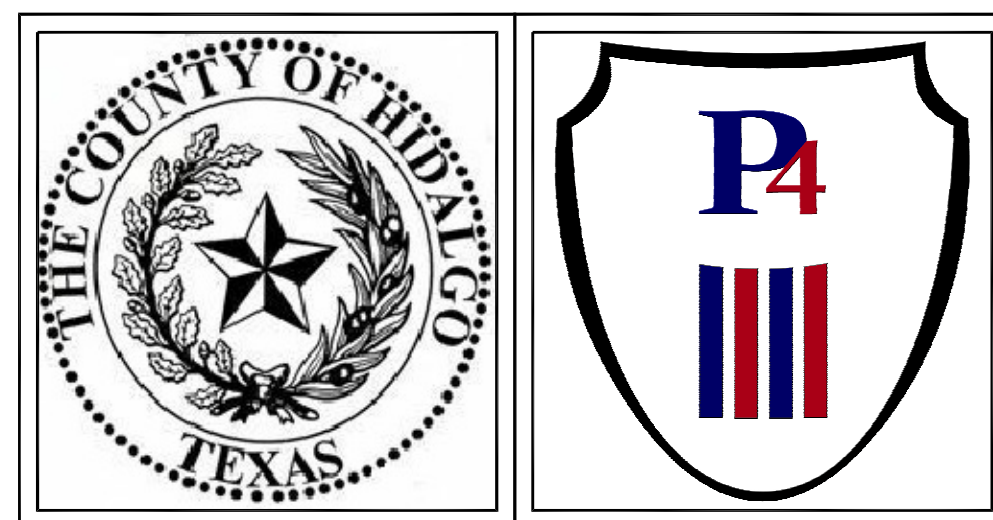


HIDALGO COUNTY PRECINCT 4 - RECOVERY AND MOTOR POOL IMPROVEMENTS

EDINBURG, TEXAS



COUNTY OFFICIALS

RAMON GARCIA

A.C. CUELLAR, JR.

EDUARDO "EDDIE" CANTU

JOE M. FLORES

JOSEPH PALACIOS

VALDE GUERRA

COUNTY JUDGE

COMMISSIONER PRECINCT 1

COMMISSIONER PRECINCT 2

COMMISSIONER PRECINCT 3

COMMISSIONER PRECINCT 4

COMMISSIONERS COURT EXECUTIVE OFFICER

Half AVO#31806 (WA01)

SHEET LIST

Sheet Number	Sheet Title
G0.01	COVER SHEET
C1.0	DEMOLITION PLAN
C2.0	SITE DIMENSION AND STRIPING PLAN
C3.0	GRADING & PAVING PLAN
C3.1	GRADING & PAVING PLAN
C4.0	MISCELLANEOUS DETAILS
C5.0	MISCELLANEOUS DETAILS
S1.0	GENERAL NOTES
S1.1	GENERAL NOTES
S1.2	EXCAVATION PLAN
S1.3	ROOF UPLIFT PLAN
S2.0	TYPICAL DETAILS
S2.1	TYPICAL DETAILS
S3.0	FOUNDATION PLAN
S4.0	CMU WALL LAYOUT PLAN
S5.0	ROOF FRAMING PLAN
B-101	STORAGE BUILDING DOORS
MP1.01	SITE PLAN
MP2.01	ENLARGED MECHANICAL & PLUMBING PLAN - STORAGE BUILDING
MP3.01	MECHANICAL & PLUMBING SCHEDULES AND DETAILS
E0.01	ELECTRICAL GENERAL LEGEND
ES1.00	ELECTRICAL SITE PLAN
ES1.01	ENLARGED ELECTRICAL PLANS
E2.01	ELECTRICAL SCHEDULES
E3.01	ELECTRICAL RISER DIAGRAMS
E4.01	ELECTRICAL DETAILS
E4.02	ELECTRICAL DETAILS
E4.03	ELECTRICAL DETAILS

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

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MCALLEN, TEXAS 78503
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TBE FIRM # 3172

Revision No.	Date	Description

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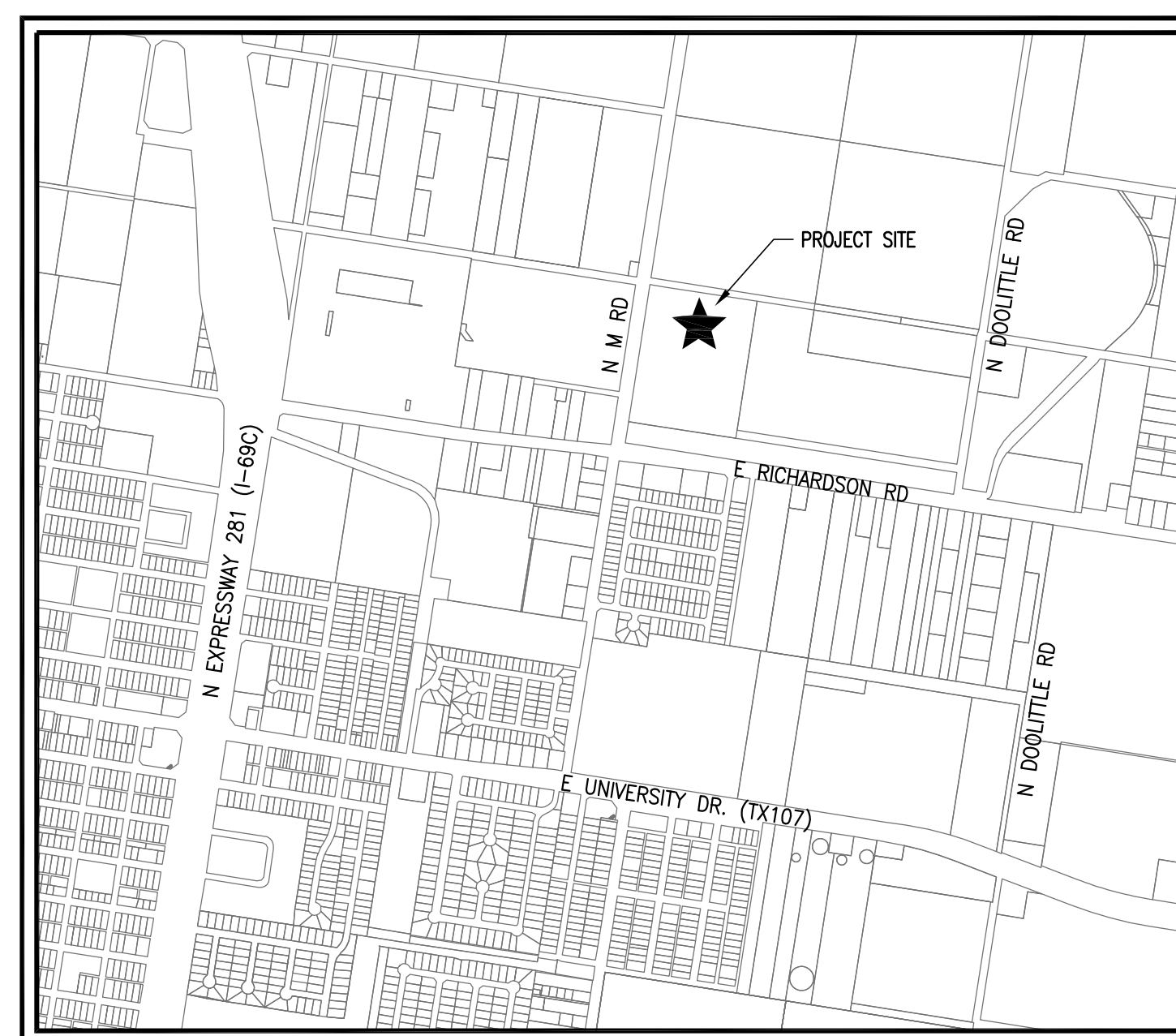
Miguel Chanin, P.E. (Structural)
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OWNER

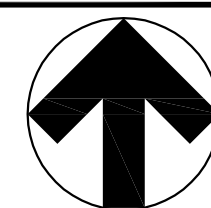
The County of Hidalgo Texas
Precinct 4
1051 N. Doolittle Rd.
Edinburg, Texas 78542
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Honorable Joseph Palacios (Commissioner Precinct 4)
Email: joseph.palacios@co.hidalgo.tx.us

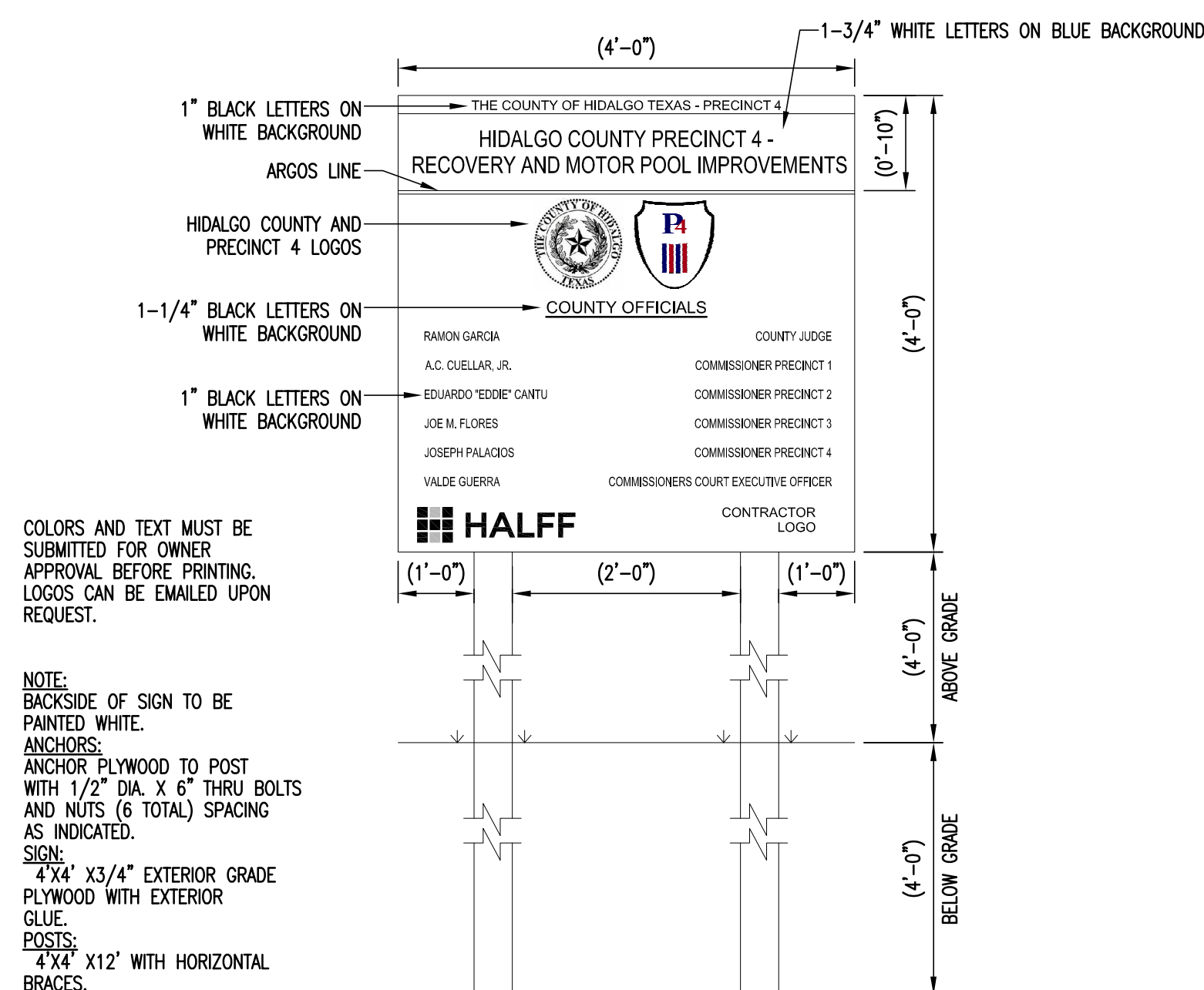
LOCATION



HIDALGO COUNTY PRECINCT 4
1051 N. Doolittle Rd.
Edinburg, Texas 78542



PROJECT SIGN



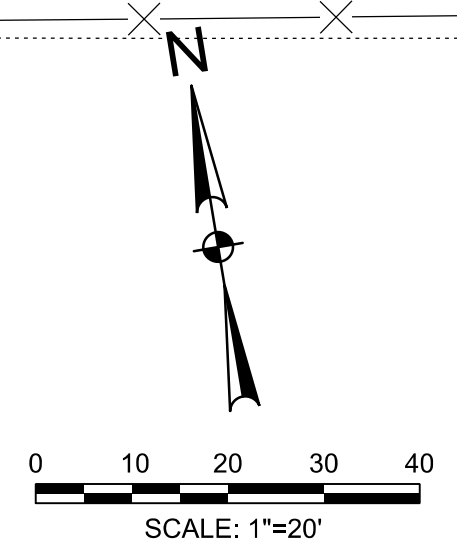
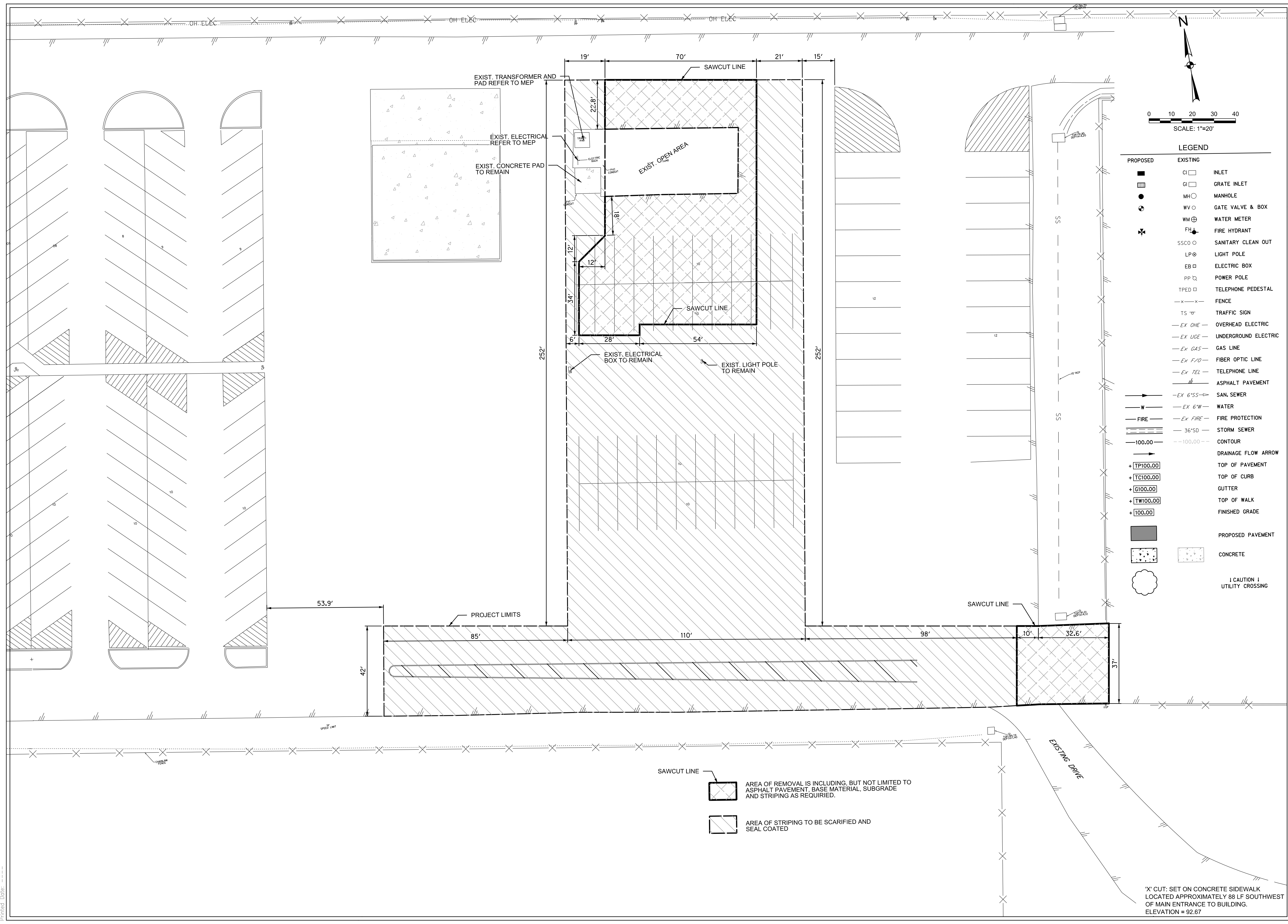
100% CONSTRUCTION DOCUMENTS

SET # : _____

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Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	COVER SHEET
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LEGEND

PROPOSED	EXISTING	
■	□	INLET
■	□	GRATE INLET
●	○	MANHOLE
○	○	GATE VALVE & BOX
⊕	⊕	WATER METER
⊕	⊕	FIRE HYDRANT
○	○	SANITARY CLEAN OUT
⊕	⊕	LIGHT POLE
□	□	ELECTRIC BOX
□	□	POWER POLE
□	□	TELEPHONE PEDESTAL
-x-x-	-x-x-	FENCE
TS	TS	TRAFFIC SIGN
-EX OHE-	-EX OHE-	OVERHEAD ELECTRIC
-EX UGE-	-EX UGE-	UNDERGROUND ELECTRIC
-EX GAS-	-EX GAS-	GAS LINE
-EX F/O-	-EX F/O-	FIBER OPTIC LINE
-EX TEL-	-EX TEL-	TELEPHONE LINE
///	///	ASPHALT PAVEMENT
-EX 6"SS-	-EX 6"SS-	SAN. SEWER
-EX 6"W-	-EX 6"W-	WATER
-EX FIRE-	-EX FIRE-	FIRE PROTECTION
-36"SD-	-36"SD-	STORM SEWER
-100.00-	-100.00-	CONTOUR
→	→	DRAINAGE FLOW ARROW
+TP100.00	+TP100.00	TOP OF PAVEMENT
+TC100.00	+TC100.00	TOP OF CURB
+GI100.00	+GI100.00	GUTTER
+TW100.00	+TW100.00	TOP OF WALK
+100.00	+100.00	FINISHED GRADE
■	■	PROPOSED PAVEMENT
■	■	CONCRETE
⊕	⊕	CAUTION UTILITY CROSSING

SAWCUT LINE

AREA OF REMOVAL IS INCLUDING, BUT NOT LIMITED TO ASPHALT PAVEMENT, BASE MATERIAL, SUBGRADE AND STRIPING AS REQUIRED.

AREA OF STRIPING TO BE SCARIFIED AND SEAL COATED

'X' CUT: SET ON CONCRETE SIDEWALK LOCATED APPROXIMATELY 88 LF SOUTHWEST OF MAIN ENTRANCE TO BUILDING. ELEVATION = 92.67

Hidalgo County
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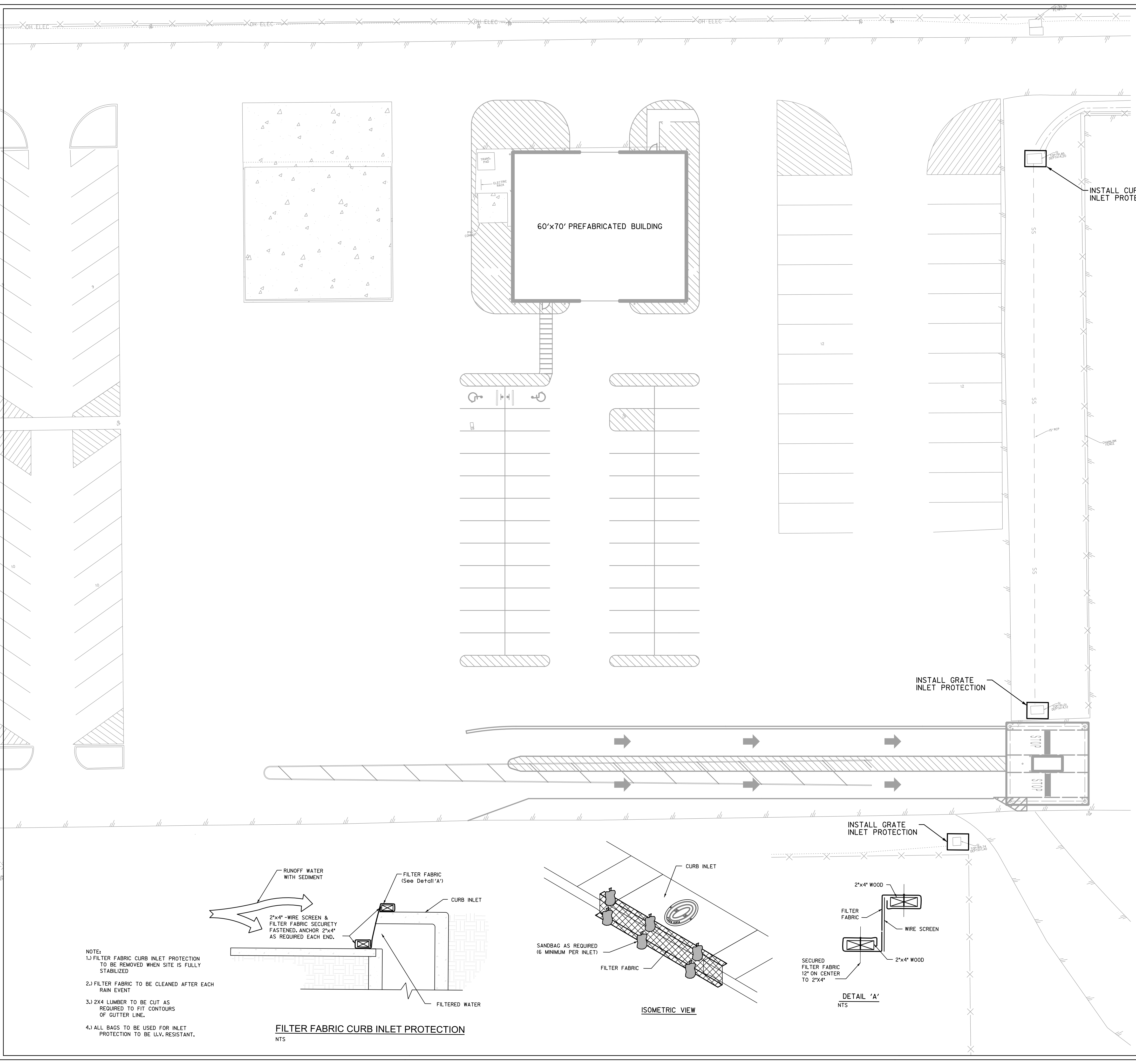
HALFF
 5000 WEST MILITARY, SUITE 100
 McALLEN, TEXAS 78903
 FAX: (361) 664-4322
 TBPE FIRM #F-312

Revision No.	Date	Description

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 RAUL GARCIA, P.E., P.E. 94855 09/02/16
 TBPE FIRM #F-312

Project No.:	31806(WA01)
Issued:	08 / 02 / 16
Drawn By:	FC
Checked By:	CM
Scale:	AS NOTED
Sheet Title	DEMOLITION PLAN
Sheet Number	C1.0

File Name: I:\31000s\31806\WA01\MEP\CADD\DWG\Reference Files\Half-xdr-22x34 - Phosell.dwg
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0 10 20 30 40
SCALE: 1"=20'

LEGEND

□ INLET PROTECTION
 - SF - SILT FENCE

THIS IS NOT A STORM WATER POLLUTION PREVENTION PLAN. CONTRACTOR MUST ADD HIS OPERATION SPECIFIC INFORMATION PER THE PERMIT REQUIREMENTS & INCLUDE ALL DOCUMENTATION & CERTIFICATES AS REQUIRED BY THE PERMIT.

NOTE:
 STABILIZED CONSTRUCTION EXIT LOCATION TO BE DETERMINED BY CONTRACTOR.

EROSION GENERAL NOTES

1. IT IS THE INTENT OF THIS SUGGESTED EROSION CONTROL PLAN AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH FEDERAL REGULATIONS. CONTRACTOR SHALL PREPARE AND SUBMIT A NOTICE OF INTENT PER THE REQUIREMENTS IN THE NPDES GENERAL PERMIT. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLEMENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH IN THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) NPDES GENERAL PERMIT FOR REGION 6 FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES.
2. THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THREE GOALS:
 - A) DIVERSION OF UPSLOPE WATER AROUND DISTURBED AREAS OF THE SITE;
 - B) LIMITS THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE; AND
 - C) REMOVAL OF SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.
3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO TCEQ.
4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE OF THE PLAN OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 14 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.
7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.
8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE: DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR; REGULAR COLLECTION OF WASTE; CONVENIENTLY LOCATED WASTE RECEPTACLES; AND DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
12. ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER.
13. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.

Hidalgo County
 Precinct 4 - Recovery and
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 Edinburg, Texas 78542

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 TEL: (361) 664-4322
 FAX: (361) 664-4322
 TBP# FIRM #F-312

Revision No.	Date	Description

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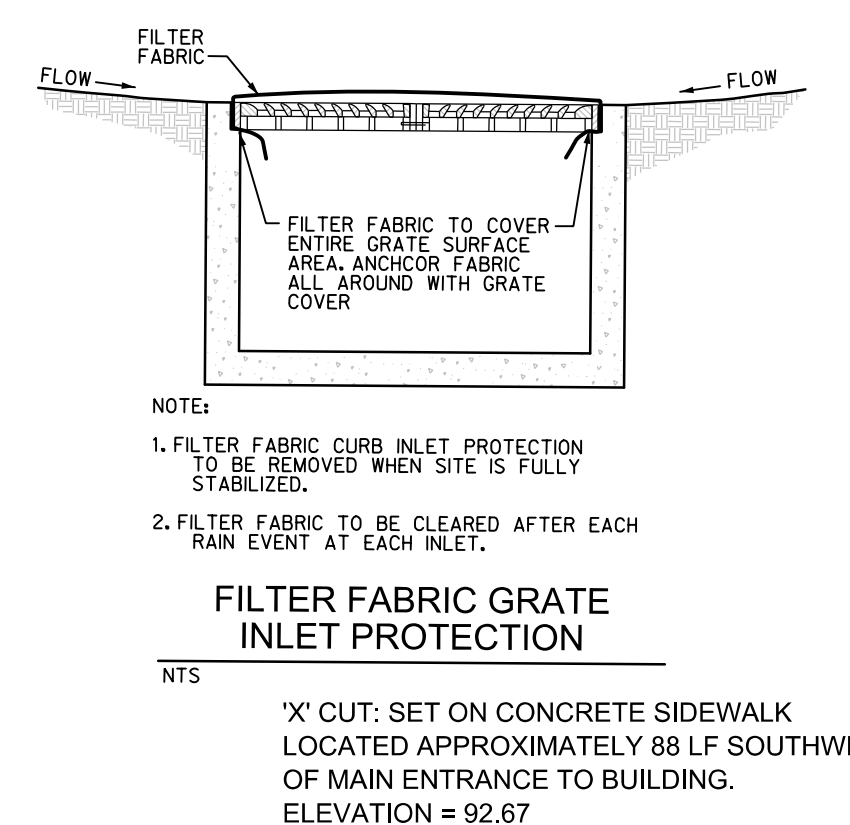
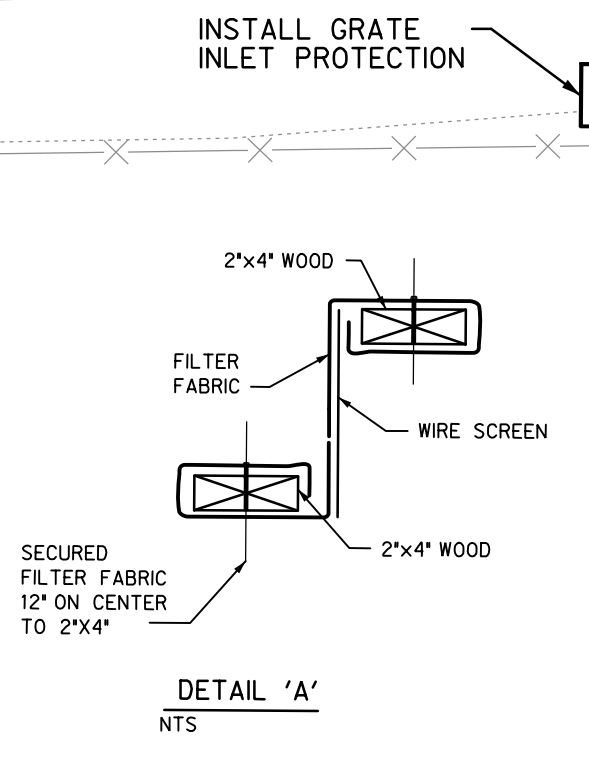
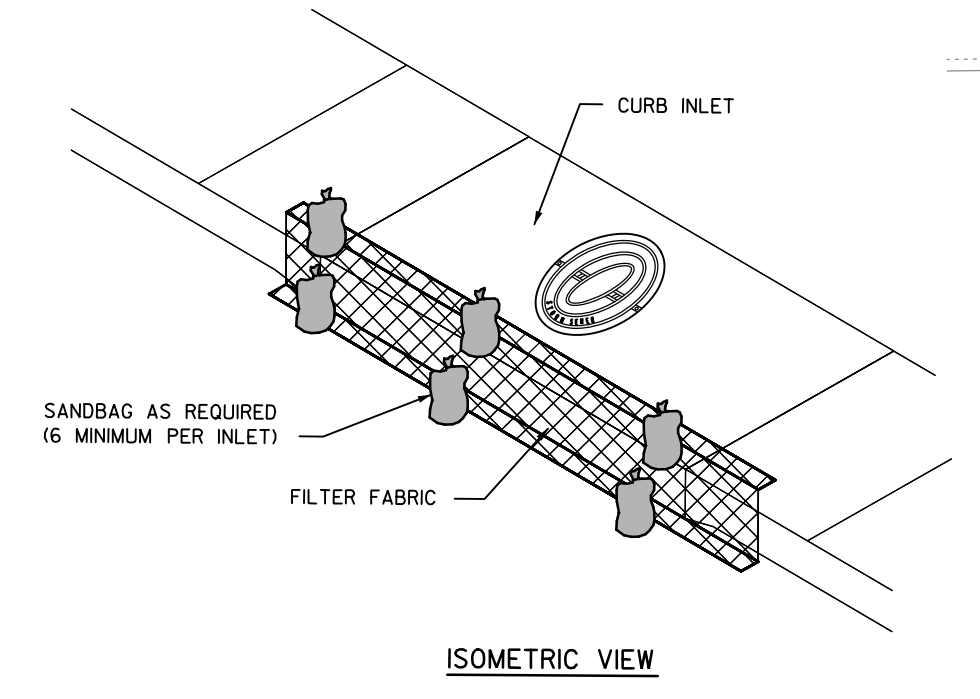
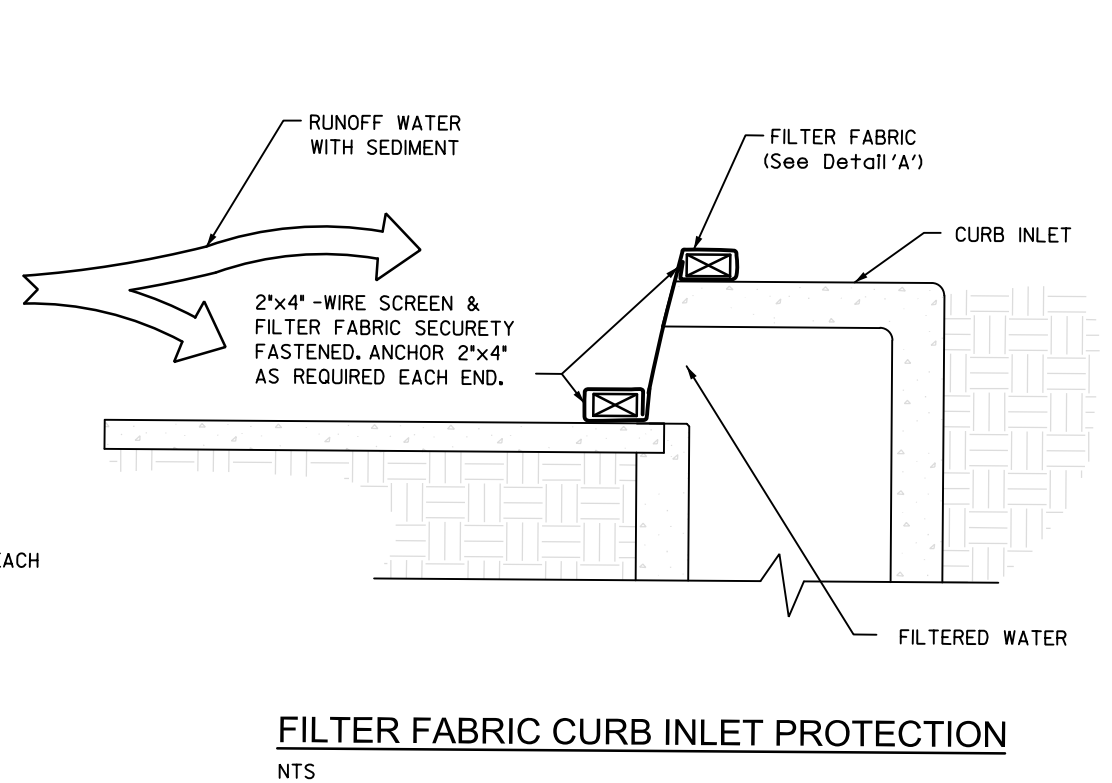
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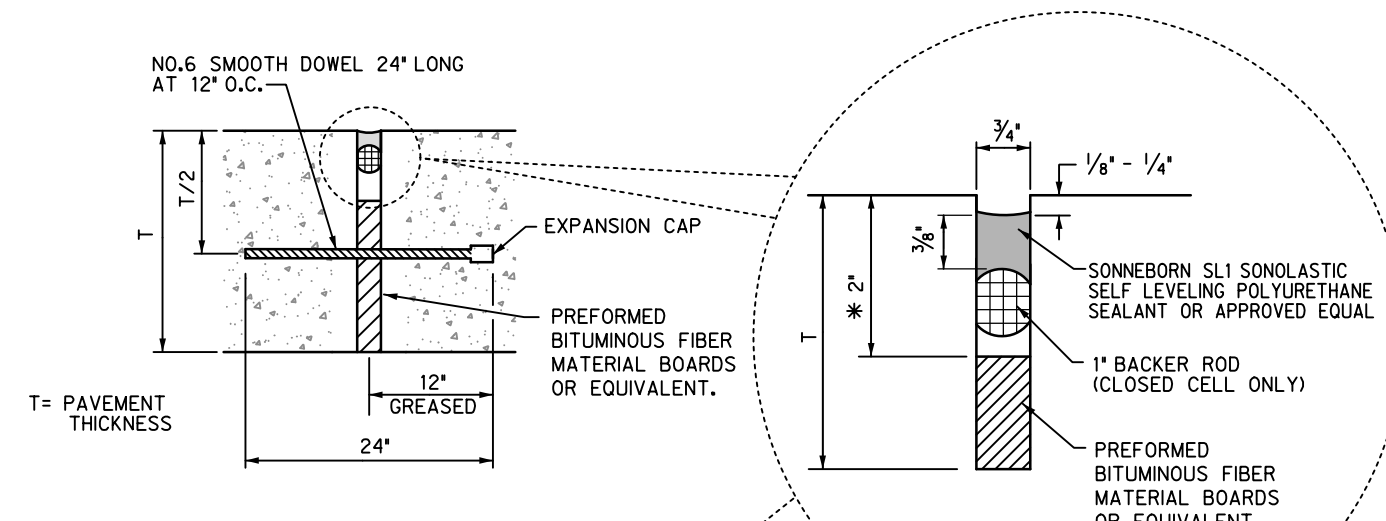
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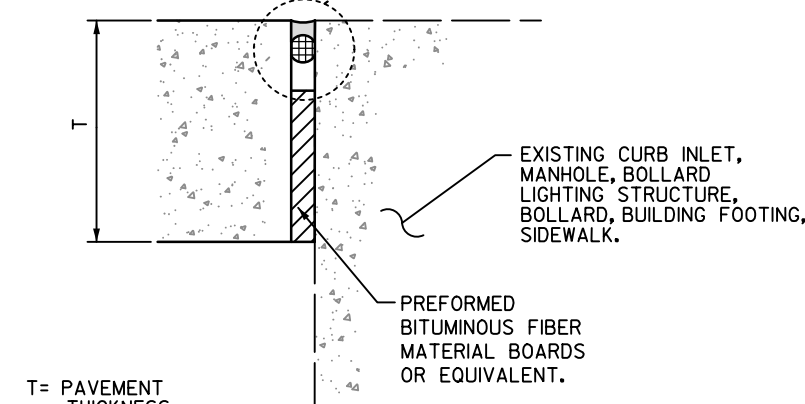
RAUL GARCIA, P.E., P.E. 94855 09/02/16
 TBP# FIRM #F-312

Project No.: 31806(WA01)	Issued: 08 / 02 / 16
Drawn By: FC	Checked By: CM
Scale: AS NOTED	Sheet Title
MISCELLANEOUS DETAILS	
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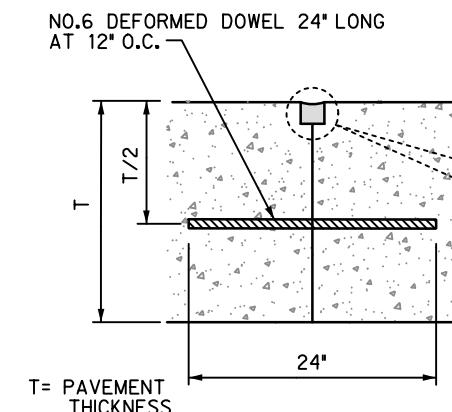




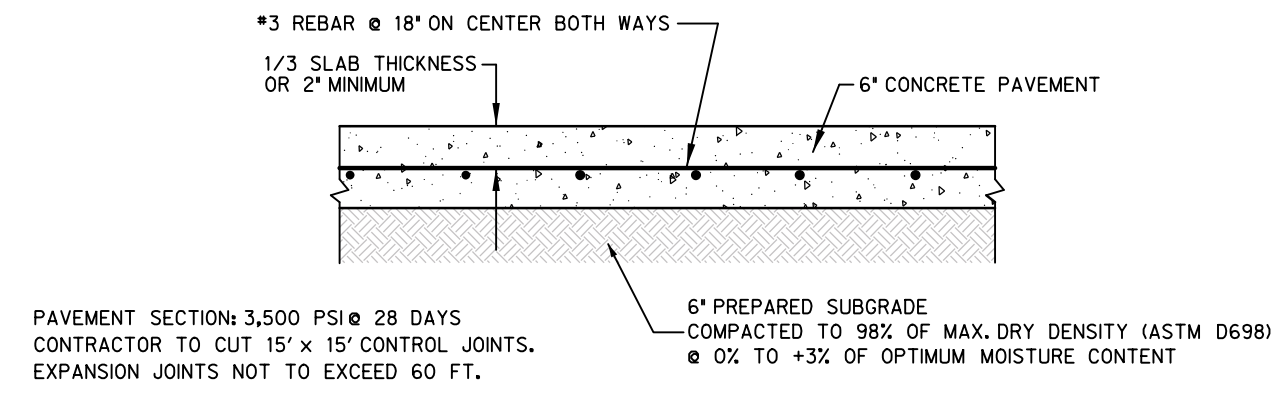
EXPANSION JOINT
NTS



ISOLATION JOINT
NTS



CONSTRUCTION JOINT
NTS

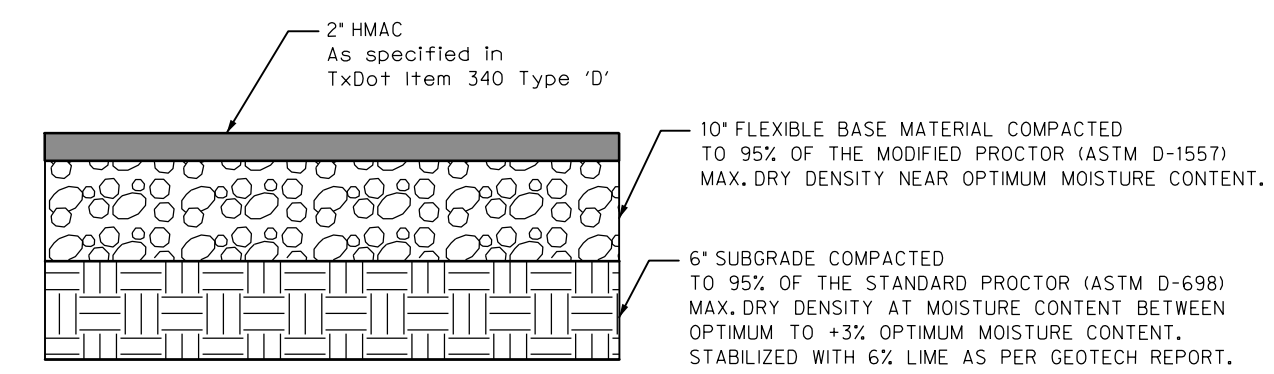


PAVEMENT SECTION: 3,500 PSI @ 28 DAYS
CONTRACTOR TO CUT 15' x 15' CONTROL JOINTS.
EXPANSION JOINTS NOT TO EXCEED 60 FT.

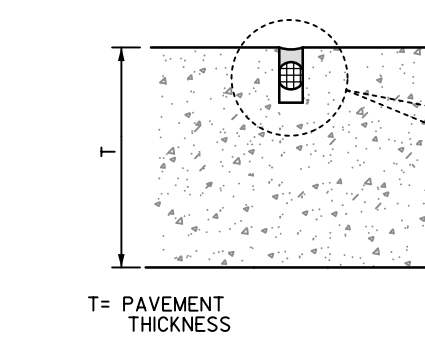
CONTRACTOR TO USE CONSTRUCTION JOINTS WHERE NEW PAVEMENTS ARE POURED ON TWO SEPARATE DAYS.

* GEOTECHNICAL STUDY:
PROVIDED BY: L&G CONSULTING ENGINEERS, INC.
PROJECT NO.: GL16012
DATE: JULY 31, 2016

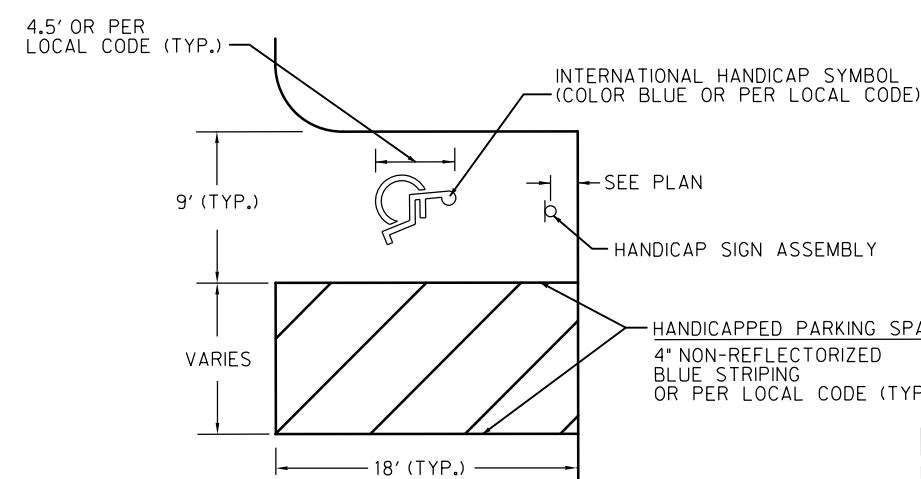
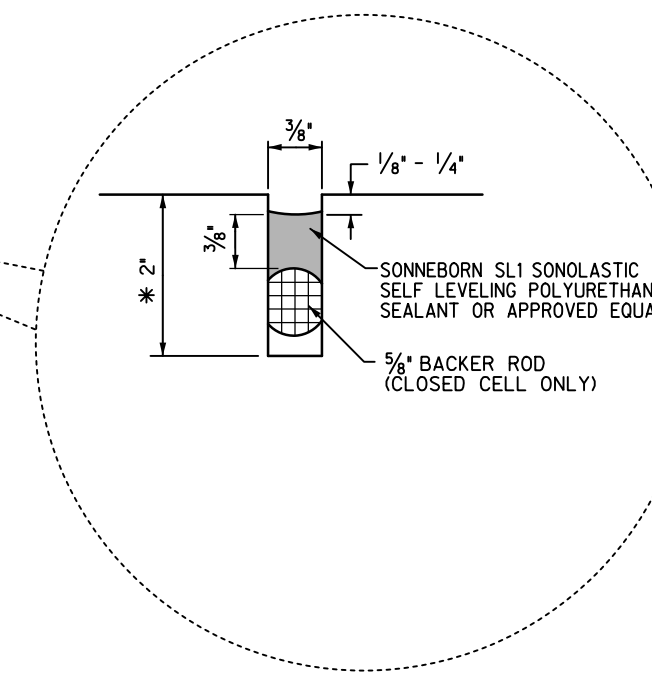
CONCRETE PAVEMENT SECTION
NTS



ASPHALT PAVEMENT SECTION
NTS

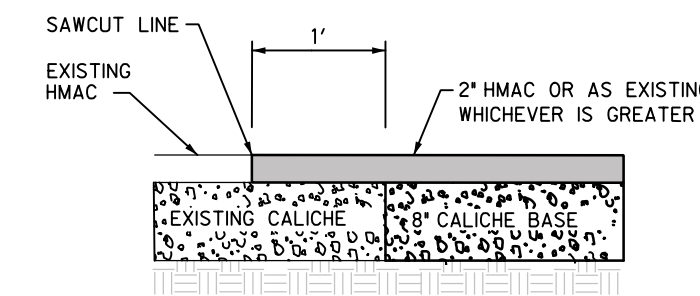


SAWED CONTRACTION JOINT
NTS

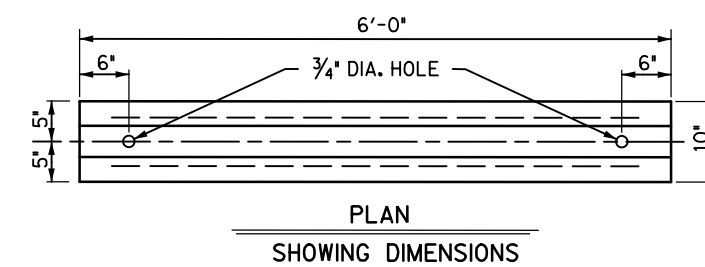


- GENERAL NOTES**
1. ALL WALKWAYS, RAMPS, HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED A.D.A. STANDARDS.
 2. 2.0% MAX. SLOPE IN ALL DIRECTIONS IN AREAS OF HANDICAP PARKING SPACES AND AISLES.
 3. STRIPING SHALL HAVE TWO COATS OF PAINT, ALKYD BASE SYNTHETIC RESIN, FED. SPEC. TTP-115 TYPE 1, IF SEAL COAT IS USED, IT SHALL BE COMPATIBLE WITH STRIPING COMPOUND.

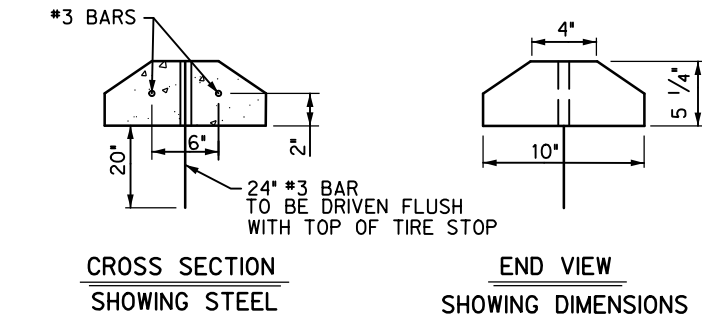
HANDICAP STALL DETAIL
SCALE: NTS



SAWCUT DETAIL
NTS

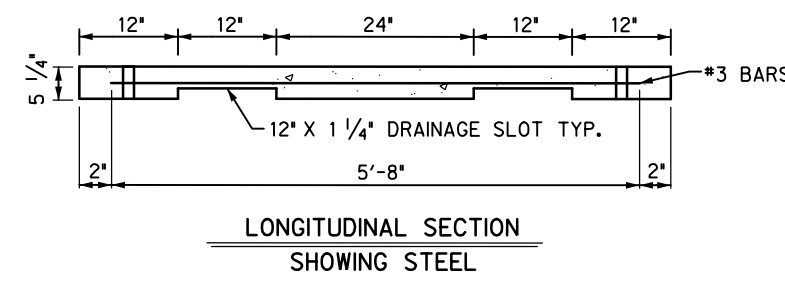


PLAN
SHOWING DIMENSIONS



CROSS SECTION
SHOWING STEEL

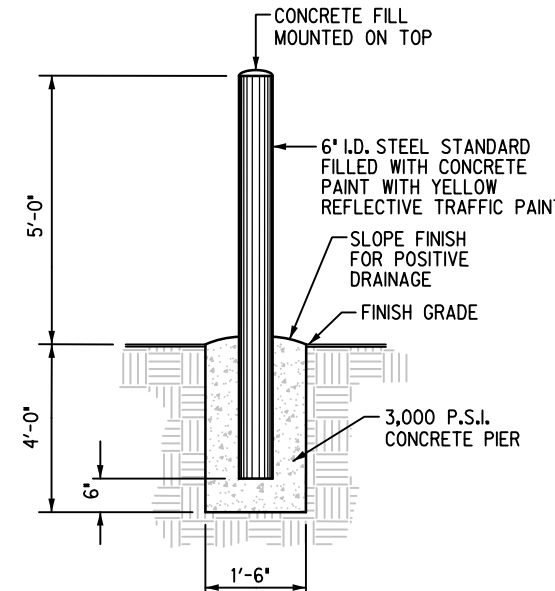
END VIEW
SHOWING DIMENSIONS



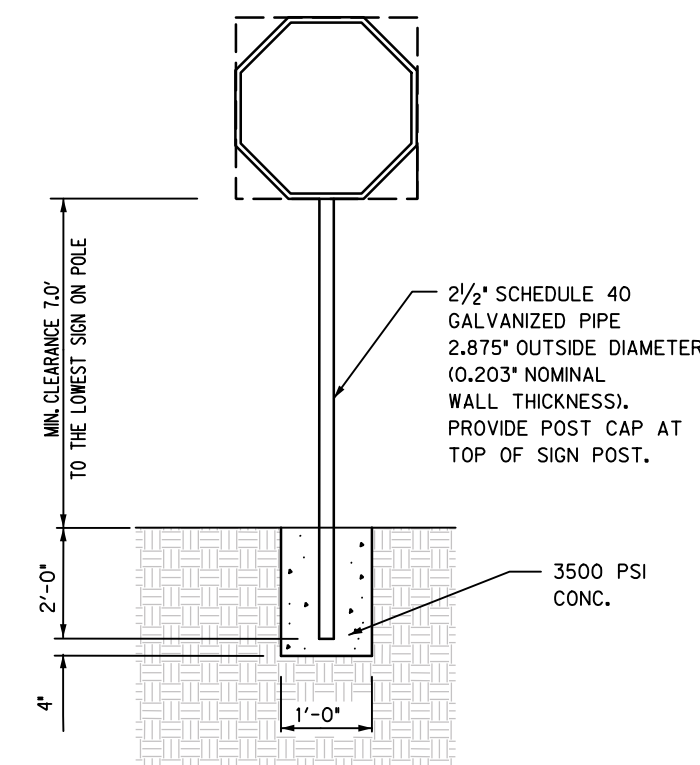
LONGITUDINAL SECTION
SHOWING STEEL

NOTE: ALL CONCRETE SHALL BE CLASS A.

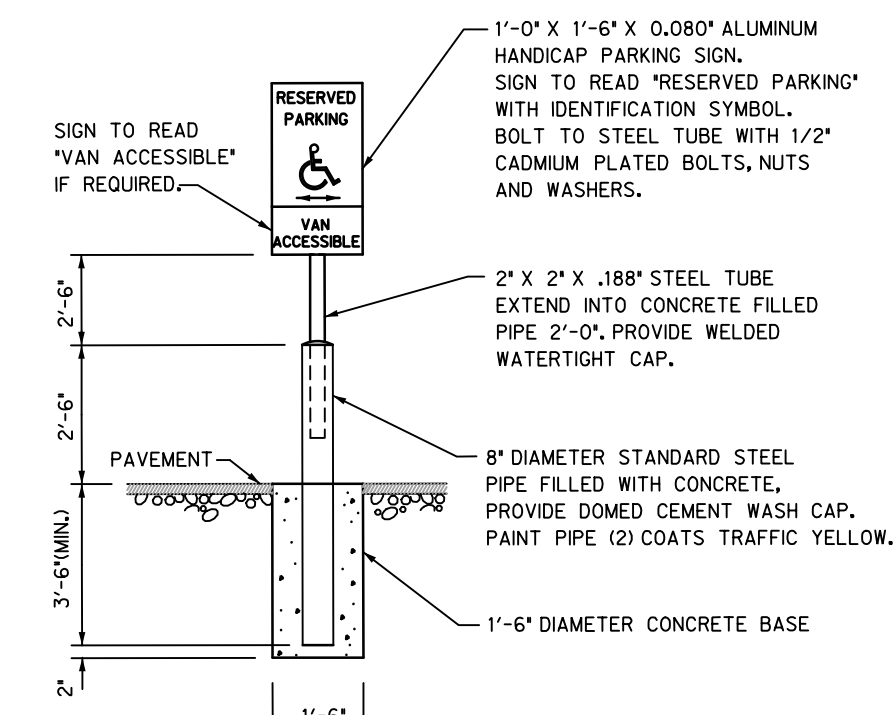
CONCRETE WHEEL STOP WITH DRAINAGE SLOTS DETAIL
NTS



BOLLARD DETAIL
NTS



REGULATORY SIGN
NTS



HANDICAP SIGN & SUPPORT
NTS

File Name: I:\31000s\31806\WAO1\MEP\CADD\DWG\Reference Files\hailff-xbrf-22x34 - Phosell.dwg
Current Tab (Layout): MODEL User: AH232Z
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Hidalgo County
Precinct 4 - Recovery and Motor Pool Improvements

1051 N. Doolittle Rd.
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RAUL GARCIA, P.E. P.E. 94855 09/02/16
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Project No.:	31806(WA01)
Issued:	08 / 02 / 16
Drawn By:	FC
Checked By:	CM
Scale:	AS NOTED
Sheet Title	MISCELLANEOUS DETAILS
Sheet Number	C5.0

GENERAL NOTES

GENERAL

- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR THE EARTH BANKS, FORMS, SCAFFOLDING, PLANNING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES, GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. EXACT WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT SHALL BE COORDINATED BY CONTRACTOR. IF THE FINAL LOCATION VARIES FROM THAT SHOWN ON THE PLANS, CONTRACTOR TO NOTIFY ARCHITECT AND ENGINEER FOR APPROVAL BEFORE INSTALLATION.
- SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL BE RESPONSIBLE FOR CONDITIONS OF ALL WORK AND MATERIALS.
- THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND ELEVATIONS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE ARCHITECT. ANY CONFLICT BETWEEN THE DRAWING AND SPECIFICATIONS OF THE VARIOUS TRADES INVOLVED SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER.
- DETAILS SHOWN ON DRAWINGS APPLY AT SIMILAR CONDITIONS.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL STANDARDS AND TO ALL APPLICABLE PROVISIONS OF THE GOVERNING BUILDING CODE.
- THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED IN WRITING WHEN WORK COMMENCES.
- CONTRACTOR SUBSTITUTIONS: ANY MATERIALS OR PRODUCTS THAT ARE SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIALS OR PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS WILL ONLY BE CONSIDERED IF THE FOLLOWING CRITERIA ARE SATISFIED:
 - A COST SAVING TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST
 - THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO) AND THE ICBO REPORT IS SUBMITTED WITH THE REQUEST.

STRUCTURAL OBSERVATION

- THE PROFESSIONAL ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE SHALL CONDUCT ALL STRUCTURAL OBSERVATIONS. STRUCTURAL OBSERVATIONS SHALL BE FOR THE PURPOSE OF ASCERTAINING GENERAL COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. HOWEVER, SUCH OBSERVATION VISITS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS AND RESPONSIBILITIES TO THE CONSTRUCTION DOCUMENTS.
- ITEMS THAT REQUIRE A STRUCTURAL OBSERVATION ARE AS FOLLOWS:
 - STEEL REINFORCEMENT IN SLAB OR FOUNDATION
 - FRAMING OF ROOF BEFORE PANELS ARE INSTALLED
 - EXTERIOR METAL PANELS
 - CMU WALL REINFORCING BEFORE FILLING WITH GROUT
- NOTIFY ENGINEER 24 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED.
- WORK SHALL NOT CONTINUE AT THESE AREAS UNTIL OBSERVATION AND APPROVAL BY ENGINEER. FAILURE BY THE CONTRACTOR TO PROVIDE PROPER NOTICE FOR AN OBSERVATION VISIT AT THE REQUIRED TIME OR ADDITIONAL WORK PERFORMED WITHOUT AN OBSERVATION VISIT WILL BE DONE AT CONTRACTOR'S RISK AND MAY BE SUBJECT TO COMPLETE OR PARTIAL REMOVAL TO VERIFY COMPLIANCE OF PREVIOUS WORK.

STEEL REINFORCING

- ALL REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60.
 - REINFORCING STEEL SHALL BE DESIGNED, DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL (SP-66) AND CSRI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE, (ACI #315) LATEST EDITIONS.
 - BARS SCHEDULED OR DETAILED "CONT" SHALL BE SPLICED ONLY WHEN UNAVOIDABLE AT POINTS OF MINIMUM STRESS AND WITH A MINIMUM LAP AS FOLLOWS:
 - HORIZONTAL BARS w/ MORE THAN 12" OF FRESH CONCRETE CAST BELOW LAPS.

#6 BARS AND SMALLER	-	57 BAR DIAMETERS
#7 BARS AND BIGGER	-	72 BAR DIAMETERS
 - OTHER BARS

#6 BARS AND SMALLER	-	44 BAR DIAMETERS
#7 BARS AND BIGGER	-	55 BAR DIAMETERS
 - ALL SPLICES TO BE STAGGERED A MINIMUM OF 4'-0". TOP BAR AND BOTTOM BAR SPLICES TO BE LOCATED AT MID-SPAN AND WITHIN 1/3 SPAN RESPECTIVELY.
- CORNER REINFORCING BARS SHALL BE USED AT ALL CORNERS AND INTERSECTIONS.
- EXTEND THE SLAB REINFORCING STEEL PERPENDICULAR TO EXTERIOR GRADE BEAM TO THE TOP OUT SIDE REINFORCING BAR OF BEAM.
- SPACE REINFORCING BARS WITH MINIMUM CLEAR SPACING IN ACCORDANCE WITH ACI 318 OF ONE BAR DIAMETER, BUT NOT LESS THAN 1 INCH. FOR COMPRESSION MEMBERS, SPACE AT A MINIMUM OF 1.5 INCHES OR 1.5 BAR DIAMETERS, WHICHEVER IS GREATER.
- WHERE REINFORCING BARS ARE PLACED IN MULTIPLE LAYERS, PLACE UPPER BARS DIRECTLY ABOVE LOWER BARS.
- MAINTAIN CONCRETE COVER AROUND REINFORCEMENT IN ACCORDANCE WITH ACI 318 AND AS FOLLOWS:
 - FOOTING AND CONCRETE CAST AGAINST EARTH - 3 INCHES
 - EXPOSED TO EARTH OR WEATHER

#6 BARS AND BIGGER	-	2 INCHES
#5 BARS AND SMALLER	-	1.5 INCHES
 - BEAMS AND COLUMNS - 1.5 INCHES
 - SLABS AND WALLS - 1 INCH
- REPAIR ANY DAMAGE TO VAPOR RETARDER PER MANUFACTURER SPECIFICATIONS.
- ADDITIONAL REINFORCING TO BE PROVIDED ON SITE FOR USE AS DIRECTED BY STRUCTURAL ENGINEER.

#4 BARS	-	100 FT.
#5 BARS	-	100 FT.
#6 BARS	-	100 FT.

DESIGN CRITERIA

- DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATION OF STRUCTURAL MEMBERS ARE BASED ON THE FOLLOWING CRITERIA:
- CODE: IBC 2012
- VERTICAL LOADS
 - ROOF DEAD LOAD (PRE-ENGINEERED BUILDING): STRUCTURE SELF WEIGHT
 - COLLATERAL LOAD (PRE-ENGINEERED BUILDING): 20 PSF
 - ROOF LIVE LOAD(REDUCIBLE) : 10 PSF
 - UPLIFT LOAD SEE ROOF UPLIFT PLAN
- MECHANICAL LOAD: THE GENERAL CONTRACTOR SHALL SUBMIT ACTUAL WEIGHTS AND LOCATIONS OF EQUIPMENT TO BE USED IN THE PROJECT TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOADS USED IN THE DESIGN AT LEAST TWO WEEKS PRIOR TO FABRICATION AND CONSTRUCTION OF THE SUPPORTING STRUCTURE.
- LATERAL LOADS
 - WIND SPEED (V-ULT): 131 MPH
 - WIND SPEED (V-ASD) 102 MPH
 - EXPOSURE CATEGORY: C
 - IMPORTANCE FACTOR: 1.0
 - BUILDING CATEGORY: II
 - SEISMIC DESIGN CATEGORY: A
 - SITE CLASS: D
- GEOTECHNICAL ENGINEERING REPORT: PROVIDED BY: L&G ENGINEERING
PROJECT NUMBER: GL16012
DATED: 7/31/16
FOUNDATION DESIGN BASED ON THE FOLLOWING PARAMETERS
 - EFFECTIVE PL: 32 IN
 - CLIMATIC RATING (CWF): 15
 - MINIMUM BEAM DEPTH: 36 IN
 - MINIMUM FOOTING DEPTH: 36 IN
 - ALLOWABLE BEARING CAPACITY (BEAMS) 950 PSF
 - ALLOWABLE BEARING CAPACITY (FOOTING) 1100 PSF
 - EXISTING PVR: 2.3 IN
 - PVR (SEE EXCAVATION NOTES) 1.0 IN

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERRECTED IN ACCORDANCE TO AISC SPECIFICATIONS.
- MATERIALS USED SHALL BE AS FOLLOWS=

A. STRUCTURAL W-SHAPES	-	ASTM A992 GRADE 50
B. STRUCTURAL M-SHAPES AND S-SHAPES	-	ASTM A36
C. STRUCTURAL T-SHAPES	-	CUT FROM W-SHAPES
D. CHANNELS AND ANGLES	-	ASTM A36
E. ROUND HOLLOW STRUCTURAL SECTIONS	-	ASTM A500 GRADE B
F. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS	-	ASTM A500 GRADE B
G. STRUCTURAL PLATES	-	ASTM A36
H. STRUCTURAL BARS	-	ASTM A36
I. HIGH STRENGTH BOLTS	-	ASTM A325
J. ELECTRODES	-	SERIES E70
- ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS.
- CONNECTIONS NOT DETAILED AND/OR SCHEDULED ON STRUCTURAL DRAWINGS SHALL BE DETAILED BY FABRICATOR AND MARKED FOR ENGINEERS APPROVAL. CONNECTIONS TO BE DESIGNED TO AISC SPECIFICATIONS AND SHALL BE CAPABLE OF SUPPORTING 55% OF THE MAXIMUM UNIFORM LOAD CAPACITY FOR THE SPAN SPECIFIED, SHOWN IN THE TABLES OF UNIFORM CONSTANTS OF THE AISC MANUAL OF STEEL CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR ANY MISCELLANEOUS STEEL. MISCELLANEOUS STEEL AND CONNECTIONS SHALL BE DESIGNED BY STEEL FABRICATOR.
- HOT DIP GALVANIZE, IN ACCORDANCE WITH ASTM A123 AND ASTM A153, STRUCTURAL STEEL AND FASTENERS PERMANENTLY EXPOSED TO THE WEATHER.
- STEEL SUPPORTING OR CONNECTED TO HVAC AND OTHER EQUIPMENT AS SHOWN ON THE DRAWINGS IS SHOWN FOR BIDDING PURPOSES ONLY CONTRACTOR SHALL COORDINATE EXACT LOCATION AND SIZE BEFORE COMMENCING WORK.
- STRUCTURAL STEEL SHALL BE PAINTED WITH ONE COAT OF RUST INHIBITIVE PAINT.
- STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED IN WHOLE OR IN PART FOR SHOP DRAWING SUBMITTALS.
- PROVIDE 3 TONS OF RED IRON ALLOWANCE TO BE USED AS DIRECTED BY STRUCTURAL ENGINEER. INCLUDE LABOR COSTS IN THE ALLOWANCE. ANY UNUSED ALLOWANCE SHALL BE CREDITED BACK TO OWNER AT A COST OF \$3500 PER TON.
- ALL WELDED CONNECTION SHALL BE MADE WITH A 1/4" FILLET WELD U.N.O.
- PROVIDE 1/2" GAP AT ALL PENETRATIONS THROUGH CMU WALL AND INFILL WITH ELASTOMERIC MATERIAL.
- STEEL FABRICATOR SHALL BE CERTIFIED BY ONE OF THE FOLLOWING: AISC/ IBC/ IAS-ICC

SHOP DRAWINGS & SUBMITTALS

- SUBMITTAL THAT WILL BE REQUIRED FOR APPROVAL INCLUDE:
 - CONCRETE MIX DESIGN
 - CURING COMPOUND FOR CONCRETE
 - REINFORCING STEEL
 - STRUCTURAL STEEL
 - METAL PANELS
 - CMU WALL COMPONENTS
 - PRE-ENGINEERED BUILDING CALCULATIONS (INCLUDING REACTIONS)
- ALLOW (2) WEEKS MINIMUM FOR REVIEW OF SHOP DRAWINGS.
- PRIOR TO ISSUING THE SUBMITTALS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSION WITH ARCHITECTURAL PLANS.
- REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR FOR ANY ERRORS IN DIMENSIONS OR MATERIAL INDICATED ON THE SHOP DRAWINGS.

CONCRETE

- ALL CONCRETE WORK SHALL BE EXECUTED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION.
- CEMENT SHALL CONFORM TO ASTM C150 TYPE I AGGREGATE SHALL CONFORM TO ASTM C39.
- CONCRETE SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH AS FOLLOWS:

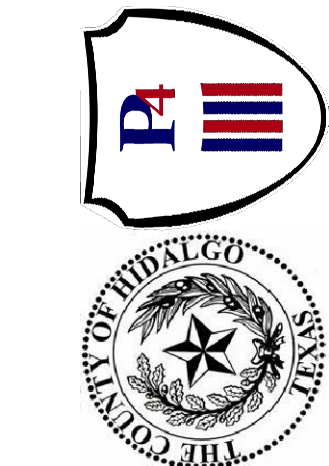
MEMBER TYPE	STRENGTH	SLUMP	MAX AGG.
FOUNDATION AND SLAB	3000 PSI	4"-6"	1.5 IN.
PIERS	3000 PSI	6"-8"	1 IN.
COLUMNS	4000 PSI	4"-6"	1 IN.
- INSTALL 10 MIL VAPOR RETARDER UNDER SLABS ON GRADE AND ALONG SIDE OF TRENCHES IN ACCORDANCE WITH ASTM E1643. LAP JOINTS MINIMUM OF 12 INCHES.
- PLACE CONCRETE CONTINUOUSLY BETWEEN PRE-DETERMINED EXPANSION AND CONSTRUCTION JOINTS.
- ALL CONSTRUCTION JOINT LOCATIONS TO BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER.
- HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED.
- CURE CONCRETE IN ACCORDANCE WITH ACI 308.1
- REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATIONS OF ALL DEPRESSIONS, OPENINGS, ACCESSORIES, ETC.
- CONDUIT AND PLUMBING LINES SHALL BE PLACED BELOW SLAB REINFORCING AND SHALL BE NO BIGGER THAN 1 INCH.
- FLYASH MAY BE USED TO REPLACE A PORTION OF THE PORTLAND CEMENT. THE RATIO OF FLYASH TO THE TOTAL OF THE FLYASH AND CEMENT IN A MIX SHALL NOT EXCEED 20%. FLYASH SHALL CONFORM TO ASTM C618, TYPE C OR F.
- ALL FLOORS SHALL BE CONSTRUCTED WITH A MINIMUM FLATNESS FF = 35 AND A MINIMUM LEVELNESS OF FL = 25
- CONTRACTION JOINTS TO BE INSTALLED WITHIN 12 HOURS OF POURING FOUNDATION.
- TESTING OF CONCRETE SHALL BE DONE AS FOLLOWS:
 - SETS SHALL CONSIST OF 3 CYLINDERS ONE TESTED AT 7 DAYS TWO TESTED AT 28 DAYS
 - ONE SET SHALL BE TAKEN FOR EACH 150 CY AND FOR EVERY 5000 SF OF SURFACE AREA AND AT LEAST ONCE PER DAY OF POURING
 - A MINIMUM OF 3 SETS SHALL BE TAKEN FOR EACH CLASS OF CONCRETE
- NO WATER SHALL BE ADDED TO THE CONCRETE AT THE JOBSITE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE CONCRETE SUPPLIER TO ENSURE A PUMPABLE AND WORKABLE MIX WITHOUT THE ADDITION OF WATER AT THE JOBSITE. THE USE OF PLASTICIZERS, RETARDANTS AND OTHER ADDITIVES SHALL BE AT THE OPTION OF THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER FOR THE PROPER USE OF ADDITIVES. THE USE OF CALCIUM CHLORIDE OR OTHER CHLORIDE BEARING SALTS SHALL NOT BE PERMITTED.
- PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE WATER. DO NOT SPRINKLE FREE CEMENT ON THE SLAB SURFACE FINISHING OF SLAB SURFACES SHALL COMPLY WITH THE RECOMMENDATIONS OF ACI 302.1 AND 304.
- UNLESS SPECIFIED, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28-DAY COMPRESSIVE STRENGTH (F_c), BEFORE FORMS MAY BE REMOVED.

WALL, COLUMNS, & BEAM SIDES.....	40%
JOIST PANS & BEAM BOTTOMS (IF RESHORED).....	70%
SHORING FOR FLOOR SYSTEMS (IF NOT RESHORED).....	85%
- NO CONCRETE SHALL BE PLACED OUTSIDE OF THESE SPECIFICATIONS WITHOUT THE OWNER'S PRIOR APPROVAL. ANY ITEMS NOT IN COMPLIANCE WITH THE OUTLINED SPECIFICATION SHALL BE REPORTED TO THE OWNER AND STRUCTURAL ENGINEER WITHIN 24 HOURS.
- CONSTRUCTION VEHICLE LOADS SHALL NOT BE PERMITTED ON ELEVATED SLABS AT ANY TIME.
- ALL RETAINING WALLS TO BE SHORED UNTIL UPPER SLAB IS IN PLACE AND HAS REACHED 70% OF ITS DESIGN STRENGTH OR THE RETAINING WALL HAS REACHED 100% OF ITS DESIGN STRENGTH. PROVIDE GRANULAR BACKFILL AND PERFORATED DRAIN PIPE CONNECTED TO SITE DRAINAGE, RE: CIVIL PLAN.

PRE-ENGINEERED METAL BUILDING AND COMPONENTS

- REFER TO SCHEMATIC ROOF FRAMING PLAN AND DESIGN CRITERIA FOR DESIGN LOAD REQUIREMENTS AND SPECIFICATIONS FOR THE PRE-ENGINEERED METAL BUILDING.
- PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL SUBMIT DESIGN CERTIFICATION SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS FOR THE STRUCTURAL FRAMING AND COVERING PANELS OF THE BUILDING SYSTEM. CERTIFICATION AND DESIGN SHALL MEET REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND ASCE 7.
- PRE-ENGINEERED METAL BUILDING MANUFACTURER CERTIFICATION SHALL BE SUBMITTED WITH SEALED SHOP DRAWINGS WHEN SUBMITTED FOR REVIEW.
- SHOP DRAWINGS AND CALCULATIONS INCLUDING BUILDING REACTIONS, SHALL BE PREPARED AND REVIEWED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS. SEALED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW BY THE DESIGN TEAM.
- ALL COMPONENTS SHALL BE DESIGNED, FABRICATED AND ERRECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS AND STANDARDS OF THE AISC. THIS WORK SHALL INCLUDE ALL MEMBERS AND BRACES NECESSARY TO BRACE MASONRY WALLS. LIGHT GAGE STEEL MEMBERS SHALL COMPLY WITH THE LATEST ADDITION OF THE AISI.
- PURLINS AND EAVE STRUTS SHALL HAVE A MINIMUM YIELD STRESS OF 55 KSI AND SHALL BE PAINTED WITH ONE COAT OF RED OXIDE OR APPROVED SHOP COAT.
- PURLIN SPACING SHOWN IN STRUCTURAL DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. PURLIN SPACING TO BE DETERMINED BY METAL BUILDING MANUFACTURER. PURLINS SHALL HAVE A MAXIMUM TOTAL LOAD DEFLECTION OF L/180.
- SAG STRAPS SHALL BE LOCATED AS SHOWN ON PLANS AND SHALL BE FABRICATED WITH A MINIMUM YIELD STRENGTH OF 50 KSI.
- STANDING SEAM METAL ROOF SHALL NOT BE CONSIDERED TO PROVIDE LATERAL BRACING FOR PURLINS. BRIDGING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO RESIST BOTH GRAVITY AND UPLIFT LOADS.
- CROSS BRACING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO PROVIDE AN ADEQUATE HORIZONTAL ROOF DIAPHRAGM FOR THE STRUCTURE.
- PROVIDE PINNED BASE CONNECTION FROM COLUMN TO FOUNDATION.
- ALL ANCHOR BOLTS SIZES, LENGTH, AND EMBEDMENT SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER AND SUPPLIED BY THE CONTRACTOR. ANCHOR BOLT EMBEDMENT DEPTHS SHALL BE DESIGNED TO RESIST CONCRETE CONICAL SHEAR FAILURE.
- THIS FOUNDATION HAS BEEN DESIGNED USING ASSUMED REACTIONS FROM THE PRE-ENGINEERED METAL BUILDING COMPONENTS AND IS FOR BID PURPOSES ONLY. THE CONTRACTOR SHALL SUBMIT BASE CONNECTION DETAILS (SIZE AND THICKNESS OF BASE PLATE AND DIAMETER AND LENGTH OF ANCHOR BOLTS) AND REACTIONS SO THE DESIGN ASSUMPTIONS CAN BE VERIFIED.
- ANY ADDITIONAL COST OF FOUNDATION WORK REQUIRED BY REVISIONS OF THE FOUNDATION DESIGN AFTER PRE-ENGINEERED METAL BUILDING REACTIONS ARE SUBMITTED SHALL NOT BE INCURRED BY STRUCTURAL ENGINEER.
- DRIFT CRITERIA FOR RIGID FRAMES AND METAL GIRTS SHALL HAVE A MAXIMUM DEFLECTION OF H/240 FOR MASONRY FINISHES AND A H/120 FOR METAL SIDING.

100% REVIEW NOT FOR CONSTRUCTION



Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542



Revision No.	Date	Description



Project No.:	16218
Issued:	09 / 08 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	N.T.S.
Sheet Title	GENERAL NOTES
Sheet Number	S1.0

GENERAL NOTES

MASONRY

- MATERIALS:
 - CONCRETE BLOCK: MEDIUM WEIGHT ASTM C90 (HOLLOW) ASTM C145 (SOLID) MINIMUM COMPRESSIVE STRENGTH: 1900 PSI
 - MORTAR: ASTM C270 TYPE S.
 - GROUT: MINIMUM COMPRESSIVE STRENGTH: 2000 PSI
 - NET AREA COMPRESSIVE STRENGTH: 1500 PSI TO BE TESTED IN ACCORDANCE TO ATSM C1314 STANDARDS.
 - JOINT REINFORCING: MILL GALVANIZED FINISH, 9 GAGE MINIMUM SIDE WIRES AND CROSS WIRES (DUR-O-WALL), A HOHMANN + BARNARD COMPANY.
 - BAR REINFORCING: ASTM A615, GRADE 60 (UNLESS NOTED OTHERWISE).
 - TYPICAL CMU WALL REINFORCING SHALL BE #5 (V) AT 48" O.C. AND #5 (H) AT 8'-0" O.C. U.N.O. ON DRAWINGS.
- REINFORCED MASONRY, WHERE VERTICAL BARS ARE TO BE GROUTED INTO CORES, THE FOLLOWING REQUIREMENTS APPLY:
 - PROVIDE DOWELS FROM WALL, SAME SIZE AND SPACING AS WALL BARS. LAP 48 BAR DIAMETERS MINIMUM WITH WALL BAR.
 - PROVIDE A CONTINUOUS VERTICAL CAVITY, AT LEAST 2" x 3" IN SIZE, FREE OF MORTAR DROPPINGS.
 - PROVIDE REBAR ALIGNMENT DEVICES AT A MAXIMUM SPACING OF 96 BAR DIAMETERS (MINIMUM OF 2 PER BAR).
 - AT SPLICES IN VERTICAL BARS, PROVIDE MECHANICAL COUPLERS OR 48 BAR DIAMETER LAP.
 - ALL REINFORCEMENT MUST BE INSTALLED AND SECURELY ANCHORED IN PLACE PRIOR TO PLACEMENT OF GROUT.
 - MAXIMUM HEIGHT OF GROUT LIFT = 4'-0". UNLESS HIGH LIFT GROUTING PROCEDURES ARE EMPLOYED IN ACCORDANCE WITH ASI 530-99
- MISCELLANEOUS:
 - FILL CORE SOLID AROUND ANCHOR BOLTS.
 - PROVIDE SOLIDLY FILLED HOLLOW BLOCKS AT ALL EMBED ANCHOR LOCATIONS.
 - SET WELD PLATES IN BOND BEAMS AFTER THE GROUT IS PLACED, BUT WHILE IT IS STILL PLASTIC.
 - HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS, AND IN THE STARTING COURSE ON FOOTING, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT. SOLID UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
 - PROVIDE JOINT REINFORCING AT 16 INCHES, EXCEPT AS NOTED.
 - LAP JOINT REINFORCING 6 INCHES FOR STANDARD, 15 INCHES FOR HEAVY WEIGHT.
 - VERTICAL CONTROL JOINTS SHALL BE PROVIDED FULL HEIGHT OF MASONRY WALLS AS LOCATED ON THE DRAWINGS. THE JOINT SHALL BE PROVIDED AS A CONTINUOUS HEAD JOINT WITH MORTAR RAKED BACK 3/4" AT BOTH FACES AND 50% OF THE HORIZONTAL JOINT REINFORCING CUT AT THE JOINT. AFTER THE MORTAR IS SET, THE JOINT SHALL BE CAULKED.
 - FILL ALL VOIDS AND CELLS WITHIN 12" EITHER SIDE OF CENTERLINE OF BEAM AND/OR COLUMN BEARING LOCATIONS WITH A #4 REINFORCING BAR AND GROUT U.N.O.
 - ALL CMU WALLS MUST HAVE SPECIAL INSPECTION PER IBC CODE 2012 SECTION 1705.4 "MASONRY CONSTRUCTION" ON CHAPTER 17- "STRUCTURAL TEST & SPECIAL INSPECTION". THE CONTRACTOR MUST PROVIDE REPORTS OF THESE "SPECIAL INSPECTIONS".
 - BARS SCHEDULED "CONTINUOUS" SHALL BE SPLICED AS FOLLOWS:

REINFORCING BAR SIZE	MIN. LAP SPLICE LENGTH
#5	30"
#6	36"
#7	42"
#8	48"
#9	54"
#10	MECHANICAL CONNECTOR
#11	

- STABILITY AND BRACING: ALL MASONRY WALLS SHOWN ON THE CONTRACT DRAWINGS HAVE BEEN DESIGNED TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES APPLIED TO THEM IN THEIR FINAL CONSTRUCTED POSITION ONLY ASSUMING FULL BRACING AT TOP, BOTTOM, AND/OR SIDES AS INDICATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT CONSTRUCTION RESIST ANY ERECTION VERTICAL OR LATERAL LOADS THAT COULD BE IMPOSED ON THE WALLS PRIOR TO CONSTRUCTION COMPLETION.
- GENERAL CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH STRUCTURAL ENGINEER AND MASONRY CONTRACTOR BEFORE MASONRY WORK COMMENCES.

CONTRACTOR NOTE

THE STRUCTURAL SYSTEM FOR THIS PROJECT SHALL NOT BE CONSTRUCTED BY USING THE STRUCTURAL DRAWINGS ALONE. THESE DRAWINGS WERE DEVELOPED FROM DATA DERIVED PRIMARILY FROM THE ARCHITECTURAL DRAWINGS AND SECONDARILY FROM MEP, CIVIL AND OTHER DISCIPLINES' DOCUMENTS. IT IS INTENDED THAT CONSTRUCTION PROCEED BY UTILIZING ALL OF THE INFORMATION CONTAINED IN THE ENTIRE SET OF CONSTRUCTION DOCUMENTS TAKEN AS A WHOLE; FAILURE TO DO SO WILL RESULT IN ERRORS WHICH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

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STRUCTURAL TESTS AND SPECIAL INSPECTION

- THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THIS SECTION.
- THE FOLLOWING TERMS AND PHRASES SHALL HAVE THE MEANINGS SHOWN BELOW AS IT PERTAINS TO THIS SECTION.
 - APPROVED AGENCY- AN ESTABLISHED AND RECOGNIZED AGENCY REGULARLY ENGAGED IN CONDUCTING AND FURNISHING SPECIAL INSPECTION SERVICES.
 - APPROVED FABRICATOR - AN ESTABLISHED AND QUALIFIED FIRM APPROVED BY BUILDING OFFICIAL. SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS PERFORMED ON THE PREMISES OF AN APPROVED FABRICATOR.
 - SPECIAL INSPECTION, CONTINUOUS- THE FULL TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.
 - SPECIAL INSPECTION, PERIODIC - THE PART TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.
- SPECIAL INSPECTORS SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED THEY SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION.

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD ^a	IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	X	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 360, SECTION A3.3	---
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	---	X	---	---
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
a. BEARING-TYPE CONNECTIONS.	---	X	AISC 360, SECTION M2.5	1704.3.3
b. SLIP-CRITICAL CONNECTIONS.	X	X		
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	---	ASTM A 6 OR ASTM A 568	1708.4
b. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	---	---	ASTM A 6 OR ASTM A568	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	---	AISC 360, SECTION A3.5	---
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	---	---	---	---
5. INSPECTION OF WELDING:				
a. STRUCTURAL STEEL:				
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	X	---	AWS D1.1	1704.3.1
2) MULTIPASS FILLET WELDS.	X	---		
3) SINGLE-PASS FILLET WELDS > 5/16"	X	---	AWS D1.3	---
4) SINGLE-PASS FILLET WELDS ≤ 5/16"	---	X		
5) FLOOR AND ROOF DECK WELDS.	---	X	---	---
b. REINFORCING STEEL:				
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	---	X	AWS D1.4 ACI 318: 3.5.2	---
2) REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	X	---		
3) SHEAR REINFORCEMENT.	X	---	---	---
4) OTHER REINFORCING STEEL.	---	X		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:				
a. DETAILS SUCH AS BRACING AND STIFFENING.	---	---	---	1704.3.2
b. MEMBER LOCATIONS.	---	---		
c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	---	---		

REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	---	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	---	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	---	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	---
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	---	X

REQUIRED VERIFICATION AND OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	---
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	---
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	---	---

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD ^a
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK.			
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	X	APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFICATE TEST REPORTS.	---	X	---
2. INSPECTION OF WELDING:			
a. COLD-FORMED STEEL DECK:			
1) FLOOR AND ROOF DECK WELDS	---	X	AWS D1.3
b. REINFORCING STEEL:			
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	---	X	AWS D1.4 ACI 318 SECTION 17.5.2
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	---	
3) SHEAR REINFORCEMENT.	X	---	---
4) OTHER REINFORCING STEEL.	---	X	

LEVEL 1 SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY OF INSPECTION		REFERENCE FOR CRITERIA	
	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	IBC SECTION	ACI 530/ASCE 5/TMS 402 ^a
1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:				
a. PROPORTIONS OF SITE-PREPARED MORTAR.	---	X	---	Art. 2.6A
b. CONSTRUCTION OF MORTAR JOINTS.	---	X	---	Art. 2.6B
c. LOCATION OF REINFORCEMENT, CONNECTORS, PRESTRESSING TENDONS AND ANCHORAGES.	---	X	---	Art. 3.4, 3.6A
d. PRESTRESSING TECHNIQUE.	---	X	---	Art. 3.6B
e. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	---	X	---	Art. 2.4B, 2.4H
2. THE INSPECTION PROGRAM SHALL VERIFY:				
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	---	X	---	Art. 3.3B
b. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.	---	X	---	Sec. 1.2.2(e), 2.1.4, 3.1.6
c. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT	---	X	---	Sec. 1.13, Art. 2.4, 3.4
d. WELDING OF REINFORCING BARS.	X	---	---	Sec. 2.1.10.7.2, 3.3.3.4(b)
e. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F).	---	X	---	Sec. 2104.3, 2104.4, Art. 1.8C, 1.8E
f. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	---	X	---	Art. 2.6B
3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:				
a. GROUT SPACE IS CLEAN.	---	X	---	Art. 3.2D
b. PLACEMENT OF REINFORCEMENT AND CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES.	---	X	---	Sec. 1.13, Art. 3.4
c. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.	---	X	---	Art. 2.6B
d. CONSTRUCTION OF MORTAR JOINTS.	---	X	---	Art. 3.3B
4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS.	X	---	---	Art. 3.5
a. GROUTING OF PRESTRESSING BONDED TENDONS.	X	---	---	Art. 3.6C
5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	X	---	---	Sec. 2105.2.2, 2105.3, Art. 1.8
6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	---	X	---	Art. 1.8

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements



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Project No.: 16218
Issued: 09 / 08 / 16
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Sheet Title

GENERAL NOTES

S1.1
Sheet Number

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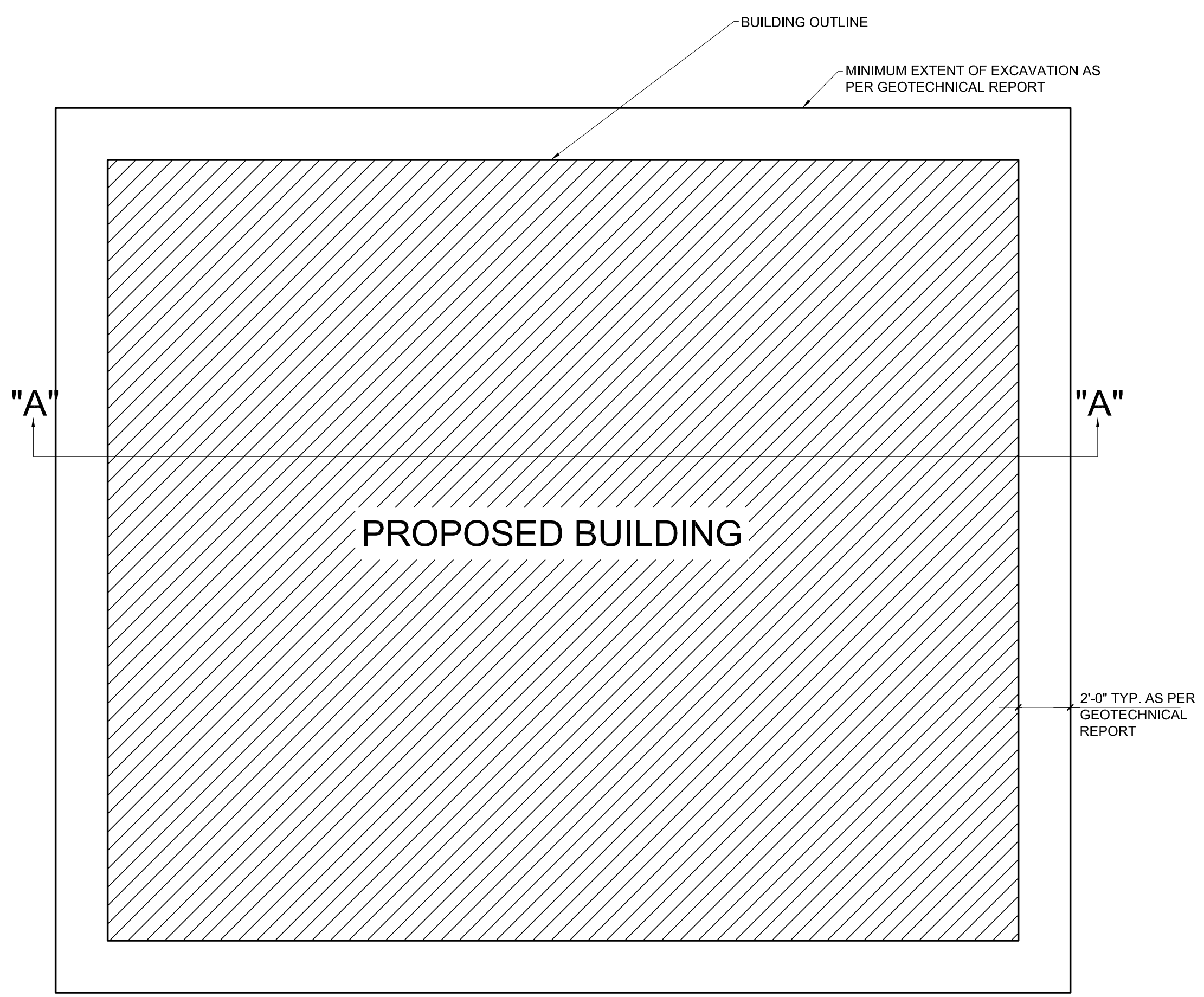
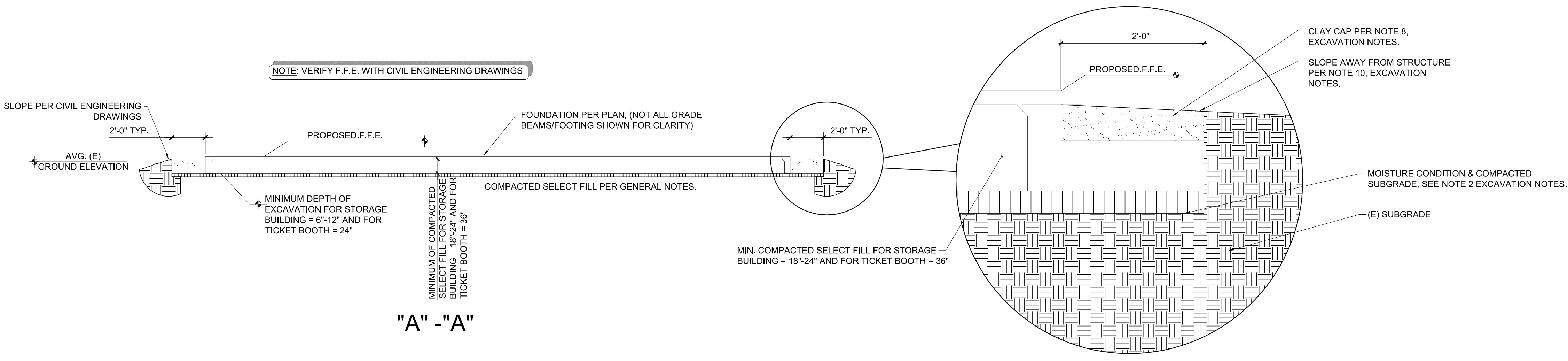
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EXCAVATION PLAN
S1.2
 Sheet Number

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EXCAVATION NOTES

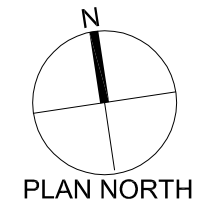
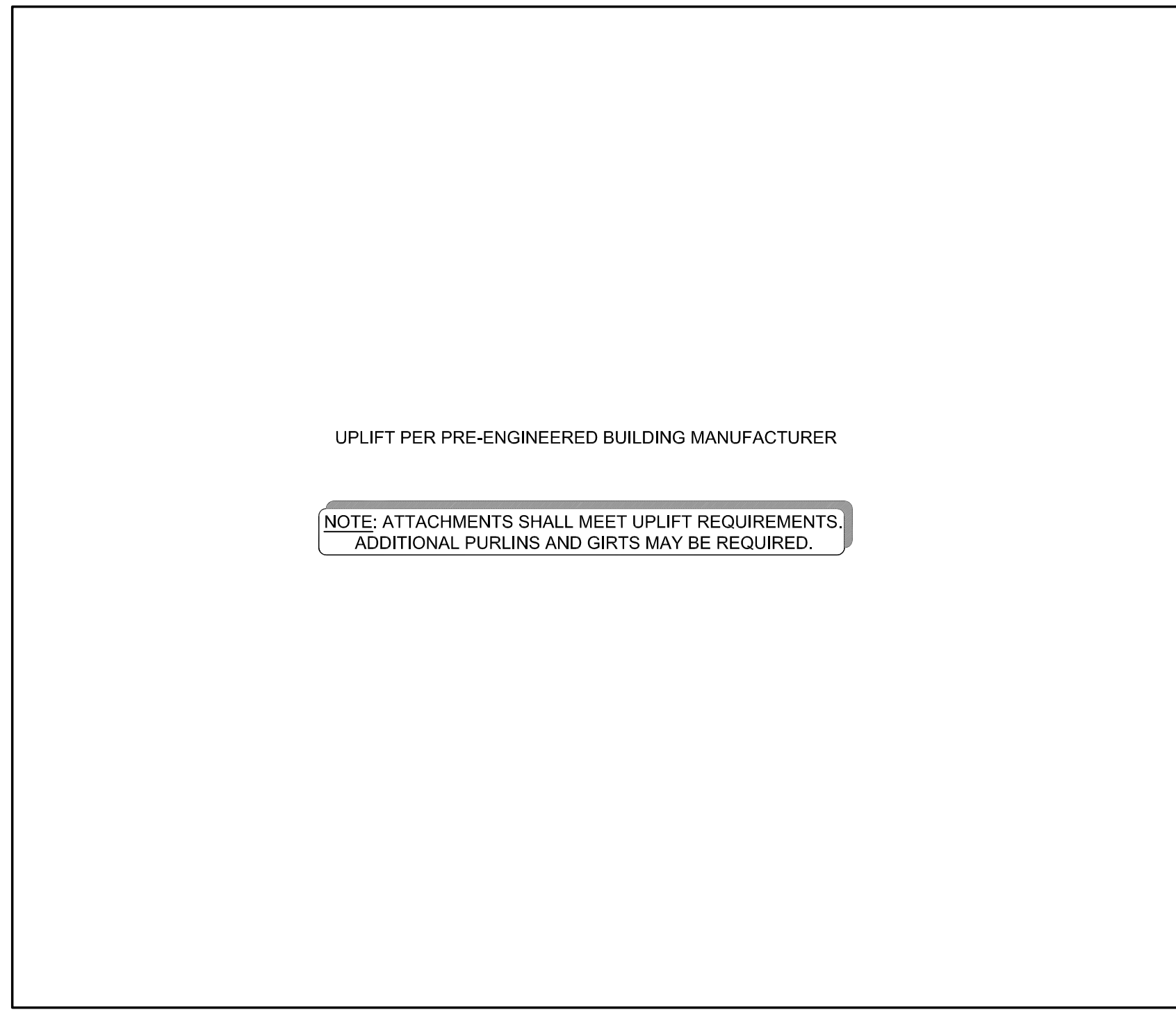
- CONSTRUCTION AREAS REMOVE AT LEAST 6"-12" OF TOP SOIL, VEGETATION, DEBRIS, ETC., FROM THE PROPOSED BUILDING AREA TO A DISTANCE OF 2'-0" OUTSIDE THE BUILDING LINE PROPOSED. FURTHER, EXCAVATE SOILS DOWN TO 24" BELOW EXISTING GROUND AT TICKET BOOTH ONLY.
- EXPOSED SUBGRADE SHOULD BE MOISTURE CONDITIONED, COMPACTED, AND TESTED (MIN. DEPTH OF 12") TO A RANGE OF OPTIMUM MOISTURE CONTENT TO +3% ABOVE OPTIMUM, AND COMPACTED TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D-698. ANY SOFT AND/OR COMPRESSIBLE SOFT SPOTS NOTED DURING COMPACTION ACTIVITIES SHALL BE ORER-EXCAVATED AND REPLACED WITH SELECT FILL.
- FILL BACK TO REQUIRED GRADE (A MINIMUM OF 18" TO 24" AT STORAGE BUILDING AND 36" AT TICKET BOOTH OF STRUCTURAL FILL IS REQUIRED. REFER TO CIVIL PLANS FOR FINISHED FLOOR ELEVATION TO DETERMINE ADDITIONAL AMOUNT OF SELECT FILL NEEDED) WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW.
- MATERIALS USED FOR STRUCTURAL FILL SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS OF TX DOT 2014 SPECIFICATION:
 - A. ITEM 247 TYPE E, GRADE 4 - CALICHE

RETAINED ON SQUARE SIEVE	PERCENT RETAINED
2"	0
1/2"	20-60
NO. 4	40-75
NO. 40	70-90
PLASTICITY INDEX, MAX	15
WET BALL PI, MAX	15
WET BALL MILL, % MAX	50
 - B. ITEM 247 TYPE A, GRADE 1- LIMESTONE

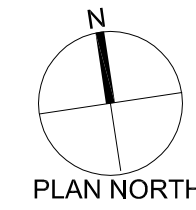
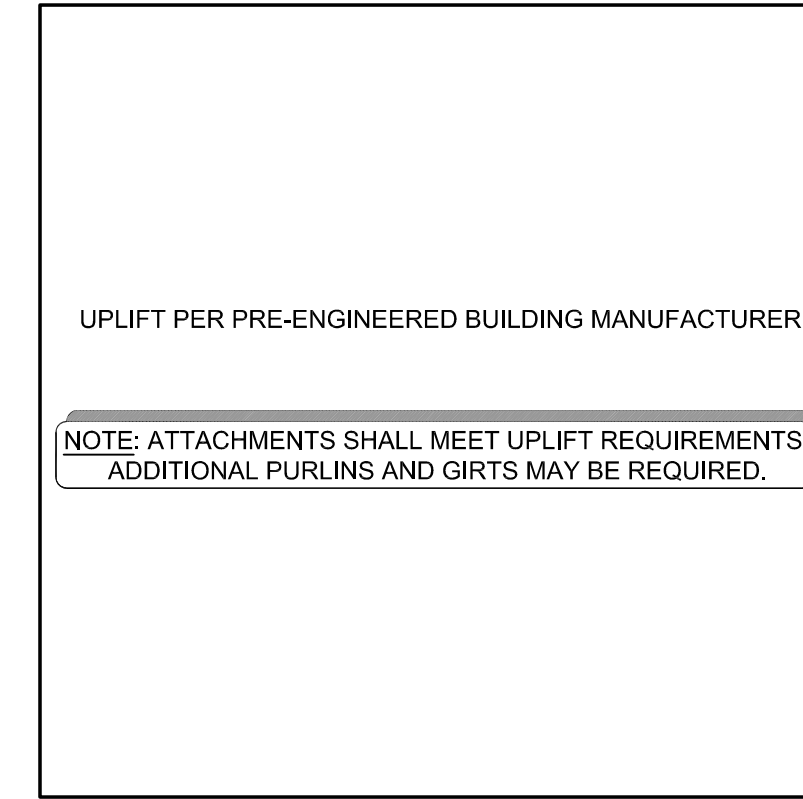
RETAINED ON SQUARE SIEVE	PERCENT RETAINED
2-1/2"	0
1-3/4"	0-10
7/8"	10-35
3/8"	30-65
NO. 4	45-75
NO. 40	65-90
PLASTIC LIMIT, % MAX	40
PLASTICITY INDEX, % MAX	10
WET BALL MILL, % MAX	40
- STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM 98 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D698 AT MOISTURE CONTENTS RANGING BETWEEN -2% AND + 2% OF THE OPTIMUM MOISTURE CONTENT. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 8" THICK. THE FILL SHOULD BE PROPERLY COMPACTED IN ACCORDANCE WITH THESE RECOMMENDATION AND TESTED FOR COMPACTION AS SPECIFIED.
- SAMPLES OF PROPOSED STRUCTURAL FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.
- SITE PREPARATION TESTING SHALL BE AS FOLLOWS:
 - A. ATTERBERG LIMITS OF SELECT FILL MATERIAL:
 - (1) ONE TEST PER 5,000 CY
 - B. COMPACTION TEST:
 - TO BE PERFORMED PER LIFT ON TEST PER 3,000 SF MINIMUM
 - OF (4) FOUR TEST PER LIFT
- IF 5' PERIMETER OVER EXCAVATION IS NOT COVERED BY CONCRETE SLABWORK, PROVIDE 2" THICK CLAY CAP IN OVER EXCAVATED ZONE. CLAY CAP SHOULD BE SLOPED AWAY FROM THE FOUNDATION AT A MINIMUM SLOPE OF 2%, AND SURROUNDING AREAS SHOULD HAVE POSITIVE DRAINAGE. THE LOW PERMEANCE CLAY CAP SHALL MEET THE USCS CLASSIFICATION OF CH OR CL WITH A MINIMUM P.I. OF 20, A MINIMUM OF 50% BY WEIGHT PASSING THE NO. 200 SIEVE, AND SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698. THE MOISTURE CONTENT OF THE SUBGRADE SHOULD BE MAINTAINED WITHIN THE RANGE OF OPTIMUM TO 4% ABOVE THE OPTIMUM MOISTURE.
- GEOTECHNICAL REPORT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR TO REVIEW AND COMPLY WITH ALL EARTHWORK AND GRADING REQUIREMENT IN GEOTECHNICAL REPORT.
- FINAL SITE GRADING TO SLOPE AWAY FROM THE STRUCTURE AND SHALL PREVENT WATER FROM PONDING IN THE AREAS ADJACENT TO THE STRUCTURE FOR A MINIMUM DISTANCE OF 10'-0". ANY PONDING CLOSE TO THE STRUCTURE WILL CREATE VOLUMETRIC CHANGES IN THE SOIL AND MAY LEAD TO LESS THAN OPTIMUM PERFORMANCE OF THE BUILDING FOUNDATION.
- IT IS ALSO IMPORTANT TO MINIMIZE CHANGES IN MOISTURE CONTENT CREATED BY ROOF DRAINAGE, PLUMBING LEAKS, LANDSCAPING / IRRIGATION, AND DOWNSPOUT OUTFALLS. ANY PLUMBING LEAKS SHALL BE REPAIRED AS SOON AS POSSIBLE AND PROPER DRAINAGE PROVIDED AWAY FROM THE BUILDING. LARGE BUSHES AND TREES SHALL NOT BE PLACED IN AREAS DIRECTLY ADJACENT TO THE FOUNDATION AS THEIR ROOT SYSTEM MAY CREATE SUBSTANTIAL MOISTURE DIFFERENTIALS THAT MAY LEAD TO VOLUME CHANGES IN THE SOIL. LARGE BUSHES AND TREES SHOULD BE LOCATED AT A REASONABLE DISTANCE FROM THE FOUNDATION.

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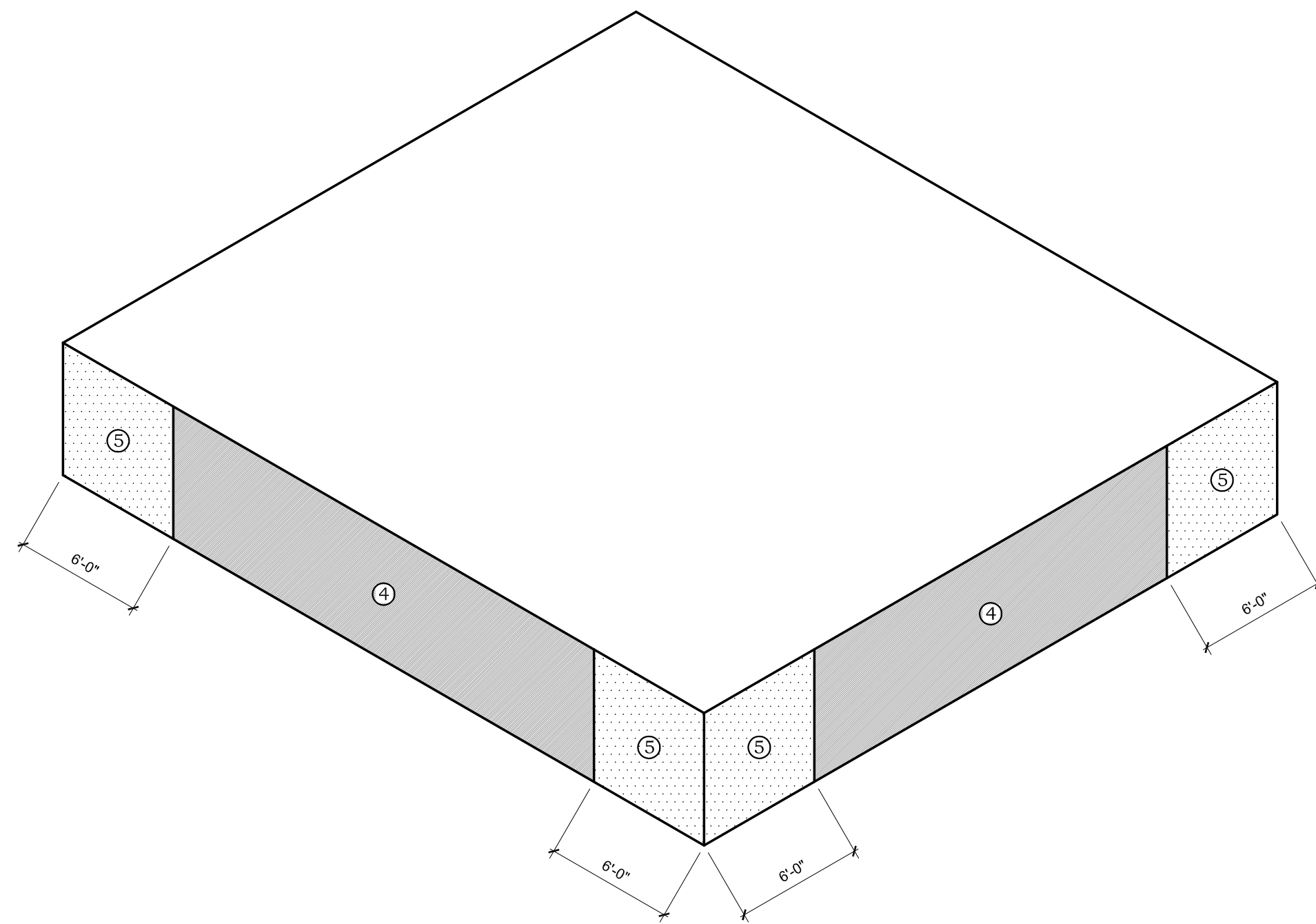
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ROOF UPLIFT PLAN AT STORAGE
SCALE: NTS



ROOF UPLIFT PLAN AT BOOTH
SCALE: NTS

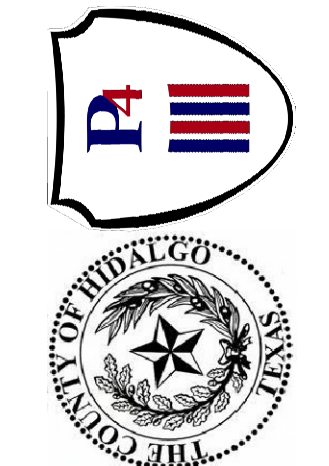


ALLOWABLE STRESS DESIGN

EFFECTIVE WIND AREA	ZONE	MAX PRESSURE
10	④	25.5 psf
20	④	24.5 psf
50	④	23.1 psf
10	⑤	31.5 psf
20	⑤	29.4 psf
50	⑤	26.6 psf

COMPONENTS AND CLADDING
SCALE: NTS

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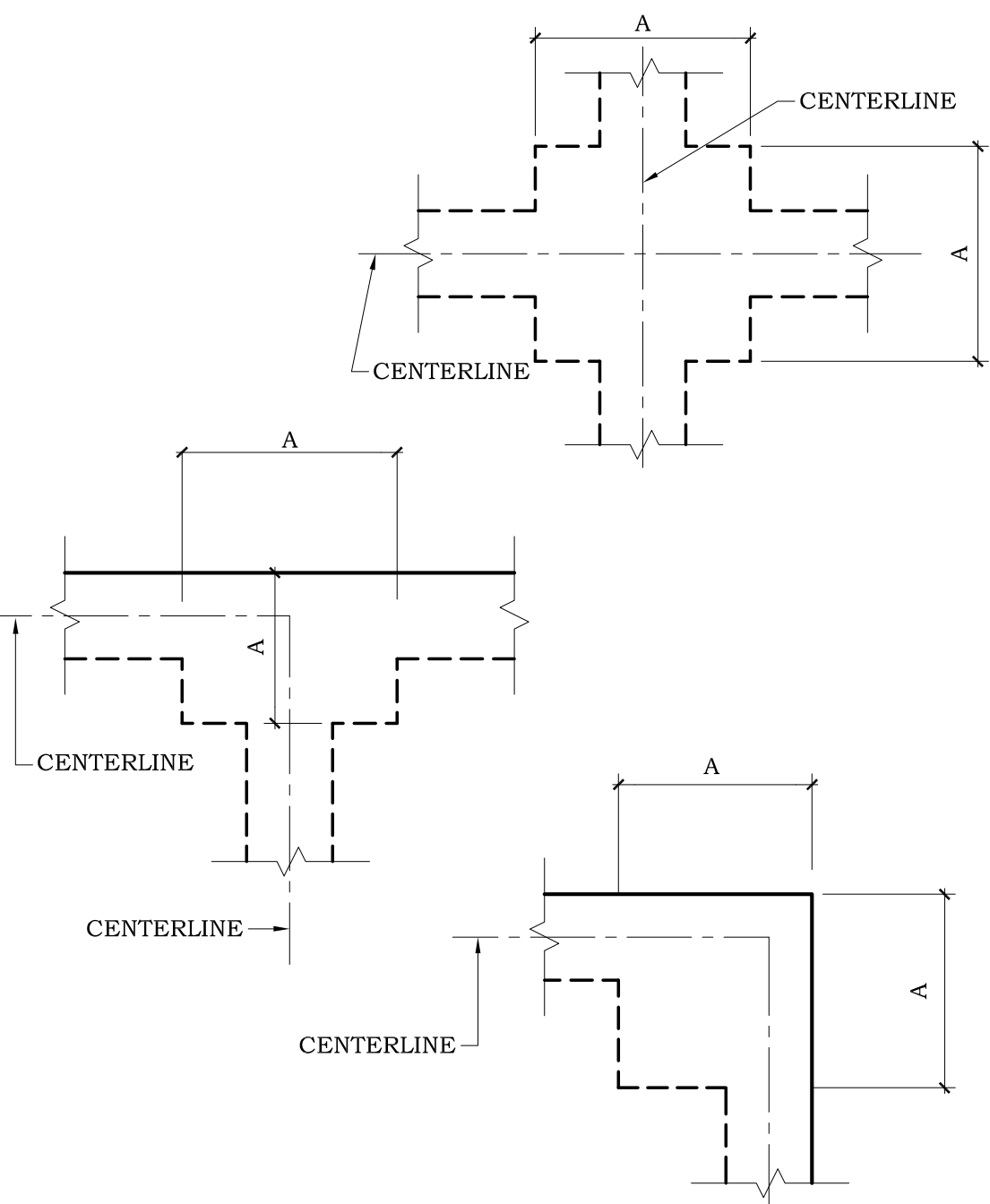
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Sheet Title
 ROOF UPLIFT PLAN
S1.3
 Sheet Number

FOOTING SCHEDULE AT STEEL COLUMNS

TYPE	A	DEPTH	REBAR REINFORCEMENT
S2	2'-6"	3'-0"	#5S @ 12" O.C. E.W. TOP & BOTTOM
S3	3'-6"	3'-0"	#5S @ 12" O.C. E.W. TOP & BOTTOM
S4	4'-6"	3'-0"	#5S @ 12" O.C. E.W. TOP & BOTTOM
S5	5'-6"	3'-0"	#5S @ 12" O.C. E.W. TOP & BOTTOM
S6	6'-6"	3'-0"	#5S @ 12" O.C. E.W. TOP & BOTTOM

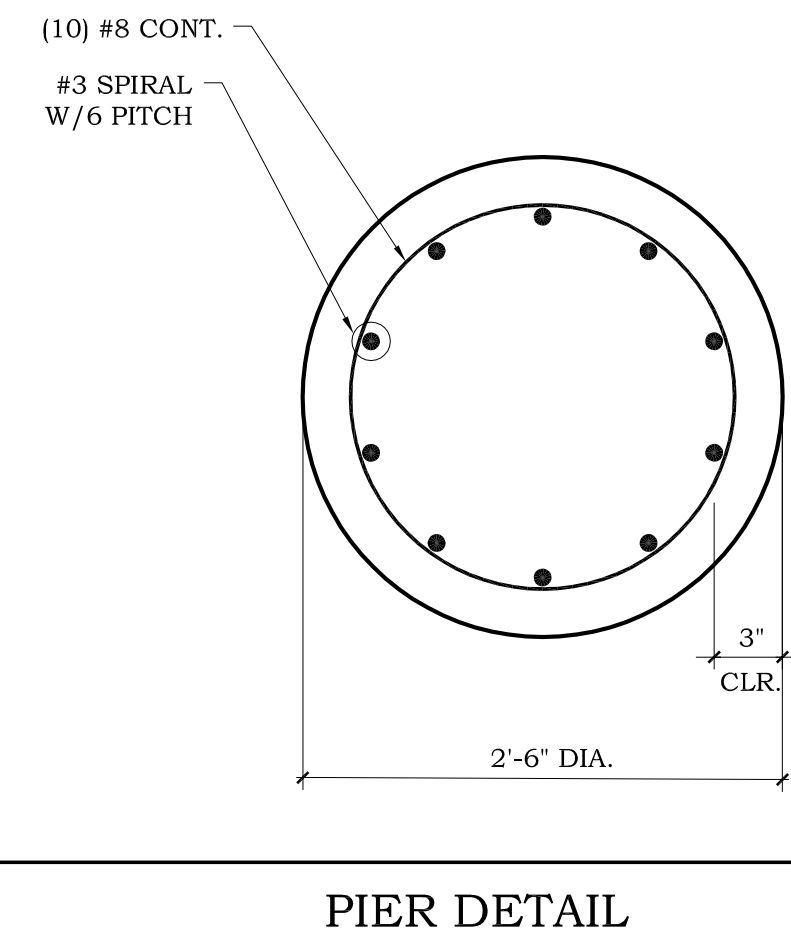


FOOTING SCHEDULE

14

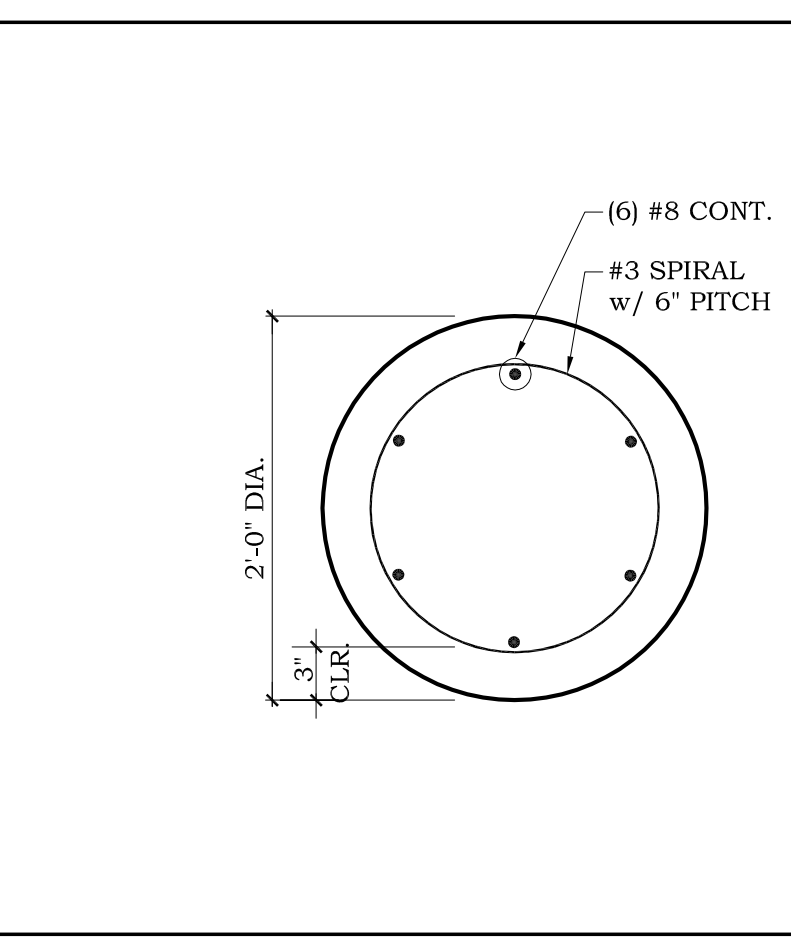
RIGID FRAME DETAIL

10



PIER DETAIL

11

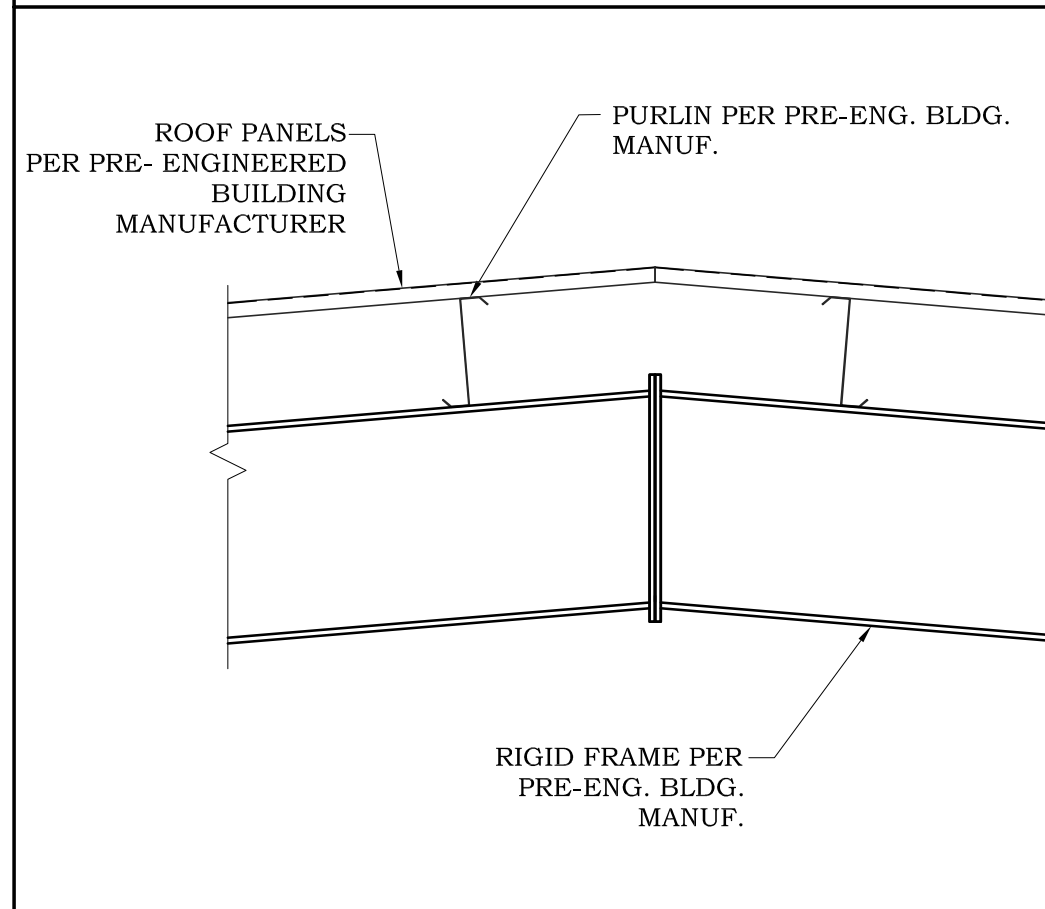


PIER DETAIL

12

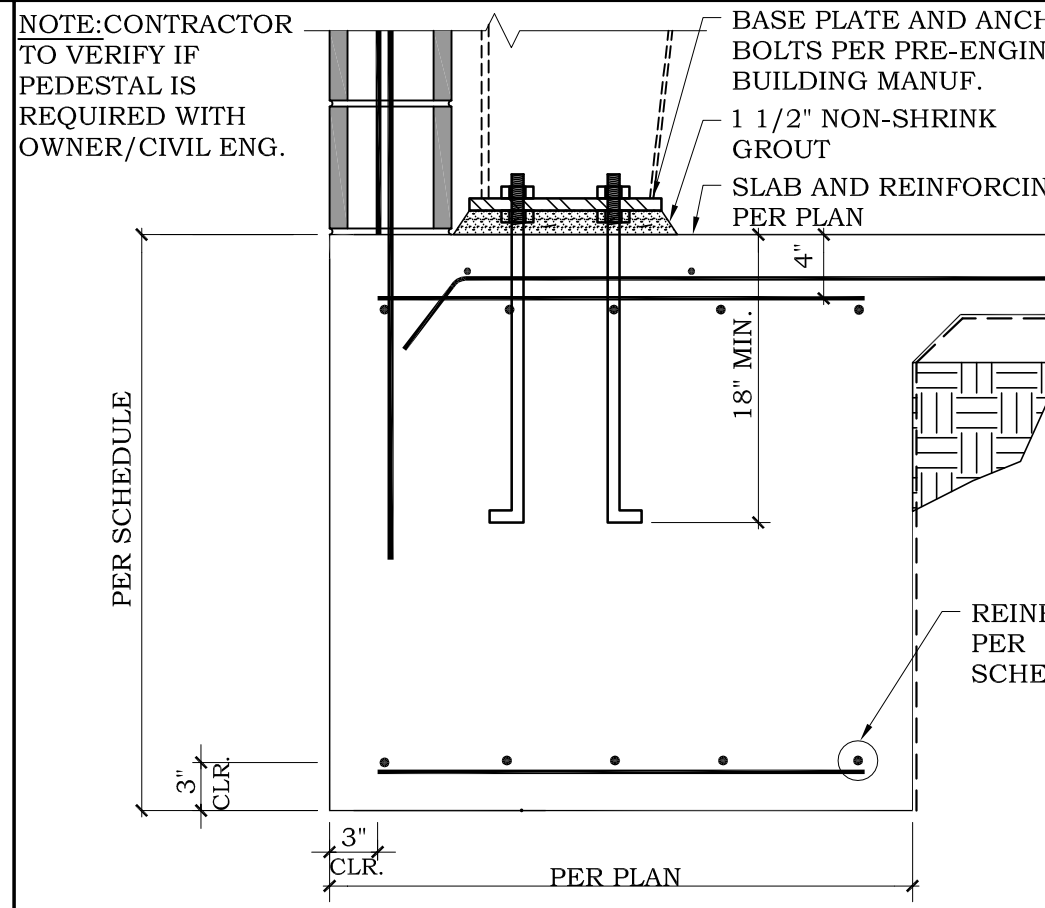
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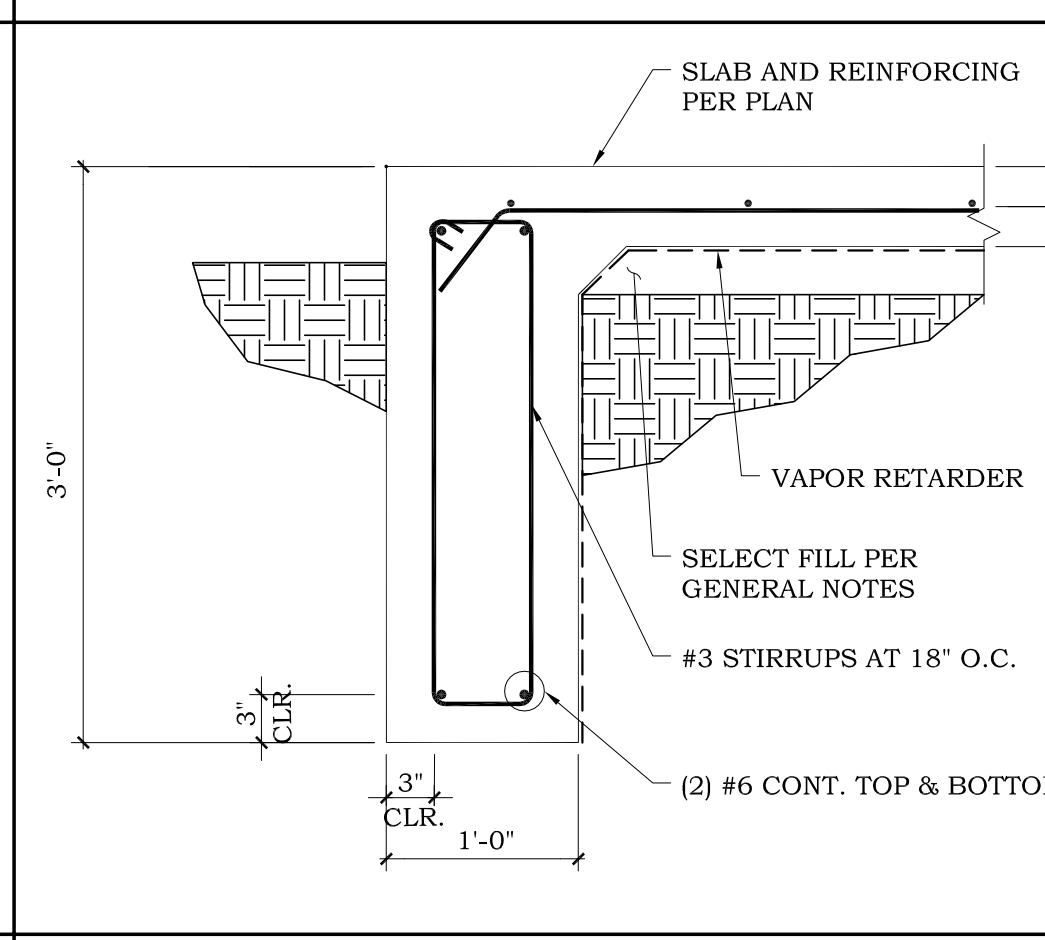
RIGID FRAME DETAIL

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FOOTING AT STEEL COLUMN

7

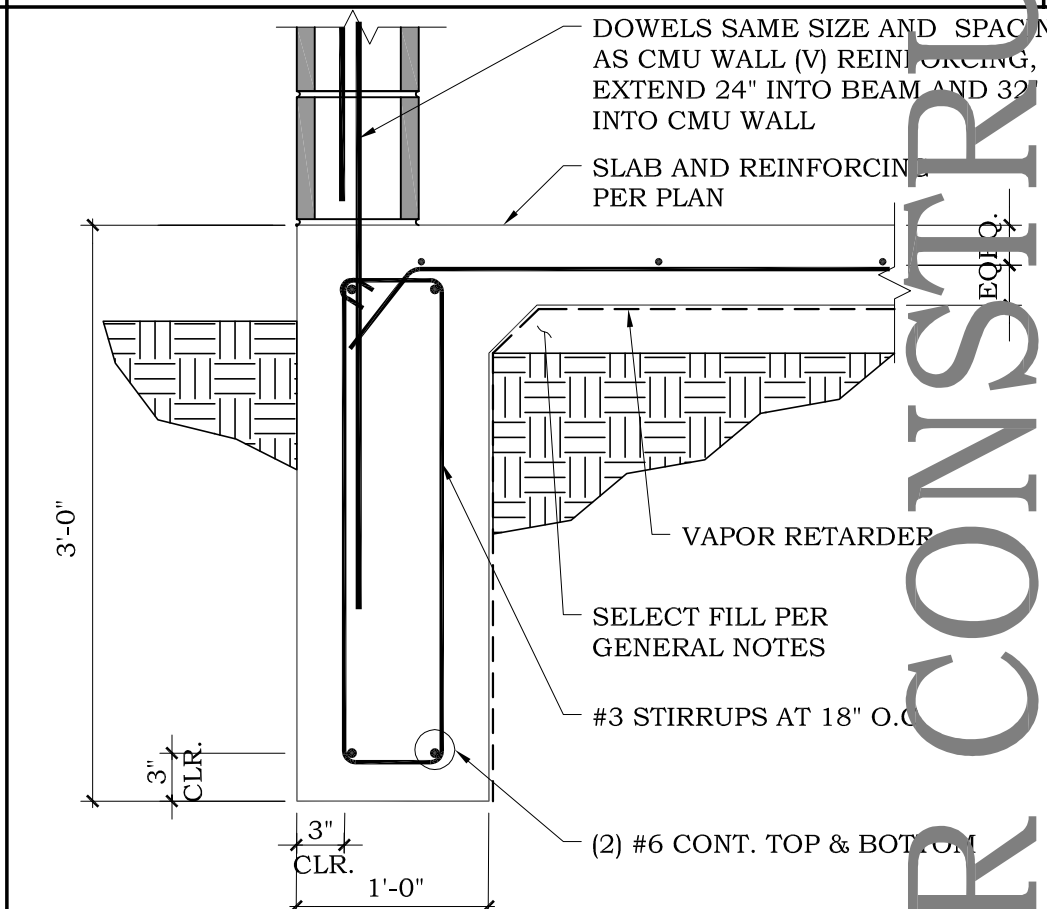


EXTERIOR FOOTING

8

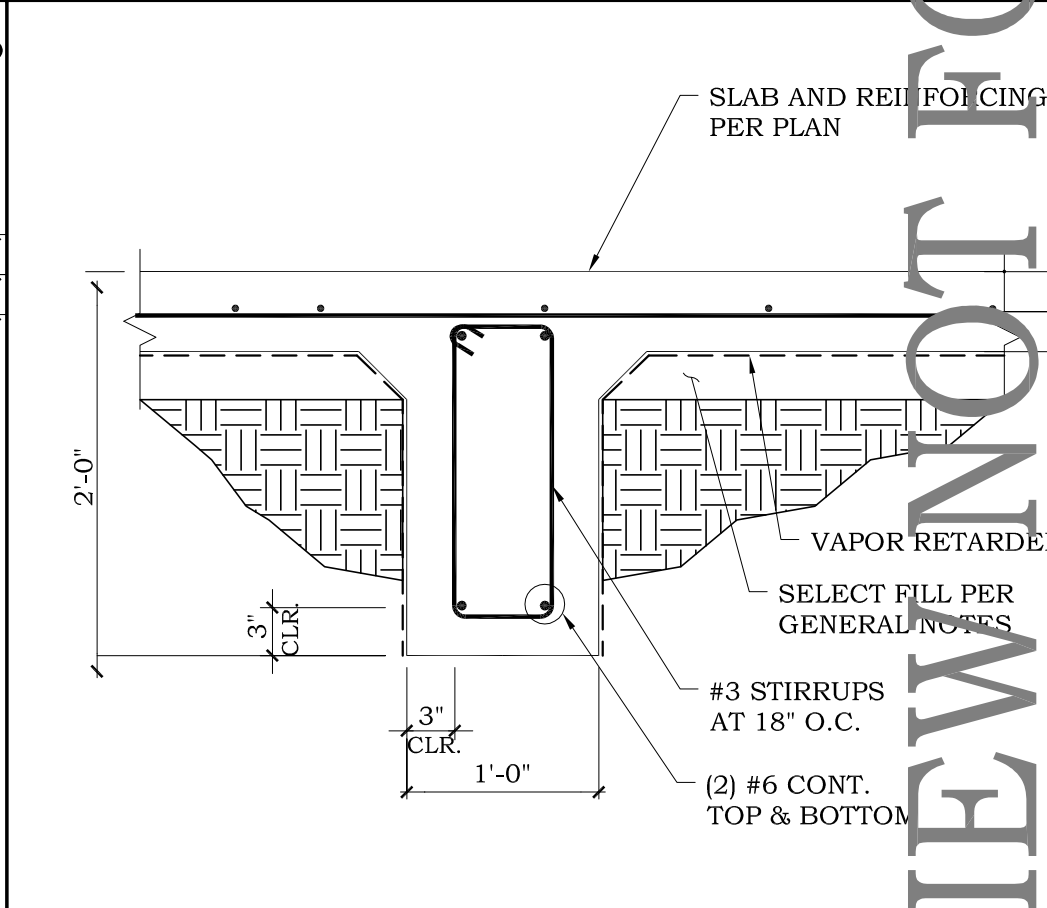
TYPICAL HAIR PINS

1



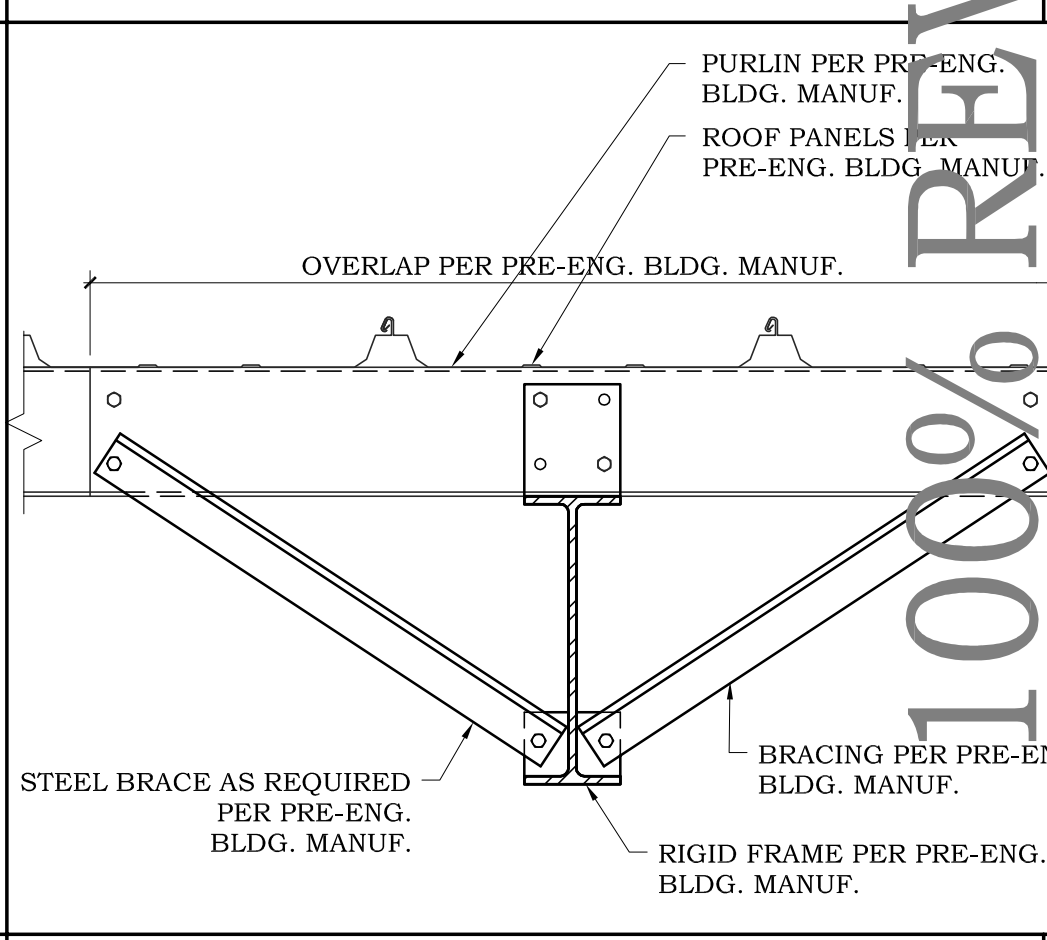
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2



INTERIOR FOOTING

3

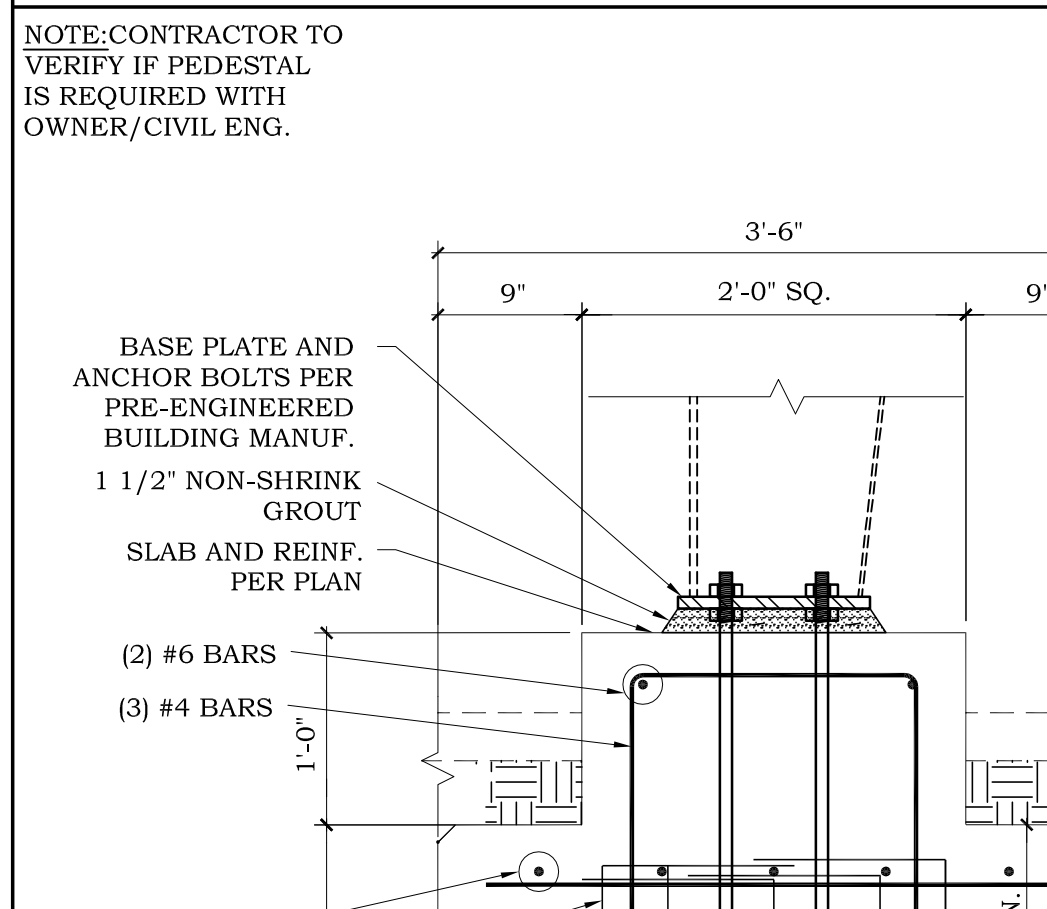


RIGID FRAME DETAIL

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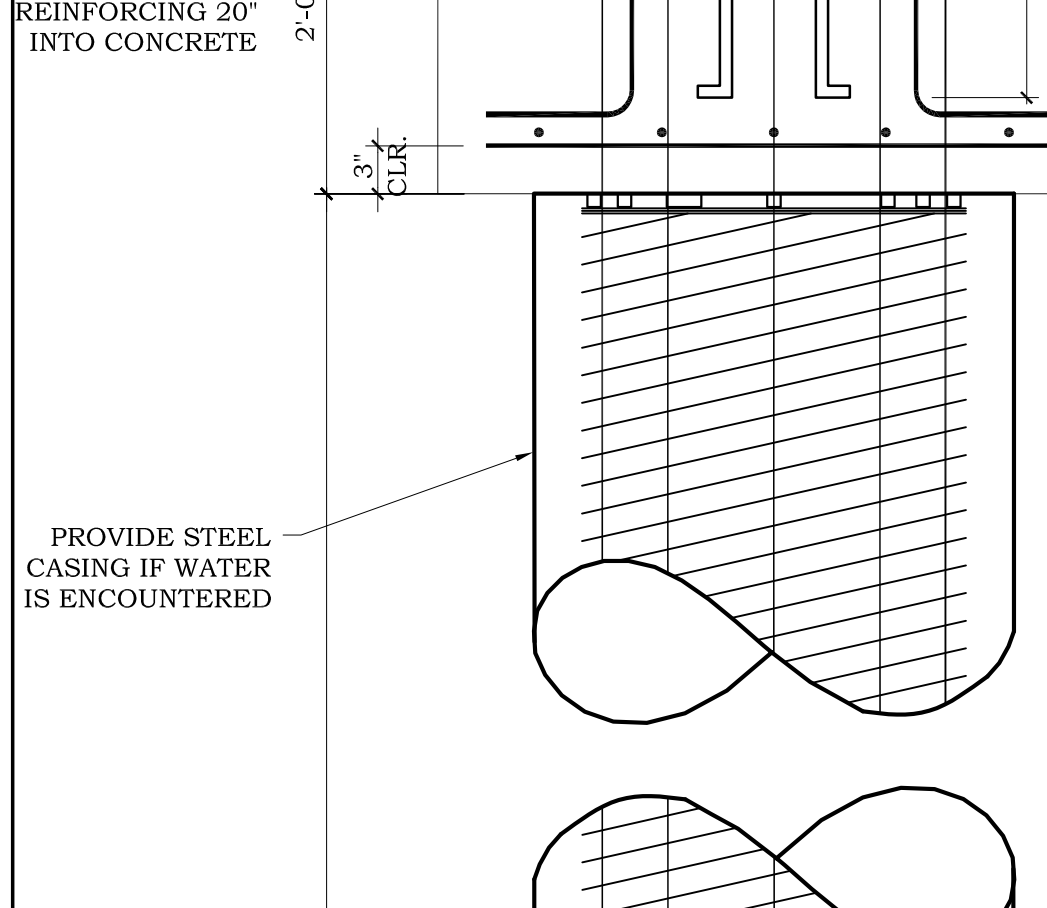
EXTERIOR FOOTING

17



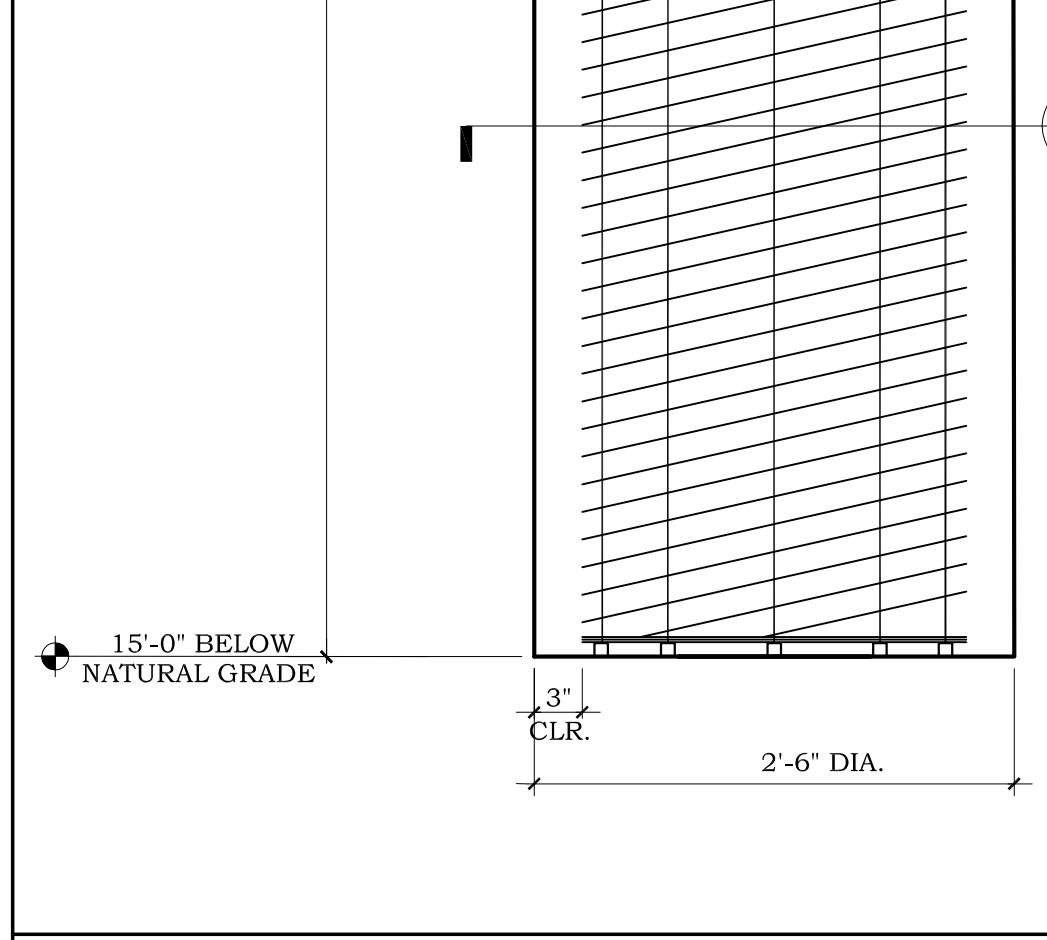
PIER DETAIL

20



LIGHT POLE DETAIL

16



PIER DETAIL

20

NOTE: IF ANY GROUND WATER IS ENCOUNTERED DURING DRILLING OPERATIONS, STEEL CASING MAY BE REQUIRED.

LIGHT POLE DETAIL

16

NOTE: CONTRACTOR TO VERIFY IF PEDESTAL IS REQUIRED WITH OWNER/CIVIL ENG.

REINFORCING PER SCHEDULE EXTEND 20" INTO CONCRETE

PROVIDE STEEL CASING IF WATER IS ENCOUNTERED

NOTE: CONTRACTOR TO VERIFY IF PEDESTAL IS REQUIRED WITH OWNER/CIVIL ENG.

BASE PLATE AND ANCHOR BOLTS PER PRE-ENGINEERED BUILDING MANUF.

1 1/2" NON-SHRINK GROUT

SLAB AND REINFORCING PER PLAN

REINFORCING PER SCHEDULE

SLAB AND REINFORCING PER PLAN

VAPOR RETARDER

SELECT FILL PER GENERAL NOTES

#3 STIRRUPS AT 18" O.C.

(2) #6 CONT. TOP & BOTTOM

(8) #6 CONT.

#3 SPIRAL w/ 6" PITCH

2'-0" DIA.

3" CLR.

15'-0" BELOW NATURAL GRADE

30" VERIFY WITH ARCHT. 1 1/2" CLR.

(E) NATURAL GRADE

2'-0" DIA.

3" CLR.

2'-0" DIA.

3" CLR.

2'-0" DIA.

3" CLR.

2'-0" DIA.

3" CLR.

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Precinct 4 - Recovery and
Motor Pool Improvements
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Edinburg, Texas 78542

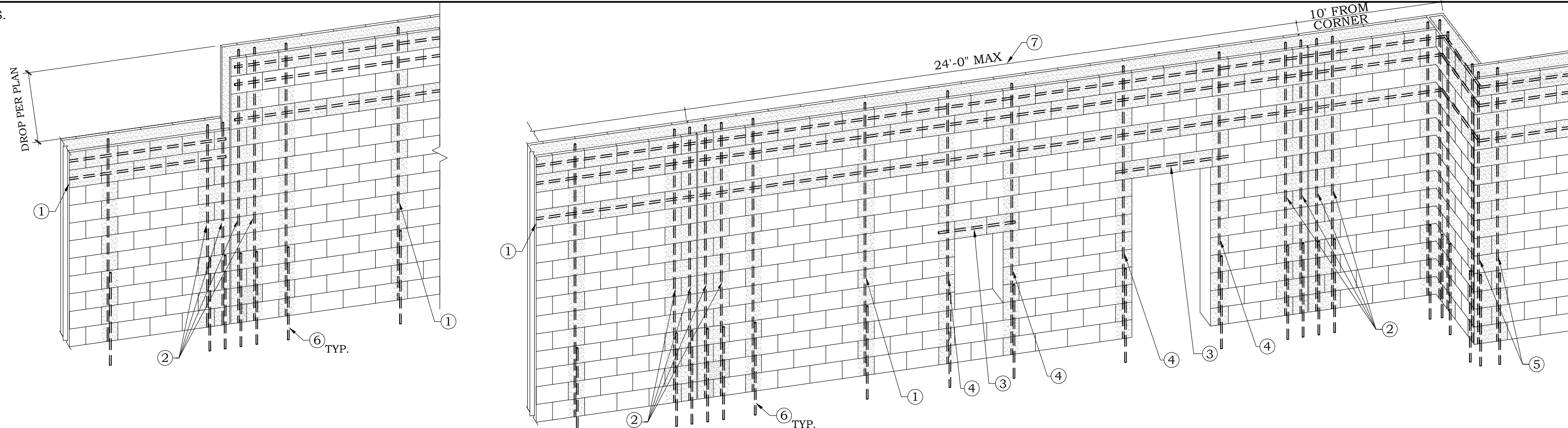
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TYPICAL DETAILS
S2.0
Sheet Number

- ① TYPICAL WALL REINFORCING AS CALLED OUT IN PLANS AND GENERAL NOTES.
- ② VERTICAL REINFORCING AT CONTROL JOINTS, REFER TO DETAIL (8) (S2.1)
- ③ LINTELS PER LINTEL SCHEDULE, REFER TO DETAIL (7) (S2.1)
- ④ ADDITIONAL VERTICAL REINFORCING AT JAMBS OF ALL OPENINGS
- ⑤ WALL CORNER REINFORCING, REFER TO DETAIL (2,3,4) (S2.1)
- ⑥ DOWELS TO MATCH VERTICAL REINFORCEMENT PER PLAN, TYPICAL
- ⑦ CONTROL JOINT SPACING AS NOTED IS MAXIMUM ALLOWED, COORDINATE CONTROL JOINT LOCATIONS w/OWNER.

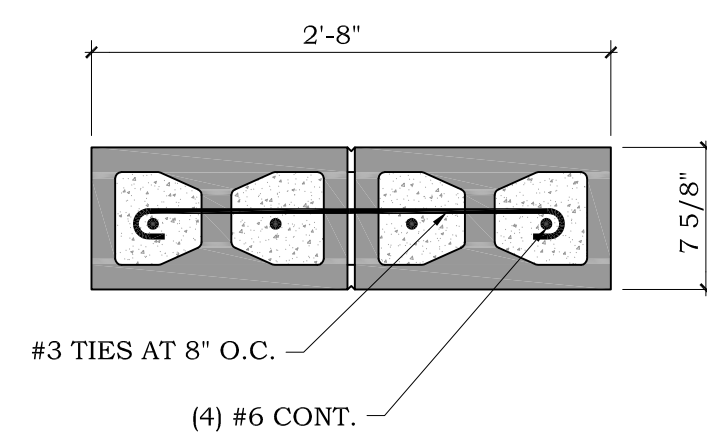


TYPICAL CMU WALL CONSTRUCTION

5

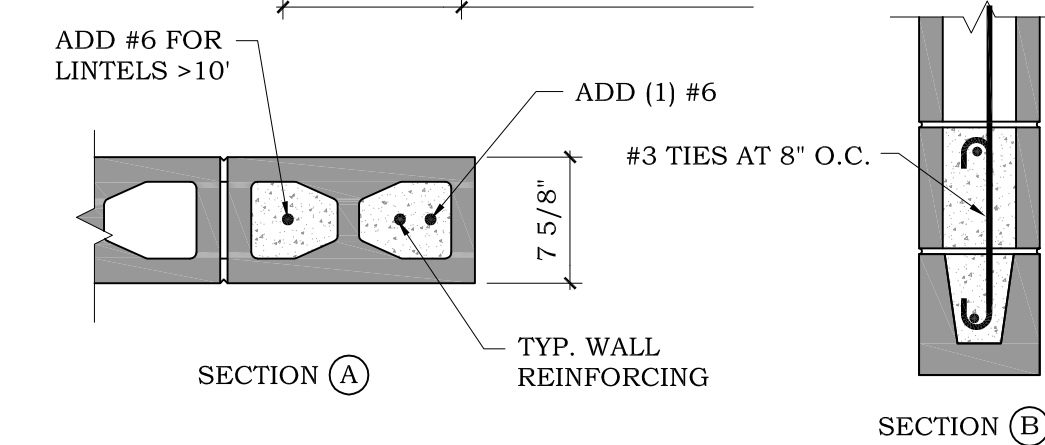
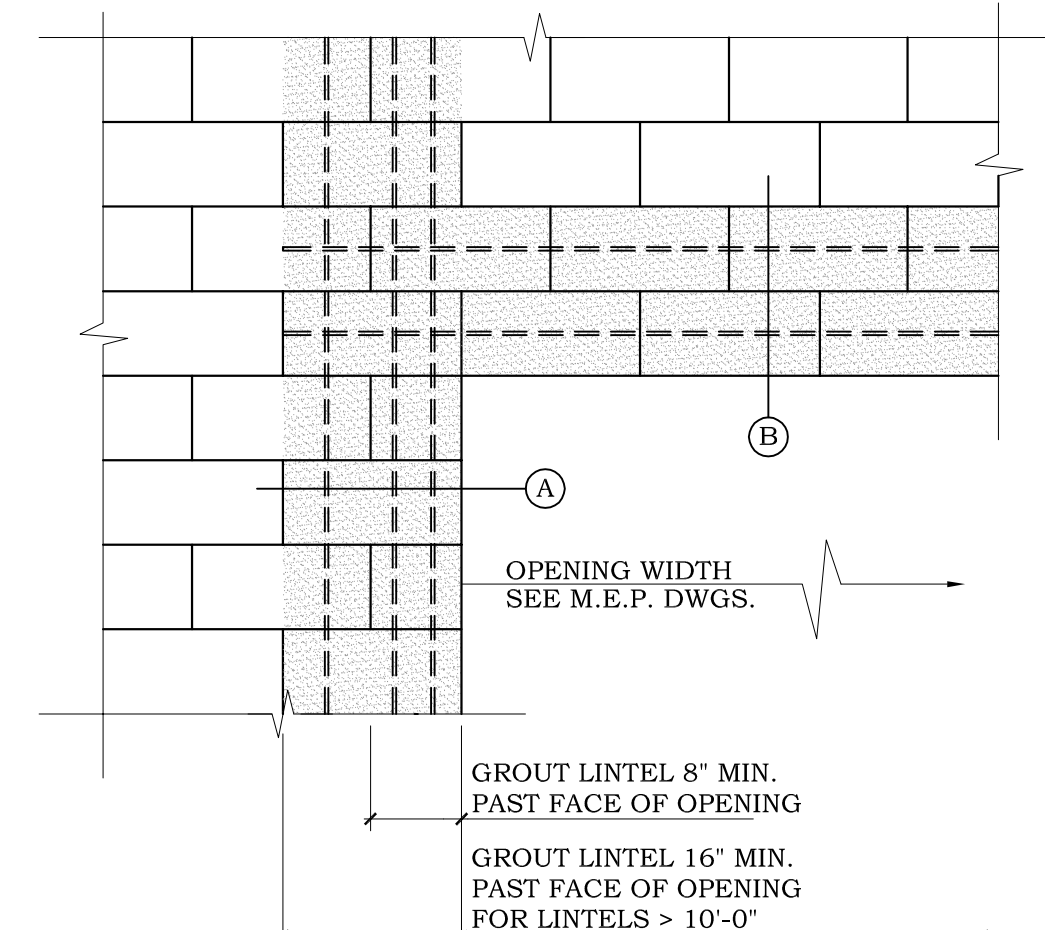
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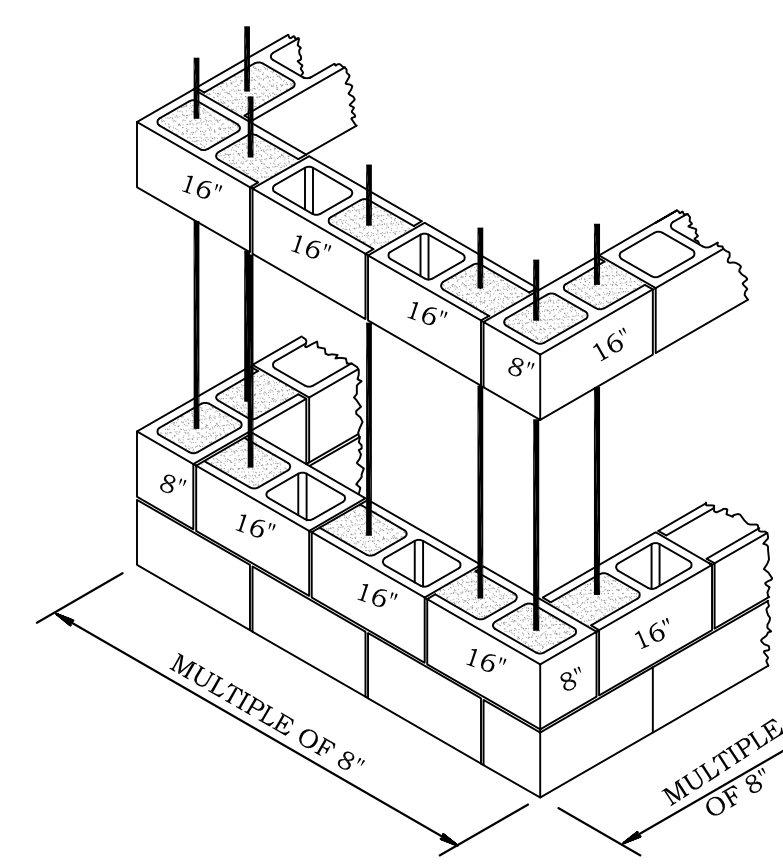


8" PILASTER "P1"

10



LINTEL SCHEDULE					
CLEAR SPAN	WIDTH	DEPTH	REINFORCING	#3 TIES AT:	REMARKS
<3'-4"	8"	8"	(1)#5		
<4'-8"	8"	16"	(1)#5 (T) & (B)	8"	
<6'-8"	8"	16"	(1)#6 (T) & (B)	8"	
<10'-0"	8"	24"	(1)#6 (T) & (B)	8"	
<12'-0"	8"	24"	(1)#7 (T) & (B)	8"	



TYPICAL CMU CORNER DETAIL

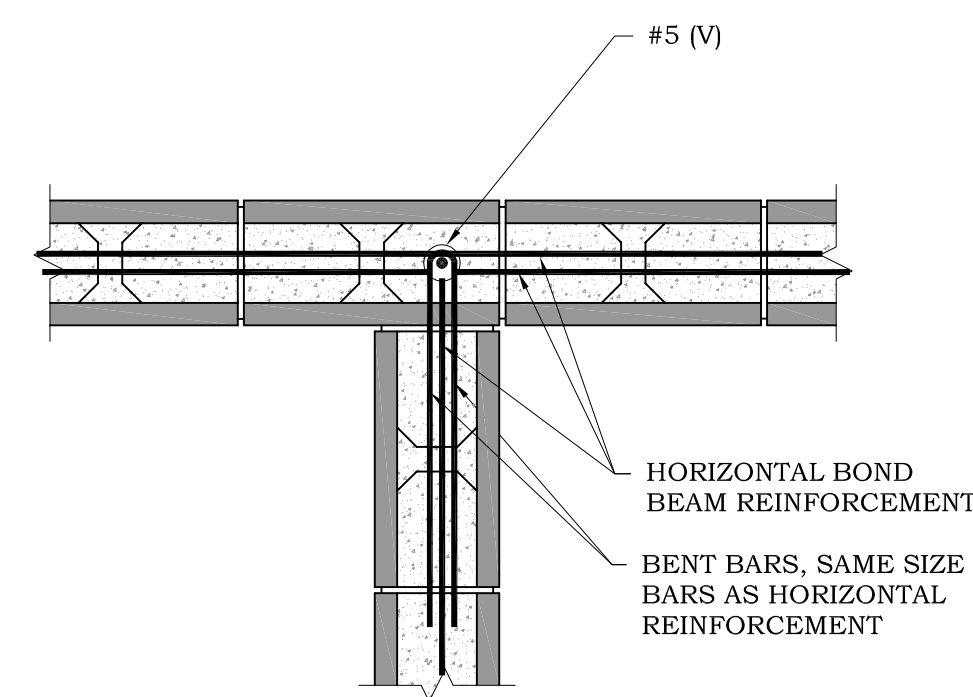
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18

NOT USED

14



TYPICAL BOND BEAM INTERSECTION

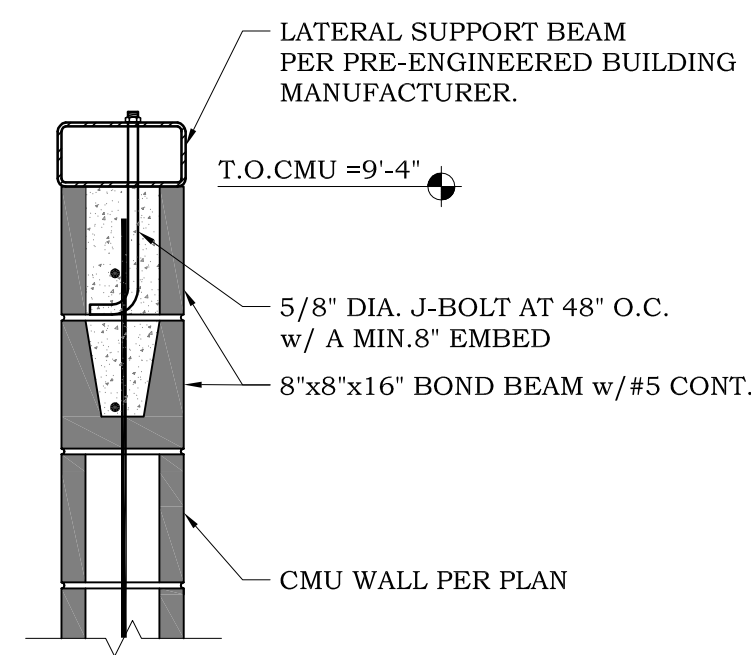
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LINTEL SCHEDULE

7

TYPICAL BOND BEAM CORNER

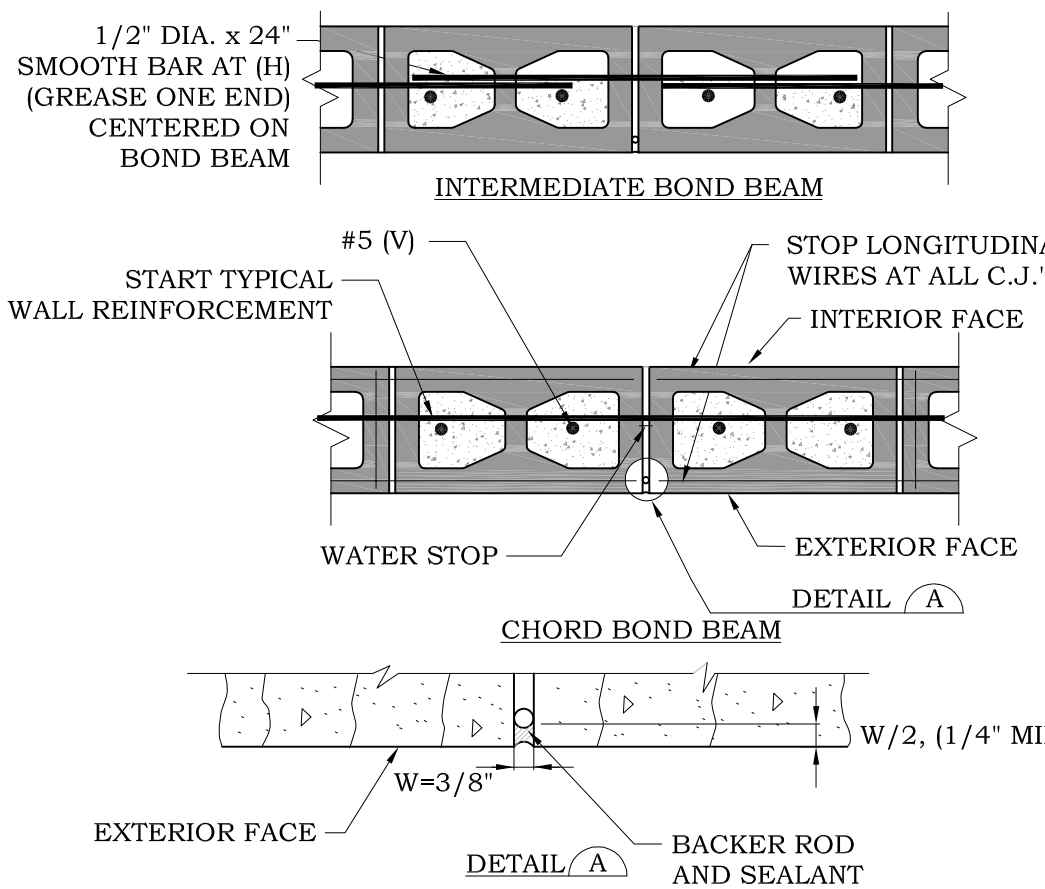
3



NOTE: ALL STEEL AND BOLT EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED (TYPICAL ALL PROJECT)

CMU WALL TO LATERAL SUPPORT BEAM

12



CMU CONTROL JOINT (C.J.)

8

TYPICAL BOND BEAM CORNER

4

NOT USED

20

NOT USED

16

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Hidalgo County
Precinct 4 - Recovery and
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1051 N. Doolittle Rd.
Edinburg, Texas 78542

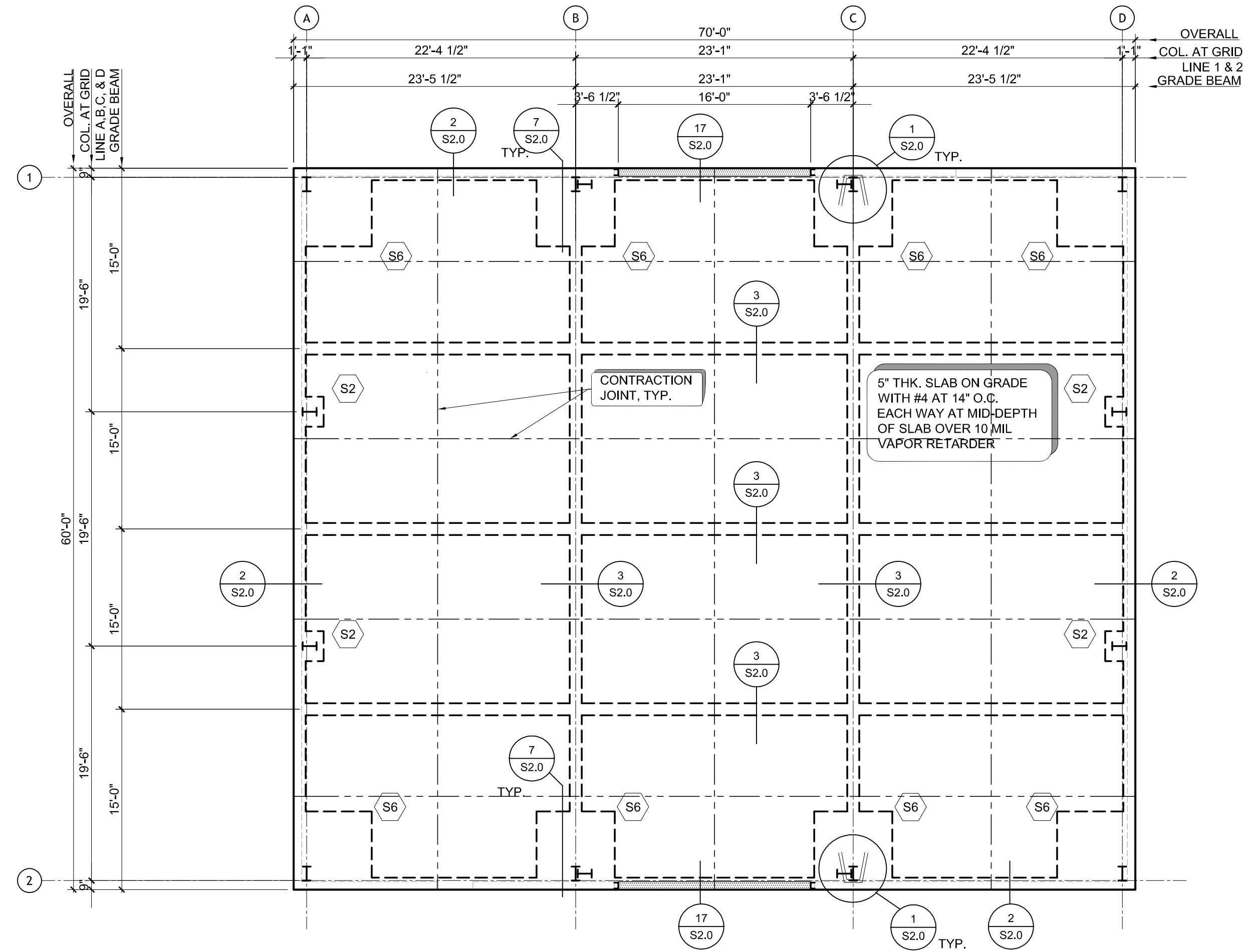
HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL: (361) 664-4882
FAX: (361) 664-4882
TBPE FIRM #1372

Revision No.	Date	Description

CHANIN ENGINEERING, LLC
TBPE FIRM REG. NUMBER F-9369
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www.chaninengineering.com

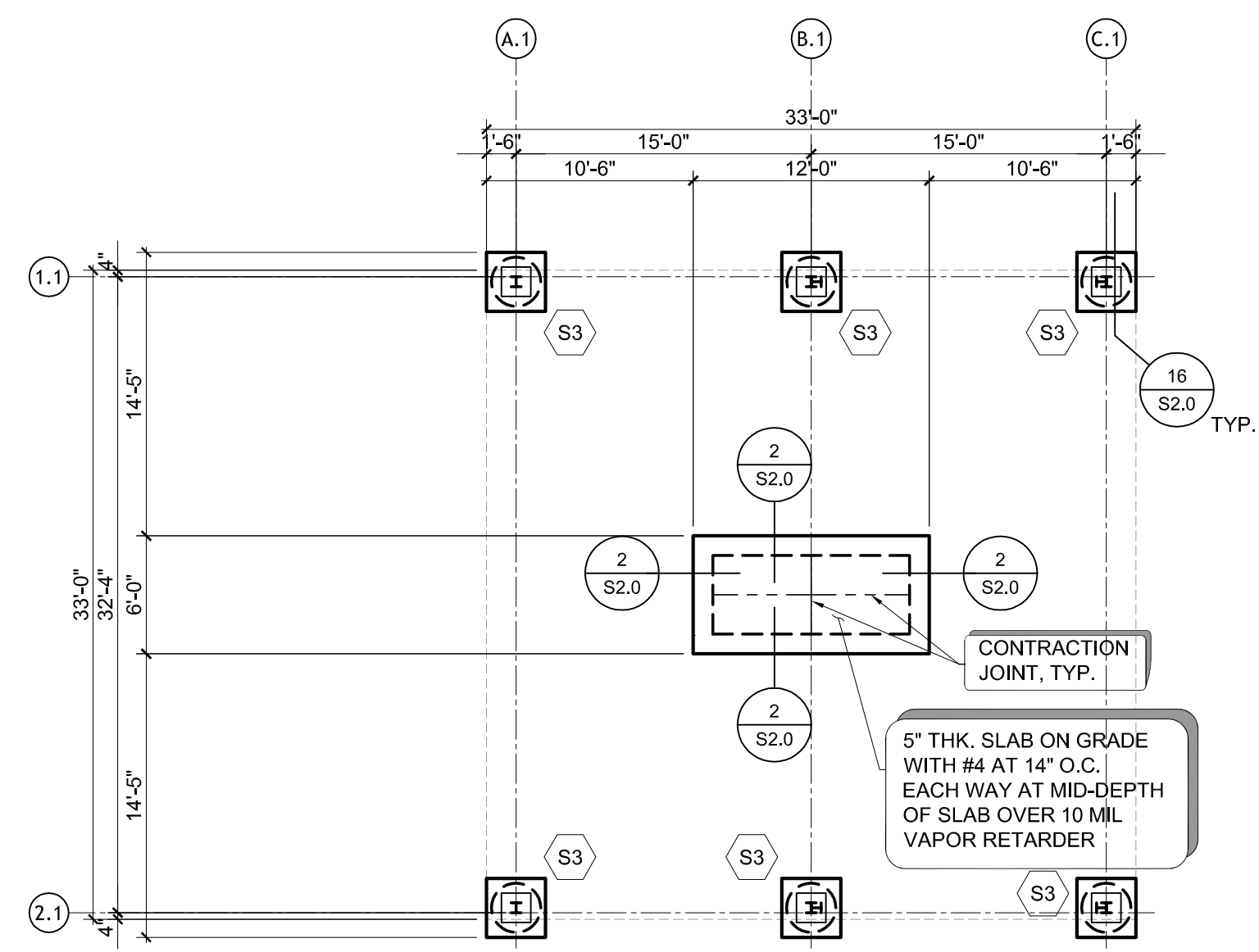
Project No.: 16218
Issued: 09 / 08 / 16
Drawn By: A.V
Checked By: M.C.
Scale: N.T.S.
Sheet Title
TYPICAL DETAILS
S2.1
Sheet Number

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Current Tab (Layout): MODEL User: #####
Printed Date: 9/7/2016 9:13:10 AM



- FOUNDATION NOTES:**
1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL M.E.P. PLANS BEFORE COMMENCING WORK.
 2. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
 3. REFER TO FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCEMENT, SEE DETAIL 14/S2.0
 4. [Symbol] INDICATES 1/2" SLAB DEPRESSION.

FOUNDATION PLAN
 SCALE: 1/8"=1'-0"

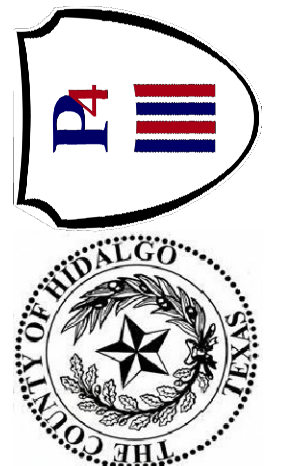


- FOUNDATION NOTES:**
1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL M.E.P. PLANS BEFORE COMMENCING WORK.
 2. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
 3. REFER TO FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCEMENT, SEE DETAIL 14/S2.0
 4. [Symbol] INDICATES 1/2" SLAB DEPRESSION.

FOUNDATION PLAN
 SCALE: 1/8"=1'-0"

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Hidalgo County
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 Motor Pool Improvements
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 Edinburg, Texas 78542



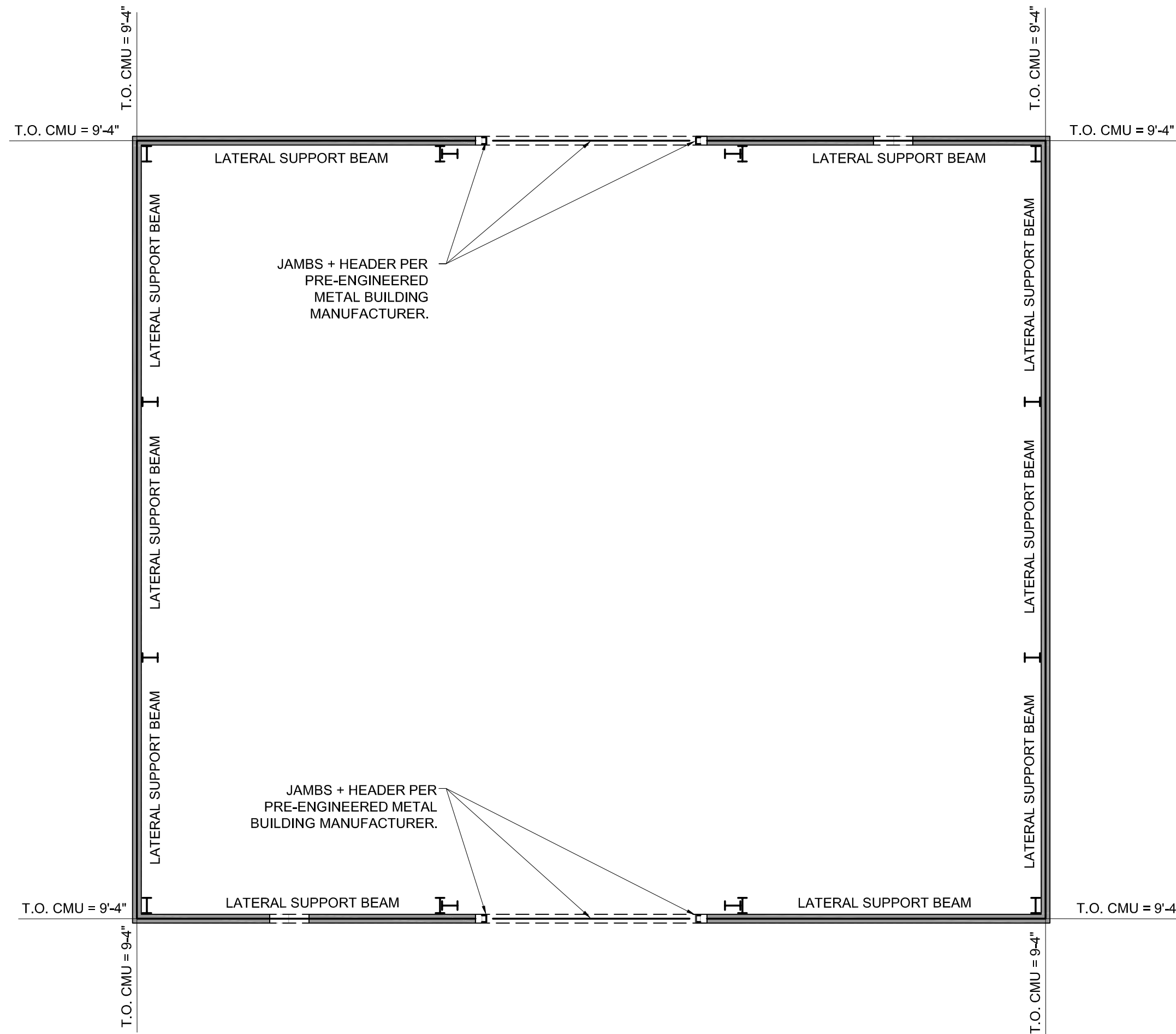
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 FAX: (956) 664-4982
 TBPE FIRM # 572

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Project No.:	16218
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Checked By:	M.C.
Scale:	1/8"=1'-0"
Sheet Title	FOUNDATION PLAN

S3.0
 Sheet Number



CMU WALL LAYOUT NOTES:

1. IF ANY DISCREPANCIES ARE FOUND BETWEEN THESE DRAWINGS AND THE M.E.P. DRAWINGS THE CONTRACTOR SHALL NOTIFY THE M.E.P. ENGINEER AND ENGINEER BEFORE COMMENCING CONSTRUCTION.
2. FOR TYPICAL CMU WALL CONSTRUCTION SEE SHEET S2.1
3. INDICATES EXTERIOR 8" CMU WALL WITH #5 (V) AT 8" O.C. AND #5 (H) AT 8'-0" O.C., U.N.O.
4. INDICATES LINTEL, SEE DETAIL 7/S2.1
5. FOR SPECIAL INSPECTION REQUIREMENTS SEE GENERAL NOTES.
6. ALL TOP OF WALLS FROM FINISH FLOOR ELEVATION 0'-0".
7. SEE M.E.P. PLANS FOR EXACT LOCATION, LENGTH, AND HEIGHT OF ALL OPENINGS IN CMU WALLS.
8. FOR CONTROL JOINT LOCATIONS, SEE 5/S2.1
9. PROVIDE CMU LINTEL OVER ALL MECHANICAL SYSTEM PENETRATIONS IN CMU WALL. COORDINATE WITH MEP DRAWINGS FOR ALL LOCATIONS.
10. 8" CMU WALL IS A NOMINAL DIMENSION, ACTUAL WIDTH IS 7 5/8".

CMU WALL LAYOUT PLAN
 SCALE: 1/8"=1'-0"

100% REVIEW NOT FOR CONSTRUCTION

Revision No.	Date	Description

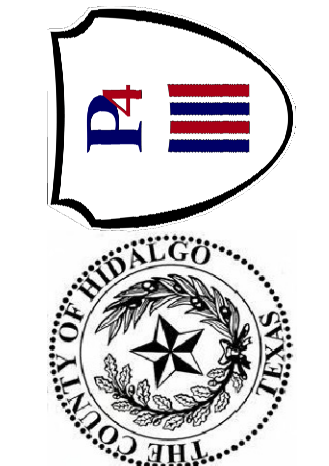
CHANIN ENGINEERING, LLC
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Project No.:	16218
Issued:	09 / 08 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	1/8"=1'-0"

Sheet Title
 CMU WALL LAYOUT PLAN

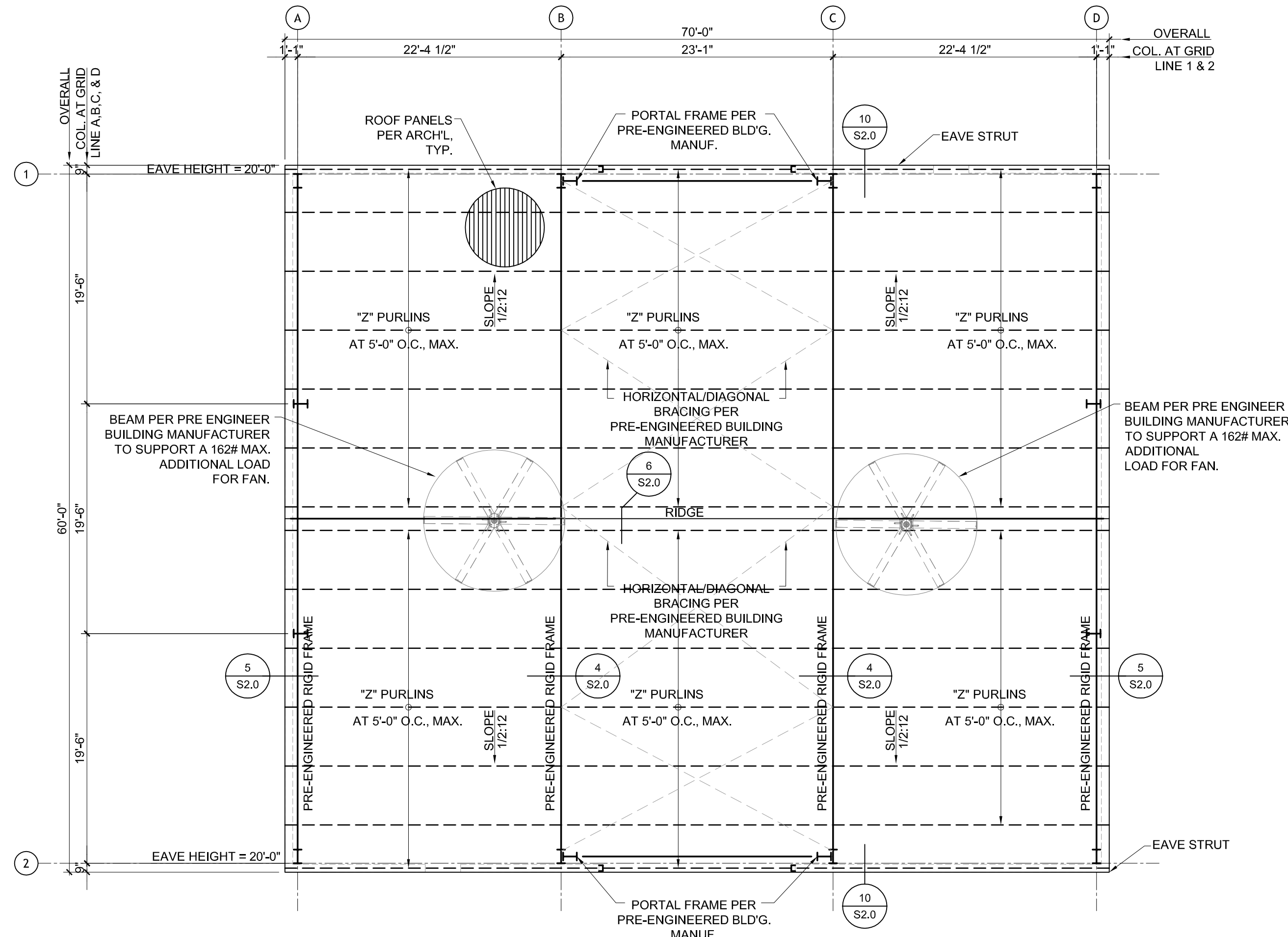
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Sheet Number



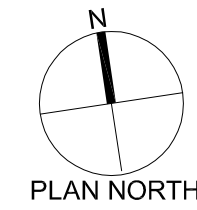
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 Edinburg, Texas 78542

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 FAX: (956) 664-4982
 TBPE FIRM # 5172



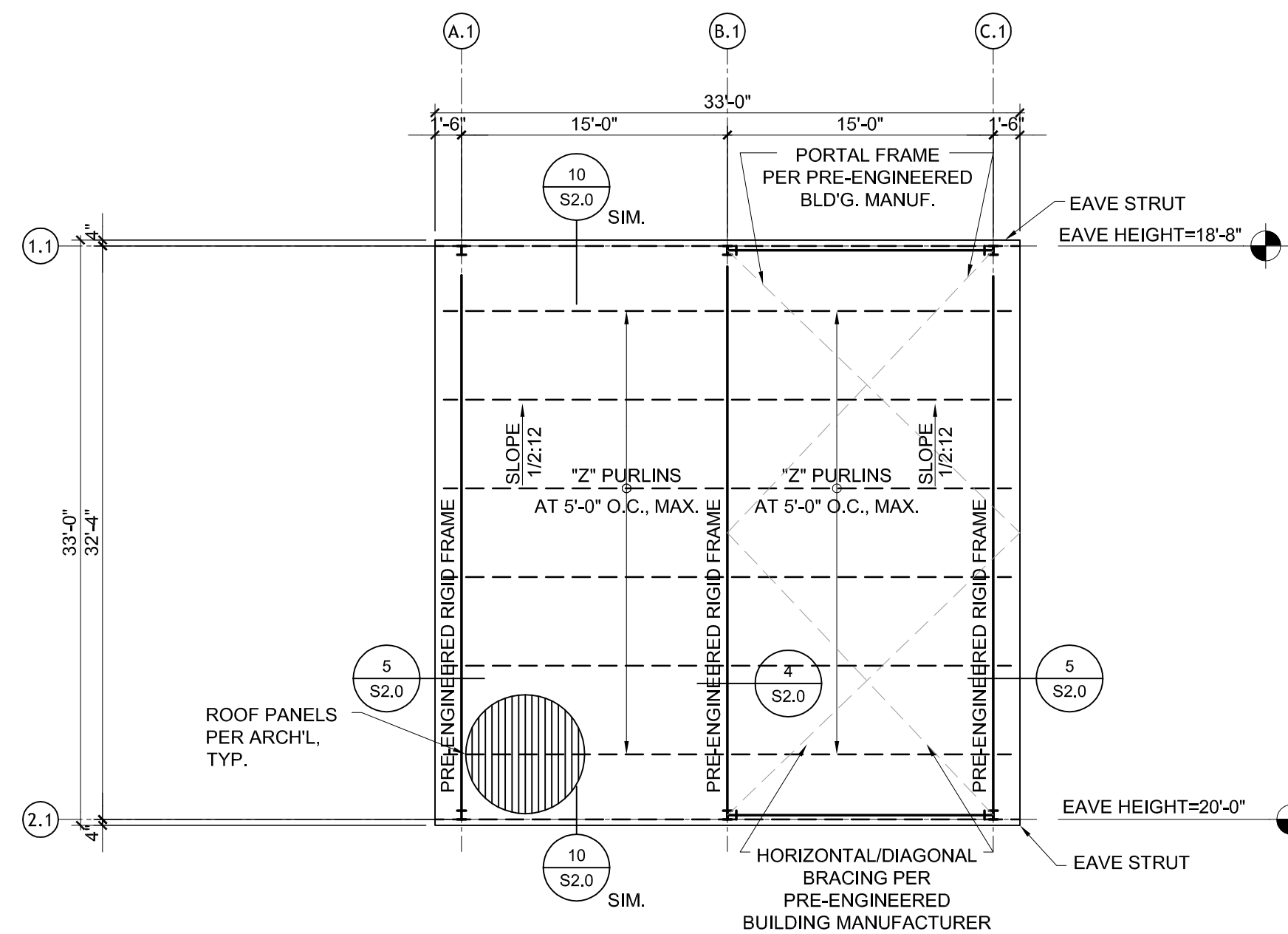
FRAMING NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL AND M.E.P. PLANS BEFORE COMMENCING WORK.
2. REFER TO CIVIL AND M.E.P. DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. CONTRACTOR TO COORDINATE ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTURER.



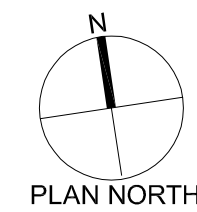
ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"



FRAMING NOTES:

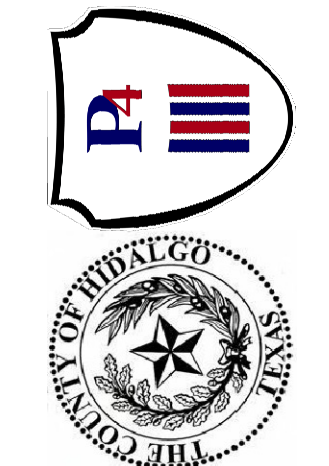
1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL AND M.E.P. PLANS BEFORE COMMENCING WORK.
2. REFER TO CIVIL AND M.E.P. DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. CONTRACTOR TO COORDINATE ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTURER.



ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"

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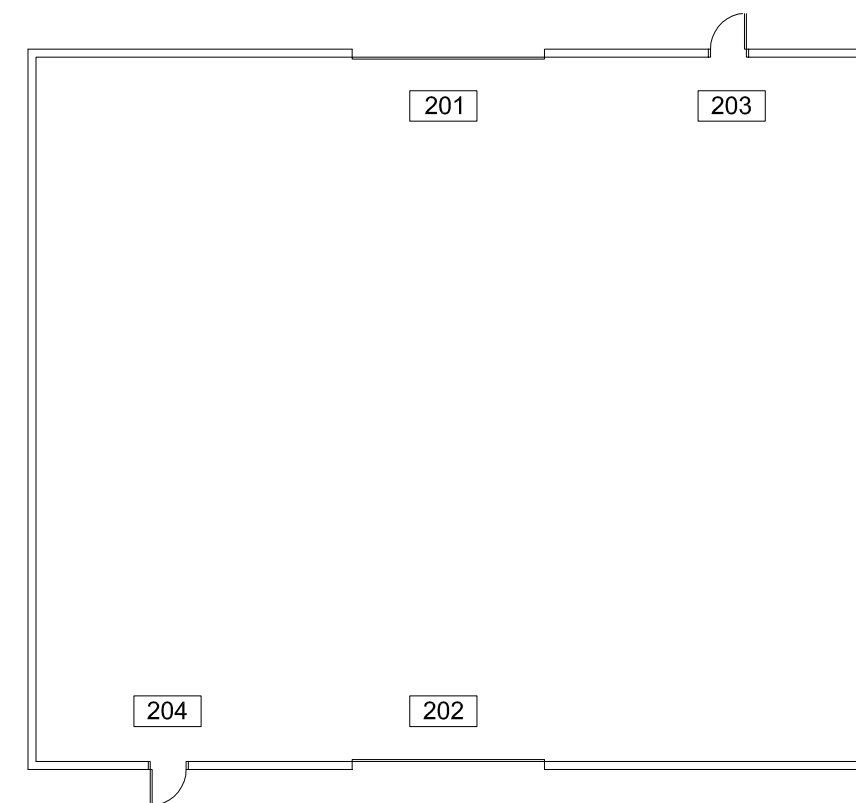
Revision No.	Date	Description

CHANIN ENGINEERING, LLC
 TBPE FIRM REG. NUMBER F-9369
 PH: (956) 687-9421
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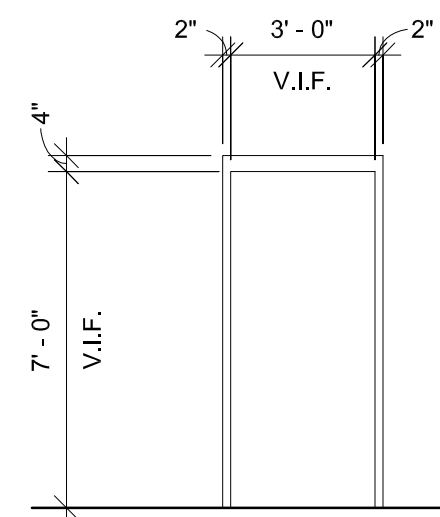
Project No.:	16218
Issued:	09 / 08 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	1/8"=1'-0"
Sheet Title	

ROOF FRAMING PLAN
S5.0
 Sheet Number

DOOR SCHEDULE														
NUMBER	DOOR						FRAME		REFERENCE DETAIL			HARDWARE	FIRE RATING	REMARKS
	WIDTH	HEIGHT	THICKNESS	TYPE	FINISH	GLAZING	TYPE	FINISH	HEAD	JAMB	SILL			
201	16' - 0"	16' - 0"	PER MFR.	A	PAINT	-	-	-	4	5	-	BY MFR.	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
202	16' - 0"	16' - 0"	PER MFR.	A	PAINT	-	-	-	4	5	-	BY MFR.	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
203	3' - 0"	7' - 0"	1 3/4"	B	PAINT	-	A	PAINT	7	6	-	SEE SPECS	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
204	3' - 0"	7' - 0"	1 3/4"	B	PAINT	-	A	PAINT	7	6	-	SEE SPECS	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE

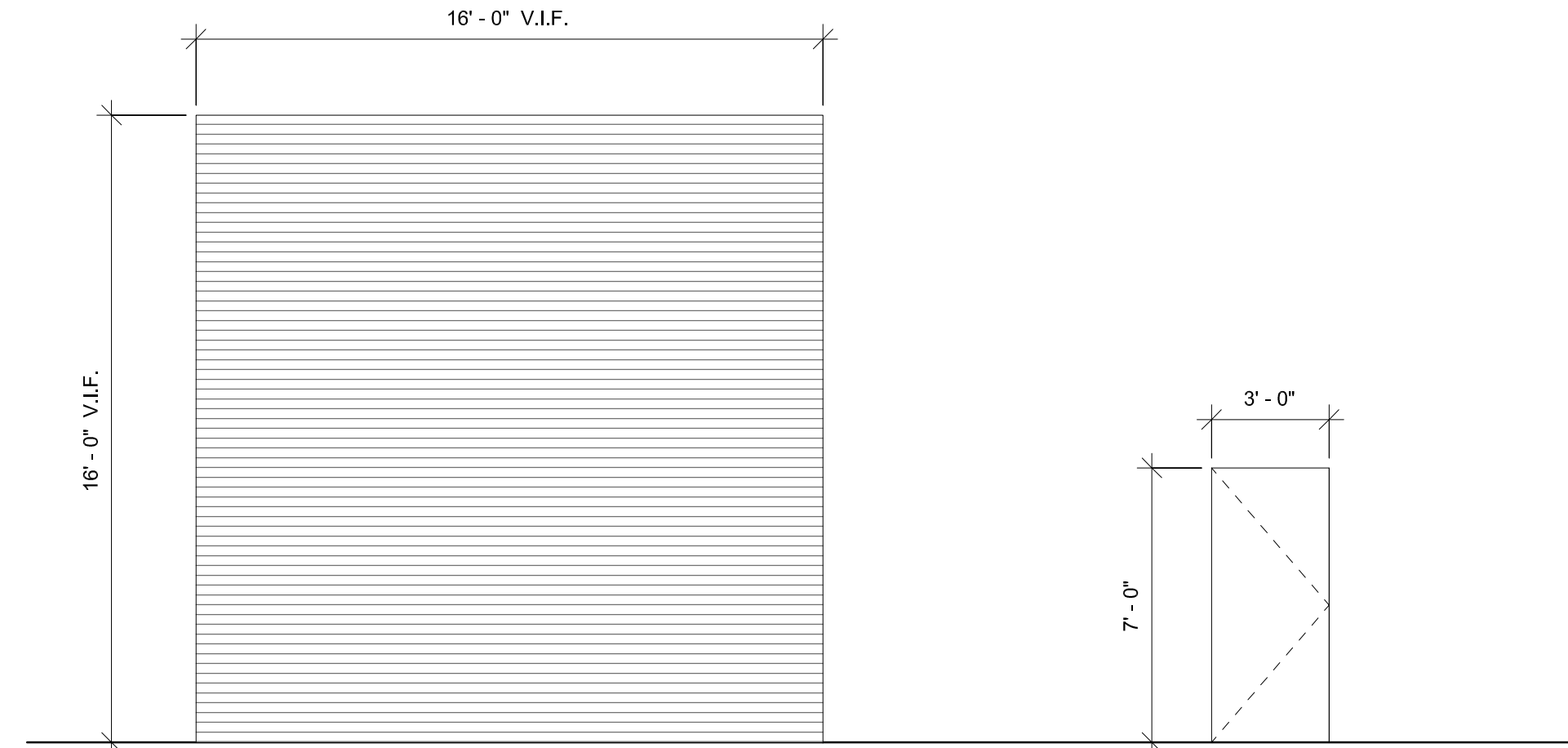


1 STORAGE BUILDING FLOOR PLAN
1/16" = 1'-0"



A HOLLOW METAL

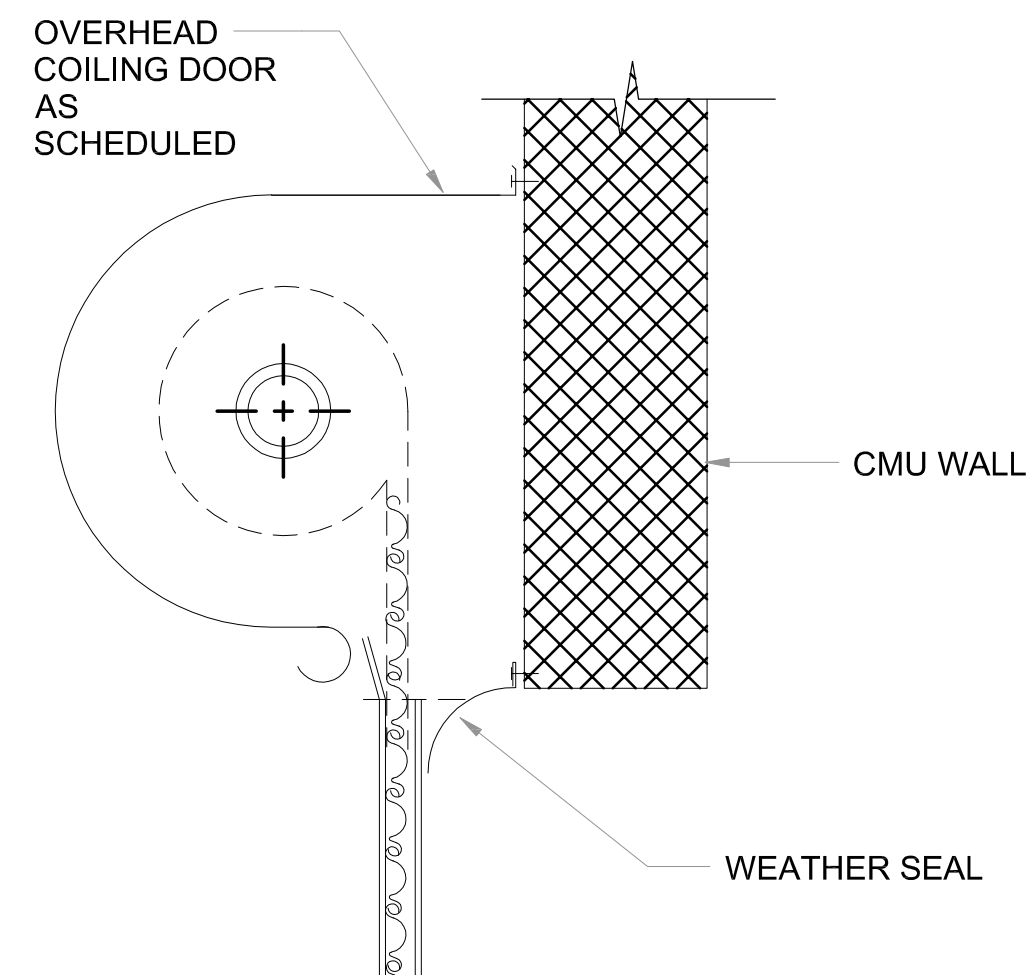
2 FRAME TYPES
1/4" = 1'-0"



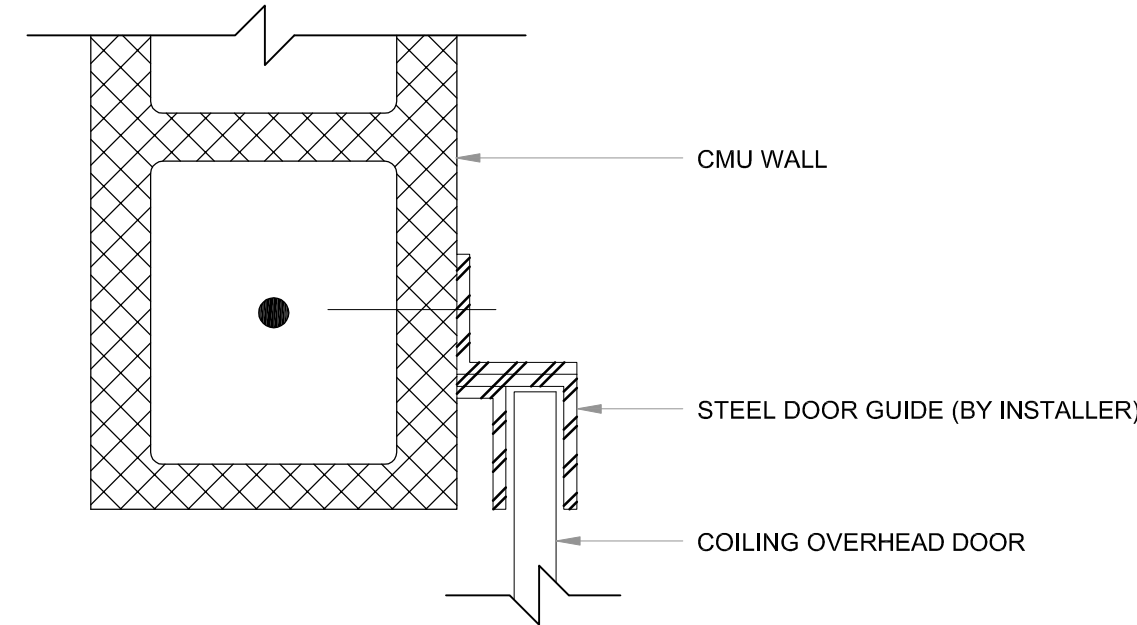
A OVERHEAD COILING DOOR

B HOLLOW METAL DOOR

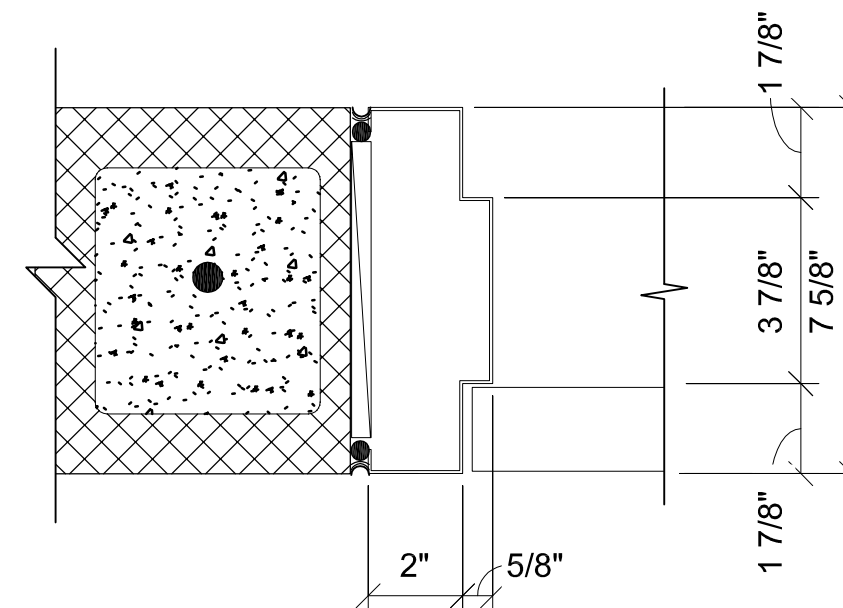
3 DOOR TYPES
1/4" = 1'-0"



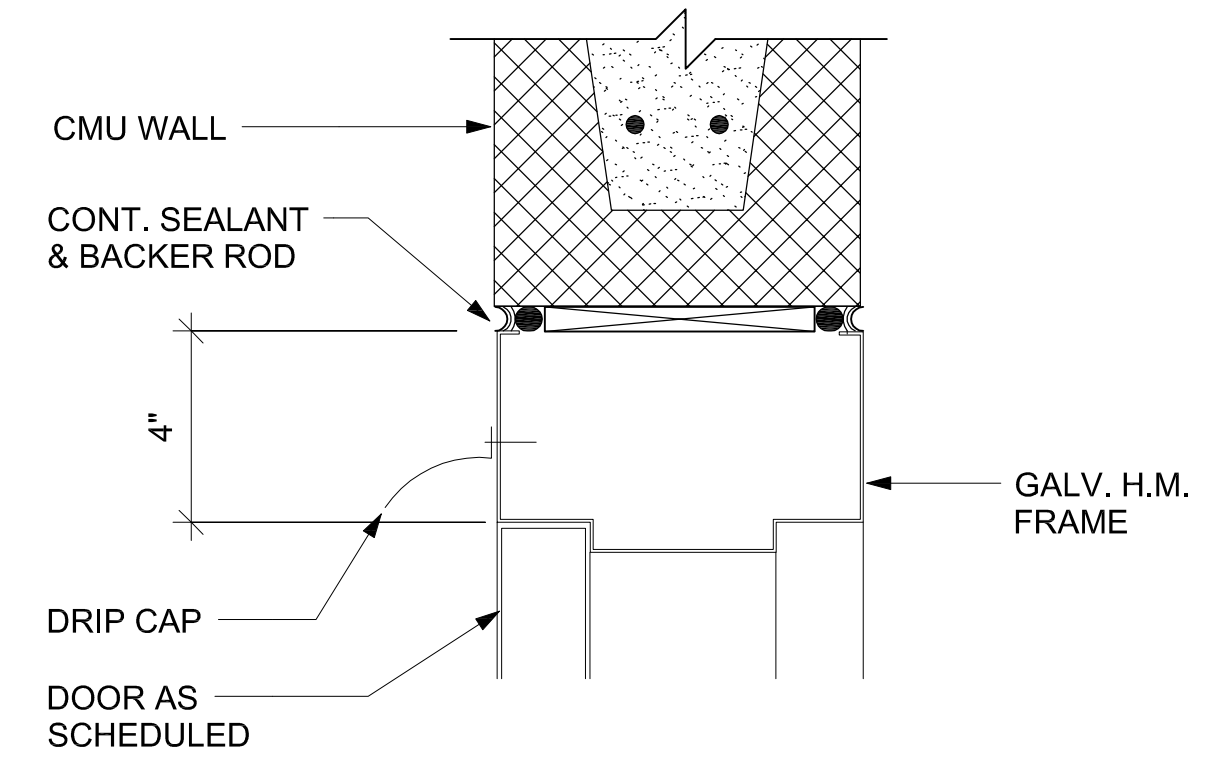
4 OVERHEAD DOOR HEAD
1 1/2" = 1'-0"



5 OVERHEAD DOOR JAMB
3" = 1'-0"

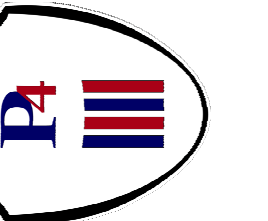


6 H.M. EXTERIOR JAMB
3" = 1'-0"



7 H.M. EXTERIOR HEAD
3" = 1'-0"

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TBE FIRM # 5172

Revision No.	Date	Description

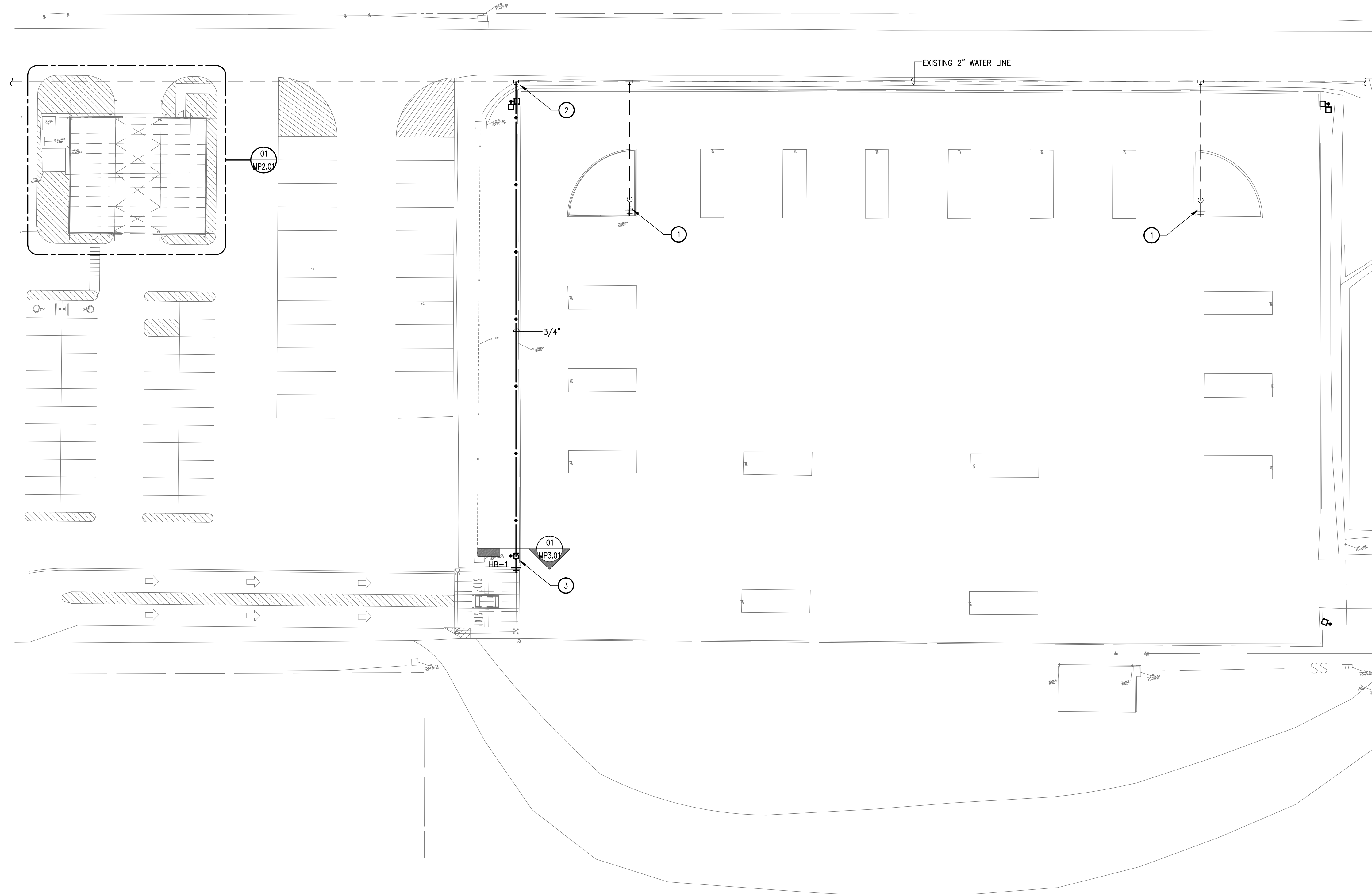
Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED

Sheet Title
STORAGE BUILDING DOORS

Sheet Number
B-101

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 Current Tab (Layout): MP1.01 - SITE PLAN User: AH2522
 Printed Date: 9/7/2016 11:29:23 AM



GENERAL NOTES:
 A. PLUMBING CONTRACTOR SHALL ADHERE TO ALL CITY, STATE AND LOCAL CODES THAT HAVE AUTHORITY OVER THIS PROJECT.

KEY NOTES: ①
 1. EXISTING HOSE BIBS.
 2. CONNECT TO EXISTING 2" WATER LINE.
 3. COORDINATE LOCATION OF NEW HOSE BIB WITH OWNER IN THE FIELD.

01 PLUMBING SITE PLAN
 SCALE: 1"=30'

Hidalgo County
 Precinct 4 - Recovery and
 Motor Pool Improvements
 1051 N. Doolittle Rd.
 Edinburg, Texas 78542

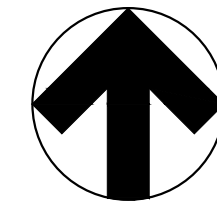
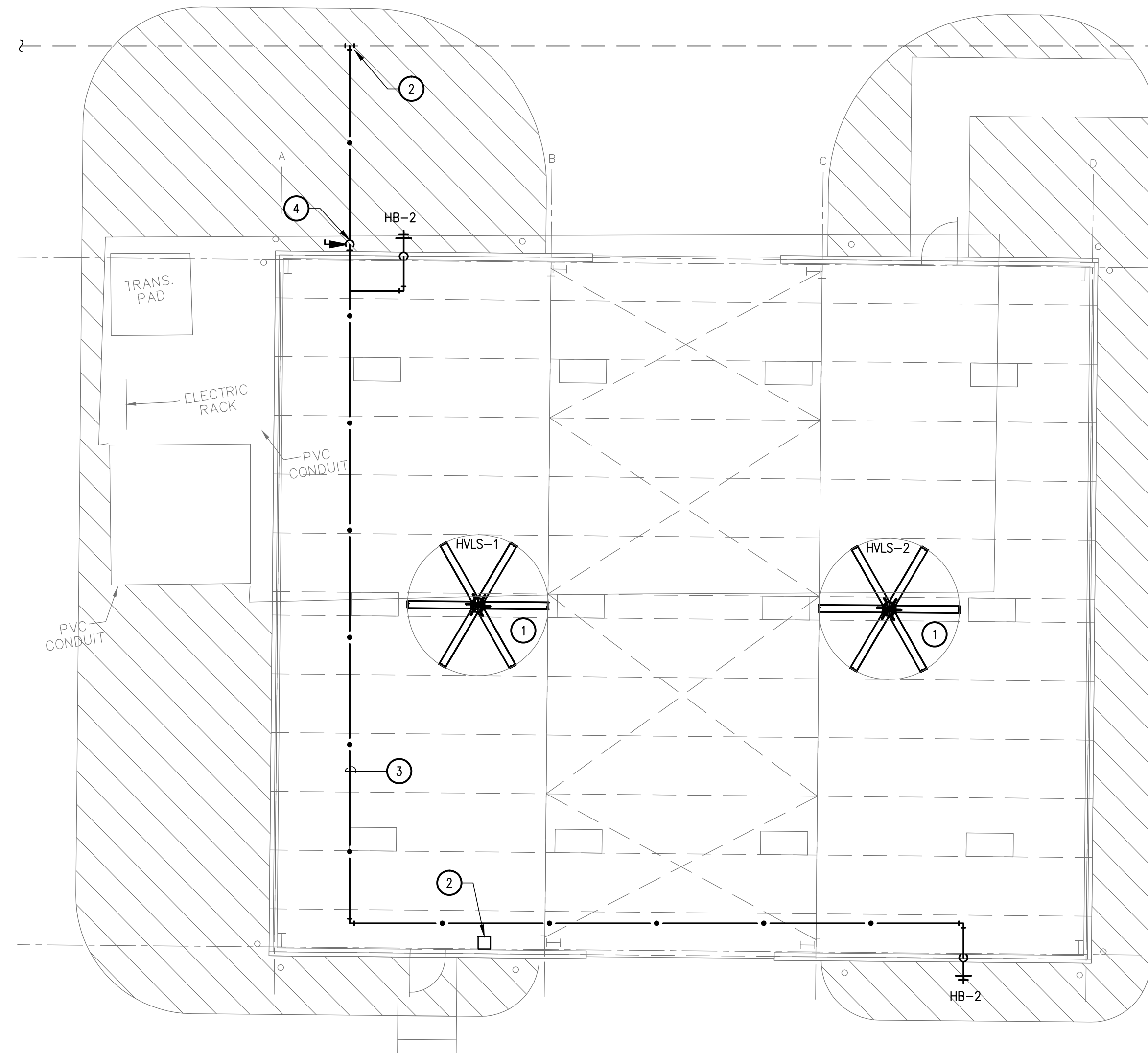
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 TBP# FIRM #F-312

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 MERTON J. MURRAY III, P.E. 87004, 9/7/2016.
 TBP# FIRM #F-312

Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	SITE PLAN
Sheet Number	MP1.01

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01

**ENLARGED MECHANICAL & PLUMBING PLAN -
 STORAGE BUILDING**
 SCALE: 1/8" = 1'-0"

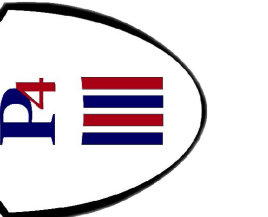
GENERAL NOTES:

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

KEY NOTES: #

1. COORDINATE MOUNTING OF HVLS FANS WITH BUILDING STRUCTURE AND OTHER TRADES.
2. COORDINATE INSTALLATION OF FAN CONTROLLER WITH ELECTRICAL DEVICES.
3. DOMESTIC WATER PIPING WITHIN INTERIOR OF BUILDING SHALL BE INSULATED WITH 1" MINERAL FIBER PERFORMED PIPE INSULATION TYPE 1.
4. EXPOSED DOMESTIC WATER PIPING AT EXTERIOR OF BUILDING SHALL BE INSULATED WITH 2" MINERAL FIBER PERFORMED PIPE INSULATION TYPE 1 AND FIELD APPLIED JACKET TO PREVENT FREEZING.

Hidalgo County
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Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED

Sheet Title
 ENLARGED MECHANICAL &
 PLUMBING PLAN - STORAGE
 BUILDING

MP2.01
 Sheet Number

HVLS FAN SCHEDULE

TAG	DIAMETER	BLADE QTY.	HP	RPM	DRIVE	WEIGHT (LBS)	CFM	VOLT/PHASE	MCA/MOCP	POWER USAGE (W)	MANUFACTURER	MODEL	NOTES
HVLS-1	12 FT	6	1.05	137	DIRECT	162	106,000	208/1	7.3/10	920	MACRO AIR	AVD550	ALL
HVLS-2	12 FT	6	1.05	137	DIRECT	162	106,000	208/1	7.3/10	920	MACRO AIR	AVD550	ALL

- NOTES:
- FAN SHALL BE GEARLESS DIRECT DRIVE; NO GEARBOX OR VFD REQUIRED. MOTOR SHALL BE BRUSHLESS PERMANENT MAGNET, TRANSVERSE-FLUX DC MOTOR.
 - FAN SHALL BE VARIABLE SPEED.
 - PROVIDE FAN WITH FUSED DISCONNECT.
 - PROVIDE SINGLE CONTROLLER TO CONTROL ALL FANS.
 - PROVIDE FAN WITH ALL NECESSARY MOUNTING HARDWARE.
 - PROVIDE FAN WITH 50,000 HOUR WARRANTY AND 3 YEAR LABOR WARRANTY.
 - ENTIRE FAN ASSEMBLY SHALL BE UL LISTED.
 - MOUNT FAN NO LESS THAN 16 FEET A.F.F.
 - WASH DOWN DUTY RATING MUST BE IP66.

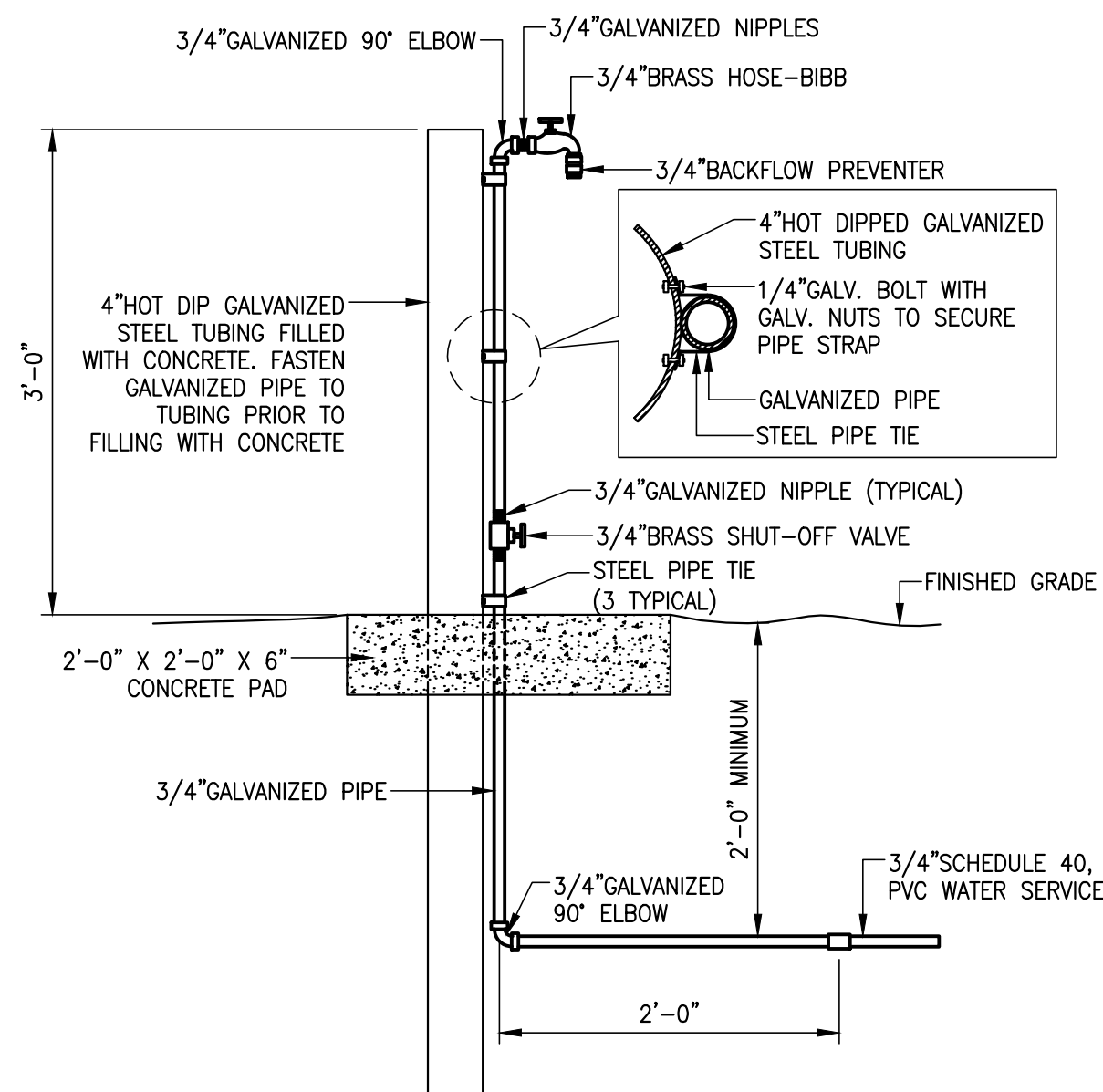
PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DOMESTIC COLD WATER LINE	CW	COLD WATER
	CUT OFF VALVE	TYP	TYPICAL
	PIPE DROP		

NOTE: NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT

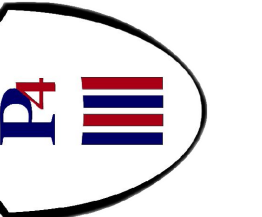
PLUMBING SCHEDULE

MARK	FIXTURE TYPE	CONNECTION SIZE				DESCRIPTION
		SEWER	VENT	CW	HW	
HB-1	HOSE BIB	-	-	3/4"	-	3/4" BRASS HOSE BIB EQUAL TO EVERBILT MODEL #103-004EB COMPLETE WITH BACKFLOW PREVENTER.
HB-2	HOSE BIB	-	-	3/4"	-	CHROME FINISH WALL MOUNTED FAUCET EQUAL TO WOODFORD MODEL #26-P, WITH BACK FLOW PREVENTER, AND LOOSE TEE KEY.



01 HOSE BIB INSTALLATION DETIAL
N.T.S.

Hidalgo County
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Project No.: 31806(WA01)
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Drawn By: CHAVEZ
Checked By: J.D.
Scale: AS NOTED

Sheet Title
MECHANICAL & PLUMBING
SCHEDULES AND DETAILS

MP3.01

Sheet Number

ELECTRICAL GENERAL LEGEND

ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

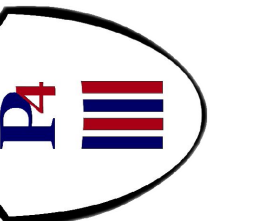
SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)	SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)	SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)
LIGHTING								
	2'x4' LAY-IN LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN		SINGLE RECEPTACLE - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF		FIRE ALARM PULL STATION - ROUGH-IN ONLY	48" AFF
	2'x2' LAY-IN LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN		DUPLX RECEPTACLE - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF		FIRE ALARM AUDIBLE/VISUAL SIGNAL - ROUGH-IN ONLY	80" AFF
	STRIP LIGHT HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN		220 RECEPTACLE - 250V/2P/3W/G (RATING AS INDICATED)	15" AFF		FIRE ALARM AUDIBLE SIGNAL - ROUGH-IN ONLY	80" AFF
	SUSPENDED LINEAR LUMINARY	REFER TO ARCH. CLG. PLAN		DUPLX RCPT. GFI/WATER PROOF - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF		FIRE ALARM VISUAL SIGNAL - ROUGH-IN ONLY	80" AFF
	DOWNLIGHT HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN		QUADRAPLEX RECEPTACLE (TWO DUPLX RCPTS. UNDER ONE COVERPLATE)	15" AFF		FIRE ALARM SPRINKLER FLOW SWITCH - ROUGH-IN ONLY	-
	WALL MOUNTED LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN		ISOLATED GROUND QUADRAPLEX RECEPTACLE (TWO DUPLX RCPTS. UNDER ONE COVERPLATE)	15" AFF		FIRE ALARM SPRINKLER TAMPER SWITCH - ROUGH-IN ONLY	-
	EMERGENCY FIXTURE	9"-0" AFF U.N.O.		ISOLATED GROUND DUPLX RECEPTACLE - 20A/125V NEMA 5-20R	15" AFF		SPRINKLER SYSTEM REGULATOR RELAY	-
	POLE MOUNTED FIXTURE	REFER TO LUMINARIES SCHEDULE		DUPLX RECEPTACLE ON EMERGENCY CIRCUIT	15" AFF		FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED - ROUGH-IN ONLY	-
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED	REFER TO ARCH. CLG. PLAN		FLOOR MOUNTED DUPLX RECEPTACLE - FLUSH MOUNTED UNO	-		HEAT DETECTOR CEILING OR WALL MOUNTED - ROUGH-IN ONLY	80" AFF
	DIGITAL SWITCH - BASIS OF DESIGN: Z MAX #ZMSW-X-X X=SWITCH ID, XX=# OF BUTTONS	48" AFF		ISOLATED GROUND FLOOR MOUNTED DUPLX RECEPTACLE FLUSH MOUNTED UNO	-		DUCT SMOKE DETECTOR - ROUGH-IN ONLY	-
	DIMMER SWITCH	48" AFF		DUPLX RCPT. SPLIT-WIRED - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF		FIRE ALARM CONTROL PANEL	-
	SINGLE POLE SWITCH	48" AFF		SPECIAL PURPOSE RECEPTACLE (NEMA NO. OR RATING AS INDICATED)	15" AFF		FIRE ALARM ANNUNCIATOR PANEL	-
	3-WAY/4-WAY SWITCH	48" AFF		JUNCTION BOX - SIZE & MOUNTING AS REQUIRED	15" AFF		FIRE ALARM BELL BUZZER	-
	TIMER SWITCH BASIS OF DESIGN: TORK #A530M W	48" AFF		MULTIOUTLET ASSEMBLY - LENGTH AND OUTLET SPACING AS INDICATED	-	COMMUNICATION		
	OCCUPANCY SENSOR (DUAL TECHNOLOGY WALL SWITCH SENSOR)	48" AFF		DISCONNECT SWITCH - 30/-/3 INDICATES 30A, 3-POLE, NONFUSED; 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.		TELEPHONE/DATA OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
	OCCUPANCY SENSOR (DUAL TECHNOLOGY DUAL RELAY WALL SWITCH SENSOR)	48" AFF		CIRCUIT BREAKER DISCONNECT SWITCH - THERMAL MAGNETIC CB IN NEMA 1 ENCL; AMPS/POLES AS INDICATED	-		TELEPHONE OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
	LINE VOLTAGE KEY SWITCH : SINGLE	48" AFF		DISCONNECT SWITCH - 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.		DATA OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
	LINE VOLTAGE KEY SWITCH : 3-WAY	48" AFF		MOTOR STARTER FVNR UNO; NUMBER INDICATES NEMA SIZE	AS REQD.		FLOOR MOUNTED TELEPHONE/DATA OUTLET - FLUSH MOUNTED UNO	-
	LINE VOLTAGE KEY SWITCH : 4-WAY	48" AFF		COMBINATION MOTOR CONTROLLER/DISCONNECT SWITCH	AS REQD.		FLOOR MOUNTED TELEPHONE OUTLET - FLUSH MOUNTED UNO	-
	WIRELESS SINGLE POLE SWITCH	-		PANELBOARD	AS REQD.		FLOOR MOUNTED DATA OUTLET - FLUSH MOUNTED UNO	-
	CEILING MOUNT OCCUPANCY SENSOR (DUAL TECHNOLOGY SENSOR)	-		TRANSFORMER	-		SOUND CONSOLE (RACK)	48" AFF
	PHOTOCELL DEVICE	-		MOTOR	-		P.A. SPEAKER, CEILING OR WALL MOUNTED	-
SECURITY SYSTEM								
	CARD READER - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-		SINGLE LINE CONTINUATION	-		MICROPHONE OUTLET	9" BFC, UNO
	DOOR CONTACT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-		CIRCUIT HOME RUN TO PANELBOARD (2 #12, 1 #12G, 3/4" C. 20A/1P CB UNO)	-		CLOCK - SINGLE OR DOUBLE FACE	-
	DOOR HOLDER - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-		THREE SINGLE POLE DEVICE CIRCUIT NUMBERS	-		WIRELESS ACCESS POINT	-
	DOOR MONITOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-		MULTI-POLE DEVICE CIRCUIT NUMBERS	-		TELEVISION OUTLET. CLG. OR WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	-
	GLASS BREAK SENSOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-					PUSHBUTTON FOR INTERCOM CALL IN	-
	KEY PAD - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-					BUZZER/BELL	48" AFF
	MOTION DETECTOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-					TELEPHONE BOARD	-
	PANIC BUTTON - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-					CABLE TRAY	-
	REQUEST-TO-EXIT BUTTON - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-						
	CAMERA, WALL MOUNT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-						
	CAMERA, CEILING MOUNT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-						

GENERAL ABBREVIATIONS

ABS	ABOVE BACK SPLASH	EX	EXISTING	MTD	MOUNT OR MOUNTED	NL	NIGHT LIGHT	SW	SWITCH
AFF	ABOVE FINISHED FLOOR	F	FUSE	MTG	MOUNTING	NO (N.O.)	NORMALLY OPEN	UF	UNDERFLOOR
BFC	BELOW FINISHED CEILING	G	GROUND (EQUIPMENT)	NC (N.C.)	NORMALLY CLOSED	RCPT(S)	RECEPTACLE(S)	UG	UNDERGROUND
C	CONDUIT	GFI	GROUND FAULT INTERRUPTER	NF	NONFUSED	PNL	PANEL	WG	WIRE GUARD
CB	CIRCUIT BREAKER	H	HORIZONTAL MOUNTING	NIC	NOT IN CONTRACT	SO (S.O.)	SPACE ONLY	WP	WEATHERPROOF
CLG	CEILING	IC	INTERRUPTING CAPACITY	TYP	TYPICAL	SP	SPARE	XFMR	TRANSFORMER
EC	EMPTY CONDUIT	IG	ISOLATED GROUND	EP	ELECTRICAL PRIMARY	ST (S.T.)	SHUNT TRIP	UNO	UNLESS NOTED OTHERWISE

NOTES:
1. 48" AFF INDICATES TO TOP OF DEVICE;
15" AFF INDICATES TO BOTTOM OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

Hidalgo County
 Precinct 4 - Recovery and
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 1051 N. Doolittle Rd.
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Revision No.	Date	Description

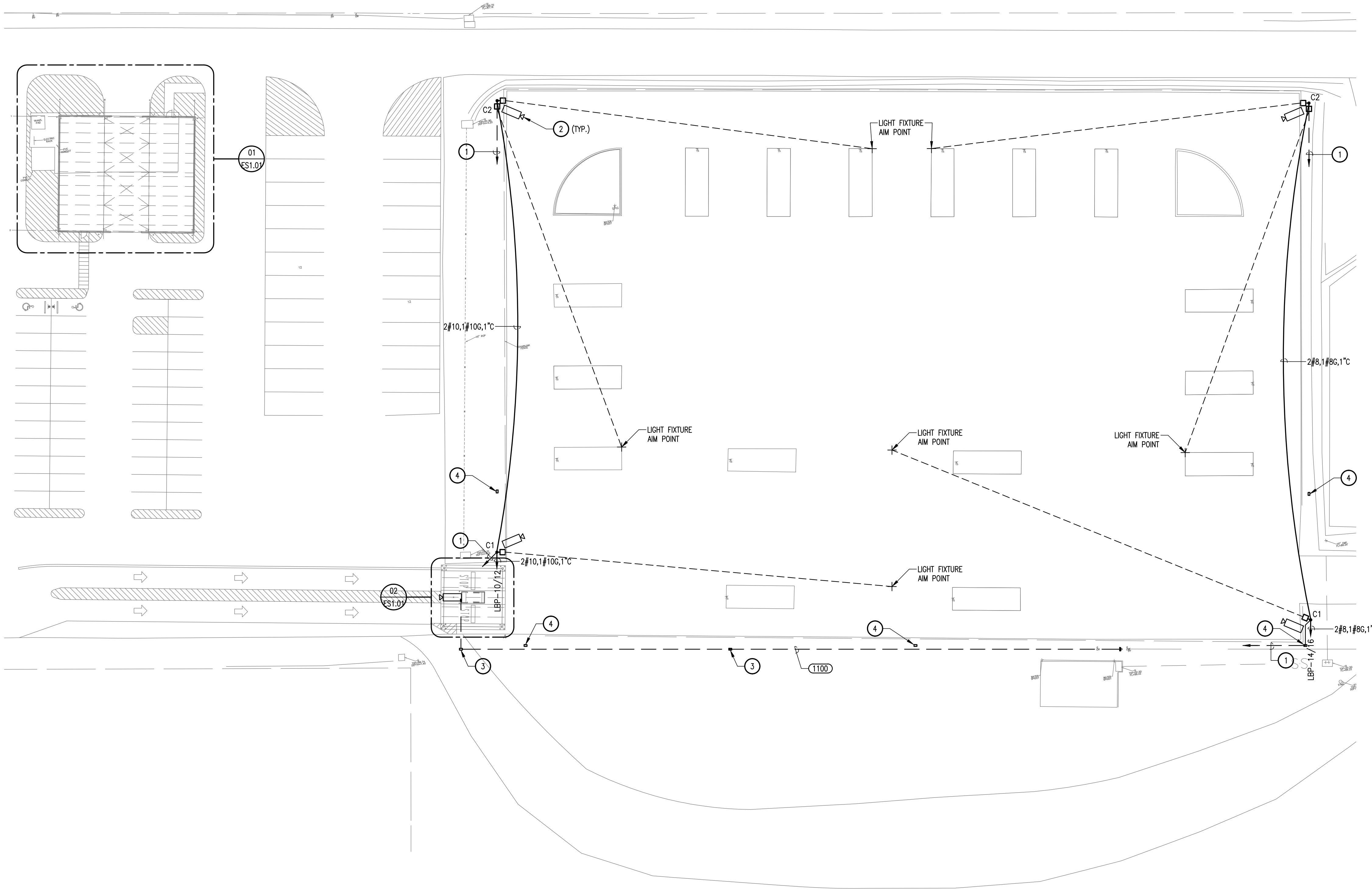
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JOSE A. DELGADO, P.E. 101998 9/7/2016
 TUBE FIRM #F-512

Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	ELECTRICAL GENERAL LEGEND

E0.01
 Sheet Number

File Name: I:\31000s\31806\WA01\MEP\CADD\DWG\LEGEND-IG-31806(WA01).PHI.dwg
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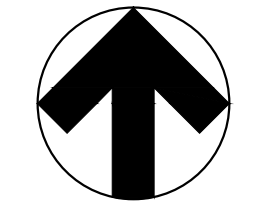


GENERAL NOTES:

- A. REFER TO E0.01 FOR GENERAL NOTES.
- B. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TRENCHING WITHIN THE COLLECTION SITE. ROUTE ALL NEW CONDUIT IN GREEN AREA AROUND COLLECTION SITE FOR INSTALLATION OF NEW ELECTRICAL CIRCUITING AND FUTURE COMMUNICATION SYSTEMS.
- C. CONTRACTOR SHALL COORDINATE ROUTING AND LOCATION OF TRENCHING TO MINIMIZE THE AMOUNT TRENCHING REQUIRED TO INSTALL NEW ELECTRICAL SYSTEMS. RUN NEW ELECTRICAL AND COMMUNICATIONS CONDUIT IN SAME TRENCH AS MUCH AS POSSIBLE.

KEY NOTES:

1. PROVIDE 1-1/2" CONDUIT WITH PULL STRING FOR CAMERA INSTALLATION. EXTEND CAMERA ASSOCIATED CONDUIT TO NETWORK SWITCH AT NEW BOOTH. CAMERAS BY OTHERS.
2. CAMERA INSTALLATION BY OTHERS. PROVIDE POLE WITH REQUIRED MOUNTING PLATE AND PREDRILLED FOR ROUTING OF CAMERA WIRING. COORDINATE EXACT CAMERA REQUIREMENTS WITH CAMERA INSTALLER.
3. FOR SUB-FEED FEEDER TO PANEL 'LBP', PROVIDE WITH OLDCASTLE, SYNERTECH COMPOSITE DUO13X24 WITH TIER 15 COVER.
4. FOR FUTURE SECURITY CAMERA ROUGH-IN, PROVIDE WITH OLDCASTLE, SYNERTECH COMPOSITE DUO11X18 WITH TIER 15 COVER AT EVERY 200'-0".



01 ELECTRICAL SITE PLAN
 SCALE: 1"=30'

Hidalgo County
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 1051 N. Doolittle Rd.
 Edinburg, Texas 78542

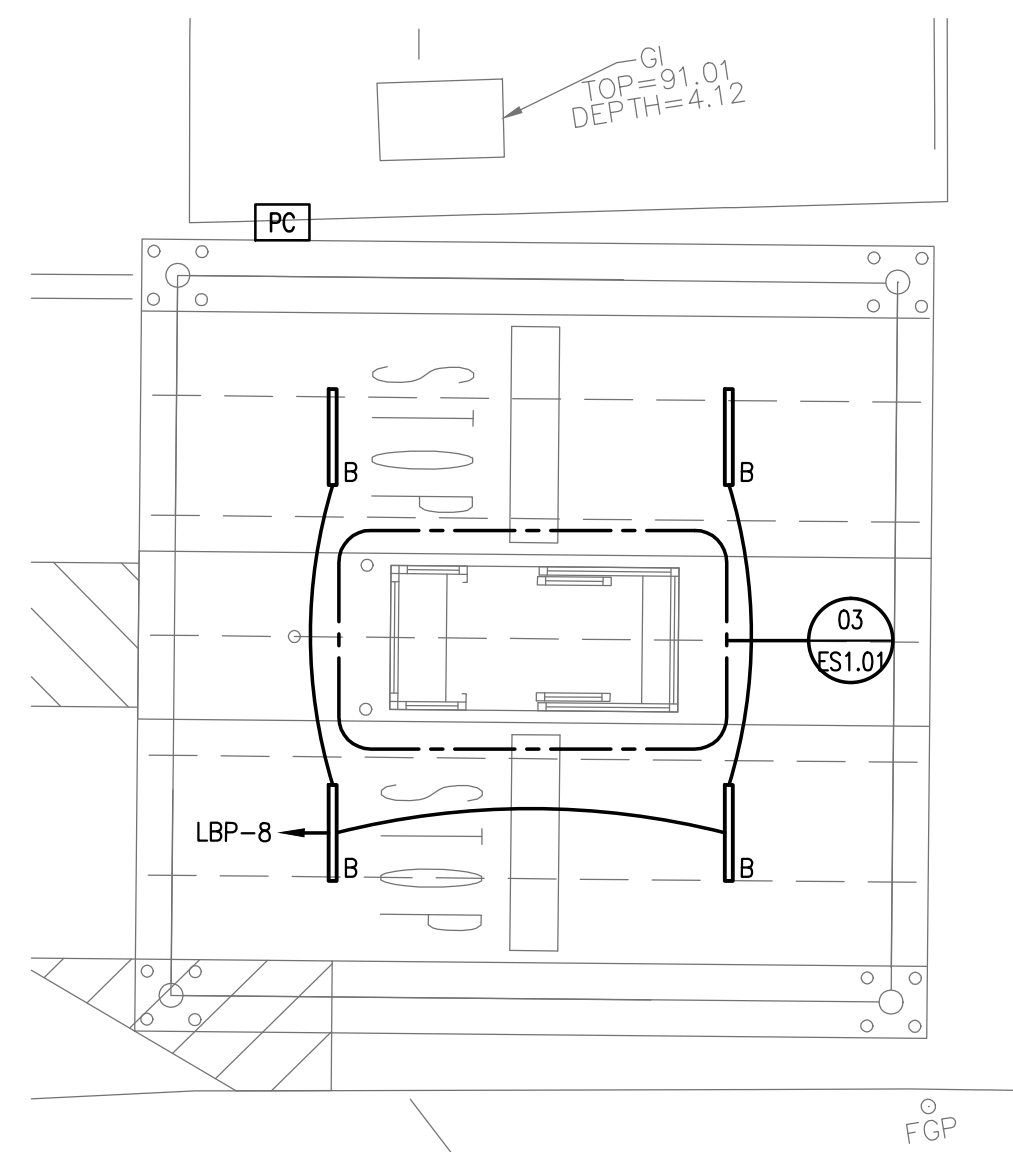


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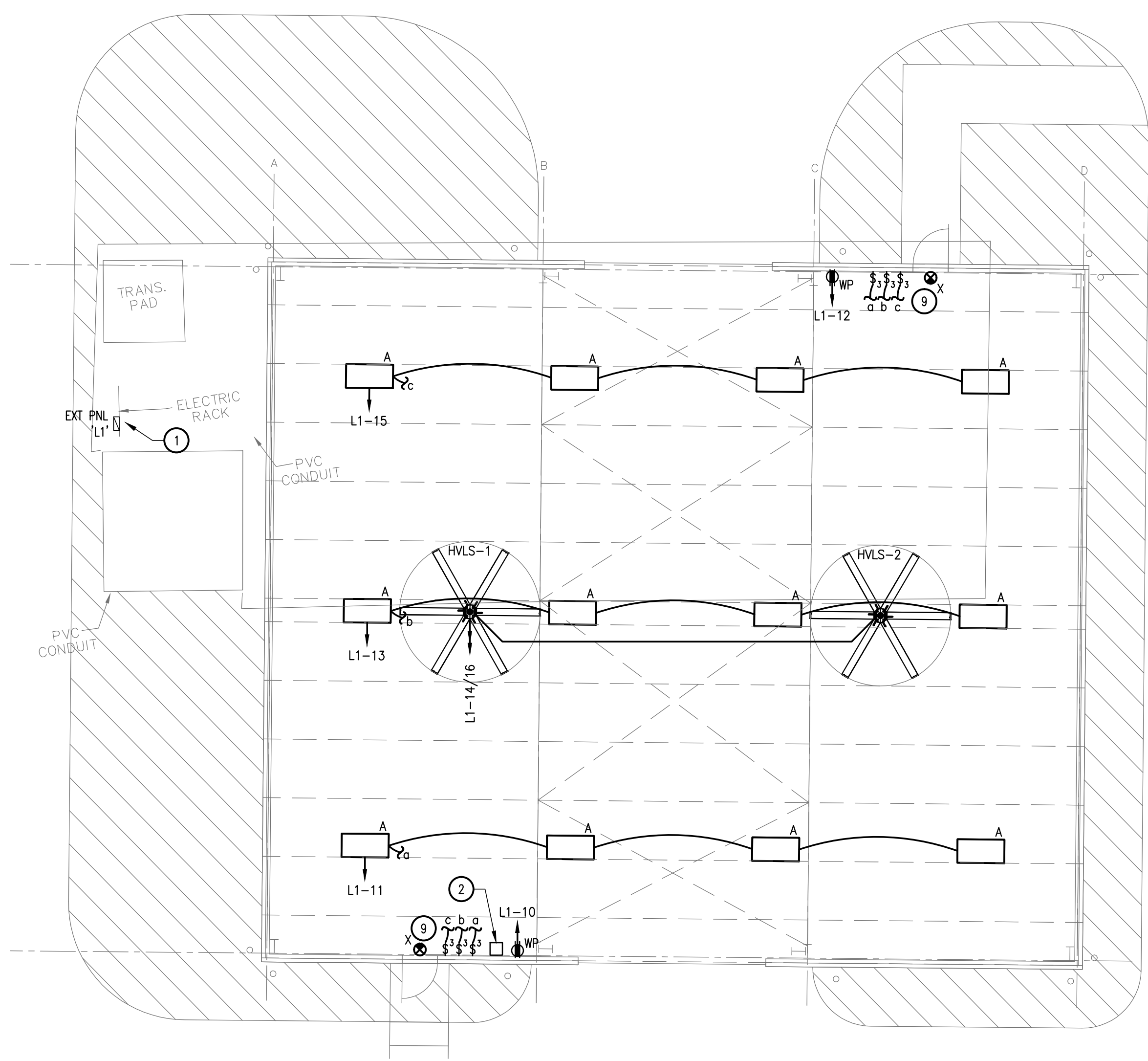
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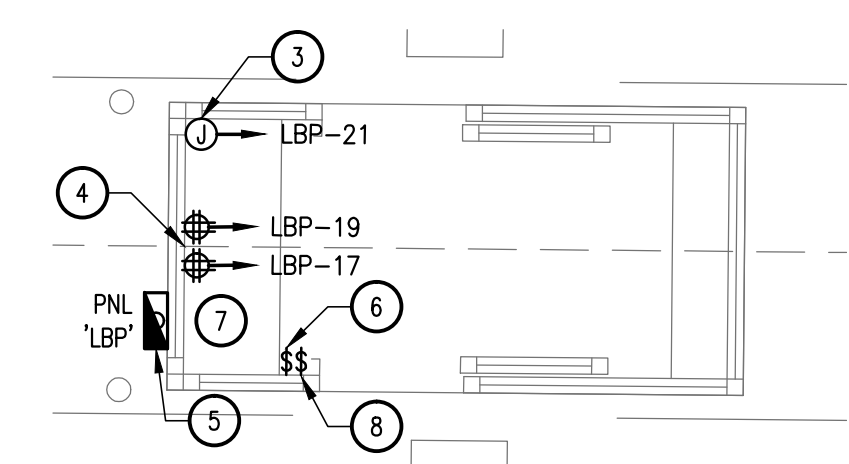
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Sheet Number	ES1.00



02 ENLARGED ELECTRICAL PLAN - CANOPY
SCALE: 1/8" = 1'-0"



01 ENLARGED ELECTRICAL PLAN - STORAGE BUILDING
SCALE: 1/8" = 1'-0"



03 ENLARGED ELECTRICAL PLAN - BOOTH
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.
- IN ADDITION TO THE ELECTRICAL DEVICES PROVIDED WITH PREFABRICATED BOOTH, PROVIDE ELECTRICAL DEVICES SHOWN AND CIRCUIT AS SPECIFIED. REFER TO KEYNOTES ON THIS SHEET.

KEY NOTES: #

- EXISTING ELECTRICAL RACK.
- INSTALL MACROAIR NETWORK CONTROLLER 6 DEVICE AT THIS LOCATION. CONTROLLER SHALL OPERATE BOTH FANS.
- PROVIDE WEATHER PROOF J-BOX AT ROOF LEVEL FOR POWER TO WIRELESS ANTENNA. COORDINATE POINT AND TYPE OF ELECTRICAL CONNECTION WITH ANTENNA PROVIDER, MAKE FINAL CONNECTION.
- PROVIDE QUAD RECEPTACLE DEVICES, SURFACE MOUNTED AND AT COUNTER LEVEL, FOR POWER TO NETWORK SWITCH AND ACCESSORIES.
- ELECTRICAL PANELBOARD PROVIDED WITH BOOTH.
- SWITCH FOR CONTROL OF COLLECTION SITE LIGHTING.
- STUB IN SECURITY CAMERA CONDUITS AT THIS LOCATION.
- SWITCH FOR CONTROL OF CANOPY LIGHTING.
- CONNECT EXIT LIGHT TO UN-SWITCHED LIGHTING CIRCUIT.

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TBP# FIRM #F-312

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Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	ENLARGED ELECTRICAL PLANS
Sheet Number	ES1.01

File Name: I:\31000s\31806\WA01\MEP\CADD\DWG\ES1.01-EEP-31806(WA01)_PHI.dwg
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LIGHTING FIXTURE SCHEDULE

TYPE	MANUF & MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION	NOTES
A	LITHONIA - #IBZ-454L-WDU-NLWG-GB10PS90-LP850-HBBS36IC	T5HO	5000K	120	FLUORESCENT HIGHBAY FIXTURE WITH WIREGUARD, MULTI-TAP ELECTRONIC BALLAST AND 36" CHAIN HANGING KIT MOUNT FIXTURES AT 16'-0" AFF.	
B	LITHONIA - #FFG4-2-54T5HO-B1X20-MVOLT-GB10PS90-GLR-LP841	T5HO	4000K	120	4' LOW PROFILE CANOPY LINEAR FLOURESCENT STRIP LIGHT, POLYCARBONATE LENS, AND ELECTRONIC BALLAST, U.L. LISTED FOR DAMP LOCATIONS.	
C1	LITHONIA - #TFL-400M-RA2-208-SCWA-XX-DF-DNA-LPI	400W-MH	4000K	208	SINGLE METAL HALIDE FLOOD LIGHT, WITH TENNON MOUNT ON POLE.	
P1	KW INDUSTRIES - #RTSP 27-7-11-XX-2 BC		456		30' POLE CUT TO 27' WITH MINIMUM 7.59 EPA AT 130MPH. FINISH TO BE SELECTED BY OWNER.	
C2	LITHONIA - #TFL-400M-RA2-208-SCWA-XX-DF-DNA-LPI	400W-MH	4000K	208	DUAL METAL HALIDE FLOOD LIGHTS, WITH TENNON MOUNT ON POLE.	
P2	KW INDUSTRIES - #RTSP 27-7-11-XX-2 BC / FA2180-36-2-XX		912		30' POLE CUT TO 27' WITH MINIMUM 7.59 EPA AT 130MPH WITH BULLHORN MOUNTING ADAPTER FOR TWO FIXTURES AT 180deg. FINISH TO BE SELECTED BY OWNER.	
X	LITHONIA - #LHQM S W 3 R N	INCLUDED	LED	120/277	POLYCARBONATE EMERGENCY EXIT LIGHT WITH EMERGENCY LAMPS LED LAMPS, SINGLE/DOUBLE FACE, PROVIDE WITH EMERGENCY BATTERY PACK	
			6			

PANELBOARD 'LBP'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE
 100 A MAIN BREAKER
 BUSES: MAIN - 100 A; NEUTRAL - 100%; EQUIPMENT GROUND
 LOCATION: BOOTH EXTERIOR
 MOUNTING: SURFACE
 I_{sc} = 10,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	180		REC: PREWIRED	20/1	1	A	2	20/1	LTS: PREWIRED	500	0	0
0	180		REC: PREWIRED	20/1	3	B	4	20/2	REC: PREWIRED FOR A/C	0	0	1550
0	180		REC: PREWIRED	20/1	5	C	6	-	"	0	0	1550
0	180		REC: PREWIRED	20/1	7	A	8	20/1	LTS: CANOPY	420	0	0
0	180		REC: PREWIRED	20/1	9	B	10	20/2	LTS: COLLECTION	684	0	0
0	180		REC: PREWIRED	20/1	11	C	12	-	"	684	0	0
0	180		REC: PREWIRED	20/1	13	A	14	20/2	LTS: COLLECTION	684	0	0
0	180		REC: PREWIRED	20/1	15	B	16	-	"	684	0	0
0	720		REC: NETWORKING EQUIPMENT	20/1	17	C	18	20/1	SPARE	0	0	0
0	720		REC: NETWORKING EQUIPMENT	20/1	19	A	20	20/1	SPARE	0	0	0
0	540		PWR: WIRELESS ANTENNA	20/1	21	B	22	20/1	SPARE	0	0	0
0	0		SPARE	20/1	23	C	24	20/1	SPARE	0	0	0

VA:L (LIGHTING)	3656	CONNECTED	4570	DEMAND
VA:R (RECEPTACLES)	3420	CONNECTED	3420	DEMAND
VA:O (OTHER)	3100	CONNECTED	3100	DEMAND
VA: TOTAL	10176	CONNECTED	11090	DEMAND
AMPS: TOTAL	28	CONNECTED	31	DEMAND

L	R	O	TOTAL	VA =	VA =	VA =
1604	1260	0	2864	24	AMPS CONNECTED TO A PHASE @ 120 VOLTS	
1368	1080	1550	3998	33	AMPS CONNECTED TO B PHASE @ 120 VOLTS	
684	1080	1550	3314	28	AMPS CONNECTED TO C PHASE @ 120 VOLTS	
3656	3420	3100	10176	VA		

FEEDER / BRANCH CIRCUIT SCHEDULE

MARK	RACEWAY	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	REMARKS
S001	2"	3#3/0	1#3/0	-----	
1000	2"	3#3/0	-----	1#6	
1001	2"	3#3/0	1#3/0	-----	
1100	1 1/2"	3#3	1#3	1#8	
EX1		3#3/0	1#3/0	-----	IN EXISTING CONDUIT
EX2		3#3/0	1#3/0	1#6	IN EXISTING CONDUIT

EXISTING PANELBOARD 'L1'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE
 200A MAIN BREAKER
 BUSES: MAIN - 225 A; NEUTRAL - 100%; EQUIPMENT GROUND
 LOCATION: EXTERIOR ROOM
 MOUNTING: SURFACE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	0		PWR: FUTURE PUMP EQUIPMENT	100/2	1	A	2	100/3	PWR: FUTURE PUMP EQUIPMENT	0	0	0
0	0		"	-	3	B	4	-	"	0	0	0
0	0		SPARE	20/1	5	C	6	-	"	0	0	0
0	0		SPARE	20/1	7	A	8	20/1	RECEP: GFI AT RACK	0	0	0
0	0		SPARE	20/1	9	B	10	-	SPARE	0	0	0
0	0		SPARE	-	11	C	12	-	SPARE	0	0	0
0	0		SPARE	-	13	A	14	-	SPARE	0	0	0
0	0		SPARE	-	15	B	16	-	SPARE	0	0	0
0	0		SPARE	-	17	C	18	-	SPARE	0	0	0
0	0		SPARE	-	19	A	20	-	SPARE	0	0	0
0	0		SPARE	-	21	B	22	-	SPARE	0	0	0
0	0		SPARE	-	23	C	24	-	SPARE	0	0	0
0	0		SPARE	-	25	A	26	-	SPARE	0	0	0
0	0		SPARE	-	27	B	28	-	SPARE	0	0	0
0	0		SPARE	-	29	C	30	-	SPARE	0	0	0
0	0		SPARE	-	31	A	32	-	SPARE	0	0	0
0	0		SPARE	-	33	B	34	-	SPARE	0	0	0
0	0		SPARE	-	35	C	36	-	SPARE	0	0	0
0	0		SPARE	-	37	A	38	-	SPARE	0	0	0
0	0		SPARE	-	39	B	40	-	SPARE	0	0	0
0	0		SPARE	-	41	C	42	-	SPARE	0	0	0

VA:L (LIGHTING)	0	CONNECTED	0	DEMAND
VA:R (RECEPTACLES)	0	CONNECTED	0	DEMAND
VA:O (OTHER)	0	CONNECTED	0	DEMAND
VA: TOTAL	0	CONNECTED	0	DEMAND
AMPS: TOTAL	0	CONNECTED	0	DEMAND

L	R	O	TOTAL	VA =	VA =	VA =
0	0	0	0	0	AMPS CONNECTED TO A PHASE @ 120 VOLTS	
0	0	0	0	0	AMPS CONNECTED TO B PHASE @ 120 VOLTS	
0	0	0	0	0	AMPS CONNECTED TO C PHASE @ 120 VOLTS	
0	0	0	0	0	TOTAL	

REVISED PANELBOARD 'L1'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE
 200A MAIN BREAKER
 BUSES: MAIN - 225 A; NEUTRAL - 100%; EQUIPMENT GROUND
 LOCATION: EXTERIOR ROOM
 MOUNTING: SURFACE

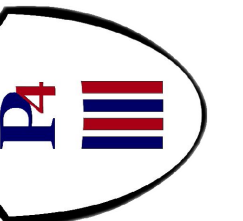
VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	0		PWR: FUTURE PUMP EQUIPMENT	100/2	1	A	2	100/3	PWR: FUTURE PUMP EQUIPMENT	0	0	9600
0	0		"	-	3	B	4	-	"	0	0	9600
0	0		SPARE	20/1	5	C	6	-	"	0	0	9600
0	0		SPARE	20/1	7	A	8	20/1	RECEP: GFI AT RACK	0	180	
0	0		SPARE	20/1	9	B	10	20/1	RECEP: STORAGE	0	180	
996	0		LTC: HIGHBAY	20/1	11	C	12	20/1	RECEP: STORAGE	0	180	
996	0		LTC: HIGHBAY	20/1	13	A	14	20/2	PWR: HVLS-1 & HVLS-2	0	0	920
996	0		LTC: HIGHBAY	20/1	15	B	16	-	"	0	0	920
0	0		SPARE	20/1	17	C	18	20/1	SPARE	0	0	0
0	0		SPARE	20/1	19	A	20	20/1	SPARE	0	0	0
0	0		SPARE	20/1	21	B	22	20/1	SPARE	0	0	0
0	0		SPARE	-	23	C	24	-	SPARE	0	0	0
0	0		SPARE	-	25	A	26	-	SPARE	0	0	0
0	0		SPARE	-	27	B	28	-	SPARE	0	0	0
0	0		SPARE	-	29	C	30	-	SPARE	0	0	0
0	0		SPARE	-	31	A	32	-	SPARE	0	0	0
0	0		SPARE	-	33	B	34	-	SPARE	0	0	0
0	0		SPARE	-	35	C	36	-	SPARE	0	0	0
0	0		SPARE	-	37	A	38	-	SPARE	0	0	0
0	0		SPARE	-	39	B	40	-	SPARE	0	0	0
0	0		SPARE	-	41	C	42	-	SPARE	0	0	0

VA:L (LIGHTING)	2988	CONNECTED	3735	DEMAND
VA:R (RECEPTACLES)	540	CONNECTED	540	DEMAND
VA:O (OTHER)	47280	CONNECTED	47280	DEMAND
VA: TOTAL	50808	CONNECTED	51555	DEMAND
AMPS: TOTAL	141	CONNECTED	143	DEMAND

L	R	O	TOTAL	VA =	VA =	VA =
996	180	18840	20016	167	AMPS CONNECTED TO A PHASE @ 120 VOLTS	
996	180	18840	20016	167	AMPS CONNECTED TO B PHASE @ 120 VOLTS	
996	180	9600	10776	90	AMPS CONNECTED TO C PHASE @ 120 VOLTS	
2988	540	47280	50808	VA		

NEW CIRCUITS

Hidalgo County
 Precinct 4 - Recovery and
 Motor Pool Improvements



HALFF
 5000 WEST MILITARY, SUITE 100
 McALESTER, OKLAHOMA 74503
 PHONE: (918) 664-4882
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 TUBE FIRM #F-312

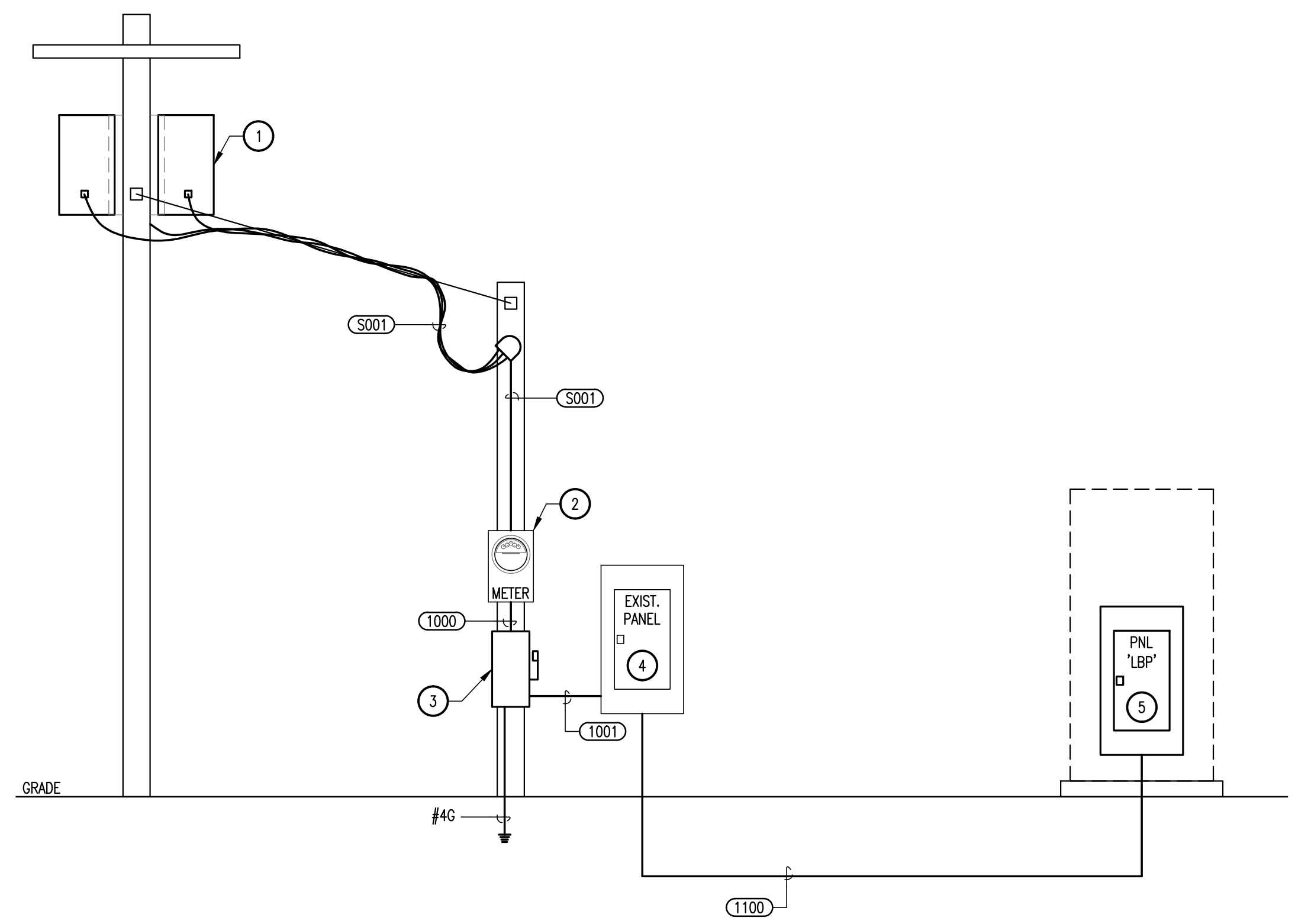
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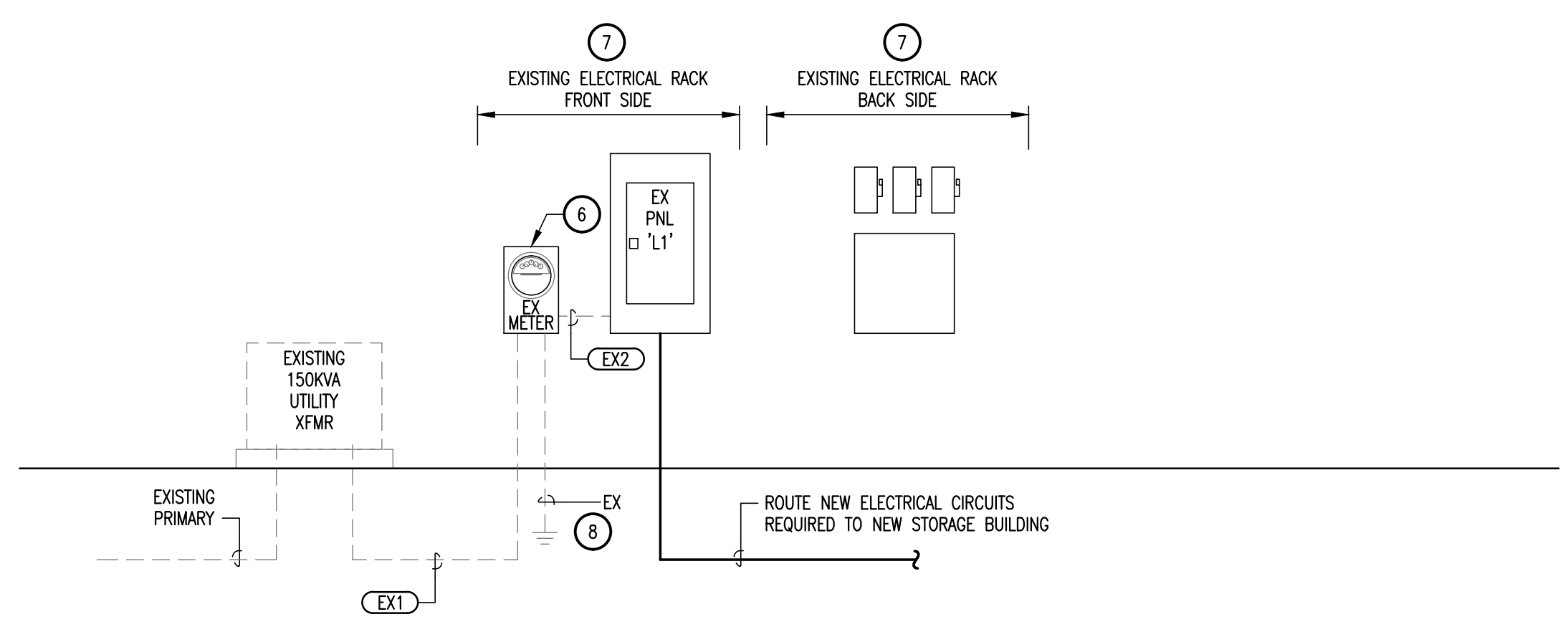
Project No.:	31806(WA01)
Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	ELECTRICAL SCHEDULES

E2.01
 Sheet Number

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 Printed Date: 9/7/2016 11:29:59 AM



01 ELECTRICAL RISER DIAGRAM - COLLECTION SITE
 N.T.S.



02 ELECTRICAL RISER DIAGRAM - STORAGE BUILDING
 N.T.S.

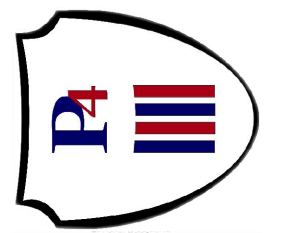
GENERAL NOTES:

- A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

KEY NOTES: Ⓡ

- 1. EXISTING POLE MOUNTED UTILITY TRANSFORMERS.
- 2. RE-INSTALL EXISTING METER ENCLOSURE AT NEW LOCATION.
- 3. PROVIDE NEW 200/200/3, 240V, NEMA-3R DISCONNECT SWITCH.
- 4. REINSTALL EXISTING ELECTRICAL PANEL AT NEW LOCATION.
- 5. REFER TO PANEL SCHEDULE AND SPECIFICATION SECTION FOR BOOTH.
- 6. EXISTING METER SOCKET.
- 7. EXISTING ELECTRICAL EQUIPMENT RACK. REFER TO SITE PLAN FOR LOCATION.
- 8. FIELD VERIFY EXISTING GROUNDING ELECTRODE CONDUCTOR IS #4 IN SIZE, IF EXISTING CONDUCTOR IS SMALLER THAN #4 REPLACE WITH #4 AND CONNECT TO EXISTING GROUNDING ROD(S).

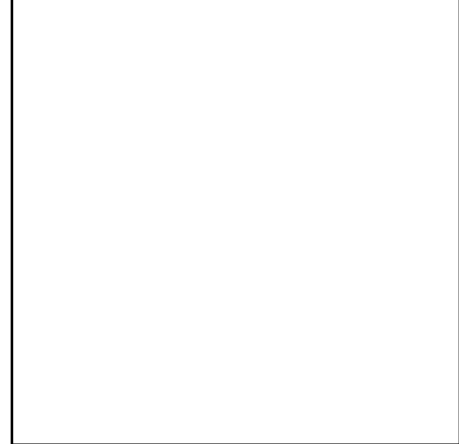
Hidalgo County
 Precinct 4 - Recovery and
 Motor Pool Improvements
 1051 N. Doolittle Rd.
 Edinburg, Texas 78542



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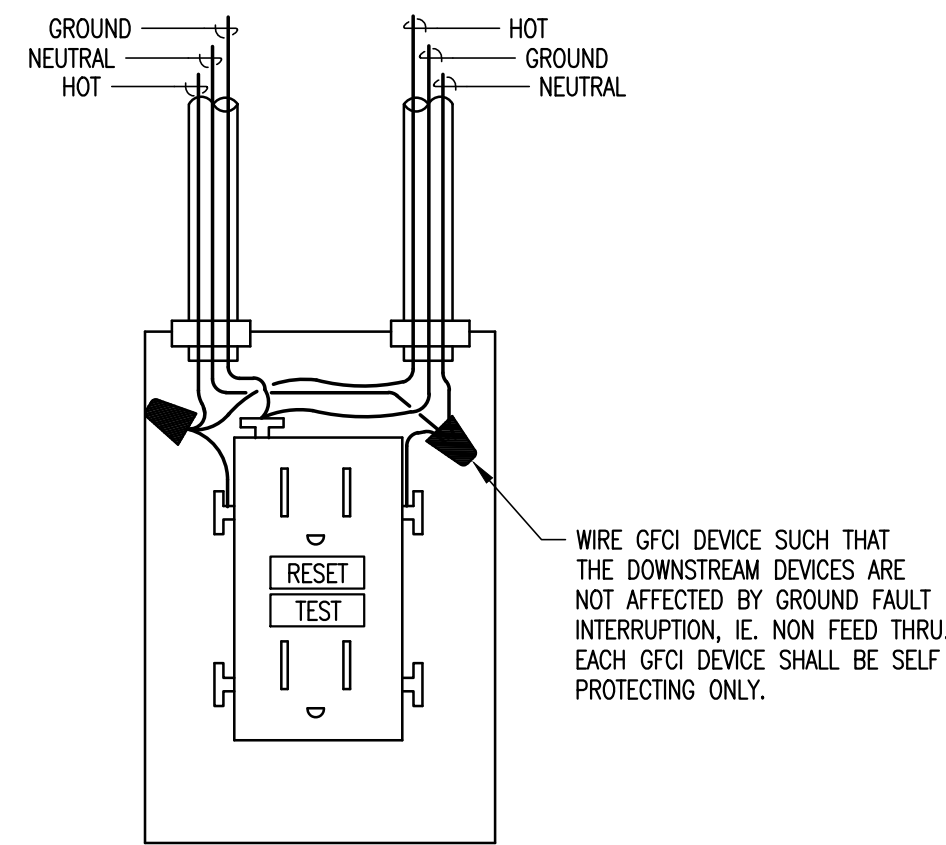
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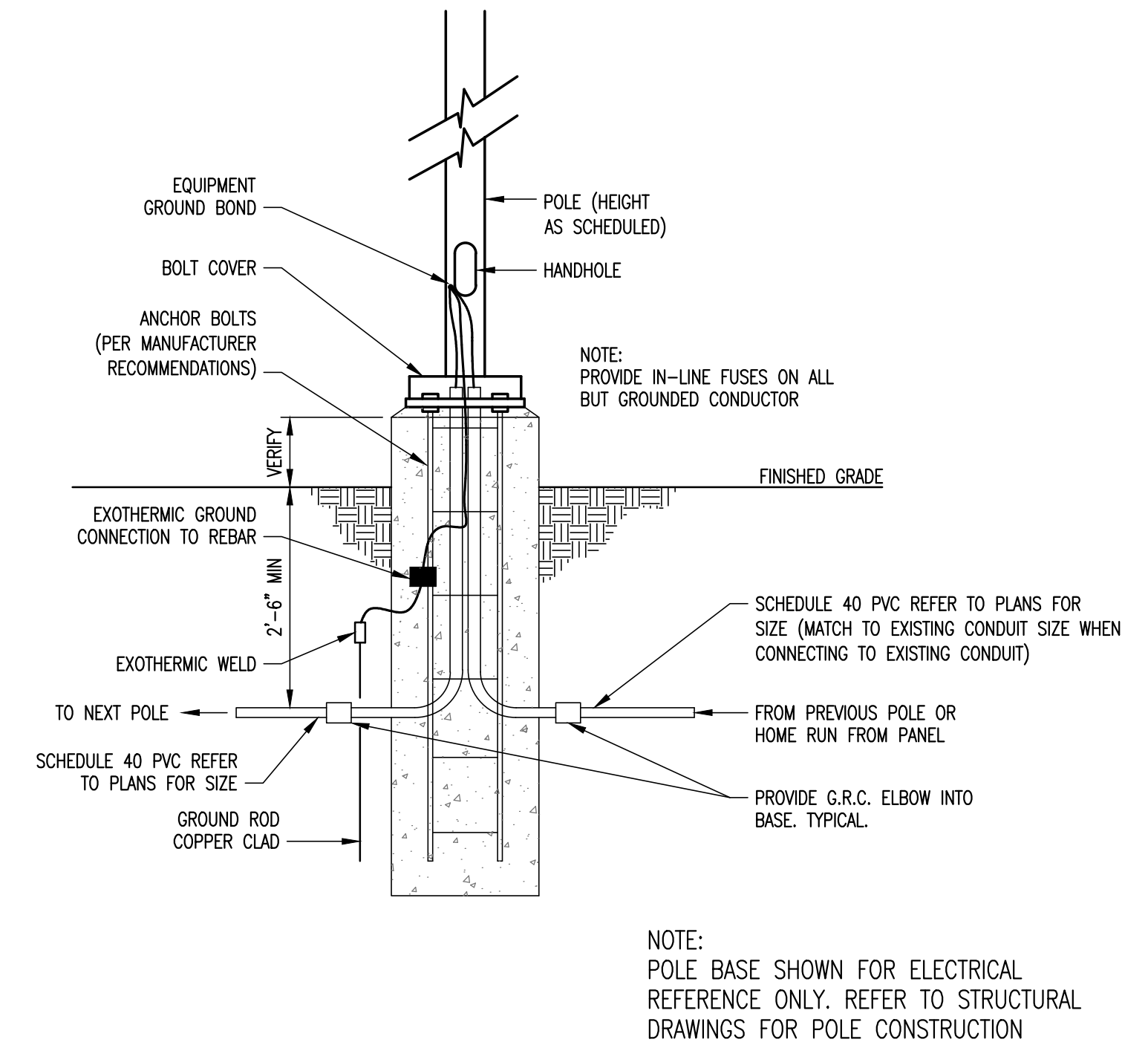
Project No.:	31806(WA01)
Issued:	09 / 07 / 16
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Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	ELECTRICAL RISER DIAGRAMS

E3.01
 Sheet Number

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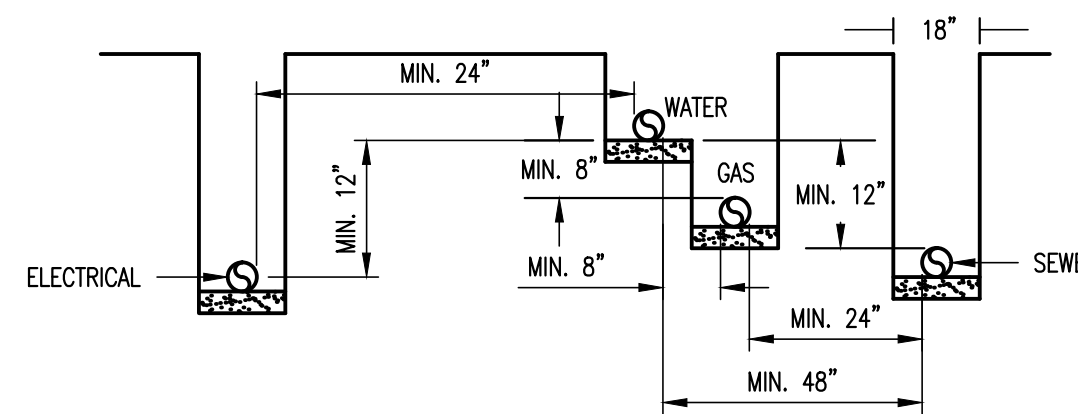
02 GFCI RECEPTACLE - WIRING DIAGRAM
N.T.S.



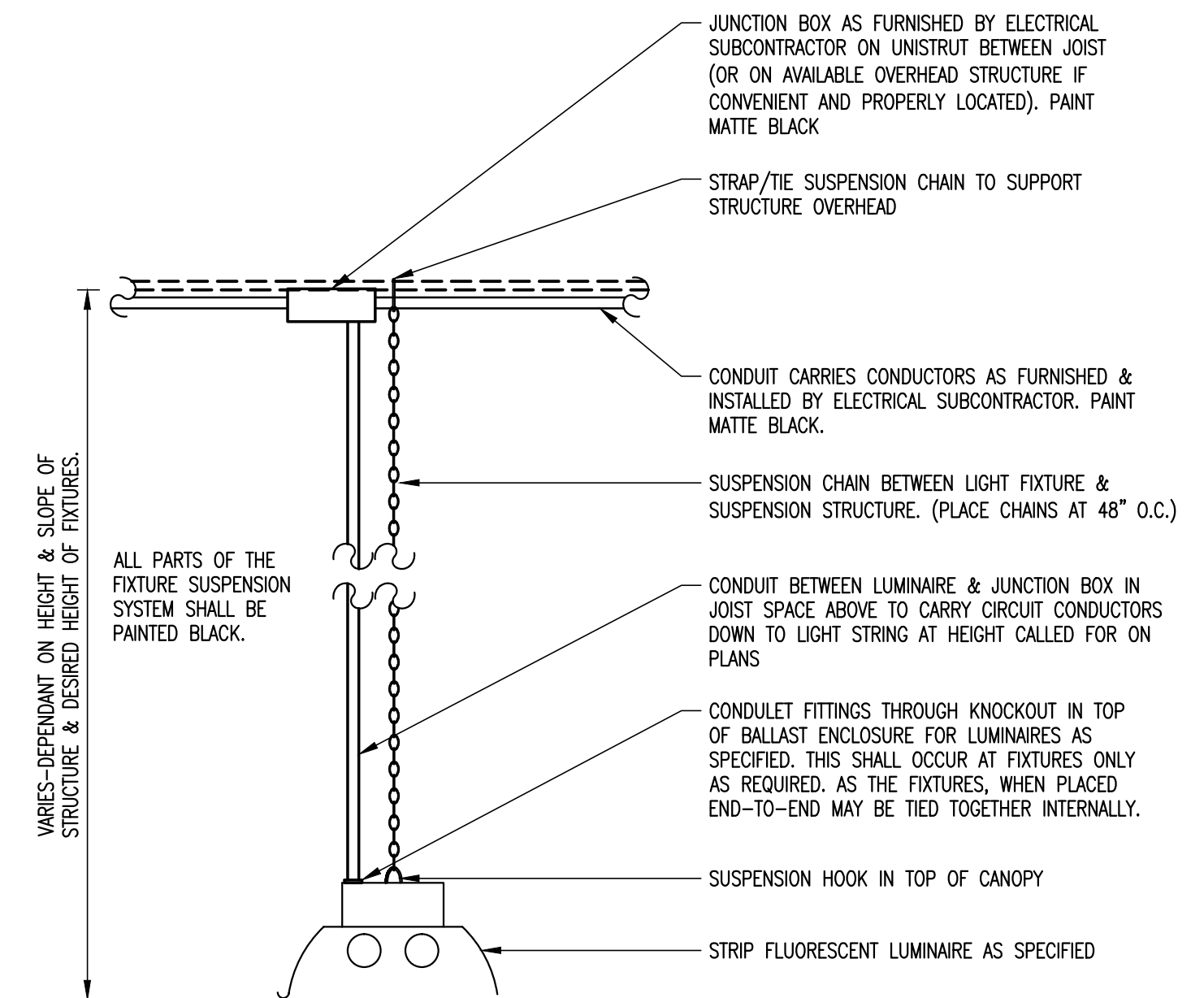
01 ELECTRICAL POLE BASE DETAIL
N.T.S.

GENERAL NOTES:

- CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.
- MAINTAIN ALL MINIMUM 48 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES.
- COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.



04 TRENCH DETAIL - UTILITIES
N.T.S.



03 LIGHT SUSPENSION DETAIL
N.T.S.

Hidalgo County
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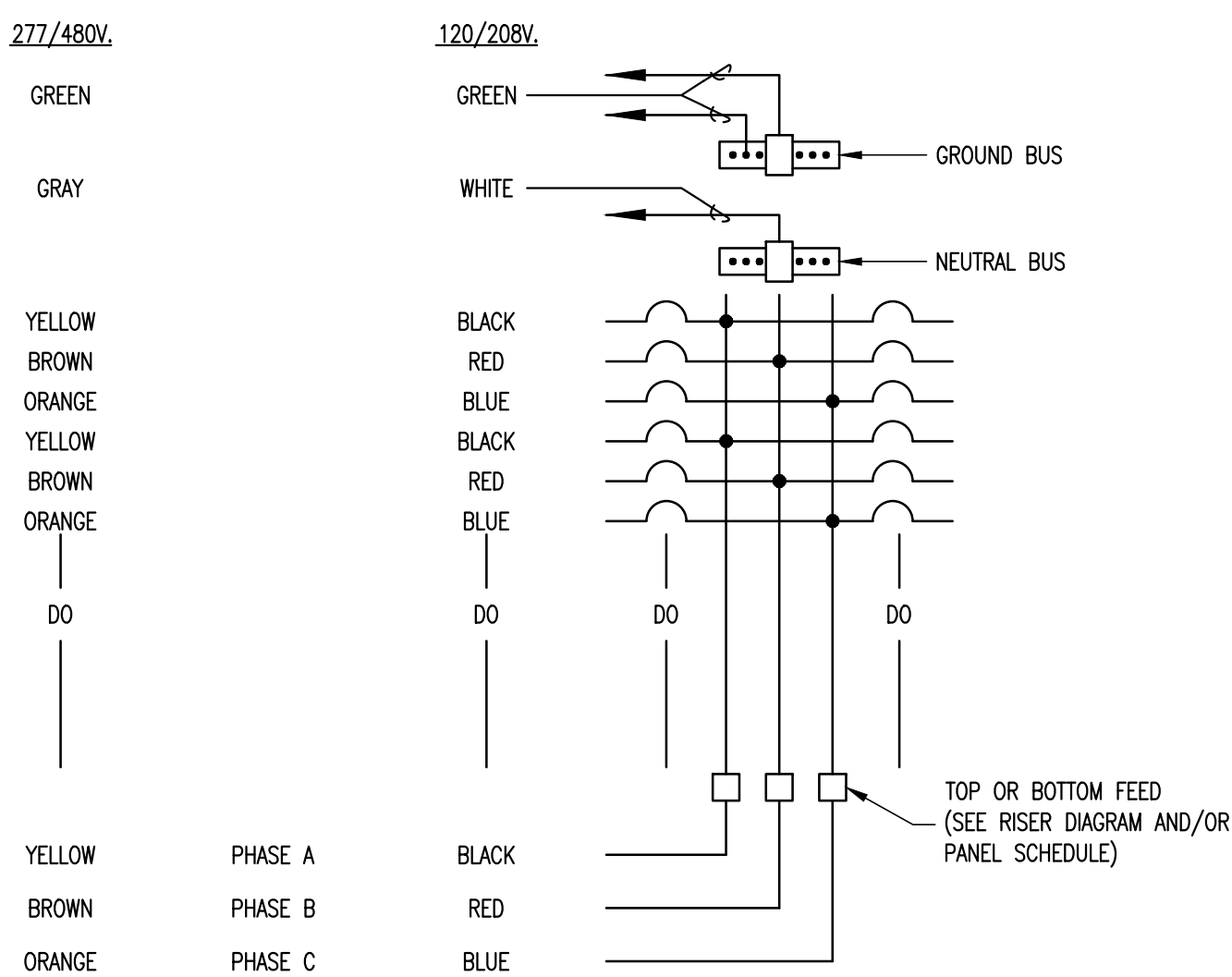
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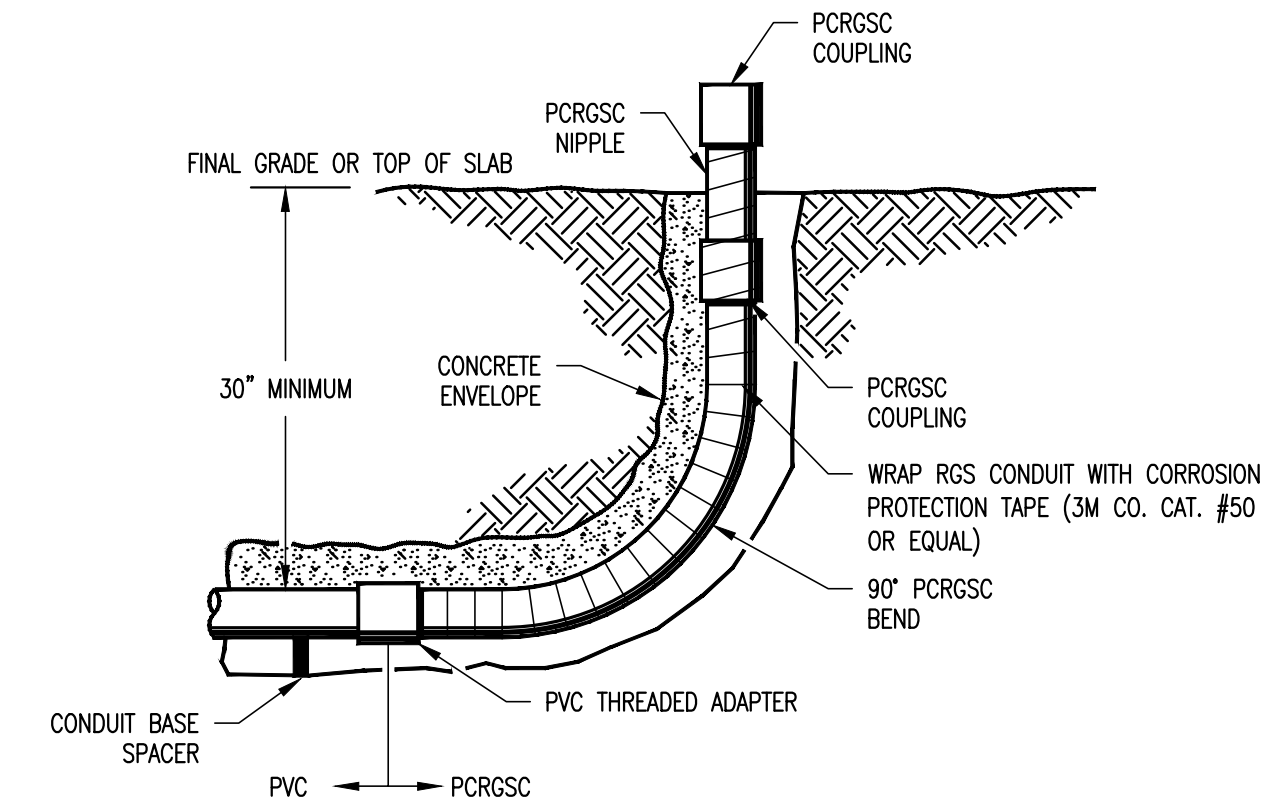
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Issued:	09 / 07 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	ELECTRICAL DETAILS

E4.01
 Sheet Number

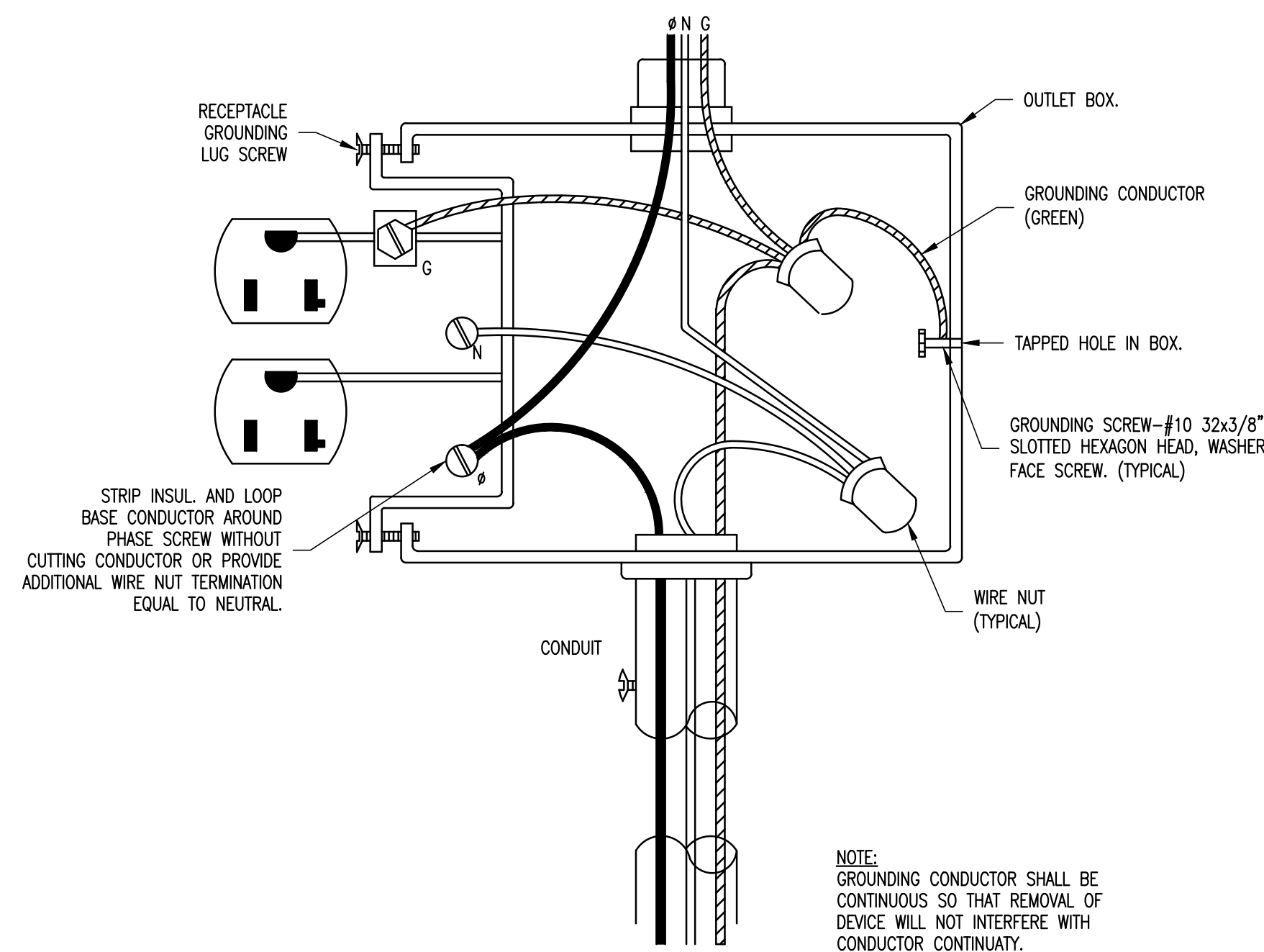
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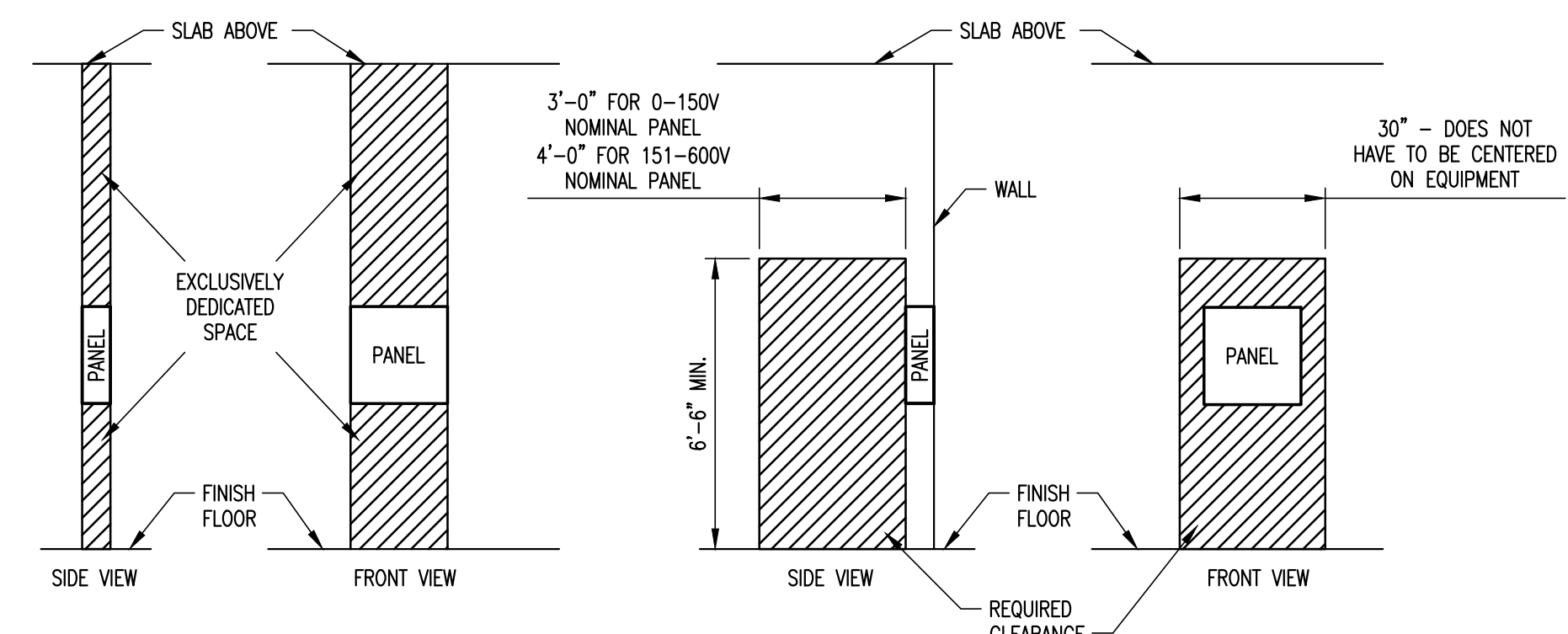
02 TYPICAL PANEL COLOR CODE
N.T.S.



01 TYPICAL CONDUIT STUB-UP DETAIL
N.T.S.



04 TYPICAL RECEPTACLE GROUNDING DETAIL
N.T.S.



03 TYPICAL PANELBOARD REQUIRED CLEARANCE
N.T.S.

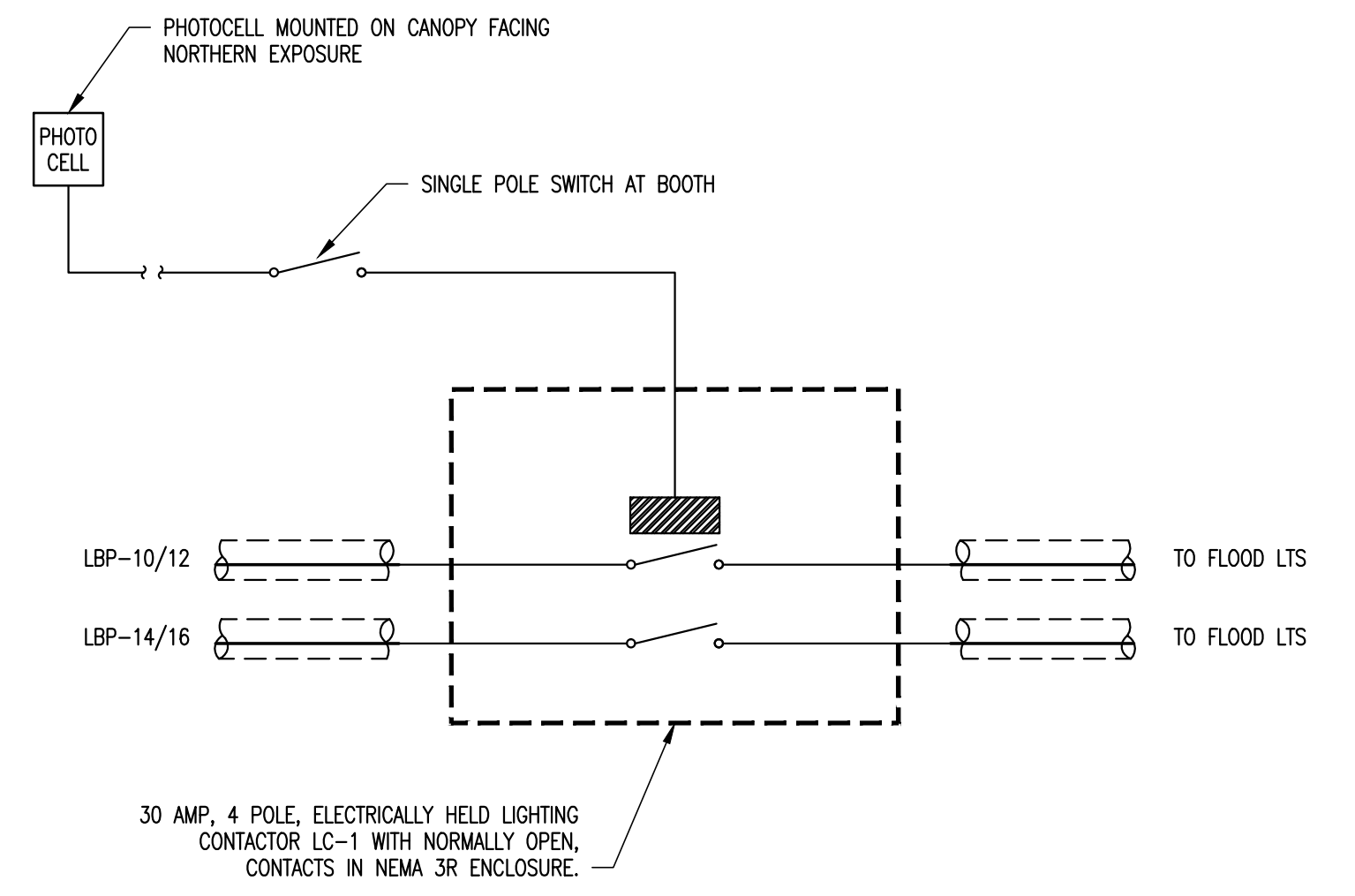
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Sheet Title	ELECTRICAL DETAILS
Sheet Number	E4.02



01 LIGHTING CONTROL CONTACTOR
 N.T.S.

Hidalgo County
 Precinct 4 - Recovery and
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 1051 N. Doolittle Rd.
 Edinburg, Texas 78542

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Sheet Title	ELECTRICAL DETAILS

E4.03
 Sheet Number