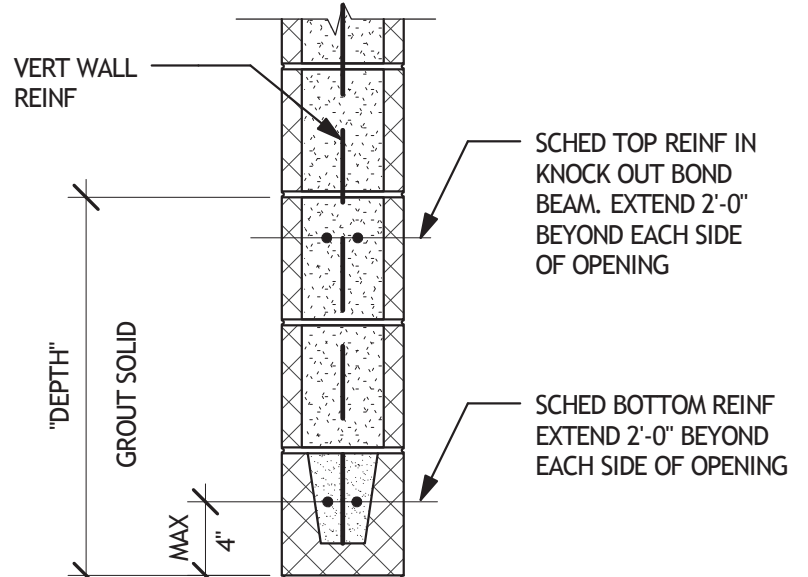


1 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

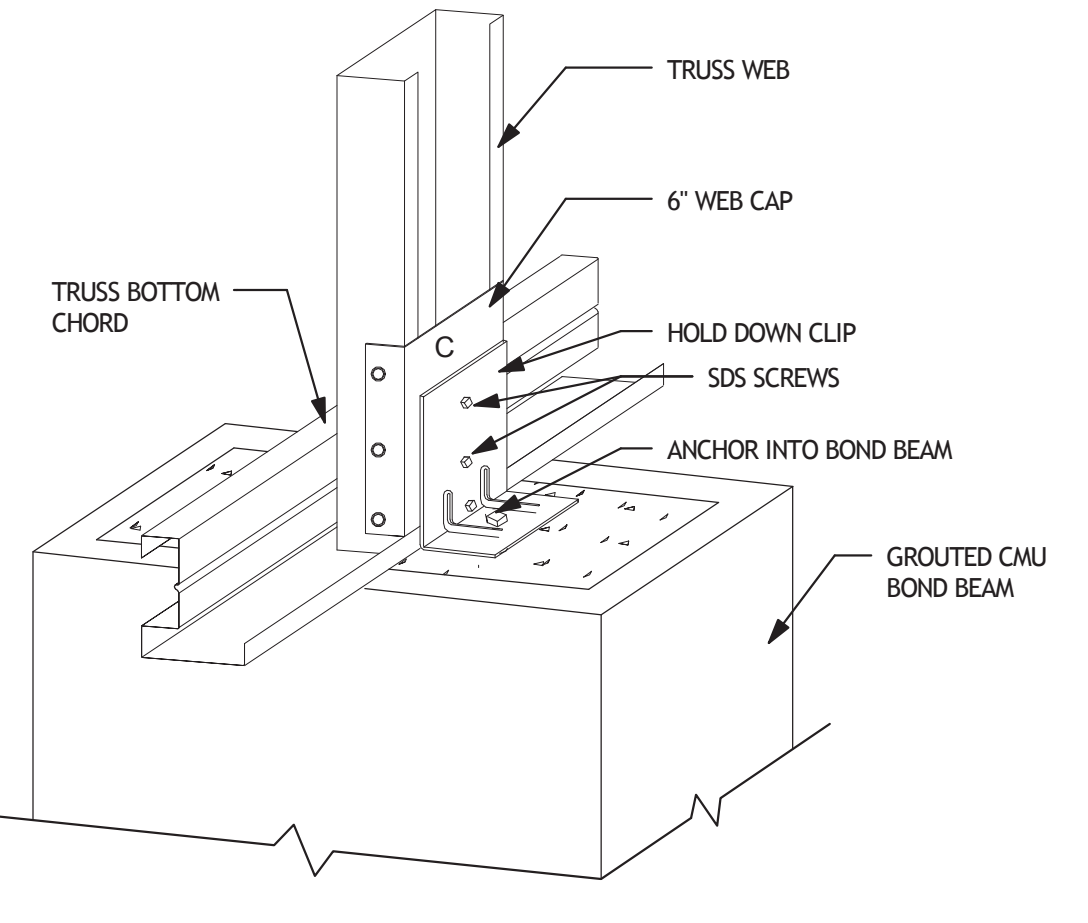
CMU LINTEL SCHEDULE				
OPENING WIDTH	CMU WIDTH	DEPTH	TOP REINF.	BOTTOM REINF.
0'-0" - 3'-4"	8"	16"	2-#5	2-#5
3'-5" - 6'-8"	8"	24"	2-#5	2-#5

BRICK LINTEL SCHEDULE		
OPENING WIDTH	LINTEL	BEARING EA END
0'-0" - 5'-0"	L 3 1/2" X 3 1/2" X 5/16"	8"

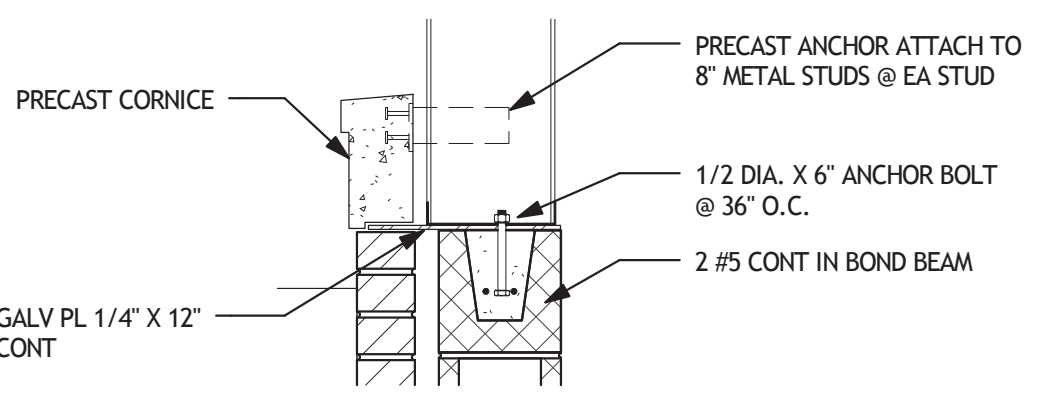


3 TYPICAL DETAIL AT BRICK LINTEL
SCALE: 1" = 1'-0"

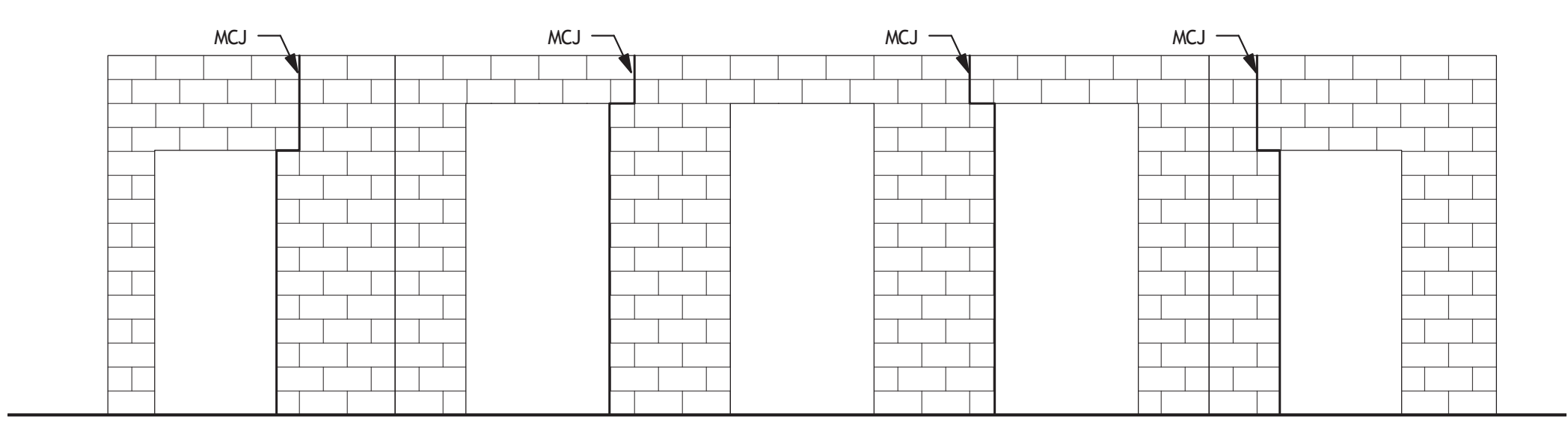
11 TYPICAL DETAIL AT CMU LINTEL
SCALE: 1" = 1'-0"



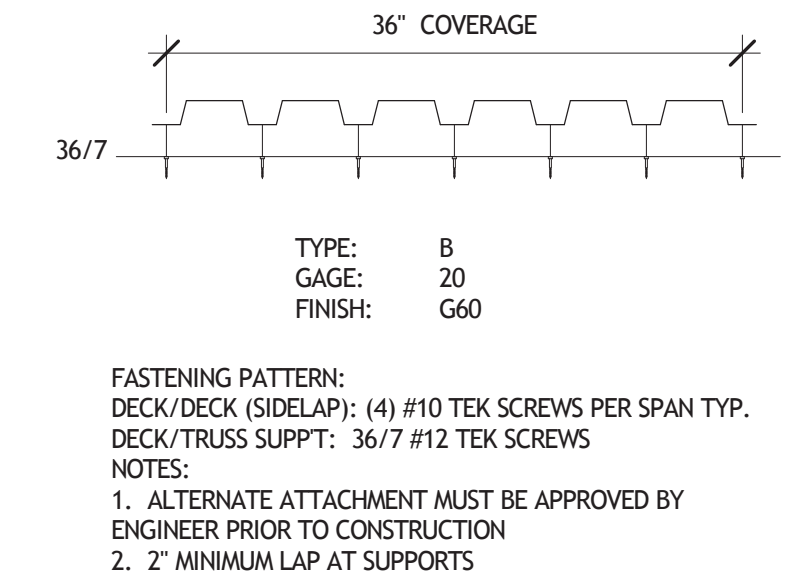
2 TRUSS CMU CONNECTION
SCALE: 3" = 1'-0"



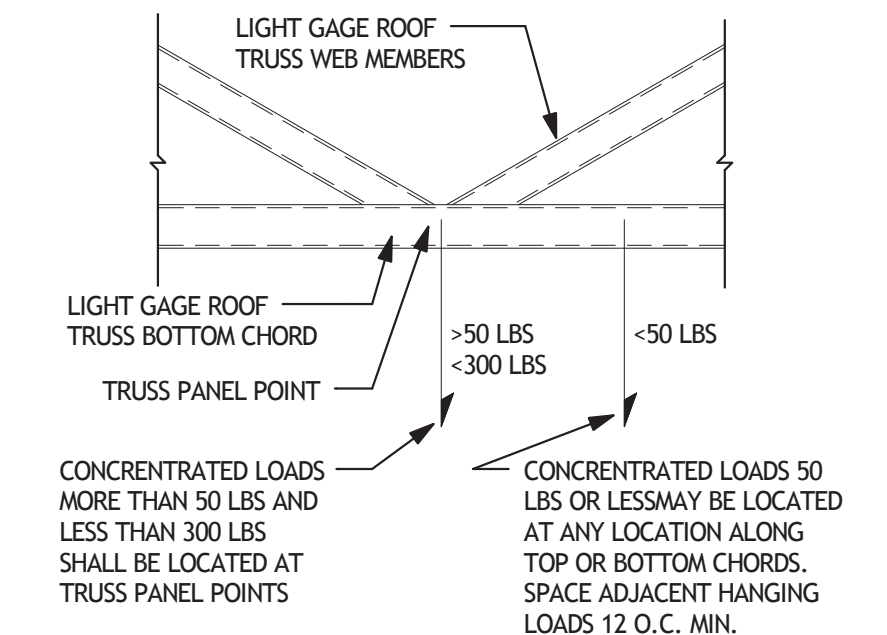
4 CORNICE SUPPORT DETAIL
SCALE: 1" = 1'-0"



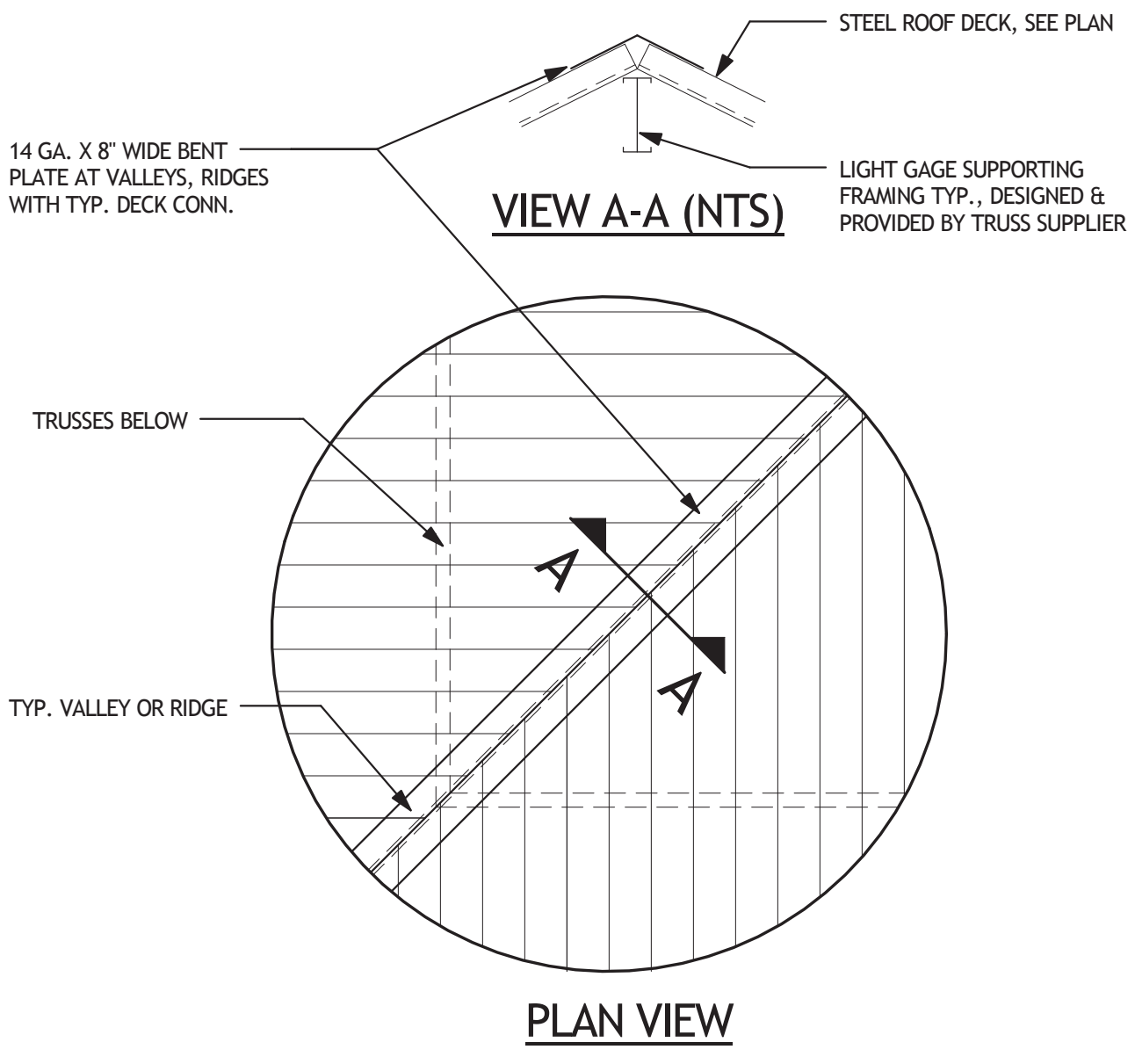
8 CMU CONTROL JOINTS
SCALE: 1/4" = 1'-0"



7 TYP. ROOF DECK CONNECTION
SCALE: 1" = 1'-0"



5 TYP. HANGING EQUIPMENT ATTACHMENT DETAIL
SCALE: 3/4" = 1'-0"



6 TYP. DECK TRANSITION
SCALE: 1/2" = 1'-0"

14. COLD-FORMED STEEL (CFS) TRUSSES:

- DESIGN DOCUMENTS INCLUDE A SYSTEM OF CUSTOM ENGINEERED TRUSS COMPONENTS, ASSEMBLIES AND CONNECTIONS IN ACCORDANCE WITH AISI CODE OF STANDARD PRACTICE FOR CFS STRUCTURAL FRAMING (2007 EDITION) AND THE STATE OF FLORIDA DEPARTMENT OF PROFESSIONAL REGULATION GUIDELINES (FLORIDA ADMINISTRATIVE CODE). THE ENTIRE SYSTEM, INCLUDING ALL TRUSSES, CONNECTIONS, BRIDGING, TEMPORARY AND PERMANENT BRACING SHALL BE DESIGNED BY A DELEGATED SPECIALTY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- THE COLD-FORMED STEEL TRUSSES SHALL BE DESIGNED BY TRUSS SUPPLIER USING COLDFORMED STEEL SHAPES. CHORD MEMBERS TO COMPLY WITH ASTM A653 WITH MINIMUM STRENGTH OF 50 KSI, AND MINIMUM 22 GAGE (28 MILS). WEB MEMBERS TO COMPLY WITH ASTM A500 WITH MINIMUM STRENGTH OF 45 KSI AND MINIMUM 20 GAGE (33 MILS).
- ALL CFS TRUSS ELEMENTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF AISI/COFS TRUSS-2004 AND OTHER APPLICABLE CODES AND SPECIFICATIONS.
- THE CFS TRUSS SUPPLIER SHALL SUBMIT FOR REVIEW AND APPROVAL, DETAILED SHOP DRAWINGS AND DESIGN CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF MISSISSIPPI. FABRICATION OF CFS TRUSSES SHALL NOT BEGIN UNTIL THE SHOP DRAWINGS AND CALCULATIONS HAVE BEEN REVIEWED AND RETURNED APPROVED. REFER TO CONTRACT SPECIFICATIONS FOR APPROVED MANUFACTURERS. MANUFACTURERS NOT PRE-APPROVED, MUST HAVE QUALIFICATIONS MEETING CONTRACT SPECIFICATIONS APPROVED PRIOR TO BIDDING.
- DELEGATED ENGINEER CALCULATIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
 - ENGINEERING ANALYSIS SHOWING LOADING, MEMBER STRESSES AND DEFLECTIONS FOR EACH DIFFERENT TRUSS DESIGN BASED ON DESIGN LOADS LISTED ON THE DRAWINGS.
 - ALL TRUSS MEMBERS, PITCH, SPAN, CAMBER, BEARING, CONFIGURATION, TYPE, LOCATION, SPACING AND LAYOUT OF TRUSSES.
 - ALL BRIDGING AND BRACING FOR LOADS INDICATED INCLUDING WIND DIAPHRAGM CONSTRUCTION, AND ALL OTHERS, TEMPORARY AND PERMANENT LOADS.
 - ALL TRUSS TO TRUSS CONNECTIONS, TRUSS TO CMU, GUSSET PLATES, FASTENERS, BRIDGING AND RELATED ACCESSORIES TO BE DESIGNED AND DETAILED FOR ALL LOADING CONDITIONS INCLUDING NET WIND UPLIFT AND REACTIONS FROM HORIZONTAL WIND DIAPHRAGM ACTION.
 - ALL TRUSS MEMBER AND BRACING SIZES, PROPERTIES, AND ANY YIELD STRENGTH.
 - SPACING AND LAYOUT OF TRUSSES MEETING REQUIREMENTS INDICATED ON THE DRAWINGS.
 - NOTE ANY PROPOSED TRUSS LAYOUT CHANGES THAT WOULD EFFECT THE LOCATION OF BEARING WALLS OR FOUNDATION DESIGN OR CONSTRUCTION.
 - WIND TRUSSES DESIGNED TO TRANSFER THE HORIZONTAL WIND LOADS AS NOTED ON THE DRAWINGS.
- GENERAL CONTRACTOR SHALL COORDINATE TRUSS REQUIREMENTS WITH M/E/P, HVAC AND DUCT WORK REQUIREMENTS, INCLUDING HORIZONTAL AND VERTICAL CHASES, ATTIC/ACCESS SPACE REQUIREMENTS, INCLUDING SIZE AND LOCATION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DESIGN DOCUMENTS.
- SUBMIT FULL TRUSS SYSTEM DESIGN AND ERECTION DRAWINGS PREPARED BY DELEGATED SPECIALTY ENGINEER FOR APPROVAL. THESE DRAWINGS SHALL INCLUDE:
 - PLACING DRAWINGS FOR STEEL AND TRUSS SYSTEM SHOWING MEMBERS, PITCH, SPAN, CAMBER, CONFIGURATION, TYPE, LOCATIONS, AND SPACING OF ALL MEMBERS. ALL ATTACHMENTS, BEARINGS, AND ANCHORAGE SHALL BE CLEARLY DETAILED ON DWGS. INDICATE SUPPLEMENTAL STRAPPINGS, BRACINGS, CLIPS & OTHER ACCESSORIES REQUIRED FOR PROPER INSTALLATION. MEETING DESIGN CRITERIA OUTLINED.
 - CROSS SECTIONS, DRAWINGS AND ELEVATIONS DEPICTING COMPONENT LOCATIONS.
 - CONNECTION DETAILS SHOWING SCREW TYPES, NUMBER AND LOCATIONS, MAXIMUM VERTICAL AND HORIZONTAL ALLOWABLE LOADS/WELD LENGTHS AND LOCATIONS OR OTHER RELATED FASTENER REQUIREMENTS. ALL CONNECTIONS SHALL MEET OUTLINED DESIGN CRITERIA.
 - DETAILED TRUSS SYSTEM DRAWINGS OUTLINING PROPOSED PERMANENT AND TEMPORARY BRACING, CONNECTIONS, AND PROPOSED REACTIONS TO ADJACENT STRUCTURAL SYSTEMS IF UTILIZED AS BRACING RESTRAINT.
- THE CFS TRUSSES SHALL BE SHOP FABRICATED BY THE TRUSS SUPPLIER. FIELD FABRICATION OF TRUSSES IS NOT PERMITTED. THE DELEGATED SPECIALTY ENGINEER FOR THE STEEL TRUSSES SHALL INSPECT ALL FABRICATED TRUSSES AND SHALL PROVIDE A SIGNED AND SEALED LETTER CERTIFYING THAT THE TRUSSES ARE FABRICATED IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS AND WILL SUSTAIN THE DESIGN LOADS SPECIFIED IN THE CONTRACT DOCUMENTS.
- THE TRUSS SUPPLIER SHALL SUBMIT FOR REVIEW DESIGN DATA FOR ALL SHOP OR FIELD SELF-DRILLING FASTENERS USED FOR CONSTRUCTION OF TRUSSES. PROVIDE CONNECTION DETAILS SHOWING SCREW TYPES, NUMBER AND LOCATIONS, AND OTHER RELATED FASTENER REQUIREMENTS, INCLUDING MAXIMUM VERTICAL AND HORIZONTAL ALLOWABLE LOADS.
- DESIGN LOADS FOR TRUSSES:
 - BUILDING DESIGN CODE = IBC
 - UPLIFT: -40 PSF
 - TOP CHORD: LIVE LOAD 40 PSF, DEAD LOAD 20 PSF
 - BOTTOM CHORD: LIVE LOAD 0 PSF, DEAD LOAD 10 PSF
 - DESIGN TRUSS MEMBERS FOR CONCENTRATED LOAD OF PIPING, EQUIPMENT, AND OTHER COLLATERAL MECHANICAL LOADS. SEE MECHANICAL DRAWINGS.
 - SEE PLANS FOR SPECIAL CONCENTRATED AND UNIFORM LOADS.
 - THE ACTUAL IN-SERVICE DEAD LOAD OF SPRINKLER AND MECHANICAL PIPING SHOULD BE USED FOR THE DESIGN OF TRUSSES. THE SPRINKLER AND MECHANICAL CONTRACTOR SHALL SUBMIT ACTUAL SIZE, LOCATION AND WEIGHT OF ALL PIPING TO BE USED. THE GENERAL CONTRACTOR SHALL SUPPLY THIS INFORMATION TO THE TRUSS SUPPLIER TO BE USED FOR FINAL TRUSS DESIGN. MECHANICAL PIPING SUPPORTS SHALL BEAR ON TRUSS BOTTOM CHORDS. THE BOTTOM CHORD MEMBER SHALL BE CAPABLE OF SUPPORTING THIS LOAD.
- THE BOTTOM CHORD SHALL NOT BE ASSUMED TO BE LATERALLY SUPPORTED BY THE CEILING CONSTRUCTION. BOTTOM CHORD BRACING SHALL BE DESIGNED AND FURNISHED BY THE LIGHT GAUGE STEEL TRUSS SUPPLIER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY BRACING OF THE STRUCTURE DURING ERECTION. THE STRUCTURE IS NOT STABLE UNTIL ALL ELEMENTS ARE CONNECTED IN PLACE. DO NOT PLACE ANY LOAD ON TRUSSES UNTIL ALL BRACING IS INSTALLED AS DETAILED ON APPROVED SHOP DRAWINGS. BRACING AND BRIDGING SHALL BE COORDINATED WITH THE LOCATIONS OF MECHANICAL PIPING AND DUCTWORK IN THE ATTIC SPACE BY THE TRUSS SUPPLIER AND THE CONTRACTOR. DO NOT STORE OR STAGE MATERIALS ON ROOF TRUSSES WITHOUT PRIOR WRITTEN APPROVAL OF TRUSS SYSTEM SPECIALTY ENGINEER. LIFTING AND STAGING OF TRUSSES TO COMPLY WITH SUPPLIERS - FIELD INSTALLATION GUIDE FOR CFS TRUSSES AND CFSEI TECH NOTE 551 d and e.
- PERMANENT CFS TRUSS BRACING DESIGN AND CONSTRUCTION TO COMPLY WITH CFSEI TECH NOTE 551e. THE ROOF DECK CAN BE RELIED ON TO SERVE AS TOP CHORD LATERAL BRACING ONCE FULLY INSTALLED PER CONTRACT DOCUMENTS FOR CFSEI TECH NOTE 558 b-1.
- TEMPORARY CFS TRUSS BRACING DESIGN AND CONSTRUCTION TO COMPLY WITH TECH NOTE 551d. PROVIDE GROUND BRACING AS REQUIRED PER CFSEI TECH NOTE 556 a-6.

14. POST-INSTALLED ANCHORS

- POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
 - CONCRETE ANCHORS
 - MECHANICAL ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 308.2 AND ICC-ES AC108.
 - ADHESIVE ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308.
 - MASONRY ANCHORS (ANCHORAGE TO SOLID-GROUTED CONCRETE MASONRY)
 - MECHANICAL ANCHORS FOR USE IN SOLID-GROUTED CONCRETE MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC01.
 - ADHESIVE ANCHORS FOR USE IN SOLID-GROUTED CONCRETE MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC58.
- THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. THE ENGINEER WILL DETERMINE IF POST-INSTALLED ANCHORS ARE BEST SUITED FOR THE PARTICULAR APPLICATION. THE CONTRACTOR SHALL THEN SUBMIT CALCULATIONS, SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE JURISDICTION OF THE PROJECT, THAT DEMONSTRATE THE POSTINSTALLED ANCHOR ASSEMBLY WILL EQUAL OR EXCEED THE CAPACITY OF THE CAST-IN-PLACE ANCHOR ASSEMBLY.
- HOLES FOR POST-INSTALLED ANCHORS SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS.
- PRIOR TO INSTALLING POST-INSTALLED ANCHORS, LOCATE THE EXISTING REINFORCING WITH AN "R"-METER OR PACHOMETER. LOCATE BOLT POSITIONS SO THAT THEY DO NOT CONFLICT WITH THE EXISTING REINFORCING. BOLT POSITIONS MAY BE ADJUSTED 1/16" INCHES FROM THE POSITIONS SHOWN IN THE CONTRACT DRAWINGS. CREATE A TEMPLATE SHOWING THE BOLT LOCATIONS, CONNECTION PLATE DIMENSIONS WITH PROPOSED HOLE LOCATIONS AND EXISTING REINFORCING LOCATIONS TO BE USED IN THE FABRICATION OF THE CONNECTION PLATE AND DRILLING OF THE BOLT HOLES. SUBMIT TEMPLATE DRAWING FOR APPROVAL PRIOR TO THE FABRICATION OF THE CONNECTION PLATE OR INSTALLATION OF THE POST-INSTALLED ANCHORS.
- HOLES IN CONNECTION PLATES FOR POST-INSTALLED ANCHORS SHALL NOT BE MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. IF FIELD CONDITIONS OR TOLERANCES REQUIRE LARGER HOLES, PROVIDE PLATE WASHERS, WITH BOLT HOLES NOT MORE THAN 1/16" LARGER THAN THE POST-INSTALLED ANCHOR, THAT ARE FIELD WELDED TO THE CONNECTION PLATE. THE CONTRACTOR SHALL SIZE THE PLATE WASHERS TO TRANSFER THE TOTAL SHEAR AND TENSION CAPACITY OF THE POST-INSTALLED ANCHOR.
- NOTIFY THE ENGINEER FOR ANY REASON THAT A DRILLED HOLE FOR A POSTINSTALLED ANCHOR MUST BE ABANDONED. WITH THE ENGINEERS APPROVAL, HOLES IN THE EXISTING CONCRETE SHALL BE FILLED WITH EPOXY GROUT.

15. METAL ROOF DECK

- ROOF DECK SHALL BE IN COMPLIANCE WITH THE CURRENT STEEL DECK INSTITUTE SPECIFICATIONS.
- ROOF DECK DIMENSIONS SHALL BE AS FOLLOWS:
 - 1 1/2" DEEP, 20 GAUGE, WIDE RIB, WITH 6" RIB SPACING.
- REFER TO THE SPECIFICATIONS FOR DECK STEEL MATERIAL AND DECK COATING.
- SCREWS SHALL BE AS SHOWN ON DETAIL 7/S201.
- NOT USED
- NOT USED
- ROOF DECK IS DESIGNED TO BE CONTINUOUS OVER THREE OR MORE SPANS. THE DECK SUPPLIER SHALL ADJUST THE THICKNESS OR GAUGE OF THE DECK AT LOCATIONS WHERE SINGLE OR DOUBLE SPAN CONDITIONS ARE PROVIDED. DECK SHALL BE DESIGNED TO PROVIDE EQUIVALENT OR GREATER LOAD CAPACITY AS THE SPECIFIED DECK SUPPORTED OVER THREE CONTINUOUS SPANS.
- INSTALL DECK ENDS OVER SUPPORTING FRAME WITH A MINIMUM END BEARING OF 1-1/2 INCHES, WITH END JOINTS LAPPED 2 INCHES MINIMUM.
- COORDINATE METAL DECK LENGTHS WITH THE FINAL TRUSS LAYOUT. THE FINAL TRUSS LAYOUT CAN BE DIFFERENT THAN THAT SHOWN IN THE CONTRACT DRAWINGS DEPENDING ON THE PRE-ENGINEERED TRUSS SYSTEM DESIGN. THE TRUSS LOCATIONS SHOWN IN THE CONTRACT DRAWINGS DO NOT ACCOUNT FOR THE DIFFERENCE IN TRUSS LOCATION DUE TO THE DIFFERENCES THAT MAY OCCUR BETWEEN WHAT IS SHOWN AND THE PRE-ENGINEERED TRUSS DESIGN.
- DECK CONNECTIONS SHALL BE AS SHOWN ON 7/S201
- DO NOT SUSPEND LIGHT FIXTURES, CEILING, DUCTS OR OTHER UTILITIES FROM THE STEEL DECK.

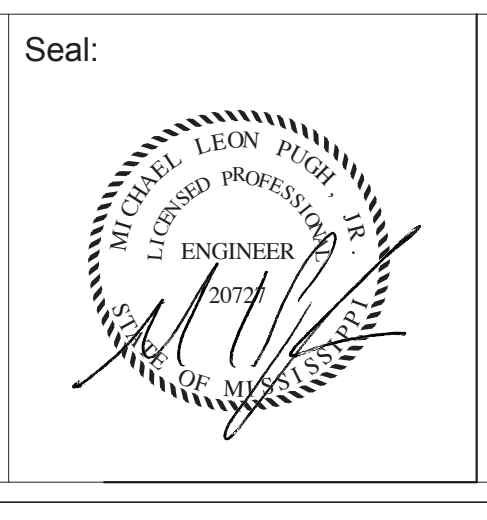
16. COLD FORMED METAL FRAMING

- ALL COLD-FORMED METAL FRAMING SHALL CONFORM TO AISI STANDARD S100-07 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS"
- WALLS SHALL BE PROVIDED WITH MANUFACTURERS STANDARD BRIDGING: (EITHER WLEDED 2 1/2" X 18 GAGE STUD OR CLIPPED COLD-ROLLED CHANNEL 1 1/2" X 16 GAGE). PROVIDE BRIDGING AT 4'-0" ON CENTER MAXIMUM FOR LOAD BEARING AND EXTERIOR WALLS.
- PROVIDE ALL MISCELLANEOUS ACCESSORIES AND FOLLOW ERECTION PROCEDURES AS PER MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS UNLESS NOTED OTHERWISE.
- ALL TRACK SHALL BE DEEP LEG, 18 GAGE MINIMUM.
- SECURE STUDS TO TOP AND BOTTOM TRACKS BY WELDING AT BOTH INSIDE AND OUTSIDE FLANGES OR WITH A MINIMUM OF 2-#8 TEK SCREWS PER LOCATION UP TO 16 GAGE MATERIAL AND 2-#10 TEK SCREWS PER LOCATION FOR 14 GAGE MATERIAL AND THICKER UNLESS NOTED OTHERWISE.

Revisions	Date

Consultants:

Seal:



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Approved:

PROGRAM MANAGER, PROJECTS _____

SAFETY/INDUSTRIAL HYGIENE _____

HEALTH SYSTEM SPECIALIST _____

MAINTENANCE SUPERVISOR _____

MAINTENANCE FOREMAN _____

MAINTENANCE FOREMAN _____

Drawing Title: **FRAMING PLAN AND DETAILS**

Approved: Service Engineer _____

Approved: Service Director _____

Project Title: **VA Gulf Coast Decontamination Unit**

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