FABIAN TOWNHOMES

San Luis, Arizona

GENERAL NOTES

1. UTILITIES
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE BLUE STAKE CENTER AT 1-800-STAKE-IT TO LOCATE EXACTLY THE UNDERGROUND UTILITIES WITHIN THE CONSTRUCTION AREA TWO WORKING DAYS BEFORE ANY EXCAVATION BEGINS. OMISSION FROM, OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE 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.

2. AS-BUILT DRAWINGS
THE CONTRACTOR SHALL MAINTAIN A 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 EDAIS ENGINEERING UPON COMPLETION OF THE WORK WHICH SHALL REFLECT "AS-BUILT" MODIFICATIONS.

3. DUST CONTROL
DUE TO THE LOCATION OF THE WORK THE CONTRACTOR SHALL OBTAIN AN AZDEQ PERMIT TO CONTROL DUST DURING THE PROCESS OF THE WORK. DUST SHALL BE MAINTAINED TO A MINIMUM BY REGULAR APPLICATIONS OF WATER AS NECESSARY AND AS DIRECTED BY THE AZDEQ. AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL SWEEP THE STREETS TO REMOVE ALL LOOSE DIRT AND DUST RESULTING FROM CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BEAR THE COSTS OF ALL FINES.

4. BARRICADES
THE CONTRACTOR SHALL PROVIDE LIGHTED BARRICADES POSITIONED ON FOUR FOOT CENTER AROUND THE PERIMETER OF OPEN EXCAVATION DURING AND AT THE CONCLUSION OF THE WORK DAY.

5. CLEANUP
THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL UNCLASSIFIED EXCAVATION MATERIAL, EXISTING PAVEMENT, CONCRETE DEBRIS, AND ALL OTHER MATERIAL RESULTING FROM DEMOLITION ACTIVITIES IN ACCORDANCE WITH CITY OF SAN LUIS REQUIREMENTS.

6. PERMITS
THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND BUSINESS LICENSES.

7. 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.

8. POWER LINES
THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH OVERHEAD ELECTRIC LINE CONDITIONS AND TAKE NECESSARY PRECAUTIONS TO PROTECT AGAINST INJURY AND DAMAGE DURING CONSTRUCTION.

9. TRAFFIC CONTROL
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN PROPER SIGNS, BARRICADES, AND WARNING LIGHTS TO CONTROL THE FLOW OF TRAFFIC AND TO ENSURE THE PUBLIC'S HEALTH, WELFARE, AND SAFETY IN ACCORDANCE WITH CITY OF SAn LUIS. ALL DEVICES MUST CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

10. CHANGES
THE CONTRACTOR SHALL NOTIFY THE CITY OF SAN LUIS AND THE ENGINEER IMMEDIATELY OF ANY CONDITIONS REQUIRING CHANGES TO THE PLANS.

11. ACCESS TO ADJACENT PROPERTY
ACCESS TO ADJACENT PROPERTIES CROSS STREETS OR USE OF STREETS SCHEDULED FOR IMPROVEMENT MUST BE REASONABLY MAINTAINED FOR NORMAL LOCAL, BUSINESS, AND RESIDENT ACCESS.

12. CONSTRUCTION STAKING
ALL CONSTRUCTION STAKING SHALL BE PROVIDED IN ACCORDANCE WITH CITY OF SAN LUIS REQUIREMENTS.

13. SPECIFICATIONS
ALL CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH EDAIS ENGINEERING / CITY OF SAN LUIS STANDARDS AND SPECIFICATIONS, AND LOCAL BUILDING CODE.

(A) REFER TO THE SITE PLAN FOR ALL CORRECT DIMENSIONS AND MINIMUM SETBACKS FOR BUILDINGS AND YARDS.
(B) THE CONTRACTOR WILL PROVIDE THE ENGINEER AND CITY OF SAN LUIS WITH CERTIFIED COMPACTION, CONCRETE, AND LABORATORY TESTS AS REQUIRED BY CITY OF SAN LUIS STANDARD SPECIFICATIONS FOR ALL WORK WITHIN CITY OF SAN LUIS RIGHT-OF-WAYS PRIOR TO ACCEPTANCE OF THE PROJECT.
(C) ALL MATERIALS SUPPLIED MUST BE SUBMITTED IN ACCORDANCE WITH EDAIS ENGINEERING / CITY OF SAN LUIS STANDARDS AND SPECIFICATIONS.
(D) IF THE CONTRACTOR FINDS ANY DISCREPANCY OR OMISSION IN THESE PLANS, HE SHALL NOTIFY THE ARCHITECT, ENGINEER, AND CITY OF SAN LUIS BEFORE ANY INTERPRETATION OR DECISION IS MADE WHICH WILL AFFECT THE CONSTRUCTION COST, APPEARANCE, QUALITY, OR PERFORMANCE OF THE COMPLETED WORK.
(E) THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES 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 CONTRACT DOCUMENTS.
(F) ALL ENGINEERED BACKFILL SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF EDAIS ENGINEERING / CITY OF SAN LUIS STANDARDS AND SPECIFICATIONS.
(G) UNDERGROUND UTILITIES SHOWN HEREON ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL VERIFY LOCATION, DEPTH, AND ROUTING OF UTILITIES BEFORE CONSTRUCTION PER PLANS.
(H) ALL EXISTING MONUMENTATION SHALL BE REFERENCED PRIOR TO CONSTRUCTION AND REPLACED IF DISTURBED AFTER ALL WORK IS COMPLETED BY CONTRACTOR.
(I) 4" WIDE YELLOW PARKING STRIPES SHALL BE PAINTED WITH SHERWAN-WILLIAMS TRAFFIC PAINT OR APPROVED EQUAL FOR PARKING SPACES AND HANDICAP PARKING.
(J) PAVING CONTRACTOR IS TO COORDINATE WITH IRRIGATION AND UTILITY CONTRACTORS TO ENSURE INSTALLATION OF IRRIGATION AND ELECTRICAL CONDUIT, AND ALL UNDERGROUND UTILITIES PRIOR TO PAVING OR PLACING ABC.

13. SPECIFICATIONS (CONT.)
(K) PROVIDE RAMP AT 1:12 SLOPE CONSTRUCTED OF CONCRETE FROM HANDICAP PARKING TO MAIN ENTRANCE.
(L) PAVING CONTRACTOR IS TO PROVIDE ALL BACKFILL REQUIRED BEHIND ALL IMPROVEMENTS IN ACCORDANCE WITH THE TYPICAL DETAILS AND SLOPE LINES SHOWN HEREON.
(M) BACKFLOW PREVENTION ASSEMBLY NEEDS TO BE INSPECTED BY CITY OF SAN LUIS PRETREATMENT SECTION. CONTACT THE INDUSTRIAL WASTE INSPECTOR IN CHARGE OF BACKFLOW PREVENTION IN THE PRETREATMENT SECTION AT (928) XXX-XXXX TO REQUEST AN INSPECTION.
(N) TESTING OF BACKFLOW DEVICE BY CERTIFIED TESTER, INSTALLATION, AND TESTING TO BE COMPLETED WITHIN ONE WEEK OF THE TIME THAT THE WATER METER IS SET.
(O) POST-WORK ZONE IDENTIFICATION SIGNS PER CITY STD 8-100.

WATER NOTES

1. UNLESS HEREON REVISED, ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY OF SAN LUIS SPECIFICATIONS AND RECOMMENDED DETAILS AND SHALL, WHERE APPLICABLE, BE IN ACCORDANCE WITH ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS.

2. A MINIMUM OF 7' SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SEWER LINES.

3. GRAVITY SEWER MAINS AND SERVICES SHALL BE DUCTILE IRON PIPE CLASS 53 (FUSION BOND EPOXY COATED - THICKNESS OF 60 MILS) OR "SEWER COAT", FOR A PERPENDICULAR DISTANCE OF 7' IN BOTH DIRECTIONS FROM A WATER MAIN OR SERVICE WHEN:

A. SEWER MAIN OR SERVICE CROSSES LESS THAN 2' BELOW A WATER MAIN 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).

4. ALL FERROUS MATERIAL INCLUDING FLANGE BOLTS SHALL BE PROTECTED FROM DIRECT CONTACT WITH SOIL BY 10 MIL. POLYETHYLENE WRAP.

5. WATER MAINS AND VALVES SHALL BE FLUSHED AND DISINFECTED BY THE "GENERAL METHOD" AS DESCRIBED IN THE 1978 ARIZONA DEPARTMENT OF HEALTH SERVICES ENGINEERING BULLETIN NO. 8.

6. ENGINEERING PERSONNEL SHALL BE PRESENT WHEN WATER MAINS ARE BOTH FLUSHED AND PRESSURE TESTED.

7. CONTRACTORS SHALL PROVIDE THE ENGINEER AND THE CITY OF SAN LUIS WITH ALL CITY REQUIRED COMPACTION AND CONCRETE TEST RESULTS.

8. ALL PVC WATER DISTRIBUTION PIPES, FITTINGS, AND VALVES SHALL COMPLY WITH NSF STANDARD 61 AND SHALL BEAR THE NSF-PW SEAL FOR POTABLE WATER USE.

9. APPROVED WATER SERVICE COMPONENTS

CORPORATION STOPS	PVC/ PLASTIC SERVICES: AYM 3404 AYM 4707-33
ANGLE STOPS	AYM 4202 AYM 4602-33-1" ONLY
SERVICE SADDLES	AYM 979 (REPLACEMENT ONLY- A.C. OR CAST IRON PIPE) AYM 969 (FOR AWWA C-900 PVC PIPE ONLY) W/ 5 ¼" MAIN VALVES AS REQUIRED BY NFPA. AYM 3825 AND 3826
FIRE HYDRANTS	AMERICAN AVK, CLOW MEDALLION WATEROUS PACER WB-67 EAST JORDAN IRONWORKS- WATER MASTER
METER	BADGER METER, INC BRAND. MUST BE OUTFITTED WITH AUTOMATIC READING (AMR) CAPABILITY; AN INTEGRAL DATA PROFILE TRANSMITTER, AND REGISTER THAT RECORDS IN CUBIC FEET. DUAL REGISTER COMPOUND METERS MUST INCLUDE A SEPARATE TRANSMITTER FOR EACH REGISTER. METERS 3" TO 8" MUST ALSO INCLUDE TEST PART ON BODY, AND STRAINER OR INTEGRAL STRAINER.
METER COUPLINGS	AYM ¾" / 1" : 4622 1 ½" / 2": 610F
METER BUSHINGS	AYM 1" X 1 ¼" 10534
REPAIR CLAMPS	SMITH-BLAIR (MINIMUM LENGHT: 15") WITH STAINLESS STEEL BOLTS 304
TAPPING SLEEVES	SMITH-BLAIR MODEL 662-663 STAINLESS STEEL (6" AND SMALLER; 15" LONG MIN.; LARGER OR EQUAL TO 8": 20" LONG MIN.) CASCADE CST-SL
VALVES (2")	MUELLER
VALVES (4" THROUGH 30")	AMERICAN DARLING, AMERICAN FLOW CONTROL, CLOW MASTEROUS, AMERICAN AVK EAST JORDAN IRONWORKS FLOW MASTER VALVES (ONLY RESILENT WEDGE GATE VALVES SHALL BE USED)
TRANSITION	SMITH-BLAIR (20" LONG FOR WATER MAINS 12" AND LARGER/15" LONG FOR WATER MAINS 10" AND SMALLER). ANY DEVICE USED TO CONNECT A.C. PIPE TO DUCTILE IRON OR P.V.C. PIPE SHALL REQUIRE PRIOR APPROVAL BY THE CITY ENGINEER. HYMA X LONGBODY COUPLINGS.
AIR RELEASE VALVES	A.R.I. MODEL D-020 (FOR USE IN WASTE WATER APPLICATIONS WHERE AIR RELEASE AND VACUUM BREAKS NEED TO OCCUR IN SANITARY FORCED MAINS).

WATER NOTES (CONT.)

NOTES:
1. THE APPROVED EQUIPMENT SHOWN IS NOT NECESSARILY EXCLUSIVE. IF APPROVAL OF A SIMILAR DEVICE BELIEVED TO BE COMPARABLE AND EQUAL IS DESIRED, AREQUEST SUPPORTED BY APPROPRIATE INFORMATION AND DATA MAY BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW.
2. ALL BURIED COMPONENTS WILL REQUIRED TYPE 304 STAIN-LESS STEEL (MIN.) COMPONENTS (NUTS, BOLTS, WASHERS, ETC.) UNLESS OTHERWISE NOTED.
3. ALL NEW WATER SERVICE REQUESTS 2" AND SMALLER OFF OF AN EXISTING WATER MAIN WILL BE INSTALLED BY CITY OF SAN LUIS UTILITIES PERSONNEL.

10. CONSTRUCTION MATERIALS USED IN THE WATER SYSTEM SHALL BE LEAD FREE AS DEFINED AT A.A.C. R18-4-504 AND R18-1-101

11. WATER/SEWER LINES SEPARATION SHALL BE IN ACCORDANCE WITH A.A.C. R18-4-502.C

SEWER NOTES

1. UNLESS HEREON REVISED, ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY OF SAN LUIS SPECIFICATIONS AND RECOMMENDED DETAILS AND SHALL, WHERE APPLICABLE, BE IN ACCORDANCE WITH ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS.

2. A MINIMUM OF 7' SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SEWER LINES.

3. SEWER CONSTRUCTION STAKING SHALL BE DONE UNDER THE SUPERVISION OF A REGISTERED ENGINEER OR REGISTERED LAND SURVEYOR.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF SITE AND SOIL CONDITION AND SHALL NOTIFY ALL UTILITY AGENCIES PRIOR TO EXCAVATION.

5. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONDITIONS REQUIRING CHANGE TO THE PLANS.

6. CONTRACTOR SHALL NOTIFY CITY OF SAN LUIS WATER AND SEWER COMPANY PRIOR TO START OF CONSTRUCTION.

7. A MINIMUM OF 7' SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SEWER LINESAND WATER AND SEWER MAINS.

8. PVC SEWER SEWER PIPES SHALL BE INSTALLED ACCORDING TO ASTM D2321 STANDARDS.

9. SHORT TERM DEFLECTION TESTING OF ALL PVC SEWER PIPE MUST BE PERFORMED. SHORT TERM DEFLECTION IN EXCESS OF 5% SHALL BE CONSIDERED UNSERVICEABLE AND SHALL BE REPAIRED AND RETESTED.

10. MANHOLES SHALL BE TESTED FOR WATER TIGHTNESS AND SHALL CONFORM TO EXFILTRATION LIMITS OF 0.1 GALLON/HOUR/VERT. FT. AS PER ARIZONA DEPARTMENT OF ENVIROMENTAL QUALITY REGULATIONS.

PRIVATE FIRE LINE NOTES

1. PRIVATE FIRE LINES SHALL BE TESTED IN ACCORDANCE WITH NFPA, CHAPTER 8, SECTION 9.3. THIS TEST, BETWEEN A WATERMAIN CONNECTION AND EITHER AN ONSITE FIRE HYDRANT OR THE SPRINKLER SYSTEM FLANGE LOCATED IMMEDIATELY ABOVE A BUILDING FLOOR SLAB, SHALL BE WITNESSED/VERIFIED BY A REPRESENTATIVE OF CITY OF SAN LUIS.

2. FOLLOWING APPROVAL OF THE SYSTEM, AS CONSTRUCTED AND TESTED, CITY OF SAN LUIS SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF A. THAT PORTION OF THE FIRE LINE BETWEEN THE CITY WATERMAIN AND THE DOWNSTREAM SIDE OF THE VALVE ADJACENT TO THE CITY OF SAN LUIS MAIN

3. ALL TAPS OF CITY WATER MAINS REQUIRE THAT CITY OF SAN LUIS ISSUE A TAP PERMIT, PRIOR TO TAPPING ACTIVITIES, AND THE TAPPING ACTIVITIES SHALL BE MONITORED BY CITY OF SAN LUIS PERSONNEL.

4. ALL FIRE LINES, AS NOTED IN ITEM 1. ABOVE, SHALL BE-
A. STERILIZED IN ACCORDANCE WITH ADEQ/ADHS BULLETIN NO. 8. THE SUB-CONTRACTOR SHALL PERFORM STERILIZATION AND BACTERIOLOGICAL TESTING OF THE SYSTEM THROUGH A LICENSED LABORATORY AND SHALL PROVIDE THE RESULTS OF THESE TEST TO ENGINEERING DIVISION, PRIOR TO BEING ALLOWED TO PLACE THE SYSTEM INTO OPERATION.
B. FLUSHED VIA SIZE-ON-SIZE FLUSHING TUBES.

5. AT THE TIME THAT THE PRIVATE FIRE LINE SYSTEM DESIGN IS APPROVED BY CITY OF SAN LUIS, THE DIVISION WILL PROVIDE THE DEVELOPER WITH ONE (1) FIRE HYDRANT RING FOR EACH HYDRANT TO BE INSTALLED. THE RING NOTES THAT THE HYDRANT IS OUT OF SERVICE. THE RING SHALL BE PLACED ON THE HYDRANT PUMPER NOZZLE, AT THE TIME THAT THE HYDRANT IS DELIVERED TO THE SITE.

ONCE A FIRE HYDRANT LINE HAS BEEN CONSTRUCTED AND ALL PRESSURE, STERILIZATION AND BACTERIOLOGICAL TESTING HAS BEEN SUCCESSFULLY COMPLETED, THE SUBCONTRACTOR SHALL- .

A. NOTIFY THE FIRE DEPARTMENT THAT THE FIRE HYDRANT IS OPERATIONAL.

B. REMOVE THE RING FROM THE FIRE HYDRANT AND RETURN SAME TO THE CITY OF SAN LUIS PERSONNEL INSPECTING THE PROJECT.

PREPARED BY:

Edais Engineering, Inc.
3075 S. AVENUE 4E
YUMA, ARIZONA 85365
(928) 344-3566

SEWER LINE TESTING PROCEDURE

LOW PRESSURE AIR TESTING
AAC R18-9-E301-D-2-J-I

NOTE: LOW PRESSURE AIR TESTING SHALL BE LIMITED TO PIPES LESS THAN 30 INCHES IN DIAMETER.

TEST PROCEDURE

1. CLEAN AND WET THE LINE TO BE TESTED.
2. PLUG ALL PIPE OUTLETS WITH SUITABLE TEST PLUGS AND SECURELY BRACE EACHPLUG.
3. ADD AIR SLOWLY TO THE PORTION OF THE PIPE INSTALLATION UNDER TEST UNTIL THE INTERNAL AIR PRESSURE IS RAISED TO 4.0 PSIG.
4. CHECK EXPOSED PIPE AND PLUGS FOR LEAKAGE BY COATING WITH A SOAPSOLUTION. IF ANY FAILURES ARE OBSERVED, BLEED OFF AIR AND MAKE NECESSARY REPAIRS.
5. AFTER AN INTERNAL PRESSURE OF 4.0 PSIG. IS OBTAINED, ALLOW AT LEAST TWO MINUTES FOR INTERNAL AIR TEMPERATURE TO STABILIZE, ADDING ONLY THE AMOUNT OF AIR REQUIRED TO MAINTAIN PRESSURE.
6. AFTER THE TWO MINUTE PERIOD, DISCONNECT THE AIR SUPPLY.
7. WHEN THE PRESSURE DECREASES TO 3.5 PSIG, STAR TIMING. DETERMINE THE TIME IN SECONDS THAT IS REQUIRED FOR THE PRESSURE TO FALL FROM 3.5 PSIG TO 2.5 PSIG. THIS TEST DURATION TIME MUST BE EQUAL TO OR GREATER THAN THE MINIMUM TEST DURATION TIME OBTAINED FROM THE FOLLOWING FORMULA: TIME (SEC) = (0.011) X (PIPE DIA IN INCHES)^2 X (LINEAL FEET OF PIPE)

WATER LINE TESTING PROCEDURE

1. ALL VISIBLE LEAKS SHALL BE REPAIRED REGARDLESS OF THE AMOUNT OF LEAKAGE REGARDLESS OF WHETHER 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 FOR WATERLINES AND 200 PSI FOR FIRELINES
3. A PRESSURE TEST SHALL BE DEEMED AS SUCCESSFUL IF IT PASSES THE CRITERIA SET FORTH BY AWWA C-600, SEC. 4 (LATEST 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. SEC. 4 (LATEST EDITION) OR AWWA M-23 (LATEST EDITION), WHICHEVER IS MORE RESTRICTIVE AND COMPLIES WITH THAT CRITERIA NOTED ABOVE.

LEGEND

——— — ———	CENTERLINE
———	BOUNDARY LINE
— — — — — — — —	SETBACK LINE
—EX. — — 8" — — W—	EXISTING WATER LINE
—EX. — — 8" — — S —	EXISTING SEWER LINE
———	NEW WATER LINE
———	NEW SEWER LINE
	NEW STORM DRAIN LINE
	NEW AC PAVEMENT
	EXISTING VERTICAL CURB AND GUTTER
	EXISTING SIDEWALK
	EXISTING CHAIN LINK FENCE
	NEW CONCRETE
	EXISTING CONCRETE
	EXISTING AC PAVEMENT
●	SET ½" REBAR W/R.L.S. #16528
○	FOUND MONUMENT (TYPE AS SHOWN)
B.C.	INDICATES BRASS CAP
FH	EXISTING FIRE HYDRANT
MH	EXISTING MANHOLE
WV	EXISTING WATER VALVE
	NEW WATER METER
	NEW BACKFLOW PREVENTER
	NEW WATER VALVE
	NEW TWO WAY SEWER CLEANOUT
	NEW SEWER CLEANOUT
(XXX.XX)	EXISTING GROUND ELEVATION
(A-XXX.XX)	EXISTING ASPHALT ELEVATION
(C-XXX.XX)	EXISTING CURB ELEVATION
(CONC-XXX.XX)	EXISTING CONCRETE ELEVATION
A-XXX.XX	NEW ASPHALT ELEVATION
CONC-XXX.XX	NEW CONCRETE ELEVATION
S/W-XXX.XX	NEW SIDEWALK ELEVATION
FG-XXX.XX	NEW FINISH GRADE ELEVATION
C-XXX.XX	NEW TOP OF CURB ELEVATION
G-XXX.XX	NEW TOP GUTTER ELEVATION
F.F.E.	FINISH FLOOR ELEVATION
F.G.	FINISH GRADE
H.W.E.	HIGH WATER ELEVATION
	NEW RETENTION BASIN SLOPE DIRECTION
	DRAINAGE FLOW LINE
	EXISTING STREET LIGHT

CALL TWO WORKING DAYS
BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

REVISIONS

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2	
3	
4	
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1185 N HIDALGO AV.
SAN LUIS, AZ. 85349

CIVIL COVER SHEET

FABIAN TOWNHOMES

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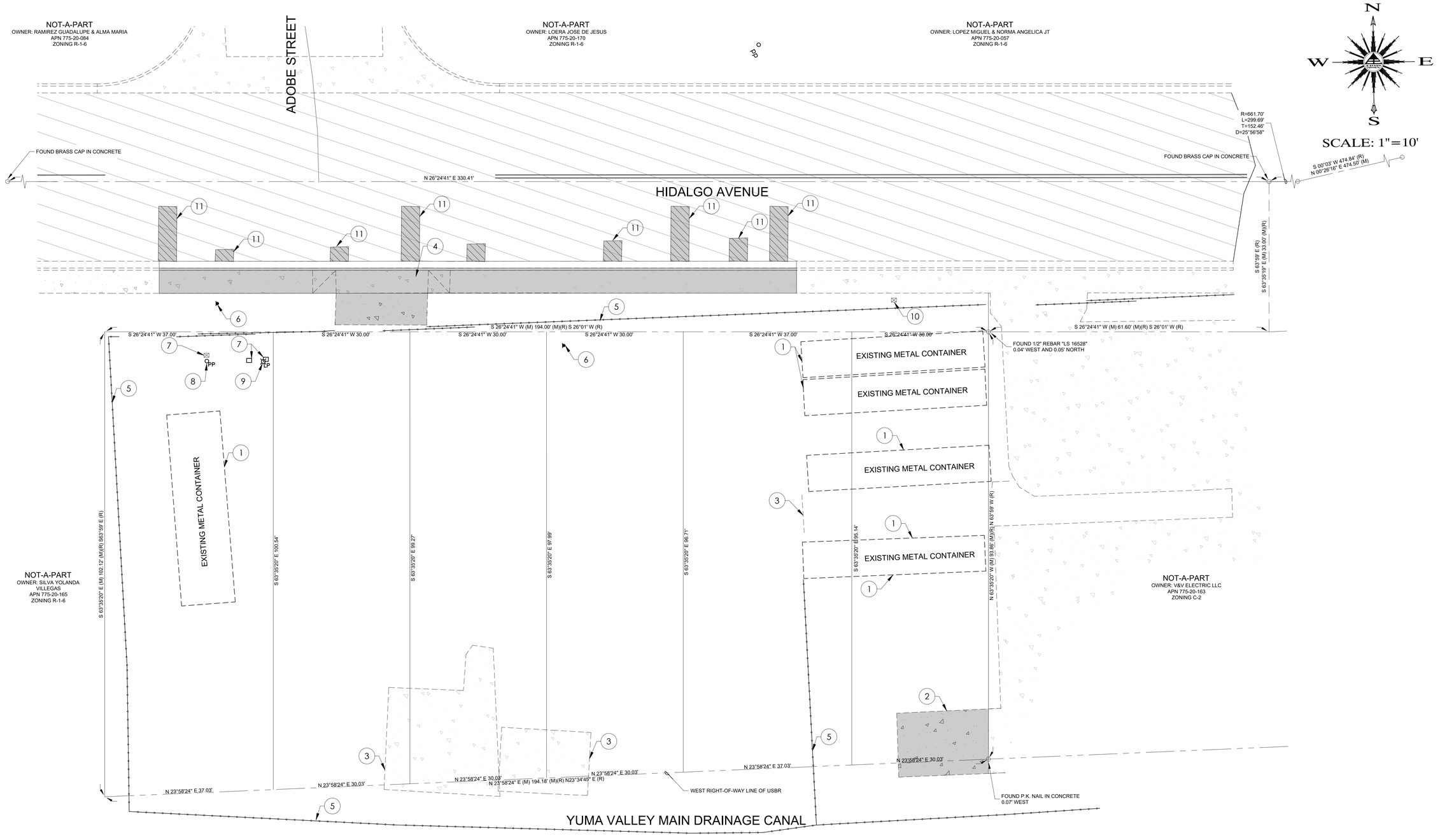
Registered Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 4/1/25
ARIZONA U.S.A.
EXPIRES 3/31/26

DATE:
JANUARY 2025
DRAWN:
PLBR
CHECKED:
NKE
PROJECT:
24-006
SHEET NUMBER
C-0



KEYNOTES

1. EXISTING METAL CONTAINER TO BE REMOVED
2. SAWCUT AND REMOVE EXISTING CONCRETE PAS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS.
3. EXISTING CONCRETE PAD TO BE REMOVED.
4. SAWCUT AND REMOVE EXISTING CONCRETE CURB, GUTTER, SIDEWALK AND OR DRIVE WAY AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS
5. EXISTING CHAIN LINK FENCE TO BE REMOVED
6. EXISTING STREET SIGN TO BE REMOVED
7. EXISTING ELECTRIC OR TELECOMMUNICATION BOX TO BE RELOCATED
8. EXISTING POWER POLE TO BE RELOCATED
9. EXISTING LIGHT POLE TO BE REMOVED
10. EXISTING ELECTRIC OR TELECOMMUNICATION BOX TO REMAIN
11. SAWCUT AND REMOVE EXISTING ASPHALT AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS.

REVISIONS

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DEMOLITION PLAN

FABIAN TOWNHOMES

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Professional Engineer
26844
NAJEH K. EDAIS
Date Signed 4/1/25
ARIZONA U.S.A.
EXPIRES 3/31/26

DATE:
JANUARY 2025

DRAWN:
PLBR

CHECKED:
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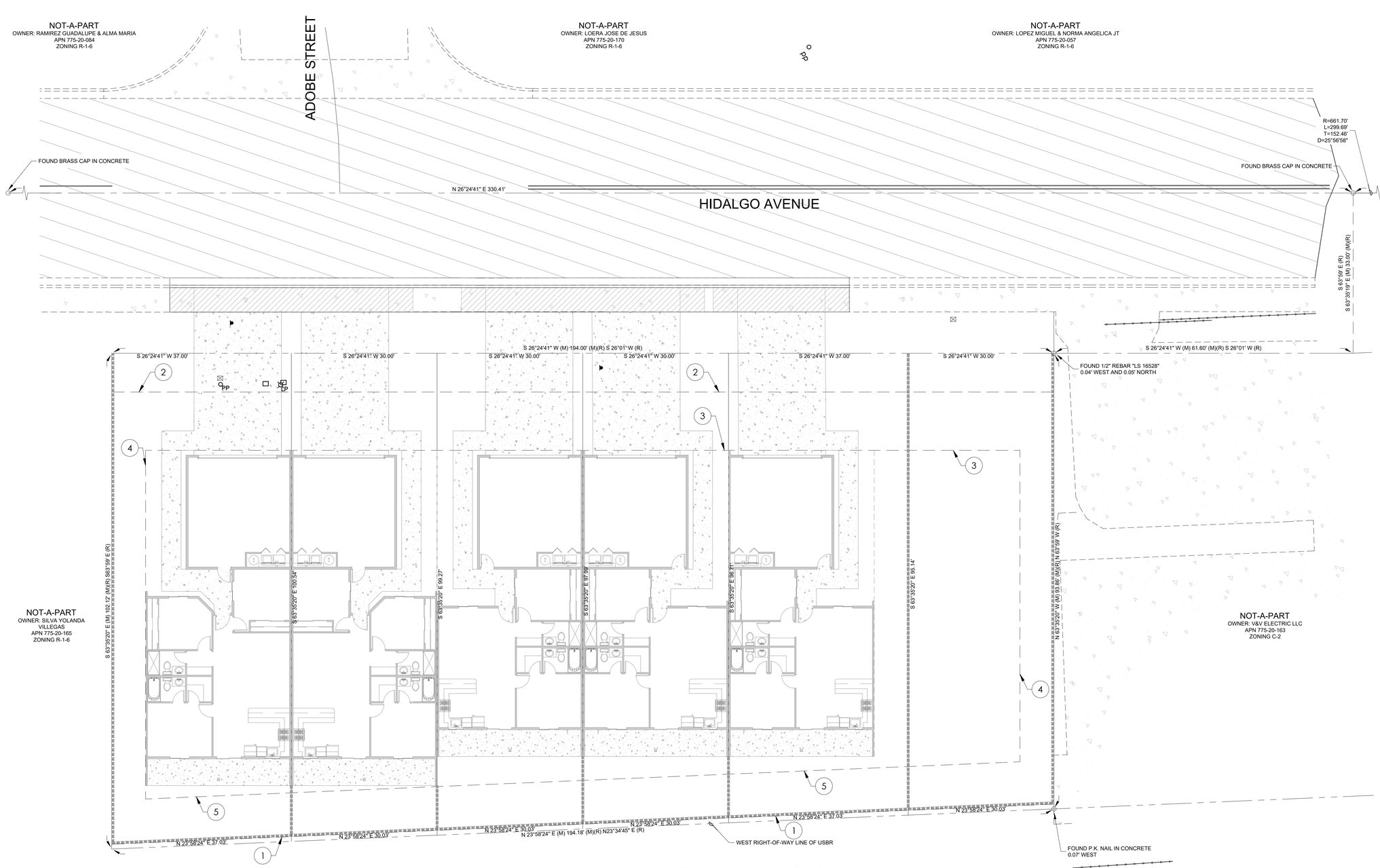
PROJECT:
24-006

SHEET NUMBER

C-1.1



OWNER	ADDRESS
KNAM&D CONSTRUCTIO LLC P.O. BOX 2865 SAN LUIS, AZ. 85349	FABIAN TOWNHOMES 1185 N HIDALGO AVENUE SAN LUIS, AZ. 85349 ZONING R-2

FLOOD ZONE DESIGNATION

THE SUBJECT PROPERTY IS LOCATED WITHIN AN AREA HAVING A FLOOD ZONE X DESIGNATION.
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 I SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. REFERENCE - FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 04027C2135F. MAP REVISED 01/16/2014

NOTE

FOR BOUNDARY INFORMATION REFER TO BOUNDARY AND TOPOGRAPHIC SURVEY BY DAHL, ROBINS & ASSOCIATES, INC DATED --/--/---- (SHEET 1 OF 1)

LEGAL DESCRIPTION

FOR LEGAL DESCRIPTION REFER TO THE BOUNDARY AND TOPOGRAPHIC SURVEY BY DAHL, ROBINS & ASSOCIATES, INC DATED --/--/-- (SHEET 1 OF 1)

APN: 775-20-164

CONSTRUCTION NOTES

1. NEW 1' NON-ACCESS EASEMENT
2. NEW 8' PUE (PUBLIC UTILITY EASEMENT)
3. NEW 20' FRONT YARD SETBACK LINE
4. NEW 7' SIDE YARD SETBACK LINE
5. NEW 10' REAR YARD SETBACK LINE

REVISIONS

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SITE PLAN

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Najeh K. Edais
Registered Professional Engineer
26844
NAJEH K.
EDAIS
Date Signed 4/7/25
ARIZONA U.S.A.
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24-006

SHEET NUMBER
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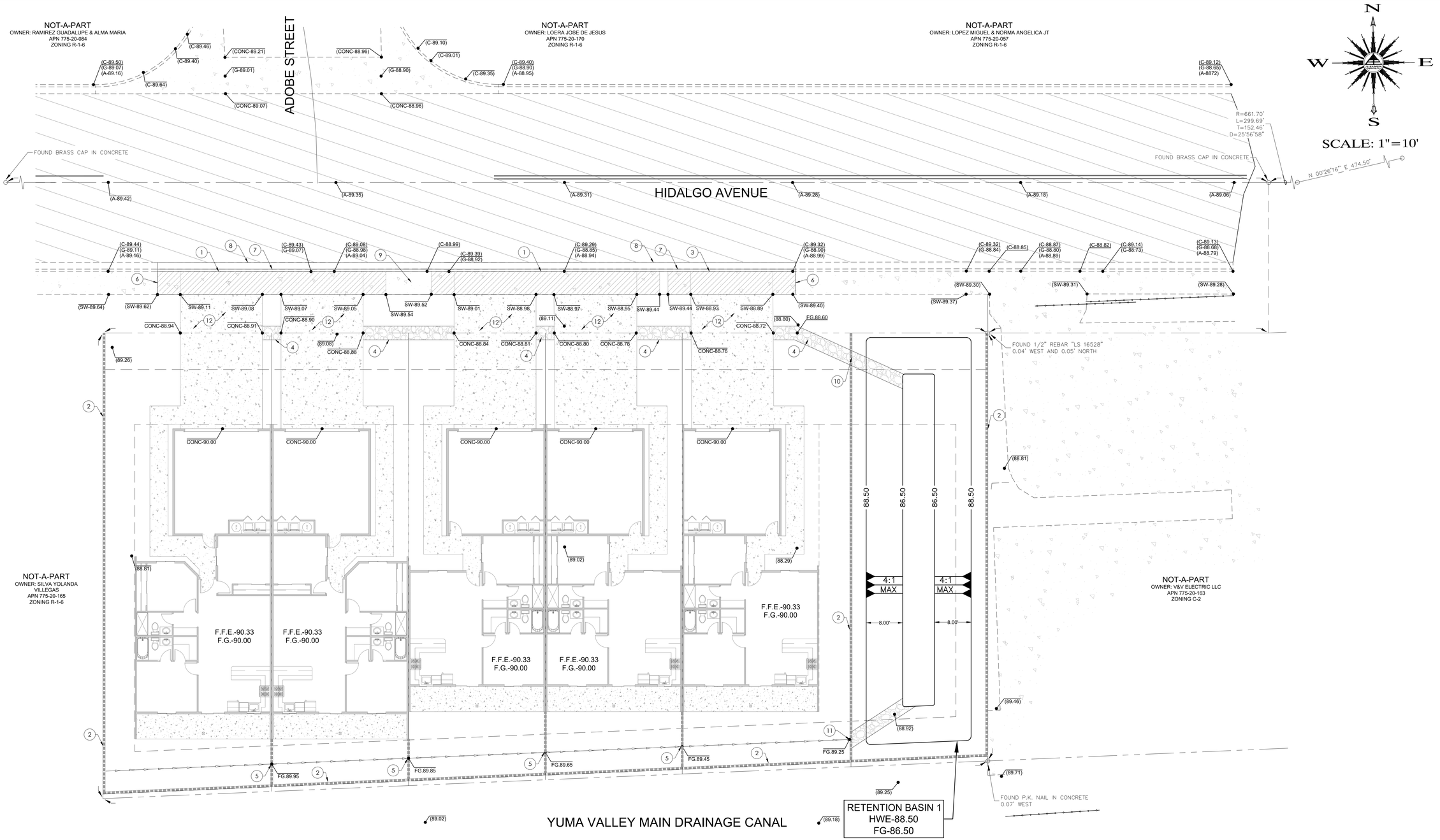


KEYNOTES

1. NEW 40' SHARED DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
2. NEW 6' HIGH (AS MEASURED FROM THE HIGHER GROUND ELEVATION SIDE OF WALL) CMU WALL AS PER CITY OF YUMA STD. NO. 1-015
3. NEW 18' DRIVEWAY AS PER CITY OF YUMA STD. NO. 3-105
4. NEW ROCK CHANNEL - SEE DETAIL A/C-2.1
5. NEW 2' WIDE WALL OPENING - SEE DETAIL B/C-2.1
6. MATCH NEW CURB, GUTTER AND/OR CONCRETE SIDEWALK TO EXISTING
7. NEW VERTICAL CURB AND GUTTER AS PER CITY OF YUMA STD. NO. 3-060
8. MATCH NEW VERTICAL CURB & GUTTER YO EXISTING PAVEMENT - SEE DETAIL C/C-2.1
9. NEW 5' CONCRETE SIDEWALK AS PER CITY OF YUMA STD. NO. 3-135
10. NEW 4' WIDE WALL OPENING - SEE DETAIL F,G/C-2.1
11. NEW 4' WIDE WALL OPENING - SEE DETAIL F,H/C-2.1
12. NEW DRIVEWAY ENTRANCE - SEE DETAIL D/C-2.1

DRAINAGE REPORT

STORAGE VOLUME REQUIRED NEW AREA:

NEW DRAINAGE AREA	= 20,658SF = 0.4748 AC
VOLUME REQUIRED	
C	= 0.43
I (IN/HR)	= 1.22
A (ACRES)	= 0.4748
	= 0.43 x 1.22 X 0.4748
	= 0.249 X 7200
	= 1,794 CF

NEW STORAGE VOLUME PROVIDED:

RETENTION BASIN #1:

TOP AREA	= 2,043 SF
BOTTOM AREA	= 510 SF
DEPTH	= 2.0 FT

NEW STORAGE VOLUME $= \frac{2,043 + 510}{2} \times 2.0$
$= 2,553$ CF

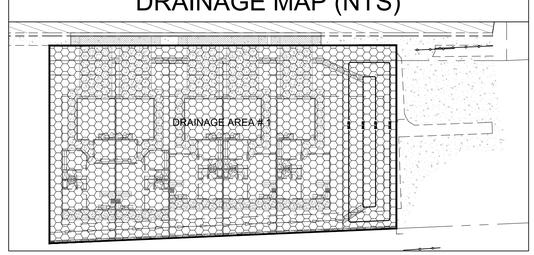
TOTAL STORAGE VOLUME PROVIDED:
2,553 = 2,553 CF

2,553 CF > 1,794 CF OK

FACTOR OF SAFETY

REQUIRED 1.25% PROVIDED 1.42%

DRAINAGE MAP (NTS)



REVISIONS

1185 N HIDALGO AV.
SAN LUIS, AZ. 85349

PAVING AND GRADING PLAN

FABIAN TOWNHOMES

EDAIS Engineering, Inc.
1075 S. 1st Ave.
Yuma, Arizona 85365
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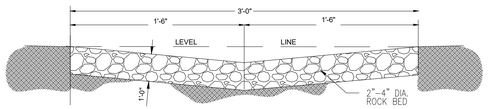
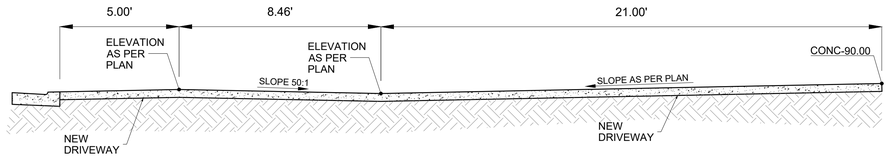
Najeh K. Edais
Registered Professional Engineer
26844
NAJEH K.
EDAIS
Date Signed 4/7/25
ARIZONA U.S.A.
EXPIRES 3/31/26

DATE: JANUARY 2025
DRAWN: PLBR
CHECKED: NKE
PROJECT: 24-006
SHEET NUMBER
C-2



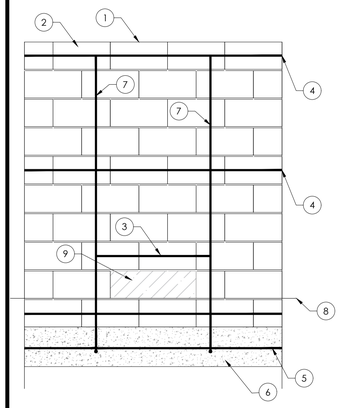
ROCK CHANNEL SECTION

NTS **A**



DRIVEWAY DETAIL

NTS **D**

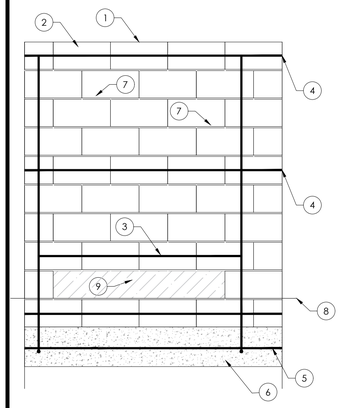


KEY NOTE :

1. CONCRETE CAP
2. 6x8x16 CMU WALL
3. #4 CONT. REBAR HORIZONTALREINFORCEMENT IN GROUTED BOND BEAM OVER OPENING
4. #4 CONT. REBAR HORIZONTAL REINFORCEMENT IN GROUTED BOND BEAM
5. #4 CONT. REBAR
6. WALL FOOTING AS PER STD. DETAIL
7. #4 VERTICAL REINFORCEMENT @ 24" O.C. IN GROUTED CELLS & @ OPENINGS
8. FINISH GRADE AS PER PLAN
9. 8x24 OPENING IN CMU WALL FOR DRAINAGE

CMU WALL OPENING

NTS **B**



KEY NOTE :

1. CONCRETE CAP
2. 6x8x16 CMU WALL
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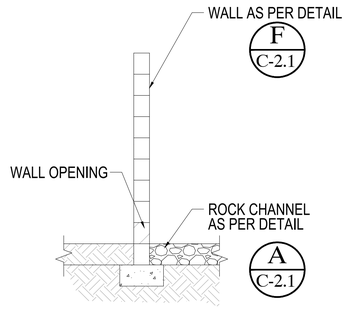
6. WALL FOOTING AS PER STD. DETAIL
7. #4 VERTICAL REINFORCEMENT @ 24" O.C. IN GROUTED CELLS & @ OPENINGS
8. FINISH GRADE AS PER PLAN
9. 8x48 OPENING IN CMU WALL FOR DRAINAGE

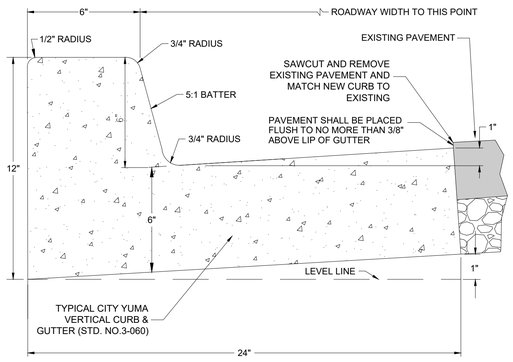
CMU WALL OPENING @ ROCK CHANNEL

NTS **F**



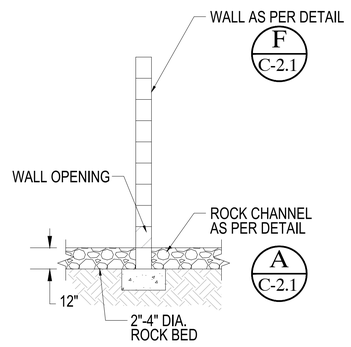
SPILLWAY WITH WALL OPENING

NTS **H**



VERTICAL CURB AND GUTTER

NTS **C**



SPILLWAY WITH WALL OPENING

NTS **G**

REVISIONS

1	
2	
3	
4	
5	

1185 N HIDALGO AV.
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CIVIL DETAILS

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Najeh K. Edais

REGISTERED PROFESSIONAL ENGINEER
26844
NAJEH K. EDAIS
Date Signed 4/1/26
ARIZONA, U.S.A.
EXPIRES 5/31/26

DATE:
JANUARY 2025

DRAWN:
PLBR

CHECKED:
NKE

PROJECT:
24-006

SHEET NUMBER
C-2.1

NOT-A-PART
OWNER: RAMIREZ GUADALUPE & ALMA MARIA
APN 775-20-084
ZONING R-1-6

NOT-A-PART
OWNER: LOERA JOSE DE JESUS
APN 775-20-170
ZONING R-1-6

NOT-A-PART
OWNER: LOPEZ MIGUEL & NORMA ANGELICA JT
APN 775-20-057
ZONING R-1-6

ADOBE STREET

EX-SEWER

HIDALGO AVENUE

FOUND BRASS CAP IN CONCRETE

EX-W-SERVICE

EX-WATER

EX-SEWER

(RIM-89.02)
(INV-76.11 N/S)
(INV-77.02 W)
smh

WM

R=661.70'
L=299.69'
T=152.46'
D=25°56'58"

FOUND BRASS CAP IN CONCRETE

N. 00°26'16" E. 474.50'

FOUND 1/2" REBAR "LS 16528"
0.04' WEST AND 0.05' NORTH

N
W E
S

SCALE: 1"=40'

NOT-A-PART
OWNER: SILVA YOLANDA
VILLEGAS
APN 775-20-165
ZONING R-1-6

NOT-A-PART
OWNER: V&V ELECTRIC LLC
APN 775-20-163
ZONING C-2

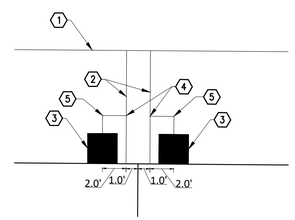
FOUND P.K. NAIL IN CONCRETE
0.07' WEST

YUMA VALLEY MAIN DRAINAGE CANAL

KEYNOTES

1. INSTALL 1" SINGLE WATER/FIRE SERVICE (TYP.) AS PER CITY OF YUMA STD. NO. 5-035 & 5-055
2. INSTALL 4" SEWER SERVICE AS PER CITY OF YUMA STD. NO. 6-015
3. CONSTRUCT ALL SEWER SERVICES TO THE CENTER OF THE LOT UNLESS NOTED OTHERWISE
4. REMOVE EXISTING PAVEMENT AND REPLACE WITH NEW PAVEMENT AS PER CITY OF YUMA STD. NO. 5-016

DOMESTIC WATER / FIRE LINE DETAIL



KEYNOTES

1. EXISTING 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

REVISIONS

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WATER, SEWER & UTILITIES PLAN

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