

CORPUS CHRISTI REGIONAL TRANSPORTATION AUTHORITY

RFP No. 2024-FC-17

GENERATOR FOR BEAR LANE

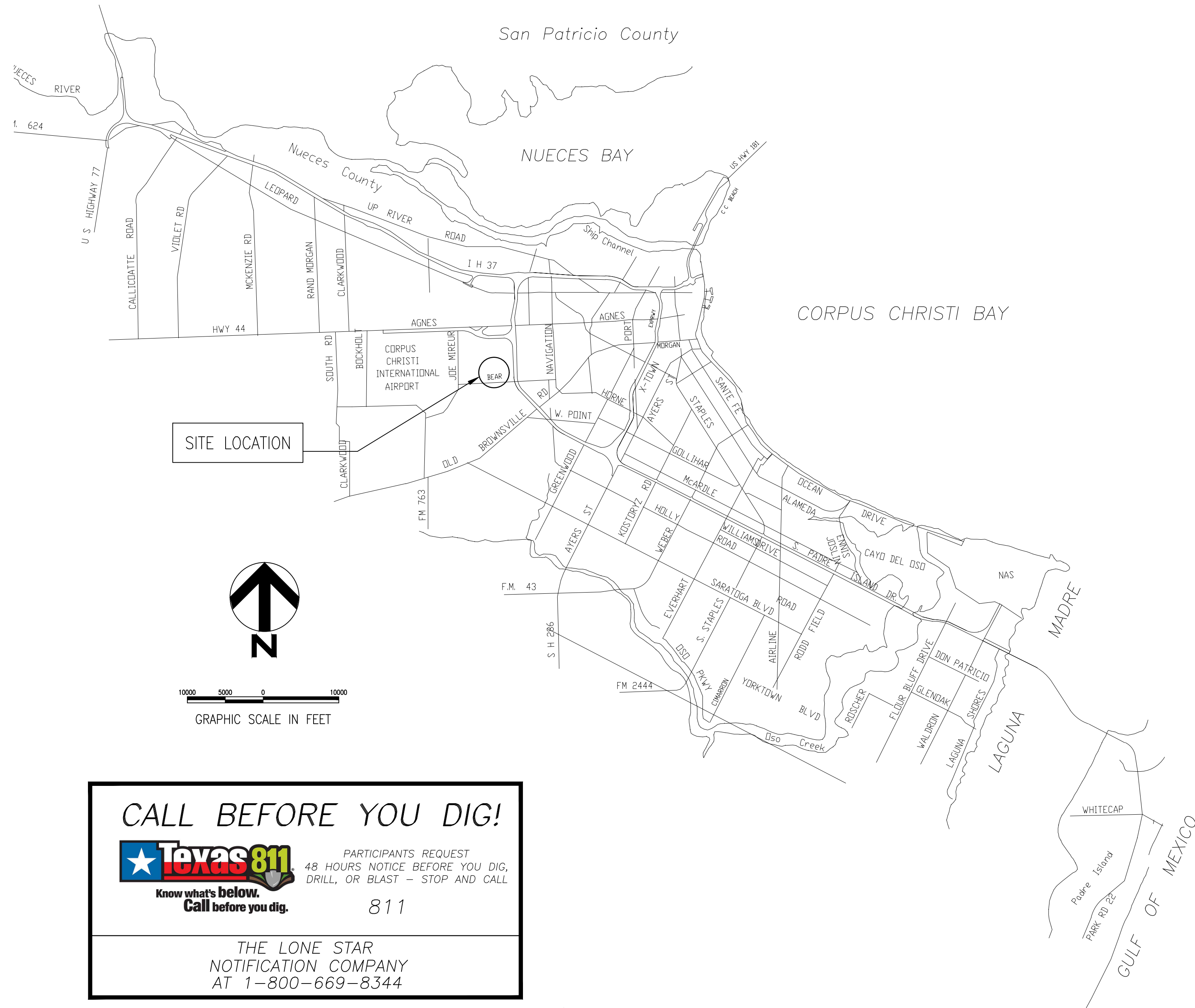
**CONSTRUCTION DRAWINGS
(EXHIBIT II)**

Prepared by

Hanson Professional Services, Inc.

BEAR LANE GENERATOR

5658 BEAR LANE, CORPUS CHRISTI, TEXAS 78405



Sheet Index

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|----------|---|
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CALL BEFORE YOU DIG!

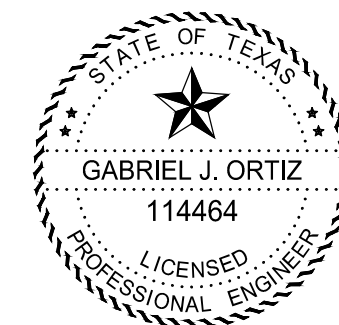


THE LONE STAR
NOTIFICATION COMPANY
AT 1-800-669-8344

Gabriel Ortiz 07/17/2023

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Filename COVER SHEET.DWG
Scale AS NOTED
Date 7/17/2023

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| DRAWN | MTG | 07/17/23 |
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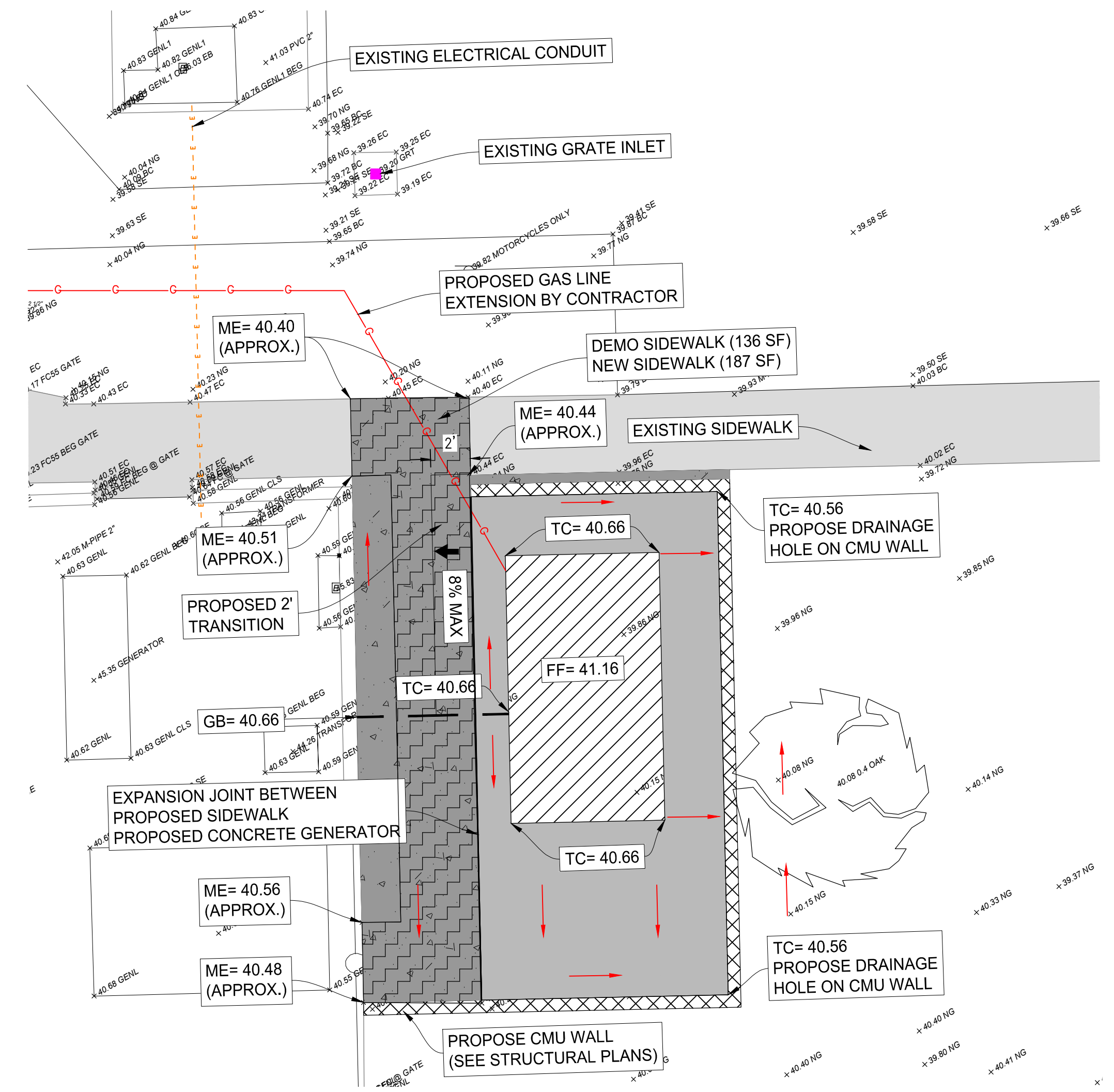
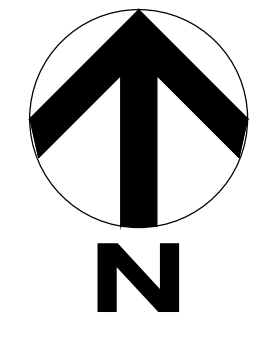
COVER SHEET

BEAR LANE GENERATOR
CORPUS CHRISTI, TEXAS

FINAL SUBMITTAL

G0

1 of 11 sheets



INSET A



LEGEND

- PROPOSED CONCRETE (SEE STRUCTURAL)
- CMU WALL (SEE STRUCTURAL)
- FUTURE FOUNDATION PAD FOR GENERATOR
- EXISTING SIDEWALK
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE PAVEMENT REPAIR
- DEMO EXISTING SIDEWALK
- EXISTING WATER MAIN
- EXISTING WASTEWATER MAIN
- EXISTING STORM LINE
- PROPOSED GAS LINE
- EXISTING ELECTRICAL CONDUIT
- DRAINAGE FLOW

NOTE: EXISTING UTILITIES ARE REFERENCE FROM CITY OF CORPUS CHRISTI GIS AND AVAILABLE AS-BUILT DRAWINGS ARE APPROXIMATE. CONTRACTOR SHALL CONTACT 811 AND VERIFY UTILITIES LOCATION PRIOR TO ANY WORK. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPROPRIATE PUBLIC AND PRIVATE UTILITY COMPANIES, BY ALL MEANS POSSIBLE, PRIOR TO COMMENCING CONSTRUCTION TO DETERMINE UTILITY LOCATION(S) WITHIN AND ADJACENT TO THE PROJECT SITE

CALL BEFORE YOU DIG!

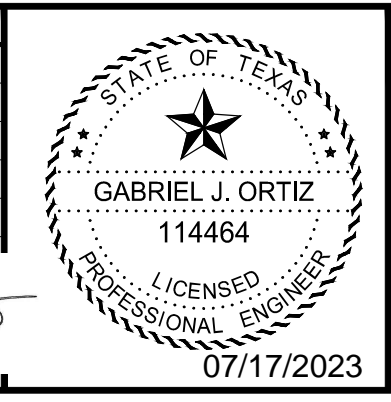
PARTICIPANTS REQUEST 48 HOURS NOTICE BEFORE YOU DIG, DRILL, OR BLAST - STOP AND CALL

Know what's below. Call before you dig. 811

THE LONE STAR NOTIFICATION COMPANY AT 1-800-669-8344

JUL 17, 2023 4:18 PM TORREC02031 I:\19\085\1910017B\CAD\SITE\1910017B\BEAR LN GENERATOR\PLAN.DWG

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| DRAWN | MTG | 07/17/23 |
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SITE & GRADING PLAN

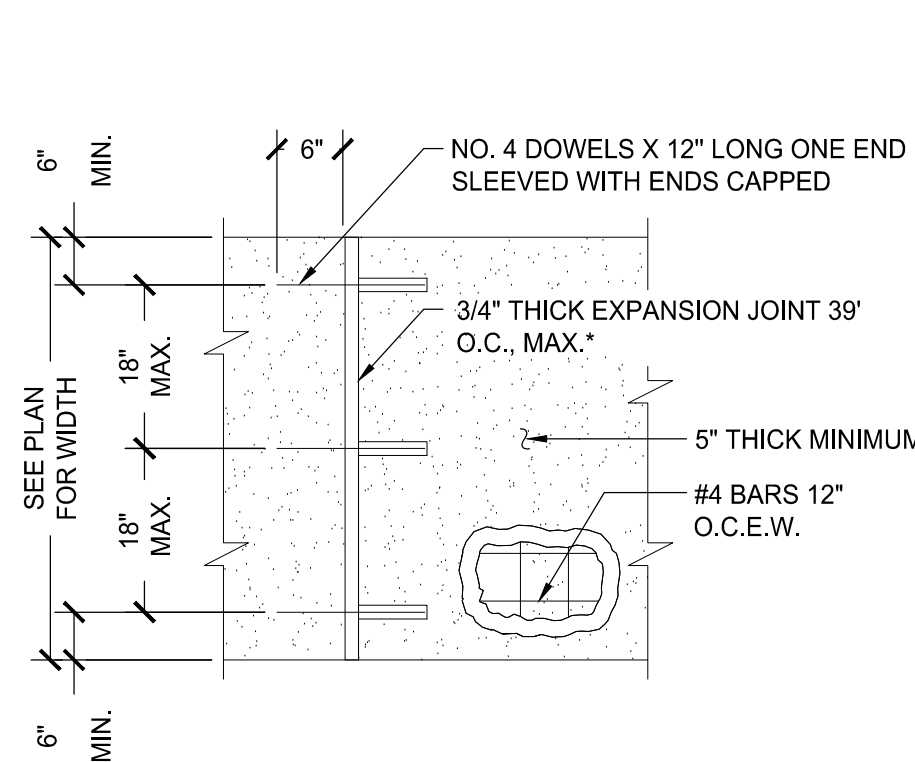
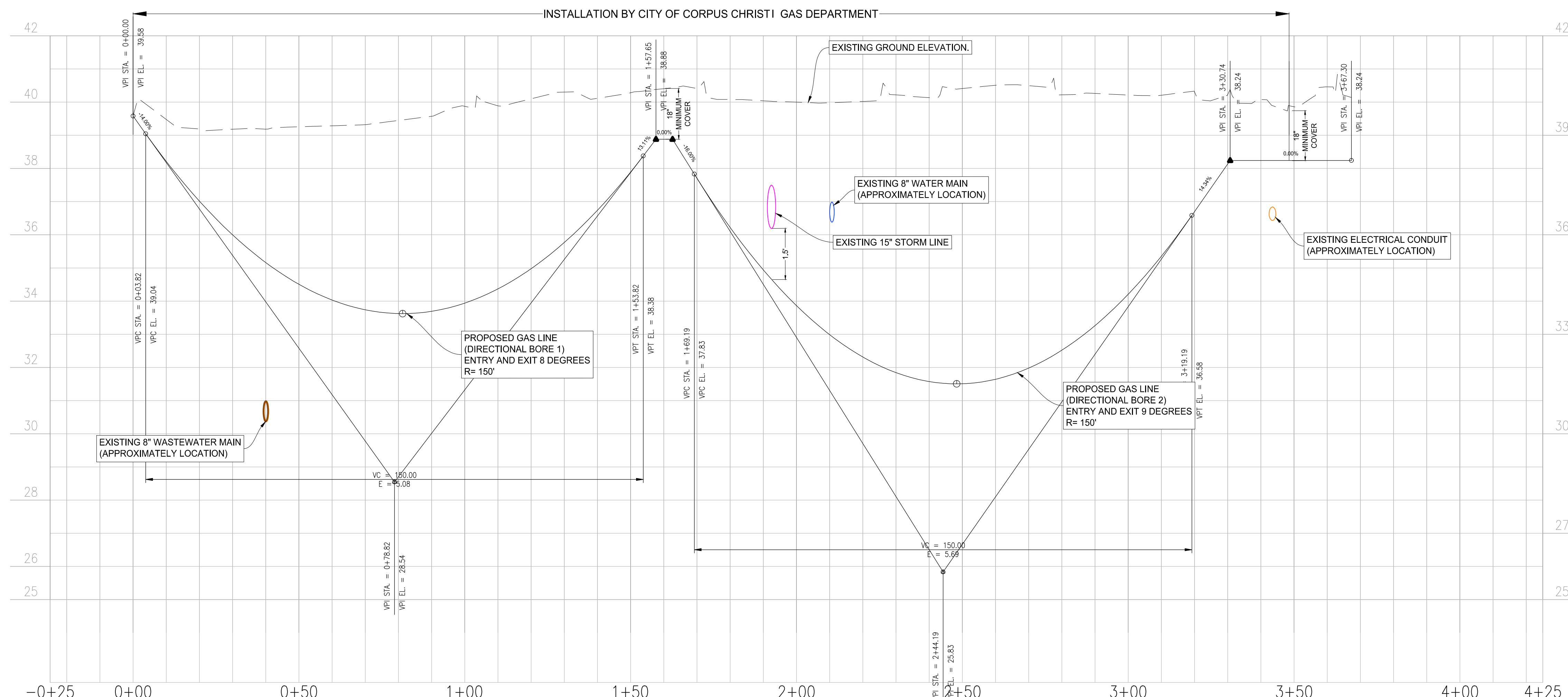
BEAR LANE GENERATOR
CORPUS CHRISTI, TEXAS

FINAL SUBMITTAL

C1

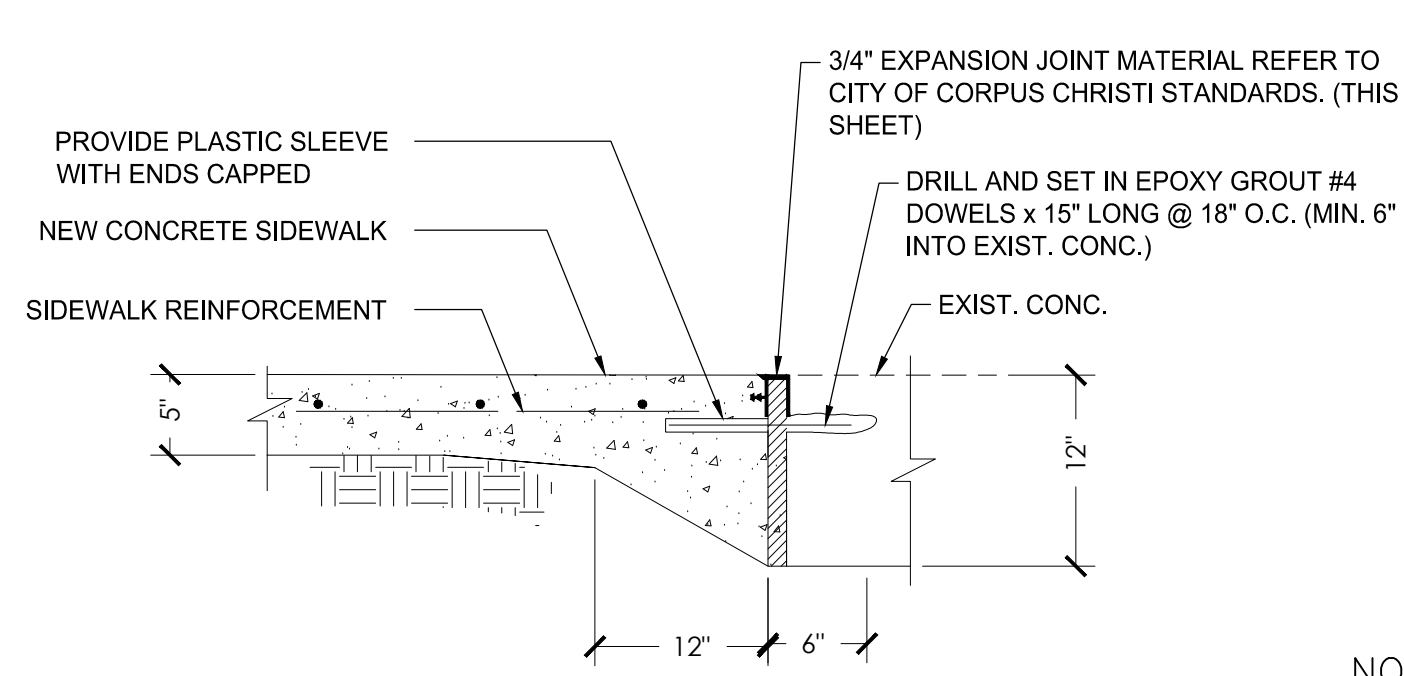
1 of 2 sheets

Proposed Gas Line



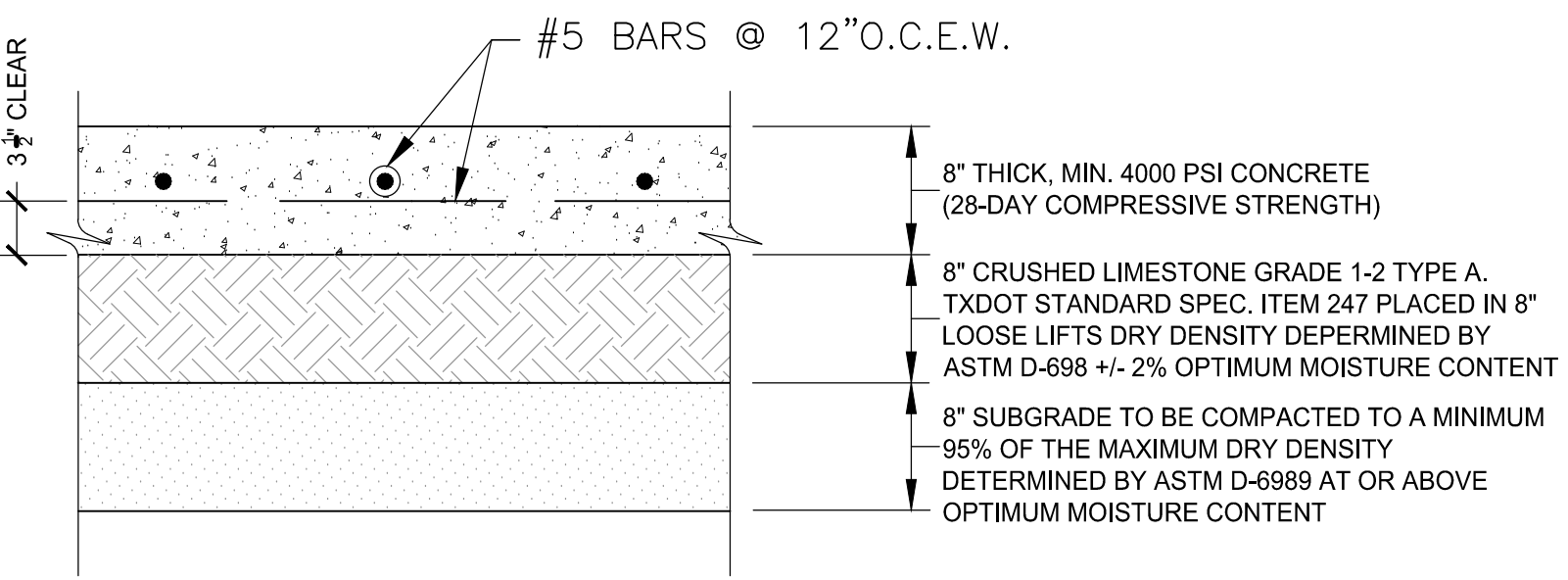
SIDEWALK DETAIL

NOT TO SCALE



SIDEWALK TIE-IN DETAIL

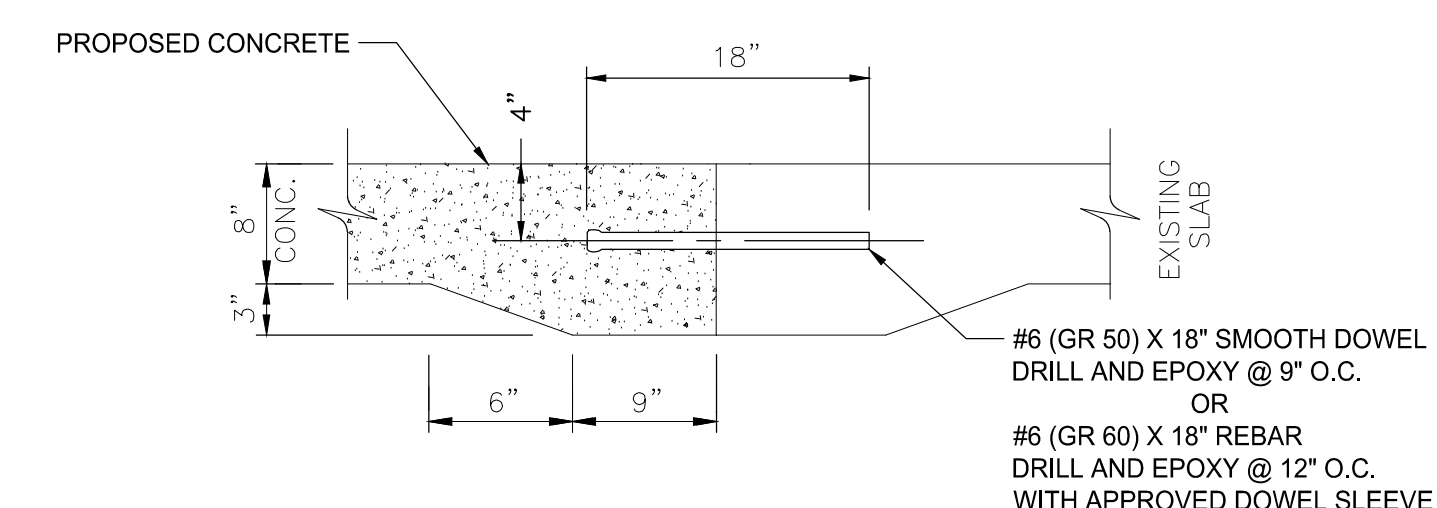
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NOTE: 1. CONCRETE PAVEMENT SHALL HAVE HEAVY BROOM TEXTURED FINISH.
2. A MINIMUM 5'X5' REPAIR SHOULD BE INCLUDED IN THE BID SET IN THE EVENT THE CITY GAS DEPARTMENT DOES NOT REPAIR EXISTING PAVEMENT.

CONCRETE PAVEMENT REPAIR

NOT TO SCALE



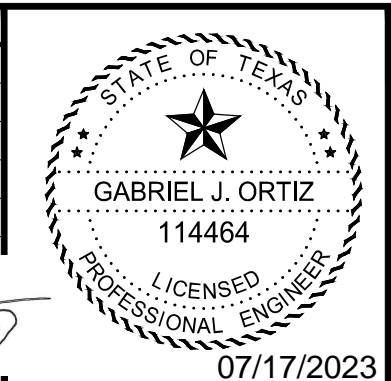
CONCRETE PAVEMENT CONNECTION TO EXISTING

NOT TO SCALE

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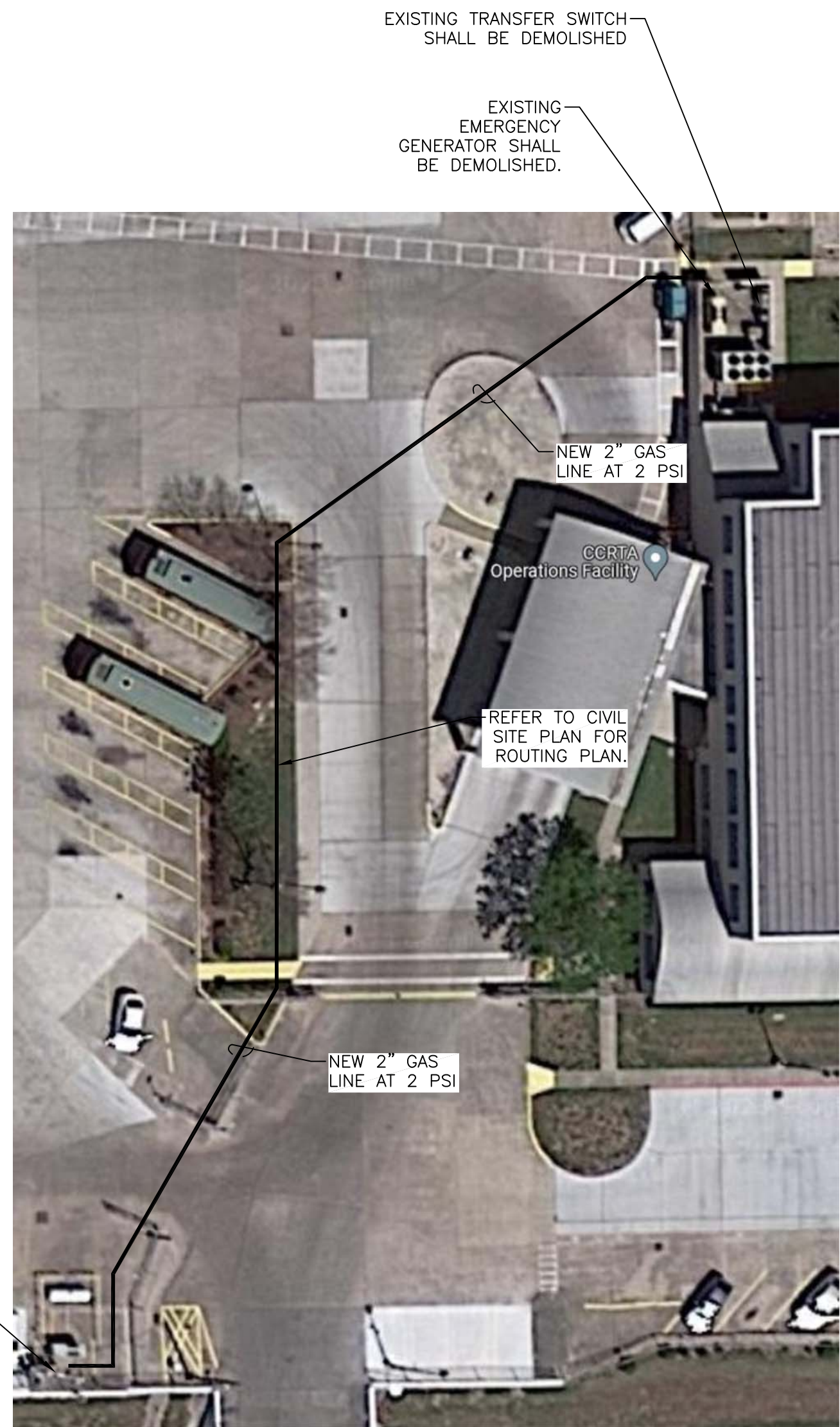
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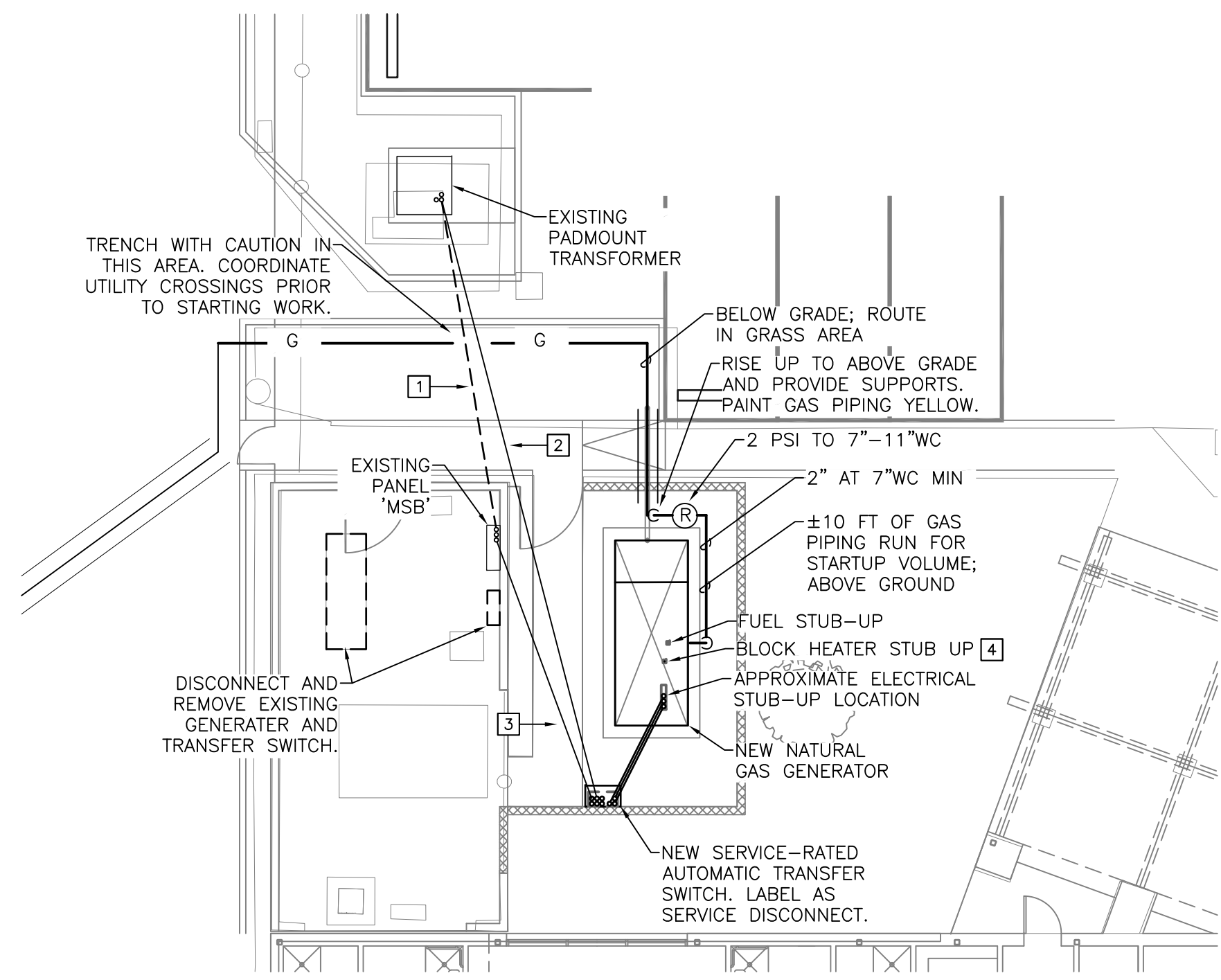
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GAS LINE PROFILE & DETAILS
 BEAR LANE GENERATOR
 CORPUS CHRISTI, TEXAS

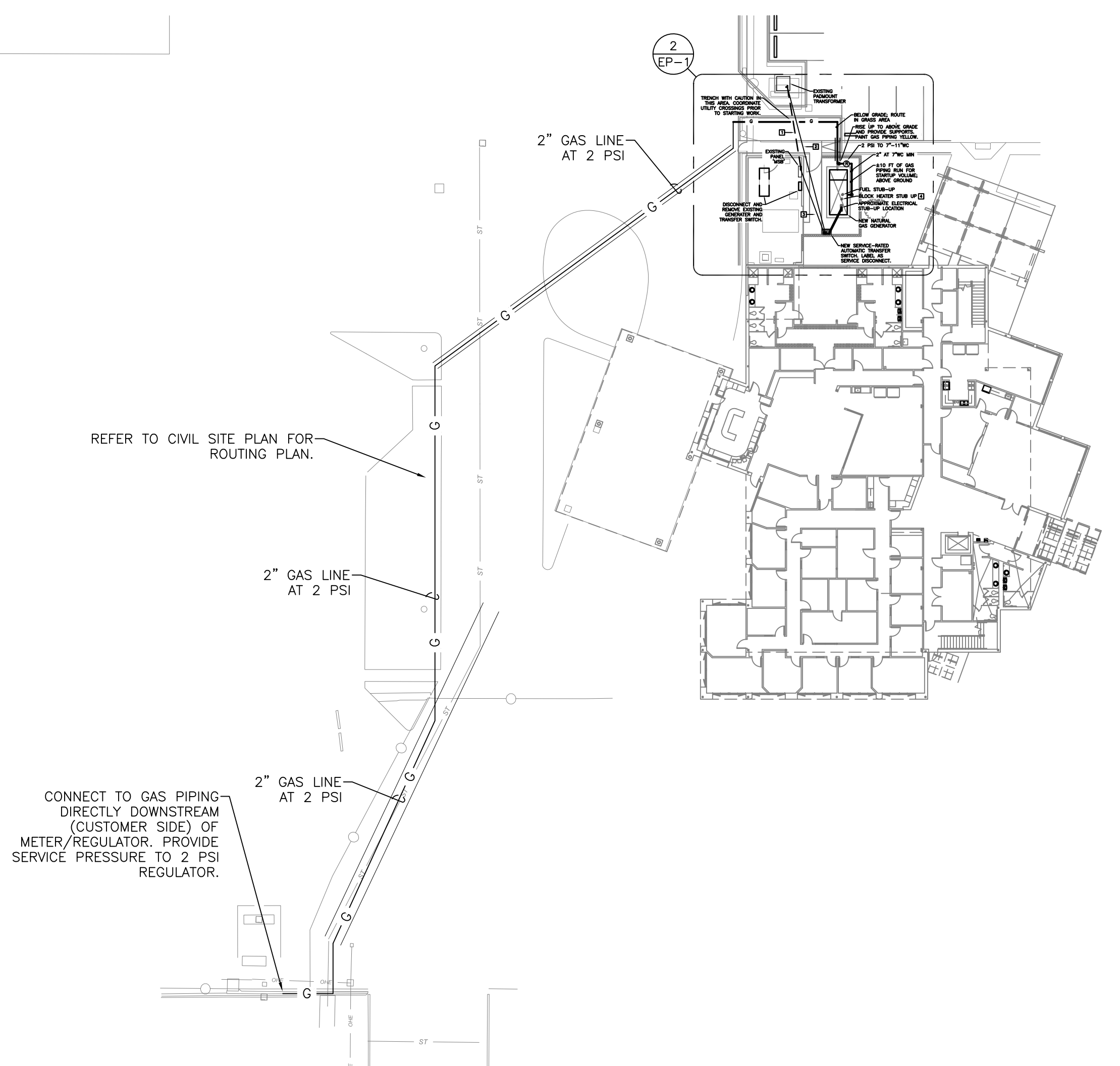
FINAL SUBMITTAL
C2
 2 of 2 sheets



3 PHOTO PLATE
SITE NATURAL GAS ROUTING
SCALE: 1/32" = 1' - 0" (LOOSELY)



2 OUTDOOR ELECTRICAL YARD
FOR PROPOSED EMERGENCY GENERATOR
SCALE: 3/32" = 1' - 0"



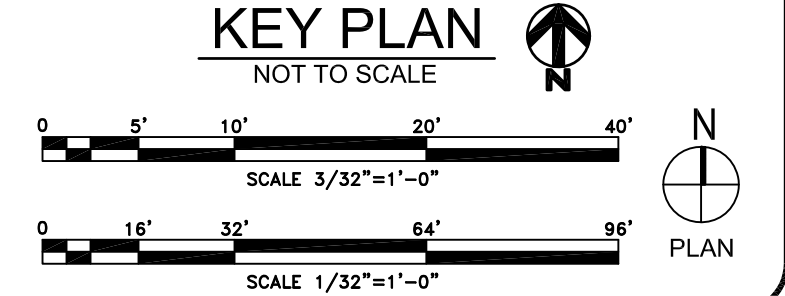
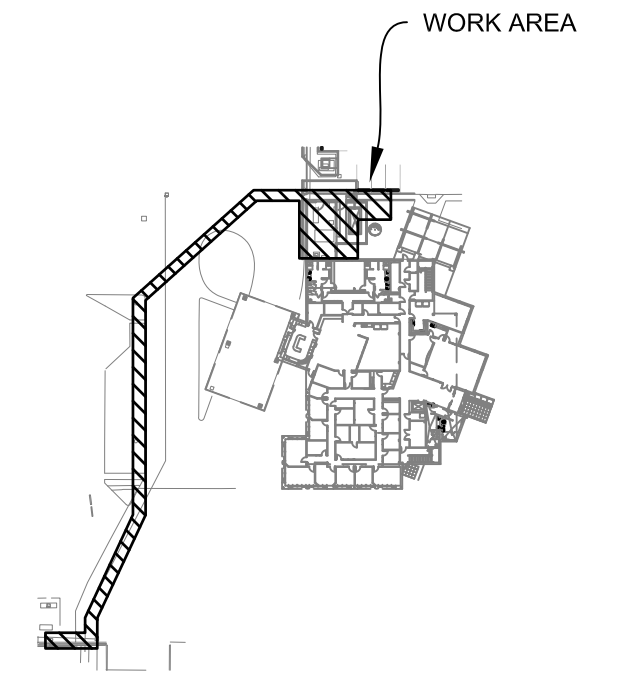
1 NATURAL GAS PIPE ROUTING
FOR PROPOSED EMERGENCY GENERATOR
SCALE: 1/32" = 1' - 0"

GENERAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE TRANSFER/DOWNTIME WITH LOCAL POWER COMPANY (AEP) AND CCRTA FACILITY MANAGER PRIOR TO THE COMMENCEMENT OF WORK IN ORDER TO MINIMIZE OPERATIONAL DOWNTIME OF FACILITY.
2. REFER TO ONE-LINE DIAGRAM FOR MORE INFORMATION ON CONDUIT AND FEEDER SIZING.
3. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER CODE CLEARANCES AROUND NEW ELECTRICAL EQUIPMENT AND PROPER AIR CLEARANCES FOR GENERATOR ARE MET.

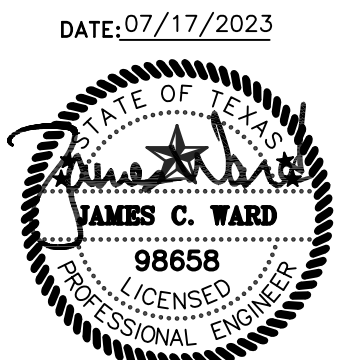
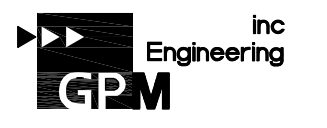
ELECTRICAL KEYED NOTES:

- 1 DISCONNECT AND REMOVE ALL EXISTING CONDUITS AND FEEDERS FROM PAD MOUNTED TRANSFORMER TO PANEL MSB.
- 2 PROVIDE NEW UNDERGROUND CONDUIT AND FEEDER FROM EXISTING PAD MOUNT TRANSFORMER TO NEW AUTOMATIC TRANSFER SWITCH.
- 3 PROVIDE NEW UNDERGROUND CONDUIT AND FEEDER FROM NEW AUTOMATIC TRANSFER SWITCH TO EXISTING PANEL MSB.
- 4 PROVIDE NEW CIRCUIT (LA-28) TO CONNECT BLOCK HEATER AS REQUIRED. REUSE EXISTING CONDUIT FROM EXISTING BLOCK HEATER CIRCUIT WHERE POSSIBLE AND PROVIDE NEW JUNCTION BOX ON EXTERIOR WALL TO TRANSITION TO UNDERGROUND. FIELD COORDINATE ROUTING PRIOR TO STARTING WORK.



JUL 14, 2023 2:40 PM JOEM Z:\2023\23023_ELECTRICAL\23023_ELECTRICAL.DWG

Mechanical and Electrical Consultants
Firm Registration # F-2829
4444 Corona Drive, Ste. 212
Corpus Christi, TX 78411
361 852 2342 vox
361 852 2343 fax



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| Hanson No. | | |
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ELECTRICAL/PLUMBING SITE PLAN

BEAR LANE GENERATOR
5658 BEAR LANE
CORPUS CHRISTI, TEXAS 78405

EP-1

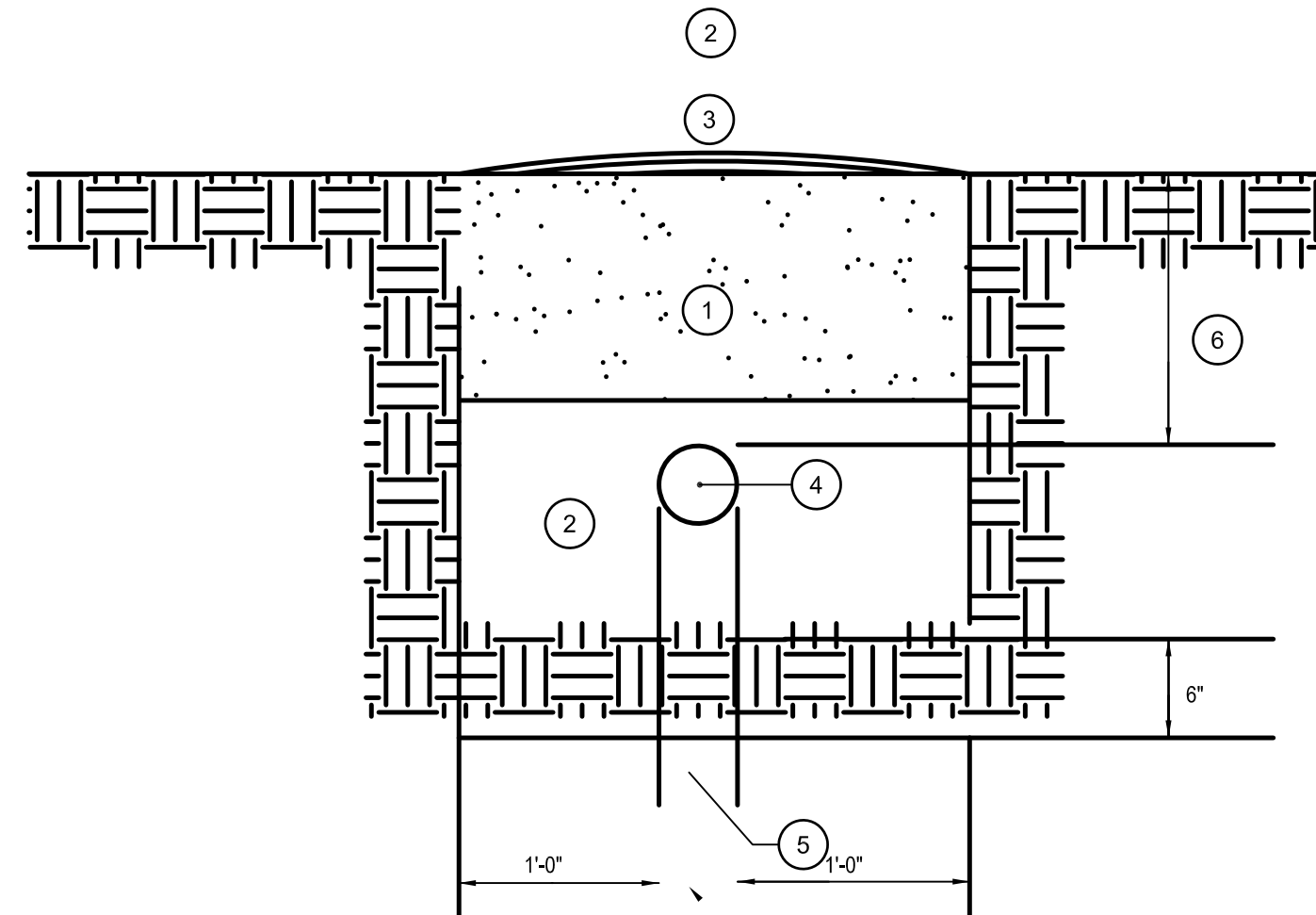
EXISTING ELECTRICAL SYSTEM CONNECTED LOAD = 791.589 AMPERES

ELECTRICAL PEAK DEMAND:

HIGHEST PEAK ELECTRICAL DEMAND = 216 KW = 259.9 AMPERES

TRENCH (W/PIPE) DETAIL KEYED NOTES:

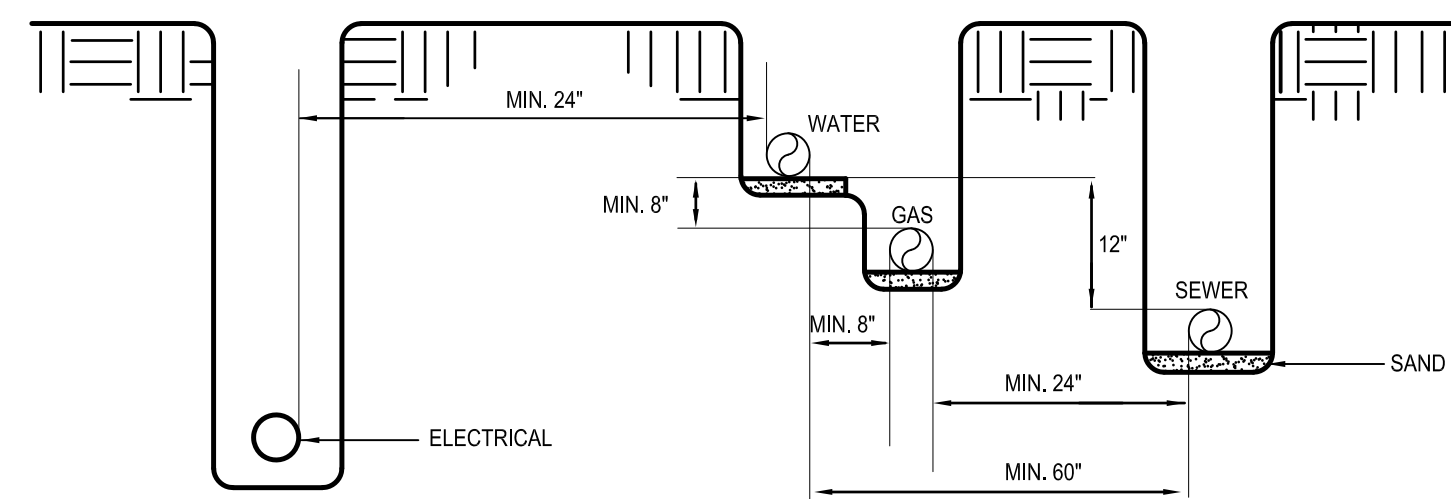
1. BACKFILL SHALL BE RETAINED, SELECT MATERIAL FROM TRENCH EXCAVATION. MECHANICALLY COMPACT TO 95% PROCTOR. MOISTURE CONTENT -1 TO +3 % OF OPTIMAL PER ASTM-D698.
2. BEDDING SHALL BE SELECT SAND BACKFILL PER ASTM-D2321, CLASS II, MECHANICALLY COMPACT TO 95% PROCTOR. MOISTURE CONTENT -1 TO 3 % OF OPTIMAL PER ASTM D698.
3. PROVIDE SLIGHT OVERFILL FOR SETTLING. PROVIDE SEED, FERTILIZER, AND WATERING.
4. PIPE SHALL BE INSPECTED BEFORE COVERING.
5. VARIES, REFER TO PLAN.
6. VARIES, FIELD VERIFY.



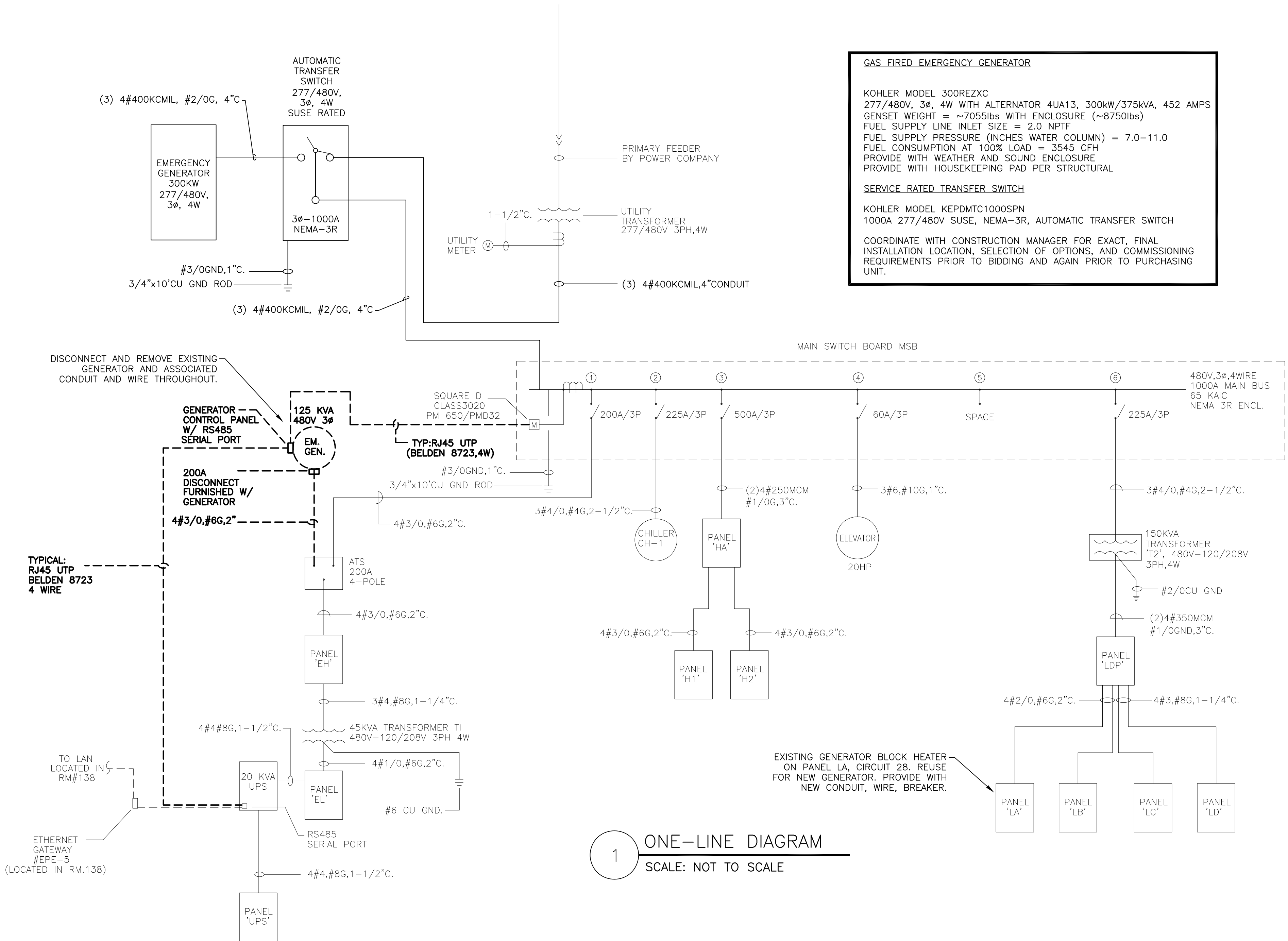
1 PIPE TRENCH SCHEMATIC
SCALE: NOT TO SCALE

TRENCHING DETAIL NOTES:

1. CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.
2. COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.
3. MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATERLINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.
4. MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



2 UTILITY SEPARATION SCHEMATIC
SCALE: NOT TO SCALE



1 ONE-LINE DIAGRAM
SCALE: NOT TO SCALE

GAS FIRED EMERGENCY GENERATOR

KOHLER MODEL 300REZXC
277/480V, 3Ø, 4W WITH ALTERNATOR 4UA13, 300kW/375kVA, 452 AMPS
GENSET WEIGHT = ~7055lbs WITH ENCLOSURE (~8750lbs)
FUEL SUPPLY LINE INLET SIZE = 2.0 NPTF
FUEL SUPPLY PRESSURE (INCHES WATER COLUMN) = 7.0-11.0
FUEL CONSUMPTION AT 100% LOAD = 3545 CFH
PROVIDE WITH WEATHER AND SOUND ENCLOSURE
PROVIDE WITH HOUSEKEEPING PAD PER STRUCTURAL

SERVICE RATED TRANSFER SWITCH

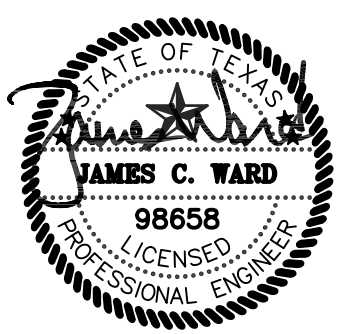
KOHLER MODEL KEPDMTC1000SPN
1000A 277/480V SUSE, NEMA-3R, AUTOMATIC TRANSFER SWITCH

COORDINATE WITH CONSTRUCTION MANAGER FOR EXACT, FINAL INSTALLATION LOCATION, SELECTION OF OPTIONS, AND COMMISSIONING REQUIREMENTS PRIOR TO BIDDING AND AGAIN PRIOR TO PURCHASING UNIT.

Mechanical and Electrical Consultants
Firm Registration # F-2829
4444 Corona Drive, Ste. 212
Corpus Christi, TX 78411
361 852 2342 vox
361 852 2343 fax



DATE: 07/17/2023



CORPUS CHRISTI REGIONAL TRANSPORTATION AUTHORITY

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Filename _____
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| DRAWN | X | X-X-X |
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ELECTRICAL ONE-LINE DIAGRAM

BEAR LANE GENERATOR
5658 BEAR LANE
CORPUS CHRISTI, TEXAS 78405

EP-2

| NUMBER | REVISION | DATE | DRAWN | DESIGNED | REVIEWED |
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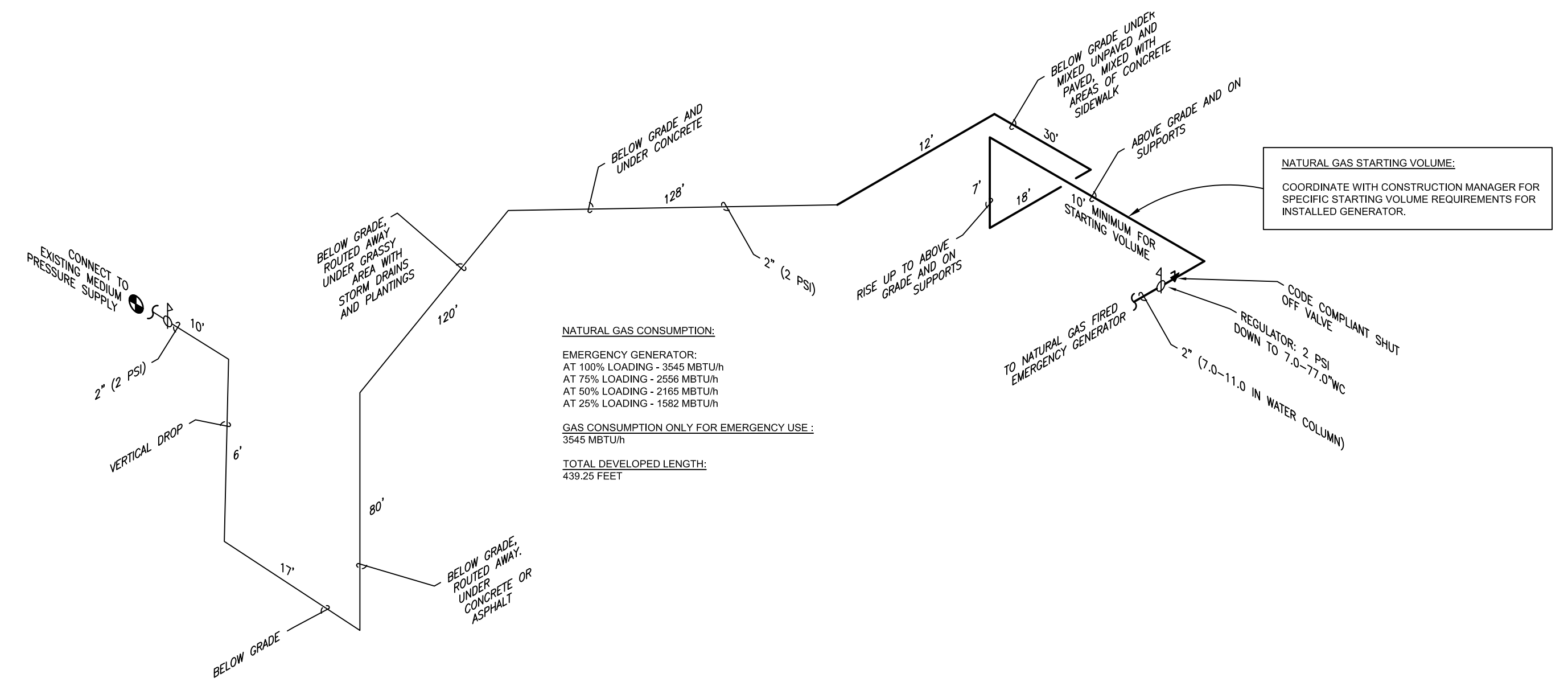
| ELECTRICAL LEGEND | | |
|--|--|--|
| NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS JOB! | | |
| SYMBOL | DESCRIPTION | SYMBOL DESCRIPTION |
| B-2 | HOMERUN TO CIRCUIT AND PANEL INDICATED | ▽ TELEPHONE OUTLET |
| (2) | NUMBER IN PARENTHESIS INDICATES CIRCUIT TO WHICH DEVICE IS CONNECTED | ▼ DATA/TELEPHONE OUTLET |
| | | ▼ DATA OUTLET |
| \$ | TOGGLE SWITCH | ⊙ 120V, 1P EQUIPMENT CONNECTION |
| \$3 | THREEWAY SWITCH | ⊙ 208V, 1P EQUIPMENT CONNECTION |
| \$4 | FOURWAY SWITCH | ⊙ 208V, 3P EQUIPMENT CONNECTION |
| \$0 | DIMMER SWITCH | ⊙ 240V, 1P EQUIPMENT CONNECTION |
| \$k | KEY SWITCH | ⊙ 240V, 3P EQUIPMENT CONNECTION |
| \$m | MANUAL MOTOR STARTER | ⊙ 277V, 1P EQUIPMENT CONNECTION |
| ⊙ | OCCUPANCY SENSOR | ⊙ 480V, 1P EQUIPMENT CONNECTION |
| ⊙ | PHOTOCELL | ⊙ 480V, 3P EQUIPMENT CONNECTION |
| ⊖ | SINGLE RECEPTACLE | □ DISCONNECT SWITCH - SIZE AND POLE AS NOTED |
| ⊖ | ISOLATED GROUND SINGLE RECEPTACLE | Ⓟ JUNCTION BOX, SIZED PER NEC |
| ⊖ | DUPLEX RECEPTACLE | Ⓟ TELEVISION OUTLET BOX |
| ⊖ | ISOLATED GROUND DUPLEX RECEPTACLE | WP WEATHER PROOF |
| ⊖ | QUADPLEX RECEPTACLE | GFI GROUND FAULT INTERRUPTER |
| ⊖ | ISOLATED GROUND QUADPLEX RECEPTACLE | EWC ELECTRIC WATER COOLER |
| ⊖ | GFI DUPLEX RECEPTACLE | EWB ELECTRIC WATER HEATER |
| ⊖ | FLOOR MOUNTED DUPLEX | E.C. ELECTRICAL CONTRACTOR |
| ⊖ | FLOOR MOUNTED QUADPLEX | |

| PANEL 'MSB' | | | | | | | | | | | | |
|--|-------------|--------|---------------------|----------|---|---|---|----------|---------------------|-------|--------------|-------|
| 1000AMP, M.L.O., 277/480V, 3Ø, 4W, SURFACE, NEMA 3R, 65 KAIC | | | | | | | | | | | | |
| SWITCHBOARD SHALL BE FRONT SIDE DRAW-OUT TYPE. | | | | | | | | | | | | |
| CKT # | LOAD SERVED | LOAD | CONDUIT & WIRE SIZE | BKR SIZE | A | B | C | BKR SIZE | CONDUIT & WIRE SIZE | LOAD | LOAD SERVED | CKT # |
| 1 | PANEL EH | 22295 | 4#3/0#6G,2°C. | 200/3 | A | | | 225/3 | 3#4/0,#4G,2°C. | 43877 | CHILLER CH-1 | 2 |
| 3 | | 22691 | | | B | | | | | 43877 | | 4 |
| 5 | | 18628 | | | C | | | | | 43877 | | 6 |
| 7 | PANEL HA | 107675 | (2)4#250MCM | 500/3 | A | | | 60/3 | 3#6,1#10G,1°C. | 12853 | ELEVATOR | 8 |
| 9 | | 100954 | #1/0G,3°C. | | B | | | | | 12853 | | 10 |
| 11 | | 94484 | | | C | | | | | 12853 | | 12 |
| 13 | SPACE | | | | A | | | 225/3 | 3#4/0,#4G,2-1/2°C. | 35556 | PANEL LDP | 14 |
| 15 | | | | 200/3 | B | | | | | 43686 | | 16 |
| 17 | | | | | C | | | | | 41652 | | 18 |

CONNECTED LOAD = 657811 VA PHASE A = 222256 VA PHASE B = 224061 VA PHASE C = 211494 VA

| PANEL 'LA' | | | | | | | | | | | | |
|---|-----------------------|------|---------------------|----------|---|---|---|----------|---------------------|------|----------------------|-------|
| 225 AMP, M.L.O., 120/208V, 3Ø, 4W, S/N, SURFACE, NEMA 1 | | | | | | | | | | | | |
| CKT # | LOAD SERVED | LOAD | CONDUIT & WIRE SIZE | BKR SIZE | A | B | C | BKR SIZE | CONDUIT & WIRE SIZE | LOAD | LOAD SERVED | CKT # |
| 1 | KITCH-118 RCPT (GFI) | 1500 | 2#12,#12G,1/2°C. | 20/1 | A | | | 20/1 | 2#12,#12G,1/2°C. | 400 | KITCH-117 ICE MACH | 2 |
| 3 | KITCH-118 MICRO. | 1200 | 2#12,#12G,1/2°C. | 20/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 1200 | KITCH-117 MICRO | 4 |
| 5 | KITCH-118 REFRIG. | 1500 | 2#12,#12G,1/2°C. | 20/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 1800 | KITCH-117 DISHWASH | 6 |
| 7 | LUNCH RM RECEPT. | 720 | 2#12,#12G,1/2°C. | 20/1 | A | | | 20/1 | 2#12,#12G,1/2°C. | 250 | KITCH-117 REFRIG. | 8 |
| 9 | LUNCH RM VEND MACH | 1000 | 2#12,#12G,1/2°C. | 20/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 1200 | KITCH-117 RECEPT. | 10 |
| 11 | LUNCH RM VEND MACH. | 1000 | 2#12,#12G,1/2°C. | 20/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 900 | ELECT RM & MISC RCPT | 12 |
| 13 | CONF. RECEPT. | 540 | 2#12,#12G,1/2°C. | 20/1 | A | | | 20/1 | 2#12,#12G,1/2°C. | 360 | WP GFI RECEPT | 14 |
| 15 | MEN RR RECEPT. | 720 | 2#12,#12G,1/2°C. | 20/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 1018 | ACTIVITY RM RECEPT | 16 |
| 17 | MEN RR HAND DRYER | 2300 | 2#10,#10G,3/4°C. | 30/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 1000 | ACTIVITY RM VEND | 18 |
| 19 | WOMEN RR RECEPT | 360 | 2#12,#12G,1/2°C. | 30/1 | A | | | 20/1 | 2#12,#12G,1/2°C. | 1000 | ACTIVITY RM VEND | 20 |
| 21 | WOMEN RR HAND DRYER | 2300 | 2#10,#10G,3/4°C. | 30/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 1200 | ACTIVITY RM MICRO | 22 |
| 23 | MISC RECEPT. | 540 | 2#12,#12G,1/2°C. | 30/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 540 | READY RM RECEPT. | 24 |
| 25 | LOBBY & CORR. RECEPT. | 720 | 2#12,#12G,1/2°C. | 30/1 | A | | | 20/1 | 2#12,#12G,1/2°C. | 540 | MONEY RM RECEPT. | 26 |
| 27 | MISC RECEPT. | 720 | 2#12,#12G,1/2°C. | 30/1 | B | | | 30/1 | 2#10,#10G,1/2°C. | 2500 | GEN. BLOCK HEATER | 28 |
| 29 | EDF-1 | 410 | 2#12,#12G,1/2°C. | 30/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 1000 | CONF. LIGHTS | 30 |
| 31 | WOMEN RR HAND DRYER | 2300 | 2#10,#10G,3/4°C. | 30/1 | A | | | 15/1 | 2#12,#12G,1/2°C. | 520 | RCP-1 | 32 |
| 33 | MEN RR HAND DRYER | 2300 | 2#10,#10G,3/4°C. | 30/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 280 | ELEV RECEPT. | 34 |
| 35 | DDC CONTROLS | 1000 | 2#12,#12G,1/2°C. | 20/1 | C | | | 15/1 | 2#12,#12G,1/2°C. | 528 | EF-2 | 36 |
| 37 | TIME CLOCK | 360 | 2#12,#12G,1/2°C. | 20/1 | A | | | 15/1 | 2#12,#12G,1/2°C. | 528 | EF-3 | 38 |
| 39 | ROLL DOWN SHUTTER | 1000 | 2#12,#12G,1/2°C. | 20/1 | B | | | 20/1 | 2#12,#12G,1/2°C. | 1000 | MECH CONTROLS | 40 |
| 41 | SPARE | | | 20/1 | C | | | 20/1 | 2#12,#12G,1/2°C. | 1000 | MECH CONTROLS | 42 |

CONNECTED LOAD = 39954 VA PHASE A = 10098 VA PHASE B = 16338 VA PHASE C = 13518 VA



1 NATURAL GAS PIPING ISOMETRIC
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Mechanical and Electrical Consultants
 Firm Registration # F-2829
 4444 Corona Drive, Ste. 212
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 CORPUS CHRISTI, TEXAS 78405

EP-3

ARCHITECTURAL GENERAL NOTES

PROJECT NOTES

- THE GENERAL CONTRACTOR, AND THEIR RESPECTIVE SUBCONTRACTORS, WILL BE HELD TO HAVE STUDIED THE CONSTRUCTION DOCUMENTS, VISITED THE SITE, AND BECOME FAMILIAR WITH EXISTING CONDITIONS IN WHICH THEY WILL HAVE TO OPERATE.
 - CONSTRUCTION DOCUMENTS MAY INCLUDE THE CONSTRUCTION DRAWINGS, SPECIFICATIONS, CONTRACTS, AND ANY SUBSEQUENT DOCUMENTS RELEASED BY THE DESIGN PROFESSIONAL (ARCHITECT AND/OR ENGINEER) FOR THIS PROJECT, BOTH PRIOR TO AND DURING CONSTRUCTION.
- THE OVERALL CONSTRUCTION DOCUMENTS EXPRESS THE DESIGN INTENT, AND MAY NOT INCLUDE ALL DETAILS NECESSARY TO PERFORM THE WORK. THE CONSTRUCTION DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS.
- THE CONSTRUCTION DRAWINGS FOR THIS PROJECT MAY INCLUDE, BUT ARE LIMITED TO, THE FOLLOWING DISCIPLINES:
 - CIVIL
 - STRUCTURAL
 - ARCHITECTURAL
 - MECHANICAL, ELECTRICAL AND PLUMBING
 - LANDSCAPE
 - ANY OTHER SPECIALIZED DISCIPLINES
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES IN THE CONTRACT DOCUMENTS SO THAT THEY MAY BE EVALUATED PRIOR TO PERFORMING THE WORK. WRITTEN DIRECTION WILL BE PROVIDED BY THE DESIGN DISCIPLINE BEFORE PROCEEDING WITH ANY WORK. ANY WORK COMPLETED WITHOUT WRITTEN DIRECTION WILL BE AT THE CONTRACTOR'S OWN RISK AND EXPENSE.
- THE CONTRACTOR AND THEIR SUBCONTRACTORS SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE GOVERNING BUILDING CODES, CURRENT O.S.H.A. SAFETY REGULATIONS, AND CURRENT MUNICIPAL ORDINANCES OF THE PROJECT'S LOCATION.
- ALL RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (T.A.S.) UNLESS NOTED OTHERWISE.
- IF THE PROJECT IS LOCATED WITHIN ONE OF THE DESIGNATED WINDSTORM CATASTROPHE COUNTIES IDENTIFIED BY THE TEXAS DEPARTMENT OF INSURANCE, THEN REFER TO THE NOTES PROVIDED BY THE STRUCTURAL ENGINEER FOR FURTHER INSTRUCTIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY CLEARANCES AND PERMITS FOR THE PROJECT FROM THE LOCAL MUNICIPALITY, UNLESS STATED OTHERWISE IN OTHER DOCUMENTS.
- THE CONTRACTOR SHALL SCHEDULE WITH THE LOCAL BUILDING AUTHORITY ALL REQUIRED INSPECTIONS FOR THE WORK TO BE PERFORMED IN THE CONSTRUCTION DOCUMENTS.
- THE CONTRACTOR SHALL PROVIDE A MEANS TO PROTECT ALL EXISTING AND NEW SURFACES - BOTH HORIZONTAL AND VERTICAL - FROM DAMAGE DURING CONSTRUCTION, ESPECIALLY THOSE SCHEDULED TO REMAIN "AS IS" OR TO RECEIVE A NEW FINISH / COATING ACCORDING TO THE CONSTRUCTION DOCUMENTS.
- DAMAGE DONE TO ANY SURROUNDING SURFACES (HORIZONTAL AND VERTICAL), SUBGRADE AND OVERHEAD UTILITIES, SITE LANDSCAPING, THE IRRIGATION SYSTEM, PAVED SURFACES, OR ANY OTHER ITEMS THAT PERTAIN TO THE NORMAL APPEARANCE AND OPERATIONS OF THE PROPERTY, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL LEAVE THE JOBSITE CLEAN AND FREE OF CONSTRUCTION DEBRIS AT THE END OF EACH WORK DAY, AND AT THE COMPLETION OF THE PROJECT.
- LOCATIONS FOR THE FOLLOWING, AND OPERATIONS SCHEDULING, SHALL BE COORDINATED WITH THE OWNER, IF APPLICABLE TO THIS PROJECT:
 - THE CONSTRUCTION DUMPSTER
 - THE EQUIPMENT AND MATERIALS STORAGE YARD
 - THE PORTABLE RESTROOM FACILITY
 - THE PORTABLE JOBSITE OFFICE
 - SCHEDULED POWER OUTAGES TO PERFORM WORK
 - SCHEDULED UTILITY SHUTDOWNS TO PERFORM WORK
 - SITE ACCESS, THE HOURS OF WEEKDAY / WEEKEND OPERATIONS
 - MATERIAL DELIVERIES TO THE JOBSITE
 - ANY OTHER REQUIRED ITEMS TO PERFORM THE WORK
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER OF ANY CONCEALED OR UNKNOWN CONDITIONS ENCOUNTERED DURING CONSTRUCTION THAT DIFFER FROM THOSE NOTED IN THE CONSTRUCTION DOCUMENTS.
 - THE CONTRACTOR WILL BE NOTIFIED BY THE ARCHITECT AND/OR ENGINEER OF THE APPROXIMATE AMOUNT OF TIME NECESSARY TO EVALUATE AND RESPOND TO THE DISCOVERY IN WRITING.
 - WORK NOT DIRECTLY EFFECTED BY THE ANOMALLY MAY PROCEED CAUTIOUSLY, UNLESS INSTRUCTED OTHERWISE BY THE OWNER, OWNER'S REPRESENTATIVE, OR THE DESIGN PROFESSIONAL ACTING UNDER THE OWNER'S INSTRUCTIONS.
- THE CONTRACTOR SHALL RETAIN A COPY OF ALL CONSTRUCTION DRAWINGS, SPECIFICATIONS, INSPECTION REPORTS, APPROVED SUBMITTALS, AND SUBSEQUENT DOCUMENTS PROVIDED BY THE DESIGN PROFESSIONAL(S) IN THE JOBSITE OFFICE.
- AERIAL DRONES: ANY PARTY INTENDING TO OPERATE AN AERIAL DRONE FOR ANY PURPOSE ON THE CONSTRUCTION SITE SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS (F.A.A. OR OTHER) AND ABIDING BY CURRENT REGULATIONS (F.A.A., LOCAL, OR OTHER) BEFORE UTILIZATION. THE PARTY SHALL MAKE AVAILABLE COPIES OF THE PERMITS AND THE OPERATOR'S LICENSE TO THE OWNER IF REQUESTED. COORDINATE ALL FLIGHTS WITH THE GENERAL CONTRACTOR AND OWNER.

SYMBOLS LEGEND

PROJECT NOTES

- ELEVATION/GRADE TAG WITH NOTES
- BUILDING / INTERIOR ELEVATION TAG WITH SHEET REFERENCE
- SECTION OR DETAIL TAG WITH SHEET REFERENCE
- DOOR IDENTIFICATION TAG
- FLOOR FINISH IDENTIFICATION TAG
- WALL TYPE / PARTITION IDENTIFICATION TAG
- PLUMBING FIXTURE IDENTIFICATION TAG
- INTERIOR / EXTERIOR WINDOW IDENTIFICATION TAG
- REVISION NUMBER IDENTIFICATION TAG
- AREA AND AREA NUMBER IDENTIFICATION TAG
- SLOPE AND DIRECTION INDICATOR
- INTERIOR / EXTERIOR AREA IDENTIFICATION / DIRECTIONAL SIGN DESIGNATION TAG
- RESTROOM ACCESSORY DESIGNATION TAG
- TAG INDICATES A CHANGE IN THE FLOOR LEVEL
- TAG INDICATES A SLOPE IN THE FLOOR LEVEL

GENERAL ABBREVIATIONS

PROJECT NOTES

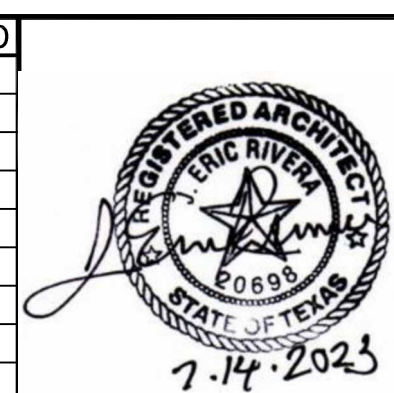
- A.C.T. ACOUSTICAL CEILING TILE
- A.H.U. AIR HANDLER UNIT
- ALUM. ALUMINUM
- APPROX APPROXIMATE(LY)
- ARCH. ARCHITECT, ARCHITECTURAL
- B.O.C. BOTTOM OF CONCRETE
- BOT. OR BTM. BOTTOM
- C.L. CENTER LINE
- CLR. CLEAR
- COND. CONDENSER
- COL. COLUMN
- CONC. CONCRETE
- CONNEX CONNECTION
- CY CUBIC YARD
- D. DEPTH
- DIA. DIAMETER
- DWGS. DRAWINGS
- EA. EACH
- EL. ELEVATION
- ELEC. ELECTRICAL
- E.M.T. (EMT) ELECTRICAL METALLIC TUBING
- EXIST. EXISTING
- EXT. EXTERIOR
- F.D. FLOOR DRAIN
- F.D.C. FIRE DEPARTMENT CONNECTION
- F.E. FIRE EXTINGUISHER
- F.F.E. FINISHED FLOOR ELEVATION
- GA. GAUGE
- GALV. GALVANIZED
- GYP. BD. GYPSUM BOARD
- HVAC HEATING / VENTING / AIR CONDITIONING
- HGT. HEIGHT
- H.M. HOLLOW METAL
- HORIZ. HORIZONTAL
- HSS. HOLLOW STRUCTURAL STEEL
- H.W.H. (HWH) HOT WATER HEATER
- INSUL. INSULATION
- INT. INTERIOR
- LAV. LAVATORY
- LBS. POUND(S)
- LP. LIGHT POLE
- LVL. LAMINATED VENEER LUMBER
- LVT. LUXURY VINYL TILE
- MAX. MAXIMUM
- M.E.P. (MEP) MECHANICAL-ELECTRICAL-PLUMBING
- MD. MAIN DISCONNECT
- MID. MIDDLE
- MIN. MINIMUM
- MOD. BIT. MODIFIED BITUMEN (ROOF)
- MTD. MOUNTED
- MTL. METAL
- N/A. NOT APPLICABLE
- N.I.C. NOT IN CONTRACT
- NO. NUMBER
- O.C. ON CENTER
- O.C.E.W. ON CENTER EACH WAY
- OSB. ORIENTED STRAIN BOARD
- OVHD. OVERHEAD
- PL. PLATE
- PLYWD. PLYWOOD
- P.P. POWER POLE
- PSI. POUNDS PER SQUARE INCH
- PSF. POUNDS PER SQUARE FOOT
- PVC. POLYVINYL CHLORIDE
- PVMT. PAVEMENT
- REINF. REINFORCEMENT
- R.T.U. ROOF TOP [HVAC] UNIT
- SF. SQUARE FOOT
- SHWR. SHOWER
- S.S. STAINLESS STEEL
- S.S.R. STANDING SEAM ROOF
- STL. STEEL
- STRUCT. STRUCTURE, STRUCTURAL
- SY. SQUARE YARD
- THK. THICK
- T.O. TOP OF
- T.O.C. TOP OF CONCRETE
- T.O.S. TOP OF SLAB
- T.P.O. THERMOPLASTIC POLYOLEFIN ROOF
- TYP. TYPICAL
- VCT. VINYL COMPOSITION TILE
- VERT. VERTICAL
- W. WIDE, OR WIDTH
- W / WITH
- W.C. WATER CLOSET (TOILET)
- WP. WORK POINT
- XFMR. TRANSFORMER

REFERENCED CODES

PROJECT NOTES

- THE FOLLOWING BUILDING CODES AND STANDARDS WERE USED IN THE DESIGN OF THE ARCHITECTURAL PORTION OF THIS PROJECT:
- INTERNATIONAL BUILDING CODE, 2021 IBC
 - INTERNATIONAL EXISTING BUILDING CODE, 2021 IEBC
 - INTERNATIONAL FIRE CODE, 2021 IFC
 - INTERNATIONAL ENERGY CONSERVATION CODE, 2021 IECC
 - OTHER CODES REFERENCED BY THE MECHANICAL, ELECTRICAL AND PLUMBING DISCIPLINES CONSULTED IN THIS PROJECT
- THE FOLLOWING ACCESSIBILITY LAWS AND STANDARDS WERE USED IN THE DESIGN OF THE ARCHITECTURAL PORTION OF THIS PROJECT:
- OUTSIDE THE STATE OF TEXAS
 - 2010 AMERICANS WITH DISABILITIES ACT (ADA), OR
 - THE ICC 117.1-2017, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
 - WITHIN THE STATE OF TEXAS
 - 2012 TEXAS ACCESSIBILITY STANDARDS (TAS)

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GENERAL NOTES

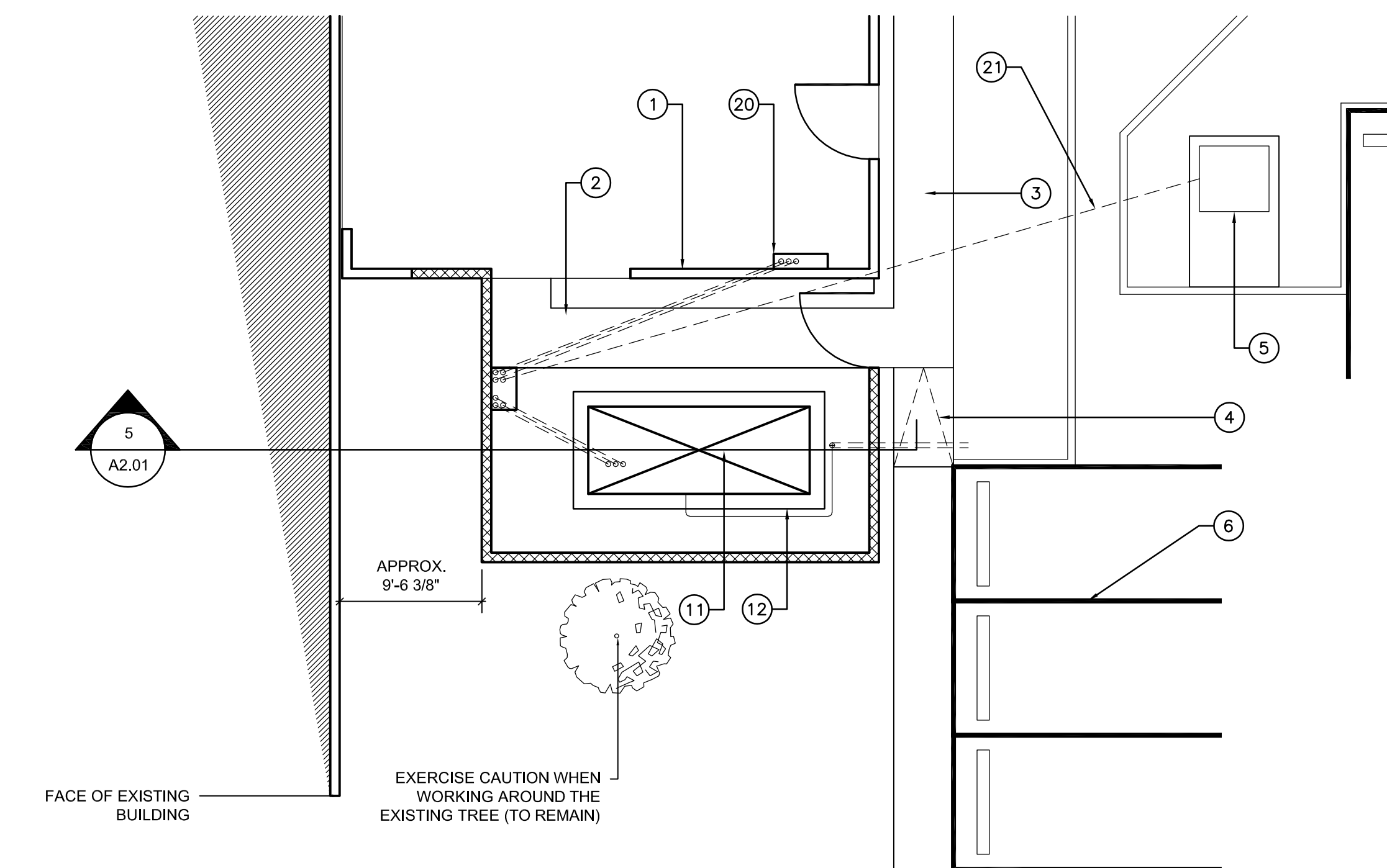
PROJECT NOTES

- IT IS THE INTENT OF THE ARCHITECT THAT THE DRAWINGS HEREIN SHALL BE CROSS-REFERENCED WITH THE DRAWINGS FROM OTHER DISCIPLINES PROVIDED IN THIS SET OF CONSTRUCTION DRAWINGS IN ORDER TO OBTAIN THE INFORMATION NECESSARY TO CONSTRUCT THIS PROJECT IN AN ORDERLY AND TIME EFFICIENT MANNER.
- ALL DRAWINGS REPRESENT THE DESIGN INTENT FOR THE SCOPE OF THE PROJECT AND MAY NOT INCLUDE ALL NECESSARY WORK IN DETAIL FOR FULL EXECUTION OF THE PROJECT.
- THE CONTRACTOR AND THEIR SUBCONTRACTORS SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE GOVERNING BUILDING CODES, CURRENT O.S.H.A. SAFETY REGULATIONS, AND CURRENT MUNICIPAL ORDINANCES OF THE PROJECT'S LOCATION.
- UNLESS NOTED OTHERWISE, ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (T.A.S.). REFER TO THE ACCESSIBILITY GENERAL NOTES SHEET IN THESE DRAWINGS FOR MORE INFORMATION.
- REFER TO THE ARCHITECTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION.

KEY NOTES

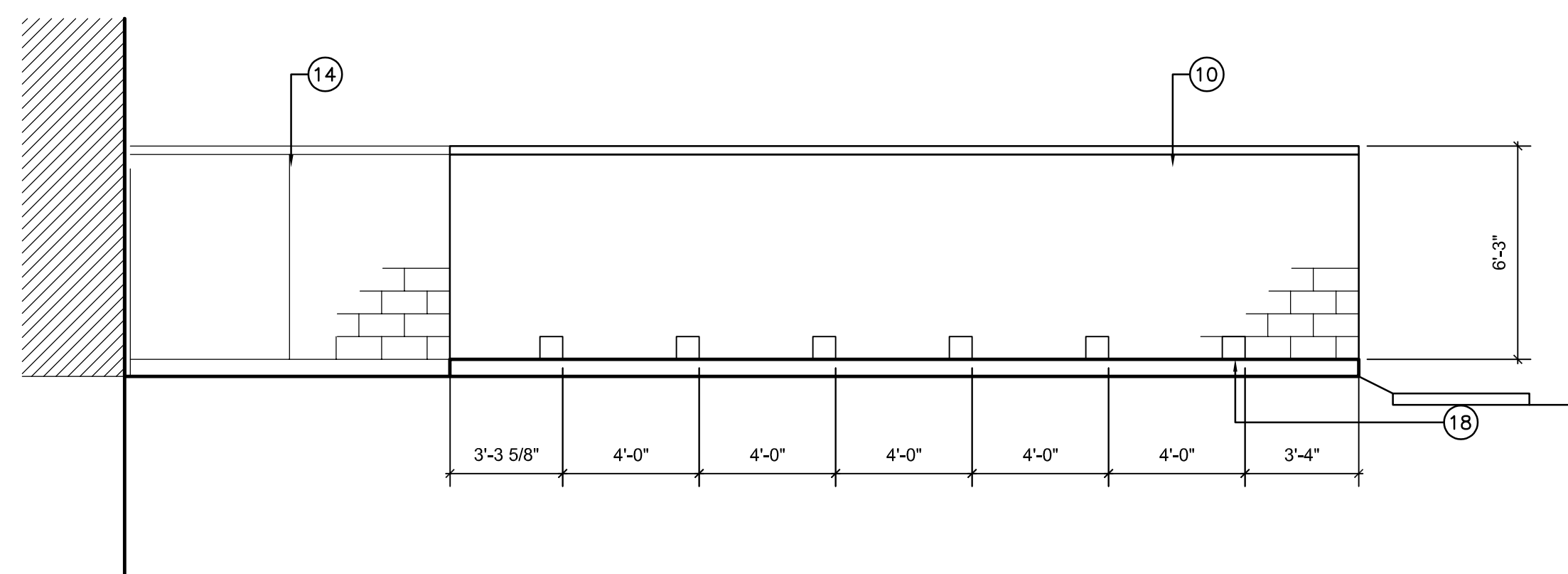
THIS SHEET ONLY

- EXISTING UTILITY SERVICE YARD ENCLOSED WITH MASONRY WALL AND CHAIN LINK GATES
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING PEDESTRIAN SIDEWALK TO REMAIN
- EXISTING ACCESSIBLE RAMP TO REMAIN
- EXISTING TRANSFORMER AND PAD, N.I.C.
- EXISTING PARKING, N.I.C.
- REMOVE EXISTING CHAIN LINK FENCE GATE AND SUPPORT POLES; CUT DOWN POLES AS CLOSE TO THE CONCRETE FLOOR LEVEL AS POSSIBLE AND GRID SMOOTH WITH THE PAVEMENT; GROUT FILL THE REMAINING HOLES
- PROVIDE NEW REINF. CONC. FOUNDATION; BUTT EDGE OF NEW PAVEMENT UP TO EXISTING SIDEWALK AND MAINTAIN THE EXISTING ELEVATION LEVEL; RE: STRUCT. FOR DETAILS
- PROVIDE NEW 4'-0" MIN. WIDE CHAIN LINK FENCE GATE WITH SUPPORT POSTS. PROVIDE PRIVACY SLATS FOR THE CHAIN LINK FENCING; GATE TO MATCH EXISTING
- PROVIDE NEW REINF. SPLIT FACE MASONRY (8 X 8 X 16) SCREEN WALL; COLOR AND CAP OF NEW WALL TO MATCH EXISTING; RE: STRUCT. FOR REINFORCING DETAILS
- PHASE II - NEW GENERATOR REINF. CONC. HOUSEKEEPING PAD; PAD TO BE ELEVATED AT LEAST SIX (6) INCHES ABOVE SURROUNDING SERVICE YARD PAVEMENT; CONSTRUCT PAD SEPARATELY FROM SURROUNDING CONC. PAVEMENT
- PHASE II - LOCATE ELECTRICAL CONDUIT STUB OUTS PER THE SERVICE CONNECTION LOCATIONS OF THE SPECIFIED GENERATOR; VERIFY THE GENERATOR MODEL PRIOR TO PLACING THE CONDUIT;
- PHASE II - FUTURE ELECTRICAL SWITCH GEAR LOCATION; VERIFY WITH ELECTRICAL DRAWINGS
- PROVIDE EXPANSION JOINT IN THE MASONRY WALL AT NEW-TO-OLD WALL JUNCTION
- PROVIDE EXPANSION JOINT IN THE MASONRY WALL AT NEW-TO-OLD PAVEMENT JUNCTION
- PROVIDE SUBGRADE ELECTRICAL CONDUIT; SIZE AND QUANTITY PER THE ELECTRICAL DRAWINGS; VERIFY STUB OUT LOCATIONS WITH THE SWITCH GEAR PRODUCT DATA AND THE NATURAL GAS GENERATOR PRODUCT DATA
- PROVIDE ONE (1) SUBGRADE PVC SLEEVE FOR FUTURE NATURAL GAS LINE; SIZE AND STUB OUT LOCATION PER THE ELECTRICAL DRAWINGS; STUB OUT SHOULD EXTEND 12 INCHES MIN. ABOVE THE FIN. ELEVATION OF THE CONCRETE PAVEMENT FOR EASY ACCESS
- PROVIDE OPENINGS AT THE BASE OF THE NEW MASONRY WALL (8 X 8 X 8) TO ALLOW FOR DRAINAGE
- PROVIDE NEW SUBGRADE ELECTRICAL CONDUIT EXTENDING FROM CURRENT PANEL TO THE NEW SWITCH GEAR LOCATION; SIZE AND QUANTITY PER THE ELECTRICAL DRAWINGS; VERIFY FINAL STUB OUT LOCATIONS WITH THE NEW SWITCH GEAR PRODUCT DATA
- EXISTING PANEL "MSB" PER THE ELECTRICAL DRAWINGS
- PROVIDE NEW SUBGRADE ELECTRICAL CONDUIT EXTENDING FROM CURRENT TRANSFORMER TO THE NEW SWITCH GEAR LOCATION; SIZE AND QUANTITY PER THE ELECTRICAL DRAWINGS; VERIFY FINAL STUB OUT LOCATIONS WITH THE NEW SWITCH GEAR PRODUCT DATA
- PROVIDE NEW REGULATOR AND ABOVE GRADE GAS LINE TO GENERATOR; REFER TO ELECTRICAL DRAWINGS



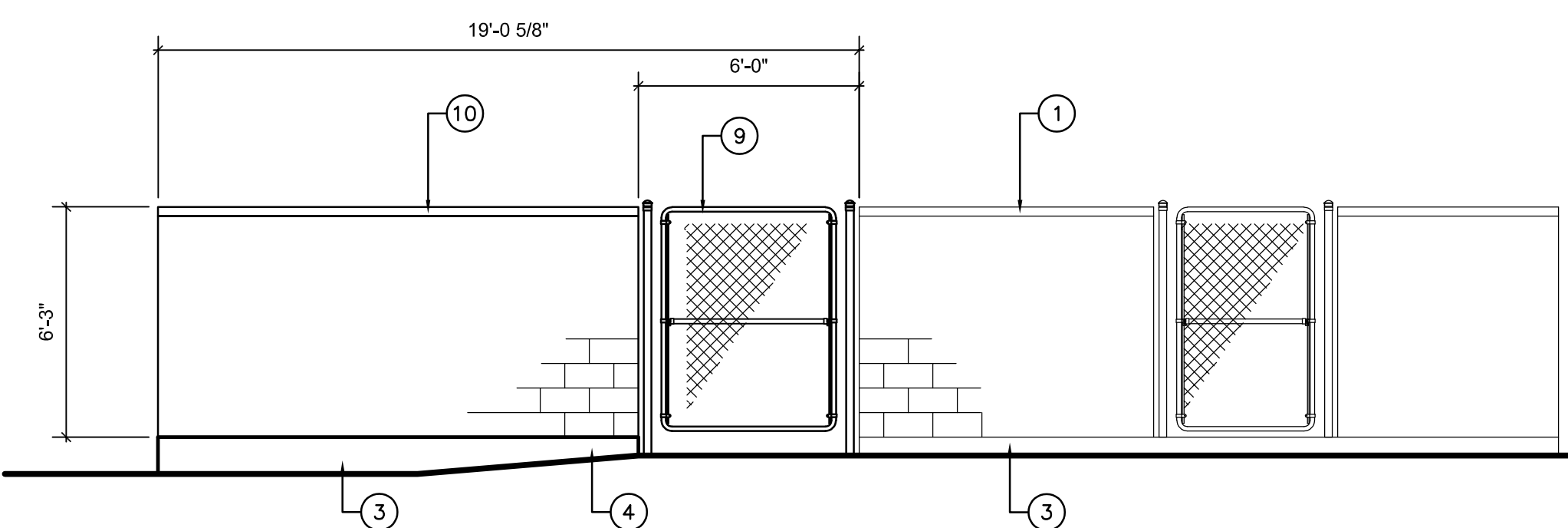
1 GENERATOR ENCLOSURE SITE PLAN

A2.01 SCALE: 1/8" = 1'-0"



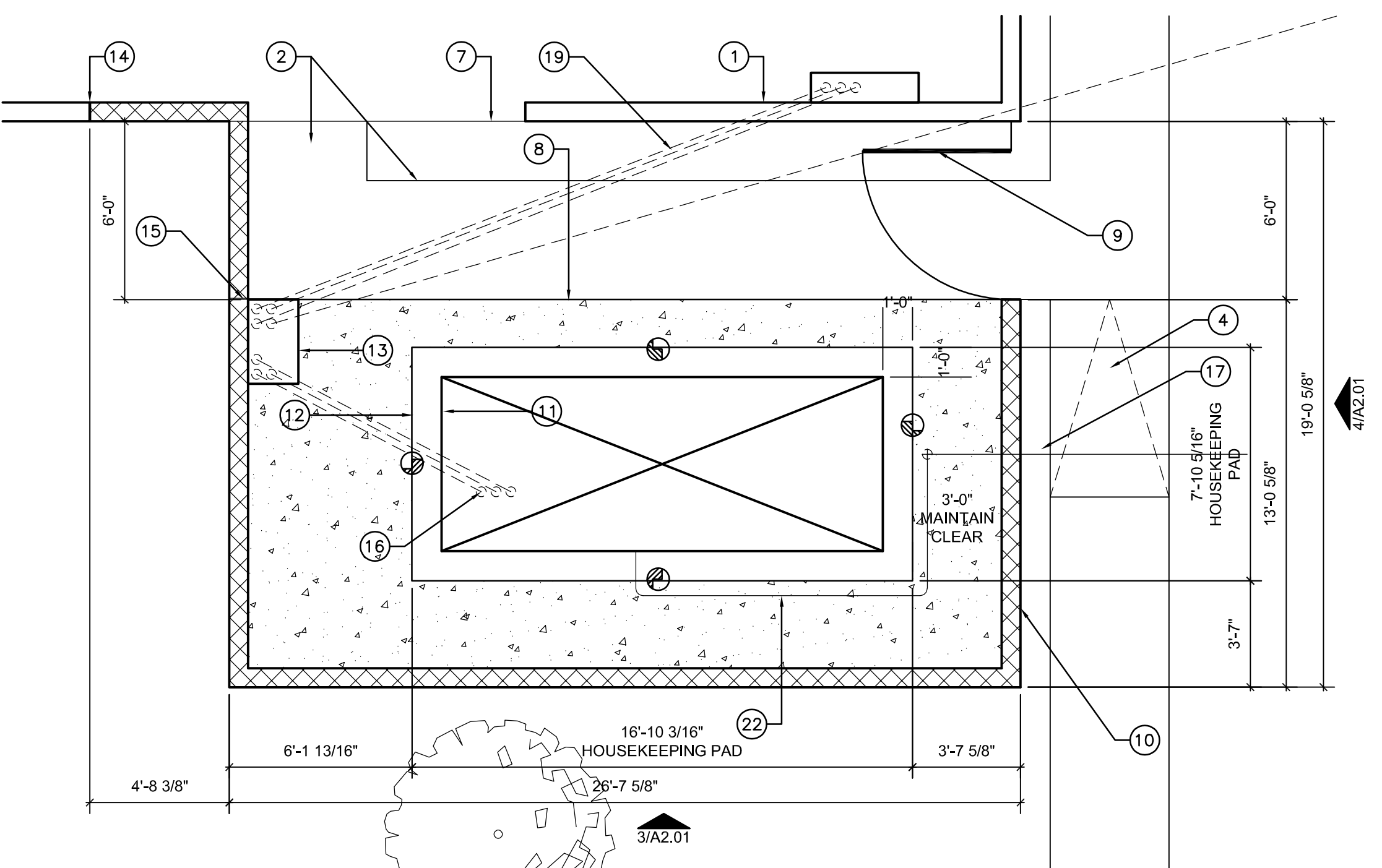
3 GENERATOR ENCLOSURE ELEVATION

A2.01 SCALE: 1/4" = 1'-0"



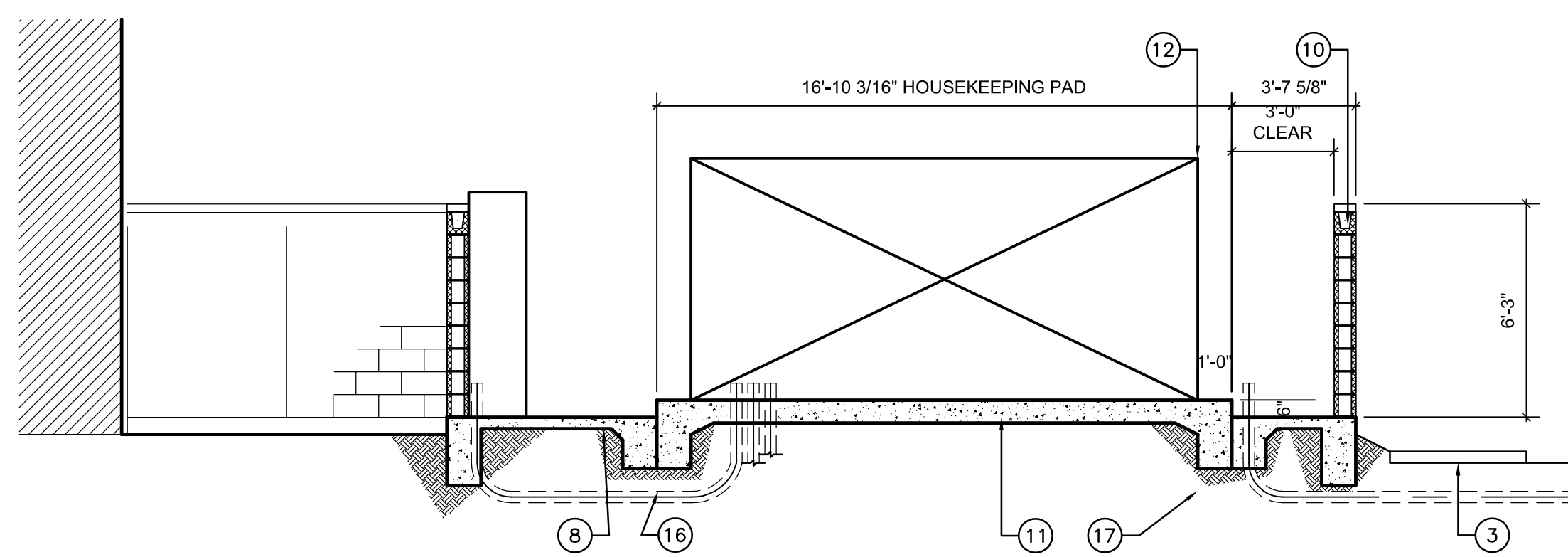
4 GENERATOR ENCLOSURE ELEVATION

A2.01 SCALE: 1/4" = 1'-0"



2 GENERATOR ENCLOSURE PLAN

A2.01 SCALE: 1/4" = 1'-0"



5 GENERATOR ENCLOSURE SECTION

A2.01 SCALE: 1/4" = 1'-0"

CONSTRUCTION PHASE APPROACH

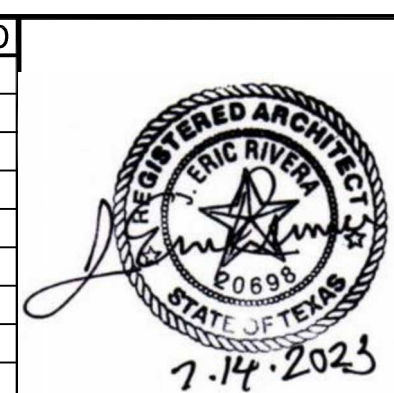
THIS PROJECT ONLY

PHASE I - PROVIDING THE GENERATOR INFRASTRUCTURE, SUCH AS THE NEW ENCLOSED SERVICE YARD, NEW SUBGRADE CONDUIT SLEEVES, NEW GATE, OPEN FLOOR SPACE FOR THE GENERATOR AND PAD

PHASE II - PROVIDING THE ACTUAL GENERATOR AND CONCRETE PAD, COMPLETING THE INSTALLATION AND CONNECTIONS FOR THE NATURAL GAS LINE, ELECTRICAL LINES AND ELECTRICAL GEAR - PANELS AND SWITCH GEAR - AND THE CONNECTION TO THE EXISTING SERVICE LINE THAT FEEDS INTO THE BUILDING'S ELECTRICAL DISTRIBUTION SYSTEM.



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GENERATOR ENCLOSURE
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GENERAL REQUIREMENTS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAINING HIS EMPLOYEES AND SUBCONTRACTORS IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS, AND IN THE REGULATIONS AND HAZARDS WHICH APPLY TO THE AREA IN WHICH THE WORK WILL TAKE PLACE.
- ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROTECTION OF PERSONS AND PROPERTY, AND FOR PROVIDING SAFE WORKING CONDITIONS THROUGHOUT THE WORK PROGRESS. ALL AREAS ADJACENT TO THE CONSTRUCTION AREA OR AFFECTED BY THE CONSTRUCTION MUST BE PROTECTED FROM DAMAGE, CLEANED, AND RESTORED TO THE ORIGINAL CONDITION, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL CLEARANCES AND PERMITS, AS NECESSARY, PRIOR TO THE COMMENCEMENT OF THE WORK.
- WORK AREAS SHALL BE KEPT, AT ALL TIMES, FREE OF DEBRIS AND NON-HAZARDOUS MATERIAL TO THE SATISFACTION OF THE OWNER. ALL EXISTING PIPING AND CONDUITS SHALL HAVE TEMPORARY PROTECTION DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE OWNER. AFTER PROJECT COMPLETION, THE SITE SHALL BE CLEANED UP TO ITS CONDITION PRIOR TO THE START OF THE PROJECT TO THE SATISFACTION OF THE OWNER.
- THE SEQUENCE OF CONSTRUCTION SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS, AND SHALL PERFORM FIELD MEASUREMENTS PRIOR TO FABRICATION AND/OR PURCHASE OF ANY MATERIAL AND SHALL CONTACT THE ENGINEER SHOULD EXISTING CONDITIONS BE DIFFERENT FROM THE DESIGN DRAWINGS FOR THIS PROJECT. CONFLICTS ARISING DUE TO LACK OF COORDINATION SHALL BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT FABRICATE OR INSTALL MEMBERS AS SHOWN ON THE DRAWINGS IF THERE ARE DISCREPANCIES OR CONFLICTS BETWEEN THE EXISTING CONDITIONS AND THE INFORMATION SHOWN ON THE DRAWINGS, UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED. PRIOR TO FABRICATION OR INSTALLATION, THE CONTRACTOR SHALL IMMEDIATELY CALL SUCH DISCREPANCIES OR CONFLICTS TO THE ATTENTION OF THE ENGINEER.
- ANY REQUIRED CHANGES TO THE DRAWINGS RESULTING FROM THE ACCEPTANCE OF ALTERNATES AND/OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE OWNER AND THE ENGINEER FOR APPROVAL.
- ALL CONTRACT WORK IN THESE DRAWINGS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING NATIONAL CODES AND STANDARDS:
 - INTERNATIONAL BUILDING CODES, 2018 (IBC2018).
 - AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-16.
 - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTING TO THE ENGINEER. ALL SHOP DRAWINGS NOT REVIEWED BY THE CONTRACTOR WILL BE RETURNED WITHOUT REVIEW. AFTER REVIEW HAS BEEN COMPLETED, THE CONTRACTOR SHALL SUBMIT A COPY OF EACH SHOP DRAWING TO THE OWNER, WITH THE APPROVAL SEAL OF THE ENGINEER AND THE CONTRACTOR.
- THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS REMOVED WHICH ARE NOT TO BE REINSTALLED OR SALVAGED ON THE PROJECT. DISPOSAL OF MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER, IN LIEU OF THE PREPARATION OF SHOP DRAWINGS IS FORBIDDEN. SHOP DRAWINGS RECEIVED BEARING THE ENGINEER'S TITLE AND SEAL SHALL BE PROMPTLY REJECTED.

DESIGN CRITERIA

- GOVERNING CODES AND STANDARDS
 - INTERNATIONAL BUILDING CODE, 2018 EDITION (IBC 2018)
 - AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-16 – MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
 - AMERICAN CONCRETE INSTITUTE (ACI) – BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, LATEST EDITION.
- DESIGN LOADS
 - WIND CRITERIA: WIND LOADS IN ACCORDANCE WITH ASCE 7-16, 142 MPH ULTIMATE WIND SPEED (3-SECOND GUST), EXPOSURE CATEGORY C, AND RISK CATEGORY II.
 NEW CMU WALL WIND LOAD = 46 PSF (ULTIMATE)
 LATERAL WIND LOAD ON EQUIPMENT PAD FOUNDATION = 46 PSF (ULTIMATE)
 - GENERATOR EQUIPMENT FOUNDATION PAD
 FOUNDATION DESIGN IS BASED ON MODEL "300REZXC" AS MANUFACTURED BY KOHLER CO. THE GENERATOR ASSEMBLY HAS AN APPROXIMATE LENGTH OF 178.2 INCHES, WIDTH OF 70.3 INCHES, HEIGHT OF 96.9 INCHES, AND A WET WEIGHT OF 8,750 LBS. THIS INFORMATION IS PROVIDED ON KOHLER DOCUMENT 66-109 11/20r.
 IF AN ALTERNATIVE GENERATOR ASSEMBLY IS PROVIDED, SUBMIT PRODUCT DATA INDICATING WEIGHTS, DIMENSIONS, ETC. TO ENGINEER FOR REVIEW AND VERIFICATION OF FOUNDATION DESIGN.
 - ALLOWABLE SOIL BEARING CAPACITY = 1,500 PSF (PER IBC 2018, TABLE 1806.2)

SUBMITTAL NOTES

- THE FOLLOWING PARTIAL LISTING OF SUBMITTALS SHALL BE FORWARDED TO ENGINEER FOR REVIEW. THE WORK ASSOCIATED WITH THESE ITEMS SHALL NOT COMMENCE UNTIL THE SUBMITTALS HAVE BEEN REVIEWED AND APPROVED BY THE ENGINEER. REFERENCE THE PROJECT SPECIFICATIONS FOR A COMPLETE LISTING OF REQUIRED SUBMITTALS.
- SUBMIT MOISTURE-DENSITY RELATIONSHIPS FOR EACH TYPE OF FILL MATERIAL SPECIFIED AND FOR EACH TYPE OF EXPOSED EXISTING SUBGRADE MATERIAL.
 - SUBMIT MIX DESIGNS WITH TEST DATA FOR EACH TYPE AND STRENGTH OF STRUCTURAL CONCRETE SPECIFIED.
 - SUBMIT REINFORCING STEEL SHOP DRAWINGS DETAILING REINFORCEMENT FABRICATION AND BAR PLACEMENT. THE SHOP DRAWINGS SHALL CLEARLY INDICATE LOCATION, SIZE, SPACING, SPLICES AND PIECEMARK FOR ALL REINFORCING STEEL. THE SHOP DRAWINGS SHALL INCLUDE A COMPLETE BILL OF MATERIALS FOR ALL REINFORCING STEEL, WHICH IS REFERENCED TO THE INFORMATION ON THE SHOP DRAWINGS. THE SHOP DRAWINGS SHALL PROVIDE SUFFICIENT DETAIL TO PERMIT PLACEMENT OF THE REINFORCEMENT WITHOUT THE USE OF THE DESIGN DRAWINGS.
 - SUBMIT DESCRIPTIVE LITERATURE, BULLETINS, TECHNICAL DATA SHEETS, MATERIAL SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS FOR THE MISCELLANEOUS PRODUCTS SPECIFIED HEREIN.
 - SUBMIT ANY PROPOSED SUBSTITUTIONS TO THE ITEMS SPECIFIED HEREIN OR IN THE SPECIFICATIONS. OWNER RESERVES THE RIGHT TO REJECT ANY PROPOSED SUBSTITUTION IN FAVOR OF THAT SPECIFIED.

TESTING LABORATORY REQUIREMENTS

THE OWNER WILL SECURE THE SERVICES OF A COMMERCIAL TESTING LABORATORY TO PERFORM CONSTRUCTION MATERIALS TESTS AND VISUAL INSPECTION SERVICES AS OUTLINED IN THE PROJECT SPECIFICATIONS AND AS LISTED BELOW:

- MOISTURE-DENSITY CURVES SHALL BE GENERATED FOR EACH TYPE OF SOIL MATERIAL USED ON THE PROJECT. IN-PLACE COMPACTION DENSITIES SHALL BE TAKEN AT THE RATE OF ONE TEST PER 2,500 SQUARE FEET PER LIFT OF COMPACTED MATERIAL. A MINIMUM OF 3 TESTS SHALL BE TAKEN FOR ANY LIFT OF COMPACTED MATERIAL.
- CONCRETE STRENGTH CYLINDERS SHALL BE MADE AT THE RATE OF ONE SET PER 50 CUBIC YARDS OF CONCRETE. A MINIMUM OF ONE SET OF CYLINDERS SHALL BE MADE FOR ANY CONCRETE PLACED IN ANY DAY. TEST SHALL BE EVALUATED IN ACCORDANCE WITH ACI 318.
- IF WORKMANSHIP IS FOUND TO BE BELOW THE REQUIREMENTS SET FORTH HEREIN OR IN THE SPECIFICATIONS AS A RESULT OF TESTING AND/OR VISUAL INSPECTION, THE CONTRACTOR SHALL CORRECT OR REPLACE MATERIALS AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL COOPERATE AND COORDINATE FULLY WITH THE TESTING LABORATORY AND PROJECT TESTING REQUIREMENTS.

STRUCTURAL EXCAVATION, BACKFILL AND COMPACTION NOTES

- EXCAVATION WORK SHALL BE NEAT AND FREE OF DEBRIS AND LOOSE MATERIAL. EXCAVATIONS SHALL NOT BE MADE DURING INCLEMENT WEATHER. WATER ACCUMULATION IN EXCAVATIONS EXCEEDING 1 INCH SHALL BE PUMPED OUT BEFORE THE CONCRETE IS PLACED.
- ALL SURFICIAL VEGETATION AND OTHER ORGANIC MATERIAL SHALL BE REMOVED BENEATH THE PROPOSED FOUNDATION AREA TO A MINIMUM DEPTH OF 8" PRIOR TO CONSTRUCTION. EXCAVATE THE ENCLOSURE AREA A MINIMUM OF 24" BELOW EXISTING GRADE. THE EXCAVATED AREA AND SUBSEQUENT SELECT NON-EXPANSIVE FILL SHALL EXTEND AN MINIMUM OF 2'-0" BEYOND THE FACE OF THE ENCLOSURE FOUNDATION. THE EXPOSED SURFACE SHALL BE PROOF-ROLLED WITH A HEAVY RUBBER TIRE ROLLER WEIGHING AT LEAST 25 TONS. ANY SOFT OR WEAK AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT NON-EXPANSIVE FILL. COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
- SELECT NON-EXPANSIVE FILL MATERIAL SHALL BE A UNIFORM, WELL GRADED MATERIAL WITH LESS THAN 15% PASSING THE NO. 200 SIEVE AND NO PARTICLES GREATER THAN 3". SELECT NON-EXPANSIVE FILL SHALL BE CLASSIFIED AS A SANDY-CLAY (CL) OR A CLAYEY-SAND (SC) IN ACCORDANCE WITH ASTM D2487. SELECT NON-EXPANSIVE FILL SHALL HAVE A PI BETWEEN 7 AND 17 AND SHALL HAVE A LIQUID LIMIT OF LESS THAN 35. AT THE CONTRACTOR'S OPTION, TxDOT 247, TYPE A, GRADE 2 OR BETTER MAY BE SUBSTITUTED FOR SELECT NON-EXPANSIVE FILL MATERIAL.
- PLACE SELECT NON-EXPANSIVE FILL IN UNIFORM LAYERS OF LOOSE MATERIAL, 8 INCHES IN DEPTH, DRIED OR MOISTENED AS REQUIRED TO OBTAIN OPTIMUM MOISTURE CONTENT (-2% TO +2%), AND COMPACT EACH LAYER TO 95% MAXIMUM DRY DENSITY OF ASTM D698. USE HAND OPERATED COMPACTION EQUIPMENT AND 4" LOOSE LIFTS IN CONFINED AREAS AND AREAS IMMEDIATELY ADJACENT TO UTILITY LINES.

REINFORCED CONCRETE NOTES

- CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, LATEST EDITION. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL COMPLY WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315). SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION OR PLACEMENT.
- ALL CONCRETE SHALL BE NORMAL WEIGHT AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI. USE GRAY PORTLAND CEMENT CONFORMING TO ASTM C 150 TYPE I. MINIMUM CEMENT CONTENT SHALL BE 4 SACKS PER CUBIC YARD. MAXIMUM WATER CEMENT RATIO SHALL BE 0.50. MAXIMUM SLUMP SHALL BE 5 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 1 1/2". PROVIDE 4 TO 6 PERCENT AIR-ENTRAINMENT, CONFORMING TO ASTM C 260. CHEMICAL ADMIXTURES SHALL CONFORM TO ASTM C 494, TYPE A, D, OR E. IF FLYASH IS TO BE USED IN THE CONCRETE MIX, IT SHALL BE INCLUDED IN THE MIX DESIGN SUBMITTAL. THE AMOUNT OF FLY ASH USED SHALL BE NO GREATER THAN 15 TO 20 PERCENT BY WEIGHT OF THE SPECIFIED CEMENT. IN NO CASE SHALL THE PORTLAND CEMENT CONTENT OF THE MIX BE LESS THAN 4 SACKS PER YARD. CONCRETE SHALL NOT BE PLACED PRIOR TO APPROVAL OF THE CONCRETE MIX DESIGN BY THE ENGINEER.
- FORMWORK SHALL COMPLY WITH THE REQUIREMENTS OF ACI 347.
- REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL, CONFORMING TO ASTM A615, GRADE 60, EXCEPT TIES AND STIRRUPS SHALL CONFORM TO ASTM A615, GRADE 40.
- PROVIDE CORNER BARS AT ALL GRADE BEAM INTERSECTIONS. MATCH SIZE AND SPACING OF INTERSECTING STEEL REINFORCING. PROVIDE 40 BAR DIAMETER LAPS WITH CONTINUOUS STEEL.
- UNLESS NOTED OTHERWISE, ALL 90, 135 AND 180 DEGREE HOOKS SHOWN ON THE DRAWINGS SHALL BE STANDARD ACI HOOKS.
- ALL CONTINUOUS REINFORCEMENT SHALL LAP 40 BAR DIAMETERS AT SPLICES. SPLICE LOCATIONS FOR CONTINUOUS REINFORCEMENT SHALL BE AT THE SUPPORTS FOR BOTTOM BARS AND AT MID-SPAN FOR ALL OTHER BARS.
- UNLESS NOTED OTHERWISE ON THE DRAWINGS, MINIMUM REINFORCING STEEL COVERAGE SHALL BE AS FOLLOWS:
 SURFACES CAST AGAINST EARTH ----- 3"
 FORMED SURFACES ----- 2"
 CLEARANCE TO TOP SURFACE OF FILL SUPPORTED SLABS - 2"
- PROVIDE A 3/4" CHAMFER AT ALL VERTICAL EXPOSED EDGES OF CONCRETE, U.N.O.
- ENSURE THAT ALL ITEMS WHICH MUST BE EMBEDDED IN THE CONCRETE ARE DELIVERED TO THE SITE IN A TIMELY FASHION AND FIRMLY INSTALLED IN THE FORMWORK PRIOR TO PLACING CONCRETE. THE DRAWINGS SHALL BE THOROUGHLY EXAMINED TO ENSURE THAT ALL EMBEDDED ITEMS ARE PROVIDED AND PROPERLY INSTALLED. PROVIDE ACCURATELY MADE, RIGID TEMPLATES FOR SETTING ANCHOR BOLTS AND DOWELS.
- FIELD CUTTING OF REINFORCING BARS SHALL BE BY SHEARING OR SAWING. FIELD CUTTING BY CUTTING TORCH IS NOT ALLOWED. HEATING OR WELDING REINFORCING BARS IS PROHIBITED.
- CURING MAY BE ACCOMPLISHED WITH A LIQUID CURING COMPOUND CONFORMING TO ASTM C309. LIQUID CURING COMPOUNDS SHALL BE APPLIED IN A TWO-COAT PROCESS WITH THE SECOND APPLICATION APPLIED AT RIGHT ANGLES TO THE FIRST APPLICATION. LIQUID CURING COMPOUND SHALL CONTAIN A FUGITIVE DYE THAT WILL CHANGE TO A CLEAR FINISH AT THE END OF THE CURING PERIOD. TO CONTROL SLAB TEMPERATURE DURING THE INITIAL 7 DAYS OF CURING, APPLICATION OF WATER BY SPRINKLERS AND MOISTURE RETAINING COVERS WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.
- ALL CONCRETE BLEMISHES, HONEYCOMBS, AND OTHER IMPERFECTIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST. CONCRETE REPAIR MATERIALS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. APPROVAL OF THE REPAIR MATERIALS MUST BE OBTAINED PRIOR TO REPAIRING ANY CONCRETE SURFACES OR CRACKS.
- SUBMIT ANY PROPOSED ALTERNATES TO THE ITEMS AND METHODS NOTED HEREIN OR REQUIRED IN THE SPECIFICATIONS. THE OWNER RESERVES THE RIGHT TO REJECT ANY CONTRACTOR PROPOSED ALTERNATES IN FAVOR OF THOSE SPECIFIED.
- STORAGE OF ALL CONCRETE MATERIALS SHALL BE SUCH THAT CONCRETE QUALITY SHALL NOT BE AFFECTED BY STORAGE.

REINFORCED MASONRY NOTES

- CONCRETE MASONRY UNIT (CMU) CONSTRUCTION SHALL BE IN ACCORDANCE WITH:
 - ACI 530/ASCE 5/TMS 402: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
 - ACI 530.1/ASCE 6/TMS 602: SPECIFICATIONS FOR MASONRY STRUCTURES
- MASONRY DESIGN IS BASED ON A MASONRY PRISM STRENGTH OF F'm = 1500 PSI.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90, LIGHTWEIGHT, GRADE N, TYPE I, MOISTURE-CONTROLLED, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI ON THE NET AREA OF THE BLOCK.
- MORTAR SHALL CONFORM TO ASTM C 270, TYPE S, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.
- COURSE GROUT SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
- COARSE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 404. SAND SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 144.
- LOAD BEARING WALLS SHALL HAVE FULL BED MORTAR JOINTS.
- VERTICAL REINFORCING SHALL BE AS NOTED ON PLANS. IN ADDITION, THE FIRST CELL AT CORNERS AND ENDS OF WALLS SHALL BE REINFORCED WITH 2 #5 AND FILLED WITH 2500 PSI COURSE GROUT.
- CONTINUOUS REBAR FOR VERTICAL REINFORCING BARS (NO SPLICES).
- BOND BEAMS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS. REINFORCE BOND BEAMS AS NOTED ON PLANS AND FILL WITH 2500 PSI COURSE GROUT. REINFORCING STEEL IN BOND BEAMS MAY BE SPLICED WITH A MINIMUM LAP LENGTH OF 50 BAR DIAMETERS.
- PROVIDE STAINLESS STEEL REBAR POSITIONERS, AS MANUFACTURED BY HOHMANN & BARNARD, TO MAINTAIN ALIGNMENT OF VERTICAL WALL REINFORCING.
- PROVIDE GALVANIZED SPYRA-LOX REBAR LAP JOINT TIES, AS MANUFACTURED BY HOHMANN & BARNARD, FOR ALL LAP SPLICES IN VERTICAL AND HORIZONTAL REINFORCING BARS.
- HORIZONTAL JOINT REINFORCEMENT SHALL BE "DUR-O-WAL" (TRUSS TYPE, 9 GAGE, GALVANIZED) AT 16 INCHES ON CENTER, VERTICALLY, UNLESS OTHERWISE NOTED ON DRAWINGS. HORIZONTAL JOINT REINFORCEMENT SHALL BE LAPPED AT LEAST 11" AT SPLICES AND SHALL CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.
- CONTRACTOR TO PROVIDE TEMPORARY BRACING FOR WALLS AS REQUIRED FOR PROJECT. THE CONTRACTOR SHALL DESIGN ALL TEMPORARY BRACING.

MISCELLANEOUS PRODUCTS

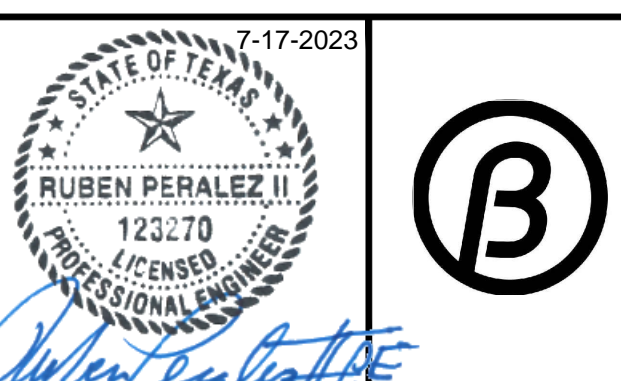
- ADHESIVE ANCHORING SYSTEM: BOLTING INTO EXISTING CONCRETE SHALL BE BY SIMPSON STRONG-TIE "SET-3G" HIGH STRENGTH EPOXY ADHESIVE SYSTEM, OR APPROVED EQUAL. PROVIDE EMBEDMENT AS INDICATED ON DRAWINGS, INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTION.
- BONDING AGENT: SHALL CONFORM TO ASTM C881, TWO-COMPONENT EPOXY RESIN, CAPABLE OF HUMID CURING AND BONDING TO DAMP SURFACES, OF CLASS SUITABLE FOR BONDING FRESHLY MIXED CONCRETE TO HARDENED CONCRETE.
- JOINT SEALANT: SHALL CONFORM TO ASTM C920, ONE-COMPONENT, MOISTURE-CURING POLYURETHANE SEALANT. "MASTERSEAL NP 1" AS MANUFACTURED BY MASTER BUILDERS.

TEXAS DEPARTMENT OF INSURANCE WINDSTORM CERTIFICATION

- THIS PROJECT IS LOCATED IN THE TEXAS DEPARTMENT OF INSURANCE (TDI) CATASTROPHE ZONE. ALL BUILDING MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO THE IBC 2018. THE GENERAL CONTRACTOR SHALL INCLUDE AS PART OF THEIR BID THE COST OF WINDSTORM INSPECTIONS AND CERTIFICATION. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING TDI FORMS WPI-1 AND WPI-2.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THEIR WINDSTORM INSPECTORS AND FOR PROVIDING TIMELY NOTICE TO THE WINDSTORM INSPECTORS SO THAT COMPLIANCE WITH THE TDI WINDSTORM CODE CAN BE VERIFIED.
- SUBSEQUENT CONSTRUCTION THAT COVERS UP ITEMS THAT REQUIRE TDI WINDSTORM INSPECTION SHALL BE REMOVED BY THE GENERAL CONTRACTOR AND REINSTALLED AFTER THE WINDSTORM INSPECTIONS HAVE BEEN CONDUCTED AT NO ADDITIONAL COST. MATERIALS THAT ARE DAMAGED DURING REMOVAL SHALL BE REPLACED WITH NEW MATERIALS SATISFACTORY TO THE OWNER AT NO ADDITIONAL COST.
- PRIOR TO PURCHASING OR INSTALLING ANY ITEMS, THE GENERAL CONTRACTOR SHALL VERIFY THAT ALL EXTERIOR BUILDING MATERIALS, COMPONENTS & CLADDING ARE ON THE LIST OF TDI APPROVED BUILDING PRODUCTS. ANY SPECIFIED ITEMS THAT ARE NOT ON THE TDI LIST OF APPROVED BUILDING PRODUCTS SHALL BE BROUGHT TO THE ATTENTION OF THEIR WINDSTORM ENGINEER IMMEDIATELY. A CURRENT LIST OF TDI APPROVED BUILDING PRODUCTS CAN BE FOUND ON THE INTERNET AT: www.tdi.texas.gov/wind/prod/index.html
- REVIEW SUBMITTALS OF EXTERIOR BUILDING MATERIALS, COMPONENTS & CLADDING SHALL HAVE THE APPROPRIATE TDI PRODUCT EVALUATION NUMBER INDICATED ON THE SUBMITTAL.

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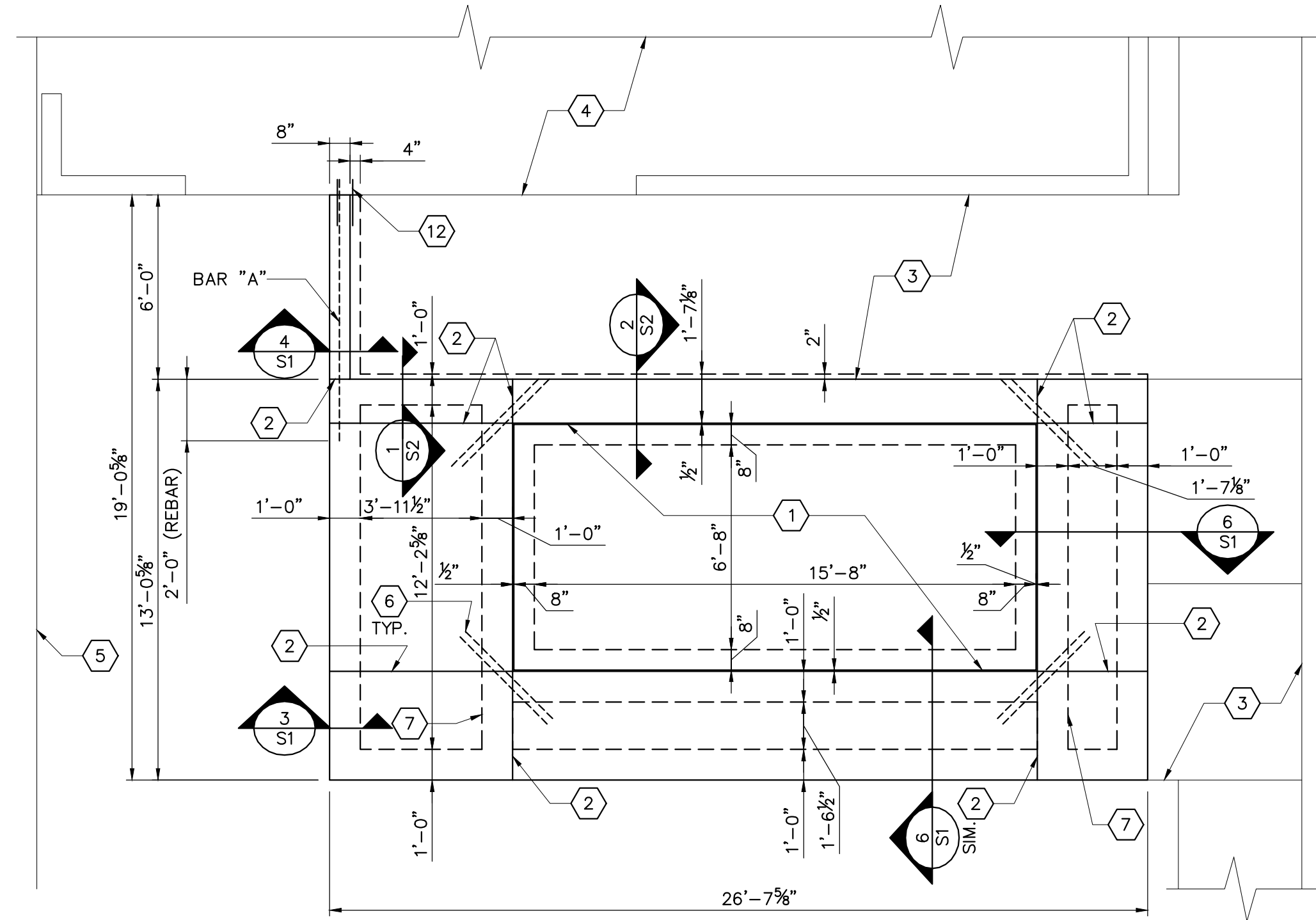


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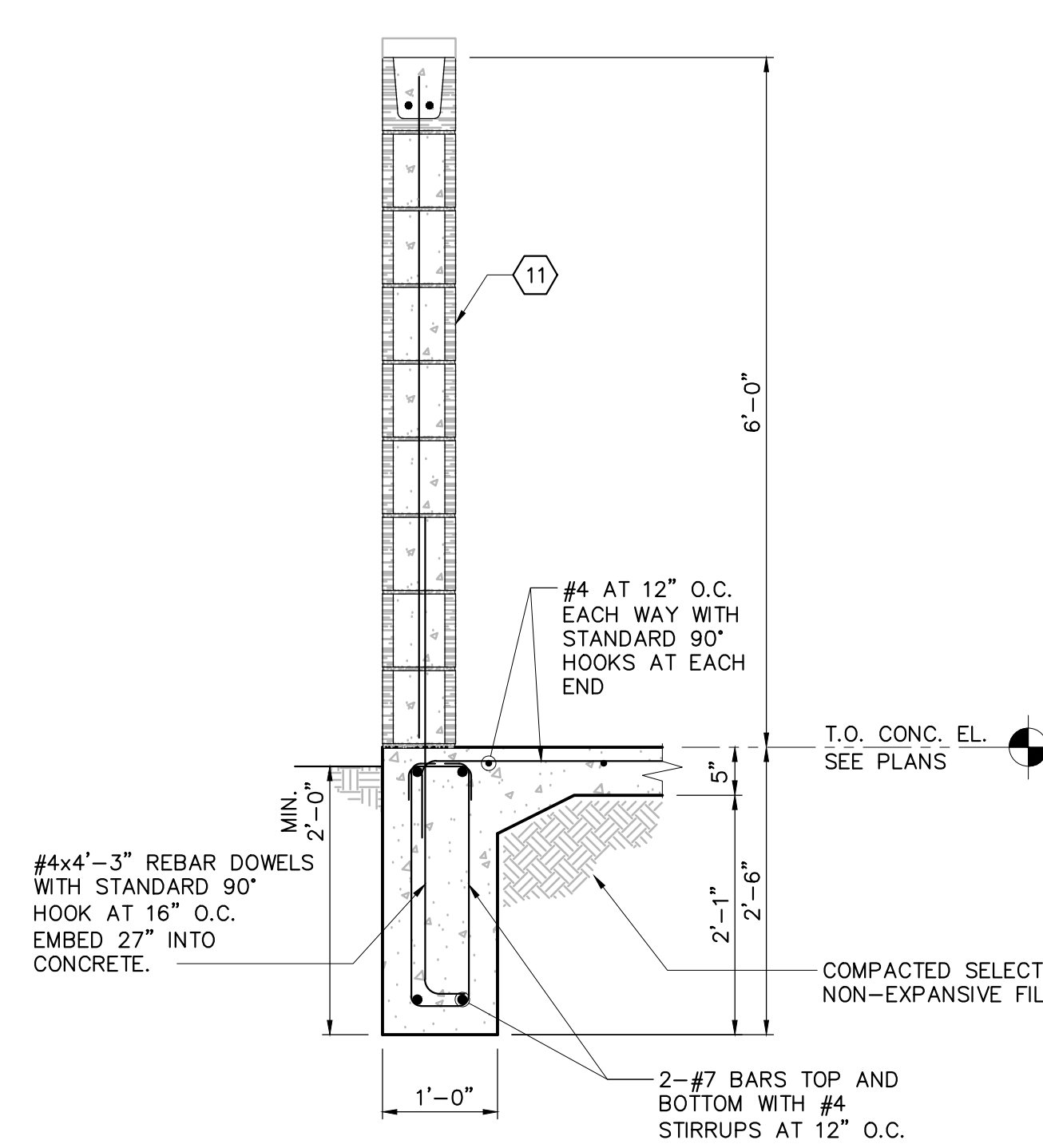
STRUCTURAL GENERAL NOTES

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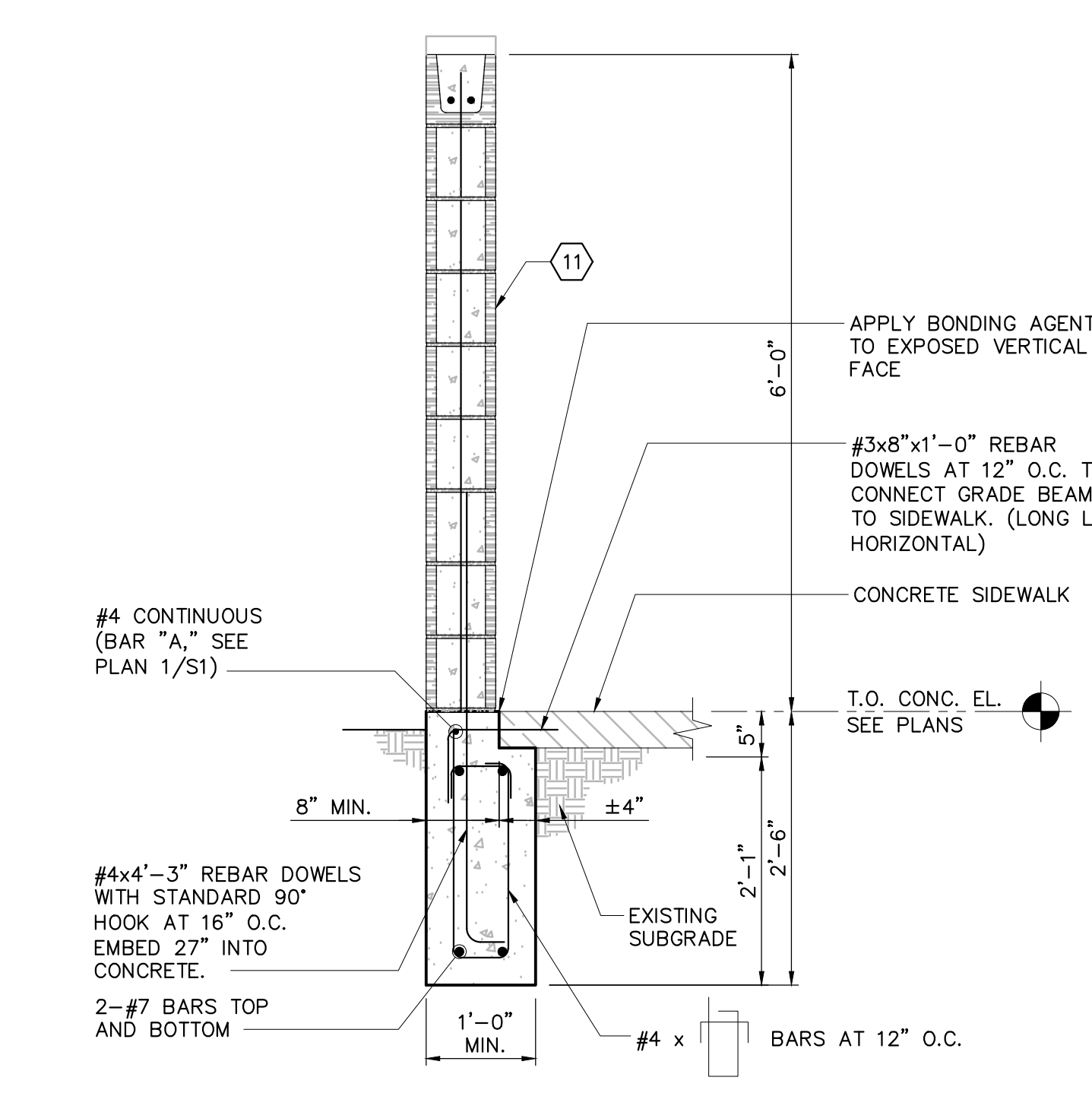
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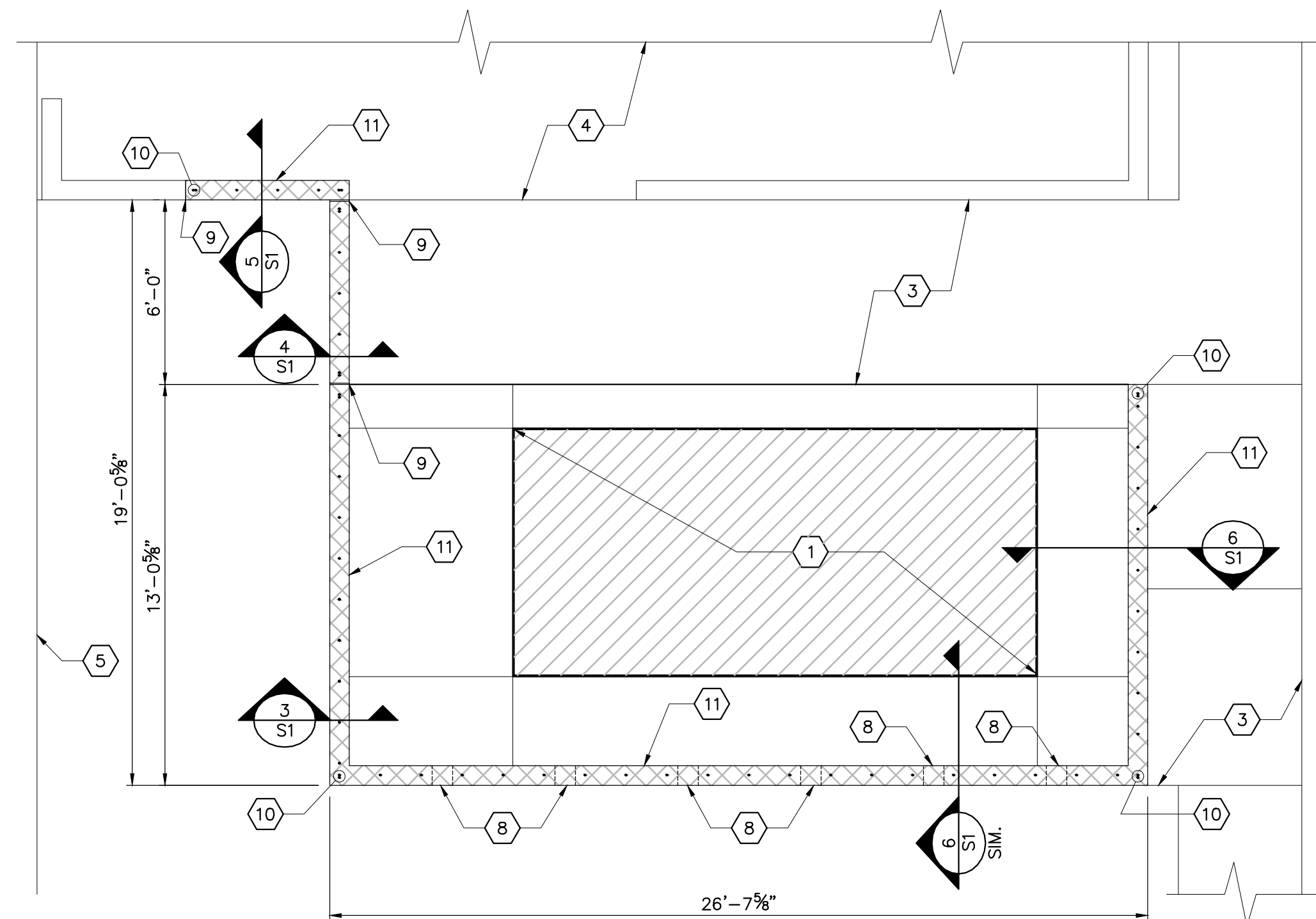
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RTA GENERATOR ENCLOSURE
FOUNDATION PLAN
SCALE: 3/4" = 1'-0"



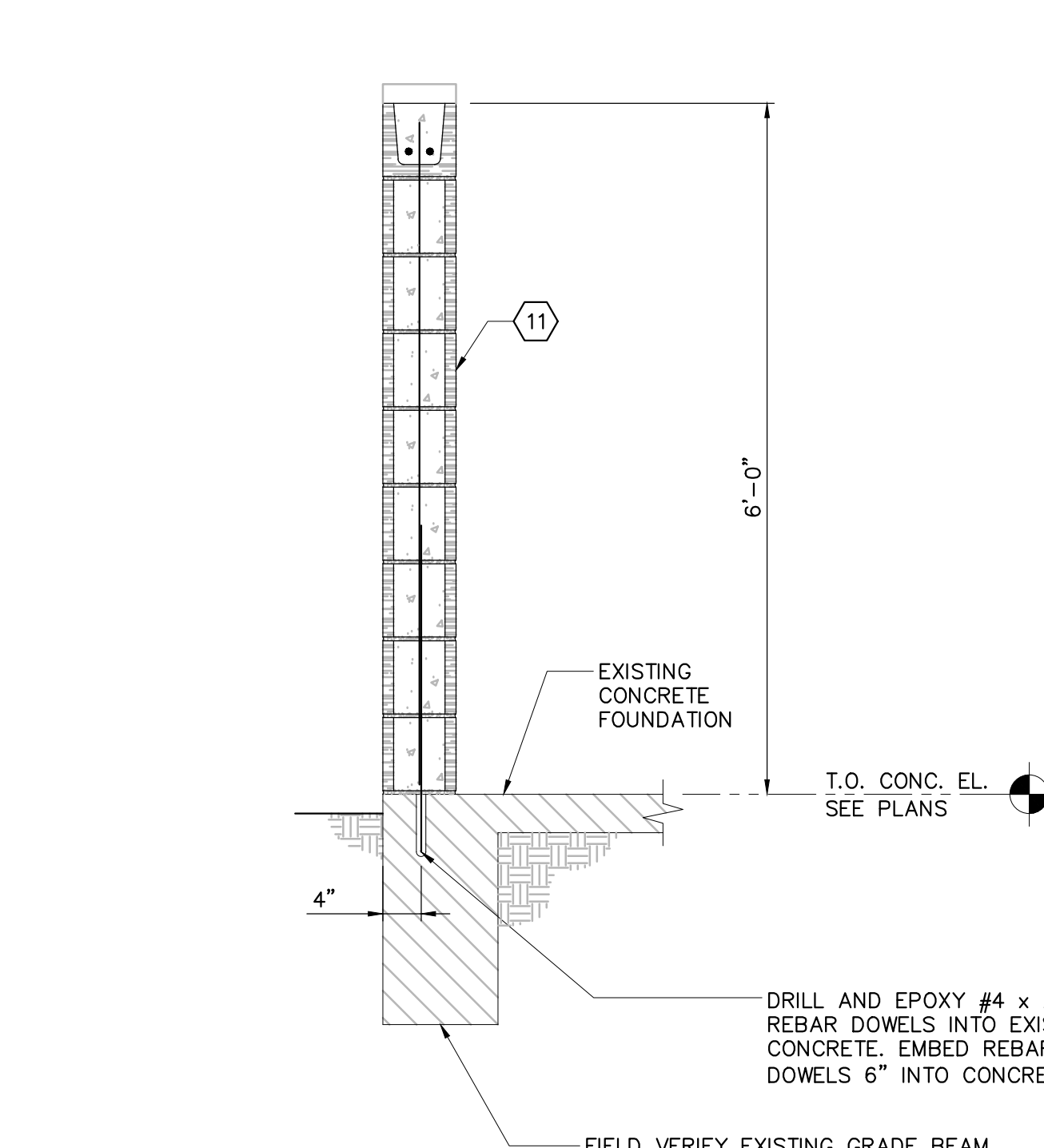
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EXTERIOR GRADE BEAM SECTION
SCALE: 3/4" = 1'-0"



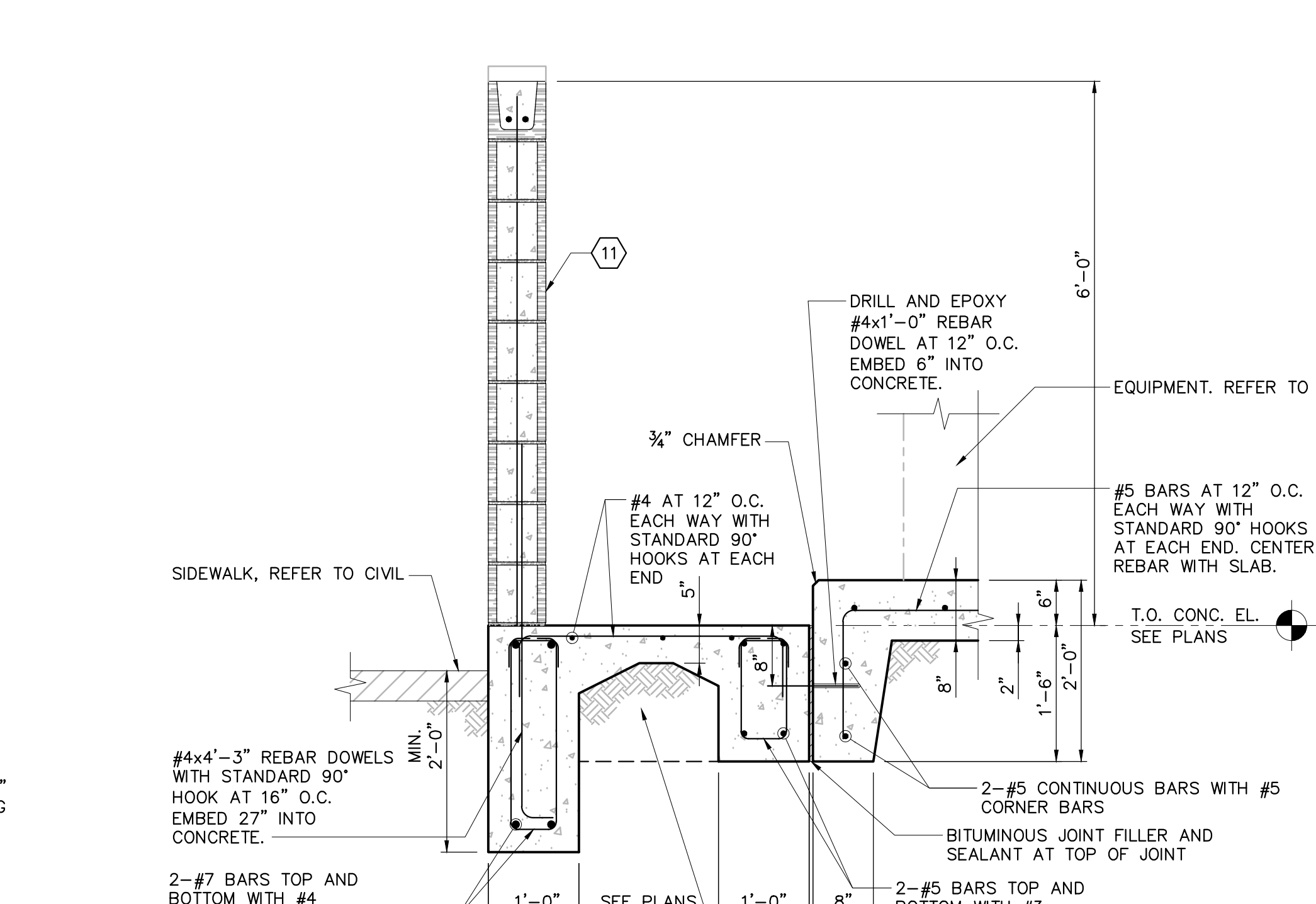
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EXTERIOR GRADE BEAM SECTION
SCALE: 3/4" = 1'-0"



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RTA GENERATOR ENCLOSURE
CMU PLAN
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EXTERIOR GRADE BEAM SECTION
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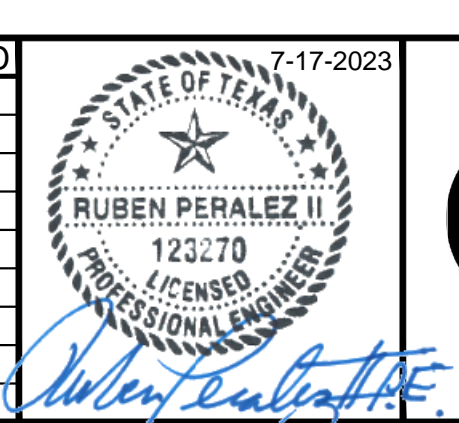


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EXTERIOR GRADE BEAM SECTION
SCALE: 3/4" = 1'-0"

- REFERENCE NOTES**
- FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 - COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
- REFERENCE NOTES**
- FOUNDATION PAD FOR GENERATOR.
 - CONTROL JOINT. SEE DETAIL 3/S2.
 - CONCRETE SIDEWALK.
 - EXISTING FOUNDATION.
 - EXISTING BUILDING.
 - PROVIDE 2-#4x4'-0" BARS AT INSIDE CORNERS.
 - EXTEND 12" WIDE BY 18" DEEP GRADE BEAM TO EXTERIOR GRADE BEAM. REINFORCE WITH 2-#5 TOP BARS, 2-#5 BOTTOM BARS, AND #4 TIES AT 12" O.C.
 - 8"x8" CMU OPENING AT BOTTOM OF WALL. REFER TO ARCHITECTURAL PLANS.
 - EXPANSION JOINT. REINFORCE CELL ON EACH SIDE OF JOINT WITH 2-#4 VERTICAL BARS.
 - REINFORCE CORNER OR END OF WALL WITH 2-#4 VERTICAL BARS.
 - 8" CMU WALL REINFORCED WITH #4 VERTICAL BARS AT 16" O.C. SPACING WITH BOND BEAM AT TOP OF WALL REINFORCED WITH 2-#4 HORIZONTAL BARS. PROVIDE 2-#4 HORIZONTAL CORNER BARS AT CMU WALL CORNERS.
 - DRILL AND EPOXY 4-#7x2'-0" AND 1-#4x2'-0" BARS INTO EXISTING CONCRETE GRADE BEAM. #7 BARS TO LAP WITH #7 BARS IN NEW GRADE BEAM AND #4 BAR TO LAP WITH #4 CONTINUOUS BAR "A." EMBED #4 AND #7 BARS 6" INTO CONCRETE. CONTRACTOR TO FIELD VERIFY PRESENCE OF EXISTING GRADE BEAM, DEPTH OF GRADE BEAM, AND THICKNESS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF EXISTING CONDITIONS VARY.

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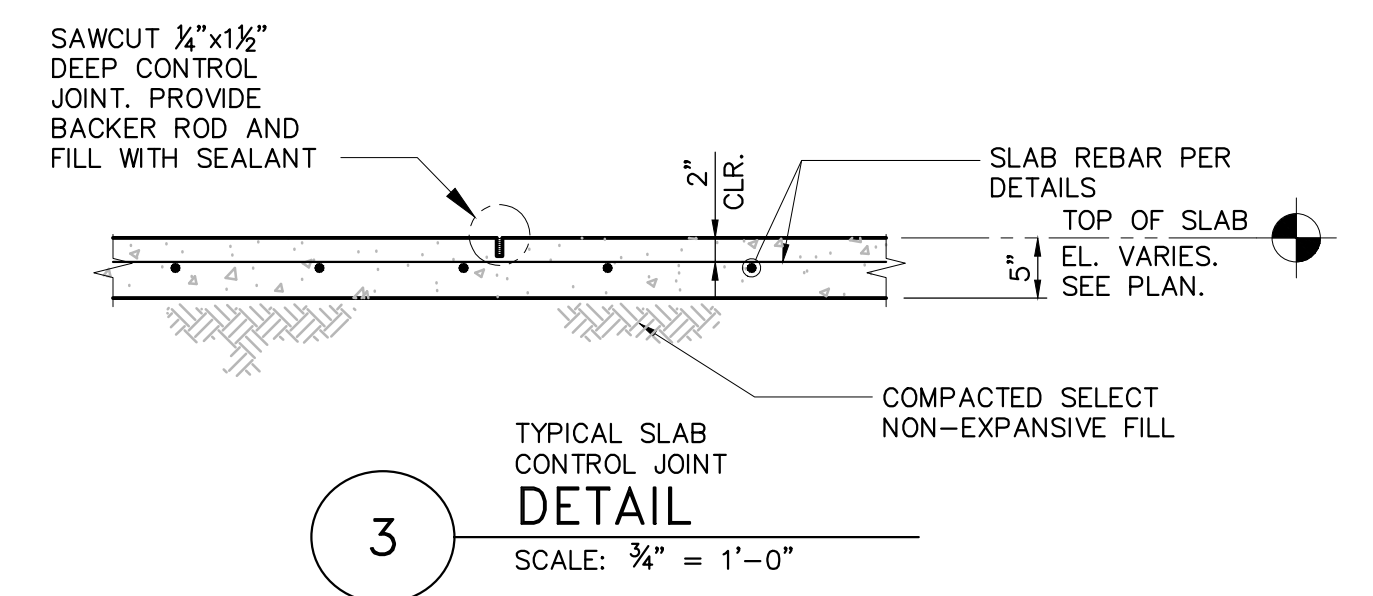
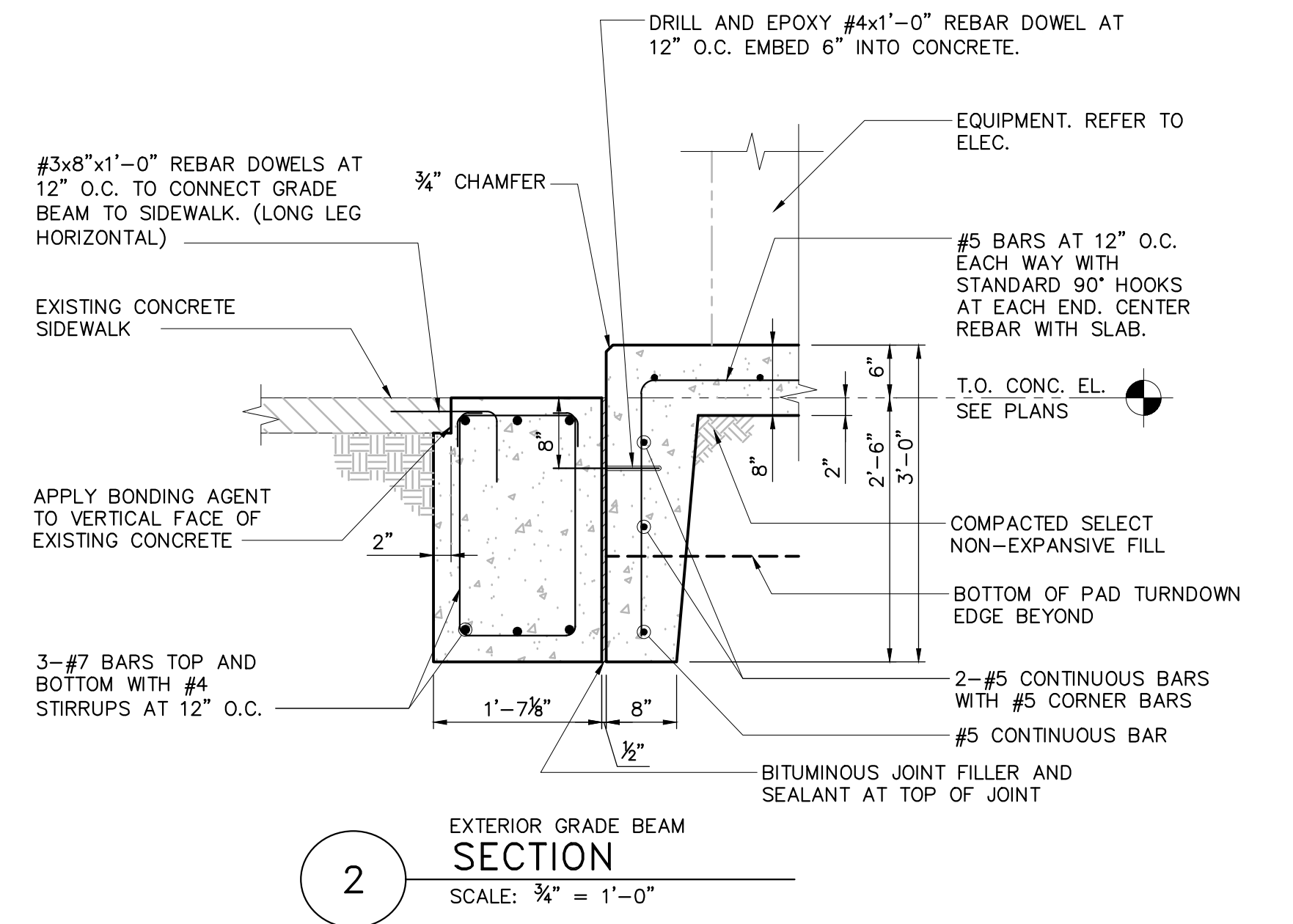
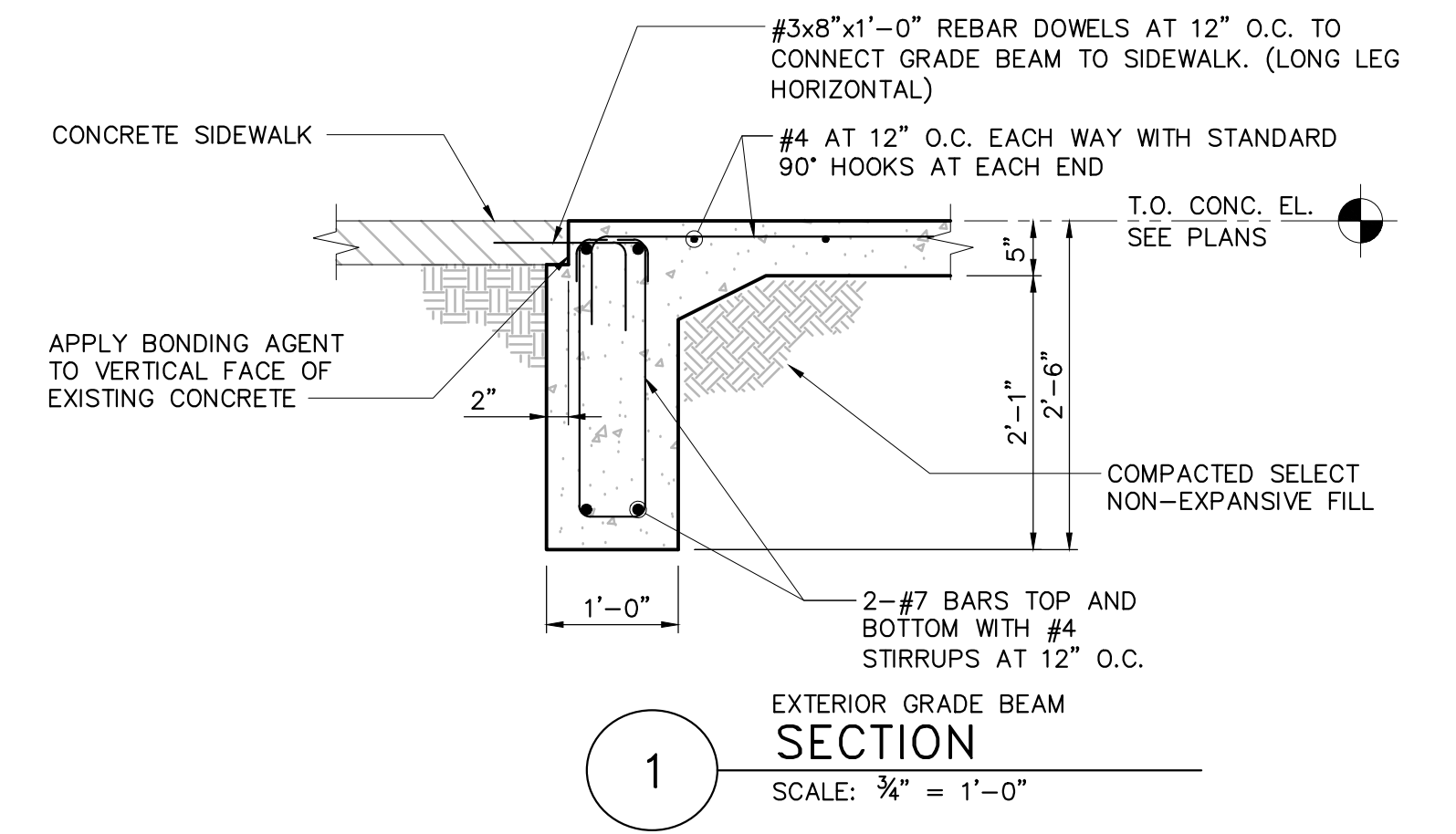
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STRUCTURAL PLANS & DETAILS

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