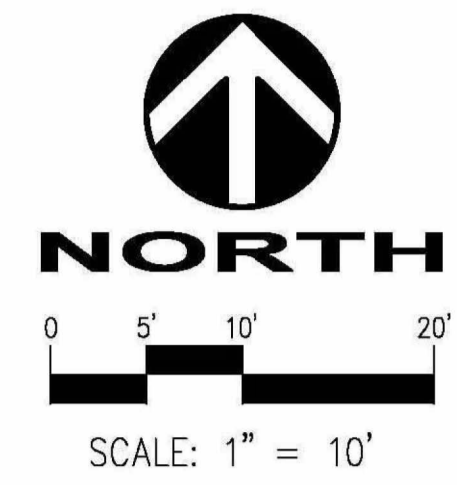


SE 1/4 OF THE SE 1/4, SEC. 12, TWP. 24 N., RNG. 4 E., W.M.



LEGEND

- ⊙ SEWER MANHOLE
- WM WATER METER
- EM POWER METER
- ⊕ POWER POLE
- ⊙ GUY ANCHOR
- ⊙ LANDSCAPE LIGHT
- GM GAS METER
- ⊙ SIGN
- MB MAILBOX
- ⊙ MONUMENT, FOUND AS NOTED
- ⊙ PROPERTY CORNER, FOUND AS NOTED
- FFE FINISH FLOOR ELEVATION
- PA PLANTER AREA
- DEC DECIDUOUS TREE (DEC)
- CFR CONIFEROUS TREE (F+CFR)
- HEDGE
- ASPHALT PAVING
- CONCRETE PAVING
- GRAVEL PATH

VERTICAL DATUM NAVD 88

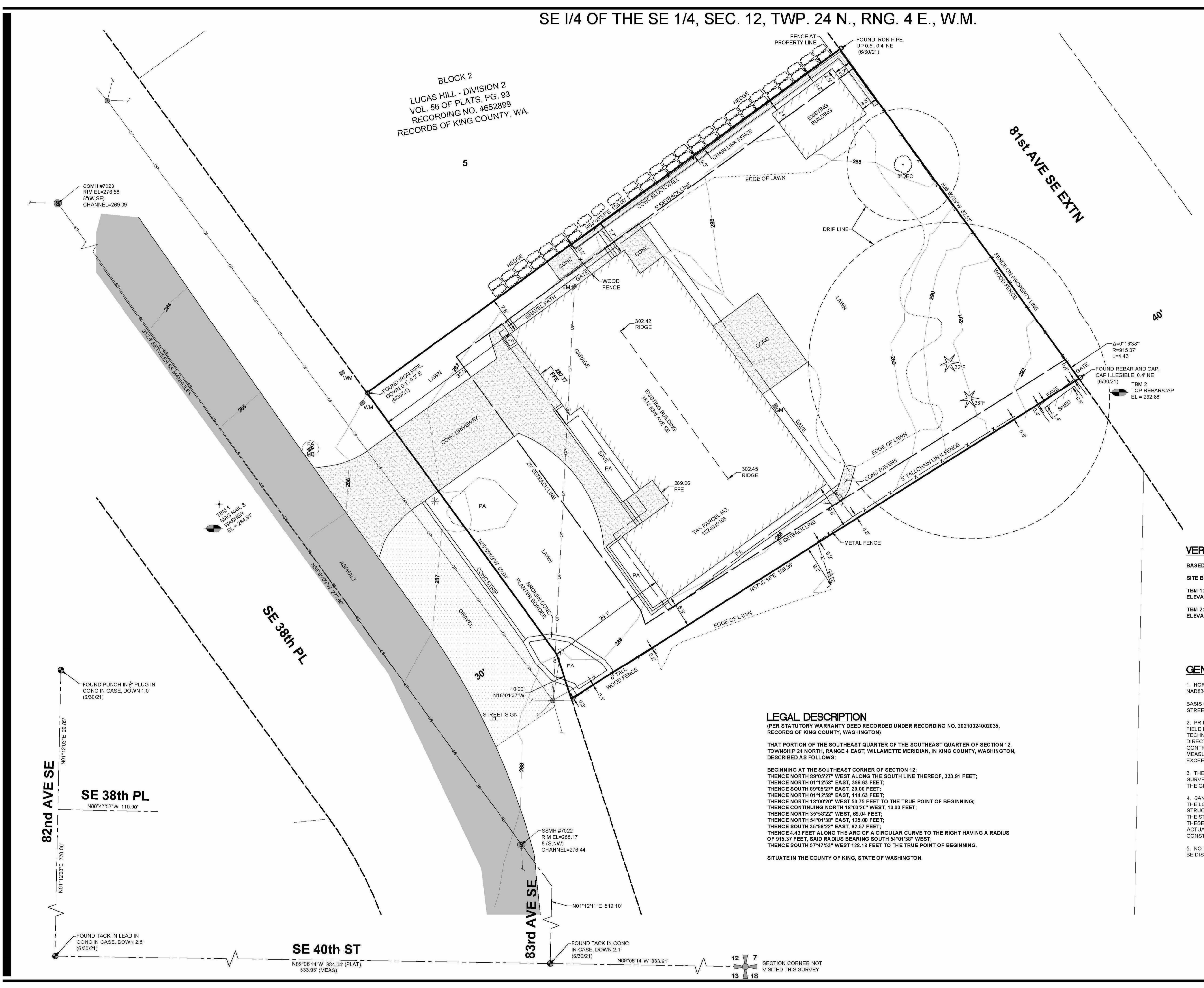
BASED ON GPS OBSERVATIONS.
 SITE BENCH MARKS:
 TBM 1: MAG NAIL & WASHER, 40' SW OF NW PROPERTY CORNER, ELEVATION = 284.91'
 TBM 2: TOP OF REBAR/CAP FOUND AT SE PROPERTY CORNER, ELEVATION = 282.88'

GENERAL NOTES

- HORIZONTAL DATUM: WASHINGTON COORDINATE SYSTEM, NORTH ZONE, NAD83-2011, EPOCH 2010.00 COORDINATES.
- PRIMARY CONTROL POINTS AND ACCESSIBLE MONUMENT POSITIONS WERE FIELD MEASURED UTILIZING GLOBAL POSITIONING SYSTEM (GPS) SURVEY TECHNIQUES USING TRIMBLE EQUIPMENT. MONUMENT POSITIONS THAT WERE NOT DIRECTLY OBSERVED USING GPS SURVEY TECHNIQUES WERE TIED INTO THE CONTROL POINTS UTILIZING TRIMBLE ELECTRONIC TOTAL STATIONS FOR THE MEASUREMENT OF BOTH ANGLES AND DISTANCES. THIS SURVEY MEETS OR EXCEEDS THE STANDARDS SET BY WAC 332-130-080.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON JUNE 30, 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
- SANITARY SEWER HAVE BEEN ASBUILT THROUGH FIELD MEASUREMENTS OF THE LOCATION OF THE ACCESS STRUCTURES, THE TOP ELEVATION OF THE STRUCTURES, AND THE INVERT ELEVATIONS OF ANY PIPES ENTERING OR LEAVING THE STRUCTURES. IT IS STANDARD PRACTICE TO SHOW THE PIPES CONNECTING THESE STRUCTURES AS STRAIGHT LINES. THIS IS ONLY AN ASSUMPTION AND THE ACTUAL LOCATION OF THE PIPING MUST BE VERIFIED IN THE FIELD BY THE CONSTRUCTION CONTRACTOR PRIOR TO ANY CONSTRUCTION.
- NO EASEMENTS, RESTRICTIONS OR RESERVATION OF RECORD WHICH WOULD BE DISCLOSED BY TITLE REPORT ARE SHOWN.

LEGAL DESCRIPTION
 (PER STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NO. 2021032402935, RECORDS OF KING COUNTY, WASHINGTON)

THAT PORTION OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 24 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
 BEGINNING AT THE SOUTHEAST CORNER OF SECTION 12;
 THENCE NORTH 89°02'27" WEST ALONG THE SOUTH LINE THEREOF, 333.91 FEET;
 THENCE NORTH 01°12'58" EAST, 398.63 FEET;
 THENCE SOUTH 89°05'27" EAST, 20.00 FEET;
 THENCE NORTH 01°12'58" EAST, 114.63 FEET;
 THENCE NORTH 18°00'20" WEST, 50.75 FEET TO THE TRUE POINT OF BEGINNING;
 THENCE CONTINUING NORTH 18°00'20" WEST, 10.00 FEET;
 THENCE NORTH 35°58'22" WEST, 89.04 FEET;
 THENCE NORTH 54°01'38" EAST, 128.00 FEET;
 THENCE SOUTH 35°58'22" EAST, 82.57 FEET;
 THENCE 443 FEET ALONG THE ARC OF A CIRCULAR CURVE TO THE RIGHT HAVING A RADIUS OF 915.37 FEET, S84°0' BEARING SOUTH 54°01'38" WEST;
 THENCE SOUTH 57°47'53" WEST 128.18 FEET TO THE TRUE POINT OF BEGINNING.
 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.



BOUNDARY AND TOPOGRAPHIC SURVEY
SUN CHA RESIDENCE
 JOHN-SUN CHA
 3818 83rd AVE SE, MERCER ISLAND, WA.

DAVID EVANS
 AND ASSOCIATES
 INC.
 20300 MacArthur Schuchman Rd, Ste A
 Woodinville, Washington 98072
 Phone: 425.415.2000



REVISIONS:	APPD
ADD SETBACK LINES	7/07/21
DATE:	JULY 2, 2021
DESIGN:	
DRAWN:	
CHECKED:	
REVISION NUMBER:	
SCALE:	1"=10'
PROJECT NUMBER:	OVDV01770001
DRAWING FILE:	SV-TP-OVDV0177.dwg
SHEET NO.	

G0.03

Plot Date: 7/7/2021 10:19 AM
 Save Date: 7/7/2021 7:51 AM
 By: Charles Cornwall
 File: P:\OVDV\OVDV1770001\OVDV\BASE\SV-TP-OVDV0177.dwg

SECTION 1

- I. DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STRUCTURAL ENGINEERS WET SIGNATURE IS AFFIXED TO DRAWINGS.
- II. ANY DISCREPANCIES IN THE DRAWINGS, NOTES AND SPECIFICATIONS SHALL BE REPORTED TO OWNERS REPRESENTATIVE FOR CLARIFICATION. THE CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION.
- III. THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING DURING CONSTRUCTION.
- IV. CONTRACTOR TO SUBMIT A REQUEST TO ENGINEER/ARCHITECT FOR ANY SUBSTITUTION OF MATERIALS OR PRODUCTS SPECIFIED ON THE DRAWINGS.
- V. THE FOLLOWING NOTES APPLY UNLESS SHOWN OTHERWISE
- VI. THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR THE USE IN THE CONSTRUCTION OF A PROPOSED BUILDING TO WHICH THESE NOTES ARE ATTACHED. THE DRAWINGS SHALL NOT BE USED IN WHOLE OR IN PART, FOR FABRICATION OR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT THE WRITTEN CONSENT OF THE ENGINEER

SECTION 2

CODE: INTERNATIONAL BUILDING CODE 2021 WITH MERCER ISLAND AND THE STATE OF WASHINGTON PROVISIONS

- I. ROOF LOADING: DEAD LOAD 20 PSF
SNOW LOAD 25 PSF
TOTAL LOAD 45 PSF
- II. FLOOR LOADING: DEAD LOAD 10 PSF
LIVE LOAD 40 PSF
- III. 1500 PSF BEARING PRESSURE ASSUMED PER IBC TABLE 1804.2 CLASS 4 MATERIAL(S).
- IV. SPECIAL INSPECTION REQUIRED
- V. WIND LOADING: 98 MPH (3 SECOND GUST) EXPOSURE C, Kzt = 1.0. PER IBC FIGURE 1609
- VI. SEISMIC LOADING: SEISMIC CATEGORY D, SITE CLASS Sd PER IBC. 35% SNOW LOAD USED IN SEISMIC DESIGN. SEISMIC DESIGN PARAMETERS AS FOLLOWS.

- A. RISK CATEGORY: II
- B. SEISMIC IMPORTANCE FACTOR, Ie: 1.0
- C. MAPPED RESPONSE PARAMETERS, Ss & S1: Ss=1.41, S1=0.491
- D. SITE CLASS: D
- E. DESIGN RESPONSE PARAMETERS, Sds & Sd1: Sds=1.12 Sd1=0.59
- F. SEISMIC DESIGN CATEGORY: D
- G. SEISMIC RESPONSE COEFFICIENT(S), Cs: 0.17g WHEN R=6.5
- H. RESPONSE MODIFICATION COEFFICIENT(S), R: R=6.5 (LIGHT FRAME WOOD SHEAR WALLS)

SECTION 3 – CONCRETE

- I. GENERAL REQUIREMENTS
STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI. (VALUE USED FOR DESIGN = 2,500 PSI) MINIMUM CEMENT CONTENT SHALL BE 5 SACKS/CU.YD. MAXIMUM SIZE AGGREGATE SHALL BE 3/4" SLUMP NOT TO EXCEED 4".
- II. CAST IN PLACE CONCRETE

A. CONCRETE FORM WORK TO BE OF ADEQUATE SIZE AND STRENGTH. PROPERLY BRACED TO PREVENT SAGGING OR BULGING. PROTECT ALL CONCRETE FROM EXCESSIVE TEMPERATURES. REFER TO DRAWING FOR DIMENSIONS OF CONCRETE MEMBERS AND SIZE AND LOCATION OF ALL ENFORCEMENT.
B. FOOTINGS
NO FOOTING SHALL BE PLACED ON DISTURBED SOIL (IF DISTURBED, COMPACT SOIL IN 6" LIFTS TO 90% OF MAXIMUM DRY DENSITY PER ASTM D1557). FOOTINGS SHALL BE STEPPED DOWN ONE (1) VERTICALLY TO ONE AND ONE HALF (1-1/2) HORIZONTALLY.
C. FOUNDATION WALLS
REINFORCE PER DRAWINGS. DO NOT BACKFILL WALLS UNTIL MAIN FLOOR IS FRAMED AND SHEATHED AND CONCRETE HAS CURED A MINIMUM OF 7 DAYS. USE HAND OPERATED COMPACTION EQUIPMENT ADJACENT TO NEWLY PLACED CONCRETE BASEMENT WALLS.
D. CONCRETE PADS AND THICKENED SLABS
REFER TO DRAWINGS AS TO SIZE AND REINFORCEMENT.
E. CONCRETE SLABS
SLABS ON GRADE, AS NOTED ON THE DRAWINGS, TO BEAR ON 6" COMPACTED GRAVEL BASE.

F. REINFORCEMENT

- 1. TYPICAL REINFORCEMENT SHALL BE ASTM A615, GRADE 60 FOR ALL BARS. ALL REBAR LAPPED 30 TIMES BAR DIAMETER OR 24" WHICHEVER IS GREATER. REBAR AT FOOTING TO HAVE 3" CLEAR COVER WHEN CAST AGAINST EARTH; 2" WHERE EXPOSED TO AIR OR BACKFILL (U.N.O. ON DRAWING). PROVIDE CORNER BARS WITH 18" LEGS AT THE CORNERS OF ALL WALL AND FOOTINGS, SIZE AND PLACEMENT TO MATCH HORIZONTAL REINFORCEMENT.
- 2. DEFORMED NONPRESTRESSED LONGITUDINAL REINFORCEMENT RESISTING EARTHQUAKE-INDUCED MOMENT, AXIAL FORCE, OR BOTH, IN SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, AND ALL COMPONENTS OF SPECIAL STRUCTURAL WALLS INCLUDING COUPLING BEAMS AND WALL PIERS SHALL BE ASTM A706, GRADE 60 FOR ALL BARS.

G. ANCHOR BOLTS

- ANCHOR BOLTS TO BE ASTM A307, 1/2" x 10" EMBEDDED IN FOUNDATION WALLS @ 48" O.C. (MAX) U.N.O. (SEE FOUNDATION PLAN FOR REQUIREMENTS AT SHEAR WALL). BOLTS TO BE WITHIN 12" (MAX.) & 4" (MIN) TO ENDS OF SILL PLATES (COORDINATE WITH GENERAL CONTRACTOR) MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE
- 1. ALL POSTS SUPPORTED BY ISOLATED FOOTINGS TO HAVE POST ANCHORS UNLESS BRACED IN STUD WALLS.
- 2. REFER TO DRAWINGS FOR HOLDOWN REQUIREMENTS. INSTALL REQUIRED EMBEDDED ITEMS PER MANUFACTURER'S CATALOG TO ENGAGE HOLDOWNS
- 3. 0.229"x3"x3" SQUARE STEEL PLATE WASHERS SHALL BE PLACED BETWEEN SILL PLATE AND NUT PER IBC 2308.3.1.1.
- 4. 1/2" TITEN ANCHORS w/ 5" EMBED w/ SQ PL 0.229"x3"x3" CAN BE SUBSTITUTED FOR CAST IN PLACE A.BOLTS

H. CONSTRUCTION AND CRACK CONTROL JOINTS

ALL SURFACES OF CONSTRUCTION JOINTS SHALL BE CLEANED TO REMOVE DUST, CHIPS AND OTHER FOREIGN MATERIAL PRIOR TO PLACING ADJACENT CONCRETE. CRACK CONTROL JOINTS IN SLABS SHALL HAVE A MAXIMUM SPACING OF 14'-0" IN BOTH DIRECTIONS AND AT RE-ENTRANT CORNERS.

J. VAPOR BARRIER

VAPOR BARRIER TO BE 10 MIL POLYETHYLENE SHEET PLACED ON UNDISTURBED SOIL. VAPOR BARRIER UNDER SLAB ON GRADE IF REQUIRED, IF SLAB WILL HAVE FLOOR COVERING APPLIED. PLACED ON COMPACTED GRAVEL WITH POLYETHYLENE VAPOR BARRIER AND CONCRETE.

- K. EMBEDDED ITEMS FOR HD TYPE HOLDOWNS TO BE ASTM A307 HEX HEADED BOLT IN THE DIAMETER AS SPECIFIED BY THE MANUFACTURER FOR THE HD. ALL BOLTS TO HAVE 3" MIN. CONCRETE SIDE COVER. EMBEDMENT DEPTHS ARE 15" FOR BOLTS UP TO AND INCLUDING 3/4" DIA, 24" DEPTH FOR BOLTS OVER 3/4". TYPICAL REINFORCEMENT TO PASS UNINTERRUPTED ALONGSIDE HOLDOWN AS APPLICABLE COUPLER NUTS MAY BE USED TO EXTEND THE HOLDOWN ANCHOR THROUGH THE FLOOR PLATE TO THE SHEAR WALL CHORD.

L. EPOXY ANCHORS

EPOXY GROUTED ANCHORS SHALL CONFORM TO SIMPSON CO. ET EPOXY-TIE ADHESIVE FOR TEMPERATURES ABOVE 40 F, ET22C. EPOXY-TIE ADHESIVE FOR TEMPERATURES OF 25° F TO 40° F OR ENGINEER APPROVED EQUIVALENT. INSTALL PER MANUFACTURER'S INSTRUCTIONS, WIRE BRUSH AND BLOW OUT HOLES.

SECTION 4 – FRAMING LUMBER

- I. SAWN STRUCTURAL LUMBER
A. SAWN LUMBER SHALL BE DOUGLAS FIR-LARCH (DF-L) NO. 1 (U.N.O.). STUD GRADE MAY BE USED FOR STUDS.
B. WOOD IN CONTACT WITH CONCRETE AND WITHIN 8" OF GRADE SHALL BE PRESSURE TREATED. WOOD IN CONTACT WITH THE INTERIOR FACE OF STEM WALLS AND BELOW GRADE SHALL BE PRESSURE TREATED. WOOD SLEEPERS AND SILLS IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. PROVIDE MILD STEEL PLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING ON WOOD.
C. METAL HANGERS AND CONNECTORS SHALL BE FULLY NAILED OR BOLTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. METAL HANGERS OR CONNECTORS SHOWN ON THE DRAWINGS SHALL BE MANUFACTURED BY SIMPSON COMPANY. METAL HANGERS OR CONNECTORS BY OTHER MANUFACTURERS MAY BE CONSIDERED WHERE LOAD CAPACITY AND DIMENSIONS ARE EQUAL OR BETTER. ALL SUBSTITUTIONS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW.

- D. PROVIDE SOLID BLOCKING BELOW ALL BEARING WALLS. PROVIDE SOLID VERTICAL BLOCKING IN FLOOR SPACE TO MATCH STUD BUNDLE OR SOLID COLUMN ABOVE AND BELOW. VERTICAL BLOCKING AT WOOD "I" JOISTS SHALL BE 1/16" LONGER THAN JOIST IS DEEP. MINIMUM POST TO BE TWO 2x STUDS BEARING AT EACH END OF HEADER U.N.O. FOR BEAMS FRAMING PERPENDICULAR TO BEARING WALLS PROVIDE FULL WIDTH BEAM POCKET WITH FILLER AS REQUIRED AND KING STUD BOTH SIDES. STITCH STUD BUNDLES TOGETHER WITH 16d COMMON @ 18" O.C. MAXIMUM (U.N.O.) WHERE FLOOR BEAMS ARE FRAMED FLUSH WITHIN FLOOR AND TOP FLANGE HANGERS ARE SPECIFIED. BEAMS ARE TO BE BLOCKED UP TO JOIST HEIGHT WITH FULL WIDTH DF-L SPACER AS REQUIRED.

II. STRUCTURAL GLUED-LAMINATED TIMBER

ALL GLUED-LAMINATED TIMBER SHALL BE COMBINATION 24F-V4 FOR SIMPLY SUPPORTED BEAMS, COMBINATION 24F-V8 FOR BEAMS CONTINUOUS OVER SUPPORTS, AND COMBINATION L2 FOR COLUMNS (U.N.O.) FABRICATION TO BE IN ACCORDANCE WITH AITC A190.1 AND ASTM D3737, PROVIDE WET-USE ADHESIVES MAXIMUM MOISTURE CONTENT SHALL BE 15%. PROVIDE MILD STEEL PLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING ON WOOD. WOOD BEARING ON OR WITH 1" OF MASONARY OR CONCRETE SHALL BE TREATED WITH AN APPROVED PRESERVATIVE. SEAL END GRAIN OF ALL EXTERIOR EXPOSED BEAMS INCLUDING NON-LOAD BEARING ARCHITECTURAL BEAMS.

III. WOOD SHEATHING

- A. ALL WOOD SHEATHING SHALL BE RATED EXPOSURE 1, APA RATED "SHEATHING" WITH THICKNESS, VENEER GRADES AND SPAN RATING AS SHOWN HEREIN OR ON DRAWINGS.
 - 1. ROOF SHEATHING
19/32" WITH MINIMUM (40/20) SPAN RATING
 - 2. EXTERIOR WALL AND SHEAR WALL SHEATHING
15/32" WITH MINIMUM (24/0) SPAN RATING
- B. ROOF AND FLOOR SHEATHING TO BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND END JOINTS STAGGERED 4'-0" O.C. INSTALL ROOF SHEATHING WITH 1/8" SPACE AT ALL PANEL EDGES. NAIL ROOF SHEATHING WITH 10d @ 6" O.C. AT SUPPORTED PANEL AND 12" O.C. AT INTERMEDIATE FRAMING, FLOOR SHEATHING WITH 10d @ 6" O.C. AT SUPPORTED PANEL EDGES AND 10" O.C. FIELD, U.N.O. HOLES ARE NOT PERMITTED IN DIAPHRAMS UNLESS REVIEWED BY ENGINEER.
- C. NAIL EXTERIOR WALL SHEATHING WITH 8d @ 6" O.C. EDGES AND 12" O.C. FIELD, U.N.O. IN SHEARWALL SCHEDULE OFFSET VERTICAL JOINTS 4'-0" O.C. INSTALL WITH 1/8" GAP AT BUTT ENDS.

IV. WOOD SHEARWALLS

- 1. NO. 16 GAUGE STAPLES WITH MINIMUM 7/16" OF CROWN AND 1-1/2" LENGTH MAY BE USED AS 3 STAPLES FOR 2 NAILS IN LIEU OF 8d NAILS. WHERE SUBSTITUTING FOR 10d NAILS USE 2 STAPLES FOR EACH NAIL.
- 2. WHERE PLYWOOD PANELS ARE APPLIED TO BOTH SIDES OF SHEARWALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBERS SHALL BE 3" (NOMINAL) WIDE AND NAILS ON EACH SIDE SHALL BE STAGGERED.
- 3. ALLOWABLE SHEAR VALUES IN SHEARWALL TABLE ARE FOR DOUGLAS FIR FRAMING MEMBERS (GROUP II). NO SUBSTITUTION OF LESSER GROUPS WILL BE ALLOWED. FASTENERS EXPOSED TO WEATHER SHALL BE ZINC COATED BY HOT DIP GALVANIZING, MECHANICALLY DEPOSITED, OR ELECTRO-DEPOSITED.

SECTION 5 SPECIAL INSPECTION

SPECIAL INSPECTION, AS SPECIFIED IN CHAPTER 17, SECTION 1704, 1705 OF THE 2018 IBC, IS REQUIRED AS NOTED FOR THE FOLLOWING ITEMS. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE SPECIAL INSPECTOR PRIOR TO INSPECTION.

I. CONCRETE CONSTRUCTION

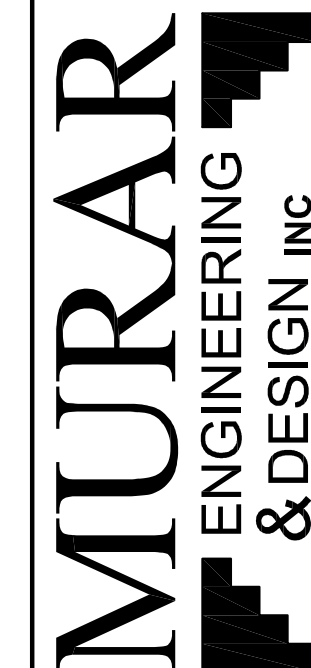
- PER IBC 1705.3 SPECIAL INSPECTION NOT REQUIRED FOR:
 - ISOLATED SPREAD CONCRETE FOOTING OF BUILDINGS THREE STORIES OR LESS THAT ARE FULLY SUPPORTED ON EARTH OR ROCK PER EXCEPTION 1.
 - CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS THREE STORIES OR LESS ABOVE THE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK, WHICH SUPPORT LIGHT FRAME CONSTRUCTION OR WHERE THE SPECIFIED F'c USED IN THE DESIGN OF THE CONCRETE IS NOT MORE THAN 2500 PSI PER EXCEPTION 2.1 OR 2.2.
 - NONSTRUCTURAL SLABS SUPPORTED DIRECTLY ON GROUND PER EXCEPTION 3.
 - CONCRETE FOUNDATION WALLS CONSTRUCTED IN ACCORDANCE WITH TABLE 1807.1.6.2 PER EXCEPTION 4.
 - CONCRETE PATIOS, DRIVEWAYS AND SIDEWALKS ON GRADE PER EXCEPTION 5.
- PER SECTION 1705.3 SPECIAL INSPECTION REQUIRED PER TABLE 1705.3
 - 1. REINFORCING BAR WELDING, PERIODICALLY VERIFY WELDABILITY OF REINFORCING BAR OTHER THAN A706, INSPECT SINGLE PASS WELD, MAX 1/8" - REQUIRED FOR THE ANCHOR RODS AT THE BUILDING COLUMNS. CONTINUOUSLY INSPECT ALL OTHER WELDS THEN NOTED ABOVE.
 - 2. ANCHORS CAST IN CONCRETE - PERIODICALLY INSPECT
 - 3. POST INSTALLED ANCHORS- CONTINUOUSLY INSPECT ADHESIVE ANCHORS INSTALLED HORIZONTALLY OR UPWARDLY INCLINED. PERIODICALLY INSPECT ALL OTHER ANCHORS.
 - 4. DESIGN MIX - PERIODICALLY INSPECT REQUIRED DESIGN MIX USED.
 - 5. PRIOR TO CONCRETE PLACEMENT CONTINUOUSLY INSPECT SPECIMENS MADE FOR STRENGTH TESTS, PERFORM SLUMP AND AIR TESTS AND TEMPERATURE OF THE CONCRETE.
 - 6. CONCRETE AND SHOT-CRETE PROPER APPLICATION TECHNIQUES. INSPECT ON A PERIODIC BASIS.
 - 7. MAINTENANCE OR SPECIFIED CURING TEMPERATURE AND TECHNIQUES - PERIODIC INSPECTION.
 - 8. FORMWORK SHAPE, LOCATION AND DIMENSIONS INSPECT ON A PERIODIC BASIS

II. WOOD CONSTRUCTION

- 1. PER SECTION 1705.11 PERIODIC SPECIAL INSPECTION IS REQUIRED FOR ELEMENTS OF THE MAIN WIND FORCE RESISTING SYSTEM FOR NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WIND FORCE RESISTING SYSTEM (INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLD DOWNS. - EXCEPTION. NOT REQUIRED FOR ELEMENTS THAT HAVE A NAIL OF SPACING GREATER THAN 4 INCHES ON CENTER.



1501 N 13th st. STE.202
BOISE, IDAHO 83702
PHONE : 208-343-4125
FAX: 866-855-9379
EMAIL: CONTACT@MURARENGINEERING.COM



STRUCTURAL SPECIFICATIONS

CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

DESIGNED BY
EMJ
FILE NAME
CL_2025_ANNEX_CHA &...
SCALE
1/4" SCALE
SHEET

STRUCTURAL SPECIFICATIONS

S0.0



1501 N 13th St. STE. 202
BOISE, IDAHO 83702
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**NEW & EXISTING
FOUNDATION PLAN**



CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

DESIGNED BY
EMJ
FILE NAME
CL_2025_ANNEX_CHA & K.
SCALE
1/4" SCALE
SHEET

S1.0

FOUNDATION NOTES

1. THE ENGINEER HAS PREPARED THIS DRAWING BASED ON THE DIMENSIONS, ELEVATIONS AND TOP OF CONCRETE PROVIDED BY THE ARCHITECT/DESIGNER. IT REMAINS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS ELEVATIONS AND TOP OF CONCRETE PRIOR TO COMMENCING CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK MATERIALS AND SAFETY IN CONFORMANCE WITH INTERNATIONAL BUILDING CODE (IBC) AND OSHA STANDARDS.
3. FRAMING CONDITIONS MAY DEVELOP DURING CONSTRUCTION FOR WHICH NO SPECIFIC DETAIL OR TYPICAL CONSTRUCTION APPLIES. NOTIFY ENGINEER PRIOR TO PROCEEDING IF UNCLEAR.
4. ALIGN HOLD DOWNS WITH END OF SHEARWALL STUDS ABOVE. ATTACH TO DOUBLE STUDS UNLESS NOTED OTHERWISE (UNO). USE HOLD DOWN EMBED AND PLACEMENT PER MANUFACTURER.
5. DO NOT BACKFILL WALL UNTIL FLOOR IS FRAMED AND SHEATHED AND CONCRETE HAS CURED 7 DAYS (MINIMUM).
6. ANCHOR BOLTS (1/2" Ø EMBED 7") SHALL BE PLACED A MAXIMUM SPACING OF 48" OC ANCHOR BOLTS TO BE INSTALLED 12" FROM ENDS. TWO ANCHOR BOLTS MINIMUM ARE REQUIRED PER SILL. ANCHOR BOLTS AT SHEAR WALLS PER SHEAR WALL SCHEDULE.
7. 1/2" Ø w/ 5" EMBED TITEN HD SCREW ANCHORS CAN BE SUBSTITUTED FOR ANCHOR BOLTS
8. ALL WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED FIR.
9. ALL POSTS FROM THE UPPER LEVELS MUST BE ALIGNED WITH, AND MATCH THE POSTING BELOW TO THE FOUNDATION UNLESS TRANSFERRED.
10. SEE DRAWING SHEETS S2 SERIES FOR GENERAL DETAILS NOT CALLED OUT HERE.

ABBREVIATION LIST

- * - DEGREE
- Ø - DIAMETER
- A.B. - ANCHOR BOLT
- ARCH - ARCHITECT
- APA - AMERICAN PLYWOOD ASSOCIATION
- BLK'G - BLOCKING
- BM - BEAM
- BOT - BOTTOM
- C.I.P. - CAST IN PLACE
- CLR - CLEAR
- COL - COLUMN
- CONT - CONTINUOUS
- D.F. - DOUGLAS FIR
- DIM - DIMENSION
- EA - EACH
- E.W. - EACH WAY
- EXT - EXTERIOR
- FDN - FOUNDATION
- FRMG - FRAMING
- FT - FOOT, FEET
- FTG - FOOTING
- FND - FOUNDATION
- GWB - GYPSUM BOARD
- HD - HOLD DOWN
- HDR - HEADER
- HORIZ - HORIZONTAL
- INT - INTERIOR
- LVL - LAMINATED VENEER LUMBER
- MAX - MAXIMUM
- MFT'R - MANUFACTURER
- MIN - MINIMUM
- N.T.S. - NOT TO SCALE
- P.T. - PRESSURE TREATED
- PL - PLATE
- PSL - PARALLAM
- REINF - REINFORCED
- REQ'D - REQUIRED
- SCHED - SCHEDULE
- SHT - SHEET
- STD - STANDARD
- STRUCT - STRUCTURAL
- T&G - TONGUE AND GROOVE
- TRTD - TREATED
- TYP - TYPICAL
- U.N.O. - UNLESS NOTED OTHERWISE
- VERT - VERTICAL
- w/ - WITH
- w/o - WITHOUT

FOOTING SCHEDULE

- ①6 = 16" SQ x 12" DEEP FDN PAD
 - ②4 = 24" SQ x 12" DEEP FDN PAD
- NOTES:**
REINF. TO BE #4's @ 10" OC
EACH WAY 3" CLR OF BOTTOM
(U.N.O.)

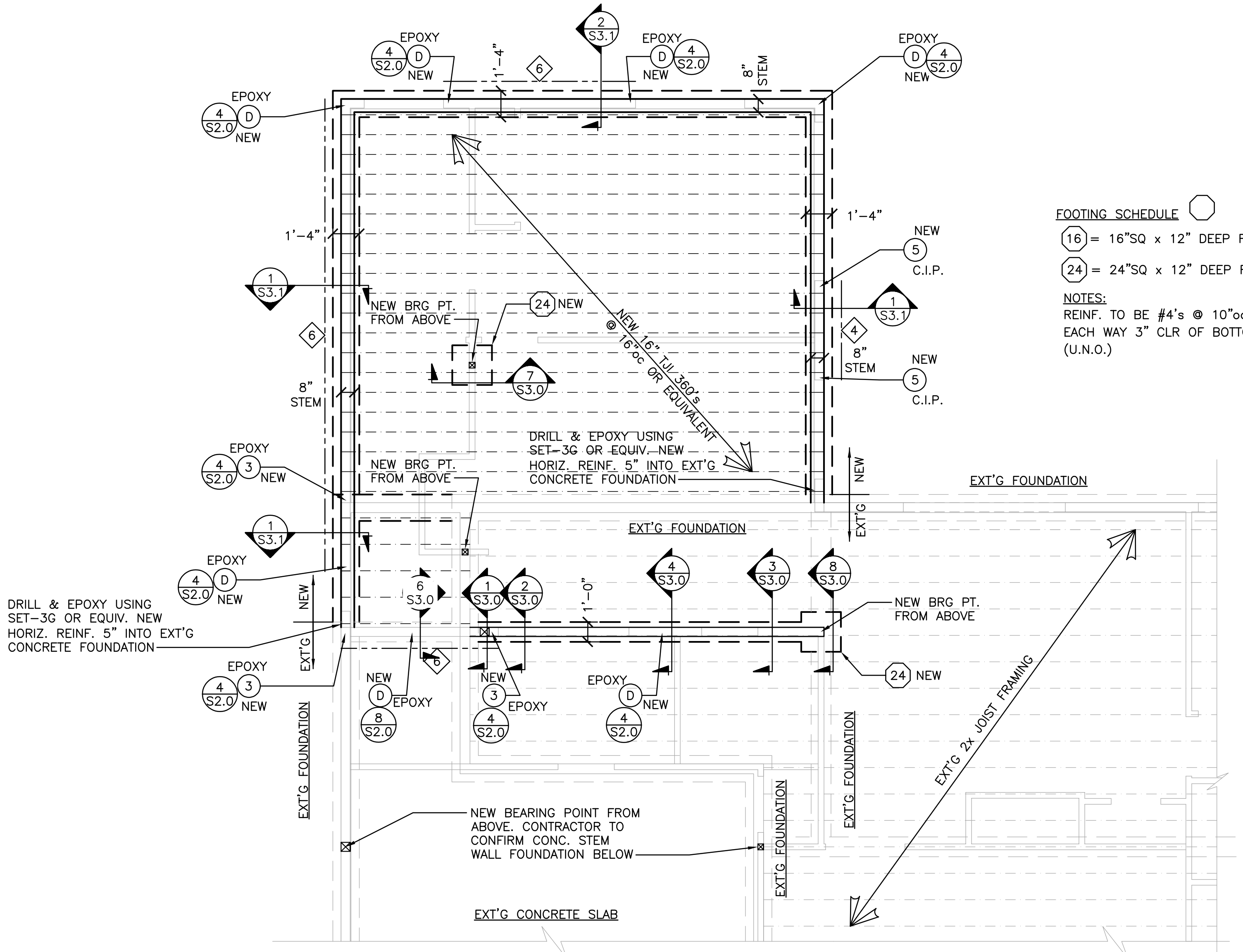
SHEAR WALL SCHEDULE

WHERE PANELS ARE APPLIED ON BOTH FACES OF A SHEAR WALL AND NAIL SPACING IS LESS THAN 6" OC ON EITHER SIDE, 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. SPACING OF ANCHOR BOLTS TO BE HALVED WHEN PANELS ARE APPLIED ON BOTH FACES OF A SHEAR WALL.

SHEAR WALL MARK	SHEATHING MATERIAL	FIELD NAILING ³	EDGE NAILING ³	BOTTOM PLATE	STUDS AT EDGE NAILING	ANCHOR BOLT ⁴
⑥	1 1/2" SHT'G	8d's @ 12" oc	8d's @ 6" oc	2x	2x	1/2"x10" @ 48" oc
④ ^{2A}	1 1/2" SHT'G	8d's @ 12" oc	8d's @ 4" oc	2x	3x	1/2"x10" @ 27" oc

NOTE

1. ALL SHEAR WALLS LISTED MAY NOT BE USED ON THIS PROJECT.
2. DOUBLE STUDS AND DOUBLE PLATES MAY BE SUBSTITUTED FOR 3x STUDS
 - A. WHEN 8d NAILS OR STAPLES ARE SPACED AT 3" OR LESS, EDGE & PANEL SPLICE MEMBERS TO BE 3x FRAMING MEMBERS OR DOUBLE STUDS.
3. NAILS OR STAPLES
 - A. 8d's = 2 1/2"x0.131" COMMON OR 2 1/2"x0.113" GALVANIZED BOX NAILS, 1 1/2" 16 GAUGE STAPLES
 - B. 1 1/2" 16 GAUGE STAPLES CAN BE SUBSTITUTED FOR 8d COMMONS OR 8d BOX NAILS WITH (3) STAPLES FOR EVERY (2) 8d's.
 - C. STAPLES TO HAVE 3/16" MIN CROWN WIDTH AND INSTALLED WITH THEIR CROWNS PARALLEL TO THE LONG DIM OF THE FRAMING MEMBER.
4. ANCHOR BOLTS TO BE ASTM A307, 1/2" w/ 7" EMBED IN FOUNDATION WALLS @ 48" O.C. (MAX) U.N.O. (SEE FOUNDATION PLAN FOR REQUIREMENTS AT SHEAR WALL). BOLTS TO BE WITHIN 12" (MAX.) & 4" (MIN) TO ENDS OF SILL PLATES (COORDINATE WITH GENERAL CONTRACTOR) MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE
 - A. 0.229"x3"x3" SQUARE STEEL PLATE WASHERS SHALL BE PLACED BETWEEN SILL PLATE AND NUT PER IBC 2308.3.1.1
 - B. 1/2" Ø w/ 5" EMBED TITEN HD SCREW ANCHORS w/ SQ PL 0.229"x3"x3" CAN BE SUBSTITUTED FOR ANCHOR BOLTS
 - C. THE EDGE OF THE SQ PL WASHER SHALL BE PLACED PARALLEL WITHIN 1/2" OF THE SHEATHING AT SHEAR WALLS.
 - D. SQ PL WASHERS w/ 1/4"x1 3/4" MAXIMUM DIAGONAL SLOT MAY BE USED IF A STANDARD CUT PL WASHER IS PLACED BETWEEN THE NUT AND THE SQ PL WASHER.
5. STUDS AT ENDS OF SHEAR WALLS TO BE PER HOLD DOWN REQUIREMENTS.

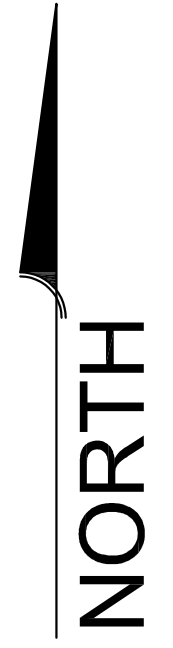
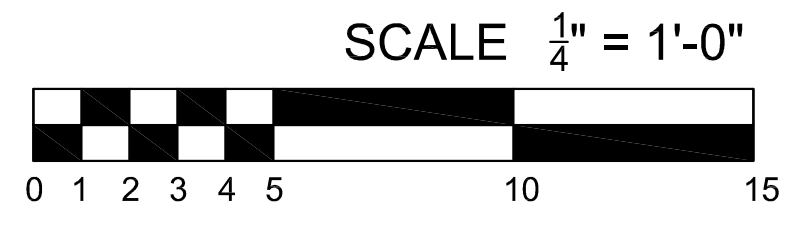


HOLD DOWN SCHEDULE

- ③B = CMSTC16 TO BELOW. SEE DETAIL 9/S4.0
- ③CA = CMSTC16 ATTACHING DBL 2x STUDS ABOVE & DBL 2x STUDS BELOW RIM BOARD AT FLOOR ON THIS LEVEL. STRAP MAY TERMINATE AROUND BEAM. SEE PLAN. SEE TYPICAL STRAP CONN. DETAILS 9 & 10/S2.0
- ③D = DTT22 W/ CAST IN PLACE A.BOLT OR EPOXY SEE DETAILS 4 & 8/S2.0
- ③ = HDUE3 W/ CAST IN PLACE A.BOLT OR EPOXY SEE DETAILS 4 & 8/S2.0
- ③5 = HDU5 W/ CAST IN PLACE A.BOLT. CAN NOI EPOXY. SEE 3/S2.0

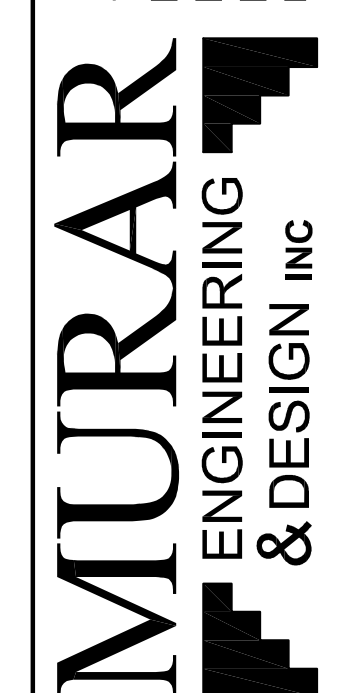
NOTE:
C.I.P. = CAST IN PLACE A.BOLTS
EPOXY = HOLD DOWN RODS ALLOWED TO BE EPOXIED SEE DETAILS 4 & 8/S2.0 FOR ADD'L SPECS.

NEW & EXISTING FOUNDATION PLAN

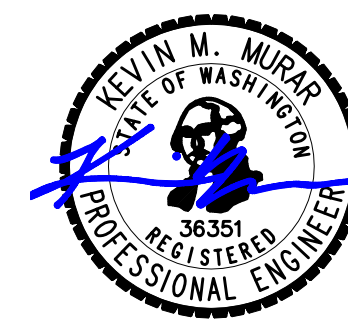




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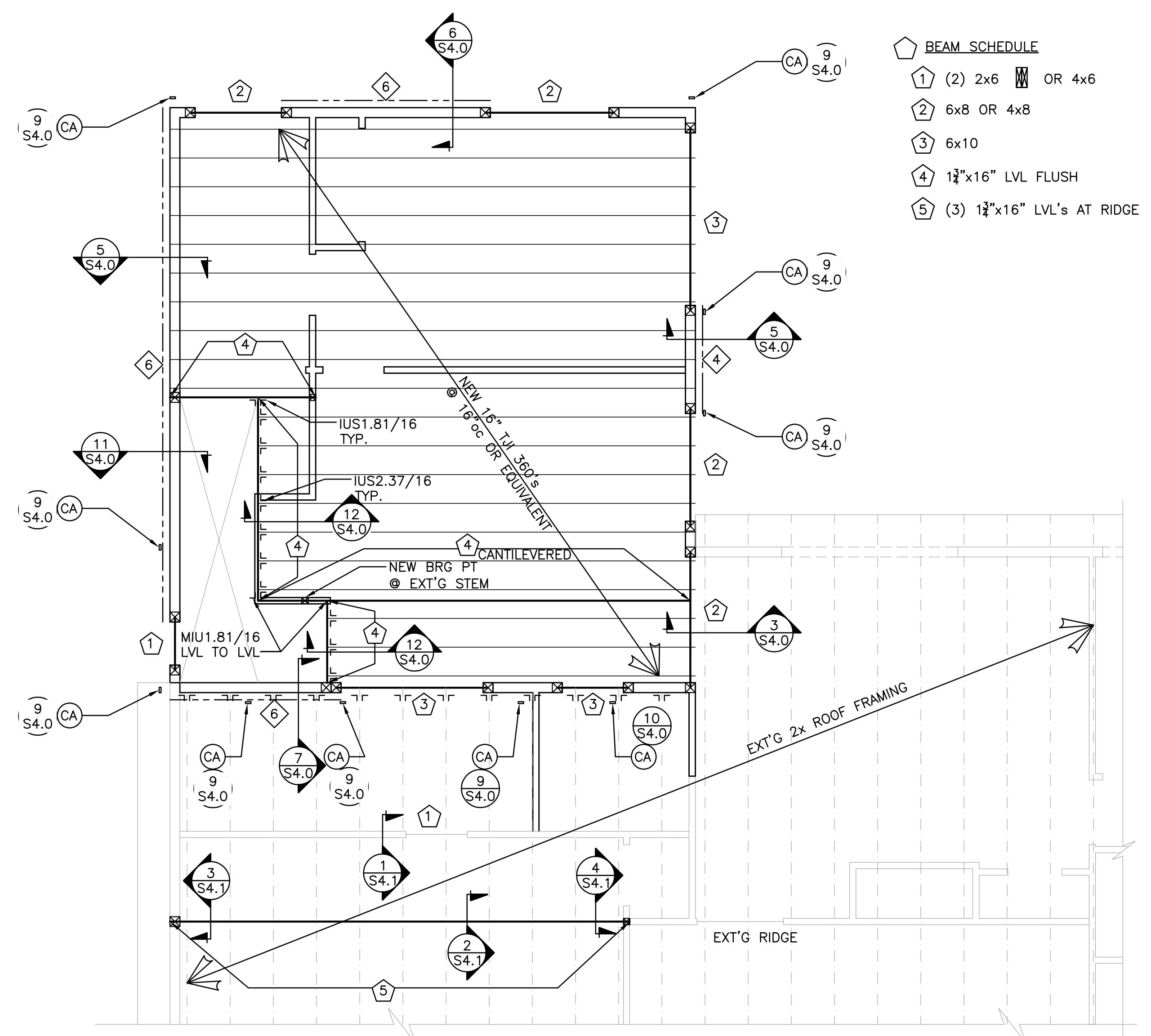
SECOND FLOOR & EXISTING ROOF FRAMING PLAN



CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

DESIGNED BY
EMJ
FILE NAME
C:\12025\ANNEX_CHA A...
SCALE
1/4" SCALE
SHEET

S1.1



BEAM SCHEDULE

1	(2) 2x6 W OR 4x6
2	6x8 OR 4x8
3	6x10
4	1 1/2"x16" LVL FLUSH
5	(3) 1 1/2"x16" LVL's AT RIDGE

HOLD DOWN SCHEDULE

- (CB) = CMSTC16 TO BELOW. SEE DETAIL 9/S4.0
- (CA) = CMSTC16 ATTACHING DBL 2x STUDS ABOVE & DBL 2x STUDS BELOW RIM BOARD AT FLOOR ON THIS LEVEL. STRAP MAY TERMINATE AROUND BEAM, SEE PLAN. SEE TYPICAL STRAP CONN. DETAILS 9 & 10/S2.0
- (D) = DTT2Z W/ CAST IN PLACE A.BOLT OR EPOXY SEE DETAILS 4 & 8/S2.0
- (3) = HDUE3 W/ CAST IN PLACE A.BOLT OR EPOXY SEE DETAILS 4 & 8/S2.0
- (5) = HDU5 W/ CAST IN PLACE A.BOLT. CAN **NOI** EPOXY. SEE 3/S2.0

NOTE:
C.I.P. = CAST IN PLACE A.BOLTS
EPOXY = HOLD DOWN RODS ALLOWED TO BE EPOXIED SEE DETAILS 4 & 8/S2.0 FOR ADD'L SPECS.

FRAMING NOTES

- SEE ARCH. FLOOR PLAN FOR PLATE HEIGHTS.
- REFER TO LATERAL BRACING PRIOR TO FRAMING.
- PROVIDE (2) STUDS UNDER ALL BEARING POINTS U.N.O. PROVIDE SOLID BLOCKING AT ALL POINT LOADS TO FOUNDATION. SOLID BLOCK BETWEEN ALL FLOOR CAVITIES, MATCHING COLUMN SIZE ABOVE.
- UNLESS OTHERWISE NOTED, PROVIDE (1) KING STUD AND (1) TRIMMER AT EACH SIDE OF ALL OPENINGS.
- TRUSS-TO-TRUSS CONNECTIONS PROVIDED BY TRUSS MFR. TRUSS MFR. SHALL VERIFY ALL DIMENSIONS OFF OF FDN PLAN AND FLOOR PLAN PRIOR TO TRUSS FABRICATION AND NOTIFY ENGINEER OF ANY LAYOUT CHANGES.
- PROVIDE ATTIC VENTILATIONS AS REQUIRED BY CODE.
- CONTRACTOR SHALL INSTALL TRUSSES PER TRUSS MANUFACTURER'S SPECIFICATIONS, INCLUDING PROVIDING FASTENERS TO RESIST ANY UPLIFT.
- ROOF SHEATHING: 19/32" APA RATED: SHT'G WITH 10d NAILS AT 6" oc ALONG EDGES AND DIAPHRAGM BOUNDARIES AND 12" oc IN THE FIELD.
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- PRESERVATIVE TREATED OR PRESSURE TREATED (PT) LUMBER SHALL MEET THE U1 AND M4 STANDARDS SET BY THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA)
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ABBREVIATION LIST

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SHEAR WALL SCHEDULE

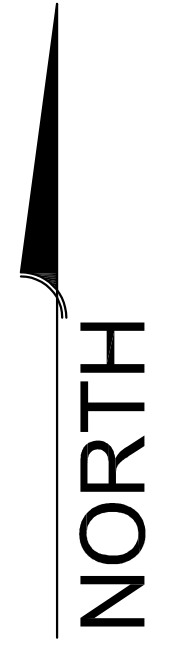
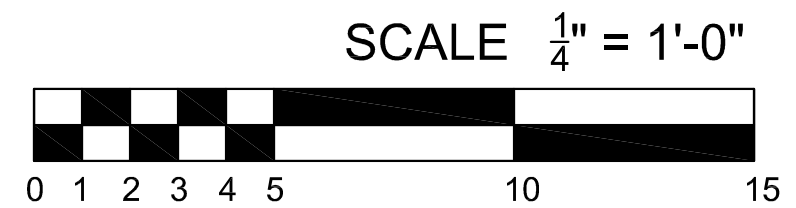
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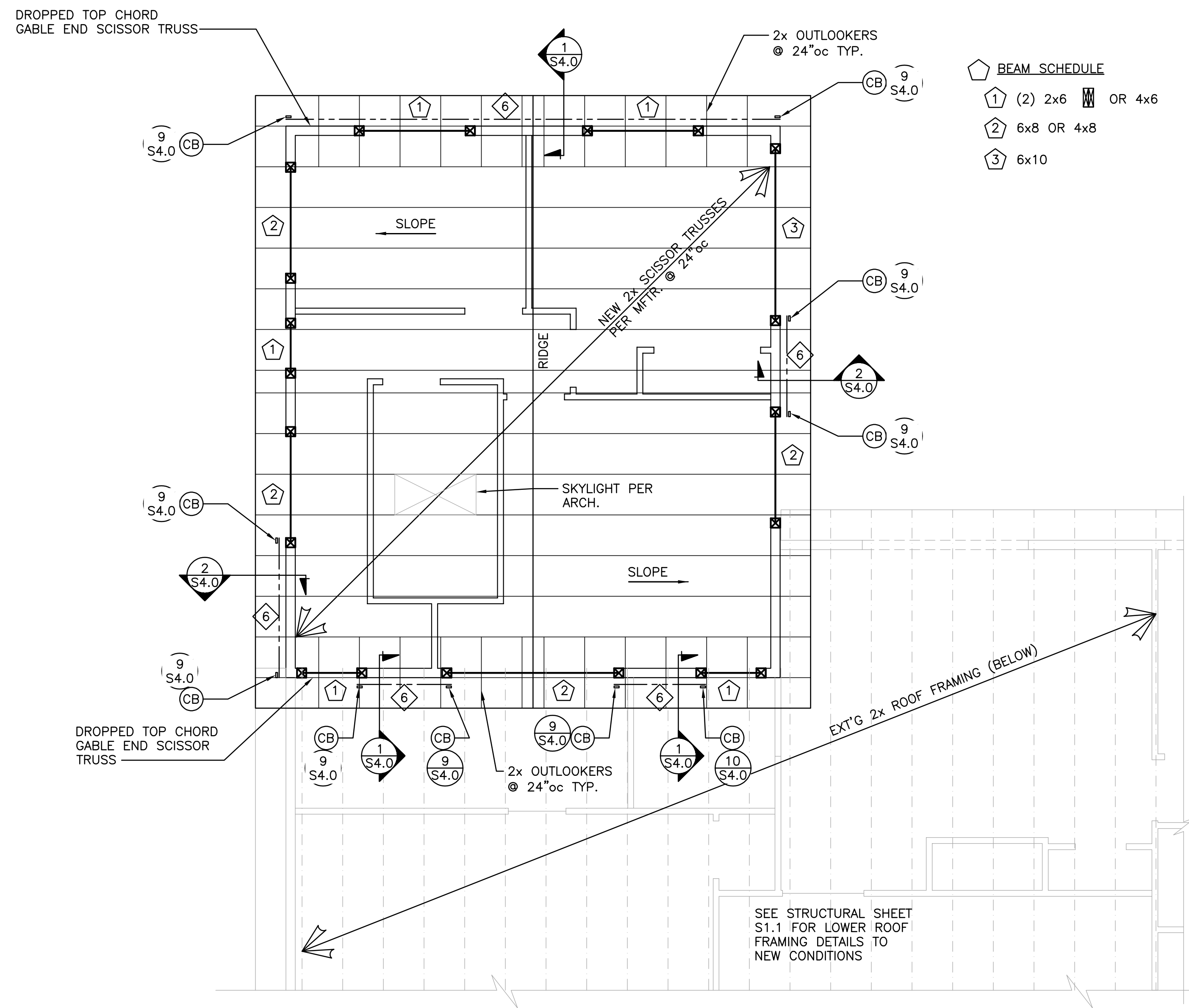


**UPPER ROOF
FRAMING PLAN**

CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

DESIGNED BY
EMJ
FILE NAME
C:_2025_ANNEX_CHA & K.
SCALE
1/4" SCALE
SHEET

S1.2



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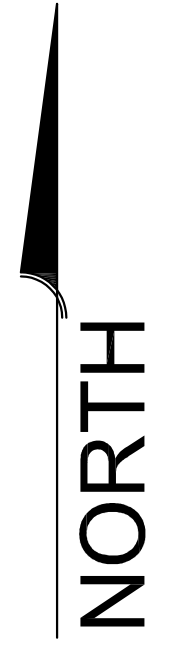
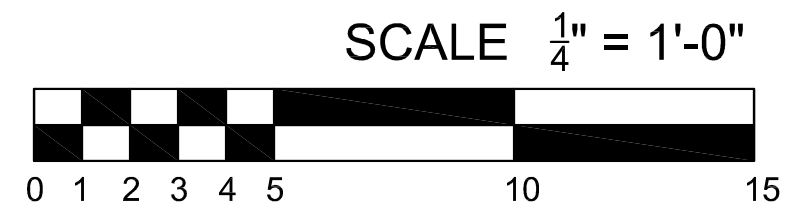
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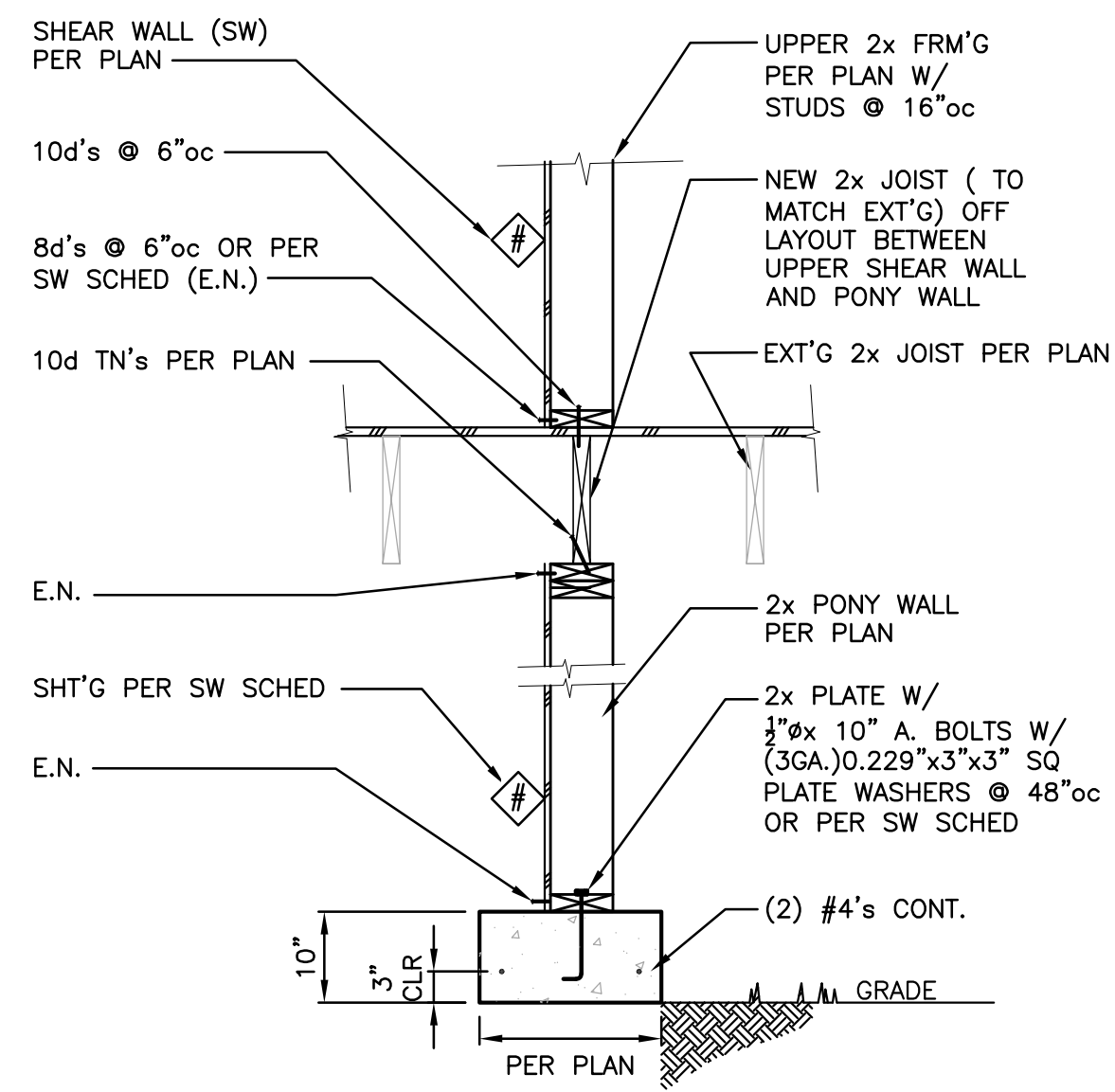
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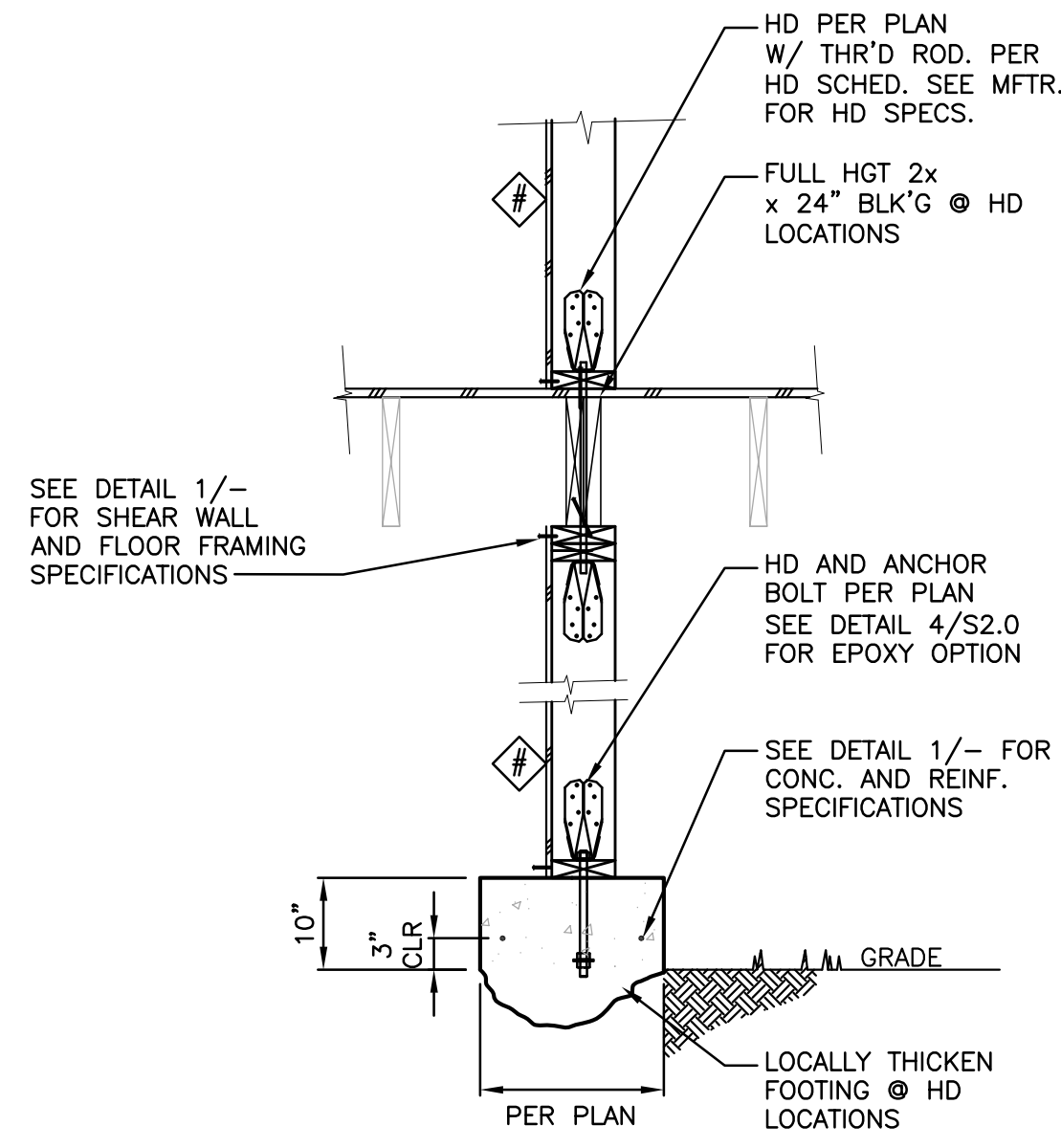
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UPPER ROOF FRAMING PLAN

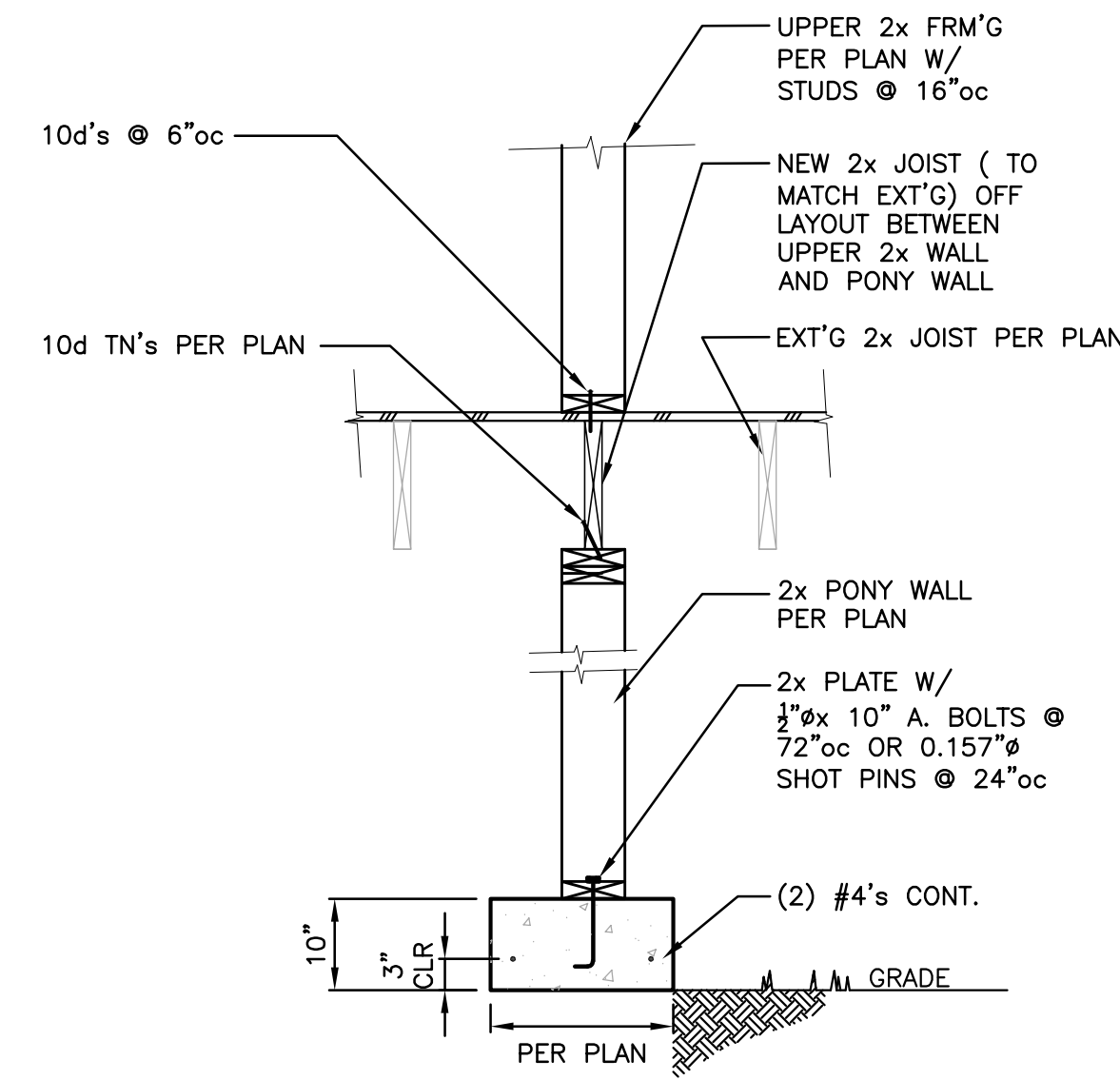




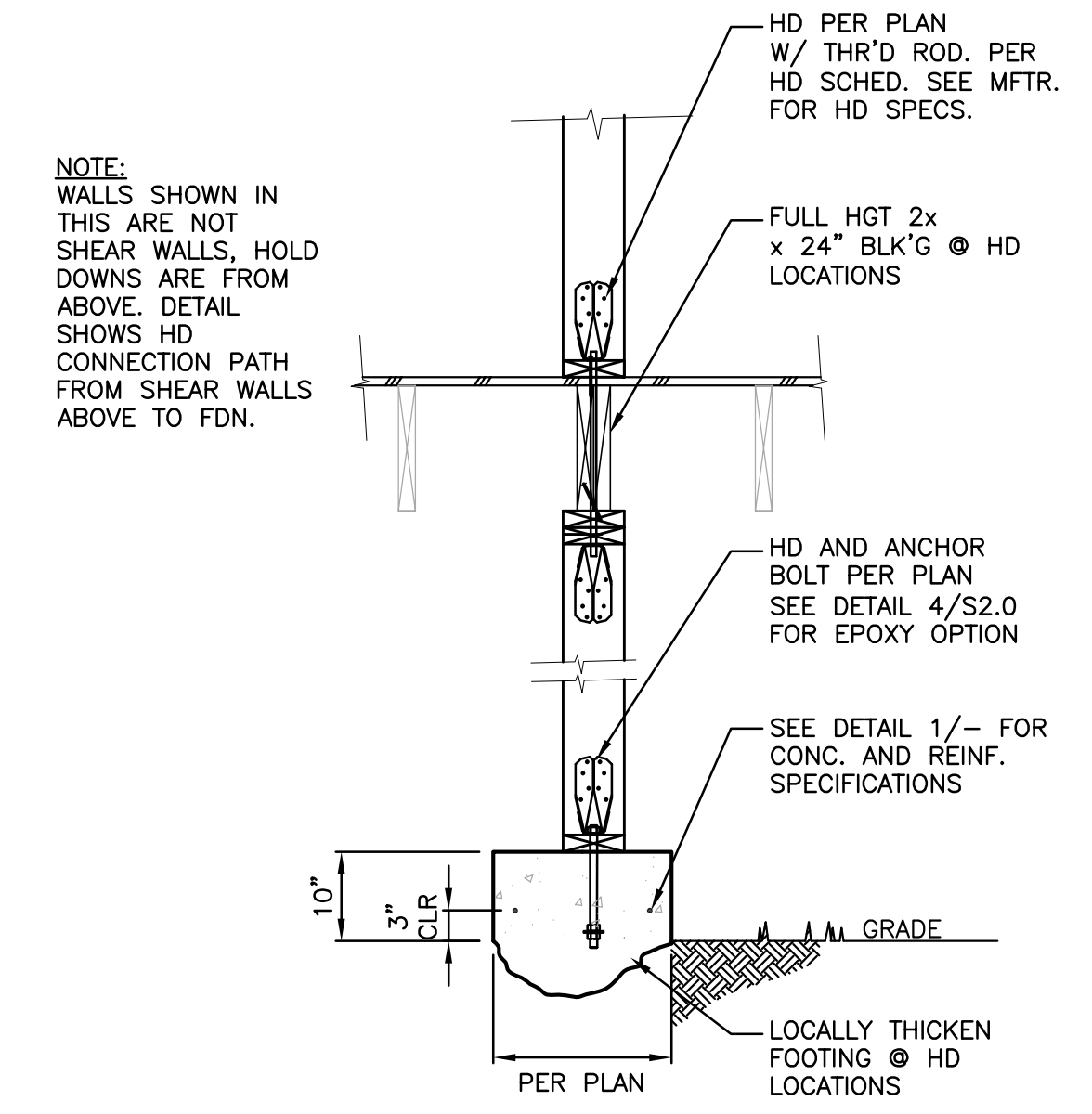
1 3/4" SCALE



2 3/4" SCALE



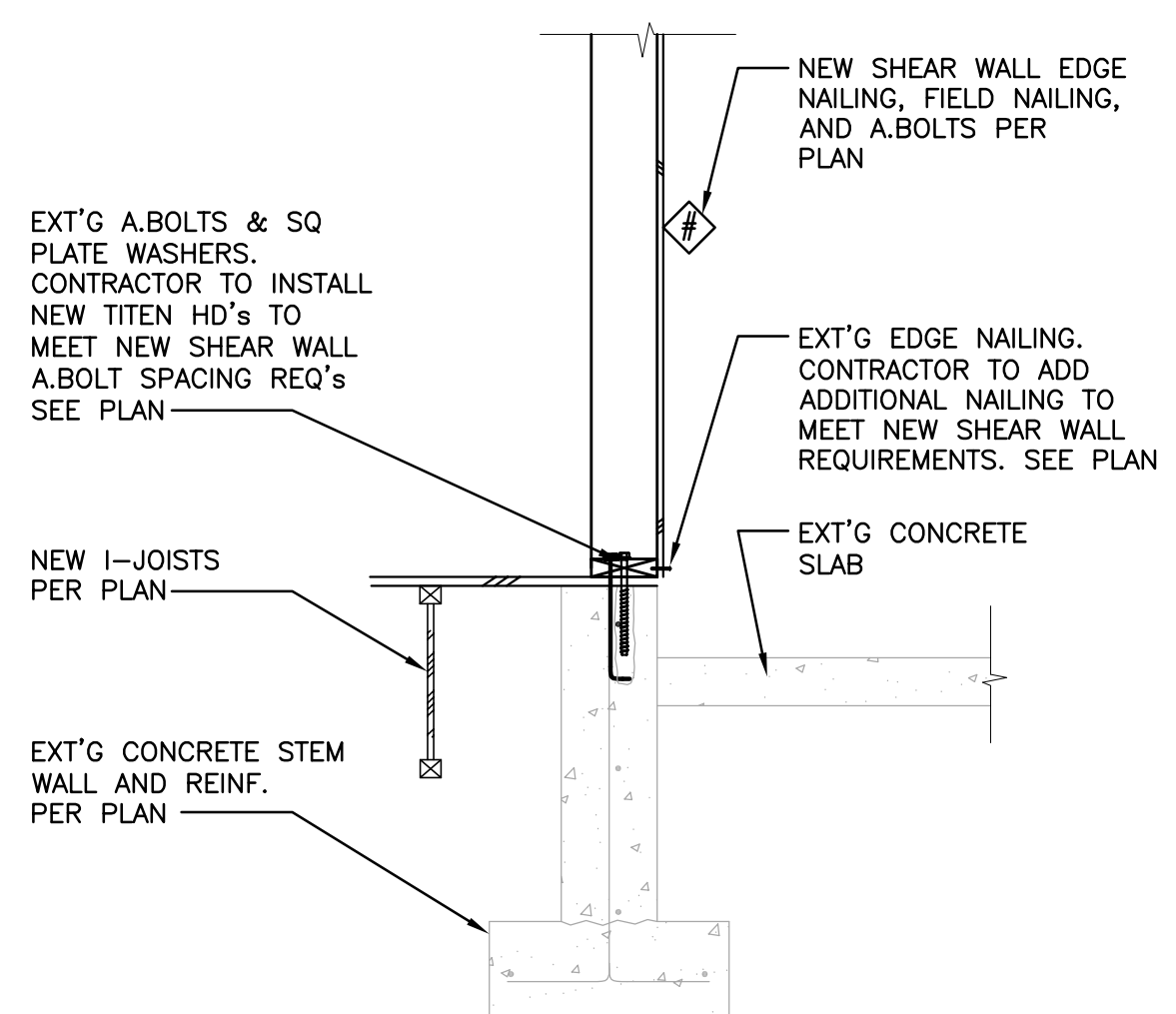
3 3/4" SCALE



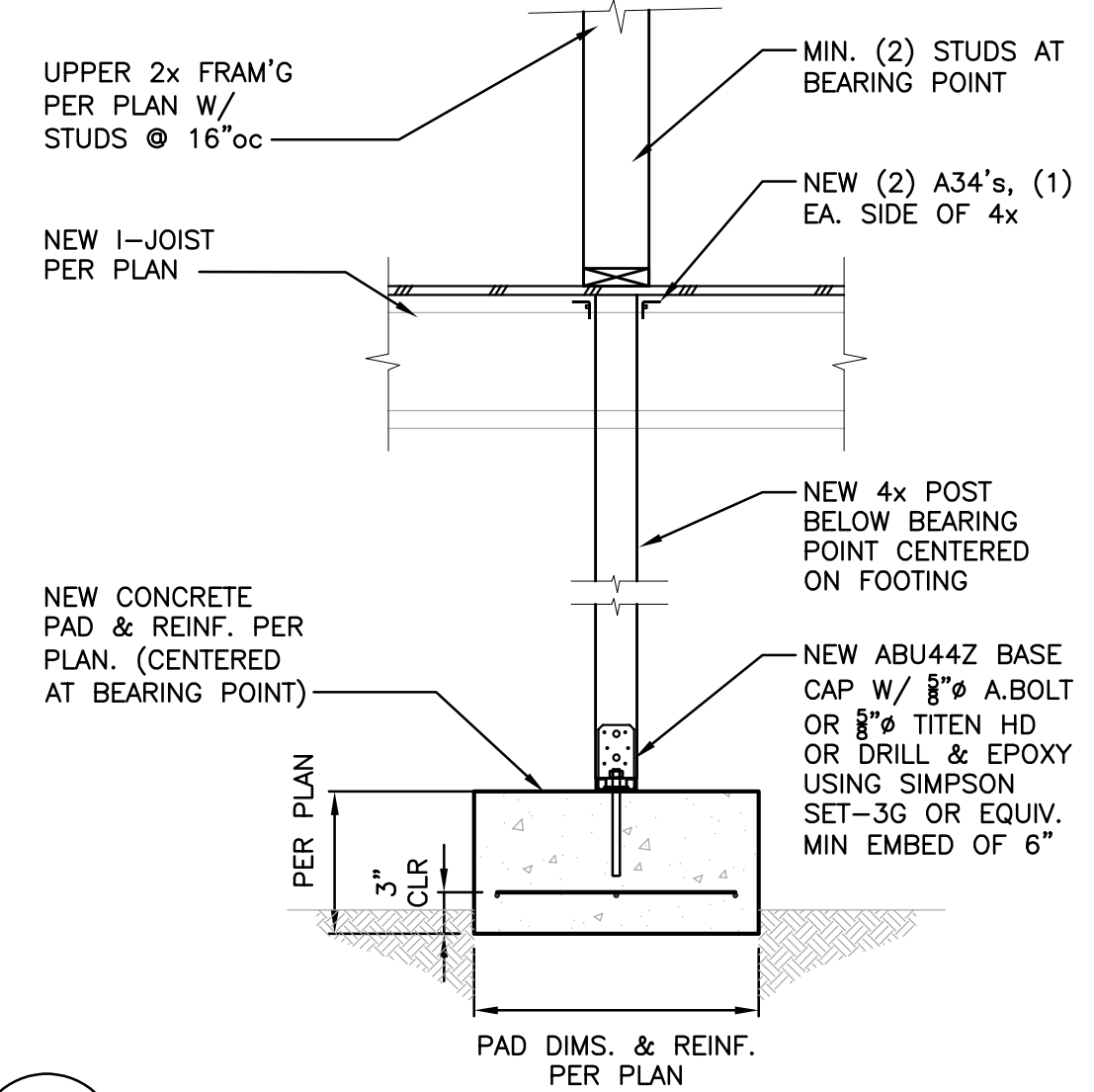
4 3/4" SCALE

NOTE: WALLS SHOWN IN THIS ARE NOT SHEAR WALLS, HOLD DOWNS ARE FROM ABOVE. DETAIL SHOWS HD CONNECTION PATH FROM SHEAR WALLS ABOVE TO FDN.

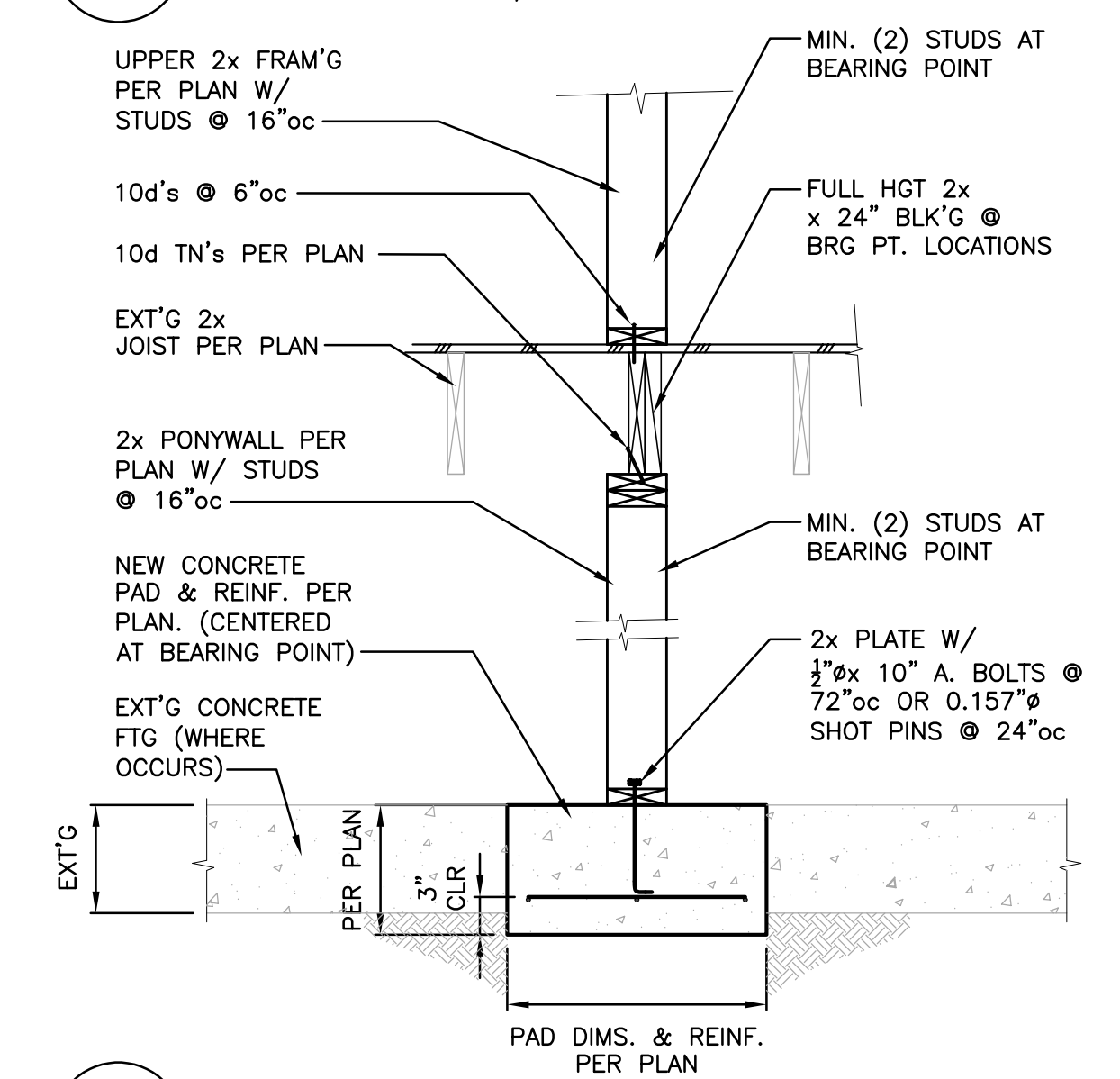
NOT USED



6 3/4" SCALE



7 3/4" SCALE



8 3/4" SCALE

NOT USED

9 3/4" SCALE

NOT USED

10 3/4" SCALE

NOT USED

11 3/4" SCALE

NOT USED

12 3/4" SCALE



REVISION	DATE
FOR PERMIT	2025/AUGUST 18

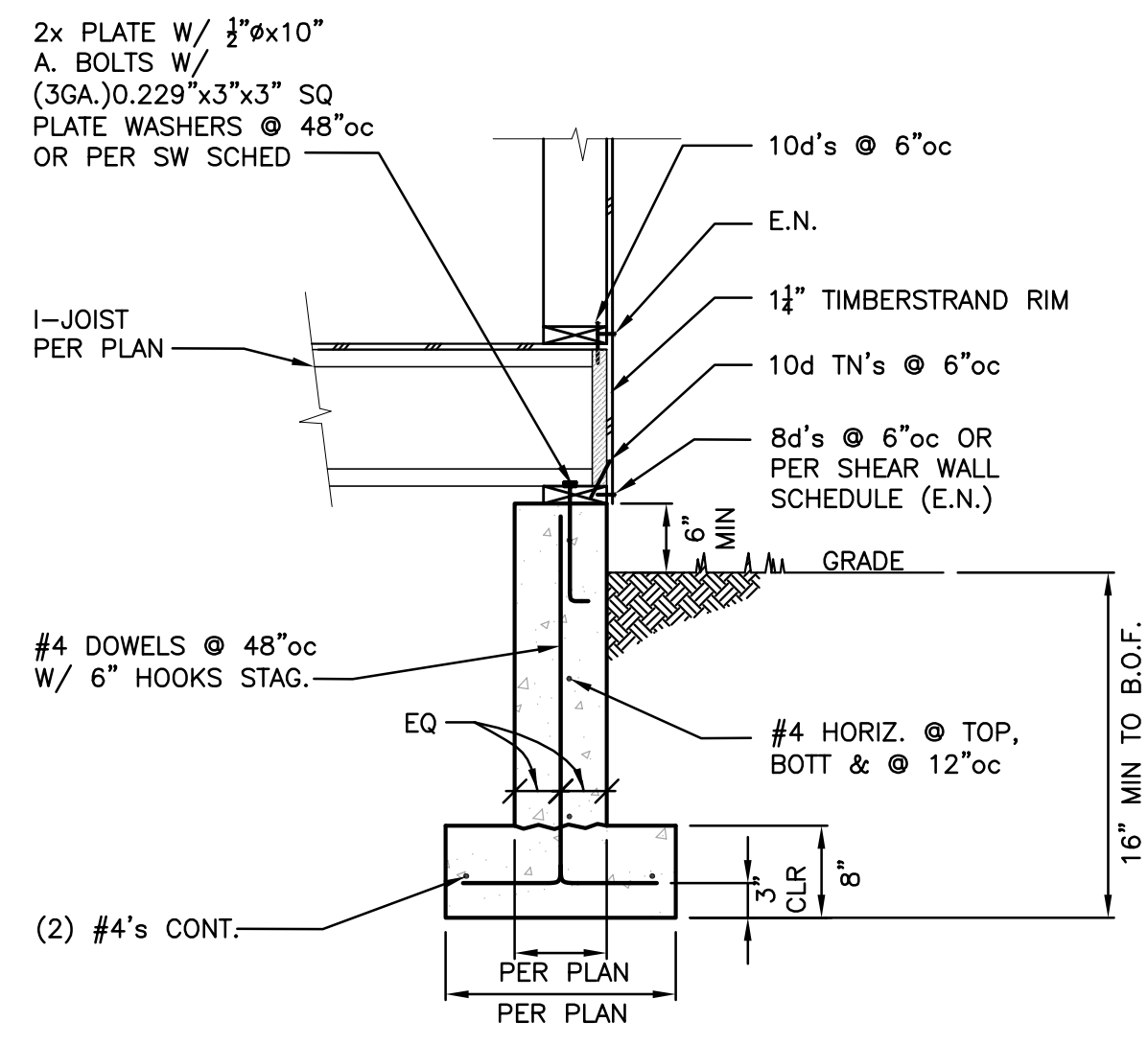
1501 N 13th st. STE. 202
BOISE, IDAHO 83702
PHONE : 208-343-4125
FAX : 866-855-9379
EMAIL: CONTACT@MURARENGINEERING.COM



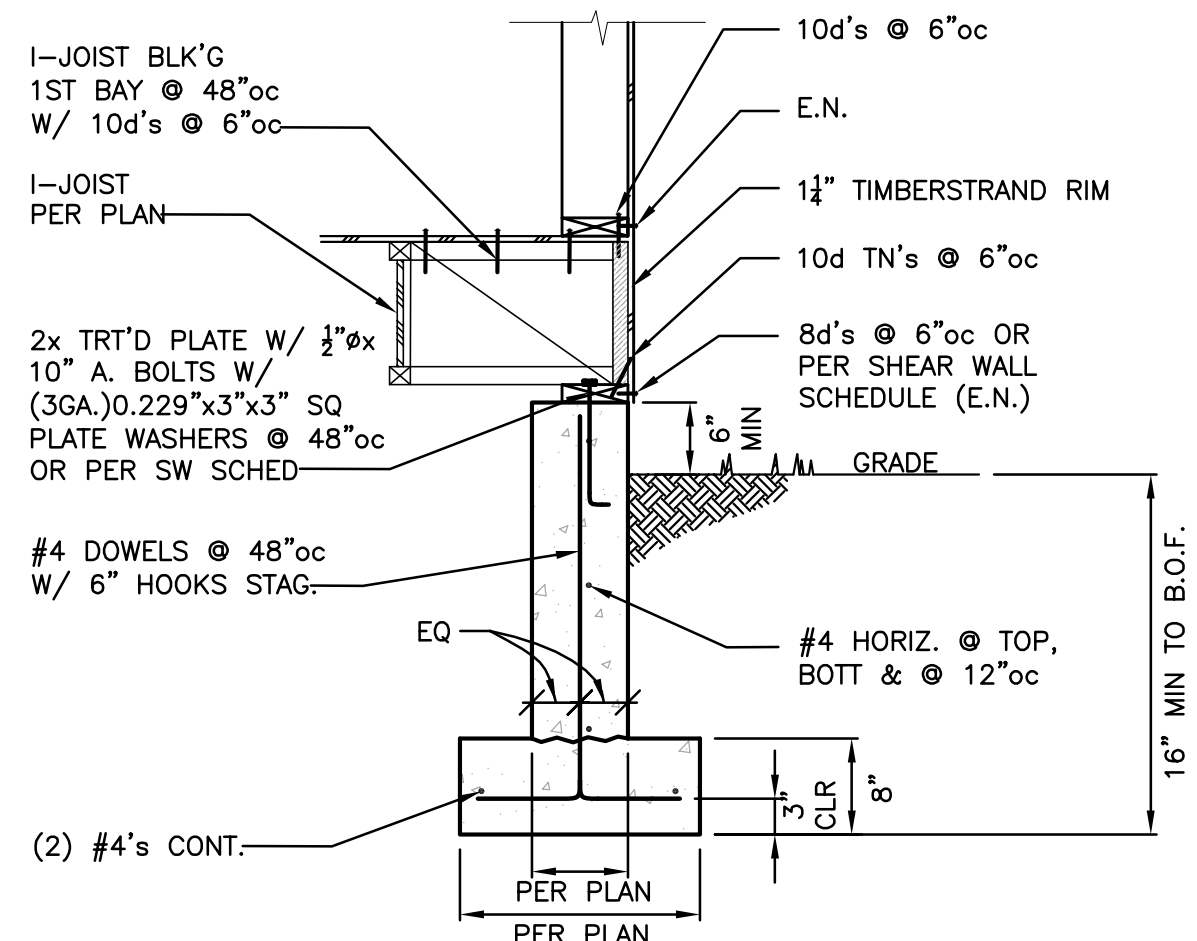
FOUNDATION DETAILS
- SHEET 1

CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

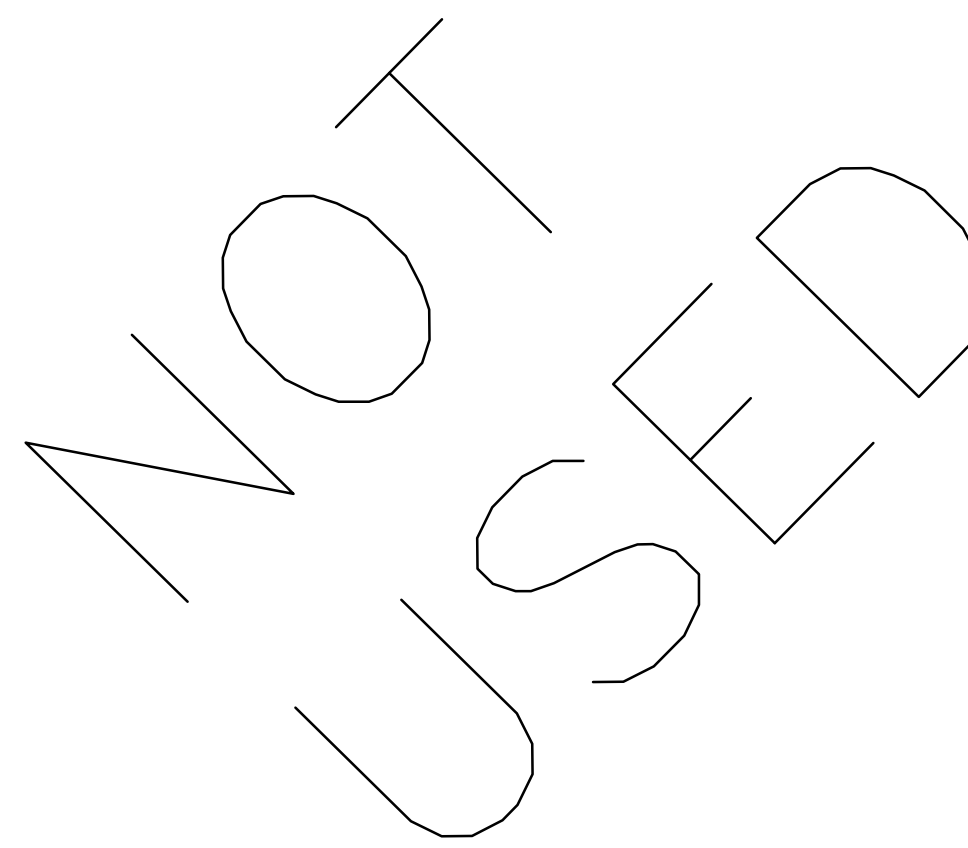
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FILE NAME	C:\2025_ANNEX_CHA &...
SCALE	1/4" SCALE
SHEET	



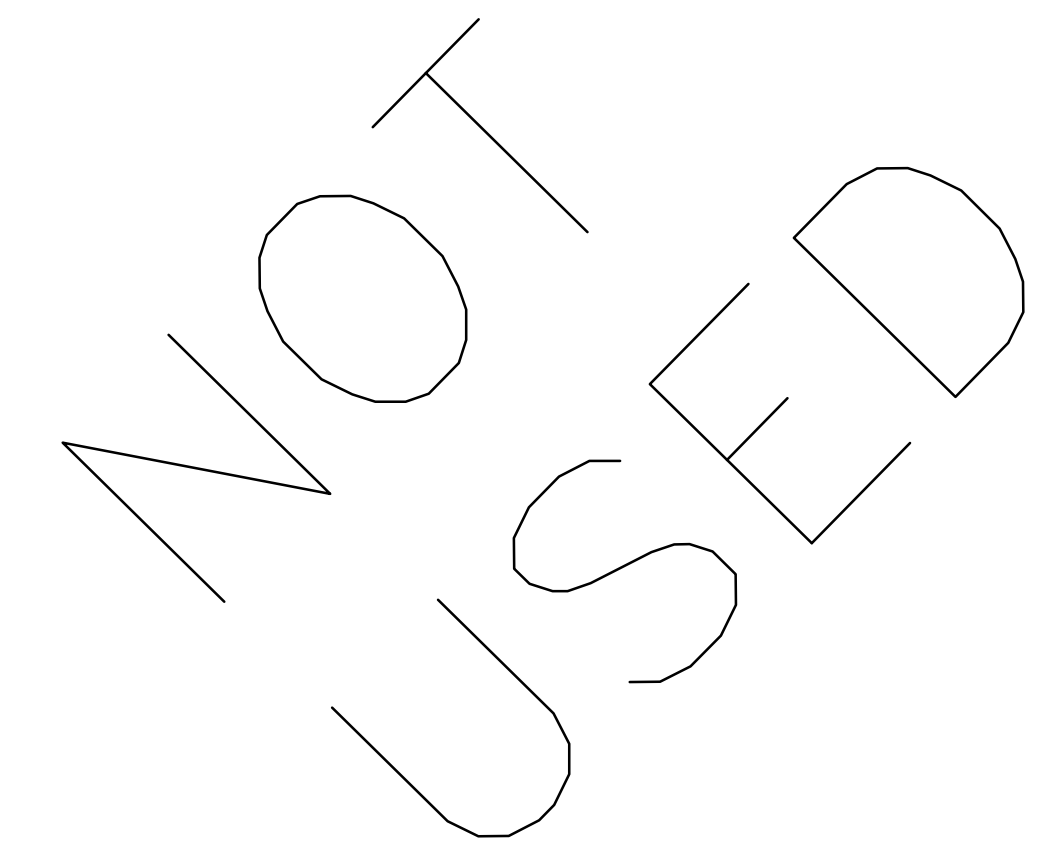
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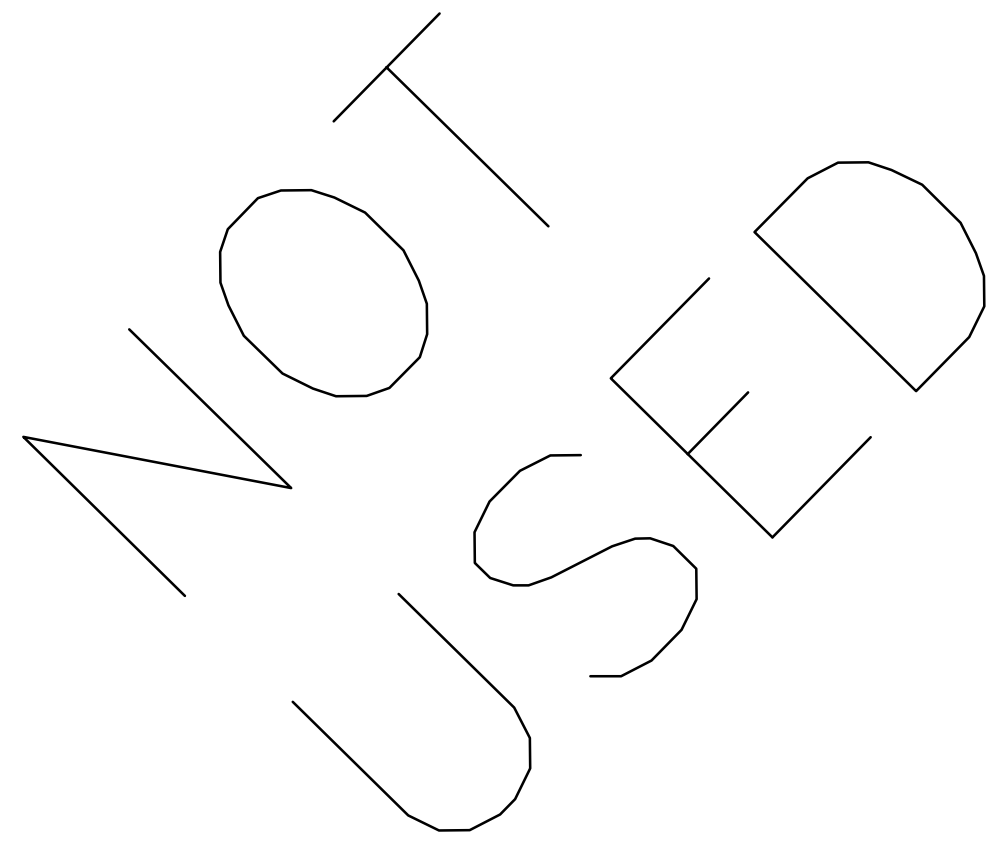
2 3/4" SCALE



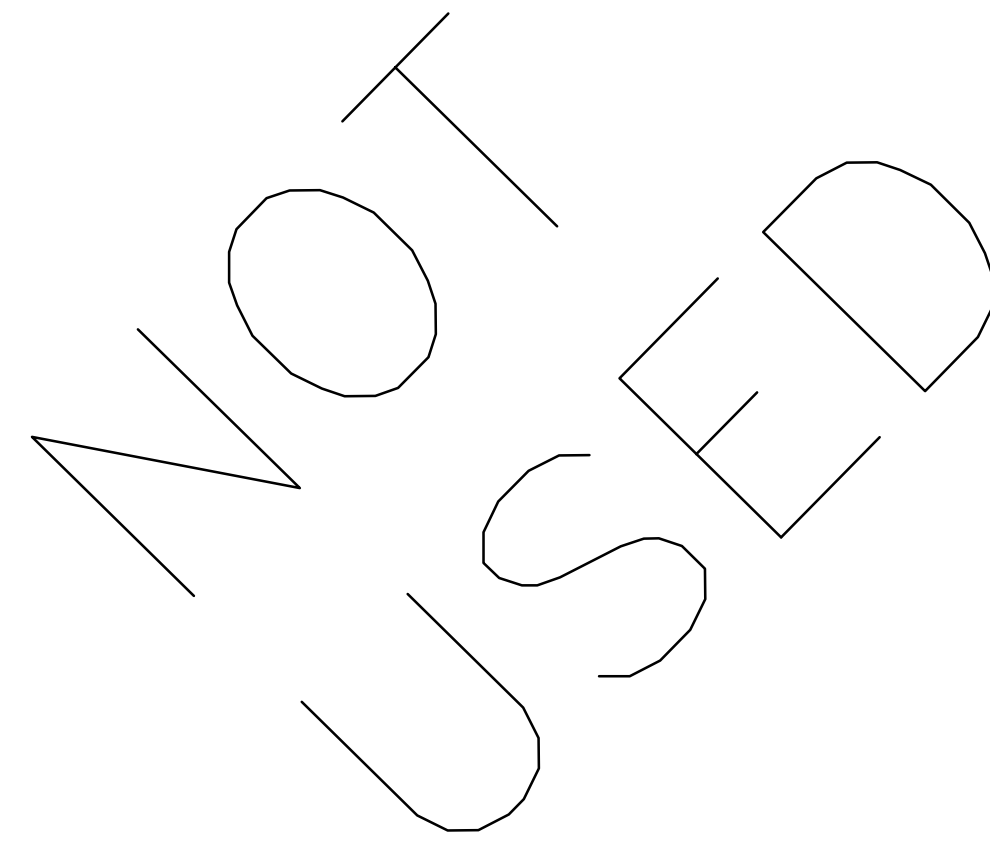
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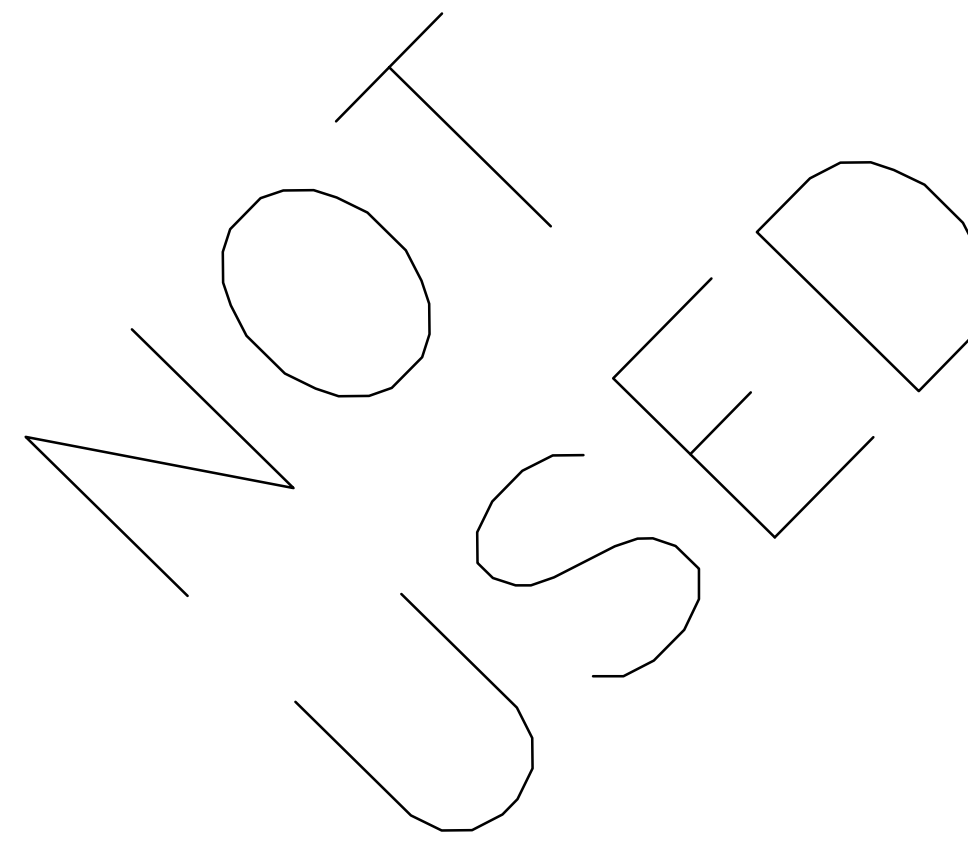
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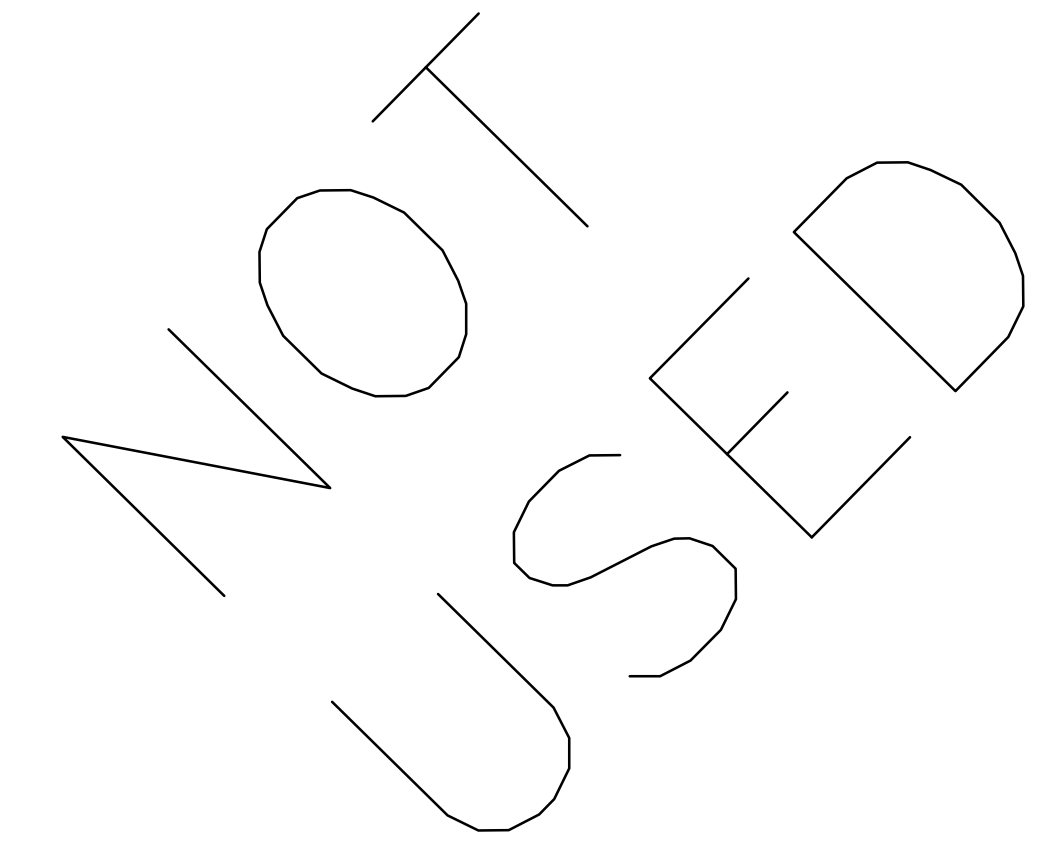
5 3/4" SCALE



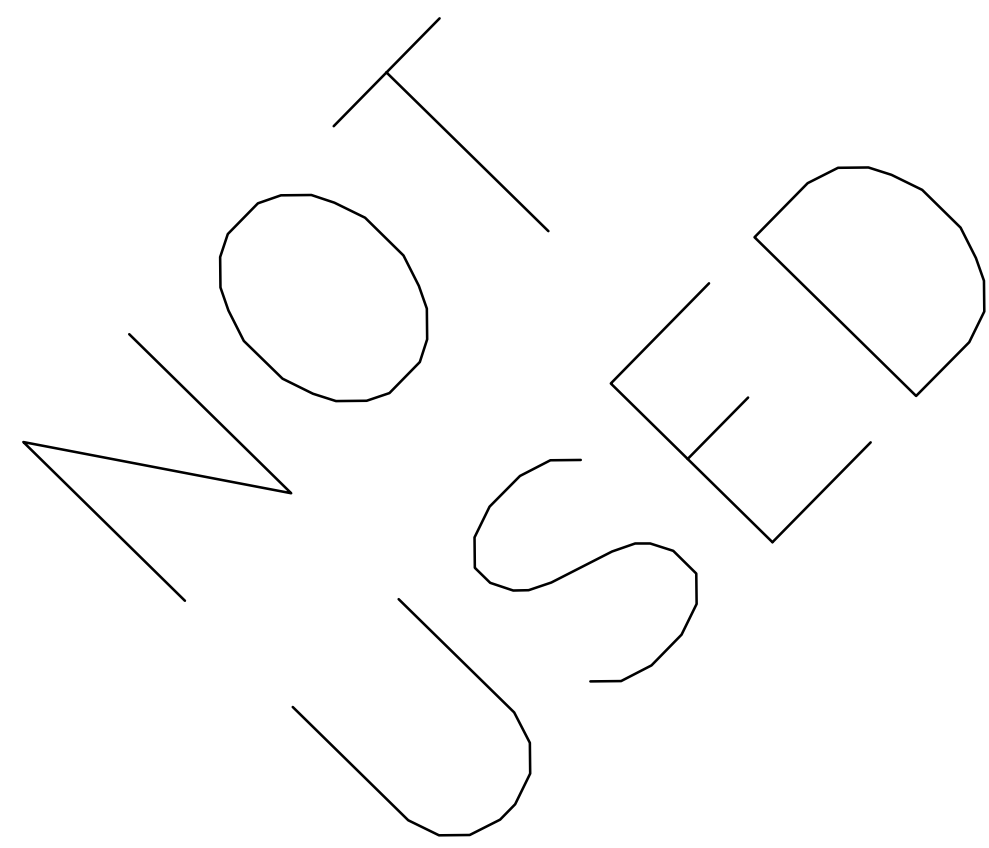
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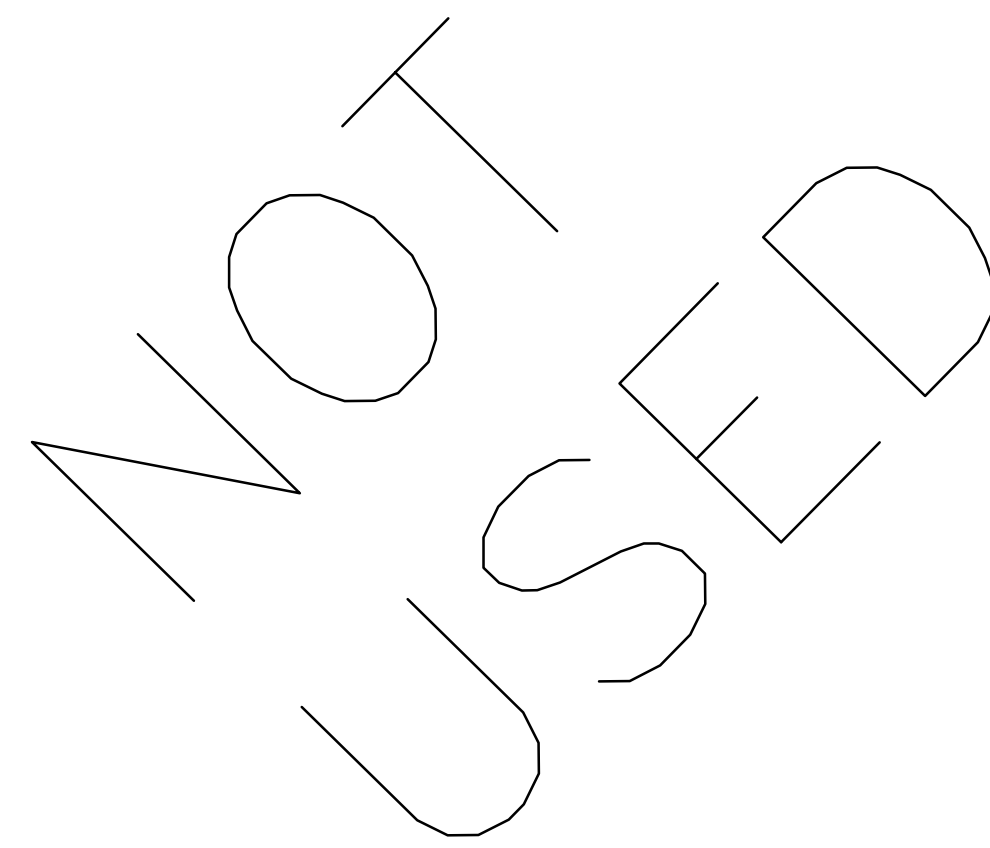
7 3/4" SCALE



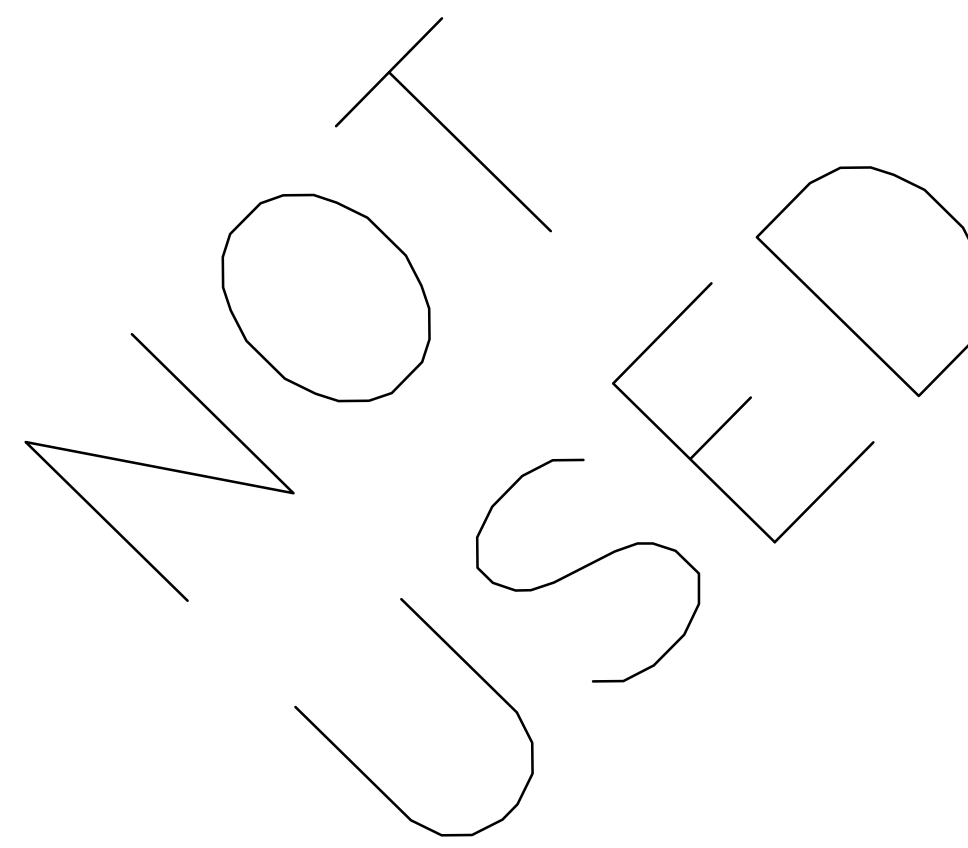
8 3/4" SCALE



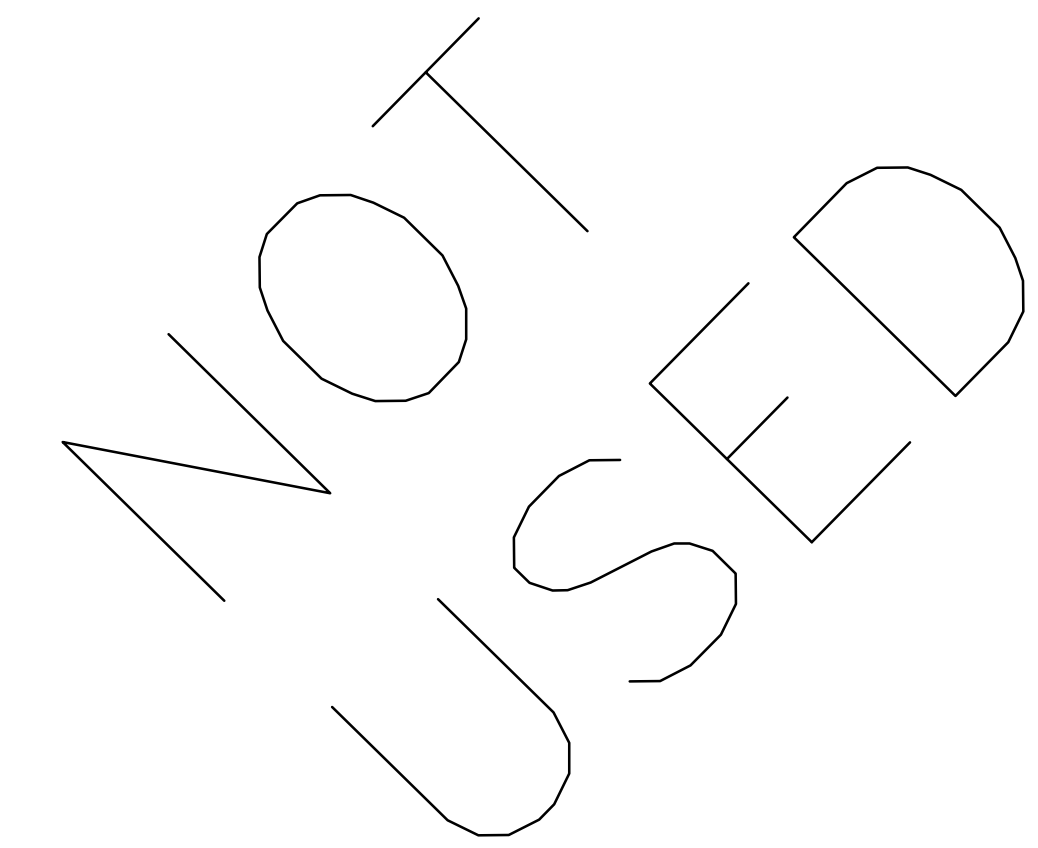
9 3/4" SCALE



10 3/4" SCALE



11 3/4" SCALE



12 3/4" SCALE

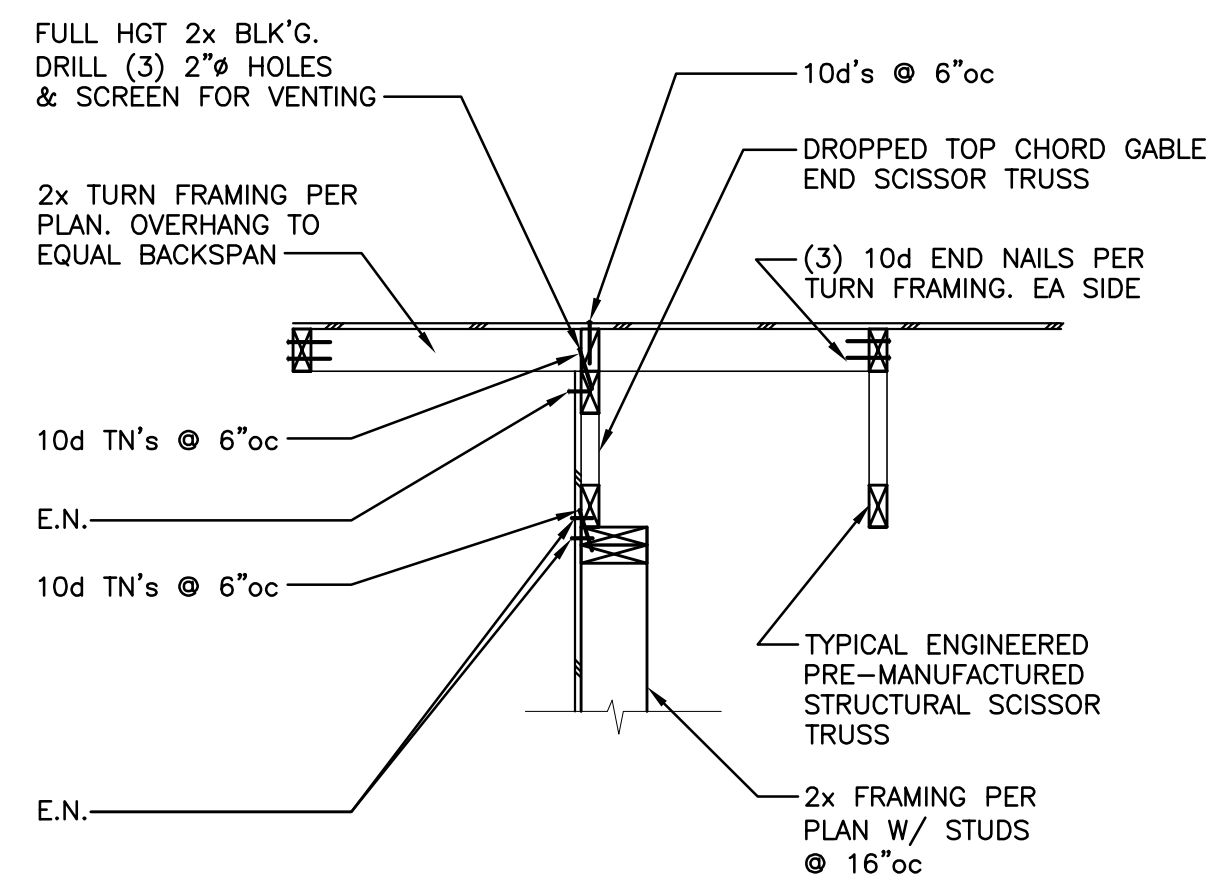


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FOR PERMIT	2025/AUGUST/8
<p>1501 N 13th st, STE. 202 BOISE, IDAHO 83702 PHONE : 208-343-4125 FAX: 866-855-9379 EMAIL: CONTACT@MURAREENGINEERING.COM</p>	

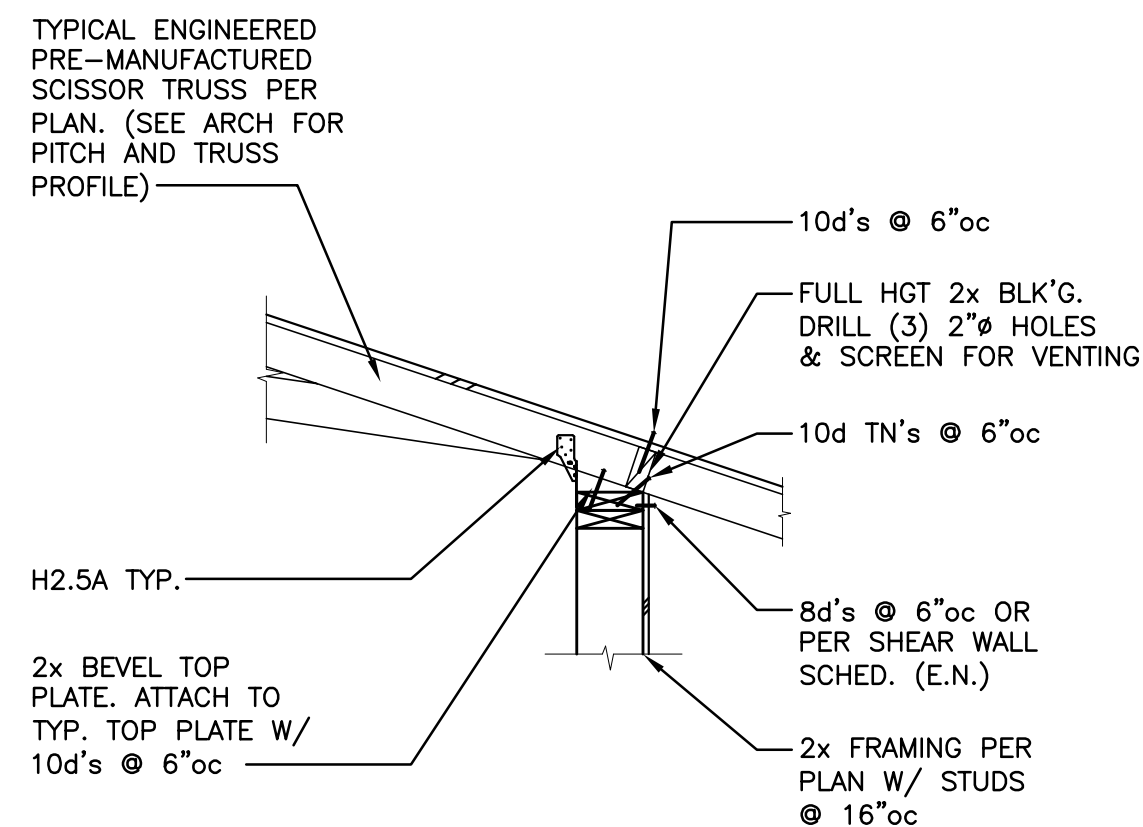
FOUNDATION DETAILS
- SHEET 2

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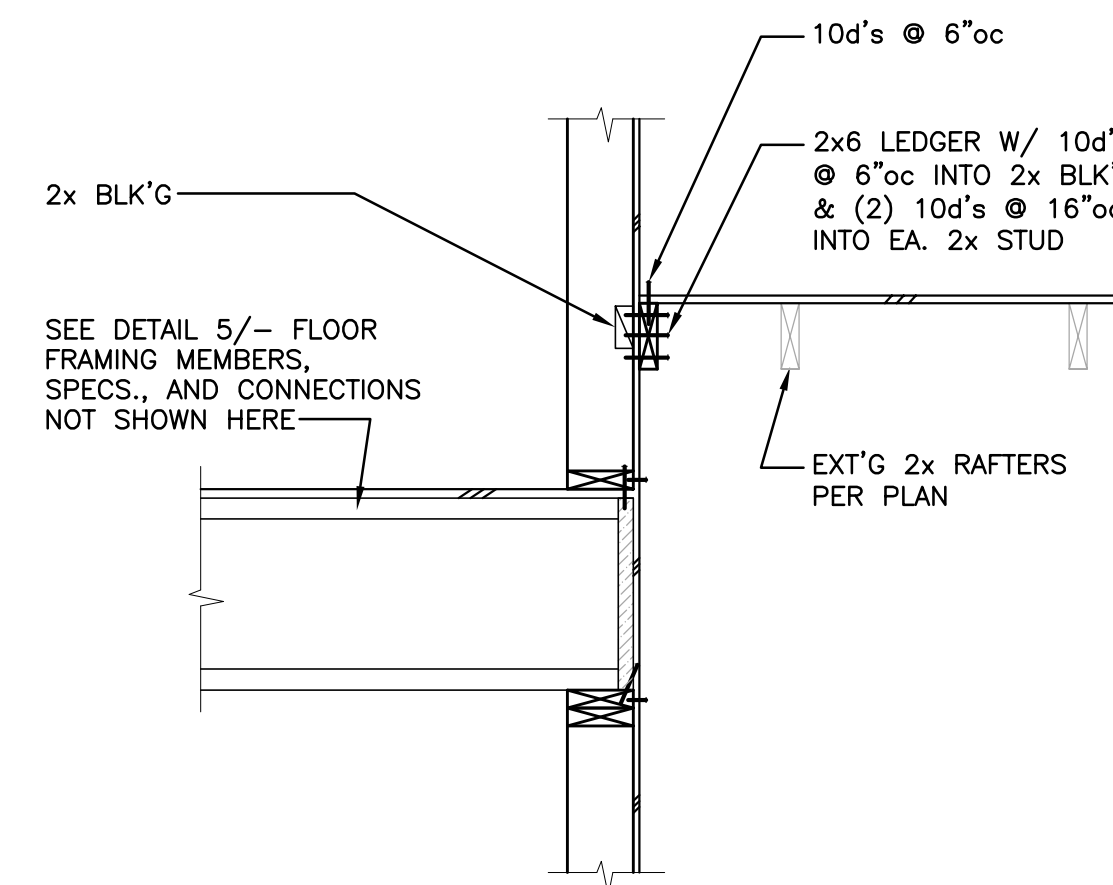
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EMU
FILE NAME
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SCALE
1/4" SCALE
SHEET



1 3/4" SCALE



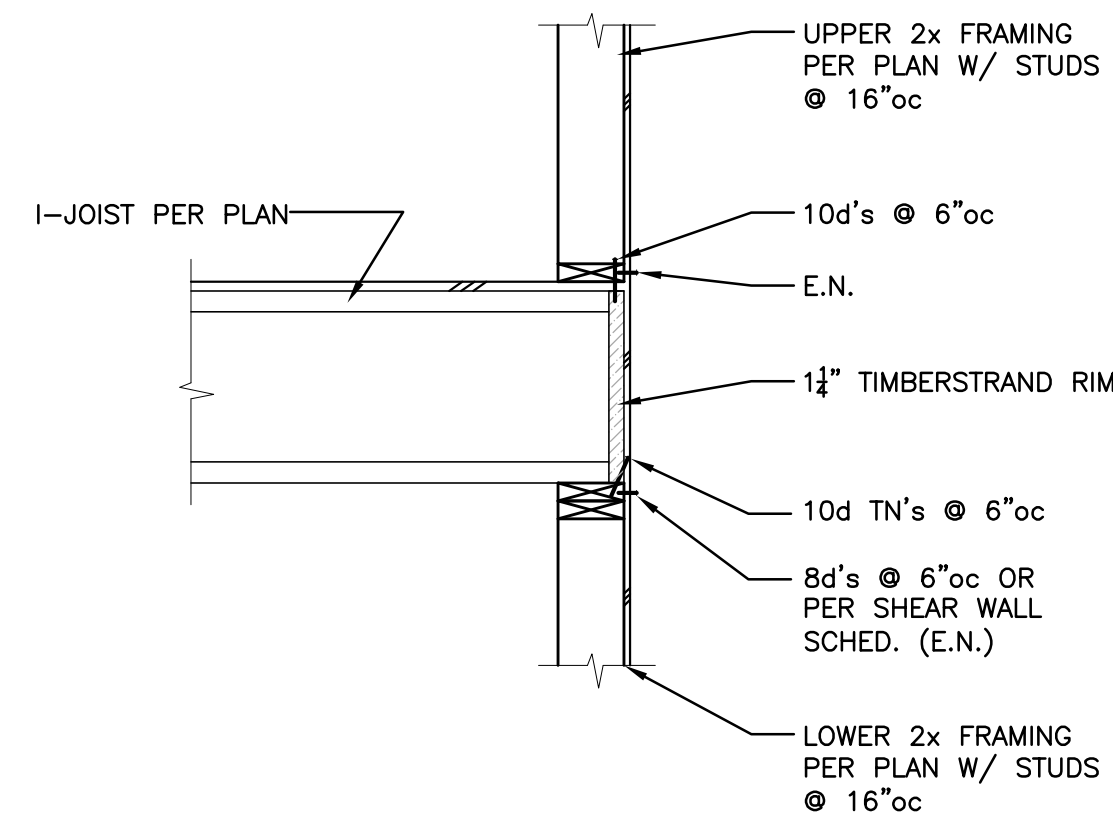
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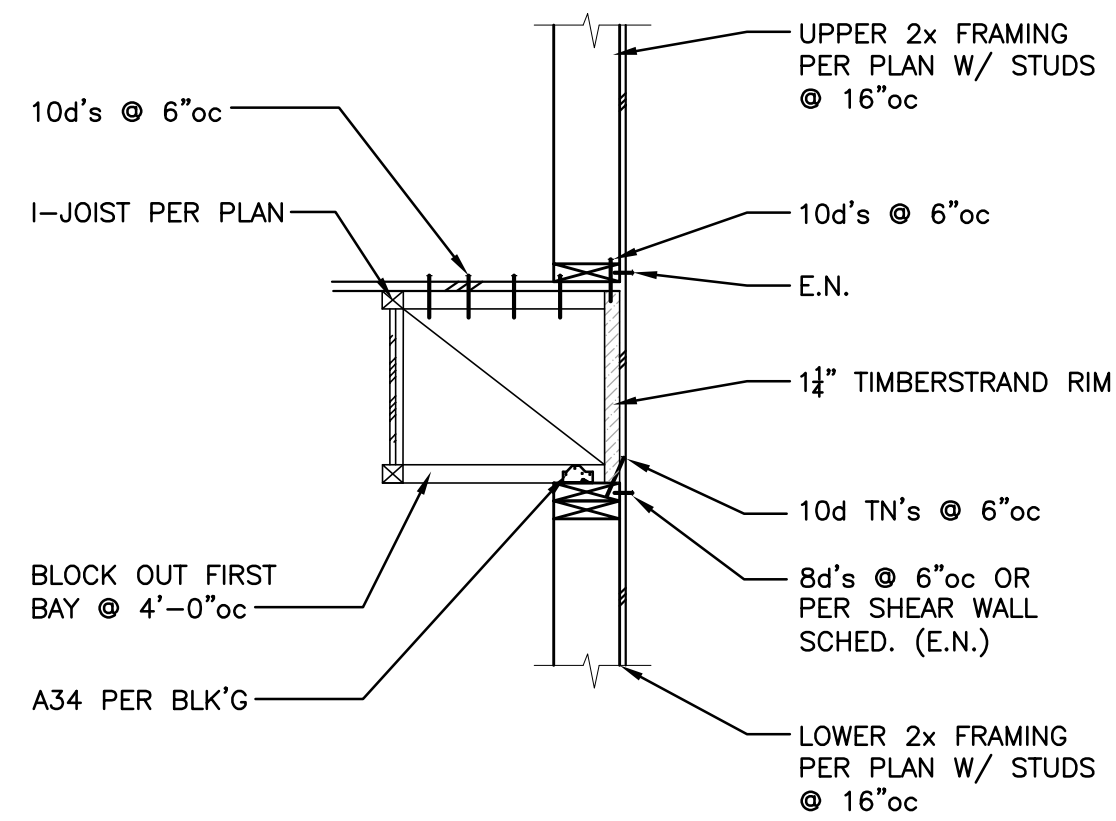
3 3/4" SCALE

NOT USED

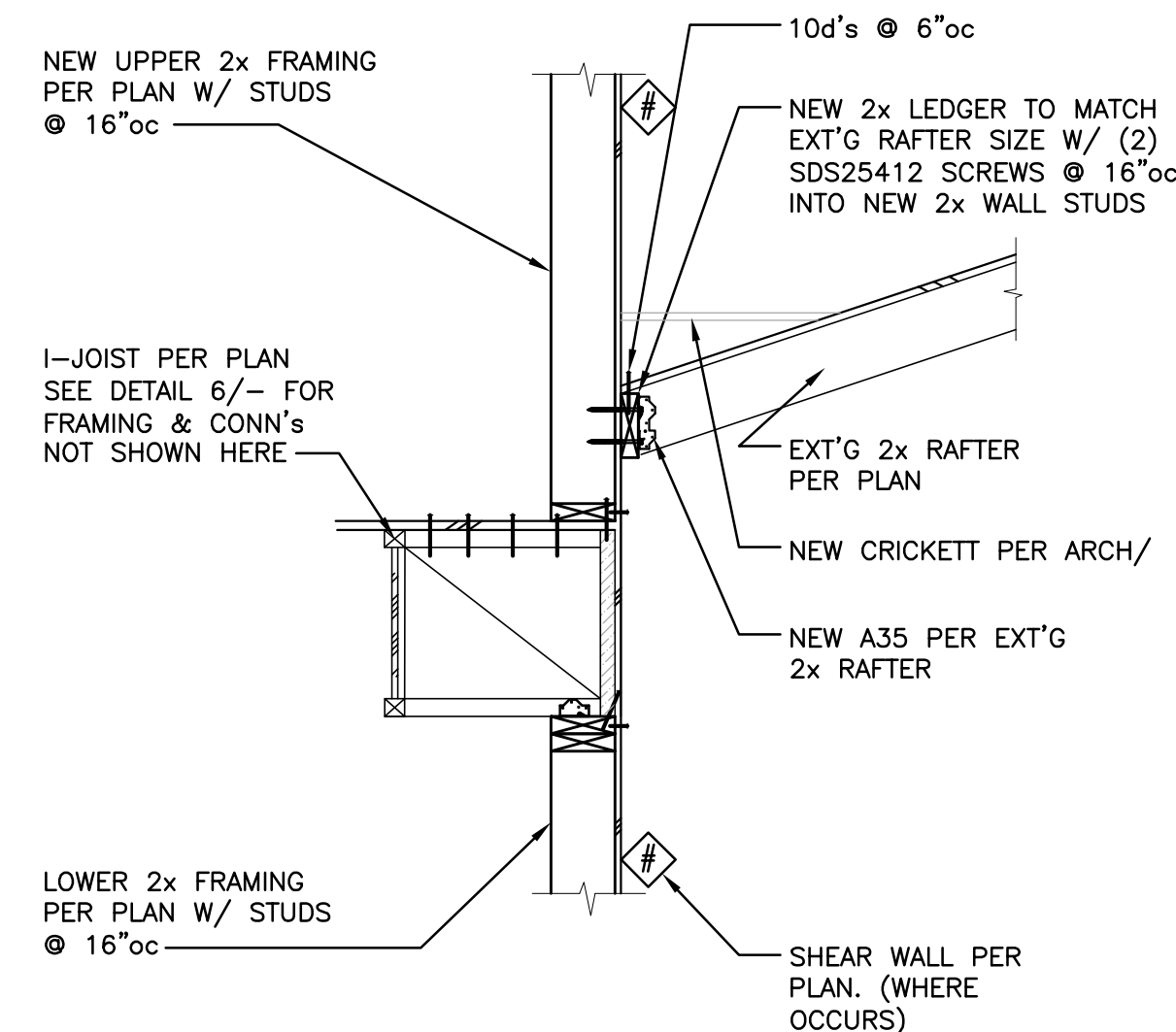
4 3/4" SCALE



5 3/4" SCALE



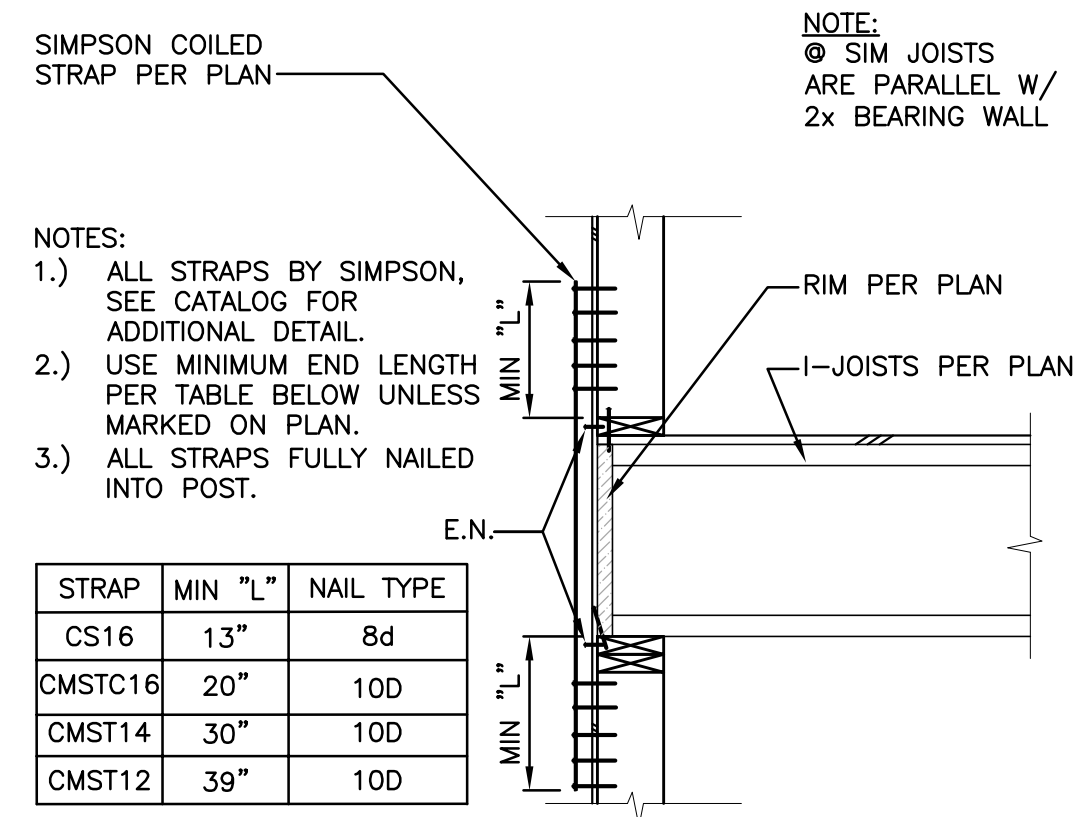
6 3/4" SCALE



7 3/4" SCALE

NOT USED

8 3/4" SCALE

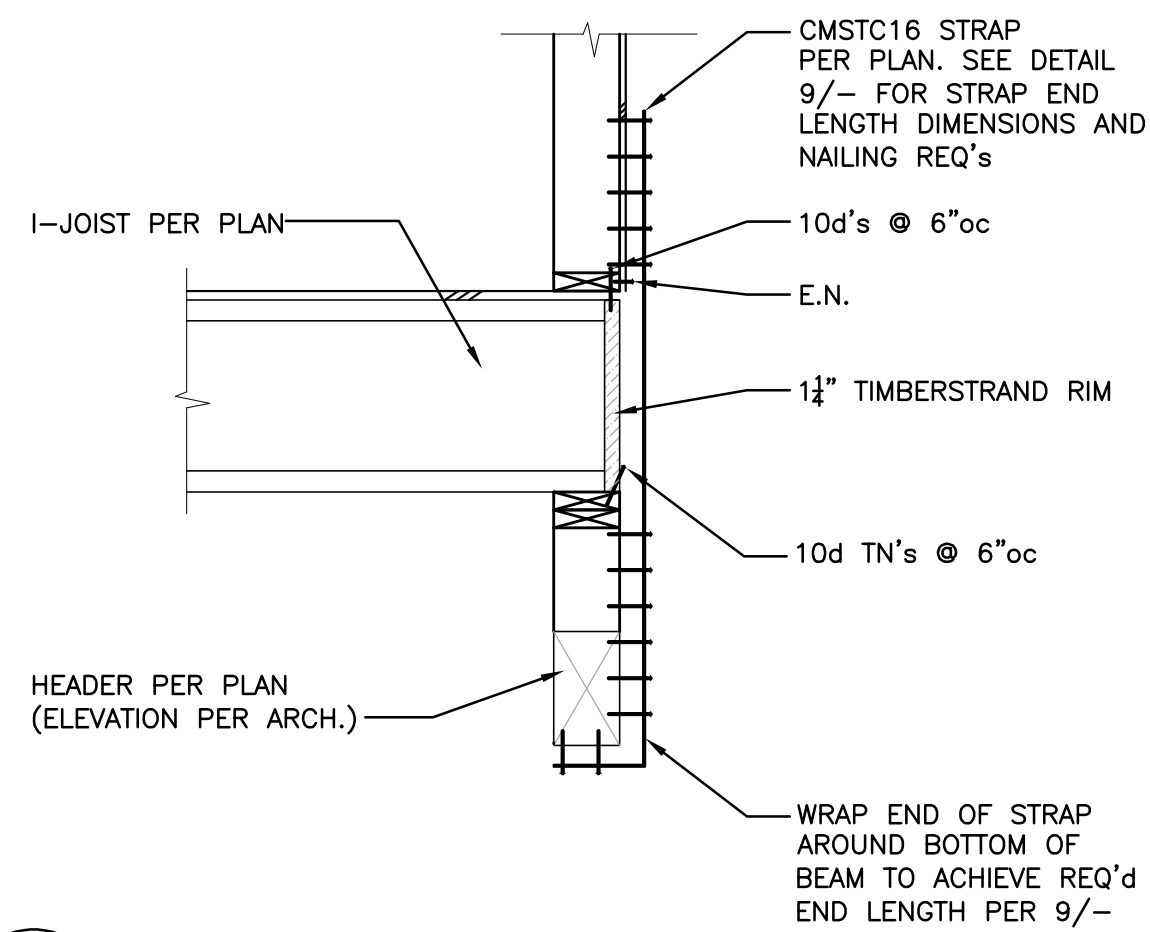


9 3/4" SCALE

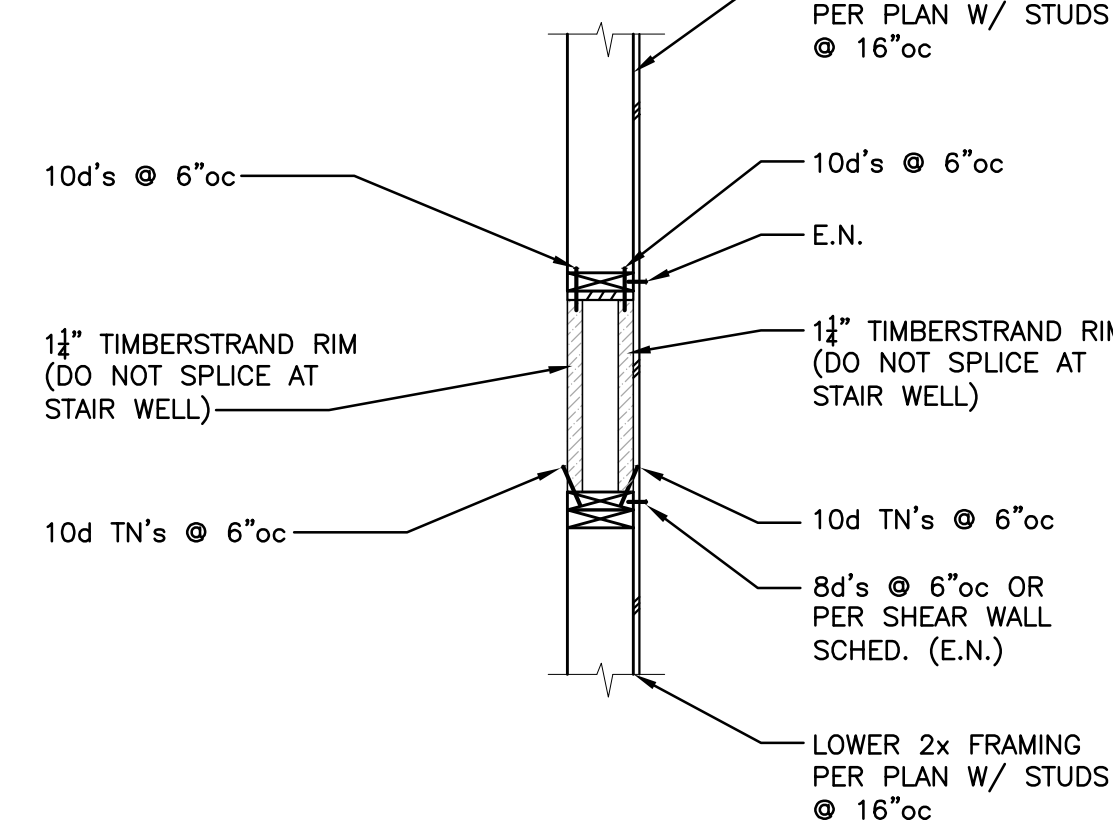
NOTES:

- ALL STRAPS BY SIMPSON, SEE CATALOG FOR ADDITIONAL DETAIL.
- USE MINIMUM END LENGTH PER TABLE BELOW UNLESS MARKED ON PLAN.
- ALL STRAPS FULLY NAILED INTO POST.

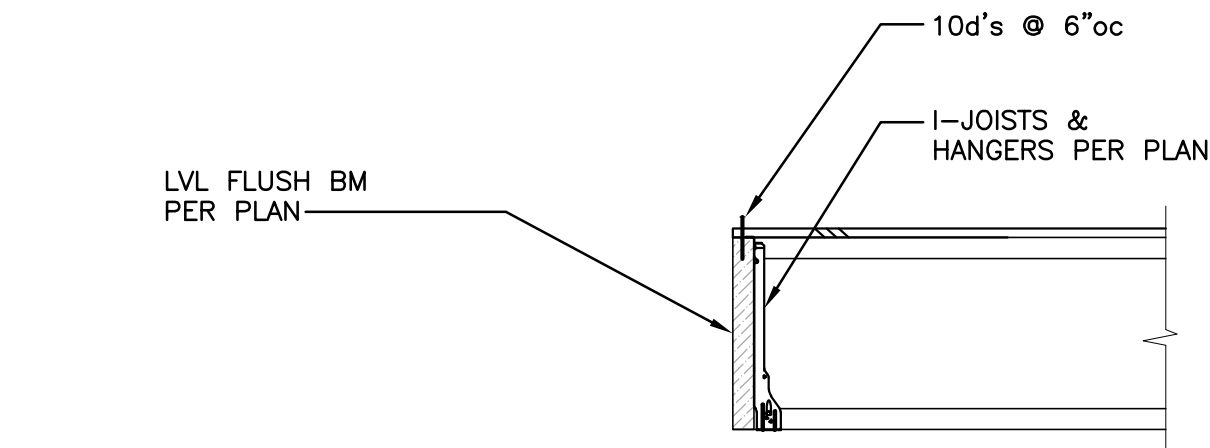
STRAP	MIN "L"	NAIL TYPE
CS16	13"	8d
CMSTC16	20"	10D
CMST14	30"	10D
CMST12	39"	10D



10 3/4" SCALE



11 3/4" SCALE



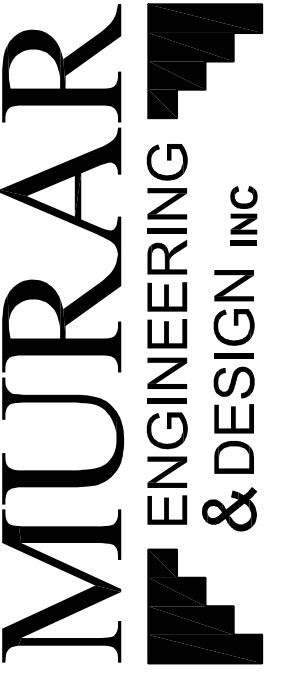
12 3/4" SCALE



FLOOR & ROOF FRAMING DETAILS - SHEET 1

CHA & KOO REMODEL
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MERCER ISLAND, wa 98040

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EMJ
FILE NAME
CL_2025_ANNEX_CHA &
SCALE
1/4" SCALE
SHEET



REVISION	DATE

FOR PERMIT 2025AUGUST18



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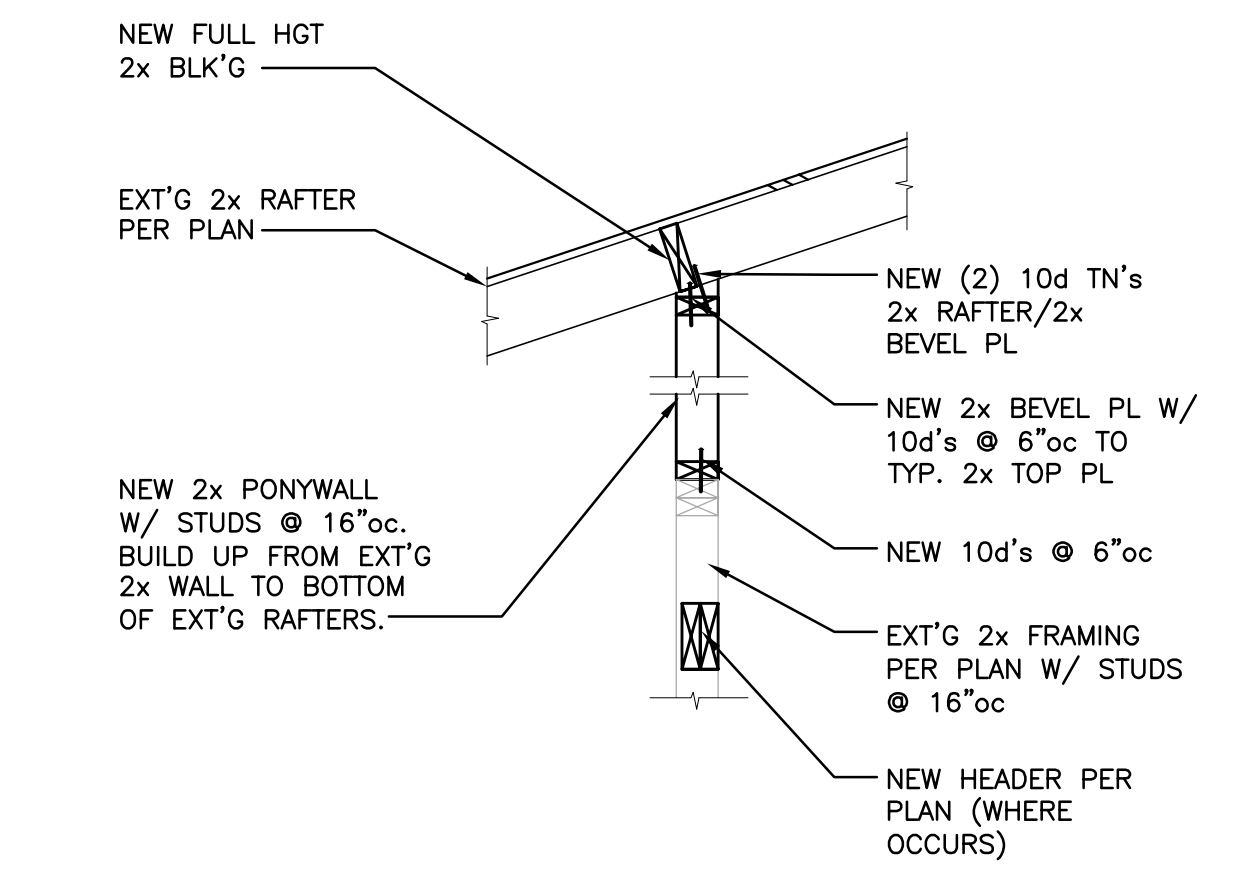
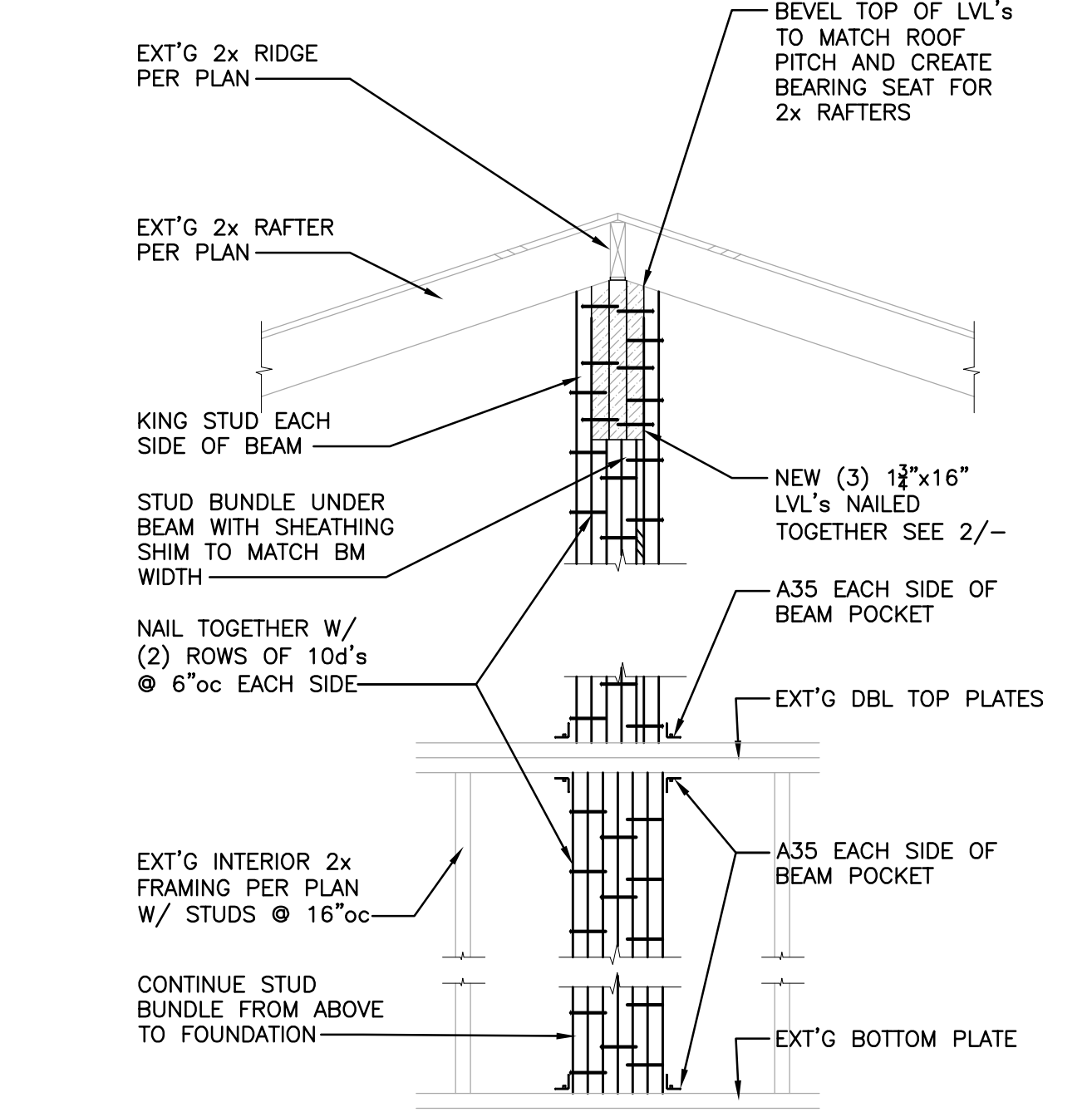
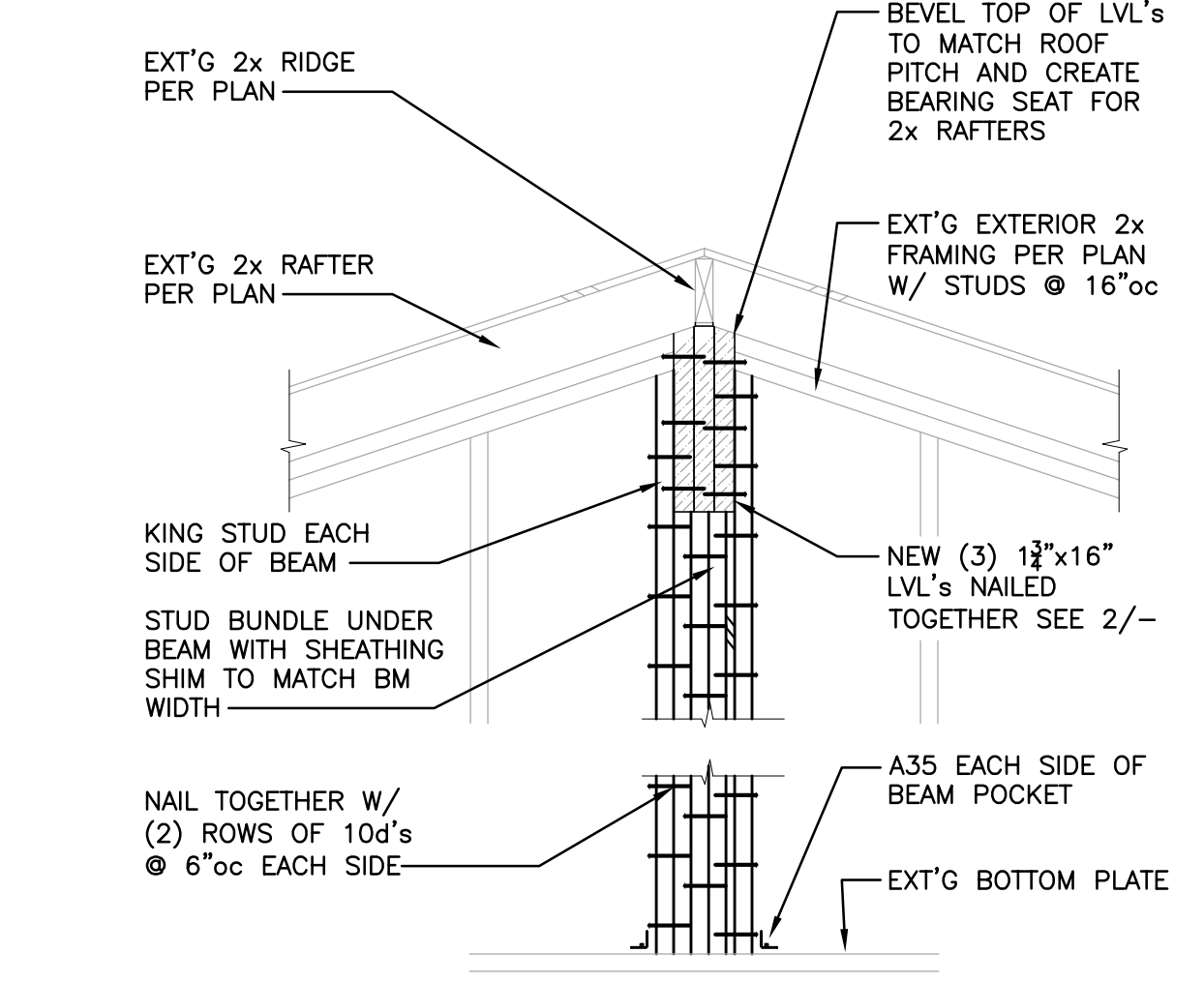
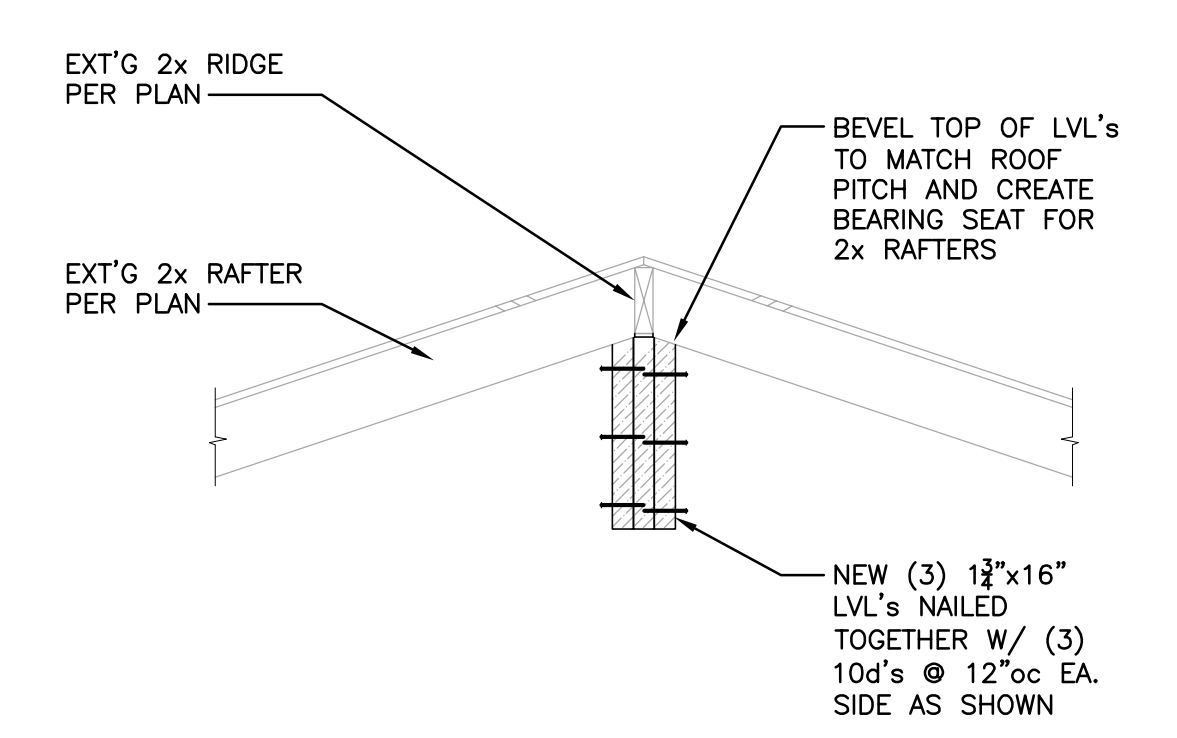
**FLOOR & ROOF
FRAMING DETAILS
- SHEET 2**



CHA & KOO REMODEL
3818 83rd AVE SE
MERCER ISLAND, wa 98040

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EMU
FILE NAME
CL_2025_ANNEX_CHA &
SCALE
1/4" SCALE
SHEET

S4.1



1 3/4" SCALE

2 3/4" SCALE

3 3/4" SCALE

4 3/4" SCALE

NOT USED

NOT USED

NOT USED

NOT USED

5 3/4" SCALE

6 3/4" SCALE

7 3/4" SCALE

8 3/4" SCALE

NOT USED

NOT USED

NOT USED

NOT USED

9 3/4" SCALE

10 3/4" SCALE

11 3/4" SCALE

12 3/4" SCALE

FLOOR & ROOF FRAMING DETAILS - SHEET 2