GENERAL ENGINEERING NOTES:

1. GENERAL

A. ALL CONSTRUCTION SHALL CONFORM TO:

1. THE FLORIDA BUILDING CODE 2023, 8th. EDITION
2. THE FLORIDA BUILDING CODE 2023, 8th. EDITION RESIDENTIAL
3. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE/SEI 7- 22.
4. SIGNIFICANT CHANGES TO THE WIND LOAD PROVISIONS OF ASCE 7- 22.

B. DRAWINGS SHOW TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY.

C. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE STARTING WORK. NOTIFY STRUCTURAL ENGINEER OF ANY DISCREPANCY.

D. NOTIFY THE STRUCTURAL ENGINEER IN WRITING OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS.

E. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC.

F. COORDINATE STRUCTURAL CONTRACT DOCUMENTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL. NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY CONFLICT AND/OR OMISSION.

G. COORDINATE AND VERIFY FLOOR AND ROOF OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.

H. FOR DIMENSIONS NOT SHOWN SEE ARCHITECTURAL DRAWINGS.

I. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

J. SUPERIMPOSED DESIGN LIVE LOADS:

LIVING AREAS.....40 PSF
PORCH & DECKS.....60 PSF
ROOF.....20 PSF

2. FOUNDATION AND SLAB-ON-GROUND

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING EXISTING PILE CAPACITY TESTS PRIOR TO COMMENCING SUPERSTRUCTURE CONSTRUCTION AND SHALL SUBMIT A SIGNED AND SEALED GEOTECHNICAL REPORT TO THE ENGINEER OF RECORD (EOR) FOR REVIEW. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS OR PILE CAPACITIES THAT DIFFER FROM THOSE ASSUMED IN THE DESIGN.

B. EARTH SUPPORTED SLAB SHALL BE 4" THICK, PLACED ON COMPACTED SUBGRADE, REINFORCED WITH 6"X6"-W1.4XW1.4 WELDED WIRE FABRIC REINFORCEMENT.

C. ALL CONCRETE WORK SHALL CONFORM TO ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS. DESIGN IS BASED ON ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

D. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE THE FOLLOWING MINIMUM 28 DAY STRENGTHS:

FOUNDATIONS.....4000 PSI
SLAB-ON-GROUND.....4000 PSI

E. USE OF CALCIUM CHLORIDE, CHLORIDE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.

F. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE.

G. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE PROVIDED IN FLAT SHEETS (ROLLS NOT PERMITTED).

H. TIE ALL REINFORCING STEEL AND EMBEDMENTS SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN THE POSITION OF REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES.

I. PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE; SPLICE ONLY AS SHOWN OR APPROVED; STAGGER SPLICES WHERE POSSIBLE; USE TENSION SPLICE (CLASS "B") UNLESS NOTED OTHERWISE. DOWELS SHALL MATCH THE SIZE AND SPACING OF THE SPECIFIED REINFORCEMENT AND SHALL BE LAPPED WITH TENSION SPLICES (CLASS "B") UNLESS NOTED OTHERWISE.

J. DO NOT WELD OR TACK WELD REINFORCING STEEL UNLESS APPROVED OR DIRECTED BY THE STRUCTURAL ENGINEER.

K. STRUCTURAL TESTING/INSPECTION AGENCY SHALL CERTIFY THE BEARING MEDIUM BEFORE STARTING CONSTRUCTION.

L. NO CONCRETE SHALL BE PLACED IN STANDING WATER.

M. ALL FOOTING TRENCHES TO BE CLEARED OF ORGANIC MATERIALS.

N. ANY SOIL CONDITION ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THE CONDITIONS USED FOR DESIGN OF FOOTINGS AS OUTLINED IN THESE NOTES OR ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER OF RECORD BEFORE PROCEEDING.

3. TIMBER, PLYWOOD, SHEATHING, TRUSSES, JOISTS:

A. ALL TIMBER FRAMING SHALL CONFORM TO THE FOLLOWING CODES: AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (TIMBER CONSTRUCTION MANUAL, LATEST EDITION). THE FLORIDA BUILDING CODE 2023, RESIDENTIAL.

B. STRUCTURAL TIMBER SHALL BE #2 SOUTHERN YELLOW PINE (M.C. - 19%), OR APPROVED EQUAL (BY THE STRUCTURAL ENGINEER) UNLESS OTHERWISE NOTED ON DRAWINGS, WITH THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:

BENDING STRESS.....1,050 PSI
SHEAR STRESS.....90PSI
COMPRESSION STRESS PARALLEL TO GRAIN.....1,000 PSI
MODULUS OF ELASTICITY. .....1,600,000 PSI

C. STRUCTURAL GLUE LAMINATED TIMBER SHALL BE VISUALLY GRADED SOUTHERN PINE WITH THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:

BENDING STRESS.....2,400 PSI
SHEAR STRESS.....200 PSI
MODULUS OF ELASTICITY.....1,800,000 PSI

D. STRUCTURAL PARALLAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:

BENDING STRESS.....2,900 PSI
SHEAR STRESS.....290 PSI
MODULUS OF ELASTICITY. .....2,000,000 PSI

E. STRUCTURAL LAMINATED VENEER LUMBER SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:

BENDING STRESS.....3,100 PSI
SHEAR STRESS.....285 PSI
MODULUS OF ELASTICITY. .....2,100,000 PSI

F. PLYWOOD SHEATHING:

I. EACH CONSTRUCTION AND INDUSTRIAL PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF U.S. PRODUCT STANDARD PS 1 OR APA PRP-180 PERFORMANCE STANDARDS. ALL PANELS WHICH HAVE ANY EDGE OR SURFACE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE CLASSED EXTERIOR.

II. PANEL ROOF, WALL, CEILING, AND FLOOR SHEATHING SHALL BE (MIN.): 1/2" THICK (WALLS & CEILING), 3/4" THICK (FLOOR), 5/8" THICK (ROOF), OF APA STRUCTURAL I RATED SHEATHING EXP. 2 (REFER TO DETAILS AND NOTES ON PLANS). SHEATHING PERMANENTLY EXPOSED TO WEATHER, CONCRETE AND GYPCRETE SHALL BE CLASSED EXTERIOR.

III. NAIL WALL PANELS W/ 10d COMMON NAILS AT 3" O.C. ALONG SUPPORTED PANEL EDGES AND AT 12" O.C. AT INTERMEDIATE SUPPORTS. U.N.O. ON PLANS.

IV. ANCHOR ROOF PANELS W/ 8d RING-SHANK NAILS AT 4" O.C. ALONG SUPPORTED PANEL EDGES AND AT 6" O.C. AT INTERMEDIATE SUPPORTS. U.N.O. ON PLANS.

V. ANCHOR FLOOR PANELS W/ 10d RING-SHANK NAILS AT 3" O.C. ALONG SUPPORTED PANEL EDGES AND AT 6" O.C. AT INTERMEDIATE SUPPORTS. U.N.O. ON PLANS.

G. ALL EXTERIOR AND BEARING STUD WALLS SHALL BE #2 2X6 SOUTHERN YELLOW PINE U.N.O. AND HAVE SOLID BLOCKING AT MID-HEIGHT OR AT EACH SHEATHING JOINT.

H. NO SUPERIMPOSED LOAD FROM FLOOR, CEILING OR ROOF FRAMING MEMBERS SHALL BE TRANSFERRED TO INTERIOR NON-LOAD-BEARING WALLS. PROVIDE SLIDE CONNECTORS PER TYPICAL DETAILS OR APPROVED EQUAL.

I. PREFABRICATED WOOD STRUCTURAL MEMBERS, INCLUDING WOOD FLOOR AND ROOF TRUSSES SHALL BE DESIGNED SPECIFICALLY FOR THIS PROJECT PER WIND DESIGN INFORMATION TABLE. SHOP DRAWINGS SHALL BE SEALED BY A FLORIDA REGISTERED ENGINEER.

J. ROOF TRUSS MANUFACTURER TO REFER TO ARCHITECTURAL PLANS FOR RAFTER, CEILING AND BOTTOM CHORD CONFIGURATION, AND SHALL COORDINATE WITH THE MECHANICAL, AND ELECTRICAL PLANS FOR VERTICAL/ HORIZONTAL CHASES, PIPES AND DUCTING REQUIREMENTS.

K. TRUSS AND PRE-ENGINEERED BEAM MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE STRUCTURAL ENGINEER AND VERIFY ALL BEARING DIMENSIONS WITH THE BUILDING CONTRACTOR BEFORE FABRICATION OF TRUSSES.

L. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES BEFORE CONSTRUCTION AND/OR TRUSS FABRICATION COMMENCES.

M. WOOD TO WOOD FRAMED CONNECTIONS ARE TO BE MADE WITH BOLTS AND/OR JOIST HANGERS AS SHOWN. TOE-NAILING IS NOT PERMITTED.

N. ALL TRUSSES AND RAFTERS SHALL BE STRAPPED OR HURRICANE CLIPPED AT ALL SUPPORTING MEMBERS AT ALL BEARING POINTS.

O. ALL EXTERIOR FRAMING MEMBERS THAT ARE IN DIRECT CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE ACQ, (ALKALINE COPPER QUATERNARY) PRESSURE TREATED.

P. ALL METAL HARDWARE THAT IS IN DIRECT CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE STAINLESS STEEL, GRADE 304, GR. 316 OR GALVANIZED.

Q. PRESSURE TREATED LUMBER & CONNECTORS:

I. ALL SALT WATER/AIR EXPOSED AND GROUND CONTACT LUMBER, AS WELL AS LUMBER IN CONTACT WITH CONCRETE/GYPCRETE IN SALT WATER/AIR EXPOSED AREAS SHALL BE ACQ (ALKALINE COPPER QUATERNARY) CHEMICAL PRESSURE TREATED, AT THE RECOMMENDED RATE. THIS MATERIAL IS CORROSIVE TO METALS.

II. ALL NAILS, BOLTS, SCREWS, WOOD CONNECTORS, AND SIMPSON/USP MANUFACTURED METAL HARDWARE EXPOSED TO ACQ, (ALKALINE COPPER QUATERNARY) PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL GRADE 304 OR 316.

III. LUMBER IN CONTACT WITH CONCRETE/GYPCRETE, AND NOT SALT WATER/AIR EXPOSED, AND NOT GROUND CONTACT CAN BE SODIUM BORATE CHEMICAL PRESSURE TREATED, (AT THE RECOMMENDED RATE), AT THE CONTRACTOR'S OPTION. PRODUCTS TREATED WITH SODIUM BASED RETARDANTS AND PRESERVATIVES SHALL BE STAINLESS STEEL GRADE 304 OR 316.

R. ALL 2X WOOD STUDS SHALL BE ATTACHED TO TOP AND BOTTOM PLATES WITH MINIMUM (4) 10d NAILS. TOE NAILING IS NOT PERMITTED.

S. BASE PLATES OF ALL EXTERIOR WALLS TO BE ATTACHED TO CONCRETE SLAB W/ 1/2"ø ANCHORS AT 32" O/C MAX W/ 6" MIN. EMBED U.N.O. ON PLANS.

4. MASONRY SPECIFICATIONS:

A. HOLLOW CONCRETE BLOCK (MASONRY) UNITS SHALL CONFORM TO ASTM C90, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA AND 1000 PSI ON THE GROSS AREA. (F'M = 1500 PSI)

B. ALL MORTAR FOR MASONRY SHALL CONFORM TO ASTM C270, TYPE S. ALL GROUT FOR USE IN MASONRY SHALL CONFORM TO ASTM C476, MINIMUM 3000 PSI AT 28 DAYS.

C. REINFORCING BARS: ASTM A615 GRADE 60.

D. ALL CONTINUOUS HORIZONTAL BARS SHALL HAVE AT LEAST MINIMUM REQUIRED TENSION SPLICE WITH CORNER BARS AT ALL CORNERS AND WALL INTERSECTIONS PER IBC 2021.

E. ALL VERTICAL REINFORCEMENT IN MASONRY WALLS SHALL HAVE AT LEAST MINIMUM REQUIRED TENSION SPLICE PER IBC 2021.

F. PROVIDE MASONRY HORIZONTAL TRUSS TYPE JOINT REINFORCEMENT AT 16" O.C., (REFER TO PLANS/DETAILS), VERTICAL IN ALL CONCRETE BLOCK WALLS. REINFORCEMENT SHALL BE FOR TOTAL WIDTH OF CAVITY WALLS.

G. CONCRETE FOR BLOCK FILL SHALL HAVE 3/8 INCH MAXIMUM SIZE COARSE AGGREGATE AND SUFFICIENT SLUMP SO THE CONCRETE WILL FLOW INTO THE BLOCK CELLS WITHOUT LEAVING VOIDS. HEIGHT OF LIFT WHEN FILLING CELLS SHALL NOT EXCEED 4'-0".

H. UNLESS INDICATED OTHERWISE PROVIDE MASONRY CONTROL JOINTS AT A MAXIMUM SPACING OF 40 FEET. JOINTS SHALL BE DISCONTINUOUS AT BOND BEAM.

I. FILL CELLS OF MASONRY WITH CONCRETE. REINFORCE ONE CELL AT 32" ON CENTER, TWO CELLS AT EACH END OF OPENINGS, THREE CELLS AT CORNERS AND BEAM BEARING LOCATIONS, AND FOUR CELLS AT T-INTERSECTIONS WITH 1- #5 VERTICAL BAR AT EACH GROUTED CELL.

J. ANCHOR BOLTS INTO MASONRY WALL SHALL BE GALVANIZED STEEL AND MINIMUM 1/2" IN DIAMETER WITH MINIMUM 4" EMBEDMENT LENGTH IN CONCRETE U.N.O. ON PLANS.

5. STRUCTURAL STEEL

A. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED ACCORDING TO THE 'LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

B. STRUCTURAL STEEL SHALL BE OF THE FOLLOWING GRADE UNLESS NOTED OTHERWISE ON DRAWINGS:

1. W-SHAPES SHALL CONFORM TO ASTM A992, GRADE 50. (ASTM A572, GRADE 50 MAY BE SUBSTITUTED FOR ASTM A992.)
2. SQUARE/RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B.
3. ROUND HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A501 OR ASTM A53, GRADE B.
4. OTHER STEEL SHAPES (CHANNELS, ANGLES, AND PLATES) MAY CONFORM TO ASTM A36.

C. BOLTS, RODS, ANCHORS AND HEADED STUDS:

1. ALL CONNECTIONS SHALL BE SNUG TIGHTENED USING THE TURN OF NUT METHOD CRITICAL WITH A MINIMUM 3/4" DIAMETER A325 HIGH-STRENGTH BOLTS.
2. ANCHOR RODS SHALL CONFORM TO ASTM A36 OR A307, UNLESS NOTED OTHERWISE.
3. HEADED STUDS SHALL BE 3/4" DIAMETER, UNLESS NOTED OTHERWISE, AND SHALL CONFORM TO AWS D1.1. LENGTH OF STUD SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWING:

D. CONNECTIONS SHALL BE DETAILED BASED ON THE DESIGN INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. DEVIATION FROM THE CONNECTION DETAILS DEPICTED IN THE CONTRACT DOCUMENTS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.

1. STANDARD SHEAR CONNECTIONS SHALL BE DETAILED AS DOUBLE-ANGLE, SINGLE PLATE.
2. FOR WELDED CONNECTIONS, USE PREQUALIFIED WELDED JOINTS IN ACCORDANCE WITH AISC AND THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY. "NON-PREQUALIFIED JOINTS" SHALL BE QUALIFIED PRIOR TO FABRICATION.
3. FACTORED DESIGN REACTIONS SHALL BE AS SHOWN ON THE STRUCTURAL DRAWINGS.

E. THE CAMBER OF STEEL MEMBERS SHALL BE VERIFIED IN THE SHOP AND THE FIELD PER THE SPECIFICATIONS.

F. THE STRUCTURAL STEEL MEMBERS HAVE NOT BEEN DESIGNED TO ACCOMMODATE THE TORSION RESULTING FROM THE ECCENTRIC LOADING OF THE PRECAST PANELS, CURTAIN WALL SYSTEMS, LIGHT GAUGE METAL FRAMING, ETC. SUPPLEMENTAL SECONDARY BRACING SHALL BE DESIGNED AND PROVIDED BY THE SUPPLIER TO ELIMINATE THE TORSION.

G. STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED.

6. POST INSTALLED ANCHORS

A. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. 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. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQ'D BY THE BUILDING CODE, PROVIDE CONTINUOUS SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE EVALUATION REPORT. CONTACT MANUFACTURER'S REPRESENTATIVE FOR THE INITIAL TRAINING AND INSTALLATION OF ANCHORS AND FOR PRODUCT RELATED QUESTIONS AND AVAILABILITY.

B. CONCRETE ANCHORS

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:

- SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713)
- SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)

2. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED AND UNCRACKED CONCRETE

- SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
- SIMPSON STRONG-TIE "AT-XP" (IAPMO-ES ES-0263)
- HILTI HIT HY150 INJECTION ADHESIVE
- EPCON CERAMIC 6 EPOXY ADHESIVE SUPPLIED BY ITW RAMSET/RED HEAD
- POWER-FAST EPOXY INJECTION GEL SUPPLIED BY POWERS FASTENING

3. POWDER AND GAS-ACTUATED FASTENERS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED POWDER ACTUATED FASTENERS INCLUDE:

- SIMPSON STRONG-TIE "POWER-DRIVEN FASTENERS" (ICC-ES-ESR-2138)
- SIMPSON STRONG-TIE "GAS-ACTUATED FASTENERS" (ICC-ES ESR-2811)

C. MASONRY ANCHORS

- ANCHORAGE TO SOLID-GROUTED CONCRETE MASONRY:

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC01 OR AC106. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:

- SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES FL15730)
- SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAMPO-ES FL16230)
- SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES FL15730)

2. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:

- SIMPSON STRONG-TIE "AT-XP" (IAMPO-ES FL16230)
- SIMPSON STRONG-TIE "SET-XP" (IAMPO-ES ER-16230)
- HILTI HIT HY150 INJECTION ADHESIVE (ICC-ES ESR-3963)

3. ANCHORAGE TO HOLLOW CONCRETE MASONRY:

3.1. ADHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS APPROPRIATE. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED ADHESIVE ANCHORS WITH SCREEN TUBES INCLUDE:

- SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)
- SIMPSON STRONG-TIE "AT" (ICC-ES ESR-1958)
- HILTI HIT HY150 INJECTION ADHESIVE
- EPCON CERAMIC 6 EPOXY ADHESIVE SUPPLIED BY ITW RAMSET/RED HEAD
- POWER-FAST EPOXY INJECTION GEL SUPPLIED BY POWERS FASTENING

7. CAST IN PLACE CONCRETE:

A. CONCRETE WORK SHALL CONFORM TO ACI 318-99 AND CRSI STANDARDS.

B. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM SPECIFIED 28-DAY COMPRESSIVE STRENGTH:

B.1. NORMAL WEIGHT STRUCTURAL CONCRETE: 4,000 PSI

C. PIPES OR DUCTS SHALL NOT EXCEED ONE-THIRD THE SLAB OR WALL THICKNESS UNLESS SPECIFICALLY DETAILED. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION OF SLEEVES, ACCESSORIES, ETC.

D. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES,ORNAMENTS, CLIPS OR GROUNDS REQUIRED TO BE ENCASED IN CONCRETE AND FOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.

E. CONSTRUCTION JOINT LOCATIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. NO HORIZONTAL CONSTRUCTION JOINTS ARE PERMITTED EXCEPT THOSE SHOWN ON THE STRUCTURAL DRAWINGS.

F. DEFECTIVE AREAS IN CONCRETE INCLUDING, BUT NOT LIMITED TO, HONEY-COMBING, SPALLS, AND CRACKS WITH WIDTHS EXCEEDING 0.01 INCH SHALL BE REPAIRED. EXTENT OF DEFECTIVE AREA TO DETERMINED BY THE STRUCTURAL ENGINEER.

8. STRUCTURAL INSPECTIONS:

A. CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER TO PERFORM STRUCTURAL INSPECTIONS PRIOR TO PLACING CONCRETE OR COVERING STRUCTURAL MEMBERS OR CONNECTIONS.
CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AT LEAST 48 HOURS IN ADVANCE OF A NECESSARY INSPECTION.

B. TYPICAL SCHEDULING OF INSPECTION:

- PILINGS (WHEN APPLICABLE)
- FOUNDATION
  - FOOTINGS (LAYOUT AND REBARS)
  - STEM WALL BLOCK AND/OR BLOCK PIER (LAYOUT AND REBARS)
- FIRST FLOOR
  - SLAB (REINFORCING STEEL AND GRADE BEAMS) (WHEN APPLICABLE)
  - FIRST FLOOR FRAMING (BEAMS, JOISTS, HANGERS, STRAPS, HOLDOWNS) (WHEN) APPLICABLE)
- SHEATHING NAIL-OFF INSPECTION (EXTERIOR SHEATHING, SHEARWALL SHEATHING, ROOF DECKING) (WHEN APPLICABLE)
- FINAL FRAMING/STRAPPING (BEAMS,COLUMNS, TRUSSES, STRAPS, HOLDOWNS, SHEAR WALLS) FOLLOW-UP FRAMING/STRAPPING INSPECTIONS (IF CORRECTIONS WERE REQUIRED AFTER INITIAL FRAMING/STRAPPING INSPECTION)
- CAST IN PLACE CONCRETE ELEMENTS
  - REINFORCING FOR WALL AND COLUMNS PRIOR TO CLOSING FORMWORK
  - REINFORCING IN ALL C.I.P. BEAMS AND STRUCTURAL SLABS.

C. THE E.O.R. INSPECTIONS LISTED ABOVE ARE MANDATORY AND CAN NOT BE SUBSTITUTED BY COUNTY, OR ANY OTHER THIRD PARTY INSPECTION AGENCY.

9. REINFORCEMENT:

A. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.

B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND HAVE MINIMUM SIDE AND END LAPS OF 8".

C. REINFORCING STEEL SHALL ONLY BE WELDED OR TACK-WELDED IF IT CONFORMS TO ASTM A706, AND AWS D1.4. REINFORCING SHALL NOT BE WELDED NOR TACK-WELDED UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.

D. SUBMIT SHOP DRAWINGS WHICH ADEQUATELY DEPICT THE REINFORCING BAR SIZES AND PLACEMENT. WRITTEN DESCRIPTION OF REINFORCEMENT WITHOUT ADEQUATE SECTIONS, ELEVATIONS, AND DETAILS IS NOT ACCEPTABLE.

E. PROVIDE DOWELS FROM FOUNDATIONS THE SAME SIZE AND NUMBER AS THE VERTICAL WALL OR COLUMN REINFORCING, UNLESS NOTED OTHERWISE.

F. PLACE REINFORCEMENT AS FOLLOWS, UNLESS NOTED OTHERWISE:

CAST-IN-PLACE (NON POST-TENSIONED) CONCRETE REINFORCEMENT COVER:

PERMANENTLY EXPOSED TO EARTH:
CAST AGAINST THE EARTH.....3" CLEAR
CAST AGAINST THE FORMWORK.....2" CLEAR

EXPOSED TO EARTH OR WEATHER:
FOR BARS LARGER THAN NO. 5 BAR.....2" CLEAR
NO. 5 BARS OR SMALLER.....1-1/2" CLEAR

G. MASONRY REINFORCING SHALL BE PLACED IN THE CENTER OF CMU CELLS, UNLESS NOTED OTHERWISE.

H. REINFORCEMENT SHALL BE SPLICED ONLY AT LOCATIONS SHOWN OR NOTED IN THE STRUCTURAL DOCUMENTS. SPLICES AT OTHER LOCATIONS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. REINFORCING STEEL SPLICES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE.

TENSION DEVELOPMENT & LAP SPLICE LENGTHS FOR BARS IN WALLS, SLABS AND FOOTINGS. (1.5" min. concrete cover)

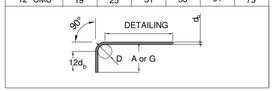
BAR SIZE	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
LENGTH	20	26	32	38	63	78

STANDARD HOOK GEOMETRY FOR DEVELOPMENT OF DEFORMED BARS IN TENSION

	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
D=6*d_b	2.25	3.00	3.75	4.50	5.25	6.00
A or G	6	8	10	12	14	16

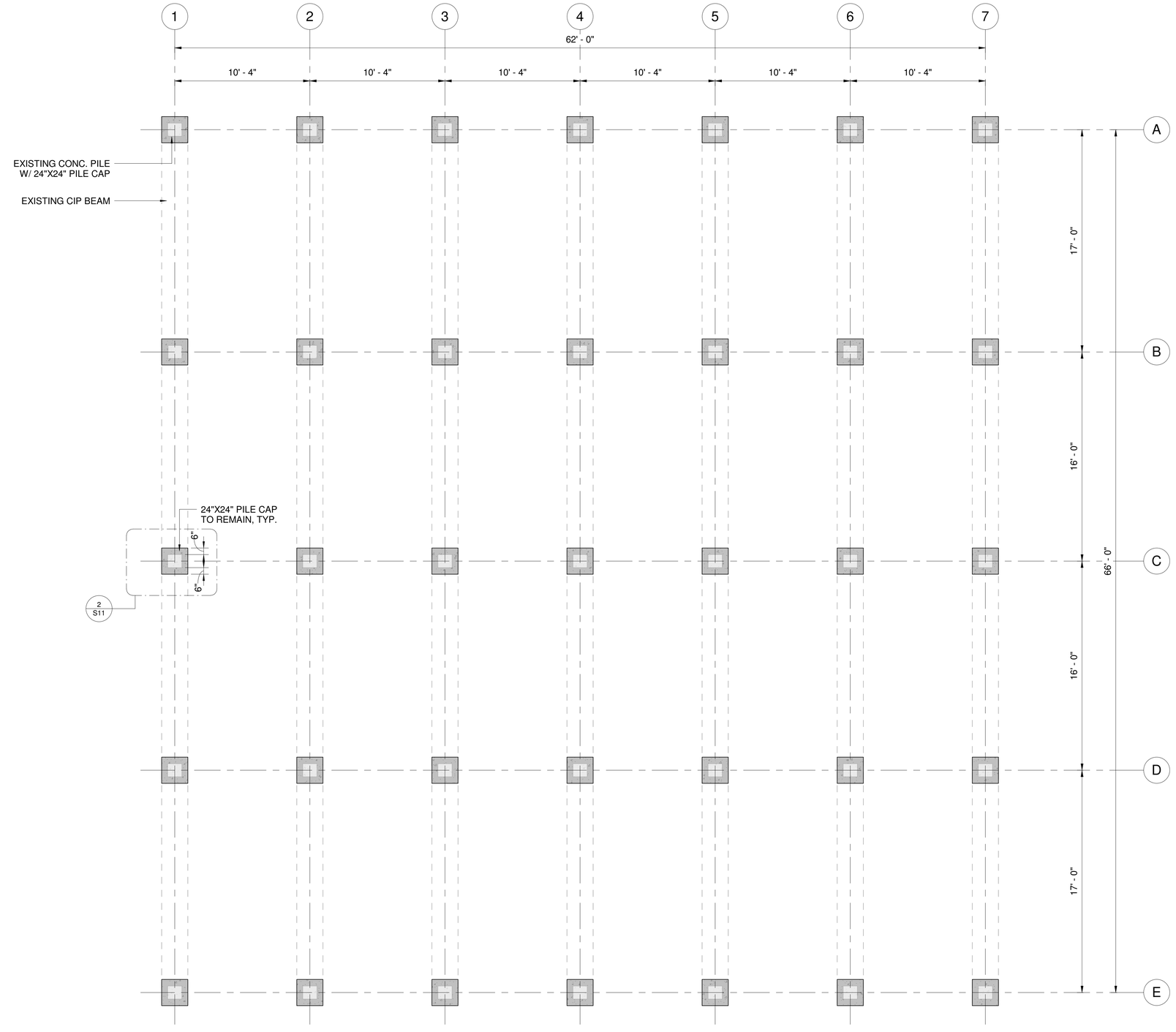
MINIMUM LAP SPLICE LENGTH (IN.) 1500 PSI NORMAL WEIGHT CMU

	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
6" CMU	19	25	39	81	NA	NA
8" CMU	19	25	31	57	79	113
12" CMU	19	25	31	53	61	75



ABBREVIATIONS

AB	ANCHOR BOLT
ADD	ADDITIONAL
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL or ARCHITECT
B/	BOTTOM OF
BLDG	BUILDING
BLKG	BLOCKING
BOS	BOTTOM OF STEEL
BRG	BEARING
B/S	BOTTOM SIDE
BTM or (B)	BOTTOM, "BOT" SIM
BTW	BETWEEN
CB	CARRIAGE BOLT
CFS	COLD FORMED STEEL
C/P	CAST IN PLACE
C.J.	CONTROL JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.	CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CSJ	CONSTRUCTION JOINT
CTR	CENTERED, "CNTRD" SIM
DBL	DOUBLE
DIA or (Ø)	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIR	DIRECTION
D.L.	DEAD LOAD
DN	DOWN
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.E.	EACH END
E.F.	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EMBED	EMBEDDED or EMBEDMENT
EOS	EDGE OF SLAB
E.G.	EXISTING GRADE
E.S.	EACH SIDE
EQ	EQUAL
E.W.	EACH WAY
EX	EXISTING
EXPB	EXPANSION BOLT
EXT	EXTERIOR
F.F.	FAR FACE
FFE	FINISHED FLOOR ELEVATION
F.G.	FINISHED GRADE
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FND	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FULL PENETRATION
F/S	FAR SIDE
FT OR (')	FOOT or FEET
FTG	FOOTING
FTAO	FORCE TRANSFER AROUND OPENING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GLULAM	GLUE LAMINATED LUMBER
GDR	GIRDER
GP	GUSSET PLATE
HAS	HEADED ANCHOR STUD
HD	HOLDOWN
HDG	HOT DIP GALVANIZED
HDR	HEADER
HK	HOOK
HORZ	HORIZONTAL
HSB	HIGH STRENGTH BOLT
H.S.S.	HEADED SHEAR or "HELSON" STUD
HSS	HOLLOW STL SECTION or TUBE
I.F.	INSIDE FACE
IN or (")	INCH or INCHES
INT.	INTERIOR
INV	INVERT
LB or (#)	POUNDS
L.E.	LEFT END
L.L.	LIVE LOAD
LLD	LONG LEG DOWN
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC.	LOCATION
LVL	LAMINATED VENEER LUMBER
LWC	LIGHT WEIGTH CONCRETE
MAS	MASONRY
MAX	MAXIMUM
MFGR	MANUFACTURER



NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING EXISTING PILE CAPACITY TESTS PRIOR TO COMMENCING SUPERSTRUCTURE CONSTRUCTION AND SHALL SUBMIT A SIGNED AND SEALED GEOTECHNICAL REPORT TO THE ENGINEER OF RECORD (EOR) FOR REVIEW. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS OR PILE CAPACITIES THAT DIFFER FROM THOSE ASSUMED IN THE DESIGN.
2. CUT ALL EXISTING CONCRETE BEAMS PER 2/S11. 24"X24" PILE CAP TO REMAIN.
3. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN, SLOPES, DRAINS, OPENINGS, AND FLOOR RECESSES.
4. - - - - - INDICATES LOCATION OF EXISTING CIP BEAM TO BE CUT PER 2/S11.
5. ▭ - INDICATES LOCATION OF EXISTING 12" SQ. CONC. PILES, CONTRACTOR TO TEST PILES AND PROVIDE GEOTECHNICAL ENGINEERING REPORT TO EOR FOR REVIEW.

1 EXISTING PILE AND BEAM PLAN
1/4" = 1'-0"

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EXISTING PILE AND BEAM PLAN

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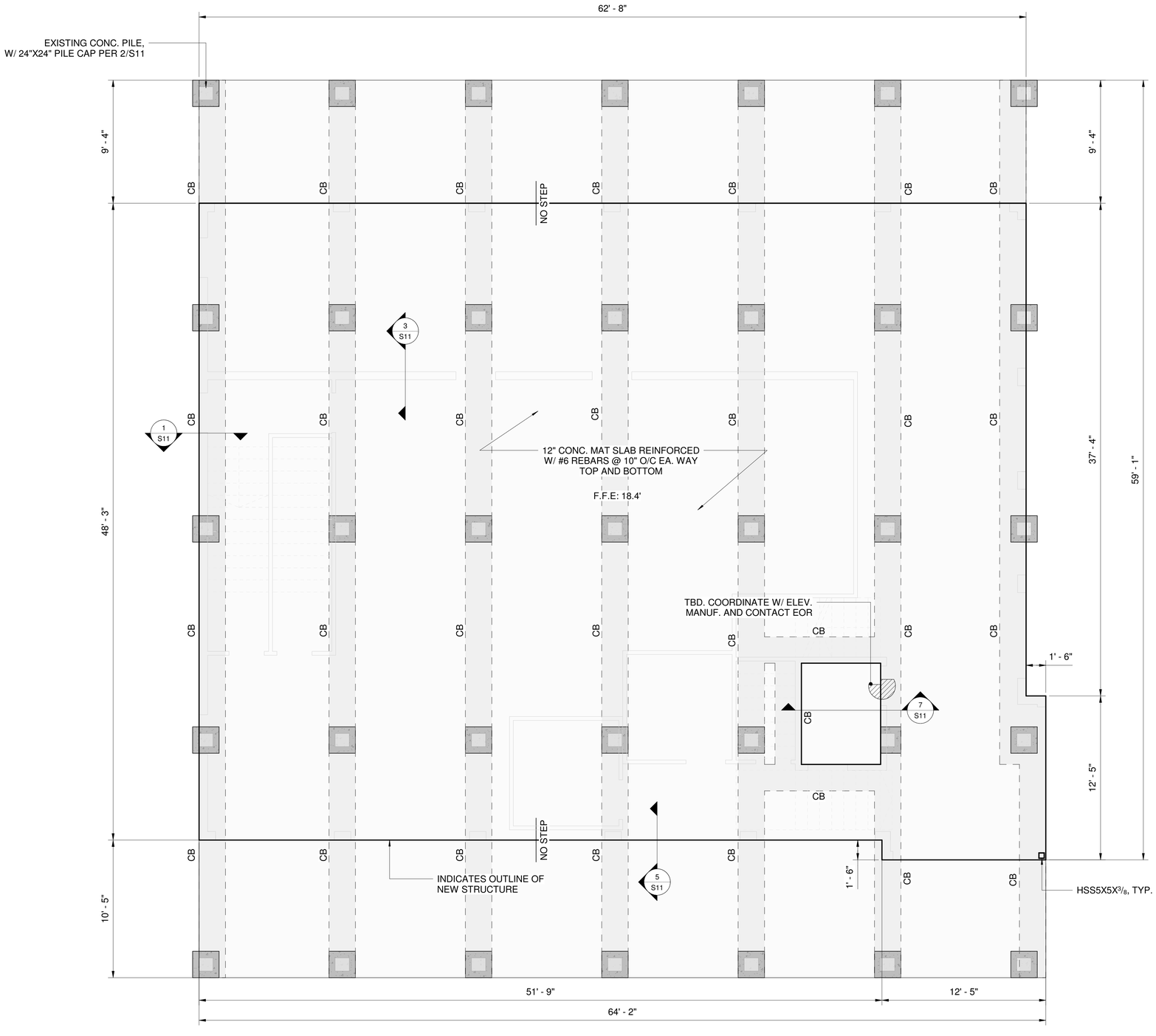
PR. ID: 24207
DATE: 2/21/2026

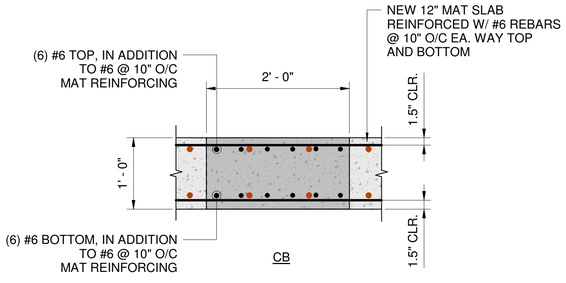
S2



1 MAT SLAB PLAN
1/4" = 1'-0"

NOTES:

1. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN, SLOPES, DRAINS, OPENINGS, AND FLOOR RECESSES.
2. X" - INDICATES LOCATION OF X" STEP.
3. - INDICATES LOCATION OF EXISTING 12" SQ. CONC. PILES.



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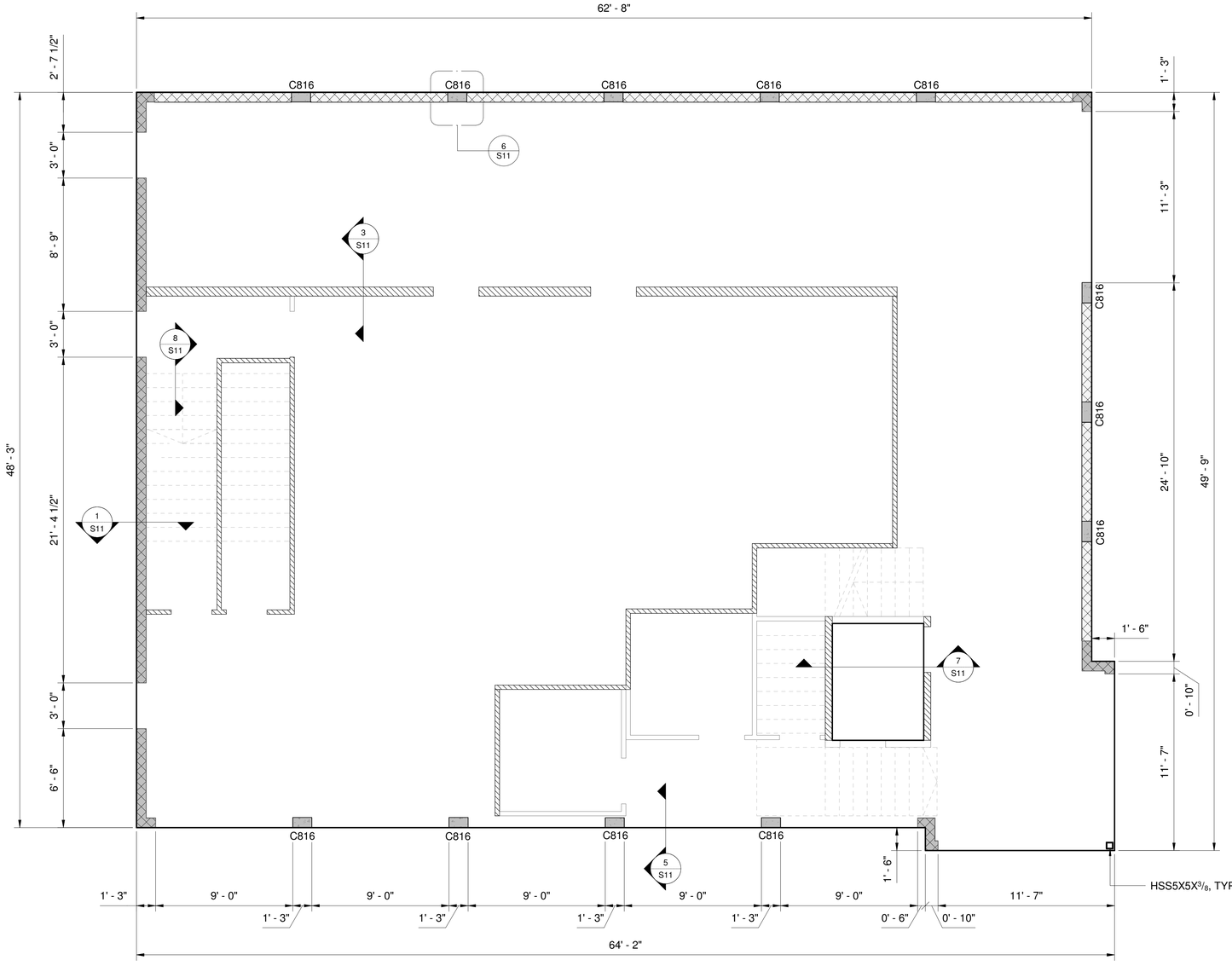
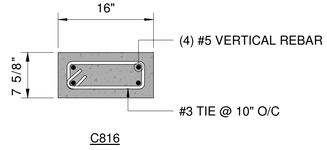
MAT SLAB PLAN

DRAWN BY: RC
CHECKED BY: DT
PR. ID: 24207
DATE: 2/21/2026

S3



1 FIRST FLOOR WALL LAYOUT
1/4" = 1'-0"



C816

NOTES:

1. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN, SLOPES, DRAINS, OPENINGS, AND FLOOR RECESSES.
2. ▨ - INDICATES LOCATION OF FULLY GROUTED 8" CMU WALL REINFORCED WITH # 5 VERTICAL REBARS @ 32" O/C AND PER DETAIL 7/S9.
3. COORDINATE W/ ARCH. FOR EXACT DOOR AND WINDOW ROUGH OPENING SIZES.
4. ▨ - INDICATES LOCATION OF 2X FRAMED INTERIOR LOAD BEARING WALL.

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FIRST FLOOR WALL LAYOUT

DRAWN BY: RC
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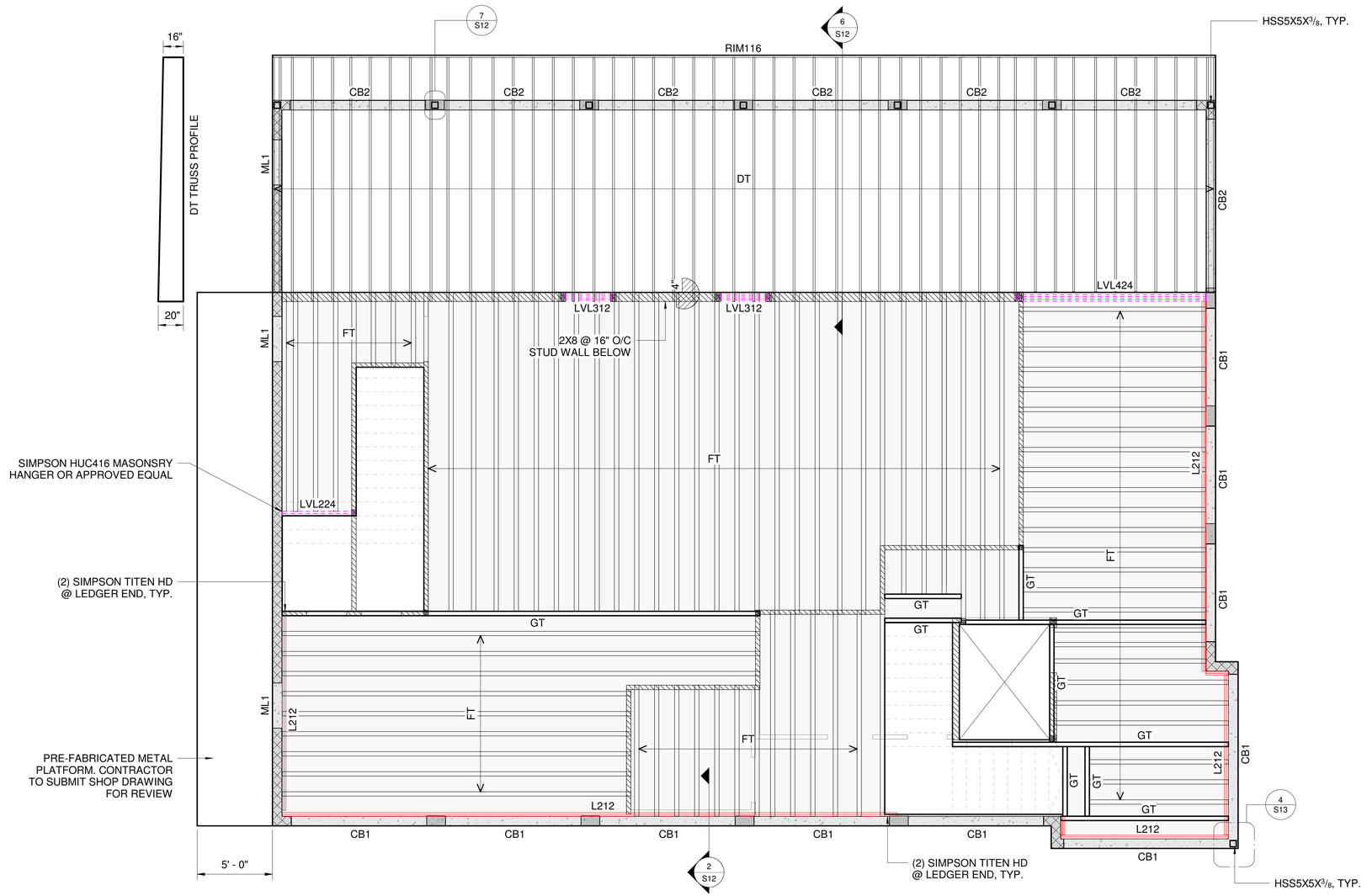
PR. ID: 24207
DATE: 2/21/2026

S4

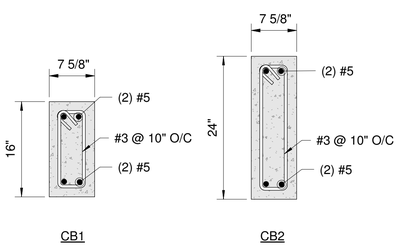


1 SECOND FLOOR FRAMING PLAN

1/4" = 1'-0"

NOTES:

1. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN, SLOPES, DRAINS, OPENINGS, AND FLOOR RECESSES.
2. TRUSS MANUF. TO REFER TO TRUSS DESIGN LOADS ON GENERAL NOTES SHEET.
3. ALL WOOD LOAD BEARING HEADERS/BEAMS NOT SPECIFIED ON PLANS SHALL BE MIN. (3) 2X12 W/ (2) 1/2" PLYWOOD FLITCH PLATES TYP. FOR 2X6 WALLS AND (2) 2X12 1/2" PLYWOOD FLITCH PLATE FOR 2X4 WALLS (U.N.O.)
4. ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED UNLESS WATERPROOFED BY A CERTIFIED CONTRACTOR.
5. ALL FASTENERS/STRAPS/CLIPS/HANGER ETC. THAT ARE LOCATED OUTSIDE THE BUILDING ENVELOPE OF THE HOUSE SHALL BE STAINLESS STEEL GR.304, GR. 316 OR GALVANIZED.
6. ALL BEAM TO BEAM/WALL CONNECTIONS TO BE MADE WITH SIMPSON HUCQ612-SDS/HHU5.5/10 U.N.O.
7. X" - INDICATES LOCATION OF X" STEP.
8. - INDICATES LOCATION OF MIN. 3 PLY 2X STUD PACK STRAPPED TO BEAM/TRUSS ABOVE W/ (2) MTS20 STRAP OR APPROVED SIMILAR. ATTACH BASE OF ROOF SUPPORTING STUD PACKS TO FRAMING BELOW W/ (2) MTS20 STRAPS AND/OR TO CONCRETE FOUNDATION W/ SIMPSON HDU5-SDS2.5.
9. - INDICATES LOCATION OF 2X FRAMED INTERIOR LOAD BEARING WALL.
10. - INDICATES LOCATION OF FULLY GROUTED 8" CMU WALL REINFORCED WITH # 5 VERTICAL REBARS @ 32" O/C AND PER DETAIL 7/S9.



CAST-CRETE LINTEL SCHEDULE

NOTES:

1. ALL LINTELS SHALL HAVE 8" MIN. BEARING @ EA. END.
2. ALL LINTELS SHALL BE FILLED W/ 4000 PSI GROUT MIN.
3. DESIGN IS BASED ON CAST-CRETE PRECAST LINTEL TYPES.
4. LINTELS THAT COVER SPAN 8'-0" AND GREATER SHALL BE PROVIDED WITH TEMPORARY SUPPORT AT MIDPOINT UNTIL GROUTED CONCRETE HAS REACHED FULL STRENGTH.

FRAMING LEGEND

FT	24" PRE-ENGINEERED FLOOR TRUSSES @ 16" O/C MAX
GT	24" PRE-ENGINEERED FLOOR GIRDER TRUSS
DT	PRE-ENGINEERED DECK TRUSSES @ 16" O/C MAX.
LVL424	QUAD. 1.75"X 24" LVL BEAM
LVL224	DOUBLE 1.75"X 24" LVL BEAM
LVL312	TRIPLE 1.75"X 12" LVL BEAM
B212	DOUBLE 2X12 BEAM
L212	DOUBLE 2X12 LEDGER
RIM116	SINGLE 1.75"X16" LVL RIMBOARD

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SECOND FLOOR FRAMING PLAN

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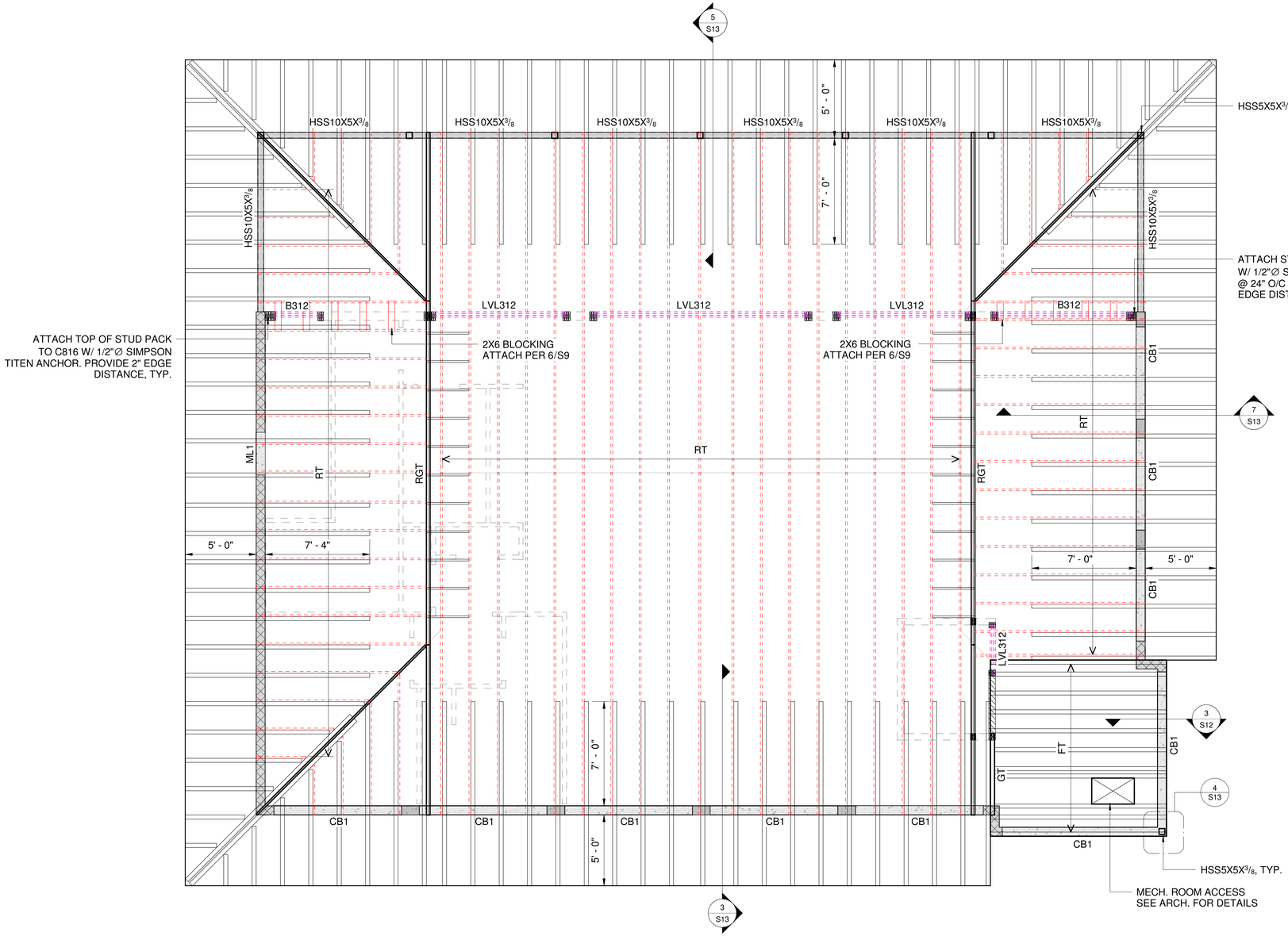
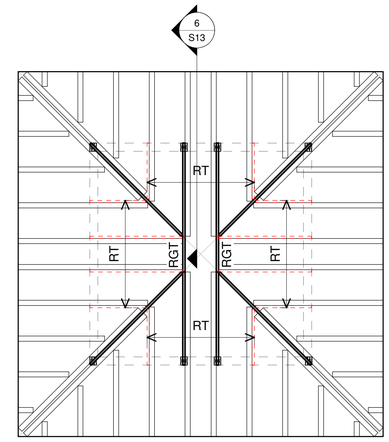
DATE: 2/21/2026

S5



1 MAIN ROOF FRAMING PLAN
1/4" = 1'-0"



2 TOWER LEVEL ROOF FRAMING PLAN
1/4" = 1'-0"

NOTES:

1. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN, SLOPES, DRAINS, OPENINGS, AND FLOOR RECESSES.
2. TRUSS MANUF. TO REFER TO TRUSS DESIGN LOADS ON GENERAL NOTES SHEET.
3. ALL WOOD LOAD BEARING HEADERS/BEAMS NOT SPECIFIED ON PLANS SHALL BE MIN. (3) 2X12 W/ (2) 1/2" PLYWOOD FLITCH PLATES TYP. FOR 2X6 WALLS AND (2) 2X12 1/2" PLYWOOD FLITCH PLATE FOR 2X4 WALLS (U.N.O.)
4. ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED UNLESS WATERPROOFED BY A CERTIFIED CONTRACTOR.
5. ALL FASTENERS/STRAPS/CLIPS/HANGER ETC. THAT ARE LOCATED OUTSIDE THE BUILDING ENVELOPE OF THE HOUSE SHALL BE STAINLESS STEEL GR.304, GR. 316 OR GALVANIZED.
6. ALL BEAM TO BEAM/WALL CONNECTIONS TO BE MADE WITH SIMPSON HUCQ612-SDS/HHU5.5/10 U.N.O.
7. ▨ - INDICATES LOCATION OF MIN. 3 PLY 2X STUD PACK STRAPPED TO BEAM/TRUSS ABOVE W/ (2) MTS20 STRAP OR APPROVED SIMILAR. ATTACH BASE OF STUD PACK TO FRAMING BELOW W/ (2) MTS20 STRAPS AND/OR TO CONCRETE FOUNDATION W/ SIMPSON HDU5-SDS2.5.
8. ▩ - INDICATES LOCATION OF FULLY GROUTED 8" CMU WALL REINFORCED WITH # 5 VERTICAL REBARS @ 32" O/C AND PER DETAIL 7/S9.

FRAMING LEGEND

RT	PRE-ENGINEERED ROOF TRUSSES @ 24" O/C MAX.
RGT	PRE-ENGINEERED ROOF GIRDER TRUSS
FT	16" PRE-ENGINEERED FLOOR TRUSSES @ 16" O/C MAX
GT	16" PRE-ENGINEERED FLOOR GIRDER TRUSS
LVL312	TRIPLE 1.75"X 12" LVL BEAM
LVL212	DOUBLE 1.75"X 12" LVL BEAM
B312	TRIPLE 2X12 BEAM

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ROOF FRAMING PLAN

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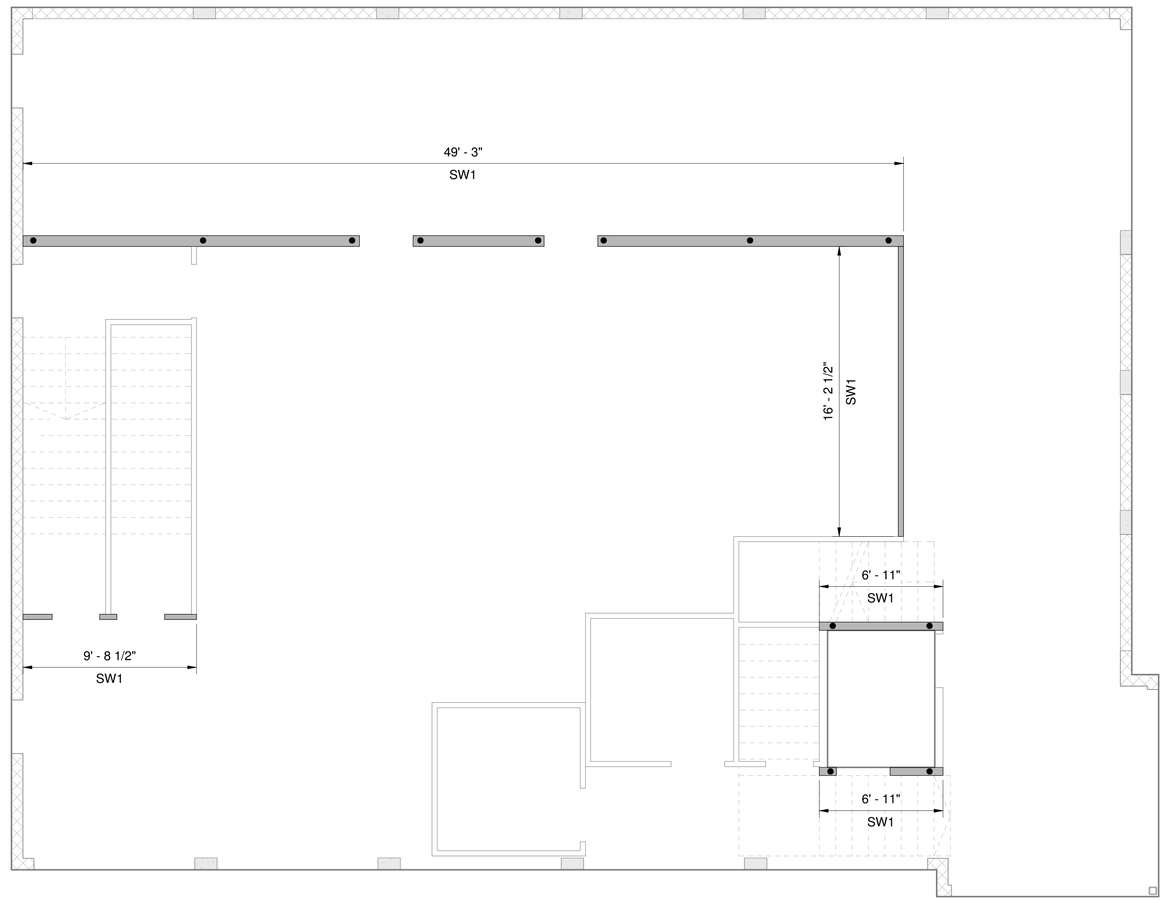
DATE: 2/21/2026

S6



1 FIRST FLOOR SHEAR WALL LAYOUT
1/4" = 1'-0"

NOTES:

1. ALL EXTERIOR WALLS NOT SPECIFICALLY DESIGNATED ON PLANS SHALL BE TYPE "SW1".
2. WHERE PANELS ARE APPLIED ON BOTH FACES OF SHEAR WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. ALTERNATIVELY, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE 3" NOMINAL OR GREATER AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED.
3. PROVIDED PARAMETERS ARE MINIMUM ALLOWABLE.
4. ● - INDICATES APPROXIMATE LOC. OF $^{5}/_{8}$"Ø ALL THREAD HOLDOWN. LOCATE UPLIFT DEVICE WITHIN A FOOT OF EVERY CORNER AND WALL OPENING, AND AS SHOWN ON PLANS.
5. ▭ - INDICATES LOCATION OF 2X FRAMED INTERIOR SHEAR WALL. CONTINUOUSLY (DON'T BREAK SHEATING @ INTERIOR WALLS) SHEATH WITH $^{15}/_{32}$" APA RATED SHEATHING. ATTACH FLOOR AND/ OR ROOF DIAPHRAGM TO ALL SHEAR WALLS.

WOOD FRAMED SHEAR WALL SCHEDULE

MARK	SHEATHING	EDGE NAILING	FIELD NAILING	SIDE	BASE PLATE CONNECTION	
					WOOD	CONCRETE
SW1	15/32" PLYWOOD SHEATHING	10d (3"X0.128") @ 3" O/C	10d (3"X0.128") @ 12" O/C	1	(3) 10d NAILS 12" O/C MAX.	5/8" Ø ANCHOR 24" O/C MAX.

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FIRST FLOOR SHEAR WALL LAYOUT

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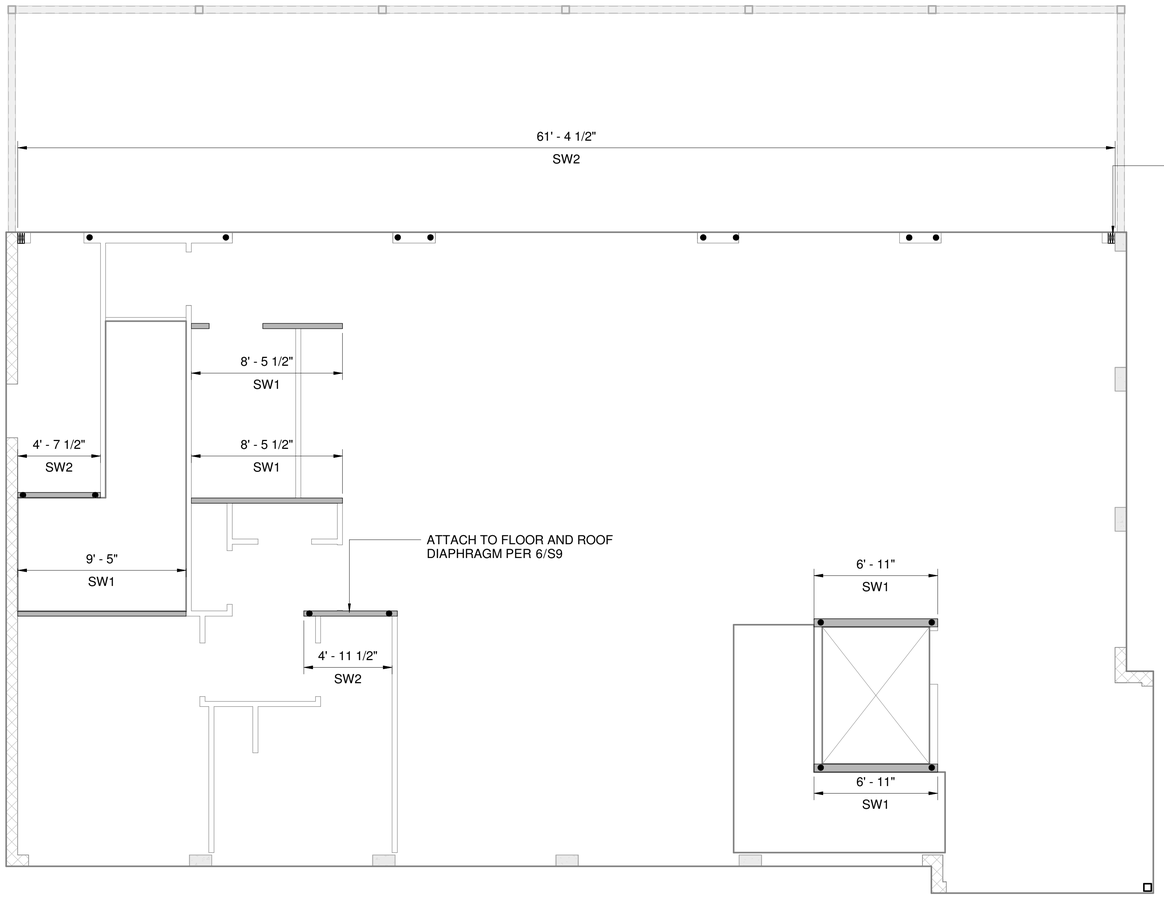
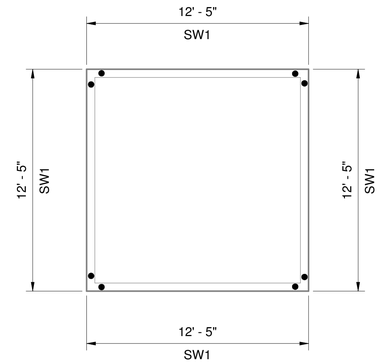
CHECKED BY: DT
PR. ID: 24207
DATE: 2/21/2026

S7



1 SECOND FLOOR SHEAR WALL LAYOUT
1/4" = 1'-0"



2 TOWER LEVER SHEAR WALL LAYOUT
1/4" = 1'-0"

NOTES:

1. ALL EXTERIOR WALLS NOT SPECIFICALLY DESIGNATED ON PLANS SHALL BE TYPE "SW1".
2. WHERE PANELS ARE APPLIED ON BOTH FACES OF SHEAR WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. ALTERNATIVELY, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE 3" NOMINAL OR GREATER AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED.
3. PROVIDED PARAMETERS ARE MINIMUM ALLOWABLE.
4. ● - INDICATES APPROXIMATE LOC. OF $^{5}/_{8}$"∅ ALL THREAD HOLDOWN. LOCATE UPLIFT DEVICE WITHIN A FOOT OF EVERY CORNER AND WALL OPENING, AND AS SHOWN ON PLANS.
5. ▭ - INDICATES LOCATION OF 2X FRAMED INTERIOR SHEAR WALL. CONTINUOUSLY (DON'T BREAK SHEATING @ INTERIOR WALLS) SHEATH WITH $^{15}/_{32}$" APA RATED SHEATHING. ATTACH FLOOR AND/ OR ROOF DIAPHRAGM TO ALL SHEAR WALLS.

WOOD FRAMED SHEAR WALL SCHEDULE

MARK	SHEATHING	EDGE NAILING	FIELD NAILING	SIDE	BASE PLATE CONNECTION	
					WOOD	CONCRETE
SW1	15/32" PLYWOOD SHEATHING	10d (3"X0.128") @ 3" O/C	10d (3"X0.128") @ 12" O/C	1	(3) 10d NAILS 12" O/C MAX.	5/8" Ø ANCHOR 24" O/C MAX.
SW2	15/32" PLYWOOD SHEATHING	10d (3"X0.128") @ 3" O/C	10d (3"X0.128") @ 12" O/C	2	(3) 10d NAILS 6" O/C MAX.	5/8" Ø ANCHOR 24" O/C MAX.

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SECOND FLOOR AND TOWER
LEVEL SHEAR WALL LAYOUT

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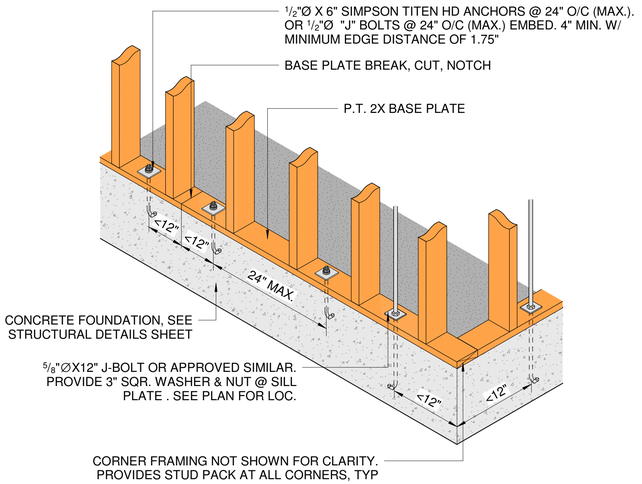
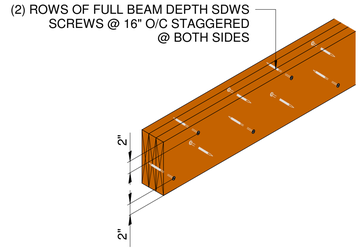
DATE: 2/21/2026

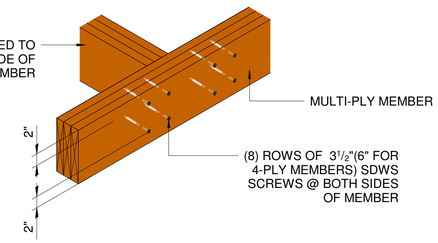
S8



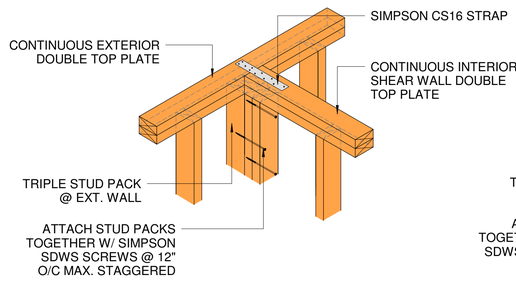
1 TYP. BASE PLATE ATTACHMENT DETAIL



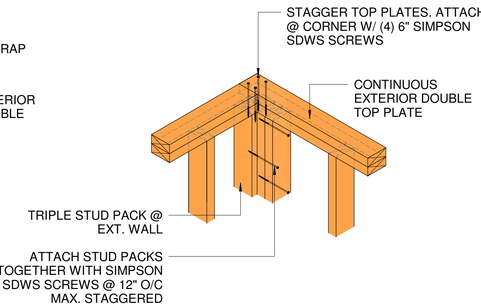
2 MULTI-PLY MEMBER SCREW PATTERN CONNECTION DETAIL



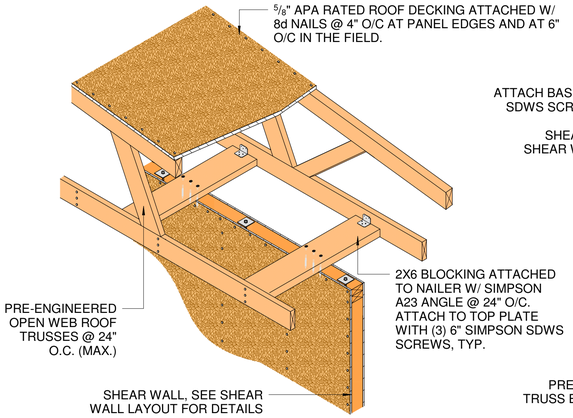
3 MULTI-PLY MEMBER SCREW PATTERN CONNECTION DETAIL @ POINT LOAD APPLIED TO EITHER SIDE OF MEMBER

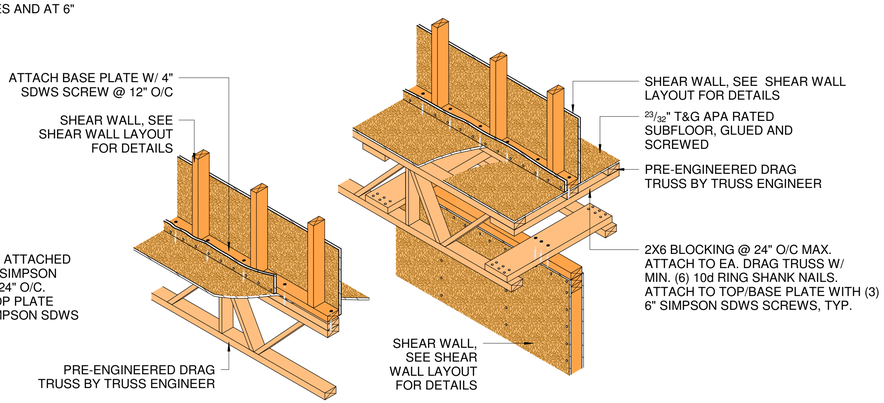


4 SHEAR WALL TOP PLATE CONNECTION DETAIL @ EXTERIOR WALL

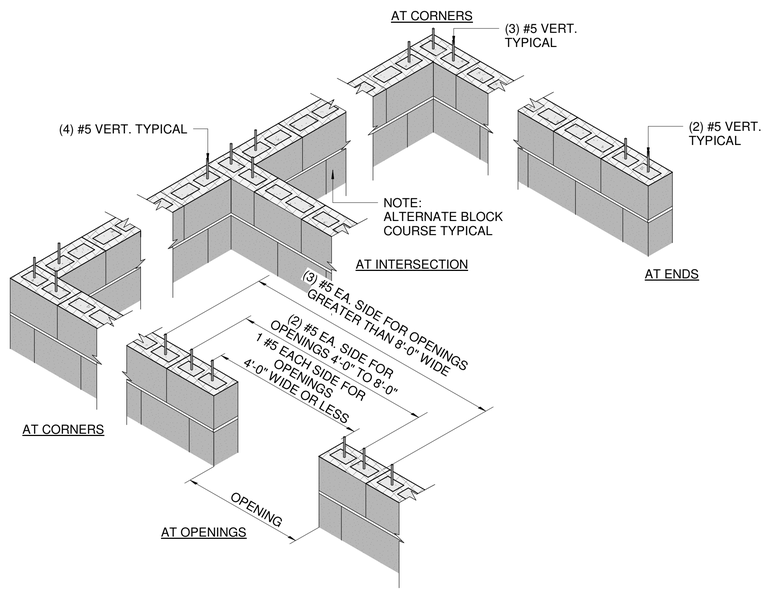


5 TYP. TOP PLATE SPLICE @ CORNER

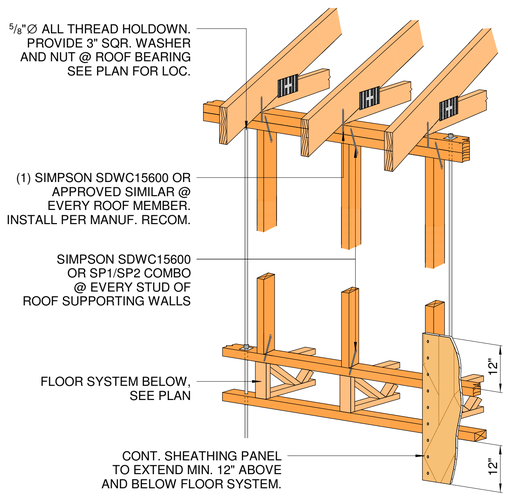




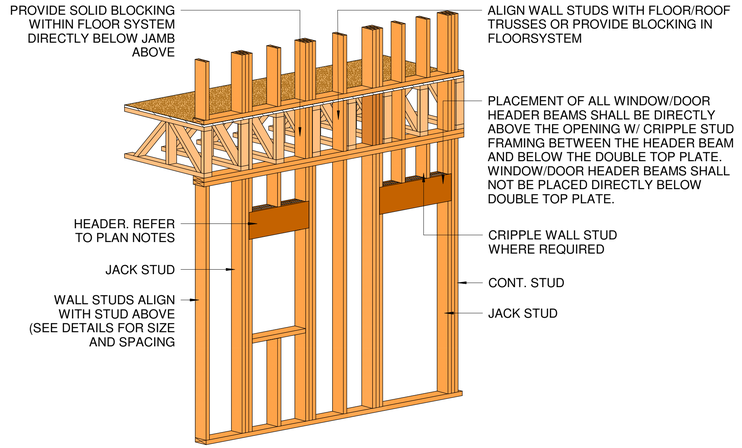
6 TYP. FLOOR/ROOF TO SHEAR WALL CONECTION DETAILS



7 TYP. CMU WALL REINFORCING LAYOUT



8 TYP. CONNECTION DETAIL @ ROOF SUPPORTING STUDS



ROUGH OPENING FRAMING TABLE					
UP TO 3'-0" R.O.		3'-1" TO 6'-0" R.O.		6'-1" TO 10'-0" R.O.	
CONT.	JACK	CONT.	JACK	CONT.	JACK
2-2X6	1-2X6	3-2X6	2-2X6	4-2X6	3-2X6

9 TYPICAL WALL FRAMING DETAIL @ HEADERS

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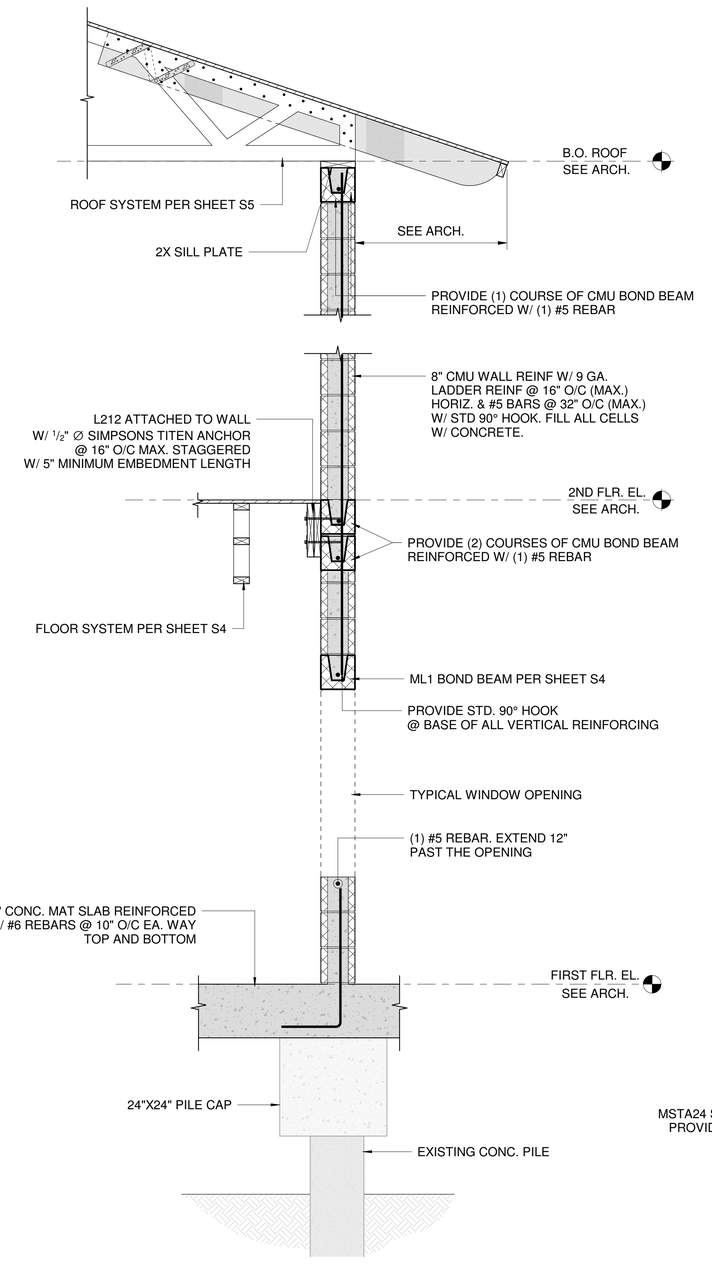
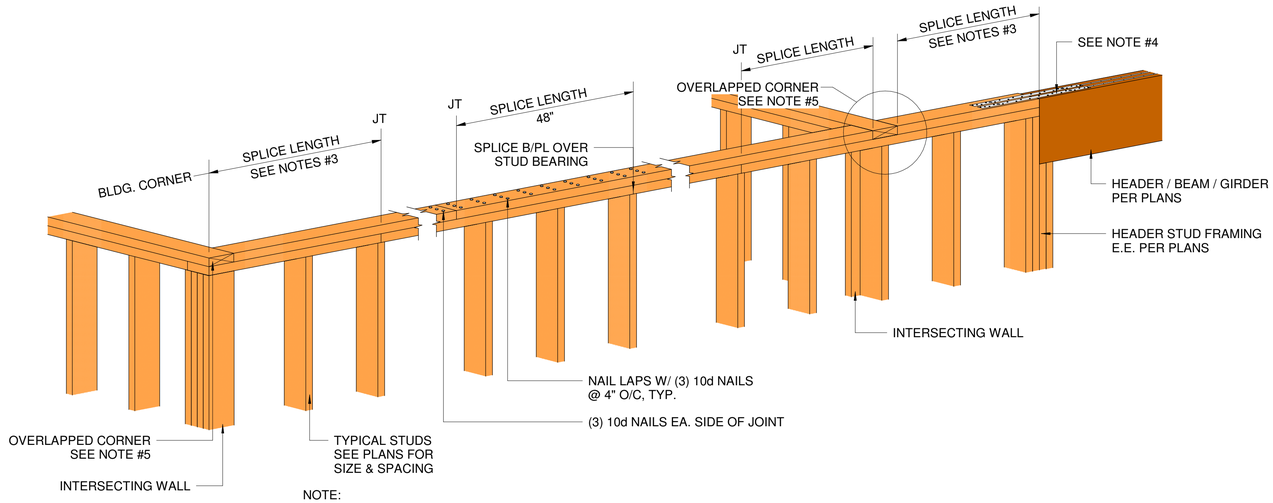


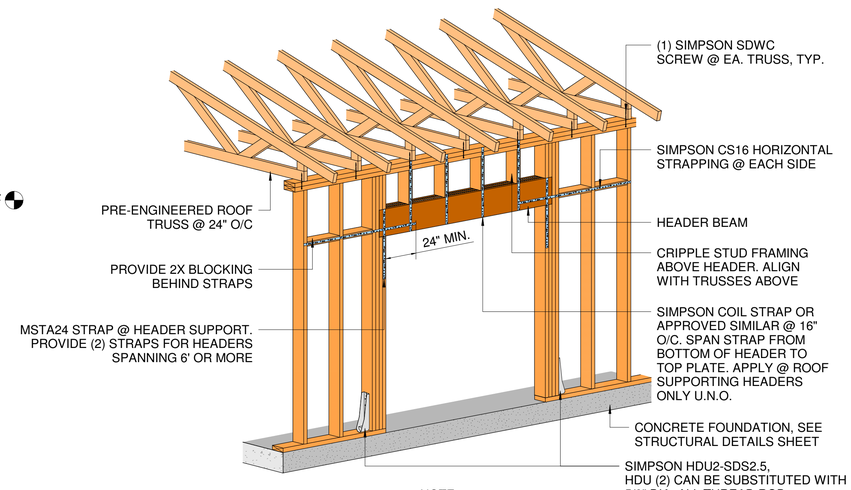
1 TYPICAL CMU WALL SECTION



NOTE:

1. WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND INTERSECTIONS WITH BEARING PARTITIONS.
2. NAIL TOP PLATE MEMBERS ALONG LENGTH WITH (2) 10D BOX (3" X 0.128" OR 3" X 0.131") NAILS @ 12" O/C.
3. END JOINTS IN TOP PLATES SHALL BE OFFSET NOT LESS THAN 24 INCHES.
4. OMISSION OF THE TOP PLATE IS PERMITTED OVER HEADERS WHERE THE HEADERS ARE ADEQUATELY TIED TO ADJACENT WALL SECTIONS USING A (2) SIMPSON LSTA24 STRAPS. FILL ALL HOLES W/ 10d NAILS.
5. CONNECT TOP PLATE LAPPED CORNERS AND INTERSECTIONS WITH MIN. (5) 10d NAILS.
6. ALL WALL FRAMING MEMBER CONNECTIONS NOT NOTED OR SHOWN SHALL MEET THE MINIMUM REQUIREMENTS OF 2023 FBC TABLE R602.3(1) FASTENING SCHEDULE U.N.O.

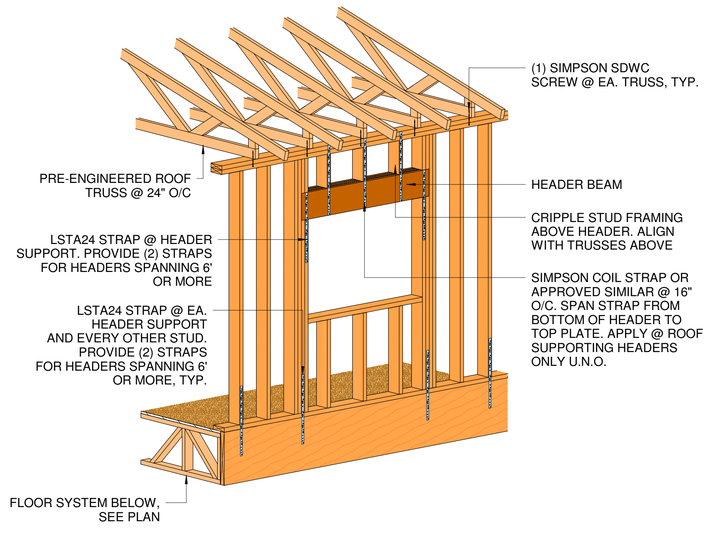
2 TOP PLATE SPLICING DETAIL



NOTE:

1. HORIZONTAL BRACING APPLIES TO ALL HEADERS @ OPENINGS LARGER THAN 8'- 0".

3 TYP. DOOR HEADER BRACING DETAIL



4 TYP. HEADER BRACING DETAIL @ ROOF

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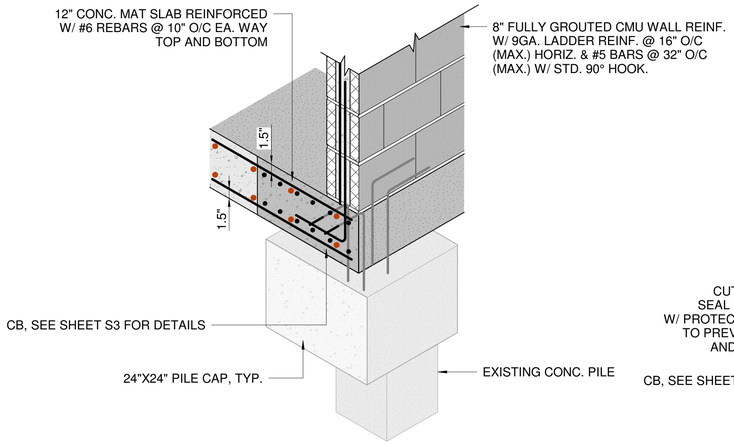
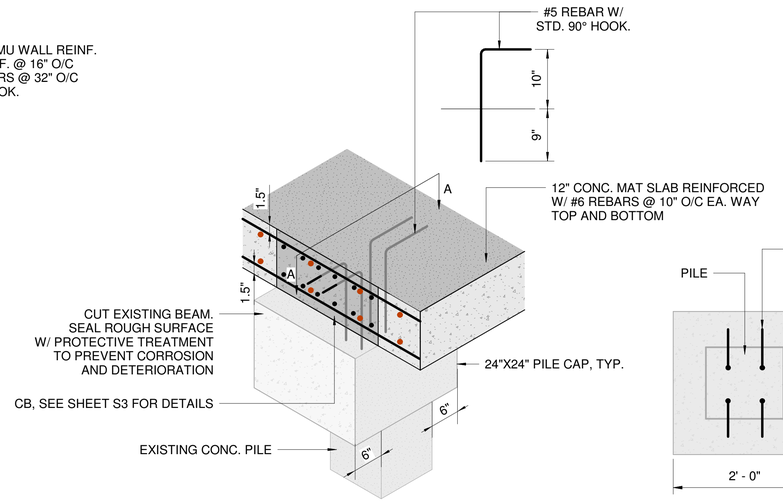
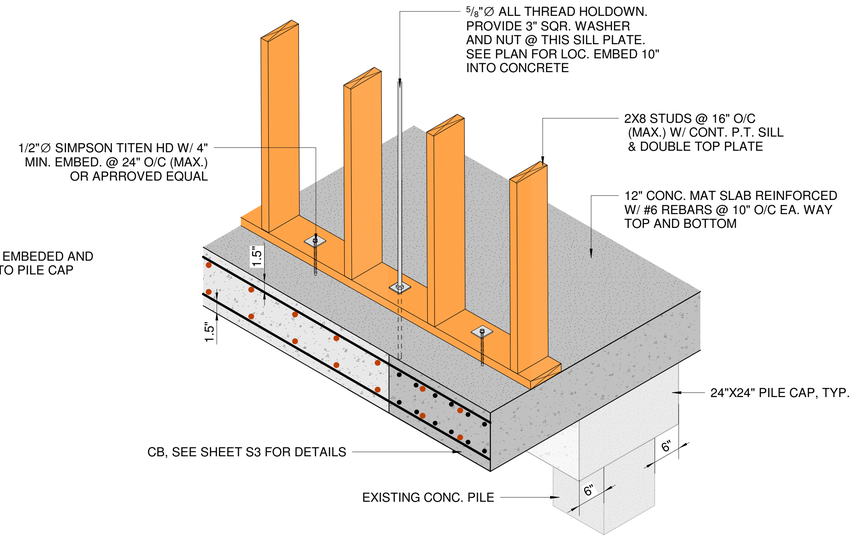


1 FOUNDATION DETAIL @ EXTERIOR WALL



2 TYP. PILE CAP AND SLAB DETAIL

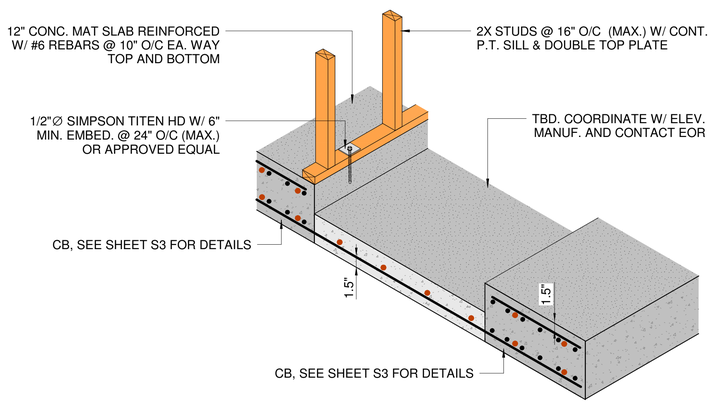


3 FOUNDATION DETAIL @ INTERIOR FLOOR SLAB

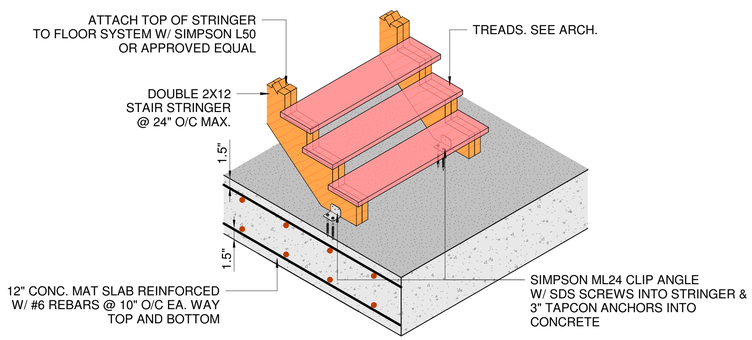
4 FOUNDATION DETAIL @ EXTERIOR WALL

5 FOUNDATION DETAIL @ OPENING

6 FOUNDATION DETAIL @ CMU COLUMN



7 FOUNDATION DETAIL @ ELEVATOR PIT



8 TYP. SLAB DETAIL @ STAIR

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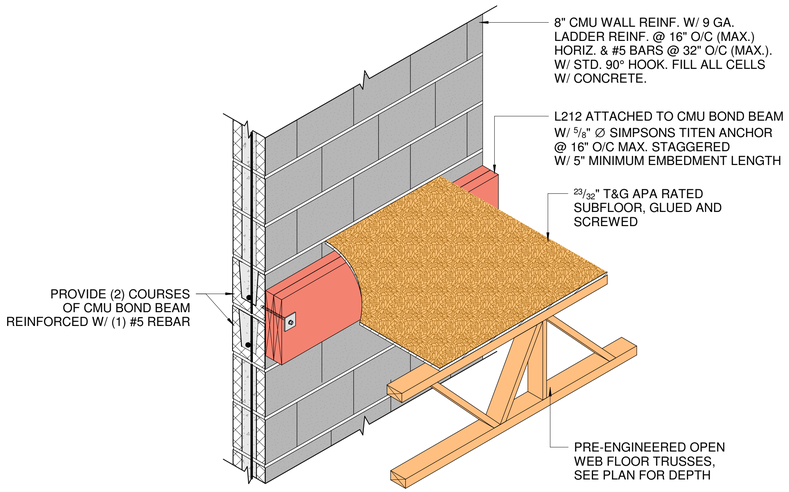
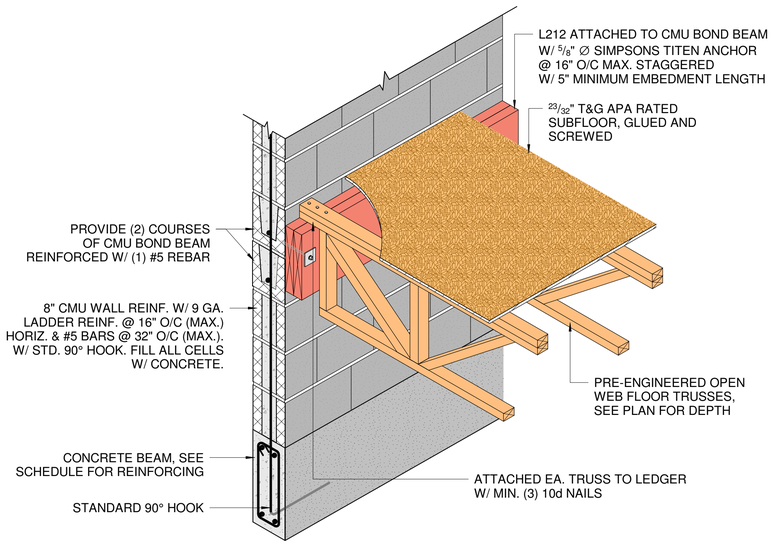
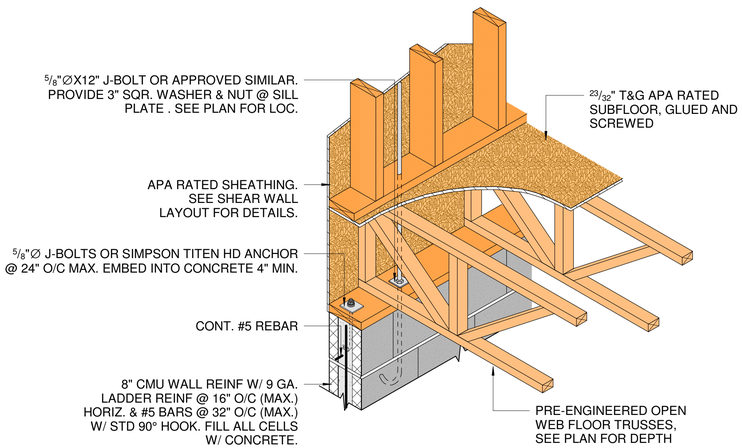


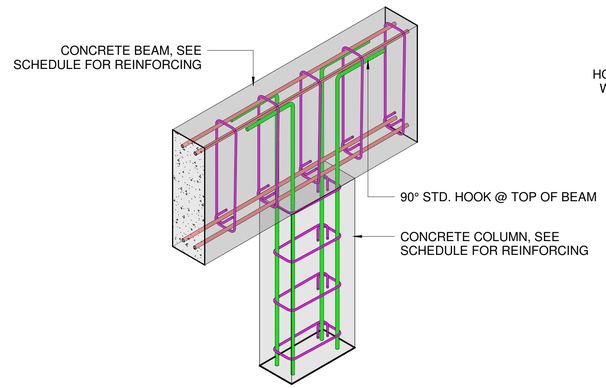
1 TYP. FRAMING DETAIL @ EXT. WALL



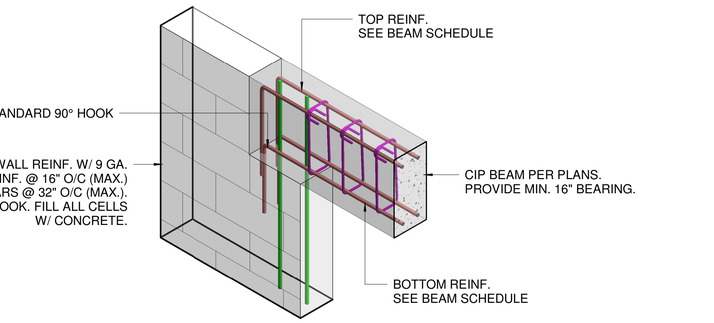
2 TYP. FRAMING DETAIL @ EXT. WALL



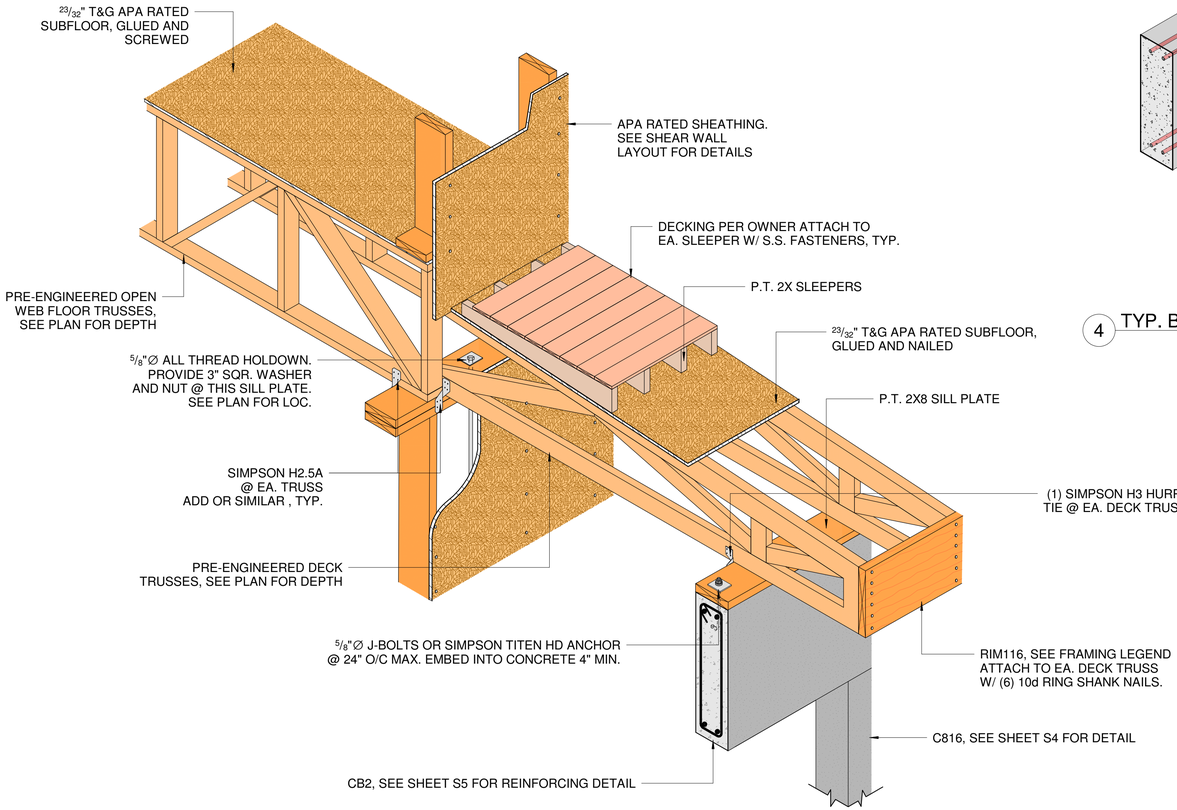
3 TYP. FRAMING DETAIL @ TOWER FLOOR



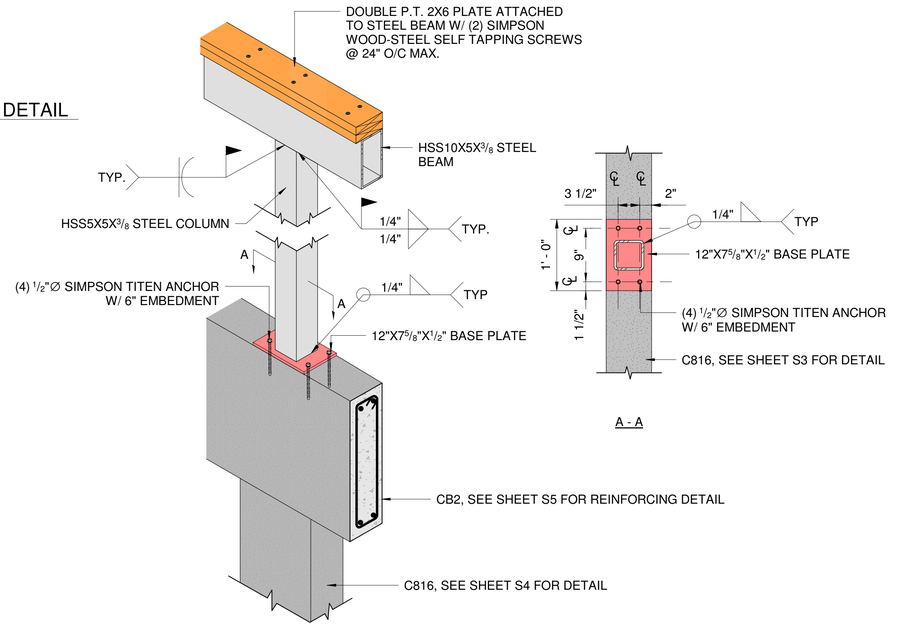
4 TYP. BEAM TO COLUMN CONNECTION DETAIL



5 TYP. CIP BEAM TO WALL CONNECTION DETAIL



6 FRAMING DETAIL @ DECK



7 STEEL BEAM CONNECTION DETAILS

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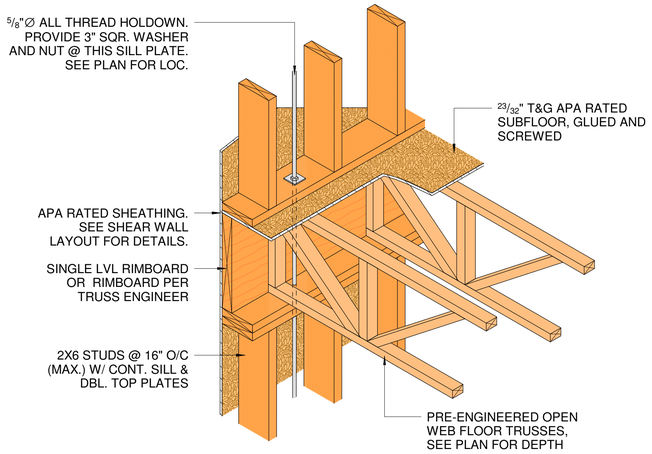
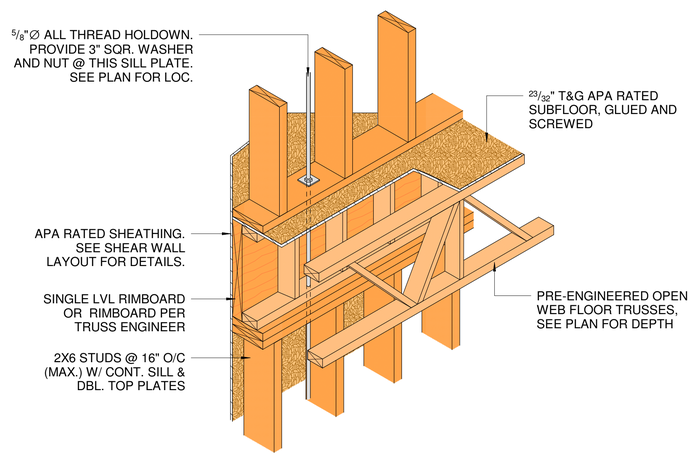
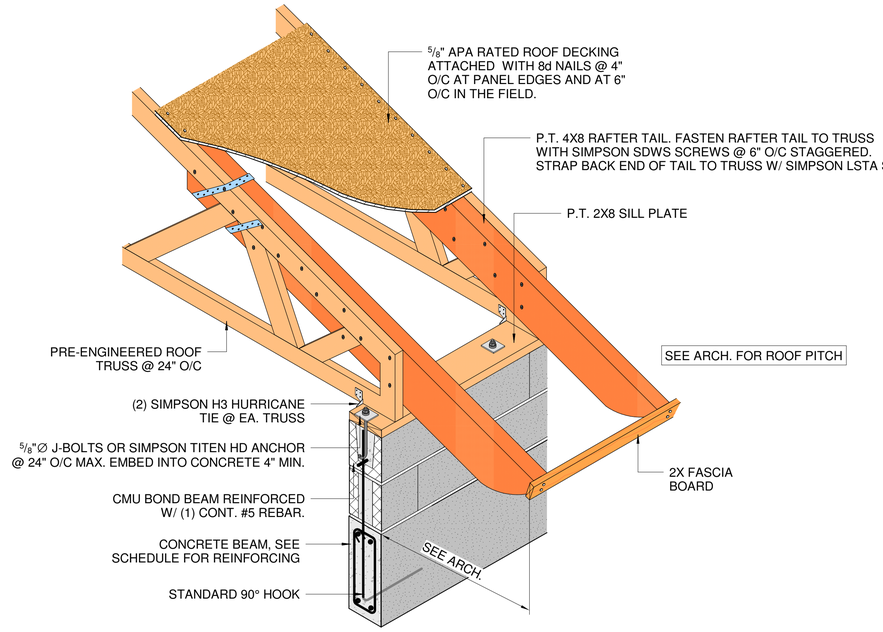


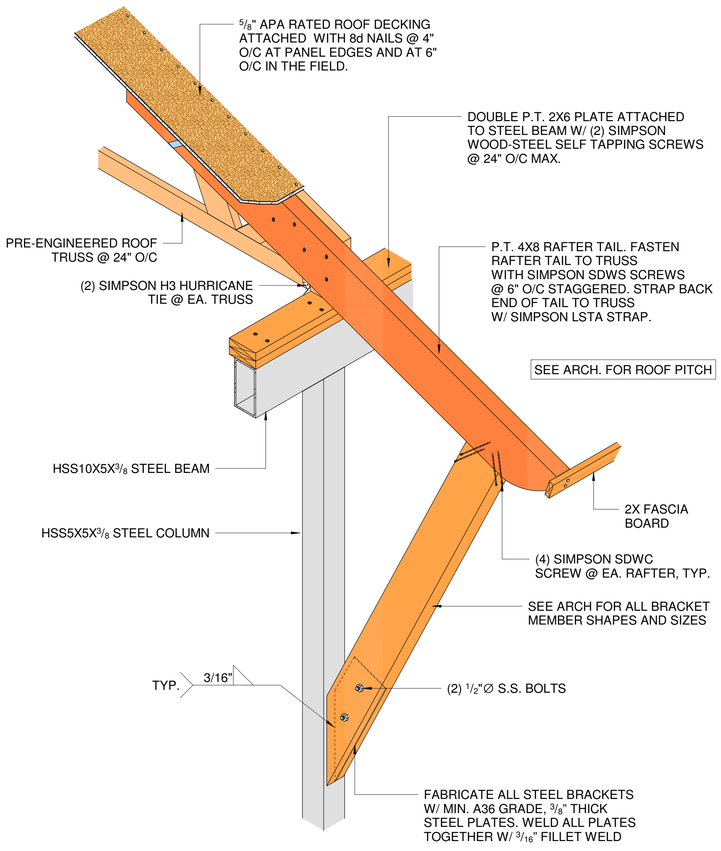
1 TYP. FRAMING DETAIL @ FLOOR



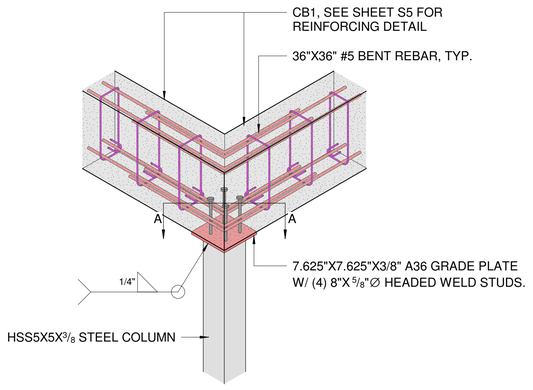
2 TYP. FRAMING DETAIL @ FLOOR

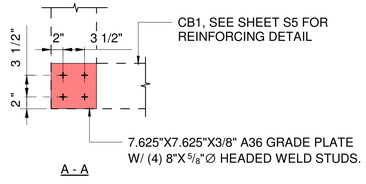


3 TYP. FRAMING DETAIL @ ROOF

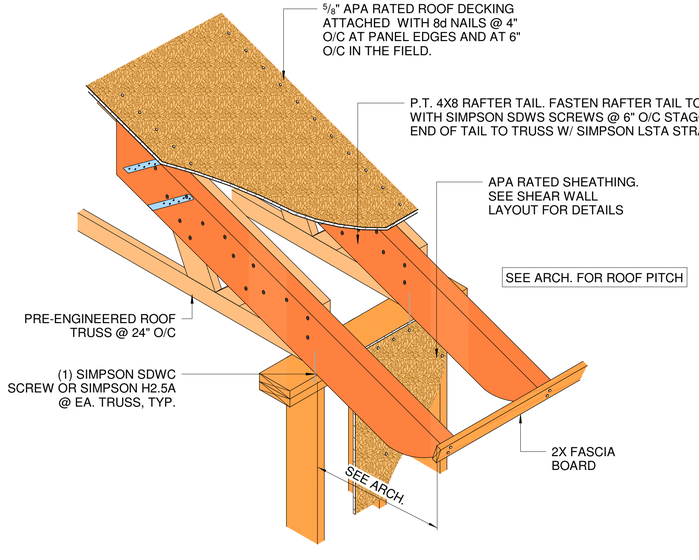


5 BRACKET DETAIL @ STEEL COLUMN

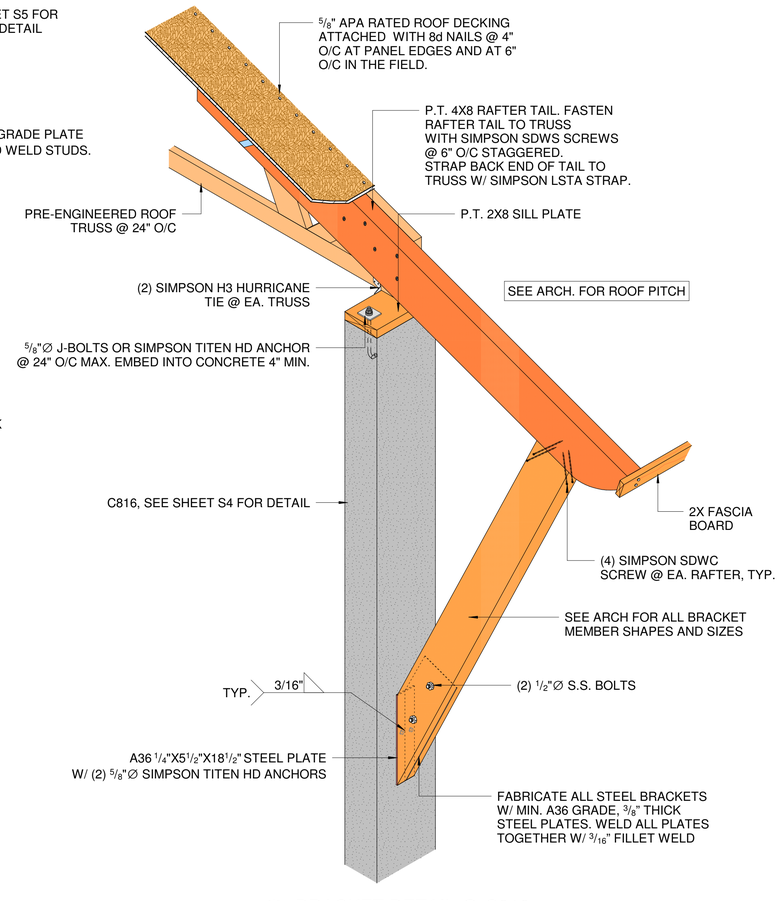




4 FRAMING DETAIL @ STEEL COLUMN



6 TYP. FRAMING DETAIL @ TOWER ROOF



7 BRACKET DETAIL @ C816

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