

FOUNDATION NOTES

GENERAL

- 1. THESE PLANS AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF METAL BUILDING COMPANY, UNAUTHORIZED COPYING, DISCLOSURE OR OTHER UNAUTHORIZED USES ARE PROHIBITED.
2. OWNER / CONTRACTOR IS RESPONSIBLE TO PROVIDE METAL BUILDING COMPANY WITH APPROVED PLANS PRIOR TO FABRICATION.
3. OWNER / CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY AND REQUIRED PERMITS, FEES, DEPOSITS, ECT.
4. THE OWNER AND/OR CONTRACTOR SHALL REVIEW AND DETERMINE THAT ALL DIMENSIONS ARE COORDINATED AS REQUIRED WITH ALL OTHER DESIGN PROFESSIONALS DRAWINGS AND SHOP DRAWINGS FOR PROJECT PRIOR TO FABRICATION OF MATERIALS OR THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE METAL BUILDING COMPANY AND ENGINEER OF RECORD.
5. SHOP DRAWING ARE CRITICAL TO ENSURE THE DIMENSIONS AND DESIGN OUTLINED IN THESE PLANS MEET THE MINIMUM REQUIREMENTS REQUIRED BY THESE SCOPES OF WORK IF UNDER CONTRACT BY OTHERS. IN THE EVENT THE CONTRACTOR'S OR OWNER'S FAILING TO PROVIDE, HE SHALL BE RESPONSIBLE FOR THE RESULTS OR ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME (EXAMPLES: ELEVATOR, STAIRWELL, DOORS, ETC....)
6. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENT, THE OWNER / CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AND METAL BUILDING COMPANY IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE COORDINATION BETWEEN THESE DRAWINGS AND THE STRUCTURAL PLANS. IN THE EVENT THE CONTRACTOR'S OR OWNER'S FAILING TO GIVE SUCH NOTICE, THEY SHALL BE RESPONSIBLE FOR THE RESULTS OR ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
7. ANY OMISSIONS AND/OR CONFLICTS WITH PLANS SHALL BE REPORTED TO METAL BUILDING COMPANY SO THAT THEY CAN BE RESOLVED PRIOR TO PROCEEDING WITH WORK.
8. DO NOT SCALE DRAWINGS - IF A REQUIRED DIMENSION IS MISSING PLEASE CONTACT THE METAL BUILDING COMPANY AND / OR ENGINEER OF RECORD.
9. NO MODIFICATIONS TO PLANS SHALL BE MADE WITHOUT THE PERMISSION OF METAL BUILDING COMPANY AND ENGINEER OF RECORD. MODIFICATIONS REQUIRED DUE TO FIELD CONDITIONS OR OTHER CONTRACTORS OR ITEMS THAT WHICH MAY ADVERSELY AFFECT THE STRUCTURE REQUIRES WRITTEN PERMISSION (NO MODIFICATIONS TO STRUCTURAL MEMBERS IS ALLOWED).
10. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TO BE TYPICAL OR SIMILAR UNLESS ANOTHER SECTION OR DETAIL IS REFERENCED ON THE PLANS.
11. SCOPE OF WORK OF METAL BUILDING COMPANY IS INDICATED IN THE CONTRACT. THE DRAWINGS REFLECT SCOPES OF WORK AS REQUIRED FOR PERMITTING OR AT THE DIRECTION OF OWNER / CONTRACTOR.
12. SUBMITTALS TO THE ENGINEER OF RECORD FOR REVIEW MUST CONTAIN THE CONTRACTOR'S OR OWNER'S STAMP SIGNIFYING THEIR REVIEW / ACCEPTANCE. SUBMITTALS SENT WITHOUT WILL BE RETURNED AT THEIR EXPENSE WITHOUT REVIEW. A MAX. OF THREE SETS ADDITIONAL SETS WILL BE DISCARDED.
13. THE CONTRACTOR OR OWNER SHALL TAKE ALL NECESSARY STEPS TO PROTECT THE STRUCTURE, THE WORK PERSONS AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION.

SLAB ON GRADE

- UNLESS SPECIFICALLY STATED OTHERWISE IN THE GEOTECHNICAL SOILS REPORT, THE FOLLOWING MINIMUM CRITERIA SHALL BE ADHERED TO.
a) INTERIOR FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY TEST (ASTM D 1557).
b) COMPACTION OF THE SOIL IN THE FIELD SHALL BE MONITORED/CONTROLLED BY A REPRESENTATIVE OF A QUALIFIED LABORATORY.
c) EACH LAYER OF FILL SHALL NOT EXCEED 12" THICK AND SHALL BE COMPACTED PRIOR TO PLACEMENT OF THE NEXT LAYER.
MAXIMUM SPACING OF CONTROL JOINTS SHALL BE AS SHOWN IN THE TABLE BELOW. PATTERNS SHALL BE APPROXIMATELY SQUARE W/ RATIO OF LONG SIDE TO SHORT SIDE NOT TO EXCEED 1.5 TO 1.0.

Table with 2 columns: SLAB THICKNESS (IN) - SPACING (FT), and values 4, 5, 6, 7, 8, 9, 10 and 12, 13, 15, 18, 20, 23, 25.

MIX DESIGNS CONTAINING AGGREGATE LESS THAN 3/4" ARE NOT ACCEPTABLE
CUT SLAB AS SOON AS AGGREGATE DOES NOT DISCLOSE (MUST BE WITHIN THE SAME DAY AS THE CONC. WAS PLACED)

CARE SHALL BE TAKEN BY THE GENERAL CONTRACTOR WHEN DETERMINING THE LOCATION OF SJS AND CJS TO ENSURE SLAB JOINTS DOES NOT READ THROUGH THE ARCHITECTURAL FINISHES.

WAREHOUSE SLABS SHALL BE POWER-TROWELLED TO A HARD, SMOOTH BURNISHED FINISH. THE FINAL TROWEL PASS SHALL BE DONE BY MACHINE - NOT BY HAND. WITHIN 30 MINUTES OF THE FINAL TROWEL PASS, THE FLOOR SHALL BE CURED WITH EUCUIDS SUPER REZ-SEAL OR APPROVED EQUIV, WHICH MAY BE WAIVED AT THE OWNERS OPTION.

SLAB THICKNESS SHALL BE INCREASED AS REQUIRED TO PROVIDE ADEQUATE SUPPORT FOR CRANE LOADS WITHOUT CRACKING SLAB.
ALL CONCRETE SLABS ON GRADE SHALL BE A MINIMUM OF 4" THICK AND BE REINFORCED WITH 6 X 6 W1.4 X W1.4 EXCEPT WERE SPECIFICALLY NOTED ON PLANS. FIBERMESH CONCRETE INSTEAD OF WIRE MESH IS AN ACCEPTABLE ALTERNATE ON SINGLE STORY BUILDING AND MULTISTORY BUILDING WITHOUT LOAD BEARING FLOOR PADS. FIBERMESH SHALL BE IN COMPLIANCE WITH ASTM C 1116 TYPE III AND ASTM C 1116 LEVEL 1 AND SHALL BE PLANT BATCH MIX WITH PROPORTIONS OF 1.5 POUNDS OF FIBERMESH PER CUBIC YARD OF CONCRETE.

PLACE A MINIMUM 6 MIL POLYETHYLENE VAPOR BARRIER (LAPPED A MIN. OF 6") OVER COMPACTED SOIL BETWEEN FOUNDATION AND SLAB UNLESS NOTED OTHERWISE IN GEOTECHNICAL ENGINEERS REPORT FOR THE PROJECT.

DESIGN CRITERIA

CONSTRUCTION DOCUMENTS WERE DESIGNED AND MEET THE REQUIREMENTS OF THE OF THE LOCAL BUILDING CODE DESIGNATED UNDER STRUCTURAL DESIGN CRITERIA. (SEE STRUCTURAL PLANS FOR DESIGN LOADS).

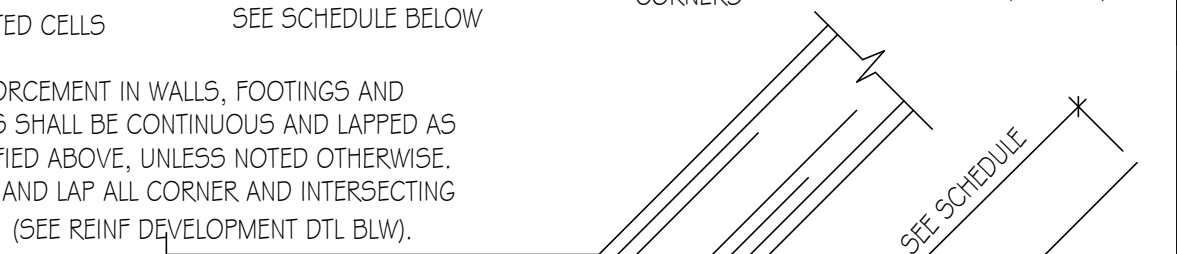
FOUNDATIONS

- 1. CONFORMANCE WITH THE REQUIREMENTS OUTLINED IN THE GEOTECHNICAL SOILS REPORT SHALL BE DETERMINED BY PERFORMING INDUSTRY STANDARD SOIL DENSITY TESTS BY A CERTIFIED TESTING AGENCY.
2. IF SUBSURFACE INVESTIGATION FOR FOUNDATIONS HAS NOT BEEN PERFORMED AND GEOTECHNICAL ENGINEERING REPORT WAS NOT AVAILABLE FOR FOUNDATION DESIGN. PRIOR TO CONSTRUCTION, THE OWNER SHALL RETAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO PERFORM SOILS BORINGS, PROVIDE RECOMMENDATIONS FOR FOUNDATION DESIGN (INCLUDING NET ALLOWABLE SOIL BEARING PRESSURE) PROVIDE EARTHWORK CONSTRUCTION CRITERIA AND PERFORM SOIL TESTING DURING CONSTRUCTION. THE OWNER / CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL EARTHWORK OPERATIONS IN STRICT ACCORDANCE WITH THIS REPORT. IF THE FOUNDATION RECOMMENDATIONS AND NET ALLOWABLE SOIL BEARING CAPACITY OR ANY OTHER ASSUMPTIONS (SEE BELOW) DIFFER FROM THE ASSUMED VALUE, THEN MODIFICATIONS TO THE STRUCTURAL DRAWINGS SHALL BE REQUIRED. SHOULD THIS OCCUR, THE OWNER / CONTRACTOR SHALL STOP CONSTRUCTION AND NOTIFY METAL BUILDING COMPANY AND THE ENGINEER OF RECORD IMMEDIATELY.
3. FOUNDATION PLANS HAVE BEEN DESIGNED WITH THE FOLLOWING ASSUMPTIONS IN THE ABSENCE OF A SUBSURFACE INVESTIGATION BY A GEOTECHNICAL ENGINEER. NET ALLOW. SOIL BEARING PRESSURE OF 2,000 PSF.
4. CONDITIONS DISCOVERED BY THE CONTRACTOR AND/OR GEOTECHNICAL FIELD REPRESENTATIVE DURING EXCAVATION WHICH MAY PREVENT THE ATTAINMENT OF THE ALLOWABLE BEARING PRESSURE STATED IN THE GEOTECHNICAL SOILS REPORT, SHALL BE REPORTED TO THE ENGINEER.
5. THE SHEETLEDGES, RAINPUPS AND MASONRY LEDGES ARE VITAL TO THE PROPER FIT OF THE STEEL CONSTRUCTION. OWNER / CONTRACTOR SHALL FIELD VERIFY ALL TO BE AS SHOWN ON PLANS. IF THEY ARE NOT TO THE DRAWINGS CONTACT METAL BUILDING COMPANY PRIOR TO FABRICATION OR BEFORE STEEL ERECTION STARTS.
6. ALL ISOLATED PAD FOOTING ARE TO BEAR A MINIMUM OF 18" BELOW THE TOP OF CONCRETE SLAB / PAVEMENT OR A MINIMUM OF 12" BELOW FINISHED GRADE U.O. ON PLANS.
7. THE MINIMUM BEARING WIDTH OF CONTINUOUS FOOTINGS SHALL NOT BE LESS THAN 12" UNLESS SPECIFICALLY NOTED IN GEOTECHNICAL ENGINEERING REPORT.
8. PLANS AND DETAILS REFLECT A DESIGN TO ACCOMMODATE A MAXIMUM FROST PROTECTION OF 12" UNLESS NOTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. IF THE REQUIRED FROST DEPTH EXCEEDS 12" THAN ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO EXCAVATION OR FOUNDATIONS.

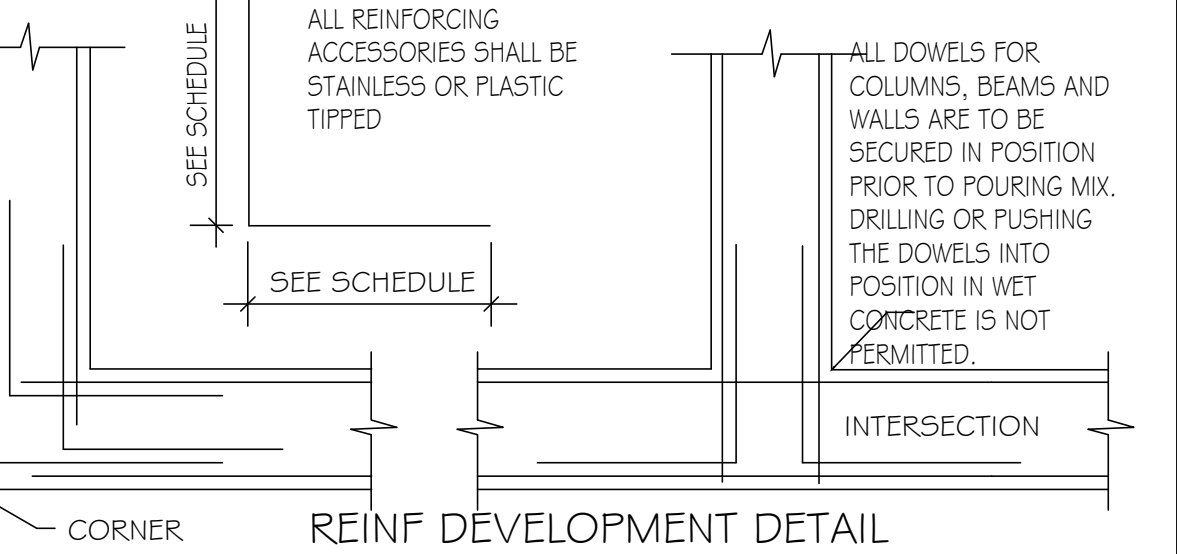
REINFORCING:

ALL REINFORCING SHALL BE DOMESTICALLY PRODUCED WITH REBAR CONFORMING TO ASTM-615 FOR GRADE 60 STEEL, AND WELDED WIRE FABRIC (WWF) TO ASTM A-185.

SPICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:



REINFORCEMENT IN WALLS, FOOTINGS AND BEAMS SHALL BE CONTINUOUS AND LAPPED AS SPECIFIED ABOVE, UNLESS NOTED OTHERWISE. HOOK AND LAP ALL CORNER AND INTERSECTING BARS. (SEE REINF DEVELOPMENT DTL BLW).



COVER FOR REINFORCING SHALL BE AS FOLLOWS:

- a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
b. CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THRU #18 BARS 2" #5 BAR, W31 OR D31 WIRE AND SMALLER 1 1/2"
c. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: #14 AND #18 BARS 1 1/2" #11 BAR AND SMALLER 3/4"

LAP SCHEDULE

Table with columns: BAR #, TOP, OTHERS, and rows for bars #3 through #11 with various lap lengths.

ALL TOP BARS ARE DEFINED AS HORIZ. BARS WITH MORE THAN 12" OF CONCRETE BELOW BARS

THE VALUES IN THE TABLE SHOWN BELOW IS FROM THE VULCRAFT METAL DECK PRODUCT MANUAL AND REPRESENTS THE RECOMMENDED WELDED WIRE FABRIC.

Table with columns: DECK TYPE, TOTAL SLAB DEPTH, and RECOMMENDED WELDED WIRE FABRIC. Rows include 1.5VLVL10R, 2VL, 2VU, 3VL, 3VU.

ACCEPTABLE ALTERNATIVES:
• CONCRETE SPECIFIED IN ACCORDANCE WITH ASTM C 1116, TYPE I, CONTAINING STEEL FIBERS MEETING THE CRITERIA OF ASTM A820, TYPE I, TYPE II, OR TYPE V, AT A DOSAGE RATE DETERMINED BY THE FIBER MANUFACTURER FOR THE APPLICATION, BUT NOT LESS THAN 25LB/CU YD IS AN ACCEPTABLE ALTERNATIVE TO THE WWF SPECIFIED ABOVE.
• CONCRETE SPECIFIED IN ACCORDANCE WITH ASTM C 1116, TYPE III, CONTAINING MACROSYNTHETIC FIBERS MEETING THE CRITERIA OF ASTM D7508 AT A DOSAGE RATE DETERMINED BY THE FIBER MANUFACTURER FOR THE APPLICATION, BUT NOT LESS THAN 4LB/CU YD IS AN ACCEPTABLE ALTERNATIVE TO THE WWF SPECIFIED ABOVE.

CONCRETE:

Table with columns: LOCATION, 28 DAY STRENGTH, SLUMP, and MAX AGGR. Rows include FOUNDATION, SLAB-ON-GRADE, TIE BEAMS, TIE COLUMNS, CAST-IN-PLACE BEAMS, EQUIPMENT SUPPORTS, TILT-UP PANELS, GROUT UNDER TILT-UP PANELS, ELEVATED SLABS FORMED AND POURED, ELEVATED SLABS FORMED W/ MTL DECK, GROUT FOR FILLED CELLS.

- 1. SLUMP FOR RAMPS AND SLOPING SURFACES SHALL NOT EXCEED 4".
2. SEE MASONRY GENERAL NOTES FOR GROUT TESTING REQUIREMENTS.
3. COLD JOINTS ARE NOT RECOMMENDED - ALTHOUGH IF REQUIRED THEY SHOULD BE PLACED A MINIMUM OF 2'-0" OFF CENTERLINE OF COLUMNS.

CONCRETE PROPERTIES SHALL BE VERIFIED THROUGH INDUSTRY STANDARD TESTING PROCEDURES BY A CERTIFIED TESTING AGENCY. MIN. TEST REQUIRED SHALL INCLUDE SLUMP AND CYLINDER BEAKS FOR COMPRESSIVE STRENGTH. FINDINGS SHALL BE SUBMITTED TO THE ARCH.ENG. FOR REVIEW.

CONCRETE WORK SHALL CONFORM TO LATEST EDITIONS OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ACI 315 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.

CONCRETE MIX DESIGN SHALL MEET THE FOLLOWING CRITERIA:

- 1. PROPOSED MIX DESIGN SHALL BE ACCORDANCE WITH ACI 301 METHOD 1 OR METHOD 2
2. ENTRAPPED AIR CONTENT SHALL NOT EXCEED 3%.
3. ADMIXTURES USED TO ENTRAIN AIR ARE NOT ACCEPTABLE. ALL CONCRETE TO BE NORMAL WIGHT WITH A DESIGN STRENGTH AT 28 DAYS.

SITE ADDED WATER IS NOT ACCEPTABLE. ADDING WATER TO THE MIX WILL RESULT IN REJECTION OF THE RESULTS BY THE ENGINEER OF RECORD.
CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF THE FORMS AND SHORING AND FOR SAFE PRACTICE IN THEIR USE AND REMOVAL.

PLACING OF CONCRETE IN ALL REINFORCED COLUMNS AND WALLS SHALL BE IN LIFTS NOT EXCEEDING 7 1/2 FEET IN HEIGHT. CONCRETE SHALL BE PLACED THROUGH ELEPHANT TRUNK TUBULAR SHUTES LOCATED SUCH THAT THE FREE AIR DROP OF THE MIX DOES NOT EXCEED 6 FEET. ALTERNATE PLACEMENT METHOD OF CONCRETE WITH OR WITHOUT ADMIXTURES SHALL NOT BE USED UNLESS APPROVED BY ENGINEER OF RECORD.

MONOLITHIC SLAB FINISHES

THE FOLLOWING REQUIREMENTS ARE BASED ON THE LATEST FLOOR FLATNESS (FF) / FLOOR LEVELNESS (FL) VALUES/METHODS. BIDS FOR THIS WORK SHALL REFLECT THESE REQUIREMENTS AND ENFORCEMENT THEREOF CAN BE EXPECTED.

- NON-CRITICAL FLOOR TOLERANCE
1. FLOAT FINISH (FLT-FN)
2. SPECIFIED OVERALL VALUE: FF25/FL20
3. MINIMUM LOCAL VALUE: FF20/FL17
4. APPLY FLOAT FINISH TO MONOLITHIC SLAB SURFACES THAT ARE TO RECEIVE MUD SET TILE AND OTHER THIN FINISHES, AND TO SLAB SURFACES WHICH ARE TO BE COVERED WITH WATERPROOFING MEMBRANE.

- TYPICAL CLASSROOM, CORRIDOR, NORMAL SIZED ROOMS (100 TO 600 SF): TROWEL FINISH 1 (TR-FN1)
1. SPECIFIED OVERALL VALUE: FF30/FL23
2. MINIMUM LOCAL VALUE: FF25/FL20
3. APPLY TROWEL FINISH TO MONOLITHIC SLAB SURFACES THAT ARE TO RECEIVE WOOD FLOORING, CARPET, PAINT, OR OTHER THIN FLOOR FINISH COATING SYSTEM.

- LARGE ROOMS (601 SF AND OVER) AND PUBLIC AREAS: TROWEL FINISH 2 (TR-FN2)
1. SPECIFIED OVERALL VALUE: FF36/FL25
2. MINIMUM LOCAL VALUE: FF30/FL22
3. APPLY TROWEL FINISH TO MONOLITHIC SLAB SURFACES THAT ARE TO RECEIVE RESILIENT FLOORING, CARPET, PAINT, OR OTHER THIN FLOOR FINISH COATING SYSTEM.

ELEVATED SLABS SHALL HAVE A SPECIFIED OVERALL VALUE OF FF22 TO FF27 AND A MINIMUM LOCAL OF FF20 WITH NO FL NUMBER DEFINED.

FLOOR TOLERANCE MEASUREMENTS: FLOOR FLATNESS AND LEVELNESS TESTS ON FLOOR SLABS SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ASTM E1155-87, WITH THE EXCEPTION OF SUBPARAGRAPHS 7.2.3 AND 7.3.2 WHICH MAY BE WAIVED AT THE OWNERS OPTION. ALSO 2 CALCULATION TO BE USED SHALL BE N MIN = M/10. FLOOR TOLERANCE MEASUREMENTS SHALL BE MADE BY THE INDEPENDENT TESTING LABORATORY WITHIN 24 HOURS AFTER COMPLETION OF THE FINAL TROWELING OPERATION, AND BEFORE FORMS AND SHORES HAVE BEEN REMOVED. MEASUREMENT SHALL BE TAKEN USING A DIPSTICK AUTO-READ FLOOR PROFILER AS MANUFACTURED BY THE EDWARD W. FACE COMPANY, INC. OF NORFOLK, VA. RESULTS OF FLOOR TOLERANCE TESTS, INCLUDING A FORMAL NOTICE OF ACCEPTANCE OR REJECTION OF THE WORK, SHALL BE PROVIDED TO THE CONTRACTOR AND THE ARCHITECT WITHIN 24 HOURS AFTER DATA COLLECTION. OUT-OF-TOLERANCE WORK SHALL BE REPAIRED OR REPLACED AT THE ARCHITECT'S DISCRETION AT NO COST TO THE OWNER.

SPECIALTY ENGINEERING REQUIREMENTS

STEEL PAN STAIRS SHALL BE DESIGNED BY A SPECIALTY ENGINEER, HIRED BY THE STEEL FABRICATOR, AND SHALL INCLUDE STRINGERS, TREADS, HAND RAILINGS, PLATFORMS AS REQUIRED, PAN INSERTS, MISC SUPPORTS AND CONNECTIONS. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND MUST BE SIGNED AND SEALED BY A STRUCTURAL ENGINEER REGISTERED IN THE SAME STATE AS THE PROJECT LOCATION. MINIMUM DESIGN LIVE LOAD SHALL BE 100 PSF.

HANDRAILS, POSTS AND SUPPORT CONNECTIONS SHALL BE DESIGNED BY A SPECIALTY ENGINEER, HIRED BY THE STEEL FABRICATOR. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND MUST BE SIGNED & SEALED BY AN ENGINEER REGISTERED IN THE SAME STATE AS THE PROJECT LOCATION. DESIGN LOADING(S) SHALL CONFORM TO AT LEAST THE MINIMUM REQUIREMENTS OF THE APPLICABLE BUILDING CODE. (SEE DESIGN CRITERIA).

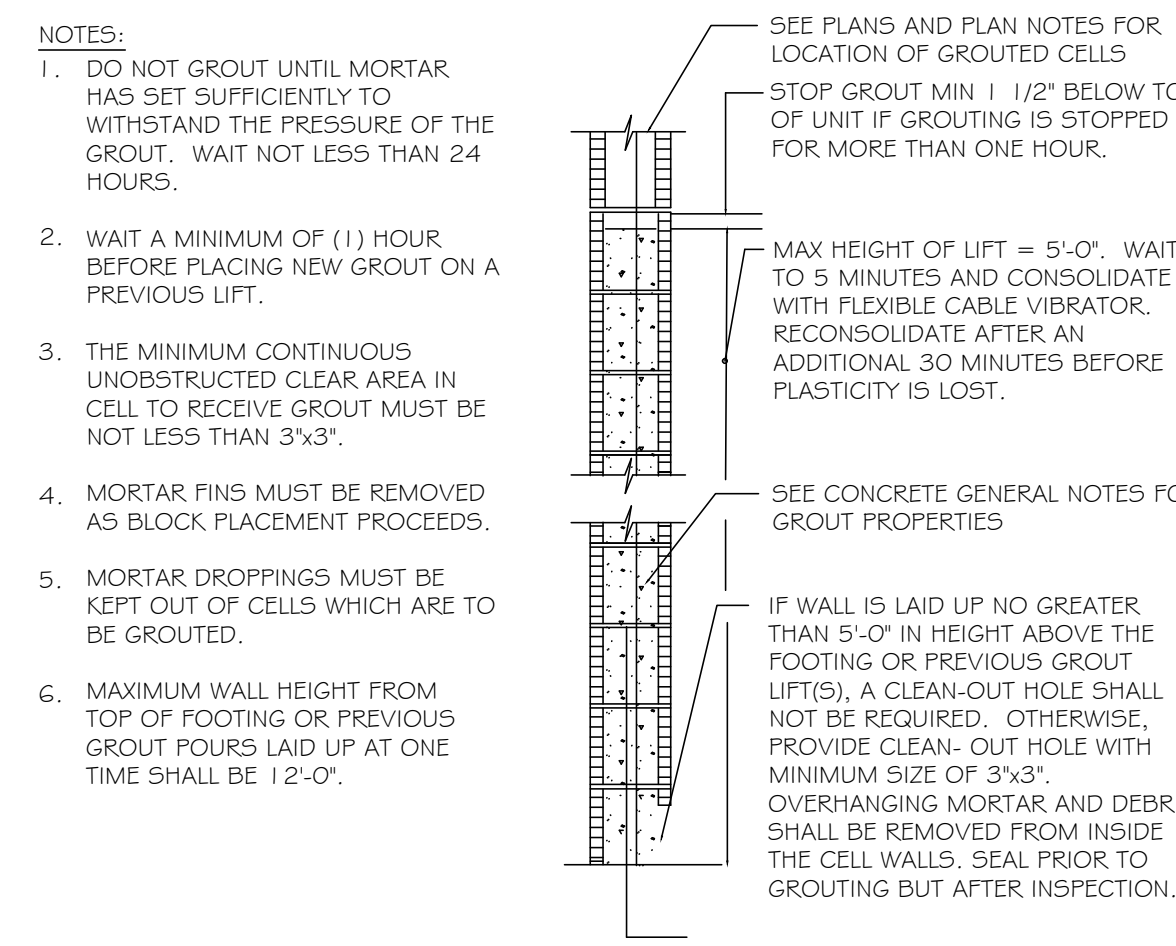
MASONRY

MASONRY CONSTRUCTION, MATERIALS, AND INSPECTION SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE LATEST ADOPTED EDITIONS ACI 530.1, ASCE 5 & 6, TMS 402 & 602, ASTM C476 & C1019, AND NOMA TEK 107, UNLESS SPECIFIED IN THESE CONTRACT DOCUMENTS.

CONCRETE BLOCKS SHALL CONFORM TO THE MINIMUM REQ. OF ASTM C-90 WITH fm=1,500psi (1,900psi ON THE NET AREA)

MORTAR SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF ASTM C270 FOR TYPE M OR S W/ (COMPRESSIVE STRENGTH = 2500psi AND 1800psi RESPECTIVELY. SITE TESTED MORTAR CUBES SHALL ACHIEVE A MINIMUM OF 80% OF THE DESIGN COMPRESSIVE STRENGTH)

BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.
ALL CROSS WEBS SHALL BE FULLY BEDDED IN MORTAR AROUND CELLS TO BE GROUTED.
GROUT FOR FILLED CELLS SHALL BE PLACED AS INDICATED BELOW:



GROUTING DETAIL

CONCRETE SHALL BE PLACED AT LEAST 1 HOUR OR MORE SHOULD BE STOPPED (1 1/2") BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.

- STOPPING AND RESUMING WORK: RACK BACK 1/2-UNIT LENGTH IN EACH COURSE. DO NOT TOOTH. CLEAN EXPOSED SURFACES OF SET MASONRY WET UNITS LIGHTLY (IF REQD) AND REMOVE LOOSE MAS UNITS AND MORTAR PRIOR TO LAYING FRESH MASONRY.
DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS.
DO NOT APPLY CONCENTRATED LOADS TO MASONRY WALLS FOR (7) DAYS.
MAXIMUM CONTROL JOINT SPACING FOR CONCRETE MASONRY UNITS SHALL BE THREE (3) X WALL HEIGHT BUT NO FURTHER THAN SOFT.
REFERENCE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

PROVIDE GROUT FILLED PRECAST 'U-LINTELS' AT ALL OPENINGS WHERE THE CONCRETE BEAMS ARE NOT SHOWN OR NOTED. SEE PRECAST LINTEL SCHEDULE FOR ADDITIONAL REQUIREMENTS W/ MINIMUM UNFILLED LINTEL CAPACITY EQUAL FOUR HUNDRED (400) POUNDS/FOOT FOR SPAN INDICATED.

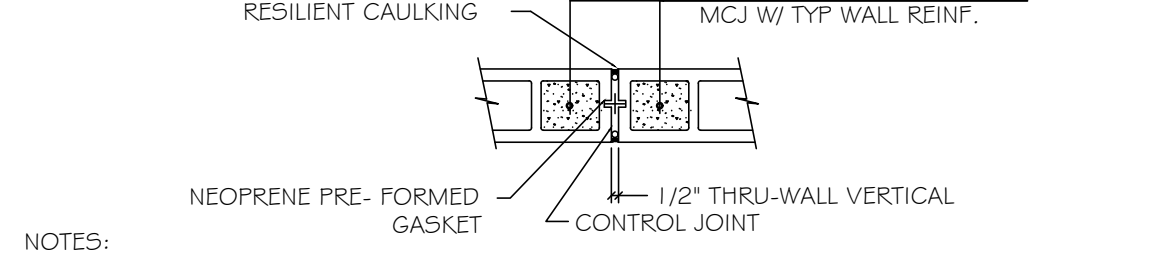
HORIZONTAL REINFORCE WALL WITH LADDER TYPE (ASTM A82, #9 GAGE WIRE) DEFORMED REINFORCEMENT EQUAL TO DURO-WALL IN BED JOINTS AT SIXTEEN (16) INCHES O.C. UNLESS OTHERWISE NOTED ON PLANS MEASURED VERTICALLY.

EXTEND ALL VERTICAL WALL REINFORCING TO WITHIN TWO (2) INCHES OF TOP OF WALL OR BEAM UNLESS OTHERWISE NOTED ON PLANS. TERMINATE REINFORCING WITH STANDARD ACI 90 DEGREE HOOK IF ROOF JOIST AND / OR TRUSSES BEAR ON THE TOP OF WALL. IF A PARAPET EXIST, HOOK IS NOT REQUIRED.

SEE FOUNDATION PLAN FOR ALL VERTICAL REINFORCING REQUIRED TYPICAL VERTICAL REINFORCING SIZE AND SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.

CONTINUOUS x NOMINAL WALL WIDTH x 16" (MIN.) DEEP BOND BEAMS REINFORCED WITH TWO (2) #5 CONTINUOUS BARS IN EACH COARSE ARE REQUIRED AT EACH FLOOR LEVEL, INTERMEDIATE STAIR LANDING, ROOF BEAM/DECK ATTACHMENT, & TRUSS BEARING LOCATIONS - (TYP. UNO)

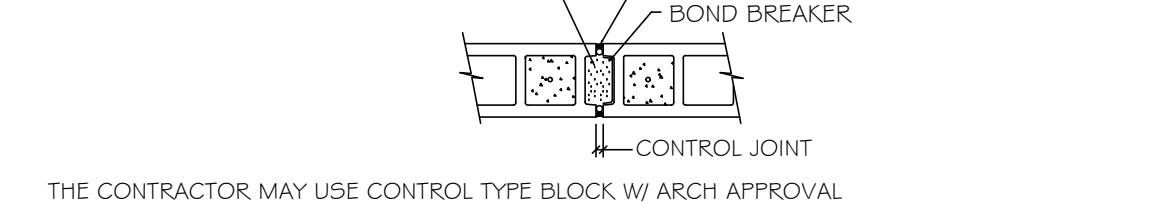
CONTINUOUS X NOMINAL WALL WIDTH X 8" (MIN.) DEEP BOND BEAMS REINFORCED WITH TWO (2) #5 CONTINUOUS BARS ARE REQUIRED AT TYPARAPET OR INT. NON-LOAD BRG WALL, T/ KNEEWALL, TYPARAPET, AND INT. NON LOAD BRG WALL (TYP., UNO).



- NOTES:
1. THRU-WALL JOINT SHALL BE CONTINUOUS WITHOUT INTERRUPTION FROM FOUNDATION TO TOP OF WALL.
2. TERMINATE TYPICAL HORIZONTAL JOINT REINFORCING AT JOINT.
3. MAXIMUM SPACING OF CONTROL JOINTS SHALL BE (3 x WALL HEIGHT) BUT NO FURTHER THAN 30' APART NOR 15' OFF ANY CORNER OR RETURN.

MASONRY CONTROL JT (MCJ)

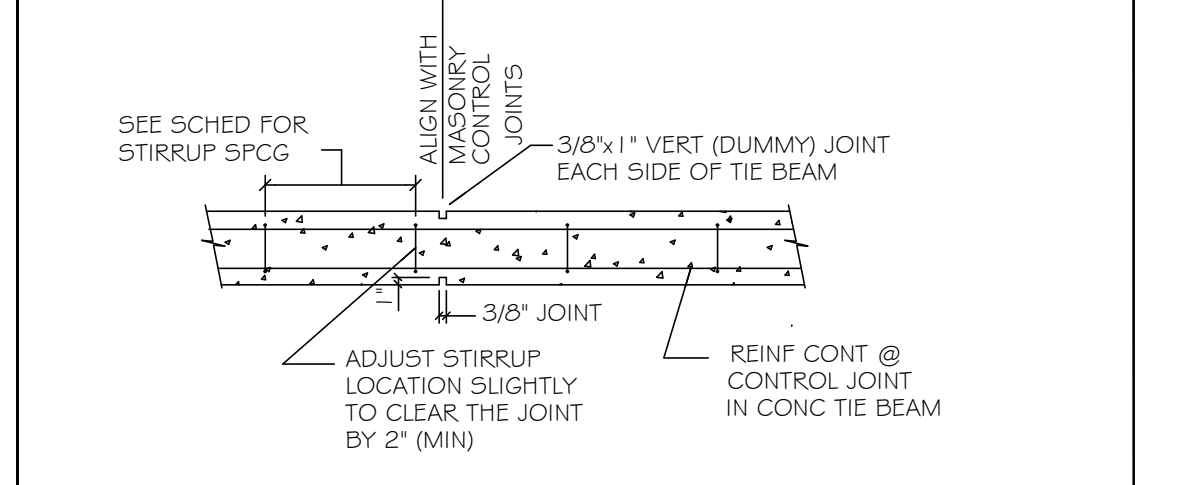
MAXIMUM SPACING OF CONTROL JOINTS SHALL BE (3 x WALL HEIGHT) BUT NO FURTHER THAN 30' APART NOR 15' OFF ANY CORNER OR RETURN.



MASONRY CONTROL JT (MCJ) ALTERNATE

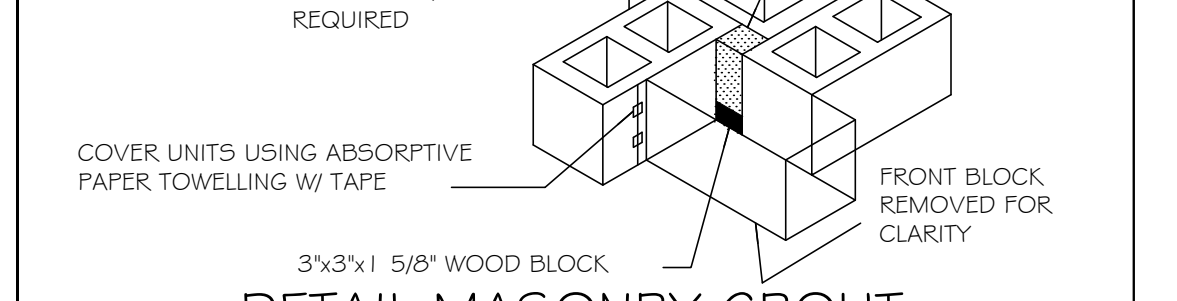
THE CONTRACTOR MAY USE CONTROL TYPE BLOCK W/ ARCH APPROVAL

TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE OWNER / CONTRACTOR.



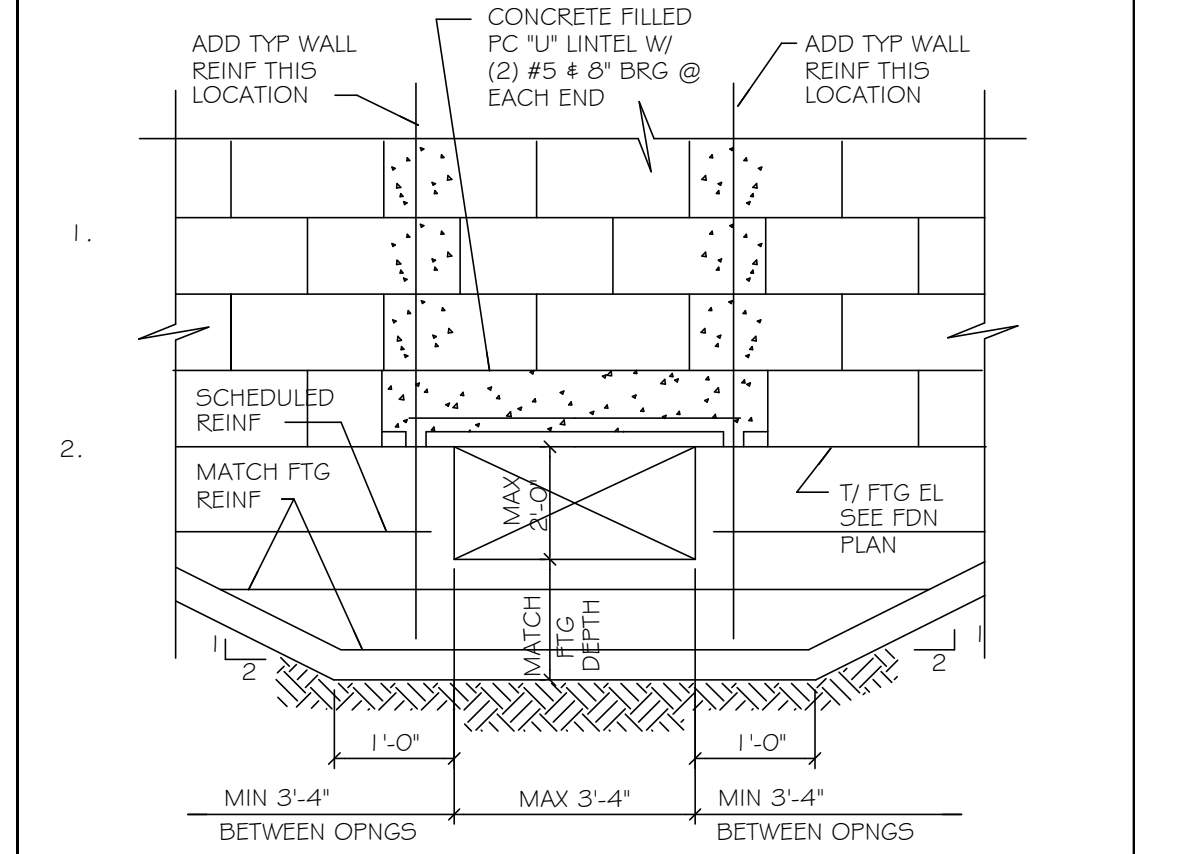
MCJ @ TIE BEAM

JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED. TESTING SHALL CONFORM TO ASTM C 1019. SEE TEST MOLD DETAIL BELOW. SEE SCHEDULE UNDER CONCRETE NOTES FOR COMPRESSIVE STRENGTH AND SLUMP REQUIREMENTS.



DETAIL MASONRY GROUT TEST MOLD (ASTM C-1019)

MASONRY CONT
TYPICAL MECHANICAL OPENING DETAIL:
NOTE: GC TO CONTACT ENGINEER IF OPENING EXCEEDS SIZE AND AND SPACING SHOWN.



TYP MECH OPNG THRU FTG

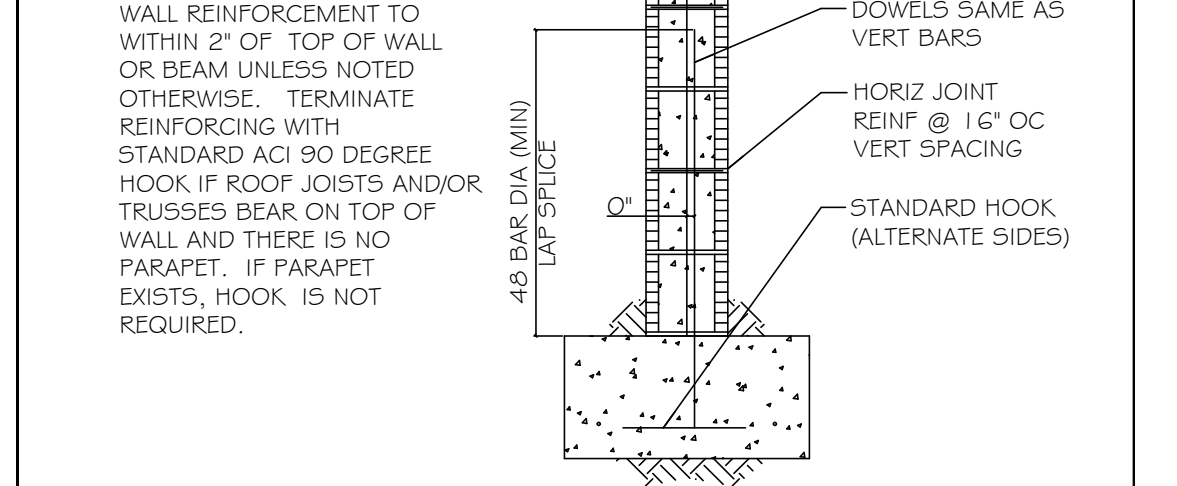
TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

PROVIDE GROUT FILLED PRECAST 'U-LINTELS' AT ALL OPENINGS WHERE THE CONCRETE BEAMS ARE NOT SHOWN OR NOTED. SEE PRECAST LINTEL SCHEDULE FOR ADDITIONAL REQUIREMENTS W/ MINIMUM UNFILLED LINTEL CAPACITY EQUAL FOUR HUNDRED (400) POUNDS/FOOT FOR SPAN INDICATED.

HORIZONTALLY REINFORCE WALLS WITH LADDER TYPE (ASTM A82, #9 GAGE WIRE) DEFORMED REINFORCEMENT EQUAL TO DURO-WALL IN BED JOINTS AT 16" OC UNO, MEASURED VERTICALLY. PLACE PER MFR INSTRUCTIONS. LAP ALL HORIZONTAL JOINT REINFORCING 8" MIN.

VERTICAL REINFORCING MUST HAVE A MINIMUM CLEARANCE OF 1/2" TO INSIDE FACE. VERTICAL BAR LAP = 48 x BAR DIAMETER. SEE FILLED CELL DETAIL BELOW FOR ADDITIONAL INFORMATION.

- NOTES:
SEE FOUNDATION PLANS FOR ALL VERT REINF. REQ. TYP
VERTICAL REINFORCING SIZE & SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.
STOP VERTS 2' FROM TOP OF WALL & PROVIDE STANDARD ACI HOOK (TYP)
VERT BAR CENTERED IN FILLED CELL
DOWELS SAME AS VERT BARS
HORIZ JOINT REINF @ 16" OC VERT SPACING
STANDARD HOOK (ALTERNATE SIDES)



FILLED CELL DETAIL

VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND LATERALLY SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 192 x BAR DIAMETER OR 10 FT WHICHEVER IS LESS WHENEVER A CLEANOUT IS REQUIRED. SEE GROUTING DETAIL NOTE FOR CLEANOUT REQUIREMENTS.

REINFORCE MASONRY OPENINGS GREATER THAN 1'-0" WIDE, WITH HORIZ JT REINF PLACED IN (2) HORIZ JOINTS APPROXIMATELY 8" APART, IMMEDIATELY ABOVE THE LINTEL AND IMMEDIATELY BELOW THE SILL. EXTEND REINFORCING A MINIMUM OF 2'-0" BEYOND JAMBS OF THE OPENING EXCEPT AT CONTROL JOINTS. SEE PLAN FOR ADDITIONAL REQUIREMENTS.

ALL CELLS OF CMU WALLS IN CLIMATE CONTROLLED BUILDING WHICH ARE NOT GROUTED SHALL BE FILLED WITH PERLITE, VERMICULITE, OR POLYURETHANE FOAMED-IN-PLACE AS SPECIFIED BY THE LATEST ADOPTED EDITION ON THE INTERNATIONAL ENERGY CONSERVATION CODE.

MAKORABCO logo and contact information: EAST COAST OFFICE: 1041 CROWN PALM CIRCLE WATER GARDEN FL 34707 PHONE: (800) 989-0220

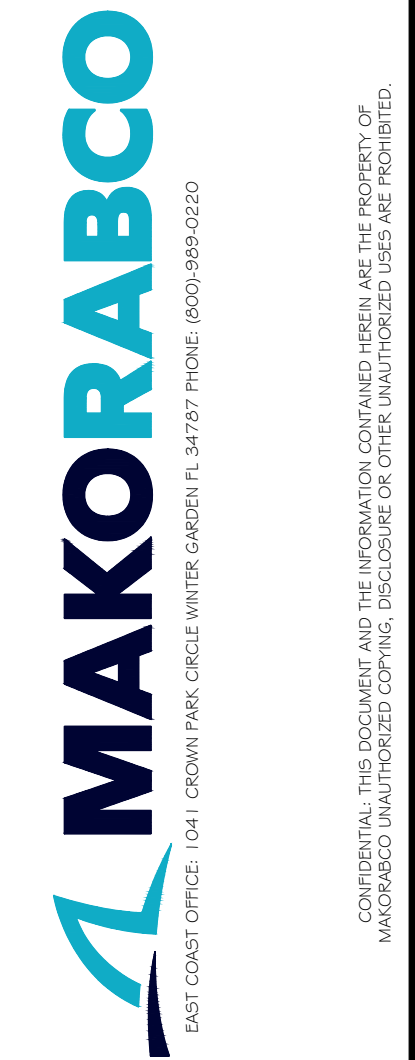
LIBERTY DELRAY, DELRAY FL logo and professional engineer information for Robert M. Beattie.

Professional Engineer Stamp for Robert M. Beattie, License No. 55428, State of Florida.

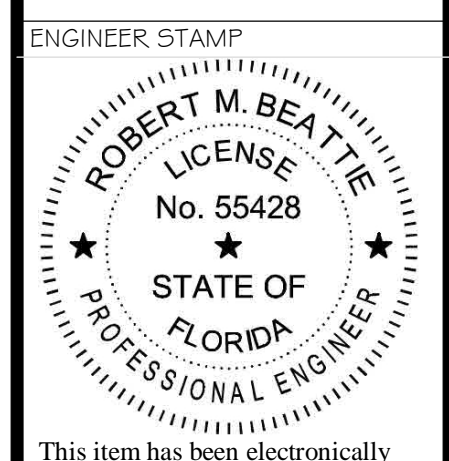
ENGINEER and RBE CONSULTING SERVICES, LLC information.

FOUNDATION NOTES, SHEET TITLE, and revision table.

MARKUPS / REVISIONS			
NO	BY	ISSUE	DATE



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DELRAY FL



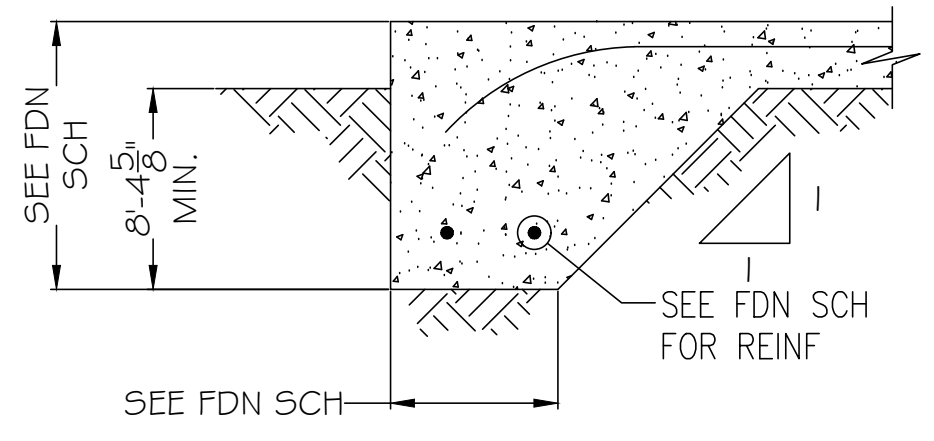
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08/04/2023
Digitally signed by Robert Beattie Date: 2023.08.04 16:02:37 -0400

ENGINEER
RBE CONSULTING SERVICES, LLC
10001 W. STATE ROAD 70, SUITE 1000, BOCA RATON, FL 33433
TEL: 561-393-7777 FAX: 561-393-7778
WWW.RBECONSULTING.COM
THIS CONSULTING SERVICE IS PROVIDED BY THE SIGNATURED ENGINEER AND IS NOT TO BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN CONSENT OF RBE CONSULTING SERVICES, LLC.
RBE CONSULTING SERVICES, LLC IS AN EQUAL OPPORTUNITY FIRM.

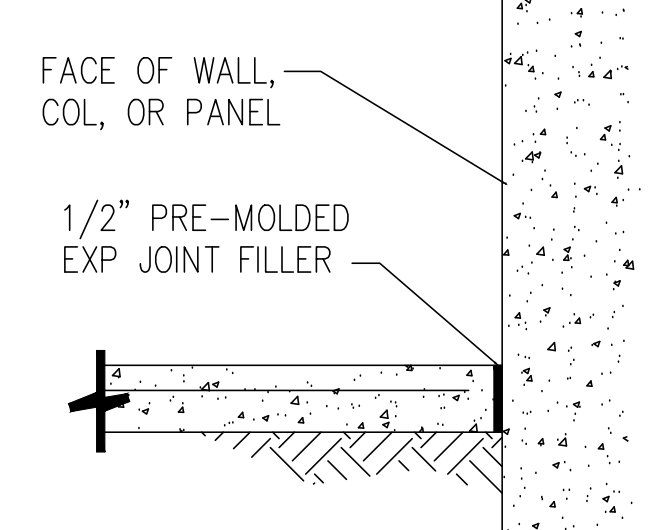
FOUNDATION NOTES
DATE: 06-12-23
DRAWN BY: AWM/MG
CHECKED BY: xxx
JOB NO.: E 2705
SCALE: AS NOTED
SHEET

SF-0-0

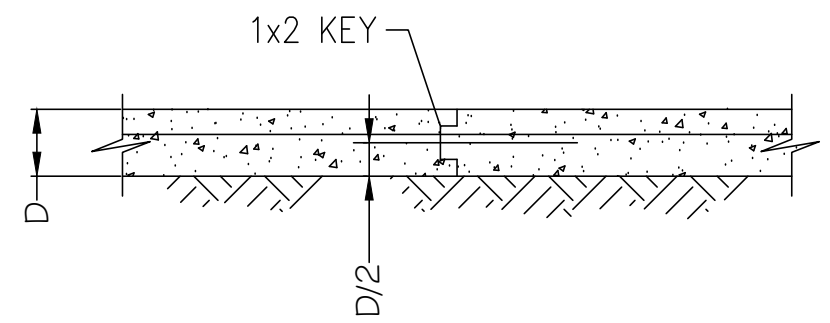


TURNED-DOWN SLAB (TDS)

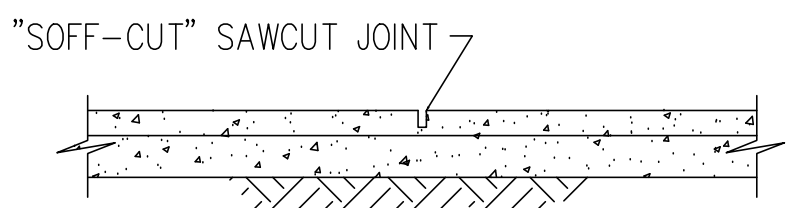
(SEE FDN SCH FOR SIZE AND REINF)



EXPANSION JOINT (EJ)



CONSTRUCTION JOINT (CJ), KEYED

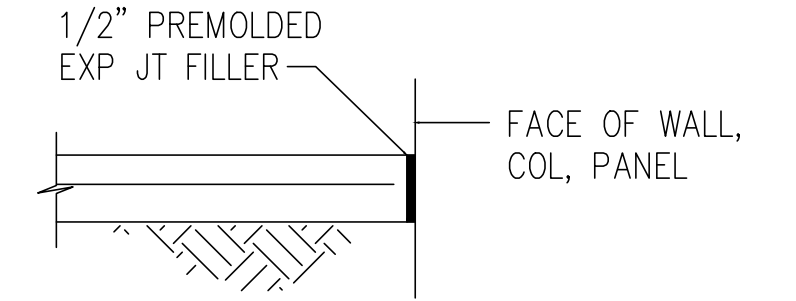


- NOTES:
- CUT SLAB AS SOON AS AGGREGATE DOES NOT DISLodge (MUST BE WITHIN SAME DAY AS CONCRETE PLACEMENT).
 - PLACE REINFORCING 1 1/2" CLEAR.
 - HAND-TOOL JOINT TO FACE OF WALL WHERE SAWCUT DOES NOT REACH.

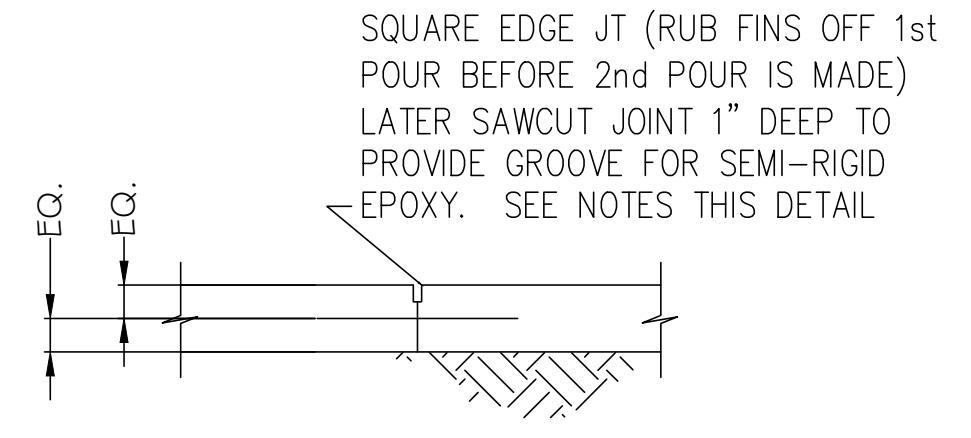
SAWCUT JOINT (SJ)

SCALE: # SECTION
N.T.S. # - # (SLAB ON GRADE - 4" SLAB)

- SEMI-RIGID EPOXY NOTES
- SEMI-RIGID EPOXY SHALL BE PROVIDED IN CONSTRUCTION & SAWCUT JOINTS WHERE EXPOSED TO TRAFFIC. EPOXY SHALL BE MM80 BY METZGER/McGUIRE OR EUCCO 700 BY EUCLID.
 - CONCRETE SHALL AGE A MINIMUM OF 90 DAYS. CHASE THE JOINT WITH A CONCRETE SAW AND BLOW CLEAN W/ COMPRESSED AIR.
 - USE BACKER ROD TO CREATE VERTICAL DAM AT EA END OF THE LEG TO BE FILLED. DO NOT USE BACKER ROD AT THE BOTTOM OF THE JOINT.
 - LEAVE THE SURFACE CROWNED AND GRIND FLUSH AFTER IT HAS HARDENED.



EJ (EXPANSION JOINT)

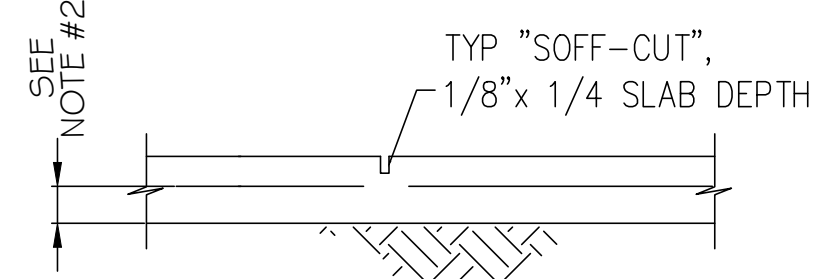


- NOTES:
- USE SMOOTH DWL W/ PROJECTED END COATED TO PREVENT BOND. SEE SCHEDULE BELOW.
 - REINF NOT SHOWN FOR CLARITY. DISC. REINF @ JOINT.
 - APPLY BOND BREAKER TO VERT SURFACE OF JOINT.

SMOOTH DOWEL SCHEDULE			
SLAB DEPTH (IN)	DIAMETER (IN)	TOTAL LENGTH (IN)	SPACING C TO C (IN)
5	5/8	12	16
6	3/4	14	16
7	7/8	14	16
8	1	14	18
9	1 1/8	16	18
10	1 1/4	16	18

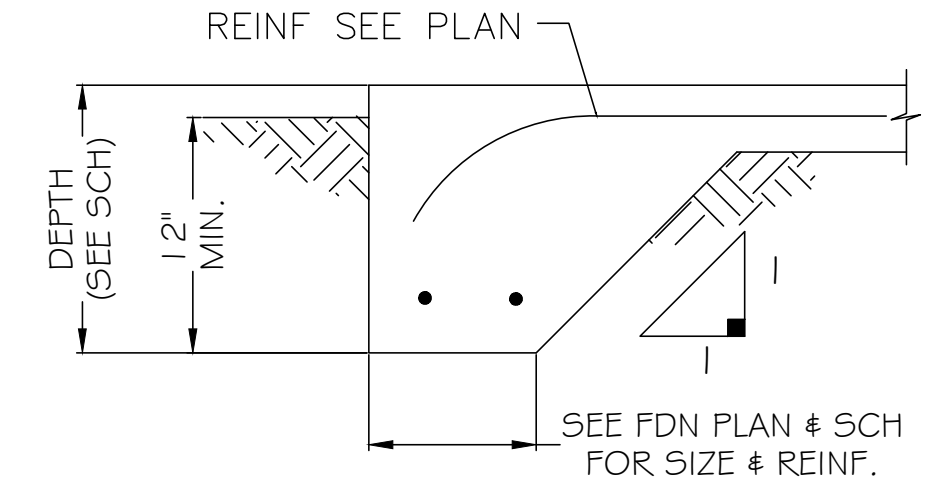
NOTE: DWLS SHALL BE CUT TO LENGTH NOT SHEARED. GRIND ANY BURRS SMOOTH FROM PROJECTED END.

CJ (CONSTRUCTION JOINT - DOWELLED)



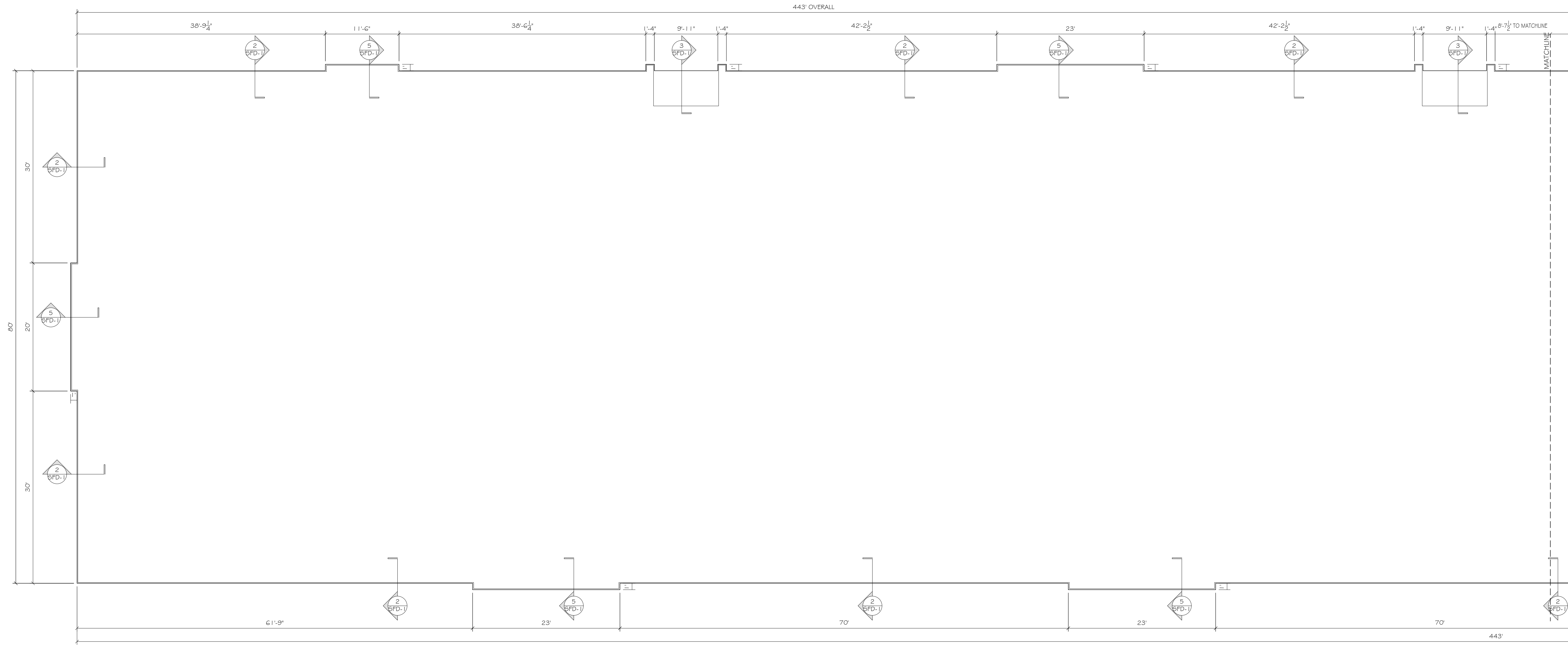
- NOTES:
- CUT WITHIN SAME DAY OF SLAB PLACEMENT.
 - PLACE REINF 1/3 SLAB DEPTH FOR SLABS GREATER THAN 5", 1 1/2" CLR FOR SLABS 5" OR LESS.
 - SEE SEMI-RIGID NOTES THIS DTL.

SJ (SAWCUT JOINT)



TDS (TURNED DOWN SLAB)
(SEE FOUNDATION SCHEDULE)

SCALE: # SECTION
N.T.S. # - # (SLAB ON GRADE - 5" & THICKER)



  FOUNDATION PLAN 1/8" = 1'

SINGLE STORY FOUNDATION PLAN NOTES:

1. FLOOR SLAB SHALL BE 4" THICK, $F_c=3,000$ psi CONCRETE REINF W 6x6 W 1.4xw 1.4 WWF OVER 10 MIL VAPOR BARRIER (LAPPED A MIN. OF 6") ON COMPACTED SUBGRADE. (SEE SLAB ON GRADE DETAILS FOR PLACEMENT OF REINF)
- 1a. FIBER REINFORCED CONCRETE IS AN ACCEPTABLE ALTERNATIVE TO WELDED WIRE FABRIC. REINFORCED CONCRETE FIBERS SHALL BE 100% VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS AS MANUFACTURED BY FIBER MESH CO, OR APPROVED EQUAL APPLIED AT A RATE OF 1 1/2lbs/CY.
2. T/ SLAB EL = 0'-0", UNO (REFERENCE ONLY) SEE CIVIL DWGS FOR ACTUAL ELEVATION.
3. T/INT. CMU WALL FTG EL = -1'-4", TYP UNO. T/EXT. CMU WALL FTG. EL = -1'-4", TYP. UNO (VERIFY W/ FROST DEPTH REQUIREMENTS)
4. T/INT. STL COL FTG EL = -1'-0", TYP UNO. T/EXT. STL COL FTG EL = -1'-4", TYP UNO (VERIFY W/ FROST DEPTH REQUIREMENTS)
5. ALL CMU BRG WALLS ARE 8", TYP UNO.
6. STEP FTG WHERE SHOWN AND AS REQUIRED TO AVOID INTERFERENCE W/ OTHER TRADES. SEE TYP STEPPED FTG DETAIL
7. ALL FTGS ARE CENTERED BENEATH BEARING WALLS AND COLUMNS, TYP UNO.
8. REINF CMU WALLS WITH #5 VERT BAR CENTERED IN GROUT FILLED CELL AT ENDS, CORNERS AND AT MAX SPACING OF 48"o.c. SEE TYP FILLED CELL PARTIAL PLAN FOR ADDITIONAL INFORMATION.
9. TYPICAL SPACINGS OF FILLED CELLS SHALL APPLY ABOVE AND BELOW OPENINGS ALSO. SEE GENERAL NOTES SHEETS FOR ADDITIONAL INFORMATION.
10. (2) #4 x 4'-0" LONG @ 3" CC PLACED 2' CLEAR FROM CORNER, CENTERED IN SLAB, TYP.
11. MAINTAIN STRUCTURAL SLAB THICKNESS AT ALL FLOOR SLOPES AND DEPRESSIONS.

NOTES:

1. WITHOUT EXCEPTION, ALL RAINLIP, SHEETLEDGE AND BLOCKLEDGE SHALL BE 1-1/2" DOWN FROM THE T/FINISHED FLOOR ELEVATION.
2. WITHOUT EXCEPTION, ALL DOOR THRESHOLD SHALL BE 3/4" DOWN FROM THE T/FINISHED FLOOR ELEVATION. G.C. SHALL VERIFY WIDTH OF RAINLIP, SHEETLEDGE, BLOCKLEDGE AND DOOR THRESHOLD WITH CONTRACT DOCUMENTS PRIOR TO FORMING SLAB EDGE.
3. IN THE ABSENCE OF RAINLIP, SHEETLEDGE, BLOCKLEDGE OR DOOR THRESHOLD BEING SPECIFIED ON THE PLANS, THE G.C. SHALL VERIFY IN WRITING WITH THE STEEL CONTRACTOR THE INTENT PRIOR TO FORMING SLAB EDGE.
4. RAINLIP, SHEETLEDGE, BLOCKLEDGE AND DOOR THRESHOLD ARE VITAL TO THE PROPER FIT OF THE STEEL CONSTRUCTION.
5. G.C. SHALL FIELD VERIFY THE RAINLIP, SHEETLEDGE, AND BLOCKLEDGE HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CONTRACT DOCUMENTS BEFORE STEEL CONSTRUCTION BEGINS.

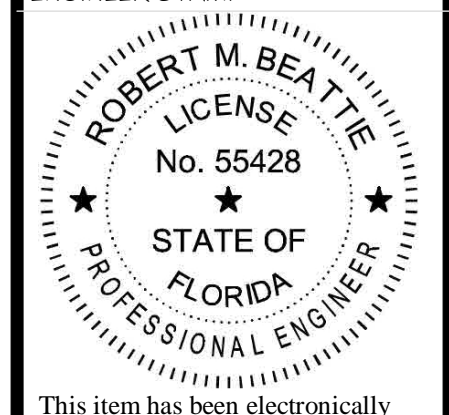
NOTE:

G.C. SHALL COORDINATE ALL T/CMU WALL HEIGHTS WITH RBACO ENTERPRISES, LLC PRIOR TO CONSTRUCTION TO ENSURE PROPER FIT OF THE METAL BUILDING COMPONENTS. FAILURE TO GET WRITTEN APPROVAL PRIOR TO ERECTING THE CMU WALLS MAY RESULT IN NEEDED MODIFICATIONS TO EITHER THE CMU WALL AND/OR THE METAL BUILDING COMPONENTS AT THE G.C.'S EXPENSE.

MARKUPS / REVISIONS			
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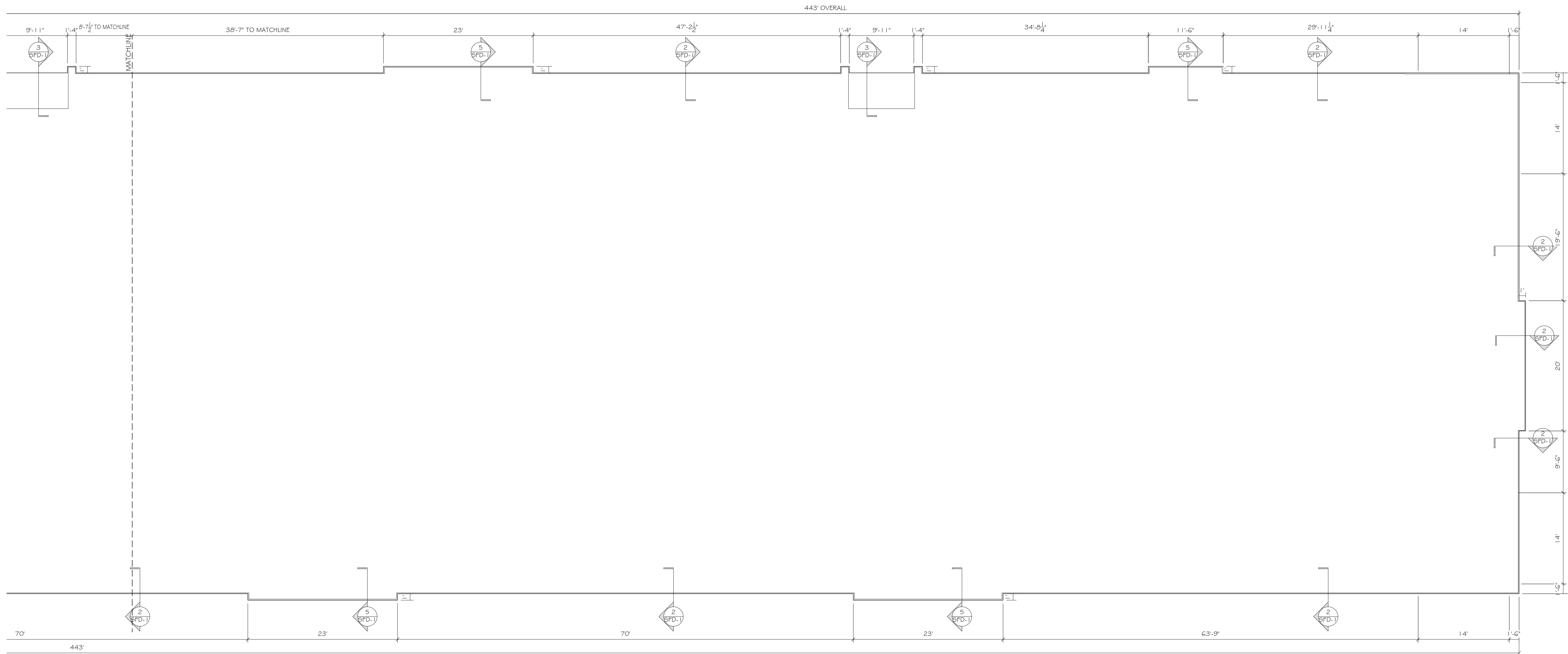
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 RBE CONSULTING SERVICES, LLC
1805 SW 14th Street, Suite 100, Ft. Lauderdale, FL 33304
 (954) 581-1111
 www.rbecs.com

SHEET TITLE
BLDG. C
 FOUNDATION PLANS

DATE	06-12-23
DRAWN BY	AWMMG
CHECKED BY	xxx
JOB NO.	E 2705
SCALE	AS NOTED
SHEET	

SF-1.0



NORTH

BLDG. C FOUNDATION PLAN

1/8" = 1'

SINGLE STORY FOUNDATION PLAN NOTES:

1. FLOOR SLAB SHALL BE 4" THICK, $f_c = 3,000\text{psi}$ CONCRETE REINF W 6x6 W1.4xW1.4 WWF OVER 10 MIL VAPOR BARRIER (LAPPED A MIN. OF 6") ON COMPACTED SUBGRADE. (SEE SLAB ON GRADE DETAILS FOR PLACEMENT OF REINF)
- 1a. FIBER REINFORCED CONCRETE IS AN ACCEPTABLE ALTERNATIVE TO WELDED WIRE FABRIC. REINFORCED CONCRETE FIBERS SHALL BE 100% VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS AS MANUFACTURED BY FIBER MESH CO, OR APPROVED EQUAL APPLIED AT A RATE OF 1 1/2lbs/CY.
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3. T/INT. CMU WALL FTG EL = -1'-4", TYP UNO. T/EXT. CMU WALL FTG. EL = -1'-4", TYP. UNO (VERIFY W/ FROST DEPTH REQUIREMENTS)
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8. REINF CMU WALLS WITH #5 VERT BAR CENTERED IN GROUT FILLED CELL AT ENDS, CORNERS AND AT MAX SPACING OF 48"o.c. SEE "TYP FILLED CELL PARTIAL PLAN" FOR ADDITIONAL INFORMATION.
9. TYPICAL SPACINGS OF FILLED CELLS SHALL APPLY ABOVE AND BELOW OPENINGS ALSO. SEE GENERAL NOTES SHEETS FOR ADDITIONAL INFORMATION.
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NOTE:
GC SHALL COORDINATE ALL T/CMU WALL HEIGHTS WITH RABCO ENTERPRISES, LLC PRIOR TO CONSTRUCTION TO ENSURE PROPER FIT OF THE METAL BUILDING COMPONENTS. FAILURE TO GET WRITTEN APPROVAL PRIOR TO ERRECTING THE CMU WALLS MAY RESULT IN NEEDED MODIFICATIONS TO EITHER THE CMU WALL AND/OR THE METAL BUILDING COMPONENTS AT THE G.C.'S EXPENSE.

NO.	BY	ISSUE	DATE

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Phone: (954) 561-1111
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SHEET TITLE

BLDG. C
FOUNDATION PLANS

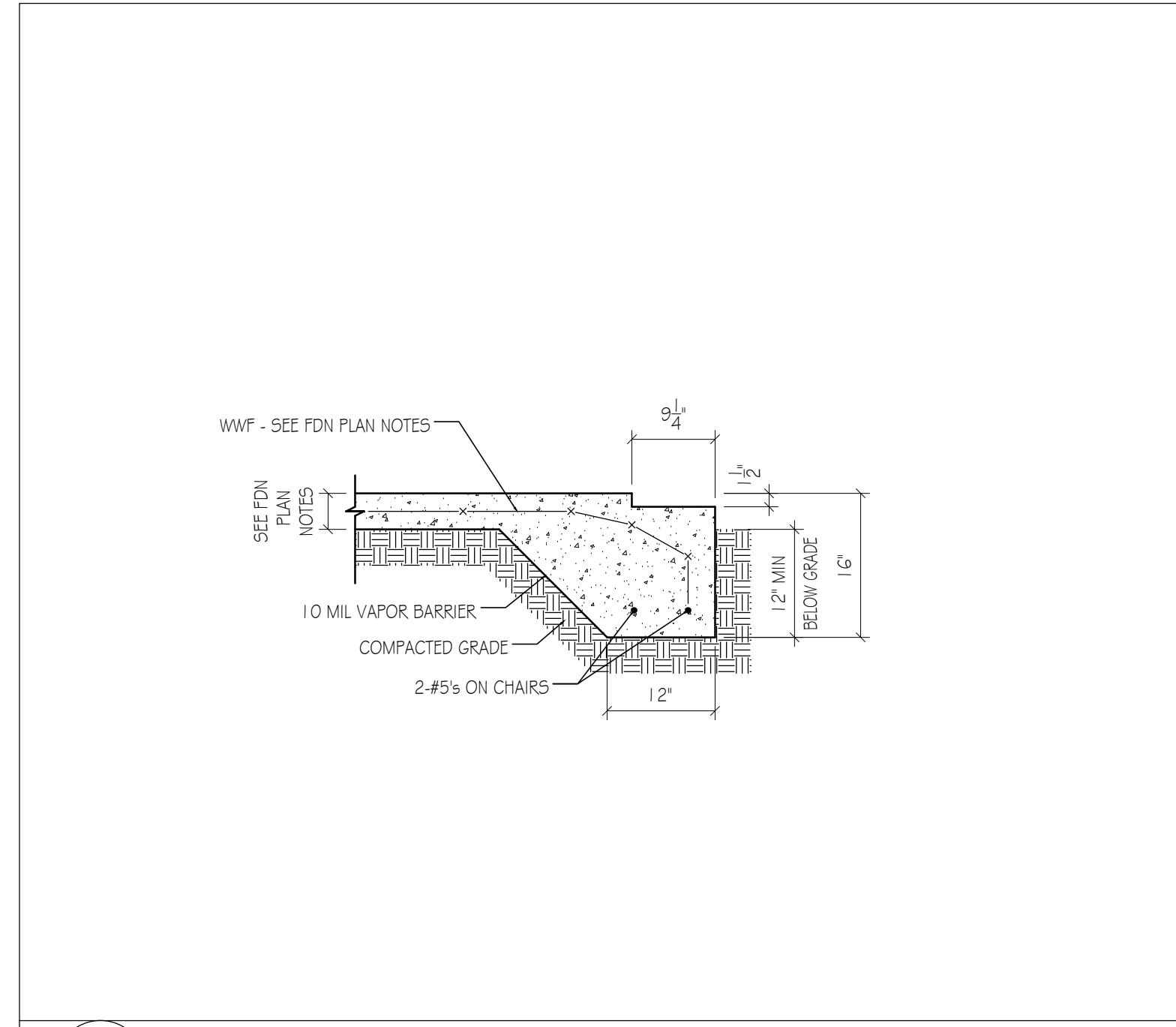
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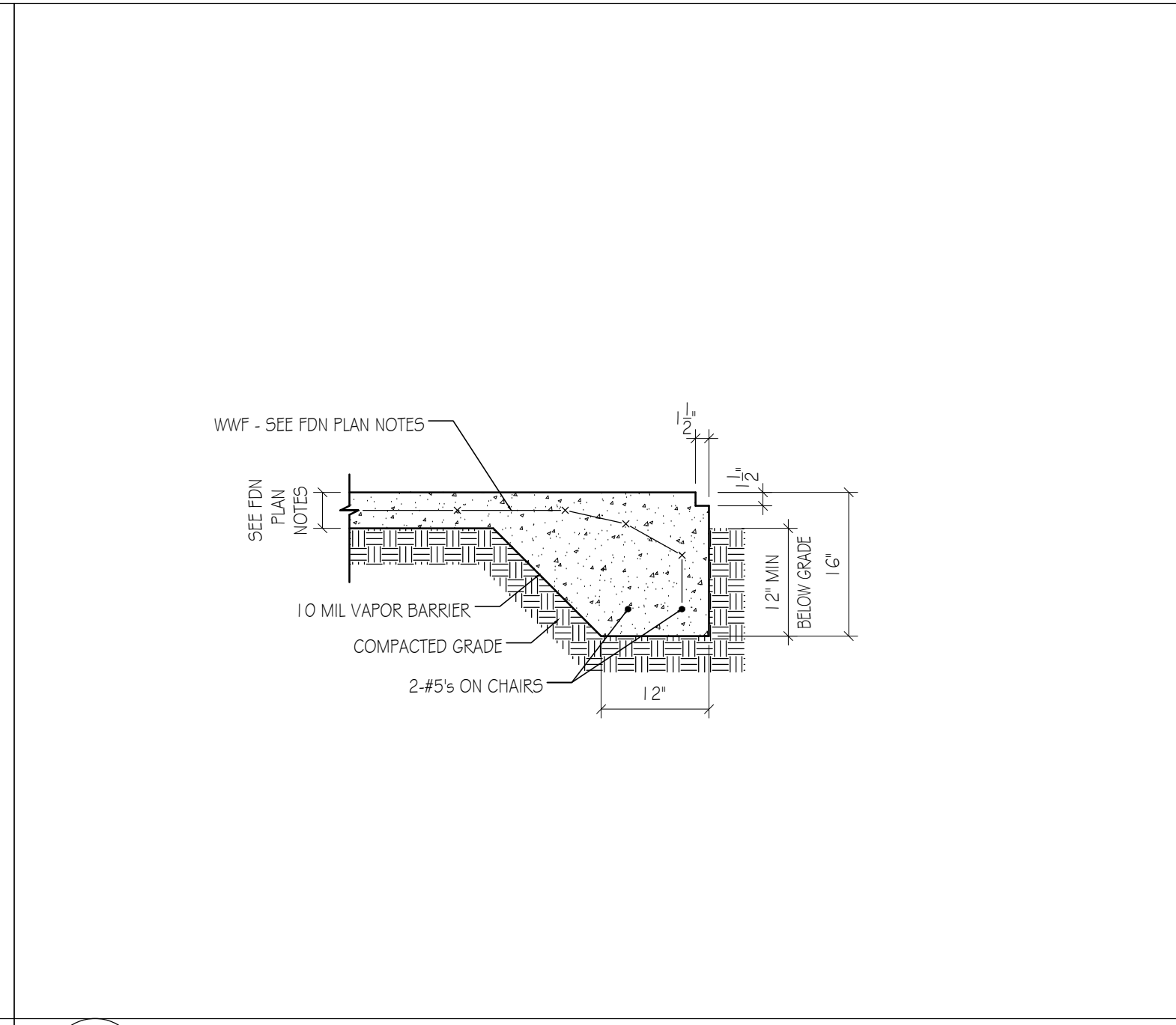
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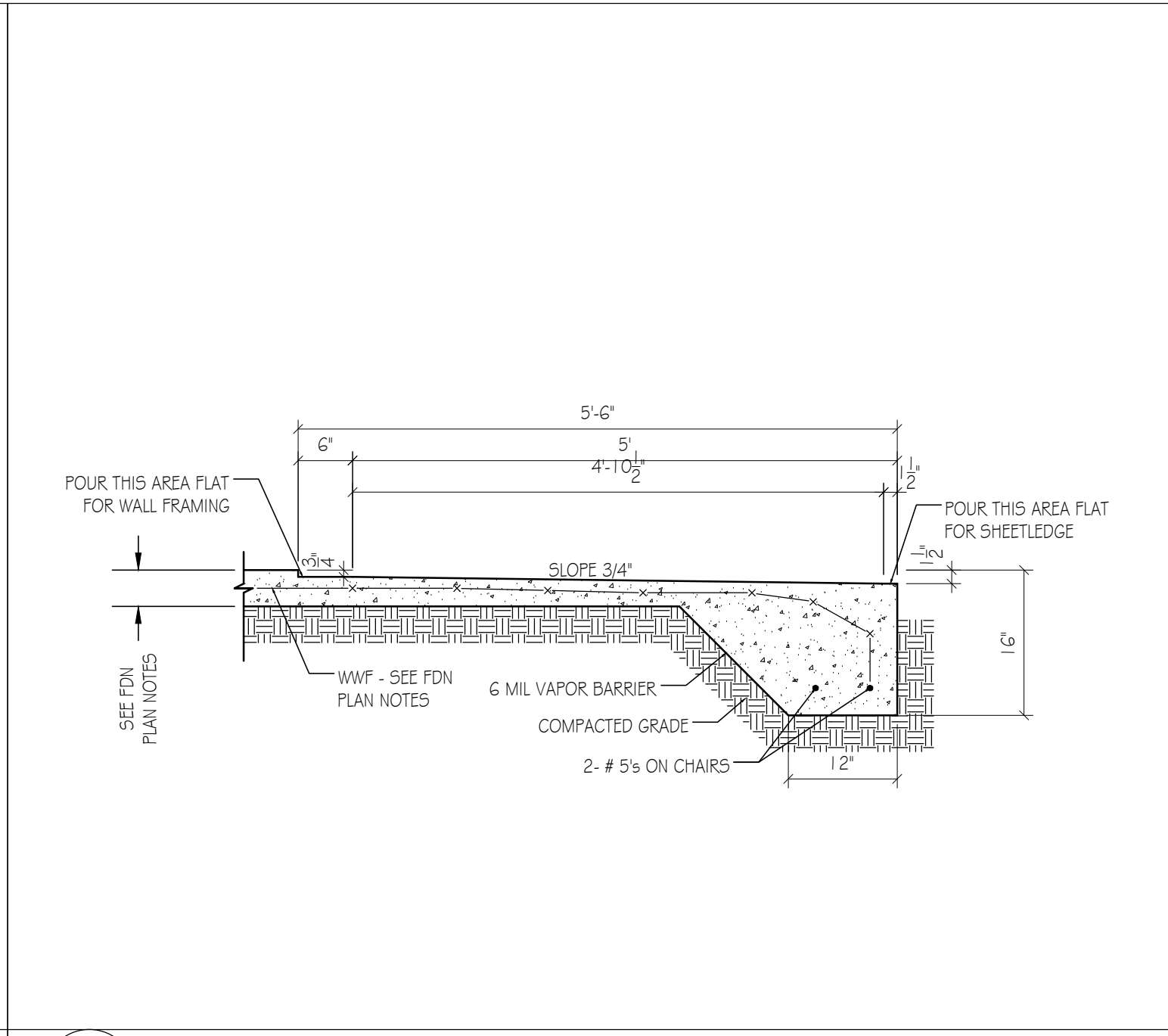
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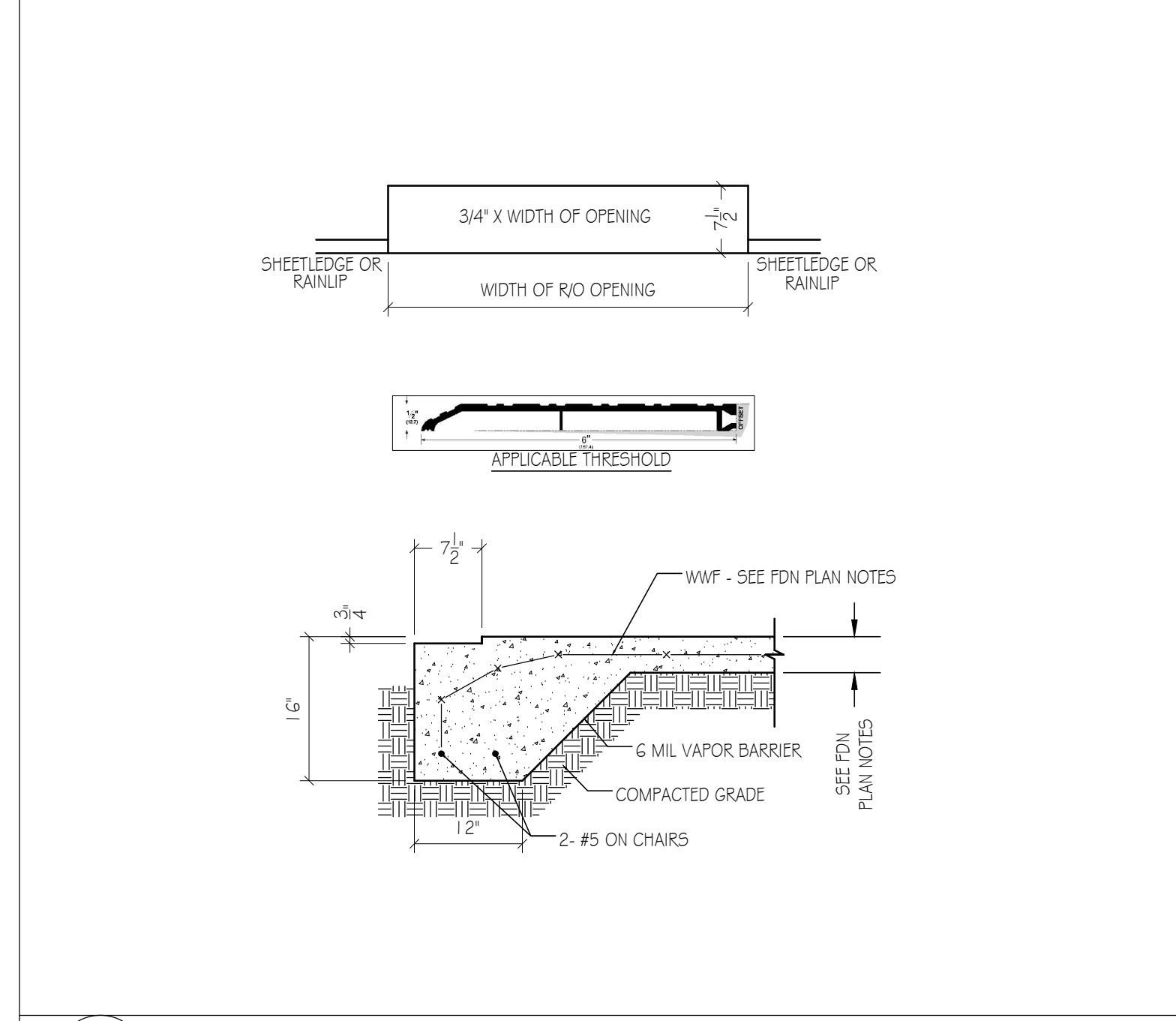
1 TYPICAL FOUNDATION DETAIL AT RAINLIP
SFD-1 SCALE: 3/4" = 1'



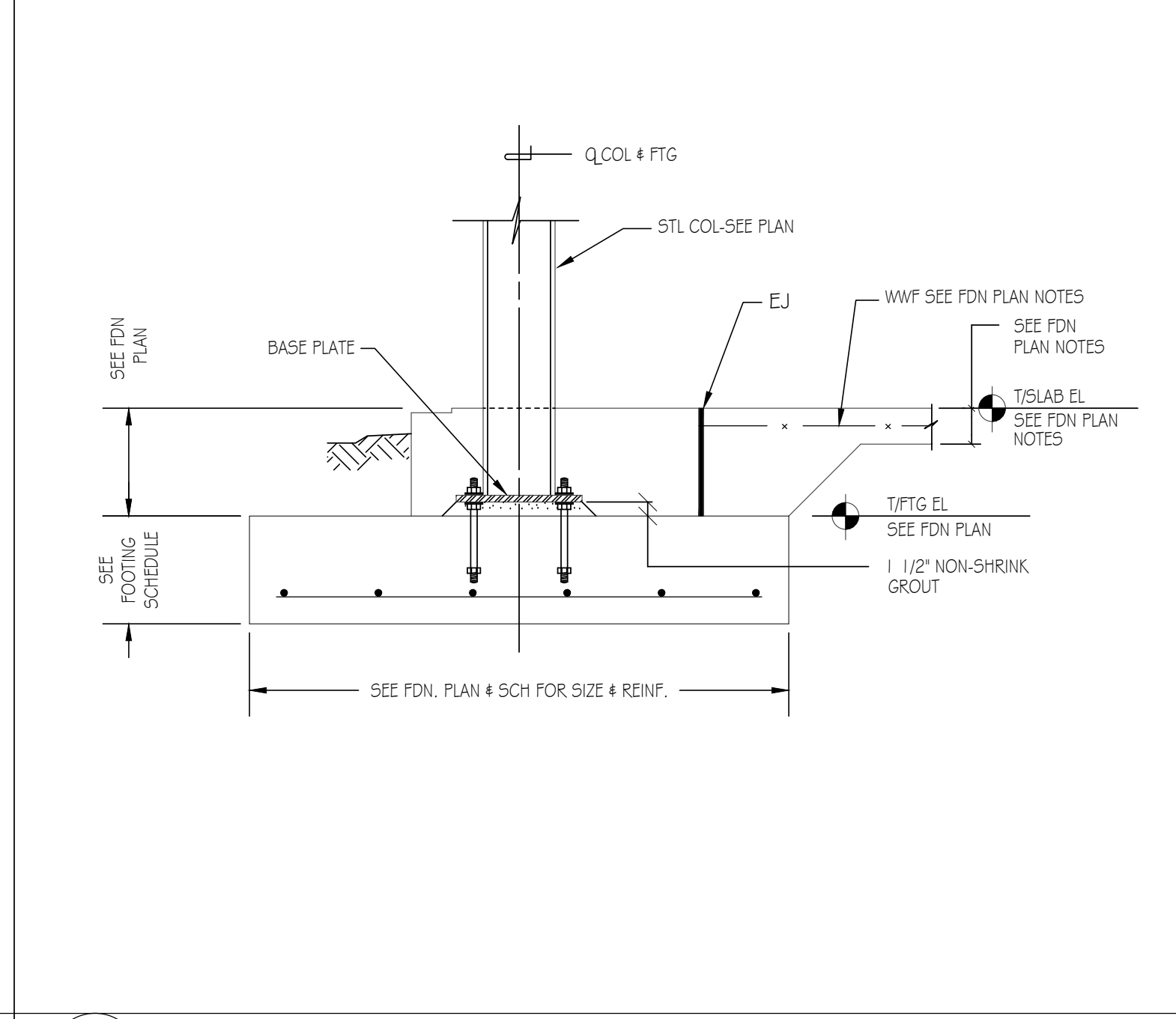
2 TYPICAL FOUNDATION DETAIL AT SHEETLEDGE
SFD-1 SCALE: 3/4" = 1'



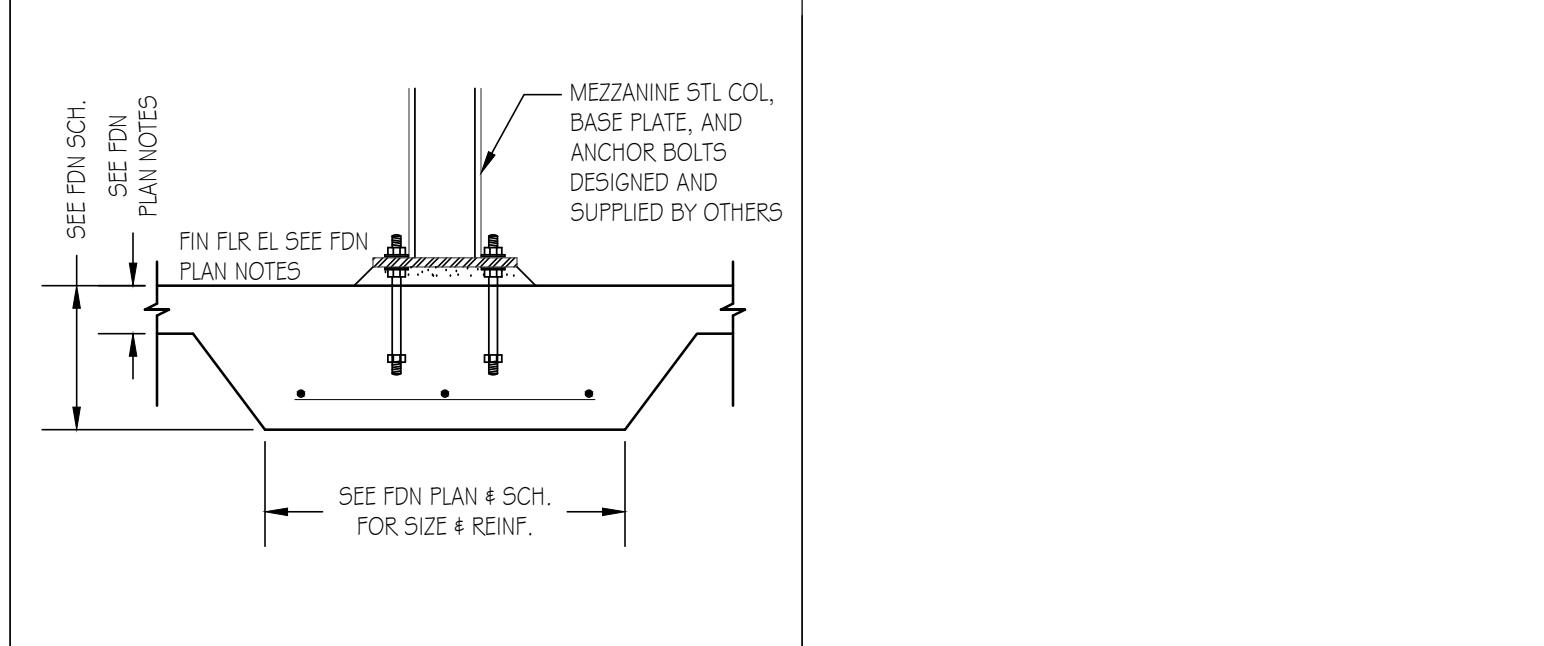
3 FOUNDATION DETAIL AT RECESSED ENTRY FOR 6" FRAMING AT SHEETLEDGE
SFD-1 SCALE: 3/4" = 1'



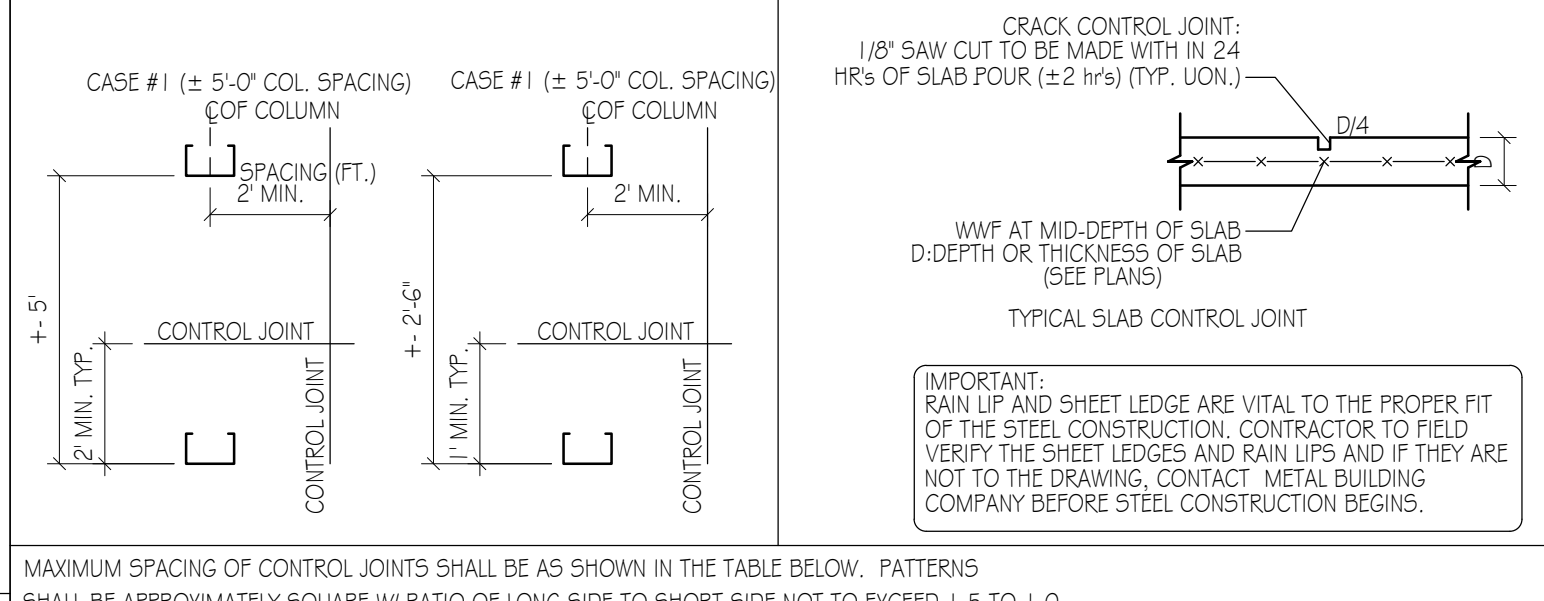
4 FDN. DETAIL AT PERSONNEL DOOR 6" WALL & PIER
SFD-1 SCALE: 3/4" = 1'



5 SECTION @ EXTERIOR STEEL COLUMN
SFD-1 SCALE: 3/4" = 1'



6 (THICKEND SLAB) THIS (SEE FDN SCHEDULE ON F-1)
SFD-1 SCALE: 3/4" = 1'



MAXIMUM SPACING OF CONTROL JOINTS SHALL BE AS SHOWN IN THE TABLE BELOW. PATTERNS SHALL BE APPROXIMATELY SQUARE W/ RATIO OF LONG SIDE TO SHORT SIDE NOT TO EXCEED 1.5 TO 1.0.

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ENGINEER

RBE CONSULTING SERVICES, LLC

18001 SW 15th Street, Suite 100, Delray Beach, FL 33433

PH: 561-277-7777 FAX: 561-277-7778

WWW.RBECONSULTING.COM

REGISTERED PROFESSIONAL ENGINEER STATE OF FLORIDA LICENSE NO. 55428

THIS DOCUMENTING SERVICES, LLC PROJECT NO. 2023-08-04

DATE: 08/04/2023

PROJECT: STRC. FOUNDATION DETAILS

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: 08/04/2023

SHEET TITLE

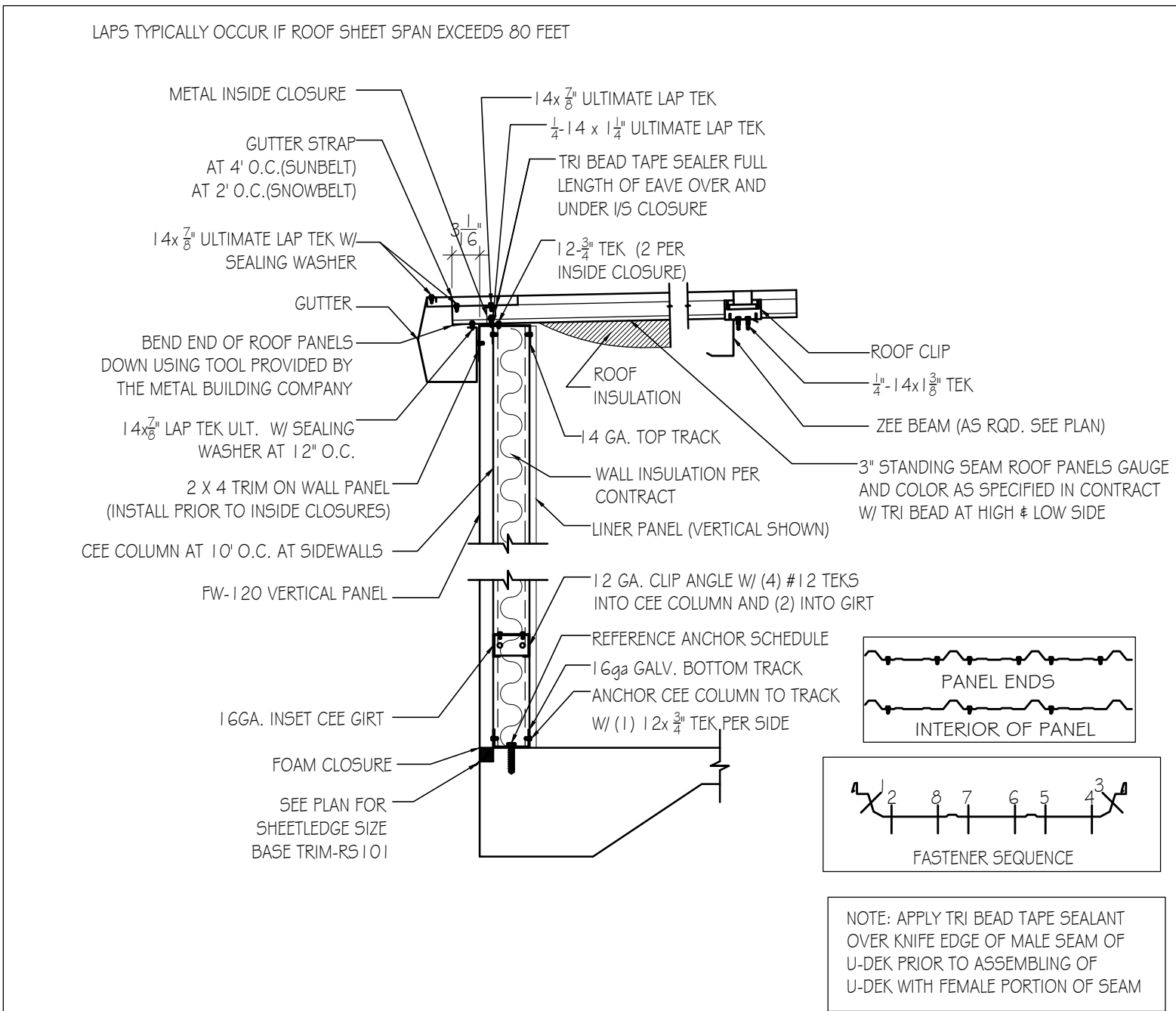
STRC.
FOUNDATION DETAILS

DATE: 06-12-23
DRAWN BY: AWMMG
CHECKED BY: xxx
JOB NO.: E 2705
SCALE: AS NOTED
SHEET

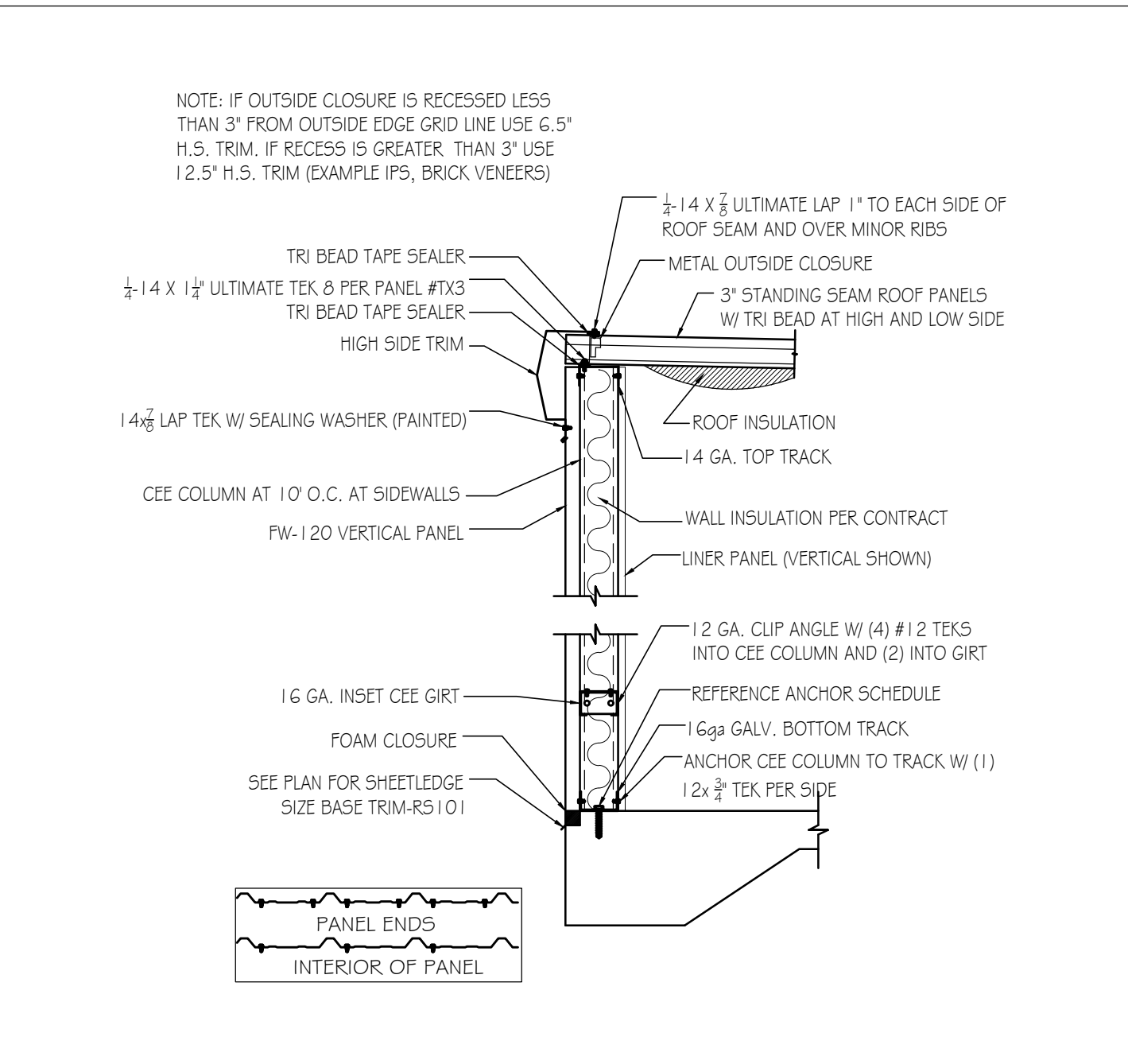
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NO.	BY	ISSUE	DATE

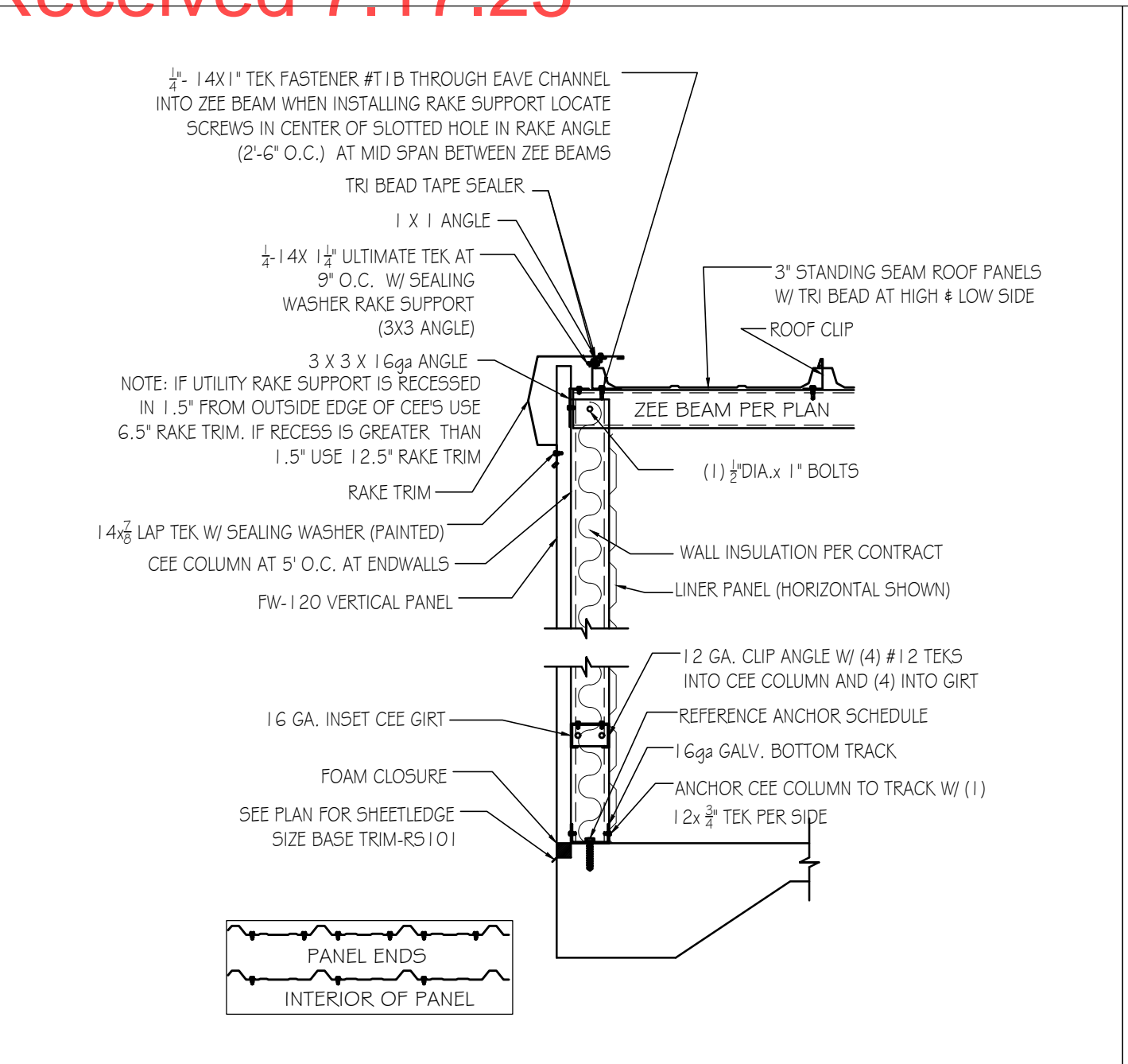
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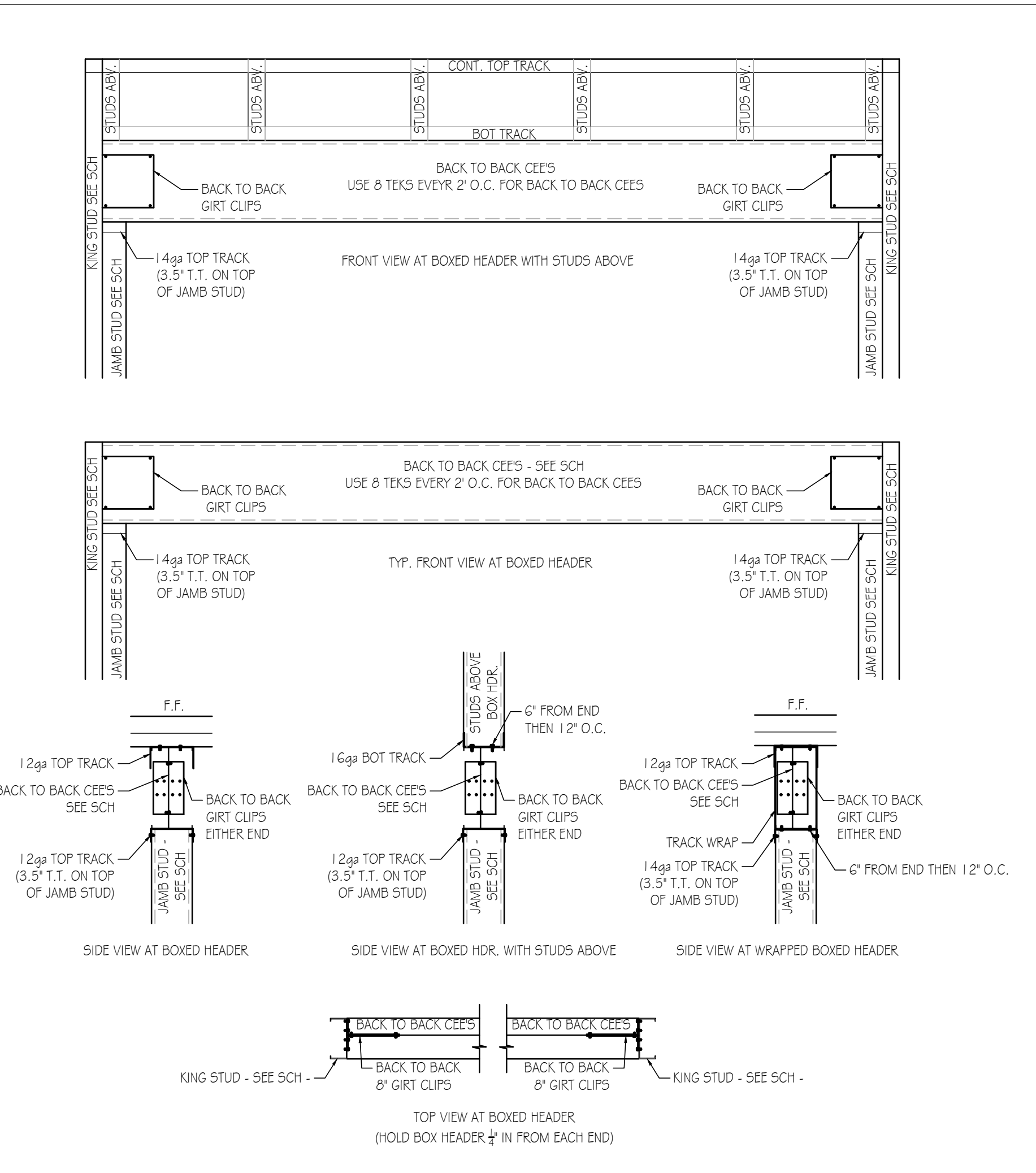
1 ROOF LOW SIDE EAVE PANEL WALL-GUTTER, VERTICAL PANEL (INSULATED WALL)
 SD-1 SCALE: 3/4" = 1"



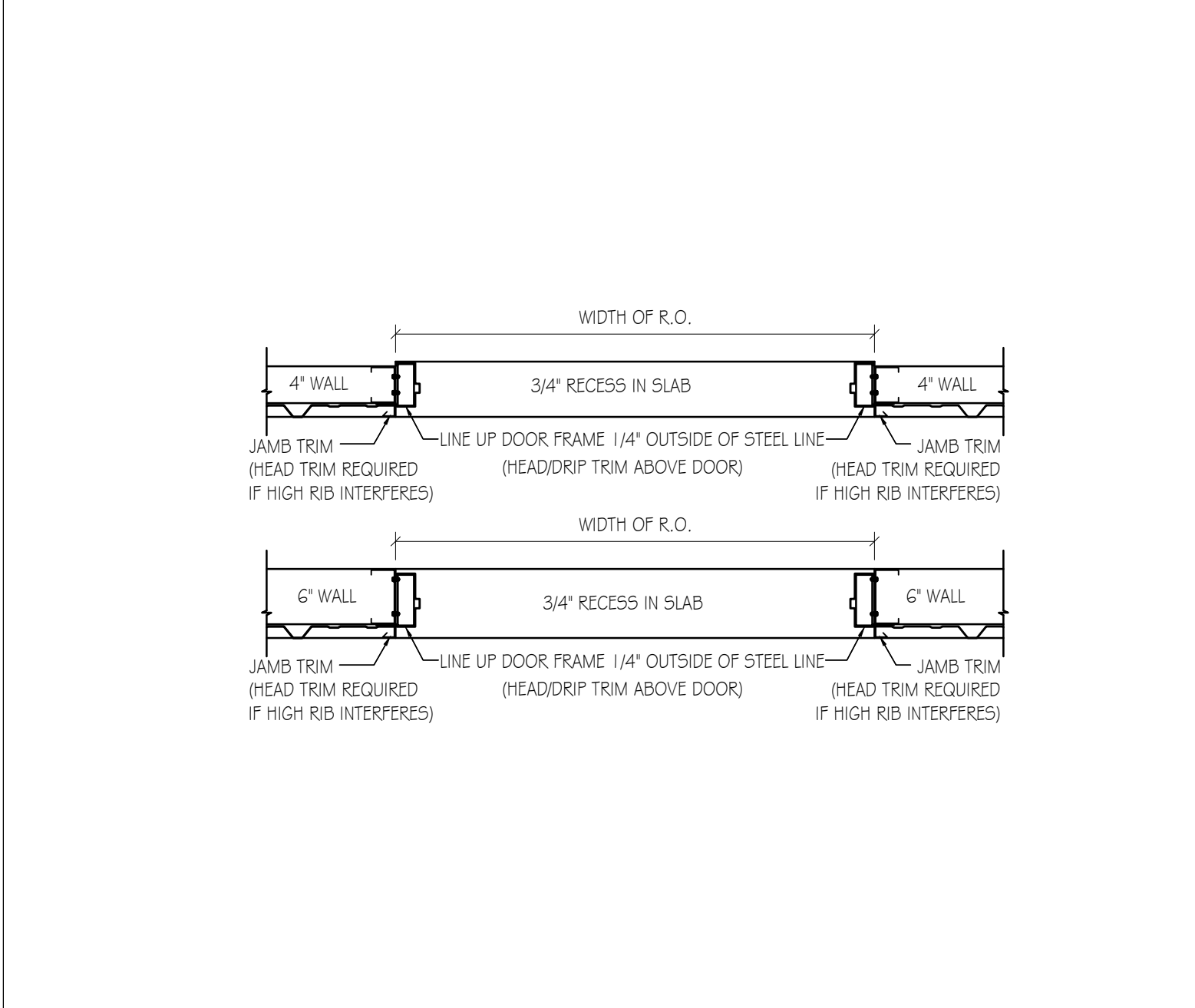
2 ROOF HIGH SIDE EAVE PANELED WALL, VERTICAL PANEL (INSULATED WALL)
 SD-1 SCALE: 3/4" = 1"



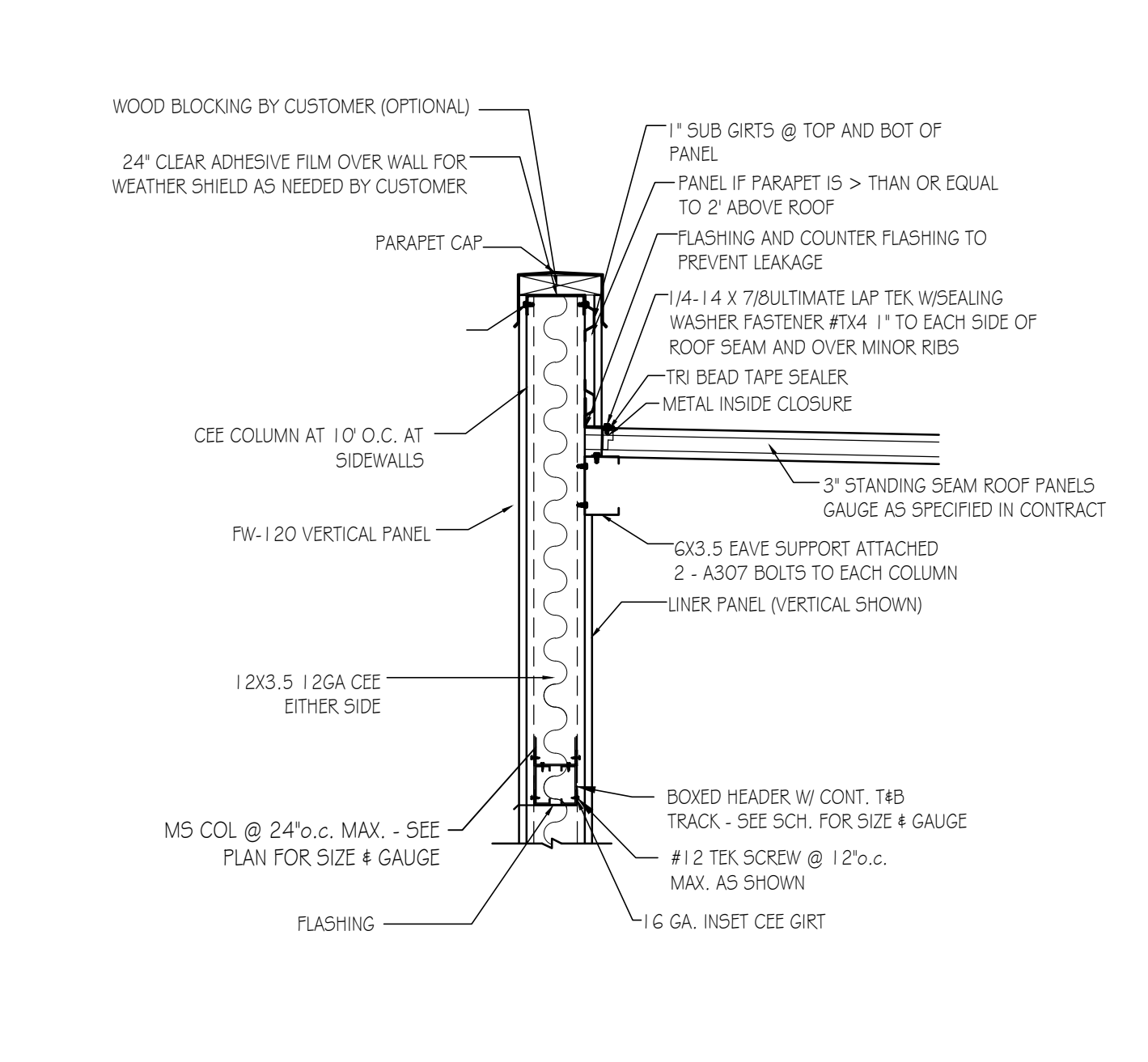
3 ROOF END WALL PANELED WALL (OFF MODULE), VERTICAL PANEL (INSULATED WALL)
 SD-1 SCALE: 3/4" = 1"



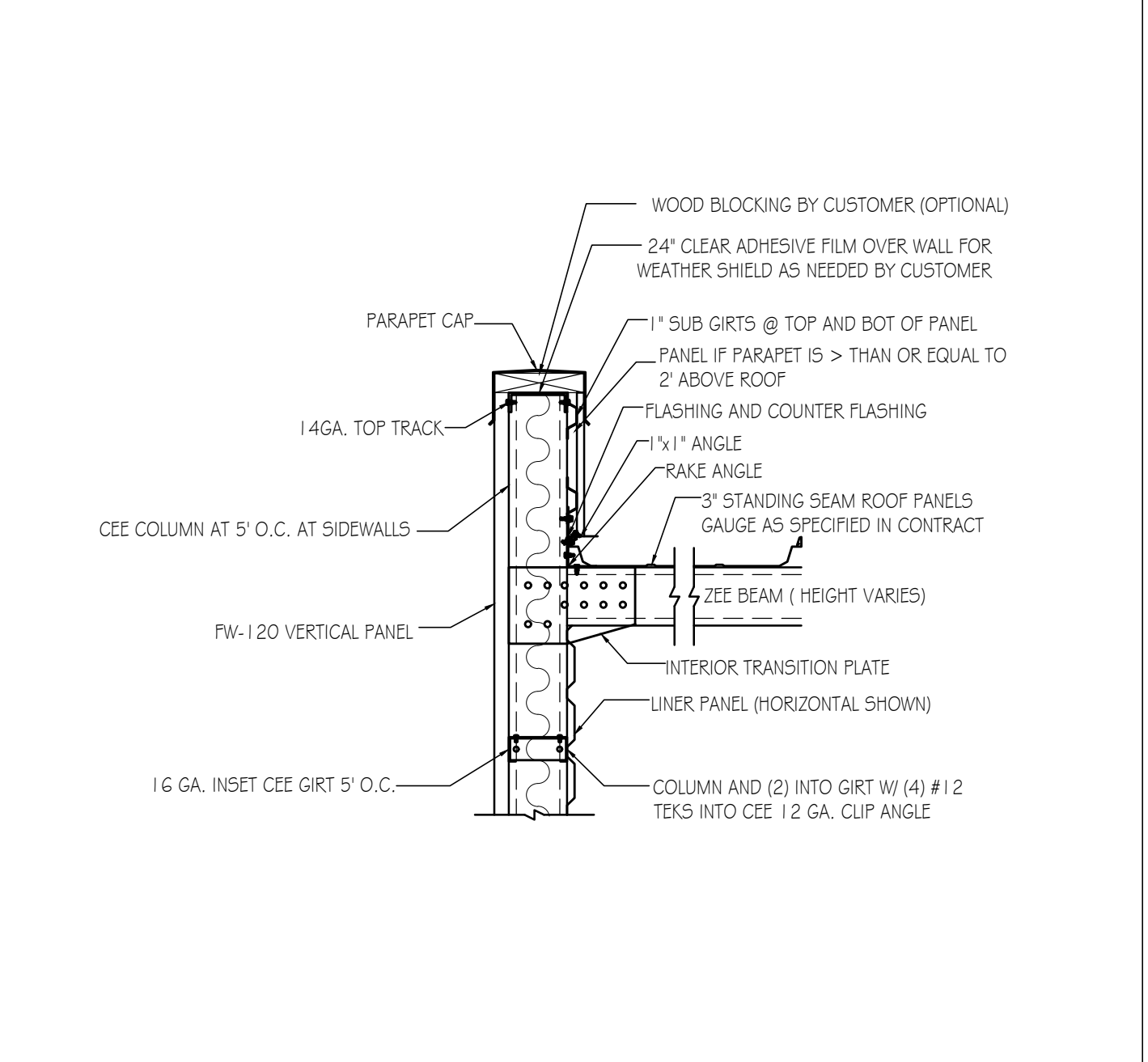
8 TYPICAL BOXED HEADER DETAILS
 SD-1 SCALE: 3/4" = 1"



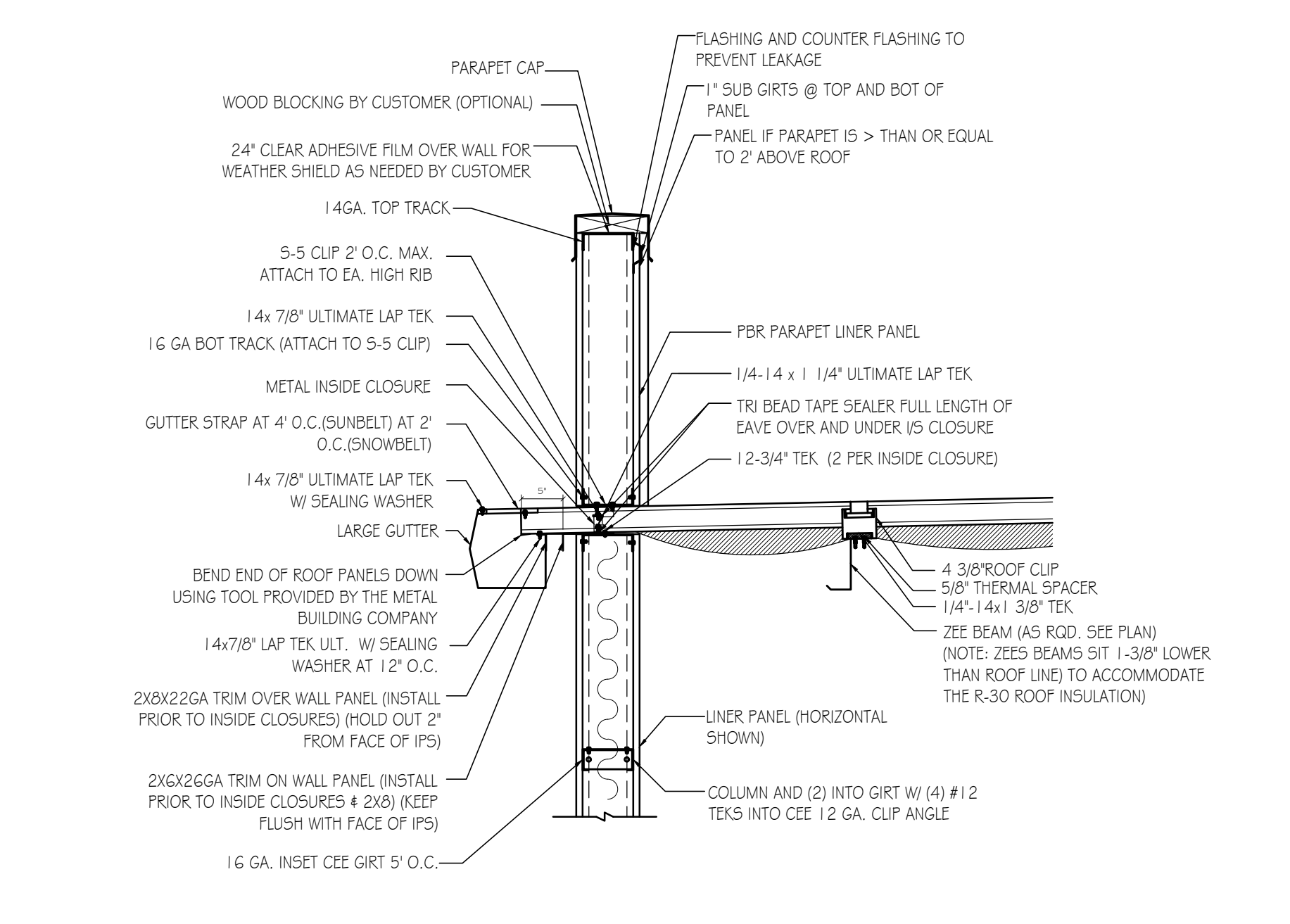
4 EXTERIOR RECESSED ENTRY PERSONNEL DOOR DETAIL
 SD-1 SCALE: 3/4" = 1"



5 HIGH SIDE PARAPET @ VERTICAL PANEL EXTERIOR
 SD-1 SCALE: 3/4" = 1"



6 END WALL PARAPET @ FBR PANEL EXTERIOR
 SD-1 SCALE: 3/4" = 1"



7 LOW SIDE PARAPET @ VERTICAL PANEL EXTERIOR
 SD-1 SCALE: 3/4" = 1"

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 DELRAY FL

ENGINEER STAMP

ENGINEER
 RBE CONSULTING SERVICES, LLC
 1000 S.W. 10TH AVENUE, SUITE 200
 MIAMI, FL 33135
 (305) 555-1111
 WWW.RBECONSULTING.COM
 I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA. MY LICENSE NO. IS 12543. I AM CURRENTLY LICENSED IN THE STATES OF FLORIDA AND ALABAMA. I AM CURRENTLY LICENSED IN THE STATES OF FLORIDA AND ALABAMA. I AM CURRENTLY LICENSED IN THE STATES OF FLORIDA AND ALABAMA.

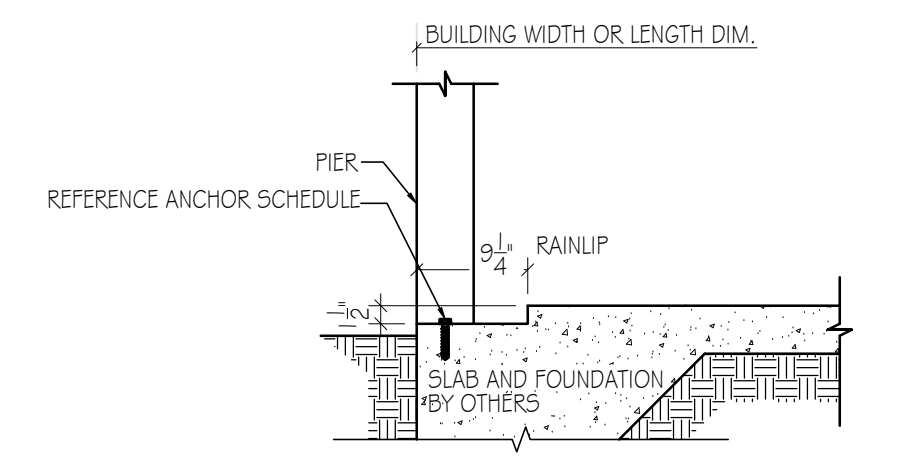
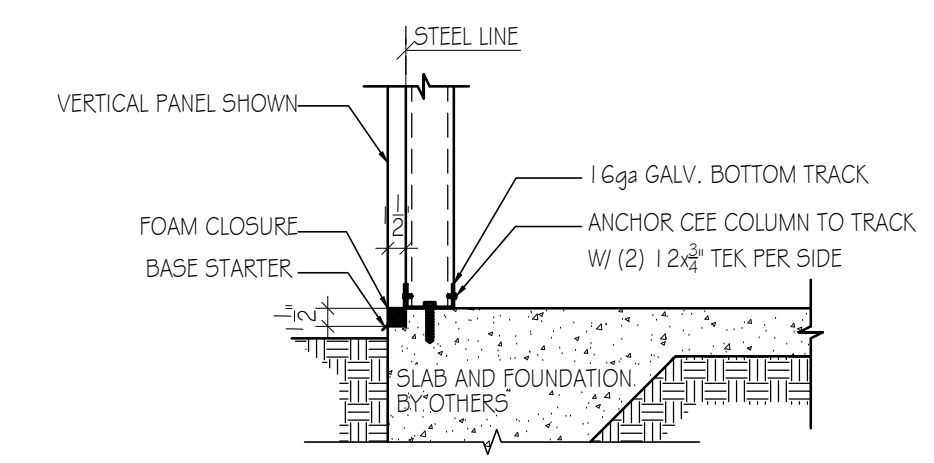
SHEET TITLE
STRC.
 DETAILS
 DATE: 06-12-23
 DRAWN BY: AWM/MG
 CHECKED BY: xxx
 JOB NO.: E 2705
 SCALE: AS NOTED
 SHEET

SD-1

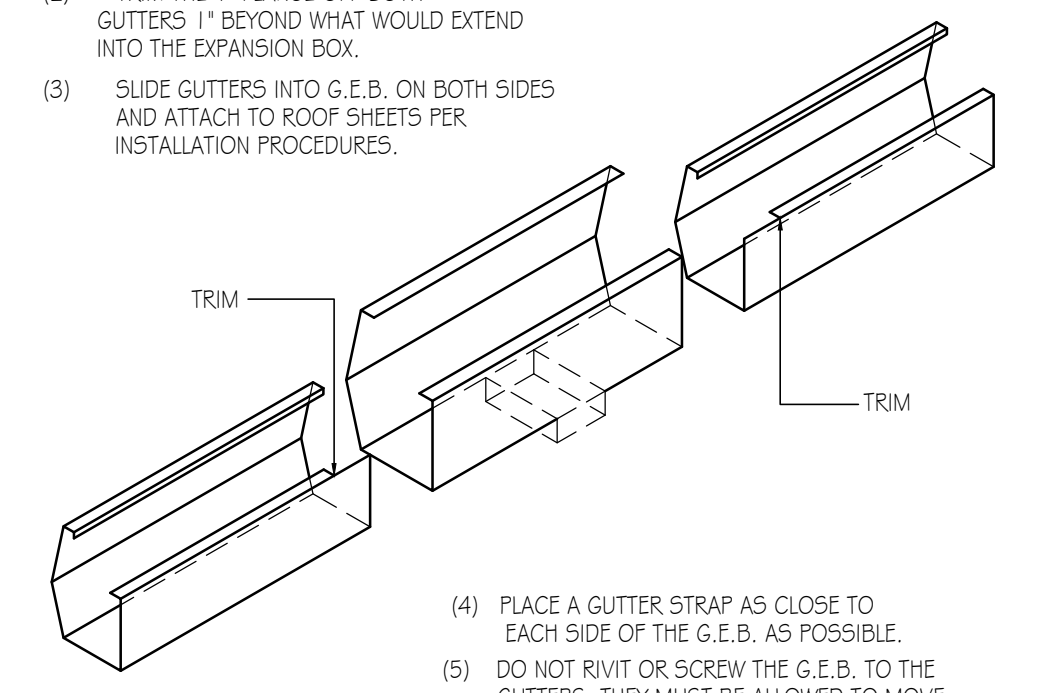
MARKUPS / REVISIONS			
NO.	BY	ISSUE	DATE

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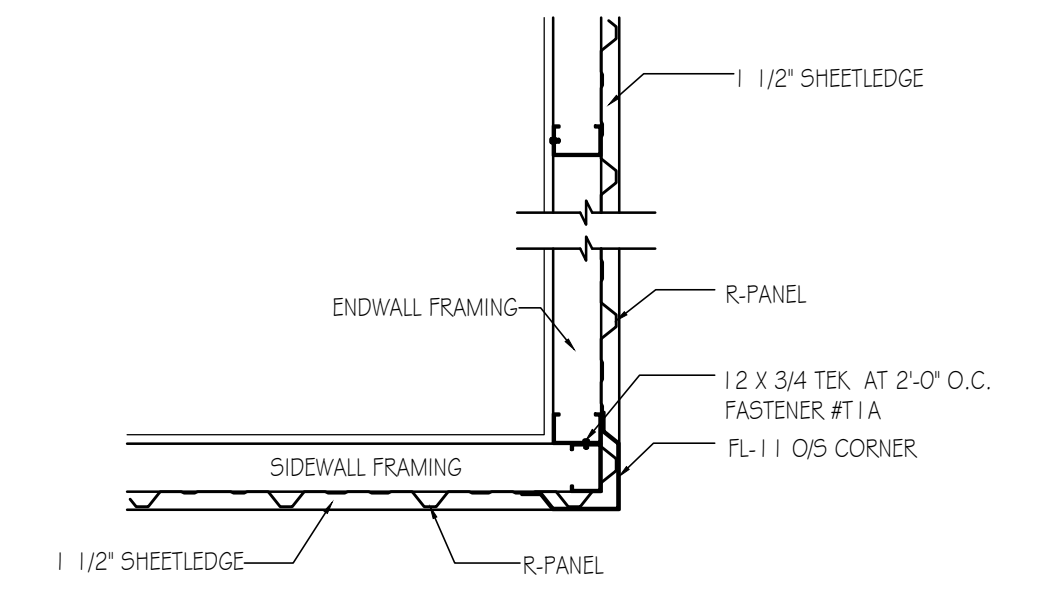
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- INSTALLATION PROCEDURE
- (1) CENTER THE G.E.B. ON THE PIER AND ATTACH REAR FLANGE TO THE ROOF PAN WITH (2) 1/4-14X7/8 EXTENDED LIFE STICH SCREWS 3-4" FROM EACH END FASTENER #TX4. WHEN ATTACHING THE G.E.B. BE SURE THE REAR OF THE G.E.B. IS AGAINST THE FACE OF THE PIER. (EXCEPT ON SHURCARD PROJECTS WHERE THE SPECS REQUIRE A 2" GAP BETWEEN THE REAR OF THE GUTTER AND PIER)
 - (2) TRIM THE 1" FLANGE OFF BOTH GUTTERS 1" BEYOND WHAT WOULD EXTEND INTO THE EXPANSION BOX.
 - (3) SLIDE GUTTERS INTO G.E.B. ON BOTH SIDES AND ATTACH TO ROOF SHEETS PER INSTALLATION PROCEDURES.



- (4) PLACE A GUTTER STRAP AS CLOSE TO EACH SIDE OF THE G.E.B. AS POSSIBLE.
- (5) DO NOT RIVET OR SCREW THE G.E.B. TO THE GUTTERS. THEY MUST BE ALLOWED TO MOVE FOR EXPANSION.
- (6) NOTE THAT THE DOWNSPOUTS ATTACHED TO THE G.E.B. ARE 4" SHORTER THAN THOSE ATTACHED TO THE GUTTERS.
- (7) IN THE CASE WHERE SCUPPERS ARE REQUIRED, CUT OUT THE BOTTOM OF THE G.E.B. TO THE INSIDE DIMENSIONS OF THE SCUPPER, RIVET SCUPPER TO THE BOTTOM OF THE G.E.B.

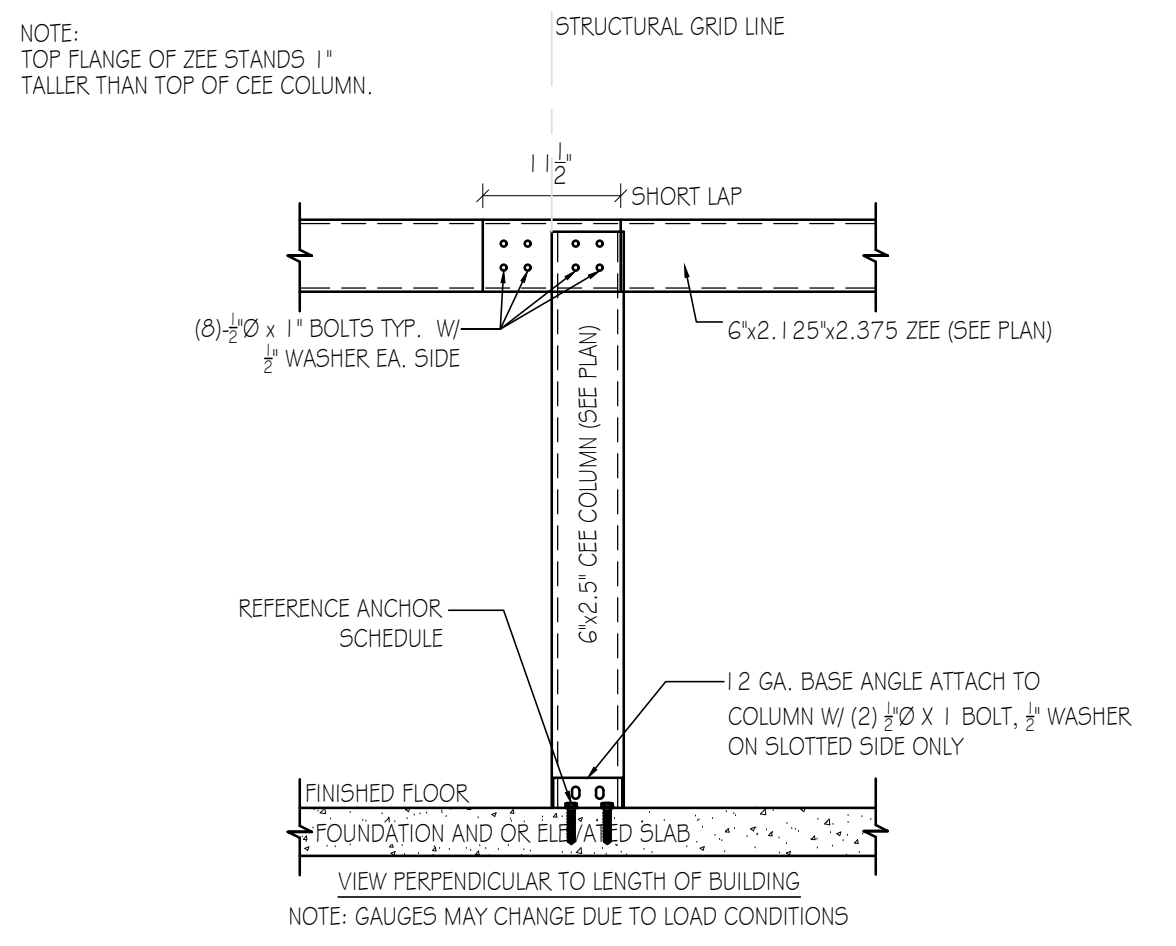


1 PANEL TO SLAB CONNECTION
 SD-2 SCALE: 3/4" = 1'

2 PIER TO FOUNDATION DETAIL
 SD-2 SCALE: 3/4" = 1'

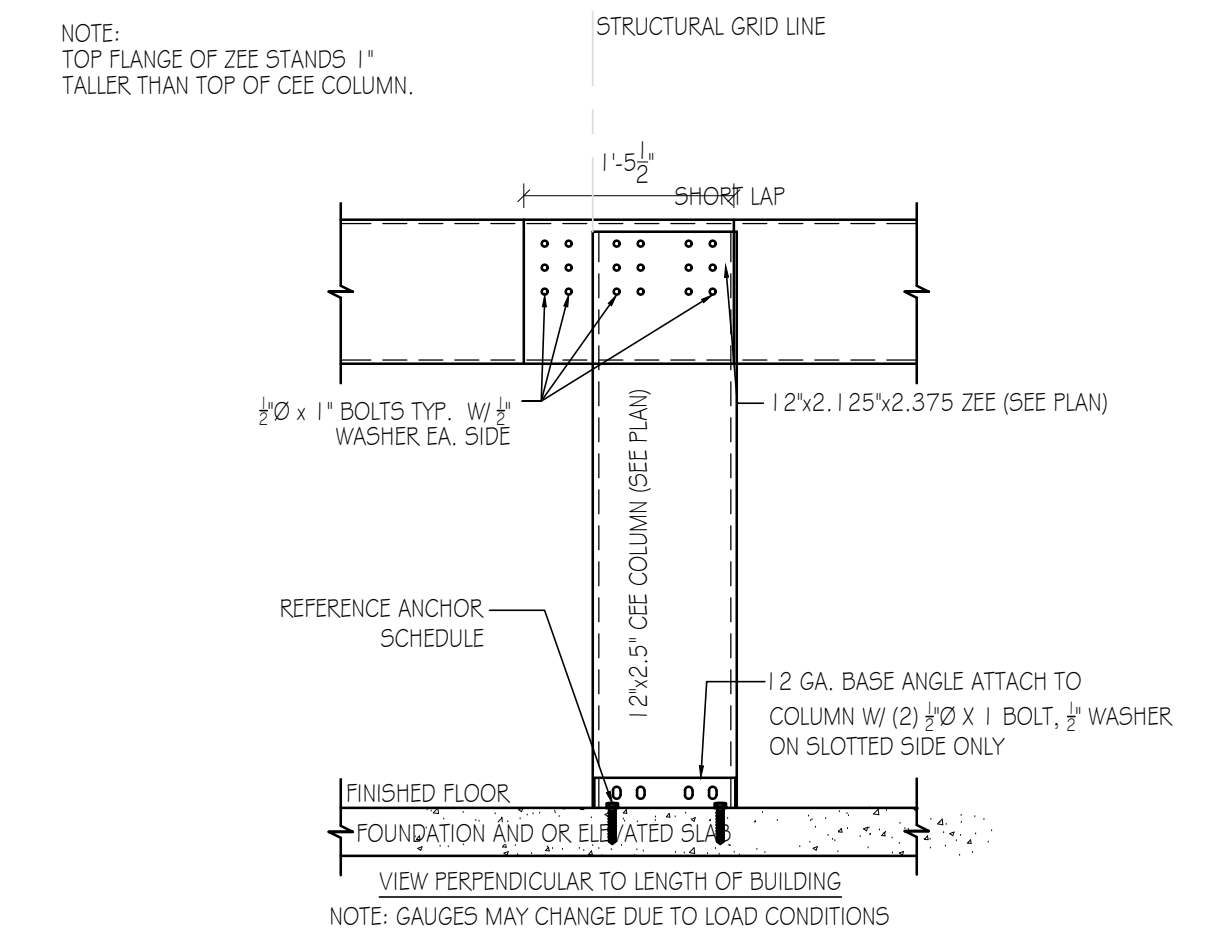
3 GUTTER EXPANSION BOX INSTALLATION DETAIL
 SD-2 SCALE: 3/4" = 1'

4 WALL FRAMING VERTICAL EXTERIOR R-PANEL INTERIOR U-PANEL
 SD-2 SCALE: 3/4" = 1'



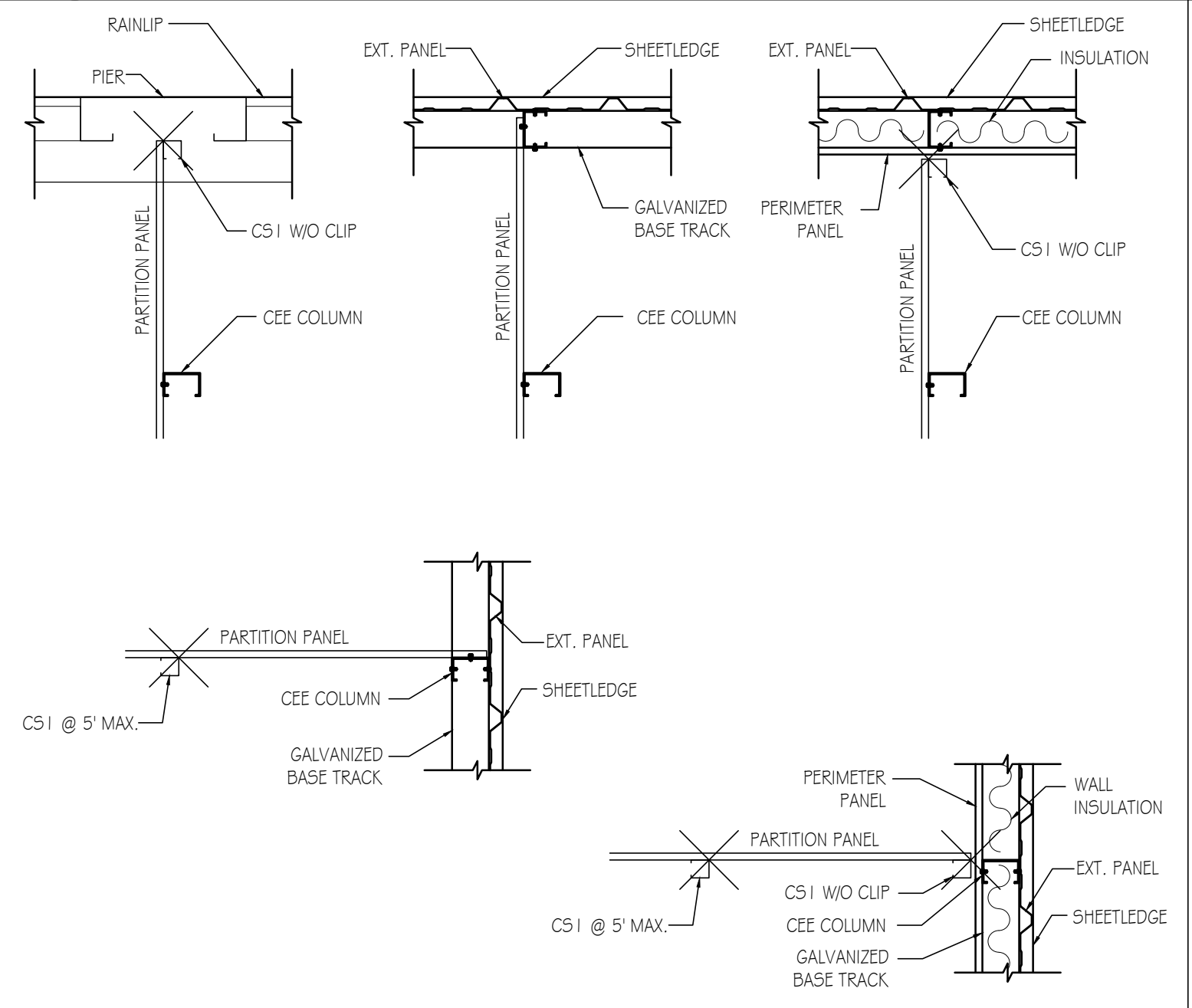
NOTE: TEK SCREW FASTENING OF THE ZEE PURLIN TO CEE COLUMN IS AN ACCEPTABLE ALTERNATE. PROVIDE A MIN. OF (4) #1/2 TEK SCREWS PER EACH 1/2 DIA. BOLT SHOWN

5 ZEE BEAM COLUMN CONNECTION, 6\"/>

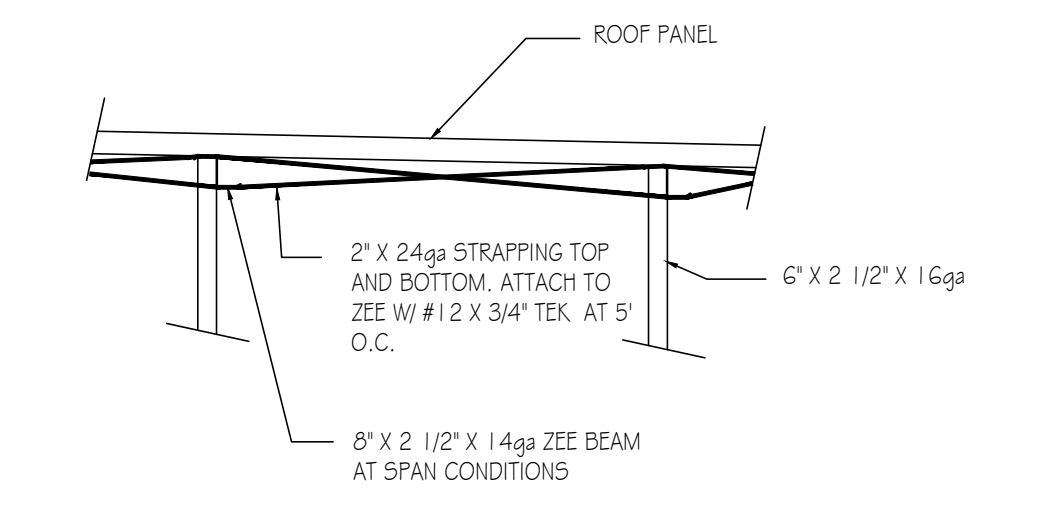


NOTE: TEK SCREW FASTENING OF THE ZEE PURLIN TO CEE COLUMN IS AN ACCEPTABLE ALTERNATE. PROVIDE A MIN. OF (4) #1/2 TEK SCREWS PER EACH 1/2 DIA. BOLT SHOWN

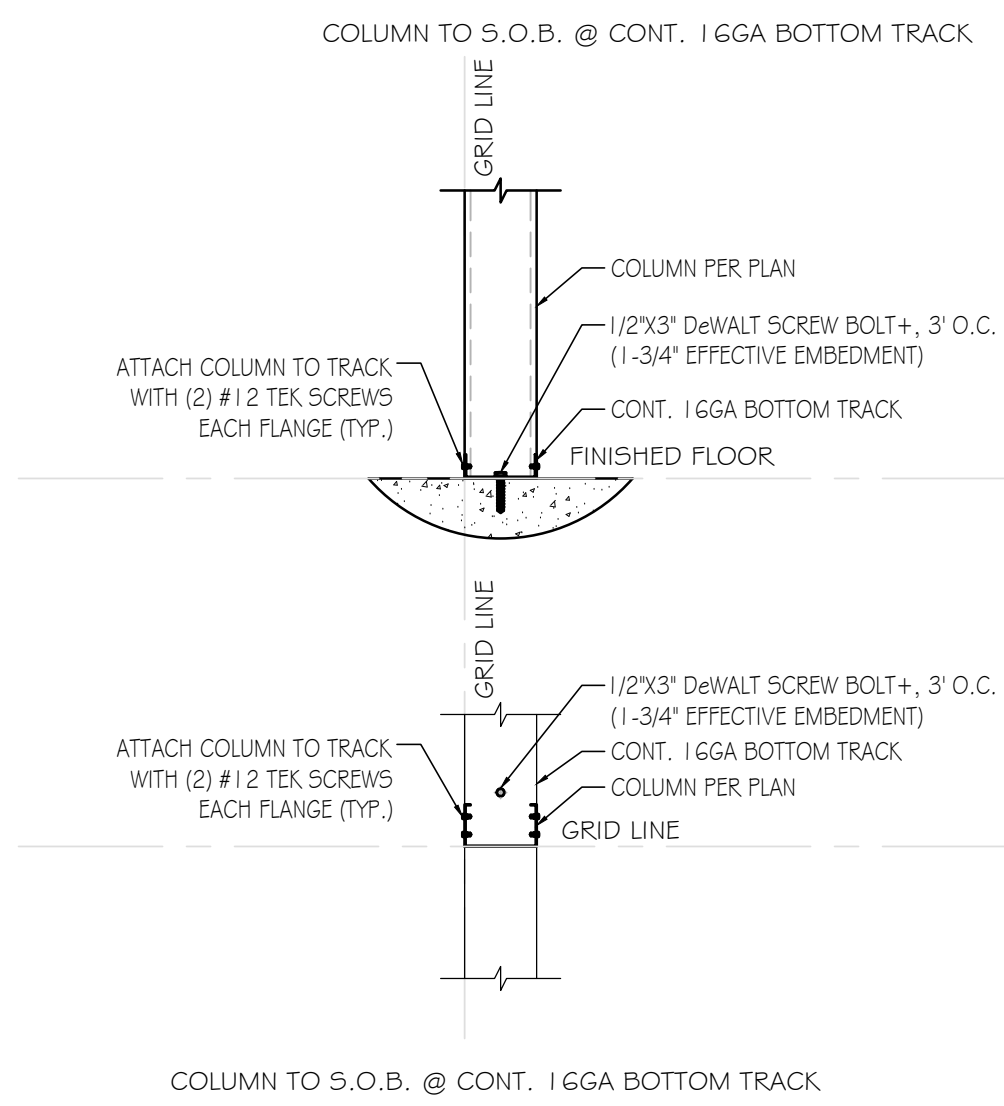
6 ZEE BEAM COLUMN CONNECTION, 12\"/>



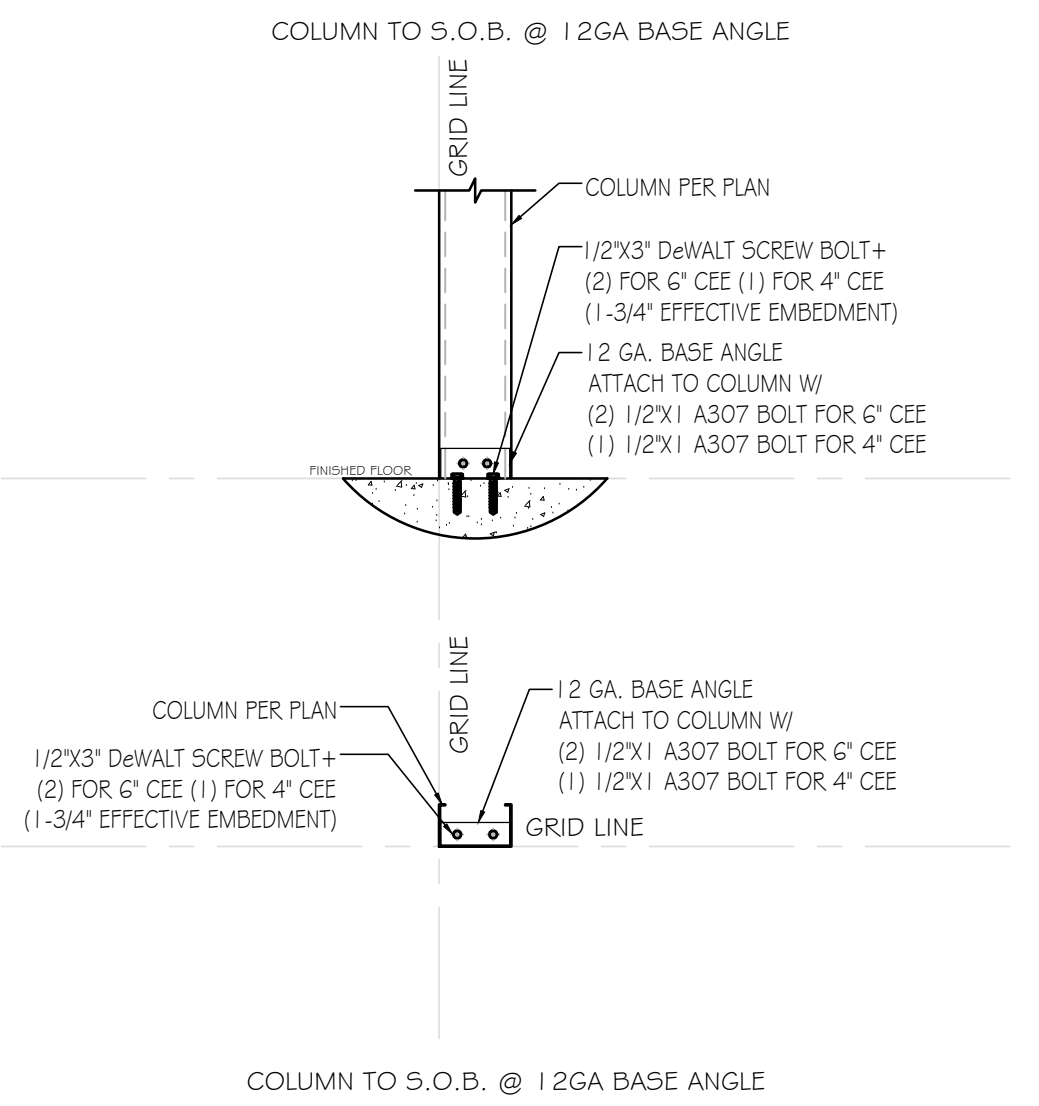
7 PARTITION PANEL DETAILS AT PERIMETER WALL (SINGLE-STORY)
 SD-2 SCALE: 3/4" = 1'



8 8214 W/ STRAPPING
 SD-2 SCALE: 3/4" = 1'



8 TYPICAL COLUMN TO SLAB ANCHORING (SINGLE-STORY)
 SD-2 SCALE: 3/4" = 1'



10 6C12 CROSS BEAM SUPPORT
 SD-2 SCALE: 3/4" = 1'

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 WEST PALM BEACH, FL 33411
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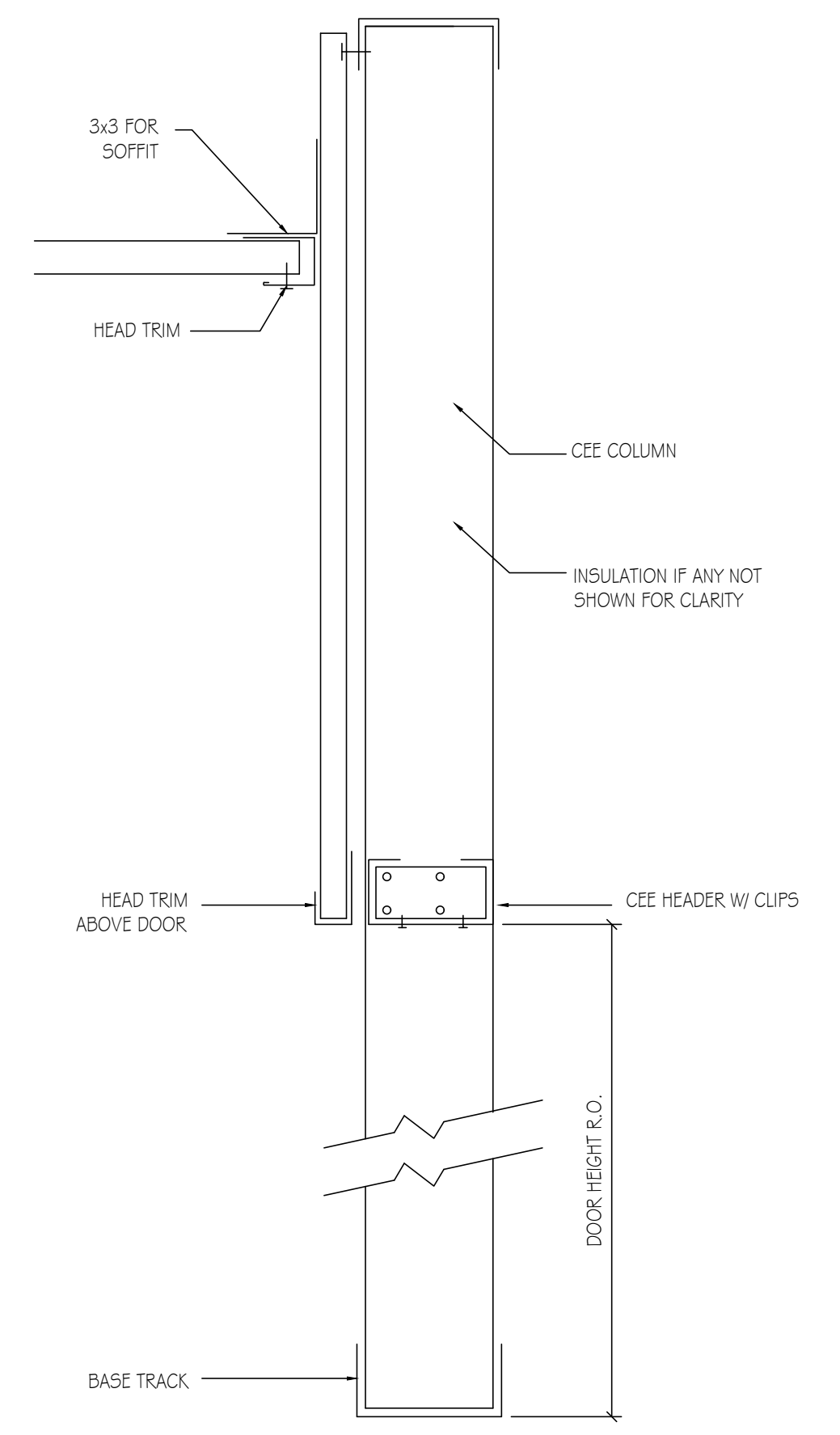
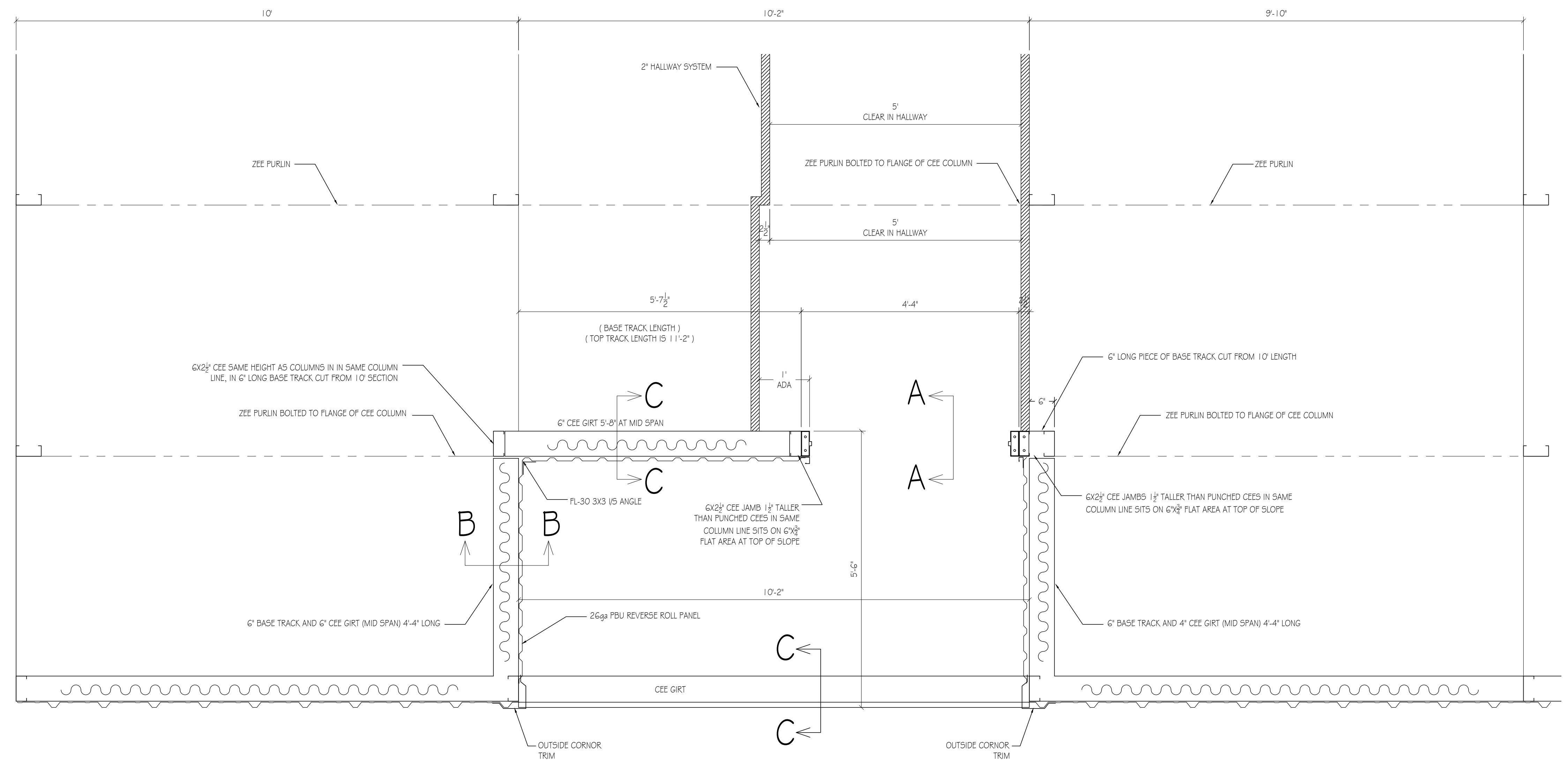
SHEET TITLE

STRC.
 DETAILS

DATE: 06-12-23
 DRAWN BY: AWMMG
 CHECKED BY: xxx
 JOB NO.: E 2705
 SCALE: AS NOTED
 SHEET

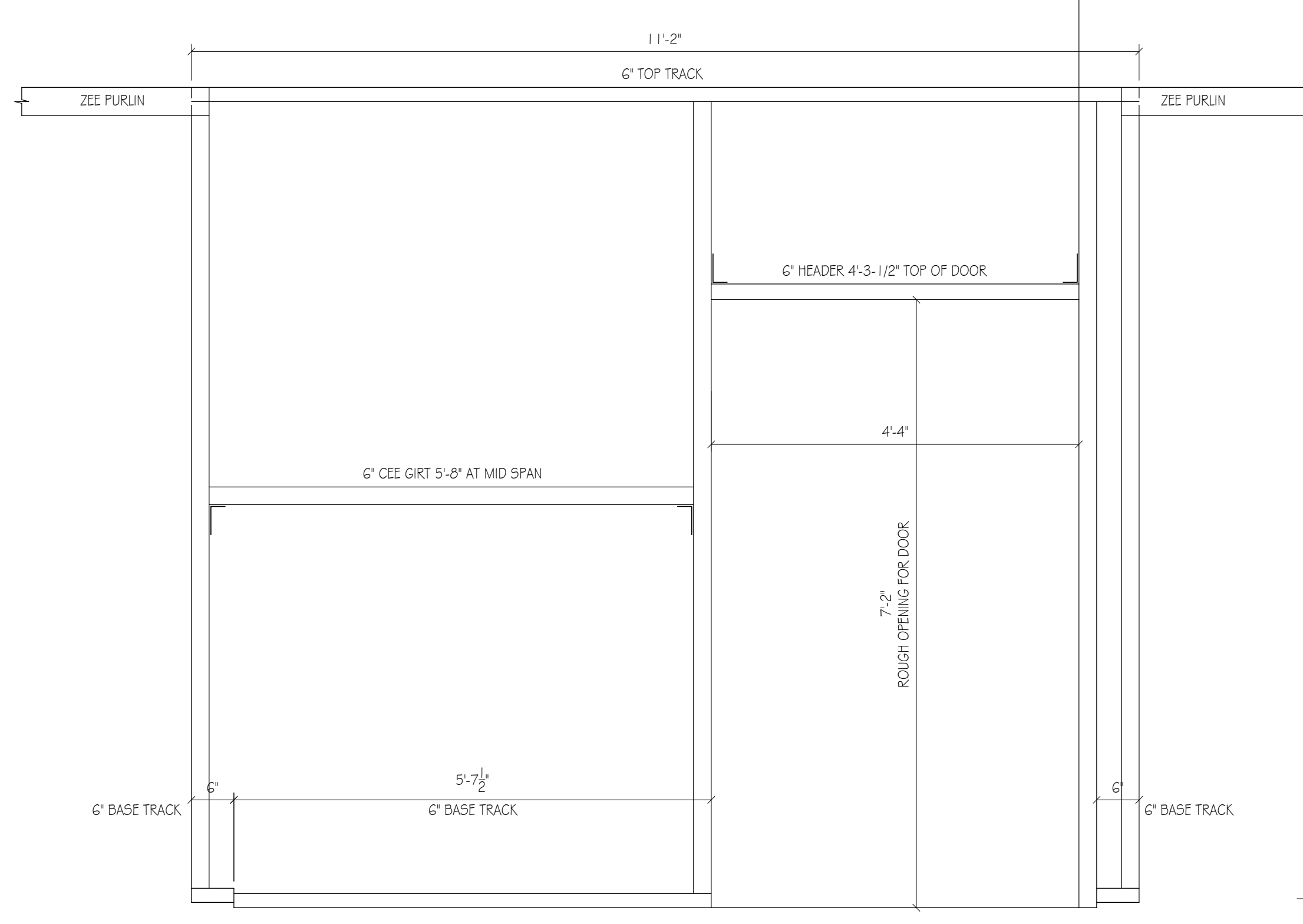
SD-2

MARKUPS / REVISIONS			
NO.	BY	ISSUE	DATE

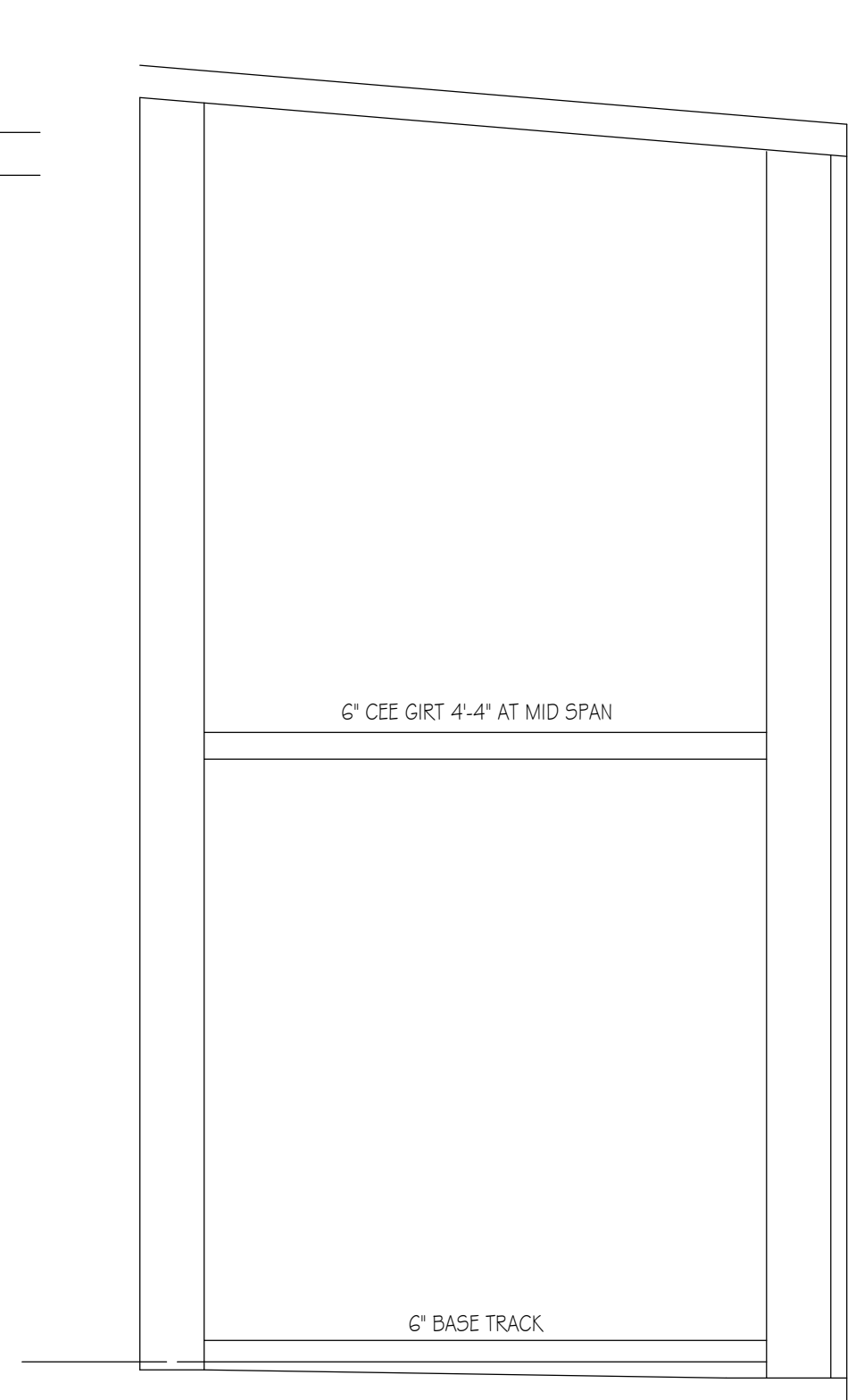


SECTION A-A

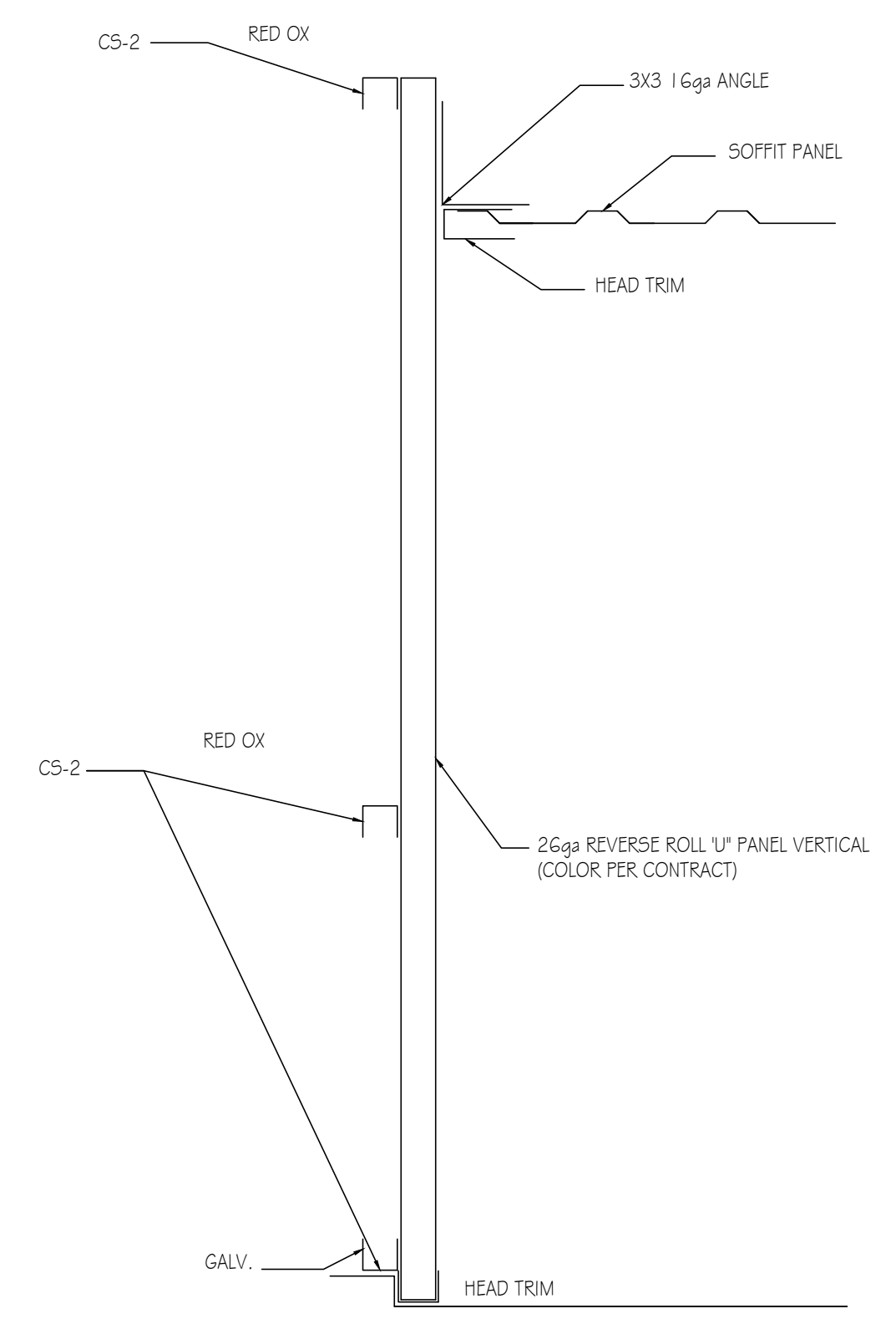
5 X 10 RECESSED ENTRY 6\"/>



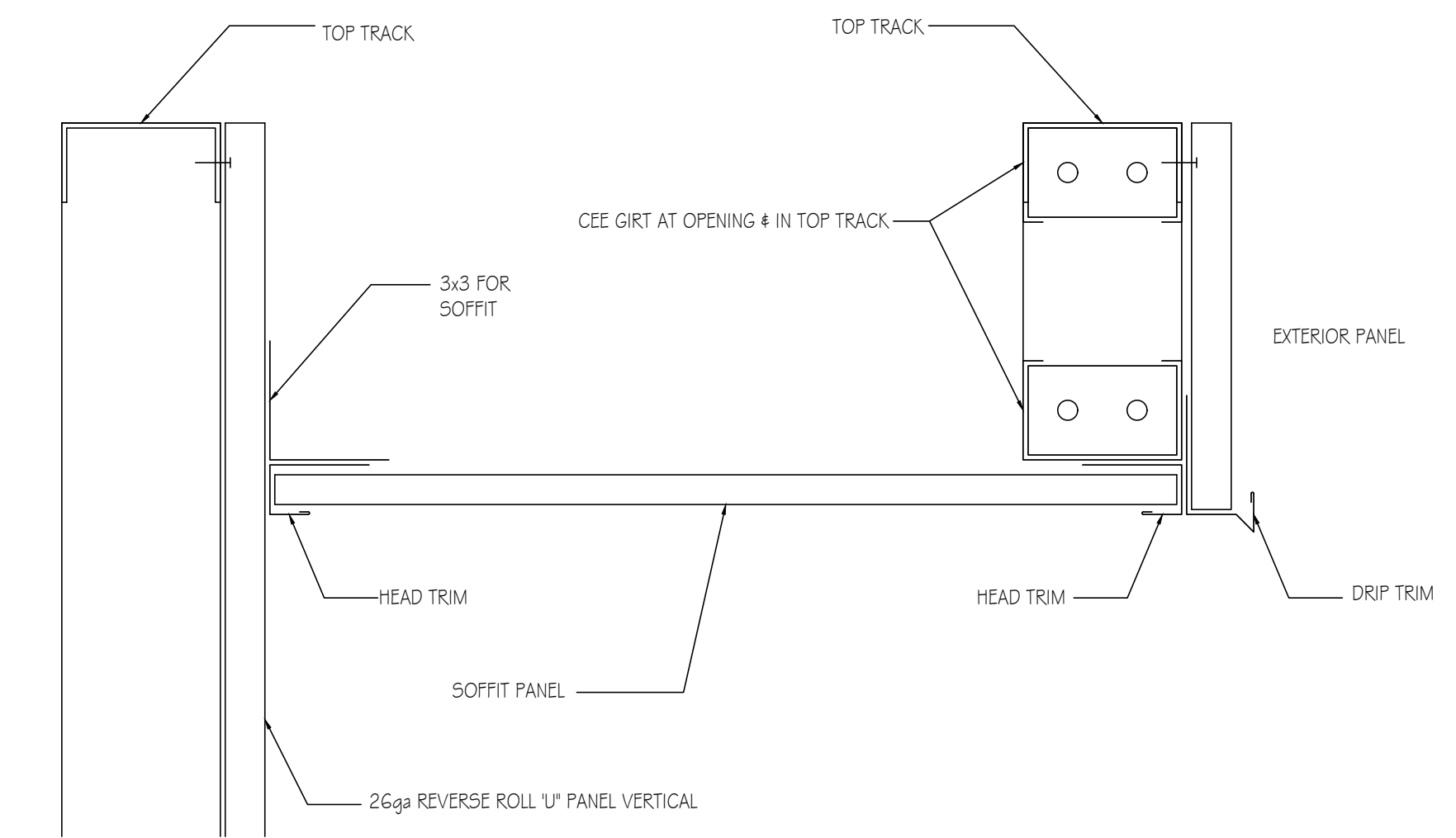
FRAMING AT DOOR



FRAMING AT SIDE



SECTION B-B



SECTION C-C

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 SHEET

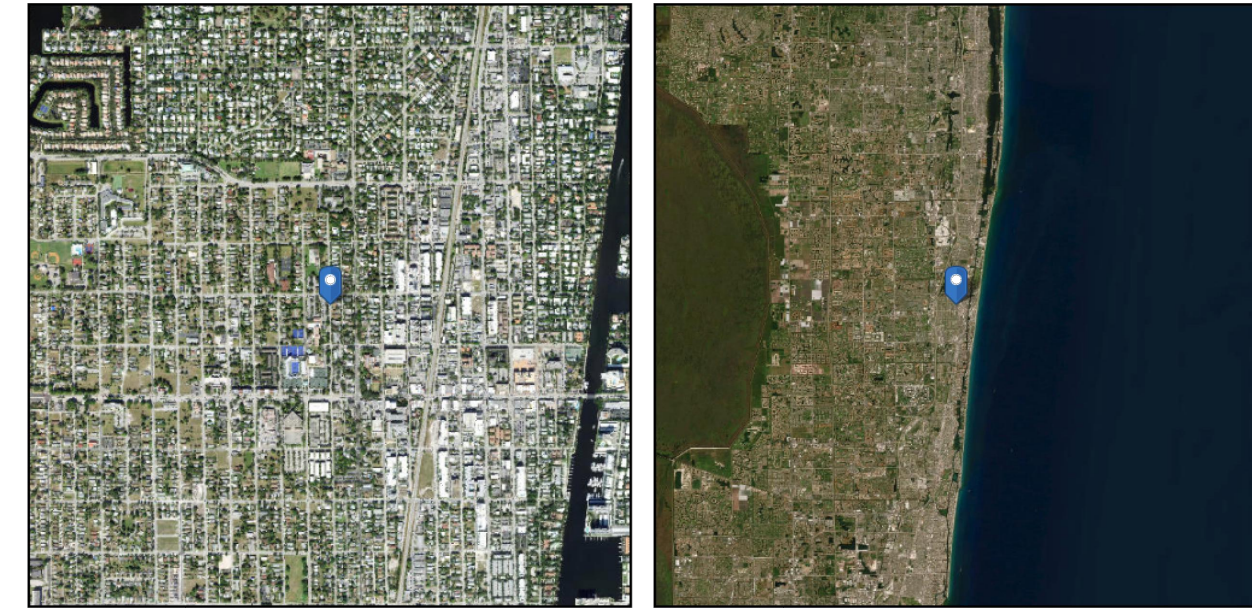
MARKUPS / REVISIONS			
NO.	BY	ISSUE	DATE



ASCE 7 Hazards Report

Address: Delray Beach, Florida

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)
Latitude: 26.4649
Longitude: -80.07419
Elevation: 19.6092138164712 ft (NAVD 88)



Wind

Results:	
Wind Speed	168 Vmph
10-year MRI	90 Vmph
25-year MRI	112 Vmph
50-year MRI	127 Vmph
100-year MRI	138 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC-2.1-CC-2.4, and Section 26.5.2
Date Accessed: Tue Jun 27 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings shall be protected against wind-borne debris as specified in Section 26.12.3.



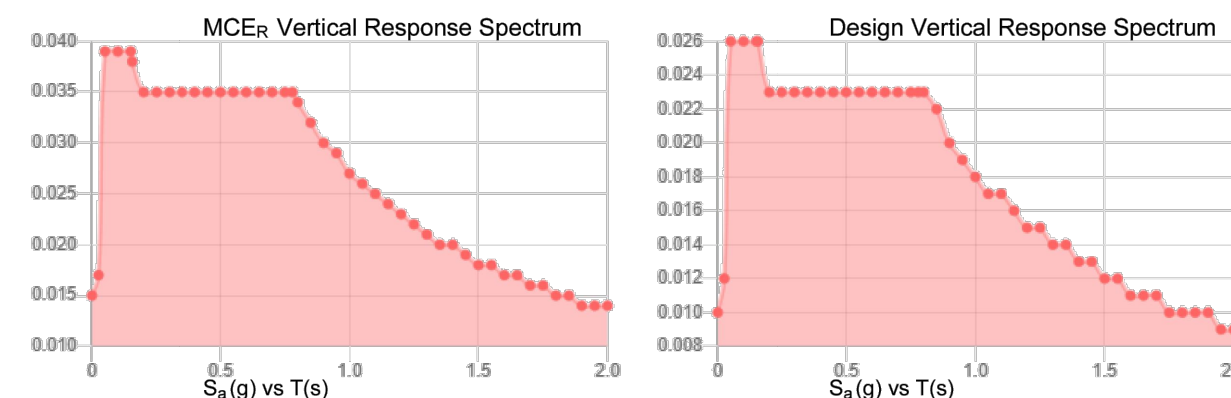
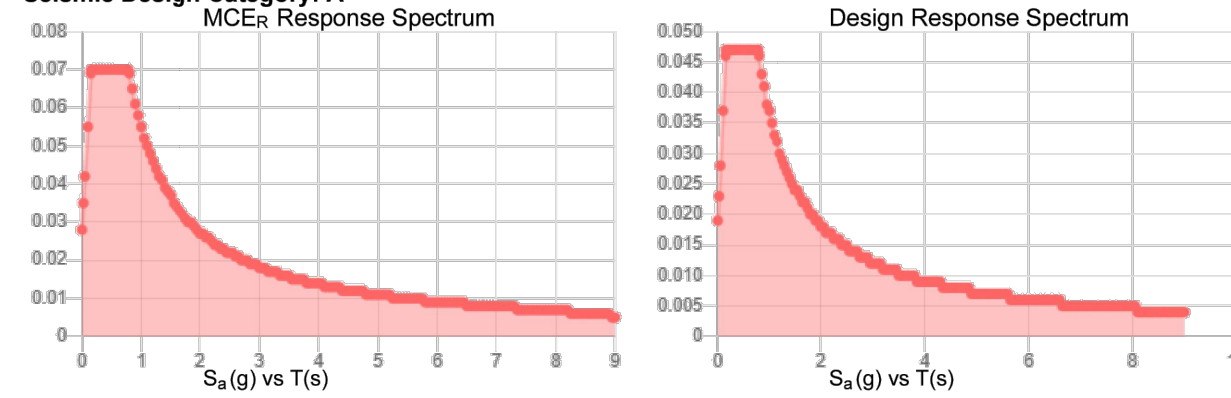
Seismic

D - Default (see Section 11.4.3)

Site Soil Class:

Results:			
S _s	0.044	S _{D1}	0.037
S ₁	0.023	T _L	8
F _v	1.6	PGA	0.021
F _w	2.4	PGA _M	0.033
S _{M5}	0.07	F _{PGA}	1.6
S _{M1}	0.055	I _w	1
S _{D5}	0.047	C _v	0.7

Seismic Design Category: A



Data Accessed: Tue Jun 27 2023
Data Source: USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.



Ice

Results:	
Ice Thickness:	0 in.
Concurrent Temperature:	25 F
Gust Speed:	30 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed: Tue Jun 27 2023

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Snow

Results:	
Ground Snow Load, p _s	0 lb/ft ²
Mapped Elevation:	19.6 ft
Data Source:	ASCE/SEI 7-16, Table 7.2-8
Date Accessed:	Tue Jun 27 2023

Values provided are ground snow loads. In areas designated "case study required," extreme local variations in ground snow loads preclude mapping at this scale. Site-specific case studies are required to establish ground snow loads at elevations not covered.

Snow load values are mapped to a 0.5 mile resolution. This resolution can create a mismatch between the mapped elevation and the site-specific elevation in topographically complex areas. Engineers should consult the local authority having jurisdiction in locations where the reported 'elevation' and 'mapped elevation' differ significantly from each other.



Rain

Results:	
15-minute Precipitation Intensity:	9.58 in./h
60-minute Precipitation Intensity:	5.23 in./h

Data Source: NOAA National Weather Service, Precipitation Frequency Data Server, Atlas 14 (<https://www.nws.noaa.gov/oh/hds/>)

Date Accessed: Tue Jun 27 2023



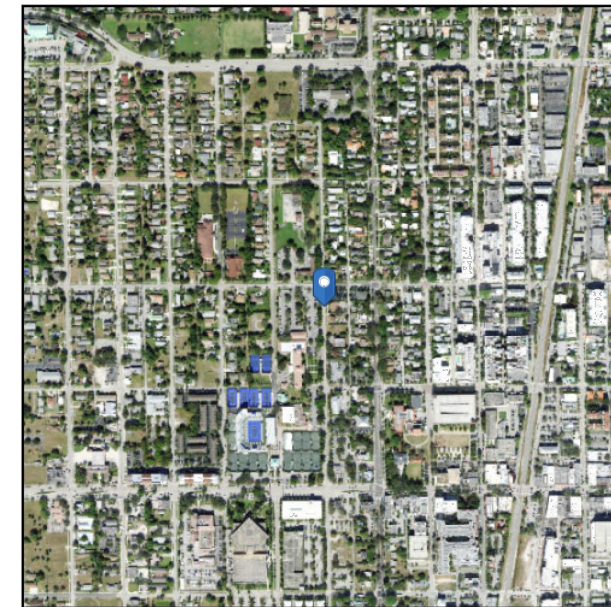
Flood

Results: Flood Zone Categorization: X (unshaded)

Base Flood Elevation:

Data Source: FEMA National Flood Hazard Layer - Effective Flood Hazard Layer for US, where modernized (<https://msc.fema.gov/portal/search/>)

Date Accessed: Tue Jun 27 2023
FIRM Panel: If available, download FIRM panel [here](#)
Insurance Study Note: Download FEMA Flood Insurance Study for this area [here](#)



Tsunami

Results: Tsunami: Not in mapped tsunami design zone.

Data Source: [ASCE Tsunami Design Geodatabase](#)
Date Accessed: Tue Jun 27 2023



Tornado

Results: Not Applicable to Risk Category 2

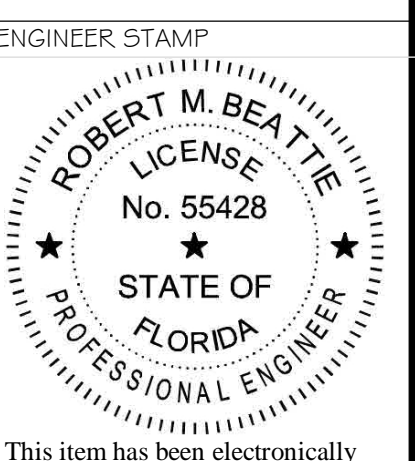
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Date: 2023.08.04 16:02:27 -0400

ENGINEER
RBE CONSULTING SERVICES, LLC
1000 W. PALM BEACH BLVD., SUITE 1000
PALM BEACH, FL 33480
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SHEET TITLE
CODE ANALYSIS

DATE: 06-12-23
DRAWN BY: AWM/MG
CHECKED BY: xxx
JOB NO.: E 2705
SCALE: AS NOTED
SHEET

STRUCTURAL DESIGN CRITERIA
DESIGN PARAMETERS SOURCE:
DESIGN MANUALS (LATEST ADOPTED EDITIONS): AISC - MANUAL OF STEEL CONSTRUCTION
WIND LOAD DESIGN PARAMETERS
SNOW LOAD DESIGN PARAMETERS
SEISMIC DESIGN PARAMETERS
RAIN DESIGN PARAMETERS

WIND LOADS - ENCLOSED BUILDINGS
METHOD 2 ANALYTICAL PROCEDURE
DESIGN WIND PRESSURES ON COMPONENT & CLADDING ELEMENTS OF BUILDINGS WITH H ≤ 60 FT.
COMPOUND AND CLADDING PRESSURES - p = q(GCp)(GCpf) (lb/ft²)
MAIN WIND FORCE RESISTING SYSTEM - p = qGc - q(GCp) (lb/ft²)

PROJECT STRUCTURE(S)
TOTAL SF = 89,589.00
DESKTOP
LOADING
MIN. UNIFORMLY DISTRIBUTED LIVE LOADS - PSF
GOVERNING LATERAL FORCE/BASE SHEAR
ROOF GUTTERS AND DOWNSPOUTS

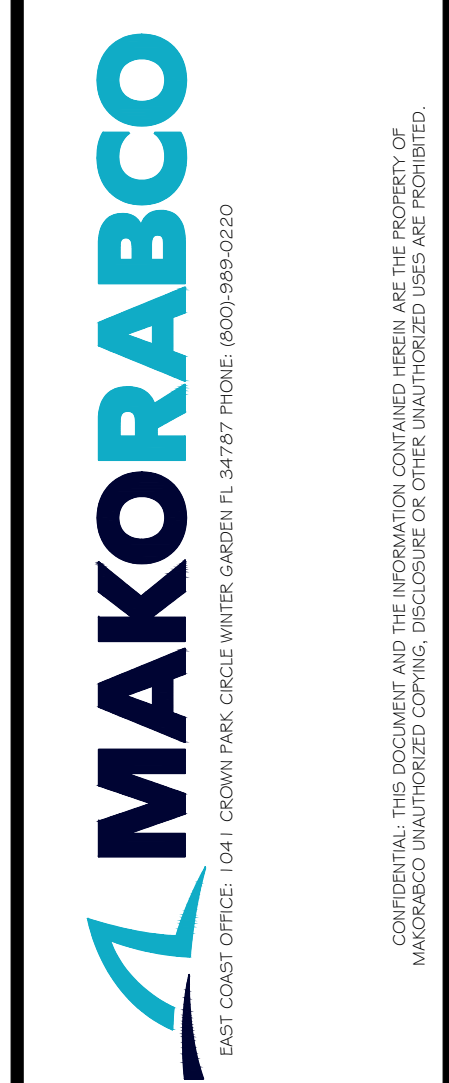
PROJECT BUILDING(S) - SUMMARY ANALYSIS OF CODE
TOTAL SQUARE FOOTAGE = 89,589.00
USE AND OCCUPANCY CLASSIFICATION [CHAPTER 3]
TYPES OF CONSTRUCTION [CHAPTER 6]
FIRE RESISTANCE RATING REQS FOR BUILDING ELEMENTS (HOURS)
FIRE PROTECTION SYSTEMS [CHAPTER 9]
GENERAL BUILDING HEIGHTS AND AREAS [CHAPTER 5]
FIRE-RESISTANCE-RATED CONSTRUCTION [CHAPTER 7]
MEANS OF EGRESS [CHAPTER 10]

NOMINAL (ASD) GARAGE DOOR & ROLLING DOOR WIND LOADS FOR BUILDINGS IN EXPOSURE 'B' W/ MEAN ROOF HEIGHT OF 30FT (PSF)
Table with columns for Wind Speed (100 MPH to 200 MPH) and Roof Angle (< 10 DEGREES, > 10 DEGREES)

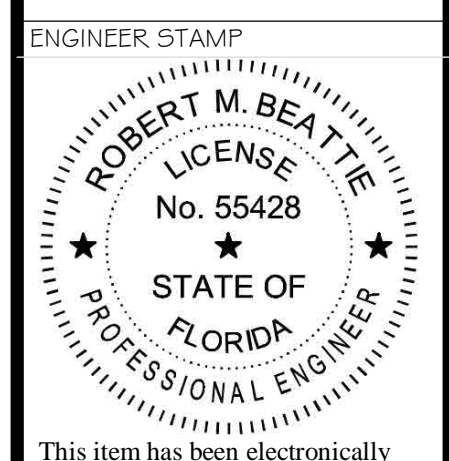
ADJUSTMENT FACTOR FOR BUILDING HEIGHT & EXPOSURE
Table with columns for Mean Roof Height (15 to 60 FT) and Exposure Category (B, C, D)

NOTES:
1. FOR EFFECTIVE AREAS OR WIND SPEEDS BETWEEN THOSE GIVEN ABOVE, THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREA.
2. VALUES SHOWN ABOVE SHALL BE ADJUSTED FOR HEIGHT AND EXPOSURE BY MULTIPLYING BY THE RELATIVE COEFFICIENT SHOWN IN THE CHART TO THE RIGHT.
3. PLUS (+) AND MINUS (-) SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM BUILDING SURFACES.
4. VALUES SHOWN IN TABLE ABOVE ALREADY INCLUDE THE LOAD REDUCTION FACTOR OF 0.6.

MARKUPS / REVISIONS
Table with columns for NO, BY, ISSUE, DATE



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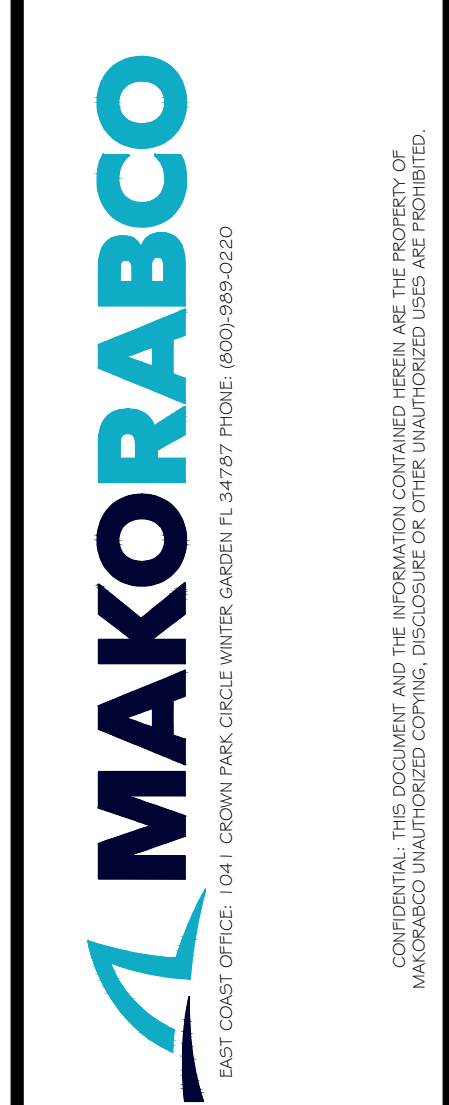


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15000 W. STATE ROAD 70, SUITE 200, DELRAY BEACH, FL 33433
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GENERAL NOTES

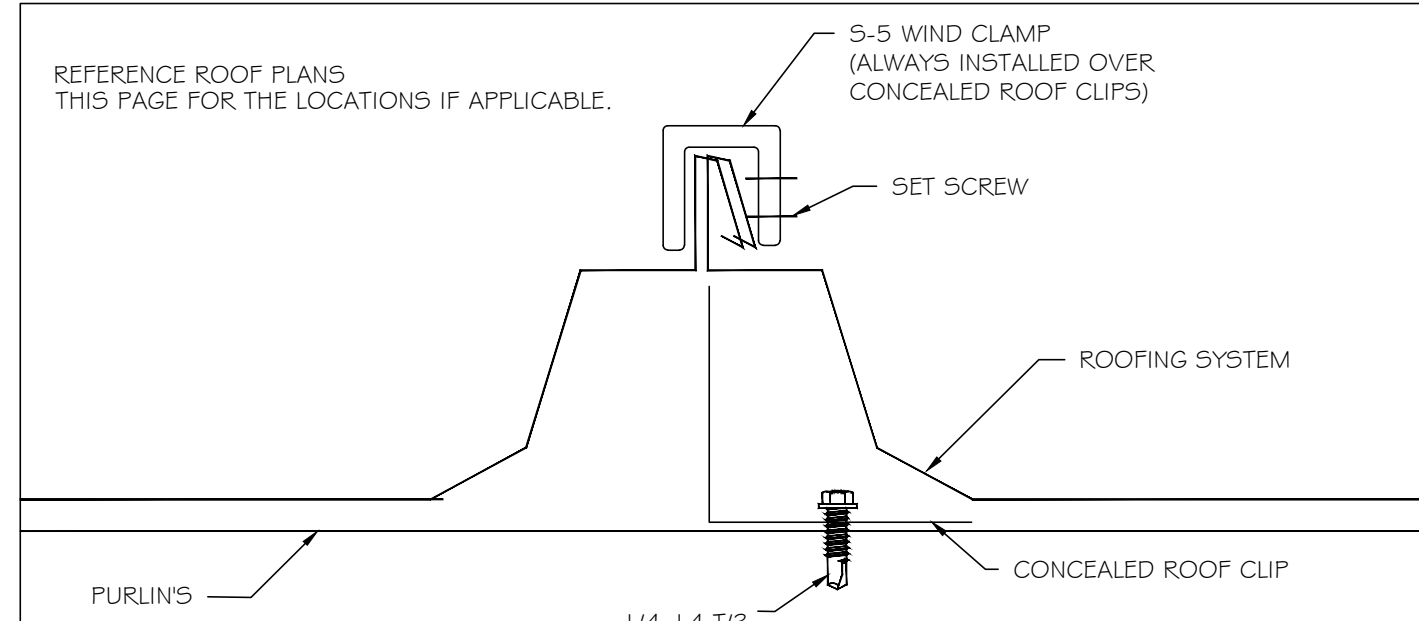
① DIMENSIONS INDICATE THE WIDTH OF ROOF ZONES.

② NUMBERS IN DIAGRAMS TO RIGHT INDICATE ROOF ZONES AND CORRELATE TO COMPONENT PRESSURES FOUND ON SHEET S-O-1 OF CONSTRUCTION DOCUMENTS.

- 24" WIDE ULTRA DEK ROOFING SYSTEM.
 - 18" WIDE ULTRA DEK ROOFING SYSTEM.
 - 12" WIDE ULTRA DEK ROOFING SYSTEM.
- * IF A ROOFING SYSTEM OTHER THAN ULTRA DEK IS USED IT WILL BE NOTED.
- EXTERNAL WIND CLAMPS.

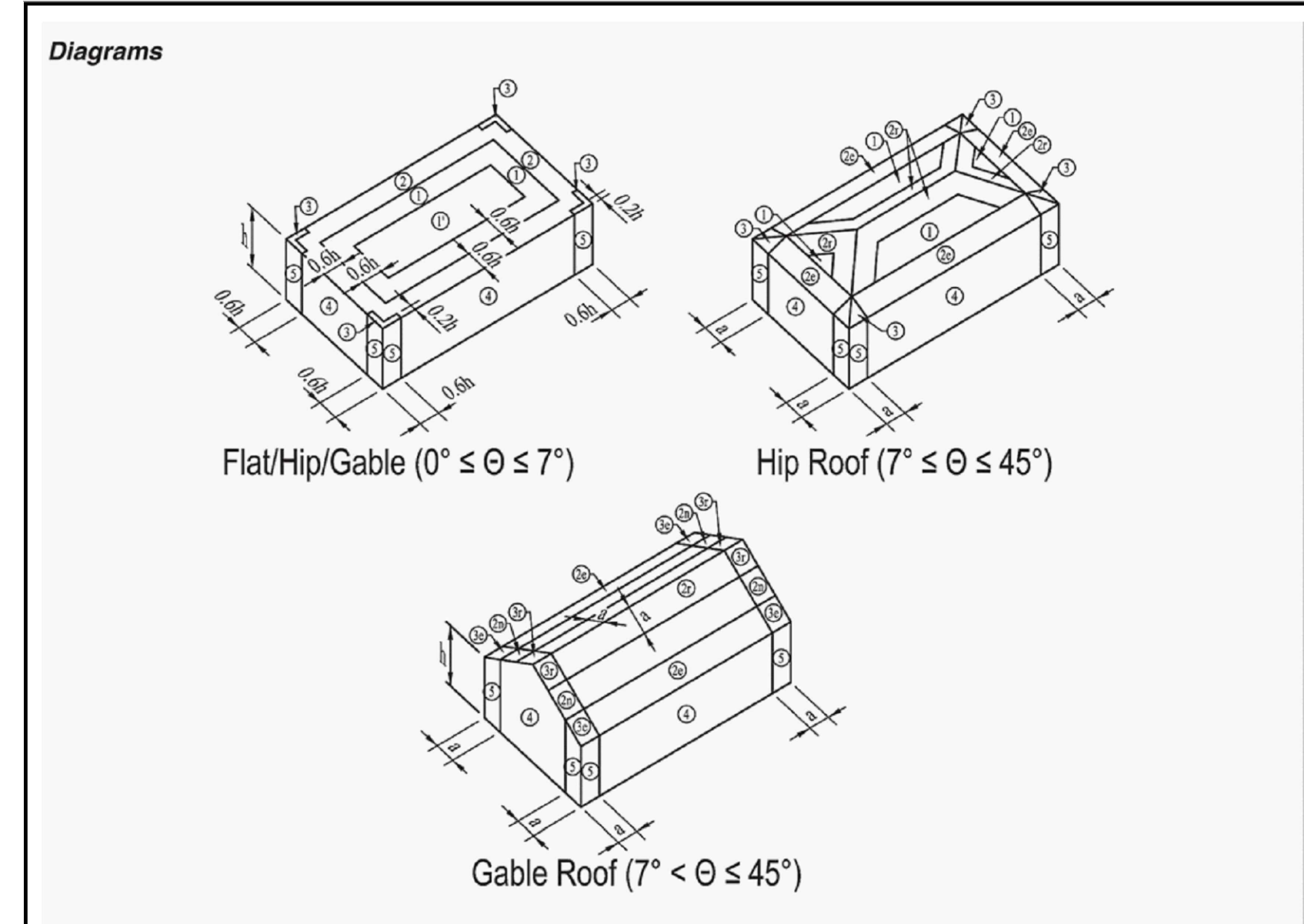
ROOF PITCH TABLE

RISE (in ft.)	DECK
0.250	1.15
0.375	1.75
0.500	2.35
0.625	2.95
0.750	3.55
0.875	4.15
1.000	4.75
1.125	5.35
1.250	5.95
1.375	6.55
1.500	7.15
1.625	7.75
1.750	8.35
1.875	8.95
2.000	9.55
2.125	10.15
2.250	10.75
2.375	11.35
2.500	11.95
2.625	12.55
2.750	13.15
2.875	13.75
3.000	14.35
3.125	14.95
3.250	15.55
3.375	16.15
3.500	16.75
3.625	17.35
3.750	17.95
3.875	18.55
4.000	19.15
4.125	19.75
4.250	20.35
4.375	20.95
4.500	21.55
4.625	22.15
4.750	22.75
4.875	23.35
5.000	23.95
5.125	24.55
5.250	25.15
5.375	25.75
5.500	26.35
5.625	26.95
5.750	27.55
5.875	28.15
6.000	28.75



Roof Span Comparison

ROOFING SYSTEM: MBCI	SELF WT. PSF	UPLIFT CAPACITY - PSF	LIVE LOAD CAPACITY - PSF	5 FT SPAN									2.5 FT SPAN									4 FT SPAN									3 FT SPAN																							
				NET DESIGN WIND PRESSURE									NET DESIGN WIND PRESSURE									NET DESIGN WIND PRESSURE									NET DESIGN WIND PRESSURE																							
				ZONE 1'	ZONE 1	ZONE 2	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3	ZONE 3e	ZONE 3r	ZONE 1'	ZONE 1	ZONE 2	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3	ZONE 3e	ZONE 3r	ZONE 1'	ZONE 1	ZONE 2	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3	ZONE 3e	ZONE 3r	ZONE 1'	ZONE 1	ZONE 2	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3	ZONE 3e	ZONE 3r															
Final Comparison Values			Positive Negative	16.00 36.87	16.00 54.88	16.89 86.25					16.89 117.95								16.00 36.87	16.00 54.88	16.89 86.25								16.89 117.95								16.00 36.87	16.00 54.88	16.89 86.25								16.89 117.95							
24" 26GA UD	1.02	17.65	55.40	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 26GA UD CLIPS	1.02	36.86	55.40	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 24GA UD	1.23	23.87	75.90	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 24GA UD CLIPS	1.23	42.83	75.90	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 22GA UD	1.56	28.73	106.30	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 22GA UD CLIPS	1.56	48.53	106.30	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
18" 24GA UD	1.32	24.95	101.60	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
18" 24GA UD CLIPS	1.32	47.54	101.60	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
18" 22GA UD	1.66	40.48	142.10	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
18" 22GA UD CLIPS	1.66	66.13	142.10	Yes	Yes	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
12" 24GA UD	1.48	52.00	123.00	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
12" 22GA UD	1.86	78.00	178.60	Yes	Yes	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 24GA DL	1.23	40.84	79.00	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24" 24GA DL CLIPS	1.23	81.12	79.00	Yes	Yes	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
18" 22GA LOKSEAM	1.60	47.50	47.50	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
16" 24GA LOKSEAM	1.34	36.20	36.20	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
16" 22GA LOKSEAM	1.71	53.20	53.20	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
12" 24GA LOKSEAM	1.41	47.70	47.70	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
12" 22GA LOKSEAM	1.81	70.10	70.10	No	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
26GA PBR SD	0.94	43.33	46.37	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA
24GA PBR SD	1.14	44.56	44.80	Yes	No	No	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA	No	NA	NA	NA	NA	NA	NA



Notation

a = 10% of least horizontal dimension or $0.4h$, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft (0.9 m).

Exception: For buildings with $\theta = 0^\circ$ to 7° and a least horizontal dimension greater than 300 ft (90 m), dimension a shall be limited to a maximum of $0.8h$.

h = Mean roof height, in ft (m), except that eave height shall be used for roof angles $<10^\circ$.

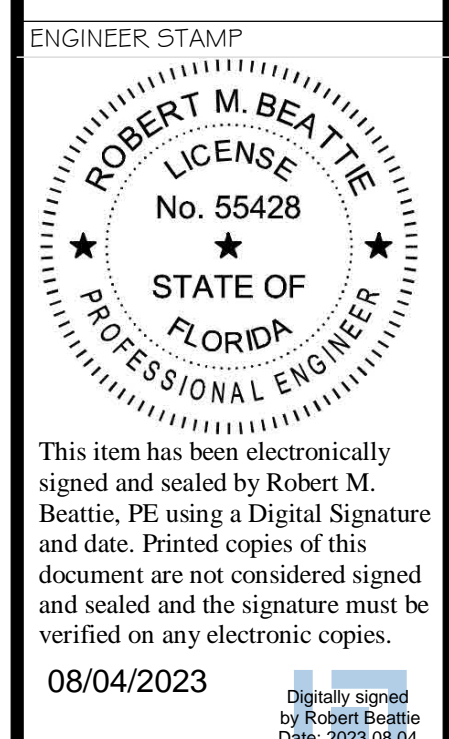
θ = Angle of plane of roof from horizontal, in degrees.

Notes

- Pressures shown are applied normal to the surface, for Exposure B, at $h = 30$ ft (9.1 m). Adjust to other conditions using Eq. (30.4-1).
- Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.
- For hip roofs with $\theta \leq 25^\circ$, Zone 3 shall be treated as Zone 2e and 2r.
- For effective wind areas between those given, values may be interpolated; otherwise use the value associated with the lower effective wind area.
- If overhangs exist, the lesser horizontal dimension of the building shall not include any overhang dimension, but the edge distance, a , shall be measured from the outside edge of the overhang.

TYPICAL ULTRA DEK ROOFING SYSTEM (SEE ELEVATIONS FOR ROOFING SYSTEM BY STRUCTURE)	FIRE WALLS					
	LOAD BEARING			NON-LOAD BEARING		
	18"	16"	20"	18"	16"	20"
24" 26GA UD	2	1	1	1	1	1
24" 26GA UD WITH EXTERNAL WIND CLAMPS	N/A	2	2	1	1	1
24" 24GA UD	2	2	2	1	1	1
24" 24GA UD WITH EXTERNAL WIND CLAMPS	N/A	2	2	1	1	1
24" 22GA UD	2	2	2	1	1	1
24" 22GA UD WITH EXTERNAL WIND CLAMPS	N/A	N/A	2	2	1	1
18" 24GA UD	2	1	1	1	1	1
18" 24GA UD WITH EXTERNAL WIND CLAMPS	N/A	2	2	1	1	1
18" 22GA UD	2	2	2	1	1	1
18" 22GA UD WITH EXTERNAL WIND CLAMPS	N/A	N/A	2	2	1	1
12" 24GA UD	2	2	2	1	1	1
12" 22GA UD	N/A	2	2	1	1	1

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08/04/2023

Digitally signed by

STATEMENT OF SPECIAL INSPECTION. ALL REQUIRED SPECIAL INSPECTIONS SHALL BE AS INDICATED BELOW. NO ADDITIONAL REQUIREMENTS FOR SPECIAL INSPECTION OR TESTING FOR SEISMIC OR WIND RESISTANCE SHALL BE REQUIRED.

SCHEDULE OF SPECIAL INSPECTION SERVICES. PROJECT: MATERIAL / ACTIVITY, SERVICE, Y/N, EXTENT, AGENT*, DATE COMPLETED.

SCHEDULE OF SPECIAL INSPECTION SERVICES. PROJECT: MATERIAL / ACTIVITY, SERVICE, Y/N, EXTENT, AGENT*, DATE COMPLETED.

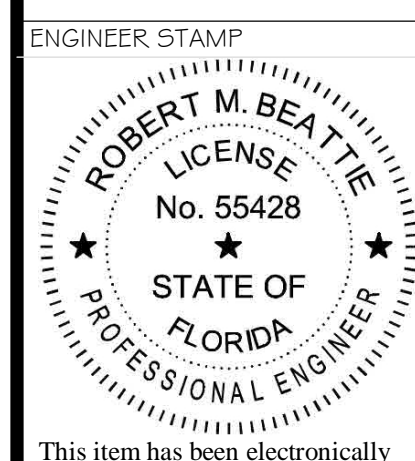
SCHEDULE OF SPECIAL INSPECTION SERVICES. PROJECT: MATERIAL / ACTIVITY, SERVICE, Y/N, EXTENT, AGENT*, DATE COMPLETED.

SCHEDULE OF SPECIAL INSPECTION SERVICES. PROJECT: MATERIAL / ACTIVITY, SERVICE, Y/N, EXTENT, AGENT*, DATE COMPLETED.

MARKUPS / REVISIONS table with columns for NO, BY, ISSUE, DATE.



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ENGINEER: RBC CONSULTING SERVICES, LLC. ENGINEER: Robert M. Beattie, P.E. License No. 55428, State of Florida. Date: 08/04/2023.

SHEET TITLE: SPECIAL INSPECTION. DATE: 06-12-23. DRAWN BY: AWM/MG. CHECKED BY: XXX. JOB NO.: E 2705. SCALE: AS NOTED. SHEET: 5-0-4.

SCHEDULE OF SPECIAL INSPECTION SERVICES					
PROJECT	MATERIAL / ACTIVITY	SERVICE	AS APPLICABLE TO THIS PROJECT		
			Y/N	EXTENT	AGENT*
1705.7 Driven Deep Foundations					
1. Verify element materials, sizes and lengths comply with requirements	Field inspection	N	Continuous		
2. Determine capacities of fast elements and conduct additional load tests, as required	Field inspection	N	Continuous		
3. Observe driving operations and maintain complete and accurate records for each element	Field inspection	N	Continuous		
4. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	Field inspection	N	Continuous		
5. For steel elements, perform additional inspections per Section 1705.2	See Section 1705.2	N	See Section 1705.2		
6. For concrete elements and concrete-filled elements, perform additional inspections per Section 1705.3	See Section 1705.3	N	See Section 1705.3		
7. For specialty elements, perform additional inspections as determined by the registered design professional in reasonable charge	Field inspection	N	In accordance with construction documents		
8. Perform additional inspections and tests in accordance with the construction documents	Field Inspection and testing	N	In accordance with construction documents		
1705.8 Cast-in-Place Deep Foundations					
1. Observe drilling operations and maintain complete and accurate records for each element	Field inspection	N	Continuous		
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes	Field inspection	N	Continuous		
3. For concrete elements, perform additional inspections in accordance with Section 1705.3	See Section 1705.3	N	See Section 1705.3		
4. Perform additional inspections and tests in accordance with the construction documents	Field Inspection and testing	N	In accordance with construction documents		
1705.9 Helical Pile Foundations					
1. Verify installation equipment, pile dimensions, tip elevations, final depth, final installation torque and other data as required	Field inspection	N	Continuous		
2. Perform additional inspections and tests in accordance with the construction documents	Field Inspection and testing	N	In accordance with construction documents		

SCHEDULE OF SPECIAL INSPECTION SERVICES					
PROJECT	MATERIAL / ACTIVITY	SERVICE	AS APPLICABLE TO THIS PROJECT		
			Y/N	EXTENT	AGENT*
1705.10.1 Structural Wood Special Inspections For Wind Resistance					
1. Inspection of field gluing operations of elements of the main windforce-resisting system	Field inspection	N	Continuous		
2. Inspection of nailing, bolting, anchoring and other fastening of components within the main windforce-resisting system	Shop (3) and field inspection	N	Periodic		
1705.10.2 Cold-formed Steel Special Inspections For Wind Resistance					
1. Inspection during welding operations of elements of the main windforce-resisting system	Shop (3) and field inspection	N	Periodic		
2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the main windforce-resisting system	Shop (3) and field inspection	Y	Periodic		
1705.10.3 Wind-resisting Components					
1. Roof cladding	Shop (3) and field inspection	N	Periodic		
2. Wall cladding	Shop (3) and field inspection	N	Periodic		
1705.11.1 Structural Steel Special Inspections For Seismic Resistance					
Inspection of structural steel in accordance with AISC 341	Shop (3) and field inspection	N	In accordance with AISC 341		
1705.11.2 Structural Wood Special Inspections For Seismic Resistance					
1. Inspection of field gluing operations of elements of the seismic-force resisting system	Field inspection	N	Continuous		
2. Inspection of nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic		
1705.11.3 Cold-formed Steel Light-Frame Construction Special Inspections For Seismic Resistance					
1. Inspection during welding operations of elements of the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic		
2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system	Shop (3) and field inspection	Y	Periodic		
1705.11.4 Designated Seismic Systems Verification					
Inspect and verify that the component label, anchorage or mounting conforms to the certificate of compliance in accordance with Section 1705.12.3	Field inspection	N	Periodic		

SCHEDULE OF SPECIAL INSPECTION SERVICES					
PROJECT	MATERIAL / ACTIVITY	SERVICE	AS APPLICABLE TO THIS PROJECT		
			Y/N	EXTENT	AGENT*
1705.11.5 Architectural Components Special Inspections for Seismic Resistance					
1. Inspection during the erection and fastening of exterior cladding and interior and exterior veneer	Field inspection	N	Periodic		
2. Inspection during the erection and fastening of interior and exterior nonbearing walls	Field inspection	N	Periodic		
3. Inspection during anchorage of access floors	Field inspection	N	Periodic		
1705.11.6 Mechanical and Electrical Components Special Inspections for Seismic Resistance					
1. Inspection during the anchorage of electrical equipment for emergency or standby power systems	Field inspection	N	Periodic		
2. Inspection during the anchorage of other electrical equipment	Field inspection	N	Periodic		
3. Inspection during installation and anchorage of piping systems designed to carry hazardous materials, and their associated mechanical units	Field inspection	N	Periodic		
4. Inspection during the installation and anchorage of HVAC ductwork that will contain hazardous materials	Field inspection	N	Periodic		
5. Inspection during the installation and anchorage of vibration isolation systems	Field inspection	N	Periodic		
1705.11.7 Storage Racks Special Inspections for Seismic Resistance					
Inspection during the anchorage of storage racks 8 feet or greater in height	Field inspection	N	Periodic		
1705.11.8 Seismic Isolation Systems					
Inspection during the fabrication and installation of isolator units and energy dissipation devices used as part of the seismic isolation system	Shop and field inspection	N	Periodic		
1705.12.1 Concrete Reinforcement Testing and Qualification for Seismic Resistance					
1. Review certified mill test reports for each shipment of reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls	Review certified mill test reports	N	Each shipment		

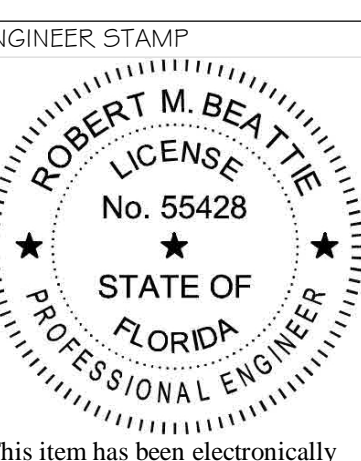
SCHEDULE OF SPECIAL INSPECTION SERVICES					
PROJECT	MATERIAL / ACTIVITY	SERVICE	AS APPLICABLE TO THIS PROJECT		
			Y/N	EXTENT	AGENT*
2. Verify reinforcement weldability of ASTM A615 reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls	Review test reports	N	Each shipment		
1705.12.2 Structural Steel Testing and Qualification for Seismic Resistance					
Test in accordance with the quality assurance requirements of AISC 341	Shop (3) and field testing	N	Per AISC 341		
1705.12.3 Seismic Certification of Nonstructural Components					
Review certificate of compliance for designated seismic system components	Certificate of compliance review	N	Each submittal		
1705.12.4 Seismic Isolation Systems					
Test seismic isolation system in accordance with ASCE 7 Section 17.8	Prototype testing	N	Per ASCE 7		
1705.13 Sprayed Fire-resistant Materials					
1. Verify surface condition preparation of structural members	Field inspection	N	Periodic		
2. Verify application of sprayed fire-resistant materials	Field inspection	N	Periodic		
3. Verify average thickness of sprayed fire-resistant materials applied to structural members	Field inspection	N	Periodic		
4. Verify density of the sprayed fire-resistant material complies with approved fire-resistant design	Field inspection and testing	N	Per IBC Section 1705.13.5		
5. Verify the cohesive/adhesive bond strength of the cured sprayed fire-resistant material	Field inspection and testing	N	Per IBC Section 1705.13.6		
1705.14 Mastic and Intumescent Fire-Resistant Coatings					
Inspect mastic and intumescent fire-resistant coatings applied to structural elements and decks	Field inspection	N	Periodic		
1705.15 Exterior Insulation and Finish Systems (EIFS)					
1. Verify materials, details and installations are per the approved construction documents	Field inspection	N	Periodic		
2. Inspection of water-resistive barrier over sheathing substrate	Field inspection	N	Periodic		

SCHEDULE OF SPECIAL INSPECTION SERVICES					
PROJECT	MATERIAL / ACTIVITY	SERVICE	AS APPLICABLE TO THIS PROJECT		
			Y/N	EXTENT	AGENT*
1705.16 Fire-Resistant Penetrations and Joints					
1. Inspect penetration firestop systems	Field testing	Y	Per ASTM E2174		
2. Inspect fire-resistant joint systems	Field testing	Y	Per ASTM E2393		
1705.17 Smoke Control Systems					
1. Leakage testing and recording of device locations prior to concealment	Field testing	N	Periodic		
2. Prior to occupancy and after sufficient completion, pressure difference testing, flow measurements, and detection and control verification	Field testing	N	Periodic		
* INSPECTION AGENTS					
FIRM		ADDRESS		TELEPHONE NO.	
1.					
2.					
3.					
4.					
Notes: 1. The inspection and testing agent(s) shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The qualifications of the Special Inspector(s) and/or testing agencies may be subject to the approval of the Building Official and/or the Design Professional. 2. The list of Special Inspectors may be submitted as a separate document, if needed to above. 3. Special Inspectors as required by Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.2. 4. Observe on a random basis, operations need not be delayed pending these inspections. Perform these tests for each welded joint, bolted connection, or steel element. 5. NOT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHI, refer to AISC 360, 401. The Requirements for Seismic Resistance included in the Statement of Special Inspections? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> The Requirements for Wind Resistance included in the Statement of Special Inspections? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
DATE:					

NO.	BY	ISSUE	DATE



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08/04/2023

ENGINEER
RBE CONSULTING SERVICES, LLC
10001 SW 15th Street, Suite 100, Delray Beach, FL 33433
Tel: 561-271-7777, Fax: 561-271-7778, Email: info@rbeconsulting.com
www.rbeconsulting.com

SHEET TITLE
SPECIAL INSPECTIONS
DATE: 06-12-23
DRAWN BY: AWMMG
CHECKED BY: xxx
JOB NO.: E 2705
SCALE: AS NOTED
SHEET

MARKUPS / REVISIONS table with columns for NO, BY, ISSUE, DATE.

GENERAL NOTES

- 1. THESE PLANS AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF SELLER/SUBCONTRACTOR AND ARE TO BE USED SOLELY IN CONNECTION WITH ERECTION OF BUILDING SYSTEMS AND MATERIALS SOLD TO OWNER/CONTRACTOR BY SELLER/SUBCONTRACTOR. UNAUTHORIZED COPYING, DISCLOSURE OR OTHER UNAUTHORIZED USES ARE PROHIBITED. OWNER/CONTRACTOR IS RESPONSIBLE TO PROVIDE SELLER/SUBCONTRACTOR WITH APPROVED PLANS PRIOR TO FABRICATION. SELLER/SUBCONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY AND REQUIRED PERMITS, FEES, DEPOSITS, ETC. THE OWNER AND/OR CONTRACTOR SHALL REVIEW AND DETERMINE THAT ALL DIMENSIONS ARE COORDINATED AS REQUIRED WITH ALL OTHER DESIGN PROFESSIONALS DRAWINGS AND SHOP DRAWINGS FOR PROJECT PRIOR TO FABRICATION OF MATERIALS OR THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE SELLER/SUBCONTRACTOR AND ENGINEER OF RECORD PRIOR TO FABRICATION. PRODUCTS SHIPPED TO OWNER/ CONTRACTOR SHALL BE INSPECTED IMMEDIATELY UPON ARRIVAL. THE SHEET LEDGES, RAINPITS, AND MASONRY LEDGES ARE VITAL TO THE PROPER FIT OF THE STEEL CONSTRUCTION. OWNER/ CONTRACTOR SHALL FIELD VERIFY ALL TO BE AS SHOWN ON DRAWINGS. IF THEY ARE NOT IN COMPLIANCE WITH THE DRAWINGS, OWNER/ CONTRACTOR SHALL CONTACT SELLER/SUBCONTRACTOR PRIOR TO START OF STEEL ERECTION. ANY OMISSIONS AND/OR CONFLICTS WITH PLANS SHALL BE REPORTED TO METAL BUILDING COMPANY SO THAT THEY CAN BE RESOLVED PRIOR TO PROCEEDING WITH WORK. DO NOT SCALE DRAWINGS - IF A REQUIRED DIMENSION IS MISSING PLEASE CONTACT THE METAL BUILDING COMPANY AND/OR ENGINEER OF RECORD. NO MODIFICATIONS TO PLANS SHALL BE MADE WITHOUT THE PERMISSION OF METAL BUILDING COMPANY AND ENGINEER OF RECORD. MODIFICATIONS REQUIRED DUE TO FIELD CONDITIONS OR OTHER CONTRACTORS OR ITEMS THAT WHICH MAY ADVERSELY AFFECT THE STRUCTURE, THE WORK PERSONS AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION. THE CONTRACTOR/ OWNER SHALL TAKE ALL NECESSARY STEPS TO PROTECT THE STRUCTURE, THE WORK PERSONS AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION. IF ANYTHING IN THESE DRAWINGS CONFLICTS WITH THE CONTRACT, THE TERMS OF THE CONTRACT SHALL GOVERN. TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR (U.N.O.) IN CONFORMANCE WITH THE DESIGN CRITERIA. THE OWNER AND/OR CONTRACTOR SHALL TEMPORARILY BRACE AND/ OR SHORE EXISTING AND NEW CONSTRUCTION AS REQUIRED TO ENSURE THE STRUCTURAL STABILITY IS NOT COMPROMISED IF DEMOLITION IS INVOLVED. BRACING AND/ OR SHALL REMAIN IN PLACE UNTIL THE STRUCTURAL WORK IS COMPLETE AND HAS BEEN INSPECTED BY A TESTING AGENCY AND IS CERTIFIED TO BE IN SUBSTANTIAL COMPLIANCE WITH PLANS AND SPECIFICATIONS. EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE COORDINATION BETWEEN THESE DRAWINGS AND THE BOUND STRUCTURAL SPECIFICATIONS. IF A DISCREPANCY IS DISCOVERED, THE OWNER/ CONTRACTOR SHALL, IN WRITING, REQUEST A CLARIFICATION IN THE ABSENCE OF SAID REQUEST, THE MORE STRINGENT REQUIREMENT SHALL GOVERN. ALL CELLS OF CMU WALLS IN CLIMATE CONTROLLED BUILDING WHICH ARE NOT GROUTED SHALL BE FILLED WITH PERLITE, VERMICULITE, OR POLYURETHANE FOAMED-IN-PLACE AS SPECIFIED BY THE LATEST ADOPTED EDITION ON THE INTERNATIONAL ENERGY CONSERVATION CODE. AREAS WITHIN HURRICANE-PRONE REGIONS LOCATED WITHIN 1 MILE OF THE COASTAL MEAN HIGH WATER LINE WHERE THE BASIC DESIGN WIND SPEED, V, IS 130MPH OR GREATER; OR IN ALL AREAS WHERE THE BASIC DESIGN WIND SPEED IS 140MPH OR GREATER SHALL MEET THE REQUIREMENTS FOR WIND BORNE DEBRIS REGION. GLAZING IN BUILDINGS IN AREAS THAT MEET THE CRITERIA FOR WIND BORNE DEBRIS REGION SHALL BE IMPACT RESISTANT OR PROTECTED WITH AN IMPACT RESISTANT COVERING MEETING THE LARGE MISSILE TEST (ASTM E 1996) FOR OPENINGS LOCATED WITHIN 30FT OF GRADE OR SHALL MEET THE REQUIREMENTS FOR SMALL MISSILE TEST (ASTM E 1996) FOR OPENINGS LOCATED MORE THAN 30FT ABOVE GRADE.

- THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH. THE GENERAL CONTRACTOR SHALL COORDINATE ALL DESIGN PROFESSIONALS DRAWINGS AND SPECIFICATIONS, FOR ITEMS WHICH MAY ADVERSELY AFFECT THE STRUCTURE AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND/OR OMISSIONS. SUBMITTAL SETS SHALL CONSIST OF A MAXIMUM OF 1 SET/PA AND 2 BLUE LINES, ADDITIONAL BLUE LINES WILL BE DISCARDED. SUBMITTALS TO ENGINEER OF RECORD FOR REVIEW MUST CONTAIN THE GENERAL CONTRACTORS STAMP SIGNIFYING HIS REVIEW/ACCEPTANCE. SUBMITTALS SENT WITHOUT THE GC'S REVIEW STAMP WILL BE RETURNED AT HIS EXPENSE AND WITHOUT REVIEW.

STRUCTURAL NOTES

- 1. TEMPORARY BRACING SHOULD BE PROVIDED TO RESIST WIND LOADING ON STRUCTURAL COMPONENTS AND STRUCTURAL ASSEMBLIES DURING ERECTION AND CONSTRUCTION PHASE. NEVER ALLOW YOUR FOOT TO COME IN CONTACT WITH, OR WATER RUNOFF FROM, ANY DISSIMILAR METAL, INCLUDING, BUT NOT LIMITED TO, COPPER, LEAD, OR GRAPHITE. THIS INCLUDES COPPER AND ARSENIC SALTS USED IN TREATED LUMBER, AND CALCIUM USED IN CONCRETE, MORTAR, AND GROUT. SCOPES OF WORK FOR OTHERS WHOSE LATERAL LOADS WILL BE TRANSFERRED INTO STEEL MEMBER PROVIDED BY METAL BUILDING COMPANY SHALL BE TEMPORARILY BRACED BY OTHERS IN A METHOD THAT DOES NOT INTERFERE WITH ERECTION OF STEEL, UNTIL STEEL ERECTION IS COMPLETE. THE UNCOATED MINIMUM STEEL THICKNESS OF THE COLD-FORMED PRODUCTS AS DELIVERED SHALL NOT BE LESS THAN 95% PERCENT OF THE DESIGN THICKNESS. THICKNESS MEASUREMENTS MAY BE MADE ANYWHERE ACROSS THE WIDTH OF THE SHEET, BUT NOT CLOSER TO THE EDGES THAN THE MINIMUM DISTANCES SPECIFIED IN THE RELEVANT ASTM SPECIFICATIONS. THICKNESS AT BENDS, SUCH AS CORNERS, MAY BE LESS THAN 95% OF DESIGN THICKNESS, DUE TO COLD-FORMING EFFECTS, AND STILL BE ACCEPTABLE. RECESSED ENTRIES AND BREEZEWAYS MUST BE RECESSED BELOW FINISHED FLOOR TO AVOID POTENTIAL WATER PROBLEMS. ROLL-UP DOORS LOCATED IN BREEZE WAY NEED TO BE INSTALLED IN RECESSED AREA. IF A CHANGE IS MADE BY OWNER/ CONTRACTOR, SELLER/SUBCONTRACTOR MUST BE NOTIFIED IMMEDIATELY. ALL ERECTION, FABRICATION, WORKMANSHIP AND INSTALLATION SHALL BE IN ACCORDANCE WITH INSTALLATION PROCEDURES MANUAL AND/OR INDUSTRY STANDARDS APPROVED BY SELLER/SUBCONTRACTOR AND THE ENGINEER OF RECORD.

ROOF SYSTEMS: MBCI OR EQUAL

- 1. ROOFING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECS, ALONG WITH SELLER/SUBCONTRACTOR INSTALLATION PROCEDURES MANUAL. ROOF SHEETS SHOULD BE INSTALLED FROM THE LOWEST STEP-DOWN TO HIGHEST ELEVATION.

INSULATION: BAY INSULATION SUPPLY CO. OR EQUAL

- 1. VINYL-BACKED INSULATION- BY BAY INSULATION CO. OR EQUAL. R-VALUES FOR WINTER CONDITIONS (MEAN 40 DEGREES F.): 3'-0" - 0.6 LB DENSITY FIBERGLASS 3'-0" = 10 3'-5" - 0.6 LB DENSITY FIBERGLASS 3'-0" = 11 4'-0" - 0.6 LB DENSITY FIBERGLASS 3'-0" = 13 6'-0" - 0.6 LB DENSITY FIBERGLASS 3'-0" = 19 2. POLYFOIL FIRE-RATED R-FOIL BY TVM OR EQUAL SINGLE BUBBLE R-VALUES FOR ROOF = 10 DOUBLE BUBBLE R-VALUES FOR ROOF = 10 3. INSULATION SHALL BE INSTALLED PER THE MANUFACTURER'S PUBLISHED INSTRUCTIONS. INSULATION MAY BE INSTALLED IN ONE OR MULTIPLE LAYERS TO MEET THE REQUIRED R-VALUE.

FASTENERS AND ANCHORS

- 1. THE FOLLOWING OUTLINES THE MECHANICAL ANCHORS APPROVED FOR USE ON THIS PROJECT. A. EXPANSION ANCHORS- "KWICK BOLT 3" BY HILTI OR EQUAL. DRILL HOLE IN CONCRETE OR GROUT-FILLED CMU AND REMOVE DUST. THE MIN. HOLE DEPTH MUST EXCEED THE ANCHOR EMBEDMENT PRIOR TO TORQUING BY ONE HOLE DIAMETER. CRIVE THE ANCHOR INTO THE HOLE USING A HAMMER. A MINIMUM OF SIX THREADS MUST BE BELOW THE SURFACE OF THE FIXTURE. TIGHTEN THE NUT TO THE RECOMMENDED INSTALLATION TORQUE (T₁ = 40 lbs.ft.). B. ADHESIVE ANCHORS IN CONCRETE - "HIT HY 150" BY HILTI OR EQUAL. C. ADHESIVE ANCHORS IN GROUT-FILLED BLOCK- "HIT HY 20" BY HILTI OR EQUAL. D. ADHESIVE ANCHORS IN HOLLOW BLOCK- "HIT HY 20" WITH SCREEN TUBES BY HILTI OR EQUAL. E. CONCRETE MASONRY SCREWS- "KWIK CON II" BY HILTI OR EQUAL. F. POWER-ACTUATED FASTENERS (PAF)- "DX" BY HILTI OR EQUAL. 2. ALL FASTENERS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

COLD FORMED STEEL: LGSJ SECTIONS OR EQUAL

- 1. COLD FORM STEEL SECTIONS SHALL CONFORM TO APPLICABLE PROVISIONS OF ASTM A572, ASTM A607 AND/OR ASTM A611. 2. MIN. DELIVERED THICKNESS OF COLD FORMED STEEL CS & ZS

Table with columns: GAGE, DESIGN THICKNESS, FINISH, Fy. Rows for 12, 14, 16, 18 gages.

NOTES: INSIDE RETURN ON PIERS IS 3 1/2" TO 4". VERIFY REQUIRED DIMENSIONS FOR EXTERIOR ROLL UP DOORS.

- 4. LOAD-BEARING STUD TO TRACK CONNECTIONS- THE ENDS OF THE LOAD-BEARING STUDS MUST BE INSTALLED INTO THE TOP AND BOTTOM TRACKS SO THAT THE GAP BETWEEN THE ENDS OF THE STUD AND THE WEB OF THE TRACK IS AS SMALL AS PRACTICABLE AND IN NO CASE GREATER THAN 1/8" AT THE TIME OF INSTALLATION. THE GAP MUST BE LESS THAN 1/8" AFTER THE DEAD LOAD OF THE STRUCTURE IS IN PLACE. 5. ALL BOLTED CONNECTIONS OF COLD FORMED STEEL BEAMS SUPPORTING ROOF LOADING ONLY SHALL BE MADE USING 1/2" DIA. A307 BOLTS OR HIGHER GRADE (U.N.O.). 6. ALL BOLTED CONNECTIONS OF COLD FORMED STEEL BEAMS SUPPORTING FLOOR LOADING SHALL BE MADE USING A325 BOLTS OR HIGHER GRADE. (U.N.O.) 7. IN THE EVENT THAT THE BOLT HOLES IN THE COLD FORMED STEEL BEAMS DO NOT ALIGN WITH THE SUPPORTING CONNECTION MEMBER IT IS ACCEPTABLE TO SUBSTITUTING #12 TEK SCREWS FOR THE FOLLOWING SIZE/GRADE BOLTS. * (4) #12 TEK SCREWS PER EACH MIS-ALIGNED 1/2" DIAMETER A307 BOLT * (6) #12 TEK SCREWS PER EACH MIS-ALIGNED 1/2" DIAMETER A325 BOLT

HOT ROLLED STEEL

- 1. DESIGN OF STRUCTURAL STEEL ELEMENTS WAS COMPLETED UNDER THE REQUIREMENTS SET FORTH IN THE "MANUAL OF STEEL CONSTRUCTION- ALLOWABLE STRESS DESIGN (LATEST EDITION)" 2. MATERIAL SPECIFICATIONS: A. ALL STEEL SHALL BE DOMESTICALLY PRODUCED. B. ASTM A36- ROLLED SHAPES, PLATES, AND BARS. Fy=36ksi C. ASTM A992- WIDE FLANGE SECTIONS. Fy=50ksi D. ASTM A53, TYPE E, GRADE B - PIPE. Fy=36ksi E. ASTM A500 GRADE B - TUBES. Fy=46ksi F. ASTM F1554 (A36) - ANCHOR BOLTS, RODS, NUTS & WASHERS. G. ASTM A108 GRADE 1015 THROUGH 1020 - COLD FINISHED CARBON STEEL, AWS D1. J, TYPE B - HEADED STUDS. H. ASTM A325, TYPE N - BOLTED STRUCTURAL CONNECTIONS. I. ASTM A307 - FOR BOLTED CONN. OF LESS THEN 5/8" DIA. J. E70XX ELECTRODE (LOW HYDROGEN) - WELDED CONNECTIONS (U.N.O.). K. WELDED CONNECTIONS SHALL BE A MIN. OF 3/16" FILLET WELD ALL AROUND FOR CONNECTING MEMBERS UP TO 1/4" THICK. USE 1/4" FILLET WELD FOR ALL OTHER MEMBER THICKNESSES (U.N.O.). 3. ALL BOLTED CONNECTIONS SHALL BE "SNUG-TIGHT" AS DEFINED IN THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" (LATEST ADOPTED EDITION) BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSG). (U.N.O.) 4. BOLTED CONNECTIONS INDICATED TO BE "SLIP-CRITICAL" (SC) SHALL BE INSTALLED, TIGHTENED, TESTED, AND INSPECTED AS OUTLINED IN THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" (LATEST ADOPTED EDITION) BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSG). (U.N.O.) 5. BRACE AND/ OR STEEL IN ALIGNMENT UNTIL OTHER PARTS OF CONSTRUCTION NECESSARY FOR PERMANENT SUPPORT ARE COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TEMPORARY SHORING AS REQUIRED FOR THE STABILITY OF THE STEEL FRAME UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN COMPLETED AND BUILDING IS ENCLOSED. 6. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY. 7. GROUT FOR COLUMN BASE PLATES AND PRESET BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT. (5000Psi MIN.) 8. SUBJECT DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOADS AND TOLERANCES. 9. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF ASTM A123. STRUCTURAL STEEL SHALL RECEIVE A SHOP COAT OF PRIMER COLOR AS DIRECTED BY ARCHITECT) EXCEPT AREAS THAT WILL RECEIVE SPRAY-ON FIRE PROTECTION. 10. BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR FOR THE REACTIONS SHOWN ON THE FRAMING PLANS, SIGNED AND SEALED SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. CLEARLY INDICATES THE ALLOWABLE LOAD CAPACITY OF EACH UNIQUE CONNECTION, WHERE REACTION IS NOT INDICATED ON THE PLANS, THE CONNECTION SHALL BE DESIGNED FOR THE MAXIMUM SHEAR CAPACITY OF THE BEAM, FOR THE GIVEN SPAN.

STRUCTURAL STEEL

- 1. A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER. 2. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN STRICT CONFORMANCE WITH THE LATEST ADOPTED EDITION OF THE AISC MANUAL. DESIGN OF STRUCTURAL STEEL ELEMENTS WAS COMPLETED UNDER THE REQUIREMENTS SET FORTH IN THE "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN (LATEST EDITION)".

STEEL DECKING

- 1. THE REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE AISI SECTION A3, SHALL GOVERN FABRICATION OF THE SPECIFIED STEEL DECK. 2. THE MINIMUM YIELD STRENGTH OF STEEL USED, SHALL BE, 33KSI (230 MPa). 3. ALL FIELD WELDING OF DECK SHALL BE IN STRICT CONFORMANCE WITH ANSI/AISC 1.3 STRUCTURAL WELDING CODE. 4. GALVANIZING SHALL CONFORM TO ASTM-A653, STRUCTURAL QUALITY, AND FEDERAL SPEC. QQ-5-775. 5. THE VALUES LISTED IN THE TABLE SHOWN BELOW IS FROM THE MBCI ULTRA-DEK TECHNICAL-INSTALLATION INFORMATION MANUAL, AND REPRESENTS THE MINIMUM ROOF DECK SECTION PROPERTIES THAT ARE REQUIRED BY DESIGN.

ROOF DECK table with columns: DECK TYPE, DESIGN THICK (in), lxe in 4ft, Sxe in 3ft, lxe in 4ft, Sxe in 3ft, Fy (ksi). Rows for 24x26ga, 24x24ga, 24x22ga ULTRA-DEK.

COMPOSITE FLOOR DECK table with columns: DECK TYPE, DESIGN THICK (in), lp 4 in/ft, ln 4 in/ft, Sp 3 in/ft, Sn 3 in/ft, STL STRENGTH, Fy=50ksi. Rows for 1.5VL22, 1.5VL20, 1.5VL18, 2.0VL22, 2.0VL20, 2.0VL18, 2.0VL16, 3.0VL22, 3.0VL20, 3.0VL18.

- 6. COMPOSITE STEEL FLOOR DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE AS RECOMMENDED BY THE MANUFACTURER, WITH MAXIMUM SPACING NOT TO EXCEED 24" O.C. 7. THE VALUES LISTED IN THE TABLE SHOWN BELOW IS FROM THE VULCRAFT METAL DECK PRODUCT MANUAL, AND REPRESENTS THE MINIMUM COMPOSITE FLOOR DECK SECTION PROPERTIES THAT ARE REQUIRED BY DESIGN. 8. NON-COMPOSITE STEEL FLOOR DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE AS RECOMMENDED BY THE MANUFACTURER, WITH MAXIMUM SPACING NOT TO EXCEED 24" O.C. 9. STEEL USED TO MANUFACTURE THE NON-COMPOSITE METAL FLOOR DECKING SHALL CONFORM TO THE REQUIREMENTS OF ASTM-A1008 GRADES C, D, OR E, AND/OR A653 STRUCTURAL QUALITY. 10. THE VALUES LISTED IN THE TABLE SHOWN BELOW IS FROM THE VULCRAFT METAL DECK PRODUCT MANUAL, AND REPRESENTS THE MINIMUM NON-COMPOSITE FLOOR DECK SECTION PROPERTIES THAT ARE REQUIRED BY DESIGN.

NON COMPOSITE FLOOR DECK table with columns: DECK TYPE, DESIGN THICK (in), lp 4 in/ft, ln 4 in/ft, Sp 3 in/ft, Sn 3 in/ft, STL STRENGTH, Fy=50ksi. Rows for 0.6C26, 0.6C24, 0.6C22.

MINIMUM STANDARD FOR ELEVATED FLOOR SLABS

- 1. ALL CONCRETE SHALL HAVE THE FOLLOWING MIN. PROPERTIES: LOCATION, 28 DAY STRENGTH, SLUMP, MAX AGGR. ELEVATED SLABS FORMED AND POURED, 4,000 psi, 4" ± 1", 1". ELEVATED SLABS FORMED W/ W/L DECK, 4,000 psi, 4" ± 1", 1". A. SLUMP FOR RAMPS AND SLOPING SURFACES SHALL NOT EXCEED 4". B. COLD JOINTS ARE NOT RECOMMENDED - ALTHOUGH IF REQUIRED THEY SHOULD BE PLACED A MINIMUM OF 2'-0" OFF CENTERLINE OF COLUMNS. 2. CONCRETE PROPERTIES SHALL BE VERIFIED THROUGH INDUSTRY STANDARD TESTING PROCEDURES BY A CERTIFIED TESTING AGENCY. MIN. TEST REQUIRED SHALL INCLUDE SLUMP AND CYLINDER BEAKS FOR COMpressive STRENGTH. FINDINGS SHALL BE SUBMITTED TO THE ARCH./ENG. FOR REVIEW. 3. CONCRETE WORK SHALL CONFORM TO LATEST EDITIONS OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ACI 315 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT. 4. CONCRETE MIX DESIGN SHALL MEET THE FOLLOWING CRITERIA: A. PROPOSED MIX DESIGN SHALL BE ACCORDANCE WITH ACI 301 METHOD 1 OR METHOD 2. B. ENTRAPPED AIR CONTENT SHALL NOT EXCEED 3%. C. ADMIXTURES USED TO ENTRAIN AIR ARE NOT ACCEPTABLE. D. ALL CONCRETE TO BE NORMAL WEIGHT WITH A DESIGN STRENGTH AT 28 DAYS. 5. SITE ADDED WATER IS NOT ACCEPTABLE. HOLD BACK WATER CLEARLY IDENTIFIED TO BE ADDED AT THE SITE AS SPECIFIED IN EITHER THE MIX DESIGN AND/OR THE BATCH PLANT LOG SHALL BE CONSIDERED ACCEPTABLE. IN THE ABSENCE SPECIFIED HOLD BACK WATER, THE MIX WILL RESULT IN A REJECTION OF THE RESULTS BY THE ENGINEER OF RECORD. 6. THE USE OF MIX DESIGNS WITH EITHER SLAG OR FLY ASH ARE NOT ACCEPTABLE FOR ALL EXPOSED SURFACES, SLABS ON GROUND OR ELEVATED SLABS, AND WHERE THE SURFACE IS INTENDED TO BE EXPOSED. 7. THE USE OF RIDE ON POWER TROWELS IS STRICTLY PROHIBITED ON ELEVATED SLABS. THE USE OF WALK BEHIND POWER TROWELS ARE RECOMMENDED. 8. CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF THE FORMS AND SHORING AND FOR SAFE PRACTICE IN THEIR USE AND REMOVAL. 9. THE VALUES IN THE TABLE SHOWN BELOW IS FROM THE VULCRAFT METAL DECK PRODUCT MANUAL AND REPRESENTS THE RECOMMENDED WELDED WIRE FABRIC.

Table with columns: DECK TYPE, TOTAL SLAB DEPTH, RECOMMENDED WELDED WIRE FABRIC. Rows for 1.5 VL, 2VL, 3VL, 3VL.

NOTE

THE FOLLOWING METHODS OF REINFORCEMENT SHALL BE ACCEPTABLE ALTERNATES TO THE WELDED WIRE FABRIC SPECIFIED FOR THE ELEVATED SLABS ABOVE

- 1. CONCRETE IN ACCORDANCE WITH ASTM C 1116, TYPE I, CONTAINING STEEL FIBERS MEETING THE CRITERIA OF ASTM A820, TYPE I, TYPE II OR TYPE V, AT A DOSAGE RATE DETERMINED BY THE FIBER MANUFACTURER FOR THIS APPLICATION, BUT NOT LESS THAN 25 LB/CU YD. 2. CONCRETE IN ACCORDANCE WITH ASTM C 1116, TYPE III CONTAINING MACROSYNTHETIC FIBERS MEETING THE CRITERIA OF ASTM D7508 AT A DOSAGE RATE DETERMINED BY THE FIBER MANUFACTURER FOR THE APPLICATION, BUT NOT LESS THAN 4 LB/CU YD.

CONCRETE WORK

- 1. MONOLITHIC SLAB FINISHES: THE FOLLOWING REQUIREMENTS ARE BASED ON THE LATEST FLOOR FLATNESS (FF) FLOOR LEVELNESS (FL) VALUES/ METHODS. BIDS FOR THIS WORK SHALL REFLECT THESE REQUIREMENTS AND ENFORCEMENT THEREOF CAN BE EXPECTED. A. NON-CRITICAL FLOOR TOLERANCE a. FLOAT-FINISH (FLT-FN) b. SPECIFIED OVERALL VALUE: FF25/FL20 c. MINIMUM LOCAL VALUE: FF25/FL20 d. APPLY FLOAT FINISH TO MONOLITHIC SLAB SURFACES THAT ARE TO RECEIVE MUD SET TILE AND OTHER THICK FINISHES, AND TO SLAB SURFACES WHICH ARE TO BE COVERED WITH WATERPROOFING MEMBRANE. B. TYPICAL CORRIDOR OR NORMAL SIZED ROOMS (100-600 SF) a. TROWEL FINISH I (TR-FN1) b. SPECIFIED OVERALL VALUE: FF30/FL23 c. MINIMUM LOCAL VALUE: FF25/FL20 d. APPLY TROWEL FINISH TO MONOLITHIC SLAB SURFACES THAT ARE TO RECEIVE RESILIENT FLOORING, CARPET, PAINT, OR OTHER THIN FILM FINISH COATING SYSTEMS. 2. ELEVATED SLABS SHALL HAVE A SPECIFIED OVERALL VALUE OF FF22 AND FF27 AND A MINIMUM LOCAL OF FF20 WITH NO FL NUMBER DERIVED. MINIMUM THICKNESS OF SLAB ON GRADE IS THE GREATER OF 3" OR 0.8 TIMES ANCHOR EMBEDMENT SPECIFIED IN CONSTRUCTION DOCUMENTS (SUCH USE OF HILTI KWIK BOLT 3). 3. CONTROL JOINTS SHOULD BE PLACED A MINIMUM 2'-0" OFF THE CENTERLINE OF COLUMNS. IF THE DISTANCE BETWEEN COLUMNS IS LESS THAN 4'-0" BUT GREATER THAN 2'-6" THEN PLACE AT MID-POINT OTHERWISE CONTACT ENGINEER OF RECORD.

SITE REQUIREMENT NOTES

- 1. OWNER/ CONTRACTOR SHALL ENSURE THAT SITE IS STABILIZED AND MAINTAINED CURING HEAVY PRECIPITATION. OWNER/ CONTRACTOR TO PROVIDE MATERIAL STORAGE AREA ON SITE OTHER THAN BUILDING BEING ERECTED. 2. OWNER/ CONTRACTOR SHALL PROVIDE A CONSTRUCTION DUMPSTER UNIT ON THE JOBSITE AT NO COST TO SELLER/ CONTRACTOR. OWNER/ CONTRACTOR TO PROVIDE TEMPORARY POWER TO ALLOW FOR A MAXIMUM POWER LEAD RUN OF 200 FEET TO EACH STRUCTURE BEING ERECTED. 3. TEMPORARY POWER MUST MEET ALL APPLICABLE CODES AND SAFETY REQUIREMENTS. OWNER/ CONTRACTOR MUST ENSURE THAT BUILDING PADS ARE BROOM CLEAN AND FREE OF DEBRIS PRIOR TO SELLER/ SUBCONTRACTOR CREW BEGINNING INSTALLATION SEQUENCE AS AGREED. 4. OWNER/ CONTRACTOR SHALL ENSURE THAT THE SITE AND ALL SIDES OF BUILDING ARE ACCESSIBLE WITH EQUIPMENT AND FREE FROM ANY OBSTRUCTIONS TO DELIVERY OR REMOVAL. 5. CLEANING OF MATERIALS, INCLUDING BUT NOT LIMITED TO WALL PANELS AND STRUCTURAL MATERIALS, IS NOT THE RESPONSIBILITY OF SELLER/ SUBCONTRACTOR. 6. THE OWNER CONTRACTOR SHALL PROPERLY PROTECT THE WORK FOR PUBLIC SAFETY AND AGAINST ACCIDENTS, WEATHER OR ANY OTHER HAZARDS WITH LIGHTS, GUARDRAILS OR BARRICADES AS APPLICABLE (INCLUDES FALL PROTECTION ON MULTI-STORY BUILDINGS).

MAINTENANCE NOTES

- 1. ROOF MAINTENANCE GUIDELINES A. WALK ON THE FLAT OF PANEL NEAR THE STRUCTURAL SUPPORTS. B. KEEP ROOF, GUTTERS AND DOWNSPOUTS FREE OF DEBRIS. C. INSPECT ROOF FOR DAMAGE AFTER HEAVY STORM. D. REMOVE EXCESS ICE AND SNOW ACCUMULATIONS AS NECESSARY. E. INSPECT AND RESEAL AS NECESSARY ALL ROOF CURBS AND OTHER PENETRATIONS WITH URETHANE SEALANT. F. ALWAYS GET MANUFACTURER'S APPROVAL BEFORE MAKING ANY MODIFICATION TO THE ROOF. WHEN PERFORMING ROOF MAINTENANCE ALWAYS TAKE THE FOLLOWING PRECAUTIONS. A. USE FALL PROTECTION AND OTHER SAFETY EQUIPMENT AS REQUIRED. B. DO NOT WALK ON THE ROOF FLASHING SUCH AS GUTTER, RAKE, HIP, OR RIDGE FLASHING. C. DO NOT WALK ON LIGHT TRANSMITTING PANELS (LTP). THEY DO NOT SUPPORT A PERSON'S WEIGHT. D. GUARD ALL LTPs AND ROOF OPENINGS. E. STEP ONLY IN THE PANEL FLAT DIRECTLY ON OR IN CLOSE PROXIMITY TO A SUPPORTING ROOF STRUCTURAL. KEY INSPECTION TIMES: A. AFTER A FIRE, VANDALISM, OR KNOWN DAMAGE TO AN ADJACENT ROOF AREA. B. EXPOSURE TO SEVERE WEATHER CONDITIONS, INCLUDING HIGH WINDS, HAIL OR ABNORMALLY HEAVY RAINS OR ICE AND SNOW. C. AFTER OTHER TRADES HAVE BEEN ON THE ROOF FOR ANY REASON, INSPECT THE ROOF FOR DAMAGE CAUSED BY WORKERS INCLUDING CHEMICAL OR SOLVENT SPILLS, SCRATCHES IN THE FINISH, EXCESSIVE ROOF TRAFFIC, AND PUNCTURES. MAKE SURE THAT ANY DEBRIS OR SCRAP LEFT BEHIND BY THE WORKERS IS REMOVED FROM THE ROOF IMMEDIATELY. AVOID USING CUTOFF SAWS AND WELDING EQUIPMENT OVER THE ROOF IN CASES WHERE THIS IS NOT POSSIBLE, THE ROOF MUST BE PROTECTED. 2. FOOT TRAFFIC: KEEP FOOT TRAFFIC TO A MINIMUM. HEAVY FOOT TRAFFIC CAN CAUSE PONDING ON LOW PITCHED ROOFS. THIS IS A PARTICULARLY TRUE JUST ABOVE THE EAVE AND AT ENDLAPS. ALWAYS WALK IN A FLAT OF PANEL NEAR A SUPPORTING ROOF STRUCTURAL. DO NOT WALK ON TRIM OR IN GUTTERS. ON BARE GALVALUME ROOFS, EXCESSIVE FOOT TRAFFIC IS PLANNED FOR A ROOF. PROVISIONS SHOULD BE MADE FOR A PROPERLY DESIGNED AND INSTALLED ROOF WALKWAY SYSTEM. 3. DRAINAGE: KEEP ROOF FREE OF DEBRIS AND KEEP DEBRIS OUT OF GUTTER TO ALLOW WATER TO QUICKLY DRAIN FROM ROOF. DO NOT USE WOOD BLOCKING TO HOLD UP EQUIPMENT OFF PANEL SEAMS. THIS BLOCKS THE FLOW OF WATER AND HOLDS MOISTURE. DO NOT ALLOW ROOFTOP AC UNITS OR EVAPORATIVE COOLERS TO DRAIN onto the ROOF. ANYTHING THAT TRAPS OF HOLDS MOISTURE ON A ROOF WILL CAUSE PREMATURE CORROSION. 4. POST-ERECTION ROOF CLEANING: AFTER THE ROOF INSTALLATION IS COMPLETE, ALL FITTINGS, SHAVINGS, ETC. FROM FASTENER INSTALLATION, ETC. SHALL BE SWEEP COMPLETELY CLEAR OF THE ROOF PANELS. IF THIS DOES NOT HAPPEN, THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY RESULTING CORROSION. 5. DEBRIS REMOVAL: ANY FOREIGN DEBRIS SUCH AS SAWDUST, DIRT, LEAVES, ANIMAL DROPPINGS, ETC. WILL CAUSE CORROSION OF THE ROOF, GUTTERS, TRIM, ETC. IF LEFT ON BUILDING SURFACE FOR A LONG ENOUGH TIME, THE ROOF SHOULD BE PERIODICALLY INSPECTED FOR SUCH CONDITIONS AND IF FOUND, THEY SHOULD BE RECTIFIED IN A MANNER CONSISTENT WITH THESE ROOF MAINTENANCE GUIDELINES. NEVER ALLOW TREATED LUMBER OR CONCRETE/ MORTAR/ GROUT TO COME IN CONTACT WITH ROOF PANELS, ESPECIALLY GALVALUME, FOR EXTENDED PERIOD OF TIME.

- 6. CORRIDOR FIRE RESISTANCE RATING IT IS THE INTENT OF DESIGN TO KEEP OCCUPANCY LOAD SERVED BY A CORRIDOR LESS THAN OR EQUAL TO COMPLY WITH ZERO RATING IN A BUILDING WITHOUT SPRINKLERS. FIRE RATED DOOR AND HARDWARE FIRE DOORS AND FRAME SHALL BE LABELED SHOWING THE NAME OF MANUFACTURER, THE NAME OF THE THIRD-PARTY INSPECTOR AGENCY, AND THE FIRE PROTECTION RATING. ALL RATED DOORS ARE TO BE INSTALLED WITH A POSITIVE STRIKE DEVICE, AND BE SELF-CLOSING. 7. PROTECTION RATINGS AND LIMITING SIZES OF WIRELASS OF TYPE, MINIMUM (HOURS), MAX. AREA (INCHES), MAX. HGT. (INCHES), MAX. WID. (INCHES). FIRE BARRIERS: 3 HOUR, 1 1/2, 0, 0, 0. 2 HOUR, 1 1/2, 100, 33, 10. 1 HOUR, 1, 100, 33, 10. RATED EXTERIOR WALLS: 3 HOUR, 1 1/2, 0, 0, 0. 2 HOUR, 1 1/2, 0, 0, 0. 1 HOUR, 3/4, 1296, 54, 54. FIRE PARTITIONS: 1 HOUR, 1/3, 1296, 54, 54. 8. HARDWARE REQUIREMENTS FOR RATED DOORS 1. DOOR SHALL BE SELF OR AUTOMATIC CLOSING. 2. DOORS SHALL BE PROVIDED WITH AN ACTIVE LATCH BOLT THAT WILL SECURE THE DOOR WHEN IT IS CLOSED. DOOR AND FRAME SHALL BE LABELED SHOWING NAME OF MANUFACTURER AND THE THIRD-PARTY INSPECTOR AGENCY. 9. COMMON PATH OF TRAVEL IF A BUILDING'S OCCUPANCY LOAD IS LESS THAN 50 THEN PERSONNEL DOORS ARE ALLOWED TO SWING BOTH IN THE DIRECTION OF EGRESS AND AGAINST THE DIRECTION OF EGRESS THIS INSTALLING EXIT LIGHTS ON BOTH SIDE OF PERSONAL DOORS IN CORRIDORS WOULD MAKE THE CORRIDOR A TWO-WAY PATH VERSUS A SINGLE-DIRECTION PATH. 10. ACCESSIBLE AREA REQUIREMENTS HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPENING DEVICES SHALL HAVE A LEVER OPERATED MECHANISM. IF THE DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 9 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH MEASURED TO THE LEADING EDGE OF THE DOOR. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS: EXTERIOR DOOR <= 8.5 LBF. INTERIOR DOOR < 5 LBF. REFERENCE THE DOOR DETAIL PAGE FOR DETAILS WITH REGARDS TO PROPER INSTALLATION.

CONTINGENCIES

- 1. THE CONTRACTOR IS TO PROVIDE AN ALLOWANCE IN THE BASE BID FOR THE CONTINGENCIES SPECIFIED IN THIS SECTION. 2. THE CONTINGENCIES ARE TO INCLUDE ALL COSTS ASSOCIATED WITH THE INSTALLATION OF THE STRUCTURAL COMPONENT, THIS INCLUDES BUT NOT LIMITS TO, THE FOLLOWING: CONSTRUCTION MANAGEMENT FEES, MATERIAL, DETAILING, FABRICATION, SHIPPING, INSTALLATION, AND INSPECTION COSTS. 3. CONCRETE: 5 C.Y. 4. REINFORCING STEEL: 100 FEET, #6 BAR 5. STRUCTURAL STEEL: 3.0 TON 6. C.F.M.F.: (30 600.5) (68 68 107.0) (5 50.05, 100 FT. OF 600.1-125.54. (20) 2'0 x 1'-0" LG. 7. ANCHORS: 1. ALL CONTINGENCIES TO BE FABRICATED AND INSTALLED AS DIRECTED BY THE SER.

MAINTENANCE NOTES

- TERMITE PROTECTION ALL BUILDING PADS ARE TO BE PROTECTED FOR TERMITES AS REQUIRED BY GOVERNING CODE AND LOCAL JURISDICTION. FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS CONSTRUCTION TYPES II-B & V-B ALL BUILDING ELEMENTS RATINGS ARE ZERO (0). FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS CONSTRUCTION TYPES II-B & V-B (ALL USE GROUPS EXCEPT H) REQUIRE A MINIMUM FIRE SEPARATION DISTANCE OF TEN (10) FEET FOR A ZERO (0) RATING. PERCENTAGE OF OPENINGS IN EXTERIOR WALLS BUILDINGS WHOSE EXTERIOR WALL AND STRUCTURAL FRAME ARE NOT REQUIRED TO BE FIRE-RESISTANCE RATED SHALL BE PERMITTED TO HAVE UNLIMITED UNPROTECTED OPENINGS. FIRE BARRIERS/ FIRE WALLS/ STRUCTURE DESIGN W/O SPRINKLERS STORAGE OCCUPANCIES DESIGNED WITHOUT SPRINKLER SYSTEM CAN'T BE MORE THAN 3 STORIES CONTAIN FIRE AREA GREATER THAN 12,000 SF, OF HAVE COMBINED FIRE AREAS GREATER THAN 24,000 SF. OUR TYPICAL DESIGN STANDARD IS TO USE 3 HOUR FIRE BARRIERS TO DIVIDE BUILDING INTO FIRE AREAS AND FIRE WALLS TO SEPARATE LARGE STRUCTURES INTO SEPARATE BUILDING TO AVOID EXCEEDING MAXIMUM COMBINED FIRE AREAS.

CORRIDOR FIRE RESISTANCE RATING

- IT IS THE INTENT OF DESIGN TO KEEP OCCUPANCY LOAD SERVED BY A CORRIDOR LESS THAN OR EQUAL TO COMPLY WITH ZERO RATING IN A BUILDING WITHOUT SPRINKLERS. FIRE RATED DOOR AND HARDWARE FIRE DOORS AND FRAME SHALL BE LABELED SHOWING THE NAME OF MANUFACTURER, THE NAME OF THE THIRD-PARTY INSPECTOR AGENCY, AND THE FIRE PROTECTION RATING. ALL RATED DOORS ARE TO BE INSTALLED WITH A POSITIVE STRIKE DEVICE, AND BE SELF-CLOSING.

Table with columns: PROTECTION RATINGS, LIMITING SIZES OF WIRELASS OF TYPE, MINIMUM (HOURS), MAX. AREA (INCHES), MAX. HGT. (INCHES), MAX. WID. (INCHES). Rows for FIRE BARRIERS, RATED EXTERIOR WALLS, FIRE PARTITIONS.

HARDWARE REQUIREMENTS FOR RATED DOORS

- 1. DOOR SHALL BE SELF OR AUTOMATIC CLOSING. 2. DOORS SHALL BE PROVIDED WITH AN ACTIVE LATCH BOLT THAT WILL SECURE THE DOOR WHEN IT IS CLOSED. DOOR AND FRAME SHALL BE LABELED SHOWING NAME OF MANUFACTURER AND THE THIRD-PARTY INSPECTOR AGENCY.

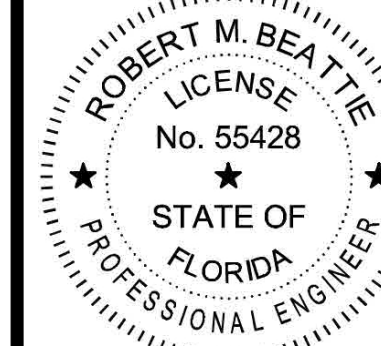
COMMON PATH OF TRAVEL

IF A BUILDING'S OCCUPANCY LOAD IS LESS THAN 50 THEN PERSONNEL DOORS ARE ALLOWED TO SWING BOTH IN THE DIRECTION OF EGRESS AND AGAINST THE DIRECTION OF EGRESS THIS INSTALLING EXIT LIGHTS ON BOTH SIDE OF PERSONAL DOORS IN CORRIDORS WOULD MAKE THE CORRIDOR A TWO-WAY PATH VERSUS A SINGLE-DIRECTION PATH.

ACCESSIBLE AREA REQUIREMENTS

HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPENING DEVICES SHALL HAVE A LEVER OPERATED MECHANISM. IF THE DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 9 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH MEASURED TO THE LEADING EDGE OF THE DOOR. THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN A DOOR SHALL BE AS FOLLOWS: EXTERIOR DOOR <= 8.5 LBF. INTERIOR DOOR < 5 LBF. REFERENCE THE DOOR DETAIL PAGE FOR DETAILS WITH REGARDS TO PROPER INSTALLATION.

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08/04/2023

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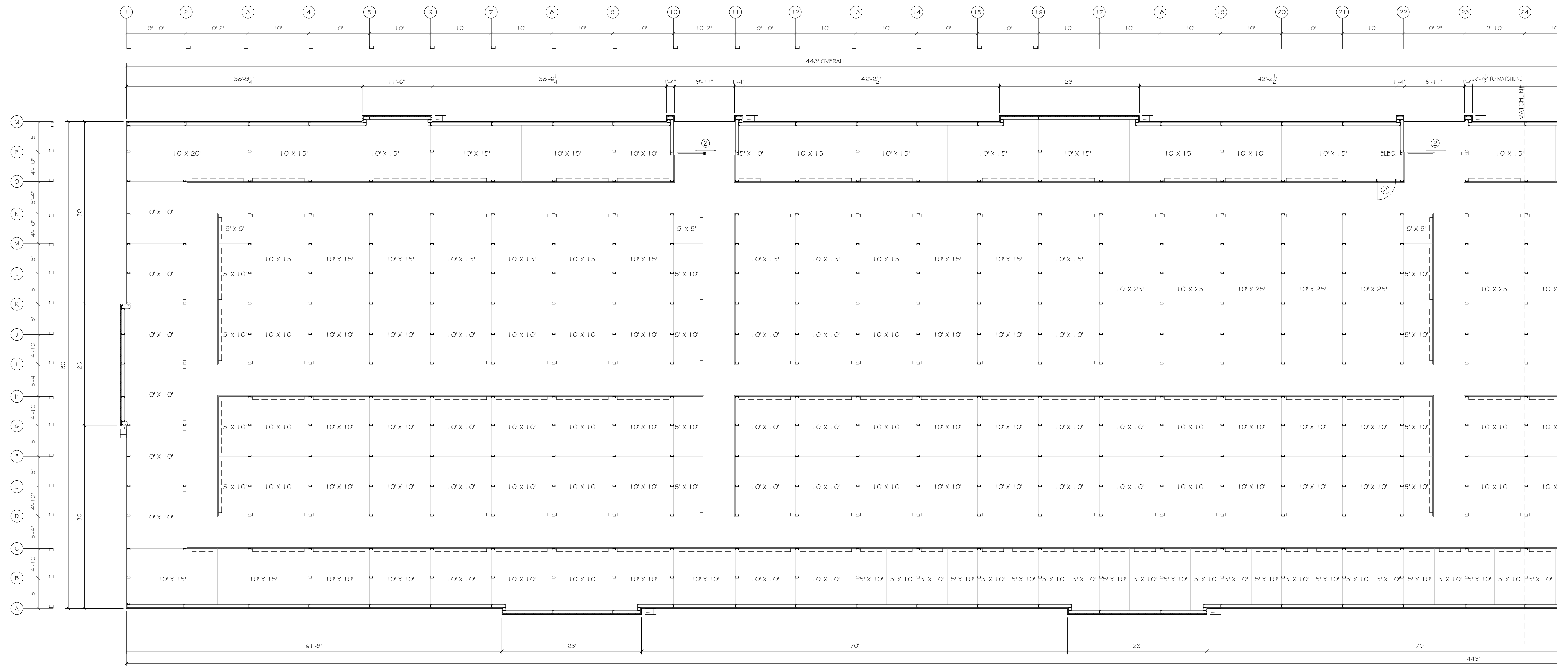
ENGINEER RBE CONSULTING SERVICES, LLC 10000 W. BOYD BLVD. SUITE 100 BOYDTON, ALA 35024-1000 TEL: 205-992-1000 FAX: 205-992-1001 WWW.RBECONSULTING.COM

SHEET TITLE

GENERAL NOTES

DATE 06-12-23 DRAWN BY AWMMG CHECKED BY xxx JOB NO. E 2705 SCALE AS NOTED SHEET

MARKUPS / REVISIONS			
NO.	BY	ISSUE	DATE



PARTITION PLAN
1/8" = 1'

LINE KEY	
	HORIZONTAL PARTITION PANEL 29GA GALVALUME TYPE "U"
	HALL WAY SYSTEM
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES

DOOR SCHEDULE	
	9'-0" x 7'-0" SLIDING DOOR, (BY CUSTOMER)
	3'-0" x 7'-0" PERSONNEL DOOR, (BY CUSTOMER)

WINDOW SCHEDULE	
	14'-0" x 8'-0" WINDOW

NOTE:
CC/CUSTOMER TO PROVIDE DISTANCE TO HOLD DOWN PARTITIONS FROM BOTTOM OF ROOF DECK BEFORE ANY MATERIALS CAN BE ORDERED.

- PIER & HEADER FINISHES:**
- PREFABRICATED PIERS & HEADERS**
- THERE IS NO ADDITIONAL APPLICATIONS REQ'D.
 - REMOVE THE PROTECTIVE FILM FROM AREAS OF BOTH PIERS & HEADERS WHERE THEY CONTACT EACH OTHER.
 - LEAVE THE FILM ON TO PROTECT THE PREFABRICATED SURFACE UNTIL CONSTRUCTION IS NEAR COMPLETION.
- GALVANNEAL PIERS & HEADERS REQUIRING FIELD PAINTING.**
- VERIFY PAINT COLOR WITH COLOR REQ'D IN LABOR CONTRACT.
 - CAULK PIERS TO HEADERS AND HEADERS TO HEADERS IF STACKED.
 - PRIME ALL EXPOSED SURFACES OF PIERS & HEADERS.
 - PAINT ALL EXPOSED SURFACES OF PIERS & HEADERS WITH PAINT SPECIFIED IN LABOR CONTRACT EVENLY SO PRIMER CAN NOT BE SEEN THROUGH TOP COAT.
 - IF TEXTURED, ROLL OUT TO ACHIEVE AND SAND FINISH STUCCO LIKE LOOK.

MAKORABCO
 EAST COAST OFFICE: 1041 CROWN PINE CIRCLE WATER GARDEN FL 34727 PHONE: (800) 989-0220
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ROBERT M. BEATTIE
 LICENSE No. 55428
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

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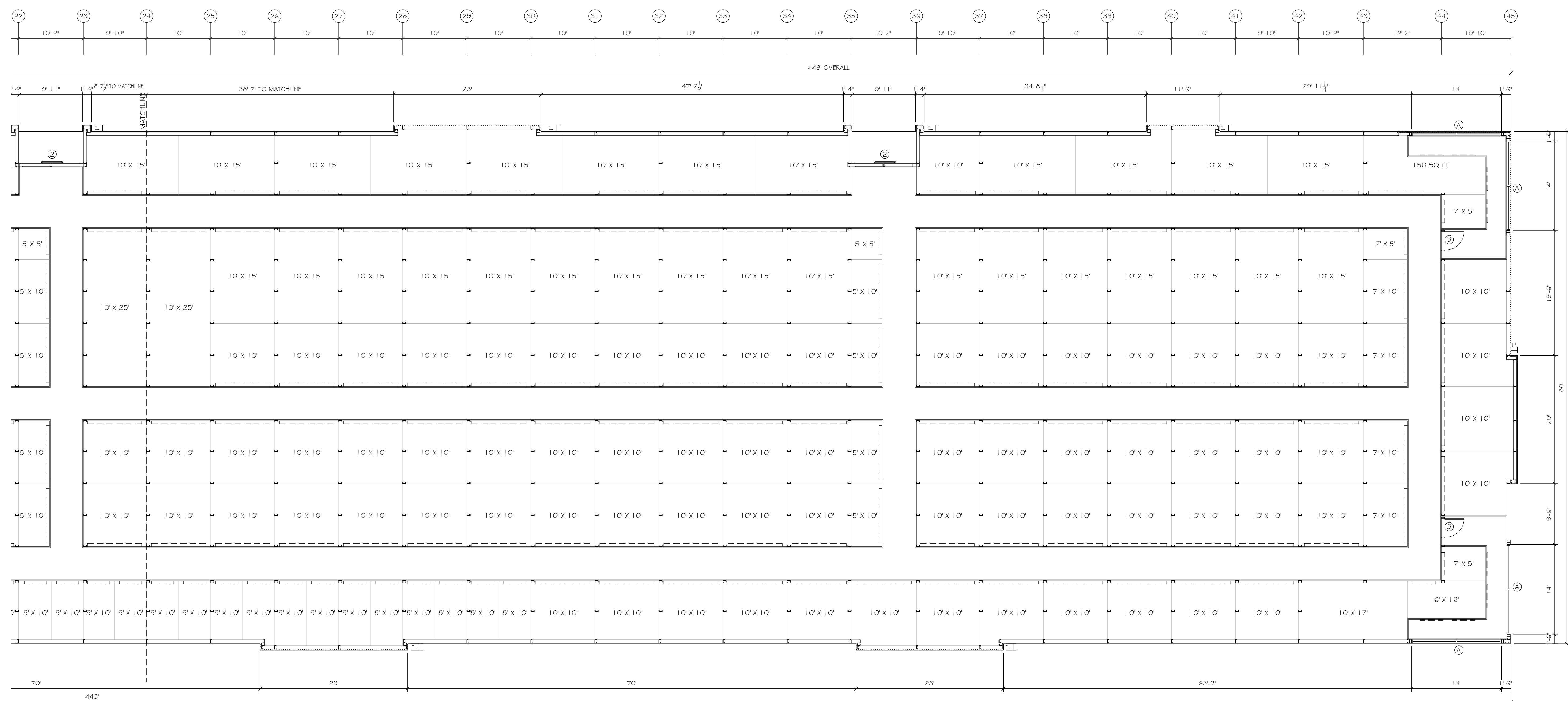
08/04/2023
 Digitally signed by Robert Beattie Date: 2023.08.04 16:02:31 -0400

ENGINEER: RBE CONSULTING SERVICES, LLC

BLDG. C
PARTITION PLANS

DATE: 06-12-23
 DRAWN BY: AWM/MG
 CHECKED BY: XXX
 JOB NO.: E 2705
 SCALE: AS NOTED
 SHEET: S-1.0

MARKUPS / REVISIONS			
NO.	BY	ISSUE	DATE



BLDG. C PARTITION PLAN
 NORTH
 1/8" = 1'

LINE KEY	
	HORIZONTAL PARTITION PANEL 29GA GALVALUME TYPE "U"
	HALL WAY SYSTEM
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES

DOOR SCHEDULE	
	9'-0" x 7'-0" SLIDING DOOR (BY CUSTOMER)
	3'-0" x 7'-0" PERSONNEL DOOR (BY CUSTOMER)

WINDOW SCHEDULE	
	14'-0" x 8'-0" WINDOW

NOTE:
 GC/CUSTOMER TO PROVIDE DISTANCE TO HOLD
 DOWN PARTITIONS FROM BOTTOM OF ROOF
 DECK BEFORE ANY MATERIALS CAN BE ORDERED.

PIER & HEADER FINISHES:
 PREPAINTED PIERS & HEADERS
 • THERE IS NO ADDITIONAL APPLICATIONS REQ'D.
 • REMOVE THE PROTECTIVE FILM FROM AREAS OF BOTH PIERS & HEADERS WHERE THEY CONTACT EACH OTHER.
 • LEAVE THE FILM ON TO PROTECT THE PREPAINTED SURFACE UNTIL CONSTRUCTION IS NEAR COMPLETION.

GALVANEAL PIERS & HEADERS REQUIRING FIELD PAINTING.
 • VERIFY PAINT COLOR WITH COLOR REQ'D IN LABOR CONTRACT.
 • CAULK PIERS TO HEADERS AND HEADERS TO HEADERS IF STACKED.
 • PRIME ALL EXPOSED SURFACES OF PIERS & HEADERS
 • PAINT ALL EXPOSED SURFACES OF PIERS & HEADERS WITH PAINT SPECIFIED IN LABOR CONTRACT EVENLY SO PRIMER CAN NOT BE SEEN THROUGH TOP COAT.
 • IF TEXTURED, ROLL OUT TO ACHIEVE AND SAND FINISH STUCCO LIKE LOOK.



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 DELRAY FL**

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08/04/2023

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 Date: 2023.08.04 16:02:00 -0400

ENGINEER

RBE CONSULTING SERVICES, LLC
 10000 W. UNIVERSITY BLVD., SUITE 1000
 BOCA RATON, FL 33433
 TEL: 561-993-8888
 WWW.RBECONSULTING.COM

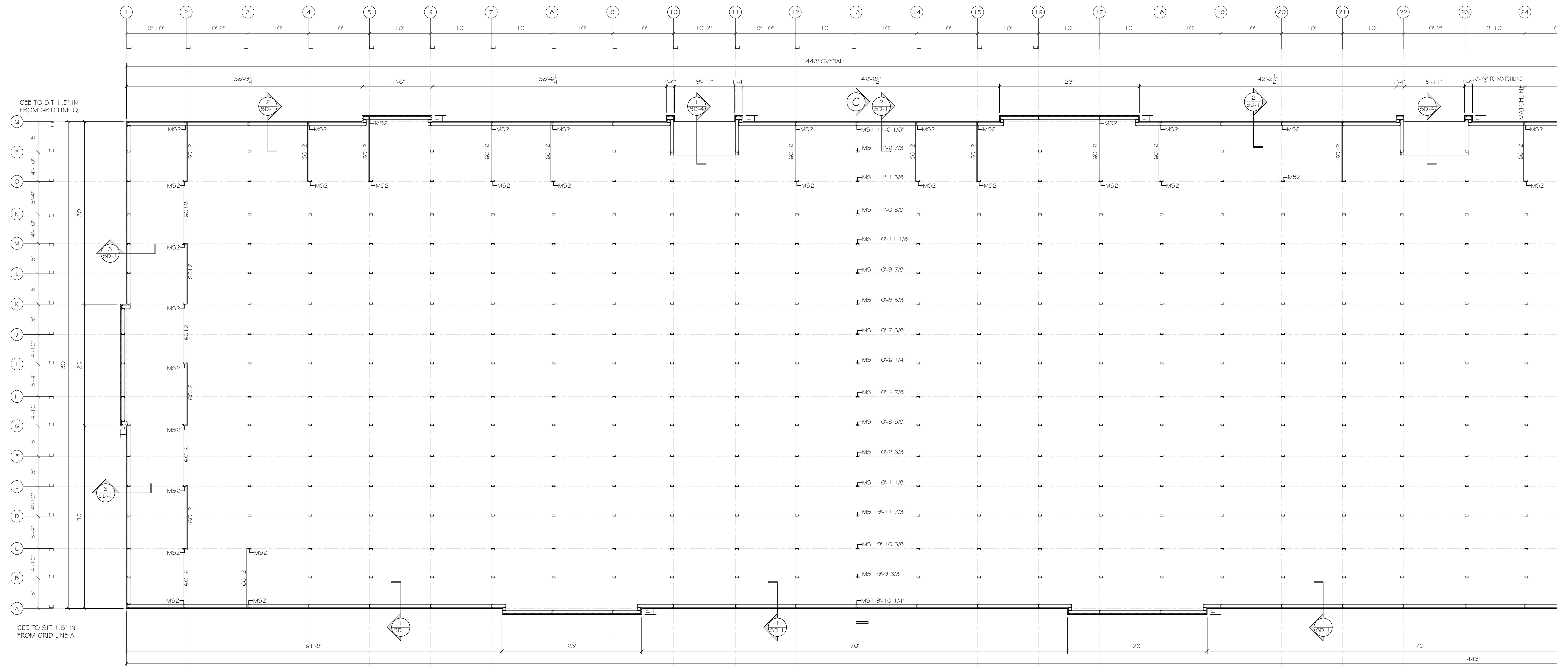
SHEET TITLE

BLDG. C PARTITION PLANS

DATE: 06-12-23
 DRAWN BY: AWMMG
 CHECKED BY: xxx
 JOB NO.: E 2705
 SCALE: AS NOTED
 SHEET

S-1.1

NO.	BY	ISSUE	DATE



BLDG. C
COLUMN FRAMING PLAN
1/8" = 1'

LINE KEY

	BOX HDR
	FRAMED COLUMN OPENING W/ BOX HEADER
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES
	CROSS BEAMS NEED MORE THAN 5" BAY
	COLUMNS
	ZEE BEAMS

TYPICAL COLUMNS & BEAMS UNLESS NOTED OTHERWISE

COLUMN : M51 = GC16 - 6'X2 1/2" X 16GA CEE PRIME PAINTED
 COLUMN : M52 = GC14 - 6'X2 1/2" X 14GA CEE PRIME PAINTED
 PURLIN : P1 = GZ16 - 6'X2 1/2" X 16GA ZEE PRIME PAINTED

ANCHOR SCHEDULE

FASTENERS AND ANCHORS ALL FASTENERS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS

ANCHOR TYPE	ANCHOR NAME	ECC-53 #	MIN. ANCHOR DIA. (IN)	MIN. BASE MATERIAL THICKNESS (IN)	MIN. OR YONGI MAX. OR REF. J. DIMENSION (IN)	MIN. ANCHOR SPACING (IN)	MIN. EDGE / END DISTANCE (IN)	ALLOWABLE BASE MATERIAL						
								CONC.	CONC. OVER STEEL DECK	GF CMU	HOLLOW CMU W/ SCREEN TUBES	SOLID BRICK	STEEL	
EPOXY	AC108+GOLD	ESR-2502	1/2" DIA	4" (CONC)	2-3/4" (MIN) / 2" (MAX)	2-1/2"	2-1/2"	X	X					
		ESR-3300	1/2" DIA	5-3/4" (CONC)	3-1/2" (MIN) / 2" (MAX)	3-3/4"	3-3/4"	X	X					
MECHANICAL	POWER STUD #501	ESR-2818	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2818	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2818	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2818	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
MECHANICAL	POWER STUD #502	ESR-2502	1/2" DIA	4-1/2" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2502	1/2" DIA	4-1/2" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2502	1/2" DIA	4-1/2" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-2502	1/2" DIA	4-1/2" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
SCREW BOLT+	ESR-3489	ESR-3489	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-3489	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-3489	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
		ESR-3489	1/2" DIA	4" (CONC)	2-1/2" (MIN) / 2" (EFF)	4-1/2"	4-1/2"	X	X	X				
DIRECT FASTEN	CSU SPIRAL DRIVE PINS	D157-AD	3/16" DIA	3/16" (STEEL)	1-1/2" (MIN)	1-1/2"	1-1/2"	X	X	X	X	X	X	X
		D157-AD	3/16" DIA	3/16" (STEEL)	1-1/2" (MIN)	1-1/2"	1-1/2"	X	X	X	X	X	X	X
		D157-AD	3/16" DIA	3/16" (STEEL)	1-1/2" (MIN)	1-1/2"	1-1/2"	X	X	X	X	X	X	X
		D157-AD	3/16" DIA	3/16" (STEEL)	1-1/2" (MIN)	1-1/2"	1-1/2"	X	X	X	X	X	X	X

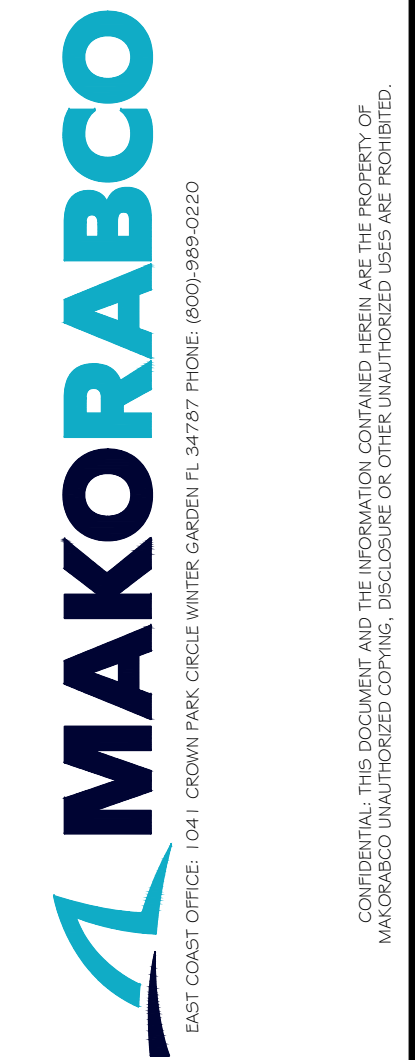
ANCHOR SCHEDULE UNLESS NOTED OTHERWISE

BOTTOM FLOOR (MULTI)

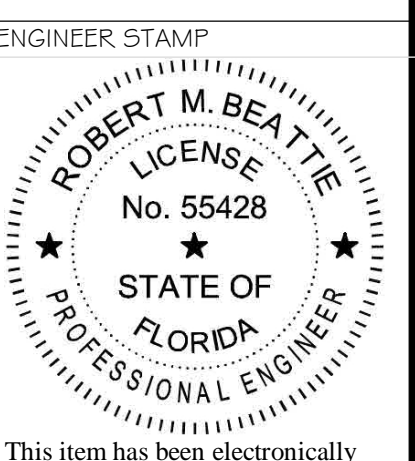
BASE TRACK INSTALLATION
 1/2"X3" DeWALT SCREW BOLT+ (OR EQUAL) SPACING 3' O.C. (1 3/4" EFFECTIVE EMBEDMENT)

PIER INSTALLATION
 1/2"X3" DeWALT SCREW BOLT+ (OR EQUAL) @ EA. PIER (1 3/4" EFFECTIVE EMBEDMENT)
 HEAVY STEEL DECK SUPPORT ANGLE (1/4" THICK OR GREATER) (TO CMU)
 3/4"X6" DeWALT SCREW BOLT+ (OR EQUAL) 2' O.C. (5" MIN. EMBEDMENT) (4" MIN. FROM EDGE OF CMU)
 1/4" MIN. EXPANSION ANGLE INSTALLATION (TO CMU)
 (3) 3/4"X6" DeWALT SCREW BOLT+ (OR EQUAL) (5" MIN. EMBEDMENT) (4" MIN. FROM EDGE OF CMU)

HSS STEEL COLUMN BASE PLATE INSTALLATION
 USE DeWALT AC200+ EPOXY TO INSTALL. DIAMETER TO MATCH ANCHOR IN COLUMN SCHEDULE X 1 1/2" LONG THREADED ROD WITH LEVELING NUTS (7" MIN. EMBEDMENT)



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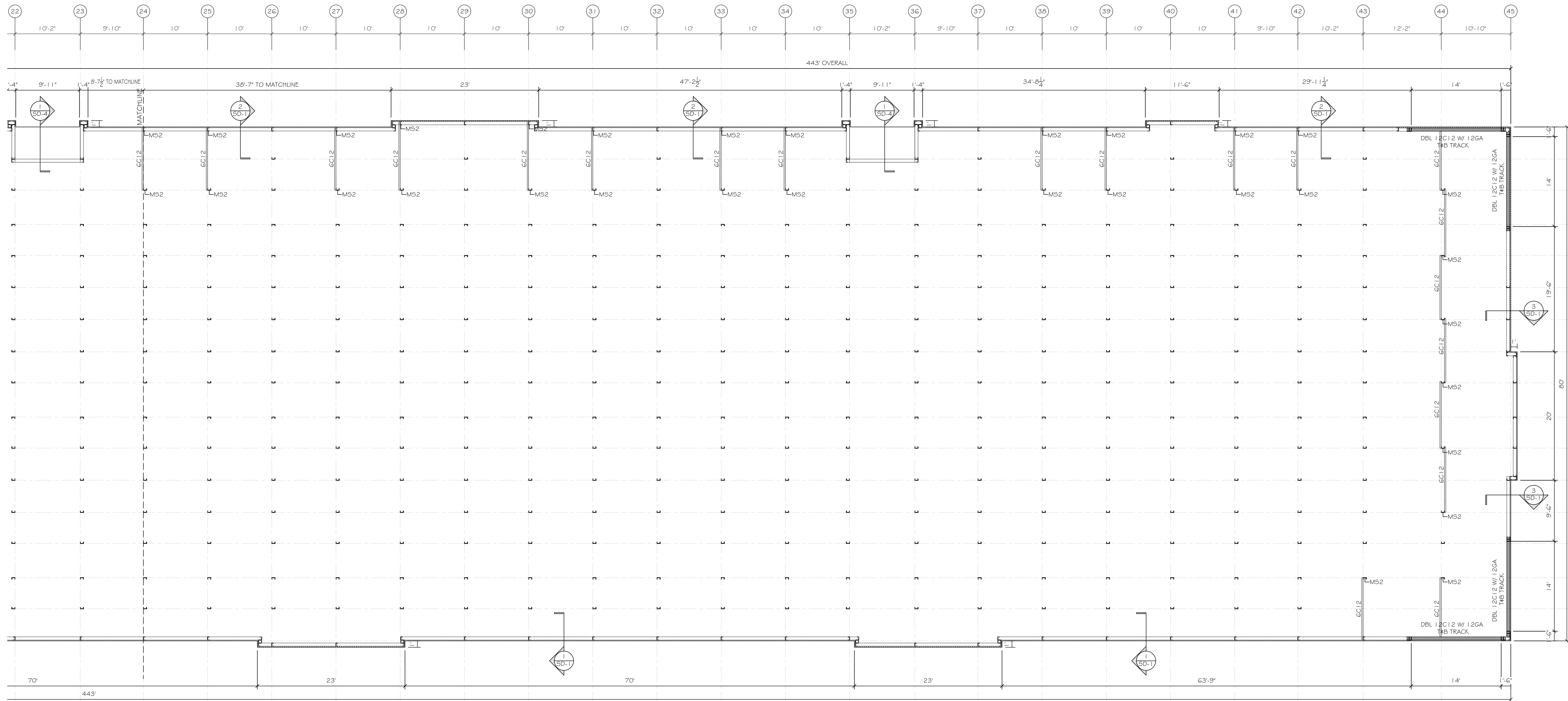
08/04/2023

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 RBE CONSULTING SERVICES, LLC
 1500 S.W. 10TH AVENUE, SUITE 200, MIAMI, FL 33135
 (305) 555-1111
 WWW.RBECONSULTING.COM

BLDG. C
COLUMN FRAMING PLANS

DATE: 06-12-23
 DRAWN BY: AWMMG
 CHECKED BY: XXX
 JOB NO.: E 2705
 SCALE: AS NOTED
 SHEET

NO.	BY	ISSUE	DATE



BLDG. C
COLUMN FRAMING PLAN
1/8" = 1'

LINE KEY	
	BOX HDR
	FRAMED COLUMN OPENING W/ BOX HEADER
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES
	CROSS BEAMS NEED MORE THAN 5" BAY
	COLUMNS
	ZEE BEAMS
TYPICAL COLUMNS & BEAMS UNLESS NOTED OTHERWISE	
COLUMN : M51 = GC16 - 6'X2 1/2" X 16GA CEE PRIME PAINTED	
COLUMN : M52 = GC14 - 6'X2 1/2" X 14GA CEE PRIME PAINTED	
PURLIN : P1 = GC16 - 6'X2 1/2" X 16GA ZEE PRIME PAINTED	

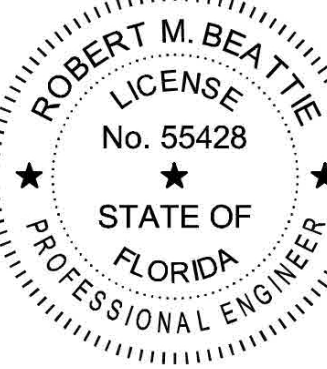
ANCHOR SCHEDULE		FASTENERS AND ANCHORS ALL FASTENERS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS											
ANCHOR TYPE	ANCHOR NAME	ECC-55 #	ANCHOR DIA. (IN)	MIN. BASE MATERIAL THICKNESS (IN)	(MIN. OR YONG) MAX. EMBEDMENT (IN)	MIN. ANCHOR SPACING (IN)	MIN. EDGE / END DISTANCE (IN)	ALLOWABLE BASE MATERIAL CONC.	CONC. OVER STEEL DECK	GF CMU	HOLLOW CMU W/ SCREEN TUBES	SOLID BRICK	STEEL
EPOXY	AC108+SOLID	ESR-2502 [CONC]	1/2" DIA	4" [CONC]	2-3/4"(MIN) / 12" MAX	2-1/2"	2-1/2"	X	X	X	X	X	X
			3/4" DIA	5-3/4" [CONC]	3-1/2"(MIN) / 8" MAX	3-3/4"	3-3/4"	X	X	X	X	X	X
MECHANICAL	POWER STUD #501	ESR-3300 [CMU]	1/2" DIA	6" GF CMU	4" (MIN)	(1) PER CELL	4"	X	X	X	X	X	X
			3/4" DIA	6" GF CMU	6" (MIN)	(1) PER CELL	4"	X	X	X	X	X	X
			1/2" DIA	4" [CONC]	2-1/2"(MIN) / 2" (EFF)	4-1/2"	6"	X	X	X	X	X	X
			3/4" DIA	2" [CONC]	4"(MIN) / 2" (EFF)	6"	6"	X	X	X	X	X	X
MECHANICAL	POWER STUD #502	ESR-2502 [CONC]	1/2" DIA	4-1/2" [CONC]	2-1/2"(MIN) / 2" (EFF)	6"	6"	X	X	X	X	X	X
			3/4" DIA	7" [CONC]	4-1/2"(MIN) / 3-3/4" (EFF)	6"	12"	X	X	X	X	X	
			1/2" DIA	2" [CONC OVER STL DECK]	2-3/8"(MIN) / 2" (EFF)	6"	4"	X	X	X	X	X	
			3/4" DIA	2" [CONC OVER STL DECK]	2-3/8"(MIN) / 2" (EFF)	6"	4"	X	X	X	X	X	
SCREW BOLT+	ESR-3409 [CONC]	ESR-3409 [CONC]	1/2" DIA	6" GF CMU	3-1/4" (MIN)	6"	3"	X	X	X	X	X	X
			1/2" DIA	3" [CONC]	1-5/8"(MIN) / 1-2" (EFF)	1-1/2"	1-1/2"	X	X	X	X	X	
			3/4" DIA	3" [CONC]	2"(MIN) / 1-1/8" (EFF)	2"	1-1/2"	X	X	X	X	X	
			3/8" DIA	3" [CONC]	2-1/2"(MIN) / 1-3/4" (EFF)	2-3/4"	1-3/4"	X	X	X	X	X	
			1/2" DIA	3-3/4" [CONC]	4-1/4"(MIN) / 3-5/8" (EFF)	3"	1-3/4"	X	X	X	X	X	
			1/4" DIA	2" [CONC OVER STL DECK]	1-5/8"(MIN) / 1-2" (EFF)	1-1/2"	1-1/2"	X	X	X	X	X	
			3/8" DIA	2" [CONC OVER STL DECK]	2"(MIN) / 1-3/8" (EFF)	2"	2"	X	X	X	X	X	
			1/2" DIA	2" [CONC OVER STL DECK]	2-1/2"(MIN) / 1-3/4" (EFF)	2-1/2"	2-1/2"	X	X	X	X	X	
			1/2" DIA	6" GF CMU	4-1/4"(MIN)	(1) PER CELL	4"	X	X	X	X	X	
			3/4" DIA	6" GF CMU	6-1/4"(MIN)	(1) PER CELL	4"	X	X	X	X	X	
DIRECT FASTEN	CSU SPHRAL DRIVE PINS	ESR-2024 [CONC]	1/157" DIA	3/16" (STEEL)	ANCHOR POINT MUST TOUCH STEEL SURFACE	1-1/2"	1/2"	X	X	X	X	X	X
			1/157" DIA	2-1/4" [CONC]	3/4" (MIN)	4"	3-1/2"	X	X	X	X	X	
			1/157" DIA	1" (MIN)	1" (MIN)	4"	3-1/2"	X	X	X	X	X	
			1/157" DIA	3-3/4" [CONC]	1-1/4" (MIN)	4"	3-1/2"	X	X	X	X	X	
DIRECT FASTEN	CSU SPHRAL DRIVE PINS	ESR-2024 [CONC]	1/157" DIA	6" GF CMU	1" (MIN)	4"	3-3/4"	X	X	X	X	X	
			1/157" DIA	6" HOLLOW CMU	1" (MIN)	6"	3-3/4"	X	X	X	X	X	

ANCHOR SCHEDULE UNLESS NOTED OTHERWISE	
BOTTOM FLOOR (MULTI)	
BASE TRACK INSTALLATION	
1/2"X3" DeWALT SCREW BOLT+ (OR EQUAL) SPACING 3' O.C. (1 3/4" EFFECTIVE EMBEDMENT)	
PIER INSTALLATION	
1/2"X3" DeWALT SCREW BOLT+ (OR EQUAL) @ EA. PIER (1 3/4" EFFECTIVE EMBEDMENT)	
HEAVY STEEL DECK SUPPORT ANGLE (1/4" THICK OR GREATER) (TO CMU)	
3/4"X6" DeWALT SCREW BOLT+ (OR EQUAL) 2' O.C. (5" MIN. EMBEDMENT) (4" MIN. FROM EDGE OF CMU)	
1/4" MIN. EXPANSION ANGLE INSTALLATION (TO CMU)	
(3) 3/4"X6" DeWALT SCREW BOLT+ (OR EQUAL) (5" MIN. EMBEDMENT) (4" MIN. FROM EDGE OF CMU)	
HSS STEEL COLUMN BASE PLATE INSTALLATION	
USE DeWALT AC208+ EPOXY TO INSTALL. DIAMETER TO MATCH ANCHOR IN COLUMN SCHEDULE X 1 2" LONG THREADED ROD WITH LEVELING NUTS (7" MIN. EMBEDMENT)	



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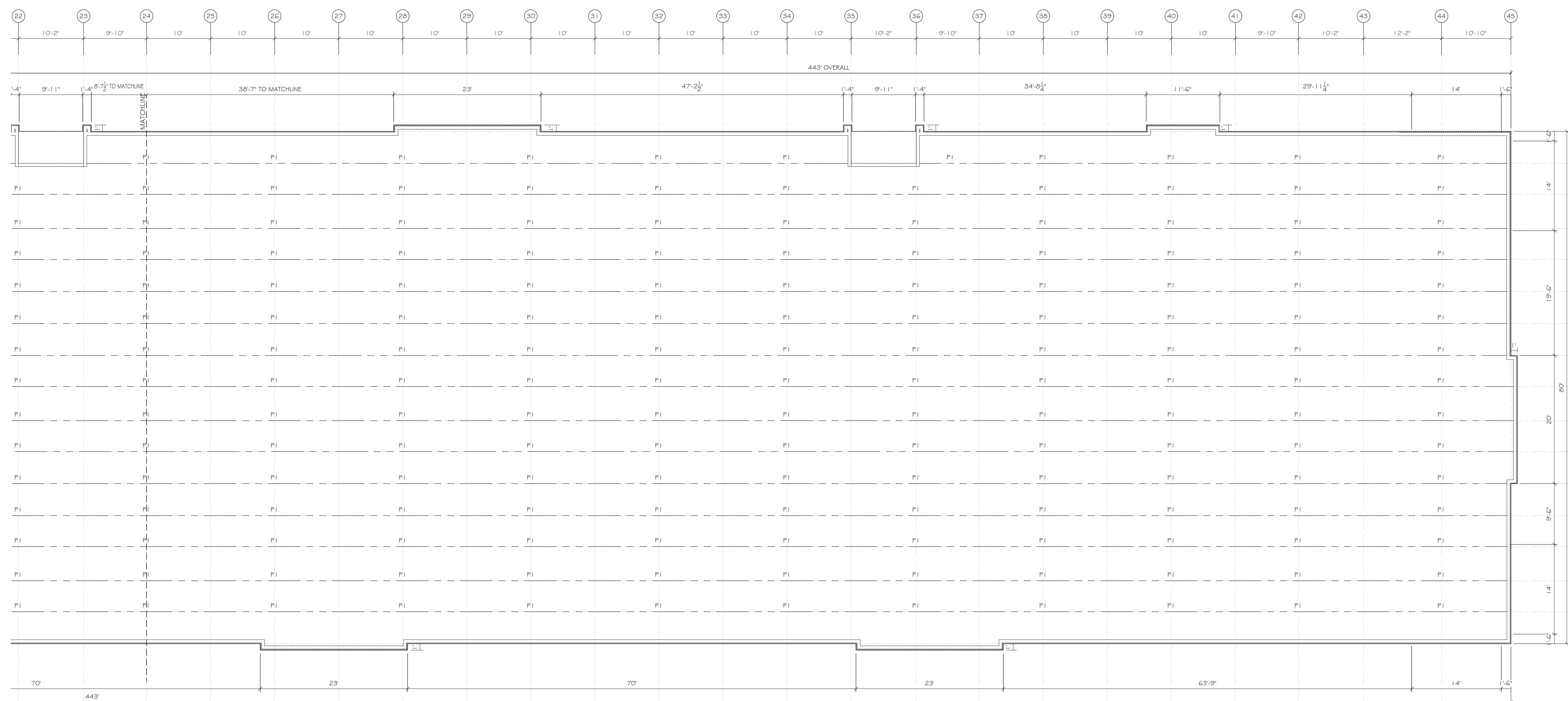
08/04/2023

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RBE CONSULTING SERVICES, LLC
1500 S.W. 10TH AVENUE, SUITE 200, MIAMI, FL 33135
TEL: 305.444.1111 FAX: 305.444.1112
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SHEET TITLE
BLDG. C
COLUMN FRAMING PLANS

DATE: 06-12-23
DRAWN BY: AWMMG
CHECKED BY: XXX
JOB NO.: E 2705
SCALE: AS NOTED
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NO.	BY	ISSUE	DATE



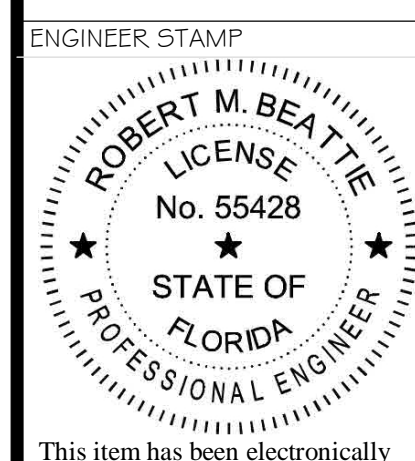
ROOF FRAMING PLAN
 BLDG. C
 1/8" = 1'

LINE KEY	
	BOX HDR
	FRAMED COLUMN OPENING W/ BOX HEADER
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR, AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR, AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES
	CROSS BEAMS NEED MORE THAN 5' BAY
	COLUMNS
	ZEE BEAMS

TYPICAL COLUMNS & BEAMS UNLESS NOTED OTHERWISE	
COLUMN : M51	= 6C16 - 6"x2 1/2" X 16GA CEE PRIME PAINTED
COLUMN : M52	= 6C14 - 6"x2 1/2" X 14GA CEE PRIME PAINTED
PURLIN : P1	= 6Z16 - 6"x2 1/2" X 16GA ZEE PRIME PAINTED

MAKORABCO
 EAST COAST OFFICE: 1041 CROWN PINE CIRCLE WATER GARDEN FL 34727 PHONE: (800) 989-0220
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 Digitally signed by Robert Beattie Date: 2023.08.04 15:02:04 -0400

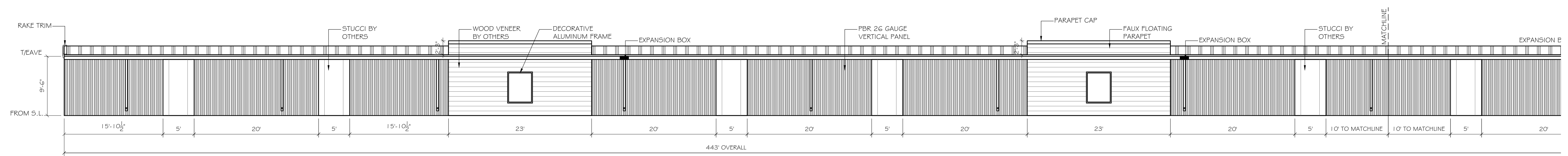
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 RBE CONSULTING SERVICES, LLC
10000 W. STATE ROAD 70, SUITE 200, DELRAY BEACH, FL 33433
 (561) 321-1111
 www.rbeconsulting.com

SHEET TITLE
BLDG. C
 ROOF FRAMING PLANS
 DATE: 06-12-23
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 JOB NO.: E 2705
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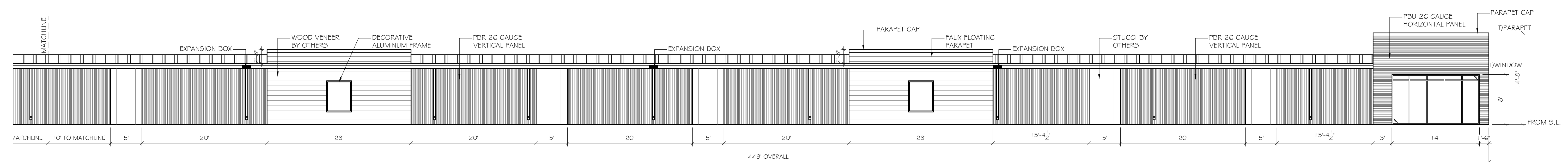
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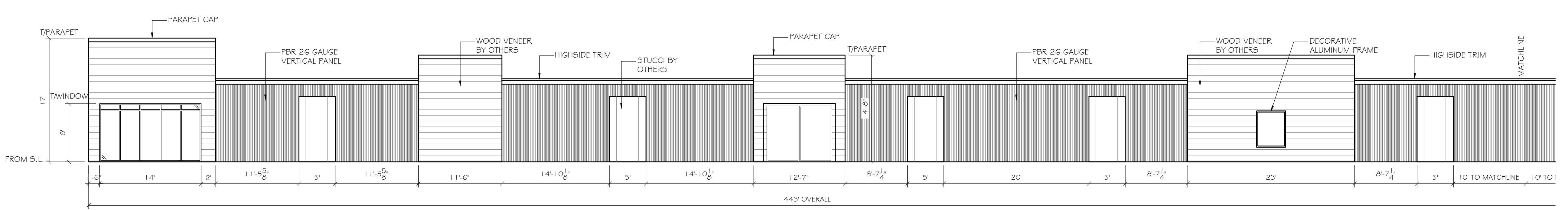
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BLDG. C EAST ELEVATION
1/8" = 1'



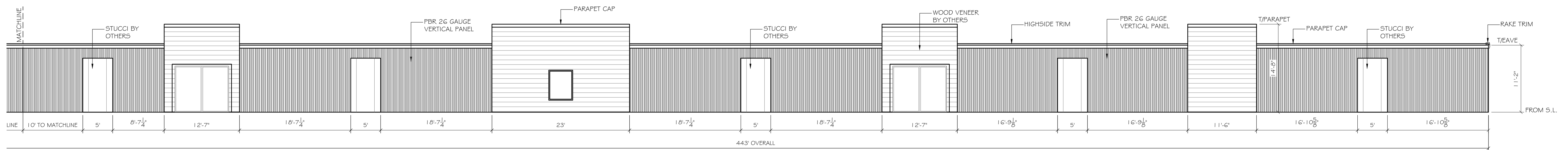
BLDG. C EAST ELEVATION
1/8" = 1'



BLDG. C WEST ELEVATION
1/8" = 1'

NOTES:
ALL MAN DOORS, ROLL-UP DOORS, SLIDING GLASS DOORS, WINDOWS AND TRANSOMS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION TO ENSURE PROPER FIT. G.C./SUBCONTRACTOR SHALL NOT FABRICATE FROM THE CONSTRUCTION DOCUMENTS. SHOULD THE G.C./SUBCONTRACTOR CHOOSE TO FABRICATE THE PREVIOUSLY REFERENCED ITEMS FROM THE CONTRACT/PROPOSAL DOCUMENTS AND NOT FROM THE FIELD THEY DO SO AT THEIR OWN RISK AND ANY AND ALL MODIFICATIONS REQUIRED AS A RESULT SHALL BE AT THEIR OWN EXPENSE.

NOTE:
GC SHALL COORDINATE ALL T/CMU WALL HEIGHTS WITH RABCO ENTERPRISES, LLC PRIOR TO CONSTRUCTION TO ENSURE PROPER FIT OF THE METAL BUILDING COMPONENTS. FAILURE TO GET WRITTEN APPROVAL PRIOR TO ERECTING THE CMU WALLS MAY RESULT IN NEEDED MODIFICATIONS TO EITHER THE CMU WALL AND/OR THE METAL BUILDING COMPONENTS AT THE G.C.'S EXPENSE.



BLDG. C WEST ELEVATION
1/8" = 1'

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DELRAY FL

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Robert M. Beattie
Professional Engineer
No. 55428
STATE OF FLORIDA

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1805 SW 14th Street, Suite 100, Delray Beach, FL 33444
Tel: 561-271-1111
Fax: 561-271-1112
www.rbeservices.com

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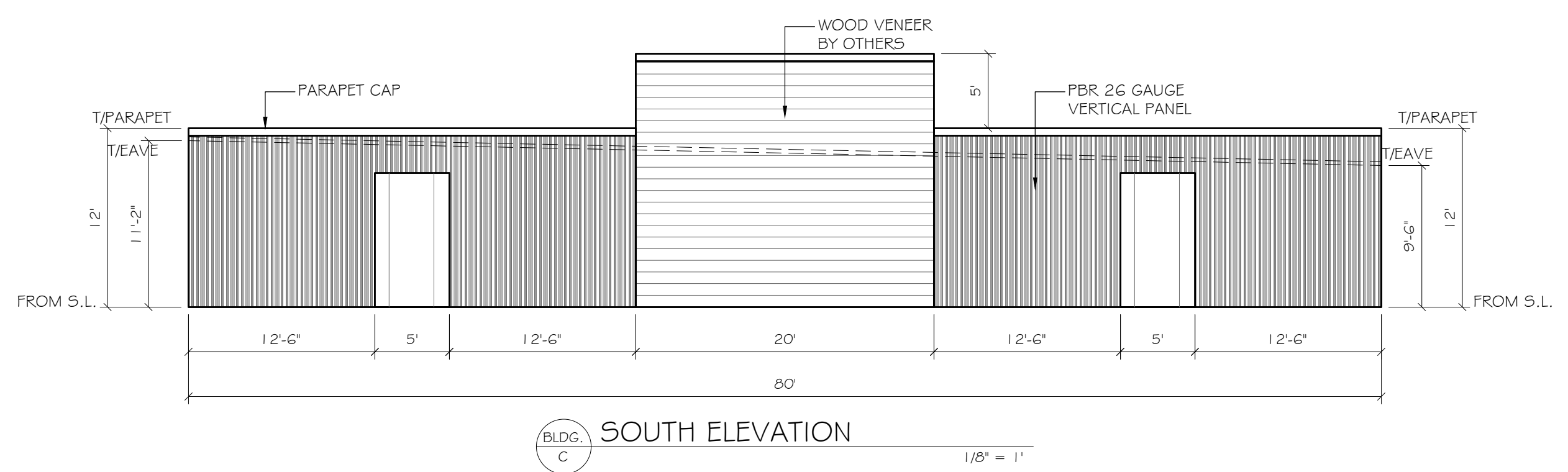
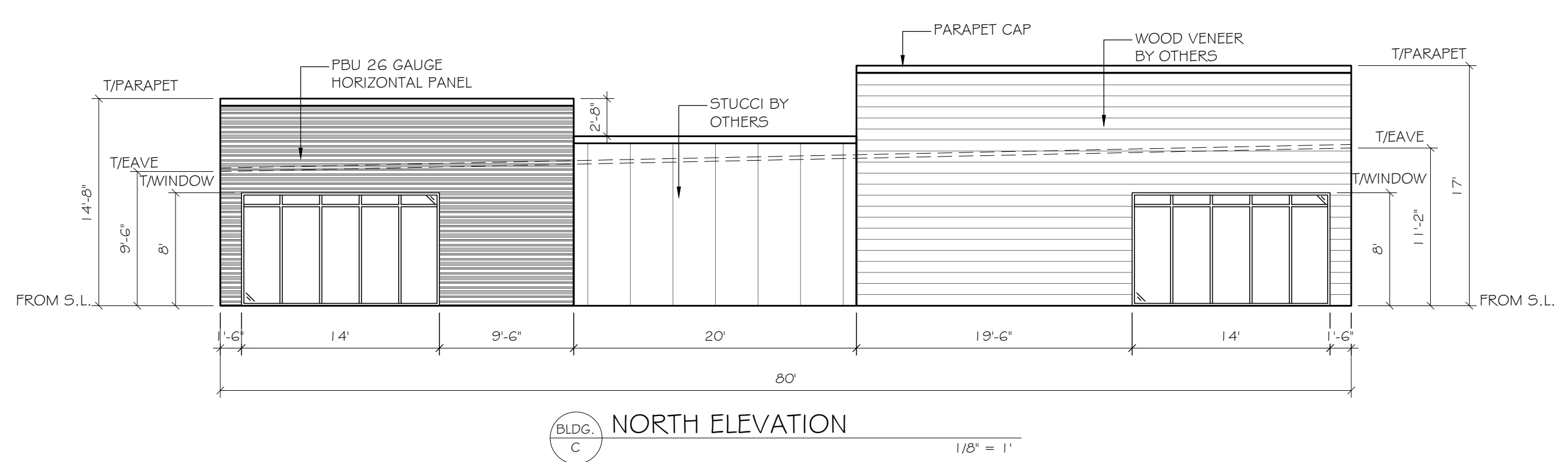
BLDG. C
ELEVATIONS

DATE: 06-12-23
DRAWN BY: AWM/MG
CHECKED BY: xxx
JOB NO.: E 2705
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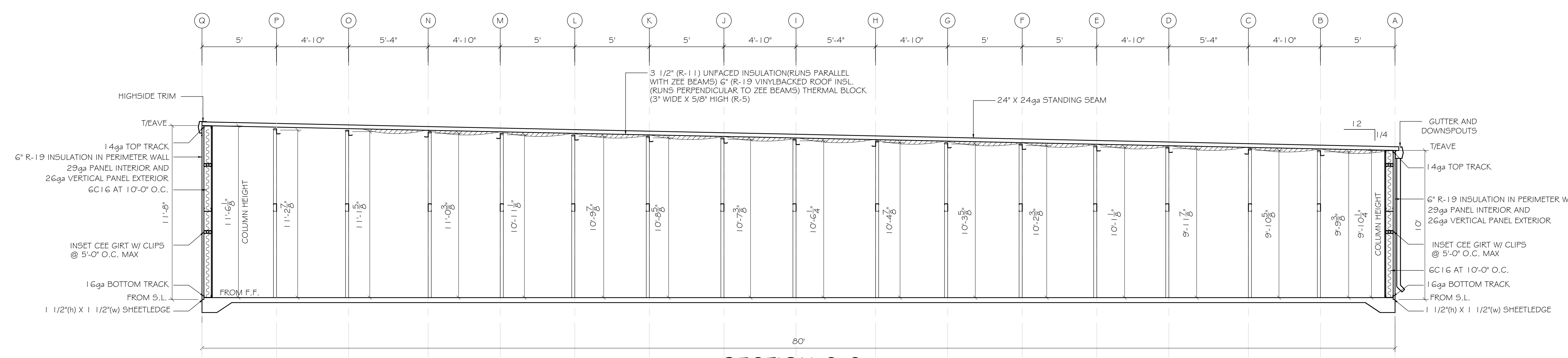
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NOTES:
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NOTE:
 GC SHALL COORDINATE ALL CMU WALL HEIGHTS WITH RABCO ENTERPRISES, LLC PRIOR TO CONSTRUCTION TO ENSURE PROPER FIT OF THE METAL BUILDING COMPONENTS. FAILURE TO GET WRITTEN APPROVAL PRIOR TO ERECTING THE CMU WALLS MAY RESULT IN NEEDED MODIFICATIONS TO EITHER THE CMU WALL AND/OR THE METAL BUILDING COMPONENTS AT THE G.C.'S EXPENSE.

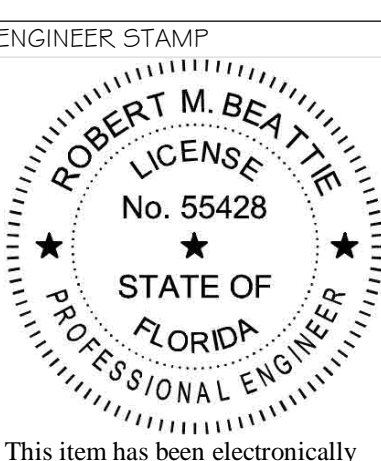
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NOTE: VERTICAL COLUMN DIMENSION IS ACTUAL LENGTH OF CEE FROM F.F. (U.N.O.)

SECTION C-C
 SCALE: 1/4" = 1'

- NOTES:**
- UNLESS NOTED OTHERWISE ON THE PLANS, THE FOLLOWING OUTLINES STANDARD PARTITION HEIGHTS USED FOR DESIGN PURPOSES.
 - NON-CLIMATE CONTROLLED SINGLE STORY BUILDINGS HAVE BEEN DESIGNED BASED ON THE TOP OF ALL INTERIOR PARTITION PANELS BEING HELD TO WITHIN 8" OF THE BOTTOM OF THE ROOF DECK.
 - CLIMATE CONTROLLED SINGLE STORY BUILDING HAVE BEEN DESIGNED BASED ON THE TOP OF ALL INTERIOR PARTITION PANELS BEING HELD TO WITHIN 18" OF THE BOTTOM OF THE ROOF DECK.
 - CLIMATE CONTROLLED MULTI-STORY BUILDING HAVE BEEN DESIGNED BASED ON THE TOP OF ALL INTERIOR PARTITION PANELS BEING HELD TO WITHIN 18" OF THE BOTTOM OF THE FLOOR/ROOF DECK.
 - SHOULD THE PARTITION PANELS NEED TO BE HELD DOWN FURTHER THAN 18" FROM THE BOTTOM OF THE FLOOR/ROOF DECK, THE REQUEST SHALL BE SUBMITTED IN WRITING AND A FORMAL WRITTEN RESPONSE PROVIDED PRIOR TO FABRICATION AND/OR INSTALLATION.



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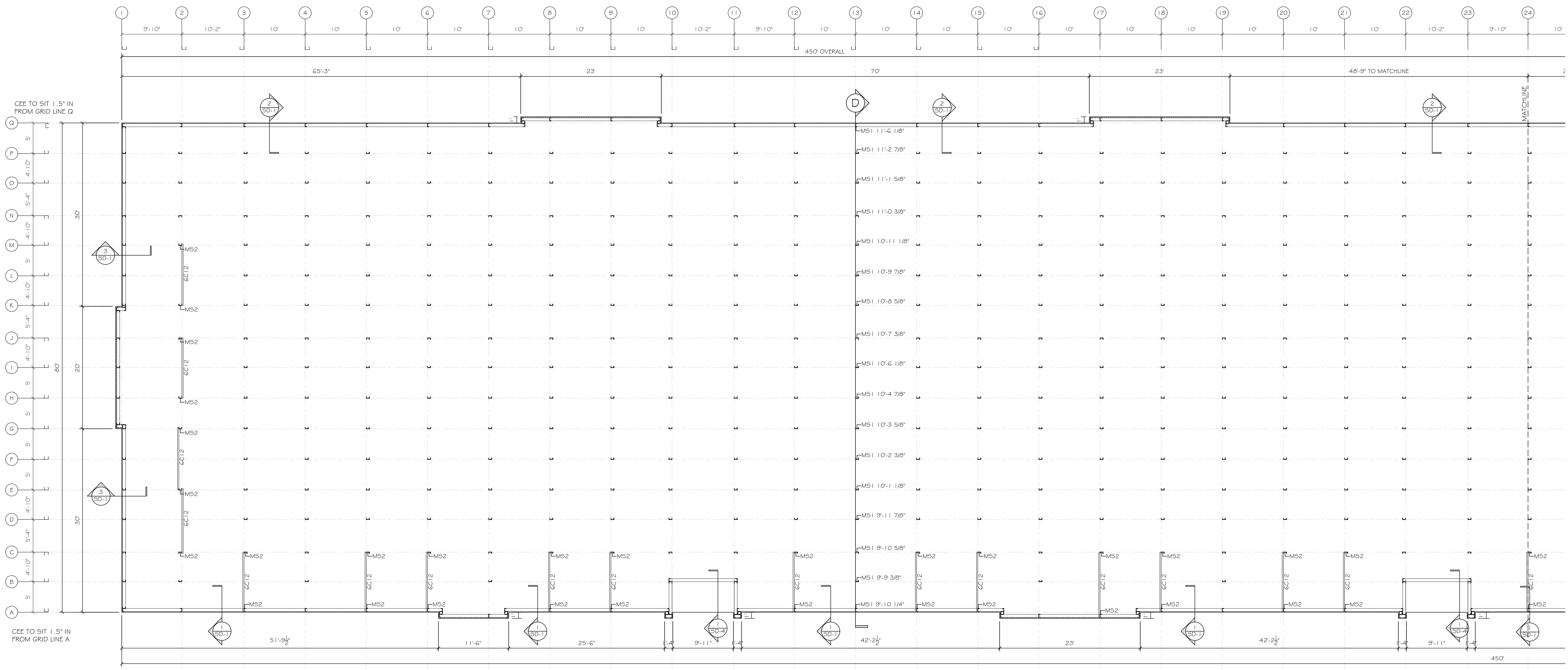
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 Digitally signed by Robert Beattie
 Date: 2023.08.04 16:02:35 -0400

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 RBE CONSULTING SERVICES, LLC
 1000 W. PALM BEACH BLVD. SUITE 1000
 PALM BEACH, FL 33480
 (561) 842-1111
 WWW.RBECONSULTING.COM

SHEET TITLE
 BLDG. C
 ELEVATIONS &
 SECTIONS

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NO.	BY	ISSUE	DATE



BLDG. D COLUMN FRAMING PLAN
1/8" = 1'

LINE KEY	
	BOX HDR
	FRAMED COLUMN OPENING W/ BOX HEADER
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND 26GA VERT. OR HORIZ. PANEL EXTERIOR
	6" R-19 INSULATION IN PERIMETER WALL 29GA PANEL INTERIOR AND WOOD VENEER BY OTHERS
	6" R-19 INSULATION IN WALL WITH 29GA PANEL BOTH SIDES
	CROSS BEAMS NEED MORE THAN 5' BAY
	COLUMNS
	ZEE BEAMS
	ROOF STRAPPING

TYPICAL COLUMNS & BEAMS UNLESS NOTED OTHERWISE	
COLUMN : M51	= 6C16 - 6X2 1/2" X 16GA CEE PRIME PAINTED
COLUMN : M52	= 6C14 - 6X2 1/2" X 14GA CEE PRIME PAINTED
PURLIN : P1	= 6Z16 - 6X2 1/2" X 16GA ZEE PRIME PAINTED

ANCHOR SCHEDULE		FASTENERS AND ANCHORS ALL FASTENERS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS													
BRAND: DEWALT (OR EQUAL)	ANCHOR TYPE	ECC-55 #	ANCHOR DIA. (IN)	MIN. BASE MATERIAL THICKNESS (IN)	(MIN. OR YONG) MAX. (OR REQ.) EMBEDMENT (IN)	MIN. ANCHOR SPACING (IN)	MIN. EDGE (C/O) DISTANCE (IN)	ALLOWABLE BASE MATERIAL	CONC.	CONC. OVER STEEL DECK	GF CMU	HOLLOW CMU W/ SCREEN TUBES	SOLID BRICK	STEEL	
EPDM	AC108+SOLID	ESR-2502 [CONC]	1/2" DIA	4" [CONC]	2-3/4"(MIN) / 2" MAX	2-1/2"	2-1/2"	X	X			X	X		
			3/4" DIA	5-3/4" [CONC]	3-1/2"(MIN) / 2" MAX	3-3/4"	3-3/4"								
MECHANICAL	POWER STUD #501	ESR-3300 [CMU]	1/2" DIA	6" GF CMU	4" (MIN)	(1) PER CELL	4"								
			3/4" DIA	6" GF CMU	6" (MIN)	(1) PER CELL	4"								
MECHANICAL	POWER STUD #502	ESR-2502 [CONC]	1/2" DIA	4-1/2" [CONC]	2-1/2"(MIN) / 2" (EFF)	6"	6"	X	X	X					
			3/4" DIA	7" [CONC]	4-1/2"(MIN) / 3-3/4" (EFF)	6"	12"								
SCREW BOLT+	ESR-3409 [CONC]	1/2" DIA	6" GF CMU	2-1/2" (MIN)	4"	4"	4"								
			6" GF CMU	3-1/4" (MIN)	6"	3"									
DIRECT FASTEN	CSU SPIRAL DRIVE PND	ESR-2024 [CMU]	1/2" DIA	3" [CONC]	1-5/8"(MIN) / 1-2" (EFF)	1-1/2"	1-1/2"	X	X	X	X			X	
			3/4" DIA	3" [CONC]	2"(MIN) / 1-1/2" (EFF)	2"	1-1/2"								
			1/2" DIA	3" [CONC]	2-1/2"(MIN) / 1-3/4" (EFF)	2-3/4"	1-3/4"								
			1/2" DIA	3-3/4" [CONC]	4-1/4"(MIN) / 3-5/8" (EFF)	3"	1-3/4"								
			1/4" DIA	29" CONC OVER STL DECK	1-3/8"(MIN) / 1-2" (EFF)	1-1/2"	1-1/2"								
			3/8" DIA	29" CONC OVER STL DECK	2"(MIN) / 1-3/4" (EFF)	2"	2"								
			1/2" DIA	29" CONC OVER STL DECK	2-1/2"(MIN) / 1-3/4" (EFF)	2-1/2"	2-1/2"								
			1/2" DIA	6" GF CMU	4-1/4"(MIN)	(1) PER CELL	4"								
			3/4" DIA	6" GF CMU	6-1/4"(MIN)	(1) PER CELL	4"								
			1/2" DIA	2-1/4" [CONC]	3/4" (MIN)	4"	3-1/2"								
			1/2" DIA	3" [CONC]	1"(MIN)	4"	3-1/2"								
			1/2" DIA	3-3/4" [CONC]	1-1/4" (MIN)	4"	3-1/2"								
1/2" DIA	6" GF CMU	1"(MIN)	4"	3-3/4"											
1/2" DIA	6" GF CMU	1"(MIN)	6"	3-3/4"											

ANCHOR SCHEDULE UNLESS NOTED OTHERWISE	
BOTTOM FLOOR (MULTI)	
BASE TRACK INSTALLATION 1/2"x3" DeWALT SCREW BOLT+ (OR EQUAL) SPACING 3' O.C. (1 3/4" EFFECTIVE EMBEDMENT)	
PIER INSTALLATION 1/2"x3" DeWALT SCREW BOLT+ (OR EQUAL) @ EA. PIER (1 3/4" EFFECTIVE EMBEDMENT)	
HEAVY STEEL DECK SUPPORT ANGLE (1/4" THICK OR GREATER) (TO CMU) 3/4"x6" DeWALT SCREW BOLT+ (OR EQUAL) 2' O.C. (5' MIN. EMBEDMENT) (4' MIN. FROM EDGE OF CMU)	
1/4" MIN. EXPANSION ANGLE INSTALLATION (TO CMU) (3) 3/4"x6" DeWALT SCREW BOLT+ (OR EQUAL) (5' MIN. EMBEDMENT) (4' MIN. FROM EDGE OF CMU)	
HSS STEEL COLUMN BASE PLATE INSTALLATION USE DEWALT AC200+ EPOXY TO INSTALL. DIAMETER TO MATCH ANCHOR IN COLUMN SCHEDULE X 1 2" LONG THREADED ROD WITH LEVELING NUTS (7" MIN. EMBEDMENT)	



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ENGINEER
RBE CONSULTING SERVICES, LLC
10000 W. STATE ROAD 70, SUITE 200, BOCA RATON, FL 33433
TEL: 561-993-8888 FAX: 561-993-8889
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SHEET TITLE
BLDG. C
COLUMN FRAMING PLANS
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