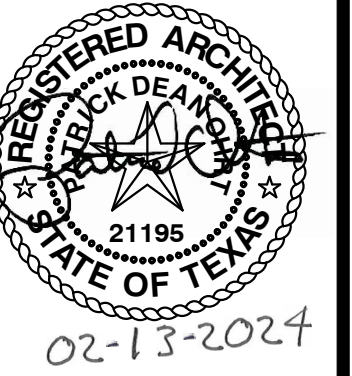


BLESSING COMMUNITY CENTER

MATAGORDA COUNTY



CONSULTANTS

URBAN ENGINEERING
CIVIL ENGINEER
2004 N. Commerce
Victoria, TX 77901
361-578-9836
Contact: Matt Glaze

RAWLEY McCOY AND ASSOCIATES
ARCHITECTS AND INTERIOR DESIGNERS
1908 N. Laurent St. Suite 540
Victoria, Texas 77901
phone: 361.573.1642
fax: 361.573.2114
Contact: Patrick Ohrt

REM ENGINEERING
STRUCTURAL ENGINEER
6800 Park Ten Blvd., Suite 239E
San Antonio, Texas 78213
210.320.1199 Voice
Contact: Robert Martinez

NRG ENGINEERING
MEP ENGINEER
5656 S. Staples, Suite 360
Corpus Christi, Texas 78413
361.852.2727 Voice
Contact: Sean Rodriguez

PROJECT GENERAL INFORMATION

PROJECT: BLESSING COMMUNITY CENTER
LOCATION: 560 FM 616, BLESSING, TEXAS 77419
BUILDING HEIGHT: 35'-0" (ONE STORY)
FLOOR AREA SUMMARY - MAIN BUILDING
INTERIOR: 3,430 SF
COVERED EXTERIOR: 428 SF
TOTAL = 3,858 SF

CODE REVIEW: IBC 2015

PRIMARY OCCUPANCY (SEC. 304.1): ASSEMBLY "A-2"
AUTOMATIC SPRINKLER SYSTEM: NO
TYPE OF CONSTRUCTION (TABLE 601): TYPE II-B
BUILDING AREA AND HEIGHT LIMITATIONS: GROUP A-2 OCCUPANCY
BUILDING HEIGHT LIMITATION (TABLE 504.3): 55 FT
BUILDING STORY LIMITATION (TABLE 504.4): 2 STORY HEIGHT
BUILDING AREA LIMITATION (TABLE 506.2): 9,500 AREA

FIRE-RESISTANCE REQUIREMENTS

FOR GENERAL BUILDING ELEMENTS:	(TABLE 601 AND SECTION 602)	DOOR RATING (TABLE 716.5)
STRUCTURAL FRAME BEARING WALLS:	0 HR	
EXTERIOR WALLS:	0 HR	
INTERIOR WALLS:	0 HR	
NONBEARING WALLS:		
EXTERIOR LESS THAN 5'	1 HR	45 MIN
BETWEEN 5' & 10'	1 HR	45 MIN
BETWEEN 10' & 30'	0 HR	45 MIN
GREATER THAN 30'	0 HR	0 HR
INTERIOR WALLS:	0 HR	
FLOOR CONSTRUCTION (INCL. SUPPORT BEAMS/JOISTS)	0 HR	
ROOF CONSTRUCTION (INCL. SUPPORT BEAMS/JOISTS)	0 HR	
OCCUPANCY SEPARATIONS:		
NONSEPARATED USE AREA (SEC. 508.3.1)		

FIRE SEPARATIONS BETWEEN USES ARE NOT REQUIRED WHEN THE MOST RESTRICTIVE USE IS APPLIED TO ENTIRE BUILDING AS DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES.

MISCELLANEOUS DETAILED REQUIREMENTS

CEILING HEIGHT FOR MEANS OF EGRESS (SEC 1208.2): 7'-6" MIN
CEILING HEIGHT FOR OCCUPIABLE SPACES AND CORRIDORS (SEC 1208.2): 7'-6" MIN
SAFETY GLAZING MISCELLANEOUS REQUIREMENT: SEC 2406

EGRESS REQUIREMENTS: IBC 2015

REQUIRED EGRESS WIDTH:

MINIMUM CORRIDOR WIDTH (TABLE 1020.2)	44" MIN OR 2" PER OCCUPANT WHICHEVER IS GREATER
NUMBER OF EXITS REQUIRED (SEC 1016)	
1-49 OCCUPANTS	1
50-500 OCCUPANTS	2
501-1000 OCCUPANTS	3
1001 OR MORE OCCUPANTS	4

MAXIMUM TRAVEL DISTANCE TO AN EXIT (TAB 1017.2)
OCCUPANCY A, E, F-1, M, R, S-1: 200' - W/O AUTO FIRE SUPPRESSION
MAXIMUM LENGTH OF DEAD END CORRIDORS (1020.4, EXC 2 & 3): 20' OR 2.5 TIMES THE LEAST WIDTH OF THE CORRIDOR

OCCUPANCY LOADS: (TABLE 1004.1.2)

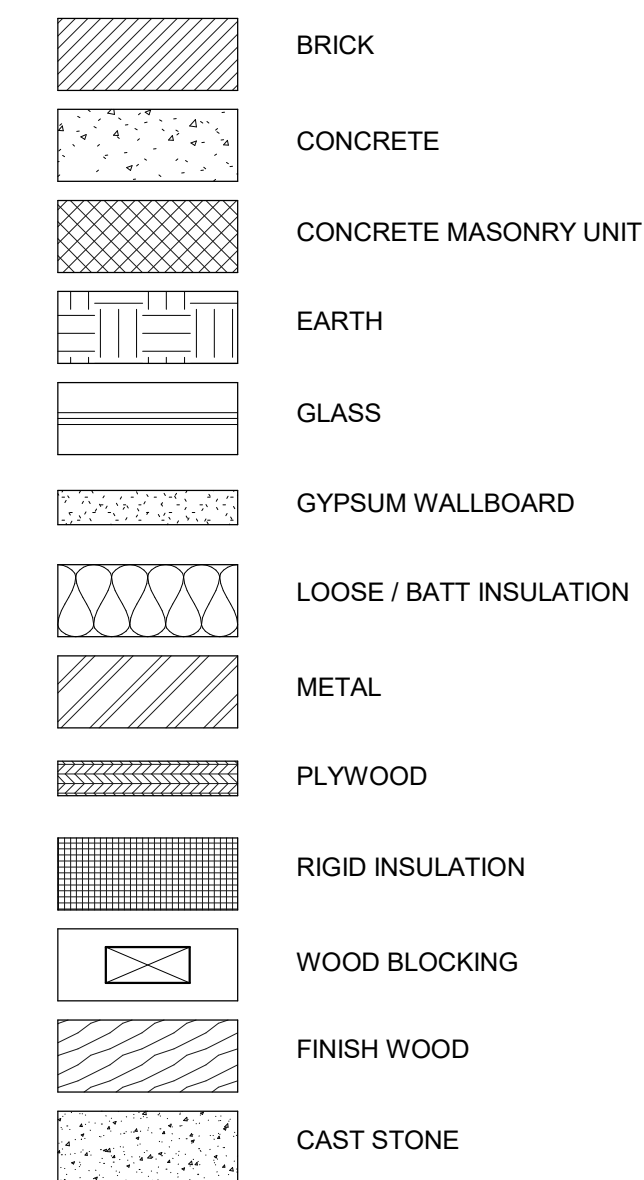
FUNCTION OF SPACE:	SQ. FT PER OCCUPANT:
ACCESSORY STORAGE AREAS, MECH. EQUIPMENT ROOMS	300 GROSS
ASSEMBLY W/OUT FIXED SEATS:	
UNCONCENTRATED (TABLES AND CHAIRS)	15 NET
KITCHENS	200 GROSS

PLUMBING COUNT

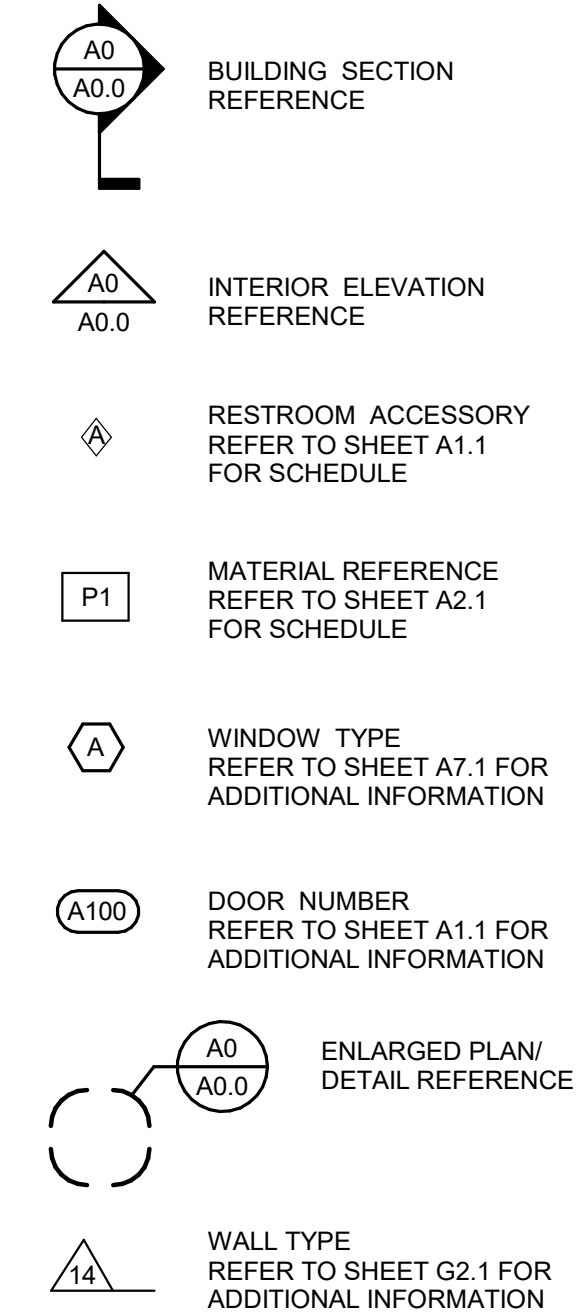
TYPE OF OCCUPANCY: ASSEMBLY (A-2)
TOTAL No OCCUPANTS: 132

No OF MALES: 66	No OF FEMALES: 66		
REQD	PROVIDED	REQD	PROVIDED
1:40 TLTS	1	1:40 TLTS	2
URINALS-67%	[1]		
1:75 LAVS	1	1:75 LAVS	2
TOTAL FIXTURES	3	TOTAL FIXTURES	4
UNISEX REQUIREMENTS (1109.2.1): (1 FOR # OF FIXTURES >6)	N/A REQUIRED; N/A PROVIDED		
1:500 EWC's	1 REQUIRED; 1 PROVIDED		
1 SERVICE SINK	1 REQUIRED; 1 PROVIDED		

MATERIAL LEGEND



SYMBOLS



ABBREVIATIONS

ABV	ABOVE	HOR	HORIZONTAL
ADD	ADDENDUM	ID	INSIDE DIAMETER
ADDL	ADDITIONAL	INFO	INFORMATION
ADJ	ADJACENT	INT	INTERIOR
AFF	ABOVE FINISH FLOOR	INV	INVERT
ALUM	ALUMINUM	LAV	LAVATORY
APPROX	APPROXIMATELY	LH	LEFT HAND
ARCH	ARCHITECTURAL	MFR	MANUFACTURER
ACT	ACOUSTICAL CEILING TILE	MAX	MAXIMUM
AUTO	AUTOMATIC	MECH	MECHANICAL
BD	BOARD	MEP	MECHANICAL, ELECTRICAL, & PLUMBING
BK	BRICK	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BLKG	BLOCKING	MTL	METAL
BM	BEAM	NIC	NOT IN CONTRACT
BOTT	BOTTOM	NO	NUMBER
BOD	BOTTOM OF DECK	NOM	NOMINAL
CFMF	COLD FORMED METAL FRAMING	NTS	NOT TO SCALE
CLR	CLEAR	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CO	CLEANOUT	OFOI	OWNER FURNISHED OWNER INSTALLED
COL	COLUMN	OH	OVERHEAD
CONC	CONCRETE	OPH	OPPOSITE HAND
CONT	CONTINUOUS	OSB	ORIENTED STRAND BOARD
CJ	CONTROL JOINT	PL	PLATE
CL	CENTERLINE	PLAM	PLASTIC LAMINATE
DEMO	DEMOLITION	PLYWD	PLYWOOD
DIA	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIM	DIMENSION	PSI	POUNDS PER SQUARE INCH
DOCS	DOCUMENTS	PVC	POLYVINYL CHLORIDE
DS	DOWNSPOUT	RD	ROOF DRAIN
DTL	DETAIL	REF	REFER(ENCE)
DWGS	DRAWINGS	RH	RIGHT HAND
EA	EACH	RO	ROUGH OPENING
EJ	EXPANSION JOINT	S CONC	SEALED CONCRETE
EJC	EXPANSION JOINT COVER	SIM	SIMILAR
ELEC	ELECTRIC(AL)	SPEC	SPECIFICATION
ELEV	ELEVATOR	SS	STAINLESS STEEL
EWC	ELECTRIC WATER COOLER	STD	STANDARD
EXIST	EXISTING	STL	STEEL
EXT	EXTERIOR	STOR	STORAGE
FD	FLOOR DRAIN	STRUCT	STRUCTURAL
FEB	FIRE EXTINGUISHER & BRACKET	TOS	TOP OF STEEL
FEC	FIRE EXTINGUISHER CABINET	TYP	TYPICAL
FT	FOOT (FEET)	UNO	UNLESS NOTED OTHERWISE
FV	FIELD VERIFY	VCT	VINYL COMPOSITION TILE
GA	GAUGE	VERT	VERTICAL
GALV	GALVANIZED	VIF	VERIFY IN FIELD
GC	GENERAL CONTRACTOR	W/	WITH
GYP	GYP SUM	W/O	WITHOUT
GYPWB	GYP SUM WALLBOARD	WD	WOOD

INTERIOR WALL

E5 WALL TYPES

1" = 1'-0"

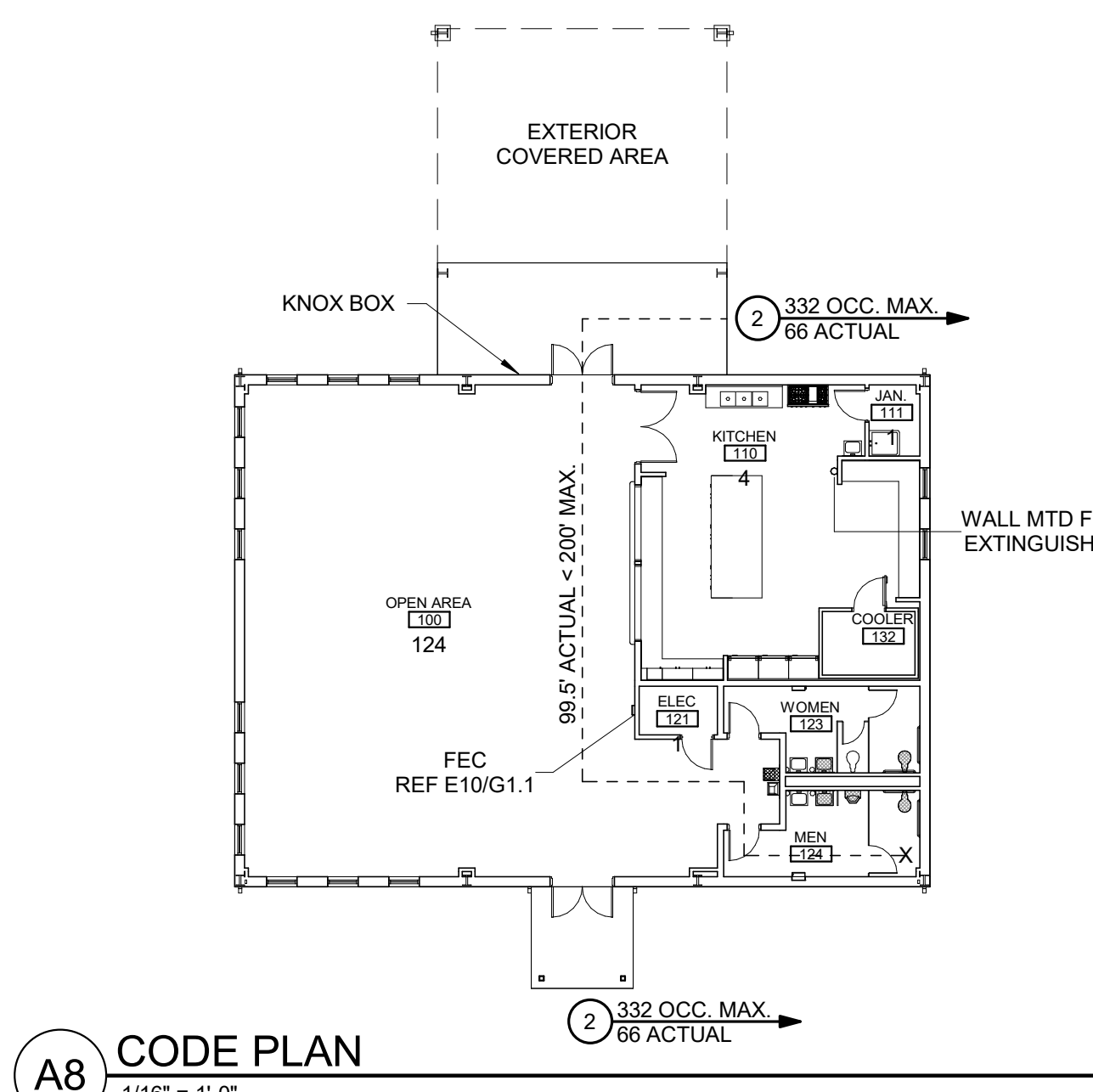
NO.	TITLE
GENERAL	
G1.1	COVER SHEET AND CODE REVIEW
G1.2	ADA DETAILS AND MOUNTING HEIGHTS
G3.1	ARCHITECTURAL SITE PLAN, DEMOLITION PLAN AND WALL TYPES
CIVIL	
C1	CIVIL GENERAL NOTES
C2	CIVIL DEMOLITION PLAN
C3	CIVIL UTILITY PLAN
C4	CIVIL PAVING & GRADING PLAN
C5	DETAILS
STRUCTURAL	
S1.1	FOUNDATION PLAN
S2.1	FOUNDATION DETAILS
S3.1	GENERAL NOTES
ARCHITECTURAL	
A1.1	FLOOR PLAN & REFLECTED CEILING PLAN
A1.2	ROOF PLAN
A2.1	FINISH PLAN & CASEWORK ELEVATIONS
A3.1	BUILDING SECTIONS AND EXTERIOR ELEVATIONS
A4.1	DOOR SCHEDULE, DETAILS & WINDOW ELEVATIONS
MECHANICAL	
M0.1	MECHANICAL SPECIFICATIONS
M1.1	MECHANICAL FLOOR PLAN
M2.1	MECHANICAL SCHEDULES
M3.1	MECHANICAL DETAILS
ELECTRICAL	
E0.1	ELECTRICAL SITE PLAN
E1.1	ELECTRICAL LIGHTING PLAN
E2.1	ELECTRICAL POWER PLAN
E3.1	ELECTRICAL DETAILS & SPECIFICATIONS
PLUMBING	
P0.1	PLUMBING SPECIFICATIONS
P1.1	PLUMBING DIVV
P1.2	PLUMBING WATER
P2.1	PLUMBING SCHEDULES
P3.1	PLUMBING DETAILS
P4.1	PLUMBING RISER DIAGRAMS

OCCUPANCY TOTAL

132 OCCUPANTS
2 EXITS REQUIRED: 26.4" REQUIRED;
2 EXITS PROVIDED: 132.8" PROVIDED

EGRESS LEGEND

TYPE	DESCRIPTION	COUNT
2	PAIR 3'-0" DOORS (66.4" CLR.) AT 2"/PERSON = 332 PERSONS	2



A8 CODE PLAN

1/16" = 1'-0"

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX
©2023 RAWLEY McCOY & ASSOCIATES

DATE ISSUED:
Issue Date

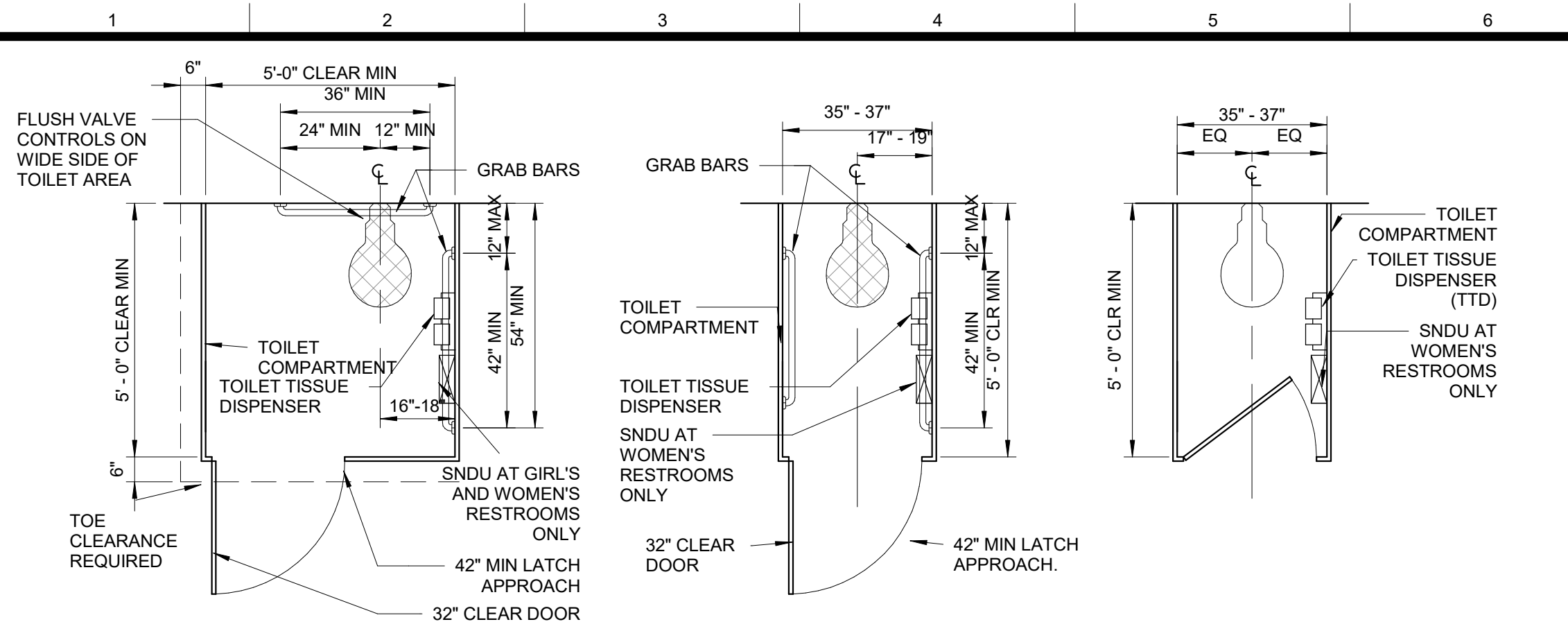
PROJECT NUMBER:
1027-0623

PLAN NORTH
TRUE NORTH

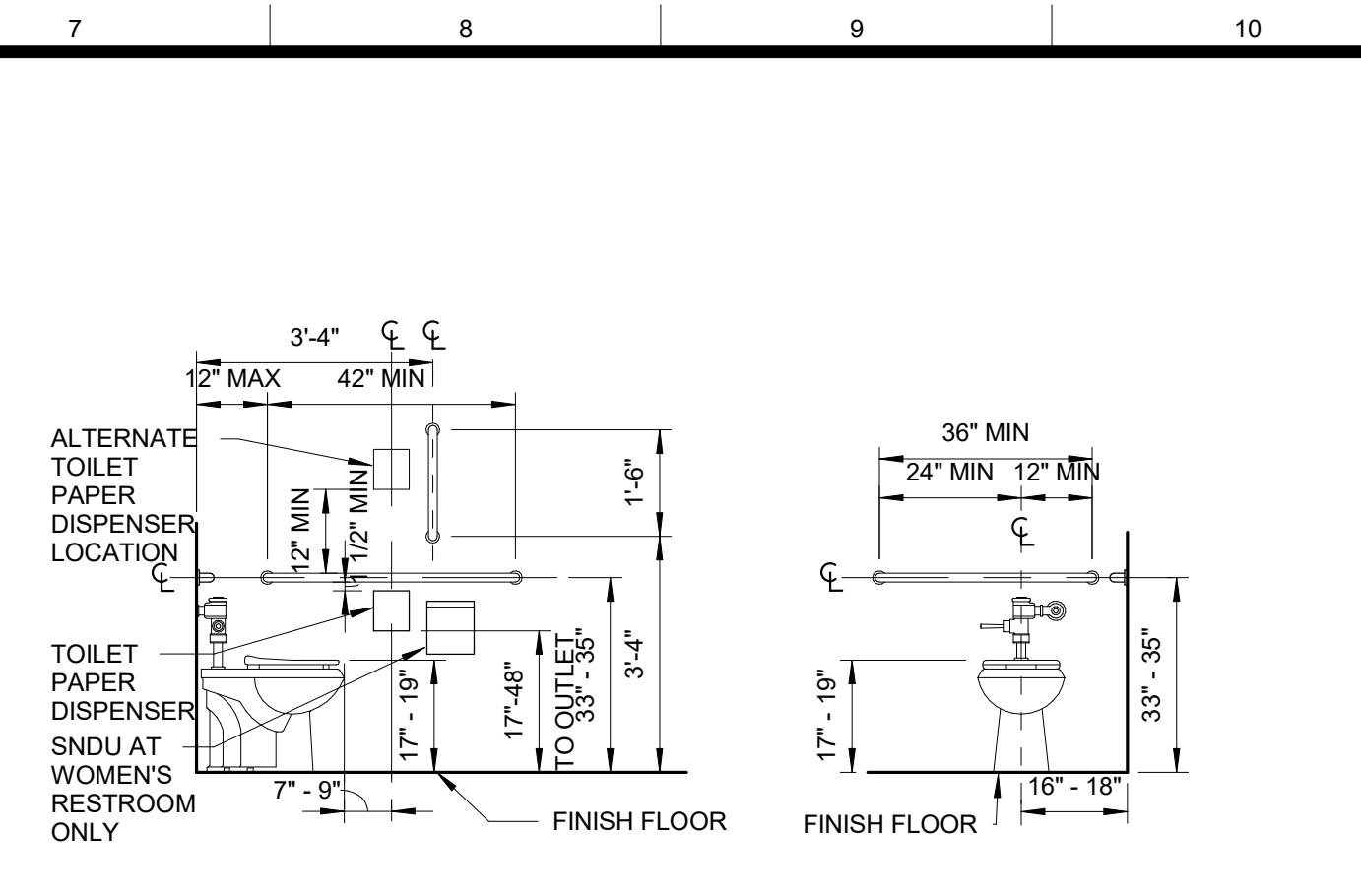
SHEET NAME
COVER SHEET AND
CODE REVIEW

SHEET NUMBER

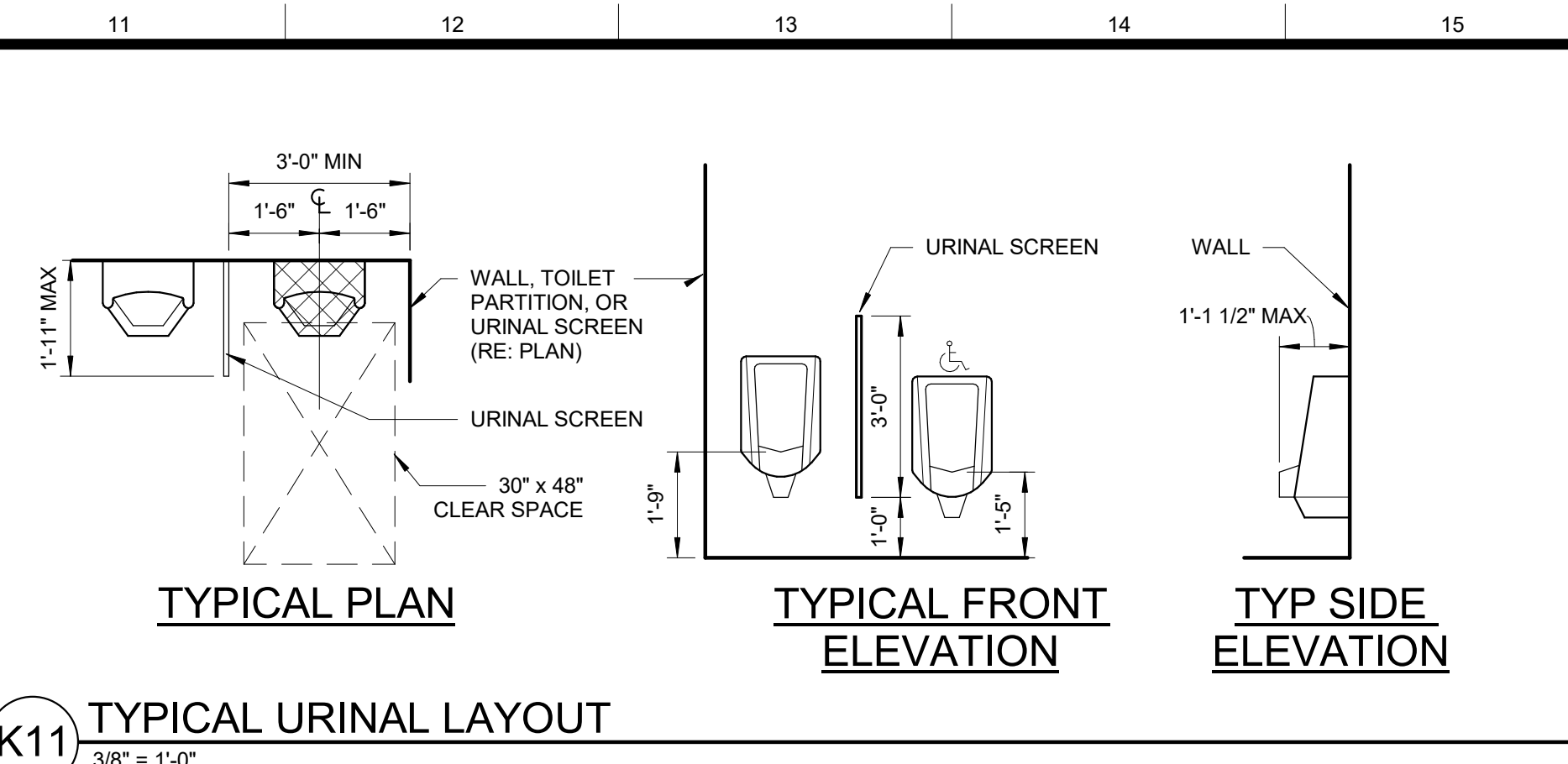
G1.1



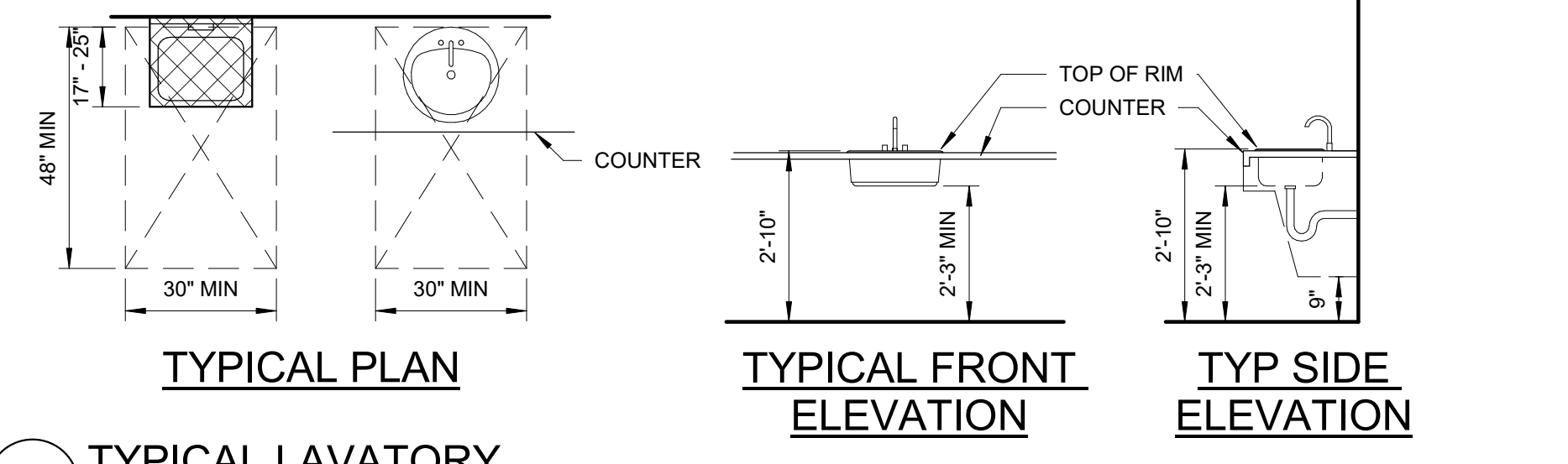
J1 TYPICAL STANDARD TOILET STALL LAYOUTS
3/8" = 1'-0"



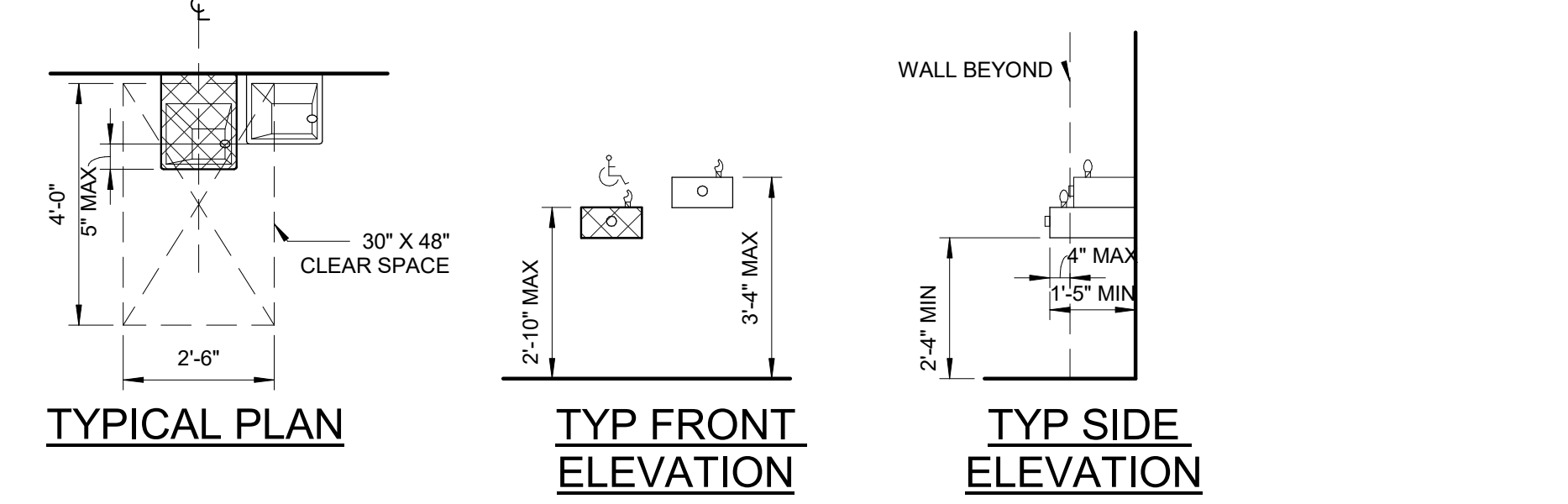
J7 TYPICAL STANDARD STALL MOUNTING HEIGHTS
3/8" = 1'-0"



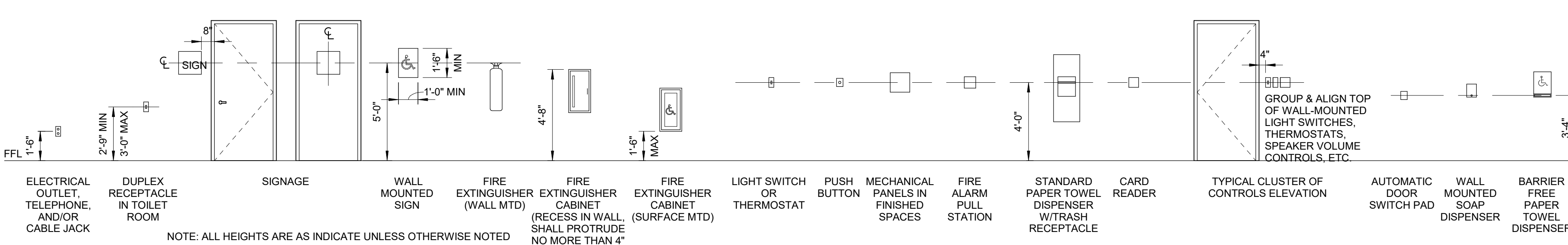
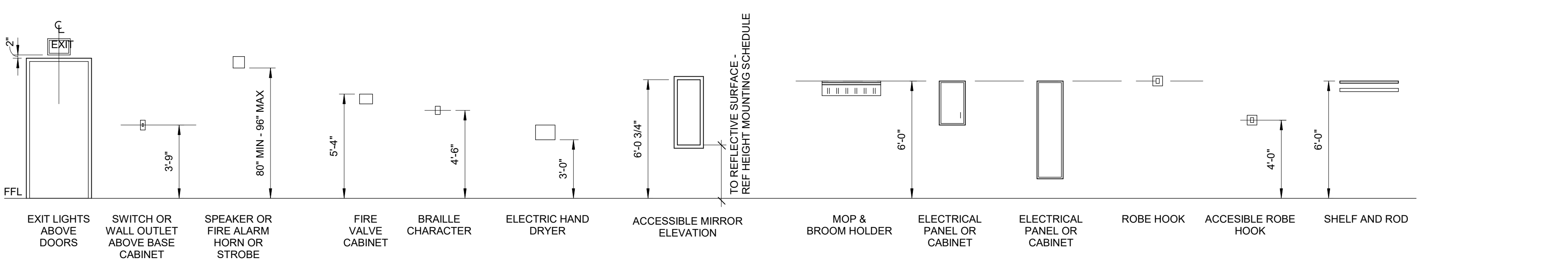
K11 TYPICAL URINAL LAYOUT
3/8" = 1'-0"



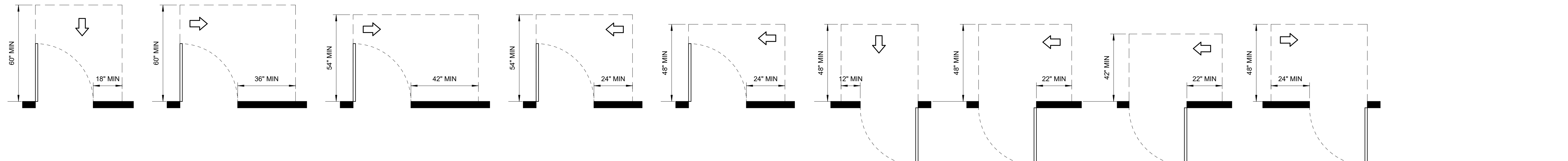
H11 TYPICAL LAVATORY
3/8" = 1'-0"



F11 TYPICAL DRINKING FOUNTAIN
3/8" = 1'-0"



C1 TYPICAL MOUNTING HEIGHTS
1/4" = 1'-0"



A1 TYPICAL DOOR CLEARANCES
3/8" = 1'-0"

GENERAL NOTES

- CROSSHATCHED FIXTURES ARE TO BE MOUNTED AT ACCESSIBLE HEIGHTS.
- INFORMATION ON THIS SHEET IS THE MINIMUM REQUIRED TO PROVIDE ACCESSIBILITY AND DOES NOT ADDRESS COMPLIANCE WITH OTHER CODES OR STANDARDS.
- ALL DIMENSIONS SHOWN ARE TO THE FINISH FACE. CONTRACTOR TO MAKE ALLOWANCES FOR THICKNESSES OF MATERIALS SPECIFIED.

T.A.S. DOOR NOTES

- ALL DOORS SHALL MEET T.A.S. REQUIREMENTS FOR CLEARANCES, HARDWARE, ETC.
- ALL THRESHOLDS SHALL NOT EXCEED 1/2" IN HEIGHT AND SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- ALL DOORS TO HAVE A.D.A. APPROVED LEVER LOCKSETS OR LATCHSETS, PULLS, ETC. ALL OPERATING DEVICES ON DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOESN'T REQUIRE TIGHT GRASPING OR PINCHING, OR SEVERE TWISTING TO OPERATE.
- THE FORCE REQUIRED TO ACTIVATE DOOR HARDWARE AND OPEN DOORS SHOULD BE NO GREATER THAN 5 LB/FT FOR INTERIOR DOORS. OPENING FORCE FOR ALL EXTERIOR DOORS SHALL BE 8.5 LB/FT.
- DOORS TO HAZARDOUS AREAS SUCH AS LOADING PLATFORMS, BOILER ROOMS, MECHANICAL AND ELECTRICAL ROOMS, AND OTHER AREAS THAT MIGHT BE DANGEROUS TO A BLIND PERSON SHALL BE MADE IDENTIFIABLE TO THE TOUCH BY A TEXTURED SURFACE ON THE DOOR HANDLE OR OTHER DOOR OPERATING HARDWARE.
- THE SWEEP PERIOD ON ANY DOORS WITH CLOSERS SHOULD BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70° THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
- ADJUST CUT-OFF AT BOTTOM OF ANY EXTERIOR HOLLOW METAL DOORS WITH HANDICAP ACCESSIBLE THRESHOLDS TO INSURE THAT THERE IS NO GAP BETWEEN THE BOTTOM OF THE DOOR AND TOP OF THRESHOLD SEAT.

RMA ARCHITECTS & INTERIOR DESIGNERS
1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.rmaarch.com

PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

REGISTERED ARCHITECT
PATRICK DEAN OHRT
STATE OF TEXAS
21195
02-13-2024

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX
©2023 PARLEY MALCOLM & ASSOCIATES

DATE ISSUED:
Issue Date

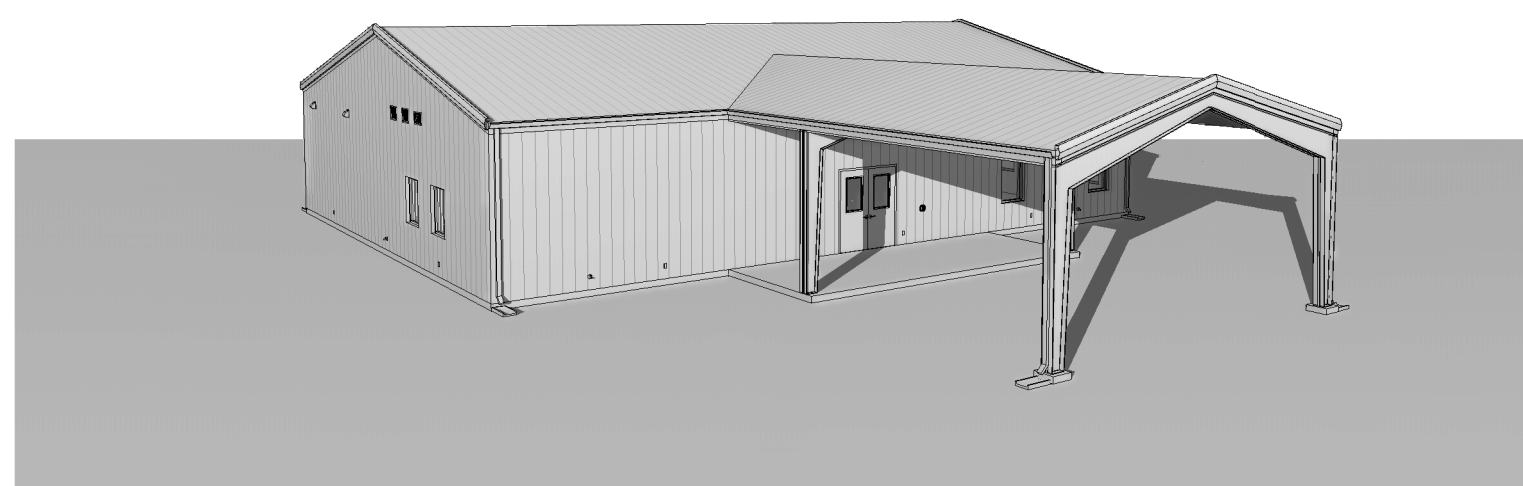
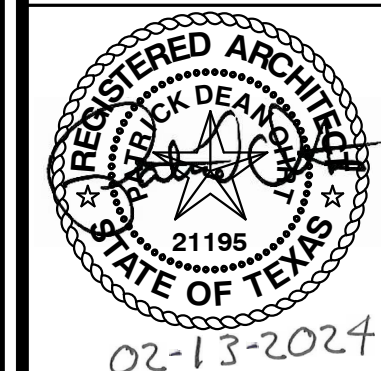
PROJECT NUMBER:
1027-0623

PLAN NORTH TRUE NORTH

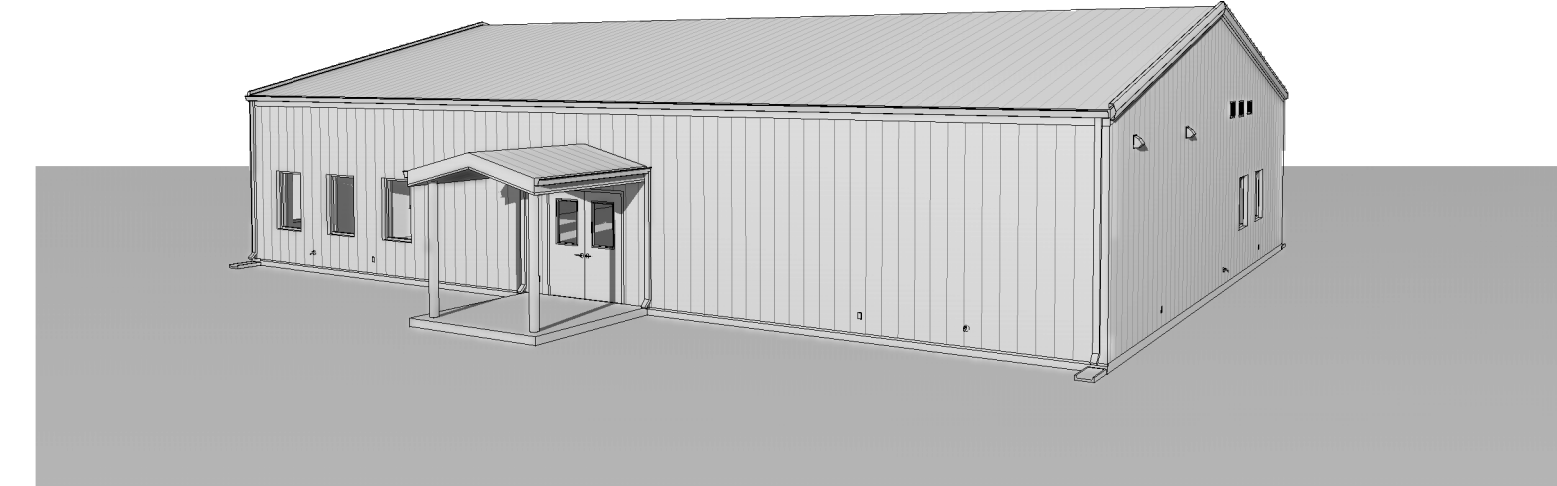
SHEET NAME
ADA DETAILS AND MOUNTING HEIGHTS

SHEET NUMBER
G1.2

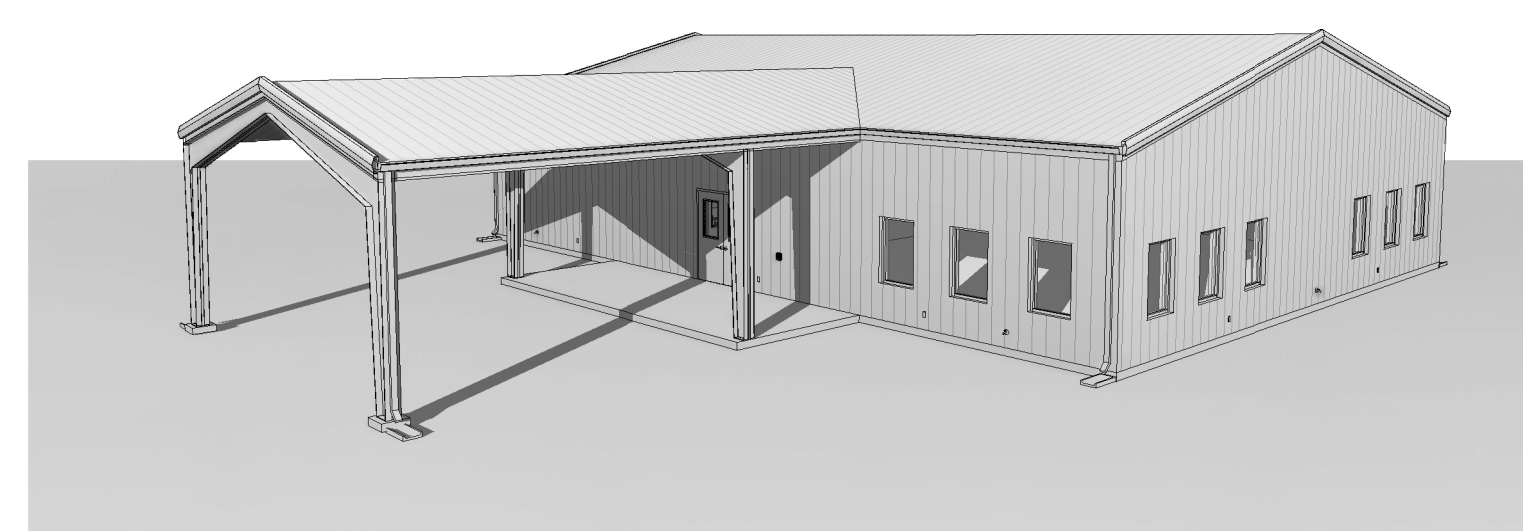
2/7/2024 11:05:59 AM
C:\Revit\Local Files\MC-BCC-A22_pattickGPZFS.rvt



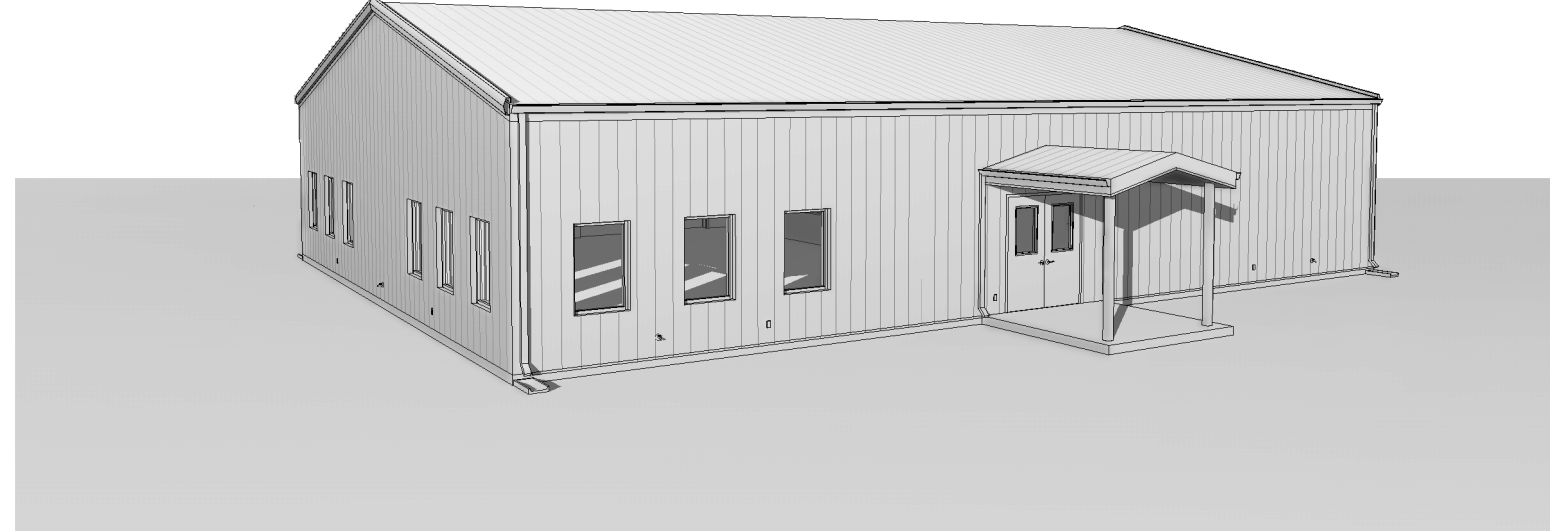
K8 EXTERIOR PERSPECTIVE - NORTHEAST



K12 EXTERIOR PERSPECTIVE - SOUTHEAST



H8 EXTERIOR PERSPECTIVE - NORTHWEST



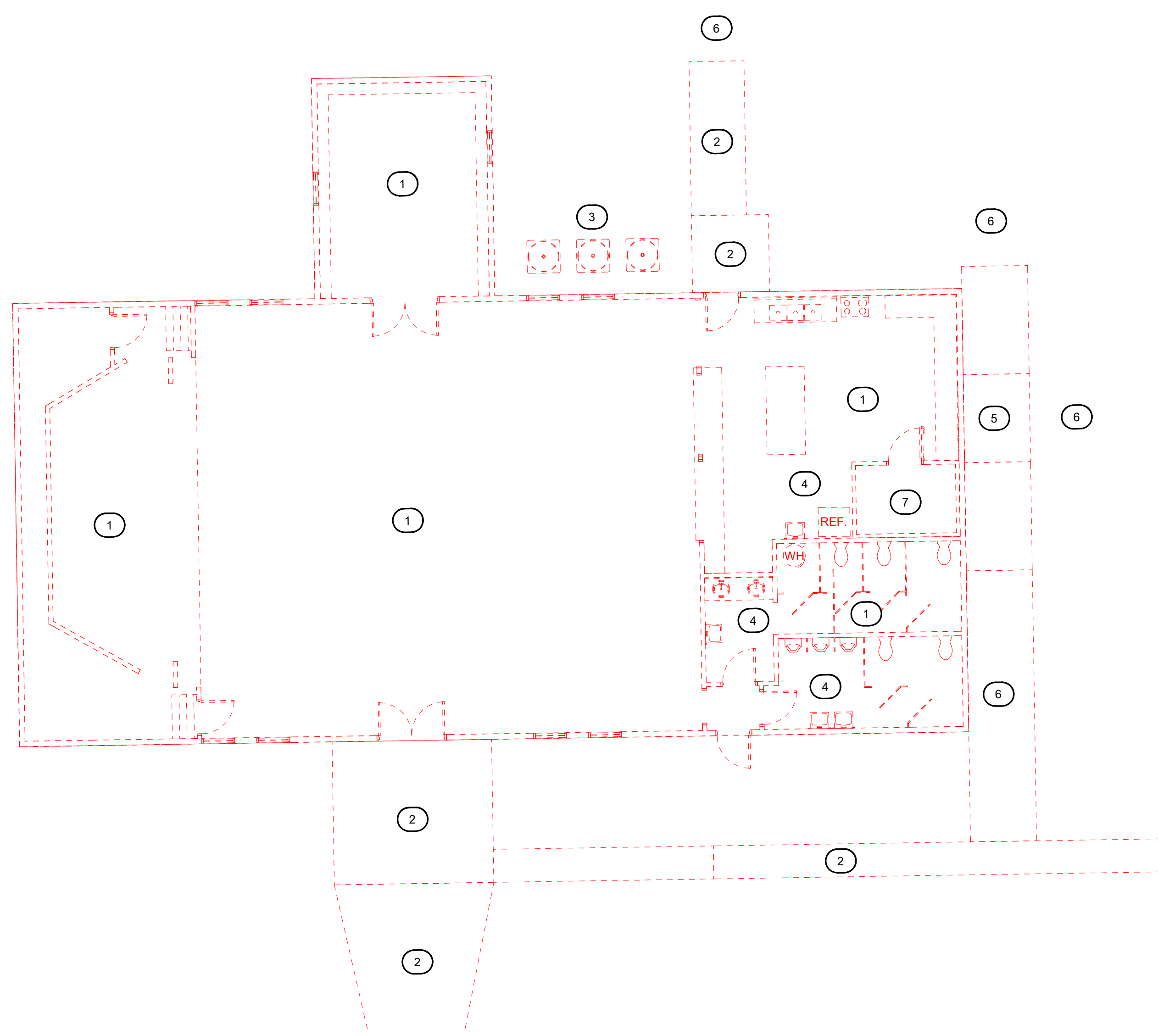
H12 EXTERIOR PERSPECTIVE - SOUTHWEST

DEMOLITION LEGEND

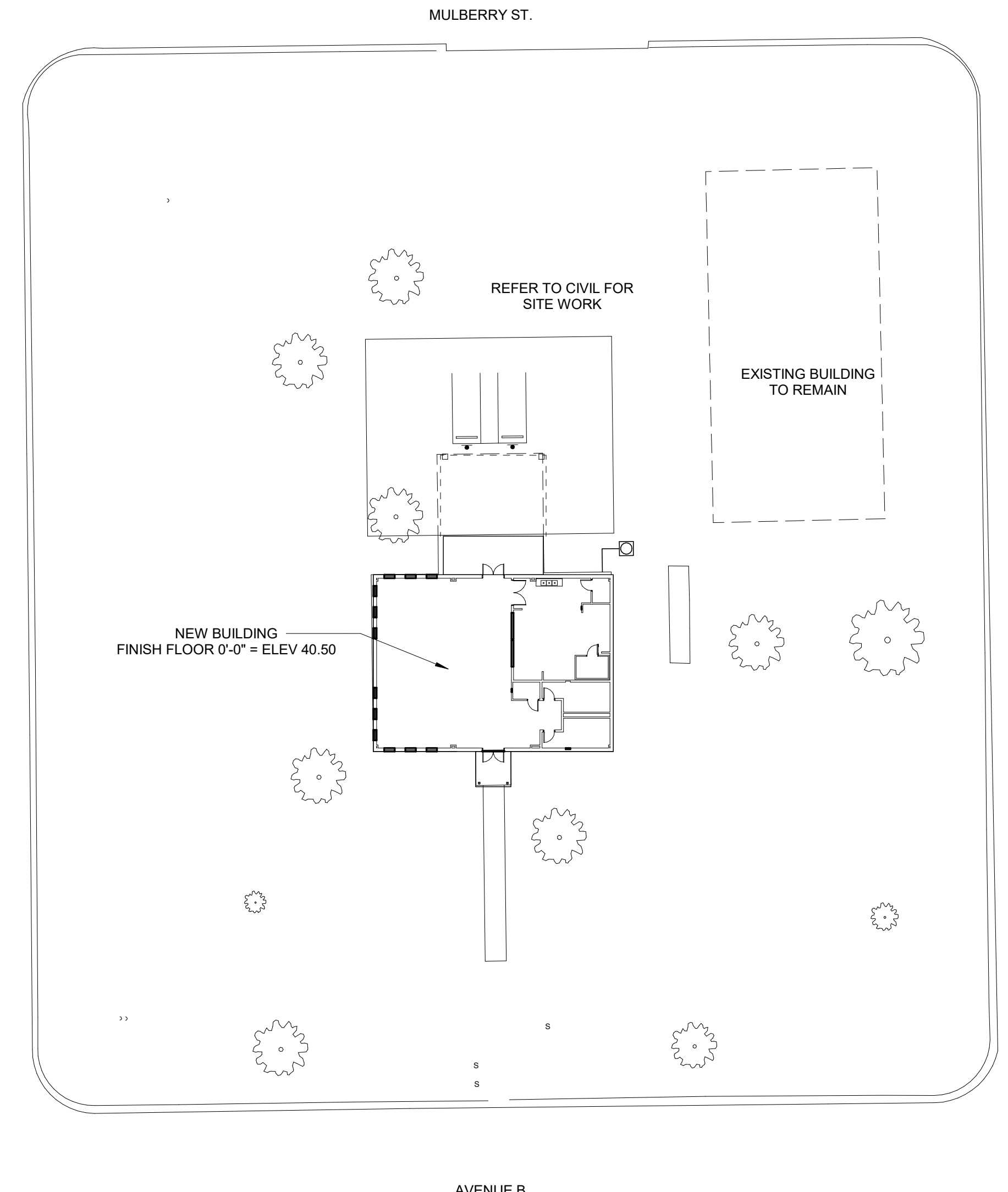
- EXISTING WALLS TO REMAIN
- EXISTING DOORS TO REMAIN
- EXISTING TO BE REMOVED (REFER DEMOLITION PLANS)
- REMOVE EXISTING DOORS, FIXTURES, AND MISC IN DEMOLITION
- DEMOLITION KEYNOTE

DEMOLITION KEYNOTES

#	Description
1	DEMOLISH EXISTING BUILDING AND FOUNDATIONS. REFER TO MEP AND CIVIL FOR UTILITY DEMOLITION.
2	DEMOLISH EXISTING CONCRETE RAMP/PAVEMENT. REFER TO CIVIL.
3	SALVAGE EXISTING HVAC EQUIP AND RETURN TO OWNER. REFER TO MEP.
4	REMOVE EXISTING PLUMBING FIXTURE. COORDINATE W/ MEP FOR REMOVAL OF EXISTING PLUMBING LINES AND EXISTING PLUMBING LINES TO REMAIN.
5	DEMOLISH EXISTING WOOD RAMP/PLATFORM. REFER TO CIVIL.
6	DEMOLISH EXISTING ASPHALT PAVEMENT. REFER TO CIVIL.
7	EXISTING COOLER TO BE DISCONNECTED, REMOVED AND STORED FOR RELOCATION IN THE NEW BUILDING.



A1 DEMOLITION PLAN - BUILDING
 1/8" = 1'-0"



A9 ARCHITECTURAL SITE PLAN - NEW CONSTRUCTION
 1" = 30'-0"

DATE ISSUED:
 Issue Date

PROJECT NUMBER:
 1027-0623

PLAN NORTH TRUE NORTH

SHEET NAME
ARCHITECTURAL
SITE PLAN,
DEMOLITION PLAN
AND WALL TYPES
 SHEET NUMBER

G3.1

GENERAL NOTES

PRELIMINARY MATTERS

1. THE INSTRUCTIONS GIVEN BY THE NOTES ON THIS SHEET DO NOT CONSTITUTE SEPARATE PAY ITEMS UNLESS SPECIFICALLY INCLUDED IN THE PROPOSAL FORM.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS LISTED IN THE CONTRACT DOCUMENTS & THE STANDARD DETAILS INCLUDED OR REFERENCED IN THE PLANS.
3. ANY CHANGES OR REVISIONS TO THESE PLANS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW & APPROVAL PRIOR TO IMPLEMENTATION.
4. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE & WERE OBTAINED FROM EXISTING RECORDS & VISIBLE EVIDENCE ON THE GROUND. IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES & OMISSIONS IN THE LOCATIONS & QUANTITIES OF EXISTING UTILITIES & STRUCTURES SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION & DEPTH OF ALL KNOWN EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT CONFLICTS CAN BE AVOIDED. WHEN AN EXISTING UTILITY OR UNDERGROUND PIPELINE IS ENCOUNTERED, THAT WAS PREVIOUSLY NOT LOCATED OR INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER & THE APPROPRIATE UTILITY COMPANY TO OBTAIN PROCEDURAL INSTRUCTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE APPROPRIATE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
5. EXISTING PAVING, BUILDINGS & OTHER ITEMS SHOWN ON PLANS, BUT NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR, ARE FOR INFORMATIONAL PURPOSES ONLY & MAY BE SHOWN TO A LESSER ACCURACY OR TO A LESSER DEGREE OF DETAIL THAN THE REMAINDER OF THE PLANS.
6. ELEVATIONS SHOWN ON THE PLAN & FOLLOWED BY A "s" SYMBOL, INDICATE THAT THE ENGINEER'S INTENTION IS TO MATCH THE EXISTING GRADE OF THE TIE-IN PAVEMENT OR STRUCTURE. THE CONTRACTOR SHALL VERIFY THE ELEVATION AT THESE LOCATIONS & NOTIFY THE ENGINEER IMMEDIATELY, IF THE PLAN ELEVATION VARIES SIGNIFICANTLY.
7. WHERE ELEVATIONS ARE SHOWN ON THE PLAN AS "TBD", IT INDICATES THAT THE ELEVATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS NOTATION IS TYPICALLY USED FOR BURIED UTILITIES WHO'S ELEVATION COULD NOT BE DETERMINED BY AS-BUILT PLANS, OR PROBING DURING THE DESIGN PHASE OF THE PROJECT. THE CONTRACTOR SHALL EXCAVATE THE UTILITY, DETERMINE THE ELEVATION, AND NOTIFY THE ENGINEER IMMEDIATELY, SO THAT ADJUSTMENTS MAY BE MADE TO THE DESIGN PRIOR TO ORDERING MATERIALS OR SCHEDULING THE WORK.
8. THE OWNER/ENGINEER RESERVE THE RIGHT TO MAKE REASONABLE ADJUSTMENTS IN LINE AND/OR GRADE IN ORDER TO AVOID CONFLICTS WITH OTHER STRUCTURES OR UTILITIES. THE CONTRACTOR AGREES TO MAKE SUCH REASONABLE ADJUSTMENTS AT NO COST TO OWNER OR ENGINEER.
9. EXISTING ELECTRICAL LINES ARE LOCATED CLOSE TO THE PROJECT. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE STATE LAW (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436(C)) CONCERNING OPERATIONS IN THE VICINITY OF ELECTRICAL LINES & THE NEED FOR EFFECTIVE PRECAUTIONARY MEASURES.
10. THE MUNICIPALITY SHALL PERFORM ALL OPERATION INVOLVING OPENING & CLOSING OF VALVES ON EXISTING PUBLIC WATER MAINS. THE CONTRACTOR SHALL VERIFY MAINS ARE DEAD BEFORE PERFORMING WORK ON EXISTING MAINS.

NOTIFICATION REQUIREMENTS

1. THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO THE OWNER, ENGINEER & PERSONS IN CHARGE OF PRIVATE & PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
2. AT LEAST 48 HOURS PRIOR TO COMMENCING ANY ACTIVITY FOR A TCEQ REGULATED SANITARY SEWER AND/OR WATER COLLECTION SYSTEM(S), THE CONTRACTOR SHALL NOTIFY THE LOCAL TCEQ'S REGIONAL OFFICE, IN WRITING, OF THE DATE ON WHICH CONSTRUCTION WILL BEGIN.
3. AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR IS REQUIRED TO NOTIFY TEXAS ONE CALL AT 1-800-245-4545.
4. THE CONTRACTOR SHALL NOTIFY LOCAL EMERGENCY SERVICES (I.E. FIRE, E.M.S. & POLICE) OF ANY CONSTRUCTION ACTIVITIES THAT WOULD AFFECT THE NORMAL FLOW OF TRAFFIC.
5. THE CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE TO THE ENGINEER & AUTHORIZED TESTING LABORATORY PRIOR TO REQUIRED TESTS.
6. THE CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE TO THE ENGINEER & THE OWNER PRIOR TO TESTING OF SANITARY SEWER & WATER LINES. INSPECTION BY THE MUNICIPALITY IS REQUIRED FOR ALL TESTING OF SANITARY SEWER & WATER LINES.

CONTRACTOR'S RESPONSIBILITIES

1. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER & THE ENGINEER OF ANY DISCREPANCIES, ERRORS, OR OMISSIONS, DISCOVERED IN THE FIELD OR ON THE PLANS.
2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER & THE ENGINEER, VERBALLY & IN WRITING, OF ANY FUEL OR TOXIC MATERIAL SPILLS ONTO THE PROJECT/CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF FUELS, WASTE MATERIALS & CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
3. THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES & SERVICES WITH APPLICABLE UTILITY COMPANY, OWNER & TENANT. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
4. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING INGRESS & EGRESS FOR ALL PUBLIC & PRIVATE FACILITIES AT ALL TIMES & FOR ALL WEATHER CONDITIONS, UNLESS OTHERWISE INDICATED ON THE PLANS OR APPROVED BY THE ENGINEER.
5. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE & MAINTAIN ALL NECESSARY WARNING & SAFETY DEVICES (FLASHING LIGHTS, FLAG MEN, BARRICADES, SIGNS, ETC.) TO PROTECT THE PUBLIC SAFETY & HEALTH UNTIL THE WORK HAS BEEN COMPLETED & ACCEPTED BY THE ENGINEER & OWNER. ALL BARRICADING SHALL BE DONE IN COMPLIANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. THE CONTRACTOR SHALL MAINTAIN ALL REGULATORY SIGNS DURING THE CONSTRUCTION PERIOD.
7. THE CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN ONLY BE ISSUED TO CONTRACTOR ARE TO BE OBTAINED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING & MAINTAINING SANITARY FACILITIES ON THIS PROJECT FOR EMPLOYEES.
9. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE FLOW IN DITCHES & STORM SEWERS AT ALL TIMES.

GENERAL NOTES

CONTRACTOR'S RESPONSIBILITIES (CONT.)

10. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF ALL EXCESS CONSTRUCTION & WASTE MATERIALS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, & FEDERAL REQUIREMENTS REGARDING HANDLING & DISPOSAL OF EXCESS & WASTE MATERIAL. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO AREAS AROUND CONCRETE PAVEMENT & STRUCTURES TO ENSURE THAT CONSTRUCTION DEBRIS IS REMOVED & PROPERLY DISPOSED OF PRIOR TO BACKFILLING & THE APPLICATION OF TOPSOIL. EXCESS SOIL, ROCK OR SPOIL MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE & DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.
11. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION. COPIES OF OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION & RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM OSHA, 903 SAN JACINTO, AUSTIN, TEXAS.
12. DESIGN INSTALLATION, MAINTENANCE, & INSPECTION OF TRENCH SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF EXCAVATIONS, TRENCHING & SHORING, FEDERAL OCCUPATION SAFETY & HEALTH ADMINISTRATION (OSHA) STANDARDS, 29CFR. PART 1926. SUBPART P. AS AMENDED, INCLUDING FINAL RULE, PUBLISHED IN THE FEDERAL REGISTER VOL. 209 ON TUESDAY, OCTOBER 31, 1989. TRENCH SAFETY SYSTEMS SHALL ALSO BE IN ACCORDANCE WITH TEXAS HEALTH & SAFETY CODE ANN., 756.021 (VERNON 1991).
13. THE CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES (INCLUDING BUILDINGS, STRUCTURES, ROADWAYS, PARKING AREAS, DRIVEWAYS, UTILITIES, ETC.) FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE THE DAMAGE WAS DONE. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE FACILITY OWNER & THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
14. THE CONTRACTOR SHALL LOCATE, PROTECT & MAINTAIN BENCHMARKS, MONUMENTS & CONTROL POINTS. THE CONTRACTOR SHALL RE-ESTABLISH DISTURBED OR DESTROYED ITEMS AT HIS EXPENSE. THE RE-ESTABLISHMENT SHALL BE PERFORMED UNDER THE DIRECTION OF A TEXAS REGISTERED PROFESSIONAL LAND SURVEYOR.
15. WATER NECESSARY FOR CONSTRUCTION SHALL BE PROVIDED & PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL ARRANGE FOR A METERED CONNECTION(S) & SHALL PROVIDE THE PROPER EQUIPMENT TO PREVENT CROSS-CONNECTION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHARGES ASSOCIATED WITH TEMPORARILY SECURING OR TEMPORARILY RELOCATING POWER POLES THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS. THIS DOES NOT APPLY TO THE PERMANENT RELOCATION OF POWER POLES THAT ARE PHYSICALLY IN CONFLICT WITH THE PROPOSED IMPROVEMENTS.
17. THE CONTRACTOR SHALL CLEAR STREETS, SIDEWALKS, DRIVEWAYS, & PARKING LOTS OF ALL CONSTRUCTION MATERIALS, EQUIPMENT, TRAFFIC CONTROL DEVICES, DIRT, & DEBRIS CAUSED BY CONSTRUCTION AT THE END OF EACH CONSTRUCTION PERIOD. ALL OPEN EXCAVATIONS & PITS MUST BE BARRICADED, FENCED, OR PLATED OVER WHEN NOT IN USE.
18. GRAVITY MAINS SHALL BE INSTALLED IN THE UPSTREAM DIRECTION, BEGINNING AT THE LOWEST POINT IN THE SYSTEM. THE CONTRACTOR IS REQUIRED TO VERIFY THE LOCATION, ELEVATION & CONDITION OF THE ALL CONNECTION POINTS (I.E. UPSTREAM AND DOWNSTREAM) & INVESTIGATE ALL POTENTIAL CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, PRIOR TO BEGINNING THE NEW UTILITY INSTALLATION.
19. UTILITY MAINS MUST BE INSTALLED WITH ADEQUATE COVER TO PREVENT FLOATATION & TO SUPPORT CONSTRUCTION LOADS. THE CONTRACTOR SHALL ENSURE THAT ADEQUATE COVER IS MAINTAINED OVER THE UTILITY DURING CONSTRUCTION. IF ADEQUATE COVER CANNOT BE MAINTAINED, THE CONTRACTOR SHALL UTILIZE CEMENT STABILIZED BACKFILL AND/OR ADDITIONAL TEMPORARY OVERBURDEN TO ACHIEVE THE SAME GOALS.
20. THE CONTRACTOR SHALL PLACE & COMPACT BACKFILL AS PROMPTLY AS PRACTICAL AFTER COMPLETION OF EACH STRUCTURE OR PORTION OF A STRUCTURE. DO NOT, HOWEVER, PLACE BACKFILL AGAINST NEWLY CONSTRUCTED CONCRETE WALLS OR SIMILAR STRUCTURES UNTIL CONCRETE HAS CURED AT LEAST 7-DAYS.
21. UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS, THE CONTRACTOR SHALL PLACE & COMPACT BACKFILL AROUND UTILITY STRUCTURES IN ACCORDANCE WITH APPLICABLE TRENCH ZONE BACKFILL DETAIL FOR UTILITY LINE.
22. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION PRIOR TO ACCEPTANCE OF THE PROJECT.

GENERAL NOTES

PRIVATE UTILITIES

1. PRIVATE GRAVITY SANITARY SEWER SHALL BE CONSTRUCTED OF SDR 26 PVC MEETING THE REQUIREMENTS OF ASTM D 3034 OR SCHEDULE (SCH) 40 PVC MEETING THE REQUIREMENTS OF ASTM D 2665 OR AS DESIGNATED ON THE PLANS. PRIVATE GRAVITY SANITARY SEWER PIPE SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH LOCAL CODES AND ADOPTED INTERNATIONAL PLUMBING CODE. THE MINIMUM SLOPE FOR SANITARY SEWER LINES 3" TO 6" SHALL BE 1/8" PER FOOT (1.04%), THE MINIMUM SLOPE FOR SANITARY SEWER LINES 8" AND LARGER SHALL BE 1/16" PER FOOT (0.52%).
2. PRIVATE WATER SERVICE LINES, LOCATED ON THE PRIVATE SIDE OF THE METER, SHALL BE CONSTRUCTED AS FOLLOWS:
 - A. SERVICE LINES 4-INCHES IN DIAMETER & LARGER SHALL BE CONSTRUCTED OF C900 PVC.
 - B. SERVICE LINES LESS THAN 4-INCHES IN DIAMETER, BUT LARGER THAN 2-INCHES IN DIAMETER, SHALL BE CONSTRUCTED OF SCH 40 PVC.
 - C. SERVICE LINES 2-INCHES IN DIAMETER & SMALLER SHALL BE CONSTRUCTED OF CROSS LINKED POLYETHYLENE (PEX-A) IN ACCORDANCE WITH LOCAL CODES.
 - D. PRIVATE WATER SERVICE LINES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH LOCAL CODES AND ADOPTED INTERNATIONAL PLUMBING CODE.
3. PRIVATE STORM SEWER MAINS, DESIGNATED ON THE PLANS AS "RCP" SHALL BE CONSTRUCTED OF CLASS III REINFORCED CONCRETE PIPE. PRIVATE STORM SEWER MAINS DESIGNATED ON THE PLANS AS "HDPE" SHALL BE DUAL WALL HIGH DENSITY POLYETHYLENE, WITH SOIL-TIGHT, RUBBER, GASKETED JOINTS. STORM SEWER MAINS, DESIGNATED ON THE PLANS ONLY AS "STM", MAY BE EITHER RCP OR HDPE AS SPECIFIED ABOVE.

LIST OF ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
B-B	BACK TO BACK
BC	BACK OF CURB
BM	SURVEY BENCHMARK
CI	CURB INLET
CJ	CONTRACTION JOINT
DCO	DOUBLE CLEAN OUT
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EXIST	EXISTING
EJ	EXPANSION JOINT
FDC	FIRE DEPARTMENT CONNECTION
F-F	FACE TO FACE
FG	FINISHED GRADE
FF	FINISHED FLOOR
FIRE HYD, FH	FIRE HYDRANT
FL	FLOW LINE
FC, FOC	FACE OF CURB
FSR	FOUND STEEL ROD
GI	GRATE INLET
HDPE	HIGH DENSITY POLYETHYLENE
HB	HOSE BIB
LP	LIGHT POLE
L&C	LOCATE & CONNECT
MH	MANHOLE
NG	NATURAL GRADE
NV	NOT VERIFIED
PL	PROPERTY LINE
PP	POWER POLE
PROP	PROPOSED
RCP	REINFORCED CONCRETE PIPE
S.E.T	SLOPED END TREATMENT or SAFETY END TREATMENT
SP	SAMPLE PORT
SAN SWR, SS	SANITARY SEWER
SS CLEANOUT	SANITARY SEWER CLEAN OUT
SS MH	SANITARY SEWER MANHOLE
SSR	SET STEEL ROD
SWR SERVICE, SWR SER	SEWER SERVICE
STM	STORM SEWER
SW	TOP OF SIDEWALK
TBD	TO BE DETERMINED (SEE NOTE 7 OF PRELIMINARY MATTERS)
TC	TOP OF CURB
TEL	TELEPHONE
TG	TOP OF GRATE
TP	TOP OF PAVEMENT
TR	TOP OF RIM
UC	UNDER CONSTRUCTION
UE	UTILITY EASEMENT
WTR	WATER
WV	WATER VALVE
±	INDICATES CONTRACTOR SHALL MATCH EXIST ELEVATION
>>	INDICATES DIRECTION OF FLOW



1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.maaarch.com

PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

FOR BIDDING & CONSTRUCTION



BESSING COMMUNITY CENTER

MATAGORDA COUNTY
BLESSING TEXAS

©2022 RAWLEY HADDOY & ASSOCIATES

DATE ISSUED:
12/15/23

PROJECT NUMBER:
1027-0623



SHEET NAME
CIVIL GENERAL NOTES

SHEET NUMBER

C1



2004 N. Commerce, Victoria, Texas 77901 · 361.578.9836
urbanvictoria.com · TREF# F-160

6/23/2023 12:56:47 PM
 C:\Revit Local Files\VC-Student-Ctr-Addr-A22_patrickGPZF5.rvt

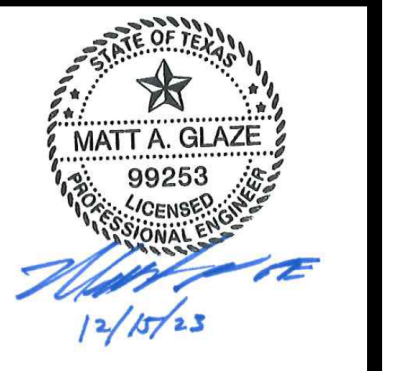


KEYED NOTES & LEGEND DEMOLITION		
KEY #	SYMBOL	NOTE
1		EXISTING BUILDING TO BE REMOVED AND DISPOSED OF BY CONTRACTOR.
2		EXISTING SIDEWALK TO BE REMOVED AND DISPOSED OF BY CONTRACTOR.
3		EXISTING TIMBER RAMP TO BE REMOVED AND DISPOSED OF BY CONTRACTOR.
4		EXISTING TREE TO BE REMOVED AND DISPOSED OF BY CONTRACTOR.

RMA
ARCHITECTS
 & INTERIOR DESIGNERS
 1908 N. Laurent St., Suite 540
 Victoria, Texas 77901
 www.rmaarch.com

PATRICK DEAN OHRT
 REGISTERED ARCHITECT
 REGISTRATION NO. 21195
 STATE OF TEXAS

FOR BIDDING & CONSTRUCTION



BESSING COMMUNITY CENTER
MATAGORDA COUNTY
 BLESSING TEXAS
©2023 RAWLEY WOODY & ASSOCIATES

DATE ISSUED:
 12/15/23

PROJECT NUMBER:
 1027-0623

PLAN NORTH TRUE NORTH

SHEET NAME
CIVIL DEMOLITION PLAN

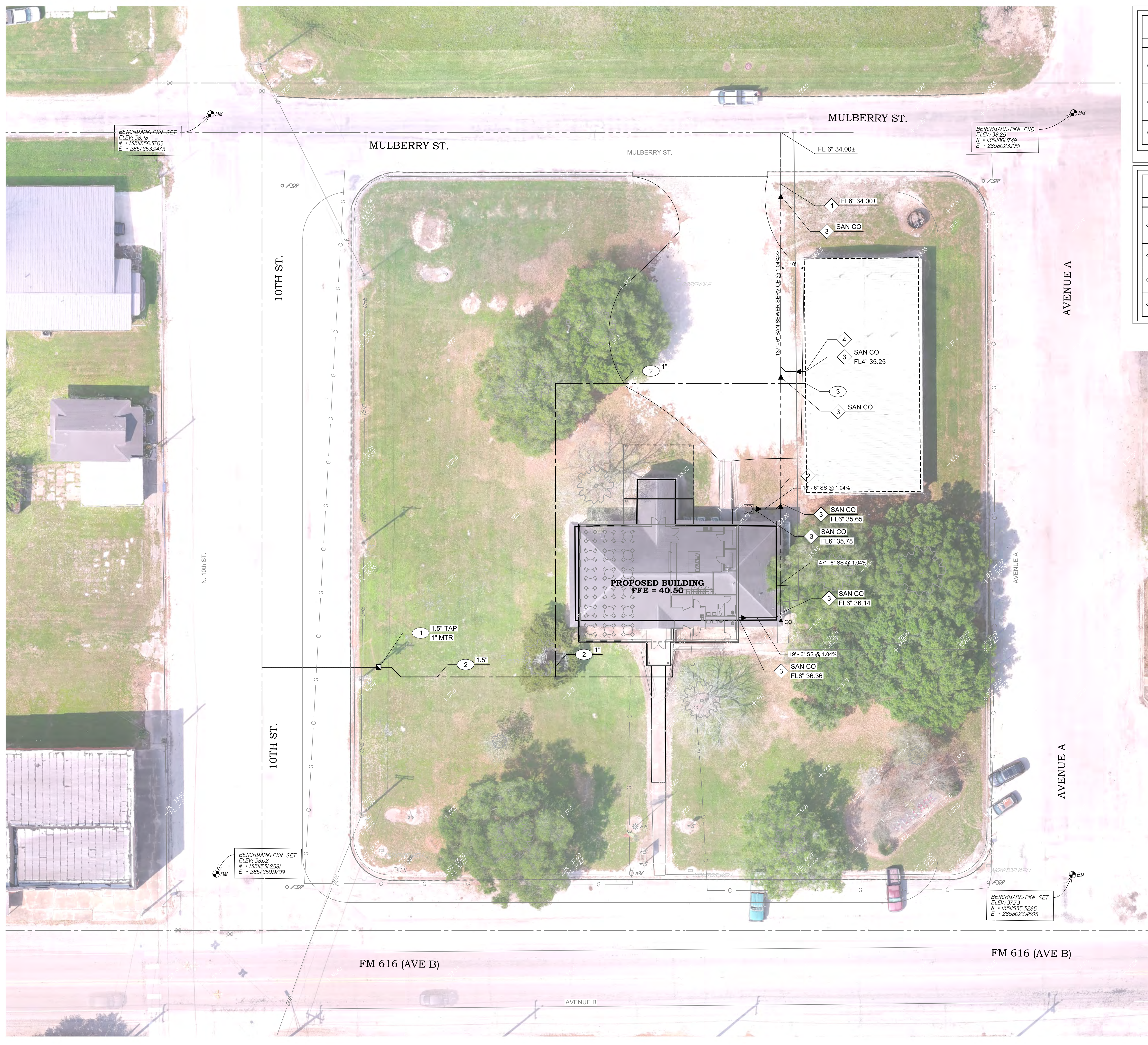
SHEET NUMBER

C2

URBAN
 engineering
 2004 N. Commerce, Victoria, Texas 77901 · 361.578.9836
 urbanvictoria.com · TREF# F-160

GRAPHIC SCALE IN FEET
 0 20 40 60 80

5/23/2023 12:56:47 PM
 C:\Revit Local Files\VC-Student-Ctr-AddrA22_patriciGPZF5.rvt



KEYED NOTES & LEGEND WATER UTILITY		
KEY #	SYMBOL	NOTE
1		WATER TAP AND WATER METERS FOR DOMESTIC SERVICE TO BE PROVIDED AND INSTALLED BY MATAGORDA COUNTY WCID #5 (BLESSING). THE INSTALLATION SHALL BE SCHEDULED AND COORDINATED BY THE CONTRACTOR. TAP FEE SHALL BE PAID FOR BY THE OWNER. TAP SIZE INDICATED ON PLANS.
2		SCH 40 PVC WATER SERVICE LINE BY CONTRACTOR, MINIMUM 24" COVER BELOW FINISHED GRADE. ALL NEW DOMESTIC WATER PIPING SHALL BE THOROUGHLY DISINFECTED AND TESTED IN ACCORDANCE WITH ALL LOCAL CODES. PIPE BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH STANDARD DETAILS. SERVICE SIZE INDICATED ON PLANS.
3		RECONNECT EXISTING WATER TO EXISTING BUILDING

KEYED NOTES & LEGEND SANITARY SEWER UTILITY		
KEY #	SYMBOL	NOTE
1		LOCATE & CONNECT TO EXISTING 6" SANITARY SEWER STUB-OUT. THE INSTALLATION SHALL BE SCHEDULED AND COORDINATED BY CONTRACTOR. MATAGORDA COUNTY WCID #5 (BLESSING) TAP FEE SHALL BE PAID FOR BY THE OWNER. TAP SIZE INDICATED ON PLANS. VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.
2		SDR 26 PVC SANITARY SEWER SERVICE LINE BY CONTRACTOR. PIPE BEDDING & BACKFILL SHALL BE IN ACCORDANCE WITH STANDARD DETAILS. LINE SIZE, FLOW LINE & SLOPE INDICATED ON PLAN.
3		SANITARY SEWER MAIN CLEAN OUT IN ACCORDANCE WITH THE STANDARD DETAIL. XXX. SIZE & FLOWLINE AS INDICATED ON PLAN.
4		LOCATE AND RECONNECT EXISTING DRAIN

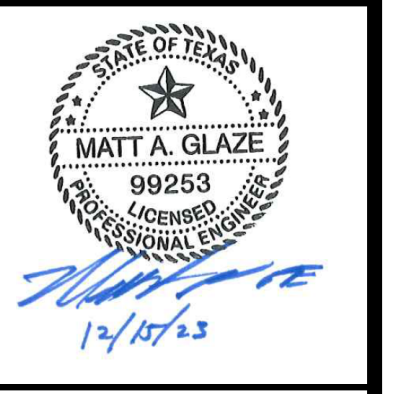


URBAN
 engineering

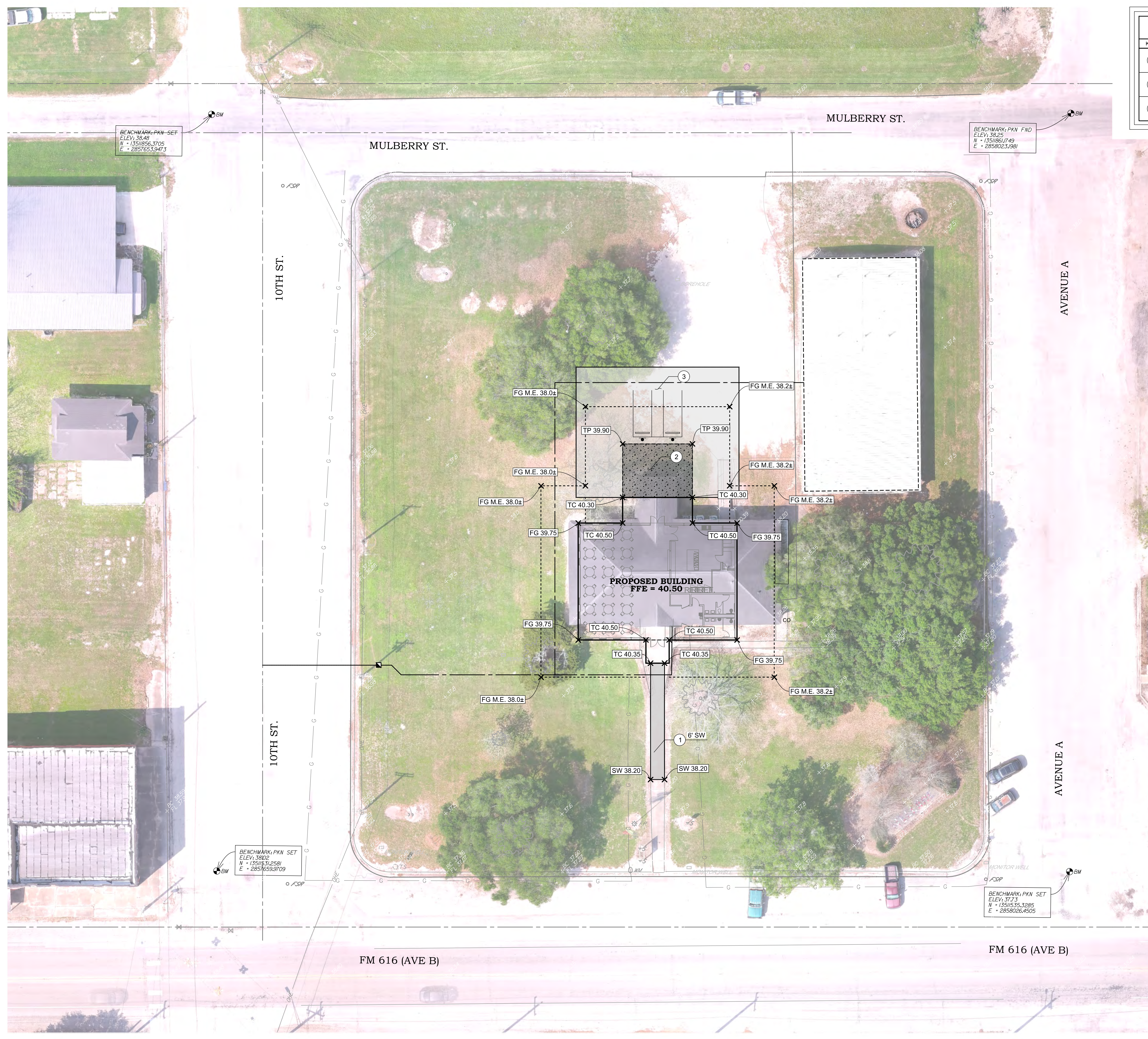
2004 N. Commerce, Victoria, Texas 77901 · 361.578.9836
 urbanvictoria.com · TREF# F-160

GRAPHIC SCALE IN FEET
 0 20 40 60 80

PLAN NORTH TRUE NORTH
 SHEET NAME
 CIVIL UTILITY PLAN
 SHEET NUMBER
C3



5/21/2023 12:56:47 PM
 C:\Revit Local Files\VC-Student-Ctr-Addr-A22_patriciGPZF5.rvt



KEYED NOTES & LEGEND		
PAVING		
KEY #	SYMBOL	NOTE
1		CONCRETE SIDEWALK IN ACCORDANCE WITH THE STANDARD DETAIL. XXX
2		CONCRETE PAVEMENT IN ACCORDANCE WITH THE STANDARD DETAIL. XXX
3		FUTURE PAVEMENT BY OTHERS

RMA
ARCHITECTS
 & INTERIOR DESIGNERS
 1908 N. Laurent St., Suite 540
 Victoria, Texas 77901
 www.maarch.com

PATRICK DEAN OHR
 REGISTERED ARCHITECT
 REGISTRATION NO. 21195
 STATE OF TEXAS

FOR BIDDING & CONSTRUCTION

STATE OF TEXAS
 MATT A. GLAZE
 99253
 LICENSED PROFESSIONAL ENGINEER
 12/15/23

BESSING COMMUNITY CENTER
MATAGORDA COUNTY
 BLESSING TEXAS
 ©2023 RAWLEY HADDOY & ASSOCIATES

DATE ISSUED:
 12/15/23

PROJECT NUMBER:
 1027-0623

PLAN NORTH TRUE NORTH

SHEET NAME
CIVIL
PAVING & GRADING
PLAN

SHEET NUMBER

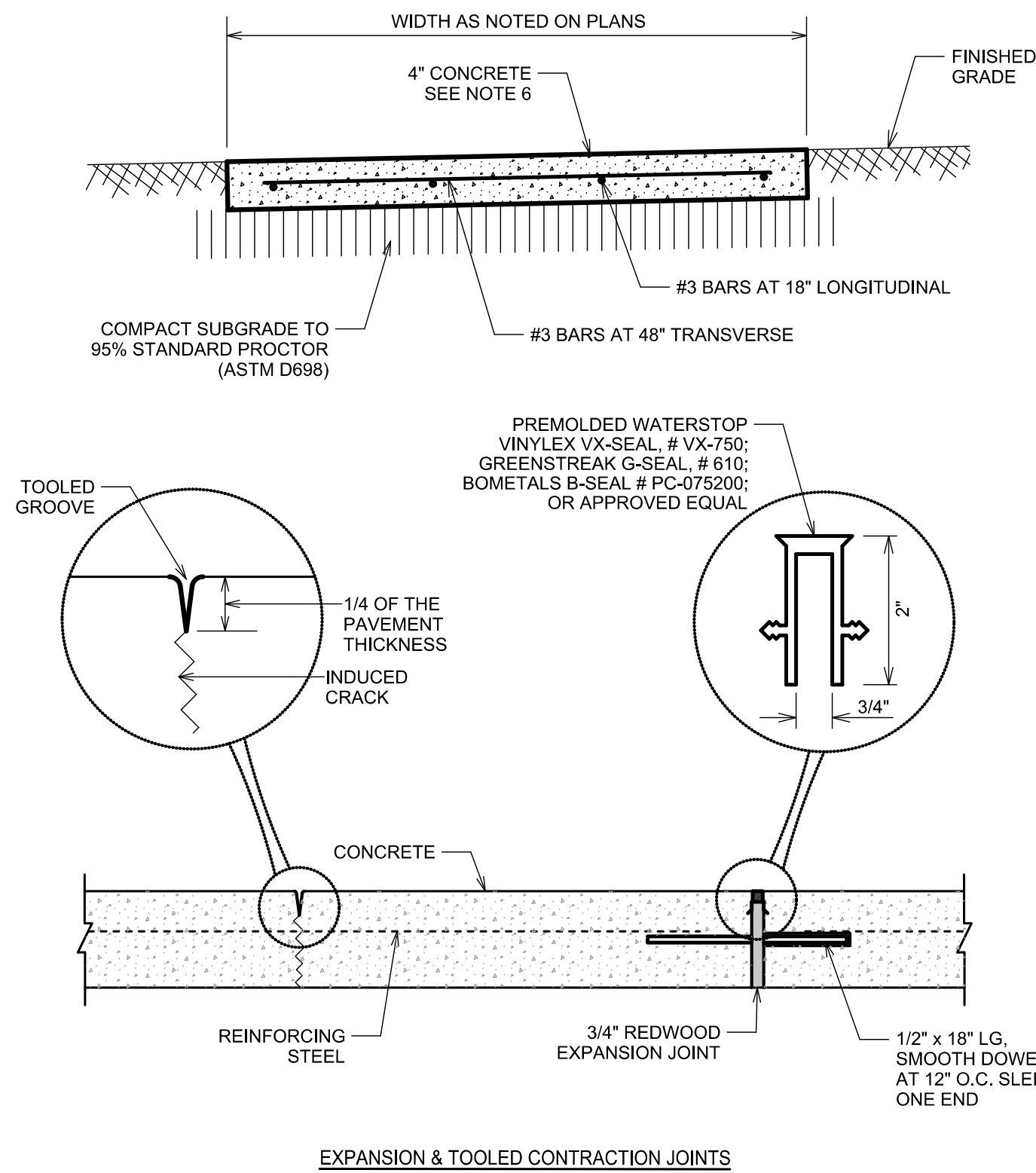
C4

URBAN
 engineering
 2004 N. Commerce, Victoria, Texas 77901 · 361.578.9836
 urbanvictoria.com · TREF# F-160

GRAPHIC SCALE IN FEET
 0 20 40 60 80

GENERAL NOTES

1. REINFORCING STEEL SHALL BE ASTM A615, GRADE 40.
2. EXPANSION JOINTS SHALL BE LOCATED AT DRIVEWAYS AND OTHER FIXED OBJECTS, AND AT 45' MAXIMUM INTERVALS ALONG THE SIDEWALK OR AS INDICATED ON PLANS.
3. EXPANSION JOINT SHALL BE SEALED SONNEBORN BUILDING PRODUCT, SONOLASTIC SL-1; NON-PRIMING, ONE-PART, SELF LEVELING POLYURETHANE SEALANT OR APPROVED EQUAL. JOINT CLEANING AND PREPARATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. TOOLED CONTRACTION JOINTS SHALL BE LOCATED AT REGULAR INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK OR AS INDICATED ON PLANS. JOINTS SHALL BE SPACED TO SO THAT THE RESULTING PANELS ARE SQUARE. IN NO CASE SHOULD THE LENGTH OF A PANEL EXCEED 1.5 TIMES THE WIDTH.
5. FINISH EXPOSED EDGES WITH 1/4" RADIUS.
6. CONCRETE SHALL MEET THE REQUIREMENTS OF TXDOT (2014) ITEM 421 -HYDRAULIC CEMENT CONCRETE, CLASS A (3,000 PSI), WITH THE FOLLOWING MODIFICATIONS: SLUMP SHALL RANGE FROM 4 INCHES TO 6-1/2 INCHES AT THE POINT OF PLACEMENT.
7. MAXIMUM LONGITUDINAL SLOPE FOR ANY SIDEWALK SHALL BE 1:20 (5.0%).
8. MAXIMUM TRANSVERSE SLOPE FOR ANY SIDEWALK SHALL BE 1:50 (2.0%).

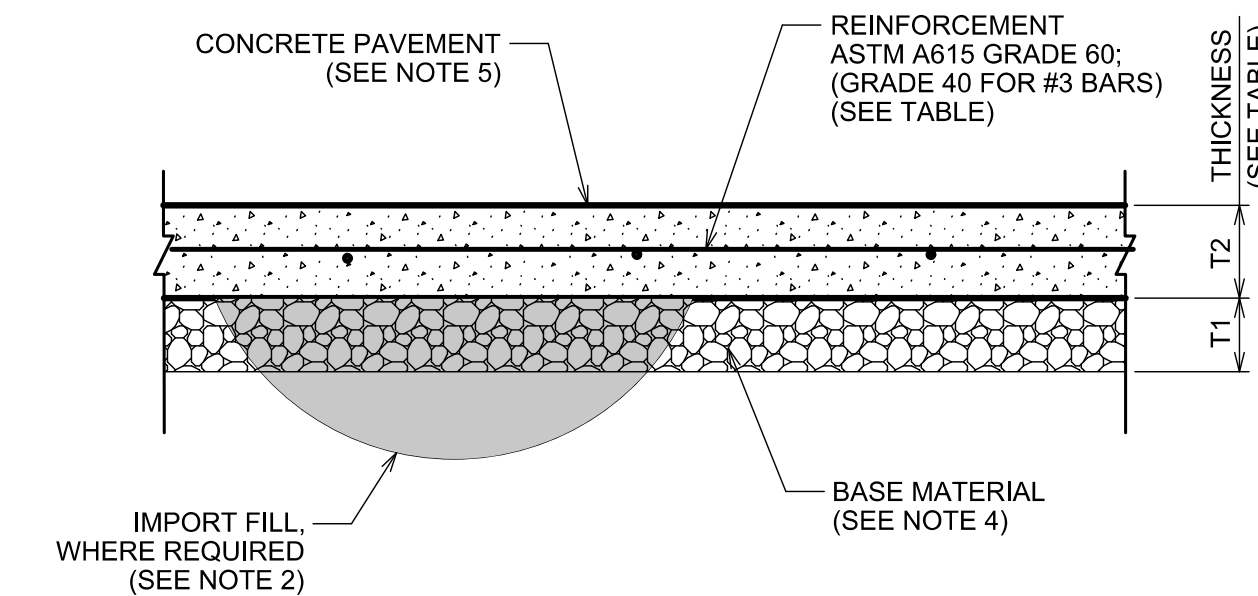


1 CONCRETE SIDEWALK

GENERAL NOTES

1. CLEARING & GRUBBING: STRIP AND REMOVE ALL VEGETATION, LOOSE TOPSOIL, TREES AND ROOTS WITHIN THE CONSTRUCTION AREA.
2. SUBGRADE PREPARATION:
 - A. IMPORTED FILL MATERIALS, WHEN REQUIRED TO ACHIEVE FINAL SUBGRADE ELEVATION, SHALL BE CHOSEN THAT EXHIBIT SIMILAR CLASSIFICATION AND PHYSICAL PROPERTIES AS THE ON SITE SOILS. SAMPLES OF THE FILL MATERIAL SHALL BE MADE AVAILABLE TO THE OWNER'S TESTING LABORATORY 7 DAYS PRIOR TO PLACEMENT.
 - B. SUBGRADE FILL, WHETHER IMPORTED OR EXCAVATED ON-SITE, SHALL BE PLACED IN 6" LOOSE LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY (ASTM D698) AT A MOISTURE CONTENT WITHIN BETWEEN OPTIMUM AND +4% OF OPTIMUM. THE DEGREE OF COMPACTION AND MOISTURE CONTENT SHOULD BE MAINTAINED UNTIL THE SURFACE IS LIME STABILIZED.
3. BASE MATERIAL SHALL BE CRUSHED LIMESTONE, MEETING THE REQUIREMENTS OF TXDOT (2004) ITEM 247, TYPE A, GRADE 1 OR 2. THE BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" COMPACTED LIFTS AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) AT A MOISTURE CONTENT BETWEEN -2% & +2% OF OPTIMUM.
4. CONCRETE SHALL MEET THE REQUIREMENTS OF TXDOT (2014) ITEM 421 -HYDRAULIC CEMENT CONCRETE, CLASS A, WITH THE FOLLOWING MODIFICATIONS: MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI; SLUMP SHALL RANGE FROM 4 INCHES TO 6-1/2 INCHES AT THE POINT OF PLACEMENT.

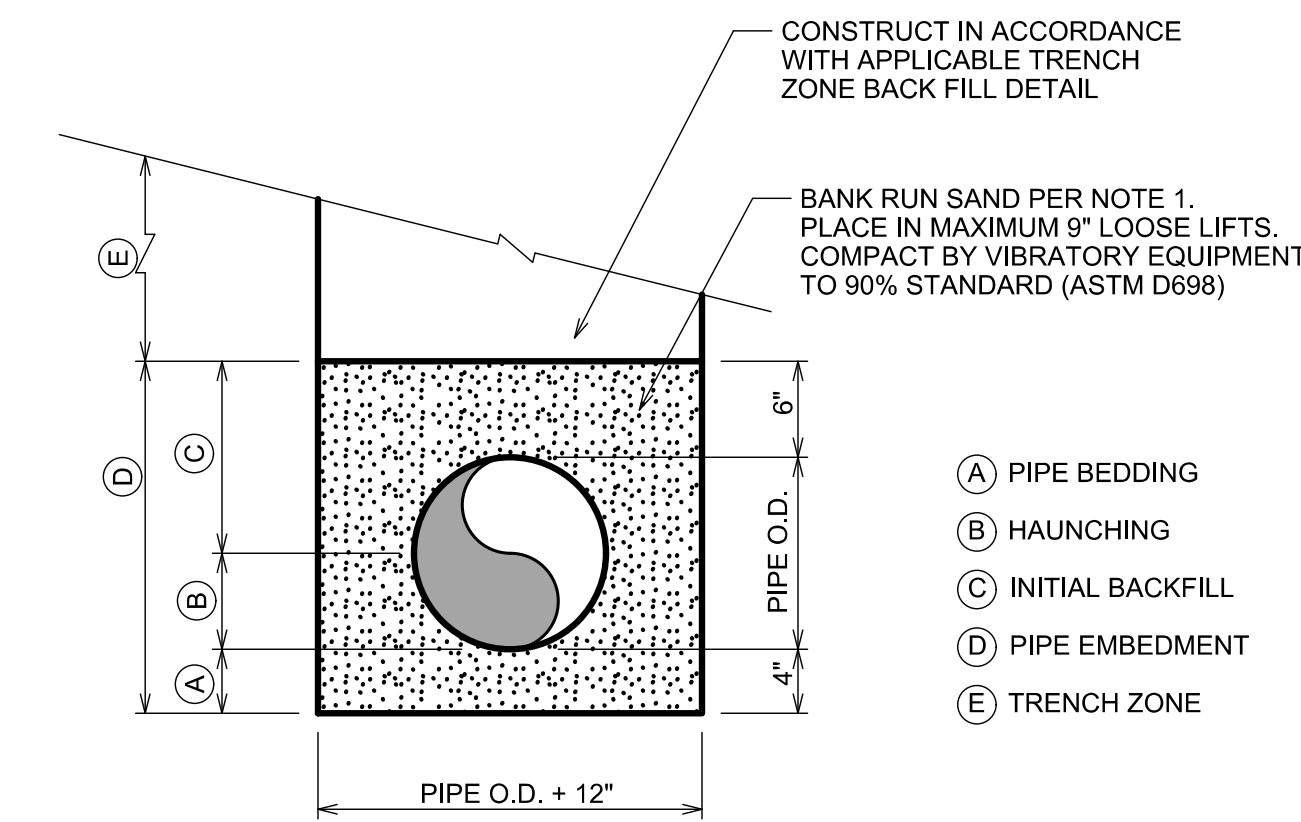
PAVEMENT THICKNESS & REINFORCEMENT			
DESCRIPTION	SUBGRADE (T1)	CONC (T2)	REINFORCEMENT
LIGHT DUTY DRIVEWAYS	6" BASE MATERIAL	6"	#4 BARS @ 16" O.C.B.W



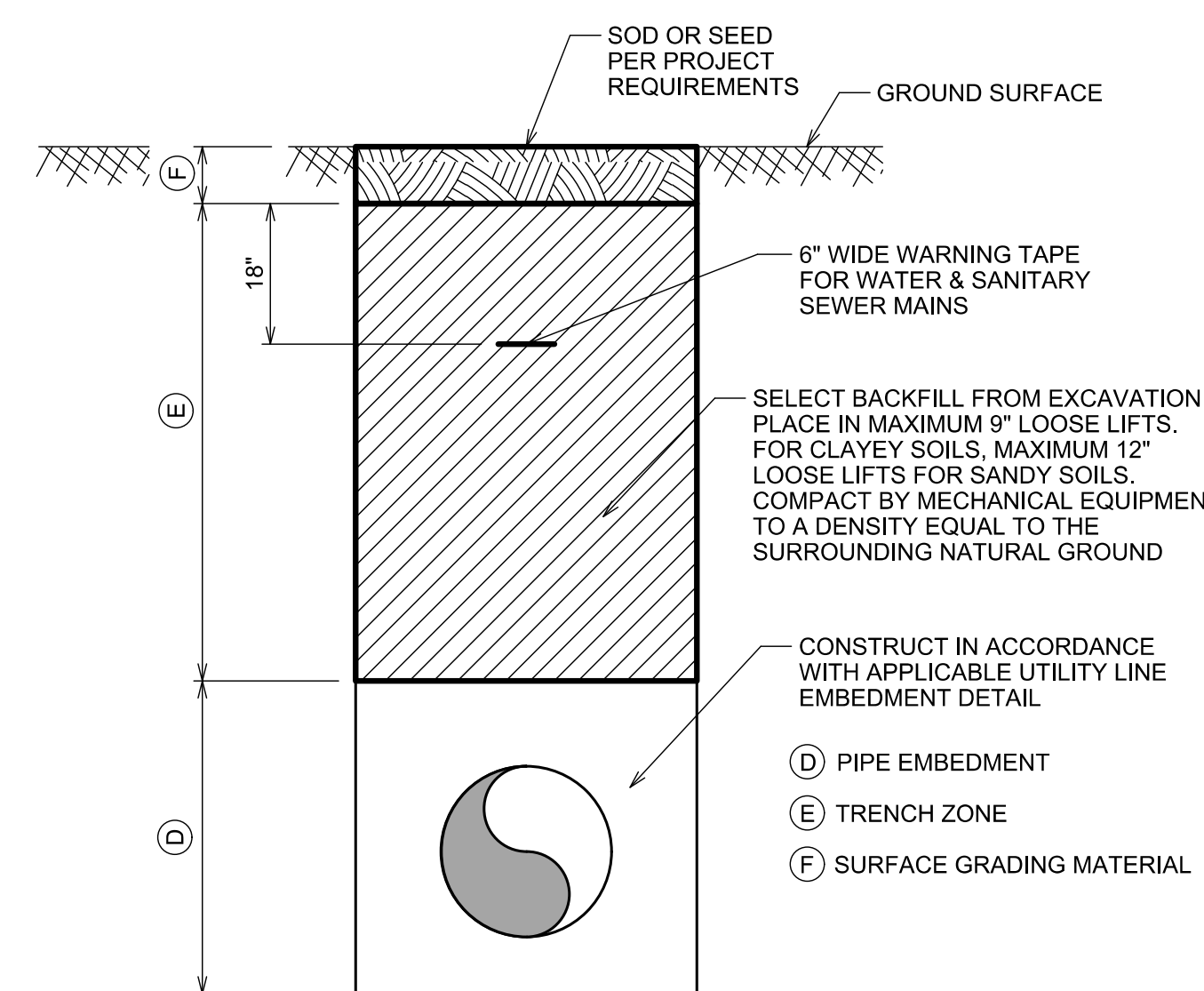
2 CONCRETE PAVEMENT

GENERAL NOTES

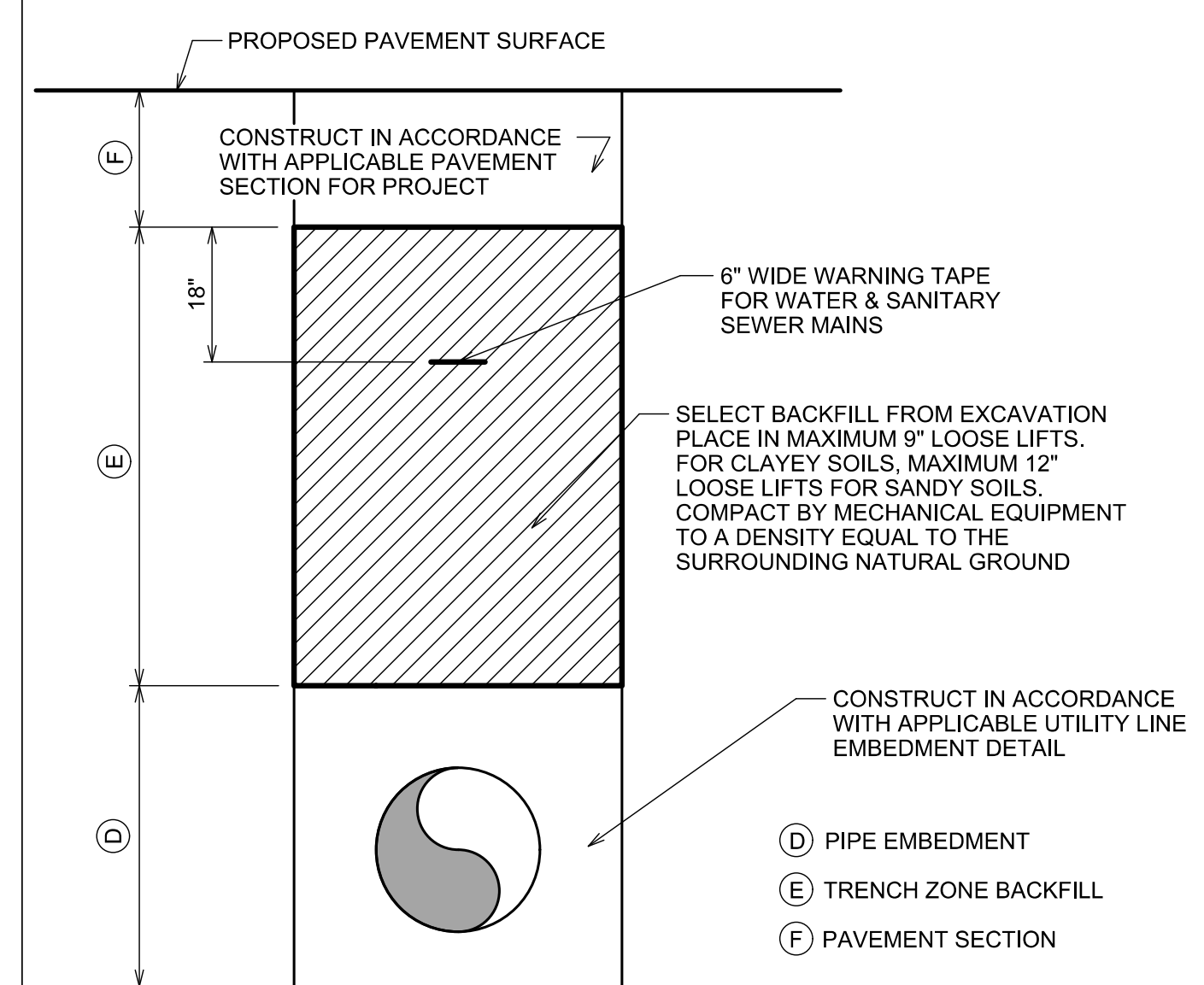
1. BANK RUN SAND SHALL BE SP. SW OR SM PER USC (ASTM D2487) AND SHALL HAVE THE FOLLOWING PROPERTIES: LESS THAN 15% PASSING #200 SIEVE; LESS THAN 2% CLAY LUMPS; PI < 7; LL < 25.



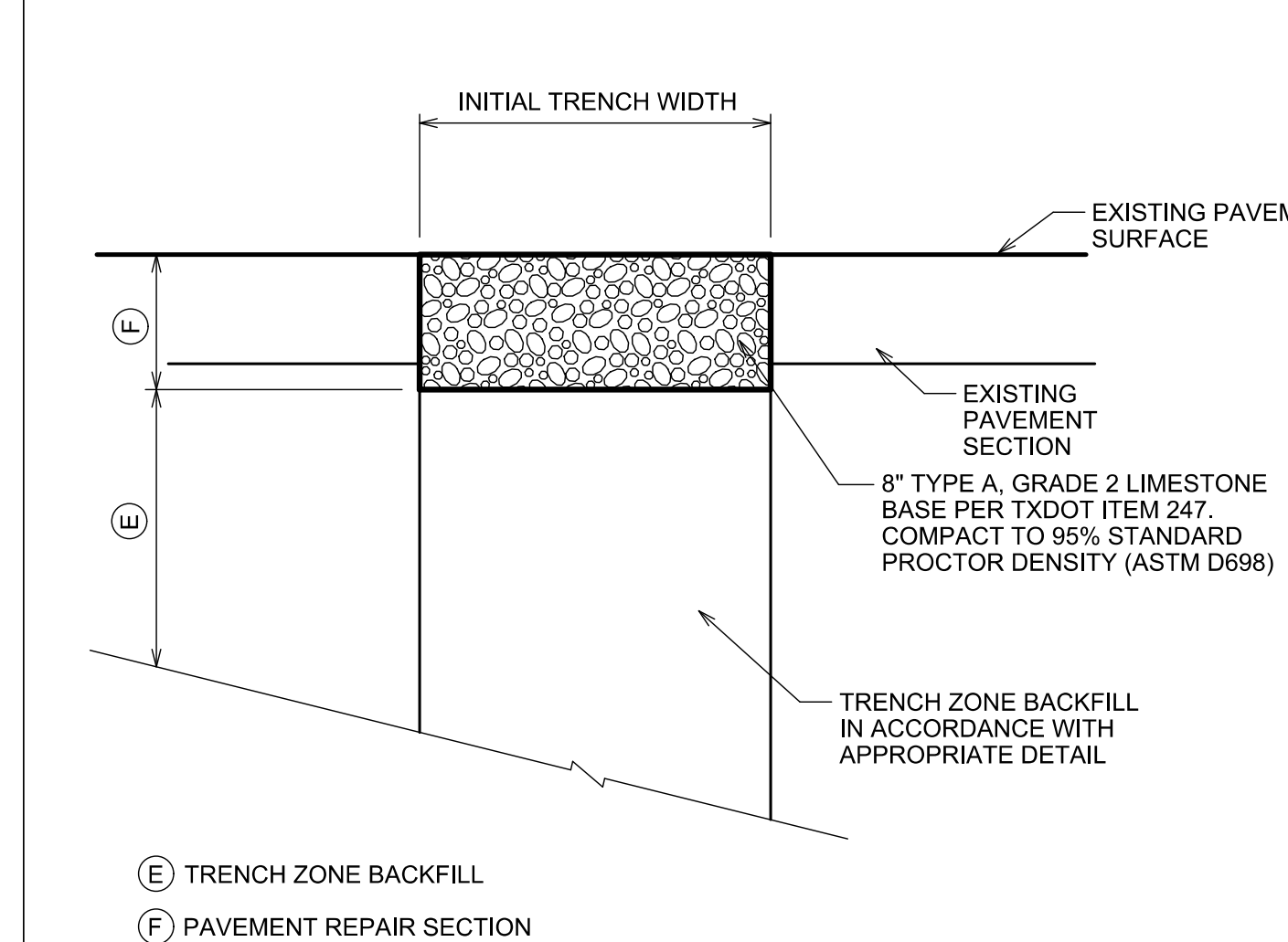
3 UTILITY LINE EMBEDMENT
(FOR WTR, SAN & STM MAINS)



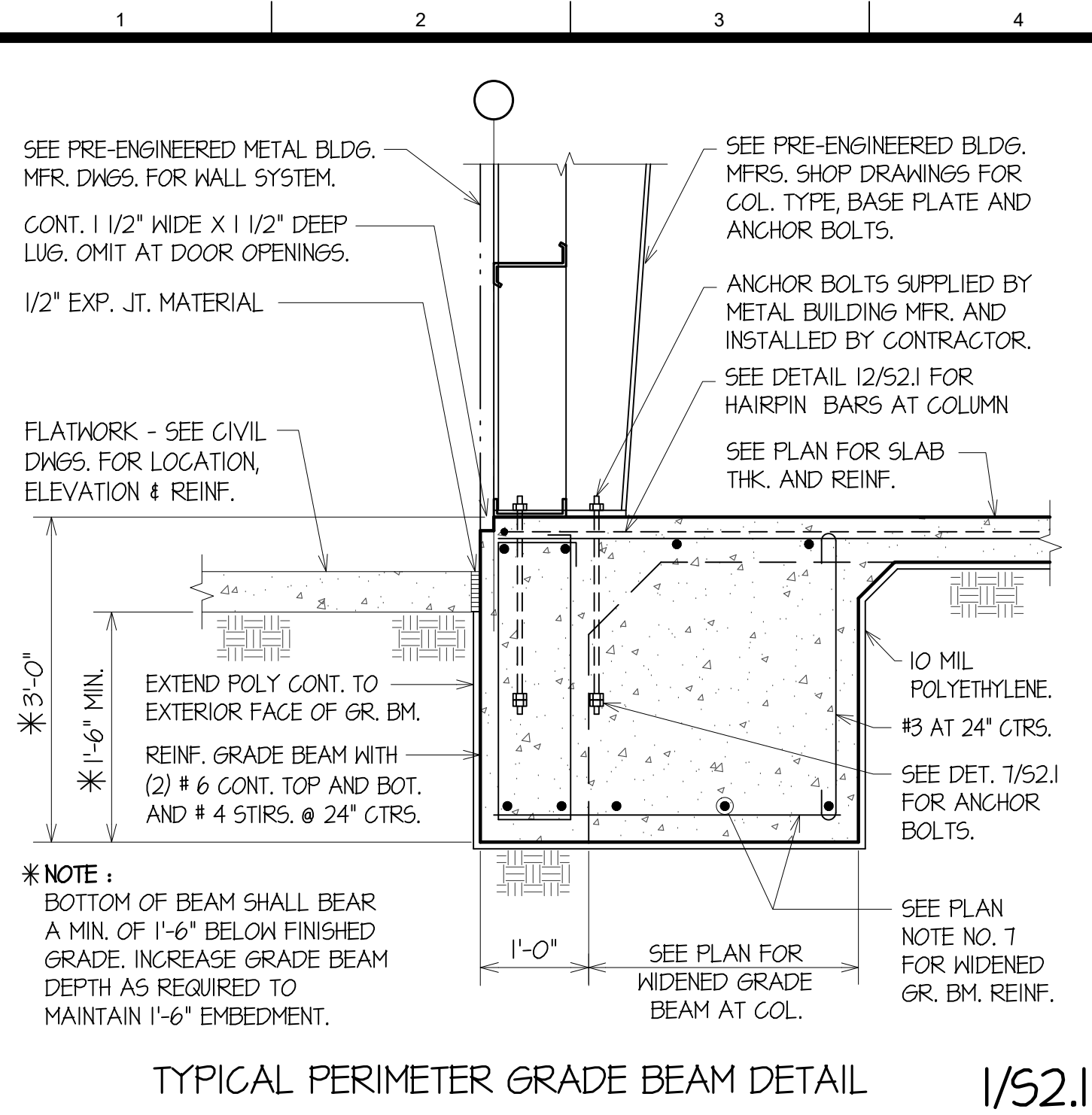
5 TRENCH ZONE BACKFILL
(FOR WTR, SAN & STM IN NON-PAVED AREAS)



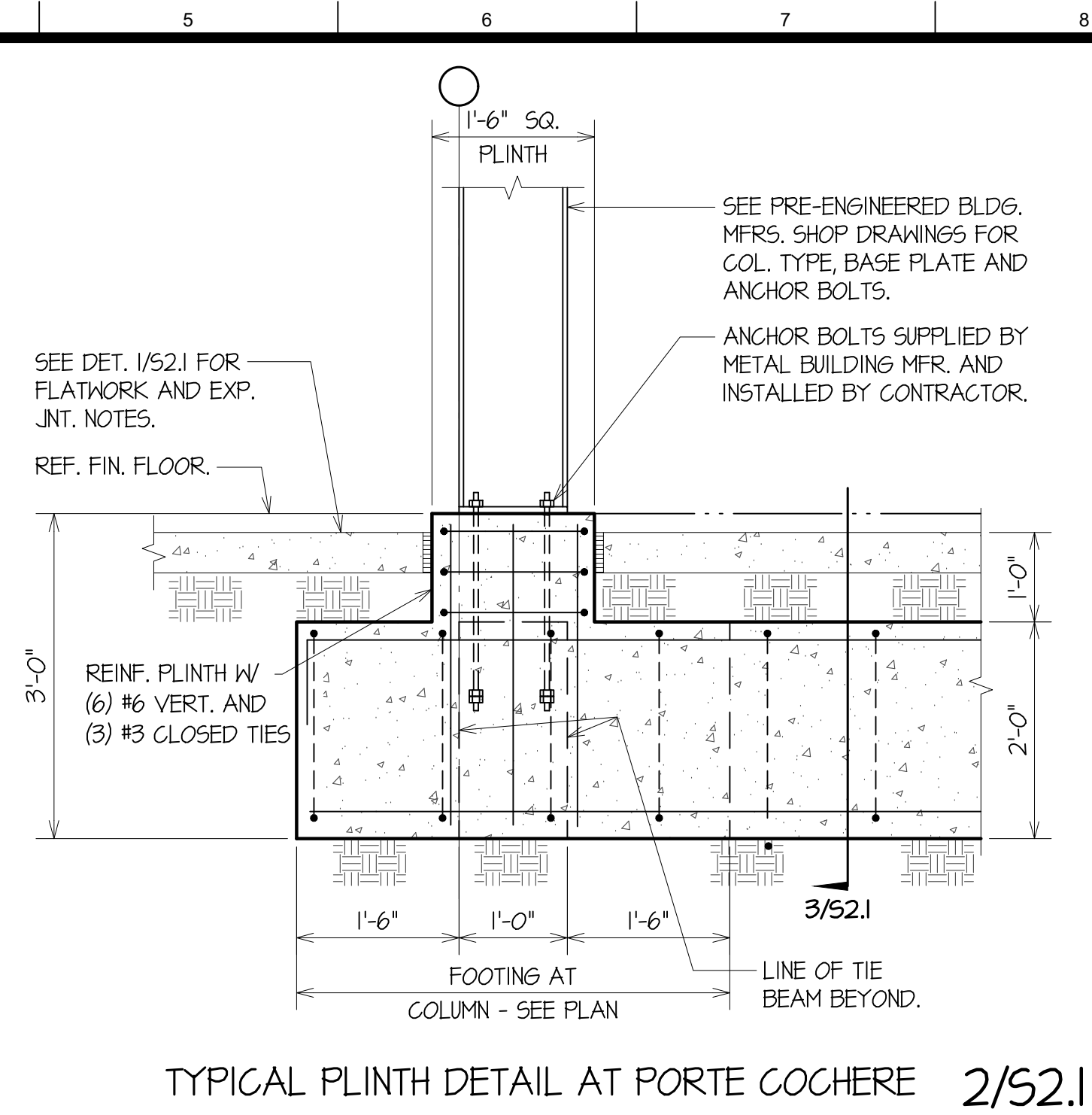
4 TRENCH ZONE BACKFILL
(FOR WTR, SAN & STM IN FUTURE PAVED AREAS)



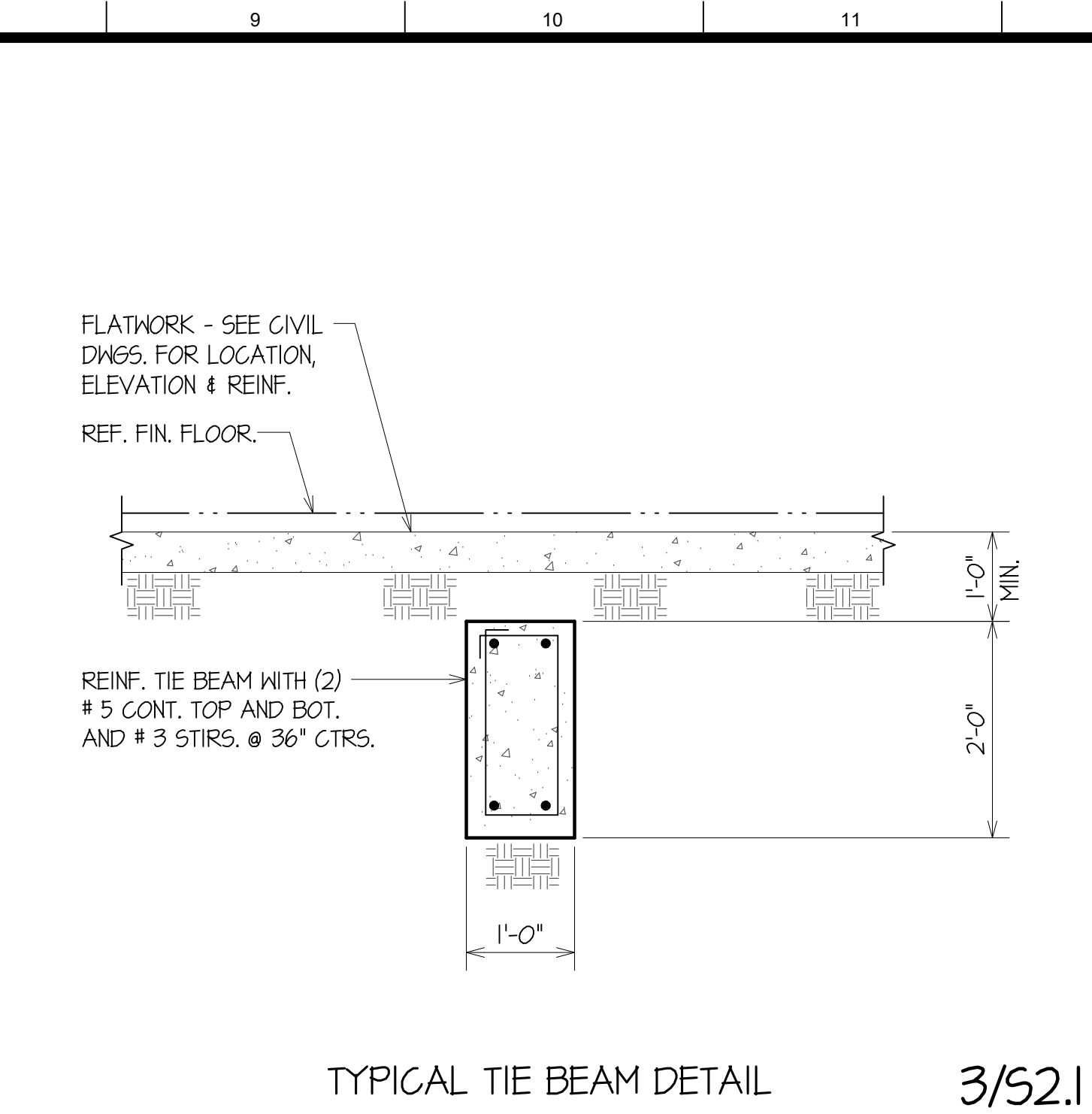
10 PERMANENT TRENCH RESTORATION
(FOR UTILITIES IN EXISTING GRAVEL DRIVEWAYS)



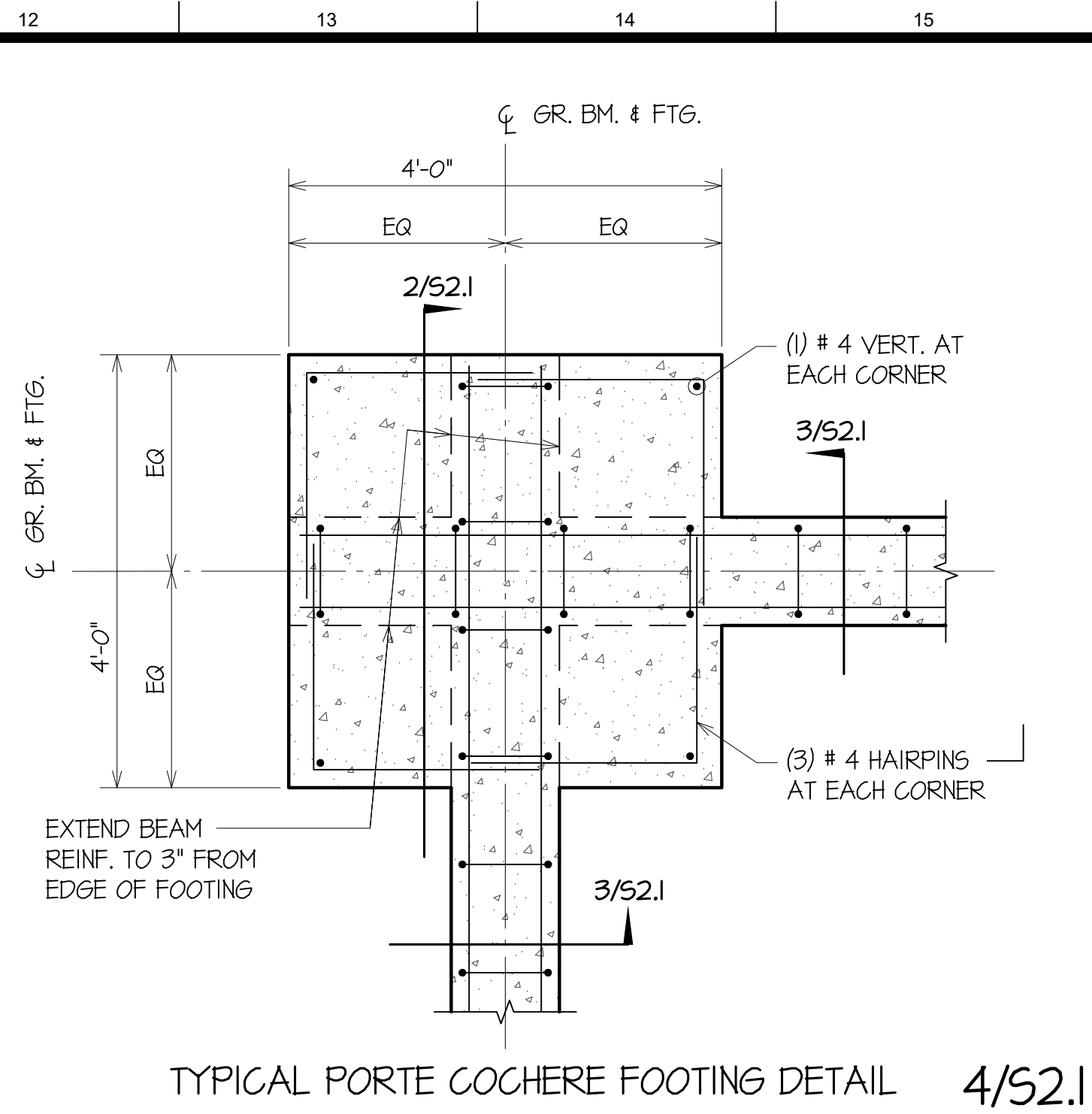
TYPICAL PERIMETER GRADE BEAM DETAIL 1/52.1



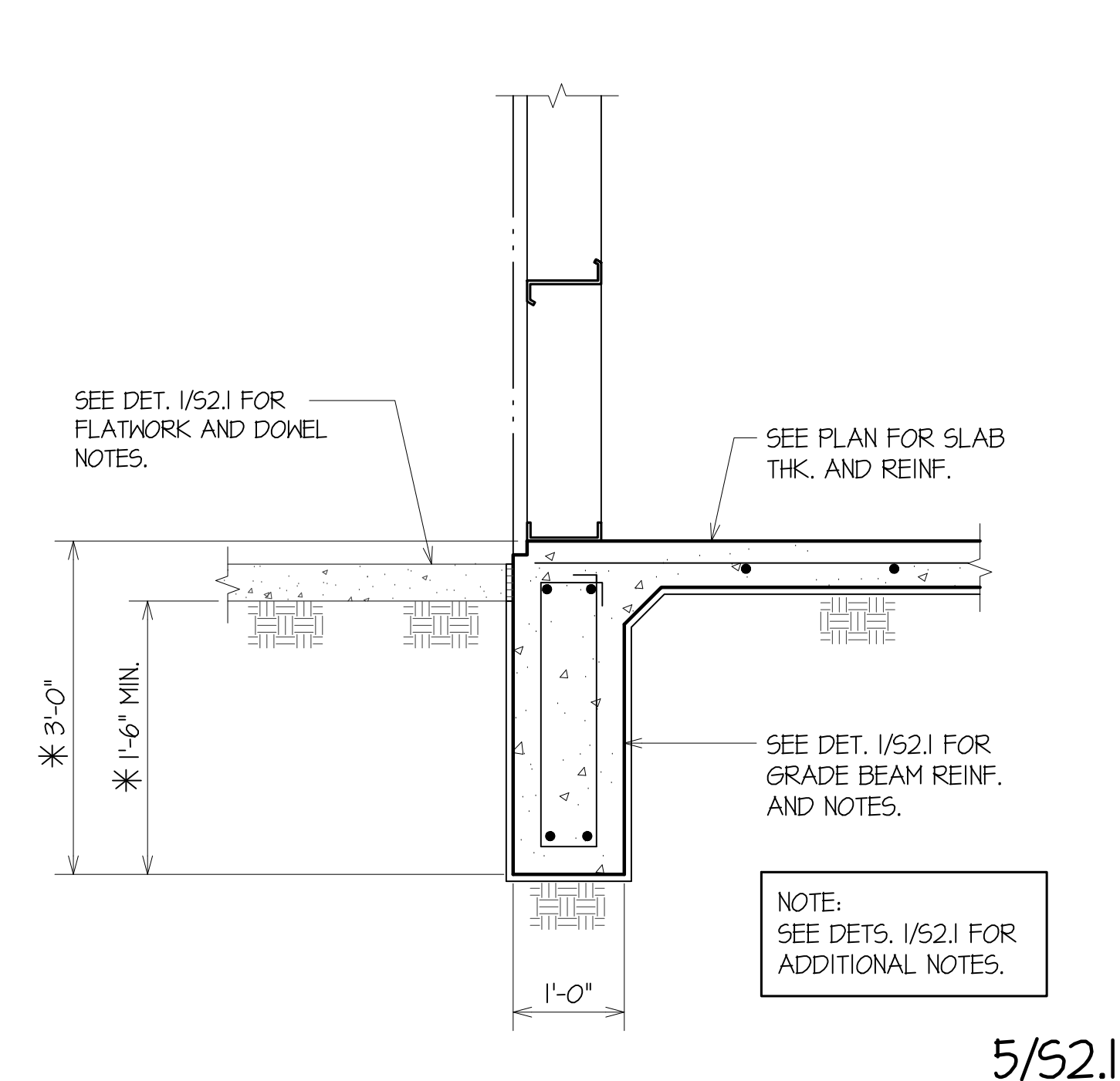
TYPICAL PLINTH DETAIL AT PORTE COCHERE 2/52.1



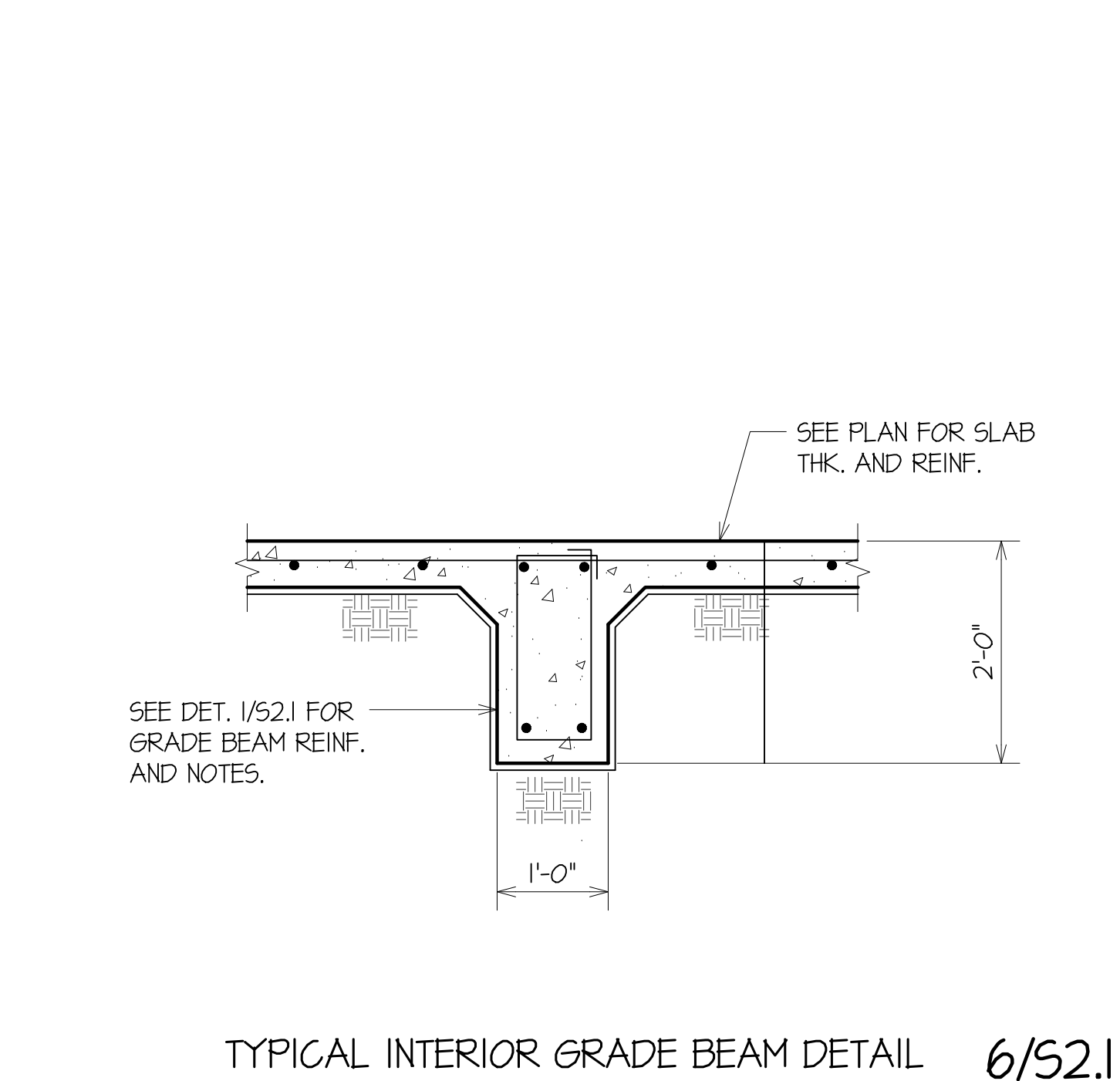
TYPICAL TIE BEAM DETAIL 3/52.1



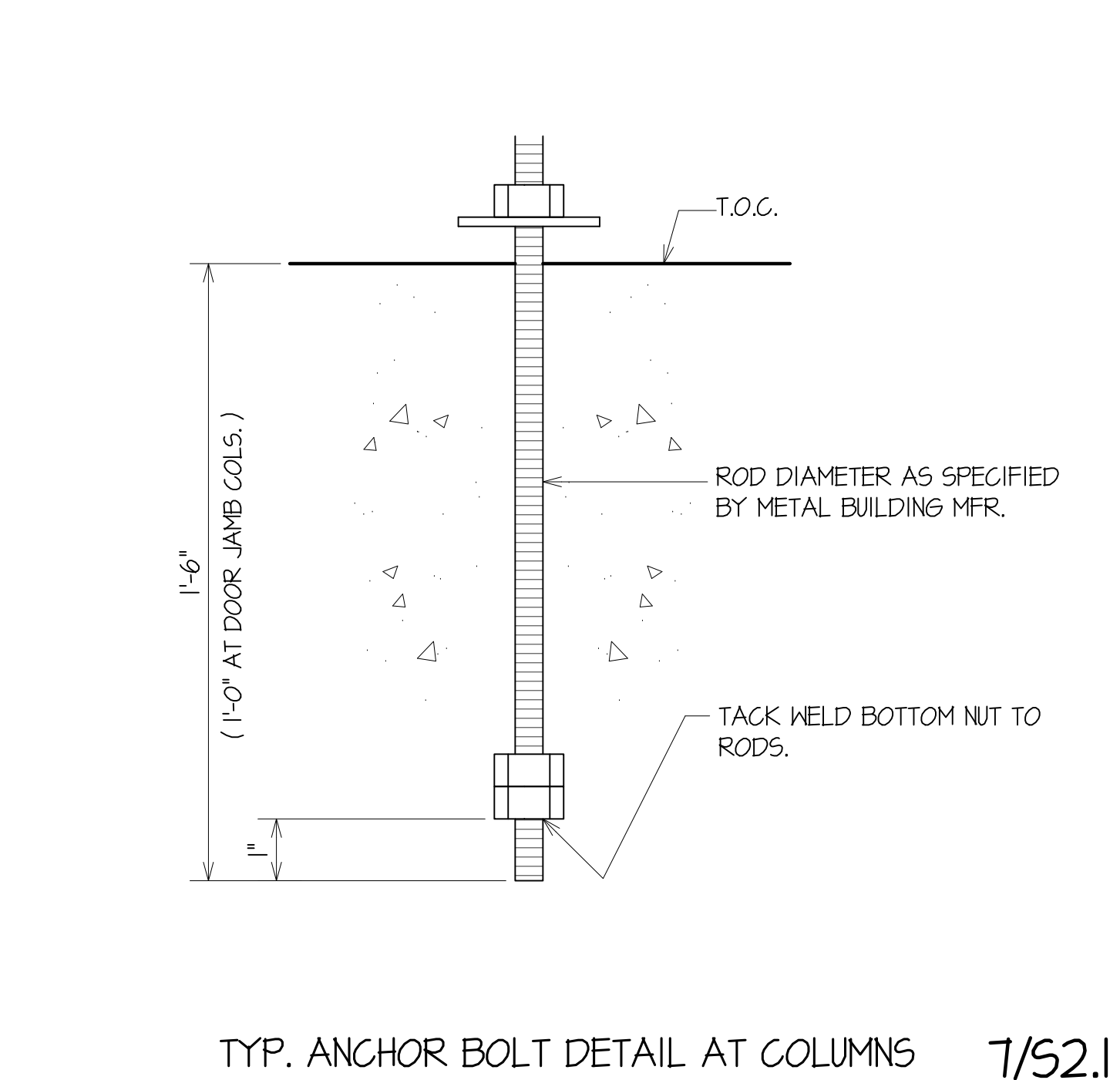
TYPICAL PORTE COCHERE FOOTING DETAIL 4/52.1



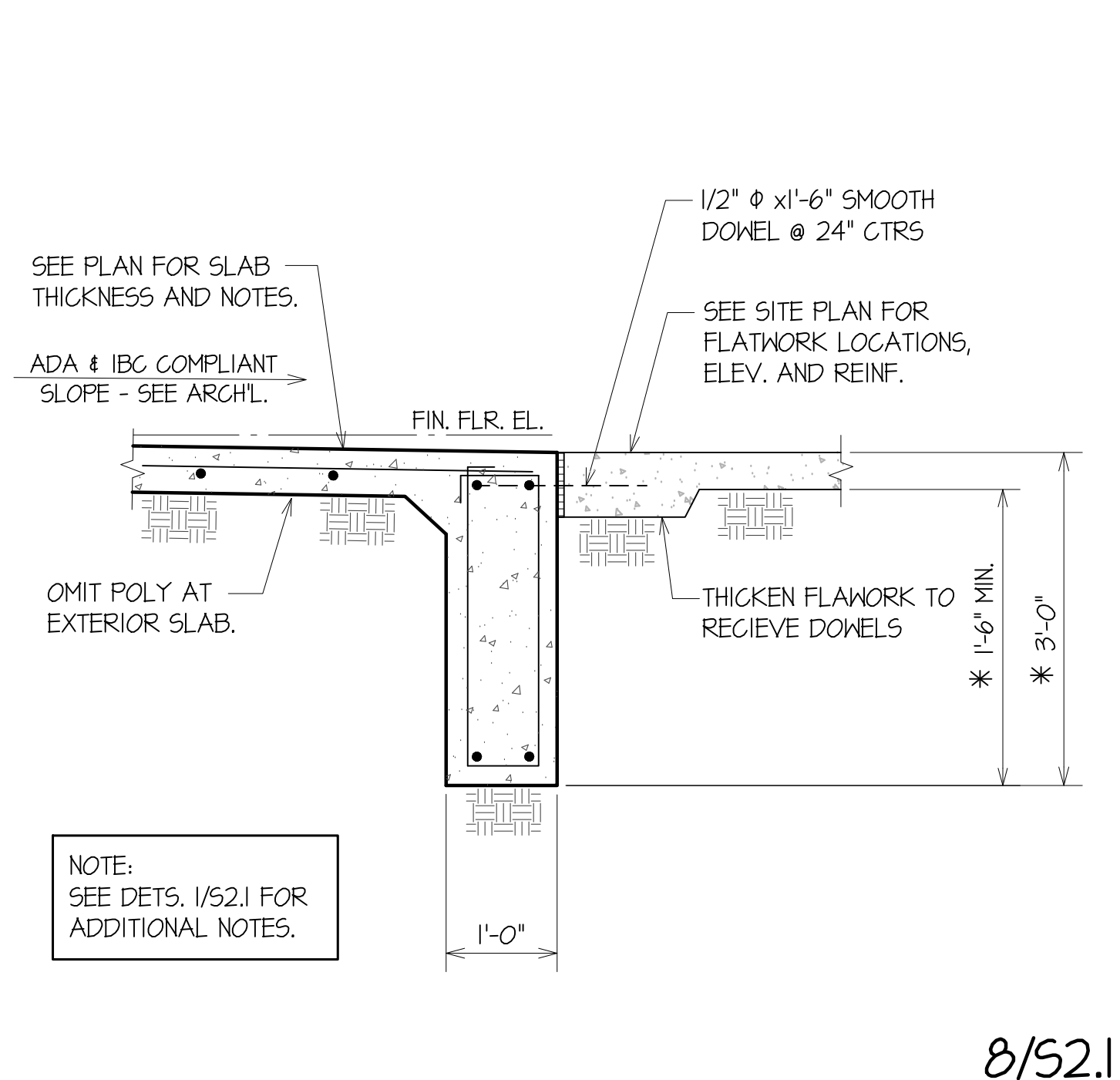
5/52.1



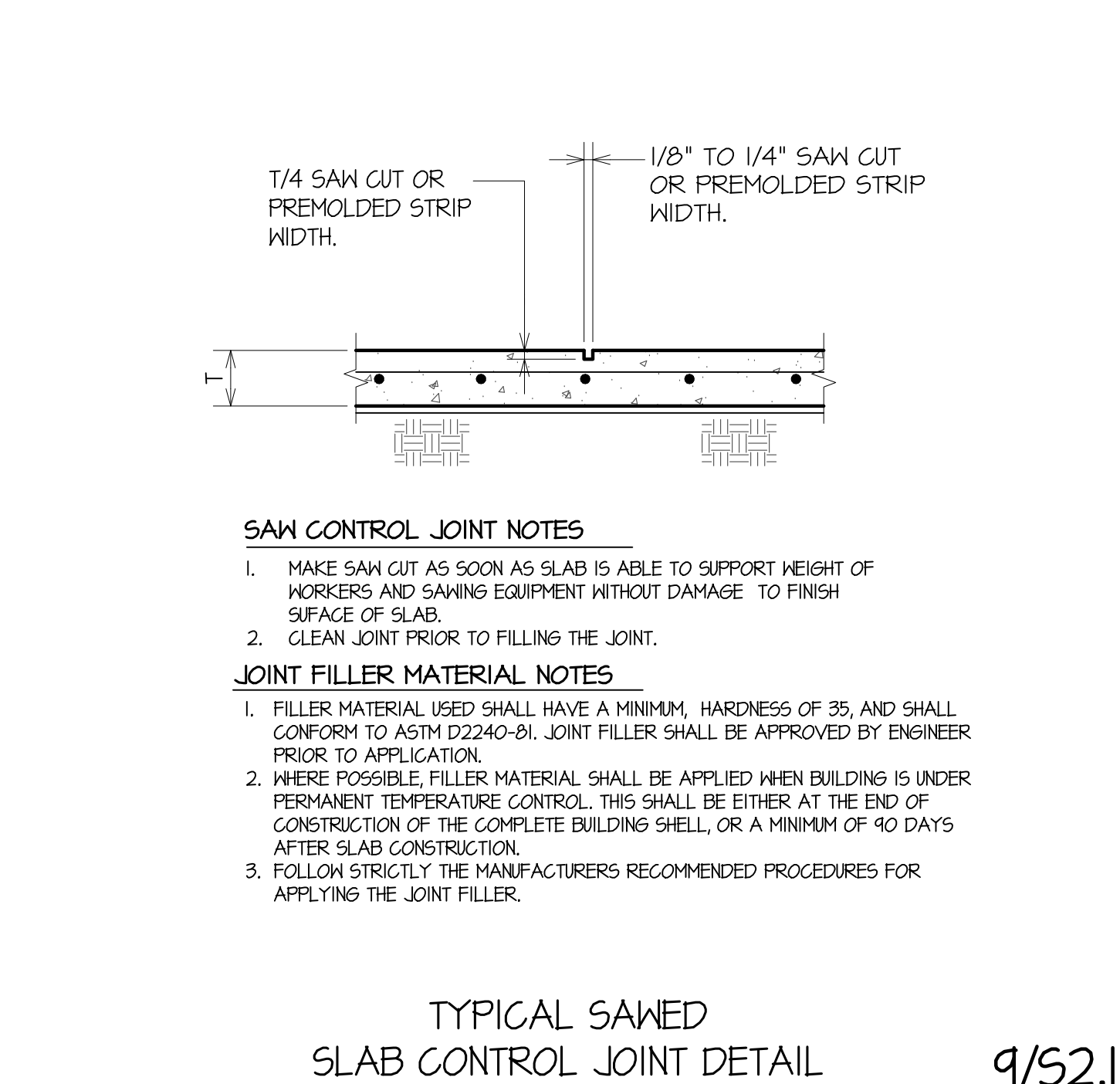
TYPICAL INTERIOR GRADE BEAM DETAIL 6/52.1



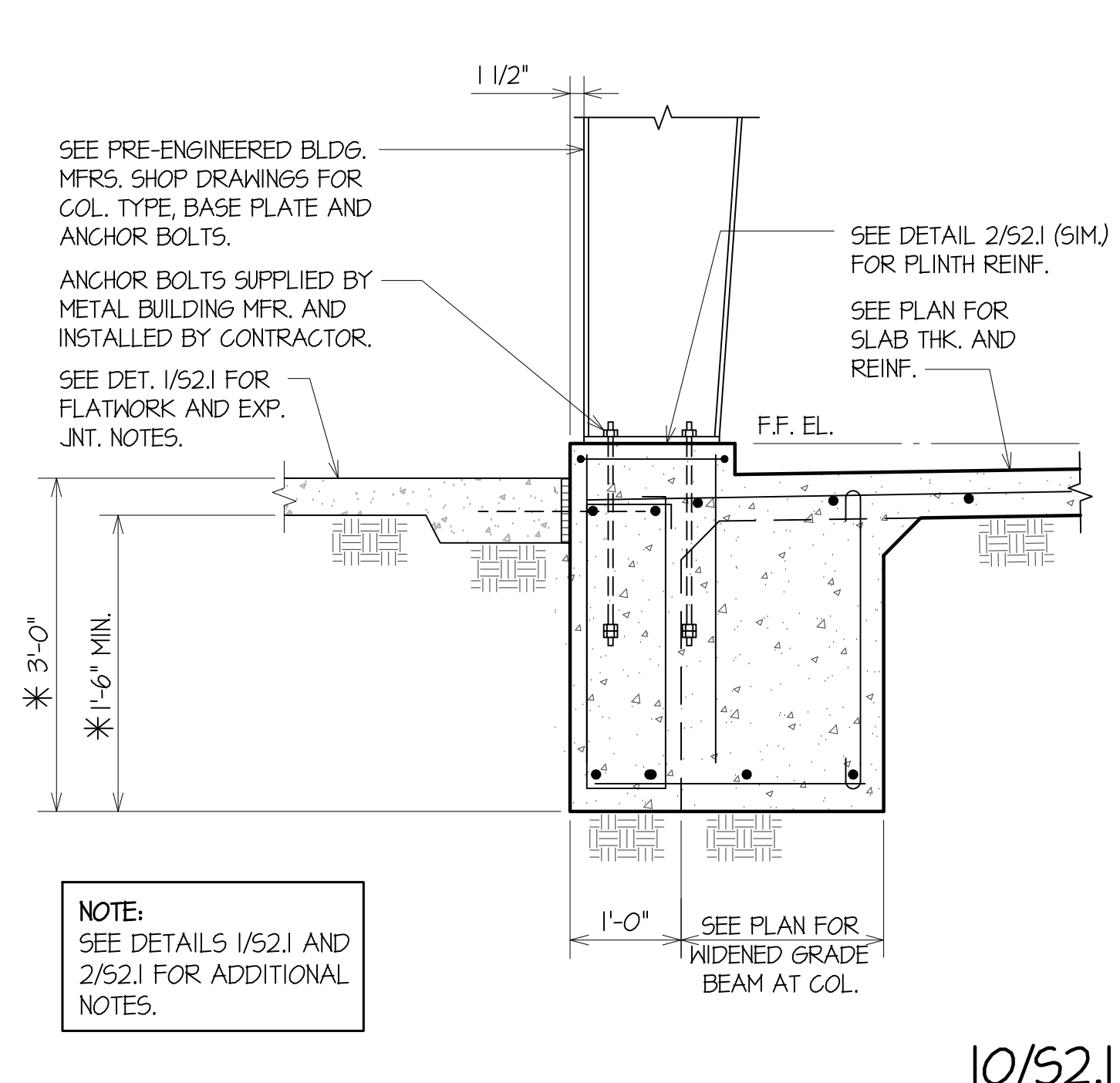
TYP. ANCHOR BOLT DETAIL AT COLUMNS 7/52.1



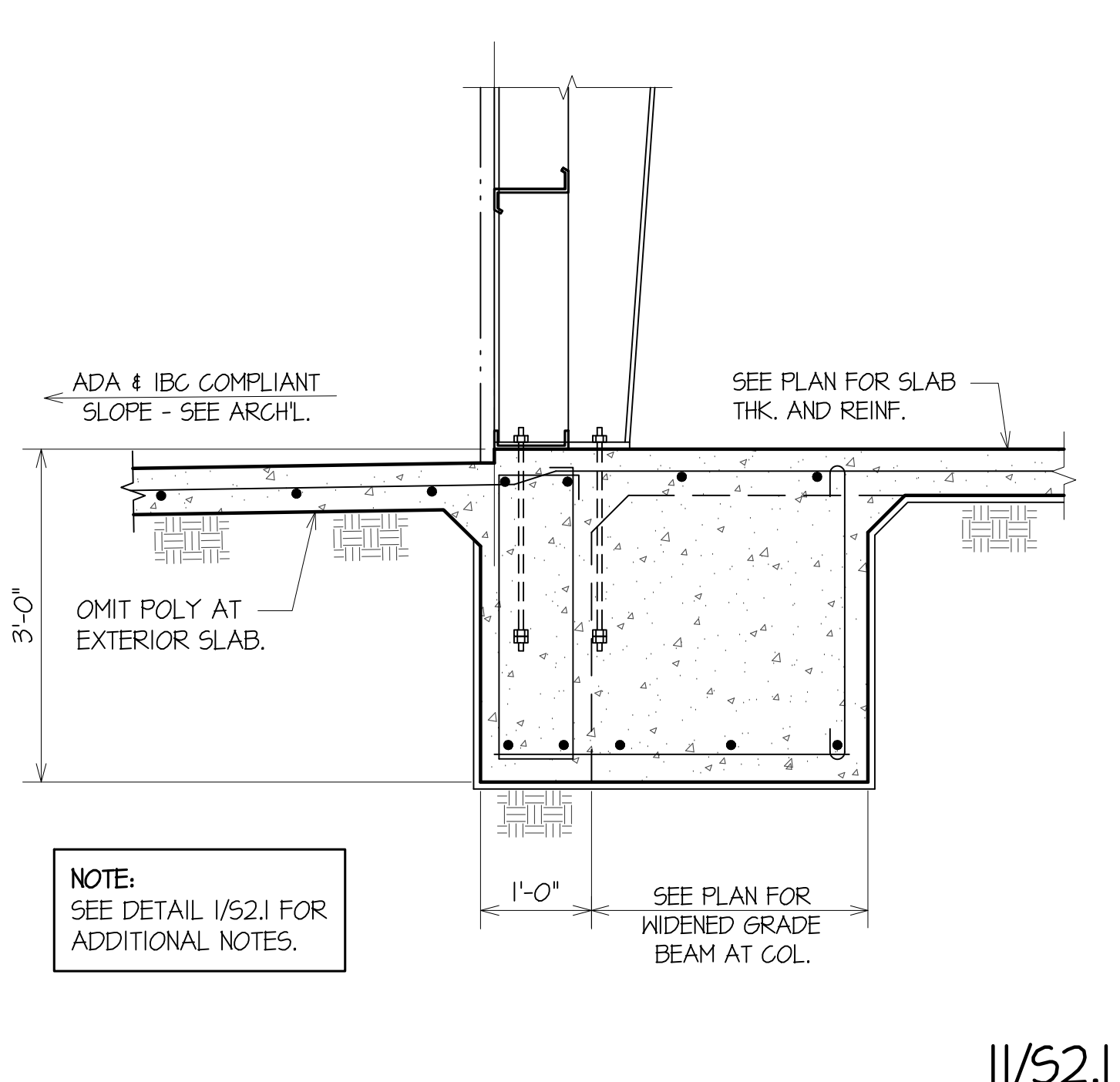
8/52.1



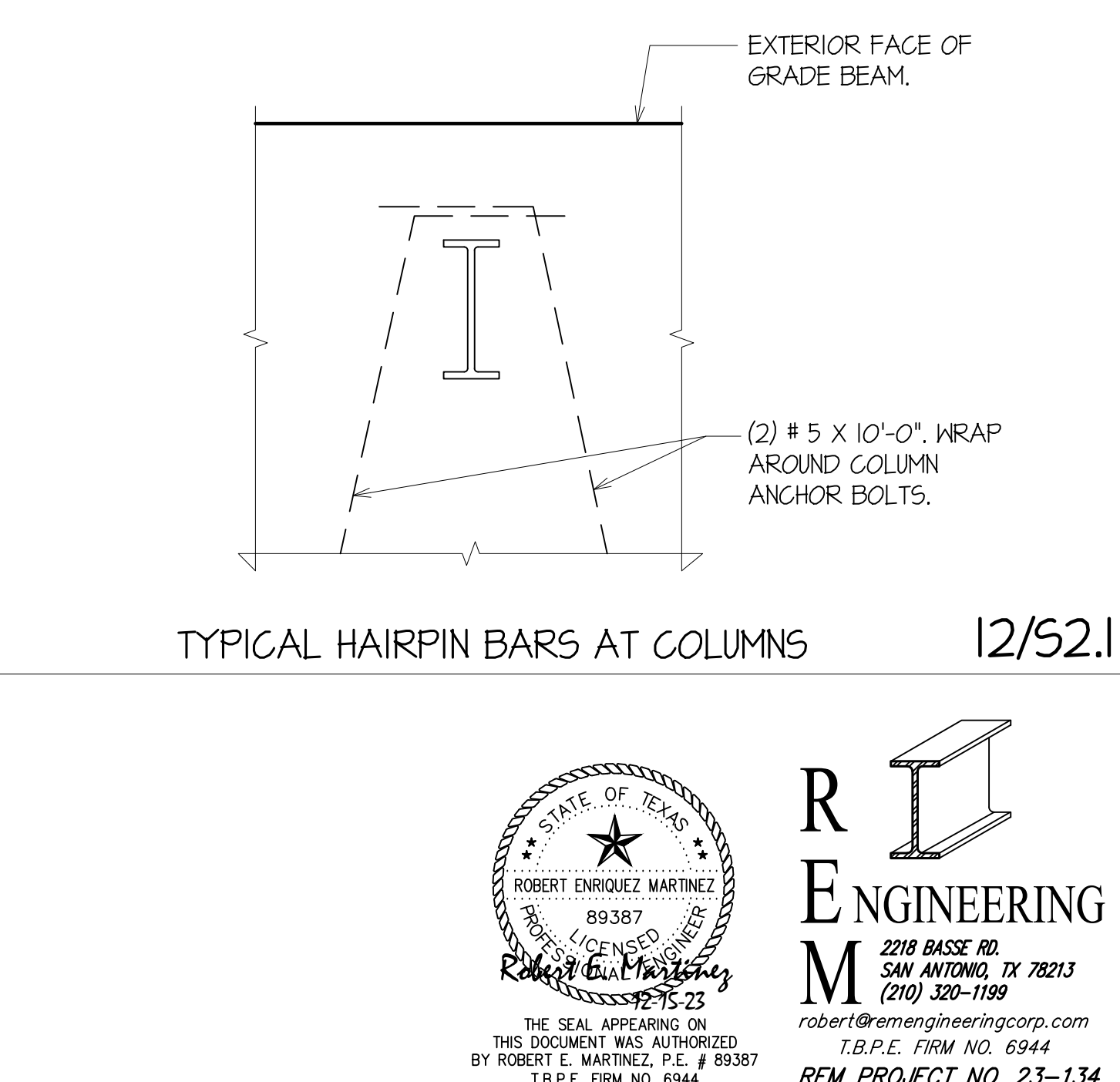
TYPICAL SAWED SLAB CONTROL JOINT DETAIL 9/52.1



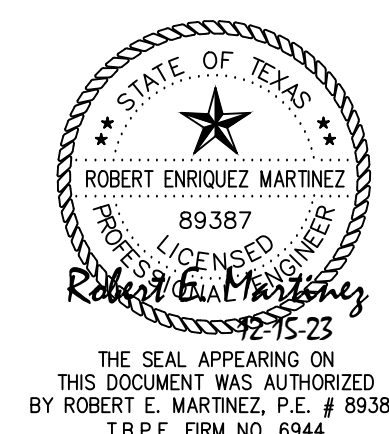
10/52.1



11/52.1



TYPICAL HAIRPIN BARS AT COLUMNS 12/52.1



R E ENGINEERING
 2210 BASSE RD.
 SAN ANTONIO, TX 78213
 (210) 332-1159
 robert@reengineeringcorp.com
 T.B.P.E. FIRM NO. 6944
 REM PROJECT NO. 23-134

GENERAL

- GC-1 The contract structural documents represent the finished structure, and, except where specifically shown, do not indicate the method or means of construction. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence.
GC-2 The structure has been designed to resist design loads only as a completed structure. Applications of construction loads to the partially completed structure shall be considered by the Contractor and so included in the design of shoring, bracing, formwork, and any other supporting elements provided for construction of the structure. During erection and until all permanent connections are made, the Contractor must provide temporary bracing to brace the structure in all directions.
GC-3 The Engineer shall not have control or charge of, and shall not be responsible for, construction means, methods techniques, sequences, or procedures for safety precautions and programs in connection with the work, for the acts or omission of the Contractor, Subcontractor, or any other persons performing any of the work, or for the failure of any of them to carry out the work in accordance with the contract documents.
GC-4 General Contractor shall check and verify all dimensions, grade conditions, (both new and existing) reporting any discrepancies to the Engineer before proceeding with any phase of the work as the Contractor will be responsible for all work fitting as intended by the construction documents.

STRUCTURAL DESIGN CRITERIA

- SD-1 A. Live loads:
1. Roof - 20 PSF (Reduced in accordance with IBC 1607.13.2.1)
2. Offices - 50 PSF
3. Partitions - 20 PSF
4. Public Areas - 100 PSF (Non-Reduceable)
5. Combinations in accordance with IBC 1605.3.1
B. Wind loads - ASCE 7-10 (IBC 1609.1)
Ultimate Design Wind Speed (MPH) 143 (Vult)
Exposure classification C
Risk Category II (IBC Table 1604.5)
C. Ground Snow Load 0 PSF
D. Seismic Design Category A
SD-2 Future Loads: Unless specifically noted, there are no provisions made for future floors, roofs, or other loads.
SD-3 Applicable codes:
A. 2018 International Building Code
B. ASCE 7-16
C. ACI 318-14
D. AISC Fourteenth Edition 2011
E. AWS D1.1

GEOTECHNICAL REPORT

- GR-1 Foundation design is based on the geotechnical investigation report by Terracon dated August 16, 2023. (Terracon Project No. AS235033)
GR-2 The soil report is available to the General Contractor upon request to the Architect. The information included therein may be used by the General Contractor for his general information only.

SUBGRADE AND UNDERFLOOR FILL PREPARATION AT SLAB-ON-GRADE FOUNDATIONS

- UF-1 The subgrade and underfloor fill shall be prepared to a point that extends 5'-0" minimum beyond the limits of the building foundation. Increase this width as needed to include all sidewalks/flatwork directly adjacent to the building foundation. Refer to the geotechnical report for the preparation of the subgrade soils beneath the flatwork/sidewalks beyond this width.
UF-2 The subgrade and underfloor fill shall be prepared in accordance with the geotechnical report recommendations provided by Terracon which calls for the removal of existing soils to a depth that will allow a minimum 36-inch depth of compacted, select fill material to be installed to the bottom of slab elevation. The subgrade and select fill pad shall be tested, inspected and approved by the Testing Lab in writing prior to placing concrete. The subgrade preparation shall improve subgrade performance to limit the PVR to 1" or less. Refer to the Terracon report for specific subgrade and select fill preparation and testing requirements.
UF-3 Locate all utility lines prior to starting work. Carefully demolish the existing Foundation and existing foundation elements.
UF-4 Perform all earthwork before trenching for grade beams or mechanical lines.
UF-5 Maintain subgrade and the fill at optimum insitu moisture content after completion of structural fill placement. This may include drying or wetting processes depending on the introduction or evaporation of moisture due to the weather and construction condition. The Testing Lab shall make a final site visit no sooner than two days prior to the concrete pour in order to verify and approve the structural select fill condition including moisture content to be fit and in accordance with the contract documents, prior to pour. Contractor shall make all corrective work required to improve the subgrade and structural fill areas which are not acceptable to the Testing Lab prior to placement of concrete.

- UF-6 The finish grading around the building shall be graded to ensure adequate drainage of surface water away from the building. All air conditioning condensate lines and roof gutter downspouts shall be directed to discharge a minimum of ten (10) feet away from the foundation for further removal from the site.

- UF-7 Trenching of grade beams shall be excavated in order to provide the beam cross sections indicated. Beam and slab depths and widths as indicated are minimum acceptable sizes. Larger size beams and slabs formed by less accurate trenching may require additional reinforcing (not shown) which shall be determined by the Engineer during construction review. All loose soil from sides and bottoms of trenches shall be removed. If a toothed bucket is used, excavation with this bucket shall stop six (6) inches above final grade and the excavation completed with a smooth-bucket or by hand labor.
UF-8 Drain exposed grade beams during construction in the event of inclement weather.

CONCRETE / REINFORCING:

- CR-1 All concrete shall test 3000 PSI at 28 days and shall be in accordance with ACI 301. Flyash shall not exceed 20 percent.
CR-2 Bar support accessories shall be provided in accordance with the latest ACI manual of standard practice for detailing reinforced concrete structures, except that reinforcing shall be supported on bolsters spaced not more than 4 feet on center. Do not use brick fragments for bar supports.
CR-3 Mechanical and electrical conduit in slabs shall run under top layer of slab reinforcing. Provide a minimum of 1-1/2" clear between conduits and between reinforcing and adjacent conduits parallel to reinforcing. Excavate the subgrade and recess the conduits as needed to maintain slab thickness and achieve clearance requirements.
CR-4 All reinforcing steel shall be grade 60 and shall conform to the ASTM Specification A615. Detailing of reinforcing steel shall conform to the American Concrete Institute Detailing Manual. Lap continuous unscheduled reinforcing bars 40 bar diameters at splices. Tie wire shall be 18 gage annealed type. Rebar shall not be heated with a torch in the field.
CR-5 Provide 1-#6 x 4'-0" L-shaped bar top and bottom of exterior face of grade beams at corners.
CR-6 Reinforcing steel coverage shall be: Grade Beams - 3" Bottom, 3" Sides
CR-7 Provide "Z" transition bars (same size as beam reinforcement) where beam soffit step downs are greater than 6 inches.
CR-8 Vapor barrier shall be 10 mil polyethylene film for below grade application with a permeance of less than 0.3 US perms (ASTM E96). Vapor barrier shall be continuous with joints lapped a minimum of 12 inches and taped. The vapor barrier shall be installed in accordance with ASTM E1643.
CR-9 Concrete shall be placed and cured in accordance with ACI 302.1R. Finish tolerance shall be in accordance with ACI 117.
CR-10 Construct formwork to maintain tolerances outlined in ACI 347. Formwork shall extend a minimum of 6 inches below finished grade at perimeter beams.
CR-11 Refer to the Architectural Drawings for areas requiring colored concrete and/or special concrete finishes.
CR-12 Sawcut control joints into slab as early in the concrete placement process as possible as soon as the slab can support the weight of the workers and equipment without damage to the finished concrete surface. Unless noted otherwise, typically install control joints at quarter points from each beam line in both directions.
CR-13 All anchor bolts for the pre-engineered metal building must be installed prior to concrete placement. The Contractor must fabricate templates (wood is acceptable) for the installation of the bolts. These templates must be coordinated by the Contractor with the approved anchor bolt shop drawings submitted by the pre-engineered metal building manufacturer. The General Contractor shall provide and set anchor bolts as per prefabricated building manufacturer's drawings.

EPOXY

- EX-1 Care shall be taken in placing post-installed anchors to avoid conflicts with existing rebar. Holes shall be drilled and cleaned in accordance with the manufacturer's written instructions. Substitution requests for products other than those specified below shall be submitted by the Contractor to the Engineer.
EX-2 All holes shall be drilled with a "Rotary Hammer" percussion drill. All holes shall have a diameter no larger than 1/8" greater than the diameter of the steel member being installed.
EX-3 All holes shall be cleaned with compressed air and a wire brush and shall be dry prior to installation of epoxy. Holes shall be free of all deleterious material such as laitance, dust, dirt, and oil.
EX-4 Steel shall be cleaned to a bright finish with wire brushes prior to installation. Prime surface as required by Manufacturer.
EX-5 Acceptable Products are HILTI RE 500 V3, HILTI HIT HY200 or Simpson Strong-Tie Set-XP or approved equal. Substitutions may be considered provided complete technical information is furnished to the Engineer and approved prior to commencement of work. In using the above products, follow strictly the manufacturer's specifications and directions for mixing and application. Also heed all label warnings by manufacturer. Make application in accordance with applicable safety laws.

PRE-ENGINEERED/PRE-FABRICATED METAL BUILDING (DEFERRED SUBMITTAL)

- MB-1 All pre-engineered metal building components shall be designed and fabricated under the direct supervision of a Registered Texas Professional Engineer.
MB-2 Limit the metal building frame design drift to no more than the allowable deflection limitations of the back-up components that are specified by the building code for the veneer systems supported by the metal building structure.
MB-3 Building frame resistance for lateral loads shall be designed so that columns do not transfer moment into the walls or foundation.
MB-4 Provide structural design data for the framing members and covering of the metal building system necessary to show compliance with the construction documents and building code. The structural design data includes magnitude and location of design loads and support conditions, material properties, and the type and size of structural members.
MB-5 Provide a statement/letter by the design engineer stating that the structural design of the metal building is in compliance with the specified code requirements. This letter shall be signed and sealed by the Metal Building System Engineer who is a Registered Texas Professional Engineer.
MB-6 Framing members shall be fabricated in accordance with AISC Specifications for plate, bar, tube, or rolled structural shapes. Framing member finish shall be cleaned and shop primed.
MB-7 Inspection of Fabricators (IBC Chapter 1704.2) The fabricator shall submit to the owner and the general contractor a certificate of compliance stating that he fabricated his work either under the inspection services of a special inspector or under the inspection services of his nationally recognized trade organization that requires controlled inspections.
MB-8 Anchor bolts shall be unprimed, ASTM A 193 Grade B-7 or ASTM F-1554 Grade 105 or equivalent all thread; diameter and quantity as specified by the metal building manufacturer.
MB-9 Wall girt spacing and column interior angle brace locations shall be manufacturer's standard spacing and number of braces as required for building design. Braces shall not be located below the ceiling elevations shown on the Architectural plans.
MB-10 Beam flange angle brace locations shall be manufacturer's design standard spacing and number of braces as required for building design. Braces shall be located above the ceiling elevations shown on the Architectural plans.
MB-11 Roof framing members spanning between frames supporting the covering of the metal building system shall be cold formed, high strength roof framing long bay purlins and other secondary framing and the bolts required for their erection.
MB-12 Closure pieces shall be manufacturer's standard, necessary to finish out the metal building system. Color of trim pieces shall be selected from manufacturer's standard color. Refer to Architectural drawings for closure pieces. Sealants shall be manufacturer's standard.
MB-13 Roof assemblies shall include sub framing members that span between purlins to support suspended mechanical equipment (see M.E.P. Dwg's). The metal building system shall be strengthened to support the additional equipment.
MB-14 Coordinate structural engineer's review, the building official inspection and the special inspector inspection and testing services.

The Building Official shall inspect the primary structural framing. The Building Official may accept a review by a licensed professional engineer in place of the Building Official conducting his inspection. (IBC Chapter 110.3.4)
The special inspector (SI) shall inspect bolted connections according to AISC specifications as designed by the metal building specialty engineer. (IBC Chapter 1705.2)
The special inspector (SI) shall inspect the steel frame to verify compliance with the details shown on the approved construction documents, such as bracing, stiffening, member locations and proper application of joint details at each connection. (IBC Chapter 1705.2)

TEXAS DEPARTMENT OF INSURANCE WINDSTORM INSPECTION REQUIREMENTS

- TDI-1 All exterior doors and windows must comply with and be installed in accordance with ASTM E1886, ASTM E1996 and TDI requirements.
TDI-2 Submit P.E. sealed shop drawings for all exterior doors and windows to be installed showing compliance with the above listed requirements and applicable wind loads. The installation method to be used must be clearly shown on the shop drawings. The installation method must have accompanying TDI approved documentation.
The Structural Engineer must be allowed to inspect the installation of all door and window fasteners prior to the installation of the glazing.

INSPECTION BY THE TESTING LAB

- TL-1 The testing lab shall provide special inspection of the following items in accordance with the code. Re-inspect as required until all items pass inspection. Written reports shall be submitted to the Engineer.
1. Subgrade and Select Fill Pad: The prepared subgrade and each lift of select fill material shall be tested, evaluated and reworked as necessary until approved by the Testing Lab prior to placement of additional lifts. Refer to the geotechnical report for the frequency of tests.
2. Concrete: During the taking of test specimens and placing of reinforced concrete.
3. Bolts Installed in Concrete: Prior to and during the placement of concrete around bolts.
4. Reinforcing Steel: Inspect all rebar prior to placing concrete.
5. Pre-Engineered Metal Building: Inspect bolted connections according to AISC specifications as designed by the metal building engineer. Inspect the steel frame to verify compliance with the details shown on the approved P.E. sealed shop drawings, such as bracing, stiffening, member locations and proper application of joint details at each connection.
TL-2 The testing lab shall provide testing and inspection services for all items listed in Chapter 17 of the International Building Code. Re-inspect as required until all items pass inspection. Written reports shall be submitted to the Engineer.
TL-3 Periodic site observations by the Testing Lab are solely for the purpose of determining if the work of the Contractor is proceeding in general accordance with the structural contract documents. These limited site observations should not be construed as exhaustive or continuous to check the quality or quantity of the work, but rather periodic in an effort to guard the Owner against defects or deficiencies in the work of the Contractor.
TL-4 The Contractor shall notify the Testing Lab 48 hours in advance of any concrete placement.
TL-5 The Contractor shall not place any concrete until all reinforcing steel placement has been reviewed by the Testing Lab AND all corrections made by the Contractor. It is the Contractor's responsibility to ensure that all corrections have been made.
TL-6 Do not cover up structural framing until it has been reviewed by the Testing Lab.

MISCELLANEOUS

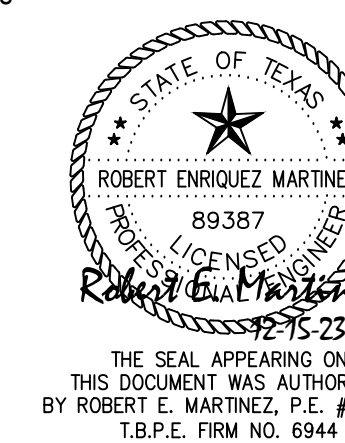
- M-1 Typical Details shall apply to ALL such situations and conditions which are similar to the condition shown on the detail or verbally described in the title of the detail or notes on the detail. Typical Details shall apply regardless of whether or not the detail section mark is cut on the plans.
M-2 See Architectural/Civil drawings for floor elevations, slopes, and the location of depressed floor areas.
M-3 The Contractor shall compare Structural sections with Architectural sections and report any discrepancy to the architect prior to fabrication or installing structural members.
M-4 Changes shall not be made to the drawings without written approval of the Engineer.
M-5 Shop drawings shall be submitted for all structural items including concrete mix design, rebar, epoxy, pre-engineered metal building, and TDI Windstorm documentation on exterior doors and windows.
The Contractor must submit all shop drawings for review a minimum of ten (10) working days prior to their due date back to the supplier. Failure to do so will be the responsibility of the Contractor.

SITE OBSERVATION BY THE STRUCTURAL ENGINEER

- SV-1 Periodic site observations by field representatives of REM Engineering are solely for the purpose of determining if the work of the Contractor is proceeding in general accordance with the structural contract documents. These limited site observations should not be construed as exhaustive or continuous to check the quality or quantity of the work, but rather periodic in an effort to guard the Owner against defects or deficiencies in the work of the Contractor.
SV-2 The Contractor shall notify the Engineer and Testing Lab 48 hours in advance of any concrete placement.
SV-3 The Contractor shall not place any concrete until all reinforcing steel placement has been reviewed by the Structural Engineer AND all corrections made by the Contractor. It is the Contractor's responsibility to ensure that all corrections have been made.
SV-4 Do not cover up structural framing until it has been reviewed by the Engineer.

REPRODUCTION NOTE

- R-1 The use of reproductions of these contract drawings by any contractor, subcontractor, erector, fabricator, or material supplier in lieu of preparation of shop drawings signifies his acceptance of all information shown hereon as correct, and obligates himself to any job expense, real or implied, arising due to any errors that may occur hereon.



RE ENGINEERING
2218 BASSE RD.
SAN ANTONIO, TX 78213
(210) 330-1159
robert@remengineeringcorp.com
T.B.P.E. FIRM NO. 6944
REM PROJECT NO. 23-134

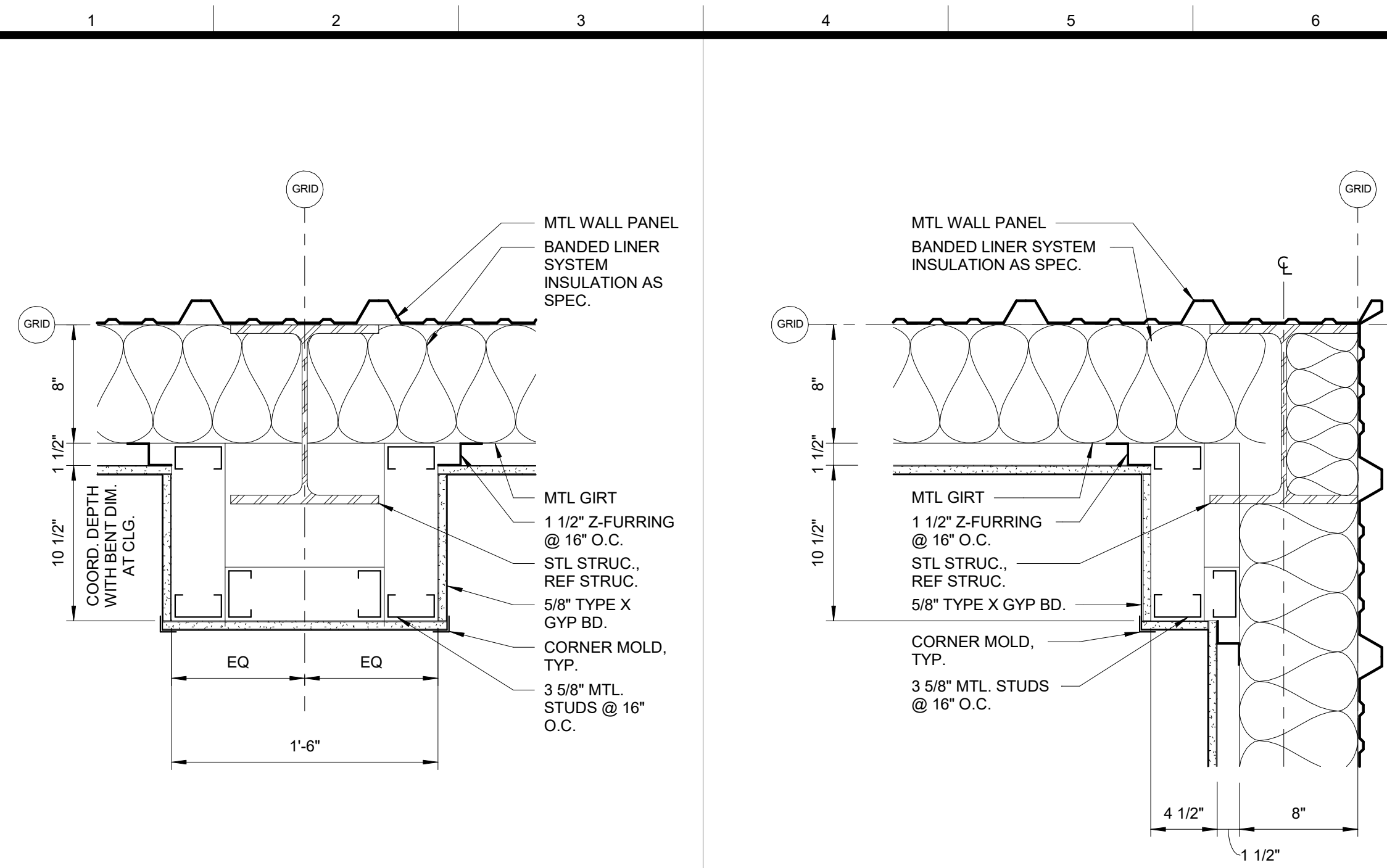


BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BEEVILLE, TX
0202 ENWLEY HADDOY & ASSOCIATES

DATE ISSUED: 12/15/2023

PROJECT NUMBER: 23-134

SHEET NAME: GENERAL NOTES
SHEET NUMBER: S3.1



H1 PLAN DETAILS
1 1/2" = 1'-0"

H4 PLAN DETAILS
1 1/2" = 1'-0"

CEILING LEGEND

- ACOUSTICAL PANEL CEILING SYSTEM. REF MATERIAL SCHEDULE FOR TYPES.
- ELEVATION HEIGHT SYMBOL INDICATES HEIGHT ABOVE FINISH FLOOR
- SUPPLY AND RETURN AIR GRILLS. REF MEP DOCS
- RECESSED 2' X 4' LIGHT FIXTURE REF MEP DWGS
- RECESSED LIGHTING FIXTURE REF MEP DWGS

WALL TO DECK LEGEND

- WALL TO DECK

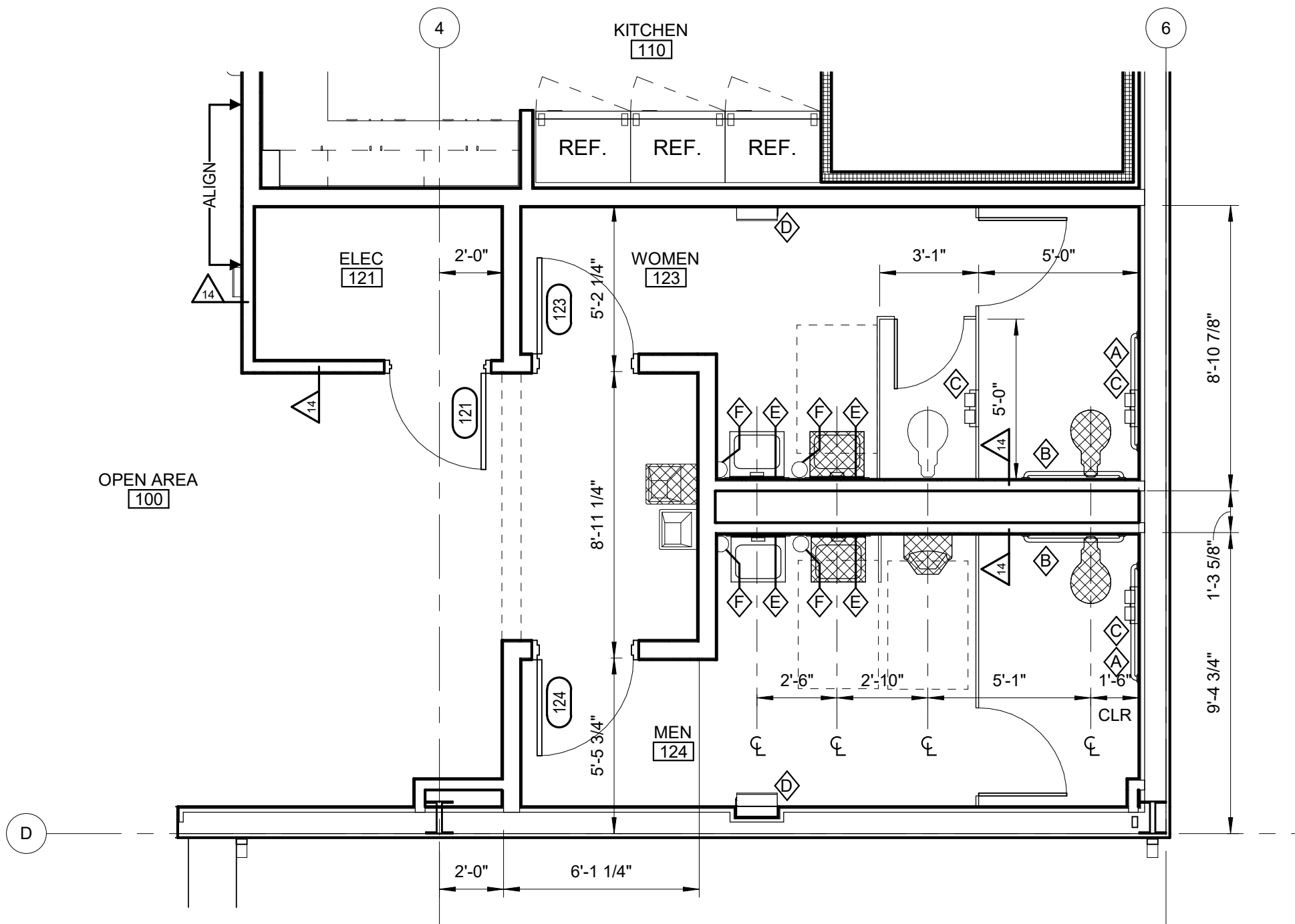
GENERAL NOTES

1. ON THIS PLAN, WALL TYPE 50 IS TYP AT EXTERIOR WALLS AND WALL TYPE 16 IS TYP AT INTERIOR WALLS, UON.
2. DIMENSIONS ARE TO FACE OF STUD, UON.
3. ALL WALLS ARE TO DECK, UON

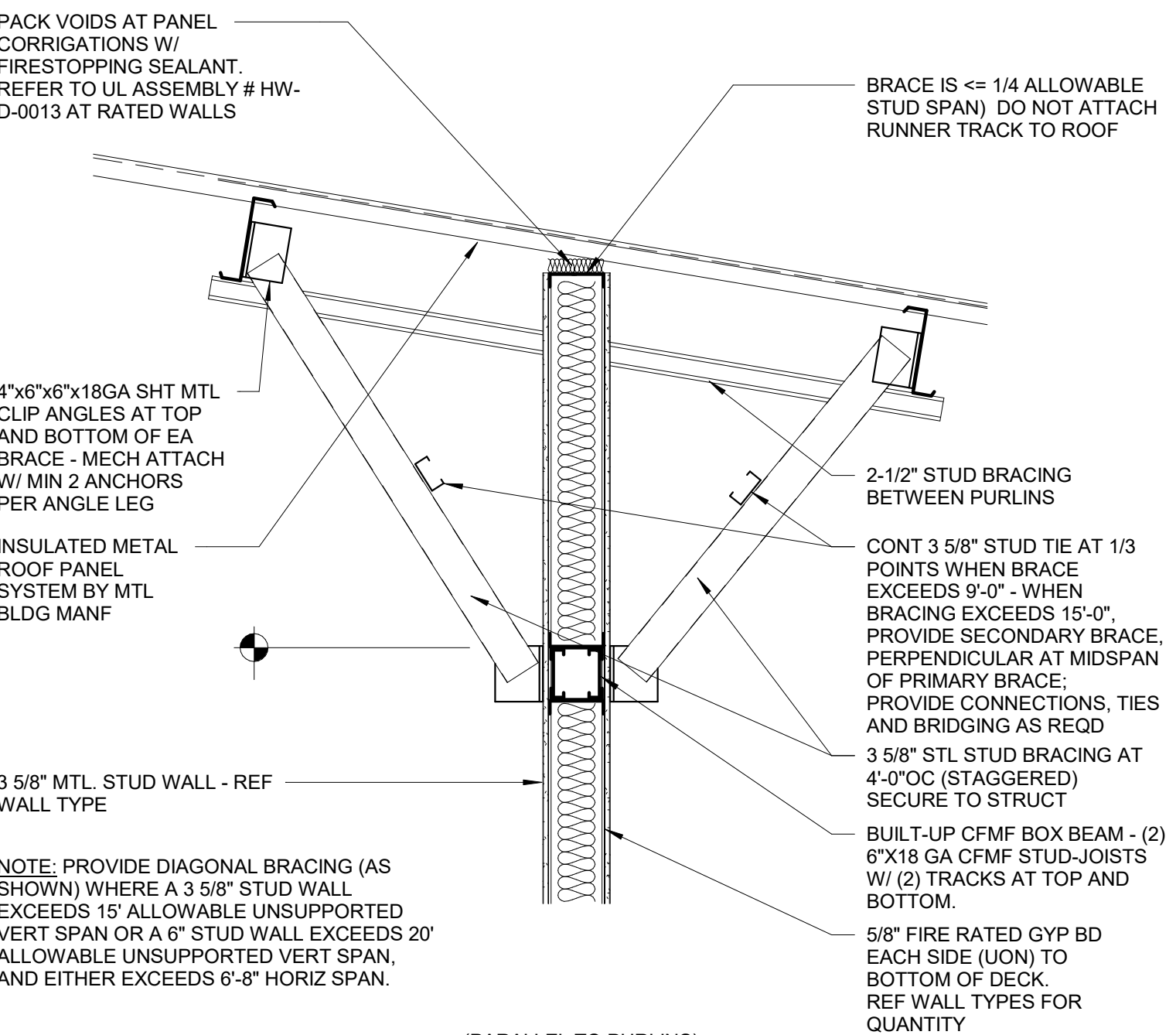
CONSTRUCTION LEGEND

- STL STUD WALLS (REFER TO WALL TYPES)

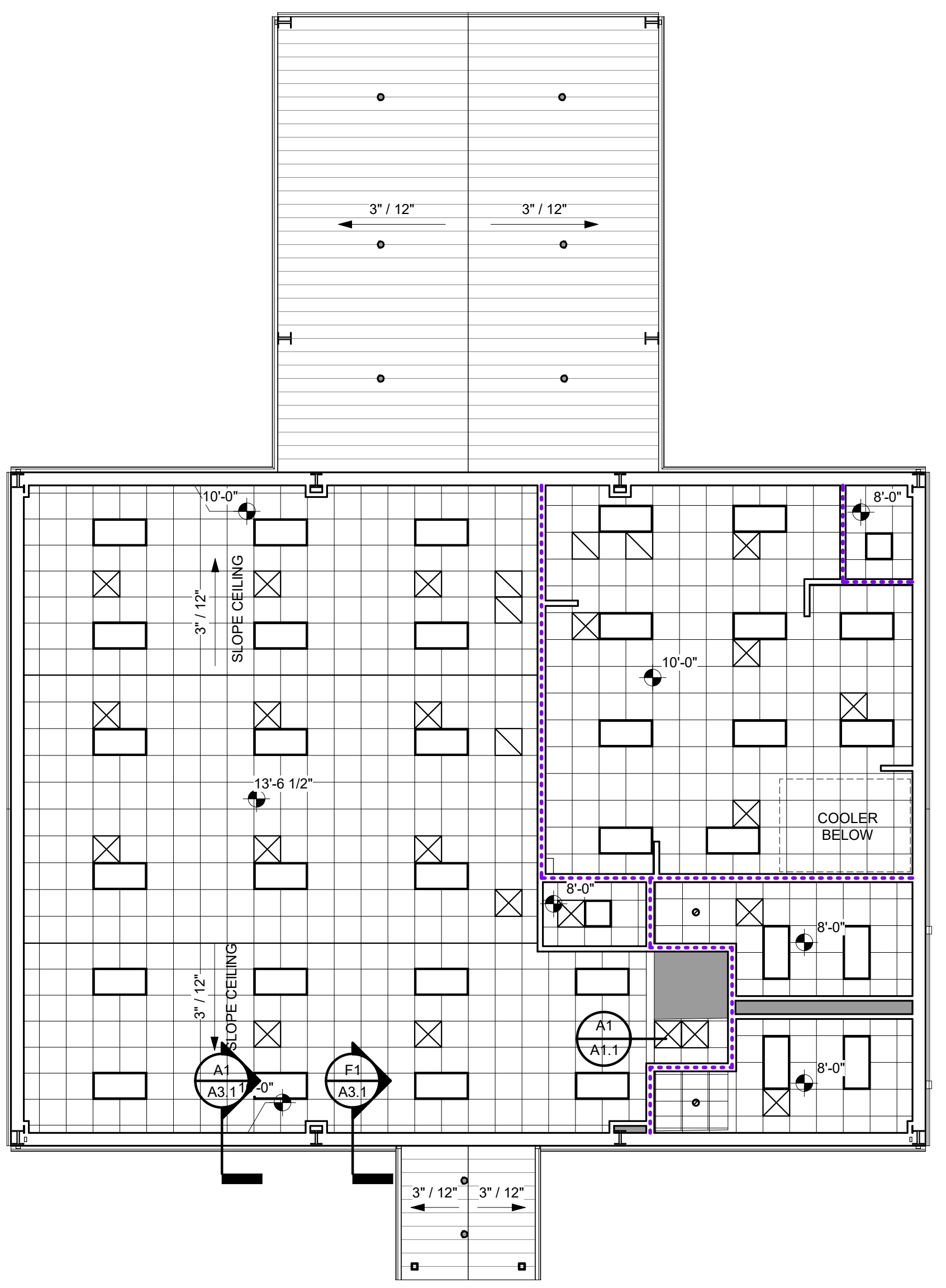
RESTROOM ACCESSORY SCHEDULE		
MARK	NAME	DESCRIPTION & MOUNTING
A	GRAB BAR	"BOBRICK" B-6806 X 42" 1 1/2" DIAMETER, STAINLESS STEEL - SATIN FINISH, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT
B	GRAB BAR	"BOBRICK" B-6806 X 36" 1 1/2" DIAMETER, STAINLESS STEEL - SATIN FINISH, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT
C	TOILET TISSUE DISPENSER	"BOBRICK" B-2740 SURFACE-MOUNTED TOILET TISSUE DISPENSER, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT AND LOCATION
D	PAPER TOWEL DISPENSER	"BOBRICK" B-3961 - MASONRY MOUNTING, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT
E	MIRROR	"BOBRICK" B290 - 1836 STAINLESS STEEL ANGLE FRAME, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT
F	SOAP DISPENSER	"BOBRICK" B-4112 SURFACE MOUNTED SOAP-DISPENSER, STAINLESS STEEL - SATIN FINISH, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT
G	MOP/BROOM HOLDER	"BOBRICK" B223 X 24" L STAINLESS STEEL W/3 HOLDERS, REFER TO SHEET G1.2 FOR MOUNTING HEIGHT



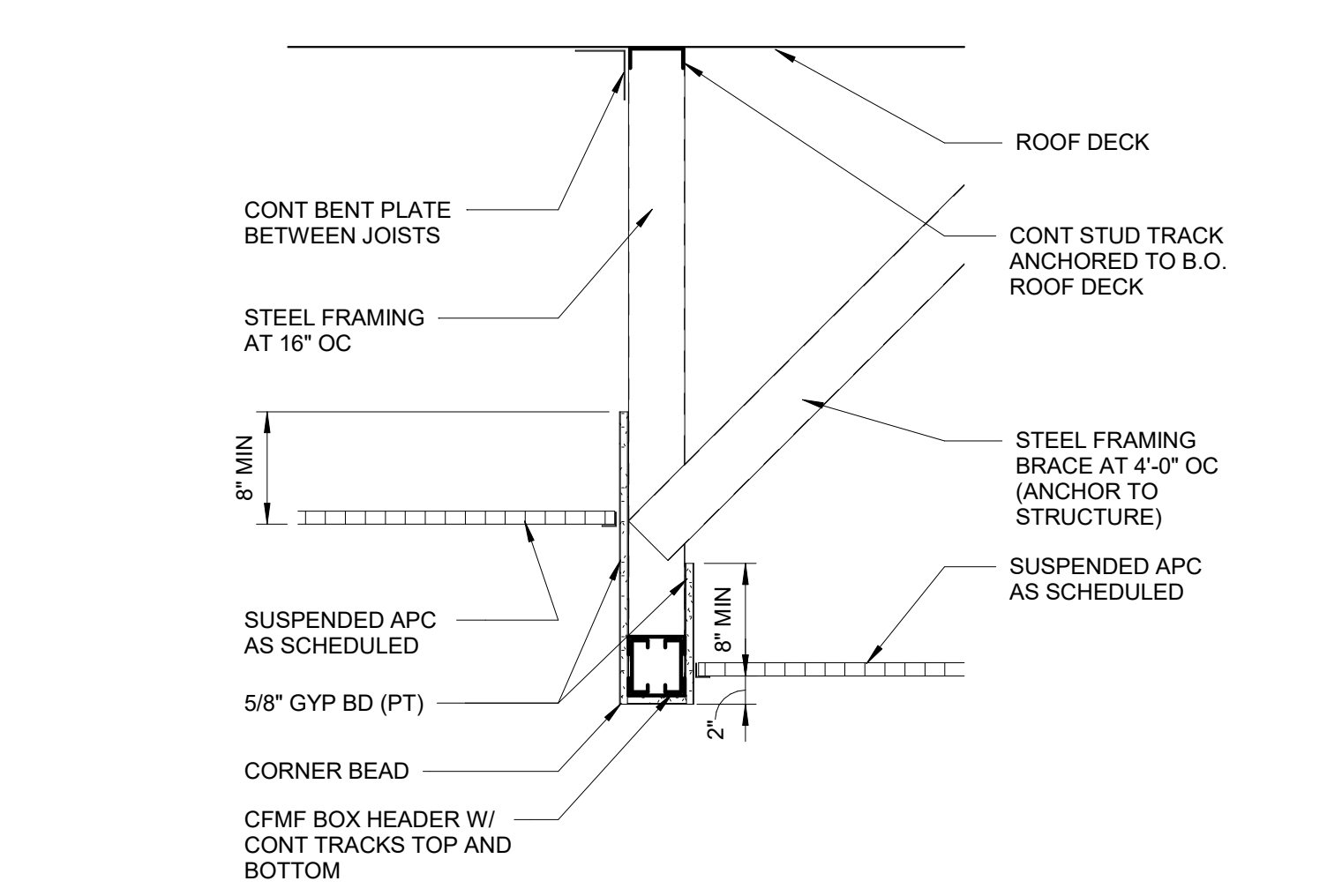
H10 EP RESTROOMS
1/4" = 1'-0"



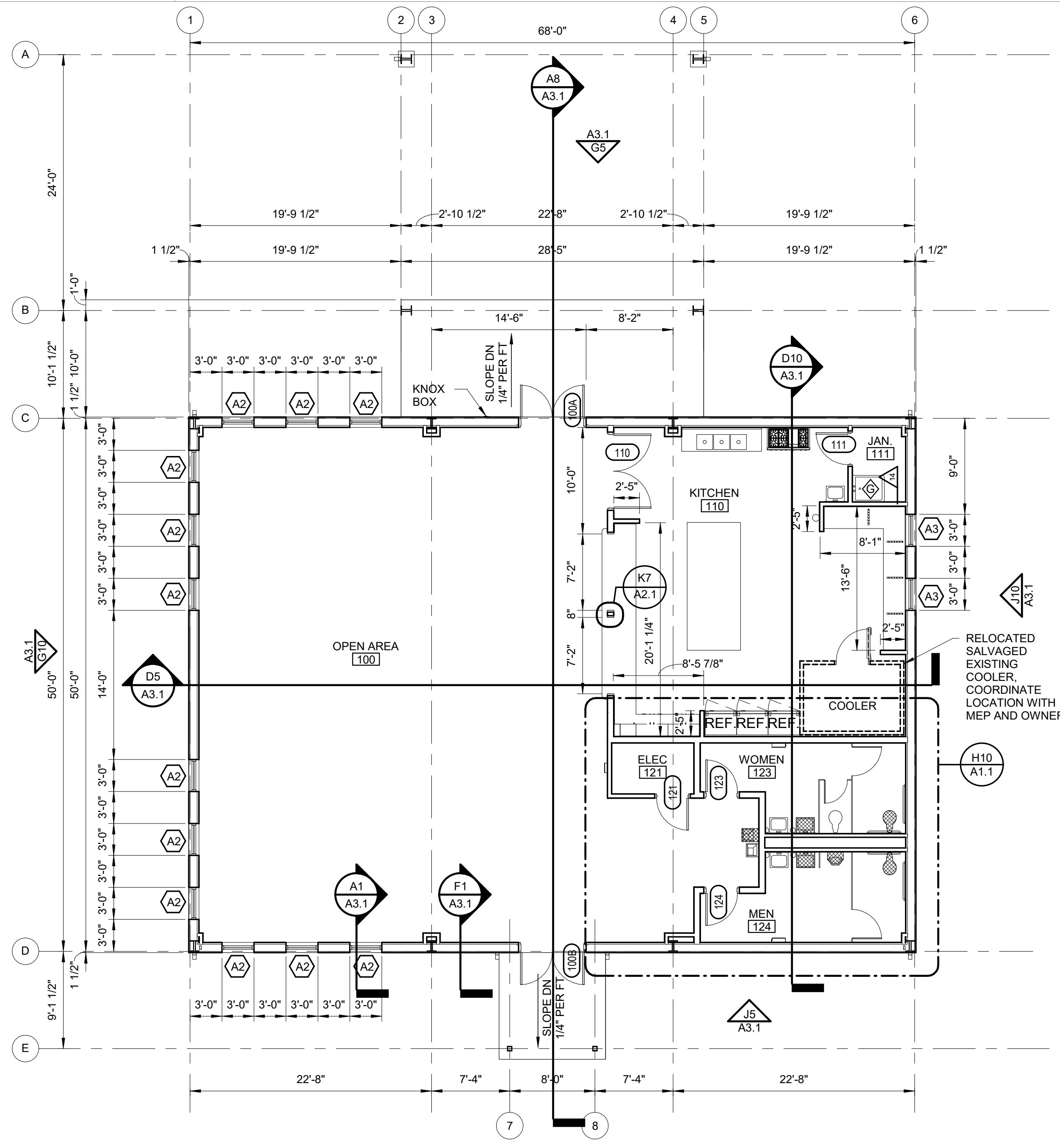
D1 WALL TO DECK DETAIL
3/4" = 1'-0"



A5 REFLECTED CEILING PLAN
1/8" = 1'-0"



A1 FURRDOWN DETAIL
1" = 1'-0"

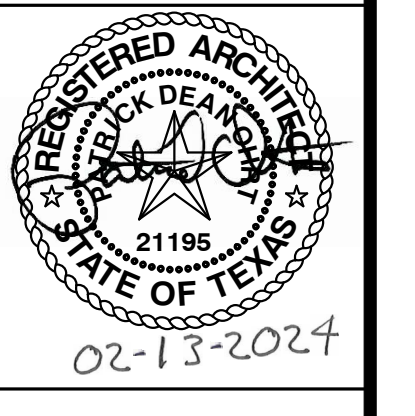


A10 FLOOR PLAN
1/8" = 1'-0"



PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction



BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
 BLESSING, TX
 ©2023 PEARLEY MACKEY & ASSOCIATES

DATE ISSUED:
Issue Date

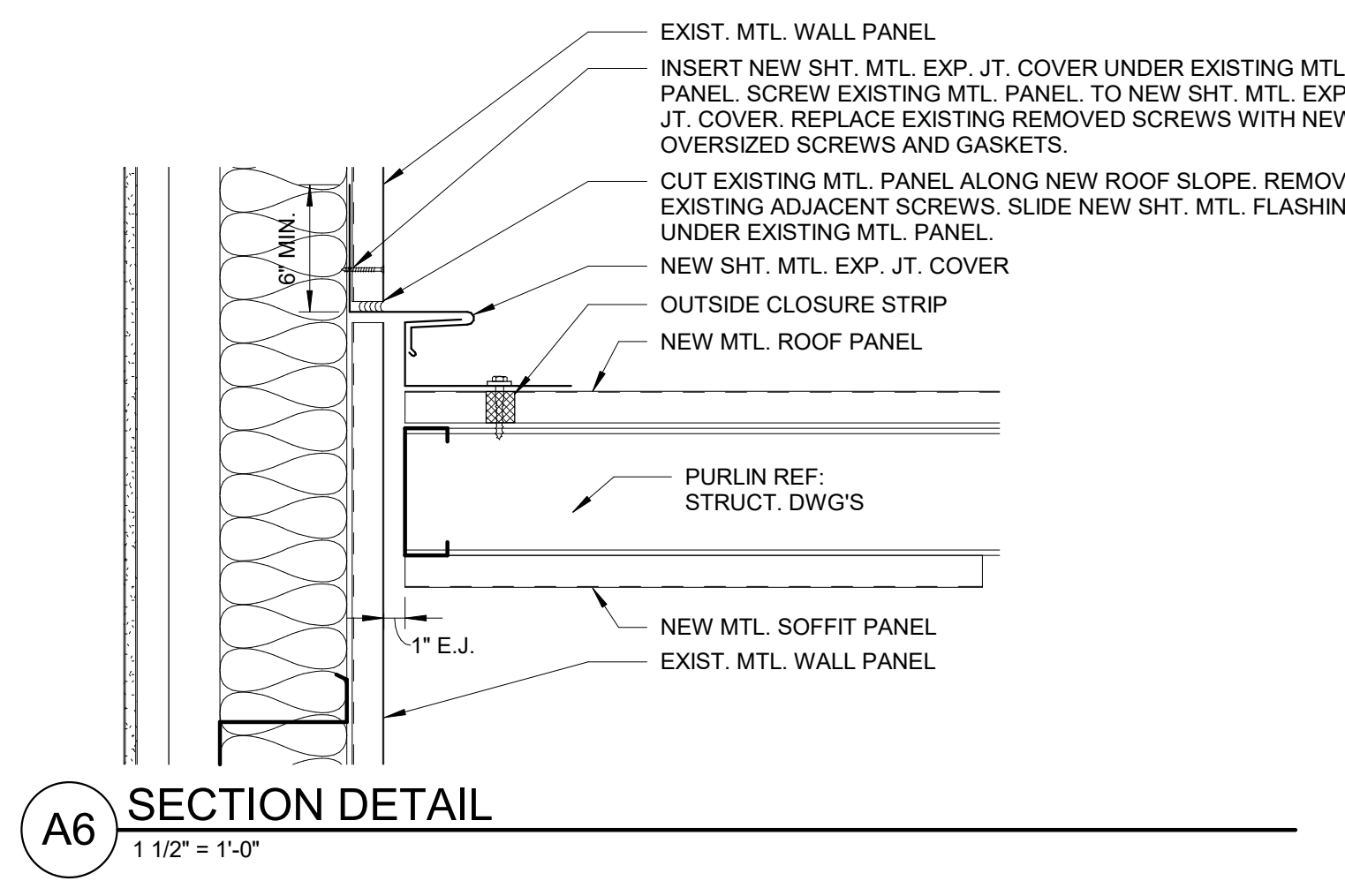
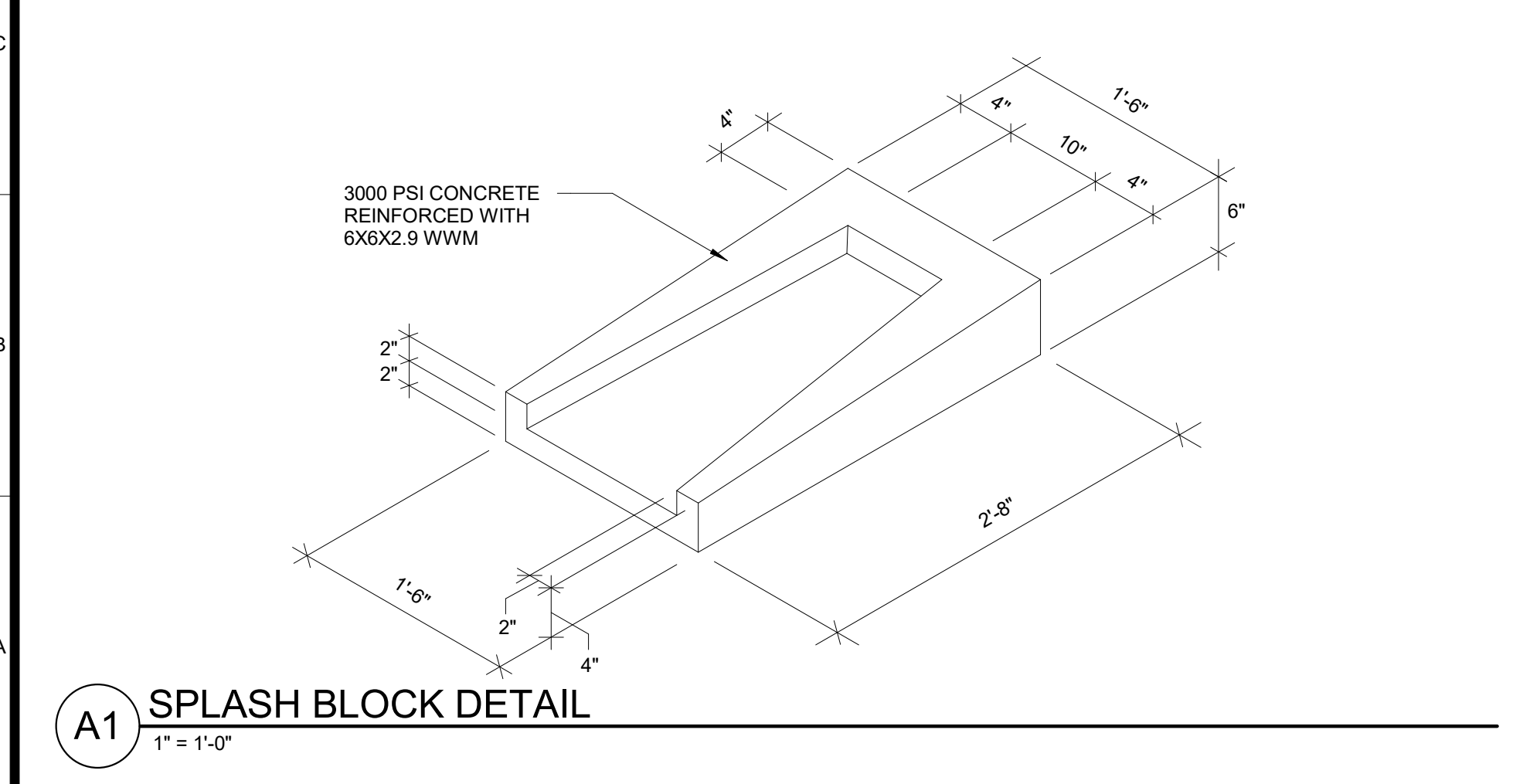
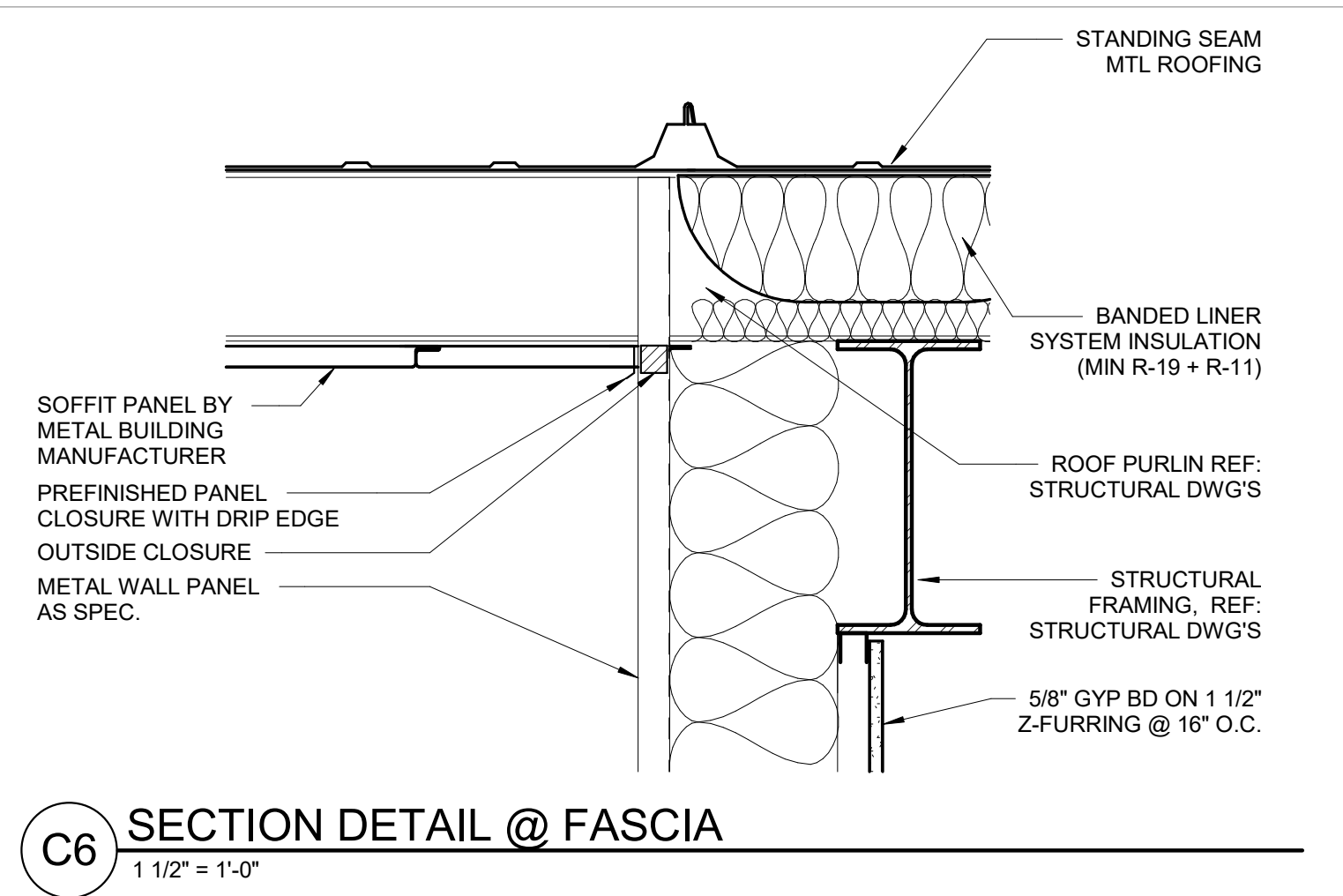
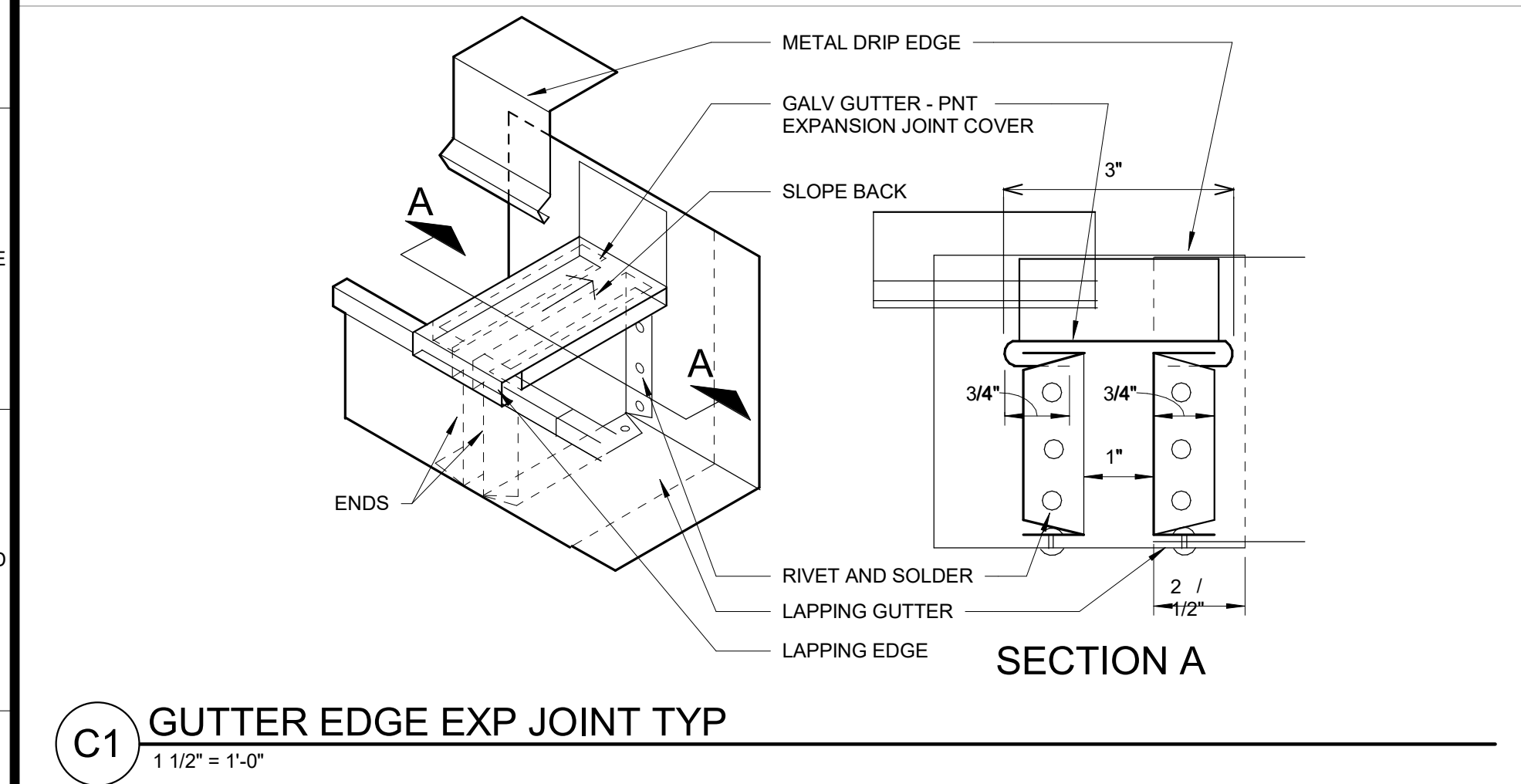
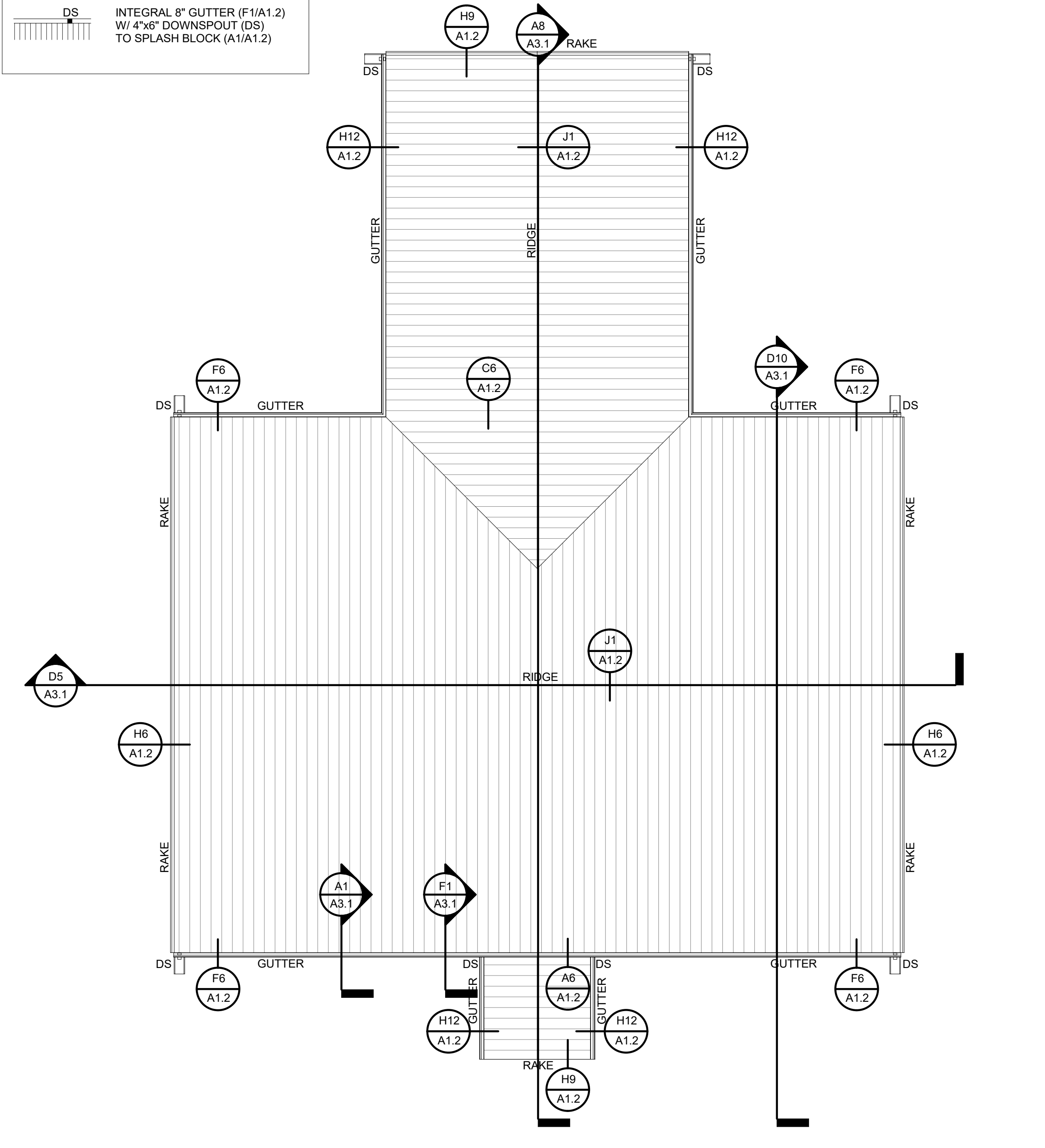
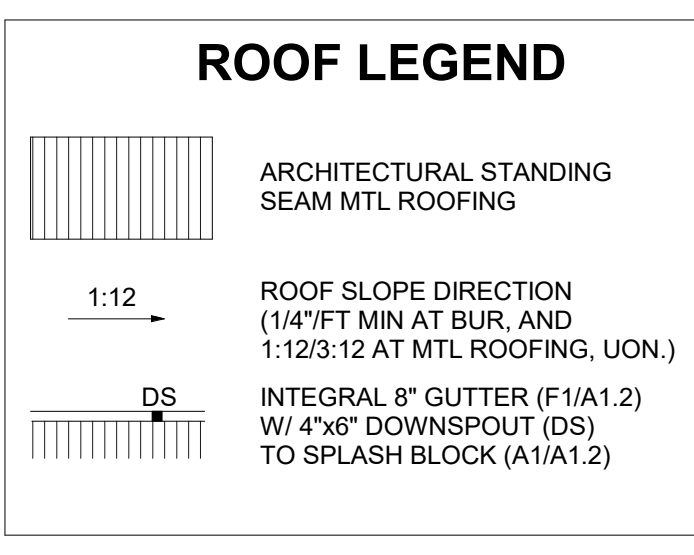
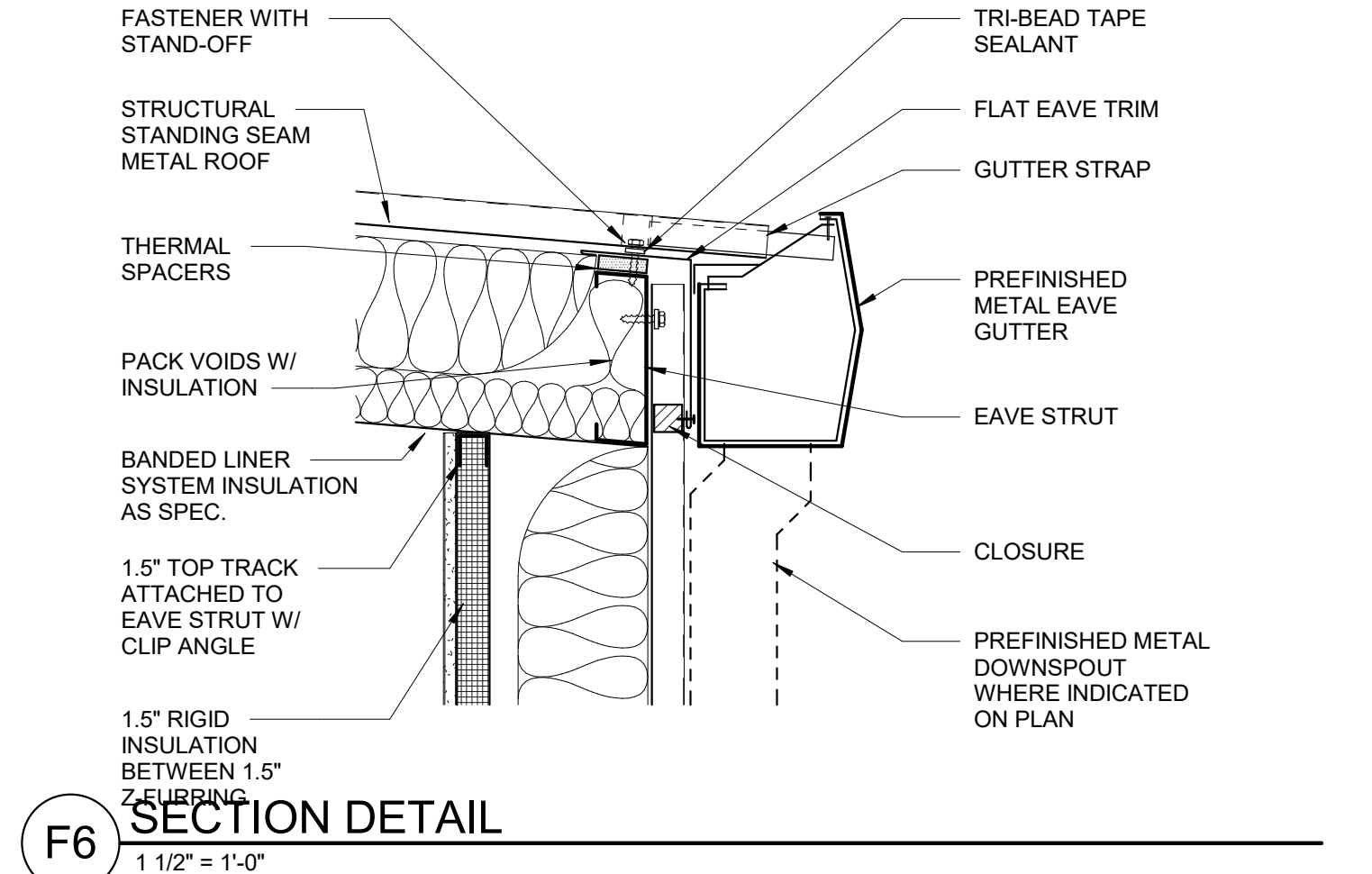
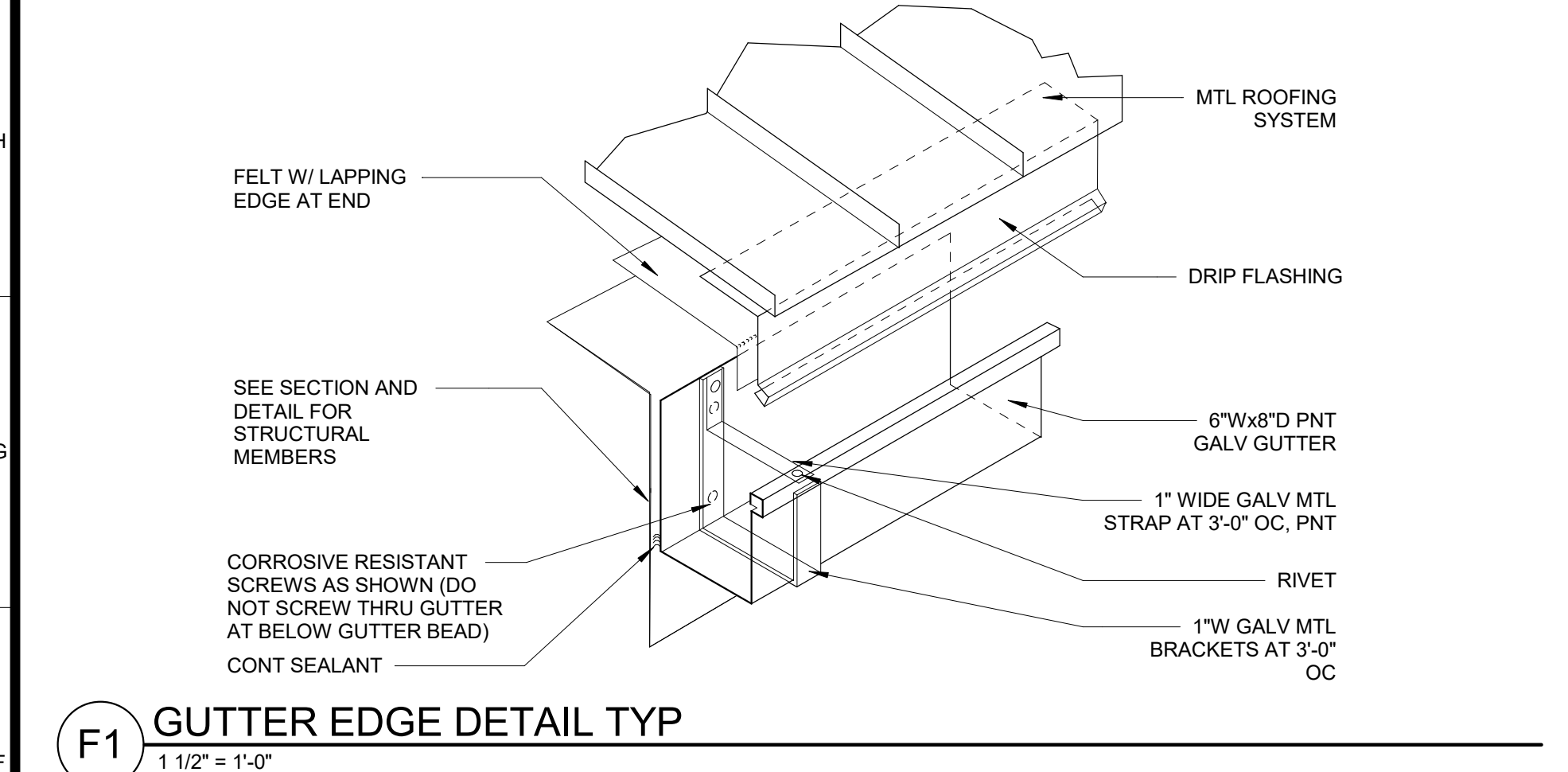
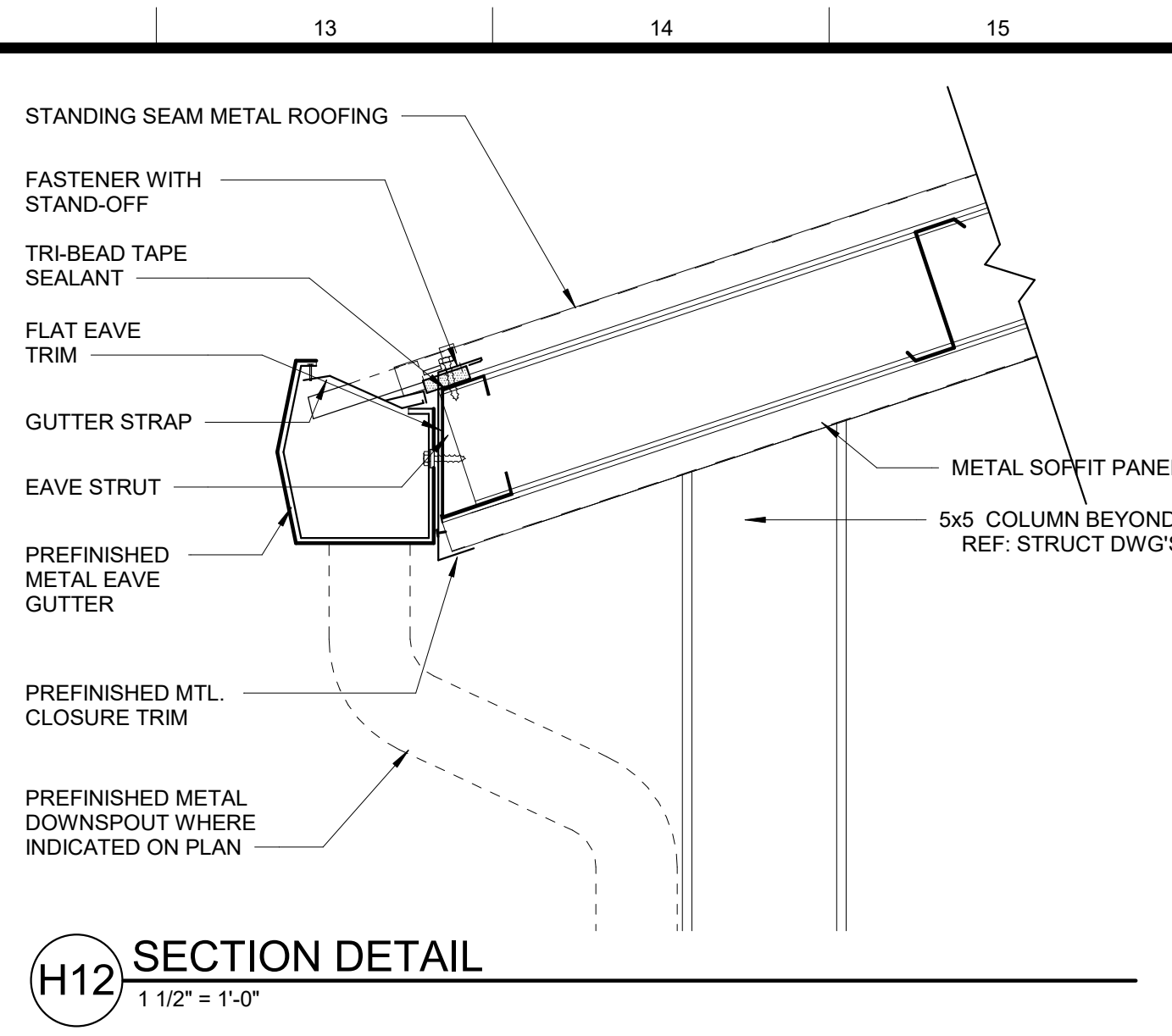
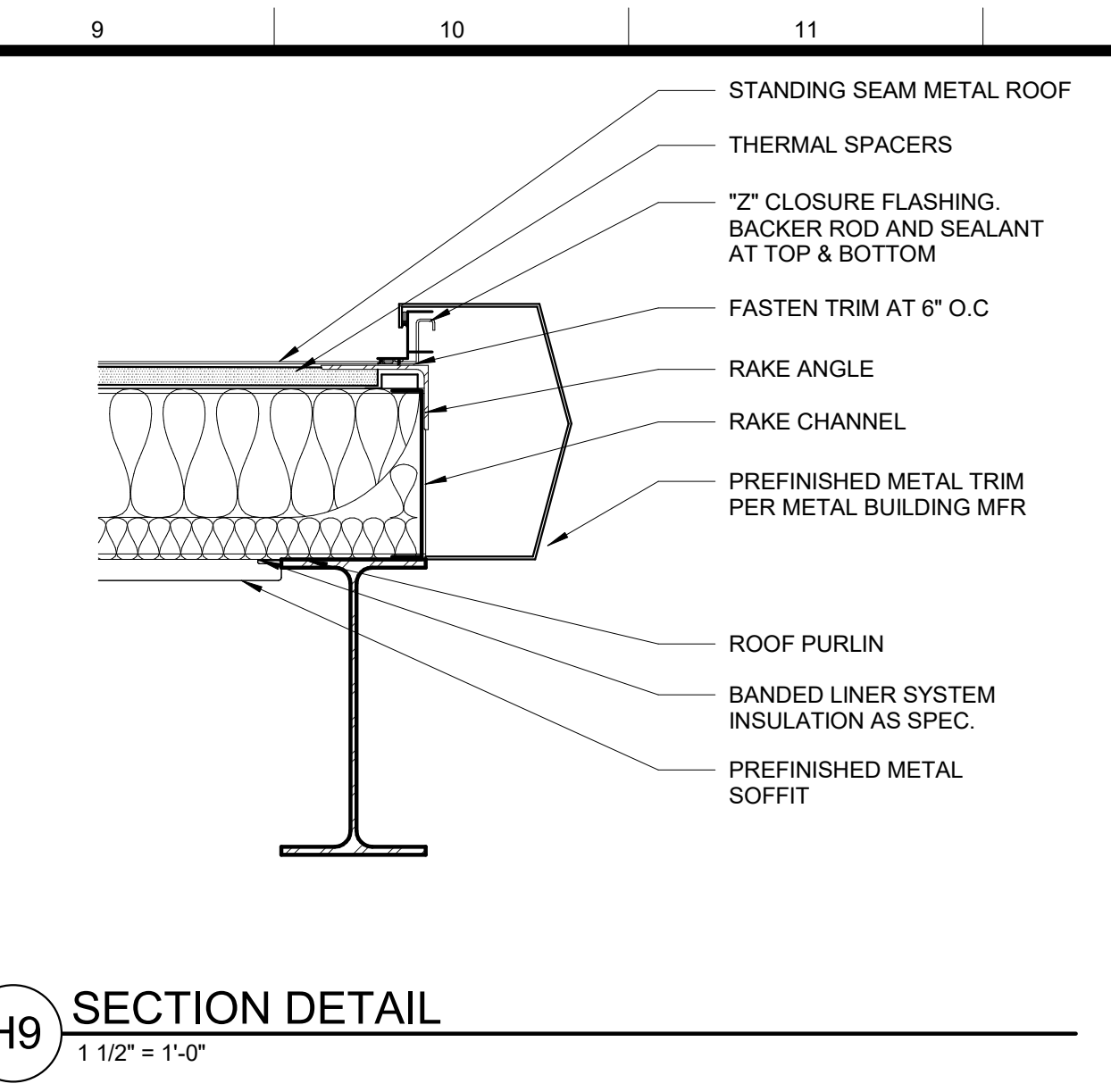
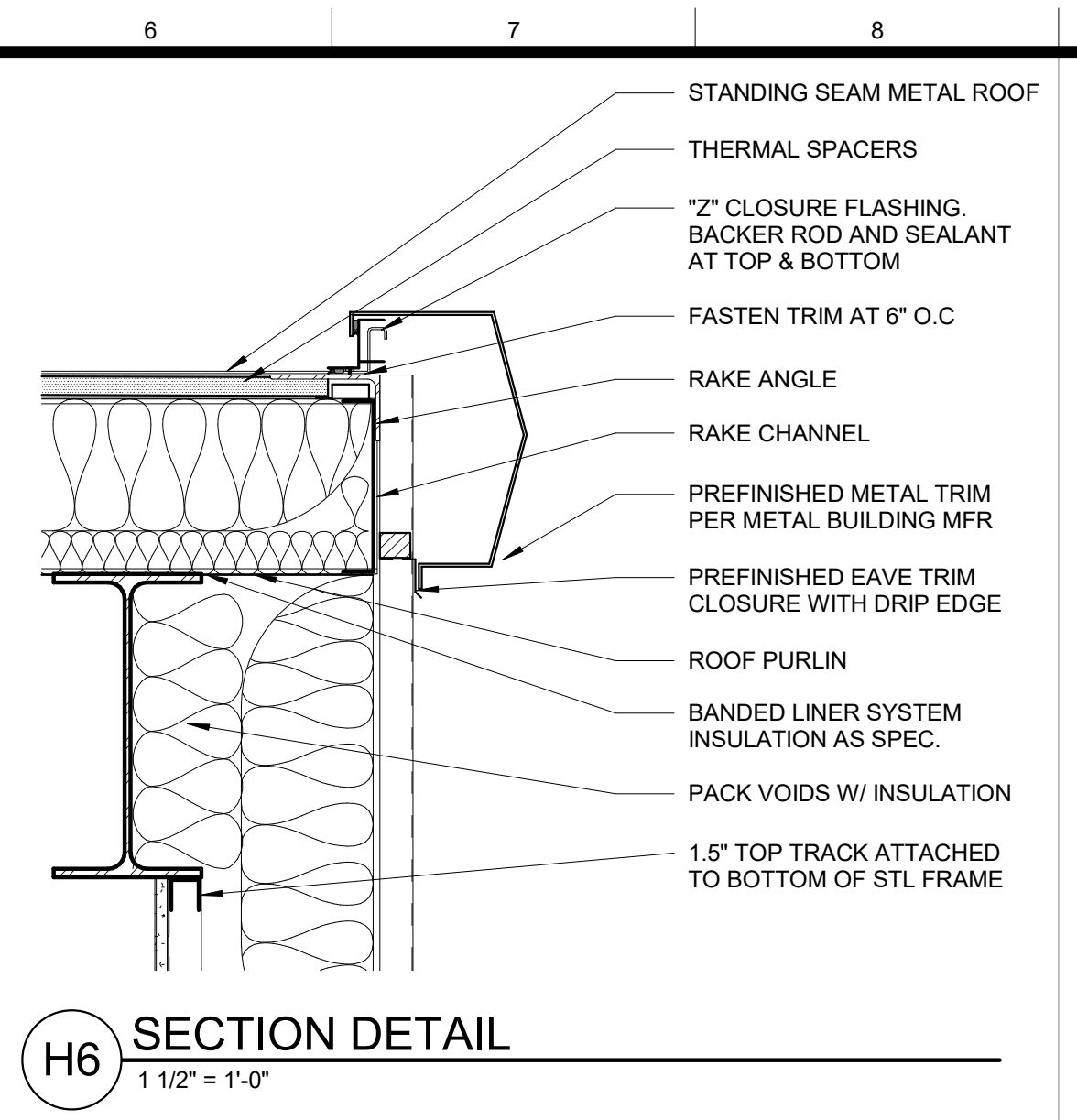
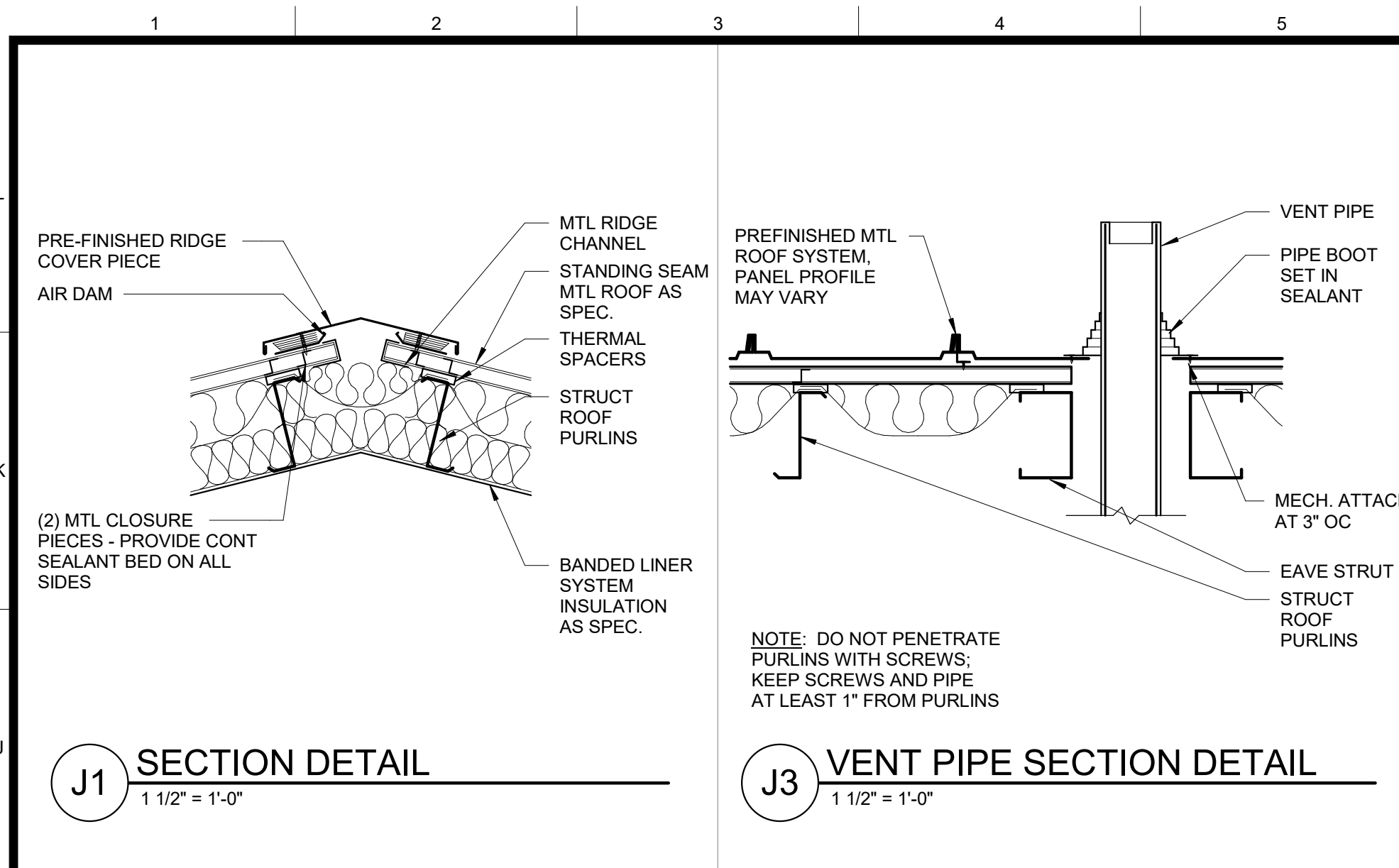
PROJECT NUMBER:
1027-0623

PLAN NORTH TRUE NORTH
SHEET NAME
FLOOR PLAN & REFLECTED CEILING PLAN

SHEET NUMBER

A1.1

2/7/2024 10:54:40 AM C:\Revit\Local Files\BCC-A22_patrickGPZF5.rvt



RMA ARCHITECTS & INTERIOR DESIGNERS
1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.rmaarch.com

PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

REGISTERED ARCHITECT
PATRICK DEAN OHRT
STATE OF TEXAS
21195
02-13-2024

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX

©2023 PARELLEY MACOBY & ASSOCIATES

DATE ISSUED:
Issue Date

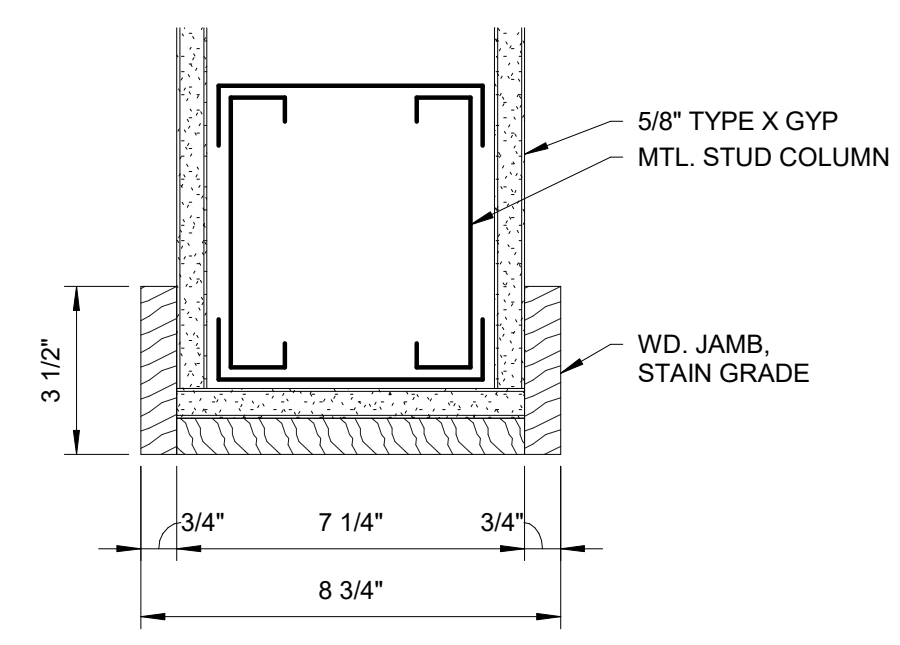
PROJECT NUMBER:
1027-0623

PLAN NORTH TRUE NORTH

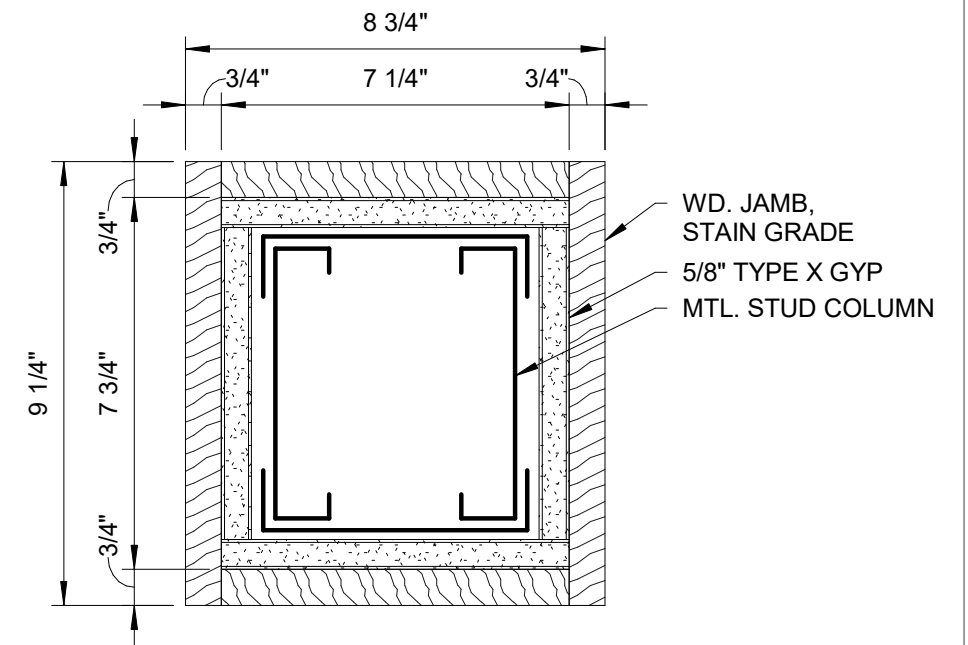
SHEET NAME
ROOF PLAN

SHEET NUMBER
A1.2

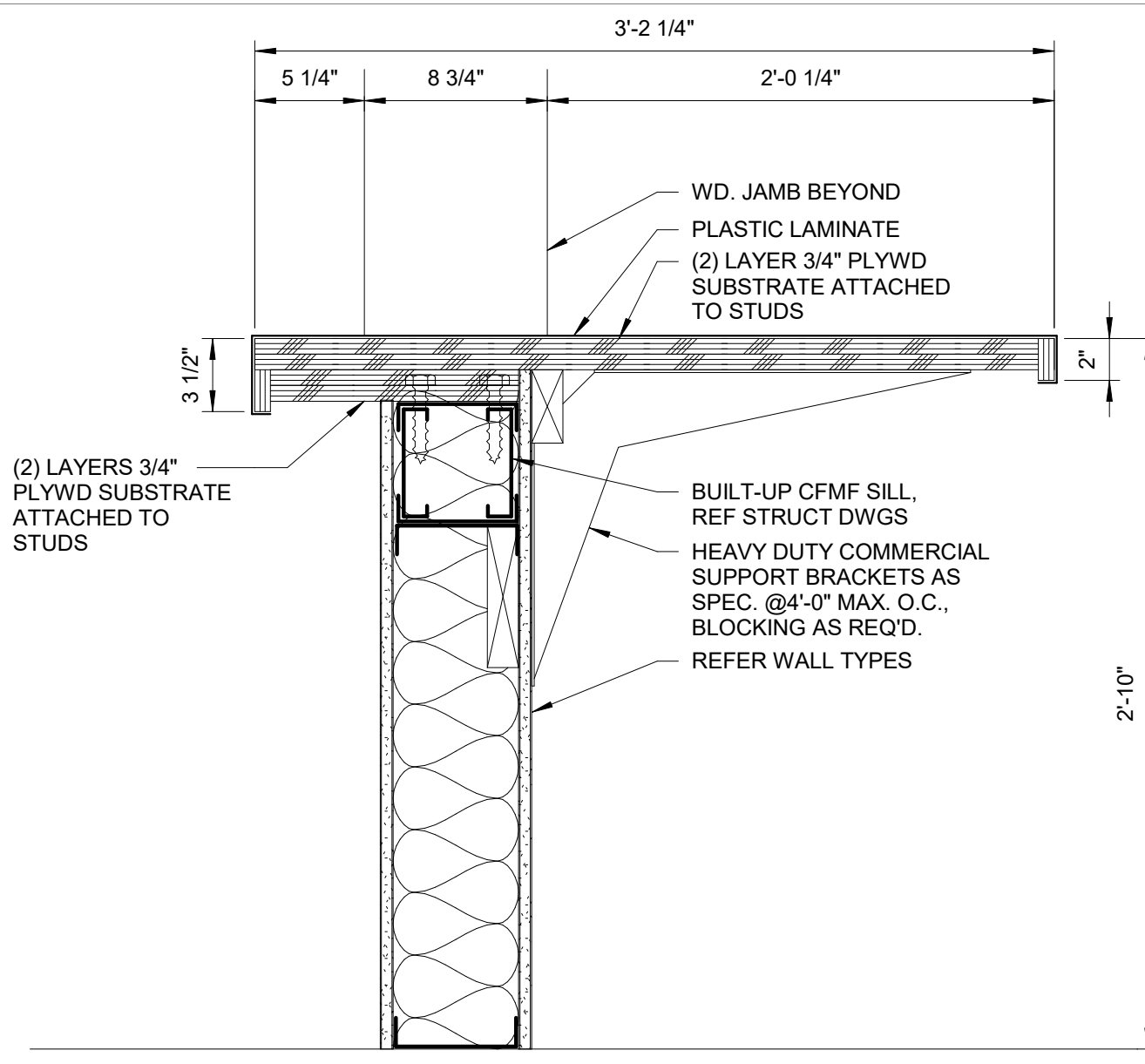
2/7/2024 10:54:41 AM
C:\Revit\Local Files\MCMC-BCC-A22_parelley\GPZF5.rvt



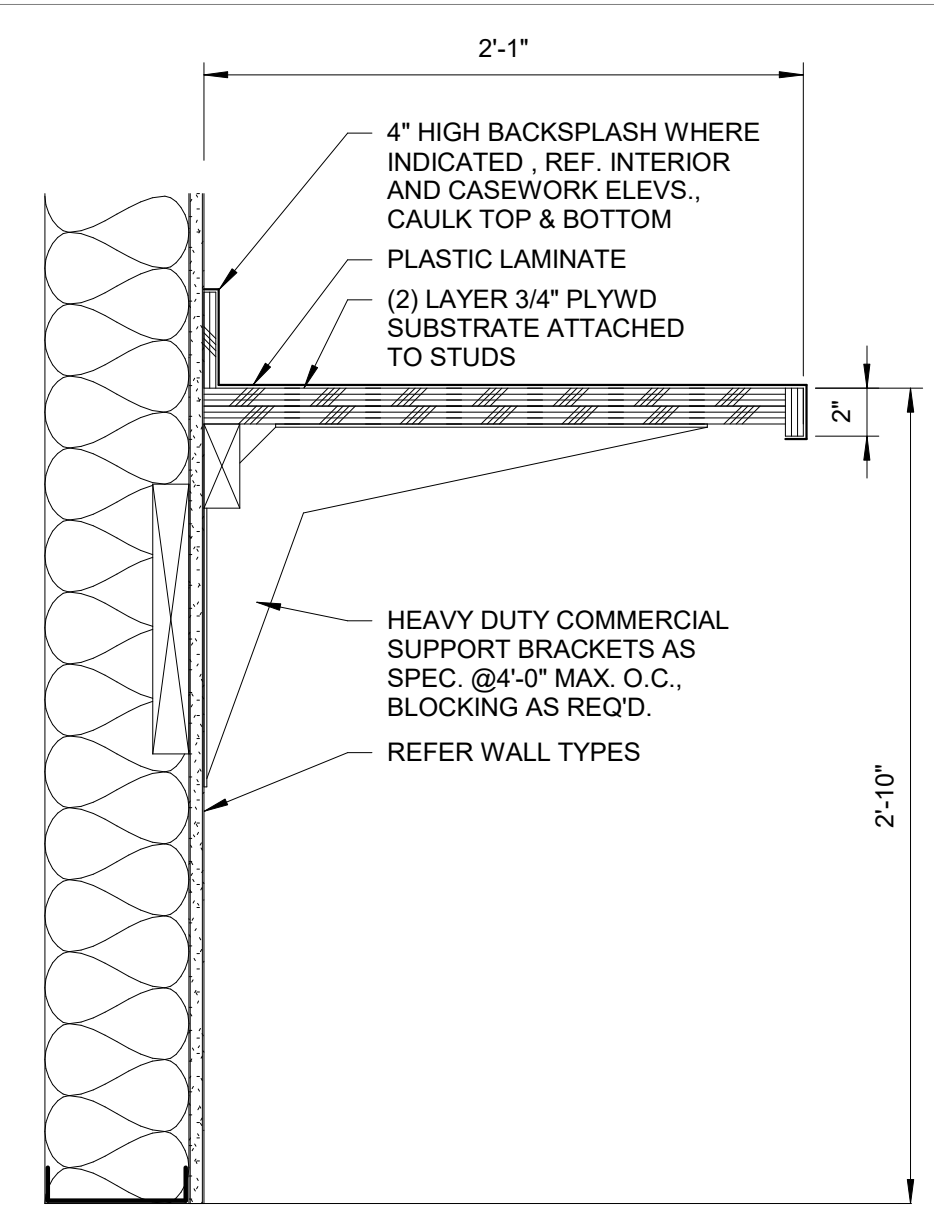
K4 OPENING HEAD/JAMB DETAIL
3" = 1'-0"



K7 OPENING COLUMN DETAIL
3" = 1'-0"

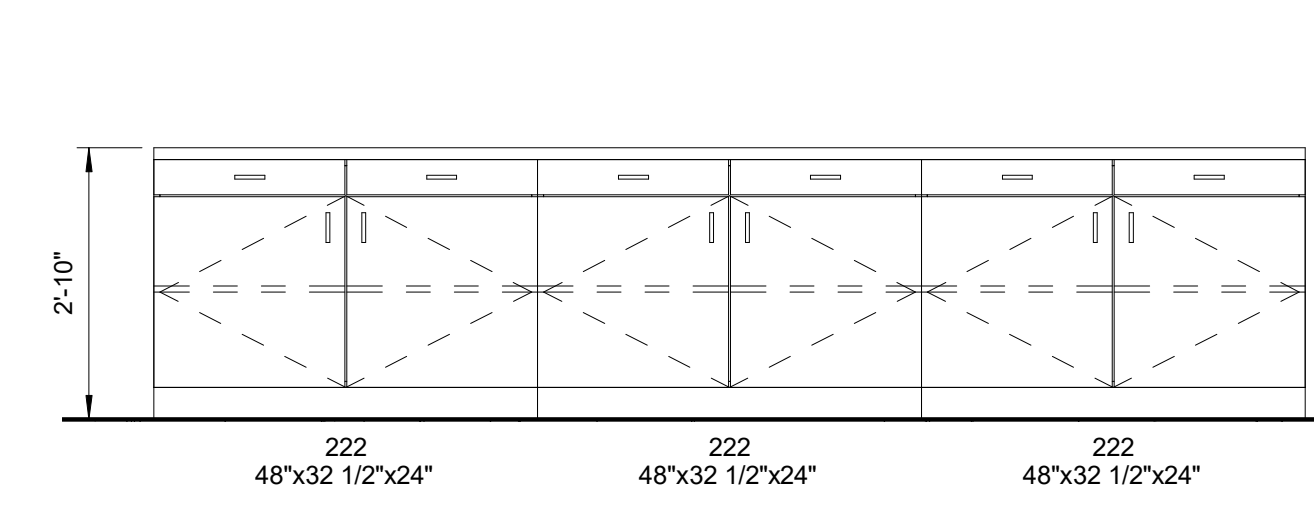
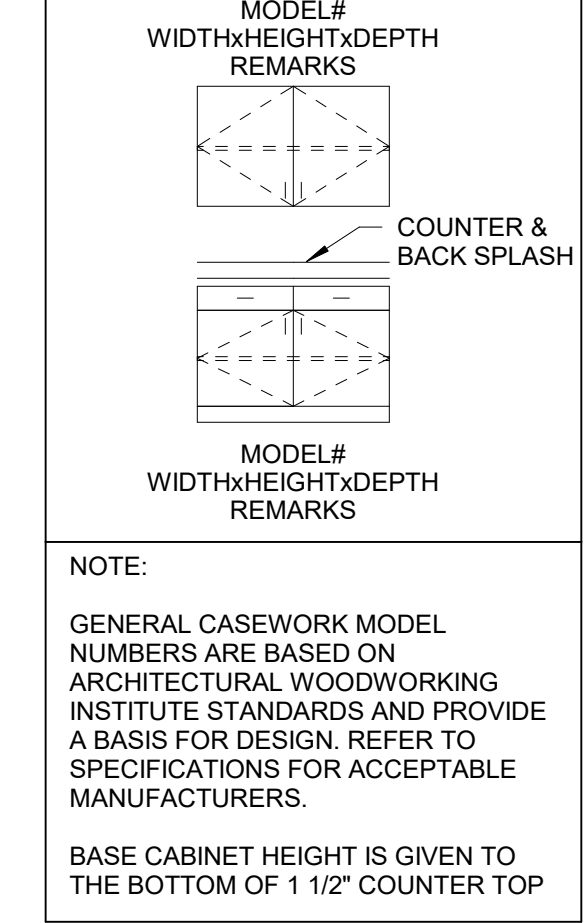


F1 SECTION DETAIL
1 1/2" = 1'-0"

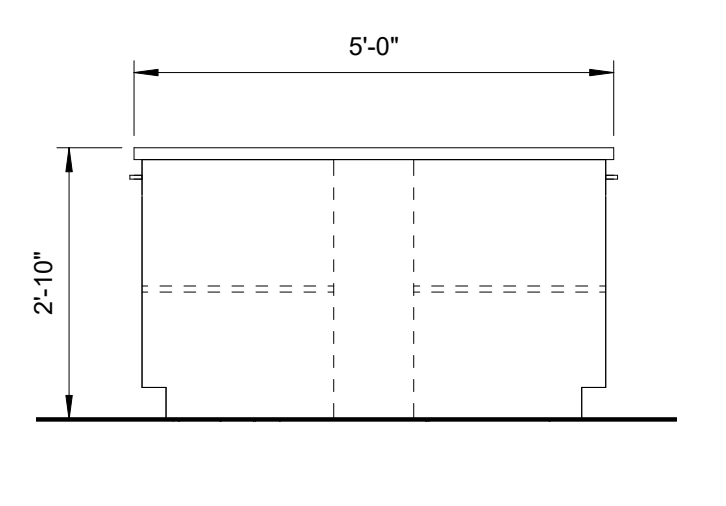


F4 SECTION DETAIL
1 1/2" = 1'-0"

CASEWORK LEGEND

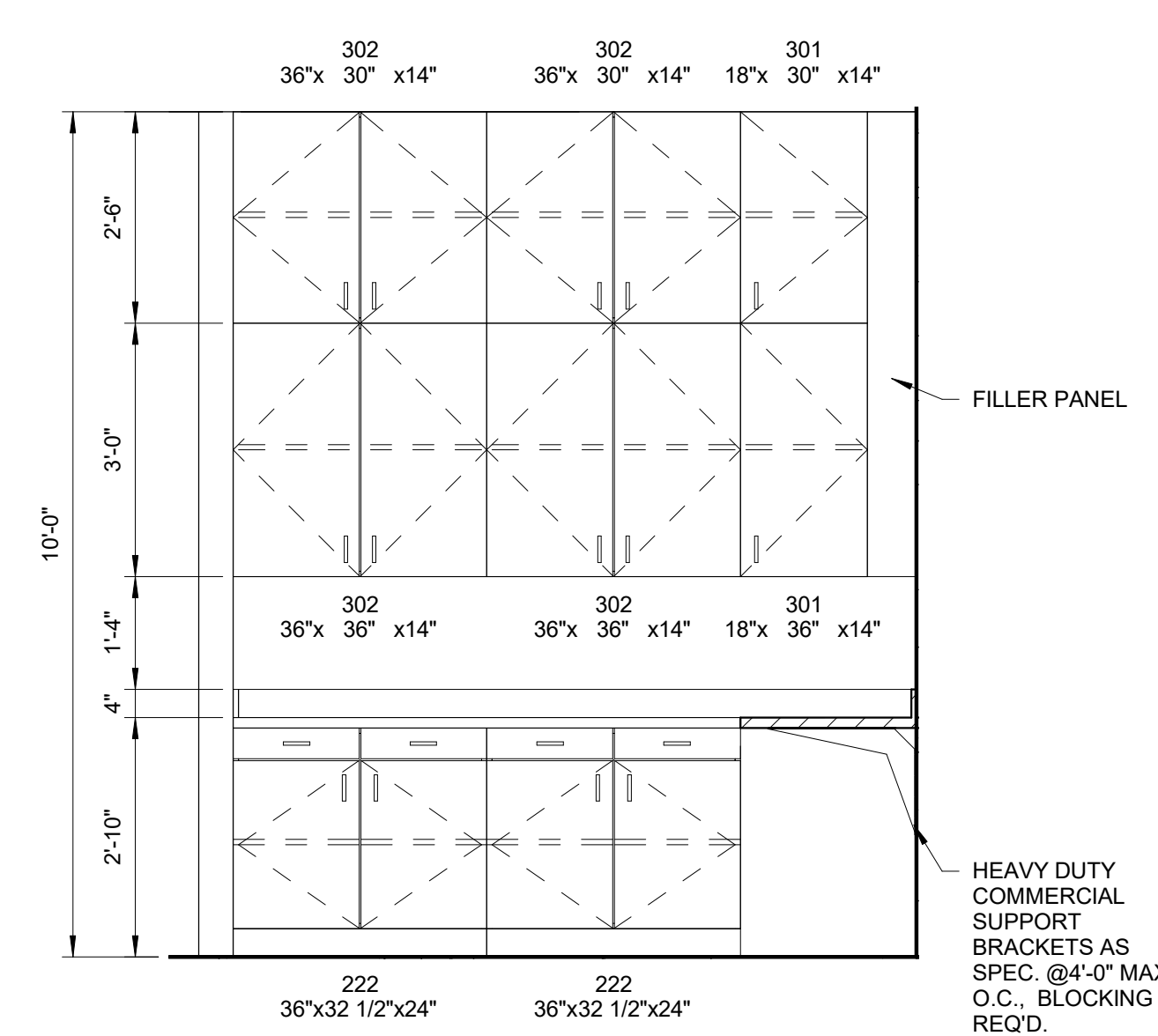


D1 CASEWORK ELEVATION
1/2" = 1'-0"

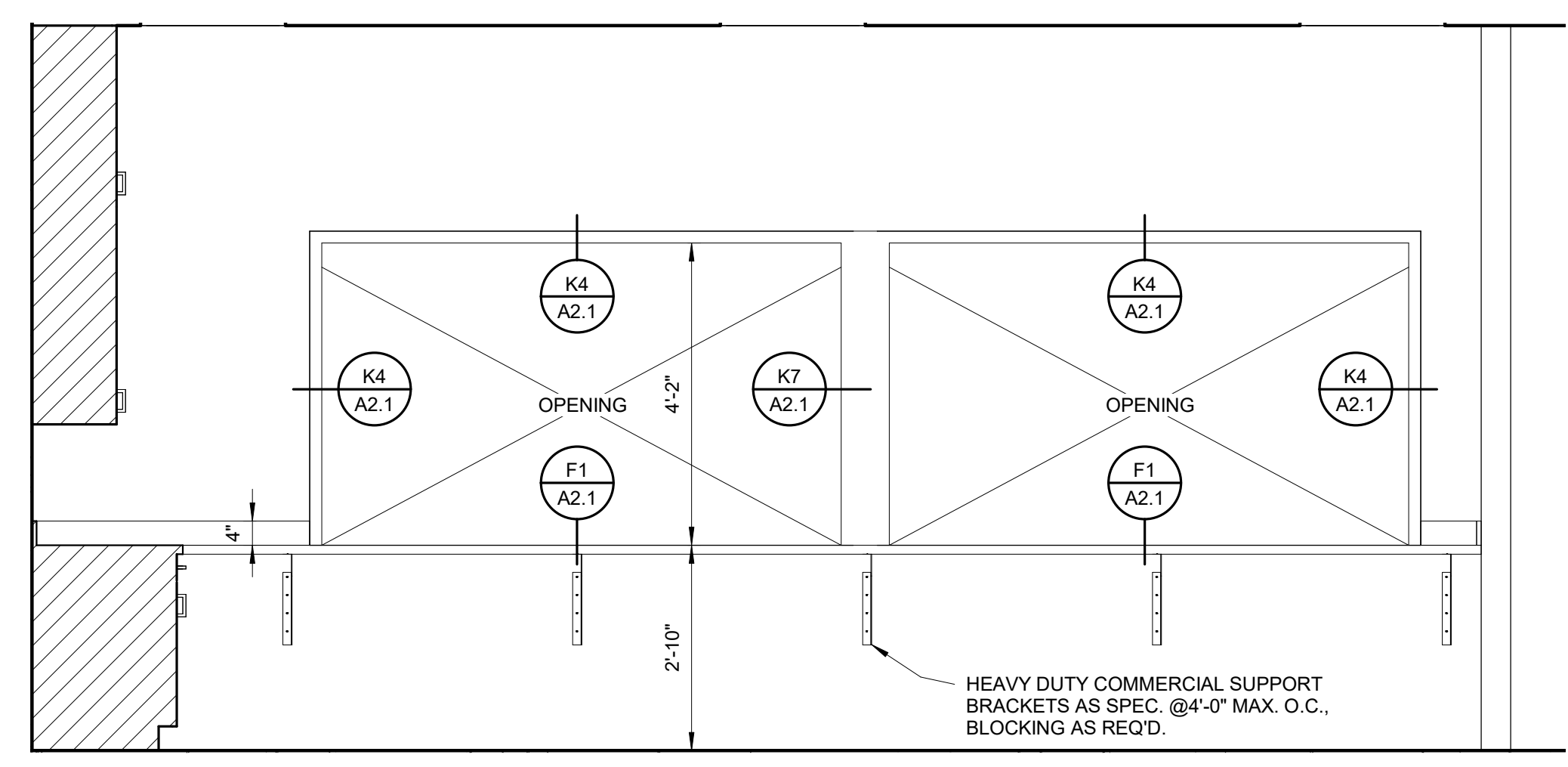


D4 CASEWORK ELEVATION
1/2" = 1'-0"

FINISH TAG KEY		FLOOR LEGEND	
APC2	CEILING TYPE	[Pattern]	SEALED CONCRETE
P1	WALL FINISH, UNO	[Pattern]	CFT1
RB1	BASE TYPE	[Pattern]	CFT2
VCT3	FLOOR FINISH	[Pattern]	LVT1
1	FINISH KEYNOTE		
P1	MATERIAL TAG (REF SHEET A8.2 FOR MATERIAL SCHEDULE)		

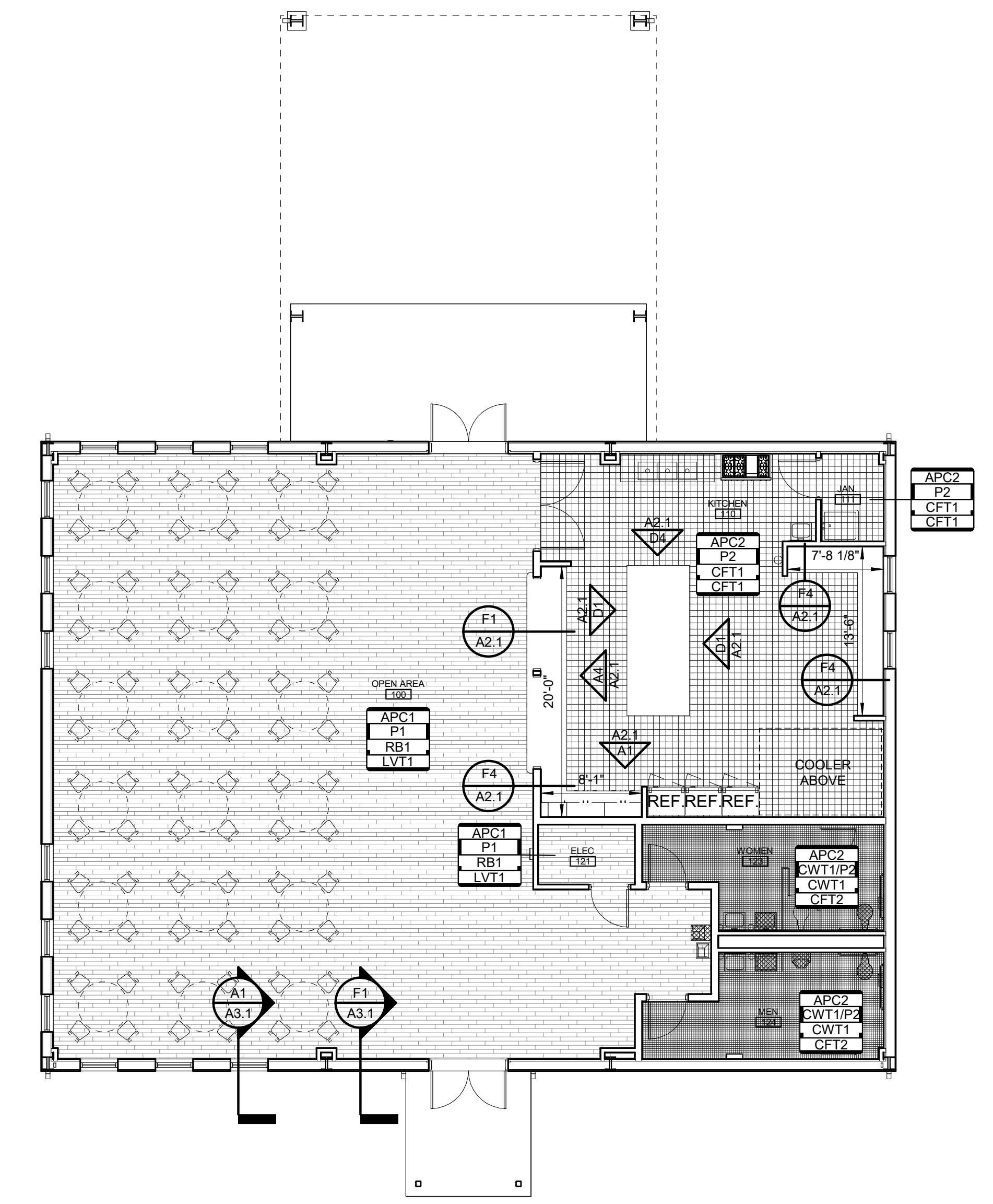


A1 CASEWORK ELEVATION
1/2" = 1'-0"



A4 CASEWORK ELEVATION
1/2" = 1'-0"

MATERIAL SCHEDULE						
MATERIAL	MARK	MANUFACTURER	STYLE	MFR. NO.	COLOR	LOCATION
ACOUSTIC PANEL CEILING	APC1	ARMSTRONG, 24x24	SCHOOL ZONE FINE FISSURED	465	WHITE	TYPICAL
ACOUSTIC PANEL CEILING	APC2	ARMSTRONG, 24x24	SHASTA - VINYL-FACED	2904	WHITE	KITCHEN AND RESTROOMS/SHOWERS
ALUMINUM STOREFRONT	AL1	KAWNEER	TRIFAB	VG 451T	-	
CERAMIC FLOOR TILE	CFT1	DAL TILE	QUARRY - 6"x6"			
CERAMIC FLOOR TILE	CFT2	AMERICAN OLEAN	UNGLAZED MOSAICS - 2"x2"	A17(2)	BISCUIT SPECKLED	RESTROOMS
CERAMIC WALL TILE	CWT1	AMERICAN OLEAN	COLOR STORY WALL - 4"x4"	0036(1)	MATTE CALM	RESTROOMS
GLASS	GL-1	PPG	SINGLE PANE SAFETY GLASS	-	CLEAR	INTERIOR GLAZING
GLASS	GL-2	PPG	SOLABAN 60	-	SOLARGRAY	EXTERIOR GLAZING
GROUT	GT1	LATICRETE	-	-	-	
LUXURY VINYL TILE	LVT1	MOHAWK	MOLVENO STONES	879	PERFECT GREIGE	
METAL ROOF	MR	MBCI	PBR	-	STANDARD-SIGNATURE 200 OR 300	
METAL SOFFIT PANEL	MS1	MBCI	FW-120	KYNAR 500	-	
METAL WALL PANEL	MP1	MBCI	PBR	KYNAR 500	-	
PAINT	P1	SHERWIN WILLIAMS	-	SW 7043	WORLDLY GRAY	STANDARD WALL COLOR, EXPOSED STRUCTURE
PAINT	P2	SHERWIN WILLIAMS	-	SW 6074	SPALDING GRAY	HM DOOR FRAMES, STEEL DOORS, HANDRAILS
PAINT	P3	SHERWIN WILLIAMS	-	SW 6074	SPALDING GRAY	ACCENT COLOR
PLASTIC LAMINATE	PL1	WILSONART	MATTE FINISH	4842-60	CANYON ZEPHYR	BASE CABINETS, UPPER CABINETS
PLASTIC LAMINATE	PL2	WILSONART	FINE VELVET FINISH	5036-38	HANDSPUN CHESTNUT	COUNTER TOPS
PREFINISHED METAL	PM1	CECO	-	KYNAR 500	-	GUTTERS, DOWNSPOUTS, RAKES, EXTERIOR METAL TRIM, BUILDING SIGNAGE, METAL LOCKERS
PREFINISHED METAL	PM2	CECO	-	KYNAR 500	-	LOUVERS
RUBBER BASE	RB1	JOHNSONITE	4" COVE	TA8	WELSH CASTLE CB	
TOILET PARTITION	TP1	AMPCO	HIGH DENSITY POLYETHYLENE		STANDARD	
WOOD STAIN	WS1	SHERWIN WILLIAMS	-	-	CLEAR MAPLE	WOOD DOORS, WOOD SILLS

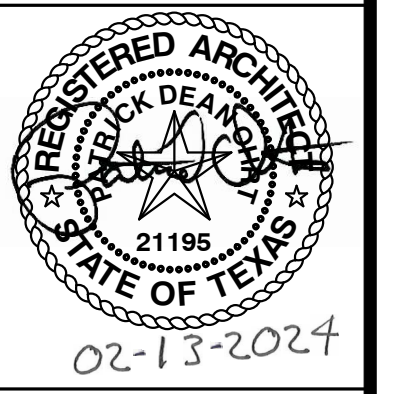


A10 FINISH PLAN
1/8" = 1'-0"



PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction



BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX

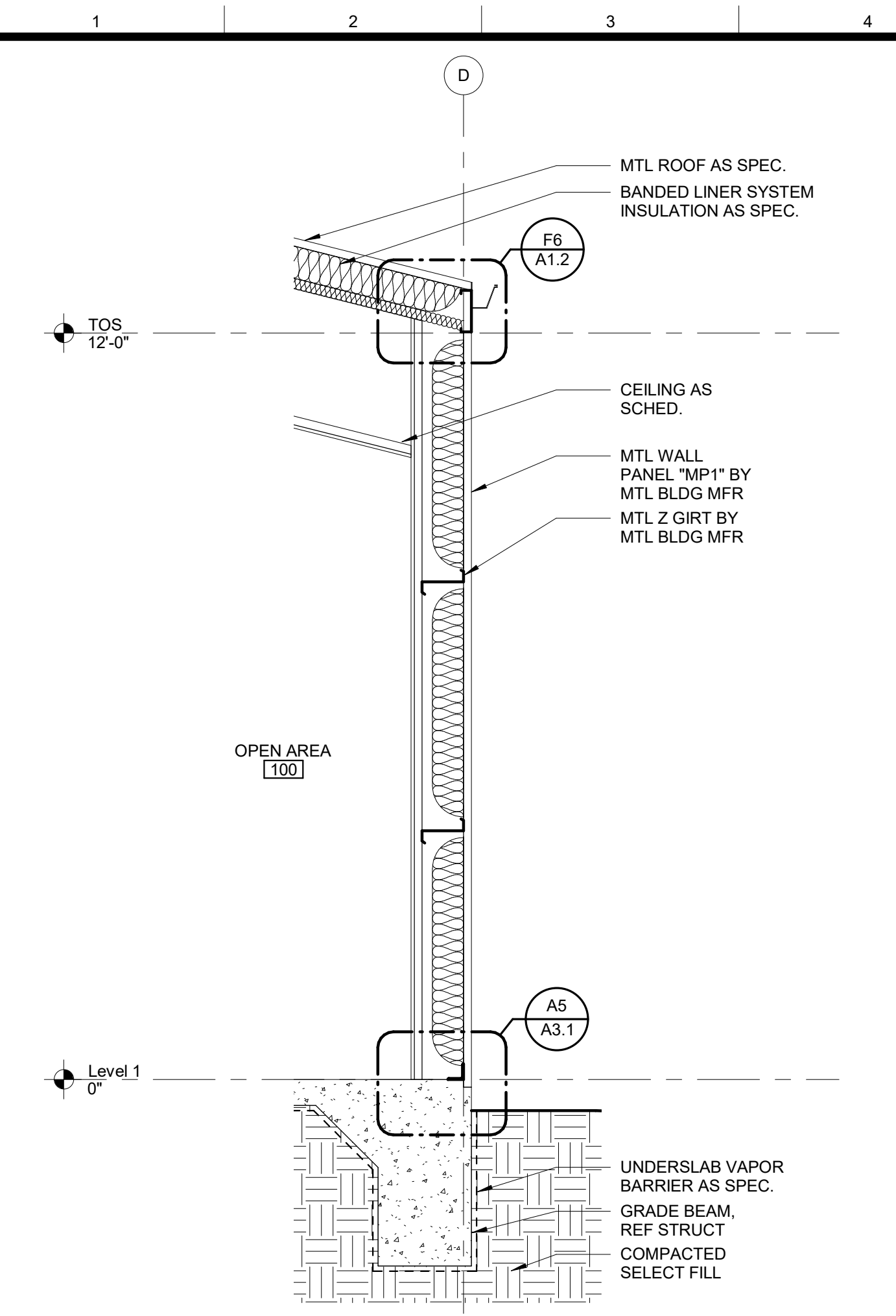
DATE ISSUED:
Issue Date

PROJECT NUMBER:
1027-0623

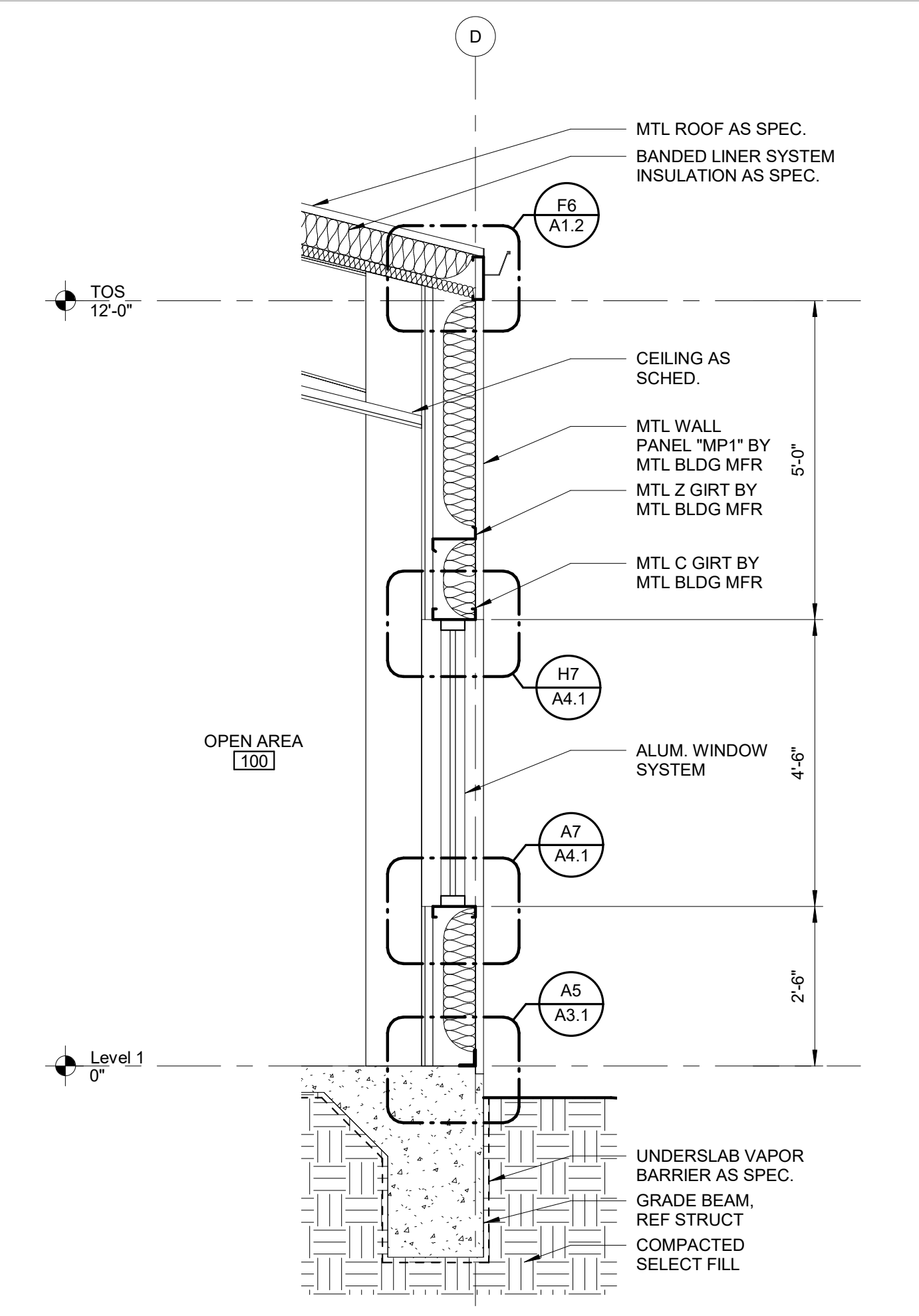
PLAN NORTH TRUE NORTH
SHEET NAME
FINISH PLAN & CASEWORK ELEVATIONS
SHEET NUMBER

A2.1

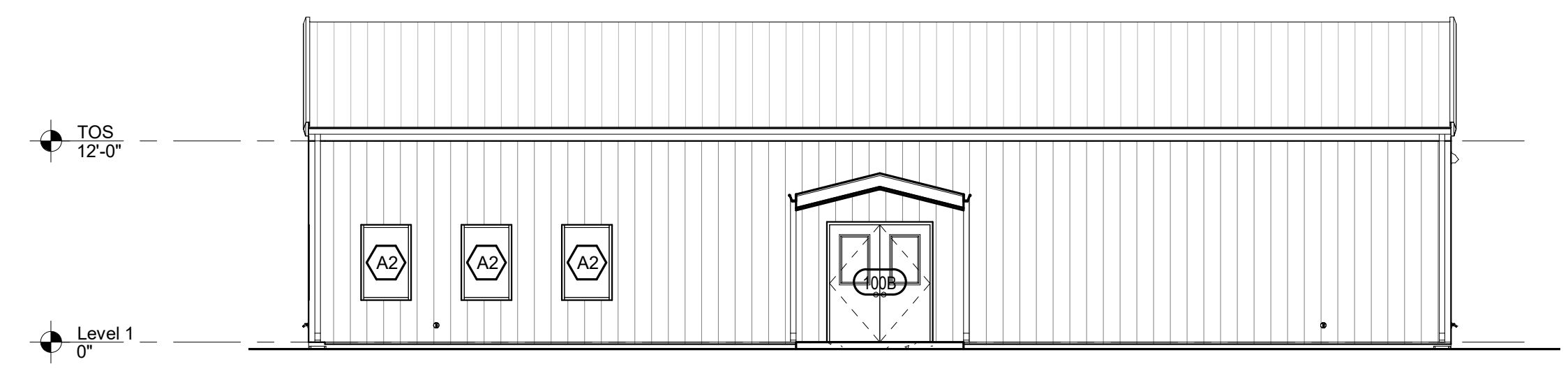
2/7/2024 10:54:42 AM
C:\Revit Local Files\BCC-A22_pattickGPZF5.rvt



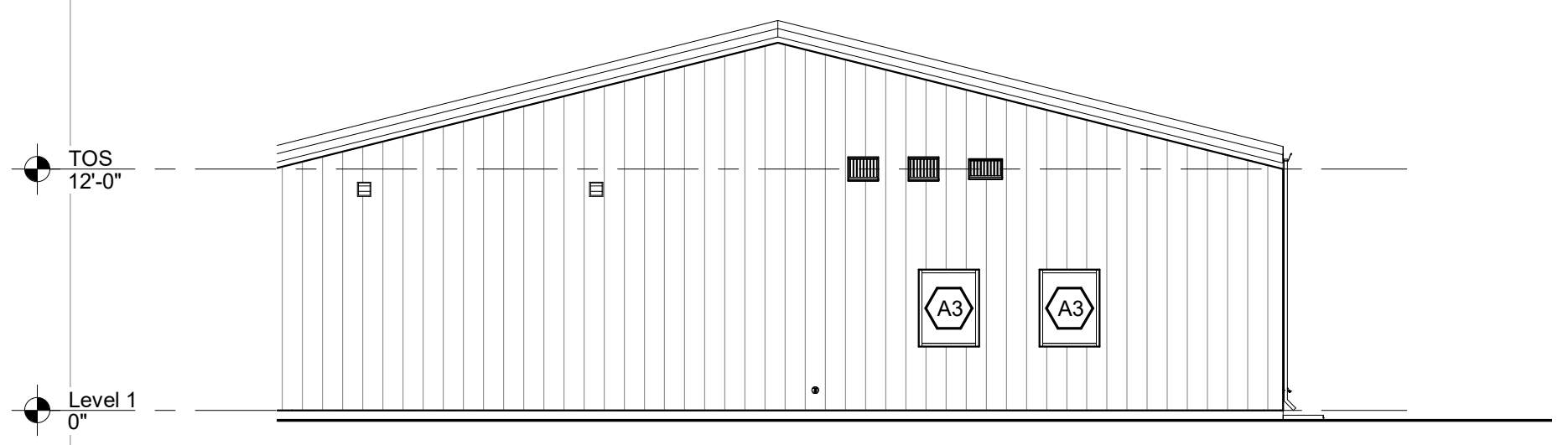
F1 WALL SECTION
 1/2" = 1'-0"



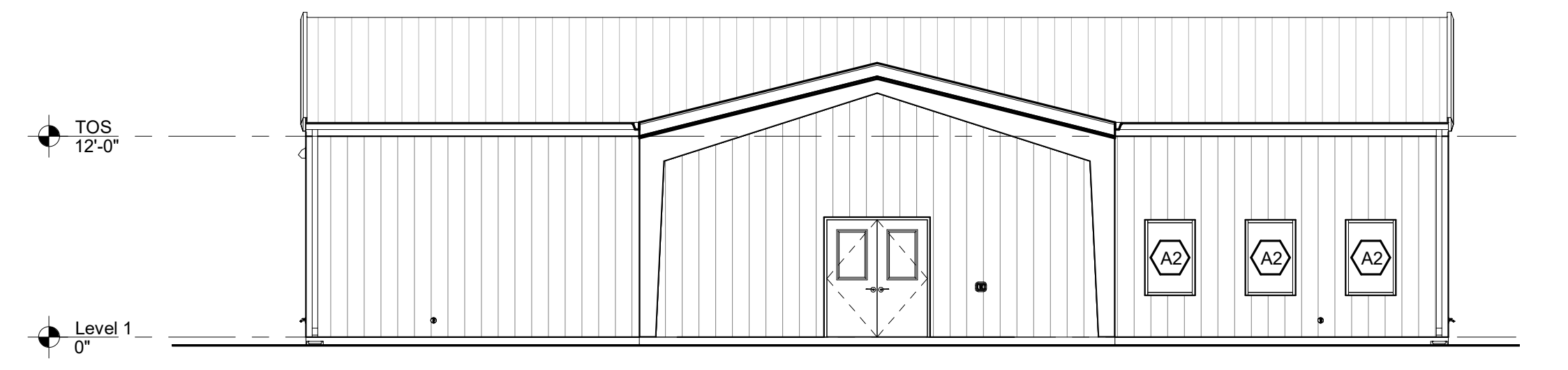
A1 WALL SECTION
 1/2" = 1'-0"



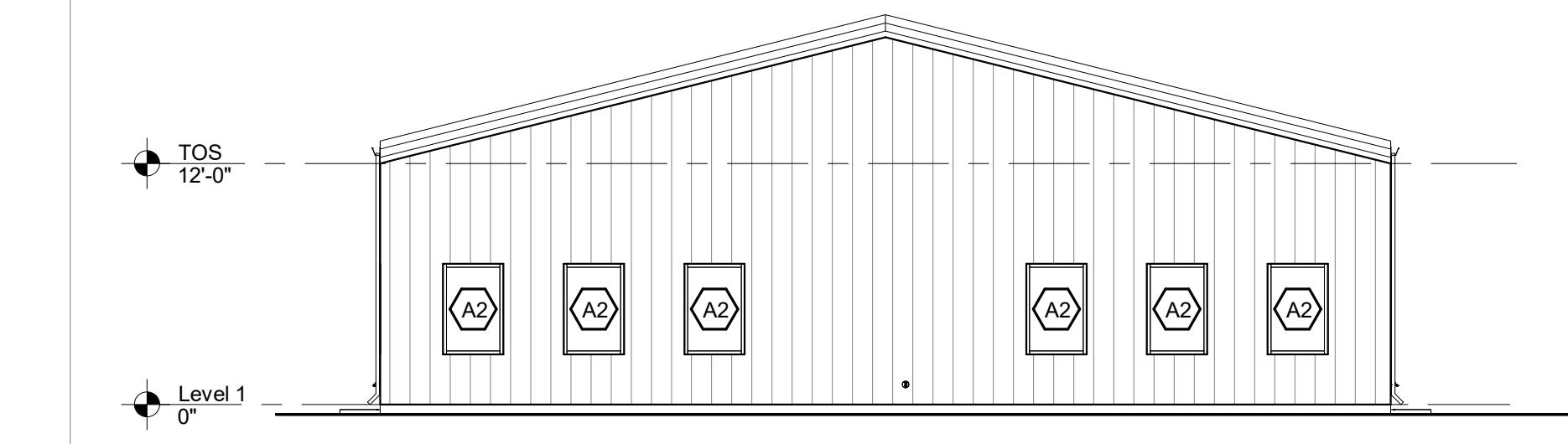
J5 EXTERIOR ELEVATION
 1/8" = 1'-0"



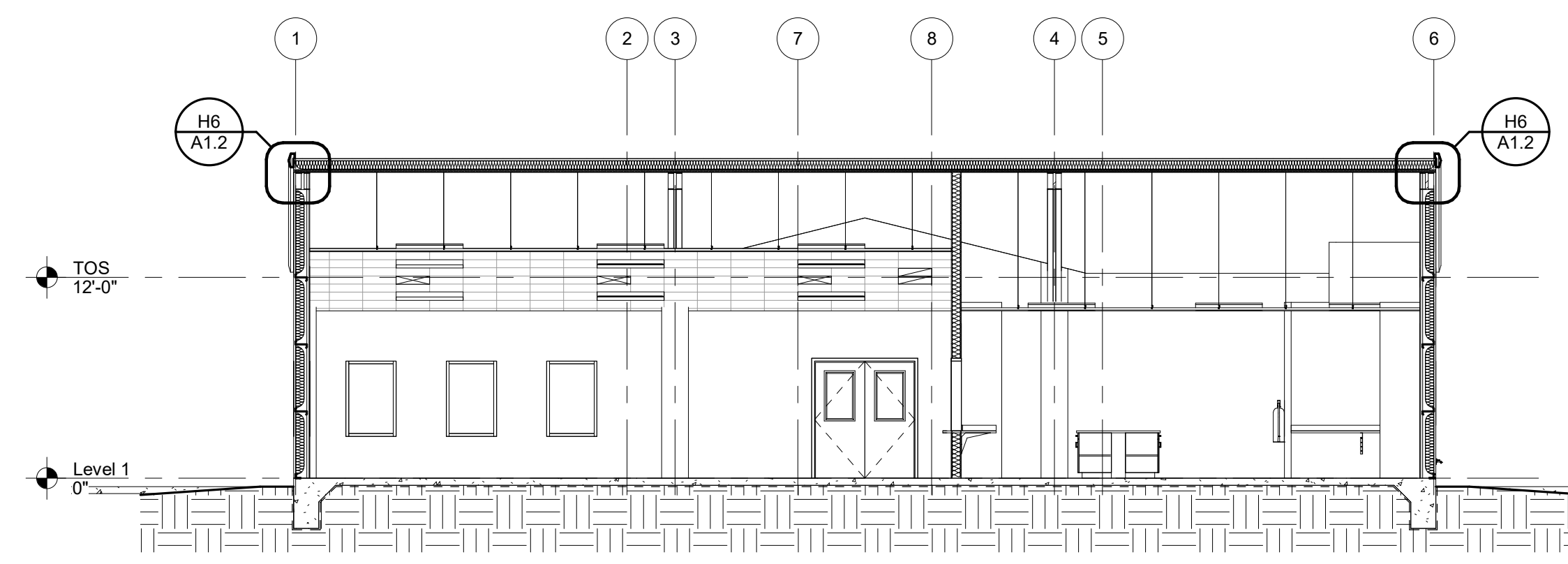
J10 EXTERIOR ELEVATION
 1/8" = 1'-0"



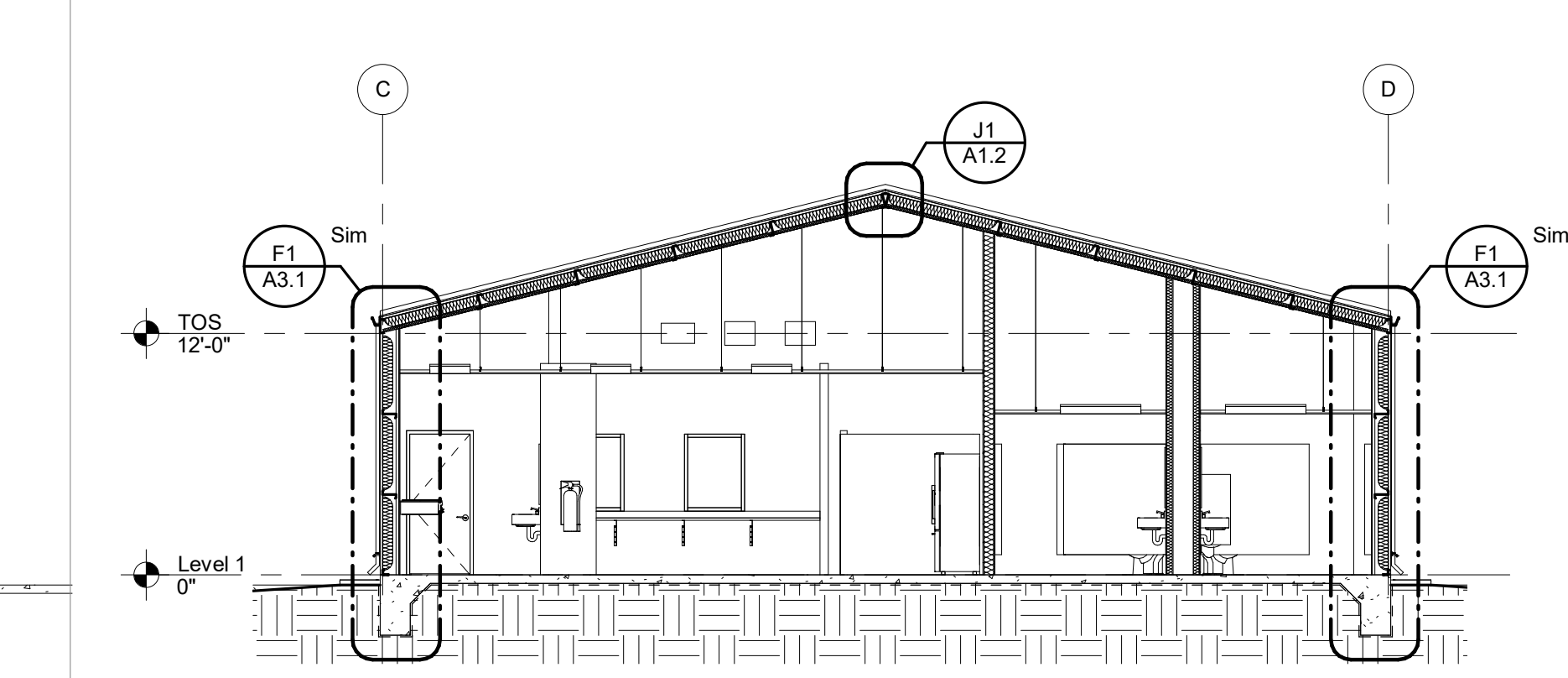
G5 EXTERIOR ELEVATION
 1/8" = 1'-0"



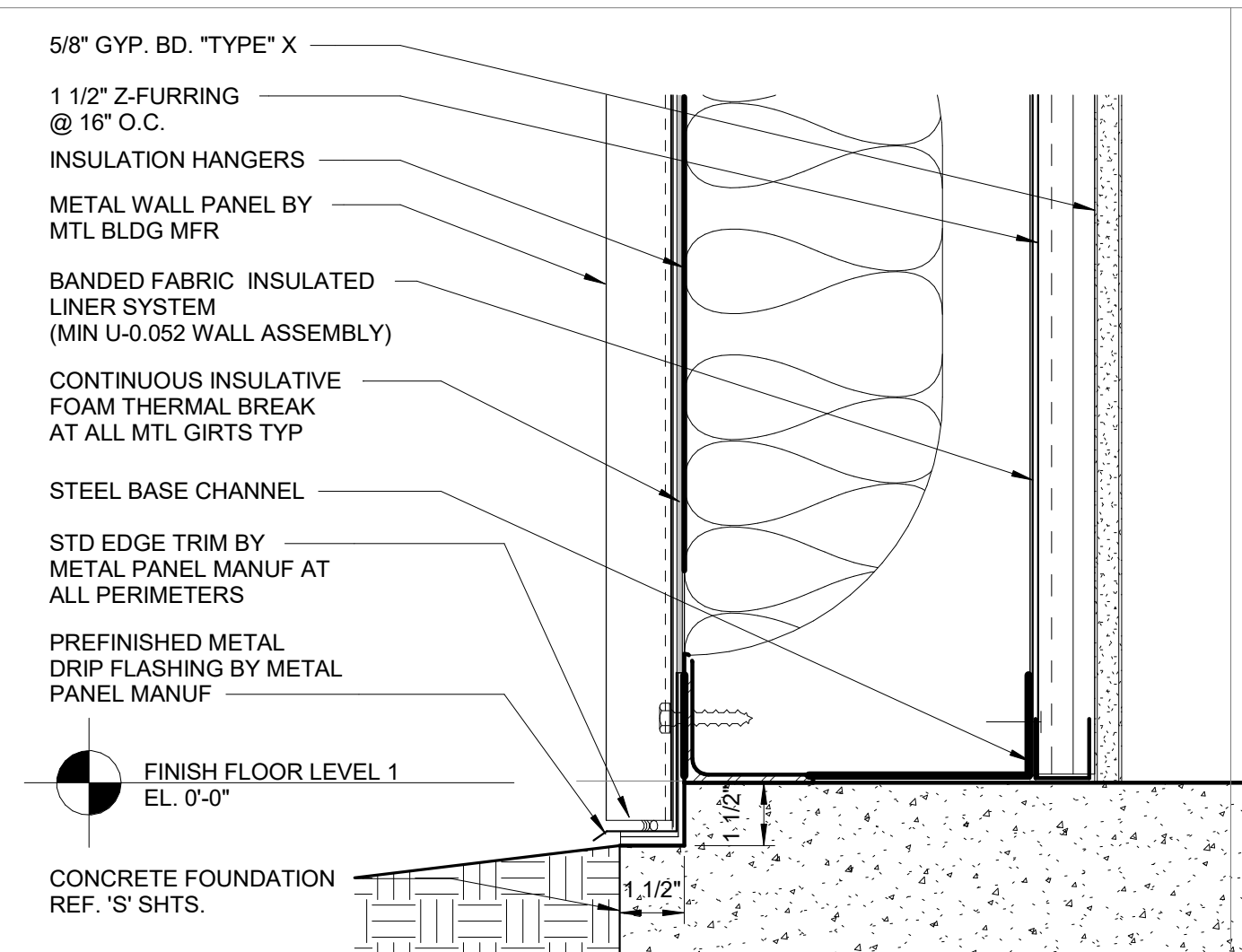
G10 EXTERIOR ELEVATION
 1/8" = 1'-0"



D5 BUILDING SECTION
 1/8" = 1'-0"



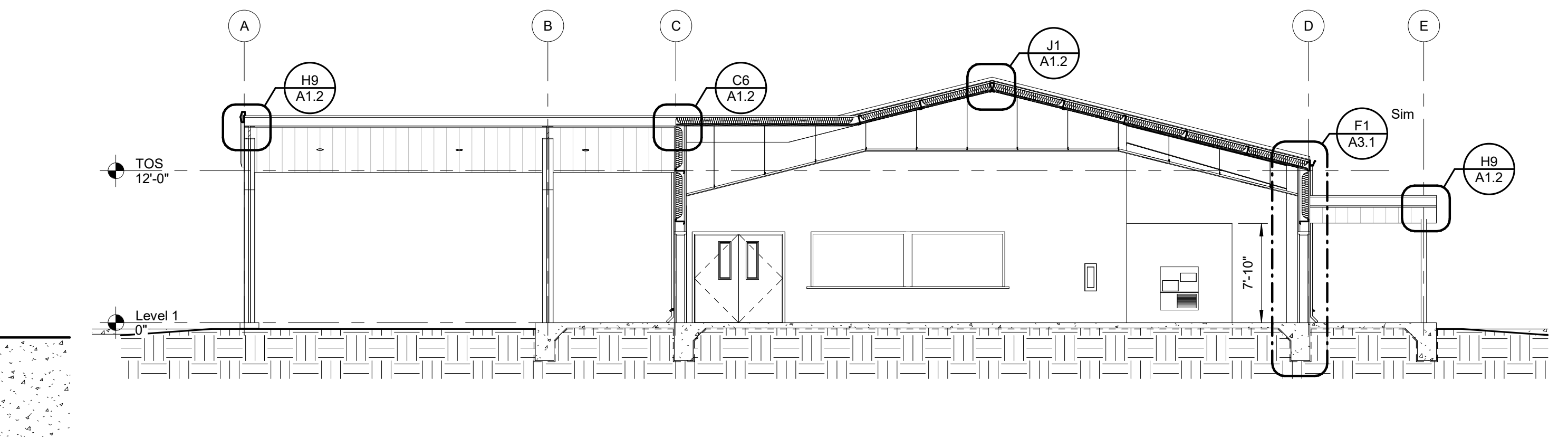
D10 BUILDING SECTION
 1/8" = 1'-0"



A5 METAL PANEL LEDGE DETAIL
 3" = 1'-0"

ELEVATION LEGEND

- VERTICAL METAL PANEL - MP1
- STANDING SEAM METAL ROOF



A8 BUILDING SECTION
 1/8" = 1'-0"

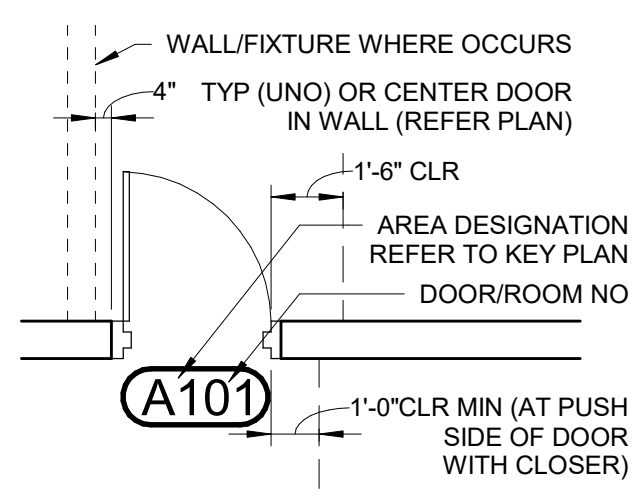
2/7/2024 10:54:43 AM
 C:\Revit Local Files\MC-BCC-A22_patrickGPZF5.rvt

DOOR SCHEDULE													
DOOR NUMBER	DOOR TYPE	FIRE RATING	DOOR			FRAME				DETAILS			REMARKS
			WIDTH	HEIGHT	THICKNESS	MATERIAL	GLAZING	TYPE	MATERIAL	HEAD	JAMB	SILL	
100A	HL		6'-0"	7'-0"	1 3/4"	STL	GL-1	S2	STL	H10/A4.1	E10/A4.1	A10/A4.1	EXTERIOR DOOR
100B	HL		6'-0"	7'-0"	1 3/4"	STL	GL-1	S2	STL	H10/A4.1	E10/A4.1	A10/A4.1	EXTERIOR DOOR
110	NL		7'-0"	7'-0"	1 3/4"	WD	GL-1	S2	STL	H13/A4.1	E13/A4.1	-	-
111	F		3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	H13/A4.1	E13/A4.1	-	-
121	F		3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	H13/A4.1	E13/A4.1	-	-
123	F		3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	H13/A4.1	E13/A4.1	-	-
124	F		3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	H13/A4.1	E13/A4.1	-	-
Grand total: 7													

DOOR GENERAL NOTES:

- INTERIOR THRESHOLDS SHOULD NOT EXCEED 1/2" IN HEIGHT AND SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS SHALL BE MOUNTED AT 3'-6" A.F.F. AND SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOESNT REQUIRE TIGHT GRASPING OR PINCHING, OR SEVERE TWISTING TO OPERATE.
- THE FORCE REQUIRED TO ACTIVATE DOOR HARDWARE AND OPEN DOORS SHOULD BE NO GREATER THAN 5 LBFT FOR INTERIOR DOORS.
- DOORS TO HAZARDOUS AREAS SUCH AS LOADING PLATFORMS, BOILER ROOMS, MECHANICAL AND ELECTRICAL ROOMS AND OTHER AREAS THAT MIGHT BE DANGEROUS TO A BLIND PERSON SHALL BE MADE IDENTIFIABLE TO THE TOUCH BY A TEXTURED SURFACE ON THE DOOR HANDLE OR OTHER DOOR OPERATING HARDWARE.
- THE SWEEP PERIOD ON ANY DOORS WITH CLOSERS SHOULD BE ADJUSTED SO THAT FROM ANY OPEN POSITION OF 70 DEGREES THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
- ADJUST CUT-OFF AT BOTTOM OF ANY EXTERIOR HOLLOW METEL DOORS WITH HANDICAP ACCESSIBLE THRESHOLDS TO INSURE THAT THERE IS NO GAP BETWEEN THE BOTTOM OF THE DOOR AND THE TOP OF THRESHOLD SEAT.
- ALL DOORS SHALL MEET T.A.S. REQUIREMENTS FOR CLEARANCES, HARDWARE, ETC.

DOOR MARK LEGEND

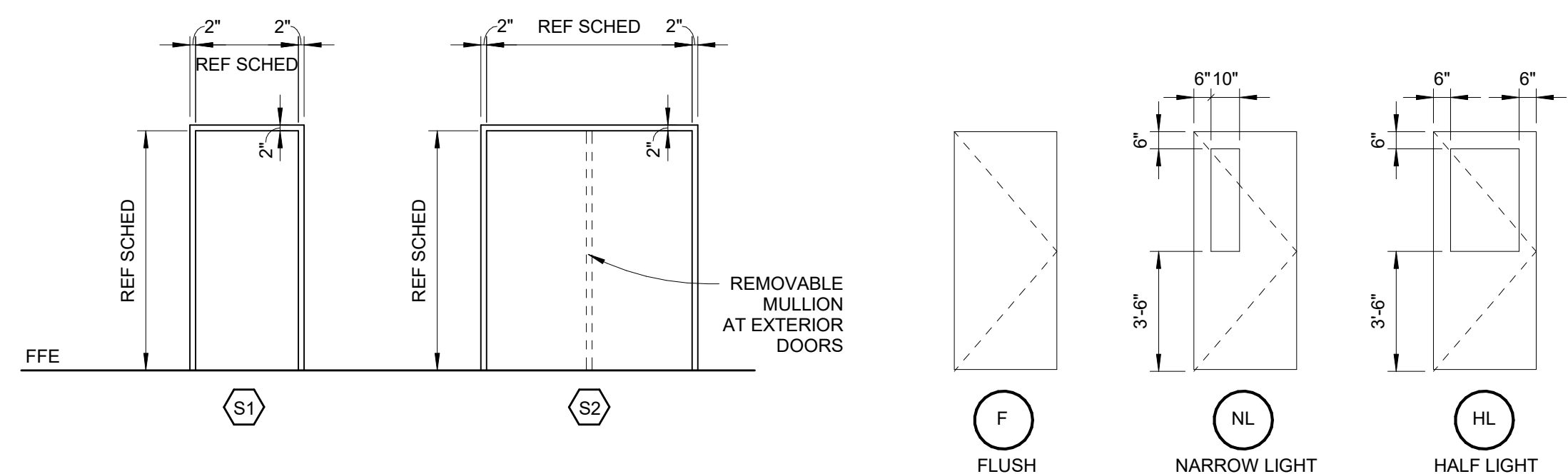


FRAME TYPE LEGEND

- S# STEEL (HM) FRAME TYPE
- A# ALUMINUM (STOREFRONT) FRAME TYPE

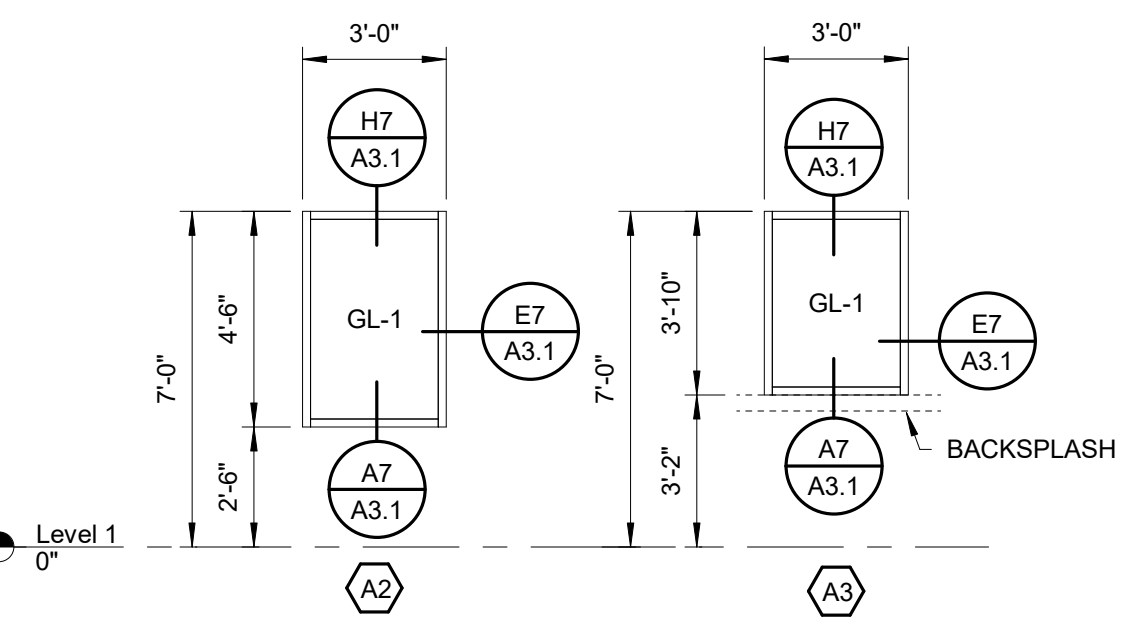
GLAZING LEGEND

- GL-1 TINTED INSUL SAFETY GLASS

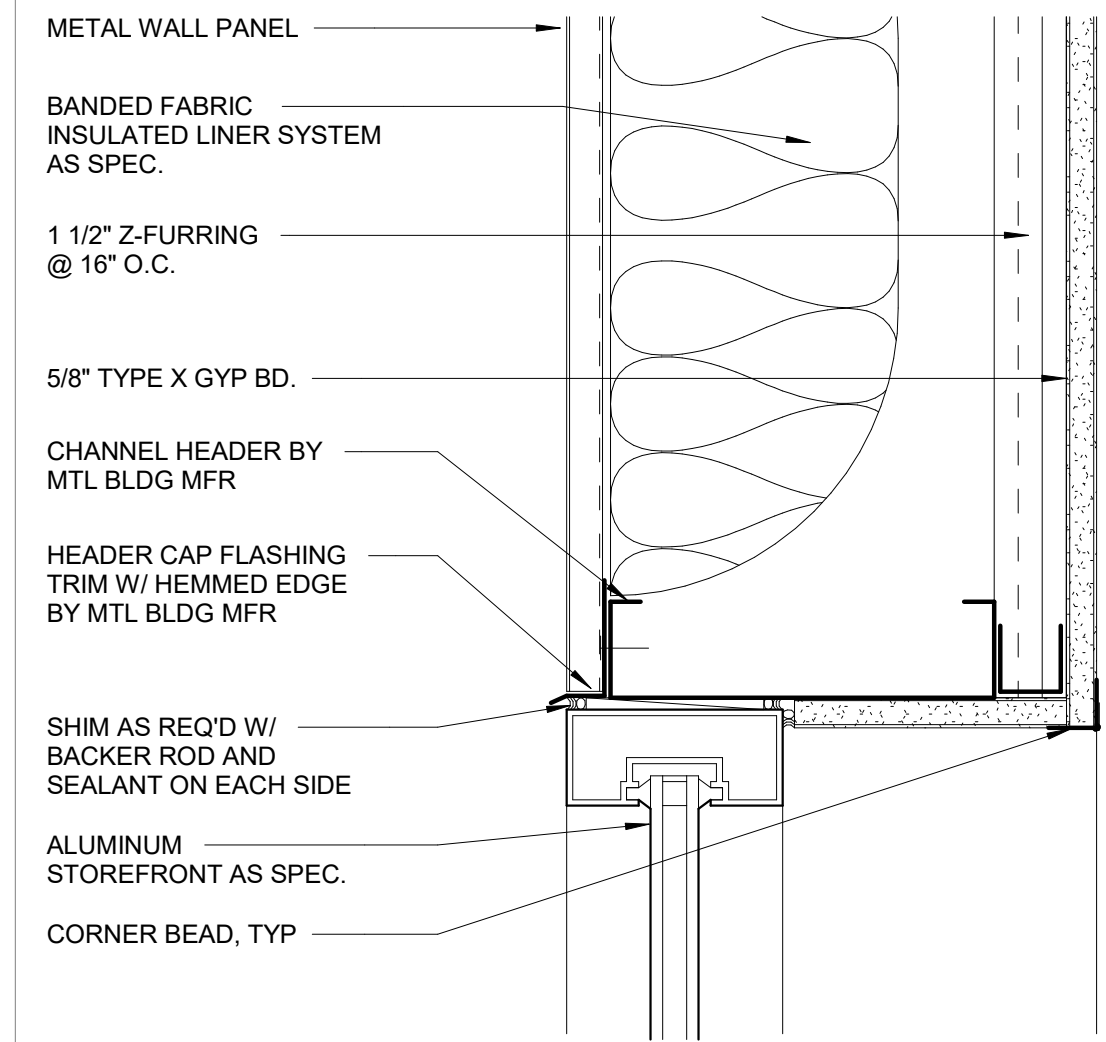


D1 FRAME TYPES
1/4" = 1'-0"

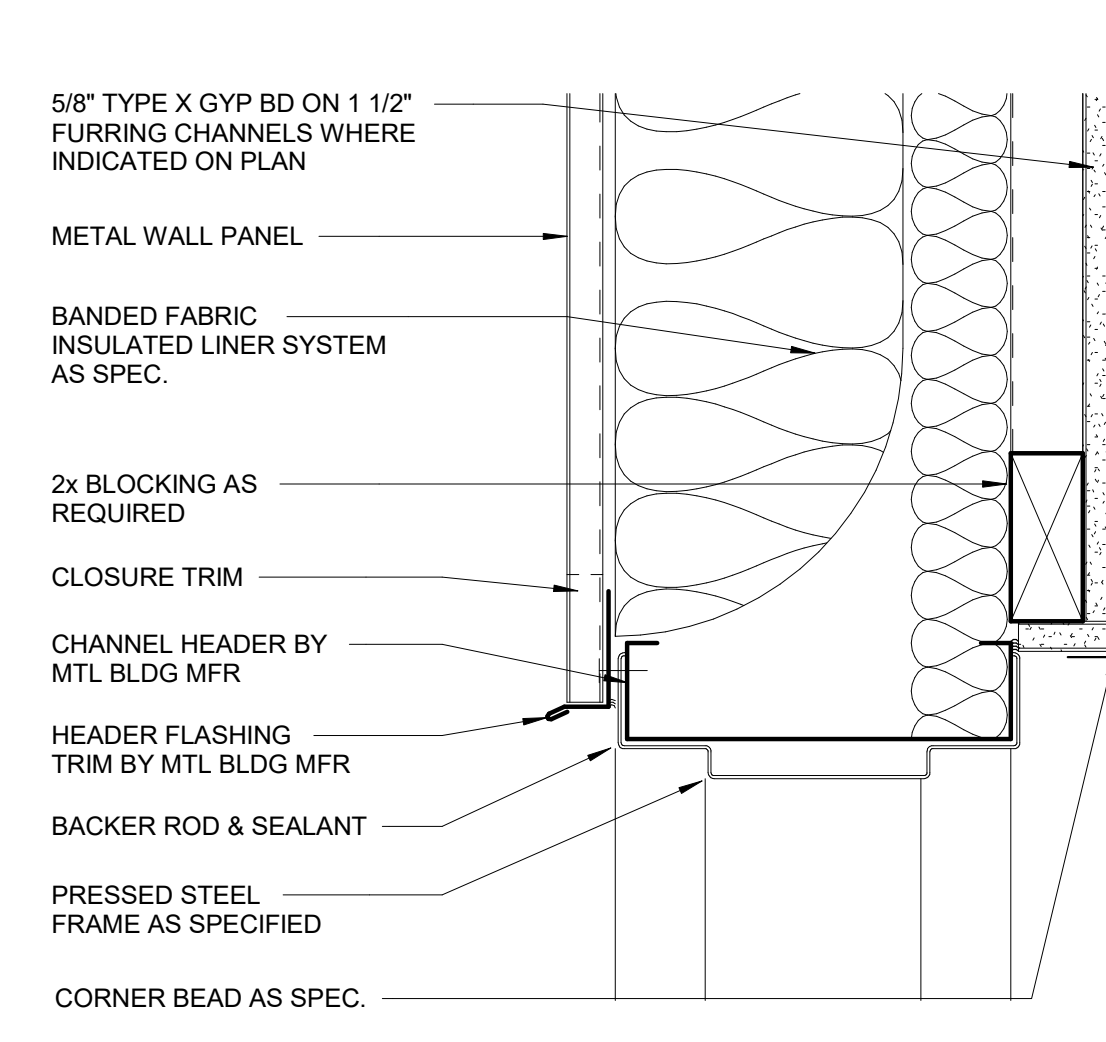
DOOR TYPES
1/4" = 1'-0"



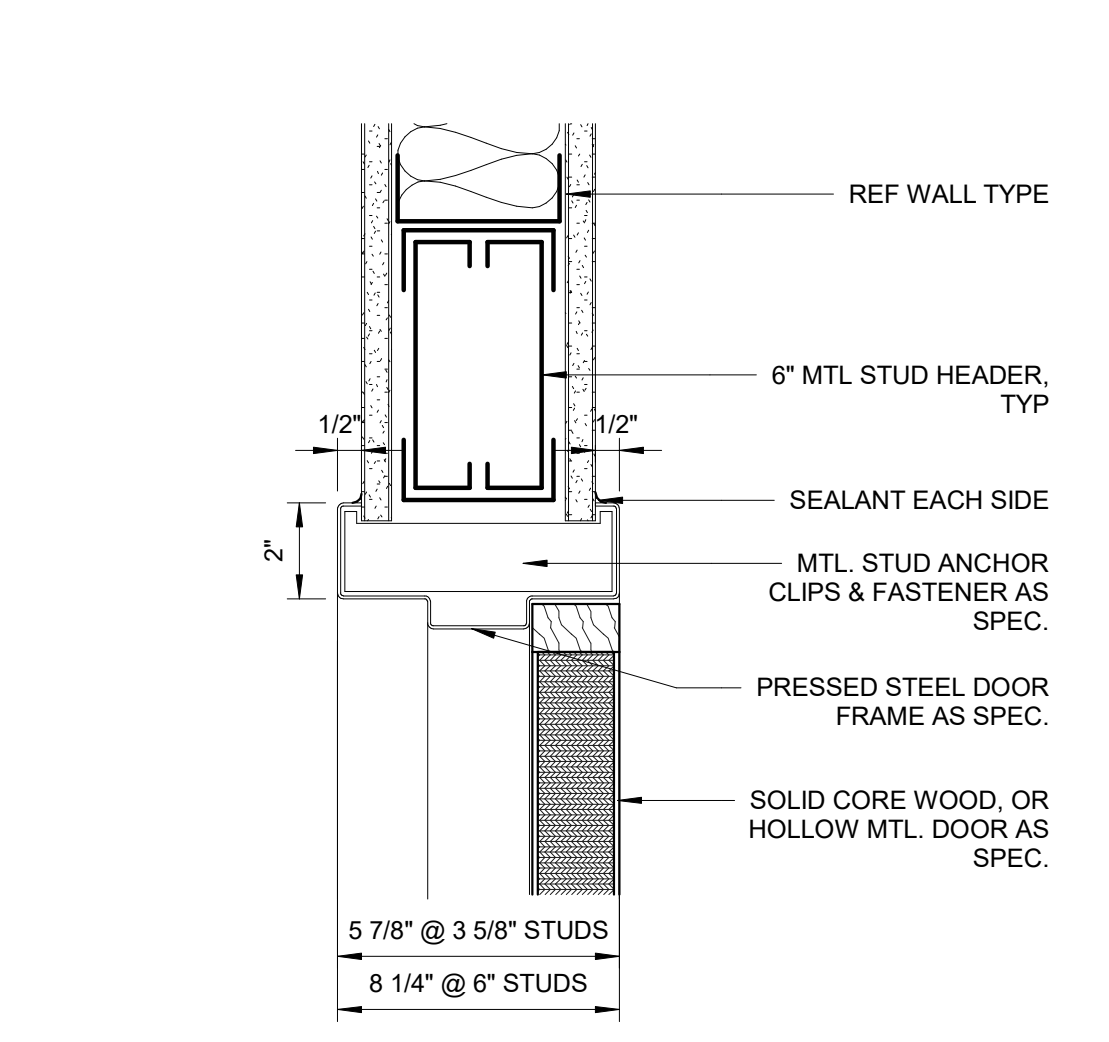
A1 WINDOW TYPES
1/4" = 1'-0"



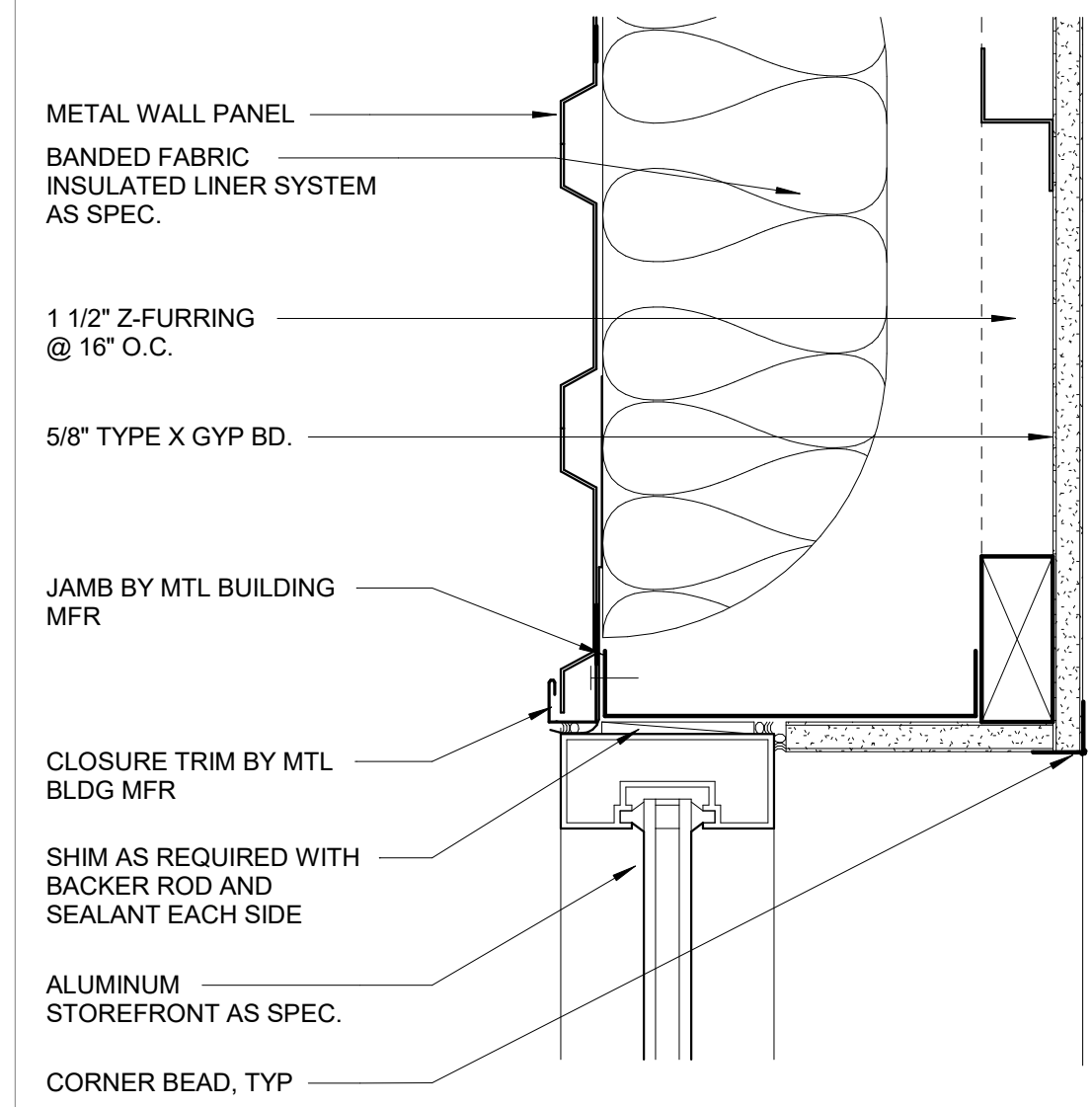
H7 ALUMINUM STOREFRONT HEAD DETAIL
3" = 1'-0"



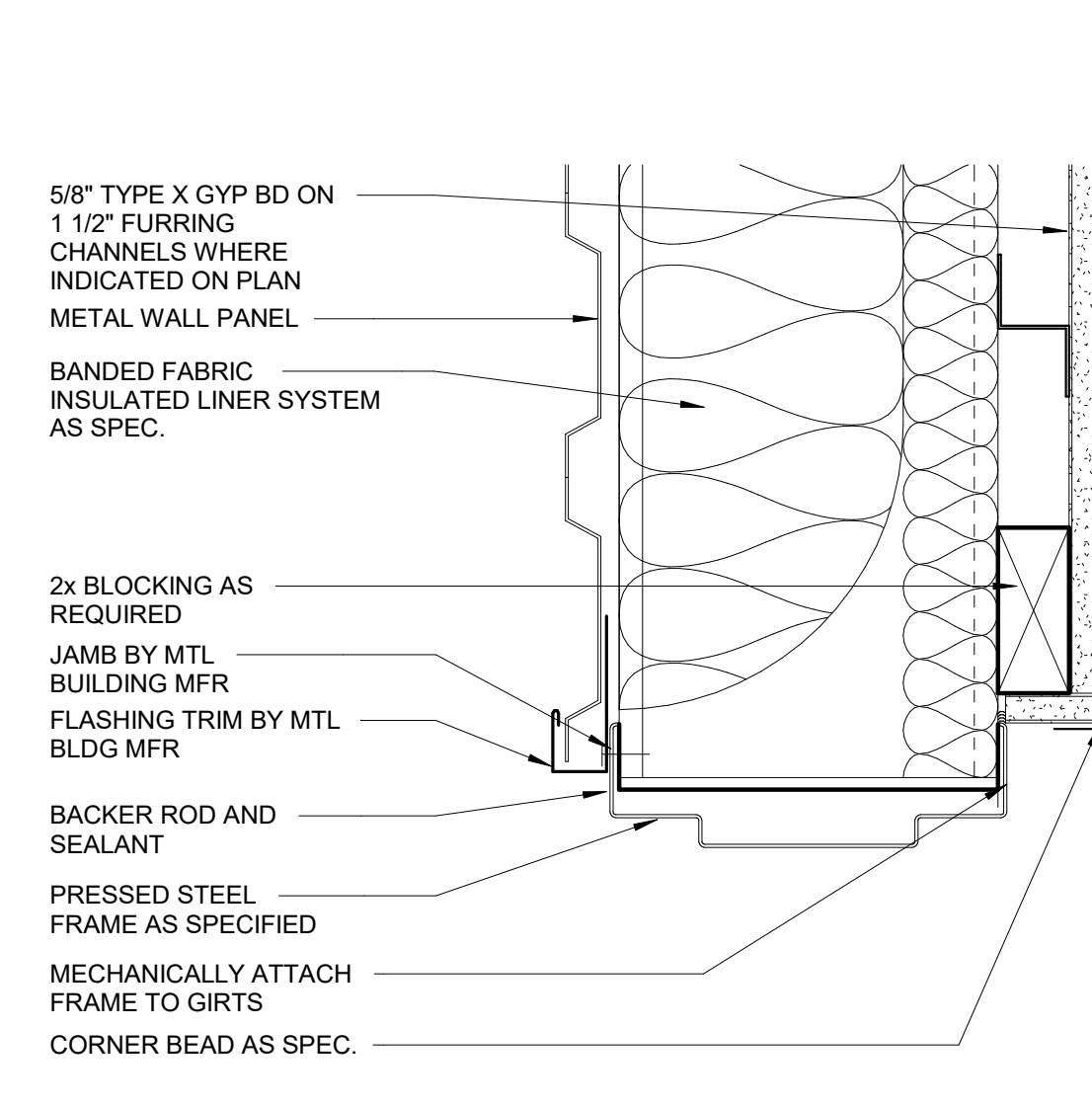
H10 STEEL HEAD DETAIL
3" = 1'-0"



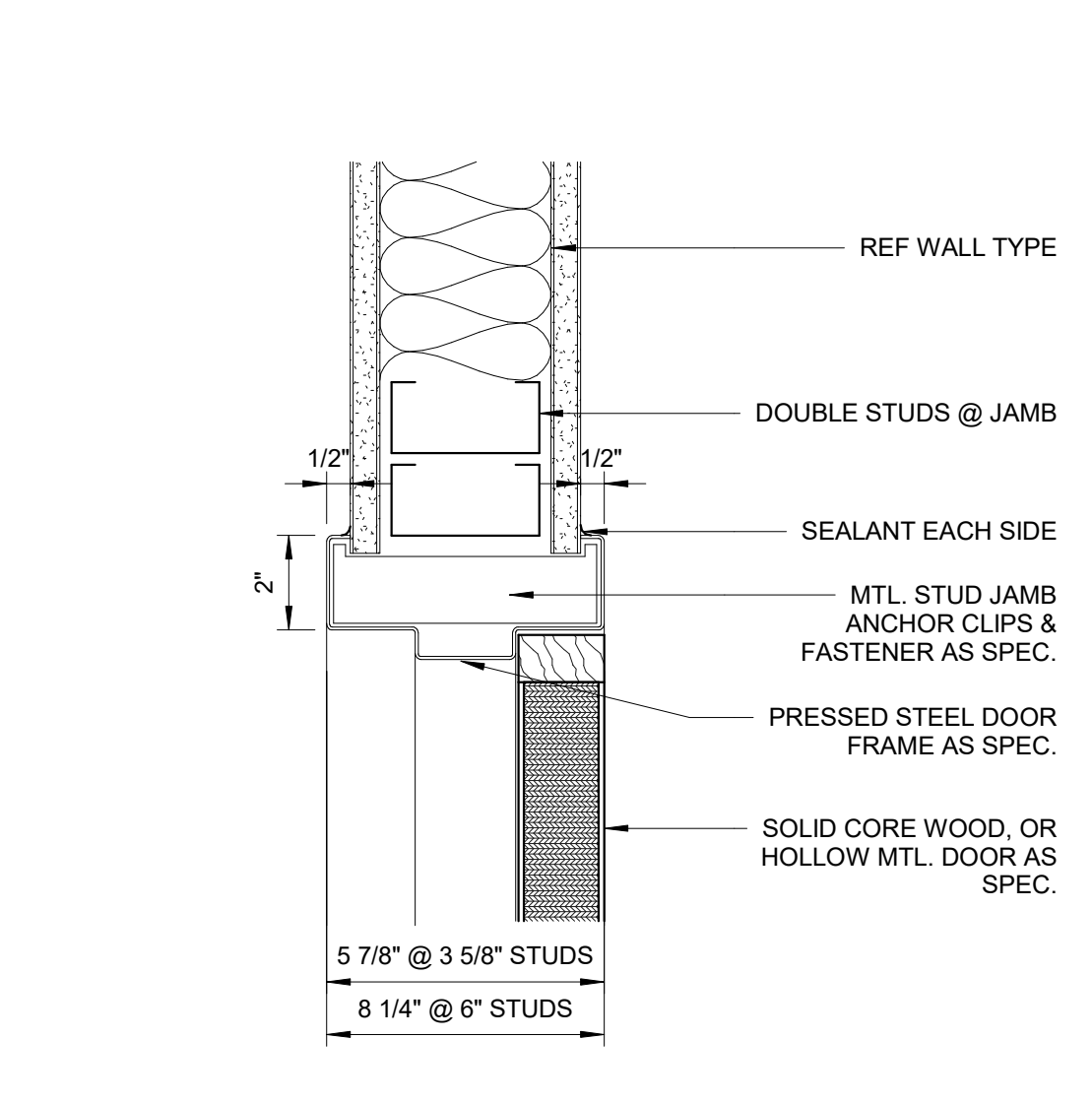
H13 PRESSED STEEL HEAD DETAIL
3" = 1'-0"



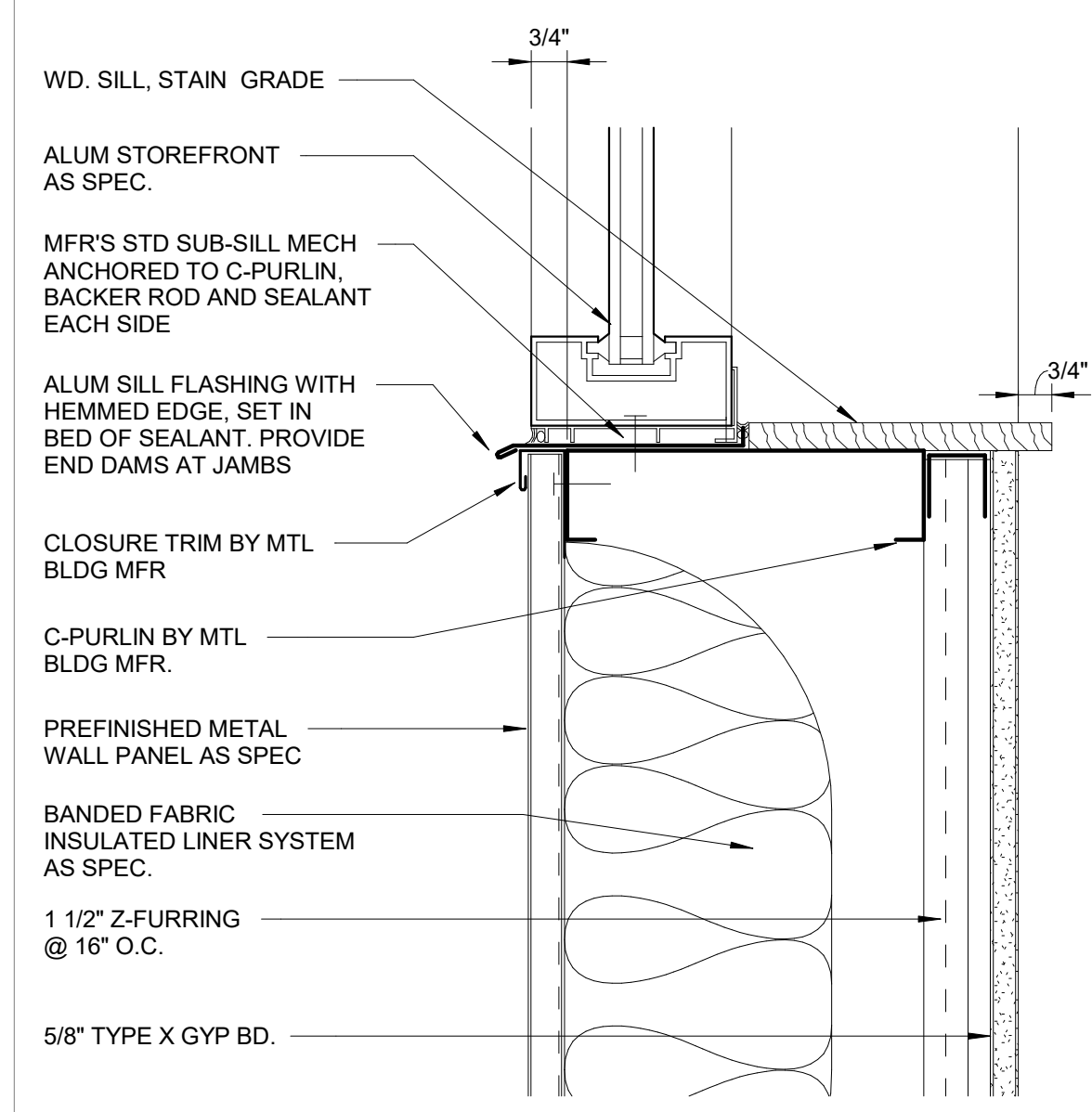
E7 ALUM STOREFRONT JAMB DETAIL
3" = 1'-0"



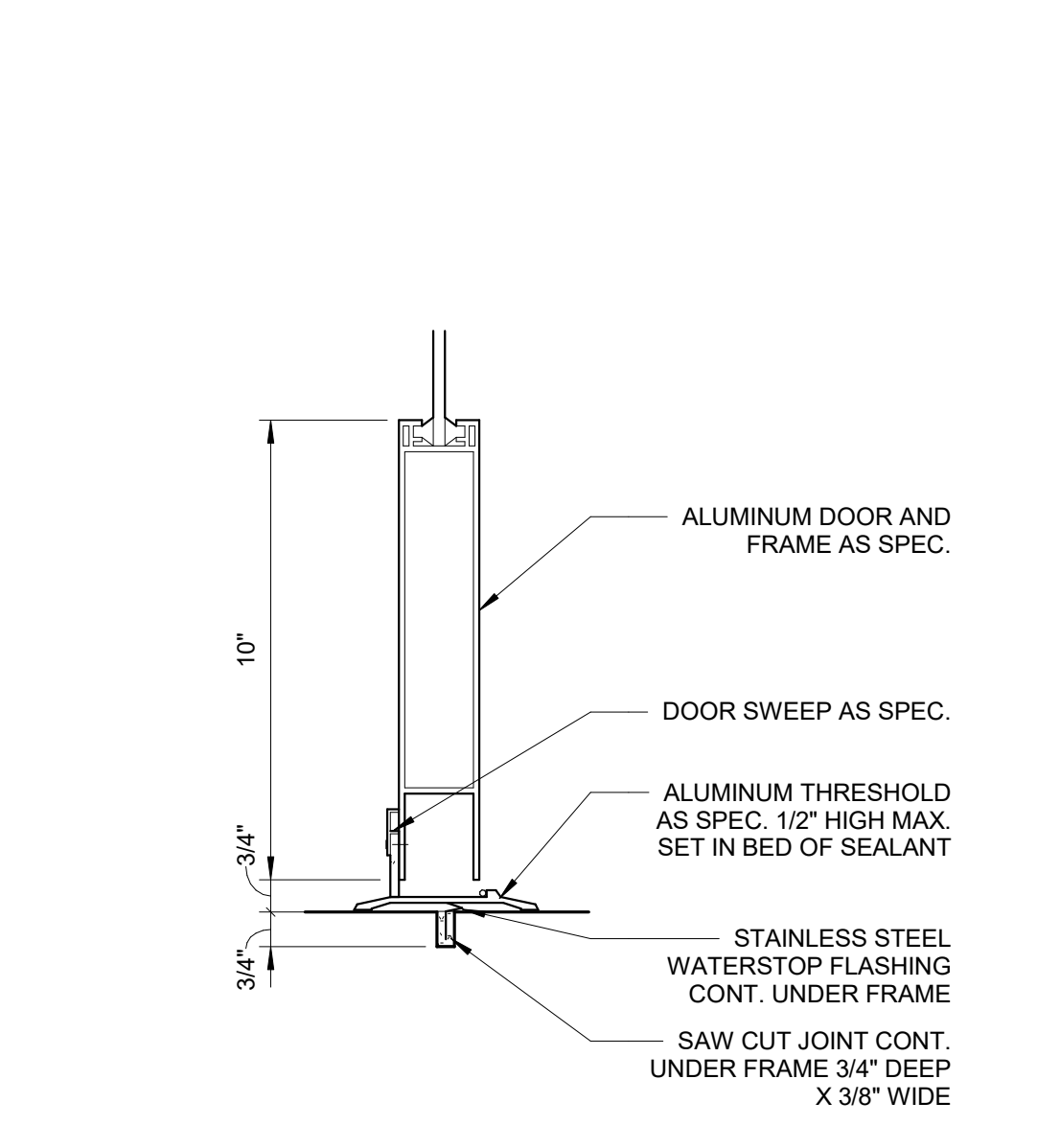
E10 STEEL JAMB DETAIL
3" = 1'-0"



E13 PRESSED STEEL JAMB DETAIL
3" = 1'-0"



A7 ALUMINUM STOREFRONT SILL
3" = 1'-0"

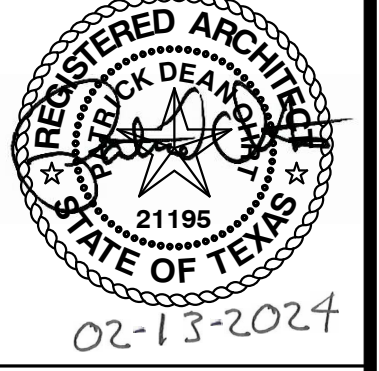


A10 DOOR THRESHOLD DETAIL
3" = 1'-0"



PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction



BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX

DATE ISSUED:
Issue Date

PROJECT NUMBER:
1027-0623

PLAN NORTH TRUE NORTH
SHEET NAME
DOOR SCHEDULE, DETAILS & WINDOW ELEVATIONS

SHEET NUMBER
A4.1

2/7/2024 10:54:44 AM C:\Revit Local Files\MC-BCC-A22_pattickGPZF5.rvt

THE WORK INCLUDES PROVIDING NEW DUCTWORK, DIFFUSERS, GRILLES, INSULATION, CONTROLS AND EQUIPMENT NECESSARY FOR A COMPLETE AND FUNCTIONING SYSTEM. THE WORK INCLUDES BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING:

EQUIPMENT INDICATED ON THE DRAWINGS OR AS REQUIRED FOR A COMPLETE INSTALLATION, SUCH AS DUCTWORK, EXHAUST FANS, SUPPLY AND RETURN DIFFUSERS, ETC. SHALL BE PROVIDED WITHIN THE SCOPE OF WORK OF THIS SECTION.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR.

INSTRUCTIONS TO THE OWNER: THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE PROPER OPERATION OF ALL EQUIPMENT. THE CONTRACTOR SHALL FURNISH TO THE OWNER ALL PAMPHLETS AND OTHER LITERATURE FURNISHED BY THE MANUFACTURER

EXHAUST FANS: FURNISH AND INSTALL EXHAUST FANS IN THE LOCATION AND OF THE SIZE AND CAPACITY SHOWN ON THE DRAWINGS. EXHAUST FANS SHALL BE CEILING CABINET IN-LINE EXHAUST FANS WITH PLASTIC HOUSING AND GRILL. SUPPORT FAN WITH VIBRATION ISOLATORS FROM ROOF STRUCTURE NOT FROM THE CEILING.

EXTRA STOCK: PROVIDE TWO SETS OF REPLACEMENT FILTERS PER EACH INSTALLED FOR ALL THE AIR HANDLING UNITS, AND OTHER EQUIPMENT AND DEVICES, AND PROVIDE A ITEMIZED LIST OF THE NUMBER, TYPE REQUIRED AND WHERE USED. OBTAIN RECEIPT FROM OWNER THAT THESE ITEMS HAVE BEEN DELIVERED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE NET INSIDE CLEAR DIMENSIONS ON LINED DUCTS OR UNLINED SHEET METAL DUCTS.

SHEET METAL DUCTWORK: SHEETMETAL SHALL BE FABRICATED AND INSTALLED TO ASHRAE AND SMACNA STANDARDS. SHEETMETAL SHALL BE G-90 GALVANIZED SHEET STEEL OF LOCK-FORMING QUALITY, ASTM A-525. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOORS SHALL BE AIRTIGHT WITH APPROVED WEATHERPROOF CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR-TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 33 DEGREES.

TRAPEZE DUCT HANGERS: MINIMUM 1" X 2" X 1" X 18" GAGE CHANNELS WITH 1" X 18" GAGE STRAPS TO STRUCTURAL SUPPORT ABOVE.

ALL SUPPLY AND RETURN DUCTWORK SHALL HAVE THE FIRST TEN (10) FEET INTERNALLY LINED. THE REMAINING DUCT SHALL BE EXTERNALLY WRAPPED.

DUCT WRAP/INSULATION: (ON ALL SUPPLY, RETURN, AND ROUND RIGID SHEETMETAL DUCTWORK) PROVIDE 2" THICK FIBERGLASS ASJ DUCTWRAP WITH VAPOR SEAL ON ALL SHEETMETAL DUCT. INSULATION SHALL HAVE AN INSTALLED R-VALUE OF 5 OR GREATER WITH A K VALUE OF 0.28. ACCEPTABLE MANUFACTURERS ARE KNAUF, OWENS CORNING, JOHNS MANVILLE. INSULATION SHALL MEET THE LATEST ADOPTED IECC AND LOCAL AMENDMENTS.

ALL DUCT INDICATED AS LINED SHALL BE INTERNALLY INSULATED WITH OWENS CORNING FIBERGLASS AEROFLEX DUCT WRAP, 2" THICK, TYPE B-150 INSULATION SHALL HAVE AN INSTALLED R-VALUE OF 5 OR GREATER WITH A K VALUE OF 0.28. ACCEPTABLE MANUFACTURERS ARE KNAUF, OWENS CORNING, JOHNS MANVILLE. INSULATION SHALL MEET THE LATEST ADOPTED IECC AND LOCAL AMENDMENTS.

FLEXIBLE DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH 1-1/2" THICK 1 PCF FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER / VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR 2" W.G. PRESSURE AND 0 TO 250 DEGREE TEMPERATURE. PROVIDE METAL ADJUSTABLE CAMPING DEVICES, SCREW OPERATED. USE TWISTLOCK CONICAL TAP COLLARS AT CONNECTIONS INTO SHEET METAL CUTWROK. DO NOT EXCEED 6 FEET INLENGTH. FLEXMASTER 8M OR APPROVED EQUAL.

CEILING DIFFUSERS/RETURNS: INSTALL SUPPLY & RETURN DIFFUSERS/REGISTERS WITH DAMPER | SIZES, CAPACITIES, MATERIALS, AND PATTERN INDICATED ON THE DRAWINGS.

INSULATE REFRIGERANT SUCTION LINES WITH 1-1/2" CLOSED CELL FOAM PIPE INSULATION WITH SELF-ADHESIVE SEAMS. INSULATION SHALL BE EQUIVALENT TO ARMACELL AP ARMAFLEX.

ACCESS PANELS: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.

AUTOMATIC TEMPERATURE CONTROL: PROVIDE FOR EACH HVAC UNIT, LOW VOLTAGE SEVEN DAY PROGRAMMABLE THERMOSTAT, TRANE, CARRIER, OR HONEYWELL T7300. UNIT SHALL INCORPORATE TWO STAGE HEAT/COOL AS APPLICABLE WITH AN AUTO CHANGE OVER FEATURE. HEATING AND COOLING SET POINTS SHALL BE OPERATOR ADJUSTABLE (THERMOSTATS BY UNIT SUPPLIER). THERMOSTAT SHALL HAVE A NON-VOLATILE MEMORY WITH MINIMUM 24 HOUR MEMORY RETENTION, 5 DEGREE F DEADBAND, AND LCD DISPLAY. WIRING SHALL COMPLY WITH SECTION 16000 REQUIREMENTS. PROVIDE RELAYS AS REQUIRED FOR UNIT INTERFACE. PROVIDE ALL TEMPERATURE CONTROL WIRING FOR ALL HVAC SYSTEMS, INCLUDING THERMOSTATS, SMOKE DETECTOR INTERLOCK ETC. INSTALL THERMOSTAT SAME HEIGHT AS LIGHT SWITCHES. COORDINATE FINAL LOCATION WITH ARCHITECT.

ROOF PENETRATIONS SHALL COMPLY WITH SMACNA AND NRCA STANDARDS.

CONTRACTOR TO PROVIDE TEST AND BALANCE NEBB CERTIFIED AIR BALANCE BY INDEPENDENT THIRD PARTY CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL HAVE ALL EQUIPMENT STARTED, ADJUSTED AND TESTED PRIOR TO BALANCING. MECHANICAL CONTRACTOR SHALL ALSO HAVE THEIR TECHNICIAN ON SITE DURING BALANCE TO ADJUST OR CORRECT EQUIPMENT OPERATION DURING BALANCE.

- 1. CONTRACTOR SHALL CAREFULLY REVIEW CONTRACT DOCUMENTS INCLUDING DRAWINGS AND PROJECT MANUAL. INFORMATION REGARDING WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS ARE DISPERSED THROUGHOUT THE DOCUMENTS AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE FULL SET OF DOCUMENTS.
- 2. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES ABOVE THE CEILING TO PROVIDE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF AND FUTURE CHANGES IN MECHANICAL EQUIPMENT. CONDUIT AND PIPE TO BE RUN THROUGH TRUSSES. COORDINATE SERVICE AND ACCESS POINTS ABOVE THE CEILING TO MINIMIZE REQUIRED ACCESS.
- 3. VERIFY EXACT LOCATION OF ALL HVAC EQUIPMENT WITH HVAC CONTRACTOR PRIOR TO COMMENCING ANY WORK.
- 4. ALL EQUIPMENT (RECEPTACLES, DISC. SWITCHES, ETC.) SHALL BE WEATHERPROOF.
- 5. ALL FUSES FOR HVAC UNITS SHALL BE SIZED AS REQUIRED BY MANUFACTURER'S NAMEPLATE ON EQUIPMENT. FUSES SHALL BE CURRENT LIMITING, TIME DELAY BUSSMAN FRN-R OR RQUAL BY GOULD SHAWMUT.
- 6. ALL CONDUIT SHALL BE RUN CONCEALED BELOW ROOF. PROVIDE WATERTIGHT PITCH POCKETS AS REQUIRED.
- 7. REFER TO HVAC DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. PROVIDE ALL CONTROL CONDUIT AND WIRING AS REQUIRED FOR INTERLOCKING FANS, MOTORS, ETC. AS INDICATED ON THE HVAC DRAWINGS.
- 8. ALL DEVICES INSTALLED ON ROOF TOP EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. THIS LOCATION SHALL BE COORDINATED WITH THE MECHANICAL OR PLUMBING CONTRACTOR PRIOR TO ROOF-IN.
- 9. ROOF DECK PENETRATIONS: CONTRACTOR SHALL SECURE LANDLORD APPROVAL FOR ALL BUILDING ROOF DECK PENETRATIONS. REQUESTS SHALL BE ON A SCALED ROOF PLAN SHOWING EXACT LOCATION & SIZE OF PENETRATION & INCLUDE DETAILS OF MOUNTING, FLASHING & SEALING. CONTRACT WITH THE LANDLORD'S ROOFING CONTRACTOR TO PERFORM ALL WORK AT THIS CONTRACTOR'S SOLE EXPENSE. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL AIR HANDLING EQUIPMENT, NEW ROOF PENETRATIONS, REMOVAL OF EXISTING AIR HANDLING EQUIPMENT & INSTALLATION OF ALL AIR HANDLING EQUIPMENT WITH THE LANDLORD.

GENERAL ENERGY NOTES

THERMOSTATIC CONTROLS MUST HAVE A 5deg DEADBAND OR HAVE MANUAL CHANGEOVER BETWEEN HEATING AND COOLING.

PROVIDE AUTOMATIC CONTROLS: SETBACK TO 55degF (HEAT) AND 85degF (COOL); 7-DAY CLOCK, 2-HOUR OCCUPANT OVERRIDE, 10-HOUR BACKUP IN THE EVENT OF A POWER LOSS.

OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE PROVIDED WITH AUTOMATIC MEANS TO REDUCE AND SHUT OFF AIRFLOW WITH THE EXCEPTION FOR SYSTEM DESIGNED FOR CONTINUOUS OPERATION OR SYSTEM WITH AN FLOW RATE LESS THAN 3,000 CFM. SYSTEMS WITH READILY ACCESSIBLE MANUAL DAMPERS; OR RESTRICTED BY HEALTH AND LIFE SAFETY CODES.

ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL181-A OR UL181-B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEMS SHALL BE SEALED AND MECHANICALLY FASTENED. DUCT TAPE IS NOT PERMITTED AS A SEALANT OF ANY METAL DUCTS.

INSULATION SHALL BE PROVIDED FOR PIPING AS NOTED IN THE TABLE BELOW. PIPING INSULATION SHALL BE PROVIDED FOR RETURN CIRCULATION HOT WATER SYSTEM WITH 1" OR R-4 INSULATION. THE FIRST 8' OF PIPING IN NONCIRCULATING SYSTEMS SERVED BY EQUIPMENT W/O INTERGRAL HEAT TRAPS SHALL BE INSULATED WITH 5" OR R-4 INSULATION.

WATER HEATING EQUIPMENT NOT SUPPLIED WITH INTEGRAL HEAT TRAPS AND SERVING NONCIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING AS ASSOCIATED WITH THE EQUIPMENT.

AUTOMATIC CIRCULATING HOT WATER SYSTEMS OR HEAT TRACE SHALL HAVE TIME SWITCHES THAT ARE CAPABLE OF BEING SET TO TURN OFF THE SYSTEM.

Table with 2 columns: MINIMUM PIPE INSULATION (INCH) and MINIMUM DUCT INSULATION (R). Includes rows for UNCONDITIONED SPACE, OUTSIDE BLDG. ENVELOPE, and EXCEPTIONS.

MECHANICAL NARRATIVE

THE HVAC SYSTEM CONSISTS OF THREE NEW SPLIT DX SYSTEMS WITH ELECTRIC HEAT.

ALL UNITS SHALL BE PROVIDED WITH THEIR OWN WALL MOUNTED THERMOSTAT FOR CONTROLLING TEMPERATURE IN THE SPACE. THE NEW UNITS SHALL BE CONSTANT VOLUME AND OPERATE BASED ON AN OCCUPIED SCHEDULE.

THE EXHAUST FAN SHALL BE INTERLOCKED WITH THE RESTROOM LIGHTS.

REFER TO THE MECHANICAL ENERGY NOTES FOR COMPLIANCE REQUIREMENTS WITH IECC 2015. SEE THE HVAC DESIGN CRITERIA ON THIS SHEET AS REQUIRED BY THE 2015 IECC.

THE MECHANICAL CONTRACTOR SHALL REVIEW THE SYSTEM COMMISSIONING SPECIFICATION ON THIS SHEET FOR REQUIREMENTS AND PARTICIPATION IN THE COMMISSIONING PROCESS. FAILURE TO COMPLY OR PARTICIPATE MAY INCUR ADDITIONAL COST TO THE CONTRACTOR.

SYSTEMS START-UP REQUIREMENTS

CONTRACTOR SHALL PROVIDE AN EQUIPMENT OPERATION CHECK (EOC). EOC TO PROVIDE VERIFICATION AND DOCUMENTATION OF EQUIPMENT CONDITION, INTEGRITY OF INSTALLATION AND OPERATIONAL PERFORMANCE WITH REGARD TO THE SPECIFICATIONS. IT SHALL ALSO INCLUDE ALL ASSOCIATED COMPONENTS PROVIDED BY MANUFACTURER, THE FOLLOWING EQUIPMENT AND INSTALLATION INTEGRITY CHECKS SHALL BE PERFORMED AS PART OF AN EOC. ANY INSTALLER DEFECTS SHALL BE NOTED AND ANY FACTORY DEFECTS SHALL BE REPAIRED. A REPORT FOR EACH UNIT ALONG WITH A SUMMARY REPORT FOR THE JOB SITE WILL BE PROVIDED TO THE OWNER AND ENGINEER UPON COMPLETION.

JOB SITE REQUIREMENTS PRIOR TO EOC:

- A. COMPLETE INSTALLATION OF AIR HANDLING UNIT PER MECHANICAL DRAWINGS, SPECIFICATIONS AND THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- B. AIR HANDLING UNIT MUST BE STARTED UP AND RUNNING 24 HOURS PRIOR TO EOC.
- C. UNIT'S RETURN AIR FILTERS MUST BE NEW AND AT LEAST EQUIVALENT TO FACTORY PROVIDED FILTERS.
- D. ALL FIELD INSTALLED HOODS ACCESSORIES MUST BE INSTALLED AND OPERATIONAL.

1. UNIT INSTALLATION CHECK:

- A. RECORD AHU #, UNIT C/N, UNIT MODEL #, AND UNIT SERIAL #.
- B. CHECK CURB INSTALLATION INCLUDING VIBRATION ISOLATION AND WIND OR SEISMIC RESTRAINTS. VERIFY PER OWNER SPECIFICATIONS AND THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- C. CHECK UNIT CLEARANCES AND VERIFY INSTALLATION PER THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- D. CHECK DOOR ALIGNMENT AND ADJUST AS NECESSARY.
- E. CHECK UNIT INSTALLATION IS SECURE AND CLEAN.
- F. CHECK INSTALLATION OF CONDENSATE TRAP AND DRAIN LINES PER THE PROJECT SPECIFICATIONS. DRAWING DETAILS AND AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTION.
- G. CHECK AND NOTE INSTALLATION OF ANY AIR HANDLING UNIT MANUFACTURER'S PROVIDED ACCESSORIES PER THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- H. CHECK CLEANLINESS OF UNIT AND AREA AROUND IT. DISPOSE OF ANY DEBRIS FOUND.

2. ELECTRICAL SYSTEM CHECK:

- A. CHECK AND RECORD INCOMING POWER SUPPLY. VERIFY PER THE AIR HANDLING UNIT MANUFACTURER'S SPECIFICATIONS AND RECORD.
- B. VERIFY INSTALLATION AND PROPER SIZING OF ELECTRICAL DISCONNECT OR CIRCUIT BREAKER INCLUDING WIRE SIZE.
- C. CHECK ELECTRICAL CONNECTIONS AND TIGHTEN AS NEEDED.
- D. VERIFY INSTALLATION OF WIRING TO 120V CONVENIENCE OUTLET (IF APPLICABLE).
- E. CHECK AND RECORD UNIT'S CONTROL TRANSFORMER(S) SECONDARY VOLTAGE. ADJUST PER THE AIR HANDLING UNIT MANUFACTURER'S SPECIFICATIONS.

3. INTEGRATED MODULAR CONTROLLER CHECK:

- A. VERIFY LED HEARTBEAT ON ALL THE AIR HANDLING UNIT MANUFACTURER'S PROVIDED CONTROL BOARDS.
- B. RECORD HARDWARE AND SOFTWARE VERSIONS OF ALL PROVIDED CONTROL BOARDS.
- C. VERIFY DIP SWITCHES ON ALL CONTROL BOARDS ARE SET FOR OWNER SPECIFICATIONS PER THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- D. VERIFY ALL THE AIR HANDLING UNIT MANUFACTURER'S PROVIDED TEMPERATURE SENSORS READINGS ARE ACCURATE.

4. SUPPLY FAN SYSTEM CHECK:

- A. CHECK BLOWER PULLEY SEY SCREWS FOR PROPER TORQUE. ADJUST AS NEEDED.
- B. CHECK BELT TENSION AND ALIGNMENT AND ADJUST AS NEEDED.
- C. START UNIT INDOOR BLOWER TO CHECK ROTATION CORRECT AS NEEDED. VERIFY AND DRAW IS PER THE AIR HANDLING UNIT MANUFACTURERS SPECIFICATIONS AND RECORD.

5. COOLING SYSTEM CHECK:

- A. LEAK CHECK ALL CIRCUITS.
- B. CHECK COIL INTEGRITY AND CLEANLINESS. CLEAN AS NEEDED.
- C. START EACH COMPRESSOR IN UNIT. CONFIRM PROPER ROTATION AND CORRECT AS NEEDED.
- D. CHECK REFRIGERANT PRESSURES OF EACH CIRCUIT PER THE AIR HANDLING UNIT MANUFACTURER'S SPECIFICATION. CORRECT CHARGE AS NEEDED.
- E. RECORD TEMPERATURE DROP ACROSS THE EVAPORATOR COIL IN FULL COOLING (ALL COMPRESSOR RUNNING).

6. GAS HEATING SYSTEM (WHEN SPECIFIED):

- A. RECORD FUEL TYPE.
- B. CHECK INSTALLATION OF INTAKE AND EXHAUST HOODS. VERIFY PER THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- C. CHECK INSTALLATION OF GAS UNIONS.
- D. CHECK AND RECORD INCOMING GAS PRESSURE TO UNIT.
- E. CHECK MANIFOLD GAS PRESSURE FROM THE OUTLET OF THE BAS VALVE(S) PER THE AIR HANDLING UNIT MANUFACTURER'S SPECIFICATIONS. ADJUST AS NECESSARY.
- F. CHECK AND RECORD TEMPERATURE RISE ACROSS HEAT EXCHANGER IN FULL HEAT.
- G. CHECK OPERATION OF TEMPERATURE LIMIT.

7. ELECTRICAL HEAT SYSTEM CHECK: (WHEN SPECIFIED):

- A. CHECK AND RECORD AMP DRAW OF THE HEATING ELEMENTS.
- B. CHECK HEATING SECTION OPERATION. RECORD TEMPERATURE RISE THRU UNIT IN FULL HEATING OPERATION PER THE AIR HANDLING UNIT MANUFACTURER'S SPECIFICATIONS.
- C. CHECK OPERATION OF TEMPERATURE LIMIT.
- D. VERIFY CO² SENSORS ARE OPERATIONAL.
- E. PERFORM COOLING SIMULATION TEST. VERIFY COOLING STAGES PER OWNER'S SPECIFICATIONS.
- F. PERFORM HEATING SIMULATION TEST. VERIFY HEATING STAGES PER OWNER'S SPECIFICATIONS.
- G. PERFORM VENTILATION SIMULATION TEST. VERIFY VENTILATION OPERATION PER OWNER'S SPECIFICATIONS.

8. THERMOSTAT/UNIT CONTROLS SYSTEM CHECK:

- A. RECORD THERMOSTAT OR DDC SYSTEM MAKE, MODEL AND SERIAL NUMBER.
- B. VERIFY CLASS 2 CONTROLS WIRING INSTALLATION TO TERMINAL BOARD OF UNIT.
- C. VERIFY THAT REMOTE SENSORS ARE OPERATIONAL.
- D. VERIFY CO² SENSORS ARE OPERATIONAL.
- E. PERFORM COOLING SIMULATION TEST. VERIFY COOLING STAGES PER OWNER'S SPECIFICATIONS.
- F. PERFORM HEATING SIMULATION TEST. VERIFY HEATING STAGES PER OWNER'S SPECIFICATIONS.
- G. PERFORM VENTILATION SIMULATION TEST. VERIFY VENTILATION OPERATION PER OWNER'S SPECIFICATIONS.

9. INDOOR AIR QUALITY SYSTEM CHECK:

- A. CHECK AND RECORD CONDITION AND TYPE OF FILTERS.

10. OUTDOOR AIR ACCESSORY CHECK:

- A. CHECK OPERATION OF ECONOMIZER OR MOTORIZED OUTDOOR AIR DAMPER BY DRIVING IT FULL OPEN AND CLOSED.
- B. RECORD MINIMUM DAMPER POSITION AND ENTHALPY SETTING (IF PROVIDED).
- C. CHECK ECONOMIZER CONTROL BOARD SETTINGS PER OWNER SPECIFICATIONS. RECORD SETTING.
- D. CHECK OPERATION OF BAROMETRIC RELIEF DAMPER IF INSTALLED.
- E. CHECK OPERATION OF POWER EXHAUST IF INSTALLED. CHECK MOTOR AMP DRAW PER THE AIR HANDLING UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.

11. CONTROL CHECK:

- A. VERIFY COMPLETE INSTALLATION/OPERATION OF ALL THERMOSTATS AND TIME CLOCKS IF UTILIZED.
- B. VERIFY COMPLETE INSTALLATION/OPERATION OF SMOKE DETECTOR/FIRE ALARM INTERFACE.

12. DUCT SYSTEMS AND AIR DISTRIBUTION:

- A. VERIFY INSTALLATION CONFORMS TO DESIGN AND ALL PIECES OF AIR DISTRIBUTION, DUCTWORK, DIFFUSERS, AND GRILLES ARE COMPLETE AND PROPERLY INSTALLED.
- B. VERIFY ALL MANUAL VOLUME DAMPERS ARE IN FULL OPEN OR NEUTRAL POSITION.

13. EXHAUST FAN(S):

- A. VERIFY PROPER INSTALLATION/OPERATION AND FAN ROTATION.

SIGNATURE: DATE: PLEASE DATE AND INITIAL EACH ITEM AS VERIFIED. COMPLETED VERIFICATION CHECK LIST IS INCLUDED IN OUR REPORT TO THE OWNER AND MUST BE RETURNED PRIOR TO SCHEDULING ARRIVAL OF HVAC SYSTEMS TEST DATE. PLEASE FAX TO THE ITC UPON COMPLETION.

THE HVAC INSTALLER IS REQUIRED TO BE ON SITE FOR THE TWO (2) DAYS THAT THE ITC IS PERFORMING THEIR WORK IN ORDER TO CORRECT ANY PUNCH LIST ITEMS THAT MAY EXIST. SHOULD RETURN TRIPS BECOME NECESSARY AFTER THE INITIAL TWO (2) DAYS, ANY RETEST COST INCURRED BY THE ITC SHALL BECOME THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE ESTIMATED COST IS \$1,000.00 PER DAY.

_ END OF SECTION _



1908 N. Laurent St., Suite 540 Victoria, Texas 77901 www.rmaarch.com

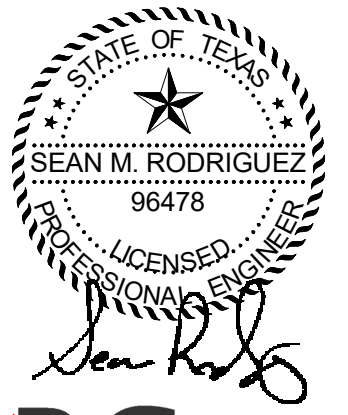
PATRICK DEAN OHRT REGISTERED ARCHITECT REGISTRATION NO. 21195 STATE OF TEXAS

Final Plans for Bidding and Construction

BLESSING COMMUNITY CENTER MATAGORDA COUNTY BLESSING, TX

DATE ISSUED: 12.15.2023

PROJECT NUMBER: 1027-0623



5656 S. STAPLES, SUITE 360, CORPUS CHRISTI, TX 78411 P - 361.852.2727 F - 361.852.2922 TEXAS ENGINEERING FIRM NO. 005318

23110

PLAN NORTH TRUE NORTH

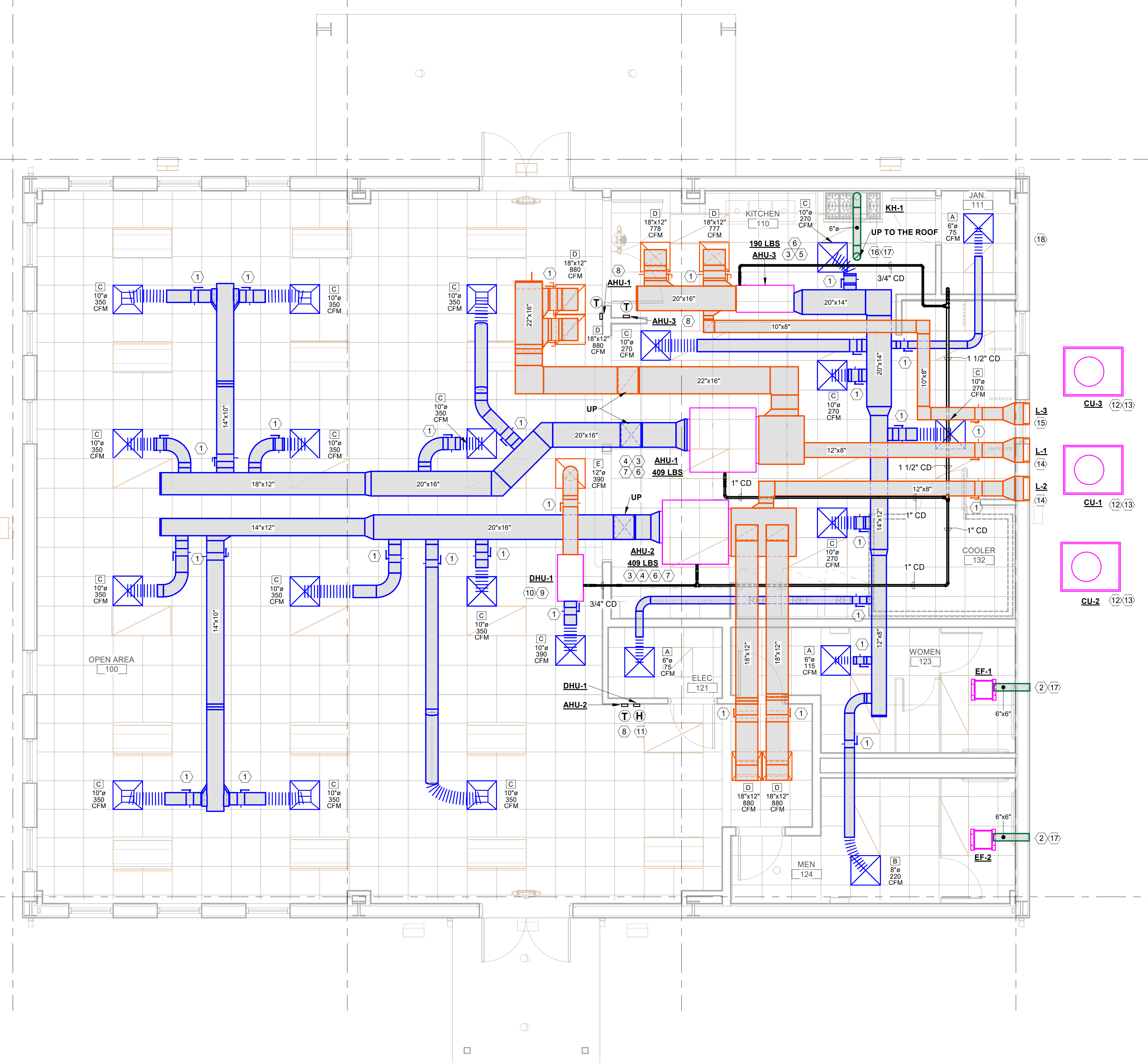
SHEET NAME Mechanical Specifications

SHEET NUMBER

MO.1

MECHANICAL KEYNOTES:

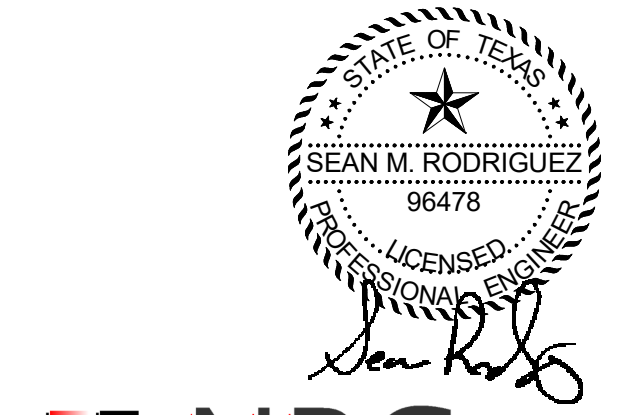
- ① PROVIDE MANUAL BALANCING DAMPERS AT ALL RUN OUTS SHOWN OR NOT (TYPICAL).
- ② ROUTE 6/6 RESTROOM EXHAUST TO EXTERIOR WALL. PROVIDE WALL CAP. REFER TO DETAIL 12/M3.1.
- ③ SUSPENDED AIR HANDLING UNIT (AHU) ABOVE THE CEILING. PROVIDE WITH EMERGENCY DRAIN PAN AND FLOAT SWITCH FOR AUTOMATIC SHUTOFF. PROVIDE SLIDE OUT FILTER FRAME WITH 2" MERV 13 FILTERS.
- ④ PROVIDE 3" DEEP P-TRAP AT CONDENSATE OUTLET. ROUTE 1" CONDENSATE DRAIN FROM AHU TO MOP SINK IN JANITOR A111. TERMINATE 2" ABOVE MOP SINK RIM. COORDINATE WITH PLUMBING CONTRACTOR.
- ⑤ PROVIDE 3" DEEP P-TRAP AT CONDENSATE OUTLET. ROUTE 3/4" CONDENSATE DRAIN FROM AHU TO MOP SINK IN JANITOR A111. TERMINATE 2" ABOVE MOP SINK RIM. COORDINATE WITH PLUMBING CONTRACTOR.
- ⑥ INSULATE CONDENSATE DRAIN LINE WITH 1" CLOSED CELL INSULATION.
- ⑦ PROVIDE DUCT MOUNTED SMOKE DETECTORS IN SA ANS RA DUCTS. INTERLOCK WITH AHU.
- ⑧ PROVIDE WALL MOUNTED THERMOSTAT. MOUNT THERMOSTAT 48" A.F.F.
- ⑨ SUSPENDED DEHUMIDIFIER (DHU-1) ABOVE THE CEILING. PROVIDE WITH EMERGENCY DRAIN PAN AND FLOAT SWITCH FOR AUTOMATIC SHUTOFF.
- ⑩ PROVIDE FULL SIZE P-TRAP AT CONDENSATE OUTLET. ROUTE 3/4" CONDENSATE DRAIN FROM DHU-1 TO MOP SINK IN JANITOR A111. TERMINATE 2" ABOVE MOP SINK RIM. COORDINATE WITH PLUMBING CONTRACTOR.
- ⑪ PROVIDE HONEYWELL HUMIDIPRO PROGRAMMABLE DIGITAL HUMIDISTAT. MOUNT HUMIDISTAT AT 48" ABOVE THE FLOOR AND SET UNIT TO COME ON AT 55% (ADJ.) RELATIVE HUMIDITY.
- ⑫ PROVIDE CONCRETE HOUSEKEEPING PAD FOR CONDENSING UNIT. EXTEND PAD 6" BEYOND UNIT.
- ⑬ REFRIGERANT LINES SHALL ENTER THE BUILDING DOWN LOW AND RISE IN EXTERIOR WALL. COORDINATE ROUTING AND WALL THICKNESS WITH GENERAL CONTRACTOR. SEAL PENETRATION WITH MP-1 SEALANT.
- ⑭ ROUTE 12/8 OA DUCT UP TO EXTERIOR WALL. TERMINATE OUTSIDE AIR DUCT WITH LOUVER. REFER TO LOUVER SCHEDULE ON M2.1.
- ⑮ ROUTE 10/8 OA DUCT UP TO EXTERIOR WALL. TERMINATE OUTSIDE AIR DUCT WITH LOUVER. REFER TO LOUVER SCHEDULE ON M2.1.
- ⑯ ROUTE 6" ROUND KITCHEN HOOD EXHAUST DUCT UP TO THE ROOF. TERMINATE EXHAUST DUCT WITH ROOF CAP.
- ⑰ MAINTAIN MINIMUM 10' CLEARANCE BETWEEN EXHAUST OUTLET AND AHU OA INTAKE.
- ⑱ MAINTAIN MINIMUM 10' CLEARANCE BETWEEN WATER HEATER FLUE PIPE EXHAUST OUTLET AND AHU OA INTAKE.



① Mechanical Floor Plan
 1/4" = 1'-0"



1/4" = 1'-0"
 SCALE
 FEET



NRG
ENGINEERING
 5656 S. STAPLES, SUITE 360,
 CORPUS CHRISTI, TX 78411
 P - 361.852.2727 F - 361.852.2922
 TEXAS ENGINEERING FIRM NO.
 005318
23110

12/15/23

12/13/2023 2:41:22 PM
 C:\Users\CarlosRodriguez\Documents\23110_MEP_R22_epedrosal\FPA6.rvt

HVAC GENERAL NOTES:

- A. THESE GENERAL NOTES APPLY TO ALL HVAC DRAWINGS.
- B. DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
- C. INSULATE DUCTWORK AS FOLLOWS:
 1. WRAP ALL INDOOR SUPPLY, RETURN, OUTSIDE AIR DUCT AND EXHAUST DUCT WITH THICK INSULATION WITH A THERMAL MIN. R-6 VALUE PER SPECIFICATIONS. THIS APPLIES TO CONCEALED DUCTWORK.
 2. COVER ALL OUTDOOR SUPPLY AND RETURN DUCTS WITH 2" THICK RIGID BOARD INSULATION WITH A THERMAL MIN. R-8 VALUE PER SPECIFICATIONS. ALL OUTDOOR DUCTS SHALL HAVE ALL JOINTS AND SEAMS SEALED LIQUID TIGHT WITH A RCD #8, UL-181 MASTIC OR EQUAL. ALL JOINTS AND SEAMS ON THE RIGID INSULATION BOARD SHALL BE SEALED LIQUID TIGHT USING RCD #8, UL-181 MASTIC OR EQUAL. THEN ALL RIGID BOARD SHALL BE PAINTED WITH A LIBERAL AMOUNT OF "KOOL-SEAL" ALUMINUM ROOF COATING #20-400 OR EQUAL.
 3. PROVIDE DOUBLE WALL DUCTWORK IN AREAS WHERE DUCT IS EXPOSED TO VIEW. PROVIDE DUCT INSULATION BETWEEN DUCT WALLS WITH MINIMUM R-VALUE OF 6. REFER TO SPECIFICATIONS.
- D. PROVIDE FLEXIBLE CONNECTION AT DUCT ATTACHMENTS TO MECHANICAL EQUIPMENT.
- E. HVAC EQUIPMENT SUBMITTED OTHER THAN SCHEDULED MANUFACTURER'S SHALL NOT EXCEED PHYSICAL DIMENSIONS DUE TO SPACE LIMITATIONS.
- F. ALL PIPING AND DUCTWORK PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE PROTECTED WITH FIRE BLOCKING MATERIAL AND/OR DAMPERS PER SPECIFICATIONS.
- G. MANUAL VOLUME DAMPERS INSTALLED IN RECTANGULAR DUCTWORK SHALL BE OPPOSED BLADE TYPE. MANUAL VOLUME DAMPERS INSTALLED IN ROUND DUCTWORK SHALL BE BUTTERFLY TYPE.
- H. BALANCING DAMPERS IN EXTERNALLY INSULATED DUCTWORK SHALL BE PROVIDED WITH A BUILD-OUT ON DAMPER OPERATOR TO EXTEND OPERATOR HANDLE TO OUTSIDE OF INSULATION.
- I. CONCEALED DUCTWORK TO HAVE OPERABLE QUADANTS ON BALANCING DAPERS.
- J. PROVIDE ACCESS TO ALL CONTROL, MOTORIZED, BALANCING AND FIRE DAMPERS. PROVIDE ACCESS DOORS IN DUCTS AND CEILINGS WHERE NECESSARY.
- K. DUCTWORK SHALL BE GALVANIZED G-90 SHEETMETAL FABRICATED TO SMACNA STANDARDS. DUCTWORK SHALL BE SHEET STEEL OF LOCK-FORMING QUALITY, ASTM-525. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL SEAMS AIR TIGHT WITH LOW PRESSURE DUCT SEALANT.
- L. FLEXIBLE DUCTWORK SHALL BE EQUAL TO FLEXMASTER 8M WITH AN INSULATING R-VALUE OF 6 OR BETTER. FLEX DUCT SHALL NOT EXCEED 6 FT. IN LENGTH. DUCT RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK.
- M. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT WITH 24 HOUR MEMORY BACKUP SIMILAR TO HONEYWELLS TB3029B.

HVAC SYMBOLS AND ABBREVIATIONS

DUCTWORK:

- 20" □ PRIMARY DUCT, ROUND
- 20/12 □ PRIMARY DUCT, RECTANGULAR
- DUCT TRANSITION
- BRANCH TAP
- MANUAL VOLUME DAMPER (MVD)

MISCELLANEOUS:

- TS HS ZONE TEMP/HUMIDITY SENSOR
- T H ZONE THERMOSTAT/HUMIDISTAT
- 8" □ 200 CFM AIR DEVICE TYPE, NECK SIZE, SCHEDULED CFM
- NEW EQUIPMENT
- NEW PIPING OR DUCT
- EXISTING PIPING OR DUCT

RETURN AIR

- RETURN AIR
- FIRE/SMOKE DAMPER
- CEILING DIFFUSER
- RETURN/EXHAUST AIR GRILLE

NOTE: ALL SYMBOLS & ABBREVIATIONS MAY NOT APPLY TO THIS PROJECT

LEGEND

ACC.DR. ACCESS DOOR	HVAC IN W.G. HEATING VENTILATING & AIR CONDITIONING
AFF ABOVE FINISHED FLOOR	IN W.G. INCH WATER GAUGE
CFM CUBIC FEET PER MINUTE	KW KILOWATT
DB DRY BULB	LAT LEAVING AIR TEMPERATURE
E/A EXHAUST AIR	MBH THOUSAND BTU PER HOUR
EAT ENTERING AIR TEMPERATURE	MOCOP MAXIMUM OVER CURRENT PROTECTION
ESP EXTERNAL STATIC PRESSURE	O/A OUTSIDE AIR
FC FLEXIBLE CONNECTION	PD PRESSURE DROP
FLA FULL LOAD AMPS	R/A RETURN AIR
FPI FINS PER INCH	R/LA RUNNING LOAD AMPS
FT W.G. FOOT WATER GAUGE	RPM REVOLUTION PER MINUTE
GA GAUGE	S/A SUPPLY AIR
GALV GALVANIZED	SP STATIC PRESSURE
GPM GALLONS PER MINUTE	SQ FT SQUARE FEET
	U.C.D. UNDERCUT DOOR BY 1"
	WB WET BULB

AIR DEVICE SCHEDULE

PLAN MARK	MANUF. & MODEL NUMBER	SERVICE	MODULE SIZE	NECK SIZE	FACE SIZE	BORDER TYPE	FINISH	BLOW PATTERN	MATL.	OPTIONS/NOTES
A	TITUS OMNI-AA	SUPPLY	24 X 24	6" ROUND	24 X 24	3	26	4	ALU	
B	TITUS OMNI-AA	SUPPLY	24 X 24	8" ROUND	24 X 24	3	26	4	ALU	
C	TITUS OMNI-AA	SUPPLY	24 X 24	10" ROUND	24 X 24	3	26	4	ALU	
D	TITUS 50 F	RETURN	24 X 24	18 X 12	20 X 20	3	26	-	ALU	1/2" X 1/2" X 1" CORE PROVIDE BACKPAN AND DUCT COLLAR
E	TITUS 50 F	RETURN	24 X 24	12" ROUND	20 X 20	3	26	-	ALU	1/2" X 1/2" X 1" CORE PROVIDE BACKPAN AND DUCT COLLAR

BORDER TYPE	BLOW PATTERN	FINISH	OPTIONS/NOTES
1. SURFACE MOUNT 2. SNAP-IN 3. LAY-IN	1. 1-WAY 2. 2-WAY 2C. 2-WAY, OPPOSITE 3. 3-WAY 5. DROPPED 6. BEVELED	01 ALUMINUM 04 MILL (STD) 26 WHITE	TRM RAPID MOUNT FRAME PFSS SS PLASTER FRAME PPA ALUM PLASTER FRAME AG-15 STEEL DAMPER AG-15-AA ALUMINUM DAMPER AG-15-SS STAINLESS STEEL DAMPER EQT EARTHQUAKE TABS L FRONT BLADE LONG ORIENTATION S FRONT BLADE SHORT ORIENTATION AG-85 BUTTERFLY DAMPER EG EQUALIZING GRID TRV THROW REDUCING VANES
MATERIAL		STL 22 GAUGE STEEL ALU ALUMINUM	

AIR BALANCE SCHEDULE

BASED ON ASHRAE 62.1-2010

MARK	SERVES	SUPPLY AIR CFM	RETURN AIR CFM	OUTSIDE AIR CFM	EXHAUST AIR CFM	RESULTING BALANCE	PERCENT OUTSIDE AIR
AHU-1	OPEN AREA	2100	1760	340		340	16.2%
AHU-2	OPEN AREA	2100	1760	340		340	16.2%
AHU-3	KITCHEN / RESTROOMS	1835	1555	280		280	15.3%
EF-1	MEN RESTROOM				100	-100	
EF-2	WOMEN RESTROOM				100	-100	
EF-3	KITCHEN HOOD				400	-400	
OA	OUTSIDE AIR TOTAL					960	
EA	EXHAUST AIR TOTAL					-600	
	DIFFERENCE (OA-EA)					360	
CONDITIONED AREA (SQUARE FEET)						3096	
A	DESIRED CFM FOR PRESSURIZATION (CFM/SF)				0.033	102.168 CFM	
B	BUILDING LEAKAGE BASED ON NEW/EXISTING BLDG AT 0.04 CFM/SF X TOTAL SURFACE AREA					251.68 CFM	
C	BUILDING EXHAUST					600 CFM	
	MINIMUM REQUIRED FOR PRESSURIZATION (A+B+C)					954 CFM	
	AMOUNT OF FRESH AIR PROVIDED (DELIVERED)					960	
	AMOUNT TO BE RELIEVED (DELIVERED - MINIMUM)					6 CFM	
	BUILDING PRESSURIZED AT:	0.025 in. W.G.	AT	954 CFM			

KITCHEN HOOD

TAG	SERVICE	MODEL NUMBER	SIZE (INCHES)	AIR FLOW (CFM)	VOLTAGE (V)	PHASE	FREQUENCY (Hz)	NOTES
KH-1	GAS RANGE	ZLINE KB-48	48	400	120	1	60	ALL

NOTES:

1. FOUR SPEED FAN CONTROL (120, 240, 320, 400 CFM).
2. BRUSHED 430 STAINLESS STEEL.
3. THREE YEARS PARTS WARRANTY, LIFE TIME MOTOR WARRANTY.

AIR HANDLING UNIT SCHEDULE

MARK	AHU-1	AHU-2	AHU-3
SERVES	OPEN AREA	OPEN AREA	KITCHEN / RESTROOMS
TYPE	CV	CV	CV
SUPPLY (CFM)	2,100	2,100	1,835
OUTSIDE AIR (CFM)	340	340	280
EXT. SP. (IN. WG)	0.75	0.75	0.75
PERCENT OUTSIDE AIR	16%	16%	15%
FAN MOTOR HORSEPOWER	1.5	1.5	1
FAN STYLE/CONFIGURATION	HORIZONTAL	HORIZONTAL	HORIZONTAL
FAN MOTOR TYPE	MULTI-STAGE AIR VOLUME	MULTI-STAGE AIR VOLUME	ECM VARIABLE SPEED
COOLING COIL			
MAX. COIL FACE VEL. (FPM)	500	500	500
EAT DB/WB (F)	75.7 / 64.4	75.7 / 64.4	76.9 / 63.9
LAT DB/WB (F)	53.9 / 53.5	53.9 / 53.5	53.9 / 53.1
TOTAL GRAND (MBTUH)	66.1	66.1	55.2
TOTAL SENSIBLE (MBTUH)	48.4	48.4	43.9
REHEAT COIL			
HEATING EAT DB (F)	63.9	63.9	64.1
HEATING LAT DB (F)	80.9	80.9	83.9
HEATING (KW)	15.0	15.0	15.0
HEATING (MBTUH)	38.6	38.6	39.2
ELECTRICAL DATA			
VOLTS/PH/Hz	208/3/60	208/3/60	208/1/60
MCA	47	47	74
MOCOP	50	50	80
WEIGHT (LBS)	409	409	190
MANUFACTURE	LENNOX	LENNOX	LENNOX
MODEL No.	EL072XASS	EL072XASS	CBA25UHV-060
NOTES:	ALL	ALL	ALL

NOTES:

1. PROVIDE 2" PLEATED 80% EFFICIENT MERV 13 FILTERS FOR THE AHU.
2. PROVIDE SLIDE OUT FILTER FRAME ON RETURN INLET OF AIR HANDLER.
3. PROVIDE WITH SINGLE POINT OF ELECTRICAL CONNECTION FOR EACH UNIT. THE UNIT SHALL BE CONSTANT VOLUME.
4. PROVIDE RUBBER IN SHEAR ISOLATORS FOR SUSPENDED AIR HANDLER.
5. PROVIDE SECONDARY DRAIN PAN WITH EMERGENCY FLOAT SWITCH. INTERLOCK FLOAT SWITCH WITH UNIT SAFETIES.
6. PROVIDE EQUIPMENT MANUFACTURER'S THERMOSTAT/HUMIDISTAT FOR PROPER UNIT OPERATION.
7. PROVIDE UNIT WITH TWO STAGES OF COOLING.
8. PROVIDE UNIT WITH MICROBLUE OR MEGABLUCE CONDENSATE PUMP AND RESERVOIR WITH OVERFLOW SENSOR.
9. PROVIDE ALL SENSORS, ACCESSORIES, CONTROL POINTS, AND INTERLOCKS FOR THE AHU AND THEIR RESPECTIVE ACCUS TO BE PROPERLY OPERATED AND PROPERLY STAGED. COORDINATE ALL THE REQUIRED CONTROLS WITH THE EQUIPMENT TYPE, CONFIGURATION, NUMBER OF DX STAGES, REFRIGERATION CIRCUITS, CONTROLS SEQUENCES AND SPECIFICATIONS.
10. INSTALL ALL UNITS AS PER THE MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS. PROVIDE THE MANUFACTURERS MINIMUM CLEARANCES FOR OPERATION AND SERVICE OF THE UNIT. COORDINATE THE INSTALLATION OF THE UNIT WITH ALL OTHER DISCIPLINES, DUCTWORK, STRUCTURE, ELECTRICAL, AND ALL OTHER OBSTRUCTION PRIOR TO INSTALLATION OF THE UNIT, ITS EQUIPMENT PAD, AND ALL ACCESSORIES.
11. MECHANICAL SPACES HAVE BEEN DESIGNED AROUND THE SPECIFIED MANUFACTURER. ALTERNATE MANUFACTURERS EQUIPMENT SHALL NOT EXCEED THE SPECIFIED MANUFACTURES PHYSICAL DIMENSIONS AND WEIGHTS.
12. EQUIVALENT MANUFACTURERS ARE TRANE, DAIKIN, AND LENNOX.

CONDENSING UNIT SCHEDULE

MARK	CU-1	CU-2	CU-3
SERVES	AHU-1	AHU-2	AHU-3
TOT MBTUH	66.1	66.1	55.2
NOM. TONS	6	6	5
AMBIENT TEMP.	100	100	100
EER (IEER)	12 (16)	12 (16)	11.7 (SEER 15.5)
VOLTS/PH	208/3/60	208/3/60	208/3/60
MCA	25	25	22
MOCOP	40	40	35
MFG	LENNOX	LENNOX	LENNOX
MODEL No.	EL072XCSST	EL072XCSST	SSB060H4
NOTES:	ALL	ALL	ALL

NOTES:

1. PROVIDE COMPRESSOR WITH 5 YEAR WARRANTY.
2. SIZE REFRIGERANT LINES PER MANUFACTURES RECOMMENDATIONS. PROVIDE HIGH AND LOW PRESSURE SWITCHES, LIQUID LINE FILTER DRIER, CRANKCASE HEATERS AND NON-BLEED PORT, ADJUSTABLE TXV VALVE. PROVIDE LIQUID LINE SIGHT GLASS AND PRESSURE TAPS ON INLET AND OUTLET OF INDOOR COILS.
3. PROVIDE HAIL GUARD.
4. EQUIVALENT MANUFACTURERS ARE TRANE, DAIKIN, AND LENNOX.

FAN SCHEDULE

MARK	EF-1	EF-2
SERVES	WOMEN'S RESTROOM	MEN'S RESTROOM
DRIVE	DIRECT/CEILING	DIRECT/CEILING
CFM	100	100
E.S.P. IN W.G.	0.3	0.3
WATTS	19	19
RPM	660	660
RPM (MAX.)	900	900
SONES (MAX.)	1.4	1.4
VOLTS/PHASE/HERTZ	115/1/60	115/1/60
MANUFACTURER	GREENHECK	GREENHECK
MODEL NUMBER	SP-A200	SP-A200
WEIGHT	24	24
NOTES	1, 2, 3	1, 2, 3

NOTE:

1. FAN SHALL BE DIRECT DRIVE WITH MOTOR MOUNTED SPEED CONTROL RELAY. PREWIRED INTEGRAL DISCONNECT SWITCH, AND BACKDRAFT DAMPER.
2. EXHAUST FAN SHALL BE CONTROLLED BY LIGHT SWITCH TO TURN ON WHEN RESTROOM LIGHT IS ON. COORDINATE WITH ELECTRICAL.
3. EQUIVALENT MANUFACTURES ARE COOK AND GREENHECK.

DEHUMIDIFIER SCHEDULE

MARK	DHU-1
SERVES	OPEN AREA
CFM	390
WATER REMOVAL (PIDAY) @ 80F/60% RH	155
EFFICIENCY (PKWH) @ 80F/60% RH	7.3
ENERGY FACTOR (LKW/H) @ 80F /60% RH	3.5
MCA	10
MOP	20
POWER (W)	920
VOLTS/PHASE/HERTZ	120/1/60
MANUFACTURER	QUEST
MODEL NUMBER	155
WEIGHT	140
NOTES	1, 2, 3

NOTE:

1. PROVIDE INTEGRAL FILTER HOUSING WITH MERV 13 FILTERS.
2. PROVIDE UNIT WITH DRAIN CONNECTION, INLET AND OUTLET COLLARS.
3. PROVIDE WITH HONEYWELL HUMIDIPRO HUMIDISTAT CONTROLLER.
4. PROVIDE UNIT WITH SUPPLY AND RETURN DUCT KIT.
4. EQUIVALENT MANUFACTURERS ARE SANTA FE AND QUEST.

LOUVER SCHEDULE

TAG	SERVICE	GREENHECK MODEL NUMBERS	SIZE (INCHES) (WXH)	AIR FLOW (CFM)	FREE AREA (FT2)	PRESSURE DROP (IN WG)	INTAKE OR EXHAUST	NOTES
L-1	AHU-1	EHH-501X-20x14	20X14	340	0.5	0.07	INTAKE	ALL
L-2	AHU-2	EHH-501X-20x14	20X14	340	0.5	0.07	INTAKE	ALL
L-3	AHU-3	EHH-501X-18x14	18x14	280	0.4	0.06	INTAKE	ALL

NOTES:

1. PROVIDE WITH FLANGED FRAME.
2. PROVIDE WITH INSECT SCREEN AND 2 COAT KYNAR COLOR FINISH, COLOR BY ARCHITECT.
3. LOUVER SHALL BE WIND DRIVEN RAIN, HURRICANE RATED PER IBC TWIA FOR 120 MPH WITH A 3 SECOND GUST.
4. COORDINATE LOCATION AND MOUNTING HEIGHT WITH GENERAL CONTRACTOR.
5. RUSKIN, GREENHECK, AND UNITED ENERTECH ARE APPROVED EQUALS.



1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.rmaarch.com

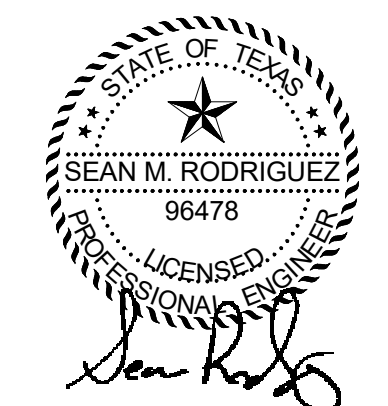
PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX
©2023 HANLEY MALCOLM & ASSOCIATES

DATE ISSUED:
12.15.2023

PROJECT NUMBER:
1027-0623



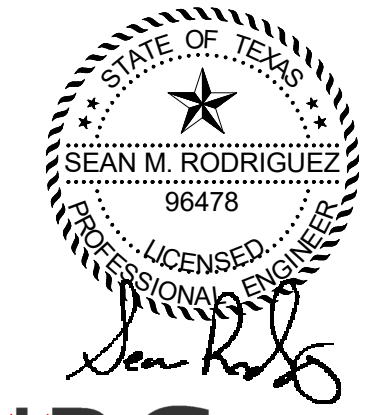
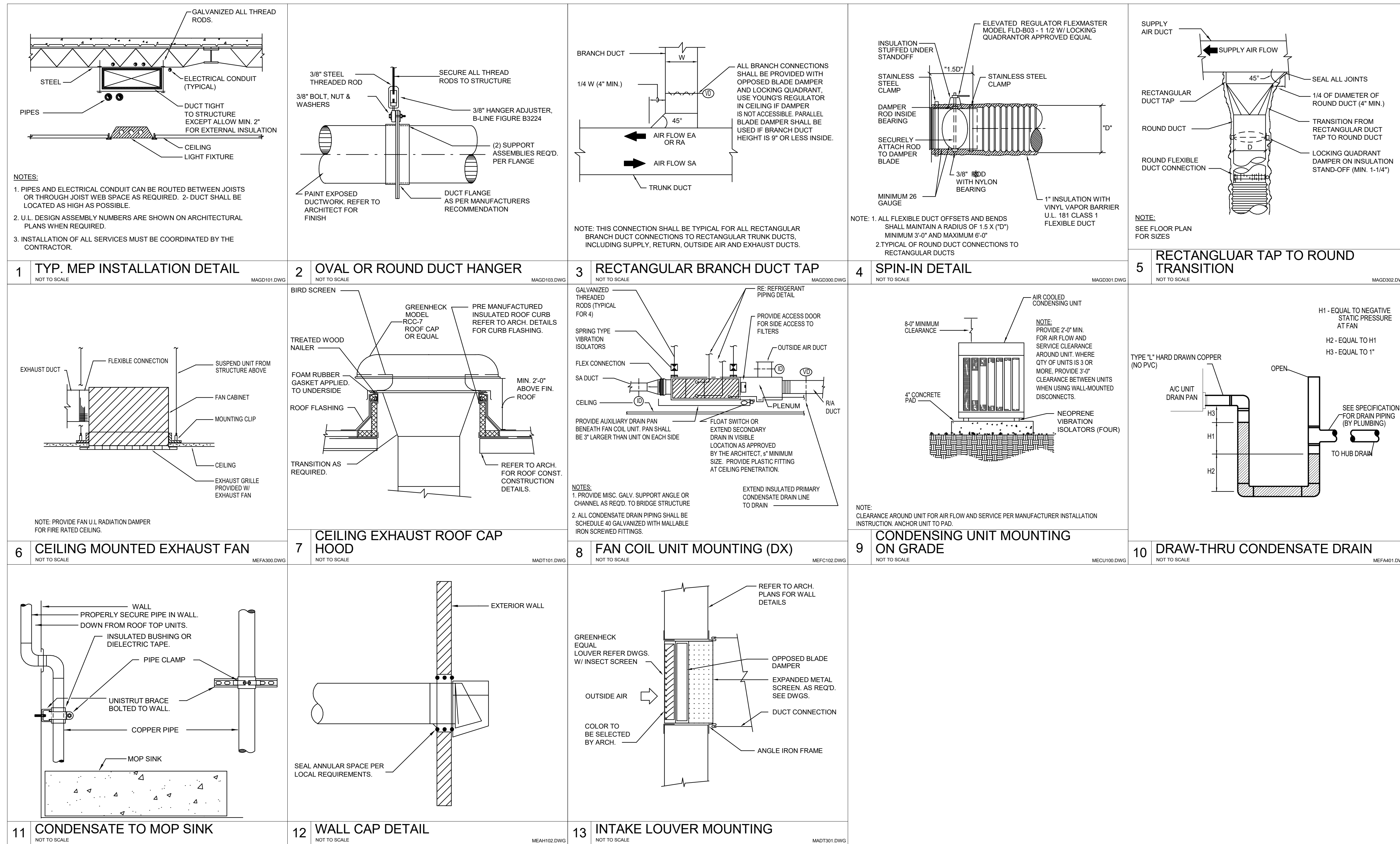
NRG 12/15/23
ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO. 005318
23110

PLAN NORTH TRUE NORTH

SHEET NAME
Mechanical Schedules

SHEET NUMBER

M2.1



NRG
ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO.
005318

23110

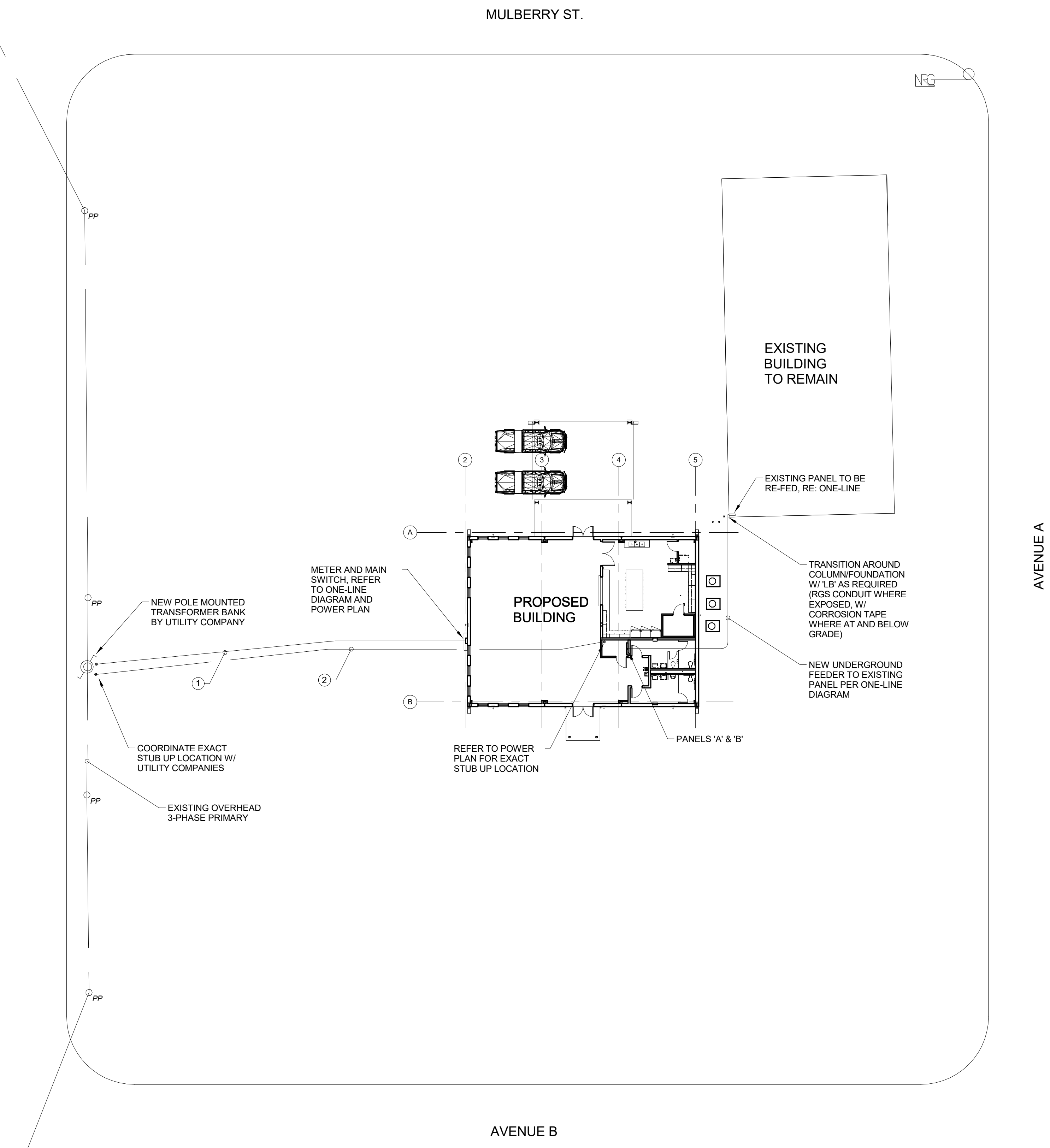
ELECTRICAL SITE GENERAL NOTES:

- A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE BEFORE COMMENCING ANY PHASE OF THE WORK. ADJUSTMENTS FOR FIT AND COORDINATION SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES OR OMISSIONS PRIOR TO COMMENCEMENT OF THE CONTRACT WORK.
- B. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, CIVIL, MECHANICAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.
- C. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.
- D. ALL WORK SHALL COMPLY WITH CURRENTLY ADOPTED VERSION OF NATION ELECTRICAL CODE.
- E. SEAL ALL WALL, ROOF, AND FLOOR PENETRATIONS WITH UL LISTED FIRE SEALANT.

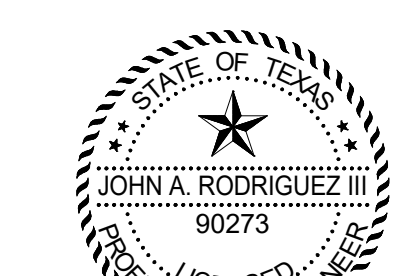
ELECTRICAL SITE KEY NOTES:

- ① UNDERGROUND SECONDARY ELECTRIC SERVICE PER ONE-LINE DIAGRAM.
- ② UNDERGROUND 2" FOR TELECOM SERVICE ENTRANCE.

FIELD COORDINATE STUB UPS OF ELECTRIC AND TELECOM SERVICES AT EASEMENT/RIGHT OF WAY W/ RESPECTIVE UTILITY COMPANIES.



① Electrical Site Plan.
 1" = 20'-0"



John A. Rodriguez III
 12/15/23

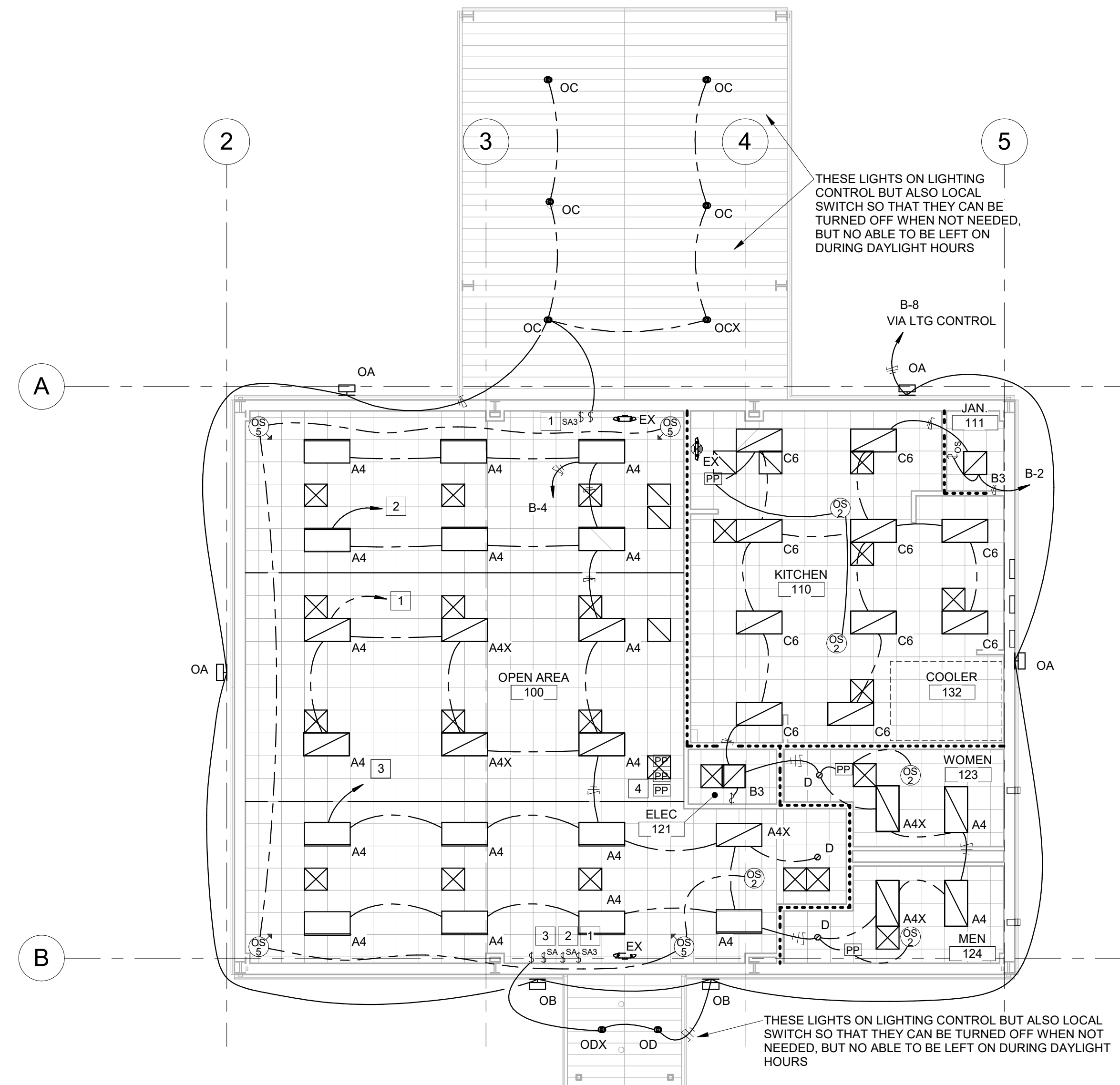
NRG
ENGINEERING
 5656 S. STAPLES, SUITE 360,
 CORPUS CHRISTI, TX 78411
 P - 361.852.2727 F - 361.852.2922
 TEXAS ENGINEERING FIRM NO.
 005318
23110

ELECTRICAL GENERAL NOTES:

- A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE BEFORE COMMENCING ANY PHASE OF THE WORK. ADJUSTMENTS FOR FIT AND COORDINATION SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES OR OMISSIONS PRIOR TO COMMENCEMENT OF THE CONTRACT WORK.
- B. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, CIVIL, MECHANICAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.
- C. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.
- D. ALL CONDUIT SHALL BE AS STRAIGHT AS POSSIBLE AND PARALLEL OR PERPENDICULAR TO BUILDING LINES.
- E. ALL WORK SHALL COMPLY WITH CURRENTLY ADOPTED VERSION OF NATION ELECTRICAL CODE.
- F. SEAL ALL WALL, ROOF, AND FLOOR PENETRATIONS WITH UL LISTED FIRE SEALANT.
- G. ALL CONDUIT SHALL BE ROUTED CONCEALED WITHIN WALLS AND/OR ABOVE CEILINGS, WHERE APPLICABLE.
- H. REFER TO DETAIL #1/E3.1 PLANS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL FIXTURES PRIOR TO ROUGH-IN.

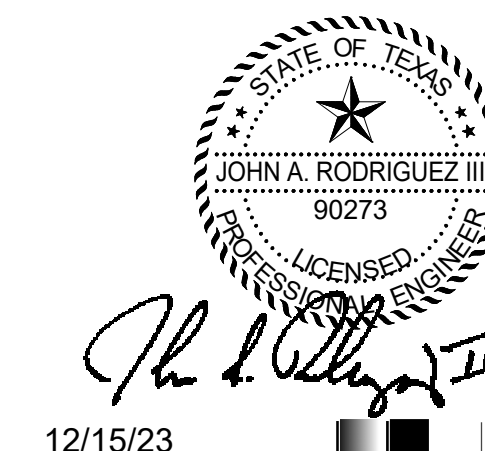
ELECTRICAL LIGHTING KEY NOTES:

- 1 ZONE 'A' LIGHTING IN OPEN AREA LIGHTING CONTROL.
- 2 ZONE 'B' LIGHTING IN OPEN AREA LIGHTING CONTROL.
- 3 ZONE 'C' LIGHTING IN OPEN AREA LIGHTING CONTROL.
- 4 POWER PACKS FOR OPEN AREA LIGHTING. ALL SHALL BE ACTIVATED BY INDICATED OCCUPANCY SENSORS (CIRCUITED IN SERIES SO THAT ACTIVATION OF ANY ONE SENSOR ENABLES LIGHTING ACTIVATION).



1 Electrical Lighting Plan
1/8" = 1'-0"

LIGHT FIXTURE SCHEDULE							
TYPE	MANUFACTURER & CATALOG NO.	VOLTAGE	WATTS	LUMENS	TEMP	MOUNTED	DESCRIPTION
A4	ACUITY #STAKS-2X4-ALO6-SWW7	120	31	4000	3500	GRID/RECESSED	2X4 LED TROFFER-SWITCHABLE, SET AS SCHEDULED
A4X	ACUITY #STAKS-2X4-ALO6-SWW7-ILBCP10A	120	31	4000	3500	GRID/RECESSED	2X4 LED TROFFER W/ BATTERY PACK-SWITCHABLE, SET AS SCHEDULED
B3	ACUITY #STAKS-2X2-ALO3-SWW5	120	21	3000	3500	GRID/RECESSED	2X2 LED TROFFER
C6	ACUITY #2GTL4-60L-FW-GZ10-LP835-ABC	120	49	6000	3500		LENSED LED TROFFER, ALUM FRAME, W/ GASKET
D	ACUITY #LBR6-ALO2-SWW1-AR-LSS-MWD-80CRI-MVOLT-UGZ-HSG	120	19	1500	3500	RECESSED	LED RECESSED CAN W/ ROUGH-IN HSG - SETTINGS PER THIS SCHEDULE
EX	ACUITY #LHQM-LED-G-SD	120	-	-	-	SURFACE	LED EXIT SIGN W/ EMERG HEADS & BATTERY
OA	ACUITY #WFX1-LED-P1-40K-MVOLT-DOBXD	120	11	1568	3500	WALL/SURFACE	LED WALL PACK W/ FULL CUT-OFF
OB	ALLOWANCE \$500 EACH, FIXTURE COST ONLY	120	10	800	3500	WALL/SURFACE	DECORATIVE WALL SCNCE
OC	ACUITY #LND6-35/30-AR-LSS-MVOLT-GZ10-SCA6-15D	120	32	3000	3500	RECESSED	LED RECESSED CAN W/ SLOPE CLG ADAPT
OCX	ACUITY #LND6-35/30-AR-LSS-MVOLT-GZ10-SCA6-15D-EL	120	32	3000	3500	RECESSED	LED RECESSED CAN W/ BATTERY PACK & SLOPE CLG ADAPT
OD	ACUITY #LND6-35/10-AR-LSS-MVOLT-GZ10-SCA6-15D	120	10	1000	3500	RECESSED	LED RECESSED CAN W/ SLOPE CLG ADAPT
ODX	ACUITY #LND6-35/10-AR-LSS-MVOLT-GZ10-SCA6-15D-EL	120	10	1000	3500	RECESSED	LED RECESSED CAN W/ BATTERY PACK & SLOPE CLG ADAPT
OEM	ACUITY #AFF-ODEL-DBTDX-UJOLT-LTP-SDRT-WT-CW	120	-	-	-	SURFACE	EXTERIOR EMERGENCY EGRESS LIGHT (NORMALLY OFF)



12/15/23

NRG
ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO.
005318
23110

ELECTRICAL LEGEND

NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS JOB!

SYMBOL	DESCRIPTION
B-2	HOMERUN TO CIRCUIT AND PANEL INDICATED
—	NEUTRAL CONDUCTOR
—	HOT CONDUCTOR
—	GROUNDING CONDUCTOR
—	TRAVELER
—	SWITCH LEG
S	TOGGLE SWITCH - 120/277V, 20A
S ₃	THREEWAY SWITCH - 120/277V, 20A
S ₄	FOURWAY SWITCH - 120/277V, 20A
S ₀	DIMMER SWITCH - REFER TO LTG CONTROL FOR ADDITIONAL INFORMATION
S _k	KEY SWITCH - 120/277V, 20A
S _M	MOTOR RATED SWITCH
REFER TO LIGHTING PLAN FOR ADDITIONAL LOW VOLTAGE LIGHTING CONTROLS SYMBOLS	
⊖	DUPLEX RECEPTACLE - 125V, 20A, 1P
⊖	SPLIT-CIRCUIT DUPLEX RECEPTACLE - 125V, 20A, 1P
⊖	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE - 125V, 20A, 1P
⊖	ISOLATED GROUND RECEPTACLE - 125V, 20A, 1P
⊖	SINGLE RECEPTACLE - 250V, AMPS PER PANEL SCHEDULE
⊖	QUADRAPLEX RECEPTACLE - 125V, 20A, 1P
⊖	ISOLATED GROUND QUADRAPLEX RECEPTACLE - 125V, 20A, 1P
⊖	SINGLE RECEPTACLE - 125V, 20A, 1P
⊖	DUPLEX RECEPTACLE - 125V, 20A, 1P (FLOOR MOUNTED)
⊖	JUNCTION BOX, SIZED PER N.E.C.
⊖	COMBO RECEPT. & USB CHARGING DEVICE HUBBELL #HBS20AC5
⊖	TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊖	DATA/TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊖	DATA OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊖	TELEVISION OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊖	SPEAKER
⊖	PUSHBUTTON
⊖	HOLD UP BUTTON
AC	ABOVE COUNTER
WP	WEATHER PROOF
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
E.C.	ELECTRICAL CONTRACTOR
NL	NIGHT LIGHT - ON 24 HOURS
RCP	CIRCULATION PUMP
⊖	120V, 1P EQUIPMENT CONNECTION
⊖	240V, 1P EQUIPMENT CONNECTION
⊖	240V, 3P EQUIPMENT CONNECTION
⊖	208V, 1P EQUIPMENT CONNECTION
⊖	208V, 3P EQUIPMENT CONNECTION
⊖	DISCONNECT SWITCH - SIZE AND POLE AS NOTED
⊖	COMBINATION STARTER/DISCONNECT SWITCH
⊖	STARTER
S _M	MANUAL MOTOR STARTER
⊖	PANELBOARD AS SPECIFIED
⊖	EXHAUST FAN
SEC	SECURITY PANEL
PA	GENERAL PAGING SYSTEM
H	FIRE ALARM AUDIO HORN
F	FIRE ALARM PULL STATION
F	FIRE ALARM AUDIOVISUAL SIGNAL
M	MOTION DETECTOR
V	FIRE ALARM ADA VISUAL SIGNAL
R	FIRE ALARM SHUT DOWN RELAY
S	SMOKE DETECTOR
H	HEAT DETECTOR
S _b	DUCT MTD. SMOKE DETECTOR
DC	DOOR CONTACTOR ROUGH-IN WITH CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING.
KP	KEY PAD
AAN	FIRE ALARM ANNUCIATOR
FACP	FIRE ALARM CONTROL PANEL
⊖	CAMERA
PB	PUSH-TO-EXIT BUTTON
A	ANSUL SUPPRESSION SYSTEM
DR	FIRE ALARM DOOR RELEASE
KP	KEYPAD (ROUGH-IN W/CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING)
CR	CARD READER (ROUGH-IN W/CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING)

ELECTRICAL SYSTEM SECTION 16000

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND DISMANTLING OF TEMPORARY POWER USED FOR CONSTRUCTION AND ALL COSTS INCURRED AS A RESULT OF THIS WORK. COORDINATE ALL TEMPORARY ELECTRICAL SERVICE WORK WITH LOCAL UTILITY COMPANY PRIOR TO COMMENCING WORK.

WORK UNDER THIS CONTRACT INCLUDES MODIFICATIONS TO ANY EXISTING ELECTRICAL SYSTEM AND ALSO PROVIDING NEW MATERIALS, DEVICES AND ACCESSORIES AS NECESSARY FOR A COMPLETE FUNCTIONING ELECTRICAL SYSTEM. THE WORK ALSO INCLUDES FINAL CONNECTIONS TO FOOD SERVICE EQUIPMENT ITEMS PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES, ALL LOCAL APPLICABLE ORDINANCES AND LAWS, AS WELL AS, SUBJECT TO INSPECTION.

THE INTENT OF THESE DRAWINGS ARE TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE LOCATION, TYPE, DEVICES, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. PROVIDE ALL DEVICE ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PROPER OPERATION OF ALL SYSTEMS AND THEIR ASSOCIATED EQUIPMENT AS INDICATED BY THE DESIGN ON THESE PLANS.

COORDINATE WITH THE WORK OF ALL OTHER SECTIONS. VERIFY ALL EXISTING CONDITIONS PRIOR TO BID REGARDING RELATED EQUIPMENT, CASEWORK, AND ELECTRICAL CONNECTIONS REQUIRED THEREIN.

COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, NFPA 70E, OSHA, LIFE SAFETY CODES, AND ALL APPLICABLE LAWS IN EFFECT AT THE TIME OF THIS PROPOSAL. IN THE CASE OF CONFLICT, THEN THE STRICTER INTERPRETATION SHALL TAKE PRECEDENCE. ALL MATERIALS USED SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS ESTABLISHED BY THE UNDERWRITER'S LABORATORIES INC.

VERIFY VOLTAGE DROPS, A.I.C. RATINGS FOR ALL EQUIPMENT CONNECTED, AND VERIFY SIZE OF ALL CIRCUIT BREAKERS, CONDUIT, ETC. PRIOR TO INSTALLATION.

ROOF PENETRATIONS SHALL COMPLY WITH SMACNA, NRCA STANDARDS, AS WELL AS, ALL REQUIREMENTS OF THE OWNER AND ROOF METHODS AND MATERIALS WARRANTY. SUB-CONTRACT ROOFING PENETRATION WORK TO AN ENTITY APPROVED FOR USE BY THE OWNER AND ROOF MANUFACTURER.

PANELBOARDS: SHALL BE AS MANUFACTURED BY SQUARE D, EATON, OR SIEMENS. ALL EQUIPMENT SHALL BE U.L. LISTED AND MEET OR EXCEED ALL OF THE LATEST APPLICABLE U.L. AND NEMA STANDARDS. BUSHING WITH SILVER SOLDER PROVIDED TO BE CONNECTED TO NEUTRAL BAR DISCONNECT SWITCHES: SHALL BE HEAVY-DUTY TYPE AS MANUFACTURED BY SQUARE D, EATON, OR SIEMENS. ALL EQUIPMENT SHALL BE U.L. LISTED AND MEET OR EXCEED ALL OF THE LATEST APPLICABLE U.L. AND NEMA STANDARDS. DO NOT MOUNT DISCONNECT SWITCHES TO ANY HVAC UNIT. LOCATION TO BE COORDINATED WITH MECHANICAL CONTRACTOR.

CIRCUIT BREAKERS: THERMAL MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, BOLT-ON TYPE OF SINGLE UNIT CONSTRUCTION. TWO AND THREE POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE. BREAKERS USED AS A SWITCH FOR 120 VOLT LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SW" BREAKERS USED FOR PROTECTING HVAC EQUIPMENT SHALL BE RATED HACR.

SURGE PROTECTION DEVICE (SPD): SPDs SHALL BE UL1449 4TH EDITION LISTED AND MANUFACTURED BY THOR SQUARE D, EATON OR SIEMENS. SPDs SHALL HAVE STANDARD 7-MODE PROTECTION AND SERVICE ENTRANCE & INTERMEDIATE DISTRIBUTION UNITS SHALL BE UL LABELED WITH 20KA 1-NOMINAL.

SURGE CURRENT CAPABILITY FOR SERVICE ENTRANCE DEVICES SHALL BE 30KA PER PHASE. 200KA PER PHASE FOR INTERMEDIATE DISTRIBUTION OR ROOF MOUNTED BRANCH PANELS, AND 100KA FOR BRANCH PANELS. SPDs SHALL BE EXTERNAL TO EQUIPMENT UNLESS NOTED OTHERWISE ON DRAWING.

CABINETS: SHALL BE ONE PIECE CODE GAGE GALVANIZED STEEL WITH MOUNTING STUDS, WIRING GUTTERS OF AMPLE SIZE AND KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. BUS BARS SHALL BE 98% CONDUCTIVE COPPER, ALUMINUM OR COPPER-CLAD ALUMINUM. FRONTS SHALL BE ONE PIECE CODE GAGE FURNITURE STEEL WITH ADJUSTABLE FASTENERS. PROVIDE FLUSH MOUNT UNITS UNLESS OTHERWISE INDICATED. PROVIDE A PLASTIC COVERED TYPEWRITTEN SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS INSIDE EACH CABINET.

GROUNDING SYSTEM: PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT, SUPPORTS, CABINETS, PANELBOARDS AND SYSTEM NEUTRAL CONDUCTORS. MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING. WHERE GROUNDING CONDUCTORS ARE ENCLOSED IN CONDUIT, GROUND CLAMPS SHALL BE A TYPE WHICH GROUND BOTH CONDUCTOR AND CONDUIT. ALL CONDUITS IN FLEXIBLE METAL OR PLASTIC CONDUIT SHALL INCLUDE A GROUND WIRE SIZE IN ACCORDANCE WITH NEC TABLE 250.

CONDUIT: SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED. MINIMUM OF 2" BELOW GRADE. PROVIDE SCHEDULE 40 PVC PLASTIC OR RIGID STEEL CONDUIT BELOW GRADE. MINIMUM SIZE SHALL BE 1/2" FOR RIGID STEEL CONDUIT. PROVIDE 1/2" RIGID STEEL CONDUIT THROUGH FLOOR SLAB. PROVIDE ELECTRICAL METALLIC TUBING (EMT) MEETING FSW-C563, ARMOR CABLE, OR FLEXIBLE CONDUIT (IN LENGTHS 6' OR LESS) FOR INTERIOR LOCATIONS. EMT CONNECTORS AND COUPLINGS 2" AND SMALLER SHALL BE COMPRESSION TYPE. CLAMP CONDUIT TO BOXES WITH BUSHING INSIDE AND LOCKWIP OUTSIDE.

- RIGID STEEL CONDUIT: ANSI C80.1
- INTERMEDIATE STEEL CONDUIT: UL 1242
- ELECTRICAL METALLIC TUBING AND FITTINGS: ANSI C80.3
- FLEXIBLE METAL CONDUIT: ZINC COATED STEEL.
- LIQUID-TIGHT FLEXIBLE METAL CONDUIT AND FITTINGS: UL 360. FITTINGS TO BE SPECIFICALLY APPROVED FOR USE WITH THIS RACEWAY.
- MC CABLE IS APPROVED FOR INSTALLATION ONLY AT THE END OF A RIGID CONDUIT RUN AND IS ONLY TO ORIGINATE FROM AN APPROVED JUNCTION BOX AND FEED DIRECTLY DOWN TO DEVICE.

CONDUCTORS: INSULATED SOFT ANNEALED 98% PURE COPPER WITH COLOR CODING. B AND S GAGE, #12 TO BE SOLID OR STRANDED, #10 AND LARGER TO BE STRANDED, MINIMUM #12, UNLESS OTHERWISE INDICATED. ALL EQUIPMENT TO BE PROVIDED WITH C/UAL 75° DEGREE C. TERMINAL LUGS. CONDUCTORS WITH "THHN" INSULATION MAY NOT BE USED UNDERGROUND AT SERVICE ENTRANCES, OUTSIDE, OR IN WET LOCATIONS. ALL INSULATION TO BE RATED FOR 90° DEGREE C OR 600 VOLT AND TYPES AS FOLLOWS:

BRANCH CIRCUITS	THHN, THWN2
FEEDERS	THWN2
SERVICE ENTRANCE	THWN2, XHHW, XHHW2

DEVICES & COVERPLATES:

ALL DEVICES AND COVERPLATES SHALL BE STAINLESS STEEL. STANDARD DUPLEX RECEPTACLES SHALL BE GROUNDING TYPE, 20 AMP, NEMA 5-20R, SIDE OR BACK WIRED.

SINGLE RECEPTACLE: 15 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-15R. HUBBELL #5251-#4. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

DUPLEX RECEPTACLE: 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R. HUBBELL #5342-#4. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

GROUND-FAULT INTERRUPTER RECEPTACLE: 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R. FEED-THRU TYPE CAPABLE OF PROTECTING CONNECTED DOWNSTREAM RECEPTACLES. UL RATED CLASS A, GROUP 1, SOLID STATE GROUND-FAULT SENSING LEVEL WITH 5 ma GROUND-FAULT TRIP LEVEL. HUBBELL #1G5362#. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

WEATHERPROOF RECEPTACLE: SHALL BE A GROUND-FAULT INTERRUPTER WITH STAINLESS STEEL, GASKETED LIDS AND PLATE. PLATE TO CONSIST OF TWO SPRING LOADED LIDS HINGED AT TOP.

PUBLIC AREAS: PROVIDE FLUSH RECEPTACLE COVERS AT ALL DUPLEX RECEPTACLES IN PUBLIC AREAS. COLOR OF FILLERS TO MATCH COLOR OF RECEPTACLE AND COVERPLATE.

LIGHTING FIXTURES: ALL LIGHTING FIXTURES AND ASSOCIATED LAMPS AND BALLASTS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

LAYOUT BRANCH CIRCUIT WIRING AND ARRANGE HOMERUNS FOR MAXIMUM ECONOMY AND EFFICIENCY. INCREASE WIRE AND CONDUIT SIZE ACCORDINGLY IF VOLTAGE DROP EXCEEDS 3% OR LENGTH OF RUN EXCEEDS 100 FEET.

CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL OR FLOOR CONSTRUCTION WHERE POSSIBLE. INSTALL CONDUIT PARALLEL OR PERPENDICULAR TO ALL BUILDING LINES, SUCH THAT ALL OPENINGS, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC. ARE AVOIDED.

INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90° DEGREE BENDS. SECURELY FASTEN IN PLACE WITH STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. DO NOT SUPPORT CONDUIT FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES. REAM CONDUIT ENDS AND THOROUGHLY CLEAN BEFORE INSTALLATION. OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT FREE OF DEBRIS. SWITCHES AND OUTLETS SHALL NOT BE USED TO "FEED THRU" TO THE NEXT SWITCH OR OUTLET. THE DISCONNECTION OR REMOVAL OF A RECEPTACLE, FIXTURE OR OTHER DEVICE FED FROM A BOX SHALL NOT INTERFERE WITH OR INTERRUPT THE CONDUCTOR CONTINUITY.

ADJUSTING AND TESTING: ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED AND TESTED FOR PROPER OPERATION. COMPLETED WIRING SYSTEM SHALL BE FREE OF SHORT CIRCUITS.

TOUCH-UP OR REFINISH DAMAGED SURFACES OF FIXTURES AND EQUIPMENT, EXPOSED TO VIEW, TO PRESENT A "NEW" APPEARANCE.

ALL CONDUIT AND JUNCTION BOXES LOCATED WITHIN AN EXPOSED STRUCTURAL SYSTEM SHALL BE PAINTED TO MATCH THE COLOR OF THE STRUCTURE (COLOR TO BE VERIFIED WITH ARCHITECT).

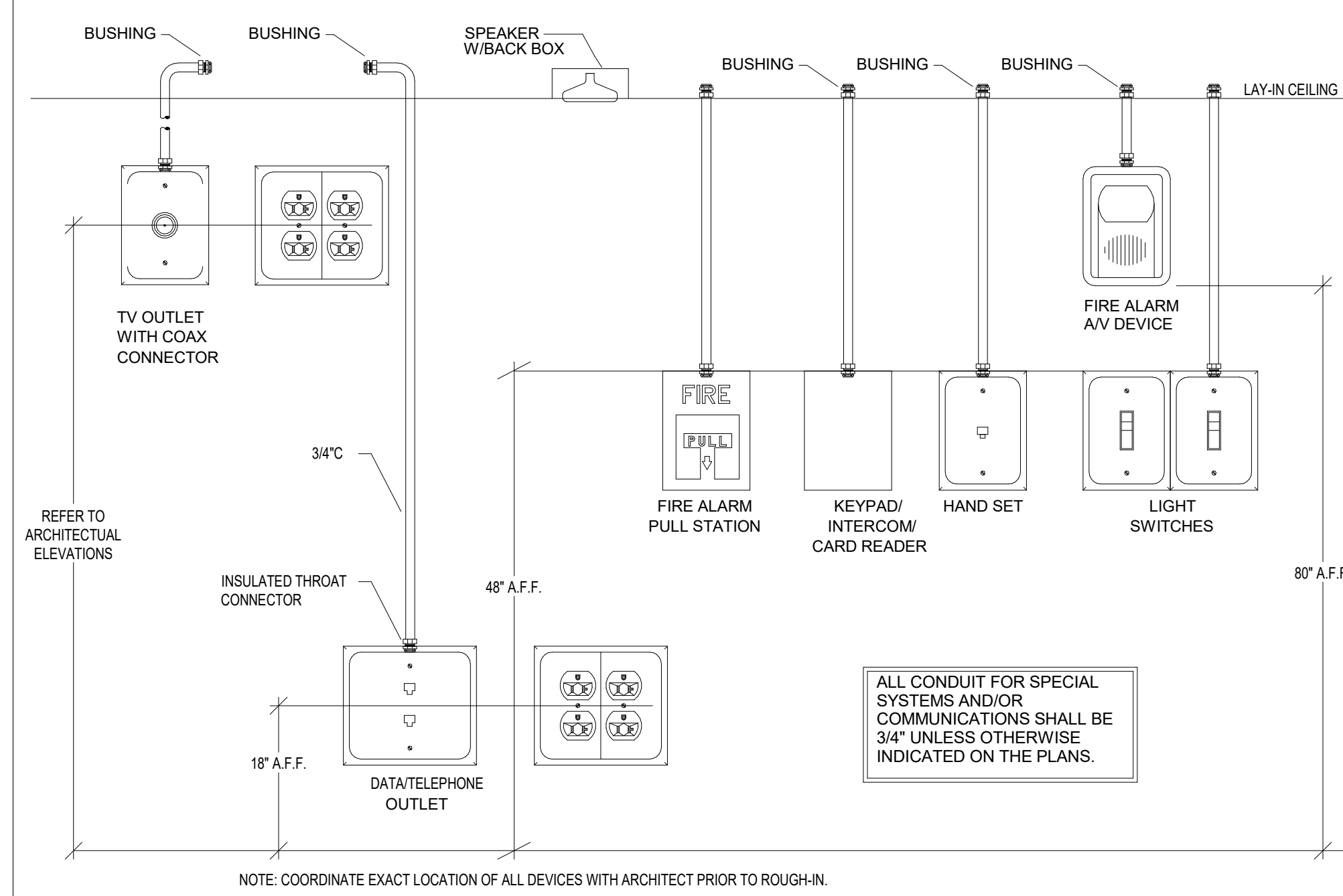
ALL LAMPS, FIXTURES AND ASSOCIATED HOUSINGS, LENSES, AND LOUVERS SHALL BE CLEANED PRIOR TO OWNER ACCEPTANCE.

TOGGLE TYPE SWITCH: 20 AMP, 120/277 VOLT AC SINGLE-POLE, QUIET TYPE, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS. HUBBELL #HBL 12211.

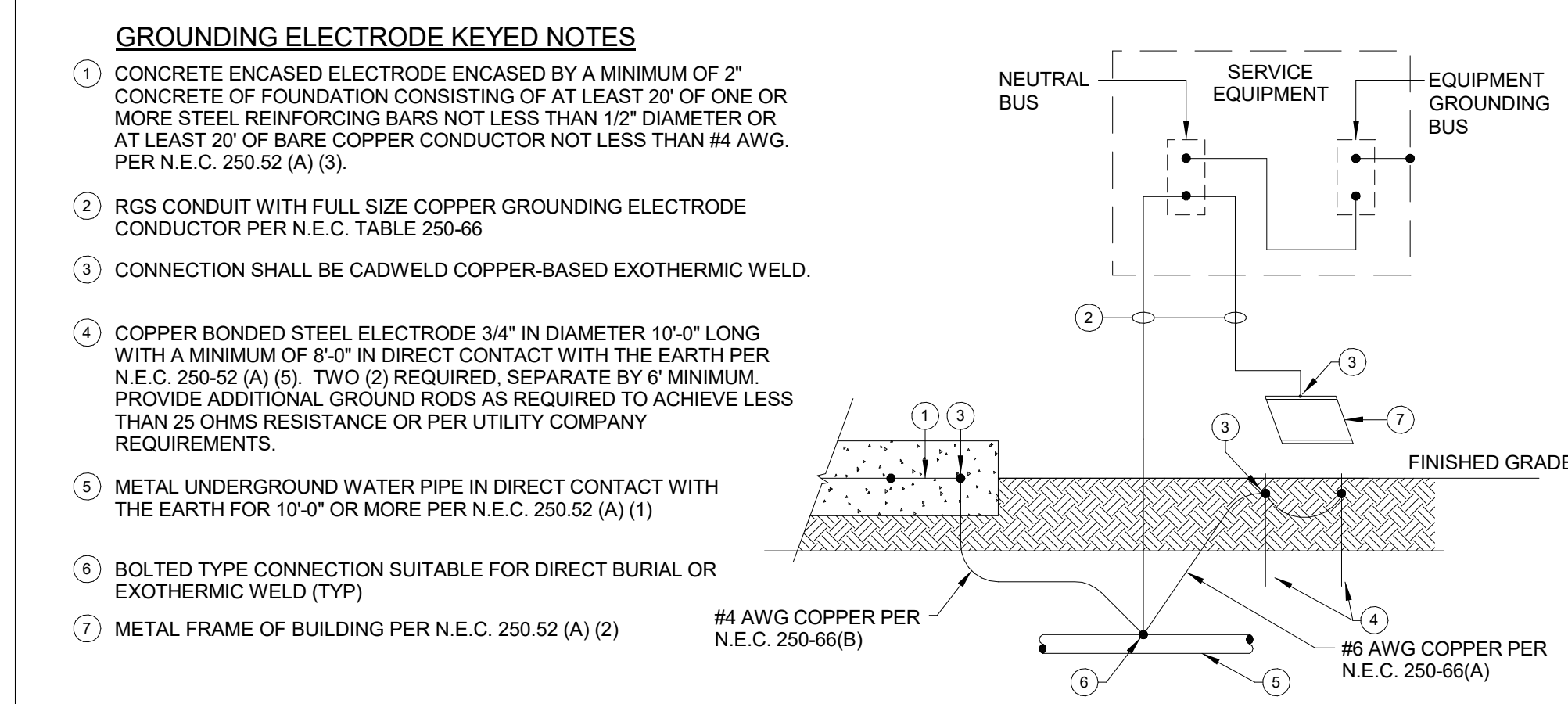
A. 2-POLE, 3-WAY & 4-WAY SWITCHES SHALL BE OF THE SAME MAKE AS FOR SINGLE-POLE.

ELECTRICAL EQUIPMENT IDENTIFICATION:

- ENGRAVED PLASTIC-LAMINATE NAMEPLATES: SHALL BE ENGRAVING STOCK MELAMINE PLASTIC LAMINATE 1/16" THICK, 1-1/2" HIGH (2" HIGH FOR 2 LINES OF TEXT) WITH 1/2" HIGH ENGRAVERS ST. OR LETTERS, OR SHALL BE BLACK WITH WHITE LETTERING. NAMEPLATE SHALL BE PUNCHED FOR MECHANICAL FASTENING WITH SELF-TAPPING STAINLESS STEEL SCREWS, UNLESS ADHESIVE MOUNTING IS NECESSARY DUE TO SUBSTRATE MATERIAL.
- UNDERGROUND-TYPE PLASTIC LINE MARKER: SHALL BE PERMANENT, BRIGHT COLORED, CONTINUOUS-PRINTED PLASTIC TAPE, INTENDED FOR DIRECT BURIAL SERVICE, NOT LESS THAN 6" WIDE x 4 MILS THICK. PROVIDE TAPE WITH WORDED PRINT WHICH MOST ACCURATELY DESCRIBES THE TYPE OF SERVICE FOR BURIED CABLE.
- CABLE/CONDUCTOR IDENTIFICATION BANDS: SHALL BE VINYL-CLOTH, SELF-ADHESIVE, WRAP-AROUND TYPE MARKER. EITHER PRE-NUMBERED PLASTIC COATED TYPE OR WRITE-ON TYPE WITH CLEAR PLASTIC SELF-ADHESIVE COVER FLAP, NUMBERED TO SHOW CIRCUIT IDENTIFICATION.



1 TYPICAL DEVICE ELEVATIONS (UNLESS NOTED OTHERWISE)



3 GROUNDING ELECTRODE SYSTEM DETAIL

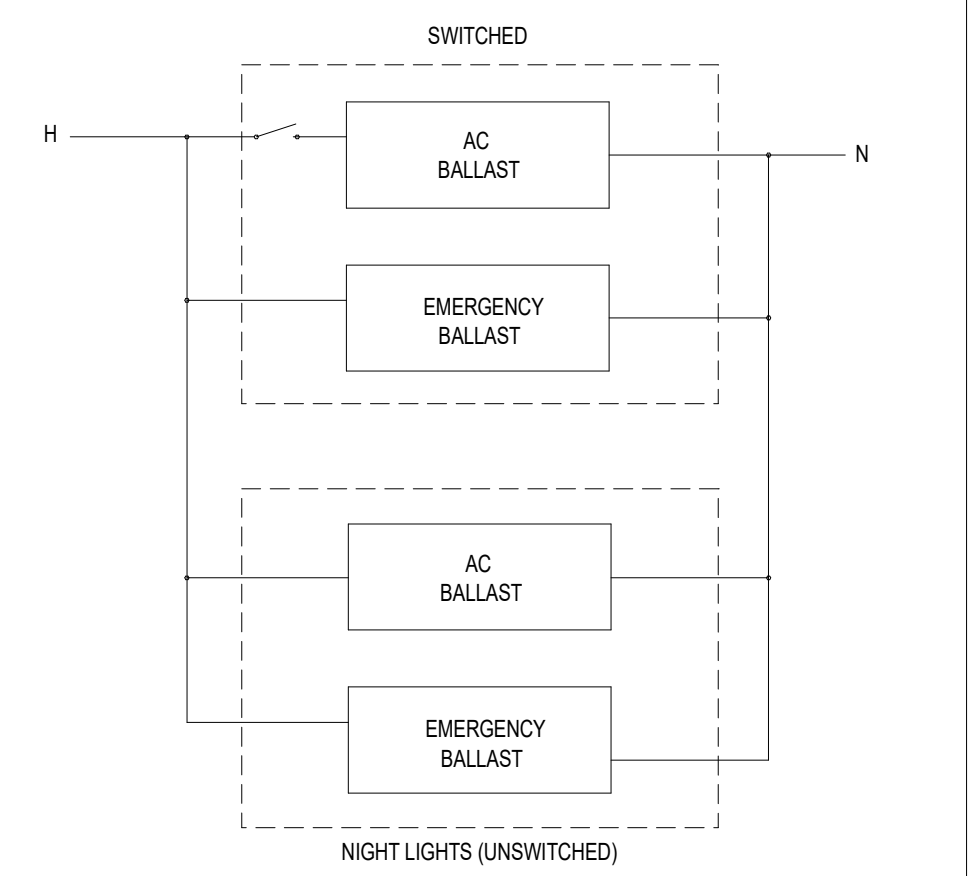
LIGHTING CONTROL NARRATIVE:

- OCCUPANT SENSOR CONTROLS SHALL BE UTILIZED THROUGHOUT FOR INTERIOR LIGHTING CONTROL, EXCEPT IN AREAS FOR WHICH EXCEPTIONS APPLY.
- NO DAYLIGHT RESPONSIVE CONTROLS ARE REQUIRED DUE TO THE FACT THAT NO ZONE MEETS THE MINIMUM REQUIREMENT OF 150WATTS PER ZONE.
- EXTERIOR LIGHTING WILL BE CONTROLLED VIA TIME CLOCK AND PHOTOCELL.
- REDUCED LIGHTING POWER DENSITY (IECC C408.3) METHOD WILL BE UTILIZED TO SATISFY THE ADDITIONAL EFFICIENCY PACKAGE OPTION IN IECC C408.

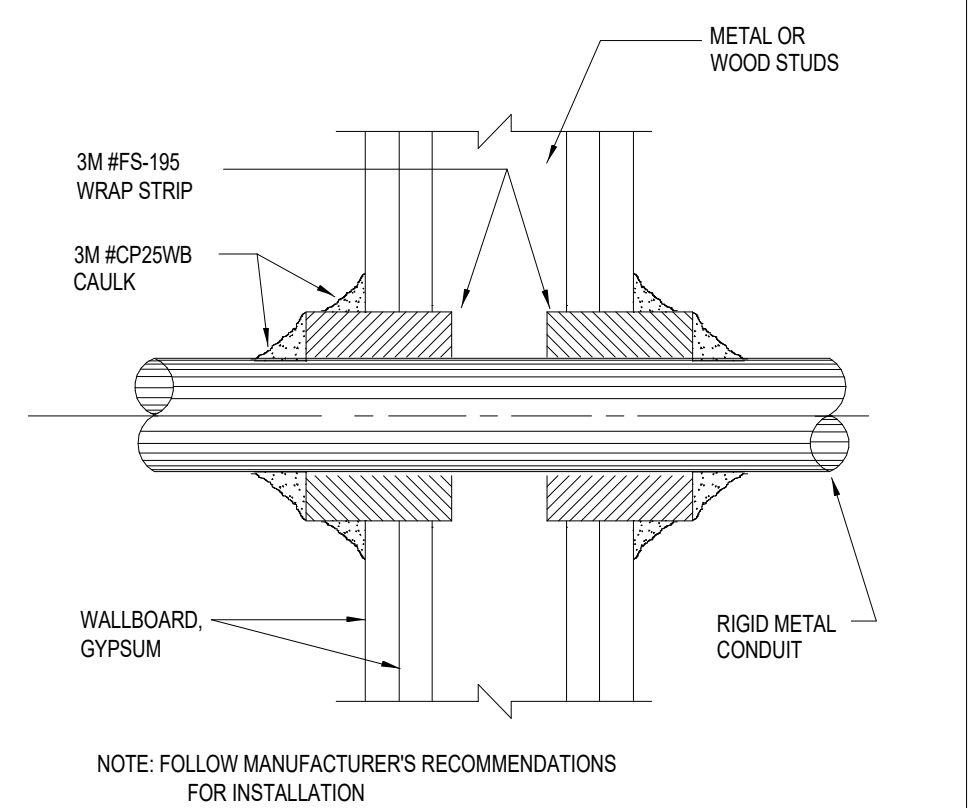
LIGHTING SYSTEM CONTROLS FUNCTIONAL TESTING (IECC C408.3):

UNDER 2015 IECC, LIGHTING SYSTEM CONTROLS TESTING IS REQUIRED FOR ALL COMMERCIAL PROJECTS. A LETTER FROM THE THIRD PARTY REGISTERED DESIGN PROFESSIONAL OR COMMISSIONING AGENT THAT FOLLOWS THE REQUIREMENT IN C408.3.1 WILL FULFILL THIS REQUIREMENT. THIS INCLUDES IN PARTICULAR:

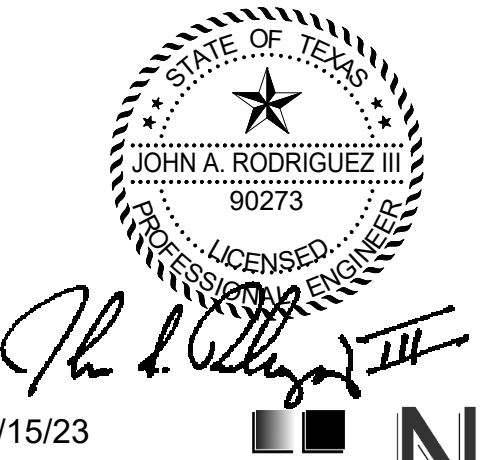
- OCCUPANT SENSOR CONTROLS, APPLICABLE FOR ALL PROJECTS C405.2.1
- TIME SWITCH CONTROLS, APPLICABLE FOR ALL PROJECTS C405.2.2
- DAYLIGHT RESPONSIVE CONTROLS, WHERE APPLICABLE C405.2.3
- SPECIFIC APPLICATION CONTROLS, WHERE APPLICABLE C405.2.4 (DISPLAY LIGHTING, ETC.)
- EXTERIOR LIGHTING CONTROLS, WHERE APPLICABLE C405.2.5



2 EMERGENCY BALLAST WIRING



1 AND 2 HR. GYPSUM/WALLBOARD PIPE PENETRATION



12/15/23

NRG ENGINEERING

5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO. 005318

23110



PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX

DATE ISSUED:
12.15.2023

PROJECT NUMBER:
1027-0623

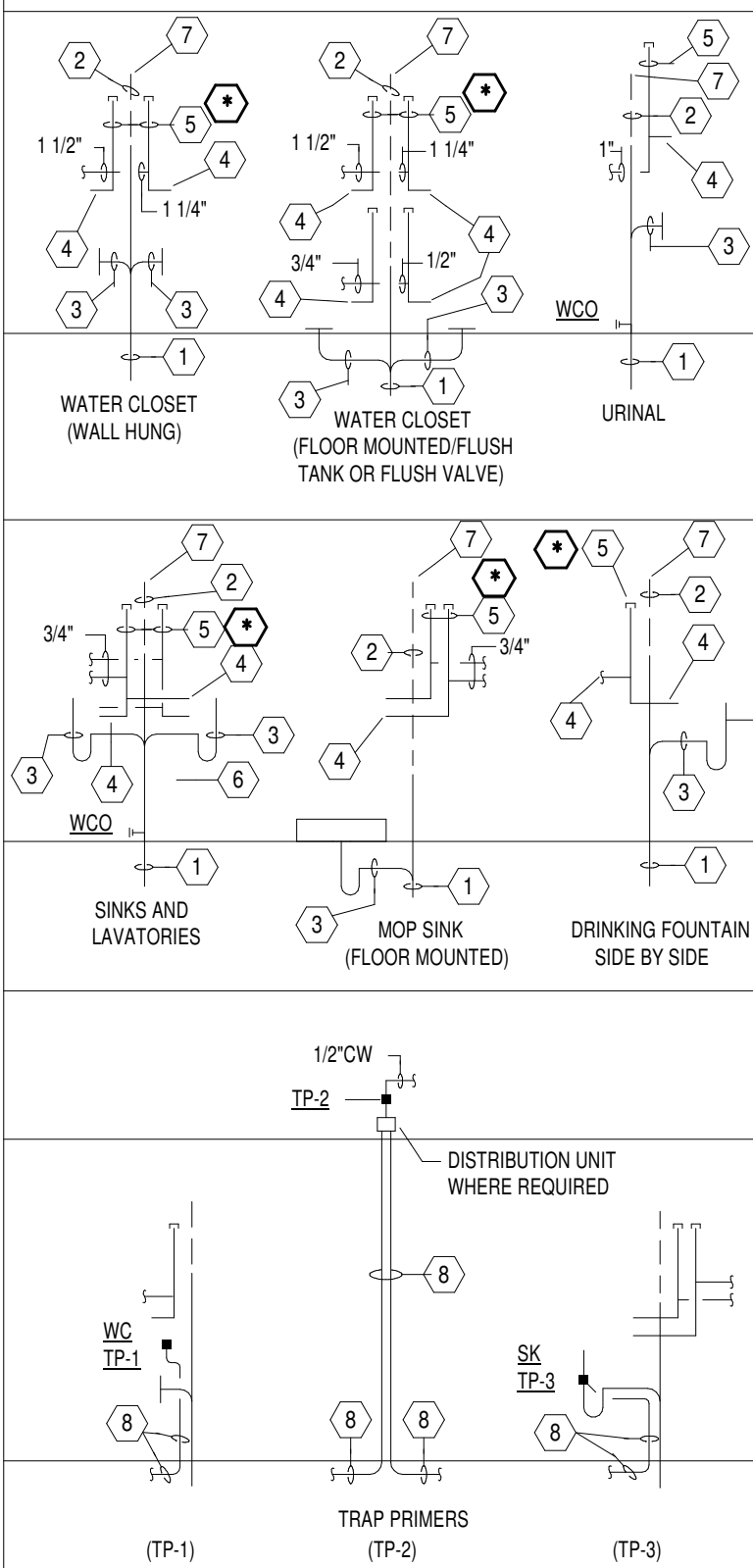
PLAN NORTH TRUE NORTH

SHEET NAME
Electrical Details & Specifications

SHEET NUMBER
E3.1

PLUMBING LEGEND		
DISREGARD LEGEND ITEMS NOT INDICATED ON DRAWINGS		
SYMBOL	DESCRIPTION	ABBR.
---	SOIL OR WASTE PIPING B.G.	WST
---	SOIL OR WASTE PIPING A.G.	WST
GW	GREASE WASTE PIPING	GW
---	VENT PIPING	V
SD	STORM DRAIN PIPING	SD
OD	OVERFLOW STORM DRAIN PIPING	OD
G	GAS LINE	G
F	FIRE OR SPRINKLER LINE	F
---	DOMESTIC COLD WATER	CW
---	DOMESTIC HOT WATER	HW
---	DOMESTIC HOT WATER RETURN	HWR
TW	TEMPERED DOMESTIC HOT WATER	TW
GV	GATE VALVE	GV
GLV	GLOBE VALVE	GLV
BV	BALL VALVE	BV
CKV	CHECK VALVE	CKV
BAV	BALANCING VALVE	BAV
BTV	BUTTERFLY VALVE	BTV
PLV	PLUG VALVE	PLV
PRV	PRESSURE REDUCING VALVE	PRV
T&P	PRESSURE RELIEF VALVE	T&P
STR	STRAINER	STR
UN	UNION	UN
TW	THERMOMETER WELL	TW
PG	PRESSURE GAUGE	PG
THRM	THERMOMETER	THRM
D	CONDENSATE OR INDIRECT DRAIN	D
---	BRANCH CONNECTION, TOP	--
---	BRANCH CONNECTION, BOTTOM	--
---	ELBOW UP	--
---	ELBOW DOWN	--
FCO	FLOOR CLEANOUT (INTERIOR)	FCO
COG	CLEANOUT AT GRADE (EXTERIOR)	COG
WCO	WALL CLEANOUT	WCO
FD	FLOOR DRAIN	FD
FS	FLOOR SINK	FS
HB	HOSE BIBB	HB
WH	WALL HYDRANT	WH
---	NEW TO EXISTING PIPE CONNECTION	--
P/X	PLUMBING RISER IDENTIFICATION	P/X
DS/X	DOWNSPOUT RISER IDENTIFICATION	DS/X
F/X	FIRE RISER IDENTIFICATION	F/X
ABBR.	ABBREVIATIONS	ABBR.
AFF	ABOVE FINISHED FLOOR	AFF
AP	ACCESS PANEL	AP
BFF	BELOW FINISHED FLOOR	BFF
BOP	BOTTOM OF PIPE	BOP
D	INDIRECT DRAIN	D
(E)	EXISTING TO REMAIN	(E)
(D)	EXISTING TO BE DEMOLISHED	(D)
(R)	EXISTING TO BE RELOCATED	(R)
FIN	FINISHED	FIN
FLR	FLOOR	FLR
INV. EL.	INVERT ELEVATION	INV. EL.
NC	NORMALLY CLOSED	NC
SW	SOFT WATER	SW
TP	TRAP PRIMER	TP
TYP	TYPICAL	TYP
VTR	VENT THRU ROOF	VTR
NOT ALL SYMBOLS MAY BE USED		

PLUMBING RISER DETAILS



KEYED NOTES - RISER DIAGRAM DETAILS:

- REFER TO PLUMBING FIXTURE SCHEDULE FOR SOIL OR WASTE ROUGH-IN PIPE SIZE. MINIMUM SOIL OR WASTE DRAIN LINE SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR SANITARY VENT ROUGH-IN PIPE SIZE. MINIMUM SANITARY VENT BRANCH SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR FIXTURE DRAIN ROUGH-IN PIPE SIZE. MINIMUM FIXTURE DRAIN AND TRAP SIZE FOR THIS FIXTURE.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR WATER PIPING ROUGH-IN PIPE SIZE. MINIMUM WATER SUPPLY BRANCH SIZE (EXCEPT AS NOTED) FOR THIS FIXTURE.
- SHOCK ARRESTOR INLET; REFER TO SHOCK ARRESTOR SCHEDULE FOR SIZE. LOCATION SHOWN HERE FOR INDIVIDUAL FIXTURE WILL VARY WHERE INCLUDED AS PART OF PLUMBING CHASE BATTERY OF PIPING. REFER TO RISER DIAGRAMS FOR BATTERY LOCATIONS. ARRANGE ALL WATER LINES TO GRAVITY DRAIN.
- WALL CLEANOUTS SHALL BE PROVIDED AT END OF BATTERY OR END OF BRANCH LINE FIXTURES AND WHERE REQUIRED BY PLUMBING CODE OFFICIALS TO ASSURE COMPLETE ACCESS TO ALL PORTIONS OF DRAIN.
- SANITARY VENT PIPES SHALL CONTINUE TO CEILING OR HEADER TOGETHER AT A MINIMUM 42" ABOVE FIN. FLOOR.
- TRAP REILL LINE; SEE PLUMBING DETAILS SHEET. EXTEND AND CONNECT TO FLOOR DRAIN TRAP AS SHOWN.

GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY ELEVATIONS AND DIMENSIONS OF FINISHED FLOORS AND WALLS. TRUE ALL DRAINS, ROUGH-INS AND CARRIERS IN ACCORDANCE WITH THE PROPOSED ELEVATIONS AND FINISHED SURFACES.
- MOUNTING HEIGHT ELEVATION OF ALL WALL HUNG OR COUNTER MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION OF ROUGH-IN WORK.
- FOR ALL FIXTURES AND EQUIPMENT WITH ASSOCIATED TRIM OR COMPONENT ACCESSORIES, PROVIDE UNDER SEPARATE DIVISIONS AND REQUIRING PLUMBING CONNECTIONS. THIS CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS OF, MAKE PROVISIONS FOR, AND SUPPLY ALL MATERIALS AND LABOR FOR MAKING FINAL CONNECTIONS.
- CONTRACTOR SHALL REFER TO SHOP DRAWINGS OF EQUIPMENT TO BE SUPPLIED FOR FINAL COORDINATION OF ALL ROUGH-IN OPENINGS BEFORE BEGINNING WORK.
- ALL FIXTURE AND EQUIPMENT STUB-OUTS SHALL BE PROVIDED WITH A STOP VALVE. ALL FIXTURE STOPS SHALL BE SOLID BRASS, LOOSE KEY OPERATED, CHROME PLATED (WHERE EXPOSED), AND FITTED TIGHT TO CHROME PLATED BRASS WALL ESCUTCHEON PLATES. SUPPLY RISERS SHALL BE TYPE "L" TUBING, CHROME PLATED. PROVIDE 1/2" FIP X 3/8" OD COMPRESSION FITTINGS FOR ALL SINKS, LAVATORIES, AND SIMILAR FIXTURES.
- ALL P-TRAPS WITHIN THE BUILDING, ABOVE GRADE AND EXPOSED TO INSPECTION SHALL BE CHROME PLATED ADJUSTABLE, CAST BRASS WITH CLEANOUT PLUG. PROVIDE C.P. CAST BRASS SLIP NUTS AND WASHERS, 17 GAUGE SEAMLESS TUBULAR BRASS DRAIN TO WALL AND WALL FLANGE. PROVIDE 1/2" P-TRAP FOR ALL LAVATORIES AND SIMILAR FIXTURES. PROVIDE 1/2" P-TRAP FOR ALL SINKS AND SIMILAR FIXTURES, MOGURE OR EQUAL.
- ALL ROUGH-IN OPENINGS SHALL BE FITTED WITH CHROME PLATED, WROUGHT BRASS DEEP BELL OR BOX ESCUTCHEON PLATES FITTED TIGHT TO PIPE AND FLUSH TO WALL. STEEL ESCUTCHEON PLATES ARE NOT ACCEPTED.
- ALL EXPOSED BRASS SHALL BE CHROME PLATED.
- ALL HANDICAPPED ACCESSIBLE FIXTURES SHALL BE OF APPROVED TYPES AND WITH REQUIRED CONTROLS INSTALLED TO HEIGHTS AND CLEARANCES, AS PRESCRIBED BY THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY STANDARDS (TAS). FIXTURES SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ACCESSIBILITY CODE REQUIREMENTS. PROVIDE FIXTURES WITH DEPTHS AT MAXIMUM PERMITTED AND AVAILABLE FOR INTENDED FIXTURE USE.
- INSULATE ALL EXPOSED WATER AND DRAIN LINES ON ADA/TAS ACCESSIBLE LAVATORIES AND SINKS WITH MOGURE PRO WRAP OR EQUAL. PROVIDE OFFSET DRAIN FITTINGS WHERE REQUIRED TO PROVIDE MINIMUM CLEARANCES.
- ALL ADA/TAS SINKS SHALL BE STAMPED WITH DRAIN OUTLET AT THE REAR OF THE BOWL.
- PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE IN ACCORDANCE WITH SENATE BILL 587 FOR WATER SAVING PERFORMANCE. LAVATORY AND SINK FAUCETS SHALL INCLUDE 0.5 GPM AND 2.2 GPM FLOW CONTROL RESPECTIVELY.
- ORIENT ADA/TAS WATER CLOSET FLUSH VALVE WITH OPERATOR ON LARGE SIDE OF ENCLOSURE AND BELOW GRAB BARS.
- SEAL ALL SPACES BETWEEN PLUMBING FIXTURES AND MOUNTING SURFACES WITH WHITE LATEX CAULK WIPED SMOOTH AND FLUSH WITH FIXTURE.
- FLOOR DRAINS SHALL BE INSTALLED AT LOW POINTS OF UNIFORMLY SLOPED FLOOR. CONTRACTOR SHALL FIELD COORDINATE WITH STRUCTURAL TO INSURE FLOORS ARE UNIFORMLY SLOPED ACROSS ENTIRE TOILET ROOMS OR OVER AS WIDE AN AREA AS PRACTICAL FOR OPEN AREA FLOOR DRAINS. CONVEX FLOOR SLOPE IN THE IMMEDIATE VICINITY OF THE FLOOR DRAIN IS NOT ACCEPTABLE.
- EQUIVALENT MANUFACTURES OF CHINA FIXTURES ARE KOHLER, AND AMERICAN STANDARD. EQUIVALENT MANUFACTURES OF STAINLESS FIXTURES ARE JUST, ELKAY, AND ADVANCE TABCO.
- WATER HEATER SHALL BE PROVIDED WITH CODE APPROVED VACUUM BREAKER AND BRASS ASME TEMPERATURE AND PRESSURE RELIEF VALVE. ROUTE TPR DRAIN LINE FULL SIZED TO EXTERIOR OF BUILDING AND TERMINATE 6" ABOVE FINISHED GRADE, OR AS INDICATED ON PLANS.
- ROOF PENETRATIONS SHALL BE DONE IN STRICT COMPLIANCE WITH THE ARCHITECTS SPECIFICATIONS AND SHALL BE LEAK PROOF.
- FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF STUB OUTS. NOTIFY ARCHITECT OF ANY DISCREPANCIES IMMEDIATELY WHICH MAY AFFECT THE INTENDED DESIGN.
- ALL PLUMBING WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL STATE AND LOCAL CODES.
- THE PLUMBING CONTRACTOR SHALL GUARANTEE THE COMPLETE PLUMBING SYSTEM TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE.
- ALL WATER HEATER SUPPLY CONNECTIONS SHALL HAVE HEAT TRAP NIPPLE CONNECTIONS. HEAT TRAP NIPPLES NOT REQUIRED IF HOT WATER RECIRCULATION SYSTEM IS PROVIDED.
- NO HUB COUPLINGS SHALL BE HEAVY DUTY 4 BAND COUPLINGS WITH STAINLESS STEEL SHIELD.
- INSULATE CONCEALED ROOF DRAIN BODIES, VERTICAL LEAD AND HORIZONTAL PIPING WITH R-6 FLEXIBLE BLANKET INSULATION. EXPOSED ROOF DRAIN BODIES AND PIPES SHALL BE INSULATED WITH AN R-6 RIGID INSULATION AND PAINTABLE CANVAS JACKET.

PLUMBING SYSTEM SECTION 15400

THE WORK INCLUDES PROVIDING NEW MATERIALS, FITTINGS, AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. THE WORK ALSO INCLUDES ROUGH-IN AND FINAL CONNECTIONS TO EQUIPMENT PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

CONNECTION CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION.

THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS. COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS ON THE PROJECT SITE.

SUBMITTALS
COORDINATE WITH DIVISION 1 FOR SUBMITTAL TIMETABLE REQUIREMENTS, UNLESS NOTED OTHERWISE WITHIN THIRTY (30) DAYS AFTER THE CONTRACT IS AWARDED THE CONTRACTOR SHALL SUBMIT A MINIMUM OF ONE ELECTRONIC COPY IN A PORTABLE DIGITAL FORMAT (PDF) COMPLETE WITH TABLE OF CONTENTS AND BOUND SETS OF SHOP DRAWINGS AND COMPLETE DATA COVERING EACH ITEM OF EQUIPMENT OR MATERIAL. THE FIRST SUBMITTAL OF EACH ITEM REQUIRING A SUBMITTAL MUST BE RECEIVED BY THE ARCHITECT OR ENGINEER WITHIN THE ABOVE THIRTY DAY PERIOD. THE ARCHITECT OR ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DELAYS OR COSTS INCURRED DUE TO EXCESSIVE SHOP DRAWING REVIEW TIME FOR SUBMITTALS RECEIVED AFTER THE THIRTY (30) DAY TIME LIMIT. THE ARCHITECT AND ENGINEER WILL RETAIN A COPY OF ALL SHOP DRAWINGS FOR THEIR FILES. WHERE FULL SIZE DRAWINGS ARE INVOLVED, SUBMIT ONE (1) PRINT IN LIEU OF ELECTRONIC COPIES. ALL LITERATURE PERTAINING TO AN ITEM SUBJECT TO SHOP DRAWING SUBMISSION SHALL BE SUBMITTED AT ONE TIME. A SUBMITTAL SHALL NOT CONTAIN INFORMATION FROM MORE THAN ONE SPECIFICATION SECTION, BUT MAY HAVE A SECTION SUBDIVIDED INTO ITEMS OR EQUIPMENT AS LISTED IN EACH SECTION. THE CONTRACTOR MAY ELECT TO SUBMIT EACH ITEM OR TYPE OF EQUIPMENT SEPARATELY.

PIPING SYSTEMS - GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.

PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

SEWER/WASTE PIPING: SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE HUBLESS CAST IRON, PVC PIPE WHERE ACCEPTED BY CODE. FITTINGS AND CONNECTIONS. SANITARY DRAINAGE PIPING BELOW GRADE SHALL BE SCHEDULE 40 SWEAT WELD JOINTS AND FITTINGS. ALL DRAINAGE PIPING SHALL BE UNIFORMLY PITCHED, 1/4" PER FOOT FOR PIPES 3" AND SMALLER AND 1/8" PER FOOT FOR PIPE SIZES 4" AND LARGER.

VENTS: PROVIDE A COMPLETE SYSTEM OF STANDARD WEIGHT CAST IRON. DO NOT USE DWV PLASTIC IN RETURN AIR PLENUM SPACES. THE VENT SYSTEM SHALL BE CARRIED THROUGH THE ROOF WITH APPROPRIATE FLASHING.

CONDENSATE AND INDIRECT DRAIN PIPING: TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV TUBING AND FITTINGS FOR 1-1/4" AND LARGER SIZES.

CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW.

WATER DISTRIBUTION PIPING: LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE 1/2" MIN. TYPE L COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS OR PEV IF ALLOWABLE BY LOCAL JURISDICTION. PROVIDE WATER HAMMER ARRESTORS AT EACH FIXTURE STOP. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). USE TIN-ANTIMONY SOLDER, 95/5 FOR ALL SWEAT FITTINGS OF COPPER PIPING.

PIPE INSULATION: INSULATE ALL HOT AND COLD WATER PIPING, ROOF DRAIN BODIES AND HORIZONTAL ROOF DRAIN PIPES WITH A THERMAL INSULATION HAVING AN R-VALUE OF 4 OR GREATER. INSULATION SHALL HAVE A K FACTOR OF 0.23 AT 75 DEGREES F. PROVIDE PRE-FORMED FIBERGLASS, AS-UV, FLAME SPREAD 25, SMOKE DEV. 50, ASTM C-547, OR PROVIDED WHERE PERMITTED BY LOCAL CODES. 1" SELF-ADHESIVE CLOSED CELL FOAM PIPE INSULATION WITH PRE-FORMED PVC FITTING COVERS - EQUAL TO SELF-ADHESIVE ARMACELL'S AP ARMAFLEX WITH K FACTOR OF 0.23 AT 75 DEGREES MEAN TEMPERATURE. INSULATE ANY EXPOSED CONDENSATE PIPING WITH WASTE TEMPERATURES BELOW 60 DEGREES F.

PROVIDE HEAT TRAPS AT HOT AND COLD WATER CONNECTIONS TO WATER HEATER.

SHUTOFF VALVES, WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE, FOOD SERVICE EQUIPMENT ITEM OR OTHER EQUIPMENT ITEM. TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. VALVES SHALL BE EQUAL TO NIBCO NO. T-585-70-66 BALL VALVE, BRONZE BODY, S.S. BALL AND STEM, TEFLON SEATS AND PACKING, 600 LB. W.O.G., THREADED UNION END.

ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETC. ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED.

SUPPLIES AND TRAPS: PROVIDE WATER SEALED TRAPS AND/OR SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND FOOD SERVICE EQUIPMENT OR BEVERAGE DISPENSING EQUIPMENT ITEMS FURNISHED BY OTHERS, HAVING A WASTE CONNECTION OR REQUIRING WATER SERVICE. EXPOSED TRAPS AND SUPPLIES IN EXPOSED AREAS (INCLUDING CABINET INTERIORS) SHALL BE CHROMIUM PLATED BRASS, WITH CHROME PLATED BRASS NUTS AND CHROME PLATED BRASS ESCUTCHEON PLATES. PROVIDE HUBLESS CAST IRON WASTE PIPING AND FITTINGS FOR THE TWO, THREE AND, FOUR COMPARTMENT SINKS. REMOVE MARKINGS FROM ALL PIPING WHEN INSTALLATION IS COMPLETE.

INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS.

REPAIR EXISTING PLUMBING SYSTEM COMPONENTS DAMAGED BY CONSTRUCTION OPERATIONS AND RESTORE TO ORIGINAL CONDITIONS.

TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

SHOP DRAWINGS: CONTRACTORS TO PROVIDE SIX SETS OF SHOP DRAWING SUBMITTALS FOR REVIEW AND APPROVAL TO ARCHITECT, OWNER, ARCHITECT, AND ENGINEER (WHEN APPLICABLE) TO RETAIN ONE SET FOR THEIR OWN RECORDS.

GENERAL ROOF PLAN NOTES:

- CONTRACTOR SHALL CAREFULLY REVIEW CONTRACT DOCUMENTS INCLUDING DRAWINGS AND PROJECT MANUAL INFORMATION REGARDING WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS ARE DISPERSED THROUGHOUT THE DOCUMENTS AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE FULL SET OF DOCUMENTS.
- CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES ABOVE THE CEILING TO PROVIDE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF AND FUTURE CHANGES IN MECHANICAL EQUIPMENT. CONDUIT AND PIPE TO BE RUN THROUGH TRUSSES. COORDINATE SERVICE AND ACCESS POINTS ABOVE CEILING TO MINIMIZE REQUIRED ACCESS.
- ALL DEVICES INSTALLED ON ROOF TOP EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. THIS LOCATION SHALL BE COORDINATED WITH THE MECHANICAL OR PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- ROOF DECK PENETRATIONS: CONTRACTOR SHALL SECURE LANDLORD APPROVAL FOR ALL BUILDING ROOF DECK PENETRATIONS. REQUESTS SHALL BE ON A SCALED ROOF PLAN SHOWING EXACT LOCATION & SIZE OF PENETRATION & INCLUDE DETAILS OF MOUNTING, FLASHING & SEALING. CONTRACT WITH THE LANDLORD'S ROOFING CONTRACTOR TO PERFORM ALL WORK AT THIS CONTRACTOR'S SOLE EXPENSE. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL ROOFTOP EQUIPMENT, NEW ROOF PENETRATIONS, REMOVAL OF EXISTING ROOFTOP EQUIPMENT & INSTALLATION OF ALL ROOFTOP EQUIPMENT WITH THE LANDLORD.

PLUMBING NARRATIVE:

ELECTRIC WATER HEATERS LESS THAN 12 KW SHALL HAVE A PERFORMANCE RATING OF 0.97.

THE HOT WATER HEATING SYSTEM SHALL BE BY AN ELECTRIC WATER HEATER WITH A RECIRCULATION LINE AND PUMP. THE RE-CIRC PUMP SHALL BE CONTROLLED BY AN AQUASTAT AND TIME CLOCK. THE TIME CLOCK SHALL ENABLE THE PUMP TO OPERATE FROM 6AM TO 8PM (ADJ.) AND SHUT OFF THE PUMP FROM 8PM TO 6AM (ADJ.).

AND/OR

THE HOT WATER HEATING SYSTEM SHALL BE BY WATER HEATER WITH A MAXIMUM OF 6'-0" OF 1-1/4" TUBING, 3'-0" OF 3/8" TUBING TO LAVATORIES AND 43'-0" OF 1/2" TUBING, 21'-0" OF 3/4" TUBING TO ALL OTHER FIXTURES.

REFER TO THE 2015 IECC SECTION C404 SERVICE WATER HEATING FOR OTHER REQUIREMENTS.

THE PLUMBING CONTRACTOR SHALL REVIEW THE SYSTEM COMMISSIONING SPECIFICATION ON THIS SHEET FOR REQUIREMENTS AND PARTICIPATION IN THE COMMISSIONING PROCESS. FAILURE TO COMPLY OR PARTICIPATE MAY INCUR ADDITIONAL COST TO THE CONTRACTOR

GENERAL ENERGY NOTES:

INSULATION SHALL BE PROVIDED FOR PIPING AS NOTED IN THE TABLE BELOW. PIPING INSULATION SHALL BE PROVIDED FOR RETURN CIRCULATION HOT WATER SYSTEM WITH 1" OR R-4 INSULATION. THE FIRST 8' OF PIPING IN NONCIRCULATING SYSTEMS SERVED BY EQUIPMENT W/O INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 1-1/2" OR R-4 INSULATION.

WATER HEATING EQUIPMENT NOT SUPPLIED WITH INTEGRAL HEAT TRAPS AND SERVING NONCIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING AS ASSOCIATED WITH THE EQUIPMENT.

AUTOMATIC CIRCULATING HOT WATER SYSTEMS OR HEAT TRACE SHALL HAVE TIME SWITCHES THAT ARE CAPABLE OF BEING SET TO TURN OFF THE SYSTEM.

MINIMUM PIPE INSULATION THICKNESS (in inches)

FLUID	CONDUCTIVITY	MEAN TEMP °F	NORMINAL PIPE DIA.			
			< 1"	1 - 1.5"	1.5" TO 4"	4 TO 8"
DOM. COLD WATER	0.23	75	1/2	1	1	1
HOT WATER	0.24	100	1	1	1-1/2	1-1/2
LOW PSI STEAM	0.28	200	2-1/2	2-1/2	2-1/2	3
HI PSI STEAM	0.34	300	3	4	4-1/2	4-1/2
ROOF DRAIN	0.23	75	1/2	1	1	1



1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.rmaarch.com

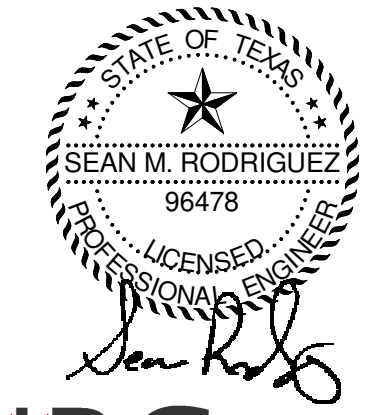
PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX
©2023 PANKLEY TACOCKY & ASSOCIATES

DATE ISSUED:
12.15.2023

PROJECT NUMBER:
1027-0623



NRG
ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO.
005318

12/15/23

PLAN NORTH TRUE NORTH

SHEET NAME
Plumbing Specifications

SHEET NUMBER

P0.1

23110

12/14/2023 9:49:50 AM
D:\Revit\22_backups\23110_MEP_R22_kenneth@ngc.com.rvt

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
 BLESSING, TX

©2023 PEARLEY MACKEY & ASSOCIATES

DATE ISSUED:
 12.15.2023

PROJECT NUMBER:
 1027-0623

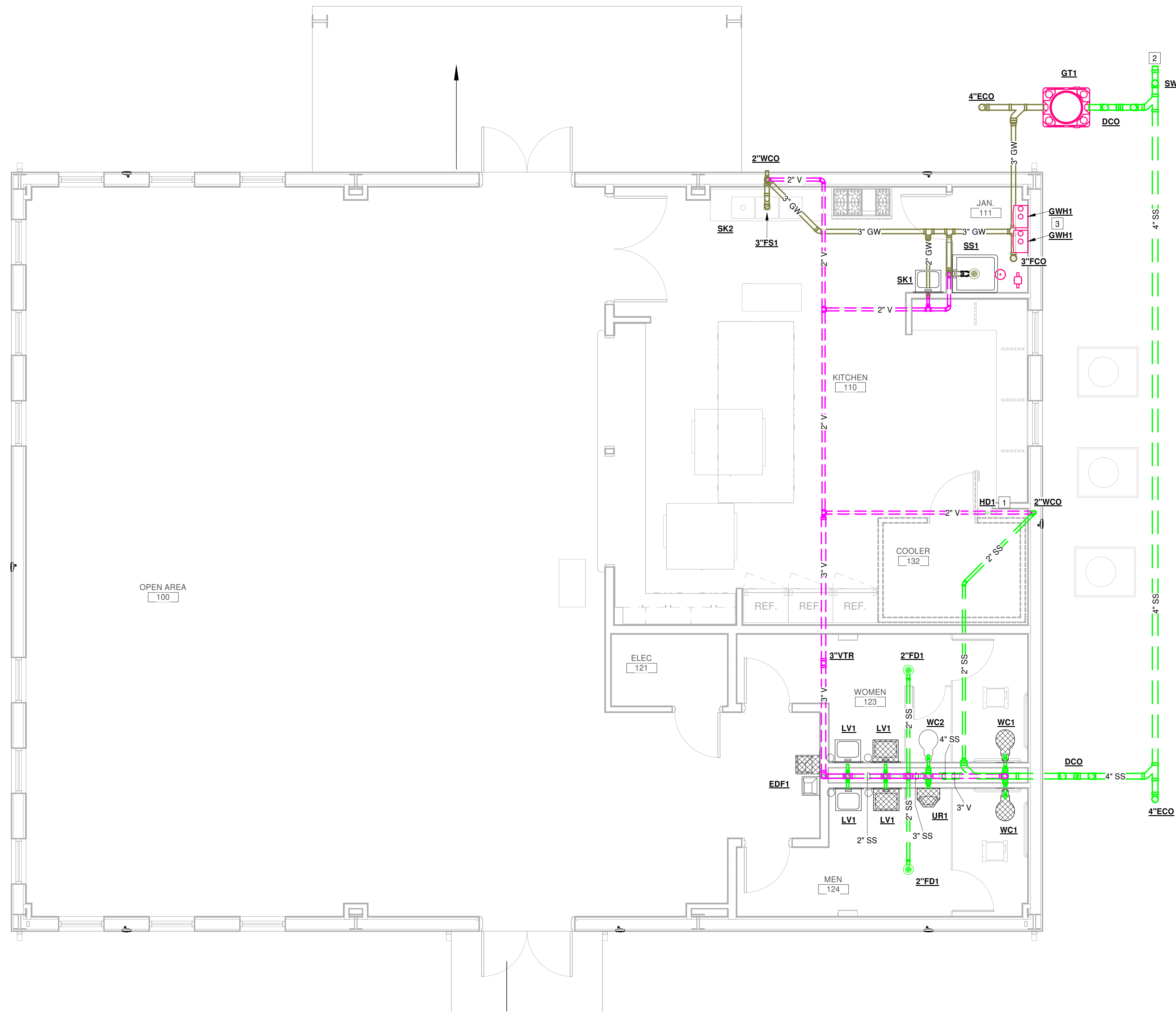
PLAN NORTH TRUE NORTH

SHEET NAME
Plumbing DWV

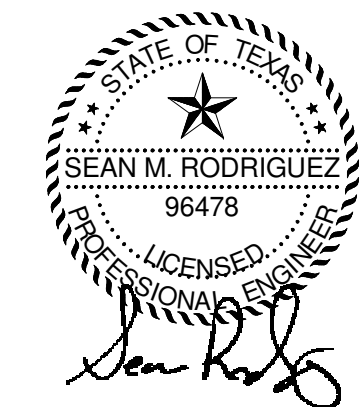
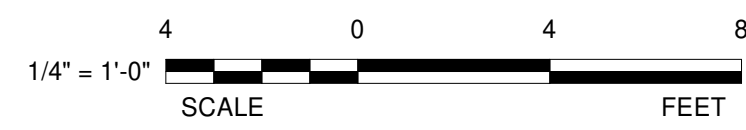
SHEET NUMBER

P1.1

Plumbing Keynotes	
1	INDIRECTLY ROUTE FREEZER CONDENSATION LINE TO THE HUB DRAIN.
2	REFER TO CIVIL PLANS FOR CONTINUATION
3	INDIRECTLY ROUTE WATER HEATER DRAIN TO THE SERVICE SINK.



① Plumbing Floor Plan DWV
 1/4" = 1'-0"



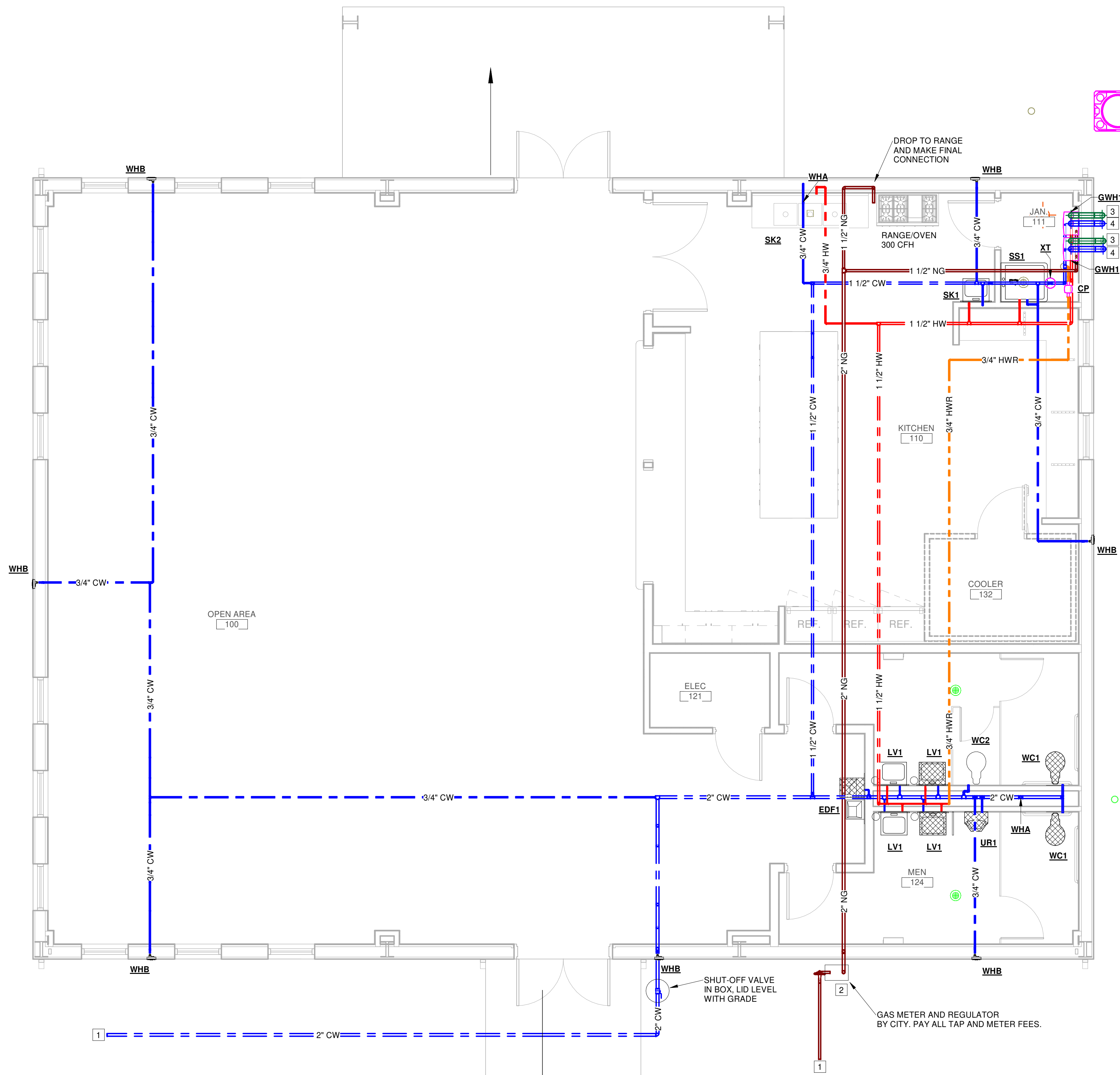
NRG
ENGINEERING
 5656 S. STAPLES, SUITE 360,
 CORPUS CHRISTI, TX 78411
 P - 361.852.2727 F - 361.852.2922
 TEXAS ENGINEERING FIRM NO.
 005318

12/15/23

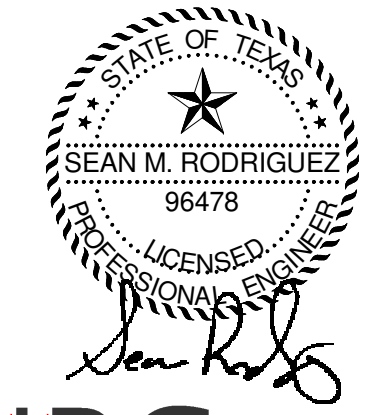
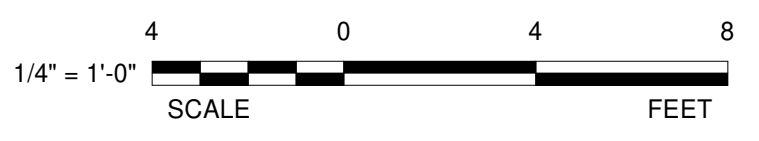
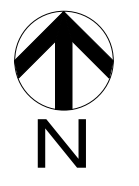
23110

12/14/2023 8:49:52 AM
 D:\Revit\22_backups\23110_MEP_R22_kenneth@ngcc.com.rvt

Plumbing Keynotes	
1	REFER TO CIVIL PLANS FOR CONTINUATION
2	THE GAS METER AND REGULATOR ARE TO BE SELECTED AND INSTALLED BY THE CITY. PAY ALL TAP AND METER FEES.
3	THE FLUE PIPE FOR THE GAS WATER HEATER WILL BE INSTALLED UP THROUGH THE CEILING AND OUT THE WALL.
4	THE COMBUSTION AIR PIPE FOR THE GAS WATER HEATER WILL BE INSTALLED UP THROUGH THE CEILING AND OUT THE WALL.



1 Plumbing Floor Plan Water
 1/4" = 1'-0"



NRG ENGINEERING
 5656 S. STAPLES, SUITE 360,
 CORPUS CHRISTI, TX 78411
 P - 361.852.2727 F - 361.852.2922
 TEXAS ENGINEERING FIRM NO.
 005318
23110

12/15/23

12/14/2023 8:52:54 AM D:\Revit\22_backups\23110_MEP_R22_kenneth@ngcc.com.rvt

PLUMBING FIXTURE UNITS

FIXTURE	QTY.	DRAINAGE				WATER SUPPLY				
		TRAP SIZE	DFU EA	SDFU	GDFU	WSFU EA	TOT. WSFU	CW WSFU	HW WSFU	PEAK GPM
WATER CLOSET - FV	3	-	4	12		10	30	30	-	25.00
LAVATORY	4	1 1/4"	1	4		2	8	6.0	6.0	0.40
DRINKING FOUNTAIN	2	1 1/4"	0.50	1.00		0.25	0.50	0.50	-	0.75
URINAL	1	-	2	2		5	5	5	-	12.00
2" TRAP	0	2"	3	0						
3" TRAP	0	3"	5	0						
HOSE BIBB	7	-	0							5.00
HAND SINK	1	1-1/2"	2	2		2	2	1.5	1.5	0.40
SERVICE SINK KITCHEN	1	2"	2		2	3	3	2.25	2.25	3.00
3-COMPARTMENT SINK	1	4" FS	6		6	4	4	3	3	3.00
2" TRAP KITCHEN	0	2"	3		0					
3" TRAP KITCHEN	0	3"	5		0					
TOTAL FU						21	8			
TOTAL GPM								51	49	29
PIPE SIZE						4"	4"	2"	2"	1.5"

GAS LOAD SUMMARY (10"W.C.)

2015 IFGC TABLE 402.4(1)		0.3 IN. W.C. PRESSURE DROP			
APPLIANCE	QTY.	CONN. SIZE	CFH EA	TOT. CFH	MIN. PRES.
GW1	2	-	199	398	4"W.C.
RANGE	1	3/4"	300	300	4"W.C.
TOTAL CFH				698	
TOTAL DEV. LENGTH				100'	
PIPE SIZE				2"	

PLUMBING EQUIPMENT SCHEDULE

SYMB.	PLAN MARK	MINIMUM ROUGH-IN SIZES					DESCRIPTION
		WST & VENT	DRAIN	CW	HW	HW	
***	NATURAL GAS TANKLESS WATER HEATER GWH1 (QUANTITY: 2)	----	----	----	SEE PLAN	SEE PLAN	AO SMITH MODEL NO. ACT-1991-N INDOOR TANKLESS WATER HEATER; INSTANTANEOUS CONDENSING ON-DEMAND WATER HEATER; 199,000 BTU/HR INPUT - NATURAL GAS FIRES; 10 GPM FLOW RATE; DIRECT ELECTRONIC IGNITION; 120/160, 12 V DC. EXHAUST AND COMBUSTION VENT, ELECTRONIC WATER FLOW SENSOR, WALL MOUNT BRACKET, ASME TEMP. & PRESS. RELIEF VALVE, DRAIN VALVE, CONCENTRIC VENT KIT, PROVIDE ACCESSORIES, SCALEOUTTER FILTER, RECIRCULATION PUMP. NOTE MINIMUM WATER SUPPLY PRESSURE IS 50 PSI, RECOMMENDED 60-70 PSI.
○	EXPANSION TANK XT	----	----	----	3/4"	----	AMTROL NO. ST-5-C, HEAVY DUTY BUTYL, FDA APPROVED DIAPHRAGM, POLYPROPYLENE LINED DOME WITH 2.0 GALLON VOLUME. ELBI IS AN EQUIVALENT MANUFACTURER. STRAP TANK TO WALL WITH HOLDRITE QUICK STRAP. TANK SHALL NOT BE SUPPORTED BY THE PIPING THAT CONNECTS TO SUCH TANK.
●	CIRCULATING PUMP CP Total Length is = 92.74 Total G.P.M. = 0.96 Total Head in Feet = 7'-6" Pipe Size = 1/2"	----	----	----	----	1/2"	GRUNDFOS MODEL NO. UP 15-18B5, IN-LINE, LEAD-FREE BRONZE CIRCULATOR. PROVIDE 1/2" SWEAT CONNECTION, 1 PHASE, 85 WATTS, 115 VOLTS, 1/25HP. PROVIDE WITH TIMER, SWITCHES ON AT 6AM, AND OFF AT 8PM, PROVIDE AQUASTAT, SWITCHES PUMP ON AT 105°F, AND OFF AT 115°F, 1 GPM AND 7.5 FOOT OF HEAD.
□	ACCESS DOOR AP1	----	----	----	----	----	MIFAB UA ACCESS DOOR: 12"x12", 16 GAUGE SATINCOAT STEEL WALL FLANGE AND DOOR, WHITE PRIMED; INSTALL AT ALL CONCEALED VALVES OR ACCESSORIES IN ACCESSIBLE LOCATION NOT MORE THAN 90" AFF; COORDINATE ACCESS PANEL LOCATIONS WITH GENERAL CONTRACTOR.
⊗	DOUBLE CLEANOUT DCO	4"	----	----	----	----	WADE 8000-12 (MIFAB C1100-4-R-P) (ZURN Z1400) (SMITH 4240) (JOSAM 55000-5) EXTERIOR CLEANOUT: ADJUSTABLE C.I. CLEANOUT AND HOUSING, ABS TAPER PLUG, SPECIAL DUTY ROUND SCORIATED DUCTILE IRON TOP, NON-TILT TRACTOR COVER, ANCHOR IN CONCRETE PAD 42"x18"x6" DEEP, FLUSH WITH GRADE OR SET FLUSH WITH SIDEWALK.
⊗	EXTERIOR CLEANOUT ECO	4"	----	----	----	----	WADE 8000-12 (MIFAB C1100-4-R-P) (ZURN Z1400) (SMITH 4240) (JOSAM 55000-5) EXTERIOR CLEANOUT: ADJUSTABLE C.I. CLEANOUT AND HOUSING, ABS TAPER PLUG, SPECIAL DUTY ROUND SCORIATED DUCTILE IRON TOP, NON-TILT TRACTOR COVER, ANCHOR IN CONCRETE PAD 18"x18"x6" DEEP, FLUSH WITH GRADE OR SET FLUSH WITH SIDEWALK.
○	FLOOR CLEANOUT FCO	SEE PLAN	SEE PLAN	SEE PLAN	----	----	SIoux CHIEF 852-4P1V "PVC" FLOOR CLEANOUT: 4" PVC HUB, ROUND SCORIATED NICKEL BRONZE MEDIUM DUTY TOP, VANDAL-PROOF SCREWS, THREADED PVC PLUG; MOUNT COVER FLUSH WITH FLOOR.
⊗	FLOOR DRAIN FDI (REST ROOMS)	2"	1-1/2"	2"	----	----	WADE 1100-TSD-A6-1 (MIFAB F1100-C) (JOSAM 30000-A) (SMITH 2005-A) (ZURN No.ZN-415B-P) (WATTS FD-100-A) FLOOR DRAIN: CAST IRON DRAIN BODY WITH 1/2" IPS TRAP PRIMER TAP, BOTTOM OUTLET, CLAMPING COLLAR, WEEP HOLES, V.P. SCREWS, ADJUSTABLE TOP, STRAINER 6" DIAMETER, LIGHT DUTY, NICKEL BRONZE, HEEL PROOF PERFORATED; DEEP SEAL TRAP, PROVIDE PROSET SYSTEMS TRAP GUARD INSERT.
■	FLOOR SINK FS1	4"	2"	2"	----	----	PLASTIC ODDITIES MODEL #PBH-400H PVC FLOOR SINK, 14"x14"x6" PVC BODY & 1/2 GRATE WITH ALUMINUM DOME STRAINER.
■	GREASE INTERCEPTOR GT1	4"	2"	4"	----	----	SCHIER GREAT BASIN GREASE INTERCEPTOR GB-75: 75 GPM MAX. FLOW, HYDRO-MECHANICAL, ROTATIONALLY MOLDED HIGH DENSITY POLYETHYLENE, 4" INLET/OUTLET, CAST IRON COVER ENGINEERED TO EXCEED H-20 LOADING.
■	HUB DRAIN HD1	2"	1-1/2"	2"	----	----	PROSET No.TG23HD PVC HUB DRAIN WITH 3" HUB AND 2" TRAP GUARD AND DEEP SEAL TRAP.
■	SAMPLE WELL SW	----	----	6"	----	----	SCHIER SV24 SEWER VIEWER SAMPLE WELL: 24" MOLDED POLYETHYLENE, 6" INLET/OUTLET, 20" PORT ACCESS, CAST IRON FRAME AND COVER ENGINEERED TO EXCEED H-20 LOADING.
■	WALL CLEANOUT WCO	SEE PLAN	SEE PLAN	SEE PLAN	----	----	ZURN NO. ZS1469-7-VP ROUND STAINLESS STEEL ACCESS COVER COMPLETE WITH SECURING SCREW, MIN 5" DIA. PROVIDE CLEANOUT PLUG TO MATCH PIPE MATERIAL.
○	WATER HAMMER ARRESTOR WHA	SEE DETAIL	SEE DETAIL	SEE DETAIL	----	----	SIoux CHIEF 650 SERIES WATER HAMMER ARRESTOR: TYPE L COPPER TUBE, POLY PISTON WITH TWO EPDM O-RINGS, ASSE 1010 CERT., MAX. 250°F, MAX. 350 PSIG, LEAD FREE, INSTALL TO MANUFACTURERS SPECIFICATIONS.
⊕	WALL HYDRANT IN BOX WHB	----	----	----	3/4"	----	WOODFORD MODEL #B75, MODERATE CLIMATE WALL HYDRANT W/ ANTI-SIPHON VACUUM BREAKER ENCLOSED IN A BRASS FLUSH WALL BOX.

PLUMBING PIPE MATERIALS SCHEDULE

PIPING SYSTEM	PIPING MATERIAL
SANITARY SEWER BELOW GRADE	SCHEDULE 40 DWV PVC
SANITARY DRAIN AND VENTS ABOVE GRADE	SCHEDULE 40 DWV PVC *
GREASE WASTE BELOW GRADE	SCHEDULE 40 DWV PVC
GREASE WASTE AND VENTS ABOVE GRADE	SCHEDULE 40 DWV PVC *
DOMESTIC HOT & COLD WATER BELOW GRADE	COPPER, TYPE "K" SOFT
DOMESTIC HOT & COLD WATER ABOVE GRADE	COPPER, TYPE "L" HARD DRAWN
NATURAL GAS	SCHEDULE 40 BLACK STEEL
HOT AND COLD WATER PIPE INSULATION	1" RIGID FIBER GLASS
RO FILTERED WATER	(PP) POLYPROPYLENE/SCH 80 CPVC

*SCHEDULE 40 DWV PVC SHALL NOT BE USED IN RETURN AIR PLENUMS. WHERE CEILING PLENUMS ARE USED FOR RETURN AIR, CONTRACTOR SHALL ONLY USE BELL AND SPIGOT SERVICE WEIGHT CAST IRON PIPE.

GREASE INTERCEPTOR SIZING*

STEP 1: Size by Flow Rate To Satisfy the Local Plumbing Code
 PIPE SIZE PER PLAN: MIN. FLOW RATE AT 1/2 PIPE FLOW:
 4 = 62.96

STEP 2: Calculate Grease Output for Pump-Out Cycle
 FORMULA:
 Cat. Oil/Meal/day X Grease lbs/meal X 90 Days = Grease Output Per Quarter
 100 X 0.0325 X 90 = 292.5

Schier Model: Capacity:
 FLOW RATE GREASE(lbs.)
GREAT BASIN GB-75 75 GPM 643

*GREASE INTERCEPTOR SIZED PER SCHIER PRODUCTS MANUFACTURERS SIZING GUIDELINES. SCHIER RECOMMENDS TWO STEPS FOR GREASE INTERCEPTOR SIZING: FIRST BY FLOW RATE PER PLUMBING CODE REQUIREMENTS, THEN BY GREASE OUTPUT FOR 90 DAY PUMP-OUT CYCLE.

PLUMBING FIXTURE SCHEDULE

SYMB.	PLAN MARK	MINIMUM ROUGH-IN SIZES					DESCRIPTION
		WST & VENT	DRAIN	CW	HW	HW	
⊕	REFER TO ARCHITECTURAL T&A/ADA SHEETS AND T&A/ADA REGULATIONS FOR MOUNTING HEIGHTS AND CLEARANCES.						
⊕	ELEC. DRINKING FOUNTAIN ED1 (BI LEVEL COOLER)	2"	1-1/2"	1-1/2"	1/2"	----	ELKAY NO. EZST18W5LK "HI-LO" BARRIER FREE WATER COOLER AND BOTTLE STATION; T&S COMPLIANT, 8 GPH CAPACITY, WALL HUNG, STANDARD FINISH, COLOR TO BE SELECTED BY ARCHITECT, S.S. TOP WITH INTEGRAL STRAINER, FRONT & SIDE PUSH BARS, AUTOMATIC STREAM REGULATOR, THERMOSTAT, AIR COOLED, P.134A, AND STANDARD FACTORY WARRANTY, 1/5 HP, 120V-1-60, MOUNT AT MAX. 36" FROM FLOOR TO LOWER SPOUT OUTLET AND MIN. 38-43" MAX. FOR UPPER UNIT; LKAPREZL CANE TOUCH APRON; ABS PLASTIC, MOUNT ON UPPER UNIT; ZURN Z-1225-BL C.I. WALL CARRIER; WASTE: 1-1/4" 17 GA C.P. BRASS TAILPIECE, 1-1/4" 17 GA BRASS C.P. ADJ. "P" TRAP W/ C.P. BRASS NUTS; SUPPLY: C.P. ANGLE SUPPLY W/STOP, 3/8" FLEX TUBE RISER.
⊕	LAVATORY LV1 (WALL HUNG)	2"	1-1/2"	1-1/4"	1/2"	1/2"	AMERICAN STANDARD NO.0355.012 "LUCERNE" WALL MOUNTED LAVATORY; T&S COMPLIANT, WHITE, FRONT OVERFLOW, CONCEALED WALL CARRIER, 4" O.C. TAPPING; MIFAB MC-41 SERIES FLOOR MOUNTED CONCEALED ARM CARRIER WITH TWO UPRIGHTS; WATTS P1070 FAUCET; C.P. BRASS BODY, 0.5 GPM AERATOR, DECK PLATE, ASSE 1070, SET AT 105°F; WASTE: 1-1/4" 17 GA C.P. BRASS TAILPIECE WITH GRID STRAINER, 1-1/4" 17 GA BRASS C.P. ADJ. "P" TRAP W/ C.O. AND C.P. BRASS NUTS; ESCUTCHEON; SUPPLY: C.P. ANGLE SUPPLIES W/STOPS, 3/8" FLEX TUBE RISERS, ESCUTCHEONS, PROVIDE TRUEBRO FACTORY CUT LAV SHIELD NO. 2018-AS-L FOR EXPOSED PIPING. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
⊕	SERVICE SINK SS1 (FLOOR MOUNTED)	3"	2"	3"	1/2"	1/2"	STERN-WILLIAMS No. SB-902 "SERVICEPORT" SERVICE SINK; MARBLE AND CEMENT, 24"x24"x12", 1" INTEGRAL TILE FLANGE ON TWO SIDES, STAINLESS STEEL CAP, 3" CAULK OUTLET, INTEGRAL BRASS DRAIN WITH S.S. STRAINER, SUPPLY: CHICAGO No. 897-CCP SERVICE SINK FAUCET; C.P., VACUUM BREAKER, INTEGRAL STOPS, INTEGRAL CHECK VALVES, LEVER HANDLES, WALL BRACE, 3/4" HOSE THREAD SPOUT, PAIL HOOK, ESCUTCHEONS, (MOUNT 36" A.F.F.) ACSS: STERN-WILLIAMS No. T35-36" HOSE AND S.S. WALL HOOK; NO. T-40 MOP HANGER FOR THREE MOPS; NO. BP S.S. 20 GA SPLASH SHIELD.
⊕	SINK SK1 (HAND SINK)	2"	1-1/2"	1-1/2"	1/2"	1/2"	ADVANCE TABCO #7-PS-60 HAND SINK; 20 GA 304 SERIES S.S., 6" BACKSPLASH, 1-1/2" DRAIN AND STRAINER, GOOSENECK FAUCET, NSF APPROVED, SINK FAUCET FLOW RATE SHALL CONFORM TO LOCAL AMENDED CODE, 0.5 GPM MAX FLOW RATE PER TABLE 604.4, SUPPLY: CHICAGO, CP, 1/2" IPS LOOSE KEY ANGLE STOP (2) WITH 1/2" OD FLEXIBLE RISER TUBE, INSTALL WATTS NO. 601S CHECK VALVES IN HW & CW LINES UPSTREAM OF THE MIXING VALVE, WASTE: 1-1/2" 17 GA. C.P. BRASS WASTE OUTLET ON HAND SINK, TRAP: 17 GA. CP BRASS ADJ. P-TRAP W/CO TUBING WASTE AND ESCUTCHEON, 1-1/4" X 1-1/2".
⊕	SINK SK2 (3-COMPARTMENT)	-	-	2"	3/4"	3/4"	ADVANCE TABCO 9-63-54-18RL "REGALINE" THREE COMPARTMENT SINK; 18 GA 304 S.S., S.S. TUBULAR LEGS, ADJUSTABLE FEET; T&S BRASS B-0133-01 PRE-RINSE UNIT; 8" WALL MOUNT MIXING FAUCET, QUARTER TURN CARTRIDGES W/ SPRING CHECKS, 1/4" ADD ON SWING FAUCET, 56" FLEXIBLE S.S. HOSE, 1.15 GPM SPRAY VALVE, 9" WALL SUPPORT BRACKET, FAUCET FLOW RATE SHALL CONFORM TO LOCAL AMENDED CODE, 2.2 GPM MAX FLOW RATE PER TABLE 604.4; SUPPLY: NIBCO #T-311, 1/2" BRONZE BALL VALVE WITH LOCK SHIELD, 1/2" HARD DRAWN COPPER (TYPE L) HW & CW TO FAUCET AND PRE-RINSE UNIT. INSTALL WATTS NO. 601S CHECK VALVES IN HW & CW LINES TO PRE-RINSE WASTE; FRANKLIN MACHINE NO. 1130 WASTE LEVER HANDLE WITH STRAINER, 2" PVC CONTINUOUS WASTE.
⊕	URINAL UR1	2"	2"	1-1/2"	3/4"	----	AMERICAN STANDARD NO. 6550.001 "ALLBROOK" (KOHLER NO. K-5016-ET "DEXTER") URINAL; T&S COMPLIANT, SIPHON JET, V.C., WHITE, WALL HUNG, 3/4" TOP SPUD, 0.5 GAL. FLUSH, 1/4" LIP, MOUNT AT 17" A.F.F. TO TOP OF LIP; SLOAN ROYAL NO.198-0.5 FLUSH VALVE; 0.5 GPF, DIAPHRAGM TYPE, EXPOSED, C.P., 3/4" VACUUM BREAKER TOP SPUD, MANUAL OPERATED, ZURN ZR-1222 C.I. WALL CARRIER; C.I. FLOOR MOUNTED.
⊕	WATER CLOSET WC1 (FLOOR MOUNT) (FLUSH VALVE)	4"	2"	4"	1"	----	AMERICAN STANDARD 3043.001 "MADERA" FLUSH VALVE WATER CLOSET; ADULT T&S COMPLIANT, 17-18" MAX. TOP OF SEAT, FLOOR MOUNTED, BOTTOM OUTLET, V.C., 1.28 GPF SIPHON FLUSH, ELONGATED, 1-1/2" TOP SPUD, WHITE, BOLT CAPS, CLOSET SEAL; CHURCH 255SSC SEAT; ELONGATED, PLASTIC, WHITE, OPEN FRONT, SS POSTS, SELF SUSTAINING CHECK HINGE; SLOAN 111-1-28 "ROYAL" FLUSH VALVE; LEVER HANDLE, DIAPHRAGM FLUSHOMETER, VACUUM BREAKER, C.P., EXPOSED, 1.28 GPF, ESCUTCHEON, MOUNT HANDLE 25" MAX. A.F.F. AT WIDE SIDE OF STALL.
⊕	WATER CLOSET WC2 (FLOOR MOUNT) (FLUSH VALVE)	4"	2"	4"	1"	----	AMERICAN STANDARD 3451.001 "MADERA" FLUSH VALVE WATER CLOSET; 15" TOP OF SEAT, FLOOR MOUNTED, BOTTOM OUTLET, V.C., 1.28 GPF SIPHON FLUSH, ELONGATED, 1-1/2" TOP SPUD, WHITE, BOLT CAPS, CLOSET SEAL; CHURCH 255SSC SEAT; ELONGATED, PLASTIC, WHITE, OPEN FRONT, SS POSTS, SELF SUSTAINING CHECK HINGE; SLOAN 111-1-28 "ROYAL" FLUSH VALVE; LEVER HANDLE, DIAPHRAGM FLUSHOMETER, VACUUM BREAKER, C.P., EXPOSED, 1.28 GPF, ESCUTCHEON, MOUNT HANDLE 44" MAX. A.F.F. AT WIDE SIDE OF STALL.



1908 N. Laurent St., Suite 540
Victoria, Texas 77901
www.rmaarch.com

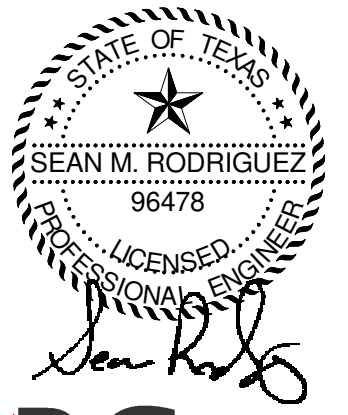
PATRICK DEAN OHRT
REGISTERED ARCHITECT
REGISTRATION NO. 21195
STATE OF TEXAS

Final Plans for Bidding and Construction

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX
0000 PLANET PRACTICE ASSOCIATES

DATE ISSUED:
12.15.2023

PROJECT NUMBER:
1027-0623



NRG ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO. 005318

23110

PLAN NORTH TRUE NORTH

SHEET NAME
Plumbing Schedules

SHEET NUMBER

P2.1

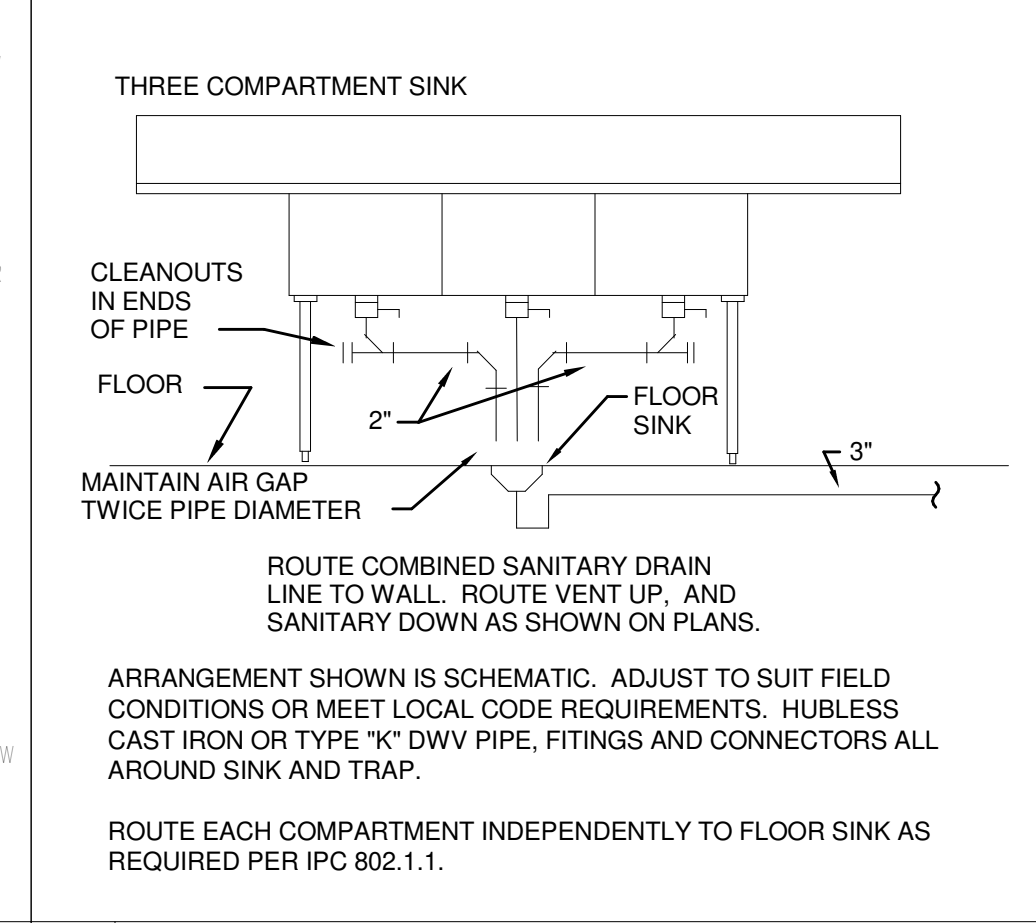
12/14/2023 9:49:55 AM D:\Revit\22_backups\23110_MEP_R22_kenins@ngc.com.rvt



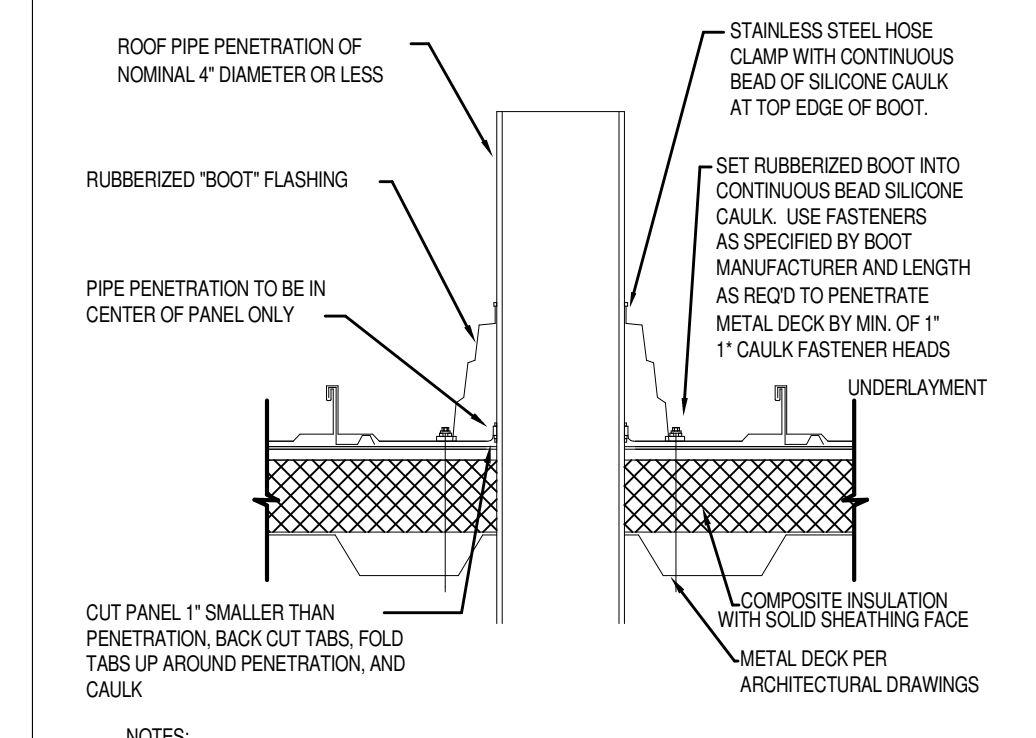
NRG ENGINEERING
12/15/23
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO.
005318

23110

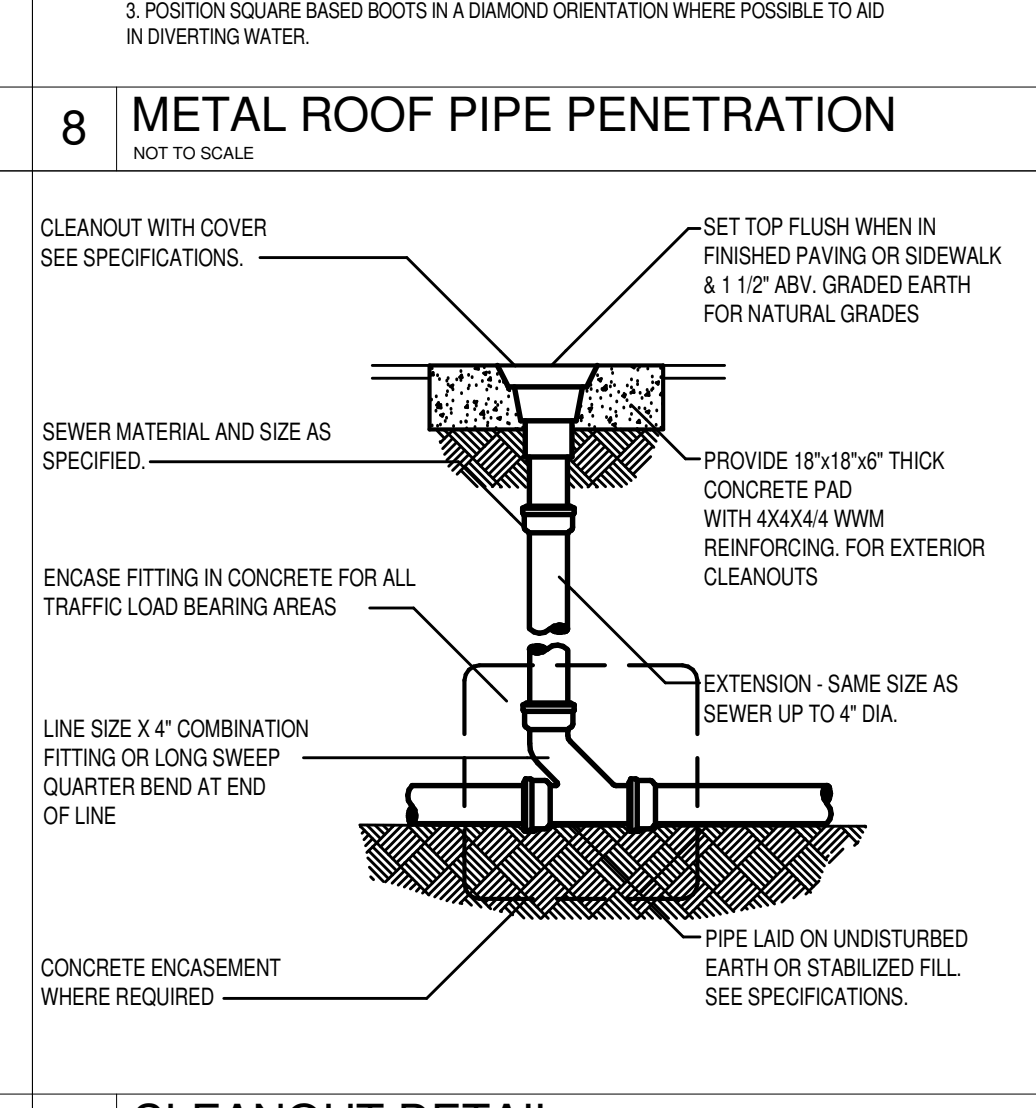
18 GAS CONNECTION - TYP.



13 SCULLERY SINK



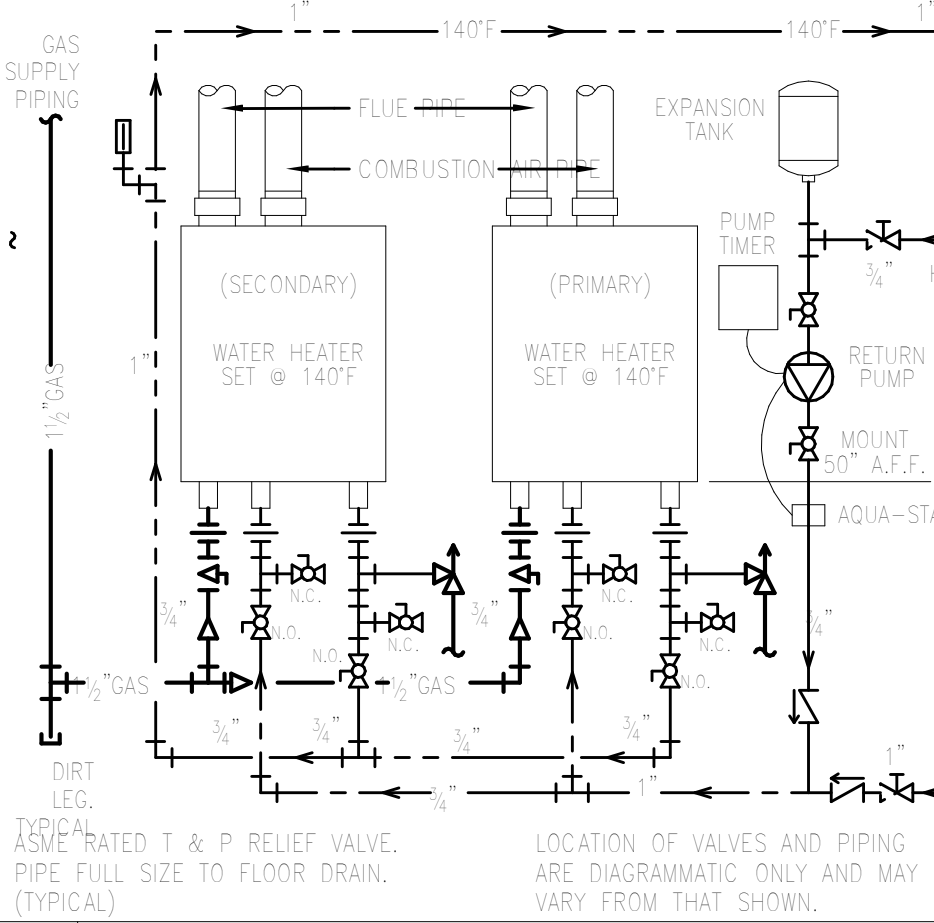
8 METAL ROOF PIPE PENETRATION



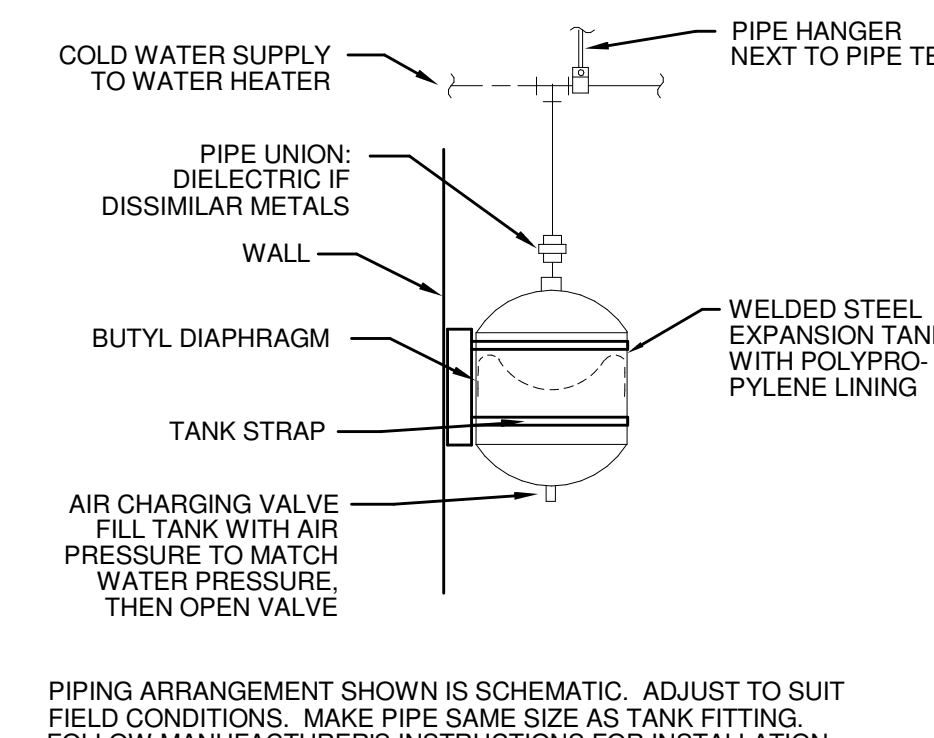
3 CLEANOUT DETAIL



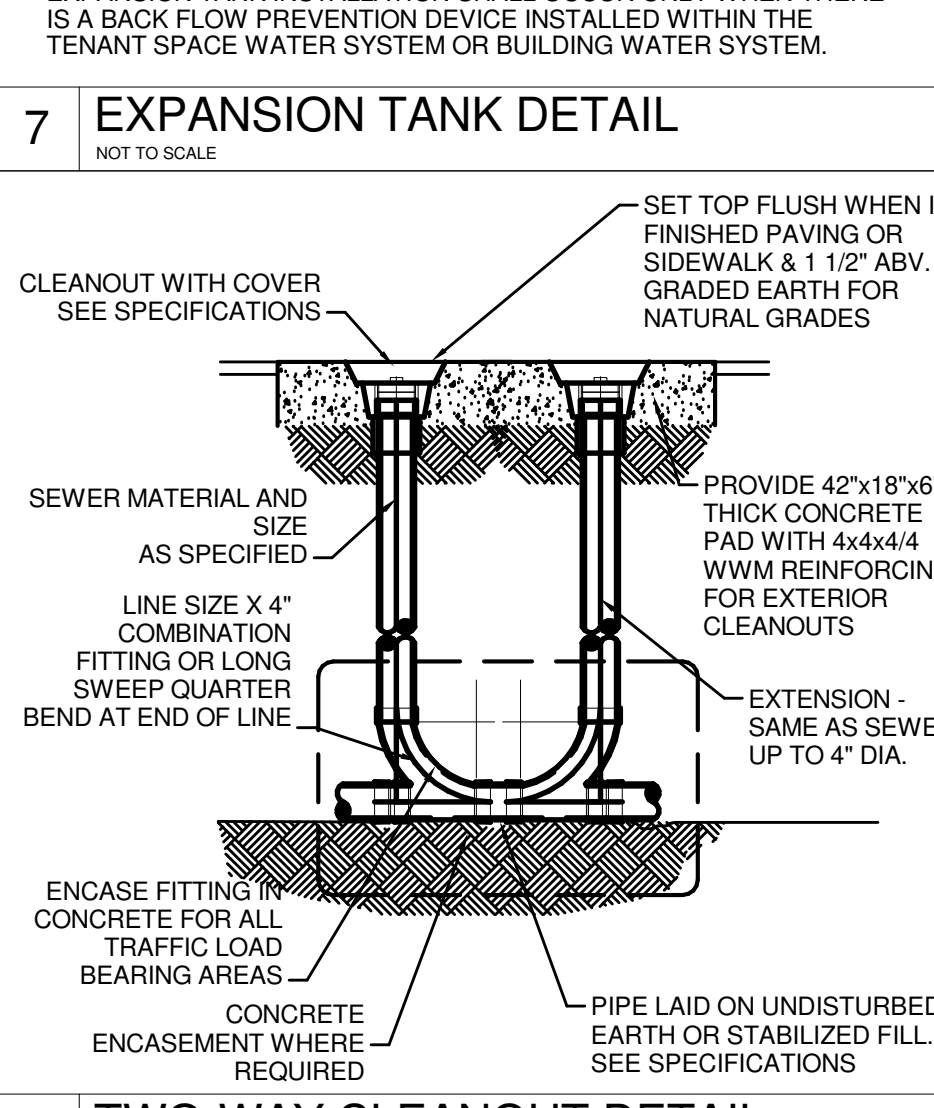
17 GAS SERVICE CONNECTION



12 GAS WATER HEATER DETAIL



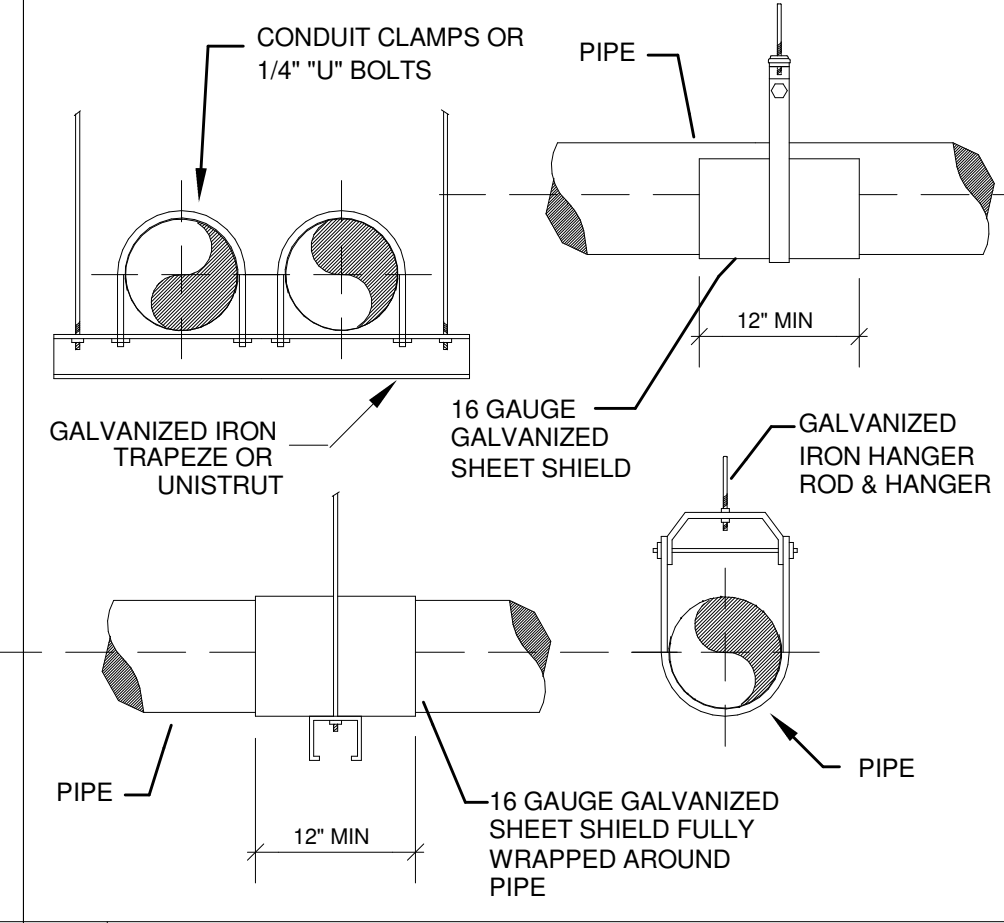
7 EXPANSION TANK DETAIL



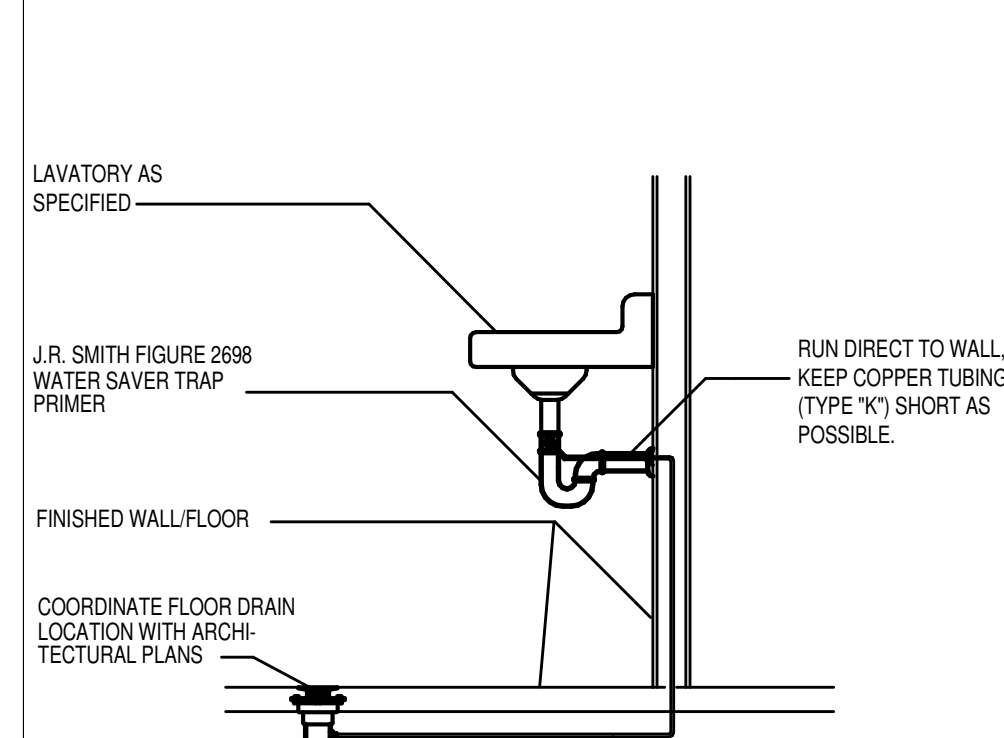
2 TWO-WAY CLEANOUT DETAIL



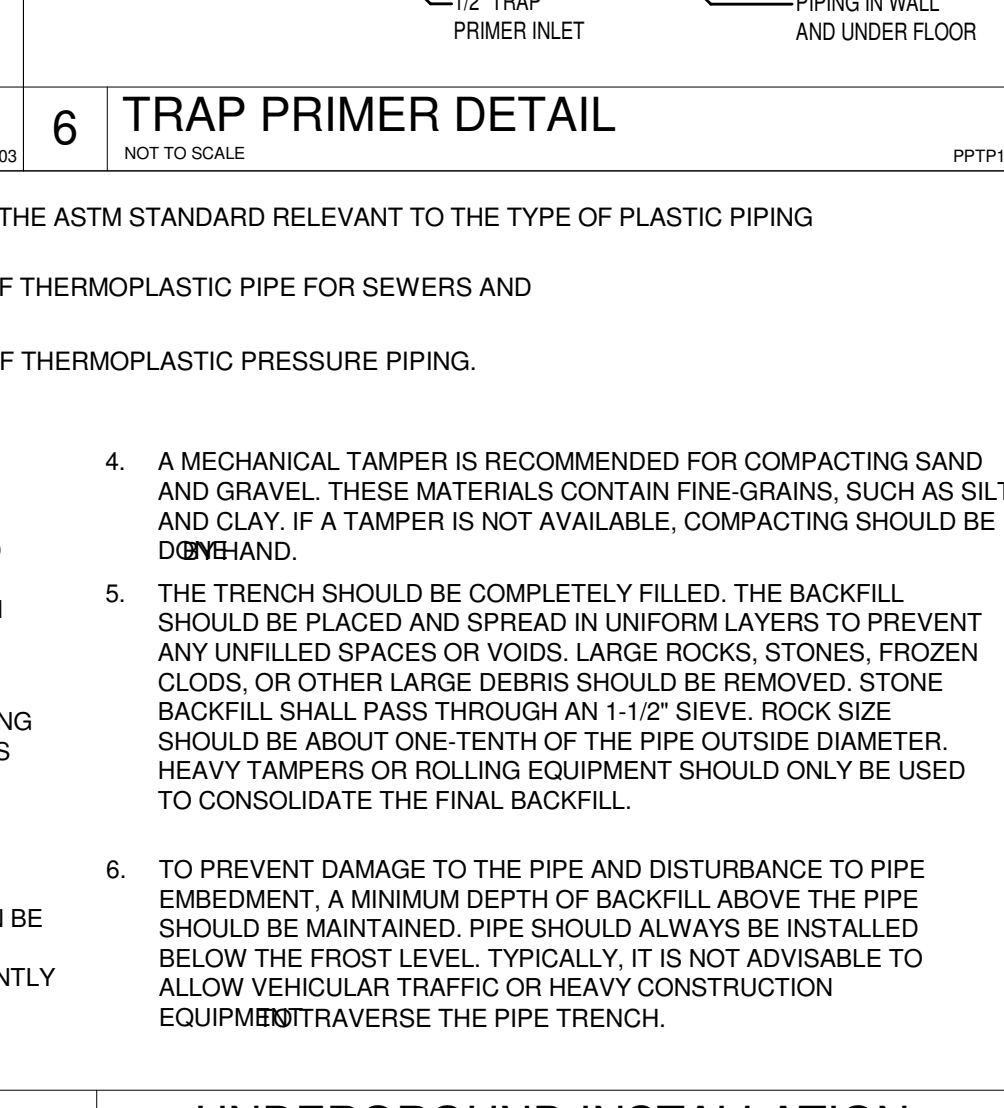
16 SAMPLE WELL DETAIL



11 UNINSULATED PIPE HANGER



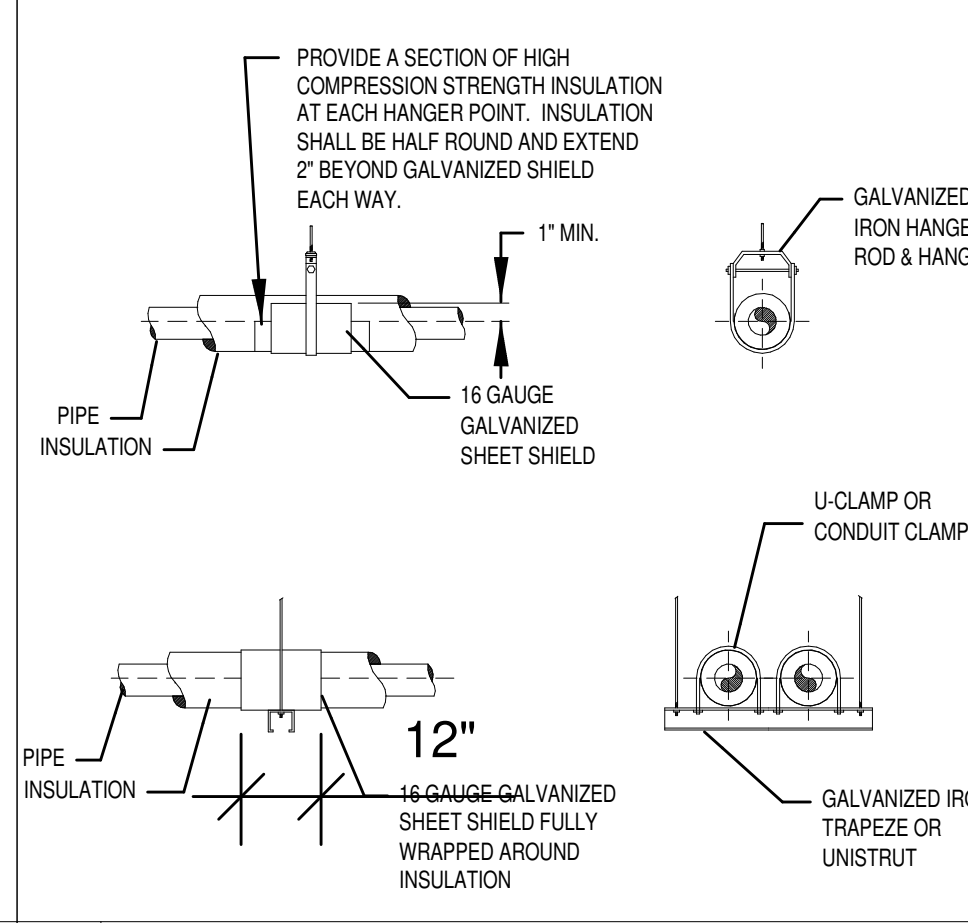
6 TRAP PRIMER DETAIL



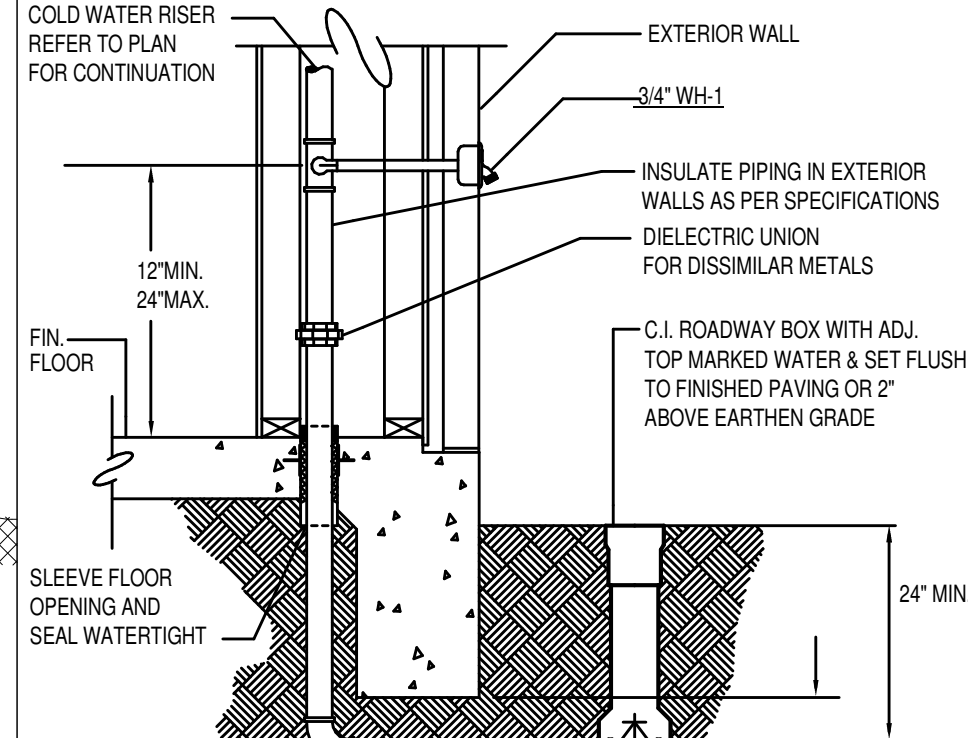
1 UNDERGROUND INSTALLATION DETAIL OF PLASTIC PIPING SYSTEMS



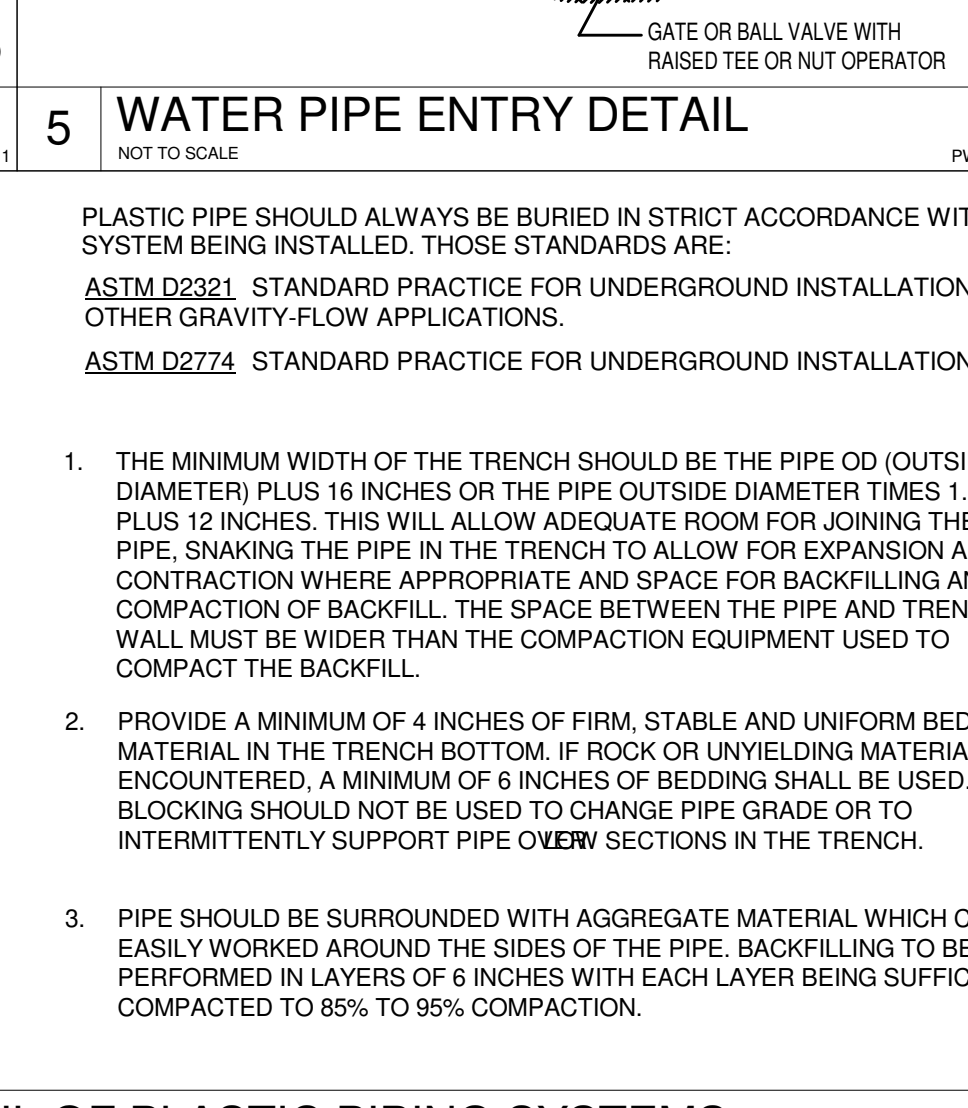
15 GREASE INTERCEPTOR



10 PIPE HANGER FOR INSUL. PIPE



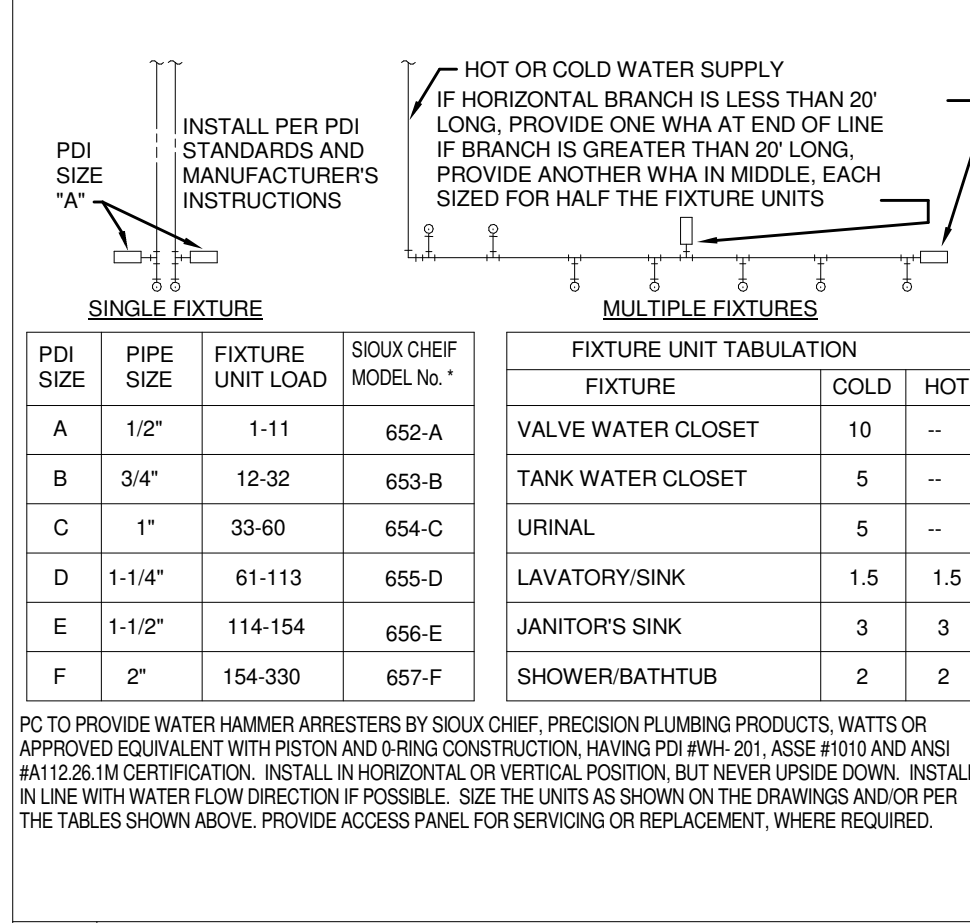
5 WATER PIPE ENTRY DETAIL



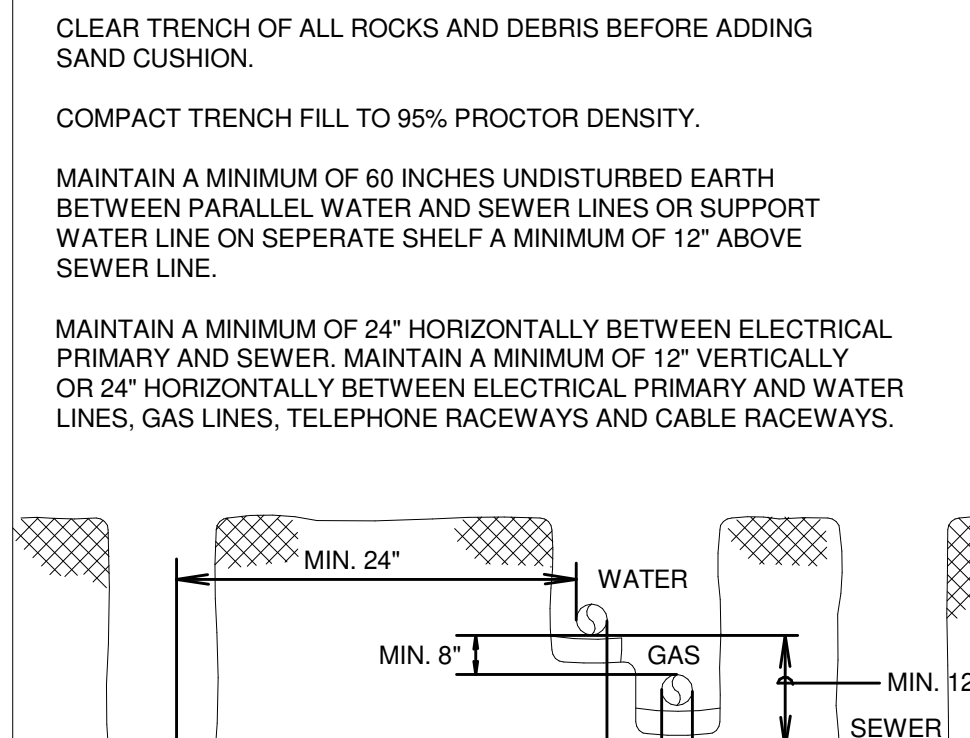
4 TRENCH PIPE SEPERATION DETAIL



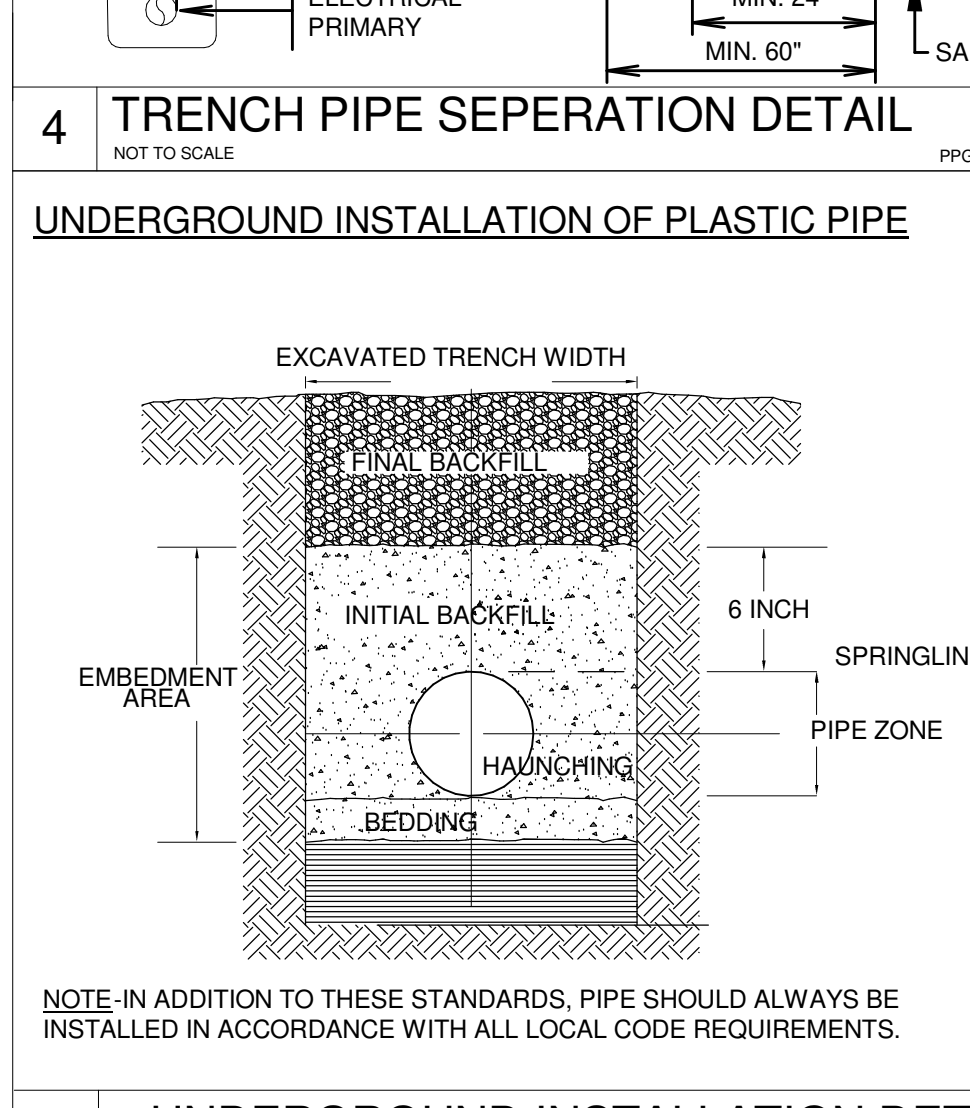
14 HUB DRAIN W/ AIR GAP



9 WATER HAMMER ARRESTOR



4 TRENCH PIPE SEPERATION DETAIL

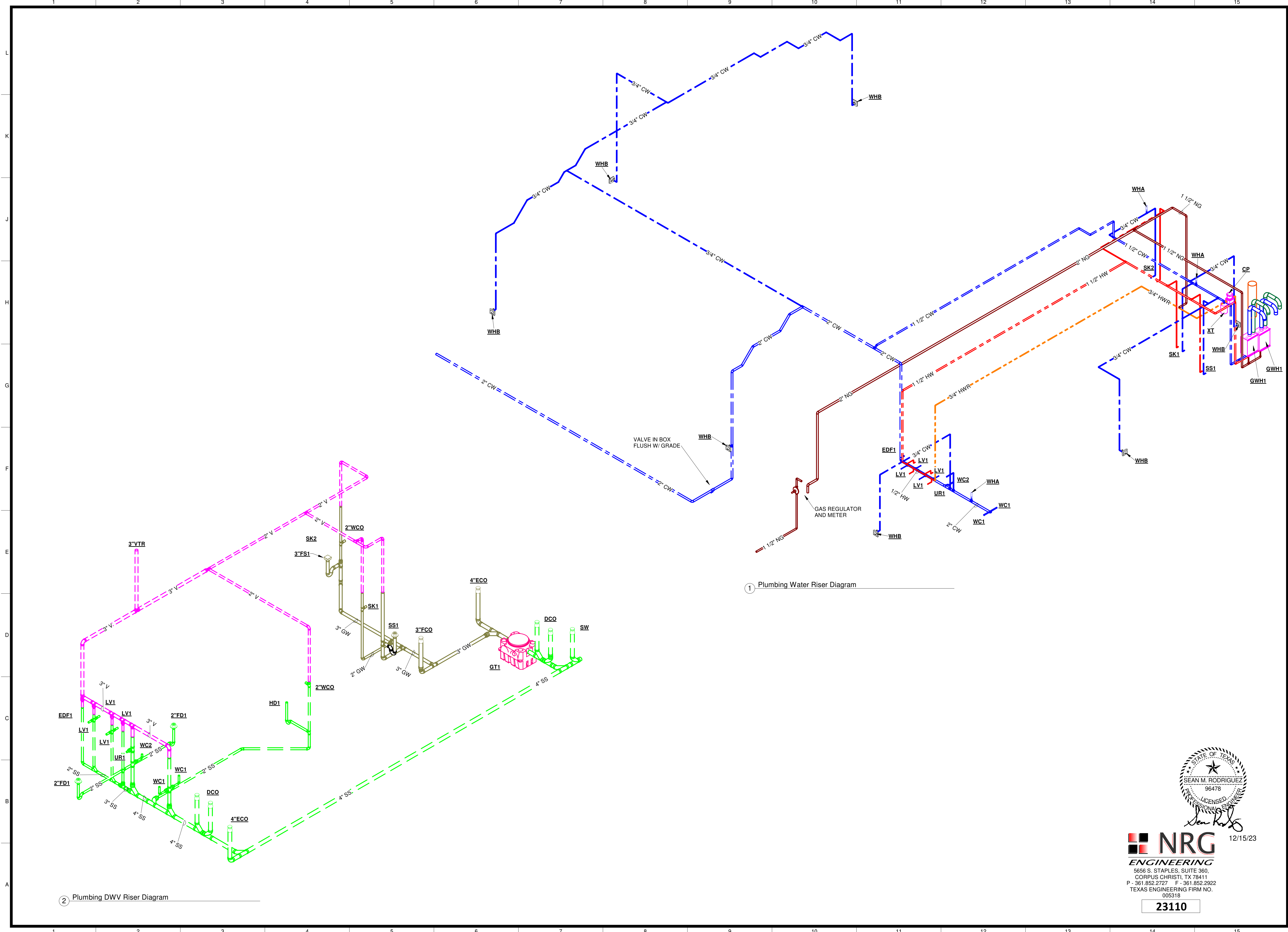


1 UNDERGROUND INSTALLATION DETAIL OF PLASTIC PIPING SYSTEMS



12/14/2023 9:49:56 AM D:\Revit\23 backups\23110_MEP_R22_kennin@ngc.com.rvt

12/14/2023 9:49:58 AM
D:\Revit\22_backups\23110_MEP_R22_kenn@ngcc.com.rvt



② Plumbing DWV Riser Diagram

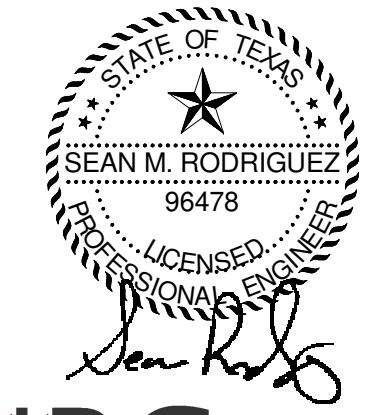
① Plumbing Water Riser Diagram

BLESSING COMMUNITY CENTER
MATAGORDA COUNTY
BLESSING, TX

©2023 PEARLEY MACKEY & ASSOCIATES

DATE ISSUED:
12.15.2023

PROJECT NUMBER:
1027-0623



NRG
ENGINEERING
5656 S. STAPLES, SUITE 360,
CORPUS CHRISTI, TX 78411
P - 361.852.2727 F - 361.852.2922
TEXAS ENGINEERING FIRM NO.
005318

12/15/23

23110

PLAN NORTH TRUE NORTH

SHEET NAME
Plumbing Riser
Diagrams

SHEET NUMBER

P4.1