NOTICE OF REGULAR COUNCIL MEETING

In accordance with § 38-431.02 of the Arizona Revised Statutes of the State of Arizona, notice is hereby given to the Members of City Council and to the general public that the Mayor and Council of the City of San Luis, Arizona will hold a Regular City Council meeting at 6:00 p.m., Wednesday, February 26, 2025. The meeting will take place at the City Council Chambers, located at 1090 E. Union Street, San Luis, Arizona, 85349. The public is invited to attend the open meeting.

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the City of San Luis does not discriminate on the basis of disability in the admission of or access to, or treatment or employment in its programs, activities, or services. For information regarding rights and provisions of the ADA or Section 504, or to request reasonable accommodations for participation in City programs, activities, or services contact: ADA/Section 504 Coordinator, City of San Luis Human Resources Department, 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Notice is hereby given that pursuant to A.R.S. § 1-602.A.9, subject to certain specified statutory exceptions, parents have a right to consent before the State or any of its political subdivisions make a video or audio recording of a minor child. Meetings of the City Council are audio and/or video recorded, and, as a result, proceedings in which children are present may be subject to such recordings. Parents in order to exercise their rights may either file written consent with the City Clerk to such recordings or take personal action to ensure that their child or children are not present when a recording may be made. If a child is present at the time a recording is made, the City will assume that the rights afforded parents pursuant to A.R.S. § 1-602.A.9 have been waived.

THIS NOTICE IS GIVEN BY:

/s/ Sonia Cornelio, City Clerk

AVISO DE JUNTA REGULAR

De acuerdo con los Estatutos del Estado de Arizona A.R.S. § 38-431.02, se le informa a los miembros del Cabildo y al público en general que el Alcalde y el Cabildo, tendrán una Junta Regular a las 6:00 p.m., el día Miercoles, 26 de Febrero del 2025. La junta se llevará a cabo en la Sala del Cabildo, ubicada en el 1090 E. Union Street, San Luis, Arizona, 85349. El público está invitado a la junta.

De acuerdo con el Acta de Americanos con Discapacidades y la Sección 504 del Acta de Rehabilitación del 1973, la Ciudad de San Luis, Arizona no discrimina por causa de discapacidad la admisión y acceso a sus programas, actividades, servicios o en el trato en cuanto a empleo. Para más información referente a derechos y provisiones del Acta de Americanos con Discapacidades o Sección 504, o para solicitar adaptaciones que sean razonables para la participación en programas, actividades o servicios de la Ciudad, contactar al: Coordinador del Acta de Americanos con Discapacidades/Sección 504, Departamento de Recursos Humanos de la Ciudad de San Luis, Arizona, ubicado en el 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Por medio de este aviso y de acuerdo con los Estatutos del Estado de Arizona A.R.S § 1-602.A.9, sujeto a ciertas excepciones reglamentarias, los padres de familia tienen el derecho de dar el consentimiento ante el Estado o cualquiera de sus subdivisiones políticas para hacer una grabación de audio o video de su hijo menor de edad. Las juntas del Cabildo se graban en audio y/o video y como resultado, el hecho de que haya menores presentes puede ser sujeto a que sean grabados. Para que los padres de familia puedan ejercer sus derechos pueden dar el consentimiento por escrito con la Secretaria de la Ciudad a tal grabación, o tomar acción personal para asegurarse que su hijo menor no esté presente cuando la grabación se lleve a cabo. Si un menor de edad está presente en el momento de la grabación, la Ciudad asumirá que los padres de familia están cediendo los derechos sobre una posible grabación de acuerdo con los Estatutos del Estado de Arizona A.R.S. § 1-602.A.9.

ESTE AVISO ES DADO POR:

/f/ Sonia Cornelio, Actuaria de la Ciudad

AGENDA
Regular Meeting
San Luis City Council
San Luis Council Chambers
1090 E. Union Street
San Luis, AZ 85349
February 26, 2025
6:00 p.m.

PLEASE TAKE NOTICE THAT MEMBERS OF THE CITY COUNCIL WILL ATTEND EITHER IN PERSON, TELEPHONE, OR VIDEO CONFERENCE COMMUNICATION. THE MAYOR OR ACTING MAYOR FOR THIS MEETING MAY CHANGE THE ORDER OF THE ITEMS; IF AUTHORIZED BY LAW AND BY A MAJORITY VOTE OF A QUORUM OF CITY COUNCIL MEMBERS PRESENT, AN EXECUTIVE SESSION WILL BE HELD IMMEDIATELY FOLLOWING THE VOTE IN ACCORDANCE WITH A.R.S. § 38-431.03(A) AND THE MEETING WILL BE TEMPORARILY RECESSED WHILE THE CITY COUNCIL RETIRES TO EXECUTIVE SESSION WHICH WILL NOT BE OPEN TO THE PUBLIC.

TENGA EN CUENTA QUE LOS MIEMBROS DEL CABILDO DE LA CIUDAD ASISTIRÁN EN PERSONA, TELÉFONO O COMUNICACIÓN POR VIDEO CONFERENCIA. EL ALCALDE O ALCALDE INTERINO DE ESTA REUNIÓN PUEDE CAMBIAR EL ORDEN DE LOS TEMAS; SI ESTÁ AUTORIZADO POR LA LEY Y POR MAYORÍA DE VOTOS DE UN QUÓRUM DE MIEMBROS DEL CABILDO PRESENTES, SE LLEVARÁ A CABO UNA SESIÓN EJECUTIVA INMEDIATAMENTE DESPUÉS DE LA VOTACIÓN DE ACUERDO CON LOS ESTATUTOS DEL ESTADO DE ARIZONA A.R.S. § 38-431.03 (A) Y LA REUNIÓN SERÁ TEMPORALMENTE RECESADA MIENTRAS EL CABILDO DE LA CIUDAD SE RETIRE A UNA SESIÓN EJECUTIVA QUE NO ESTARÁ ABIERTA AL PÚBLICO.

1. **CALL TO ORDER/ROLL CALL**

2. **PLEDGE OF ALLEGIANCE**

3. **INVOCATION**

4. **PROCLAMATIONS/PRESENTATIONS**

4. A. Proclamation on Read Across America Week March 2-6, 2025

4. B. Proclamation on International Women's Day March 8, 2025

4. C. Recognition to Captain Robert Solis for his dedicated 20 years of unwavering service to the fire department and the City of San Luis. **(Angel Ramirez, Fire Chief)**

4. D. Presentation by San Luis High School on their Career Technical Education Programs. **(Iris Castillo, San Luis High School CTE Instructional Leader)**

5. CONSENT AGENDA

All matters are considered to be routine by the City Council and will be enacted by one motion. If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

5. A. MINUTES OF

- Work Session held January 22, 2025
- Regular Council meeting held January 22, 2025

5. B. DISBURSEMENTS

From February 6, 2025 to February 18, 2025
Total $1,941,614.01
(One Million, Nine Hundred Forty-One Thousand, Six Hundred Fourteen Dollars and One Cent)

6. DISCUSSION AND POSSIBLE ACTION ITEMS:

6. A. Discussion and possible action on any and all matters regarding the selection and purchase of new headworks and grit removal systems for the West Wastewater Treatment Plant expansion project. **(Jorge Perez, Assistant Director of Public Works)**

6. B. Discussion and possible action on any and all matters regarding the selection and purchase of a new Sludge Dewatering system for the West Wastewater Treatment Plant expansion project. **(Jorge Perez, Assistant Director of Public Works)**

6. C. Discussion and possible action on any and all matters regarding the acceptance and award of a pre-construction services contract to MGC Contractors, Inc. for the pre-construction/design phase of the West Wastewater Treatment Plant Expansion project. **(Jorge Perez, Assistant Director of Public Works)**

6. D. Discussion and possible action on any and all matters regarding the City of San Luis Public Works Department accepting Construction Services from Yuma Valley Contractors, Inc. for the installation of new sewer service at the City of San Luis Public Works yard and adjacent parcels to the South. **(Jorge Perez, Assistant Director of Public Works).**

6. E. Discussion and possible action on any and all matters regarding the acceptance of slurry seal application services from American Pavement Preservation for the application of Type 2 slurry seal and road striping services from Franklin Striping Incorporated. **(Manuel Hernandez, Assistant Director of Public Works)**

6. F. Discussion and possible action on any and all matters regarding Order No. 2025-03. An Order of the Mayor and City Council of the City of San Luis, Arizona, approving and adopting the Intergovernmental Agreement between the City of San Luis and Gadsden Elementary School District #32 (GESD #32) for funds supporting the San Luis Police Department's participation in the School Resource Officer assignment at San Luis Middle School and Southwest Junior High School. **(Alan Guevara, Patrol Lieutenant)**

6. G. Discussion and possible action on any and all matters regarding Resolution No. 2354. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, authorizing the submission of an application to the USDA Rural Business Development Grant to establish a Small Business Assistance Fund. **(Armando Esparza, Director of Economic Development)**

6. H. Discussion and possible action on any and all matters regarding Subdivision Case No. 2024-0865F - Los Mezquites Unit 5 Subdivision; a request by Edais Engineering Inc., on behalf of Riedel Holdings LLC, for the approval of Los Mezquites Unit 5 final plat, located east of 24th Avenue and south of Los Mezquites Unit 4 Subdivision in San Luis, Arizona. **(Juan Leal Rubio, Assistant Director of Development Services)**

6. I. Discussion and possible action on any and all matters regarding Resolution No. 2355. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, approving the First Amendment to La Esperanza Estates Subdivision Development Agreement as approved by Resolution No. 2292; repealing conflicting provisions; and providing for severability. **(Jose A. Guzman, Director of Development Services)**

6. J. Discussion and possible action on any and all matters regarding Resolution No. 2356. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, reducing the City Council Members' pay by fifty percent and amending the City of San Luis Personnel Policies to remove City Council Members from dental and vision care coverage paid by the city; establishing an effective date; repealing any conflicting provisions; and providing for severability. **(Kay Marion Macuil, City Attorney)**

7. SUMMARY OF CURRENT EVENTS

Events by Mayor, Council Members and/or City Manager pursuant to A.R.S. § 38-431.02 (K).

8. CALL TO THE PUBLIC

This is the time for the public to comment. Under A.R.S. § 38-431.01(I), Members of the City Council shall not discuss or take legal action on matters raised during an open call to the public that are not properly noticed on this agenda for discussion and legal action. At the conclusion of an open call to the public, individual Members of the City Council may respond to criticism made by those who have addressed the City Council, may ask staff to review a matter, or may ask that a matter be put on a future agenda.

9. ADJOURNMENT

PROCLAMATION

Regular City Council Meeting **4. A.**

Meeting Date: 02/26/2025

Title:

Proclamation on Read Across America Week March 2-6, 2025

Attachments

Proclamation

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Proclamation

READ ACROSS AMERICA WEEK
March 2-6, 2025

WHEREAS, the citizens of San Luis, Arizona, stand firmly committed to promoting reading as the catalyst for our students' future academic success, their preparation for America's jobs of the future and their ability to compete in a global economy; and

WHEREAS, our local schools have provided significant leadership in the area of community involvement in the education of our youth, grounded in the principle that educational investment is key to the community's well being and long-term quality of life; and

WHEREAS, the initiative was established by the National Education Association (NEA) in 1998, to work for the betterment of public education with events organized in libraries, schools, book clubs and communities; and

WHEREAS, by recommitting to improve literacy and raising the expectations we have for our students, schools and ourselves, we will secure the future for our children and give every child a chance to succeed; and

WHEREAS, Read Across America Day falls on the same day as the birthday of children's book author Dr. Seuss so, naturally, it is a tradition to read his storybooks on this day. Parents, teachers, students and members of society all come together to celebrate the joys of reading and to encourage it to become a habit for children.

NOW, THEREFORE, BE IT RESOLVED, that, I, Nieves Riedel, Mayor of the City of San Luis, Arizona, do hereby proclaim March 2-6, 2025, as **"Read Across America Week"** and call on the citizens of San Luis to encourage literacy and a love of reading among children and to inspire them to explore the world of books and reading.

DATED this **26th** day of **February 2025**.

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

PROCLAMATION

Regular City Council Meeting **4. B.**

Meeting Date: 02/26/2025

Title:

Proclamation on International Women's Day March 8, 2025

Attachments

Proclamation

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Proclamation

INTERNATIONAL WOMEN'S DAY
March 8, 2025

WHEREAS, International Women's Day is celebrated in many countries around the world; and

WHEREAS, it is a day when women are recognized for their achievements without regard to divisions, whether national, ethnic, linguistic, cultural, economic or political; and

WHEREAS, International Women's Day has assumed a new global dimension for women in developed and developing countries alike; and

WHEREAS, each year on March 8th, countries around the world lift up the achievements of women leaders in their societies to recognize and celebrate the leadership role that women play in business, academia, government, community-building, and families; and

WHEREAS, it offers an opportunity to reflect on progress made, to call for change, and to celebrate acts of courage and determination by ordinary women who have played an extraordinary role in the history of their countries and communities.

NOW, THEREFORE, BE IT RESOLVED, that, I, Nieves Riedel, Mayor of the City of San Luis, Arizona, do hereby proclaim March 8, 2025, as **"International Women's Day"** and call on the citizens of San Luis to observe this day with appropriate programs and activities.

DATED this **26th** day of **March 2025**.

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

PRESENTATION

Regular City Council Meeting **4. C.**

Meeting Date: 02/26/2025

Submitted By: Angel Ramirez, Fire Department

Presentation Topic/Summary:

Recognition to Captain Robert Solis for his dedicated 20 years of unwavering service to the fire department and the City of San Luis. **(Angel Ramirez, Fire Chief)**

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **4. D.**

Meeting Date: 02/26/2025

Summary

Presentation by San Luis High School on their Career Technical Education Programs. **(Iris Castillo, San Luis High School CTE Instructional Leader)**

Attachments

Presentation

CAREER AND TECHNICAL EDUCATION

PRESENTED BY CTE LEADERS

CTE®
CAREER & TECHNICAL EDUCATION





Christian Romo
CTE Leader
SLHS SkillsUSA Chapter V.President



Skelsey Moraga Espinoza
CTE Leader
SLHS SkillsUSA Chapter Regional Officer



Chelsea Moraga Espinoza
CTE Ambassador
SLHS FCCLA Chapter V.President



Violeta Acosta
CTE Ambassador
SLHS SkillsUSA Chapter Representative

SLHS Career Technical Education Programs

Agriscience

Business Management

Construction

Culinary

Digital Photography

Early Childhood Education

Engineering

Welding

Film & TV

Medical Assistant

Emergency Medical Services

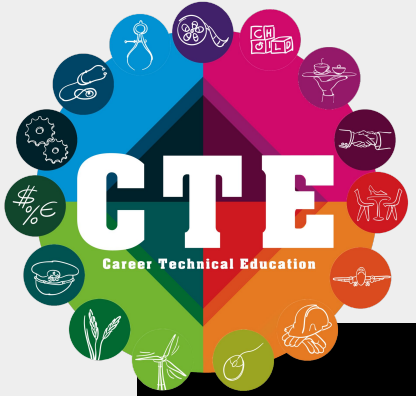
Law and Public Safety

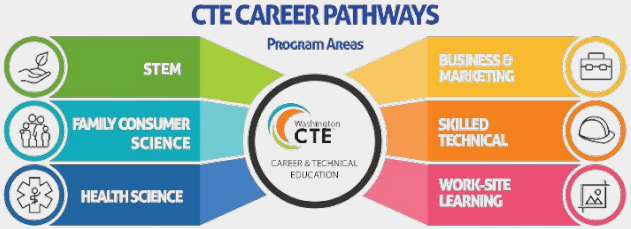
Mental and Social Health Services

Sports Medicine

Stagecraft

WHAT CTE IS





-**Career and Technical Education**

-Are programs that prepares students for high-wage, high-demand careers.

-CTE covers many different fields, including health care, information technology, advanced manufacturing, hospitality and management and many more.



CTE Benefits

-CTE helps guide students towards a career path, it helps them find their interest on what could be their possible work environments.

-CTE helps reduce the number of unemployed graduates, and the number of students who don't pursue any career after high school. Meaning that students once they graduate, can work while they are earning a degree to gain more experience.

SLHS CTE Program Highlights

AWC Dual Credit Enrollment

CTE Programs have dual credit opportunities with Arizona Western College.

Industry Certifications

CTE Programs offer various Industry Certifications to prepare students for the workforce or postsecondary advancement

CTE Program Enrollment

- **SY24-25 CTE Enrollment 1972**
- AG - 152
- Culinary-117
- Early Childhood Education-142
- Law & Public Safety - 292
- Construction -140
- Welding-147
- Stagecraft-114
- Film & TV - 118
- Digital Photography-131
- Medical Assisting Services- 152
- EMS-93
- Sports Medicine Rehabilitation-103
- Mental & Social Services - 123
- Business Management-148

Construction Technology

- Construction technology is a hands on class designed to equip students with the skills and knowledge needed to safely and professionally develop their vocation.
- In the class, students can work in teams to practice their blue-printing, plumbing, electrical skills by hands on practice in construction project development activities such as building small models and creating blueprints.
- Some certifications students can obtain are OSHA-10 and OSHA-30 in Construction Health and Safety , as well as their (Technical Skills assessment) TSA Certification.

- Students can attend many SkillsUSA conferences. They also get to compete in categories such as carpentry, masonry and technical math.










Law & Public Safety

- Law and Public safety is a program where students get the opportunity to learn and develop skill sets related to the Law Enforcement Field. Each student gets to experience the pride of protection and serving the community. We apply forensic investigative skills to process crime scenes. As Well as the performance of Law enforcement operations such as SWAT techniques, calls for service, traffic control,police car maneuvers and everything about Gun Safety.

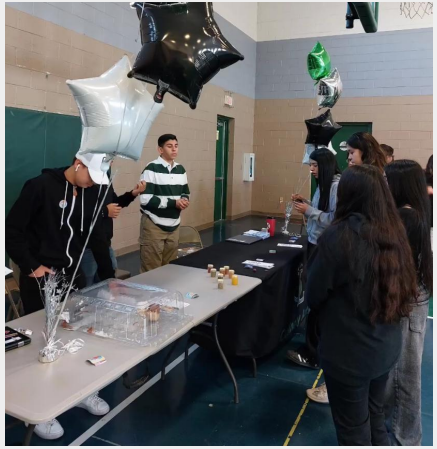
- Level 1 focuses on the history of law enforcement. The fundamentals like Police Alphabet, Police Codes, Radio basics, Gun Safety, and Crime scene Investigations.

- Level 2 Is a more hands-on experience, Students get the opportunity to get certified from various organizations like for example: CPR, CSM, FEMA, OSHA and many more. Students experience educational field trips that enrich the students by showcasing different law enforcement fields. And overall prepare them for a career in this field.

Skills USA

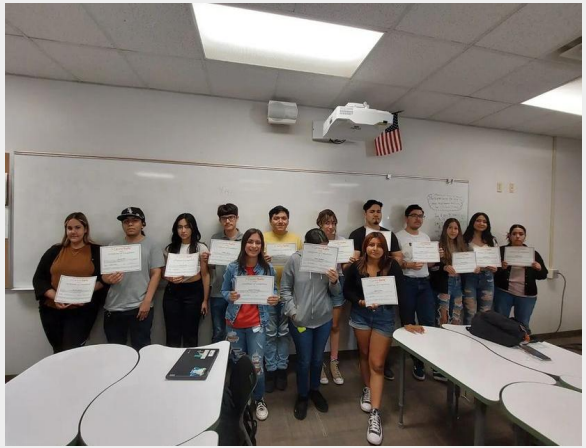
- Law and public safety is part of Skillsusa, an organization whose mission is to “empower students to become skilled professionals, career ready leaders and responsible community members. Through Skillsusa we attend various leadership conferences and competitions that ultimately allow us to showcase our skills and abilities. Skillsusa empowers us to be








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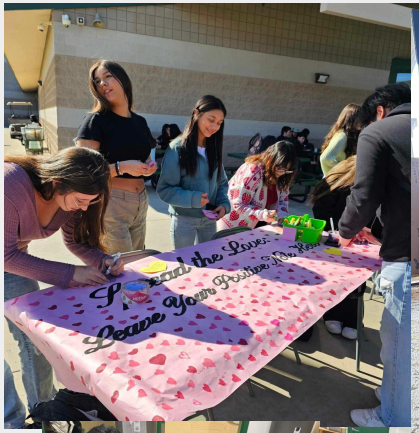


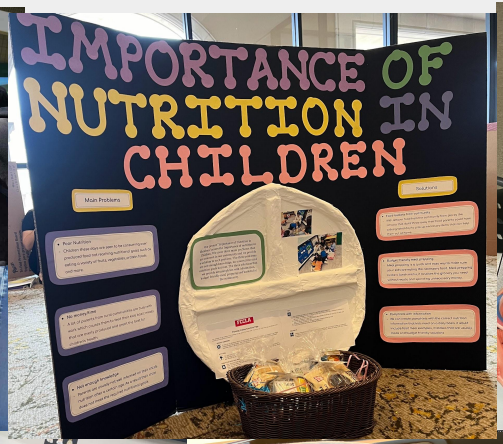

Darfon

Early Childhood & SLHS Preschool

- Early Childhood has 3 different class levels.
- Level one students learn about prenatal stages from conception to birth. Along with taking a pregnancy-stimulating stomach and a real care baby. Students can obtain their Food Handlers Certification.
- Continuing to level 2
    - CPR Certification
    - Paraprofessional
    - Take the TSA
- In level 3, students can create lesson plans and teach them to preschool students as real teachers
- The preschool just got licensed in order to accept students from the community as well.

Early Childhood & SLHS Preschool









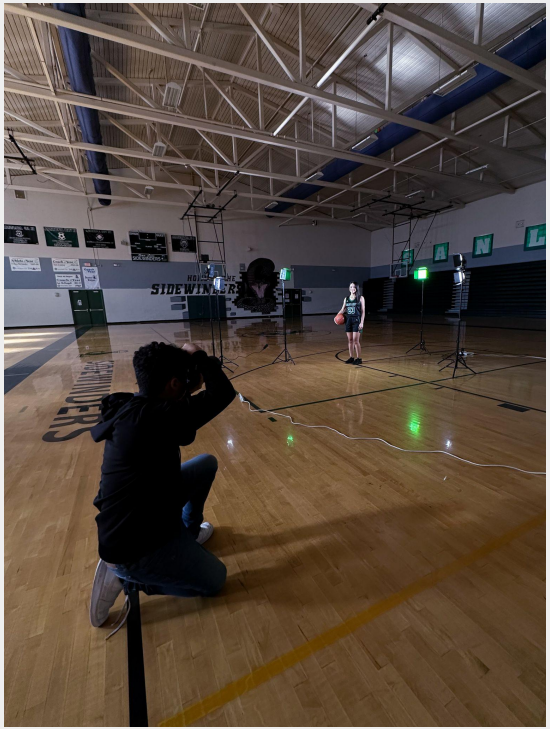








Film and TV



- Be part of a professional broadcast team producing videos for sporting events, news reports, and commercials
- Utilize creative and artistic talents using professional equipment and media to exceed client expectations
- Work as a sideline reporter, news anchor, camera operator, video editor, play-by-play announcer, and color analyst
- Develop leadership and employability skills through participation in SkillsUSA


Tourism is a fun and smart way
to learn about a specific city


hosa
EDUCATORS RISING


IT'S TIME TO BE NOW
IT'S TIME TO BE NOW




discoverycenter
SkillsUSA




Debbie Lesko
1214


SkillsUSA
ARIZONA













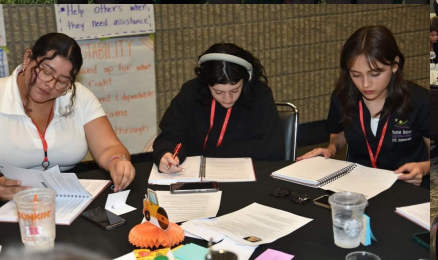

SkillsUSA
ARIZONA




LET'S CLOSE THE
SKILLS
GAP
SkillsUSA




The Original
SINCE 1971






SkillsUSA



Funding for CTE



Thanks to the state and federal funding, CTE programs and SLHS CTE students would not have had these opportunities, such as earning certifications, equipment that meets industry standards, and leadership trainings. This is why we need your support and advocacy for Education funding and CTE.

We invite you to visit the SLHS campus and our CTE programs to learn about all the opportunities our students receive.

Thank You

SLHS CTE Leaders & Ambassadors

Iris Castillo
SLHS CTE Instructional Leader
icastillo1@yumaunion.org
(928) 502-6077

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **5. A.**

Meeting Date: 02/26/2025

Summary

MINUTES OF

- Work Session held January 22, 2025
- Regular Council meeting held January 22, 2025

Attachments

1/22/2025 WS

1/22/2025 RCM

MINUTES
Work Session
San Luis City Council
San Luis Council Chambers
1090 E. Union Street
January 22, 2025
5:00 p.m.

1. CALL TO ORDER/ROLL CALL

Mayor Nieves Riedel called the Work Session to order at approximately 5:00 p.m.

PRESENT:
Mayor Nieves Riedel
Vice Mayor Tadeo A. De La Hoya - arrived at 5:09 p.m.
Council Member Luis E. Cabrera - arrived at 5:04 p.m.
Council Member Maria Cecilia Cruz - arrived at 5:01 p.m.
Council Member Esteban C. Rosales
Council Member Lizeth Servin
Council Member Javier Vargas

OTHERS PRESENT:
Jenny Torres, Acting City Manager
Kay Marion Macuil, City Attorney
Sonia Cornelio, City Clerk
Adela Cortez, Director of Human Resources
Albert Moreno, Information Technology Specialist
Angel Ramirez, Fire Chief
Antonio Maldonado, Multimedia Production & Operations Specialist
Eulogio Vera, Director of Public Works
Francia Alonso, Public Information Officer
Joaquin Campa, Building Official
Jorge Perez, Assistant Director of Public Works
Jose A. Guzman, Director of Development Services
Juan Leal Rubio, Assistant Director of Development Services
Manuel Hernandez, Assistant Director of Public Works
Mario Rodriguez, Finance Department
Miguel Ramirez, Finance Accounting Manager
Roula Encinas, Director of Finance
Tomas Sanchez, Engineer
Christian Cuevas, Translator
Elizabeth Carpenter, Visitor
Eric Jones, Visitor

2. ITEMS FOR DISCUSSION ONLY:

2. A. Discussion and possible directions to staff on any and all matters regarding the Land Use Assumptions, Infrastructure Improvements Plans, and Development Fee Report under A.R.S. §9-463.05. (Benjamin Griffin, Senior Fiscal/Economic Analyst, Consultant from TischlerBise, Inc.)

Mr. Benjamin Griffin, Senior Fiscal/Economic Analyst and Consultant from TischlerBise, Inc., made a PowerPoint Point Presentation on the Draft Land Use Assumptions, Infrastructure Improvements Plan, and Development Fees. This presentation included Development Fees Basics, Fee Methodologies, Evaluate Need for Credits, Arizona Legislations, Necessary Public Service, Project Timeline, Land Use Assumptions (LUA), Infrastructure Improvement Plan (IIP) for Fire, Parks and Recreation, Police, Street, Water and Wastewater, and a Proposed Fee Summary. A copy of the presentation is included in the complete agenda packet filed in the City Clerk's Office.

Discussion was held, and comments were made by the Mayor, City Council, and staff.

3. Adjournment

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Javier Vargas to adjourn the meeting at 5:55 p.m. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Council Member Tadeo A. De La Hoya	Aye
Council Member Javier Vargas	Aye
Council Member Lizeth Servin	Aye
Council Member Luis E. Cabrera	Aye
Council Member Esteban C. Rosales	Aye
Council Member Maria Cecilia Cruz	Aye

APPROVED:

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

Certification

I hereby certify that the foregoing minutes are a true and correct copy of the Work Session minutes for the City Council of the City of San Luis, Arizona, held on January 22, 2025. I further certify that the meeting was duly called and held and that a quorum was present.

_____
Sonia Cornelio, City Clerk

M I N U T E S
Regular Council Meeting
San Luis City Council
San Luis Council Chambers
1090 E. Union Street
San Luis, AZ 85349
January 22, 2025
6:00 p.m.

1. CALL TO ORDER/ROLL CALL

Mayor Nieves Riedel called the Regular City Council meeting to order at approximately 6:00 p.m.

PRESENT:
Mayor Nieves Riedel
Vice Mayor Tadeo Azael De La Hoya
Council Member Luis E. Cabrera
Council Member Maria Cecilia Cruz
Council Member Esteban C. Rosales
Council Member Lizeth Servin
Council Member Javier Vargas

OTHERS PRESENT:
Jenny Torres, Acting City Manager
Kay Macuil, City Attorney
Sonia Cornelio, City Clerk
Adela Cortez, Director of Human Resources
Alan Guevara, Police Lieutenant
Angel Ramirez, Fire Chief
Antonio Maldonado, Multimedia Production & Operations Specialist
Armando Esparza, Director of Economic Development
Edgar Esparza, Billing & Collections Manager
Eulogio Vera, Director of Public Works
Francia Alonso, Public Information Officer
Javier Nuño, Police Officer
Jorge Perez, Assistant Director of Public Works
Jose Barragan, Fire Battalion Chief
Jossue Cerda, I.T. Support Supervisor
Manuel Hernandez, Assistant Director of Public Works
Melissa Lopez, Deputy City Clerk
Miguel Ramirez, Finance Accounting Manager
Olivia Jenkins, Administrative Services Manager
Oscar Barnett, Project Manager
Roula Encinas, Director of Finance
Tomas Sanchez, Engineer
Cesar Neyoy, Reporter
Christian Cuevas, Translator
Edrel Silva, Resident

Elizabeth Carpenter, Developer
Eric Jones, Visitor
Fabher Sanchez, Resident
Luisa Arreola, Resident
Maria Robles, Resident
Mark Concha, Resident
Matias Rosales, Resident

2. PLEDGE OF ALLEGIANCE

Council Member Luis E. Cabrera led the Pledge of Allegiance.

3. INVOCATION

Ms. Maria Cecilia Cruz, Church For The City, led the invocation.

4. PROCLAMATIONS/PRESENTATIONS

4. A. Proclamation on Education Day - January 24, 2025
4. B. Proclamation on SkillUSA Week February 2-8, 2025
4. C. Proclamation on Career and Technical Education Month February 2025
4. D. Proclamation on Teen Dating Violence Prevention and Awareness Month February 2025

Mrs. Sonia Cornelio, City Clerk, read the proclamations by title only.

5. CONSENT AGENDA

5. A. MINUTES OF
- Regular Council meeting held December 11, 2024

5. B. DISBURSEMENTS
From January 1, 2025 to January 15, 2025
Total $999,009.12 (Nine Hundred Ninety-Nine Thousand, Nine Dollars and Twelve Cents)

MOTION: Council Member Luis E. Cabrera/Council Member Lizeth Servin to approve the Consent Agenda as presented. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel		Aye
Vice Mayor Tadeo Azael De La Hoya	Aye	
Council Member Luis E. Cabrera		Aye
Council Member Maria Cecilia Cruz		Aye
Council Member Esteban C. Rosales		Aye
Council Member Lizeth Servin		Aye
Council Member Javier Vargas		Aye

6. DISCUSSION AND POSSIBLE ACTION ITEMS:

6. A. Discussion and possible action on any and all matters regarding the appointment or re-appointment of members to serve on the Greater Yuma Port Authority Board (GYPA). (Jenny Torres, Acting City Manager)

Ms. Jenny Torres, Acting City Manager, stated that she will be presenting the next four (4) items. She added that former Vice Mayor Gloria Torres and Council Member Matias Rosales, served on some of the different boards and need to be replaced. She included the intent of the organization, meeting dates, meeting times, requirements and the bylaws for the city to be able to appoint someone.

She added that for the Greater Yuma Port Authority (GYPA), the city is allowed to appoint two (2) directors to the board. Currently, Mayor Nieves Riedel serves as the elected official, and for the position of director it can be an employee of the city, another elected official or an outside person. Mr. Matias Rosales has served on this board for several years and he has expressed his interest to continue serving, however, it is up to the City Council to decide who will serve.

MOTION: Mayor Nieves Riedel/Vice Mayor Tadeo Azael De La Hoya to appoint Matias Rosales to serve on the Greater Yuma Port Authority. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. B. Discussion and possible action on any and all matters regarding the appointment to the Yuma County Intergovernmental Public Transportation Authority (YCIPTA) Board. (Jenny Torres, Acting City Manager)

Ms. Jenny Torres, Acting City Manager, indicated that for this board, the appointment should be one (1) representative capable of representing the municipality.

MOTION: Vice Mayor Tadeo Azael De La Hoya/Council Member Esteban C. Rosales to appoint Council Member Lizeth Servin to the Yuma County Intergovernmental Public Transportation Authority. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. C. Discussion and possible action on any and all matters regarding the appointment of members to serve on the Greater Yuma Economic Development Corporation (GYEDC) Board. (Jenny Torres, Acting City Manager)

Ms. Jenny Torres, Acting City Manager, explained that for this board, the city is required to appoint a council member. They also designate the City Administrator as an ex officio, meaning that, that member is a non-voting member, but if there is another council member that wants to serve as a non-voting member to learn, she will be happy to appoint that person. The City Council appoints one (1) elected official.

MOTION: Vice Mayor Tadeo Azael De La Hoya/Mayor Nieves Riedel to appoint Council Member Esteban C. Rosales to serve on the Greater Yuma Economic Development Corporation Board as a director and appoint Jenny Torres, Acting City Manager or her designee as an ex-officio member. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. D. Discussion and possible action on any and all matters regarding the appointment of a member to serve on the Western Arizona Council of Government (WACOG) Executive Board of Directors. (Jenny Torres, Acting City Manager)

Ms. Jenny Torres, Acting City Manager, stated that for this board an elected official must be the one appointed. She added that WACOG has several advisory councils or subcommittees such as the Regional Council of Aging. The Executive Committee is in charge of appointing a representative to the Community Action Board and the Yuma County Advisory Council.

Mayor Nieves Riedel proposed Council Member Luis E. Cabrera to serve on this board.

Council Member Luis E. Cabrera stated that unfortunately this board meets in the mornings and he works, therefore he cannot accept the proposal.

Mayor Nieves Riedel proposed Council Member Javier Vargas.

MOTION: Vice Mayor Tadeo Azael De La Hoya/Council Member Esteban C. Rosales to appoint Council Member Javier Vargas to serve on the Western Arizona Council of Governments Executive Board of Directors. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. E. Discussion and possible action on any and all matters regarding the appointment of one (1) member to the San Luis Economic Development Commission. (Armando Esparza, Director of Economic Development & Government Affairs)

Mr. Armando Esparza, Director of Economic Development and Government Affairs, mentioned that his department is seeking the appointment of one (1) member to the San Luis Economic Development Commission for a period of two (2) years to fill a vacancy that was created last month by Ms. Audry Morris Sandoval.

He added that Ms. Sandoval was working with Campesinos Sin Fronteras for some time, and she left her position as deputy director to start her own non-profit. Some of the requirements for this commission are that the appointees should be residents of San Luis, Ms. Sandoval is a resident of Yuma, or should have a business located in the city, or should just have a general interest in the quality, development and growth of the community. His department recruited for the vacancy for three (3) weeks and received five (5) applications from community members. The Economic Development Department reached out to the applicants to invite them to be present tonight.

Council Member Lizeth Servin asked if they can be allowed to address the Mayor and City Council to state why they are interested in serving on this board.

Mr. Edrel Silva, applicant, stated he is a resident and veteran adding that he is interested because of professional development through community engagement. He is currently in school for project management, which goes hand in hand with economic development. All the experience he can get will help and would like to get involve with his community.

Mr. Eric Jones, applicant, indicated that his family has been in the San Luis area since 1951 and has a strong heart to be part of San Luis and supports what is being done here. His current business is in fueling and property management, warehousing and other opportunities that they are providing. He thinks it is important that there be a strong economic development program as there a lot of houses and developers in San Luis. There needs to be negotiation opportunities for growth throughout the area and with his experience and background, he can help San Luis grow.

MOTION: Council Member Luis E. Cabrera/Council Member Lizeth Servin to appoint Eric Jones to complete the two-year vacant term of the San Luis Economic Development Commission. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. F. Discussion and possible action on any and all matters regarding the selection and purchase of a new Membrane Bioreactor (MBR) process equipment for the West Wastewater Treatment Plant expansion project. (Jorge Perez, Assistant Director of Public Works)

Mr. Jorge Perez, Assistant Director of Public Works, stated that they are seeking approval for the purchase of a membrane bioreactor process equipment for the West Wastewater Treatment Plant Expansion project. Staff is over 30% design on the overall expansion project with the consultant engineer, Pacific Advanced Civil Engineering. Staff obtained three (3) proposals for the membrane equipment; Kubota Membrane USA, MMBR Systems and Veolia Water Technologies. Based on the Criteria Ranking developed as part of the performance-based specifications, Kubota Membrane USA scored the highest and is the recommended manufacturer to supply the MBR process equipment for the City of San Luis West WWTP Phase 1 MBR Upgrades in the amount of $2,998,000.00. He added that staff is trying to do this ahead of time just like in other projects as the delivery of equipment is between 38 to 50 weeks.

MOTION: Council Member Luis E. Cabrera/Council Member Lizeth Servin to approve the Kabota Bid Proposal for the West Wastewater Treatment Plant Expansion Phase 1 in an amount not to exceed $2,998,000.00 to be spent over this and the next fiscal year and authorize appropriate staff to take all actions necessary to finalize contract terms. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. G. Discussion and possible action on any and all matters regarding the City of San Luis Public Works Department accepting Construction Services from Westmoor Electric, Inc. for the installation of City furnished traffic signal equipment at the intersection of County 22nd Street and 4th Ave. (Manny Hernandez, Assistant Director of Public Works).

Mr. Manuel Hernandez, Assistant Director of Public Works, mentioned that staff is seeking approval to contract Westmoor Electric for the installation of a traffic signal at the intersection of County 22nd Street and 4th Avenue. Recently there have been several severe accidents at this intersection. Westmoor Electric is confident that they can complete the project in approximately one (1) month from the notice to proceed. A traffic signal at this highly trafficked intersection will help improve the safety, efficiency and traffic flow. He added that all the materials have arrived and are ready to be installed.

Mr. Eulogio Vera, Director of Public Works, indicated that this is for the installation of the traffic signal. Staff was trying to put a temporary solution to this intersection, since it has not been advertised for the actual project construction, the additional lanes and width, as the city is waiting on the right-of-way. Staff received one (1) today and should be expecting the other one in the next couple of days. But for clarification, this is the installation of the actual traffic signal only, the roadway improvements will be coming before the City Council's approval within the next month or so.

Mayor Nieves Riedel mentioned that County 22nd Street now counts with street lights and thanked the Public Works Department.

MOTION: Council Member Javier Vargas/Council Member Esteban C. Rosales to accept construction services from Westmoor Electric, Inc., for the installation of traffic signal equipment at the intersection of County 22nd Street and 4th Avenue in the amount of $159,420.00 and to waive formal procurement procedures for the reasons presented. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

6. H. Discussion and possible action on any and all matters regarding Resolution No. 2351. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, ordering and calling a Special Election to be held on May 20, 2025, in and for the City of San Luis, Arizona, to submit to the qualified electors of San Luis the proposed amount to be raised by a primary (ad valorem) property tax. (Sonia Cornelio, City Clerk)

Mrs. Sonia Cornelio, City Clerk, explained that this resolution is for the call of election and is a good practice to inform the community members of the city's intent to hold a Special Election on May 20, 2025, to add the question on the ballot on whether the city should implement a primary property tax.

Mayor Nieves Riedel commented that people have approached her and asked why voters have not approved this for the second time. She responded that President Abraham Lincoln ran seven (7) times and on the 7th try, he became the President of the United States. Property tax is something that is needed in the City of San Luis and if this is something she needs to bring every year while she is Mayor, she will. There are demands or requests from residents for better streets and public safety, however, there is no money. Last year when this was brought up, she became the favorite piñata of all people, but those that worked against the property tax did her a great favor. She was for it knowing it was going to cost her hundreds of thousands of dollars on property taxes. This is now up to the people that say they care and love their community. She was asked to place this item on the agenda and she did as it is a need.

Council Member Lizeth Servin commented that it has not been year from the last time it was placed on the agenda and she was surprised to see it on the agenda again. She is not against property tax, however, it is too soon to bring it again. Last year there was a lot of misinformation and if the city is going to bring it again, the city needs to make sure to strategize ways to educate the community and make sure that they have the right information. Even though there was a publicity pamphlet, she does not think citizens really got a hold of that pamphlet, she did not get it and she was not in the City Council. She now understands the needs of the city and employees, but still for her it is too early to put it up again and is not in agreement.

Council Member Javier Vargas asked the community members of the City of San Luis to come to City Hall and get inform. He encouraged citizens to not be misinformed by people who are against this measure and to come in to the office to see for themselves the benefits that come with property taxes. He understands it is too early to bring it again, however, he agrees with the Mayor that it would have to be placed on the agenda every year as it is a much needed source of income for the city.

Council Member Maria Cecilia Cruz commented she is all for property tax and has supported it every time it has been on the ballot and as everyone knows, it has not passed. The main reason for not passing is because there is no education and misinformation on the topic. She would like to wait for the property tax because there is a new President and he says he is going to bring down costs and inflation. The Executive Order states that it is critical to restore purchasing power to the American family and improve the quality of life, she added that the new President's Administration should be given some time. She also thinks it is too soon for this matter to be placed on the ballot.

Mayor Nieves Riedel stated that staff did an outstanding job in putting the information together, meetings were held and the public was invited to attend these meetings and only two (2) or three (3) people showed up. The information was there, it was mainly misinformation by some people voting against it because they thought it was her idea. She does not like to pay taxes, but it is her duty to pay them, because taxes is what provides the needs of a city. She has learned about this community that people do not like to pay, but expect top of the line service. Staff was very transparent with the numbers. When former Mayor Gerardo Sanchez placed this matter on the ballot, he got accused of not being transparent. She went beyond being transparent and yet people voted against it. The measure can only be placed on the ballot once a year in the month of May.

Council Member Maria Cecilia Cruz said it is a good idea to give them a year of educating the people more.

Council Member Lizeth Servin remarked that everyone can do its due diligence and be more vocal about it as council members and be out there in the community. She knows the Ms. Jenny Torres, Acting City Manager, has planned to do some community forums and be out there with directors and staff. She mentioned that they are not putting in question what staff did to bring the information to the community. It is just that the city could not get the community there. Staff was there, but the community was not there. So that is why the city needs to be more focused, more intentional, and have those strategies to make sure that they get there, and agreed with Council Member Maria Cecilia Cruz.

Council Member Esteban C. Rosales asked how much is it to put it on the ballot again this year?

Mrs. Cornelio responded the cost is close to $61,000.00, that is what the city paid in May 2024.

Council Member Javier Vargas added that even though President Trump might lower the living cost in the future, one should remember that this was brought up back in 2019, because it was so much needed then and it is much needed today.

Council Member Maria Cecilia Cruz stated that she did not say it was not needed, but the residents need to be educated on this topic, besides when it is not on the ballot, the city can explain it more thoroughly without any hesitations, because when it is in the ballot, the city is limited on what it can be said and share.

Ms. Jenny Torres, Acting City Manager, stated that was correct. When the item is placed on the ballot the city can educate, it cannot promote the ballot. If it is not in the ballot, obviously, the city can educate and promote other sources of revenue.

Council Member Javier Vargas commented that the thing is that one never talks about property tax until it is on the agenda. Therefore, once it is not on the agenda, one does not talk about educating the residents, so something has to get done, even though it does not go to the ballot this year. But something needs to be done and not forget about this issue.

Mayor Nieves Riedel expressed that it might be a good idea to get some of the Council Members to form a committee, go and educate the people, take the time and see if they can convince them. That would be great and she would like to see hands up and asked who would like to be part of this committee and come back and report for 12 months and see how people are responding?

Council Member Javier Vargas stated that he could be that person as long as this item gets approved today.

Council Member Lizeth Servin mentioned she can also help with this.

Council Member Luis E. Cabrera commented that he read through the resolution, basically, the information is the same that was presented to the electors back in 2024. One of the things that people told him when they voted against the property tax was that the amount was too high, the $2.5 million. They said that the city could possibly start at $1.5 million or $1.2 million and not be so aggressive. Then eventually it can increase a little bit every year, but that was some of the feedback he received. Another thing is, he also thinks that it is too soon to put it back on the ballot. One of the reasons is that the majority of the people voted against it. He would understand, if it was like a 45, 55 percentage where it did not pass. But sadly, it was over a 1,000 people who voted against it, and only 200 people voted in favor.

Mayor Nieves Riedel said that maybe the city needed to start lower and another thing that it failed was because she should have been stronger on that issue where people are already paying dues on the new subdivisions.

Those are the people that went out and voted against it, because they were going to get a double whammy, so it will be something to consider when forming this committee and bring this to the table and find ways, even if the city starts with a lower number and get away with those people that are already paying. If the city loses the food tax, the city is going to start with lay-offs.

Council Member Luis E. Cabrera added that he also told about the improvement districts and the subdivisions that pay that. And then another thing that he heard a lot was the sales tax. That the City of San Luis has the highest sales tax, and that on top of that, the city wants residents to pay property taxes. This is the feedback he received from the community; that clearly they did not want to continue paying more. And the city, as a community, is always trying to make ends meet to pay bills. He is pretty sure many people out there are living paycheck to paycheck, so it does carry a burden on these families. He thinks that the city needs to reconsider,1. the amount or 2. does the city take away improvement districts? Will the city make changes to the sales tax? Because, as the way they see it is, the city just wants more, more and more. He told them that the money is needed for all the projects. And then they tell him that the city has been doing so many projects already, and and the city has continued to grow and expand. That the city has new vehicles, new roads, lighting and all these things. He tells them, the city could have way more things if this was approved, and that is the point he tries to make. But as they see, it is like, it is going to cost them more, and at this time it is either them feeding their family or them paying more to the city.

Vice Mayor Tadeo Azael De La Hoya commented that it would his 3rd time that he is part of. If it goes again, the decision today is to ask the voters and most people will not support the city when one (1) tool is popular to support you. And the decision is one of those that you know is not popular, and people will not support it. But one has to understand that they took an oath of office, to protect all residents of the City of San Luis. A property tax creates a stable source of revenue that the city needs for its projects, it does not fluctuate. The city would not be dependent on what the Federal Government will do or what the State Government Legislature might do. It pays for the public services that are much needed. The officers, firemen and the staff in other departments that the city does not have, it gives the city local control because the city can say and dictate how much the city can charge people and that is important. It provides equity to the residents that depending on the home that they have, it is how much they are going to pay. So if you are able to make your house payment for the type of house that you have, that is where the equity is out. It encourages development to have a stable income and it promotes long term planning having a reliable source of income. Yet he knows it is not popular and a lot of people do not understand that. Yes, it is too soon, but again the city has to do what is right.

Council Member Esteban C. Rosales commented that he agreed with Vice Mayor Tadeo Azael De La Hoya, because knowing that the city never knows what is going to happen this year with legislation, it would be better to be proactive than waiting to the last minute.

Mayor Nieves Riedel stated that she met with Mr. James Allen, Jr., and he graciously agreed to form a committee and asked him if he will be interested in forming a committee and help the city?

Mr. James Allen, Jr. United States Navy retired, 1549 E. Babbit Lane, San Luis, AZ, said that he listened to everyone else's words, they are very encouraging. He agrees with Luis, Lizeth and the other members. Reason why is because right now one sits in what is called uncharted waters, there is a new president and a lot of things are going to occur which have never occurred in the history of San Luis very shortly. The best thing to do would be to stop all projects that are not necessary, put a hold on, rework the budget for what the city has. Recently, what happened was the city asked for the Home Rule and it went through. That gives the opportunity a teachable moment to look at what the city has. Make sure the services that the city needs to accomplish, it is day to day for its citizens. Take care of that first, anything above and beyond that, wait, tomorrow it could be different. But the city has to deal with reality. There are people on dialysis, older people, one (1) person in a home. These costs can destroy people's lives. If the city wants to be a destroyer which you know, before he was listed as being a destroyer of the city, he is coming to build, but he points out things that do not make sense. He is from Washington, D.C., a place where they have a shadow Senator, a shadow Congressperson, meaning, they do not have a vote on the laws of the country one was born in. Put it on hold for now and see what is before them.

Mayor Nieves Riedel said that she can assure him that every single project that is going on in the City of San Luis is a need, it is not a water park or anything that is not needed, the city covers needs.

MOTION: Council Member Luis E. Cabrera/Council Member Lizeth Servin to deny Resolution No. 2351. Motion did not pass with three (3) Ayes four (4) Nays by Mayor Nieves Riedel, Vice Mayor Tadeo Azael De La Hoya and Council Members Esteban C. Rosales and Javier Vargas.

The vote was as follows:

Mayor Nieves Riedel	Nay
Vice Mayor Tadeo Azael De La Hoya	Nay
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Nay
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Nay

MOTION: Vice Mayor Tadeo Azael De La Hoya/Council Member Javier Vargas to approve and adopt Resolution No. 2351. Motion passed with four (4) Ayes and three (3) Nays by Council Members Luis E. Cabrera, Maria Cecilia Cruz and Lizeth Servin.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Nay
Council Member Maria Cecilia Cruz	Nay
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Nay
Council Member Javier Vargas	Aye

7. SUMMARY OF CURRENT EVENTS

Council Member Luis E. Cabrera reported that last week the City Council was invited to attend Eddie's Food and Drink located in the east side of Avenue E, they are scheduled to open up soon. It is a great facility, there are a lot of local vendors selling great food and drinks. He thanked the developers of Eddie's Food and Drink because something like this was needed in the community.

Council Member Lizeth Servin reported she also attended Eddie's Food and Drink, it is a beautiful facility and will give the City of San Luis a plus as it is a different concept. It needs to be promoted as it is not near this area and encouraged everyone to stop by when they have a chance.

8. CALL TO THE PUBLIC

Mr. James Allen, Jr., 1549 E. Babbit Lane, San Luis, AZ, stated that the thing he gets at about all of what he has seen just now, he had a meeting this morning and for every action that the City Council takes, there are consequences. He cannot stand with any of those that voted for it, but the main thing, the people, will speak. The other thing is, considering always someone else more than themselves is something that all have to understand. He is his brother's keeper, is the City Council? Consider that when they make their decisions on anything in this house of the people.

Mr. Mark Concha, 1310 N. Quintero Avenue, San Luis, AZ, commented that last week a resident of the City of San Luis, came before the City Council to speak about the case going onwith Pastor Castro. But this person continues to misinform people, because what this person does not say is that the city is defending itself from Pastor Castro. The city did not file a lawsuit, but is defending and responding to a lawsuit that originated Pastor Castro because he does not want to follow the rules of the City of San Luis. The rules should be followed by everyone as they exist to maintain an orderly city. This person does not want to follow the regulations and that is why he is suing the city. If a cost is being generated is because the city is defending itself from a lawsuit and not because the city wants to spend money unnecessarily. It is enough that people continue to be misinformed, people should be informed correctly as it is vital so they can make decisions such as what the City Council just approved, which are the property taxes.

9. ADJOURNMENT

MOTION: Mayor Nieves Riedel/Council Member Javier Vargas to adjourn the Regular Council meeting at approximately 6:59 p.m. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Tadeo Azael De La Hoya	Aye
Council Member Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Esteban C. Rosales	Aye
Council Member Lizeth Servin	Aye
Council Member Javier Vargas	Aye

APPROVED:

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Regular City Council meeting of the City Council of the City of San Luis, Arizona, held on January 22, 2025. I further certify that the meeting was duly called and held and that a quorum was present.

_____
Sonia Cornelio, City Clerk

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **5. B.**

Meeting Date: 02/26/2025

Summary

DISBURSEMENTS
From February 6, 2025 to February 18, 2025
Total $1,941,614.01
(One Million, Nine Hundred Forty-One Thousand, Six Hundred Fourteen Dollars and One Cent)

Attachments

Disbursements

City of San Luis
Finance Department

COUNCIL MEETING FEBRUARY 26, 2025
Disbursement Report from 02/06/2025 TO 02/18/2025

Bank Accounts	Check Date	Amount	Schedule
Accounts Payable Check Account	02/07/2025	$ 678,210.18	Schedule A
Payroll Check Account	02/11/2025	$ 4,820.53	Schedule B
Payroll Check Account	02/13/2025	$ 529,001.32	Schedule C
Accounts Payable Check Account	02/14/2025	$ 729,581.98	Schedule D
	Total Disbursements:	**$ 1,941,614.01**	

Please contact Ms. Roula Encinas or Mr. Miguel Ramirez prior to the meeting if additional information is needed.

Prepared by Karla Plascencia: _____

Verified by Finance: _____

For Council approval on: _____

Mayor: _____

Council: _____

_____

_____

_____

_____

_____

RECEIVED
2025 FEB 20 A 9:11
CITY OF SAN LUIS
OFFICE OF THE CITY CLERK

City of San Luis

Payment Register

From Payment Date: 2/3/2025 - To Payment Date: 2/7/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1BYPAYABLE - 1st BY Accounts Payable									
Check									
111178	02/06/2025	Open			Accounts Payable	AIRGAS USA LLC	$669.97		
111179	02/06/2025	Open			Accounts Payable	ARIZONA PUBLIC SERVICE	$744.19		
111180	02/06/2025	Open			Accounts Payable	ARIZONA STATE TREASURER	$21,727.75		
111181	02/06/2025	Open			Accounts Payable	AT&T MOBILITY LLC	$1,535.21		
111182	02/06/2025	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$220.50		
111183	02/06/2025	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$131.00		
111184	02/06/2025	Open			Accounts Payable	AZUL CAFE LLC	$119.57		
111185	02/06/2025	Open			Accounts Payable	BLX GROUP LLC,	$3,000.00		
111186	02/06/2025	Open			Accounts Payable	C&D DISPOSAL LLC	$401.76		
111187	02/06/2025	Open			Accounts Payable	CENTURYLINK	$525.23		
111188	02/06/2025	Open			Accounts Payable	COMITE DE BIENESTAR INC	$2,683.70		
111189	02/06/2025	Open			Accounts Payable	DPE CONSTRUCTION, INC	$199,029.30		
111190	02/06/2025	Open			Accounts Payable	DUENAS, ANDREY	$280.00		
111191	02/06/2025	Open			Accounts Payable	ECOENERGY SOLUTIONS LLC	$14,483.33		
111192	02/06/2025	Open			Accounts Payable	FX TACTICAL, LLC	$1,259.80		
111193	02/06/2025	Open			Accounts Payable	HD SUPPLY, INC.	$797.22		
111194	02/06/2025	Open			Accounts Payable	IPS GROUP INC	$960.77		
111195	02/06/2025	Open			Accounts Payable	KING MARKET	$5.00		
111196	02/06/2025	Open			Accounts Payable	LA CHOYA PLUMBING LLC	$1,406.00		
111197	02/06/2025	Open			Accounts Payable	LIMON CAZARES, EMMA	$25.00		
111198	02/06/2025	Open			Accounts Payable	LOCAL FIRST ARIZONA FOUNDATION	$30,000.00		
111199	02/06/2025	Open			Accounts Payable	LOWE'S HIW, INC.	$6,036.88		
111200	02/06/2025	Open			Accounts Payable	MEMBERSHIP LOCKBOX 4047	$900.00		
111201	02/06/2025	Open			Accounts Payable	MGM INTERNET SOLUTIONS, INC	$120.00		
111202	02/06/2025	Open			Accounts Payable	MONROY, MARIA	$291.00		
111203	02/06/2025	Open			Accounts Payable	MR. B'S BICYCLES	$599.63		
111204	02/06/2025	Open			Accounts Payable	ORTEGA, LUZ	$75.00		
111205	02/06/2025	Open			Accounts Payable	PEREZ LOPEZ, ANA, BRENDA	$382.87		
111206	02/06/2025	Open			Accounts Payable	ROBERT HALF INC.	$2,800.00		
111207	02/06/2025	Open			Accounts Payable	RUIZ, ALDO	$90.00		
111208	02/06/2025	Open			Accounts Payable	SECURITY TITLE AGENCY, INC	$5,021.00		
111209	02/06/2025	Open			Accounts Payable	THE HOME DEPOT	$2,783.33		
111210	02/06/2025	Open			Accounts Payable	THE LOZANO LAW FIRM PLLC	$800.00		
111211	02/06/2025	Open			Accounts Payable	TISCHLERBISE, INC.	$2,124.00		
111212	02/06/2025	Open			Accounts Payable	WAL-MART	$5.00		
111213	02/06/2025	Open			Accounts Payable	YUMA VALLEY CONTRACTORS	$302,250.66		
Type Check Totals:					36 Transactions		$604,284.67		
EFT									
6931	02/06/2025	Open			Accounts Payable	AMBERLY'S PLACE	$6,750.00		
6932	02/06/2025	Open			Accounts Payable	ARK WIRELESS & NETWORKING	$300.00		
6933	02/06/2025	Open			Accounts Payable	AUTOZONE STORES, INC	$134.80		
6934	02/06/2025	Open			Accounts Payable	BIG TRUCK RENTAL, LLC	$1,700.00		
6935	02/06/2025	Open			Accounts Payable	BILL ALEXANDER FORD	$406.55		
6936	02/06/2025	Open			Accounts Payable	CDWG	$26.13		
6937	02/06/2025	Open			Accounts Payable	CONSULTANT ENGINEERING INC	$1,129.99		

SCHEDULE A

City of San Luis

Payment Register

From Payment Date: 2/3/2025 - To Payment Date: 2/7/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
6938	02/06/2025	Open			Accounts Payable	CSC OF YUMA	$268.72		
6939	02/06/2025	Open			Accounts Payable	FNP-C & ASSOCIATES PLLC	$90.00		
6940	02/06/2025	Open			Accounts Payable	HEINFELD, MEECH & CO., P.C.	$272.51		
6941	02/06/2025	Open			Accounts Payable	JSA COMPANY	$26,391.00		
6942	02/06/2025	Open			Accounts Payable	KTL&C, LLC.	$68.88		
6943	02/06/2025	Open			Accounts Payable	LG ON SITE LLC	$57.66		
6944	02/06/2025	Open			Accounts Payable	MN8 ENERGY OPERATING COMPANY LLC	$17,717.48		
6945	02/06/2025	Open			Accounts Payable	NICKLAUS ENGINEERING	$1,605.00		
6946	02/06/2025	Open			Accounts Payable	ORDUNO-CROUSE, CANDICE	$2,200.00		
6947	02/06/2025	Open			Accounts Payable	POLAR ICE LLC	$193.75		
6948	02/06/2025	Open			Accounts Payable	PURCHASE POWER	$440.00		
6949	02/06/2025	Open			Accounts Payable	RAMIREZ ADVISORS INTER-NATIONAL,LLC	$7,500.00		
6950	02/06/2025	Open			Accounts Payable	SAM'S CLUB	$310.76		
6951	02/06/2025	Open			Accounts Payable	SEBIS DIRECT INC.	$1,114.67		
6952	02/06/2025	Open			Accounts Payable	SOUTHWEST MERCH LLC	$510.23		
6953	02/06/2025	Open			Accounts Payable	SPECTRUM BUSINESS	$791.78		
6954	02/06/2025	Open			Accounts Payable	UNITED LABORATORIES INC.	$3,945.60		
Type EFT Totals:					24 Transactions		$73,925.51		

1BYPAYABLE - 1st BY Accounts Payable Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	36	$604,284.67	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	36	$604,284.67	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	24	$73,925.51	$0.00
	Reconciled	0	$0.00	$0.00

City of San Luis

Payment Register

From Payment Date: 2/3/2025 - To Payment Date: 2/7/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source		Payee Name	Transaction Amount	Reconciled Amount	Difference
					Voided	0		$0.00	$0.00	
					Total	24		$73,925.51	$0.00	

	All	Status	Count	Transaction Amount	Reconciled Amount
		Open	60	$678,210.18	$0.00
		Reconciled	0	$0.00	$0.00
		Voided	0	$0.00	$0.00
		Stopped	0	$0.00	$0.00
		Total	60	$678,210.18	$0.00

Grand Totals:

	Checks	**Status**	**Count**	**Transaction Amount**	**Reconciled Amount**
		Open	**36**	**$604,284.67**	**$0.00**
		Reconciled	**0**	**$0.00**	**$0.00**
		Voided	**0**	**$0.00**	**$0.00**
		Stopped	**0**	**$0.00**	**$0.00**
		Total	**36**	**$604,284.67**	**$0.00**
	EFTs	**Status**	**Count**	**Transaction Amount**	**Reconciled Amount**
		Open	**24**	**$73,925.51**	**$0.00**
		Reconciled	**0**	**$0.00**	**$0.00**
		Voided	**0**	**$0.00**	**$0.00**
		Total	**24**	**$73,925.51**	**$0.00**
	All	**Status**	**Count**	**Transaction Amount**	**Reconciled Amount**
		Open	**60**	**$678,210.18**	**$0.00**
		Reconciled	**0**	**$0.00**	**$0.00**
		Voided	**0**	**$0.00**	**$0.00**
		Stopped	**0**	**$0.00**	**$0.00**
		Total	**60**	**$678,210.18**	**$0.00**

Karla Plascencia

Digitally signed by: Karla Plascencia
DN: CN = Karla Plascencia email = kplascencia@sanluisaz.gov C = US O = City of San Luis OU = Finance
Date: 2025.02.07 09:29:14 -07'00'

Pay Day Register

Pay Date Range 02/01/25 - 02/28/25

Pay Batch 202502M

Pay Batch 202502M Total

Employees in Pay Batch 7

Female Employees in Pay Batch 3

Hours Description	Hours	Gross
102 - SALARY	.0000	7,550.00
806 - TELEPHONE STIPEND	.0000	50.00
Total	0.0000	$7,600.00

Withholdings and Deductions		Gross Base
Gross	7,600.00	
Imputed Income		
FEDERAL TAX WITHHOLDING	181.17	5,729.16
SOCIAL SECURITY TAX	471.20	7,600.00
MEDICARE	110.21	7,600.00
STATE WITHHOLDING	142.75	5,729.16
ASRS Council	266.64	2,200.00
ASRS LTD Council	3.30	2,200.00
Council Retirement EORP	117.00	900.00
Dental Council	92.28	.00
EODCRS - COUNCIL	356.00	4,450.00
EODCRS - DISABILITY	6.23	4,450.00
Medical Council	1,004.81	.00
Vision Council	27.88	.00
Net	$4,820.53	

Roula Jouanne de Encinas

Digitally signed by: Roula Jouanne de Encinas
DN: CN = Roula Jouanne de Encinas email = rencinas@sanluisaz.gov C = US O = City of San Luis
Date: 2025.02.13 10:36:45 -07'00'

Benefits		Gross Base
ASRS Council	266.64	2,200.00
ASRS LTD Council	3.30	2,200.00
ASRS/EORP - LEGACY RATE	1,025.64	2,200.00
Dental Council	254.03	.00
EODCRS - COUNCIL	267.00	4,450.00
EODCRS - DISABILITY	6.23	4,450.00
EODCRS/EORP LEGACY RATE	2,074.59	4,450.00
Health Council	5,844.91	.00
Retirement Council EORP	633.96	900.00
Vision Council	77.85	.00
Total	$10,454.15	

Employer Taxes		Gross Base
MEDICARE	110.21	7,600.00
SOCIAL SECURITY TAX	471.20	7,600.00
SUTA/UNEMPLOYMENT	45.60	7,600.00
Total	$627.01	

Workers' Comp		Gross Base
MUNICIPAL/ TOWN/	133.01	7,600.00
Total	$133.01	

Direct Deposits	Amount
1st Bank Yuma	1,396.60
CAPITAL ONE	728.95
Chase Bank	1,110.34
Navy Federal	167.18
Wells Fargo	717.85
Total	$4,120.92

Check $699.61

SCHEDULE B

Pay Day Register

Pay Date Range 01/25/25 - 02/07/25
Pay Batch 202504

Pay Batch 202504 Total

Employees in Pay Batch 339
Female Employees in Pay Batch 94

Hours Description	Hours	Gross
100 - REGULAR	25,768.5000	623,042.51
1001 - LEAVE WITHOUT PAY	147.2269	.00
1007 - ON CALL WORKED HOURS	29.7500	558.77
1009 - PART TIME	200.0000	2,988.88
1010 - PART TIME FIREFIGHTERS	101.2500	2,117.10
201 - OVERTIME	1,929.5000	66,352.73
202 - OP STONE GARDEN- O.T.	428.0000	20,680.08
2023 - FMLA - SICK LEAVE	126.5800	2,663.35
2024 - FMLA - VACATION LEAVE	121.4600	2,564.79
2036 - MARSHALS OT	6.0000	244.44
2038 - FMLA - LEAVE WITHOUT	101.9600	.00
210 - SRO	80.5000	2,490.79
300 - VACATION EARNED	1,375.0800	.00
301 - VACATION USED	714.6400	16,578.79
400 - SICK EARNED	1,331.9250	.00
405 - SCHEDULED SICK LEAVE	198.4500	4,771.40
406 - UNSCHEDULED SICK LEAVE	434.6200	8,640.27
501 - WC PUBLIC SAFETY USED	110.0000	2,432.10
502 - ON CALL PAY I.T.	.0000	100.00
503 - STAND-BY PAY	647.7000	1,295.40
701 - HOLIDAY	(10.6000)	(176.17)
703 - FIRE HOLIDAY USED	23.0000	382.26
704 - FIRE HOLIDAY EARNED	.0000	.00
900 - COMPENSATION EARNED	2.7500	.00
940 - PD - EDU ASST	.0000	600.00
941 - PD - EDU BCHL	.0000	600.00
942 - PD - EDU MAST	.0000	100.00
951 - PD - K-9 HANDLER	.0000	100.00
952 - PD - PHLEBOTOMIS	.0000	150.00
953 - PD - COLLISION	.0000	150.00
954 - PD - NEGOTIATOR	.0000	100.00
956 - PD - MIDNIGHT SHFT	.0000	750.00
961 - FD - EDU ASST	.0000	700.00
962 - FD - EDU BACHL	.0000	225.00
965 - PD - STAND-BY PAY	.0000	2,215.00
Total	33,868.2919	$763,417.49

Withholdings and Deductions		Gross Base
Gross	763,417.49	
Imputed Income		
FEDERAL TAX WITHHOLDING	47,306.91	659,428.79
SOCIAL SECURITY TAX	47,332.04	763,417.49
MEDICARE	11,069.45	763,417.49
STATE WITHHOLDING	14,242.37	659,428.79
AM. FIDELITY - HEALTH FSA	50.00	.00
AM. FIDELITY- ACCIDENT-POST	25.01	.00
AM. FIDELITY- ACCIDENT-PRE	540.70	.00
AM. FIDELITY- CANCER-POST	28.70	.00
AM. FIDELITY- CANCER-PRE TAX	136.15	.00
AM. FIDELITY- GCI -POST TAX	48.51	.00
AM. FIDELITY- GHI- PRE TAX	275.40	.00
AM. FIDELITY- LIFE -POST TAX	392.90	.00
AM. FIDELITY- TX LIFE -POST	173.31	.00
AZ COPS - SLPD	525.00	.00
AZ STATE RETIREMENT	51,904.83	428,257.89
CHILD SUPPORT 2	234.46	.00
DEFERRED COMP - ROTH	915.00	.00
DEFERRED COMP - ROTH	282.34	7,561.37
DEFERRED COMPENSATION	3,185.00	.00
DEFERRED COMPENSATION	514.55	7,623.88
FOP/ALC	420.00	.00
GARNISHMENT - CHILD	2,968.33	.00
IAFF- FIRE DEPT	1,510.00	.00
LEGAL SHIELD	59.31	.00
LONG TERM DISABILITY	642.42	428,257.89
MANHATTANLIFE ASSURANCE	96.51	.00
MEX ONLY DENTAL - EE &	201.52	.00
MEX ONLY DENTAL - EE &	537.24	.00
MEX ONLY DENTAL - EE &	192.36	.00
MEX ONLY HEALTH - EE & CH	570.46	.00
MEXICO ONLY HEALTH - EE &	2,044.71	.00
MEXICO ONLY HEALTH - EE &	466.74	.00
MISCELLANEOUS	130.00	.00
PAC FUND- FIRE DEPT.	123.00	.00
PS DEFERRED COMP - ROTH	705.00	.00
PS DEFERRED COMP - ROTH	275.40	2,754.00
PS DEFERRED COMP TIAA -	501.67	12,801.25

Benefits		Gross Base
ASRS ALTERNATE	738.24	7,244.80
AZ STATE RETIREMENT	51,904.83	428,257.89
DENTAL = FAMILY	457.70	.00
LONG TERM DISABILITY	642.42	428,257.89
MEDICAL MEX ONLY - EE &	1,768.00	.00
MEDICAL MEX ONLY - EE &	6,970.59	.00
MEDICAL MEX ONLY - EE &	1,591.20	.00
MEDICAL MEX ONLY - EE ONLY	551.00	.00
MEX & US HEALTH = EE	58,367.06	.00
MEX ONLY DENTAL - EE &	156.64	.00
MEX ONLY DENTAL - EE &	417.56	.00
MEX ONLY DENTAL - EE &	149.52	.00
MEX ONLY DENTAL - EE ONLY	56.98	.00
PSPRS - ALTERNATE	219.66	2,745.78
PSPRS FIRE DB NORM - TIER 1	10,856.74	85,756.29
PSPRS FIRE DB NORM - TIER 2	846.46	6,686.14
PSPRS FIRE DB NORM - TIER 3	7,025.22	79,023.74
PSPRS FIRE DB UNFUND - TIER	514.53	85,756.29
PSPRS FIRE DB UNFUND - TIER	40.11	6,686.14
PSPRS FIRE DB UNFUND - TIER	578.35	81,455.84
PSPRS POLICE DB NORM - TIER	6,769.82	67,833.81
PSPRS POLICE DB NORM - TIER	1,224.26	12,267.16
PSPRS POLICE DB NORM - TIER	4,757.63	53,516.60
PSPRS POLICE DB UNFUND -	3,005.04	67,833.81
PSPRS POLICE DB UNFUND -	543.44	12,267.16
PSPRS POLICE DB UNFUND -	2,547.41	53,516.60
STANDARD STD	3,531.11	.00
U.S. MEX DENTAL - EE &	366.62	.00
U.S. MEX DENTAL - EE &	111.58	.00
US & MEX DENTAL - EE	3,210.24	.00
US & MEX HEALTH = C	17,469.00	.00
US & MEX HEALTH = FAMILY	25,980.15	.00
US & MEX HEALTH = SP	4,367.25	.00
VISION - SINGLE	1,172.14	.00
VSP- VISION	598.50	.00
WC PSPRS 17.78	432.43	2,432.10
Total	$219,939.43	

SCHEDULE C

Pay Day Register

Pay Date Range 01/25/25 - 02/07/25

Pay Batch 202504

PS DEFERRED COMPENSATION	1,790.00	.00
PSPRS FIRE DB RATE - TIER 1a	5,343.71	69,852.29
PSPRS FIRE DB RATE - TIER 1b	1,216.66	15,904.00
PSPRS FIRE DB RATE - TIER 2	511.49	6,686.14
PSPRS FIRE DB RATE - TIER 3	7,025.22	79,023.74
PSPRS POLICE DB RATE - TIER	3,699.40	48,358.26
PSPRS POLICE DB RATE - TIER	1,489.87	19,475.55
PSPRS POLICE DB RATE - TIER 2	938.44	12,267.16
PSPRS POLICE DB RATE - TIER 3	4,757.63	53,516.60
STANDARD LIFE ADDTNL	864.51	.00
TRANSWESTERN MEXICAN	139.50	.00
U.S. MEX DENTAL - EE &	451.66	.00
U.S. MEX DENTAL - EE &	143.71	.00
UNITED WAY	14.00	.00
US & MEX DENTAL= FAMILY	589.26	.00
US & MEX HEALTH = C	5,124.24	.00
US & MEX HEALTH = FAMILY	7,620.90	.00
US & MEX HEALTH = SP	1,281.06	.00
VSP - VISION CHILDREN	257.89	.00
VSP - VISION FAMILY	369.41	.00
VSP - VISION SPOUSE	160.31	.00
Net	$529,001.32	

Employer Taxes		Gross Base
MEDICARE	11,069.45	763,417.49
SOCIAL SECURITY TAX	47,332.04	763,417.49
SUTA/UNEMPLOYMENT	4,371.11	728,529.63
Total	$62,772.60	

Workers' Comp		Gross Base
Ambulance EMT Search &	4,303.17	90,592.62
ANIMAL CONTROL OFFICERS	73.05	3,246.49
ATTORNEY- ALL & CLERICAL-	65.94	29,971.76
AUTO SERVICE/ REPAIR	299.60	10,738.38
BUILDING- NOC OPER BY	566.28	15,642.97
BUS COMPANY AND DRIVERS	90.69	1,642.85
CLERICAL OFFICE/ LIBRARY/	411.88	171,626.36
Electrician	68.58	2,184.00
FIREFIGHTERS & DRIVERS	4,313.03	90,800.15
GARBAGE/ ASH/ REFUSE	621.97	9,951.54
Homemaker Service	40.73	1,778.71
Motion Picture Production	13.98	2,151.18
MUNICIPAL/ TOWN/	859.85	49,135.26
PARKS- NOC ALL EMPLOYEES	834.09	26,906.00
POLICE OFFICERS	7,029.03	147,979.38
RECREATION- ALL EMPLOYEES/	296.30	21,628.36
SEWAGE DISPOSAL/ PLANT	1,103.20	32,070.65
Street or Road Construction	2,701.11	30,590.07
WATERWORKS OPERATIONS	859.89	24,780.76
Total	$24,552.37	

Roula Jouanne de Encinas

Digitally signed by: Roula Jouanne de Encinas
DN: CN = Roula Jouanne de Encinas email = rencinas@sanluisaz.gov C = US O = City of San Luis
Date: 2025.02.13 10:37:47 -07'00'

Direct Deposits	Amount
1st Bank Yuma	43,895.69
ACADEMY BANK	3,487.08
Ally Bank	1,490.41
AVENIR FINANCIAL	44,115.01
Bank of America	6,542.40
Bankcorp	200.00
CAPITAL ONE	2,497.89
Charles Sch	250.00
Chase Bank	248,379.37
CHASE BANK CA	1,329.26
CHASE BANK MORGAN	2,289.11
CHASE BANK TX	2,287.64
chase centro	1,815.68
discover	400.00

Pay Day Register

Pay Date Range 01/25/25 - 02/07/25
Pay Batch 202504

FF CREDIT UNION	3,072.98
FIDELITY	344.80
FIREFIGHTER FIRST CREDIT UNION	17,817.60
HUGHES FCU	1,761.88
MECHNICS BANK	217.30
National Bank	1,299.22
Navy Federal	28,450.19
NetSpend Corporation DD	120.00
NORTH ISLAND CREDIT UNION	819.15
PATHWARD	1,405.90
SOFI BANK	2,600.92
Sunbank	1,611.16
THE FOOTHILLS BANK	675.70
USAA FEDERAL SAVING	1,189.90
VANTAGE WEST	2,040.42
WASHINGTON FEDERAL	1,097.31
Wells Fargo	93,503.77
WELLS FARGO ARKANSAS	1,442.53
WELLS FARGO CA	4,179.54
WELLS FARGO YUMA	2,863.72
Total	$525,493.53
Check	$3,507.79

City of San Luis

Payment Register

From Payment Date: 2/10/2025 - To Payment Date: 2/14/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1BYPAYABLE - 1st BY Accounts Payable									
Check									
111214	02/10/2025	Open			Accounts Payable	AT&T MOBILITY LLC	$7,342.26		
111215	02/13/2025	Open			Accounts Payable	ARIZONA DEPT OF ECONOMIC SECUR	$6,903.46		
111216	02/13/2025	Open			Accounts Payable	FOP/ALC	$420.00		
111217	02/13/2025	Open			Accounts Payable	SAN LUIS POLICE OFFICERS ASSOC	$525.00		
111218	02/13/2025	Open			Accounts Payable	SUPPORT PAYMENT CLEARINGHOUSE	$3,202.79		
111219	02/13/2025	Open			Accounts Payable	UNITED WAY OF YUMA COUNTY INC.	$14.00		
111220	02/13/2025	Open			Accounts Payable	UNITED YUMA FIRE FIGHTERS ASSOC	$123.00		
111221	02/13/2025	Open			Accounts Payable	UNITED YUMA FIRE FIGHTERS-IAFF	$1,510.00		
111222	02/13/2025	Open			Accounts Payable	AFFORDABLE TOWING AND ROAD SERVICE	$400.00		
111223	02/13/2025	Open			Accounts Payable	ARIZONA FURNISHINGS	$5,606.70		
111224	02/13/2025	Open			Accounts Payable	AZUL CAFE LLC	$119.57		
111225	02/13/2025	Open			Accounts Payable	BANNER HEALTH	$84.43		
111226	02/13/2025	Open			Accounts Payable	BOUND TREE MEDICAL, LLC.	$171.44		
111227	02/13/2025	Open			Accounts Payable	BRATTON, WALT	$7,410.00		
111228	02/13/2025	Open			Accounts Payable	BUSTAMANTE, EDGAR	$200.00		
111229	02/13/2025	Open			Accounts Payable	CALIFORNIA ENVIRONMENTAL CONTROLS, INC	$85,351.23		
111230	02/13/2025	Open			Accounts Payable	CANADA-ARIZONA BUSINESS COUNCIL	$2,500.00		
111231	02/13/2025	Open			Accounts Payable	CATS ARMS, LLC	$43,977.25		
111232	02/13/2025	Open			Accounts Payable	CENTURYLINK	$103.33		
111233	02/13/2025	Open			Accounts Payable	CENTURYLINK	$5,749.64		
111234	02/13/2025	Open			Accounts Payable	CUEVAS, ALEJANDRA	$545.40		
111235	02/13/2025	Open			Accounts Payable	EMPIRE MACHINERY	$1,604.74		
111236	02/13/2025	Open			Accounts Payable	FACTOR SALES, INC.	$109.60		
111237	02/13/2025	Open			Accounts Payable	FERGUSON WATERWORKS	$3,917.79		
111238	02/13/2025	Open			Accounts Payable	FLORES, JORGE	$50.00		
111239	02/13/2025	Open			Accounts Payable	FREIGHTLINER OF ARIZONA, LLC	$792.72		
111240	02/13/2025	Open			Accounts Payable	G&T ALARM CO LLC	$78.00		
111241	02/13/2025	Open			Accounts Payable	GADSDEN ELEMENTARY SCHOOL	$500.00		
111242	02/13/2025	Open			Accounts Payable	GONZALEZ, JAVIER	$177.00		
111243	02/13/2025	Open			Accounts Payable	GONZALEZ, JAVIER	$98.00		
111244	02/13/2025	Open			Accounts Payable	HAJOCA CORPORATION	$16.98		
111245	02/13/2025	Open			Accounts Payable	HORIZON DISTRIBUTORS	$118.11		
111246	02/13/2025	Open			Accounts Payable	HUGHES FIRE EQUIPMENT, INC.	$29,593.36		
111247	02/13/2025	Open			Accounts Payable	I AM WELLNESS STUDIO, LLC	$200.00		
111248	02/13/2025	Open			Accounts Payable	JAY'S ELECTRIK LLC	$9,957.15		
111249	02/13/2025	Open			Accounts Payable	KING MARKET	$62.30		
111250	02/13/2025	Open			Accounts Payable	LA BODEGA, LLC	$464.68		
111251	02/13/2025	Open			Accounts Payable	LOWE'S HIW, INC.	$1,211.51		
111252	02/13/2025	Open			Accounts Payable	MARTIN'S CUSTOM CABINETS, LLC	$880.00		
111253	02/13/2025	Open			Accounts Payable	MUELA, CARLOS	$291.00		

SCHEDULE D

City of San Luis

Payment Register

From Payment Date: 2/10/2025 - To Payment Date: 2/14/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
111254	02/13/2025	Open			Accounts Payable	PITNEY BOWES GLOBAL FINANCIAL SERVICES LLC	$477.58		
111255	02/13/2025	Open			Accounts Payable	RADIOTRONICS, INC.	$504.00		
111256	02/13/2025	Open			Accounts Payable	RAMIREZ, FELIPE	$198.00		
111257	02/13/2025	Open			Accounts Payable	RUMBLEON DEALERS, INC.	$262.67		
111258	02/13/2025	Open			Accounts Payable	SANCHEZ, ERIC	$175.00		
111259	02/13/2025	Open			Accounts Payable	SHUCK DRILLING COMPANY LLC	$5,880.28		
111260	02/13/2025	Open			Accounts Payable	SOUTH YUMA COUNTY LANDFILL	$33,716.77		
111261	02/13/2025	Open			Accounts Payable	TECHNOLOGIES CGC INC/ TECHNIMOUNT SYSTEM	$1,015.00		
111262	02/13/2025	Open			Accounts Payable	THE WINDOOR SHOP	$277.45		
111263	02/13/2025	Open			Accounts Payable	TORO, JOSE	$280.00		
111264	02/13/2025	Open			Accounts Payable	YUMA CO. DEPT OF DEV SERVICES	$120.00		
111265	02/13/2025	Open			Accounts Payable	YUMA COUNTY CHAMBER	$2,000.00		
111266	02/13/2025	Open			Accounts Payable	YUMA COUNTY PUBLIC WORKS	$2,358.72		
111267	02/13/2025	Open			Accounts Payable	YUMA UNION HIGH SCHOOL	$500.00		
111268	02/13/2025	Open			Accounts Payable	Z TRENDS INC	$372.95		
111269	02/13/2025	Open			Accounts Payable	KEITHLY-WILLIAMS SEED, INC.	$2,327.50		
111270	02/13/2025	Open			Accounts Payable	REPUBLIC SERVICES, INC.	$3,807.88		
Type Check Totals:					57 Transactions		$276,656.24		
EFT									
6955	02/13/2025	Open			Accounts Payable	24/7 GET FIT LLC	$1,377.00		
6956	02/13/2025	Open			Accounts Payable	AMAZON WEB SERVICES INC	$1.94		
6957	02/13/2025	Open			Accounts Payable	ARIZONA PNEUMATIC SYSTEM	$1,568.97		
6958	02/13/2025	Open			Accounts Payable	ARIZONA POLICE PSYCHOLOGY, PLLC	$1,600.00		
6959	02/13/2025	Open			Accounts Payable	BILL ALEXANDER FORD	$1,516.15		
6960	02/13/2025	Open			Accounts Payable	BLUE STREAK SIGNS, LLC	$70.47		
6961	02/13/2025	Open			Accounts Payable	BORDER GYM	$275.00		
6962	02/13/2025	Open			Accounts Payable	BSN SPORTS	$219.20		
6963	02/13/2025	Open			Accounts Payable	CDWG	$1,075.29		
6964	02/13/2025	Open			Accounts Payable	CHAPMAN DCJR YUMA LLC	$1,162.61		
6965	02/13/2025	Open			Accounts Payable	CITY OF YUMA	$37,781.82		
6966	02/13/2025	Open			Accounts Payable	CONSULTANT ENGINEERING INC	$14,146.24		
6967	02/13/2025	Open			Accounts Payable	CORE ENGINEERING GROUP, PLLC	$10,858.50		
6968	02/13/2025	Open			Accounts Payable	CUEVAS, CHRISTIAN	$137.50		
6969	02/13/2025	Open			Accounts Payable	CYBER MARKETING NETWORK, INC	$132.84		
6970	02/13/2025	Open			Accounts Payable	DESERT WATER STORE INC	$487.09		
6971	02/13/2025	Open			Accounts Payable	FNP-C & ASSOCIATES PLLC	$270.00		
6972	02/13/2025	Open			Accounts Payable	G&T LOCKSMITH AND SAFE CO.	$252.86		
6973	02/13/2025	Open			Accounts Payable	GARCIA, JESUS	$275.00		
6974	02/13/2025	Open			Accounts Payable	GEO-LOGIC ASSOCIATES, INC	$8,126.19		
6975	02/13/2025	Open			Accounts Payable	HILL BROTHERS CHEMICAL CO.	$5,599.13		
6976	02/13/2025	Open			Accounts Payable	HUMANE SOCIETY OF YUMA	$5,416.66		
6977	02/13/2025	Open			Accounts Payable	LOOMIS	$1,852.93		
6978	02/13/2025	Open			Accounts Payable	LOPEZ ARMENTA, JOSE, MARTIN	$225.00		
6979	02/13/2025	Open			Accounts Payable	M & C DISTRIBUTING, INC.	$145.95		

City of San Luis

Payment Register

From Payment Date: 2/10/2025 - To Payment Date: 2/14/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
6980	02/13/2025	Open			Accounts Payable	MAYA'S CONSTRUCTION LLC.	$497.06		
6981	02/13/2025	Open			Accounts Payable	MCNEECE BROS. OIL COMPANY, INC	$40,658.47		
6982	02/13/2025	Open			Accounts Payable	MUNICIPAL EMERGENCY SERVICES, INC	$184.46		
6983	02/13/2025	Open			Accounts Payable	PACIFIC ADVANCED CIVIL ENGINEERING INC	$36,690.00		
6984	02/13/2025	Open			Accounts Payable	PULIDO INIGUEZ, ALAN FRANCISCO	$162.00		
6985	02/13/2025	Open			Accounts Payable	PURCHASE POWER	$53.96		
6986	02/13/2025	Open			Accounts Payable	REAL PURIFIED WATER LLC	$61.47		
6987	02/13/2025	Open			Accounts Payable	REPUBLIC SERVICES, INC.	$16,238.52		
6988	02/13/2025	Open			Accounts Payable	ROACH PEST CONTROL	$1,790.00		
6989	02/13/2025	Open			Accounts Payable	RWC INTERNATIONAL LTD	$2,590.35		
6990	02/13/2025	Open			Accounts Payable	SAN DIEGO POLICE EQUIPMENT CO.	$35,040.98		
6991	02/13/2025	Open			Accounts Payable	SEBIS DIRECT INC.	$2,958.71		
6992	02/13/2025	Open			Accounts Payable	SIMS MACKIN, LTD.	$337.50		
6993	02/13/2025	Open			Accounts Payable	SOUTHWEST MERCH LLC	$128.40		
6994	02/13/2025	Open			Accounts Payable	SPECTRUM BUSINESS	$204.52		
6995	02/13/2025	Open			Accounts Payable	SUN GRAPHICS	$1,048.81		
6996	02/13/2025	Open			Accounts Payable	TAYLOR ENGINEERING, PLLC	$196,624.97		
6997	02/13/2025	Open			Accounts Payable	ULINE, INC.	$114.04		
6998	02/13/2025	Open			Accounts Payable	WAXIE SANITARY SUPPLY	$1,774.72		
6999	02/13/2025	Open			Accounts Payable	WESTERN SUN SYSTEMS, INC	$2,580.00		
7000	02/13/2025	Open			Accounts Payable	WILLDAN ENGINEERING	$4,119.38		
7001	02/13/2025	Open			Accounts Payable	YUMA COUNTY RECORDER'S OFFICE	$213.00		
7002	02/13/2025	Open			Accounts Payable	YUMA SUN INC	$1,288.32		
7003	02/13/2025	Open			Accounts Payable	YUMA WINNELSON CO.	$1,691.21		
7006	02/14/2025	Open			Accounts Payable	ALSCO, INC	$2,816.26		
7007	02/14/2025	Open			Accounts Payable	AMAZON.COM SALES, INC.	$167.16		
7008	02/14/2025	Open			Accounts Payable	AUTOZONE STORES, INC	$3,280.58		
7009	02/14/2025	Open			Accounts Payable	O'REILLY AUTO PARTS	$2,197.45		
7010	02/14/2025	Open			Accounts Payable	ODP BUSINESS SOLUTIONS LLC	$2,839.10		
Type EFT Totals:					54 Transactions		$452,925.74		

1BYPAYABLE - 1st BY Accounts Payable Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	57	$276,656.24	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	57	$276,656.24	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	54	$452,925.74	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	54	$452,925.74	$0.00

City of San Luis

Payment Register

From Payment Date: 2/10/2025 - To Payment Date: 2/14/2025

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name		Transaction Amount	Reconciled Amount	Difference
				All	Status	Count	Transaction Amount		Reconciled Amount	
					Open	111	$729,581.98		$0.00	
					Reconciled	0	$0.00		$0.00	
					Voided	0	$0.00		$0.00	
					Stopped	0	$0.00		$0.00	
					Total	111	$729,581.98		$0.00	

Grand Totals:

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	**57**	**$276,656.24**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**0**	**$0.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**57**	**$276,656.24**	**$0.00**

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	**54**	**$452,925.74**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**0**	**$0.00**	**$0.00**
	Total	**54**	**$452,925.74**	**$0.00**

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	**111**	**$729,581.98**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**0**	**$0.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**111**	**$729,581.98**	**$0.00**

Karla Plascencia

Digitally signed by: Karla Plascencia
DN: CN = Karla Plascencia email = kplascencia@sanluisaz.gov C = US O = City of San Luis OU = Finance
Date: 2025.02.14 09:17:14 -07'00'

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. A.**

Meeting Date: 02/26/2025

Department Head: Eulogio Vera, Director of Public Works, Public Works Department

Submitted By: Jorge Perez, Assistant Director of Public Works, Public Works Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the selection and purchase of new headworks and grit removal systems for the West Wastewater Treatment Plant expansion project. **(Jorge Perez, Assistant Director of Public Works)**

SUMMARY:

The City of San Luis is currently working with its consultant, Pacific Advanced Civil Engineers ("PACE") on the design of the West Wastewater Treatment Plant expansion. The expansion will double the treatment capacity of the plant and take it from 1.5 Million Gallons a Day ("MGD") to 3 MGD. The expansion also entails a treatment process change from a Sequential Batch Reactor ("SBR") to a Membrane Bioreactor ("MBR"). By doing this treatment process, the city will produce better quality water that can be reused for irrigation purposes, for example. At this time, the City has completed the request for qualification ("RFQ") process for the selection of Construction Manager at Risk (CMAR) for the wastewater plant expansion. Currently, we are undergoing negotiations for the pre-construction services contract, which we will be presenting before the council at a later meeting.

The transition to MBR equipment entails additional changes to the plant and its equipment. Regardless of the treatment process, the headworks process is critical to all wastewater treatment plants. With that said, MBR plants require fine screens in their headworks section to maintain reliable and efficient membrane operation. There are various headworks (fine screen) vendors that could provide the equipment that the plant will require for the expansion. In an effort to make the best selection of the equipment for the City, PACE produced a performance-based specifications document and, in representation of the City of San Luis, conducted a request for proposal process. In response, we received three proposals for the headworks and grit removal equipment from the following manufacturers: Hydro-Dyne Engineering, Huber Technology, Inc., Kusters Water (Two alternatives provided), and Smith and Loveless. PACE thoroughly reviewed all three equipment proposals and produced a technical memorandum and recommendation to the City of San Luis.

In order to compare each manufacturer's proposal, evaluation criteria were established and assigned a weight; the higher the weight, the more critical the aspect is to the project. Each equipment solution proposed was rated on a scale, with the highest score indicating the most competitive or best. For each criterion, the score and the weight were multiplied together. The sum of the multiplied numbers for each equipment/process system solution was used to arrive at the total score for each manufacturer's proposed system.

Recommendation:

All of the manufacturer's proposals for the MBR systems met the requirements of the performance-based specifications. The city has expressed the importance of lower capital and operating and maintenance ("O&M") costs, equipment performance, and ease of operation. Based on

the Criteria Ranking developed as part of the performance-based specifications, Hydro-Dyne Engineering, Inc. scored the highest and is the recommended manufacturer to supply the complete headworks and grit removal process equipment for the City of San Luis West Wastewater Treatment Plant Phase 1 MBR Upgrades.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE THE HYDRO-DYNE ENGINEERING, INC. BID OF $1,510,550.00 FOR THE WEST WASTEWATER TREATMENT PLANT EXPANSION PHASE 1 UPGRADES TO BE SPENT OVER THIS AND THE NEXT FISCAL YEAR AND AUTHORIZE APPROPRIATE STAFF TO TAKE ALL ACTIONS NECESSARY TO FINALIZE THE PURCHASE PAYMENT SCHEDULE.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City and Federal
TOTAL:	$1,510,550.00
BUDGETED AMOUNT:	$6,000,000.00
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Capital Outlay - CIP / 310-311-90015 - $4,203,872.87

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

Public Works budgeted $6,000,000.00 for FY25 to cover the following expenses:

- Project Design
- CMAR pre-construction Services
- Procurement of equipment

It is likely that this year, the City will only cover 35% of the cost through progress payments, given that equipment will not arrive until FY26.

Attachments

PACE's Technical Memo Recommendation

Hydro-Dyne Proposal

Request for Proposal (RFP)

Technical Memorandum



Exp. 12-31-26

Date: January 14, 2025

To: Eulogio Vera– City of San Luis

From: Duong Do, PE – PACE

Re: City of San Luis West WWTP – Headworks and Grit Removal Recommendations #B777

At the direction of the City of San Luis, PACE has prepared the following evaluation to assist the City in the selection of the new complete headworks and grit removal system as part of the City of San Luis West Wastewater Treatment Plant (WWTP) Phase 1 MBR Upgrades. PACE prepared a performance-based specification and sent Requests for Proposals (RFPs) to manufacturers for a new, complete packaged influent headworks and grit removal system to include 6mm & 2mm screening, grit removal, horizontal and vertical conveying, washing, dewatering, an automatic/endless bagging system, and a prepackaged electrical control system. The stated equipment design parameters are based on the following criteria:

WWTP Conditions:

Project Location:	San Luis West WWTP, San Luis, AZ
Treatment Facility Design Flow:	3.0 MGD (MMADF)
Wastewater Type:	Domestic
Treatment Process:	BNR Activated Sludge with MBR Secondary Treatment
Site Elevation:	Approximately 100 ft.
Equipment Exposure:	Outdoor with Shade Canopy

Performance Requirements:

Minimum Number of Identical Trains:	2
Design Flow/ Train:	3.0 MGD
Peak-hour Flow/ Train:	7.5 MGD
Maximum Fine Screen Clear Opening:	6 mm (0.25”)
Maximum MBR Screen Clear Opening:	2 mm (0.08”)
Minimum Grit Removal:	90% of 2.65 specific gravity grit greater than 60 Mesh (0.25 mm)

The following manufacturers provided proposals:

- **Hydro-Dyne Engineering**
- **Huber Technology, Inc.**
- **Kusters Water (Alternatives 1 & 2 Provided)**
- **Smith and Loveless (Disqualified[1])**

[1]The proposal from Smith and Loveless has been disqualified due to the omission of the specified 2mm fine screen in their submission package, rendering it ineligible for further evaluation in the analysis process.

Proposing manufacturers/vendors were tasked with provided a complete influent fine screen headworks and grit removal system; which is to be designed, fabricated, and supplied based on the following general requirements:

A. The 6mm fine screen shall have a screening openings of 6mm (¼”), a screenings hopper, a screenings conveyor/washer/compactor auger with drive unit and discharge chute with an automatic/endless bagger unit.

B. Grit Vortex Inducing/Chamber Processing Equipment: the grit vortex chamber will be installed integral to the headworks and grit removal structure. The grit vortex device shall include all necessary devices (baffles, impeller paddles, etc.) to promote collection of grit particles within the center of the grit chamber.
C. The 2mm fine screen shall be a center-flow band screen or in-channel drum screen with a perforated screening basket with openings of 2mm (0.08”), a screenings hopper, a screenings conveyor/washer/compactor auger with drive unit and discharge chute with an automatic/endless bagger unit. The screen shall be designed with no bypass or overflow of the peak-hr design flow.
D. The screening equipment shall produce dewatered screenings capable of passing the EPA Paint Filter Test as described in method 9095 of EPA Publication SW-486.
E. Operation of the screens and its screenings wash and auger system shall be automatically initiated at a preset high liquid level (or differential pressure) and shall include a timer-mode operation as a backup. Screens that operate continuously or via timer only will not be acceptable.
F. Unless otherwise specified in these specifications, the entire equipment shall be manufactured from 304 austenitic stainless steel shapes (rods, angles, and channels), pipes, and sheets. All anchoring systems shall be 316 SS. All mechanical parts shall be designed to handle the forces that may be exerted on the unit during fabrication, shipping, erection, and during normal operation.
G. To minimize odors and nuisance, the complete headworks system shall be sealed and gasket-covered with flanged connections for odor control. Areas of the headworks that required access for inspection/ maintenance shall have hinged and gasketed access covers. All covers that also serve as access way and all access platform and stairway shall be pedestrian-rated. All elevated access shall be installed with a handrail system meeting OSHA requirements and the severe corrosive environment.
H. The headworks system shall also include spray wash system(s) for both the screening and grit removal, as needed, and flanged inlet and outlet connections.
I. All electrical components, enclosures, and instruments shall be rated for the environment in which they are installed (Meeting NFPA 820 Classifications for the installation area: Class 1, Div. 1; Class 1, Div 2; etc.).

Evaluation:

In order to compare each manufacturer’s proposal, evaluation criteria were established and assigned a weight; the higher the weight, the more important the aspect is to the project. Each equipment solution proposed was rated on a scale, with the highest score indicating the most competitive or best. For each criterion, the score and the weight were multiplied together. The sum of the multiplied numbers for each equipment/process system solution was used to arrive at the total score for each manufacturer’s proposed system. The equipment with the highest total score shall be the recommended selection. The criteria definitions are listed below, with the Evaluation Criteria Scoring following in Table 1. **Recommendation of a vendor or equipment system does not guarantee the selection or purchase of the equipment, but serves as a decision tool for the City staff to make the final purchase determination.**

Criteria Definitions

Capital Cost:	The cost to purchase and deliver the complete equipment F.O.B. jobsite. Each vendor with proposal costs within 5% of the lowest is scored the same. The evaluation of capital costs will also be associated with the evaluation of the installation requirements, as this criterion considers equipment footprint. Structural or process components, such as structural concrete flow channels, that are not included in the vendor’s scope but is necessary for the process and access will be added to the capital cost by the Owner (if not included in the vendor’s scope of supply).
10-Year Life Cycle Cost:	Evaluation of capital cost, power; O&M over 10-year period in today’s value based on a 5% interest rate. The O&M cost shall be derived from the *Full Maintenance & Repair Contract* and power cost.

Full Maintenance & Repair Service Contract:	Ranking will be tied into the 10-Year Life Cycle Cost ranking. The Contract shall cover a period of the first 5 years with the City's option to extend for an additional 5-year period. The contract shall include site visits by manufacturer's certified service technicians to perform all repairs, replacements, and maintenance services, including but not limited to seal replacements, bearing services, equipment replacement, electrical and controls components, etc., as well as any repairs that results from operating the headworks under site operating conditions defined within these specifications; any repairs that can result from the installation environment at the WWTP, including temperature, moisture, etc.; and any repairs or upgrades needed to maintain system performance guarantee. The contract shall include parts, labor, travel and any other expenses required to perform the work. The service shall include a minimum of one annual site visit by a certified service technician for inspection and service. Each manufacturer shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or equipment malfunction. Each manufacturer shall propose a guaranteed onsite response time once it is determined that a technician will be required to be onsite to address the problem. The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the manufacturer will pay <u>liquidated damages of $500 for each day of delay.</u> Each manufacturer shall provide a list of incidental maintenance items that the City can perform to minimize the need for the manufacturer's service technician to be onsite. An example of incidental maintenance is performing a greasing, lubrication, or any similar activities. All equipment parts for incidental maintenance shall still be provided by the manufacturer. The cost of the future 5-yr and 10-yr options will be based on present day cost and shall be tied to an inflation rate of no more than 1% increase per quarter or to the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall – whichever of the two is lower. The City shall have the option to accept the Maintenance and Repair Service Contract.
Performance:	Meets the performance requirements identified in the General Design Requirements. Where applicable, the City, at their discretion, may request shop/factory, or field testing, or referenced party site visits to verify stated performance of equipment. The manufacturer shall assist in coordinating requested site visits/testing for the City.
Reference List:	List of similar equipment installations, including WWTP capacity; type of units, number of units; reference contact information (WWTP name, location, person, phone number). Each vendor shall provide an installation list with contact information for a minimum of 3 systems in operation with a configuration that consists of grit system and 2mm perforated fine screen in the United States of America (no more than 5 references). A minimum of one (1) of the three referenced projects shall include the headworks system in front of an MBR WWTP process. Installations shall be of comparable model and design requirements (i.e., facilities with treatment capacity from 1-5 MGD capacity). The term "installations" shall mean individual projects/contracts. Multiple equipment units for a project will be considered as one

(1) installation toward meeting the experience requirements. Installations shall be only those in the United States (fifty states). Confirmation that the installed equipment is in good standing with the customer and customer feedback will be used as part of the proposal scoring process. The City will require a minimum of three references' feedback (of which a minimum of 1 will be for installations at an MBR WWTP). The City will make a good faith attempt to contact a maximum of five references in order to obtain the feedbacks.

Each successful reference shall be asked to rank their overall experiences from 1 – 10 (10 being highest). Scores will be based on average ranking from the responsive references. At minimum, 3 references will be scored. If there are less than 3 responsive references, non-responses will be given a ranking of 1. For example, if only 2 references responded, then a score of 1 will be given to the missing third reference. The average of the three scores will be used in the evaluation. The City reserves the right to contact additional references. If additional references are contacted by the City, those references will be averaged into the score.

Reference installations within the State of Arizona are preferred in order to provide the City/WWTP Operators with ease in coordinating site visits and corresponding with other relatively local Cities and WWTP Operators regarding equipment performance, service, etc. See also performance and fabrication definitions.

Bids from manufacturers lacking the U.S. installation requirements, but meeting all technical and performance requirements of these specifications, may be considered by the City if the manufacturer provides a satisfactory seven (7) year performance bond in lieu of evidence of experience and operation. The performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona. The cost of such bonding shall be included in the Base Bid price at the time of proposal.

Fabrication:

Proposals will be reviewed and graded by the City to determine the quality of materials used in the fabrication of the complete system as stated in the vendor's provided CSI specifications. The City, at their discretion, may request site visits of existing installations to view completed and operational systems, which are representative of the quality the manufacturer is proposing. The manufacturer shall assist in coordinating requested site visits for the City. Refer also to the Reference List Definition.

Delivery Schedule:

Proposed equipment will be at the job site when needed. Submittals shall include a schedule outlining the anticipated time to develop submittals, and construct equipment and deliver to job site. The schedule shall be broken down into submittal preparation period, fabrication time, and delivery time. The total time required from notice of selection to arrival of equipment on site shall be clearly indicated.

Service:

Location of nearest service center, availability of spare parts; quality of service provided. Each vendor shall list the nearest service and support center to the project location. Distance from the project site shall be included along with the services provided by the location. Due to the geographic location of the project, equipment service may be an issue for the City in the past. Vendors with relatively "local", and/or expeditious Service Supply and Part Center's, fully stocked with equipment consumables and spare part inventory will be scored higher under this Criterion.

Completeness of Supply: The completeness of the proposal to include all the necessary equipment and ancillaries that will be required to meet the performance requirements as stated herein. Proposals, at the determination of the City, not conforming to the requirements of these specifications may be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Completeness of Response: The completeness of the proposal in terms of supplying all requested information within the RFP. Proposals, at the determination of the City, not providing all requested information within this RFP may be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Performance Bond: Willingness to agree to terms of the Performance Bond *(Exhibit B)* and to provide a performance guarantee for a minimum of 2 years on the equipment, with the ability to extend the Bond to match the lifetime of the extended Warranty (if chosen). The costs associated with extending the Performance Bond will be provided as a separate line item. Proposals not accepting the terms of the bond will not be considered. The Performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona.

Recommendation:

All of the equipment package proposals for the combined headworks and grit removal system met the requirements of the Performance-based specifications with the exception of Smith and Loveless. Smith and Loveless failed to include 2mm screening within their proposal. The City has expressed the importance of lower capital and O&M costs, equipment performance, and service. Based on the Criteria Ranking developed as part of the Performance-based specifications, Table 1 tabulated the results of the criteria ranking:

Table 1 – Evaluation Criteria Scoring

Criteria	Weight	Hydro-Dyne	Huber	Kusters (Alternative 1)	Kusters (Alternative 2)
		Scoring Scale 1 – 4			
Capital Cost	*10*	2.5	1	4	2.5
10-Year Life Cycle Cost	*8*	2.5	2.5	2.5	2.5
Performance	*10*	4	3	1.5	1.5
Reference List	*8*	3.5	3.5	1.5	1.5
Fabrication	*7*	4	2	2	2
Delivery Schedule	*3*	2.5	2.5	2.5	2.5
Service	*4*	2.5	2.5	2.5	2.5
Completeness of Supply	*Y / N*	Yes	Yes	Yes	Yes
Completeness of Response	*Y / N*	Yes	No	No	No
Performance Bond	*Y / N*	Yes	No	Yes*	Yes*
Summary		**158.5**	**119.5**	**118.5**	**103.5**
Rank		**1**	**2**	**3**	**4**

NOTE: Total combined score for each criteria equals 10.
*Kusters provided the cost of a performance bond but did not include any additional bond terms within their proposal.

Hydro-Dyne Engineering, Inc. scored the highest with a total score of 158.5 and is the recommended manufacturer to supply the complete headworks and dewatering process equipment for the City of San Luis West WWTP Phase 1 MBR Upgrades.

The following sections discuss the evaluation criteria and weighing parameters used for the scoring and the overall recommendation.

Capital Cost (Weight = 10):

The proposals were scored based on overall capital cost, which includes the overall costs of the combined headworks and grit removal equipment, FOB jobsite delivery, manufacturer installation/start-up services, and structural or process components, as summarized in Table 2 below. The capital cost criterion favors Kusters Alternative 1 with a cost difference of $315,169 (~16% difference) from the next lowest capital cost proposal from Hydro-Dyne. No proposal costs were within 5% of the costs from Kusters Alternative 1 proposal; as such, Kusters Alternative 1 was scored the highest for this criterion. As the equipment capital costs of Hydro-Dyne and Kusters Alternative 2 had a difference of $37,034 (~2% difference) and were within 5% of each other, they will be scored the same. The difference between Kusters Alternative 2 and Huber was $128,572 (~6% difference), as they were greater than 5% apart, Huber will be scored the lowest under this criterion.

Table 2 - Capital Cost Analysis

	Hydro-Dyne	Huber	Kusters 1	Kusters 2
6mm Bar Screen Equipment and Accessories	$445,422	$554,302	$138,700	$216,827
2mm Bar Screen Equipment and Accessories	$760,710	$715,229	$243,125	$243,125
Washer Compactor Equipment and Accessories	Included	Included	$196,130	$106,626
Grit / Classifier Equipment and Accessories	$266,418	$518,541	$158,595	$158,595
Misc. Equipment	Included	By Others	$23,248	$23,248
Structural Components	$742,000[1]	By Others	$655,020	$655,020
Manufacturer Site Services	$16,000	$96,134	$10,950	$10,950
Freight (FOB Jobsite)	$16,000	$85,251	$46,283	$46,238
Spare Parts and Consumables	$6,000	-	-	-
Equipment Capital Cost	**$2,252,550**	**$2,418,156[2]**	**$1,937,381[2]**	**$2,289,584[2]**
Score	**2.5**	**1**	**4**	**2.5**
BABA Compliance Adder	Included	Not Available	$8,460	$10,004

[1]The cost of structural components for the Hydro-Dyne system was estimated as $2,000 per cubic yard of concrete at 371 cubic yards.
[2]If the total equipment capital cost is not the sum of all parts, the total equipment capital cost will be the value provided in Exhibit C and is assumed to include all structural and misc. components.

It is not included within the Capital Cost Analysis, but there would be no cost for the Hydro-Dyne system to reach BABA compliance, there would be minimal cost for the Kusters Alternatives to reach BABA compliance, and BABA compliance is not offered/available to the Huber system.

10-Year Life Cycle Cost (Weight = 8):

The scoring criteria for the 10-Year Life Cycle cost (LCC) is determined from capital cost, power cost, and 10-year O&M cost. As the O&M cost “shall be derived from the *Full Maintenance & Repair Contract* and power cost”, the only way the O&M cost could be estimated equally would be if each manufacturer agreed to the specified Full Maintenance and Repair Contract that PACE provided. Kusters was the only manufacturer to provide pricing for the Full Maintenance and Repair Contract without any exclusions/exceptions noted. Both Huber and Hydro-Dyne provided options for maintenance contracts, but both manufacturers made exceptions to the contract provided within the RFP.

As the O&M cost could not be accurately estimated from the Full Maintenance and Repair Contract, the 10-year O&M cost could be estimated from a combination of part replacement schedule & cost and the estimated power cost. Huber did not provide a part replacement schedule that included the cost of replacement items, or a maintenance schedule with required time to complete each task. Kusters provided information on all motorized components and a replacement schedule (with

costs of each replacement item) for both Alternatives, but they did not provide the estimated time required to complete each maintenance task.

As each of the required components to calculate and score the 10-year LCC are either missing or provided differently between the manufacturers, a series of assumptions would be required to estimate the 10-Year LCC. The following assumptions could be made: average maintenance man-hours are comparable between manufacturers, average replacement parts are comparable in cost, all motor efficiencies are the same, and all motor operating hours are the same. Each of the assumptions required to estimate 10-year LCC would result is an estimate that is incredibly similar between all manufacturers. Due to the lack of comparable information provided, the 10-Year Life Cycle Cost will not be scored and will be removed from the final analysis and recommendation; as a result, all vendors were scored the same.

Performance (Weight = 10):

The Performance Specifications required the following minimum performance requirements from the combined headworks and grit removal equipment:

Minimum Number of Identical Trains:	*2*
Design Flow/ Train:	*3.0 MGD*
Peak-hour Flow/ Train:	*7.5 MGD*
Maximum Fine Screen Clear Opening:	*6 mm (0.25")*
Maximum MBR Screen Clear Opening:	*2 mm (0.08") (Perforated)*
Minimum Grit Removal:	*90% of 2.65 specific gravity grit greater than 60 Mesh (0.25 mm)*
Maximum Flow Through Velocity:	*3.0 f/s*

In addition to these requirements, all controls necessary for fully automatic operation of the combined headworks and grit system were required within a minimum of 2 identical enclosures (1 for each train).

It is anticipated that all of the proposed equipment packages will meet the required performance criteria; however, the Huber proposal is lacking pertinent performance information to deem it complete and the Kusters proposal included only a single reference that had operational problems with the equipment and ultimately refused to score the Kusters system.

The Hydro-Dyne proposal included the required design calculations, specifications, signed conformance statement, and positive references. The Hydro-Dyne provided a complete proposal with the required information for evaluation. The equipment and performance data provided indicate that the Hydro-Dyne system all the requirements within the Performance category; as such, they will be scored the highest. The Huber proposal failed to include design calculations or a statement from a representative of the company stating that the system will meet the performance requirements of the RFP. Due to the lack of performance information provided and the lack of a statement guaranteeing conformance with the specifications, the Huber proposal was scored below the Hydro-Dyne proposal.

Both alternatives of the Kusters proposal included design calculations and a signed statement indicating that the provided systems will meet the requirements stated within the RFP, but only 1 reference was provided within the Kusters proposal. The sole Kusters reference stated that there have been continuous problems with the provided equipment and that is has never worked consistently or as intended. The reference declined providing a score for the system (See **Reference List** section below). As only 1 reference was provided, the reference had negative comments for the Kusters system, and Kusters took exception to providing the 7-Year Performance Bond in lieu of installation references, the Kusters proposals will be scored the lowest in terms of Performance.

Table 3 - Performance Analysis

	Hydro-Dyne	Huber	Kusters #1	Kusters #2
Design Flow (MGD)	3	3	3	3
Peak-Hour Flow (MGD)	7.5	7.5	7.5	7.5
Coarse Screen Type	Perforated Plate Centerflow Band Screen	Multi-Rake Bar Screen	Perforated Plate Filter Screen	Perforated Plate Centerflow Band Screen
Coarse Screen Clear Opening Size (In.))	0.25	0.25	0.25	0.25
Fine Screen Type	Perforated Plate Centerflow Band Screen	Perforated Centerflow Drum Screen	Perforated Plate Centerflow Band Screen	Perforated Plate Centerflow Band Screen
Fine Screen Clear Opening Size (In.)	0.08	0.08	0.08	0.08
Grit System Design Particle Specific Gravity	2.65	Not Stated	Not Stated	Not Stated
Grit Capture Efficiency of 0.25 mm Particle at AADF (%)	95	Not Stated	Not Stated	Not Stated
Grit Capture Efficiency of 0.25 mm Particle at PHF (%)	95	Not Stated	Not Stated	Not Stated
Guarantee / Conformance Statement Provided (Y/N)	Yes	No	Yes	Yes
Score	**4**	**3**	**1.5**	**1.5**

Reference List (Weight = 8):

The proposals were ranked on the references provided from previous projects. Each vendor was required to provide a minimum of 3 references for systems that are in operation in the United States of America that contain a 2mm perforated screen and a grit system. It was required that one of the references pertained to a headworks system upstream of an MBR facility. The references were called at random until a minimum of 3 responses were obtained, any uncontacted references or references not meeting the scoring criteria provided in the **Criteria Definitions** were counted as 1 and marked with an X.

Among the provided vendor RFPs, Hydro-Dyne and Huber were the only vendor in which communication was established with 3 references. Kusters provided only 1 reference; the reference stated that the equipment has had many problems and has never worked consistently since it began operation. When asked to provide a rating for the system, the Kusters reference declined so the score was recorded as a 1. It was noted within the **Criteria Definitions** that any manufacturer that lacked the U.S. installation requirements (references) may be considered if the “manufacturer provides a satisfactory seven (7) year performance bond in lieu of evidence of experience and operation.” Kusters explicitly took exception to this requirement and did not provide the 7-Year Performance Bond. Without a single positive reference and exceptions taken to the Performance Bond, PACE does not believe that the Kusters system should be chosen. Huber and Hydro-Dyne were both scored the same and the Kusters submittals were both scored as the minimum available score of 1.

Table 4 - Reference Analysis

Top Three Reference Scores	Hydro-Dyne	Huber	Kusters (Alternative 1)	Kusters (Alternative 2)
	Scoring Scale 1 – 10			
Reference #1	10	10	1	1
Reference #2	9	9	X	X
Reference #3	9	8	X	X
Summary	**9.3**	**9**	**1**	**1**
Score	**3.5**	**3.5**	**1.5**	**1.5**

Fabrication (Weight = 7):

The proposals were scored based on fabrication, including the quality and materials of construction of both major and ancillary equipment for each of the proposed combined headworks and grit removal systems. It was requested within the RFP that each of the manufacturers provide CSI specifications of their major pieces of equipment as well as layout views. All of the primary components within the submittals contain high quality and durable equipment which is fabricated and erected in methods consistent with the provided Performance-based specifications / RFP.

Hydro-Dyne was given the highest score as all primary components are made of stainless steel, and Hydro-Dyne performs pickle and passivation in-house. Hydro-Dyne was also the only manufacturer that provided the requested CSI specifications for their equipment and the only manufacturer that has equipment that is inherently BABA compliant. Hydro-Dyne has proprietary sealing mechanisms that are constructed of stainless steel as opposed to soft components, the stainless steel seals reduce and prevent wear and erosion and ensure the longevity of operation. Hydro-Dyne also provided statements indicating that their system is compatible with Dupont, Kubota, and Veolia MBR systems.

The submittal by Kusters does not indicate that any of their equipment is pickled and passivated, but Kusters is the only manufacturer that provided an entire headworks and dewatering system that is completely contained within a pre-fabricated support structure, complete with stairs, handrails, grating, and equipment access. Kusters failed to provide CSI specifications for the equipment, but both Kusters' Alternatives contain equipment that is assumed to be manufactured in the same location with the same quality of materials; as such, they will be scored the same. Like Kusters, Huber failed to provide CSI specifications for their equipment, but they do indicate that their equipment is pickled and passivated. Based on the information provided, there is not enough data to differentiate the scores between Huber and Kusters; as such, they will be scored the same.

Table 5 - Fabrication Scoring

Fabrication	Hydro-Dyne	Huber	Kusters 1	Kusters 2
Score	**4**	**2**	**2**	**2**

Delivery Schedule (Weight = 3):

The delivery schedule was based on three durations provided in the proposals: time required to develop submittals, time required to fabricate equipment, and time required to deliver the fabricated equipment. The time required to develop submittals is the amount of time it would take to finalize the drawings. Fabrication time is the amount of time it would take to manufacture the equipment/system. Delivery time is the amount of time required to deliver the equipment to the site once it is manufactured. Timeframes were requested in values of months, but some submittals provided time periods in terms of weeks; in order to standardize the timeframes, each week is converted to 0.23 months (4.0 weeks equals approximately 1 month) and rounded to 2 significant digits.

Table 6 - Delivery Schedule Analysis

	Hydro-Dyne[1]	Huber[1,2]	Kusters (Both)
Submittal Period (months)	1.4	1.8	3
Fabrication Period (months)	6.0	7.8	5.5
Delivery Period (months)	0.23	-	0.50
Total (months)	**7.6**	**9.6**	**9**
Score	**2.5**	**2.5**	**2.5**

[1] Hydro-Dyne and Huber delivery dates were converted from weeks into months with a factor of 1 week = 0.23 months
[2] Huber Delivery Period is included within Fabrication Period.

As all of the delivery timelines are within the project schedule, PACE does not believe there is enough of a reason to deduct points from any manufacturer/submittal: all submittals will be scored the same.

Service (Weight = 4):

The proposals were scored based on equipment service capability and the location of the nearest parts distribution center for each of the manufacturers. All manufacturers have similar service capability, so the scoring of this criterion was based solely on the location of the nearest parts distribution center to the City of San Luis West WWTP. As each of the part distribution centers are located approximately the same distance from the proposed facility (within 60 miles of each other), they will be scored the same.

- Hydro-Dyne: Clearwater, FL (1,926 miles)
- Huber: Charlotte, NC (1,951 miles)
- Kusters: Spartanburg, SC (1,891 miles)

Table 7 - Service Scoring

Service	Hydro-Dyne	Huber	Kusters (Both)
Score	**2.5**	**2.5**	**2.5**

Completeness of Supply (Weight = y/n):

Each proposal was evaluated for completeness of supply based on the manufacturer's proposals including all necessary equipment and ancillaries that would be required to meet the performance requirements of the RFP. The proposals of Hydro-Dyne, Huber, and Kusters all met the stated requirements of the RFP.

Completeness of Response (Weight = y/n):

Each proposal was evaluated for completion of response based on the manufacturer's proposals meeting the minimum proposal requirements as provided in the "Proposal Requirements" section of the RFP. This includes providing sufficient information so that no outside inferences are required. The proposals of Huber, Hydro-Dyne, and Kusters generally met the minimum requirements for supplied screening and grit removal (based on overall supply and fabrication requirements), but only Hydro-Dyne provided sufficient information to qualify their proposal and response as being complete, and were therefore ranked as "Yes" under this criterion.

The Huber and Kusters proposals were ranked as "No" under this criterion as their proposals omitted information to deem it complete. The Huber proposal failed to include specifications for their equipment, any design calculations, the requested drawings (no drawings were provided for the 2mm RPPS Fine Screen nor the entire system layout), a detailed description

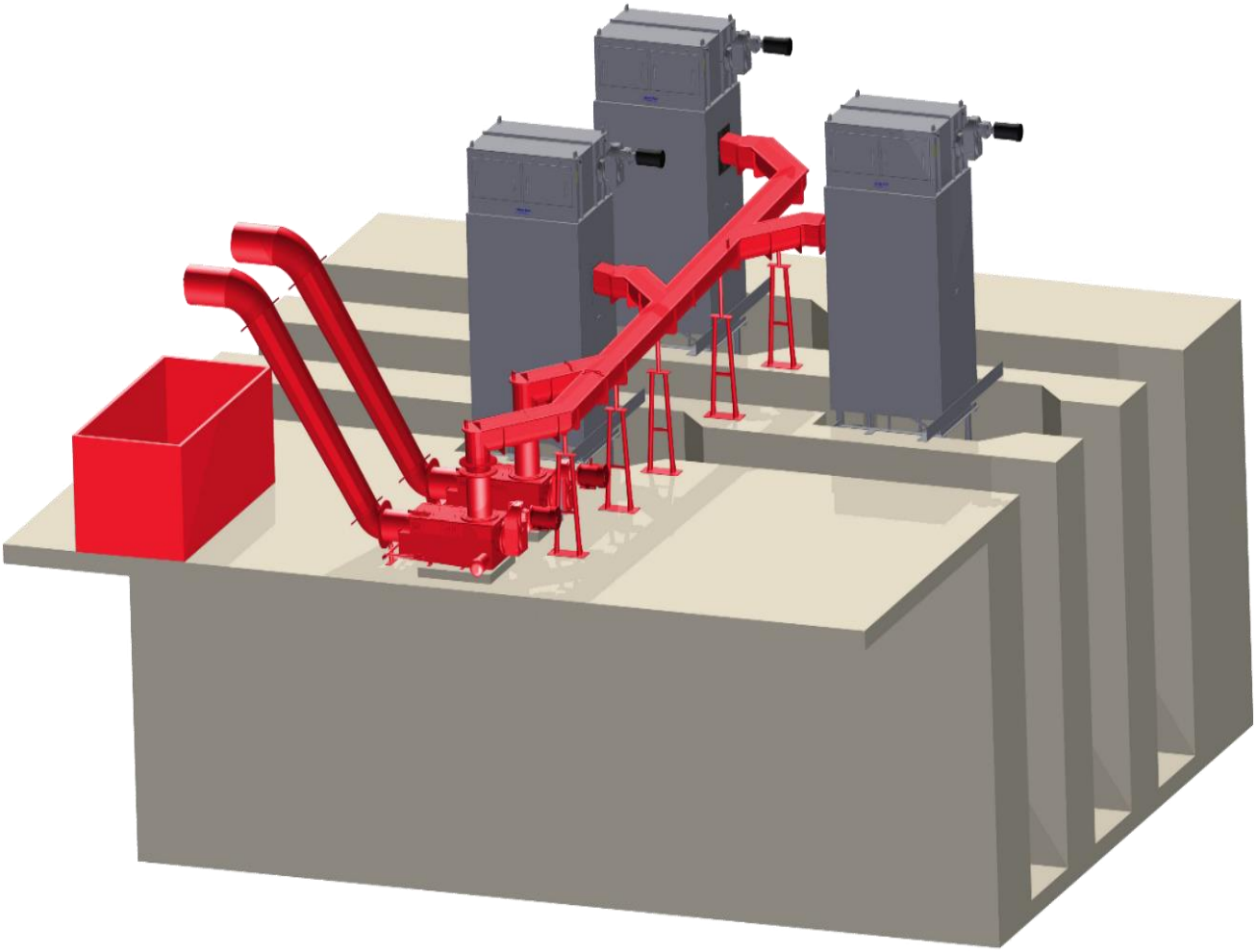
of their automation capability, or a signed Guarantee/Conformance statement indicating compliance with the specifications. The Kusters proposals failed to include the required references, equipment specifications, and O&M Manual.

Performance Bond (Weight = y/n):

The proposals were ranked on willingness to agree to the terms of the Performance Bond and to provide a performance guarantee for a minimum of 2 years on the equipment. Out of the 3 manufacturers, only Hydro-Dyne provided a written statement indicating willingness to provide a Performance Bond on their equipment with a policy-holder rating of “A+” and financial class rating of “Class XV”.

The response from Huber failed to include information pertaining to the details and willingness to provide a Performance Bond on the equipment. Without supplemental information, PACE will not provide Huber a “Yes”. The submittals by Kusters state: “Bonding or bonding expenses are not included in this proposal and will not be considered unless specifically identified and authorized by Zima Corporation prior to the bid.” There is no definitive “identified and authorized” performance bond within the submittal, but they did provide the pricing to provide a performance bond; as such, PACE will record Kusters as a “Yes*”.

GREAT WHITE CENTER FLOW SCREENS, WHITETIP SHARK WASHING COMPACTORS AND GRIT PACKAGE PROPOSAL FOR SAN LUIS WEST WWTP SAN LUIS, AZ DECEMBER 13, 2024



ORIGINAL EQUIPMENT MANUFACTURER

HYDRO DYNE ENGINEERING
DESIGNED TO PROTECT. BUILT TO PERFORM.™

4750 118th Avenue North • Clearwater, Florida 33762
Phone: 813-818-0777 • Fax: 813-818-0770

HYDRO DYNE® ENGINEERING

Designed to Protect.
Built to Perform.™

Mr. Randall Dow, Sales and Marketing Director
Hydro-Dyne Engineering
4750 118th Avenue North
Clearwater, FL 33762

December 13, 2024

To: PACE
Attention: Nathaniel Tesch,
Ref: REQUEST FOR PROPOSALS ("RFP")
San Luis – West WWTP
San Luis, AZ

Dear Mr. Tesch:

Thank you for opportunity for Hydro-Dyne Engineering ("Hydro-Dyne") to offer equipment and services for the San Luis, AZ – West WWTP Project. We are an ISO 9001:2015 certified and BABA compliant, in-house US manufacturer of custom screening and grit removal equipment, uniquely qualified to design and manufacture the multi-stage Center Flow screening equipment and grit removal equipment for San Luis, AZ.

Hydro-Dyne prides itself on making high-quality equipment. Our patented designs are simple and robust and therefore reliable. Some of our older screens have been in service for 30 years or more. There are no submerged sprockets, bearings, or chains that need to be maintained or fixed, much less allow rags to wrap around them. Our products are always made of stainless steel that we pickle and passivate in-house.

I wish to highlight specific RFP evaluation criteria:

1. BABA Compliance – Hydro-Dyne can provide a system that is fully compliant with BABA requirements at no additional cost or extension of delivery schedule. Included is an Appendix "BABA Compliance Certificate and Factory Overview" with our BABA Certification.

2. Capital Cost – Hydro-Dyne price reflects the value we provide in our equipment design, the quality of our US based manufacturing and the industry's lowest cost to maintain equipment. Hydro-Dyne has taken exception to several RFP requirements (see Exhibit D), in order to provide the most competitive capital equipment offer.

   Hydro-Dyne is quoting an upgraded enhanced washing compactor which exceeds the RFP requirement to produce dewatered screenings capable of passing the EPA Paint Filter Test as described in method 9095 of EPA Publication SW-486. Smaller opening (6mm and smaller) perforated plate screens may remove a high amount of organic solids which need to be thoroughly washed and returned to the channel by the washing compactor. The quoted washing compactor will meet the following specifications:
   - Weight reduction up to 80%
   - Screening volume reduction up to 85%
   - Organic removal up to 95%
   - Dewatered screenings dry solids content up to 40% (depending on material to be dewatered)

3. Maintenance Cost – Hydro-Dyne has the industry's lowest equipment lifecycle costs due to a myriad of factors, including multiple proprietary designs, component selection, pickling process and proven record of operational longevity. A majority of the replacement parts included as part of our bid, will not require use as replacements over the next 10 years. We maintain an inventory of spare parts and can quickly manufacture and deliver other parts within days. Included is an Appendix "10 Year Life Cycle Cost: Screening and Grit Removal Systems" which provides a detailed spreadsheet of labor, power and replacement parts costs over 10 years.

4. References – Hydro-Dyne is including as Exhibit A, our list of eleven MBR System United States reference installations, including two (Mountain House, CA and Goodyear (Sarival), AZ) of design similar to San Luis, AZ. Our oldest dual stage membrane screening system (Canton, OH – 88MGD design flow) has been in operation for over 9 years.

   Hydro-Dyne is the only Center Flow Band Screen to receive pre-approval from three major MBR System Suppliers (Dupont (Memcor, Veolia (Suez) and Kubota) for use in protect of their MBR Systems.

5. Technical Support – Hydro-Dyne has an experienced and dedicated team of in-house factory trained service technicians. They can provide prompt phone support and can be quickly deployed to Sarival, AZ for any needed service support. We also have a local representative (Joe Wolfer, JBI) who can deploy to the site quickly.

6. Schedule Support – All of the resources required to design, procure, manufacture, assemble, and test our equipment, is located under one roof at our Clearwater, FL factory. This gives us total control over our submittal and manufacturing delivery lead times.

Key Members of Hydro-Dyne Engineering's Team, all located at our Clearwater, FL factory, Include:

Jay Conroy – President/Owner
Christy Howard – Vice President
Brett Malson – VP Operations
Joe Clark – Sales Director
Randy Dow – Sales & Marketing Director
Brandon Leeth – Regional Sales Manager
Chris Brierley – Engineering Director
David Scatton – Quality Assurance Manager
Tim Nemes – Production Manager
Tony Farmer – Service Manager

Once again, Hydro-Dyne Engineering appreciates this opportunity to submit a bid and looks forward to discussing our proposal with you.

Kindest regards,

Randall Dow
Sales and Marketing Director
Hydro-Dyne Engineering, Inc.

GREAT WHITE CENTER FLOW SCREENS, WHITETIP SHARK WASHING COMPACTORS AND GRIT PACKAGE BID PROPOSAL PACKAGE INDEX

File Name: San Luis, AZ

1) Recommended Technical Specifications for Fine Screens
   a. Peak Flow: 7.5 MGD
   b. Grid Type: UHMWPE Perforated Panels Opening Size: 6 mm (1/4")
   c. Channel Depth: 66"
   d. Channel Width: 18"
   e. Channel Recess Width around Screen: 36"
   f. Material of Construction: 304 Stainless Steel

2) Hydraulic Capacity & Headloss Calculations for Fine Screens

3) Recommended Technical Specifications for Ultra Fine Screens
   a. Peak Flow: 7.5 MGD
   b. Grid Type: Stainless Steel Perforated Panels Opening Size: 2 mm (5/64")
   c. Channel Depth: 102"
   d. Channel Width: 18"
   e. Channel Recess Width around Screen: 36"
   f. Material of Construction: 304 Stainless Steel

4) Hydraulic Capacity & Headloss Calculations for Ultra Fine Screens

5) Recommended Technical Specifications for Grit Package:
   a. Peak Flow: 7.5 MGD
   b. Vortex Grit Trap components for Concrete Chamber with 5hp Gorman Rupp Grit Pump
   c. Grit Classifier with Krebs DB10 Cyclone
   d. Material of Construction: 304 Stainless Steel

6) Proposed Drawings:
   a. Headworks Proposed Layout - Plan View
   b. Headworks Proposed Layout – View A-A
   c. Headworks Proposed Layout - View B-B
   d. Headworks Proposed Layout - View C-C
   e. Headworks Proposed Layout - View D-D
   f. Screen Breakout Assembly
   g. Washing Compactor Breakout Assembly
   h. Grit Trap Breakout Assembly
   i. Grit Classifier Breakout Assembly

7) Exhibits
   a. Exhibit A – Reference List & Membrane Supplier Approvals For Use Of Hydro-Dyne Engineering Screens To Protect MBR Systems
   b. Exhibit B – Performance Bond – Surety Letter of Bondability
   c. Exhibit C – Equipment Summary List
   d. Exhibit D – Exclusions/Exceptions
   e. Exhibit E – Addendum Acknowledgement Form

8) Appendices
   a. 5-Year Service Proposal
   b. Typical Sequence Of Operation For Two Channel Integrated Headworks System
   c. UKWIR Certificates for Hydro-Dynes 2mm and 6mm Center Flow Screens
   d. Bipartisan Infrastructure Law, Build America, Buy America and Domestic Content Assurance of Compliance and Factory Overview
   e. 10 Year Life Cycle Cost: Screening and Grit Removal Systems
   f. Standard Spare Parts Pricing and Availability
   g. Sample Operation and Maintenance Manual (See Separate File)
   h. Certificate of Conformance
   i. Literature

HYDRO DYNE ENGINEERING
DESIGNED TO PROTECT. BUILT TO PERFORM.™
Tel: 813-818-0777 Fax: 813-818-0770

Represented Locally By:
HRM
Attn: Jay Martin
Number-(817)-835-0195

December 9, 2024

Ref: San Luis, AZ - West WWTP
Bid Date: 12/13/24
Specification: RFP
Appendices: 1,2

Hydro-Dyne Engineering Scope of Work 5753-7, 8, 9

Hydro-Dyne Engineering is pleased to offer this Scope of Work for the equipment detailed below in accordance to the specification(s) and addendum(s) stated above, and the attached Hydro-Dyne Engineering Terms and Conditions. Where clarifications to the specifications are necessary, they will be listed below.

Hydro-Dyne Specification Section	Description Center Flow Coarse/Fine Screen	Quantity
2.2	Center Flow Coarse Center Flow Fine	2 each 2 each
2.3	Weir (coarse and fine)	4
2.4	Sluice	2
2.5	Washing Compactor Coarse Washing Compactor Fine	2 2
2.6	Spare Parts	1 lot
2.7	Accessories	1 lot
2.8	Controls	1 lot

Hydro-Dyne Specification Section	Description Grit System	Quantity
2.2	Vortex Grit Trap	2
2.3	Grit Pump	2
2.4	Grit Classifier	2
2.5	Controls – (included with Screen Controls)	
2.7	Spare Parts	1 lot
2.8	Accessories	1 lot

	Total Base Price	USD$
Adder	1 Year Extended Warranty (Total 3 years)	
Adder	12 month validity extension – beyond initial 6 months (for notification to proceed with manufacturing)	
Adder	5 – YEAR ON-SITE INSPECTION AND SERVICE PLAN	
Adder	Performance Bond	

FREIGHT

F.O.B shipment point with freight costs included.

NOT INCLUDED

This scope of work is limited to the specification section(s) and addendum(s) referenced above. Any other documents are not included. Concrete work, installation, plumbing, wiring connections, valves, strainers, level sensor mounts, engineering certifications or seals, seismic/wind calculations and related PE stamps, and anything else not specifically detailed as included by the manufacturer in the specification above will be construed as NOT INCLUDED, whether or not inclusion is specifically acknowledged.

This scope of work does not include supply of any type of bond unless specifically itemized in the table above.

COMPLIANCE WITH BIPARTISAN INFASTRUCTURE LAW (BIL Public Law 117-58)
and BUILD AMERICA, BUY AMERICA ACT (BABA)

Equipment supplied in this Scope of Work will comply with the Bipartisan Infrastructure Law's (BIL) Build America, Buy America (BABA) requirements for manufactured products. As defined in the Law, this means:
(i) the manufactured product was manufactured in the United States, and
(ii) the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

VALIDITY

Price quoted is firm provided:

1. Written acceptance is received at the factory **and notification to proceed with manufacture** within 180 calendar days of the date of this offering.
2. Purchaser agrees to timely review and approval of submittals. The Purchaser is permitted a maximum of thirty (30) calendar days for the review and return of initial submittals, and fourteen (14) calendar days for the review and return of any resubmittal. Purchaser is allowed no more than one (1) resubmittal. Any delays in the review and approval process or any resubmittals exceeding this limit may result in a price escalation, not to exceed 1.5% per calendar month of the total purchase price. Hydro-Dyne Engineering reserves the right to impose not only additional costs, but such delays may also affect the overall project timeline.
3. Purchaser agrees to accept shipment 26 to 30 weeks from date of receipt of approved drawings and authorization to proceed with manufacture. Shipments delayed by the purchaser or his agents will be escalated at a rate of 1-1/2% per calendar month, compounded, of the value of the unshipped portion.

PROJECT DELIVERY SCHEDULE

- Time required to generate an acceptable submittal for the Engineer's review – 6 weeks
- Time required to manufacture the equipment once the submittal has been approved by the Engineer and receipt of Notification to Proceed – 26 Weeks
- Time of delivery for O&M Manuals – Prelim - 8 weeks after approved submttals, Final – 16 weeks after submittal approval.
- Time of delivery of complete equipment systems – 1 week after manufacture of equipment
- Schedule delay (for both shop drawing submittals preparation and equipment fabrication and delivery with O&M Manual) will result in liquidated damage of $500 per calendar day with cap at 50% of the equipment cost starting two weeks after milestone due date.

TAXES

Applicable sales or use taxes, fees, permits, and licenses are not included.

COMMISSIONING SERVICE & CUSTOMER TRAINING

- This service will not exceed three (3) trips and five (5) eight-hour working days.
- Each additional trip will be figured at $2,000 and each additional day onsite will be figured at $1,200. It is agreed and understood that all necessary utilities such as water, electric, air, etc. be connected and functional prior to the arrival of our servicemen.
- A complete job of checking, adjusting, etc. of the equipment and installation cannot be accomplished unless the plant is ready to operate at the time this service is to be performed.
- Our servicemen are non-union technicians and any extra cost for other assisting personnel as required by local union regulations is not included in this proposal.
- Advance notification of at least fifteen (15) working days prior to the date start-up service is required.

WARRANTY

The equipment and all appurtenances including, but not limited to: frame, supports, covers, and mechanisms manufactured by Hydro-Dyne Engineering are warranted for a period of 24 months against defects in materials and workmanship, starting upon beneficial use or 90 days after delivery, whichever occurs first. The Warranty covers repair or replacement of the defective components, but does not included labor to remove and install equipment or parts, or shipping and freight charges to and from the purchaser's job site. The Warranty shall also not apply to any parts, equipment, accessories or components that were either manufactured or were designed by any person or entity other than Hydro-Dyne Engineering itself. Hydro-Dyne will provide any pass-through warranty that is permitted to pass-through to Purchaser in connection with the portions of the Products that are not Warranted Parts.

Optional Adder - 5 – YEAR ON-SITE INSPECTION AND SERVICE PLAN

One of our factory trained field service technicians will be on-site at your facility once per year to perform all the adjustments and tests that your specific Hydro-Dyne equipment requires to stay functioning at peak performance. Please see Attachment for details of service plan.

PAYMENT TERMS AS QUOTED

10% on Approved Submittal(s) - paid after assignment of contract to contractor and issuing of notice to proceed to manufacture equipment
70% on Delivery
15% on Start Up & Training
5% on Delivery of Final O&M Manual(s). Operation & Maintenance Manuals must be submitted and approved prior to shipping equipment to the jobsite.

- Past due balances will be subject to a service charge of 1-1/2% per month on the unpaid balance and services, including shipping and startup, will not be scheduled until account is current.

CLARIFICATIONS TO THE RFP

1. Hydro-Dyne's pricing is valid based on notification to proceed with manufacture by 6/9/25.
2. RFP 1.a.v - Hydro-Dyne is taking exception to the requirement to supply Volume in cubic yards of structural concrete required – Hydro-Dyne's design fits within a footprint of 27.0 ft x 63.2 ft, well within the 42 ft x 72 ft area identified in the RFP.
3. RFP 1.b. - There is no cost adder or schedule impact for providing a BABA compliant system.
4. RFP 1.e – Hydro-Dyne is willing to provide a Performance Bond in the amount of 100% through the end of warranty period. Hydro-Dyne is supplying a Letter of Bondability from our Surety in lieu of a letter in Hydro-Dyne letterhead.
5. RFP 1.e – Hydro-Dyne is taking exception to the requirement to provide a letter stating our willingness to provide a 100% performance guarantee for the duration of the warranty. Hydro-Dyne is excluding the Performance Guarantee from our offer.
6. RFP 1.g. – Hydro-Dyne is taking exception to the escalation clause and is including an adder for cost escalation to extend bid validity an additional 12 months. Note bid validity is based on date Notice To Proceed is received.
7. 4 - Maintenance and Repair Contract – Hydro-Dyne is taking exception to the Full Maintenance and Repairs Contract provisions. Hydro-Dyne is including, as an adder, a 5-year service plan as part of our offer.
8. 5 – Guarantee - Hydro-Dyne is taking exception to the following "*Further, it shall state that required subsystems or appurtenances omitted will be provided by the vendor at no additional cost to the owner*."
9. 6 – Warranty – Hydro-Dyne is taking exception to the following *"The warranty shall include meeting the performance guarantee specified. Vendor shall bear 100% of any replacement costs or costs incurred due to upgrades required to meet the performance requirements during the lifetime of the warranty period and/or the duration of the Full Maintenance and Repair Contract."* Hydro-Dyne is providing our standard 2 year warranty.
10. 8 - Equipment Performance, Layouts, and Specifications – Hydro-Dyne is taking exception to the following "*Performance data provided shall be guaranteed for the duration of the warranty period and/or Full Maintenance and Repair Contract*."
11. 9 - Equipment/System Automation - Hydro-Dyne's system is designed for fully automatic operation with minimal operator attention. See Appendix "Typical Sequence Of Automatic Operation For Two Channel Integrated Headworks System", for detailed description of system's automatic operation.

CLARIFICATIONS TO THE RFP

12. 12 – Schedule Liquidated Damages - Hydro-Dyne can agree to liquidated damage provisions for late delivery as revised below: "Should Seller delay the Project, or any portion thereof, in any way, then Supplier's sole liability and Purchaser's sole remedy is assessment of liquidated damages of $500/day, starting 2 weeks after the contractual milestone date, up to 50% of the contract value, only if Purchaser is assessed liquidated damages by the Owner as a result of Supplier's delay."
13. RFP 1.2.D - Hydro-Dyne is quoting an upgraded enhanced washing compactor which exceeds the RFP requirement to produce dewatered screenings capable of passing the EPA Paint Filter Test as described in method 9095 of EPA Publication SW-486. Smaller opening (6mm and smaller) perforated plate screens may remove a high amount of organic solids which need to be thoroughly washed and returned to the channel by the washing compactor. The quoted washing compactor will meet the following specifications:
    - Weight reduction up to 80%
    - Screening volume reduction up to 85%
    - Organic removal up to 95%
    - Dewatered screenings dry solids content up to 40% (depending on material to be dewatered)
14. RFP 1.2.I - Details of electrical classification environments are not provided in the RFP. Hydro-Dyne is quoting both C1D2 components (motors, MCP) and C1D1 components (solenoids, LCS, level instruments) and can supply C1D1 components for a cost adder, if the final design requires these to be placed in a C1D1 environment.
15. Exhibit C – Capital Cost Summary – Hydro-Dyne costing details are for information only as we are providing an integrated package. Pricing provided cannot be used to purchase selective line items.
16. Materials of Construction - Hydro-Dyne is supplying our standard paint coatings and is taking exception to the paint spec for gears, motors and bearings. We can provide an adder to supply spec compliant paint if requested.
17. Payment Terms & Conditions A.1. – Hydro-Dyne takes exception to the statement "*Equipment submittal is required prior to the execution of this contract for the Engineer to review and approve*." **Hydro-Dyne cannot start submittals until execution of the contract. We can complete submittals under a separate contract for 10% of the total order value. This contract will be billed and payments received within 30 days of submittal approval.**
18. Payment Terms & Conditions A.1. – The statement "*billing and payments will not commence until the assigning of this contract to the Construction Contractor where in the Construction Contractor will issue the Notice to Proceed to Order Equipment to the Vendor*", does not define the time period between completion of submittals and the issuing of the notice to proceed. Hydro-Dyne pricing validity and validity extensions are based on receipt of the notification to proceed within 6 months of the proposal date.
19. Payment Terms & Conditions B. - Hydro-Dyne takes exception to Payment Terms paragraph B.
20. Hydro-Dyne proposal does not include engineering certifications or seals, seismic/wind calculations and related PE stamps. These can be provided for a cost adder upon request.

For additional information, please contact our local representative listed above or me personally.

Sincerely,
Randall Dow
Sales Director
Hydro-Dyne Engineering, Inc.

Hydro-Dyne Engineering Inc.
Terms & Conditions

1. ENTIRE AGREEMENT. This Agreement constitutes the complete agreement and understanding between Hydro-Dyne Engineering Inc. ("Seller") and the purchase order issuer ("Purchaser") with respect to the subject matter hereof and supersedes all prior solicitations, agreements, understandings and representations between the parties. This Agreement consists of these Terms and Conditions, Seller's Scope of Work (the "SOW"), and Owner's specifications (the "Owner Specs"). The SOW references the Owner Specs and provides clarifications and modifications to the Owner Specifications. If there is any conflict between the Owner Specifications and the SOW, the SOW shall control. Prior dealings, usage of the trade, and course of performance shall not be used to determine the meaning of this Agreement. Any terms and conditions included in Purchaser's acceptance/purchase order that are in addition to or different from this Agreement shall have no force and effect and shall not be deemed to be part of this Agreement, except that the purchase price for the "Products" (as defined below) set forth in Purchaser's acceptance/purchase order shall be deemed to be part of this Agreement unless Seller objects to the purchase price (and if Seller objects, a revised purchase price for the Products shall be mutually agreed between the parties and then listed in a revised acceptance/purchase order from Purchaser). Any agreement between the final equipment owner ("Owner") and Purchaser (the "Prime Contract") shall not be deemed to be part of this Agreement, Seller is not a party to the Prime Contract, and Seller is not required to comply with the Prime Contract.

2. DELIVERY. The SOW sets forth the delivery point(s) and delivery terms for delivery of the products expressly set forth in the SOW to be delivered to Purchaser under this Agreement (the "Products"). Seller shall not be liable to Purchaser or in breach of this Agreement if delivery does not occur by the dates set forth in the SOW as such dates are estimated delivery dates. If any delivery is or may be delayed by reason of Force Majeure (as defined in Section 10), Seller may at its option tender delivery to Purchaser at any point of manufacture and such shall constitute delivery for all purposes under this Agreement. If Purchaser fails to accept delivery when made by Seller, Purchaser shall promptly reimburse Seller for all costs associated with such failure, including costs of storage of the Products, regardless of whether some or all of the storage occurs at Seller's facilities, and the storage location(s) shall be deemed to be the delivery point(s). If shipment is postponed at the request of Purchaser, as a result of delay in receipt of shipping instructions, or due to any other cause or reason other than the negligence or willful misconduct of Seller, payment of the purchase price for the Products by Purchaser shall be due on notice from Seller that the Products are ready for shipment, and the delivery point will then be the current location of the Products. Handling, moving, storage, insurance and other charges thereafter incurred by Seller with respect to the Products shall be for the account of Purchaser. Risk of loss shall pass to Purchaser at the delivery point.

3. TITLE. Seller shall retain all right, title, and interest in the Products to the extent permitted by applicable law, including a security interest in the Products, until the full purchase price has been paid to Seller. Without limiting the foregoing, until Purchaser pays Seller the full purchase price for the Products, Purchaser grants to Seller a purchase money security interest in the Products. Purchaser authorizes Seller to file, with or without Purchaser's signature, and Purchaser will cooperate fully with Seller regarding, any documents needed to perfect a security interest with the appropriate jurisdiction(s). The giving and accepting of drafts, notes and/or trade acceptances to evidence the payments due shall not constitute or be construed as payment so as to pass Seller's interests until said drafts, notes and/or trade acceptances are paid in full.

4. PAYMENTS. The payment terms for the Products are set forth in the SOW, the purchase price for the Products shall be set forth in the manner described in Section 1 above, and other amounts owed for or relating to the Products (e.g., Taxes/Surcharges, as defined below) are set forth in these Terms and Conditions. Seller may at its option ship the Products in stages and if it does so Purchaser shall pay

Seller on a pro rata basis, as shipped, for the amounts then owed. If Purchaser fails to make a payment under or relating to this Agreement by the due date, interest at a rate of the lesser of the maximum rate allowed by law, and one and one half percent (1.5%) per month, calculated daily, shall apply from the due date for payment. Purchaser shall promptly pay Seller's attorneys' fees and all other expenses of Seller incurred in seeking to collect past-due amounts owed under or relating to this Agreement. The purchase price does not include any federal, state, local, or provincial sales, use, value-added, excises, or other taxes or any surcharges, or import fees or duties (collectively, "Taxes/Surcharges"). Seller shall list Taxes/Surcharges separately on each invoice, and Purchaser is responsible for paying all Taxes/Surcharges to Seller. Purchaser shall pay to Seller any amounts owed under this Agreement when due and Purchaser shall not be entitled to setoff or apply against any money due or claimed to be due from Seller to Purchaser on account of any other agreement, transaction or claim unless Seller agrees in writing to be responsible and liable on each such occasion.

5. WARRANTY.

a. Solely for the benefit of Purchaser, Seller warrants that the portion of the Products that are both designed and manufactured by Seller (the "Warranted Parts) shall be free from defects in material and workmanship for the "Warranty Period", which (a) shall begin on the "Warranty Period Commencement Date". The Warranty Period Commencement Date shall be the earlier of (1) ninety (90) days from the date of delivery of the Warranted Parts, and (2) the date the Products are beneficially occupied by the Seller. The Warranty Period Length shall be documented by the SOW. Notwithstanding the foregoing, if the Warranted Parts are delivered in stages, then the Warranty Period described above shall apply on a per stage basis.

b. If any of the Warranted Parts fail to comply with the Warranty during the Warranty Period, Purchaser notifies Seller of such failure during the Warranty Period (and no later than five (5) days after Purchaser discovers the non-compliance), Purchaser is at the applicable time in full compliance with this Agreement, and none of the exclusions set forth in Section 5(c) apply, Seller shall repair or replace, at its option, free of charge to Purchaser (other than that of labor to remove and install equipment or parts, shipping and freight charges), at Seller's location or other location that Seller designates, any Warranted Part, or the relevant portion thereof, that examination by Seller establishes has failed under normal use and service operation (according to the guidelines of the applicable Operation and Maintenance Manual) by Purchaser within the Warranty Period; provided, that if it would be impracticable for the Warranted Part or relevant portion thereof to be returned to Seller as determined by Seller, Seller will visit Purchaser's job site to inspect the Warranted Part; however, if it is determined by Seller after inspection that Seller is not responsible under the Warranty, Purchaser shall pay seller published travel and other costs of Seller with respect to the site visit detailed in the SOW. Warranted Parts repaired or replaced under the terms of this warranty remain warranted under the original warranty period only. Proof of maintenance logs as dictated in the applicable Operation and Maintenance Manual will be required by the seller from the owner.

c. In addition to any other limitation or disclaimer with respect to the Warranty, the Warranty shall not apply if any defect in material or workmanship in the Warranted Part is caused in whole or in part by any acts or omissions of Purchaser or any other person or entity other than Seller (e.g. negligence acts, willful misconduct, or alterations to the Warranted Parts, by any person or entity other than Seller, failure to operate or maintain equipment under normal operating conditions in accordance with applicable Operation and Maintenance Manual(s), compromising equipment protection via controls changes), or any event (e.g., an accident during transit) or condition (e.g. decomposition of Warranted Parts by chemical action, erosion or corrosion or wear to Warranted Parts or due to conditions of temperature, moisture and dirt), beyond the reasonable control of Seller, including any Force Majeure event. The Warranty shall also not apply to any Products that are not Warranted Parts (e.g., parts, equipment, accessories or components that were either manufactured or were designed by any person

or entity other than Seller itself), but if there is any pass-through warranty that Seller is permitted to pass-through to Purchaser in connection with the portions of the Products that are not Warranted Parts, Seller shall do so.

d. THE PARTIES AGREE THAT OTHER THAN THE WARRANTY SET FORTH IN SECTION 5(a) WITH RESPECT TO THE WARRANTED PARTS ONLY, ALL OTHER WARRANTIES (WITH RESPECT TO THE PRODUCTS OR OTHERWISE RELATING TO THIS AGREEMENT), EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHETHER WRITTEN, ORAL OR STATUTORY, ARE EXCLUDED BY SELLER TO THE FULLEST EXTENT PERMISSIBLE BY LAW.

6. DRAWINGS AND TECHNICAL DOCUMENTATION. The seller requires approval of the Drawings before Seller begins manufacturing the Products, shipment may be delayed if the Drawings are not returned to Seller within forty-five (45) days of receipt by Purchaser of the Drawings for approval. Seller will furnish only general arrangement, general assembly, and if required, wiring diagrams, erection drawings, installation and operation-maintenance manuals for Seller's equipment (in English language). Seller will supply a maximum of three (3) complete sets of drawings and operating instructions. Additional sets will be paid for by Purchaser. Electronic files, if requested from Seller, will be provided in *pdf, jpg or tif* format only.

7. INDEMNITY. Purchaser shall defend, hold harmless, and indemnify Seller and its affiliates, and each of their employees, officers, directors, representatives, contractors and agents (individually and collectively, "Indemnitees"), against all damages, costs, liability, losses, and expenses, including reasonable attorneys' fees, incurred by any Indemnitees in connection with any claim, action, demand, suit, or proceeding (individually and collectively "Claims"), arising out of, or relating to, the negligent acts or omissions of Purchaser , willful misconduct of Purchaser, or any breach of this Agreement or violation of law by Purchaser.

8. DEFAULT, TERMINATION. In the event that a party materially breaches this Agreement and does not cure within thirty (30) days of notice of such material breach from the other party, or such longer time as reasonably necessary to cure such breach, the non-breaching party may terminate this Agreement. Notwithstanding the foregoing, Seller shall also have the right to terminate this Agreement if Purchaser fails to pay any amount owed within ten (10) days after the due date for such payment. If Purchaser becomes insolvent, commits an act of bankruptcy or defaults in the performance of any term or condition of this Agreement, the entire unpaid portion of the purchase price shall, without notice or demand, become immediately due and payable. Seller at its option, without notice or demand, shall be entitled to sue for said balance and for reasonable legal fees, plus out-of-pocket expenses and interest; and/or to enter any place where the Products are located and to take immediate possession of and remove the Products, with or without legal process; and/or retain all payments made as compensation for the use of the Products: and/or resell the Products, without notice or demand, for and on behalf of the Purchaser, and to apply the net proceeds from such sale (after deduction from the sale price of all expenses of such sale and all expenses of retaking possession, repairs necessary to put the Products in saleable condition, storage charges, taxes, liens, collection and legal fees and all other expenses in connection therewith) to the balance then due to Seller for the Products and to receive from the Purchaser the deficiency between such net proceeds of sale and such balance. Purchaser hereby waives all trespass, damage and claims resulting from any such entry, repossession, removal, retention, repair, alteration and sale. The remedies provided in this paragraph are in addition to and not limitations of any other rights of Seller.

9. TERMINATION FOR CONVENIENCE. Purchaser may terminate this Agreement for convenience upon notifying Seller at least thirty (30) days prior to the "termination date" set forth in the notice and paying Seller for all costs and expenses (including overhead) incurred by it in

performing its work and closing out the same plus a reasonable profit thereon in an amount determined by Seller. Purchaser shall pay all such costs and expenses and the reasonable profit to Seller within ten (10) days of the termination of the Agreement.

10. FORCE MAJEURE. If Seller is unable, wholly or in material part, by any reason of Force Majeure to carry out any of its obligations hereunder, then on Seller's notice to Purchaser within a reasonable time after the occurrence of the cause relied upon, such obligations shall be suspended. "Force Majeure" shall include, but not be limited to, acts of God, laws and regulations, strikes, civil disobedience or unrest, pandemics, lightning, fire, flood, washout, storm, communication lines failure, delays of the Purchaser or any third party, breakage or accident to equipment or machinery, wars, police actions, terrorism, embargos and any other causes that are not reasonably within the control of the Seller. Notwithstanding anything in this Agreement to the contrary, if the delay is the result of Purchaser's action or inaction, then in addition to an adjustment in time, Purchaser shall promptly reimburse Seller for Seller's costs incurred to maintain its schedule or to seek to limit any slippage from the schedule as much as reasonably practicable under the circumstances.

11. CHOICE OF LAW, CHOICE OF VENUE. This Agreement shall be governed and construed in accordance with the laws of the State of Florida, without regard to its rules regarding conflicts or choice of law. The parties submit to the exclusive jurisdiction and venue of the state and federal courts located in Pinellas County or Clearwater, FL. The parties irrevocably waive the right to request trial by jury.

12. ASSIGNMENT. Purchaser shall not assign or transfer this Agreement without the prior written consent of the Seller. Any attempt to make such an assignment or transfer shall be null and void. Seller shall have the authority to assign, or otherwise transfer, its rights and obligations in connection with this Agreement, in whole or in part, upon prior written notice to Purchaser.

13. LIMITATION OF LIABILITY/NO LIQUIDATED DAMAGES, THIRD PARTY BENEFICIARIES, OR BACKCHARGES. Notwithstanding anything in this Agreement to the contrary, (i) except as set forth in Sections 7 and 9, under no circumstances shall either party be liable to the other party for any special, incidental, indirect, punitive or consequential damages, whether foreseeable or not, under, relating to, or arising out of this Agreement, including, without limiting the forgoing, for any losses relating to plant shutdowns, non-operation or increased expense of operation, service interruptions, or cost of purchased or replacement power; and (ii) the maximum aggregate liability of Seller under, relating to, or arising out of this Agreement, shall be the amount paid by Purchaser to Seller under this Agreement for the Products. This is an aggregate cap, not a per claim cap. This Section 15 shall apply to any and all claims, regardless of whether such claims are in contract, tort, strict liability or otherwise. The parties agree that there are no liquidated damages associated with this Agreement nor are there any third-party beneficiaries to this Agreement. In addition, under no circumstances shall Seller be responsible and liable for any work, repairs, replacements or changes to the Products, or any backcharges, unless Seller agrees in writing to be responsible and liable on each such occasion.

14. MISCELLANEOUS. The Parties are entering into this Agreement as independent contracting parties. This Agreement will not be construed to create an association, joint venture or partnership between the Parties or to impose any partnership liability upon any Party. This Agreement may be signed in counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one single agreement between the Parties. A signature delivered by pdf format or facsimile will be considered an original. The Parties agree to act in good faith with respect to each provision of this Agreement and any dispute that may arise related hereto. The provisions of this Agreement that by their nature are continuing shall continue in full force and effect and shall bind the

Parties beyond any termination of this Agreement. Each Party shall have the right to use any agents, contractors, subcontractors, or other non-employees (individually and collectively, "Contractors/Agents" of such Party) to perform any of its obligations or to act on behalf of the Party. All actions of a Party's Contractors/Agents in connection with this Agreement are attributable to that Party for all purposes under this Agreement. The rights and remedies of the Purchaser in connection with the Products provided by Seller and limited to the rights and remedies expressly stated in this Agreement. Any failure by Seller to enforce Purchaser's strict performance of any provision of this Agreement will not constitute a waiver of Seller's right to subsequently enforce such provision or any other provision of this Agreement. If any portion of this Agreement is held to be invalid or unenforceable under applicable law, then the validity of the remaining portions thereof shall not be affected by such invalidity or unenforceability and shall remain in full force and effect. Furthermore, any invalid or unenforceable provision shall be modified accordingly within the confines of applicable law, giving maximum permissible effect to the parties' intentions expressed herein. Seller shall retain sole ownership of its intellectual property used or produced in connection with this Agreement, and Purchaser shall not gain any rights in such intellectual property under this Agreement or otherwise arising out of this Agreement. Each party has had an opportunity to independently review this Agreement, and the language in all parts of this Agreement shall in all cases be construed simply, as a whole and in accordance with its fair meaning and not strictly for or against any party. Each party has been given the opportunity to independently review this Agreement with legal counsel, and each party has the requisite experience and sophistication to understand, interpret and agree to the particular language of the provisions hereof. Accordingly, it is the parties' intent that in the event of an ambiguity in or dispute regarding the interpretation of this Agreement, this Agreement shall not be interpreted or construed against the party preparing it.

GREAT WHITE CENTER FLOW SCREEN & WHITETIP SHARK WASHING COMPACTOR TECHNICAL SPECIFICATIONS

Part 1 GENERAL

1.1 SCOPE – Supply all labor, materials, equipment and incidentals required to install and place into operation the fine and coarse screening system as shown on the Drawings and as specified herein.

1.2 REFERENCE STANDARDS – The properties of all materials, design, fabrication and performance of the equipment to be furnished under this section shall be in accordance with the latest issue of applicable standard specifications. The governing authorities of these standards are listed below.

A. AISC, American Institute of Steel Construction
B. AISI American Iron and Steel Institute
C. ANSI, American National Standards Institute
D. ASCE, American Society of Civil Engineers
E. ASME, American Society of Mechanical Engineers
F. ASTM, American Society of Testing and Materials
G. AWS, American Welding Society
H. IBC, International Building Code
I. IEC, International Electric Code
J. IEEE, Institute of Electrical and Electronics Engineers
K. NEC, National Electrical Code
L. NEMA, National Electrical Manufacturers Association
M. Underwriters Laboratory (UL and cUL)

1.3 SUBMITTALS - Submittals shall be provided to the engineer that includes all the following information:

A. Certified shop drawings showing all important details of construction, dimensions and anchor bolt locations.
B. Descriptive product literature.
C. Schematic electrical wiring diagram and electrical controls information.
D. Complete motor and drive data.
E. The total weight of the equipment.
F. A complete bill of materials of all equipment.
G. A valid certificate of registration naming manufacturer, and supplier if equipment is relabeled, as ISO 9001:2015 certified.
H. A certificate from an industry recognized, independent testing facility verifying compliance with Screening Capture Ratio requirement.

1.4 QUALIFICATIONS

A. All the equipment specified under this Section shall be supplied by a single manufacturer whose Quality Management System is ISO 9001:2015 certified and applicable to the manufacture of water and wastewater treatment equipment.

B. If equipment is not manufactured by supplier, including welding and machining, the name and contact information of manufacturing facility must be supplied. If more than one manufacturer is used all companies and facilities must be provided.

C. If patents protecting equipment are not owned by supplier, then an affidavit must be supplied stating owner of design and expiration of licensing agreement.

D. All equipment specified under this Section shall comply with Bipartisan Infrastructure Law's (BIL Public Law 117-58) Build America, Buy America (BABA) requirements for manufactured products. As defined in the Law, this requires:
(i) the manufactured product was manufactured in the United States, and
(ii) the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.
Certifications attesting to compliance will be required prior to approval and shall be included with submittals and upon completion of manufacture.

1.5 DESIGN REQUIREMENTS

A. System Description

1. The fine screen will have a continuous stainless steel belt that automatically rotates within the internal guide system of the static frame.

2. The fine screen herein specified will be of the center flow type. The flow enters the inside of the continuous belt and exits through both sides and the bottom of the belt.

3. The screen shall have undergone performance testing by an industry recognized, independent testing facility. The results of this testing shall verify a Screening Capture Ratio of at least 84% (coarse screen)/ 93% (fine screen) for solids equal to or larger than the screen grid opening listed in System Performance below.

4. The screen will be installed into a widened chamber section of the channel as shown on the contract drawings to accommodate the flow pattern through the screen belt.

5. The solids will collect as a mat on the inside of the continuous belt. The belt will intermittently rotate and elevate the solids to the discharge point. Larger objects will be picked up by a series of hooks and/or trays placed at regular intervals.

6. The solids will be removed at the top of the screen by two spray bar headers positioned on the outside of the belt. The screenings will drop into an internal hopper and be fed to the screening handling system.

7. The continuous belt will be directly driven by drive sprockets that shall support and rotate the grid assembly.

8. The screen will be totally enclosed and have access covers that will be lightweight and easily removable for maintenance. Maintenance, inspection, access and lubrication points shall be no higher than 60 inches above grade level.

9. The Washing Compactor will be positioned next to the screening channels and will be fed by a sluice system.

10. The Washing Compactor will be adequately sized to handle all the screenings and wash water that will be generated by the screen at peak flow. The system will be required to wash the screenings to reduce the organic content and compact the remaining solids into a dry plug.

11. The Washing Compactor will generally comprise of a screw auger rotating within the washing and drainage trough, a wash water system, a compaction zone and an outlet chute arrangement.

12. All stainless steel (including frame, grid and drive components) mentioned below as stainless steel shall be T304 stainless steel. All hardware shall be T316 stainless steel.

B. System Performance – The fine screening system will be designed to meet the following design parameters:

COARSE SCREENS;

1. Number of screens	2
2. Peak flow per screen	7.5 MGD
3. Average flow to screen	3 MGD
4. Velocity through the grid	max 3.0 ft/s
5. Screen grid opening	6 mm
6. Head loss at peak flow	4.7 inches @ 50% blinding and 37 inches downstream water level
7. Structural design differential of frame/grid	48 inches minimum @ 100% blinding
8. Drive design differential (operating)	48 inches minimum
9. Screen grid supporting drive sprockets	2 minimum – all stainless steel
10. Channel width	18 inches
11. Channel Recess	36 inches
12. Channel height	66 inches
13. Number of Washing Compactors	2
14. Diameter of screw	8 inches
15. Minimum diameter of shaft	2.75 inches
16. Compactor discharge height above grade	48 inches
17. Screen wash water requirements	29 GPM @ 60 PSI each
18. Compactor wash water requirements	25 GPM @ 60 PSI each
19. Sluice wash water requirements	10-20 GPM @ 60 PSI intermittent

FINE SCREENS;

1. Number of screens	2
2. Peak flow per screen	7.5 MGD
3. Average flow to screen	3 MGD
4. Velocity through the grid	max 3.0 ft/s
5. Screen grid opening	2 mm
6. Head loss at peak flow	11.4 inches @ 65% blinding and 34 inches downstream water level
7. Structural design differential of frame/grid	48 inches minimum @ 100% blinding
8. Drive design differential (operating)	48 inches minimum
9. Screen grid supporting drive sprockets	3 minimum – all stainless steel
10. Channel width	18 inches
11. Channel Recess	36 inches
12. Channel height	102 inches
13. Number of Washing Compactors	2
14. Diameter of screw	6 inches
15. Minimum diameter of shaft	2.25 inches
16. Compactor discharge height above grade	48 inches
17. Screen wash water requirements	58 GPM @ 60 PSI each
18. Compactor wash water requirements	25 GPM @ 60 PSI each
19. Sluice wash water requirements	10-20 GPM @ 60 PSI intermittent

Part 2 PRODUCTS

2.1 MANUFACTURER

A. The equipment shall be the Center Flow Screen and Washing Compactor as provided by Hydro-Dyne Engineering, Inc., Clearwater, FL. Other than the named supplier, all manufacturers proposing equipment described herein, will provide a detailed submittal package, which will consist, at a minimum, of all information and details prescribed in section 1.3, 1.4 and Part 2 of this specification. All pre-qualification submittals will be submitted to the Engineer at least 15 days prior to the bid date.

B. If submitted equipment requires arrangement differing from that specified, prepare and submit for review complete structural, mechanical, and electrical drawings and equipment lists showing all necessary changes and embodying all special features of equipment proposed. Any changes are at no additional compensation and the Manufacturer will be responsible for all engineering costs of redesign by the Engineer, if necessary.

2.2 THE CENTER FLOW SCREEN

A. Perforated Plate - The Continuous Screening Belt

1. The Fine screenings belt will consist of panels manufactured from stainless steel plate that shall be punched with perforations of the specified opening. The stainless steel plate shall be reinforced with a stainless steel frame.

2. The Coarse screenings belt will consist of panels manufactured from 3/8" thick UHMWPE with perforations of the specified opening.

3. The perforated panels will be supported by 12 gauge stainless steel vertical mounted lifting hooks horizontally spaced a maximum of 3 inches apart preventing deflection. The lifting hooks shall support the screening grid and bear tension loads across the entire length and width of the screen belt. Grids that do not have stainless steel vertical mounted lifting hooks horizontally spaced a maximum of 3 inches apart across the grid will not be acceptable.

4. The hooks on elements shall form horizontal lifting trays or shelves for removing large solids and rags every 8 inches around the entire screen grid.

5. The perforated panels will be connected by heavy duty stainless steel axles every 8 inches to form a continuous belt that will rotate within the frame's guide system. The axle design will allow the plates to pivot and create a seal between the perforated panels to prevent the passage of solids.

6. The axles will include Delrin spacers that will maintain the 3 inch space between the vertical support elements. Delrin spacers will also form a seal between each perforated panel with clearance not to exceed 0.5mm.

7. The axles will be extended to fix a UHMWPE guide link to the side of each perforated plate. These guides will interlock to create a continuous guide link system that will slide within the frame.

8. Guide links shall be precision machined from solid virgin UHMWPE. Injection molded links are not acceptable.

9. The heavy duty guide links will be minimum 2 inches thick to protect against undue wear from grit and will be specially machined to form a closure seal between the rotating belt and the static frame.

10. The seal shall be continuous from grade level through the water flow forming an uninterrupted closure between the traveling screen grid and the stationary frame. The seal shall be heavy gauge stainless steel, fixed to the screen frame and be adjustable so it will remain in contact with the rotating screen belt at all times.

11. Screen designs that have gaps and/ or tolerances greater than 0.5mm between the screens grid plates and between the sides of the grid and screen frame, including the chain, are not acceptable.

12. Screen's sealing materials are to consist of solid, non-flexible materials that will maintain the 0.5mm tolerance for the lifecycle of the screen.

13. Screen designs whose sealing materials will not last the lifecycle of the screen and require replacement by the owner/ operators, are not acceptable.

14. Guide systems that use rollers, stainless or hardened steel chains will not be acceptable.

15. Grid panel sealing systems that require the use of replaceable neoprene seals or stainless steel hinges will not be acceptable.

16. Grid to frame sealing systems that require the use of replaceable adjustable UHMWPE strips attached to the frame will not be acceptable.

B. The Frame

1. The continuous belt will rotate within a heavy duty stainless steel static support frame that shall be a rectangular box construction.

2. The guide link system will travel around a stainless steel guide wear track that is integral to the support frame. Top and bottom wear tracks shall be bolt in and field replaceable.

3. There shall be a removable inspection panel located directly beneath the drive allowing easy access to the grid drive sprockets, drive shaft and screenings collection hopper.

4. The design will ensure that the support frame meshes with the closure seal on each guide link to prevent passage of screening material and grit particles.

5. All components of the lower wear tracks shall be bolt in, field replaceable and manufactured from stainless steel.

6. The frame shall accommodate stainless steel protective covers designed to prevent leakage and contain spray wash. All maintenance and inspection access points shall have hinged and gasketed access covers. Screens with covers requiring neoprene, rubber or plastic seals are not acceptable.

7. To minimize odors and nuisance, the screen frame shall have flanged connections for odor control.

8. The screen manufacturer will supply stainless steel angled filler plates to connect from the upstream corners of the support frame to the channel walls.

C. The Offloading of Screenings

1. Two stainless steel spray wash headers will be located in the head space of the screen to offload the screenings from the continuous belt.

2. The spray bar will incorporate brass nozzles at 2 inch spaces that can easily be replaced or removed for cleaning.

3. The spray bars will be positioned behind the rotating belt and will backwash the solids into an internal hopper manufactured from stainless steel. The wash water will be used to continuously flush the screenings from the internal hopper into the extended sluice.

4. The addition of a rotating or static brush system to aid offloading will not be acceptable.

D. Screen Drive Mechanism

1. Each screen will have a maximum 0.75 hp (0.56KW, FLA 1.1), inverter duty electric motor suitable for a 460/3/60 supply and rated for a Class 1 Div. 2 environment. As a minimum, the motor will have an IP55 enclosure rating and will conform to NEMA MG-1 requirements. The motor will be located outside of the screen covers and above the top of the channel.

2. The gear reducer shall be directly coupled to a heavy duty shaft machined from solid stainless steel round bar.

3. The drive shaft shall be supported on both ends by grease filled roller bearings. Separate grease-filled self-contained cartridge seals shall be mounted on drive shaft between bearings and frame to eliminate spray wash from entering bearings or gear reducer.

4. The continuous belt will be supported and rotated around heavy duty stainless steel sprockets located on the drive shaft in the head space of the screen.

5. These sprockets will have removable bolted-on lugs that transmit torque directly from the gear reducer to notches on the underside of the UHMWPE guide links. The drive shall be sized so that a minimum of four lugs are engaging guidelinks at all times. Driving forces shall be transmitted to areas located behind the screen's grid to prevent solids from contacting drive surfaces.

6. Chain driven systems or screens with wheels submerged in the wastewater are not acceptable.

7. Drive systems that use an external track and pinion to drive or push the band against grid weight supporting wear tracks will not be acceptable. Drive shall lift, and be capable of bearing, the full weight of the grid.

2.3 WEIR

A. The manufacturer shall design and supply a stainless steel weir that will be installed by the contractor downstream of the screen.

B. The weir will be designed to maintain a downstream water depth that will increase screen performance during periods of high flow.

C. The weir will be anchored to the sides of the channel with no horizontal supports across the channel to prevent the accumulation of solids.

2.4 THE SCREENINGS TRANSFER SLUICE

A. The manufacturer will design and supply a screenings launder sluice system that will collect screenings and wash water from the discharge hopper of the screen and transfer them into the washing compactors.

1. Collected screenings will transfer through the sluice by means of gravity. Mechanically driven conveyors will not be acceptable.

2. The manufacturer shall supply a solenoid valve that will be plumbed in field into the back plate of the sluice. The contractor will connect to a local plant water supply, and the water supply will provide supplementary transport water.

3. The sluice will be manufactured from stainless steel. It shall comprise of U-shaped lengths of trough that will be flange connected to the desired overall length.

4. A change in direction will be achieved using long swept bends that will prevent blockages from occurring.

5. The sluice system will be designed with a splitter that diverts flow into 1 of 2 compactors. The splitter will be fitted with a manual removable gates to divert into any branch of the sluice

6. The sluice system will include the support leg structure manufactured from stainless steel as needed. The legs will be suitable for anchoring to a concrete floor.

7. Covers will be lightweight, no more than 6 feet long and bolted for easy removal by a single operator.

2.5 THE WASHING COMPACTOR WITH ENHANCED WASHING AND DEWATERING

A. The main body will be the washing trough that will receive screenings and wash water directly from the end of the screenings transfer sluice.

B. The washing trough will house the screw auger and provide a dedicated section to reduce organic content.

C. The stainless steel drainage section will be perforations with 2mm or 5mm openings and be adjustable to maintain auger alignment. This drainage section shall be removable and easily replaceable in the field with no special tools. The flights of the screw may be fitted with a stiff nylon brush that will maintain contact with the drainage section, preventing blockages. The replaceable brushes will be supplied in pre-coiled lengths with stainless steel removable clamps.

D. The underside of the washing trough will be a catch pan chute that will divert the water that passes through the drainage section, back to the influent flow with dual outlet plain end pipe connections. The unconnected pipe side will be capped with a rubber compression cap so that it can be removed and the drain piping can be cleaned if necessary. The catch pan will include a flushing connection point for washing and cleaning.

E. The catch pan will include a separate wash water supply to purge the area of accumulated solids. A single spray nozzle will direct water across the length of the pan toward the outlet. The frequency of cleansing cycles will be controlled through the main control panel.

F. The AR400 hardened steel screw auger will sit in the washing trough. Washing compactors with shaftless screws are not acceptable as a shaft is required to support the flight and provide necessary torque and compaction. Screw auger will be primer coated to inhibit corrosion. Screw augers not made out of AR-400 hardened steel will not be acceptable.

G. The auger will be a varied pitch screw aligned at the compaction end by AR400 hardened steel wear and anti-rotation bars designed to prevent the compacted screening from spinning within the compaction zone.

H. The screw will rotate allowing wash water and free organic/fecal material finer than trough openings to escape and return to the plant flow. The wash water will flush the separated organic material through the drainage section in solution or as small particles.

I. Washing of screenings shall be achieved through an enhanced washing module consisting of the following minimum requirements manufactured out of stainless steel:

    1. Variable pitch flight for separate screening transport through the wash, dewatering and compaction zones.
    2. Washing Module Zone
        a. Flanged connections and a stainless steel orifice plate or nozzle
        b. Hardened steel wear and anti-rotation bars
        c. Separately controlled high pressure washing to sheer and break-up organic and fecal material for return to the channel.
        d. Cleansing cycles moving the auger in forward and reverse direction are controlled through the main control panel and operator adjustable up to 9 cycles
    3. Dewatering and Compaction Zone
        a. Stainless steel header feeding an external rinse shower
        b. Hardened steel wear and anti-rotation bars
        c. Full circumference perforations for dewatering and extrusion of organics and fecal material.
        d. Attached drainage catch pan with a separate wash water supply to purge the area of accumulated solids
        e. Removable covers for inspection access

J. Washing compactors that do not have a separate washing and rinse/dewatering zones will not be accepted.

K. The compacted screenings will be pushed through the compaction zone and pass through an elbow into an outlet chute. The outlet chute will provide for screening expansion and will elevate the dewatered screenings to discharge into a bagging system.

L. The outlet chute will terminate in a flange that will connect directly to a stainless steel discharge long radius elbow that will direct the compacted screenings downward into the screenings collection bag. The elbow will be designed to prevent bridging of solids and will be flanged for accessibility.

M. The outlet of the discharge elbow will be a stainless steel mounting assembly that will allow a 24” diameter circular screenings collection bag to slide into position.

N. The screenings collection bag will house one 230 feet long continuous bag that will be released under the weight of compacted screenings dropping from the outlet chute.

O. The plastic bag shall be capable of cutting and tying off into operator determined sizes to effectively capture odor and all remaining water in screenings.

P. Each Washing Compactor will have a maximum 3 hp(2.2KW, FLA 3.8), inverter duty electric motor suitable for a 460/3/60 supply and rated for a Class 1 Div. 2 environment. As a minimum, the motor will have an IP55 enclosure rating and will conform to NEMA MG-1 requirements.

2.6 SPARE PARTS - The manufacturer will supply the following spare parts, per screen supplied, with the equipment:

A. Ten (10) hook links and elements spacers
B. Two (2) grid axles
C. Two (2) guide links
D. Two (2) screen panels
E. One (1) center support link (fine screens only)
F. One (1) brush for each screw
G. Five (5) total screenings collection continuous bags

2.7 ACCESSORIES - The manufacturer will supply the following accessories, with the equipment:

A. Eight (8) 0.75” NEMA 7 brass body solenoid valve
B. Six (6) 1” NEMA 7 brass body solenoid valve
C. Two (2) 2” NEMA 7 brass body solenoid valve
D. Four (4) 2” wash water strainer
E. Eight (8) wash water pressure gauge
F. One (1) lot of anchor bolts.
G. One (1) lot of ball valves

2.8 ELECTRICAL CONTROLS AND ANCILLARY COMPONENTS

A. General Information - The manufacturer will supply two UL listed main control panels and fourteen local control stations that shall automatically control the equipment offered in this section.

B. The Main Control Panel – NEMA 4X stainless steel enclosure for outdoor installation – Each control panel shall consist of the following components for each screening system:

1 Enclosure, NEMA 4X, 304SS, 2-door, floor standing, 3-point latch with lighting fixture with door switch
1 Purge kit, exterior mount, leak compensation type
1 Main disconnect breaker with operating handle
1 480V surge suppressor
1 120V surge suppressor
1 Line filter
1 Control power transformer
1 ABB, ACS580 series VFD, 0.75HP, 480VAC/3Ph with fused protection (Coarse Screen)
1 Schneider, IEC starter, reversing type, 3HP, 480VAC/3Ph with circuit protection (Coarse Screen – WC)
1 ABB, ACS580 series VFD, 1.5HP, 480VAC/3Ph with fused protection (Fine Screen)
1 Schneider, IEC starter, reversing type, 1.5HP, 480VAC/3Ph with circuit protection (Fine Screen – WC)
1 Schneider, IEC starter, non-reversing type, 0.75HP, 480VAC/3Ph with circuit protection (Grit Trap)
1 Schneider, IEC starter, non-reversing type, 0.5HP, 480VAC/3Ph with circuit protection (Grit Classifier)
1 Schneider, IEC starter, non-reversing type, 5HP, 480VAC/3Ph with circuit protection (Grit Pump)
1 Allen Bradley, CompactLogix 1769-L33ER controller with standard I/O modules as required
1 Allen Bradley, PanelView Plus 7 series, 10’’ HMI, standard model with window it
1 24VDC power supply
1 Unmanaged ethernet switch, 8-ports (10/100Mbps)
7 Hour meter
2 IS Barrier – Analog Signal
1 IS relay – 4 channels
1 Ethernet surge suppressor
1 APC, SMT1500C UPS, 120VAC with UPS maintenance bypass switch
1 Heater with thermostat
1 Vortex A/C enclosure cooler, hazardous location, 2500BTU
1 Ground bar
LOT of signal surge suppressors LOT of timer relays
LOT of pilot lights as required
LOT of control relays, terminal blocks, fuse blocks, wire duct, supplementary circuit protection, UL label as required

C. Ancillary Control Components -

1. Float switch
2. Ultrasonic differential level system consisting of the following per screen:
   a. NEMA 4X enclosure with viewing window
   b. Milltronics Hydro-Ranger LT500 controller with real-time 4-20 mA output
   c. Two (2) NEMA 4X/7 transducers
3. Local Control Station – NEMA 7 - Each local station panel shall consist of the following components:
   a. NEMA 7 enclosure
   b. Hand/Off/Auto switch for each motor
   c. Forward/Off/Reverse switch for compactor motor
   d. Emergency stop
4. Sluice level limit switches

Part 3 SURFACE PREPARATION AND PAINTING

A. The majority of stainless steel materials, flanges and piping shall be pickled by means of a four tank system that is in accordance with ASTMs A380. This process is for quality control, removal of heat affected discoloration, surface treatment for corrosive environments and to provide a uniform finish to stainless steel surfaces. Stainless steel components must be fully submerged in the tanks for complete coverage. Electro-chemical wanding is acceptable on weld finishes that cannot be submerged due to size. Sandblasting, pickling pastes and abrasive cleaners will not be accepted as forms of metal finishing. The drive and grid components do not require pickling.

Tank 1 – Detergent bath for the removal of soils, greases, oils and dirt
Tank 2 – Rinsing process to remove detergent and residual soils
Tank 3 – Two part acid solution for the removal of tightly adhere oxide films
Tank 4 – Final rinse process to remove all residual acid

The four-tank pickling process must be conducted in-house at the manufacturer's own ISO 9001 certified manufacturing facility. Any screening equipment providers who are unable to perform this process in-house are not acceptable.

B. All ferrous surfaces (except stainless steel) shall be coated with a pre-primer, primer, and an exterior top coating, or fusion bonded polyester coating suitable for humid/wet environments for superior corrosion protection.

C. Motor(s) and gearbox(s) shall be surface prepared to withstand humid/wet environments for superior corrosion protection.

Part 4 EXECUTION

4.1 WARRANTY - The Manufacturer of the equipment supplied under this specification shall provide a warranty for a period of 2 years commencing on startup and /or acceptance by the Owner but no later than 90 days from the date of shipment by the Manufacturer. The Manufacturer shall guarantee that the equipment furnished is suitable for the purpose intended and free from defects in design, materials and workmanship. In the event that the equipment fails to perform as specified the Manufacturer shall, at his option, promptly repair, modify or replace the defective equipment.

4.2 FACTORY TESTING

A. The screening system and all components shall be factory assembled. Equipment is tested for a minimum of 4 hours prior to shipment. The equipment shall be shipped fully assembled and shall be capable of being set in place and field erected by the Contractor with minimal field assembly.

B. During the factory test period the screening system shall be adjusted as required assuring proper operation on completion of the field installation. The Manufacturer shall supply a certification of the completion of the factory testing of the assembled screening system and appurtenances and shall certify as to the equipment being in satisfactory operating condition at time of shipment. The Engineer and/or Owner may, at their own option and expense, witness the factory test.

4.3 DELIVERY AND STORAGE

A. The screening system shall be appropriately crated and delivered to protect against damage during shipment.

B. An authorized representative of the Contractor shall inspect the screens on delivery to the jobsite and shall report any damage or missing components to the Manufacturer and the Engineer within 72 hours of receipt of the shipment.

4.4 INSTALLATION - The installation of the equipment shall be as indicated on the drawings and in strict accordance with the Manufacturer's instructions and recommendations.

4.5 FIELD TESTS, ADJUSTMENTS AND COMMISSIONING

A. The equipment shall be shipped completely factory assembled. Contractor shall verify all access dimensions, channel dimensions, and any interior building dimensions to ensure equipment may be installed as factory assembled units.

B. After completion of the installation, the equipment shall be inspected and certified by an authorized representative of the Manufacturer as being in compliance with the Manufacturer's recommendations and requirements. At such time as the Manufacturer has deemed the installation to be acceptable, the Manufacturer's authorized service representative shall make any required adjustments and shall start the equipment to ensure proper operation.

C. The Manufacturer's authorized representative shall provide instruction to the plant personnel as to the operation and maintenance of the equipment including commissioning, shut down, on-line operations, lubrication and preventative maintenance.

D. Manufacturer shall state field service rates for a Service Engineer to Owner and Contractor. In the event that the field service time required by this section should not be sufficient to properly place the equipment into operation, and the requirement for additional time is beyond the manufacturer's responsibility, additional time shall be purchased by Contractor to correct deficiencies in installation, equipment, or material without additional cost to Owner.

E. The Contractor shall include in his bid, the cost of the above referenced authorized service representative for a minimum of three (3) trips totaling five (5) eight hour days onsite to complete the certifications and training described in this specification section.

End of Section

Great White Center Flow Screen Equipment Sizing

HYDRO DYNE ENGINEERING

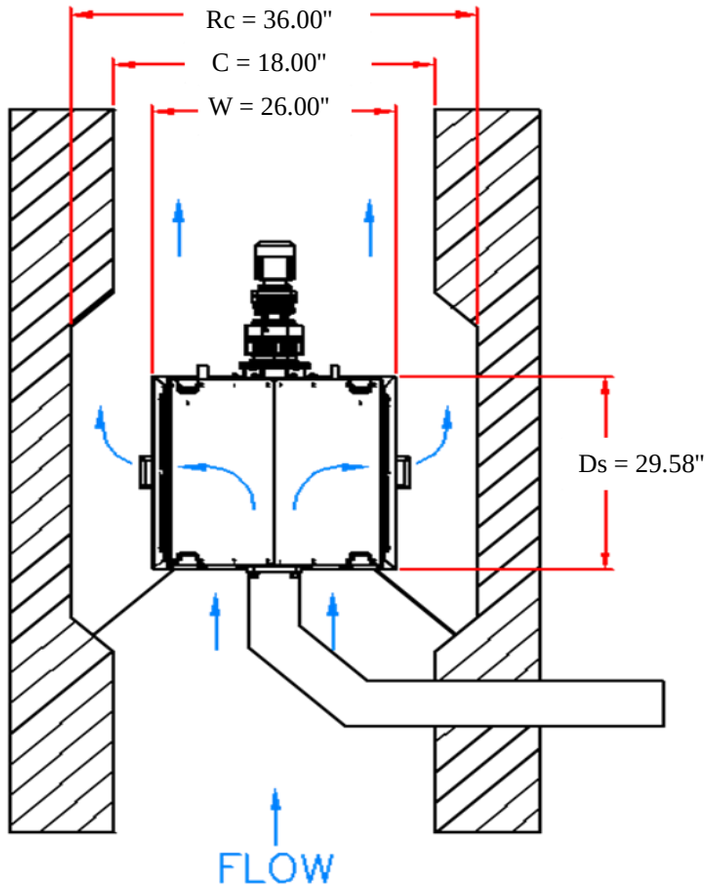
Tel: 813-818-0777 Fax: 813-818-0770

Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 30 – 144 – 6 – P

Channel Dimensions:		English Units	SI Units
C	Channel Width	18.00 in	457 mm
H	Channel Height	66.00 in	1676 mm
Rc	Recess Width,	36.00 in	914 mm
Rd	Channel Recess Depth	49.58 in	1259 mm
TC	Height from Grade to Top of Channel	0.00 in	0 mm

Equipment Dimensions:			English Units	SI Units
L	Length of Screen		143.77 in	3652 mm
W	Width of Screen		26.00 in	660 mm
Ds	Depth of Screen		29.58 in	751 mm
Y	Discharge Height from the Sluice		29.01 in	737 mm
Screen Grid Parameters:				
S	Grid Opening Spacing		6mm Perf UHMWPE	
Obs	Percent of Screen Obstructed	50 %	Hook Link	12 ga
OA_{eff} *	Effective Percent of Grid Opening	31.64 %	Straight Link	12 ga



NOTE: Image is not to Scale. Orientation of Equipment Subject to Change Depending on Layout Requirements.
NOTE: * Effective Percent of Grid Opening = Percent of Grid Opening at 6mm Opening × (1 - Proposed 50% of Screen Obstructed).

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Great White Center Flow Screen Hydraulic Performance

HYDRO DYNE ENGINEERING

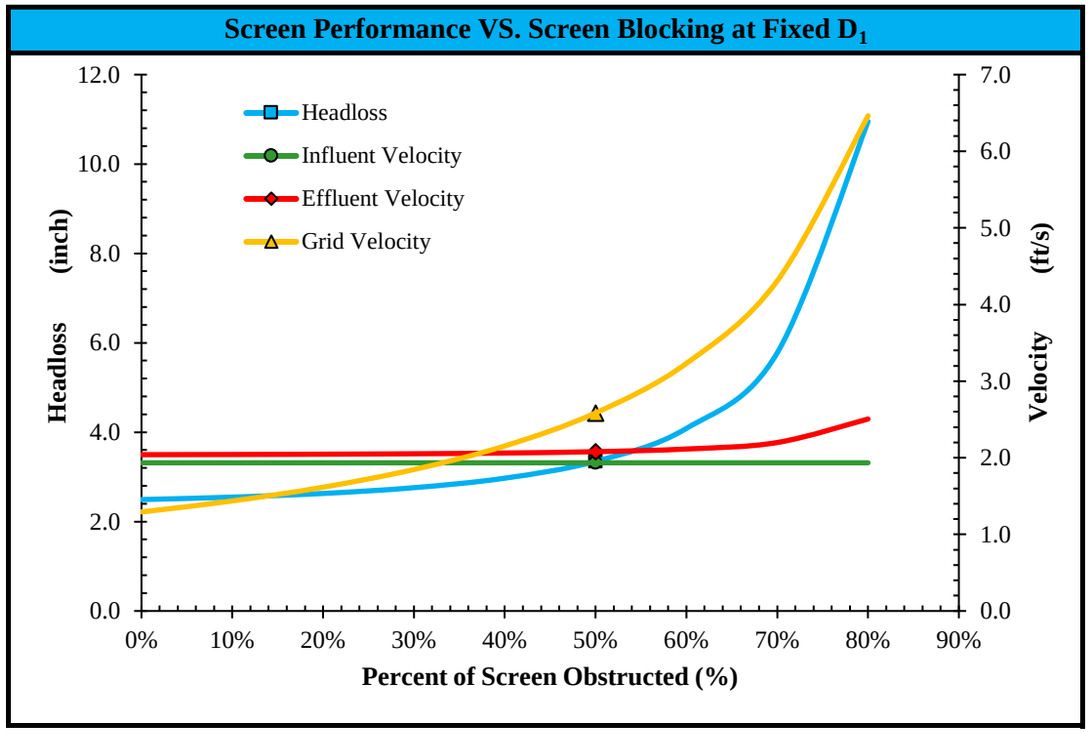
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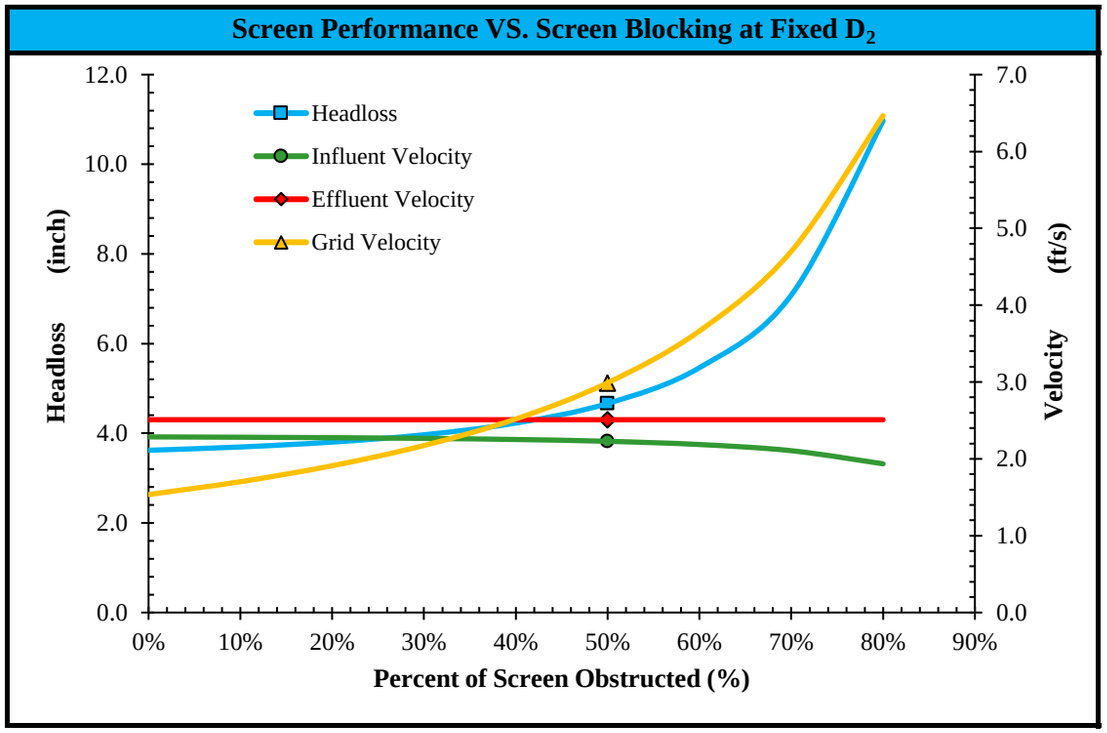
Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 30 – 144 – 6 — P

Fixed D_1 Condition @ 50% Obs		English Units		SI Units	
Q	Flow Rate	7.50 MGD	5208 gpm	329 L/s	28391 m^3/d
D_1	Upstream Water Depth	48.00 in		1219 mm	
D_2	Downstream Water Depth	44.65 in		1134 mm	
ΔH	Total Headloss	3.35 in		85 mm	
F	Freeboard	18.00 in		457 mm	
V_1	Influent Channel Velocity	1.93 ft/s		0.59 m/s	
V_T	Throat Velocity of Screen	2.82 ft/s		0.86 m/s	
V_G	Velocity Through Grid	2.58 ft/s		0.79 m/s	
V_{Re}	Recess Zone Velocity	2.63 ft/s		0.80 m/s	
V_2	Effluent Channel Velocity	2.08 ft/s		0.63 m/s	

Fixed D_2 Condition @ 50% Obs		English Units		SI Units	
Q	Flow Rate	7.50 MGD	5208 gpm	329 L/s	28391 m^3/d
D_1	Upstream Water Depth	41.66 in		1058 mm	
D_2	Downstream Water Depth	37.00 in		940 mm	
ΔH	Total Headloss	4.66 in		118 mm	
F	Freeboard	24.34 in		618 mm	
V_1	Influent Channel Velocity	2.23 ft/s		0.68 m/s	
V_T	Throat Velocity of Screen	3.33 ft/s		1.01 m/s	
V_G	Velocity Through Grid	2.99 ft/s		0.91 m/s	
V_{Re}	Recess Zone Velocity	3.11 ft/s		0.95 m/s	
V_2	Effluent Channel Velocity	2.51 ft/s		0.77 m/s	





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Great White Center Flow Screen Hydraulic Performance

HYDRO DYNE ENGINEERING

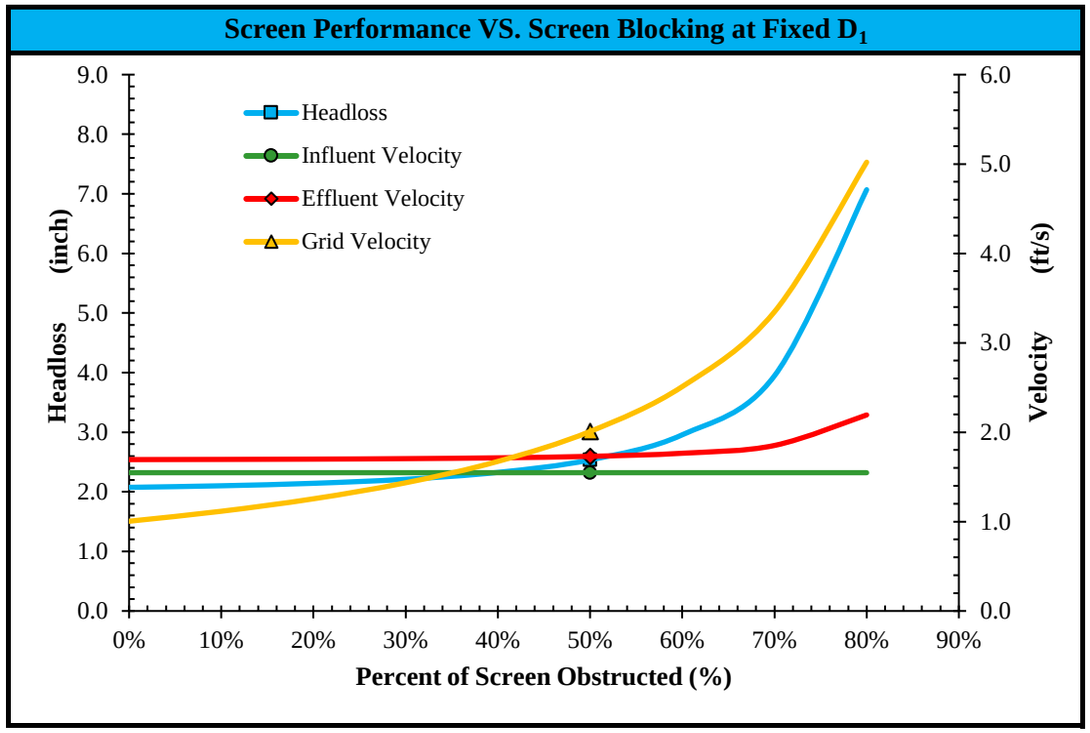
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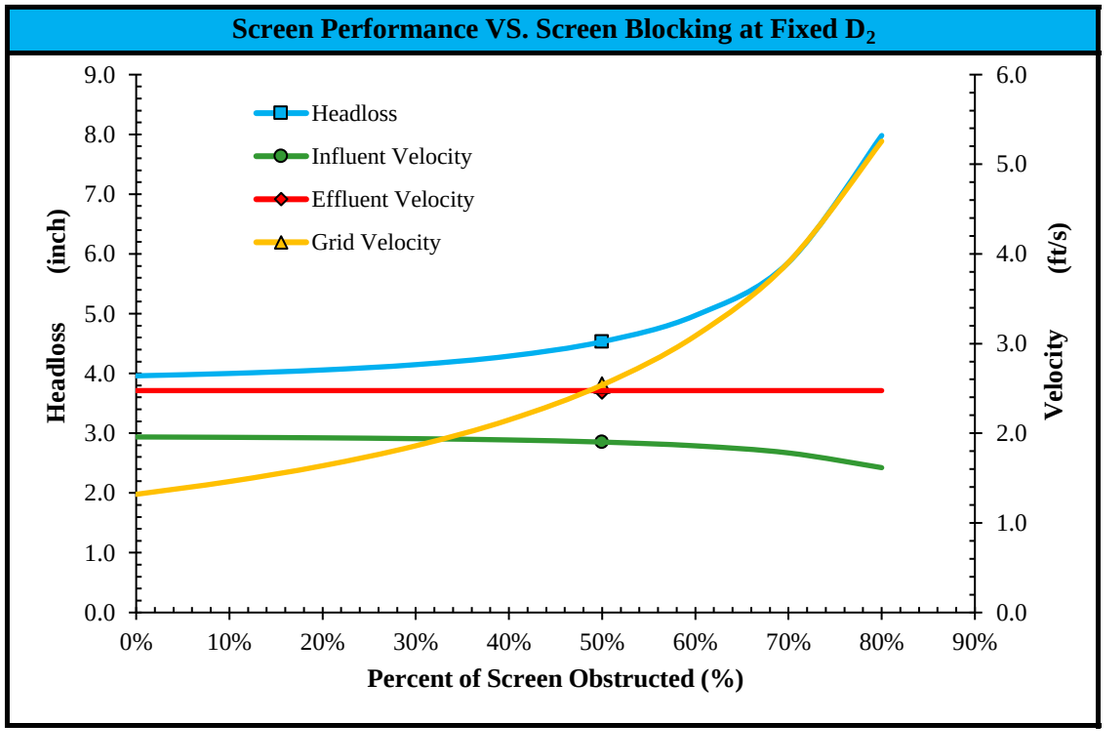
Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 30 – 144 – 6 — P

Fixed D_1 Condition @ 50% Obs		English Units		SI Units	
Q	Flow Rate	3.00 MGD	2083 gpm	131 L/s	11356 m^3/d
D_1	Upstream Water Depth	24.00 in		610 mm	
D_2	Downstream Water Depth	21.46 in		545 mm	
ΔH	Total Headloss	2.54 in		65 mm	
F	Freeboard	42.00 in		1067 mm	
V_1	Influent Channel Velocity	1.55 ft/s		0.47 m/s	
V_T	Throat Velocity of Screen	2.67 ft/s		0.81 m/s	
V_G	Velocity Through Grid	2.01 ft/s		0.61 m/s	
V_{Re}	Recess Zone Velocity	2.16 ft/s		0.66 m/s	
V_2	Effluent Channel Velocity	1.73 ft/s		0.53 m/s	

Fixed D_2 Condition @ 50% Obs		English Units		SI Units	
Q	Flow Rate	3.00 MGD	2083 gpm	131 L/s	11356 m^3/d
D_1	Upstream Water Depth	19.53 in		496 mm	
D_2	Downstream Water Depth	15.00 in		381 mm	
ΔH	Total Headloss	4.53 in		115 mm	
F	Freeboard	46.47 in		1180 mm	
V_1	Influent Channel Velocity	1.90 ft/s		0.58 m/s	
V_T	Throat Velocity of Screen	3.58 ft/s		1.09 m/s	
V_G	Velocity Through Grid	2.54 ft/s		0.77 m/s	
V_{Re}	Recess Zone Velocity	2.92 ft/s		0.89 m/s	
V_2	Effluent Channel Velocity	2.48 ft/s		0.76 m/s	





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Great White Center Flow Screen Equipment Sizing

HYDRO DYNE ENGINEERING

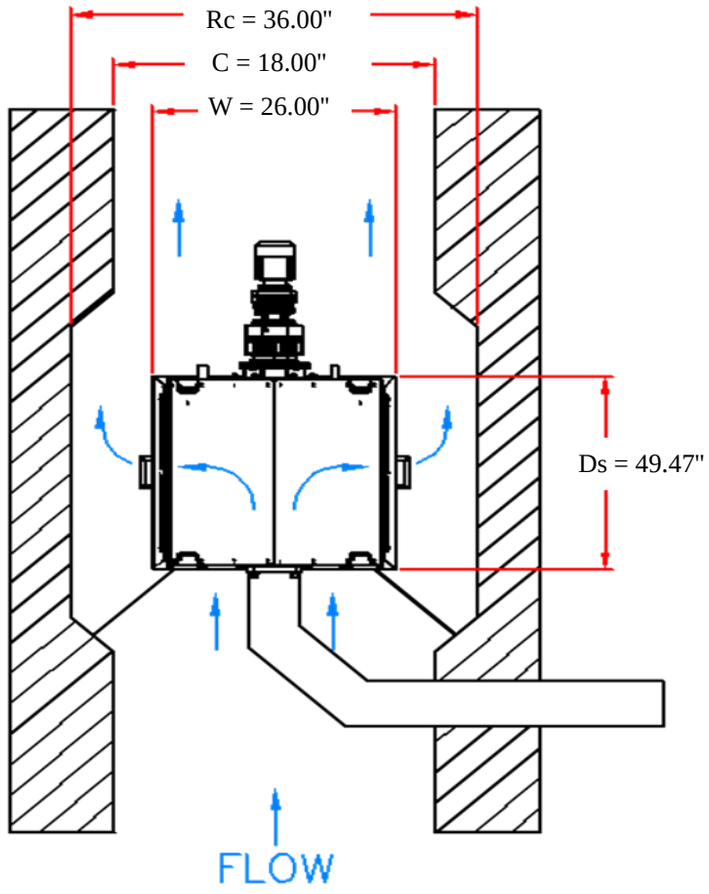
Tel: 813-818-0777 Fax: 813-818-0770

Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 49 – 176 – 2 – P

Channel Dimensions:		English Units	SI Units
C	Channel Width	18.00 in	457 mm
H	Channel Height	102.00 in	2591 mm
Rc	Recess Width,	36.00 in	914 mm
Rd	Channel Recess Depth	69.47 in	1765 mm
TC	Height from Grade to Top of Channel	0.00 in	0 mm

Equipment Dimensions:			English Units	SI Units
L	Length of Screen		175.77 in	4465 mm
W	Width of Screen		26.00 in	660 mm
Ds	Depth of Screen		49.47 in	1257 mm
Y	Discharge Height from the Sluice		24.66 in	626 mm
Screen Grid Parameters:				
S	Grid Opening Spacing		Perf 2mm metal	
Obs	Percent of Screen Obstructed	65 %	Hook Link	12 ga
OA_{eff} *	Effective Percent of Grid Opening	17.50 %	Straight Link	12 ga



NOTE: Image is not to Scale. Orientation of Equipment Subject to Change Depending on Layout Requirements.
NOTE: * Effective Percent of Grid Opening = Percent of Grid Opening at 2mm Opening × (1 - Proposed 65% of Screen Obstructed).

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Great White Center Flow Screen Hydraulic Performance

HYDRO DYNE ENGINEERING

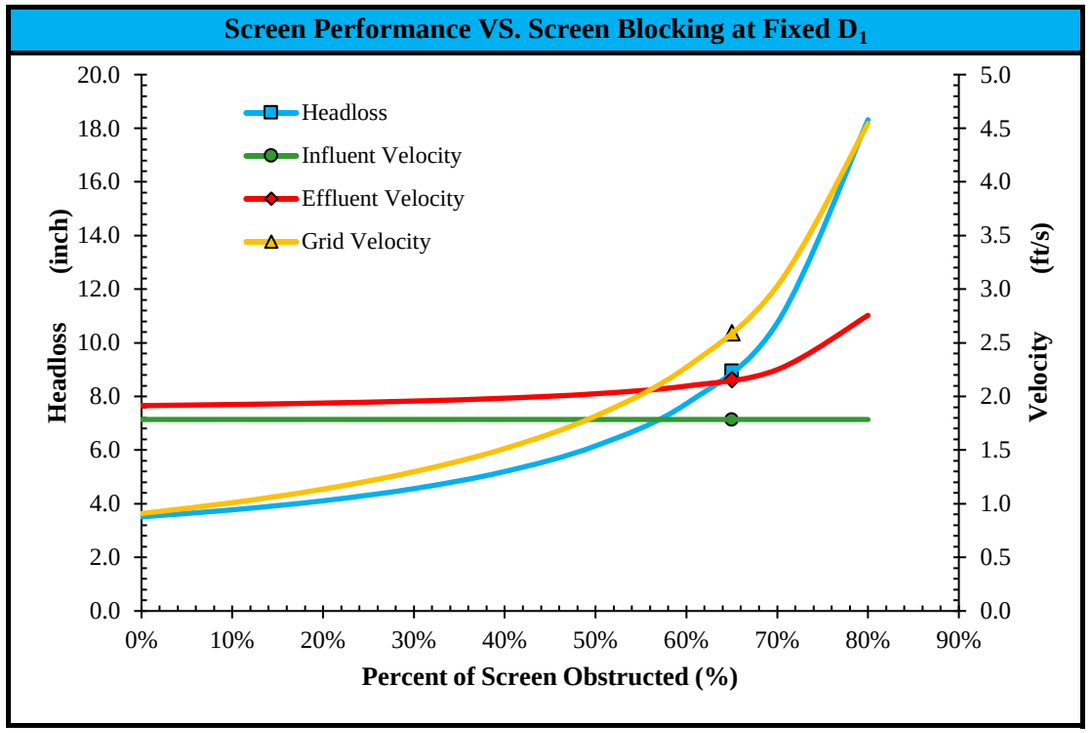
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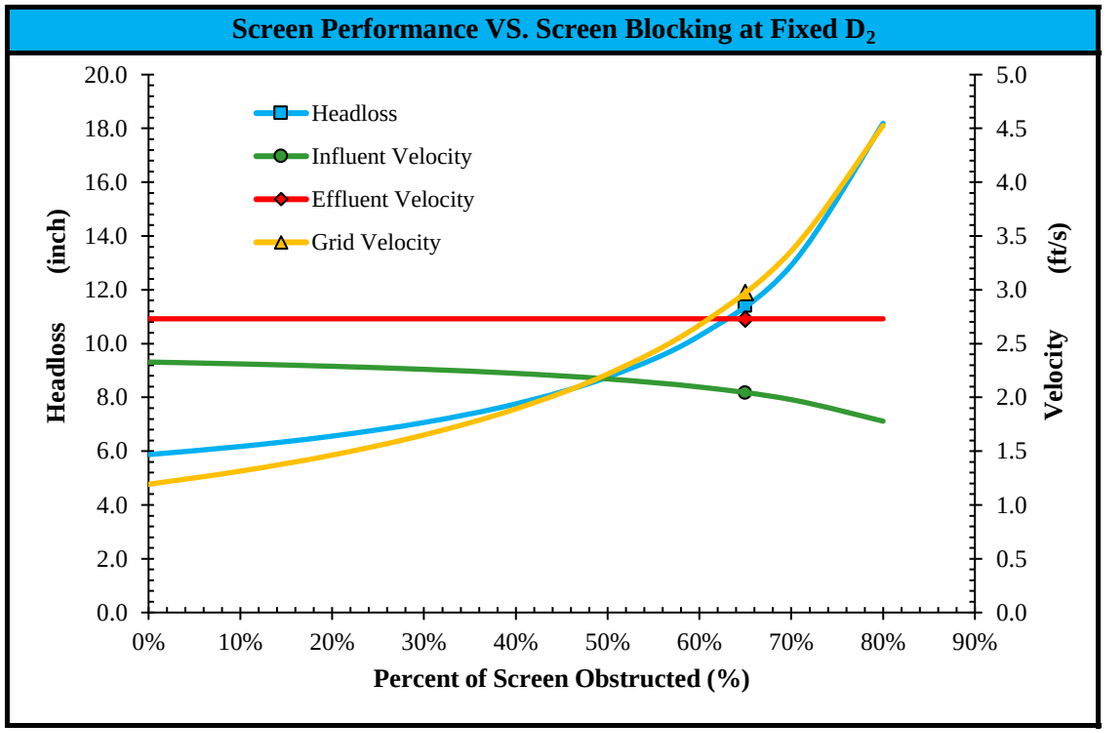
Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 49 – 176 – 2 — P

Fixed D_1 Condition @ 65% Obs		English Units		SI Units	
Q	Flow Rate	7.50 MGD	5208 gpm	329 L/s	28391 m^3/d
D_1	Upstream Water Depth	52.00 in		1321 mm	
D_2	Downstream Water Depth	43.04 in		1093 mm	
ΔH	Total Headloss	8.96 in		228 mm	
F	Freeboard	50.00 in		1270 mm	
V_1	Influent Channel Velocity	1.79 ft/s		0.55 m/s	
V_T	Throat Velocity of Screen	2.57 ft/s		0.78 m/s	
V_G	Velocity Through Grid	2.60 ft/s		0.79 m/s	
V_{Re}	Recess Zone Velocity	2.71 ft/s		0.83 m/s	
V_2	Effluent Channel Velocity	2.16 ft/s		0.66 m/s	

Fixed D_2 Condition @ 65% Obs		English Units		SI Units	
Q	Flow Rate	7.50 MGD	5208 gpm	329 L/s	28391 m^3/d
D_1	Upstream Water Depth	45.41 in		1153 mm	
D_2	Downstream Water Depth	34.00 in		864 mm	
ΔH	Total Headloss	11.41 in		290 mm	
F	Freeboard	56.59 in		1437 mm	
V_1	Influent Channel Velocity	2.04 ft/s		0.62 m/s	
V_T	Throat Velocity of Screen	3.01 ft/s		0.92 m/s	
V_G	Velocity Through Grid	2.98 ft/s		0.91 m/s	
V_{Re}	Recess Zone Velocity	3.34 ft/s		1.02 m/s	
V_2	Effluent Channel Velocity	2.73 ft/s		0.83 m/s	





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Great White Center Flow Screen Hydraulic Performance

HYDRO DYNE ENGINEERING

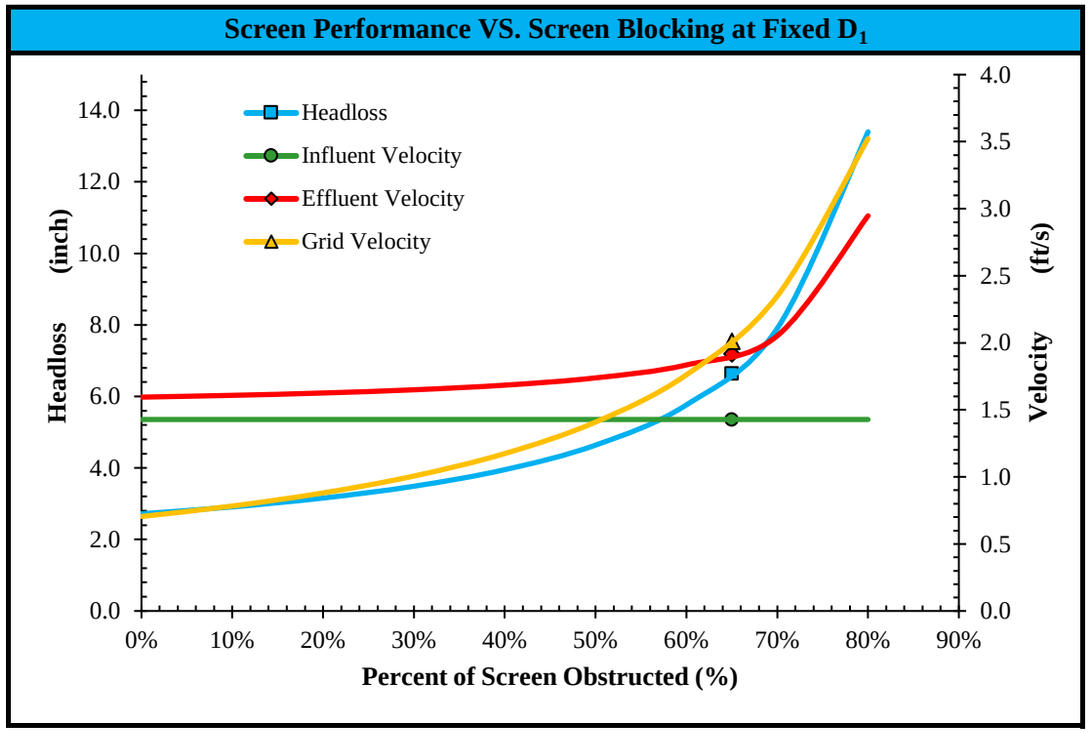
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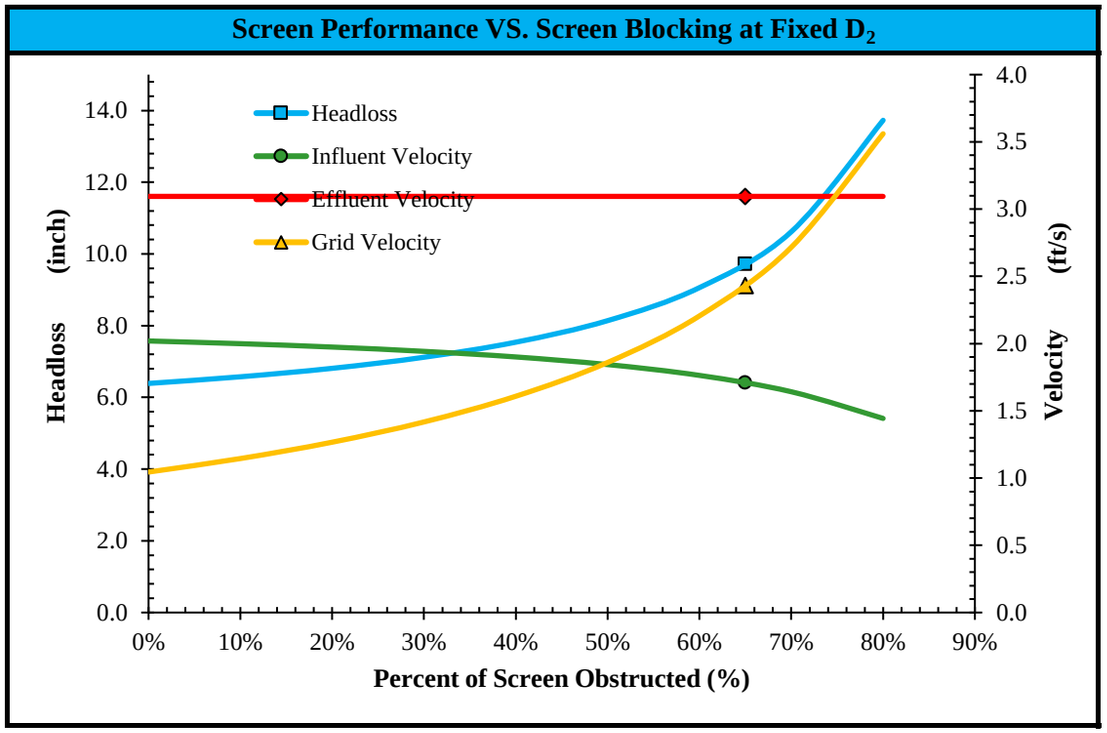
Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:** JMB

Model # **CF** 26 – 49 – 176 – 2 — P

Fixed D_1 Condition @ 65% Obs		English Units		SI Units	
Q	Flow Rate	3.00 MGD	2083 gpm	131 L/s	11356 m^3/d
D_1	Upstream Water Depth	26.00 in		660 mm	
D_2	Downstream Water Depth	19.36 in		492 mm	
ΔH	Total Headloss	6.64 in		169 mm	
F	Freeboard	76.00 in		1930 mm	
V_1	Influent Channel Velocity	1.43 ft/s		0.44 m/s	
V_T	Throat Velocity of Screen	2.40 ft/s		0.73 m/s	
V_G	Velocity Through Grid	2.01 ft/s		0.61 m/s	
V_{Re}	Recess Zone Velocity	2.36 ft/s		0.72 m/s	
V_2	Effluent Channel Velocity	1.92 ft/s		0.59 m/s	

Fixed D_2 Condition @ 65% Obs		English Units		SI Units	
Q	Flow Rate	3.00 MGD	2083 gpm	131 L/s	11356 m^3/d
D_1	Upstream Water Depth	21.73 in		552 mm	
D_2	Downstream Water Depth	12.00 in		305 mm	
ΔH	Total Headloss	9.73 in		247 mm	
F	Freeboard	80.27 in		2039 mm	
V_1	Influent Channel Velocity	1.71 ft/s		0.52 m/s	
V_T	Throat Velocity of Screen	3.07 ft/s		0.94 m/s	
V_G	Velocity Through Grid	2.43 ft/s		0.74 m/s	
V_{Re}	Recess Zone Velocity	3.41 ft/s		1.04 m/s	
V_2	Effluent Channel Velocity	3.09 ft/s		0.94 m/s	





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VORTEX GRIT REMOVAL AND HANDLING SYSTEM (PUMP) TECHNICAL SPECIFICATIONS

Part 1 GENERAL

1.1 SCOPE – Supply all labor, materials, equipment and incidentals required to install and place into operation the grit system as shown on the Drawings and as specified herein.

1.2 REFERENCE STANDARDS – The properties of all materials, design, fabrication and performance of the equipment to be furnished under this section shall be in accordance with the latest issue of applicable standard specifications. The governing authorities of these standards are listed below.

A. AISC, American Institute of Steel Construction
B. AISI American Iron and Steel Institute
C. ANSI, American National Standards Institute
D. ASCE, American Society of Civil Engineers
E. ASME, American Society of Mechanical Engineers
F. ASTM, American Society of Testing and Materials
G. AWS, American Welding Society
H. IBC, International Building Code
I. IEC, International Electric Code
J. IEEE, Institute of Electrical and Electronics Engineers
K. NEC, National Electrical Code
L. NEMA, National Electrical Manufacturers Association
M. Underwriters Laboratory (UL and cUL)

1.3 SUBMITTALS – Submittals shall be provided to the engineer that includes all the following information:

A. Certified shop drawings showing all important details of construction, dimensions and anchor bolt locations.
B. Descriptive product literature.
C. Schematic electrical wiring diagram and electrical controls information.
D. Complete motor and drive data.
E. The total weight of the equipment.
F. A complete bill of materials of all equipment.
G. A valid certificate of registration naming manufacturer, and supplier if equipment is relabeled, as ISO 9001:2015 certified.

1.4 QUALIFICATIONS

A. All the equipment specified under this Section shall be supplied by a single manufacturer whose Quality Management System is ISO 9001:2015 certified and applicable to the manufacture of water and wastewater treatment equipment.

B. If equipment is not manufactured by supplier, including welding and machining, the name and contact information of manufacturing facility must be supplied. If more than one manufacturer is used all companies and facilities must be provided.

C. If patents protecting equipment are not owned by supplier then an affidavit must be supplied stating owner of design and expiration of licensing agreement.

D. All equipment specified under this Section shall comply Bipartisan Infrastructure Law's (BIL Public Law 117-58) Build America, Buy America (BABA) requirements for manufactured products. As defined in the Law, this requires:
(i) the manufactured product was manufactured in the United States, and
(ii) the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.
Certifications attesting to compliance will be required prior to approval and shall be included with submittals and upon completion of manufacture.

1.5 DESIGN REQUIREMENTS – VORTEX COLLECTOR

A. System Description

1. The Grit Trap will be a "vortex" style system designed to operate continuously.

2. The internal rotating mechanism will be installed into the circular concrete chamber as shown on the contract drawings. The chamber will consist of an upper separation chamber and a lower collection hopper.

3. The wastewater flow will enter the chamber tangentially, flow around the upper separation chamber and exit via an outlet channel running parallel to the inlet.

4. The grit solids will fall through the upper separation chamber to settle in the lower collection hopper. The transfer grit pump will regularly cycle and transport the grit particles to the de-watering Grit Classifier.

5. Consistent performance of the grit chamber throughout the flow ranges will be maintained by the motor driven impeller that continuously rotates within the upper separation chamber. The device will provide the ideal conditions to enhance grit settlement and maximize the ejection of light organic solids from the chamber.

6. The floor of the upper separation chamber must be sloped as shown on the contract drawings to prevent grit accumulation and allow the grit to fall be gravity into the collection hopper.

7. All stainless steel (including drive tube and impeller) mentioned below as stainless steel shall be T304 stainless steel. All hardware shall be T316 stainless steel.

B. System Performance

1. The Grit Trap will be designed to meet the following grit removal performance guarantee at all flows up to and including the peak flow. Grit is defined as silica sand; specific gravity = 2.65 g/cc:

a. Grit greater than 50 mesh/297 micron	95%
b. Grit greater than 60 mesh	90%
c. Grit greater than 70 mesh/210 micron but not less than 50 mesh	85%
d. Grit greater than 100 mesh/149 micron but not less than 70 mesh	65%

2. The Grit Trap model will be selected to meet the following design parameters:

a. Number of chambers required	1
b. Peak flow per chamber	7.5 MGD
c. Maximum allowable head loss at peak flow	1 inches
d. Average flow	3 MGD
e. Grit fluidizing water requirements	20gpm @ 40PSI

1.6 DESIGN REQUIREMENTS – GRIT PUMP

A. System Description

1. The manufacturer shall supply a grit pump to transfer the grit and liquid from the collection hopper to the grit screw classifier system.

2. The grit pump shall be mounted as shown on the contract drawings.

3. The contractor shall supply the 4 inch pipe from the top of the suction pipe to the grit pump inlet and the grit pump outlet to the grit screw classifier.

4. System Performance – The grit pump will fully comply with the following criteria:

a. Number of grit pumps	1
b. Maximum pump capacity	250 GPM
c. Minimum Motor HP rating	5 hp
d. Inlet connection	4 inches
e. Outlet connection	4 inches

1.7 DESIGN REQUIREMENTS – GRIT CLASSIFIER SYSTEM

A. System Description

1. The Grit Classifier system will be adequately sized to receive and process a mixture of grit and liquid regularly pumped at the maximum specified rate from the vortex grit chamber.

2. A cyclone mounted on top of the Grit Classifier will provide initial dewatering. The excess liquid will be immediately returned to the main flow.

3. The partially dewatered grit will be deposited into the main body of the Grit Classifier. The heavy grit will settle in the collection hopper while the excess liquid will overflow an internal weir and be returned to the main flow.

4. The grit will be elevated by a rotating screw to a discharge point above the internal water level. By this time the grit material will be free of any free-standing liquid.

5. All stainless steel (including Grit Classifier and grit cyclone) mentioned below as stainless steel shall be T304 stainless steel. All hardware shall be T316 stainless steel.

B. System Performance – The Grit Classifier system will fully comply with the following criteria:

1.	Number of cyclones	1
2.	Maximum capacity of cyclone:	250 GPM
3.	Inlet flanged spool piece connection	4 inches
4.	Overflow flanged spool piece connection	6 inches
5.	Apex	2 inches
6.	Maximum underflow to screw classifier	30 GPM Maximum
7.	Number of screw classifiers	1
8.	Maximum capacity of screw classifier	30 GPM
9.	Diameter of screw	12 inches
10.	Diameter of screw shaft	3 inches
11.	Minimum length of screw	8 feet
12.	Speed of screw	12 RPM
13.	Motor Size	1/2 HP

Part 2 PRODUCTS

2.1 MANUFACTURER

A. The equipment shall be the Grit Trap and the Grit Classifier as provided by Hydro-Dyne Engineering, Inc., Clearwater, FL. The grit pump shall be the Gorman Rupp T4A. Other than the named supplier, all manufacturers proposing equipment described herein, will provide a detailed submittal package, which will consist, at a minimum, of all information and details prescribed in section 2.2, including BABA compliance, of this specification. All pre-qualification submittals will be submitted to the Engineer at least 15 days prior to the bid date.

B. If submitted equipment requires arrangement differing from that specified, prepare and submit for review complete structural, mechanical, and electrical drawings and equipment lists showing all necessary changes and embodying all special features of equipment proposed. Any changes are at no additional compensation and the Manufacturer will be responsible for all engineering costs of redesign by the Engineer, if necessary.

2.2 THE VORTEX GRIT TRAP

A. General

1. The internal mechanism of the Grit Trap will consist of a gear motor, a drive head, a drive tube and a rotating impeller.

2. The grit chamber shall be a concrete structure provided by the contractor that must have inlet and outlet channels as shown on the drawings.

B. The Drive Head Assembly

1. The drive head will be a composite unit consisting of a heavy duty steel base and cover. The base section will support a nominal 20 inch turntable bearing that has a minimum B-10 life of 20 years. The Contractor will be responsible for correctly mounting the drive head on the bridge.

2. The drive tube will be rotated at a nominal 15 RPM by a heavy duty spur tooth bull gear wheel securely bolted to the turntable bearing. This bull gear wheel will be driven by a steel drive pinion mounted on the output shaft of the helical gear motor. The pinion and the bull gear will have a service factor of 5.0 or greater at standard operating speeds.

3. The helical gear motor will be directly shaft mounted to the bull gear wheel. Each drive head will have a single 3/4 hp(0.56KW, FLA 1.1), continuous duty electric motor suitable for a 460/3/60 supply and rated for a Class 1 Div.2 environment. As a minimum, the motor will have an IP55 enclosure rating and will conform to NEMA MG-1 requirements.

4. The whole drive head assembly will be suitable for continuous operation.

C. The Rotating Mechanism

1. The drive tube will be 10 inch diameter pipe that will run down the center of the grit chamber. The drive tube will pass through an opening in bull gear wheel and terminate inside the drive head as an open pipe. This will allow passage for the suction pipe assembly detailed in 2.3 B1.

2. The impeller will be attached to the drive tube by means of a two piece collar. The impeller shall have four equally spaced blades fixed to a base plate. As the impeller rotates each blade will pass within 6 inches from the top of the collection hopper. The impeller blades will be set at 5 to 20 degrees to the vertical. The profile of the impeller blades will be designed to maximize grit capture and eject floating solids out of the chamber. The impeller will rotate at a nominal 15 RPM in the direction to the wastewater flow.

3. The rotating mechanism will be manufactured from stainless steel.

2.3 THE GRIT PUMP – TOP MOUNTED

A. General

1. The grit pump shall be supplied on a factory built fabricated steel base suitable for mounting as shown on the contract drawings.

B. The Internal Suction Pipe for Top Mounted Grit Pump

1. The grit pump suction arrangement will consist of a 4-inch diameter suction pipe and a parallel 1.5-inch fluidizing pipe that will run down the inside of the drive tube to within 4 inches off the bottom of the grit collection hopper floor. Both pipes will terminate immediately above the drive head. The manufacturer will supply a 1.0 inch solenoid valve and two manual PVC isolation valves that the Contractor will install at a convenient place in the fluidizing pipe above the drive head. The Contractor will bring and connect an air or water supply to the 1.5 inch pipe that will provide agitation of the grit before each pumping cycle.

2. The grit pump suction assembly will be manufactured from stainless steel.

3. The contractor will connect the fluidizing pipe to a water supply that will deliver a minimum pressure of 40 psig at the suction point. This will provide a blast of water that will agitate the grit prior to each pumping cycle.

4. The manufacturer will control the solenoid valve and hence the fluidizing cycle through the control panel

5. The Contractor will supply the pipe to the flanged connection of the center mounted 4 inch suction pipe that terminates above the drive head to the inlet of the grit pump.

6. The Contractor shall provide the 4 inch pipe from the outlet of the grit pump to the dewatering screw classifier.

7. The grit pump shall be designed to handle the passage of a 3-inch spherical solid.

C. Grit Pump Design

1. The foot supported pump casing will be designed to retain sufficient liquid for automatic re-priming between pumping cycles. It will allow a horizontal centerline suction and vertical discharge arrangement and incorporate a fill port with safety lock bar and Teflon gasket. A drain hole will be provided for connection to the drain kit. The kit shall contain 10' length of reinforced plastic hose with a female quick connect fitting at one end, and factory installed drain fittings in each pump. Fittings include a stainless steel pipe nipple, stainless steel bushing, stainless steel ball valve and aluminum male quick connect fitting.

2. A separate capped threaded port will be provided if a casing heater is required. If required thermostat control will be provided the main control panel.

3. The cover plate will be supplied with a removable wear liner. It will be sealed to the pump casing by two Buna-N O-rings. The cover plate also has a pressure relief valve to open at 75 PSI fitted with a handle pusher bolt capability.

4. The two vane impeller will be a semi open, non clog design that has integral pump-out vanes on the back shroud. The impeller will be threaded on to the pump shaft and secured with a lock screw.

5. The shaft bearings will be anti-friction ball or tapered roller type that will withstand loads associated with normal operation. A mechanical cartridge seal will seal the pump shaft against leakage. This seal will be double floating to prevent misalignment that might arise from vibration, deflection or general movement.

6. Separate oil filled cavities, vented to the atmosphere will be provided for the shaft seal and bearings. The cavities will be cooled by the pumped liquid. The bearing and seal cavities will have an oil level sight gauge and fill plug with vent. The oil will be prevented from leaking by a three lip seal arrangement.

D. Grit Pump Drive Motor

1. The motor will 5 hp(3.7KW, FLA 6.5), minimum continuous duty electric motor suitable for a 460/3/60 supply and rated for a Class 1 Div.2 environment. As a minimum, the motor will have an IP55 enclosure rating and will conform to NEMA MG-1 requirements.

2. The V-belt transmission will transfer the power from the motor to the pump. The V-belt will have two belts and safety factor of 1.5. The drive transmission will be supplied with removable guards with openings less than ½ an inch.

E. Grit Pump Construction

1. The materials of construction will be as follows:
   a. Casing – Gray Iron No. 30
   b. Suction flap – molded neoprene with steel reinforcement.
   c. Cover plate – Iron 30 with replaceable wear plate
   d. Impeller – Cast ADI (Austempered Ductile Iron) with minimum Brinell hardness of 400.
   e. Pump shaft – Alloy steel No. 4150
   f. Shaft sleeve – Alloy steel No. 4130
   g. Mechanical seal mating faces – Silicon Carbide
   h. Replaceable seal plate.

2.4 THE GRIT CLASSIFIER SYSTEM

A. The Grit Cyclone

1. The grit pump will pump the grit mixture directly to a flanged inlet connection situated on the side of the cyclone through a 4 inch delivery pipe, supplied by the contractor. The cyclone will be mounted on a support placed over the inlet hopper of the Grit Classifier.

2. The cyclone will be capable of receiving and processing pumped flow up to the maximum capacity per section 1.7.B.2. The excess water will be separated and returned to the main flow via a vortex finder and through a 6 inch flanged outlet connection situated on the top of the cyclone inlet head. The contractor will supply and install the return pipe with siphon break. The remaining concentrated grit mixture will be removed and directed via the cone and apex into Grit Classifiers inlet hopper. The apex will have a fixed neoprene rubber liner and include quick release toggle clamps.

3. The cyclone will be designed to remove at least 98% of grit entering the feed inlet that is larger than 100 micron and having a specific gravity of 2.65 or greater.

4. The cyclone will work on the constant centrifugal principle and have no moving parts. Pressure must be maintained above 5 psi.

5. The cyclone casing will be fabricated from carbon steel plate sections. All sections shall be constructed with replaceable neoprene rubber liners.

6. The inlet adapter will include a 1.25" pressure gauge connection and the manufacturer shall supply a pressure gauge assembly complete with protective diaphragm, 0-30 PSI dial.

7. Cyclones must be painted with one coat gray Primer – 2-3 mils nominal dry film thickness. Finish Coat will be one part enamel, color blue, 2-3 mils nominal dry film thickness.

B. The Grit Classifier

1. The partially de-watered grit mixture will fall by gravity from the underside of the cyclone into the main body of the Grit Classifier. The main body is comprised of an inlet hopper and a screw trough that will be manufactured from stainless steel plate.

2. The inlet hopper will have sloping side walls and a minimum pool area of $6ft^2$. The design will guarantee retention of 95% of 100-micron grit particles (silica sand with specific gravity of 2.65) at the maximum inflow without added internal baffle plates.

3. The grit particles will settle on the bottom of the inlet hopper. The excess liquid will spill over an internal weir within the inlet hopper and be returned to the sewage flow. The manufacturer will terminate with a flanged 4 inch pipe connection within 12 inches of the main body of the Grit Classifier.

4. The retained grit particles will be elevated from the inlet hopper by a rotating screw that runs the full length of the Grit Classifier. The full pitch screw will be installed at a nominal 16 degree angle to the horizontal.

5. The screw assembly will move the grit particles from the submerged inlet hopper to the "drying zone" section of the screw trough. The length of the "drying zone" must be no less than 2 feet to ensure adequate de-watering. The dry grit will discharge from an outlet at the end of the screw trough and be directed into the dumpster (supplied by others).

6. The screw assembly will be supported within the main body by a top and bottom bearing arrangement specially designed to avoid premature wear by abrasive grit particles. The bearing arrangement must support the entire length of the screw and maintain a 1/2 inch nominal clearance between the screw flights and the full length of the Grit Classifier main body. This will allow a permanent grit layer to accumulate and act as a natural wear liner protection.

7. The bottom bearing shall be mounted externally to the main body of the classifier. A 2" full port drain and flush valve will be mounted below the bottom drive shaft bearing on the main body of the classifier.

8. The bottom drive shaft bearing shall be mounted to the main body of the classifier and will consist of a (4) bolt flanged housing that is accessed externally to the hopper.

9. The entire Screw Classifier will be provided complete with the support legs suitable for mounting directly to the concrete floor.

10. The manufacturer shall provide lightweight minimum 16 gauge stainless steel covers that are easily removed for maintenance and totally enclose the Grit Classifier.

11. The motor shall be 1/2 hp(0.37KW, FLA 0.81), continuous duty electric motor suitable for a 460/3/60 supply and rated for a Class 1 Div.2 environment. As a minimum, the motor will have an IP55 enclosure rating and will conform to NEMA MG-1 requirements.

2.5 THE CONTROL PANEL

A. The manufacturer will supply two (2) UL listed main control panels and fourteen local control stations that shall automatically control the coarse and fine screen equipment and the grit system in this section. Details are included in the screening specification.

B. Sequence of operation and control:

1. The Grit Trap will run continuously.
2. The grit pump can be controlled manually but will normally operate automatically in timed on/off adjustable cycles as selected.
3. In automatic mode the grit pump cycle will be initiated by a 24 hour time clock.
4. The grit agitation cycle will start (0-5 minutes) and then stops.
5. The grit pump and screw classifier will then start immediately (0-10 minutes).
6. The signal is received to stop and the grit pump stops immediately.
7. The Screw Classifier initiates a run on cycle (0-5 minutes) and then stops.
8. End of cycle.

2.6 SURFACE PREPARATION AND PAINTING

A. The majority of stainless steel materials, flanges and piping shall be pickled by means of a four tank system that is in accordance with ASTMs A380. This process is for quality control, removal of heat affected discoloration, surface treatment for corrosive environments and to provide a uniform finish to the stainless steel surfaces. Stainless steel components must be fully submerged in the tanks for complete coverage. Electro-chemical wanding is acceptable on weld finishes that cannot be submerged due to size. Sandblasting, pickling pastes and abrasive cleaners will not be accepted as forms of metal finishing.

   Tank 1 – Detergent bath for the removal of soils, greases, oils and dirt
   Tank 2 – Rinsing process to remove detergent and residual soils
   Tank 3 – Two part acid solution for the removal of tightly adhere oxide films
   Tank 4 – Final rinse process to remove all residual acid

B. All ferrous surfaces (except stainless steel) shall be coated with a pre-primer, primer, and an exterior top coating, or fusion bonded polyester coating suitable for humid/wet environments for superior corrosion protection.

C. Motor(s) and gearbox(s) shall be surface prepared to withstand humid/wet environments for superior corrosion protection.

2.7 SPARE PARTS - The manufacturer will supply the following spare parts:

A. One (1) rotating assembly O-Ring(s)
B. One (1) set of impeller clearance adjustment spacers
C. One (1) set of spare V-belts

2.8 ACCESSORIES – The manufacturer will supply the following accessories with the equipment:

A. One (1) 1” explosion proof brass body solenoid valve (GT Fluidizing)
B. Two (2) 1” manual isolation valve (GT Fluidizing)
C. Bagger system on Grit Classifier
D. One (1) lot of anchor bolts.

Part 3 EXECUTIONS

3.1 WARRANTY – The Manufacturer of the equipment supplied under this specification shall provide a warranty for a period of twenty-four months commencing on acceptance and/or beneficial occupancy by the Owner but no later than 90 days from the date of shipment by the Manufacturer. The Manufacturer shall guarantee that the equipment furnished is suitable for the purpose intended and free from defects in design, materials and workmanship. In the event that the equipment fails to perform as specified the Manufacturer shall, at his option, promptly repair, modify or replace the defective equipment.

3.2 FACTORY TESTING

A. The grit removal system and all components shall be factory assembled and operationally tested prior to shipment. The equipment shall be shipped fully assembled and shall be capable of being set in place and field erected by the Contractor with minimal field assembly.

B. During the factory test period the grit removal system shall be adjusted as required assuring proper operation on completion of the field installation. The Manufacturer shall supply a certification of the completion of the factory testing of the assembled system and appurtenances and shall certify as to the equipment being in satisfactory operating condition at time of shipment. The Engineer and/or Owner may, at their own option and expense, witness the factory test.

3.3 DELIVERY AND STORAGE

A. The grit removal system shall be appropriately crated and delivered to protect against damage during shipment.

B. An authorized representative of the Contractor shall inspect the equipment on delivery to the jobsite and shall report any damage or missing components to the Manufacturer and the Engineer within 72 hours of receipt of the shipment.

3.4 INSTALLATION – The installation of the grit removal system shall be as indicated on the drawings and in strict accordance with the Manufacturer's instructions and recommendations.

3.5 FIELD TESTS, ADJUSTMENTS AND COMMISSIONING

A. The equipment shall be shipped completely factory assembled. Contractor shall verify all access dimensions, channel dimensions, and any interior building dimensions to ensure equipment may be installed as a factory assembled units.

B. After completion of the installation, the equipment shall be inspected and certified by an authorized representative of the Manufacturer as being in compliance with the Manufacturer's recommendations and requirements. At such time as the Manufacturer has deemed the installation to be acceptable, the Manufacturer's authorized service representative shall make any required adjustments and shall start the equipment to assure proper operation.

C. The Manufacturer's authorized representative shall provide instruction to the plant personnel as to the operation and maintenance of the equipment including commissioning, shut down, on-line operations, lubrication and preventative maintenance.

D. Manufacturer shall state field service rates for a Service Engineer to Owner and Contractor. In the event that the field service time required by this section should not be sufficient to properly place the equipment into operation, and the requirement for additional time is beyond the manufacturer's responsibility, additional time shall be purchased by Contractor to correct deficiencies in installation, equipment, or material without additional cost to Owner.

E. The Contractor shall include in his bid, the cost of the above referenced authorized service representative. See screen specification for trip and days supplied.

End of Section

Sand Shark Grit Trap Equipment Sizing

HYDRO-DYNE ENGINEERING
Tel: 813-818-0777 Fax: 813-818-0770

Project: San Luis, AZ - West WWTP
Date: 11/19/2024
Rep: JBI Water
By: STM **Checked:**

Model#	GTT60I102CC4C
	GTK-144CN

Equipment Dimensions

A	B	C	D	E	F	G	H
144 inches	60	30	60	16	67	24	0
3658 mm	1524	762	1524	406	1702	610	0

Channel Dimensions

J	K	L
23	32	78
579	813	1981

NOTE: Water levels into grit trap as follows:

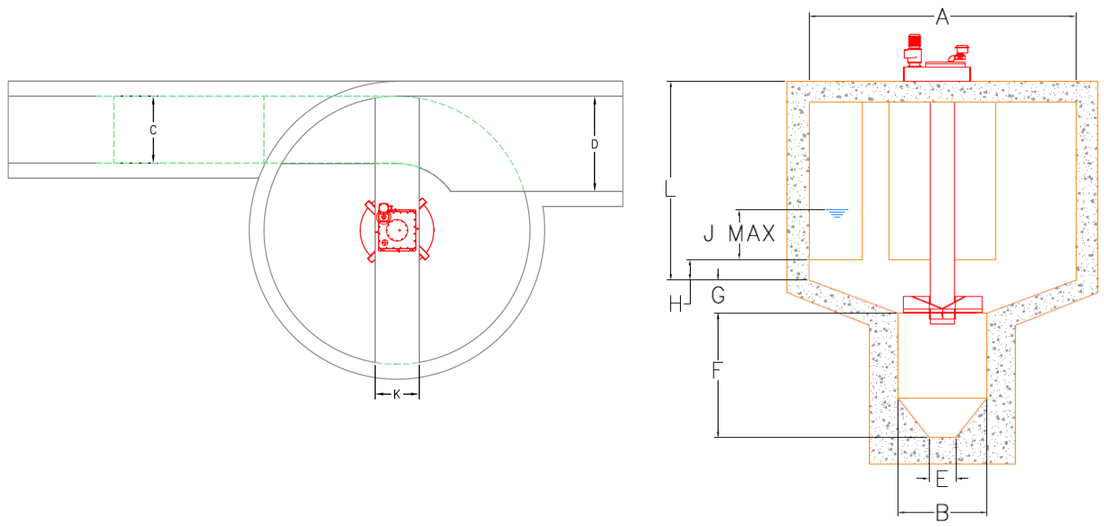
Peak water level	1.33 ft	16.00 in
Average water level	0.97 ft	11.63 in

Channel height	66.00 in
Freeboard at peak	50.00 in
Freeboard at avg	54.37 in

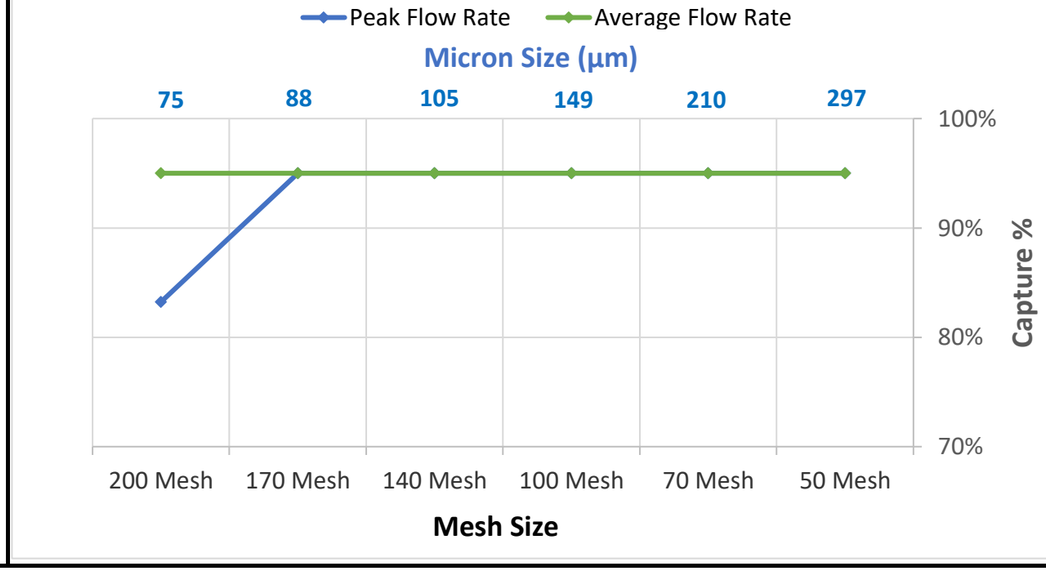
Operating Conditions

				Peak	Average
Weir Height	0.5 feet	6.4 inches	**Flow Rate**	7.5 MGD	3 MGD
	0.16 m	164 mm		329 L/s	131 L/s
Specific Gravity	2.65		**Upstream Channel Velocity**	3.48 ft/s	1.92 ft/s
				1.14 m/s	0.63 m/s
			Required Capture	**HDE Projected Capture**	
Cut Size (X_{50})	50 mesh	297 microns	95%	95%	95%
Cut Size (X_{70})	70 mesh	210 microns	85%	95%	95%
Cut Size (X_{100})	100 mesh	149 microns	65%	95%	95%
Cut Size (X_{140})	140 mesh	105 microns			
Cut Size (X_{200})	200 mesh	75 microns			

Equipment Layout

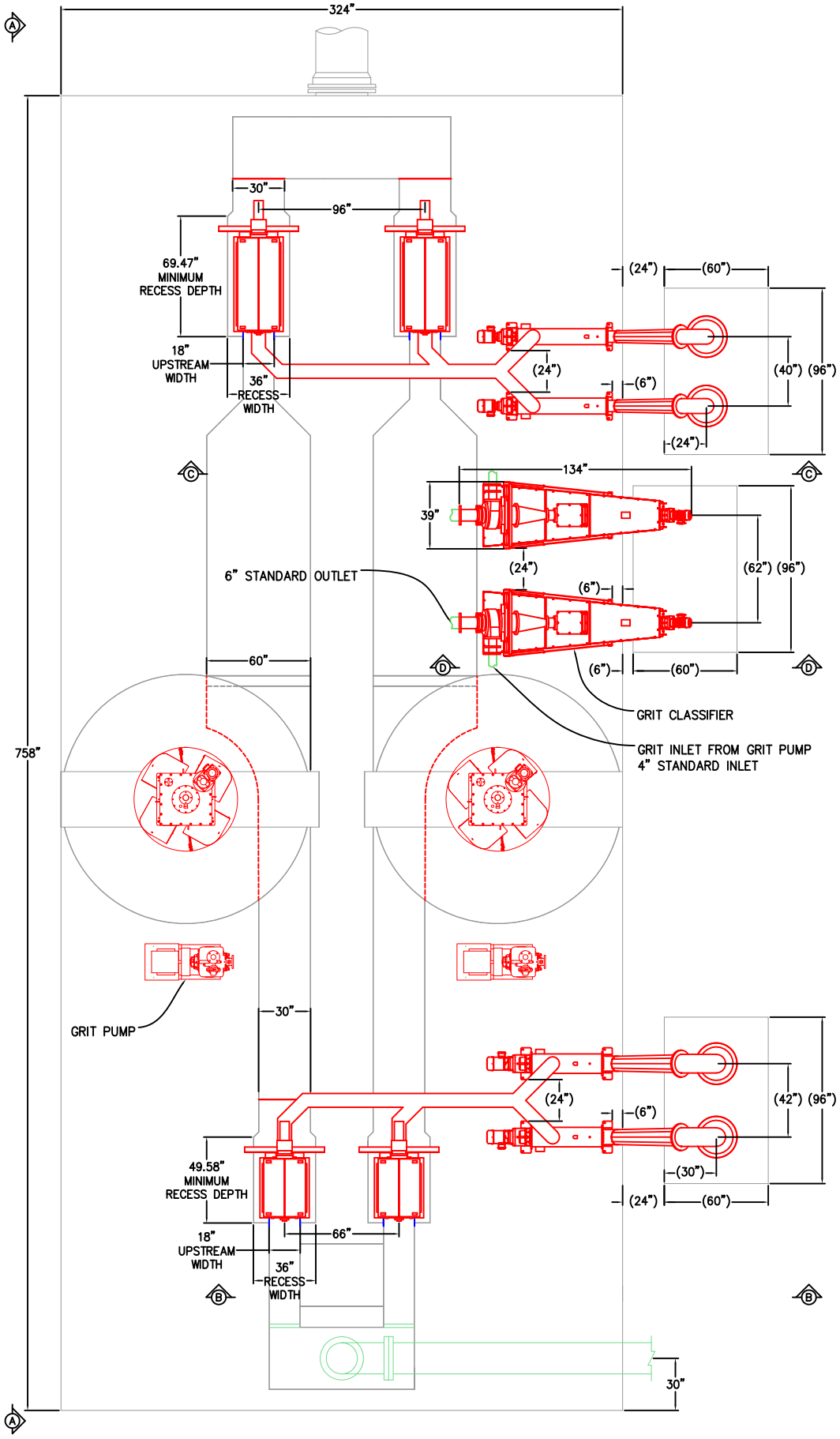


Grit Capture vs. Particle Size



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Proposal Drawings

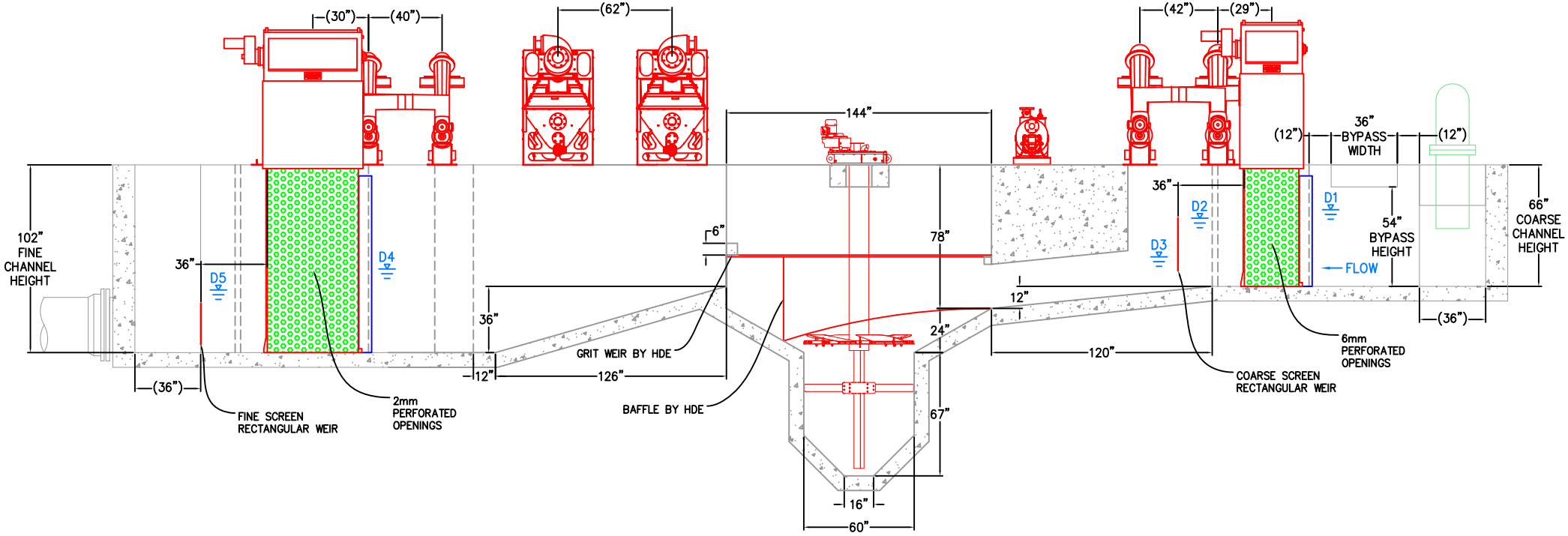


PLAN VIEW

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P3 – S. T–M. – UPDATED LAYOUT WITH SMALLER EQUIPMENT RATED FOR 7.5MGD PEAK FLOW. BOTH COARSE AND FINE SCREENS HAVE SINGLE STAGE WYE SLUICE CONVEYANCE. 12/06/2024

UNLESS NOTED			
TOLERANCE	HYDRO-DYNE® ENGINEERING www.hydro-dyne.com	SAN LUIS, AZ – TYPICAL PROPOSAL LAYOUT	
.X ± 0.125"		DRAWING #: CF26-30-144-6P4-WCW8S-CF26-49-176-2P4-WCW8S-SLUICE-GT60-102-GC12-98-2X-P3	SHT.: 1/5 REV.: P3
.XX ± 0.060"		DRAWN BY/DATE: S. T–M 12/6/2024	SCALE: NTS
.XXX ± 0.030"		CHECKED BY/DATE: J. BOGGESS 12/6/2024	SIZE: A
FRACTIONAL: ± 1/4"			
∠ ± 1°			



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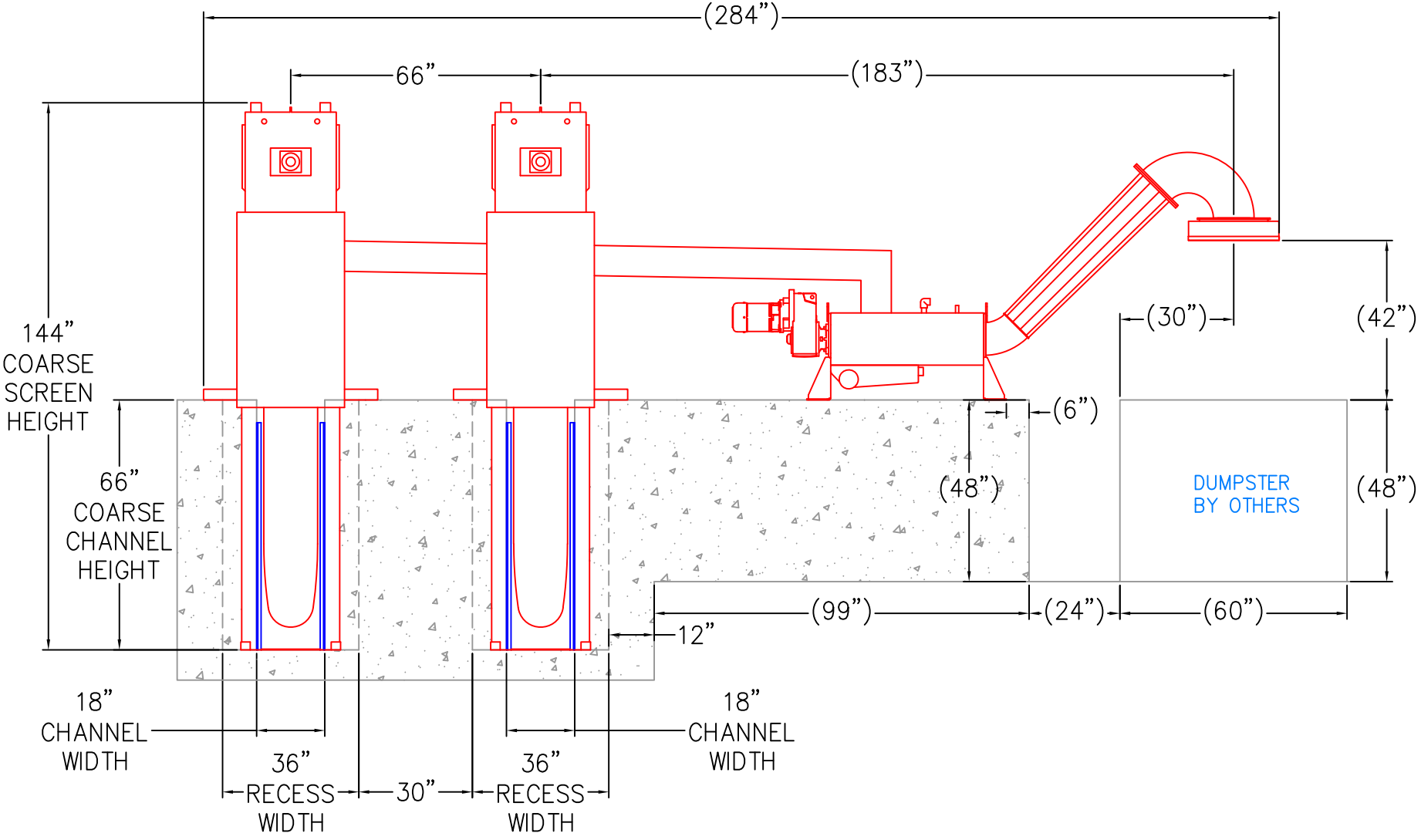
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FRACTIONAL: ± 1/4"

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SAN LUIS, AZ – TYPICAL PROPOSAL LAYOUT

DRAWING #: CF26-30-144-6P4-WCWBS-CF26-40-176-2P4-WCWBS-SLUICE-GT60-102-GC12-98-2X-P3	SHT.: 2/5	REV.: P3
DRAWN BY/DATE: S. T-M 12/6/2024	SCALE: NTS	
CHECKED BY/DATE: J. BOGGESS 12/6/2024	SIZE: A	



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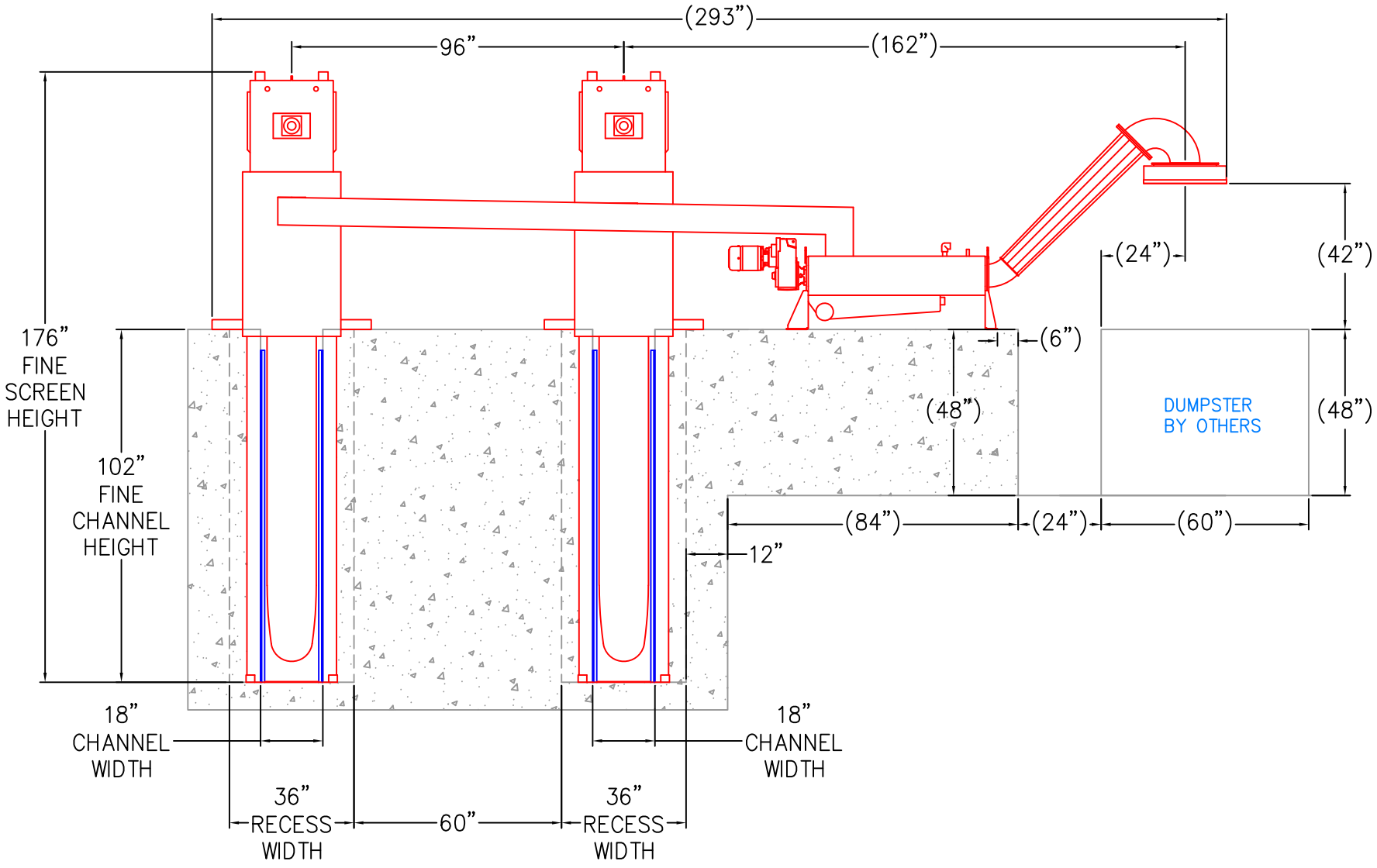
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SAN LUIS, AZ – TYPICAL PROPOSAL LAYOUT

DRAWING #: CF26-30-144-6P4-WCWBS-CF26-49-176-2P4-WCWBS-SLUICE-GT60-102-GC12-98-2X-P3	SHT.: 3/5	REV.: P3
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CHECKED BY/DATE: J. BOGGESS 12/6/2024	SIZE: A	



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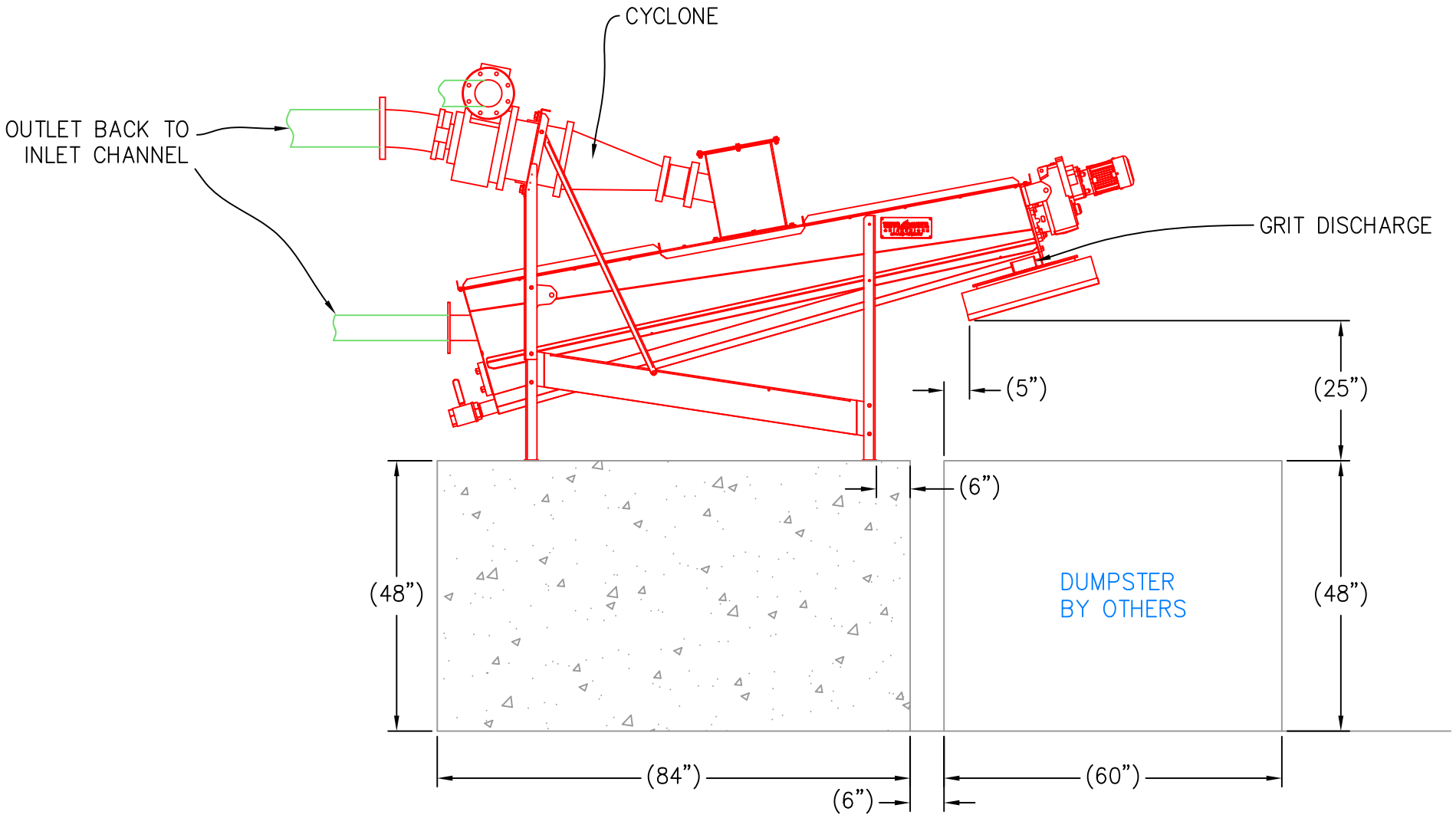
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SAN LUIS, AZ – TYPICAL PROPOSAL LAYOUT

DRAWING #: CF26-30-144-6P4-WCWBS-CF26-49-176-2P4-WCWBS-SLUICE-GT60-102-GC12-98-2X-P3	SHT.: 4/5	REV.: P3
DRAWN BY/DATE: S. T–M 12/6/2024	SCALE: NTS	
CHECKED BY/DATE: J. BOGGESS 12/6/2024	SIZE: A	



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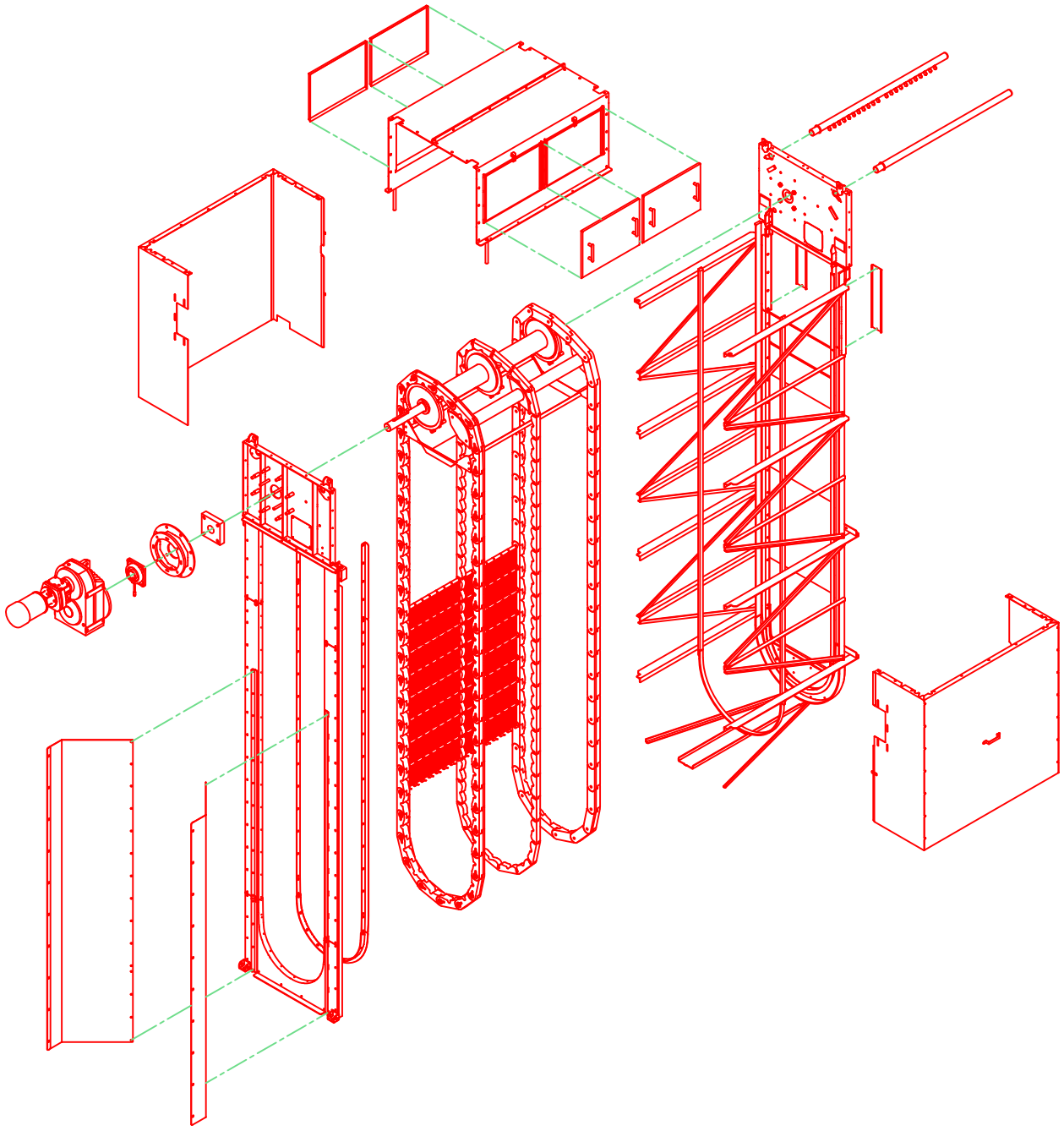
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SAN LUIS, AZ – TYPICAL PROPOSAL LAYOUT

DRAWING #: CF26-30-144-6P4-WCWBS-CF26-49-176-2P4-WCWBS-SLUICE-GT60-102-GC12-98-2X-P3	SHT.: 5/5	REV.: P3
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CHECKED BY/DATE: J. BOGGESS 12/6/2024	SIZE: A	



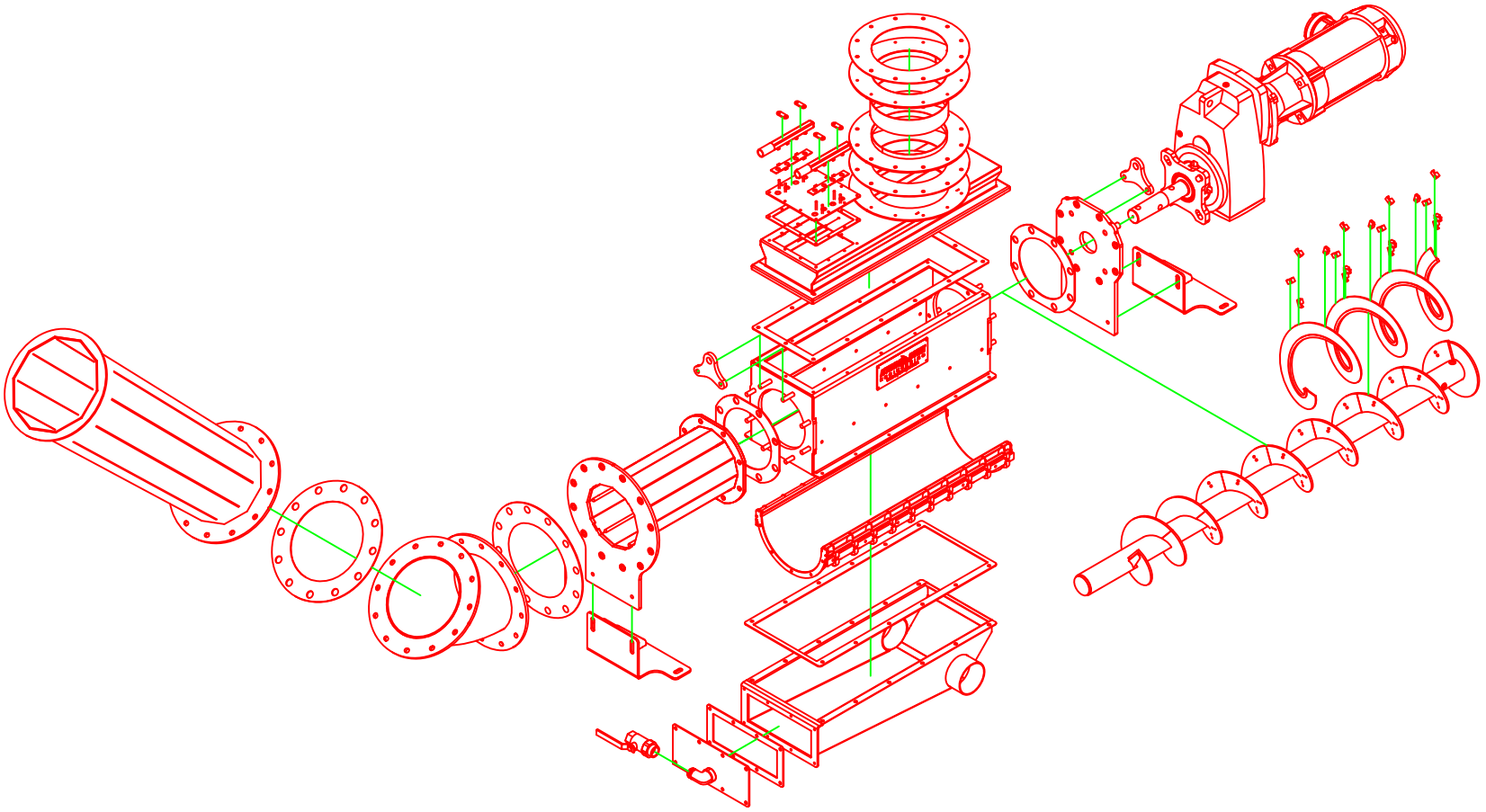
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UNLESS NOTED			
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.X	±	.030	
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.XXX	±	.005	
.XXXX	±	.0005	

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HYDRO-FLO – TYPICAL BREAKOUT – COMPLETE ASSEMBLY

FILE #: HF38-74-3SPR-P	SHT.: 1/4	REV.: D
DRAWN BY/DATE: J. COONEY – 04/23/14	SCALE: NTS	
CHECKED BY/DATE: T. HUNT – 04/23/14	SIZE: A	



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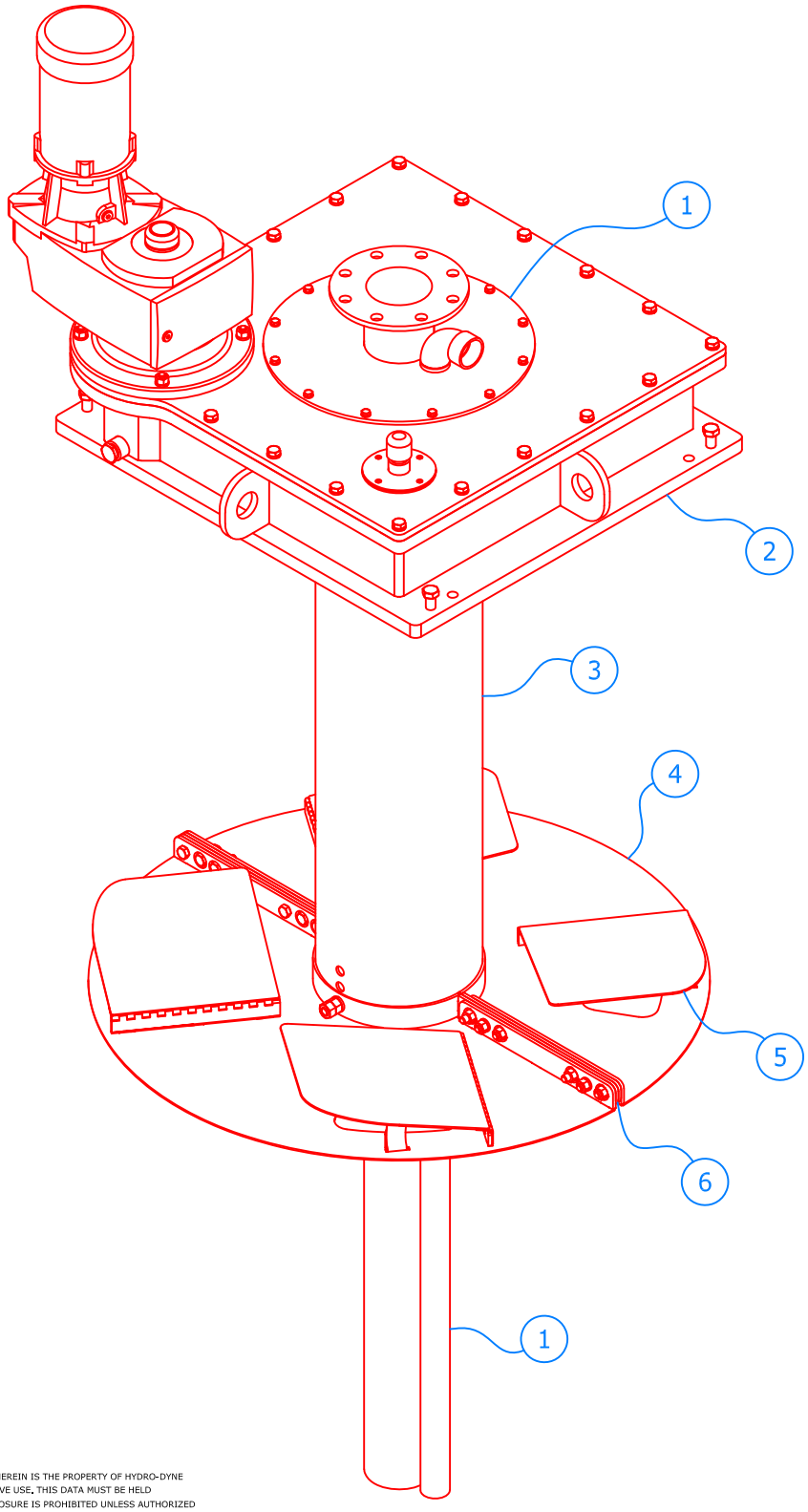
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TYPICAL BREAKOUT – COMPACTOR

DRAWING #: WCP10-5S-EXT		SHT.: 1/1	REV.: –
DRAWN BY/DATE: C. DISPENZA	6/28/2016	SCALE: NTS	
CHECKED BY/DATE: –	6/28/2016		SIZE: A

N:\Sales & Marketing\Made Easy\Drawings\Screening-Handling\WCP\WCP-10\WCP-Redesigned\WCP10-5S-EXT.dwg, 7/13/2016 9:50:32 AM, Adobe PDF

ITEM	PART NUMBER	QTY	DESCRIPTION
1	GT-T-A1-008-XX	1	TOP MOUNT SUCTION ASSEMBLY
2	GT-D-A2-001	1	DRIVE ASSEMBLY
3	GT-P-A1-013-XX	1	DRIVE PIPE ASSEMBLY
4	GT-P-A1-001-XX	2	IMPELLER ASSEMBLY
5	GT-P-A1-021-XX	4	VANE ASSEMBLY
6	GT-P-A1-018-XX	2	IMPELLER CLAMP ASSEMBLY



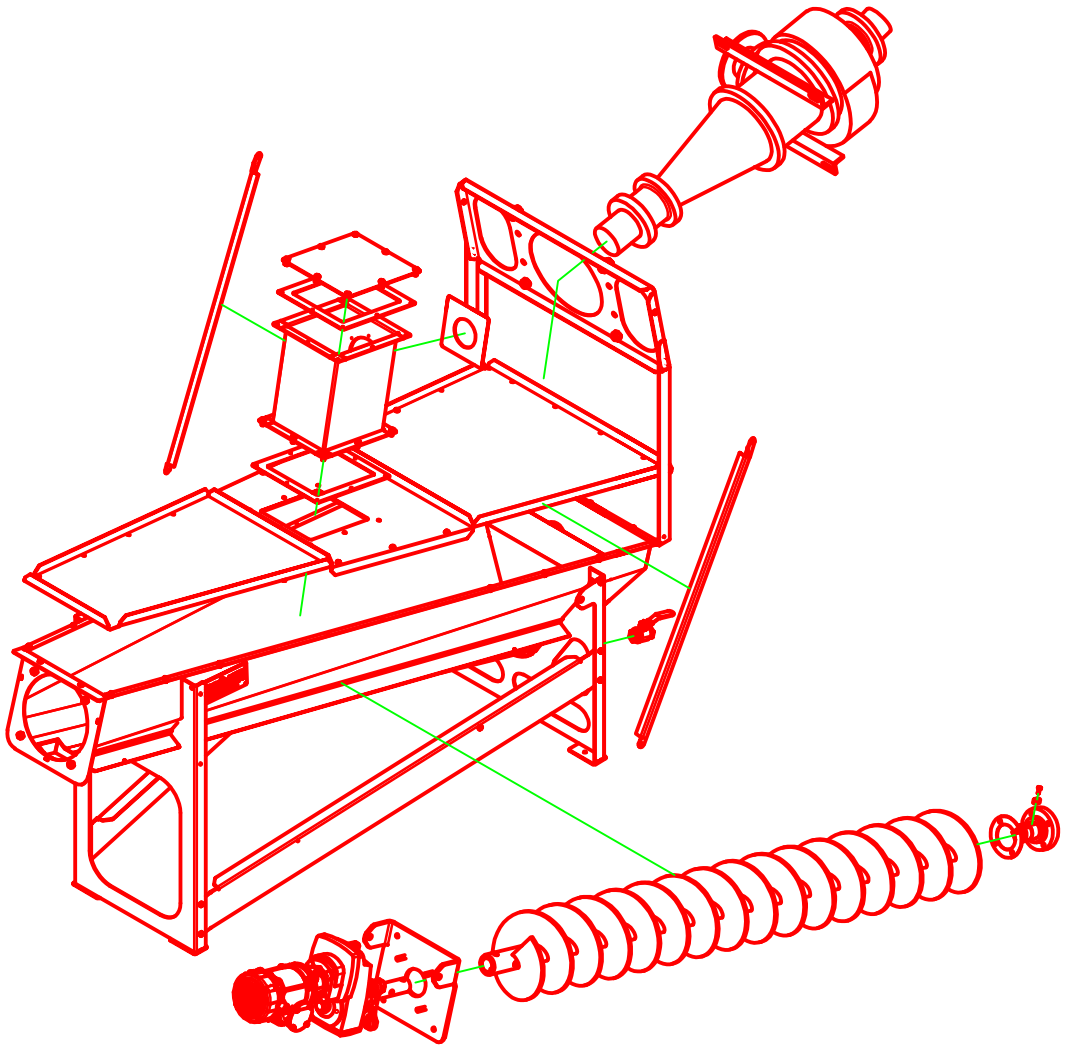
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UNLESS NOTED
TOLERANCE
.X ± 0.125"
.XX ± 0.060"
.XXX ± 0.030"
FRACTIONAL: ± ¼"
± 1°

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GRIT TRAP - TYPICAL ASSEMBLY - TOP MOUNT - IMPELLER

DRAWING #: GT-TOP-IMPELLER		SHT.: 1/1	REV.: C
DRAWN BY/DATE: C. DISPENZA	02/17/19	SCALE: N.T.S.	
CHECKED BY/DATE: J. BOGGESS	02/17/19		SIZE: A



UNLESS NOTED	
TOLERANCE	
.X	± .030
.XX	± .015
.XXX	± .005
.XXXX	± .0005

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GRIT CLASSIFIER TYPICAL BREAKOUT – ASSEMBLY

DRAWING #: GC–12–98C		SHT.: 1/1	REV.: –
DRAWN BY/DATE: C. DISPENZA	12/23/20	SCALE: N.T.S.	
CHECKED BY/DATE: –	–		SIZE: A

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Exhibit A Reference List & Membrane Supplier Approvals For Use Of Hydro-Dyne Engineering Screens To Protect MBR Systems

Hydro-Dyne Engineering - MBR Reference List (June 2024)

#	Facility / Installation	Process	Install Date	Indoor/ Outdoor	Scope of Supply (All Fine Screening - 2mm PP)	Scope of Supply (Grit Removal)	Operation Period	Flow Rate	Owner Contact Name	Owner Contact Number	email address
1	Cranberry, PA Brush Creek WPCF	Municipal WWTP	2017	Indoor/ Outdoor	Fine Screen Only: CF38-61-199-2P (x2) Compactor: WCP10-2P (x2)	None	24/7	30 MGD each	Mike Sedon	724-776-4806 x1300	mike.sedon@cranberrytownship.org
2	Shepardstown, WV Shepardstown WWTP	Municipal WWTP	2011	Indoor	Dual Stage Screening/ Integrated Headworks Coarse Screen: STR-20-127-3L (x1) Fine Screen: CF26-37-135-2P (x2)	Grit Tank - GT 40 Grit Classifier 9-144-C Sluice	24/7	2 MGD each	Frank Welch	304-876-3322	fwelch@shepherdstown.us
3	Franconia, PA Franconia Sewer Authority	Municipal WWTP	2010	Outdoor	Package Plant Fine: CF23-18-87-2P (x2) (2mm PP Screen in tank) Integral Compactor: WCP6 1WW(x2)	None	24/7	1 MGD each	Joanne Strom	215-272-4155	jstrom@franconia-township.org
4	Fallsburg / Loch Sheldrake, NY Loch Sheldrake WWTP	Municipal WWTP	2017	Indoor	Dual Stage Screening CF 23-36-129-2P STR 23-89-6L, WCP6-5S	None	24/7	3 MGD	John Barton	845-701-3974	lswwtplab@fallsburgny.com
5	Minotola, NJ Borough of Buena Municipal Authority	Municipal WWTP	2013	Outdoor	Fine: CF26-30-119-2P(x2) Compactor: WCP-6VP-2WW (x2)	None	24/7	2 MGD	Jon Erber	856-697-0450	j.erber@buenaboroughmua.com
6	Canton, OH Canton WWTP	Municipal WWTP	2015	Indoor	Dual Stage Screening Coarse: CF50-67-277-4P (x3) Fine: CF38-72-217-2P (x6) Compactor: WCP-12 – 2WW (x3) Sluice	None	24/7	44 MGD each (coarse) 22MGD each (fine)	Deborah Houdeshell	330-489-3080	deb.houdeshell@cantonohio.gov
7	Schofield Barracks Wahiawa HI	Municipal WWTP	2021	Outdoor	Single Stage Screening CF28-67-181-2P (x2) WCW-10HD-64-2P with Sluice	None	24/7	6.5 MGD each	Wayne White - Aqua Engineers	808-685-7873	wayne@aquaengineers.com
8	Mountain House, CA	Municipal WWTP	2023	Indoor	Dual Stage Screening/ Integrated Headworks CF32-43-163-6P (x2) CF32-67-187-2P (x2) WCW10(x2)	Grit Tank - GT192-60 (x2) Grit Classifier: GC-12 (x2)	24/7	17 MGD each	Richard White	916 997 7245	rwhite@auburnconstructors.com
9	Lloydminster, AB	Municipal WWTP	2023	Indoor	CF 28-36-229-2P (x2) WCP6 (x2)	None	24/7	16 MGD each	Landon Code	780-205-0954	lcode@lloydminster.ca
10	Sioux Falls, SD Smithfield Foods (Process – Industrial Hog Processing Waste post lagoon and coarse screen)	Industrial WWTP	2022	Indoor	Fine Screen: CF28-30-261-2P (x2) WCP6 (x2)	None	24/7	4 MGD each	Tony Naatjes	605-359-0115	tnaatjes@smithfield.com
11	Goodyear, AZ Sarival WRF (Process - Dual stage screening of raw influent)	Municpial WWTP	2023	Outdoor	Dual Stage Screening/ Integrated Headworks CF28 33 157 6P (x2) CF28-55-165 2P (x2) WCW10 (x2) Sluice	Grit Tank: GT-144-60 (x2) Grit Classifier: GC-12 (x2)	24/7	10 MGD each	Rick Rhodes	623-688-4371	rick.rhoads@libertyutilities.com

Hydro-Dyne Screen Approval – MBR System Suppliers

SUEZ/GE

From: Goldstein, Jake <jake.goldstein@suez.com>
Sent: Wednesday, October 16, 2019 5:00 PM
To: Randall Dow <randall.dow@hydro-dyne.com>
Cc: Bemmann, Cinzia (ext) <cinzia.bemmann.ext@suez.com>
Subject: RE: Suez/GE MBR System - Hydro-Dyne Screen Approval

Hi Randy,

Cinzia has received responses from the majority on your reference list; the last email has just arrived.

Based on these responses, your customers are happy with the product and with the service.

As a result, we have decided that your screens can be used for membrane protection when there is a primary clarification in place.

I just modified the list of acceptable screens, and yours is No 1 in the respective category:

Traveling-Band Screens (mostly in gravity channels) – used in tandem with clarifiers		
Hydro-Dyne	Great White Center Flow Screen	https://www.hydro-dyne.com/products/great-white-center-flow-screen/

Cinzia has already initiated the internal procedure in order to officially make your screens acceptable in the MBR applications.

Please let me know if you have any your comments.

Regards,
Jake

Kubota

From: Hiro Kuge <hiroo.kuge@kubota.com>
Sent: Wednesday, June 24, 2020 5:48 PM
To: Randall Dow <randall.dow@hydro-dyne.com>
Subject: Re: Hydro-Dyne Thank You For Visiting Us At WEFTEC (Kubota)

Randy

Sorry for not replying, but thanks for the reminder. I think I have explained to you before, but we never had any "Organized Approval process" for the fine screen, but I think we are a lot more confident with your screen then before.

I think I have told you this before, very honestly, but before, our organization has almost never recommended the band screen, but currently, we have changed our explanation whenever we get asked about the fine screen.

The only band screen we will recommend is going to be your screen. Please keep explaining to our sales regional managers, because I think they need to confirm in their own eyes like I did at WEFTEC. They need to believe in what they are recommending, and this is not a paper process.

Thank you & with my best respect,

Hiro Kuge M. S.
Technology Manager
KUBOTA Membrane USA Corporation

Dupont/ Memcor

EVOQUA
WATER TECHNOLOGIES

05 June, 2019

Evoqua Water Technologies has evaluated the Hydro-Dyne Engineering Great White Shark Center Flow Band Screen and approves the use of their screen as a pre-screen for Evoqua MBR system designs. The final viability of using a Hydro-Dyne screen for a specific project needs to be based on the project specific design requirements

With kind regards,



Gerin James
Technology Leader, Memcor® MBR

Exhibit B Performance Bond
Surety Letter of Bondability

PROSURE GROUP
BONDING TOGETHER . BUILDING TOGETHER

7217 Benjamin Road
Tampa, FL 33634

(813) 243-1110
(813) 243 -1109 fax
contractbonds@prosuregroup.com
www.prosuregroup.com

December 9, 2024

Pacific Advanced Civil Engineering, Inc. (PACE)
C/O Nathaniel Tesch
8723 E. Via de Commercio, Ste. A-204
Scottsdale, AZ 85258

Re: Letter of Bondability for Hydro-Dyne Engineering, Inc.

To Whom It May Concern:

Please be advised that we are the surety bond agents for Hydro-Dyne Engineering, Inc.. As such, we have enjoyed an excellent relationship with this firm as they have completed all contractual obligations in an acceptable fashion and have taken care of all pay obligations in a timely manner.

We have established a bond line for Hydro-Dyne Engineering, Inc. in the amount of $3,000,000.00 per single project with an $6,000,000.00 aggregate limit. This program is in place through Swiss Re Corporate Solutions America Insurance Corporation rated "A +" (Class XV) by A.M. Best and appears on the U.S. Treasury Circular 570 of approved sureties.

We don't hesitate to recommend this fine company to you. If you should have any further questions, please don't hesitate to contact me.

Sincerely,
ProSure Group, LLC

David B. Shick
President
Attorney-In-Fact for Surety

Exhibit C
Equipment Summary List

Exhibit C - Proposed Equipment Summary

Headworks Screening and Grit Removal System

Manufacturer/Equipment System General Information	
6 mm Fine Screens	
Name of Manufacturer	Hydro-Dyne Engineering
Type of Screening System	Great White Shark Center Flow Screen
Model Info. 6mm Fine Screen	CF26-49-176-2P4
Total # of Units for System (Including Redundancy)	Two (2)
6mm Fine Screen Drive Assembly - Horsepower per Unit (Hp)	0.5 hp
Other Motorized Devices - Horsepower per Unit (Hp)	N/A
Total Unit Max Connected Electrical Load/Train (kW)	=0.44 kW per screen
Max Operational Weight per 6mm Fine Screen (lbs - if packaged unit)	2600 lbs
Overall Footprint (ft x ft)	2.5 ft x 12 ft; Screen only
Endless Bagger (Yes/No)	N/A (Will be on Washing Compactors)
2mm Fine Screens	
Name of Manufacturer	Hydro-Dyne Engineering
Type of Screening System	Great White Shark Center Flow Screen
Model Info. 2mm Fine Screen	CF26-49-176-2P4
Total # of Units for System (Including Redundancy)	Two (2)
2mm Fine Screen Drive Assembly - Horsepower per Unit (Hp)	0.75 hp
Other Motorized Devices - Horsepower per Unit (Hp)	N/A
Total Unit Max Connected Electrical Load/Train (kW)	=0.44 kW per screen
Max Operational Weight per 2mm Fine Screen (lbs - if packaged unit)	4000 lbs
Endless Bagger (Yes/No)	N/A (Will be on Washing Compactors)
Overall Footprint (ft x ft)	4.1 ft x 14.6 ft
Washer Compactor (if not integrated with screens)	
Name of Manufacturer	Hydro-Dyne Engineering
Model Info.	WCW8S-23-5P4 (Coarse Screening) / WCW6S-38-2P4 (Fine Screening)
Total # of Units for System (Including Redundancy)	Two (2) / Two (2)
Conveyor Horsepower (Hp)	3.0 hp / 1.5 hp
Total Unit Max Connected Electrical Load (kW)	=1.9 kW per Coarse Screen WC / =0.97 kW per Fine Screen WC
Power Requirements, and Controlled By?	480V / 3 phase / 60hz and Controlled by Main Control Panel and Local Control Panel supplied by Manufacturer
Endless Bagger (Yes/No)	Yes
Grit Vortex Unit	
Name of Manufacturer	Hydro-Dyne Engineering
Vortex Model Info	Sand Shark Grit Trap / GTT60I102CC4C
Total # of Units for System (Including Redundancy)	Two (2)
Total Unit Max Connected Electrical Load/ Grit Train (kW)	=0.62 kW per Vortex Grit Trap
Power Requirements, and Controlled By?	480V / 3 phase / 60hz and Controlled by Main Control Panel and Local Control Panel supplied by Manufacturer
Grit Pump	
Name of Manufacturer	Gorman-Rupp
Model Info	T4A71S-B/F
Total # of Units for System (Including Redundancy)	Two (2)
Total Unit Max Connected Electrical Load/ Grit Train (kW)	3.1 kW per Grit Pump
Power Requirements, and Controlled By?	480V / 3 phase / 60hz and Controlled by Main Control Panel and Local Control Panel supplied by Manufacturer
Grit Vortex Classifier	
Name of Manufacturer	Hydro-Dyne Engineering
Model Info	Sand Shark Grit Classifier / GC12-98-4C
Total # of Units for System (Including Redundancy)	Two (2)
Total Unit Max Connected Electrical Load/ Grit Train (kW)	0.44 kW per Grit Classifier
Power Requirements, and Controlled By?	480V / 3 phase / 60hz and Controlled by Main Control Panel and Local Control Panel supplied by Manufacturer
Endless Bagger (Yes/No)	Yes
Performance Information	
6 mm Fine Screen and Washer Compactor	
Peak Flow Capacity per 6mm Screen (MGD)	7.5 MGD
Design Headloss (in)	3.35 in
Velocity Through 6mm Fine Screen (fps) @ Design Flow & Peak hr Flow	**Include Graph or Separate Table with Values (FLOW VARYING)**
6mm Fine Screen Head loss at Peak hr Flow (in) and Blinding (0%,30%,65%)	**Include Graph or Separate Table with Values (FLOW VARYING)**
Washer Compactor Screenings Handling (cu ft/Hr)	40 cu ft/Hr
Conveyor Lifting Capacity (lbs)	1150 lbs
Screen Washwater Consumption and Pressure (GPM and PSI)	28.8 GPM at 60 PSI
Screenings Volume Reduction (%)	Up To 85%
Screenings Volume Reduction (% Dryness)	Up To 40%
2mm Fine Screen and Washer Compactor	
Peak Flow Capacity per 2mm Screen (MGD)	7.5 MGD
Design Headloss (in)	8.96 in
Velocity Through 2mm Fine Screen (fps) @ Design flow and Peak-hr Flow	**Include Graph or Separate Table with Values (FLOW VARYING)**
2mm Fine Screen Head loss at Peak Flow (in) and Blinding (0%,30%,65%)	**Include Graph or Separate Table with Values (FLOW VARYING)**
Washer Compactor Screenings Handling (cu ft/Hr)	17.9 cu ft/Hr
Conveyor Lifting Capacity (lbs)	770 lbs
Screen Washwater Consumption and Pressure (GPM and PSI)	57.6 GPM at 60 PSI
Screenings Volume Reduction (%)	Up To 85%
Screenings Volume Reduction (% Dryness)	Up To 40%
Grit Vortex Unit and Classifier	
Solids Capture (%) at 0.25mm particle size & 2.65 SG	95%
Grit Pump Capacity (gpm)	250 GPM
Grit Pump Operating Pressure	12.5 PSI
Grit Classifier and Integral Hydro-Cyclone Capacity	250 GPM
Grit Classifier Grit Handling (cu ft/Hr)	180 cu ft/Hr
Capital Cost	
Single Train 6mm Fine Screen Equipment Cost ($)	$222,711
Total 6mm Fine Screens Equipment Cost ($)	$445,422
Single Train 2mm Fine Screen Equipment Cost ($)	$380,355
Total 2mm Fine Screens Equipment Cost ($)	$760,710 Price includes controls for all equipment
Single Train Washer/Compactor Equipment System Cost ($)	Included in Screen Cost
Total Washer/Compactor Equipment System Cost ($)	Included in Screen Cost
Single Train Grit System and Classifier Equipment Cost ($)	$133,290
Total Grit System and Classifier Equipment Cost ($)	$266,418
If Required: Total Misc. Equipment Costs (Booster Pumps, etc) ($)	$0
If Required: Structural Components (Lifts, Access Platforms, etc) ($)	$0
If Required: Total Volume of Structural Concrete (CY)	See Exceptions
Installation/Start-Up/Training Cost ($)	$16,000
Total Freight (FOB to Jobsite) ($)	$16,000
Standard Spare Parts and System Consumables ($)	$6,000 **Include With Spare Parts List - See Service & Support Section**
Total Equipment System Capital Cost ($)	$1,510,550
Total Cost Addition to Reach BABA Compliance ($)	$0 No additional cost required
Maintenance and Repair Contract	
Guaranteed Response Period (hrs)	Excluded
Cost of 5-year Service Contract ($) - see exception/clarification	$32,000
Cost of 5-yr Extension Option ($)	Excluded
Electrical and Controls	
Equipment Design Input Power (kW)	To be provided at submittal
Total Power at Point of Connection (kW)	To be provided at submittal
Separate Control Panels per Train included (y/n)	Y
PLC Type/Model and Communication Protocol going to Other PLCs or SCADA	Allen Bradley CompactLogix 1769-L33ER / Ethernet IP
Warranty & Guarantee	
Guarantee Statement Provided (y/n)	N
Equipment System Warranty Period (months)	24
Extended Warranty (months)	12
Cost of Extended Warranty ($)	$44,840
Performance Bond	
Performance Bond Cost - 24 Months ($)	$52,869
Performance Bond Cost - 36 Months ($)	$59,700
Service & Support	
Start-up Period (days)	(3) Trips and (5) days
Is Spare Parts List Provided? (y/n)	Y
Are Maintenance Requirements and Schedule Provided? (y/n)	Y
Location of Parts Distribution Center (city, distance in miles to project)	Clearwater, FL / 1,926 miles
Location of Design Support Center (city, distance in miles to project)	Clearwater, FL / 1,926 miles
Design Support (y/n)	
Delivery Schedule	
Submittal Preparation Period (months)	6 weeks
Fabrication Period (months)	26 weeks
Delivery Period (months)	1 week

Exhibit D
Exclusions/Exceptions

EXHIBIT D – EXCLUSIONS/EXCEPTIONS FORM

Please identify exceptions to any of the specifications provided in the RFP Package. Please submit this form with your proposal. If no exceptions are taken, enter "None" for the first item. Make additional copies as necessary. Please note that these exceptions do not mitigate the responsibility of the vendor, in any way, whatsoever, on performance, equipment quality, maintainability, and operability.

Exception #	Proposal Page #	Section #	Exception Taken
1	NA	NA	Hydro-Dyne's pricing is valid based on notification to proceed with manufacture by 6/9/25.
2	2	1.a.v	Hydro-Dyne is taking exception to the requirement to supply Volume in cubic yards of structural concrete required – Hydro-Dyne's design fits within a footprint of 27.0 ft x 63.2 ft, well within the 42 ft x 72 ft area identified in the RFP.
3	2	1.b	There is no cost adder or schedule impact for providing a BABA compliant system.
4	3	1.e.	Hydro-Dyne is willing to provide a Performance Bond in the amount of 100% through the end of warranty period. Hydro-Dyne is supplying a Letter of Bondability from our Surety in lieu of a letter in Hydro-Dyne letterhead.
5	3	1.e.	Hydro-Dyne is taking exception to the requirement to provide a letter stating our willingness to provide a 100% performance guarantee for the duration of the warranty. Hydro-Dyne is excluding the Performance Guarantee from our offer.
6	3	1.g.	Hydro-Dyne is taking exception to the escalation clause and is including an adder for cost escalation to extend bid validity an additional 12 months. Note bid validity is based on date Notice To Proceed is received.
7	3	4. Maintenance and Repair Contract	Hydro-Dyne is taking exception to the Full Maintenance and Repairs Contract provisions. Hydro-Dyne is including, as an adder, a 5-year service plan as part of our offer.
8	4	5. Guarantee	Hydro-Dyne is taking exception to the following "*Further, it shall state that required subsystems or appurtenances omitted will be provided by the vendor at no additional cost to the owner.*"

EXHIBIT D – EXCLUSIONS/EXCEPTIONS FORM

9	4	6. Warranty	Hydro-Dyne is taking exception to the following "*The warranty shall include meeting the performance guarantee specified. Vendor shall bear 100% of any replacement costs or costs incurred due to upgrades required to meet the performance requirements during the lifetime of the warranty period and/or the duration of the Full Maintenance and Repair Contract*." Hydro-Dyne is providing our standard 2 year warranty.
10	4	8. Equipment Performance, Layouts, and Specifications	Hydro-Dyne is taking exception to the following "*Performance data provided shall be guaranteed for the duration of the warranty period and/or Full Maintenance and Repair Contract*."
11	5	9. Equipment/System Automation	Hydro-Dyne's system is designed for fully automatic operation with minimal operator attention. See Appendix "Typical Sequence Of Automatic Operation For Two Channel Integrated Headworks System", for detailed description of system's automatic operation.
12	6	12. Schedule Liquidated Damages	Hydro-Dyne can agree to liquidated damage provisions for late delivery as revised below: "Should Seller delay the Project, or any portion thereof, in any way, then Supplier's sole liability and Purchaser's sole remedy is assessment of liquidated damages of $500/day, starting 2 weeks after the contractual milestone date, up to 50% of the contract value, only if Purchaser is assessed liquidated damages by the Owner as a result of Supplier's delay."
13	13	1.2.D	Hydro-Dyne is quoting an upgraded enhanced washing compactor which exceeds the RFP requirement to produce dewatered screenings capable of passing the EPA Paint Filter Test as described in method 9095 of EPA Publication SW-486. Smaller opening (6mm and smaller) perforated plate screens may remove a high amount of organic solids which need to be thoroughly washed and returned to the channel by the washing compactor. The quoted washing compactor will meet the following specifications: • Weight reduction up to 80% • Screening volume reduction up to 85% • Organic removal up to 95% • Dewatered screenings dry solids content up to 40% (depending on material to be dewatered)

EXHIBIT D – EXCLUSIONS/EXCEPTIONS FORM

14	13	1.2.I	Details of electrical classification environments are not provided in the RFP. Hydro-Dyne is quoting both C1D2 components (motors, MCP) and C1D1 components (solenoids, LCS, level instruments) and can supply C1D1 components for a cost adder, if the final design requires these to be placed in a C1D1 environment.
15		Exhibit C Capital Cost Summary	Hydro-Dyne costing details are for information only as we are providing an integrated package. Pricing provided cannot be used to purchase selective line items.
16	16	Materials of Construction	Hydro-Dyne is supplying our standard paint coatings and is taking exception to the paint spec for gears, motors and bearings. We can provide an adder to supply spec compliant paint if requested.
17	17	Payment Terms & Conditions A.1	Payment Terms & Conditions A.1. – Hydro-Dyne takes exception to the statement "Equipment submittal is required prior to the execution of this contract for the Engineer to review and approve." Hydro-Dyne cannot start submittals until execution of the contract. We can complete submittals under a separate contract for 10% of the total order value. This contract will be billed and payments received within 30 days of submittal approval.
18	17	Payment Terms & Conditions A.1	The statement "*billing and payments will not commence until the assigning of this contract to the Construction Contractor where in the Construction Contractor will issue the Notice to Proceed to Order Equipment to the Vendor*", does not define the time period between completion of submittals and the issuing of the notice to proceed. Hydro-Dyne pricing validity and validity extensions are based on receipt of the Notification To Proceed within 6 months of the proposal date.
19	17	Payment Terms & Conditions B.	Hydro-Dyne takes exception to Payment Terms paragraph B.
20	NA		Hydro-Dyne proposal does not include engineering certifications or seals, seismic/wind calculations and related PE stamps. These can be provided for a cost adder upon request.

Exhibit E
Addendum Acknowledgement Form

EXHIBIT E - ADDENDUM ACKNOWLEDGEMENT		
ADDENDUM	**DATE ISSUED**	**SIGNATURE**
1	11/22/24	Randall Dow
2	11/26/24	Randall Dow

APPENDIX

5-Year Service Proposal

HYDRO-DYNE ENGINEERING
DESIGNED TO PROTECT. BUILT TO PERFORM.™
4750 118th Ave. N. | Clearwater, FL 33762
P. 813-818-0777 | F. 813-818-0770
www.hydro-dyne.com

Date: 12/9/24
Plant Name: San Luis, AZ - West WWTP

Hydro-Dyne Engineering On-Site Inspection and Service

Hydro-Dyne Engineering is pleased to offer On-Site Inspection and Service for your HDE equipment. There is no better way to protect the investment you have in this equipment and your sensitive downstream processing equipment than to properly maintain your screening, compacting and collection equipment to factory specifications. Your decision to use Hydro-Dyne on-site factory service will ensure that the health of your equipment is our priority. Our service planner will add your facility to our service calendar and arrange any air travel, rental cars and accommodations needed for our field technician to provide you the best service in the industry.

Our field service technicians are all full-time factory trained and authorized technicians that also work on our factory floor. Their knowledge of your equipment is not limited only to maintenance and service. They have a great understanding of how it is built and the processes we use to make this the best equipment on the market. One of our factory trained field service technicians will be on-site at your facility to perform all the adjustments and tests that your specific Hydro-Dyne equipment requires to stay functioning at peak performance. We will provide to you with our 5-year service contract offering, so we can continue to work with you to keep your Hydro-Dyne equipment running optimally.

Here is an itemization of the Hydro-Dyne equipment to be installed at your facility:

• Screens	QTY 2	CF26-30-144-6P
• Compactors	QTY 2	WCW8S 23 5P
• Screens	QTY 2	CF26-49-176-2P
• Compactor	QTY 2	WCW6s 38 2P
• Grit Trap	QTY 2	GTT60I102CC4C/CC, GTK-144C-N
• Grit Pump	QTY 2	Gorman Rupp T4A71S-B/F
• Grit Classifier	QTY 2	GC12-98-4C

HYDRO DYNE ENGINEERING
DESIGNED TO PROTECT. BUILT TO PERFORM.™
4750 118th Ave. N. | Clearwater, FL 33762
P. 813-818-0777 | F. 813-818-0770
www.hydro-dyne.com

On-Site inspection and service includes:

- Authorized service and repairs performed by our factory trained technician.
- All technician expenses including: air travel, rental car, meals and hotel expenses.
- A comprehensive after-service summary report of all work performed, a record of control settings upon arrival and departure, a list of any performance improvements offered, oil analysis reports, a description of any current repairs needed and a schedule of recommended daily, weekly and monthly maintenance.
- Each electric motor will be cleaned, greased when needed, and the bearings inspected for wear. The full load amp draw will be measured on each motor. This inspection allows us to verify the output horsepower of the motor and brings to light any unforeseen mechanical load problems. All wiring, switches, resets and connections will be inspected.
- All screen and compactor bearings will be inspected and greased as needed.
- All seals and gaskets will be inspected for integrity and leakage.
- The spray nozzles will be cleaned and inspected for wear or damage. The orifice size will be measured, and the spray pattern confirmed.
- The spray wash header will be inspected. All supply lines and connections will be inspected.
- The drive shaft, drive sprockets, pivot shafts, drive chains and guide links will all be inspected for integrity and wear.
- The frames, guide tracks and screen panels will all be inspected for integrity and wear.
- All current monitors, proximity switches, motion switches, speed sensors, solenoids, transducers will be inspected and adjusted as needed.
- The control panel, emergency stop button, circuit breakers, and timers will be inspected.
- The compactor auger, brushes, spray assembly, housings and bagging assembly (if supplied) will be inspected.
- Sediment filters, filter housings, strainers, wiper blades and discharge chutes will be inspected.
- All access panels will be removed to accommodate inspections and cleaning.
- Channel seals and lower screen frame and wear tracks will be inspected (channel will need to be drained by facility personnel during inspection and service call).
- Weather sealing, insulation, heat trace and climate protection equipment will be inspected and tested as needed.

APPENDIX

Typical Sequence Of Operation For Two Channel Integrated Headworks System

Typical SEQUENCE OF OPERATIONS

SCREEN MODE OF OPERATION (TYPICAL FOR 4):

HAND: WHEN THE SCREEN HAND-OFF-AUTO SELECTOR IS IN THE HAND POSITION, THE SCREEN WILL RUN CONTINUOUSLY. THE SCREEN WILL RUN AT HIGH SPEED (60 HZ) UNLESS PROGRAMMED OTHERWISE IN THE FIELD. HAND CONTROL IS AVAILABLE EXTERNAL TO THE PLC FOR CONTINUED OPERATION IN EMERGENCY CONDITIONS.

AUTO: WHEN THE SCREEN HAND-OFF-AUTO SELECTOR IS IN THE AUTO POSITION, THE SCREEN WILL RUN BASED ON THE REPEAT CYCLE TIMER OR LEVEL CONTROL MODE OUTLINED BELOW.

SCREEN REPEAT CYCLE TIMER:

IF THE SCREEN HAS NOT RUN FOR THE CYCLE OFF TIME, THE SCREEN WILL BE CALLED TO RUN FOR THE CYCLE ON TIME. ANY CALL TO RUN THE SCREEN WILL RESET THE CYCLE OFF TIMER.

LEVEL CONTROL MODE:

THE SCREEN WILL BE CALLED TO RUN WHEN THE DIFFERENTIAL LEVEL REACHES THE HIGH LEVEL ON SETPOINT FOR LONGER THAN THE SCREEN ON DELAY TIME. THE SCREEN SPEED WILL VARY PROPORTIONAL TO THE DIFFERENTIAL LEVEL. THE SCREEN WILL CONTINUE TO RUN UNTIL THE LEVEL FALLS BELOW THE HIGH LEVEL OFF SETPOINT. THE SCREEN WILL THEN CONTINUE TO RUN FOR THE SCREEN OFF DELAY TIME.
A HIGH-HIGH LEVEL CONDITION IS TRIGGERED IF THE UPSTREAM LEVEL OR DIFFERENTIAL LEVEL RISE ABOVE THE RESPECTIVE HIGH-HIGH LEVEL ON SETPOINTS, OR IF THE UPSTREAM FLOAT SWITCH IS TRIGGERED. DURING A HIGH-HIGH LEVEL CONDITION, THE SCREEN SPEED WILL RUN AT HIGH SPEED (60 HZ BY DEFAULT).

SCREEN FAULTS:

THE SCREEN WILL FAULT AND STOP IMMEDIATELY BASED ON THE FOLLOWING CONDITIONS:

1. MOTOR OVER TEMPERATURE
2. VFD FAULT
3. MOTOR CIRCUIT PROTECTOR OVERLOAD
4. HIGH CURRENT
5. EMERGENCY STOP

IF A FAULT OCCURS, ENSURE THE FAULT CONDITIONS ARE CLEAR AND PRESS THE RESET PUSHBUTTON ON THE CONTROL PANEL.

SCREEN WASH VALVE MODE OF OPERATION:

THE SCREEN WASH VALVE WILL BE CALLED TO OPEN ANY TIME THE ASSOCIATED SCREEN IS RUNNING.

GRIT TRAP MODE OF OPERATION (TYPICAL FOR 2):

THE GRIT TRAP WILL RUN CONTINUOUSLY WHENEVER THE SELECTOR SWITCH IS IN THE ON POSITION.

THE GRIT TRAP WILL FAULT AND STOP IMMEDIATELY BASED ON THE FOLLOWING CONDITIONS:

1. MOTOR OVER TEMPERATURE
2. MOTOR CIRCUIT PROTECTOR OVERLOAD
3. EMERGENCY STOP

IF A FAULT OCCURS, ENSURE THE FAULT CONDITIONS ARE CLEAR AND PRESS THE RESET PUSHBUTTON ON THE CONTROL PANEL.

GRIT PUMP MODE OF OPERATION (TYPICAL FOR 2):

HAND: WHEN THE GRIT PUMP HAND-OFF-AUTO SELECTOR IS IN THE HAND POSITION, THE GRIT PUMP WILL RUN CONTINUOUSLY. HAND CONTROL IS AVAILABLE EXTERNAL TO THE PLC FOR CONTINUED OPERATION IN EMERGENCY CONDITIONS.

AUTO: WHEN THE GRIT PUMP HAND-OFF-AUTO SELECTOR IS IN THE AUTO POSITION, THE GRIT PUMP WILL RUN BASED ON THE GRIT PUMP CYCLE ON AND OFF TIMERS THAT ARE ADJUSTABLE THROUGH THE OIT. ONLY ONE GRIT PUMP WILL RUN AT A TIME.

THE GRIT PUMP WILL FAULT AND STOP IMMEDIATELY BASED ON THE FOLLOWING CONDITIONS:

1. MOTOR OVER TEMPERATURE
2. MOTOR CIRCUIT PROTECTOR OVERLOAD
3. EMERGENCY STOP

IF A FAULT OCCURS, ENSURE THE FAULT CONDITIONS ARE CLEAR AND PRESS THE RESET PUSHBUTTON ON THE CONTROL PANEL.

GRIT FLUIDIZING VALVE MODE OF OPERATION (TYPICAL FOR 2):

HAND: WHEN THE GRIT VALVE OPEN-CLOSE-AUTO SELECTOR IS IN THE OPEN POSITION, THE VALVE WILL REMAIN OPEN CONTINUOUSLY. HAND CONTROL IS AVAILABLE EXTERNAL TO THE PLC FOR CONTINUED OPERATION IN EMERGENCY CONDITIONS.

AUTO: WHEN THE GRIT VALVE OPEN-CLOSE-AUTO SELECTOR IS IN THE AUTO POSITION, THE VALVE WILL OPEN FOR THE GRIT FLUIDIZING TIME PRIOR TO THE GRIT PUMP RUNNING ON CYCLE TIME. THE FLUIDIZING TIME IS ADJUSTABLE THROUGH THE OIT.

COMPACTOR MODE OF OPERATION (TYPICAL FOR 2):

HAND: WHEN THE COMPACTOR HAND-OFF-AUTO SELECTOR IS IN THE HAND POSITION, THE COMPACTOR WILL RUN FORWARD OR REVERSE BASED ON THE FWD-OFF-REV SWITCH AT THE LOCAL CONTROL STATION. THE REVERSE POSITION WILL SPRING RETURN TO OFF WHEN NOT HELD. HAND CONTROL IS AVAILABLE EXTERNAL TO THE PLC FOR CONTINUED OPERATION IN EMERGENCY CONDITIONS.

AUTO: WHEN THE COMPACTOR HAND-OFF-AUTO SELECTOR IS IN THE AUTO POSITION, THE COMPACTOR WILL RUN WHENEVER AN ASSOCIATED FINE OR ULTRA-FINE SCREEN IS RUNNING. THE COMPACTOR WILL RUN ACCORDING TO THE AUTO CYCLE DETAILED BELOW.

COMPACTOR AUTO CYCLE:

REVERSING WASH SEQUENCE:

WHEN CALLED TO RUN, THE COMPACTOR WILL FOLLOW A REVERSE-DWELL-FORWARD-DWELL CYCLE. INDIVIDUAL TIMER VALUES ARE ADJUSTABLE THROUGH THE OIT. THE COMPACTOR WILL CONTINUE TO CYCLE FOR AN OFF-DELAY TIME AFTER BOTH ASSOCIATED SCREENS HAVE STOPPED. THE COMPACTOR WILL THEN RUN FORWARD FOR THE EXTRUDE TIME AND STOP. THE REVERSING SEQUENCE CAN BE DISABLED THROUGH THE OIT.

FORWARD ONLY MODE:

IF THE HIGH-HIGH LEVEL CONDITIONS ARE DETECTED IN AN ASSOCIATED SCREEN, THE COMPACTOR WILL PAUSE THE REVERSING SEQUENCE AND RUN IN FORWARD ONLY MODE UNTIL THE LEVEL CONDITION IS CLEARED. ON-DELAY AND OFF-DELAY TIMERS FOR FORWARD ONLY MODE ARE ADJUSTABLE THROUGH THE OIT.

JAM REVERSAL SEQUENCE:

IF THE COMPACTOR DETECTS HIGH CURRENT WHEN RUNNING FORWARD IN AUTO MODE, IT WILL INITIATE A JAM REVERSAL SEQUENCE. IT WILL PAUSE, THEN RUN IN REVERSE FOR THE JAM REVERSE TIME. AFTER ANOTHER PAUSE IT WILL CONTINUE RUNNING FORWARD. THE NUMBER OF JAM ATTEMPTS IS COUNTED, AND IF THE NUMBER OF ATTEMPTS EXCEEDS THE SETPOINT WITHIN THE JAM CLEAR TIME, THE COMPACTOR WILL FAULT.

IF A JAM OCCURS WHEN RUNNING IN HAND OR WHEN RUNNING REVERSE, THE COMPACTOR WILL FAULT IMMEDIATELY AND WILL NOT ATTEMPT A JAM REVERSAL SEQUENCE. THE JAM REVERSAL SEQUENCE CAN BE DISABLED THROUGH THE OIT.

COMPACTOR FAULTS:

THE COMPACTOR WILL FAULT AND STOP IMMEDIATELY BASED ON THE FOLLOWING CONDITIONS:

1. MOTOR OVER TEMPERATURE
2. MOTOR CIRCUIT PROTECTOR OVERLOAD
3. HIGH CURRENT IN HAND MODE OR REVERSE
4. JAM ATTEMPTS EXCEEDED
5. EMERGENCY STOP

IF A FAULT OCCURS, ENSURE THE FAULT CONDITIONS ARE CLEAR AND PRESS THE RESET PUSHBUTTON ON THE CONTROL PANEL.

COMPACTOR WASH VALVE MODE OF OPERATION:

THE COMPACTOR WASH VALVE WILL BE CALLED TO OPEN ANY TIME THE COMPACTOR IS CALLED TO RUN.

COMPACTOR RINSE/CATCH PAN/SCREEN TOP END SLUICE PURGE VALVE MODE OF OPERATION:

THE COMPACTOR RINSE/CATCH PAN/SCREEN TOP END SLUICE PURGE VALVE WILL OPEN FOR AN ADJUSTABLE DURATION TIME AFTER THE COMPACTOR HAS RUN FOR AN ADJUSTABLE ACCUMULATION TIME. THE VALVE WILL ALSO OPEN IF A HIGH SLUICE LEVEL IS DETECTED.

HIGH LEVEL CAPACITANCE SENSOR MODE OF OPERATION:

IF A HIGH LEVEL IS DETECTED IN THE SCREEN SLUICE, THE COMPACTOR RINSE/CATCH PAN/SCREEN TOP END SLUICE PURGE VALVE WILL OPEN AND RUN AS OUTLINED ABOVE.

IF A HIGH LEVEL IS DETECTED IN THE COMPACTOR ENTERANCE, THE COMPACTOR WASH VALVE AND COMPACTOR RINSE/CATCH PAN/SCREEN TOP END SLUICE PURGE VALVE WILL DISABLE TO PREVENT ADDITIONAL WATER FROM FILLING THE SLUICE/COMPACTOR. ADDITIONALLY, THE COMPACTOR WILL ENTER A FORWARD ONLY MODE AS OUTLINED ABOVE.

SYSTEM OPERATION:

EMERGENCY STOP:

IF THE EMERGENCY STOP PUSHBUTTON IS PRESSED AT THE MAIN CONTROL PANEL, ALL ASSOCIATED EQUIPMENT WITH THE CONTROL PANEL WILL STOP IMMEDIATELY AND VALVES WILL RETURN TO THEIR POWERED OFF STATE. PRESSING THE EMERGENCY STOP ON A LOCAL CONTROL STATION WILL STOP ALL EQUIPMENT ASSOCIATED WITH THAT STATION. TO RESET, ENSURE THE E-STOP IS NOT ACTIVE AND PRESS THE RESET PUSHBUTTON ON THE PANEL.

LOSS OF POWER:

IF THE POWER TO THE PANEL IS INTERRUPTED, THE EQUIPMENT MAY CYCLE IMMEDIATELY ONCE THE POWER IS RESTORED. PRESSING THE RESET PUSHBUTTON AFTER A POWER OUTAGE WILL NOT BE REQUIRED. LOSS OF POWER WILL BE INDICATED ON THE OIT.

*ALL RIGHTS RESERVED. THE INFORMATION TRANSMITTED HEREIN IS THE PROPERTY OF HYDRO-DYNE ENGINEERING INC. AND HAS BEEN PROVIDED FOR RESTRICTIVE USE. THIS DATA MUST BE HELD CONFIDENTIAL AND TRANSMISSION, DUPLICATION OR DISCLOSURE IS PROHIBITED UNLESS AUTHORIZED IN WRITING BY HYDRO-DYNE ENGINEERING INC.

NO.	DATE	REVISION	BY
1	11/18/22	PER SUBMITTAL COMMENTS	W. BARNETT
0	10/12/22	FOR SUBMITTAL	W. BARNETT

UNLESS NOTED TOLERANCE
.X ± .030
.XX ± .015
.XXX ± .005
.XXXX ± .0005

HYDRO-DYNE ENGINEERING
www.hydro-dyne.com

PROJECT #: 04907

SCREEN & GRIT SYSTEM CONTROL PANEL - GOODYEAR, AZ / SARIVAL

DRAWING #: AC0724 | SHT.: 24/24 | REV.: 1

DRAWN BY/DATE: W. BARNETT 10/12/22 | SCALE: N.T.S.

CHECKED BY/DATE: M. HOWZE 10/12/22 | SIZE:

APPENDIX

UKWIR

Screenings Capture Rate (SCR)

Certifications

ThompsonRPM

THIS IS TO CERTIFY THAT THE:

HYDRO-DYNE HYDRO-FLO (2 mm APERTURES)

WAS TESTED AT THE:

NATIONAL SCREEN EVALUATION FACILITY
CHESTER LE STREET STW
NORTHUMBRIAN WATER
AUGUST 2011

AVERAGE SCREENINGS CAPTURE RATIO = 93%

FOR FURTHER DETAILS REFER TO:

THOMPSON RPM REPORT REF- TRPM-REP251

Barry Thompson
Thompson RPM Ltd

ThompsonRPM

THIS IS TO CERTIFY THAT THE:

HYDRO-DYNE HYDRO-FLO (6 mm APERTURES)

WAS TESTED AT THE:

NATIONAL SCREEN EVALUATION FACILITY
CHESTER LE STREET STW
NORTHUMBRIAN WATER
AUGUST 2011

AVERAGE SCREENINGS CAPTURE RATIO = 84%

FOR FURTHER DETAILS REFER TO:

THOMPSON RPM REPORT REF- TRPM-REP251

Barry Thompson
Thompson RPM Ltd

APPENDIX

BABA Compliance Certificate and Factory Overview

BUILD AMERICA, BUY AMERICA COMPLIANCE CERTIFICATION

Date 12/5/24

RE: San Luis, AZ - West WWTP
Location: San Luis, AZ
Specification Section(s): Request For Proposal

Dear Valued Partner,

We hereby certify that the products supplied for the above referenced project are in full compliance with Build America, Buy America (BABA) requirements including the domestic content requirements under Section 70912 stating the following requirement of Manufactured Products:

i) the manufactured product was manufactured in the United States; and
ii) (ii) the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55% of the total cost of all components of the manufactured product

The products below have a final manufacturing point at our Clearwater, Florida, USA headquarters.

1. Great White Shark (Coarse Screen) (x2) Model #: CF-26-30-144-6P4
2. White Tip Shark (Coarse Screen) Washing Compactor (x2) Model #: WCW8S-23-5P4
3. Sand Shark Grit Tank (x2) Model #: (1) GTT60I102CC4C, (1) GTT60I102CC4C, (2) GTK-144C-N
4. Sand Shark Grit Classifier (x2) Model #: GC12-98-4C
5. Great White Shark (Fine Screen) (x2) Model #: CF26-49-176-2P4
6. White Tip Shark (Fine Screen) Washing Compactor (x2) Model #:WCW6S-38-2P4

Selection of domestic materials and components wherever possible has been standard practice for Hydro-Dyne therefore compliance with BABA domestic content requirements is met without need for waivers or exceptions.

Signed by:

David Scatton

Quality Assurance Manager

Hydro-Dyne Engineering, Inc
6.6.22

Introduction

Hydro-Dyne Engineering, Inc. is a leading manufacturer of exceptional quality preliminary treatment equipment for municipal and industrial water and wastewater facilities. This includes both water and wastewater screening, solids compaction, solids handling, grit collection and removal equipment. We design and manufacture some of the most advanced technologies to protect not only the processes within municipal and industrial applications, but also our natural environments to ensure a cleaner and sustainable future for generations to come.

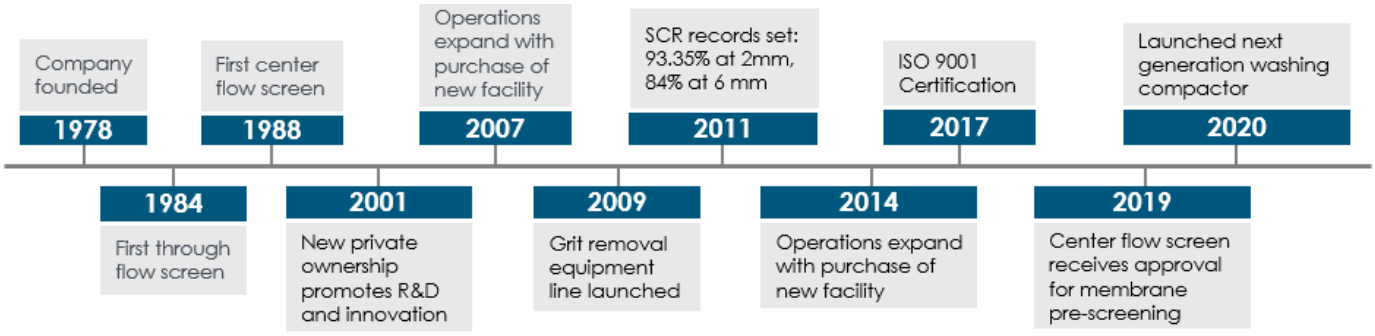
The figure below provides a picture of the 110,000 square foot manufacturing facility located in Clearwater.



Hydro-Dyne Engineering, Inc Headquarters located in Clearwater

Hydro-Dyne is unique in the water and wastewater industry as one of the only manufacturers that owns its own patents and performs all equipment design, fabrication, assembly, and testing in house. We have complete control of our products from start to finish and continuously improve and advance technologies through innovation and product testing. In fact, several of Hydro-Dyne's recently patented designs establish the highest limits of screening in the industry.

It is important to note this company has been in the wastewater industry continuously under one owner for 20 years as an original equipment manufacturer. The figure below provides a timeline history of Hydro-Dyne Engineering.



Company History / Timeline

All equipment is manufactured from stock including steel preparation, welding, stainless steel passivation, assembly, and equipment testing. Equipment of various sizes is produced in the facility for <1 MGD to >100 MGD water and wastewater applications. The figures below provide pictures of various sizes of the equipment engineered, fabricated, assembled, and tested. Typically, septage receiving screening and compaction is on the smaller end of the spectrum to the left below.





Screen sizes from 1 MGD to 50 MGD

A 20,000 square foot area is dedicated to fabrication with stainless steel. The figure below shows the welding and material storage areas.



Welding / Fabrication Area

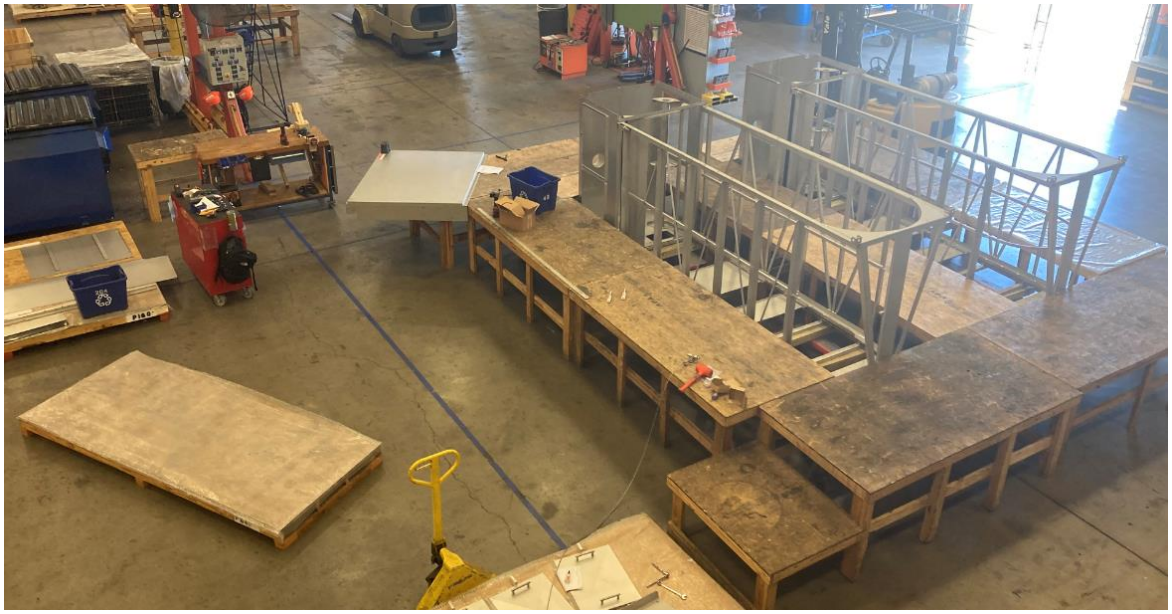
Pickling and passivation are completed in house with a 4-tank submerged cleaning, passivation and rinse process. All stainless steel weldments fabricated in the shop are passivated. Passivation provides a protective oxide layer over the steel surface. The result is steel that is resistant to the corrosive forces, particularly biogenic corrosion that is present in any wastewater application near the collection system or

headworks. The figure below shows stainless steel parts going into the pickling and passivation tank for contact with a mixture of hydrofluoric and nitric acid. This process is done to ASTM A380 for passivation of stainless steel.



Pickling and Passivation Process – Clearwater Facility

A 20,000 square foot area is dedicated to assembly of fabricated parts. The entire process completed under one roof. The figure below shows the assembly of wastewater screens in this area.



Clearwater Assembly Area

APPENDIX

10 Year Life Cycle Cost:
Screening and Grit Removal Systems

Maintenance Summary Table - Screen and Compactor

CENTER FLOW SCREEN

PREVENTIVE MAINTENANCE SCHEDULE								# Events	Total Hours	Part Replacement Cost	Man-Hours To Replace	Total Cost To Replace (10 yrs)	Comments
Item #	Part Name	Maintenance Requirement	W	M	Y	H	Mins to perform task	Year	Year	$	Hrs Per Event	$	
1	Screen grid area	Inspect for any build-up. Clean as needed.	X				5	52	4.3				
2	Drive shaft sprockets	Inspect for any build-up. Clean as needed.	X				5	52	4.3				
3	Pressure gauge	Inspect water pressure. Provide as required	X				5	52	4.3				
4	*Sediment filter	Inspect for blockages. Clean as needed.	X				15	52	13.0				Optional Item
5	Spray nozzles	Inspect for blockages. Clean as needed.	X				5	52	4.3	$13.8	0.5	$389	Figure 1 per year
6	Wash water accessories	Inspect for leaks, damage and function. Replace as needed.	X				5	52	4.3				
7	Flange bearing	Add appropriate grease		X			5	12	1.0	$10	0.1	$85	Once per year
8	Screen assembly	Clean machine exterior. Apply stainless steel preservative.			X		30	1	0.5				Once per year
9	Channel	Flush Tank of grit			X		0	1	0.0				Not required in most cases
11	Gear reducer breather	Inspect for wear or damage. Clean/replace as needed.			X	2,000	5	1	0.1				
12	Electric motor	Clean & measure full load amp draw.			X	2,000	30	1	0.5				Should not require replacement in 10 yrs
13	Gear reducer oil	Drain and replace oil.			5	10,000	30	1/5 years	0.10	$50	1	$200	Gears and bearings are not expected to require replacement
14	Guide links	Inspect for wear or damage. Replace as needed.			5		5	1/5 years	0.02				Should not require replacement unless damaged
15	Pivot shafts (axels)	Inspect for wear or damage. Replace as needed.			5		5	1/5 years	0.02				Should not require replacement unless damaged
16	Hook & straight links	Inspect for wear or damage. Replace as needed.			5		5	1/5 years	0.02				Should not require replacement unless damaged
17	Wear tracks	Inspect for wear or damage. Replace as needed.			5		2	1/5 years	0.01			$0	Should not require replacement - grit loading dependent
W = WEEKLY, M = MONTHLY, Y = YEARS, H = HOURS													
Screen Subtotal									**36.9**	**$73.80**	**1.6**	**$674**	

WASHING COMPACTOR

PREVENTIVE MAINTENANCE SCHEDULE								# Events	Total Hours	Part Replacement Cost	Man-Hours To Replace	Total Cost To Replace (10 yrs)	Comments
Item #	Part Name	Maintenance Requirement	W	M	Y	H	Mins to perform task	Year	Year	$	Per Event	$	
1	Trough drainage area	Inspect solids are cleared. Clean as needed.	X				5	52	4.3				
2	*Wash Module drainage area	Inspect solids are cleared. Clean as needed.	X				5	52	4.3				Optional Item
3	Flight coil brush	Inspect for any build-up. Clean as needed.	X				10	52	8.7				
4	Pressure Gauge	Inspect water pressure. Provide as required	X				5	52	4.3				
5	*Sediment Filter	Inspect for blockages. Clean as needed.	X				5	52	4.3				Optional Item
6	Trough drainage area	Inspect for damage or build-up. Clean or repair as needed.		X			5	12	1.0	$2,395	4	$2,695	Trough may require replacement once within 10 years.
7	Flight coil brush	Inspect for damage or build-up. Clean or replace as needed.		X			10	12	2.0	$485	4	$1,385	Replace approx every 3 years
8	Compactor Assembly	Clean machine exterior. Apply stainless steel preservative.		X	X		30	1	0.5				
9	Trough catch pan drainage area	Inspect for build-up. Clean as needed.			X		0	1	0.0				Not required in most cases
10	*Wash water accessories	Inspect for wear or damage. Replace as needed.			X		30	1	0.5				
12	Gear reducer breather	Inspect for wear or damage. Clean/replace as needed.			X	2,000	5	1	0.1				
13	Electric motor	Clean & measure full load amp draw.			X	2,000	30	1	0.5				Should not require replacement in 10 yrs
14	Gear Reducer oil	Drain and replace oil.			X	10,000	30	1/5 years	0.1	$50	1	$200	
W = WEEKLY, M = MONTHLY, Y = YEARS, H = HOURS													
Compactor Subtotal									**30.7**	**$2,930.00**	**9.0**	**$4,280.00**	
Grand Total									**67.6**	**$3,003.80**	**10.6**	**$4,953.80**	

10 year Cost - Labor	**$50,693**
10 year Parts Replacement	**$4,954**
10 Year Total	**$55,646**
Power	**$13,718**
10 year total	**$69,364**

Maintenance Summary Table - Grit System

Grit Tank

PREVENTIVE MAINTENANCE SCHEDULE							# Events	Total Hours	Part Replacement Cost	Man-Hours To Replace	Total Cost To Replace (10 yrs)	Comments
Item #	Part Name	Maintenance Requirement	W	M	Y	Mins to perform task	Year	Year	$	Hrs Per Event	$	
1	Flush water pressure	Inspect water pressure.	X			5	52	4.3				
2	Flush water accessories	Inspect for leaks, damage and function. Replace as needed.	X			5	52	4.3				
3	Rotating System	Inspect for leaks, damage, vibration etc	X			5	52	4.3	$13.8	0.5	$389	Low speed operation
4	Flange bearing	Add appropriate grease		X		5	12	1.0	$10	0.1	$85	
5	Gear reducer breather	Inspect for wear or damage. Clean/replace as needed.			X	5	1	0.1				
6	Electric motor	Clean & measure full load amp draw.			X	30	1	0.5				Not expected to be replaced in 10 yrs
7	Gear reducer oil	Drain and replace oil.			5	30	1/5 years	0.10	$50	1	$200	Change oil once every 5 years
W = WEEKLY, M = MONTHLY, Y = YEARS, H = HOURS												
		GT Subtotal						**14.7**	**$73.80**	**1.6**	**$674**	

Grit Pump

PREVENTIVE MAINTENANCE SCHEDULE							# Events	Total Hours	Part Replacement Cost	Man-Hours To Replace	Total Cost To Replace (10 yrs)	Comments
Item #	Part Name	Maintenance Requirement	W	M	Y	Mins to perform task	Year	Year	$	Hrs Per Event	$	
1	General Inspection	Inspect for temp, vibration, noise, leaks				10	356	59.3				
2	Bearing Lubrication	Inspect	X			5	52	4.3				
3	Seal Lubrication	Inspect	X			5	52	4.3				
4	V Belt Adjustment	Inspect and adjust if needed		X		5	12	1.0				
5	Air Release	Inspect for blockages. Clean as needed.		X		5	12	1.0				
6	Impeller Clearance Check	Inspect for wear, damage and function. Replace as needed.			X	60	1	1.0				
7	Check Valve	Inspect			X	5	1	0.1				
8	PRV	Inspect			X	30	1	0.5				
9	Alignment	Check within Tolerance			X	120	1	2.0				
10	Check Shaft Deflection	Check within Tolerance			X	120	1	2.0				
11	Electric Motor	Clean & measure full load amp draw.			X	60	1	1.0				Should not require replacement in 10 yrs
12	Bearings	Inspect & Lubricate			X	30	1	0.5	$50	1	$200	Assumes pump is not running continuously
13	Bearling Housing	Inspect			X	30	1	0.5				
14	Piping	Inspect for leaks			X	10	1	0.2				
15	Spare Part Replacement	Impellor, V Belt				60	1	1.0	$2,500	4	$3,100	Contingency
W = WEEKLY, M = MONTHLY, Y = YEARS, H = HOURS												
		Grit Pump Subtotal						**78.8**	**$2,550**	**5.0**	**$3,300**	

Grit Classifier

PREVENTIVE MAINTENANCE SCHEDULE							# Events	Total Hours	Part Replacement Cost	Man-Hours To Replace	Total Cost To Replace (10 yrs)	Comments
Item #	Part Name	Maintenance Requirement	W	M	Y	Mins to perform task	Year	Year	$	Hrs Per Event	$	
1	Rotating System	Inspect for leaks, damage, vibration etc	X			15	52	13.0				
2	Cyclone	Inspect for leaks, damage, vibration etc	X			5	52	4.3				
3	Solids Quality	Inspect for proper dewatering / dryness	X			5	52	4.3				
4	Flange bearing - Top & Bottom	Add appropriate grease		X		5	12	1.0	$20	0.1	$95	Once per year
5	GC assembly	Clean machine exterior. Apply stainless steel preservative.			X	30	1	0.5				Once per year
6	Gear reducer breather	Inspect for wear or damage. Clean/replace as needed.			X	5	1	0.1				
7	Electric motor - Auger	Clean & measure full load amp draw.			X	30	1	0.5				Should not require replacement in 10 yrs
8	Gear reducer oil	Drain and replace oil.			5	30	1/5 years	0.10	$50	1	$200	Replace on 5 yr intervals
W = WEEKLY, M = MONTHLY, Y = YEARS, H = HOURS												
		Grit Classifier Subtotal						**23.9**	**$70.00**	**1.1**	**$295**	

10 year Cost - Labor	**$87,963**
10 year Parts Replacement	**$4,269**
10 Year Total	**$92,231**
10 yr Power	**$13,065**
10 year total	**$105,296**

APPENDIX

Standard Spare Parts Pricing and Availability

HYDRO-DYNE CENTER-FLOW SCREEN AND WASHING COMPACTOR
RECOMMENDED STANDARD SPARE PARTS LIST

Item #	Part Description	Lead Time	Shipping Location	*Current Price
1	Brass Nozzle Spray Tips	Stock	Clearwater, FL	$ 30.00
2	Guide Link	Stock	Clearwater, FL	$ 65.00
3	Grid Panel UHMW .250 x .295	1 - 2 weeks	Clearwater, FL	$ 650.00
4	5/8" Axle - Cotter Pin	Stock	Clearwater, FL	$ 80.00
5	Slotted Hook Link	Stock	Clearwater, FL	$ 30.00
6	Compactor auger brush	Stock	Clearwater, FL	$ 550.00

*** 2024 PRICING**

ESTIMATED AVERAGE ANNUAL REPLACEMENT PARTS COST

APPENDIX

Sample Operation and Maintenance Manual (See Separate File)

APPENDIX

Certificate of Conformance

HYDRO DYNE® ENGINEERING

Designed to Protect.
Built to Perform.™

CERTIFICATE OF CONFORMANCE
City of San Luis
West Wastewater Treatment Plant 3
MGD MBR Phase 1 Upgrades
Request for Proposals
Headworks and Grit Removal System

This will certify that the all headworks subsystems required for a fully operational system, as outlined in the specifications contained in the Request for Proposal, have been included in Hydro-Dyne Engineering firm equipment proposal #5753-7,8,9, dated 12/9/24 (subject to the Proposal Scope of Work Clarifications and Exceptions). Any required subsystems or appurtenances omitted, **and specifically called out in the specification**, will be provided by Hydro-Dyne Engineering at no additional cost to the owner.

BY: Randall Dow _____ DATE: 12/9/24

Randall Dow
Sales & Marketing Director

APPENDIX

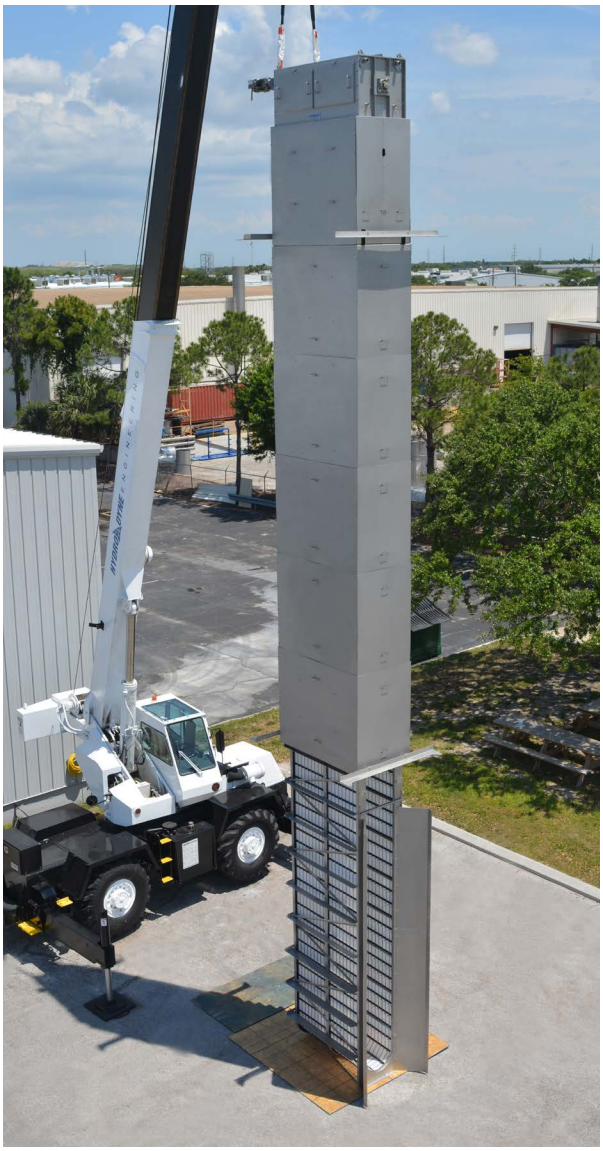
Literature and Project Profiles



Great White Center/Dual Flow Screen

Highest Screenings Capture Ratio Available

- Independently certified[1] highest SCR water/wastewater screen
  - 93.25% with 2mm opening
  - 84% with 6mm opening
- Continuous band screen design eliminates bypass and carryover
- Excellent sensitive process and membrane protection
- Proprietary design features easily capture and offload screenings including rags and stringy material
- All T304 or T316 stainless steel fabrication



About the Great White Center/Dual Flow Screen

The Great White Shark is an apex predator that rules almost every body of water around the world. Like the Great White, our Center/Dual Flow Screen is designed and manufactured at the pinnacle of quality and dominates application environments.

The Great White Center/Dual Flow continuous band screen is designed to handle low-to-high flows and has been independently[1] certified to have the highest screenings capture ratio of all band screens on the market. Dual spray wash, patented grid design, proprietary sealing system and UHMWPE guide links make this an exceptional product for the filtering and offloading of water and wastewater screenings.

[1] *UK Water Industry Research in National Screen Evaluation Facility Inlet Screen Evaluation Comparative Report (1999-2011)*

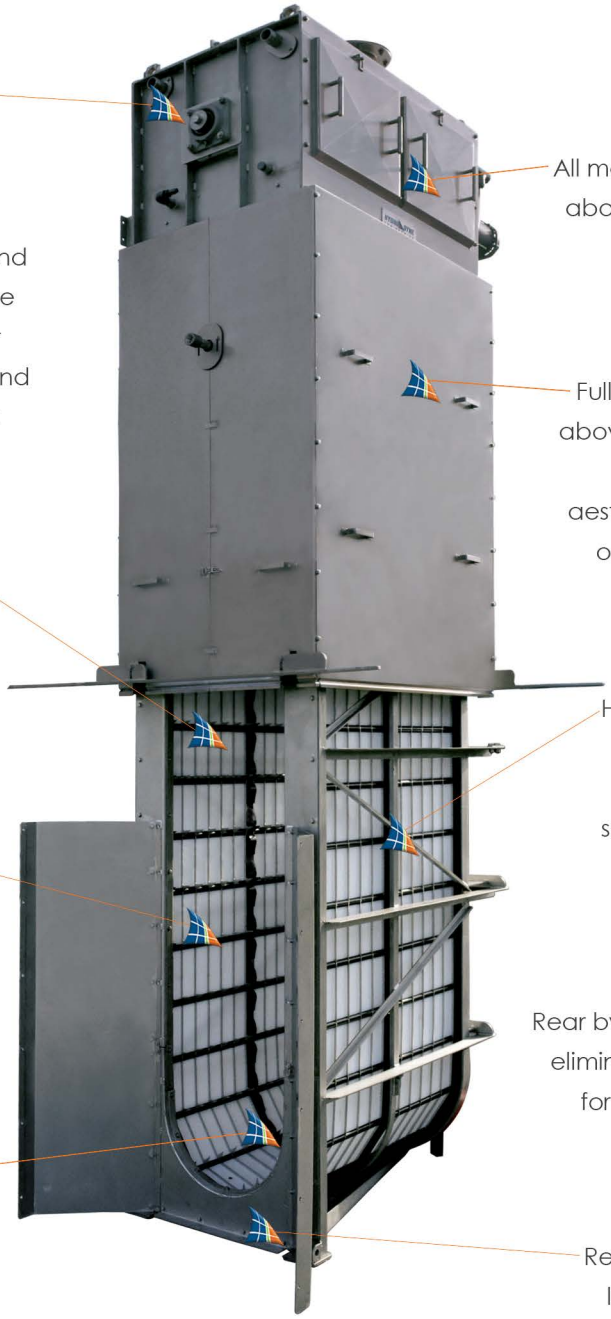
To learn more visit: www.hydro-dyne.com
sales@hydro-dyne.com | +1 (813) 818-0777

Coarse Screens | Fine Screens | Screenings Handling | Grit Removal Equipment

Designed & Manufactured in the USA
4750 118th Avenue North Clearwater, FL 33762

ISO 9001:2015 Certified

HYDRO-DYNE® ENGINEERING
Designed to Protect. Built to Perform.™



At-a-glance

models
Center Flow (center entrance/side exit)
Dual Flow (side entrance/rear exit)

grid opening range
0.5-25mm

flow capacity
0.1mgd (5 L/s) to 125+mgd (5,500+ L/s)

grid types
Stainless steel laced link
Stainless steel wire mesh
Stainless steel perforated panel
UHMWPE perforated panel

Patented Drive Features

- Grid does not contact drive or unloading mechanism
- Direct drive uses no chains or sprockets
- Fully supports grid for negligible wear
- Fractional hp requirements



Optional Equipment

- Specialty stainless steel construction
- Cold weather/freeze protection
- Basic to sophisticated automation controls
- Sectional construction for restricted area assembly
- Integrated screenings handling equipment
- Electric, hydraulic or explosion-proof drives





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Whitetip Shark Washing Compactors

Robust, High Performing Design to Meet Your Application Needs

- Multiple models and options to suit individual applications
- Designed to collect, dewater, condition, compact and transport screenings from any screen, launder/sluice or conveyor to any waste disposal drop point
- Weight reduction up to 80%
- Screening volume reduction up to 85%
- Organic removal up to 95%
- Dewatered screenings dry solids content up to 40% (depending on material to be dewatered)
- Screenings meet strict landfill requirements (EPA 9095 Paint Filter Test)
- All T304 or T316 stainless steel fabrication
- Heavy duty AR400 Auger for long wear life and ability to crush large objects
- Standard screw diameters: 6", 8", 10", 12" ,16" and 20"



Whitetip Shark Family of Washing Compactors

The Whitetip Shark is a fierce but slow-moving shark, notable for its long, rounded fins which feature an iconic white tip. Hydro-Dyne's family of Whitetip Shark Washing Compactors thoroughly wash and compact screenings to produce the clean, compact white screening plugs they are known for by efficiently returning organics to the channel. Every compactor is custom-designed for individual applications, taking into account the type of flow and solids collected. Multiple models are available to ensure organic material is returned to the treatment plant's process and inorganic materials are separated, cleaned and dewatered in the most effective and efficient way possible. Stainless steel construction with a hardened alloy auger provides an enduring solution to exceed performance and disposal requirements.



To learn more visit: www.hydro-dyne.com
sales@hydro-dyne.com | +1 (813) 818-0777

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HYDRO-DYNE® ENGINEERING

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Whitetip Shark Washing Compactor

The Whitetip Shark Washing Compactor features screenings drainage and compaction zones. Stainless steel flights and anti-rotation bars improve compaction and provide reliable equipment performance and life.

- Drainage/Washing
- Compaction

Whitetip Shark with Enhanced Dewatering

The Whitetip Shark Washing Compactor with Enhanced Dewatering features screenings drainage and rinse/compaction zones. Hardened Alloy screw and AR-400 flights greatly improve compaction and equipment reliability in harsh environments.

- Drainage/Washing
- Rinse/Dewatering
- Compaction

Whitetip Shark with Enhanced Wash/Dewatering

Up to 80% decrease in the total weight of solids output and up to 90% organic removal is achieved by this model with the addition of a washing zone and additional wash cycle. Operation includes a reversing function to the auger and timers so that the screened material is aggressively agitated during a longer wash cycle. Organic material is further broken down and washed back into the system through the drain. Rinse/Dewatering zone thoroughly rinses and compacts captured screenings.

- Drainage/Washing
- Enhanced Washing
- Rinse/Dewatering
- Compaction

Optional Equipment

- Basic rinsing to thorough washing
- Integrated models located within screens
- External models fed via sluice or conveyor
- Trough types: perforated, slotted, wedgewire
- Shafted or shaftless flight
- Electric or hydraulic drive
- Cold weather/freeze protection

Discharge Options

- Dual Bearing: Dewatering
- Reduction Flange: Dewatering and some compaction
- Hinged Gate: Dewatering and compaction
- Press Elbow: Maximum dewater and compaction plus elevation

Screenings Collection Options

- Screenings collection bagging system
- Self-leveling bins
- Stainless steel discharge chute
- Lay flat hose or flexible pipe



To learn more visit: www.hydro-dyne.com
sales@hydro-dyne.com | +1 (813) 818-0777

Coarse Screens | Fine Screens | Screenings Handling | Grit Removal Equipment

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ISO 9001:2015 Certified

HYDRO DYNE® ENGINEERING

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PROJECT HIGHLIGHTS

Dual Stage Screening/Membrane Pretreatment/ Sluice Configurations/On-site Testing

Great White Center Flow Screen







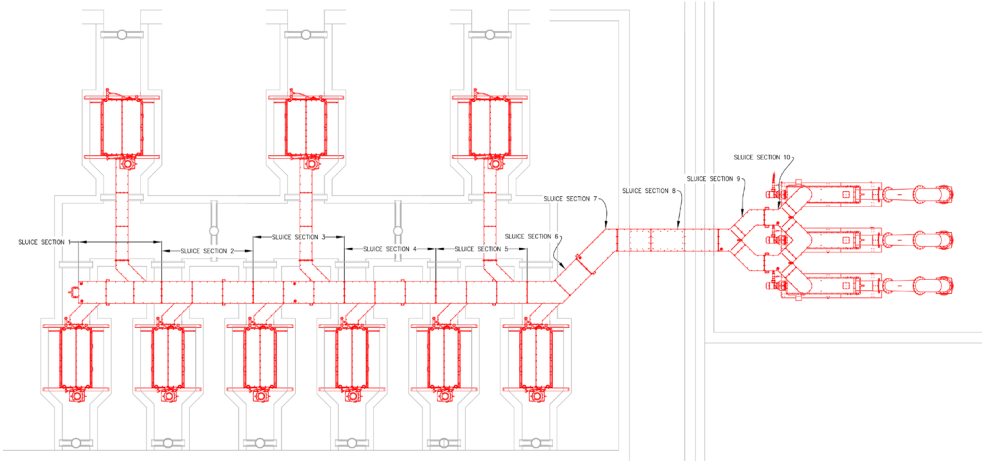
Dual stage screening with a common sluice shared by all screens and disposing into 3 washing compactors



Hammerhead on-site screen sizing test to determine the proper design and size



Right angle drive creates more open space around the screens



quick facts

location
Ohio, USA

consulting engineering firm
CT Consultants

contractor
Shook Construction

year installed
2015

scope of supply
Hammerhead On-Site Screen Sizing
CF50-67-277-4P (x3)
CF38-72-217-2P (x6)
WCP12-2WW (x3)
Sluice

application
Municipal Wastewater Membrane Bioreactor Plant (MBR)

flow rate
44 MGD (1,928 L/s) each

innovative aspects

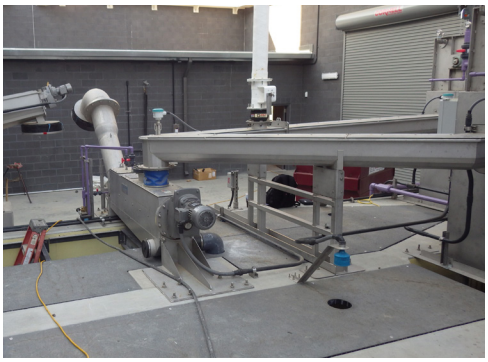
- Design included three trains, each has one coarse and two fine screens
- Dual trough, fully enclosed sluice design connects all nine screens, with the ability to isolate to one compactor
- One of largest MBR (Ovivo/ Kubota) installations in North America
- On-site testing helped determine the optimal coarse and fine grid sizes

HYDRO DYNE® ENGINEERING

Project Number: 21910













quick facts

location
California, USA

models
CF32-43-163-6P (x2)
CF32-67-187-2P (x2)
WCW10S-70-2P (x2)
GT-T-60-116 (x2)
GC-12-98C (x2)

application
Municipal Wastewater
Membrane Bioreactor Plant (MBR)

Coarse Screens (x2)

peak flow
17 MGD (745 L/s) each

grid openings
6 mm - UHMWPE
Perforated Panels

screen height
163" (4,140 mm)

screen width
32" (813 mm)

screen depth
43" (1,092 mm)

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Great White Center Flow Screen

4011.07.22













quick facts

Fine Screens (x2)

peak flow
17 MGD (745 L/s) each

grid openings
2 mm - Stainless Steel
Perforated Panels

screen height
187" (4,750 mm)

screen width
32" (813 mm)

screen depth
67" (1,702 mm)

Screenings Handling (x2)

Whitetip Shark
Washing Compactor
10" (254 mm) diameter

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Great White Center Flow Screen

4907.08.23











quick facts

location
Arizona, USA

models
CF28-33-157-6P (x2)
CF28-55-165-2P (x2)
WCW10S-38-2P (x2)
GT-T-60-112 (x2)

application
Municipal Wastewater
Membrane Bioreactor Plant (MBR)

Fine Screens (x2)

peak flow
10 MGD (438 L/s) each

grid openings
6 mm - UHMWPE
Perforated Panels

screen height
157" (3,988 mm)

screen width
28" (711 mm)

screen depth
33" (838 mm)

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Great White Center Flow Screen

4907.08.23













quick facts

Ultra-Fine Screens (x2)

peak flow
10 MGD (438 L/s) each

grid openings
2 mm - Stainless Steel
Perforated Panels

screen height
165" (4,191 mm)

screen width
28" (711 mm)

screen depth
55" (1,397 mm)

Screenings Handling

Whitetip Shark
Washing Compactor (x2)
10" (254 mm) diameter

Grit Removal

Sand Shark Grit Trap (x2)

peak flow
10 MGD (438 L/s) each

impeller diameter
60" (1,524 mm)

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City of San Luis
West Wastewater Treatment Plant 3 MGD MBR Phase 1 Upgrades

Request for Proposals
Headworks and Grit Removal System

Date: October 15th, 2024
Proposals Due: TBD

All interested equipment manufacturers/vendors shall provide a design and price proposal to be received no later than **5:00 PM (Mountain Standard Time) TBD, 2024** for a Complete Headworks System in conformance with the following performance specification, emailed in **PDF format** (hard copy optional).

This request for proposal is for a complete packaged headworks system for the City of San Luis, West Wastewater Treatment Plant MBR Phase 1 Upgrades project with a design capacity of 3.0 MGD MMADF. The new headworks system shall be designed to provide screening and grit removal upgradient of a new MBR activated sludge treatment process. The combined headworks system will include a 6 mm fine screen, a grit vortex grit removal system, and a 2 mm fine screen. The system will be fully redundant in regards to all major components (i.e., there must be 2 separate trains each capable of treating the Phase 1 PHF). The screens will be used for removal of non-biodegradable particulates and fibrous material from the pumped influent flow. The screening system will include washing, dewatering, compacting, and automatic bagging of collected and dried screening materials. Water from the washing/dewatering/compactors will discharge back into the fine screen channel. Following the 6 mm fine screen, a grit removal system will be used for removal of grit particles from the influent flow prior to flow entering the downstream 2 mm MBR fine screen. The grit system will be complete with all required vortex devices, grit collection sump and pumping systems, and a grit classifying and dewatering system with an automatic/endless bagging system for disposal with a refuse bin. The grit classifying system will allow for water to discharge back into the fine screen channel. Each identical train shall be supplied with a separate prepackaged electrical instrumentation and PLC-based control system for automated control of each headworks component. The control system will communicate via Ethernet to a new WWTP master control panel.

One equipment vendor will be pre-selected and will form the basis of the full-scale design that will be incorporated into the WWTP's MBR Phase 1 Upgrade plans. The modification design plans are scheduled to be completed before the summer of 2025. Construction is anticipated to be initiated within 6 months of design completion and approval.

Equipment Manufacturers/Vendors have the option to provide multiple proposals for all equipment that can satisfy this performance specification RFP. Equipment Manufacturers/Vendors are encouraged to identify significant benefits their proposal provides which are above and beyond the minimum requirements of this specification RFP. Proposal offerings will be evaluated based on the following criteria. See PROPOSAL REVIEW & GRADING section for the weighting and definition of criteria.

- Capital Cost
- 20-year Life Cycle Cost
- Performance
- Reference List
- Fabrication

- Delivery Schedule
- Service
- Completeness of Response
- Performance Bond

PROPOSAL REQUIREMENTS

Proposal submissions should include all the information requested within the RFP. Proposals must be complete, including - but not limited to - the following items below. Submittals shall be formatted in a manner that allows quick referencing for pertinent information. All requested information is to be provided so that no inferences will be required by the engineer. PDF files shall be provided with digital tabs or bookmarks for quick navigation within the Submittal Package. Each item below shall have its own individual section in the proposal. The offering shall include, at a minimum, the following sections with the required information.

1. Fixed Price Proposal

   Fixed Price Proposal for the specified equipment system offered with a detailed Scope of Supply, including:

   a. Total capital equipment cost as required for a complete, functional, and automatic, combined influent 6mm fine screen, grit removal system, and 2mm fine screen combined headworks system meeting the requirements of these performance-based specifications. At a minimum, each of the following major components shall have a separate line item, separated by train:
      i. 6 mm Fine screen package (including screen hopper, dewatering compactor, conveyor, bagging unit, instrumentation, and controls)
      ii. Grit vortex grit removal package (including grit pump, grit classifier, conveyor, bagging unit, instrumentation, and controls)
      iii. 2 mm Fine screen package (including screen hopper, dewatering compactor, conveyor, and bagging unit, instrumentation, and controls)
      iv. Access platform for each of the above components (if applicable)
      v. Volume in cubic yards of structural concrete required (if applicable)
   b. Packaging, freight, and taxes, F.O.B. to jobsite.
   c. Price list of standard spare parts and system consumables; including availability and lead time of spare parts.
   d. A letter on company letterhead stating the willingness to provide a Performance Bond *(See Exhibit B)* & performance guarantee in the amount of 100% of the contract equipment price for the duration of the warranty. Vendors shall provide a separate line item in the proposal for the costs associated with providing a Performance Bond (with additional line items including the cost associated with extending the performance bond to match the lifetime of the warranty).
      i. All bonding companies shall have a policy-holder rating of A+ and a financial rating of “Class XV” in the most recent edition of “Best Key Rating Guide”. The bonding company shall be licensed to do business in the State of Arizona.
   e. Provide recommended requirements and costs for the following Services to be included within the proposal:
      i. Installation Inspection Services
      ii. Start-Up Services
      iii. Site Performance Testing
      iv. O&M Training Services

f. Pricing shall be guaranteed based on Item 1 – Fixed Price Proposal shall be guaranteed for 6-months after offering has been received and a notice of selection has been issued by PACE and the City of San Luis, AZ. At the end of the 6-month holding period, the selected vendor agrees the inflation rate shall not exceed more than a 1% increase per quarter for 1-year, or the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall - whichever of the two is lower. The City reserves the right to cancel its dealing with the selected Vendor at any time prior to issuing a purchase order.

2. Power Requirements

Power requirements (in kW) at point of connection and full-load amp (FLA) requirements for all equipment items. Provide load calculations.

3. Maintenance Requirements and Schedule

Schedules shall include an itemized list of tasks that need to be done on a daily, weekly, monthly, or yearly basis to ensure proper operation of the proposed equipment. Maintenance requirements and schedule should parallel list of spare parts (and system consumables) that will need to be checked, and/or replaced as part of the normal maintenance for each equipment item.

4. Maintenance and Repair Contract

Provide offering for Full Maintenance and Repairs Contract that covers a period of 5-years with the option to extend for an additional 5-year period. The contract shall include all repairs, major maintenance, and support to be performed by the manufacturer's certified service technicians. This shall include inspections, repairs, part replacements, and maintenance services, including but not limited to seal replacements, bearing services, electrical components, etc., as well as any repairs as a result of operating the headworks under site operating conditions defined within these specifications. The Contract shall include parts, labor, travel and any other expenses required to perform the work. Please also see Definition and Scoring section for additional details and requirements.

a. Each manufacturer shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or screen malfunction.

b. Each manufacturer shall provide a guaranteed onsite response time (the time required to have a technician onsite once it is determined that a technician is required). The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the manufacturer will pay liquidated damages of $500 for each day of delay.

c. Each manufacturer shall provide a list of incidental/routine maintenance items that the City can perform to minimize the need for the manufacturer's service technician to be onsite.

d. The contract shall include, at a minimum, an annual site visit by the manufacturer's certified service technician for inspection and service of the headworks system.

5. Warranties/Guarantees

Manufacturer's Standard Warranty Terms: A minimum 2-year warranty shall be provided. Manufacturers/Vendors shall provide the cost to extend the warranty for an additional 1-year and list the cost as an add alternate in a separate line item in the proposal. If additional Extended Warranty Options (durations) are available, the Manufacturers/Vendors shall include this information in the price proposal, along with the costs associated with the respective options (as a separate line item).

The warranty shall include meeting the performance guarantee specified. Vendor shall bear 100% of any replacement costs or costs incurred due to upgrades required to meet the performance requirements during the lifetime of the warranty period and/or the duration of the Full Maintenance and Repair Contract.

NOTE: Warranty period to commence following start-up and acceptance of the equipment.

6. Installation References
    a. Manufacturer to provide a minimum of 3 installed references with contact information. A minimum of 1 of the referenced projects shall include both a grit vortex and a 2 mm centerflow perforated band screen or 2 mm perforated in-channel drum screen ahead of an MBR treatment process with a similar design capacity (1-5 MGD).
    b. Statement willing to provide a 7-year Performance Bond for manufacturers lacking the reference requirements.
7. Equipment Performance, Layouts, and Specifications

    Proposal shall include all performance information for the proposed system. **Performance data provided shall be guaranteed for the duration of the warranty period and/or Full Maintenance and Repair Contract.**

    Proposal performance information shall include, at a minimum:

    a. Detailed design calculations for the proposed equipment systems, showing compliance with the proposed application.
    b. Maximum (and minimum) hydraulic and solids loading rates for all equipment.
    c. Minimum solids capture percentage for all screening equipment.
    d. Each Screen's head loss curve vs. capacity based no blockage, 10% blockage and 35% blockage.
    e. Washer/Compactor maximum volumetric capacity and minimum percent dryness.
    f. Upstream and downstream water levels in channels and vortex based on capacity and minimum/maximum hydraulic capacity of grit chamber.
    g. Grit Equipment Performance Table: Summarized values of the grit capture efficiency versus the mesh (or grit particle) size removed/captured. Assumed grit specific gravity, inlet flowrates, and velocities shall also be provided for this table.
    h. Grit Washer/Compactor/Conveyor/Classifier maximum volumetric capacity and minimum percent dryness.
    i. Maximum equipment system power usage.
    j. Maximum wash water usage, and minimum wash water pressure required.
    k. Materials of construction schedule.
    l. Detailed description of normal operation of equipment, as well as alarm conditions and control options. This includes description of both the screen and the grit systems, and the washer/compactors, grit pumps and classifiers, and other pertinent equipment operations.
    m. All other information to be provided as part of Exhibit C.

    Proposal Shop Drawings shall include, at a minimum:

    a. Overall system dimensions with clearance/service space requirements.
    b. Minimum of three layout views (one plan view, one side section, and one front section). Drawings shall show the required dimensions and sizes, including locations of inlets and outlets. The new combined screens and grit system will be installed within a cast-in-place concrete structure (constructed by the selected contractor) or as an elevated packaged system with all associated stands or platforms: manufacturers are encouraged to provide recommended installation alternatives/methods as they see fit, a statement of benefits is encouraged with any proposed installation alternative.
    c. PACE shall provide PDF drawings for the available layout area for vendor use (See *Exhibit D* – AutoCAD documents can be provided upon request*)*. In addition to PDF format, the manufacturer/vendor shall submit all layout drawings in AutoCAD.

d. Locations, sizes, and materials for all process connections:
    a. Minimum requirements for all process connections (flow, pressure, etc.).
e. Locations for electrical power and instrumentation connections.
f. All instrumentation inputs and outputs (P&IDs).

Technical Specifications in CSI (50 Division MasterFormat) and shall include, at a minimum:

a. Provide technical specifications for all major headworks components.
    a. 6mm Fine Screen
    b. Grit Vortex and associated equipment, such as grit pump, grit classifier, etc.
    c. 2mm MBR Fine Screen
    d. Conveyance equipment
b. Specifications can be individual or combined
c. Specifications shall be in CSI (50 Division MasterFormat) and shall include:
    a. Part 1- Description of general product, functionality, and warranty
    b. Part 2 – Product Specifications and Performance
    c. Part 3 – Execution for the installation of the equipment

8. Equipment/System Automation

   Provide a detailed description of the automation capability of the proposed equipment including a description of automation systems, instruments, and functions along with expected man-hours required to operate the complete headworks system at design conditions and performance requirements. It is the intent of the project to install a system that can operate, unattended, for extended periods of time under normal operating conditions with minimal need for operator attention.
9. Equipment/System Redundancy

   A minimum of two identical trains shall be supplied with the ability to meet the performance requirements with one unit out of service. The redundant unit shall be identical in all respects to the primary unit. The system's auxiliary components (local control panels, instruments, etc.) shall also be supplied to allow for redundancy, with the redundant unit identical in all respects to the primary unit.
10. O&M Manual

    Provide a copy of a standard/general O&M Manual for the proposed equipment system with the proposal. This manual does not have to be project specific, but shall provide enough information to determine the make-up of the Final O&M Documents as well as service requirements for the proposed equipment system. Once pre-selected, the Final O&M Documents must be submitted and approved prior to shipping equipment to the jobsite. Provide two (2) hard copies and one (1) electronic copy of the Final O&M Documents.
11. Schedule

    Provide a proposed schedule to include the following:
    a. Time required to generate an acceptable submittal for the Engineer's review
    b. Time required to manufacture the equipment once the submittal has been approved by the Engineer.
    c. Time of delivery for O&M Manuals.
    d. Time of delivery of complete equipment systems.
    e. Statement indicating schedule delay (for both shop drawing submittals preparation and equipment fabrication and delivery with O&M Manual) will result in liquidated damage of $500 per calendar day with cap at 50% of the equipment cost.

12. Completed Exhibits
    a. Completed Reference List (See *Exhibit A)*
    b. Completed Performance Bond (*See Exhibit B)*
    c. Completed Equipment Summary List (*See Exhibit C)*
    d. Available Headworks Area (See *Exhibit D)*
13. Site Visits

    The equipment vendor shall include a minimum three (3) trips. The first trip will include a minimum of two full work day (8 hrs each) for the purpose of installation and structural inspection. The second trip will include a minimum of two full work days for the purpose of start-up, commissioning, and training. The final trip will include a 10-month follow-up inspection/training visit for all supplied equipment/systems. Site visits/trips shall be coordinated with the CMAR Contractor and City a minimum of 10 calendar days prior to trip.

PROPOSAL REVIEW & GRADING

In order to select the best headworks system for the application, the following methodology will be used. Each criterion will be assigned a weight; the higher the weight, the more important the aspect is to the project. Then, each equipment solution proposed will be rated on a scale, with the highest score indicating most competitive or best. For each criterion, the score and the weight will be multiplied together. The scores will then be added together for each solution to arrive at the total score. The equipment with the highest score will be the recommended selection. Omission of information for any of the listed criteria categories will result in a score of zero (0) for that criteria category. Equipment not meeting the minimum requirements as stated in the General Design Requirements section will not be considered.

Criteria	Weight	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5
		Scoring Scale				
Capital Cost	*10*					
10-Year Life Cycle Cost	*8*					
Performance	*10*					
Reference List	*8*					
Fabrication	*7*					
Delivery Schedule	*3*					
Service	*4*					
Completeness of Response	*y/n*					
Performance Bond	*y/n*					
Total Score						

Criteria Definitions and Requirements

Capital Cost: The cost to purchase and deliver the complete equipment F.O.B. jobsite. Each vendor with proposal costs within 5% of the lowest is scored the same. The evaluation of capital costs will also be associated with the evaluation of the installation requirements, as this criterion considers equipment footprint. Structural or process components, such as structural concrete flow channels, that are not included in the vendor's scope but is necessary for the process and access will be added to the capital cost by the Owner (if not included in the vendor's

scope of supply).

10-Year Life Cycle Cost: Evaluation of capital cost, power; O&M over 10-year period in today's value based on a 5% interest rate. The O&M cost shall be derived from the *Full Maintenance & Repair Contract* and power cost.

Full Maintenance & Repair Service Contract: Ranking will be tied into the 10-Year Life Cycle Cost ranking. The Contract shall cover a period of the first 5 years with the City's option to extend for an additional 5-year period. The contract shall include site visits by manufacturer's certified service technicians to perform all repairs, replacements, and maintenance services, including but not limited to seal replacements, bearing services, equipment replacement, electrical and controls components, etc., as well as any repairs that results from operating the headworks under site operating conditions defined within these specifications; any repairs that can result from the installation environment at the WWTP, including temperature, moisture, etc.; and any repairs or upgrades needed to maintain system performance guarantee. The contract shall include parts, labor, travel and any other expenses required to perform the work. The service shall include a minimum of one annual site visit by a certified service technician for inspection and service.

Each manufacturer shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or equipment malfunction.

Each manufacturer shall propose a guaranteed onsite response time once it is determined that a technician will be required to be onsite to address the problem. The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the manufacturer will pay liquidated damages of $500 for each day of delay.

Each manufacturer shall provide a list of incidental maintenance items that the City can perform to minimize the need for the manufacturer's service technician to be onsite. An example of incidental maintenance is performing a greasing or lubrication or a similar activities that does not require more than 30 minutes of labor. All equipment parts for incidental maintenance shall still be provided by the manufacturer.

The cost of the future 5-yr and 10-yr options will be based on present day cost and shall be tied to an inflation rate of no more than 1% increase per quarter or to the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall – whichever of the two is lower.

The City shall have the option to accept the Maintenance and Repair Service Contract.

Performance:

Meets the performance requirements identified in the General Design Requirements. Where applicable, the City, at their discretion, may request shop/factory, or field testing, or referenced party site visits to verify stated performance of equipment. The manufacturer shall assist in coordinating requested site visits/testing for the City.

Reference List:

List of similar equipment installations, including WWTP capacity; type of units, number of units; reference contact information (WWTP name, location, person, phone number). Each vendor shall provide an installation list with contact information for a minimum of 3 systems in operation with a configuration that consists of grit system and 2mm perforated fine screen in the United States of America (no more than 5 references). A minimum of one (1) of the three referenced projects shall include the headworks system in front of an MBR WWTP process. Installations shall be of comparable model and design requirements (i.e., facilities with treatment capacity from 1-5 MGD capacity). The term "installations" shall mean individual projects/contracts. Multiple equipment units for a project will be considered as one (1) installation toward meeting the experience requirements. Installations shall be only those in the United States (fifty states). Confirmation that the installed equipment is in good standing with the customer and customer feedback will be used as part of the proposal scoring process. The City will require a minimum of three references' feedback (of which a minimum of 1 will be for installations at an MBR WWTP). The City will make a good faith attempt to contact a maximum of five references in order to obtain the feedbacks.

Each successful reference shall be asked to rank their overall experiences from 1 – 10 (10 being highest). Scores will be based on average ranking from the responsive references. At minimum, 3 references will be scored. If there are less than 3 responsive references, non-responses will be given a ranking of 1. For example, if only 2 references responded, then a score of 1 will be given to the missing third reference. The average of the three scores will be used in the evaluation. The City reserves the right to contact additional references. If additional references are contacted by the City, those references will be averaged into the score.

Reference installations within the State of Arizona are preferred in order to provide the City/WWTP Operators with ease in coordinating site visits and corresponding with other relatively local Cities and WWTP Operators regarding equipment performance, service, etc. See also performance and fabrication definitions.

Bids from manufacturers lacking the U.S. installation requirements, but meeting all technical and performance requirements of these specifications, may be considered by the City if the manufacturer provides a satisfactory seven (7) year

	performance bond in lieu of evidence of experience and operation. The performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona. The cost of such bonding shall be included in the Base Bid price at the time of proposal.
Fabrication:	Proposals will be reviewed and graded by the City to determine the quality of materials used in the fabrication of the complete system as stated in the vendor's provided CSI specifications. The City, at their discretion, may request site visits of existing installations to view completed and operational systems, which are representative of the quality the manufacturer is proposing. The manufacturer shall assist in coordinating requested site visits for the City. Refer also to the Reference List Definition.
Delivery Schedule:	Proposed equipment will be at the job site when needed. Submittals shall include a schedule outlining the anticipated time to develop submittals, and construct equipment and deliver to job site. The schedule shall be broken down into submittal preparation period, fabrication time, and delivery time. The total time required from notice of selection to arrival of equipment on site shall be clearly indicated.
Service:	Location of nearest service center, availability of spare parts; quality of service provided. Each vendor shall list the nearest service and support center to the project location. Distance from the project site shall be included along with the services provided by the location. Due to the geographic location of the project, equipment service may be an issue for the City in the past. Vendors with relatively "local", and/or expeditious Service Supply and Part Center's, fully stocked with equipment consumables and spare part inventory will be scored higher under this Criterion.
Completeness of Response:	The completeness of the proposal to include all the necessary equipment and ancillaries that will be required to meet the performance requirements as stated herein. Proposals, at the determination of the City, not conforming to the requirements of these specifications may be eliminated from further consideration. The City reserves the right to reject any and all proposals.
Performance Bond:	Willingness to agree to terms of the Performance Bond *(Exhibit B)* and to provide a performance guarantee for a minimum of 2 years on the equipment, with the ability to extend the Bond to match the lifetime of the extended Warranty (if chosen). The costs associated with extending the Performance Bond will be provided as a separate line item. Proposals not accepting the terms of the bond will not be considered. The Performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a

policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona.

PROJECT INFORMATION

The City of San Luis is upgrading its existing West WWTP to improve effluent quality and increase total treatment capacity. The current flow to the West WWTP is 1.0 MGD of max month average daily flow (MMADF), the current design flow of the WWTP is 1.5 MGD of MMADF. The upgrades and expansion to the West WWTP will take place in Phases: Phase 1 will increase treatment capacity to 3.0 MGD MMADF, Phase 2 will raise treatment capacity to 4.5 MGD MMADF, and Phase 3 – the final Phase – will increase WWTP capacity to a buildout of 6.0 MGD MMADF. As part of the upgrades, a new packaged headworks system will be installed. The equipment will be installed outdoors and will be covered with a permanent shade structure to provide partial protection against the sun. The headworks structure will receive all influent flow to the WWTP from two offsite lift stations via a combined influent force main. The inlet of the headworks system will be the point of the highest hydraulic grade line and the process will flow down-gradient to the secondary process. Four (4) of the existing static screens will be removed and demolished to install the new headworks system, the other four (4) static screens will remain in operation until the proposed headworks system is installed and operating as intended. Once the new headworks system is operational, the remaining static screens will be removed.

Screenings from the new headworks system will be conveyed via washer/compactor/conveyors to the discharge points, where the screenings and grit are to be collected in screening and grit refuse bins located adjacent to the respective headworks equipment (at grade). Where required, the new screening and grit conveyors will extend above grade and above the height of the refuse bins for proper discharge and use of the automatic/endless bagging system attached to each of the conveyor discharge chutes.

The Headworks system shall be designed to meet the rating of the environment in which they are installed (Class 1, Div. 1; Class 1, Div. 2: etc.). This includes all electrical components, such as motors, actuators, instruments, conduits & fittings, control panels, etc.

NOTE: Each independent headworks train must be capable of handling the Ph1 PHF capacity of 7.5 MGD

Parameter	Value
Project Location	San Luis West WWTP, San Luis, Arizona
Treatment Facility MMADF Current Flow	1.0 MGD
Treatment Facility MMADF Current Design Flow	1.5 MGD
Treatment Facility MMADF Ph 1 Design Flow	3.0 MGD
Treatment Facility MMADF Ph 2 Design Flow	4.5 MGD
Treatment Facility MMADF Ph 3 Design Flow	6.0 MGD
Peak-hr Factor	2.5
Treatment Facility PHF Phase 1 Flow	7.5 MGD
Treatment Facility PHF Buildout Flow	15.0 MGD
Wastewater Type	Domestic
Upgraded Treatment Process	6mm Fine and 2mm Fine Headworks Screening and Grit removal, anoxic, oxic, and biological nutrient removal activated sludge with MBR secondary treatment process, chlorine disinfection, mechanical dewatering.
Site Elevation	Approximately 100 ft above MSL
Equipment Exposure	Outdoor w/ shade canopy

Ambient Temperature Range	35 deg F – 120 deg F
Available Flush/Spray Water Source	Potable Water or Class A+ Effluent

GENERAL DESIGN REQUIREMENTS

An established headworks vendor/manufacturer shall supply a fully redundant headworks system with two (2) process trains consisting of 6mm fine screens, 2mm fine screens, and grit vortex removal systems as described in the following Specifications. **6mm Fine Screen can be any industry-standard screening technology. Grit removal system shall be vortex type. Secondary 2mm screening shall be a perforated Center Flow Band Screen or Perforated In-Channel Drum Screen.** The manufacturer shall be responsible for providing a complete and operable headworks system consisting of all pertinent equipment, associated instruments, electrical controls, valving, etc. Necessary spare parts shall be included in the bid. Only structural components maybe listed as outside of vendors' scope, such as structural concrete channels, concrete slabs, etc. Vendors with elevated equipment shall include structural supports, stairways, and access platform within their scope. Complete installation and start-up services with operation and maintenance manuals (in electronic PDF format) shall also be included in the bid.

Vendors are recommended to provide proposal(s) that includes the following:

1.1 MAJOR COMPONENTS

A. Provide 2 fully redundant Headworks trains. Each train shall consist of the following major components
   1. 6 mm fine screen equipment complete with all supports and covers
   2. Grit vortex inducing/chamber processing equipment: Grit Vortex inducing paddle mixers/motor drives, compressor, grit pump and conveyance piping, grit classifier with hydro-cyclone separator, washing conveyance, and autobagging devices
   3. 2mm perforated fine screen equipment complete with all supports and covers (Perforated Center-Flow Band Screen or Perforated In-Channel Drum Screen only)
   4. Common screenings sluice/ conveyance channel with all isolation valves/ gates, supports and covers
   5. Screenings washer compactors/dewatering equipment with autobagging device
   6. All spray wash valves, manifolds, and nozzles
   7. Structural supports, elevated platforms, and stairways
   8. Electrical connection panels
   9. Control panels
   10. All instrumentation and electrical control equipment
   11. All necessary safety equipment

1.2 SYSTEM DESCRIPTION

A. The 6mm fine screen shall have a screening openings of 6mm (¼"), a screenings hopper, a screenings conveyor/washer/compactor auger with drive unit and discharge chute with an automatic/endless bagger unit.
B. Grit Vortex Inducing/Chamber Processing Equipment: the grit vortex chamber will be installed integral to the headworks and grit removal structure. The grit vortex device shall include all necessary devices (baffles, impeller paddles, etc.) to promote collection of grit particles within the center of the grit chamber.
C. The 2mm fine screen shall be a center-flow band screen or in-channel drum screen with a perforated screening basket with openings of 2mm (0.08"), a screenings hopper, a screenings conveyor/washer/compactor auger

with drive unit and discharge chute with an automatic/endless bagger unit. The screen shall be designed with no bypass or overflow of the peak-hr design flow.

D. The screening equipment shall produce dewatered screenings capable of passing the EPA Paint Filter Test as described in method 9095 of EPA Publication SW-486.

E. Operation of the screens and its screenings wash and auger system shall be automatically initiated at a preset high liquid level (or differential pressure) and shall include a timer-mode operation as a backup. Screens which operate continuously or via timer only will not be acceptable.

F. Unless otherwise specified in these specifications, the entire equipment shall be manufactured from 304 austenitic stainless steel shapes (rods, angles, and channels), pipes, and sheets. All anchoring systems shall be 316 SS. All mechanical parts shall be designed to handle the forces that may be exerted on the unit during fabrication, shipping, erection, and during normal operation.

G. To minimize odors and nuisance, the complete headworks system shall be sealed and gasket-covered with flanged connections for odor control. Areas of the headworks that required access for inspection/ maintenance shall have hinged and gasketed access covers. All covers that also serve as access way and all access platform and stairway shall be pedestrian-rated. All elevated access shall be installed with a handrail system meeting OSHA requirements and the severe corrosive environment.

H. The headworks system shall also include spray wash system(s) for both the screening and grit removal, as needed, and flanged inlet and outlet connections.

I. All electrical components, enclosures, and instruments shall be rated for the environment in which they are installed (Meeting NFPA 820 Classifications for the installation area : Class 1, Div. 1; Class 1, Div 2; etc.).

1.2 OPERATING CONDITIONS

A. Minimum Design Criteria:

Headworks & Grit Removal System	
Minimum Number of Identical Headworks Equipment Systems or Trains	2
Average Design Flow per Train	3 MGD
Peak-hour Flow per Train	7.5 MGD
Maximum fine Screen Clear Opening	6 mm (0.25”)
Maximum MBR fine Screen Clear Opening	2 mm (0.08”) (Perforated)
Influent Feed Total Suspended Solids	360 mg/L
Minimum Grit Removal	90% of 2.65 specific gravity grit greater than 60 Mesh (0.25 mm)
Maximum Flow-Through Velocity (either screen)	3.0 f/s

1.4ELECTRICAL REQUIREMENTS

1. Electrical Power Connection Volt/Phase/Hz: 480/3/60
2. Motor and solenoid valve classification: Meets NFPA 820 Classification
3. Control panel enclosure type: Meets NFPA 820 Classification (SS where applicable)
4. Remote E-Stops/Local Control Stations Meets NFPA 820 Classification

5. Electrical connections shall be flexible and of sufficient length to allow servicing of all components and pivoting the screen out of the tank for maintenance.

1.5CONTROL SYSTEM

A. General: All controls necessary for fully automatic operation of the headworks system shall be provided within a minimum of two identical enclosures (one for each train). The vendor/manufacturer shall be responsible for proper sizing and function of the instrumentation and controls. The manufacturer shall supply UL listed control panels and all local control stations for automatic control of the equipment proposed.

1. Main control panel shall be operated within the project's ambient temperature range.

2. Controls shall be designed to accept incoming 480V, 3 phase power supply and shall include a step-down transformer as needed to achieve 120V for all control instrumentation and communication relays, etc.

3. The electrical control system shall provide for automatic control of the screens and spray system(s) via a high liquid level set-point using an ultrasonic level sensor system (or differential pressure sensor) in conjunction with an adjustable timer as a backup.

4. The screen shall be provided with a home position sensor.

5. The grit removal screws shall be operated by timer.

6. HMI graphics shall be provided to be installed on the WWTP Main SCADA System/Network.

7. Provide complete documented PLC ladder program listing.

8. Provide defined address range with all equipment related alarms, warning, analog values and equipment status for interfacing with the WWTP Main SCADA and Headworks PLC via Ethernet.

B. Components:

1. Main Control Panel

a. Enclosure(s) shall meet and shall be constructed from 304 SSTL (minimum) for outdoor installations, suitable for free standing, stanchion-mounting, or wall mounting.

b. The control panel will include automatically controlled closed-loop ventilation fans or closed-loop air conditioners with filtered air louvers if required to maintain temperature inside each enclosure below the maximum operating temperature rating of the components inside the enclosure. Housing shall be constructed of corrosion resistant materials.

i. Provide calculations for cooling and heating load requirements.

ii. Provide thermostats to automatically control heating and cooling requirements without need of manual operation of a heating/cooling transfer switch.

iii. Heating and coiling elements including external shall be Heresite coated, or equal.

c. Main Control Panel shall be designed with a SCCR rating of 18KA at 480VAC minimum and labeled as such, unless otherwise specified.

d. All terminals utilized in the main panel shall be 600V rated terminals and 20% spare terminal space shall be provided for any potential future revisions.

e. Control panel shall be equipped with the necessary IEC starters for each equipment item, as needed.

f. The Main Control Panel shall include, at a minimum, the following:

- Main fusible disconnect with lockable operator
- Physical Hand/Off/Auto (HOA) switch for each screen, compactor, grit paddle drive, pump, and classifier
- Backup power UPS
- Network switch
- Programmable control relay with minimum of 5 cycle timers
- Fuses and breakers
- Motor overload sensor
- Panel power light
- Manual operator and reversing contactors for wash module operation
- Reset pushbutton
- Emergency stop pushbutton
- Pilot light indicators
- Elapsed run-time meter for each equipment
- Indication for "Power On", "Forward" and necessary faults for each equipment
- Name plates
- Control panel wiring
- Programmable Logic Controller (PLC) Allen Bradley CompactLogix
- Two spare digital inputs
- Two spare analog inputs
- Two spare dry contact outputs
- Variable Frequency Drive(s) (VFDs) as required
- HMI and HMI programmable functions
- SCADA communication via Allen Bradley with Ethernet TCP/IP Communication Protocol

2. Local Control Push Button Station

a. Include local control push button station for each screen and grit system. Enclosure shall meet NFPA 820 Classification for the installation area. Local push button station must be local to the equipment to maintain requirements of local safety codes as determined by the Engineer.

b. Local station shall be mounted within 10 feet or as close to the equipment as safely possible and be field wired by the electrical subcontractor to the corresponding terminal inputs in the main control panel.

c. The remote pushbutton station shall include hand/off/auto switch for each motor and an emergency stop.

3. Instrumentation: The screen shall include a primary level sensing instrument; in addition, a timer shall be installed as backup for the screen cleaning and rotation controls. The grit system shall be operated on a timer.

    a. Differential Level Control: Programing shall include multiple differential setpoints used for automatic and optimum control of the screen rotation and spray mechanisms as the differential level increases/decreases. Level/Pressure sensing instrumentation shall be installed upstream and downstream (as needed) from the screen and shall be of one of the following types:

        - Ultrasonic Level Transducers intrinsically safe for Class I Div I hazardous environments. Transducers shall be installed at least 1 foot above the anticipated water elevation and the beam angle shall not have obstructions between the transducer face and the water surface.

        - Differential Pressure Sensor intrinsically safe for Class I Division I hazardous environments. Sensor shall be installed, such that entry into equipment tank/housing is not required.

    b. High level float alarm.

OTHER REQUIREMENTS

Proprietary Designs

If a proprietary or otherwise US Patented component is proposed by the manufacturer, the manufacturer shall indicate such in their proposal and shall include all costs for licensing and/or usage fees required by the patented holder within the proposal. The manufacturer shall further indemnify and warrant to the Contractor and Owner that no patent violations exist. If a patent violation claim is made due to the scope of supply for this project, the manufacturer shall be fully responsible for all costs associated with the amicable settlement of such dispute.

Materials of Construction

Acceptable materials of construction for this project include:

- Type 300 Series Stainless Steel

All fasteners, anchor bolts and assembly hardware shall be **Type 316 Series Stainless Steel**.

All non-submerged ferrous components, such as gears and motors, shall be shop prepared per SSPC-SP6 and shall be coated to protect against sever hydrogen sulfide corrosion using two (2) coats of Tnemec N69 Hi-Build Epoxoline II, 3-5 mils each and (1) Finish Coat Tnemec 1075 Endura Shield II, 2.5-3.5 mil for a total of 9.5 – 14.5 mil DFT or Engineer-approved equal coating. The Manufacturer shall also supply field touch-up paint to be applied by the Contractor prior to and/or following the installation of equipment within the tanks.

Along with the required submittals, Exhibit C is to be completed and included in each proposal. If information requested is not applicable, an explanation must be provided as to why. Proposals may be submitted via email in PDF format or hardcopy (email is preferred).

The manufacturer of the combined headworks and grit equipment/systems shall be completely responsible for the proper design of their system. All equipment shall perform and operate as specified.

PAYMENT TERMS AND CONDITIONS

A. The City shall make progress payments on account of the Contract Price on the basis of Vendor's Applications for Payment as follows:

1. 10% on Approved Submittal(s)

   a. Equipment submittal is required prior to the execution of this contract for the Engineer to review and approve, however, billing and payments will not commence until the assigning of this contract to the Construction Contractor where in the Construction Contractor will issue the Notice to Proceed to Order Equipment to the Vendor.

2. 70% on Delivery

3. 15% on Start Up & Training

4. 5% on Delivery of Final O&M Manual(s). Operation & Maintenance Manuals must be submitted and approved prior to shipping equipment to the jobsite.

B. No payment application will be accepted nor will any payments be distributed until this contract has been assigned. After assignment payments will be made by the Construction Contractor.

This request for proposals was prepared by Pacific Advanced Civil Engineering, Inc. (PACE) at the direction of the City of San Luis. The City of San Luis and PACE will review the proposals and select the preferred equipment manufacturer to form the basis of design for the project. The City of San Luis and PACE reserve the right to reject any and all proposals. Proposers should contact PACE with all questions regarding this proposal. All questions shall be submitted via email a minimum of 2 weeks prior to the final bid date and should be directed to Mr. Nathaniel Tesch, Pacific Advanced Civil Engineering, Inc. at ntesch@pacewater.com. All questions and responses will be posted on the City's website via an addendum. It is the proposer's responsibility to check the website at www.sanluisaz.gov The proposal shall include an acknowledgement of all addendums posted on the website. The last addendum will be posted 1 week prior to the due date.

Final Proposals shall be submitted via email in PDF format to:
ntesch@pacewater.com

Optional hardcopies can be sent to:
Pacific Advanced Civil Engineering, Inc.
Attention: Nathaniel Tesch, EIT
8723 E. Via de Commercio, Ste. A-204
Scottsdale, AZ 85258
Phone: (602) 695-4679
Fax: (480) 751-1810

REFERENCE LIST (EXHIBIT A)

#	Job/Operating Facility Name	Process Used For? (Municipal WWTP Processing, etc)	Year Installed	Installation Location (Indoor/Outdoor)	Number of and Size of Units (Headworks)	Number of and Size of Units (Grit)	Operation Period (24/7, etc.)	Peak Design Capacity (MGD)	Job/Facility Contact Name	Contact Phone Number	Contact Email
1											
2											
3											
4											
5											
6											

PERFORMANCE BOND
FOR PROCUREMENT CONTRACTS

Any singular reference to Seller, Surety, Buyer or other party shall be considered plural where applicable.

SELLER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

BUYER (Name and Address):

CONTRACT
Date:
Amount:
Description (Name and Location):

BOND
Date (Not earlier than Contract Date):
Bond Number:
Amount:
Modifications to this Bond Form:

Surety and Seller, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

Seller as Principal		**Surety**	
Company:	(Corp. Seal)	Company:	(Corp. Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
		(Attach Power of Attorney)	
		Address:	
		Telephone Number:	

(Space is provided below for signatures of additional parties, if required.)

Seller as Principal		**Surety**	
Company:	(Corp. Seal)	Company:	(Corp. Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
		Address:	
		Telephone Number:	

1. Seller and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Buyer for the performance of the Contract, which is incorporated herein by reference. For purposes of this bond, Buyer means Buyer's assigns, if and when Buyer has assigned the Contract.

2. If Seller performs the Contract, Surety and Seller have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no Buyer Default, Surety's obligation under this Bond shall arise after:

3.1. Buyer has notified Seller and Surety pursuant to paragraph 10 that Buyer is considering declaring a Seller Default and has requested and attempted to arrange a conference with Seller and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. (If Buyer, Seller and Surety agree, Seller shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Buyer's right, if any, subsequently to declare a Seller Default); and

3.2. Buyer has declared a Seller Default and formally terminated Seller's right to complete the Contract. Such Seller Default shall not be declared earlier than 20 days after Seller and Surety have received notice as provided in paragraph 3.1; and

3.3. Buyer has agreed to pay the Balance of the Contract Price to:

1. Surety in accordance with the terms of the Contract;

2. Another seller selected pursuant to paragraph 4.3 to perform the Contract.

4. When Buyer has satisfied the conditions of paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:

4.1. Arrange for Seller, with consent of Buyer, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified sellers acceptable to Buyer for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Buyer and Seller selected with Buyer's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to Buyer the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by Buyer resulting from Seller Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new seller, and with reasonable promptness under the circumstances, either:

1. determine the amount for which it may be liable to Buyer and, as soon as practicable after the amount is determined, tender payment therefor to Buyer; or

2. deny liability in whole or in part and notify Buyer citing reasons therefor.

5. If Surety does not proceed as provided in paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Buyer to Surety demanding that Surety perform its obligations under this Bond, and Buyer shall be entitled to enforce any remedy available to Buyer. If Surety proceeds as provided in paragraph 4.4, and Buyer refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Buyer shall be entitled to enforce any remedy available to Buyer.

6. After Buyer has terminated Seller's right to complete the Contract, and if Surety elects to act under paragraph 4.1, 4.2, or 4.3, then the responsibilities of Surety to Buyer shall not be greater than those of Seller under the Contract, and the responsibilities of Buyer to Surety shall not be greater than those of Buyer under the Contract. To a limit of the amount of this Bond, but subject to commitment by Buyer of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

6.1. The responsibilities of Seller for correction or replacement of defective Goods and Special Services and completion of the Contract;

6.2. Additional legal, design professional and delay costs resulting from Seller's Default, and resulting from the actions or failure to act of Surety under paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Seller.

7. Surety shall not be liable to Buyer or others for obligations of Seller that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Buyer or its heirs, executors, administrators, successors, or assigns.

8. Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Goods and Services are located and shall be instituted within two years after Seller Default or within two years after Seller ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to Surety, Buyer or Seller shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Goods were to be delivered and the Special Services were to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by Buyer to Seller under the Contract after all proper adjustments have been made, including allowance to Seller of any amounts received or to be received by Buyer in settlement of insurance or other Claims for damages to which Seller is entitled, reduced by all valid and proper payments made to or on behalf of Seller under the Contract.

12.2. Contract: The agreement between Buyer and Seller identified on the signature page, including all Contract Documents and changes thereto.

12.3. Seller Default: Failure of Seller, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. Buyer Default: Failure of Buyer, which has neither been

remedied nor waived, to pay Seller as required by the Contract or to perform and complete or comply with the other terms thereof.

Exhibit C - Proposed Equipment Summary

Headworks Screening and Grit Removal System

Manufacturer/Equipment System General Information

6 mm Fine Screens	
Name of Manufacturer	
Type of Screening System	
Model Info. 6mm Fine Screen	
Total # of Units for System (Including Redundancy)	
6mm Fine Screen Drive Assembly - Horsepower per Unit (Hp)	
Other Motorized Devices - Horsepower per Unit (Hp)	
Total Unit Max Connected Electrical Load/Train (kW)	
6 mm Fine Screen Channel Width Requirements (inches - if in channel installation)	
6mm Fine Screen Channel Depth Requirements (inches - if in channel installation)	
6mm Fine Screen: Total Height of Equipment Above Channel (inches)	
Inlet Connection Size (inches)	
Outlet Connection Size (inches)	
Max Operational Weight per 6mm Fine Screen (lbs - if packaged unit)	
Overall Footprint (ft x ft)	
2mm Fine Screens	
Name of Manufacturer	
Type of Screening System	
Model Info. 2mm Fine Screen	
Total # of Units for System (Including Redundancy)	
2mm Fine Screen Drive Assembly - Horsepower per Unit (Hp)	
Other Motorized Devices - Horsepower per Unit (Hp)	
Total Unit Max Connected Electrical Load/Train (kW)	
2mm Fine Screen Channel Width Requirements (inches - if in channel installation)	
2mm Fine Screen Channel Depth Requirements (inches - if in channel installation)	
2mm Fine Screen: Total Height of Equipment Above Channel (inches)	
Inlet Connection Size (inches)	
Outlet Connection Size (inches)	
Max Operational Weight per 2mm Fine Screen (lbs - if packaged unit)	
Overall Footprint (ft x ft)	
Washer Compactor	
Name of Manufacturer	
Model Info.	
Total # of Units for System (Including Redundancy)	
Conveyor Horsepower (Hp)	
Total Unit Max Connected Electrical Load (kW)	
Min Clearance Required Around Unit (ft)	
Max Operational Weight per Unit (lbs)	
Overall Footprint (ft x ft)	
Power Requirements, and Controlled By?	
Grit Vortex Unit and Classifier	
Name of Manufacturer	
Vortex Model Info	
Classifier Model Info	
Total # of Units for System (Including Redundancy)	
Total Unit Max Connected Electrical Load/ Grit Train (kW)	
Chamber Dimensions (ft)	
Overall Footprint (ft x ft)	
Power Requirements, and Controlled By?	

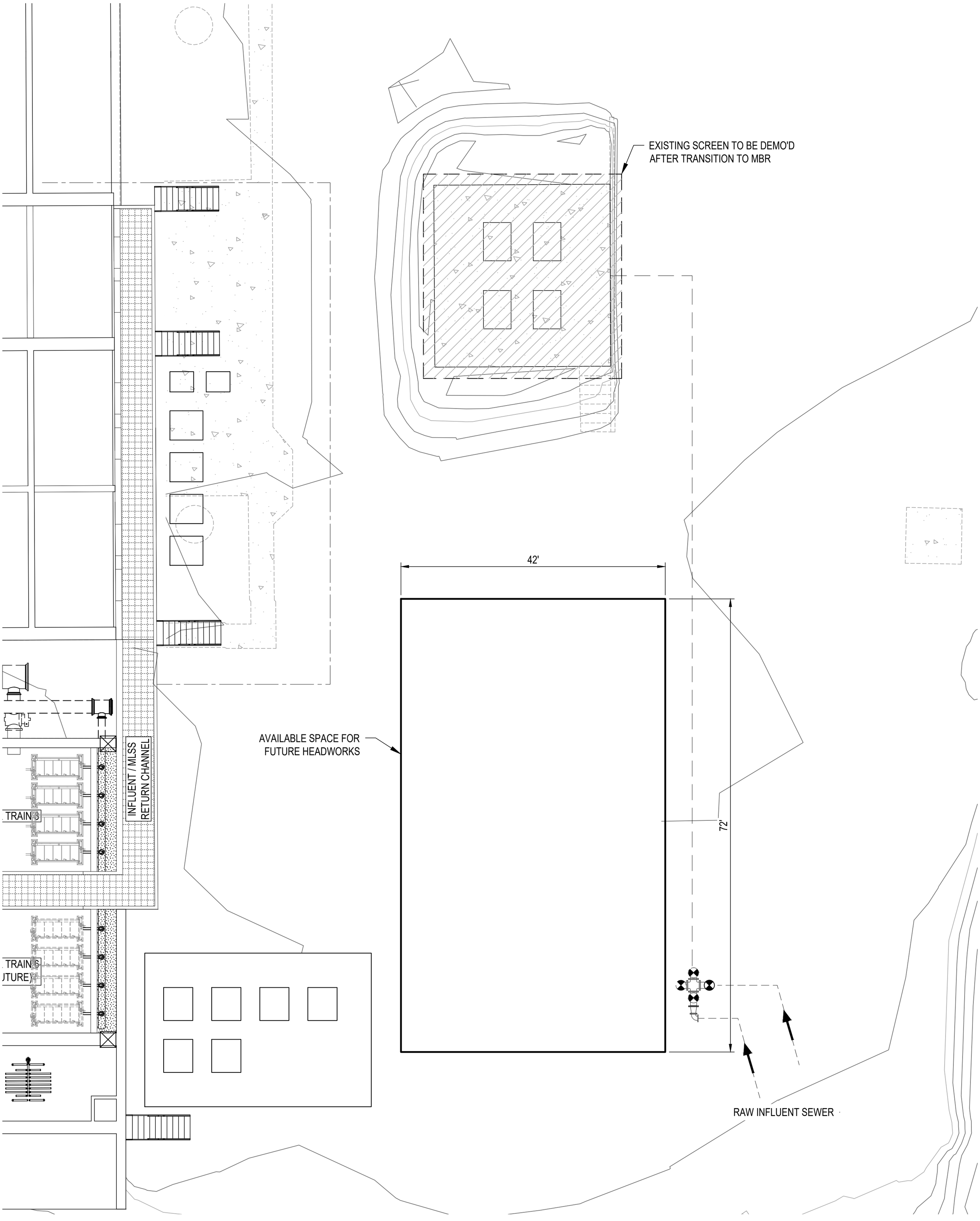
Construction/Fabrication Materials

Fine Screen, Washer Compactor, Grit Unit and Grit Classifier	
Structural Material	
Frame / Base Fabrication Materials and Surface Prep Type and Finish	
Fastening Hardware Materials	
Fine Screen Size (mm)	
Fine Screen Angle from Vertical (degrees)	
Screen Type (perforated plate, etc.)	
Seal and Support/Wear Bar Materials of Construction	
Screenings Collection/Pan Materials, Drainage Pipe Materials	
Discharge Hopper Materials of Construction	
Compactor Auger Type (Hollow Spiral, etc)	
Grit Pump Impeller Hardness Rating	
Bearing Type, Material, Life Rating	
Motor Types, Service Factor, Insulation Class Ratings	
Gear Drive and Reducer Manufacturer, Type/Model/Rating, Grease, or Oil	
Wash System and Nozzles Materials of Construction	
Electrical Equipment Ratings:	
Safety Devices:	
If Required: Wash Water Booster Pump Type/Design	
Local/Motor Control Panel Materials of Construction	
VFD Type	
Washer Compactor	
Frame / Base Fabrication Materials and Surface Prep Type and Finish	
Fastening Hardware Materials	
Trough Opening Type and Size (mm)	
Seal and Support/Wear Bar Materials of Construction	
Auger Materials of Construction	
Discharge Tube Materials of Construction	
Auto-Bagger Type	
Bearing Type, Material, Life Rating	
Motor Types, Service Factor, Insulation Class Ratings	
Gear Drive and Reducer Manufacturer, Type/Model/Rating, Grease, or Oil	
Wash System and Nozzles Materials of Construction	
Electrical Equipment Ratings:	
Safety Devices:	

Exhibit C - Proposed Equipment Summary

Headworks Screening and Grit Removal System

Grit System and Grit Classifier	
Vortex Frame / Base Fabrication Materials and Surface Prep Type and Finish	
Vortex Frame Fastening Hardware Materials	
Classifier Frame / Base Fabrication Materials and Surface Prep Type and Finish	
Classifier Frame Fastening Hardware Materials	
Seal and Support/Wear Bar Materials of Construction	
Vortex Paddle Materials	
Classifier Equipped with Hydrocyclone (y/n?)	
Hydrocyclone Lining Materials	
Classifier Collection/Pan Materials, Drainage Pipe Materials	
Classifier Discharge Hopper Materials of Construction	
Classifier Auger Type (Hollow Spiral, material, etc)	
Grit Pump Impeller Hardness Rating	
Vortex and Classifier Bearing Type, Material, Life Rating	
Motor Types, Service Factor, Insulation Class Ratings	
Gear Drive and Reducer Manufacturer, Types/Models/Ratings, Grease, or Oil	
Wash System and Nozzles Materials of Construction	
Electrical Equipment Ratings:	
Safety Devices:	
If Required: Wash Water Booster Pump Type/Design	
Local/Main Control Panel Materials of Construction	
VFD Type	
Performance Information	
6 mm Fine Screen and Washer Compactor	
Peak Flow Capacity per 6mm Screen (MGD)	
Peak Solids Loading (mg/L)	
Velocity Through 6mm Fine Screen (fps)	**Include Graph or Separate Table with Values (FLOW VARYING)**
6mm Fine Screen Head loss at Peak Flow (in) and Blinding (0,30,65%)	**Include Graph or Separate Table with Values (FLOW VARYING)**
Design 6mm Fine Screen Head Differential (ft)	
Washer Compactor Screenings Handling (cu ft/Hr)	
Conveyor Lifting Capacity (lbs)	
Screen Washwater Consumption and Pressure (GPM and PSI)	
Screenings Volume Reduction (%)	
Screenings Volume Reduction (% Dryness)	
2mm Fine Screen and Washer Compactor	
Peak Flow Capacity per 2mm Screen (MGD)	
Peak Solids Loading (mg/L)	
Velocity Through 2mm Fine Screen (fps)	**Include Graph or Separate Table with Values (FLOW VARYING)**
2mm Fine Screen Head loss at Peak Flow (in) and Blinding (0,30,65%)	**Include Graph or Separate Table with Values (FLOW VARYING)**
Design 2mm Fine Screen Head Differential (ft)	
Washer Compactor Screenings Handling (cu ft/Hr)	
Conveyor Lifting Capacity (lbs)	
Screen Washwater Consumption and Pressure (GPM and PSI)	
Screenings Volume Reduction (%)	
Screenings Volume Reduction (% Dryness)	
Grit Unit and Classifier	
Solids Capture (%) at ___ particle size	
Particle Size	
Design Particle's Specific Gravity	
Grit System Detention Time	
Grit Pump Capacity	
Grit Pump Operating Pressure	
Grit Classifier and Integral Hydro-Cyclone Capacity	
Grit Classifier Grit Handling (cu ft/Hr)	
Capital Cost	
Single Train 6mm Fine Screen Equipment Cost ($)	
Total 6mm Fine Screens Equipment Cost ($)	
Single Train 2mm Fine Screen Equipment Cost ($)	
Total 2mm Fine Screens Equipment Cost ($)	
Single Train Washer/Compactor Equipment System Cost ($)	
Total Washer/Compactor Equipment System Cost ($)	
Single Train Grit System and Classifier Equipment Cost ($)	
Total Grit System and Classifier Equipment Cost ($)	
If Required: Total Misc. Equipment Costs (Booster Pumps, etc) ($)	
Start-up/ Training Cost ($)	
Total Freight (FOB to Jobsite) ($)	
Total Equipment System Capital Cost ($)	
Maintenance and Repair Contract	
Guaranteed Response Period (hrs)	
Cost of 5-year Service Contract ($)	
Cost of 5-yr Extension Option ($)	
Electrical and Controls	
Equipment Design Input Power (kW)	
Total Power at Point of Connection (kW)	
Two Separate Control Panels included (y/n)	
PLC Type/Model and Communication Protocol going to Other PLCs or SCADA	
Operator Interface Type	
Manual Override & Automatic Controls, Speed Adjustment Controls, Indication Lights or Graphics	
Warranty	
Equipment System Warranty Period (months)	
Extended Warranty (months)	
Cost of Extended Warranty ($)	
Performance Bond	
Performance Bond Cost - 24 Months ($)	
Performance Bond Cost - 36 Months ($)	
Service & Support	
Start-up Period (days)	
Is Spare Parts List Provided? (y/n)	
Service Maintenance Contract Included (y/n)	
Location of Parts Distribution Center (city, distance in miles to project)	
Location of Design Support Center (city, distance in miles to project)	
Design Support (y/n)	
Delivery Schedule	
Submittal Period (months)	
O&M Fabrication and Delivery Period (months)	
Equipment Fabrication and Delivery Period (months)	



PROPOSED
HEADWORKS AREA

SCALE: 1" = 10'

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. B.**

Meeting Date: 02/26/2025

Department Head: Eulogio Vera, Director of Public Works, Public Works Department

Submitted By: Jorge Perez, Assistant Director of Public Works, Public Works Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the selection and purchase of a new Sludge Dewatering system for the West Wastewater Treatment Plant expansion project. **(Jorge Perez, Assistant Director of Public Works)**

SUMMARY:

The City of San Luis is currently working with its consultant, Pacific Advanced Civil Engineers ("PACE") on the design of the West Wastewater Treatment Plant ("West WWTP")expansion. The expansion will double the treatment capacity of the plant and take it from 1.5 Million Gallons a Day ("MGD") to 3 MGD. The expansion also entails a treatment process change from a Sequential Batch Reactor ("SBR") to a Membrane Bioreactor ("MBR"). By doing this treatment process, the city will produce better quality water that can be reused for irrigation purposes, for example. At this time, the City has also selected a contractor for the expansion project and will be presenting the pre-construction services contract before the council at a later meeting.

The transition to MBR equipment entails additional changes to the plant and its equipment. Regardless of the treatment process, the sludge dewatering process is critical to all wastewater treatment plants. Sludge dewatering can be attained through different processes. At this time, PACE is recommending the use of dewatering equipment to facilitate this process. There are various sludge dewatering system vendors that could provide the equipment that the plant will require for the expansion. In an effort to make the best selection of the equipment for the city, PACE produced a performance-based specifications document and, in representation of the City of San Luis, conducted a request for proposal process. In response, we received three proposals for the sludge dewatering equipment from the following manufacturers: FKC Co, LTD, Schwing Bioset, and PW Tech, LLC. PACE thoroughly reviewed all three equipment proposals and produced a technical memorandum and recommendation to the City of San Luis.

In order to compare each manufacturer's proposal, evaluation criteria were established and assigned a weight; the higher the weight, the more critical the aspect is to the project. Each equipment solution proposed was rated on a scale, with the highest score indicating the most competitive or best. For each criterion, the score and the weight were multiplied together. The sum of the multiplied numbers for each equipment/process system solution was used to arrive at the total score for each manufacturer's proposed system.

Recommendation:

All of the equipment package proposals for a complete sludge dewatering system with a mechanical sludge pump, polymer feed, and conveying system met the requirements of the performance-based specifications. The City has expressed the importance of lower capital and Operating and Management

("O&M") costs, equipment performance, and service. Based on the Criteria Ranking developed as part of the Performance-based specifications, FKC Co., LTD scored the highest and is the recommended manufacturer to supply the complete sludge dewatering system for the City of San Luis West WWTP Phase 1 MBR Upgrades.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE THE FKC CO., LTD BID PROPOSAL FOR THE WEST WASTEWATER TREATMENT PLANT EXPANSION PHASE 1 UPGRADES IN THE AMOUNT OF $869,887.00 TO BE SPENT OVER THIS AND THE NEXT FISCAL YEAR AND AUTHORIZE APPROPRIATE STAFF TO TAKE ALL ACTIONS NECESSARY TO FINALIZE THE PURCHASE PAYMENT SCHEDULE.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$869,887.00
BUDGETED AMOUNT:	$6,000,000.00
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Capital Outlay CIP - 310-311-90015 / $4,203,872.87

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

Public Works budgeted $6,000,000.00 for FY25 to cover the following expenses:

- Project Design
- CMAR pre-construction Services
- Procurement of equipment

It is likely that this year, the City will only cover 35% of the cost through progress payments, given that equipment will not arrive until FY26.

Attachments

PACE's Technical Memo Recommendation

FKC Proposal

Request for Proposals (RFP)

PACE
Advanced Water Engineering

Technical Memorandum



Exp. 12-31-26

Date: January 14, 2025

To: Eulogio Vera– City of San Luis

From: Duong Do, PE – PACE

Re: City of San Luis West WWTP – Dewatering Process Recommendations #B777

At the direction of the City of San Luis, PACE has prepared the following evaluation to assist the City in the selection of the new complete sludge dewatering system as part of the City of San Luis West Wastewater Treatment Plant (WWTP) Phase 1 MBR Upgrades. PACE prepared a performance specification and sent Requests for Proposals (RFPs) to manufacturers for a new, complete sludge dewatering system to include mechanical sludge pumping; processing; and dewatering equipment, a processed/dewatered sludge conveyor, and a prepackaged electrical control system for the control of the supplied sludge feed pumps, polymer feed system, main sludge dewatering unit (SDU), and the processed/dewatered sludge conveyor. The stated equipment design parameters are based on the following criteria.

WWTP Conditions:

Project Location	San Luis West WWTP, San Luis, AZ
Treatment Facility Design Flow	3.0 MGD (MMADF)
Wastewater Type	Domestic
Treatment Process:	BNR Activated Sludge with MBR Secondary Treatment
Site Elevation:	Approximately 100 ft.
Ambient Temperature:	35°F – 120°F
Equipment Exposure:	Outdoor with Shade Cover and Odor Control
Flush/Spray Water Source:	Potable Water or Class A+ Effluent

Feed Sludge Conditions:

Type of Sludge:	Secondary Waste Activated (with minimal digestion)
Estimated WAS (3 MGD):	7,945 lbs/day TS Maximum
Estimated Sludge Volume:	95,256 gal/day @ 1% solids
Feed Concentration:	1% (or greater)
Temperature:	13°C - 30°C
pH:	6-8

Performance Requirements:

Days of Operation:	5 days per week (Monday – Friday)
Max Hours of Operation:	8 hours – Daily Production
SDU Min Solids Loading Capacity:	994 lbs/hr (8 – hour operation)
SDU Min Hydraulic Capacity:	200 gpm @ 1% solids (8 – hour operation)
SDU Min Cake Solids Conc.:	15% @ 1% solids feed concentration
SDU Min Solids Capture:	95% by weight
SDU Max Polymer Usage:	20 lbs/dry ton
Screw Press Min Drum Diameter:	1.2 m

The following manufacturers provided proposals:

- **FKC –** BHX-1250x6500L (Screw Press)
- **Schwing –** FSP 903 (Screw Press)
- **PWTech –** ES-354 (Volute Press)

NOTE: FKC provided two different Alternatives (A & B). After consideration of the options, only Alternative B will be included within the estimate/recommendation as Alternative B is cheaper and meets the performance specified within the RFP.

Proposing manufacturers/vendors were tasked with provided a complete sludge dewatering system with mechanical sludge pump, polymer feed and conveying system; which is to be designed, fabricated, and supplied based on the following general requirements:

A. The two separate sludge feed pumps shall be capable of pumping 30,000 mg/L (3%) sludge concentration. Hydraulic capacity 20% higher than the units max HLR, a minimum operating pressure of 30 ft, controlled by VFD & control system.
B. Polymer feed system to supply the required polymer dosage to the sludge dewatering equipment. Shall include PLC controls with microprocessor, variable speed polymer feed/mixing equipment, NEMA 4x control panel for polymer skid, polymer pump with positive-displacement type. Vendor shall state the water demand and pressure required for the polymer system.
C. Dewatering equipment shall be ready to plumb to new sludge feed piping, polymer feed system, WAS polymer feed system, wash/flush water, and pneumatic lines (where applicable) with a majority of the equipment factory plumbed.
D. Cake Conveyer will include: closed tube, shaftless screw-type conveying system, limit of safety switches, shock relays, motion sensors, flushing ports and drains. Horizontal, inclined, and vertical, configurations, with a sludge cake disposal bin of 5 ft. Conveyer must be able to max discharge capacity. Control shall be automatic and manual and will send feedback to PLC.
E. Primary sludge dewatering shall be screw press or volute press technology. Operating properties include: all equipment dimensions must be provided, and press must be capable of handling the operating conditions specified within the RFP.
F. Electrical equipment will be connected with 480 volt/ 3 phase/ 60 Hz. Equipment shall be accommodating of servicing all components and meet NFPA 820 classification.
G. All necessary control for operation will be included in a single enclosure. Dewatering controls and instrumentation shall be properly sized and functional. UL listed control panels and local control stations for automatic control. All control requirements listed in RFP will be met.
H. The main control panel shall meet NFPA 820 classifications, and constructed from 304 SSTL. Control panel will be climate controlled and ventilated or air conditioned if in a hazardous or corrosive environment. The control panel will be designed with a SCCR rating of 18KA at 480 VAC minimum. All terminals will be 600V rated and with 20% spare space. Shall be equipped with IEC starter and drives, and all other components listed in RFP.
I. All local control push button stations will be provided for all major equipment. Enclosure must meet NFPA 820 classification for installation area. It shall be mounted 10 feet from equipment and wired by electrical subcontractor to main control panel. The remote pushbutton station shall include hand/off/auto switch.

Evaluation:

In order to compare each manufacturer's proposal, evaluation criteria were established and assigned a weight; the higher the weight, the more important the aspect is to the project. Each equipment solution proposed was rated on a scale, with the highest score indicating the most competitive or best. For each criterion, the score and the weight were multiplied together. The sum of the multiplied numbers for each equipment/process system solution was used to arrive at the total score for each manufacturer's proposed

system. The equipment with the highest total score shall be the recommended selection. The criteria definitions are listed below, with the Evaluation Criteria Scoring following in Table 1. **Recommendation of a vendor or equipment system does not guarantee the selection or purchase of the equipment, but serves as a decision tool for the City staff to make the final purchase determination.**

Criteria Definitions

Capital Cost:	The cost to purchase and deliver the complete equipment F.O.B. jobsite. Each Vendor with proposal costs within 5% of the lowest is scored the same. The evaluation of capital costs will also be associated with the evaluation of the installation requirements, as this criterion considers equipment footprint. Structural components (shade structure) which are not included in the vendor's scope but are necessary for the process and equipment will be added to the capital cost by the Owner (if not included in the vendor's scope of supply).
10-Year Life Cycle Cost:	Evaluation of capital cost, power; O&M over 10-year period in today's value based on an 5% interest rate. The O&M cost shall be derived from the *Full Maintenance & Repair Contract*, power cost, and estimated cost of consumables (polymer).
*Full Maintenance & Repair Service Contract	Ranking will be tied into the 10-Year Life Cycle Cost Ranking. The Contract shall cover a period of the first 5-years with the City's option to extend for an additional 5-year period. The contract shall include site visits by Vendor's certified service technicians to perform all repairs, replacements, and maintenance services, including but not limited to seal replacements, bearing services, equipment replacement, electrical and controls components, etc., as well as any repairs that results from operating the dewatering system under site operation conditions defined within these specifications; any repairs that results from the installation environment at the WWTP, including temperature, moisture, etc.; and any repairs or upgrades needed to maintain system performance guarantee. The Contract shall include parts, labor, travel and any other expenses required to perform the work. The service shall include a minimum of one annual site visit by a certified service technician for inspection and service. Each Vendor shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or equipment malfunction. Each Vendor shall propose a guaranteed onsite response time once it is determined that a technician will be required to be onsite to address the problem. The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the Vendor will pay liquidated damages of $500 for each day of delay.

Each Vendor shall provide a list of incidental maintenance items that the city can perform to minimize the need for the Vendor's service technician to be onsite. An example of incidental maintenance is performing a greasing or lubrication. All equipment parts for incidental maintenance shall still be provided by the Vendor.

The cost of the 5-year and 5-year options will be based on present-day cost and shall be tied to an inflation rate of no more than 1% increase per quarter or to the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall – whichever of the two is lower.

The City shall have the option to accept the Maintenance and Repair Service Contract.

Performance:

Meets the performance requirements identified in the General Design Requirements. Where applicable, the City, at their discretion, may request shop/factory, or field testing, or referenced party site visits to verify stated performance of equipment. The manufacturer shall assist in coordinating requested site visits/testing for the City.

Reference List:

List of similar equipment installations, including WWTP capacity, type of units, number of units, and reference contact information (WWTP name, location, person, phone number). Each vendor shall provide an installation list with contact information for a minimum of 3 systems in operation for a minimum of 3 years in the United States of America. Installations shall be of comparable model and design requirements. The term "installations" shall mean individual projects/contracts. Multiple equipment units for a project will be considered as one (1) installation toward meeting the experience requirements. Installations shall be only those in the United States (fifty states). Confirmation that the installed equipment is in good standing with the customer and customer feedback will be used as part of the proposal scoring process. The City will require a minimum of three references' feedback and will make a good faith attempt to contact a maximum of five references in order to obtain the feedbacks.

Each successful reference shall be asked to rank their overall experiences from 1-10 (10 being the best). Scores will be based on average ranking from the responsive references. At a minimum, 3 references will be scored. If there are less than 3 responsive references, non-responses will be given a ranking of 1. For example, if only 2 references responded, then a score of 1 will be given to the missing third reference. The average of the three scores will be used in the evaluation. The City reserves the right to contact additional references. If additional references are contacted by the City, those references will be averaged into the score.

Reference installations within the State of Arizona are preferred in order to provide the City/WWTP Operators with ease in coordinating

site visits and corresponding with other relatively local Cities and WWTP Operators regarding equipment performance, service, etc. See also Performance and Fabrication definitions.

Bids from Vendors lacking the U.S. installation requirements, but meeting all technical and performance requirements of these specifications, may be considered by the City if the Vendor provides a satisfactory seven (7) year performance bond in lieu of evidence of experience and operation. The performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona. The cost of such bonding shall be included in the Base Bid price at the time of proposal.

Fabrication: Proposals will be reviewed and graded by the City to determine the quality of materials used in the fabrication of the complete system as stated in the vendor's provided CSI specifications. The City, at their discretion, may request site visits of existing installations to view completed and operational systems, which are representative of the quality the Vendor is proposing. The Vendor shall assist in coordinating requested site visits for the City. Refer also to the Reference List Definition.

Delivery Schedule: Proposed equipment will be at the job site when needed. Submittals shall include a schedule outlining the anticipated time to develop submittals, and construct equipment and deliver to the job site. The schedule shall be broken down into submittal preparation period, fabrication time, and delivery time. The total time required from notice of selection to arrival of equipment on site shall be clearly indicated

Service: Location of nearest service center, availability of spare parts; quality of service provided. Each vendor shall list the nearest service and support center to the project location. Distance from the project site shall be included along with the services provided by the location. Due to the geographic location of the project, equipment service may be an issue for the City in the past. Vendors with relatively "local", and/or expeditious Service Supply and Part Center's fully stocked with equipment consumables and spare part inventory will be scored higher under this Criterion.

Completeness of Supply: The completeness of the proposal in terms of supplying all requested information within the RFP. Proposals, at the determination of the City, not providing all requested information within the RFP may be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Completeness of Response: The completeness of the proposal to include all the necessary equipment and ancillaries that will be required to meet the performance requirements as stated herein. Proposals, at the

determination of the City, not conforming to the requirements of these specifications maybe be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Performance Bond: Willingness to agree to terms of the Performance Bond (*Exhibit B)* and to provide a performance guarantee for a minimum of 2 years on the equipment, with the ability to extend the Bond to match the lifetime of the extended Warranty (if chosen). The costs associated with extending the Performance Bond will be provided as a separate line item. Proposals not accepting the terms of the bond will not be considered. The Performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona.

Recommendation:

All of the equipment package proposals for a complete sludge dewatering system with mechanical sludge pump, polymer feed, and conveying system met the requirements of the Performance-based specifications. The City has expressed the importance of lower capital and O&M costs, equipment performance, and service. Based on the Criteria Ranking developed as part of the Performance-based specifications, Table 1 tabulated the results of the criteria ranking:

Table 1 – Evaluation Criteria Scoring

Criteria	Weight	FKC	Schwing	PWTECH
		Scoring Scale 1-3		
Capital Cost	*10*	1.5	1.5	3
10-Year Life Cycle Cost	*8*	1.5	1.5	3
Performance	*10*	3	1.5	1.5
Reference List	*9*	3	2	1
Fabrication	*9*	3	2	1
Delivery Schedule	*3*	2	1	3
Service	*4*	3	1	2
Completeness of Supply	*Y / N*	Yes	Yes	Yes
Completeness of Response	*Y / N*	Yes	Yes	Yes
Performance Bond	*Y / N*	Yes	No	Yes
Summary		**129.0**	**85.0**	**104.0**
Rank		**1**	**3**	**2**

NOTE: Total combined score for each criteria equals 6.

FKC Co., LTD scored the highest with a total score of 129 and is the recommended manufacturer to supply the complete sludge dewatering system for the City of San Luis West WWTP Phase 1 MBR Upgrades. The following sections discuss the evaluation criteria and weighing parameters used for the scoring and the overall recommendation.

Capital Cost (Weight = 10):

The proposals were scored based on overall capital cost, which includes the overall costs of the combined dewatering system, FOB jobsite delivery, spare parts, and manufacturer installation/start-up services. As shown in Table 2, the capital cost criterion favors PWTech with a cost difference of $144,887 (19% difference) from the next lowest capital cost proposal from FKC. No proposal costs were within 5% of the costs from PWTech; as such, PWTech was scored the highest for this criterion. As the cost difference between FKC and Schwing was $10,613 (1% difference), which is less than a 5% difference, FKC and Schwing will be scored the same; both lower than PWTech.

Table 2 - Capital Cost Analysis

	FKC	Schwing	PWTech
Total Primary Dewatering Unit Equipment Cost	$636,677.00	$682,300	$577,000.00
Total Conveyance System Equipment Cost	$69,250.00	$44,000	$62,000.00
Total Sludge Pumping Equipment Cost	$44,100.00	$53,900	$36,000.00
Total Polymer System Equipment Cost	$71,500.00	$43,800	$35,000.00
Price of spare parts	Included	$800	Included
Start-up/ Training Cost	Included	$42,100	Included
Total Freight (FOB to Jobsite)	$48,360.00	$13,600	$15,000.00
Equipment System Capital Cost ($)	**$869,887.00**	**$880,500**	**$725,000.00**
Score	**1.5**	**1.5**	**3**
BABA Compliance Adder	Not Available	$326,300	Included

It is not included within the Capital Cost Analysis, but there would be no cost for the PWTech system to reach BABA compliance, there would be a cost increase of $326,300 for the Schwing system to reach BABA compliance, and BABA compliance is not offered/available for the FKC system.

10-Year Life Cycle Cost (Weight = 8):

The 10-year life cycle cost (LCC) includes capital cost, power cost, chemical cost, and O&M cost (estimated from each vendor's 10-year Maintenance and Repair Contract cost). PWTech offered the lowest 10-year LCC, followed by FKC and Schwing. The LCC cost difference between PWTech and FKC was $108,274 (~ 7% difference), as the difference in cost was greater than 5%, PWTech will be scored the highest. The cost difference between FKC and Schwing was $18,907 (roughly 2% difference), as the difference in cost was less than 5%, FKC and Schwing will be provided the same score.

Table 3 – 10 Year LCC Analysis

	FKC	Schwing	PWTech
Capital Cost	$869,887	$880,500	$725,000
Power Cost ($ / year) [1]	$2,300	$3,594	$5,241
Chemical Cost ($ / year) [2]	$82,700	$80,680	$82,700
Maintenance ($ / year) [3]	$7,500	$9,300	$9,300
10-Year Life Cycle Cost ($)[4]	**$1,584,148**	**$1,603,055**	**$1,475,874**
Score	**1.5**	**1.5**	**3**

[1]Power consumption is calculated using the power loading information provided by vendors in Exhibit C, Power usage is assumed 8 hours per day, 5 days per week at a rate of $0.12/kW-h
[2]Chemical consumption is calculated based on polymer usage rates by vendors, vendors not providing polymer activation values were estimated at 40% activity, vendor polymer usage was estimated at 20 lbs/dry-ton.
[3]Maintenance costs are estimated from vendor provided Full Maintenance and Repair Contracts, vendors who failed to provide the contract have an assumed 10-year contract cost of $93,000.
[4]10-Year Life Cycle Cost is the sum of power, chemical, and Maintenance and Repair Contract costs, labor is not included. 10-Year Life Cycle Cost is based on 10-year present value at 5% interest.

Performance (Weight = 10):

The Performance Specifications required the following minimum performance requirements from the complete sludge dewatering system; inclusive of mechanical sludge pumping, polymer feed equipment, and conveyance equipment.

Days of Operation:	5 days per week (Monday – Friday)
Max Hours of Operation:	8 hours – Daily Production
SDU Min Solids Loading Capacity:	994 lbs/hr (8 – hour operation)
SDU Min Hydraulic Capacity:	200 gpm @ 1% solids (8 – hour operation)
SDU Min Cake Solids Conc.:	15% @ 1% solids feed concentration
SDU Min Solids Capture:	95% by weight
SDU Max Polymer Usage:	20 lbs/dry ton
Screw Press Min Drum Diameter:	1.2 m

The performance required was based on the following parameters:

Type of Sludge:	Secondary Waste Activated (with minimal digestion)
Estimated WAS (3 MGD):	7,945 lbs/day TS Maximum
Estimated Sludge Volume:	95,256 gal/day @ 1% solids
Feed Concentration:	1% (or greater)
Temperature:	13°C - 30°C
pH:	6-8

In addition to meeting the minimum performance requirements, the evaluation ranking was also based on the following equipment capabilities:

- Maximum hydraulic loading rate.
- Maximum solids loading rate
- Estimated polymer usage (neat and active, lb/dry-ton)
- All other performance parameters and information included in Exhibit C.

Table 4 - Dewatering Performance Analysis

	FKC	Schwing	PWTech
# of Units	One	One	One
Model Info.	BHX-1250x6500l	FSP 903	ES-354
Max Hydraulic Capacity (gpm @ 1% solids)	TBD[1]	290	260

Max Solids Loading Capacity (dry lbs/hr)	TBD[1]	1455	2600
Hydraulic Capacity @ 1% DS (gpm)	200	200	200
Max Hydraulic Capacity @ 1% DS Feed with Final Sludge Concentration of 15% DS (gpm)	170	Not Provided	Not Provided
Solids Loading Capacity @ 1% DS (lbs/hr)	1000	994	1000
Dry Solids (cake – assume 1% DS feed) (%)	15 (or higher)	15-20	15
Minimum Solids Capture Rate (assume 1% DS feed) (%)	95	95	95
Wash Water Requirement (gpm, psi)	55 gpm @ 35 psi	43 gpm @ 60-90 psi	18 gpm @ 40 psi
Polymer Used at Design Dry Solids of 1% Feed (lbs active polymer per ton DS)	20-40	20-40	20
Drum Diameter (mm)	1250	900	N/A
Performance Bonds and Guarantees			
Performance Bond Offered (y/n, duration)	Yes, 2-Year only	No	Yes, 2 or 3-Year
Performance Guarantee Offered for Lifetime of Warranty (y/n)	Yes	No	No
Maintenance and Repair Contract Offered (y/n, duration)	Yes, 10-Year only	No	Yes, 5 or 10-Year
Score	**3**	**1.5**	**1.5**

[1]Vendor will provide values following startup.

The performance of each proposed system was based on the previously stated parameters, which are provided in Table 4, above. Each of the dewatering system suppliers stated that they were capable of meeting the minimum performance criteria. However, only FKC provided a guarantee performance of their offering. In addition to the stated performance criteria, it was a requirement within the RFP that each vendor provided a Performance Bond, a Performance Guarantee for the lifetime of the warranty period, and agree to the terms of the Full Maintenance and Repair Contract. Only FKC was willing to provide a Performance Guarantee that their supplied equipment would meet/exceed the stated values that were provided within their submittal.

As FKC met the performance requirements specified within the RFP, provided a full Performance Guarantee, provided written willingness to provide a Performance Bond, and took no exception to the 10-year Full Maintenance and Repair Contract, they were scored the highest under this criterion. Both Schwing and PWTech stated that they will meet the required performance criteria; however, neither vendor provided Performance Guarantees for the lifetime of their warranty periods; and as such, were scored lower under this criterion.

Reference List (Weight = 8):

The proposals were ranked on the references provided from previous projects. Each vendor was required to provide a minimum of 3 references for systems that have been in operation in the United States of America for a minimum of 3 years. The references were called at random until a minimum of 3 responses were obtained. Each of the vendors provided more than 3 references and communication was established

with a minimum of 3 references from each vendor. In general, each of the references had positive feedback pertaining to the system they were supplied with, but one of the references from PWTech stated that the performance was poor and they were only able to reach a dewatered concentration of 12% with the use of an expensive polymer. They stated that PWTech would not respond in a timely manner when problems did arise. As FKC was ranked the best according to their references, they will be scored the highest, followed by Schwing and PWTech, respectively.

Table 5 - Reference Response Analysis

Three Randomly Selected Reference Scores	FKC	Schwing	PWTech
	Scoring Scale 1 – 10		
Reference #1	9	8.5	10
Reference #2	8.5	8	8
Reference #3	8.5	8	4
Summary	**8.7**	**8.2**	**7.3**
Score	**3**	**2**	**1**

Fabrication (Weight = 7):

The proposals were scored based on fabrication, including the quality and materials of construction of both major and ancillary equipment for each of the proposed complete sludge dewatering systems. It was requested within the RFP that each of the manufacturers provided CSI specifications of their major pieces of equipment as well as layout views.

Both the FKC screw press and Schwing screw press are constructed of stainless steel wetted parts, have automated washdown cycles, and are enclosed systems. Unlike Schwing, FKC provides a screw press that is constructed with a tight tolerance between the screw flight and perforated screen which removes the need for wearable parts. The FKC press is constructed without wearable components such as brushes, squeegees, or sealing lips. Between all vendors, FKC provided the lowest Full Maintenance and Repair Contract without exceptions, and FKC was the only vendor to provide a Performance Guarantee during the lifetime of their warranty. FKC was scored the highest under this criterion.

Schwing is known to produce high quality equipment and they did provide full CSI specifications and layout drawings, but due to the fact that they include wearable parts within their screw press, they have a smaller drum diameter compared to FKC, they failed to produce a Full Maintenance and Repair Contract, and they do not guarantee performance for the lifetime of their warranty period they will be scored lower than FKC under this criterion. However, Schwing has positive references that verified the quality of their equipment.

PWTech was scored lower than both FKC and Schwing because PWTech failed to provide full formal CSI specifications for all of their provided equipment and failed to provide a performance guarantee for the lifetime of their warranty period. In addition, Schwing had a negative reference that disputed the quality of their equipment. As a result, they were scored the lowest.

Table 6 - Fabrication Scoring

Fabrication	FKC	Schwing	PWtech
Score	**3**	**2**	**1**

Delivery Schedule (Weight = 3):

Delivery schedule was based on three durations provided in the proposals: time required to develop submittals, time required to fabricate equipment, and time required to deliver the fabricated equipment. The time required to develop submittals is the amount of time it would take to finalize the drawings. Fabrication time is the amount of time it would take to manufacture the equipment/system. Delivery time is the amount of time required to deliver the equipment to the site once it is manufactured. Timeframes were requested in values of months but some submittals provided time periods in terms of weeks; in order to standardize the timeframes, each week is converted to 0.23 months (4.0 weeks equals approximately 1 month) and rounded to 2 significant digits.

Table 7 - Delivery Schedule Analysis

Delivery Schedule	FKC	Schwing	PWtech
Submittal Period (months)	1.8	4	1.5
Fabrication Period (months)	-	-	4.2
Delivery Period (months)	7[1]	11[1]	0.5
Total (months)	**8.8**	**15**	**6.2**
Score	**2**	**1**	**3**

[1] Fabrication Period is included within Delivery Period.

Both FKC and PWTech provided statements indicating their willingness to accept the liquidated damages due to schedule delay, Schwing indicated that no liquidated damages due to schedule delay will be provided. Due to the drastic difference between schedules, PWTech will be scored the highest, followed by FKC, and lastly by Schwing. Should Schwing be required to provide a BABA compliant system, they estimate the delivery of the system will require an additional 26 weeks (6 months).

Service (Weight = 4):

The proposals were scored based on equipment service capability and the location of the nearest parts distribution center for each of the manufacturers. Both FKC and PWTech provided an offering of a Maintenance and Repair contract without exclusions to the terms stated within the RFP. FKC provided a guaranteed response time of 48-hours with their Maintenance and Repair contract (with a liquidated damages agreement) and PWTech provided a guaranteed response time of 5 business days (with a liquidated damages statement).

As FKC provided a Maintenance and Repair contract, provided the fastest guaranteed response time, and have the closest service center, FKC will be scored the highest. PWTech will be scored below FKC as they have a slower response time and a service center that is located the furthest away from the City of San Luis. Schwing will be scored the lowest as they failed to provide a Maintenance and Repair contract, they provided no guaranteed response time, and they took exception to all liquidated damages due to delay.

- FKC: Port Angeles, Washington (1,550 miles)
- Schwing: Somerset, Wisconsin (1,870 miles)
- PWTech: Rosedale, Maryland (2,500 miles)

Table 8 - Service Scoring

Service	FKC	Schwing	PWtech
Score	3	1	2

Completeness of Supply (Weight = Y/N):

Each proposal was evaluated for completeness of supply based on the manufacturer's proposals including all necessary equipment and ancillaries that would be required to meet the performance requirements of the RFP. The proposals of FKC, Schwing, and PWTech all met the stated requirements of the RFP.

Completeness of Response (Weight = Y/N):

Each proposal was evaluated for completeness of response based on the manufacturer's proposals meeting the proposal requirements as provided in the "Proposal Requirements" section of the RFP. This includes providing sufficient information so that no outside inferences are required. Each of the vendors was missing at least one piece of information from their proposals, but the majority of requested information was provided to allow PACE to form an accurate analysis of each system. Each vendor will be marked as "Yes".

Performance Bond (Weight = Y/N):

The proposals were considered based on manufacturer's willingness to agree to the terms of the Performance Bond and to provide a performance guarantee for a minimum of 2 years on the equipment. Schwing refused to provide a Performance Bond in any duration on their equipment. Both FKC and PWTech provided the costs to provide a bond. PWTech offered both a 24-month or 36-month Performance Bond on their systems but failed to provide details pertaining to the bond. FKC offered only a 24-month Performance Bond, and included written confirmation from a bonding company that FKC will be backed.

Both FKC and PWTech will be recorded as "Yes", but it is important to note that only FKC provided additional information from a bonding company. Schwing will be marked as "No" as they declined the offering of any bond within their proposal.



Proposal for Complete Sludge Dewatering System

for

City of San Luis

West WWTP 3 MGD MBR Phase 1 Upgrades

December 2, 2024

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Fixed Price Proposal

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Fixed Price Proposal

OPTION A - NOT SELECTED

Exhibit C - Proposed Equipment Summary	
Sludge Dewatering System	
Manufacturer/Equipment System General Information	
Name of Manufacturer:	FKC Co., Ltd.
Model Info.	BHX-1350x7500L
Total # of Units for System (Including Redundancy)	One
Main Drive - Horsepower per Unit (Hp)	5 HP, 1200 RPM
Flocculation Tank Drive - Horsepower per Unit (Hp)	1.5 HP, 1800 RPM
Conveyor Drive - Horsepower per Unit (Hp)	3.0 HP, 1800 RPM
Sludge Pump - Horsepower per Unit (Hp)	10 HP, 1800 RPM
Polymer System - Horsepower per Unit (Hp)	1 HP
Total Unit Max Connected Electrical Load (kW)	6.4 kW. See electric calc'c sheet for assumptions.
Equipment Size - per Unit (LxWxH) (in)	414" x 78" x 184" (screw press only. See drawings provided for complete dimensions)
Equipment Dry Weight - per Unit (lbs)	34,479 lbs empty (screw press only. See drawings provided for additional weights)
Equipment Max Operational Weight - per Unit (lbs)	46,298 lbs full (screw press only. See drawings provided for additional weights)
Equipment Skid Mounted (y/n)	n (no). All equipment proposed is shipped loose and separate for field installation by others.
Drum Diameter (in)	53 inches (1350 mm)
Max Screw Speed (RPM)	0.24 rpm (screw press only. Up to 64 rpm for flocculation tank)
Emergency Shutdown Equipment Included (y/n)	y (yes)
Construction/Fabrication Materials	
Equipment Component Construction/Fab Materials info provided in proposal (y/n)	y (yes)
Frame / Base Fabrication Materials and Surface Prep Type and Finish	Galvanized carbon steel screw press channel base. Standard manufacturer's prep and finish for drives and motors. SSPC-SP-6 with Zinc Primer / Epoxy / Polyurethane coating system for others.
Fastening Hardware Materials	316 stainless steel in the wetted area. Others (like drive to discharge box) are 304 stainless steel.
Seal and Support/Wear Materials of Construction	Inlet and outlet bearing seals on the screw are nitrile Buna-N. There are no wear materials within the drum/screen/screw dewatering area for the screw press.
Perforated Plate Material and Opening Size	304 stainless steel with 2.5 mm holes
Drainage Pipe Size, Type, and Material	ANSI 10-inch 150lb Flange, 304 stainless steel
Discharge Hopper Materials of Construction	304 stainless steel wetted parts. Bearing housings & gussets are painted carbon steel.
Bearing Type, Material, Life Rating	Spherical roller bearings, carbon steel, >100,000 hours for screw press.
Motor Types, Service Factor, Insulation Class Ratings	Severe Duty, NEMA Premium Efficiency, Class I-Div 2-Group D compliant, 1.15 SF (1.0 for ASD Duty), Class F Insulation
Drive Mechanism, Type/Model/Rating	SEW, 5 HP, 1200 RPM for screw press.
Floc Tank Drive Mechanism, Type/Model/Rating	Helical Wormgear, SEW Eurodrive, SAF47AM145 29:1, 1.5 HP
Wash System and Nozzles Materials of Construction	304 stainless steel or better
Electrical Equipment Ratings:	Motors & solenoid valves are Class I, Div 2, Group D. NEMA 12 for MCP. Local Control Station & Estop push button control stations are NEMA 4X.
Safety Devices:	Two (2) NEMA 4X Estop Push Button Control Stations (loose), One (1) Process Stop Push Button on MCP door)
Local/Main Control Panel Materials of Construction (NEMA Rating)	Local NEMA 4X, Main Control Panel NEMA 4X, 304 SS
Performance Information	
Maximum Hydraulic Capacity (gpm)	200 gpm
Maximum Solids Loading Capacity (lbs/hr)	1000 dry lbs/hr
Hydraulic Capacity @ 1.0% DS (gpm)	200 gpm
Solids Loading Capacity @ 1.0% DS (lbs/hr)	1000 dry lbs/hr
Dry Solids (cake - assume 1.0% DS feed) (%)	15 % TS or Higher
Minimum Solids Capture Rate - assume 1.0% DS feed (%)	95%
Wash Water Requirements (gpm, psi)	55 gpm @ 35 psi, intermittent, solenoid is open for 15 seconds every 10 minutes. Opens 3.0 minutes total per hour of operation.
Lbs. of Polymer used at design dry solids of 2.25% feed (lbs active polymer per ton DS)	30 active lbs per dry ton
Capital Costs	
Total Primary Dewatering Unit Equipment Cost ($)	$813,297.00
Total Conveyance System Equipment Costs ($)	$69,250.00
Total Sludge Pumping Equipment Costs($)	$44,100.00
Total Polymer System Equipment Costs ($)	$71,500.00
Price of spare parts ($)	Included
Start-up / Training Costs ($)	Included
Total Freight (FOB to Jobsite)($)	$48,360.00
Total System Capital Costs ($)	$1,046,507.00
Total Cost Addition to Reach BABA Compliance ($)	Not Available
Warranty	
Equipment System Warranty Period (months)	24 months after start-up or 30 months after delivery. 5 year extended mechanical warranty.
Service & Support	
Start-up Period (days)	two trips, total of 8 days for inspection, functional/operational testing, training, and performance.
Is Spare Parts List Provided? (y/n)	y (yes)
Location of Parts Distribution Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Location of Design Support Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Quote for 10-Year Full Maintenance Contract Included with proposal (y/n)	y (yes)
Full Maintenance Contract Costs ($)	$75,000
Delivery Schedule	
Submittal Period (months)	8 weeks after date of signed Purchase Order
Fabrication and Delivery Period (months)	not to exceed 7 months after submittal approval and notice to proceed with manufacturing.

OPTION B - SELECTED OPTION

Exhibit C - Proposed Equipment Summary	
Option B	
Sludge Dewatering System	
Manufacturer/Equipment System General Information	
Name of Manufacturer:	FKC Co., Ltd.
Model Info.	BHX-1250x6500L
Total # of Units for System (Including Redundancy)	One
Main Drive - Horsepower per Unit (Hp)	5 HP, 1800 RPM
Flocculation Tank Drive - Horsepower per Unit (Hp)	1.5 HP, 1800 RPM
Conveyor Drive - Horsepower per Unit (Hp)	3.0 HP, 1800 RPM
Sludge Pump - Horsepower per Unit (Hp)	10 HP, 1800 RPM
Polymer System - Horsepower per Unit (Hp)	1 HP
Total Unit Max Connected Electrical Load (kW)	6.4 kW. See electric calc'c sheet for assumptions.
Equipment Size - per Unit (LxWxH) (in)	345" x 74" x 112" (screw press only. See drawings provided for complete dimensions)
Equipment Dry Weight - per Unit (lbs)	28,660 lbs empty (screw press only. See drawings provided for additional weights)
Equipment Max Operational Weight - per Unit (lbs)	35,274 lbs full (screw press only. See drawings provided for additional weights)
Equipment Skid Mounted (y/n)	n (no). All equipment proposed is shipped loose and separate for field installation by others.
Drum Diameter (in)	49 inches (1250 mm)
Max Screw Speed (RPM)	0.24 rpm (screw press only. Up to 64 rpm for flocculation tank)
Emergency Shutdown Equipment Included (y/n)	y (yes)
Construction/Fabrication Materials	
Equipment Component Construction/Fab Materials info provided in proposal (y/n)	y (yes)
Frame / Base Fabrication Materials and Surface Prep Type and Finish	Galvanized carbon steel screw press channel base. Standard manufacturer's prep and finish for drives and motors. SSPC-SP-6 with Zinc Primer / Epoxy / Polyurethane coating system for others.
Fastening Hardware Materials	316 stainless steel in the wetted area. Others (like drive to discharge box) are 304 stainless steel.
Seal and Support/Wear Materials of Construction	Inlet and outlet bearing seals on the screw are nitrile Buna-N. There are no wear materials within the drum/screen/screw dewatering area for the screw press.
Perforated Plate Material and Opening Size	304 stainless steel with 2.5 mm holes
Drainage Pipe Size, Type, and Material	ANSI 10-inch 150lb Flange, 304 stainless steel
Discharge Hopper Materials of Construction	304 stainless steel wetted parts. Bearing housings & gussets are painted carbon steel.
Bearing Type, Material, Life Rating	Spherical roller bearings, carbon steel, >100,000 hours for screw press.
Motor Types, Service Factor, Insulation Class Ratings	Severe Duty, NEMA Premium Efficiency, Class I-Div 2-Group D compliant, 1.15 SF (1.0 for ASD Duty), Class F Insulation
Drive Mechanism, Type/Model/Rating	Cyclo, 5 HP, 1800 RPM for screw press.
Floc Tank Drive Mechanism, Type/Model/Rating	Helical Wormgear, SEW Eurodrive, SAF47AM145 29:1, 1.5 HP
Wash System and Nozzles Materials of Construction	304 stainless steel or better
Electrical Equipment Ratings:	Motors & solenoid valves are Class I, Div 2, Group D. NEMA 12 for MCP. Local Control Station & Estop push button control stations are NEMA 4X.
Safety Devices:	Two (2) NEMA 4X Estop Push Button Control Stations (loose), One (1) Process Stop Push Button on MCP door)
Local/Main Control Panel Materials of Construction (NEMA Rating)	Local NEMA 4X, Main Control Panel NEMA 4X, 304 SS
Performance Information	
Maximum Hydraulic Capacity (gpm)	170 gpm with Cake Dryness of 15% TS or Higher; 200 GPM Guaranteed to Pass the Paint Filter Test
Maximum Solids Loading Capacity (lbs/hr)	1000 dry lbs/hr
Hydraulic Capacity @ 1.0% DS (gpm)	170 gpm
Solids Loading Capacity @ 1.0% DS (lbs/hr)	1000 dry lbs/hr
Dry Solids (cake - assume 1.0% DS feed) (%)	15 % TS or Higher
Minimum Solids Capture Rate - assume 1.0% DS feed (%)	95%
Wash Water Requirements (gpm, psi)	55 gpm @ 35 psi, intermittent, solenoid is open for 15 seconds every 10 minutes. Opens 3.0 minutes total per hour of operation.
Lbs. of Polymer used at design dry solids of 2.25% feed (lbs active polymer per ton DS)	30 active lbs per dry ton at 170 GPM; 40 active lbs per dry ton at 200 GPM
Capital Costs	
Total Primary Dewatering Unit Equipment Cost ($)	$636,677.00
Total Conveyance System Equipment Costs ($)	$69,250.00
Total Sludge Pumping Equipment Costs($)	$44,100.00
Total Polymer System Equipment Costs ($)	$71,500.00
Price of spare parts ($)	Included
Start-up / Training Costs ($)	Included
Total Freight (FOB to Jobsite)($)	$48,360.00
Total System Capital Costs ($)	$869,887.00
Total Cost Addition to Reach BABA Compliance ($)	Not Available
Warranty	
Equipment System Warranty Period (months)	24 months after start-up or 30 months after delivery. 5 year extended mechanical warranty.
Service & Support	
Start-up Period (days)	two trips, total of 8 days for inspection, functional/operational testing, training, and performance.
Is Spare Parts List Provided? (y/n)	y (yes)
Location of Parts Distribution Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Location of Design Support Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Quote for 10-Year Full Maintenance Contract Included with proposal (y/n)	y (yes)
Full Maintenance Contract Costs ($)	$75,000
Delivery Schedule	
Submittal Period (months)	8 weeks after date of signed Purchase Order
Fabrication and Delivery Period (months)	not to exceed 7 months after submittal approval and notice to proceed with manufacturing.

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363

(360) 452-9472
FAX (360) 452-6880

December 5, 2024

Re: Scope of Supply – City of San Luis, Arizona
CDN Project Number: 9395167

This document outlines FKC's Scope of Supply for the City of San Luis Request for Proposals for a Complete Sludge Dewatering System. This proposal includes all items outlined in the RFP.

In summary this scope of supply includes:

Qty (1) BHX-1350x7500L screw presses
Or BHX 1250 x 6500L (up to 170 GPM) – Option B
with Screw Press Legs
with Headbox Level Transmitter
with all Solenoid Valves
with Legs as shown in the equipment layout drawings
with access platforms on both sides of the equipment
Qty (1) 540GL flocculation tanks
with access platform as shown in the equipment layout drawing
Qty (1) Custom Control Panel
Qty (1) 12" Dia x 30' Long Shaftless Screw Conveyor
With Stainless Steel inlet chute
With support legs as shown in the equipment layout drawings
Qty (2) Seepex Sludge Feed Pumps
Qty (1) FKC Emulsion Polymer system with PLC Controls
with variable water controls
with FKC Polymer Injection Ring and Manifold
Warranty as specified
All required Manufacturer's Field Services as outline
All documentation, such as submittal, O&M, ext.

All items listed are shipped separate and loose to be assembled/installed by others.

We hope this information is helpful. Please contact this office if you have questions or require any further information.

Thank you,

Wesley Bond
FKC Co., Ltd.

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A. Proposed Equipment OPTION A - NOT SELECTED

1. Screw Press

Quantity	Description	Unit Price FOB San Luis, Arizona
1	FKC Screw Press Model BHX 1350x7500L	

Material to process:	Secondary Sludge from MBR plant
Inlet Consistency:	1.0% Total Solids or Higher
Max Flow:	200 gpm @ 1.0 % Total Solids (polymer excluded)
Max Solids Thru put:	1,000 dry pounds per hour 12 BDST/d
Outlet Consistency:	15% or Higher, Lab testing required to verify cake dryness
Solids Capture:	95% minimum
Typical Operation:	24 hours per Day or less
Polymer Use:	30 Lbs. / Dry Ton of Active Polymer

A. Proposed Equipment

1. Screw Press (con't)

Quantity	Description	Unit Price FOB San Luis, Arizona

(con't – FKC Screw Press Model BHX-1350x7500L)

Materials of Construction:

Screw Shell	304 Stainless Steel
Screw Flight	304 Stainless Steel
Drums	304 Stainless Steel
Screens	304 Stainless Steel
Discharge Box	304 Stainless Steel
Inlet Stand	304 Stainless Steel
Bearing Housings & Gussets	Painted Carbon Steel
Base	Galvanized Carbon Steel
Covers	304 Stainless Steel
Fasteners (B,N,W,Clips) in wetted area	304 Stainless Steel
Shaft Seals	Nitrile Rubber

Other:
1 set standard tools in tool box
1 set drum covers
1 motor coupling
5 solenoid valves
1 headbox level transmitter

Speed Reducer: SEW Speed Reducer

Motor: Toshiba C-face severe duty motor or equivalent
5.0 HP, 1200 RPM, 460V, 3ph, 184TC Frame

A. Proposed Equipment – Option B SELECTED OPTION

1. Screw Press

Quantity	Description	Unit Price FOB San Luis, Arizona
1	FKC Screw Press Model BHX 1250x6500L	

Material to process:	Secondary Sludge from MBR plant
Inlet Consistency:	1.0% Total Solids or Higher
Max Flow:	170 gpm @ 1.0 % Total Solids (polymer excluded)
Max Solids Thru put:	1,000 dry pounds per hour (170 GPM @ 1.2% TS) 12 BDST/d
Outlet Consistency:	15% or Higher, Lab testing required to verify cake dryness
Solids Capture:	95% minimum
Typical Operation:	24 hours per Day or less
Polymer Use:	30 Lbs. / Dry Ton of Active Polymer

A. Proposed Equipment

1. Screw Press (con't)

Quantity	Description	Unit Price FOB San Luis, Arizona

(con't – FKC Screw Press Model BHX-1250x6500L)

Materials of Construction:

Screw Shell	304 Stainless Steel
Screw Flight	304 Stainless Steel
Drums	304 Stainless Steel
Screens	304 Stainless Steel
Discharge Box	304 Stainless Steel
Inlet Stand	304 Stainless Steel
Bearing Housings & Gussets	Painted Carbon Steel
Base	Galvanized Carbon Steel
Covers	304 Stainless Steel
Fasteners (B,N,W,Clips) in wetted area	304 Stainless Steel
Shaft Seals	Nitrile Rubber

Other:
1 set standard tools in tool box
1 set drum covers
1 motor coupling
5 solenoid valves
1 headbox level transmitter

Speed Reducer: Cyclo Speed Reducer

Motor: Toshiba C-face severe duty motor or equivalent
5.0 HP, 1800 RPM, 460V, 3ph, 184TC Frame

A. Proposed Equipment

2. Flocculation Tank

Quantity	Description	Unit Price FOB San Luis, Arizona
1	FKC Flocculation Tank Model 540GL	**Included**

Material to flocculate: Secondary Sludge from MBR plant

Inlet Consistency: 1.0 % Total Solids or Higher

Max Flow: 200 gpm @ 1.0 % Total Solids (polymer excluded)

Ave Detention Time: 2.7 minutes @ 1.0% Total Solids

Materials of Construction:

Tank	304 Stainless Steel
Covers	304 Stainless Steel
Agitator Support Stand	304 Stainless Steel
Agitator Blades & Shaft	304 Stainless Steel
Fasteners (B,N,W,Clips) in wetted area	304 Stainless Steel

Other: 1 Hi-Hi Level Floc Tank Probe

Speed Reducer: SEW Standard Varimot Gearmotor
with mechanical hand wheel for speed adjustment

Motor: SEW Standard
1.5 HP, 460V, 3ph, integral to gearbox

A. Proposed Equipment

3. Control Panel

Quantity	Description	Unit Price FOB San Luis, Arizona

1 System Controls

(Qty. 1) Screw Press Control Panel (60" x 49" x 18" NEMA 4X (316SS), Flange Mount Disconnect Enclosure) including:

- Allen Bradley 5069-L310ER Processor w/ Ethernet Connection Including:
  - 32 Digital Inputs
  - 16 Digital Outputs ▪ 8 Analog Inputs
  - 8 Analog Outputs
- Maple Systems 9.7" OIT – w/ Sun Shield
- (Qty.1) Sludge Feed Pump VFD, 15 HP PowerFlex 525 w/ 3% Line Reactor & Ethernet Connection.
  - HOA, running light, fail light & potentiometer.
- (Qty.1) Floc Tank Mixer VFD, 2 HP PowerFlex 525 w/ 3% Line Reactor & Ethernet Connection.
  - HOA, running light, fail light & potentiometer.
- (Qty.1) Screw Press VFD, 7.5 HP PowerFlex 525 w/ 3% Line Reactor & Ethernet Connection.
  - HOA, running light, fail light & potentiometer.
- (Qty.1) Conveyor VFD, 5 HP PowerFlex 525 w/ 3% Line Reactor & Ethernet Connection.
  - HOA, running light, fail light & potentiometer.
- Process Stop, Power on Light on Panel Door
- UPS 1000VA
- Air Conditioner – 8000 BTU
- TVSS & 480/120 VAC Transformer - 120 VAC Power for 1 - Polymer System - Controls for 3 – Washwater Solenoids.
- Controls for 1 - Polymer System.

1.1 INSTRUMENTATION LIST

(Qty.1) Floc Tank Hi-Hi Level Switch (Warrick 316SS Probe w/ Electronics Module) (Qty.1) Headbox Level Transmitter (IFM 2" Sanitary Connection)

A. Proposed Equipment

1. Inclined Shaftless Screw Conveyor

Quantity	Description	Unit Price
1	Inclined Shaftless Conveyor 12-inch diameter Approximately 30-feet 5 HP, 460V, 3ph, 1800 rpm motor	See Bid Form
	To include:	
	Reducer: SEW Eurodrive, Type FAF, “Snuggler” Parallel Helical Gearmotor with AM type “C” face adapter.	
	Spiral Flighting: Diameter of 12” minimum, 2-1/2” wide x 3/4" thick spiral. Spring effect at full load will not elongate more than .08” per foot of length. 8620 steel material. Drive end of flighting to include shop installed torque plate for bolting to drive shaft. Shop/field full penetration welds at all splice connections.	
	Troughs: 10-gauge, 304 stainless steel formed flange u-troughs fabricated in maximum 8' lengths. Trough end plates will be minimum 3/8" thick 304 stainless steel.	
	Trough Liners: 1/2" thick UHMW two color trough liner in 4' long sections. Liners held in place with 304 stainless steel 1/2” square bar retaining rods.	
	Covers: 10-gauge 304 stainless steel formed conveyor covers in maximum 48" lengths. Covers will be gasketed and bolted to trough flange.	
1	Screw Press inlet connections	
1	Omron ER6022 Emergency Stop Switches with pull cords	
1	Siemens Milltronics Zero Speed Switch Probe	
1	Set Support Legs	

A. Proposed Equipment

1. FKC Polymer Systems

Quantity	Description	Unit Price FOB San Luis, Arizona
2	FKC Model PMS-M-5-P-120-P	
	Polymer Flow Range: 0.5 – 5.0 GPM Dilution Water Flow: 5 to 20 GPM Each Unit will include the following:	
1	Progressive Cavity Neat Polymer Pump: • 1" Polymer Inlet • ½ HP, 1800 RPM, AC Inverter Duty Motor • Loss of Polymer Switch by IFM • Calibration Column	
1	Inlet Water Piping: • 1" NPT Water Inlet • Incoming Water Pressure Relief Valve • FlowTec Motorized Ball Valve • Make-Down Water flow meter: IFM Magnet Flow Meter • Water Pressure Gage • Differential Pressure Switch	
1	Mechanical Neat Polymer : Water Mixing Chamber: • Polymer / Water injection assembly a. 316 L injection Valve • 1/3 HP, 3600 RPM, AC Inverter Duty Motor • 316L SS Mixing blades • PVC Body with Clear Polycarbonate face • Manual Drain Valve • Discharge Pressure Gage	

A. Proposed Equipment

1. FKC Polymer Systems

Continued from page 1.

1 Controls:

- Enclosure: NEMA 4X, 304SS 42x36x12
- Power Requirements: 120 VAC, 30A service
- PLC Control w/ HMI interface
- Operator Controls:
  a. Hand / Off / Auto
  b. Alarm Status
  c. E-Stop
- Inputs by Others
  a. Remote Start / Stop
  b. 4 – 20 mA speed control
- Outputs to Others:
  a. System Running
  b. System in Remote
  c. Alarm Status

1 System Skid:

- Manufactured in USA
- 304L SS, 1'' square tube

1 FKC Services:

- Engineer Drawing 2D and 3D available
- Pump Flow Curves
- Submittal
- Operation and Maintenance Manuals

1 Start-Up Services:

- Included 1-Day Start-Up and Training

A. Proposed Equipment (con't)

3. Screw Press Aluminum Platform

Qty.	Description	Unit Price, FOB
1	**Marine Grade Aluminum Platform Structure**	
	Material:	Marine Grade Aluminum 6061-T6

A. Screw press manufacturer to provide access platform on both sides of screw press and stairways as shown in drawings provided.

B. Platform and stairs shall be made out of 6061-T6 or 5052 marine grade aluminum shapes.

C. Platform shall be made of 6" channel, while stair sidewalls shall be made out of 8" channel.

D. Legs shall be made out of 4" x 4" x ¼" square tubing. The platform shall be bolted to the concrete risers below the screw press for support where the platform runs along the edge of the screw press. Otherwise, the square tubing legs shall be provided to anchor the platform to the floor.

E. Handrails and guards shall be made out of 1 ½" pipe and tubing.

F. Decking shall be 1 ½" by 3/16" I-Bar grating.

G. Toe board shall be 4" x ¼" flat bar.

H. All hardware and fasteners shall be Aluminum. Anchor bolts will be sized by screw press manufacturer and provided by contractor.

I. Provide structural calculations stamped by a professional engineer in the state of Arizona for legs, bracing and anchorage of the platform and stairways.

A. Proposed Equipment

1. Sludge Feed Pumps

Offer No. 500315890/1/
FKC Co.Ltd.

SEEPEX.
An Ingersoll Rand Business

11/20/2024	**Item 10**
	pump to handle secondary waste activated
qty.: 2	**Progressive cavity pump**
	BN 70-6L / A1-C1-L8-F0-GA

Application data

Conveyed product	secondary waste activated
Flowability	flowable
Viscosity	low viscosity (< 500 cP/mPas)
Solids content	3.0% max.
Size of solids	not specified
Density	unknown, 1 kg/dm³ assumed
Product temperature	56°F - 86°F
Product temperature (norm.)	68°F
pH value	5-9
Kind of operation	continuous
Operating hours	8 h/day
Location	indoor, dry atmosphere
Altitude of installation	up to 1000 m assumed
Surrounding temperature	normal (32-104 °F)

Performance data

Capacity	**Pressure**	**Speed**
240 USGPM	18 psi	246 rpm

Starting torque	332 lb.ft
Inlet pressure	flooded suction (up to 0,5bar)

Tolerances according to SEEPEX standards.

Materials and executions

Installation	horizontal
Direction of rotation	counter clockwise (left)
Lantern - Design	with cover plates
Lantern - Material	EN-JL 1040 (gci-25)
Suction casing - Design	standard
Suction casing - Material	EN-JL 1040 (gci-25)
Pressure branch - Design	standard
Pressure branch - Material	EN-JL 1040 (gci-25)
Position of branch	position 1
Suction connection	NPS 6, drilled acc. to ASME B 16.5, Class 150, RF
Pressure connection	NPS 6, drilled acc. to ASME B 16.5, Class 150, RF
Joint - Design	pin joint with joint sleeve, grease filled
Joint - Material	standard, holding bands 1.4401
Joint - Universal joint sleeve: material	NBR - Perbunan
Coupling rod - Design	standard
Coupling rod - Material	1.4021 / AISI 420
Rotor - Design	standard
Rotor - Material	1.0503 (C45) / AISI 1045
Rotor - Coating	ductile chromium coating
Stator - Design	standard
Stator - Material	NBR - Perbunan
Shaft sealing	mechanical seal
Code	GA - single acting mechanical seal
Shaft diameter	80 mm
Rotating/stationary seal face	SiC SiC
Elastomers	FPM
Spring	1.4571 / AISI 316Ti
Metal parts	1.4571 / AISI 316Ti
Casing - material	1.4408 / ASTM A351 grade CF8M
Casing - connection standard	NPT

A. Proposed Equipment

1. Sludge Feed Pumps, Cont.

Offer No. 500315890/1/ Item 10
FKC Co.Ltd.

SEEPEX.
An Ingersoll Rand Business

Plug-in Shaft - Design	standard
Plug-in Shaft - Material	1.4021 / AISI 420
Bolting - Design	standard
Painting - Number of colors	single-colored
Painting - Painted components	complete combination
Painting - Color	Primer Coat: Tnemec Hi-Build Epoxoline II series N69-1211/Red, 4 mil, DFT Finish Coat: Tnemec Hi-Build Epoxoline II series N69-04BR/ Desert Sands, 4 mil DFT
Painting - Surface protection	SSPC-SP1 Solvent Cleaning SSPC-SP3 Power Tool Cleaning SSPC-SP6 Commercial Blast on base plate only

Drive

Type	Gear & Motor at freq. inv. (Inverter is not included)
Mounting type	Flange design
Mounting orientation	M1
Ratio (i)	6.42

	Norm	Min	Max
Speed	275 rpm	246 rpm	246 rpm
Motor speed	1765 rpm	1580 rpm	1580 rpm
Frequency	60 Hz	53 Hz	53 Hz

Rated output	15 HP
Rated speed	1765 rpm
Starting	direct on frequency inverter
Efficiency class	premium efficiency
Terminal box position acc. to supplier	right
Cable entry position acc. to supplier	not specified
Voltage	3x 230/460 V
Frequency	60Hz
Enclosure	TEFC
Thermal class	F
Winding protection	Thermostats

The frequency inverter has to follow a linear U/f characteristic curve (constant torque).
It's essential to have a minimum overload capability of 150% for at least 60 seconds. (see technical data sheet)

Baseplate

Design	extended - with motor support
Material	steel, painted
GPU Type Code	B-ST-LS-EM

Packing

Type of packing	skid (US)
Type of transport	truck
Quantity of pumps per position	1 pump

Price composition

B. Miscellaneous

1. Delivery

Delivery will be within eight (8) months after approved submittals and notice to proceed with manufacturing.

2. Shipping Arrangements

The FKC screw press will be shipped via open top container from FKC Ishinomaki, Japan factory to a local port then best way overland to the WWTP.
Purchaser is responsible to remove the top of the container, unload the screw press and other miscellaneous crates/boxes via a crane, then replace and close up the container.
The flocculation tanks and other ancillary equipment provided will be delivered on a flatbed trailer from the FKC Port Angeles, WA facility then best way overland to the WWTP.

3. Price Summary

Qty	Description	Price US$
1	Primary Dewatering Equipment	813,297.00
	Option B Screw Press	636,677.00
1	Conveyance System	69,250.00
1	Sludge Pumping Equipment	44,100.00
1	Polymer System	71,500.00
1	Start-Up	Included
1	Freight	48,360.00
	Total FOB San Luis, AZ	**1,046,507.00**
	Total FOB San Luis, AZ Option B	**869,886.00**

FKC cannot offer pricing at this time that is BABA compliant. The following equipment is manufactured in the USA with US materials and would be BABA compliant, break-out pricing can be provided upon request:

Flocculation Tank – BABA Compliant
Conveyor – BABA Compliant
Polymer System – BABA Compliant
Aluminum access platforms and Screw Press support legs – BABA Compliant
Pricing does not include taxes or bonding.

Additional ancillary equipment necessary for a complete dewatering system such as conveyors, valves, disposal bin, etc. are not included.

4. Purchase Options Offered

No purchase options are offered at this time.

5. Effective Period

This proposal shall remain valid 6-months days from the date of the proposal.

FKC will also agree to hold the price for an additional year, with an inflation rate not to exceed 1% increase per quarter or less as stated by the Phoenix Tender Price Index, whichever is lower.

6. Payment Terms

10% with approved drawings & submittals
90% with delivery

Net 30 days

FKC realizes that up to 10% of the total purchase price may be retained until final performance testing and acceptance are completed.

7. Installation

The screw press is shipped as one piece. The screw press motor and coupling will require field installation by Purchaser.

Each piece of equipment offered is loose and separate. Purchaser would need to unload, field assemble, install and provide utilities and connections to and in between all pieces of equipment offered in this proposal.

Anchor bolts are to be provided by the Contractor.

Installation and erection assistance are not included in the price of the equipment and generally are not required. However, the service is available for our standard service rates found in paragraph B.12.

8. On-Site Services

Seven (7) days of on-site services are included with the price of this proposal. Each day consists of one man 8-hour day. Holidays and weekends days are not offered for on-site services. Time of on-site service is exclusive of travel time.

On-site services can include installation inspection, start-up, testing, calibration, performance, optimization, and training for the equipment. Operator & maintenance instruction is usually completed in one (1), 8-hour day. Performance testing normally occurs within two (2) consecutive days of operation.

9. Warranty

A. Warranty shall extend for 24 months after start-up or 32 months after delivery, whichever comes first.

B. Warranty shall include all parts, labor, and coatings for repairing or replacing equipment that fails during the warranty period. Defects occurring within the warranty period shall be repaired or replaced by the manufacturer at no cost to the OWNER.

10. Performance Guarantee

The performance figures and conditions denoted in section A of this proposal constitute FKC Co., Ltd.'s performance guarantee and the conditions required to meet the guarantee. All of the consistency figures are based on total solids (TS) not total suspended solids (TSS).

In the event that performance is not met, FKC will provide all parts, engineering, and labor associated with the work necessary to bring the equipment into conformance with the performance guarantee.

11. Documentation Schedule

a. Submittals for Approval – Screw press and flocculation tank submittals and drawing within three (3) weeks of written purchase order. Control panel submittal and drawing within six (6) weeks after receipt of purchase order.
b. Certified Drawings - within 2 weeks after submittal approval
c. Operation & Maintenance Manuals – before delivery of equipment

12. Spare Parts List

The following spare parts are provided with this quotation:

1. Screw Press
    a. 4 each screens per screw press
    b. 1 each motor coupling per screw press
2. Flocculation Tank
    a. None.

There are no spare parts required for the first 24 months after startup. A list of spare parts are listed below:

Screw Press:

ITEM #	DESCRIPTION	Lead Time	Q'TY	UNIT PRICE
1	CYCLO REDUCER CHVJ-6275DA-7569 / SUMITOMO	6 – 8 weeks	1	$73,668
2	OIL SEAL UD 270×330×25 / MUSASHI	6 – 8 weeks	1	$560
3	SPHERICAL ROLLER BEARING 23056	6 – 8 weeks	1	$572
4	OIL SEAL UD 300×360×25 / MUSASHI	6 – 8 weeks	1	$432
5	OIL SEAL UE 220×260×22 / MUSASHI	6 – 8 weeks	2	$428
6	OIL SEAL UD 220×260×20 / MUSASHI	6 – 8 weeks	1	$2,970
7	SPHERICAL ROLLER BEARING 23040	6 – 8 weeks	1	$3,173

Flocculation Tank:

ITEM #	DESCRIPTION	Lead Time	Q'TY	UNIT PRICE
1	SEW Gearbox	1 – 3 weeks	1	$3,750
2	Motor	Shelf Item	1	$960

12. Spare Parts List, continued

Conveyor:

ITEM #	DESCRIPTION	Lead Time	Q'TY	UNIT PRICE
1	SEW Gearbox	1 – 3 weeks	1	$4,350
2	Motor	Shelf Item	1	$1,250
3	4' Section UHMW Liner	Shelf Item	1	$450

Polymer System:

ITEM #	DESCRIPTION	Lead Time	Q'TY	UNIT PRICE
1	Neat Polymer Pump	1 – 3 weeks	1	$5,050
2	Mixer Motor	Shelf Item	1	$960
3	Polymer Injection Check-Valve	Shelf Item	1	$275

Sludge Feed Pump:

ITEM #	DESCRIPTION	Lead Time	Q'TY	UNIT PRICE
1	Gearbox and Motor	1 – 3 weeks	1	$4,800
2	Stator	1 – 3 weeks	1	$850
3	Rotor	1 – 3 weeks	1	$1,850

13. Service Rates

Note: For off-site work beyond this quotation scope of supply, final billing of airfare, lodging, and rental car expenses will be based on actual costs plus 10% for administrative costs.

Weekdays
$1800.00 - per eight (8) hour day on weekdays plus, lodging, & rental car expenses.
$337.50 - per hour for all hours exceeding eight (8) hour workday on weekdays.
$225.00 - per hour for office engineering services and telephone consultations.

Saturdays, Sundays and Holidays
$2,700.00 - per eight (8) hour day plus lodging and rental car expenses.
$450.00 - per hour for all hours exceeding eight (8) hour workday.

Travel Time - Weekdays
$150.00 - per hour travel time.

Travel Time – Weekends and US Holidays
$225.00 - per hour travel time

14. Notes and Clarifications

- See Attached document

Insurance

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363

(360) 452-9472
FAX (360) 452-6880

December 5, 2024

Re: FKC Co., Ltd. Performance Bond

To Whom It May Concern:

FKC has reviewed the Performance Bond (Exhibit B) & Performance guarantee and is willing to provide a Performance Bond in the amount of 100% of the contract price for the duration of the warranty. FKC can supply this Bond for a period of two years.

FKC can provide this bond for an additional US$ 12,489.60

FKC will offer this Bond from Travelers Insurance. See letter attached.

Sincerely,
FKC Co., Ltd.

Wesley Bond

Laura Harris

Account Executive Officer
Travelers Bond & Financial Products
Commercial Surety, Seattle

(206) 326-4264
(206) 326-4292 (fax)

1501 Fourth Avenue, Suite 1000
Seattle, WA 98101

March 13, 2024

Re: FKC Co., LTD

To Whom It May Concern:

It has been the privilege of Travelers Casualty and Surety Company of America ("Travelers")[1] to provide surety bonds for FKC Co., Ltd., for over 15 years. During that time, they have completed, and we have bonded, projects for a wide variety of owners. They currently have a bonding line of $9,000,000 in the aggregate.

At their request we will give favorable consideration to providing the required performance and payment bonds. We are licensed in all States.

Please note that the decision to issue performance and payment bonds is a matter between FKC Co., Ltd. and Travelers, and will be subject to our standard underwriting at the time of the final bond request, which will include but not be limited to the acceptability of the contract documents, bond forms and financing. We assume no liability to third parties or to you if for any reason we do not execute said bonds.

If you have any questions or need any additional information, please do not hesitate to contact me.

Sincerely,

Travelers Casualty and Surety
Company of America

Laura Harris

[1] Travelers Casualty and Surety Company of America is rated A++ (Superior) by A.M. Best Financial Size Category XIV ($1.5 Billion to $2.0 Billion).

A.M. Best's rating of A+ applies to certain insurance subsidiaries of Travelers that are members of the Travelers Insurance Companies pool; other subsidiaries are included in another rating pool or are separately rated. For a listing of companies rated by A.M. Best and other rating services visit www.travelers.com. Ratings listed herein are as of May 23, 2014, are used with permission, and are subject to changes by the rating services. For the latest rating, access www.ambest.com.

Example Insurance Certificate

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/6/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Fryer Insurance Agency Inc.
PO Box 1347
Port Angeles WA 98362

CONTACT NAME: Cathy Wahlsten
PHONE (A/C, No, Ext): 360-457-1144 **FAX (A/C, No):** 360-457-9440
E-MAIL ADDRESS: fryer.pa@fryerins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : The Ohio Casualty Insurance Co	24074
INSURER B : Ohio Security Insurance Compan	24082
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED FKCCOMP-01
FKC Company Ltd.
2708 West 18th Street
Port Angeles WA 98362

COVERAGES **CERTIFICATE NUMBER:** 365305725 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	BKO56092021	7/20/2020	7/20/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	**AUTOMOBILE LIABILITY** [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	Y	Y	BAS56092021	7/20/2020	7/20/2021	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X **UMBRELLA LIAB** [X] OCCUR **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 10,000	Y	Y	USO56092021	7/20/2020	7/20/2021	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		BKO56092021	7/20/2020	7/20/2021	[ ] PER STATUTE [X] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	WA STOP GAP $ 1,000,000 $ 1,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Operations of the above named insured. GL form CG8810 & Auto Liability form AC 8501 which respectively includes: Additional Insureds by written contract, written agreement or permit; Waiver of transfer of rights of recovery against others to us when required in a contract or agreement with you; Primary and Non-Contributory – Additional Insured Extension by written contract or written agreement.

CERTIFICATE HOLDER

EXAMPLE ONLY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BUSINESS AUTO COVERAGE ENHANCEMENT ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage afforded by this endorsement, the provisions of the policy apply unless modified by the endorsement.

If the policy to which this endorsement is attached also contains a Business Auto Coverage Enhancement Endorsement with a specific state named in the title, this endorsement does not apply to vehicles garaged in that specified state.

COVERAGE INDEX

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TRAILERS - INCREASED LOAD CAPACITY	1
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WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US	22

SECTION I - COVERED AUTOS is amended as follows:

1. TRAILERS - INCREASED LOAD CAPACITY

The following replaces Paragraph **C.1. Certain Trailers, Mobile Equipment And Temporary Substitute Autos** of **SECTION I - COVERED AUTOS:**

"Trailers" with a load capacity of 3,000 pounds or less designed primarily for travel on public roads.

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SECTION II - LIABILITY COVERAGE is amended as follows:

2. NEWLY FORMED OR ACQUIRED SUBSIDIARIES

SECTION II - LIABILITY COVERAGE, Paragraph **A.1. - Who Is An Insured** is amended to include the following as an "insured":

d. Any legally incorporated subsidiary of which you own more than 50 percent interest during the policy period. Coverage is afforded only for 90 days from the date of acquisition or formation. However, "insured" does not include any organization that:

(1) Is a partnership or joint venture; or

(2) Is an "insured" under any other automobile policy except a policy written specificall y to apply in excess of this policy; or

(3) Has exhausted its Limit of Insurance or had its policy terminated under any other automobile policy.

Coverage under this provision **d.** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization.

3. EMPLOYEES AS INSUREDS

SECTION II - LIABILITY COVERAGE, Paragraph **A.1. Who Is An Insured** is amended to include the following as an "insured":

e. Any "employee" of yours while using a covered "auto" you do not own, hire or borrow but only for acts within the scope of their employment by you. Insurance provided by this endorsement is excess over any other insurance available to any "employee".

f. Any "employee" of yours while operating an "auto" hired or borrowed under a written contract or agreement in that "employee's" name, with your permission, while performing duties related to the conduct of your business and within the scope of their employment. Insurance provided by this endorsement is excess over any other insurance available to the "employee".

4. ADDITIONAL INSURED BY CONTRACT, AGREEMENT OR PERMIT

SECTION II - LIABILITY COVERAGE, Paragraph **A.1. Who Is An Insured** is amended to include the following as an "insured":

g. Any person or organization with respect to the operation, maintenance or use of a covered "auto", provided that you and such person or organization have agreed in a written contract, written agreement, or permit issued to you by governmental or public authority, to add such person, or organization, or governmental or public authority to this policy as an "insured".

However, such person or organization is an "insured":

(1) Only with respect to the operation, maintenance or use of a covered "auto";

(2) Only for "bodily injury" or "property damage" caused by an "accident" which takes place after you executed the written contract or written agreement, or the permit has been issued to you; and

(3) Only for the duration of that contract, agreement or permit.

The "insured" is required to submit a claim to any other insurer to which coverage could apply for defense and indemnity. Unless the "insured" has agreed in writing to primary noncontributory wording per enhancement number 24, this policy is excess over any other collectible insurance.

5. SUPPLEMENTARY PAYMENTS

SECTION II - LIABILITY COVERAGE, Coverage Extensions, 2.a. Supplementary Payments, Paragraphs **(2)** and **(4)** are replaced by the following:

(2) Up to $3,000 for cost of bail bonds (including bonds for related traffic violations) required because of an "accident" we cover. We do not have to furnish these bonds.

(4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to $500 a day because of time off from work.

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6. AMENDED FELLOW EMPLOYEE EXCLUSION

In those jurisdictions where, by law, fellow "employees" are not entitled to the protection afforded to the employer by the workers compensation exclusivity rule, or similar protection, the following provision is added:

SECTION II - LIABILITY, Exclusion B.5. Fellow Employee does not apply if the "bodily injury" results from the use of a covered "auto" you own or hire if you have workers compensation insurance in force for all of your "employees" at the time of "loss".

This coverage is excess over any other collectible insurance.

SECTION III - PHYSICAL DAMAGE COVERAGE is amended as follows:

7. HIRED AUTO PHYSICAL DAMAGE

Paragraph **A.4. Coverage Extensions** of **SECTION III - PHYSICAL DAMAGE COVERAGE,** is amended by adding the following:

If hired "autos" are covered "autos" for Liability Coverage, and if Comprehensive, Specified Causes of Loss or Collision coverage are provided under the Business Auto Coverage Form for any "auto" you own, then the Physical Damage coverages provided are extended to "autos":

a. You hire, rent or borrow; or

b. Your "employee" hires or rents under a written contract or agreement in that "employee's" name, but only if the damage occurs while the vehicle is being used in the conduct of your business,

subject to the following limit and deductible:

a. The most we will pay for "loss" in any one "accident" or "loss" is the smallest of:

(1) $50,000; or

(2) The actual cash value of the damaged or stolen property as of the time of the "loss"; or

(3) The cost of repairing or replacing the damaged or stolen property with other property of like kind and quality, minus a deductible.

b. The deductible will be equal to the largest deductible applicable to any owned "auto" for that coverage.

c. Subject to the limit, deductible and excess provisions described in this provision, we will provide coverage equal to the broadest coverage applicable to any covered "auto" you own.

d. Subject to a maximum of $1,000 per "accident", we will also cover the actual loss of use of the hired "auto" if it results from an "accident", you are legally liable and the lessor incurs an actual financial loss.

e. This coverage extension does not apply to:

(1) Any "auto" that is hired, rented or borrowed with a driver; or

(2) Any "auto" that is hired, rented or borrowed from your "employee" or any member of your "employee's" household.

Coverage provided under this extension is excess over any other collectible insurance available at the time of "loss".

8. TOWING AND LABOR

SECTION III - PHYSICAL DAMAGE COVERAGE, Paragraph **A.2. Towing,** is amended by the addition of the following:

We will pay towing and labor costs incurred, up to the limits shown below, each time a covered "auto" classified and rated as a private passenger type, "light truck" or "medium truck" is disabled:

a. For private passenger type vehicles, we will pay up to $75 per disablement.

b. For "light trucks", we will pay up to $75 per disablement. "Light trucks" are trucks that have a gross vehicle weight (GVW) of 10,000 pounds or less.

c. For "medium trucks" , we will pay up to $150 per disablement. "Medium trucks" are trucks that have a gross vehicle weight (GVW) of 10,001 - 20,000 pounds.

However, the labor must be performed at the place of disablement.

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9. PHYSICAL DAMAGE - ADDITIONAL TRANSPORTATION EXPENSE COVERAGE

Paragraph **A.4.a. Coverage Extensions, Transportation Expenses** of **SECTION III - PHYSICAL DAMAGE COVERAGE,** is amended to provide a limit of $50 per day and a maximum limit of $1,500.

10. RENTAL REIMBURSEMENT

SECTION III - PHYSICAL DAMAGE COVERAGE, A. Coverage, is amended by adding the following:

a. We will pay up to $75 per day for rental reimbursement expenses incurred by you for the rental of an "auto" because of "accident" or "loss", to an "auto" for which we also pay a "loss" under Comprehensive, Specified Causes of Loss or Collision Coverages. We will pay only for those expenses incurred after the first 24 hours following the "accident" or "loss" to the covered "auto."

b. Rental Reimbursement requires the rental of a comparable or lessor vehicle, which in many cases may be substantially less than $75 per day, and will only be allowed for the period of time it should take to repair or replace the vehicle with reasonable speed and similar quality, up to a maximum of 30 days.

c. We will also pay up to $500 for reasonable and necessary expenses incurred by you to remove and replace your tools and equipment from the covered "auto". This limit is excess over any other collectible insurance.

d. This coverage does not apply unless you have a business necessity that other "autos" available for your use and operation cannot fill.

e. If "loss" results from the total theft of a covered "auto" of the private passenger type, we will pay under this coverage only that amount of your rental reimbursement expenses which is not already provided under Paragraph **4. Coverage Extension.**

f. No deductible applies to this coverage.

g. The insurance provided under this extension is excess over any other collectible insurance.

If this policy also provides Rental Reimbursement Coverage you purchased, the coverage provided by this Enhancement Endorsement is in addition to the coverage you purchased.

For the purposes of this endorsement provision, materials and equipment do not include "personal effects" as defined in provision **12.B.**

11. EXTRA EXPENSE - BROADENED COVERAGE

Under **SECTION III - PHYSICAL DAMAGE COVERAGE, A. Coverage,** we will pay for the expense of returning a stolen covered "auto" to you. The maximum amount we will pay is $1,000.

12. PERSONAL EFFECTS COVERAGE

A. SECTION III - PHYSICAL DAMAGE COVERAGE, A. Coverage, is amended by adding the following:

If you have purchased Comprehensive Coverage on this policy for an "auto" you own and that "auto" is stolen, we will pay, without application of a deductible, up to $600 for "personal effects" stolen with the "auto."

The insurance provided under this provision is excess over any other collectible insurance.

B. SECTION V - DEFINITIONS is amended by adding the following:

For the purposes of this provision, "personal effects" mean tangible property that is worn or carried by an "insured." "Personal effects" does not include tools, equipment, jewelry, money or securities.

13. ACCIDENTAL AIRBAG DEPLOYMENT

SECTION III - PHYSICAL DAMAGE COVERAGE, B. Exclusions is amended by adding the following:

If you have purchased Comprehensive or Collision Coverage under this policy, the exclusion for "loss" relating to mechanical breakdown does not apply to the accidental discharge of an airbag.

Any insurance we provide shall be excess over any other collectible insurance or reimbursement by manufacturer's warranty. However, we agree to pay any deductible applicable to the other coverage or warranty.

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14. PHYSICAL DAMAGE DEDUCTIBLE - VEHICLE TRACKING SYSTEM

SECTION III - PHYSICAL DAMAGE COVERAGE, D. Deductible, is amended by adding the following:

Any Comprehensive Deductible shown in the Declarations will be reduced by 50% for any "loss" caused by theft if the vehicle is equipped with a vehicle tracking device such as a radio tracking device or a global position device and that device was the method of recovery of the vehicle.

15. AUDIO, VISUAL AND DATA ELECTRONIC EQUIPMENT COVERAGE

SECTION III - PHYSICAL DAMAGE COVERAGE, B. Exclusions, Paragraph **a.** of the exception to exclusions **4.c.** and **4.d.** is deleted and replaced with the following:

Exclusions **4.c.** and **4.d.** do not apply to:

a. Electronic equipment that receives or transmits audio, visual or data signals, whether or not designed solely for the reproduction of sound, if the equipment is:

(1) Permanently installed in the covered "auto" at the time of the "loss" or removable from a housing unit that is permanently installed in the covered "auto"; and

(2) Designed to be solely operated by use from the power from the "auto's" electrical system; and

(3) Physical damage coverages are provided for the covered "auto".

If the "loss" occurs solely to audio, visual or data electronic equipment or accessories used with this equipment, then our obligation to pay for, repair, return or replace damaged or stolen property will be reduced by a $100 deductible.

16. LOAN / LEASE GAP COVERAGE (Not Applicable In New York)

A. Paragraph **C. Limit Of Insurance** of **SECTION III - PHYSICAL DAMAGE COVERAGE** is amended by adding the following:

The most we will pay for a "total loss" to a covered "auto" owned by or leased to you in any one "accident" is the greater of the:

1. Balance due under the terms of the loan or lease to which the damaged covered "auto" is subject at the time of the "loss" less the amount of:

a. Overdue payments and financial penalties associated with those payments as of the date of the "loss";

b. Financial penalties imposed under a lease due to high mileage, excessive use or abnormal wear and tear;

c. Costs for extended warranties, Credit Life Insurance, Health, Accident or Disability Insurance purchased with the loan or lease;

d. Transfer or rollover balances from previous loans or leases;

e. Final payment due under a "Balloon Loan";

f. The dollar amount of any unrepaired damage which occurred prior to the "total loss" of a covered "auto";

g. Security deposits not refunded by a lessor;

h. All refunds payable or paid to you as a result of the early termination of a lease agreement or as a result of the early termination of any warranty or extended service agreement on a covered "auto";

i. Any amount representing taxes;

j. Loan or lease termination fees; or

2. The actual cash value of the damage or stolen property as of the time of the "loss".

An adjustment for depreciation and physical condition will be made in determining the actual cash value at the time of the "loss". This adjustment is not applicable in Texas.

B. Additional Conditions

This coverage applies only to the original loan for which the covered "auto" that incurred the "loss" serves as collateral, or lease written on the covered "auto" that incurred the "loss".

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C. SECTION V - DEFINITIONS is changed by adding the following:

As used in this endorsement provision, the following definitions apply:

"Total loss" means a "loss" in which the cost of repairs plus the salvage value exceeds the actual cash value.

A "balloon loan" is one with periodic payments that are insufficient to repay the balance over the term of the loan, thereby requiring a large final payment.

17. GLASS REPAIR - WAIVER OF DEDUCTIBLE

Paragraph **D. Deductible** of **SECTION III - PHYSICAL DAMAGE COVERAGE** is amended by the addition of the following:

No deductible applies to glass damage if the glass is repaired rather than replaced.

18. PARKED AUTO COLLISION COVERAGE (WAIVER OF DEDUCTIBLE)

Paragraph **D. Deductible** of **SECTION III - PHYSICAL DAMAGE COVERAGE** is amended by the addition of the following:

The deductible does not apply to "loss" caused by collision to such covered "auto" of the private passenger type or light weight truck with a gross vehicle weight of 10,000 lbs. or less as defined by the manufacturer as maximum loaded weight the "auto" is designed to carry while it is:

a. In the charge of an "insured";

b. Legally parked; and

c. Unoccupied.

The "loss" must be reported to the police authorities within 24 hours of known damage.

The total amount of the damage to the covered "auto" must exceed the deductible shown in the Declarations.

This provision does not apply to any "loss" if the covered "auto" is in the charge of any person or organization engaged in the automobile business.

19. TWO OR MORE DEDUCTIBLES

Under **SECTION III - PHYSICAL DAMAGE COVERAGE,** if two or more company policies or coverage forms apply to the same "accident", the following applies to Paragraph **D. Deductible:**

a. If the applicable Business Auto deductible is the smaller (or smallest) deductible, it will be waived; or

b. If the applicable Business Auto deductible is not the smaller (or smallest) deductible , it will be reduced by the amount of the smaller (or smallest) deductible; or

c. If the "loss" involves two or more Business Auto coverage forms or policies, the smaller (or smallest) deductible will be waived.

For the purpose of this endorsement, company means any company that is part of the Liberty Mutual Group.

SECTION IV - BUSINESS AUTO CONDITIONS is amended as follows:

20. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

SECTION IV- BUSINESS AUTO CONDITIONS, Paragraph **B.2.** is amended by adding the following:

If you unintentionally fail to disclose any hazards, exposures or material facts existing as of the inception date or renewal date of the Business Auto Coverage Form, the coverage afforded by this policy will not be prejudiced.

However, you must report the undisclosed hazard of exposure as soon as practicable after its discovery, and we have the right to collect additional premium for any such hazard or exposure.

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21. AMENDED DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT, OR LOSS

SECTION IV - BUSINESS AUTO CONDITIONS, Paragraph **A.2.a.** is replaced in its entirety by the following:

a. In the event of "accident", claim, "suit" or "loss", you must promptly notify us when it is known to:

(1) You, if you are an individual;

(2) A partner, if you are a partnership;

(3) Member, if you are a limited liability company;

(4) An executive officer or the "employee" designated by the Named Insured to give such notice, if you are a corporation.

To the extent possible, notice to us should include:

(a) How, when and where the "accident" or "loss" took place;

(b) The "insureds" name and address; and

(c) The names and addresses of any injured persons and witnesses.

22. WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

SECTION IV - BUSINESS AUTO CONDITIONS, Paragraph **A.5. Transfer Of Rights Of Recovery Against Others To Us,** is amended by the addition of the following:

If the person or organization has in a written agreement waived those rights before an "accident" or "loss", our rights are waived also.

23. HIRED AUTO COVERAGE TERRITORY

SECTION IV - BUSINESS AUTO CONDITIONS, Paragraph **B.7. Policy Period, Coverage Territory,** is amended by the addition of the following:

f. For "autos" hired 30 days or less, the coverage territory is anywhere in the world, provided that the "insured's" responsibility to pay for damages is determined in a "suit", on the merits, in the United States, the territories and possessions of the United States of America, Puerto Rico or Canada or in a settlement we agree to.

This extension of coverage does not apply to an "auto" hired, leased, rented or borrowed with a driver.

24. PRIMARY AND NON-CONTRIBUTING IF REQUIRED BY WRITTEN CONTRACT OR WRITTEN AGREEMENT

The following is added to **SECTION IV - BUSINESS AUTO CONDITIONS, General Conditions, B.5. Other Insurance** and supersedes any provision to the contrary:

This Coverage Form's Covered Autos Liability Coverage is primary to and will not seek contribution from any other insurance available to an "insured" under your policy provided that:

1. Such "insured" is a Named Insured under such other insurance; and

2. You have agreed in a written contract or written agreement that this insurance would be primary and would not seek contribution from any other insurance available to such "insured".

SECTION V - DEFINITIONS is amended as follows:

25. BODILY INJURY REDEFINED

Under **SECTION V - DEFINITIONS,** Definition **C.** is replaced by the following:

"Bodily injury" means physical injury, sickness or disease sustained by a person, including mental anguish, mental injury, shock, fright or death resulting from any of these at any time.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

COMMERCIAL GENERAL LIABILITY EXTENSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

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With respect to coverage afforded by this endorsement, the provisions of the policy apply unless modified by the endorsement.

A. NON-OWNED AIRCRAFT

Under Paragraph **2. Exclusions** of **Section I – Coverage A - Bodily Injury And Property Damage Liability,** exclusion **g. Aircraft, Auto Or Watercraft** does not apply to an aircraft provided:

1. It is not owned by any insured;

2. It is hired, chartered or loaned with a trained paid crew;

3. The pilot in command holds a currently effective certificate, issued by the duly constituted authority of the United States of America or Canada, designating her or him a commercial or airline pilot; and

4. It is not being used to carry persons or property for a charge.

However, the insurance afforded by this provision does not apply if there is available to the insured other valid and collectible insurance, whether primary, excess (other than insurance written to apply specifically in excess of this policy), contingent or on any other basis, that would also apply to the loss covered under this provision.

B. NON-OWNED WATERCRAFT

Under Paragraph **2. Exclusions** of **Section I – Coverage A – Bodily Injury And Property Damage Liability,**

Subparagraph **(2)** of exclusion **g. Aircraft, Auto Or Watercraft** is replaced by the following:

This exclusion does not apply to:

(2) A watercraft you do not own that is:

(a) Less than 52 feet long; and

(b) Not being used to carry persons or property for a charge.

C. PROPERTY DAMAGE LIABILITY – ELEVATORS

1. Under Paragraph **2. Exclusions** of **Section I – Coverage A – Bodily Injury And Property Damage Liability,** Subparagraphs **(3), (4)** and **(6)** of exclusion **j. Damage To Property** do not apply if such "property damage" results from the use of elevators. For the purpose of this provision, elevators do not include vehicle lifts. Vehicle lifts are lifts or hoists used in automobile service or repair operations.

2. The following is added to **Section IV – Commercial General Liability Conditions,** Condition **4. Other Insurance,** Paragraph **b. Excess Insurance:**

The insurance afforded by this provision of this endorsement is excess over any property insurance, whether primary, excess, contingent or on any other basis.

D. EXTENDED DAMAGE TO PROPERTY RENTED TO YOU (Tenant's Property Damage)

If Damage To Premises Rented To You is not otherwise excluded from this Coverage Part:

1. Under Paragraph **2. Exclusions of Section I - Coverage A - Bodily Injury and Property Damage Liability:**

a. The fourth from the last paragraph of exclusion **j. Damage To Property** is replaced by the following:

Paragraphs **(1), (3)** and **(4)** of this exclusion do not apply to "property damage" (other than damage by fire, lightning, explosion, smoke, or leakage from an automatic fire protection system) to:

(i) Premises rented to you for a period of 7 or fewer consecutive days; or

(ii) Contents that you rent or lease as part of a premises rental or lease agreement for a period of more than 7 days.

Paragraphs **(1), (3)** and **(4)** of this exclusion do not apply to "property damage" to contents of premises rented to you for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to this coverage as described in **Section III – Limits of Insurance**.

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b. The last paragraph of subsection **2. Exclusions** is replaced by the following:

Exclusions **c.** through **n.** do not apply to damage by fire, lightning, explosion, smoke or leakage from automatic fire protection systems to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to Damage To Premises Rented To You as described in **Section III – Limits Of Insurance.**

2. Paragraph **6.** under **Section III – Limits Of Insurance** is replaced by the following:

6. Subject to Paragraph **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to:

a. Any one premise:

(1) While rented to you; or

(2) While rented to you or temporarily occupied by you with permission of the owner for damage by fire, lightning, explosion, smoke or leakage from automatic protection systems; or

b. Contents that you rent or lease as part of a premises rental or lease agreement.

3. As regards coverage provided by this provision **D. EXTENDED DAMAGE TO PROPERTY RENTED TO YOU (Tenant's Property Damage) -** Paragraph **9.a.** of **Definitions** is replaced with the following:

9.a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion, smoke, or leakage from automatic fire protection systems to premises while rented to you or temporarily occupied by you with the permission of the owner, or for damage to contents of such premises that are included in your premises rental or lease agreement, is not an "insured contract".

E. MEDICAL PAYMENTS EXTENSION

If **Coverage C Medical Payments** is not otherwise excluded, the Medical Payments provided by this policy are amended as follows:

Under Paragraph **1. Insuring Agreement** of **Section I – Coverage C – Medical Payments,** Subparagraph **(b)** of Paragraph **a.** is replaced by the following:

(b) The expenses are incurred and reported within three years of the date of the accident; and

F. EXTENSION OF SUPPLEMENTARY PAYMENTS – COVERAGES A AND B

1. Under **Supplementary Payments – Coverages A** and **B,** Paragraph **1.b.** is replaced by the following:

b. Up to **$3,000** for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

2. Paragraph **1.d**. is replaced by the following:

d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or “suit”, including actual loss of earnings up to **$500** a day because of time off from work.

G. ADDITIONAL INSUREDS - BY CONTRACT, AGREEMENT OR PERMIT

1. Paragraph **2.** under **Section II – Who Is An Insured** is amended to include as an insured any person or organization whom you have agreed to add as an additional insured in a written contract, written agreement or permit. Such person or organization is an additional insured but only with respect to liability for “bodily injury”, “property damage” or “personal and advertising injury” caused in whole or in part by:

a. Your acts or omissions, or the acts or omissions of those acting on your behalf, in the performance of your on going operations for the additional insured that are the subject of the written contract or written agreement provided that the “bodily injury” or “property damage” occurs, or the “personal and advertising injury” is committed, subsequent to the signing of such written contract or written agreement; or

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b. Premises or facilities rented by you or used by you; or

c. The maintenance, operation or use by you of equipment rented or leased to you by such person or organization; or

d. Operations performed by you or on your behalf for which the state or political subdivision has issued a permit subject to the following additional provisions:

(1) This insurance does not apply to “bodily injury”, “property damage”, or “personal and advertising injury” arising out of the operations performed for the state or political subdivision;

(2) This insurance does not apply to “bodily injury” or “property damage” included within the “completed operations hazard”.

(3) Insurance applies to premises you own, rent, or control but only with respect to the following hazards:

a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners, or decorations and similar exposures; or

(b) The construction, erection, or removal of elevators; or

(c) The ownership, maintenance, or use of any elevators covered by this insurance.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and

2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

With respect to Paragraph **1.a.** above, a person’s or organization’s status as an additional insured under this endorsement ends when:

(1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

(2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

With respect to Paragraph **1.b.** above, a person’s or organization’s status as an additional insured under this endorsement ends when their written contract or written agreement with you for such premises or facilities ends.

With respects to Paragraph **1.c.** above, this insurance does not apply to any “occurrence” which takes place after the equipment rental or lease agreement has expired or you have returned such equipment to the lessor.

The insurance provided by this endorsement applies only if the written contract or written agreement is signed prior to the "bodily injury" or "property damage".

We have no duty to defend an additional insured under this endorsement until we receive written notice of a “suit” by the additional insured as required in Paragraph **b.** of Condition **2. Duties In the Event Of Occurrence, Offense, Claim Or Suit** under **Section IV – Commercial General Liability Conditions.**

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2. With respect to the insurance provided by this endorsement, the following are added to Paragraph **2. Exclusions** under **Section I - Coverage A - Bodily Injury And Property Damage Liability:**

This insurance does not apply to:

a. "Bodily injury" or "property damage" arising from the sole negligence of the additional insured.

b. "Bodily injury" or "property damage" that occurs prior to you commencing operations at the location where such "bodily injury" or "property damage" occurs.

c. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

(1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(2) Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

d. "Bodily injury" or "property damage" occurring after:

(1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

(2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

e. Any person or organization specifically designated as an additional insured for ongoing operations by a separate **ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS** endorsement issued by us and made a part of this policy.

3. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

a. Required by the contract or agreement; or

b. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

H. PRIMARY AND NON-CONTRIBUTORY ADDITIONAL INSURED EXTENSION

This provision applies to any person or organization who qualifies as an additional insured under any form or endorsement under this policy.

Condition **4. Other Insurance of SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS** is amended as follows:

a. The following is added to Paragraph **a. Primary Insurance:**

If an additional insured's policy has an Other Insurance provision making its policy excess, and you have agreed in a written contract or written agreement to provide the additional insured coverage on a primary and noncontributory basis, this policy shall be primary and we will not seek contribution from the additional insured's policy for damages we cover.

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b. The following is added to Paragraph **b. Excess Insurance:**

When a written contract or written agreement, other than a premises lease, facilities rental contract or agreement, an equipment rental or lease contract or agreement, or permit issued by a state or political subdivision between you and an additional insured does not require this insurance to be primary or primary and non-contributory, this insurance is excess over any other insurance for which the additional insured is designated as a Named Insured.

Regardless of the written agreement between you and an additional insured, this insurance is excess over any other insurance whether primary, excess, contingent or on any other basis for which the additional insured has been added as an additional insured on other policies.

I. ADDITIONAL INSUREDS - EXTENDED PROTECTION OF YOUR "LIMITS OF INSURANCE"

This provision applies to any person or organization who qualifies as an additional insured under any form or endorsement under this policy.

1. The following is added to Condition **2. Duties In The Event Of Occurrence, Offense, Claim or Suit:**

An additional insured under this endorsement will as soon as practicable:

a. Give written notice of an "occurrence" or an offense that may result in a claim or "suit" under this insurance to us;

b. Tender the defense and indemnity of any claim or "suit" to all insurers whom also have insurance available to the additional insured; and

c. Agree to make available any other insurance which the additional insured has for a loss we cover under this Coverage Part.

d. We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a "suit" by the additional insured.

2. The limits of insurance applicable to the additional insured are those specified in a written contract or written agreement or the limits of insurance as stated in the Declarations of this policy and defined in **Section III – Limits of Insurance** of this policy, whichever are less. These limits are inclusive of and not in addition to the limits of insurance available under this policy**.**

J. WHO IS AN INSURED - INCIDENTAL MEDICAL ERRORS / MALPRACTICE
WHO IS AN INSURED - FELLOW EMPLOYEE EXTENSION - MANAGEMENT EMPLOYEES

Paragraph **2.a.(1)** of **Section II - Who Is An Insured** is replaced with the following:

(1) "Bodily injury" or "personal and advertising injury":

(a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;

(b) To the spouse, child, parent, brother or sister of that co-"employee" or "volunteer worker" as a consequence of Paragraph **(1) (a)** above;

(c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs **(1) (a)** or **(b)** above; or

(d) Arising out of his or her providing or failing to provide professional health care services. However, if you are not in the business of providing professional health care services or providing professional health care personnel to others, or if coverage for providing professional health care services is not otherwise excluded by separate endorsement, this provision (Paragraph **(d)**) does not apply.

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Paragraphs **(a)** and **(b)** above do not apply to “bodily injury” or “personal and advertising injury” caused by an “employee” who is acting in a supervisory capacity for you. Supervisory capacity as used herein means the “employee’s” job responsibilities assigned by you, includes the direct supervision of other “employees” of yours. However, none of these “employees” are insureds for “bodily injury” or “personal and advertising injury” arising out of their willful conduct, which is defined as the purposeful or willful intent to cause “bodily injury” or “personal and advertising injury”, or caused in whole or in part by their intoxication by liquor or controlled substances.

The coverage provided by provision **J.** is excess over any other valid and collectable insurance available to your “employee”.

K. NEWLY FORMED OR ADDITIONALLY ACQUIRED ENTITIES

Paragraph **3.** of **Section II** - **Who Is An Insured** is replaced by the following:

3. Any organization you newly acquire or form and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:

a. Coverage under this provision is afforded only until the expiration of the policy period in which the entity was acquired or formed by you;

b. Coverage **A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and

c. Coverage **B** does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.

d. Records and descriptions of operations must be maintained by the first Named Insured.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations or qualifies as an insured under this provision.

L. FAILURE TO DISCLOSE HAZARDS AND PRIOR OCCURRENCES

Under **Section IV – Commercial General Liability Conditions,** the following is added to Condition **6. Representations:**

Your failure to disclose all hazards or prior “occurrences” existing as of the inception date of the policy shall not prejudice the coverage afforded by this policy provided such failure to disclose all hazards or prior “occurrences” is not intentional.

M. KNOWLEDGE OF OCCURRENCE, OFFENSE, CLAIM OR SUIT

Under **Section IV – Commercial General Liability Conditions,** the following is added to Condition **2. Duties In The Event of Occurrence, Offense, Claim Or Suit:**

Knowledge of an “occurrence”, offense, claim or “suit” by an agent, servant or “employee” of any insured shall not in itself constitute knowledge of the insured unless an insured listed under Paragraph **1.** of **Section II – Who Is An Insured** or a person who has been designated by them to receive reports of “occurrences”, offenses, claims or “suits” shall have received such notice from the agent, servant or “employee”.

N. LIBERALIZATION CLAUSE

If we revise this Commercial General Liability Extension Endorsement to provide more coverage without additional premium charge, your policy will automatically provide the coverage as of the day the revision is effective in your state.

O. BODILY INJURY REDEFINED

Under **Section V – Definitions,** Definition **3.** is replaced by the following:

3. “Bodily Injury” means physical injury, sickness or disease sustained by a person. This includes mental anguish, mental injury, shock, fright or death that results from such physical injury, sickness or disease.

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P. EXTENDED PROPERTY DAMAGE

Exclusion a. of **COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY** is replaced by the following:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or “property damage” resulting from the use of reasonable force to protect persons or property.

Q. WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US – WHEN REQUIRED IN A CONTRACT OR AGREEMENT WITH YOU

Under **Section IV – Commercial General Liability Conditions,** the following is added to Condition **8. Transfer Of Rights Of Recovery Against Others To Us:**

We waive any right of recovery we may have against a person or organization because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard" provided:

1. You and that person or organization have agreed in writing in a contract or agreement that you waive such rights against that person or organization; and

2. The injury or damage occurs subsequent to the execution of the written contract or written agreement.

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Power Requirements

San Luis Power Requirements

	FLA	Operating AMPS	Qty	kW	Annual Hrs	Annual kWh
Screw Press Motor	7.2	5.76	1	3.63	2080	7541.0
Flocculation Tank Motor	2.4	1.92	1	1.21	2080	2513.7
Conveyor Motor	6.6	5.28	1	3.32	2080	6912.6
1KVA Transformer	2.1	1.68	1	1.06	2080	2199.5
					Total	19166.8

Assumes kW is calculated as p(kW = Sqrt(3) x PF x I x V/1000
Assumes power factor is 0.79 for all motors.
Assumes power factor for kVA transformer is 1.0
Assumes voltage is 460V 3ph
Assumes 40 hours per week of runtime

Maintenance Requirements and Schedule

FKC Maintenance Requirements and Schedule

Item #	Task	Schedule
1	Grease Screw Press Inlet Bearing	Monthly
2	Grease Screw Press Outlet Bearing	Monthly
3	Change Oil in Screw Press Gearbox	Annually
4	Inspect and cleaning of the flocculation Tank agitator	Monthly
5	Change Oil in SEW GB for Flocculation Tank	Annually
6	Inspect Conveyor Liners	Quarterly
7	Change Oil in SEW GB on Conveyor	Annually
8	Sludge Pump Gearbox oil	Annually
9	Polymer system pump gearbox oil	Annually

Recommended Maintenance over a 20 year period

(Based on 40 hours operation per week ; 2,080 hrs per year)

Item	Description of Activity	Labor Time Man-Hours	List of Parts and Consumables	Activty Frequency per Year
1	Screw Press Gearbox Oil Changeout	1.5 Hours	6.1 gallons oil, $130	0.05 times per year. Only once after 1st 500 hours of operation (not yearly) per unit
2	Screw Press Gearbox Oil Changeout	1.5 Hours	6.1 gallons oil, $130	0.832 times per year. Every 2,500 hours of operation.
3	Flocculation Tank Gearbox Oil Changeout	1.5 Hours	0.66 gallons of oil, $14	0.05 times per year. Only once after 1st 500 hours of operation (not yearly) per unit
4	Flocculation Tank Gearbox Oil Changeout	1.5 Hours	0.66 gallons of oil, $14	0.208 times per year. Every 10,000 hours of operation.
5	Screw Press Inlet and Outlet Bearing Grease Replenishment	1.0 Hour	1 tube grease, $4	6.0 times per year. Every 2 months.
6	Flocculation Tank Gearbox AM Adapter Renew Grease & Replace Oil Seal	2.0 Hour	1 oil seal, dab of grease, $9	2.0 times per year. Every 3,000 hours, at least every 6 months.
7	Screw Press Drum Screen Washdown and Flocculation Tank Agitator Cleaning	3.0 Hour	No parts, consumables, or supplies	8.7 times per year. Every 6 weeks.
8	Screw Press High Pressure Drum, Screens, and Flight Inspection	16 Hours	No parts, consumables, or supplies	0.1 times per year. Every 10 years.
9				
10	Motors, Solenoid Valves, Level Transmitters, Level Probes, Control Panel Hardware	Statistical Analysis, environmental conditions, operator adjustments, etc. are beyond FKC ability to offer frequency or annual cost for these items. They are AS NEEDED.		

Assume $25 / hr labor rate.

ITEM	LABOR	PARTS	times yearly rate	TOTAL per year (over 20 years)
1	$37.50	$130.00	0.05	$8.38
2	$37.50	$130.00	0.832	$139.36
3	$37.50	$14.00	0.05	$2.58
4	$37.50	$14.00	0.208	$10.71
5	$25.00	$4.00	6	$174.00
6	$50.00	$9.00	2	$118.00
7	$75.00	$0.00	8.7	$652.50
8	$400.00	$0.00	0.1	$40.00

rounded up SUM	$1,146

Maintenance and Repair Contract

OPTIONAL FKC SCREW PRESS 5-YEAR SERVICE CONTRACT INFORMATION

With 5-Year Optional Extension

A. FKC offers the optional 5 or 10-year service contract as outlined below. This warranty is for FKC Manufactured equipment ONLY. The sludge feed pumps and Local Control Panel are NOT part of this extended warranty. This optional 5 or 10-year service contract does not include the incidental maintenance items listed or washing/cleaning of the equipment.

B. An Optional 5 or 10-year Service Contract is offered for all mechanical components of the flocculation tank and dewatering screw press. The Service Contract shall be for up to 10 years after start-up.

1. Optional 5 / 10-year Service Contract shall include maintenance of:
    a. Gearboxes, drums, screens, screw(s), bearings, bushings and spray showers,
    b. Any normal wearing parts such as brushes, squeegees and/or oscillating rings.
    c. Annual sampling and analysis of screw press gearbox oil.
2. Optional 10-year Service Contract does not cover:
    a. Damage or failures due to lack of proper lubrication types, quantities or schedules.
    b. Damage due to processing non-specified materials, operating the equipment outside of normal parameters, jogging the screw, reversing the screw.
    b. Motors, field instrumentation, power control, logic control, or any other electronic component.
    c. Coatings and/or corrosion.
    d. Lubrication of gearbox or bearings.
    (FKC technician can assist in an oil changeout during annual visits.)
    e. Cleaning of the flocculation tank and screw press.
3. One annual site visit by a certified service technician for equipment / system inspection and service is included.
4. Optional 10-year Service Contract includes all parts, shipping and labor for repairing or replacing components to maintain the screw press minimum performance requirements listed.

C. The FKC certified technician to provide the services may be a certified FKC representative technician, or an FKC field technician from the Port Angeles, WA facility.

Detailed approach to address technical support and service calls

If an incident (alarm or component failure) occurs, then the following steps can be taken to reach a decision that an FKC technician should be invited to make an on-site service call. (These steps do not discuss whether the work is covered under warranties and/or service contracts. It only helps to decide whether an FKC technician should come on-site.)

1. Determine if it is a process, controls, electrical or mechanical incident.

    A. Process Incident

        i. Use the troubleshooting guidelines in the O&M Manual and the training received at startup to make the necessary cleaning, corrections and/or setpoint adjustments to solve the problem. FKC is available by phone during business hours to discuss the incident and help with troubleshooting.

        ii. Examples: hi-hi flocculation tank level alarm, hi headbox level alarm, loss of polymer, loss of sludge flow, poor flocculation, poor solids capture, low cake solids, excessive high screw press speeds, excessive low sludge flows, excessive high headbox level.

    B. Controls Incident

        i. Have the plant's electrician check to see if it is a programming or software problem, or an electric failure.

            a. For a programming or software problem, call FKC and describe the concern. FKC is available by phone during business hours to discuss the incident and help with troubleshooting. If the problem persists then FKC will have the control panel sub-supplier (CPSS) call the Owner to discuss the problem. If the problem will not go away, then the Owner will need to arrange for the CPSS to get remote access to the control panel by tunneling in through the ethernet or some other method. If

CPSS cannot resolve the problem with remote access, then an FKC technician should be invited to make an on-site service call.

C. Electrical Incident

i. Have the plant's electrician determine if there is an issue with the plant's power supply, wiring or field connections. If this is the problem, then the electrician should take corrective steps as needed. FKC and the CPSS are available by phone during business hours to discuss the plant's electrical problem and help with troubleshooting.

ii. For an FKC electronic component problem, the plant's electrician should use the alarm description or equipment status to troubleshoot the field instrumentation, wiring, connections, relays, fuses, etc. to determine which component has failed. FKC is available by phone during business hours to discuss the incident and help with troubleshooting. If the component cannot be re-started, then FKC will have the CPSS call the Owner to discuss the problem. If the component needs to be replaced, then the Owner and FKC can arrange for shipping and delivery of a new component. Once the component arrives, the Owner can choose to have the plant's electrician install the replacement or invite an FKC technician to make an on-site service call. The CPSS will remotely coordinate the replacement with the Owner and/or the FKC technician.

D. Mechanical Incident

i. Call FKC by phone during business hours to discuss the incident. Information about amperages, lubrication, data and photos will be shared. If after discussion the cause of the problem remains unknown, then an FKC technician should be invited to make an on-site service call.

ii. When the cause of the problem is confirmed, then FKC will coordinate with the Owner and propose a corrective action plan. This will include FKC and Owner personnel to be

scheduled for the work, parts availability (onsite, online, FKC factory, components factories, etc.), equipment/tools needed, work schedule and a description of how the incident will be resolved. With Owner approval, FKC will execute the corrective action plan.

iii. Examples include excessive gearbox noise or failure, loss of lubrication, catastrophic screen/drum/cover destruction (like by a forklift or dropping tools in the headbox), excessive motor coupling noise or failure, excessive bearing noise or failure, leaking oil seals, motor/VFD trip overload alarms, hi current readings from the gearbox/motor VFD's, spring cone rods/springs immobility, screw not rotating while running, flocculation tank agitator not rotating while running, etc.

Guaranteed On-site Response Time

FKC onsite response time for the 10-year service contract offered is 48 hours.

Depending on the type of equipment/system malfunction, the technician may be a control panel technician, a certified FKC representative technician, or an FKC technician from the Port Angeles, WA facility.

FKC acknowledges that the manufacturer will pay liquidated damages of $500 for each day of delay.

Additional terms, conditions and wording for the service contract will be negotiated at the time of signing.

Incidental / Routing Maintenance Items

1. Grease replenishment of the Screw Press Inlet Bearing
2. Grease replenishment of the Screw Press Discharge Bearing
3. Inspection and Cleaning of the Flocculation Tank Agitator Blades

Guarantee

OPTION A GUARANTEE

FKC CO., LTD.

2708 West 16th Street
Port Angeles, WA 98363

(360) 452-9472
FAX (360) 452-6880

GUARANTEE

Project: City of San Luis West WWTP, AZ
Project Engineer: Wesley Bond
Equipment Name: FKC Screw Press and associated equipment

FKC has reviewed the bid documents for the City of San Luis West WWTP. Although we listed a couple notes and clarifications in this bid package, FKC can guarantee the performance of our equipment, per Table A listed below.

Table A

Material to be dewatered:	Secondary Waste Activated (with minimal digestion)
Capacity:	11.928 BDST/Day (24-hours) or 994 Dry Lbs. / Hr.
Average Flowrate:	200 GPM @ 1.0%TS
Inlet Consistency:	1.0% or Higher
Outlet Consistency:	15% or Higher
Maximum Polymer Dose:	30 Lbs. / Dry Ton (Active)
Capture Rate:	95% or Higher

The performance figures and conditions denoted in this proposal constitute FKC Co., Ltd.'s performance guarantee and the conditions required to meet the guarantee. FKC further guarantee's the equipment provided in this bid package, after installation, is a full and functioning system.

FKC's packages does not include installation, assembly, field piping or field wirings. All other equipment is included in this proposal. Any subsystems or appurtenances omitted will be provided by FKC at no additional cost to the owner. In the event that performance is not met, FKC will provide all parts, engineering, and labor associated with the work necessary to bring the equipment into conformance with the performance guarantee.

12/9/24

FKC Co., Ltd. Date
Roger Olson
President

UPDATED GUARANTEE - OPTION B

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363

(360) 452-9472
FAX (360) 452-6880

January 14, 2025

Steven Seymour
490 Latigo Row
Encinitas, CA 92024

Tel: (760) 304-4224
Cell: (949) 291-0555
Email: Steven@saddlebackenviro.com

Re: Correction for Sludge Dewatering Screw Press System
City of San Luis West WWTP 3 MGD MBR Phase 1 Upgrades

Steven,

With this letter, FKC offers a correction to the FKC's Option B bid offered for the Complete Sludge Dewatering Screw Press System, for the City of San Luis West WWTP 3 MGD MBR Phase 1 Upgrades.

FKC's Option "B" bid was for a BHX 1250 Screw Press with a capacity of 1,000 Dry Lbs. / HR with a maximum Hydraulic Capacity of 170 GPM. This capacity is better defined as 170 GPM and guaranteed to achieve cake dryness of 15% or Higher and 200 GPM to achieve cake dryness guaranteed to pass the paint filter test with less than 40 Lbs. / Dry Ton of polymer.

No other changes to the original FKC proposal are offered. Please see attached the corrected Exhibit C – Proposed Equipment Summary sheet.

Thank you,

1/14/25

Roger Olson
President
FKC Co., Ltd.

Date

UPDATED GUARANTEE

Exhibit C - Proposed Equipment Summary	
	Option B
Sludge Dewatering System	
Manufacturer/Equipment System General Information	
Name of Manufacturer:	FKC Co., Ltd.
Model Info.	BHX-1250x6500L
Total # of Units for System (Including Redundancy)	One
Main Drive - Horsepower per Unit (Hp)	5 HP, 1800 RPM
Flocculation Tank Drive - Horsepower per Unit (Hp)	1.5 HP, 1800 RPM
Conveyor Drive - Horsepower per Unit (Hp)	3.0 HP, 1800 RPM
Sludge Pump - Horsepower per Unit (Hp)	10 HP, 1800 RPM
Polymer System - Horsepower per Unit (Hp)	1 HP
Total Unit Max Connected Electrical Load (kW)	6.4 kW. See electric calc'c sheet for assumptions.
Equipment Size - per Unit (LxWxH) (in)	345" x 74" x 112" (screw press only. See drawings provided for complete dimensions)
Equipment Dry Weight - per Unit (lbs)	28,660 lbs empty (screw press only. See drawings provided for additional weights)
Equipment Max Operational Weight - per Unit (lbs)	35,274 lbs full (screw press only. See drawings provided for additional weights)
Equipment Skid Mounted (y/n)	n (no). All equipment proposed is shipped loose and separate for field installation by others.
Drum Diameter (in)	49 inches (1250 mm)
Max Screw Speed (RPM)	0.24 rpm (screw press only. Up to 64 rpm for flocculation tank)
Emergency Shutdown Equipment Included (y/n)	y (yes)
Construction/Fabrication Materials	
Equipment Component Construction/Fab Materials info provided in proposal (y/n)	y (yes)
Frame / Base Fabrication Materials and Surface Prep Type and Finish	Galvanized carbon steel screw press channel base. Standard manufacturer's prep and finish for drives and motors. SSPC-SP-6 with Zinc Primer / Epoxy / Polyurethane coating system for others.
Fastening Hardware Materials	316 stainless steel in the wetted area. Others (like drive to discharge box) are 304 stainless steel.
Seal and Support/Wear Materials of Construction	Inlet and outlet bearing seals on the screw are nitrile Buna-N. There are no wear materials within the drum/screen/screw dewatering area for the screw press.
Perforated Plate Material and Opening Size	304 stainless steel with 2.5 mm holes
Drainage Pipe Size, Type, and Material	ANSI 10-inch 150lb Flange, 304 stainless steel
Discharge Hopper Materials of Construction	304 stainless steel wetted parts. Bearing housings & gussets are painted carbon steel.
Bearing Type, Material, Life Rating	Spherical roller bearings, carbon steel, >100,000 hours for screw press.
Motor Types, Service Factor, Insulation Class Ratings	Severe Duty, NEMA Premium Efficiency, Class I-Div 2-Group D compliant, 1.15 SF (1.0 for ASD Duty), Class F Insulation
Drive Mechanism, Type/Model/Rating	Cyclo, 5 HP, 1800 RPM for screw press.
Floc Tank Drive Mechanism, Type/Model/Rating	Helical Wormgear, SEW Eurodrive, SAF47AM145 29:1, 1.5 HP
Wash System and Nozzles Materials of Construction	304 stainless steel or better
Electrical Equipment Ratings:	Motors & solenoid valves are Class I, Div 2, Group D. NEMA 12 for MCP. Local Control Station & Estop push button control stations are NEMA 4X.
Safety Devices:	Two (2) NEMA 4X Estop Push Button Control Stations (loose), One (1) Process Stop Push Button on MCP door)
Local/Main Control Panel Materials of Construction (NEMA Rating)	Local NEMA 4X, Main Control Panel NEMA 4X, 304 SS
Performance Information	
Maximum Hydraulic Capacity (gpm)	170 gpm with Cake Dryness of 15% TS or Higher; 200 GPM Guaranteed to Pass the Paint Filter Test
Maximum Solids Loading Capacity (lbs/hr)	1000 dry lbs/hr
Hydraulic Capacity @ 1.0% DS (gpm)	170 gpm
Solids Loading Capacity @ 1.0% DS (lbs/hr)	1000 dry lbs/hr
Dry Solids (cake - assume 1.0% DS feed) (%)	15 % TS or Higher
Minimum Solids Capture Rate - assume 1.0% DS feed (%)	95%
Wash Water Requirements (gpm, psi)	55 gpm @ 35 psi, intermittent, solenoid is open for 15 seconds every 10 minutes. Opens 3.0 minutes total per hour of operation.
Lbs. of Polymer used at design dry solids of 2.25% feed (lbs active polymer per ton DS)	30 active lbs per dry ton at 170 GPM; 40 active lbs per dry ton at 200 GPM
Capital Costs	
Total Primary Dewatering Unit Equipment Cost ($)	$636,677.00
Total Conveyance System Equipment Costs ($)	$69,250.00
Total Sludge Pumping Equipment Costs($)	$44,100.00
Total Polymer System Equipment Costs ($)	$71,500.00
Price of spare parts ($)	Included
Start-up / Training Costs ($)	Included
Total Freight (FOB to Jobsite)($)	$48,360.00
Total System Capital Costs ($)	$869,887.00
Total Cost Addition to Reach BABA Compliance ($)	Not Available
Warranty	
Equipment System Warranty Period (months)	24 months after start-up or 30 months after delivery. 5 year extended mechanical warranty.
Service & Support	
Start-up Period (days)	two trips, total of 8 days for inspection, functional/operational testing, training, and performance.
Is Spare Parts List Provided? (y/n)	y (yes)
Location of Parts Distribution Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Location of Design Support Center (city, distance in miles to project)	Port Angeles, Washington. 1,550 miles.
Quote for 10-Year Full Maintenance Contract Included with proposal (y/n)	y (yes)
Full Maintenance Contract Costs ($)	$75,000
Delivery Schedule	
Submittal Period (months)	8 weeks after date of signed Purchase Order
Fabrication and Delivery Period (months)	not to exceed 7 months after submittal approval and notice to proceed with manufacturing.

Warranty

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363

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WARRANTY CERTIFICATION

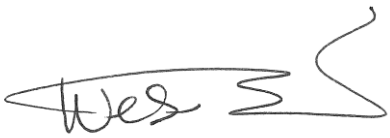
Project: City of San Luis West WWTP, AZ
Project Engineer: Wesley Bond
Equipment Name: FKC Screw Press and associated equipment

Conditions of Warranty:

A. General Warranty – the General Warranty shall cover all components of the system for a period of 24 months after component acceptance. It will cover all parts, labor and coating for repair or replacement of equipment that fails during the warranty period at no cost to the Owner.

B. This warranty includes meeting the performance requirements as outlined in the Guarantee tab in this bid proposal.

C. FKC will expend this warranty an additional 12 months (36 months total) for an additional US$12,500.00



12/5/24

FKC Co., Ltd. Date
Wesley Bond
Project Manager

Installation References

REFERENCE LIST (EXHIBIT A)

Ref #	Job / Operating Facility Name	Process Used For? (Municipal WWTP Sludge Dewatering)	Year Commissioned	Years in Operation	Installation Location (Indoor / Oudoor)	Number of and Size of Units	Operation Period (24,7, etc.)	Design Capacity (Hydraulic -gpm & Dry Solids-lbs/hr)	Design Active Polymer Demand (lbs/DT)	Job / Facility Contact Name	Contact Phone Number	Contact Email
1	East Lansing, MI WWTP	Municipal WWTP Sludge Dewatering	2021	4	Indoor	BHX 1250, 3 Units	18 hrs per day	120 GPM, 1200 Dry Lbs. / Hr.	25 active lbs per dry ton	Josh Moore	(517) 371-2240	
2	Salt Lake City, UT WWTP	Municipal WWTP Sludge Dewatering	2021	4	Outdoor	BHX 1350, 2 Units	18 hrs per day	110 GPM , 1375 Dry Lbs. per Hr.	20 active lbs per dry ton	Jose Rubalcaba	801-799-4080,	Jose.Rubalcaba@slcgov.com
3	City of Petaluma, CA WWTP	Municipal WWTP Sludge Dewatering	2019	6	Indoor	BHX 1350, 1 Unit	8 - 12 hrs per day	75 GPM, 1125 Dry Lbs.per HR.	20 active lbs per dry ton	Matthew Pierce	(707) 776-3777	
4	Pahrump, NV WWTP	Municipal WWTP Sludge Dewatering	2020	5	Indoor	BHX 1100, 1 Unit	8 - 12 hrs per day	170 GPM, 680 Dry Lbs.per Hr.	18 active lbs per dry ton	Brian Magana	(775) 764-0321	Brian.Magana@greatbasinwaterco.com
5	Lake Wales, FL WWTP	Municipal WWTP Sludge Dewatering	2003	17	Outdoor	BHX-1050, 1 unit	8 - 12 hrs per day	75 gpm, 300 dry lbs per hour	27.4 active lbs per dry ton	Ted Long, WW Division Manager ; Chris Jackson, WWTP operator	(863) 678- 4114	tlong@cityoflakewales.com ; cjackson@cityoflakewales.com
6	Puyallup, WA WWTP	Municipal WWTP Sludge Dewatering	2015	5	Indoor	BHX-1000, 1 unit	8 - 12 hrs per day	65 gpm, 650 dry lbs per hour	21.2 active lbs per dry ton	Daniel Messier	(253) 435-3658	dmessier@ci.puyallup.wa.us
7	City of Merrimack, NH WWTP	Municipal WWTP Sludge Dewatering	2010	10	Indoor	BHX-1100, 1 unit	8 - 12 hrs per day	95 gpm, 1,660 dry lbs per hour	7.4 active lbs per dry ton	Leo Gaudette, Lead Operator	(603) 420-1621	lgaudette@merrimacknh.gov
8	Visalia, CA WWTP	Municipal WWTP Sludge Dewatering	2015	5	Outdoor	BHX-1200, 2 units	8 - 12 hrs per day	110 gpm, 625 dry lbs per hour	19.1 active lbs per dry ton	Jason Rodriques, Lead Operator	(559) 713-4671	Jason.rodigues@visalia.city
9	Sonoma, CA WWTP	Municipal WWTP Sludge Dewatering	2012	8	Outdoor	BHX-1250, 1 unit	8 - 12 hrs per day	80 gpm, 600 dry lbs per hour	15.4 active lbs per dry ton	John Albrecht	(707) 547-1073	John.Albrecht@scwa.ca.gov
10	Pendleton, OR WWTP	Municipal WWTP Sludge Dewatering	2011	9	Indoor	BHX-1050, 1 unit	8 - 12 hrs per day	100 gpm, 1,000 dry lbs per hour	34.6 active lbs per dry ton	Mark Milne, WW Treatment Superintendent	(541) 276-3372	mark.milne@ci.pendleton.or.us

**Information on the facility and operation was valid at the year of startup. Current operation periods, etc. may vary.

FKC CO., LTD.

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CONTACT LIST FOR MUNICIPAL BIOLOGICAL SLUDGE DEWATERING APPLICATIONS UTILIZING FKC SCREW PRESSES

Screw Press Location:	City of Victoriaville, Quebec
Screw Press Model #:	SHX-1000x7000L (2 each) [3 HP]
Year Started:	1997

Screw Press Location:	City of Mirabel, Quebec
Screw Press Model #:	SHX-1100x7000L [3 HP]
Year Started:	2001

Screw Press Location:	City of Sequim, WA
Screw Press Model #:	SHX-600x5000L for Class A Biosolids [3 HP]
Year Started:	2003

Screw Press Location:	City of Forks, WA
Screw Press Model #:	SHX-300x2000L for Class A Biosolids [1 HP]
Year Started:	2003

Screw Press Location:	City of Lake Wales, FL
Screw Press Model #:	SHX-1050x8000L [3 HP]
Year Started:	2003

Screw Press Location:	City of Anson-Madison, ME
Screw Press Model #:	SHX-650x4500L [15 HP]
Year Started:	2003

Screw Press Location:	California American Water Company – Las Palmas Facility in Salinas, CA
Screw Press Model #:	SHX-400x3500L [2 HP]
Year Started:	2004

Screw Press Location:	Marin Sanitation District #5 – Tiburon, California
Screw Press Model #:	SHX-400x3000L [1 HP]
Year Started:	2007

Screw Press Location:	California American Water Company – Pasadera Facility by Monterey, CA
Screw Press Model #:	SHX-300x2500L [1 HP]
Year Started:	2005

Screw Press Location:	California American Water Company – Carmel Valley Ranch by Carmel, CA
Screw Press Model #:	SHX-300x2500L [1 HP]
Year Started:	2005

Screw Press Location:	City of St. Cloud, FL
Screw Press Model #:	SHX-900x7500L [3 HP]
Year Started:	2005

Screw Press Location:	City of Aberdeen, WA
Screw Press Model #:	SHX-900x6000L [3 HP]
Year Started:	2005

Screw Press Location:	Monterey Regional Water Pollution Control Authority / Monterey, CA
Screw Press Model #:	SHX-1250x9000L (2 each) [7.5 HP]
Year Started:	2007

Screw Press Location:	City of Cambria, CA
Screw Press Model #:	SHX-900x7000L for Class A Biosolids [3 HP]
Year Started:	2008

Screw Press Location:	City of Petaluma, CA
Screw Press Model #:	SHX-1250x9000L [7.5 HP]
Year Started:	2009

Screw Press Location:	City of Hampstead, MD
Screw Press Model #:	SHX-800x5000L [3 HP]
Year Started:	2008

Screw Press Location:	California American Water Company – Fillmore WRF, CA
Screw Press Model #:	SHX-900x6000L Biosolids [3 HP]
Year Started:	2009

Screw Press Location:	City of Yachats, OR
Screw Press Model #:	SHX-300x2500L for Class A Biosolids [1 HP]
Year Started:	2009

Screw Press Location:	City of Enterprise, OR
Screw Press Model #:	HX 400 x 3000L Skid system, [1 HP]
Year Started:	2009

Screw Press Location:	City of Bainbridge Island, WA
Screw Press Model #:	SHX-900x6000L [3 HP], Class “A” Capable
Year Started:	2009

Screw Press Location:	City of Toppenish, WA
Screw Press Model #:	SHX-650x4000L [3 HP]
Year Started:	2009

Screw Press Location:	City of Sausalito, CA
Screw Press Model #:	SHX-900x5000L [2 HP]
Year Started:	2009

Screw Press Location:	City of Fairfield, CA
Screw Press Model #:	SHX-1250x8000L [7.5 HP]
Year Started:	2009

Screw Press Location:	City Live Oak, FL
Screw Press Model #:	SHX-600x4000L [3 HP]
Year Started:	2010

Screw Press Location:	Sun n' Lake, Sebring, FL
Screw Press Model #:	BHX-600x4000L [2 HP]
Year Started:	2010

Screw Press Location:	City of Hamilton, MT
Screw Press Model #:	BHX-400x2500L [1 HP]
Year Started:	2010

Screw Press Location:	Oroville, WA
Screw Press Model #:	SHX-350x3000L
Year Started:	2010

Screw Press Location:	City of Kerman, CA
Screw Press Model #:	SHX-1000x8000L
Year Started:	2010

Screw Press Location:	City of Umatilla, FL
Screw Press Model #:	SHX-800x6500L
Year Started:	2010

Screw Press Location:	City of Erie, Co
Screw Press Model #:	SHX-800x6500L
Year Started:	2011

Screw Press Location:	City of Merrimack, NH
Screw Press Model #:	BHX-1100x6000L
Year Started:	2011

Screw Press Location:	City of Lapwai, ID
Screw Press Model #:	SHX-400x3500L
Year Started:	2012

Screw Press Location:	Waikoloa, HI / Hawaii Water Service Co.
Screw Press Model #:	SHX-900x7000L, [5HP] Class "A" Capable
Year Started:	2012

Screw Press Location:	City of Avon Park, FL #1
Screw Press Model #:	BHX-700x4000L [2 HP]
Year Started:	2012

Screw Press Location:	City Skagway, AK
Screw Press Model #:	HX-350x2000L [2 HP]
Year Started:	2012

Screw Press Location:	City of Pendleton, OR
Screw Press Model #:	BHX-1050x5500L [5 HP]
Year Started:	2012

Screw Press Location:	City Raymond/South Bend, WA
Screw Press Model #:	SHX-500x4000L [3 HP]
Year Started:	2013

Screw Press Location:	City of Brookings, OR
Screw Press Model #:	BHX-800 x 4500L [2 HP]
Year Started:	2012

Screw Press Location:	City of Guadalupe, CA
Screw Press Model #:	BHX-500 x 3000L [2 HP]
Year Started:	2012

Screw Press Location:	City of Tehachapi, CA
Screw Press Model #:	BHX-550 x 4000L [2 HP]
Year Started:	2013

Screw Press Location:	City of Gold Beach, OR
Screw Press Model #:	BHX-500 x 3000L [2 HP]
Year Started:	2013

Screw Press Location:	Polk County, FL
Screw Press Model #:	BHX-900 x 5000L (2 each) [3 HP]
Year Started:	2012

Screw Press Location:	City of Waterloo, WI
Screw Press Model #:	BHX-1000x5000L [3 HP]
Year Started:	2012

Screw Press Location:	Mackinac Island, MI
Screw Press Model #:	SHX-700x5000L [5 HP] Class “A” Capable
Year Started:	2013

Screw Press Location:	Fort Meade, MD
Screw Press Model #:	BHX-600x4000L
Year Started:	2012

Screw Press Location:	North of the River Sanitation District - Shafter, CA
Screw Press Model #:	SHX-1100x8500L
Year Started:	2013

Screw Press Location:	City of Graceville, FL
Screw Press Model #:	SHX-600x5000L [3 HP] Class “A” Capable
Year Started:	2013

Screw Press Location:	City of Tacoma, WA
Screw Press Model #:	BHX-1100x6000L (3 each) [5HP]
Year Started:	2014

Screw Press Location:	Oceanside Wastewater Treatment Plant - San Francisco, CA
Screw Press Model #:	BHX-1100x6000L (2 each) [5 HP]
Year Started:	2013

Screw Press Location:	City of Mt Sterling, OH
Screw Press Model #:	SHX-600x5000L
Year Started:	2014

Screw Press Location:	City of Bridgeport, WA
Screw Press Model #:	BHX-450x2500L [1HP]
Year Started:	2014

Screw Press Location:	City of Roseburg, OR
Screw Press Model #:	BHX-1000x5500L
Year Started:	2014

Screw Press Location:	Sonoma, CA
Screw Press Model #:	SHX-1250x9000L [7.5 HP]
Year Started:	2014

Screw Press Location:	Quincy, FL
Screw Press Model #:	BHX-500x3000L Skid [3 HP]
Year Started:	2014

Screw Press Location:	Hualalai, HI
Screw Press Model #:	BHX-700x4000L [3 HP]
Year Started:	2014

Screw Press Location:	Berlin NH
Screw Press Model #:	BHX-1100X6000L [5 HP]
Year Started:	2014

Screw Press Location:	Bay City MI
Screw Press Model #:	BHX-700X4000L (2 each) [5 HP]
Year Started:	2014

Screw Press Location:	Visalia, CA
Screw Press Model #:	BHX-1200X6500L (2 each) [5 HP]
Year Started:	2016

Screw Press Location:	San Luis Obispo CA
Screw Press Model #:	BHX-1000x5500L [5 HP]
Year Started:	2015

Screw Press Location:	Stonegate CO
Screw Press Model #:	BHX-600X4000L
Year Started:	2016

Screw Press Location:	Monroe MI
Screw Press Model #:	BHX-1000x5500L (3 each) [5 HP]
Year Started:	2015

Screw Press Location:	Galt, CA
Screw Press Model #:	BHX-900x5000L [3 HP]
Year Started:	2016

Screw Press Location:	Lynnwood WA
Screw Press Model #:	BHX-800x4500L [5 HP]
Year Started:	2015

Screw Press Location:	Puyallup WA
Screw Press Model #:	BHX-1000x5500L [3 HP]
Year Started:	2016

Screw Press Location:	Paris Illinois
Screw Press Model #:	BHX-600x3500 [3 HP]
Year Started:	2015

Screw Press Location:	Davis CA
Screw Press Model #:	BHX-1000x5500 (2 each) [5 HP]
Year Started:	2016

Screw Press Location:	Holland MI
Screw Press Model #:	BHX-1250x7000 (4 each) [7.5 HP]
Year Started:	2015

Screw Press Location:	Hill Canyon WWTP, Thousand Oaks CA
Screw Press Model #:	BHX-1100x6000 (2 each) [5 HP]
Year Started:	2015

Screw Press Location:	Lewiston ME
Screw Press Model #:	BHX-900x5000 (2 each) [3 HP]
Year Started:	2016

Screw Press Location:	Myrtle Point OR
Screw Press Model #:	SHX-400x3500 [2 HP]
Year Started:	2016

Screw Press Location:	Middleborough MA
Screw Press Model #:	BHX-700x4000 (2 each) [5 HP]
Year Started:	2016

Screw Press Location:	Fredericksburg, TX
Screw Press Model #:	BHX-900x4000 [2 HP]
Year Started:	2016

Screw Press Location:	Carmel CA
Screw Press Model #:	BHX-900x4500 [2 HP]
Year Started:	2016

Screw Press Location:	Hartsville TN
Screw Press Model #:	BHX-700x4000 [2 HP]
Year Started:	2017

Screw Press Location:	Miller Creek Treatment Plant, SSSD, Normandy Park WA
Screw Press Model #:	BHX-800x4500L [2 HP]
Year Started:	2016

Screw Press Location:	Keene NH WWTP
Screw Press Model #:	(2) BHX-1000x5500L (5 HP)
Year Started:	2017

Screw Press Location:	Ocala, FL American Pipe & Tank
Screw Press Model #:	BHX-1250x7000 [7.5 HP]
Year Started:	2017

Screw Press Location:	Central Davis Sewer Dist., Kaysville UT
Screw Press Model #:	BHX 1100 x 6000L
Year Started:	2016

Screw Press Location:	Palmyra, MO
Screw Press Model #:	BHX-400x2500L [1 HP]
Year Started:	2017

Screw Press Location:	Talbot County MD
Screw Press Model #:	Two each BHX-500x3000L [3 HP] Skid Systems
Year Started:	2017

Screw Press Location:	City of Avon Park, FL #1
Screw Press Model #:	BHX-700x4000L [2 HP]
Year Started:	2018

Screw Press Location:	Benton IL WWTP
Screw Press Model #:	BHX 600x3500L
Year Started:	2018

Screw Press Location:	Sydney Water Corp, Sydney Australia
Screw Press Model #:	BHX-1250x7000 [7.5 HP]
Year Started:	2018

Screw Press Location:	Sunnyside WA WWTP
Screw Press Model #:	BHX 800x4500L
Year Started:	2018

Screw Press Location:	West Sound Utility District WWTP, Port Orchard WA
Screw Press Model #:	BHX-700x4000L [2 HP]
Year Started:	2018

Screw Press Location:	Port Angeles WA WWTP
Screw Press Model #:	BHX-800x4500L [2 HP]
Year Started:	2018

Screw Press Location:	Woodland WA WWTP
Screw Press Model #:	BHX-500x3000L [2 HP] Skid System
Year Started:	2018

Screw Press Location:	Mount Vernon WA WWTP
Screw Press Model #:	BHX-1050x5500L [3HP]
Year Started:	2017

Screw Press Location:	Pleasant Hills PA WWTP
Screw Press Model #:	BHX-1050x5500L [3HP]
Year Started:	2019

Screw Press Location:	City of Coulee Dam WA WWTP
Screw Press Model #:	BHX-500x3000L [2 HP] Skid System
Year Started:	2019

Screw Press Location:	Lyon County NV WWTP
Screw Press Model #:	BHX-800x4500L [2 HP] Skid System
Year Started:	2018

Screw Press Location:	Hermiston OR WWTP
Screw Press Model #:	BHX-800x4500L [2 HP] Skid System
Year Started:	2018

Screw Press Location:	Salmon Creek Treatment Plant, SSSD, Burien WA
Screw Press Model #:	BHX800x4500L (2 HP)
Year Started:	2019

Screw Press Location:	Harrisonburg WWTP
Screw Press Model #:	BHX-1100x6000L [3 HP]
Year Started:	2018

Screw Press Location:	Santaquin WWTP
Screw Press Model #:	BHX-800x4000L [2 HP]
Year Started:	2019

Screw Press Location:	Tesuque Casino WWTP, Santa Fe NM
Screw Press Model #:	BHX-350x2000L [1 HP] Skid System
Year Started:	2018

Screw Press Location:	Evansville WI WWTP
Screw Press Model #:	BHX-1000x5500L [3HP}
Year Started:	2019

Screw Press Location:	Epping NH WWTP
Screw Press Model #:	BHX-700x4000L [5 HP]
Year Started:	2019

Screw Press Location:	Depoe Bay WWTP
Screw Press Model #:	SHX-500x4000L [2 HP]
Year Started:	2018

Screw Press Location:	Sutherlin OR WWTP
Screw Press Model #:	BHX-900x5000L [3 HP]
Year Started:	2019

Screw Press Location:	Cayucos CA WWTP
Screw Press Model #:	BHX-600x3500L [3 HP]
Year Started:	2020

Screw Press Location:	Hawaii American Water, Hawaii Kai, HI
Screw Press Model #:	BHX-700x4000L (2 each) [2 HP]
Year Started:	2019

Equipment Performance and Layout Information

Proposal Performance Information

FKC CO., LTD.
2708 West 18th Street
Port Angeles, WA 98363
(360) 452-9472
FAX (360) 452-6880

Equipment Performance

Project: City of San Luis West WWTP, AZ
Project Engineer: Wesley Bond
Equipment Name: FKC Screw Press and associated equipment

Screw Press Performance is as follows:

Material to be dewatered:	Secondary Waste Activated (with minimal digestion)
Capacity:	11.928 BDST/Day (24-hours) or 994 Dry Lbs. / Hr.
Average Flowrate:	200 GPM @ 1.0%TS
Inlet Consistence:	1.0% or Higher
Outlet Consistency:	15% or Higher
Maximum Polymer Dose:	30 Lbs. / Dry Ton (Active)
Capture Rate:	95% or Higher

Sizing calculation are proprietary.

Flocculation Tank size is based on Hydraulic retentions time. FKC sizes the flocculation tank for 2 – 3 minutes of retention time. At 200 GPM we specified a 540 gallon tank, giving us 2.7 minutes.

Conveyor Calculations are attached

Sludge Pump Calculations are attached

Polymer System:

FKC assumes 30 Lbs. / DT of active polymer or 66.7 Lbs. / DT of neat Polymer

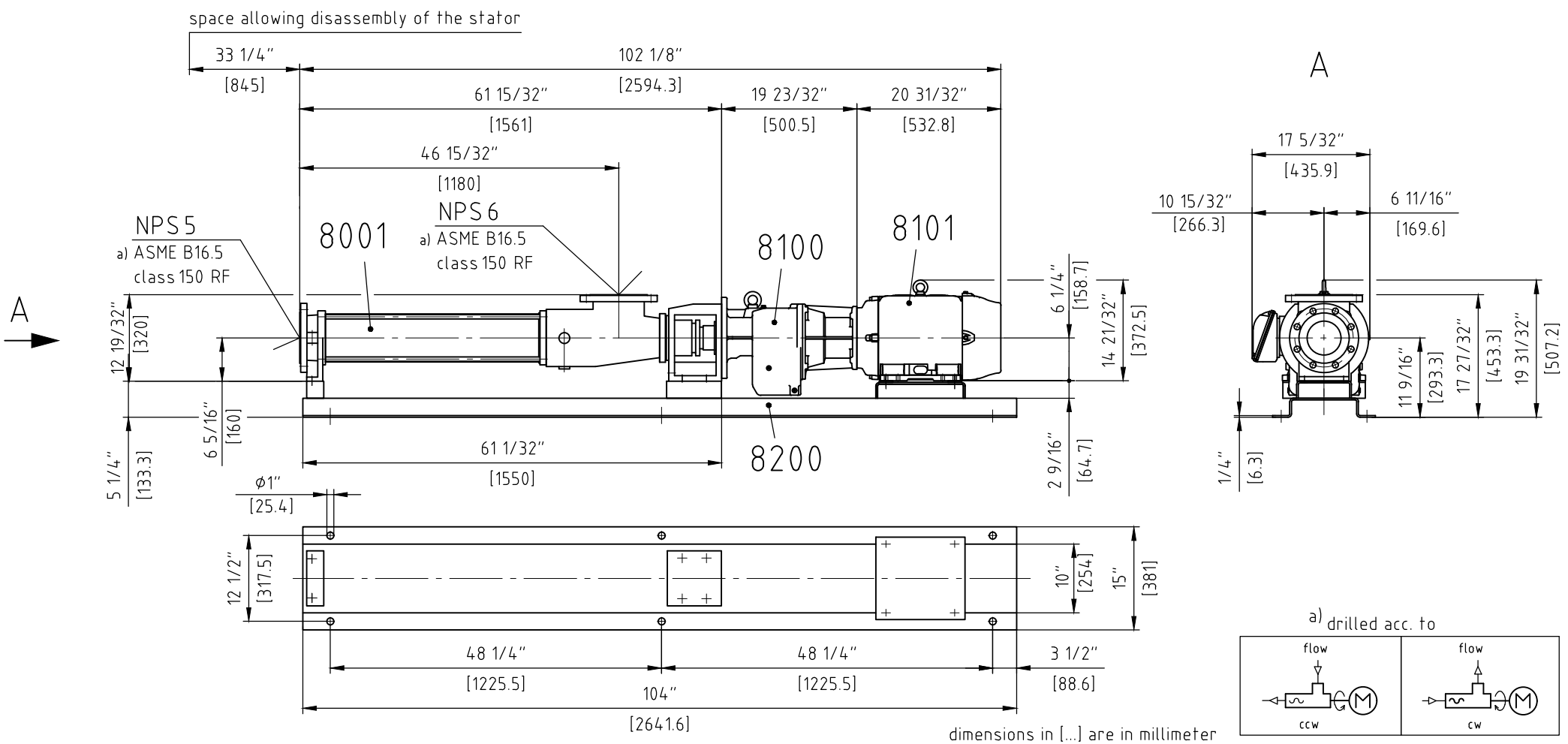
To process 0.5 Dry Ton/ Hr., we will need 33.3 Lbs. of neat polymer per hour or 3.7 Gallons.

The polymer system is provided with a 5 GPH Neat Polymer Pump.

Make-Down solution is 0.5% or approximately 12.5 GPM of Make-down water.

not binding drawing for offer

Copyright: This drawing is our property and patented for us according to the law of copyright and associated rights !



Quant.	Denomination	Item	Material	Note	Weight / kg
1	baseplate:	8200		Var.: 801-200/0350-C-815	70
1	motor: WEG 01518ET3E254TC-W22	8100			143
1	gear: Nord SK52F-250TC	8100			121
1	pump: BN 35-12 / 70-6L / 110-6LT / 55-12T	8001			160

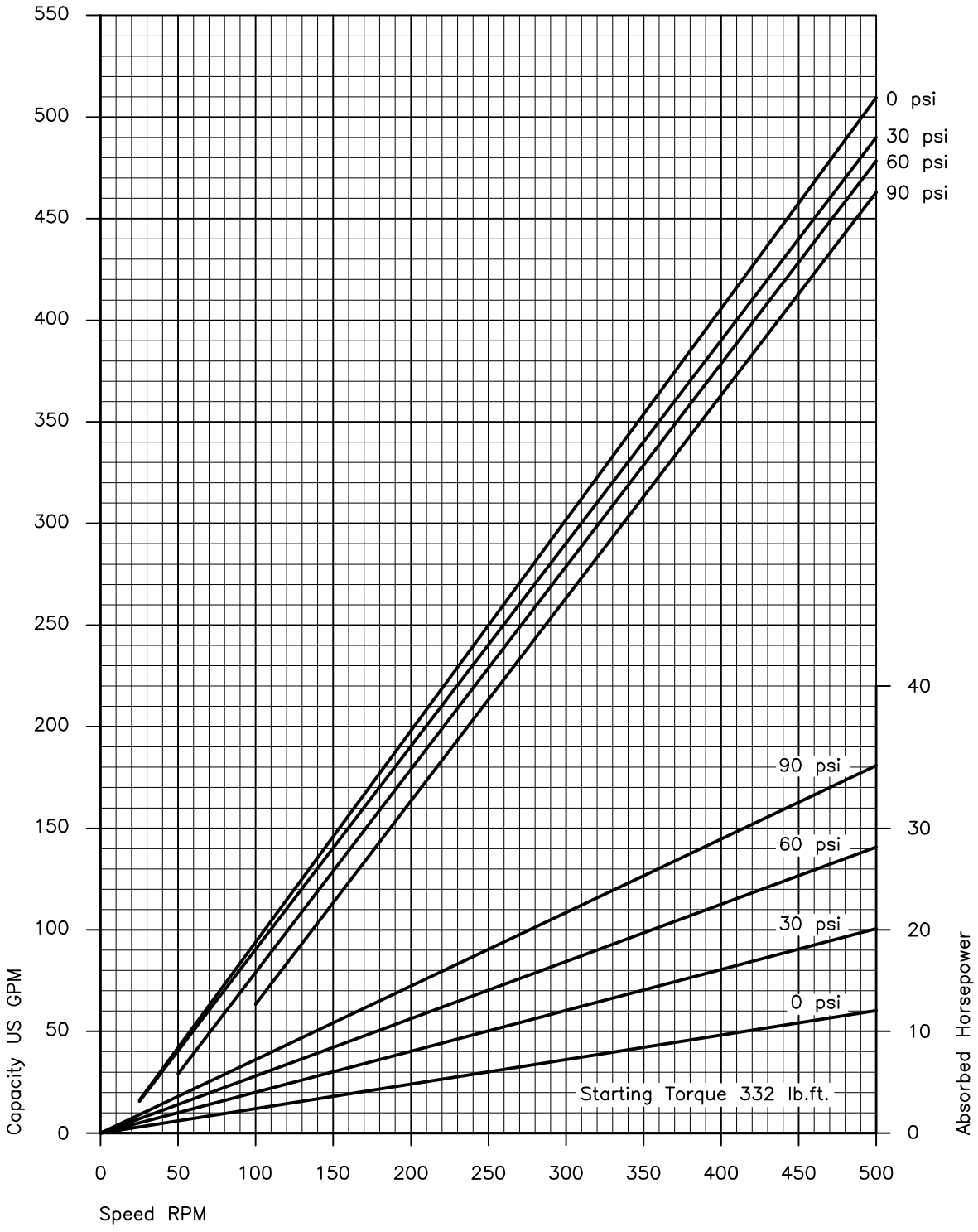
SEEPEX.

	Name	Day	Scale	Weight	Denomination
2023					
Drawn	lsh	04.05	1:20	494 kg	dimensional drawing
Checked	gf	04.05.	EDP-No. 224155.dwg		Drawing-no. 262-C65/0350-C-758A4

General tolerances for dimensions without specified tolerances acc. to DIN ISO 2768-v

SEEPEX.
ALL THINGS FLOW

Characteristic Curves
Size
70–6L



Values based upon water 68°F ; For notes on drive selection refer to PER

CHA.70–6L_6, D 05.09us

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Benefiting from over 160 years of experience, which comes from serving 100,000 industrial customers across 50 countries, being ‘an Ingersoll Rand business’ brings unparalleled value to our customers and markets.

This portfolio of industry-leading brands provide customers the most precise and innovative solutions in the market for monitoring, dosing and transfer of high-value fluids and gases. These solutions also deliver significant sustainability impact to clean energy, water, food and human health that makes life better for our society and planet.

SEEPEX is proud to be an Ingersoll Rand business.



Offer No.: 500315890/1
Your reference: City of San Luis, AZ
Date: 20 November 2024

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TERMS & CONDITIONS OF SALE AND/OR REPAIR 12.22

The following terms and conditions shall apply to an order for all or any part of the articles covered by the accompanying offer unless a specific exception is included therein. Acceptance of any order by SEEPEX Inc. is expressly made conditional upon Buyer/Customer's acceptance of SEEPEX Inc. Terms and Conditions of Sale and/or Repair. All prior or future terms, conditions or negotiations (whether written or oral) by Buyer/Customer will therefore be considered void and inapplicable unless otherwise agreed in writing. SEEPEX Inc. reserves the right, in its sole discretion, to refuse any order, unconditionally, for any reason including but not limited to: expiration of the validity of the offer, errors in the offer, unacceptable payment risks, conflicts with contractual commitments made to other potential customers and the chance that a customer may try to enforce an implied warranty or merchantability of the products offered.

1.0 PRICES

1.1 Any prices quoted shall only be valid for orders placed within 30 days from the date of issue of the offer. Prices are Ex-Works SEEPEX Inc. plant (Enon, Ohio USA) in U.S. dollars, unless otherwise agreed. SEEPEX Inc. reserves the right to correct typographical or clerical errors.

2.0 TERMS

2.1 All orders are subject to approval by the SEEPEX Inc. Credit Department. Unless otherwise agreed, if payment for the invoice due is not made in full within thirty (30) days after shipment, late fees of eighteen percent (18%) per year (equivalent to a nominal monthly interest rate of 1.5%) will be applied on the unpaid balance until paid in full. The terms and conditions herein set forth are based upon tariffs, taxes, foreign exchange rates, delivery, and other conditions in effect on the date of the Buyer/Customer's order. In the event that such tariffs, taxes, foreign exchange rates, delivery, and/or other conditions should change prior to delivery of the goods, SEEPEX Inc. reserves the right to charge such increased duties, taxes, or charges to the Buyer/Customer.

2.2 Unless the order includes the appropriate exemption certificates and/or licenses, duties and taxes levied by Federal, State, or other governments are required to be charged automatically at the rate imposed at time of importation/shipment. Any change in law, regulations, or Government practice which causes a variation of any kind in the applicable charges from the amounts stated in the offer shall result in an equivalent change in the price quoted.

2.3 Until payment is made in full, SEEPEX Inc. shall retain the right, without notice, to repossess and/ or retain the items, and/or dispose of them, for its benefit and hold the Buyer/Customer responsible for any loss. Buyer/Customer agrees to enter into any agreements, contracts, or notices required confirming such rights.

2.4 Except where prohibited by law, all products and services paid with a credit card will be subject to a 2.5% convenience fee added to the price of the order. This fee will not exceed our cost of acceptance and will not apply to orders placed through an online platform.

3.0 SECURITY

3.1 In order to secure any obligations due to SEEPEX Inc. from the Buyer/Customer, the Buyer/Customer grants to SEEPEX Inc. a security interest in:

a. The merchandise covered by the Buyer/Customer's order (s), and

b. All property and funds of the Buyer/Customer now or hereafter in SEEPEX Inc.'s possession, and in all additions and proceeds of such merchandise and/or property. The Buyer/Customer hereby authorizes SEEPEX Inc. to sign alone any financing statement or statements and to do all and any other things which may be necessary to perfect such security interest.

4.0 CANCELLATION

4.1 After acceptance, orders may be cancelled only with the express approval of SEEPEX Inc. In the event of an approved cancellation, the Buyer/Customer shall remain responsible for payment for all work performed and/or material expenses incurred by SEEPEX Inc. as of the time of cancellation. SEEPEX Inc. reserves the right to cancel the order if SEEPEX Inc. determines, in its sole discretion, that the Buyer/Customer's financial condition renders the Buyer/Customer unable or unlikely to pay for the order as agreed.

5.0 RETURN

5.1 No credit will be allowed for returns unless SEEPEX Inc. has authorized such returns in writing in advance. A copy of this authorization must be returned with the item as the packing slip. All returns are subject to restocking charges and to the SEEPEX Inc. Return Goods Authorization (RGA) Policy, which is available on www.seepex.com, and is incorporated herein by reference. SEEPEX Inc. will only issue credits for items that are covered under warranty or can be resold. Items that are specially produced for a specific Buyer/Customer, including but not limited to: special hoppers, baseplates, electrical panels, gear reducers and electric motors are specifically excluded from consideration for credit. Any items not received in good, clean and uncontaminated condition or items that cannot be put back into stock will not be accepted. Any elastomer material with over three (3) years of fabrication will not be accepted for return and/or credit. Buyers/Customers must pay for all freight associated with any return, including parts or equipment that may be considered to be covered by the limited warranty protection clause below. If an item is deemed to be covered under warranty, the value of the item, and freight associated with the replacement of the item, will be reimbursed by the issuance of a credit to the Buyer/Customer's account. Outstanding RGA's that have declined repair will be scrapped automatically after ninety (90) days if no other written instructions are provided.

6.0 SHIPMENT

6.1

a. Handling Charge: Buyer/Customer shall be responsible for making all arrangements for shipment of the order with a suitable carrier. In the event that Buyer/Customer requests that SEEPEX Inc. makes arrangements for shipment, then Buyer/Customer agrees to pay to SEEPEX Inc., in addition to the applicable shipping charges, a handling charge in the amount of 10% of the shipping charges with a minimum $5.00 to a maximum charge of $150.00, with special services requiring additional charges.

b. New Articles: Where shipping instructions dictate no specific routing, SEEPEX Inc. will utilize its best judgement in determining routing but shall not be liable for any charges once the goods have reached their agreed upon point of delivery. If changes are made at Buyer/Customer's request in a) the agreed upon point of delivery, or b) in the routing selected by SEEPEX Inc. and if such changes involve additional costs to be incurred, such costs shall be borne exclusively by the Buyer/Customer, unless otherwise agreed in writing.

c. Repair Work: All items for which the Buyer/Customer requests repair or other services by SEEPEX Inc. shall be delivered to and picked up from the SEEPEX Inc. plant (Enon, Ohio USA) unless otherwise agreed in writing. All costs of delivery shall be paid by the Buyer/Customer unless otherwise agreed to in writing prior to shipment. Items returned to SEEPEX Inc. must be returned in good, clean and uncontaminated condition. Any cost of cleaning or decontamination will be charged back to the Buyer/Customer's account at the standard service rate. SEEPEX Inc. has the right to refuse acceptance of any dirty or contaminated shipment that may be suspected of being hazardous.

d. All Orders: On collect freight shipments, cartage charges from plant to carrier are the responsibility of the Buyer/Customer. Title to articles passes to Buyer/Customer upon delivery to carrier acting as Buyer/Customer's agent subject to any right of retention by SEEPEX Inc. All claims for shortage in, and damages in, shipment or otherwise must be reported to carrier immediately upon receipt with copy or report to ourselves within five (5) business days.

7.0 WARRANTIES & LIABILITY LIMITATIONS

7.1

a. New Articles: SEEPEX Inc. warrants articles of our manufacture against defects in material and/ or workmanship for a period of one (1) year from date of delivery, provided that the articles have been installed, maintained, and operated in strict accordance with SEEPEX Inc. recommendations and instructions. For any pump that Buyer/Customer registers with SEEPEX Inc., the warranty period, as expressed above, shall be extended by two (2) additional years for a total of three (3) years from date of delivery, and provided that the articles are installed, maintained and operated in strict accordance with SEEPEX Inc. recommendations and instructions for the duration of such warranty period. Registration must be confirmed and can be completed online at http://warranty.seepex.us.

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TERMS & CONDITIONS OF SALE AND/OR REPAIR 12.22

b. Repair Work: Defined herein as work and services performed by SEEPEX Inc. SEEPEX Inc. warrants all repair work and services that it performs against defects in workmanship and/or materials for a period of one (1) year from the date of delivery of the repaired articles or for the remainder of the applicable original warranty period under Section 7.1.a., if not yet expired, whichever period is longer.

c. All Orders: All warranty claims shall be submitted promptly in writing to SEEPEX Inc. Any warranty replacement and/or repair shall be made Ex-Works SEEPEX Inc. plant (Enon, Ohio USA). SEEPEX Inc.'s warranty obligation shall be limited to the replacement and/or repair only of defective material and/or workmanship.

7.2 In no event shall SEEPEX Inc. be liable for any incidental or indirect/consequential loss or damage of whatever kind of nature including but not limited to loss of business income or profits, revenue or loss of production or damage resulting from delay in manufacture or delivery, loss of use or damage to any installation into which the article may be installed, whether arising out of contract or tort.

7.3 Force Majeure: SEEPEX Inc. shall not be liable or responsible to Buyer/Customer or any other party, or be deemed to be in default or breach of its obligations to Buyer/Customer or any other party, for any failure or delay in fulfilling or performing any of its obligations, when and to the extent such failure or delay is caused by or results from acts beyond SEEPEX Inc.'s reasonable control, including, without limitation, war, invasion, hostilities, calamity, riot, civil commotion or disorder, act of civil disobedience, threats or acts of terrorism, plague, epidemic, pandemic, outbreaks of infectious disease, including but not limited to COVID-19, or any other public health crisis, quarantine or other work-related restrictions, act of authority whether lawful or unlawful, compliance with any law or governmental order, rule, regulation or direction, embargoes or blockades, national or regional emergency, act of God or natural disaster, explosion, fire, destruction, general labor disturbance such as but not limited to boycott, strike and lockout, or shortage or inability to obtain critical labor, material or supplies, telecommunication breakdowns, power outages or shortages, lack of warehouse, dock, cargo container or storage space, inadequate shipment or transportation services, port delays or backups such as but not limited to shortage of labor, equipment, trailers, trucks, vehicles or other services to unload ships or haul cargo away, or inability or delay in obtaining supplies of adequate or suitable materials, or any other event which is beyond the reasonable control of SEEPEX Inc. that renders its performance inadvisable, commercially impracticable, illegal, or impossible ("Force Majeure Event"). Upon the occurrence of any Force Majeure Event, SEEPEX Inc., in its sole discretion and without prior notice to Buyer/Customer or any other party, shall be entitled to terminate the performance of its obligations immediately without Buyer/Customer or any other party having recourse against SEEPEX Inc., or otherwise suspend performance of its obligations to Buyer/Customer or any other party, including without limitation the payment of any funds, monies, wages, compensation or remuneration to Buyer/Customer or any other party, and such performance shall be deemed permanently excused and released hereunder or otherwise suspended until such time that SEEPEX Inc. in its sole discretion determines that it can and should resume performance of its obligations, whether in full or in part.

7.4 Notwithstanding anything herein to the contrary, SEEPEX Inc.'s liability to Buyer/Customer on any cause of action shall be limited to the amount paid by the Buyer/Customer on the subject order. SEEPEX Inc. makes no warranties, express or implied, with respect to articles or products manufactured or provided by any party other than SEEPEX Inc., except to transfer to the Buyer/Customer, where permissible, any warranty provided to SEEPEX Inc. by the original manufacturer. On any claims for repairs and/or replacement under such warranty, all costs incurred by SEEPEX Inc., which are not underwritten by the original manufacturers, shall be borne by the Buyer/Customer. Except as provided herein, SEEPEX Inc. expressly disclaims all representations, promises, or warranties, express or implied, with respect to any products, articles, work, or services, including any warranties of merchantability and of fitness for a particular purpose. All warranties made by SEEPEX Inc. shall be void where the goods have been subject to misuse, neglect, damage or alteration. SEEPEX Inc. shall be held free and harmless from any dispute or claim anywhere arising from and relating to infringement of patent, design, trademark, or copyright of items, sold or repaired under this contract.

8.0 PROPERTY RIGHTS AND RISKS

8.1 SEEPEX Inc. disclaims any liability or responsibility whatsoever with regard to loss or damages to the Buyer/Customer's property while in the possession, custody or control of SEEPEX Inc. for requested repairs or other services, and the Buyer/Customer expressly agrees to indemnify and hold SEEPEX Inc. harmless against any and all claims for such loss or damage.

9.0 HAZARDOUS MATERIALS

9.1 Any hazardous materials or the existence of any hazards relative to the condition of any product tendered to SEEPEX Inc. for service or repair work must be disclosed by Buyer/Customer in writing in the RGA Request Form, whether or not required to be disclosed per federal law on the MSDS sheet. Buyer/Customer shall defend, indemnify and hold SEEPEX Inc. harmless from and against any and all claims of injury or damage, including attorney's fees, caused by any hazardous condition or material on or about products accepted for service/ repair. This obligation includes but is not limited to claims of bodily injury or death suffered by SEEPEX Inc. employees, or by other parties.

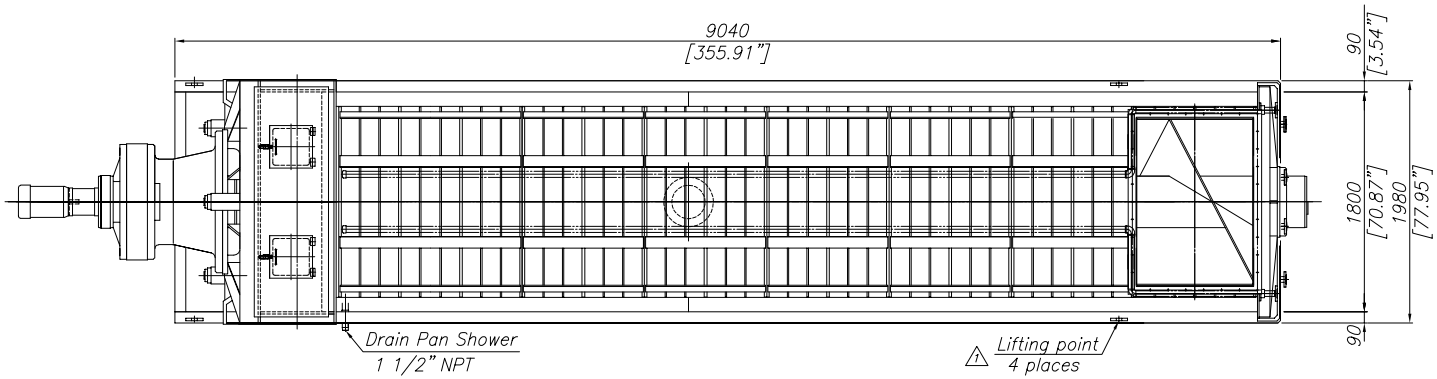
10.0 GENERAL CONDITIONS

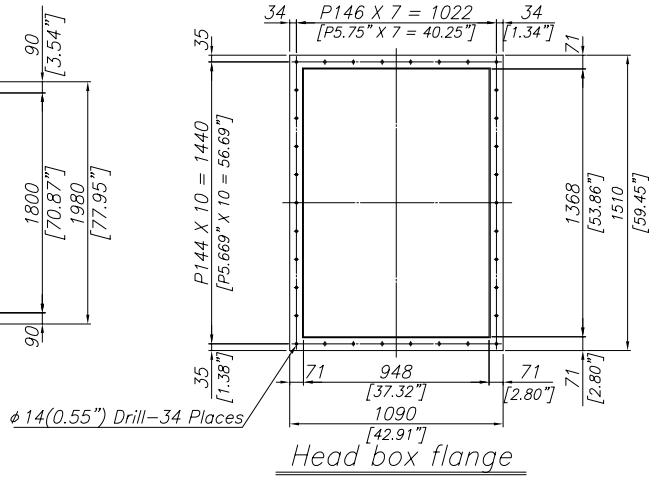
10.1 No modification, amendment, rescission, discharge, abandonment or waiver of these terms and conditions shall be binding upon SEEPEX Inc. unless set forth in writing and signed by a duly authorized officer or representative of SEEPEX Inc.. In any action or proceeding to enforce these terms and conditions against Buyer/Customer or any other party, SEEPEX Inc. shall be entitled to recover all of its costs and expenses, including reasonable attorney's fees and expenses incurred in connection with such action or proceeding. These terms and conditions shall be governed by and construed in accordance with the laws of the State of Ohio, and any contract resulting here from shall be deemed to be made in the State of Ohio, and SEEPEX Inc. and Buyer/Customer hereby consent to the exclusive jurisdiction of the courts of the State of Ohio located in Clark County, with respect to any controversy or claim arising out of, or relating to, any contract resulting from these terms and conditions.

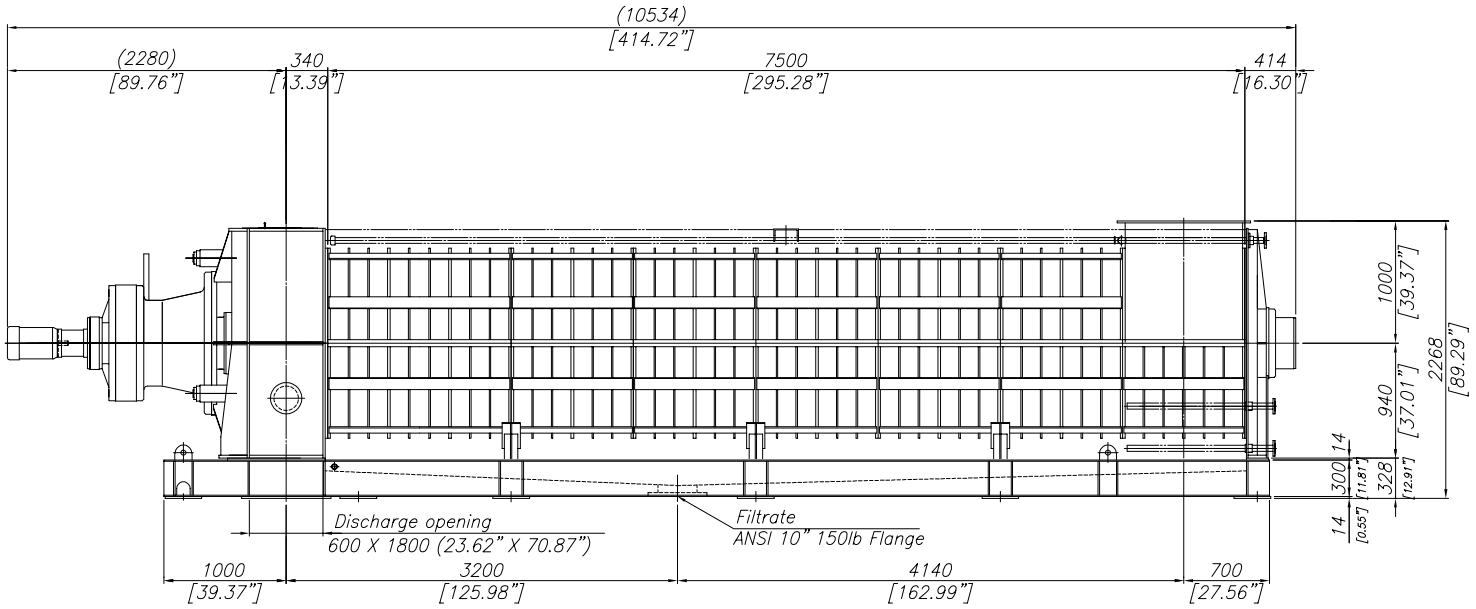
SEEPEX Inc.
511 Speedway Drive
Enon, Ohio 45323
USA

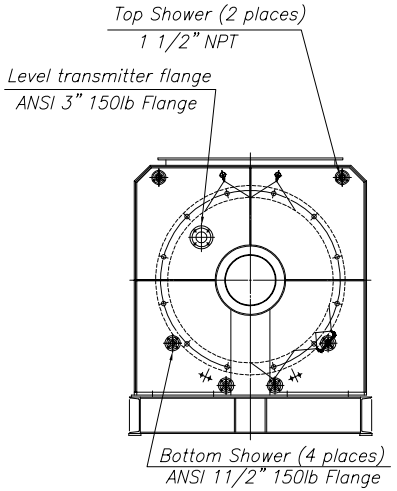
T +1 937 864-7150
sales.us@seepex.com
www.seepex.com

Shop Drawings









Cyclo reducer, CHVJ-6275DA-7569
Motor 7.5 HP, 1800rpm (213TC)

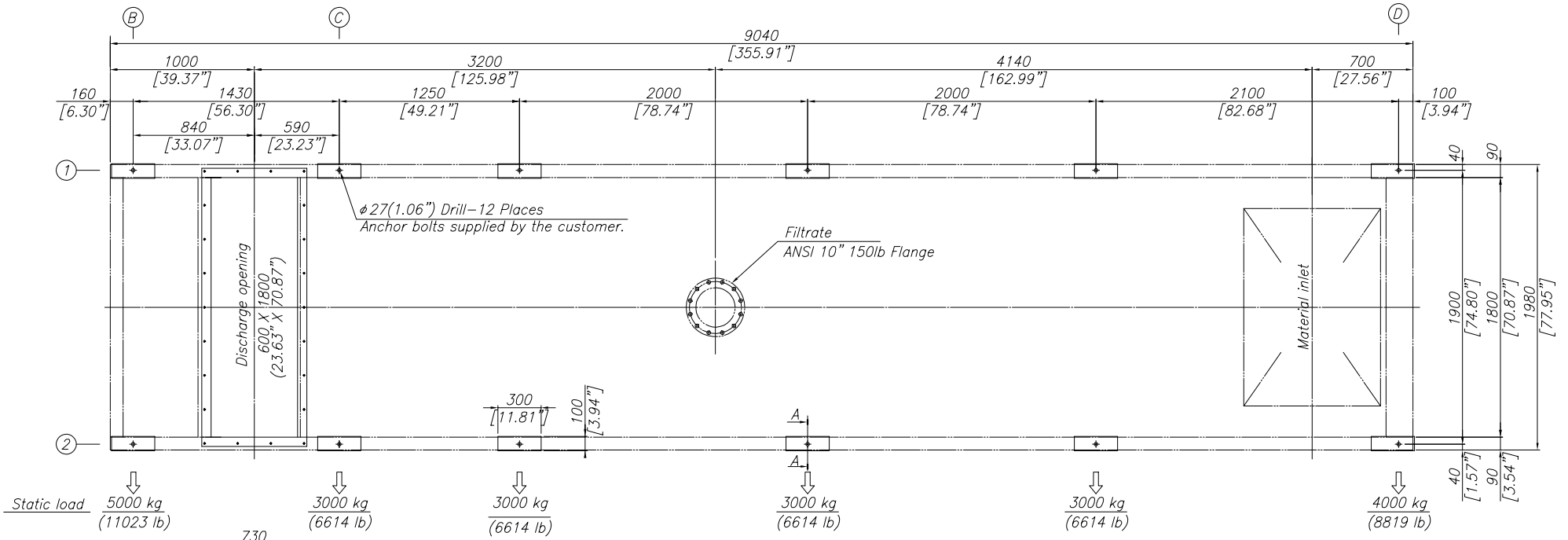
Screw rev.
0~1800 X 1/7569 = ~0.238 rpm

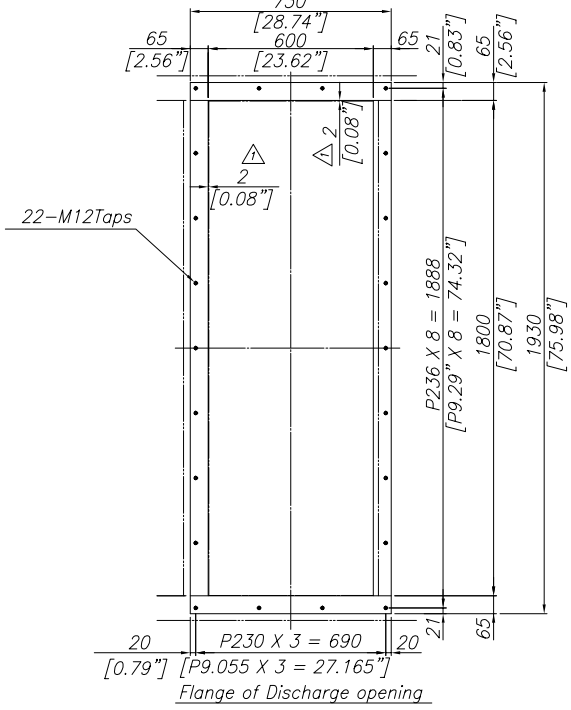
Total weight = 17,000 kg (34,479 lbs)
Operating weight = 21,000 kg (46,298 lbs)

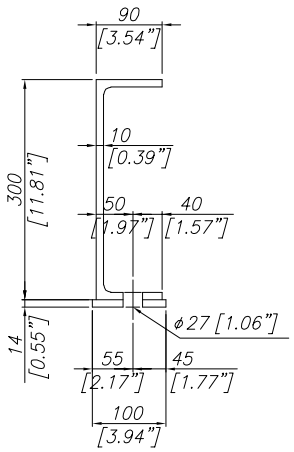
Rev.	Date	Description	Drawn by	Rev. by	Appd. by
2	4/6 '23	Issued as Certified	TC		
1	3/14 '23	Lifting point	S.ENDO		
0	1/10 '23	Approval	S.ENDO	Y.ITO	H.ABE

発注先 Purchaser	FKC CO., LTD.	Quantity	配布先		
最終客先 End user	Sabine Creek WWTP, TX	2	貿易部	.	
工事名称 Job name	BHX-1350X7500L Screw press	Scale	FKC	.	
図面名称 Dwg. name	Assembly	1/30	営業部	.	
工事番号 Job No.	M-3510		QC部	.	
図面番号 Dwg. No.	S3510-1		QC ﾌｧｲﾙ	.	
			製造部	.	
			設計部	.	
			釧路工場	.	
			大阪営業所	.	
			富士営業所	.	
		Ref. job No.	合計	.	

FUKOKU KOGYO CO., LTD.







A-A View

Dynamic load

	B	C	D
1	232 Kg (511 lbs) ↓	330 Kg (728lbs) ↓	−562 Kg (−1239 lbs) ↑
2	−232 Kg (−511 lbs) ↑	−330 Kg (−728 lbs) ↑	562 Kg (1239 lbs) ↓

Note: Loads shown above are worst case dynamic loads during plugged condition.

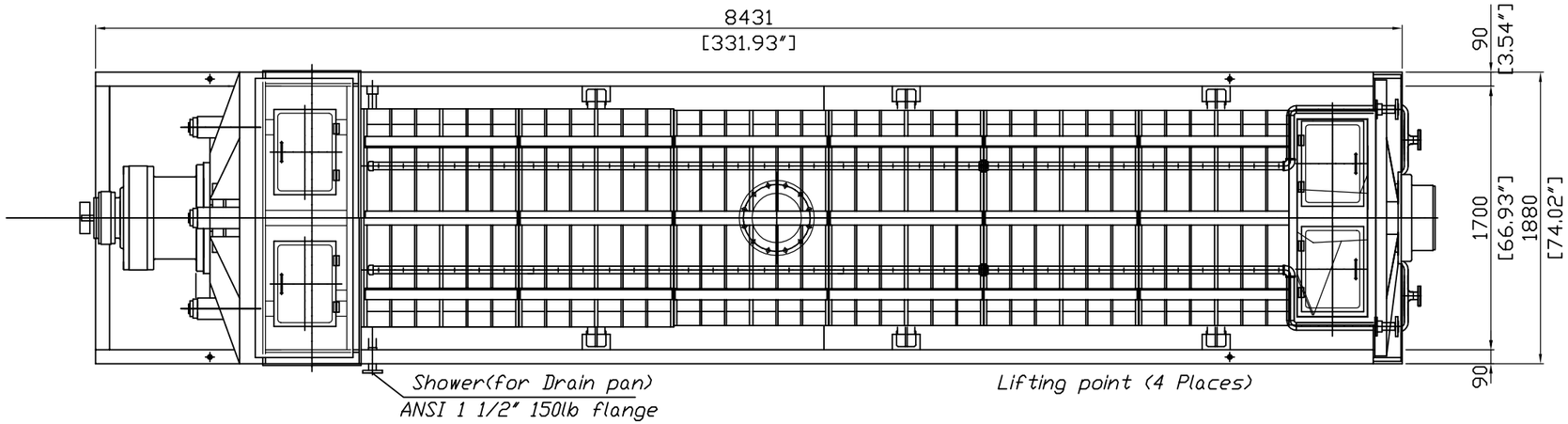
Total weight = 17,000 kg (37,479 lbs)

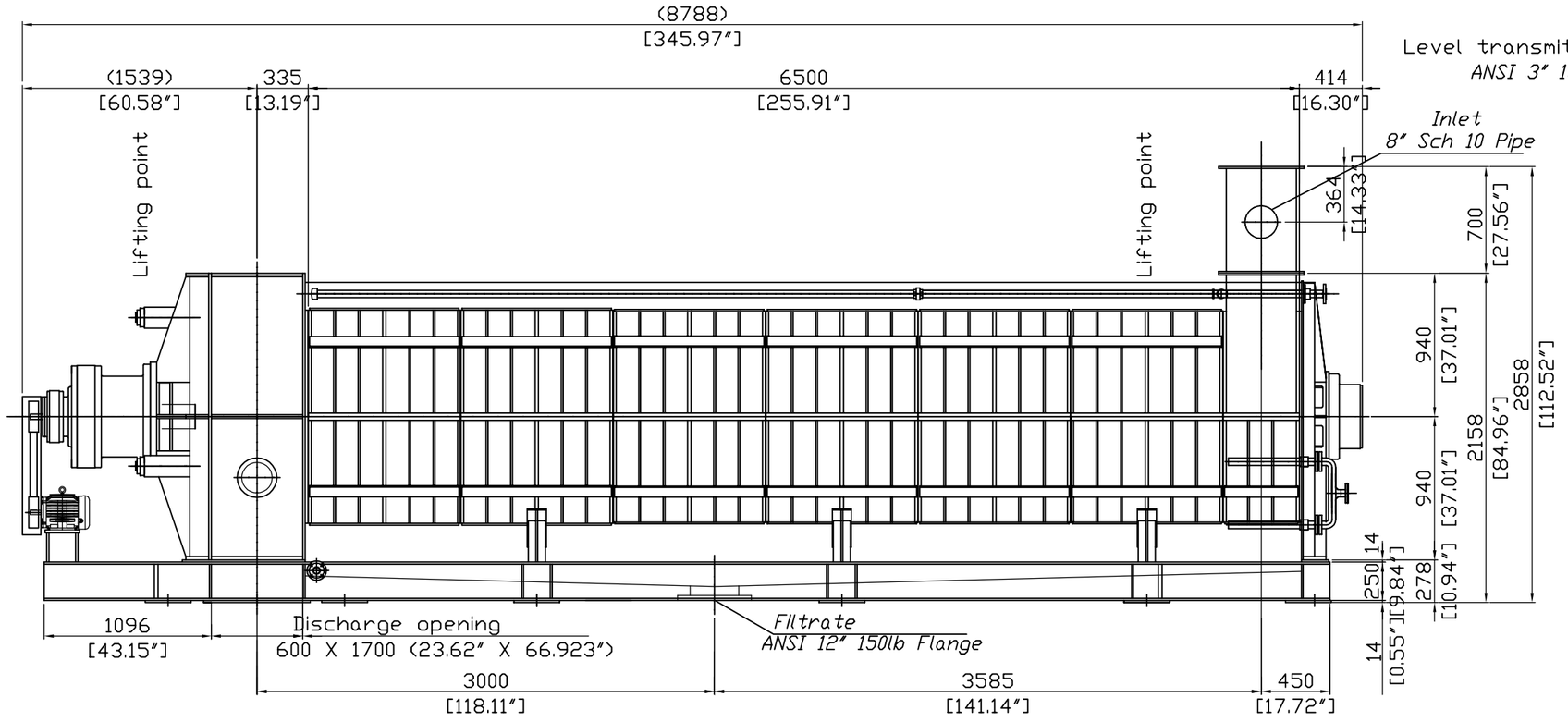
Operating weight = 21,000 kg (46,298 lbs)

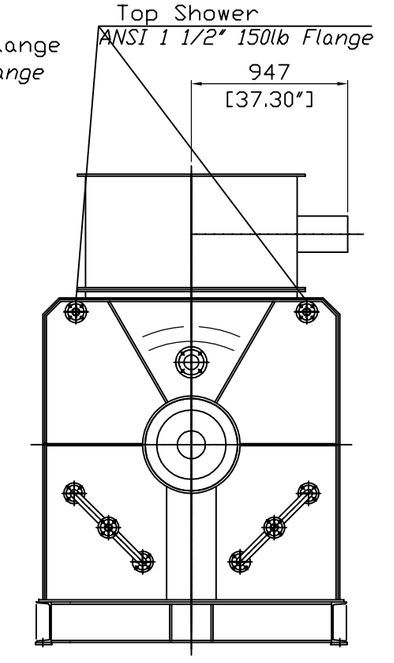
Rev.	Date	Description	Drawn by	Rev. by	Appd. by
2	4/6 '23	Issued as Certified	TC		
1	3/14 '23	Lining (SS316L)	S.ENDO		
0	1/10 '23	Approval	S.ENDO	Y.ITO	H.ABE

		Quantity	配布先	
発注先 Purchaser	FKC CO., LTD.	2	貿易部	.
			FKC	.
最終客先 End user	Sabine Creek WWTP, TX	Scale	営業部	.
工事名称 Job name	BHX-1350X7500L	1/20	QC部	.
			QCファイル	.
図面名称 Dwg. name	Foundation		製造部	.
			設計部	.
工事番号 Job No.	M-3510		釧路工場	.
			大阪営業所	.
図面番号 Dwg. No.	S3510-02	.	富士営業所	.
		Ref. job No.	合計	.

FKC FUKOKU KOGYO CO., LTD.







Level transmitter flange
ANSI 3" 150lb Flange

Cyclo reducer, CHVJ-6255DA-7569
Motor 5 HP, 1800rpm (184T)

Screw rev.
0~1800 X 1/7569 = ~0.238 rpm

Total weight = 13,000 kg (28,660 lbs)
Operating weight = 16,000 kg (35,274 lbs)

Rev.	Date	Description	Drawn by	Rev. by	Appd. by
0	9/15/16	Approval	S.ENDO	H.ABE	T.OGAWA

Purchaser	Messrs. FKC CO., LTD.	Quantity	1
End user	Messrs.	Scale	1/25
Job name	BHX-1250X6500L Screw Press		
Dwg. name	Assembly		
Job No.			
Dwg. No.		Ref. job No	

FUKOKU KOGYO CO., LTD.

Specificaitons

Screw Press

SECTION 11340

FLOCCULATION TANK AND DEWATERING SCREW PRESS

PART 1 GENERAL

1.1 WORK INCLUDED

A. There shall be furnished a dewatering system including in-line flocculation tank and dewatering screw press with drivers and features specified in this Section and scheduled below. All equipment shall be provided by a single manufacturer. The dewatering system line shall be capable of dewatering municipal waste activated sludge.

B. Tag Numbers.

1. Flocculation Tank: SP-FT-XXX

2. Flocculation Tank Gearmotor: SP-FT-M-XXX

3. Screw Press: SP-XXX

4. Screw Press Motor: SP-M-XXX

5. Screw Press Local Control Panel: SP-LCP-XXX

6. Screw Press Headbox Level Transmitter: SP-LT-XXX

7. Screw Press Headbox Hi Level Switch: SP-LH-XXX

C. The purchase price of the Flocculation Tank and Dewatering Screw Press, as specified herein has been pre-negotiated with the manufacturer. The pre-negotiated price is $XXX,XXX. The price shall be used in preparing a lump sum base bid. The purchase price shall include the scope of supply identified in this specification as outlined in the attached Scope of supply letter from the manufacturer. The Contractor shall review the scope of supply and provide all additional appurtenances, equipment, installation labor, testing, and other services for a complete system.

1.2 REFERENCES

A. American Bearing Manufacturers Association (ABMA)

B. American Gear Manufacturers Association (AGMA)

C. American Society of Mechanical Engineers (ASME)

D. Institute of Electrical and Electronics Engineers, Inc. (IEEE)

E. American Welding Society (AWS) D1.1, Structural Welding Code.

F. National Electric Code (NEC).

G. National Electrical Manufacturers Association (NEMA).

H. American National Standards Institute (ANSI).

1.3 SCREW PRESS DESCRIPTION

A. Screw press system shall be capable of municipal waste activated sludge described below.

B. Dewatering screw press with components as specified in this Section and shown on the Drawings and as required for a complete and functional screw press system, including:

1. Screw press with all 304 stainless steel wetted parts.
2. Sludge inlet headbox.
3. Removable drums.
4. Removable drum covers.
5. Three screen spray showers.
6. Speed reducer.
7. Galvanized carbon steel base.
8. Flanged filtrate outlet.
9. Back pressure cone.
10. Flocculation tank with mixer.
11. Equipment Motors.
12. Anchor age/seismic support calculations.
13. Pressure transducer type level element with indicating transmitter and high level probe.

C. Design Requirements:

1. Screw Press Minimum Performance Requirements

Type of Sludge	XXXXXXXXXXXX
Feed Solids, % total solids (TS)	XX – XX %
Discharge Solids, % TS	XX - XX % with polymer addition

Design Inlet Capacity XXX dry pounds per hour

2. Motor Characteristics – as described in this Section.

1.4 SUBMITTALS

A. Submit as specified in Section XXXXX – Submittals.

B. Product Data:

1. Submit data completely describing product including plan and section views and listings of materials of construction.

2. Submit surface preparation and finishes to be applied to all equipment.

C. Shop Drawings:

1. Complete manufacturer fabrication/assembly drawings stamped by a registered Engineer.

2. Certified drawings showing dimensions, weights, loading information and location of all components; Include details on interconnecting piping, supports, and control panel.

3. Wiring, control schematics, and control logic diagrams for all electrical and control components furnished.

4. Manufacturer's Drawings shall be coordinated with the Contract Drawings, including equipment numbers and piping designations.

5. List of Recommended Spare Parts with price information

D. Structural Calculations

1. Structural anchor points to concrete foundation.

2. Seismic loads on frame and anchor bolts.

E. Resume of Technician to perform thickener screw press adjustments, inspections, observations of test operations, supervision of functional and performance testing, and training.

F. Training Course Outline

G. Operating and Maintenance Manuals: Include complete lubrication, maintenance, and operation instructions, including initial start-up instructions, and unloading and handling methods.

H. Manufacturer's references

I. Quality Control Submittals:

1. Special shipping storage, protection, and handling instructions

2. Manufacturer's Installation Instructions

3. Factory Test Results

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Consideration will be given only to the equipment of Manufacturers who are regularly engaged in such work and thoroughly experienced in the design and manufacture of screw press equipment specifically manufactured for municipal, secondary treated, waste activated sludge. Manufacturer shall meet the requirements below:

1. Have a minimum of 10 years of experience of producing substantially similar equipment, and show evidence of satisfactory operation in North America for presses dewatering XXXXXXXX sludge.

2. Must have a company-owned service and parts facility within the continental United States.

B. Certifications: The dewatering equipment supplier must provide the "Certification of Compliance" (COC) letter with their priced equipment proposal to the general contractor(s) bidding the project. The general contractor must include the dewatering equipment supplier COC in their bid proposal submitted to the OWNER at bid closing.

1. Certification of Compliance: In the initial submittal for the equipment, included a certification of compliance with this specification on the screw press manufacturer's letterhead (certification by manufacturer's representatives is not acceptable), worded as follows:

a. "[Insert manufacturer's name] proposes to supply equipment included in Specification 11340 for the Flocculation Tank and Dewatering Screw Press. We have examined the specification and have a clear understanding of the requirements insofar as they affect the proposed products. We certify that the products will operate satisfactorily under the conditions described in the specification and that the products meet the requirements of the specification with the exception of the following (if none, print "NONE"):

[List exceptions, deviations or changes necessary to accommodate the proposed products. It shall be at the County's sole discretion to accept or reject deviations. If "NONE" is listed, it shall be understood and agreed that the vendor meets or exceeds the specifications hereinafter.]

We further certify that the products to be furnished shall meet the performance criteria as required in the specification and as listed in

the solicitation response as submitted by [Insert manufacturer's name] on [Insert date of solicitation response] including:

[List performance criteria as required in response to this solicitation]

_____ _____
Authorized Signature & Title Date"

b. Provide justification for exceptions, variations, deviations, or changes (such as advancements in technology that benefit the OWNER, changes in design or material sources that have no impact on overall performance of the unit, or changes made necessary due to differing conditions noted in the specification). COUNTY will determine whether exceptions, deviations, and changes are acceptable. Exceptions, variations, deviations, and changes may result in rejection of submittal and original specified requirements must be met.

c. Acceptance of certification shall not relieve SUPPLIER of responsibility for adequacy of all equipment.

d. Submittal of certification shall not relieve SUPPLIER of requirement to comply with submittal procedure requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Contractor shall unload, store, and handle the equipment per the manufacturer's instructions.

1.7 WARRANTY

A. Warranty shall extend for 12 months after start-up or 18 months after delivery, whichever comes first.

B. Warranty shall include all parts, labor, and coatings for repairing or replacing equipment that fails during the warranty period. Defects occurring within the warranty period shall be repaired or replaced by the manufacturer at no cost to the OWNER.

C. An Extended Mechanical Warranty shall be offered for all mechanical components of the flocculation tank and dewatering screw press. The Extended Mechanical Warranty shall be for 10 years after start-up.

1. Extended Warranty shall include coverage of:

a. Gearboxes, bearings, bushings, spray showers, and any wear items.

2. Extended Mechanical Warranty does not cover:

a. Damage or failures due to lack of proper lubrication types, quantities

or schedules.

b. Motors, field instrumentation, power control, logic control, or any other electronic component.

c. Coatings.

3. Extended Mechanical Warranty shall include all parts and labor for repairing or replacing components to maintain the screw press minimum performance requirements listed.

1.8 PROJECT CONDITIONS

A. Deliver screw press and flocculation tank as completely assembled as practical to minimize field assembly. Contractor shall be responsible for unloading and any necessary field assembly. Contractor shall contact manufacturer for screw press field assembly requirements during bid.

1.9 SEQUENCING AND SCHEDULING

A. Coordinate work with restrictions as specified.

1.10 MAINTENANCE

A. Special Tools: Provide standard manufacturer supplied toolbox with all tools needed to assemble and disassemble the screw press.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Manufacturer: FKC Co., LTD. No other manufacturers will be accepted.

1. Screw press, flocculation tank, and appurtenances shall be provided by one (1) manufacturer.

2.2 MATERIALS

A. Wetted Parts : Stainless Steel, Type 304, unless otherwise indicated.

B. Drive Unit: As scheduled.

C. Galvanized carbon steel base

D. Other parts : Coated carbon steel

E. Miscellaneous hardware, including bolts, nuts, washers, and fastener clips in the wetted area: Stainless steel.

2.3 HOUSING

A. Housing shall be rigid Type 304 stainless steel weldment, supported by structural carbon steel base and shall have removable Type 304 stainless steel covers for screen access.

B. Sludge feed connections and filtrate discharge connections shall be Type 304 stainless steel 6-inch pipe stub and 4-inch (respectively) flanged meeting ANSI/ASME B 16.1, Class 125, or ANSI/ASME B 16.5, Class 150; provide higher pressure class as required to meet Design Working Pressure.

C. Press shall have Type 304 stainless steel discharge box with hinged lid. Dimensions as indicated on the Drawings.

D. Housing shall be designed for noise reduction, to act as a protective guard and to provide a complete enclosure for odor containment.

E. The screw press shall be provided with Type 304 stainless steel spray covers on the top and sides of the screw press drums where necessary for sanitation and personnel protection. Side covers shall be easily removable by a single person.

F. If applicable, include 304 stainless steel foul air connections suitable for flexible duct connections with clamps for as shown on the Drawings.

G. Headbox shall include hinged top inspection doors (12 inch by 12 inch min).

2.4 DRIVE SYSTEM

A. Drive system shall consist of an electric motor suitable to use with a variable speed drive system as required to provide full load capacity and also to withstand the full starting torque of the system. VFD shall be provided as part of the Dewatering Control Panel.

B. Screw speed shall be electronically controlled by means of a VFD in a NEMA 4X enclosure. Maximum screw speed shall be XX rpm or lower.

C. Speed Reducer:

1. Provide speed reducer rated for uniform shock load classification with a SUM ITOMO-CYCLO reducer service factor of 1.00.

2. Speed reducer shall be Sumitomo Cyclo Reducer or equal.

D. Shaft Seals shall be Musashi double lip spring-loaded Nitrite oil seal or equal.

E. Bearings:

1. Bearings:

a. Screw press shall be designed so that the entire rotating assembly is supported on the discharge end by a grease lubricated ball or

spherical roller type bearing. The bearing shall be conservatively designed to withstand all stresses of the service specified. Main bearings shall have a minimum B-10 life rating of 500,000 hours at standard operating speeds.

b. Bearings for the screw shall be anti-friction with grease lubrication.

F. Flexible connectors for the drive motor and screw press junction boxes shall be furnished by the installing Contractor such that all local electrical codes are met.

G. Screw Press Motor SP-M-XXX:

1. Provide inverter rated, severe duty motor, 1.15 SF, NEMA Premium Efficiency, cast iron frame with manufacturer's standard, corrosion resistant, epoxy finish.

2. Minimum screw press motor requirements of XX HP, (480v/3 phase)

2.5 SCREW ASSEMBLY

A. Screw Shell: Stainless steel, Type 304.

B. Helical flight welded to screw shell: Stainless steel Type 304 Brushless Flight.

C. The screw supported in the head by a radial bearing.

2.6 SCREEN ASSEMBLY

A. Type 304 stainless steel panels with punched holes.

B. Wedgewire screens are not acceptable.

2.7 DRUM ASSEMBLY

A. Drums shall be 0.5 to 1.0 meters in length and split into two, removable drum halves.

B. Drum configuration shall allow maintenance work in the screw press flight area without removal of the screw from the press.

2.8 PRESS ASSEMBLY

A. Screw press assembly shall be such that clearances around the entire perimeter of the unit for maintenance work shall not exceed 36 inches.

2.9 FLOCCULATION TANK SP-FT-XXX

A. Flocculation tank wetted parts shall be constructed of 304 stainless steel throughout.

B. Flocculation tank shall be designed for a retention time of XX to XX minutes under the normal design flow rate. The inlet of the tank shall be located at the bottom of the tank and conditioned sludge shall overflow from the discharge pipe located near the top of the tank. Provide XX-inch discharge pipe stub with flexible rubber hose sleeve connection.

C. Flocculation tank shall be supplied complete with an agitator. The agitator drive SP-FT-M-XXX shall be an SEW Eurodrive Varimot speed reducer/mechanical variator or equal. Agitator speed shall be adjusted manually at the flocculation tank.

D. Flocculation tank, agitator, and agitator drive shall be designed to handle the entire flow capacity range of the screw press.

E. Motor for the SP-FT-M-XXX drive shall be a minimum XX hp, 480 v / 3-phase unit. Motor shall have an aluminum cast frame. Motor efficiency will be 77% or greater. Motor bearings shall be 6306 C3-2RS or equal on the drive end and 6205 C3-2RS or equal on the fan end.

F. Provide split flocculation tank cover with a hinged inspection port. Include a 4-inch pipe stub vent connection on the fixed portion of the cover.

2.10 INSTRUMENTATION AND CONTROLS

A. Screw press manufacturer shall provide the dewatering control panel, PLC and field instrumentation for the dewatering system, as described and shown on the Drawings as SP-LCP-XXX. See section XXXXX for details on the SP-LCP-XXX dewatering control panel.

B. Within 180 days of Contract Notice to Proceed, screw press manufacturer shall provide a detailed written description of the modes of operation, interlocking and process control requirements for use by the Contractor, sufficient for proper operation of the dewatering system.

C. The PLC for SP-LCP-XXX will be programmed by the screw press manufacturer. See section XXXXX for details on all logic and process control requirements. Screw press manufacturer is responsible to direct all programming changes required to meet the system performance standards.

D. The HMI for SP-LCP-XXX will be programmed by the screw press manufacturer. See section XXXXX for details on all required display, setpoints, alarms and parameter ranges.

E. Screw press manufacturer shall provide a pressure sensing type level indicating transmitter SP-LT-XXX as follows:

1. Manufacturer: One of the following or equal:

   a. Rosemount

   b. Fischer and Porter

c. Leeds and Northrup

d. Foxboro

2. Level Indicating Transmitters: Pressure sensing, 24 volt direct current 2 wire type with the following:

a. 3-inch ANSI B16.5, Class 150 carbon steel mounting flange

b. 1/2 inch National Pipe Tread pressure or reference connection

c. No mechanical fulcrum points

d. Electronic span

e. Zero adjustments

f. Adjustable damping feature

g. Positive over-range protection

h. Field adjusted zero elevation or suppression

i. 3 valve manifold

3. Transmitters Housings: NEMA 4X corrosion resistant and weatherproof, with operation temperature range of from 0 to 175 degrees Fahrenheit with relative humidity of 0 to 100 percent.

4. Wetted Material: Cadmium-plated carbon steel, stainless steel, or other corrosion-resistant materials, compatible with process fluid.

5. Accuracy: Within 0.25 percent of span with repeatability of 0.10 percent.

6. Output: 4 to 20 milliampere direct current without need for external load adjustments.

7. Calibrate transmitters to required range.

8. Provide flange on headbox for mounting the level element.

F. Conductivity Level Probe SP-LH-XXX by Screw Press Manufacturer

1. Manufacturers, Products: Omega LVC-E511 or equal.

2. 303 Stainless Steel electrodes, ¼" diameter.

2.11 ANCHOR BOLTS

A. Anchor bolts will be sized by the screw press Manufacturer and provided by the

Contractor.

2.12 FINISHES

A. Surface preparation of carbon steel surfaces on the screw press and flocculation tank shall be in accordance with SSPC-SP6 standards and shall be coated as follows:

1. Prime Coat: 5 mils of Carboline 890

2. Top Coat: 2 mils of Carboline 890 (if outdoors & exposed to direct sunlight), 5 mils (if indoors or covered outdoors)

B. Motors and gearboxes for the screw press and flocculation tank shall be prepared and coated with the manufacturer's standard surface preparation, prime coat and top coat for corrosion resistance.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. The Contractor shall provide all hardware and accessories required for installation.

C. Manufacturer's Field Services

1. Include the following:

a. Inspection and Functional/Operational Testing: One trip with 3 days service.

b. Performance Testing/Training: One trip with 2 days service.

2. Additional trips resulting from failed tests shall be the sole responsibility of the manufacturer.

3.2 EQUIPMENT STARTUP AND TESTING

A. Perform start-up and functional testing for entire dewatering system, with all units operating in AUTO mode. The Contractor shall complete all electrical/instrumentation and loop testing prior to functional performance testing

B. Provide Major Certificate of Proper Installation.

C. Operational Test:

1. Functional/operational tests may be performed in the same trip.

D. Guaranteed Performance Testing:

1. Include the minimum number of trips and duration of service as previously indicated.

2. Include demonstration that dewatering system meets minimum specified performance requirements of this specification.

3. Manufacturer's representative shall supervise all performance testing and be solely responsible for operating the dewatering and ancillary equipment (e.g., sludge and polymer feed systems). The OWNER shall furnish personnel to assist in operating the equipment and take samples. Manufacturer shall provide certified test reports.

4. After adjustments are made to achieve the operating requirements, the dewatering system will be operated at the design conditions to demonstrate consistent performance. Samples of feed, filtrate, and cake shall be collected by Engineer's appointed representative or Owner and evaluated by the Owner. The test will be deemed successful if average test results meet or exceed those specified.

5. Sample testing and analysis costs shall be the responsibility of the Owner.

6. Polymer shall be as selected by the polymer representative and supplied by the Owner for testing.

7. Data collected during each test run used to complete guaranteed performance testing shall include, as a minimum:

   a. Run number.

   b. Date.

   c. Time.

   d. Feed sludge percent total solids, %TS

   e. Sludge feed rate, gpm.

   f. Polymer name.

   g. Polymer percent active, %.

   h. Polymer feed rate (neat), gph.

   i. Screw press speed, rpm.

   j. Amperage draw by the screw press drive.

   k. Cake percent total solids, %TS.

8. Provide calculated values for the following:

   a. Solids throughput, lbs TS/hr.

9. Solids concentrations will be determined using “Standard Methods.”

10. Guaranteed Performance Test Runs:

    a. Test runs shall consist of two 5 hour steady state runs performed on two consecutive days. Maintain the average design solids throughput of XXXX dry pounds per hour throughout the test runs.

    b. All test data and values and previously described and required to demonstrate compliance shall be recorded at the start of each run and every hour thereafter. The averaged results for each sample shall meet or exceed the minimum and guaranteed performance standards.

    c. The units shall be operated in AUTO mode at all times during the Guaranteed Performance test runs.

    d. Should the installed equipment fail to meet the specified minimum performance requirements, the manufacturer shall within 30 days make all necessary changes to the equipment and/or operation at no cost to the Owner. The equipment shall be retested using the same procedure indicated above. If after the second test the equipment still does not meet the minimum performance requirements and/or guaranteed performance standards, damages will be assessed and/or equipment replaced. If assessed, damages will be limited to ten percent (10%) retention, if performance requirements are not met.

    e. The screw press dewatering system shall meet every item of the performance criteria as specified prior to acceptance of the Owner.

11. MANUFACTURER shall prepare and submit a written report documenting the test data listed above.

12. Provide a computer spreadsheet compatible with Microsoft Excel (latest version) with the test data listed above.

E. Witnessing: All field testing shall be witnessed by the Engineer.

F. A representative of the screw press manufacturer shall be provided for the following:

1. To inspect the equipment and installation

2. To make any field adjustments to ensure proper equipment operation

3. To furnish affidavit stating that the dewatering system has been tested and is ready for installation as specified.

4. To inspect start-up

G. Manufacturer shall inspect system before initial start-up and certify that system has been correctly installed and prepared for start-up.

H. Training:

1. Provide operator training for at least 2 days on-site by factory trained representative. Operator training to include:

   a. Operations and inspection training.

   b. Safety instruction.

   c. Preventative maintenance instruction.

   d. Calibration and other pertinent services.

END OF SECTION

Conveyor

SECTION 14555

SHAFTLESS SCREW CONVEYOR SYSTEM

PART 1 GENERAL

1.1 WORK INCLUDED

A. There shall be furnished a shaftless screw conveyor including support legs and inlet hopper with drivers and features specified in this Section and scheduled below. All equipment shall be provided by a single manufacturer. The shaftless screw conveyor shall be capable of conveying dewatered municipal anaerobically digested sludge.

B. Tag Numbers.

1. Shaftless Screw Conveyor: CV-001

2. Shaftless Screw Conveyor Motor: CV-M-001

3. Shaftless Screw Conveyor Zero Speed Switch: CV-ZS-001

4. Shaftless Screw Conveyor Emergency Stop Switches: CV-ES-001, CV-ES-002

C. The purchase price of the shaftless screw conveyor, as specified herein has been pre-negotiated with the manufacturer. The pre-negotiated price is $XXX,XXX. The price shall be used in preparing a lump sum base bid. The purchase price shall include the scope of supply identified in this specification as outlined in the attached Scope of supply letter from the manufacturer. The Contractor shall review the scope of supply and provide all additional appurtenances, equipment, installation labor, testing, and other services for a complete system.

1.2 REFERENCES

A. American Bearing Manufacturers Association (ABMA)

B. American Gear Manufacturers Association (AGMA)

C. American National Standards Institute (ANSI).

D. American Society of Mechanical Engineers (ASME)

E. American Welding Society (AWS) D1.1, Structural Welding Code.

F. Conveyor Equipment Manufacturer’s Associations (CEMA).

G. National Electric Code (NEC).

H. National Electrical Manufacturers Association (NEMA).

1.3 SCREW PRESS DESCRIPTION

A. Shaftless screw conveyor CV-001 system shall be capable of conveying dewatered municipal anaerobically digested sludge.

B. Shaftless screw conveyor with components as specified in this Section and shown on the Drawings and as required for a complete and functional shaftless screw conveyor, including:

1. Shaftless screw conveyor with all 304 stainless steel wetted parts.
2. Spiral Flight, Shaftless.
3. End Shaft.
4. Speed Reducer.
5. Motor.
6. Trough and Liners.
7. Covers, bolt-on.
8. Inlet chute.
9. Support Legs, 304 stainless steel.
10. Zero Speed Switch.
11. Emergency Stop Pull-Cords.
12. Anchor age/seismic support calculations.

C. Design Requirements:

1. Shaftless screw conveyor shall be suitable for both intermittent and continuous loading and operation.
2. Shaftless screw conveyor minimum performance requirements

Type of Biosolids	Anaerobically Digested Sludge
Dewatered Biosolids, % total solids (TS)	16 to 18 % total solids
Design Capacity @ 35% Trough Loading	1,600 dry pounds per hour 10,000 wet pounds per hour 160 cubic feet per hour

3. Motor Characteristics – as described in this Section.

1.4 SUBMITTALS

A. Submit as specified in Section 01330 and Section 15050.

B. Product Data:

1. Submit data completely describing product including plan and section views and listings of materials of construction.

C. Shop Drawings:

1. Complete manufacturer fabrication/assembly drawings including location of conveyor relative to locations of associated feed equipment, inlet chute and leg supports.

2. Certified drawings showing dimensions, weights, loading information and location of all components.

3. Wiring diagrams for all motors and electrical field instrumentation furnished.

D. Structural Calculations

1. Structural calculations prepared, sealed and signed by a registered professional structural engineer in the State of California.

a. Structural anchor points to concrete foundation.

b. Seismic loads on frame and anchor bolts.

E. Resume of Technician to perform conveyor adjustments, inspections, observations of test operations, supervision of functional and performance testing, and training.

F. Training Course Outline

G. Operating and Maintenance Manuals: Include complete lubrication, maintenance, and operation instructions, including initial start-up instructions, and unloading and handling methods.

H. Manufacturer's references.

I. Quality Control Submittals:

1. Special shipping storage, protection, and handling instructions

2. Manufacturer's Installation Instructions

3. Factory Test Results

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Consideration will be given only to the equipment of

Manufacturers who are regularly engaged in such work and thoroughly experienced in the design and manufacture of screw press equipment specifically manufactured for municipal, secondary treated, waste activated sludge. Manufacturer shall meet the requirements below:

1. Have a minimum of 5 years of experience of producing substantially similar equipment, and show evidence of satisfactory operation in North America for conveying municipal wastewater treatment plant sludge.

2. Must have a company-owned service and parts facility within the continental United States.

B. Certifications: The dewatering equipment supplier must provide the "Certification of Compliance" (COC) letter with their priced equipment proposal to the general contractor(s) bidding the project. The general contractor must include the dewatering equipment supplier COC in their bid proposal submitted to the OWNER at bid closing.

1. Certification of Compliance: In the initial submittal for the equipment, included a certification of compliance with this specification on the screw press manufacturer's letterhead (certification by manufacturer's representatives is not acceptable), worded as follows:

   a. "[Insert manufacturer's name] proposes to supply equipment included in Specification 14555 for the Shaftless Screw Conveyor System. We have examined the specification and have a clear understanding of the requirements insofar as they affect the proposed products. We certify that the products will operate satisfactorily under the conditions described in the specification and that the products meet the requirements of the specification with the exception of the following (if none, print "NONE"):

      [List exceptions, deviations or changes necessary to accommodate the proposed products. It shall be at the County's sole discretion to accept or reject deviations. If "NONE" is listed, it shall be understood and agreed that the vendor meets or exceeds the specifications hereinafter.]

      We further certify that the products to be furnished shall meet the performance criteria as required in the specification and as listed in the solicitation response as submitted by [Insert manufacturer's name] on [Insert date of solicitation response] including:

      [List performance criteria as required in response to this solicitation]

      _____ _____
      Authorized Signature & Title Date"

   b. Provide justification for exceptions, variations, deviations, or changes (such as advancements in technology that benefit the OWNER, changes in design or material sources that have no impact on overall

performance of the unit, or changes made necessary due to differing conditions noted in the specification). COUNTY will determine whether exceptions, deviations, and changes are acceptable. Exceptions, variations, deviations, and changes may result in rejection of submittal and original specified requirements must be met.

c. Acceptance of certification shall not relieve SUPPLIER of responsibility for adequacy of all equipment.

d. Submittal of certification shall not relieve SUPPLIER of requirement to comply with submittal procedure requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Contractor shall unload, store, and handle the equipment per the manufacturer's instructions.

1.7 WARRANTY

A. Warranty shall extend for 12 months after start-up or 18 months after delivery, whichever comes first.

B. Warranty shall include all parts, labor, and coatings for repairing or replacing equipment that fails during the warranty period. Defects occurring within the warranty period shall be repaired or replaced by the manufacturer at no cost to the OWNER.

1.8 PROJECT CONDITIONS

A. Deliver shaftless screw conveyor as completely assembled as practical to minimize field assembly. Contractor shall be responsible for unloading and any necessary field assembly. Contractor shall contact manufacturer for screw press field assembly requirements during bid.

1.9 SEQUENCING AND SCHEDULING

A. Coordinate work with restrictions as specified.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Manufacturer: FKC Co., LTD. No other manufacturers will be accepted.

1. Shaftless screw conveyor shall be provided by one (1) manufacturer.

2.2 MATERIALS

A. Wetted Parts: Stainless Steel, Type 304, unless otherwise indicated.

1. Troughs and inlet chute: 10 gauge.

2. Covers: 10 gauge.

3. Drive and end plates: 3/8-inch minimum.

B. Support Legs: 304 stainless steel.

C. Spiral Flights: Cold-formed flat hot-rolled carbon, spring steel bar, Brinell 220 minimum.

1. For 9-inch diameter conveyor, use 3/4 x 2-1/2 inch.

2. For 12-inch diameter conveyor, use 1 x 3 inch.

D. Drive Shaft: AISI 1045.

E. Drive Unit: As scheduled.

F. Wear Liners: UHMW, 1/2-inch thickness, 1 color.

G. Other parts: Coated carbon steel

H. Miscellaneous hardware, including bolts, nuts, and washers in the wetted area: 18-8 Stainless steel.

2.3 SPIRAL FLIGHTING

A. Design spiral flighting to convey material without a center shaft and designed with the stability to prevent distortion and jumping in the trough.

B. Connect spiral flighting to the drive shaft:

1. For 9-inch conveyors, connection by welding the spirals to a 3-1/2 O.D. x 1/4-inch thick inner shaft sleeve. Shaft is inserted into sleeve and fastened by two cross bolts.

2. For 12-inch conveyors, connection by welding the spirals to a 5-1/2 O.D. x 3/8-inch thick inner shaft sleeve. 1/2-inch plate is welded to sleeve. Another 1/2-inch plate is welded to the drive shaft. The two 1/2-inch plates are fastened to each other by four 1/2-inch 304 stainless steel bolts, nuts and washers.

C. Spiral Flights to be concentric to within 1/16-inch.

2.4 DRIVE SYSTEM

A. The drive units shall be hollow shaft-mounted, roller-bearing gear motor rated a minimum AFMA Class II, single or double reduction or triple reduction.

B. Drive finish shall be severe duty wash-down surface protection finish as provided by manufacturer.

C. Drive system shall consist of an electric motor as required to provide full load capacity and also to withstand the full starting torque of the system.

D. Screw speed shall be electronically controlled by means of a motor starter in a NEMA 4X enclosure. Motor starter shall be provided as part of the Dewatering Control Panel SP-VCP-001.

E. Maximum conveyor shall be 32 revolutions per minute or lower.

F. V-belt driven speed reducer, or chain driven reducers are not permitted.

G. Speed Reducer:

1. Speed reducer shall be SEW Eurodrive Reducer or equal.

H. Shaftless Screw Conveyor Motor CV-M-001:

1. Provide inverter rated, severe duty motor, 1.15 SF, NEMA Premium Efficiency, cast iron frame with manufacturer's standard, corrosion resistant, epoxy finish.

2. Minimum screw press motor requirements of 3.0 HP, (480v/3 phase)

I. Motors shall be mounted at the end of the conveyors as shown in the contract plan drawings.

2.5 TROUGH AND LINERS

A. Construction shall be of U-trough design with gasketing at each trough flange. Trough sections in 8-foot lengths.

B. Trough end plates shall be 3/8-inch minimum, removable, with wastepack seal at drive end.

C. Provide each conveyor with a 2-inch NPT drain outlet at the lowest end of the conveyor.

D. Liner sections in 4-foot lengths. Liners are 1/2-inch minimum plastimeric-type ultra-high molecular weight (UHMW) polyethylene, 1 color.

2.6 INLET CHUTE

A. Purpose: Convey the dewatered cake from the screw press discharge box to the

inlet trough of the shaftless screw conveyor.

B. Fabricated and provided by the shaftless screw conveyor manufacturer.

C. Construct of 12-gauge wall and flange thickness for connection to conveyors.

D. Provide chute with external body reinforcing stiffeners as required.

E. Provide chute with both the interior and exterior surfaces smooth, free from sharp edges, burrs, and projections, and with all welds ground smooth and all edges and corners rounded.

F. The minimum incline angle of the chute is 60 degrees.

G. The chute shall not be supported by any element of the screw press frame.

H. No part of the chute shall come in contact with the screw press drive, screw, flight, nor interfere with normal operation of the screw press.

I. Bolt hole pattern for fastening to screw press to match pattern at bottom of screw press discharge box. Bolts and washers for this connection included with shaftless screw conveyor.

2.7 INSTRUMENTATION AND CONTROLS

A. All electrical equipment shall conform to applicable standard of NEMA and the NEC.

1. Both power and control equipment shall be insulated for not less than 600 volts even though operating voltages may be lower.

B. Shaftless screw conveyor motor CV-M-001 shall have power control from a motor starter housed in the screw press vendor control panel SP-VCP-001.

C. Shaftless screw conveyor manufacturer shall provide motion sensor probe and control relay box CV-ZS-001 as follows:

1. Manufacturer: Siemens Milltronics MFA 4P or equal:

a. 100/115.200 VAC, 50/60 Hz, 15 VA.

b. 2 relay outputs with S.P.D.T. fail-safe contracts operating in unison.

c. 2 to 3,000 pulses per minute adjustment setpoint range.

d. Polycarbonate NEMA 4/4X Enclosure for relay circuit board

e. MSP-12 standard probe, cast aluminum body and zinc flange.

D. Shaftless screw conveyor manufacturer shall provide emergency pull-cords and

safety switches CV-ES-001 and CV-ES-002 as follows:

1. Manufacturer: Omron STI or equal:

    a. Housing: Heavy-duty painted zinc-based die-cast alloy.

    b. Indicator: Glass-filled nylon.

    c. Switch color: Yellow body, blue reset button.

    d. Switch lockout on cable pulled and cable slack.

    e. Cable-status indicator on switch lid.

    f. 6A @120 VAC, 3A @ 240 VAC

    g. 2 N.C. direct-operating safety contacts.

    h. 1 N.O. direct-opening auxiliary contacts.

    i. IP67 enclosure type for switches.

    j. All cables, eyebolts, hooks, springs and clips necessary to run pull cords down both sides of the conveyor.

2.8 ANCHOR BOLTS

A. Anchor bolts will be sized by the screw press Manufacturer and provided by the Contractor.

2.9 FINISHES

A. Motors and gearboxes for the screw press and flocculation tank shall be prepared and coated with the manufacturer's standard surface preparation, prime coat and top coat for corrosion resistance.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. The Contractor shall provide all hardware and accessories required for installation.

C. Manufacturer's Field Services

1. Include the following:

    a. Inspection, Functional/Operational Testing: Two trips for a total of 2

days, 8 hours per day.

2. Additional trips resulting from failed tests shall be the sole responsibility of the manufacturer.

3.2 SHOP TESTING

A. Units shall be full assembled at the factory and test run for 15 minutes to check for equipment tolerances and proper operation.

B. Conveyors shall be corrected as necessary.

3.3 FIELD QUALITY CONTROL

A. Witnessing: All field testing shall be witnessed by the Engineer.

B. A representative of the screw press manufacturer shall be provided for the following:

1. To inspect the equipment and installation

2. To make any field adjustments to ensure proper equipment operation

3. To furnish affidavit stating that the dewatering system has been tested and is ready for installation as specified.

4. To inspect start-up

C. Manufacturer shall inspect system before initial start-up and certify that system has been correctly installed and prepared for start-up.

D. Training:

1. Provide operator training for at least 1 day on-site by factory trained representative. Training can be coordinated and occur during same days as functional/operational testing. Operator training to include:

a. Operations and inspection training.

b. Safety instruction.

c. Preventative maintenance instruction.

END OF SECTION

Polymer System

FKC Liquid Polymer Blending System

PART 1 GENERAL

1.01 SUMMARY

A. Furnish one (1) polymer blending system with progressive cavity pump, motors and controls, including all integral piping, valves, fitting, pipe supports, special equipment and appurtenances in accordance with these specifications, including all incidental work necessary to make it complete, satisfactory and ready for operation.

B. The polymer dilution and feed system shall be capable of effectively activating and fully blending with water a homogenous polymer solution ranging from 0.1% to 1% concentration of emulsion polymers with active contents up to 75%.

1.02 SYSTEM DESCRIPTION

A. DESIGN CRITERIA
1. Polymer Type: Emulsion
2. Polymer Activity (percent active): 30 to 75
3. Solution Concentration Range: 0.1% to 1%

Neat Polymer Flow Range (GPH)	Dilution Water Range (GPH)
0.25 – 5	120 – 1200

1.03 SUBMITTALS

A. Product Data:
1. Submit data completely describing product, including detailed scope of supply, detailed bill of materials and annotated specification sheets of all components.

B. Shop Drawings:
1. Submit detailed specifications and shop drawings with both shaded isometric and orthogonal views of the proposed system, including dimensions and weights.
2. Submit wiring, control schematics, and control logic diagrams for all electrical and control components furnished.

C. Provide detailed Operations and Maintenance Manuals including storage, installation start-up and operating instructions. Provide safety precautions and warnings of all hazards operating equipment.

1.04 QUALITY ASSURANCE

A. Prior to shipment the system shall be inspected for quality of construction verifying all fasteners and fittings are tight, all wires are secure and connections whisker-free. The system shall be tested under pressure for a minimum of one hour at 100 psi. If leaks are found they shall be fixed and a new test shall be conducted for one hour at 100 psi until the plumbing system is verified to be leak free.

1.05 DELIVERY & STORAGE

A. The equipment will be shipped in a new, high quality completely enclosed weather proof wooden crate constructed of 2" x 4" studs and 3/8" thick ply wood. Access to the crate shall be by a front panel removable by lag bolts. A skid shall be constructed of 4" x 4" or two 2" x 4" each, allowing fork-lifting. The crate shall include a shock sensor to warn of equipment mishandling during shipment.

1.06 WARRANTY

A. The system shall be covered by a one (1) year limited warranty against defects in materials and workmanship.

1.07 SPARE PARTS

A. One (1) polymer injection check valve

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturers:
   1. FKC Co., Ltd., No Equal.

2.02 IDENTIFICATION

A. Provide a name plate securely affixed to the unit providing Manufacturer with phone number, model number, serial number.

2.03 MATERIALS

A. The following material requirements will be strictly adhered to:
   1. System skid: 304 stainless steel
   2. Hardware: Type 18-8 stainless steel.
   3. Piping & pipe fittings: schedule 80 PVC
   4. Tubing and tube fittings: polyethylene, polypropylene, stainless steel and Viton
   5. Water solenoid valve: brass
   6. Pressure gauges: stainless steel, liquid filled
   7. Pressure switches: NEMA 4, brass connection
   8. Flow meter: acrylic, stainless steel, PVC and or polypropylene
   9. Water control valve: stainless steel with stainless steel seat
   10. Mixing chamber body / flanges: PVC
   11. Mixing chamber cover / chamber: clear polycarbonate
   12. Impeller: 304 stainless steel
   13. Impeller shaft seal: Viton, stainless steel, ceramic, carbon
   14. Mixing chamber pressure relief valve: brass, stainless steel or PVC
   15. Metering pump wetted parts: stainless steel & Viton

16. Seals: Viton, ceramic, Teflon, and or carbon
17. Control enclosure: FRP.

2.04 EQUIPMENT

A. Polymer Activation & Blending Chamber:

1. These specifications are based on a multi-stage, multi-zone, Hydro-Mechanical polymer activation & blending technology. Alternate technologies will only be considered if proven to provide an equal level of performance, versatility, reliability and quality, otherwise the following technology will be provided without exception.
2. In order to provide control and versatility to optimize the performance of the wide range of polymers available and to optimize system reliability, a multi-stage Hydro-Mechanical polymer blending technology shall be provided with both a non-mechanical and mechanical mixing stage:
   a. Non-Mechanical Stage: To optimize reliability, the device shall be capable of activating and blending polymer based on plant water pressure alone at 30 psid or greater. Polymer shall be injected directly into a water jet by means of an injection quill positioned such that the non-mechanical mixing energy is no way diminished prior to polymer and water contact. The non-mechanical zone shall be designed such that the velocity of the mixing energy-producing water jet is maintained or increases as flow decreases.
   b. Hydro-Mechanical mixing Stage: In order to provide optimal polymer performance under all operating conditions and to provide total control over mixing energy, in addition to the non-mechanical mixing stage the device shall be capable of producing its mixing energy independent of plant water pressure through a variable intensity, controllable stainless steel hydro-mechanical mixer. The mixing impeller shall be fully controllable and capable of inducing ultra high, non-damaging mixing energy at all flow rates. This shall be accomplished by controlling mixing intensity and preventing over exposure to, or damaging recirculation through the impeller. The polymer mixing impeller shall be designed to produce both axial and radial flow to optimize mixing effectiveness and to effectively inducing high, non-damaging mixing energy over the systems full flow range.
   c. Mixers that rely solely on plant water pressure and or flow for mixing energy will not be acceptable. Mixers where performance is affected by flow rate and therefore retention time resulting in under or over exposure to mixing energy, or which rely on constant speed impellers or that rely on close tolerances for blending shall not be acceptable.
3. In order to prevent polymer build-up, the mixing chamber shall maintain high velocity in the entire chamber - at no time shall there be low velocity within any portion of the mixing chamber.
4. The mixing impeller shall be controlled by VFD motor controller and driven by a wash-down duty AC motor. The motor shall be mounted horizontally. Motors mounted under the mixing chamber where seal failure or leaks can damage the motor shall not be acceptable.
5. The mixer drive shaft shall be sealed by a mechanical seal which shall have an integrally mounted and factory plumbed seal flush. A drain port behind the seal shall be provided in the mixing chamber to drain the

polymer solution in case of a seal failure. The seal shall be easily accessible for replacement. All bearings shall be external from the mixing chamber. Internal bearings shall not be acceptable.

6. Both mechanical and non-mechanical mixing zones shall be clear polycarbonate to view the mixing action and blending effectiveness. Acrylic chambers prone to becoming brittle over time and cracking, or opaque pipe shall not be acceptable to meet this requirement.
7. The mixing chamber shall have a maximum rated pressure of 100 psi. Provide a pressure relief on the mixing chamber factory set at 75 psi.
8. Provide a neat polymer check valve specifically designed to isolate neat polymer from dilution water.

B. Dilution Water Assembly:
   1. The dilution water flow rate shall be monitored by a Rotameter type flow meter having the range as specified under paragraph 1.02 above. Unions or flanges shall be provided on the flow meter to allow easy removal for cleaning.
   2. The unit shall have an electric solenoid valve for on/off control of total dilution water flow.
   3. A differential pressure type low water differential pressure alarm shall be provided. The switch shall be adjustable between 25 and 100 psid. Proof pressure shall be 500 psi minimum. The pressure switch shall be as manufactured by Ashcroft.
   4. Provide a 2-1/2” stainless steel liquid filled pressure gauge to monitor dilution water inlet pressure.

C. Progressive Cavity Neat Polymer Metering Pump
   1. The unit shall have one (1) neat polymer metering pump(s) integrally mounted on the systems skid. The metering pump(s) shall have a range as specified under paragraph 1.02 above. The pump shall be a positive displacement, progressive cavity type constructed of stainless steel and Viton. The shaft seal shall be mechanical seals, packing type shall not be used. A 240 VAC wash-down duty motor shall drive the pump. DC motor are not acceptable. A gear reducer shall be provided to produce a maximum pump shaft speed of not more than 545 RPM. The motor shall be controlled by an VFD located in the system control panel.
   2. Provide a calibration column with two full port PVC ball valves having Viton o-rings. The column shall be calibrated for a one minute draw-down and read in GPH and milliliters. The calibration column shall be rigidly mounted to the systems frame with a minimum of two heavy duty brackets. Mounting the calibration to the neat polymer inlet piping shall not be acceptable.
   3. Provide a thermal type loss of polymer flow sensor.

D. Solution Discharge Assembly:
   1. Provide a 2-1/2” stainless steel liquid filled pressure gauge to monitor system discharge pressure.

E. Controls:
   1. A control panel integral to the systems frame shall be provided. The enclosure shall be rated NEMA 4X and constructed of FRP. The control panel shall consist of all controllers, digital displays,

potentiometers, switches, lights, relays, and other control devices required for a complete operable system. The control panel and all components shall be industrial duty. All skid mounted electrical components interconnected to the control panel shall terminate at numbered and labeled terminal blocks. The terminal blocks shall be sized for 14 ga. wire. Wires shall be neatly run through wire race-way and numbered with shrink tubing type labels. Adhesive labels shall not be used. The control panel shall be positioned such that there are no obstructions in front of the control panel per related NFPA requirements. Control.

2. Power: 120 VAC, 1Ph, 60/50 Hz.

D Control Series:

3. Operator Interface – Discrete Selector Switch:
   a. System ON / OFF(reset) / Remote
   b. One-Turn Potentiometer – Mixer Speed
   c. Ten-Turn Potentiometer – Progressive Cavity Metering Pump Control
4. Status / Alarm Indicators:
   a. Main Power ON Indication
   b. LED display of Metering Pump Rate
   c. Low Water Differential Pressure Alarm
   d. Low Polymer Flow Alarm
5. Inputs (signals by others):
   a. Remote Start / Stop (discrete dry contact)
   b. Pacing Signal Based on Process Flow (4-20mA)
6. Outputs:
   a. System Running (discrete dry contact)
   b. Remote Mode (discrete dry contact)
   c. Common Alarm (discrete dry contact)

F. System Skid:
   1. The system's frame shall be of rugged 304 stainless steel construction. No mild steel shall be used. All piping shall be rigidly supported.
   2. Under no circumstance shall the pump suction exceed 5” from the bottom of the skid for progressive cavity pumps and 12” from the bottom of the skid for diaphragm pumps.
   3. The overall system dimensions shall not exceed 36”W x 26”D X 60”H.

PART 3 Field Services

3.01 Field Services:

A. Process equipment manufacturer shall provide the services of a qualified field service technician to inspect and certify the installation, start-up the equipment, trouble shoot any problems that may arise and providing complete and thorough training of operator personnel.

-END SECTION-

Equipment / System Automation

Simplified Control Narrative for an FKC Dewatering System Does not define FKC Scope of Supply – Example Only

1. <u>To run equipment in HAND:</u>
    a. Screw press, flocculation tank, and sludge feed pumps
        i. If you are going to run the sludge feed pump in HAND, then verify all gates and/or valves between the sludge pump and the flocculation tank are manually adjusted to be open.
        ii. For a given piece of equipment, set the HOA switch to HAND on the front of the dewatering control panel.
            1. Ex: To run the flocculation tank in HAND, turn the HOA switch for the flocculation tank to HAND on the front door of the dewatering control panel.
        iii. For the sludge feed pump, enter the desired running speed on the sludge feed pump pop-up on the HMI and set the HOA switch on the same HMI pop-up to HAND.
    b. Polymer Makedown System
        i. The polymer system can either be run in HAND at the dewatering control panel, or in LOCAL at the polymer system control panel.
            1. To run the polymer system in HAND at the dewatering control panel, press (to select) the polymer makedown system graphic on the Screw Press Overview Screen of the HMI on the dewatering control panel. The polymer makedown system Equipment Control Pop-Up Screen will appear. Press (to select) the HAND label on the PLC Control HOA switch.
            2. To run the polymer system in LOCAL, press the LOCAL START button on the HMI screen of the polymer system control panel.
                a. Adjust neat polymer gph setpoint on the RUN RP MANUAL screen on the polymer makedown system control panel HMI.
                b. Adjust the polymer makedown water using the dilution water flow valve % open setpoint on the RUN RP MANUAL screen on the polymer makedown system control panel HMI.
    c. Solenoid Valves
        i. To open a solenoid valve in HAND at the dewatering control panel, set the OCA switch to OPEN on the front of the dewatering control panel.
            1. As another option, with the OCA switch in AUTO, press (to select) a solenoid valve graphic on the Screw Press Overview Screen of the HMI on the dewatering control panel. The solenoid valve Equipment Control Pop-Up Screen will appear. Press (to select) the HAND label on the PLC Control HOA switch.

(con't) Simplified Control Narrative for an FKC Dewatering System

2. <u>To run the screw press dewatering system in AUTO:</u>
    a. Verify all HOA switches on the front of the dewatering control panel are set to AUTO.
        i. This includes the HOA switches for the sludge pumps, the flocculation tank, the screw press, and the OCA switches for the solenoid valves.
    b. Press the ENABLE REMOTE START/STOP button on the polymer makedown system control panel HMI.
    c. Verify all the gates and/or valves between the sludge pumps and the flocculation tank are adjusted to be open.
    d. On the Screw Press Overview Screen of the HMI on the dewatering control panel, press (to select) the FLOW MODE button.
        i. Once the FLOW MODE pop-up screen appears on the HMI, press (to select) either the CONSTANT or the VARIABLE button. The notice under these buttons will change to read which flow mode is currently active.
    e. On the Screw Press Overview Screen of the HMI on the dewatering control panel, press (to select) the SETPOINTS button.
        i. For steps "ii" thru "iv" below, refer to the page entitled SETPOINT VALVES AT TIME OF START UP that was inserted into the O&M Manual after startup of the equipment was completed.
        ii. Verify that all the operator setpoints listed on the screen are set to correct values.
        iii. Press (to select) the WASHWATER SETPOINTS button and verify that all the operator setpoints listed on the screen are set to correct values. Press (to select) the CLOSE button after verification is complete.
        iv. Press (to select) the PID SETPOINTS button and verify that all the operator setpoints listed on the screen are set to correct values. Press (to select) the CLOSE button after verification is complete.
        v. Press (to select) the CLOSE button on the SYSTEM SETPOINTS SCREEN to return to the Screw Press Overview Screen.
    f. On the Screw Press Overview Screen of the HMI on the dewatering control panel, press (to select) the SEQUENCE button.
        i. Once the SEQUENCE pop-up screen appears on the HMI, press (to select) the ALL IN AUTO button.
        ii. Press (to select) the SYSTEM START button on the SEQUENCE pop-up screen.
        iii. Press (to select) the CLOSE button on the SEQUENCE pop-up screen.

(con't) Simplified Control Narrative for an FKC Dewatering System

3. <u>Auto sequence of operation</u>
    a. Auto Startup
        i. Auto startup occurs when the operator has successfully put the dewatering system into AUTO by pressing the SYSTEM START button.
        ii. The following sequence occurs during Auto Startup:
            1. The polymer system is turned on and polymer begins to flow to the flocculation tank.
            2. The duty sludge feed pump is turned on and sludge begins to flow to the flocculation tank.
            3. The flocculation tank is turned on.
            4. Flocculated sludge begins to enter the screw press headbox and the headbox level begins to rise.
            5. Once the HEADBOX DESIRED LEVEL is reached, the screw press will turn on.
    b. Running in Auto
        i. Once the Auto Startup sequence has been completed, the screw press dewatering system with then run in either Constant Flow Mode or Variable Flow Mode based on operating settings.
        ii. In Constant Flow Mode:
            1. The PLC maintains constant sludge and polymer flows while varying the screw press speed to maintain a relatively constant headbox level over time.
        iii. In Variable Flow Mode:
            1. The PLC maintains a constant screw press speed while varying the sludge and polymer flow to maintain a relatively constant headbox level over time.
    c. Auto Shutdown
        i. Auto shutdown occurs when one of three conditions occur:
            1. While the dewatering system is running in AUTO, the operator presses (to select) the SYSTEM STOP button on the SEQUENCE pop-up screen.
            2. Except for the screw press motor alarms or any conveyor alarm, the dewatering system will go into auto shutdown when an alarm occurs.
            3. When the AUTO SHUTDOWN TIMER reaches 0.0 hours.

(con't) Simplified Control Narrative for an FKC Dewatering System

ii. The following sequence occurs during Auto Shutdown:
    1. The polymer system is turned off and polymer flow stops.
    2. The sludge feed pump is turned off and sludge flow stops.
    3. The flocculation tank is turned off.
    4. If the screw press is still running, then the screw press will continue to run for XX minutes according to the SCREW PRESS SHUT DOWN DELAY setpoint.
    5. If the screw press is running, then the screw press is turned off.

4. <u>Alarms</u>
    a. With the screw press dewatering system running in AUTO, the following alarm conditions will cause an Auto Shutdown to occur:
        i. Sludge Feed Pump Motor VFD Fault
        ii. Sludge Flow Meter Low Flow
        iii. Polymer System General Fault/Alarm
        iv. Flocculation Tank Motor VFD Fault (or motor trip if applicable)
        v. Flocculation Tank Hi-Hi Level
        vi. Screw Press Headbox Hi-Hi Level
    b. With the screw press dewatering system running in AUTO, the following alarm conditions will cause the entire screw press dewatering system to immediately shutdown:
        i. Screw Press Motor VFD Fault
        ii. Process Stop Mushroom Button is pressed on the Screw Press Dewatering Control Panel.

CONTROL PANEL
SCREENS & OPERATION

ACTUAL SCREENS AND SETPOINTS MAY VARY

DOES NOT DEFINE FKC SCOPE OF SUPPLY
EXAMPLE ONLY

NOTE:

see
other sections of O&M MANUAL
for
hardware itemized cut sheets

SETPOINT VALVES AT TIME OF START UP

DATE: _____

BY: _____

PARAMETER	VALUE	UNITS
Headbox Desired Level		Inches
Headbox Hi-Hi Level Alarm		Inches
Headbox Hi Level Warning (Stop Feed)		Inches
Headbox Level to Resume Feed		%
Constant Flow Mode Feed Pump Speed		%
Variable flow Mode Screw Press Speed		%
Polymer Ratio to Feed Pump		
Screw Press Shutdown Delay		Minutes
Maximum Pause Time Allowed		Minutes
Screw Press Auto Shutdown Timer		Hours
Washwater Top Solenoid ON Time		Seconds
Washwater Top Solenoid OFF Time		Minutes
Washwater Headbox Solenoid ON Time		Seconds
Washwater Headbox Solenoid OFF Time		Minutes
Washwater Bottom Solenoid ON Time		Seconds
Washwater Bottom Solenoid OFF Time		Minutes
Constant Flow PID		
Gain / Proportional		n/a
Integral		n/a
Derivative (typ zero)		n/a
Min Speed		%
Max Speed		%
Zero Cutoff Deadband		Inches
Use on Startup	Initial CV	Initial CV
Initial CV		%
Variable Flow PID		
Gain / Proportional		n/a
Integral		n/a
Derivative (typ zero)		n/a
Min Speed		%
Max Speed		%
Zero Cutoff Deadband		Inches
Use on Startup	Initial CV	Initial CV
Initial CV		%

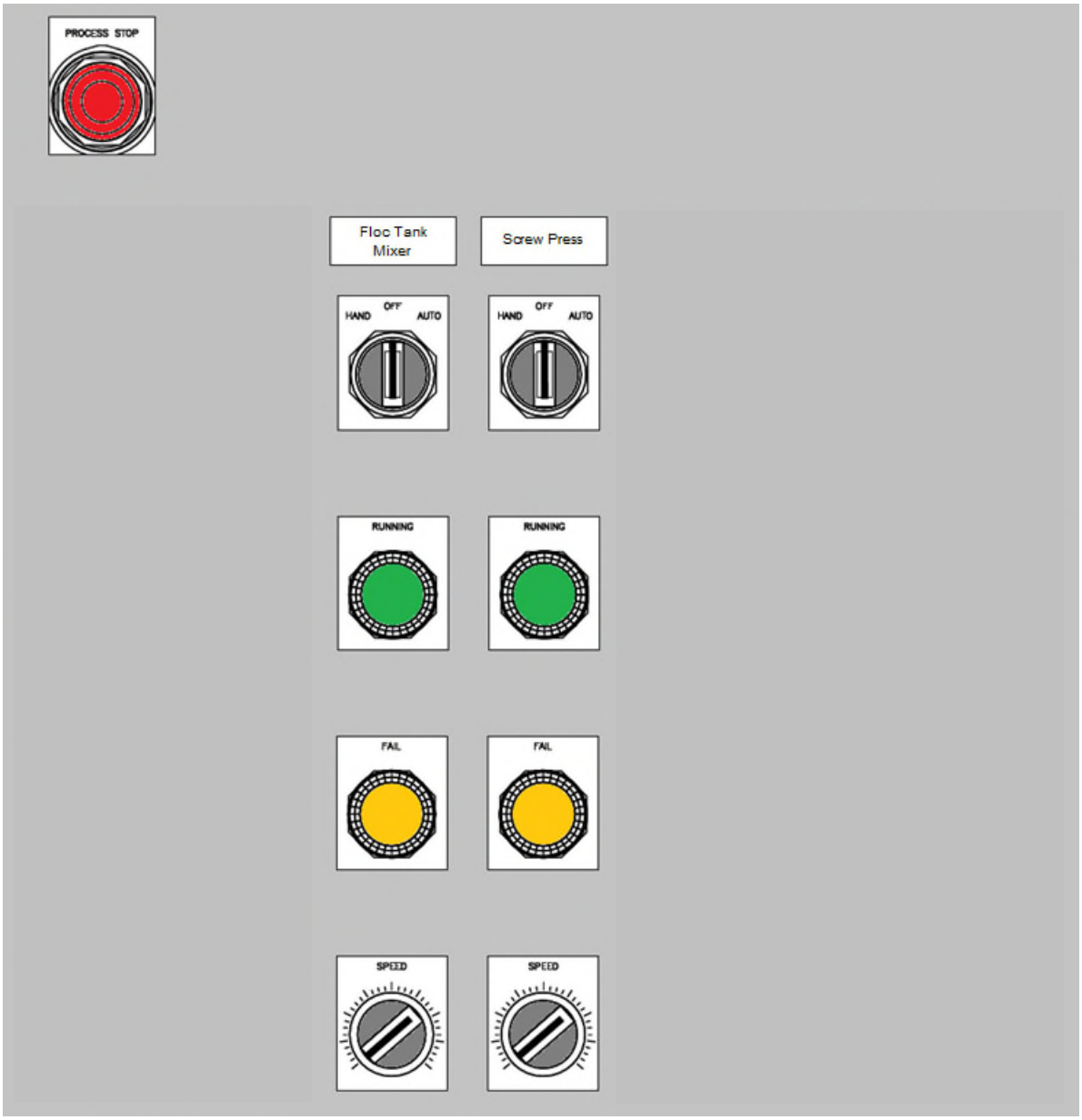


Figure CP-1 : Example Control Panel Door Layout – EXAMPLE ONLY. Actual layout may vary.

Process Stop Button

Pressing this button at any time will stop all equipment labeled on the front door of the control panel, i.e. screw press and flocculation tank mixer. This equipment will not be able to re-start until this alarm is cleared on the HMI alarm screen.

HOA (OCA) Switches

HAND - To run a piece of equipment without any interlocks to other equipment, rotate its HOA switch to the HAND position. The piece of equipment will run continuously until the HOA switch is returned to the OFF position.

OFF – The piece of equipment will not run in HAND or in AUTO with its HOA switch in the OFF position.

AUTO – This gives control of all the equipment listed to the PLC. At this point the equipment is now controlled by the selector switches and buttons on the HMI screen. The operator can now use the HMI to put the equipment in HAND, OFF or AUTO mode for PLC control.

Running Green Lights

For each piece of equipment labeled on the front door of the control panel, the green light below its HOA switch will be lit up when it is running in HAND or AUTO.

FAIL Orange Lights

For each piece of equipment labeled on the front door of the control panel, the red light below its HOA switch will be lit up when a fault has occurred with its respective motor starter or VFD. The piece of equipment will not be able to re-start until the alarm is cleared on the HMI alarm screen.

Potentiometers

There is a potentiometer for the sludge feed pumps, flocculation tank (optional, only if there is VFD for the flocculation tank motor), and the screw press. When the HOA switch of one the screw press is switched to HAND, then the potentiometer below its HOA switch is used to set the speed of its motor anywhere between the minimum and maximum speed programmed into the VFD.

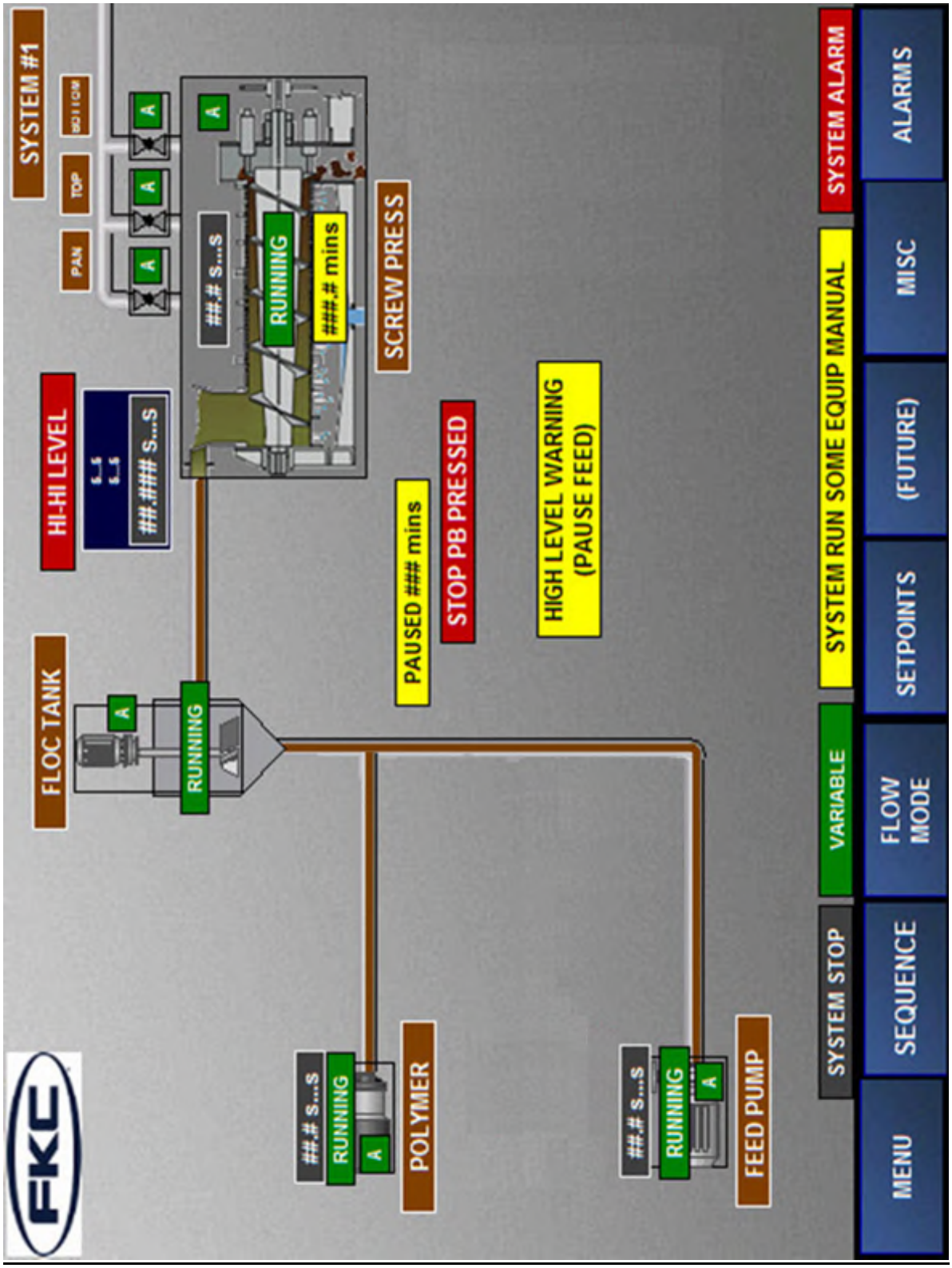


Figure CP-2 : Screw Press Overview Screen – EXAMPLE ONLY. Actual screens may vary.

System Labels

System Labels appear as white text with brown backgrounds. The operator cannot select or change these labels. They are for information display only, showing what the graphic, switch or value is referring to. They remain constant over time and do not change.

Alarms

Alarms are displayed as white text with red backgrounds. They are not normally displayed and appear only when an alarm occurs. If an alarm is displayed, then it will disappear only when the alarm has been cleared on the Alarm screen.

FAILURE

This alarm occurs when the motor starter trips or VFD faults for a specific piece of equipment. It will be displayed next to the graphic of the equipment that has faulted. The motor starter or VFD will need to be reset, then the alarm cleared from the Alarm screen before system operation can proceed.

HI-HI LEVEL

This alarm occurs when the level in the screw press headbox hits the hi-hi level probe electrode mounted on the headbox.

RUN/FAIL

This alarm occurs when a piece of equipment does not run when it is being called by the control panel to run. It will be displayed next to the graphic of the equipment that has faulted. The cause of the alarm will need to be resolved, then the alarm cleared from the Alarm screen before system operation can proceed.

STOP PB PRESSED

This alarm occurs when the Process Stop Button is pressed on the front door of the control panel. See Figure CP-1 : Control Panel Door Layout for more information.

SYSTEM ALARM

This alarm can occur for several reasons. When this alarm is displayed then the operator will need to go to the Alarm screen to see what the specific alarm is, then clear the alarm before system operation can proceed.

System Status Labels

System Status Labels appear as black text with yellow backgrounds. They are for information display only and may change over time depending on the current status of the system.

HIGH LEVEL WARNING (PAUSE FEED)

This occurs when a high level is reached in the screw press headbox while running in AUTO. See Systems Setpoint screen for the Headbox High Level Warning setpoint. The sludge and polymer flows stop along with the flocculation tank. Once the screw press headbox level drops to zero then the flows and flocculation tank start back up again.

SYSTEM RUN SOME EQUIPMENT IN MANUAL

If the system is running in AUTO and one or more pieces of equipment are then set to HAND, then this system status label appears to let the operator know that not all equipment is in AUTO. This means that some of the interlocks programmed for the equipment in HAND may not be active. Typically, all equipment should be set to AUTO while the system is running in AUTO.

###.# mins

If the system is in an auto shutdown, then the system uses operator setpoints for the amount of time left to run the screw press and/or conveyor. This "###.# mins" label displays for the operator how much time is left for the screw press and/or conveyor to run in auto shutdown.

Paused ###.# mins

If the system has detected a high level in the screw press headbox, then the system pauses all the equipment except for the screw press and conveyor. This is an attempt to drop the headbox back down to normal levels. A "High Level Warning (Pause Feed)" and "Paused ###.# mins" status labels are then displayed. The "Paused ###.# mins" label displays for the operator how much the system has been paused due to a high level warning.

Equipment Status Labels

Equipment Status Labels appear as white text with a green background. They are for information display only and may change over time depending on the current status of the piece of equipment. They display if a piece of equipment is currently “RUNNING”, “H” for in HAND, or “A” for in AUTO. This type of display can also show if the equipment which flow mode (VARIABLE or CONSTANT) is active for running in AUTO.

CONSTANT

If CONSTANT is selected in FLOW MODE, then the HMI will display CONSTANT on the main overview screen. The PLC will maintain constant sludge and polymer flows while varying the screw press speed to maintain a relatively constant headbox level over time.

VARIABLE

If VARIABLE is selected in FLOW MODE, then the HMI will display VARIABLE on the main overview screen. The PLC will maintain a constant screw press speed while varying the sludge and polymer flow to maintain a relatively constant headbox level over time. This is the preferred mode over CONSTANT.

Analog Parameter Value Displays

Analog Parameter Value Displays appear as white numbers with a dark gray background. They are for information display only and change over time depending on the current value of the analog signal. The values shown correspond to flow for flow meters and the level for the screw press headbox. See the Equipment Control Pop-Up screen description for how to set HAND speeds of these analog parameters. See the System Setpoints screens description for how to set AUTO speed for these analog parameters.

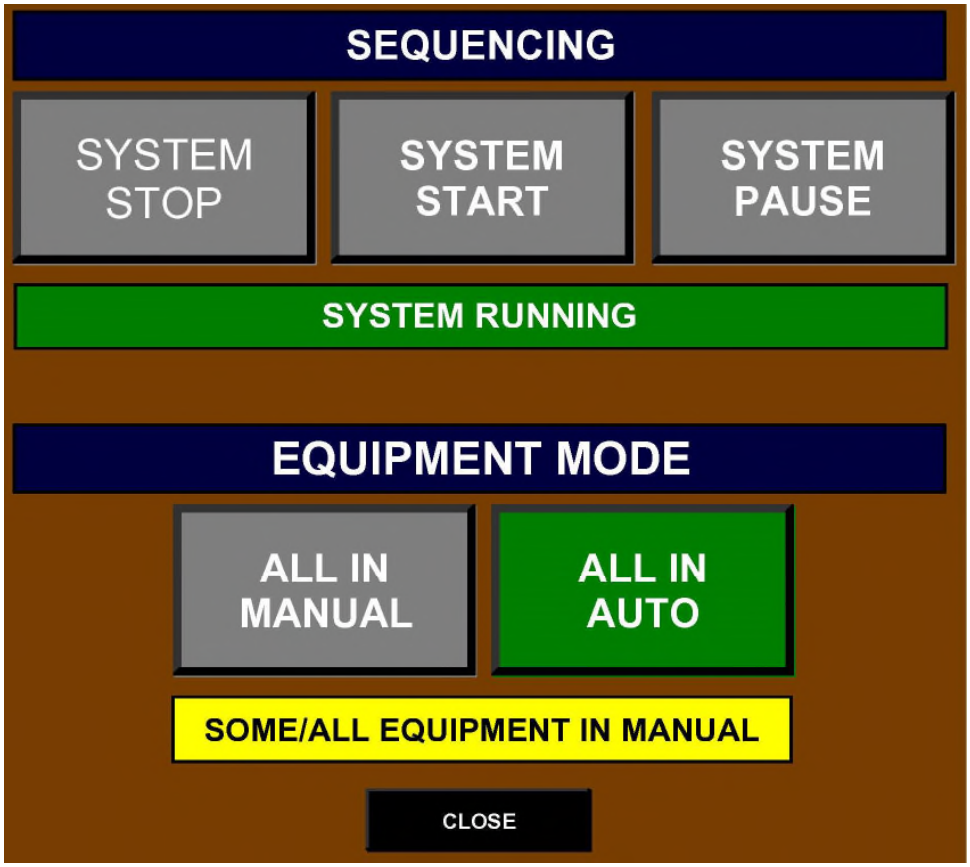


Figure CP-3 : Sequence Screen EXAMPLE ONLY. Actual screens may vary.

SYSTEM STOP

Pressing this button will set all equipment to OFF on the HMI controls. This does not stop any equipment that is set to HAND with their HOA switch on the front panel of the control panel.

SYSTEM START

With all the HOA switches set to AUTO on the front door of the control panel, and with all equipment set to AUTO on the HMI control screens, the entire dewatering system will startup in AUTO when this SYSTEM START button is pressed.

SYSTEM PAUSE

With all the HOA switches set to AUTO on the front door of the control panel, and with all equipment set to AUTO on the HMI control screens, the entire dewatering system will pause when this SYSTEM PAUSE button is pressed. See System Status Labels in the Screw Press Overview screen description for more information.

SYSTEM RUNNING

This shows the status of the entire dewatering system. It will either show that the system is OFF, the system is running, or the system is in PAUSE.

ALL EQUIPMENT IN MANUAL

With all the HOA switches set to AUTO on the front door of the control panel, pressing this button will cause all the equipment to be set in HAND by the PLC Control. See the Equipment Control Pop-Up screen for more information.

ALL EQUIPMENT IN AUTO

With all the HOA switches set to AUTO on the front door of the control panel, pressing this button will cause all the equipment to be set in AUTO by the PLC Control. See the Equipment Control Pop-Up screen for more information.

SOME/ALL EQUIPMENT IN MANUAL

This shows the status of all the equipment. It will either show that that all equipment is in HAND, all equipment is in AUTO, or SOME/ALL EQUIPMENT IN MANUAL.

CLOSE

Pressing this button will return you to the Screw Press Overview Screen.

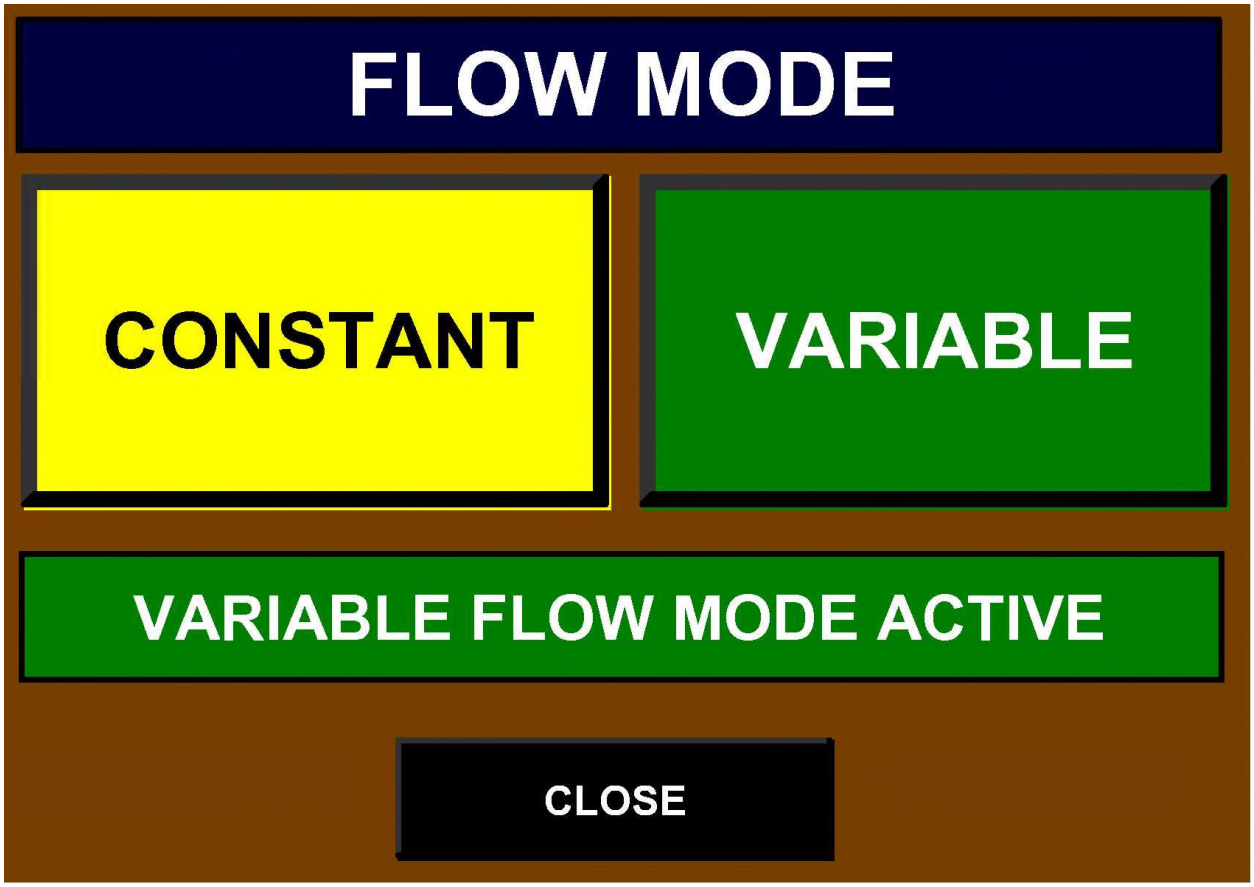


Figure CP-4 : Flow Mode Screen EXAMPLE ONLY. Actual screens may vary.

CONSTANT

This button affects how the system runs the process while in AUTO mode. If CONSTANT is selected, then the PLC will maintain constant sludge and polymer flows while varying the screw press speed to maintain a relatively constant headbox level over time.

VARIABLE

This button affects how the system runs the process while in AUTO mode. If VARIABLE is selected, then the PLC will maintain a constant screw press speed while varying the sludge and polymer flow to maintain a relatively constant headbox level over time. This is the preferred mode over CONSTANT.

VARIABLE FLOW MODE ACTIVE

This shows the current status of the system. It will either show VARIABLE FLOW MODE ACTIVE or CONSTANT FLOW MODE ACTIVE.

CLOSE

Pressing this button will return you to the Screw Press Overview Screen.

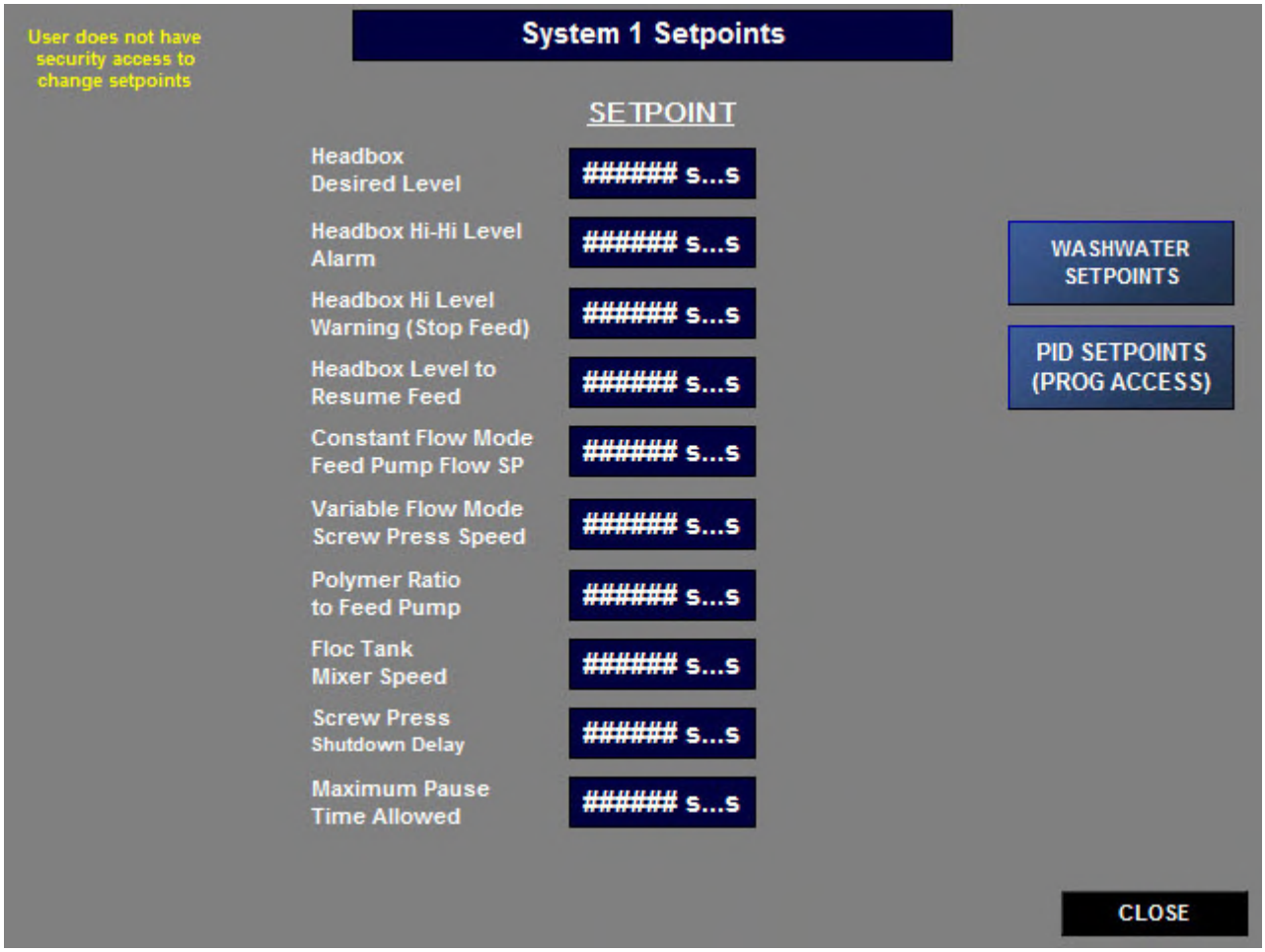


Figure CP-5 : System Setpoints Screen EXAMPLE ONLY. Actual screens may vary.

Headbox Desired Level

When running in AUTO, the PLC attempts to maintain a relatively stable screw press headbox level by varying either the screw speed or the sludge & polymer flows. The Headbox Desired Level setpoint is the operator selected target level that the PLC is always trying to achieve.

Headbox Hi-Hi Level Alarm

Whether in AUTO, HAND or OFF, the headbox level sensor continually measures the level in the screw press headbox. This Headbox Hi-Hi Level Alarm setpoint is the level at which the Hi-Hi Level Alarm will occur. A backup for this alarm (should the headbox level sensor fail) is the conductance level probe mounted on the headbox that will also cause the Hi-Hi Level Alarm to occur.

Headbox Hi Level Warning (Stop Feed)

When running in AUTO, the PLC attempts to maintain a relatively stable screw press headbox level. Situations like poor screw press screen drainage or poor flocculation will cause the headbox level to rise regardless of the PLC's attempt to bring the level down. This Headbox Hi Level Warning setpoint is the level at which the operator would like the sludge and polymer flows to stop in an attempt to prevent hitting the headbox hi-hi level. Once the headbox level drops to zero then the sludge and polymer flows will start up again.

Headbox Hi Level to Resume Feed

After a Headbox Hi Level Warning stops the sludge and polymer flow, the flows will resume after the Headbox Hi Level to Resume Feed has been reached. The system then continues to run in normal AUTO operation.

Constant Flow Mode Feed Pump Speed

This value sets the sludge feed pump speed at a constant speed for CONSTANT FLOW MODE operation while running in AUTO. The polymer pump will also maintain a constant speed since in AUTO it proportionally follows the sludge feed pump speed.

Variable Flow Mode Screw Press Speed

This value sets the screw press speed at a constant speed for VARIABLE FLOW MODE operation while running in AUTO.

Polymer Ratio to Feed Pump Flow

In AUTO mode, the polymer pump speed proportionally follows the sludge feed pump speed. The polymer pump % speed is calculated using this setpoint. The simplified calculation can be expressed as [Sludge Pump Speed] x [Polymer Ratio to Feed Pump Flow setpoint] = [Polymer Pump Speed].

Flocculation Tank Mixer Speed

In AUTO mode, the flocculation tank mixer speed is set a d adjusted using this setpoint.

Screw Press Shutdown Delay

When the system undergoes an AUTO shutdown cycle, the flocculation tank, sludge and polymer flows shutdown immediately. However, the screw press will continue to run based on the time entered in the Screw Press Shutdown Delay setpoint. This allows the operator to select how empty he would like to leave the screw press after an AUTO shutdown.

Maximum Pause Time Allowed

See the Headbox Hi Level Warning setpoint description. The Headbox Max. Pause Time Allowed setpoint is used to time how long the system remains PAUSED after the screw press headbox hi level is reached. If the Max. Pause Time Allowed is exceeded, then the system will alarm and shutdown with the expectation that something is wrong with the process. The operator will need to troubleshoot the dewatering process and correct the problem before starting up again.

WASHWATER SETPOINTS

Press this button to access the Washwater Setpoints screen.

PID SETPOPINTS

Press this button to access the PID Setpoints screen.

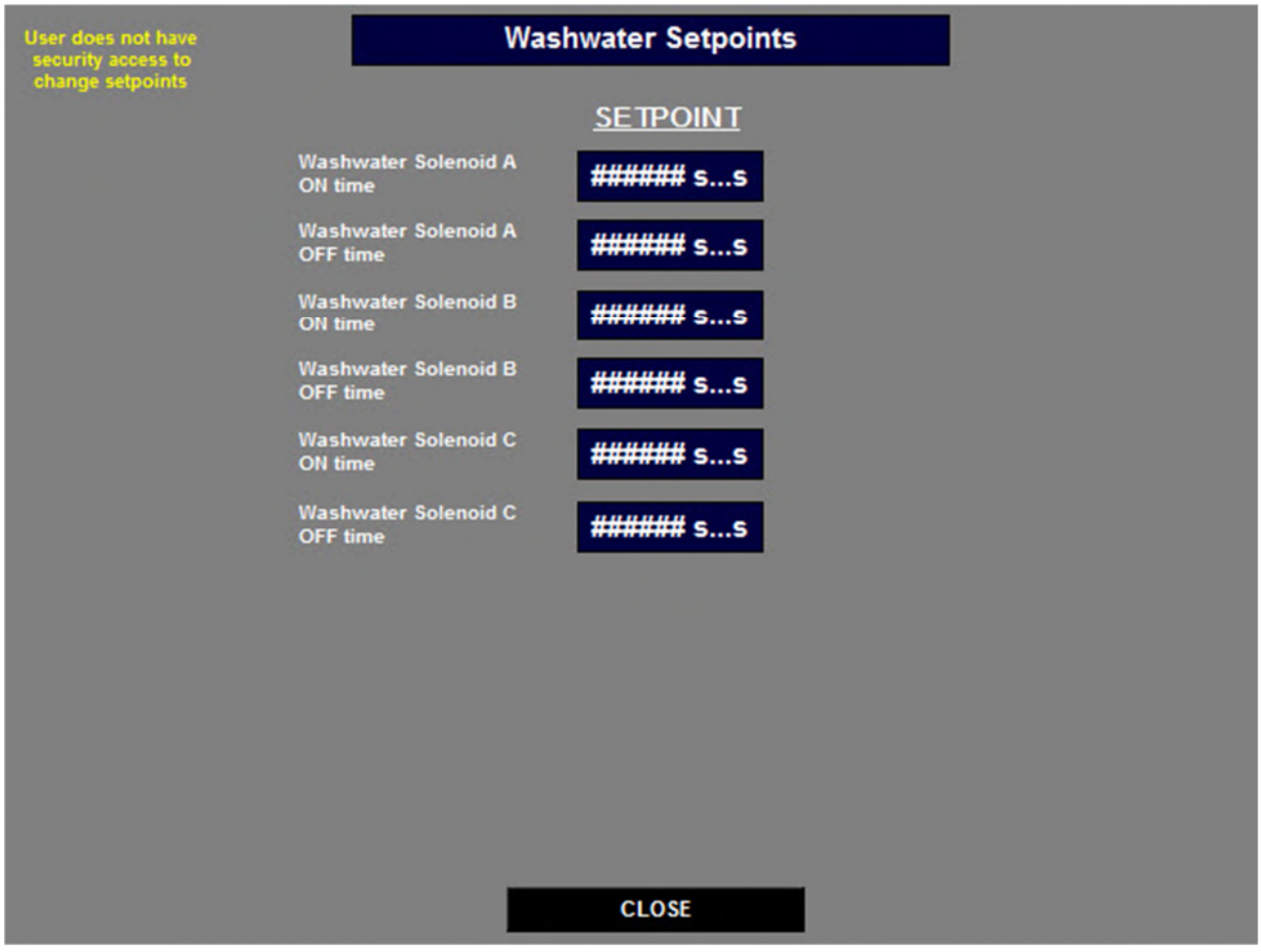


Figure CP-6 : Washwater Setpoint Screen EXAMPLE ONLY. Actual screens may vary.

The PLC will ensure that only one solenoid valve will be on at one time.

Washwater Top Solenoid ON Time

This is the amount of time in seconds that the top solenoid valve will be open.

Washwater Top Solenoid OFF Time

This is the amount of time in minutes that the top solenoid valve will be closed.

Washwater Headbox Solenoid ON Time

This is the amount of time in seconds that the headbox solenoid valve will be open.

Washwater Headbox Solenoid OFF Time

This is the amount of time in minutes that the headbox solenoid valve will be closed.

Washwater Bottom Solenoid ON Time

This is the amount of time in seconds that the bottom solenoid valve will be open.

Washwater Bottom Solenoid OFF Time

This is the amount of time in minutes that the bottom solenoid valve will be closed.



Figure CP-7 : PID Setpoints Screen EXAMPLE ONLY. Actual screens may vary.

Gain / Proportional

This value is the Proportional Gain of the PID loop that attempts to maintain relatively constant headbox level. For Constant Flow, the screw press speed is adjusted. For Variable flow, the sludge & polymer flows are adjusted. Proportional Gain accounts for the present value of the headbox level error from the desired setpoint. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Integral

This value is the Integral Gain of the PID loop that attempts to maintain relatively constant headbox level. For Constant Flow, the screw press speed is adjusted. For Variable flow, the sludge & polymer flows are adjusted. Integral Gain accounts for past values of the headbox level errors away the desired setpoint. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Derivative (typically zero)

This value is the Derivative of the PID loop that attempts to maintain relatively constant headbox level. For Constant Flow, the screw press speed is adjusted. For Variable flow, the sludge & polymer flows are adjusted. The derivative accounts for possible future values of headbox level errors away the desired setpoint. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Min Speed

When running in AUTO Constant Flow Mode, this sets the minimum speed of the screw press. In AUTO Variable Flow Mode, this sets the minimum speed of the sludge feed pump. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Max Speed

When running in AUTO Constant Flow Mode, this sets the maximum speed of the screw press. In AUTO Variable Flow Mode, this sets the maximum speed of the sludge feed pump. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Zero Cutoff Deadband

For the PID loop that attempts to maintain a relatively constant headbox level, this setpoint determines the deadband (+/-) around the headbox level setpoint that is insignificant. This generally means that although the current headbox level is not EXACTLY at the desired level setpoint, the PID loop does not consider the error to be significant enough for a change to occur. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Use on Startup

This determines was value is plugged into the Process Value (PV) of the PID at startup. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Initial CV

This is the value that will be plugged into the Current Value (CV) of the PID loop at startup. The operator does not have security access to change this setpoint. Please consult with FKC before making any PID setpoint changes.

Primary Setpoints

Press this button to access the Setpoints screen.

Washwater Setpoints

Press this button to access the Washwater Setpoints screen.

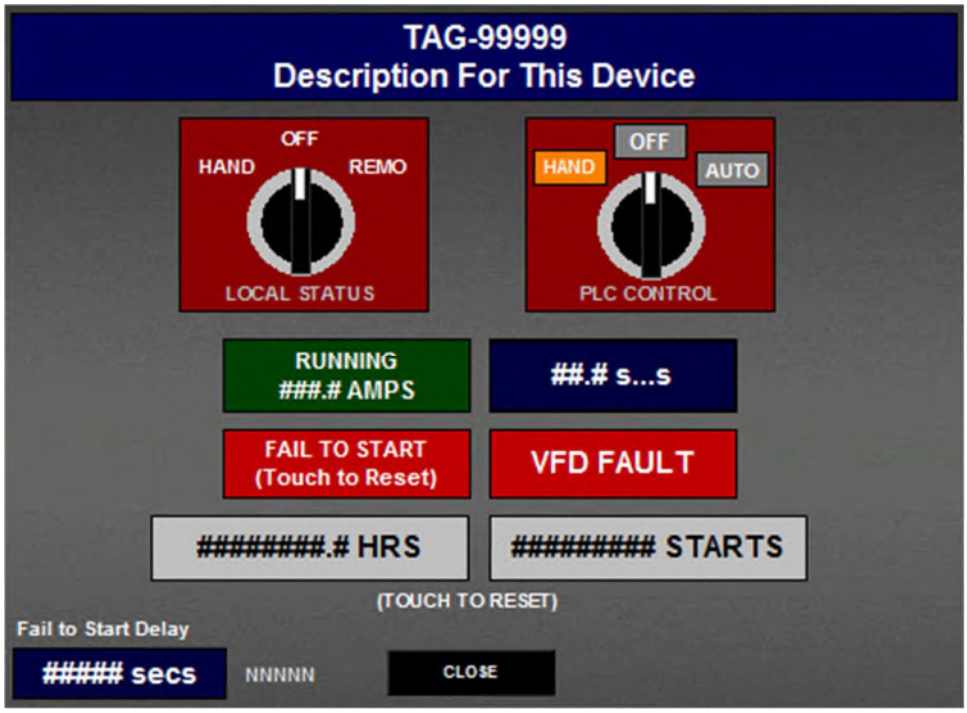


Figure CP – 8 : Equipment Control Pop-Up Screen EXAMPLE ONLY. Actual screens may vary.

This pop-up is accessed for each piece of equipment on the main overview screen by pressing the M logo beside the equipment's graphic.

LOCAL STATUS HAND/OFF/REMOTE

This graphic shows the status of the given equipment's HOA switch found on the front door of the control panel. The operator can only change the state of this graphic by switching the front door HOA switch to a different position.

PLC CONTROL HAND/OFF/AUTO

This graphic allows the operator to switch PLC Control from HAND, OFF or AUTO. In order for this HMI switch to work, the HOA switch on the front door of the control panel for this particular equipment must be set to AUTO. This can be verified by the LOCAL STATUS HAND/OFF/AUTO graphic showing that the switch is set to REMOTE.

RUNNING AMPS

This label shows the current running status and amp draw for the given equipment's motor.

MOTOR SPEED

This label shows the current running speed for the given equipment's motor.

FAIL TO START

This label indicates that a FAIL TO START alarm has occurred for this equipment. To reset and make this alarm disappear, touch this FAIL TO START label.

VFD FAULT

This label indicates that a VFD FAULT has occurred for this equipment's motor. To clear the fault and make this alarm disappear, touch this VFD FAULT label.

RUNTIME HOURS

This label displays the runtime hours for this equipment's motor since the last reset. To reset this value, touch this RUNTIME HOURS label and it will reset to zero.

NUMBER OF STARTS

This label displays the number of starts that has occurred with this equipment's motor since the last reset. To reset this value, touch this NUMBER OF STARTS label and it will reset to zero.

FAIL TO START DELAY

This is a setpoint for motor operation. This value is the wait time between a motor not starting and a FAIL START ALARM occurring.

CLOSE

Pressing this button will return you to the Screw Press Overview Screen.

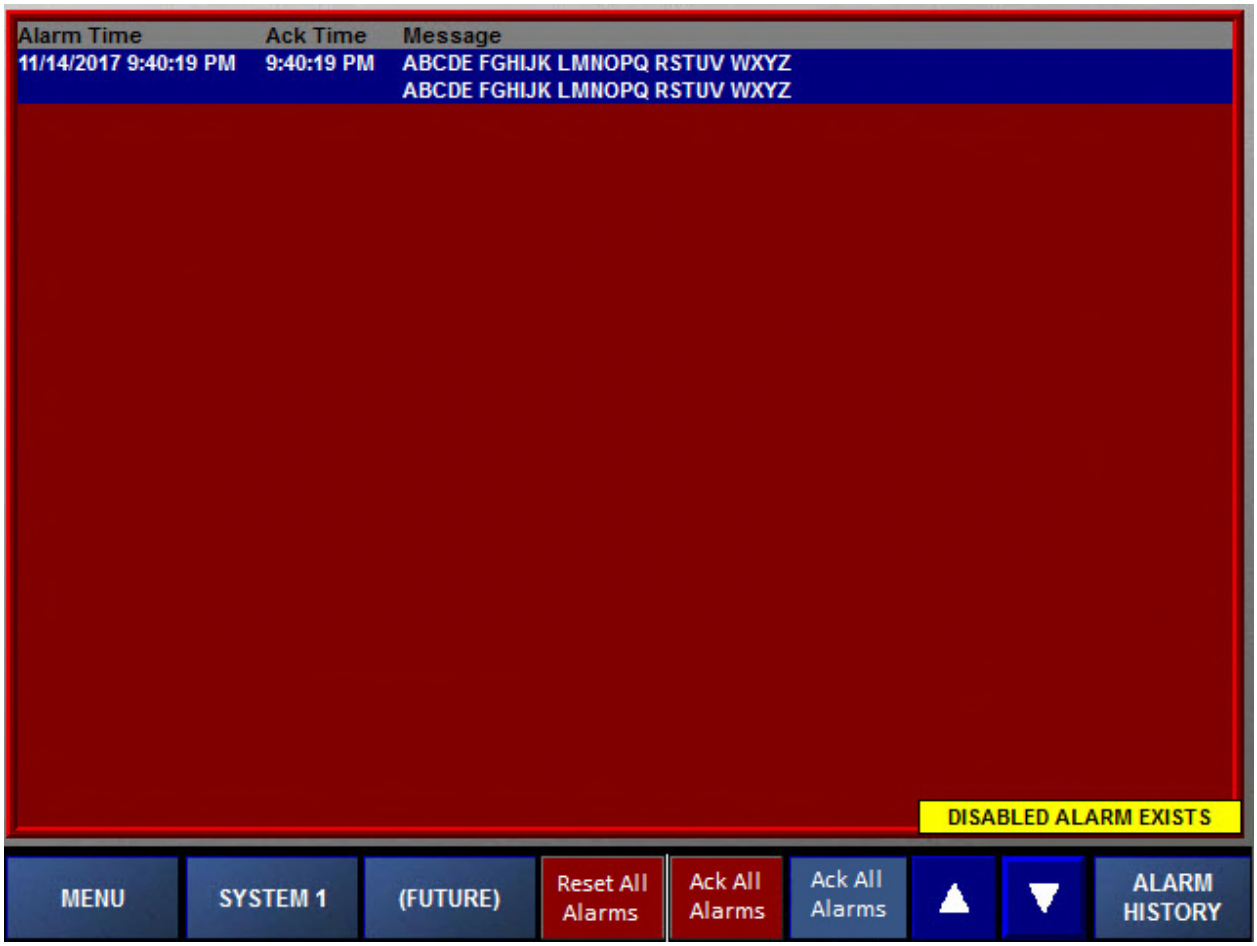


Figure CP –9: Alarm Screen EXAMPLE ONLY. Actual screens may vary.

RESET ALARMS

Press this button to reset and clear all the current alarms.

ACK ALL

Press this button to acknowledge all current alarms. This will allow the alarms to clear and the equipment to be re-started in HAND or AUTO.

ALARM HISTORY

Press this button to view the list of alarms in the order they occurred.

Equipment / System Redundancy

FKC CO., LTD.

2708 West 18th Street
Port Angeles, WA 98363

(360) 452-9472
FAX (360) 452-6880

System Redundancy

Project: City of San Luis West WWTP, AZ
Project Engineer: Wesley Bond
Equipment Name: FKC Screw Press and associated equipment

FKC's bid package includes two sludge feed pumps.

No other equipment has redundance, including the conveyor, screw press, flocculation tank, or polymer system.

O&M Manual

SCREW PRESS

Operation and Maintenance Data

BIOSOLIDS DEWATERING EQUIPMENT

Screw Press
Flocculation Tank
Controls

Reference Only

FKC Co., Ltd.
2708 W. 18th St.
Port Angeles, WA 98363
(360) 452-9472
www.fkcscrewpress.com

Screw Press

Reference Only

OPERATION AND MAINTENANCE MANUALS FOR FKC SCREW PRESS

Visalia Water Conservation Plant
Visalia, California

FKC CO., LTD.
2708 West 18th Street
Port Angeles, WA 98363
Tel: (360) 452-9472 • Fax: (360) 452-6880
e-mail: mail@fkcscrewpress.com

Screw Press

Part 1 – Equipment Summary

FKC Biosolids Dewatering

Equipment Summary

FKC Screw Press

FKC Serial Number	M-2795 1/2
City of Visalia Tag #	8SDPRO1 / 8SDPRO2
Process Area	Sludge Dewatering Facility

FKC Flocculation Tank

FKC Serial Number	FT-302 1/2
City of Visalia Tag #	8SCT01 / 8SCT02
City of Visalia Tag # Mixer	8MXR01 / 8MXR02
Process Area	Sludge Dewatering Facility

Part 1
General Principles

SECTION 1

GENERAL PRINCIPLES

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1B GENERAL MECHANICAL CONSTRUCTION Page 1-2

1C GENERAL OPERATING PRINCIPLES Page 1-3

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b) HEADBOX LEVEL Page 1-4

c) PRESSURE CONE SETTING Page 1-4

d) SCREW INLET CONSISTENCY Page 1-5

1D ADDITIONAL PERFORMANCE INFORMATION Page 1-6

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c) SLUDGE PROPERTIES Page 1-6

1E CONCLUSION Page 1-7

SECTION 1A

SCREW PRESS INTRODUCTION

A screw press will achieve maximum performance only if the operator controls the various factors affecting its operation. In order to control these various conditions, the screw press operator must have the basic understanding regarding screw press operation this manual provides.

FKC screw presses have been in use with municipal biosolids, pulp & paper, food, chemical, and industrial applications since 1958. Some uses include, secondary sludges (Waste Activated, Aerobically Digested), primary and secondary sludge dewatering, wood pulp dewatering, spent grains and many others.

The function of the screw press is to remove liquid from a solid/liquid mixture. This is accomplished by squeezing the solid/liquid mixture while allowing liquids to escape through perforated screens surrounding the screw while retaining the solids inside the press.

As shown in Figure 1A, the solid/liquid mixture enters the screw press by way of the head box at the inlet end. The mixture is conveyed from the inlet end to the outlet end of the press by the rotating screw. As the material is conveyed along the length of the press it is squeezed between the tapered screw shell and the screen drums. The dry solids exit the press at the discharge end and fall down the discharge box. The liquid (pressate) that was forced out through the screens is collected in the pressate pan and flows to the discharge flange.

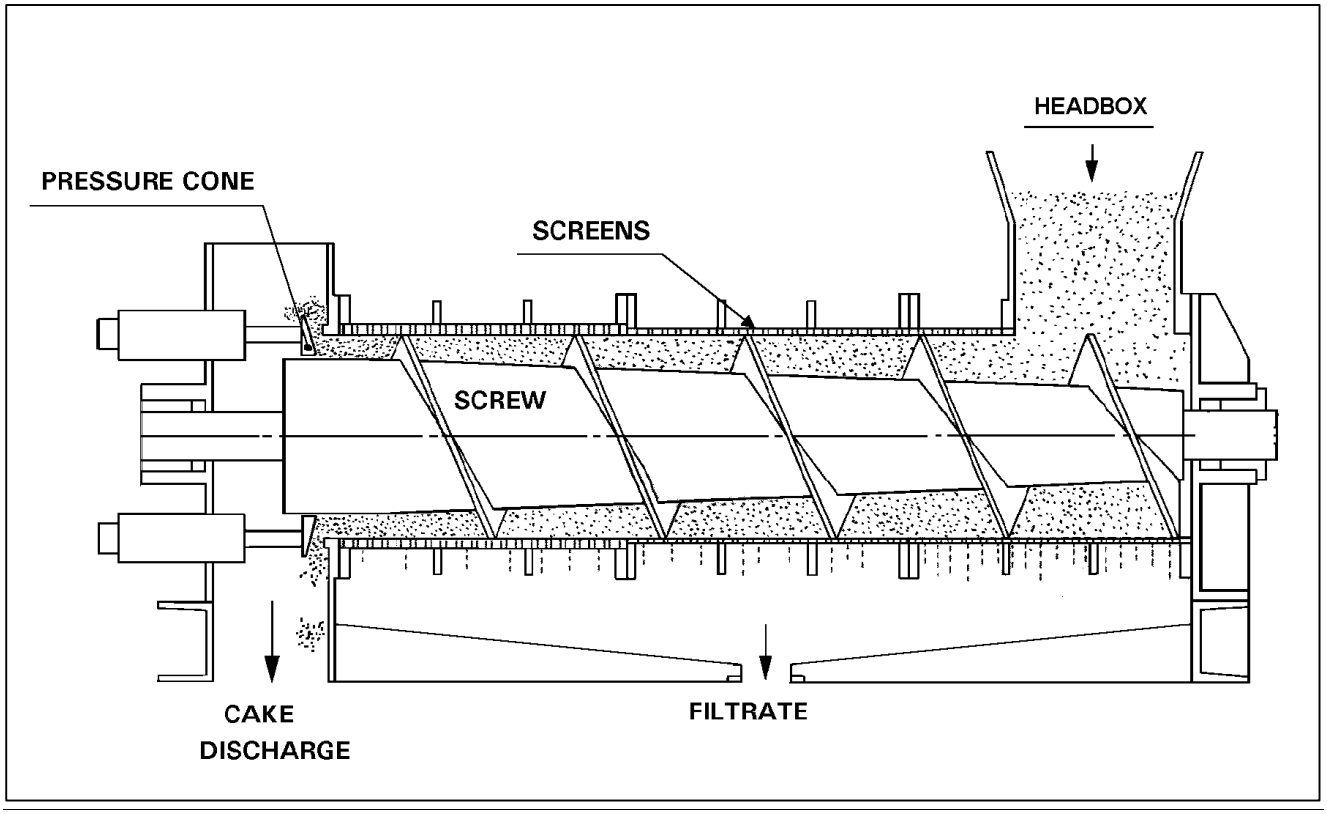


FIGURE 1A SCREW PRESS CROSS SECTION

SECTION 1B

GENERAL MECHANICAL CONSTRUCTION

The key component of the screw press is the screw. As Figure 1B shows, the screw consists of a tapered shell to which a helical flight is attached. The outside diameter of the flight is constant. The tapered shell is smallest at the inlet end and largest at the discharge end. The screw rotates inside a series of drums lined with replaceable, perforated, stainless steel screens.

The screw is supported by two radial, spherical roller bearings. The screw and bearings can be accessed by lifting the top half of the drums and bearing stands as shown in Figure 1B.

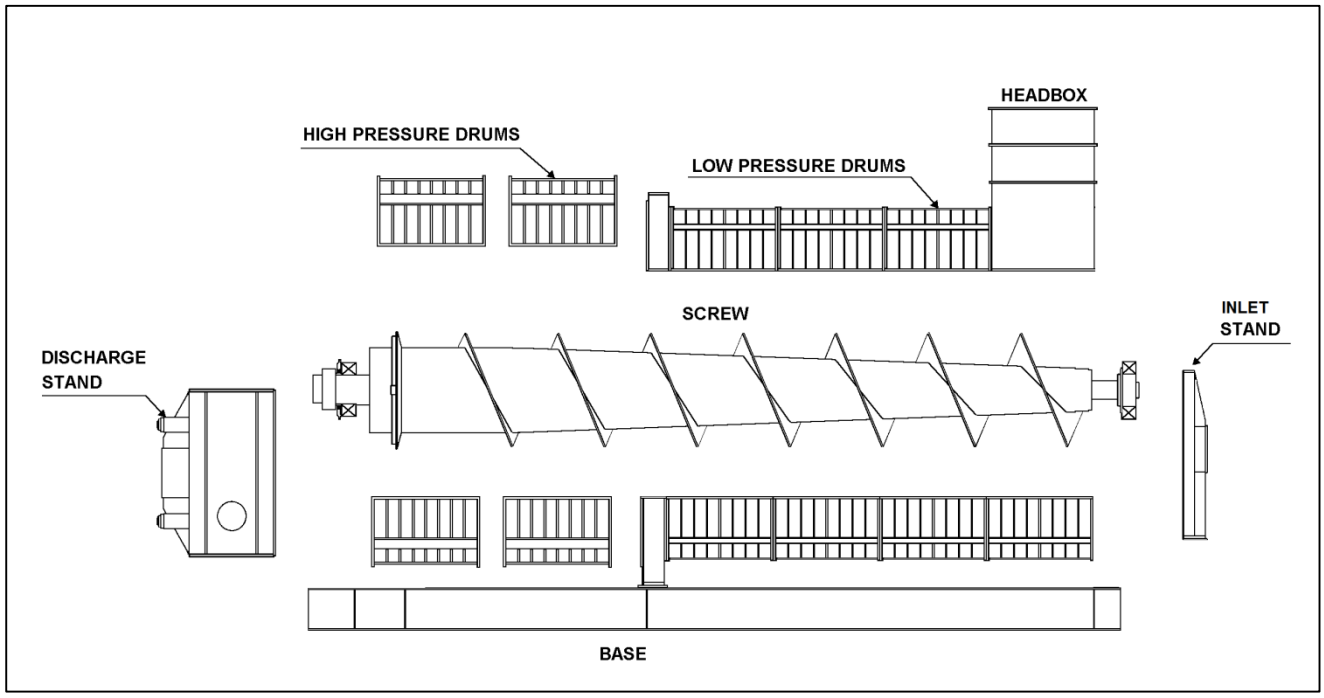


FIGURE 1B - SCREW PRESS EXPLODED VIEW

SECTION 1C

GENERAL OPERATIONAL PRINCIPLES

Screw Press throughput and discharge cake consistency are determined by many factors including screw speed, headbox level, sludge feed rate, back pressure, sludge inlet consistency, sludge conditioning, and other sludge properties. To thoroughly facilitate overall screw press performance, the effect each factor has on throughput and discharge cake consistency must be understood.

Table 1D below summarizes the resulting screw press performance caused by varying screw speed, headbox level, and backpressure. Detailed explanations can be found on the following pages.

	OPERATING PARAMETER		OUTPUT CONSISTENCY	THROUGHPUT CAPACITY	MOTOR LOAD
a.	SCREW SPEED	UP	DOWN	UP	UP
		DOWN	UP	DOWN	DOWN
b.	HEADBOX LEVEL	UP	UP	UP	UP
		DOWN	DOWN	DOWN	DOWN
c.	BACK PRESSURE	UP	UP	DOWN	UP
		DOWN	DOWN	UP	DOWN
d.	INLET CONSISTENCY	UP	SAME	GPM DOWN	SAME
		DOWN	SAME	GPM UP	SAME

TABLE 1C - FUNDAMENTAL OPERATING RELATIONSHIPS

Assuming sludge pump speed is controlled by headbox level and all other factors remain constant, adjustments to the operational parameters listed will have the effects noted on the chart above.

Note: The effects of backpressure on discharge cake solids should be relatively minimal compared with the resulting increase of required motor amperage.

SECTION 1C (con't)

a) SCREW SPEED

Screw speed is directly related to throughput and inversely related to discharge cake consistency, assuming all other factors (listed below) remain constant.

Throughput will increase if screw speed is increased and will decrease if screw speed is decreased. The screw press works similar to a screw conveyor in that the faster it turns, the more material it conveys.

Discharge cake consistency will decrease if screw speed is increased and will increase if screw speed is decreased. A faster screw speed reduces retention time of the sludge in the press resulting in less dewatering or lower discharge cake consistency. A slower screw speed allows for a longer retention time of sludge in the press, which results in more dewatering and a higher discharge cake consistency.

The screw speed or throughput rate at which a given discharge cake consistency can be achieved/maintained will vary as sludge characteristics change.

b) HEADBOX LEVEL

Headbox level is directly related to both throughput and discharge cake consistency, assuming all other factors remain constant.

If headbox level is increased (i.e. sludge flow is increased), throughput, discharge cake consistency, and drawn motor amperage will increase. This is because the higher headbox level promotes increased dewatering in the "gravity drainage" section (first section at the inlet end of the press), resulting in a higher consistency material (more solids per volume) being fed into the press.

Conversely, if headbox level is decreased (i.e. sludge flow is decreased) both throughput and discharge cake consistency will decrease. This is because less gravity drainage occurs at the inlet end of the press resulting in a lower consistency material (less solids per volume) being fed into the press.

c) PRESSURE CONE SETTING (BACK PRESSURE)

The pressure cone applies backpressure on the cake in the high-pressure section of the press (see Figure 1A). The pressure is adjusted by moving the cone closer or further from the discharge of the screw press. This adjustment is done with the equipment is off and the cake is removed from the discharge of the machine. Generally, as backpressure is increased, the discharge cake consistency of fibrous materials increases and the throughput remains constant (or possibly decreases) due to increased rotation of sludge with the screen. The adverse effects of increasing back pressure include accelerated wear, higher motor load, increased chance of plugging, and decreased capture efficiency for low fiber sludges.

d) INLET CONSISTENCY

At a given screw speed and sludge type, the screw press over time will process the same amount of dry pounds per hour. When the inlet consistency varies, the dry pounds per hour capacity stays the same while the flow or gallons per minute capacity will change.

INLET CONSISTENCY	DRY SOLIDS LBS/HR	GALLONS PER MINUTE
2.0%	625	62.5
2.1%	625	59.5
2.2%	625	56.8
2.3%	625	54.3
2.4%	625	52.0
2.5%	625	50.0

TABLE 1D-2 Relationship to inlet consistency and gallons per minute.

It is also important to keep the same polymer dosage rate, even when the inlet consistency varies. If the inlet consistency varies greatly overtime, then increased operator attention or monitoring of the inlet consistency may be required to maintain a proper polymer dose.

SECTION 1D

ADDITIONAL PERFORMANCE INFORMATION

a) FEED RATE

Feed rate (which is a function of both sludge flow & consistency) and headbox level are interrelated. If the screw speed is kept constant, then an increase in feed rate will result in an increase in headbox level. The increase in headbox level will promote gravity drainage at the inlet end of the press and result in increases in throughput and discharge cake dryness. Conversely, if the feed rate decreases (with screw speed remaining constant), the headbox level will decrease and less gravity drainage will occur resulting in decreased throughput and discharge cake consistency.

b) CHEMICAL CONDITIONING (FLOCCULATION)

Most sludges, require flocculation prior to being dewatered. Typically, the chemical conditioning rate is ratioed to the sludge feed rate to insure correct dosage.

In order to minimize polymer consumption (i.e. maximize polymer efficiency) and improve dewaterability, it is important to choose the chemical or combination of chemicals (e.g. coagulant and/or flocculant) best suited for the specific sludge to be dewatered.

Poor conditioning results in decreased capture efficiency for the press and reduces dewaterability of the sludge yielding lower throughput capacity and discharge cake consistency.

c) SLUDGE PROPERTIES

The most important, yet least controllable factor in sludge dewatering is the sludge itself. Dewaterability depends upon the type, freeness, fiber content, ash content, pH level, etc. of the sludge.

Although it is generally difficult to control sludge properties it is important to understand the effects of sludge characteristics on sludge dewaterability.

As fiber content and/or length increases, dewaterability generally increases. As ash content increases, discharge cake consistency generally also increases; however, both capture efficiency and wear due to abrasion can increase.

Primary sludges are easier to dewater than secondary sludges. As the ratio of primary to secondary sludge varies in a blended sludge, the dewaterability of the sludge blend will vary accordingly.

Changes in the pH level of the sludge indirectly affect dewaterability. Generally, chemical Conditioners (polymers) added to flocculate the sludge work best within a certain pH range. If the pH level of the sludge swings outside the functional range of the polymer, then poor conditioning results, leading to reduced dewaterability, throughput, discharge cake consistency, and capture efficiency.

SECTION 1E

CONCLUSION

A screw press operator needs to understand the various factors involved in press performance to be able to operate the screw press efficiently and safely.

In ideal situations, sludge conditions do not change so that the operational settings of the screw press (screw speed, headbox level, etc.,) remain constant. In the real world, sludge conditions change on a day-to-day, and sometimes hour-to-hour, basis.

As sludge conditions (flow rate, inlet consistency, fiber content, etc.) vary, appropriate changes need to be made to screw press operational settings to optimize performance or to avoid overload situations. Since every sludge is different and each mill experiences unique periodic variations in their sludge, it is not possible to itemize specific operational changes for each change in sludge characteristics. However, with good operational records, see section 10, FKC can assist in making recommendations for fine-tuning.

Initial screw press operation should be based on operational settings determined by FKC during start-up. If significant changes occur in the sludge properties after start-up, contact FKC for revised operational settings.

Contact your FKC representative if you have any questions or concerns about FKC Screw Press operations.

Screw Press

Part 2 – Operational Procedures

Part 2

Assembly & Installation Instructions

SECTION 2

ASSEMBLY & INSTALLATION INSTRUCTIONS

2A SCREW PRESS DRUM COVERS Page 2-1

a) DRUM COVER INSTALLATION INSTRUCTIONS Page 2-1
b) DRUM COVER ASSEMBLY DIAGRAMS Page 2-2

2B TIGHTENING TORQUE FOR RIGID SCREWS Page 2-3

SECTION 2A

SCREW PRESS DRUM COVERS

a) DRUM COVER INSTALLATION INSTRUCTIONS

The lightweight drum covers are designed to be installed and removed easily by one person without the use of tools.

Note that there are two types of covers - top covers and side covers. All of the covers are numbered.

Note that the draw latches which attach the side covers to the top covers have a LOCK BUTTON on the side of the latch. The LOCK BUTTON must be pressed before the latch can be opened. If the latch is forced open it will be permanently damaged.

For simple installation and removal, refer to the following instructions and drawings:

1. Hang the cover clips on the drums as shown on the attached DRUM COVER ASSEMBLY DIAGRAMS 1-3. Note that the clips should be positioned about 7 inches from the drum ends. There are four different types of clips - two sizes used with the upper drum halves, and two sizes used with the lower drum halves. Of the two upper drum types, the clips used on the low pressure drums (the drums toward the inlet end) are longer in length. Conversely, clips used on the lower half of the the low pressure drums are the shorter of the two lower half types.

2. Install the #2 top cover.

3. Install the #1 and #3 top covers.

4. Install the #5 top cover.

5. Install the #4 and #6 top covers.

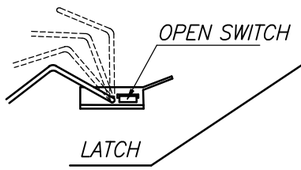
6. Install the #2 side cover.
   Note that one side has dots over the numbers and the other side does not.

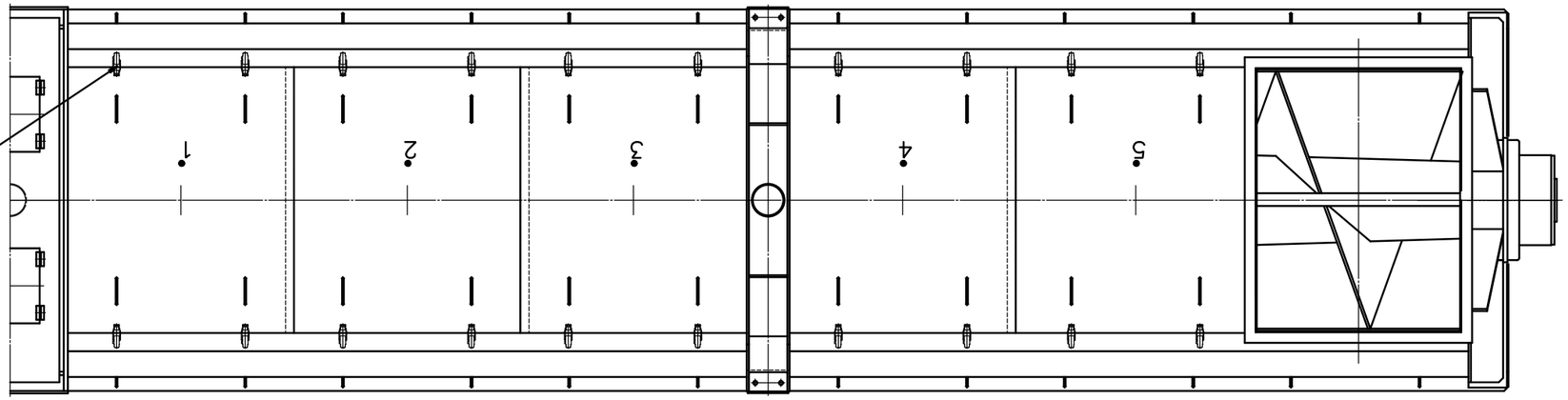
7. Install the #1 and #3 side covers.

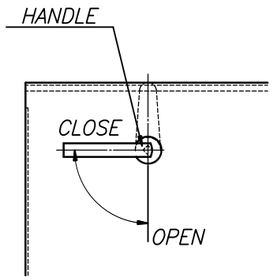
8. Install the #5 side cover.

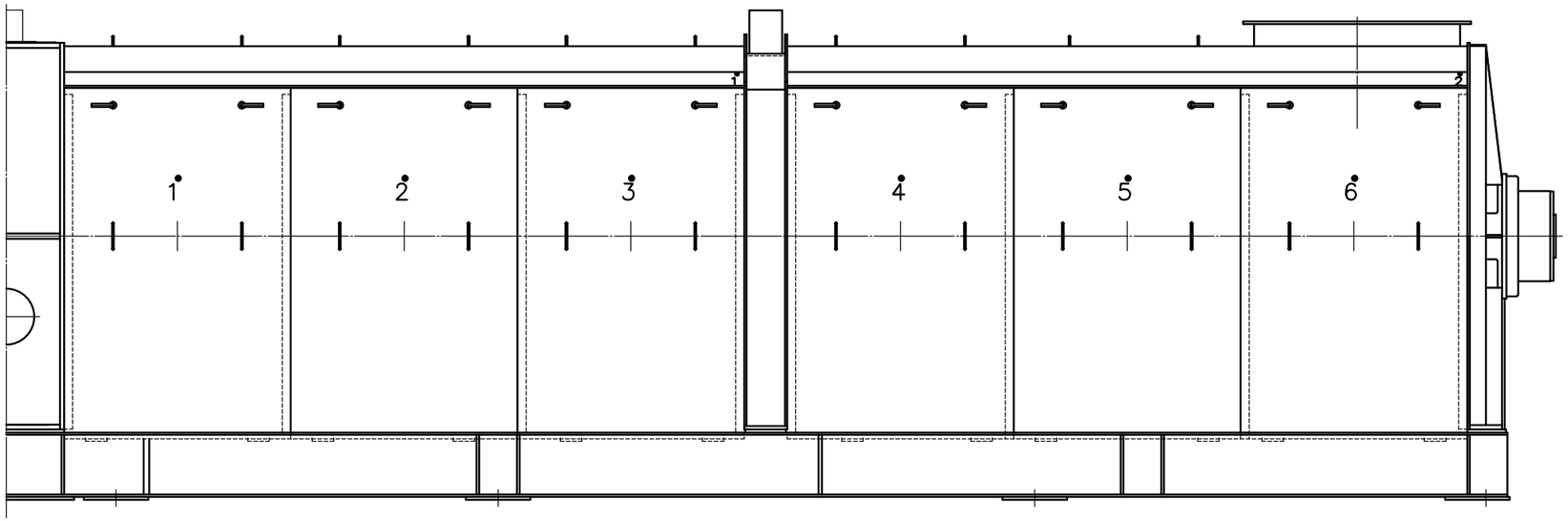
9. Install the #4 and #6 side covers.

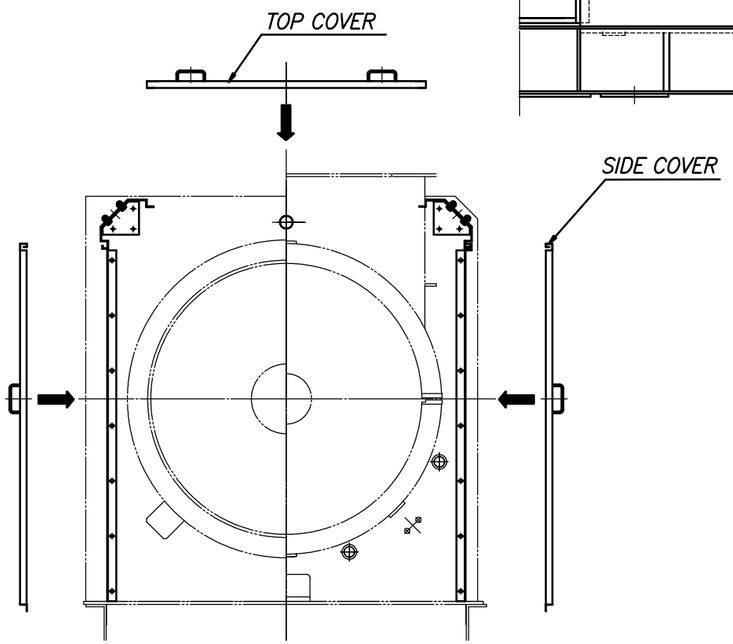
6. Use the draw latches to attach the side covers to the top covers.

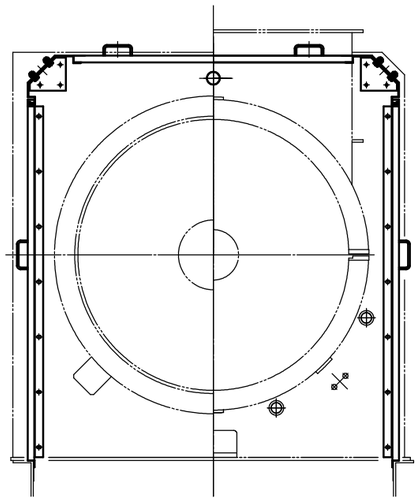












THE ORDER OF ASEMBLY OF DURM COVER

2→1→3	2→1→3
5→4	5→4→6
(TOP COVER)	(SIDE COVER)

JOB No. M−2795	Messrs. City of Visalia, CA WWTP	Quantity 2	Scale 1/15
Drawing No.	Title BHX−1200X6500L Drum cover assembly	Date 8/7/15	
		Drawn by S.Endo	
			Ref. JOB No.

FUKOKU KOGYO CO., LTD.

TIGHTENING TORQUES FOR RIGID SCREWS

TIGHTENING TORQUES & PRE-STRESSING FORCES FOR RIGID SCREWS (NORMAL THREADS)

	Pre-stressing forces (kN)					Tightening Torques (Nm)				
Class (Mat. No.)	5.6	8.8	A4-50	A4-70	C3-80	5.6	8.8	A4-50	A4-70	C3-80
Thread										
M-16	28	60	20	42	60	75	160	53	115	160
M-20	44	94	31	66	94	145	315	105	220	315
M-24	64	436	44	53	436	255	545	180	210	545
M-30	101	215	71	84	215	505	1080	355	420	1080
M-36	147	314	103	123	314	885	1890	620	735	1890
M-42	202	430	-	-	430	1420	3020	-	-	3020
M-48	265	566	-	-	566	2130	5430	-	-	4530

The thread and screw head should be lubricated with an appropriate lubricatnt (for example Molyslide Plus by Loctite) in order to obtain the required friction coefficient. This applies in particular to stainless and adic-resistant screws since the friction coefficient for these two materials can be much higher without lubricant.

The above pre-stressing figures are standard bolt connection.

Part 2

Initial Prestart Inspection

SECTION 3

INITIAL PRESTART INSPECTION

SECTION 3

INITIAL PRESTART INSPECTION

Prior to FKC arriving on-site for screw press start-up, confirm the following items:

		✓
A)	Verify screw press is mounted on rigid foundation, installed with the specified anchor bolts, and leveled per FKC requirements. See Section 3A for leveling specifications.	
B)	Verify that all anchor bolts are tight.	
C)	Re-torque all bolts on screw press prior to startup.	
D)	Verify that the press is completely assembled including safety guards.	
E)	Verify screw press covers are properly installed.	
F)	Verify that the supplied motor matches the motor specified by FKC.	
G)	Verify that the motor and speed reducer have been properly aligned. Send copies of alignment records if motor was not installed at the factory.	
H)	Verify lubrication of: ⇒ Speed Reducer ⇒ Main Screw Shaft Bearings	
I)	Verify electrical connections are complete.	
J)	Verify control headbox level / flow control system is complete including flow meter.	
K)	Verify calibration of headbox level transmitter and flow meter.	
L)	Verify high motor load alarm trip set-point is set per FKC recommendations.	
M)	Program DCS/PLC to stop the screw press when the actual % motor load exceeds high motor load alarm set-point.	
N)	Verify polymer delivery systems are complete and functional.	
O)	Bump Floc Tanks and Screw Press motors for no more than 10 seconds to: ⇒ Verify rotation Check and record amp draw, load on equipment	
P)	Verify clearance between screw flight and inner screen surface along entire screw. Clearance is adjusted at factory however drums occasionally shift during shipment. See Section 7C for instructions on checking clearances. This item will be completed by FKC personnel prior to start-up. Retorque <u>all</u> drum bolts after checking clearances.	

Part 2
Operating Instructions

SECTION 4

OPERATING INSTRUCTIONS

4A STARTING THE SCREW PRESS	Page 4-1
4B STOPPING THE SCREW PRESS	Page 4-2
4C CLEANING THE SCREW PRESS	Page 4-3
4D WARNING: FREEZING CONDITIONS	Page 4-4
4E WARNING: OVERLOADING	Page 4-5
4F UNPLUGGING THE SCREW PRESS	Page 4-6
4G WARNING: MECHANICAL WARRANTY	Page 4-7

SECTION 4A

STARTING THE SCREW PRESS

AUTO START

1. For an initial screw press startup, the checklist in section 4 must be completed before the following instructions. Verify that the press is empty, that is, the press was emptied of sludge/stock during the previous shutdown.

   Note that since the screw flight does not extend all of the way to the discharge end, there will normally be some material visible at the discharge end although the rest of the press is empty.

2. Set all the equipment to AUTO using the HOA switches on the front of the control panel.

3. Set the two polymer system control panels to REMOTE.

4. Ensure that the inlet pipe to the sludge feed pump is full of liquid, either by the sludge itself or with water filled from a priming port.

4. Set all the equipment to AUTO in the HMI of the control panel.

5. Verify that all the control setpoints have the desired values.

6. Press the Start system in AUTO button.

7. Ensure that the stroke length is set properly for each polymer system pump running.

8. Verify proper flocculation of the sludge in the flocculation tank just before it enters into the screw press headbox.

MANUAL START

1. Set the screw press speed potentiometer on the front of the control panel to the desired screw press speed.

2. Set the HOA switch of the screw press to HAND.

.

SECTION 4B

STOPPING THE SCREW PRESS

AUTO STOP

1. Verify that the "*SP Run Timer After Shutdown"* setpoint is set to the proper amount of time.

2. Press the Auto System Shutdown button.

MANUAL STOP

1. Set the HOA switch of the screw press to OFF.

SECTION 4C

CLEANING THE SCREW PRESS

The screw press should be cleaned at least once every month. The press should be cleaned as follows:

1. The press does not need to be shut down to be cleaned. It is recommended that the person doint the cleaning wear protective raingear with full face shield.
2. The top and side covers on the press should be removed. See section 3C.
3. Wash the press from top to bottom the entire length with mill water washdown hose. If there is significant hard deposits of dried sludge, scale, etc. the press may need to be pressure washed.
4. After cleaning the press it should be inspected and the high and low pressure drum bolts checked. See section 7.

SECTION 4D

WARNING: FREEZING CONDITIONS

Do not allow sludge/pulp or condensate to freeze in the equipment! Failure to do so may result in mechanical damage due to freezing expansion!

Please note the following guidelines for operating the FKC screw press under freezing conditions.

1. Completely discharge the sludge/pulp from the screw press prior to stopping the equipment.

2. If the sludge/pulp becomes frozen in the equipment it must be thawed prior to starting. Equipment overload and damage will occur if the equipment is started without thawing the frozen sludge.

SECTION 4E

WARNING: OVERLOADING

Overloading (plugging) of the screw press and drive train should be avoided at all times. However, FKC realizes that at times overload situations occur which can cause the screw press to electrically trip out and stop operating. When an overload situation arises the recommended procedure for restarting/returning to service an overloaded or plugged press is as follows:

1. Inspect the screw press outlet cake. If the material is compressed/compacted to an extremely high consistency and is very hard or if knots, chips, or very long fiber are present, do not attempt to restart the press. Digging out the plugged area of the press must be completed, as described in Section 5E, before restarting. The high-pressure drums should be removed as described in Section 7B, after which the compacted material should be removed. With the top high pressure drums removed the press can be restarted to assist with unplugging.

2. **Screw press with variable frequency drive (VFD)**

   If the outlet cake is soft and has normal fiber and ash content then the press can be restarted as follows:

   a. Back out the pressure cone.

   b. For a VFD (Variable Frequency Drive) unit set speed at 25% and **restart only once**. If the press trips out on overload again **DO NOT RESTART**, unplugging the press must be completed as described in Section 5F.

   d. If the press remains running after restarting at 25% speed then as the motor load drops the speed can be increased slowly until the normal operating speed is achieved.

SECTION 4F

UNPLUGGING THE SCREW PRESS

To unplug a screw press, the following procedure should be followed:

1. Remove the covers on the high pressure section of the press and remove the upper half of the high pressure drums as described in Section 7B.

2. Dig out as much compacted material as possible. With the upper high pressure drums removed start the press. Starting the press will allow the compacted material in the lower portion of the high-pressure drums to rotate out of the press.

3. Once the press is clear of compacted material then reassemble the high pressure drums as described in Section 7B.

4. Replace the covers and restart the press. Increase the screw speed to a faster RPM than normal. Re-establish flow with a low headbox level. Let the system run until it stabilizes and then fine tune operation by adjusting headbox level, RPM, polymer and pressure cone.

SECTION 4G

WARNING: MECHANICAL WARRANTY

1. Jogging

Repetitive restarts (jogging) of the screw press should never be attempted. Failure to follow the unplugging recommendations in section 5D and 5E could result in damage to the screw and/or drive train components. The Mechanical Equipment Warranty does not cover damage to any screw press component caused by jogging an overloaded machine.

2. Reversing

Running the screw backwards **is not** an acceptable method of unplugging the screw press. Reversing a plugged screw press can result in damage to the screw press (Inlet and discharge bearings, chain tensioner, screw flight, and drums). The Mechanical Equipment Warranty does not cover damage caused by reversing the screw.

Part 2
Troubleshooting

SECTION 5

TROUBLESHOOTING

5A PROBLEM: Low Cake Discharge Dryness	Page 5-1
5B PROBLEM: High Screw Press Motor Load	Page 5-1
5C PROBLEM: Low Screw Press Throughput Capacity	Page 5-1
5D PROBLEM: Poor Capture Rate	Page 5-2
5E PROBLEM: Headbox Level Too High	Page 5-2
5F PROBLEM: Unusual Vibration	Page 5-2
5G PROBLEM: Covers Difficult to Install	Page 5-2

SECTION 5

TROUBLESHOOTING

5A PROBLEM: Low Cake Discharge Dryness	
POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Screw Speed Too Fast.....	Reduce Screw Press Speed
- Poor Conditioning.....	Adjust Polymer Flow & Agitation
- Changing Sludge Properties.....	Adjust Polymer/Screw speed/Headbox
- Low Headbox Level.....	Raise Headbox Level Setpoint
- Plugged Screens.....	Remove Covers and Wash Press
- Clearance Problems.....	Readjust Clearances (also, see SECTION 7, parts C,D, and E)
- Low Feed Consistency.....	Check Sludge Properties/Conditioning

5B PROBLEM: High Screw Press Motor Load	
POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Too High Headbox Level.....	Lower Headbox Setpoint
- Too Slow Screw Speed.....	Increase Screw Speed
- Increased Fiber Content.....	Reduce Headbox Lvl/Increase Screw Speed
- Too Much Backpressure.....	Back Off Pressure Cone

5C PROBLEM: Low Screw Press Throughput Capacity	
POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Low Headbox Level.....	Raise Headbox Level Setpoint
- Low Feed Consistency.....	Check Sludge Properties/Conditioning
- Low Screw Speed.....	Increase Screw Speed
- Poor Conditioning.....	Adjust Polymer Flow & Agitation
- Clearance Problems.....	Readjust Clearances (also, see SECTION 7, parts C,D, and E)
- Low Sludge Flow.....	Increase Sludge Flow/Headbox Level

TROUBLESHOOTING (con't)

5D PROBLEM: Poor Capture Rate

POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Poor Conditioning.....	Adjust Polymer Flow, Adjust Agitator
- Too Much Backpressure.....	Back Off Pressure Cone
- Screw Speed Too Fast.....	Reduce Screw Press Speed
- Screen Damage.....	Inspect/Replace Damaged Screens
- Low Feed Consistency.....	Check Sludge Properties/Conditioning

5E PROBLEM: Headbox Level Too High

POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Conditioning Problem.....	Adjust Polymer Flow, Adjust Agitator
- Flow Rate Too High.....	Reduce Flow Rate
- Plugged Overflow.....	Unplug Overflow
- Feedback Loop Overcompensation.....	Adjust Headbox Level Control Setpoints

5F PROBLEM: Unusual Vibration

POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Lack of Chain Lubrication.....	Lubricate Chain/Sprockets (check wear)
- Motor Coupling.....	Inspect for Wear
- Loss of Steam Pressure.....	Increase Steam Pressure/Temperature
- Screw & Screen Contact.....	Readjust Clearances
- High Motor Load.....	Lower Headbox Lvl,Increase Screw Speed
- Stock Spill/ Wood Chips.....	Lower Headbox Lvl,Increase Screw Speed
- Drive Misalignment.....	Realign Drive Train

5G PROBLEM: Covers Difficult to Install

POSSIBLE CAUSES:	REMEDY / ACTION REQUIRED:
- Missing Clips/Holders.....	Install New Clips/Holders
- Bent Covers.....	Rebend Covers to Proper Radius
- Installed in Wrong Order.....	See SECTION 3B for Instructions
- Latches Damaged.....	Remove and straighten LOCK BUTTON

Screw Press

Part 3 – Preventive Maintenance Procedures

Part 3

Maintenance Instructions

SECTION 6

MAINTENANCE INSTRUCTIONS

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SECTION 6A

LUBRICATION (SEE SECTION 6F FOR LUBRICATION DIAGRAM)

a) SPEED REDUCER

1. The oil should be replaced every 6 months when the press is operated less than 10 hours per day.
2. The oil should be replaced every 2500 hours when the press is operated 10 to 24 hours per day.
3. The oil should be replaced every 1 – 3 months when the press is operated high temperature, high humidity, or atmospheric active gases are present.
4. Please refer to the respective SM-CYCLO 6000 series manual for specific recommended schedules, lubricant specifications, replenishment and grease change guidelines.

b) INLET STAND BEARING / OUTLET STAND BEARING

1. Lubricate each bearing monthly using a high quality EP 1 grease. All bearings on the screw press are fitted with grease nipples and spring loaded relief valves. Grease should be injected until it begins to come out the pressure relief valve.
2. **NOTE: These bearings must be kept totally full of grease** due to the extreme low speed operation.

SECTION 6B

OPENING THE SCREW DRUM

a) Drum Removal

Note: Numbers in parenthesis correspond to items shown on the maintenance diagram in Section 6H.

It is usually not necessary to open the Screw Press for inspection, repair, etc. But you may run into a case where a screw inspection is warranted. Often removal of only the upper half of a drum is required. The procedure to remove a complete drum is as follows:

1. Remove all of the bolts from the vertical flanges of the drum half (#3).

2. Remove all of the bolts from the horizontal flanges of the drum half (#2).

3. Lift off the upper drum slowly using a cable and chain block or crane as shown in Maintenance Diagram 6H.

4. Record the number of shims (#1) between the left and right sections and set these shims aside for reinstallation.

5. Support the lower drum half to prevent it from falling. Remove all of the bolts from the vertical flanges (#3).

6. Remove the lower drum from the bottom. If it is tight then use a lead hammer (or the equivalent) to tap it downward. Use caution when removing a bound drum half. Excessive force can cause damage to the drums and fixed supports.

For municipal sludges, high pressure drum removal usually occurs within 7-10 years for an inspection.

SECTION 6B

OPENING THE SCREW DRUM

b) DRUM REINSTALLATION

Note: Numbers in parenthesis correspond to items shown on the maintenance diagram in Section 6H of this manual.

1. Verify that there are no burrs on the drum end flanges, which can make reinstallation difficult.

2. Install the lower drum half from the bottom. Slowly pull the lower drum half in place until the screw flight to screen clearance (#6) is 0.5 mm to 1.5 mm. See Diagram 6C.

3. Install and tighten the vertical flange bolts (#3) for the lower drum.

4. Replace the shims (#1) which were removed during disassembly.

5. Lower the upper drum half into place. If the upper drum is tight, use a lead hammer to tap it into position.

6. Install and tighten the horizontal flange bolts (#2) for the upper drum.

7. Install and tighten the vertical flange bolts (#3) for the upper drum.

8. Check to confirm that all bolts are tight.

9. Verify that the screw flight to screen clearance (#6) for the upper drum half is 0.5 mm to 1.5 mm.

10. Turn the screw press over at minimum speed setting to confirm no contact between the screw flight and screen surfaces.

For municipal sludges, high pressure drum removal usually occurs within 7-10 years for an inspection.

SECTION 6C

CLEARANCES

a) GENERAL INFORMATION

Proper clearance between the inner surface of the screens and the screw flight is very important for optimum Screw Press performance. Check clearances every six to twelve months and adjust as required to maintain maximum screw press performance.

Although the screw shaft rotates very slowly, the outer edge of the screw flight may gradually wear. As the screw flight wears, the clearance slowly increases. Increased clearance can result in screen blinding, decreased dewatering ability, and decreased throughput capacity.

In most cases, the clearance between the inner surface of the screens and the screw flight should be 0.5 to 1.5 mm depending upon the location along the length of the screw press. A greater clearance is generally acceptable at the high pressure section.

Clearance is adjusted by moving the drums in relation to the screw. Clearances can be adjusted in two ways - by removing or inserting shims between the upper and lower halves of the drum sections and by using the jacking bolts to move the drums in relation to the screw. Removing shims is helpful to compensate for wear of the screw flight. The jacking bolts are used to center the drums around the screw. In many instances it is sufficient to adjust clearances along the bottom half of the screw press only.

Note that on new presses there are 0.5 and 1.0 mm shims. If removal of more than 5 mm of shims is required to bring the top & bottom clearances within tolerances then weld build up of the screw flight may be recommended (see SECTION 7E).

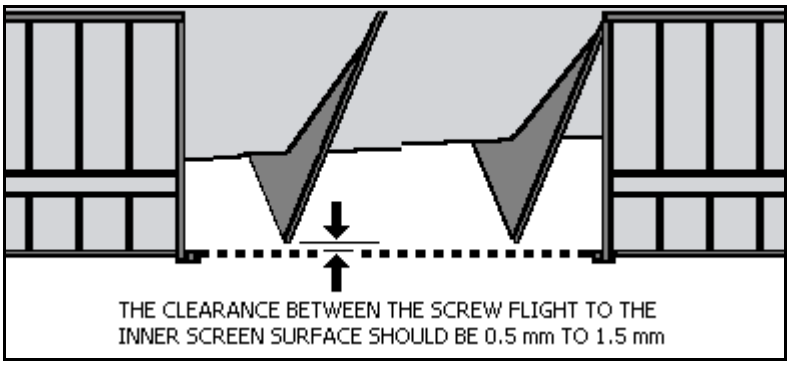


FIGURE 6C – SCREEN CLEARANCE DIAGRAM

SECTION 6C

CLEARANCES

b) CLEARANCE MEASUREMENT

A depth gage is required to measure clearances. The depth gage must have a rod/blade small enough to pass through the screen plate holes (Check the parts list in Part 4 for the screen plate hole sizes). A metric venire caliper with a depth rod is recommended.

1. With the screw press stopped and empty, locate the screw flight by looking through the screen plate holes.

2. Measure the distance from the outer surface of the screen plate to the screw flight using a depth gage.

3. Subtract the thickness of the screen plate from the previous measurement to get the clearance between the inner surface of the screens and the screw flight.

4. Repeat steps 1-3 for the top, bottom, and both sides of each drum along the length of the screw press.

5. Record the clearances on a Screen Clearance Measurement Diagram similar to that shown on page 6-17.

For municipal sludges, this only occurs at the initial startup services by an FKC technician.

SECTION 6C

CLEARANCES

c) CLEARANCE ADJUSTMENT: SHIM METHOD

Note: Numbers in parenthesis correspond to items shown on the Maintenance Diagram in Section 6H.

1. Using the clearance information recorded on the Screen Clearance Measurement Diagram (pg. 6-22), determine the number of shims (#1) to be removed (or added) to adjust the clearances at the top and/or bottom of the press to within tolerance.

2. Loosen the vertical flange bolts (#3) on the lower half of the drum section(s).

3. Loosen the horizontal flange bolts (#2) on the drum section(s) to be adjusted. Note: All of the drum halves in the low-pressure section may be adjusted together as one unit rather than adjusted separately. Separate adjustment of the drum sections may be required to achieve desired tolerance.

4. Back off on the jacking bolts (#4) to allow the lower half of the drum section(s) to drop slightly.

5. Remove all horizontal flange bolts (#2) and remove (or insert) the appropriate number of shims between the upper and lower half of the drum section(s). Verify that the same number of shims are used on both sides of each drum section.

6. Insert and securely tighten all horizontal flange bolts (#2) to draw the lower half of the drum section(s) up to the upper half drum section(s).

7. Securely tighten all vertical flange bolts (#3) on the lower half of the drum section(s). Tighten the jacking bolts (#4) up against the lower drum halves and lock in place with the jam nuts.

8. Recheck clearances to confirm that the proper screw flight to inside screen clearance has been achieved. If the screw is not centered side to side in the drums and the top and bottom clearances are not within tolerance then use the jacking bolts (#4) for the final adjustment.

9. After clearances are rechecked (page 7-6), rotate the screw at minimum speed setting to confirm no contact between the screw flight and inside screen surfaces along the entire length of the Screw Press.

Warning: If the screw is touching the screen at any point, do not operate the press until the proper clearance is achieved. Failure to do so may result in serious mechanical damage.

SECTION 6C

CLEARANCES

d) CLEARANCE ADJUSTMENT: JACKING BOLT METHOD

Note: Numbers in parenthesis correspond to items shown on the Maintenance Diagram in Section 6H.

1. Loosen the vertical flange bolts (#3) on the drum(s) to be adjusted.

2. Turn the jacking bolts (#4) to adjust the position of the drum(s). Adjust the drum position to achieve the clearances required (page 6-6).

3. Securely tighten the vertical flange bolts (#3) on the upper and lower drum halves.

4. Recheck clearances to confirm that the proper screw flight to inside screen clearance has been achieved.

5. After clearances are rechecked, rotate the screw at minimum speed setting to confirm no contact between the screw flight and inside screen surfaces along the entire length of the Screw Press.

Warning: If the screw is touching the screen at any point, do not operate the press until the proper clearance is achieved. Failure to do so may result in serious mechanical damage.

For municipal sludges, high pressure drum removal usually occurs within 7-10 years for an inspection.

SECTION 6D

SCREEN REPLACEMENT

a) GENERAL

The screens lining the screw press drums can become damaged by several means. Depending on the abrasiveness of the sludge, they can wear over the years until they weaken and break. Screen damage can also occur during severe overload conditions or if foreign objects (pipe wrenches, etc.) are introduced into the press.

b) DRUM REMOVAL

Numbers in parenthesis correspond to items shown on the Maintenance Diagram on page 6-17.

Note: remove only the drum half with the damaged screen. Removal of both upper and lower sections at the same time will make reinstalling more difficult.

1. Remove the bolts (#3) from the vertical annular joint between the damaged drum half and the adjacent drum or fixed stand.

2. Remove the bolts (#2) from the horizontal joint joining the upper and lower halves. Note, if the lower drum half is being removed brace the lower drum so it does not fall when the bolts are removed.

3. Remove the drum half from the press. Record the number of shims between the upper and lower sections and set these shims aside for reinstallation.

Screen replacement for municipal sludges does not typically occur in the 1st 15 to 20 years.

SECTION 6D

SCREEN REPLACEMENT (BOLT-IN TYPE)

a) SCREEN REMOVAL (BOLT-IN)

1. Remove the drum in accordance with 6b, then put it on a flat workbench with its split surface upside.

2. Remove the screws the retainer bar and screens can be detached.

b) SCREEN INSTALLATION (BOLT-IN)

1. Install the screen along the drum inner surface with equal margin at both ends of the drum.

2. Replace the retaining bars and screws. Tighten retaining bar screws evenly on both sides of drum. Tightening drum strainers evenly. Tap the convex part marked 4 slightly with a hammer to lay the strainer tightly to the drum surface. Then repeat the procedure until the retainer bars are completely seated and the screws are tightened fully.

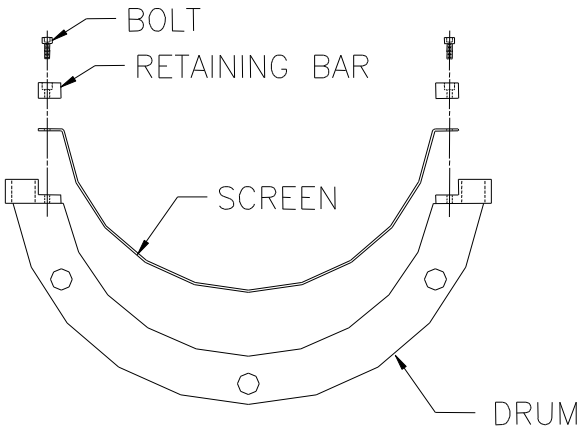


FIGURE 6D - SCREEN REPLACEMENT DIAGRAM
BOLT-IN TYPE

Screen replacement for municipal sludges does not typically occur in the 1st 15 to 20 years.

SECTION 6D

SCREEN REPLACEMENT

e) DRUM REINSTALLATION

Reinstall the drum half on the press using the same number of shims that existed when the drum half was removed. Note that when assembled at the factory, a total of 10 mm of shims are normally installed using a combination of 2 mm and 1 mm thick shims.

FOR AN UPPER DRUM HALF:

1. Replace the shims (#1) which were removed during disassembly.
2. Lower the upper drum half into place. If the upper drum is tight, use a lead hammer to tap it into position.
3. Align the reinstalled drum half with the adjacent drums.
4. Install and tighten the horizontal flange bolts (#2) then the vertical flange bolts (#3).
5. Check and adjust clearances as described in Maintenance Instruction TOPIC: CLEARANCES.

FOR A LOWER DRUM HALF:

1. Slowly pull the lower drum half in place. If the drum is tight, use a lead hammer to tap it into position.
2. Replace the shims (#1) which were removed during disassembly.
3. Install and tighten the horizontal flange bolts (#2) then the vertical flange bolts (#3).
4. Check and adjust clearances as described in Section 6C b) CLEARANCES.

Warning: If the screw is touching the screen at any point, do not operate the press until the proper clearance is achieved. Failure to do so may result in serious mechanical damage. If the clearance between the inner surface of the screen and the screw is not within acceptable tolerances then the clearance must be adjusted.

Screen replacement for municipal sludges does not typically occur in the 1st 15 to 20 years.

SECTION 6 E

FLIGHT REPAIR

The flight at the high-pressure end of the screw will slowly wear. The rate of wear is dependent upon two main factors; the screw speed and the abrasiveness of the material being dewatered. As the abrasiveness and screw speed increase, the rate of wear will also increase. For municipal applications with very low screw sped and low sludge abrasiveness, no significant wear is expected in the first 20 years of operation.

As the screw flight wears, the performance of the screw press declines and the wear of the high-pressure screens accelerates.

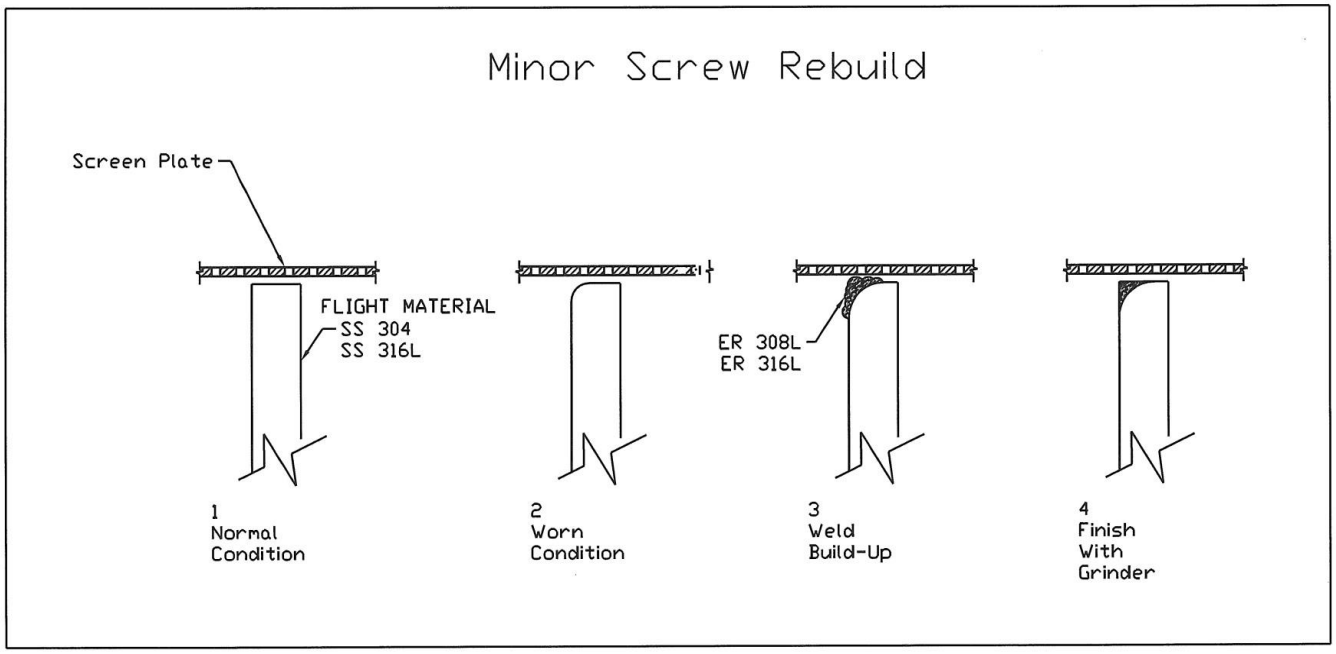
FKC recommends inspecting the high pressure screw flight on an annual basis and repairing the worn flight as required.

a) FLIGHT BUILD-UP

Figure 6E shows the method for field weld build-up of the screw flight to repair minor flight wear.

WARNING:

During weld build-up of the screw flight, ground the welding unit to the screw only. If the welding unit is grounded to the screw press foundation, the electric current will arc through the bearings causing expensive damage.



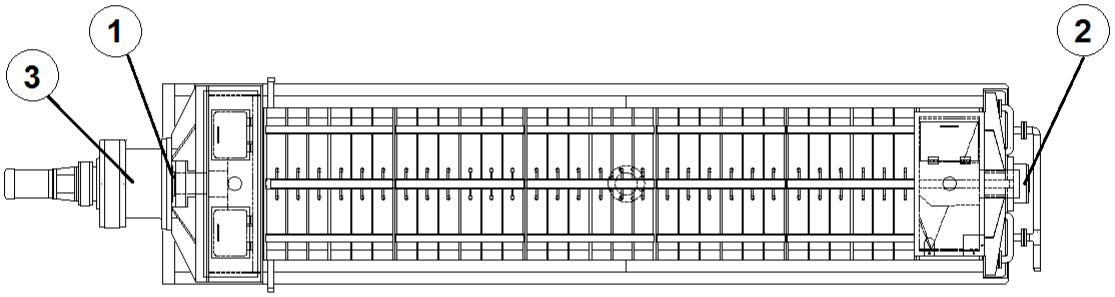
To date (2020), no FKC municpal screw presses supplied in the United States or Canada have needed any flight repair.

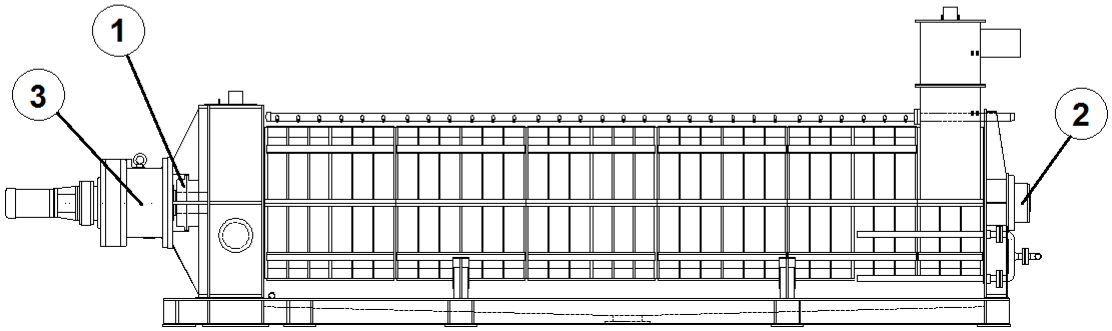
FIGURE 6E - FLIGHT BUILD-UP DIAGRAM

SECTION 6F

LUBRICATION DIAGRAM

Part #	Part	Inspection Interval	Lubrication Interval	Lubrication Specification
1	Bearing	1 Week	1 - 3 Months	Shell Alvania EP 1
2	Bearing	1 Week	1 - 3 Months	Shell Alvania EP 1
3	Reducer	1 Month	2,500 Hours	See Section 8

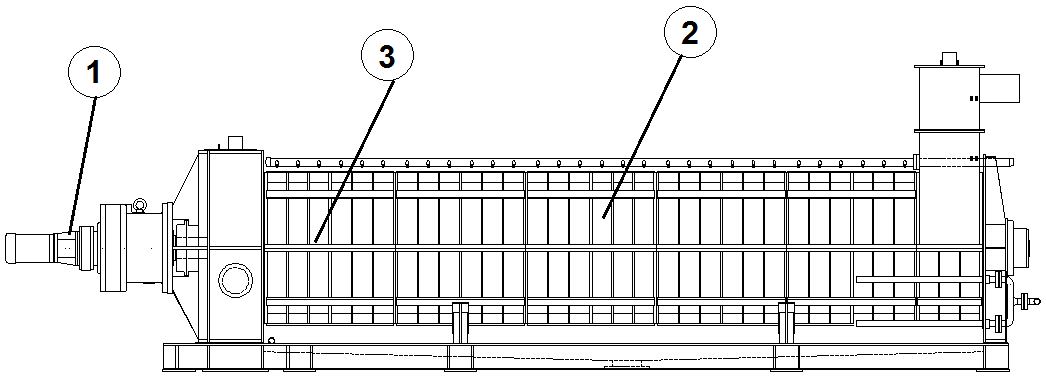




SECTION 6G

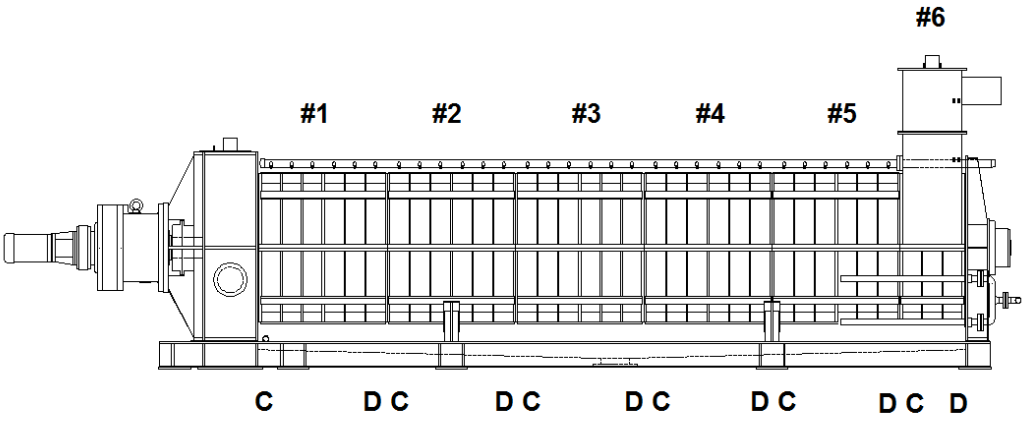
INSPECTION DIAGRAM

PART #	PART	INSPECTION INTERVAL	INSPECTION NOTES
1	COUPLING	1 YEAR	CHECK FOR EXCESSIVE WEAR CHECK FOR EXCESSIVE VIBRATION
2	CLEARANCES	5 YEARS	CHECK SCREW FLIGHT CLEARANCES CHECK DRAINAGE PATTERN
3	BOLTS	5 YEARS	CHECK TORQUE'S AT HIGH PRESSURE DRUMS

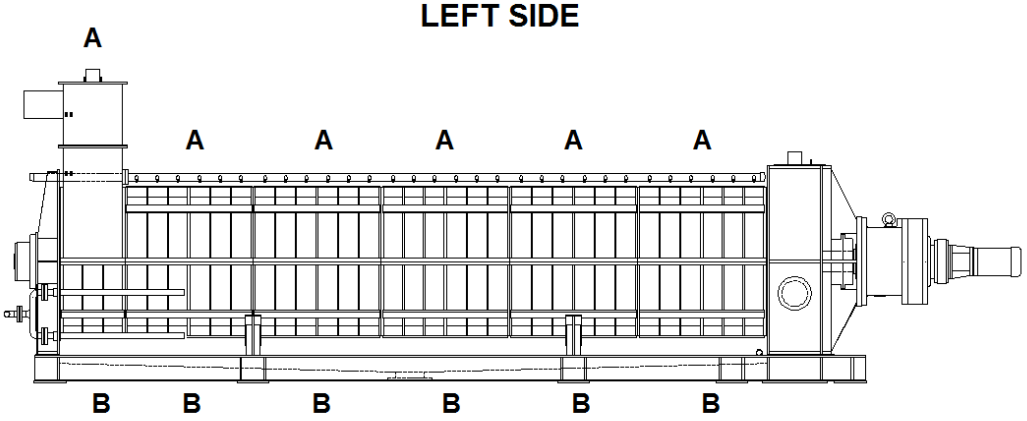


SECTION 6H
SCREW PRESS SCREEN CLEARANCE & INSPECTION DIAGRAM - 6500L

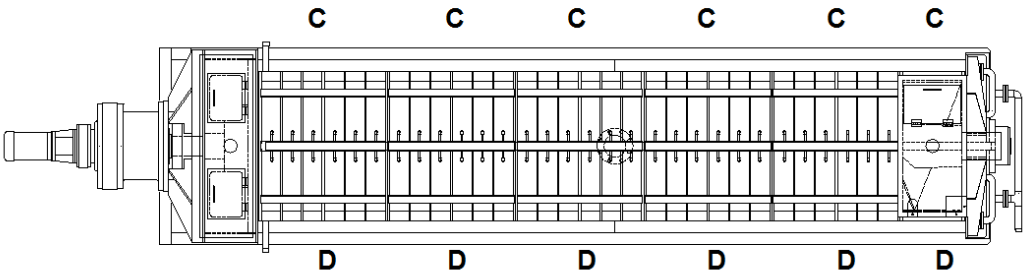
FINAL SCREEN CLEARANCES				
	A	B	C	D
#1				
#2				
#3				
#4				
#5				
#6				



LEFT SIDE



RIGHT SIDE



TOP

SECTION 6I

Screw Press Screw Removal & Re-Assembly

FKC screw presses rarely need the removal of their screws. However, when it is necessary to remove the screw from a press the following describes the preferred procedure for completing the job. FKC recommends that our service representative be present during the screw removal and reinstallation process.

A) Screw Removal

1. Disconnect power to the machine. (Lock machine out.)
2. Remove all process piping, electrical and instrumentation items from the headbox, drum covers, and main body of the screw press.
3. Remove all the drum covers from the press.
4. Remove the headbox.
5. Remove the bolts from the reducer low speed coupling outer sleeve.
6. Remove all drum halves from the press.
7. Remove the bolts and alignment pins holding down the inlet and discharge stands.
8. Support the screw at each end between the stands.
9. At the inlet end of the screw, remove the following items in the order listed;
    a. Gear coupling hub
    b. Thrust nut
    c. Bearing cover
    d. Split bearing housing
    e. Bearing
10. Remove the inlet stand from the screw.
11. At the discharge end of the screw, remove the following items in the order listed;
    a. Rotary joint
    b. Thrust nut
    c. Bearing cover
    d. Split gearing housing
    e. Bearing
12. Remove the discharge stand from the screw.

There are no preventative maintenance or typical repair procedures that requires screw removal on any of the FKC municipal screw presses.

SECTION 6I (con't)

Screw Press Screw Removal & Re-Assembly

B) Screw Reinstallation

The new or rebuilt screw should be reinstalled in the reverse order as described in the removal section above. The following should be completed during the reassembly process.

NOTE: FKC recommends that all new bearings be installed on the screw.

1. After the screw with the bearing stands has been set in place, install all of the drum halves along on side of the screw press first.

2. The clearance between the screw and screens should be adjusted and set as described in section 6C along one side of the press before installation of the drum halves on the remaining side of the press.

3. The remaining drum halves should be reinstalled and aligned one at a time. Clearances should be adjusted and set as described in section 6C.

4. After all the clearances have been checked and set and the bearings lubricated, the press should be run briefly to check for unusual noise or screw to screen contact.

5. Prior the restarting the press the items on the pre-start up inspection checklist should be re-verified.

There are no preventative maintenance or typical repair procedures that requires screw removal on any of the FKC municipal screw presses.

Flocculation Tank

Flocculation Tank

Part 1 – Equipment Summary

FKC Biosolids Dewatering

Equipment Summary

FKC Flocculation Tank

FKC Serial Number	FT-302 1/2
City of Visalia Tag #	8SCT01 / 8SCT02
City of Visalia Tag # Mixer	8MXR01 / 8MXR02
Process Area	Sludge Dewatering Facility

FKC Screw Press

FKC Serial Number	M-2795 1/2
City of Visalia Tag #	8SDPRO1 / 8SDPRO2
Process Area	Sludge Dewatering Facility

FKC FLOCCULATION TANK
FOR DIGESTER THICKENING APPLICATIONS

GENERAL DESCRIPTION

The FKC Flocculation Tank is designed to optimize the mixing of sludge and polymer prior to thickening. Typically, the conditioned sludge from the flocculation tank flows into a rotary screen thickener.

Optimum mixing of the sludge and polymer benefits the sludge dewatering system operator in two ways. First, by controlling the mixing energy involved, polymer dosage is minimized. Too little agitation and the polymer does not disperse fully in the sludge. This results in some un-reacted polymer scattered throughout the sludge. Too much agitation and the flocculated sludge particles are broken up before they make it to the next process. Excessive agitation requires excessive polymer to hold the flocculated particles together. Optimum agitation results in optimum polymer usage. Second, the flocculation tank is sized to allow sufficient retention time for the polymer to react with the sludge. With too little retention time the sludge does not have sufficient time to flocculate prior to exiting the tank.

The open top flocculation tank also allows the sludge dewatering system operator to visually check the conditioning of the sludge as it overflows to the rotary screen thickener. The visual check is a very fast and simple method of verifying proper floc tank operation.

The flocculation tank consists of a tank with the sludge/polymer inlet on the bottom and the conditioned sludge overflow on one side near the top. The flocculation tank is supplied with a variable speed top mounted agitator for controlled mixing of the sludge and polymer. The agitator speed is adjusted with either a mechanical speed variator or a variable speed motor.

Flocculation Tank

Part 2 – Operational Procedures

OPERATION

START-UP

- Start-up of the flocculation tank is normally performed in conjunction with the rotary screen thickener and screw press start-up.

- Verify that the agitator gear reducer is properly lubricated and that the agitator mounting bolts are tight.

- Start the flocculation tank agitator motor. Verify proper rotation. The axial vane impellers should force the sludge downwards towards the sludge inlet to provide for proper mixing of the sludge and polymer.

- Begin polymer flow. Begin sludge flow.

OPTIMIZING PERFORMANCE

Optimum sludge conditioning involves minimizing polymer costs while producing a flocculated sludge that can be mechanically dewatered by the equipment that follows. The flocculation tank is the last element of the sludge conditioning system. For optimum performance of the flocculation tank, the other elements in the system must first be optimized.

Factors affecting the performance of the sludge conditioning system include: polymer selection, post make-down concentration, polymer age, post dilution water addition, and polymer injection point location(s). Polymer sales representatives should be consulted to determine the best polymer for each application and for recommendations on polymer makedown equipment, tanks and pumps. Optimum post make-down concentration and post dilution water addition is normally determined after equipment startup.

FKC recommends that the polymer injection point be within five feet of the flocculation tank inlet to prevent uncontrolled mixing of the polymer and the sludge prior to entering the tank.

SHUT DOWN

- Stop sludge flow. Stop polymer flow. Stop Floc Tank agitator motor.

- Drain the flocculation tank if the sludge dewatering system will be shut down for a extended period of time.

Flocculation Tank

Part 3 – Preventive Maintenance Procedures

FKC FLOC TANK MAINTENANCE

MAINTENANCE

The oil level and oil quality in the agitator drive should be checked at frequent intervals due to the wet, humid, and dirty atmosphere that the equipment normally operates in. Oil changes are required at intervals of 10,000 operating hours or every two years, whichever comes first. See the SEW Operations Manual for details.

Schedule

FKC's Proposed Project Schedule

*FKC assumses the start-date is after the PO has been fully exicuted

Item	Time	
Equipment Submittals	6	Weeks
Manufacturing after Approved Submittals	8	Months
Delivery of O&M	6	Months
Delivery of Complete Equipmet Systems	8	Months

FKC acknowledges that the manufacturer will pay liquidated damages of $500 for each day of delay. Including shop drawings, equipment fabrication, delivery, and O&M's.

Addendum Acknowledgement Form

EXHIBIT E - ADDENDUM ACKNOWLEDGEMENT		
ADDENDUM	**DATE ISSUED**	**SIGNATURE**
1	11/22/24	~~tues~~ FKC Co, Ltd
2	11/26/24	~~tues~~ FKC Co, Ltd.

Exclusions / Exceptions Form

EXHIBIT D – EXCLUSIONS/EXCEPTIONS FORM

Please identify exceptions to any of the specifications provided in the RFP Package. Please submit this form with your proposal. If no exceptions are taken, enter "None" for the first item. Make additional copies as necessary. Please note that these exceptions do not mitigate the responsibility of the vendor, in any way, whatsoever, on performance, equipment quality, maintainability, and operability.

Exception #	Proposal Page #	Section #	Paragraph #	Exception Taken
				Please see the attached sheet. Wes Bond FKC Co., Ltd.

Notes, Clarifications & Exceptions

1. Page 2 of 6 – As certain grants require BABA compliance; the contract must provide an additional line item with the total cost associated with providing a BABA compliant system.

   FKC cannot provide a BABA compliant screw press of this size. Our proposal does not comply with the BABA requirements and we have not proved a price for this option.

2. Page 11 of 16 – SDU Maximum Polymer Usage – 20 Lbs. / dry ton.

   FKC will guarantee 30 Lbs. / dry ton or less of active polymer.

3. FKC's proposal does not include any sales tax rate amounts. Taxes will not be collected or go through FKC.
4. FKC offers the standard insurance limitations offered by Liberty Mutual. A sample copy of FKC's certificate of liability insurance is provided in the Example Insurance Certificate tab.
5. FKC takes exception to, does not have, and does not offer professional or contractual liability insurance.
6. Copies and licensing for the PLC and HMI programming software are not included. The programs and ladder logic to be used at this facility for the PLC and HMI are included along with services to inspect, commission, and startup the control panels.
7. FKC guarantees the 15% TS screw press outlet and the 30 active lbs per dry ton of polymer. The sludge to be dewatered however is currently not available to testing, so maximum cake dryness and effective polymer dose cannot be measured or verified at this time. In the event that one or both of these guarantees are not met, then verification of maximum possible cake dryness and effective polymer dose will be obtained from a reputable, agreed upon polymer vendor. Once these two parameters have been verified, then FKC will be required to meet the cake dryness and polymer dose submitted by the polymer vendor.

City of San Luis
West WWTP 3 MGD MBR Phase 1 Upgrades

Request for Proposals
Complete Sludge Dewatering System

Date: November 4, 2024
Proposals Due: December 2, 2024

All interested equipment suppliers (referred to as manufacturers, vendors, or suppliers) shall provide a design and price proposal to be received no later than **4:00 PM (Mountain Standard Time) December 2, 2024** for a Complete Sludge Dewatering System for the City of San Luis, West Wastewater Treatment Plant MBR Phase 1 Upgrades project with a design capacity of 3.0 MGD MMADF in conformance with the following performance specification, emailed in **PDF format** to ntesch@pacewater.com or alternatively, a hard copy can be submitted to Pacific Advanced Civil Engineering, Inc. (PACE), Attention: Nathaniel Tesch, EIT, 8723 E. Via de Commercio, Ste. A-204, Scottsdale, AZ 85258. The submittals will be privately opened. No pre-proposal will be held.

Bidding Documents can be downloaded at www.questcdn.com under an individual login for a non-refundable charge of $22.00. Quest CDN Project number is 9395167. Registration with Quest CDN is required to be on plan holders list and receive project communications. Please contact QuestCDN.com at (952) 233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. Any questions about obtaining documents can be forwarded to Andrea Jaycox at ajaycox@pacewater.com or (602) 502-9683.

This request for proposal is for a new complete prepackaged, sludge dewatering system for the City of San Luis, West Wastewater Treatment Plant (WWTP) Phase 1 Membrane Bioreactor (MBR) Upgrades project with a design capacity of 3.0 million gallons per day (MGD) max-month average daily flow (MMADF). The system shall include mechanical sludge pumping; processing; and dewatering equipment, a processed/dewatered sludge conveyor, and a prepackaged electrical control system for the control of the supplied sludge feed pumps, polymer feed system, main sludge dewatering unit (SDU), and the processed/dewatered sludge conveyor.

One equipment vendor will be pre-selected and will form the basis of the full-scale design that will be incorporated into the WWTP's MBR Phase 1 Upgrade plans. The modification design plans are scheduled to be completed before the summer of 2025. Construction is anticipated to be initiated within 6 months of design completion and approval. Due to the CMAR approach of the project, equipment procurement will begin soon after equipment selection and prior to completion of the final design plans.

Equipment Manufacturers/Vendors have the option to provide multiple proposals for all equipment that can satisfy this performance specification RFP. Equipment vendors are encouraged to identify significant benefits their proposal provides which are above and beyond the minimum requirements of this specification RFP. Proposal offerings will be evaluated based on the following criteria. See PROPOSAL REVIEW & GRADING section below for the weighting and definition of criteria.

- Capital Cost
- 10-year Life Cycle Cost
- Performance
- Reference List

- Fabrication
- Delivery Schedule
- Service
- Completeness of Supply
- Completeness of Response
- Performance Bond

PROPOSAL REQUIREMENTS

Proposal submissions should include all the information requested within the RFP. Proposals must be complete, including, but not limited to the following items below. Submittals shall be formatted in a manner that allows quick referencing for pertinent information. All requested information is to be provided so that no inferences will be required by the engineer. PDF files shall be provided with digital tabs or bookmarks for quick navigation within the Submittal Package. Each item below shall have its own individual section in the proposal. The offering shall include, at a minimum, the following sections with the required information.

1. Fixed Price Proposal

   Fixed Price Proposal for the specified equipment system offering with a detailed Scope of Supply, including:

   a. Total capital equipment cost as required for complete and functional sludge dewatering system meeting the requirements of these performance-based specifications.
   b. The City is pursuing additional grant funding for this project. As certain grants require BABA compliance, the contract must provide an additional line item with the total cost associated with providing a BABA compliant system.
      i. The contractor will provide a list identifying equipment in which a BABA waiver/exemption can be granted.
   c. Packaging, freight, and taxes, F.O.B. to jobsite.
   d. Price list of standard spare parts and system consumables, including availability and lead time of spare parts.
   e. A letter on company letterhead stating the willingness to provide a Performance Bond *(See Exhibit B)* & performance guarantee in the amount of 100% of the contract equipment price for the duration of the warranty. Vendors shall provide a separate line item in the proposal for the costs associated with providing a Performance Bond (with additional line items including the cost associated with extending the Performance Bond to match the lifetime of the warranty).
      i. All bonding companies shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the state of Arizona.
   f. Provide recommended requirements and cost for the following Services to be included within the proposal:
      i. Installation Inspection and Certification Services
      ii. Start-Up and Commissioning Services
      iii. Site Performance Testing
      iv. O&M Training Services
   g. Pricing shall be guaranteed based on Item 1 – Fixed Price Proposal shall be guaranteed for 6-months after offering has been received and a notice of selection has been issued by PACE and the City of San Luis, AZ. At the end of the 6-month holding period, the selected vendor agrees the inflation rate shall not exceed more than a 1% increase per quarter for 1-year, or the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall – whichever of the two is lower. The City

reserves the right to cancel its dealing with the selected Vendor at any time prior to issuing a purchase order.

2. Power Requirements

   Power requirements (in kW, kW-hr) at point of connection for different flow rates (where applicable) and full-load amp (FLA) requirements for all equipment items. Provide load calculations.

3. Maintenance Requirements and Schedule

   Schedules shall include an itemized list of tasks that need to be done on a daily, weekly, monthly, or yearly basis to ensure proper operation of the proposed equipment. Maintenance requirements and schedule should parallel list of spare parts (and system consumables) that will need to be checked, and/or replaced as part of the normal maintenance for each equipment item.

4. Maintenance and Repair Contract

   Provide offering for Full Maintenance and Repair Contract that covers a period of 5-years with the option to extend for an additional 5-year period. The contract shall include site visits by Vendor's certified service technicians to perform all repairs, part replacements, and maintenance services, including but not limited to seal replacements, bearing services, electrical components, etc., as well as any repairs as a result of operating the dewatering system under site operating conditions defined within these specifications. The Contract shall include parts, labor, travel and any other expenses required to perform the work. Please also see Definition and Scoring section below for additional details and requirements.

   a. Each Vendor shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or system malfunction.
   b. Each Vendor shall provide a guaranteed onsite response time (the time required to have a technician onsite once it is determined that a technician is required). The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the Vendor will pay liquidated damages of $500 for each day of delay.
   c. Each Vendor shall provide a list of incidental/routing maintenance items that the city can perform to minimize the need for the Vendor's service technician to be onsite.
   d. The contract shall include, at a minimum, an annual site visit by the Vendor's certified service technician for inspection and servicing of the dewatering system.

5. Guarantee

   All vendors are required to submit a guarantee letter signed by an officer of the bidder's company indicating compliance with the specification. The guarantee shall state that all dewatering subsystems required for a fully operation system, as outlined in the following specifications, have been included in the firm equipment proposal. Further, it shall state that required subsystems or appurtenances omitted will be provided by the vendor at no additional cost to the owner.

6. Warranty

   Manufacturer's Standard Warranty Terms: A minimum 2-year warranty shall be provided. Manufacturers/Vendors shall provide the cost to extend the warranty for an additional 1-year and list the cost as an add alternate in a separate line item in the proposal. If additional Extended Warranty Options (durations) are available, the Manufacturers/Vendors shall include this information in the price proposal, along with the costs associated with the respective options (as a separate line item).

   The warranty shall include meeting the performance guarantee specified. Vendor shall bear 100% of any replacement costs or costs incurred due to upgrades required to meet the performance requirements during the lifetime of the warranty period and/or the duration of the Full Maintenance and Repair Contract.

   NOTE: Warrantee period to commence following start-up and acceptance of the equipment.

7. Installation References:
    a. Vendor to provide a minimum of 3 installed references with contact information.
    b. Statement willing to provide a 7-year Performance Bond for Vendors lacking the reference requirements.
8. Equipment Performance and Layout Information

    Proposal shall include all performance information for the proposed system. **Performance data provided shall be guaranteed for the duration of the warranty period and/or Full Maintenance and Repair Contract.**

    Proposal performance information shall include, at a minimum:
    a. Detailed design calculations for the proposed equipment, showing compliance with the proposed application.
    b. Detailed description of normal operation of equipment, as well as alarm conditions and control options.
    c. Maximum hydraulic loading rate.
    d. Maximum solids loading rate.
    e. Estimated polymer usage (neat and active, lb/dry-ton).
    f. Minimum solids capture rate.
    g. Estimated dry and full (in use) capacity weight for fully assembled equipment components (lb).
    h. Minimum requirements for all process connections (flow, pressure, etc.)
    i. Maximum equipment system power usage.
    j. Materials of construction schedule.
    k. All other performance parameters and information included in Exhibit C.

    Proposal Shop Drawings shall include, at a minimum:
    l. Overall system dimensions with clearance/service space requirements.
    m. Minimum of three layout views (one plan view, one side section, and one front section). Drawings shall show the new dewatering equipment and coupled conveyor(s). Drawings will be used to determine the design and layout of the new Sludge Processing Area. In additional to pdf format, the vendor shall submit all layout drawings in AutoCAD.
    n. Locations and sizes for all process connections.
    o. Locations for control panel and/or electrical power and instrumentation connections.
    p. All Instrumentation inputs and outputs (P&IDs).

    Technical Specifications in CSI (50 Division MasterFormat) shall include, at a minimum:
    q. Provide technical specifications for all major dewatering components.
        i. Dewatering Sludge Unit
        ii. Conveyance equipment
        iii. Sludge pumps
        iv. Polymer mixing and dosing equipment
    r. Specifications can be individual or combined
    s. Specifications shall include at a minimum:
        i. Part 1 – Description of general product, functionality, and warranty
        ii. Part 2 – Product Specifications and Performance
        iii. Part 3 – Execution for the installation of equipment
9. Equipment/System Automation

Provide a detailed description of the automation capability of the proposed equipment including a description of automation systems, instruments, and functions along with expected man-hours required to operate the complete sludge dewatering system at design conditions and performance requirements. It is the intent of the project to install a system that can operate; unattended, aside from start-up and shut-down, for extended periods of time under normal operating conditions with minimal need for operator attention.

10. Equipment/System Redundancy

    It is a requirement of the project that the sludge feed pumps are fully redundant and a minimum of two (2) sludge feed pumps are supplied. Each pump, while working independently, must be capable of handling the total flow requirements of these specifications. The equipment supplier has the ability to supply either a single dewatering unit with the capacity to meet the provided performance requirements or to supply multiple units with a combined capacity capable of meeting the provided performance requirements. Redundancy is not required for polymer mixing/dosing equipment, conveyance equipment, nor additional ancillary equipment.

11. O&M Manual

    Provide a copy of a standard/general O&M Manual for the proposed equipment system with the proposal. The manual does not have to be project specific, but shall provide enough information to determine the make-up of the Final O&M Documents as well as service requirements for the proposed equipment system. Once pre-selected, the Final O&M Documents must be submitted and approved prior to shipping equipment to the jobsite. Provide four (2) hard copies and one (1) electronic copy of the Final O&M Documents.

12. Schedule

    Provide a proposed schedule to include the following:

    a. Time required to generate an acceptable submittal for the Engineers review.
    b. Time required to manufacture the equipment once the submittal has been approved by the Engineer.
    c. Time of Delivery for O&M Manuals.
    d. Time of delivery of complete equipment systems.
    e. Statement indicating schedule delay (for both shop drawing submittals preparation and equipment fabrication and delivery with O&M Manual) will result in liquidated damage of $500 per calendar day with cap at 50% of the equipment cost.

13. Exclusions/Exceptions Form

    a. Provide an Exclusions/Exceptions Form (Exhibit D) identifying exclusions or exceptions to any of the RFP requirements. If none, please include with proposal package and indicate “None”.
    b. Include a list of equipment that is not included with the Vendor’s offering but is needed for the proper operation of the Sludge Dewatering System. If none, indicate none.

14. Completed Exhibits

    a. Completed Reference List (*See Exhibit A)*
    b. Completed Performance Bond (*See Exhibit B)*
    c. Completed Equipment Summary List (*See Exhibit C)*
    d. Completed Exclusions/Exceptions Form (*See Exhibit D)*

15. Site Visits

    The equipment vendor shall include a minimum three (3) trips. The first trip will include a minimum of one full work day (8 hrs) for the purpose of installation inspection. The second trip will be for a minimum of two full work days for the purpose of start-up and training. Start-up will include polymer jar testing and performance verification. Start-up will not initiate until the new WWTP treatment process is operating and sufficient WAS is available (The City and CMAR will give notice to the vendor as to the approximate time period when this will occur). The third trip is for a 10-month follow-up inspection/training visit for all supplied equipment/systems.

Site visits/trips shall be coordinated with the CMAR Contractor and City a minimum of 10 calendar days prior to trip.

PROPOSAL REVIEW & GRADING

In order to select the best complete sludge dewatering system for the application, the following methodology will be used. Each criterion will be assigned a weight; the higher the weight, the more important the aspect is to the project. Then, each equipment solution proposed will be rated on a scale, with the highest score indicating most competitive or best. For each criterion, the score and the weight will be multiplied together. The scores will then be added together for each solution to arrive at the total score. The equipment with the highest score will be the recommended selection. Omission of information for any of the listed criteria categories will result in a score of zero (0) for that criteria category. Equipment not meeting the minimum requirements as stated in the General Design Requirement section will not be considered.

Criteria	Weight	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5
		Scoring Scale				
Capital Cost	*10*					
10-Year Life Cycle Cost*	*8*					
Performance	*10*					
Reference List	*9*					
Fabrication	*9*					
Delivery Schedule	*3*					
Service	*4*					
Completeness of Supply	*y/n*					
Completeness of Response	*y/n*					
Performance Bond	*y/n*					
Total Score						

Criteria Definitions and Requirements

Capital Cost: The cost to purchase and deliver the complete equipment F.O.B. jobsite. Each Vendor with proposal costs within 5% of the lowest is scored the same. The evaluation of capital costs will also be associated with the evaluation of the installation requirements, as this criterion considers equipment footprint. Structural components (shade structure) which are not included in the vendor's scope but are necessary for the process and equipment will be added to the capital cost by the Owner (if not included in the vendor's scope of supply).

10-year Life Cycle Cost: Evaluation of capital cost, power; O&M over 10-year period in today's value based on an 5% interest rate. The O&M cost shall be derived from the *Full Maintenance & Repair Contract*, power cost, and estimated cost of consumables (polymer).

Full Maintenance & Repair Service Contract Ranking will be tied into the 10-Year Life Cycle Cost Ranking. The Contract shall cover a period of the first 5-years with the City's option to extend for an additional 5-year period. The contract shall include site visits by Vendor's certified service technicians to perform all repairs, replacements, and maintenance services,

including but not limited to seal replacements, bearing services, equipment replacement, electrical and controls components, etc., as well as any repairs that results from operating the dewatering system under site operation conditions defined within these specifications; any repairs that results from the installation environment at the WWTP, including temperature, moisture, etc.; and any repairs or upgrades needed to maintain system performance guarantee. The Contract shall include parts, labor, travel and any other expenses required to perform the work. The service shall include a minimum of one annual site visit by a certified service technician for inspection and service.

Each Vendor shall provide a detailed approach in their proposal to address technical support and service calls. The approach should include a step-by-step procedure on the actions the City should take during an alarm or equipment malfunction.

Each Vendor shall propose a guaranteed onsite response time once it is determined that a technician will be required to be onsite to address the problem. The service contract shall include language stating that if the technician is not onsite within the guaranteed onsite response time period, the Vendor will pay liquidated damages of $500 for each day of delay.

Each Vendor shall provide a list of incidental maintenance items that the city can perform to minimize the need for the Vendor's service technician to be onsite. An example of incidental maintenance is performing a greasing or lubrication. All equipment parts for incidental maintenance shall still be provided by the Vendor.

The cost of the 5-year and 5-year options will be based on present-day cost and shall be tied to an inflation rate of no more than 1% increase per quarter or to the inflation rate stated by the Phoenix Tender Price Index determined by Rider Levett Bucknall – whichever of the two is lower.

The City shall have the option to accept the Maintenance and Repair Service Contract.

Performance:

Meets the performance requirements identified in the General Design Requirements. Where applicable, the City, at their discretion, may request shop/factory, or field testing, or referenced party site visits to verify stated performance of equipment. The Vendor shall assist in coordinating requested site visits/testing for the City.

Reference List:

List of similar equipment installations, including WWTP capacity, type of units, number of units, and reference contact information (WWTP name, location, person, phone number). Each vendor shall provide an installation list with contact information for a minimum of 3 systems in operation for a minimum of 3 years in the United States of America. Installations shall be of comparable model and design requirements. The term "installations" shall mean individual projects/contracts. Multiple equipment units for a project will be considered as one (1) installation toward meeting the experience requirements. Installations shall be only those in the United States (fifty states). Confirmation that the

installed equipment is in good standing with the customer and customer feedback will be used as part of the proposal scoring process. The City will require a minimum of three references' feedback and will make a good faith attempt to contact a maximum of five references in order to obtain the feedbacks.

Each successful reference shall be asked to rank their overall experiences from 1-10 (10 being the best). Scores will be based on average ranking from the responsive references. At a minimum, 3 references will be scored. If there are less than 3 responsive references, non-responses will be given a ranking of 1. For example, if only 2 references responded, then a score of 1 will be given to the missing third reference. The average of the three scores will be used in the evaluation. The City reserves the right to contact additional references. If additional references are contacted by the City, those references will be averaged into the score.

Reference installations within the State of Arizona are preferred in order to provide the City/WWTP Operators with ease in coordinating site visits and corresponding with other relatively local Cities and WWTP Operators regarding equipment performance, service, etc. See also Performance and Fabrication definitions.

Bids from Vendors lacking the U.S. installation requirements, but meeting all technical and performance requirements of these specifications, may be considered by the City if the Vendor provides a satisfactory seven (7) year performance bond in lieu of evidence of experience and operation. The performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona. The cost of such bonding shall be included in the Base Bid price at the time of proposal.

Fabrication:

Proposals will be reviewed and graded by the City to determine the quality of materials used in the fabrication of the complete system as stated in the vendor's provided CSI specifications. The City, at their discretion, may request site visits of existing installations to view completed and operational systems, which are representative of the quality the Vendor is proposing. The Vendor shall assist in coordinating requested site visits for the City. Refer also to the Reference List Definition.

Delivery Schedule:

Proposed equipment will be at the job site when needed. Submittals shall include a schedule outlining the anticipated time to develop submittals, and construct equipment and deliver to the job site. The schedule shall be broken down into submittal preparation period, fabrication time, and delivery time. The total time required from notice of selection to arrival of equipment on site shall be clearly

indicated.

Service: Location of nearest service center, availability of spare parts; quality of service provided. Each vendor shall list the nearest service and support center to the project location. Distance from the project site shall be included along with the services provided by the location. Due to the geographic location of the project, equipment service may be an issue for the City in the past. Vendors with relatively "local", and/or expeditious Service Supply and Part Center's fully stocked with equipment consumables and spare part inventory will be scored higher under this Criterion.

Completeness of Response: The completeness of the proposal to include all the necessary equipment and ancillaries that will be required to meet the performance requirements as stated herein. Proposals, at the determination of the City, not conforming to the requirements of these specifications maybe be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Completeness of Supply: The completeness of the proposal in terms of supplying all requested information within this RFP. Proposals, at the determination of the City, not providing all requested information within this RFP may be eliminated from further consideration. The City reserves the right to reject any and all proposals.

Performance Bond: Willingness to agree to terms of the Performance Bond (*Exhibit B)* and to provide a performance guarantee for a minimum of 2 years on the equipment, with the ability to extend the Bond to match the lifetime of the extended Warranty (if chosen). The costs associated with extending the Performance Bond will be provided as a separate line item. Proposals not accepting the terms of the bond will not be considered. The Performance bond shall be for 100 percent of the replacement value of the equipment. The bonding company shall have a policy-holder rating of A+ and a financial rating of "Class XV" in the most recent edition of "Best Key Rating Guide". The bonding company shall be licensed to do business in the State of Arizona.

PROJECT INFORMATION

The City of San Luis is upgrading its existing West WWTP to improve effluent quality and increase total treatment capacity. The current design flow of the WWTP is 1.5 MGD, max month average daily flow (MMADF). The upgrades and expansion to the West WWTP will take place in Phases:

- Phase 1 will increase treatment capacity to 3.0 MGD MMADF
- Phase 2 will increase treatment capacity to 4.5 MGD MMADF
- Phase 3 will increase treatment capacity to 6.0 MGD MMADF (buildout)

As part of the upgrades, a new dewatering system will be installed. The dewatering equipment will be installed downstream of a new membrane bioreactor (MBR) treatment system. The dewatering system will be installed outdoors but will be covered with a permanent shade structure. The dewatered sludge cake will be conveyed to a refuse bin at grade, which will allow for operators to haul off the dewatered sludge cake. The existing sludge drying beds will remain in operation until the proposed dewatering system is installed and operational; once the new dewatering system is operational, the existing drying beds will act only as emergency/temporary sludge storage units. The dewatered cake will be hauled to a local landfill for final disposal. The disposal cost is tie to the dryness of the dewatered sludge cake. Therefore, the performance of the sludge dewatering system must be guaranteed. The final design and layout of the dewatering area will be based upon the selected dewatering equipment (dewatering and conveying systems).

Parameter	Value
Project Location	San Luis West WWTP, San Luis, Arizona
Treatment Facility MMADF Current Flow	1.0 MGD
Treatment Facility MMADF Current Design Flow	1.5 MGD
Treatment Facility MMADF Ph1 Design Flow	3.0 MGD
Future Treatment Facility MMADF Ph2 Design Flow	4.5 MGD
Future Treatment Facility MMADF Ph3 Design Flow	6.0 MGD
Wastewater Type	Domestic
Treatment Process	Fine and ultrafine headworks screening and grit removal, anoxic and oxic secondary, and Membrane Bioreactor tertiary treatment process, chlorine disinfection, and mechanical dewatering.
Sludge Process	WAS from MBR will be stored and aerated in the sludge aeration basins. Detention time is approximately 7 days.
Site Elevation	Approximately 100-feet above MSL
Equipment Exposure	Outdoor w/ shade cover and odor control
Ambient Temperature Range	35°F – 120°F
Available Flush/Spray Water Source	Potable Water or Class A+ Effluent

GENERAL DESIGN REQUIREMENTS

The Sludge Dewatering System Vendor must be the Sludge Dewatering Unit (SDU) Vendor and will be the sole system supplier. The Vendor shall be responsible for providing a complete and operable sludge dewatering system consisting of pertinent equipment, associated instruments, electrical controls, valving, etc. The complete dewatering system shall

include the sludge dewatering unit (SDU), two sludge feed pumps (primary and redundant), polymer system, sludge cake system, and control equipment as described in the following Specifications. Necessary spare parts shall be included within the bid. Vendors with elevated equipment shall include structural supports, stairways, and access platforms within their scope. Only structural concrete components may be listed as outside of vendor's scope. Complete installation and start-up services with operation and maintenance manuals (in electronic PDF format) shall also be included in the bid.

The Sludge Dewatering unit shall be a Screw Press or Volute Press Technology.

Each proposer shall provide a capital equipment cost proposal for one or both of the following capacity options, based on their proposed sludge dewatering system(s):

Option 1: Single machine will full rated capacity
Option 2: Two or more machines with capacity equally split among the total number of units supplied

The Vendor shall be responsible for ensuring an operable package system consisting of sludge feed pumps, a polymer preparation and injection system, dewatering device(s), cake conveyor(s), control panel(s) and associated instruments, electrical controls, skid piping and valving, etc. Controls shall be PLC-based (Allen Bradley – Ethernet TCP/IP Communication Protocol). The device shall have the ability to operate unattended, with automated start-up and shut-down. Controls are discussed further in the Controls section of this specification.

The dewatering system shall be designed to meet the NFPA 820 electrical classification of the environment in which they are installed (Class 1, Div.1; Class 1, Div. 2; etc.), this includes all electrical components, such as motors, actuators, instruments, conduits & fittings, control panels, etc.

Parameter	Value
Type of Sludge	Secondary Waste Activated (with minimal digestion)
Estimated WAS (Phase 1 - 3 MGD)	7,945 lbs/day TS Maximum
Estimated Sludge Volume	95,256 gal/day @ 1% solids
Feed Concentration	1% (or greater)
Temperature	13 to 30°C
Ph	6-8
Days of Operation	5 days per week (Monday – Friday)
Maximum Hours of Operation	8 hours – daily production
SDU Minimum Solids Loading Capacity (8-hour operation)	994 lbs/hr
SDU Minimum Hydraulic Capacity (8-hour operation)	200 GPM @ 1% solids
SDU Minimum Cake Solids Conc.	15% @ 1% solids feed concentration
SDU Minimum Solids Capture	95% by weight
SDU Maximum Polymer Usage	20 lbs/dry ton
Screw Press Minimum Drum Diameter	1.2 m

1.1 MAJOR COMPONENTS

A. Sludge Feed Pumps

A minimum of two separate sludge feed pumps (primary and redundant) shall be provided for the sludge dewatering system. The sludge feed pumps shall be a positive-displacement solids feed pump. The pumps shall be capable of pumping liquids containing up to 30,000 mg/L (3%) sludge concentration. Each pump shall have the capacity to pump the required volume within the operating hours as specified herein, and each pump shall have a full-speed hydraulic capacity 20% higher than the dewatering unit's maximum hydraulic loading rate – whichever is higher. The minimum operating pressure, not including that required by the dewatering process shall be a total of 30 feet. The pump motors shall be controlled by supplied variable frequency drives (VFDs), which shall be integrated with the dewatering control system. The feed pumps shall be manufactured by Vogelsang, Borger, or approved equal.

B. Polymer Feed System

The polymer feed system shall be an emulsion type system with sufficient capacity to supply the required polymer dosage to the sludge dewatering equipment. The polymer system shall include automated on/off Allen-Bradley PLC based controls using a microprocessor to allow for a minimum of two operation modes (manual and proportional auto mode). The system shall allow for automatic control of variable speed polymer feed/mixing equipment to increase or decrease polymer concentrations and doses based on signals from the dewatering equipment control system. The NEMA 4X control panel shall be integral to the polymer system skid and be capable of communicating via Ethernet IP. The polymer pump shall be positive-displacement type. The polymer mixing mechanism shall allow for variable speed mixing and include a sight glass. Water required shall be provided by the City. Vendor shall state the water demand and pressure required for the polymer system.

C. Piping

The sludge dewatering equipment shall be delivered to the site ready to plumb to the new sludge feed piping, polymer feed system, wash/flush water, and pneumatic lines (where applicable) with a majority of the equipment factory plumbed. The contractor will be responsible for the installation and termination of main and auxiliary piping; however, the number of field modifications and equipment piping connections shall be kept to a minimum.

D. Conveying System

The cake conveyor shall be supplied as a closed tube, shaftless screw-type conveying system and shall be capable of meeting the maximum discharge capacity of the sludge dewatering equipment. The conveyor system shall be capable of horizontal, inclined, and vertical configurations based on both the proposed dewatering equipment's configuration, as well as the projected sludge cake disposal bin height of 5-feet. The conveying system shall be supplied with proper supports for its configuration and shall include all necessary equipment for a complete and functioning system. The conveyor system shall allow for both automatic and manual control and provide control feedback to the dewatering system's PLC. The conveying system shall include limit and/or safety switches, shock relays, motion sensors, or other protective devices to provide emergency shutdown of the conveying equipment. The conveying system shall also include strategically placed flushing ports and drains as needed to maintain the equipment.

E. Dewatering Screw Press

The primary sludge dewatering system shall be of the screw press or volute press technology. The dewatering system will be capable of handling the total daily sludge production within the operating hours specified. At a minimum, the following operating properties shall be supplied by the Vendor:

- Model Number
- Maintenance Space Requirements
- Screw/Screen Housing Diameter (in.)
- Drum Diameter (in.)
- Overall Length (in.) – Including Screw/Shaft Removal Length
- Overall Width (in.)
- Overall Height (in.)
- Dry Weight (lbs)
- Operating Weight (lbs)
- Individual Electric Load for each component (FLA, kW-hr, and horsepower)
- Guaranteed maximum hydraulic and solids loading rates for the system
- Wash water consumption (GPM & required pressure)

ELECTRICAL REQUIREMENTS

1. Electrical Power Connection Volt/Phase/Hz: 480/3/60
2. Motor and solenoid valve classification: Meets NFPA 820 Classification
3. Interior electrical/control panel enclosure type: Meets NFPA 820 Classification
4. Remote E-Stops/Local Control Stations: Meets NFPA 820 Classification
5. Electrical connections shall be flexible and of sufficient length to allow servicing of all components.

CONTROL SYSTEM REQUIREMENTS

A. General: All controls necessary for a fully automatic operation of the complete sludge dewatering system shall be provided within a single enclosure. The dewatering equipment vendor/manufacturer shall be responsible for proper sizing and function of the instrumentation and controls. The Vendor shall supply UL listed control panels and all local control stations for automatic control of the equipment proposed.

1. Main control panel shall be operated within the project's ambient temperature range.

2. Controls shall be designed to accept incoming 480V, 3 phase power supply and shall include a step-down transformer as needed to achieve 120V for all control instrumentation and communication relays, etc.

3. HMI graphics shall be provided to be installed on the WWTP Main SCADA System/Network.

4. Provide complete documented PLC ladder program listing.

5. Provide defined address range with all equipment related alarms, warning, analog values and equipment status for interfacing with the WWTP Main SCADA and Dewatering PLC via Ethernet.

B. Components:

1. Main Control Panel

a. Enclosure(s) shall meet NFPA 820 Classifications and shall be constructed from 304 SSTL (minimum) for outdoor installations, suitable for free-standing, stanchion-mounting, or wall-mounting.

b. The control panel will include climate control if required to maintain temperature inside each enclosure below the maximum operating temperature rating of the components inside the enclosure. In hazardous or corrosive environment, the control panel will include automatically controlled closed-loop ventilation fans or closed-loop air conditioners with filtered air louvers. Housing shall be constructed of corrosion resistant materials.

i. Provide calculations for cooling and heating load requirements.

ii. Provide thermostats to automatically control heating and cooling requirements without need of manual operation of a heating/cooling transfer switch.

iii. In hazardous or corrosive environment, the heating and coiling elements including external shall be Heresite coated or equal.

c. Main Control Panel shall be designed with a SCCR rating of 18KA at 480VAC minimum and labeled as such, unless otherwise specified.

d. All terminals utilized in the main panel shall be 600V rated terminals and 20% spare terminal space shall be provided for any potential future revisions.

e. Control panel shall be equipped with the necessary IEC starters and drives for each equipment item, as needed

f. The Main Control Panel shall include at a minimum the following:

- Main fusible disconnect with lockable operator.
- Physical Hand/Off/Auto (HOA) Selector and Push/pull E-Stop button for each major piece of equipment.
- Backup power UPS
- Network switch
- Programmable control relay with minimum of 5 cycle timers
- Fuses and breakers
- Motor overload sensor
- Panel power light
- Reset pushbutton
- Emergency stop pushbutton
- Pilot light indicators
- Elapsed run-time meter for each equipment
- Indication for "Power On", and necessary faults for each equipment.
- Name plates
- Control panel wiring
- Two spare digital inputs

- Two spare analog inputs
- Two spare dry contact outputs
- Variable Frequency Drive(s) (VFDs) as required
- PLC Controls shall include the following:
    a. Programmable Logic Controller (PLC)
    b. Variable Frequency Drive(s) (VFDs)
    c. HMI and HMI programmable functions as required
    d. PLC shall be capable of communicating via Allen Bradley Ethernet IP Communication Protocol

2. Local Control Push Button Station
    a. Include local control push button station for each major piece of equipment (screw press, conveyors, pumps, polymer system). Enclosure shall meet NFPA 820 Classification for the installation area. Local push button station must be local to the equipment to maintain requirements of local safety codes as determined by the Engineer.
    b. Local station shall be mounted within 10 feet or as close to the equipment as safely possible and be field wired by the electrical subcontractor to the corresponding terminal inputs in the main control panel.
    c. The remote pushbutton station shall include hand/off/auto switch for each motor and an emergency stop.

OTHER REQUIREMENTS

Proprietary Designs

If a proprietary or otherwise US Patented component is proposed by the Vendor, the Vendor shall indicate such in their proposal and shall include all costs for licensing and/or usage fees required by the patented holder within the proposal. The Vendor shall further indemnify and warrant to the Contractor and Owner that no patent violations exist. If a patent violation claim is made due to the scope of supply for this project, the Vendor shall be fully responsible for all costs associated with the amicable settlement of such dispute.

Materials of Construction

Acceptable materials of construction for this project include:

- Wetted Parts – Type 300 Series SS
- Base structural – Coated Structural Carbon Steel
- Anchors and fasteners – 316 SS

All non-submerged ferrous components, such as equipment base, gears and motors, shall be shop prepared per SSPC-SP6 and shall be coated to protect against corrosion using two (2) coats of Tnemec N69 Hi-Build Epoxoline II, 3-5 mils each for a total of 7 – 11 mil DFT or Engineer-approved equal coating. The Vendor shall also supply field touch-up paint to be applied by the Contractor prior to and/or following the installation of equipment.

Along with the required submittals, Exhibit C is to be completed and included in each proposal. If information requested is not applicable, an explanation must be provided as to why. Proposals may be submitted via email in PDF format or hardcopy (email is preferred).

The Vendor of the dewatering system shall be completely responsible for the proper design of their system. All equipment shall perform and operate as specified.

PAYMENT TERMS AND CONDITIONS

A. The City shall make progress payments on account of the Contract Price on the basis of Vendor's Applications for Payment as follows:

1. 10% on Approved Submittal(s)

    a. Equipment submittal is required prior to the execution of this contract for the Engineer to review and approve, however, billing and payments will not commence until the assigning of this contract to the Construction Contractor where in the Construction Contractor will issue the Notice to Proceed to Order Equipment to the Vendor.

2. 70% on Delivery

3. 15% on Start Up & Training

4. 5% on Delivery of Final O&M Manual(s). Operation & Maintenance Manuals must be submitted and approved prior to shipping equipment to the jobsite.

B. No payment application will be accepted nor will any payments be distributed until this contract has been assigned. After assignment payments will be made by the Construction Contractor.

This request for proposals was prepared by Pacific Advanced Civil Engineering, Inc. (PACE) at the direction of the City of San Luis. The City of San Luis and PACE will review the proposals and select the preferred equipment Vendor to form the basis of design for the project. The City of San Luis and PACE reserve the right to reject any and all proposals. Proposers should contact PACE with all questions regarding this proposal. All questions shall be submitted via email a minimum of 2 weeks prior to the final bid date and should be directed to Mr. Nathaniel Tesch, Pacific Advanced Civil Engineering, Inc. at ntesch@pacewater.com. All questions and responses will be posted on the City's website via an addendum. It is the proposer's responsibility to check the website at www.sanluisaz.gov. The proposal shall include an acknowledgement of all addendums posted on the website. The last addendum will be posted 1 week prior to the due date.

Final Proposals shall be submitted via email in PDF format to:
ntesch@pacewater.com

Optional hardcopies can be sent to:
Pacific Advanced Civil Engineering, Inc.
Attention: Nathaniel Tesch, EIT
8723 E. Via de Commercio – Ste. A-204
Scottsdale, AZ 85258
Phone: (602) 695-4679
Fax: (480) 751-1810

REFERENCE LIST (EXHIBIT A)

#	Job/Operating Facility Name	Process Used For? (Municipal WWTP Sludge Dewatering)	Year Installed	Installation Location (Indoor/Outdoor)	Number of and Size of Units	Operation Period (24/7, etc.)	Design Capacity (Hydraulic-gpm & Solids-lbs/hr)	Dewatering Performance (% Solids Cake)	Design Active Polymer Demand (lb/dry ton DS)	Job/Facility Contact Name	Contact Phone Number	Contact Email
1												
2												
3												
4												
5												
6												

PERFORMANCE BOND
FOR PROCUREMENT CONTRACTS

Any singular reference to Seller, Surety, Buyer or other party shall be considered plural where applicable.

SELLER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

BUYER (Name and Address):

CONTRACT
Date:
Amount:
Description (Name and Location):

BOND
Date (Not earlier than Contract Date):
Bond Number:
Amount:
Modifications to this Bond Form:

Surety and Seller, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

Seller as Principal		**Surety**	
Company:	(Corp. Seal)	Company:	(Corp. Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
		(Attach Power of Attorney)	
		Address:	
		Telephone Number:	

(Space is provided below for signatures of additional parties, if required.)

Seller as Principal		**Surety**	
Company:	(Corp. Seal)	Company:	(Corp. Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
		Address:	
		Telephone Number:	

1. Seller and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Buyer for the performance of the Contract, which is incorporated herein by reference. For purposes of this bond, Buyer means Buyer's assigns, if and when Buyer has assigned the Contract.

2. If Seller performs the Contract, Surety and Seller have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no Buyer Default, Surety's obligation under this Bond shall arise after:

3.1. Buyer has notified Seller and Surety pursuant to paragraph 10 that Buyer is considering declaring a Seller Default and has requested and attempted to arrange a conference with Seller and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. (If Buyer, Seller and Surety agree, Seller shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Buyer's right, if any, subsequently to declare a Seller Default); and

3.2. Buyer has declared a Seller Default and formally terminated Seller's right to complete the Contract. Such Seller Default shall not be declared earlier than 20 days after Seller and Surety have received notice as provided in paragraph 3.1; and

3.3. Buyer has agreed to pay the Balance of the Contract Price to:

1. Surety in accordance with the terms of the Contract;

2. Another seller selected pursuant to paragraph 4.3 to perform the Contract.

4. When Buyer has satisfied the conditions of paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:

4.1. Arrange for Seller, with consent of Buyer, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified sellers acceptable to Buyer for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Buyer and Seller selected with Buyer's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to Buyer the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by Buyer resulting from Seller Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new seller, and with reasonable promptness under the circumstances, either:

1. determine the amount for which it may be liable to Buyer and, as soon as practicable after the amount is determined, tender payment therefor to Buyer; or

2. deny liability in whole or in part and notify Buyer citing reasons therefor.

5. If Surety does not proceed as provided in paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Buyer to Surety demanding that Surety perform its obligations under this Bond, and Buyer shall be entitled to enforce any remedy available to Buyer. If Surety proceeds as provided in paragraph 4.4, and Buyer refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Buyer shall be entitled to enforce any remedy available to Buyer.

6. After Buyer has terminated Seller's right to complete the Contract, and if Surety elects to act under paragraph 4.1, 4.2, or 4.3, then the responsibilities of Surety to Buyer shall not be greater than those of Seller under the Contract, and the responsibilities of Buyer to Surety shall not be greater than those of Buyer under the Contract. To a limit of the amount of this Bond, but subject to commitment by Buyer of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

6.1. The responsibilities of Seller for correction or replacement of defective Goods and Special Services and completion of the Contract;

6.2. Additional legal, design professional and delay costs resulting from Seller's Default, and resulting from the actions or failure to act of Surety under paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Seller.

7. Surety shall not be liable to Buyer or others for obligations of Seller that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Buyer or its heirs, executors, administrators, successors, or assigns.

8. Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Goods and Services are located and shall be instituted within two years after Seller Default or within two years after Seller ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to Surety, Buyer or Seller shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Goods were to be delivered and the Special Services were to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by Buyer to Seller under the Contract after all proper adjustments have been made, including allowance to Seller of any amounts received or to be received by Buyer in settlement of insurance or other Claims for damages to which Seller is entitled, reduced by all valid and proper payments made to or on behalf of Seller under the Contract.

12.2. Contract: The agreement between Buyer and Seller identified on the signature page, including all Contract Documents and changes thereto.

12.3. Seller Default: Failure of Seller, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. Buyer Default: Failure of Buyer, which has neither been

remedied nor waived, to pay Seller as required by the Contract or to perform and complete or comply with the other terms thereof.

Exhibit C - Proposed Equipment Summary

Sludge Dewatering System

Manufacturer/Equipment System General Information	
Name of Manufacturer	
Model Info.	
Total # of Units for System (Including Redundancy)	
Main Drive - Horsepower per Unit (Hp)	
Flocculation Tank Drive - Horsepower per Unit (Hp)	
Other Motorized Devices - Horsepower per Unit (Hp)	
Total Unit Max Connected Electrical Load (kW)	
Equipment Size - per Unit (LxWxH) (in)	
Equipment Skid Mounted (y/n)	
Drum Diameter (in)	
Max Screw Speed (RPM)	
Emergency Shutdown Included (y/n)	
Construction/Fabrication Materials	
Equipment Component Construction/Fab Materials info provided in proposal (y/N)	
Frame / Base Fabrication Materials and Surface Prep Type and Finish	
Fastening Hardware Materials	
Seal and Support/Wear Materials of Construction	
Local/Main Control Panel Materials of Construction (NEMA Rating)	
Performance Information	
Maximum Hydraulic Capacity (gpm)	
Maximum Soilds Loading Capacity (lbs/hr)	
Hydraulic Capacity @ 1% DS (gpm)	
Solids Loading Capacity @ 1% DS (lbs/hr)	
Dry Solids (cake - assume 1% DS feed) (%)	
Minimum Solids Capture Rate (assume 1% DS feed) (%)	
Wash Water Requirements (gpm, psi)	
Lbs. of Polymer used at design dry solids of 1% feed (lbs active polymer per ton DS)	
Capital Cost	
Total Primary Dewatering Unit Equipment Cost ($)	
Total Conveyance System Equipment Cost ($)	
Total Sludge Pumping Equipment Cost ($)	
Total Polymer System Equipment Cost ($)	
Price of spare parts ($)	
Start-up/ Training Cost ($)	
Total Freight (FOB to Jobsite) ($)	
Total Equipment System Capital Cost ($)	
Total Cost Addition to Reach BABA Compliance ($)	
Maintenance and Repair Contract	
Guaranteed Response Period (hrs)	
Cost of 5-Year Service Contract ($/yr)	
Cost of 5-Year Extention Option ($/yr)	
Electrical and Controls	
Equipment Design Input Power (kW)	
Total Power at Point of Connection (kW)	
VFDs Supplied, Brand, Model, Remote Mount?	
PLC Type/Model	
Communication Protocol going to Other PLCs or SCADA	
Warranty & Guarantee	
Guarantee Statement Provided (y/n)	
Equipment System Warranty Period (months)	
Extended Warranty Period (months)	
Cost of Extended Warranty ($)	
Performance Bond	
Performance Bond Cost - 24 months ($)	
Performance Bond Cost - 36 months ($)	
Service & Support	
Start-up Period (days)	
Is Spare Parts List Provided? (y/n)	
Are Maintenance Requirements and Schedule Provided? (y/n)	
Location of Parts Distribution Center (city, distance in miles to project)	
Location of Design Support Center (city, distance in miles to project)	
Design Support (y/n)	
Delivery Schedule	
Submittal Preparation Period (months)	
Fabrication Period (months)	
Delivery Period (months)	

EXHIBIT D – EXCLUSIONS/EXCEPTIONS FORM

Please identify exceptions to any of the specifications provided in the RFP Package. Please submit this form with your proposal. If no exceptions are taken, enter "None" for the first item. Make additional copies as necessary. Please note that these exceptions do not mitigate the responsibility of the vendor, in any way, whatsoever, on performance, equipment quality, maintainability, and operability.

Exception #	Proposal Page #	Section #	Paragraph #	Exception Taken

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. C.**

Meeting Date: 02/26/2025

Department Head: Eulogio Vera, Director of Public Works, Public Works Department

Submitted By: Jorge Perez, Assistant Director of Public Works, Public Works Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the acceptance and award of a pre-construction services contract to MGC Contractors, Inc. for the pre-construction/design phase of the West Wastewater Treatment Plant Expansion project. **(Jorge Perez, Assistant Director of Public Works)**

SUMMARY:

Background

The City of San Luis is in need of expanding its West Wastewater Treatment Plant facility to increase its treatment capacity from 1.5 million gallons per day to 3.0 million gallons per day. Said improvements also provide an opportunity to address other limitations at the facility and lack of redundancy in critical areas. From the early stages of planning, it was determined that this project was to be approached utilizing the Construction Manager at Risk (CMAR) delivery method.

The City of San Luis previously conducted a request for qualifications process to hire a design consultant, from which Pacific Advanced Civil Engineers (PACE) resulted in the awarded firm. At this time, the City of San Luis conducted a request for qualifications process, now to select a construction manager at risk (CMAR/Contractor). Four interested firms submitted a statement of qualifications. Only three firms were shortlisted and given an interview based on said statement of qualifications. A selection committee conducted interviews back in January, resulting MGC Contractors, Inc. being the recommended firm for this contract.

Staff is seeking council approval to award the pre-construction services agreement to MGC Contractors, Inc. in the amount of **$470,926.82** as per the previously conducted negotiations for such services.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO ACCEPT AND AWARD THE PRE-CONSTRUCTION SERVICES AGREEMENT TO MGC CONTRACTORS, INC. IN THE AMOUNT OF $470,926.82 FOR THE WEST WASTEWATER TREATMENT PLANT EXPANSION PROJECT.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$470,926.82
BUDGETED AMOUNT:	$6,000,000.00

AVAILABLE AMOUNT TO TRANSFER: N/A

ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE: Capital Outlay - CIP / 310-311-90015 / $4,203,872.87

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

Pre-Construction Services are to be provided by a contractor during the design phase of the CMAR delivery method. During this process, MGC Contractors, Inc. will produce a Guaranteed Maximum Price (GMP), which, if agreed by the City of San Luis, will then become the final cost of the project. A construction services agreement must be signed for the construction phase of the project.

The engineer's cost estimate (at 30% design) for the construction of the project is $26M.

Attachments

Contract Pre-Construction Services Contract

MGC's Pre-Construction Services Proposal

RFQ Selection Letter to MGC

PRE-CONSTRUCTION SERVICES CONTRACT
FOR CONSTRUCTION MANAGER AT RISK (CMAR) PROJECT

Project Name: West WWTP Improvements

Project Number: BAN-2024-11

Awarded to: MGC Contractors, Inc.

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EXHIBITS

HOURLY RATE SCHEDULE A-1
GUARANTEED MAXIMUM PRICE (GMP) Proposal B-1
TOTAL PROJECT COST C-1
PROJECT DESCRIPTION D-1

PRE-CONSTRUCTION SERVICES CONTRACT
FOR CONSTRUCTION MANAGER AT RISK (CMAR) PROJECT

This CONTRACT is entered into as of the Effective Date set forth below between the City of San Luis, Arizona, a municipal corporation, hereinafter referred to as "CITY" and MGC Contractors Inc.**,** hereinafter referred to as the "CMAR." CITY and the CMAR may hereinafter be referred to individually as a "Party" or collectively as the "Parties."

CITY and CMAR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

1.0 TERMS AND DEFINITIONS

1.1 Addenda: Written or graphic instruments issued prior to the submittal of the GMP Proposal(s), which clarify, correct, make additions, deletions, or revisions to the Contract Documents.

1.2 A/E: The design professional designated by CITY to prepare Plans and Specifications for the Work, to make interpretations of the Contract Documents, to review and approve shop drawings and to perform other duties as set forth in the Contract between CITY and A/E. May be an Architectural or Engineering firm, or CITY Staff.

1.3 Allowance: Those items included in the GMP as allowances, as more fully described on Exhibits B and C attached hereto and incorporated herein by reference. The basis for an Allowance cost may be a percentage of the total Project cost.

1.4 Alternate Systems Evaluations: Alternatives for design, means and methods, or other scope considerations that are evaluated using value engineering principles and have the potential to reduce construction costs while still delivering a quality and functional Project. Alternatives shall be tracked using a Cost Estimate Development Log as described in Section 1.14.

1.5 Change Order: A document signed by CMAR and CITY that authorizes an addition, deletion, or revision in the Work or Deliverables, or an adjustment in the Contract Amount or the period of services, issued on or after the Effective Date of this Contract. The Contract Amount and/or Contract Time may be changed only by Change Order.

1.6 CITY: City of San Luis, Arizona, a municipal corporation with whom the CMAR has entered into the Contract, and for whom the Services and/or Work are to be provided pursuant to the Contract.

1.7 CITY's Project Representative: Any person or persons, designated by CITY to oversee the Project in its entirety, inclusive of CITY's Engineer, Public Works Director, Project Managers or Engineers, Inspectors, etc. If a PM/CM is retained, references to CITY's Project Representative are assigned to the PM/CM by that separate contract.

1.8 Construction Documents: A set of Drawings and Technical Specifications, along with the General Conditions and Supplementary Conditions, upon which cost estimates and the GMP Proposal(s) are to be based. The Construction Documents shall set forth in detail all items necessary to complete the construction of the Project in accordance with the Contract Documents (subject to their completion following commencement of the Construction Phase). All amendments and modifications to the Construction Documents must be approved by CITY prior to incorporation into the Construction Services Contract.

1.9 Construction Fee: The CMAR's profit.

1.10 Construction Phase(s): A portion of the Project defined by a specific scope of the Work and Contract Time that is less than the entire Project. A Construction Phase shall be separately authorized by a Notice to Proceed and shall include a GMP for that Construction Phase. Each Construction Phase shall be governed by the Contract Documents.

1.11 Contingency: Those items included in the GMP as contingency, as more fully described on Exhibits B and C attached hereto and incorporated herein by reference. The basis for a Contingency cost shall be individually defined, and shall not be a percentage of the total Project cost.

1.12 Contract: This written document signed by CITY and CMAR covering the pre-construction phase of the Project, and including the Contract Documents referenced in or attached to this Contract, and all Change Orders and/or modifications hereto executed by the Parties.

1.13 Contract Documents: Those documents, all of which together with this Contract, form the entire integrated agreement between CITY and CMAR. Contract Documents include this Contract; CMAR final approved GMP Proposal (including documentation accompanying the GMP Proposal and any post GMP Proposal documentation submitted prior to the final approval of the GMP Proposal); Notice to Proceed for pre-construction services; Construction Services Contract; General Conditions for Construction Phase; Supplementary Conditions, Technical Specifications and the Drawings produced by the A/E; Payment and Performance Bonds; technical reports as

enumerated within the Contract; A/E's Instruction Bulletins, and all Addenda and Modifications thereto. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by A/E, or (4) a written order for a minor change in the Work issued by A/E.

1.14 Contract Time(s): The number of Days or dates related to the construction of the Project or a Construction Phase that, as stated in Construction Documents, applies to achievement of Substantial and/or Final Completion of the Work so that it is ready for final payment.

1.15 Cost Estimate: Labor, materials, and equipment costs developed by the CMAR, and updated during each of the design phases, to support the "Cost of the Work" values used to develop the Cost Model for the Guaranteed Maximum Price (GMP).

1.16 Cost Estimate Development Log: A document developed by the CMAR during the design phases of the Project listing design modifications in a tabular form that, if accepted, will result in additive and deductive changes to the Cost Estimate. The initial list includes design modifications for consideration that the CMAR, from past experience with similar projects, presents for consideration by the Project Team.

1.17 Cost of the Work: The sum of all allowable direct costs during construction, including all Specification Divisions, Allowances, and a Contingency, that would be, or actually were necessarily incurred by the CMAR, directly or through Subcontractors and/or Suppliers in properly furnishing and performing the Work required by the Contract Documents. (See Exhibits B and C)

1.18 Cost Model: The Cost Model is identified in Exhibit B and on the CITY's Guaranteed Maximum Price Cost Model Form. The Cost Model provides a formula for developing the Total Project Cost.

1.19 CPI: The United States Consumer Price Index for All Urban Consumers (CPI-U) U.S. City Average published by the U.S. Department of Labor, Bureau of Labor Statistics.

1.20 Day: Calendar Day unless otherwise specified.

1.21 Delay Costs: Those items of Cost of the Work attributable to an Excusable Delay for which CITY is responsible and which are payable by CITY to the CMAR pursuant to a Change Order.

1.22 Deliverables: The products prepared by the CMAR in performing the Work. Some of the major deliverables to be prepared and provided by the CMAR during the pre-

construction phase include but are not limited to: Construction Management Plan, Cost Model, Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, cost estimates, construction market surveys, cash flow projections, GMP Proposals, Subcontractor procurement plan, Subcontractor agreements, Sub-Bid packages, Supplier agreements, and others as indicated in this Contract or required by the Project Team.

1.23 Drawings: The portion of the final construction documents submittal, which visually represents the scope, extent, and character of the Work to be furnished and performed by CMAR during construction. Drawings have been prepared or approved by the A/E, approved by CITY, and are referred to and are included in the Contract Documents. The term includes Drawings that have reached a sufficient stage of completion and released by the A/E solely for the purpose of review and/or use in performing constructability or biddability reviews and in preparing cost estimates (e.g., conceptual design Drawings, preliminary design Drawings, detailed design Drawings at SD, DD, or CD), but "not for construction". Shop drawings are not Drawings as so defined.

1.24 Engineer (A/E): CITY's Engineer or his/her designated representative, which may include an architectural or engineering firm designated by CITY to prepare plans and specifications for the Work and perform other design or submittal services as required by CITY, or other authorized representative.

1.25 Final Acceptance: A written notice from CITY, or the PM/CM (if applicable), to CMAR that Final Completion has occurred. When a Project includes Construction Phases, Final Acceptance shall only be given upon Final Completion of the final Construction Phase.

1.26 Final Completion: The date when, in the opinion of CITY's Project Representative, all Substantial Completion inspection punch-list items have been addressed, the Work is complete in accordance with the Contract Documents, and delivery of all "close-out documents" required by the Contract Documents and this Contract have been received. When a Project includes Construction Phases, Final Completion may be given for each separate Construction Phase.

1.27 Force Majeure: Labor dispute, fire, unusual delay in transportation or delivery, unavoidable casualty, flood (assuming CMAR has taken reasonable precautions), earthquake, epidemic, civil disturbance, war, freight embargo, riot, sabotage (by persons other than the CMAR and Subcontractors), or any other similar act or condition, in each case only to the extent the event in question is beyond the control of

and without the fault or negligence of the CMAR. A labor shortage or material shortage is not Force Majeure.

1.28 General Conditions Costs: Those costs generated away from the site and that are not directly related to accomplishing the Work on site, as described in Exhibit C.

1.29 Guaranteed Maximum Price ("GMP"): The maximum compensation payable to the CMAR in performance of the Work for the Project or a Construction Phase as specified in the Contract Documents or subsequently adjusted by modification to the Contract through a GMP Change Order. The CMAR does not guarantee that any Allowance Item will not change, but agrees that it alone will be responsible for paying all costs of completing the Work that exceed the GMP, as adjusted, in accordance with the Contract Documents. The GMP Proposal(s) are to be delivered pursuant to Article 2 of this Contract and are described in Exhibits B and C.

1.30 Horizontal Construction: Features as defined by A.R.S. Section 34-101.16.

1.31 Indirect Costs: That portion of the GMP contract amount identified for General Conditions, Bonds, Sales Taxes, Insurance, and the Fee, as described in Exhibit C.

1.32 Laws and/or Regulations: Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

1.33 Liquidated Damages: Damages payable by the CMAR to CITY in the event CMAR does not achieve Substantial Completion or Final Completion of the Project as specified in the Contract Documents.

1.34 Notice to Proceed: A written notice given by CITY to CMAR fixing the date on which the CMAR will start to perform CMAR's obligations to complete the Work, or a Construction Phase, under this Contract.

1.35 Progress Payment Application: The form that is used by CMAR, and accepted by CITY, in requesting progress payments or final payment, and which will include such supporting documentation as is required by the Contract Documents and/or CITY.

1.36 Project: The facility(ies), together with all on-site and off-site infrastructure, site improvements and appurtenances to be designed, constructed, and installed in connection therewith, as more fully set forth and described in the Contract Documents and as are required thereby or reasonably inferred there from. May be the whole or a part.

1.37 Project/Construction Manager (PM/CM): An individual or firm retained by CITY to act as the owner's representative during design and/or construction of the Project.

1.38 Project Team: Pre-construction services team consisting of CITY, PM/CM (if applicable), A/E, CMAR, and other stakeholders who are responsible for making decisions regarding the Project.

1.39 Punch List: Items of Work to be completed after Substantial Completion and prior to Final Completion, which do not prevent the Project from being used for the purpose for which it is intended and which will not prevent the issuance of a Certificate of Substantial Completion and/or Certificate of Occupancy.

1.40 Record Drawings: Drawings (plans) prepared after construction is complete that represent the Work accomplished under the Contract.

1.41 Request for Information (RFI): Written request from CMAR to the CITY and/or A/E seeking clarification, modification, or additional information necessary for CMAR to properly and accurately procure materials and/or equipment, or to complete the Services and/or Work required under the Contract.

1.42 Samples: Physical examples of materials, equipment, or workmanship representative of a part of the construction Work and which establish the standards by which the portion of the construction Work will be evaluated.

1.43 Schedule: The schedule agreed upon in the GMP proposal pursuant to which the CMAR has agreed to complete the Work. If schedule modifications are required, the Schedule shall be adjusted pursuant to the provisions of the Contract Documents.

1.44 Schedule of Values: A document prepared by the CMAR and accepted by the CITY which divides the Contract Price into separate pay items such that the sum of all pay items is equal to the approved Contract Price for the Work, or for any portion or phase of the Work having a separate Contract Price. The Schedule of Values serves as a basis for review of CMAR's Progress Payment Applications.

1.45 Shop Drawings: All drawings, diagrams, illustrations, schedules and other data or information specifically prepared or assembled by or for the CMAR and submitted by the CMAR to illustrate some portion of the Work.

1.46 Site: The land or premises on which the Work is located, which is more fully described in the Construction Documents.

1.47 Specifications: The part(s) of the Contract Documents used during construction services consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto. May also be referred to as Technical Specifications.

1.48 Standards: Drawings, specifications, or other guidance or regulatory documents adopted by the CITY to detail, describe, or otherwise specify the minimum acceptable quality, tolerances, materials, finishes, and other components of construction on CITY projects. Includes the most current editions of the (1) Maricopa Association of Governments ("MAG") Uniform Standard Specifications for Public Works Construction, (2) MAG Uniform Standard Details for Public Works Construction, (3) CITY Supplement to the MAG Specifications, (4) City of Yuma Construction Standard Detail Drawings, and (5) Yuma County Public Works Standards – Volume III – Storm Drainage Facilities.

1.49 Subcontract: Any agreement (other than one involving an employer-employee relationship) entered into by the CMAR with a Subcontractors, vendor or supplier calling for equipment, supplies or services required to perform a portion of the Work, including any modifications thereto.

1.50 Subcontractor: An individual, firm, or corporation having a direct contract with the CMAR, or any other individual, firm, or corporation having a contract with the aforesaid CMAR at any tier, who undertakes to perform a part of the pre-construction services or construction services Work at the site for which the CMAR is responsible. Subcontractors will be selected through the Subcontractor Selection process described in paragraph 2.7 of this Contract.

1.51 Submittal: Material data, shop drawings, and product data submitted by the CMAR for review and approval by A/E to verify that the correct materials, products, and equipment are procured and installed properly and in the correct location.

1.52 Substantial Change: A Substantial Change in the Contract is any change in the scope of service for the Project that adds an item of Work not originally included in the Project scope; that increases or decreases the cost of performance by more than $25,000 or one percent (1%) of the original contract value, whichever is greater; that changes the Project Schedule in a manner that modifies the schedule critical path; or that modifies a quality standard more than the allowable deviations defined in the Specifications.

1.53 Substantial Completion: The construction services for the Work, or an agreed upon portion thereof, has progressed to the point where, in the opinion of CITY's Project Representative, as evidenced by a Certificate of Substantial Completion and/or Certificate of Occupancy, such construction services are sufficiently complete in accordance with the Contract Documents so that the Work (or specified part) can be utilized for the purposes for which it is intended, without any outstanding concurrent Work at the site, except as may be required to complete or correct Punch List items. This may include, but is not limited to: (i) approval by CITY's Fire Department; (ii) elevator permit; (iii) all systems in place, functional, and displayed to CITY or its representative; (iv) all materials and equipment installed; (v) all systems reviewed and accepted by all consulting engineers and/or architects; (vi) draft operations and maintenance manuals and record documents reviewed and accepted by CITY; (vii) CITY staff operation and maintenance training complete; (viii) HVAC test and balance completed (Provide minimum 30 days prior to projected substantial completion); and (ix) landscaping and site work. If no such certificate is issued, Substantial Completion takes place when the construction services Work or a Construction Phase is complete and ready for final payment as evidenced by CITY's Project Representative's written recommendation of final payment. The terms "substantially complete" and "substantially completed" as applied to all or part of the construction Work refers to Substantial Completion thereof.

1.54 Supplier: A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with CMAR or any Subcontractor to provide materials, equipment, or supplies for the Project.

1.55 Total Float: Number of Calendar Days by which the pre-construction services or construction services Work or any part of the same may be delayed without extending a pertinent schedule milestone in the Project Schedule or the Contract Time.

1.56 Total Project Cost: The Total Project Cost is the sum of the Cost of the Work (Direct Costs), Indirect Costs, and Preconstruction Services.

1.57 Work: The pre-construction services described in this Contract and the entire completed construction services or the various separate Construction Phases thereof, required to be furnished pursuant to the Construction Services Contract. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources, and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents.

1.58 Working Days: Days exclusive of Saturday, Sunday and CITY recognized legal holidays.

2.0 PRE-CONSTRUCTION SCOPE OF SERVICES

For the fee set forth in Section 4, CMAR shall furnish professional pre-construction services during the design of the Project described in Appendix D. The CMAR accepts a relationship of trust and confidence between itself and CITY and undertakes to act as CITY's fiduciary in all matters related to the Project. The CMAR acknowledges that it has the expertise to complete the Work identified in this Contract and agrees to furnish its best skills and best judgment to cooperate with CITY and provide support to the Engineer during the design of the Project, and in all ways to further the interests of CITY and the Project.

The CMAR shall furnish cost effective recommendations to maintain Project budgets, efficient constructability reviews, business administration, field supervision and shall use its best efforts to see to it that the Work is done in the best and most expeditious, economical manner consistent with the interests of CITY, and in strict conformity with the Contract Documents, including all reasonable implications therein. Because of the CMAR's fiduciary duties to CITY, the Project will be an "open book" job whereby CITY may attend any and all meetings of the CMAR firm relating to the Project, and CITY or its designated auditors or accountants shall have access to any and all records of the CMAR or maintained by the CMAR relating to the Project.

2.1 GENERAL

2.1.1 PM/CM: CITY has either designated a CITY staff member to act as CITY's Project Representative or has contracted separately with a person, firm, or corporation to act as CITY's PM/CM. If a PM/CM has been assigned, the PM/CM has no design responsibilities of any nature. None of the activities of a PM/CM supplant or conflict with the design, budget, or any other services and responsibilities furnished by CMAR or Subcontractors. All instructions by CITY relating to this Contract will be issued or made through the PM/CM. All communications and submittals of CMAR to CITY shall be issued or made through the PM/CM unless CITY or the PM/CM shall otherwise direct. The PM/CM shall not reasonably withhold approval for the CMAR to communicate directly with CITY or the A/E. The PM/CM shall have the authority to establish procedures, consistent with this Contract, to be followed by the CMAR and to call periodic conferences to be attended by the CMAR and the CMAR's Subcontractors, throughout the term of this Contract.

2.1.2 Program Evaluation: As a participating member of the Project Team, the CMAR will provide to CITY, within 30 calendar days from the Notice to Proceed, a written evaluation of the project scope and project budget, each in terms of the other, with recommendations as to the appropriateness of each.

2.1.3 Project Management/Project Team/Progress Meetings: These meetings will present general Project progress, address design options that arise during the design process, and receive input and direction from CITY engineering and operational staff. Project progress meetings shall be conducted bi-weekly or as required throughout the design portion of the Project, to complement the Project schedule and design review meetings. The CMAR will participate in each meeting, report on the Project construction schedule and cost estimate, and provide pertinent input when required.

2.1.4 The CMAR will provide pre-construction services, described herein, in a proactive manner and consistent with the intent of the most current Drawings and Specifications. The CMAR will promptly notify CITY in writing whenever the CMAR determines that any Drawings or Specifications are inappropriate for the Project and/or cause changes in the scope of work requiring an adjustment in the Project Schedule, Project Cost, and/or the Contract Time for the Work, to the extent such are established.

2.1.5 The CMAR, when requested by CITY, will attend, make presentations, and participate as may be appropriate in public agency and/or community meetings germane to the Project. The CMAR will assist the A/E and CITY's Project Representative in the preparation of exhibits, schedule diagrams, budget charts and other materials describing the Project, when their use is required or apropos in any such public meetings. This Contract will require **zero (0)** such public meetings.

2.2 CONSTRUCTION MANAGEMENT PLAN (CMP)

2.2.1 Prior to the start of construction the CMAR will prepare, and submit to CITY's Project Representative, a Construction Management Plan (CMP), which will detail, but not necessarily be limited to, the CMAR's determinations concerning: (a) Project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the Project, (b) investigations, if any, to be undertaken to ascertain subsurface conditions and physical conditions of existing surface and subsurface facilities and underground utilities, (c) alternate strategies for fast-tracking and/or phasing the construction, (d)

separate bidding documents/packages and strategies for the early procurement of long-lead equipment and/or materials, (e) the number of separate sub-agreements to be awarded to Subcontractors and Suppliers for the Project construction, (f) permitting strategy, (g) safety and training programs, (h) construction quality control, (i) the Cost Model and basis of the model, (j) a matrix summarizing each Project Team member's responsibilities and roles and (k) construction security.

2.2.2 The CMAR will add detail to its initial and subsequent versions of the CMP to keep it current throughout the pre-construction services phase, so that the CMP is ready for implementation at the start of construction of the Project or any Construction Phase. The update/revisions will take into account: (a) revisions in Drawings and Specifications; (b) the CMAR's examination of the results of any additional investigatory reports of subsurface conditions, drawings of physical conditions of existing surface and subsurface facilities and documents depicting underground utilities placement and physical condition, whether obtained by CITY, PM/CM, A/E or the CMAR, (c) unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right of way, (d) the fast-tracking if any of the construction, or other chosen construction delivery methods, (e) the requisite number of separate bidding documents to be advertised, (f) the status of the procurement of long-lead time equipment and/or materials and (g) funding issues identified by CITY.

2.2.3 The CMAR will prepare a written report on the market conditions that may affect the budget or the schedule and provide the report to the CITY's Project Representative.

2.2.4 Cost Estimate Development Log: This log shall be developed by the CMAR at the beginning of the Project and will initially include additive and deductive cost item suggestions that the CMAR has found to be appropriate for consideration by the Project Team based on past experience on similar projects. The CMAR shall update this log on a regular basis during the design process and all additive and deductive items shall be approved by the CITY's Project Representative with input from the A/E.

2.3 PROJECT SCHEDULE

2.3.1 The fundamental purpose of the "Project Schedule" is to identify, coordinate and record the tasks and activities to be performed by all Project Team members and then for the Project Team to utilize that deliverable as a basis for

managing and monitoring all members' compliance with the schedule requirements of the Project. Each Project Team member is responsible for its compliance with the Project Schedule requirements. The CMAR will develop a Project Schedule to be used by the Project Team based on input from other Project Team members. The Project Schedule will be consistent with the most recent revised/updated CMP.

The Project Schedule shall use the Critical Path Method (CPM) technique, unless required otherwise in writing by CITY. The CMAR will use CPM based scheduling software to establish, update, and maintain the Project Schedule. The Project Schedule will be presented in graphical and tabular reports as agreed upon by the Project Team. The Project Schedule will include all tasks and deliverables required by each member of the Project Team to identify long lead items such as right-of-way transactions, utility relocation activity, permitting requirements, etc. If Project phasing as described below is required, the Project Schedule will indicate milestone dates for the phases once determined. The Project Schedule's activities will directly correlate with the Schedule of Values specified in section 2.5.

2.3.2 The CMAR will include and integrate into the Project Schedule the services and activities required of CITY, PM/CM, A/E and CMAR, including all pre-construction and construction services. The Project Schedule will detail activities to the extent required to show: (a) the coordination between schematic design, design development, and development of the construction documents, (b) separate long-lead procurements, (c) permitting issues, (d) land and right-of-way acquisition, if any, (e) bid packaging strategy and awards to Subcontractors and Suppliers, (f) major stages of construction, (g) start-up, and (h) occupancy of the completed Work by CITY. The Project Schedule will include by example and not limitation, proposed activity sequences and durations for design, procurement, construction and testing activities, milestone dates for actions and decisions by the Project Team, preparation and processing of shop drawings and samples, delivery of materials or equipment requiring long-lead time procurement, milestone dates for various Construction Phases, total float for all activities, relationships between the activities, CITY's occupancy requirements showing portions of the Project having occupancy priority, and proposed dates for Substantial Completion and when the Work would be ready for final acceptance.

2.3.3 Schedule Updates: The Project Schedule will be updated and maintained by the CMAR with assistance from the Project Team throughout the pre-construction

services phase such that it will not require major changes at the start of construction services or any Construction Phase to incorporate CMAR's plan for the performance of the construction services Work. The CMAR will provide updates and/or revisions to the Project Schedule for use by the Project Team, whenever required, but not less often than monthly. The CMAR will include with such submittals a narrative describing its analysis of the progress achieved to-date vs. that planned, any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions. The Project Schedule update will be submitted to the CITY's Project Representative concurrently with the monthly progress payment request.

2.3.4 Project Phasing: If phased construction is deemed appropriate and CITY approves, the CMAR will review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, including any Construction Phase, with the objective of reducing the Project Schedule and/or Cost of the Work. The CMAR will take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, and other factors pertinent to saving time and cost.

2.3.5 Long-Lead Time Item Procurement: The CMAR will provide CITY's Project Representative with a written list of long-lead items, if any, that must be procured during the pre-construction phase to meet the Project Schedule requirements and recommend a schedule for their procurement.

2.3.5.1 CITY may procure such long-lead items on terms and conditions acceptable to the CMAR to the extent CITY determines that it is their own best interest to do so under purchase orders executed by CITY. Upon CITY's acceptance of any CMAR GMP Proposals, which includes such long-lead time items, the applicable purchase orders will be assigned by CITY to the CMAR, who will accept responsibility for such items as if they were initially procured by the CMAR. The CMAR will be entitled to receive the Construction Fee associated with the pre-purchased equipment value as compensation for accepting this responsibility.

2.3.5.2 If CITY concludes alternately, that it is in its best interest to have the CMAR procure such long-lead time items, CITY may, at its sole discretion, direct the CMAR to solicit bids, and upon approval by CITY of the terms and conditions of their purchase, CITY will

authorize in writing the CMAR to issue purchase orders for those items. Only upon approval of GMP Proposals, or upon a separate executed procurement agreement, will CITY authorize the CMAR to actually expend Project funds for such long-lead items.

2.3.5.3 If CITY chooses not to procure long-lead time items prior to acceptance of a GMP Proposal, the CMAR will list the items and a delivery schedule in the Sub-Bid Documents. The CMAR will notify the potential Suppliers, Subcontractors, and fabricators of the required delivery schedule so that it will be taken into consideration, if necessary, in their bid.

2.4 DESIGN DOCUMENT REVIEWS

2.4.1 The CMAR will evaluate periodically the availability of labor, materials/equipment, building systems, cost-sensitive aspects of the design; and other factors that may impact GMP Proposals and/or the Project Schedule and provide this information in a written report to CITY's Project Representative.

2.4.2 The CMAR will identify, in writing and in conjunction with the Project Team, those additional surface and subsurface investigations that are required to provide the necessary information for the CMAR to construct the Project. The CMAR will be responsible for the time and cost required to obtain such additional investigations, except as otherwise provided by specific Additional Services.

2.4.3 The CMAR will meet with the Project Team as required to review designs during their development. The CMAR will thoroughly familiarize itself with the evolving documents through initial/schematic design (30%/SD), preliminary design/design development (60%/DD), final design/construction documents (90%/CD), and final documents (100%/PS&E). The CMAR will proactively advise the Project Team and make recommendations on factors related to construction costs, and concerns pertaining to the feasibility and practicality of any proposed means and methods, selected materials, equipment and building systems, and labor and material availability. The CMAR will also advise the Project Team on proposed site improvements, excavation and foundation considerations, as well as, concerns that exist with respect to coordination of the Drawings and Specifications. The CMAR will recommend cost effective alternatives.

2.4.4 The CMAR will conduct constructability and biddability reviews of the Drawings and Specifications at each design document review submittal. The reviews will attempt to identify all discrepancies and inconsistencies in the Construction Documents especially those related to clarity, consistency, and coordination of Work of Subcontractors and Suppliers.

2.4.4.1 Constructability Reviews: The CMAR will evaluate whether (a) the Drawings and Specifications are configured to enable efficient construction, (b) design elements are standardized, (c) construction efficiency is properly considered in the Drawings and Specifications, (d) module/preassembly design are prepared to facilitate fabrication, transport and installation, (e) the design promotes accessibility of personnel, material and equipment and facilitates construction under adverse weather conditions, (f) sequences of Work required by or inferable from the Drawings and Specifications are practicable, and (g) the design has taken into consideration, efficiency issues concerning; access and entrance to the site, lay-down and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues.

2.4.4.2 Biddability Reviews: The CMAR will check cross-references and complementary Drawings and sections within the Specifications, and in general evaluate whether (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies, (b) named materials and equipment are commercially available and are performing well or otherwise, in similar installations, (c) the design provides as-built data, (d) Specifications include alternatives in the event a requirement cannot be met in the field, (e) and the Project is likely to be subject to differing site conditions considering the data on subsurface conditions, physical conditions of existing surface and subsurface facilities and physical conditions of underground utilities made available by the design or resulting from conditions inherent to work similar to the Work.

2.4.4.3 Review comments will be provided to CITY in writing, clearly identifying all discovered discrepancies and inconsistencies in the Drawings and Specifications with notations and recommendations made on the Drawings, Specifications, and other documents. If

requested by CITY, the CMAR will meet with CITY and A/E to discuss any findings and review reports.

2.4.4.4 The CMAR's reviews will be from a contractor's perspective, and though it will serve to reduce the number of RFIs and changes during construction, responsibility for the Drawings and Specifications will remain with the A/E and not the CMAR.

2.4.5 Notification of Variance of Deficiency: It is the CMAR's responsibility to assist the A/E in ascertaining that the Construction Documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations as they relate to the performance of the Work. If the CMAR recognizes that portions of the Construction Documents as they relate to the performance of the Work are at variance with applicable laws, statutes, ordinances, building codes, rules and regulations it will promptly notify the A/E and CITY's Project Representative in writing, describing the apparent variance or deficiency.

2.4.6 Alternate Systems Evaluations: The Project Team, at all regularly scheduled Design Review Meetings will routinely identify and evaluate, using value engineering principles, any alternate systems, approaches, design changes that have the potential to reduce Project costs while still delivering a quality and functional product. If the Project Team agrees, the CMAR in cooperation with the A/E will perform a cost-benefit analysis of the alternatives and submit such in writing to the Project Team. The Project Team will decide which alternatives will be incorporated into the Project. The A/E will have full responsibility for the incorporation of the alternatives into the Drawings and Specifications. The CMAR will include the cost of the alternatives into the Cost Model and any GMP Proposals.

2.5 COST MODEL, COST ESTIMATES AND SCHEDULE OF VALUES

2.5.1 As soon as practical during the initial/schematic design phase, the CMAR will review all available information regarding the design and scope of the Project and, based upon that review, will develop a Cost Estimate that will serve as input to the Cost Model identified in Exhibit B. The Cost Estimate will be continually updated and kept current as the design progresses until a final GMP for the entire Project is established. The Cost Estimate will be the best representation by the CMAR of what the complete functional Project's construction costs will be. The CMAR will communicate to the Project Team any assumptions made in preparing the Cost Estimate. The Cost Model will include (a) the Cost of the Work (Cost Estimate, allowances, and contingencies), (b)

Indirect Costs, and (c) Pre-construction Services. The sum of (a) and (b) defines the GMP and the sum of (a) through (c) gives the Total Project Cost.

2.5.2 During the design phases the CMAR shall maintain a Cost Estimate Development Log in which the CMAR tracks the additive and/or deductive changes to the Cost Estimate based on the CMAR's review of design documents made available at the specified design phase. CITY's Project Representative, A/E and CMAR will reconcile any disagreements on the estimate to arrive at an agreed upon Cost Estimate for the construction costs based on the scope of the Project through that specified design phase. The design phases applicable to this paragraph are: initial/schematic design completion; preliminary/design development completion; and final plans, specifications, & estimate/ construction documents completion. If the Project Team requires additional updates of the Cost Estimate beyond that specified in this paragraph, the CMAR will provide the requested information in a timely manner.

2.5.3 If at any point the Cost Estimate submitted to CITY exceeds previously accepted estimates agreed to by the Project Team or other key aspects of the Cost Model or CITY's Project Budget, the CMAR will make appropriate recommendations to the A/E and CITY's Project Representative on means/methods, materials, and/or other design elements that it believes will reduce the estimated construction costs, (without altering the project's basic program) such that it is equal to or less than the established Project Team's target and/or the Project Budget. These changes to the Cost Estimate shall be identified in the Cost Estimate Development Log.

2.5.4 Before the first Progress Payment Application, CMAR shall submit to CITY, and the Parties shall agree upon, a schedule of values, setting forth the various portions of the Work, and the portion of the GMP allocated to each. This schedule of values shall be used as a basis for payment.

2.5.5 CMAR will prepare a monthly cash flow projection for the Project. This projection shall be updated on a monthly basis to reflect payments to the CMAR for completed Work.

2.6 GUARANTEED MAXIMUM PRICE (GMP) PROPOSALS

2.6.1 CITY's construction budget for this Project is approximately $23 million. During formulation of the Project and execution of the design the CMAR shall maintain

cost controls to deliver the Project GMP within the Project budget. If at any time during the design of the Project it appears the cost of construction may exceed the Project construction budget the CMAR shall immediately notify CITY. Budgets will be developed for each phase of construction. If at any point the GMP provided by the CMAR exceeds the Project budget, the CMAR shall recommend approaches to bring the Project within budget.

2.6.2 The Indirect Cost percentages associated with General Conditions, CMAR's Fee, bond allowance, insurance allowance, and sales taxes of the GMP Cost Model given in Exhibit B shall be negotiated prior to the execution of the Pre-construction Services contract and shall be used in subsequent GMP Proposal development. These percentages are to be applied to the "Cost of the Work" estimates for both additive and deductive change orders, except that for deductive change orders generated due to CMAR initiated savings the CMAR's Overhead and Fee shall not be adjusted.

2.6.3 At the stage of design as approved by CITY, the CMAR shall, if requested by CITY, propose a GMP, which shall be the sum of the estimated Cost of the Work and the Indirect Costs as defined in the "Guaranteed Maximum Price (GMP) Cost Model" given in Exhibit B.

2.6.4 The Preconstruction Services shall be negotiated separately and shall include all costs, including Indirect Costs and CMAR's Fee, associated with that phase of the Work.

2.6.5 The Total Project Cost is the sum of the GMP Proposal, Preconstruction Services, and prior phase GMPs as defined in the Guaranteed Maximum Price Cost Model given in Exhibit B.

2.6.6 CMAR shall include with the GMP Proposal a written statement of its basis, which shall include:

2.6.6.1 List of the Design Materials and Construction Documents, including all addenda, which were used in preparation of the GMP Proposal.

2.6.6.2 List of allowances and a statement of their basis.

2.6.6.3 List of the assumptions and clarifications made by the CMAR in the preparation of the GMP Proposal to supplement the information contained in the Design Materials and Construction Documents.

2.6.6.4 The Substantial Completion date upon which the GMP Proposal is based.

2.6.6.5 The Schedule of Work upon which the Substantial Completion date is based.

2.6.6.6 Schedule of applicable alternate prices.

2.6.6.7 Schedule of applicable unit prices.

2.6.6.8 Statement of additional services included, if any.

2.6.6.9 The time limit for acceptance of the GMP Proposal.

2.6.6.10 List of the proposed personnel or positions that the CMAR intends to station at the jobsite to manage the work.

2.6.7 The CMAR shall meet with CITY, and the PM/CM (if applicable) to review the GMP Proposal. In the event that CITY discovers any inconsistencies or inaccuracies in the information presented, CITY shall promptly give written notice to the CMAR, who shall make appropriate adjustments to the GMP Proposal, its basis or both.

2.6.8 Prior to CITY's acceptance of the CMAR's GMP Proposal, the CMAR shall not incur any cost to be reimbursed as part of the Cost of the Work, except as provided in this Contract or as CITY may specifically authorize in writing.

2.6.9 The CMAR, in preparing any GMP Proposal, will obtain from CITY the signed, sealed, and dated Construction Documents (including all addenda). The CMAR will prepare its GMP in accordance with CITY's "Request for GMP Proposal" requirements based on the most current completed Construction Documents at that time. The CMAR will mark the face of each document of each set upon which its proposed GMP is based. The CMAR will send one set of those documents to CITY's Project Representative, keep one set and return the third set to the A/E.

2.6.10 An updated/revised Project Schedule will be included with any GMP Proposal(s) that reflects the scope of Work shown in the current set of design documents upon which the GMP Proposal(s) is based. Any such Project Schedule updates/revisions will continue to comply with the requirements of paragraph 2.3.

2.6.11 In the event the CMAR elects, in its sole discretion, to maintain a Contingency within the GMP, the Contingency must be acceptable to CITY. In addition, the terms and conditions regarding use of the Contingency during construction services will be established by CITY and reflected in the Construction Phase Notice to Proceed for that phase of the Project. The use of the Contingency will be based on these mutually agreeable terms and conditions and written approval from CITY shall be a prerequisite to the CMAR's use of the Contingency. CMAR will establish and maintain a Contingency Log and shall review the status of the Contingency with CITY's Project Representative at each progress meeting.

2.6.12 GMP Proposal(s) Review and Approval

2.6.12.1 The CMAR will meet with CITY's Project Representative and A/E to review any GMP Proposal(s) and the written statement of its basis. In the event CITY's Project Representative or A/E discovers inconsistencies or inaccuracies in the information presented, the CMAR will make adjustments as necessary to the GMP Proposal, its basis or both.

2.6.12.2 Upon receipt of any GMP Proposal from the CMAR, CITY may submit the same documents that were used by CMAR in developing his GMP to an independent third-party or to the A/E for review and verification. The third-party or A/E will develop an independent estimate of the Cost of the Work and review the Project Schedule for the associated scope of the GMP Proposals.

2.6.12.3 If the CMAR's GMP Proposal is greater than the independent third party or A/E's estimate, CITY may require the CMAR to reconfirm its GMP Proposal. The CMAR will accept the independent third party or A/E estimate for the Cost of the Work as part of its GMP or present to CITY, within seven days of a written request, a report identifying, explaining and substantiating the differences. The CMAR may be requested or at its own discretion submit a revised GMP Proposal for consideration by CITY. At that time CITY may do one of the following:

A. Accept the CMAR's original or revised GMP Proposal, if within CITY's budget, without comment.

B. Accept the CMAR's original or revised GMP Proposal that exceeds CITY's budget, and indicate in writing to the CMAR

that the Project Budget has been increased to fund the differences.

C. Reject the CMAR's original or revised GMP Proposal because it exceeds either or both the CITY's budget and the independent third-party's or A/E's estimate, in which event, CITY may terminate this Contract and/or elect to not enter into a separate contract with the CMAR for construction associated with the scope of Work reflected in the GMP Proposal. See Section 6.8 of this contract for termination provisions.

2.6.12.4 If design changes are required during review and negotiation of GMP Proposals, CITY will authorize and cause the A/E to revise the Construction Documents to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved GMP Proposal. Such revised Construction Documents will be furnished to the CMAR. The CMAR will promptly notify the A/E and CITY's Project Representative if any such revised Construction Documents are inconsistent with the agreed-upon assumptions and clarifications.

2.7 COMPETITIVE BIDDING AND SUB-BIDS

2.7.1 The CMAR will develop a written plan for selecting Subcontractors (the "Subcontractor Selection Plan"), for acceptance by CITY, that includes the names of a minimum of three qualified Subcontractors for each trade in the Project and solicit bids for the various Work categories. If there are not three qualified Subcontractors available for a specific trade, the CMAR will request approval from CITY's Project Representative to submit less than three names. No change in the approved Subcontractors will be allowed without prior written approval by CITY.

2.7.2 If prior to receipt of Sub-bids or prior to award of Subcontractors or Suppliers, CITY objects to any nominated Subcontractor or Supplier or to any self-performed Work for good reason, the CMAR will nominate a substitute Subcontractor or Supplier, preferably if such option is still available, from those who submitted Sub-bids for the Work affected. Once such substitute Subcontractors and Suppliers are consented to by CITY, the CMAR proposed GMP for the Work or portion thereof will be correspondingly adjusted to reflect any higher or lower costs from any such substitution.

2.7.3 The CMAR will distribute Drawings and Specifications and conduct a pre-bid conference with prospective Subcontractors.

2.7.4 If the Work is Horizontal Construction as defined by A.R.S. § 34-101(16) the CMAR shall self-perform at least 45% of the construction Work. For roadway or pipeline Work the self-performance minimum shall increase to 50% of the construction Work in accordance with Maricopa Association of Governments requirements.

2.7.5 The CMAR, at the required time, will close the bidding and collect all Sub-bids received within the prescribed deadline for receipt of Sub-Bids. Promptly, after the closing of Sub-bids, the CMAR will (in the presence of CITY's Project Representative) open and read all properly and timely submitted Sub-Bids. The CMAR will submit a completed Sub-bid tabulation form to CITY's Project Representative within a reasonable time after the closing of the Sub-bid opening proceedings.

2.7.6 The CMAR, upon opening of Sub-bids will evaluate them including, but not limited to, the evaluation of lower tier Subcontractors, Subcontractor qualification submittals and prospective Suppliers selected by each apparent low Sub-Bidder. The CMAR will resolve any Sub-bid withdrawal, protest, or disqualification in connection with the award at no increase in the Cost of the Work.

2.7.7 If the CMAR elects to utilize a subcontractor whose bid was not lowest the CMAR shall request written approval from CITY for use of the subcontractor and shall state the reason(s) for not using the lowest bidder.

2.7.8 Within twenty-one (21) days after Subcontractor bid opening, the CMAR will deliver to CITY's Project Representative a written Notice of Intent to Award, itemizing the Subcontractors and Suppliers selected by the CMAR. The Notice of Intent to Award will detail (a) for each Sub-agreement the amount of the Sub-bid and the corresponding Subcontractor or Supplier, (b) the sum of Sub-bids received for all intended Sub-agreements, (c) trade work that the CMAR intends to self-perform, if any.

2.7.9 Early selection of Subcontractors or Suppliers will be performed in accordance with applicable State procurement laws. If the CMAR believes early selection of Subcontractors is in the best interest of the Project, he will notify CITY's Project Representative in writing outlining which Subcontractors and/or suppliers

should be considered on this basis. This procedure shall be in accordance with the Subcontractor Selection Plan. CITY's Project Representative will review this request and respond in writing within fourteen (14) days.

3.0 PERIOD OF SERVICES

3.1 The Pre-construction Services described in Section 2 will be performed by CMAR in accordance with the most current updated/revised Project Schedule. Failure on the part of the CMAR to adhere to the Project Schedule requirements for activities for which it is responsible will be sufficient grounds for termination of this Contract by CITY.

3.2 If the date of performance of any obligation or the last day of any time period provided for herein should fall on a Saturday, Sunday, or holiday for CITY, then said obligation will be due and owing, and said time period will expire, on the first day thereafter which is not a Saturday, Sunday or legal CITY holiday. Except as may otherwise be set forth herein, any performance provided for herein will be timely made if completed no later than 5:00 p.m. on the day of performance.

4.0 CONTRACT AMOUNT AND PAYMENTS

4.1 CONTRACT AMOUNT

Based on the final Pre-construction Services fee proposal, titled BAN-2024-11 MGC Preconstruction Services Proposal_REV5, and dated February 19, 2025, submitted by the CMAR and accepted by CITY (which by reference is made a part of this Contract); CITY will pay the CMAR on a Time and Material basis as follows:

4.1.1 For the Basic Service described in Section 2, and performed to the satisfaction of CITY, the not-to-exceed amount: Three Hundred Ten Thousand, Nine Hundred Twenty-Six dollars and Eighty-Two cents ($310,926.82).

4.1.2 For the additional services described in paragraph 4.3, and performed to the satisfaction of CITY, the not-to-exceed amount: One Hundred Sixty Thousand dollars and no cents ($160,000.00).

4.2 PAYMENTS

4.2.1 Requests for monthly payments by the CMAR for Pre-construction Services will be submitted to CITY's Project Representative in the manner specified by CITY and will be accompanied by a progress report, detailed invoices, and receipts.

The progress report will include, as a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any Deliverables submitted, copies of any Subcontractors requests for payment, an updated progress schedule, an updated cash flow report, plus similar narrative and listings of Deliverables associated with their Work. Services will be paid in accordance with the work effort expended on that service during the preceding month.

4.2.2 The Contract fees for CMAR and Subcontractors will be based upon the hourly rate schedule included as Exhibit A attached.

4.2.3 The CMAR warrants that it shall comply with A.R.S. § 34-221(G), and pay Subcontractors, design professionals, and material suppliers within seven (7) days after receipt of each progress payment. CMAR shall also require its Subcontractors to comply with A.R.S. § 34-221(G) with regard to the Subcontractors, design professionals, and material suppliers. When specifically required, as a condition precedent to CMAR's right to receive payment, with each Progress Payment Application, CMAR shall submit payrolls, petty cash accounts in excess of $500.00, receipted invoices or invoices with check vouchers attached, and any other evidence required by the CITY's Representative to demonstrate that cash disbursements already made by CMAR on account of the Contract Sum equal or exceed (a) progress payments already received by CMAR; less (b) that portion of those payments attributable to CMAR's Fee; plus (c) payrolls for the period covered by the present Progress Payment Application Bond.

4.2.4 The CMAR agrees that no charges or claims for costs or damages of any type will be made by it for any delays or hindrances such as utility companies and outside agencies which are beyond the reasonable control of CITY during the progress of any portion of the services specified in this Contract. Such delays or hindrances, if any, will be solely compensated for by a non-compensable extension of time for such reasonable period as may be mutually agreed between the Parties. It is understood and agreed, however, that permitting the CMAR to proceed to complete any services, in whole or in part after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of CITY of any of its legal rights herein.

4.2.5 Notwithstanding any other term of the Contract, CITY's or PM/CM's approval and/or payment of any Progress Payment Application shall not constitute acceptance of any work not in accordance with the Contract Documents.

4.2.6 Subject to CITY's right to withhold payments in accordance with A.R.S. § 34-221 and this Contract, and provided a Progress Payment Application is received by CITY in the method, with the documentation, and to the places specified herein, not later than the last day of a month, CITY shall make payment to CMAR no later than the twenty-first (21st) day of the following month.

4.2.7 Pursuant to A.R.S. § 34-221(C), a Progress Payment Application submitted shall be deemed approved and certified for payment after seven (7) days from the date of submission in accordance with the requirements of this Article 5 of this Contract, unless before that time CITY's Project Representative prepares and issues a specific written finding setting forth those items in detail in the Progress Payment Application that are not approved for payment under the Contract. In such case, CITY may retain an amount from the progress payment sufficient to pay the expenses that CITY reasonably expects to incur in order to pay or discharge the expenses set forth in the written finding regarding the items in the Progress Payment Application that are not approved for payment. CITY shall pay the progress payments on or before fourteen (14) days after the Progress Payment Application is certified and approved by CITY's Project Representative and Finance Department.

4.2.8 No compensation to the CMAR will be allowed contrary to Title 34, Chapter 1, Article 1, of the Arizona Revised Statutes.

4.2.9 If any service(s) executed by the CMAR is abandoned or suspended by the City in whole or in part, for a period of more than 180 days through no fault of the CMAR, the CMAR is to be paid for the services performed prior to the abandonment or suspension.

4.3 ADDITIONAL SERVICES

The following Additional Services may be required for the successful completion of this Project. Mark-ups are not authorized and only the items specifically identified below will be reimbursed as authorized herein:

A. Subsurface Utility Locating

B. Surveying

~~C. Geotechnical Investigations~~

D. Environmental Studies

E. Other (describe): <u>Manufacturer's Site Visits, Direct Costs and Reimbursables</u>

5.0 CITY OF SAN LUIS' RESPONSIBILITIES

5.1 CITY, at no cost to the CMAR, will furnish the following information:

5.1.1 One copy of data CITY determines pertinent to the Work. However, the CMAR will be responsible for searching the records and requesting information it deems reasonably required for the Project.

5.1.2 Available data and information pertaining to relevant policies, standards, criteria, studies, etc.

5.2 CITY additionally will:

5.2.1 Contract separately with one or more firms to provide engineering design services for the Project. The scope of services for the A/E will be provided to the CMAR for its information. The CMAR will have no right to limit or restrict any changes of such services that are otherwise mutually acceptable to CITY and A/E.

5.2.2 Supply copies of programs, reports, drawings, and specifications reasonably required by the CMAR.

5.2.3 Provide the CMAR with adequate information in its possession or control regarding CITY's requirements for the Project.

5.2.4 Give prompt written notice to the CMAR when CITY becomes aware of any default or defect in the Project or non-conformance with the Drawings and Specifications.

5.2.5 Notify the CMAR of changes affecting the budget allocations.

5.3 CITY's Project Representative during the term of this Contract is **Jorge R. Perez, CPM**.

5.3.1 CITY's Project Representative has the authority to administer this Contract and will monitor CMAR's compliance with all terms and conditions stated herein.

5.3.2 All requests for information from or decisions by CITY on any aspect of the work or Deliverables will be directed to CITY's Project Representative.

5.3.3 CITY's Project Representative will have authority to approve the Project Budget and Project Schedule, and render decisions and furnish information deemed appropriate to the CMAR.

6.0 CONTRACT CONDITIONS

6.1 PROJECT DOCUMENTS AND COPYRIGHTS

6.1.1 CITY Ownership of Project Documents: All work products (electronically or manually generated) including but not limited to: cost estimates, studies, design analyses, and other related documents which are prepared in the performance of this Contract (collectively referred to as Project Documents) are to be and remain the property of CITY and are to be delivered to CITY's Project Representative before the final payment is made to the CMAR. Nonetheless, in the event these Project Documents are used, modified, or adapted without the written consent of the CMAR, which consent the CMAR will not unreasonably withhold, CITY agrees to hold the CMAR harmless to the extent permitted by law, from the legal liability arising out of and or resulting from CITY's use, modification or adaptation of the Project Documents.

6.1.2 CMAR to Retain Copyrights: The copyrights, patents, trade secrets or other intellectual property rights associated with the ideas, concepts, techniques, inventions, processes or works of authorship developed or created by the CMAR, its Subcontractors or personnel, during the course of performing this Contract or arising out of the Project will belong to the CMAR.

6.1.3 License to CITY for Reasonable Use: The CMAR hereby grants, and will require its Subcontractors to grant, a license to CITY, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Project Documents, works or Deliverables developed or created for the Project and this Contract. This license will also include the making of derivative works. In the event that the derivative works require CITY to alter or modify the Project Documents, then paragraph 6.1.1 applies.

6.1.4 Documents to Bear Seal: When applicable and required by state law, the CMAR and its Subcontractors will endorse by professional seal all plans, reports, Deliverables and other works prepared by them for this Contract.

6.2 COMPLETENESS AND ACCURACY OF CMAR'S WORK

The CMAR will be responsible for the completeness and accuracy of its reviews, reports, supporting data, and other pre-construction Deliverables prepared or compiled pursuant to its obligations under this Contract and will at its sole own expense correct its work or Deliverables. The fact that CITY has accepted or approved the CMAR's work or Deliverables will in no way relieve the CMAR of any of its responsibilities under the Contract, nor does this requirement to correct the work or Deliverable constitute a waiver of any claims or damages otherwise available by law or Contract to CITY.

6.3 ALTERATION IN CHARACTER OF WORK

In the event an alteration or modification in the character of work or Deliverable results in a Substantial Change in this Contract, the work or Deliverable will nonetheless be performed as directed by CITY. However, before any altered or modified work begins, a Change Order or Amendment will be approved and executed by CITY and the CMAR. Such Change Order or Amendment will not be effective until approved by CITY. Additions to, modifications, or deletions from the Project provided herein may be made, and the compensation to be paid to the CMAR may accordingly be adjusted by mutual agreement of the Parties.

No claim for extra work done or materials furnished by the CMAR will be allowed by CITY except as provided herein, nor will the CMAR do any work or furnish any material(s) not covered by this Contract unless such work or material is first authorized in writing. Work or material(s) furnished by the CMAR without such prior written authorization will be the CMAR's sole jeopardy, cost, and expense, and CMAR hereby agrees that without prior written authorization no claim for compensation for such work or materials furnished will be made.

6.4 DATA CONFIDENTIALITY

6.4.1 As used in the Contract, data means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by or obtained by the CMAR in the performance of this Contract.

6.4.2 The Parties agree that all data, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the CMAR in connection with the

CMAR's performance of this Contract is confidential and proprietary information belonging to CITY.

6.4.3 The CMAR will not divulge data to any third party without prior written consent of CITY. The CMAR will not use the data for any purposes except to perform the services required under this Contract. These prohibitions will not apply to the following data provided the CMAR has first given the required notice to CITY:

6.4.3.1 Data known to the CMAR prior to its performance under this Contract unless such data was acquired in connection with work performed for CITY.

6.4.3.2 Data acquired by the CMAR in its performance under this Contract and which was disclosed to the CMAR by a third party, who to the best of the CMAR's knowledge and belief, had the legal right to make such disclosure and the CMAR is not otherwise required to hold such data in confidence; or

6.4.3.3 Data required to be disclosed by the CMAR by virtue of law, regulation, or court.

6.4.4 In the event the CMAR is required or requested to disclose data to a third party, or any other information to which the CMAR became privy as a result of any other contract with CITY, the CMAR will first notify CITY as set forth in this Article of the request or demand for the data. The CMAR will timely give CITY sufficient facts, such that CITY can have a meaningful opportunity to either first give its consent or take such action that CITY may deem appropriate to protect such data or other information from disclosure.

6.4.5 The CMAR, unless prohibited by law, within ten calendar days after completion of services for a third party on real or personal property owned or leased by CITY, will promptly deliver, as set forth in this section, a copy of all data to CITY. All data will continue to be subject to the confidentiality agreements of this Contract.

6.4.6 The CMAR assumes all liability for maintaining the confidentiality of the data in its possession and agrees to compensate CITY if any of the provisions of this section are violated by the CMAR, its employees, agents, or Subcontractors. For the purposes of seeking injunctive relief, it is agreed that a breach of this section will be deemed to cause irreparable harm that justifies injunctive relief in court.

6.5 PROJECT STAFFING

6.5.1 Prior to start of any work or Deliverable under this Contract, the CMAR will submit to CITY, an organization chart for the CMAR staff and Subcontractors, and detailed resumes of key personnel listed in its response to CITY's Request for Qualifications or subsequent fee proposals (or revisions thereto), that will be involved in performing the services prescribed in the Contract. Unless, otherwise informed, CITY hereby acknowledges its acceptance of such personnel to perform such services under this Contract. In the event the CMAR desires to change such key personnel from performing such services under this Contract, the CMAR will submit the qualifications of the proposed substituted personnel to CITY for prior approval. Key personnel will include, but are not limited to, principal-in-charge, project director, project manager, pre-construction manager, superintendent, or those persons specifically identified to perform services of cost estimating, scheduling, value engineering, and procurement planning.

6.5.2 The CMAR will maintain an adequate number of competent and qualified persons, as determined by CITY, to ensure acceptable and timely completion of the scope of services described in Section 2 throughout the performance of this Contract. If CITY objects, with reasonable cause, to any of the CMAR's staff, the CMAR will take prompt corrective action acceptable to CITY and, if required, remove such personnel from the Project and replace with new personnel acceptable to CITY.

6.6 INDEPENDENT CONTRACTOR

The CMAR is and will be an independent contractor and whatever measure of control CITY exercises over the work or Deliverable pursuant to the Contract will be as to the results of the Work only. No provision in this Contract will give or be construed to give CITY the right to direct the CMAR as to the details of accomplishing the Work or Deliverable. These results will comply with all applicable laws and ordinances.

6.7 SUBCONSULTANTS

Prior to beginning the Work or Deliverable, the CMAR will furnish CITY for approval, the names of all Subcontractors to be used on this Project. Subsequent changes are subject to the approval of CITY.

6.8 TERMINATION

6.8.1 CITY and the CMAR hereby agree to the full performance of the covenants contained herein, except that CITY reserves the right, at its discretion and without cause, to terminate or abandon any or all services provided for in this Contract, or abandon any portion of the Project for which services have been performed by the CMAR.

6.8.2 In the event CITY abandons any or all of the services or any part of the services as herein provided, CITY will so notify the CMAR in writing, and the CMAR will immediately after receiving such notice discontinue advancing the Work specified under this Contract and mitigate the expenditure, if any, of costs resulting from such abandonment or termination.

6.8.3 The CMAR, upon such termination or abandonment, will promptly deliver to CITY all reports, estimates and other work or Deliverable entirely or partially completed, together with all unused materials supplied by CITY.

6.8.4 The CMAR will appraise the Work completed and submit an appraisal to CITY for evaluation. CITY will have the right to inspect the CMAR's work or Deliverable to appraise the Work completed.

6.8.5 The CMAR will receive compensation in full for services satisfactorily performed to the date of such termination. The fee will be paid in accordance with Paragraph 4 of this Contract, and will be an amount mutually agreed upon by the CMAR and CITY. If there is no mutual agreement, the final determination will be made in accordance with paragraph 6.9, "Disputes." However, in no event will the fee exceed that set forth in Paragraph 4 or as amended in accordance with paragraph 6.3, "Alteration in Character of Work." CITY will make the final payment within sixty days after the CMAR has delivered the last of the partially or otherwise completed Work items and the final fee has been agreed upon.

6.9 DISPUTES

6.9.1 In the event of any dispute arising between CITY and the CMAR regarding any part of the Contract or Contract Documents, or the Parties' obligations or performance thereunder, either Party may institute the dispute resolution procedures set forth herein. The Parties shall continue performance of their respective obligations hereunder notwithstanding the existence of a dispute.

6.9.2 Any Party may from time to time call a special meeting for the resolution of disputes that would cause a Substantial Change to the Project. Such meeting shall be held at CITY's offices within three (3) Calendar days of written request, which request shall specify in reasonable detail the nature of the dispute. The meeting shall be attended by CITY's Project Representative, the CMAR's Authorized Representative and any other person who may be affected in any material respect by the resolution of such dispute. Such Representatives shall have authority to settle the dispute and shall attempt in good faith to resolve the dispute.

6.9.3 Mediation

6.9.3.1 If the dispute has not been resolved within seven (7) days after the special meeting has been held, a mediator, mutually acceptable to the Parties and experienced in design and construction matters shall be appointed. If the Parties cannot agree on a mediator, each Party shall select a mediator, and those two mediators will select a third mediator who shall then preside over the dispute resolution. The cost of the mediator shall be shared by the Parties. The mediator shall be given any written statements of the Parties and may review the Site and any relevant documents. The mediator shall call a meeting of the Parties within 21 calendar days after his/her appointment, which meeting shall be attended by CITY's Project Representative, the CMAR's Authorized Representative and any other person who may be affected in any material respect by the resolution of such dispute. Such Representatives shall have authority to settle the dispute and shall attempt in good faith to resolve the dispute. During such 21-calendar day period, the mediator may meet with the Parties separately.

6.9.3.2 No minutes shall be kept with respect to any mediation proceedings, and the comments and/or findings of the mediator, together with any written statements prepared, shall be non-binding, confidential and without prejudice to the rights and remedies of any Party. The entire mediation process shall be completed within 42 calendar days of the date upon which the initial special meeting is held, unless the Parties agree otherwise in writing. If the dispute is settled through the mediation process, the decision will be implemented by written agreement signed by the Parties. If the dispute cannot be resolved through the

mediation process, the Parties may pursue resolution though other legal remedies available to them under the terms of this Contract. Notice of claim time limits will be stayed during the mediation process.

6.10 WITHHOLDING PAYMENT

CITY reserves the right to withhold funds from the CMAR's progress payments up to the amount equal to the claims CITY may have against the CMAR, until such time that a settlement on those claims has been reached.

6.11 RECORDS/AUDIT

6.11.1 Records of the CMAR's direct personnel payroll, reimbursable expenses pertaining to this Project and records of accounts between CITY and the CMAR will be kept on a generally recognized accounting basis for a period of five years after Final Completion. CITY, its authorized representative, and/or the appropriate federal agency, reserve the right to audit the CMAR's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate this Contract and any Change Orders for a period of five years after Final Completion pursuant to this Contract. CITY reserves the right to decrease Contract Amount and/or payments made on this Contract if, upon audit of the CMAR's records, the audit discloses the CMAR has provided false, misleading, or inaccurate cost and pricing data.

6.11.2 The CMAR will include a provision similar to paragraph 6.11.1 in all of its agreements with Subconsultants, Subcontractors, and Suppliers providing services under this Contract to ensure CITY, its authorized representative, and/or the appropriate federal agency, has access to the Subconsultants', Subcontractors', and Suppliers' records to verify the accuracy of cost and pricing data. CITY reserves the right to decrease Contract Amount and/or payments made on this Contract if the above provision is not included in Subconsultant, Subcontractor, and Supplier Contracts, and one or more of those parties do not allow CITY to audit their records to verify the accuracy and appropriateness of pricing data.

6.12 INDEMNIFICATION

6.12.1 To the fullest extent permitted by law, CMAR, its successors and assigns shall defend, indemnify and hold harmless CITY, its officers, officials, agents and employees from and against all liabilities, damages, penalties, fines, demands,

judgements, losses and costs (including reasonable attorney fees and court costs including any appellate proceedings to which any such Indemnified Party may become subject) to the extent caused by the negligence, recklessness or intentional wrongful conduct of CMAR or other persons employed or used by the CMAR in the performance or non-performance of this Contract. CMAR's duty to defend, indemnify and hold harmless CITY, its officers and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction or damage of property including loss of use of resulting there from, caused by CMAR's negligence, recklessness or intentional wrongful conduct in the performance or non-performance of this Contract and the negligence, recklessness or intentional wrongful conduct of any person employed by CMAR or used by CMAR in the performance of this Contract. The indemnity obligations under this Section 6.12.1 shall survive termination of this Contract.

6.12.2 Insurance provisions set forth in this Contract are separate and independent from the indemnity provisions of this paragraph and shall not be construed in any way to limit the scope and magnitude of the indemnity provisions. The indemnity provisions of this paragraph shall not be construed in any way to limit the scope and magnitude and applicability of the insurance provisions.

6.13 NOTICES

Unless otherwise provided herein, all notices, demands, or other communication required or permitted to be given under this Contract shall be in writing and shall be deemed to have been duly given and received either (a) on the date of service if personally served on the Party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class US mail, registered or certified, postage prepaid, or (c) the following business day after the date given to a recognized and reputable overnight delivery service, and properly addressed as set forth below, or at such other address, and to the attention of such other person or officer, as any Party may designate in writing by notice duly given pursuant to this subsection:

TO CITY:
Eulogio Vera, PE
Public Works Director
City of San Luis
1090 East Union Street
PO Box 3750
San Luis, AZ 85349

TO CMAR:
Bryan Forster
Projects Director
MGC Contractors, Inc.
4110 East Elwood Street
Phoenix, AZ 85040

If a copy of a notice is also given to a Party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a Party shall mean and refer to the date on which the Party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

6.14 COMPLIANCE WITH LAWS

6.14.1 The CMAR understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to the Contract. The CMAR agrees to comply with these laws in performing this Contract and to permit CITY to verify such compliance.

6.14.2 Immigration Law Compliance Warranty

6.14.2.1 As required by A.R.S. § 41-4401, CMAR hereby warrants its compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A). CMAR further warrants that after hiring an employee, CMAR verifies the employment eligibility of the employee through the E-Verify program.

6.14.2.2 If CMAR uses any Subcontractors in performance of the Work, Subcontractors shall warrant their compliance with all federal immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A), and Subcontractors shall further warrant that after hiring an employee, such Subcontractors verifies the employment eligibility of the employee through the E-Verify program.

6.14.2.3 A breach of this warranty shall be deemed a material breach of the Contract that is subject to penalties up to and including termination of the Contract. CMAR is subject to a penalty of $100 per day for the first violation, $500 per day for the second violation, and $1,000 per day for the third violation. CITY, at its option, may terminate the Contract after the third violation. CMAR shall not be deemed in material breach of this Contract if the CMAR and/or Subcontractors establish compliance with the employment verification provisions of Sections 274A and 274B of the federal Immigration and Nationality Act and the E-Verify requirements contained in A.R.S. § 23-214(A).

6.14.2.4 CITY retains the legal right to inspect the papers of any CMAR or Subcontractors employee who works on the Contract to ensure that the CMAR or Subcontractors is complying with the warranty. Any inspection will be conducted after reasonable notice and at reasonable times.

6.14.2.5 If state law is amended the Parties may modify this paragraph accordingly.

6.14.3 Equal Treatment of Workers: CMAR shall keep fully informed of all federal and state laws, county and local ordinances, regulations, codes and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of the Work. CMAR shall at all times observe and comply with all such laws, ordinances, regulations, codes, orders and decrees; this includes, but is not limited to laws and regulations ensuring equal treatment for all employees and against unfair employment practices, including the Occupational Safety and Health Administration (“OSHA”) and the Fair Labor Standards Act (“FLSA”). CMAR shall protect and indemnify CITY and its representatives against any claim or liability arising form or based on the violation of such, whether by CMAR or its employees.

6.14.4 Equal Employment Opportunity Provisions: The following provisions, contained in Section 301 of Executive Order No. 11246, dated September 24, 1965, as amended, govern performance of Work under CITY contracts, are applicable to all CITY contracts, and must be included in all contracts executed by CITY for the performance of work. In this document, the term "Contractor," means parties awarded contracts by CITY.

6.14.4.1 CMAR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or disability in the performance of this Contract, and shall comply with the terms and intent of Title VII of the Civil Rights Act of 1964, P.L. 88-354 (1964) and State Executive Order No. 2009-09. Such action includes the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CMAR agrees to post notices provided by CITY, setting forth the provisions of this Equal Opportunity clause, in conspicuous places available to employees and applicants for employment.

6.14.4.2 CMAR will state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin or disability, in all solicitations or advertisements for employees placed by or on behalf of CMAR.

6.14.4.3 CMAR will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement advising the labor union or workers' representative of CMAR's commitments under this Equal Opportunity Resolution, and will post copies of the notice in conspicuous places available to employees and applicants for employment.

6.14.4.4 CMAR will comply with all provisions of Executive Order No. 11246, dated September 24, 1965, as amended, and with all the rules, regulations, and relevant orders of the Secretary of Labor.

6.14.4.5 CMAR will furnish all information and reports required by Executive Order No. 11246, dated September 24, 1965, as amended, and by the rules, regulations, and orders of the Secretary of Labor, and will allow CITY and the Secretary of Labor to access his books, records, and accounts in order to ascertain compliance with such rules, regulations, and orders.

6.14.4.6 The Contract may be canceled, terminated, or suspended, in whole or in part if the CMAR does not comply with the provisions of this document. Other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246, dated September 24, 1965, as amended, under rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law. Further, CMAR may be declared ineligible for further CITY Contracts in accordance with procedures authorized in Executive Order No. 11246, dated September 24, 1965, as amended.

6.14.4.7 CMAR must include the provisions of subdivisions 6.14.4.1 through 6.14.4.7 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, as amended, so that such provisions will be binding upon each subcontract or vendor.

6.14.5 Boycott of Israel: The Parties shall comply with the applicable requirements of Arizona Revised Statutes § 35-393.01. CMAR certifies that it is not engaged in a boycott of Israel as of the effective date of this Contract, and agrees for the duration of this Contract to not engage in a boycott of Israel.

6.14.6 Americans with Disabilities Act (ADA): CMAR shall comply with the ADA and shall indemnify CITY for any costs, including but not limited to, damages, attorney's fees, and staff time in any action or proceeding brought alleging violation of the ADA.

6.14.7 International Boycotts: CMAR shall not participate in or cooperate with an international boycott, as defined in Section 999(b)(3) and (4) of the Internal Revenue Code of 1954, as amended, or engage in conduct declared to be unlawful by Arizona state law.

6.14.8 Laws and Regulations: CMAR shall comply with all federal, state, and local laws, regulations, and ordinances applicable to its performance under this Contract. CMAR shall include similar requirements of all sub-contractors in contracts entered for performance of CMAR's obligations under this Contract. CMAR shall keep fully informed and shall at all times during the performance of its duties under this Contract ensure that it and any person for whom the CMAR is responsible abides by, and remains in compliance with, all rules, regulations, ordinances, statutes or laws affecting the Services, including, but not limited to, the following: (A) existing and future CITY and County ordinances and regulations; (B) existing and future State and Federal laws; and (C) existing and future Occupational Safety and Health Administration standards.

6.15 CONFLICT OF INTEREST

6.15.1 To evaluate and avoid potential conflicts of interest, the CMAR will provide written notice to CITY, as set forth in this section, of any work or services performed by the CMAR for third-parties that may involve or be associated with any real property or personal property owned or leased by CITY. Such notice will be given seven business days prior to commencement of the Project by the CMAR for a third party, or seven business days prior to an adverse action as defined below. Written notice and disclosure will be sent to CITY's Project Representative

6.15.2 Actions considered adverse to CITY under this Contract include but are not limited to:

6.15.2.1 Using data as defined in the Contract, acquired in connection with this Contract, to assist a third party in pursuing administrative or judicial action against CITY.

6.15.2.2 Testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against CITY.

6.15.2.3 Using data to produce income for the CMAR or its employees independently of performing the Services under this Contract, without prior written consent of CITY.

6.15.3 The CMAR represents that except for those persons, entities and projects previously identified in writing to CITY, the services to be performed by the CMAR under this Contract are not expected to create an interest with any person, entity, or third-party project that is or may be adverse to the interests of CIYU.

6.15.4 The CMAR's failure to provide a written notice and disclosure of the information as set forth in this section will constitute a material breach of this Contract.

6.16 CONTRACTOR'S LICENSE AND PRIVILEGE LICENSE

Prior to award of the Contract, the CMAR must provide to CITY's Finance Department its Contractor's License Classification and number, Arizona Transaction Privilege Tax License number, and Federal Tax I.D. number. A copy of the transmittal should be sent to CITY's Project Representative.

6.17 CMAR'S TAX LIABILITIES

CMAR will be liable for payment of all State of Arizona and Yuma County Transaction Taxes (A.R.S. § 41-1305) and shall include its CITY Privilege Tax License number and Arizona Transaction Privilege Tax License number on construction contracting receipts. Failure to remit the proper taxes may result in the withholding of payment until all delinquent privilege taxes, interest, and penalty have been paid.

6.18 SUCCESSORS AND ASSIGNS

CITY and the CMAR will each bind itself, and their partners, successors, assigns, and legal representatives to the other Party to this Contract and to the partners, successors, assigns, and legal representatives of such other Party in respect to all covenants of this Contract. Neither CITY nor the CMAR will assign, sublet, or transfer its interest in this Contract without the written consent of the other. In no event will any

contractual relation be created or be construed to be created as between any third Party and CITY.

6.19 FORCE MAJEURE

If either Party is delayed or prevented from the performance of any service, in whole or in part, required under this Contract by reason of acts of God or other cause beyond the control and without fault of that Party (financial inability excepted), performance of that act will be excused, but only for the period of the delay. The time for performance of the act will be extended for a period equivalent to the period of delay. No increase in contract amount will be allowed. CMAR's sole compensation will be an extension of time only.

6.20 COVENANT AGAINST CONTINGENT FEES

The CMAR warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage of contingent fee, and that no member of the CITY's City Council, or any employee of CITY has any interest, financially, or otherwise, in the firm. CITY will in the event of the breach or violation of this warranty, have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Amount or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

6.21 NON-WAIVER PROVISION

The failure of either Party to enforce any of the provisions of this Contract or to require performance by the other Party of any of the provisions hereof will not be construed to be a waiver of such provisions, nor will it affect the validity of this Contract or any part thereof, or the right of either Party to thereafter enforce each and every provision.

6.22 JURISDICTION

This Contract will be deemed to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona, without regard to the conflicts or choice of law provisions thereof. An action to enforce any provision of this Contract or to obtain any remedy with respect hereto will be brought in the Superior Court, Yuma County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

6.23 SURVIVAL

All warranties, representations and indemnifications by the CMAR will survive the completion or termination of this Contract.

6.24 MODIFICATION

No supplement, modification, or amendment of any term of this Contract will be deemed binding or effective unless in writing and signed by the Parties hereto and in conformation with provisions of this Contract, except as expressly provided herein to the contrary.

6.25 SEVERABILITY

If any provision of this Contract or the application thereof to any person or circumstance will be invalid, illegal, or unenforceable to any extent, the remainder of this Contract and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.

6.26 INTEGRATION

This Contract contains the full agreement of the Parties hereto. Any prior or contemporaneous written or oral agreement between the Parties regarding the subject matter hereof is merged and superseded hereby.

6.27 TIME IS OF THE ESSENCE

Time of each of the terms, covenants, and conditions of the Contract is hereby expressly made of the essence.

6.28 THIRD-PARTY BENEFICIARY

The Contract will not be construed to give any rights or benefits in the Contract to anyone other than CITY and the CMAR. All duties and responsibilities undertaken pursuant to this Contract will be for the sole and exclusive benefit of CITY and the CMAR and not for the benefit of any other party.

6.29 COOPERATION AND FURTHER DOCUMENTATION

The CMAR agrees to provide CITY such other duly executed documents as may be reasonably requested by CITY to implement the intent of this Contract.

6.30 CONFLICT IN LANGUAGE

All Work or Deliverables performed will conform to all applicable CITY codes, ordinances and requirements as outlined in this Contract. If there is a conflict in interpretation between provisions in this Contract and any Exhibits, the provisions in this Contract will prevail.

6.31 CITY'S RIGHT OF CANCELLATION AND OTHER STATUTORY REQUIREMENTS

All Parties hereto acknowledge that this Contract is subject to cancellation by the CITY pursuant to the provisions of A.R.S. § 38-511, as may be amended. Pursuant to A.R.S. § 35-394, as may be amended, unless exempt, the CMAR hereby certifies that it is does not use, and agrees not to use during the term of the Contract, any of the following: forced labor of ethnic Uyghurs in the People's Republic of China; any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or any contractors, subcontractors, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

7.0 INSURANCE

7.1 General: CMAR agrees to comply with all CITY ordinances and state and federal laws and regulations. Without limiting any obligations or liabilities of CMAR, CMAR shall purchase and maintain, at its own expense, hereinafter stipulated minimum insurance with insurance companies duly licensed by the State of Arizona (admitted insurer) with an AM Best, Inc. rating of A or above with policies and forms satisfactory to CITY. Failure to maintain insurance as specified may result in termination of this Contract at CITY's option.

7.2 No Representation of Coverage Adequacy: By requiring insurance herein, CITY does not represent that coverage and limits will be adequate to protect CMAR. CITY reserves the right to review any and all insurance policies and/or endorsements cited in this Contract but has no obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in the Contract Documents or failure to identify any insurance deficiency shall not relieve CMAR from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of the Contract.

7.3 Additional Insured: All insurance coverage and self-insured retention or deductible portions, except Workers Compensation Insurance and Professional Liability Insurance, if applicable, shall name, to the fullest extent permitted by law for claims

arising out of the performance of the Contract, CITY, CITY's Project Representative, CITY's elected officials, PM/CM, A/E, their agents, representatives, officers, directors, officials, and employees as Additional Insured as specified under the respective coverage sections of these Contract Documents.

7.4 Coverage Term: All insurance required herein shall be maintained in full force and effect until Final Acceptance of the Work or services required to be performed under the terms of this Contract, including during the warranty period.

7.5 Primary Insurance: CMAR's insurance shall be endorsed as primary, non-contributory insurance as respects performance of subject Contract and in the protection of CITY as an Additional Insured. Any insurance or self-insurance maintained by CITY, its officials, employees, or volunteers shall be in excess of CMAR's insurance and shall not contribute to it.

7.6 Occurrence Basis: All insurance coverage shall be on an occurrence basis and not a claims made basis.

7.7 Waiver: All policies, except for Professional Liability, but including Workers' Compensation insurance, shall contain a waiver of rights of recovery (subrogation) against CITY, its agents, representatives, officers, directors, officials, and employees for any claims arising out of the Work. CMAR shall arrange to have such subrogation waivers incorporated into each policy via formal written endorsement thereto.

7.8 Policy Deductibles and or Self-Insured Retentions: The policies set forth in these requirements may provide coverage which contains deductibles or self-insured retention amounts. Such deductibles or self-insured retention shall not be applicable with respect to the policy limits provided to CITY. CMAR shall be solely responsible for any such deductible or self-insured retention amount. CITY, at its option, may require CMAR to secure payment or such deductible or self-insured retention by a surety bond or irrevocable and unconditional Letter of Credit.

7.9 Use of Subcontractors: If any Work under the Contract is subcontracted in any manner, CMAR shall execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements set forth herein protecting CITY and CMAR. CMAR shall be responsible for executing the agreement with Subcontractor and obtaining Certificates of Insurance verifying the insurance requirements.

7.10 Evidence of Insurance: Prior to commencing any Work under the Contract Documents, CMAR shall furnish CITY with Certificate(s) of Insurance, or formal endorsements as required by the Contract Documents, issued by CMAR's insurer(s) as evidence that policies are placed with acceptable insurers, provide the required coverage, conditions, and limits of coverage specified in the Contract Documents, and that such coverage and provisions are in full force and effect. Confidential information such as the policy premium may be redacted from the declaration page(s) of each insurance policy, provided that such redactions do not alter any of the information required by this Contract. If a Certificate of Insurance is submitted as evidence of coverage, CITY shall reasonably rely upon the Certificate of Insurance as evidence of coverage but such acceptance and reliance shall not waive or alter in any way the insurance requirements or obligations of this Contract. Such certificates shall identify the Project. If any of the above cited policies expire during the life of the Contract, it shall be CMAR's responsibility to forward renewal Certificates within ten (10) days after the renewal date containing all the aforementioned insurance provisions. Certificates shall specifically cite the following provisions:

7.10.1 CITY, PM/CM, A/E, their agents, representatives, officers, directors, officials, and employees are Additional Insureds as follows:

A. Commercial General Liability – Under ISO Form CG 20 10 04 13 and CG 20 37 04 13 or equivalent.

B. Auto Liability – Under ISO Form CA 20 48 10 13 or equivalent.

C. Excess Liability – Follow Form to underlying insurance as required.

7.10.2 CMAR's insurance shall be primary insurance as respects performance of Contract.

7.10.3 Certificate shall state that should any of the required policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

7.10.4 Project descriptive information including:

A. Project Name: West WWTP Improvements

B. Project Number: BAN-2024-11

7.11 Required Coverage

7.11.1 Commercial General Liability: CMAR shall maintain "occurrence" form Commercial General Liability insurance with an unimpaired limit of not less than

$2,000,000 for each occurrence, $2,000,000 Products and Completed Operations Annual Aggregate, and a $6,000,000 General Aggregate Limit on a per project basis endorsed by means of ISO Endorsement CC-2503 1185 or equivalent. Commercial General Liability coverage specifically shall contain contractual liability insurance covering the contractual obligations of this Contract. The policy shall cover liability arising from premises, operations, independent CMAR's, products-completed operations, personal injury and advertising injury. Coverage under the policy will be at least as broad as Insurance Services Offices, Inc. policy form CG 20 10 04 13 and CG 20 37 04 13 or equivalent thereof, including but not limited to, separation of insured's clause. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, CITY, PM/CM, A/E, their agents, representatives, officers, directors, officials, and employees shall be cited as an Additional Insured under Insurance Service Offices, Inc. Commercial General Liability Additional Insured Endorsement form 10 04 13 and CG 20 37 04 13, or equivalent. CMAR, its successors and or assigns, is required to maintain Commercial General Liability insurance as specified hereunder for a minimum period of three (3) years following completion and acceptance of subject Work. CMAR shall submit Certificate of Insurance evidencing such Commercial General Liability insurance during said three-year period containing all of the insurance requirements set forth herein including naming CITY, PM/CM, A/E, their agents, representatives, officers, directors, officials and employees as Additional Insured as required. If any excess insurance is utilized to fulfill the requirements of this Paragraph, such excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

7.11.2 Automobile Liability: CMAR shall maintain Business Automobile Liability insurance with a limit of $1,000,000 each occurrence on CMAR's owned, hired, and non-owned vehicles assigned to or used in the performance of the Work. Coverage will be at least as broad as Insurance Services Office, Inc. coverage code "1" "any auto" policy form CA 00 01 12 93 or equivalent thereof. If any hazardous material, as defined by any local, state, or federal authority, is the subject, or transported, in the performance of the Work, an MCS 90 endorsement is required providing $5,000,000 per occurrence limits of liability for bodily injury and property damage. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, CITY, PM/CM, A/E, their agents, representatives, officers, directors, officials, and employees shall be cited as an Additional Insured under the Insurance Service Officers, Inc. Business Auto policy Designated Insured Endorsement form CA 20 48 10 13 or equivalent. If any excess insurance is utilized to fulfill the requirements of this

Paragraph, such excess insurance shall be “follow form” equal or broader in coverage scope than underlying insurance.

7.11.3 Worker’s Compensation Insurance: CMAR shall maintain Worker’s Compensation Insurance to cover obligations imposed by federal and state statutes having jurisdiction over CMAR’s employees engaged in the performance of the Work and shall also maintain Employers Liability Insurance of not less than $1,000,000 for each accident, $1,000,000 disease for each employee and $1,000,000 disease policy limit.

7.11.4 Umbrella/Excess Liability: CMAR must carry Umbrella/Excess Liability insurance with an unimpaired limit of not less than $4,000,000.00 per occurrence combined limit Bodily Injury and Property Damage that ‘follows form” and applies in excess of the Commercial General Liability, Business Automobile Liability and Employer's Liability, as required above.

7.11.5 Builder’s “All Risk”: CMAR shall maintain Builder’s “All Risk” Insurance in an amount not less than one hundred percent (100%) of the Contract price. Such policy shall include coverage for fire, lightening, vandalism, malicious mischief, riot, civil commotion, smoke, sprinkler leakage, water damage, windstorm, hail, earthquake, landslide, flood and collapse or loss due to the results of defective design, negligent workmanship or defective material during the Contract Time and until Final Acceptance of the Work by CITY. On roadway, pipeline, and similar horizontal (as defined by A.R.S. §34-101.16), Projects where fire hazard is negligible or nonexistent, CITY may waive the requirement for Builder’s “All Risk” Insurance and/or accept an installation waiver.

7.11.6 Railroad Protection Liability: Not Applicable

7.11.7 Additional Coverage: To the fullest extent permitted by law, if CMAR maintains higher insurance limits than the minimums shown above, CITY requires and shall be entitled to coverage for the higher limit maintained.

(Signatures on Following Page)

MGC Contractors, inc.

By: _____ Name: Bryan Forster
(Signature Required) *(Please Print)*

Title: Projects Director

ACKNOWLEDGMENT

STATE OF ARIZONA
COUNTY OF _____

On _____, 2025, Bryan Forster, as Projects Director of MGC Contractors, Inc., an Arizona corporation, personally appeared before me whose identity was proven to me on the basis of satisfactory evidence to be the person who he claims to be, and acknowledged that he signed the above document on behalf of MGC Contractors, Inc.

Notary Public _____

(Affix notary seal above)

CITY OF SAN LUIS

IN WITNESS WHEREOF, the Parties have this Contract as of this _____ day of _____, 2025 (the "Effective Date").

By: _____
Jenny Torres, Acting City Manager

ATTEST: _____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM: _____
Kay Marion Macuil, City Attorney

EXHIBIT A
HOURLY RATE SCHEDULE (CMAR)

HOURLY RATE REQUIREMENTS AND LIMITATIONS:

The schedule of hourly rates for employees of the CMAR and its Subcontractors follows and is based on the proposal submitted to CITY on January 30, 2025. The definitions and limits below apply to the rates as submitted.

Direct Labor Cost is defined as the total amount actually paid by CMAR in salaries for its staff for time directly expended on the Project for services rendered. The maximum labor rate will be $133.21 per hour.

Indirect Cost (Overhead) is defined as the general and administrative overhead burden. Indirect Cost will be calculated as a percentage of the Direct Labor Cost. The maximum allowable markup for indirect costs is 115% of the direct labor costs.

Fixed Fee is defined as a fixed amount to provide an operating margin, readiness to serve, risk, and profit. The maximum allowable markup for fixed fee is 10% of the direct labor and indirect costs.

LIST OF EMPLOYEES AND SUBCONSULTANTS:

CMAR to provide a list of key employees and Subcontractors to include position titles, names, and labor rates.

Position	Direct Labor Rates	Total Labor Rate
Principal	$133.21	$284.25
Project Director/Executive	$100.96	$217.07
Operations/General Manager	$115.38	$248.08
Sr. Project Manager	$88.94	$191.23
Project Manager	$81.73	$175.72
General Superintendent	$76.92	$165.38
Scheduler	$67.31	$144.71
Project Engineer	$43.27	$93.03
BIM/VDC Coordinator	$52.88	$113.70
Preconstruction Manager	$100.96	$217.07
Chief Estimator	$84.13	$180.89
Senior Estimator	$62.50	$134.38
Estimator	$52.88	$113.70
EI&C Manager (Swain)	$86.54	$186.06

EXHIBIT B
GUARANTEED MAXIMUM PRICE (GMP) Proposal

A Guaranteed Maximum Price (GMP) proposal shall be completed at the time of submittal of the GMP for construction of the Project, and shall include associated backup information. The GMP will be separately accepted with the approval of the Construction Services Contract. If the Project will be constructed in Construction Phases, a separate GMP shall be approved for each Construction Phase, however, the Construction Services Contract will be approved with the first GMP.

The GMP Proposal shall use the GMP Cost Model form provided by CITY. A representation of the Cost Model form is shown below.

Indirect Cost percentages as identified in sections B through D of the GMP Cost Model form shall be established prior to executing the Preconstruction Services Contract.

Exhibit C – Total Project Cost shall be used with the Cost Model form in Exhibit B for guidance in completing the GMP Proposal.

EXHIBIT C
TOTAL PROJECT COST (CMAR)

1. Cost of the Work: The term "Cost of the Work" shall mean construction costs associated with the Construction Documents incurred by the CMAR in the performance of the Work. The following are categories of cost and expense to be paid by CITY to the CMAR as Cost of the Work and are identified in the Guaranteed Maximum Price (GMP) Form given in Exhibit B:

1.1 Cost of the Work (Construction Cost) Categories

A1 Labor and Burden

A2 Equipment (Owned and Rented)

A3 Materials, Supplies, and Fees

A4 Subcontracts

A5 Allowances and Contingencies

1.2 Fines and Penalties: If fines or monetary penalties are levied against the CMAR they shall not be included in the “Cost of the Work” calculation and shall not be a part of the GMP.

2. Construction Costs Definitions

2.1 Labor and Burden Costs

2.1.1 Wages of construction workers directly employed by the CMAR to perform the construction of the Work at the Site or, with CITY’s agreement, at off-site workshops.

2..1.2 Wages or salaries of the CMAR’s supervisory and administrative personnel when stationed at the Site and wages, salaries and other costs of project management, pre-construction services, form design, foundation engineering, manpower planning, purchasing, estimating and data processing, whether performed at the Site or in the CMAR’s offices, including, but not limited to services rendered during the Design Phase of the Project.

2.1.3 Wages and salaries of the CMAR’s supervisory or administrative personnel engaged at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

2.1.4 Burden: Costs paid or incurred by the CMAR for taxes, insurance, contributions, assessments, and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such

as sick leave, medical and health benefits, holidays, vacations, and pensions, provided such costs are based on wages and salaries included in subsections 2.1.1 through 2.1.3 above.

2.2 Equipment (Owned and Rented): Costs, including transportation equipment incorporated or to be incorporated in the completed construction.

2.3 Materials, Supplies, and Fees Costs

2.3.1 Costs of materials in excess of those actually installed which are required to provide reasonable allowance for waste and spoilage. Unused excess materials, if any, shall be handed over to CITY at the completion of the Work, or at CITY's option, shall be sold by the CMAR, amount realized, if any, from such sales shall be credited to CITY as a deduction from the Cost of the Work.

2.3.2 Costs, including transportation, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment, and hand tools not customarily owned by the construction workers, which are provided by the CMAR at the Site and fully consumed in the performance of the Work; and cost, less salvage value, on such items if not fully consumed, whether sold to others or retained by the CMAR. Costs for items previously used by the CMAR shall mean fair market value.

2.3.3 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by the construction workers, which are provided by the CMAR at the Site, whether rented from the CMAR or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rental charges for equipment owned by the CMAR shall be at then prevailing rates.

2.3.4 Costs of removal of debris from the Site.

2.3.5 Costs of facsimiles, telegrams and long-distance telephone calls, postage and delivery charges (whether originating at the Site or at the offices of the CMAR telephone service at the Site and reasonable petty cash expenses of the Site office.

2.3.6 That portion of the reasonable travel and subsistence expenses of the CMAR's personnel incurred while traveling in discharge of duties connected with the Work.

2.3.7 Fees and assessments for any permits, licenses and inspections required by the Contract Documents.

2.3.8 Fees of testing laboratories for tests required by the Contract Documents or governmental authorities.

2.3.9 Royalties and license fees paid for the use of a particular design, process or product required by the Contract Documents. The costs of defending suits or claims for infringement of patent rights arising from such requirement by the Contract Documents; payments made in accordance with legal judgments against the CMAR resulting from such suits or claims and payments of settlements in connection therewith.

2.3.10 Deposits lost for cause other than the CMAR'S negligence.

2.4 Subcontractor Costs: Amounts due Subcontractors in accordance with the requirements of the Subcontracts.

2.5 Allowance and Contingency Costs

2.5.1 Those Owner controlled costs identified as Construction Allowances associated with work items that have been specifically defined through negotiations with CITY and are identified in the Guaranteed Maximum Price (GMP) Form given in Exhibit B with associated pricing.

2.5.2 The Contingency belongs to the CMAR if it is needed but is returned to CITY if it goes unused. It reflects the incomplete nature of the drawings and specifications at the time the GMP is established and may be used to cover unanticipated costs that arise during construction. Written approval from CITY is required for CMAR use of the Contingency.

3. Indirect Costs: The term "Indirect Costs" shall mean costs not associated with the Construction Documents incurred off the Project site by the CMAR in the performance of the Work. Reimbursement for these categories of cost shall be at the fixed rate percentages contained in Exhibit B and the following are categories of cost and expense to be paid by CITY to the CMAR as Indirect Costs and are identified in the Guaranteed Maximum Price (GMP) Form given in Exhibit B.

3.1 General Conditions

3.1.1 Salaries and other compensation of the CMAR's personnel stationed at the CMAR's principal office or offices other than the Site, except as specifically provided in subsections 2.1.2 and 2.1.3 above.

3.1.2 Expenses of the CMAR's principal office and offices, other than the Site office.

3.1.3 Overhead and general expenses, except as may be included in Sections 1 and 2 above.

3.1.4 Capital expenses of the CMAR, including interest on capital employed for the Work.

3.1.4 Home office profit and overhead expenses.

3.1.5 Any bonuses awarded by to the CMAR to its employees or Subcontractors.

3.2 **Fee:** "Fee" means the profit payable to the CMAR, which is a part of the GMP, as more fully described on Exhibit B attached hereto.

3.3 **Bonds:** "Bonds" refers to the Payment and Performance Bonds identified in Part III of the CMAR General Conditions that shall be furnished to CITY prior to the commencement of Construction Work on the Site.

3.4 **Insurance:** "Insurance" to be provided is described in section 7 of the Contract.

3.5 **Sales Taxes:** "Sales Taxes" refers to those sums to be paid as transaction privilege tax as a percentage of the GMP, or that receive a sales tax credit in accordance with the Arizona Department of Revenue guidelines.

3.6 **Pre-construction Services:** Those services identified in this Contract that are to be performed during the design phases of the Project by the CMAR in support of the A/E and CITY.

3.7 **Total Project Cost:** Total Project Cost is the sum total of the GMP, Pre-construction Services, and any prior phase GMPs.

EXHIBIT D
PROJECT DESCRIPTION (CMAR)

The West WWTP, located in the southwestern portion of San Luis, approximately 0.9 miles east of the Wellton/Mohawk Salinity Bypass Canal and immediately north of the international border, is an existing 1.5MGD plant producing Class B effluent. The treatment process is a modified sequential batch reactor (SBR) process consisting of 4 basins utilizing intermittent, continuous extended aeration system (ICEAS) batch reactors by Sanitaire / ABJ. The effluent is chlorine disinfected and discharged into the Wellton/Mohawk Salinity Bypass Canal.

This improvement project ("Project") will increase the plant capacity to 3.0MGD. Major upgrades include a new headworks system with fine screening and grit removal, new secondary process configuration, new MBR system, new influent and return activated sludge channel, new sludge dewatering system, new odor control units, new facility operations buildings, and existing effluent pump station and disinfection system improvements. Electrical improvements include motor control center modifications, and standby generator and automatic transfer switch upgrades.

The total program budget for construction of the Project is approximately $23 million.

Construction of the Project is estimated to begin in the summer of 2025 with a 540-calendar day duration.

Employee Owned

QUALITY · PERFORMANCE · VALUE

City of San Luis
#BAN-2024-11
WasteWater Treatment Plant Improvements

Preconstruction Services Proposal
REV 5

4110 E. Elwood St. Phoenix, Arizona 85040 Telephone (602) 437-5000
License Numbers ROC069949 & ROC071441

Employee Owned

MGC

QUALITY · PERFORMANCE · VALUE

February 19, 2025

Consultant Engineering, Inc.
135 E Chilton Dr #101
Chandler, AZ 85225

Attn: Jeffrey Kramer PE, PWLF, CCM, CJP

Re: #BAN-2024-11 City of San Luis WWTP Improvements - Preconstruction Services Proposal_REV5

Dear Mr. Kramer:

In accordance with the information provided, we are pleased to offer our Revision #5 proposal for preconstruction services on the City of San Luis Improvements Project. The total not to exceed price for this work is $470,926.82. This total cost includes allowances in the amount of $160,000.00. A further breakdown of the proposal is attached.

Summary of Pre-Construction Services Work:

This proposal includes active engagement and attendance by MGC Contractors to perform the services listed on the following level of effort spreadsheet. MGC will develop cost models, perform constructability reviews, value engineering, schedule development, risk reviews, etc. as listed. Please note, at the direction provided to MGC Contractors, no cost model will be provided at 30%. In lieu of cost modeling and design review, MGC will support the project team in major equipment selection and evaluations. The City has explicitly requested MGC provide support and include additional hours to perform reviews and comments on the Owner selected equipment to aid in the design and construction process. Should early procurement of long lead components be required, they will be procured through a long lead procurement GMP. Project allowances have been included for (1) subsurface utility locating; (2) surveying; (3) environmental studies; (4) existing equipment / gear inspections; (5) manufacturer's factory and facility site visits, plant maintenance; (6) Other Direct Costs (ODC's); and (7) Direct reimbursable lodging, meals, and travel expenses. Per the direction provided to MGC Contractors, geotechnical investigations, and permit acquisition and support have been removed. Utilization of any allowances will only occur after prior authorization from the City. Upon approval of the preconstruction contract, MGC will prepare a schedule of values and bill these services on a monthly basis as a percent complete. Sales tax, bond, and general liability insurance has been excluded as preconstruction services are tax-exempt no construction activities are being performed.

During construction, the City has clarified that MGC is to manage Owner supplied equipment coordination/deliveries, obtaining and reviewing O&M Manuals, tracking fabrication and delivery, be responsible for startup and commissioning coordination. In addition, the City has requested MGC to handle warranty requests by the City as it relates to Owner supplied equipment. The cost of these services are excluded from this preconstruction proposal. Since these costs are construction related, MGC will include the cost of performing these services for Owner supplied equipment in future GMPs. Additionally, MGC is not responsible for the manufacturers failure to deliver equipment when needed or warranty terms and contract conditions which are not in accordance with the Prime Agreement since the manufacturers are not contracted directly with MGC. However, if an equipment manufacturer fails to meet its contractual obligations with the City, MGC will notify the City and use our relationships with the equipment manufacturers to facilitate contract compliance and necessary corrective measures.

MGC will perform the services itemized on the following preconstruction services cost breakdown. This proposal is submitted with the understanding that the allocation of hours between each task may exceed the hours listed, but the total preconstruction services for the scope listed will not be exceeded and will be billed as lump sum on a percent complete basis each month.

Thank you for the opportunity to be of service. We hope this proposal meets your expectations. If you have any questions or comments, please do not hesitate to call.

Sincerely,

David Fagerstrom
Preconstruction Services Manager
dfagerstrom@mgccontractors.com
602-437-5000 (AZ Office)
480-486-7121 (Cell)
www.mgccontractors.com

CITY OF SAN LUIS
West WWTP Improvements
Project No.: BAN-2024-11

MGC CONTRACTORS, INC.
ATTACHMENT A
PRECONSTRUCTION PHASE SERVICES - DETAILED COST

Precon Phase Services:	**$ 310,926.82**
Preconstruction Allowances	**$ 160,000.00**
Total With Allowances	**$ 470,926.82**

Prepared By: D. Fagerstrom
Date: 18-Feb-25
Rev.: 5

No.	Description	Principal HR	Principal $/HR ($ 284.25)	Operations/General Mgr HR	Operations/General Mgr $/HR ($ 248.08)	Project Director/Exec HR	Project Director/Exec $/HR ($ 217.07)	Sr. Project Manager HR	Sr. Project Manager $/HR ($ 191.23)	Project Manager HR	Project Manager $/HR ($ 175.72)	Project Engineer HR	Project Engineer $/HR ($ 93.03)	General Superintendent HR	General Superintendent $/HR ($ 165.38)	Preconstruction Manager HR	Preconstruction Manager $/HR ($ 217.07)	Chief Estimator HR	Chief Estimator $/HR ($ 180.89)	Sr. Estimator HR	Sr. Estimator $/HR ($ 134.38)	Estimator HR	Estimator $/HR ($ 113.70)	BIM/VDC Coordinator HR	BIM/VDC Coordinator $/HR ($ 113.70)	Scheduler HR	Scheduler $/HR ($ 144.71)	E&IC Mgr (Swain) HR	E&IC Mgr (Swain) $/HR ($ 186.06)	Other UN	Other $/COST ($ -)	Total Hours	Subtotal Cost	Profit 10%	Total Cost
1	**Project Meetings**	**11**	**$ 3,126.80**	**12**	**$ 2,976.92**	**22**	**$ 4,775.48**	**25**	**$ 4,780.65**	**33**	**$ 5,798.80**	**0**	**$ -**	**12**	**$ 1,984.62**	**37**	**$ 8,031.49**	**37**	**$ 6,692.91**	**0**	**$ -**	**12**	**$ 1,364.42**	**0**	**$ -**	**0**	**$ -**	**34**	**$ 6,325.96**	**0**	**$ -**	**223**	**$ 45,858.05**	**$ 4,574.34**	**$ 50,432.39**
1.01	Project Kickoff and Programming Meeting	1	$ 284.25	1	$ 248.08	2	$ 434.13	2	$ 382.45	2	$ 351.44		$ -	2	$ 330.77	2	$ 434.13	2	$ 361.78		$ -		$ -		$ -		$ -		$ -	4	$ 744.23		$ -	18	$ 3,571.27	$ 356.23	$ 3,927.51
1.02	Project Management / Project Team / Progress Meetings (12 Bi-Weekly)		$ -		$ -	6	$ 1,302.40	6	$ 1,147.36	10	$ 1,757.21		$ -		$ -	12	$ 2,604.81	12	$ 2,170.67		$ -		$ -		$ -		$ -		$ -		$ -		$ -	46	$ 8,982.45	$ 896.00	$ 9,878.45
1.03	Initial Site Investigation and Evaluation		$ -		$ -	4	$ 868.27	4	$ 764.90	4	$ 702.88		$ -	4	$ 661.54	4	$ 868.27	4	$ 723.56		$ -		$ -		$ -		$ -		$ -	18	$ 3,349.04		$ -	42	$ 7,938.46	$ 791.86	$ 8,730.32
1.04	Public Agency and/or Community Meetings (0 per contract)		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
1.05	30% - Design Review		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
1.06	30% - Cost Model Review		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
1.07	60% - Design Review	1	$ 284.25	1	$ 248.08	1	$ 217.07	2	$ 382.45	2	$ 351.44		$ -	2	$ 330.77	4	$ 868.27	4	$ 723.56		$ -	4	$ 454.81		$ -		$ -		$ -		$ -		$ -	17	$ 3,860.70	$ 385.10	$ 4,245.80
1.08	60% - Cost Model Review		$ -		$ -	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	1	$ 217.07	1	$ 180.89		$ -		$ -		$ -		$ -		$ -		$ -		$ -	5	$ 981.97	$ 97.95	$ 1,079.92
1.09	90% - Design Review	1	$ 284.25	1	$ 248.08	1	$ 217.07	2	$ 382.45	2	$ 351.44		$ -	2	$ 330.77	2	$ 434.13	4	$ 723.56		$ -	4	$ 454.81		$ -		$ -		$ -	4	$ 744.23		$ -	19	$ 4,170.79	$ 416.04	$ 4,586.83
1.10	90% - Cost Model Review	1	$ 284.25	1	$ 248.08	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	1	$ 217.07	1	$ 180.89		$ -		$ -		$ -		$ -		$ -		$ -		$ -	7	$ 1,514.30	$ 151.05	$ 1,665.35
1.11	100% - Design Review	1	$ 284.25	1	$ 248.08	1	$ 217.07	2	$ 382.45	2	$ 351.44		$ -	2	$ 330.77	2	$ 434.13	4	$ 723.56		$ -	4	$ 454.81		$ -		$ -		$ -	8	$ 1,488.46		$ -	23	$ 4,915.02	$ 490.27	$ 5,405.30
1.12	100% - Cost Model Review	1	$ 284.25	1	$ 248.08	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	1	$ 217.07	1	$ 180.89		$ -		$ -		$ -		$ -		$ -		$ -		$ -	7	$ 1,514.30	$ 151.05	$ 1,665.35
1.13	Preliminary GMP Reviews (Up to 4 GMPS)	4	$ 1,137.02	4	$ 992.31	2	$ 434.13	2	$ 382.45	4	$ 702.88		$ -		$ -	4	$ 868.27	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -		$ -	24	$ 5,240.63	$ 522.75	$ 5,763.38
1.14	GMP Review - Final	1	$ 284.25	2	$ 496.15	2	$ 434.13	2	$ 382.45	4	$ 702.88		$ -		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	15	$ 3,168.15	$ 316.02	$ 3,484.17
2	**Project Programming**	**0**	**$ -**	**2**	**$ 496.15**	**6**	**$ 1,302.40**	**7**	**$ 1,338.58**	**70**	**$ 12,300.48**	**62**	**$ 5,767.79**	**26**	**$ 4,300.00**	**44**	**$ 9,550.96**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**20**	**$ 2,894.23**	**10**	**$ 1,860.58**	**0**	**$ -**	**247**	**$ 39,811.18**	**$ 3,971.16**	**$ 43,782.34**
2.01	Written Program Evaluation		$ -		$ -		$ -		$ -	4	$ 702.88	4	$ 372.12		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	12	$ 1,943.27	$ 193.84	$ 2,137.11
2.02	Develop Construction Management Plan		$ -		$ -		$ -		$ -	8	$ 1,405.77	8	$ 744.23		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	20	$ 3,018.27	$ 301.07	$ 3,319.34
2.03	Construction Management Plan Updates Throughout Preconstruction		$ -		$ -		$ -		$ -	6	$ 1,054.33	6	$ 558.17		$ -	6	$ 1,302.40		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	18	$ 2,914.90	$ 290.76	$ 3,205.67
2.04	Project Phasing Plan		$ -		$ -	1	$ 217.07	2	$ 382.45	4	$ 702.88	4	$ 372.12		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	15	$ 2,542.79	$ 253.64	$ 2,796.43
2.05	Long -Lead Time Item Procurement Plan		$ -		$ -	1	$ 217.07	1	$ 191.23	4	$ 702.88	4	$ 372.12		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -	10	$ 1,860.58		$ -	24	$ 4,212.14	$ 420.16	$ 4,632.30
2.06	Schedule Development		$ -	1	$ 248.08	1	$ 217.07	1	$ 191.23	16	$ 2,811.54		$ -	16	$ 2,646.15	8	$ 1,736.54		$ -		$ -		$ -		$ -		$ -	12	$ 1,736.54		$ -		$ -	55	$ 9,587.14	$ 956.32	$ 10,543.46
2.07	ScheduleUpdates		$ -		$ -		$ -		$ -	12	$ 2,108.65		$ -	8	$ 1,323.08		$ -		$ -		$ -		$ -		$ -		$ -	8	$ 1,157.69		$ -		$ -	28	$ 4,589.42	$ 457.79	$ 5,047.22
2.08	Permitting Plan Assistance		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
2.09	Risk Review and Mitigation Plan Development (Market Conditions Report)		$ -	1	$ 248.08	1	$ 217.07	1	$ 191.23	4	$ 702.88	4	$ 372.12	2	$ 330.77	2	$ 434.13		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	15	$ 2,496.27	$ 249.00	$ 2,745.28
2.10	Subcontractor Selection Plan		$ -		$ -	1	$ 217.07	1	$ 191.23	8	$ 1,405.77	8	$ 744.23		$ -	8	$ 1,736.54		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	26	$ 4,294.83	$ 428.41	$ 4,723.24
2.11	Assignment / Coordination of Owner Procured (LLE) Equipment		$ -		$ -	1	$ 217.07	1	$ 191.23	4	$ 702.88	24	$ 2,232.69		$ -	4	$ 868.27		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	34	$ 4,212.14	$ 420.16	$ 4,632.30
3	**Procurement Coordination of Owner Supplied Equipment**	**0**	**$ -**	**1**	**$ 248.08**	**2**	**$ 434.13**	**2**	**$ 382.45**	**24**	**$ 4,217.31**	**80**	**$ 7,442.31**	**8**	**$ 1,323.08**	**20**	**$ 4,341.35**	**16**	**$ 2,894.23**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**24**	**$ 4,465.38**	**0**	**$ -**	**$177**	**$ 25,748.32**	**$ 2,568.39**	**$ 28,316.71**
3.01	Owner Procured Process Equipment Support, design coodination and submittal tracking		$ -	1	$ 248.08	2	$ 434.13	2	$ 382.45	24	$ 4,217.31	80	$ 7,442.31	8	$ 1,323.08	20	$ 4,341.35	16	$ 2,894.23		$ -		$ -		$ -		$ -		$ -	24	$ 4,465.38		$ -	177	$ 25,748.32	$ 2,568.39	$ 28,316.71
4	**Design Phase - 60%**	**1**	**$ 284.25**	**2**	**$ 496.15**	**8**	**$ 1,736.54**	**8**	**$ 1,529.81**	**33**	**$ 5,798.80**	**0**	**$ -**	**12**	**$ 1,984.62**	**44**	**$ 9,550.96**	**60**	**$ 10,853.37**	**44**	**$ 5,912.50**	**120**	**$ 13,644.23**	**16**	**$ 1,819.23**	**1**	**$ 144.71**	**22**	**$ 4,093.27**	**0**	**$ -**	**251**	**$ 57,848.44**	**$ 5,770.38**	**$ 63,618.82**
4.01	Constructability Review & Alternative Systems Evaluations		$ -	1	$ 248.08	4	$ 868.27	4	$ 764.90	8	$ 1,405.77		$ -	8	$ 1,323.08	8	$ 1,736.54	8	$ 1,447.12		$ -		$ -	8	$ 909.62		$ -	4	$ 744.23		$ -	53	$ 9,447.60	$ 942.40	$ 10,389.99
4.02	Cost Estimate Development Log (Design Evolution)		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -	4	$ 868.27	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	10	$ 1,943.27	$ 193.84	$ 2,137.11
4.03	Biddability Review		$ -		$ -	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	4	$ 868.27	4	$ 723.56	4	$ 537.50		$ -	8	$ 909.62		$ -		$ -		$ -	23	$ 3,622.96	$ 361.39	$ 3,984.35
4.04	Updates to Phasing/Risk Mitigation/SBA and Subcontracting Plan		$ -		$ -	1	$ 217.07	2	$ 382.45	4	$ 702.88		$ -		$ -	4	$ 868.27	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	15	$ 2,894.23	$ 288.70	$ 3,182.93
4.05	Cashflow Report		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	1	$ 144.71		$ -		$ -	3	$ 496.15	$ 49.49	$ 545.65
4.06	Cost Model Development & Submission	1	$ 284.25	1	$ 248.08	2	$ 434.13	1	$ 191.23	16	$ 2,811.54		$ -	4	$ 661.54	24	$ 5,209.62	40	$ 7,235.58	40	$ 5,375.00	120	$ 13,644.23		$ -		$ -	18	$ 3,349.04		$ -	147	$ 39,444.23	$ 3,934.56	$ 43,378.79
5	**Design Phase - 90%**	**1**	**$ 284.25**	**2**	**$ 496.15**	**8**	**$ 1,736.54**	**8**	**$ 1,529.81**	**25**	**$ 4,393.03**	**0**	**$ -**	**12**	**$ 1,984.62**	**28**	**$ 6,077.88**	**60**	**$ 10,853.37**	**44**	**$ 5,912.50**	**80**	**$ 9,096.15**	**16**	**$ 1,819.23**	**1**	**$ 144.71**	**14**	**$ 2,604.81**	**0**	**$ -**	219	**$ 46,933.05**	**$ 4,681.57**	**$ 51,614.62**
5.01	Constructability Review & Alternative Systems Evaluations		$ -	1	$ 248.08	4	$ 868.27	4	$ 764.90	6	$ 1,054.33		$ -	8	$ 1,323.08	6	$ 1,302.40	8	$ 1,447.12		$ -		$ -	8	$ 909.62		$ -	4	$ 744.23		$ -	49	$ 8,662.02	$ 864.04	$ 9,526.06
5.02	Cost Estimate Development Log (Design Evolution)		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -	2	$ 434.13	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	8	$ 1,509.13	$ 150.54	$ 1,659.67
5.03	Biddability Review		$ -		$ -	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	2	$ 434.13	4	$ 723.56	4	$ 537.50		$ -	8	$ 909.62		$ -		$ -		$ -	21	$ 3,188.82	$ 318.09	$ 3,506.91
5.04	Updates to Phasing/Risk Mitigation/SBA and Subcontracting Plan		$ -		$ -	1	$ 217.07	1	$ 191.23	2	$ 351.44		$ -		$ -	2	$ 434.13	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	10	$ 1,917.43	$ 191.26	$ 2,108.69
5.05	Cashflow Report		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	1	$ 144.71		$ -		$ -	3	$ 496.15	$ 49.49	$ 545.65
5.06	Cost Model Development & Submission	1	$ 284.25	1	$ 248.08	2	$ 434.13	2	$ 382.45	12	$ 2,108.65		$ -	4	$ 661.54	16	$ 3,473.08	40	$ 7,235.58	40	$ 5,375.00	80	$ 9,096.15		$ -		$ -	10	$ 1,860.58		$ -	128	$ 31,159.50	$ 3,108.16	$ 34,267.65
6	**Design Phase - 100%**	**1**	**$ 284.25**	**2**	**$ 496.15**	**6**	**$ 1,302.40**	**6**	**$ 1,147.36**	**19**	**$ 3,338.70**	**0**	**$ -**	**12**	**$ 1,984.62**	**15**	**$ 3,256.01**	**60**	**$ 10,853.37**	**24**	**$ 3,225.00**	**40**	**$ 4,548.08**	**16**	**$ 1,819.23**	**2**	**$ 289.42**	**14**	**$ 2,604.81**	**0**	**$ -**	177	**$ 35,149.40**	**$ 3,506.15**	**$ 38,655.55**
6.01	Constructability Review & Alternative Systems Evaluations		$ -	1	$ 248.08	2	$ 434.13	2	$ 382.45	4	$ 702.88		$ -	8	$ 1,323.08	4	$ 868.27	8	$ 1,447.12		$ -		$ -	8	$ 909.62		$ -	4	$ 744.23		$ -	41	$ 7,059.86	$ 704.22	$ 7,764.08
6.02	Cost Estimate Development Log (Design Evolution)		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -	1	$ 217.07	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	7	$ 1,292.07	$ 128.88	$ 1,420.95
6.03	Biddability Review		$ -		$ -	1	$ 217.07	1	$ 191.23	1	$ 175.72		$ -		$ -	1	$ 217.07	4	$ 723.56	4	$ 537.50		$ -	8	$ 909.62		$ -		$ -		$ -	20	$ 2,971.75	$ 296.43	$ 3,268.19
6.04	Updates to Phasing/Risk Mitigation/SBA and Subcontracting Plan		$ -		$ -	1	$ 217.07	1	$ 191.23	2	$ 351.44		$ -		$ -	1	$ 217.07	4	$ 723.56		$ -		$ -		$ -		$ -		$ -		$ -	9	$ 1,700.36	$ 169.61	$ 1,869.97
6.05	Cashflow Report		$ -		$ -		$ -		$ -	2	$ 351.44		$ -		$ -		$ -		$ -		$ -		$ -		$ -	2	$ 289.42		$ -		$ -	4	$ 640.87	$ 63.93	$ 704.79
6.06	Cost Model Development & Submission	1	$ 284.25	1	$ 248.08	2	$ 434.13	2	$ 382.45	8	$ 1,405.77		$ -	4	$ 661.54	8	$ 1,736.54	40	$ 7,235.58	20	$ 2,687.50	40	$ 4,548.08		$ -		$ -	10	$ 1,860.58		$ -	96	$ 21,484.50	$ 2,143.08	$ 23,627.57
7	**GMP Development / Subcontractor Bidding**	**2**	**$ 568.51**	**2**	**$ 496.15**	**7**	**$ 1,519.47**	**7**	**$ 1,338.58**	**28**	**$ 4,920.19**	**0**	**$ -**	**4**	**$ 661.54**	**24**	**$ 5,209.62**	**40**	**$ 7,235.58**	**32**	**$ 4,300.00**	**32**	**$ 3,638.46**	**0**	**$ -**	**0**	**$ -**	**8**	**$ 1,488.46**	**0**	**$ -**	**154**	**$ 31,376.56**	**$ 3,129.81**	**$ 34,506.37**
7.01	Subcontractor Bidding/Procurement		$ -		$ -	1	$ 217.07	1	$ 191.23	8	$ 1,405.77		$ -		$ -	16	$ 3,473.08		$ -	16	$ 2,150.00	16	$ 1,819.23		$ -		$ -	8	$ 1,488.46		$ -	50	$ 10,744.83	$ 1,071.80	$ 11,816.63
7.02	GMP Estimate		$ -		$ -	4	$ 868.27	4	$ 764.90	8	$ 1,405.77		$ -	4	$ 661.54	4	$ 868.27	16	$ 2,894.23	16	$ 2,150.00	16	$ 1,819.23		$ -		$ -		$ -		$ -	56	$ 11,432.21	$ 1,140.36	$ 12,572.57
7.03	GMP Assembly and Submission	2	$ 568.51	2	$ 496.15	2	$ 434.13	2	$ 382.45	12	$ 2,108.65		$ -		$ -	4	$ 868.27	24	$ 4,341.35		$ -		$ -		$ -		$ -		$ -		$ -		$ -	48	$ 9,199.52	$ 917.65	$ 10,117.17
8	**Service Allowances**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ 160,000.00**	**$ -**	**$ 160,000.00**
8.01	Subsurface Utility Locating		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 75,000.00	$ -	$ 75,000.00
8.02	Surveying		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 25,000.00	$ -	$ 25,000.00
~~8.03~~	~~Geotechnical Investigations~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~	~~0~~	~~$ -~~	~~$ -~~	~~$ -~~
8.04	Environmental Studies		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 10,000.00	$ -	$ 10,000.00
8.05	Existing Equipment/Gear Inspections		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 10,000.00	$ -	$ 10,000.00
~~8.06~~	~~City Required Permit Acquisition~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~		~~$ -~~	~~0~~	~~$ -~~	~~$ -~~	~~$ -~~
8.06	Manufacturer's Factory and Facility Site Visits, Plant Maintenance		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 25,000.00	$ -	$ 25,000.00
8.07	Other Direct Costs (ODC's)		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 5,000.00	$ -	$ 5,000.00
8.08	Direct Reimbursable Lodging, Meals, Travel Expenses		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ 10,000.00	$ -	$ 10,000.00
9	**Reimbursables**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**$ -**	**$ -**
9.01	Bonds		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
9.02	Insurances		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
9.03	Other		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$ -	$ -
TOTAL		**16**	**$ 4,548.08**	**23**	**$ 5,705.77**	**59**	**$ 12,806.97**	**63**	**$ 12,047.24**	**232**	**$ 40,767.31**	**142**	**$ 13,210.10**	**86**	**$ 14,223.08**	**212**	**$ 46,018.27**	**273**	**$ 49,382.81**	**144**	**$ 19,350.00**	**284**	**$ 32,291.35**	**48**	**$ 5,457.69**	**24**	**$ 3,473.08**	**126**	**$ 23,443.27**	**0**	**$ -**	**1448**	**$ 442,725.00**	**$ 28,201.82**	**$ 470,926.82**

EXHIBIT A
HOURLY RATE SCHEDULE (CMAR)

HOURLY RATE REQUIREMENTS AND LIMITATIONS:

The schedule of hourly rates for employees of the CMAR and its Subcontractors follow and are based on the proposal submitted to CITY on February 19 20**25** The definitions and limits below apply to the rates as submitted.

Direct Labor Cost is defined as the total amount actually paid by CMAR in salaries for its staff for time directly expended on the Project for services rendered. The maximum labor rate will be $ 132.21 per hour.

Indirect Cost (Overhead) is defined as the general and administrative overhead burden. Indirect Cost will be calculated as a percentage of the Direct Labor Cost. The maximum allowable markup for indirect costs is 115% of the direct labor costs.

Fixed Fee is defined as a fixed amount to provide an operating margin, readiness to serve, risk, and profit. The maximum allowable markup for fixed fee is 10% of the direct labor and indirect costs.

LIST OF EMPLOYEES AND SUBCONSULTANTS:

CMAR to provide a list of key employees and Subcontractors to include position titles, names and labor rates.

Role	Base Rate	Total Rate
Principal	$ 132.21	$ 284.25
Project Director/Executive	$ 100.96	$ 217.07
Operations / General Manager	$ 115.38	$ 248.08
Sr. Project Manager	$ 88.94	$ 191.23
Project Manager	$ 81.73	$ 175.72
General Superintendent	$ 76.92	$ 165.38
Scheduler	$ 67.31	$ 144.71
Project Engineer	$ 43.27	$ 93.03
BIM/VDC Coordinator	$ 52.88	$ 113.70
Preconstruction Manager	$ 100.96	$ 217.07
Chief Estimator	$ 84.13	$ 180.89
Senior Estimator	$ 62.50	$ 134.38
Estimator	$ 52.88	$ 113.70
E&IC Mgr (Swain)	$ 86.54	$ 186.06

Public Works Department
1090 East Union Street
San Luis, Arizona 85349
www.sanluisaz.gov

Date: January 8, 2025

To: Bryan Foster, Project Director, MGC Contractors, bforster@mgccontractors.com
Glenn Anderson, gandersen@mgccontractors.com
Josh Hoffert, Project Manager, jhoffert@mgccontractors.com
JP Bourgogne, General Superintendent, jpbourgogne@mgccontractors.com

Subject: BAN-2024-11, West WWTP Expansion
CMAR Services

Congratulations. Following interviews with each of the firms that were short-listed for the above referenced project, the Selection Panel has recommended selection of your firm for this contract. We would like to initiate contract negotiations at our earliest possible mutual convenience. Please contact me at 602-796-7846 or jkramer@cei-az.com to schedule a negotiation kickoff meeting.

During the procurement process you were provided copies of the (1) Preconstruction Services Contract, (2) Construction Services Contract, (3) Construction General Conditions, (4) GMP Cost Model Form, and (5) 10/31/2024 Conceptual Design Report. Please review these items prior to our kickoff meeting and be prepared to discuss any questions you may have at that time.

Please note that if agreement on contract terms cannot be reached within a reasonable timeframe, San Luis may proceed to negotiate with the next highest ranked firm until a contract is agreed to, or San Luis decides not to proceed with further negotiations.

Please contact me if you have any questions about this process.

Sincerely,

Jeffrey A. Kramer
Director of Program & Project Management, CEI
CMAR Procurement Consultant

Distribution:
Public Works Director: Eulogio Vera
Asst. Public Works Director: Jorge Perez
Selection Panel Members
Project File: CEI# 0124039.00

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. D.**

Meeting Date: 02/26/2025

Department Head: Eulogio Vera, Director of Public Works, Public Works Department

Submitted By: Jorge Perez, Assistant Director of Public Works, Public Works Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the City of San Luis Public Works Department accepting Construction Services from Yuma Valley Contractors, Inc. for the installation of new sewer service at the City of San Luis Public Works yard and adjacent parcels to the South. **(Jorge Perez, Assistant Director of Public Works).**

SUMMARY:

The City of San Luis Public Works department currently has a construction project within its public works yard to provide a new groundwater well and a new filtration system. This project was designed keeping in mind that there was to be reclaimed water discharge from the filtration system and that it would go to the existing sewer lift station serving the existing buildings within the property. It was later decided that the existing lift station needed to be removed and that the yard property needed to connect to the gravity sewer along 4th Avenue. CORE Engineering produced design plans for the lift station removal and new connections, including two new sewer manholes that would service the adjacent properties to the south. Said properties were recently acquired by the City of San Luis, and providing sewer service is now beneficial in saving for future construction. At the same time, it is good timing to add sewer service before the full 4th Avenue road expansion to avoid cuts on new pavement.

Staff requested quotes from MGC Contractors, Gutierrez Canales Engineering, and Yuma Valley Contractors since they all have been working in the area. MGC Contractors is the Well project contractor, and Yuma Valley Contractors has been doing underground work for MGC on the same project. On the other hand, Gutierrez Canales Engineering is doing utility work on the Cesar Chavez Blvd. project. Proposals were received as follows:

- MGC Contractors Inc. $492,525.22
- Yuma Valley Contractors $198,794.00
- Gutierrez Canales Engineering - Proposal not received

The lowest quote is Yuma Valley Contractors for $198,794.00 plus 5% ($9,939.70) in contingencies for a total of $208,733.70. Under A.R.S. § 34-201(D), Arizona law requires bidding for sewer construction work for amounts that do not exceed approximately $266,850 (this was the last fiscal year that the Arizona League of Cities and Towns calculated the threshold by adjusting for inflation and other economic factors required by the statute). Since inflation has only gone up since that time, the threshold is conservative, and the city is well below the threshold. The city's formal purchase procedure is to go out to bid for purchases over $45,000. Under San Luis City Code § 3.05.01: "For good cause, with the approval of the Council, formal purchase procedures may be waived." Given the quotes we have, the approaching end of the fiscal year, and the time it would take to bid and order materials (especially new sewer manholes); staff is seeking the City Council's approval to contract with Yuma Valley Contractors and to waive formal purchasing procedures to allow the project to be completed within the current fiscal year.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO ACCEPT CONSTRUCTION SERVICES FROM YUMA VALLEY CONTRACTORS, INC. FOR THE INSTALLATION OF NEW SEWER MAIN AND SERVICES AT THE CITY OF SAN LUIS PUBLIC WORKS YARD AND ADJACENT PROPERTIES IN THE AMOUNT OF $208,733.70 TO WAIVE FORMAL PURCHASING PROCEDURES FOR THE REASONS PRESENTED, AND TO APPROVE THE BUDGET TRANSFER AS PRESENTED IN THE FISCAL IMPACT OF THIS ITEM.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$208,733.70
BUDGETED AMOUNT:	$0
AVAILABLE AMOUNT TO TRANSFER:	$300,000.00
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Capital Outlay - CIP / 310-311-90015 / $4,203,872.87

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

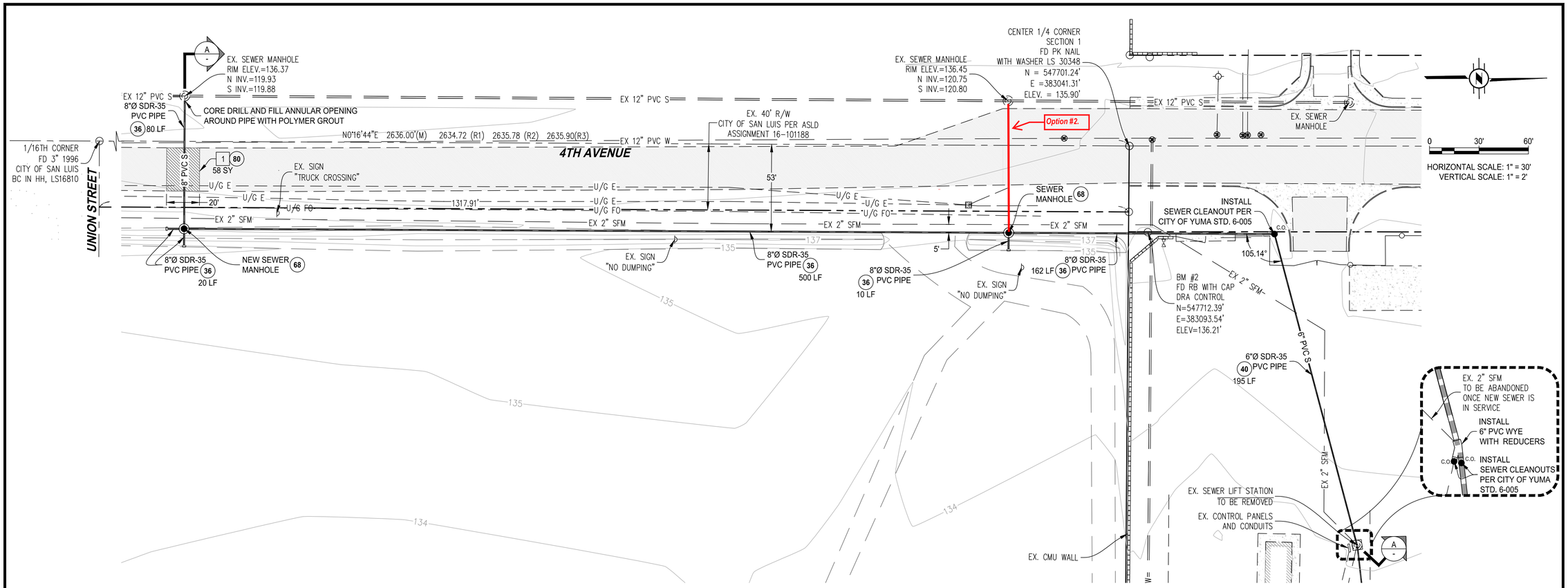
Staff is seeking council approval to reallocate funding from the following project to this construction contract.

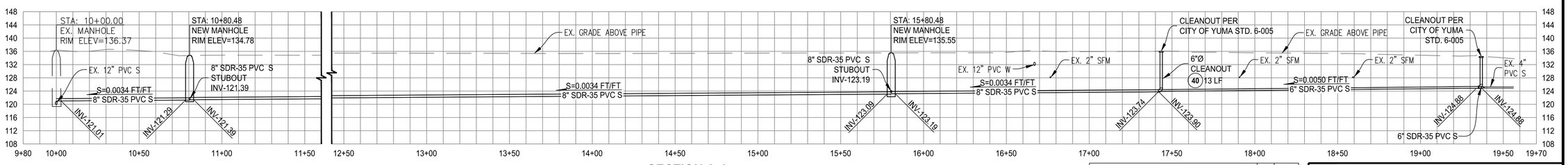
Project: Escondido Lift Station Relocation
Project No.: 2025046
Budgeted Amount: $300,000.00
Amount Requested to transfer: $208,733.70

The Escondido Lift Station project was budgeted to be relocated due to the expansion of the Cesar Chavez Blvd. project. During recent meetings with designer and project manager (ADOT), it was determined that the lift station is to be relocated as part of the Cesar Chavez Blvd. expansion project, with the ADOT contractor. This allows the City of San Luis to reallocate the purchasing capacity from this project to the sewer work that needs to be done at the Public Works yard and adjacent parcels to the South.

Attachments

Design Plans
Yuma Valley Proposal
Constructions Services Contract





SECTION A-A

REMOVAL NOTES		U/M	QTY
1	REMOVE EXISTING ASPHALT (ANY THICKNESS)	SY	58

CONSTRUCTION NOTES		U/M	QTY
36	8"Ø SDR-35 PVC PIPE	LF	772
40	6"Ø SDR-35 PVC PIPE	LF	208
68	4'Ø POLYMER CONCRETE MANHOLE (CITY OF YUMA STD. 6-025, 6-080)	EA	2
80	ASPHALT PAVING (3" AC/8" ABC)	SY	58

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

CSL-30

1 08/28/2024 - SEWER PLAN AND PROFILE

JAMES DAVEY AND ASSOCIATES
CONSULTING CIVIL ENGINEERS
1025 W. 24th Street, Suite 2 - YUMA, AZ 85364 - (928) 782-7926

CITY OF SAN LUIS
WELL SITE 5
NEW MANGANESE TREATMENT UNIT

NEW SEWER MAIN

Registered Professional Engineer (Civil) CERTIFICATE NO. 20902 JAMES V. DAVEY Date Signed 10/01/2024 ARIZONA, U.S.A.

PREPARED FOR:
CITY OF SAN LUIS
PUBLIC WORKS DEPARTMENT
SAN LUIS, AZ 85349
(928) 341-8584

DESIGNED BY: J.V.D.
DRAWN BY: O.J.Z.
APPROVED BY: J.V.D.
SHEET WS-4
OCTOBER 01, 2024

YUMA VALLEY
CONTRACTORS, INC.

1334 S. FIFTH AVE
YUMA, AZ 85364
MAIN (928) 783-6942
FAX (928) 782-7892

AZ General Commercial: B-01 072856 AZ General Engineering: A-106548 AZ General Building: B-067763 CA General: B 951391

February 7, 2025

City of san Luis
Attn: Jorge Perez
Owner rep
(928)336-8881

Re: **City of San Luis Well Site 5 New Manganese Treatment Unit, New Sewer Main**

Dear Mr. Perez

We hereby propose to furnish labor, material and equipment to complete in accordance per email set via email on 1-27-25 from Jorge Perez.

New Sewer Main

- Install 772LF 8" SDR35 PVC per plan.
- Install 208LF 6" SDR35 PVC per plan.
- Install 2EA 4' Polymer Concrete Manhole (COY Std. 6-025, 6-080)
- Install 3EA 6" Sewer Cleanout (COY Std. 6-005)
- Install 1EA 6" PVC Wye with reducer for existing force main connection.
- Remove 58SY existing asphalt (any thickness) per plan.
- Replace 58SY asphalt (3"AC / 8"ABC) per plan.
- Traffic control Included in bid for scope of work.

The total cost to complete the above scope of work……**Cost $198,794**

Note #1 Due to the COVID-19 pandemic, delays in scheduling and/or lead-time from our may be longer than expected.
Note #2 Due to the increasing cost of materials, our cost(s) is only valid for (30) days from the date of proposal. Additional cost(s) will depend on market value of the materials and will be evaluated upon acceptance of said proposal**.**
Note #3 Included in the above cost are regular work hours.

Exclusions: Permits, Fee's, inspections, bond, overtime, nights, weekends, liquidated damages, electrical, plumbing, HVAC, abatement, masonry, concrete, existing conditions, floor protection, earthwork or grading, Framing, dumpsters, signage, SWPPP, fencing, irrigation, unknown mismarked utility repair, private utility locate, survey or staking, temporary fencing, anything not mentioned above.

Submitted BY:

Project Mgr./Estimator
YUMA VALLEY CONTRACTORS, INC.

ACCEPTANCE OF PROPOSAL - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. Proposal is valid for 30days.
Late payment on invoices will incur a finance charge of 1.5% per month.

Signature:

Date of Acceptance:

Signature:

Specializing in commercial construction for over 50 years

AGREEMENT
FOR THE CONSTRUCTION OF CITY OF SAN LUIS WELL SITE 5 NEW MANGANESE TREATMENT UNIT, NEW SEWER MAIN

This agreement ("Contract") is made and entered into this ____ day of March 2025, by and between:

Yuma Valley Contractors, Inc. 1334 S. 5th Avenue Yuma, Arizona 85364 an Arizona for-profit corporation ("Contractor") and	City of San Luis 1090 East Union Street [*physical address*] P.O. Box 3750 [*mailing address*] San Luis, Arizona 85349 an Arizona municipal corporation ("City" or "City of San Luis")

The Contractor and City may be referred to individually as the "Party" and collectively as the "Parties." All defined words in the document titled "General Conditions of the Contract" ("General Conditions"), which was provided in the City's Request for Proposals ("RFP"), shall have the same meaning in this Contract unless otherwise specified in this Contract. Any term defined in the General Conditions and used in this Contract shall be interpreted as per the definition provided in the General Conditions.

WHEREAS, the Scope of Work requires the Contractor to furnish any and all labor, materials, equipment, transportation, utilities, services, and facilities required to perform all work for the City of San Luis – Well Site 5 New Manganese Treatment Unit, New Sewer Main Project ("Project"), per the Contractor's proposal of February 7, 2025 ("Proposal") and to completely and totally remove and install the materials therein for the City, in a good and workmanlike and substantial manner and to the satisfaction of the City through its engineers ("ENGINEERS"), or the ENGINEERS' properly authorized agents and strictly pursuant to and in conformity with the plans and specification prepared by the ENGINEERS, and with such modifications of the same and other documents that the City may make through the ENGINEERS or the ENGINEERS' properly authorized agents, as provided herein; and

WHEREAS, San Luis City Council, at a properly noticed open meeting, awarded the bid to the Contractor on February 26, 2025;

NOW, THEREFORE, the above recitals are incorporated into this Contract. In consideration of the City paying the sum of $198,794.00 to the Contractor and the Contractor constructing the Well Site 5 New Manganese Treatment Unit, New Sewer Main Project and other work incidental in the manner and at the time provided in this Contract, and in consideration of the other mutual benefits and obligations contained in this Contract, the Parties agree as follows:

ARTICLE 1 - PARTICIPANTS AND PROJECT

CITY:	Jenny Torres, Acting City Manager City of San Luis, Arizona Telephone: (928) 341-8520 E-mail: jtorres@sanluisaz.gov
CITY PROJECT MANAGER:	Jorge Perez, Assistant Director of Public Works City of San Luis Telephone: (928) 341-8577 E-mail: jperez@sanluisaz.gov
CONTRACTOR:	Gordon T. Jacobson, President Yuma Valley Contractors, Inc. Telephone: (928) 783-6942 E-mail: gordonj@jsyinc.com
CONTRACTOR MANAGER:	Kyle Wade, Construction Manager Yuma Valley Contractors, Inc. Telephone: (928) 210-4368 E-mail: kylew@jsyinc.com
PROJECT ENGINEER / DESIGNER:	James Davey, PE, RLS Core Engineering Group, PLLC. Telephone: (928) 344-5931 E-mail: jdavey@core-e-g.com
PROJECT DESCRIPTION:	City of San Luis – Well Site 5 New Manganese Treatment Unit, New Sewer Main
PROJECT LOCATION:	City of San Luis – Well Site 5 to 4th Avenue and Union St.

ARTICLE 2 - CONTRACT DOCUMENTS

The Contract between the City and the Contractor shall consist of the following items, collectively the "Contract Documents:"

1. Change Orders, written and properly executed (if any), as defined in the General Conditions;
2. Performance bond and payment bond (required by A.R.S. § 41-2574, also known as contract bond and labor & materials bond), warranty bond, bid bond, and other bonds;
3. Project specifications;
4. Construction Documents, as defined in the General Conditions;
5. General Conditions;
6. Bid documents {including but not limited to the advertisement for bids, bid schedule, addenda (if any), additive bid items (if any), and the Proposal;
7. Special Conditions provided in the RFP Pages SP-1 through SP-8 (which amend Part 100 of the 2016 City of San Luis Supplemental to the 2015 MAG Uniform Standard Specifications);
8. 2016 City of San Luis Supplemental to the 2015 MAG Uniform Standard Specifications and Details for Public Works Construction and City of Yuma Construction Standard Detail Drawings, MAG Uniform Standard Specifications and Details for Public Works Construction, City of Yuma Construction Standard Detail Drawings – Edition 2019;
9. Certificates of Insurance;

10. Notice to Proceed, as defined in the General Conditions; and
11. Project Schedule, as defined in the General Conditions

By this reference, the above Contract Documents are incorporated into and made a part of this Contract to the same extent as if set forth in full here.

In the event of a conflict of language between the items listed above, they shall govern in the order listed. The Contract Documents shall govern in all other matters not otherwise specified by the Contract between the Parties. All previous contracts between the Contractor and City are not applicable to this Contract or other resultant contracts.

ARTICLE 3 - DESIGN PHASE SERVICES

The Contractor is not required to provide design phase services to the City in relation to this Project.

ARTICLE 4 - CONSTRUCTION SERVICES

4-1 General.

4-1.01 The Contractor agrees, at its own cost and expense, to do all Work (as defined in the General Conditions) necessary and required to fully, timely, and properly complete the construction of the Project in strict accordance with the Contract Documents in a good and workmanlike manner, free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified, within the Project Schedule.

4-1.02 The Contractor shall provide all the labor and materials and perform the Work in accordance with Section 4 of the General Conditions. Below are some but not all of the major components of the construction services and the corresponding subsections of Section 4 of the General Conditions.

4-1.03 At all times relevant to this Contract and performance of the Work, the Contractor shall fully comply with all laws, regulations, or legal requirements applicable to the City, the Project, and the Contract, including, without limitation, those set forth in the General Conditions.

4-1.04 The Contractor shall perform the Work under this Contract using only those firms, team members, and individuals designated by Contractor consistent with the Contractor's accepted bid, or otherwise, approved by the City pursuant to the General Conditions. No other entities or individuals may be used without the prior written approval of the Project Manager.

4-1.05 The Contractor shall comply with all terms and conditions of the General Conditions.

4-1.06 The terms of this Contract shall govern in the event of a conflict between it and the General Conditions or any exhibit to the Contract or appendix to the General Conditions.

4-1.07 For purposes of this provision, "Work Product" shall include all designs, drawings, plans, specifications, ideas, renderings, and other information or matter in whatever form created (e.g., electronic or printed) and in all media now known or in the future created. All Work Product shall be considered Work Made for Hire as defined in the United States Copyright Act

17 U.S.C. § 101 (Copyright Act). If, for any reason, any such Work is found not to be a Work Made for Hire, the Contractor, by entering into this Contract, transfers and assigns ownership of the copyright in such Work to the City. Notwithstanding anything to the contrary in this Contract, all Work Product prepared or otherwise created in connection with the performance of this Contract, including the Work, are to be and remain the property of the City. The rights in this Section are exclusive to the City in perpetuity.

4-2 The Contractor's Pre-Contract and Pre-Work Deliverables. The Contractor shall provide the deliverables in accordance with Section 4.2 of the General Conditions.

4-3 Pre-Construction Conference. The Contractor shall attend the pre-construction conference in accordance with Section 4.3 of the General Conditions.

4-4 Performance of the Work (Including Field Measurements, Subcontractors, and Suppliers). The Contractor shall control and maintain the Project site in accordance with Section 4.4 of the General Conditions.

4-5 Control of the Project Site. The Contractor shall control and maintain the Project site in accordance with Section 4.5 of the General Conditions.

4-6 Project Safety. The Contractor shall implement and enforce Project safety in accordance with Section 4.6 of the General Conditions.

4-7 Materials Quality, Substitutions, and Shop Drawings. The Contractor shall provide materials testing and submit substitute materials and shop drawings in accordance with Section 4.7 of the General Conditions.

4-8 Project Record Documents. The Contractor shall maintain and make available the Project Record Document in accordance with Section 4.8 of the General Conditions.

4-9 Warranty and Correction of Defect Work. The Contractor shall provide warranties and correct defective Work in accordance with section 4.9 of the General Conditions.

ARTICLE 5 - CITY'S RESPONSIBILITIES

The City shall have the responsibilities and provide the information specified in, and subject to, the conditions set forth in Section 5 of the General Conditions.

ARTICLE 6 - CONTRACT TIME

6-1 Contract Time.

The Contract Time shall start with the Notice to Proceed and end with Final Acceptance, as set forth in Section 6-4 below. The Notice to Proceed cannot be issued prior to the City's approval and acceptance of the Contractor's bid.

6-1.01 The Contract Time shall be as set forth in the Project Schedule. The Contractor agrees that it will commence the performance of the Work and complete the Project within the Contract Time.

6-1.02 Time is of the essence of this Contract, for the Project, and for each phase and designated milestone of the Contract.

6-1.03 Failure on the part of the Contractor to adhere to the approved Project Schedule will be deemed a material breach and sufficient grounds for the City to terminate this Contract.

6-2 Project Schedule. The Project Schedule, as required by Section 6.2 of the General Conditions, shall be updated and maintained throughout the Contractor's performance under this Contract in accordance with Section 6.2 of the General Conditions.

6-3 Final Completion and Final Acceptance.

6-3.01 The Parties expressly agree by this writing that Final Completion (as defined in Section 2.14 of the General Conditions) must be obtained by **no later than ninety (60) days** (calendar days, as defined in Section 2.12 of the General Conditions) **after the date of Notice to Proceed**. Final Completion will be determined, and Final Acceptance will be issued pursuant to Sections 6.3 and 6.4 of the General Conditions.

6-4 Liquidated Damages.

6-4.01 The Contractor acknowledges and agrees that if the Contractor fails, neglects, or refuses to obtain the Final Completion of the Work within ninety (90) days, the City will sustain extensive damages and serious loss as a result of such failure. The Contractor agrees to pay the City liquidated damages for delay in the sum of **$430.00** for each consecutive calendar Day after the ninety (90) days have expired and the Final Completion of Work is not achieved. The Parties agree that the stated liquidated damages are reasonable to compensate the City and not as punitive damages. (The sum of $430.00 per day is consistent with Section 6.4 of the General Conditions and its reference to Subsection 108.9 of the 2016 City of San Luis Supplement to the 2015 MAG Uniform Standard Specification for Public Works Construction.)

6-4.02 The City may deduct liquidated damages described in Subsection 6-4 above from any unpaid amounts then or thereafter due to the Contractor under this Contract. Any liquidated damages not so deducted from any unpaid amounts due the Contractor shall be payable to the City at the demand of the City, together with interest from the date of the demand at the highest lawful rate of interest payable by the Contractor.

6-4.03 Nothing in this Contract shall be deemed to constitute a waiver of any other remedy available to the City in the event of the Contractor's default under this Contract prior to full performance of the Work, including, as applicable, specific performance or completion of the Work on behalf of the Contractor, the cost and expense of which shall be offset against any monies then or thereafter due to Contractor (if any) and otherwise immediately reimbursed to City by the Contractor

ARTICLE 7 - CONTRACT PRICE

7-1 Contract Price.

7-1.01 In exchange for the Contractor's full, timely, and acceptable performance and construction of the Work under this Contract, and subject to all of the terms of this Contract, the City will pay the Contractor the Contract Price (as defined by Section 2.6 of the General Terms), which is one hundred ninety-eight thousand seven hundred and ninety-four U.S. dollars ($198,794.00).

7-1.02 The Contract Price is all-inclusive and specifically includes all fees, costs, insurance and bond premiums, and taxes of any type necessary to fully, properly, and timely perform and construct the Work.

ARTICLE 8 - PAYMENT

Payments shall be made to the Contractor in accordance with Section 8 of the General Conditions.

ARTICLE 9 - CHANGES TO THE CONTRACT

Changes to the Contract may be made in strict accordance with Section 9 of the General Conditions.

ARTICLE 10 - TERMINATION

The Contract may be terminated in accordance with Section 10 of the General Conditions.

ARTICLE 11 - INSURANCE AND BONDS

11-1 The Contractor shall provide Insurance as provided in the Insurance Requirements and in accordance with Section 11.1 of the General Conditions. The Contractor shall provide proof of such Insurance and all required endorsements in forms acceptable to the City prior to commencing any Work under this Contract.

11-2 The Contractor shall provide performance, payment, and warranty bonds to the City in accordance with Section 11.2 of the General Conditions and A.R.S. § 34-222.

11-3 The Contractor's failure to provide proof of insurance and the required endorsements, or the required bonds, in forms acceptable to the City will be a material breach and grounds for termination for cause under this Contract.

ARTICLE 12 - INDEMNIFICATION

The Contractor shall have and assume the indemnity obligations set forth in Section 12 of the General Conditions.

ARTICLE 13 - DISPUTE RESOLUTION

Any claims or disputes relating to this Contract shall be resolved according to the dispute resolution process set forth in section 13 of the General Conditions.

ARTICLE 14 - MISCELLANEOUS PROVISIONS

14-1 The miscellaneous provisions set forth in section 14 of the General Conditions shall apply to this Contract.

14-2 The Contractor and any subcontractors or agents of the Contractor shall abide by the federal regulations prohibiting discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, national origin, or for inquiring about, discussing, or disclosing compensation, and take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity or national origin.

ARTICLE 15 - COUNTERPARTS

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts. Such signature pages may all be attached to a single instrument so that the signatures of all Parties may be physically attached to a single document.

ARTICLE 16 - AUTHORITY

Each Party represents and warrants to the other Party: (i) that such Party is duly organized and validly existing under the laws of the State of Arizona and has full corporate power and authority to enter into this Contract and to carry out the provisions of this Contract; (ii) such Party is duly authorized to execute and deliver this Contract and to perform its obligations under this Contract; (iii) the person executing this Contract on such Party's behalf has been duly authorized to do so by all requisite corporate action, and (iv) this Contract is a legal and valid obligation binding upon the Parties and enforceable in accordance with its terms.

[Intentionally left blank. Signature page follows.]

The Parties have executed this Contract in Yuma County, Arizona, on the day and year set forth above, which is the day the last Party signed this Contract. The original Contract will be filed with the City of San Luis Clerk.

City of San Luis, Arizona

_____ _____

Nieves Riedel, Mayor Date

Attest:

Approved As to Form

_____ _____ _____

Sonia Cornelio, City Clerk Kay Marion Macuil, City Attorney Date

Yuma Valley Contractors, Inc.

_____ _____

Gordon T. Jacobson, President Date

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. E.**

Meeting Date: 02/26/2025

Department Head: Manuel Hernandez, Assistant Director of Public Works, Public Works Department

Submitted By: Manuel Hernandez, Assistant Director of Public Works, Public Works Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the acceptance of slurry seal application services from American Pavement Preservation for the application of Type 2 slurry seal and road striping services from Franklin Striping Incorporated. **(Manuel Hernandez, Assistant Director of Public Works)**

SUMMARY:

Public Works is requesting to reallocate funds from the following projects to complete this year's Pavement Preservation Program. The department plans to apply slurry seal to Main Street between County 22nd Street and Urtuzuastegui Street. This slurry application will complement Yuma County's recent mill and overlay project on Highway 95. The slurry seal application is scheduled for the spring, between April and June.

Funding:

1. **Project 2025037 – Recurring Pavement Preservation Program**: $50,000 available for this year's slurry seal application.
2. **Project 2025025 – Avenue B Shoulder Improvements**: $66,000 available. The ADOT project will not require these funds this year due to right-of-way clearance issues.
3. **Project 2025026 – GSA Point of Entry Improvements to Urtuzuastegui Street**: $68,000 available. GSA informed the City of San Luis that the $359,000 contribution will not be needed this fiscal year. The majority of the funds have been reallocated to the César Chávez Boulevard widening project (underground improvements). Public Works will be purchasing some items for GSA this fiscal year. (Waterline project, *refer to 11/13/24 Council Agenda Item 6.E*).
4. **Project 2025035 – Beautification Project on Urtuzuastegui Street**: This project has been completed, leaving $40,000 available. Public Works is requesting to reallocate approximately $18,500 for this year's slurry seal application and road striping.

Public Works staff is seeking Mayor and Council approval to accept slurry seal application services from American Pavement Preservation in the amount of **$178,750.71** and road striping services from Franklin Striping Incorporated in the amount of **$23,466.54**. Additionally, staff is requesting approval to complete budget transfers as presented in the fiscal impact statement.

The City of San Luis will piggyback on the City of Yuma's cooperative agreement with American Pavement Preservation for slurry seal services (**BID #2020-20000153**) and Yuma County's cooperative agreement with Franklin Striping Incorporated (**BID #2023-2024CY.04**). Both cooperative agreements comply with **Arizona's Cooperative Purchasing under A.R.S. § 41-2632(2)** and align with the **City of San Luis Purchasing Code Section 3.05.090, Cooperative Purchasing**.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO ACCEPT SLURRY SEAL APPLICATION SERVICES FROM AMERICAN PAVEMENT PRESERVATION IN THE AMOUNT OF $178,750.71 AND ROAD STRIPING SERVICES FROM FRANKLIN STRIPING INCORPORATED IN THE AMOUNT OF $23,466.54 AND AUTHORIZE THE BUDGET TRANSFERS AS PRESENTED IN THE FISCAL IMPACT STATEMENT.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$202,217.25
BUDGETED AMOUNT:	$50,000.00 Acct# 200-210-89000
AVAILABLE AMOUNT TO TRANSFER:	$66,000 Acct #200-210-90015, $68,000 Acct #200-210-90010, $18,500 Acct #200-210-90015
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Acct# 200-210-89000/$50,000.00

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

Funding:

1. **Project 2025037 – Recurring Pavement Preservation Program**: $50,000 available for this year's slurry seal application.
2. **Project 2025025 – Avenue B Shoulder Improvements**: $66,000 available. The ADOT project will not require these funds this year due to right-of-way clearance issues.
3. **Project 2025026 – GSA Point of Entry Improvements to Urtuzuastegui Street**: $68,000 available. GSA informed the City of San Luis that the $359,000 contribution will not be needed this fiscal year. The majority of the funds have been reallocated to the César Chávez Boulevard widening project (underground improvements). Public Works will be purchasing some items for GSA this fiscal year. (Waterline project, *refer to 11/13/24 Council Agenda Item 6.E*).
4. **Project 2025035 – Beautification Project on Urtuzuastegui Street**: This project has been completed, leaving $40,000 available. Public Works is requesting to reallocate approximately $19,000 for this year's slurry seal application and road striping.

Public Works staff is seeking Mayor and Council approval to accept slurry seal application services from American Pavement Preservation in the amount of **$178,750.71** and road striping services from Franklin Striping Incorporated in the amount of **$23,466.54**. Additionally, staff is requesting approval to complete budget transfers as presented in the fiscal impact statement. A total of $202,217.25 is needed to complete the slurry seal application and road striping. The City of San Luis will piggyback on the City of Yuma's cooperative agreement with American Pavement Preservation for slurry seal services (**BID #2020-20000153**) and Yuma County's cooperative agreement with Franklin Striping Incorporated (**BID #2023-2024CY.04**). Both cooperative agreements comply with **Arizona's Cooperative Purchasing under A.R.S. § 41-2632(2)** and align with the **City of San Luis Purchasing Code Section 3.05.090, Cooperative Purchasing**.

Attachments

4827_2020-20000153_American_Pavement_-_COY_Agreement

Map

CITY OF SAN LUIS AZ SPRING 2025 PROPOSAL 1-20-25

City of San Luis 2025 Maint. Revised 020725

Franklin Striping YC Contract

CITY OF YUMA
BID #2020-20000153
PAVEMENT PRESERVATION SERVICES

Vendor # 112143

American Pavement Preservation
4725 E Cartier Avenue
Las Vegas, NV 89115

Vendor Contact: Eric Reimschiissel @ (702) 507-5410
Ericr@americanpave.com
COY Contact: PW - Streets - Michael Flowers @ (928) 373-4539
Michael.Flowers@YumaAZ.gov
COY Contact Purchasing: Mary E Roman - Buyer @ (928) 373-5114

Delivery: 30 Days ARO
Prompt Payment: Net 30 Days
Payment Method: Purchase Order
5 Year Contract: July 16, 2020 through July 15, 2025

		QTY	
			$2.130
3.	Type II Slurry Seal	250,000	$532,500.00 **P**
			$2.73
4.	Type III Slurry Seal	250,000	$682,500.00 **S**
			$2.390
5.	Type II Fiber Sealant	250,000	$597,500.00 **S**
			$3.03
6.	Type III Fiber Sealant	250,000	$757,500.00 **S**

P = Primary Vendor S = Secondary Vendor

Invoicing: In order to receive prompt payment for goods or services to the City of Yuma, the vendor is to submit an invoice to: Payables@YumaAz.gov with the following information on the invoice:

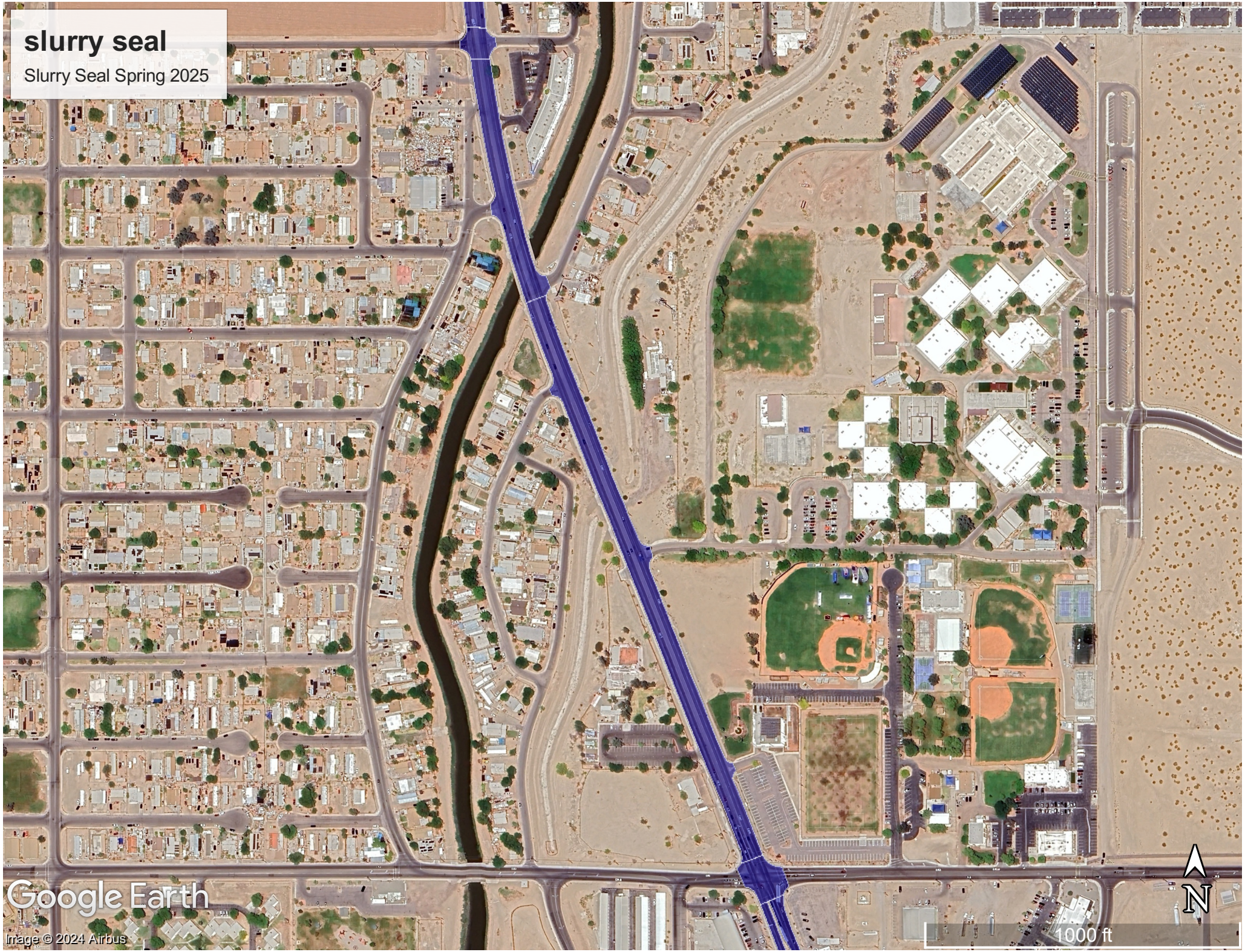
1 City Contract (Bid) Number: 2020-20000153
2 Complete descriptions of the goods or services furnished
3 Quantity of each item
4 Unit prices, extensions and all applicable taxes
5 Labor hours and materials broken down (no lump sum)
6 Name of department/division who requested services/materials
7 In addition, the invoice should include the vendor's invoice number and contact information
8 City staff person's name that placed the order

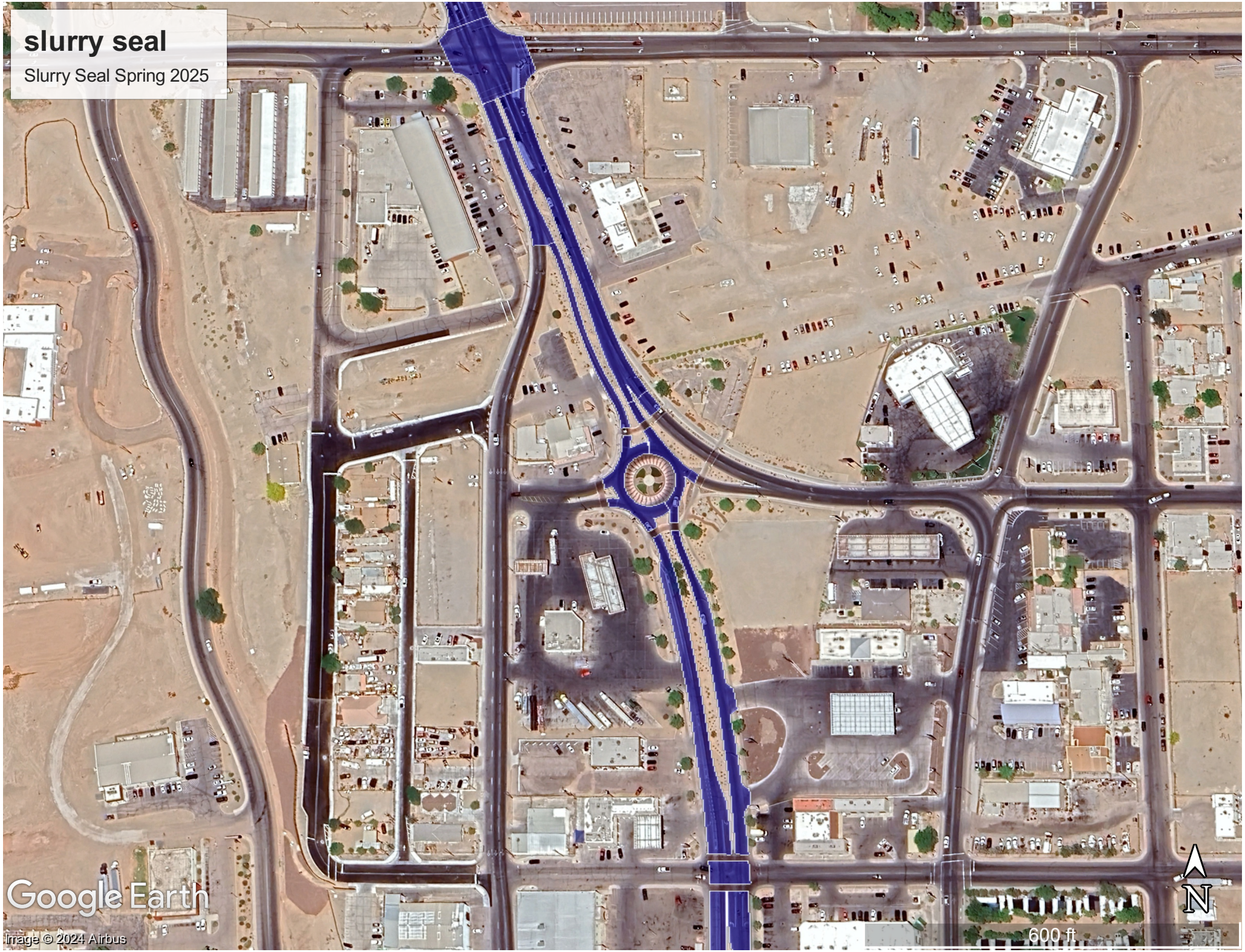
Note: Invoices for work performed during the month of June must be received no later than the end of the first week in July, for City of Yuma fiscal year end closing purposes.

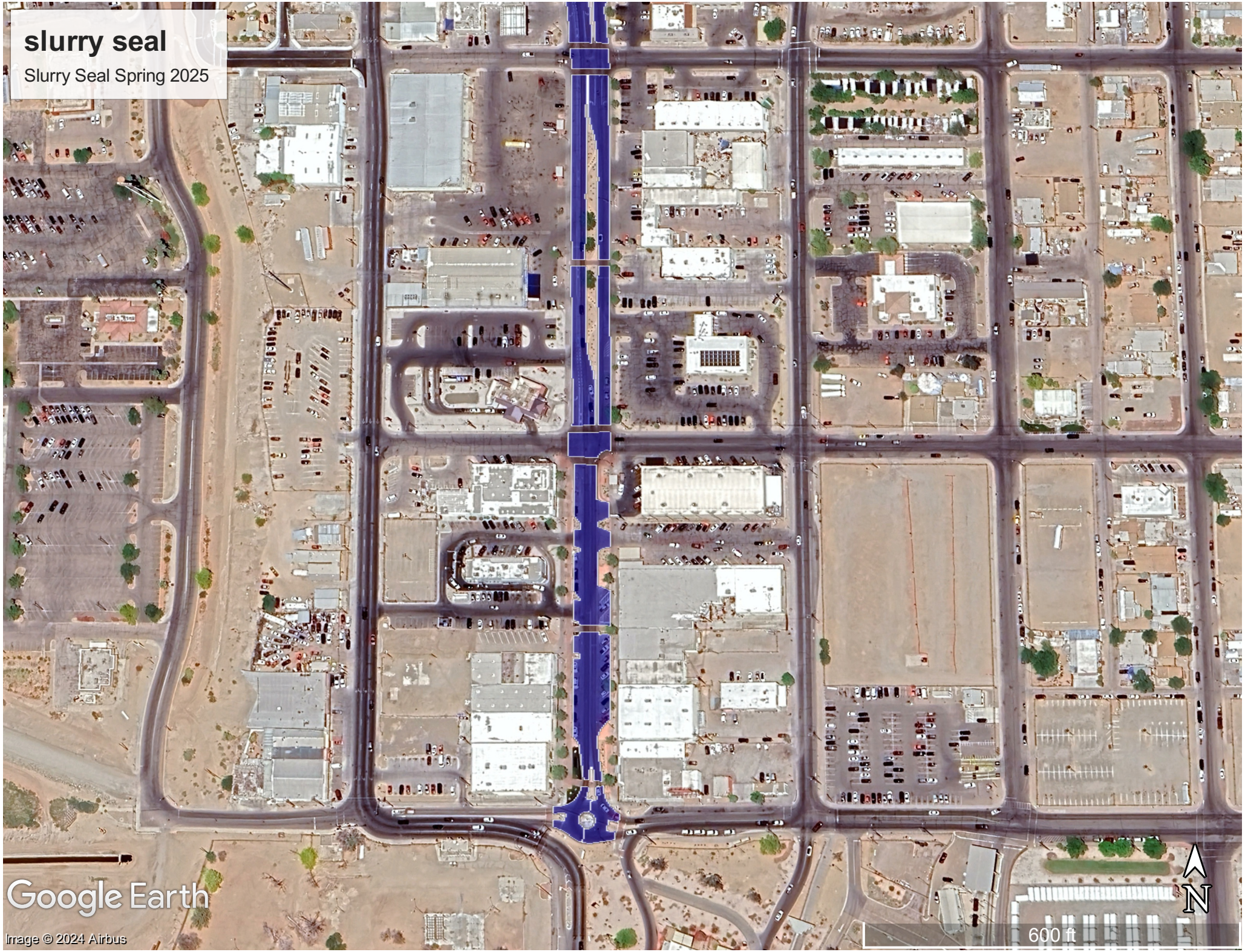

slurry seal
Slurry Seal Spring 2025
Google Earth
Image © 2024 Airbus
1000 ft
N

slurry seal

Slurry Seal Spring 2025




slurry seal
Slurry Seal Spring 2025
Google Earth
Image © 2024 Airbus
N
600 ft


slurry seal
Slurry Seal Spring 2025
Google Earth
Image © 2024 Airbus
N
600 ft

To:	CITY OF SAN LUIS	**Contact:**	Manuel Hernandez
Address:	1090 EAST UNION STREET	**Phone:**	928-341-8577
	SAN LUIS, AZ 85349	**Fax:**	
Project Name:	CITY OF SAN LUIS AZ SPRING 2025	**Bid Number:**	
Project Location:	San Luis AZ	**Bid Date:**	1/20/2025

Item Description	Estimated Quantity	Unit	Unit Price	Total Price
MOB Slurry/Micro One Mobilization From Yuma, AZ To San Luis, AZ.	1.00	LS	$2,675.840	$2,675.84
TYPE-II SLURRY SEAL Type 2 Latex Modified Aggregate Slurry Seal Material Application Of Slurry Seal Only On Approximately 56,239 SY Application Of Slurry Seal Only On Existing Asphalt Surface Slurry Seal Placed At 20 Lbs. Per SY Average Application Rate.	56,239.00	SY	$2.648	$148,920.87
TRAFFIC CONTROL	5.00	DDAY	$5,430.800	$27,154.00

Total Bid Price: $178,750.71

Notes:

- Proposal to include the following:
  Barricading of road and parking areas, area to be closed to complete the work.
  Placement of NO PARKING signs as necessary.
  Notifications placed on houses, apartment office, Condominium office, and business buildings if required.
  Unit prices to prevail. Overruns at the unit prices quoted or by dividing the lump sum price by the quantity.
  Covering or protecting of utilities to include metal manhole covers and water valves.
- Excludes any and all items not specifically listed in proposal.
- Unit prices shall prevail.
- In the event that quantities differ from above, billing will reflect agreed upon measured quantities.
- If proposal is accepted, entire proposal including all conditions and exclusions must be made part of contract.
- ALL PRICES ARE BASED ON CURRENT OIL AND ASPHALT PRODUCT PRICES. Market price for oil products including diesel fuel, lubricants, and liquid asphalt are current, are extremely unstable, and are subject to change at any time. Costs of these products will be re-evaluated at the time work is scheduled and adjustments in costs made according to the current prices. Any increase in oil products and or asphalt related prices from date of proposal will be passed on to Owner.
- All work quoted above is scheduled on an "as available" basis unless otherwise stated. APP encourages customers to verify start dates as soon as possible and realize that schedule issues and or changes on your project may mean you will be moved back to our next available date behind other customers who have met their intended schedule. Your project will not be formally scheduled without a binding letter of intent or a formal contract. We apologize for any inconvenience, but we value our relationships with all customers.
- EXCLUSIONS (Unless Otherwise Specified or Listed Above): Any and All Items not Specifically listed in Proposal,Bonds, Permits (of any type) and related expenses, Plans, Engineering, Elimination of Any Drainage Problems, Survey, Staking, Construction Water, As-Builts, Testing, Inspection, Clear & Grubb, Grading, Landscape Repairs, Weed Killer, Crack Routing, Crack-Sealing, Curb Line/Joint Sealing, Asphalt Patching, ABC, Landscape Materials, Vegetation Replacement, Preservative Seals, Prime Coats, Concrete Structures, Irrigation/Pipe Work, All Underground Items, Utility Removal or Relocation, Drywells, Rip/Rap, Structural Backfill, Striping, Curb Painting, New Signage, Parking Bumpers Removal or Replacement, Import, Export, Excavation, Subgrade Stabilization, Removal of Hazardous Waste, Removal of Hazardous Waters, Removal of Debris Generated by Other Trades, Erosion Control, SWPPP, Thickened Pavement Edge, Project Information Sign And Any Special Insurance Requirements.
- Security and or towing removal of vehicles, if required, to be furnished by Owner.
- APP will not take responsibility for unforeseen subgrade issues. APP is not responsible for drainage or compaction of subgrade areas prepared by others.
- The complete elimination of any drainage problem or reflective cracking is not intended or guaranteed.
- Power steering and tire turning marks are normal and should not be cause for concern on new slurry or micro surfacing. TIRE MARKS ARE NOT A WARRANTY ITEM.
- The new slurry/micro surface to remain tender for a few weeks and during hot temperatures.
- All materials guaranteed to be as specified. All wort to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, flood, and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

- American Pavement Preservation is not responsible for any sub-base problems or damage to asphalt due to the weight of machinery required to complete the work.
- American Pavement Preservation is not responsible for damage to finished surface by garbage trucks, landscapers, vendors, human, vehicle or animal tracking of the fresh material.
- American Pavement Preservation is a non-union contractor and will complete the work on a non-union basis, with non-union open merit shop employees only. American Pavement Preservation will not sign or become signatory to any union or sign any labor agreements American Pavement Preservation will not contribute or pay into any organized labor funds.
- Payment shall be made as the work progresses in an amount equal to the value of the work done, less the sum of any previous payments. The entire amount of the contract to be paid within 30 days after completion.
- No retention on the work to be held.
- Interest will accrue at the rate of 1.5% per month on any unpaid balance remaining at 60 days from invoice date.
- NV 0051240 Class A General
  AZ ROC261874 Class A General
  UT 7547937-5551 Class E100
  ID U2 0148818
  CA 972820 Class A General
  NM 373518 Class GA98
- Standard Terms and Conditions to follow.

ACCEPTED: The above prices, specifications and conditions are satisfactory and are hereby accepted. **Buyer:** _____ **Signature:** _____ **Date of Acceptance:** _____	**CONFIRMED:** **American Pavement Preservation** **Authorized Signature:** _____ **Estimator:** Keevin Fuentes (702) 249-1137 Kfuentes@americanpave.com

Franklin Striping, Inc.
2832 S. 45th Street
Phoenix, AZ 85040
Phone: (480) 898-1180
Fax: (480) 668-9688

REVISED 2/7/2025

QUOTE NO: **014925**

ATTENTION: **ESTIMATING DEPARTMENT**

PROJECT: **CITY OF SAN LUIS 2025 MAINT.**
PROJECT #
LOCATION

DATE: **1/27/2025**

ITEM NO.	SCOPE OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
	YELLOW PAVEMENT MARKING PAINT (2 COATS)	13016	LF	$0.30	$3,904.80
	WHITE PAVEMENT MARKING PAINT (2 COATS)	8161	LF	$0.34	$2,774.74
	YELLOW PAVEMENT MARKING PAINT TRANSVERSE (2 COATS)	420	LF	$1.00	$420.00
	WHITE PAVEMENT MARKING PAINT TRANSVERSE (2 COATS)	6457	LF	$1.00	$6,457.00
	PAVEMENT MARKING PAINTED SYMBOL (ARROW) (2 COATS)	14	LF	$150.00	$2,100.00
	PAVEMENT MARKING PAINTED SYMBOL (BIKE SYMBOL & ARROW) (2 COATS)	12	LF	$150.00	$1,800.00
	PAVEMENT MARKING PAINTED HANDICAP SYMBOL (ADA) (2 COATS)	2	LF	$170.00	$340.00
	PAVEMENT MARKING PAINTED SYMBOL (18X24 YIELD) (2 COATS)	54	LF	$30.00	$1,620.00
	PAVEMENT MARKING PAINTED LEGEND (ONLY) (2 COATS)	5	EA	$170.00	$850.00
	LABOR CHARGE/ PER CREW MEMBER (LAYOUT) 2 MEN	6	EA	$200.00	$1,200.00
	MOBILIZATION	1	EA	$2,000.00	$2,000.00
TOTAL	**BID PRICE:**				**$23,466.54**

***** TWO MOBILIZATIONS ARE INCLUDED IN THE PRICE ABOVE.**
***** ADDITIONAL MOBILIZATIONS WILL BE CHARGED AT $2000.00 EACH FOR STRIPING.**
***** ADDITIONAL MOBILIZATIONS WILL BE CHARGED AT $2500.00 EACH FOR RUMBLE STRIP CUTTING.**

To schedule projects, email us at: scheduling@franklinstriping.com

DISCLAIMER:

Quantities shown above are an estimate only, actual field quantities installed will be used for billing purpose.
Excludes: Police Officer, Traffic control, barricades, signage, bonds, sales tax, permits, survey, sweeping, as builts, water supply, dump site, shadow truck, diamond grinding, obliteration, slurry seal or sealer for obliteration scarring & removal of chip seal markers.
Additional Mobilization Charges May Be Applied From Circumstances Beyond Our Control Which Would Prohibit The Above Mentioned Work From Being Completed As Scheduled.
(i.e. UNMOVED VEHICLES, TRAILER, SPRINKLERS, OR EXCESSIVELY DIRTY AREAS ETC.)

****FSI REQUIRES 15 DAYS NOTICE PRIOR TO ANY PAVEMENT MARKING NEEDED****

**** Contractor is to provide Striping Survey. Reference ADOT Standard Specifications 2021 Edition**
**** Sec.-925. Contractor to supply Survey Control points to be set every 50ft.**

**** If striping survey is not completed per ADOT Standard Specifications, a cost of $500.00/hour will be charged to layout.**

All material is guaranteed to be as specified and preformed in accordance with the drawings and specifications submitted for the above mentioned work and completed in a substantial workmanlike manner. Payment terms to be NET 30. This proposal is valid for 60 days. Licensed and Bonded.
Lic No. 115703 & 238964

SINCERELY,
PHIL KOWALCZYK

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

By: _____

PO#: _____

- REQUEST FOR BIDS -



SPECIFICATIONS, PROPOSAL & BID DOCUMENTS FOR:

Pavement Marking (2023-2024)

Bid Number: 2023-2024CY.04

Prepared By:
YUMA COUNTY DEPARTMENT OF PUBLIC WORKS
4343 S. Avenue 5 1/2E
YUMA, ARIZONA 85365

NOTICE OF REQUEST FOR BID

Agency: **Yuma County Department of Public Works (Hereinafter referred to as the COUNTY, 4343 South Avenue 5 ½ E, Yuma, Arizona 85365, Telephone (928)341-2500, Fax (928) 341-2500.**

Description: **PAVEMENT MARKING (2023-2024 CALENDAR YEARS)**

OFFER DUE DATE: **January 31, 2023** **AT: 10:00 am**

A Pre-Offer conference will not be held.

A Post-Award conference will be held after the formal award. The CONTRACTOR / BIDDER will be notified of the date and time.

Notice is hereby given that sealed bids for the services of Pavement Marking will be received by the Yuma County Board of Supervisors at the below specified location until the time and date cited. Offer specifications may be obtained from the office of the Director, Department of Public Works, 4343 South Ave 5 ½ E, Yuma, Arizona 85365, Telephone (928) 341-2500. All offers received by the correct time and date will be opened and publicly read by the Clerk of the Yuma County Board of Supervisors, at the office of the Yuma County Administrator.

Offer Opening and Submittal Location: **Yuma County Board of Supervisors**
198 South Main Street
Yuma, Arizona 85364

Two (2) copies of all offers must be submitted in a sealed envelope and clearly marked with the following information: **Sealed Bid for Pavement Marking, with the company's name and date/time of the bid opening.** Offers must be in the possession of the Yuma County Board of Supervisors on or prior to the time and date, and at the location indicated above. Late offers will not be considered.

The Board of Supervisors reserves the right to reject any and all proposals and to waive minor defects and technicalities, as it may deem best for the interest of the COUNTY.

OFFERORS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE SOLCITATION.

/s/ Kelly Fricke
Kelly Fricke, Interim Director
Department of Public Works

I

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SECTION I – SCOPE OF WORK & LOCATION

1. DESCRIPTION:

1.1 The COUNTY is requesting bids for a Pavement Marking contract for the 2023-2024 calendar years (January 1, 2023 through December 31, 2024). Except as otherwise approved in writing by the Public Works Director, the work shall be done primarily from the months of April through June and July through October, during daylight hours, Monday through Thursday.

1.2 The work shall consist of furnishing all materials, labor, and equipment for the application of yellow and/or white traffic paint with reflective glass beads at locations specified by the Department of Public Works Director on roadways in the COUNTY. All work will be accomplished in accordance with Arizona Department of Transportation (ADOT) Standard Specifications for Road and Bridge Construction, Revised Edition 1996, and all subsequent revisions hereto; The Manual on Uniform Traffic Control Devices (MUTCD), Part VI, U.S. Department of Transportation, Federal Highway Administration, 2009, and all subsequent revisions hereto, or better; and/or as directed by the COUNTY'S representative.

1.3 The work will also consist of furnishing all materials, labor, and equipment for the purpose of installing raised pavement markers in accordance with ADOT standards or better.

1.4 The work will also consist of furnishing equipment, labor and collection containers for the obliteration of pavement marking materials through grind out, hydro blasting or other methods approved by the COUNTY'S Representative. The CONTRACTOR shall collect all debris from the obliteration process and dispose of the debris in accordance with all applicable environmental regulations and at a disposal site authorized to accept such wastes.

1.5 The work also consists of installation of preformed plastic symbols, legends and appropriate adhesive. Materials needed ***MAY*** be furnished by the COUNTY, but not equipment.

1.6 The work will also consist of labor for the performance of miscellaneous pavement marking activities such as, but not limited to physical layout for installation of new pavement markings, and the painting of median bullnoses.

1.7 During the term of this agreement, there may be special projects which the CONTRACTOR may be asked to do. These will be done upon written approval and at mutually agreed upon written pricing.

1.8 All work under this contract shall include furnishing all equipment, labor, and materials necessary for the Traffic Control in accordance with MUTCD, Part VI, and Quality Control in accordance with these specifications.

1.9 With approval of the contracted BIDDER(s), this contract may be extended for use by other municipalities and/or government agencies of the State of Arizona in addition to the COUNTY. Any such usage by other municipalities and/or government agencies must be in accordance with the ordinance, charter, and/or rules and regulations of the respective political entity.

SECTION II – SPECIAL PROVISIONS

1. **LOCATIONS:**

The CONTRACTOR should thoroughly examine the locations of any proposed work before submitting its proposal and should familiarize itself with all local conditions affecting the work. Estimated usage amounts and/or tentative projects schedules are for bidding purposes only and the COUNTY does not guarantee any maximum or minimum amounts of purchase.

2. **PAYMENTS:**

The CONTRACTOR, through its Superintendent, shall measure the work performed during the preceding month, as provided in the specifications, and submit the same to the COUNTY'S Representative for checking. On or before thirty (30) days after the verified and approved quantity of the work is received by the COUNTY, the COUNTY shall pay to the CONTRACTOR the approved quantity of work at the contract unit price. Payment shall constitute full compensation for furnishing all materials, labor equipment, services, and miscellaneous charges for this contract.

3. **CHANGES IN THE WORK:**

This contract does not guarantee any minimum or maximum amount of work and all lists or quantities are estimates and do not guarantee any quantity of work. The COUNTY may order, without invalidating the Contract, additional work or make changes by altering, adding or deducting from the work. There shall be no adjustment in the unit price bid for changes in the work.

Additional work for which unit prices were not bid and are not a part of the bid document, shall require an agreement by both parties and be outlined in a Supplemental Agreement.

4. **CLEANUP:**

When all the conditions of the contract have been fulfilled, the CONTRACTOR shall remove all rubbish, barricades and its equipment. CONTRACTOR shall leave the site in a clean and orderly manner as close to the preconstruction condition as possible.

5. QUALITY CONTROL:

The CONTRACTOR's Superintendent shall provide quality control by retaining an approved lab to assure compliance with the Technical Specifications section of the contract. The CONTRACTOR will submit a Quality Control Plan for the proposed work at least seven days (7) prior to actual project start date.

6. SCHEDULING:

6.1 The COUNTY shall provide the CONTRACTOR with at least two (2) weeks prior notice of the project start date.

6.2 No work on Fridays, Saturdays, Sundays or Holidays will be permitted, unless written permission is obtained, in advance, from the Public Works Director or his/her designated representative. This will not change the calculation of time as noted in the previous paragraph.

7. GUARANTEE OF WORK (ADDITIONAL):

The CONTRACTOR shall guarantee all work against any defects due to faulty materials or workmanship for a period of one (1) year from the date of final inspection and acceptance of each project. The COUNTY shall give notice of observed defects with reasonable promptness. Any omission on the part of the COUNTY's Representative to condemn defective work at any time of construction or final inspection shall not be deemed an acceptance and all work shall remain under guarantee for a period of one (1) year thereafter. The CONTRACTOR shall replace defective work at no cost to the COUNTY, within the limits of the one (1) year guarantee period.

8. BONDS:

All BIDDERS are required to submit a Surety Bond in the amount of 10% of the total bid amount for Primary Services, Schedule "A". Upon award of this contract, the successful BIDDER shall be required to furnish a Contract Performance Bond (CPB) which equals 100% of their total bid amount identified on Bid Schedule "A" (Primary Services) and a Labor and Materials Bond (LMB) which equals 100% of their total bid amount identified on Bid Schedule "A" (Primary Services). The CPB and the LMB bonds must be received by the office of the COUNTY within ten (10) days of the Notice of Awards. The attached forms have been selected as the forms to be used, in compliance with the requirements of CBP and LMB for this work.

1. MATERIALS:

1.1 Paint materials shall comply with ADOT Standard Specifications or better, in particular, Section 708-2.01 set forth in the following technical data.

1.2 Traffic Paint shall be Pervo 6050 Series or equal. Traffic paint shall be water borne with the yellow being lead free and shall meet the following technical data below.

Technical Data		
	White Paint	Yellow Paint
Pigment % by weight, ASTM D3723	60±2	58±2
Vehicle, % by weight	40±2	42±2
Non-Volatile, % by weight of paint, min.	77±2	77±2
Viscosity, @ 77°, Kreb Units, ASTM D562	80-95	80-95
Fineness of grind, minimum, ASTM D1210	3	3
Field Tested no tracking time under ambient conditions	20-90 seconds	20-90 seconds
Maximum Dry Through Time @ 15 mils wet, surface temperature @ 72.5 + 5°F, 90%+- 5 R.H., TEST AS PER astm d-1640, except exerting minimum pressure	1 hour	1 hour
PH, Minimum	9.6	9.6
Reflectance	84+	45-58
Dry opacity, 5 mils wet	0.92	0.90
Dry time, ASTM D-711, minutes, maximum	10	10
Thinner	Water	Water

1.3 Glass beads shall be Potters or equal and conform to ADOT specifications, Section 708-2 or better. The beads shall be manufactured from glass of a composition designated to be highly resistant to traffic wear and to the effects of weathering. The beads shall be moisture-proof and be free of trash, dirt or other deleterious materials. The bead shall be transparent, clean, colorless glass, smooth and spherically shaped, free of milkiness, pits, or excessive air bubbles and conform to the following specific requirements.

1. MATERIALS, cont'd:

1.3.1 Gradation - the beads shall meet the gradation as given in Table 1 below. Graduation shall be tested in accordance with ASTM D1214.

TABLE I		
SIEVE NUMBER		% RETAINED
12	0	100
14	0-5	95-100
16	5-20	80-95
18	40-80	10-40
20	10-40	0-5
25	0-5	0-2
Pan	0-2	--

1.3.2 Roundness - The glass bead shall have a minimum of 80 percent rounds per screen for the two highest sieve quantities (determine visually) and no more than 3 percent angular particles per screen (visual). The remaining sieve fractions shall be no less than 75 percent rounds (determined visually, per aspect ratio using microfiche reader). (Angulars are defined as particles with sharp edges). Roundness and angular particle concentration shall be tested microscopically using the two highest quantity sieve fractions.

1.3.3 Reflective Index - The glass bead shall have a reflective index of 1.50 to 1.52. Refractive index shall be tested by the liquid immersion method (Beck Line Method or equal) at a temperature of 25 ±5C (77 ±9).

1.4 Crafco bituminous adhesive or equivalent is approved for raised pavement marker installation.

1.5 Certificates of compliance will be required when requested. Request for use of substitute materials shall be submitted to the COUNTY'S Representative for approval prior to such use.

2. EQUIPMENT:

2.1 The CONTRACTOR shall maintain, during the entire period of the contract, equipment sufficient in operational conditions and capacity to efficiently perform the work and services required by this contract. Downtime due to equipment failure shall not exceed one (1) day. If an excess of one (1) day down time occurs, the CONTRACTOR shall notify the COUNTY of the problem and estimated downtime. The COUNTY reserves the right, if more than one (1) day of downtime occurs, to have roads which are deemed essential by the COUNTY's Representative striped by another provider. Any additional cost over the contract amount will be charged to the CONTRACTOR.

2. EQUIPMENT, cont'd:

2.2 The minimum equipment required shall include:

2.2.1 One (1) self-propelled pavement marking machine capable of a 4" clear cut line or lines and a clear cut 8" line. The machine shall be equipped with a glass bead dispenser controlled by the spray gun mechanism.

2.2.2 The self-propelled pavement marking machine shall be equipped with a mechanical or electronic device, capable of placing a broken reflectorized line with a 10 foot painted segment and a 30 foot gap.

2.2.3 The self-propelled pavement marking machine shall be equipped with devices capable of measuring the actual painted lines in lineal feet as the spray guns are engaged.

2.2.4 The self-propelled pavement marking machine shall be equipped with amber flashing warning lights.

2.2.5 All vehicles and equipment shall conform to federal, state, and occupational safety and health laws, rules, and regulations.

2.2.6 A shadow vehicle equipped with amber flashing warning lights will be required to protect the fresh line from tracking at some locations.

2.3 All equipment is subject to approval by the Public Works Director, or its designated representative.

2.4 The CONTRACTOR will provide its own yard for parking, maintenance and storage of all equipment, if Yuma County facilities are unavailable.

3. TRAFFIC CONTROL:

3.1 Traffic control during the striping or pavement marking application shall be in conformance with the MUTCD, Part VI. Signs warning motorists of "Wet Paint" and "Road Striping Ahead" shall be placed in advance of each job to warn motorists. Placement of signs shall conform to the MUTCD, Part VI. Placement of cones on lines is recommended and may be required on some jobs.

3.2 The CONTRACTOR is responsible for traffic control until paint is dry. The CONTRACTOR is responsible for satisfactory removal of pavement marking from motorists' vehicles if the occurrence was at a location that was under the CONTRACTOR's control. Such paint removal must be done as directed by the COUNTY'S Representative, and at no expense to the motorist or the COUNTY.

4. APPLICATION and TOLERANCES:

4.1 Pavement markings shall be applied when the pavement surface is clean and dry when the weather is not foggy, rainy, or otherwise adverse to the application of paint or other material. Sweeping prior to application will be done by the CONTRACTOR. The CONTRACTOR shall not apply markings until final approval is given by the COUNTY'S Representative. Application of pavement markings shall be done by personnel who are experienced in this work. In all cases, pavement markings shall be placed in accordance with ADOT Standard Specifications and MUTCD.

4.2 Tolerance for Application of Paint and Beads:

4.2.1 The finished line shall be smooth, aesthetically acceptable, and free from undue waviness. The end of the line shall be square and free from splatter, dribble, or trailings.

4.2.2 Center lines and edge lines shall be 6" wide. White channelizing lines for left turn bays shall be 8" wide. Line width variation more than 1/4" shall require reduction in pay or rework, if necessary.

4.2.3 Painted lines shall be installed at 16 mils wet film thickness or at a minimum rate of 300 lineal feet per gallon for 4" lines. The inspector shall perform spot checks for wet mil thickness compliance and require inspection of quantities of materials when desired. Rework will be required for striping applied below these standards.

4.2.4 The space or gap between double yellow lines shall be 4" clear. A reduction in pay or rework will be required for a gap less than 3.75" or more than 4.25".

4.2.5 Reflective glass beads shall be applied on the wet paint at a minimum rate of six pounds to each gallon of paint. All painted lines are to receive glass beads at this rate. Any line discovered to have been applied without glass beads shall be re-stripped by the CONTRACTOR within 24 hours.

4.2.6 Any error in striping pattern deemed by the COUNTY's Representative to be the responsibility of the CONTRACTOR shall be corrected by the CONTRACTOR, at the CONTRACTOR's expense, using approved methods.

4.3 Tolerances for the Installation of Raised Pavement Markers:

4.3.1 Installation of raised pavement markers may be required on various projects. The CONTRACTOR shall furnish materials, equipment and labor needed for the installation. All raised pavement markers will be installed per ADOT Standard Specifications. Standard Crafco adhesive or equivalent is required. Installation shall be on a clean, dry surface. Markers installed not in conformance with ADOT specifications shall be removed and reinstalled at the CONTRACTOR's expense. Damaged markers due to negligence will be replaced at the CONTRACTOR's expense.

4. APPLICATION and TOLERANCES, cont'd:

4.4 Tolerances for Striping Obliteration:

4.4.1 Striping requiring obliteration shall be removed using approved methods with as little pavement damage as possible. The use of black paint is not permitted. CONTRACTOR shall collect all debris from the obliteration process and dispose of the debris.

4.5 Labor:

4.5.1 The CONTRACTOR shall provide a crew (2 persons minimum, 3 persons typical), as requested by the COUNTY, to perform physical layout on roads where striping has been obliterated or new striping to be installed, or other related work. The labor charge shall be per crew member and shall include transportation to and from the job site. A COUNTY inspector may direct the activities of the crew. All labor rates begin when the crew arrives at the site and ends when the crew leaves the job site.

4.6 Tolerances for the Installation of Preformed Plastic:

4.6.1 Rolled or cut preformed plastic symbols, legends, and appropriate adhesive will be required for installation at specific locations by the CONTRACTOR. The materials required may be supplied by the COUNTY for various locations. All personnel performing this work shall be experienced with the installation of this material. Specific drawings outlining the work will be supplied by the COUNTY. The installation is to be in conformance with manufacturer's guidelines. Damaged material due to CONTRACTOR's negligence will be replaced at the CONTRACTOR's expense.

5. METHOD of MEASUREMENT and PAYMENT:

5.1 Pavement marking paint shall be measured by the linear foot along the center of the stripe. Skips in dashed lines will not be included in the measurement. Length of pavement markings will be based on 6" wide stripes, 8" wide stripes will be considered two 4" wide stripes. Payment will be made at the contract price per linear foot of 6" wide stripe for the total length of painted lines applied to the nearest foot. A deduction of payment will be made for pavement marking paint which is determined by the COUNTY to be less than 6" wide. Payment for non-conforming work will be held until such time as the work is brought into conformance and accepted by the COUNTY'S Representative.

5.2 The CONTRACTOR shall report daily to the COUNTY's Representative the total number of lineal feet of markings applied and the location of the completed work. Upon notification, the COUNTY's Representative will conduct a final inspection. Work found to be in conformance with the contract shall be accepted and scheduled for payment. Work not in conformance shall be corrected by the CONTRACTOR at CONTRACTOR's expense.

5. METHOD of MEASUREMENT and PAYMENT, cont'd:

5.3 BIDDER shall guarantee that workmanship and work performed pursuant to this agreement comply with the specifications herein and conform with the generally accepted procedures, practices and methods that are appropriate for the services provided, as well as all applicable Federal, State and COUNTY laws and regulations. Any defective workmanship or materials discovered shall be corrected at no expense, and to the satisfaction of the COUNTY.

5.4 Raised pavement markers shall be measured on a unit installed basis. Payment will be made at the contract unit price per each unit installed.

5.5 Installation of Preformed Plastic symbols, legends and adhesive shall be measured on a unit supplied and installed basis (CONTRACTOR supplying materials), and on a unit installed only basis (COUNTY supplying materials).

5.6 Striping obliteration shall be on a 6" line obliteration basis similar to the installation of pavement marking paint. Payment will be made at the contract unit price per linear foot of 6" wide stripe for the total length of obliterated lines.

5.7 Labor charges for layout shall be measured on an hourly rate per crew member basis. Payment will be made at the contract price per hour per crew member.

5.8 Mobilization charges for work requiring urgent attention shall be measured per occurrence, and shall require prior approval by the Public Works Director. Payment will be made at the contract price per each occurrence. All mobilization for work other than urgent response will be considered incidental and shall be considered as included in the unit price of contract pay items.

5.9 Special projects will be paid at the agreed upon pricing.

5.10 The CONTRACTOR shall provide invoices to the COUNTY every two weeks, including two (2) copies of each approved work report and in a format specified by the COUNTY's Representative. Payment will be made only after completion and acceptance of the work performed and receipt of supporting invoices.

6. WORK SCHEDULE:

6.1 The COUNTY is requesting bids for a Pavement Marking contract for the 2023-2024 calendar years (January 1, 2023 through December 31, 2024). Except as otherwise approved in writing by the Public Works Director, the work shall be done primarily from the months of July through October and April through June, during daylight hours, Monday through Thursday.

6.2 Prior to commencing any work, the CONTRACTOR shall receive written or verbal notification to proceed from the Director, Deputy Director and/or the Traffic Control Supervisor for the COUNTY.

6.3 The CONTRACTOR shall avoid pavement marking operations at specific locations during "rush hour" traffic, unless prior approval is received from the Public Works Director. These locations and hours of concern will be identified by the COUNTY.

6.4 The COUNTY will provide the CONTRACTOR with the locations or areas of the COUNTY in which pavement marking shall be accomplished. The CONTRACTOR shall submit a work schedule, for approval, of proposed roads in which pavement marking is to be done, based upon the COUNTY's identified locations or areas. The CONTRACTOR shall complete all work on the submitted work schedule. In some instances, projects may require urgent attention and completion within 24 hours. This work would be required to be accomplished in addition to the approved work schedule. For those projects *ONLY*, the CONTRACTOR may charge a mobilization charge, if the CONTRACTOR is not already on-site.

7. ESTIMATED QUANTITIES:

Estimated quantities provided in the bid documents are for bidding purposes only. Payment will be based on actual materials used and services provided.
The following are estimated quantities:

Estimated Inventory Totals for 2023-2024 Water based and Thermal paint striping

Total L.F. Yellow	Total L.F.

Solid	S&S	Skip	White
1,014,532	683,107	287,833	4,203,908

SECTION IV – BID PROPOSAL

1. All persons wishing to submit bids should secure specifications and a proposal package from the COUNTY, 4343 South Avenue 5 1/2E, Yuma, Arizona 85365, Telephone (928) 341-2500. No bid will be accepted unless it is submitted on a standard bid form enclosed in the proposal pamphlet.

2. The Advertisement for Bids is included in this proposal package and outlines the place and time for receipt of bids along with other information.

3. If questions arise concerning the specifications or procedures, please contact Ms. Shannon Thomas, at the COUNTY, 4343 South Avenue 5 1/2E, Yuma, Arizona 85365. Telephone (928) 341-2500, FAX (928) 341-2550.

4. In the event a clarification or interpretation is requested from the COUNTY, it must be submitted in writing to the Director of Public Works. **VERBAL CLARIFICATIONS OR INTERPRETATIONS WILL NOT BE PROVIDED.**

5. No oral interpretations or clarifications will be made to any BIDDER as to the meaning of any of these documents nor shall any clarification or interpretation, as may be given, be construed as a modification of any of the provisions of these documents. All requests must be submitted in writing. Any change will be by written addendum and sent to all known potential BIDDERS.

SECTION IV – BID PROPOSAL

TO: Clerk, Yuma County Board of Supervisors
198 S. Main St.
Yuma, Arizona 85364

FROM: BIDDER

RE: Pavement Marking Contract (2023 - 2024 Calendar Years)

The undersigned BIDDER, having examined the specifications and all related documents, and being familiar with the conditions to be met, hereby submits the following offer and bid for furnishing all labor, material, equipment supplies and all else required for the work listed at the prices set forth in this bid proposal:

(a) Warrants the accuracy of the representations contained in all of the Bid Documents;

(b) Understands that this bid cannot be withdrawn for a period of forty-five (45) calendar days after opening;

(c) Understands that approval of the bid (acceptance of the offer) by the COUNTY will result in a binding contract which terms shall include the Scope of Work and Location, Technical Specifications, Bid Proposal, Bid Schedule, Certification, Tax Information, BIDDER Information, and all of the General Provisions (collectively, "the Agreement");

(d) Agrees that, upon approval of bid by the Board of Supervisors, to immediately sign the written Agreement in the form attached hereto;

(e) Agrees to perform the work in accordance with the Agreement;

(f) Guarantees that said materials and services shall be available to the COUNTY during the complete contract period, without interruption or delay, except when material or delivery is delayed by fire, strike, freight embargo, acts of God or government restrictions; and

(g) Acknowledges that BIDDER has read all of the terms contained in the General Provisions and agrees to each and every term.



Undersigned BIDDER, Signature

1/27/2023
Date

Randy Franklin
Printed Name

Franklin Striping Inc
Contractor Name

SECTION IV – BID PROPOSAL

THIS PROPOSAL IS SUBMITTED BY: [Check applicable box and fill-in information]

☒ 1. Franklin Striping Inc , a corporation organized under the laws of the State of and qualified to do business in the State of Arizona;

☐ 2. A partnership consisting of _____ as general partners, doing business as _____;

☐ 3. An individual doing business as _____; or

☐ 4. A Limited Liability Company, organized under the laws of the State of Arizona, and qualified to do business in the State of Arizona, and who have attached its Articles of Organization and Operating Agreement with this Bid Proposal.

If applicable, the above bidding entity has been assigned CONTRACTOR's License Number: ROC 115-703.

THIS BID SUBMITTED, this 27th day of January, 20 23.

Company/Firm/Individual (print): Franklin Striping Inc

Address: 2832 S 45th Street

City, State, Zip: Phoenix, AZ 85040

Phone: (480) 898-1180

Signed: _____

Printed Name: Randy Franklin

Officer/Title: President

Dated: 1/27/2023

ATTEST:

_____

Witness: If BIDDER is an individual

Bidder Company Name: Franklin Striping Inc

SCHEDULE "A" - PRIMARY SERVICES

ITEM #	DESCRIPTION	EST. QUANTITY/ UNIT	UNIT PRICE	TOTAL
1	YELLOW Pavement Marking Paint	1,523,000 LF	$0.15	$228,450.00
2	WHITE Pavement Marking Paint	1,161,000 LF	$0.17	$197,370.00
			TOTAL AMOUNT	**$** 425,820.00

Bidder Company Name: Franklin Striping Inc

ITEM #	DESCRIPTION	EST. QUANTITY/ UNIT	UNIT PRICE	TOTAL
1	Thermoplastic line 46" Yellow 90mils	LF	$0.80	$0.80
2	Thermoplastic line 6" White 90mils	LF	$0.80	$0.80
3	Thermoplastic line 12" Yellow 90mils	LF	$3.00	$3.00
4	Thermoplastic line 12" White 90mils	LF	$3.00	$3.00
5	Thermoplastic line 6" Yellow 120mils	LF	$1.20	$1.20
6	Thermoplastic line 6" White 120mils	LF	$1.20	$1.20
7	Thermoplastic line 12" Yellow 120mils	LF	$3.50	$3.50
8	Thermoplastic line 12" White 120mils	LF	$3.50	$3.50
9	Preformed Thermoplastic (Supply & Install)	Each	$ 225.00	$ 225.00
10	Preformed Thermoplastic (Install ONLY)	Each	$ 260.00	$ 260.00
11	Raised Pavement Markers	Each	$3.50	$3.50
12	Reflective Pavement Markers	Each	$3.50	$3.50
13	Striping Obliteration	Per LF	$0.80	$0.80
14	Labor Charge/Per Crew Member	1 Hour	$100.00	$100.00
15	Mobilization	Each	$2000.00	$2000.00
			TOTAL AMOUNT	**$** 2609.80

Thermoplastic pavement markings shall conform to Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Section 704 – Thermoplastic Pavement Markings, unless otherwise approved in advance by the Public Works Director.

PREFORMED THERMOPLASTIC

Preformed Thermoplastic shall conform to Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Section 705. Preformed Thermoplastic Shall be a general purpose high durability retroreflective pliant polymer film for preformed striping and markings to be used for finished permanent markings. It shall be capable of performing as specified herein when subjected to high traffic volumes and severe wear conditions such as repeated shear act ion from crossover or encroachment on edge and channelization lines, starting, stopping, and turning movements.

SECTION VI – PERFORMANCE WARRANTY

CONTRACT PERFORMANCE WARRANTY

I, Randy Franklin, representing

Franklin Striping Inc (Company Name)

do hereby warranty the work performed for the:

YUMA COUNTY PAVEMENT MARKING CONTRACT 2023 – 2024 CALENDER YEAR

for a period of one year from completion of said work. Said work shall be free from defects due to the use of faulty materials or workmanship or any other defects which would cause the work to not perform in its intended manner, normal wear excluded.

Authorized Signatory for CONTRACTOR

1/27/2023
Date

CERTIFICATION OF SUBCONTRACTING

At the time of the submission of bids for:

YUMA COUNTY PAVEMENT MARKING CONTRACT 2023 – 2024 Calendar Years

Yuma, Arizona, my intention concerning subcontracting a portion of the work is as indicated below.

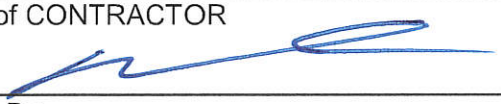
In indicating that it is my intention to subcontract a portion of the work, this will acknowledge that such Subcontractors will be identified and approved by the COUNTY prior to award of the contract; and that documentation, such as copies of letters, requests for quotations, quotations, etc. substantiating the actions taken and the responses to such actions is on file and available for review.

_____ A portion of the work will be subcontracted.

X
_____ None of the work will be subcontracted.

Subcontractor's License Number_____

Franklin Striping Inc
_____
Name of CONTRACTOR



_____
Signed By

Randy Franklin
_____
Printed Name

President
_____
Title

1/27/2023
_____
Date

SECTION VIII – CERTIFICATION

Each BIDDER must specify whether or not the BIDDER's proposal meets all specifications set forth in the Request for Bids and whether or not all of the terms and conditions set forth in the Request for Bids are accepted by the BIDDER.

If the answer is "No" on specifications, bids shall be considered if all elements of the bid comply substantially with the specifications called for; however, the BIDDER shall show each deviation of the substitution and shall include all necessary manufacturer's technical data for comparison evaluation. Any deviation shall be in writing and in letter form attached to the bid.

If the answer is "No" on the terms and conditions set forth in the Request for Bids, the BIDDER must submit the exact language changes contemplated by the BIDDER.

THE ABOVE PARAGRAPHS MUST BE COMPLIED WITH, OTHERWISE THE ENTIRE BID WILL BE *VOID*.

To: Yuma County Board of Supervisors

This firm certifies that it meets all specifications contained in this Request for Bids.

Yes X No

This firm certifies that all terms and conditions set forth in this Request for Bids are accepted.

Yes X No

Name of Contractor: Franklin Striping Inc

Signature: _____

Printed Name: Randy Franklin

Title of Position: President

Address: 2832 S 45th Street

City: Phoenix State: AZ Zip Code: 85040

This form must be filled in and signed by authorized personnel only and returned with bid. If this is not complied with, the entire bid will be void.

/s/ Kelly Fricke
Kelly Fricke, Interim Director
Department of Public Works

Thermoplastic pavement markings shall conform to Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Section 704 – Thermoplastic Pavement Markings, unless otherwise approved in advance by the Public Works Director.

PREFORMED THERMOPLASTIC

Preformed Thermoplastic shall conform to Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Section 705. Preformed Thermoplastic Shall be a general purpose high durability retroreflective pliant polymer film for preformed striping and markings to be used for finished permanent markings. It shall be capable of performing as specified herein when subjected to high traffic volumes and severe wear conditions such as repeated shear act ion from crossover or encroachment on edge and channelization lines, starting, stopping, and turning movements.

SECTION X – BIDDER INFORMATION

THIS SHEET MUST BE FULLY COMPLETED:

SEND PURCHASE ORDERS TO:

Name (print): Franklin Striping Inc, Attn: Randy Franklin

Address: 2832 S 45th Street

City: Phoenix State: AZ Zip Code: 85040

SEND PAYMENTS TO:

Name (print): Franklin Striping Inc, Attn: Randy Franklin

Address: 2832 S 45th Street

City: Phoenix State: AZ Zip Code: 85040

Telephone: (480) 898-1180

Name of Person to Contact for Orders (print): Sadim Boyd

Telephone: (480) 898-1180

E-Mail Address: sadim@franklinstriping.com

Person to Contact for Questions/Problems (print): Tim Passaglia

Telephone: (480) 898-1180

E-Mail Address: tim@franklinstriping.com

SECTION XI – EXCEPTIONS TO BID SOLICITATION

The BIDDER shall identify all Exceptions taken to any or all sections of the Request for Bids and Specifications and list those Exceptions referencing the section, paragraph & page number, the basis for the Exception and proposed alternate language, if applicable (attach additional pages as necessary).

The purpose of an Exception is to clarify any ambiguity or inconsistency in the Bid Documents. However, BIDDERS are encouraged to bring to the attention of the COUNTY before the closing time set for receipt of bids any matter the BIDDER believes to be ambiguous or inconsistent so that the matter may be clarified for all BIDDERS. Including an Exception that is not necessary to appropriate, or which misconstrues the Request for Bids, may be grounds to reject the bid.

SECTION XII – GENERAL PROVISIONS

1. PREPARATION OF BIDS:

1.1 A review of all drawings, specifications and instructions, associated with this Request for Bids, is each BIDDER'S responsibility.

1.2 All prices and notations must be printed in ink or type written. No erasures will be permitted. However, errors may be crossed out and corrections printed in ink or type adjacent to the error. All corrections must be initialed in ink by the person signing the bid.

1.3 All pricing data must be submitted in the precise manner requested and in the appropriate location on each Bid Schedule. All prices quoted shall be F.O.B. delivered and unloaded, the COUNTY, 4343 South Avenue 5 1/2E, Yuma, AZ 85365, or as otherwise agreed upon and shall not include tax.

1.4 The COUNTY reserves the right to correct obvious errors.

2. ESTIMATED QUANTITIES:

It is the intent of the COUNTY to purchase pavement marking materials and services from the CONTRACTOR, only as those items are needed. **The estimated quantities provided in the Bid Schedule are for bidding purposes only.** Payments will be based upon actual materials used and services provided.

3. QUESTIONS CONCERNING BID DOCUMENTS:

If a BIDDER believes that any provisions in this Request for Bids are needlessly restrictive, unfair or unclear, the matter must promptly be brought to the attention of the COUNTY, in writing, before the closing time set for receipt of bids.

4. BID MUST CONFORM TO BID DOCUMENTS:

All bids must comply with and not deviate from the provisions of the Request for Bids. Failure to meet a material requirement of the Request for Bids shall be reason for rejection of a bid.

5. SUBMISSION OF BID:

5.1 Bids must be signed by the BIDDER or its duly authorized agent and submitted in a sealed envelope.

5.2 BIDDERS shall verify their quotations prior to submittal. Bids and modifications thereof received after the closing time specified ***will not*** be considered. No corrections or amendments to a bid will be permitted after bid opening.

5.3 BIDDERS must complete and submit: BID PROPOSAL, BID SCHEDULE(s), BIDDER PERFORMANCE WARRANTY, SUBCONTRACTING INFORMATION, BIDDER CERTIFICATION, TAX INFORMATION, BIDDER INFORMATION and any EXCEPTIONS TO BID SOLICITATION, all attached herewith.

5. SUBMISSION OF BID, cont'd:

5.4 All BIDDERS must submit a Surety Bond in the amount of 10% of bid amount, using the form attached to this Proposal Package.

5.5 Two (2) copies of all offers must be submitted in sealed envelopes and clearly marked with the following information: **Sealed bids for Pavement Marking, with the company's name and date/time of the bid opening.**

6. PRICE GUARANTEES AND REDUCTIONS:

6.1 By submitting a bid in response to this solicitation, a BIDDER agrees to guarantee that the COUNTY is receiving the lowest price offered by his company to other customers for similar services at comparable volumes in a similar geographic area. If at any time during the contract period the CONTRACTOR offers a lower price to another customer, and the COUNTY is not notified of price reductions, the COUNTY shall reserve the right to take any or all of the following actions:

a. Cancel the current agreement with the CONTRACTOR.

b. Determine the amount which the COUNTY was overcharged and submit a request for payment from the CONTRACTOR.

c. Deduct the amount of the overcharge from any future payment due to the CONTRACTOR.

6.2 BIDDERS shall agree to hold prices for forty-five (45) days from the date of bid opening to allow adequate time for evaluation of materials offered, pricing and the representations made in the bid. Upon award of this bid, the CONTRACTOR'S prices shall remain firm through December 31, 2024.

7. CHANGES TO SPECIFICATIONS:

No changes to the COUNTY'S specifications will be made, except in the form of a written addendum. The failure of a BIDDER to address any addendum in their bid may cause that bid to be rejected.

8. FAILURE TO BID:

Failure to bid, or to advise the COUNTY that future invitation for bids are desired, may result in the removal of your name from the COUNTY'S BIDDER'S list covering this category of items.

9. FRAUD AND COLLUSION:

9.1 Each BIDDER, by submission of its bid, proclaims and agrees that no officer or employee of the COUNTY or of any subdivision thereof:

9.1.1 has aided or assisted the BIDDER in securing or attempting to secure a contract to furnish labor, materials or supplies at a higher price than that proposed by any other BIDDER;

9.1.2 has favored one BIDDER over another by giving or withholding information or by willfully misleading the BIDDER in regard to the character of the material or supplies called for or the condition under which the proposed work is to be done;

9.1.3 has or will knowingly accept materials or supplies of a quality inferior to those called for by any contract;

9.1.4 has or will knowingly certify to a greater amount of labor performed than has been actually performed, or to the receipt of a greater amount or different kind of material/supplies than has been actually received; and

9.1.5 has any direct or indirect financial interest in the bid.

9.2 Each person submitting a bid expressly warrants and certifies that neither itself or its employees or associates has directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in conjunction with this bid.

9.3 If at any time it shall be found that the person or entity to whom a contract has been awarded has, in presenting any bid, or bids, colluded with any other party or parties for the purpose of preventing any other bid being made, then the contract so awarded shall be terminated and that person or entity shall be liable for all damages sustained by the COUNTY.

9.4 All parties acknowledge that this agreement is subject to cancellation pursuant to the provisions of A.R.S. § 38-511.

10. EVALUATION AND AWARD:

10.1 It is the intent of the COUNTY to award the bid for Pavement Marking to the lowest and best BIDDER, with determination of best BIDDER being based on evaluation of products and services offered and other criteria identified herein. However, any contract resulting from this solicitation shall be awarded with the understanding that it is for the sole convenience of the COUNTY and based upon products and services offered. Evaluation of products and services offered will include, but is not limited to, prices, compliance with specifications, service response time, product availability, delivery time and any other pertinent items of the bid.

10.2 The Yuma County Board of Supervisors reserves the right to reject any or all bids which (1) do not meet or exceed all specifications listed herein and (2) do not contain all information/documents required. The Board may waive any irregularities, if it is deemed in the best interest of the COUNTY to do so.

10. EVALUATION AND AWARD, cont'd:

10.3 Pricing evaluations will be based upon pre-tax pricing offered by BIDDER. Cash discounts offered for prompt payment will be considered in the evaluation. Cash discounts offered for payment in less than twenty (20) days ***will not*** be considered

10.4 Results of this procurement **will not** be given in response to telephone inquiries. Interested parties are invited to attend the public opening at the time and date specified in this solicitation. Following the evaluation and award process, all respondents are notified of results. A tabulation of bids will be on file in the office of the COUNTY.

10.5 BIDDERS performance for previous contracts will be considered in the evaluation of bids, whether as a general CONTRACTOR or sub-contractor.

11. AWARD OF CONTRACTS:

11.1 Contract agreements and purchases will be made or entered into with the lowest and best BIDDER(S), except as otherwise required, permitted or authorized by law.

11.2 The Yuma County Board of Supervisors reserves the following rights:

11.2.1 To waive irregularities or variances in any bid or the bidding procedures.

11.2.2 To reject the bid of any persons or corporations who have previously defaulted on any contract with the COUNTY.

11.2.3 To reject any and all bids, if it is deemed in the best interest of the COUNTY.

11.2.4 To re-advertise for bids.

11.2.5 To otherwise provide for the purchase of such equipment, supplies and materials as may be required herein.

11.3 Each BIDDER, by submission of its bid, proclaims, agrees and does waive any and all claims for damages against the COUNTY, or its officers or employees, when any of the rights reserved by the COUNTY in the Request for Bids are exercised.

11.4 A written agreement will be furnished to the successful BIDDER. The contents of this Request for Bids and the selected firm's response shall be incorporated, in total, into the agreement. The contract shall be interpreted, construed and given effect in all respects according to the laws of the State of Arizona. A copy of said agreement is attached to this Request for Bids.

12. PUBLIC INFORMATION:

Pursuant to A.R.S. §39-121.01, et.seq., all information submitted with the Bid, including, but not limited to pricing, product specifications, work plans and any supporting data becomes public information, after bid opening, and upon request is subject to release to and/or review by the public, including competitors.

13. TERM OF AGREEMENT:

Any agreement made as a result of this Request for Bids shall be effective January 1, 2023 and terminate on December 31, 2024. It is further intended the agreement shall be automatically renewed for two (2) successive one (1) year periods, upon the same terms and conditions unless either party notifies the other in writing of their intention not to renew, ninety (90) days prior to the expiration date of any successive one (1) year period.

14. ASSIGNMENT OR SUBCONTRACTING:

Neither this agreement, nor any portion thereof, may be assigned by the CONTRACTOR without the written consent of the COUNTY first having been obtained. Any attempt by the CONTRACTOR to assign or subcontract performance of obligations under this agreement, without the written consent of the COUNTY, shall be null and void and shall constitute a breach of the agreement.

15. INDEMNIFICATION:

CONTRACTOR shall indemnify, and hold harmless COUNTY, its officers, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands and costs attendant thereto, arising out of any act, omission, fault or negligence by the CONTRACTOR, its agents, employees or anyone under its direction or control or on its behalf in connection with performance of this Contract.

16. INSURANCE:

16.1 The successful BIDDER(S) shall, within five (5) days after award of bid, furnish the COUNTY with Certificates of Insurance for the required insurance coverage. The Certificates shall be issued by an insurance company authorized to transact business in the State of Arizona.

16.2 The successful BIDDER(S) shall maintain, throughout the term of agreement for this work, and provide certificates of insurance for such types of insurance and the minimum limits as follows:

16.2.1 **Worker's Compensation and Employer's Liability** - A certificate of insurance evidencing statutory coverage for Worker's Compensation coverage, injury and a limit of liability of $500,000 for Employer's Liability, from and entity authorized or a letter of certification from the Industrial Commission of Arizona that the successful BIDDER(S) is insured by the State Compensation Fund or is authorized by the Arizona Department of Insurance to provide Worker's Compensation and Employer's Liability Insurance in the State of Arizona.

16.2.2 **Auto Liability*** - A certificate of insurance evidencing coverage of owned, non-owned and hired vehicles with an individual single limit for personal injury and property damage of no less than $1,000,000 for each occurrence.

16. INSURANCE, *cont'd*:

16.2.3 **General Liability*** - A certificate of insurance evidencing coverage for General Liability written on a comprehensive form, with coverage of at least $1,000,000 and $2,000,000 in the aggregate for each occurrence for bodily injury, products and completed operational premises/operations, contractual insurance, independent CONTRACTORS insurance, broad form property damage and personal injury.

*The successful BIDDER shall provide appropriate certification that any rental equipment used for the performance of this work is insured to the minimum limits of liability.

16.3 The policies, except Worker's Compensation, required by this section shall name the COUNTY as additional insured, shall specify that insurance afforded the CONTRACTOR shall be primary insurance and that any insurance coverage carried by the COUNTY or its employees, agents, officers and elected officials shall be excess coverage, and not contributory coverage to that provided by the CONTRACTOR.

16.4 No revisions shall be made to an insurance policy and no policy shall be terminated, canceled or allowed to expire without thirty (30) days written notice to the COUNTY.

16.5 The CONTRACTOR shall hold harmless and indemnify the COUNTY and its Board of Supervisors for any acts, errors or omissions of the CONTRACTOR, its employees, agents or Subcontractors, arising out of the services provided herein.

17. TAXES, FEES, EXPENSES AND EXTRAS:

17.1 Prices offered in a bid shall not include applicable state and local taxes. The COUNTY will pay all applicable taxes as listed individually on all invoices and in compliance with SECTION IX.

17.2 All equipment, materials or supplies sold to the COUNTY are exempt from federal excise tax.

17.3 No charges for delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, and costs of bonds or for any other purpose will be paid by the COUNTY, unless expressly included and itemized in the bid.

18. INDEPENDENT CONTRACTOR:

18.1 Any agreement made with the CONTRACTOR is not intended to constitute, create, give to or otherwise recognize a joint venture agreement or relationship, partnership or formal business organization of any kind, and the rights and obligations of the parties shall be only those expressly set forth in the agreement. The CONTRACTOR will be considered an independent CONTRACTOR and not an employee of the COUNTY. It will be each independent CONTRACTOR'S responsibility to comply with all required State and Federal laws and regulations.

18.2 The parties agree that no persons supplied by the CONTRACTOR in the performance of obligations under the agreement are considered to be COUNTY employees, and that no rights of COUNTY civil service, retirement or personnel rules accrue to such persons.

19. INDEPENDENT CONTRACTOR, cont'd:

18.3 The CONTRACTOR shall have total responsibility for all salaries, wages, bonuses, retirement withholdings, workmen's compensation, occupational disease compensation, unemployment compensation, other employee benefits and all taxes and premiums appurtenant thereto concerning such persons, and shall save and hold the COUNTY harmless with respect thereto.

20. RIGHTS AND REMEDIES OF YUMA COUNTY FOR DEFAULT:

19.1 Events of Default. The CONTRACTOR shall be in default if the CONTRACTOR shall violate any term or provision of the contract or should otherwise fail to make timely delivery of the supplies, materials or equipment or fail to timely perform the services provided for, or if the supplies, materials, equipment or services do not conform to the specifications and requirements of the contract, or the CONTRACTOR should otherwise not fully, timely and completely perform all of the CONTRACTOR's promises, agreements, covenants and conditions set forth in the contract.

19.2 Rejection of Goods. In the event materials or services do not appear to conform to all specifications of the contract, the COUNTY shall immediately contact the BIDDER concerning observed defects and request a representative meet with or fax the COUNTY staff documentation certifying the testing of the materials/services in question. If the BIDDER agrees there is a problem, they will insure the COUNTY has access to replacement materials immediately and be responsible for reimbursement of any transportation costs of said material. If the BIDDER disputes the claim that a problem exists with materials provided, a qualified testing lab will be provided a sample for testing against specifications provided as a part of this Request for Bids. The COUNTY shall have final authority for approval of any material or service provided under this contract.

19.3 Damages. In the event of breach of contract by CONTRACTOR or cancellation of the contract by the COUNTY, either in whole or in part, by reason of default or breach thereof by the CONTRACTOR, any loss or damage sustained by the COUNTY shall be borne and paid for by the CONTRACTOR.

19.4 Remedies not Exclusive. In addition to all rights and remedies set forth in the agreement, the COUNTY shall have and shall be entitled to enforce to the full and maximum extent provided by law, any and all other rights and remedies provided under the COUNTY Ordinance, or the laws of the State of Arizona.

19.5 Enforcement Cost: Should it ever become necessary for the COUNTY to retain outside counsel or to utilize the services of the COUNTY Attorney's Office to enforce the terms and provisions of the contract, the CONTRACTOR agrees to pay to the COUNTY, in addition to all other amounts that may be found due by reason of CONTRACTOR'S default, all costs of enforcing this contract, including reasonable attorney's fees, whether enforced by lawsuit or otherwise. The term "enforcement cost" shall include all attorney's fees and costs, including attorney's fees and costs incurred by the COUNTY for outside counsel or the reasonable value of services provided by the COUNTY Attorney's Office in or out of a court proceeding, or a bankruptcy court, whether or not such costs are for

litigation, preparation, administrative proceedings, settlement discussion or contested matters. In the context of proceedings in a bankruptcy court, the COUNTY shall be entitled to recover its actual attorney's fees, costs and expenses incurred in any administrative matter, adversary proceeding or contested matter, or in any other action taken by the COUNTY, which the COUNTY deems necessary to protect its rights under the contract, whether or not the COUNTY prevails in obtaining a remedy or relief.

22. CHANGES, ADDITIONS OR DELETIONS:

22.1 The COUNTY reserves the right to add and/or delete materials and services to this Agreement. Should a material or service requirement be deleted or changed, payment to the CONTRACTOR will be reduced proportionally, to the amount of material or service reduced in accordance with the bid price. Should additional materials or services be required from the agreement, CONTRACTOR will be offered the opportunity to provide said materials and/or services. Prices for such additions will be negotiated between the CONTRACTOR and the COUNTY. All amendments to the agreement shall be in writing and signed by both parties.

23. CONFORMATION WITH LAWS:

23.1 All services required herein, shall be accomplished in conformity with the laws, ordinances, rules, regulations and restrictions of the United States, State of Arizona and the COUNTY.

23.2 LEGAL ARIZONA WORKERS ACT COMPLIANCE: To the extent applicable under A.R.S. § 41-4401, the CONTRACTOR and its subcontractors warrant compliance with the federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under A.R.S. § 23-214(A).

The CONTRACTOR or subcontractors' breach of the above-mentioned warranty shall be deemed a material breach of the Agreement and may result in the termination of the Agreement by the COUNTY. The COUNTY retains the legal right to randomly inspect the papers and records of the CONTRACTOR and its subcontractors who work on the Agreement to ensure that the CONTRACTOR and its subcontractors are complying with the above-mentioned warranty.

The CONTRACTOR and its subcontractors warrant to keep the papers and records open for inspection during normal business hours by the COUNTY and to cooperate with the COUNTY inspections.

24. LICENSES:

The CONTRACTOR acknowledges that in order for the COUNTY to enter into a valid contract, the CONTRACTOR must maintain in current status all federal, state and local licenses, qualifications and permits required for the operation of the CONTRACTOR'S business within the State of Arizona. The CONTRACTOR expressly agrees that the CONTRACTOR shall maintain in current good status all required licenses.

25. ADDITIONAL COSTS:

If the CONTRACTOR should cause the COUNTY to incur additional costs to review and verify invoices due to submittal of incorrect data, the CONTRACTOR shall be charged for all expenses for reviewing and correcting such erroneous billings.

If at any time it is determined by the COUNTY that a cost for which payment has been made that is a disallowed cost, the COUNTY shall notify the CONTRACTOR, in writing, of the disallowance and the required course of action, which shall be at the option of the COUNTY, either to adjust any future claim submitted by the CONTRACTOR by the amount of the disallowance or to require repayment of the disallowed amount by the CONTRACTOR forthwith.

26. AUDIT DISALLOWANCE:

If at any time it is determined by the County that a cost for which payment has been made that is a disallowed cost, the County shall notify the contractor, in writing, of the disallowance and the required course of action, which shall be at the option of the County, either to adjust any future claim submitted by the contractor by the amount of the disallowance or to require repayment of the disallowed amount by the contractor forthwith.

27. TERMINATION OF AGREEMENT:

27.1 The COUNTY may, by serving thirty (30) days advance written notice, terminate any contract entered into without cause.

27.2 Failure of the CONTRACTOR (1) to provide materials or services in accordance with specifications of the contract, (2) to comply with commitments, (3) failure in the performance of materials or services or (4) to comply with the terms and conditions as set forth herein will be cause for **IMMEDIATE** termination of the agreement.

27.3 Any attempt to provide any product and/or service not specifically identified in the specifications or Bid Schedule, or which is provided without written consent/concurrence of the COUNTY, is a breach of the contract.

27.4 Notwithstanding the above, a CONTRACTOR shall not be relieved of any liability to the COUNTY for damages sustained by the COUNTY as a result of breach of this contract and the COUNTY may withhold payments to the CONTRACTOR for the purpose of set-off until such time as the exact amount of damages due to the COUNTY is determined.

28. NON-DISCRIMINATION:

During the performance of this contract, the CONTRACTOR agrees to observe the Non-Discrimination Clause as specified under the regulations of the Secretary of Labor contained in 29 CFR 3 (1874) made pursuant to 40 USC Section 276 (C) (1964) and Arizona Executive Order Number 75-5, and shall be binding as if written herein.

29. AMERICANS WITH DISABILITIES ACT:

The CONTRACTOR shall comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, n.u.s.c. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR parts 35 and 36.

30. SEVERABILITY:

Any provision of the resulting agreement which is determined to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, which shall remain in full force and effect.

31. RETENTION OF RECORDS:

The CONTRACTOR shall retain all financial books, records and other documents relevant to this agreement for five (5) years after final payment or five (5) years after resolution of any audit questions, whichever is longer. All Federal, State or COUNTY auditors, and any other persons duly authorized by the COUNTY, shall have full access to, and the right to examine, copy and make use of any and all said financial books, records and other documents of the CONTRACTOR.

32. GOVERNING LAW, JURISDICTION AND VENUE:

All matters related to the Request for Bids and the contract shall be governed by, construed under and subject to the laws of the State of Arizona. Any dispute arising between the parties shall be litigated in the Superior Court in and for the COUNTY of Yuma, Arizona and CONTRACTOR expressly consents to the jurisdiction and venue of said court.

33. SPECIFICATIONS AND QUALITY CONTROL OF GOODS & SERVICES:

All supplies, materials, equipment, and services furnished under the contract shall be in conformance with any bid specifications and shall meet the following minimum requirements:

a. The title to supplies, materials, and equipment shall be good and transfer rightful.

b. The supplies, materials, and equipment shall be delivered free from any security interest or other lien or encumbrance.

c. Any affirmation or promise made by the CONTRACTOR which relates to the supplies, materials, or equipment shall become part of the basis of the bargain and creates an express warranty that the supplies, materials, and equipment conform to the affirmation or promise.

d. Any description of supplies, materials, and equipment which is made by the CONTRACTOR creates an express warranty that the supplies, materials, and equipment shall conform to the description.

e. Any sample or model which is made a part of the bid or delivered by the CONTRACTOR to the COUNTY creates an express warranty that all of the supplies, materials, and equipment conform to the sample or model.

f. Supplies, materials, and equipment shall be merchantable such that they pass without objection in the trade under the contract description, are of fair and average quality within the description, are fit for the ordinary purposes for which such goods are used, are of even kind, quality, and quantity within each unit and among all units involved, are adequately contained, packaged, and labeled as the agreement may require and conformed to the promises or affirmations of fact made by the CONTRACTOR, and shall be fit for the purposes required by the COUNTY.

34. PROCUREMENT LAWS:

Each party expressly certifies that to the best of their knowledge each party has fully complied with all applicable procurement laws of the State of Arizona and the COUNTY. Any person entering into a contract warrants that neither himself or his employees or associates has directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in conjunction with the contract. If at any time it shall be found that the person or entity to whom a contract has been awarded has in presenting any bid or bids colluded with any other party or parties for purposes of preventing any other bid being made, or that entering into the contract is in violation of any procurement law of the State of Arizona and the COUNTY, the contract awarded shall be rescinded with all materials being returned and all payments refunded to the COUNTY. The sole remedy for violation of procurement law shall be rescission and, in the event of rescission, the parties waive any claim for damages including any claim against the COUNTY, its Board of Supervisors, or its officers, agents, or employees.

35. DELAY IN PERFORMANCE:

Time is of the essence under any agreement made as a result of this Bid Request and, at a minimum, the BIDDER/CONTRACTOR agrees to render performance on or before any deadline included in the specifications. The BIDDER/CONTRACTOR shall be liable to the COUNTY for any cost, expense or damages resulting from any failure by BIDDER/CONTRACTOR to timely perform all obligations under the agreement. In the event of a delay, the COUNTY may recover its actual damages.

36. INCORPORATION BY REFERENCE:

BIDDER understands and agrees that all of the terms and provisions of this section "General Provisions" will be incorporated into and become a part of any agreement resulting from this Request for Bids.

37. BIDDER ATTACHMENTS:

In the event the BIDDER attaches to the BIDDER'S submission any advertisement, handout, circular, pamphlet or brochure, those documents will be deemed submitted for illustration purposes only, and will not constitute a change, modification, exception or variance from the bid specifications. BIDDERS shall be fully bounded by the bid specifications notwithstanding any inconsistencies contained in BIDDER attachments.

38. NON-APPROPRIATION CLAUSE:

Provider acknowledges that the COUNTY is a governmental entity, and the contract validity is based upon the availability of public funding under its authority. In the event that public funds are unavailable and not appropriated for the performance of COUNTY's obligations under this contract, then this contract shall automatically expire without penalty to COUNTY after written notice to PROVIDER of the unavailability and non-appropriation of public funds.

ARIZONA STATUTORY BID BOND FOR CONSTRUCTION
PURSUANT TO TITLES 28,34, AND 41, ARIZONA REVISED STATUTES

(Penalty of this bond must not be less than 10% of the bid amount)

Bond No. BID01272023

KNOW ALL MEN BY THESE PRESENTS THAT: Franklin Striping, Inc.

(hereinafter "Principal"), as Principal, and Merchants National Bonding, Inc.

(hereinafter "Surety"), a corporation organized and existing under the laws of the State of Iowa, with its principal offices in the City of Des Moines, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto the Yuma County

(hereinafter "Obligee") in the sum of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the Obligee for the work described below, for the payment of which sum, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for

Pavement Marking (2023-2024)
Bid Number: 2023-2024CY.04

NOW, THEREFORE, if the Obligee shall accept the proposal of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of the proposal and give the bonds and certificates of insurance as specified in the standard specifications or Contract Documents with good and sufficient surety for the faithful performance of the contract and for the prompt payment of labor and materials furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give the bonds and certificates of insurance, if the Principal pays to the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise, it remains in full force and effect provided, however, that this bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of that section to the extent as if it were copied at length herein.

Witness our hands this 26th day of January, 20 23.

Franklin Striping, Inc.
PRINCIPAL SEAL

By _____

Title: President

Merchants National Bonding, Inc.
SURETY SEAL

By _____
(Attorney-in-Fact)

Michael J. Mesenbrink, Attorney-in-Fact

Crest Insurance Group
Agency of Record

7272 E Indian School Road, Suite 375, Scottsdale, AZ 85251
Agency Address

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Filiberto J Islas; Heather J Perrin; Jeri Lynn Thompson; Katie Love; Lisa M Hankal; Margie Wager; Maria R Lucero; Michael J Mesenbrink; Thomas R Turner

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 1st day of March , 2021 .

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.
On this 1st day of March 2021 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

POLLY MASON
Commission Number 750576
My Commission Expires
January 07, 2023

Polly Mason
Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 26th day of January , 2023.

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

William Warner Jr.
Secretary

POA 0018 (1/20)

1-30-23 @ 9:50 am (1) MC

YUMA COUNTY BOARD OF SUPERVISORS
198 SOUTH MAIN STREET
YUMA, ARIZONA 85364

SEALED BID FOR PAVEMENT MARKING
FRANKLIN STRIPING INC.
JANUARY 31, 2023 AT 10:00 AM

SHP WT: 2
DATE: 27 JAN 2023

PHIL KOWALCZYK
(480) 252-7430
THE UPS STORE #3530
STE 103
7650 S MCCLINTOCK DR
TEMPE AZ 85284-1673

SHIP TO: YUMA COUNTY BOARD OF SUPERVISORS
198 S MAIN ST

YUMA AZ 85364-1424

AZ 853 0-01

UPS NEXT DAY AIR

1

TRACKING #: 1Z 1Y7 40A 01 7059 0122

BILLING: P/P
UPS CARBON NEUTRAL SHIPMENT

REF #1: EJ

ISH 13.00F ZZP 450 03.5V 01/2023

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. F.**

Meeting Date: 02/26/2025

Department Head: Nigel Reynoso, Chief of Police, Police Department

Submitted By: Michelle Boucher, Police Administrator, Police Department

Action Requested: Motion
Order

ITEM:

Discussion and possible action on any and all matters regarding Order No. 2025-03. An Order of the Mayor and City Council of the City of San Luis, Arizona, approving and adopting the Intergovernmental Agreement between the City of San Luis and Gadsden Elementary School District #32 (GESD #32) for funds supporting the San Luis Police Department's participation in the School Resource Officer assignment at San Luis Middle School and Southwest Junior High School. **(Alan Guevara, Patrol Lieutenant)**

SUMMARY:

The San Luis Police Department is requesting approval of the Intergovernmental Agreement between the City of San Luis and GESD #32 for a School Resource Officer assignment at San Luis Middle School and Southwest Junior High. The term of this agreement shall be from the day of effectiveness which is the date set forth by the GESD #32 upon approval by their governing board up until the end of the fiscal year 2025-2027 and end on June 30, 2026. The agreement provides overtime funding for AZPOST sworn personnel of the San Luis Police Department to assume the role of a School Resource Officer during 180 school days for 8 hours per day or as funding allows for any time over the 8 hours work day upon request of the Principal or the Principal's Designee.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE AND ADOPT ORDER NO. 2025-03 AS PRESENTED.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	State
TOTAL:	$269,703.68
BUDGETED AMOUNT:	YES
AVAILABLE AMOUNT TO TRANSFER:	See fiscal impact statement
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	250-181-500000.111 Salaries - Gadsden School District #32/ $269,703.68

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

The $269,703.68 is a reimbursement amount to the San Luis Police Department for SRO hours worked under the SRO IGA with GESD #32. Funds will be released through Special Revenue funds under salaries line 250-181-50000.111 Salaries - Gadsden School District #32

The dollar amount is for the 2 SRO annual salaries for next school year and the current school year x2.
$91,130.48x2=$182,260.96-FY26
$43,721.36x2=$87,442.72-FY25

Total=$269,703.68
Funds will be budgeted accordingly in FY 2025 and FY 2026.

Attachments

Order No. 2025-03

IGA-GESD #32

School Safety Program SRO Manual

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Order

No. 2025-03

AN ORDER OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA TO AUTHORIZE THE CITY OF SAN LUIS POLICE DEPARTMENT TO RECEIVE FUNDING FOR HOURLY PAY AND EMPLOYEE RELATED EXPENSES BY APPROVING AND AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT WITH GADSDEN ELEMENTARY SCHOOL DISTRICT #32 AND THE CITY OF SAN LUIS, ARIZONA, THROUGH THE SAN LUIS POLICE DEPARTMENT FOR TWO (2) SCHOOL RESOURCE OFFICERS.

WHEREAS, the City of San Luis desires to increase police presence within the San Luis Middle School and Southwest Junior High School grounds through the assignment of School Resource Officers, which brings a broader awareness of the school's safety needs and concerns while given the assigned officers greater experience working a school environment;

WHEREAS, the Gadsden Elementary School District #32 has approved an Intergovernmental Agreement to enhance school safety and education throughout San Luis Middle School and Southwest Junior High School;

WHEREAS, the Gadsden Elementary School District #32 has prepared an Intergovernmental Agreement which provides for all the funds including that these funds shall not be used to supplant other funding of the San Luis Police Department no related to this IGA.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of San Luis, State of Arizona as follows:

Section 1: That the Intergovernmental Agreement titled "SCHOOL RESOURCE OFFICER BETWEEN THE CITY OF SAN LUIS AND GESD #32." is approved.

Section 2: That the appropriate City officials are hereby authorized and directed to enter into said agreement on behalf of the City and take any and all actions as may be necessary to effectuate said agreement.

PASSED AND ADOPTED by the Mayor and Council of the City of San Luis, Arizona this _____ day of February 2025.

_____
Nieves Reidel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney

INTERGOVERNMENTAL AGREEMENT BETWEEN

GADSDEN ELEMENTARY SCHOOL DISTRICT #32

(San Luis Middle School and Southwest Junior High School)

AND

CITY OF SAN LUIS

Through the

SAN LUIS POLICE DEPARTMENT

JANUARY 3, 2025 - JUNE 30, 2026

This intergovernmental agreement ("Agreement") is entered into this ____ day of _____ 2025, by and between the City of San Luis ("City"), located at 1090 E. Union Street, P.O. Box 1170, San Luis, Arizona 85349, a municipal corporation duly organized and existing under the laws of the State of Arizona, through its Police Department (the "City"), and Gadsden Elementary School District #32, a school district of the State of Arizona having its administrative offices in Yuma County, 1350 E, Cesar Chavez Blvd., San Luis, Arizona 85349 ("District").

RECITALS

WHEREAS, the District desires the City to assign police officers to the District to provide certain services as School Resource Officers ("SROs"), or to assist in the development and implementation of a school safety program and a law related education program (referred to collectively as the "School Safety Program"), or both, and the City is willing to assign police officers to the District for such purposes under the terms and conditions of this Agreement; and

WHEREAS, the District is authorized by A.R.S. § 15-342(13), A.R.S. § 11-952, and the approval of its Governing Board to enter into this Agreement and the City is authorized by Ch. 2, § 2(i), Charter, City of San Luis, A.R.S. § 11-952, and the approval of its City Council to enter into this Agreement; NOW, THEREFORE,

In consideration of the mutual promises set forth herein, the parties agree as follows:

1. **Assignment**. The City shall assign a total of two (2) police officers to the District seven (7) days prior to the commencement of the school year until the end of that school year to perform services as follows:

Two (2) assigned to the School Safety Program only to the following Schools: San Luis Middle School and Southwest Junior High School.

2. **Term and Termination**. This Agreement shall commence on January 3, 2025 and shall continue until June 30, 2026, unless otherwise terminated in accordance with this Agreement. This Agreement may be terminated without cause by either party upon thirty (30) days' prior written notice.

3. **Relationship of Parties.**

A. The City shall have the status of an independent contractor for purposes of this Agreement. This Agreement is not intended to and will not constitute, create, give rise to, or otherwise recognize a joint venture, partnership, or formal business association or organization of any kind between the parties, and the rights and obligations of the parties shall only be those expressly set forth in this Agreement. The parties agree that no person supplied by the District to accomplish the goals of this Agreement is a City employee and that no rights under the City's civil service, retirement, or personnel rules accrue to such person.

B. The SROs assigned to the District shall be considered employees of the City and shall be subject to its control and supervision. The assigned SROs will be subject to current procedures in effect for San Luis police officers, including attendance at all mandated training and testing to maintain state peace officer certification. The assigned SROs shall fulfill their duties as law enforcement officers as certified by Arizona Police Officers Standards and Training Bureau ("AZ POST"). The District shall not interfere with the assigned SROs' duties as sworn law enforcement officers.

C. The City understands that the District is responsible for the safety of students on campus during the school day. If the District receives information indicating that any police officer assigned to perform services for the District may have engaged in unprofessional, illegal, or immoral conduct, the District will immediately provide such information to the City. If the City receives information from any credible source indicating that any police officer assigned to perform services for the District may have engaged in unprofessional, illegal, or immoral conduct that would affect the officer's ability to safely and/or professionally perform duties for the District, the City will immediately provide such information, as allowed by law, to the District.

D. If any alleged unprofessional, illegal, or immoral conduct might affect the police officer's ability to safely and/or professionally perform duties for the District, the City will immediately remove the officer from the District and reassign the officer in accordance with City policies and procedures to allow the City and/or the District to investigate the allegations. The City agrees to assign a replacement officer to provide services to the District under this Agreement. If a replacement officer cannot be provided, the District will be credited for each day an officer is not assigned to the campus. The District, at its sole discretion, may refuse the assignment to the District of any officer who has been previously removed from the District because of allegations of unprofessional, illegal, or immoral conduct.

E. The City shall be responsible for the police officer's compensation on days schools are in session and the officer is not at the officer's assigned school unless the officer's absence is due to attendance at an off campus activity at the school's request, activity stemming from action taken by the officer while in service of the District, including attendance at Court, or if the officer is working an alternative work schedule as agreed upon by the City and the District.

4. **Costs and Payment.**

A. The District agrees to pay the City up to $269,703.68, from School Safety Grant funds, in consideration for the services provided by the City under this Agreement. The amount charged to the District will be based off the SRO's hourly rate and time on campus.

B. SROs must seek approval from the Principal, or the Principal's Designee, and the appropriate San Luis Police Department supervisor before working on SRO-related overtime (*i.e.*, those matters pertaining to the school, its students, or its employees). The District shall pay one hundred percent (100%) of any SRO overtime worked as the result of SRO-related functions. The City shall pay one hundred percent (100%) of any SRO overtime that result from City-related activities (*i.e.*, those matters that do not involve the school, its students, or its employees). The SRO and City shall make every reasonable effort to ensure that SROs do not incur overtime costs in any given week.

C. Payment to the City from the District is due within thirty (30) days of the District's receipt of a monthly itemized invoice. The City may charge, and the District agrees to pay interest ("late fees") in the amount of ten percent (10%) per annum on any balance that remains unpaid more than fifteen days after the due date. The City and the District understand that late fees will not be paid from School Safety Grant funds.

D. Each party will establish and maintain a budget according to its established rules and regulations.

5. **School Resource Officer's (SRO's) Responsibilities and Goals**.

A. An SRO shall have the following responsibilities:

1. Establish and maintain a professional working relationship with school officials.

2. Provide appropriate police and enforcement services at school.

3. Work cooperatively with school administrators and parents to identify students exhibiting high truancy rates.

4. Attempt to locate and return to school all students who are identified as absent from school without an acceptable excuse.

5. Contact a parent or guardian of each truant student to advise him or her of the incident and determine the parent's or guardian's awareness of the situation.

6. Investigate all reported child abuse incidents within the school.

7. Contact the parent or guardian of students who have not provided the school with proof of identification in accordance with A.R.S. § 15-828.

8. Prepare and maintain such records of their activities as are required by the operational needs of the San Luis Police Department.

B. An SRO shall use good faith efforts to achieve the following goals:

1. Work cooperatively with District school administrators to establish an effective administrative review of truancy and abuse incidents, with the objective of reducing truancy and abuse rates.

2. Contact at least ninety-five percent (95%) of reported truant students and one hundred percent (100%) of reported abused students during each month that this Agreement is in effect.

3. Refer juveniles or their families, or both, to appropriate social service agencies for assistance when a need is determined.

4. Instruct District school administrators and faculty members in (a) the identification of abused or neglected children, (b) the reporting of abuse or neglect, and (c) the actions that can be taken to prevent further abuse or neglect.

5. Provide counseling and educational programs in truancy, abuse, or any other topic mutually agreed upon by the parties in writing.

6. Take appropriate steps, including enforcement and reporting action, consistent with a police officer's duty, upon the discovery of child abuse, drug use, or any other crime.

6. **School Safety Program; Duties and Responsibilities.**

A. The parties agree to participate in the School Safety Program as established by A.R.S. § 15-154 and as described more fully in the School Safety Program Guidance Manual, which is attached here as Exhibit A and incorporated into this Agreement by this reference.

B. Each party agrees to assume the roles and responsibilities assigned to that party by the School Safety Program Guidance Manual.

C. An officer assigned to the School Safety Program for a ten (10) month school year shall have the following duties:

1. Establish liaison relationships with school administrators, staff, students and parents.

2. Inform students of their rights and responsibilities as lawful citizens through presentation of law-related education in the classroom. Each officer shall complete 180 hours of classroom law related education instruction per year as outlined in Exhibit A.

3. Network with community agencies that may or do provide services to the school.

4. Act as a resource in the investigation of school related criminal activities.

5. Participate in the Parent-Teacher Association as requested.

6. Participate in campus activities, student organizations, and athletic events when feasible and appropriate.

7. Provide a visible deterrence to crime while presenting a positive impression of a law enforcement officer.

8. Provide information when requested to students, parents, and staff in lawrelated situations.

9. Attend annual training provided by the Arizona Department of Education, with all related travel expenses to be paid by the District as provided in the grant.

10. Maintain an activity log that tracks law related education classroom instruction, law enforcement activity and any situations that takes the officer off his or her assigned campus.

11. Collaborate with school personnel on school-wide safety strategies and participate as a member of the School Safety Assessment and Prevention Team.

D. An officer assigned to the School Safety Program for a twelve (12) month school year, in addition to the duties specified in subsection C, shall have additional duties when school is not in session that may include any of the following activities as mutually agreed upon in writing by the parties through an amendment to this Intergovernmental Agreement:

1. Plan school security improvements.

2. Prepare law-related education lessons.

3. Develop collaborations with community resources, identifying services offered that could benefit students.

4. Conduct school safety assessments.

5. Work with the school safety team to review and update the school safety plan, and conduct school wide exercises to test the plan.

6. Plan in-service training.

7. Collaborate with school administration to analyze criminal incident reports and disciplinary records as a means of identifying patterns and developing strategies to address problems.

8. Work with community-based and youth recreational and leadership development activities that complement and reinforce the School Safety Program.

9. Attend training opportunities.

7. **Time and Place of Performance**.

A. The City will ensure that the police officers assigned to the District as SROs will be available for duty at their assigned school forty (40) hours each week that school is in session during the term of this Agreement. The parties agree that officers assigned to the School Safety Program will serve a ten (10) or twelve (12) month, full-time, forty (40) hour a week assignment as specified by the District's grant application for School Safety Grant funds. The assigned officers will wear uniforms as authorized by the applicable San Luis Police Department Operations Orders.

B. The officers' activities will be restricted to their assigned school grounds except for:

1. Follow-up home visits when needed as a result of school related problems.

2. Incentive programs approved in writing (for example by e-mail) between the San Luis Police Department Supervisor and the school's Principal, or the Principal's designee.

3. In response to off campus, but school related, criminal activity.

4. Attendance at off-campus events or meetings at the school's request.

5. Attendance at training.

6. In response to emergency police activities.

7. As directed by any San Luis Police Supervisor.

C. During days that schools are not in session, the police officers assigned as SROs shall perform their regular duties at a duty station as determined by the Police Chief or the Police Chief's designee.

8. **District Responsibilities**.

A. The District will provide the police officers with an office at the officers' assigned school and such equipment and office supplies as is necessary for performance of the officers' duties, including a desk, chair, telephone, computer and e-mail linkages, and filing space capable of being secured.

B. Upon termination, all property or equipment used by the parties in the performance of their responsibilities under this Agreement shall remain the property of the party that purchased the property or equipment.

9. **Status Meetings**. By mutual agreement, the parties may meet from time to time for purposes of discussing the status and conduct of the work being performed under this Agreement, and addressing any problems that have come to the parties' attention and their views as to how such problems may be resolved, including amending the terms and conditions of this Agreement. All amendments to this Agreement must be in writing and approved by the City of San Luis Law Department and the District.

10. **Entire Agreement; Modification**. This Agreement constitutes the full and complete understanding and agreement of the parties. It supersedes and replaces any and all previous representations, understandings, and agreements, written or oral, relating to its subject matter. There shall be no oral alteration or modification of this Agreement; this Agreement and its terms may not be modified or changed except in writing signed by both parties.

11. **Notices**. Formal notices, demands and communication between the City and the District shall be deemed sufficiently given if hand delivered or dispatched by registered or certified mail, return receipt requested, postage prepaid, and addressed as follows:

If to the City:
City Manager
City of San Luis
P.O. Box 1170 (by United States Postal Service)
1090 East Union Street (by personal process or courier service)
San Luis, Arizona 85349

With copies to:
City Attorney
City of San Luis
P.O. Box 1170
San Luis, Arizona 85349

Chief of Police
City of San Luis
P.O.Box 1170
San Luis, Arizona 85349

If to the District:
Superintendent
Gadsden Elementary School District #32
P.O. Box 6870 (by United States Postal Service)
1350 E. Cesar Chavez Blvd.
San Luis, AZ 85349

12. **Fingerprinting and Background Check**. The City represents and warrants that it will ensure that each officer assigned to perform services on District property pursuant to this Agreement will be fingerprinted and successfully complete a background check performed by the

City before such assignment.

13. **Legal Worker Requirements.** The parties warrant their respective compliance with all federal immigration laws and regulations relating to their respective employees and each party respectively warrants its respective compliance with Arizona Revised Statutes § 23-214, subsection A. Any breach of the warranties under this paragraph will be deemed a material breach of the Agreement and is subject to penalties up to and including termination of the Agreement.

14. **Resolution of Disputes**. In the event a dispute for any reason arises and pursuant to A.R.S. § 15-154(F), the parties shall meet and discuss within three (3) business days. Any dispute not resolved by mutual agreement of the parties shall be decided in accordance with the applicable Arizona laws.

15. **Cancellation**. The City and the District acknowledge that this Agreement is subject to cancellation by either party pursuant to the provisions of A.R.S. § 38-511.

16. **Nonappropriation**. Each party recognizes that the performance by either party under this Agreement may be dependent upon the appropriation of funds to or by that party. Should either party fail to appropriate the necessary funds, that party may terminate this Agreement as stated herein without further duty or obligation. Each party agrees to give notice to the other party as soon as reasonably possible after the unavailability of funds comes to the party's attention.

17. **Compliance with Applicable Laws**. Each party shall comply with all applicable laws, ordinances, Executive Orders, rules, regulations, standards, and codes of federal, state and local governments whether or not specifically referenced in this Agreement.

18. **Indemnification**. Each party (as "Indemnitor") agrees to the extent permissible under Arizona law to indemnify, defend, and hold harmless the other party (as "Indemnitee") from and against any and all claims, losses, liability, costs, or expenses (including reasonable attorneys' fees) (collectively referred to as "Claims") arising out of bodily injury of any person, including death, or property damage, but only to the extent that such Claims which result in vicarious/derivative liability to the Indemnitee are caused by the act, omission, negligence, misconduct, or other fault of the Indemnitor, its officers, officials, agents, employees, or volunteers.

19. **Workers' Compensation.** An employee of either party shall be deemed to be an "employee" of both public agencies while performing pursuant to this Agreement solely for purposes of A.R.S. § 23-1022 and the Arizona Workers' Compensation laws. The primary employer shall be solely liable for any workers' compensation benefits, which may accrue. Each party shall post a notice pursuant to the provisions of A.R.S. § 23-1022 in substantially the following form:

> "All employees are hereby further notified that they may be required to work under the jurisdiction or control or within the jurisdictional boundaries of another public agency pursuant to an intergovernmental agreement or contract, and under such circumstances they are deemed by the laws of Arizona to be employees of both public agencies for the purposes of worker's compensation."

20. **FERPA Compliance**. Both parties will ensure that the dissemination and disposition of educational records complies at all times with the Family Educational Rights

and Privacy Act of 1974 and any subsequent amendments thereto.

21. **Applicable Law**. This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona.

22. No Israel Boycott. By entering into this Agreement, the parties certify that neither is currently engaged in, and the parties further agree that for the duration of this Agreement to not engage in a boycott of Israel.

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SIGNATURES FOLLOW

The parties have caused this Agreement to be executed on the dates indicated below.

CITY OF SAN LUIS, a municipal corporation
Jenny Torres, Acting City Manager

By: _____

Name: Jenny Torres

Title: Acting City Manager

Date: _____

ATTEST:

_____
City Clerk

GADSDEN ELEMENTARY SCHOOL DISTRICT #32

By:_____

Name: Lizette Esparza

Title: Superintendent

Date:_____

This Agreement is in proper legal form and is within the powers and authority granted under the laws of this state to those parties represented by the undersigned legal counsel.

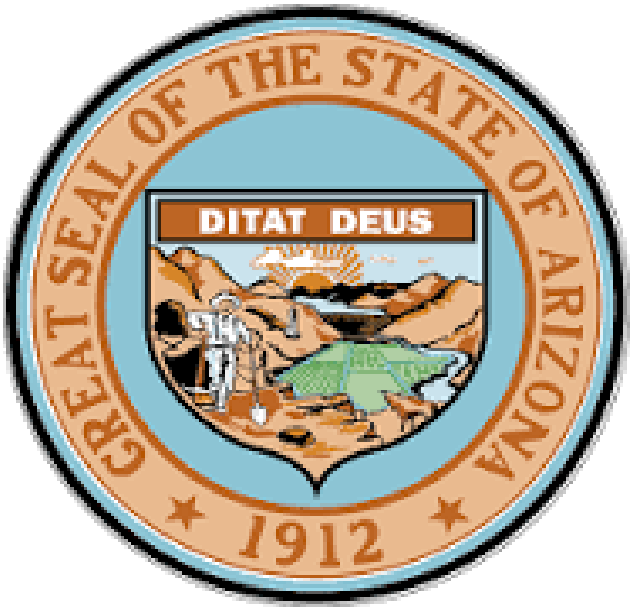
_____
City Attorney

This Agreement is in proper legal form and is within the powers and authority granted under the laws of this state to those parties represented by the undersigned legal counsel.

_____
Attorney for District

SCHOOL SAFETY PROGRAM
SRO/JPO GUIDANCE MANUAL

REVISED April 2023



ARIZONA DEPARTMENT OF EDUCATION

The Arizona Department of Education (ADE) is pleased to provide the *School Safety Program Guidance Manual.* The manual is intended for use by all those involved in the program. The *School Safety Program Guidance Manual* is intended to provide information on the intent of the grant, the responsibilities of all parties, requirements for grant compliance, assistance with administrative issues, and the elements of an effective School Safety Program.

For clarification on issues, or to provide feedback on the content, contact the School Safety Program Lead at (602) 542-8781. The guidance manual is a living document that will go through change as needed to meet the needs of the program. The ADE will continue to revise the manual as needed; therefore, comments from those using the manual are appreciated.

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SECTION 1: INTRODUCTION TO THE SCHOOL SAFETY PROGRAM

Overview

The School Safety Program (SSP) was established by ARS 15-154 in 1994 for the purpose of placing School Resource Officers (SRO), and Juvenile Probation Officers (JPO), on school grounds to contribute to safe school environments that are conducive to teaching and learning. Through comprehensive prevention and intervention approaches, School Safety Program funded officers maintain a visible presence on campus; deter delinquent and violent behaviors; serve as an available resource to the school community; and provide students and staff with Law-Related Education (LRE) instruction and training. Officers develop positive interactive relationships with the students, the staff, and the community that they serve. This proactive, prevention-based program is cultivated through collaborative working partnerships between officers, school administration, teachers, and police and juvenile probation departments.

Goals and Objectives

- Goal 1: The School Safety Program contributes to an orderly, purposeful atmosphere, which promotes the feeling of safety conducive to teaching and learning.
  - Objective 1: Staff feels that the school is safe, and administration supports and monitors the consistency of actions/strategies/policies that will improve or maintain that feeling of safety.
  - Objective 2: Students feel that the school is safe. They feel free from the threat of physical harm and verbal abuse. They feel they have an adult to go to with their safety concerns, and they feel their concerns are taken seriously and addressed.
  - Objective 3: Staff and students have a positive view of the SRO/JPO.
- Goal 2: To teach Law-Related Education that promotes a safe, orderly environment, and good citizenship.
  - Objective 1: The Arizona State Board of Education oversees the process to ensure the continuous review and provision of instructional materials that promote a safe, orderly environment, and good citizenship.
  - Objective 2: Officers annually attend a Law-Related Education academy/class to enhance their classroom skills and knowledge of appropriate LRE lessons.



SECTION 2: APPLYING FOR THE SCHOOL SAFETY PROGRAM

The School Safety Program is a competitive grant that operates in three-year cycles. Each funding year begins on July 1st and ends on June 30th.

Eligibility

The authorizing statute for the School Safety Program, ARS 15-154, allows Arizona school districts or charter schools to apply to participate in the School Safety Program for up to three fiscal years through a competitive application process. Public schools interested in applying for this three-year grant must go through their district/charter holder.

Application Process

Applications are submitted for a three-year cycle through the ADE's on-line grants management enterprise. The application due date, established in ARS 15-154, is April 15th each year. Late applications are not accepted.

Award Process

The ADE, subject to review and approval of the State Board of Education, distributes monies to the school districts and charters that are in compliance with program requirements and whose plans have been approved by the State Board of Education.

Appeal Procedure

- Who May File an Appeal: A school/district or charter denied award or renewal of their School Safety Program Grant.

- Definition of an Appeal: A written request for an appeal committee to review a denied grant application. The request shall be signed and dated by the school site administrator and the district superintendent or charter holder. The request must state the nature of the appeal and include detailed factual support.

- Request for Hearing: A notice of appeal or request for a hearing must be received by the ADE within 30 calendar days from the postmarked date of the grant denial letter. The request shall contain your school site, district, address, the action being appealed, a concise statement of the facts asserted and relief sought along with any supplemental documentation. In accordance with ADE policies and procedures for competitive discretionary grants, ARS 41-2701– 2704, and ARS 41-2611, each application was reviewed and scored by three reviewers and the scores were averaged. Requests to dispute the score given by the review team, and requests to modify, reintroduce or expand upon original information provided in the application, cannot be considered. The request shall be sent by certified mail to:

  Arizona Department of Education
  Attention: Mike Kurtenbach, Associate Superintendent
  School Safety Division
  1535 W. Jefferson Street
  Phoenix, Arizona 85007

- Hearing Panel: Upon receipt of formal written request, ADE will schedule a hearing panel of ADE employees who are independent and impartial from the School Safety Program.

- Schedule of Hearing: A hearing shall be scheduled within 30 days of receipt of formal written request. The requestor shall be notified at least 10 business days prior to hearing date and location. The requester may submit written materials no later than five business days prior to the scheduled hearing date.

- Hearing Process: At the hearing the requester may present the submitted written documentation. The panel may request additional supporting evidence and/or supportive documentation. If the requester or authorized representative fails to appear at the designated date, time, and location of the hearing, the appeal shall be considered closed and the process terminated.

- Decision: The requestor shall be notified of the final decision determined by the hearing panel via certified mail post marked within 5 business days of hearing date.

SECTION 3: PROGRAM REQUIREMENTS

The following are the requirements of the School Safety Program. Noncompliance with program requirements could result in loss of current and/or future grant funding.

Service Agreement

For each site receiving funding under the School Safety Program, a Service Agreement must be developed between your district/charter and the law enforcement agency/probation department. This essential document is an important step toward implementing a successful School Safety Program. The document shall be completed annually, within 30 days of when the officer begins work at the school. The agreement shall be kept on file at each funded site for review during a site visit conducted by the ADE.

REMEMBER: ARS 15-154 requires that the Service Agreement include a dispute resolution process between the district/charter and the law enforcement agency.

TIP: A Service Agreement Template with all required elements is provided in Section 6.

School Safety Assessment and Prevention Team

The formation and implementation of a School Safety Assessment and Prevention Team (SSAPT) is a requirement of the School Safety Program. The purpose of this team is to conduct a safety needs assessment, use the needs assessment data on an on-going basis to determine the use of the officer consistent with program requirements, coordinate efforts of this program with other safety and prevention programs and activities to achieve greater effectiveness, and make recommendations for continuous improvement of the program. A team may be formed specifically to meet this requirement, or an existing appropriate team may be utilized.

The team membership must consist of:

- School principal or assistant principal
- School Safety Program officer
- School prevention coordinator or school mental/behavioral health expert, or similar role
- Other members as needed as determined by school principal

Other members recommended for inclusion on the team are:

- District prevention coordinator
- District transportation representative
- Teacher representative
- Parent representative

The team is required to meet at a minimum on a quarterly basis. For the purpose of the School Safety Program, quarterly is defined as three month intervals (July-September, October-December, January-March, and April-June). Monthly meetings are recommended. At each meeting the team should review needs assessment data and the operational plan, make appropriate revisions to the operational plan based on the needs assessment, discuss completed and upcoming activities and milestones, and identify the person(s) responsible for ensuring the activities are achieved.

TIP: An SSAPT Agenda Template is provided in Section 6.

Operational Plan

Under the direction of the school administrator, each school is required to develop and utilize an operational plan that incorporates program requirements and illustrates their site-specific program design in a succinct and logical manner. Specific activities and milestones, responsible personnel, and projected timelines should be delineated. The plan is a fluid document that should be used by the school administrator, officer, and SSAPT to monitor program implementation and provide continuous improvement throughout the school year.

TIP: An Operational Plan Template is provided in Section 6.

Law Related Education Instruction

LRE is the teaching of rules, laws, and the legal system that actively involves students to prepare them for responsible citizenship. It also provides instructions in legal rights, responsibilities, and the role of the citizen and requires students to practice the application of LRE in potential real-life situations. (*Adopted by the Arizona Center for Law-Related Education from the Virginia Institute for Law and Citizenship Studies*.)

TIPS: LRE does NOT include one-on-one or group counseling.
An LRE Best Practices Tool Template is provided in Section 6.

Officer Weekly Activity Log

Officers are required to complete a weekly activity log that tracks LRE instruction hours, teacher and subject, the topic of each LRE lesson, and the time the officer is off their assigned campus during their duty hours, regardless of the reason.

The following information is required for grant compliance:

- Total hours of LRE classroom instruction
- Teacher /subject or staff/community group
- Total hours for planning and preparation
- LRE topic taught for each class
- Total time spent off campus
- School Safety Incidents

Officers may develop their own log that tracks required items or may use ADE's recommended activity log. The activity log must be shared with the agency supervisor and the site administrator. The agency supervisor and site administrator must support, oversee, and review the officer activity log to ensure fulfillment of grant requirements. The data from the logs shall be used for reporting to ADE. The logs must be available upon ADE's request.

TIP: A Weekly Activity Log Template is provided in Section 6.

Officer Time on Campus

When school is in session, an SRO is required to be on campus 80% of the time, and a JPO is required to be on campus 90% of the time.

Officer Continuity

Under no situation can a site have more than three officers in a three-year grant cycle.

Officer Performance Assessment

The site administrator is required to complete an officer performance assessment twice a year. The assessment must be shared with the officer's supervisor. The evaluation is meant to assist the officer and his/her supervisor in meeting the intent of the grant and effectively carrying out their duties. It is not meant to supplant the official evaluation process used by the officer's department or agency. It is at the discretion of the law enforcement agency or probation department to include the school's evaluation in the officer's official folder. Only officers who have performed in a satisfactory manner should be considered for further service in the School Safety Program.

Recommended factors to consider are as follows:

- Does the officer have a clear sense of his/her role?
- Does the officer understand the operational policies and procedures of the school necessary to perform effectively in the position?
- Has the officer attended or is scheduled to take a law-related education class in the current year?
- How does the officer relate to staff, students, and parents?
- Does the officer work well independently?
- Has the officer attempted to meet the requirements of the grant?
- Does the officer perform his/her duties effectively?
- How effective is the officer with classroom presentations?

Informal evaluations that provide the officer and supervisor with feedback regarding the officer's performance should occur frequently.

If a problem occurs, it should first be addressed at the site level between the officer and administration. If a resolution is not reached, the grievance should then move through the process as established by the officer's department and school's policy. The problem should attempt to be resolved at a level nearest the school as possible.

TIP: An Officer Performance Assessment Template is provided in Section 6.

Training

Specific training requirements are provided by ADE to the district administrator at the start of each grant year. It is the responsibility of the district administrator to share that information with all pertinent individuals in a timely manner so that all can register for appropriate training. The training requirements are as follows:

- The district administrator is required to attend training provided by the ADE. *
- The agency supervisor is required to attend training provided by the ADE. *
- The school principal and/or principal's designee (assistant principal, dean of students, or similar) is required to attend annual training provided by the ADE. *
- The officer is required to attend annual training provided by the ADE. *
  - New Officer Training: All officers new to the School Safety Program are required to attend an in-depth training which covers community oriented policing, the role of school based officers, and an introduction to LRE. This training, sponsored by ADE, meets the School Safety Program LRE training requirement.
  - School Safety Program LRE Training: Officers are required to attend an LRE Academy training provided by the AZFLSE, annually. LRE Academy courses address grade level specific topics and programs identified by officers as critical to meeting the learning needs of diverse student populations. Courses are relevant to the needs of schools with topics updated on an annual basis. The School Safety Program provides each officer with travel funds to cover travel expenses for one training per year. Officers receive a curriculum and resource package at each training. The AZFLSE is the contracted training agency for LRE. Training in LRE is essential to successfully achieve the LRE teaching requirement. Academies are approved for credit by the Arizona Peace Officers Standards and Training Board (AZPOST) and the Arizona Judicial Council (COJET).

  * Specific training requirements are provided by ADE to the District Administrator at the start of each school year.

Program Evaluation

ARS 15-154 requires the ADE to evaluate the effectiveness of the School Safety Program and report on the activities of the program and the participants in the School Safety Program to the President of the Arizona Senate, the Speaker of the Arizona House of Representatives, and the Governor of Arizona on or before November 1 of each year. The ADE shall provide a copy of this report to the Secretary of State. The evaluation and report shall include survey results from participating schools and data from participating schools on the impact of participating in the School Safety Program. The ADE shall establish data guidelines for School Safety Program participants to follow. By applying for School Safety Program funding, grant recipients agree to participate in the ADE School Safety Program evaluations.

SECTION 4: LAW RELATED EDUCATION

Why Law-Related Education?

Law-related education is the teaching of rules, laws, and the legal system that actively involves students to prepare them for responsible citizenship. LRE is required as a component of the School Safety Program because it

- promotes problem-solving skills,
- actively involves students, teachers and the community,
- increases students' knowledge of the law, making them better informed citizens and consumers,
- discourages delinquent behavior,
- promotes positive self-image in students, and
- encourages students to respect rules, laws, and persons in authority when exposed to a "balanced" view of "democratic" society.

Since LRE is being recommended as a violence prevention strategy, then it is important to have some common notion of what law-related education is and what it encompasses. LRE is instruction about rules, laws, and the legal system that actively involves students in the instruction in order to prepare them for responsible citizenship. (Definition developed by the Virginia Institute for Law and Citizenship Studies) It is instruction that teaches the legal rights, responsibilities, and role of the citizen. Students practice application of that teaching to potential real-life situations.

The approach consists of high-interest content and interactive instructional strategies. This type of instruction provides students at all levels the following opportunities:

- to explore and reflect on theirs and others' perspectives,
- to express and defend their views, to listen to the views of others,
- to develop arguments for both sides of an issue, to mediate, and
- to formulate decisions and resolutions based on multiple and often conflicting concerns.

In primary grades, students might consider a rule they don't like, explore why it was made, examine, the consequence for breaking it, and discover who acts as judge when the rule is broken. They might evaluate existing or hypothetical rules to determine whether or not they are clear, consistent, fair, and enforceable. They could listen to and analyze rules in stories, and they could create and enforce their own set of classroom rules.

Intermediate students might role play a law officer encountering a criminal dilemma. They might work in cooperative groups to offer solutions to problems that arise when a law is too general or vague. Older students might use the case study method of analysis to examine legal conflicts throughout history. Information from this exercise could then apply this information to current dilemmas. Simulations of trials, known as mock trials or moot court, legislative hearings, constitutional conventions, police procedures, role playing, conflict resolution, mediation, formal and informal debate, cooperative group problem-solving, outside speakers, from the legal community typify LRE classes al all levels.

Since rules and laws affect all aspects of life, all subject areas, and all ages, the content of LRE can be as varied as the students and teacher need it to be. The methods, however, are characteristically open-ended and participatory in nature. Although some LRE instructional materials have been written for specific topics or age groups, there is no one way to teach LRE and no set LRE curriculum.

LRE offers application possibilities at all grade levels as well as in many subject areas. It is most commonly used in social studies to promote civic understanding. However, it regularly incorporates the use of reading, writing, and speaking skills. It has the potential for application in literature, math, science, technology, foreign language, physical education, sports, and other subject areas. It need not be limited to a particular grade, subject, or time frame. The LRE approach to instruction is flexible enough to be applied as a system-wide, on-going prevention strategy, and an added benefit of such a strategy is the increased likelihood that students will better understand the rules, laws, and legal processes that govern their lives.

One of the cornerstones of LRE is the use of an outside resource such as school safety officers, attorneys, and other legal professionals. These resource people visit classrooms regularly, provide insight into how and why the system operates the way it does, and develops on-going positive, non-adversarial relationships with students in the class. Though typically not individualized as in mentoring, these relationships often hold meaning for the students and provide an opportunity for them to develop bonds or attachment with representatives of "the system".

LRE deals with issues that are meaningful to students and their views are valued. LRE provides students the opportunity to get involved and participate. The crux of LRE is problem solving, both as a part of a group process and on an individual basis. Social conflict lies at the heart of legal issues. Therefore, all LRE is some form of conflict resolution or problem solving. The regular inclusion of LRE- in the course of instruction will provide steady opportunities to develop and practice the information processing steps that must be developed in aggressive students if they are to acquire non-aggressive social problem solving skills. Further, the conflicts that characteristically surround rules and laws offer good practice in content which is hypothetical in nature yet directly related to students' lives. (See figure 1)

While not a panacea for violence prevention, LRE offers a promising strategy for schools to implement as part of their overall prevention plan. If that plan includes closer work with parents and the community, LRE might also be incorporated into after-school programs, community center programs for children and adolescents, and parent programs. In this way, the approach lends itself to a close interface with home and community.

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Classroom instruction:

A teacher must be present in the classroom, at all times, while the officer implements LRE classroom instruction. LRE best practices suggest that the teacher and the officer co-present.

The LRE classroom instruction component should be completed during the school day's regular scheduled instruction periods. However, the building administrator has the discretion to approve the use of time spent before or after school on structured law-related instructional activities.

LRE Best Practices

The following are 8 guidelines for effective LRE:

1. Sessions should utilize law-related content
   - Civil, criminal, and constitutional themes
   - Practical information about the law and public policy
   - Concepts underlying a constitutional democracy
   - Student rights and responsibilities
   - Choices and legal consequences (not moral consequences)
   - Citizenship
   - Use of Power and authority
   - Justice
   - Liberty
   - Civil Rights
   - Equality
   - Illegal Drug Use
   - Drinking and Driving

2. Law-related education provides practice for skill development
   - Critical Thinking
   - Decision-Making
   - Problem Solving
   - Communication
   - Cooperation & Participation
   - Managing conflict
   - Reasoning

3. Instructors present multiple points of view or perspective
   - Balanced view of the judicial system & other aspects of the political system
   - Controversial issues should be discussed often to motivate student interest and broaden understanding and tolerance
   - Allow for a safe voicing of viewpoints
   - Debate and free flow of ideas are crucial elements of effective civic participation
   - Many times there is no one correct answer

4. A sufficient quantity of instruction is provided
   - Students should have ample opportunities to practice skills and gain confidence in defending their points of view, making presentations, etc.
   - Look for opportunities for classroom teachers to continue teaching LRE
   - Connect your involvement in the classroom to larger learning goals
   - Try to avoid making officer's involvement in isolated subjects (ex: LRE can be taught not only in Social Studies or Government, but in Health, English, Math, etc…)
   - Seek opportunities to teach many sessions with one class (minimally, a semester long)

5. Interactive teaching strategies
   - Strategies that foster true student-to-student interaction (are the heart of the session)
     - Role Plays
     - Simulations (Mock Trials, Moot Courts, model legislatures)
     - Group Work Activities
     - Group Research Projects
     - Community-based learning (including service learning, lobbying, mentoring)
   - Sharing outcomes with students
   - Drawing on their existing knowledge
   - Giving them appropriate time to answer questions
   - Involving as many students as possible in all aspects of the class

6. Opportunities for students to interact with Community Resource People (CRP)
   - CRPs offer expertise in areas that you are less familiar with, connects you to new community resources and ensure that your learning time is dynamic and continually fresh
     - The community resource person is well prepared and integrated into the interactive session
     - Content presented by the CRP is part of the course content
   - Allow students sufficient contact with community resource people in order to bond
   - Bonding takes place when students develop positive relationships with an adult
   - Research in LRE indicates that this adult-student bonding is a key to overcoming risk factors
   - SROs and JPOs are a built in CRP

7. Administrators are actively involved in providing needed support
   - Officers should feel that the principal and education officials support their endeavors

- The administrators must be able to address questions raised by family members, other teachers or the community about Law-Related Education
- Involvement of the administrators also can serve to reduce the gap between school policies, rules and ideas about justice that may be generated by a class.
- Remember that your role is to link to standards and topics covered in a given discipline, not to create a whole new topic.
- Draw support from administrators and department heads
- Inform the school community about the valuable resources you can provide.
- Solicit feedback on how you can be an asset in the classroom.

8. Networks to support teacher/officer innovation are available through joint planning sessions, training sessions and social events
   - Strengthens teacher/officer commitments to use interactive methods and practical legal information
   - The involvement of more than one teacher from a site in trainings, helps enhance law-related education
   - Invite teachers to LRE trainings.
   - Keep them abreast of law-related materials you receive.
   - Alert them to special security concerns at school.

Sources:

- Caliber Associates (2002). "The Promise of Law-Related Education and Delinquency Prevention".
- McKinney-Browning, Mabel, Ellis, Al, Kaplan, Howard & Johnson, Seva (1995). "Essentials of Law Related Education".
- Street Law, Inc. & National Crime Prevention Council (1999). "Community Works: Smart Teens Making Safer Communities".
- Street Law, Inc. & Office of Juvenile Justice & Delinquency Prevention (2003) "Street Law for School Resource Officers".

TIP: An LRE Best Practices Checklist is provided in Section 6.



SECTION 5: KEY PARTNERS AND THEIR ROLES

Below are the key partners in the School Safety Program and their respective roles.

Arizona State Board of Education

ARS 15-154 directs the Arizona State Board of Education to review and approve School Safety Program proposals.

Arizona Department of Education

ARS 15-154 directs the ADE to administer the School Safety Grant. ADE conducts the following duties:

- Provides the application to each district and charter holder.
- Prepares the applications for review by the State Board of Education to determine awards.
- Announces awards to districts and charters.
- Conducts site visits.
- Monitors sites for compliance with the grant.
- Logs completion reports, due September 30th, for the previous program year.
- Collects money not spent by grantees at the end of the program year.
- Withholds payment to grantees that have not returned money due.
- Provides technical assistance.
- Conducts a program evaluation as specified by ARS 15-154.
- Monitors the training contract.
- Accepts complaints and acts as a liaison with the grantees and law enforcement/probation department to resolve problems.

Law Related Education Provider

The AZBF, under contract with the ADE, conducts the statewide LRE Academy. The Academy offers School Safety Officers quality LRE training and teaching materials. To accomplish these objectives, the AZBF:

- Utilizes current and former school safety officers and/or teachers as faculty for the Academy.
- Develops a tracking system to track Academy hours of each school safety officer.
- Integrates the use of technology into training classes.
- Creates a School Safety Listserv to disseminate information and encourage networking opportunities.
- Secures professional development credits for officers who attend and complete the Academy.
- Provides ongoing consultation and technical assistance with regard to implementing and teaching law-related education, within budget limitations.
- Visits schools to observe law-related education teaching and provide feedback, within budget limitations.
- Provides quantitative and qualitative data to the ADE.
- Provides financial mid-year and year-end reporting to the ADE.

- Conducts periodic surveys of school safety officers to determine changing LRE needs and level of customer satisfaction.

The AZBF provides the following expanded services to School Safety Officers:

- LRE Academy Web page: Maintains a web page on the LawForKids.org website at https://lawforkids.org/lre-academy dedicated to serving School Safety Officers. The site will provide up-to-date information about LRE research, links to other LRE related sites, professional development opportunities, publications and articles.
- Free Materials: School Safety Program Officers can access free publications and materials for their LRE classroom instruction. Materials include Pocket Constitutions, Constitution Posters, Law for Kids Cards and Posters, Gavel Pencils, Teen Court Starter Kits and When You Turn 18 Brochures.
- LRE Technical Online Resources: The AZBF tracks School Safety Program Officers' professional development credit hours on an online database.

District Administrator

The district administrator's support of the School Safety Program is vital to the program's success. The district administrator performs the following duties:

- Supports and communicates the School Safety Program philosophy to all site staff.
- Identifies those sites that would benefit and support the School Safety Program.
- Understands the School Safety Program requirements.
- Develops a Service Agreement between the school(s) and the police or juvenile probation department.
- Attends required training provided by the ADE.
- Provides for an annual evaluation of the School Safety Program.
- Develops and keeps open communication with local law enforcement.
- * Provides communications from ADE to site-level participants as required

TIP: Are all participants aware of their training requirement and are scheduled to attend training?

School Principal/Site Administrator

The school principal/site administrator's support of the School Safety Program is vital to the program's success. The site administrator performs the following duties:

- General:
  - Supports and communicates the School Safety Program philosophy to all staff, students and parents on their campus.
  - Understands and agrees with all program guidelines and requirements.
  - Attends annual training provided by the ADE.
  - Provides access to appropriate educational records and data to officers in accordance with FERPA.
  - Provides for the annual evaluation of the School Safety Program.
  - Understands that the site administrator, not the officer, is responsible for school discipline.

- School Safety Assessment and Prevention Team:
  - Establishes a multidisciplinary SSAPT that meets quarterly to conduct school needs assessment, use the needs assessment data on an on-going basis to determine the use of the officer consistent with program requirements, coordinate prevention programming, and make recommendations for continuous improvement of the program.
  - Ensures the team utilizes needs assessment data to design clear and appropriate strategies and activities to support a successful School Safety Program to include:
    - Use of law enforcement or juvenile probation expertise and resources, including strategic placement of officer, for intervention and prevention of potential crime.
    - Use of LRE instruction to students, staff, and the school community.

    TIP: Is the officer teaching LRE that ties back to the needs assessment identified by the SSAPT?

- Operational Plan
  - Leads the development and utilization of an operational plan that incorporates program requirements and illustrates their site-specific program design in a succinct and logical manner.

    TIP: Is the SSAPT reviewing the Operational Plan at each of its quarterly meetings?

- Works closely with the Officer
  - Administrators should take the lead on school policy violations. The SRO should be involved when a student's conduct violates a law.
  - Meets with the officer before the first day of duty to review the Service Agreement, school operational procedures and specifics of the program on campus.
  - Introduces the officer to staff and students and integrates officer into the school community.
  - Monitors the officer's activity logs to ensure progress is made toward achieving program requirements.
  - Completes an officer performance assessment once per semester and shares the information with the officer's supervisor including discussion of successes and concerns.
  - Facilitates collaboration between officer and other school personnel on school-wide safety strategies such as staff trainings, emergency response planning, needs assessment, and prevention programming.
  - Develops a collaborative relationship with the officer while allowing the officer to function independently. The officer serves as a resource to the students and staff.

    TIP: Are the administrator and SSO clear on who takes the lead on school policy violations?

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- Law-Related Education
  - Promotes the integration of LRE into the classrooms and directs staff development of teachers and officer involved in the delivery of LRE
  - Ensures a teacher is present in the classroom at all times during LRE instruction.
  - Provides time at regular staff meetings and trainings for the officer to deliver LRE instruction relevant to school-wide prevention safety related updates.

- Collaborates with the Law Enforcement or Juvenile Probation Partners
  - Ensures a successful partnership with law enforcement or juvenile probation partners through ongoing proactive and positive communication.
  - Formally meets with the officer's supervisor at least once per semester.
  - Participates in the selection process of their officer.
  - The site administrator and the agency supervisor are responsible for ensuring the officer is able to meet all grant requirements.

Agency Supervisor

The supervisor's support of the School Safety Program is vital to the success of the program. The supervisor performs the following duties:

- General:
  - Communicates to staff and carries out the philosophy and goal of the School Safety Program.
  - Provides written information on the philosophy and operation of the School Safety Program to appropriate supervisory/management personnel.
  - Attends required training provided by the ADE.
  - Conducts on-going visits to sites under his/her supervision.
  - Attempts to observe established, successful School Safety Programs outside his/her supervision.
- Works Closely with the Officer:
  - Ensures officer continuity over the three-year grant cycle, to the best of their ability.
  - Ensures the SRO/JPO officer is able to meet all grant requirements.
  - Motivates officer and provides positive reinforcement.
- Assists with Documentation:
  - Plays a key role in the development, review, and revision of the Service Agreement.
  - Ensures the officer keeps an activity log that tracks LRE instruction hours, teacher and subject, the topic of each LRE lesson, and the time the officer is off their assigned campus during their duty hours, regardless of the reason. Refer to instructions on page 19.
  - Amends or supplements evaluation forms to include performance criteria specific to the school officer's role.
- Collaborates with the Site Administrator:
  - Formally meets with the site administrator at least once per semester.
  - Accepts officer assessment forms completed by the site administrator and meets to discuss successes and concerns.
  - The agency supervisor and the site administrator are responsible for ensuring the officer is able to meet all grant requirements.

School Safety Officers (SRO and JPO)

Officers may only serve the site(s) specified on the award letter. The officer should only assist at a school that is not on the program if a crisis occurs. Spreading the officer among schools weakens the program, as the officer does not have the time to build the relationship with the students needed for an effective program. An officer providing services at a school not authorized by the State Board of Education may result in a loss of the grant.

The officer must be present and accessible on the school campus that they are assigned to by the grant. The grant pays the salary of a 10, 11, or 12 month, full-time position, at 40 hours per week. Absent an emergency, the SRO/JPO shall not be called away from their designated school. If the officer is called away for police or juvenile probation business (not including mandatory training, meetings, or crisis), the district shall not be invoiced for that time.

Additional activities shall not overwhelm the officer, jeopardize their ability to meet the minimum requirements of this grant (e.g. excessive law enforcement/probation activity), or go against the intent of this program (e.g. disciplinarian, detention monitor, lunch duty, fill-in for teacher)

The School Resource Officer

The SRO's support of the School Safety Program is vital to the success of the program. SROs are expected to spend most of their time on campus; at least 80 percent of time should be on site. The SRO has three basic roles:

1. Law Enforcement Officer/Public Safety Specialist

   The SRO is, first of all, a sworn law-enforcement officer. When necessary the SRO has the authority to intervene as a law-enforcement officer. Once order is restored, however, the SRO's other roles as law-related educator and role model are the more typical day to day roles.

   - Utilizes expertise and agency resources for intervention and prevention of potential crime.
   - Collaborates with school personnel on school-wide safety strategies (e.g. staff trainings, emergency response planning, needs assessment, and prevention programming).
   - Builds relationships with students, parents and staff that promote a positive image of law enforcement.
   - Serves as a member of the SSAPT.

   REMINDERS:

   - Administrators should take the lead on school policy violations. The SRO should be involved when a student's conduct violates a law. If possible the SRO should be back up to an arrest rather than the principal officer.
   - As partners in school safety, SROs and administrators shall work together to develop procedures for ongoing communication to ensure timely and uniform reporting of criminal activities.

2. Law-Related Educator*

- Collaborates with classroom teachers to integrate law-related education into their curriculum. The teacher must be present in the classroom during LRE classroom instruction.
- Attends a new officer training sponsored by the ADE.
- Upon completion of the new officer training, attends an annual advanced LRE workshop each subsequent grant year.
- Follows the best practices of LRE.
- Keeps a weekly activity log that tracks LRE instruction hours, teacher and subject or staff/community group, the topic of each LRE lesson, and the time the officer is off their assigned campus during their duty hours, regardless of the reason.

* Exceptions may occur on the Native American reservations. "Positive Role Model" adapted from *The Successful School Resource Officer Program* by Anne J. Atkinson, PhD.

3. Positive Role Model

As a positive role model for students and the school community, the SRO should:

- Set limits by being clear about what is acceptable and what is not; letting students know the consequences of unacceptable behavior and the rewards for acceptable behavior.
- Set an example by modeling how to handle stress, resolve conflicts, celebrate successes, and be a friend.
- Be honest by providing accurate information.
- Be consistent with students, staff, and parents in applying rules and regulations.
- Encourage responsibility by helping students think through options and consequences of decisions, set personal goals, and develop a plan to make the desired changes.
- Show respect by treating students with respect and expressing high expectations for them.
- Always strive to be a positive role model because students learn from every observation of or interaction with the SRO.

The Juvenile Probation Officer

The juvenile probation officer's support of the School Safety Program is vital to the program's success. JPO are expected to spend most of their time on campus; approximately 90 percent of time should be on site. The Juvenile Probation Officer (JPO) has three basic roles:

1. Court Officer

The JPO is, first of all, a sworn court appointed officer and when necessary must act in that function.

- Provides the court with school information that can be instrumental in the determination if a juvenile is to be detained or returned to the community.

- Networks with other agencies that may or do serve the school community in an effort to meet the needs of the students and school.
- Maintains a working knowledge of services available within the court system and community to meet the needs of the students and school.
- Supports and contributes to the Juvenile Probation Department, school, and community.
- Serves as a member of the SSAPT.
- Utilizes expertise and agency resources for intervention and prevention of potential crime.
- Collaborates with school personnel on school-wide safety strategies (e.g. staff trainings, emergency response planning, needs assessment, and prevention programming.
- Builds a relationship with students, parents and staff that promote a positive image of the juvenile court system. The JPO should not carry a caseload. If it becomes necessary to take on a caseload, it is recommended that the least number of cases be assigned as possible. Only cases at the officer's site(s) can be assigned. A full caseload should never be carried.

2. Law-Related Educator*
   - Collaborates with classroom teachers to integrate law-related education into their curriculum. The teacher must be present in the classroom during LRE classroom instruction.
   - Attends a new officer training sponsored by the ADE.
   - Upon completion of the new officer training, attends an annual advanced LRE workshop each subsequent grant year.
   - Follows the best practices of LRE.
   - Keeps a weekly activity log that tracks LRE instruction hours, teacher and subject or staff/community group, the topic of each LRE lesson, and the time the officer is off their assigned campus during their duty hours, regardless of the reason.

* Exceptions may occur on the Native American reservations. "Positive Role Model" adapted from The Successful School Resource Officer Program by Anne J. Atkinson, PhD.

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   - Set an example by modeling how to handle stress, resolve conflicts, celebrate successes, and be a friend.
   - Be honest by providing accurate information.

- Be consistent with students, staff, and parents in applying rules and regulations.
- Encourage responsibility by helping students think through options and consequences of decisions, set personal goals, and develop a plan to make the desired changes.
- Show respect by treating students with respect and expressing high expectations for them.
- Always strive to be a positive role model because students learn from every observation of or interaction with the SRO.

Teacher

- Supports and communicates information about the School Safety Program in their classrooms to students and parents.
- Understands and agrees to the program guidelines.
- Teams with the officer in planning and delivery of law-related education units in their classroom. A teacher must be always present in the classroom during LRE instruction.
- Cooperates in the annual evaluation of the School Safety Program.

TIP: Did you know that teachers can attend an LRE Academy with their SRO?

SECTION 6: FREQUENTLY ASKED QUESTIONS (FAQs) AND TOOLS & RESOURCES

FAQs

GENERAL

1. How long has the School Safety Program (SSP) been in existence?
   - The SSP was established in 1994 by ARS 15-154 for the purpose of placing School Resource Officers (SROs) and Juvenile Probation Officers (JPOs) on school grounds to contribute to safe school environments that are conducive to teaching and learning.

2. What laws govern the School Safety Program?
   - Arizona Revised Statutes (ARS) 15-154 and 15-155.

3. What agency administers the School Safety Program?
   - Per ARS 15-154, the Department of Education administers the School Safety Program in cooperation with the courts, law enforcement agencies, and Law-Related Education (LRE) provider (the Arizona Foundation for Legal Services & Education; also known as the Arizona Bar Foundation. The Department of Education (ADE), subject to the review and approval of the State Board of Education, distributes monies to the school districts and charter schools that are in compliance with program requirements and whose plans have been approved by the State Board of Education.

4. Who can apply for the School Safety Program?
   - The SSP is a state-funded, competitive grant that runs in three-year cycles. A school district or charter school may apply to participate in the SSP for up to three fiscal years by submitting a program proposal on April 15 of the first year of the grant cycle via the Department of Education's grants management system. Late applications are not accepted. Awarded districts or charter schools submit a renewal application on April 15 of the second and third year of the three-year cycle.

5. What does the School Safety Program grant pay for?
   - The grant pays for the salary and benefits of a 10, 11, or 12-month, full-time (at 40 hours per week) SRO or a JPO. The grant also provides $100 each year for classroom supplies for each officer.

6. Where can I find out about the requirements of the School Safety Program?
   - The requirements of the SSP are explained in the SSP Guidance Manual, which you can download on the SSP website (see Tools & Resources tab): http://www.azed.gov/ssp

7. Where can I find the tools and resources, we need for the School Safety Program?
   - Tools and resources can be downloaded from the School Safety Program website (see Tools & Resources tab): http://www.azed.gov/ssp

8. Who can I contact if I have other questions about the School Safety Program?
   - Please contact the School Safety Program Lead, Dr. Jenny Walker at 602-542-7112, or email her at jenny.walker@azed.gov

USE OF A SCHOOL SAFETY PROGRAM OFFICER

1. Is the officer responsible for school discipline?
    - No. The school administrator, not the officer is responsible for school discipline.

2. Can an officer be used as a school crossing guard?
    - No. The officer may assist a school crossing guard with traffic control issues, but the officer cannot be used to replace school personnel, such as a crossing guard.

3. Can an officer be used as a lunch time monitor?
    - The officer cannot be used to replace school personnel, such as a lunch time monitor. However, through collaboration with school personnel, an officer may utilize strategic visibility and be present at a location at a specific time on campus (such as the cafeteria at lunch time) to build relationships and improve school safety.

4. Can an officer be used as a substitute teacher?
    - No. The officer is not a certified teacher and cannot be used as a substitute teacher.

5. Is there a way to interact with other officers who are part of the School Safety grant program?
    - Yes! Please visit the Online Communication Forum by logging on at: http://lawforkids.org/lre-academy click on the Online Forum button on the left side.

6. How does the officer find out how to spend the $100 yearly grant fund for classroom resources?
    - See your purchasing department or front office staff for the correct forms to purchase from an approved school vendor. Inform the purchaser to utilize the School Safety Program grant funds.

AN OFFICER'S TIME

1. How much time is an officer required to spend on campus each school year?
    - A SRO is required to spend at least 80 percent of his/her time on campus each year. Based on a 180-day school year, this equates to 144 days on campus.
    - A JPO is required to spend at least 90 percent of his/her time on campus each year. Based on a 180-day school year, this equates to 162 days on campus.

2. What counts as time off campus?
    - Time off campus is any time the officer is on duty but is not on campus during the regularly scheduled school day. Off campus time includes both school and non-school related events. Being off campus is not necessarily considered inappropriate. It is understood that there will be activities that constitute an officer being away from school, such as picking up the police car, attending mandatory trainings, attending briefings, or joining on school field trips.

3. What does not count as time off campus?
    - Vacation time, comp time, and sick time are not counted as time off-campus.
    - Officers are encouraged to schedule vacation time when school is not in session.

4. When might it be appropriate for an officer to flex his/her hours?
    - If an officer is providing universal LRE instruction to school staff and/or the school community after the regularly scheduled school day, it would be appropriate for the officer

to flex his/her hours to allow for this instruction. The officer can use up to 20 of the required 100 universal LRE hours to provide instruction to school staff and the community. Please note that the grant does not pay for overtime.

5. Can an officer flex school day hours to attend sporting events, school dances, competitions or performances?
    - Although attendance by the officer at events outside of the regularly scheduled school day is encouraged as it can help the officer build relationships with students, staff, and the community, these are not grant required activities and flexing hours to attend same would not be considered appropriate use of School Safety Program funds. Please note that the grant does not pay for overtime. If the school asks the officer to participate in events outside of the school day, the school district or the police department will need to pay for the officer's time.

6. Can field trips qualify as an acceptable off campus time activity?
    - Yes.

LAW-RELATED EDUCATION

1. What is Law Related Education?
    - LRE is the instruction about rules, laws, and the legal system in a manner that actively involves students. The goal of LRE is to prepare students for responsible citizenship by promoting the development of characteristics (such as critical thinking, decision making, problem solving, and communication skills) that lead to healthy behaviors.
2. Does a teacher need to be present when the officer is teaching LRE?
    - Yes. A certified teacher (or certified substitute teacher) must be present in the classroom when the officer is teaching. They are encouraged to team teach with the officer.

3. Are there best practices for teaching LRE?
    - Yes. You can download the LRE Best Practices Tool from the School Safety Program website (see Tools & Resources tab): http://www.azed.gov/shs/ssp/

4. Where can officers find lessons that address campus issues and meet the Best Practices?
    - Please visit: http://lawforkids.org/document-center2 and click on Downloadable Lessons

5. If an officer needs assistance with LRE curriculum or lesson planning, whom can the officer contact?
    - The officer can contact Diana Strouth, Instruction Specialist (Arizona Bar Foundation for Legal Services & Education), at 602-773-3431 or by email at Diana.Strouth@azflse.org

SCHOOL SAFETY PROGRAM TRAININGS

1. How do I register for Leadership, Advanced Leadership, New Officer, and LRE Advanced Academy Trainings?
    - Please visit http://lawforkids.org/school-safety-program
    - On the right side of the page under login, select "create an account"
    - After creating an account, you will receive an email to activate your account
    - Then you will be able to log-in to your account and register for a training

2. I have previously attended a training, but I can't remember my username/password to register for an upcoming training.
    - Please visit http://lawforkids.org/school-safety-program
    - Click on the link below "log in" that states "forgot your username" or "forgot your password"
    - Follow the steps to retrieve your username/password

3. How do I access my training attendance history?
    - Please visit http://lawforkids.org/school-safety-program
    - Log-in to your account
    - Select "view my events" located on the left side of the page
    - View your training attendance history

4. I have misplaced my training certificate, how do I obtain another copy?
    - Please visit http://lawforkids.org/school-safety-program
    - Log-in to your account
    - Select "view my events" located on the left side of the page
    - Print out a screen shot of your training attendance history
    - The Arizona Department of Education will accept a printed screen shot of your training history in lieu of a certificate

TOOLS AND RESOURCES

The following tools and resources are provided for your information and use. The reference documents, templates, and checklists are available as downloads on the School Safety Program website under the Tools & Resources tab.

WEBSITES

- Arizona Department of Education School Safety Program
- Arizona Bar Foundation
- Law for Kids

Reference Documents

- The Service Agreement: Developing the Partnership
- The Hiring Process: Selecting the Right Officer
- Recommended Qualifications/Job Description
  - School Resource Officer
  - Juvenile Probation Officer
- When School is Not in Session: Summer Break and Intersession

Templates

- School Safety Assessment and Prevention Team Agenda
- Data Story
- Operational Plan
- School Safety Officer Weekly Activity Log and Instructions
- Officer Performance Assessment Tool for Administrators

Checklists

- Operational Plan
- Law-Related Education Best Practices
- District Administrator
- Agency Supervisor
- Site Administrator
- School Safety Officer

REFERENCE DOCUMENTS

The Service Agreement: Developing the Partnership

The Service Agreement (SA) is a general term for a contract that is developed jointly and agreed upon by the district/charter, site administrator, and law enforcement or probation department. This written agreement outlines the purpose of the partnership and the fundamental responsibilities of each entity. The terms set forth in the SA shall be in accordance with the established guidelines of the School Safety Program.

The SA shall contain a statement that:

- The SRO/JPO shall fulfill their duties as a sworn law enforcement officer for the State of Arizona.
- No district/charter/or site administrator shall interfere with the duties of the SRO/JPO as a sworn law enforcement officer.
- The district or charter and partnering law enforcement agency shall define a dispute resolution process.
- All entities shall accept the School Safety Program guidelines.
- The roles and responsibilities of all entities shall be accepted as established by the School Safety Program guidelines.
- The SA shall also reference the following School Safety Program guidelines:
  - SRO Recommended Qualifications and Recommended Job Description
  - JPO Recommended Qualifications and Recommended Job Description
  - The Hiring Process
  - Officer Training
  - 10- or 12-Month Position
  - Summer/Intersession Activities
  - The Appeal Procedure
  - Performance Evaluation
- The district shall pay within 30 days of receipt of the invoice from the law enforcement or juvenile probation department.
- The district shall pay late fees as established between the district and law enforcement/probation department and denoted in the SA. Late fees shall not be paid from School Safety Grant funds.
- The district, charter, or school shall provide office space that provides privacy for the SRO/JPO to conduct confidential business. The office shall include the necessary equipment for an officer to effectively perform their duties, i.e. telephone, desk, chair, filing cabinet, up-to-date computer and printer as provided in the grant.

- The administration shall provide a complete copy of the grant application and award to each officer by July 31st or as soon as the officer begins service at the site(s).

- Administrators shall send officers annually to School Safety Program required trainings and provide for all related travel expenses as provided in the grant.

- Officers, administrators, law enforcement and juvenile probation departments shall have a written document describing the general chain of command and channels of communication.

- The term of the SA and the schedule for updating and renewing the agreement shall be specified.

The SA shall be signed and dated by the Superintendent, site administrators, and law enforcement agency and/or probation department.

A more comprehensive SA contains the above items in addition to any or all of the following:

- Assignment of SRO/JPO
- Conditions of employment
- Duty hours
- Duties of SRO/JPO
- Training/briefing
- Dress code
- Supplies and equipment
- Policy/procedure for transporting students
- Operating procedures (SOP)
- Requirements for reporting crimes and threats to police as required by A.R.S. 13-2911 and 15-341
- Arrest procedures for school-related crimes and crimes committed off campus
- Procedure for handling critical incidents
- Access to education records
- Specific items to the district and law enforcement/probation department

THE HIRING PROCESS

Selecting the right officer is one of the most important aspects of making the School Safety Program successful. A minimum of a three-year assignment at the same school(s), in conjunction with the School Safety Program grant cycle, is recommended. Under no situation, can a site have more than three officers in a three-year grant cycle. The effectiveness and continuity of the officer significantly contributes to the quality of the program.

The selection process should identify officers who are best suited to the work as school resource officer or juvenile probation officer. That officer should be committed to the goals of the School Safety Grant.

Because the School Safety Program is a partnership between the school and law enforcement/probation department, involving the school administration in the selection process is necessary. After the final candidates, have been selected by the department/agency, a school administrator becomes a part of the selection. It is important that the school becomes involved because:

- The school administrator brings to the selection the needs of the school.
- The school administrator brings to the selection the type of personality that will work best in a specific school environment.
- The school administrator brings to the selection process insights into what is required to be effective in the school community.
- The correct applicant is more likely to be selected with the school's involvement.
- There is more of a buy-in from the school to successfully integrate the officer into the school community when they have been part of the selection process.
- The school administration brings to the selection process a critical understanding of the School Safety Program.

In situations when only one officer is available for the position, the school still should have the opportunity to review the candidate before the decision is made.

Candidates should meet the minimum qualifications recommended in this guidance to ensure an effective collaboration between the school, officer, and agency. Exceptions may occur. Under mitigating circumstances and with the ADE's grant manager's approval, the position may be filled through an alternative option.

Recommended Qualifications/Job Description - School Resource Officer

SROs are expected to spend most of their time on campus; approximately 80 percent of time should be on site.

Recommended Qualifications

- Desire to work with students, educators, and parents
- Willingness to teach law-related education
- Supportive of prevention strategies
- Satisfactory employment history with supporting documentation
- Demonstrated effectiveness in working with youth
- Oral and written communication skills
- Ability to effectively interact and communicate with diverse sets of individuals
- Supportive of the philosophy of the School Safety Program
- Willingness to serve on the School Safety Assessment and Prevention Team
- Willingness to attend law-related education training to implement and maintain LRE programs to meet the needs of the students
- Member of a law enforcement agency *
- AZPOST certified general instructor*

* May be different on Native American reservations, contact the Arizona Department of Education, School Safety Grant manager for additional information.

Recommended Job Description

- Establish liaison with school administrators, staff, students, and parents
- Inform students of their rights and responsibilities as lawful citizens through presentation of law-related education in the classroom
- Network with community agencies that may or do provide services to the school
- Act as a resource in the investigation of school related criminal activities
- Participate in the Parent-Teacher association as requested
- Participate in campus activities, student organizations, and athletic events when feasible and appropriate
- Provided a visible deterrence to crime while presenting a positive impression of a law enforcement officer
- Provide information when requested to students, parents, and staff in law-related situations
- 10, 11 or 12 month, full-time, 40 hour a week job assignment as specified by school's grant application
- Minimum three year assignment at the same school, in conjunction with the School Safety Program grant cycle.
- Maintain tracking system of statistical information required by supervisor and school administration

Recommended Qualifications/Job Description – Juvenile Probation Officer

Juvenile probation officers assigned to a school on a School Safety Grant shall not carry a full caseload. Officers shall handle only those intake cases that are directly related to the School Safety Program and/or student volunteers. JPO are expected to spend most of their time on campus; approximately 90 percent of time should be on site. If it is necessary to carry cases due to staffing problems, it is strongly recommended that only a minimum number be assigned.

Recommended Qualifications

- Desire to work with students, educators, and parents
- Willingness to teach law-related education
- Satisfactory employment history with supporting documentation
- Demonstrated effectiveness in working with youth
- Ability to act as a liaison with the school in the area of prevention and intervention of juvenile delinquency
- Supportive of the philosophy of the School Safety Program
- Willingness to serve on the School Safety Assessment and Prevention Team
- Willingness to attend law-related education training to implement and maintain LRE programs to meet the needs of the students
- Ability to effectively interact and communicate with diverse sets of individuals
- Possess the knowledge of court process and communicate information to students, parents, and staff as requested
- Employee of a juvenile probation department

Recommended Job Description

- Serve as a liaison between the school and supervising probation officer, providing information to the JPO as requested
- Keeps a record of student contacts for personal and supervising JPO use only
- Inform students of their rights and responsibilities as lawful citizens through presentation of law-related education in the classroom
- Provide assistance to the school administration identifying at-risk students for intervention/prevention services as needed
- Collaborate with school administrators to make decisions and bring about actions that effect the safety of individuals and the school environment
- Network with community agencies that may or do provide services to the school
- Meets with students to resolve conflicts
- Refer students to outside agencies that could provide services as needed
- Implement and maintain tracking system of statistical information required by supervisor and school administration
- Monitor compliance and non-compliance of students involved with the juvenile court system
- Participate in the Parent-Teacher Association or Organization as requested.
- Participate in campus activities, student organizations, and athletic events when feasible and appropriate
- 10, 11 or 12 month, full-time, 40 hour a week job assignment as specified by school's grant

- Minimum three-year assignment at the same school in conjunction with the School Safety Program grant cycle.

When School is not in Session: Summer Break and Intersession

The School Safety Grant is awarded for a typical 10-month school year. The site administrator, officer, and police/probation department have the option of extending services for 12 months - when school is not in session. This may include intersession and summer break. Applications should reflect a 10-month salary unless the 11 or 12-month salary is specifically referenced and supported on the application. To maintain the integrity of the program, teachers and students are present on campus during intersession or summer break.

Terms of an 11 or 12-month position shall be established on the application as well as the Service Agreement.

Possible Activities

- Plan school security improvements
- Prepare law-related education lessons
- Develop collaborations with community resources, identifying services offered that could benefit students
- Conduct school safety assessments
- Work with the school safety team to review and update the school safety plan, and conduct school wide exercises to test the plan
- Plan in-service training
- Collaborate with school administration to analyze criminal incident reports and disciplinary records to identify patterns and develop strategies to address problems
- Work with community-based and youth recreational and leadership development activities that complement and reinforce the School Safety Program
- Attend training opportunities

School Safety Assessment and Prevention Team Agenda

Purpose: Our SSAPT meets ***at least quarterly*** to review multiple sources of data to identify **(1)** school safety issues, **(2)** our top 3 priority focus areas (PFAs), **(3)** the target populations (cohort and/or universal) for LRE instruction, **(4)** the appropriate LRE to address the PFAs, and **(5)** the strategic visibility of the officer/others to help prevent or intervene with the PFAs. We determine how best to coordinate the efforts of the School Safety Program with other safety and prevention programs, activities, and services to help address the identified PFAs. We regularly update our Operational Plan to reflect the above.

Leader: **Date:** **Recorder:**

Title/Position (*Required):	**Staff Present**	**Title/Position (*Required):**	**Member Present:**
*Principal (or)		*Mental/Behavioral Health Expert	
*Assistant Principal		Key Staff:	
*School Safety Officer		Key Staff:	

Operational Plan/Calendar Review (note revisions/completed activities/milestones/Impact on School Climate):

What will you Learn? What will you do/change? Why? How will it impact School Climate?

1. Data Reviewed:
2. Safety Concerns Identified by Data:
3. Top 3 PFAs:
4. Cohort Groups Identified by Data:
5. Appropriate LRE to Address the Identified Safety Concerns (cohort and universal):
6. Coordinate with Campus Programs and Services:
7. Strategic Visibility – Who? Where?
8. How is the officer building positive interactive relationships with students, staff, and community ?

Review Previous Action Items:

1.
2.
3.
4.

Action Items for Next Meeting:	**Person Responsible**	**Expected Completion Date**
1.		
2.		

Notes and Reminders:

Data Story

What story does the data tell you about the climate on your campus? Does your campus have an orderly, purposeful atmosphere, which promotes the feeling of safety conducive to teaching and learning? Do staff and students feel safe, welcome, respected and able to teach and learn? Or, are there problems, and issues on the campus that create a climate of concern, frustration and possibly fear that limit the connectedness to the campus and the academic achievement that could be occurring?

As you work through the following questions, consider risk behaviors that the students engage in, youth development concerns, along with perceptions of safety on the campus by staff, students and parents.

1. What do the problems, concerns or issues appear to be on campus?

   _____

   _____

   _____

2. What led you to believe these are problems or issues on campus?

   _____

   _____

   _____

3. Your School Safety and Prevention Team (SSAPT) is expected to review data regularly to determine what the school climate issues are on your campus. What data will your team use to support your hypothesis? For example, will you gather anecdotal information or Office Discipline Referrals (ODRs), incident data from your Student Management System (SMS) or responses from campus climate surveys, etc.? It is recommended to use two or more types of data.

   _____

   _____

   _____

4. After looking at multiple sources of data, what does the data tell you?

   _____

   _____

   _____

5. Does the data support the identified problems, concerns or issues that you identified in #1, above?

   If **YES**, skip to #7 below.

6. If **NO,** what is/are the new identified problem(s), concern(s) or issue(s) on campus identified by a review of multiple data sources?

_____

_____

_____

7. Based on the actual, identified problems, how will you best address these issues on campus?
   - **Priority Focus Area**: Of the problems identified, what are your top 3 Priority Focus Areas (PFAs)?
     1. _____
     2. _____
     3. _____

   - **Coordination**: What other campus or community resources, programs, services, interventions do you have available to address these PFAs? (Tier 2 & Tier 3 interventions such as check-in/check-out, mediation, and prevention/intervention support or education groups such as anger management, grief and loss support groups, wrap-around, etc.)

     _____

     _____

     _____

   - **Strategic Visibility**: Describe where and when an officer will be visible to students to prevent or intervene with these PFAs

     _____

     _____

     _____

   - **Target Population**: Identify the target population that will receive the LRE

     _____

     _____

     _____

   - **LRE**: Identify the type of LRE instruction that will address these PFAs

     _____

     _____

     _____

8. At each SSAPT meeting, include these PFAs on your agenda and review multiple data sources to determine whether or not the problems have been appropriately addressed and what type of impact this has made on the campus.

School Safety Program Operational Plan

The operational plan is a fluid document that should be used by the school administrator, officer, and School Safety Assessment and Prevention Team to monitor program implementation and provide continuous improvement throughout the school year.

District: **School(s):**

School Administrator Name(s): **Officer Name:**

Project Activities/Milestones	**Responsible Personnel**	**School Year:**												**Completed**		
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Yes	No	Comments

School Safety Program Operational Plan

The operational plan is a fluid document that should be used by the school administrator, officer, and School Safety Assessment and Prevention Team to monitor program implementation and provide continuous improvement throughout the school year.

School Safety Program Officer Weekly Activity Log

Officer: **SRO** ☐ **JPO** ☐ **Week Of:** **Thru:**

District: **School(s):**

Law Related Education Instruction Universal

Classroom Instruction 0

Staff and Community Training 0

Planning and Preparation 0

Total minutes: 0 **Total hours:** 0.00

Law Related Education Cohort Groups

Group 1 0 **Group 2** 0

Group 3 0 **Group 4** 0

Group 5 0 **Group 6** 0

Total minutes: 0 **Total hours:** 0.00

Time Off Campus

Total minutes 0

Total hours 0.00

Departmental Recap Law Enforcement/ Juvenile Probation Activity (optional)

Total minutes: 0

Total hours: 0.00

UNIVERSAL HOURS – CLASSROOM INSTRUCTION

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		
		0		
		0		
		0		

UNIVERSAL HOURS – STAFF AND COMMUNITY TRAINING

Date	# of Participants	Time Spent (mins)	Staff/Community Group	LRE Topic
		0		
		0		
		0		
		0		
		0		

UNIVERSAL HOURS – PLANNING AND PREPARATION

Date	Time Spent (mins)	Group (Classroom/Staff/Community)	LRE Topic
	0		
	0		
	0		
	0		
	0		
	0		

COHORT – GROUP 1

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

COHORT – GROUP 2

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

COHORT – GROUP 3

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

COHORT – GROUP 4

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

COHORT – GROUP 5

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

COHORT – GROUP 6

Date	# of Students	Time Spent (mins)	Teacher/Subject	LRE Topic
		0		
		0		
		0		
		0		

TIME OFF CAMPUS

Date	Time Spent (mins)	Activity	Date	Time Spent (mins)	Activity
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	

DEPARTMENTAL RECAP

Date	Time Spent	Activity	Date	Time Spent	Activity
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	
	0			0	

School Safety Program Officer Weekly Activity Log
Instructions

Officers must complete a weekly activity log that tracks LRE instruction hours, teacher and subject, the topic of each LRE lesson, and the time the officer is off their assigned campus during their duty hours, regardless of the reason. Shaded categories on the Activity Log are required. Please enter the information described in each of the following steps:

Step 1: Officer Information

- Name
- SRO or JPO
- Week (beginning and end dates)
- District and School (select from the drop down boxes)

The shaded, double-lined table automatically calculates the totals in hours for each section (LRE Universal Instruction; LRE Cohort Groups; Time Off Campus; Departmental Recap Box) using the minutes you enter in Time Spent in Steps 3-7 described below. No action required.

Step 2: Universal Hours – Classroom Instruction AND Staff and Community Training

- Date
- # of Students (total number of students in the class or involved in the contact) **OR** # of Participants for Staff and Community Trainings
- Time Spent (select minutes 1-75 from the drop down box). Total time spent for the week will automatically total.
- Teacher Subject (list teacher name and the usual subject taught in that class; e.g. Mrs. Smith, Social Studies) **OR** Staff and Community Group addressed
- LRE Topic (list the LRE topic taught; e.g. Gangs, We the People, etc.)

Step 3: Planning and Preparation

- Date
- Time spent (select minutes 1-75 from the drop down box). Total time spent for the week will automatically total.
- Student, Staff, or Community Group
- LRE Topic

Step 4: Cohort – Groups 1 to 6 (complete for Cohort Groups 1-6 as applicable)

- Date
- # of students
- Time Spent (select minutes 1-75 from the drop down box). Total time spent for the week will automatically total.
- Teacher/Subject
- LRE Topic

Step 5: Time Off Campus*

- Date
- Time spent (select minutes 1-75 from the drop down box). Total time spent for the week will automatically total.
- Activity

Step 6: Departmental Recap (optional – complete according to your departmental tracking needs, e.g., departmental reports, gang incidents)

- Date
- Time spent (select minutes 1-75 from the drop down box). Total time spent for the week will automatically total.
- Activity

* *Time off campus* is any time the officer is not on school grounds during their duty hours. Off campus time shall include both school and no-school related events. Being off campus is not necessarily considered inappropriate; it is understood there will be activities that constitute an officer being away from school, e.g., briefings, picking up police car, mandatory trainings, and field trips.

SRO/JPO Performance Assessment

School Administrator - School Safety Program

This assessment is meant to assist the officer and his/her supervisor in meeting the intent of the grant and effectively carrying out their duties. It is not meant to supplant the official review process used by the officer's department or agency. It is at the discretion of the law enforcement agency to include the school's assessment in the officer's official file.

Officer: School: Date:

School Administrator: Title:

Police/Probation Supervisor: Agency/Department:

School Administrator	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1. The officer has a clear sense of his/her role as stated in the Guidance Manual.	○	○	○	○	○
2. The officer understands the operational policies and procedures of the school necessary to perform effectively in the position.	○	○	○	○	○
3. The officer attended or is scheduled to take a law-related education class in the current year.	○	○	○	○	○
4. *The officer relates to the staff, students and parents effectively.	○	○	○	○	○
5. The officer works well independently.	○	○	○	○	○
6. The officer attempts to meet the requirements of the grant.	○	○	○	○	○
7. The officer performs his/her duties effectively.	○	○	○	○	○
8. The officer is effective with his/her classroom presentations.	○	○	○	○	○
Please provide explanation to support question #4:					
Additional comments:					

School Safety Program
Operational Plan Checklist*

☐ Required School Safety Program trainings are planned as appropriate:

- District administrator
- School principal
- Agency supervisor
- Officer

☐ Introduction of the officer to staff, students, and general school community is scheduled by the school administrator.

☐ Quarterly School Safety Assessment and Prevention Team (SSAPT) meetings are scheduled by school administrator.

☐ Officer performance assessments are planned by school administrator twice a year.

☐ The operational plan is periodically reviewed by the SSAPT.

☐ Agency supervisor and school administrator are scheduled to meet at least once per semester.

☐ School administrator is scheduled to review officer's activity logs to determine progress made toward LRE instruction and monitor time off campus.

☐ Collaboration between the officer and school personnel on school-wide safety and prevention is planned.

☐ Officer is scheduled to implement Cohort LRE instruction according to requirements and needs identified by SSAPT's review and assessment of data.

☐ Officer is scheduled to implement Universal LRE instruction according to requirements and needs identified by SSAPT's review and assessment of data.

*Please note this is not an exhaustive list. For all program requirements, please refer to the School Safety Program Guidance Manual.

LRE Best Practices Tool

Officer:	School Name:	District Name:
Topic:	Class/Subject:	Teacher:
Approximate # of students:	Grade:	Priority Focus Area (Issue):

Effective Implementation of LRE - Use of Best Practices:

- Law-Related Education
  - ☐ Content directly related to the law (Ex: Illegal use of drugs)
  - ☐ Content in-directly related to the law (Ex: Bill of Rights)
- Focus on Real Life Issues & Situations
  - ☐ Relevant to students' everyday life
  - ☐ Topic selection based on demographics
  - ☐ Derived from data (Ex: School climate surveys, discipline and crime reports)
- Student Centered
  - ☐ Student led activities, such as debates, role plays and group brainstorming
  - ☐ Encourages student discussion (not Q & A), such as small groups and continuums
- Interactive Teaching Strategies
  - ☐ Non-lecture (student to student interaction)
  - ☐ Hands on lessons, such as role play and small group work activities
- Balanced View Point/Multiple Points of View
  - ☐ Presentation of all sides of the issue
  - ☐ Unbiased presentation
- Problem Solving Oriented Approach
  - ☐ Solution reached through student discovery
  - ☐ Facilitator guides discussion to enable students to find answer
- Utilization of a CRP
  - ☐ Use of community resource person (e.g. Attorney, Judge, Detective)

Comments:

CHECKLIST School Safety Program District Administrator		
Responsibilities	**Complete**	**Need to Complete**
General		
1. I have read the School Safety Program (SSP) Guidance Manual (GM) and understand/support the requirements of the SSP.		
2. I have developed the Service Agreement between the school(s) and the police or juvenile probation department (see Section 3 of the GM). Each site has a copy of their Service Agreement.		
3. I understand that mid- and year-end reports, which capture SSP programmatic information, must be completed and submitted to the Arizona Department of Education (ADE) in a timely fashion.		
4. I understand that a completion report, which captures SSP financial information, must be submitted to ADE via the ADE Grants Management System at the end of each fiscal year.		
5. I will provide for an annual evaluation of the SSP, as required by ARS 15-154.		
Trainings		
1. I understand that I have an annual training requirement to meet, and I know that I register for the training at http://lawforkids.org/school-safety-program.		
2. I know what training the school principal (and the designee, if applicable) has to attend and will confirm with him/her that he/she has signed up for the appropriate training.		
3. I know what training the SRO or JPO has to attend and will confirm with him/her that that he/she has signed up for the appropriate training.		
4. I know what training the SRO or JPO supervisor has to attend and will confirm with him/her that that he/she has signed up for the appropriate training.		
5. I understand that if we (the district administrator, the site administrator, officer, and the agency supervisor) do not meet our training requirements each year, funds will be withheld for the entire district at the beginning of the following year until the training requirements have been met.		
Communication		
1. I communicate the SSP philosophy to all site staff.		
2. I understand that it is my responsibility to forward information received from ADE to all SSP participants as appropriate and in a timely fashion.		
3. I will develop and keep open communication with local law enforcement.		
4. I know that if I have any questions about the SSP, I can contact the ADE School Safety Team.		

CHECKLIST School Safety Program Agency Supervisor		
Responsibilities	**Complete**	**Need to Complete**
General		
1. I have read the School Safety Program (SSP) Guidance Manual (GM) and understand/support the requirements of the SSP.		
2. I have provided written information on the philosophy and operation of the SSP to appropriate supervisory/management personnel.		
3. I know what training I need to attend and that I register for the training at http://lawforkids.org/school-safety-program.		
4. I understand that if we (the agency supervisor, site administrator, officer, and district administrator) do not meet our training requirements each year, funds will be withheld for the entire district at the beginning of the following year until the training requirements have been met.		
Work with the Officer		
1. To the best of my ability, I will ensure officer continuity over the three years of the grant cycle so that students, staff, and the community are given the best opportunity to build relationships with the officer.		
2. I will work with the officer to ensure he/she is able to meet all the grant requirements.		
3. I will motivate the officer and provide positive reinforcement.		
Collaborate with the Site Administrator		
1. I am scheduled to meet with the site administrator at least once per semester.		
2. I will accept the officer assessment forms completed by the site administrator and will meet to discuss successes and concerns. I am aware that the an Officer Performance Assessment Tool is available on the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
3. I am working with the site administrator to ensure the officer is able to meet all grant requirements.		
Documentation		
1. I will help develop, review, and revise the Service Agreement.		
2. I will ensure the officer keeps an activity log that tracks the following: a. LRE instruction hours b. The teacher and subject or staff/community group c. The topic of each LRE lesson d. The time the officer is off campus during his/her duty hours, regardless of the reason.		
3. I will amend or supplement evaluation forms to include performance criteria specific to the school officer's role.		

CHECKLIST
School Safety Program Site Administrator

Responsibilities	**Complete**	**Need to Complete**
General		
1. I have read the School Safety Program (SSP) Guidance Manual (GM) and understand/support the requirements of the SSP.		
2. I know what training I need to attend and that I register for the training at http://lawforkids.org/school-safety-program.		
3. I understand that if we (site administrator, the officer, district administrator, and agency supervisor) do not meet our training requirements each year, funds will be withheld for the entire district at the beginning of the following year until the training requirements have been met.		
Work with the Officer		
1. I understand that the site administrator, not the officer, is responsible for school discipline.		
2. I have reviewed the Service Agreement and school operational procedures and specifics with our officer.		
3. I have introduced the officer to staff and students and helped integrate the officer into our school community.		
4. I am monitoring the officer's activity logs to ensure progress is made toward program requirements.		
5. I have scheduled an officer performance assessment once each semester and will share that information with the officer's supervisor. I know that I can download an Officer Performance Assessment Tool for Administrators from the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
6. I am facilitating collaboration between the officer and other school personnel on school-wide safety strategies, such as staff trainings, emergency response planning, needs assessment, and prevention programming.		
Collaborate with the Officer's Supervisor		
1. I have established proactive and positive communication with our law enforcement or juvenile probation partners.		
2. I have scheduled to meet with the officer's supervisor at least once per semester.		
3. I am working with the officer's supervisor to ensure the officer is able to meet all the grant requirements.		
Establish a School Safety Assessment & Prevention Team (SSAPT)		
1. I understand that I need to establish a multi-disciplinary SSAPT that meets at least quarterly (monthly is recommended).		
2. I know that the SSAPT must consist of the following: a. School principal or assistant principal b. School Safety Program officer c. School prevention coordinator or school mental/behavioral health expert, or similar role d. Other members as needed.		

CHECKLIST School Safety Program Site Administrator		
Responsibilities	**Complete**	**Need to Complete**
3. I understand that at each meeting the SSAPT should, at a minimum, accomplish the following: a. Review needs assessment data and the operational plan b. Make appropriate revisions to the operational plan based on the needs assessment c. Discuss completed and upcoming activities and milestones d. Identify the person(s) responsible for ensuring the activities are achieved.		
4. I understand that the SSAPT utilizes needs assessment data to design clear and appropriate strategies and activities to support a successful SSP, to include: a. Use of law enforcement or juvenile probation expertise and resources, including strategic placement of the officer, for intervention and prevention of potential crime; b. Use of Law Related Education (LRE) instruction to students, staff, and the school community.		
5. I understand that our site will be out of compliance if our SSAPT: a. Does not meet at least quarterly b. Does not have the required people in attendance at each meeting c. Does not discuss/document SSP-specific items at each meeting.		
6. I know that our SSAPT can download an SSAPT Agenda Template from the SSP website: (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
7. I know that if our SSAPT needs assistance, the ADE School Safety Team will provide support.		
Develop and Utilize the Operational Plan		
1. I understand that it is my responsibility to lead the development and utilization of an operational plan that incorporates program requirements and illustrates our site-specific program design in a succinct and logical manner.		
2. I understand that our SSAPT should review the Operational Plan at each SSAPT meeting.		
3. I know that we can download an Operational Plan Template and an Operational Plan Checklist from the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
Promote Law-Related Education (LRE)		
1. I understand that I must ensure a teacher is present in the classroom with the officer at all times during the LRE instruction.		
2. I will provide time at regular staff meetings and trainings for the officer to deliver LRE instruction relevant to school-wide prevention safety related updates.		
3. I will promote the integration of LRE into the classrooms and assist the officer with gaining access to classrooms as required.		
4. I know that if the officer needs assistance with curriculum or lesson planning, he/she can contact Diana Strouth, Instruction Specialist, at the Arizona Foundation for Legal Services & Education: Diana.Strouth@azflse.org		

CHECKLIST
School Safety Program Officer (SRO/JPO)

Responsibilities	**Complete**	**Need to Complete**
General		
1. I have read the School Safety Program (SSP) Guidance Manual (GM) and understanding/support the requirements of the SSP.		
2. I understand that I may only serve the site(s) that was awarded SSP funding, and that I should only assist at a school that is not on the program if a crisis occurs.		
3. I know what training I need to attend and how to register for the training (see Section 3 of the GM).		
4. I understand that if we (the officer, the site administrator, district administrator, and the agency supervisor) do not meet our training requirements each year, funds will be withheld for the entire district at the beginning of the following year until the training requirements have been met.		
5. I understand that I am required to serve as a member of the SSAPT.		
6. I understand that our site will be out of compliance if our SSAPT does not meet the following requirements: a. Meets at least quarterly b. Has the required people in attendance at each meeting: i. School principal or assistant principal ii. School Safety Program officer iii. School prevention coordinator or school mental/behavioral health expert, or similar role iv. Other members as needed. c. Discusses/documents SSP-specific items at each meeting.		
7. I know that our SSAPT can download an SSAPT Model Agenda template from the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
Law Enforcement (SRO) or Court Appointed (JPO) Officer: Work with the Site Administrator		
1. The site administrator and I have discussed that it is the site administrator, not the officer, who is responsible for school discipline. As such, the administrator should take the lead on school policy violations, but the administrator should call on me when a student's conduct violates a law.		
2. As a sworn law-enforcement or court-appointed officer, I will utilize my expertise and agency resources for intervention and prevention of potential crime.		
3. The site administrator has reviewed the Service Agreement and school operational procedures and specifics with me.		
4. The site administrator has introduced me to staff and students and helped integrate me into our school community.		
5. I am providing my activity logs to the site administrator on a regular basis.		
6. I understand that the site administrator will schedule an officer performance assessment once each semester and will share that information with my supervisor. I know that an Officer Performance Assessment Tool for Administrators is available on the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		

CHECKLIST School Safety Program Officer (SRO/JPO)		
Responsibilities	**Complete**	**Need to Complete**
7. I am collaborating with the site administrator and other school personnel on school-wide safety strategies, such as staff trainings, emergency response planning, needs assessment, and prevention programming.		
Role Model		
1. I set limits by being clear about what is acceptable and what is not, and I let students know the consequences of unacceptable behavior and the rewards for acceptable behavior.		
2. I am setting an example for the students and the school community by modeling how to handle stress, resolve conflicts, celebrate successes, and be a friend.		
3. I am encouraging responsibility by helping students think through options and consequences of decisions, set personal goals, and develop a plan to make the desired changes.		
4. I show respect by treating student with respect and expressing high expectations for them.		
5. I am consistent with students, staff, and parents in applying rules and regulations.		
Law Related Educator		
1. I understand that I may be required to provide law related education as determined by the school district/principal. a. The total number of LRE hours per school year should not exceed 180. Thank you!		
2. I know that my LRE instruction must follow best practices, and I can download the LRE Best Practices Tool from the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		
3. I know that if I need assistance with curriculum or lesson planning, I can contact Diana Strouth, Instruction Specialist, at the Arizona Bar Foundation: Diana.Strouth@azflse.org		
4. I am keeping a weekly activity log that tracks the following: a. My LRE instruction hours b. The teacher and subject or staff/community group c. The topic of teach LRE lesson d. The time I am off my assigned campus during my duty hours, regardless of the reason		
5. I understand that I can use my agency's activity log as long as it tracks the above information, or I can download the Weekly Activity Log & Instructions template from the SSP website (Tools & Resources tab): http://www.azed.gov/shs/ssp/		

School Health & Safety
Arizona Department of Education
1535 West Jefferson Street, Bin 29
Phoenix, Arizona 85007
Phone: (602) 542-8730

The Arizona Department of Education is an Equal Opportunity Employer

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. G.**

Meeting Date: 02/26/2025

Department Head: Armando Esparza, Director of Economic Development, Economic Development

Submitted By: Humberto Arcos, Grants Coordinator, Economic Development

Action Requested: Motion
Resolution

ITEM:

Discussion and possible action on any and all matters regarding Resolution No. 2354. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, authorizing the submission of an application to the USDA Rural Business Development Grant to establish a Small Business Assistance Fund. **(Armando Esparza, Director of Economic Development)**

SUMMARY:

BACKGROUND:

Road improvement projects, while essential for enhancing transportation infrastructure, can have mixed effects on adjacent businesses. A study by the Minnesota Department of Transportation (MnDOT) highlighted that while such projects can increase access and potentially boost traffic to surrounding businesses, they may also pose challenges, especially during prolonged construction periods. Potential adverse effects include decreased customer foot traffic, limited access due to road closures or detours, and overall declines in sales. These challenges underscore the importance of proactive measures to support local businesses during major infrastructure projects.

USDA RURAL BUSINESS DEVELOPMENT GRANT:

The Economic Development Department is seeking City Council approval to apply for $100,000.00 in funding from the USDA Rural Business Development Grant. These funds will be used to establish a Small Business Assistance Fund to support businesses located within the Cesar Chavez Boulevard construction corridor and other commercial areas directly impacted that may experience financial hardship due to construction-related disruptions. The Department plans to use these funds to develop either a grant program or a low-to-no-interest loan fund, offering financial support to businesses affected by reduced vehicle traffic, foot traffic, temporary access limitations, and potential revenue losses caused by prolonged construction activities. The goal of this initiative is to help small businesses navigate these economic challenges by providing flexible financial assistance, business counseling, and technical support to strengthen their resilience. If awarded, the Small Business Assistance Fund may provide grants or low-to-no-interest loans to eligible businesses.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE AND ADOPT RESOLUTION NO. 2354, AUTHORIZING THE ECONOMIC DEVELOPMENT DEPARTMENT TO SUBMIT AN APPLICATION TO THE USDA RURAL BUSINESS DEVELOPMENT GRANT TO ESTABLISH A SMALL BUSINESS ASSISTANCE FUND.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	Federal- USDA Rural Business Development Grant
TOTAL:	$100,000.00
BUDGETED AMOUNT:	$100,000.00
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	255-210-90010

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

The Finance Department created a GL Account named Contractual Services Special Revenue Economic Development and numbered it GL Account 255-135-80000.

Attachments

Resolution No. 2354

USDA Grant Template

USDA Grant Fact Sheet

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

No. 2354

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, AUTHORIZING THE SUBMISSION OF AN APPLICATION FOR THE USDA RURAL BUSINESS DEVELOPMENT GRANT, CERTIFYING THAT SAID APPLICATION MEETS THE USDA RURAL COMMUNITY DEVELOPMENT REQUIREMENTS, AND AUTHORIZING ALL ACTIONS NECESSARY TO IMPLEMENT AND COMPLETE THE ACTIVITIES OUTLINED IN SAID APPLICATION.

WHEREAS, the City of San Luis, Arizona, is committed to fostering economic development and supporting local businesses; and

WHEREAS, the USDA Rural Business Development Grant provides financial assistance to rural communities for economic development projects that benefit small and emerging businesses; and

WHEREAS, the City of San Luis seeks to establish a Small Business Assistance Fund to provide grants or low-to-no-interest loans to businesses impacted by the construction of the Cesar Chavez Boulevard Project; and

WHEREAS, the activities proposed in the application align with the City's economic development goals by supporting local businesses, maintaining job stability, and mitigating financial hardships caused by infrastructure improvements; and

WHEREAS, an applicant for USDA Rural Business Development Grant funds is required to comply with program guidelines, federal statutes, and regulations.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of San Luis, Arizona, County of Yuma, as follows:

Section 1: The submission of an application for the USDA Rural Business Development Grant is hereby approved and authorized.

Section 2: The Mayor is authorized and directed to execute all necessary applications, contracts, and grant documents required for the receipt and administration of these funds in accordance with the activities outlined in the application.

Section 3: The Mayor is further authorized to take all necessary actions to implement and complete the activities described in the application, ensuring compliance with all applicable regulations and guidelines.

Section 4: The application for the USDA Rural Business Development Grant funds is in alignment with the City's commitment to supporting local businesses affected by the Cesar Chavez Boulevard construction project and meets all program requirements.

PASSED AND ADOPTED by the Mayor and City Council of the City of San Luis, Arizona, County of Yuma this 26th day of February 2025.

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney

Rural Business Development Grant

APPLICATION TOOLKIT
ARIZONA – FY 2025

APPLICATION DEADLINE: FEBRUARY 28, 2025 @ 4:30 P.M. MST

Instructions and Helpful Hints

Application Deadline: February 28, 2025, at 4:30 p.m. MST. Applications must be **received** by the Arizona State Office on or before the deadline. *This is not a postmark date.* Due to the office operating on a hybrid telework status, e-mailed applications will be accepted and should be sent to SM.RD.AZ.RBSStateOffice@usda.gov prior to the application deadline.

Applications sent by mail or overnight courier should be addressed to:

USDA Rural Development
Attn: Business & Cooperative Programs
230 N 1st Ave, Suite 206
Phoenix, AZ 85003-1706

Provide one original application only. *Please do not bind your applications.*

APPLICATION INFORMATION WEBINAR:

December 11, 2024, at 1:00 p.m. MST – REGISTER HERE
January 15, 2025, at 1:00 p.m. MST – REGISTER HERE
February 12, 2025, at 1:00 p.m. MST – REGISTER HERE

YouTube RBCS How-To Video Series regarding SAM.gov and the SF 424 series of forms:

RBCS How-To Apply Video Series for Applicants

Matching Funds: Matching funds are not required by the regulation. However, smaller projects (less than $100,000) with higher levels of matching funds are given higher priority in the scoring process.

Ceiling of Award Range: The regulation establishes no maximum level of Enterprise type grant funding. The maximum size of an Opportunity type grant will be limited to ten percent (10%) of the total state allocation or approximately $40,000.

Non Set-Aside Funds:
The anticipated total funding for Arizona is approximately $300,000. The number of awards is typically 8-10 grants, ranging from $20,000 - $80,000.

Native American Set-Aside Funds:
For funds requested from Native American congressionally mandated funds (set-aside funds), at least 75 percent of the project benefits must be received by members of a Federally Recognized Native American Tribe.

Funds of approximately $3 million will be awarded competitively through a national competition.

Instructions and Helpful Hints (continued)

Term Requirement: The project should be budgeted to be completed within one (1) full year after it has been awarded. Typically, the grant term is October 1 through September 30.

Anticipated Award Date: September 30, 2025

We encourage applicants to include the RBDG Scope of Work Template with their application. The RBDG RLF Plan Template should also be completed when applying for a grant to establish a revolving loan fund.

We encourage all applicants to review the scoring criteria and develop your grant application in accordance with program regulations. By doing so, you will be able to maximize your score and have the most competitive application. See RD Instruction 4280-E, Attachment 1 "Project Selection Criteria".

Discretionary Points: The Agency has issued guidance on implementing Agency Initiatives by assigning up to 50 discretionary points to eligible RBDG program applications as follows:

USDA Rural Development is incorporating key Biden-Harris Administration priorities into program scoring and associated funding announcements beginning with fiscal year (FY) 2024 funding announcements. Many USDA Rural Development grant and technical assistance programs have the potential to support rural communities' economic development effort and maintain and improve a healthy rural population by leveraging funding assistance to key Administration priorities.

These priorities build upon RD's continuing commitment to serving traditionally underserved and economically challenged rural areas, such as Persistent Poverty Counties. The RBDG program will have a funding set-aside for areas of persistent poverty.

USDA Rural Development has identified three key priorities that will provide a pathway to facilitate economic growth for all rural Americans and is encouraging Applicants to consider projects that will advance the following three key priorities.

1. Assisting Rural communities to recover economically through more and better market opportunities and through improved infrastructure.
2. Ensuring all rural residents have equitable access to RD programs and benefits from RD funded projects.
3. Reducing climate pollution and increasing resilience to the impacts of climate change through economic support to rural communities.

The above priorities are being incorporated into the work we do across the Agency and with our partners to incentivize strategic engagement and investment. More information on Rural Development Key Priorities can be found at: https://www.rd.usda.gov/priority-points/rural-development-priorities-fy-2024.

USDA Rural Business Development Grant (RBDG)

Application Toolkit

Before submitting the application, please review the Application Checklist to make sure you have provided **all** the required application criteria.

For additional information and the program regulation (RD Instruction 4280-E), please visit the RBDG program website at http://www.rd.usda.gov/programs-services/rural-business-development-grants.

For questions or technical assistance in completing the application, please contact any of the following:

Don Irby, Tribal Relations Specialist
(928) 910-4474
Don.Irby@usda.gov

Clinton Kaasa, Business and Cooperatives Program Specialist
(602) 280-8757
Clinton.Kaasa@usda.gov

Jennifer Burton, Business and Cooperatives Program Specialist
(602) 280-8738
Jennifer.Burton@usda.gov

Roxanne Kimm-Yanagi, Business and Cooperatives Program Specialist
(602) 280-8709
Roxanne.KimmYanagi@usda.gov

Blake Jones, Business and Cooperatives Program Specialist
(602) 280-8716
Blake.Jones@usda.gov

You may also call the Business and Cooperative Programs main line at 602-280-8715 or email our inbox at SM.RD.AZ.RBSStateOffice@usda.gov.

APPLICATION CHECKLIST

Before you submit your application, please be sure you have addressed all of the following elements.

Required forms

- ☐ Form SF-424, "Application for Federal Assistance" – required for all applications
- ☐ Form SF-424A, "Budget Information-Non-Construction Programs"

OR

- ☐ Form SF-424, "Application for Federal Assistance" – required for all applications
- ☐ Form SF-424C, "Budget Information -Construction Programs"
- ☐ Form SF-424D, "Assurances - Construction Programs"

Hints for Completing Form SF 424, "Application for Federal Assistance":

Block 1. Type of Submission: Check "Application"
Block 2. Type of Application: Check "New"
Blocks 3, 4, 5a, 5b, 6, and 7: Leave blank
Block 10. Name of Federal Agency: USDA, Rural Development
Block 11. Catalog of Federal Domestic Assistance (CDFA) Number: 10.351
Block 11. CFDA Title: Rural Business Development Grant
Blocks 12 and 13: Leave blank
Block 19: Is Application Subject to Review by State Under E.O. 12372 Process: Check Box c.

All other blocks are self-explanatory.

Section 1. Summary Information

- ☐ Legal name of applicant
- ☐ Requested Grant Amount
- ☐ Active registration in the System for Award Management (SAM) at https://www.sam.gov. Applicants must ensure they complete the Financial Assistance General Certifications and Representations in SAM. Registering in SAM will automatically result in the creation of a Uniform Entity Identifier (UEI).
  **** SAM registration should be completed as soon as possible as it can take a few weeks to complete the process.***

APPLICATION CHECKLIST (continued)

Section 2. Applicant Eligibility

- ☐ Applicant Type

Section 3. Project Eligibility

- ☐ Business Opportunity Project
  - ☐ Demonstration of Need
  - ☐ Economic Development Result
  - ☐ Local and Area Strategic Plans
  - ☐ Suggested Performance Criteria
- ☐ Business Enterprise Project
  - ☐ Demonstration of Need
  - ☐ Development or Financing of Small & Emerging Business
  - ☐ Suggested Performance Criteria

Section 4. Written Narrative

- ☐ Project Need
- ☐ Project Benefits
- ☐ Eligible Grant Purpose
- ☐ Area to be Served
- ☐ Coordination with other Area Economic Development Plans and Strategies
- ☐ Goals to be Accomplished
- ☐ Jobs Created/Saved
- ☐ Applicants Expertise
- ☐ Method and Rationale to Select Service Recipients
- ☐ Work Plan Narrative
- ☐ Project Budget and Budget Narrative

Appendices

- ☐ Appendix A – Organizational Documents
- ☐ Appendix B – Proposed Scope of Work
- ☐ Appendix C – Latest 3 Years Financial Information
- ☐ Appendix D – Supplemental Funds Verification
- ☐ Appendix E – Documentation of Experience
- ☐ Appendix F – Letters of Small Business Commitment

RURAL BUSINESS DEVELOPMENT GRANT (RBDG) APPLICATION TEMPLATE

SECTION 1: SUMMARY INFORMATION

Legal Name of Applicant: _____

Requested Grant Amount: $_____ **(Please round to the nearest $100)**

Unique Entity Identifier (UEI): _____

UEI Expiration Date: _____

SECTION 2: APPLICANT ELIGIBILITY

Applicant Type– Please Check One:

☐ Public Body/Government Entity
☐ Native American Tribe/Federally-recognized tribal group
☐ Nonprofit Entity

Organizational documents/legal standing must be attached in Appendix A

Financial information must be attached in Appendix C

SECTION 3: PROJECT ELIGIBILITY

Application Type – Please Check One:

☐ **Enterprise Grant** – Funds may be used to acquire or develop land, buildings, plants, equipment, access streets and roads, parking areas, utilities; provide technical assistance; establish revolving loan funds; and to create, expand, or operate rural distance learning programs that provide educational or job training instruction related to potential employment or job advancement to adult students. Please note that enterprise type projects must be used to finance or develop small and emerging businesses in rural areas. Projects that solely fund agriculture production are not eligible.

☐ **Opportunity Grant –** Funds may be used to analyze rural business (small and emerging or larger business) opportunities; identify and/or provide training opportunities to rural entrepreneurs; conduct leadership development; establish training or technology centers and conduct technical assistance or area-wide planning activities. Note that opportunity type projects must be consistent with any local and area-wide strategic plans for community and economic development. Please include the name and date of referenced plan.

All Applicants:

- **Demonstration of Need:**

  [Insert explanation as to why the proposed project is needed]

- **Suggested Performance Criteria:**

Suggest one or more relevant criterion to be used to evaluate the performance of the grant project during its operational phase post-award, as benchmarks to assess whether or not the primary goals and objectives proposed in the scope of work are accomplished during the project period. These criteria should relate to the overall project goal of financing and/or assisting small and emerging businesses or conducting business opportunity projects, with a resulting creation or saving of jobs.

[Insert Performance Evaluation Criteria]

Enterprise Grant Applicants Only:

- **Development or Financing of Small & Emerging Private Businesses**

  [Describe how grant funds will be used to finance and/or develop Small and Emerging Businesses in Rural Areas; provide certifications from the Small and Emerging Businesses that will be served. Letters shall be attached as Appendix F.]

<u>Opportunity</u> Grant Applicants Only:

- **Economic Development Result**

  [Describe the economic development that will occur as a result of the proposed project. Include demonstration of project sustainability]

- **Local and Area Strategic Plans**

  [Describe how the project coincides with local or area-wide strategic plans. Provide name and date of plan.]

SECTION 4: WRITTEN NARRATIVE

4.1 Project Need

[Insert explanation of why the project is needed]

4.2 Project Benefits

[Explain the benefits of the proposed project]

4.3 Eligible Grant Purpose

[Explain how the proposed project meets an eligible grant purpose]

4.4 Rural Area to be Served

[Describe the area to be served, identifying each governmental unit (i.e. town, county, community, chapter, etc.) to be affected by the project]

4.5 Coordination with Area Economic Development Activities

[Description of how the project will coordinate Economic Development activities with other Economic Development Activities within the project area.]

4.6 Businesses to be Assisted (Enterprise) and Economic Development to be Accomplished (Opportunity)

[Describe and provide the number of small, rural businesses to be assisted for Enterprise type grants and Economic Development to be accomplished for Opportunity type grants.]

4.7 Jobs Created/Saved

*[Describe how the proposed project will create jobs or save existing jobs in the service area and provide an estimated number of jobs created and jobs saved. Jobs created and/or saved are those of the businesses assisted and are directly related to, a result of, and attributed to the RBDG project. These jobs **must** be evidenced by letters from rural businesses that will be directly assisted by the project. Letters shall be attached as Appendix F.]*

Number of jobs expected to be created _____ and/or saved _____

4.8 Applicant Expertise

[Insert description of applicant's capability and expertise in doing the work proposed. If consulting with others on tasks, include their applicable experience. Attach résumés and other supporting documentation of experience in Appendix E.]

4.9 Method and Rationale to Select Service Recipients

[Describe how the service area was selected and the businesses that will receive assistance. If the businesses haven't been selected, describe how they will be selected.]

4.10 Work Plan Narrative

[Insert work plan narrative]

4.11 Project Budget

Provide a project budget by task. The budget should include salaries, fringe benefits, consultant costs, indirect costs, and other appropriate direct costs for the project. Insert additional rows as needed.

Task #	Task Name and Description	Start Date	End Date	RBDG Funds	Supplemental Funds	Total Project Costs
	TOTAL PROJECT (Please use whole dollar amounts)			**$**	**$**	**$**

Budget Narrative

[Provide explanation/clarification of the basis for the above budget figures.]

APPENDICES

APPENDIX A: Organizational Documents

Attach evidence of Legal Authority and Good Standing.

Tip: The following describes the organization documents that must be presented regarding the RBDG applicant in the application. The organization document **must** show 1) the legal existence and 2) authority to perform the activities proposed in the application.

- **Public Bodies/Governmental Entities** (defined as Public Bodies and includes States, counties, cities, townships, and incorporated towns and villages, boroughs, authorities, districts, and education institutions organized under State and Federal laws, and Indian Tribes).
  - ☐ Evidence of legal organization (provide the relevant statute that created the entity)
  - ☐ Current list of members of the governing body with terms of office, i.e. when terms begin and end

- **Native American Tribes and other Federally-recognized tribal groups**
  - ☐ Evidence that it is a Federally-recognized tribe or tribal group. The most recent list was published in the Federal Register on January 8, 2024 at: https://www.govinfo.gov/content/pkg/FR-2024-01-08/pdf/2024-00109.pdf. **Please print and include a copy of this list with your application as evidence of eligibility.** ***(If the applicant is not on the above Federal Register list, it must apply as a non-profit entity as described below.)***
  - ☐ Current list of members of the governing body with terms of office, i.e. when terms begin and end

- **Non-profit entities (including those formed in accordance with tribal laws)**
  - ☐ Articles of incorporation, including any amendments
  - ☐ Bylaws, including any amendments
  - ☐ Certificate of Good Standing with the Arizona Corporation Commission or Tribal government
  - ☐ Current list of members of the governing body with terms of office, i.e. when terms begin and end

APPENDIX B: Proposed Scope of Work

Attach Proposed Scope of Work. There is a separate template to complete for the Scope of Work.

Please note use of the template will assure all required elements for the Scope of Work are included.

APPENDIX C: Supporting Financial Documentation

Supporting financial documentation is **required** as follows to show financial capacity to carry out the proposed grant.

The following must be submitted:

A. Submit and attach the applicant's **latest three (3) fiscal year-end financial statements, which would be for the years ending in 2024, 2023, and 2022.** At a minimum, these statements should consist of a balance sheet, income statement, and statement of cash flows. Audits should be provided, if available. **If an audit is not yet available for the most recent fiscal year-end, financial statements must still be submitted for that year.** Financial information may be submitted on electronic media, i.e. CD/DVD ROM, USB flash drive, etc. in lieu of paper.

B. If the applicant is less than three (3) years old, submit and attach all available fiscal year-end financial statements, consisting of balance sheet, income statement, and statement of cash flows. Audits should be provided, if available. Financial information may be submitted on electronic media, i.e. CD/DVD ROM, USB flash drive, etc. in lieu of paper.

C. If the applicant is a department or division of a municipal or tribal government, the latest three (3) fiscal year-end financial statements, consisting of balance sheet, income statement, and statement of cash flows, for the municipal or tribal government **must** be provided, not just the statements applicable to department or division.

NOTE: Budgets or summaries of historical financial performance are not considered supporting financial documentation for the purpose of the Rural Business Development Grant (RBDG).

APPENDIX D: Supplemental Funds Verification

Attach documentation verifying that eligible supplemental funds are available and have been committed to the project. Documentation must be included in your application to qualify for consideration under the applicable scoring criterion.

If there is not a firm commitment in writing of the other (supplemental) funding, it may not be considered for leveraging and scoring purposes. Where there is not sufficient documentation, the project must be feasible without those funds.

Examples of acceptable documentation include: a signed letter from the source of funds stating the amount of funds, when the funds will be provided, and what the funds can be used for; an executed grant agreement; and a signed resolution from your governing board authorizing the use of a specified amount of funds for the project (if funds will be contributed by the applicant organization). In kind contributions must meet the requirements of 2 CFR part 200.

APPENDIX E: Documentation of Experience

Attach documentation of the applicant's experience in completing the proposed project activities.

Provide a description of the grantee (applicant) experience and **provide résumés** of those who will be completing the work of the grant.

If the person who will complete the work, in whole or in part, is a contractor, include the contractor's résumé AND either a fully executed contract OR a written commitment showing the commitment to complete the contractor's responsibilities on the grant with a term sufficient to complete the work.

APPENDIX F: Letters of Small Business Commitment

THESE ARE NOT LETTERS OF SUPPORT, BUT RATHER LETTERS FROM SMALL BUSINESSES THAT ARE COMMITTED TO PARTICIPATING IN AND/OR BENEFITING FROM GRANT ACTIVITIES.

For enterprise type projects, written evidence of commitment by a small and emerging business must be provided with the application to the Agency. For both enterprise and opportunity type projects, the Agency will award five (5) points for each letter of small business commitment up to 25 points.

Attach letters from small businesses that will be **assisted** by the proposed project activities. A small and emerging business for the purposes of the Rural Business Development Grant (RBDG) is any private or non-profit business which will employ less than 50 new employees and has less than $1 million in gross revenue.

Points will only be awarded in the jobs created or supported category of the project selection criteria score sheet if a specific number is included in the small business commitment letters. Each letter must include the name of the small business providing the letter or be on the small business' letterhead, describe the connection to the project activities, and provide specific information relative to the number of jobs supported, saved, and/or created.

Generic or duplicated letters are not acceptable and will not receive points.

Letters of support from local, state, or Federal elected officials or other businesses and interested parties in the community do not count as letters of small business commitment and will not receive points.

Rural Business Development Grants

What does this program do?

Rural Business Development Grants (RBDGs) support targeted technical assistance, training, and other activities that promote the development and expansion of small and emerging private businesses in rural areas. Eligible businesses must have fewer than 50 employees and less than $1 million in gross annual revenues. RBDG funding is separated into either enterprise or opportunity-type grant activities.

Who can apply?

Eligible applicants include:

- **Rural cooperatives**
- **State government agencies, towns, and communities**
- **Nonprofit corporations and institutions of higher learning**
- **Federally recognized Tribes**

Important: Neither individuals nor for-profit businesses or organizations are eligible to apply for RBDGs.

What is an eligible area?

The RBDG supports projects benefiting rural areas outside of urbanized areas that have populations of 50,000 or more. You can use the USDA Income and Property Eligibility site (available at this link: tinyurl.com/8ysytefa) to determine your area's eligibility.

How can funds be used?

Among other things, **enterprise-type** grant uses include:

- Training and technical assistance, including project planning, business counseling, market research, feasibility studies, and product or service improvements
- Buying or developing land, easements, or rights of way, including access streets and parking areas
- Constructing or renovating buildings, and buying machinery and equipment
- Capitalizing revolving loan funds
- Supporting rural business incubators and community economic development

Among other things, **opportunity-type** grants can support:

- Business support centers
- Technology-based economic development
- Leadership and entrepreneur training
- Feasibility studies, business plans, and long-term strategic planning, and other eligible activities

What are some grant terms?

Generally, grants range from $10,000 to $500,000, and there is no cost-sharing requirement. Opportunity-type grants are limited to no more than 10 percent of the total available RBDG funds.

How do we get started?

Applications are accepted annually through your state-based USDA Rural Development office. A list of offices is available at this link: tinyurl.com/bddtm6vj.

What governs this program?

- The basic RBDG program is governed by 7 CFR Part 4280, Subpart E, available at this link: tinyurl.com/yc2psnzu.

NOTE: Because information changes, always consult official program instructions or contact your local Rural Development office for help. A list is available at this link: go.usa.gov/xJHPE. You will find additional resources, forms, and program information at rd.usda.gov. USDA is an equal opportunity provider, employer, and lender.

Last revised September 2024

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. H.**

Meeting Date: 02/26/2025

Department Head: Jose A. Guzman, Director of Development Services, Development Services

Submitted By: Juan Tejeda, Associate Planner, Development Services, Planning & Zoning

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding Subdivision Case No. 2024-0865F - Los Mezquites Unit 5 Subdivision; a request by Edais Engineering Inc., on behalf of Riedel Holdings LLC, for the approval of Los Mezquites Unit 5 final plat, located east of 24th Avenue and south of Los Mezquites Unit 4 Subdivision in San Luis, Arizona. **(Juan Leal Rubio, Assistant Director of Development Services)**

SUMMARY:

This subdivision will contain approximately 11.83 acres and will consist of 51 residential lots. The residential lots range in size from approximately 6,000 square feet to 6,375 square feet, being a portion of Assessor's Parcel Number 227-11-004. This location was originally planned for Los Mezquites Townhomes Unit 2.

GENERAL PLAN:

City Council approved Major Amendment Case No. 2021-0340, changing the land use designation to Medium Density Residential (MDR). The Major Amendment allowed the applicant to rezone the property to residential.

REZONING:

On March 13, 2024, the City Council approved Rezoning Case No. 2023-0761, which rezoned this portion of the Assessor's Parcel Number 227-11-004 from Medium Density Residential (R1-6) to Medium-High Density Residential (R-2) for the purpose of developing a townhome subdivision. On December 11, 2024, the City Council approved Rezoning Case No. 2024-0776 and Ordinance No. 458, which rezoned this portion of Assessor's Parcel Number 227-11-004 back to Medium Density Residential (R1-6).

DEVELOPMENT AGREEMENT:

This property is part of a development agreement that was approved by Resolution No.2204. The term of the development agreement is for five (5) years, and it includes the following conditions:

- Dedication of Right of Way. At the present time, owners shall dedicate appropriate right-of-way to the City along County 23 ½ Street and Avenue D ½ alignments in accordance with the updated standards for right-of-way as provided by the Public Works Department. Dedication of right of way on County 24th shall be 62 feet from the center of alignment and 130 feet within 300 feet of the intersection. Dedication of said right-of-way shall occur at such time and in such manner as required by the City in its sole discretion.
- Development of Improvements. At such time that any lot created by City Lot Split Case Number 2021-0387 or any lot within the Rezoning Case No. 2021-0693 is developed, public improvements, including but not limited to streets, roads, retention basins, utility extensions, utility

mains, including pumping stations, lift stations, force mains, traffic signalization, and other off-site mains, including pumping stations, lift stations, force mains, traffic signalization, and other off-site public improvements will be made pursuant to City standards as may be required by the Public Works Director of City in his sole discretion. The location of such improvements and/or its development is not confined to the lot being developed but rather may be located on any portion of the entire property that is the subject of this agreement.

- The owner agrees to make such dedications of property as may be needed or necessary for such development at the discretion of the Public Works Director. Such dedications and the development of such improvements as described above shall be a condition of the issuance of any building permit(s) or other use permit(s) for the development of any such lot or portion of such lot.
- Street Lights. At such time that any lot created by City Lot Split Case Number 2021-0387 or any lot within Rezoning Case No. 2021-0693 is developed, the Public Works Director may require, in his sole discretion, that the development of streetlights in the public right-of-way is needed or desired, the development of such street lighting in the manner and at the locations as may be determined by the Public Works Director, in his sole discretion, shall be a condition of the issuance of building permit(s) or other use permit(s) for the development of any such lot.
- Residential Development. The developer is requesting Rezoning Case No. 2021-0693 to change Assessor Parcel Number 227-11-004 and portion of parcel 227-11-005 to Medium Density Residential (R1-6) to allow for single-family development. At such time as any portion of the property is developed with single-family homes, the development will be of lots no less in size than 6,000 square feet, amending the lot size requirement and removing the minimum home size on Resolution No. 933.
- Traffic Light Contribution. Any development of the property, or portion thereof, and/or the approval of any subdivision plat, be conditioned upon payment to the city the sum of $260.00 per acre, or any portion of an acre, as a proportionate contribution for a traffic signal at the intersection of County 24th Street and Avenue E.
- Waste Water Treatment Plant. The developer agrees to execute, record, and deliver such agreements, easements, and/or covenants, conditions, and restrictions that run with the land which is the subject of this development agreement for the benefit of the City of San Luis that will allow the real property of Developer that is the subject of this agreement to be used for fumes or odors from its wastewater treatment operations located at 358 N. Avenue D, and to waive any claims for any damages that might arise from wastewater treatment operations, whatsoever, and agree to indemnify and hold the City of San Luis and its officers, agents, and employees harmless from any and all claims, whatsoever, known or unknown, emanating from wastewater treatment operations including, but not limited to, claims arising from fumes or odors.
- Land Dedication for Park. The owner wishes to donate to the city, and the city agrees to accept from the Owner certain land within the Property, containing five (5) gross acres of buildable land in addition to the open space requirement. The owner agrees to convey to the City by executing a Deed, free and clear of all liens and encumbrances.
- Covenants, Conditions, and Restrictions. For any lot developed or to be developed as other than residential development, the Owner shall record a covenant, condition, and restriction to run with the land prohibiting the development and use of the property as a school, public or private, of any kind nature, or description.
- Special Taxing Districts. The owner agrees to agree to the formation of a street lighting improvement district, a community facilities district, and any enhanced municipal district needed.
- Regulations. The terms of this Agreement are in addition to City codes, rules, fees, and regulations that are applicable to this action.
- Buffer. The developer agrees to build an 8-foot cmu wall along the entire property line along the Detention Center and the East Waste Water Treatment Plant. Including as a buffer, a 30-feet wide green area and the residential street, totaling 82 feet.

PLANNING AND ZONING COMMISSION:

This item was presented to the Planning and Zoning Commission at their regular meeting on January 14, 2025. The Commission recommended approval of this request subject to the conditions of approval

presented by staff.

STAFF RECOMMENDATION:
The applicant has provided the information and materials necessary to review the final plat for Los Mezquites Unit 5 Subdivision.

Staff recommends approval of Subdivision Case No. 2024-0865F with the following conditions:

1. Developer must comply with all provisions and conditions of the development agreement approved by Resolution No. 2204 and any amendments.
2. Developer must comply with all provisions and conditions of Ordinance No. 458.
3. Developer shall develop and construct any and all improvements needed and necessary for the signalization of the intersections at County 24th Street and Ave. E and County 23 ½ Street and Ave. E in accordance with the Public Works Standards of the City and the standards of the Arizona Department of Transportation, subject to the payback provisions of Section 15.10.130 (C) of the City Code.

RECOMMENDATION / SUGGESTED MOTION:
I MOVE TO APPROVE SUBDIVISION CASE NO. 2024-0865F WITH CONDITIONS AS PRESENTED BY STAFF.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	n/a
CITY/STATE/FEDERAL FUNDS:	n/a
TOTAL:	n/a
BUDGETED AMOUNT:	n/a
AVAILABLE AMOUNT TO TRANSFER:	n/a
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	n/a

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):
n/a

Attachments

PRESENTATION
LOCATION MAP
FINAL PLAT
IMPROVEMENT PLANS
ORDINANCE NO. 458
RESOLUTION NO. 2204 - DEVELOPMENT AGREEMENT

CITY COUNCIL

February 26, 2025

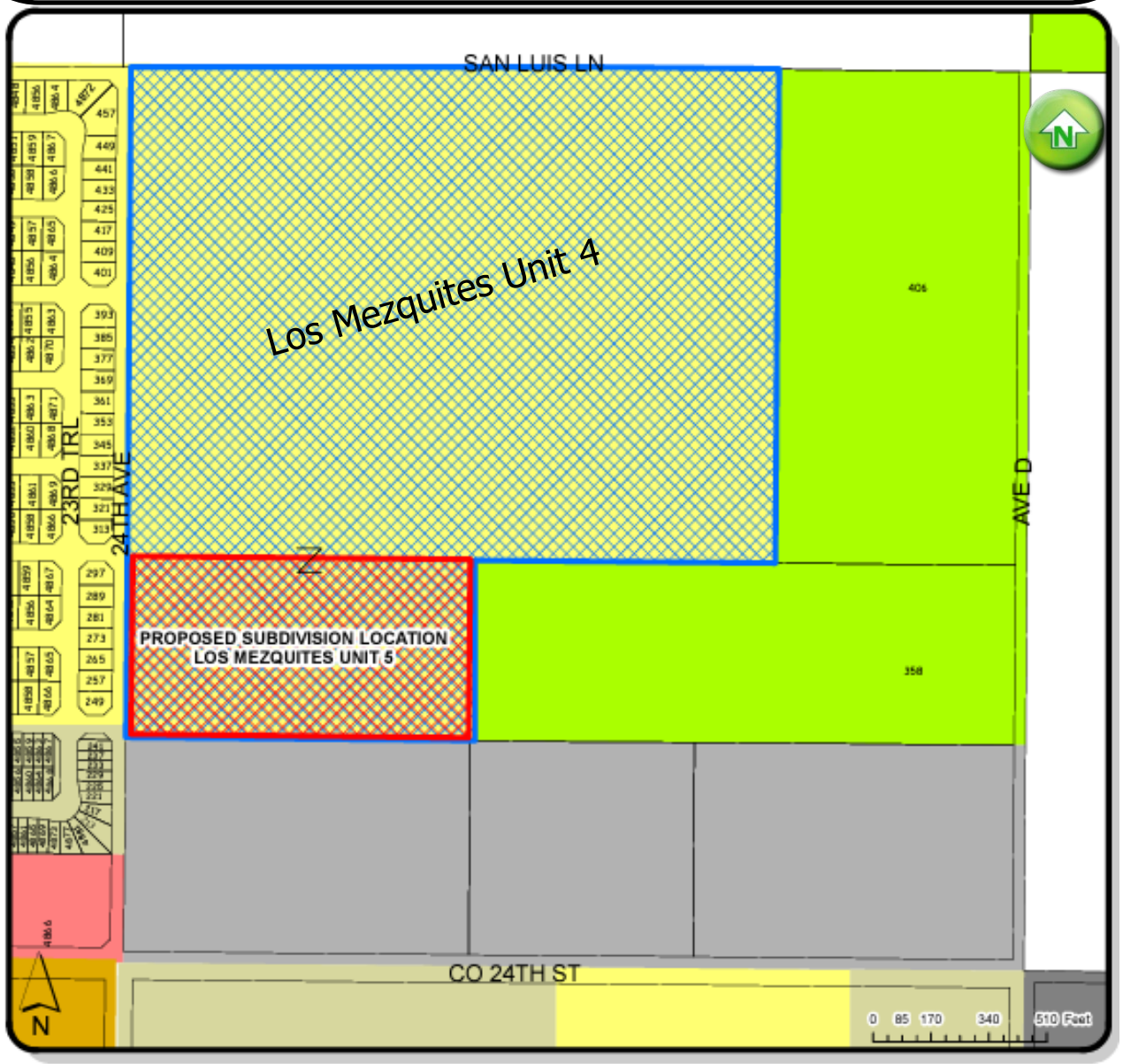
Subdivision Case No. 2024-0865F
Los Mezquites Unit 5 Subdivision Final Plat

- Requests: Edais Engineering, Inc., representing Riedel Holdings, LLC, seeks approval of Los Mezquites Unit 5 subdivision Final Plat.

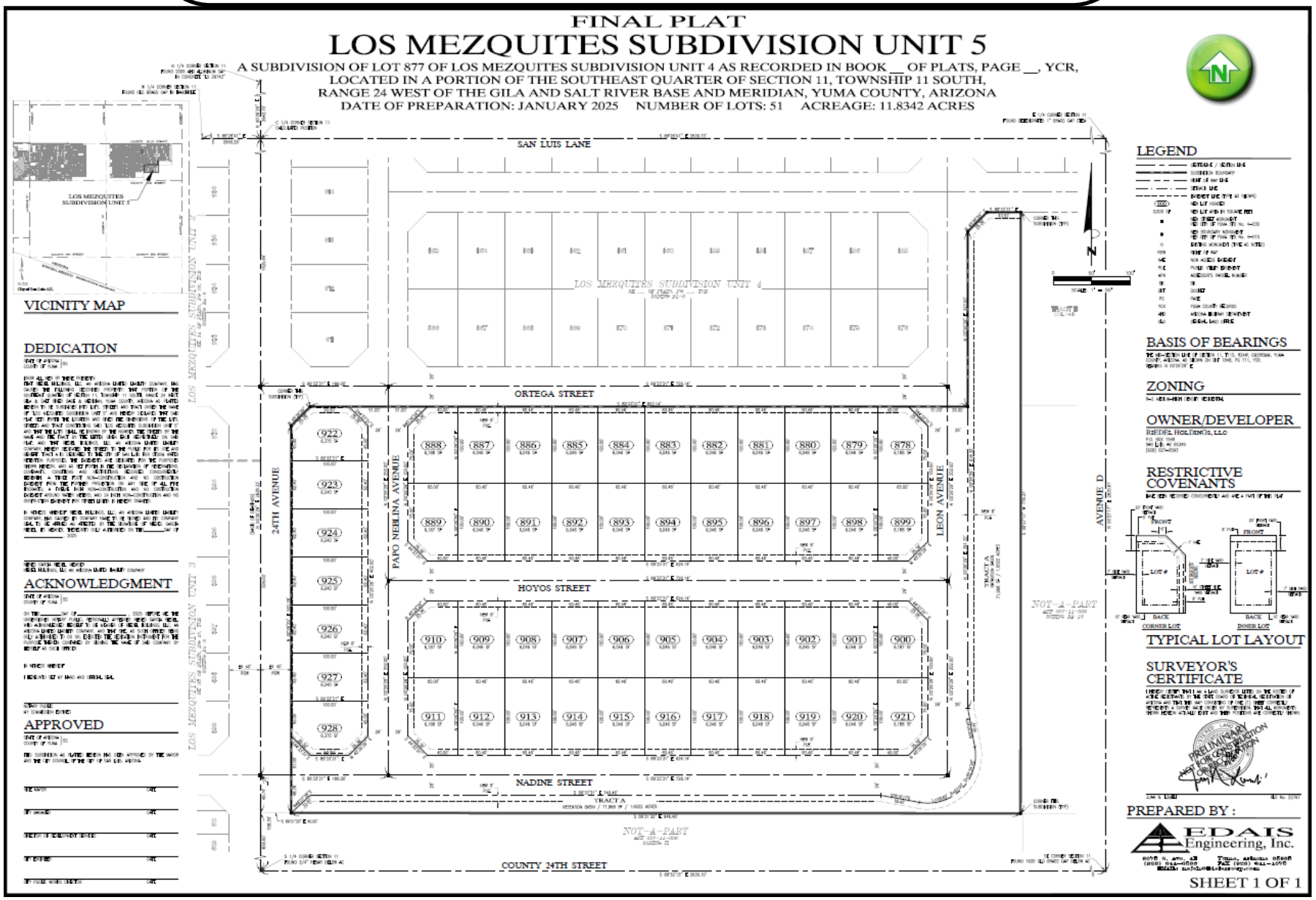
- Location: East of 24th Avenue, and South of Los Mezquites Unit 4 subdivision, San Luis, Arizona.

- Summary: This subdivision is approximately 11.83 acres in size and will consist of 51 residential lots. The residential lots range in size from approximately 6,000 square feet to 6,375 square feet, being a portion of APN 227-11-004.

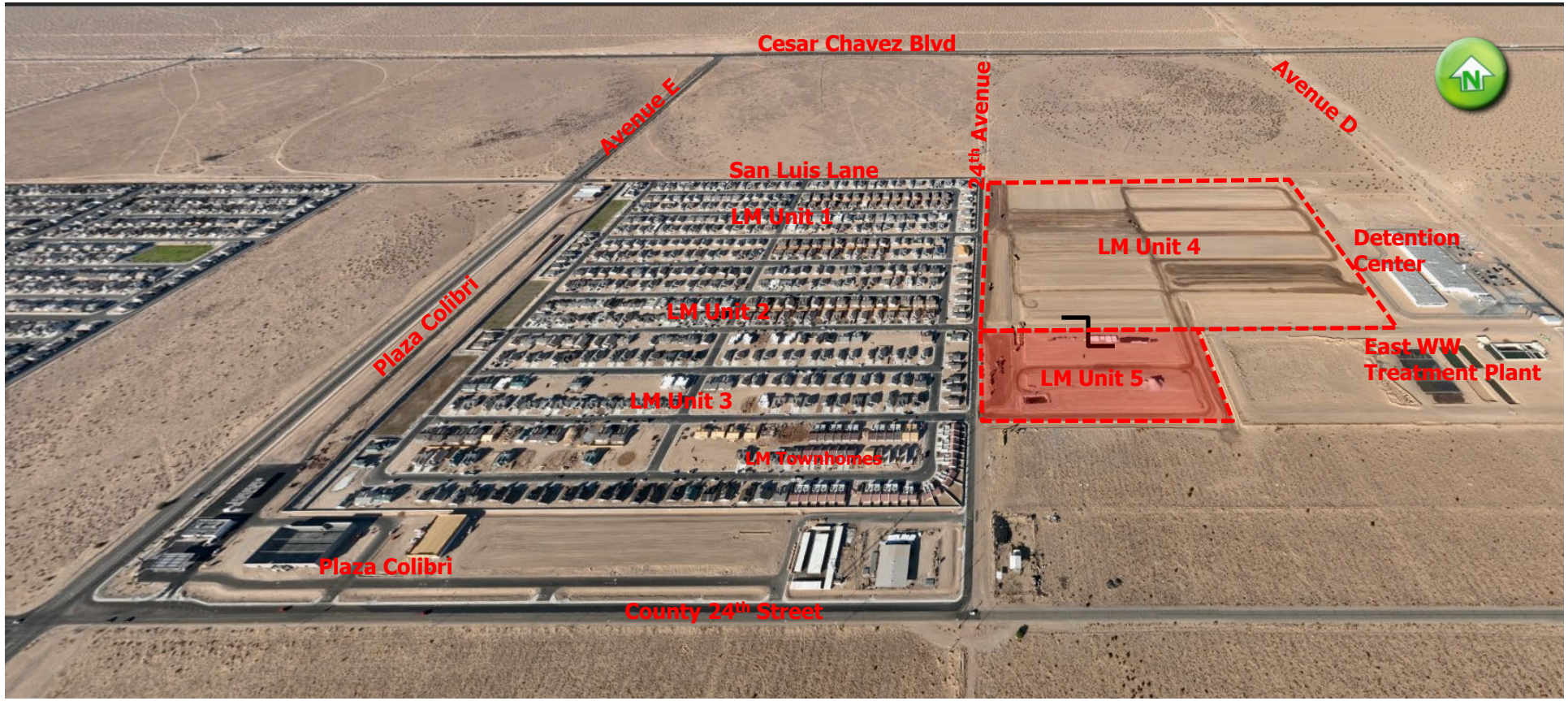
Los Mezquites Unit 5 Subdivision
Final Plat



Los Mezquites Unit 5 Subdivision Final Plat



Los Mezquites Unit 5 Subdivision
Final Plat





Looking east at subject property


Looking west from subject property



Looking south from subject property



Looking north from subject property

Los Mezquites Unit 5 Subdivision
Final Plat

The Commission recommends approval of Subdivision Case No. 2024-0865F with the following conditions:

1. Developer must comply with all provisions and conditions of the development agreement approved by Resolution No. 2204 and any amendments.

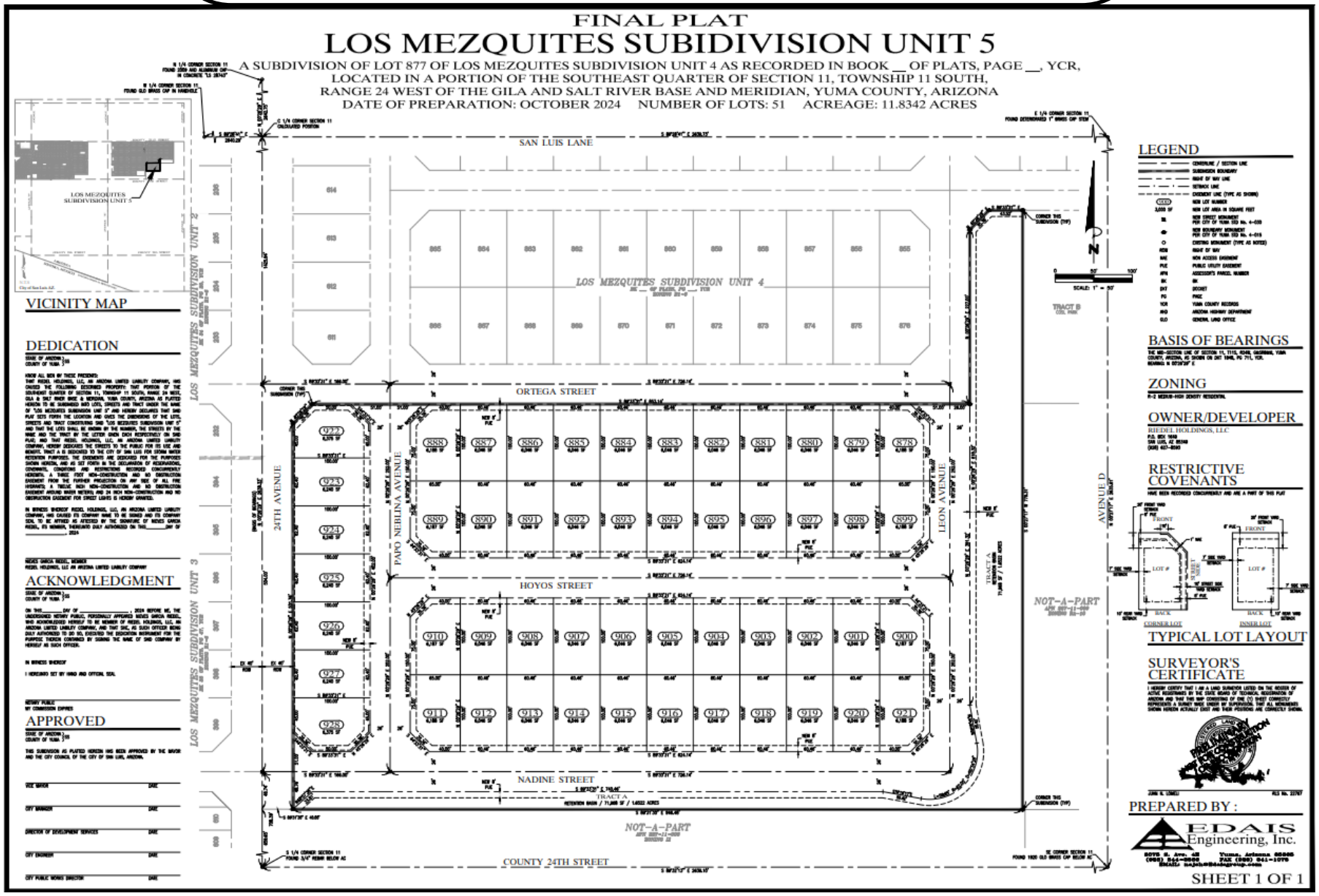
2. Developer must comply with all provisions and conditions of Ordinance No. 458.

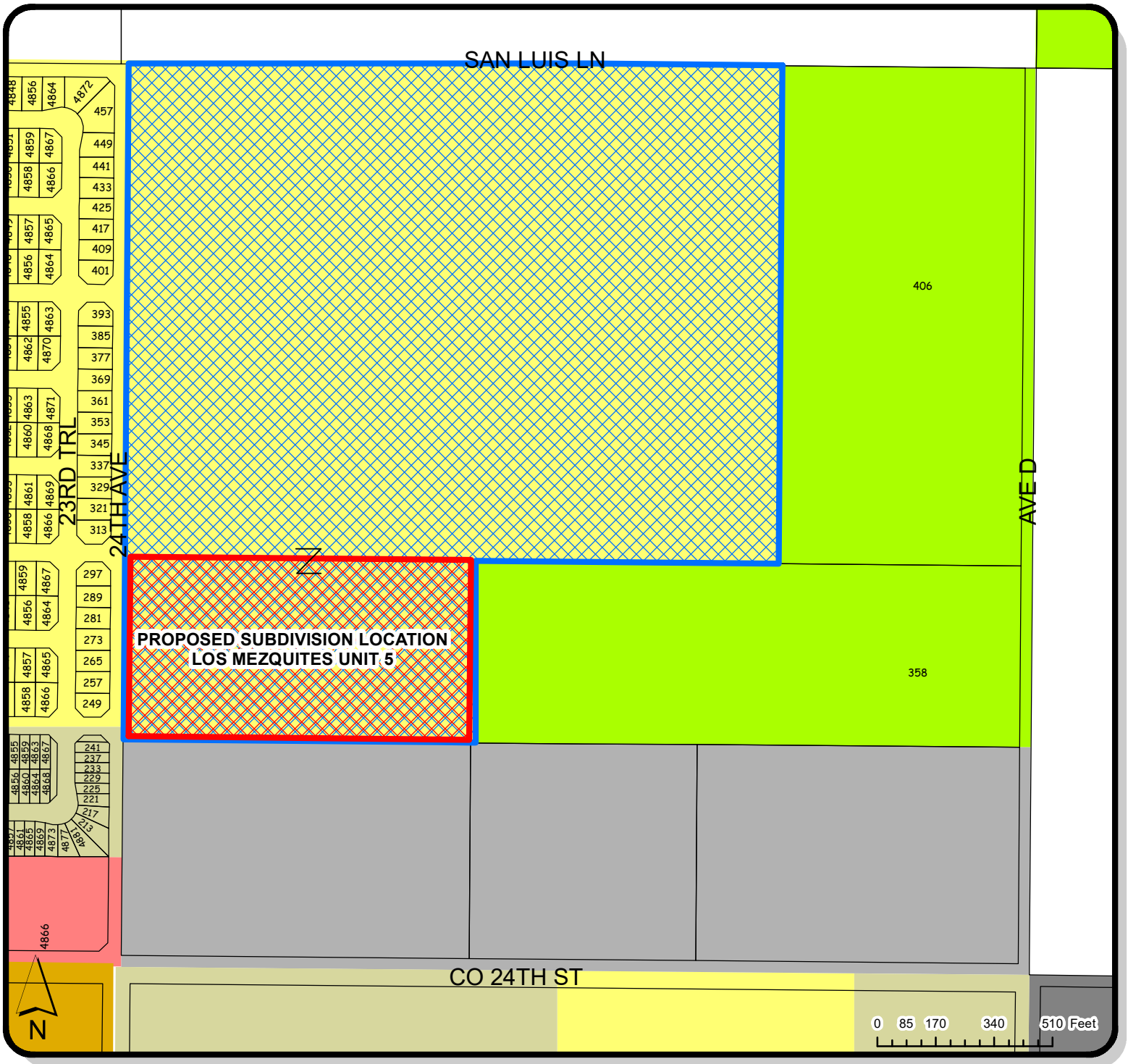
Los Mezquites Unit 5 Subdivision
Final Plat

The Commission recommends approval of Subdivision Case No. 2024-0865F with the following conditions: (cont.)

3. Developer shall develop and construct any and all improvements needed and necessary for the signalization of the intersections at County 24th Street and Ave. E and County 23 ½ Street and Ave. E in accordance with the Public Works Standards of the City and the standards of the ADOT, subject to the payback provisions of Section 15.10.130 (C) of the City Code.

Los Mezquites Unit 5 Subdivision
Final Plat





LOCATION MAP

LOCATION OF SUBJECT PROPERTY

- PARCEL ID: 227-11-004
- PROPOSED SUBDIVISION LOCATION

Legend

SINGLE RESIDENCE ZONING DISTRICTS
R1-6
RA-10

MULTIPLE RESIDENCE ZONING DISTRICTS
R-2
R-3

COMMERCIAL ZONING DISTRICTS
C-2

INDUSTRIAL ZONING DISTRICTS
LI
HI

SUBDIVISION

CASE #
2024-0858P
2024-0865F

DATE:
12/17/2024

PLANNING & ZONING

GIS

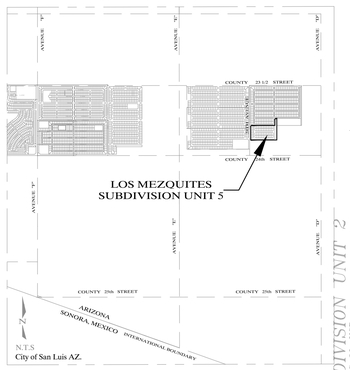
CREATED BY:
ISAAC GUTIERREZ

CHECKED BY:
JUAN TEJEDA

APPROVED BY:
JOSE A. GUZMAN

FINAL PLAT
LOS MEZQUITES SUBDIVISION UNIT 5

A SUBDIVISION OF LOT 877 OF LOS MEZQUITES SUBDIVISION UNIT 4 AS RECORDED IN BOOK __ OF PLATS, PAGE __, YCR,
LOCATED IN A PORTION OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 11 SOUTH,
RANGE 24 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, YUMA COUNTY, ARIZONA
DATE OF PREPARATION: JANUARY 2025 NUMBER OF LOTS: 51 ACREAGE: 11.8342 ACRES



VICINITY MAP

DEDICATION

STATE OF ARIZONA }
COUNTY OF YUMA } SS

KNOW ALL MEN BY THESE PRESENTS:
THAT RIEDEL HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, HAS CAUSED THE FOLLOWING DESCRIBED PROPERTY: THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 11 SOUTH, RANGE 24 WEST, GILA & SALT RIVER BASE & MERIDIAN, YUMA COUNTY, ARIZONA AS PLATTED HEREON TO BE SUBDIVIDED INTO LOTS, STREETS AND TRACT UNDER THE NAME OF "LOS MEZQUITES SUBDIVISION UNIT 5" AND HEREBY DECLARES THAT SAID PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF THE LOTS, STREETS AND TRACT CONSTITUTING SAID "LOS MEZQUITES SUBDIVISION UNIT 5" AND THAT THE LOTS SHALL BE KNOWN BY THE NUMBER, THE STREETS BY THE NAME AND THE TRACT BY THE LETTER GIVEN EACH RESPECTIVELY ON SAID PLAT; AND THAT RIEDEL HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, HEREBY DEDICATES THE STREETS TO THE PUBLIC FOR ITS USE AND BENEFIT. TRACT A IS DEDICATED TO THE CITY OF SAN LUIS FOR STORM WATER RETENTION PURPOSES. THE EASEMENTS ARE DEDICATED FOR THE PURPOSES SHOWN HEREON, AND AS SET FORTH IN THE DECLARATION OF RESERVATIONS, COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED CONCURRENTLY HEREWITH. A THREE FOOT NON-CONSTRUCTION AND NO OBSTRUCTION EASEMENT FROM THE FURTHER PROJECTION ON ANY SIDE OF ALL FIRE HYDRANTS; A TWELVE INCH NON-CONSTRUCTION AND NO OBSTRUCTION EASEMENT AROUND WATER METERS; AND 24 INCH NON-CONSTRUCTION AND NO OBSTRUCTION EASEMENT FOR STREET LIGHTS IS HEREBY GRANTED.

IN WITNESS WHEREOF RIEDEL HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, HAS CAUSED ITS COMPANY NAME TO BE SIGNED AND ITS COMPANY SEAL TO BE AFFIXED AS ATTESTED BY THE SIGNATURE OF NIEVES GARCIA RIEDEL, ITS MEMBER, THEREUNTO DULY AUTHORIZED ON THIS_____DAY OF _____, 2025

NIEVES GARCIA RIEDEL, MEMBER
RIEDEL HOLDINGS, LLC AN ARIZONA LIMITED LIABILITY COMPANY

ACKNOWLEDGMENT

STATE OF ARIZONA }
COUNTY OF YUMA } SS

ON THIS_____DAY OF _____, 2025 BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED NIEVES GARCIA RIEDEL, WHO ACKNOWLEDGED HERSELF TO BE MEMBER OF RIEDEL HOLDINGS, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AND THAT SHE, AS SUCH OFFICER BEING DULY AUTHORIZED TO DO SO, EXECUTED THE DEDICATION INSTRUMENT FOR THE PURPOSE THEREIN CONTAINED BY SIGNING THE NAME OF SAID COMPANY BY HERSELF AS SUCH OFFICER.

IN WITNESS WHEREOF

I HEREUNTO SET MY HAND AND OFFICIAL SEAL

NOTARY PUBLIC
MY COMMISSION EXPIRES

APPROVED

STATE OF ARIZONA }
COUNTY OF YUMA } SS

THIS SUBDIVISION AS PLATTED HEREON HAS BEEN APPROVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA.

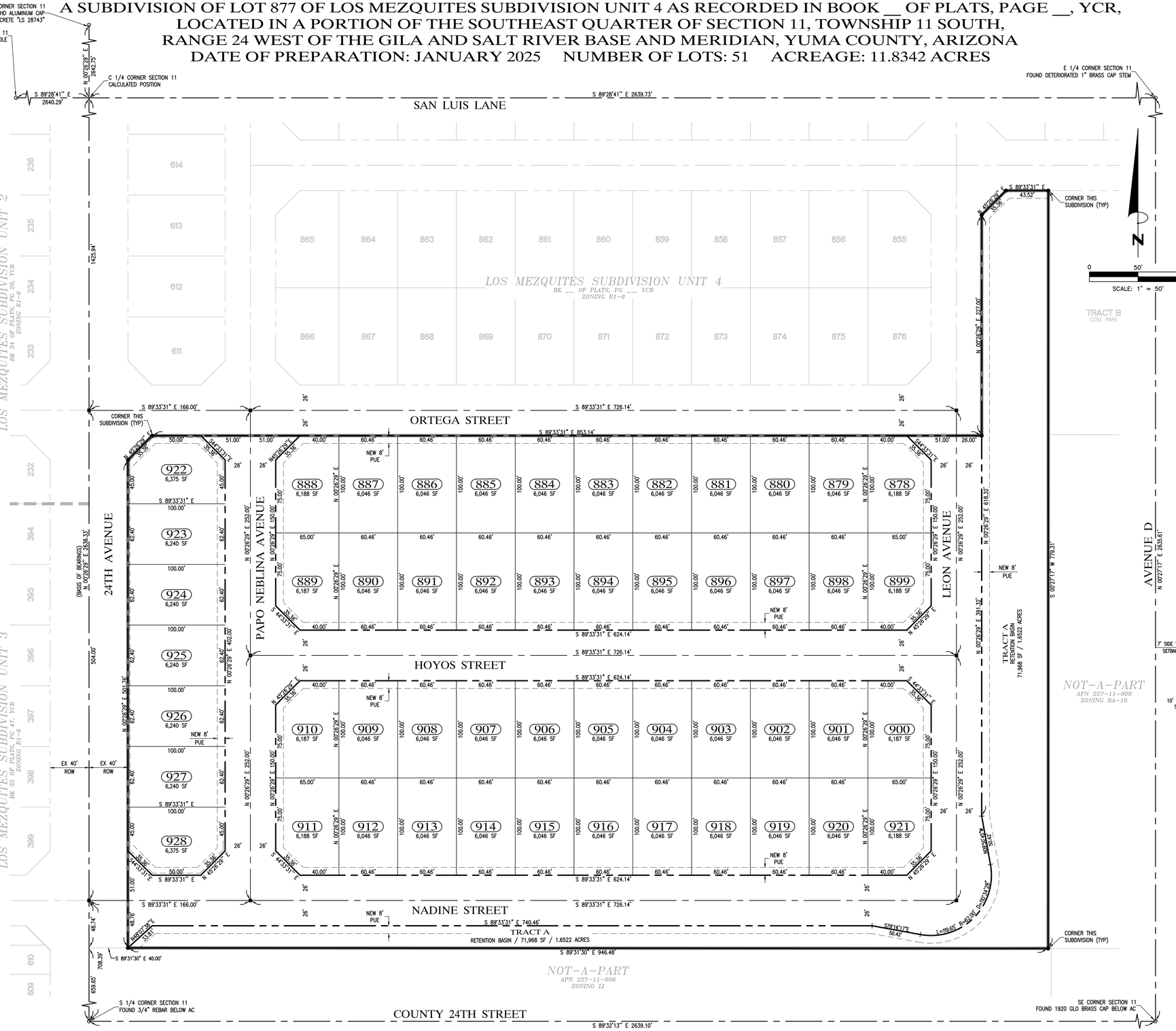
VICE MAYOR DATE

CITY MANAGER DATE

DIRECTOR OF DEVELOPMENT SERVICES DATE

CITY ENGINEER DATE

CITY PUBLIC WORKS DIRECTOR DATE



LEGEND

— — —	CENTERLINE / SECTION LINE
———	SUBDIVISION BOUNDARY
— — —	RIGHT OF WAY LINE
— · —	SETBACK LINE
- - -	EASEMENT LINE (TYPE AS SHOWN)
(900)	NEW LOT NUMBER
3,000 SF	NEW LOT AREA IN SQUARE FEET
■	NEW STREET MONUMENT PER CITY OF YUMA STD No. 4-030
●	NEW BOUNDARY MONUMENT PER CITY OF YUMA STD No. 4-015
○	EXISTING MONUMENT (TYPE AS NOTED)
ROW	RIGHT OF WAY
NAE	NON ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
APN	ASSESSOR'S PARCEL NUMBER
BK	BK
DKT	DOCKET
PG	PAGE
YCR	YUMA COUNTY RECORDS
AHD	ARIZONA HIGHWAY DEPARTMENT
GLO	GENERAL LAND OFFICE

BASIS OF BEARINGS

THE MID-SECTION LINE OF SECTION 11, T11S, R24W, G&SRB&M, YUMA COUNTY, ARIZONA, AS SHOWN ON DKT 1848, PG 711, YCR.
BEARING: N 00°26'29" E

ZONING

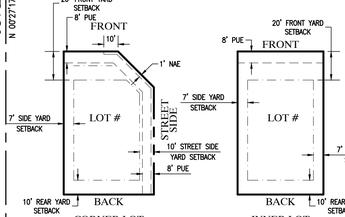
R1-6 MEDIUM DENSITY RESIDENTIAL

OWNER/DEVELOPER

RIEDEL HOLDINGS, LLC
P.O. BOX 1649
SAN LUIS, AZ 85349
(928) 627-8593

RESTRICTIVE COVENANTS

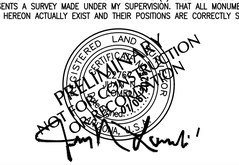
HAVE BEEN RECORDED CONCURRENTLY AND ARE A PART OF THIS PLAT



TYPICAL LOT LAYOUT

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A LAND SURVEYOR LISTED ON THE ROSTER OF ACTIVE REGISTRANTS BY THE STATE BOARD OF TECHNICAL REGISTRATION OF ARIZONA AND THAT THIS MAP CONSISTING OF ONE (1) SHEET CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION. THAT ALL MONUMENTS SHOWN HEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN.



JUAN N. LOMELI RLS No. 22767

PREPARED BY :

EDAIS Engineering, Inc.
3075 S. Ave. 4E Yuma, Arizona 85365
(928) 344-3566 FAX (928) 341-1075
EMAIL: najeh@Edaisgroup.com

SHEET 1 OF 1

D:\n2023\2023277\drawings\23277 LMA Final Plat Rev2.dwg

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

GENERAL NOTES

1. STANDARDS AND SPECIFICATIONS
ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH CITY OF SAN LUIS STANDARDS, INCLUDING THE ADOPTED CITY OF YUMA CONSTRUCTION STANDARD DETAIL DRAWINGS, THE MAG UNIFORM STANDARD SPECIFICATIONS AND THE CITY OF SAN LUIS SUPPLEMENT TO THE CITY OF YUMA STANDARDS AND THE MAG SPECIFICATION, UNLESS OTHERWISE SPECIFICALLY NOTED ON THESE PLANS.

2. UTILITIES
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE BLUE STAKE CENTER AT 1-800-STAKE-IT TO EXACTLY LOCATE THE UNDERGROUND UTILITIES WITHIN THE CONSTRUCTION AREA TWO WORKING DAYS BEFORE ANY EXCAVATION BEGINS, OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT BE CONSIDERED AS THE NONEXISTENCE OF, OR A DEFINITE LOCATION OF, EXISTING UNDERGROUND UTILITIES. THE LOCATION OF UNDERGROUND UTILITIES ILLUSTRATED ON THE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR DAMAGED UTILITIES.

3. AS-BUILT DRAWINGS
THE CONTRACTOR SHALL MAINTAIN ONE SET OF PLANS ON THE JOB SITE AND SHALL RECORD IN RED COLORED PENCIL ALL CASES WHERE ACTUAL FIELD CONSTRUCTION DIFFERS FROM WORK SHOWN ON THE PLANS. ALL CONCEALED WORK AND UTILITY LOCATIONS SHALL BE DIMENSIONED AND REFERENCED. THE MARKED-UP SET OF DRAWINGS SHALL BE DELIVERED TO THE ENGINEER UPON COMPLETION OF THE WORK WHICH SHALL REFLECT "AS-BUILT" MODIFICATIONS.

4. DUST CONTROL
DUE TO THE LOCATION OF THE WORK THE CONTRACTOR SHALL MAKE SPECIAL EFFORTS TO CONTROL DUST DURING THE PROCESS OF THE WORK. DUST SHALL BE MAINTAINED TO A MINIMUM BY REGULAR APPLICATIONS OF WATER NECESSARY AND AS DIRECTED BY THE ENGINEER. DURING AND AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL SWEEP THE STREETS TO REMOVE ALL LOOSE DIRT AND DUST RESULTING FROM THE CONSTRUCTION OPERATIONS.

5. BARRICADES
CONTRACTOR SHALL PROVIDE LIGHTED BARRICADES POSITIONED ON FOUR FOOT CENTER AROUND THE PERIMETER OF OPEN EXCAVATIONS AT THE CONCLUSION OF THE WORK DAY.

6. CLEANUP
THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL UNCLASSIFIED EXCAVATION MATERIAL, EXISTING PAVEMENT, CONCRETE DEBRIS AND ALL OTHER MATERIAL RESULTING FROM DEMOLITION ACTIVITIES.

7. PERMITS
THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND BUSINESS LICENSES AND SHALL NOTIFY THE CITY OF SAN LUIS, ARIZONA, AND EDAIS ENGINEERING, INC. AT LEAST 72 HOURS PRIOR TO COMMENCING WORK AND AT LEAST 48 HOURS PRIOR TO REQUIRING AN INSPECTION.

8. SANITARY FACILITIES
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SANITARY FACILITIES ON THE LOCATION OF THE PROJECT FOR USE BY THE CONTRACTOR'S EMPLOYEES.

9. POWER LINES
THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH OVERHEAD ELECTRIC LINE CONDITIONS AND TAKE NECESSARY PRECAUTIONS, TO PROTECT AGAINST INJURY AND DAMAGE DURING CONSTRUCTION.

10. TRAFFIC CONTROL
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN PROPER SIGNS, BARRICADES AND WARNING LIGHTS TO CONTROL THE TRAFFIC AND TO ASSURE THE PUBLIC'S HEALTH, WELFARE AND SAFETY. ALL DEVICES MUST CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

11. CHANGES
THE CONTRACTOR SHALL NOTIFY THE CITY OF SAN LUIS, AZ. AND THE ENGINEER IMMEDIATELY OF ANY CONDITIONS REQUIRING CHANGE TO THE PLANS.

12. ACCESS TO ADJACENT PROPERTY
ACCESS TO ADJACENT PROPERTIES, CROSS STREETS OR USE OF STREETS SCHEDULED FOR IMPROVEMENT MUST BE REASONABLY MAINTAINED FOR NORMAL ACCESS AND LOCAL BUSINESSES AND RESIDENTS.

13. CONSTRUCTION STAKING
ALL CONSTRUCTION STAKING WILL BE PROVIDED BY THE CONTRACTOR. CONSTRUCTION STAKING MUST BE DONE BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR.

14. ANY ITEM OF WORK CALLED OUT BY THE CONTRACT PLANS OR SPECIFICATIONS AND NOT SPECIFICALLY NOTED AS A BID ITEM ON THE PROPOSAL SHALL BE CONSIDERED INCIDENTAL TO SAID BID ITEM.

15. REFER TO SUBDIVISION PLAT FOR ALL BOUDNARY INFORMATION AND DIMENSIONS.

16. THE CONTRACTOR WILL PROVIDE THE ENGINEER AND THE CITY OF SAN LUIS, AZ WITH CERTIFIED COMPACTION, CONCRETE, AND LABORATORY TESTS AS REQUIRED BY THE CITY OF SAN LUIS STANDARD SPECIFICATIONS FOR ALL WORK WITHIN CITY OF SAN LUIS RIGHT-OF-WAYS PRIOR TO ACCEPTANCE OF THE PROJECT.

17. ALL MATERIAL SUPPLIED MUST BE SUBMITTED AS "SUBMITTALS FOR CONSTRUCTION".

18. IF THE CONTRACTOR FINDS ANY DISCREPANCY OR OMISSION IN THESE PLANS, HE SHALL NOTIFY THE ENGINEER BEFORE ANY INTERPRETATION OR DECISION IS MADE WHICH WILL AFFECT THE CONSTRUCTION COST, APPEARANCE, QUALITY, OR PERFORMANCE OF THE COMPLETE WORK.

19. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND HE WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

20. UNDERGROUND UTILITIES SHOWN HEREON ARE ONLY APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION, DEPTH AND ROUTING OF UTILITIES BEFORE CONSTRUCTION.

21. ALL EXISTING MONUMENTATION SHALL BE REFERENCED PRIOR TO CONSTRUCTION AND REPLACED IF DISTURBED AFTER ALL WORK IS COMPLETED BY CONTRACTOR.

22. PAVING CONTRACTOR TO COORDINATE WITH IRRIGATION AND UTILITY CONTRACTORS TO INSURE INSTALLATION OF IRRIGATION AND ELECTRICITY CONDUITS AND ALL UNDERGROUND UTILITIES PRIOR TO PAVING OR PLACING ABC.

23. PAVING CONTRACTOR TO PROVIDE ALL BACKFILL REQUIRED BEHIND ALL NEW IMPROVEMENTS IN ACCORDANCE WITH THE TYPICAL DETAILS AND SLOPE LINES SHOWN HEREON.

GENERAL WATER NOTES

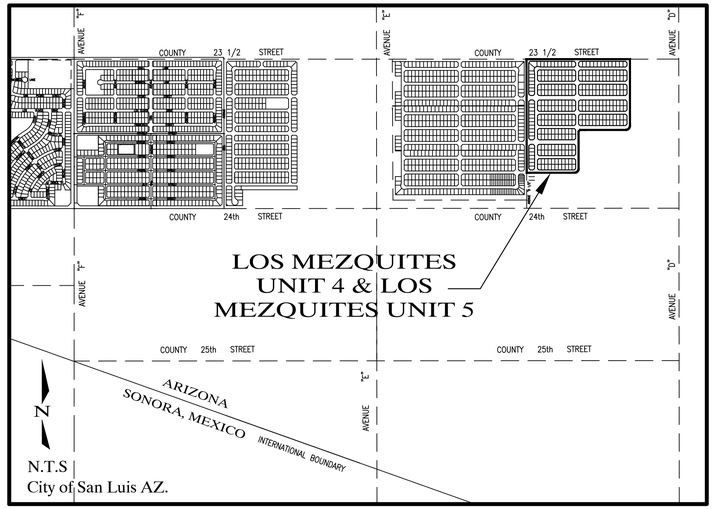
1. ALL WATER LINE CONSTRUCTION HEREON TO BE IN ACCORDANCE WITH CITY OF SAN LUIS STANDARDS, INCLUDING THE ADOPTED CITY OF YUMA CONSTRUCTION STANDARD DETAIL DRAWINGS, THE MAG UNIFORM STANDARD SPECIFICATIONS AND THE CITY OF SAN LUIS SUPPLEMENT TO THE CITY OF YUMA STANDARDS AND THE MAG SPECIFICATION, AND THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS, UNLESS OTHERWISE SPECIFICALLY NOTED ON THESE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION AND FURNISHING TO THE ENGINEER OF "AS-BUILT" RECORD DRAWINGS. THE CONTRACTOR SHALL OBTAIN ONE SET OF PLANS FROM THE ENGINEER AND SHALL RECORD IN RED COLORED PENCIL ALL CASES WHERE ACTUAL FIELD CONSTRUCTION DIFFERS FROM WORK SHOWN ON THE PLANS,TO INCLUDE SERVICE LOCATIONS.
3. ALL WATERLINES WILL BE PRESSURE AND LEAKAGE TESTED TO 150 PSI FOR 2 HOURS. SEE THIS SHEET FOR TEST PROCEDURE.
4. WATER CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF THE BACTERIOLOGICAL TEST RESULTS TAKEN ON THE SYSTEM.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE BLUE STAKE CENTER TO LOCATE ALL UNDERGROUND EQUIPMENT WITHIN THE CONSTRUCTION AREA 48 HOURS PRIOR TO THE START OF ANY EXCAVATION. CALL THE BLUE STAKE CENTER AT 1-800-782-5348. CONTRACTOR SHALL VERIFY LOCATION AN ELEVATIONS OF ALL EXISTING UTILITIES. PRIOR TO ANY CONSTRUCTION LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND INFORMATION ONLY.
6. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO HIS OPERATIONS. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
7. DEFLECT 8" WATER LINE AS SHOWN. MAX. ACCEPTABLE DEFLECTION OF 8" PIPE PER STANDARD 20' LENGTH TO BE 9". NO DEFLECTION TO OCCUR AT JOINT.
8. THE ENGINEER SHALL REVIEW ALL PIPE (WATER) MATERIAL SUBMITTALS TO ENSURE CONFORMANCE TO REQUIREMENTS BEFORE THE START OF CONSTRUCTION.
9. ALL WATER LINES (MAINS AND SERVICES) SHALL INCLUDE THE INSTALLATION OF TRACER WIRE IN ACCORDANCE WITH STANDARD DETAIL No. 5-030.
10. THE END OF EACH WATER LINE TO HAVE A TEMPORARY OR PERMANENT BLOWOFF VALVE, AS SHOWN IN PLANS.
11. THE CONTRACTOR MUST COORDINATE CONSTRUCTION INSPECTION WITH THE ENGINEER.
12. WATER/ SEWER LINES SEPARATION NEEDS TO BE IN ACCORDANCE WITH A.A.C.R18-5-502
13. A MINIMUM OF SEVEN FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SEWER LINES AND WATER AND SEWER SERVICE LINES
14. SEWER MAINS AND SERVICES SHALL BE CLASS C909 PVC PIPE FOR A DISTANCE OF 7' IN BOTH DIRECTIONS FROM A WATER MAIN OR SERVICE WHEN:
A. SEWER MAIN OR SERVICE CROSSES LESS THAN 2' BELOW A WATERMAIN OR SERVICE;
B. WATER MAIN OR SERVICE CROSSES BELOW A SEWER MAIN OR SERVICE. (A MINIMUM OF 24" SEPARATION SHALL BE MAINTAINED VERTICALLY BETWEEN WATER AND SEWER MAINS AND SERVICES).
15. FLANGE BOLTS SHALL BE PROTECTED BY 10 MIL POLYETHYLENE WRAP.
16. WATER MAINS AND VALVES SHALL BE FLUSHED AND DISINFECTED BY THE "GENERAL METHOD" DESCRIBED IN THE 1978 ARIZONA DEPARTMENT OF HEALTH SERVICES ENGINEERING BULLETIN NO. 8.
17. ENGINEERING PERSONNEL SHALL BE PRESENT WHEN WATER MAINS ARE BOTH FLUSHED AND PRESSURE TESTED.
18. ALL TEES, 90 DEGREE ELLS, BENDS, HYDRANTS AND DEAD END PLUGS SHALL BE THRUST BLOCKED WITH CAST-IN-PLACE CONCRETE AND SHALL BE MECHANICAL JOINT (MEGA LUG) FITTINGS. 19 NO STREET, WATER AND IMPROVEMENTS TO BE ACCEPTED BY CITY OF SAN LUIS FOR MAINTENANCE UNTIL "AS-BUILT", CERTIFIED, REPRODUCIBLE PLANS ARE FILED WITH AND ACCEPTED BY CITY OF SAN LUIS ENGINEER.
20. WATER LINES 4" OR LARGER SHALL BE PVC C900 DR 18 CLASS 235.
21. CONTRACTOR WILL PROVIDE THE ENGINEER WITH ALL REQUIRED COMPACTION AND CONCRETE TESTS.
22. ALL WATER LINE INSTALLATION MUST MEET OR EXCEED STANDARDS ESTABLISHED IN ADHS BULLETIN NO. 10.
23. ALL PVC WATER DISTRIBUTION PIPES MUST BE APPROVED BY AND SHALL BEAR THE NSF SEAL FOR POTABLE WATER USE.
24. THE OWNER SHALL CONTACT A PROFESSIONAL ENGINEER TO PROVIDE DETAILED CONSTRUCTION INSPECTION SERVICES FOR THE PROPOSED PROJECT. UPON COMPLETION OF THE PROJECT, THE OWNER'S ENGINEER SHALL COMPLETE THE ADEQ "ENGINEER'S CERTIFICATE OF COMPLETION" DOCUMENTATION AND FORWARD SAME TO THE APPROPRIATE OWWOM REGIONAL OFFICE.
25. ALL PIPES, FITTINGS, VALVES, COATINGS, ETC. SHALL CONFORM TO ANS/NSF STANDARD 60 AND 61.
26. IF DEAD ENDS ON WATER MAINS CANNOT BE AVOIDED, THEY MUST HAVE BLOW-OFF VALVES (MIN. DIA. 2")

WATER LINE TESTING PROCEDURE

1. ALL VISIBLE LEAKS SHALL BE REPAIRED REGARDLESS OF THE AMOUNT OF LEAKAGE AND REGARDLESS OF WHETHER THE LEAK DEVELOPS UNDER TEST PRESSURE OR LINE PRESSURE.
2. INITIAL PRESSURES FOR BOTH THE PRESSURE TEST AND ALLOWABLE LEAKAGE TEST SHALL BE A MINIMUM OF 150 PSI
3. A PRESSURE TEST WILL BE DEEMED AS SUCCESSFUL IF IT PASSES THE CRITERIA SET FORTH BY AWWA C-600, SEC. 94 (CURRENT EDITION) AND THAT CRITERIA NOTED ABOVE.
4. SHOULD THE PRESSURE TEST BE UNSUCCESSFUL, THE CONTRACTOR HAS THE OPTION OF ATTEMPTING THE ALLOWABLE LEAKAGE TEST. THIS TEST WILL BE DEEMED SUCCESSFUL IF IT PASSES THE CRITERIA SET FORTH IN AWWA C-600, SECTION 94 (CURRENT EDITION) OR AWWA M-23 (CURRENT EDITION) WHICHEVER IS MORE RESTRICTIVE AND THAT CRITERIA NOTED ABOVE.
5. DISINFECTION PROCEDURES FOR WATER LINES TO BE DONE AS PER AWWA C-605-94

GENERAL SEWER NOTES

1. SEWER CONSTRUCTION STAKING SHALL BE DONE UNDER THE SUPERVISION OF A REGISTERED ENGINEER OR SURVEYOR.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF SITE AND SOIL CONDITION AND SHALL NOTIFY ALL UTILITY AGENCIES PRIOR TO EXCAVATION.
3. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONDITIONS REQUIRING CHANGE TO THE PLANS.
4. CONTRACTOR SHALL NOTIFY CITY OF SAN LUIS PUBLIC WORKS PRIOR TO START OF CONSTRUCTION.
5. STANDARD SPECIFICATIONS AND ARIZONA STATE HEALTH DEPARTMENT BUL. NO. 11 SHALL APPLY TO THIS PROJECT.
6. A MINIMUM OF 7' SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SEWER LINES AND WATER AND SEWER MAINS.
7. SEWER MAINS AND SERVICES SHALL BE CONSTRUCTED OF C909 PVC PIPE FOR A DISTANCE OF 7' IN BOTH DIRECTIONS FROM A WATERMAIN OR SERVICE WHEN,
A. SEWER MAIN OR SERVICE CROSSES LESS THEN 2' BELOW A WATER MAIN
B. WATER MAIN OR SERVICE CROSSES BELOW A SEWER MAIN OR SERVICE (A MINIMUM OF 24" SEPARATION SHALL BE MAINTAINED VERTICALLY BETWEEN WATER AND SEWER MAINS AND SERVICES).
8. NO STREET, WATER AND SEWER IMPROVEMENTS WILL BE ACCEPTED BY CITY OF SAN LUIS FOR MAINTENANCE UNTIL "AS BUILT" CERTIFIED PLANS ARE FILED WITH AND ACCEPTED BY THE CITY OF SAN LUIS
9. SEWER PIPE SHALL BE PVC, HAVE N.S.F. SEAL OF APPROVAL, AND MEET ASTM D-3034, SDR 35.
10. SEWER MAINS SHALL BE PRESSURE AND LEAKAGE TESTED WITH 4 FEET OF HEAD UPSTREAM. ALLOWABLE LEAKAGE NOT TO EXCEED 200 GAL./IN. DIA./MILE OF PIPE/DAY.
11. EXFILTRATION FROM MANHOLES SHALL BE LIMITED TO 0.1 GALS./HR./VERTICAL FOOT.
12. DEFLECTION TEST OF AT LEAST 20% OF PLASTIC SEWER PIPE SHALL BE PERFORMED. SHORT TERM DEFLECTION IN EXCESS OF 5% SHALL BE CONSIDERED UNSERVICEABLE AND SHALL BE REPAIRED AND RETESTED.
13. IN AREAS WHERE THE GROUNDWATER IS AT PIPE SPRING LINE OR ABOVE INFILTRATION TESTS SHALL BE PERFORMED. ALLOWABLE INFILTRATION FOR SEWER MAINS NOT TO EXCEED 200 GAL/IN DIA/MILE OF PIPE/DAY. ALLOWABLE INFILTRATION FOR MANHOLES SHALL BE LIMITED TO 0.1 GALS/HR/VERTICAL FOOT.
14. SEWER LINE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AAC R18-9-E301 (D) (C)
15. ALL MANHOLES SHALL BE TESTED PER AAC R18-9-e301 (D) 3 e.



VICINITY MAP

LEGEND

———	BOUNDARY LINE
——— – ———	CENTER LINE
———	PROPERTY LINE
———	LOT LINE
●	SET MONUMENT (TYPE AS SHOWN)
■	SET MONUMENT (TYPE AS SHOWN)
	EXISTING AC PAVEMENT
	NEW AC PAVEMENT
	NEW CONCRETE
	NEW CURB & GUTTER
	NEW SLOPED AREA
2	LOT NUMBERS
(103.5)	EXISTING ELEVATION
(A=102.60) (C=101.80) (G=101.80)	EXISTING ASPHALT ELEVATION
C=100.00 G=100.00	EXISTING CURB & GUTTER ELEVATION
A=100.00	NEW CURB AND GUTTER ELEVATION
	NEW ASPHALT ELEVATION
-- EX--- S---	EXISTING SEWER LINE
-- EX--- W---	EXISTING WATER MAIN
—NEW— S——	NEW SEWER LINE
—NEW— W——	NEW WATER MAIN
◎	NEW MANHOLE
⊘	EXISTING MANHOLE
○	NEW MANHOLE
INV.=99.33 (N)	INDICATES INVERT ELEVATION
	NEW DUAL WATER SERVICE
	NEW SINGLE WATER SERVICE
	NEW FIRE HYDRANT
	NEW GATE VALVE
⊗	NEW GATE VALVE
	NEW TEMPORARY BLOWOFF
	NEW SEWER SERVICE

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OWNER/SUBDIVIDER

RIEDEL HOLDINGS LLC
P.O. BOX 1649
SAN LUIS, AZ. 85349
(928) 627-8593

ENGINEER

Edais Engineering, Inc.
3075 S. AVENUE 4E
YUMA, ARIZONA 85365
(928) 344-3566

BENCHMARK

TOP OF BRASS CAP LOCATED AT THE W1/4 COR OF SECTION 11, T11S, R24W, FOUND B.C. GLO 1920 IN HAND HOLE
ELEVATION = 156.96 FEET

REVISIONS

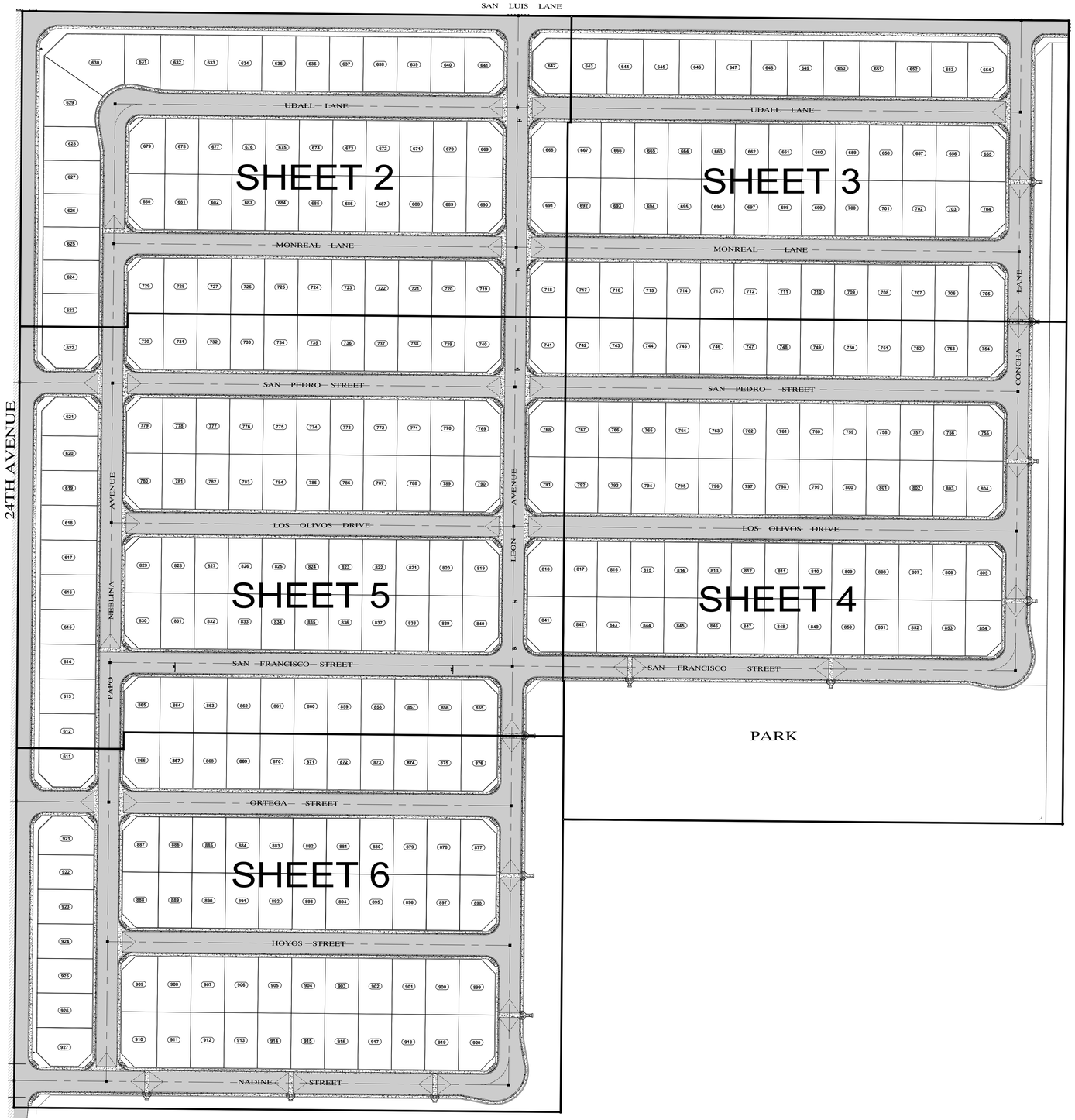
COVER SHEET

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 4E
Yuma, AZ 85365
(928) 344-3566
najeh@Edaisgroup.com
www.edaisengineering.com

Najeh K. Edais
26844
NAJEH K. EDAIS
Date Registered 08/14
ARIZONA, U.S.A.
EXPIRES 3/31/26

DATE: APR 2024
DRAWN: LPR/JAT
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER 0



N

W E

S

SCALE: 1"=100'

REVISIONS

PAVING AND GRADING PLAN KEY MAP

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 48
Yuma, Arizona 85365
najeh@Edaisgroup.com (928) 344-3566
www.edaisengineering.com

Najeh K. Edais
Registered Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 03/04
ARIZONA, U.S.A.
EXPIRES 3/31/26

DATE: APR 2024

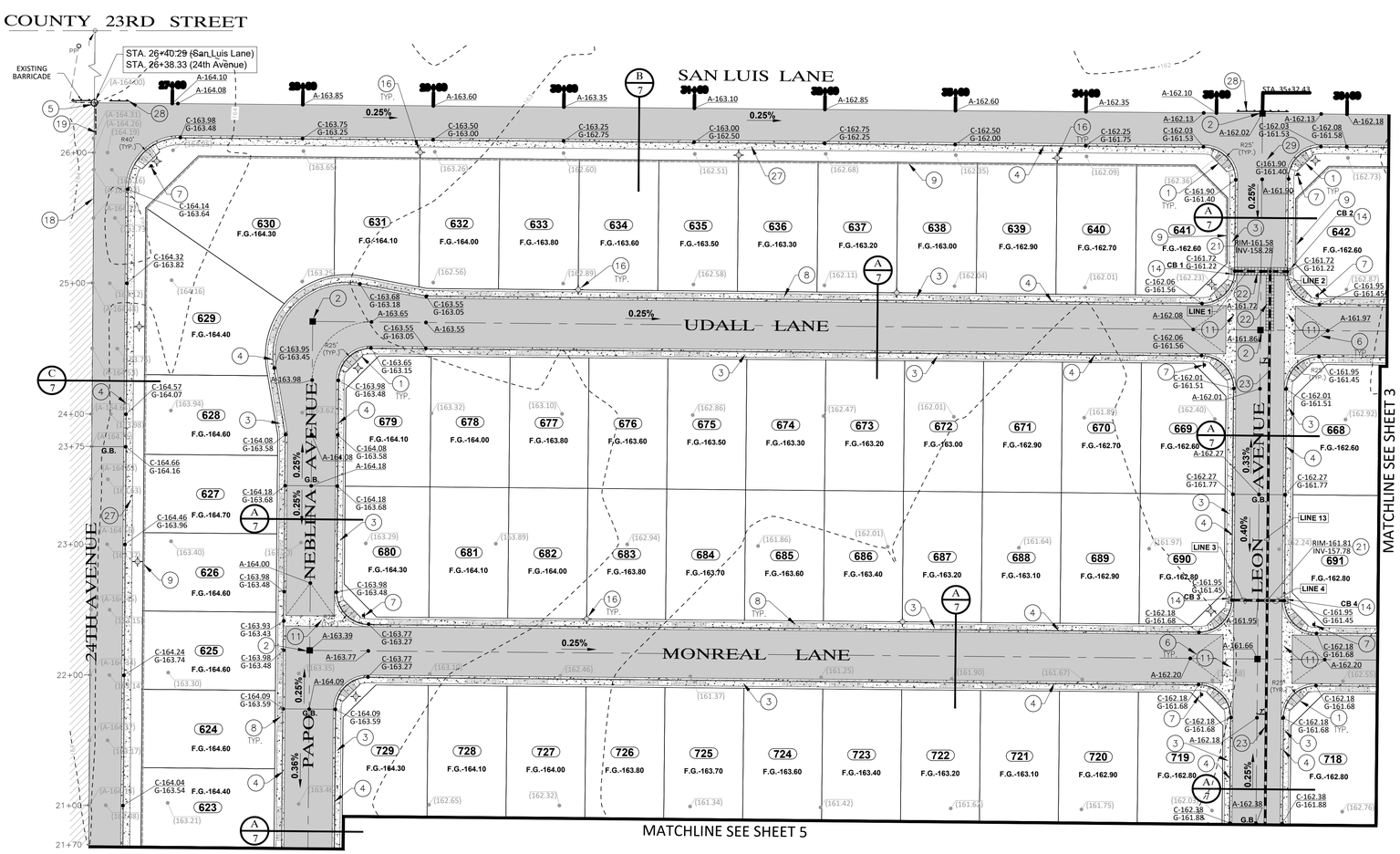
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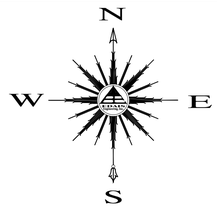
CHECKED: NKE

PROJECT: 21-028

SHEET NUMBER 1

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)





SCALE: 1"=50'

LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING ASPHALT
- EXISTING VERTICAL CURB AND GUTTER
- NEW ASPHALT
- NEW CMU WALL
- FOUND MONUMENT (TYPE AS SHOWN) INDICATES BRASS CAP
- B.C.
- (158.57) EXISTING NATURAL SOIL ELEVATION
- (A-159.03) EXISTING ASPHALT ELEVATION
- (C-157.63) (G-157.13) EXISTING CURB & GUTTER ELEVATION
- 100 NEW LOT NUMBER
- A.P.N. ASSESSOR PARCEL NUMBER
- Y.C.R. YUMA COUNTY RECORDER
- 100 NEW LOT NUMBER
- A-122.50 NEW ASPHALT ELEVATION
- C-159.98 G-159.48 NEW CURB & GUTTER ELEVATION
- -0.2% NEW SLOPE
- NEW STREET LIGHT
- 4:1 RETENTION SLOPE
- GRADE BREAK
- H.W.E HIGH WATER ELEVATION
- NEW STREET MONUMENT AS PER YUMA CITY OF YUMA STD. No. 04-030 & 04-035
- NEW SUBDIVISION BOUNDARY MONUMENT AS PER CITY OF YUMA STD. DETAIL No. 04-015
- NEW DRIVEWAY
- NEW DOUBLE FACED STREET SIGN W/STOP SIGN
- F.G. FINISH GRADE ELEVATION

KEYNOTES

1. NEW CONCRETE SIDEWALK RAMP AS PER CITY OF YUMA STD. NO. 3-145
2. NEW STREET MONUMENT AS PER CITY OF YUMA STD. NO. 4-030
3. NEW 4' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
4. NEW VERTICAL CURB & GUTTER AS PER CITY OF YUMA STD. NO 3-060
5. EXISTING STREET MONUMENT
6. NEW CROWN TRANSITION AS SHOWN ON THE PLANS
7. NEW DOUBLE FACED STREET SIGN & STOP SIGN AS PER CITY OF YUMA STD. NO. 8-005 & 8-020
8. NEW 18' DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
9. NEW 6' HIGH (AS MEASURED FROM THE HIGHER GROUND ELEVATION SIDE OF WALL) CMU WALL AS PER CITY OF YUMA STD. NO 1-015.
10. NEW BOUNDARY MONUMENT AS PER CITY OF YUMA STD. NO. 4-015
11. NEW 8' CROSS VALLEY GUTTER AS PER CITY OF YUMA STD. NO. 3-095 (SIZE AS PER PLANS)
12. NEW 4' WIDE CONCRETE SPILLWAY AS PER DETAIL E/7
13. NEW 40' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
14. NEW CITY OF YUMA STANDARD NO. 11-015 TYPE C CATCH BASIN
15. INSTALL NEW 4"X4" FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-160
16. NEW STREET LIGHT BY DEVELOPER AS PER CITY OF YUMA STANDARD NO. 7-010 & 7-040
17. NEW HEADWALL AS PER DETAIL D/7
18. SAWCUT EXISTING PAVEMENT & MATCH NEW PAVEMENT AS PER DETAIL H/7
19. EXISTING BARRICADE TO BE REMOVED
20. NOT USE
21. NEW STORMDRAIN MANHOLE AS PER YUMA COUNTY STD. NO. 5-035
22. NEW CONCRETE CAP (100 LF) AS PER DETAIL G/7
23. NEW ADS-N-12 WT IB STORMDRAIN PIPE (SIZE AS PER PLAN)
24. NEW 26' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
25. NEW DOUBLE FACED STREET SIGN AS PER CITY OF YUMA STD. NO. 8-005 & 8-020
26. NEW 8' HIGH CMU WALL AS PER DETAIL C/7 J/7
27. NEW 5' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
28. NEW TYPE III BARRICADE AS PER CITY OF YUMA STD. NO. 1-045
29. NEW 18" STOP BAR

STORM DRAIN LINES & CATCH BASIN

#LINE	DESCRIPTION	SLOPE
LINE 1		
LINE 3	NEW 27 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 5		
LINE 7		
LINE 9		
LINE 2		
LINE 4	NEW 13 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 6		
LINE 8		
LINE 10		
LINE 11	NEW 4 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 12	NEW 35 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 13	NEW 252 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 14	NEW 252 LF 30" ADS N-12 WT IB STORM DRAIN PIPE	0.21%
LINE 15	NEW 252 LF 36" ADS N-12 WT IB STORM DRAIN PIPE	0.15%
LINE 16	NEW 252 LF 42" ADS N-12 WT IB STORM DRAIN PIPE	0.10%
LINE 17	NEW 59 LF 42" ADS N-12 WT IB STORM DRAIN PIPE	0.11%
LINE 18	NEW 699 LF 30" ADS N-12 WT IB STORM DRAIN PIPE	0.15%
LINE 19	NEW 58 LF 48" ADS N-12 WT IB STORM DRAIN PIPE	0.10%

CATCH BASIN NO.	RIM	INVERT
CB 1	161.22	158.33
CB 2	161.22	158.31
CB 3	161.45	157.83
CB 4	161.45	158.81
CB 5	161.68	157.30
CB 6	161.68	158.28
CB 7	161.90	157.01
CB 8	161.90	156.99
CB 9	161.72	156.67
CB 10	161.72	156.65
CB 11	161.38	157.66
CB 12	161.38	157.64

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

1	
2	
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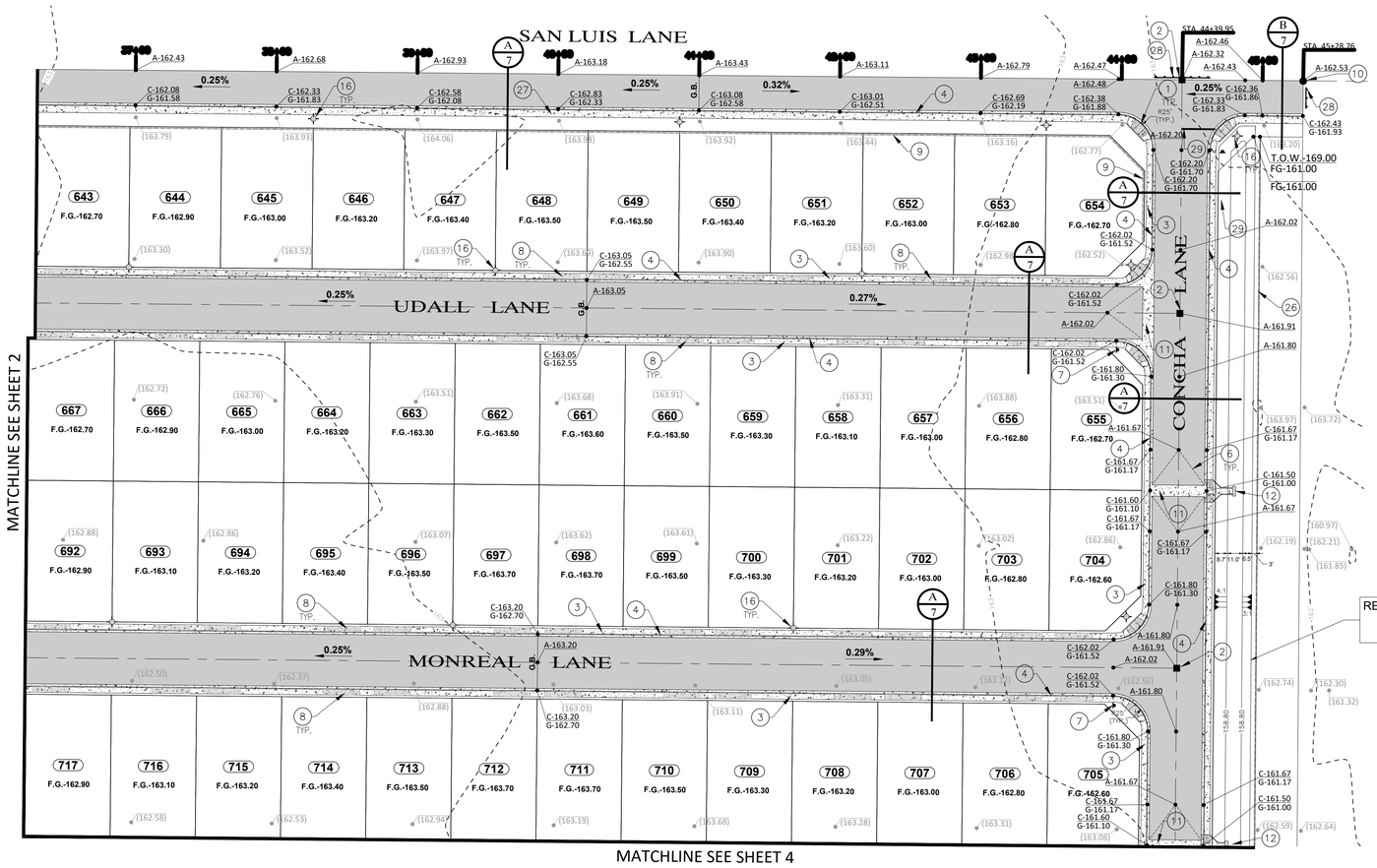
PAVING AND GRADING PLAN

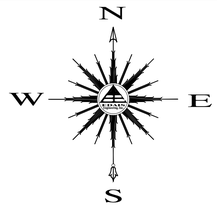
LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

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Yuma, AZ 85365
najeh@edaisgroup.com (928) 314-3566
www.edaisengineering.com

Najeh K. Edais
26844
NAJEH K. EDAIS
Date Signed 01/08/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER 2





SCALE: 1"=50'

LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING ASPHALT
- EXISTING VERTICAL CURB AND GUTTER
- NEW ASPHALT
- NEW CMU WALL
- FOUND MONUMENT (TYPE AS SHOWN) INDICATES BRASS CAP
- (158.57) EXISTING NATURAL SOIL ELEVATION
- (A-159.03) EXISTING ASPHALT ELEVATION
- (C-157.63 / G-157.13) EXISTING CURB & GUTTER ELEVATION
- 100 NEW LOT NUMBER
- A.P.N. ASSESSOR PARCEL NUMBER
- Y.C.R. YUMA COUNTY RECORDER
- 100 NEW LOT NUMBER
- A-122.50 NEW ASPHALT ELEVATION
- C-159.98 / G-159.48 NEW CURB & GUTTER ELEVATION
- -0.2% NEW SLOPE
- NEW STREET LIGHT
- 4:1 RETENTION SLOPE
- GRADE BREAK
- H.W.E HIGH WATER ELEVATION
- NEW STREET MONUMENT AS PER YUMA CITY OF YUMA STD. No. 04-030 & 04-035
- NEW SUBDIVISION BOUNDARY MONUMENT AS PER CITY OF YUMA STD. DETAIL No. 04-015
- NEW DRIVEWAY
- NEW DOUBLE FACED STREET SIGN W/STOP SIGN
- F.G. FINISH GRADE ELEVATION

KEYNOTES

1. NEW CONCRETE SIDEWALK RAMP AS PER CITY OF YUMA STD. NO. 3-145
2. NEW STREET MONUMENT AS PER CITY OF YUMA STD. NO. 4-030
3. NEW 4' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
4. NEW VERTICAL CURB & GUTTER AS PER CITY OF YUMA STD. NO 3-060
5. EXISTING STREET MONUMENT
6. NEW CROWN TRANSITION AS SHOWN ON THE PLANS
7. NEW DOUBLE FACED STREET SIGN & STOP SIGN AS PER CITY OF YUMA STD. NO. 8-005 & 8-020
8. NEW 18' DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
9. NEW 6' HIGH (AS MEASURED FROM THE HIGHER GROUND ELEVATION SIDE OF WALL) CMU WALL AS PER CITY OF YUMA STD. NO 1-015.
10. NEW BOUNDARY MONUMENT AS PER CITY OF YUMA STD. NO. 4-015
11. NEW 8' CROSS VALLEY GUTTER AS PER CITY OF YUMA STD. NO. 3-095 (SIZE AS PER PLANS)
12. NEW 4' WIDE CONCRETE SPILLWAY AS PER DETAIL (E/7)
13. NEW 40' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
14. NEW CITY OF YUMA STANDARD NO. 11-015 TYPE C CATCH BASIN
15. INSTALL NEW 4"X4" FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-160
16. NEW STREET LIGHT BY DEVELOPER AS PER CITY OF YUMA STANDARD NO. 7-010 & 7-040
17. NEW HEADWALL AS PER DETAIL (D/7)
18. SAWCUT EXISTING PAVEMENT & MATCH NEW PAVEMENT AS PER DETAIL (H/7)
19. EXISTING BARRICADE TO BE REMOVED
20. NOT USE
21. NEW STORMDRAIN MANHOLE AS PER YUMA COUNTY STD. NO. 5-035
22. NEW CONCRETE CAP (100 LF) AS PER DETAIL (G/7)
23. NEW ADS-N-12 WT IB STORMDRAIN PIPE (SIZE AS PER PLAN)
24. NEW 26' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
25. NEW DOUBLE FACED STREET SIGN AS PER CITY OF YUMA STD. NO. 8-005 & 8-020
26. NEW 8' HIGH CMU WALL AS PER DETAIL (C/7) (J/7)
27. NEW 5' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
28. NEW TYPE III BARRICADE AS PER CITY OF YUMA STD. NO. 1-045
29. NEW 18" STOP BAR

STORM DRAIN LINES & CATCH BASIN

#LINE	DESCRIPTION	SLOPE
LINE 1, LINE 3, LINE 5, LINE 7	NEW 27 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 9, LINE 2, LINE 4, LINE 6, LINE 8, LINE 10	NEW 13 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 11	NEW 4 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 12	NEW 35 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 13	NEW 252 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 14	NEW 252 LF 30" ADS N-12 WT IB STORM DRAIN PIPE	0.21%
LINE 15	NEW 252 LF 36" ADS N-12 WT IB STORM DRAIN PIPE	0.15%
LINE 16	NEW 252 LF 42" ADS N-12 WT IB STORM DRAIN PIPE	0.10%
LINE 17	NEW 59 LF 42" ADS N-12 WT IB STORM DRAIN PIPE	0.11%
LINE 18	NEW 699 LF 30" ADS N-12 WT IB STORM DRAIN PIPE	0.15%
LINE 19	NEW 58 LF 48" ADS N-12 WT IB STORM DRAIN PIPE	0.10%

CATCH BASIN NO.	RIM	INVERT
CB 1	161.22	158.33
CB 2	161.22	158.31
CB 3	161.45	157.83
CB 4	161.45	158.81
CB 5	161.68	157.30
CB 6	161.68	158.28
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CB 10	161.72	156.65
CB 11	161.38	157.66
CB 12	161.38	157.64

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
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(OUTSIDE MARICOPA COUNTY)

REVISIONS

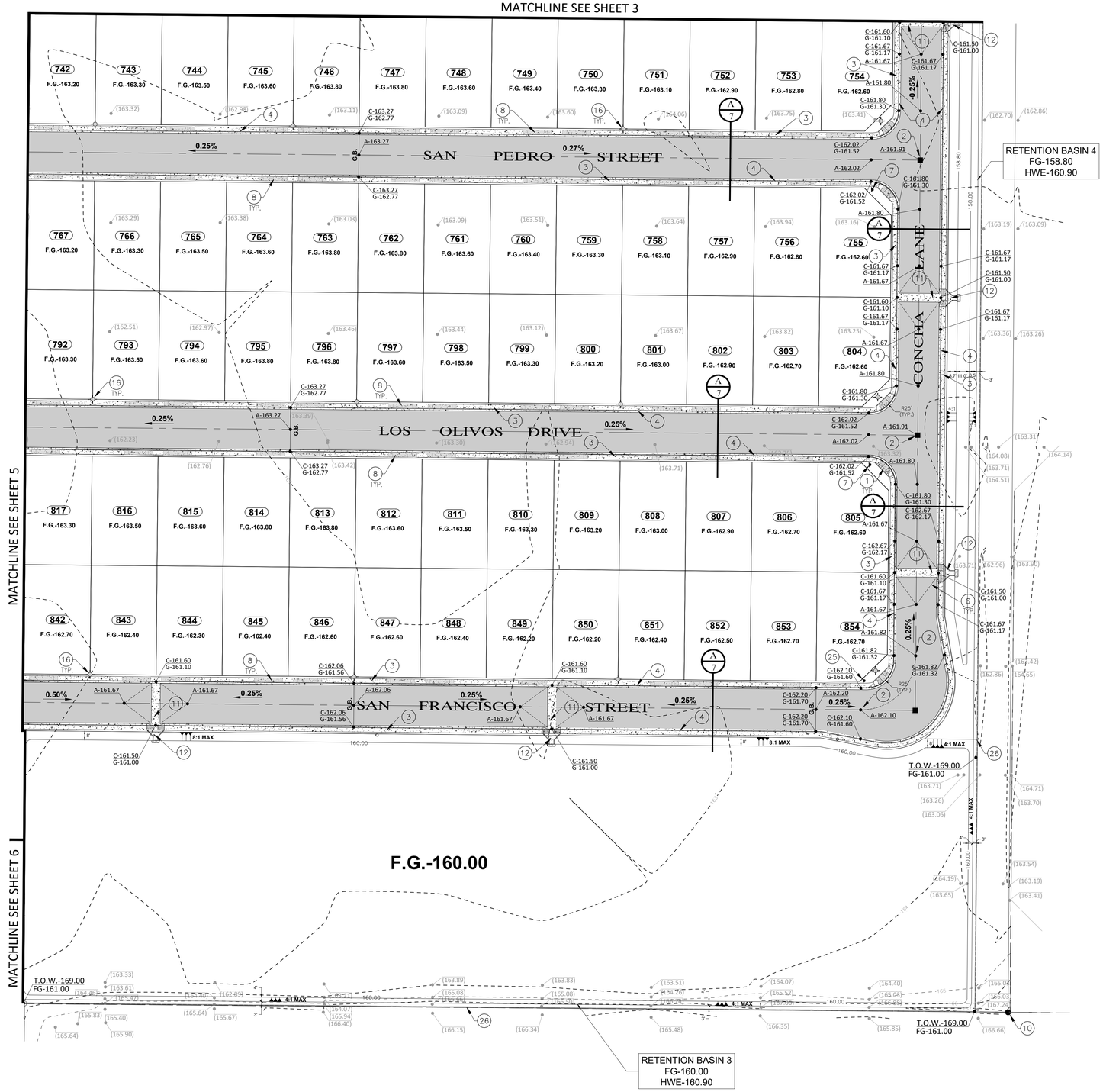
PAVING AND GRADING PLAN

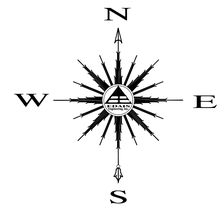
LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 4E
Yuma, AZ 85365
(928) 344-3568
najeh@edaisgroup.com
www.edaisengineering.com

Registered Engineering Professional
26844
NAJEH K. EDAIS
Date Signed 09/18/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER 3





SCALE: 1"=50'

LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING ASPHALT
- EXISTING VERTICAL CURB AND GUTTER
- NEW ASPHALT
- NEW CMU WALL
- FOUND MONUMENT (TYPE AS SHOWN) INDICATES BRASS CAP
- (158.57) EXISTING NATURAL SOIL ELEVATION
- (A-159.03) EXISTING ASPHALT ELEVATION
- (C-157.63) (G-157.13) EXISTING CURB & GUTTER ELEVATION
- 100 NEW LOT NUMBER
- A.P.N. ASSESSOR PARCEL NUMBER
- Y.C.R. YUMA COUNTY RECORDER
- 100 NEW LOT NUMBER
- A-122.50 C-159.98 G-159.48 NEW ASPHALT ELEVATION / NEW CURB & GUTTER ELEVATION
- -0.2% NEW SLOPE
- NEW STREET LIGHT
- 4:1 RETENTION SLOPE
- GRADE BREAK
- H.W.E HIGH WATER ELEVATION
- NEW STREET MONUMENT AS PER YUMA CITY OF YUMA STD. No. 04-030 & 04-035
- NEW SUBDIVISION BOUNDARY MONUMENT AS PER CITY OF YUMA STD. DETAIL No. 04-015
- NEW DRIVEWAY
- NEW DOUBLE FACED STREET SIGN W/STOP SIGN
- F.G. FINISH GRADE ELEVATION

KEYNOTES

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2. NEW STREET MONUMENT AS PER CITY OF YUMA STD. NO. 4-030
3. NEW 4' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
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7. NEW DOUBLE FACED STREET SIGN & STOP SIGN AS PER CITY OF YUMA STD. NO. 8-005 & 8-020
8. NEW 18' DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
9. NEW 6' HIGH (AS MEASURED FROM THE HIGHER GROUND ELEVATION SIDE OF WALL) CMU WALL AS PER CITY OF YUMA STD. NO 1-015.
10. NEW BOUNDARY MONUMENT AS PER CITY OF YUMA STD. NO. 4-015
11. NEW 8' CROSS VALLEY GUTTER AS PER CITY OF YUMA STD. NO. 3-095 (SIZE AS PER PLANS)
12. NEW 4' WIDE CONCRETE SPILLWAY AS PER DETAIL (E/7)
13. NEW 40' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
14. NEW CITY OF YUMA STANDARD NO. 11-015 TYPE C CATCH BASIN
15. INSTALL NEW 4"X4" FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-160
16. NEW STREET LIGHT BY DEVELOPER AS PER CITY OF YUMA STANDARD NO. 7-010 & 7-040
17. NEW HEADWALL AS PER DETAIL (D/7)
18. SAWCUT EXISTING PAVEMENT & MATCH NEW PAVEMENT AS PER DETAIL (H/7)
19. EXISTING BARRICADE TO BE REMOVED
20. NOT USE
21. NEW STORMDRAIN MANHOLE AS PER YUMA COUNTY STD. NO. 5-035
22. NEW CONCRETE CAP (100 LF) AS PER DETAIL (G/7)
23. NEW ADS-N-12 WT IB STORMDRAIN PIPE (SIZE AS PER PLAN)
24. NEW 26' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
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STORM DRAIN LINES & CATCH BASIN

#LINE	DESCRIPTION	SLOPE
LINE 1	NEW 27 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 3		
LINE 5		
LINE 7		
LINE 9		
LINE 2	NEW 13 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 4		
LINE 6		
LINE 8		
LINE 10		
LINE 11	NEW 4 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 12	NEW 35 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 13	NEW 252 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 14	NEW 252 LF 30" ADS N-12 WT IB STORM DRAIN PIPE	0.21%
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LINE 16	NEW 252 LF 42" ADS N-12 WT IB STORM DRAIN PIPE	0.10%
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CATCH BASIN NO.	RIM	INVERT
CB 1	161.22	158.33
CB 2	161.22	158.31
CB 3	161.45	157.83
CB 4	161.45	158.81
CB 5	161.68	157.30
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CB 10	161.72	156.65
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REVISIONS

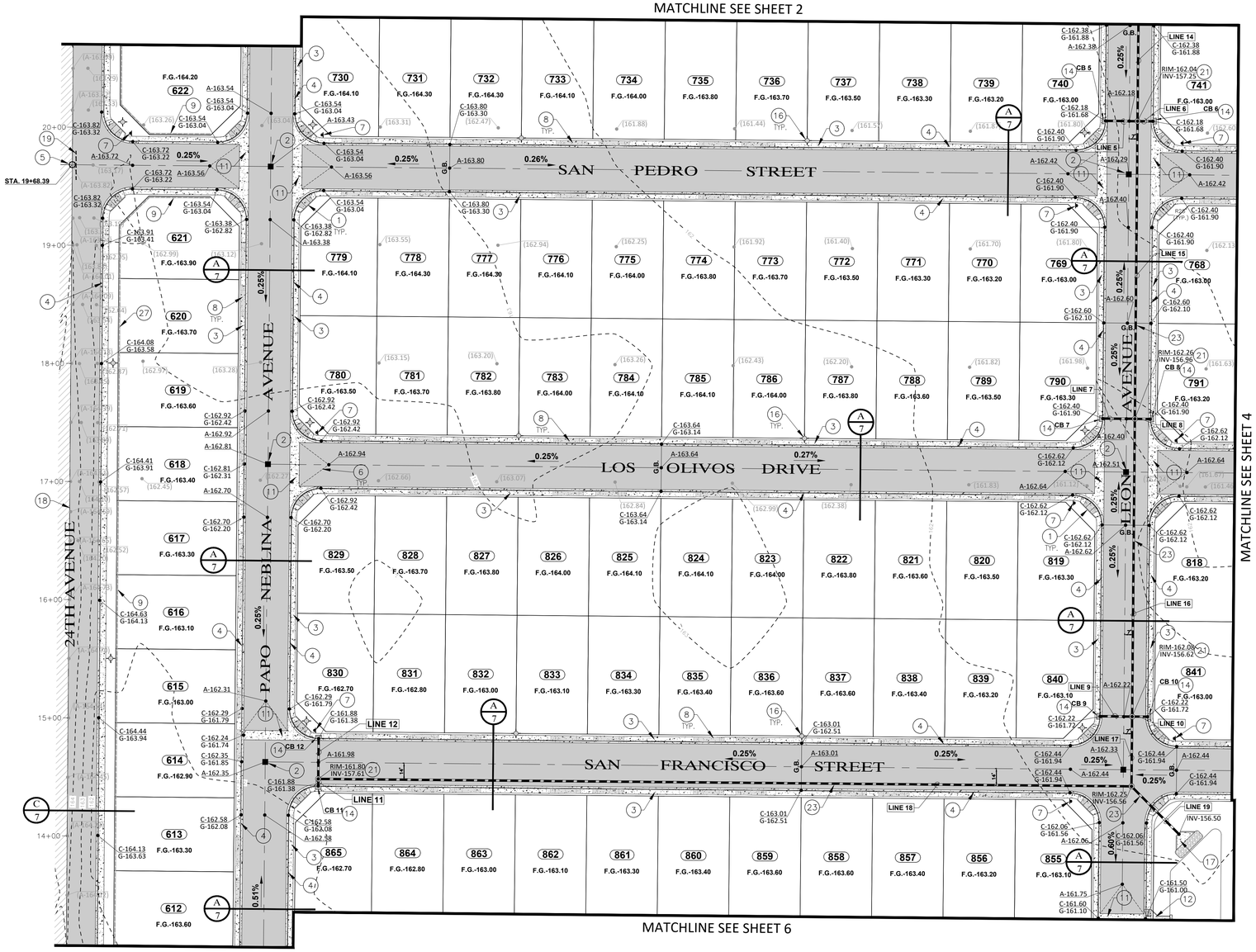
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Yuma, AZ 85365
(928) 314-3566
najeh@edaisgroup.com
www.edaisengineering.com

Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 01/08/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER 4



LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING ASPHALT
- EXISTING VERTICAL CURB AND GUTTER
- NEW ASPHALT
- NEW CMU WALL
- FOUND MONUMENT (TYPE AS SHOWN) INDICATES BRASS CAP
- (158.57) EXISTING NATURAL SOIL ELEVATION
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- (100) NEW LOT NUMBER
- A-122.50 NEW ASPHALT ELEVATION
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- -0.2% NEW SLOPE
- NEW STREET LIGHT
- 4:1 RETENTION SLOPE
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- NEW STREET MONUMENT AS PER YUMA CITY OF YUMA STD. No. 04-030 & 04-035
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KEYNOTES

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14. NEW CITY OF YUMA STANDARD NO. 11-015 TYPE C CATCH BASIN
15. INSTALL NEW 4"X4" FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-160
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22. NEW CONCRETE CAP (100 LF) AS PER DETAIL (G/7)
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29. NEW 18" STOP BAR

STORM DRAIN LINES & CATCH BASIN

#LINE	DESCRIPTION	SLOPE
LINE 1		
LINE 3	NEW 27 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
LINE 5		
LINE 7		
LINE 9		
LINE 2		
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LINE 6		
LINE 8		
LINE 10		
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CATCH BASIN NO.	RIM	INVERT
CB 1	161.22	158.33
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SCALE: 1"=50'

REVISIONS

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3075 S. Ave. 48
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Najeh K. Edais
Registered Professional Engineer
26844
NAJEH K. EDAIS
Civil
ARIZONA, U.S.A.
EXPIRES 3/31/26

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028

SHEET NUMBER
5



N

W E

S

SCALE: 1"=50'

LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING ASPHALT
- EXISTING VERTICAL CURB AND GUTTER
- NEW ASPHALT
- NEW CMU WALL
- FOUND MONUMENT (TYPE AS SHOWN) INDICATES BRASS CAP
- EXISTING NATURAL SOIL ELEVATION
- EXISTING ASPHALT ELEVATION
- EXISTING CURB & GUTTER ELEVATION
- NEW LOT NUMBER
- A.P.N. ASSESSOR PARCEL NUMBER
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- NEW LOT NUMBER
- NEW ASPHALT ELEVATION
- NEW SLOPE
- NEW STREET LIGHT
- RETENTION SLOPE
- GRADE BREAK
- HIGH WATER ELEVATION
- DETAIL No. 04-015
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KEYNOTES

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LINE 11	NEW 4 LF 24" ADS N-12 WT IB STORM DRAIN PIPE	0.20%
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2	
3	
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6	

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Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 07/08/24
ARIZONA, U.S.A.
EXPIRES 3/31/26

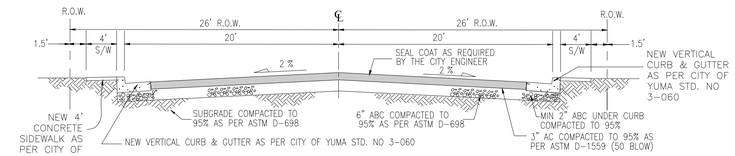
DATE: APR 2024

DRAWN: LPR

CHECKED: NKE

PROJECT: 21-028

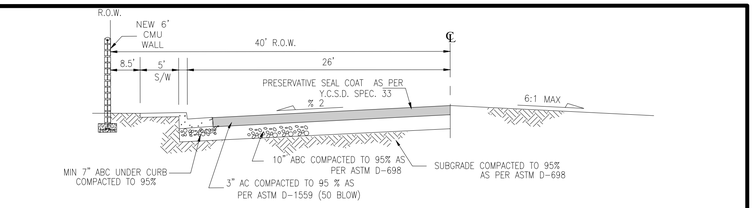
SHEET NUMBER 6



LOCAL RESIDENTIAL STREETS

(CITY OF YUMA STD-2-030 MODIFIED) NTS

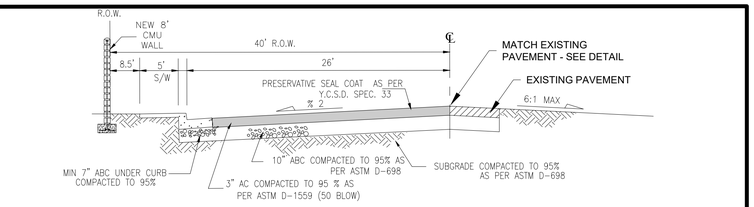
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SAN LUIS LANE

(CITY OF YUMA STD-2-031 MODIFIED) NTS

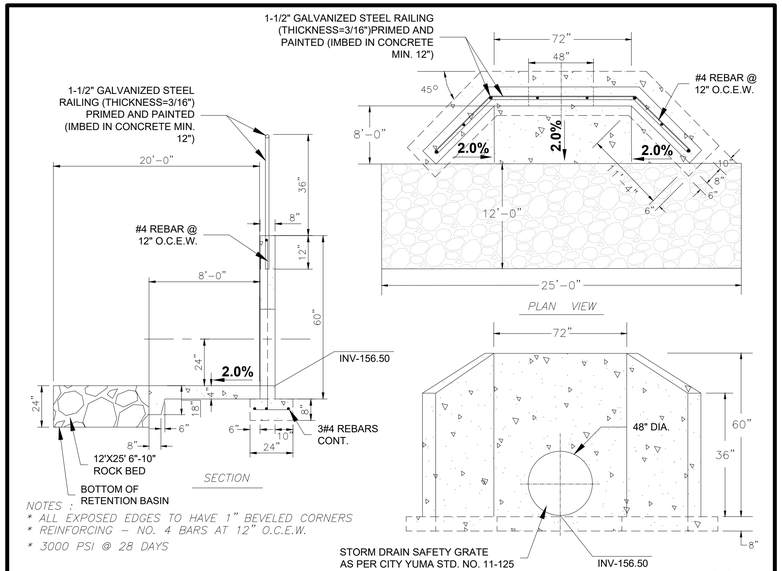
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24TH AVENUE

(CITY OF YUMA STD-2-031 MODIFIED) NTS

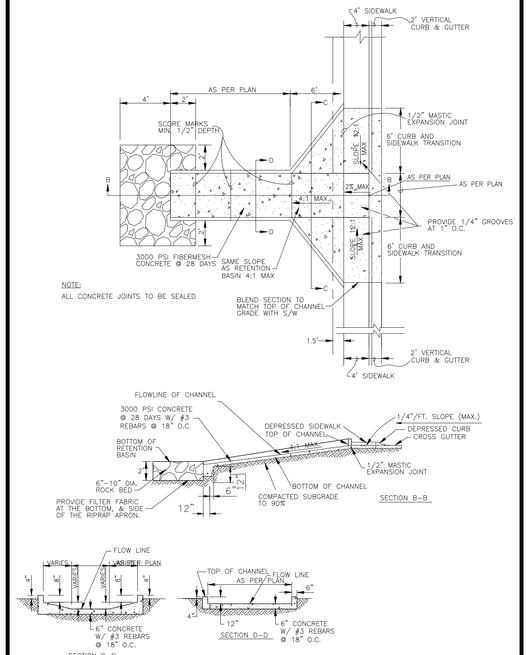
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HEADWALL DETAIL

NTS

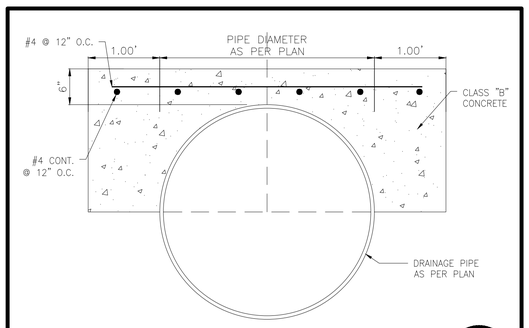
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CONCRETE SPILLWAY

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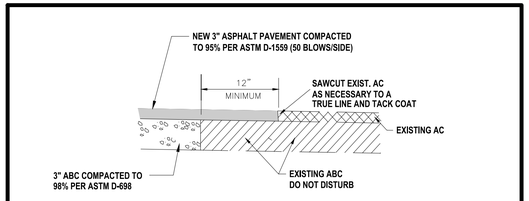
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PIPE ENCASEMENT DETAIL

NTS

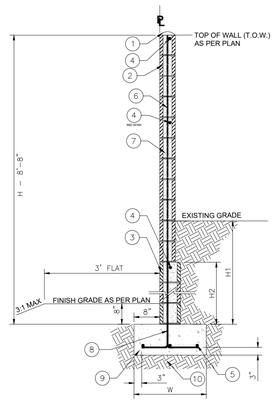
G 7



SAWCUT DETAIL

NTS

H 7



RETAINING WALL SCHEDULE				
WALL No.	H	H1	H2	W
RW#1	8'-8"	3'-4"	2'-0"	2'-4"
RW#2	8'-8"	2'-8"	1'-4"	2'-2"
RW#3	8'-8"	2'-0"	0'-0"	2'-0"
RW#4	8'-8"	1'-4"	0'-0"	2'-0"
RW#5	8'-8"	0'-8"	0'-0"	2'-0"

KEY NOTE :

1. CONCRETE CAP
2. 6x8x16 CMU WALL
3. 8x8x16 CMU WALL
4. #4 CONT. REBAR HORIZONTAL
5. 3- #4 CONT. REBAR
6. #4 VERTICAL REINFORCEMENT @ 24" O.C. IN
7. GROUTED CELLS
8. ALTERNATE TAILS
9. NEW CONCRETE FOOTING (2500PSI @28 DAYS)
10. SUBGRADE COMPACTED TO 95%

CMU WALL @ EAST AND SOUTH BOUNDARY LINE

NTS

J 7

REVISIONS

1	
2	
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PAVING AND GRADING DETAILS

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 4E
Yuma, AZ 85365
najeh@Edaisgroup.com (928) 344-3566
www.edaisengineering.com

NAJEH K. EDAIS
26844
REGISTERED ENGINEER
Date Signed 10/08/24
ARIZONA, U.S.A.
EXPIRES 3/31/26

DATE: APR 2024

DRAWN: LPR

CHECKED: NKE

PROJECT: 21-028

SHEET NUMBER 7

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

STRIPING LEGEND

6CY — NEW 6" COMBINATION YELLOW

6SDY — NEW 6" SOLID DOUBLE YELLOW

18SW — NEW 18" STOP BAR

6SW — NEW 6" SOLID WHITE

6SY — NEW 6" SOLID YELLOW

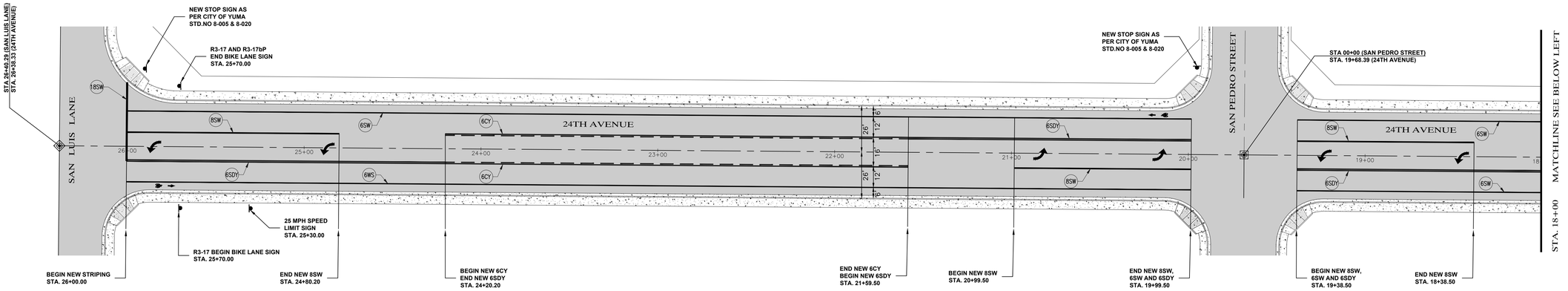
8SW — NEW 8" SOLID WHITE

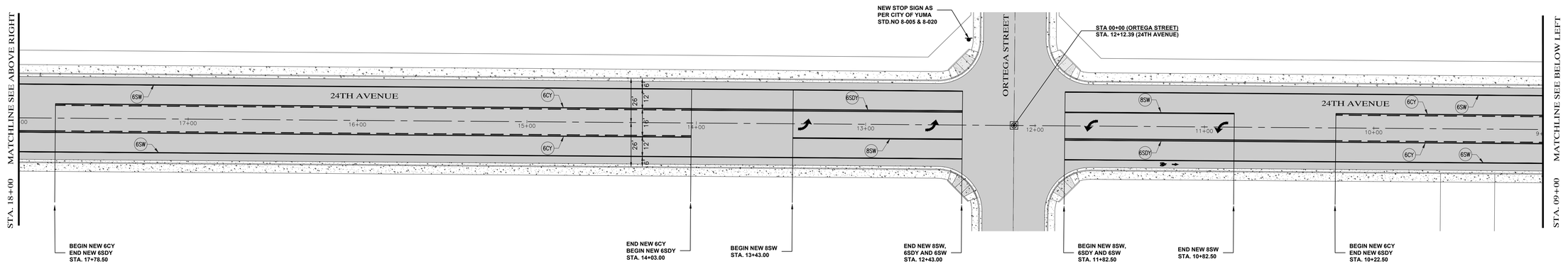
BIKE LANE MARKING AS PER MUTCD CHAPTER 9

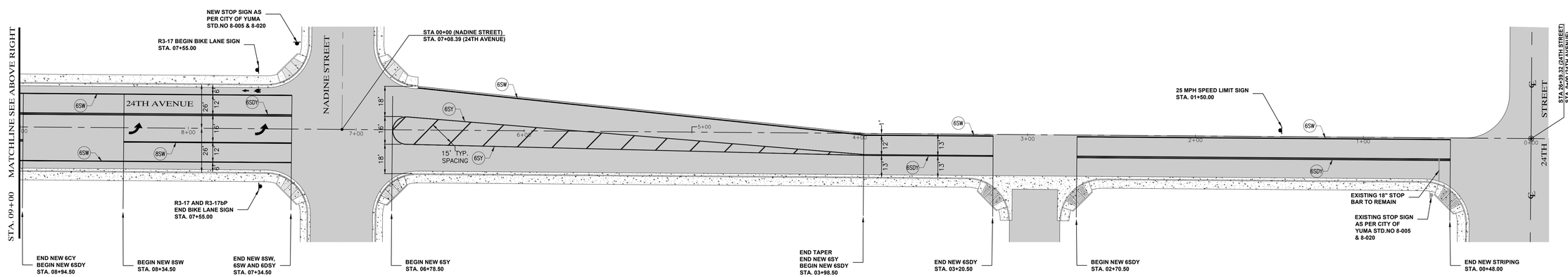
SCALE: 1"=30'

NOTES

1. STRIPING TO BE DONE BY THE CONTRACTOR AND SHALL BE ACOMPLISHED BY ANY METHOD APPROVED BY CITY OF SAN LUIS
2. STRIPING TO BE AS PER PLAN, USE 100 MM. HOT SPRAYED THERMOPLASTIC FOR ALL STRIPING MARKING
3. USE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)







REVISIONS	
1	
2	
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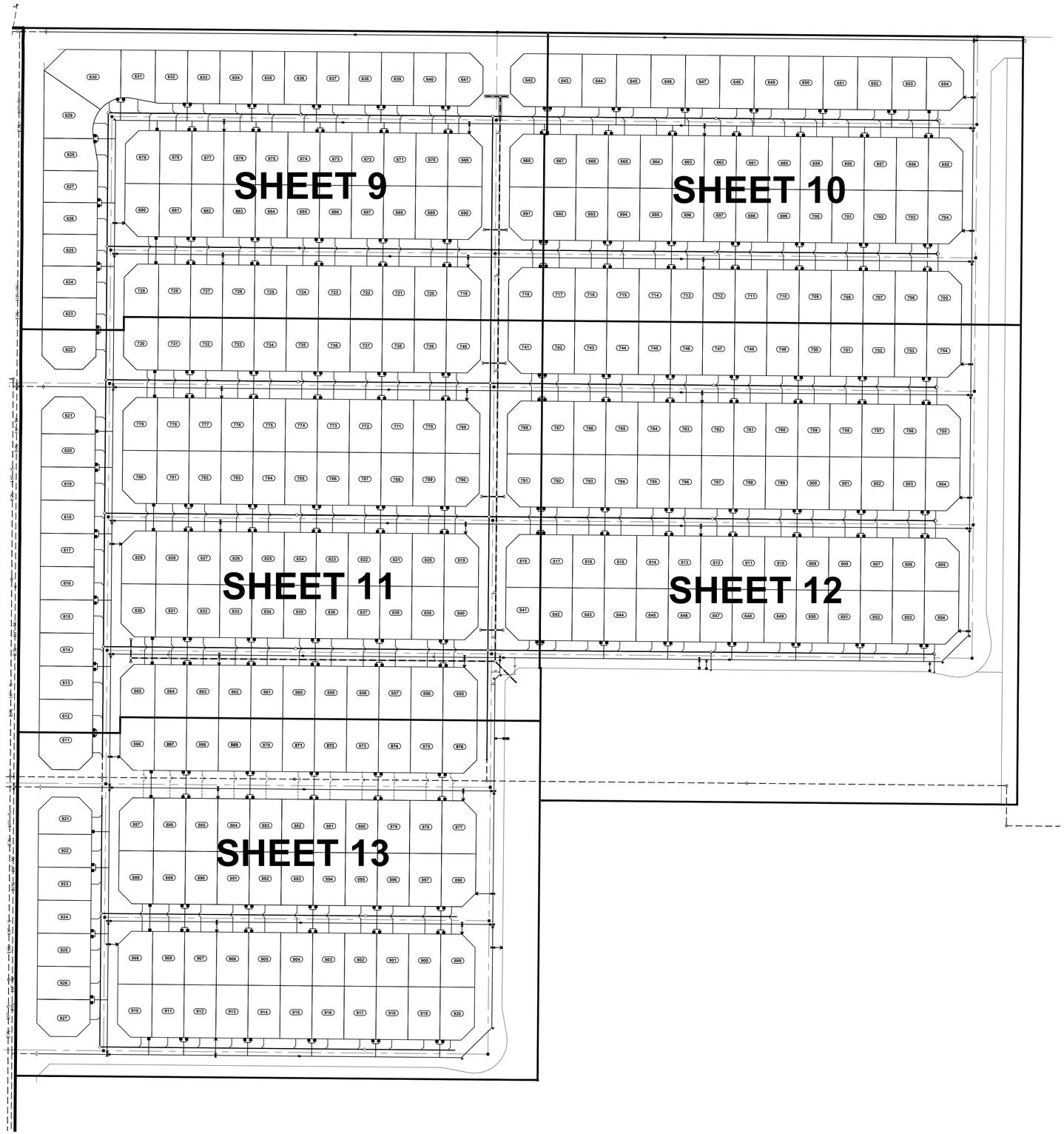
24TH AVE. STRIPING PLAN

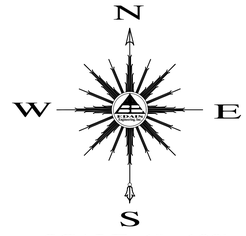
LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 4E
Yuma, AZ 85365
(928) 344-3566
najeb@Edaisgroup.com
www.edaisengineering.com

Professional Engineer — 26844 — NAJEH K. EDAIS — Date Signed 10/08/24 — ARIZONA, U.S.A. — EXPIRES: 3/31/26

DATE:	2024
DRAWN:	PLBR
CHECKED:	NKE
PROJECT:	21-028
SHEET NUMBER	7.1





SCALE: 1"=100'

REVISIONS

WATER AND
SEWER PLAN
KEY MAP

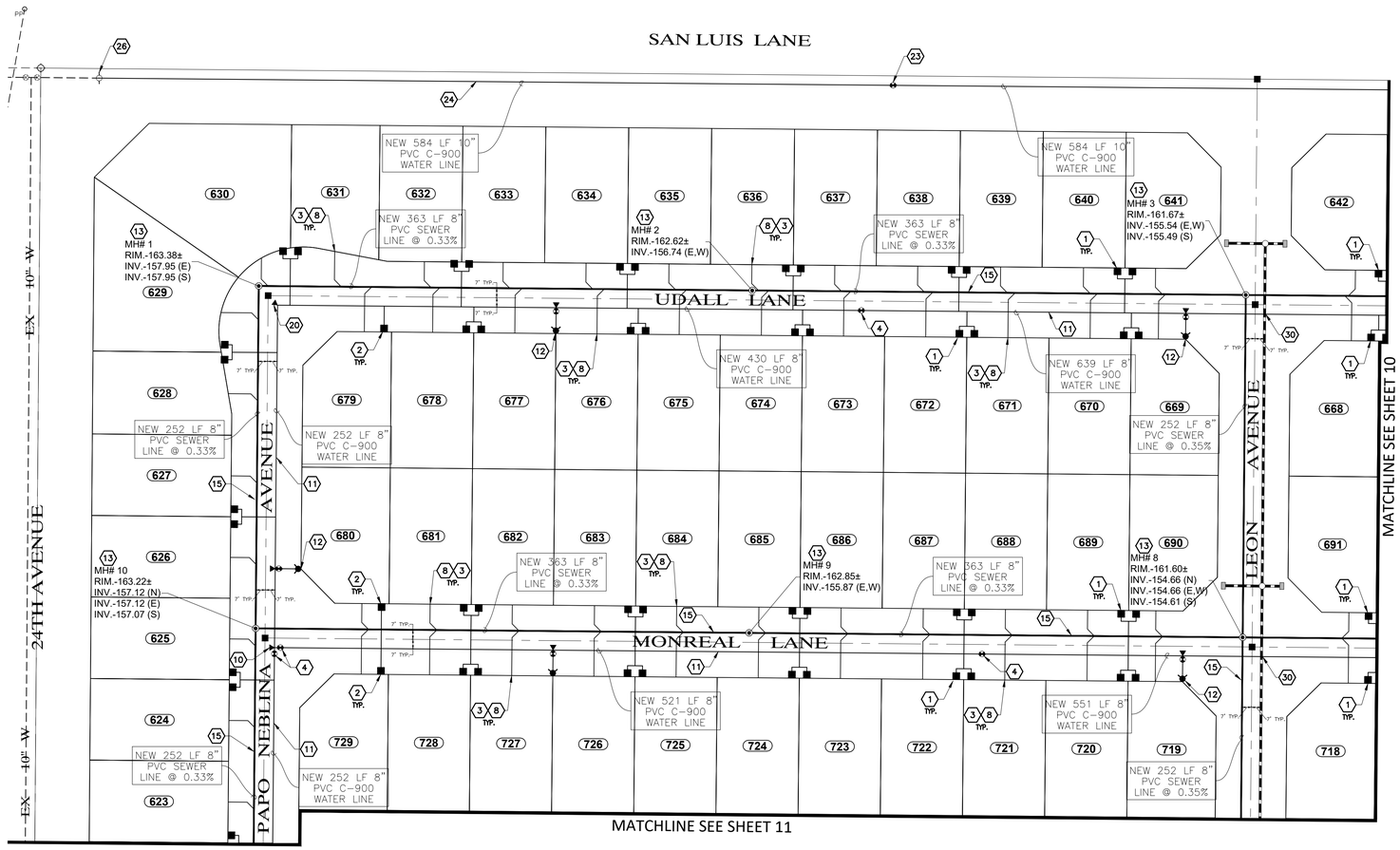
LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

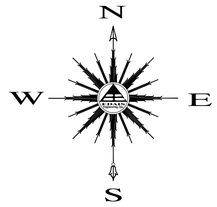
EDAIS
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Yuma, Arizona 85365
najeh@Edaisgroup.com (928) 344-3566
www.edaisengineering.com



DATE: APR-2024
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(OUTSIDE MARICOPA COUNTY)





SCALE: 1"=50'

LEGEND

- CENTERLINE
- PROPERTY LINE
- BOUNDARY LINE
- W — EXISTING PVC WATER MAIN
- S — EXISTING PVC SEWER LINE
- W — NEW PVC WATER MAIN
- S — NEW PVC SEWER LINE
- (20) NEW LOT NUMBER
- (146) EXISTING LOT NUMBER
- NEW SEWER SERVICE
- NEW SINGLE WATER SERVICE
- NEW DUAL WATER SERVICE
- NEW 2" BACKFLOW PREVENTOR
- NEW TEMPORARY BLOWOFF VALVE
- NEW FIRE HYDRANT
- NEW FIRE HYDRANT STREET MARKER
- MH NEW MANHOLE
- RIM. NEW RIM ELEVATION
- INV. NEW INVERT ELEVATION
- NEW STREET MONUMENT AS PER YUMA COUNTY STD. No. 4-080
- EXISTING WATER VALVE
- NEW MANHOLE
- NEW CLEANOUT
- NEW THRUST BLOCK
- NEW WATER VALVE

WATER / SEWER CONSTRUCTION KEYNOTES

1. INSTALL 1" DUAL WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-045 & 5-055,
2. INSTALL 1" SINGLE WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035 & 5-055
3. INSTALL 4" SEWER SERVICE (TYP.) PER CITY OF YUMA STD. NO. 6-015
4. INSTALL 8" GATE VALVE W/ V.B. & C. AS PER CITY OF YUMA STD. NO. 5-065 & 5-075
5. INSTALL 8" X 8" CROSS W/THRUST BLOCK AS PER CITY OF YUMA STD.NO. 5-020 & 5-025
6. REMOVE EXISTING BLOW OFF VALVE AND CONNECT TO EXISTING 8" WATER MAIN
7. INSTALL 2" BACKFLOW PREVENTOR W/ CAGE AS PER CITY OF YUMA STD. NO. 5-120
8. CONSTRUCT ALL SEWER SERVICES TO CENTER OF THE LOT UNLESS NOTED OTHERWISE
9. INSTALL 2" WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035
10. INSTALL 8" X 8" TEE W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
11. INSTALL NEW 8" PVC C-900 WATER LINE PER CITY OF YUMA STANDARDS AND SPECIFICIATIONS
12. INSTALL 6" FIRE HYDRANT COMPLETE W/BLUE FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-155, 5-160 & 5-165
13. CONSTRUCT NEW SANITARY SEWER POLYMER MANHOLE WITH GRADE RINGS AS PER CITY OF SAN LUIS SUPPLEMENT TO CITY OF YUMA, AND MAC UNIFORM STANDARD SPECIFICATIONS
14. REMOVE EXISTING SEWER CLEANOUT & CONNECT NEW 8" SEWER LINE TO EXISTING SEWER STUB
15. INSTALL NEW 8" PVC SDR-35 SEWER LINE PER CITY OF YUMA STANDARDS AND SPECIFICATIONS
16. INSTALL TEMPORARY BLOWOFF VALVE AS PER CITY OF YUMA STD. NO. 5-085
17. INSTALL NEW SANITARY SEWER CLEANOUT AS PER CITY OF YUMA STD. NO. 6-005
18. NEW SEWER STUB FOR FUTURE DEVELOPMENT
19. ADJUST MANHOLE TO FINAL GRADE AS PER CITY OF YUMA STD.NO. 6-040
20. INSTALL 8" 90° ELL W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
21. INSTALL 8" 45° BEND W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
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27. EXISTING 4" SEWER SERVICE
28. NEW CLEANOUT AT THE END OF EXISTING 4" SEWER SERVICE
29. ADJUST MANHOLE TO FINAL GRADE AS PER CITY OF YUMA STD.NO. 6-040
30. LOWE WATER LINE 24" BELOW STORM DRAIN PIPE AS PER CITY OF YUMA STD. NO. 5-185

MATERIAL LIST

WATER		
DESCRPTION	UNIT	QTY
1" WATER SERVICE	EA	351
8" GATE VALVE/W V.B. & C.	EA	43
6" FIRE HYDRANT	EA	29
8" X 8" PVC TEE W/THRUST BLOCK	EA	12
8" X 8" PVC CROSS	EA	2
8" X 8" PVC ELL W/THRUST BLOCK	EA	1
8" BLOW OFF VALVE	EA	1
2" BACKFLOW PREVENTOR W/CAGE	EA	1
2" WATER SERVICE	EA	3
WATER CONNECTION	EA	4
8" PVC C-900 WATER MAIN	LF	14,218
8" 45° PVC BEND W/THRUST BLOCK	EA	4
8" X 10" PVC TEE W/THRUST BLOCK	EA	1
10" GATE VALVE/W V.B. & C.	EA	3
10" PVC C-900 WATER MAIN	LF	1,874

SEWER		
DESCRIPTION	UNIT	QTY
4" SEWER SERVICE	EA	331
SEWER MANHOLE	EA	29
SEWER CLEANOUT	EA	4
8" SEWER LINE	LF	12,049

WATER LINE MAXIMUM BENDING ALLOWANCE SCHEDULE

PIPE DIAMETER (IN)	MINIMUM RADIUS (FT)
12"	315'
10"	265'
8"	215'
6"	165'
4"	110'
2"	60'
1"	50'

UTILITY WARNING

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

NOTES:

1. SEE SUBDIVISION PLAT FOR ALL DIMENSIONS.
2. SEE PAVING AND GRADING PLAN FOR ALL GRADES.
3. TRENCHING AND BACKFILLING FOR WATER AND SEWER LINES TO BE IN ACCORDANCE WITH CITY OF YUMA STD. 5-010
4. THE CITY OF SAN LUIS WILL ONLY ACCEPT CLOW OR WATEROUS WB-67 FIRE HYDRANTS.
5. THE CITY OF SAN LUIS REQUIRE THAT ALL FITTINGS TO HAVE MEGA LUG OR APPROVED EQUAL MECHANICAL RESTRAINS AND VERTICAL BENDS TO BE MJ RESTRAINED AT THE BENDS PLUS ONE ADDITIONAL RESTRAINT 20' UPSTREAM AND DOWNSTREAM OF THE BEND.

CALL TWO WORKING DAYS BEFORE YOU DIG
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1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

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WATER AND SEWER PLAN

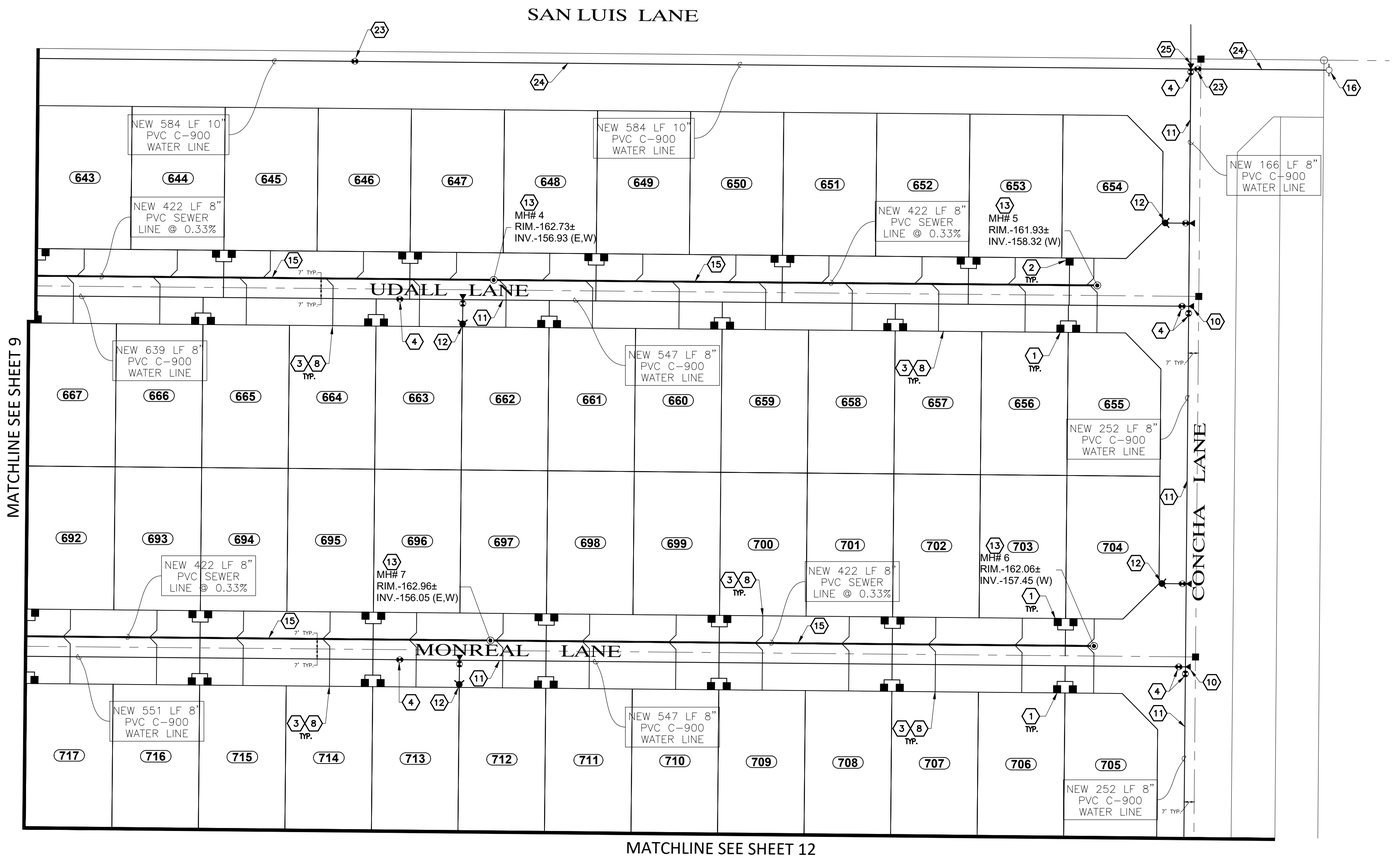
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AND
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NAJEH K. EDAIS
26844
REGISTERED PROFESSIONAL ENGINEER
ARIZONA, U.S.A.
EXPIRES 3/31/26

DATE: APR-2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028

SHEET NUMBER
9



WATER / SEWER CONSTRUCTION KEYNOTES

1. INSTALL 1" DUAL WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-045 & 5-055,
2. INSTALL 1" SINGLE WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035 & 5-055
3. INSTALL 4" SEWER SERVICE (TYP.) PER CITY OF YUMA STD. NO. 6-015
4. INSTALL 8" GATE VALVE W/ V.B. & C. AS PER CITY OF YUMA STD. NO. 5-065 & 5-075
5. INSTALL 8" X 8" CROSS W/THRUST BLOCK AS PER CITY OF YUMA STD.NO. 5-020 & 5-025
6. REMOVE EXISTING BLOW OFF VALVE AND CONNECT TO EXISTING 8" WATER MAIN
7. INSTALL 2" BACKFLOW PREVENTOR W/ CAGE AS PER CITY OF YUMA STD. NO. 5-120
8. CONSTRUCT ALL SEWER SERVICES TO CENTER OF THE LOT UNLESS NOTED OTHERWISE
9. INSTALL 2" WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035
10. INSTALL 8" X 8" TEE W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
11. INSTALL NEW 8" PVC C-900 WATER LINE PER CITY OF YUMA STANDARDS AND SPECIFICIATIONS
12. INSTALL 6" FIRE HYDRANT COMPLETE W/BLUE FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-155, 5-160 & 5-165
13. CONSTRUCT NEW SANITARY SEWER POLYMER MANHOLE WITH GRADE RINGS AS PER CITY OF SAN LUIS SUPPLEMENT TO CITY OF YUMA, AND MAC UNIFORM STANDARD SPECIFICATIONS
14. REMOVE EXISTING SEWER CLEANOUT & CONNECT NEW 8" SEWER LINE TO EXISTING SEWER STUB
15. INSTALL NEW 8" PVC SDR-35 SEWER LINE PER CITY OF YUMA STANDARDS AND SPECIFICATIONS
16. INSTALL TEMPORARY BLOWOFF VALVE AS PER CITY OF YUMA STD. NO. 5-085
17. INSTALL NEW SANITARY SEWER CLEANOUT AS PER CITY OF YUMA STD. NO. 6-005
18. NEW SEWER STUB FOR FUTURE DEVELOPMENT
19. ADJUST MANHOLE TO FINAL GRADE AS PER CITY OF YUMA STD.NO. 6-040
20. INSTALL 8" 90° ELL W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
21. INSTALL 8" 45° BEND W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
22. NEW 4" SEWER SERVICE TO BE CONNECTED TO EXISTING SEWER SERVICE
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30. LOWE WATER LINE 24" BELOW STORM DRAIN PIPE AS PER CITY OF YUMA STD. NO. 5-185

NOTES:

1. FOR LEGEND, WATER/SEWER CONSTRUCTION KEYNOTES AND MATERIAL LIST SEE SHEET 9.
2. SEE SUBDIVISION PLAT FOR ALL DIMENSIONS.
3. SEE PAVING AND GRADING PLAN FOR ALL GRADES.
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N W E S

SCALE: 1"=50'

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REVISIONS

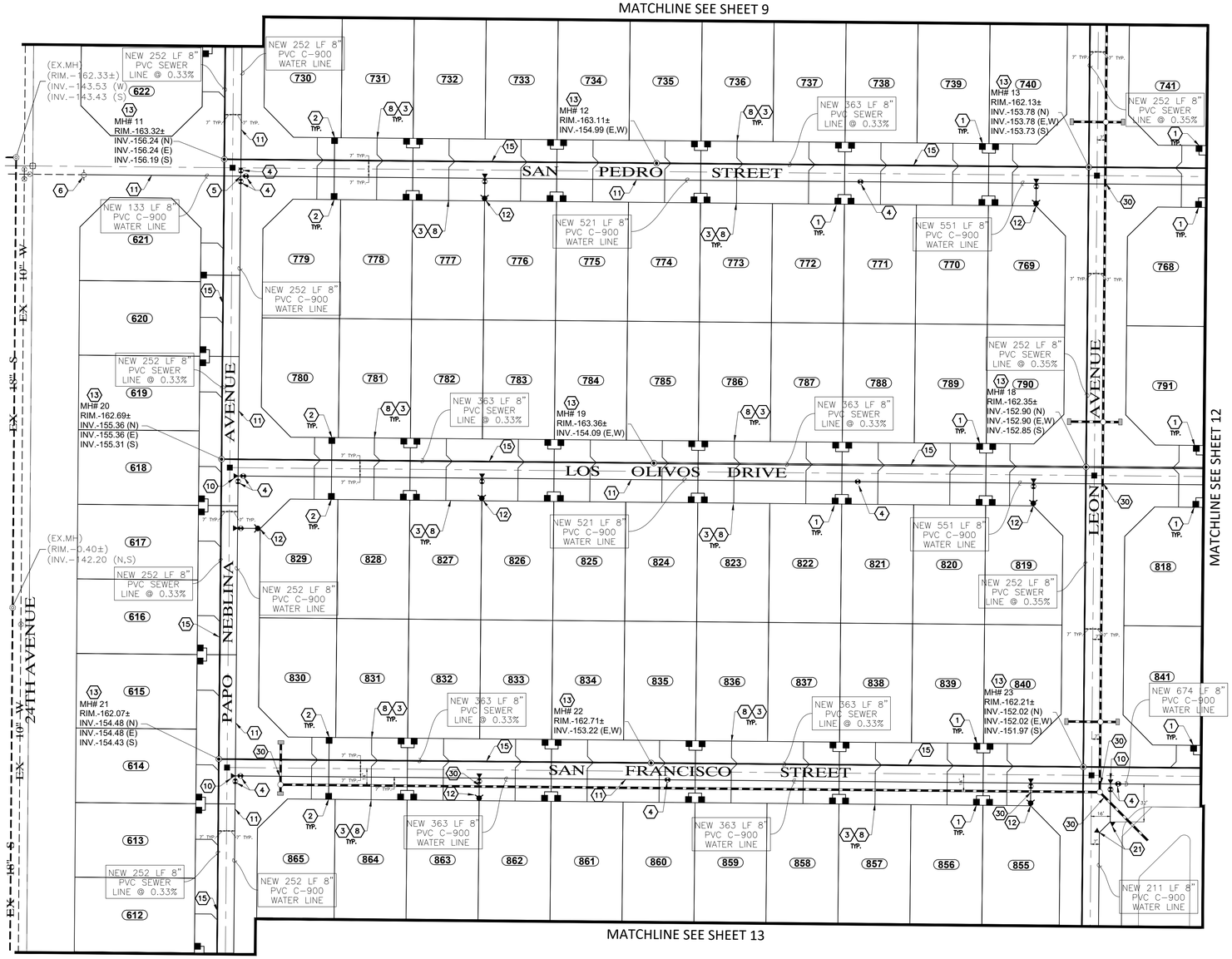
WATER AND SEWER PLAN

LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

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3075 S. Ave. 4E
Yuma, Arizona 85365
(928) 344-3566
najeh@Edaisgroup.com
www.edaisengineering.com

Najeh K. Edais
Registered Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 03/08/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE: APR-2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER 10



N

W E

S

SCALE: 1"=50'

WATER / SEWER CONSTRUCTION KEYNOTES

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20. INSTALL 8" 90° ELL W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
21. INSTALL 8" 45° BEND W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
22. NEW 4" SEWER SERVICE TO BE CONNECTED TO EXISTING SEWER SERVICE
23. INSTALL 10" GATE VALVE W/V.B & C. AS PER CITY OF YUMA STD.NO. 5-065 & 5-075
24. INSTALL NEW 10" PVC C-900 WATER LINE PER CITY OF YUMA STANDARDS AND SPECIFICATION
25. INSTALL 8" X 10" TEE W/THRUST BLOCK AS PER CITY OF YUMA STD.NO. 5-020 & 5-025
26. REMOVE TEMPORARY BLOWOFF VALVE AND CONNECT TO EXISTING 10" WATER MAIN
27. EXISTING 4" SEWER SERVICE
28. NEW CLEANOUT AT THE END OF EXISTING 4" SEWER SERVICE
29. ADJUST MANHOLE TO FINAL GRADE AS PER CITY OF YUMA STD.NO. 6-040
30. LOWE WATER LINE 24" BELOW STORM DRAIN PIPE AS PER CITY OF YUMA STD. NO. 5-185

NOTES:

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REVISIONS

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WATER AND SEWER PLAN

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

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Professional Engineering Consultants
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Najeh K. Edais
26844
NAJEH K. EDAIS
Date Signed 01/08/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE: APR-2024

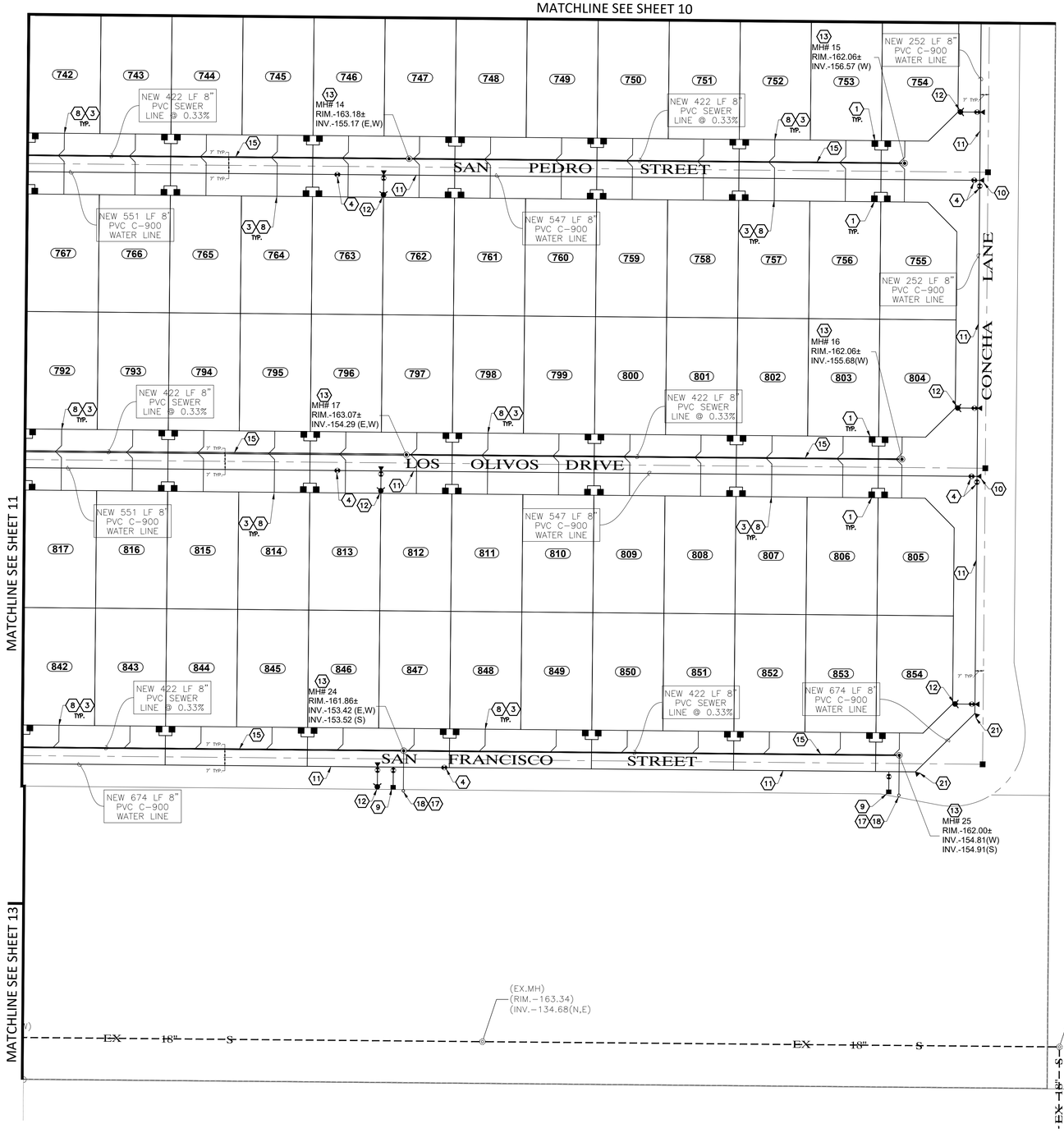
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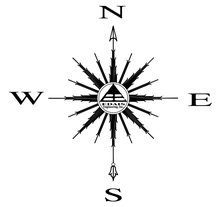
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PROJECT: 21-028

SHEET NUMBER

11





SCALE: 1"=50'

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3. INSTALL 4" SEWER SERVICE (TYP.) PER CITY OF YUMA STD. NO. 6-015
4. INSTALL 8" GATE VALVE W/ V.B. & C. AS PER CITY OF YUMA STD. NO. 5-065 & 5-075
5. INSTALL 8" X 8" CROSS W/THRUST BLOCK AS PER CITY OF YUMA STD.NO. 5-020 & 5-025
6. REMOVE EXISTING BLOW OFF VALVE AND CONNECT TO EXISTING 8" WATER MAIN
7. INSTALL 2" BACKFLOW PREVENTOR W/ CAGE AS PER CITY OF YUMA STD. NO. 5-120
8. CONSTRUCT ALL SEWER SERVICES TO CENTER OF THE LOT UNLESS NOTED OTHERWISE
9. INSTALL 2" WATER SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035
10. INSTALL 8" X 8" TEE W/ THRUST BLOCK AS PER CITY OF YUMA STD. NO. 5-020 & 5-025
11. INSTALL NEW 8" PVC C-900 WATER LINE PER CITY OF YUMA STANDARDS AND SPECIFICIATIONS
12. INSTALL 6" FIRE HYDRANT COMPLETE W/BLUE FIRE HYDRANT STREET MARKER AS PER CITY OF YUMA STD. NO. 5-155, 5-160 & 5-165
13. CONSTRUCT NEW SANITARY SEWER POLYMER MANHOLE WITH GRADE RINGS AS PER CITY OF SAN LUIS SUPPLEMENT TO CITY OF YUMA, AND MAC UNIFORM STANDARD SPECIFICATIONS
14. REMOVE EXISTING SEWER CLEANOUT & CONNECT NEW 8" SEWER LINE TO EXISTING SEWER STUB
15. INSTALL NEW 8" PVC SDR-35 SEWER LINE PER CITY OF YUMA STANDARDS AND SPECIFICATIONS
16. INSTALL TEMPORARY BLOWOFF VALVE AS PER CITY OF YUMA STD. NO. 5-085
17. INSTALL NEW SANITARY SEWER CLEANOUT AS PER CITY OF YUMA STD. NO. 6-005
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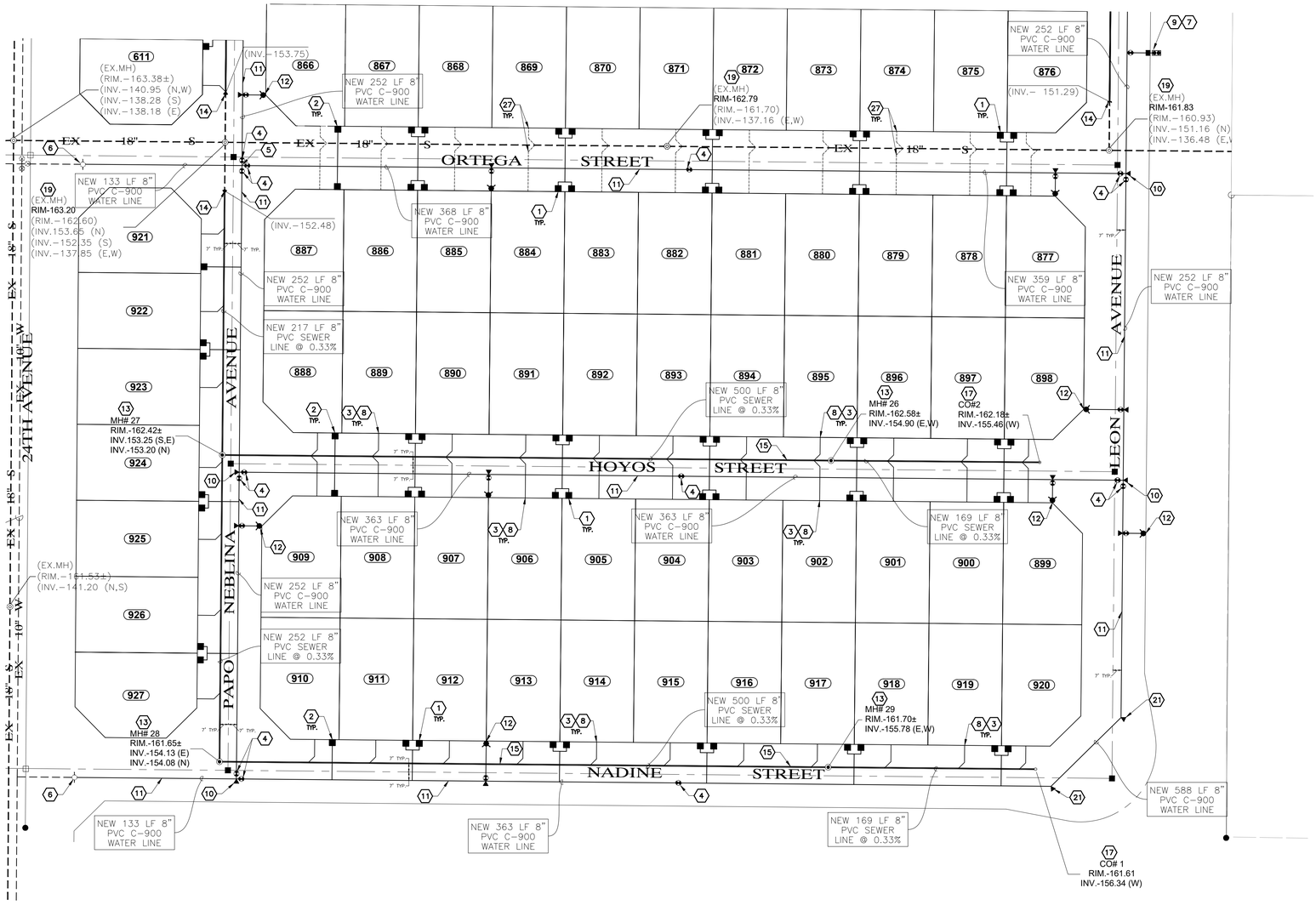
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Najeh K. Edais
Registered Professional Engineer
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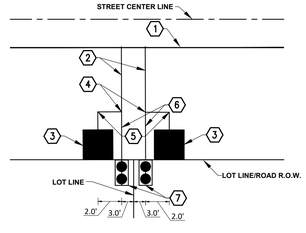
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DOMESTIC WATER / FIRE LINE DETAIL



KEYNOTES

1. NEW 8" PVC C-900 WATER LINE
2. NEW 1" PVC SCH 40 WATER SERVICE LINE
3. NEW 5/8" WATER MEATER
4. NEW 1" TEE
5. NEW 1" ELBOW
6. NEW 1" FIRE SPRINKLER LINE
7. NEW 1" BACKFLOW PREVENTOR W/CAGE AS PER CITY OF YUMA STD. NO. 5-120

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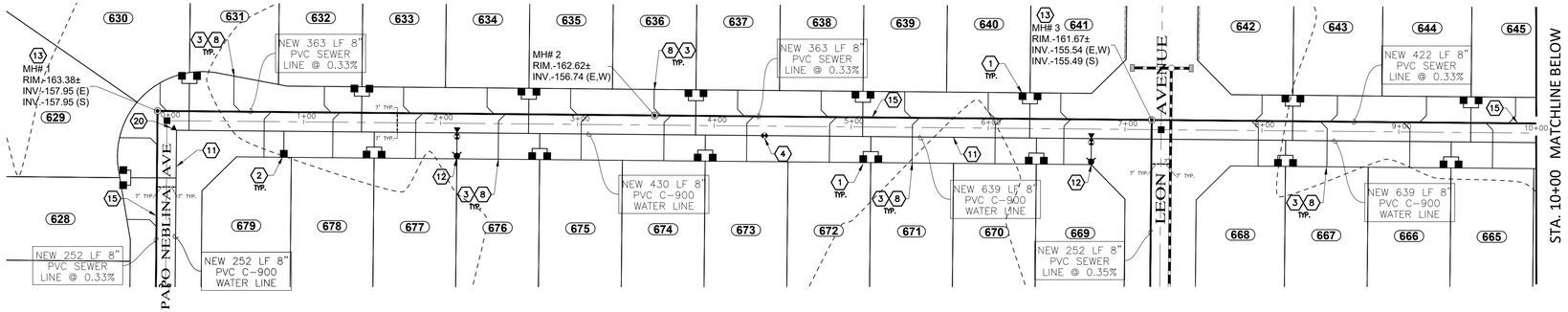
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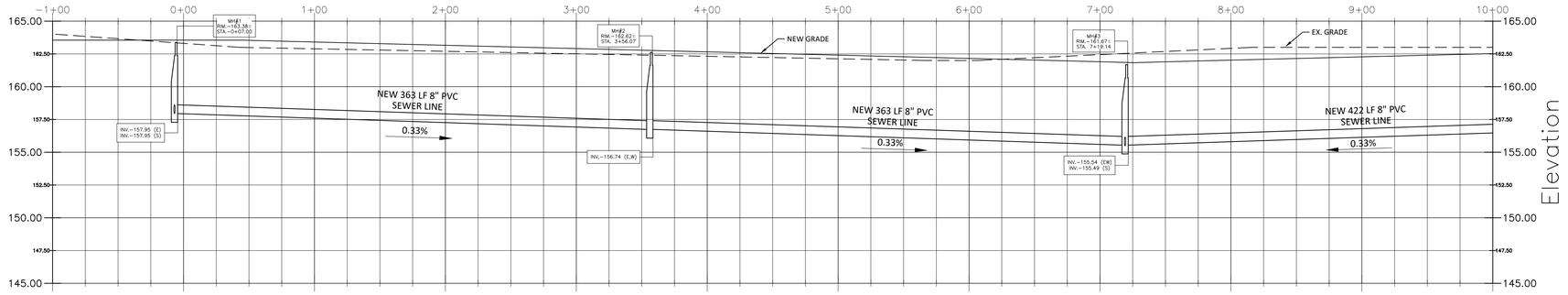
Najeh K. Edais

NAJEH K. EDAIS
26844
REGISTERED PROFESSIONAL ENGINEER
CIVIL
Date Signed 10/08/24
ARIZONA, U.S.A.
EXPIRES 3/31/26

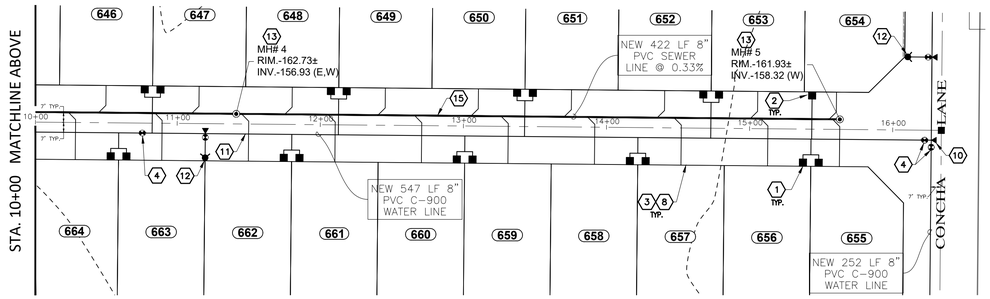
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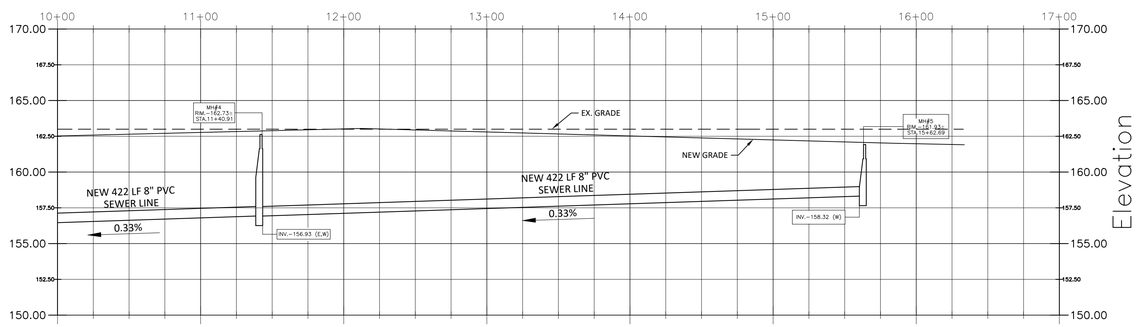
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13





UDALL LANE





UDALL LANE

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SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

REVISIONS

WATER & SEWER PROFILES

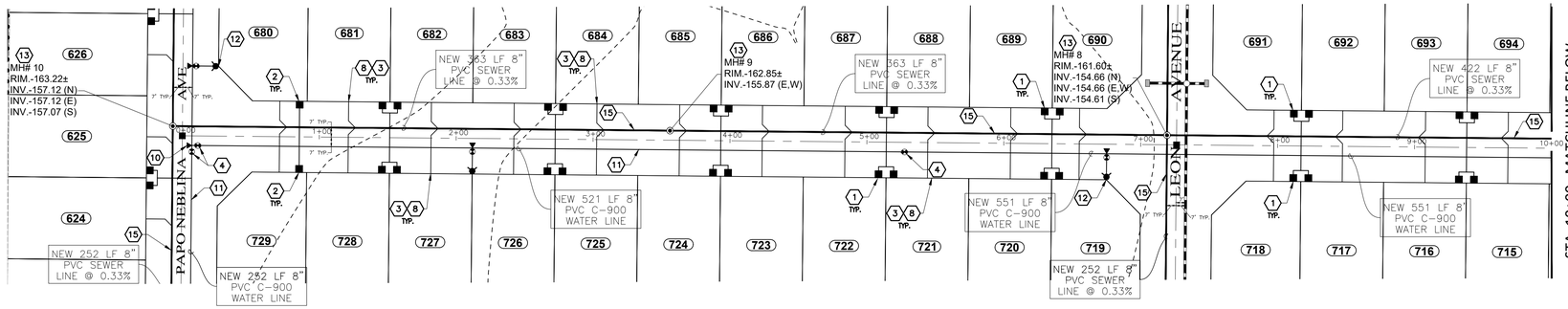
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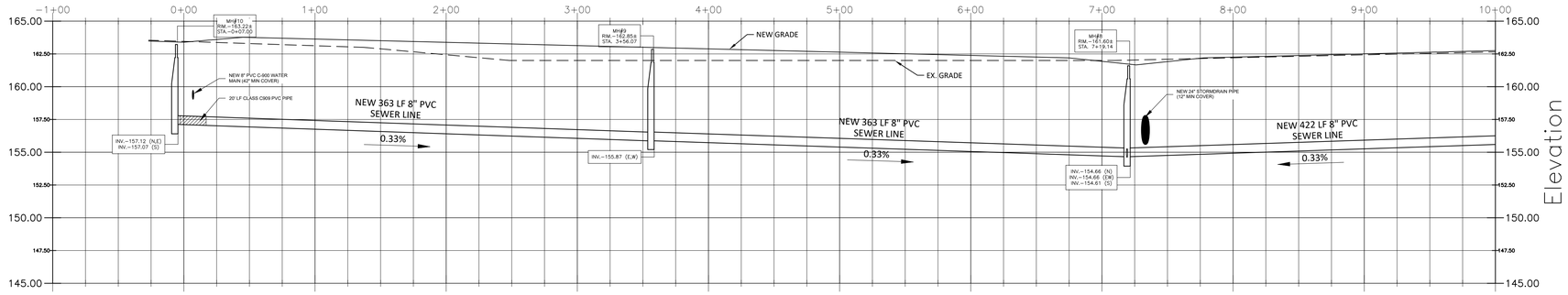
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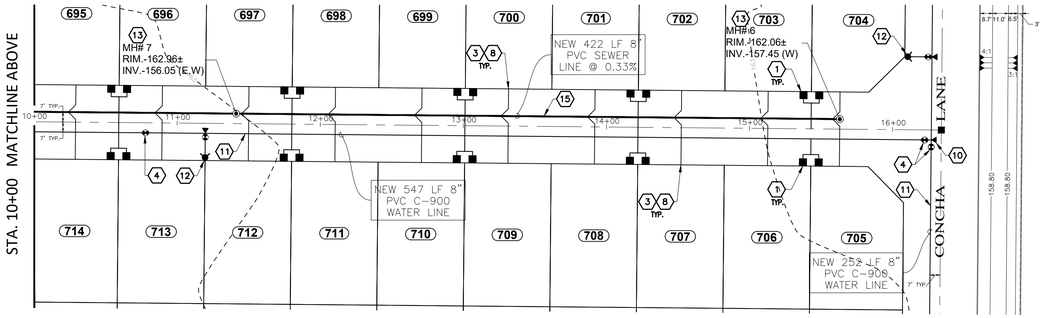
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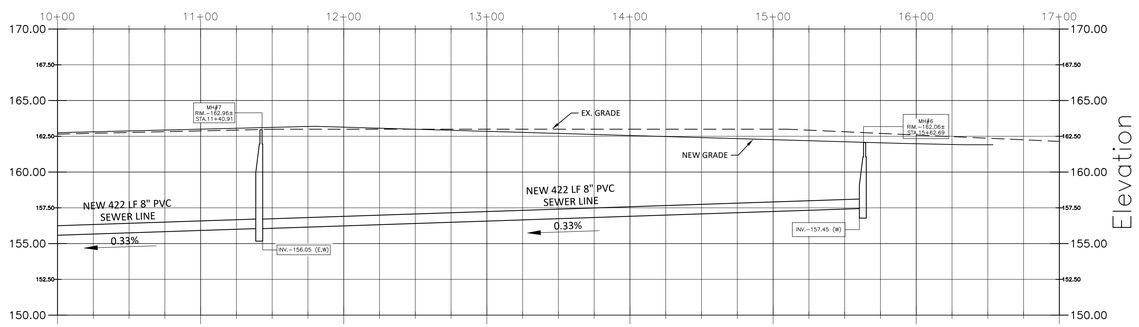
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MONREAL LANE





MONREAL LANE

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SCALE VERT: 1"=5'

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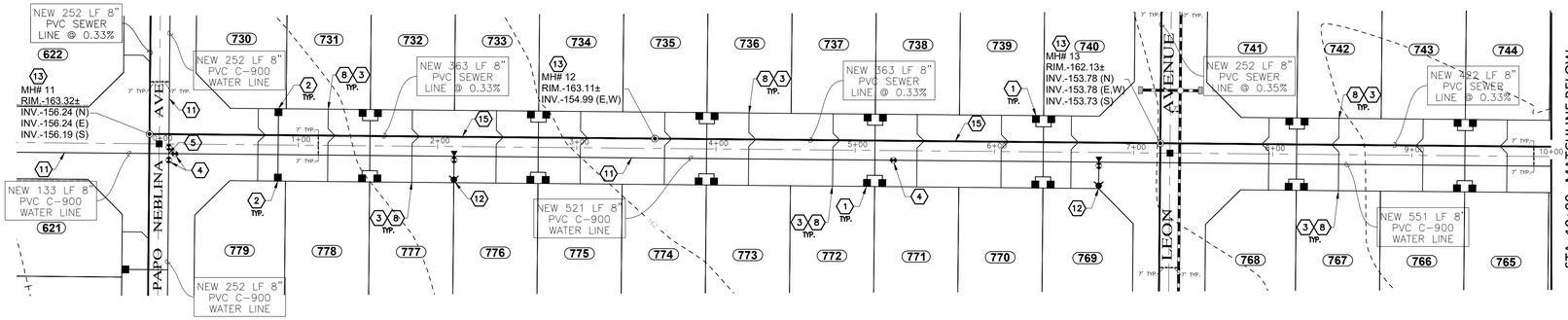
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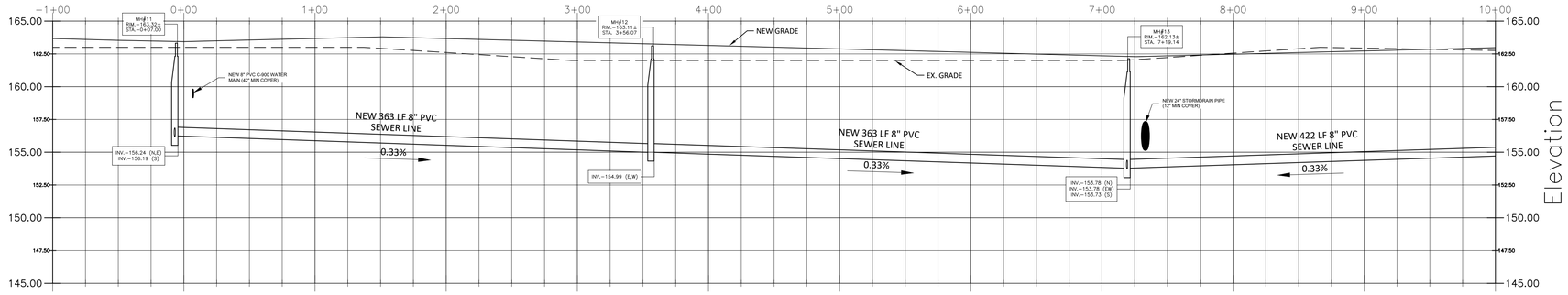
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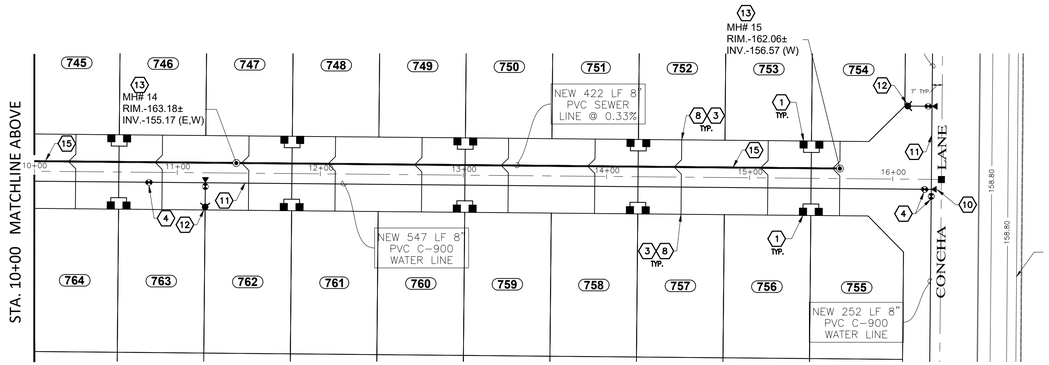
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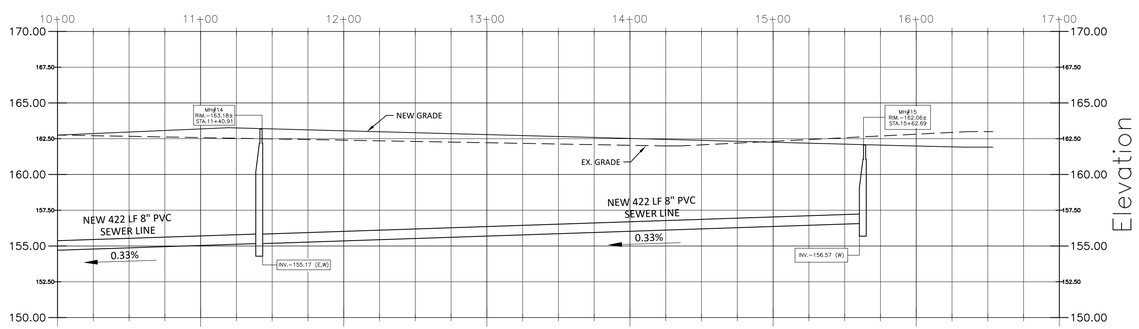
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15





SAN PEDRO STREET





SAN PEDRO STREET

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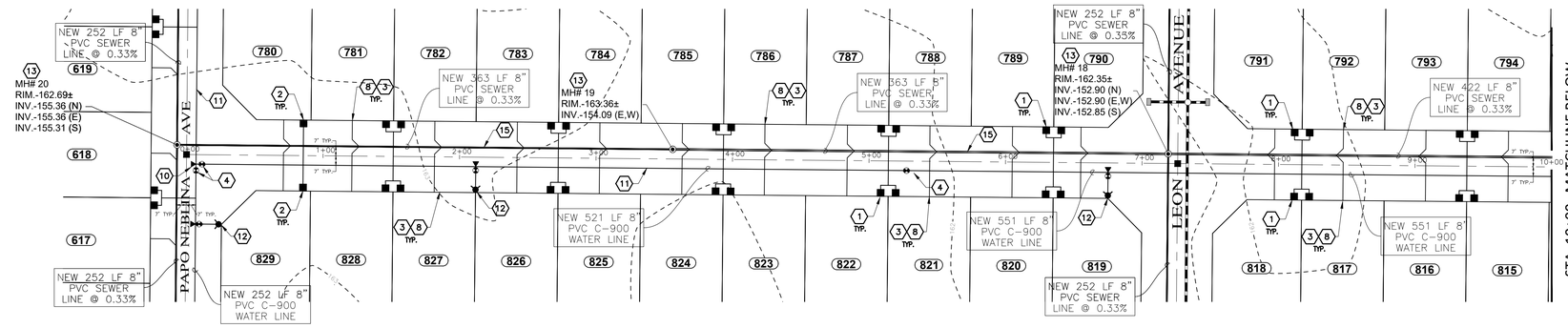
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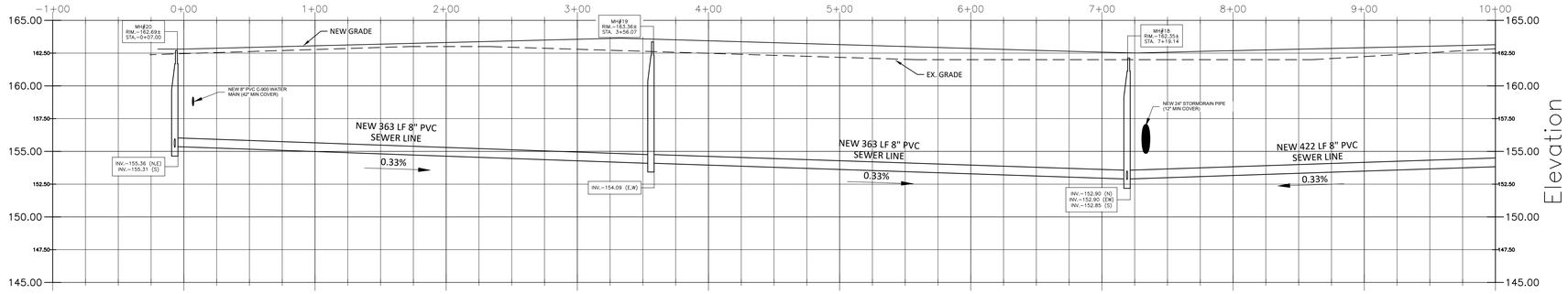
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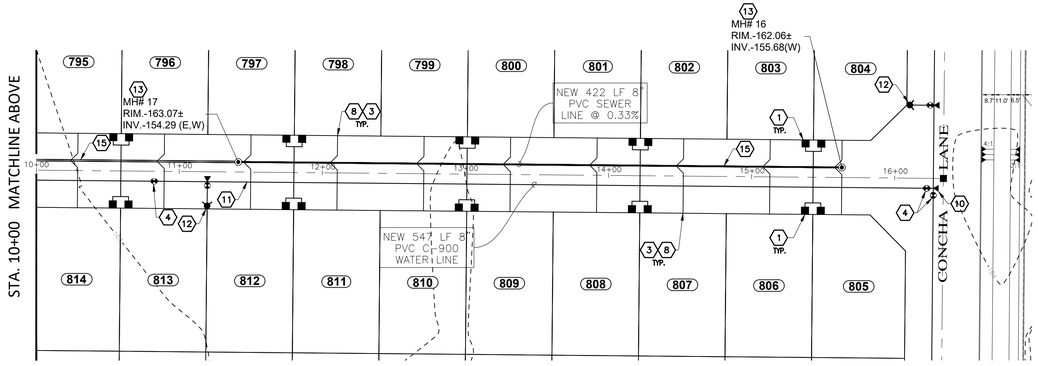
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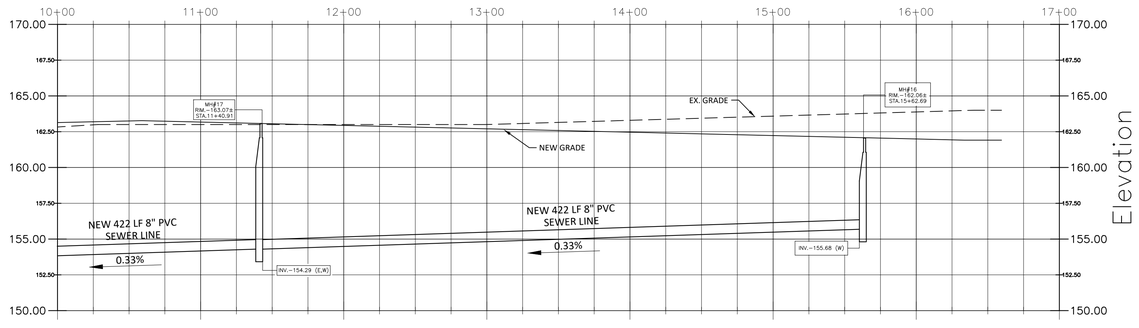
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LOS OLIVOS DRIVE





LOS OLIVOS DRIVE

NOTES:

1. FOR LEGEND, WATER/SEWER CONSTRUCTION KEYNOTES AND MATERIAL LIST SEE SHEET 9.
2. SEE SUBDIVISION PLAT FOR ALL DIMENSIONS.
3. SEE PAVING AND GRADING PLAN FOR ALL GRADES.
4. TRENCHING AND BACKFILLING FOR WATER AND SEWER LINES TO BE IN ACCORDANCE WITH CITY OF YUMA STD. 5-010
5. THE CITY OF SAN LUIS WILL ONLY ACCEPT CLOW OR WATEROUS WB-67 FIRE HYDRANTS.
6. THE CITY OF SAN LUIS REQUIRE THAT ALL FITTINGS TO HAVE MEGA LUG OR APPROVED EQUAL MECHANICAL RESTRAINS AND VERTICAL BENDS TO BE MJ RESTRAINED AT THE BENDS PLUS ONE ADDITIONAL RESTRAINT 20' UPSTREAM AND DOWNSTREAM OF THE BEND.

SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

REVISIONS

WATER & SEWER PROFILES

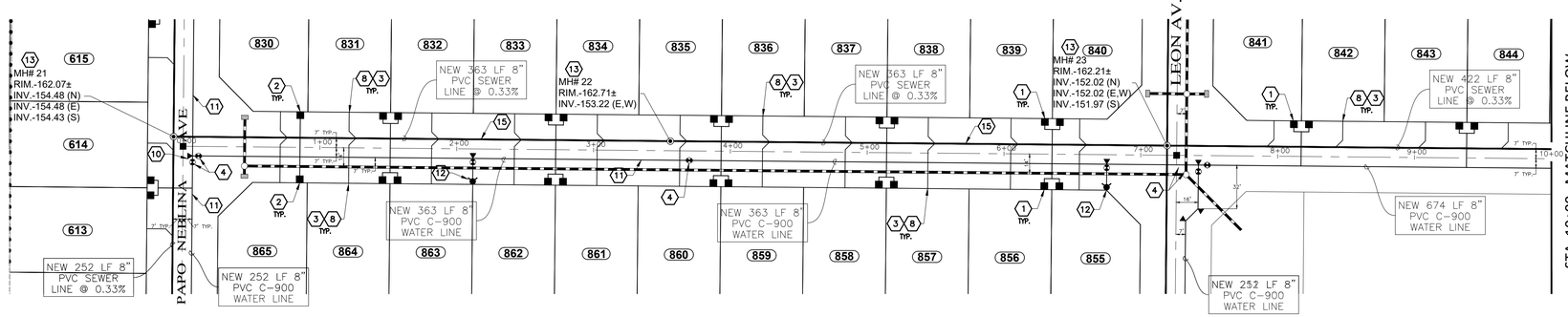
LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

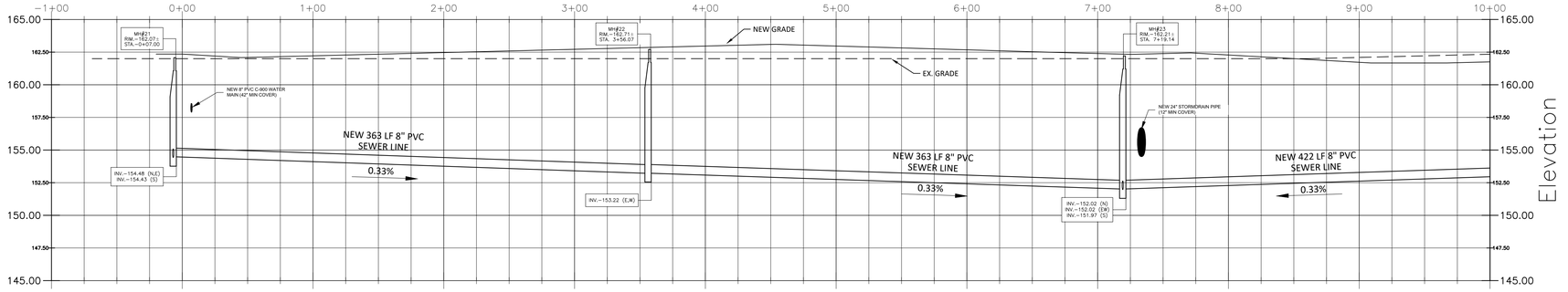
EDAIS Engineering, Inc.
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Yuma, Arizona 85365
(928) 344-3566
najeh@Edaisgroup.com
www.edaisengineering.com

Registered Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 10/18/24
ARIZONA, U.S.A.
EXPIRES 5/31/26

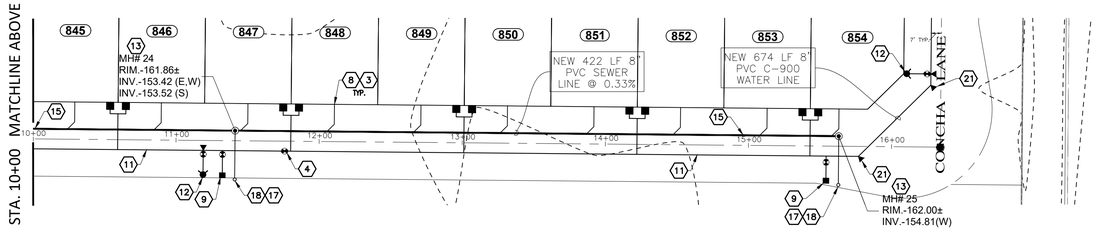
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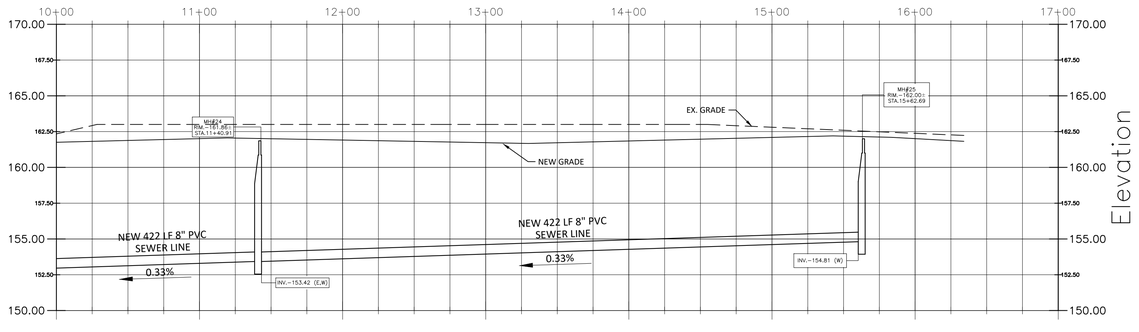
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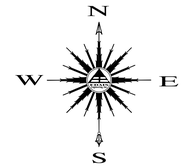


SAN FRANCISCO STREET





SAN FRANCISCO STREET



SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

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REVISIONS	

WATER & SEWER PROFILES

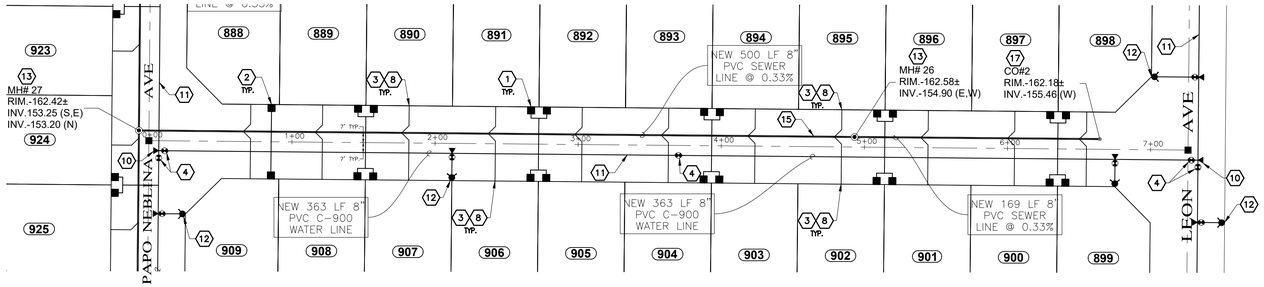
LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

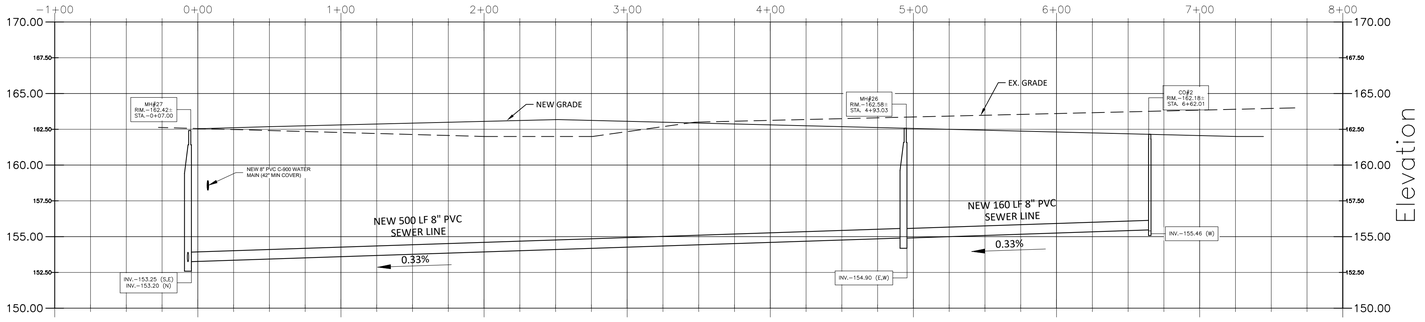
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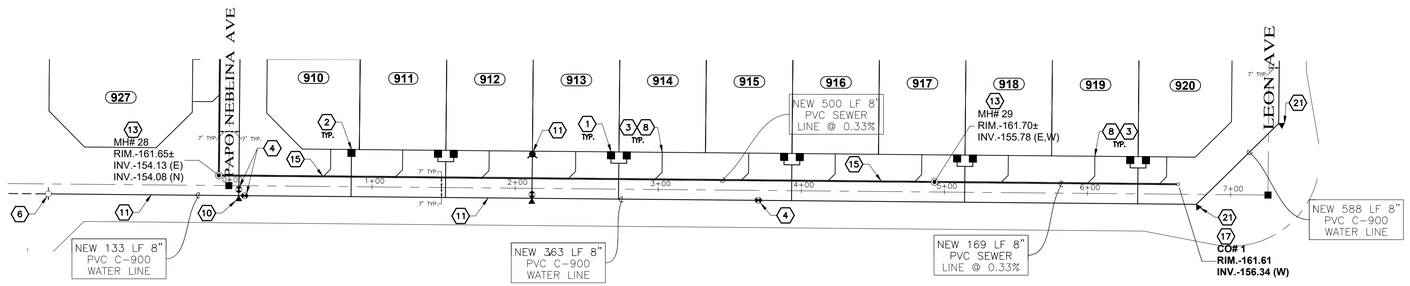
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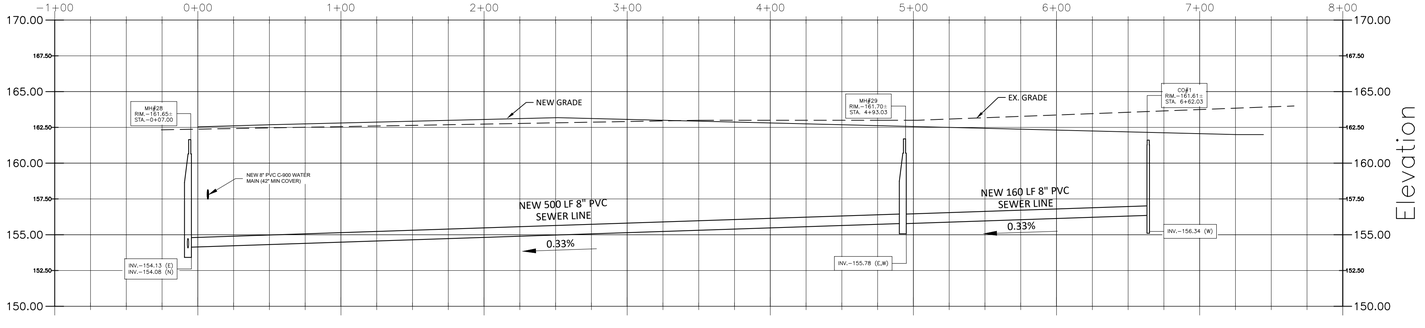
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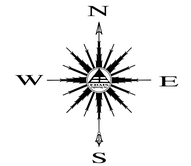


HOYOS STREET





NADINE STREET



SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

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REVISIONS

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WATER & SEWER PROFILES

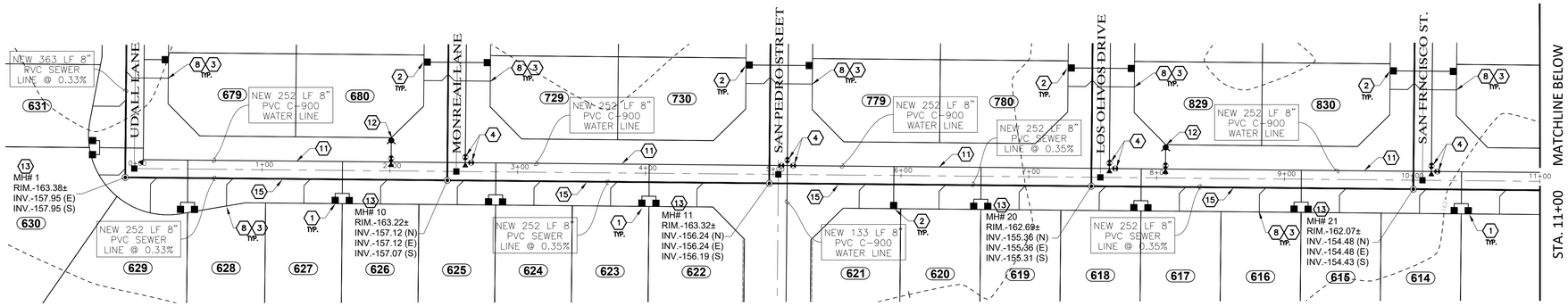
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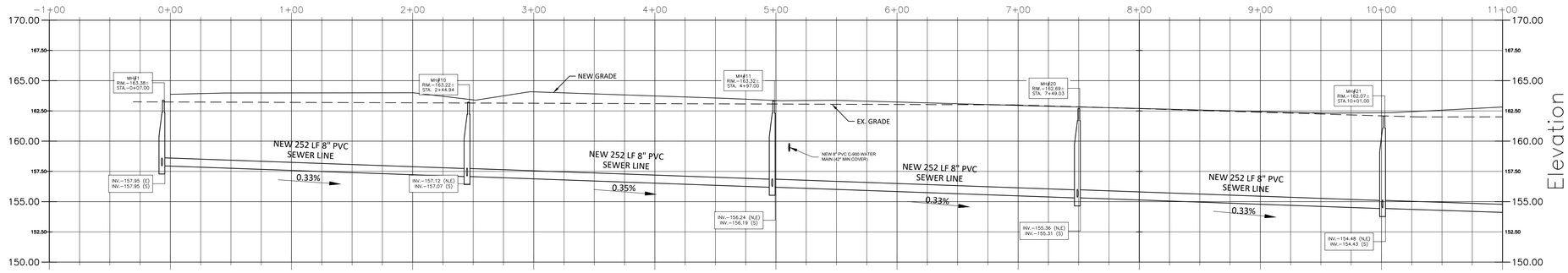
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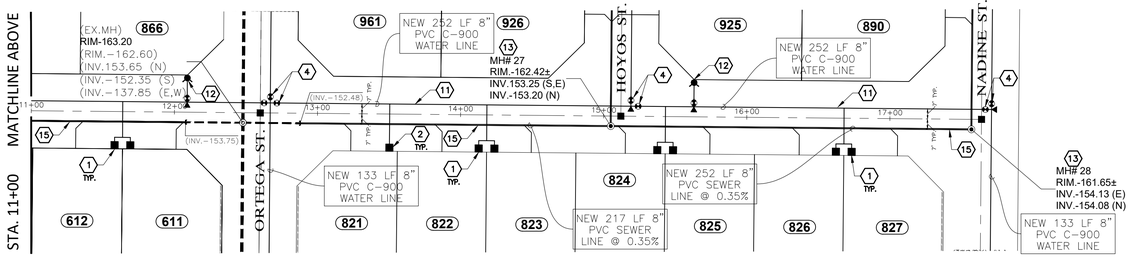
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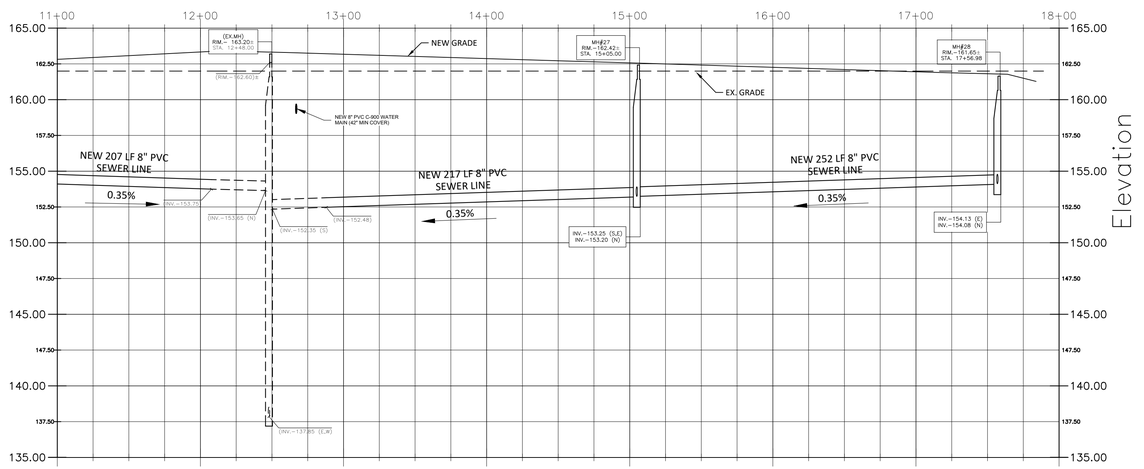
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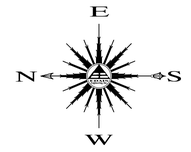


PAPO NEBLINA AVENUE





PAPO NEBLINA AVENUE



SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

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REVISIONS

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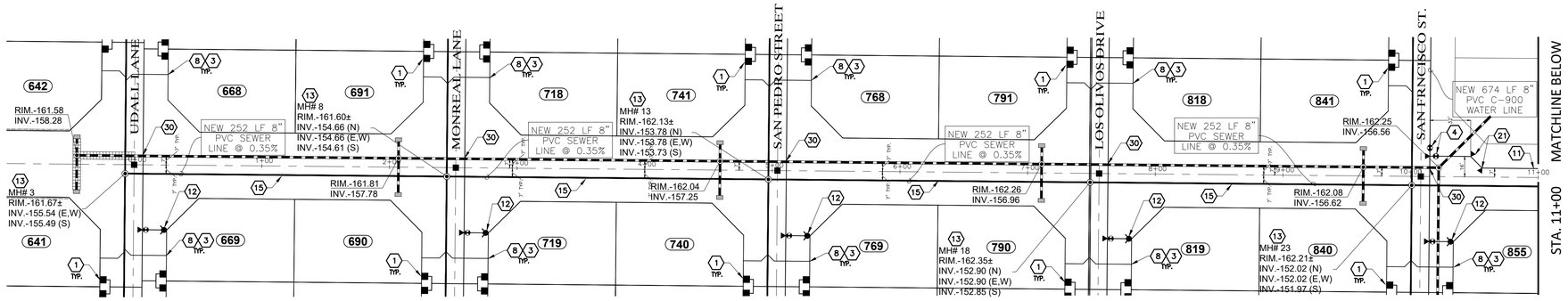
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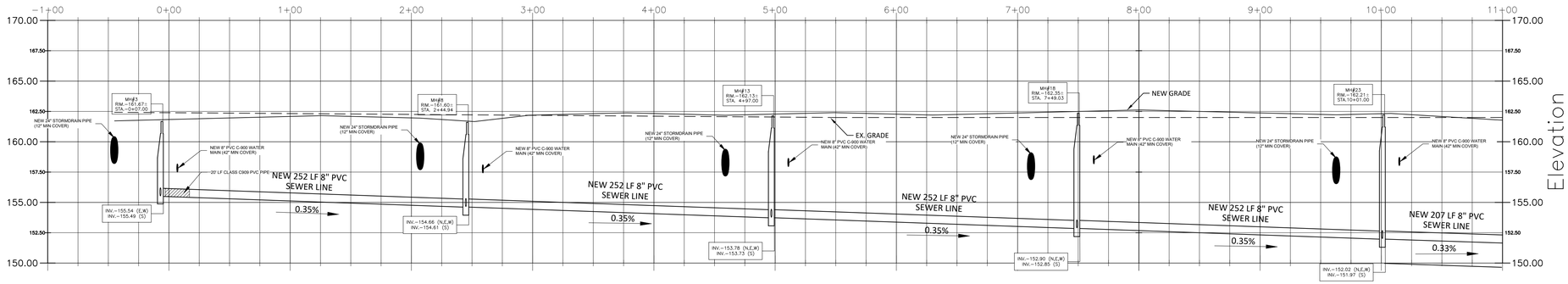
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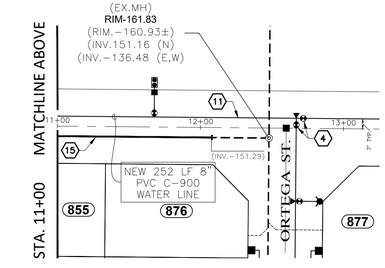
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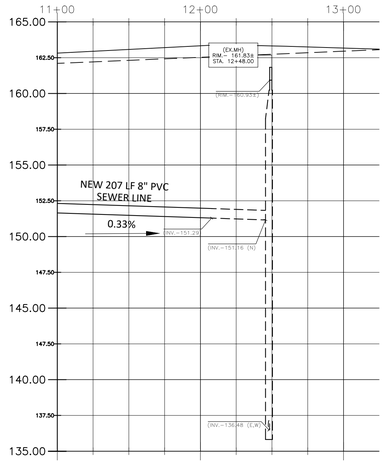
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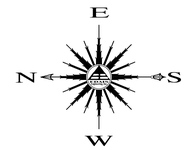


LEON AVENUE





LEON AVENUE



SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

REVISIONS

WATER & SEWER PROFILES

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

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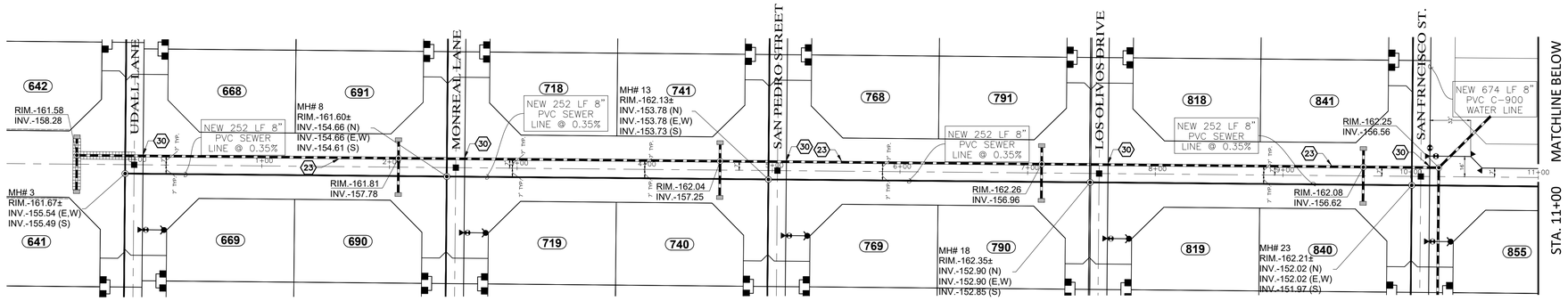
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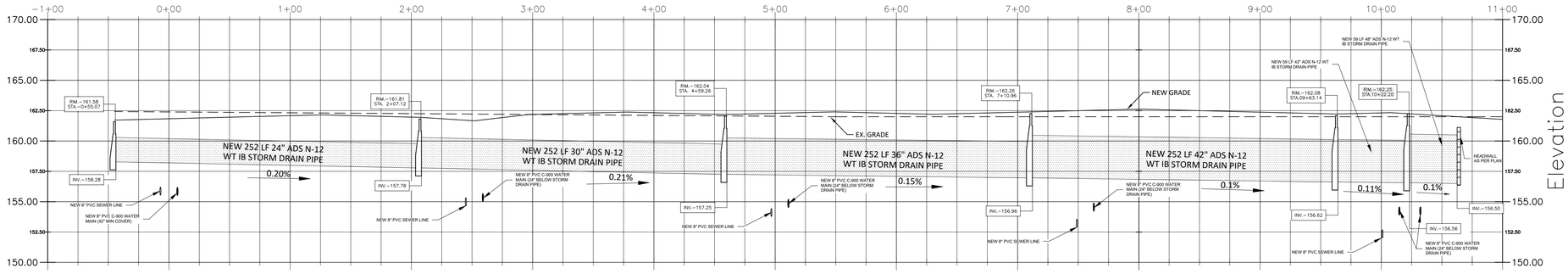
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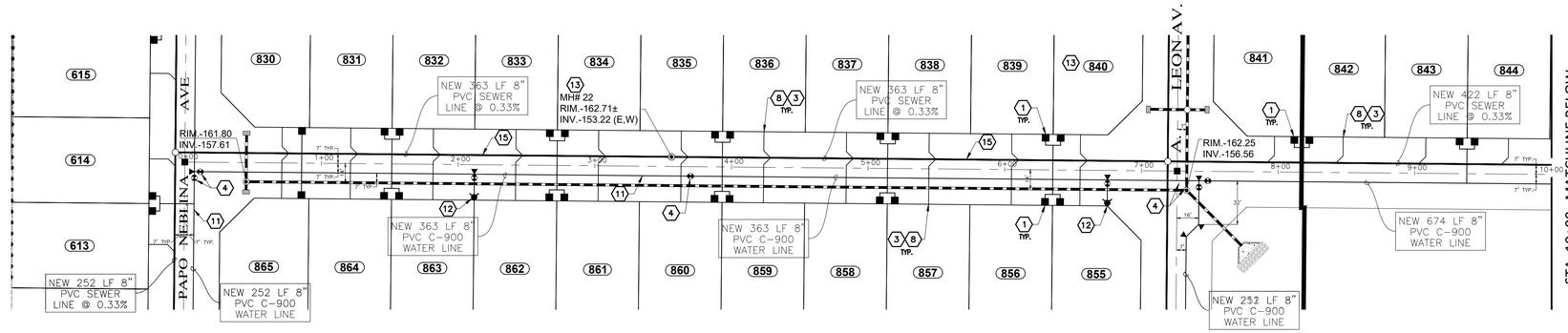
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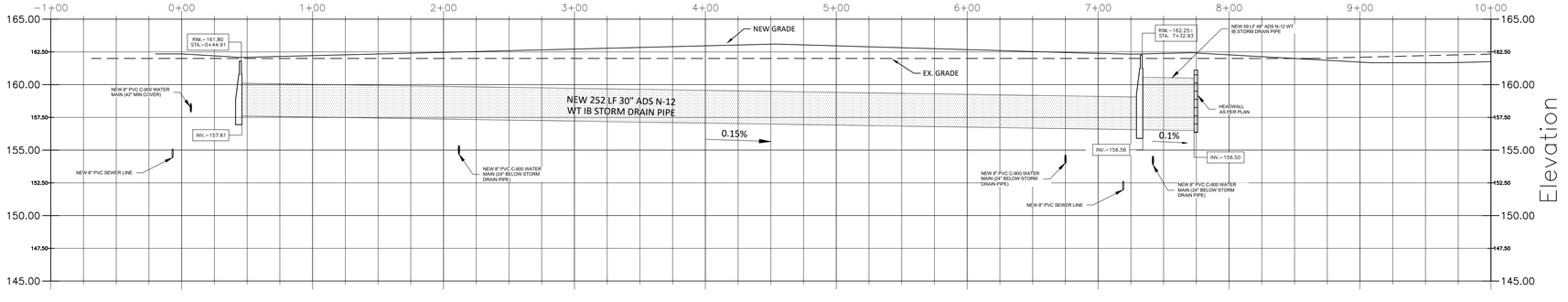
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LEON AVENUE





SAN FRANCISCO STREET

E
N
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W

SCALE HORIZ: 1"=50'
SCALE VERT: 1"=5'

REVISIONS

WATER & SEWER PROFILES

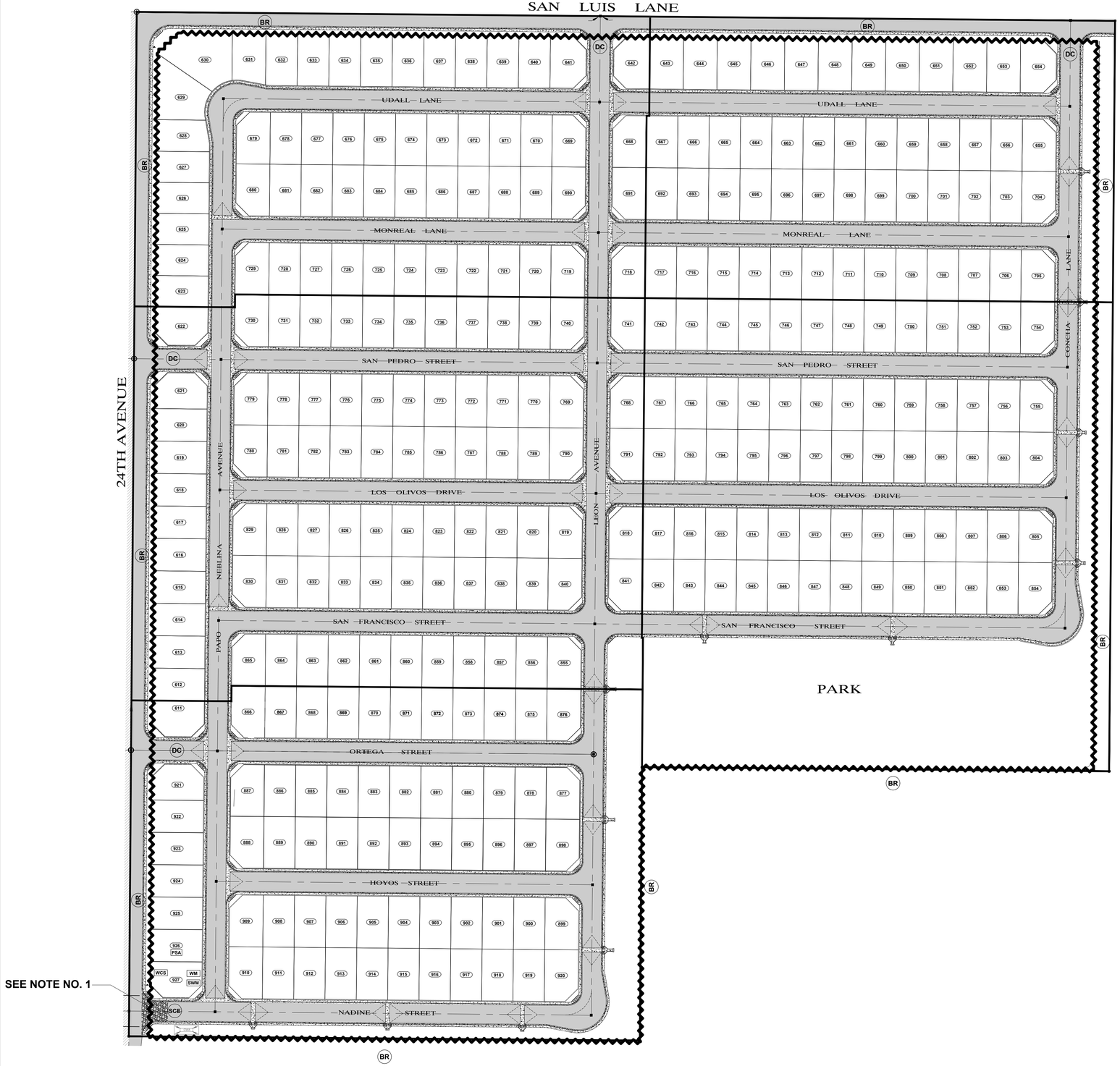
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SHEET NUMBER
22



N

W E

S

SCALE: 1"=100'

LEGEND

WCS	WATER USED TO COMPACT SOIL
CWA	CONCRETE WASH AREA
PSA	PROTECTED STORAGE AREA
SWM	SANITARY WASTE MANAGEMENT
WM	DUMPSTER FOR WASTE MANAGEMENT AND TRASH COLLECTION
SCE	STABILIZED CONSTRUCTION ENTRANCE
W.Z.S.	WORK ZONE IDENTIFICATION SIGN
DC	DUST CONTROL
BR	BERM
EW	EXISTING WALL

AREA

DISTURBED AREA = 74.8124 ACRES

FLOOD ZONE DESIGNATION

THE PROPERTY IS LOCATED IN FLOOD PLAIN ZONE X (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD) AS DETERMINED BY THE FEMA FEDERAL INSURANCE RATE MAPS

UTILITY DISCLAIMER

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM THE FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

NOTES

1. CONTRACTOR TO IMPLEMENT EFFECTIVE CONTROL MEASURES TO MINIMIZE TRACKING OF SEDIMENTS, DEBRIS AND OTHER POLLUTANTS FROM VEHICLES AND EQUIPMENT LEAVING THE SITE DURING CONSTRUCTION. EXACT PLACEMENT, DURING VARIOUS PHASES OF CONSTRUCTION, TO BE DETERMINED BY THE CONTRACTOR.

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

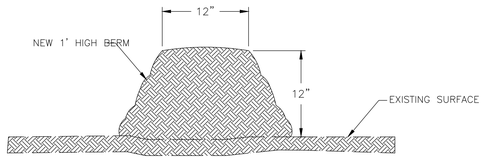
STORMWATER POLLUTION PREVENTION PLAN

LOS MEZQUITES UNIT 4 AND LOS MEZQUITEZ UNIT 5

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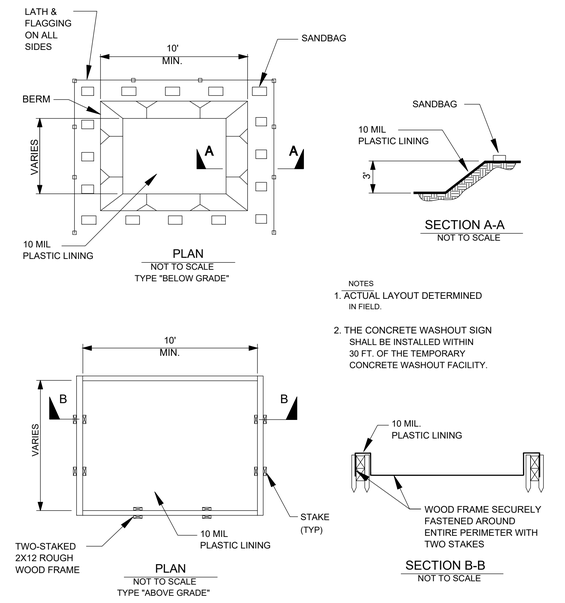
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PROJECT: 21-028
SHEET NUMBER 23



BR

BERM

NTS



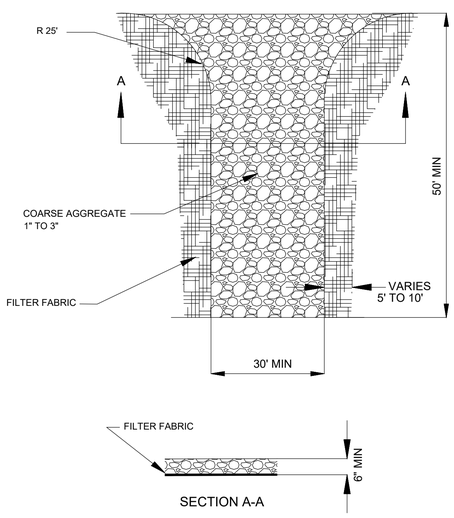
CWA

CONCRETE WASH AREA

NTS

CONSTRUCTION NOTES

1. AFTER PERMITS HAVE BEEN OBTAINED & EROSION CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL ROUGH GRADE SITE.
2. CONTRACTOR SHALL PREVENT ANY SILTATION FROM ENTERING ANY STORM SEWER SYSTEM. ALL INLETS & INLET OPENINGS SHALL BE FULLY ENCIRCLED WITH SILT FENCE DURING AND AFTER CONSTRUCTION OF INLET.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
4. MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES ESPECIALLY BEFORE ANY PREDICTABLE RAIN.
5. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE; AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE. THIS PLAN IS INTENDED TO BE UPDATED BY A QUALIFIED PERSON AS CONSTRUCTION ACTIVITIES PROCEED. METHODS OF EROSION CONTROL SHALL BE TAKEN FROM "DRAINAGE DESIGN FOR MARICOPA COUNTY, ARIZONA, VOLUME III EROSION CONTROL".
6. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
7. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
8. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. ALL EXISTING STRUCTURES, FENCING, TREES, AND ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
11. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
12. CONTRACTOR TO IDENTIFY ON PLAN AREAS THAT HAVE REACHED FINAL STABILIZATION.



SCE

STABILIZED CONSTRUCTION EXIT/ENTRANCE

NTS



WZS

YUMA COUNTY WORK ZONE IDENTIFICATION SIGN

NTS

REVISIONS

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2	
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STORM WATER POLLUTION PREVENTION PLAN DETAILS

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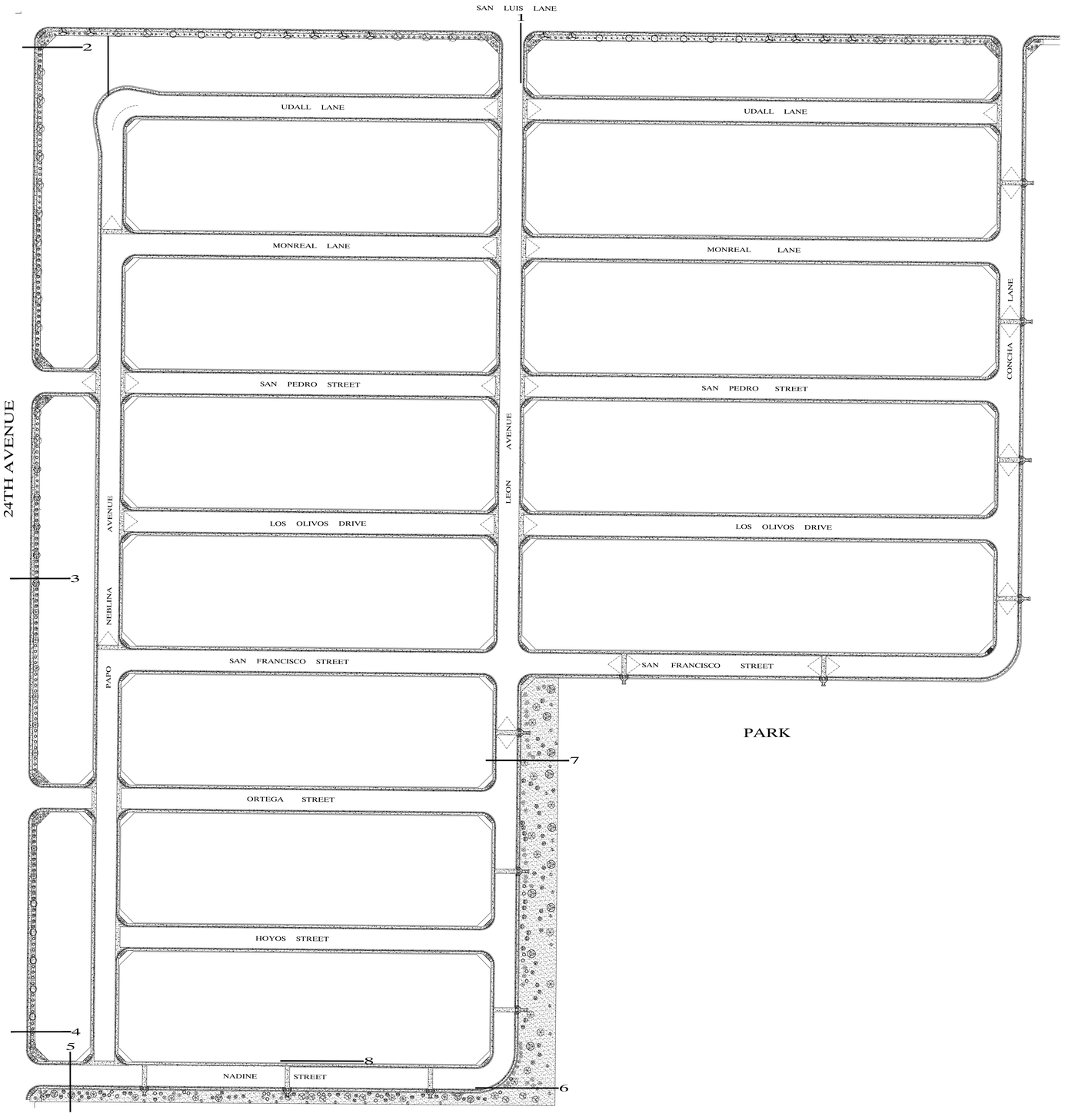
DATE: APR 2024

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CHECKED: NKE

PROJECT: 21-028

SHEET NUMBER 24



N

W E

S

SCALE: 1"=100'

LANDSCAPE LEGEND

TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Live oak	Quercus Fusiformas	24 box
	Red Pistach	Pistacia Chnensis	24 box
	Mulga	Acacia Anura	24 box
	Red Push	Red Pistacha Chinensis	24 box
	Elm	Ulmus Parviflora	24 box

SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Arizona Yellow Bells	Techoma Stans	5 Gal.
	Yellow Lantana Bush	Lantana Camara	5 Gal.
	Red Yucca	Hesperaloe Parviflora	5 Gal.
	Perrys Agave	Perri Huachucensis	5 Gal.
	Choral Fountain	Russelia Equoiseformis	5 Gal.
	Red Bird of paradise	Caesalpinia Pulcberimma	5 Gal.

HARDSCAPES

3/4"White Rose

NOTE:
ALL TREES TO BE STANDARD TRUNK

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

SOUTHWEST PREMIWORKS
LANDSCAPE IRRIGATION CONSULTING SERVICES
PO BOX 25414
941-0503
JSALARRY@AOL

LANDSCAPE

LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 4E
Yuma, Arizona 85365
(928) 344-3566
ralph@Edaisgroup.com
www.edaisengineering.com

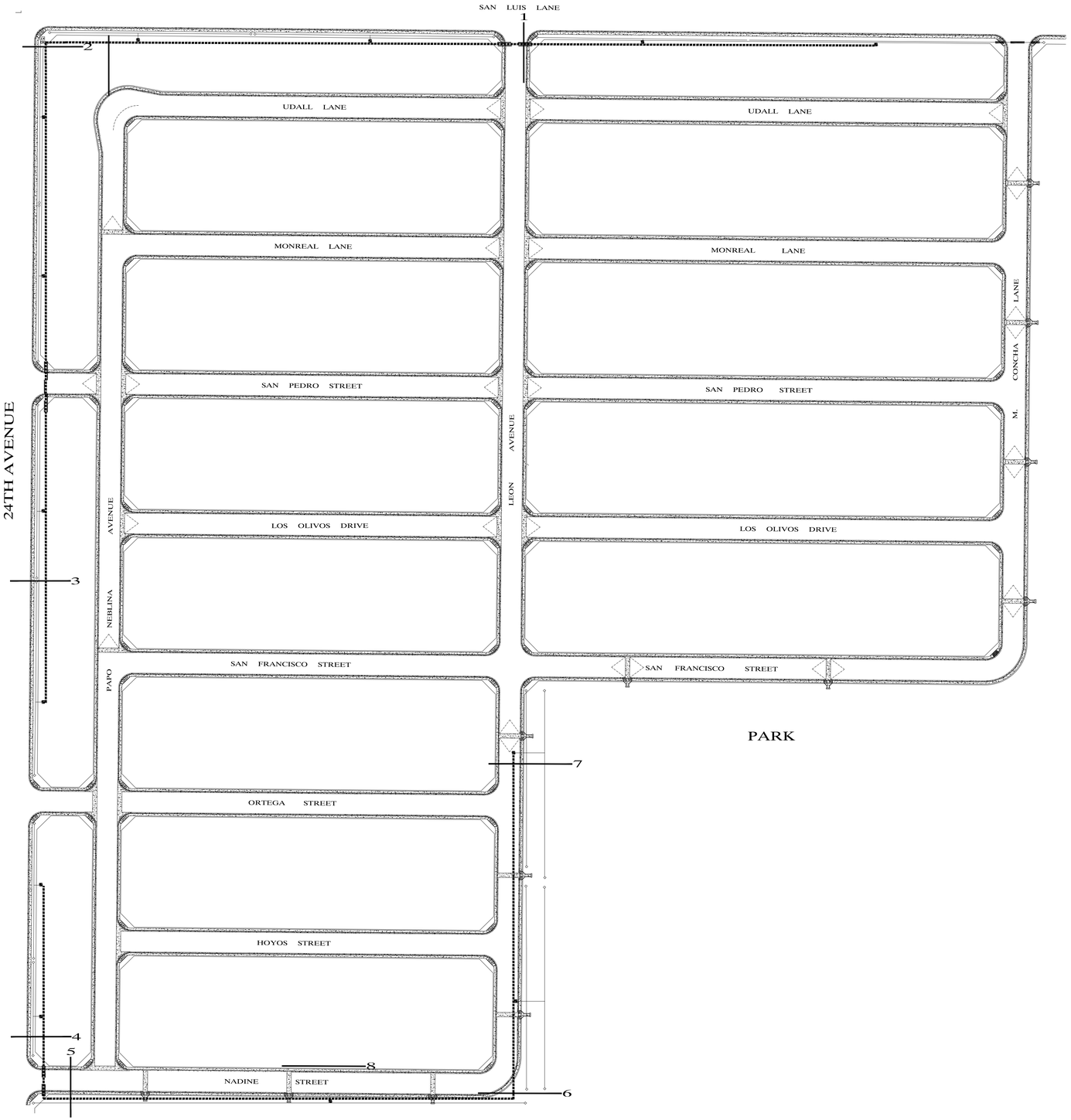
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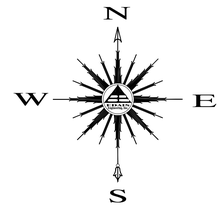
DRAWN:
LPR

CHECKED:
NKE

PROJECT:
21-028

SHEET NUMBER
L1.1





SCALE: 1"=100'

IRRIGATION LEGEND

SYMB	DESCRIPTION	MANUFACTURER	MODEL
M	WATER METER	SEE CIVIL	11/2" MINIMUM
	11/2"BACK FLOW	FEBCO	785 PVB
	WITH SLAB & ENCLOSURE	GAURDSHACK	GS-SERIES
	CONTROLLER(PEDISTAL)	HUNTER (SOLAR)	PRO C
	1" DRIP ASSEMBLY	HUNTER	SEE DETAILS
	1" VALVE	HUNTER	ICV
	VALVE BOX	CARSON	TAN STANDARD
◇	FLUSH OUT	SEE DETAILS	

SLEEVE

11/2"SCH 40 MAIN LINE

1" CL200 DRIP LATERAL

IRRIGATION NOTES

1. CONTRACTOR RESPONSIBLE FOR FULL AND EFFICIENT COVERAGE
2. VERIFY PRESSURE BEFORE LAY OUT MINIMUM PRESSURE 75 PSI AT MAINLINE
3. DRIP VALVE LOCATIONS ARE ONLY APPROXIMATE
4. DRIP VALVES NOT TO EXCEED 10 GPM LAWN VALVES NOT TO EXCEED N/A GPM
5. DRAWN FOR CLARITY ALL IRRIGATION TO BE INSTALLED IN LANDSCAPE AREA
6. SLEEVES DRAWN ARE ONLY FOR CONVIENCE CONTRACTOR RESPONSIBLE FOR ALL SLEEVES NECESSARY
7. ALL SLEEVES TO HAVE 18" COVER MINIMUM
8. IF BACKFILL MATERIAL HAS DEBRIS LARGER THAN 1"SHADE WITH MORTAR SAND 4" ABOVE
9. PLEASE SEE PIPE AND SLEEVING DETAILS
10. IF PROPER PRESSURE IS NOT AVAILABLE NOTIFY OWNERS REPRESENTATIVE BEFORE ANY WORK
11. COUNTS ON PLANS ARE ONLY FOR A CONVIENCE CONTRACTOR RESPONSIBLE FOR PLANTS ON PLANS
12. HEAD AND VALVE PLACEMENT ARE ONLY DIAGRMATIC FIELD VERIFY ALL LOCATIONS
13. 1/2" DRIP LINE AND EMITTER S ARE NOT SHOWN ON PLANS REFER DETAIL D-3 D- 16

CALL TWO WORKING DAYS BEFORE YOU DIG
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(OUTSIDE MARICOPA COUNTY)

REVISIONS

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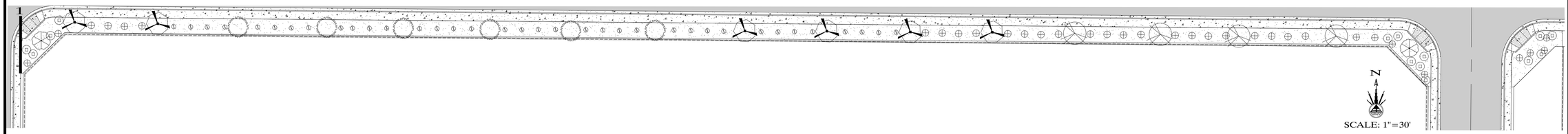
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941-0503
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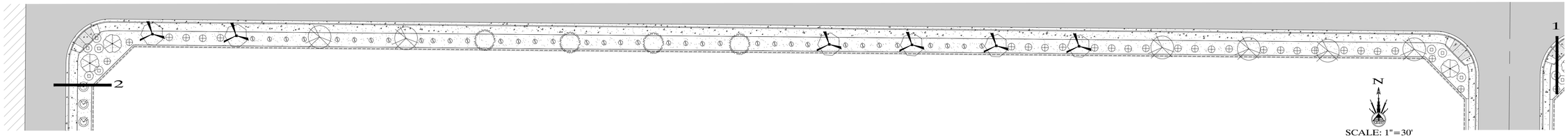
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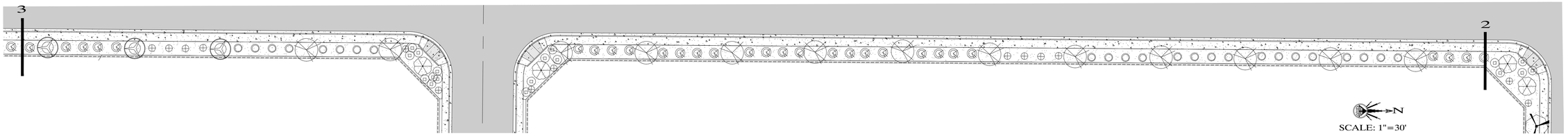
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AND
LOS MEZQUITES UNIT 5

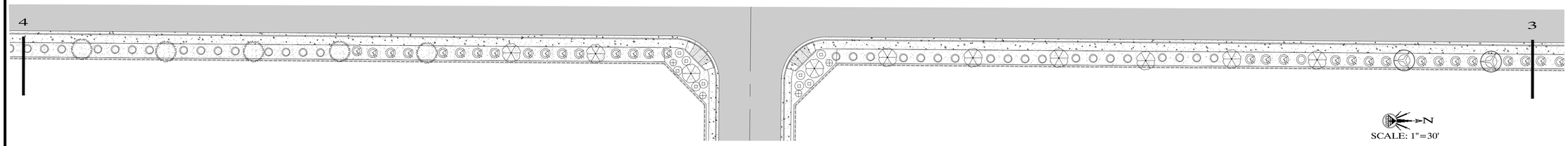
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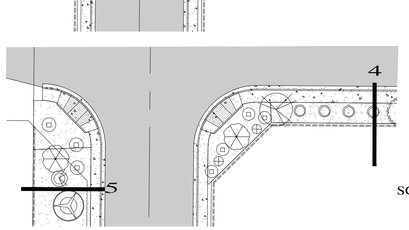
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PROJECT: 21-028
SHEET NUMBER
L1.2

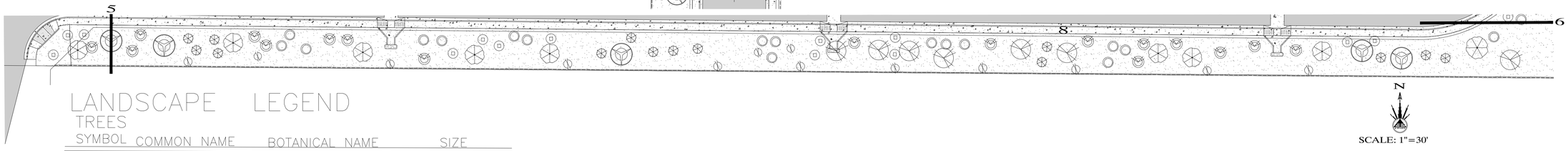












LANDSCAPE LEGEND

TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Live oak	Quercus Fusiformas	24 box
	Red Pistach	Pistacia Chnensis	24 box
	Mulga	Acacia Anura	24 box
	Red Push	Red Pistacha Chinensis	24 box
	Elm	Ulmus Parviflora	24 box

SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Arizona Yellow Bells	Techoma Stans	5 Gal.
	Yellow Lantana Bush	Lantana Camara	5 Gal.
	Red Yucca	Hesperaloe Parviflora	5 Gal.
	Perrys Agave	Perri Huachucensis	5 Gal.
	Choral Fountain	Russelia Equoiseformis	5 Gal.
	Red Bird of paradise	Caesalpinia Pulcberimma	5 Gal.

HARDSCAPES

3/4"White Rose

NOTE:
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CALL TWO WORKING DAYS BEFORE YOU DIG
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1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

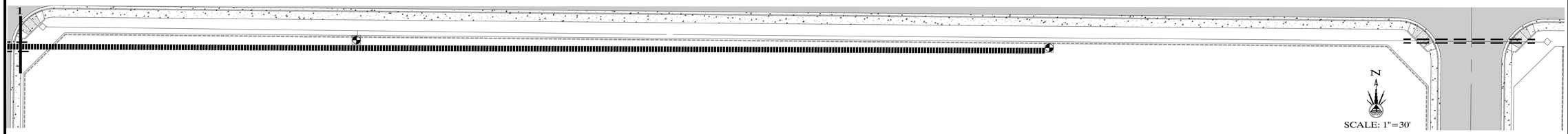
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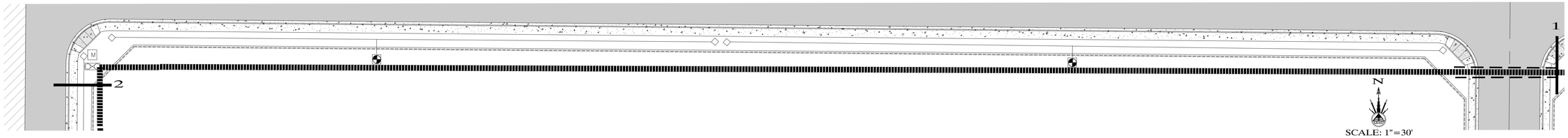
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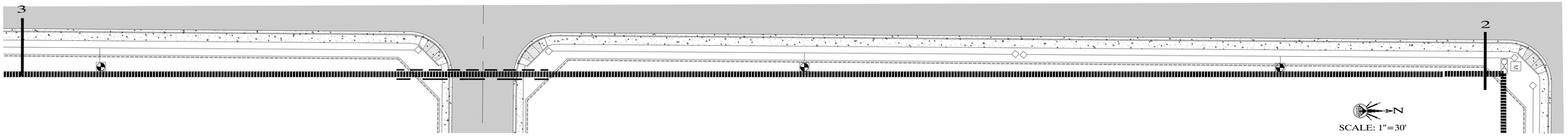
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AND
LOS MEZQUITES UNIT 5

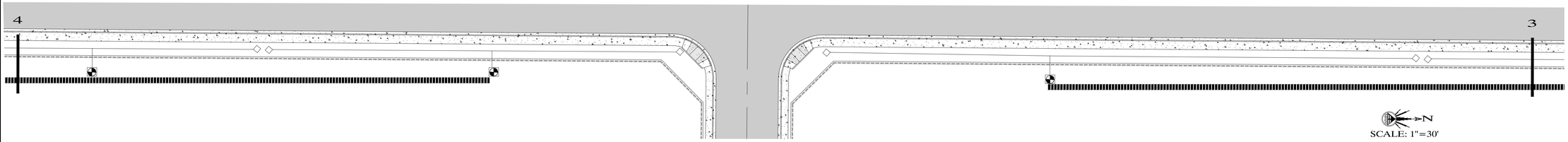
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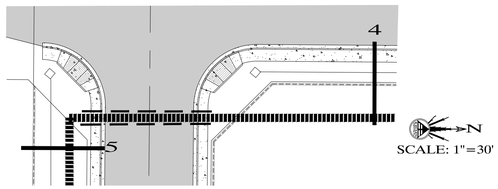
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CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.3

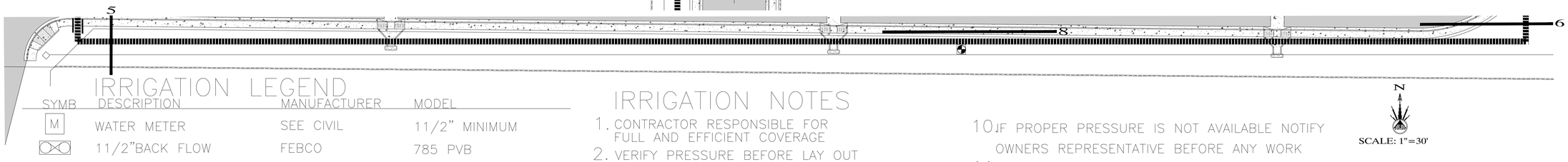












IRRIGATION LEGEND

SYMB	DESCRIPTION	MANUFACTURER	MODEL
M	WATER METER	SEE CIVIL	11/2" MINIMUM
	11/2"BACK FLOW	FEBCO	785 PVB
	WITH SLAB & ENCLOSURE	GAURDSHACK	GS-SERIES
C	CONTROLLER(PEDISTAL)	HUNTER (SOLAR)	PRO C
	1" DRIP ASSEMBLY	HUNTER	SEE DETAILS
	1" VALVE	HUNTER	ICV
	VALVE BOX	CARSON	TAN STANDARD
	FLUSH OUT	SEE DETAILS	

SLEEVE

11/2"SCH 40 MAIN LINE

1" CL200 DRIP LATERAL

IRRIGATION NOTES

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1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

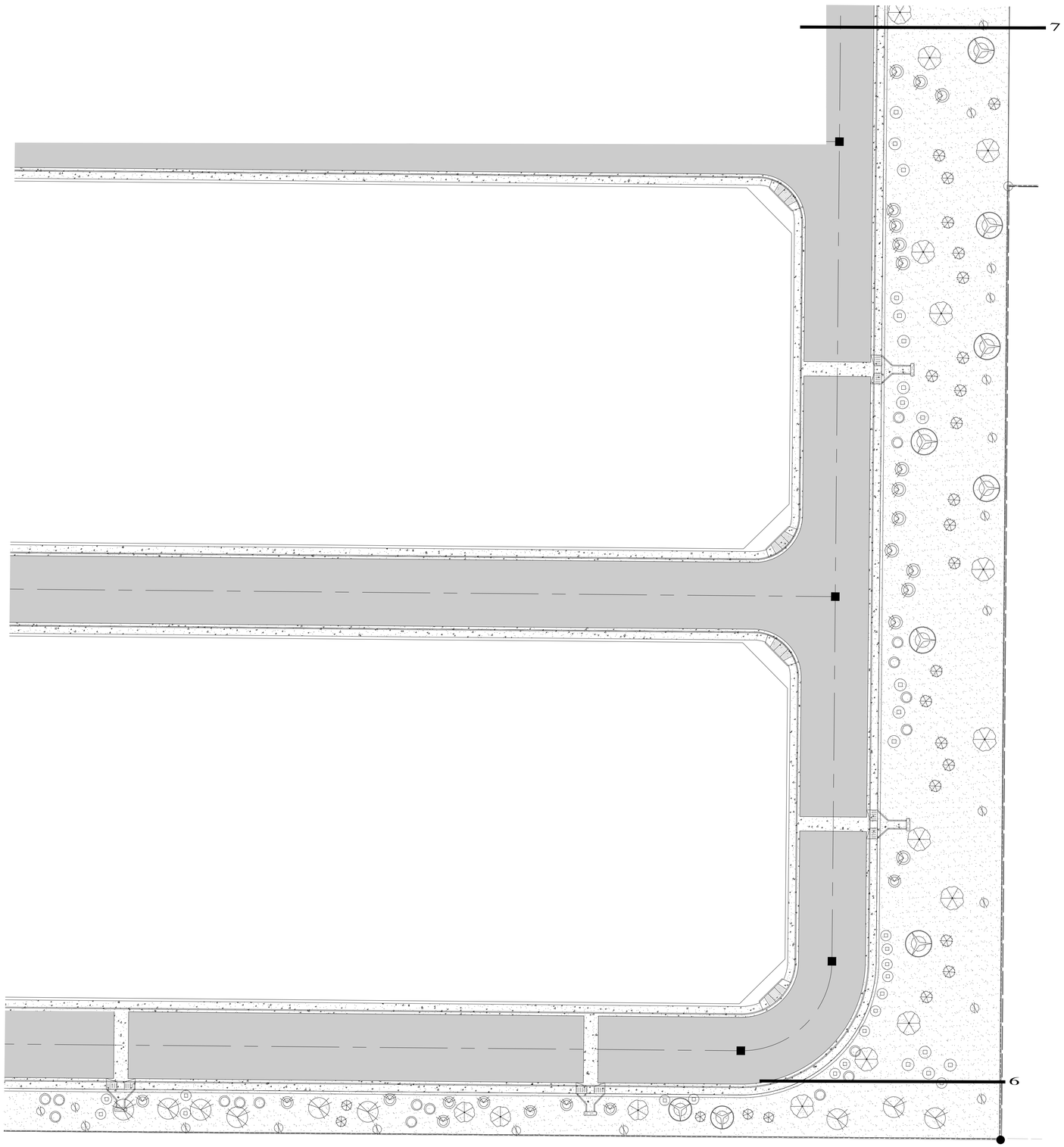
SOUTHWEST DREAMWORKS LANDSCAPE IRRIGATION CONSULTING SERVICES
PO BOX 25414
941-0503
JSALARRY@AOL

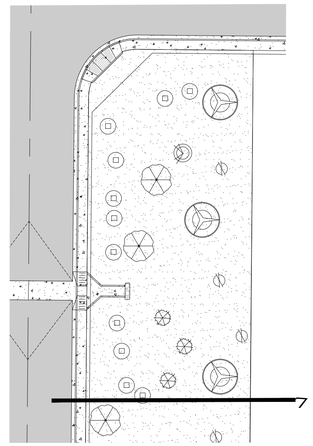
IRRIGATION

LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

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3075 S. Ave. 48
Yuma, AZ 85365
(928) 314-3566
www.epaisengineering.com

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.4





N
W E
S

SCALE: 1"=30'

LANDSCAPE LEGEND

TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Live oak	Quercus Fusiformas	24 box
	Red Pistach	Pistacia Chnensis	24 box
	Mulga	Acacia Anura	24 box
	Red Push	Red Pistacha Chinensis	24 box
	Elm	Ulmus Parviflora	24 box

SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Arizona Yellow Bells	Techoma Stans	5 Gal.
	Yellow Lantana Bush	Lantana Camara	5 Gal.
	Red Yucca	Hesperaloe Parviflora	5 Gal.
	Perrys Agave	Perri Huachucensis	5 Gal.
	Choral Fountain	Russelia Equoiseformis	5 Gal.
	Red Bird of paradise	Caesalpinia Pulcberimma	5 Gal.

HARDSCAPES

3/4"White Rose

NOTE:
ALL TREES TO BE STANDARD TRUNK

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

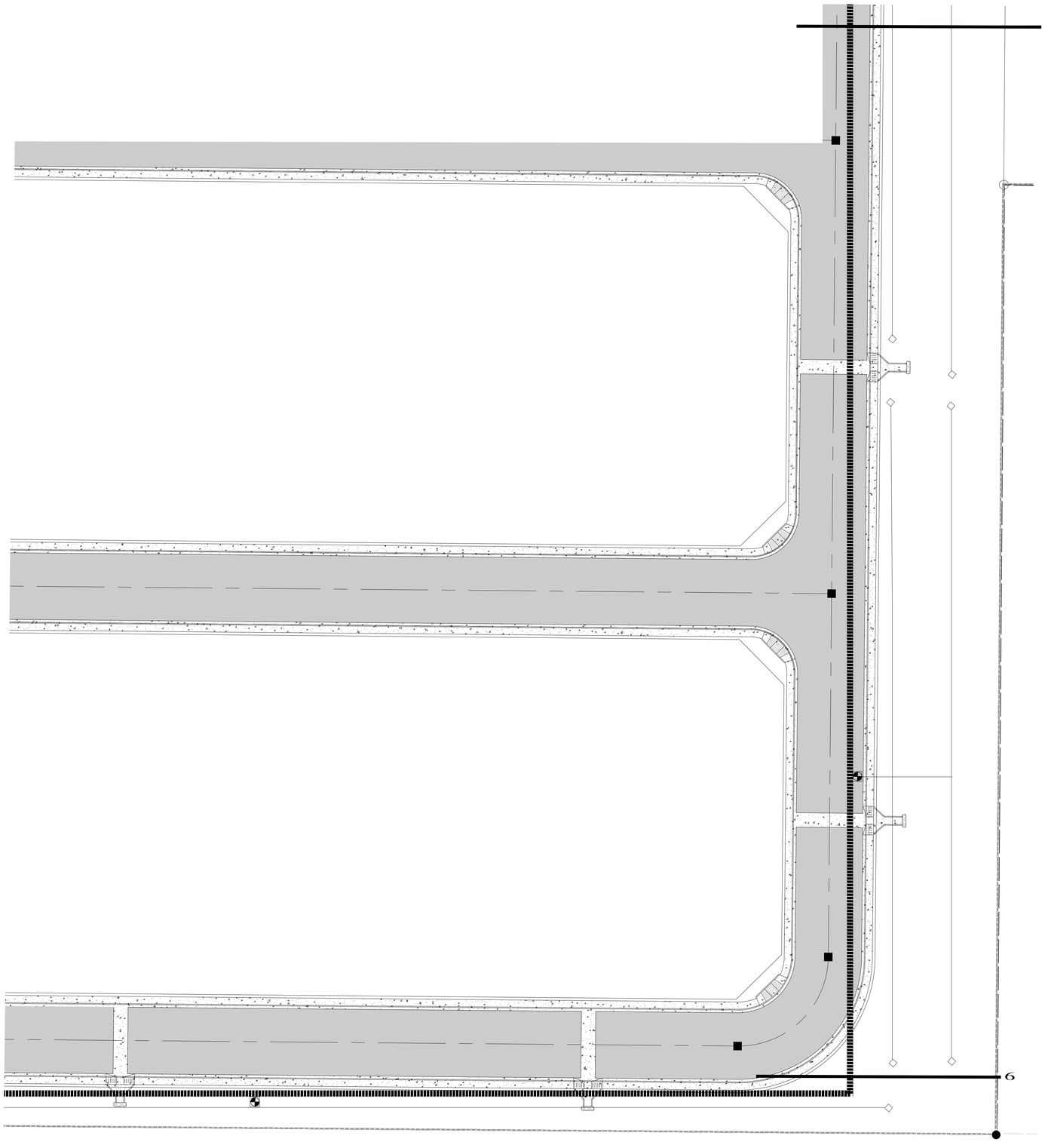
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941-0503
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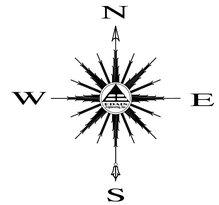
LANDSCAPE

LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

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3075 S. Ave. 48
Yuma, Arizona 85365
(928) 344-3566
mgh@Edaisgroup.com
www.edaisengineering.com

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.5





SCALE: 1"=30'

IRRIGATION LEGEND

SYMB	DESCRIPTION	MANUFACTURER	MODEL
M	WATER METER	SEE CIVIL	11/2" MINIMUM
	11/2"BACK FLOW	FEBCO	785 PVB
	WITH SLAB & ENCLOSURE	GAURDSHACK	GS-SERIES
C	CONTROLLER(PEDISTAL)	HUNTER (SOLAR)	PRO C
	1" DRIP ASSEMBLY	HUNTER	SEE DETAILS
	1" VALVE	HUNTER	ICV
	VALVE BOX	CARSON	TAN STANDARD
	FLUSH OUT	SEE DETAILS	

SLEEVE

11/2"SCH 40 MAIN LINE

1" CL200 DRIP LATERAL

IRRIGATION NOTES

1. CONTRACTOR RESPONSIBLE FOR FULL AND EFFICIENT COVERAGE
2. VERIFY PRESSURE BEFORE LAY OUT MINIMUM PRESSURE 75 PSI AT MAINLINE
3. DRIP VALVE LOCATIONS ARE ONLY APPROXIMATE
4. DRIP VALVES NOT TO EXCEED 10 GPM LAWN VALVES NOT TO EXCEED N/A GPM
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REVISIONS

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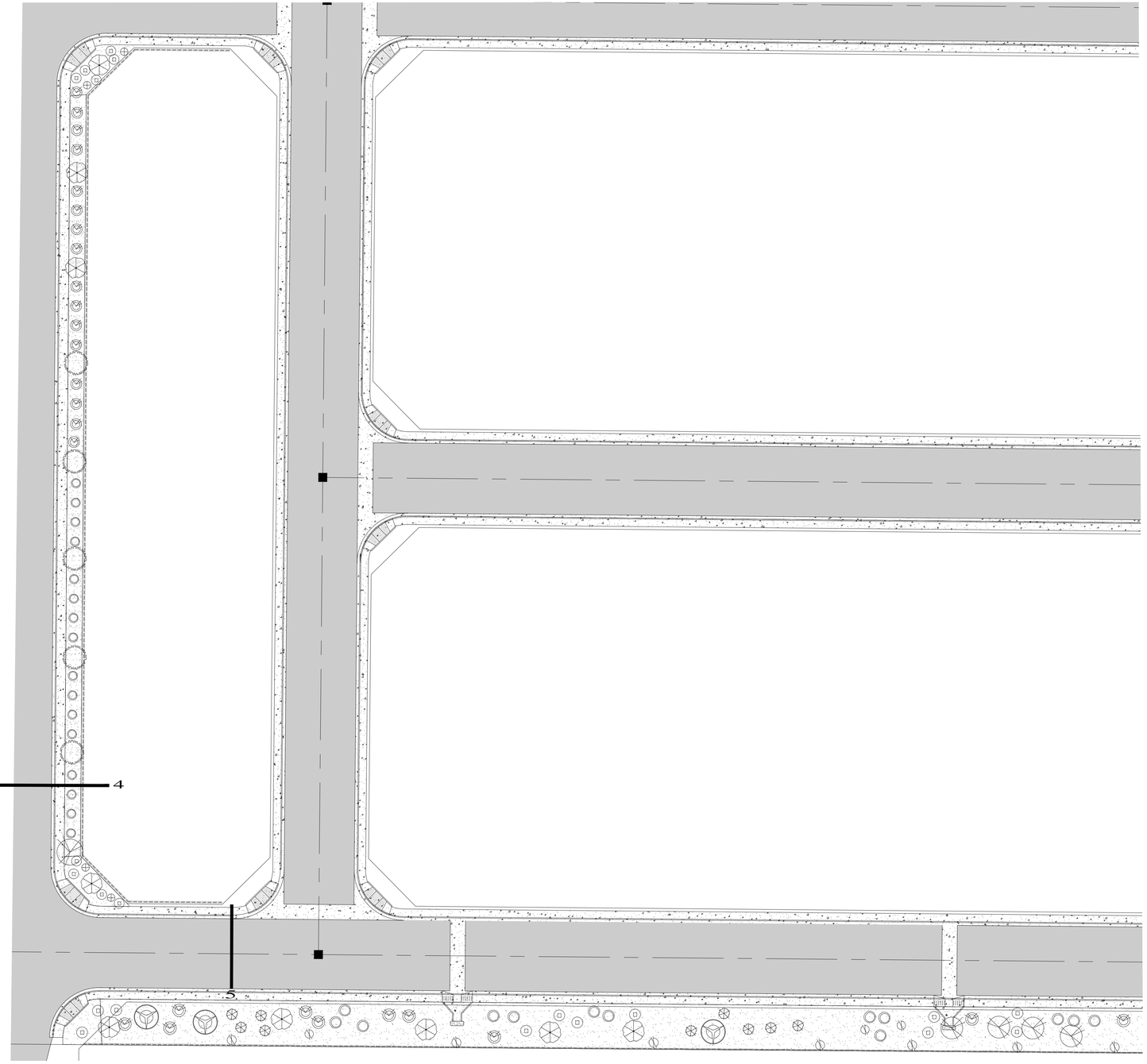
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IRRIGATION

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www.edaisengineering.com

DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.6



N

W E

S

SCALE: 1"=30'

LANDSCAPE LEGEND

TREES

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Live oak	Quercus Fusiformas	24 box
	Red Pistach	Pistacia Chnensis	24 box
	Mulga	Acacia Anura	24 box
	Red Push	Red Pistacha Chinensis	24 box
	Elm	Ulmus Parviflora	24 box

SHRUBS

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
	Arizona Yellow Bells	Techoma Stans	5 Gal.
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	Choral Fountain	Russelia Equoiseformis	5 Gal.
	Red Bird of paradise	Caesalpinia Pulcberimma	5 Gal.

HARDSCAPES

3/4"White Rose

NOTE:
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CALL TWO WORKING DAYS BEFORE YOU DIG
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REVISIONS

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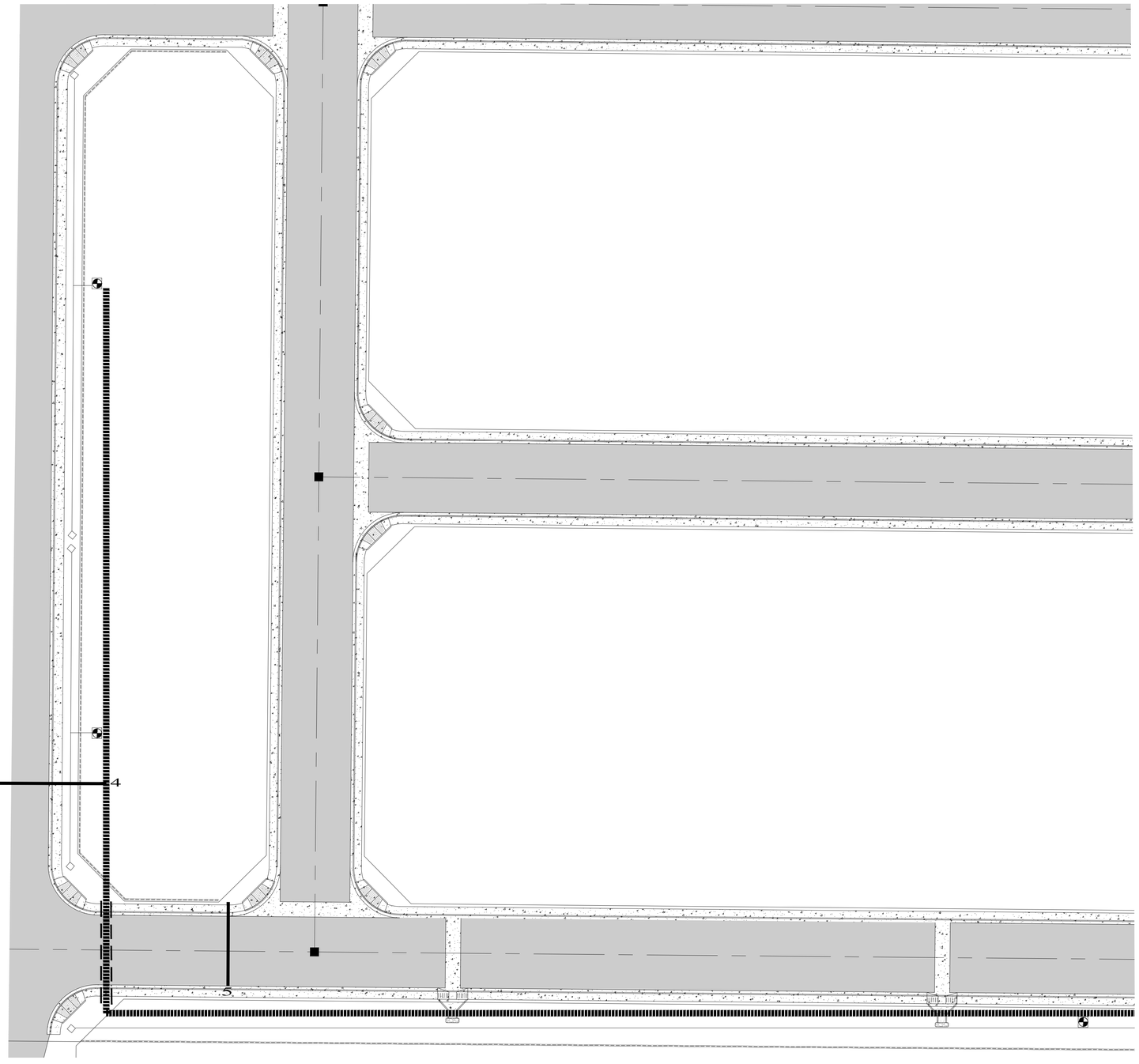
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APR 2024

DRAWN:
LPR

CHECKED:
NKE

PROJECT:
21-028

SHEET NUMBER
L1.7



N

W E

S

SCALE: 1"=30'

IRRIGATION LEGEND

SYMB	DESCRIPTION	MANUFACTURER	MODEL
M	WATER METER	SEE CIVIL	11/2" MINIMUM
	11/2"BACK FLOW	FEBCO	785 PVB
	WITH SLAB & ENCLOSURE	GAURDSHACK	GS-SERIES
C	CONTROLLER(PEDISTAL)	HUNTER (SOLAR)	PRO C
	1" DRIP ASSEMBLY	HUNTER	SEE DETAILS
	1" VALVE	HUNTER	ICV
	VALVE BOX	CARSON	TAN STANDARD
◇	FLUSH OUT	SEE DETAILS	

SLEEVE

11/2"SCH 40 MAIN LINE

1" CL200 DRIP LATERAL

IRRIGATION NOTES

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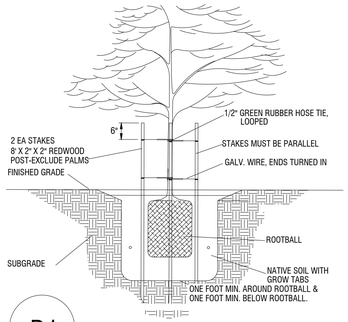
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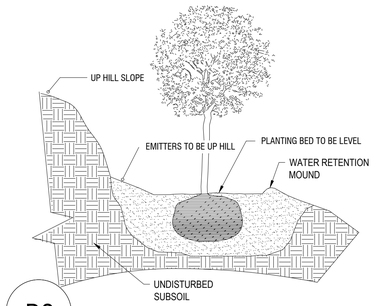
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3075 S. Ave. 48
Yuma, Arizona 85365
(928) 344-3500
mjeb@edaisgroup.com
www.edaisengineering.com

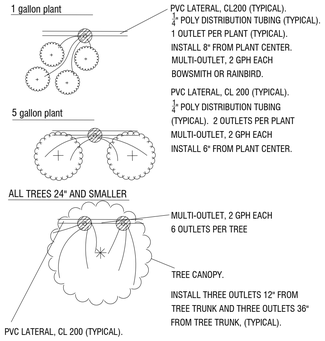
DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.8



D1 TREE PLANTING



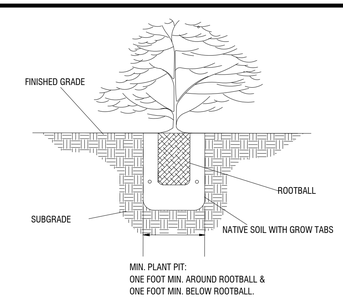
D2 PLANTED ON SLOPE



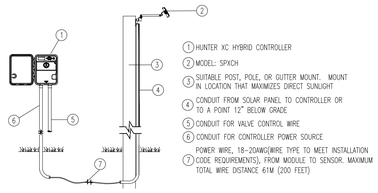
DATE PALMS AND OTHER HIGH WATER USERS - 24 OUTLETS.

SINGLE EMITTERS MAY BE USED PRIOVIDED OUT PUT IS SAME

D3 EMITTER PLACEMENT

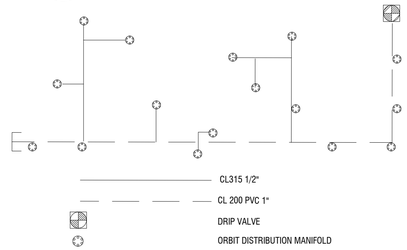


D4 SHRUB PLANTING

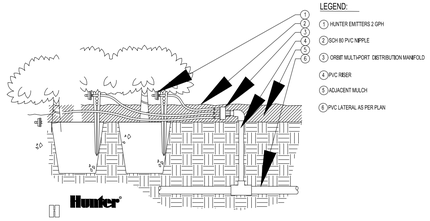


D5 SOLAR PANEL FOR XC HYBRID

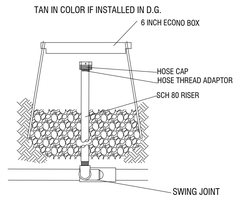
Hunter® IRRIGATION DETAIL



D6 TYPICAL CONTROLLER

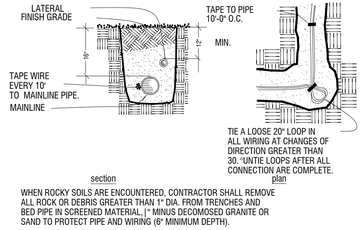


D7 MULIT-PORT MANIFOLD



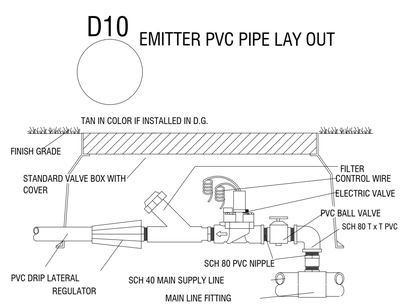
D8 FLUSH OUT

NOTE:
- WIRE SHALL BE INSTALLED PER LOCAL CODE.
- TRENCHES TO BE COMPACTED TO MATCH ADJACENT DENSITIES.
- SITE LIGHTING MAY USE COMMON TRENCH.
- MAINLINE PIPE AND WIRE DEPTH TO BE 24"



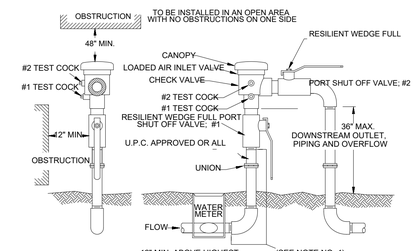
WHEN ROCKY SOILS ARE ENCOUNTERED, CONTRACTOR SHALL REMOVE ALL ROCK OR DEBRIS GREATER THAN 1" DIA. FROM TRENCHES AND BED PIPE IN SCREENED MATERIAL.|" MINUS DECOMOSED GRANITE OR SAND TO PROTECT PIPE AND WIRING (6" MINIMUM DEPTH).

D9 PIPE AND WIRE TRENCHING

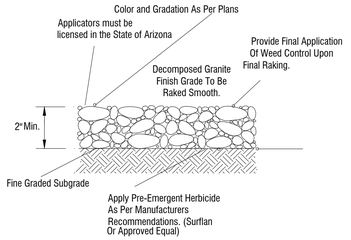


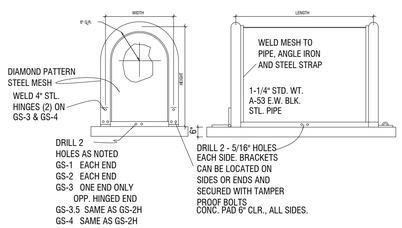
1 VALVE PER STANDARD VALVE BOX

D10 EMITTER PVC PIPE LAY OUT



D11 DECOMPOSED GRANITE





D12 GARDSHACK ENCLOSURE

size (pipe)	class	gpm	sleeve size
1/2"	SCH 40	0-5	2"
3/4"	SCH 40	6-10	2"
1"	SCH 40	11-15	2"
1-1/4"	SCH 40	16-25	3"
1-1/2"	SCH 40	26-35	3"
2"	SCH 40	36-50	4"
2-1/2"	CL160	51-75	6"
3"	CL160	76-100	6"
4"	CL160	101-190	10"
WIRING	SCH 40	1-26 WIRES	2" MIN.

ALL MAINLINE FITTINGS 3" AND LARGER SHALL BE DUCTILE IRON, ALL OTHER MAINLINE FITTINGS SHALL BE SCH. 40.

ALL MAINLINE INTERSECTIONS (45 , 90 , ECT.) SHALL HAVE THRUST BLOCKS PER MANUFACTURER'S RECOMMENDATIONS. USE MECHANICAL FITTINGS ON TEES, FOR 3" AND LARGER MAINLINE.

SLEEVE SIZE IS FOR SINGLE PIPE RUNS.

SLEEVE ALL WIRE SEPERATE FROM WATER LINES, UNDER PAVING.

ALL SOLVENT WELD MAINLINE FITTINGS SHALL BE SCHEDULE 40.

D13 PIPE AND SLEEVE SIZING

D14 DRIP VALVE

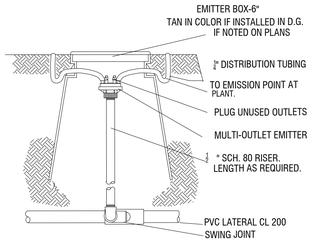
NOTES

1. A permit is required before installing or replacing a backflow assembly. Permits are obtained at the Department of Community Development.
2. A list of approved backflow assemblies are available from the , Utilities Department Pretreatment
3. The P.V.B. shall be installed outside, above ground, as close to the water meter as possible. The P.V.B. shall be located on private property unless otherwise authorized.
4. There shall be no other piping connected to the piping between the water meter and the backflow assembly except for parallel assembly installations.
5. Installations shall meet all current uniform plumbing codes in addition to the City building codes.
6. Installations shall be left exposed until inspected and approved by the City.
7. If this unit is installed to serve a retention basin, this unit shall be placed a minimum of 12" (36" maximum) above the flood rim of the retention basin.
8. Protective cages are optional and will meet clearance, access and drainage requirements.
9. It is recommended that backflow assemblies be protected from the elements. Care shall be taken to ensure that the protection does not hinder the assembly's operation.
10. All backflow units are to be tested by a certified professional prior to final approval. Backflow units shall be tested on an annual basis.
11. The installation of a pressure vacuum breaker assembly can cause a closed system. Consult with the City Building Official for pressure relief valves, thermal expansion or other needed requirements.
12. P.V.B.'s may be maintained under constant pressure and have shutoff valves downstream but there shall be no means of imposing back pressure on the P.V.B. from any other source.
13. P.V.B.'s shall only be approved for irrigation system service protection unless otherwise authorized.

SPECIAL NOTE

FOR THE CITY SAN LUIS
ALL FITTINGS, VALVES,PIPE AND UNIONS WILL BE COPPER

D15 PRESSURE VACUME BREAKER



IF NOTED ON PLANS

D16 MULTI EMITTER

MAINTENANCE AND GUARANTEE

1. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER OR OWNER'S REPRESENTATIVE FOUR (4) DAYS PRIOR TO COMPLETING IMPROVEMENTS IN ACCORDANCE WITH PLANS AND SPECIFICATIONS TO REQUEST AN INSPECTION FOR SUBSTANTIAL COMPLETION. LANDSCAPE DESIGNER OR OWNER'S REP. SHALL PREPARE PUNCHLIST OF ALL WORK REQUIRING CORRECTION. MAINTENANCE PERIOD TO BEGIN WHEN ALL PUNCHLIST ITEMS ARE CORRECTED.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING LANDSCAPE AREA FOR 30 CALENDAR DAYS OR AS SPECIFIED BY CONTRACT. MAINTENANCE INCLUDES ADJUSTING WATER SCHEDULES, WEEDING, REMOVING DEBRIS FROM LANDSCAPE, RAKING, SPRAYING, FERTILIZING, TRIMMING, OR OTHER OPERATIONS ESSENTIAL FOR CARE, UPKEEP AND PROJECT APPEARANCE.
3. CONTRACTOR SHALL NOTIFY OWNER A MINIMUM OF ONE (1) WEEK PRIOR TO MAINTENANCE PERIOD END TO RESOLVE ANY OUTSTANDING ISSUES. A FINAL INSPECTION SHALL OCCUR TO REVIEW THE PROJECT AND ISSUE A FINAL ACCEPTANCE. (PROVIDE 3 DAYS NOTICE).
4. PLANTS NOT IN HEALTHY CONDITION THROUGHOUT THE WARRANTY PERIOD SHALL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
5. PROVIDE ONE YEAR(FROM ACCEPTANCE DATE) UNCONDITIONAL WARRANTY FOR THE IRRIGATION SYSTEM.

REVISIONS

SOUTHWEST RESOURCES, LLC
LANDSCAPE IRRIGATION CONSULTING SERVICES
PO BOX 25414
941-0505
JSALARRY@AOL

INSTALLATION DETAILS

LOS MEZQUITES UNIT 4
AND
LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
Civil Engineering Consultants
3075 S. Ave. 4E
Yuma, Arizona 85365
(928) 344-3566
nale@Edaisgroup.com
www.edaisengineering.com

DATE:
APR 2024

DRAWN:
LPR

CHECKED:
NKE

PROJECT:
21-028

SHEET NUMBER
L1.9

IRRIGATION NOTES

1. CONTRACTOR TO FIELD VERIFY DRAWINGS PRIOR TO ANY INSTALLATION OR ORDERING OF MATERIALS AND NOTIFY LANDSCAPE DESIGNER OF ANY DISCREPANCIES BETWEEN DRAWINGS AND SITE. IF CONTRACTOR FAILS TO NOTIFY LANDSCAPE DESIGNER, HE ASSUMES FULL RESPONSIBILITY FOR ANY NECESSARY ALTERATIONS TO THE SYSTEM.
2. ALL MATERIALS USED SHALL BE INSTALLED AS PER PLAN AND AS PER MANUFACTURE'S SPECIFICATIONS. ALL DEVIATIONS FROM DRAWINGS OR MATERIALS USED SHALL BE APPROVED BY OWNER'S REPRESENTATIVE OR LANDSCAPE DESIGNER.
3. IRRIGATION SYSTEM HAS BEEN DESIGNED FOR A STATIC WATER PRESSURE OF 70 PSI.
4. CONTRACTOR TO FIELD VERIFY PRESSURE PRIOR TO ORDERING MATERIALS OR STARTING ANY IRRIGATION INSTALLATION AND NOTIFY CONSULTANT OF ANY DIFFERENCE FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT HE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS.
5. 120 VOLT SERVICE BY ELECTRICAL CONTRACTOR. IRRIGATION CONTRACTOR RESPONSIBLE FOR POWER CONNECTION TO CONTROLLER.
6. ALL CONTROL WIRES TO BE RED, ALL COMMON WIRES TO BE WHITE. ONE SET OF CONTROLLER KEYS TO BE GIVEN TO OWNER.
7. ALL 24 VOLT WIRE SHALL BE #14 UFL, DIRECT BURIAL, SOLID COPPER.
8. IRRIGATION CONTRACTOR RESPONSIBLE FOR ALL LANDSCAPE SLEEVING. CONTRACTOR TO COORDINATE SLEEVING INSTALLATION OF CONCRETE FLATWORK AND PAVING. ALL SLEEVES TO BE EXTENDED AT LEAST 1' BEYOND CONCRETE STRUCTURES.
9. ALL HARDSCAPE 5'-0" OR WIDER TO BE SLEEVED.
10. CONTRACTOR SHALL INSTALL ALL PIPING AND WIRING UNDER PAVED AREAS IN SLEEVES AS SHOWN ON PLANS. ALL WIRE SHALL BE SLEEVED SEPARATELY FROM PIPING.
11. IRRIGATION CONTRACTOR TO VERIFY EXISTING SLEEVES (SHOWN ON IRRIGATION PLAN) INSTALLED BY OTHER CONTRACTORS. COORDINATE INSTALLATION OF ADDITIONAL SLEEVES WITH GENERAL CONTRACTOR.
12. ALL IRRIGATION EQUIPMENT TO BE LOCATED IN LANDSCAPED AREAS (SOME LINES AND EQUIPMENT ARE SCHEMATIC).
13. LOCATE VALVE BOXES IN DECOMPOSED GRANITE NOT IN TURF, ADJACENT TO WALKWAYS AND CURBS WHENEVER POSSIBLE. BOXES IN D.G. TO BE TAN IN COLOR
14. ALL PLANTS REQUIRING MORE THAN ONE DRIP EMITTER SHALL HAVE EMITTERS DISTRIBUTED EVENLY AROUND EDGE OF ROOTBALL, WITHIN PLANT BASIN.
15. EMITTERS TO BE PLACED ON UP HILL SIDE OF PLANTS ON SLOPED PLANTING AREAS.
16. PRIOR TO OWNER APPROVAL, CONTRACTOR SHALL COMPLETE THE FOLLOWING:
    A. ALL IRRIGATION EQUIPMENT (INCLUDING PIPE LINES AND SLEEVES) TO BE DOCUMENTED FROM 2 STATIONARY POINTS.
    B. LABEL AND LAMINATE VALVE SCHEDULE, ATTACH TO INSIDE OF CONTROLLER.
    C. ALL IRRIGATION HEADS TO BE ADJUSTED TO THE PROPER HEIGHT.
    D. ALL SPRAY HEADS TO BE FLUSHED OF DEBRIS AND FLOW CONTROLS ADJUSTED TO ACHIEVE PROPER COVERAGE. AVOID SPRAY ON ALL HARDSCAPE AND STRUCTURES.
17. IRRIGATION CONTRACTOR SHALL PROVIDE 100% HEAD TO HEAD COVERAGE IN ALL TURF AREAS AT NO ADDITIONAL COST TO THE OWNER. FIELD ADJUST HEAD LOCATIONS AS REQUIRED. ACTUAL SITE CONDITIONS MAY VARY FROM DRAWINGS AND NECESSITATE ADJUSTMENT OF HEAD LAYOUT, AREA, NOZZLE OR QUANTITIES OF HEADS. CONTRACTOR SHALL ADJUST THE PERFORMANCE OF THE IRRIGATION SYSTEM FOR OPTIMUM
18. PLANT GROWTH BASED ON ACTUAL SITE CONDITIONS, INCLUDING SOIL TYPES, SLOPE OR OTHER VARIABLES THAT MAY DEVIATE FROM PROJECT PLANS. CONTACT SOUTHWEST DREAMWORKS OF ANY DISCREPANCIES BETWEEN PROJECT PLANS AND ACTUAL SITE CONDITION PRIOR TO INSTALLATION.
19. PERMANENTLY EMBOSS VALVE BOX LIDS TO CORRESPONDING CONTROLLER STATION NUMBER. LETTER HEIGHT SHALL BE 1" WITH ADDITIONAL LABELING AS FOLLOWS:
    FC = FLUSH CAP
    PR = PRESSURE REGULATOR
    QC = QUICK COUPLER
    GV = GATE VALVE
    J = WIRE "J" BOX
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF THE FULLY AUTOMATED IRRIGATION SYSTEM PRIOR TO STARTING PLANTING. IF THE IRRIGATION SYSTEM IS INTERRUPTED FOR ANY REASON THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUE MANUAL WATERING OF ALL PLANT MATERIAL UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIVE.
21. THE CONTRACTOR SHALL PROVIDE, INSTALL AND HAVE TESTED ALL CONNECTIONS DOWN STREAM OF THE WATER METER AND BACKFLOW PREVENTER.
22. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PIPING NECESSARY TO PROVIDE A COMPLETE AND FULLY OPERATIONAL IRRIGATION SYSTEM INCLUDING ALL SUB-LATERAL PIPING TO EACH PLANT EMITTER AS SPECIFIED AND DETAILED WHETHER OR NOT PIPING IS SHOWN ON PLANS.
23. REFER TO GENERAL CONSTRUCTION NOTES ON COVER SHEET FOR ADDITIONAL CONSIDERATIONS THAT RELATE TO SCOPE OF WORK WITHIN THIS SECTION.

POSSIBLE ALL ELECTRIC CONTROL VALVES TO BE LOCATED IN SERIES ALONG THE MAIN WATERLINE. ALL VALVES WILL BE IN HEAVY DUTY, PLASTIC VALVE BOXES W/LIDS RAISED TO FINISH GRADE. ALL ELECTRIC VALVES SHALL BE BELOW THE SURFACE MIN. 6".

LANDSCAPE NOTES

1. LANDSCAPE AREAS ARE DEFINED AS ALL NON-PAVED AREAS DISTURBED BY THIS PHASE OF CONSTRUCTION. SLIGHT VARIATIONS MAY EXIST BETWEEN ON-SITE CONDITIONS AND DRAWINGS. CONTRACTOR SHALL ADJUST PLANTING LAYOUT ONLY AS REQUIRED TO MAINTAIN PLANT QUANTITIES AND DESIGN INTENT.
2. THE OWNER'S REPRESENTATIVE IS TO APPROVE ANY AND ALL SUBSTITUTIONS.
3. LOCATE PLANTS AWAY FROM OBSTACLES SUCH AS FIRE HYDRANTS, TRANSFORMERS, AND LIGHT FIXTURES.
4. ALL PLANT MATERIAL SHALL MEET A.N.A. SPECIFICATIONS. THE LANDSCAPE DESIGNER OR HIS REPRESENTATIVE RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIALS DEEMED UNACCEPTABLE.
5. DOUBLE STAKE ALL SUPPLEMENTAL BOX TREES OUTSIDE ROOTBALL, SEE TREE STAKING DETAIL.
6. TREES SHALL BE A MINIMUM OF 4' FROM CURB , SHRUBS SHALL BE 3' OR MORE AWAY FROM CURBS OR WALKS. REFER TO PLANS AND MAINTAIN SHRUB MASSINGS AS SHOWN AWAY FROM HARDSCAPE.
7. PLANT LOCATIONS SHALL BE FLAGGED OR STAKED FOR REVIEW PRIOR TO STARTING IRRIGATION OR PLANTING EXCAVATION. MINOR RELOCATION'S SHALL BE MADE AT THIS TIME TO AVOID UNSUITABLE CONDITIONS.
8. NATIVE GRANULAR SOILS SHALL BE FINE GRADED AS TOPDRESSING AND RAKED UNIFORMLY ALONG CURBS, WALKS AND WALLS.
9. CONTRACTOR SHALL VERIFY ALL DESIGNATED N.A.O.S. AREAS AND ENSURE ALL AREAS ARE PROTECTED FROM CONSTRUCTION DISTURBANCE.
10. ALL PLANTING SHALL CONFORM TO THE HEIGHT REQUIREMENTS SPECIFIED FOR SIGHT VISIBILITY TRIANGLES. REFER TO C.O./ STANDARDS FOR SPECIFIED REQUIREMENTS. WHERE MULTIPLE JURISDICTION EXIST, THE MOST RESTRICTIVE SHALL APPLY.
11. GRADE NOTED ON LANDSCAPE PLAN TO BE FIELD VERIFIED/APPROVED BY OWNER'S REPRESENTATIVE BEFORE LANDSCAPE BEGINS CONSTRUCTION.
12. FEATHER AND BLEND GRADE BETWEEN CONSTRUCTION AND NATIVE AREAS FOR SMOOTH TRANSITION.
13. REVIEW SALVAGE NATIVE PLANT MATERIAL INVENTORY PRIOR TO BEGINNING WORK TO VERIFY RESPONSIBILITY OF RELOCATION AND WARRANTY.
14. SAGUARO SHALL BE PLANTED TO THEIR ORIGINAL SOLAR ORIENTATION WITH (2) DRIP EMITTERS (SEE DETAIL). SAGUARO SHALL BE PLANTED STRAIGHT AND DEEP ENOUGH TO REQUIRE NO BRACING. RETURN TAGS TO OWNER.
15. NATIVE SALVAGED SAGUAROS SHALL BE PROTECTED FROM INJURY DURING TRANSPLANT AND SHALL BE WARRANTED FOR 6 MONTHS FROM FINAL ACCEPTANCE.
16. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON DRAWINGS
17. REFER TO GENERAL CONSTRUCTION NOTES BELOW FOR ADDITIONAL CONSIDERATIONS THAT RELATE TO SCOPE OF WORK WITHIN THIS SECTION.
18. CONTRACTOR SHALL APPLY PRE-EMERGENT HERBICIDE (TREFLANS OR APPROVED EQUAL) IN ALL AREAS NOT CONTAINING BERMUDA GRASS, PER MANUFACTURERS RECOMMENDATION. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO APPLICATION OF HERBICIDE.
19. HYDROSEED GRASS FOR NORMAL APPLICATION WITH TACKIFIER AND PAPER MULCH. A BRYLION TYPE SEEDER MAY BE USED. SEED 3LBS/ 1,000 SQ. FT. OF HYBRID BERMUDA. IF PLANTING OCCURS BETWEEN OCTOBER 1, AND MAY 1, USE 15 POUNDS OF WINTER RYE SEED/ 1,000 SQ. FT. FOR FOR SMALLER AREAS HAND RAKE AND COVER WITH 1/2" MULCH USE A GOOD PRE PLANT FERTILIZER, (16-20-20)
20. LANDSCAPE CONTRACTOR SHALL SUBMIT PHOTOS OF ALL TREES FOR APPROVAL BY LANDSCAPE DESIGNER PRIOR TO DELIVERY.

REVISIONS

SOUTHWEST DREAMWORKS, LLC
LANDSCAPE IRRIGATION CONSULTING SERVICES
PO BOX 25414
941-0303
JSALARRY@AOL

INSTRUCTIONS AND NOTES

LOS MEZQUITES UNIT 4 AND LOS MEZQUITES UNIT 5

EDAIS Engineering, Inc.
3075 S. Ave. 48
Yuma, AZ 85365
(928) 344-3566
www.edaisengineering.com

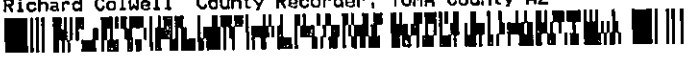
DATE: APR 2024
DRAWN: LPR
CHECKED: NKE
PROJECT: 21-028
SHEET NUMBER
L1.10

WHEN RECORDED, MAIL TO:

CITY OF SAN LUIS
ATTN: CITY CLERK
P.O. BOX 1170
SAN LUIS, ARIZONA 85349

CONFORMED COPY
2024-30028 ORDINANCE
12/16/2024 02:58:25 PM Pages: 4 Fees: $15.00
Requested By:SAN LUIS CITY CLERK'S OFFICE

Richard Colwell' County Recorder, YUMA County AZ



The above area is to be reserved for recording information.

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CAPTION HEADING:

ORDINANCE

Ordinance No. 458
Los Mezquites Unit 5
Rezoning Case No. 2024-0776
Amending the official zoning map of the City of San Luis by changing the zoning classification of 11.83 acres from Medium High Density Residential (R-2) to Medium Residential (R1-6) located at the northeast corner of 24th Avenue and Nadine Street

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Ordinance

NO. 458

AN ORDINANCE OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF SAN LUIS BY CHANGING THE ZONING CLASSIFICATION OF 11.83 ACRES FROM MEDIUM-HIGH DENSITY RESIDENTIAL (R-2) TO MEDIUM DENSITY RESIDENTIAL (R1-6) LOCATED AT THE NORTHEAST CORNER OF 24TH AVENUE AND NADINE STREET; REPEALING ANY CONFLICTING PROVISIONS; AND PROVIDING FOR SEVERABILITY.

WHEREAS, the Mayor and City Council of the City of San Luis desire to amend the City of San Luis Official Zoning District Map (the "Zoning Map") pursuant to A.R.S. §9-462.04 to change the zoning classification for 11.83 acres being a portion of real property located on Assessor Parcel ID No. 227-11-004; as attached hereto as "Exhibit A" and

WHEREAS, the aforementioned change in zoning classification is consistent with the General Plan of the City of San Luis; and

WHEREAS, all due and proper notices of public hearings on the Zoning Map Amendment have been given and proper public hearings have been held, and a recommendation has been given regarding the Zoning Map Amendment by the Planning and Zoning Commission of the City of San Luis; and

WHEREAS, the Planning and Zoning Commission recommended approval of the zoning.

BE IT ORDAINED by the Mayor and Council of the City of San Luis, Arizona, as follows:

SECTION 1. That the above recitals are hereby incorporated as though fully set forth herein.

SECTION 2. That the Official Zoning Map of the City of San Luis is hereby amended by changing the zoning classification from Medium-High Density Residential (R-2) to Medium Density Residential (R1-6) of the property subject to the following condition:

1. The owner/applicant shall submit a preliminary plat for approval in compliance with the City of San Luis subdivision regulations.

2. Developer must comply with approved development agreement.

Property more fully described as:

A portion of the southeast quarter (SE1/4) of Section 11, Township 11 South, Range 24 West, Gila and Salt River Base and Meridian, Yuma County, Arizona.

Containing 11.83 acres more or less.

SECTION 3. In the event of a conflict between the provisions of this ordinance and any other ordinance, resolution, regulation, or policy within the City of San Luis, the conflicting provisions are hereby repealed, superseded, and replaced, and the provisions of this ordinance shall govern.

SECTION 4. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the final decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance or said reference regulations.

PASSED AND ADOPTED by the Mayor and Council of the City of San Luis, Arizona, this 11th day of December, 2024.

Tadeo Azael De La Hoya, Vice Mayor

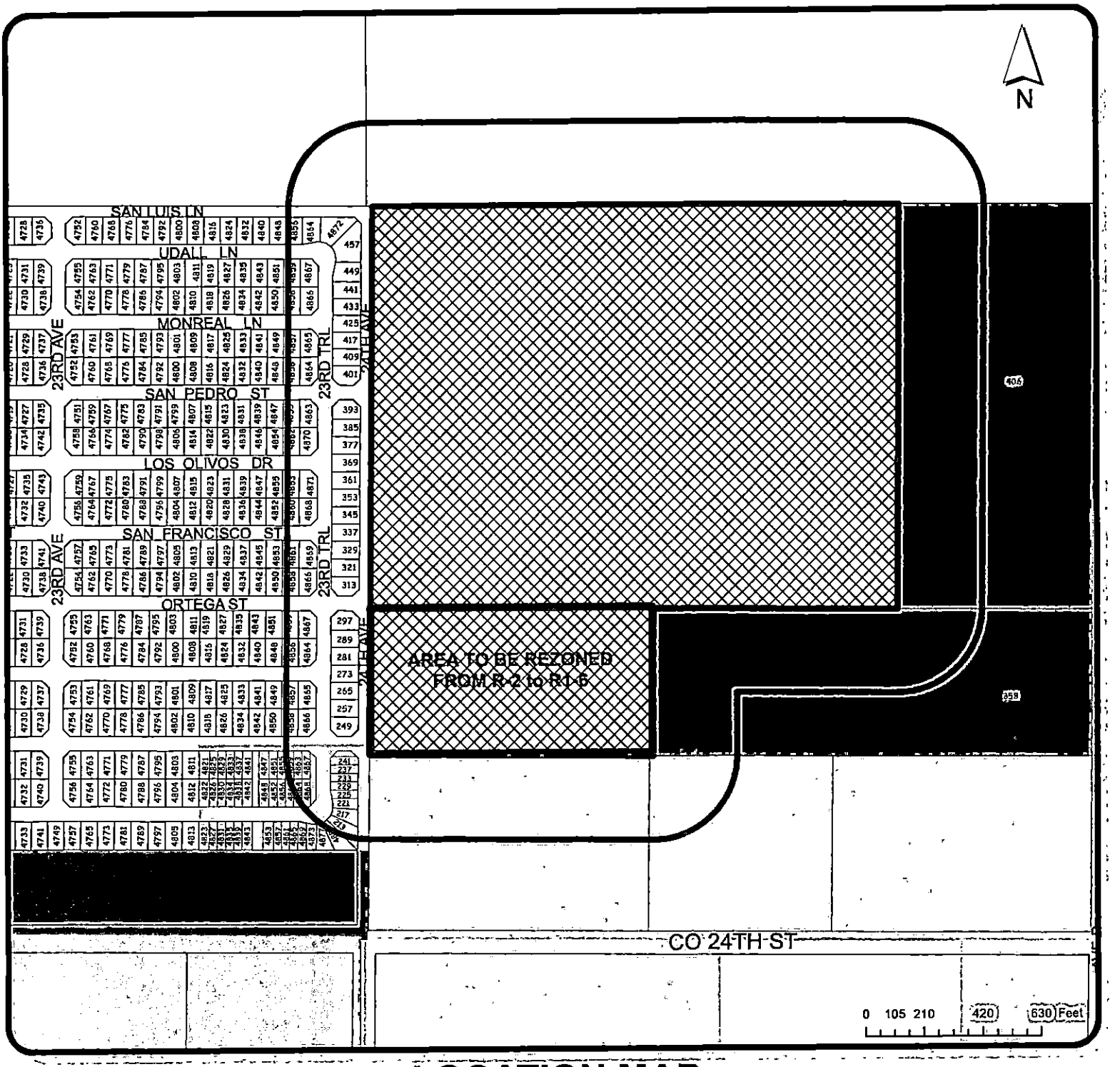
ATTEST:

Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

Kay Marion Macuil, City Attorney

Ordinance No. 458
Exhibit A



LOCATION MAP

LOCATION OF SUBJECT PROPERTY

- PARCEL ID: 227-11-004
- 300ft Notification Area
- REZONING AREA

Legend
SINGLE RESIDENCE ZONING DISTRICTS
R1-6
RA-10
MULTIPLE RESIDENCE ZONING DISTRICTS
R-2
R-3
COMMERCIAL ZONING DISTRICTS
C-2
INDUSTRIAL ZONING DISTRICTS
I-1

REZONING

CASE #
2024-0776

2021-47097 RESOLUTION
12/22/2021 09:51:20 AM Pages: 13 Fees: $15.00
Requested By:CITY OF SAN LUIS
Recorded By: arios
Robyn Stallworth Pouquette County Recorder, YUMA County AZ

WHEN RECORDED MAIL TO:

CITY OF SAN LUIS
ATTN: CITY CLERK
P.O. BOX 1170
SAN LUIS, ARIZONA 85349

The above area is to be reserved for recording information

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CAPTION HEADING:

Resolution
Resolution No. 2204
Riedel Holdings, L.L.C.
Los Mezquites Development Agreement

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

NO. 2204

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA AUTHORIZING AND DIRECTING THE ENTERING INTO A DEVELOPMENT AGREEMENT DEVELOPMENT BETWEEN THE CITY OF SAN LUIS, ARIZONA AND RIEDEL HOLDINGS, AZ LLC.

WHEREAS, Nieves Riedel, Riedel Holdings, L.L.C.; Owner, desires to enter into a development agreement for Los Mezquites project to be located in San Luis, Arizona; and

WHEREAS, A.R.S. § 9-500.05 grants power to a municipality to enter into development agreements; and

WHEREAS, the parties desire to enter into such agreement; and

WHEREAS, the applicant and the city staff agreed to all matters in the City's proposed development agreement; and

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of San Luis, State of Arizona, as follows:

SECTION 1. That the development agreement proposed by the staff of the City of San Luis, Arizona attached hereto as Exhibit "A", is hereby approved;

PASSED AND ADOPTED by the Mayor and City Council of the City of San Luis, Arizona, this 21st day of December 2021.

APPROVED:

Africa Luna-Carrasco, Vice-Mayor

ATTEST:

for Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

Kay Marion Macuil, City Attorney

LOS MEZQUITES DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT (the "**Agreement**") is entered into as of 21st day of December, 2021 ("**Effective Date**") by and between the City of San Luis an Arizona municipal corporation (the "**City**") and Riedel Holdings, AZ LLC, (the "**Owner**"). This Agreement is entered into pursuant to City Resolution Number 2204.

RECITALS

A. WHEREAS, A.R.S. § 9-500.05 authorizes the City to enter into development agreements with landowners and persons having an interest in real property that is located in the City; and

B. WHEREAS, Owner, owns real property located in the municipal limits of the City which is legally described on Exhibit 1 (the **"Property")** and is currently being developed for a commercial shopping center ("**Shopping Center**") and residential housing ("**Housing**"), and

C. WHEREAS, Owner has applied for a rezoning and lot split in order to develop the aforementioned Shopping Center and Housing Projects;

D. WHEREAS, A.R.S. § 9-500.05 provides, in part, that a development agreement can provide for the permitted uses of land; the density and intensity of uses; reservation or dedication of land for public purposes; conditions, terms, restrictions and requirements for public infrastructure; conditions, terms, restrictions and requirements relating to the governing body's intent to form a special taxing district pursuant to title 48; and any other matters relating to the development of the property; and

E. WHEREAS, the City and Owner desire to enter into an agreement to provide for the rezoning and the splitting of land and provide for the lands future development; and

F. WHEREAS, the City's governing body has authorized execution of this Agreement by Resolution No. 2204;

NOW, THEREFORE, the parties agree as follows:

AGREEMENT

DEFINITIONS

The following terms shall have the meanings set forth below whenever used in this Agreement, except where the context clearly indicates otherwise:

Agreement shall mean this development agreement.

City shall mean and refer to the City of San Luis, an Arizona municipal corporation, and any successor public body or entity.

Owner shall mean and refer to Riedel Holdings LLC, and any successor in ownership.

Property as used in this Agreement shall mean and refer to all of the real Property, which is legally described in Exhibit 1.

ARTICLE 1. DEVELOPMENT PLAN

1.1. Duration of Development Agreement. The term of this Agreement shall be for a period of five (5) years from date of execution.

1.2 Failure of Timely Performance. In the event that either party hereto fails to perform any of its obligations which are set forth in or contemplated by this Agreement in a timely manner, and should such failure not otherwise be excused by agreement of the parties or by the terms of this Agreement, such failure shall be considered to be a breach of this Agreement and the nonbreaching party shall have their respective remedies set forth in Section 5.3 of this Agreement.

1.3.Review Process. The City acknowledges the necessity for expeditious review by the City of all plans and other materials ("**Submitted Materials**") submitted by the Owner to the City hereunder or under any zoning procedure, permit procedure, or other governmental procedure pertaining to the development of the Property and agrees to use its reasonable efforts accomplish such an expeditious review of the Submitted Materials whenever possible.

ARTICLE 2. SPECIAL PROVISIONS FOR DEVELOPMENT

2.1 Dedication of Right of Way. At present time Owners shall dedicate appropriate right-of-way to the City along County 23 ½ Street and Avenue D ½ alignments in accordance with the updated standards for right-of-way as provided by Public Works Department. Dedication of right of way on County 24th shall be 62 feet from center of alignment and 130 feet within 300 feet of the intersection. Dedication of said right-of-way shall occur at such time and in such manner as required by the City in its sole discretion.

2.2 Development of Improvements. At such time that any lot created by City Lot Split Case Number 2021-0387 or any lot within the Rezoning Case No. 2021-0693 is developed, public improvements, including but not limited to streets, roads, retention basins, utility extensions, utility mains, including pumping stations, lift stations, force mains, traffic signalization, and other off-site public improvements will be made pursuant to City standards as may be required by the Public Works Director of City in his sole discretion. The location of such improvements and/or its development is not confined to the lot being developed, but rather may be located on any portion of the entire Property (Exhibit 1) that is the subject of this agreement. Owner agrees to make such

dedications of property as may be needed or necessary for such development in the discretion of the Public Works Director. Such dedications and the development of such improvements as described above shall be a condition of the issuance of any building permit(s) or other use permit(s) for the development of any such lot or portion of such lot.

2.3 Street Lights. At such time that any lot created by City Lot Split Case Number 2021-0387 or any lot within Rezoning Case No. 2021-0693 is developed, the Public Works Director may require, in his sole discretion, that the development of street lights in the public right-of-way is needed or desired, the development of such street lighting in the manner and at the locations as may be determined by the Public Works Director, in his sole discretion, shall be a condition of the issuance of building permit(s) or other use permit(s) for the development of any such lot.

2.4 Residential Development. Developer is requesting Rezoning Case No. 2021-0693 to change Assessor Parcel Number 227-11-004 and portion of parcel 227-11-005 to Medium Density Residential (R1-6) to allow for single-family development. At such time as any portion of the property is developed with single family homes, the development will be of lots no less in size of 6,000 square feet, amending the lot size requirement and removing the minimum home size on Resolution No. 933.

2.5 Traffic Light Contribution. Any development of the property, or portion thereof, and/or the approval of any subdivision plat, be conditioned upon payment to the city the sum of $260.00 per acre, or any portion of an acre, as a proportionate contribution for a traffic signal at the intersection of County 24th Street and Avenue E.

2.6 Waste Water Treatment Plant. Developer agrees to execute, record, and deliver such agreements, easements, and/or covenants conditions and restrictions that run with the land which is the subject of this development agreement for the benefit of the City of San Luis that will allow the real property of Developer that is the subject of this agreement to be used for fumes or odors from its wastewater treatment operations located at 358 N. Avenue D, and to waive any claims for any damages that might arise from wastewater treatment operations, whatsoever, and agree to indemnify and hold the City of San Luis and its officers, agents, and employees harmless from any and all claims, whatsoever, known or unknown, emanating from wastewater treatment operations including, but not limited to, claims arising from fumes or odors.

2.7 Land Dedication for Park. Owner wishes to donate to the City, and City agrees to accept from Owner, certain land within the Property, containing 5 gross acres of buildable land in addition to the open space requirement. Owner agrees to convey to the City by executing a Deed, free and clear of all liens and encumbrances.

2.8 Covenants Conditions and Restrictions. For any lot developed or to be developed as other than residential development, Owner shall record a covenant, condition and restriction to run with the land prohibiting the development and use of the property as a school, public or private, of any kind nature, or description.

2.9 Special Taxing Districts. Owner agrees to agree to the formation of a street lighting improvement district, a community facilities district and any enhanced municipal district needed.

2.10 Regulations. The terms of this Agreement are in addition to City codes, rules, fees, and regulations that are applicable to this action.

2.11 Buffer. Developer agrees to build an 8 foot cmu wall along the entire property line along the Detention Center and the East Waste Water Treatment Plant. Including as a buffer, a 30 feet wide green area and the residential street, totaling 82 feet.

ARTICLE 3. INDEMNIFICATION

3.1. Owner agrees to defend, indemnity and hold harmless City, its officers, officials and employees ("**Indemnified Group**") for liability from and against claims, damages, losses and expenses of any nature whatsoever (including but not limited to reasonable attorney fees, court costs, the costs of appellate proceedings, and all claim adjusting and handling expense), relating to, arising out of, resulting from or alleged to have resulted from the Owner's acts, errors, mistakes or omissions relating to any action or inaction of the Owner under this Agreement, including but not limited to work or services in the performance of this Agreement by any subcontractor or anyone directly or indirectly employed by or contracting with the Owner or a subcontractor or anyone for whose acts any of them may be liable.

3.2. If any claim, action or proceeding is brought against the Indemnified Group, by reason of any event that is the subject of this agreement, Owner (at its sole cost and expense) shall pay, resist or defend such claim or action on behalf of the Indemnified Group by the attorney of the Owner, or if covered by insurance, Owner's insurer, all of which must be approved by City, which approval shall not be unreasonably withheld or delayed. The City shall cooperate with all reasonable efforts in the handling and defense of such claim. Notwithstanding the foregoing, the City may engage its own attorney to defend or assist in its defense, and the Owner shall pay the reasonable costs and expenses thereof.

3.3. Any settlement of claims must fully release and discharge the Indemnified Group from any liability for such claims. The release and discharge shall be in writing and shall be subject to approval by the City, which approval shall not be unreasonably withheld or delayed. If Owner neglects or refuses to defend any of the Indemnified Group as required by this Agreement, any recovery or judgment against the Indemnified Group for a claim covered by this Agreement shall conclusively establish Owner's liability to the Indemnified Group in connection with such recovery or judgment. If the City desires to settle such dispute, the City shall be entitled to settle such dispute in good faith and Owner shall be liable for the amount of such settlement, and all expenses in connection with such settlement.

3.4. The indemnity provisions of this Agreement shall survive the termination of this Agreement.

ARTICLE 4. MEDIATION AND DEFAULT

4.1. Representatives. To further the cooperation of the parties in implementing this Agreement, the City and Owner each shall designate and appoint a representative to act as a liaison between the City and its various departments and the Owner. The initial representative for the City (the "**City Representative**") shall be the City Manager, and the initial representative for the Owner shall be its project manager, as identified by the Owner from time to time (the "**Developer Representative**"). The representatives shall be available at all reasonable times to discuss and review the performance of the parties to this Agreement and the development of the Property.

4.2. Mediation. In the event that there is a dispute hereunder which the parties cannot resolve between themselves, the parties agree that there shall be a forty-five (45) day moratorium on litigation during which time the parties agree to attempt to settle the dispute by nonbinding mediation before commencement of litigation. In the event that the parties cannot agree upon the selection of a mediator within seven (7) days, either party may request the presiding judge of the Superior Court of Yuma County to assign a mediator from a list of mediators maintained by the Arizona Municipal Risk Retention Pool.

4.3. Default. Failure or unreasonable delay be any party to perform any term or provision of this Agreement for a period of ten (10) days after written notice thereof from another party shall constitute a default under this Agreement. If the default is of a nature which is not capable of being cured within ten (10) days, the cure shall be commenced within such period, and diligently pursued to completion. The notice shall specify the nature of the alleged default and the manner in which the default may be satisfactorily cured. In the event of a default hereunder by any party, the non-defaulting party shall be entitled to all remedies at both law and in equity, including, without limitation, specific performance and the right to perform the obligation(s) of which the defaulting party is in default and to immediately seek reimbursement from the defaulting party of all sums expended in order to cure such default, together with interest on all such sums from the date said sums are expended by the non-defaulting party for the purpose of curing the default to the date such sums are paid in full.

ARTICLE 5. CONFLICT OF INTEREST; REPRESENTATIVES NOT INDIVIDUALLY LIABLE

5.1. Conflict of Interest. Pursuant to Arizona law, rules and regulations, no member, official or employee of the City shall have any personal interest, direct or indirect, in this Agreement, nor shall any such member, official or employee participate in any decision relating to this Agreement which affects his or her personal interest or

the interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested. This agreement is subject to the provisions of A.R.S. §38-511.

5.2. No Personal Liability. No member, official or employee of the City shall be personally liable to Owner, or any successor or assignee, (a) in the event of any default or breach by the City, (b) for any amount which may become due to the Owner or its successor or assign, or (c) pursuant to any obligation of the City under the terms of this Agreement.

ARTICLE 6. MISCELLANOUS PROVISIONS

6.1. Notices. All notices and communications provided for herein, or given in connection herewith, shall be validly made if in writing and delivered personally or sent by registered or certified United States Postal Service mail, return receipt requested, postage prepaid to:

If to the City:
City Manager
City of San Luis
P.O. Box 1170
1090 E. Union Street
San Luis, Arizona 85349

If to the Owner:
Nieves Riedel, Riedel Holdings, L.L.C.
1964 E. Cesar Chavez Blvd., Suite 1
P O Box 1649
San Luis, Arizona 85349

or to such other addresses as either party may from time to time designate in writing and deliver in a like manner. Any such change of address notice shall be given at least ten (10) days before the date on which the change is to become effective. Notices given by mail shall be deemed delivered 72 hours following deposit in the United States Postal Service in the manner set forth above.

6.2. Waiver. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver by the parties of the breach of any provision of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or of any other provision of this Agreement.

6.3. Headings. The descriptive headings of the paragraphs of this Agreement are inserted for convenience only, and shall not control or affect the meaning or construction of any of the provisions of the Agreement.

6.4. Authority. The undersigned represent to each other that they have full power and authority to enter into this Agreement, and that all necessary actions have been taken to give full force and effect to this Agreement. The Owner represents and warrants that it is duly formed and validly existing under the laws of the State of Arizona and that it is duly qualified to do business in the State of Arizona and is in good standing

under applicable state laws. The Owner and the City warrant to each other that the individuals executing this Agreement on behalf of their respective parties are authorized and empowered to bind the party on whose behalf each individual is signing. The Owner represents to the City that by entering into this Agreement, the Owner has bound the Property and all persons and entities having any legal or equitable interest therein to the terms of the Agreement.

6.5. Amendment of the Agreement. This Agreement may be amended, in whole or in part and with respect to all or any portion of the Property, only with the mutual written consent of the parties to this Agreement or by their successors in interest or assigns. The City shall record the amendment or cancellation in the official records of the Yuma County Recorder.

6.6. Severability. If any other provision of the Agreement is declared void or unenforceable, such provision shall be severed from this Agreement, which shall otherwise remain in full force and effect.

6.7. Governing Law. The laws of the State of Arizona shall govern the interpretation and enforcement of this Agreement. The parties agree that venue for any action commenced in connection with this Agreement shall be proper only in a court of competent jurisdiction located in Yuma County, Arizona, and the parties hereby waive any right to object to such venue.

6.8. Recordation of Agreement and Subsequent Amendment; Cancellation. This Agreement, and any amendment or cancellation of it shall be recorded in the official records of the Yuma County Recorder no later than ten (10) days after the City and the Owner execute such agreement, amendment, or cancellation, as required by A.R.S. § 9-500.05.

6.9. Attorneys' Fees and Costs. If either party brings a legal action either because of a breach of this Agreement or to enforce a provision of this Agreement, the prevailing party will be entitled to reasonable attorneys' fees and court costs.

6.10. Notice of Conveyance or Assignment. The Owner shall give notice to the City of any sale of the entire Property at least ten (10) days prior to the effective date of the sale.

6.11. No Third-Party Beneficiaries. There are no third-party beneficiaries to this Agreement, and no person or entity not a party hereto shall have any right or cause of action hereunder.

6.12. No Agency Created. Nothing contained in this Agreement shall create any partnership, joint venture, or agency relationship between the parties.

6.13. Non-Liability of City Officials and Employees. Except for mandamus and other special actions, no member, official or employee of the City shall be personally liable to Owner, or any successor in interest, in the event of any default or breach by the

City or for any amount that may become due to the Owner or successor, or under any obligation under the terms of this Agreement.

6.14. Employment Eligibility, E-Verify

1. The Owner warrants his compliance with all federal immigration laws and regulations that relate to its employees and its compliance with A.R.S. § 23214, subsection A.
2. A breach of a warranty under paragraph 1 shall be deemed a material breach of the Agreement that is subject to penalties up to and including termination of the contract.
3. That the City retains the legal right to inspect the papers of any contractor or subcontractor employee who work on the Agreement to ensure that the contractor or subcontractor is complying with the warranty under paragraph 1.

6.15. Time is of the Essence. Time is of the essence of this agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

THE CITY OF SAN LUIS,
an Arizona municipal corporation

By: _____
Vice Mayor

KMM

ATTEST:

By: _____, Deputy City Clerk
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

THE OWNER, Riedel Holding, L.L.C.

By: _____
Its: President

STATE OF ARIZONA)
) ss.
County of Yuma)

The foregoing instrument was acknowledged before me this 21st day of December 2021, by Africa Luna-Carrasco, Vice-Mayor of the City of San Luis, Arizona, a municipal corporation.

Angelica Cifuentes
Notary Public

My Commission Expires: 05-11-2023

Angelica Cifuentes
Notary Public - Arizona
Yuma County
Commission Number 562004
My Comm. Exp. 5/11/2023

STATE OF ARIZONA)
) ss.
County of Yuma)

The foregoing instrument was acknowledged before me this 22ND day of DECEMBER 2021, by NIEVES RIEDEL, on behalf of Riedel Holdings L.L.C., an Arizona Limited Liability Corporation.

Janet Taylor
Notary Public

My Commission Expires: 09/28/2025

Janet Taylor
Notary Public - Arizona
Yuma County
Commission Number 613060
My Comm. Exp. 9/28/2025

Exhibit 1

Los Mezquites Development Agreement

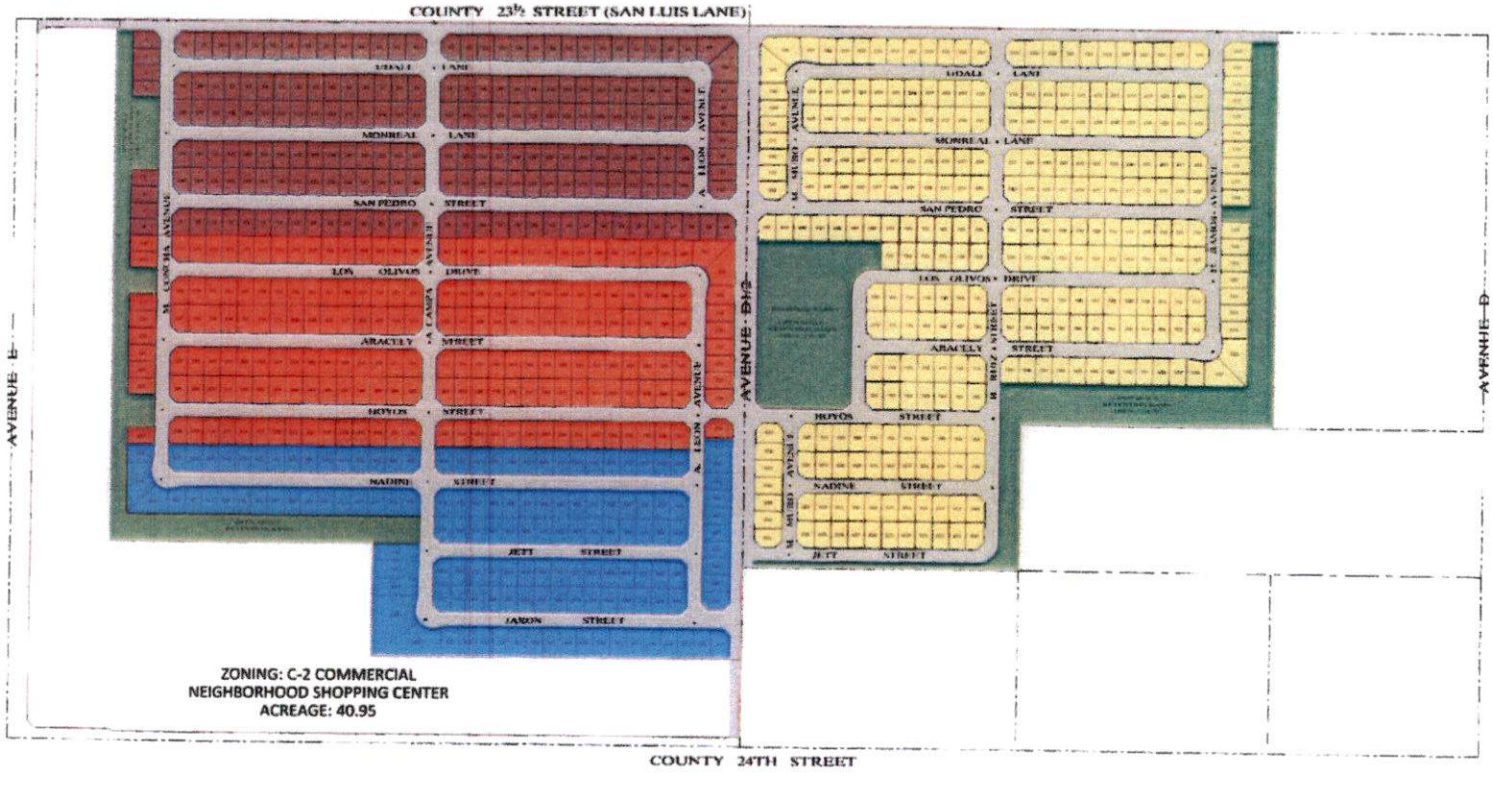
LOS MEZQUITES SUBDIVISION

DATE OF PREPARATION: NOVEMBER 2021 NUMBER OF LOTS: 897
MASTER PLAN LAYOUT

Parcel 227-11-005: A portion of the SW¼ of Section 14, Township 11 South Range 24 West. Except road right of way. **(108.91 acres)**

Parcel 227-11-004: South East ¼ of Section: 11 Township: 11S Range: 24W SE4 EXC THE E 751.25 FT OF N 1449.58 FT & EXC S 660 FT +/- & EXC THE E 1652.78 FT OF THE N 576.11 FT +/- OF S 1185.05 FT +/- **(74.64 acres)**

N
W E
S
SCALE: 1"=200'



PRELIMINARY
NOT FOR
CONSTRUCTION

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. I.**

Meeting Date: 02/26/2025

Department Head: Jose A. Guzman, Director of Development Services, Development Services

Submitted By: Jose A. Guzman, Director of Development Services, Development Services

Action Requested: Motion
Resolution

ITEM:

Discussion and possible action on any and all matters regarding Resolution No. 2355. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, approving the First Amendment to La Esperanza Estates Subdivision Development Agreement as approved by Resolution No. 2292; repealing conflicting provisions; and providing for severability. **(Jose A. Guzman, Director of Development Services)**

SUMMARY:

City Council approved a Development Agreement between the City of San Luis and Riedel Holdings LLC for the La Esperanza Estates Subdivision under Resolution No. 2292. The subdivision approval and Development Agreement included conditions requiring full improvements along adjacent streets, including 6th Avenue, as stipulated in Subdivision Regulations Section 3.3(4). Due to the City's timeline for the 6th Avenue project, it was determined that accepting financial assurance in lieu of immediate construction was the most practical approach. Therefore, the City accepted a cashier's check from the Owner in the amount of $180,655.23, which was based on the engineer's cost estimate for the required improvements.

The original approval conditioned the use of these funds solely on improvements along the subdivision's frontage. However, in coordination with the Owner, staff recommends amending the Development Agreement to authorize the use of these funds for the design, right-of-way acquisition, and construction of the entire 6th Avenue project rather than limiting use to the subdivision frontage. This amendment ensures that the funding aligns with the City's infrastructure planning and ongoing improvements along 6th Avenue. All other provisions, as outlined in Resolution No. 2292, will remain unchanged and in effect.

The proposed amendment will include the following language:

1. Unless specifically amended, all provisions of the Development Agreement shall remain in full force and effect.
2. The Development Agreement is hereby amended to allow the City to use the $180,655.23 provided by the Owner for the design, right-of-way acquisition, and related costs associated with improving the entire 6th Avenue project, not just the frontage of the La Esperanza Estates Subdivision.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE AND ADOPT RESOLUTION NO. 2355, AS PRESENTED.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	N/A
CITY/STATE/FEDERAL FUNDS:	N/A
TOTAL:	N/A
BUDGETED AMOUNT:	N/A
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	N/A

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

N/A

Attachments

Resolution No. 2355 - First Amendment to La Esperanza Estates Subdivision Development Agreement

Resolution No. 2292 - La Esperanza Estates Subdivision Development Agreement

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Resolution

NO. 2355

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA APPROVING THE FIRST AMENDMENT TO LA ESPERANZA ESTATES SUBDIVISION DEVELOPMENT AGREEMENT AS APPROVED BY RESOLUTION NO. 2292; REPEALING CONFLICTING PROVISIONS; AND PROVIDING FOR SEVERABILITY.

WHEREAS, the Mayor and City Council of the City of San Luis, Arizona previously approved Resolution No. 2292, entering into a Development Agreement with Riedel Holdings, LLC for the development of La Esperanza Estates Subdivision;

WHEREAS, the Development Agreement required the Developer to complete full street improvements along the frontage of the subdivision on 6th Avenue as a condition of subdivision approval;

WHEREAS, the City is currently undertaking a larger improvement project for 6th Avenue, and immediate construction of frontage improvements was not feasible;

WHEREAS, in lieu of constructing the frontage improvements, the Developer provided the City with a cashier's check in the amount of $180,655.23, based on the engineer's cost estimate for the required improvements;

WHEREAS, the City and Developer agree that it is in the best interest of the City to use these funds for the design and right-of-way acquisition for the entire 6th Avenue improvement project, rather than limiting their use to the frontage of La Esperanza Estates Subdivision;

WHEREAS, the Developer has agreed to amend the Development Agreement to authorize the use of these funds for the broader 6th Avenue project;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of San Luis, Arizona as follows:

SECTION 1. That the First Amendment to La Esperanza Estates Development Agreement attached hereto as Exhibit "A", is hereby approved.

PASSED AND ADOPTED by the Mayor and City Council of the City of San Luis, Arizona, this_____ day of February 2025.

APPROVED:

_____
Tadeo Azael De La Hoya, Vice-Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney

Resolution No. 2355
Exhibit "A"

FIRST AMENDMENT TO LA ESPERANZA ESTATES SUBDIVISION DEVELOPMENT AGREEMENT

This First Amendment to the La Esperanza Estates Subdivision Development Agreement (this "**First Amendment**") is made the ____ day of _____ 2025, by and between the City of San Luis, Arizona, an Arizona municipal corporation("**City**"), and Riedel Holdings L.L.C., an Arizona limited liability company, "**Owner**".

RECITALS

A. WHEREAS, on or about October 2, 2023, the **City** and **Owner** executed a Development Agreement for La Esperanza Estates Subdivision approved by Resolution No. 2292 ("**Development Agreement**"). The **Development Agreement** was recorded on October 2, 2023, as Fee Number 2023-23161, a total of pages 13 in the Official Records of the Yuma County Recorder.

B. WHEREAS, the **Development Agreement** required the **Owner** to complete full street improvements along the frontage of the subdivision on 6th Avenue, as a condition of subdivision approval;

C. WHEREAS, the **City** is currently undertaking a comprehensive improvement project for 6th Avenue, and the timing of this project is not aligned with the immediate construction of the frontage improvements;

D. WHEREAS, in lieu of constructing the frontage improvements, the **Owner** provided the **City** with a cashier's check in the amount of $180,655.23, based on the engineer's cost estimate for the required improvements;

E. WHEREAS, the **Owner** and the **City** agree that it is in the best interest of the City to use these funds for the design and right-of-way (ROW) acquisition for the entire 6th Avenue improvement project, rather than limiting their use to the subdivision frontage;

F. WHEREAS, the **Owner** and the **City** desire to amend the **Development Agreement** provided herein.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, the **Owner** and the **City** hereby amend the **Development Agreement** as follows:

1. Unless specifically amended, all provisions of the **Development Agreement** shall remain in full force and effect.

2. The **Development Agreement** is hereby amended to allow the **City** to use the $180,655.23 provided by the **Owner** for the design, right-of-way acquisition, and related costs associated with

improving the entire 6th Avenue project, not just the frontage of the La Esperanza Estates Subdivision.

IN WITNESS WHEREOF, the parties have executed this **Agreement** this _____ day of _____, 2025.

City of San Luis, Arizona

_____

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney

Riedel Holdings, L.L.C.

Signature _____ (Print name)_____
Manager

CONFORMED COPY
2023-23161 RESOLUTION
10/02/2023 03:13:45 PM Pages: 13 Fees: $15.00
Requested By:CITY OF SAN LUIS

Richard Colwell County Recorder, YUMA County AZ

WHEN RECORDED, MAIL TO:

CITY OF SAN LUIS
ATTN: CITY CLERK
P.O. BOX 1170
SAN LUIS, ARIZONA 85349

The above area is to be reserved for recording information.

****

CAPTION HEADING:

RESOLUTION
Resolution No. 2292
Development Agreement with Riedel Holdings LLC - La Esperanza Subdivision.

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

No. 2292

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA AUTHORIZING AND DIRECTING THE ENTERING INTO A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF SAN LUIS, ARIZONA, AND RIEDEL HOLDINGS, LLC.

WHEREAS, Nieves Riedel, Riedel Holdings, LLC; Owner, desires to enter into a development agreement for La Esperanza Subdivision project to be located in San Luis, Arizona; and

WHEREAS, A.R.S. §9-500.05 grants power to a municipality to enter into development agreements; and

WHEREAS, the parties desire to enter into such agreement; and

WHEREAS, the applicant and the city staff agreed to all matters in the City's proposed development agreement; and

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of San Luis, State of Arizona, as follows:

SECTION 1. That the development agreement proposed by the staff of the City of San Luis, Arizona attached hereto as Exhibit "A", is hereby approved;

PASSED AND ADOPTED by the Mayor and City Council of the City of San Luis, Arizona, this 27th day of September, 2023.

APPROVED:

Luis E. Cabrera, Vice Mayor

ATTEST:

for Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

Kay Marion Macuil, City Attorney

LA ESPERANZA ESTATES DEVELOPMENT AGREEMENT

Rezoning Case Number 2023-0214

THIS DEVELOPMENT AGREEMENT (the "**Agreement**") is entered into as of this 27th day of September, 2023 ("**Effective Date**") by and between the City of San Luis, an Arizona municipal corporation (the "**City**"), and Riedel Holdings LLC a limited liability corporation organized under the laws of Arizona, (the "**Owner**"). The City and the Owner may be referred to singularly as the "Party" and collectively as the "Parties." This Agreement is entered into pursuant to City Resolution Number 2292.

RECITALS

A. WHEREAS, A.R.S. § 9-500.05 authorizes the City to enter into development agreements with landowners and persons having an interest in real Property that is located in the City; and

B. WHEREAS, Owner, owns real property located in the municipal limits of the City which is legally described on Exhibit 1 (the "**Property**"); and

C. WHEREAS, A.R.S. § 9-500.05 provides, in part, that a development agreement can provide for the permitted uses of land; the density and intensity of uses; reservation or dedication of land for public purposes; conditions, terms, restrictions and requirements for public infrastructure; conditions, terms, restrictions and requirements relating to the governing body's intent to form a special taxing district pursuant to title 48; and any other matters relating to the development of the property; and

D. WHEREAS, the City's governing body has authorized the execution of this Agreement by Resolution No. 2292;

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

DEFINITIONS

The following terms shall have the meanings set forth below whenever used in this Agreement, except where the context clearly indicates otherwise:

Agreement shall mean this development agreement.

City shall mean and refer to the City of San Luis, an Arizona municipal corporation, and any successor public body or entity.

Improvements shall mean and refer to all public and private improvements which may be constructed from time to time on the Property, including, without limitation, all

structures, buildings, roads, driveways, parking areas, walls, landscaping, and other improvements of any type or kind, or any other alteration of the natural terrain to be built by the Owner or the City, as the case may be, pursuant to the terms of the Agreement.

Owner shall mean and refer to Riedel Holdings LLC, and any successor in ownership.

Property as used in this Agreement shall mean and refer to all of the real Property, which is legally described in Exhibit 1.

ARTICLE 1. DEVELOPMENT PLAN

1.1. Duration of Development Agreement. The term of this Agreement shall be for a period of ten (10) years from date of execution.

1.2. Failure of Timely Performance. In the event that either Party hereto fails to perform any of its obligations which are set forth in or contemplated by this Agreement in a timely manner, and should such failure not otherwise be excused by Agreement of the Parties or by the terms of this Agreement, such failure shall be considered to be a breach of this Agreement and the non-breaching Party shall have their respective remedies set forth in Section 5.3 of this Agreement.

1.3. Review Process. The City acknowledges the necessity for expeditious review by the City of all plans and other materials ("**Submitted Materials**") submitted by the Owner to the City hereunder or under any zoning procedure, permit procedure, or other governmental procedure pertaining to the development of the Property and agrees to use its reasonable efforts accomplish such an expeditious review of the Submitted Materials whenever possible.

ARTICLE 2. SPECIAL PROVISIONS FOR INFRASTRUCTURE

2.1. Rezoning Case No. 2023-0214 is conditioned upon the development of the land in a manner similar to the conceptual plan, as shown in Exhibit 1.

2.2. If the property is developed with public streets, the owner agrees that a full-length street shall be constructed between 6th Avenue and 8th Avenue as part of the development of this property. If the property is developed as a private gated community, the owner agrees to provide a 10" water line and fire hydrants at least every 300 feet and provide a 54-foot paved private street right-of-way for Union Avenue. Any private street shall have appropriate public utility easements dedicated to the City for public utility service and maintenance.

2.3. The Owner shall have a traffic study conducted at the Owner's expense in accordance with said Public Works Standards of the City of San Luis and shall construct or provide for the construction and/or development of all improvements required by the said study as a condition for issuance of any permit authorizing

construction or development. Improvements include but are not limited to, possible contributions to future roadway improvements such as traffic signals and/or canal crossing along 6th Avenue. Improvements shall also comply with the City's Ordinance No. 390.

2.4. The applicant must provide to the City any documentation regarding the Home Owners Association (HOA) including but not limited to Declaration of Covenants, Conditions and Restrictions (CC&Rs), the articles of incorporation, the bylaws, and the rules and regulations. The applicant must provide an acceptable mechanism to generate funds necessary to maintain any private streets, landscape, retention, common areas and amenities associated with the development including the landscape in the adjacent public right-of-way. The applicant agrees to submit a petition to create any applicable improvement district, dedicate easements to the City, and make changes to the plat as deemed necessary by the City. If applicant is not in agreement with any requirement or administrative interpretation, then the appeal process shall be followed in accordance with City Code Section 18.15.060.

2.5. Grading and erosion control shall comply with the 2018 International Building Code Appendix J standards for all aspects of the development, including developing lots and building houses or other buildings. The Owner shall provide a system for effective future maintenance of all improvements needed or necessary to maintain grading and erosion control after development of the subdivision. Such future maintenance shall include, but shall not be limited to and as an example only, placing common improvements such as retaining walls in common areas and establishing a homeowner's association to maintain same.

2.6. Owner agrees to provide off-site drainage. Water retention/detention areas may be counted towards the 2% Open Space required by the Zoning Regulations (Chapter 18 Table No. 2). The required 2% for La Esperanza Estates Subdivision is 0.302 acres.

2.7. Owner agrees to obtain ownership of any necessary right-of-way and/or permits for improvements.

2.8. City agrees to the deviation of Subdivision Regulations Section 3.30 allowing a cul-de-sac to serve 30 dwellings units instead of 20, if the property is developed as a private gated community in accordance with Section 2.2 of this agreement.

2.9. Owner agrees to provide a gravity system connection for sewer services.

2.10. Union Street shall be designed and constructed in accordance with the current City of San Luis Public Works Standards. Statements shall be contained on the plat and in both the CC&Rs and the HOA by-laws that Union Street is declared private, subject to an easement authorizing use by emergency and public service vehicles, and remain the permanent responsibility of the homeowners' association. The City has no

responsibility to maintain or repair the surface of the street or easement property other than to restore the street or property to its original condition after cutting the street for installation of a water main or repairs to the main or other public utilities.

2.11. The terms of this Agreement are in addition to City codes, rules, fees, and regulations that are applicable to this action.

ARTICLE 3. INDEMNIFICATION

3.1. Owner agrees to defend, indemnity, and hold harmless City, its officers, officials, and employees ("**Indemnified Group**") from and against claims, damages, losses, and expenses of any nature whatsoever (including but not limited to reasonable attorney fees, financial fees, court costs, the costs of appellate proceedings, and all claim adjusting and handling expense), relating to, arising out of, resulting from or alleged to have resulted from the Owner's acts, errors, mistakes or omissions relating to any action or inaction of the Owner under this Agreement, including but not limited to work or services in the performance of this Agreement by any subcontractor or anyone directly or indirectly employed by or contracting with the Owner or a subcontractor or anyone for whose acts any of them may be liable.

3.2. If any claim, action, or proceeding is brought against the Indemnified Group, by reason of any event that is the subject of this Agreement, Owner (at its sole cost and expense) shall pay, resist or defend such claim or action on behalf of the Indemnified Group by the attorney of the Owner, or if covered by insurance, Owner's insurer, all of which must be approved by City, which approval shall not be unreasonably withheld or delayed. The City shall cooperate with all reasonable efforts in the handling and defense of such claim. Notwithstanding the foregoing, the City may engage its own attorney to defend or assist in its defense, and the Owner shall pay the reasonable costs and expenses thereof.

3.3. Any settlement of claims must fully release and discharge the Indemnified Group from any liability for such claims. The release and discharge shall be in writing and shall be subject to approval by the City, which approval shall not be unreasonably withheld or delayed. If Owner neglects or refuses to defend any of the Indemnified Group as required by this Agreement, any recovery or judgment against the Indemnified Group for a claim covered by this Agreement shall conclusively establish Owner's liability to the Indemnified Group in connection with such recovery or judgment. If the City desires to settle such dispute, the City shall be entitled to settle such dispute in good faith, and Owner shall be liable for the amount of such settlement, and all expenses in connection with such settlement.

3.4. The indemnity provisions of this Agreement shall survive the termination of this Agreement.

ARTICLE 4. SUB AGREEMENTS

4.1.Subordinate Development Agreements. The City and Owner hereby acknowledge that the development of the Property may be accomplished by Owner through a series of sales, leases, joint ventures, and/or other agreements and arrangements with experienced developers, investors, and/or owners of real Property. In connection therewith, it is anticipated and contemplated by the parties that such developers, investors, or owners may desire to negotiate and enter into separate and subordinate development agreements with the City and/or Owner with respect to infrastructure improvements, uses, plan approvals and other similar matters which may be the subject of separate agreements between such developers, investors and owners and the City and/or Owner, all to be set forth in the Amended Agreement. The Parties hereby agree that any and all development agreements entered into with any such developer, investor, or Owner of any parcels of the Property shall be subordinate in all respects to the terms and conditions of this Agreement and the Amended Agreement, and, in the event of any conflict or discrepancy between the provisions of any such development agreement and the terms and conditions of this Agreement or the Amended Agreement, this Agreement or the Amended Agreement (as the case may be) shall govern and control.

ARTICLE 5. MEDIATION AND DEFAULT

5.1. Representatives. To further the cooperation of the parties in implementing this Agreement, the City and Owner each shall designate and appoint a representative to act as a liaison between the City and its various departments and the Owner. The initial representative for the City (the "**City Representative**") shall be the City Manager, and the initial representative for the Owner shall be its project manager, as identified by the Owner from time to time (the "**Developer Representative**"). The representatives shall be available at all reasonable times to discuss and review the performance of the parties to this Agreement and the development of the Property.

5.2. Mediation. In the event that there is a dispute hereunder which the parties cannot resolve between themselves, the Parties agree that there shall be a forty-five (45) day moratorium on litigation during which time the Parties agree to attempt to settle the dispute by nonbinding mediation before commencement of litigation. In the event that the parties cannot agree upon the selection of a mediator within seven (7) days, either Party may request the presiding judge of the Superior Court of Yuma County to assign a mediator from a list of mediators maintained by the Arizona Municipal Risk Retention Pool.

5.3. Default. Failure or unreasonable delay by any Party to perform any term or provision of this Agreement for a period of ten (10) days after written notice thereof from another Party shall constitute a default under this Agreement. If the default is of a nature which is not capable of being cured within ten (10) days, the cure shall be commenced within such period, and diligently pursued to completion. The notice shall specify the

nature of the alleged default and the manner in which the default may be satisfactorily cured. In the event of a default hereunder by any Party, the non-defaulting Party shall be entitled to all remedies at both law and in equity, including, without limitation, specific performance and the right to perform the obligation(s) of which the defaulting Party is in default and to immediately seek reimbursement from the defaulting Party of all sums expended in order to cure such default, together with interest on all such sums from the date said sums are expended by the non-defaulting Party for the purpose of curing the default to the date such sums are paid in full.

ARTICLE 6. CONFLICT OF INTEREST; REPRESENTATIVES NOT INDIVIDUALLY LIABLE

6.1. Conflict of Interest. Pursuant to Arizona law, rules and regulations, no member, official or employee of the City shall have any personal interest, direct or indirect, in this Agreement, nor shall any such member, official or employee participate in any decision relating to this Agreement which affects his or her personal interest or the interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested. This Agreement is subject the provisions of A.R.S. § 38-511.

6.2. No Personal Liability. No member, official or employee of the City shall be personally liable to Owner, or any successor or assignee, (a) in the event of any default or breach by the City, (b) for any amount which may become due to the Owner or its successor or assign, or (c) pursuant to any obligation of the City under the terms of this Agreement.

ARTICLE 7. MISCELLANEOUS PROVISIONS

7.1. Notices. All notices and communications provided for herein, or given in connection herewith, shall be validly made if in writing and delivered personally or sent by registered or certified United States Postal Service mail, return receipt requested, postage prepaid to:

If to the City:
City Manager
City of San Luis
P.O. Box 1170
1090 E. Union Street
San Luis, Arizona 85349

If to the Owner:
Nieves Riedel, Riedel Holdings LLC
1964 E. Cesar Chavez Blvd., Suite 1
P.O. Box 1649
San Luis, Arizona 85349

or to such other addresses as either Party may, from time to time, designate in writing and deliver in a like manner. Any such change of address notice shall be given at least ten (10) days before the date on which the change is to become effective. Notices

given by mail shall be deemed delivered 72 hours following deposit in the United States Postal Service in the manner set forth above.

7.2. Waiver. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver by the parties of the breach of any provision of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or of any other provision of this Agreement.

7.3 . Headings. The descriptive headings of the paragraphs of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions of the Agreement.

7.4. Authority. The undersigned represent to each other that they have full power and authority to enter into this Agreement and that all necessary actions have been taken to give full force and effect to this Agreement. The Owner represents and warrants that it is duly formed and validly existing under the laws of the State of Arizona and that it is duly qualified to do business in the State of Arizona and is in good standing under applicable state laws. The Owner and the City warrant to each other that the individuals executing this Agreement on behalf of their respective parties are authorized and empowered to bind the Party on whose behalf each individual is signing. The Owner represents to the City that by entering into this Agreement, the Owner has bound the Property and all persons and entities having any legal or equitable interest therein to the terms of the Agreement.

7.5. Entire Agreement. This Agreement, including the following exhibits, constitutes the entire Agreement between the Parties. This provision applies only to the entirety of Agreement Number 1 only; additional and separate zoning stipulations and agreements with the City may apply to the Property, and this provision has no effect on them.

Exhibit 1 Legal Description of Property and Conceptual Design

7.6. Amendment of the Agreement. This Agreement may be amended, in whole or in part, and with respect to all or any portion of the Property, only with the mutual written consent of the parties to this Agreement or by their successors in interest or assigns. The City shall record the amendment or cancellation in the official records of the Yuma County Recorder.

7.7. Severability. If any other provision of the Agreement is declared void or unenforceable, such provision shall be severed from this Agreement, which shall otherwise remain in full force and effect.

7.8. Governing Law. The laws of the State of Arizona shall govern the interpretation and enforcement of this Agreement. The Parties agree that venue for any action commenced in connection with this Agreement shall be proper only in a court of competent jurisdiction located in Yuma County, Arizona, and the Parties hereby waive any right to object to such venue.

7.9. Recordation of Agreement and Subsequent Amendment; Cancellation. This Agreement and any amendment or cancellation of it shall be recorded in the official records of the Yuma County Recorder no later than ten (10) days after the City and the Owner execute such Agreement, amendment, or cancellation, as required by A.R.S. § 9-500.05.

7.10. Attorneys' Fees and Costs. If either Party brings a legal action either because of a breach of this Agreement or to enforce a provision of this Agreement, the prevailing Party will be entitled to reasonable attorneys' fees and court costs.

7.11. Notice of Conveyance or Assignment. The Owner shall give notice to the City of any sale of the entire Property at least ten (10) days prior to the effective date of the sale.

7.12. No Third-Party Beneficiaries. There are no third-party beneficiaries to this Agreement, and no person or entity, not a party hereto shall have any right or cause of action hereunder.

7.13. No Agency Created. Nothing contained in this Agreement shall create any partnership, joint venture, or agency relationship between the parties.

7.14. Non-Liability of City Officials and Employees. Except for mandamus and other special actions, no member, official or employee of the City shall be personally liable to Owner, or any successor in interest, in the event of any default or breach by the City or for any amount that may become due to the Owner or successor, or under any obligation under the terms of this Agreement.

7.15. Employment Eligibility, E-Verify

1. The Owner warrants his compliance with all federal immigration laws and regulations that relate to its employees and its compliance with A.R.S. § 23214, subsection A.
2. A breach of a warranty under paragraph 1 shall be deemed a material breach of the Agreement that is subject to penalties up to and including termination of the contract.
3. That the City retains the legal right to inspect the papers of any contractor or subcontractor employee who work on the Agreement to ensure that the contractor or subcontractor is complying with the warranty under paragraph 1.

7.16. Boycott. Owner certifies, to the extent permitted by law, that it does not participate in, and agrees not to participate in during the term of this Agreement a boycott of Israel under A.R.S. § 35-393.01.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

THE CITY OF SAN LUIS,
an Arizona municipal corporation

By: _____
Vice Mayor

THE OWNER, Riedel Holding, L.L.C.

By: _____

Its: owner

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

STATE OF ARIZONA)
) ss.
County of Yuma)

The foregoing instrument was acknowledged before me this 27th day of September, 2023, by Luis E. Cabrera, Vice Mayor of the City of San Luis, Arizona, a municipal corporation.

Francia G Alonso
Notary Public - Arizona
Yuma County
Commission Number 592956
My Comm. Exp. 10/15/2024

Notary Public

My Commission Expires: 10/15/2024

STATE OF ARIZONA)
) ss.
County of Yuma)

The foregoing instrument was acknowledged before me this 27th day of September, 2023, by Nieves Riedel, on behalf of Riedel Holding AZ LLC, an Arizona Limited Liability Corporation.

Francia G Alonso
Notary Public - Arizona
Yuma County
Commission Number 592956
My Comm. Exp. 10/15/2024

Notary Public

My Commission Expires: 10/15/2024

LA ESPERANZA ESTATES

A SUBDIVISION OF PARCEL B OF BARKLEY LOT SPLIT No. 3 AS RECORDED IN BOOK 27 OF PLATS, PAGES 68 YUMA COUNTY RECORDERS OFFICE. YUMA, COUNTY, AZ. AND BEING A PORTION OF THE N ½ OF THE SW ¼ OF SECTION 6, T11S, R24W, G. & S. R. B. & M. YUMA COUNTY ARIZONA

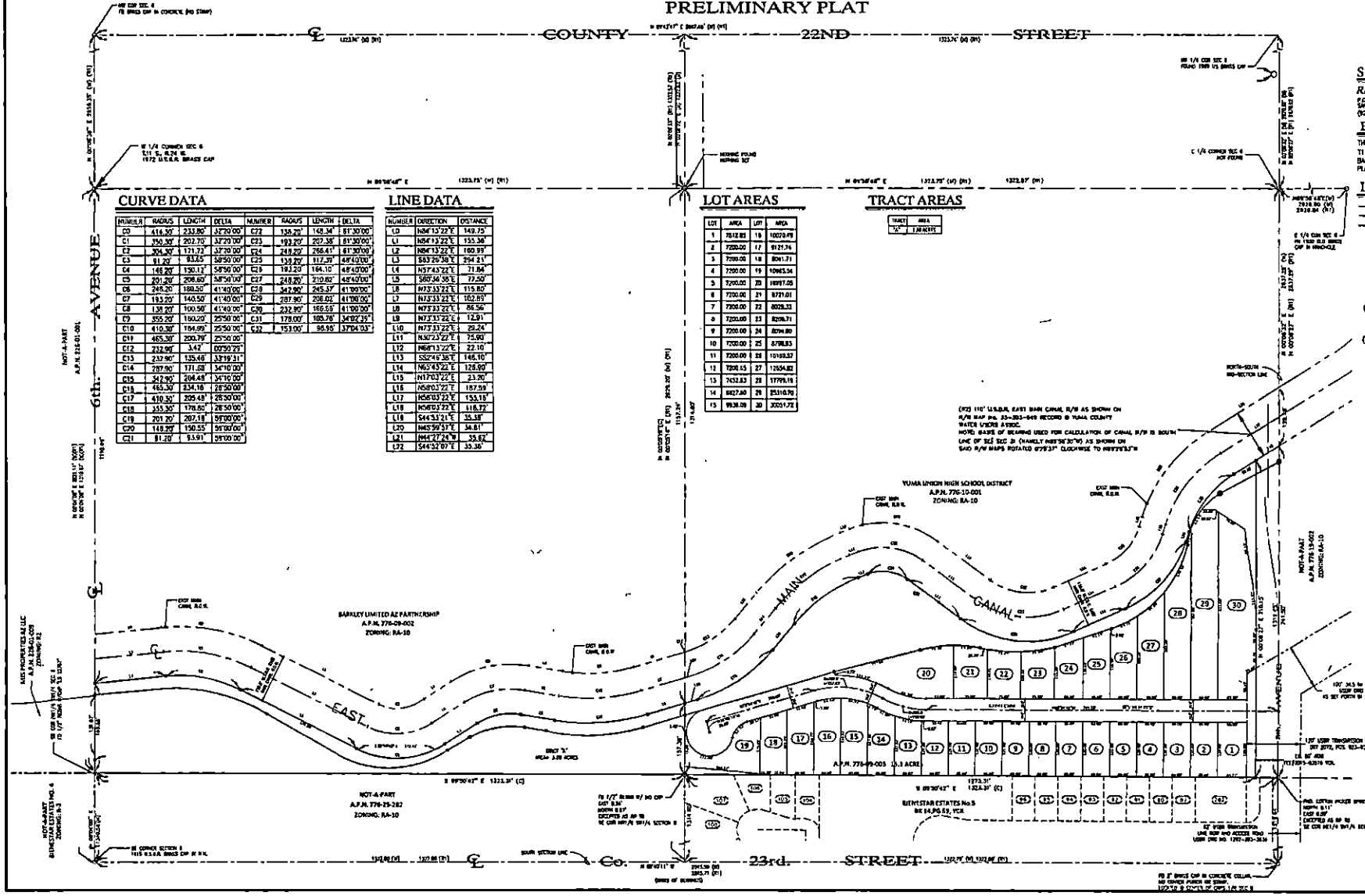
DATE OF PREPARATION: AUGUST 2020 NUMBER OF LOTS: 30 ACREAGE: 15.1

PRELIMINARY PLAT

SCALE: 1"=100'

OFFICE OF YUMA COUNTY RECORDER

BOOK _____ OF _____,
PAGE _____



CURVE DATA

NUMBER	RADIUS	LENGTH	DELTA	NUMBER	RADIUS	LENGTH	DELTA
C0	416.30'	233.80'	32°29'00"	C22	138.20'	148.34'	61°30'00"
C1	350.30'	202.70'	33°20'00"	C23	193.20'	207.38'	61°30'00"
C2	304.30'	171.73'	32°20'00"	C24	249.20'	266.41'	61°30'00"
C3	91.20'	83.55'	58°50'00"	C25	139.20'	117.39'	48°18'00"
C4	146.20'	150.11'	58°50'00"	C26	193.20'	164.10'	48°40'00"
C5	201.20'	206.60'	58°50'00"	C27	249.20'	210.80'	48°40'00"
C6	248.20'	180.50'	41°40'00"	C28	342.80'	245.37'	41°00'00"
C7	193.20'	140.50'	41°40'00"	C29	287.80'	206.02'	41°00'00"
C8	138.20'	100.50'	41°40'00"	C30	232.80'	166.58'	41°00'00"
C9	355.20'	160.20'	25°50'00"	C31	178.00'	105.76'	34°02'39"
C10	410.30'	184.99'	25°50'00"	C32	153.00'	98.95'	37°04'03"
C11	465.30'	209.79'	25°50'00"				
C12	232.90'	3.42'	00°50'29"				
C13	232.90'	135.46'	33°19'31"				
C14	287.90'	171.08'	34°10'00"				
C15	342.90'	204.48'	34°10'00"				
C16	465.30'	234.16'	28°50'00"				
C17	410.30'	205.48'	28°50'00"				
C18	355.30'	178.80'	28°50'00"				
C19	201.20'	207.18'	59°00'00"				
C20	148.20'	150.55'	59°00'00"				
C21	91.20'	93.91'	59°00'00"				

LINE DATA

NUMBER	DIRECTION	DISTANCE
L0	N84°13'22"E	149.75'
L1	N84°13'22"E	155.36'
L2	N84°13'22"E	160.99'
L3	S63°26'38"E	294.21'
L4	N57°43'22"E	71.84'
L5	S89°36'38"E	77.50'
L6	N73°33'22"E	115.80'
L7	N73°33'22"E	102.89'
L8	N73°33'22"E	86.56'
L9	N73°33'22"E	12.91'
L10	N73°33'22"E	29.24'
L11	N30°23'22"E	75.90'
L12	N68°13'22"E	22.10'
L13	S52°46'38"E	146.10'
L14	N57°43'22"E	128.60'
L15	N17°03'22"E	23.20'
L16	N58°03'22"E	187.59'
L17	N58°03'22"E	153.15'
L18	N04°03'22"E	116.72'
L19	S44°53'21"E	35.38'
L20	N45°59'37"E	34.81'
L21	N44°27'24"W	35.62'
L22	S44°32'07"E	35.36'

LOT AREAS

LOT	AREA	LOT	AREA
1	7512.83	16	10029.49
2	7200.00	17	9121.34
3	7200.00	18	8041.71
4	7200.00	19	10965.56
5	7200.00	20	18997.05
6	7200.00	21	9731.01
7	7200.00	22	8029.33
8	7200.00	23	8209.71
9	7200.00	24	8294.80
10	7200.00	25	8798.83
11	7200.00	26	10169.57
12	7205.65	27	12654.82
13	7452.83	28	17799.19
14	8827.80	29	25310.70
15	9838.08	30	20051.72

TRACT AREAS

TRACT	AREA
"A"	1.84 ACRES

SUBDIVIDER/OWNER

RIEDEL HOLDINGS, LLC
P.O. BOX 1065
SAN LUIS, AZ. 85349
(928) 627-4285

BASIS OF BEARING

THE SOUTH LINE OF THE SW 1/4 OF THE SECTION 6, T11S, R24W, INAMELY N 89°40'11" E AS SHOWN ON BARKLEY LOT SPLIT No. 3 RECORDED IN BOOK 27 OF PLATS PAGE 68, YUMA COUNTY RECORDER.

LEGEND

- CENTERLINE
- BOUNDARY LINE
- EXISTING LOTS
- NEW STREET MONUMENT AS PER YUMA CITY STD. DETAIL No. 4-030
- FOUND MONUMENT (TYPE AS SHOWN)
- SET 1/2" REBAR W/CAP LS 49335
- B.C. INDICATES BRASS CAP
- H.H. INDICATE HAND HOLE
- (R1) RECORDED INFORMATION PER BARKLEY LOT SPLIT No. 3 AS SHOWN IN BOOK 27 OF PLATS, PAGE 68 YUMA COUNTY RECORDS
- (R2) DATA REFER TO 110' U.S.B.R. EAST MAIN CANAL R.O.W. AS SHOWN ON R.O.W. MAP No. 35-303-646 RECORD @ YUMA COUNTY WATER USERS ASSOC.
- A.P.N. ASSESSOR PARCEL NUMBER
- 102 EXISTING NUMBER LOT

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A LAND SURVEYOR LISTED ON THE ROSTER OF ACTIVE REGISTRANTS BY THE STATE BOARD OF TECHNICAL REGISTRATION OF ARIZONA AND THAT THIS MAP CONSISTING OF ONE (2) SHEET CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION, THAT ALL MONUMENTS SHOWN HEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN.

PRELIMINARY

JOHN M. LOWELL R.L.S. No. 22767

PREPARED BY:

Engineering, Inc.
3575 S. AVOCA # E
YUMA, ARIZONA 85365
(928) 344-2568

ADEJ 17-425

SHEET 2 OF 2

AGENDA ITEM REVIEW FORM

Regular City Council Meeting **6. J.**

Meeting Date: 02/26/2025

Department Head: Kay Macuil, City Attorney, Attorney's Office

Submitted By: Kay Macuil, City Attorney, Attorney's Office

Action Requested: Motion
Resolution

ITEM:

Discussion and possible action on any and all matters regarding Resolution No. 2356. A Resolution of the Mayor and City Council of the City of San Luis, Arizona, reducing the City Council Members' pay by fifty percent and amending the City of San Luis Personnel Policies to remove City Council Members from dental and vision care coverage paid by the city; establishing an effective date; repealing any conflicting provisions; and providing for severability. **(Kay Marion Macuil, City Attorney)**

SUMMARY:

This item was before the City Council at the last regular meeting as Resolution 2353. A new number is assigned since the motion failed.

This item proposes to reduce the City Council Members' pay by fifty percent (50%) and remove the City Council Members' dental and vision care benefits paid by the city. Finance staff have provided a chart that was not attached to the agenda item for February 12, 2025. There is mention of retirement. Although this item is leaving retirement in place, there is a savings to the city because of the city contribution to retirement is reduced as the pay is reduced.

Under Arizona Constitution Article 4, Part 2, Section 17, these changes will not take place until those elected to City Council in the 2026 election take their oaths of office. (The Constitutional section is attached). This constitutional provision, as applied to City Councils, is intended to ensure that all City Council Members "doing, in substance, the same work, should at all times receive the same salaries." (See the penultimate paragraph in Arizona Attorney General Opinion No.I 90-135 dated October 22, 1990, attached).

The motion at the February 12, 2025, City Council meeting was:

"I move to disapprove Resolution No. 2353."

The vote on the above motion was 4 to 3, meaning the resolution was voted down so that the City Council's pay and benefits would remain the same.

Under San Luis City Code § 2.05.440, City Council meetings are conducted in accordance with the parliamentary rules contained in Robert's Rules of Order unless the City Code otherwise specifies. Under the latest edition, edition 12 of Robert's Rules of Order, Sections 35 and 12, in order to propose a change to the February 12, 2025, motion, the cleanest way under Roberts' Rules of Order would be to amend the motion.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO AMEND THE FEBRUARY 12, 2025, MOTION (WHICH WAS TO DISAPPROVE RESOLUTION NO. 2353) AND INSTEAD, I MOVE TO APPROVE AND ADOPT THE RESOLUTION REDUCING CITY COUNCIL PAY BY 50%, ELIMINATING CITY-PAID DENTAL AND VISION INSURANCE, AND SUBSTITUTING RESOLUTION NUMBER 2353 FOR NUMBER 2356.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	Reduction in Cost to the City starting January 1, 2027
BUDGETED AMOUNT:	N/A
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	N/A

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

If passed there will be a reduction in costs to the city starting January 1, 2027. Please see attached chart.

Attachments

Resolution No. 2356
Resolution No. 2353
Comparison Chart
Arizona Constitution Provision
Ariz AG Opinion

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

No. 2356

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, REDUCING THE CITY COUNCIL MEMBERS' PAY BY FIFTY PERCENT AND AMENDING THE CITY OF SAN LUIS PERSONNEL POLICIES TO REMOVE CITY COUNCIL MEMBERS FROM DENTAL AND VISION CARE COVERAGE PAID BY THE CITY; ESTABLISHING AN EFFECTIVE DATE; REPEALING ANY CONFLICTING PROVISIONS; AND PROVIDING FOR SEVERABILITY.

WHEREAS, by resolution or ordinance, A.R.S. § 9-232.01 allows city councils to prescribe salaries for the mayor and council members for the performance of official duties; and

WHEREAS, the San Luis City Code § 2.05.240 states: "The compensation of elective officers of the city shall be fixed from time to time by resolution of the Council;" and

WHEREAS, the last time the Council passed a resolution on its salary was June 24, 2014, through Resolution No.1062; and

WHEREAS, the Council desires to reduce its salary;

WHEREAS, the Council passed Resolution No. 750 adopting the City of San Luis Personnel Policies dated July 1, 2008; and

WHEREAS, the Council desires to remove city-paid benefits for dental and vision care for the City Council.

WHEREAS, under Arizona Constitution Article 4, Part 2, Section 17, as interpreted by the case of Davis v. Hale, 96 Ariz 219, 225, 393 P.2d 912, 916 (1964), the compensation of a Council Member cannot be increased or diminished before the next election so that that Council Members doing in substance, the same work, should at all times receive the same salaries.

NOW THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of San Luis, Arizona:

Section 1: The monthly salary to be paid to the Mayor, the Vice Mayor, and Members of the San Luis City Council shall be reduced fifty percent (50%) from the salary set by Resolution 1062 to be as follows:

The Office of the Mayor shall be paid the sum of $875.00 per month.
The Office of the Vice Mayor shall be paid the sum of $650 per month.
The Office of Council Member shall be paid the sum of $450 per month.

Section 2 The City of San Luis Personnel Policies Section **HR-4-13(D).** is amended and restated to read:

(1) As listed in HR-4-13(A), the City Council Members may participate in the City of San Luis' qualifying health care medical insurance plan. If they choose to participate in the qualifying health care dental and vision insurance plans if the premiums are paid by the City Council Members and at no cost to the city.
(2) As listed in HR-4-13(B), the City Council Members may participate in supplemental insurance plans or other qualifying insurance plans if the premiums are paid by the City Council Members and at no cost to the city.

Section 2: The City of San Luis Personnel Policies Section **HR-4-14(A)** is amended and restated to read:

A. Eligibility.

1. City Council Members are treated in subsection (3). All city employees, except those employees listed in subsection (2), and their eligible dependents may participate in the health benefit plan, if they comply with the contractual requirements of the selected health benefit plan. An eligible employee may enroll in a health benefit plan at any time within the first 30 days of employment or during an open enrollment period specified by the Plan. An eligible employee may submit an application for enrollment within 31 days of a family status event.
2. The following categories of employees are not eligible to participate in the health benefit plan:
   a. An employee who works fewer than 31 hours per week;
   b. An employee in a temporary, emergency, or seasonal position.
3. City Council Members and their eligible dependents may participate in qualifying health care plan for Medical Insurance, if they comply with the contractual requirements of the selected health benefit plan. A Council Member may enroll in a health benefit plan at any time within the first 30 days of their oath of office or during an open enrollment period specified by the Plan. A Council Member may submit an

application for enrollment within 31 days of a family status event. City Council Members may choose to participate in the qualifying health care dental and vision insurance plans if the premiums are paid by the City Council Members and at no cost to the city.

Section 3: This Resolution shall take effect on January 1, 2027, provided the Mayor and City Council Members elected in the 2026 election have taken their oaths of office.

Section 4: If a conflict arises between the provisions of this Resolution and any other ordinance, resolution, order, regulation, or policy of the City of San Luis, the conflicting provisions are amended, superseded, and replaced, and this Resolution shall govern.

Section 5: If any section, subsection, paragraph, sentence clause, phrase, or portion of this Resolution is held to be invalid or unconstitutional by the final decision of any court of competent jurisdiction or controlling legislation, such decision or law shall not affect the validity of the remaining portion of this Resolution.

Section 6: The City officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this Resolution.

PASSED, ADOPTED, and APPROVED by the Mayor and City Council of the City of San Luis, Yuma County, Arizona, this ____ day of February 2025.

City of San Luis, Arizona

_____
Nieves Riedel, Mayor

Attest:

_____
Sonia Cornelio, City Clerk

Approved As to Form

_____
Kay Marion Macuil, City Attorney

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

No. 2353

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, REDUCING THE CITY COUNCIL MEMBERS' PAY BY FIFTY PERCENT AND AMENDING THE CITY OF SAN LUIS PERSONNEL POLICIES TO REMOVE CITY COUNCIL MEMBERS FROM DENTAL AND VISION CARE COVERAGE PAID BY THE CITY; ESTABLISHING AN EFFECTIVE DATE; REPEALING ANY CONFLICTING PROVISIONS; AND PROVIDING FOR SEVERABILITY.

WHEREAS, by resolution or ordinance, A.R.S. § 9-232.01 allows city councils to prescribe salaries for the mayor and council members for the performance of official duties; and

WHEREAS, the San Luis City Code § 2.05.240 states: "The compensation of elective officers of the city shall be fixed from time to time by resolution of the Council;" and

WHEREAS, the last time the Council passed a resolution on its salary was June 24, 2014, through Resolution No.1062; and

WHEREAS, the Council desires to reduce its salary;

WHEREAS, the Council passed Resolution No. 750 adopting the City of San Luis Personnel Policies dated July 1, 2008; and

WHEREAS, the Council desires to remove city-paid benefits for dental and vision care for the City Council.

WHEREAS, under Arizona Constitution Article 4, Part 2, Section 17, as interpreted by the case of Davis v. Hale, 96 Ariz 219, 225, 393 P.2d 912, 916 (1964), the compensation of a Council Member cannot be increased or diminished before the next election so that that Council Members doing in substance, the same work, should at all times receive the same salaries.

NOW THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of San Luis, Arizona:

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The Office of the Vice Mayor shall be paid the sum of $650 per month.
The Office of Council Member shall be paid the sum of $450 per month.

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(1) As listed in HR-4-13(A), the City Council Members may participate in the City of San Luis' qualifying health care medical insurance plan. If they choose to participate in the qualifying health care dental and vision insurance plans if the premiums are paid by the City Council Members and at no cost to the city.
(2) As listed in HR-4-13(B), the City Council Members may participate in supplemental insurance plans or other qualifying insurance plans if the premiums are paid by the City Council Members and at no cost to the city.

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A. Eligibility.

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   a. An employee who works fewer than 31 hours per week;
   b. An employee in a temporary, emergency, or seasonal position.
3. City Council Members and their eligible dependents may participate in qualifying health care plan for Medical Insurance, if they comply with the contractual requirements of the selected health benefit plan. A Council Member may enroll in a health benefit plan at any time within the first 30 days of their oath of office or during an open enrollment period specified by the Plan. A Council Member may submit an

application for enrollment within 31 days of a family status event. City Council Members may choose to participate in the qualifying health care dental and vision insurance plans if the premiums are paid by the City Council Members and at no cost to the city.

Section 3: This Resolution shall take effect on January 1, 2027, provided the Mayor and City Council Members elected in the 2026 election have taken their oaths of office.

Section 4: If a conflict arises between the provisions of this Resolution and any other ordinance, resolution, order, regulation, or policy of the City of San Luis, the conflicting provisions are amended, superseded, and replaced, and this Resolution shall govern.

Section 5: If any section, subsection, paragraph, sentence clause, phrase, or portion of this Resolution is held to be invalid or unconstitutional by the final decision of any court of competent jurisdiction or controlling legislation, such decision or law shall not affect the validity of the remaining portion of this Resolution.

Section 6: The City officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this Resolution.

PASSED, ADOPTED, and APPROVED by the Mayor and City Council of the City of San Luis, Yuma County, Arizona, this ____ day of February 2025.

City of San Luis, Arizona

_____
Nieves Riedel, Mayor

Attest:

_____
Sonia Cornelio, City Clerk

Approved As to Form

_____
Kay Marion Macuil, City Attorney

Comparison of Compensation Scenarios

This table provides a breakdown of costs under three different scenarios:

1. **Current** – Represents the existing salary and benefits structure.
2. **Salaries 50% Reduction** – Assumes a 50% reduction in salaries while adjusting associated benefits accordingly.

Category	Current	Salaries 50% Reduction	
Salaries	90,600	45,300	
Health	70,140	70,140	
Dental	3,060	-	
Vision	1,020	-	
EAP, Life, Cancer Ins	800	-	
Retirement	63,960	31,561	
Fringe	9,180	4,530	
Total	238,760	151,531	
Final Adjusted Total		87,229	

A.R.S. Const. Art. 4 Pt. 2 § 17

§ 17. Extra compensation prohibited; increase or decrease of compensation during term of office

Currentness

Section 17. The legislature shall never grant any extra compensation to any public officer, agent, servant or contractor, after the services shall have been rendered or the contract entered into, nor shall the compensation of any public officer, other than a justice of the peace, be increased or diminished during his term of office; provided, however, that when any legislative increase or decrease in compensation of the members of any court or the clerk thereof, or of any board or commission composed of two or more officers or persons whose respective terms of office are not coterminous, has heretofore or shall hereafter become effective as to any member or clerk of such court, or any member of such board or commission, it shall be effective from such date as to each thereof.

Credits

Amendment approved by election Nov. 4, 1930, eff. Dec. 1, 1930; election Sept. 29, 1953, eff. Oct. 31, 1953.

A. R. S. Const Art. 4 Pt. 2 § 17, AZ CONST Art. 4 Pt. 2 § 17
Current through legislation of the Second Regular Session of the Fifty-Sixth Legislature (2024), and includes Election Results from the November 5, 2024 General Election.

End of Document

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Editor's and Revisor's Notes (1)

HISTORICAL NOTES

The governor, on December 1, 1930, proclaimed that the amendment of this section, as proposed by Laws 1929, Ch. 71, § 1, filed March 16, 1929, had been approved by a majority of the electors in the November 4, 1930 general election and had become law.

The governor, on October 31, 1953, proclaimed that the amendment of this section, as proposed by Laws 1953, S.C.R. No. 4, § 1, filed March 28, 1953, had been approved by a majority of the electors in the September 29, 1953 special election and had become law.

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Validity

There are no Validity results for this citation.

Bill Drafts

There are no Bill Drafts for this citation.

Legislative History Materials

There are no Legislative History Materials for this citation.

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1990 Ariz. Op. Atty. Gen. 150 (Ariz.A.G.), Ariz. Op. Atty. Gen. No. I90-094, 1990 WL 484106

Office of the Attorney General

State of Arizona

I90-094 (R90-135)

October 22, 1990

***1** The Honorable Bob Denny
Arizona State Senator
State Capitol—Senate Wing
Phoenix, Arizona 85007

Dear Senator Denny:
You asked whether article 4, part 2, section 17 of the Arizona Constitution permits a sitting member of a city council to receive a salary increase approved prior to the beginning of a new term.

Article 4, part 2, section 17 in relevant part provides:
nor shall the compensation of any public officer, other than a justice of the peace, be increased or diminished during his term of office; ...

Accordingly, on its face, Article 4, part 2, section 17 permits a sitting city council member to receive a salary increase at the beginning of a new term.

Also, we conclude that city council members who are in the middle of their terms may receive an increase of salary if the following provisions of article 4, part 2, section 17 apply:
provided, however, that when any legislative increase or decrease in compensation of the members of any court or the clerk thereof, or of any board or commission composed of two or more officers or persons whose respective terms of office are not coterminous, has heretofore or shall hereafter become effective as to any member or clerk of such court, or any member of such board or commission, it shall be effective from such date as to each thereof.

The Arizona Supreme Court has said that this constitutional provision added in 1930 was adopted "for the express purpose of insuring that all members of a court, board, or commission composed of more than one person, who were doing in substance, the same work, should at all times receive the same salaries." County of Maricopa v. Rodgers, 52 Ariz. 19, 25, 78 P.2d 989, 991–992 (1938). The provisions of article 4, part 2, section 17 have been applied to the acts of a city council. See Davis v. Hale, 96 Ariz. 219, 225, 393 P.2d 912, 916 (1964).

Therefore, we conclude that a city council member may receive a salary increase in the middle of the council member's term, provided the increase meets the conditions of article 4, part 2, section 17 of the Arizona Constitution, or at the beginning of a new term.
Very truly yours,

BOB CORBIN

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Attorney General

1990 Ariz. Op. Atty. Gen. 150 (Ariz.A.G.), Ariz. Op. Atty. Gen. No. I90-094, 1990 WL 484106

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