

CITY OF MERCER ISLAND

DEVELOPMENT SERVICES GROUP

9611 SE 36TH STREET | MERCER ISLAND, WA 98040
PHONE: 206.275.7605 | www.mercergov.org



INSPECTION REQUESTS:

online:



voicemail: (206) 275-7730

NOTE: ALL RECORDS AND DRAWINGS ARE SUBJECT TO PUBLIC DISCLOSURE AS REQUIRED BY RCW 42.56

CONTACT INFORMATION:

Applicant is to complete the following information.

Applicant Contact information prior to permit issuance: Name, Address, Phone, Email
Applicant Contact information post permit issuance: Name, Address, Phone, Email

REQUIRED SPECIAL INSPECTIONS / STRUCTURAL OBSERVATIONS:

It is the Engineer of Record's responsibility to specify all required Special Inspections or Structural Observation (check items below). The owner is responsible for hiring an approved private Special Inspector for the checked inspections noted below.

STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR): Engineer of Record, Company, Phone, General Conformance to Construction Documents, Other

SOILS / GEOTECHNICAL: Special Inspector, Company, Phone, Erosion control measures, Shoring installation and monitoring, Observe and monitor excavation, Verification of soil bearing, Other

REINFORCED CONCRETE: Special Inspector, Company, Phone, Concrete strength, Reinforcing steel and concrete placement, Shotcrete placement, Other

STRUCTURAL STEEL: Special Inspector, Company, Phone, Fabrication and shop welds, Structural steel erection, field welds and bolting, Other

STRUCTURAL MASONRY: Special Inspector, Company, Phone, Mortar strength, Masonry unit strength, Other

WOOD: Special Inspector / Engineer of Record, Company, Phone, Lateral resisting system construction, High strength diaphragm construction, Other

OTHER SPECIAL INSPECTIONS: Special Inspector, Company, Phone, Epoxy grout installations, Expansion anchor installations, Other post installed anchors, Alternative construction methods, Alternative construction materials, Other

DEFERRED SUBMITTALS:

The Applicant is required to select all deferred submittals / shop drawings for submittal to the City for review and approval prior to item fabrication / construction.

Connector plate wood trusses, Metal joist / metal trusses, Premanufactured structures (stairs, etc.), Precast concrete elements, Other, Post tension layout, Exterior cladding, Window wall / curtain wall construction, Other

ENERGY CODE COMPLIANCE INFORMATION:

Indicate where the following information is located in the drawing set. Alternatively, incorporate or include the Residential Energy Code Prescriptive Compliance (RECPC) Form into the drawing set.

Building envelope, Whole house ventilation, Energy Credit Information, RECPC Form Information, Air Leakage Testing, Duct Leakage Testing, Postconstruction Test, Rough-in Test

TO BE COMPLETED BY DSG

PROJECT ALERTS:

Construction of the project shall be from approved plans only. No deviation from the approved project plans is allowed without prior approval from the City of Mercer Island. Approved plans must be kept on site and maintained in good condition.

Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including: Site Considerations, Hours of Work, Construction Vehicle Parking Restrictions, Access Road Requirements, ROW restrictions, Drainage Requirements, Sewer Requirements, Water Service Requirements, Additional Fire Code Requirements, Planning Requirements, Noise Abatement Certification, Tree Requirements

TREE PROTECTION REQUIREMENTS:

Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and must remain in place throughout the project. No trees shall be cut without a City of Mercer Island tree permit.

FIRE PROTECTION REQUIREMENTS:

Separate Permits are required for ALL fire protection systems. For more information, see http://www.mercergov.org/Page.asp?NavID=2614

Fire Sprinkler, NFPA 13D, NFPA 13R, NFPA 13, Monitored Household Fire Alarm per NFPA 72, Monitored Sprinkler Water Flow Alarm, Other, Approved Fire Code Alternatives: FCA1, FCA2, FCA3, FCA4

WATER SUPPLY REQUIREMENTS:

Fire sprinkler design calculations must be provided prior to determining water supply system requirements. Water Supply system upgrade required, City Installation, Applicant Installation, Required Service Line Size, Required Supply Line Size, Required Meter Size

DRAINAGE REQUIREMENTS:

On site detention system required, On site infiltration system required, As-built Utility drawings required, Full Size drawings required, Direct discharge into the lake, No Storm Water permit required, Connection to public storm drainage conveyance system req'd, Other

SIDE SEWER REQUIREMENTS:

Side sewer requires a backflow preventer when connecting to the lake line or when the elevation of the lowest plumbing fixture is lower than the elevation of the upstream manhole rim or when side sewer is shared with one or more properties. Video tape of existing sewer required (see standard details), New connection, Connect to existing, Disconnect permit required, Reconnect permit required, Other

APPROVED CODE ALTERNATIVES:

Code alternatives must be inspected. Refer to the Inspection Checklist. CA1, CA2

SURVEY REQUIREMENTS (The following survey information must be submitted when checked):

Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City reserves the right to request an impervious area survey at any time prior to issuance of Certificate of Occupancy.

Surveyor, Building height survey, Building setback survey, Impervious surface survey, Other, MAXIMUM 40 PERCENT ALTERATION INSPECTION: A Building Inspection prior to demolition is required for all legally nonconforming single family dwelling to ensure no more than 40 percent of the dwelling's exterior walls are structurally altered.

GEOTECHNICAL INFORMATION:

Land clearing, grading, filling and foundation work within geologic hazard areas is NOT PERMITTED between October 1 and April 1 without an approved Seasonal Development Limitation Waiver.

Geotechnical Report provided. All construction must comply with the recommendations of the Geotechnical Report. A copy of report and other geotechnical information must be kept on site at all times.

Geotechnical Engineer, Phone

SEASONAL DEVELOPMENT LIMITATION RESTRICTION:

Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1. Waiver approved. Grading and excavation permitted subject to all conditions noted in Seasonal Development Limitation Waiver Permit.

Permit number, Approved by, Date

TO BE COMPLETED BY DSG

TO BE COMPLETED BY DSG

REQUIRED CONSTRUCTION INSPECTIONS:

It is the applicant's responsibility to contact DSG to schedule ALL inspections appropriate for the project. Request inspections online at www.MyBuildingPermit.com or by calling the Inspection Hotline at (206) 275-7730. Allow at least 24 hours (48 hours for Reinforcing steel) in advance of desired inspection. Be specific as to type of inspection.

Inspector shall initial and date appropriate inspection only if approved. Note: Items marked with an "*" require a separate permit. It is the applicants responsibility to apply for and obtain all City of Mercer Island permits.

INSPECTIONS: (Listed in order of typical sequencing) Pre-construction Meeting to Review Conditions of Permit Approval, Tree protection, Erosion control, Sewer disconnect and cap, Right-of-way use or work / easement, material delivery, etc., Land clearing, grading and demolition, Temporary power, Piling / Shoring / Shotcrete, Footings, setbacks, UFER ground, Foundation walls / concrete columns, Roof and footing drains, Foundation damproofing, Storm drainage, Water Service, Water Supply, Water as-built drawings, Side sewer installation, Driveway / Access road, Underslab electrical / mechanical / plumbing, Underslab insulation / vapor barrier / reinforcing, Underfloor framing, Nailing-Roof sheathing, Nailing-Exterior wall and Shearwall, Rough hydronic installation, Rough electric installation, Rough fire alarm (wiring inspection), Rough plumbing installation (DWV, water), Rough mechanical, Gas Piping, Rough fire sprinkler / hydrostatic and flow (bucket) test, Framing and glazing, Masonry construction (fireplace / walls / veneer / etc.), Insulation installation, Stucco (paper and lath), Shower pan (or tub), Miscellaneous, Code Alternative CA1, Code Alternative CA2, Impact Fees Paid

TO BE COMPLETED BY DSG

Final Inspection: Tree Restoration, Final Inspection: Fire protection, Final Inspection: Water supply protection, Final Inspection: Site and utility, Final Inspection: Building, including electrical / mechanical / plumbing

90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO):

Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.

Approved, Start Date, End Date

ADDITIONAL REQUIRED CITY INSPECTIONS:

Call the appropriate contact to arrange the inspection. Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

Required Inspection(s), Contact, Phone, Scheduling

TO BE COMPLETED BY DSG



CERTIFICATE OF OCCUPANCY issued after all required inspections have been performed and approved.

PROJECT NAME: PROJECT ADDRESS:

APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES REVIEWED FOR CODE COMPLIANCE

PERMIT NUMBER

Date

Approved

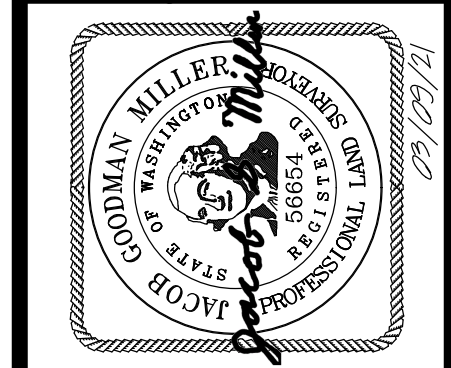
Date

Approved

TOPOGRAPHIC & BOUNDARY SURVEY

measure success

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 5458800550
LIU RESIDENCE
3705 77TH PL SE
MERCER ISLAND, WA 98040



Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

JOB NUMBER:	210282
DATE:	03/09/21
DRAFTED BY:	IDV / DSS
CHECKED BY:	DRT / JGM
SCALE:	1" = 10'
REVISION HISTORY	
SHEET NUMBER	1 OF 1

LEGAL DESCRIPTION																																																																
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<ol style="list-style-type: none"> 1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN MARCH OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS. 2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED. 3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555). 4. SUBJECT PROPERTY TAX PARCEL NO. 545880-0550 5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 8,345 ± S.F. (0.19 ACRES) 6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON. 7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 352-130-090. 																																																																
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INDEXING INFORMATION	
SW 1/4	SE 1/4
SECTION: 12	
TOWNSHIP: 24N	
RANGE: 04E, W.M.	
COUNTY: KING	

STEEP SLOPE/BUFFER DISCLAIMER:
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

AVERAGE BUILDING ELEVATION
PROPOSED RESIDENCE

WALL	WALL SEGMENT	MIDPT. ELEV.	WALL SEGMENT X ELEV.
A	13'0"	127'0"	3589
B	8'5"	126'0"	1076.7
C	9'0"	126'0"	3949
D	23'5"	126'0"	2339.5
E	29'5"	120'0"	4308
F	14'0"	120'0"	8138.53
G	3'5"	121'0"	711
H	21'5"	121'0"	4389.17
I	42'5"	126'0"	7520
TOTAL	175		21623.5

AVERAGE BUILDING ELEVATION = $21623.5/175 = 123.56'$
 MAXIMUM BUILDING HEIGHT = $123.56' + 30'0" = 153.56'$
 PROPOSED BUILDING HEIGHT = 151.95'

BASEMENT FLOOR AREA CALCULATION

WALL	LENGTH	COVERAGE	RESULT
A	3'08"	100%	3'08%
B	1'	100%	1%
C	12'	100%	12%
D	19'33"	6.3	1.22%
E	19'5"	18.6%	3.63%
TOTAL	60'91"		26.93%

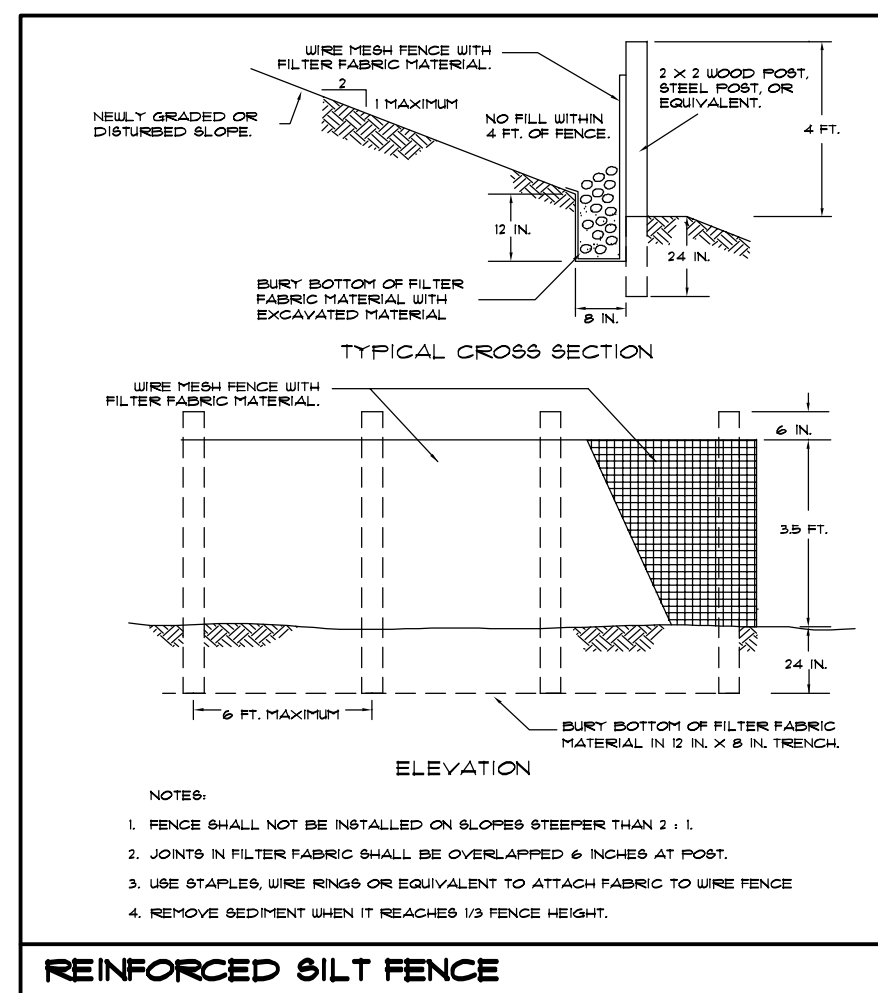
PORTION OF EXCLUDED BASEMENT FLOOR AREA:
 $619 \text{ (ACTUAL SQ. FT. W/ GARAGE)} \times (26.93/60.91) = 273.7 \text{ SQ. FT.}$
 AREA OF BASEMENT EXCLUDED = $619 - 273.7 = 345.3 \text{ SQ. FT.}$

GROSS FLOOR AREA

LOWER FLOOR W/ GARAGE	619	SQ. FT.
MAIN FLOOR W/ GARAGE	1635	SQ. FT.
UPPER FLOOR	1360	SQ. FT.
TOTAL	3614	SQ. FT.
BASEMENT EXCLUDED	345	SQ. FT.
TOTAL	3278	SQ. FT.
LOT AREA	8345	SQ. FT.
SQUARE FOOTAGE ALLOWED (40%)	3338	SQ. FT.

IMPERVIOUS SURFACE

PROPOSED HOME W/ O.H.	1860	SQ. FT.
COVERED DECK	210	SQ. FT.
FRONT PORCH	79	SQ. FT.
WALKS AND DRIVE	743	SQ. FT.
TOTAL	2892	SQ. FT. (34.7%)
LOT AREA	8345	SQ. FT.
ALLOWABLE	3338	SQ. FT. (40%)



REINFORCED SILT FENCE

LOT COVERAGE

MAIN STRUCTURE ROOF AREA	1958	SQ. FT.
DRIVEWAYS	745	SQ. FT.
COVERED DECK	210	SQ. FT.
TOTAL	2913	SQ. FT.
LOT AREA	8345	SQ. FT.
PROPOSED LOT COVERAGE	34.9%	
SQUARE FOOTAGE ALLOWED (40%)	3338	SQ. FT.

HARDSCAPE CALC

LOT AREA	8345	SQ. FT.
AREA FROM LOT COVERAGE	2913	SQ. FT.
ROCKERY	50	SQ. FT.
TOTAL	2963	SQ. FT.
HARDSCAPE ALLOWED	43.9% (3664 SQ. FT.)	
PROPOSED HARDSCAPE	35.5% (2963 SQ. FT.)	

SITE PLAN

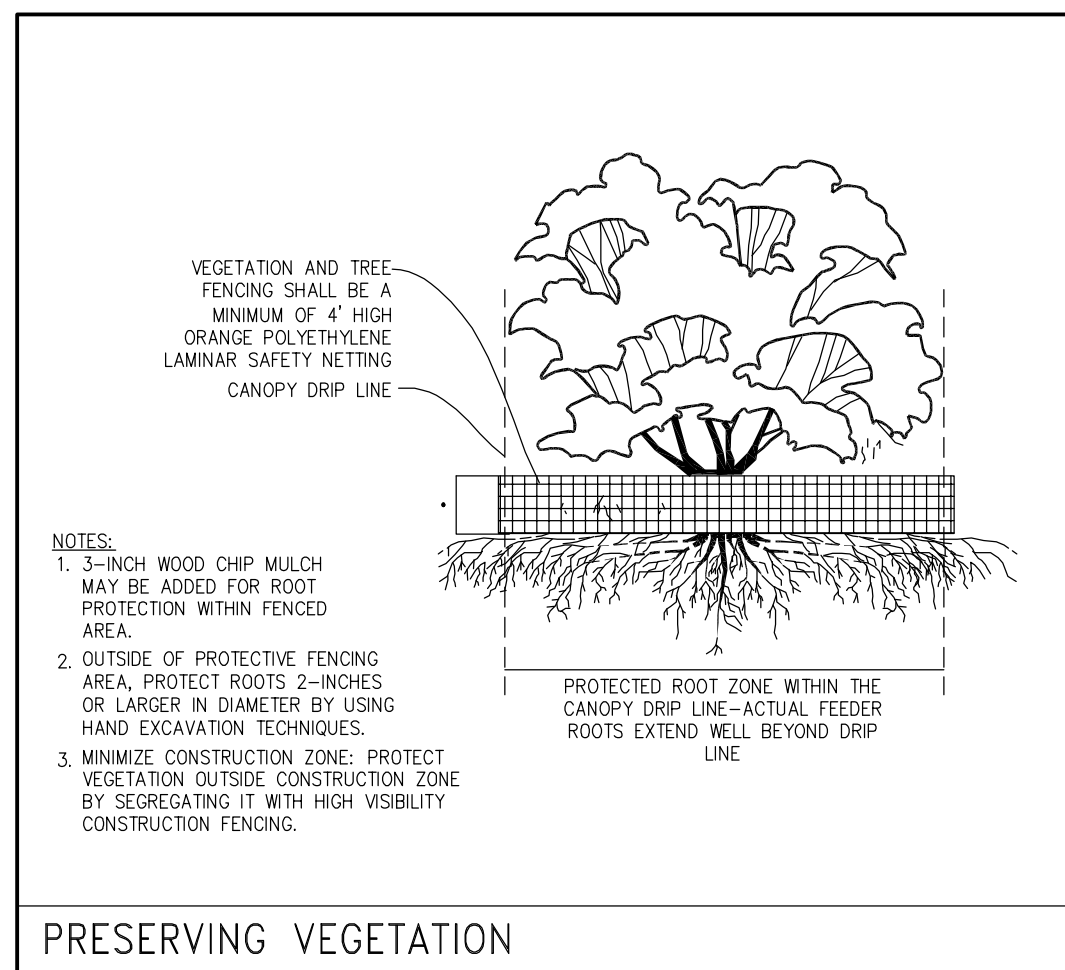
SCALE 1" = 10'
 3105 11TH PL. SE
 MERCER ISLAND, WA 98040
 PARCEL #5458800550
 ZONING: R-8.4

LEGAL:
 (PER STATUTORY WARRANTY DEED RECORDING# 199411230981)

LOT 1, BLOCK 7, MERCERDALE, ACCORDING TO THE PLAT THEREOF
 RECORDED IN VOLUME 59 OF PLATS, PAGES 94, 95 AND 96, IN
 KING COUNTY, WASHINGTON.

NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

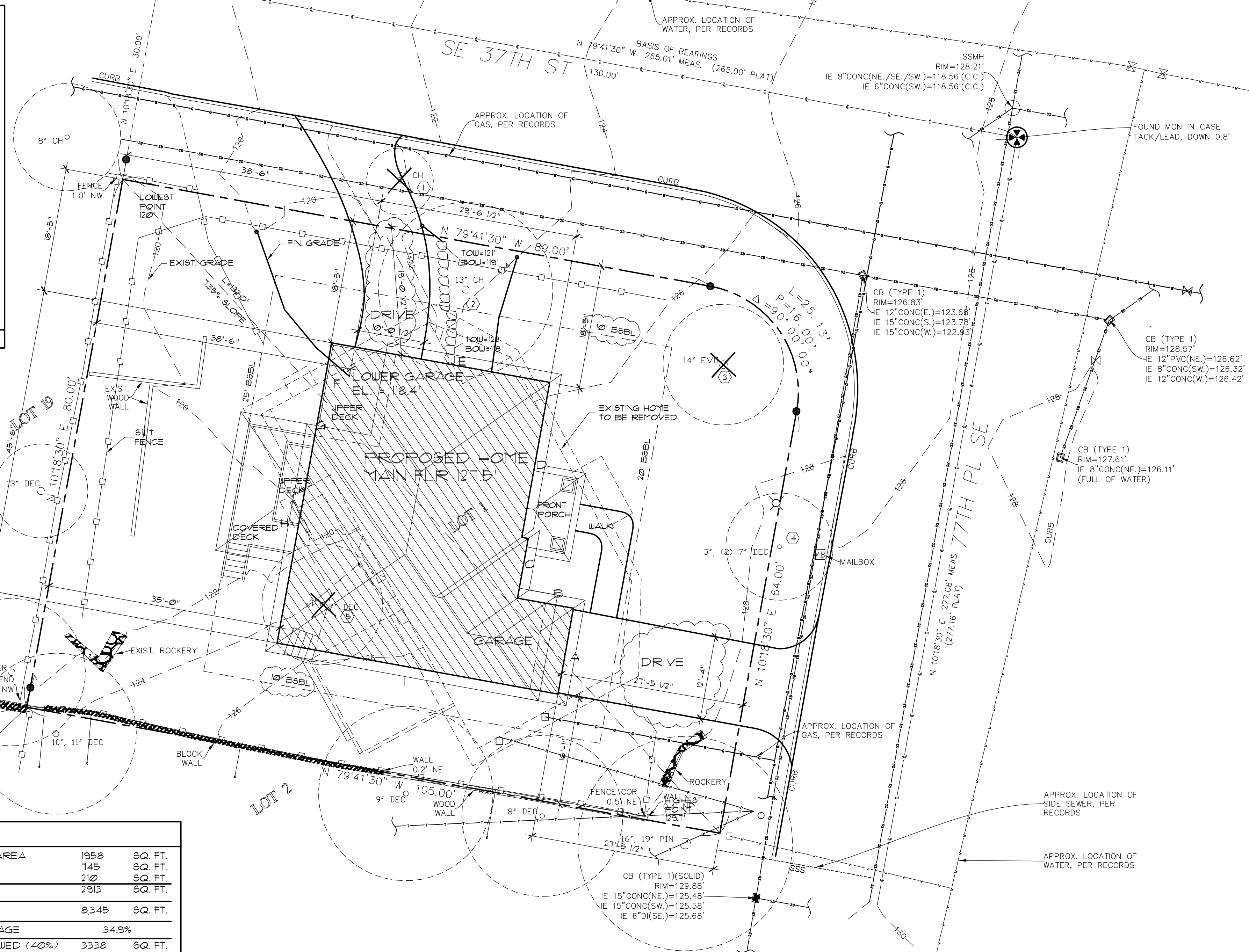
CONTACT:
 CHARLIE CHEN
 P.O. BOX 317
 MERCER ISLAND, WA 98040
 PH: 206 - 235-8818



PRESERVING VEGETATION

TREE INVENTORY

EXISTING TREES	SPECIES	DIAMETER	RETAINED	ROW
①	CHERRY	6"	NO	ROW
②	CHERRY	12"	YES	
③	EVRGN	14"	NO	
④	DEC.	3 1/2" x 1"	YES	ROW
⑤	DEC.	1"	NO	



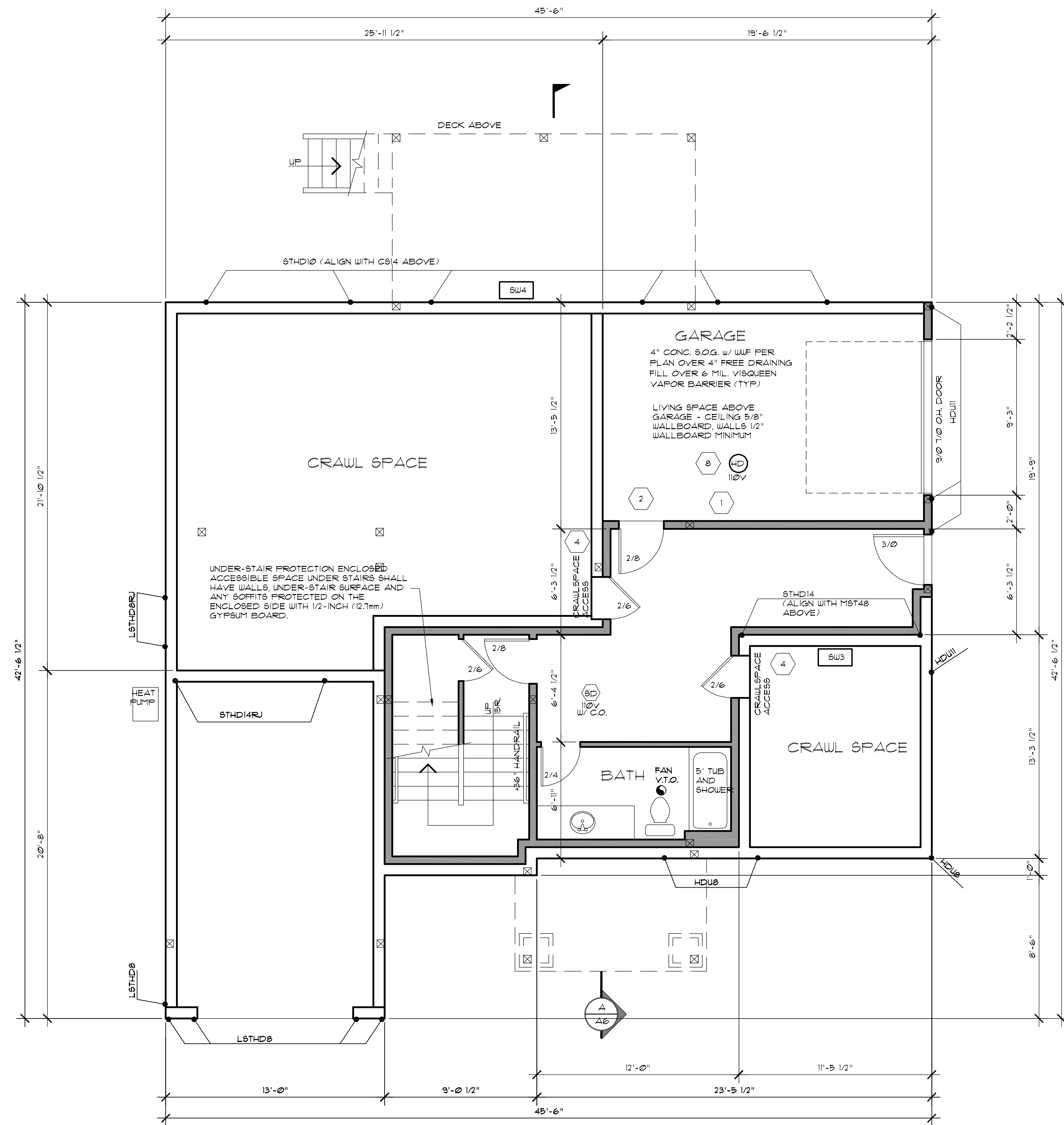
MICC 19.02.020(F)(3)(d) requires noxious weeds to be removed during new development proposals. Please add a note to the plan set that states:

"Development proposals for a new single-family home shall remove Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(F)(3)(a). New landscaping associated with new single-family home shall not incorporate any weeds identified on the King County Noxious Weed list, as amended. Provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion."

Pursuant to MICC 19.02.050(D) any "...rockeries, retaining walls, fences, or any combination thereof, are limited to a maximum height of 42 inches within that portion of any required yard which lies within 20 feet of any improved street." Please indicate the height of the rock wall that falls within 20 feet of the public-right-of-way.

If the height exceeds the 42-inch height limitation you can apply for a fence height deviation pursuant to MICC 19.02.050(F).

Fence height deviation required for 4' retaining walls.



NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

LOWER FLOOR PLAN
SCALE: 1/4" = 1' - 0"

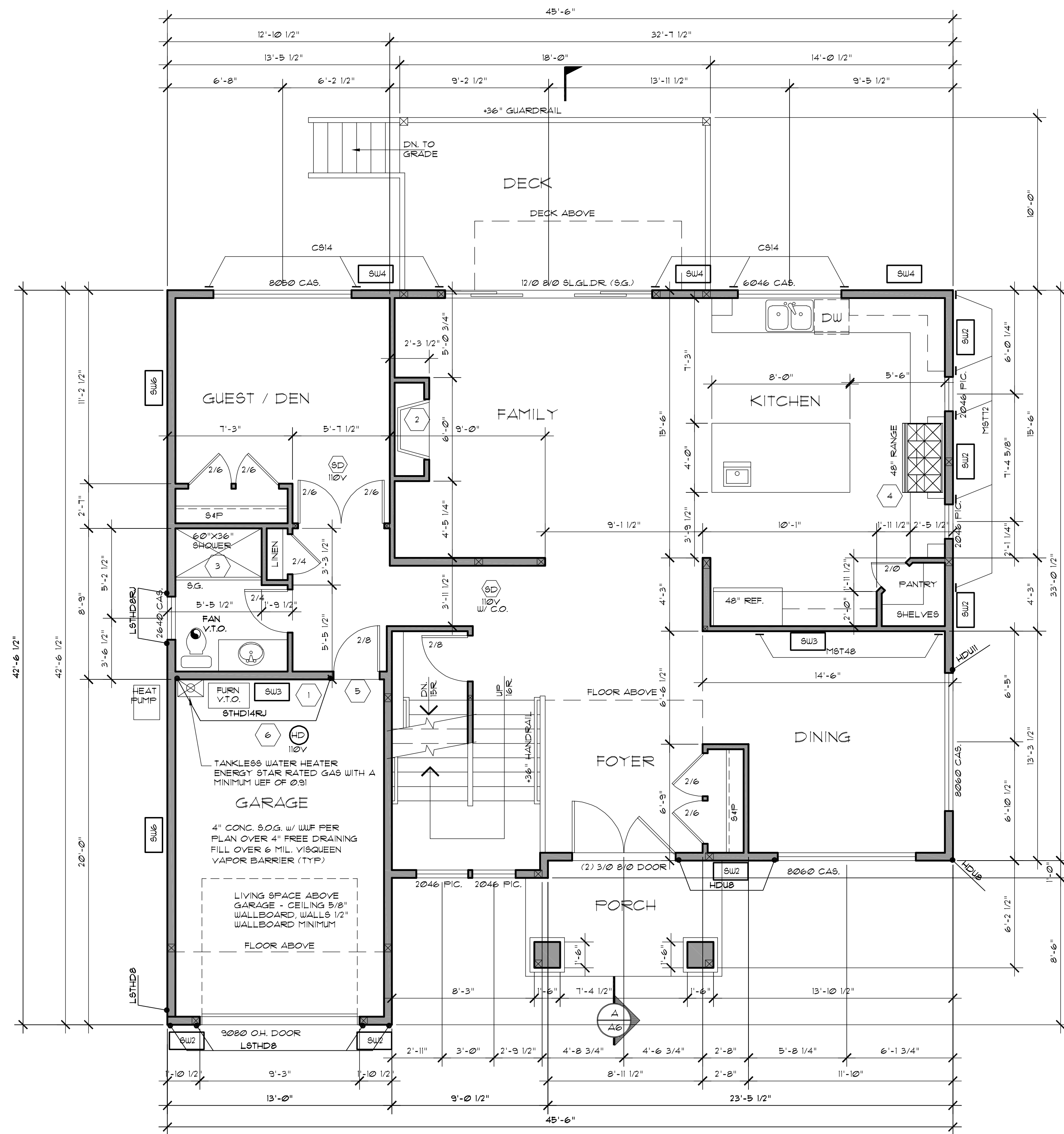
A NEW HOME FOR:
THE LIU RESIDENCE
3705 11TH PL. SE
MERCER ISLAND, WA 98040

JOB NO: 21006
DATE: 6/13/22
DRUN. BY: TH
REVISED: 9/30/22

SHEET NO.

A2

- 1 2018 IRC R302.6: Dwelling/garage separation required. The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. Ceilings and beams will be covered by 5/8" Type X gypsum run perpendicular to the floor joists (see 2018 IRC Table R102.3.5 footnote e)
 - 2 Openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8-inches (35mm) in thickness, solid or honeycomb core steel doors not less than 1-3/8 inches (35mm) thick, or 20-minute fire-rated doors, equipped with a self-closing device.
 - 3 R314.4: Heat detection interconnection. Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.
 - 4 18"x24" MIN. CRAWL SPACE ACCESS WEATHERSTRIP & INSULATE TO LEVEL EQUAL TO SURROUNDING SURFACES.
- NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5



NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

MAIN FLOOR PLAN
SCALE: 1/4" = 1' - 0"

WHOLE HOUSE VENTILATION PER SECTION M1505.4

INTERMITTENTLY OPERATION VENTILATION SYSTEM PER IRC SECTION M1501.2 REF TO TABLE M1505.4 (1) FOR MINIMUM OUTDOOR AIRFLOW RATES - CFM

RUN TIME - ON ONCE EVERY THREE HOURS FOR ONE HOUR PER TABLE M1501.2 OPERATION. TIME CLOCK TO OPEN DAMPER LOCATED IN FRESH AIR INTAKE DUCT BETWEEN THE OUTSIDE CAP AND THE RETURN AIR DUCT AT FURNACE, AND TIME CLOCK ALSO STARTS THE FURNACE FAN TO DISTRIBUTE FRESH AIR THROUGH THE HEAT DUCT SYSTEM THAT WAS BROUGHT IN THROUGH THE AIR INTAKE DUCT. THE AIR VOLUME BROUGHT IN WILL BE FLOW TESTED AND ADJUSTED TO MATCH THE AMOUNT REQUIRED BY CALCULATIONS. (PRIOR TO THE FINAL INSPECTION)

FLOOR AREA	BEDROOMS				
	0-1	2	3	4	5 OR MORE
LESS THAN 500	30 CFM	30 CFM	35 CFM	45 CFM	50 CFM
501-1,000	30 CFM	35 CFM	40 CFM	50 CFM	55 CFM
1,001-1,500	30 CFM	40 CFM	45 CFM	55 CFM	60 CFM
1,501-2,000	35 CFM	45 CFM	50 CFM	60 CFM	65 CFM
2,001-2,500	40 CFM	50 CFM	55 CFM	65 CFM	70 CFM
2,501-3,000	45 CFM	55 CFM	60 CFM	70 CFM	75 CFM
3,001-3,500	50 CFM	60 CFM	65 CFM	75 CFM	80 CFM
3,501-4,000	55 CFM	65 CFM	70 CFM	80 CFM	85 CFM
4,001-4,500	60 CFM	70 CFM	75 CFM	85 CFM	90 CFM
4,501-5,000	65 CFM	75 CFM	80 CFM	90 CFM	95 CFM

TABLE 406.3
2018 ENERGY CREDITS (DEBITS)
SEE RESIDENTIAL ENERGY EFFICIENCY SHEET ATTACHED

HEAT OPTION 2 - 10 PTS
OPTION 2.1 - 5 PTS
OPTION 2.2 - 15 PTS
OPTION 2.3 - 15 PTS
OPTION 4.1 - 5 PTS
OPTION 5.3 - 10 PTS

TOTAL POINTS - 60 PTS

PERSCRIPTIVE REQUIREMENTS 2018 W.S.E.C. (UNLIMITED)

CLIMATE ZONES 5 AND MARINE 4
GLAZING U-FACTOR: VERTICAL U+28, OVER-HEAD U+50
DOOR U-FACTOR: U+28
INSULATION: CEILING: R-49; R-38 (ADV), VAULTED CEILING: R-38
ABOVE GRADE WALLS: R-21, BELOW GRADE WALLS: R-21
FLOOR OVER VENTED CRAWL SPACE: R-38
SLAB ON GRADE: R-10

ENERGY CODE COMPLIANCE

3.5a Air-source, centrally ducted heat pump with minimum HSPF of 11.0.

To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency.

unit and shall meet the following standards:
Dishwasher - Energy Star rated
Refrigerator (if provided) - Energy Star rated
Washing machine - Energy Star rated
Dryer - Energy Star rated, ventless dryer with a minimum CEF rating of 5.2.

MECHANICAL VENTILATION
REQUIRED VENTILATION PER TABLE M1501.3.3 (1) 30 CFM
INTERMITTENT RUN TIME FACTOR 2 + 180 CFM
PROVIDE WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED AIR SYSTEM M1501.3.5

A MINIMUM OF 75% OF ALL LIGHT FIXTURES WILL BE HIGH EFFICACY. (WSEC R404.1)

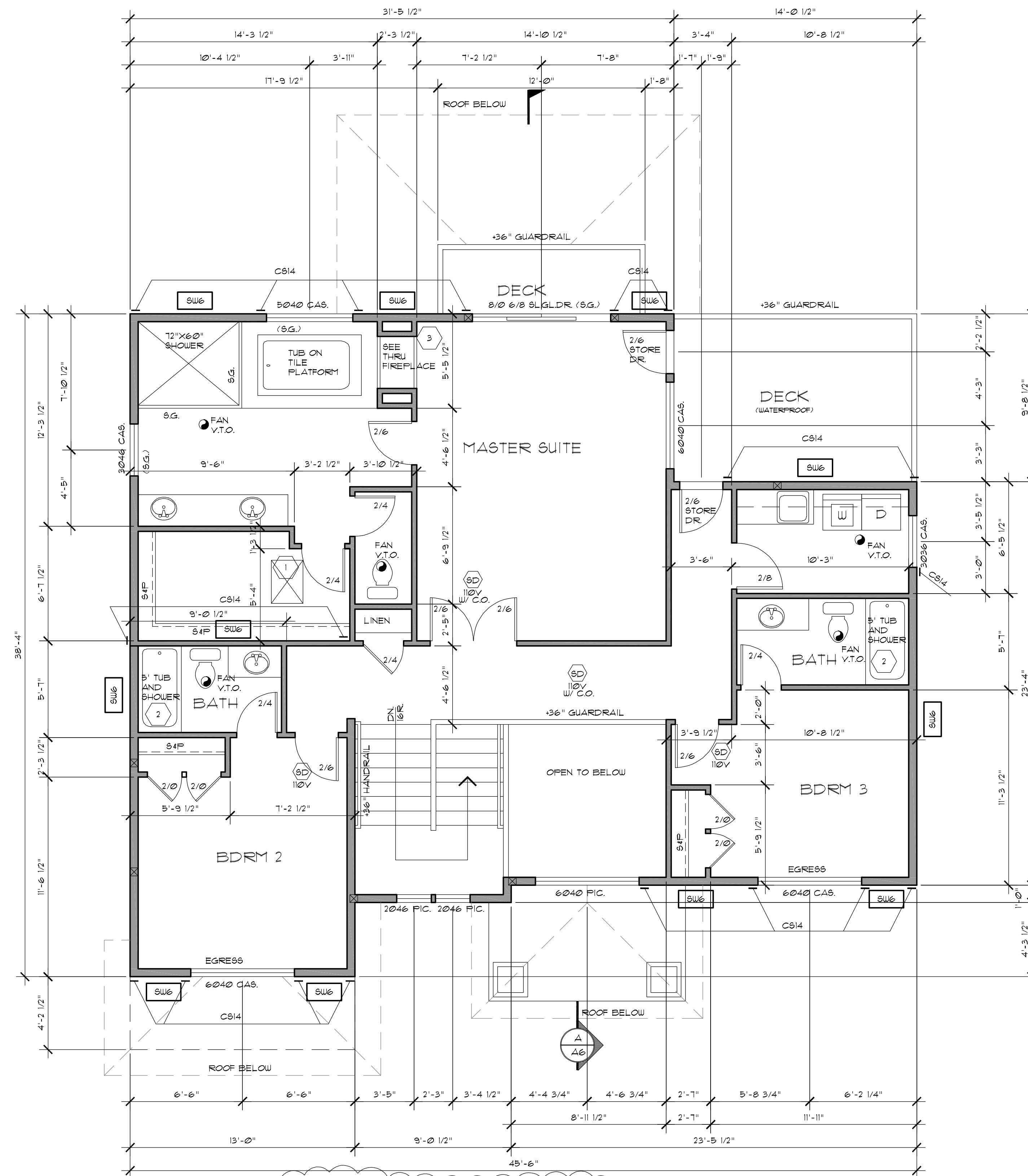
- 2018 IRC R302.6: Dwelling/garage separation required: The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. Ceilings and beams will be covered by 5/8" Type X gypsum run perpendicular to the floor joists (see 2018 IRC Table R102.3.3 Footnote e).
 - DIRECT VENT FIREPLACE
INSTALL PER MANUFACTURERS SPECIFICATIONS
 - CONC. FIBERBOARD @ TUB & SHOWER
SURROUND TO 6" ABOVE DRAIN
 - NOTE: PER M1503.6 EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE EQUAL TO THE EXHAUST RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST SYSTEM
 - Openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8-inches (35mm) in thickness, solid or honeycomb core steel doors not less than 1-3/8 inches (35mm) thick, or 20-minute fire-rated doors, equipped with a self-closing device.
 - R314.1 Heat detection interconnection. Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.
- NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5

SQUARE FOOTAGE SUMMARY

LOWER FLOOR	251	SQ. FT.
MAIN FLOOR	1332	SQ. FT.
UPPER FLOOR	1305	SQ. FT.
TOTAL	2884	SQ. FT.
LOWER GARAGE	307	SQ. FT.
GARAGE	255	SQ. FT.
COVERED DECK	210	SQ. FT.
UPPER DECKS	184	SQ. FT.

JOB NO: 21006
DATE: 6/13/22
DRUN. BY: TH
REVISED: 9/30/22

SHEET NO.



NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

UPPER FLOOR PLAN
 SCALE: 1/4" = 1' - 0"

STAIR LIGHTING ALL STAIRWAYS SHALL BE PROVIDED WITH LIGHT SOURCES. LIGHT ACTIVATION CONTROLS SHALL BE ACCESSIBLE AT THE TOP AND BOTTOM OF INTERIOR STAIRWAYS AND WITHIN DWELLING UNIT FOR EXTERIOR STAIRS. IRC SECTIONS R303.7 & R311.7.9

- 1 22"x30" ATTIC ACCESS. WEATHERSTRIP & INSULATE OVER TO EQUAL CEILING INSULATION. PROVIDE WOOD SURROUND TO PREVENT LOOSE INSULATION SPILLAGE TO LIVING SPACE. (IBC SEC. R201.1)
- 2 CONC. FIBERBOARD @ TUB & SHOWER SURROUND TO 6" ABOVE DRAIN
- 3 DIRECT VENT FIREPLACE INSTALL PER MANUFACTURERS SPECIFICATIONS
- 4 GUARDS ARE NOT OF GLASS BALUSTER CONSTRUCTION. IF GUARDS TO BE OF GLASS BALUSTER CONSTRUCTION, PROVIDE DETAILS OF CONSTRUCTION. GLASS INFILL IS PERMITTED.

NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL IN ANY DIRECTION AS REQUIRED BY IRC TABLE 301.5

MAX. BUILDING HEIGHT = 153.56'

PROPOSED BUILDING HEIGHT = 151.95'

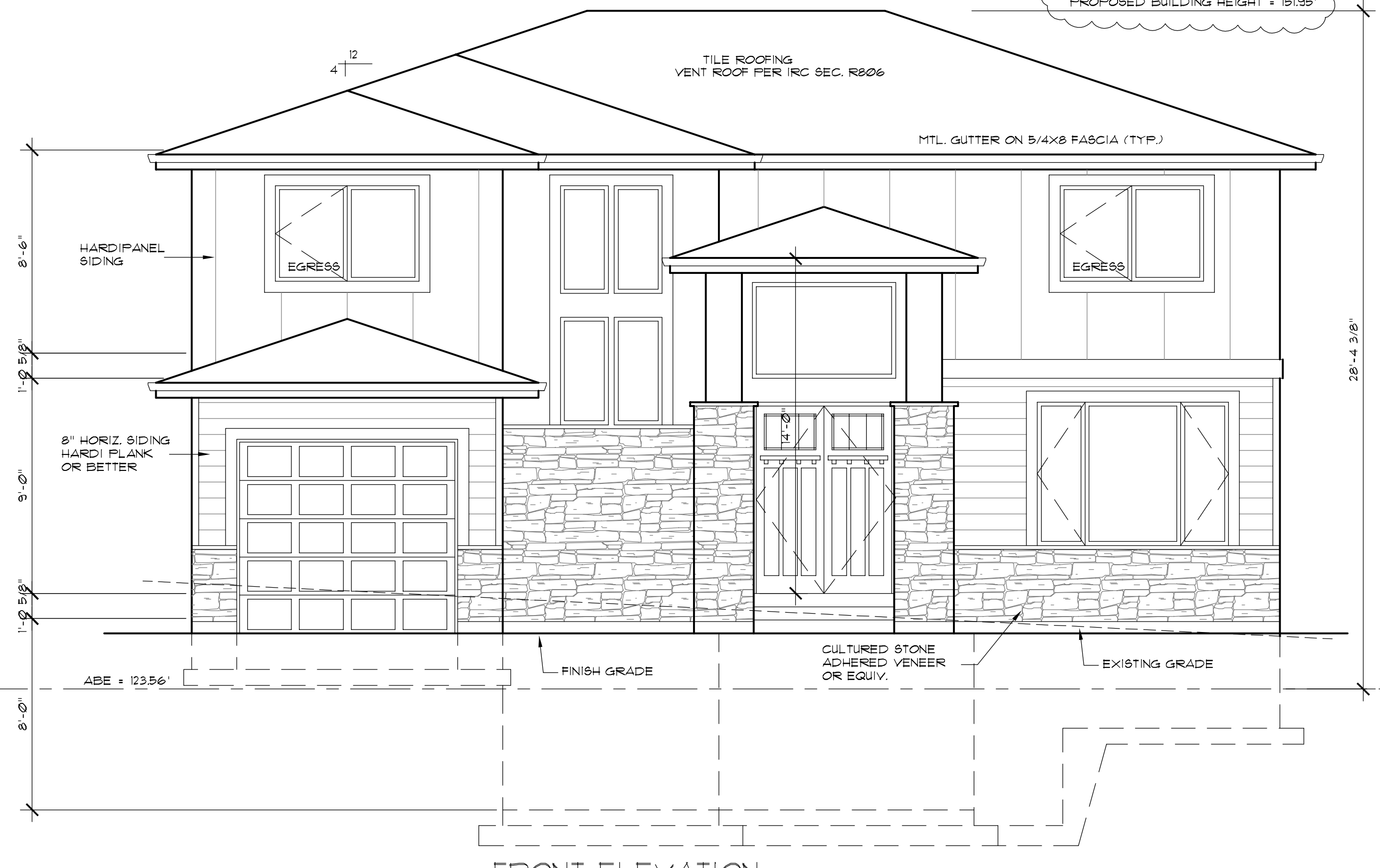


RIGHT ELEVATION

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

MAX. BUILDING HEIGHT = 153.56'

PROPOSED BUILDING HEIGHT = 151.95'

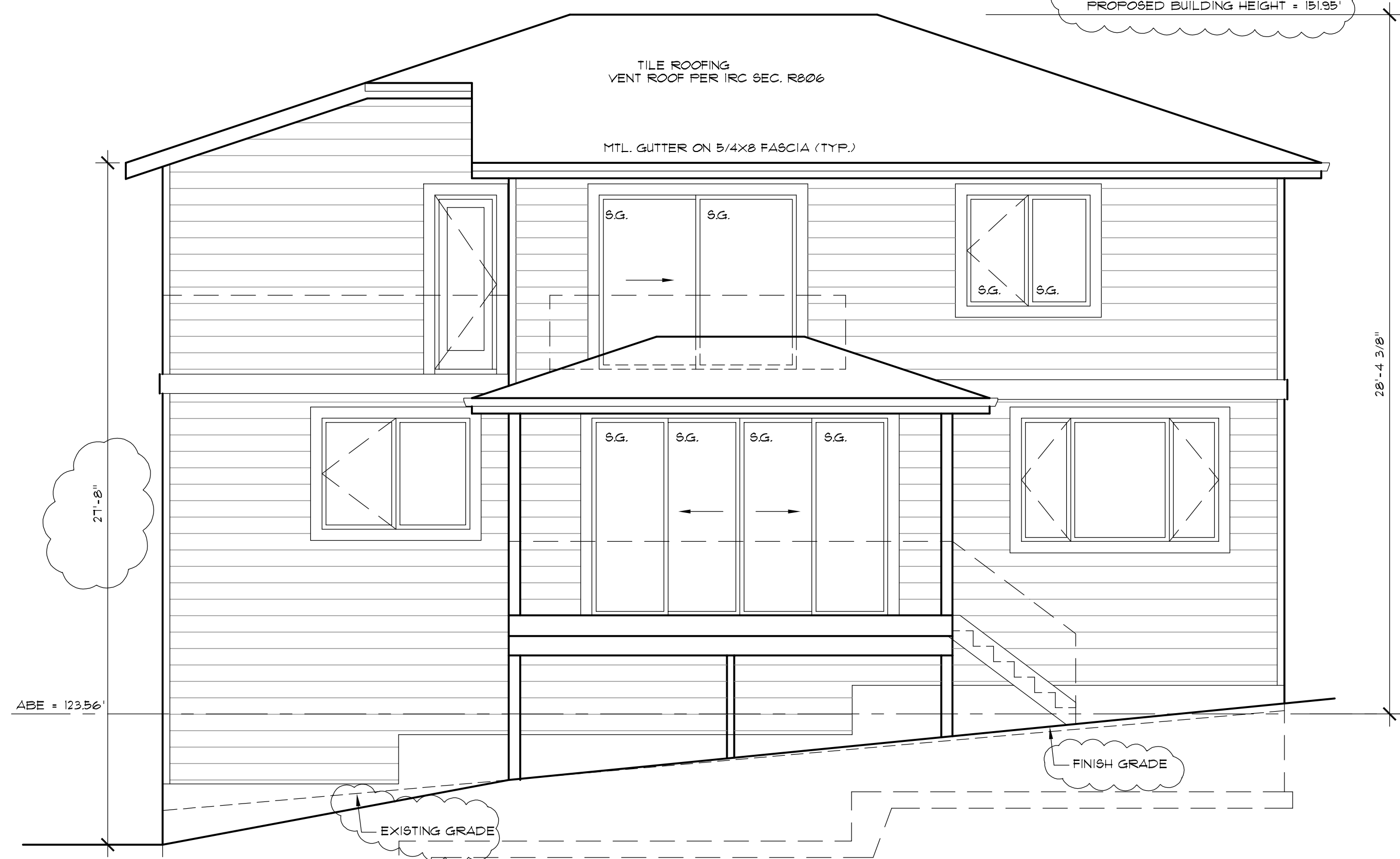


FRONT ELEVATION

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

MAX. BUILDING HEIGHT = 153.56'

PROPOSED BUILDING HEIGHT = 151.95'

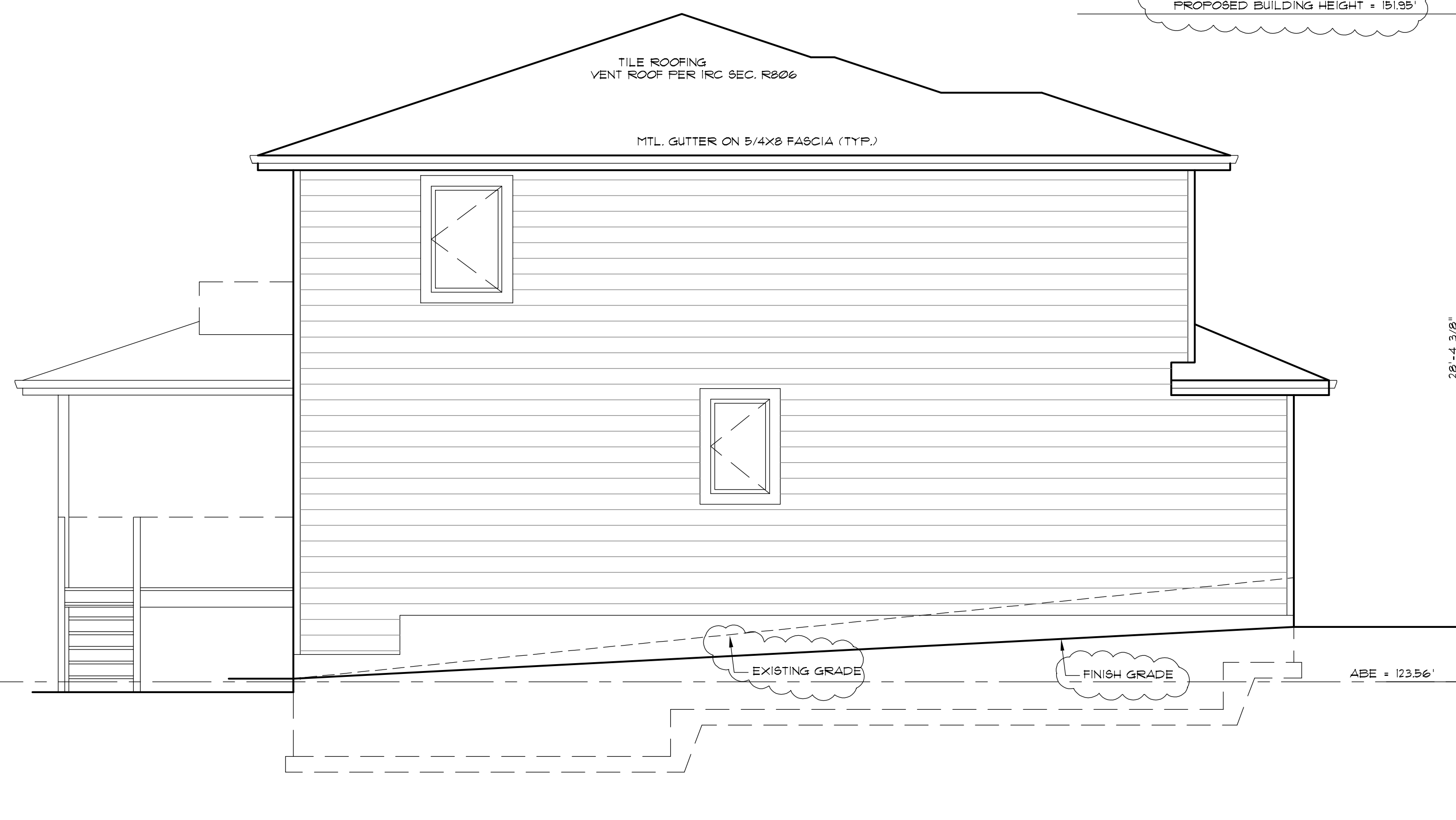


REAR ELEVATION

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

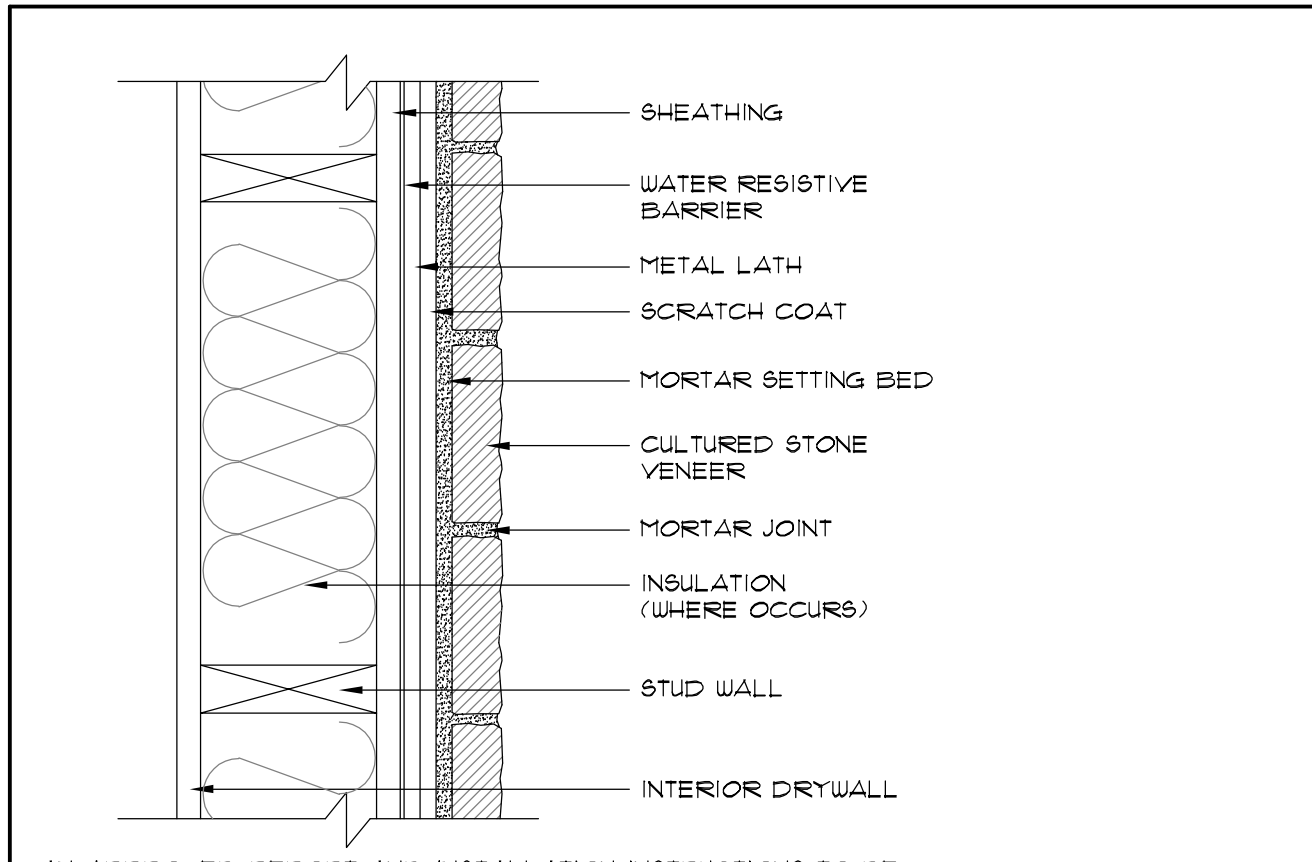
MAX. BUILDING HEIGHT = 153.56'

PROPOSED BUILDING HEIGHT = 151.95'



LEFT ELEVATION

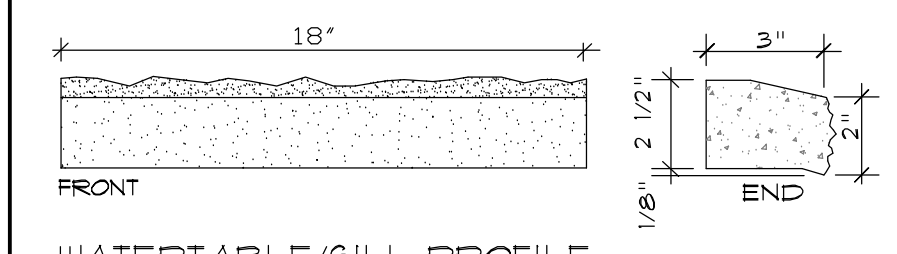
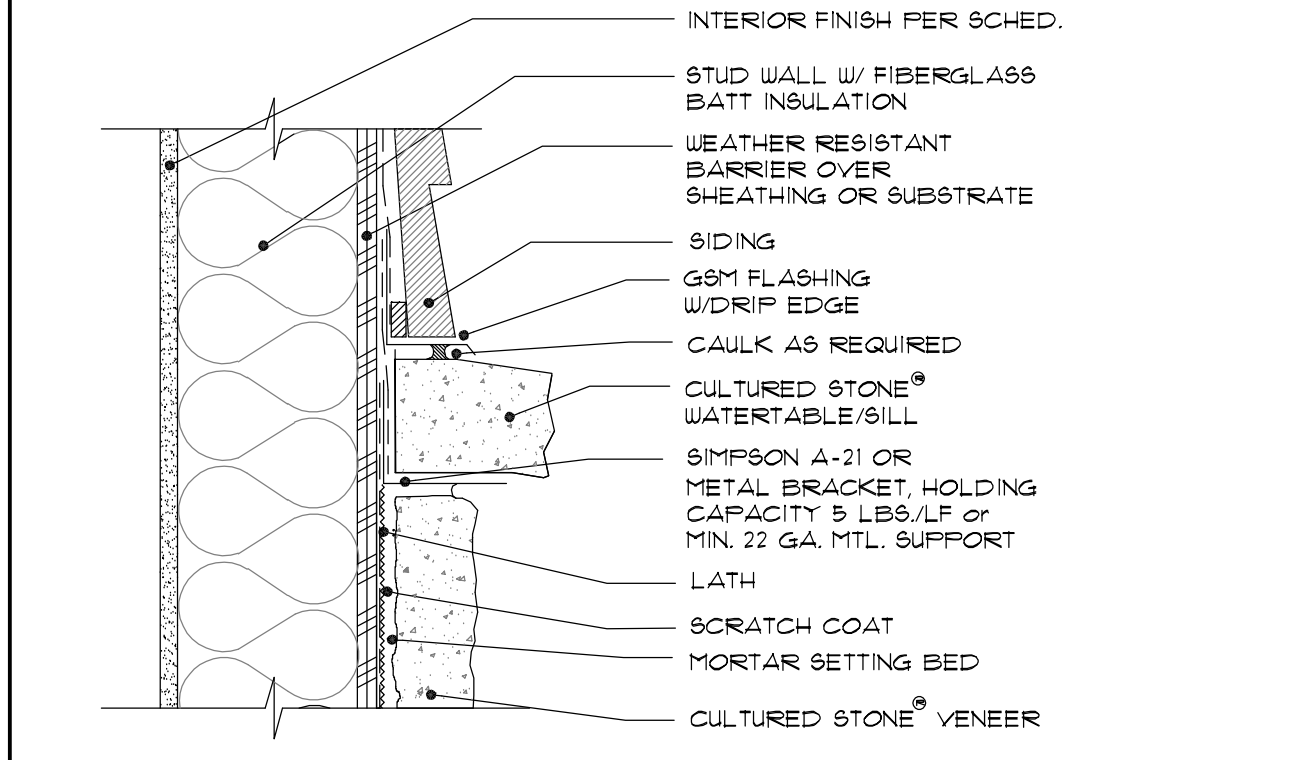
SCALE: 1/4" = 1' - 0"



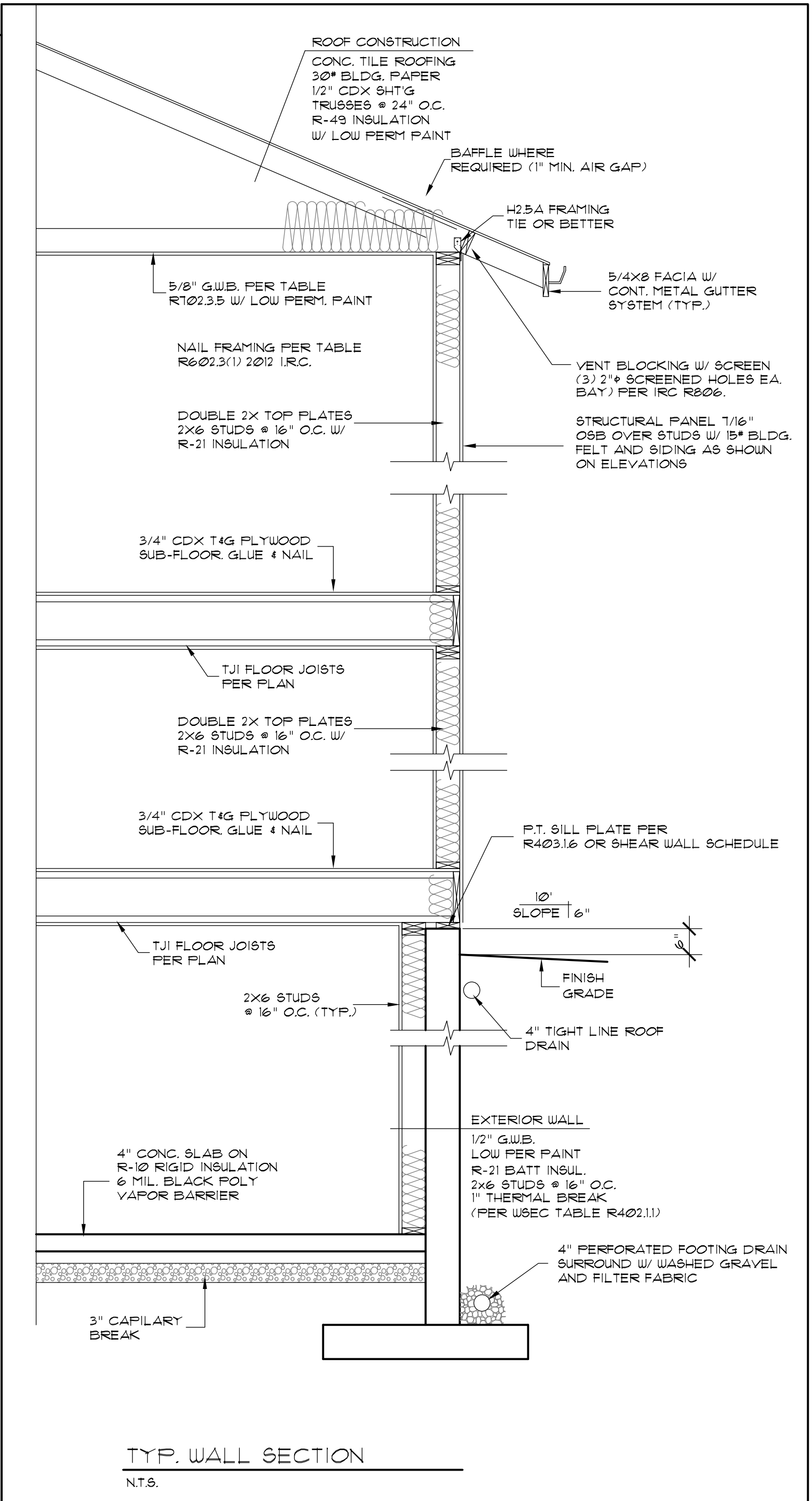
AN APPROVED REPORT AND INSTALLATION INSTRUCTIONS TO BE ON SITE DURING INSTALLATION AND INSPECTION OF STONE VENEER

STONE APPLICATION DETAIL
NT.S.

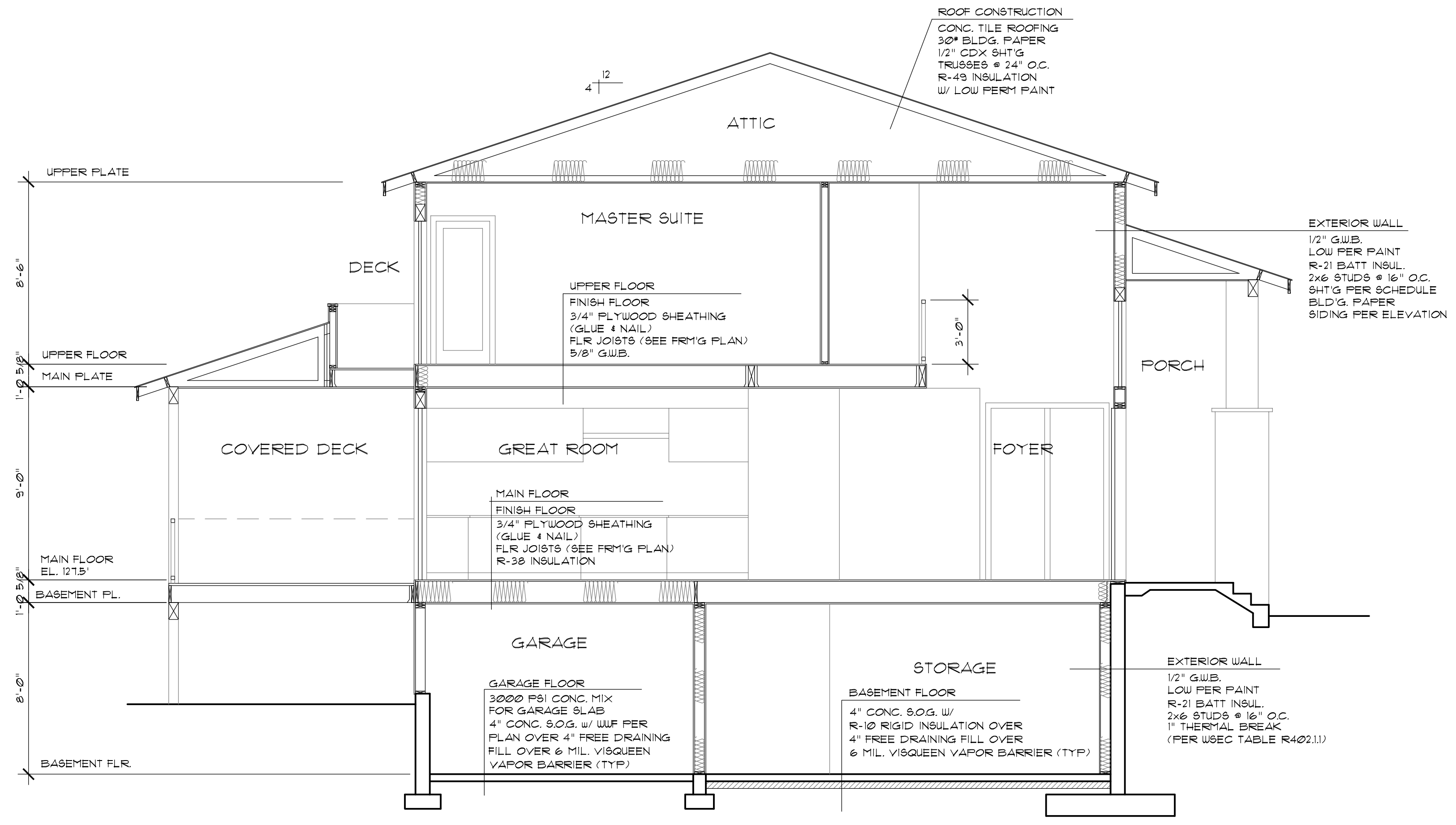
FASTENERS FOR ATTACHMENT OF TRIM ACCESSORIES, FOUNDATION TRIM AND LATH WOOD-SHEATHED FRAMING:
 1. ROOFING NAILS: 11-GAUGE - 7/16" HEAD - 1 3/8" INCHES LONG
 2. STAPLES: 16-GAUGE - 3/4" CROWN - 1 3/8" INCHES LONG
 3. TYPE W SCREWS: WAFER HEAD - 1 1/4" INCHES LONG
 FOR ATTACHMENT OF 25 POUND PER SQUARE YARD DIAMOND MESH LATH, THE SPACING OF FASTENERS SHALL BE 16 INCHES (400MM) O.C. HORIZONTALLY. FOR ATTACHMENT OF WOVEN WIRE LATH WELDED WIRE LATH AND 3/4 POUND PER SQUARE YARD DIAMOND MESH LATH, THE SPACING OF FASTENERS SHALL BE 24 INCHES (600MM) O.C. HORIZONTALLY. VERTICAL ATTACHMENT OF LATH SHALL BE 6 INCHES (150MM).



WATERTABLE/SILL PROFILE
CULTURED STONE® OR THIN STONE WATERTABLE/SILL @ SIDING
SCALE: NT.S.

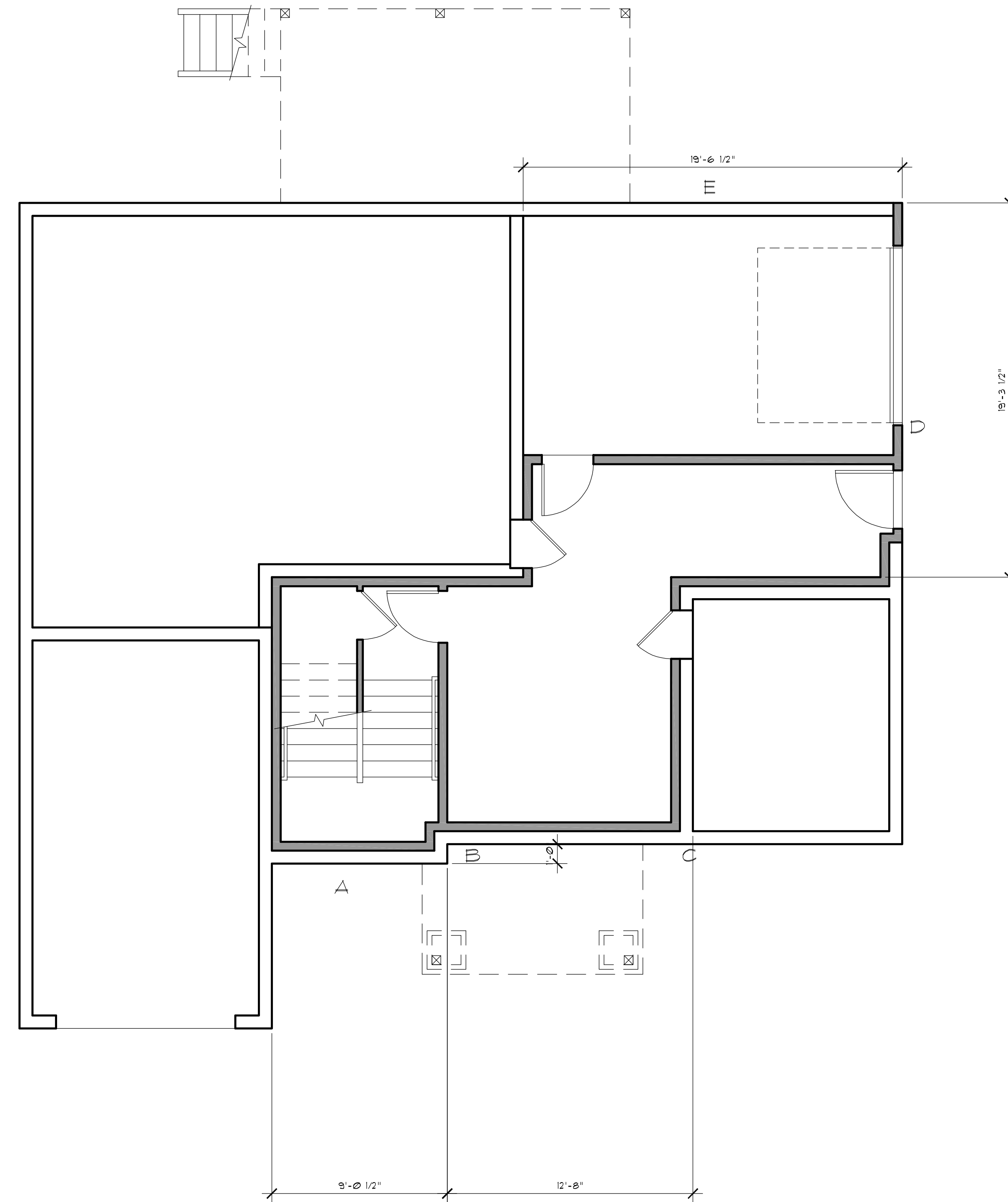


TYP. WALL SECTION
NT.S.

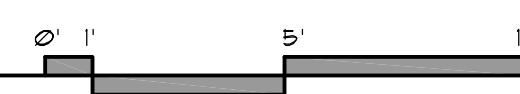


JOB NO: 21006
DATE: 6/13/22
DRUN. BY: TH
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SHEET NO.



BASEMENT REDUCTION CALC
SCALE: 1/4" = 1' - 0"



BASEMENT FLOOR AREA CALCULATION

WALL	LENGTH	COVERAGE	RESULT
A	9.08	100%	9.08%
B	1'	100%	1%
C	12'	100%	12%
D	19.33'	6.3	1.22%
E	19.5'	18.6%	3.63%
TOTAL	60.91'		26.93%

PORTION OF EXCLUDED BASEMENT FLOOR AREA:
 $619 \text{ (ACTUAL SQ. FT. W/ GARAGE)} \times (26.93/60.91) = 273.7 \text{ SQ. FT.}$
 AREA OF BASEMENT EXCLUDED = $619 - 273.7 = 336 \text{ SQ. FT.}$

GROSS FLOOR AREA

LOWER FLOOR W/ GARAGE	619	SQ. FT.
MAIN FLOOR W/ GARAGE	1635	SQ. FT.
UPPER FLOOR	1360	SQ. FT.
TOTAL	3614	SQ. FT.
BASEMENT EXCLUDED	336	SQ. FT.
TOTAL	3278	SQ. FT.
LOT AREA	8345	SQ. FT.
SQUARE FOOTAGE ALLOWED (40%)	3338	SQ. FT.

A NEW HOME FOR:

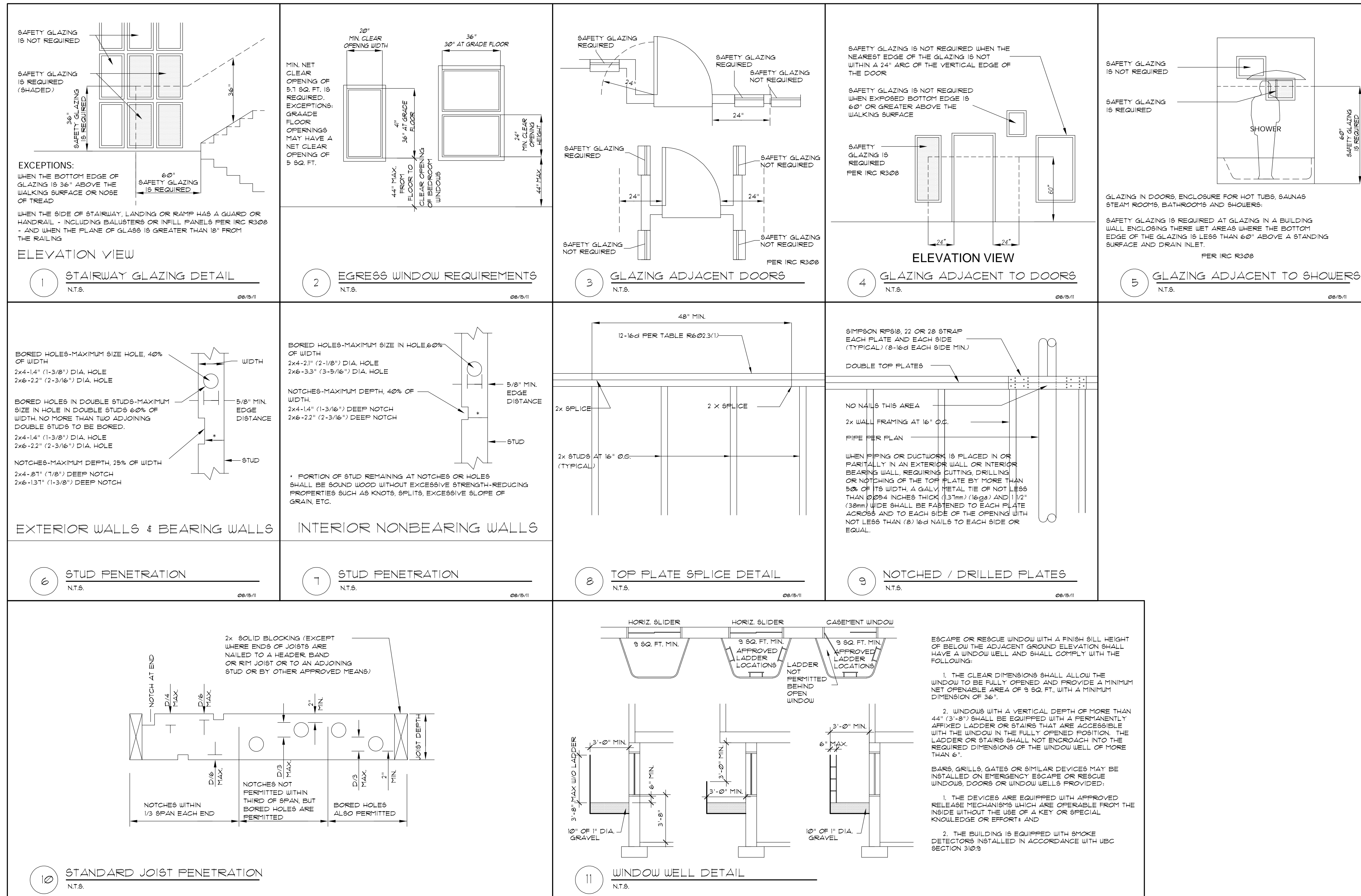
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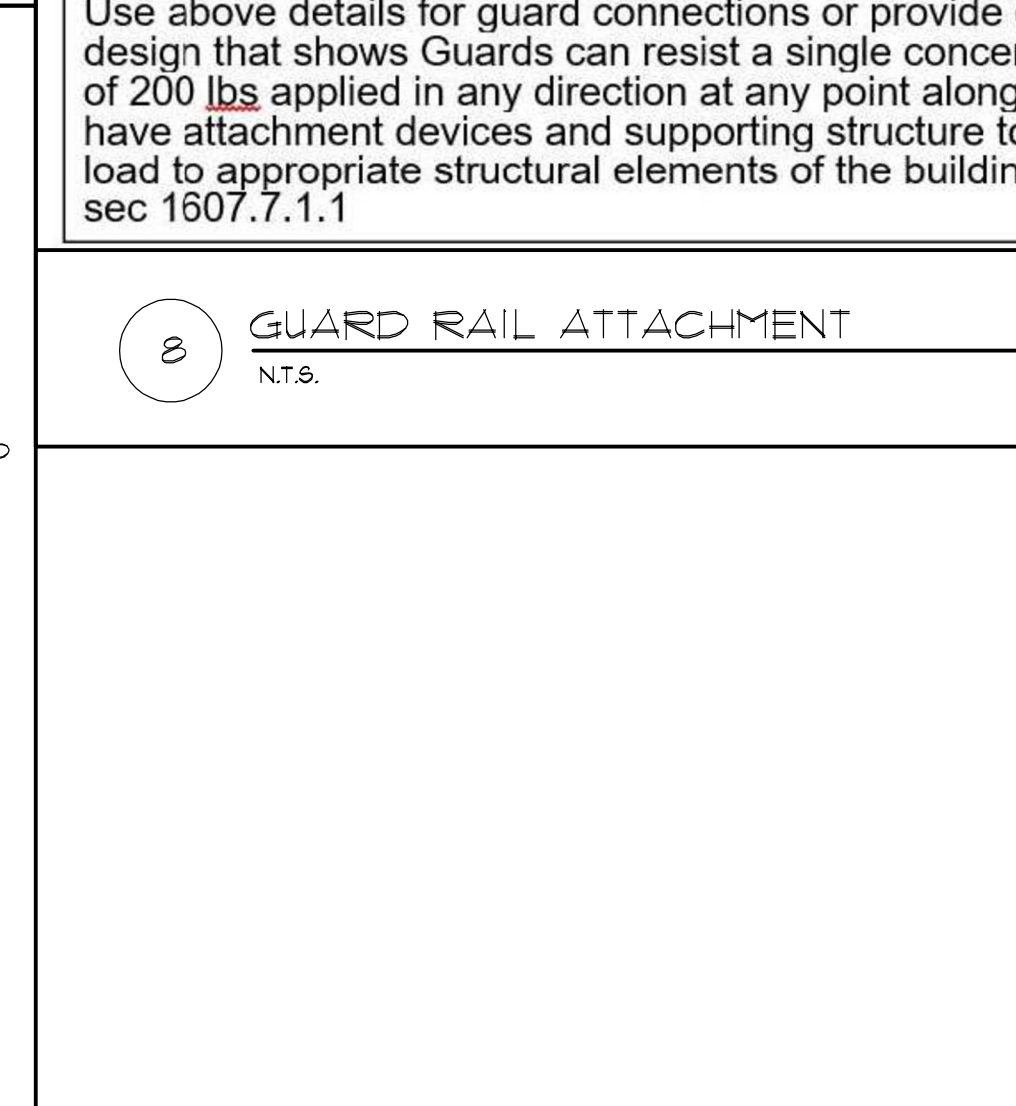
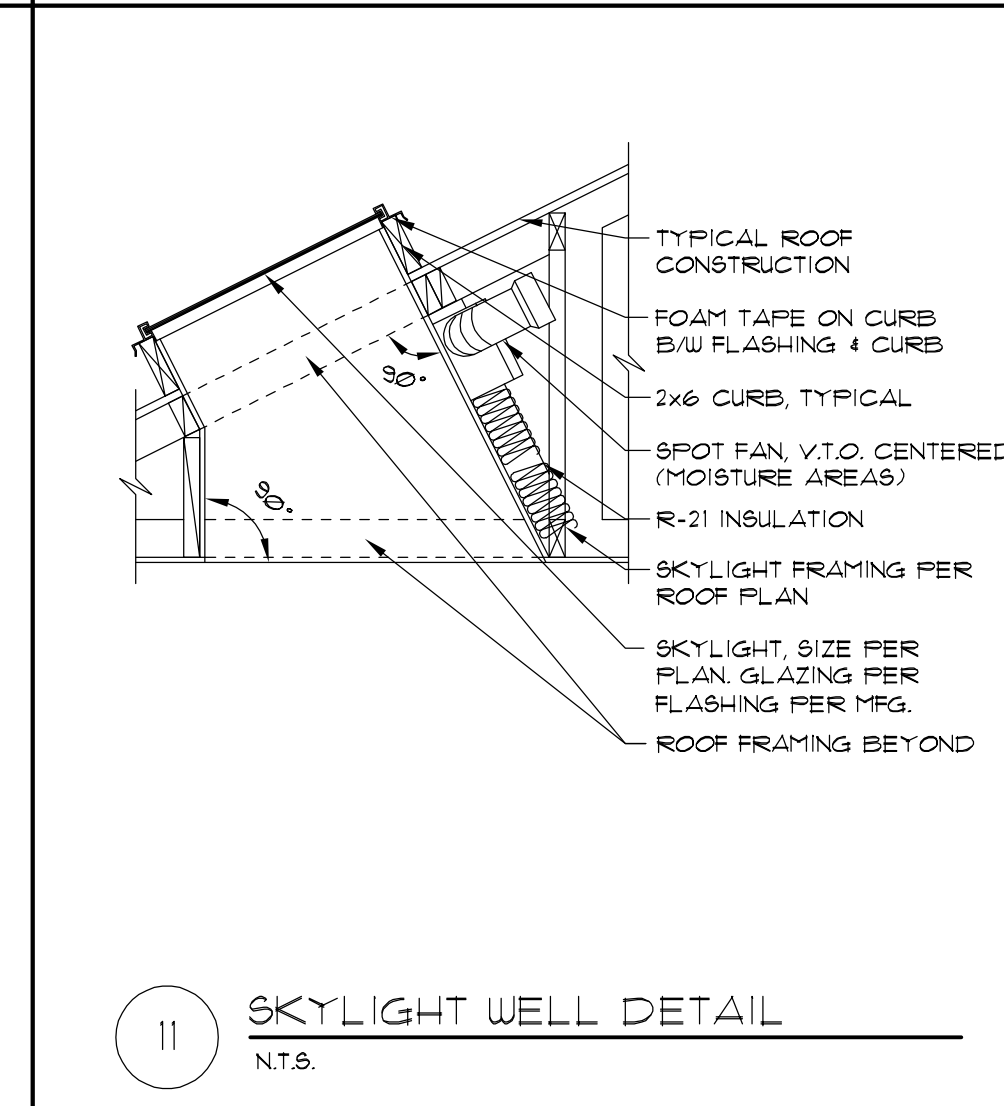
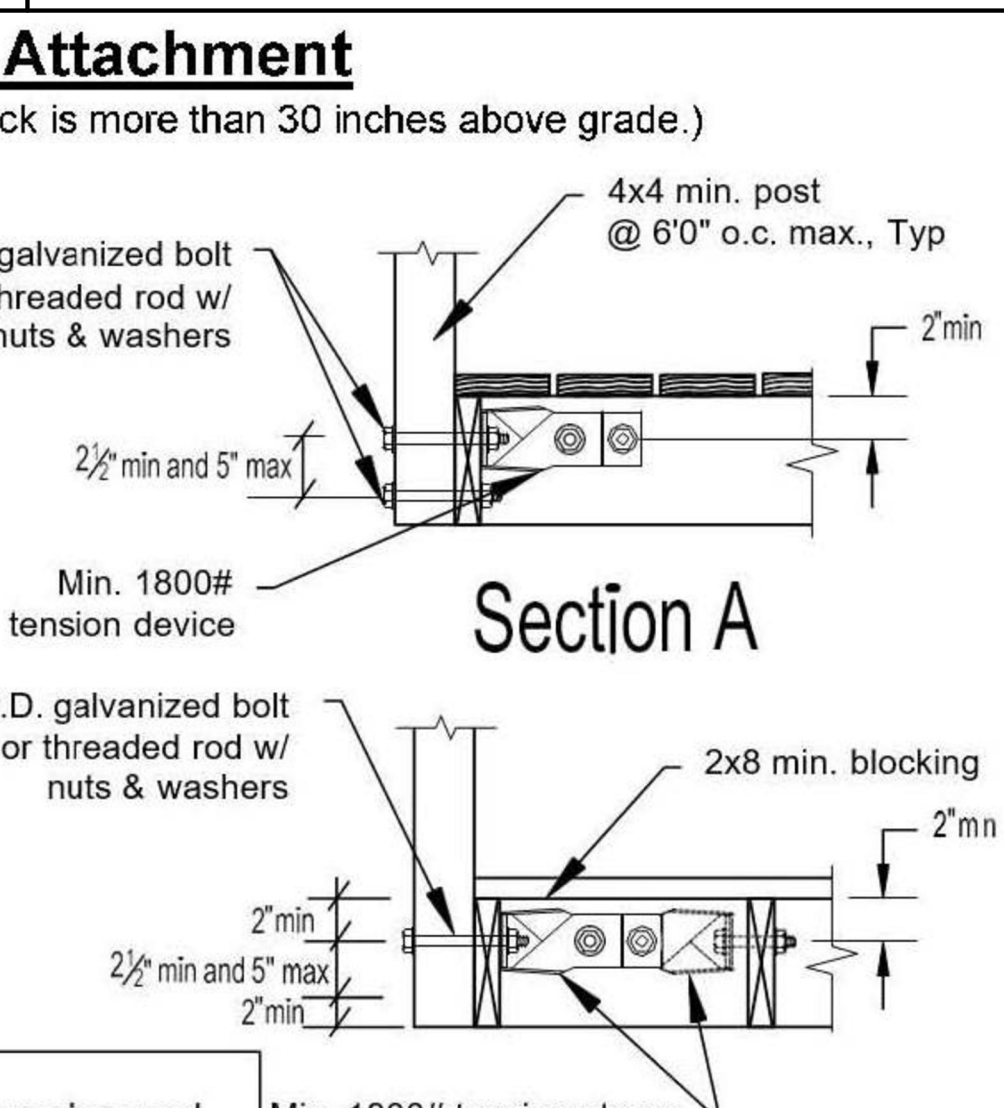
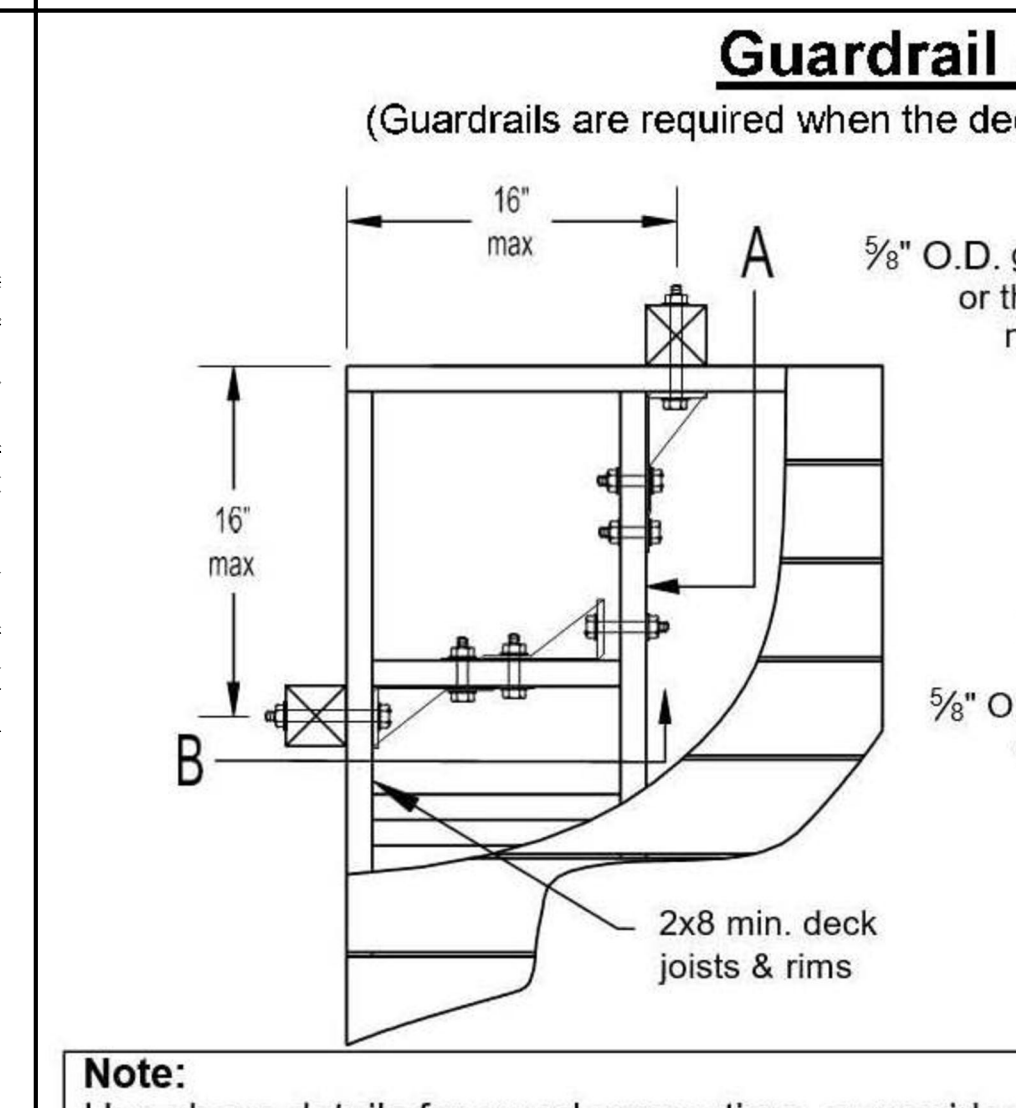
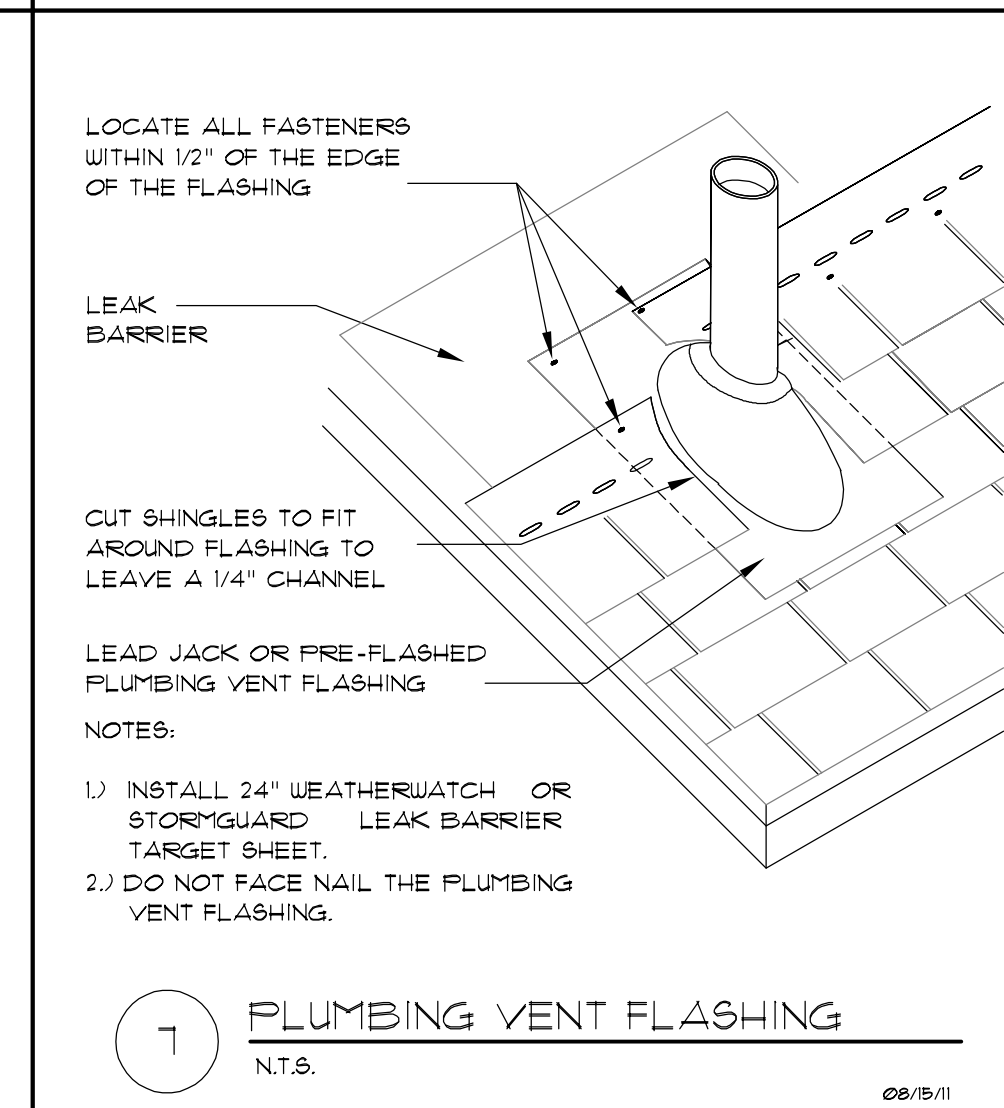
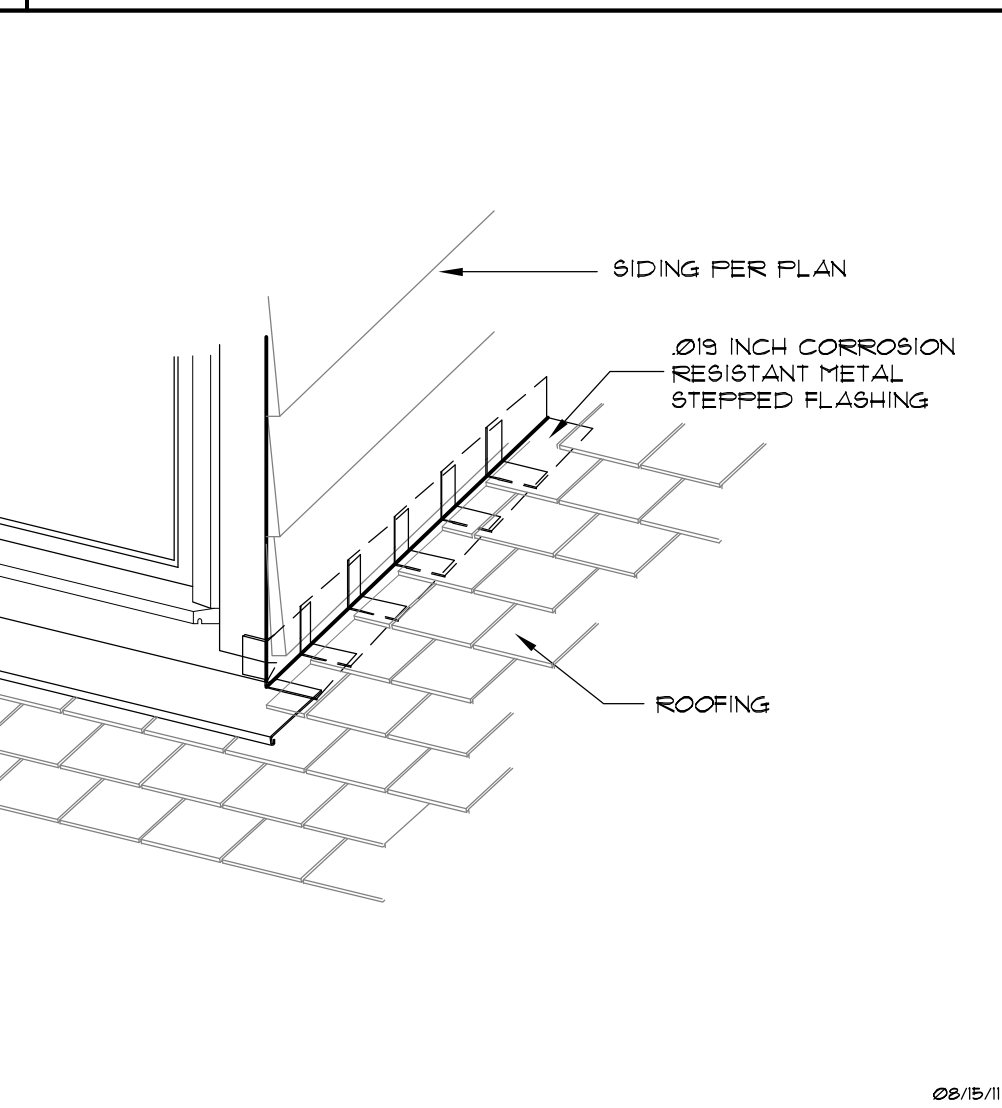
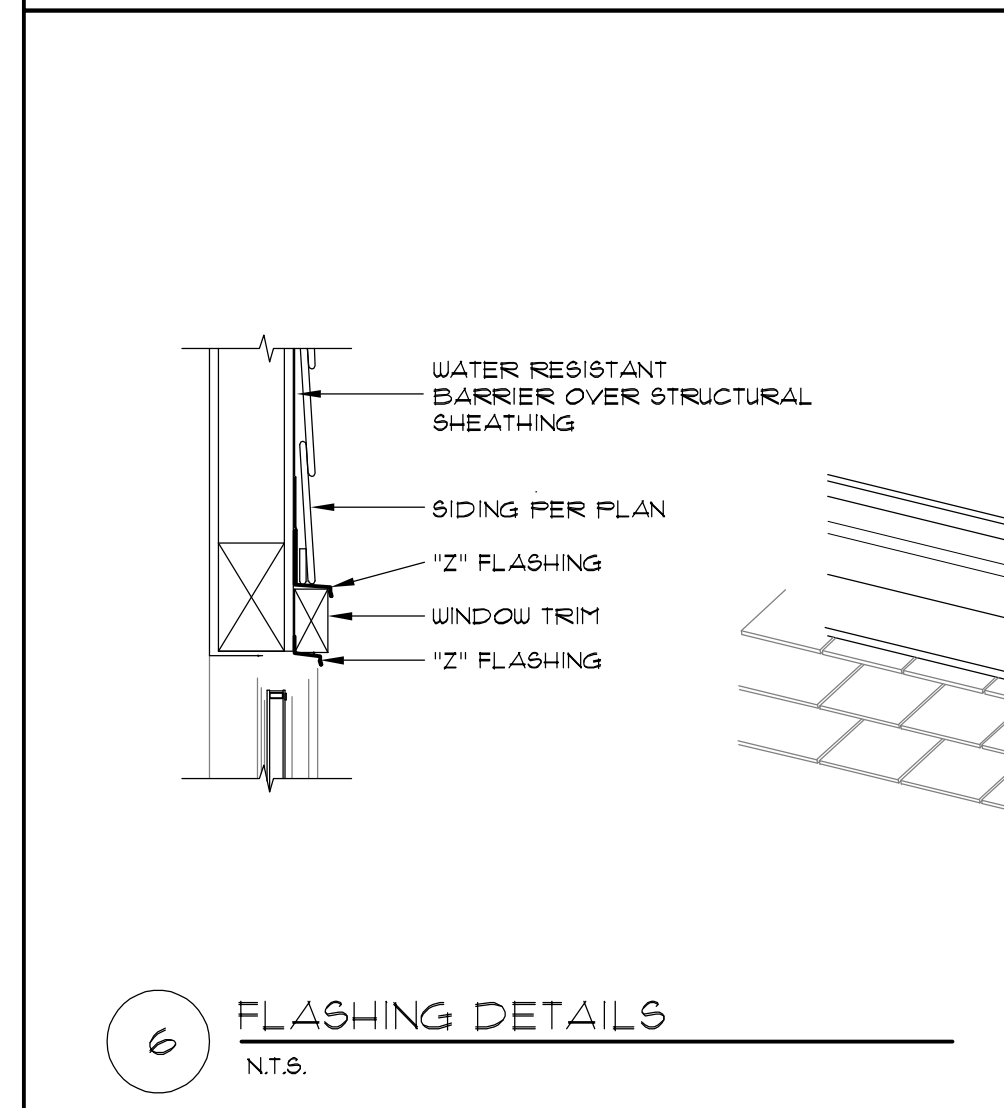
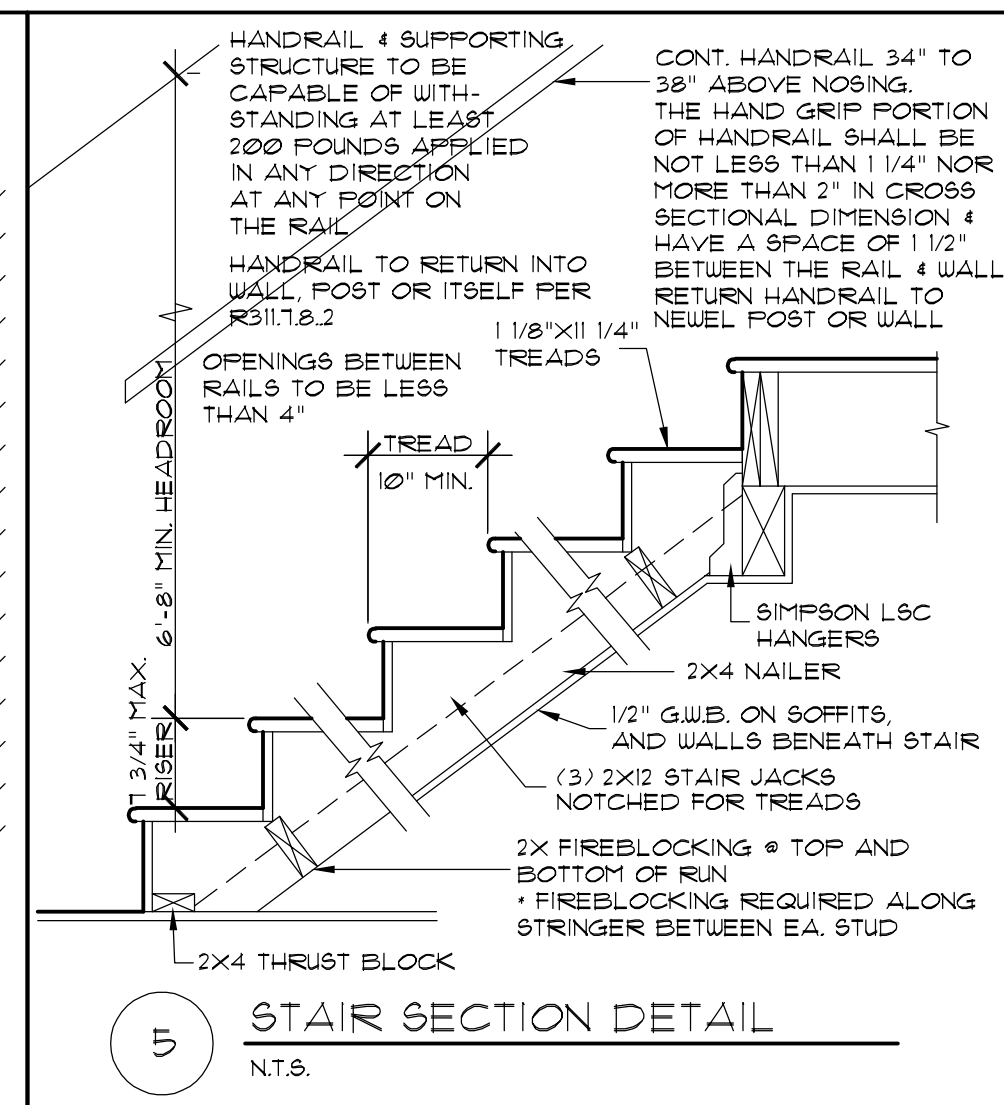
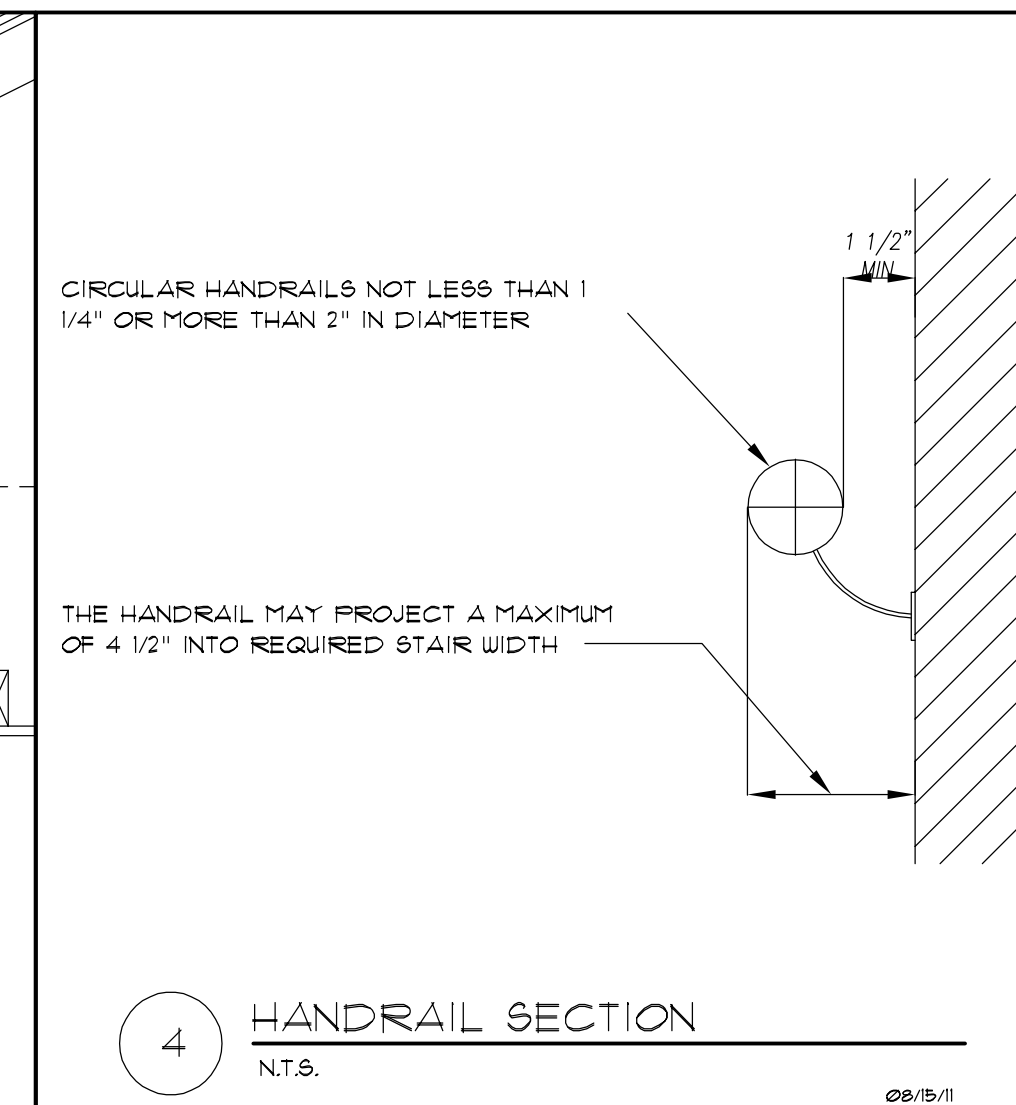
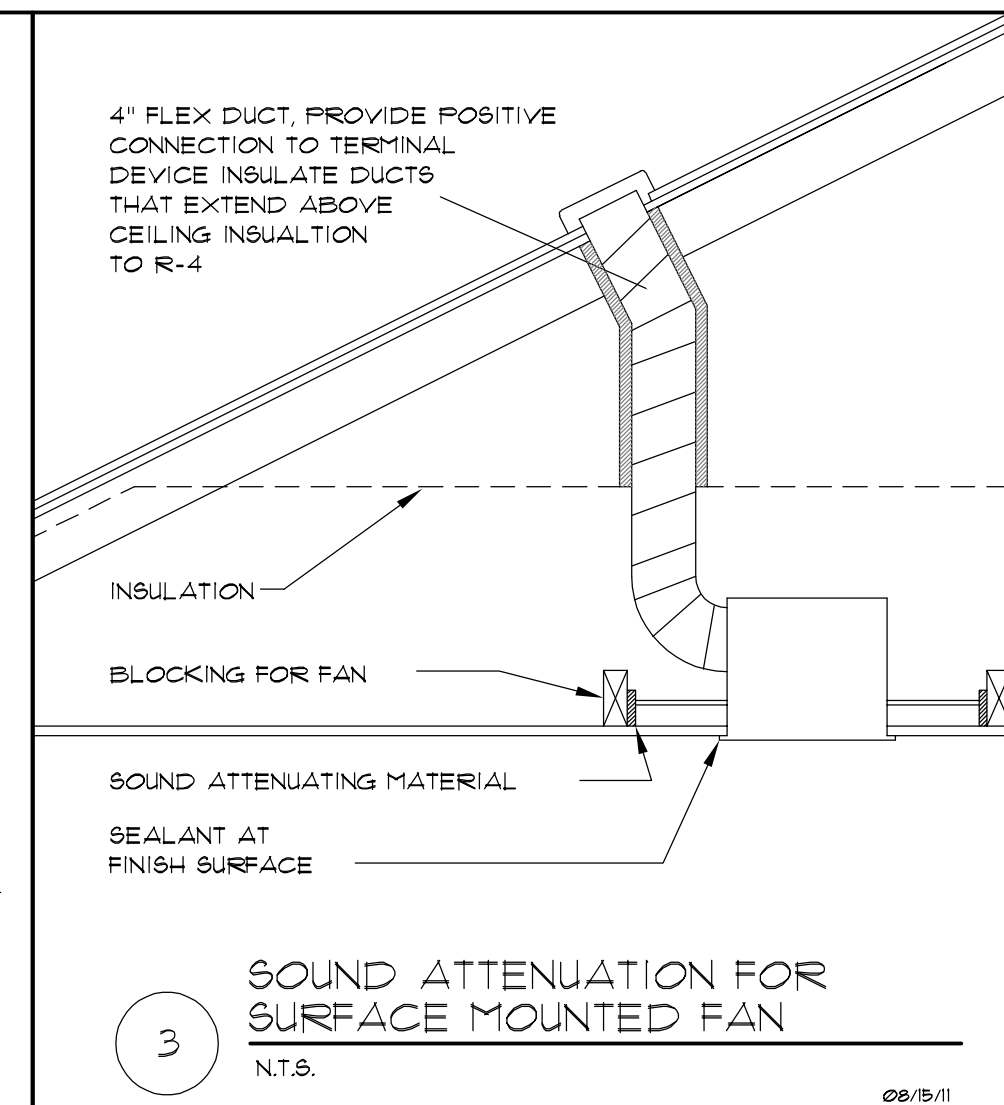
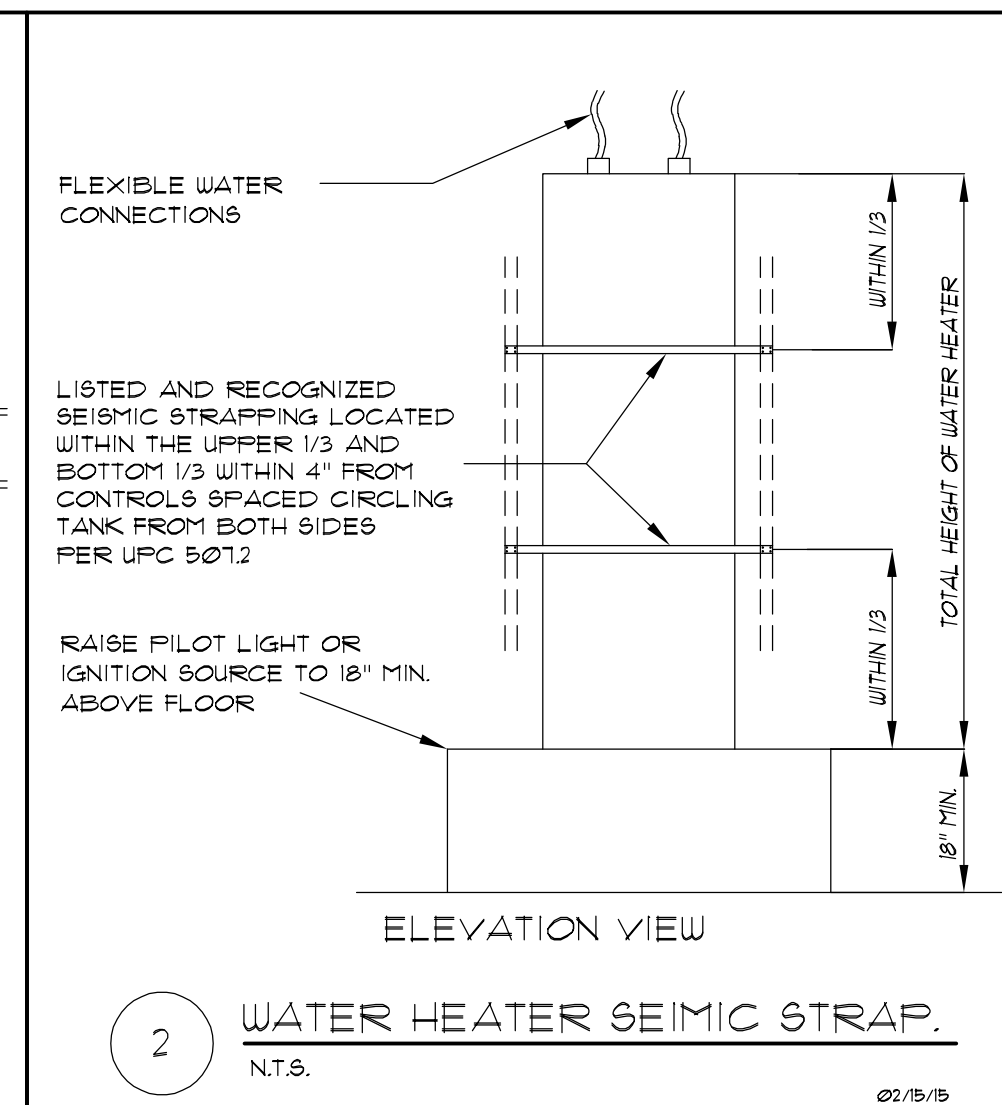
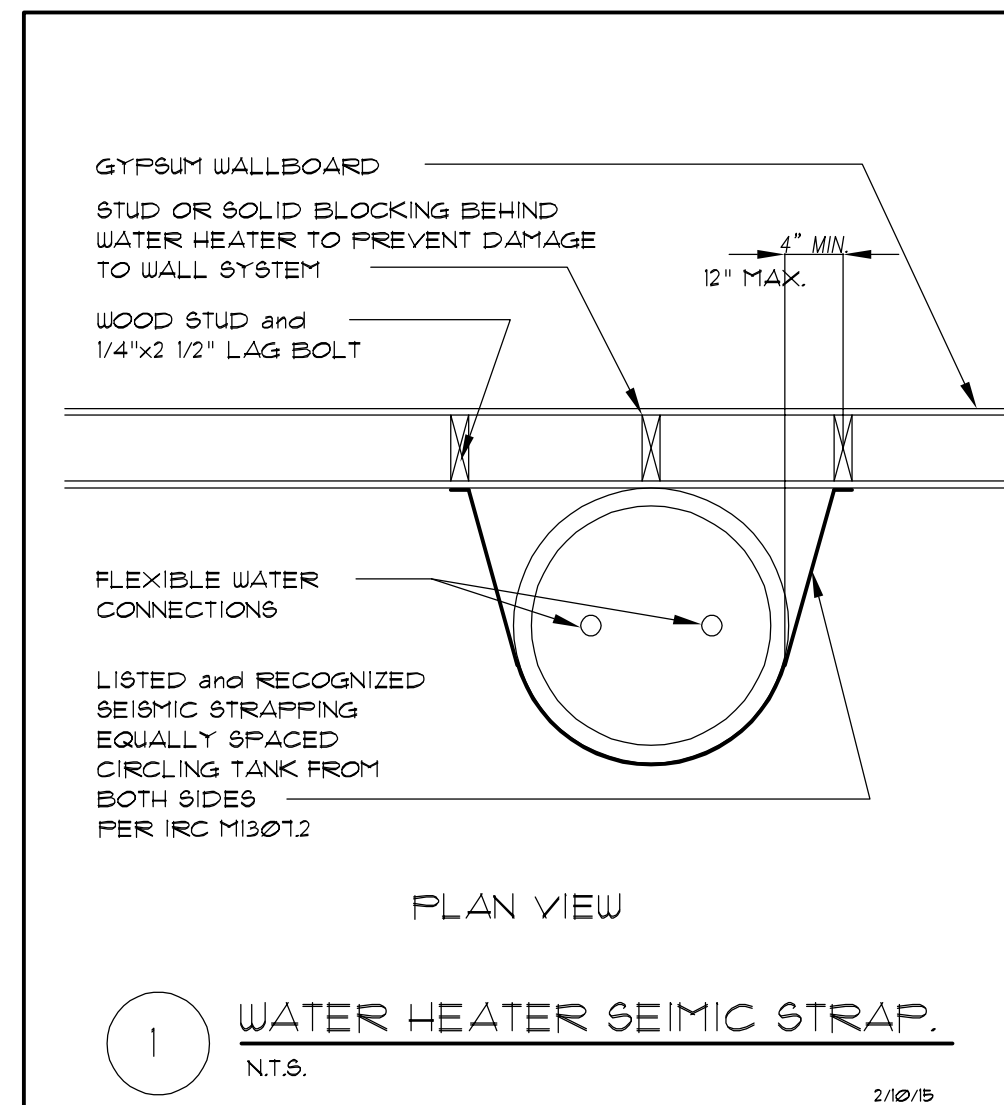
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MERCER ISLAND, WA 98040

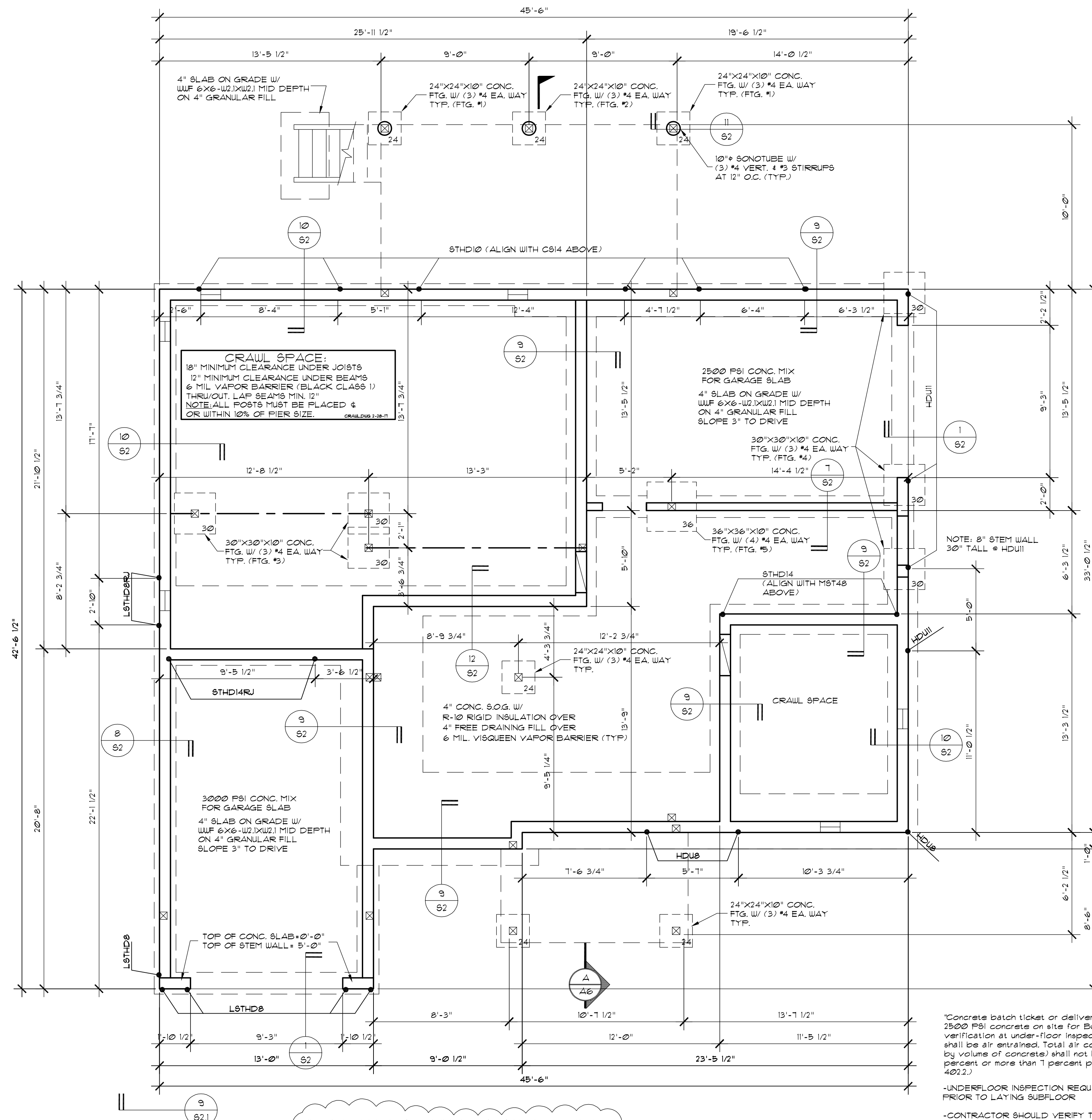
JOB NO: 21006
DATE: 6/13/22
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SHEET NO.

A8







- 1) FLOOR JOISTS PER FRAMING PLANS. REFER TO MFG. LAYOUT FOR ALL FRAMING DETAILS AND BLOCKING. REVIEW MFG. LAYOUT PRIOR TO FRAMING. OR ALL FLR JOISTS AND RFTRS TO BE #2 HEM-FIR DOUBLE UNDER BEARING PARTITIONS. PROVIDE SOLID BLOCKING OVER BEARING MEMBERS.
- 2) ALL EXT. DR. & UNDO. HDRS. TO BE 4x8 DPT. (UNC)
- 3) ALL PRE-MANUFACTURED TRUSSES TO BE IDENTIFIED BY MFG'S STAMP.
- 4) FACTORY BILT FRFLC 4 CHIMNEY TO BE UL LABELED. INSTALL PER MFR'S SPECS. O/SIDE CMBSTN. AIR REQ'D (MIN 6 SQ IN) DUCTED TO P/BOX W/ OPERABLE O/SIDE DAMPER. TIGHTLY FITTING FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN.
- 5)
- 6) HWT. TO BE LABELED PER ASHRAE STD. NO. 90A-80, AND MEET THE REQ'TS. PER NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
- 7) FURN. AND HWT. TANKS, PILOTS, BURNERS, HEATING ELEMENTS, AND SWITCHES TO BE A MIN. OF 18" ABOVE FINISHED FLOOR.
- 8) ALL SKYLITES TO COMPLY WITH IRC, SECTION R308.6
- 9) ALL SIDELITES, SLIDING GLASS DOORS AND TUB/SHOWER ENCLOSURES TO COMPLY WITH IRC, SECTION R308
- 10) HEAT REGISTERS TO BE PER LEGEND 1. LOCATE APPROXIMATELY AS SHOWN, 6" IN FROM EXTERIOR WALLS, 3" IN FROM INTERIOR WALLS.
- 11) VENT DRYER, OVEN/RANGE & EXHAUST FANS TO O/SIDE. DRYER EXH DUCTS SHALL NOT EXCEED A TOTAL COMB. HORIZ. AND VERT. LENGTH OF 14'-0", INCL. 2 90° ELBOWS. DEDUCT 2'-0" FOR EA. 90° ELBOW EXCEEDING 2'.
- 12) ALL EXHAUST DUCTS INSLTD (MIN. OF R-4)
- 13) ALL NAILING TO COMPLY WITH 2018 I.B.C., COLUMN, POST & BEAM CONNECTIONS TO COMPLY WITH 2018 I.B.C.
- 14) TUB/SHOWER SURROUND WALLS TO HAVE WATER RESNT GYP BRD AND A SMOOTH HARD SURFACE TO A MINIMUM HEIGHT OF 10" ABOVE DRAIN INLET
- 15) PROVIDE SMOKE DETCTR AND CO ALARMS IN COMPLIANCE WITH IRC, R314
- 16) ALL SMOKE DETCTRS W/ BATT BACKUP SMOKE DETCTRS WILL SOUND AN AUDIBLE ALARM IN ALL SLEEPING ROOMS.
- 17) DWELLING TO COMPLY W/ WA. ST. ENERGY CODE, 2018 EDITION
- 18) SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE: AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS STUN WALL AND ROOF AND WALL PANELS, OPENINGS AT UTILITY PENETRATIONS THROUGH WALLS, FLRS, AND ROOFS. ALL OTHER OPENINGS IN BLD'G ENVELOPE.
- 19) ALL EXTERIOR DOORS OR ACCESS HATCHES TO ENCLOSED UNHEATED AREAS MUST BE WEATHERSTRIPPED
- 20) MINIMUM SOIL BEARING PRESSURE = 1500 PSF
- 21) FOOTINGS TO BE PLACED ON FIRM UNDISTURBED NATIVE SOIL.
- 22) DWELLING TO COMPLY WITH IRC, 2018 EDITION
- 23) FIRE STOPS SHALL BE PROVIDED TO CUT OFF ALL CONCL'D DRAFT OPENINGS FROM VERT. TO HORIZL. SPACES, INCL. THE STAIR TUB, SHUR, REPLACE, ETC.
- 24) O/SB ROOF SHEATHING W/ COMP. ROOFING AND PLYTUD AT ALL OVERHANGS. SEE DETAIL SH1 FOR ALL ADDITIONAL NOTES.
- 25) EXHAUST FANS CANNOT TERMINATE WITHIN 3' FROM AN OPERABLE OR UNOPERABLE OPENING PER THE IRC R506.3

GENERAL NOTES:

690	UNDER-FLOOR AREA	+ 23	SQ. FT. NET FREE REQ'D.
300			
23	NET FREE x 144	+ 331	SQ. IN./SQ. FT. NET FREE REQ'D.
PROVIDE 1 SQ. FT. PER 300 SQ. FT. OF UNDER FLOOR AREA. COVER VENTS WITH 1/4" CORROSION RESISTANT WIRE MESH. LOCATE VENTS AS CLOSE TO CORNERS AS PRACTICAL. EFFICIENT VENT AREA = 12.5 SQ. IN.			
SQ. IN. NET FREE	331		* VENTS REQ'D.
VENT AREA	12.5		* 5

CRAWL VENTILATION CALCULATION

NOTE: STRUCTURAL FILL REQUIRED FOR ALL FOOTINGS AND SLAB

*Concrete batch ticket or delivery receipt for 2500 PSI concrete on site for Building Inspector verification at under-floor inspection. Concrete shall be air entrained. Total air content (Percent by volume of concrete) shall not be less than 5 percent or more than 7 percent per IRC Table 402.2.)

-UNDERFLOOR INSPECTION REQUIRED PRIOR TO LAYING SUBFLOOR

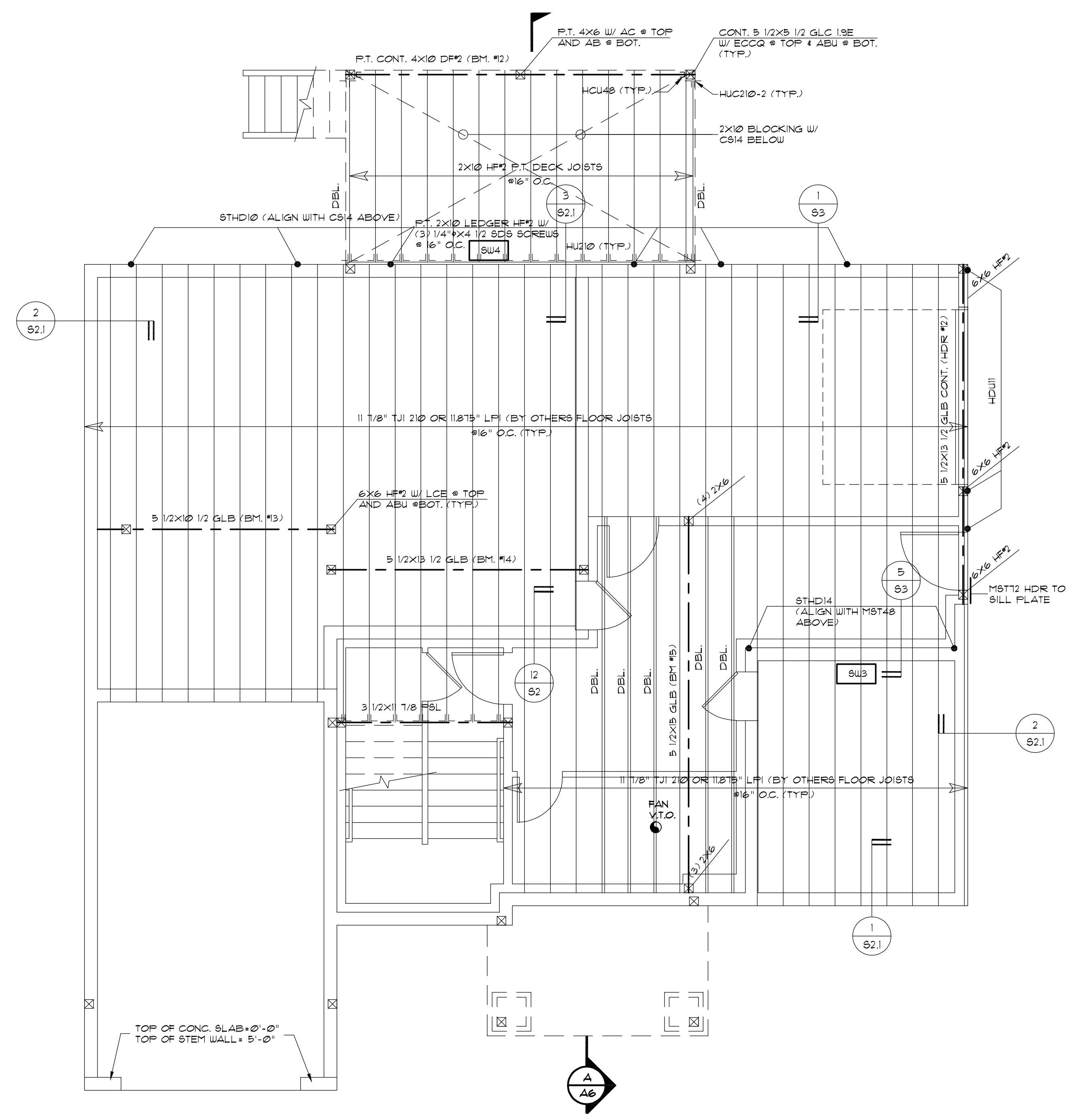
-CONTRACTOR SHOULD VERIFY THE TRANSFER OF ALL POINT LOADS FROM THE ROOF DOWN THROUGH FRAMING MEMBERS AND INTO THE FOUNDATION

FOUNDATION PLAN
SCALE: 1/4" = 1' - 0"

NOTE:
 • 16"X18" DEEP CONC. CONG. FTG. W/ (2) #4 BARS, MID DEPTH (TYP.)
 • 8" CONC. STEM WALL W/ #4 @ 16" O.C. HORIZ. AND VERT. (TYP.)

GROUNDING ELECTRODE SYSTEM. ALL GROUNDING ELECTRODES AS DESCRIBED IN 2505(2)(A)(1) THROUGH (A)(6) THAT ARE PRESENT AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM, WHERE NONE OF THESE GROUNDING ELECTRODES EXIST, ONE OR MORE OF THE GROUNDING ELECTRODES SPECIFIED IN 2505(2)(A)(4) THROUGH (A)(7) SHALL BE INSTALLED AND USED

-NOTE: SHOP DRAWINGS FOR FIRE-ENGINEERED FLOORS OR TRUSSES MUST BE ON-SITE AT TIME OF FRAMING INSPECTION, AND HAVE AN ORIGINAL WASHINGTON SEAL AND SIGNATURE OF THE DESIGNER. PROCEEDING WITH FRAMING WITHOUT APPROVED DETAILS AND PLAN IS DONE SO AT THE CONTRACTOR'S/APPLICANT'S RISK.



NOTE: COL TO BE (2) 2x6 HF2 TYP. (UNO.)
 HDR TO BE 4x8 HF2 TYP. (UNO.)

NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

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

- FLOOR FRAMING NOTES:**
- ALL BEAMS AND HEADERS TO BE 4x8 HF2 UNLESS NOTED OTHERWISE.
 - PROVIDE SOLID PRESSURE BLOCKING AT ALL POINT LOADS FROM ABOVE.
 - PROVIDE SOLID BLOCKING OR BRIDGING AT MID-SPAN OF ALL FLOOR JOISTS WITH SPANS OVER 10'-0" OR PER JOIST SPECIFICATIONS PER JOIST MANUFACTURER.
 - PROVIDE BLOCKING OR OTHER APPROVED MEANS OF LATERAL SUPPORT AT ALL JOIST BEARING LOCATIONS.
 - XXX DENOTES SHEARWALL CALLOUT PER SHEARWALL TABLE.
 - ALL HEADERS TO HAVE (1) 2x BEARING STUD AND (1) 2x KING STUD AT EACH END UNLESS NOTED OTHERWISE.

Joists shall be laterally supported at the ends by full-depth solid blocking not less than 2 inches nominal in thickness or by attachment to a full-depth header, band or rim joist, or to an adjoining stud to provide lateral support to prevent rotation. Additionally, in Seismic Design Categories D0, D1, and D2, lateral restraint shall be provided at each intermediate support. See IRC Sections 106.11 and 502.7.

WOOD-FRAMED SHEAR WALL SCHEDULE								
FOR HEM-FIR/DOUG-FIR STUD FRAMING								
SW TYPE	SW SHEATHING APA-RATED (1, 2, 3)	NAIL SIZE & SPACING @ PANEL EDGES (4, 5, 6)	RIM JOIST OR BLOCKING ATTACHMENT TO TOP PLATE BELOW (7, 8, 9)	BOTTOM PLATE & EDGE MEMBER REQUIREMENTS (10, 11)		SILL PLATE REQUIREMENTS (12)		
				SHEAR WALLING TO WOOD FRAMING BELOW	BOTTOM R. AT FRAMING	ANCHOR BOLT TO CONCRETE FOUNDATION (13)	SILL R. AT FOUNDATION (14)	
SW-6	15/32" CD-EXT	0.131" x 2 1/2" @ 6"OC	CLIP @ 18"OC	0.148" x 3 1/4" @ 6"OC	2x	5/8" @ 48"OC	P.T. 2x	260
SW-4	15/32" CD-EXT	0.131" x 2 1/2" @ 4"OC	CLIP @ 14"OC	0.148" x 3 1/4" @ 4"OC	2x	5/8" @ 32"OC 5/8" @ 48"OC	P.T. 2x P.T. 3x	380
SW-3	15/32" CD-EXT	0.131" x 2 1/2" @ 3"OC, STAGGERED	CLIP @ 12"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 18"OC	3x	5/8" @ 24"OC 5/8" @ 32"OC	P.T. 2x P.T. 3x	490
SW-2	15/32" CD-EXT	0.131" x 2 1/2" @ 4"OC	CLIP @ 8"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 16"OC	3x	5/8" @ 16"OC	P.T. 3x	640
25W-4	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 4"OC	CLIP @ 6"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 12"OC	3x	5/8" @ 24"OC	P.T. 3x	760
25W-3	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 3"OC, STAGGERED	CLIP @ 8"OC BOTH SIDES, STAGGERED	0.148" x 3 1/4" @ 4"OC & CLIP @ 8"OC	3x	5/8" @ 16"OC	P.T. 3x	980
25W-2	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 2"OC, STAGGERED	CLIP @ 6"OC BOTH SIDES, STAGGERED	0.148" x 3 1/4" @ 4"OC & CLIP @ 5"OC	3x	5/8" @ 12"OC	P.T. 3x	1280

- NOTES:**
- INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.
 - WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUD.
 - BLOCKING IS REQUIRED AT ALL PANEL EDGES.
 - PROVIDE SHEAR WALL SHEATHING AND NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL-HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLD-DOWN REQUIREMENTS PER PLANS.
 - SHEAR WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, ETC. ABOVE AND BELOW ALL OPENINGS.
 - SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLD-DOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLD-DOWN POSTS. ADDITIONAL INFORMATION PER HOLD-DOWN SCHEDULE & DETAILS.
 - INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 0.148" x 2 1/2" NAILS AT 12"OC WHERE STUDS ARE SPACED AT 16"OC AND 0.148" x 2 1/2" NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.
 - BASED ON 0.131" x 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131" x 2 1/2" NAILS WHERE INSTALLED OVER SHEATHING.
 - FRAMING CLIPS: SIMPSON "AS3" OR "L175" OR APPROVED EQUIVALENT.
 - ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 3/8"x30.225"(MIN). THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED 3/16" x 1/2" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE WASHER TO EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PLATE ON THE SIDES WITH SHEATHING. WHERE SHEAR WALLS ARE SHEATHED ON BOTH SIDES OF 2x6 WALL FRAMING, USE 4.5"x4.5"x0.225"(MIN) PLATE WASHERS. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE.
 - PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL NOTES.
 - WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM SHEATHING, CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.
 - AT ADDING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2x STUDS SHALL BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING.
 - CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO GROUT-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.
 - NAIL STUDS TO 3x BOTTOM/SILL PLATES WITH EITHER (2) 0.148" x 4" END NAILS OR (4) 0.131" x 2 1/2" TOENAILS.

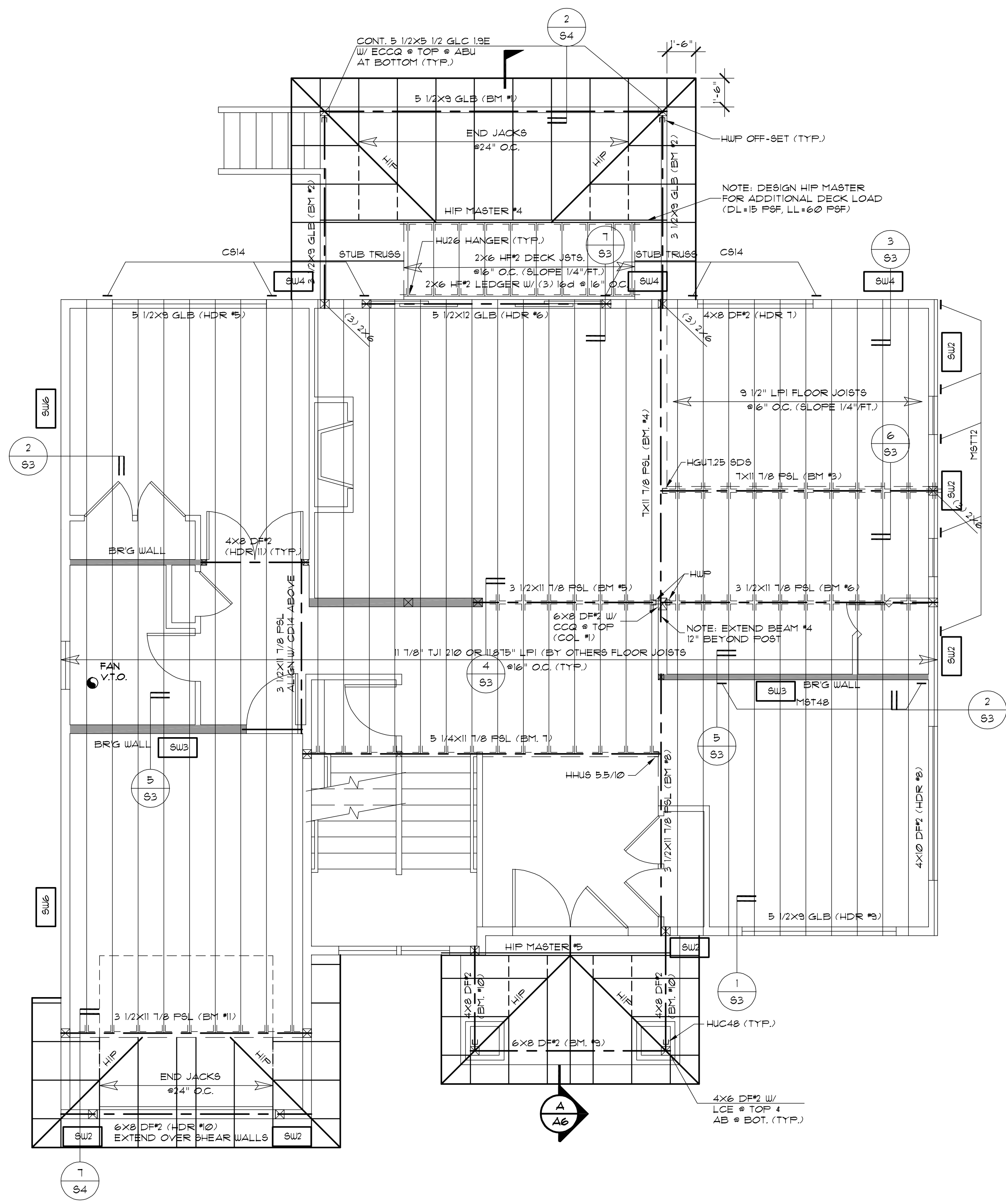
A NEW HOME FOR:

THE LIU RESIDENCE
 3705 11TH PL. SE
 MERCER ISLAND, WA 98040

JOB NO: 21006
 DATE: 6/13/22
 DRUN. BY: TH
 REVISED: 9/30/22

SHEET NO.

56



NOTE: COL TO BE (2) 2x6 HF2 TYP. (UNO.)
HDR TO BE 4x8 HF2 TYP. (UNO.)

NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

UPPER FLOOR & LOWER ROOF FRAMING PLAN
SCALE: 1/4" = 1' - 0"

WOOD-FRAMED SHEAR WALL SCHEDULE								
FOR HEM-FIR/DOUG-FIR STUD FRAMING								
SW TYPE	SW SHEATHING APA-RATED (1, 2, 19)	NAIL SIZE & SPACING @ PANEL EDGES (1, 2, 19)	RIM JOIST OR BLOCKING ATTACHMENT TO TOP PLATE BELOW (1, 2, 19)	BOTTOM PLATE & EDGE MEMBER REQUIREMENTS (1, 2, 19)		SILL PLATE REQUIREMENTS (1, 2, 19)		
				SHEAR NAILING TO WOOD FRAMING BELOW (1, 2, 19)	BOTTOM PLATE AT FRAMING (1, 2, 19)	ANCHOR BOLT TO CONCRETE FOUNDATION (1, 2, 19)	SILL PLATE AT FOUNDATION (1, 2, 19)	
SW-6	15/32" CD-EXT	0.131" x 2 1/2" @ 6"OC	CLIP @ 18"OC	0.148" x 3 1/4" @ 6"OC	2x	5/8" @ 48"OC	P.T. 2x	260
SW-4	15/32" CD-EXT	0.131" x 2 1/2" @ 4"OC	CLIP @ 14"OC	0.148" x 3 1/4" @ 4"OC	2x	5/8" @ 32"OC 5/8" @ 48"OC	P.T. 2x P.T. 3x	380
SW-3	15/32" CD-EXT	0.131" x 2 1/2" @ 3"OC, STAGGERED	CLIP @ 12"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 18"OC	3x	5/8" @ 24"OC 5/8" @ 32"OC	P.T. 2x P.T. 3x	490
SW-2	15/32" CD-EXT	0.131" x 2 1/2" @ 2"OC, STAGGERED	CLIP @ 8"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 16"OC	3x	5/8" @ 16"OC	P.T. 3x	640
25W-4	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 4"OC, STAGGERED	CLIP @ 6"OC	0.148" x 3 1/4" @ 4"OC & CLIP @ 12"OC	3x	5/8" @ 24"OC	P.T. 3x	760
25W-3	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 3"OC, STAGGERED	CLIP @ 8"OC BOTH SIDES, STAGGERED	0.148" x 3 1/4" @ 4"OC & CLIP @ 8"OC	3x	5/8" @ 16"OC	P.T. 3x	980
25W-2	15/32" CD-EXT BOTH SIDE	0.131" x 2 1/2" @ 2"OC, STAGGERED	CLIP @ 6"OC BOTH SIDES, STAGGERED	0.148" x 3 1/4" @ 4"OC & CLIP @ 5"OC	3x	5/8" @ 12"OC	P.T. 3x	1280

- NOTES:
- INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.
 - WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUD.
 - BLOCKING IS REQUIRED AT ALL PANEL EDGES.
 - PROMOTE SHEAR WALL SHEATHING AND NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL-HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLD-DOWN REQUIREMENTS PER PLANS.
 - SHEAR WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, ETC. ABOVE AND BELOW ALL OPENINGS.
 - SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLD-DOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BALT-UP HOLD-DOWN POSTS. ADDITIONAL INFORMATION PER HOLD-DOWN SCHEDULE & DETAILS.
 - INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 0.148" x 2 1/2" NAILS AT 12"OC WHERE STUDS ARE SPACED AT 16"OC AND 0.148" x 2 1/2" NAILS AT 6"OC WHERE STUDS ARE SPACED AT 24"OC.
 - BASED ON 0.131" x 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0.131" x 2 1/2" NAILS WHERE INSTALLED OVER SHEATHING.
 - FRAMING CLIPS: SIMPSON "A35" OR "L175" OR APPROVED EQUIVALENT.
 - ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 3"x3"x0.225"(MIN). THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED 3/16" x 1/2" PROVIDING A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND NUT. PLATE WASHER TO EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PLATE ON THE SIDES WITH SHEATHING. WHERE SHEAR WALLS ARE SHEATHED ON BOTH SIDES OF 2x6 WALL FRAMING, USE 4.5"x4.5"x0.225"(MIN) PLATE WASHERS. EMBED ANCHOR BOLTS 7" MINIMUM INTO THE CONCRETE.
 - PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS. ADDITIONAL INFORMATION PER STRUCTURAL NOTES.
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 - CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.
 - NAIL STUDS TO 3x BOTTOM SILL PLATES WITH EITHER (2) 0.148" x 4" END NAILS OR (4) 0.131" x 2 1/2" TOENAILS.

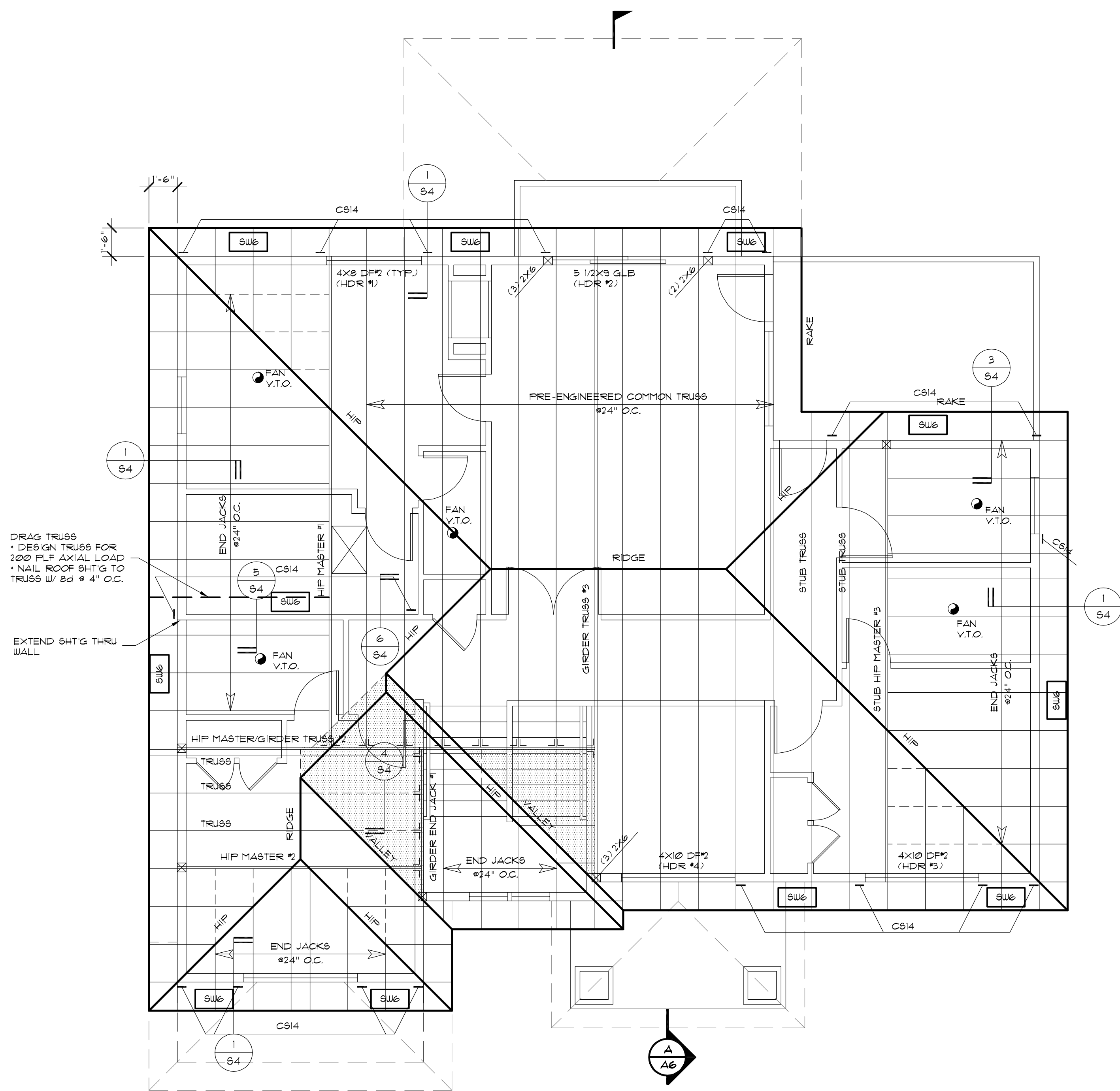
A NEW HOME FOR:

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JOB NO: 21006
DATE: 6/13/22
DRUN. BY: TH
REVISED: 9/30/22

SHEET NO.

57



DRAG TRUSS
 * DESIGN TRUSS FOR
 200 PLF AXIAL LOAD
 * NAIL ROOF SHTG TO
 TRUSS W/ Bd @ 4" O.C.
 EXTEND SHTG THRU
 WALL

NOTE: COL TO BE (2) 2X6 HP# TYP. (UNO.)
 HDR TO BE 4X8 HP# TYP. (UNO.)

NFPA 13d FIRE SPRINKLER SYSTEM REQUIRED

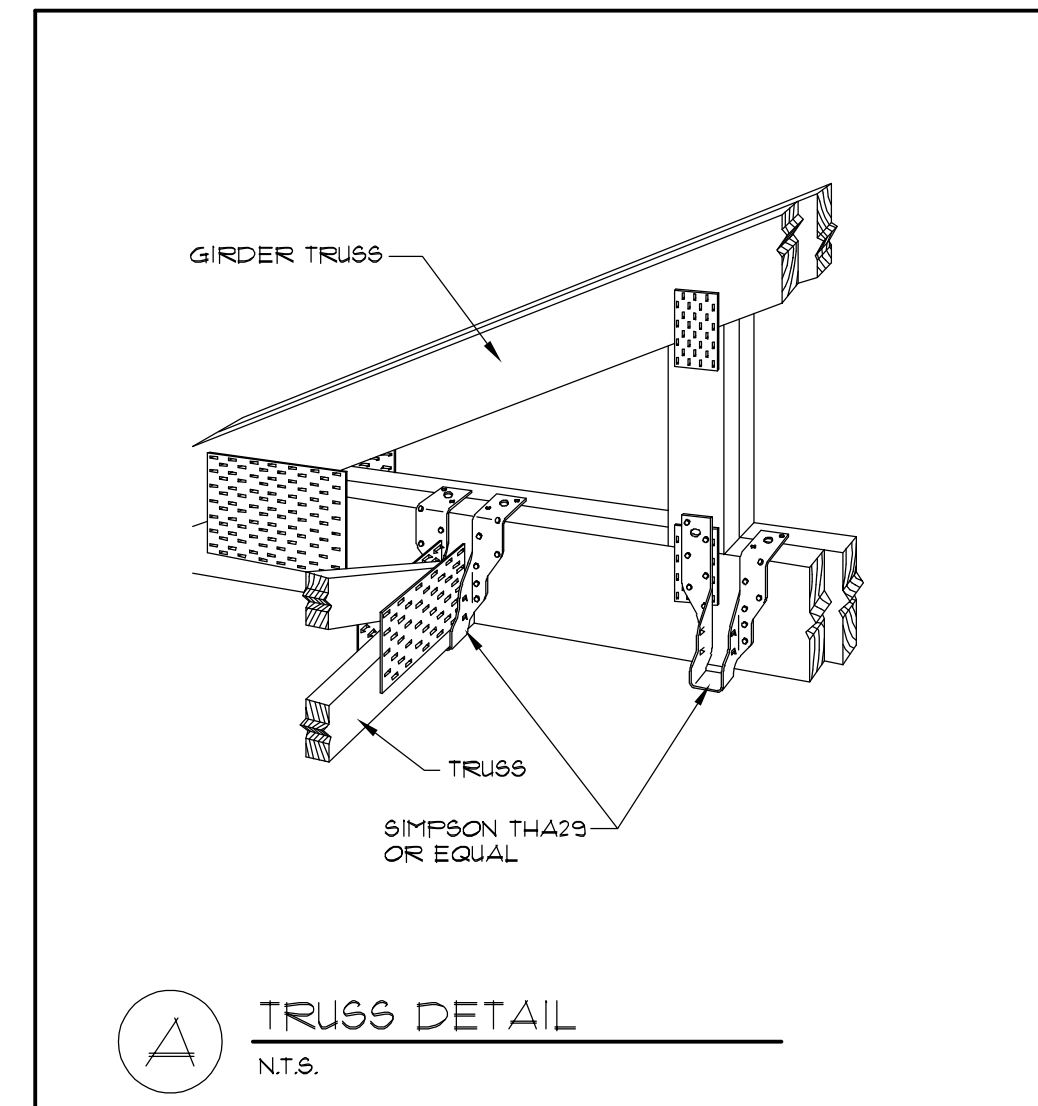


TRUSS NOTES	
* SHALL CARRY MANUFACTURERS STAMP * SHALL BE INSTALLED & BRACED TO MANUFACTURERS SPECIFICATIONS * WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL OF ENGINEERING CALCULATIONS * SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION	
TRUSS NOTES	
* TOTAL VENT. REQ'D. $\frac{1445}{300} = 4.8$ SF NET FREE	<small>MANUFACTURER'S SPEC.</small>
40% BY VENT. ABOVE EAVE 4.8 x .4 = 1.92 SF. MIN. 50% BY VENT. ABOVE EAVE 4.8 x .5 = 2.4 SF. MAX.	
* TOTAL VENTILATION PROVIDED: (MAX NUMBER OF JACKS W/O GE VENTS)	
AF-50 ROOF JACK YIELDS 50 IN ² NET FREE OR 35 SF * OF JACKS REQ'D. $\frac{1.92}{35} = .055$ VENTS OR (6) VENTS (MIN.)	
AF-50 ROOF JACK YIELDS 50 IN ² NET FREE OR 35 SF * OF JACKS REQ'D. $\frac{2.4}{35} = .069$ VENTS OR (7) VENTS (MAX.)	
EAVE VENTLN (STANDARD) 143 LIN. FEET x 4.1 IN ² /LF = 672 IN ² = 4.6 SF	
TOTAL VENTILATION PROVIDED: ROOF JACKS = (7) x 50 IN ² = 2.4 SF EAVE VENTS = 4.6 SF 7 SF PROVIDED > 4.8 SF REQUIRED	
ROOF VENTILATION CALCULATION	
NOTE: PROVIDE VENT BLOCKING EVERY BAY UNO, SEE ROOF PLAN FOR SOLID BCKG AREAS	

PROVIDE OPENING THRU SHEATHING
 FOR ACCESS AND VENTING AT OVERFRAMING

HATCHING DENOTES 2x OVERFRAMING

- OVERFRAMING SPANS**
- 2x8 HP# RAFTERS @24" O.C. - 10'-0" MAXIMUM UNBRACED SPAN
 2x10 HP# RIDGE BEAM - 8'-0" MAXIMUM UNBRACED SPAN
 2x10 HP# FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES
 - 2x6 HP# RAFTERS @24" O.C. - 8'-3" MAXIMUM UNBRACED SPAN
 2x8 HP# RIDGE BEAM - 7'-0" MAXIMUM UNBRACED SPAN
 2x8 HP# FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES
 - 3x4 HP# RAFTERS @24" O.C. - 8'-0" MAXIMUM UNBRACED SPAN
 2x6 HP# RIDGE BEAM - 5'-6" MAXIMUM UNBRACED SPAN
 2x6 HP# FLAT VALLEY LAID DIAGONALLY ACROSS TRUSSES



- ROOF FRAMING NOTES:**
- ALL BEAMS AND HEADERS TO BE 4x8 DF# UNLESS NOTED OTHERWISE.
 - ALL TRUSSES TO BE PRE ENGINEERED AND ARE TO CARRY THE STAMP OF THE TRUSS MANUFACTURER AND SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS, DESIGN DETAILS AND SPECIFICATIONS BY TRUSS MANUFACTURER TO BE ON SITE FOR FRAMING INSPECTION, PROVIDE TRUSS PACKAGE TO ENGINEER FOR SHOP DRAWING REVIEW PRIOR TO CONSTRUCTION.
 - NO TRUSS SHALL BE FIELD MODIFIED WITHOUT PRIOR CONSENT OF THE TRUSS ENGINEER AND THE BUILDING DEPARTMENT.
 - SEE ENGINEERING NOTES FOR SHEATHING REQUIREMENTS
 - Δ DENOTES SHEARWALL CALLOUT PER SHEARWALL TABLE.
 - \boxtimes DENOTES SOLID 2x STUD BEARING BELOW END OF HEADER OR GIRDER.
 - ALL HEADERS TO HAVE (2) 2x POSTS UNLESS NOTED OTHERWISE
 - PROVIDE SOLID BEARING STUDS AT ALL BEARING LOCATIONS INCLUDING GIRDER TRUSSES AND BEAMS.
 - 4x6 POSTS MAY BE SUBSTITUTED FOR (2) 2X6 POSTS FOR ROOF FRAMING PLAN ONLY.
 2-PLY BUILT UP POST SHALL BE FASTENED TOGETHER W/ 16d NAILS @ 8" O.C.



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6/10/2022

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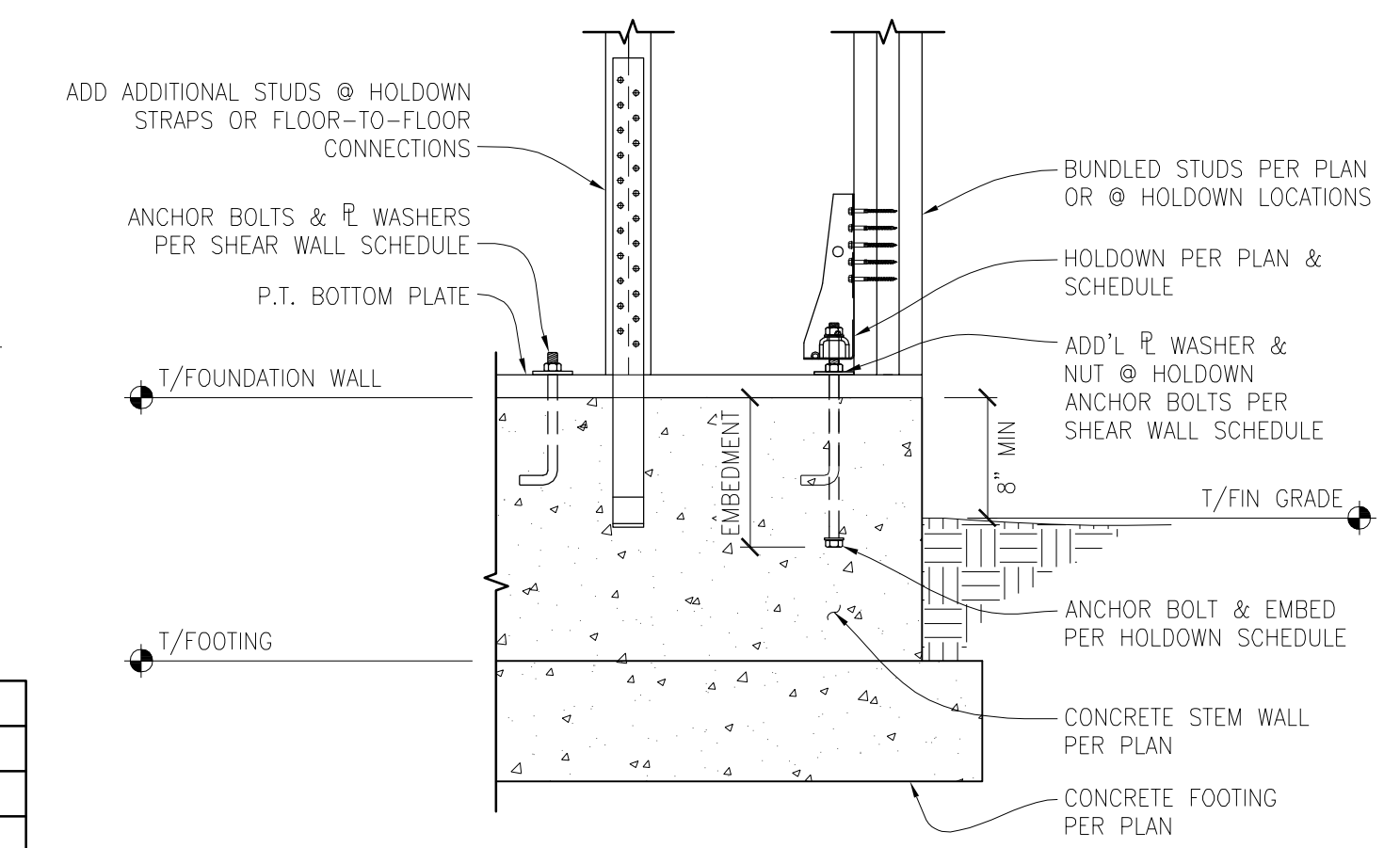
REVISION #	DATE	DESCRIPTION

Drawn By: PK
 Checked By: SC
 Date: 06-10-2022

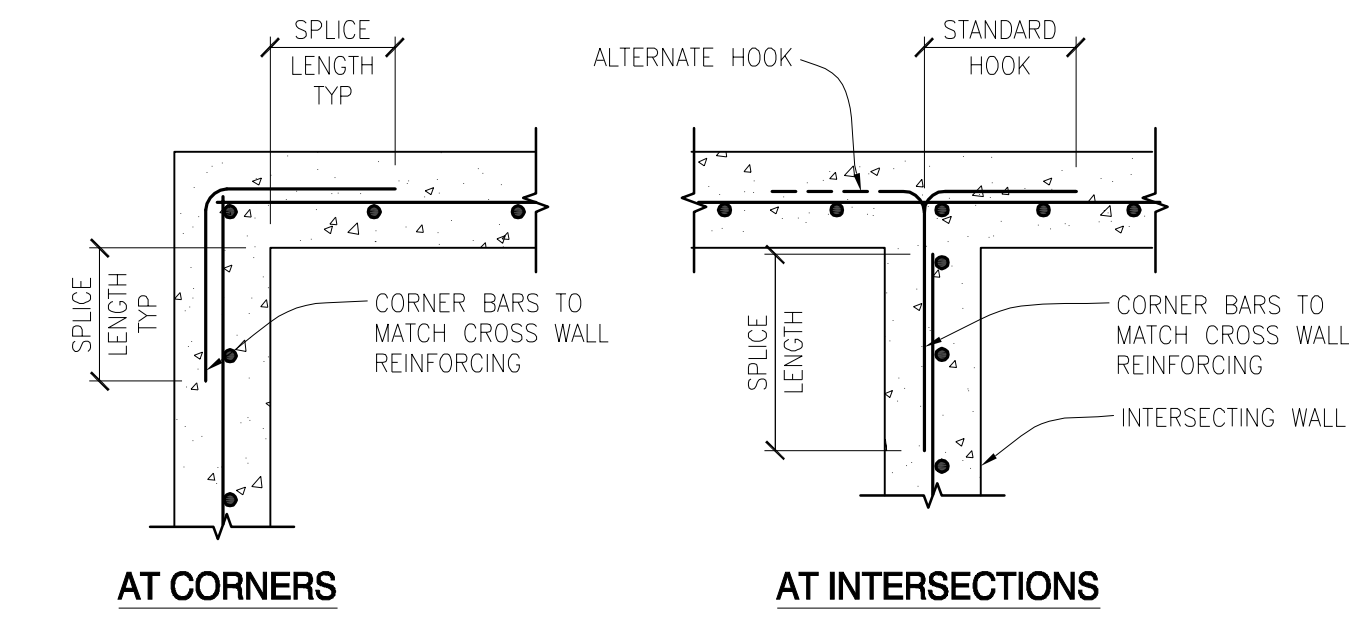
CK JOB NO.
22-028

STRUCTURAL
 DETAILS

S-2.0

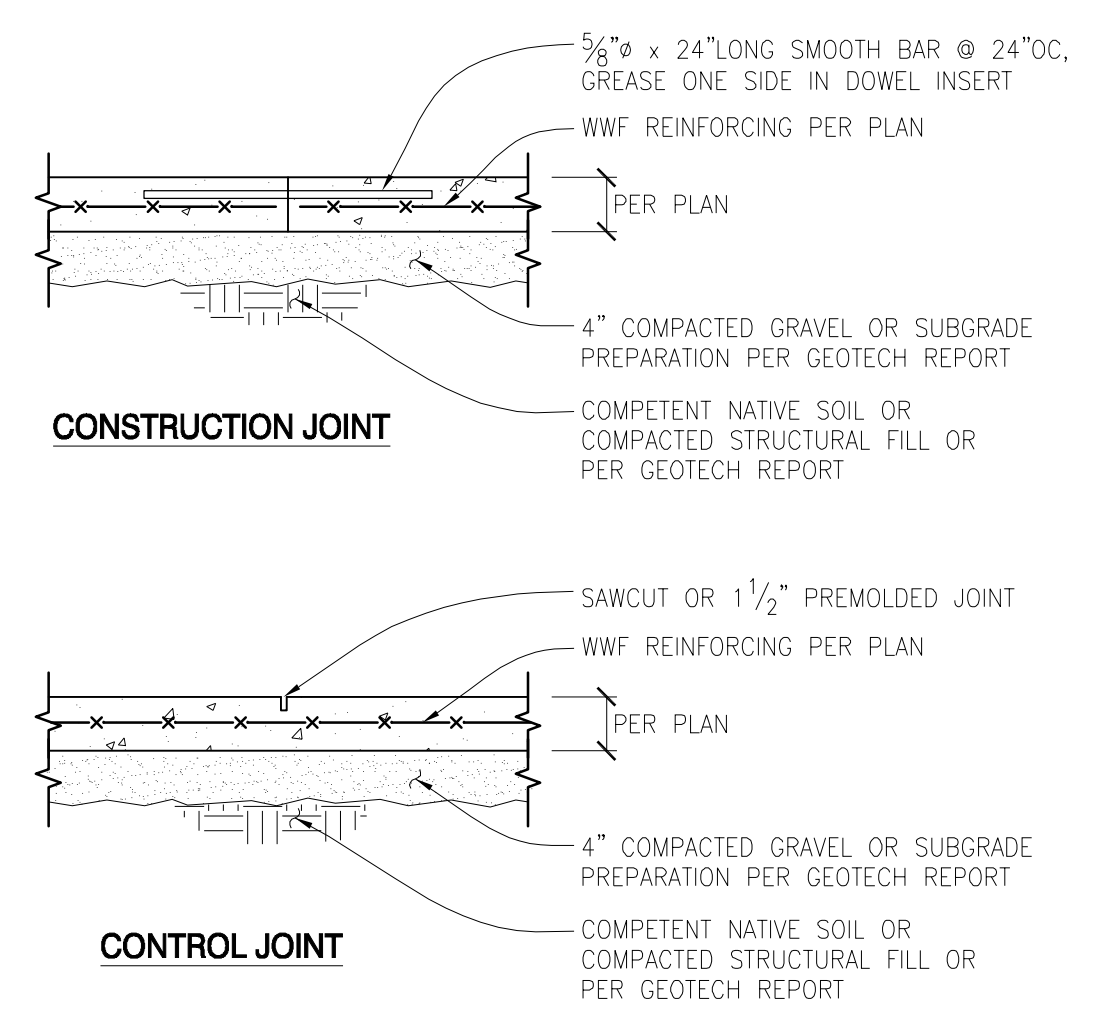


TYPICAL SHEAR WALL HOLDDOWN CONNECTIONS AT FOUNDATION CONCRETE WALL
 SCALE: 3/4" = 1'-0"



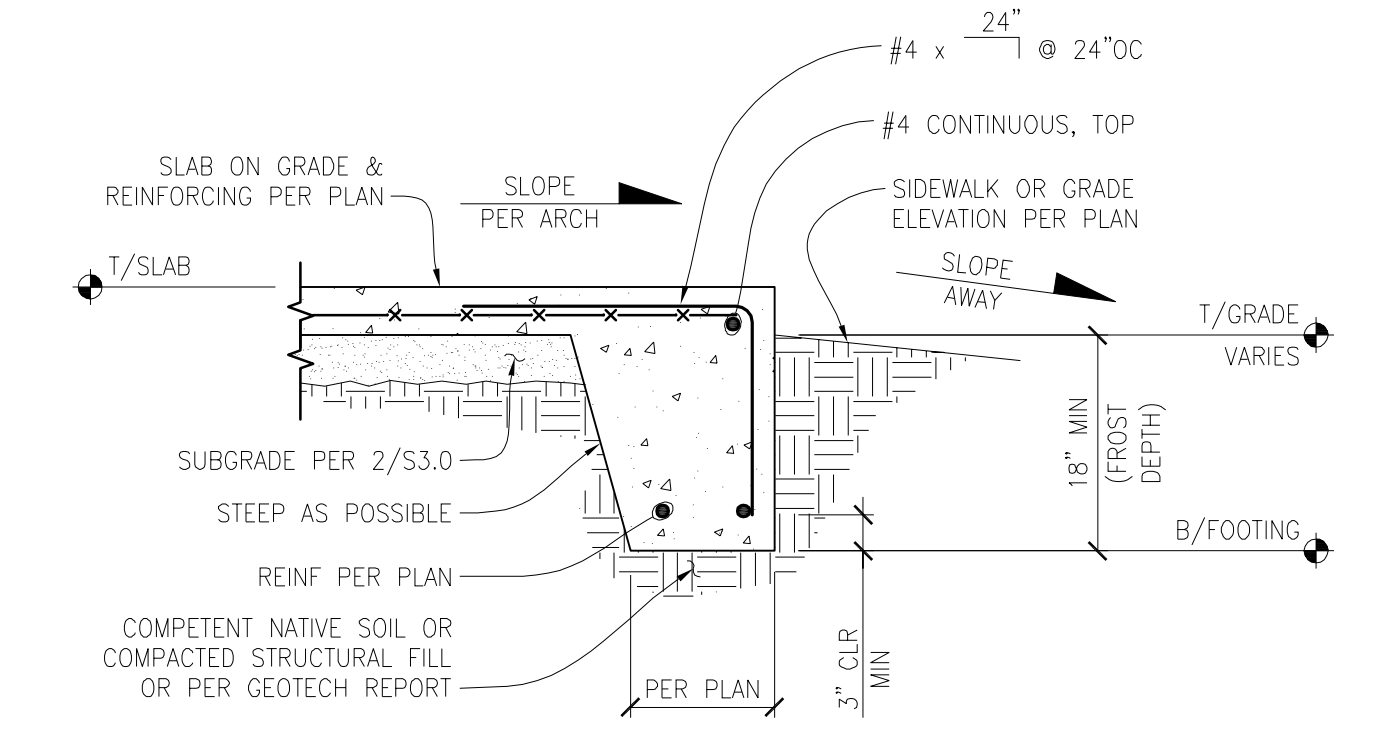
TYPICAL CORNER BARS AT CONCRETE WALLS - SINGLE MAT
 SCALE: N.T.S.

SPlice LENGTH	
BAR	LENGTH
#4	28"
#5	36"

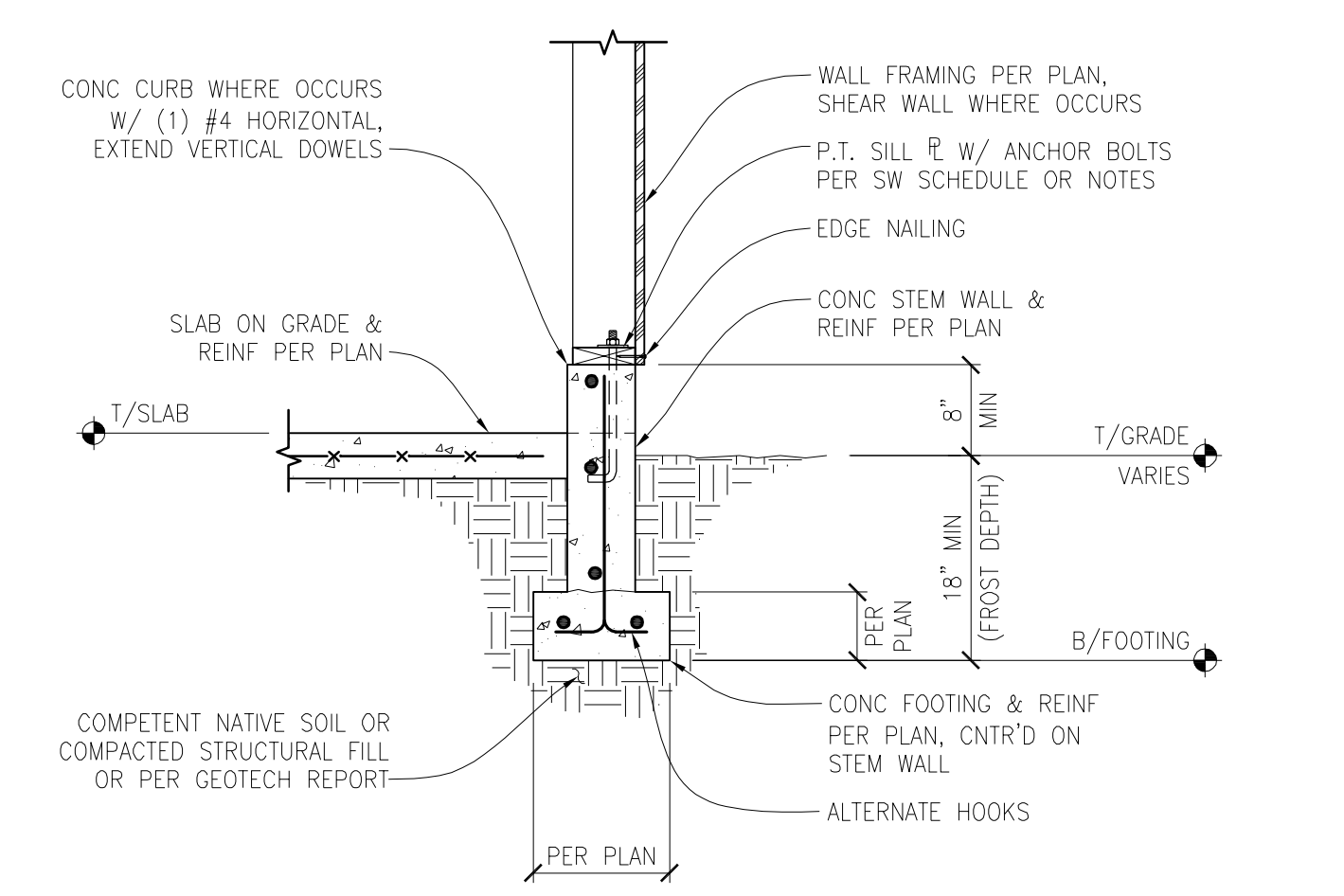


TYPICAL SLAB ON GRADE JOINT DETAILS
 SCALE: N.T.S.

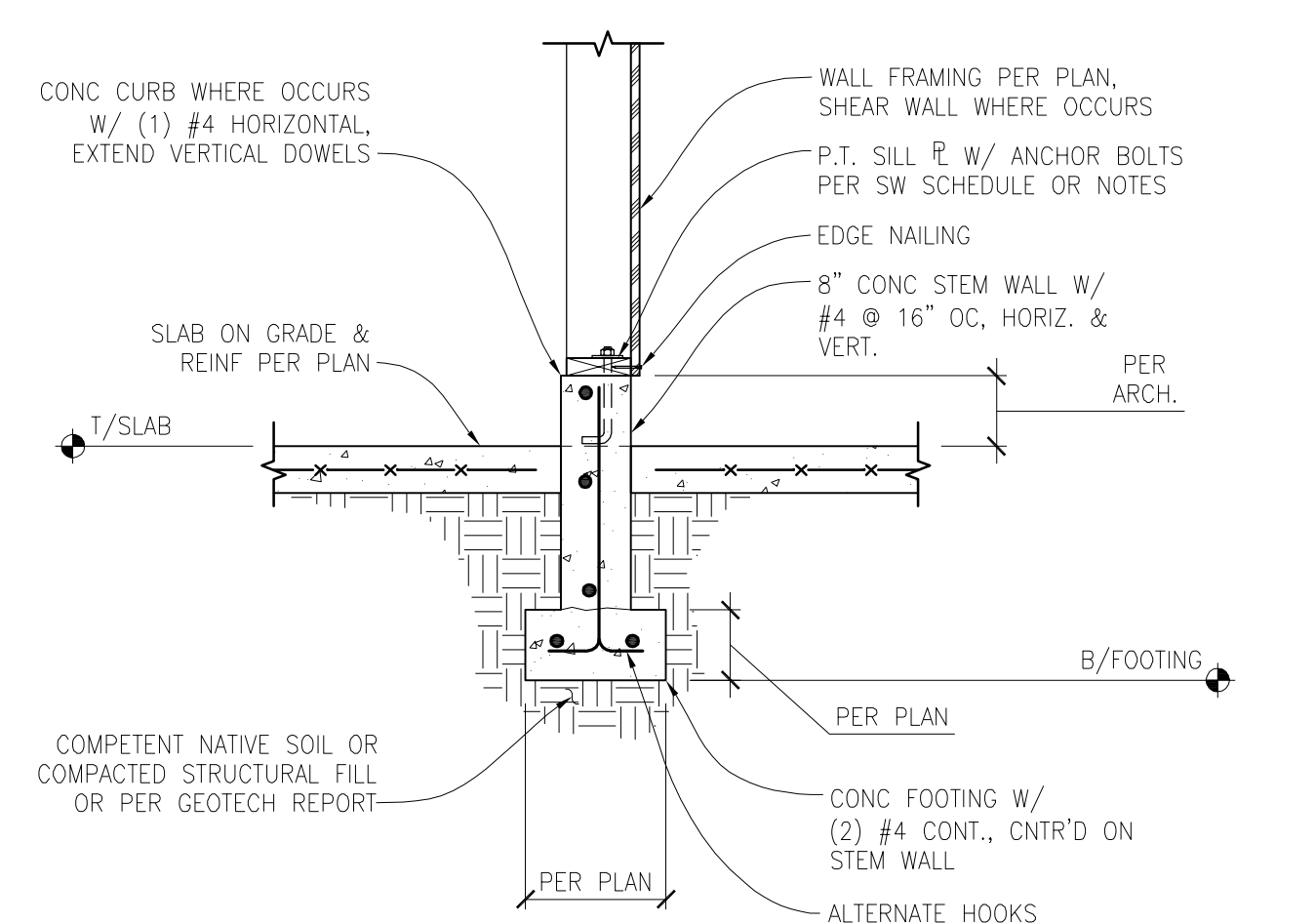
NOTES:
 1. FOR CONSTRUCTION OR CONTROL JOINT LOCATIONS REFERENCE FOUNDATION/SLAB PLAN
 2. USE "SOFT CUT SAW" AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EDGES. SAWCUT ALONG SHORT DIRECTION OF POUR FIRST
 3. PROVIDE CONSTRUCTION/CONTROL JOINT TO ENCLOSE APPROXIMATE SQUARE AREAS OF 225 SF MAX



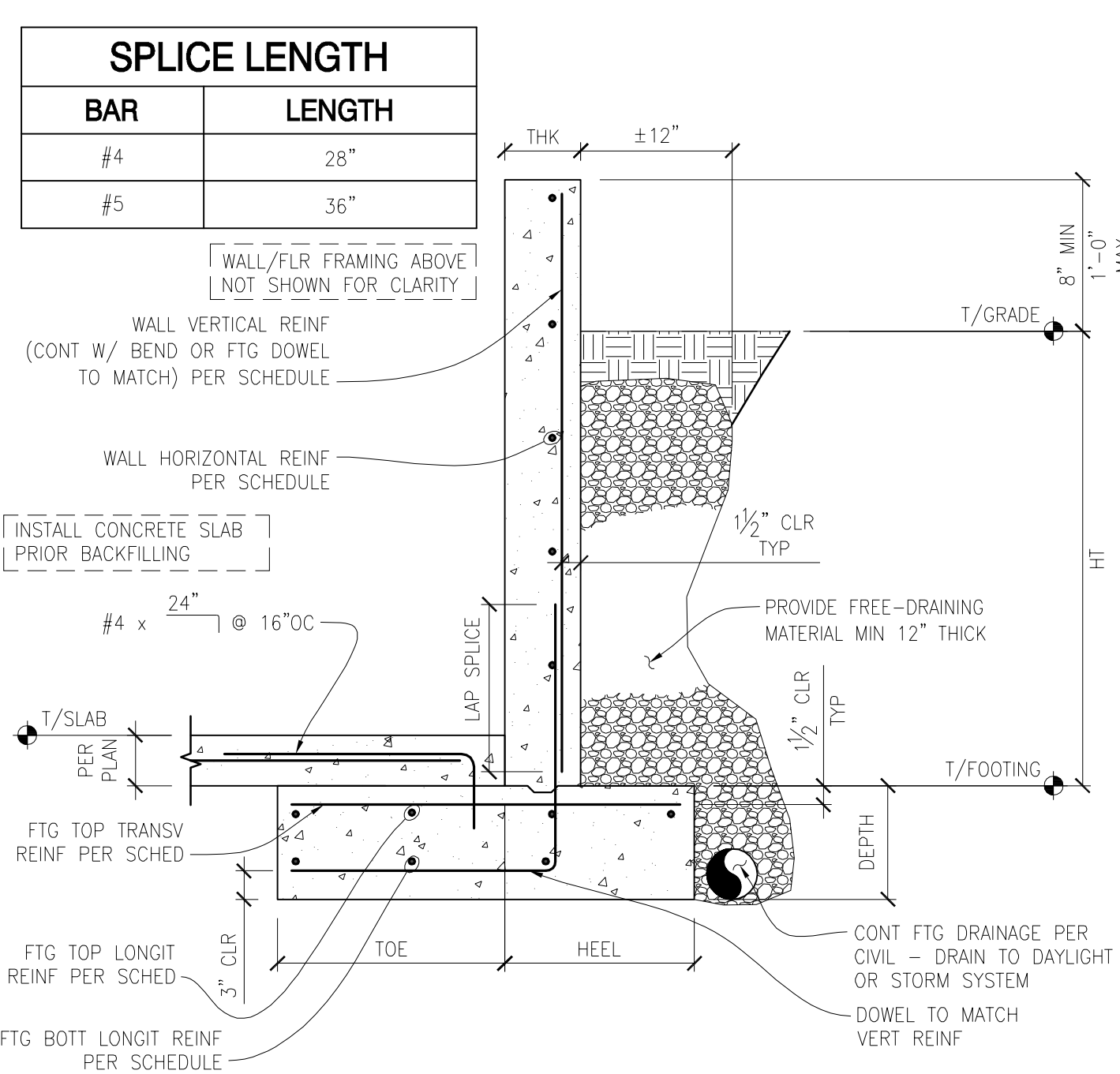
TYPICAL THICKENED SLAB EDGE FOOTING
 SCALE: 3/4" = 1'-0"



TYPICAL FOUNDATION FOOTING AND STEM WALL WITH SLAB ON GRADE
 SCALE: 3/4" = 1'-0"



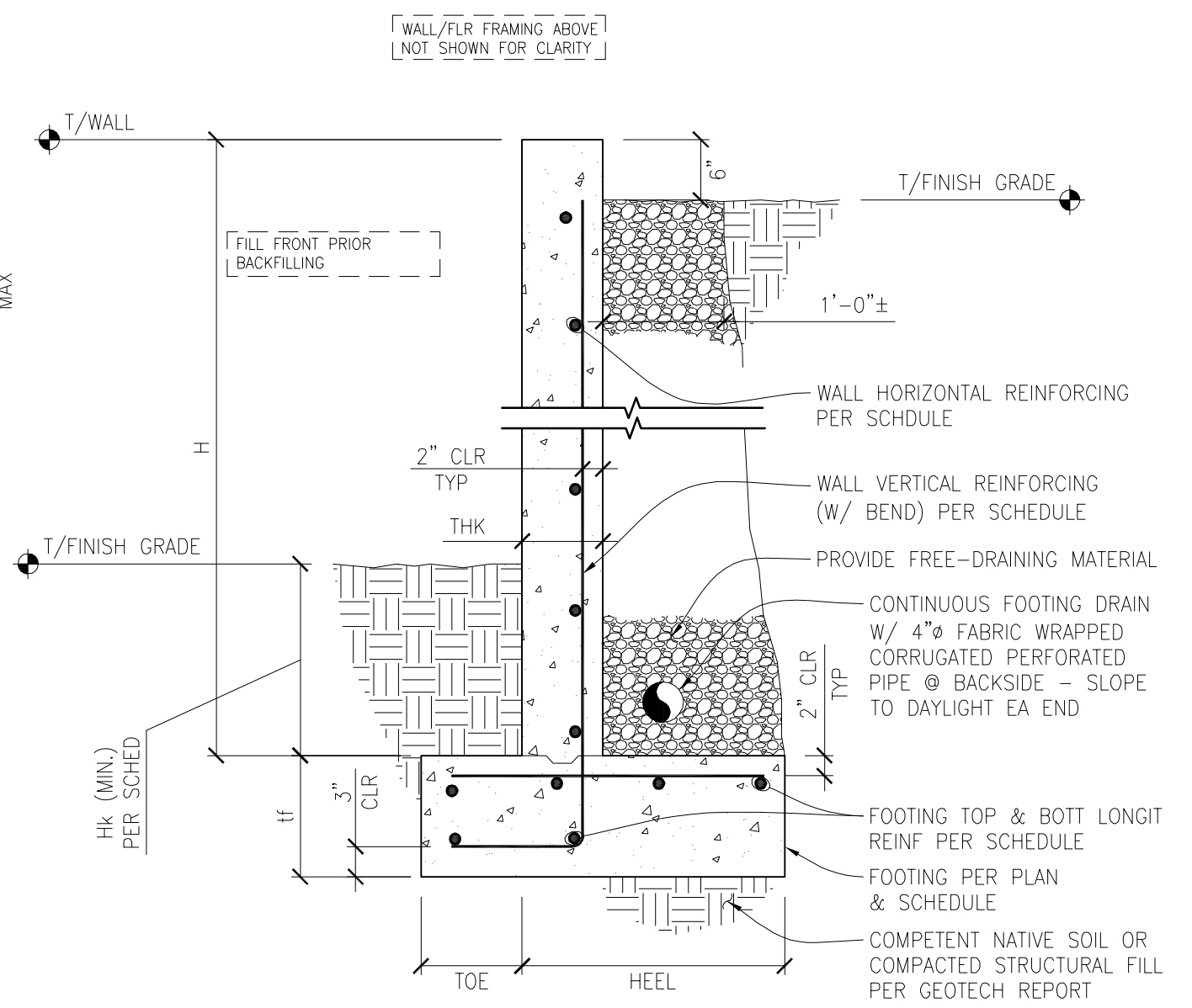
TYPICAL INTERIOR FOUNDATION FOOTING AND STEM WALL WITH SLAB ON GRADE
 SCALE: 3/4" = 1'-0"



RETAINING WALL/FOOTING SCHEDULE

WALL				FOOTING			
HT (MAX)	THK	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT	TOE	HEEL	DEPTH	REINFORCEMENT
4'-0"	8"	#4 @ 12" OC	#4 @ 12" OC	1'-0"	1'-3"	10"	#4 @ 10" OC (3) #4 (2) #4
6'-0"	8"	#4 @ 10" OC	#4 @ 12" OC	2'-0"	1'-6"	10"	#4 @ 10" OC (4) #4 (3) #4
8'-0"	8"	#5 @ 12" OC	#4 @ 12" OC	3'-3"	1'-9"	14"	#5 @ 10" OC (5) #5 (3) #5
9'-0"	10"	#5 @ 8" OC	#4 @ 10" OC	4'-3"	2'-0"	14"	#5 @ 10" OC (7) #5 (5) #5

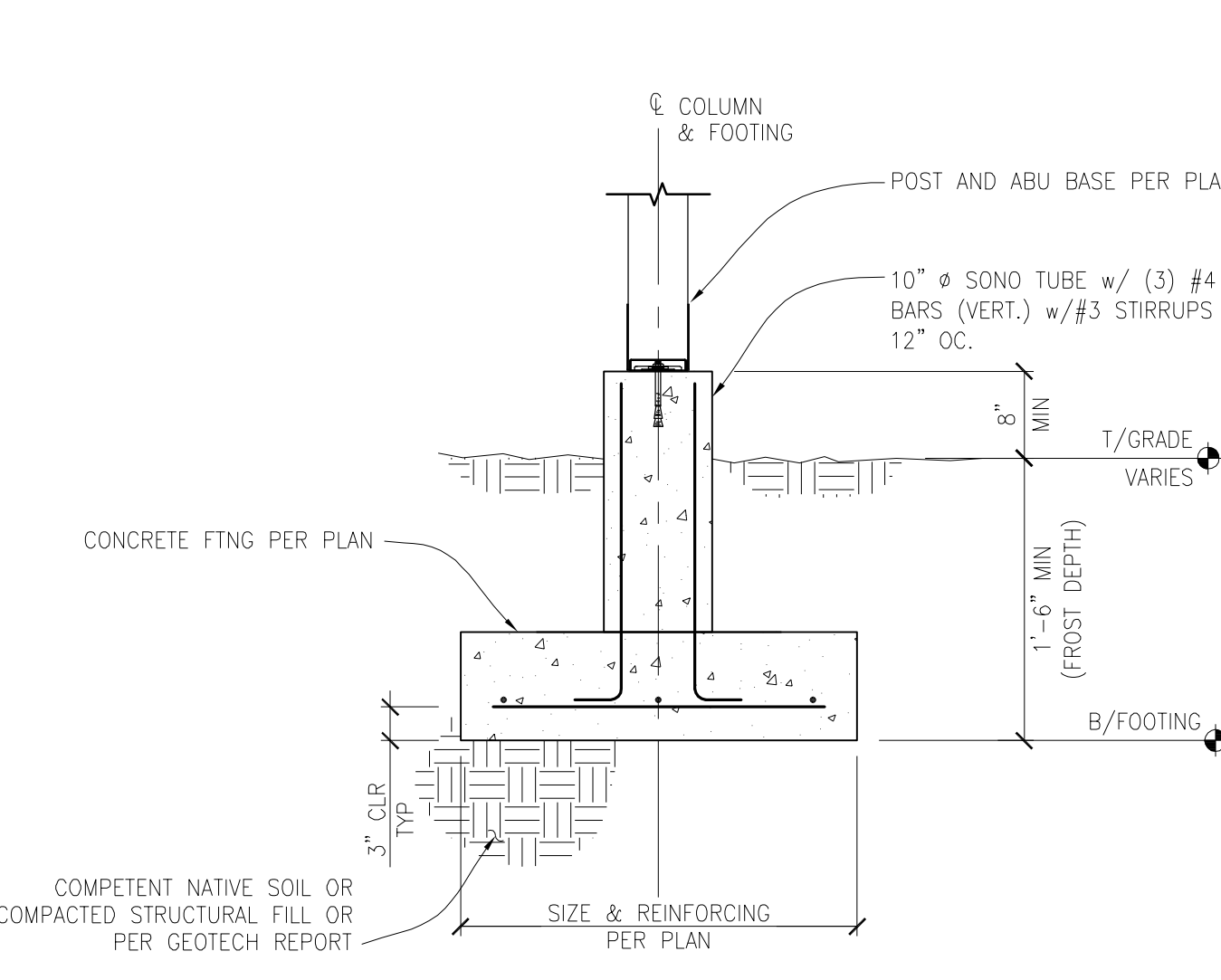
BASEMENT RETAINING WALL SCHEDULE
 SCALE: N.T.S.



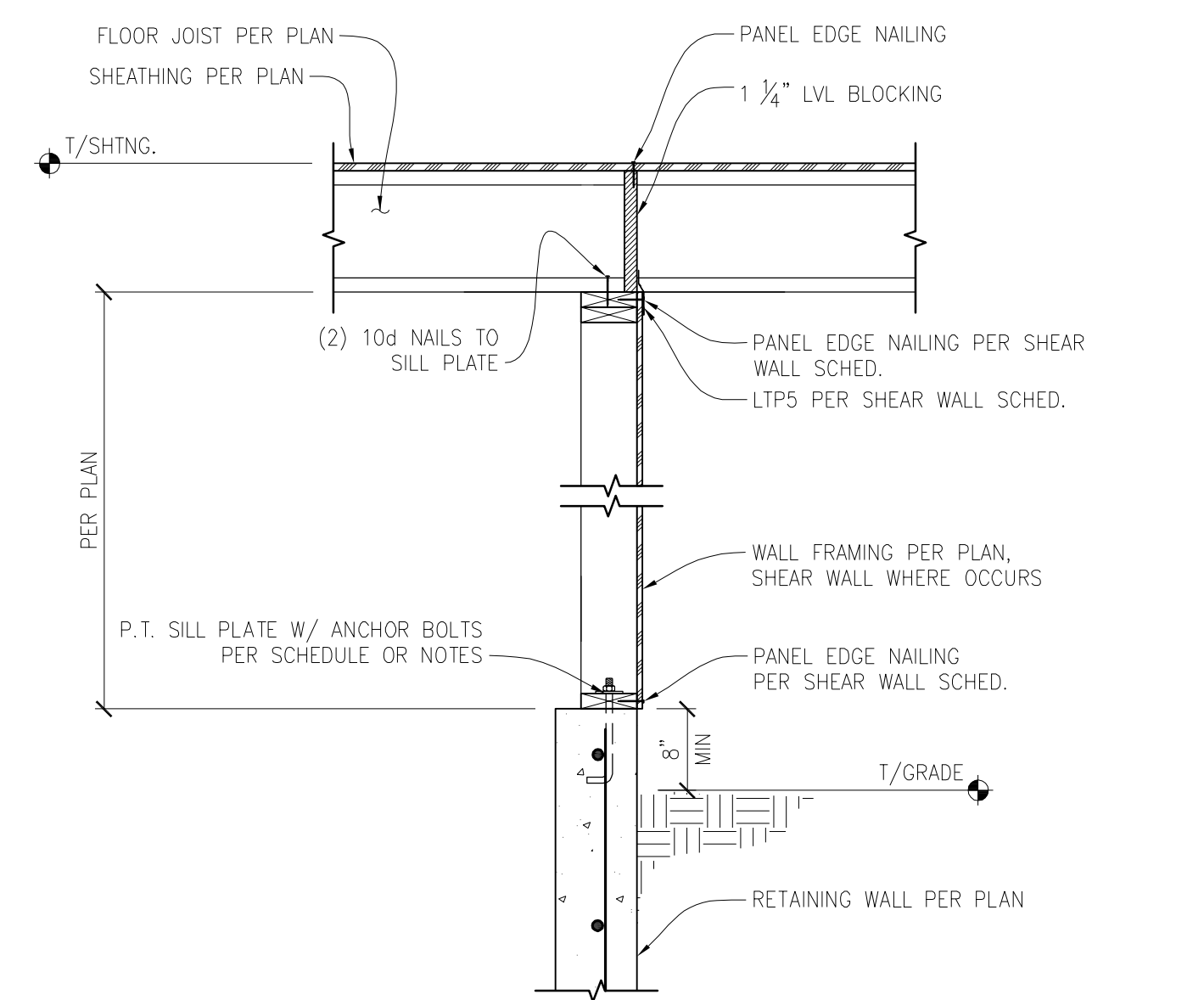
RETAINING WALL/FOOTING SCHEDULE

WALL				FOOTING			
HT (MAX)	THK	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT	TOE	HEEL	DEPTH	REINFORCEMENT
4'-0"	8"	#4 @ 12" OC	#4 @ 12" OC	1'-0"	1'-3"	10"	#4 @ 10" OC (3) #4 (2) #4 15"
6'-0"	8"	#4 @ 8" OC	#4 @ 12" OC	2'-0"	1'-6"	10"	#4 @ 10" OC (4) #4 (3) #4 22"
8'-0"	8"	#5 @ 12" OC	#4 @ 12" OC	2'-0"	2'-3"	12"	#5 @ 12" OC (5) #5 (3) #5 30"

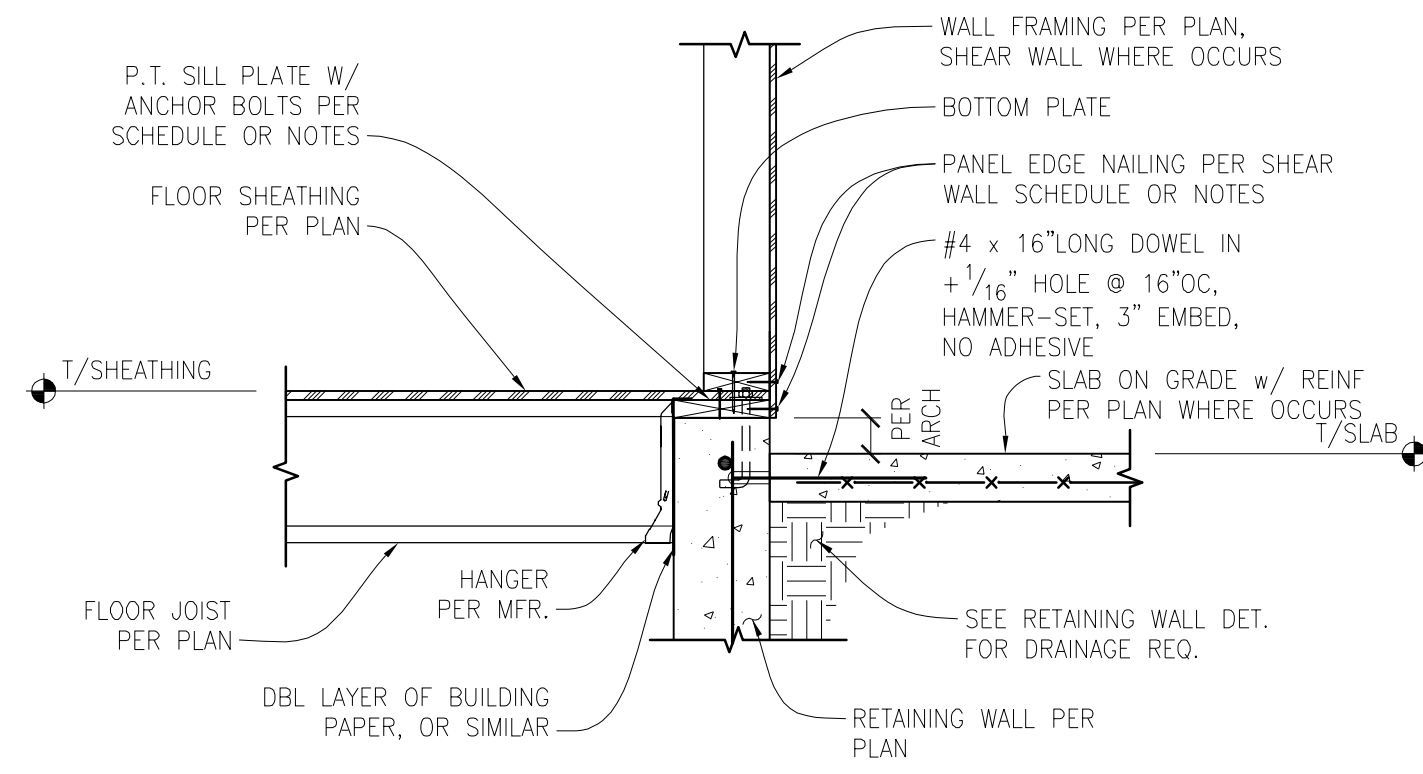
TALL CRAWLL SPACE RETAINING WALL SCHEDULE
 SCALE: N.T.S.



EXTERIOR FOOTING/POST CONNECTION
 SCALE: 3/4" = 1'-0"

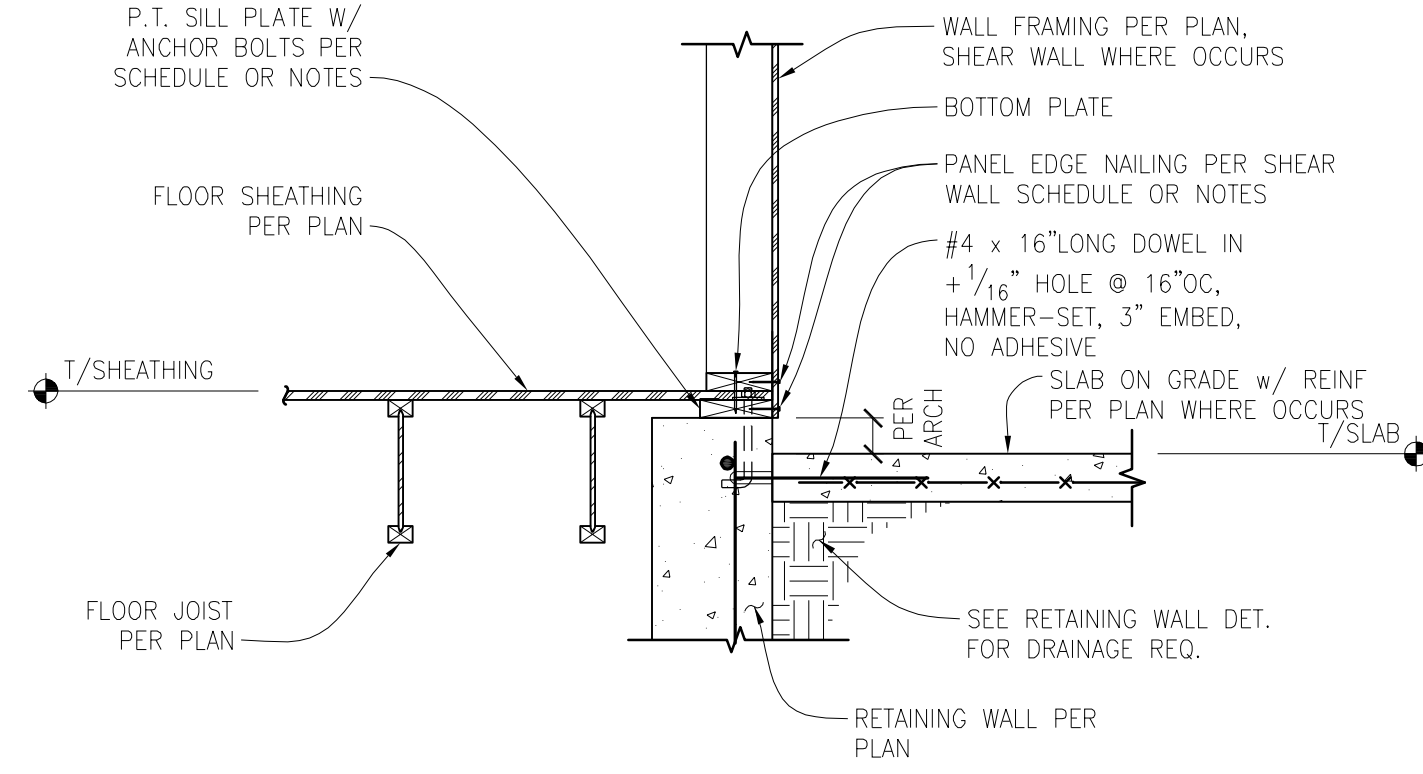


MAIN FLOOR WALL TO PONY WALL CON. FLOOR JOIST PERPENDICULAR
 SCALE: 3/4" = 1'-0"



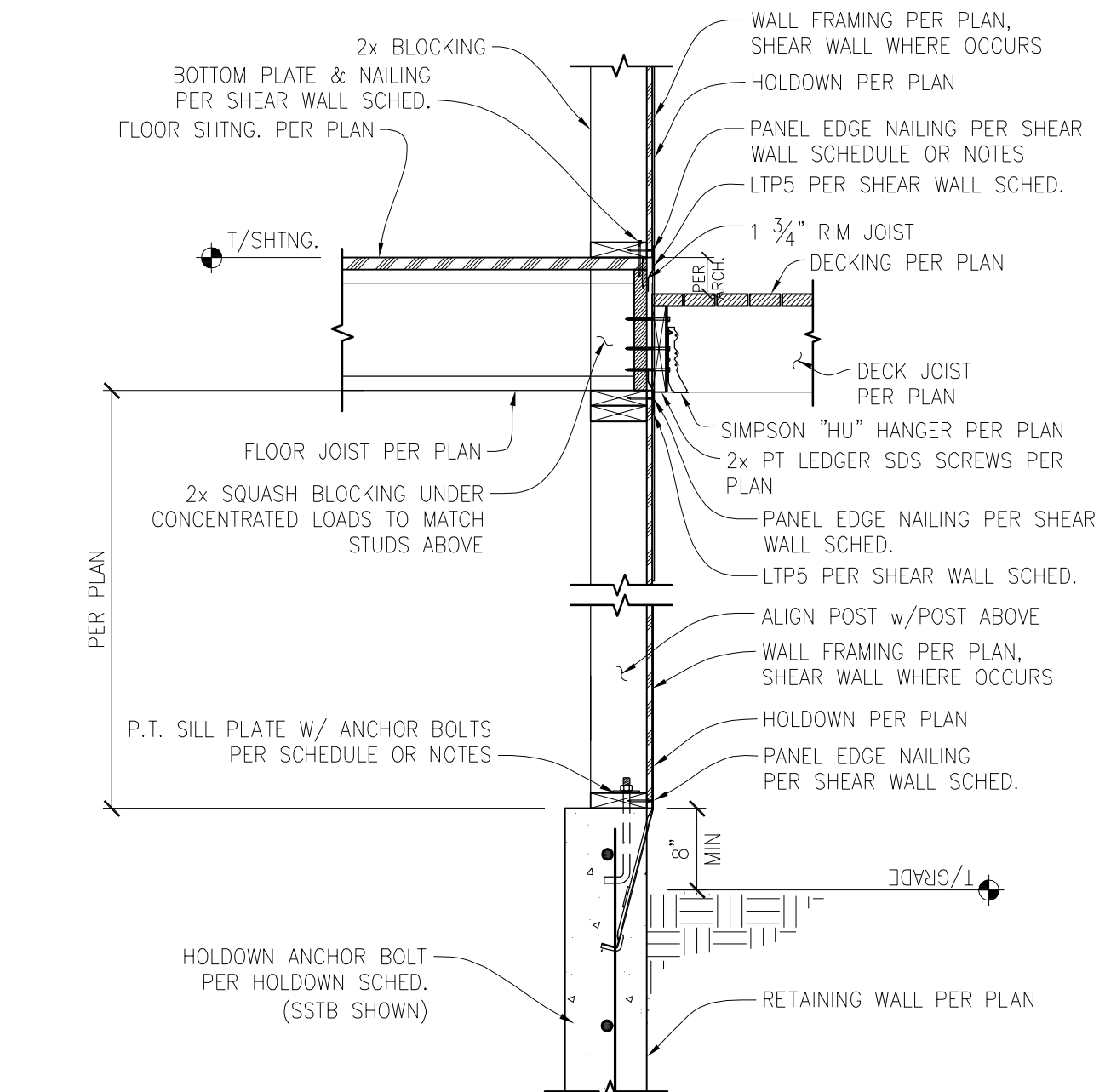
EXTERIOR SHEAR WALL WITH JOISTS PERPENDICULAR TO RETAINING WALL

SCALE: 3/4" = 1'-0"



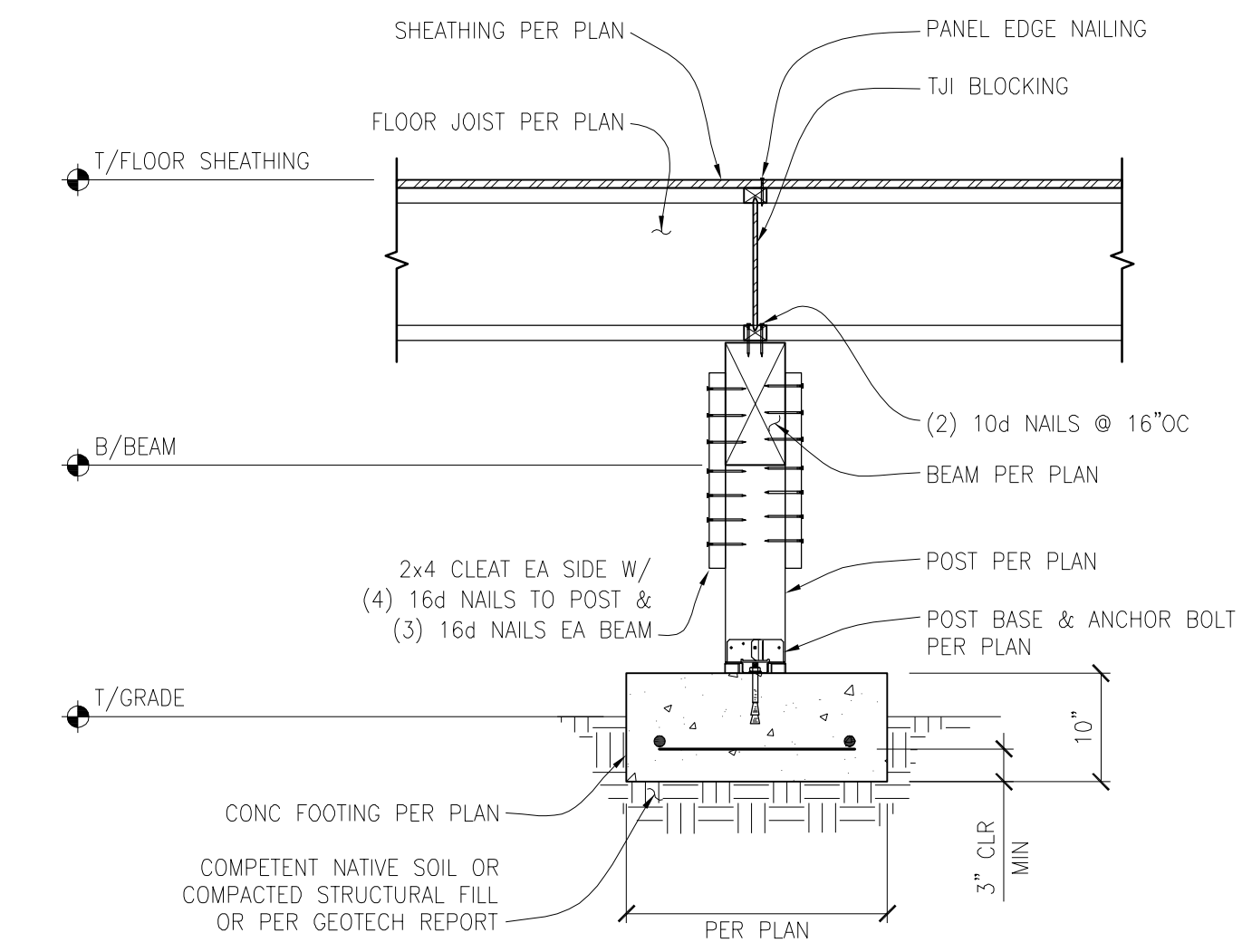
EXTERIOR SHEAR WALL WITH JOISTS PARALLEL TO RETAINING WALL

SCALE: 3/4" = 1'-0"



MAIN FLOOR WALL TO PONY WALL / LEDGER CON. (FLOOR JOIST PERPENDICULAR)

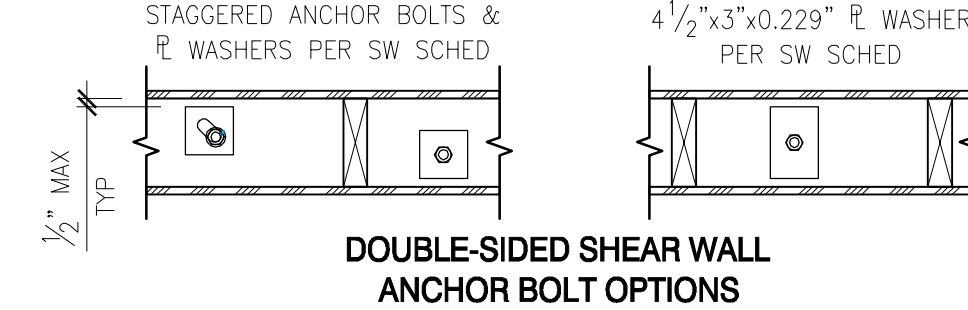
SCALE: 3/4" = 1'-0"



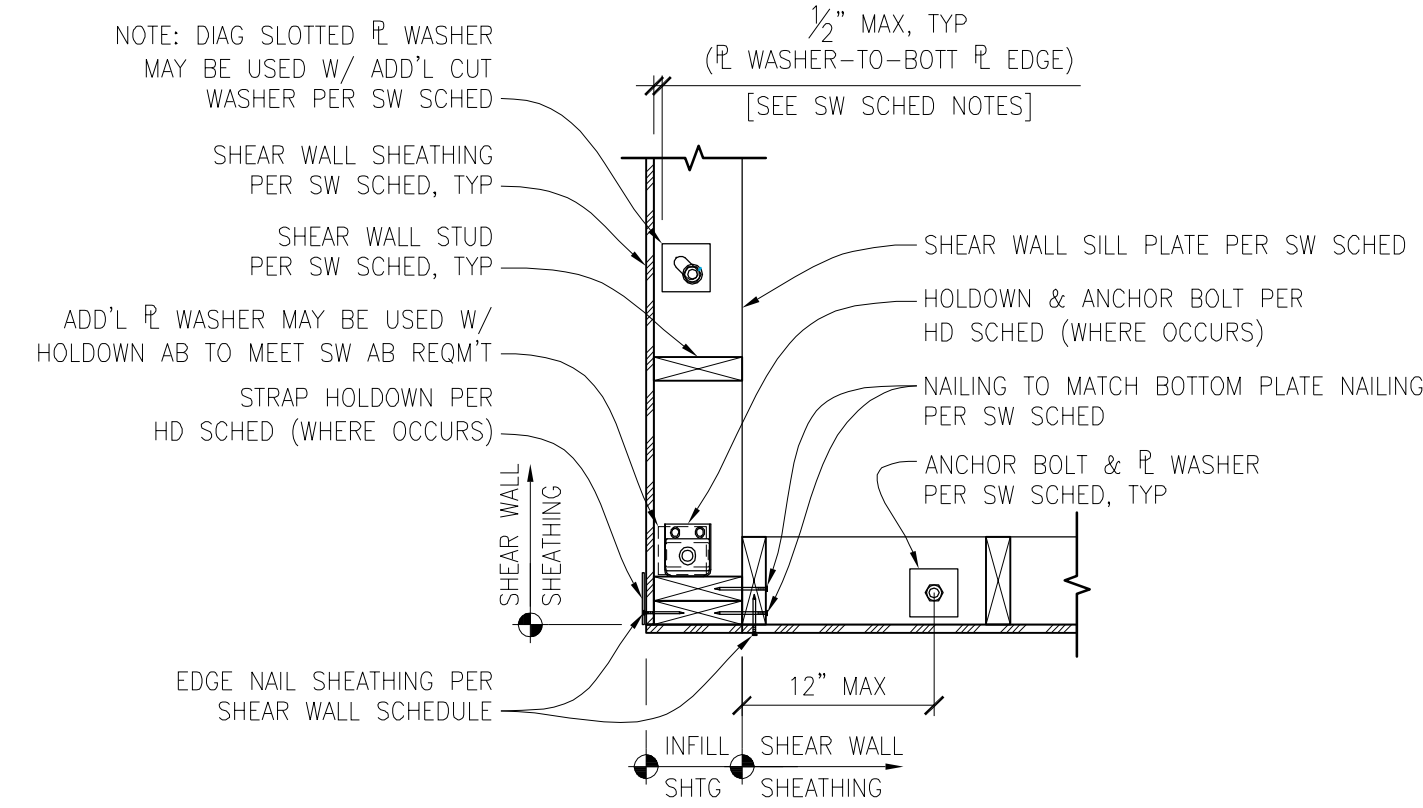
POST AND BEAM AT CRAWLSPACE

SCALE: 3/4" = 1'-0"

SIMPSON STRONG-TIE SLOTTED PLATE WASHERS W/ 3/8\"/>

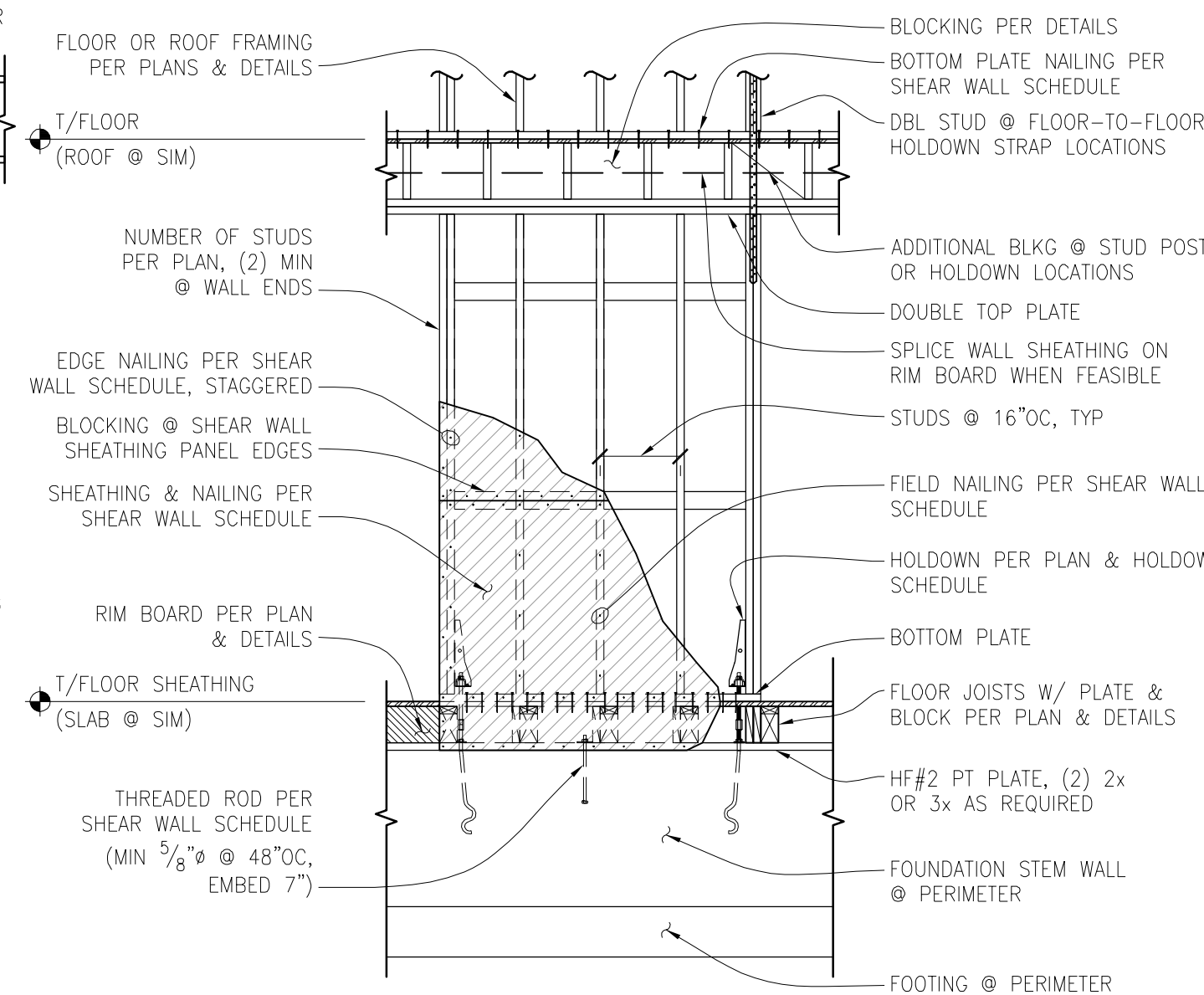


DOUBLE-SIDED SHEAR WALL ANCHOR BOLT OPTIONS



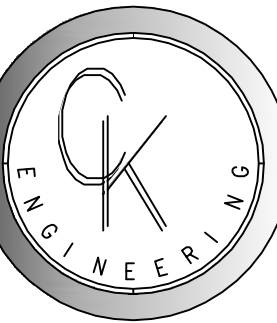
TYPICAL PLAN VIEW - SHEAR WALL HOLDOWNS & ANCHOR BOLTS

SCALE: 1" = 1'-0"



TYPICAL SHEAR WALL ELEVATION

SCALE: N.T.S.



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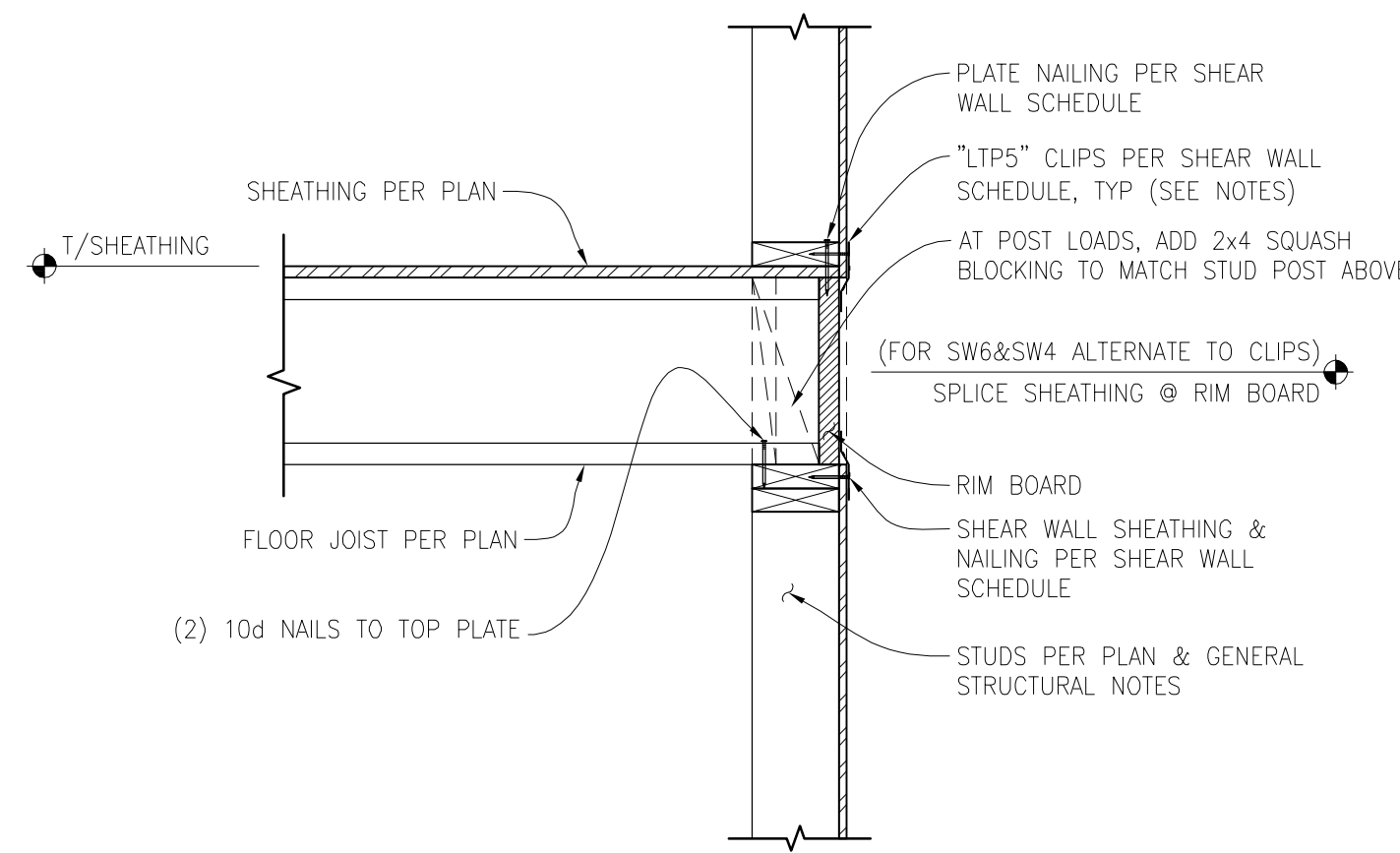
Drawn By: PK
Checked By: SC
Date: 06-10-2022

CK JOB NO.
22-028

STRUCTURAL
DETAILS

S-2.1

NOTES:
FOR SW-6 TO SW-4, TO ELIMINATE SHEAR WALL CLIPS @ R'S, LOCATE SHEATHING SPLICES AT MID-HT OF RIM BOARD & NAIL W/ (2) ROWS OF PANEL EDGE NAILING PER SHEAR WALL SCHEDULE.

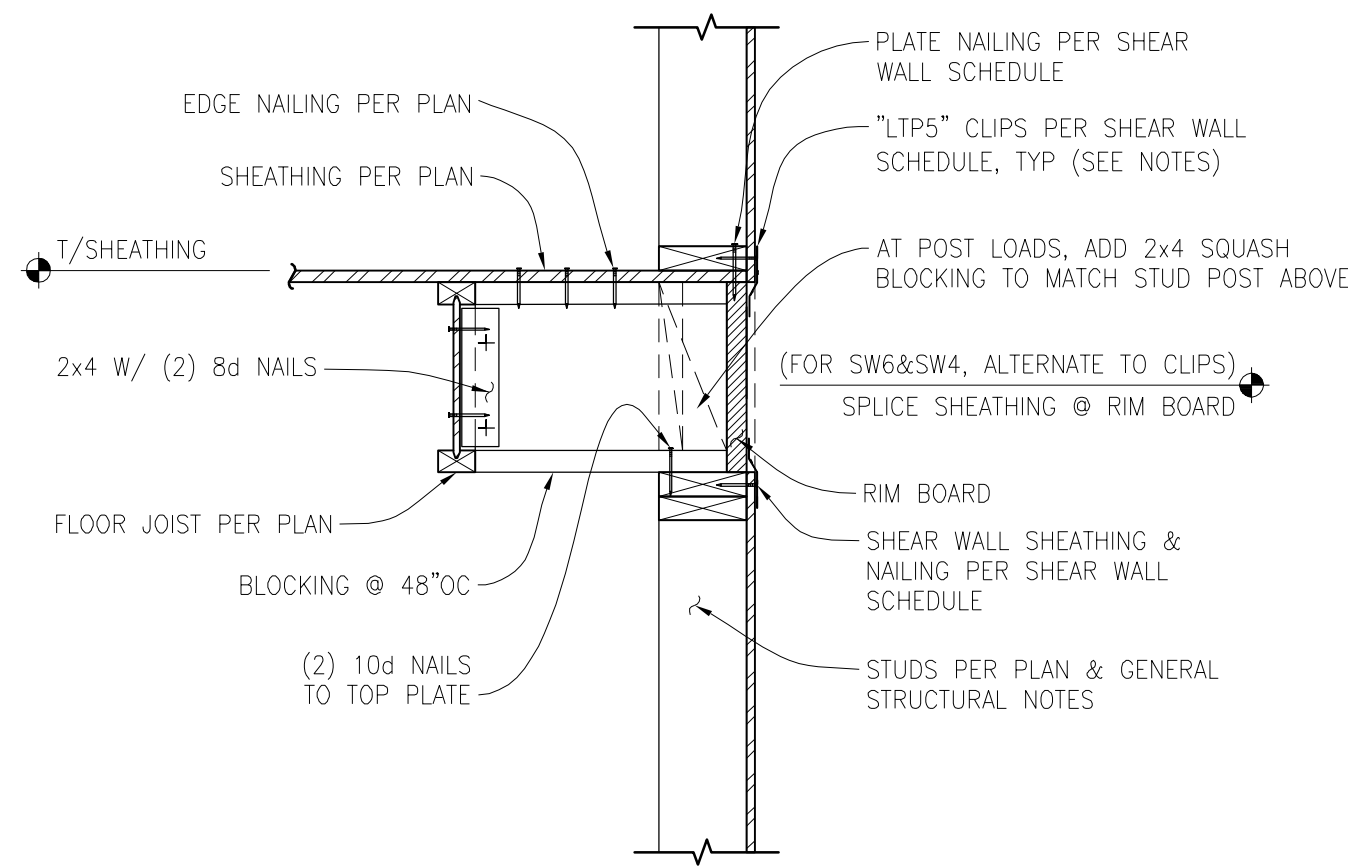


EXTERIOR WALL PERPENDICULAR TO JOISTS

SCALE: 1" = 1'-0"

1

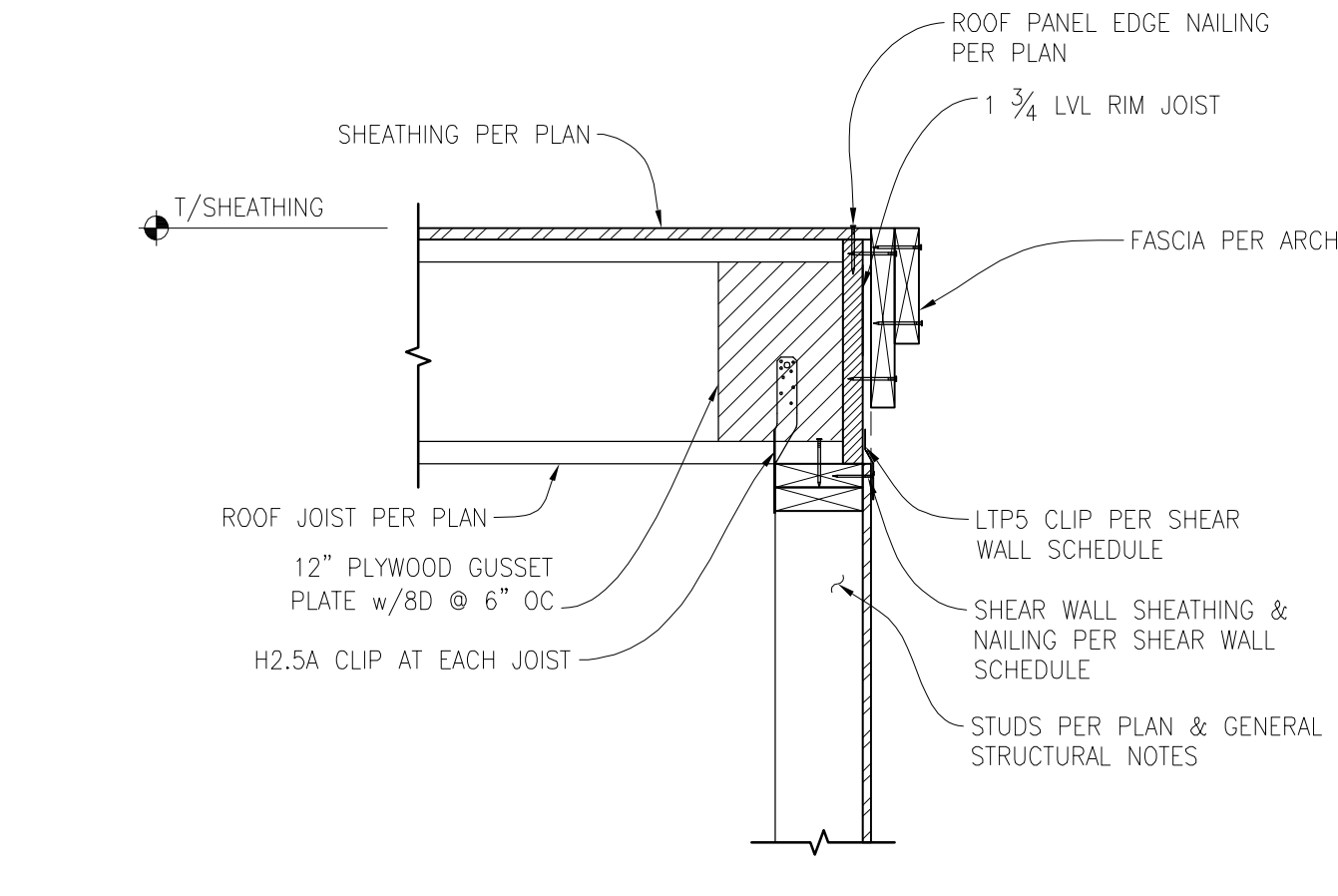
NOTES:
FOR SW-6 TO SW-4, TO ELIMINATE SHEAR WALL CLIPS @ R'S, LOCATE SHEATHING SPLICES AT MID-HT OF RIM BOARD & NAIL W/ (2) ROWS OF PANEL EDGE NAILING PER SHEAR WALL SCHEDULE.



EXTERIOR WALL PARALLEL TO JOISTS

SCALE: 1" = 1'-0"

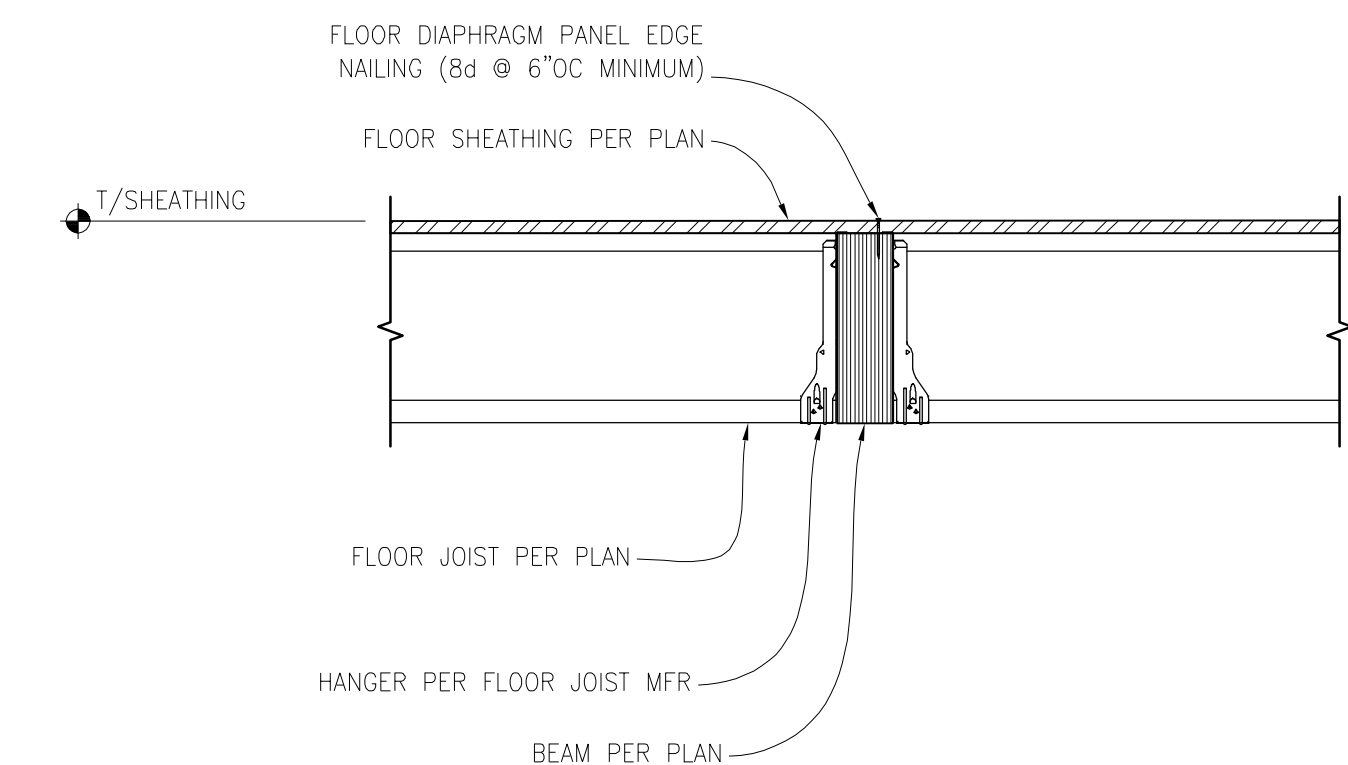
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DECK JOIST PERPENDICULAR TO BEARING/SHEAR WALL

SCALE: 1" = 1'-0"

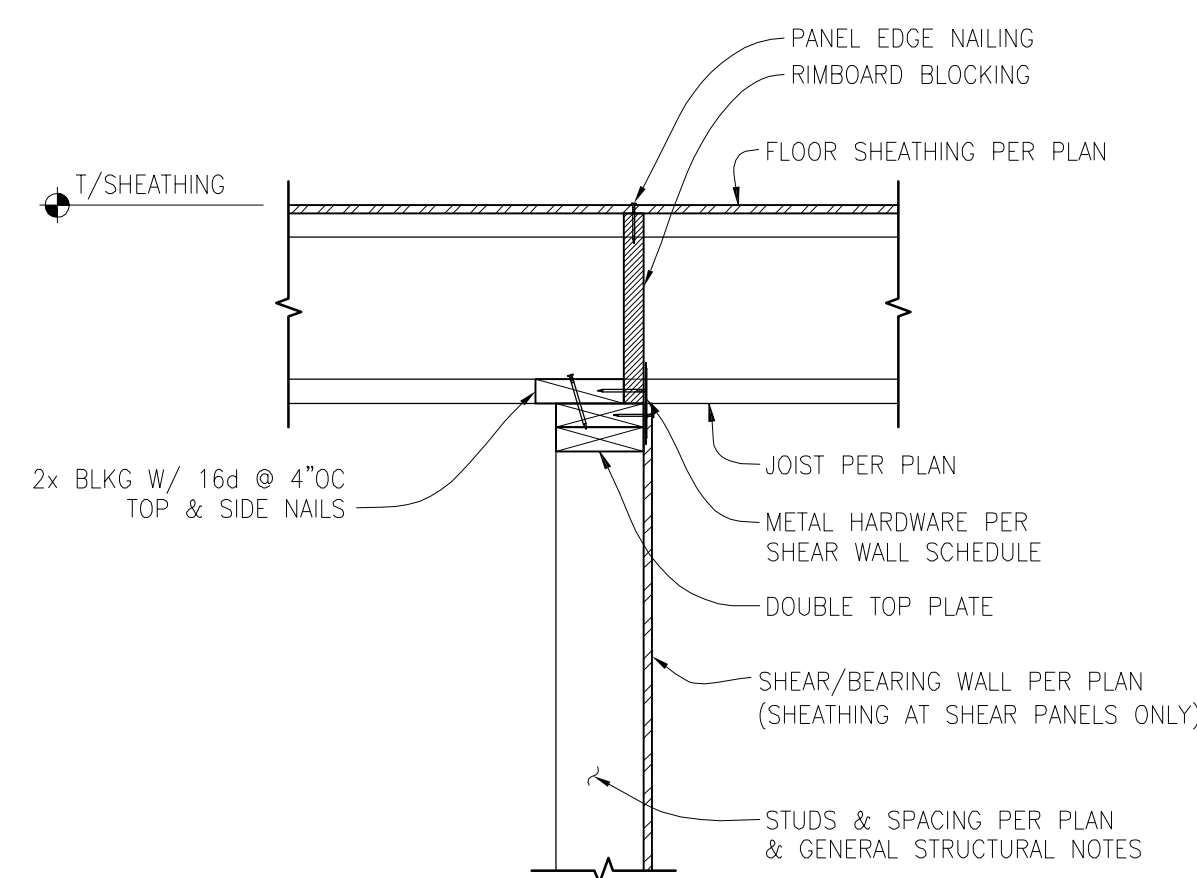
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FLOOR JOIST/FLUSH BEAM CONNECTION

SCALE: 1" = 1'-0"

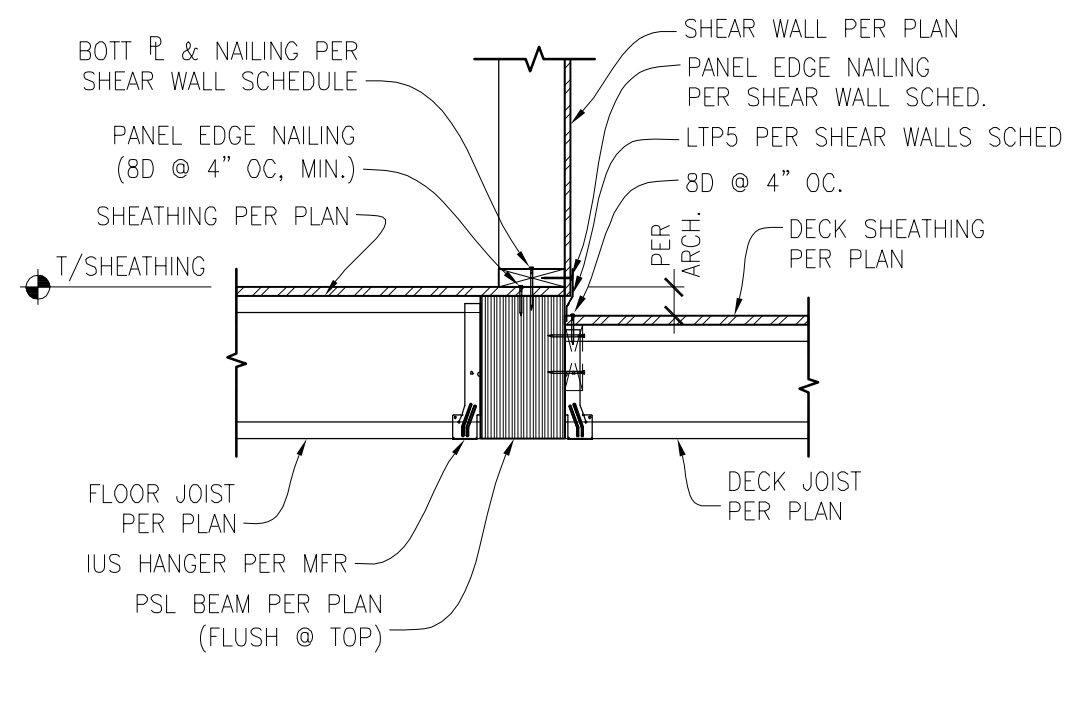
9



INTERIOR SHEAR/BEARING WALL CON.

SCALE: 1" = 1'-0"

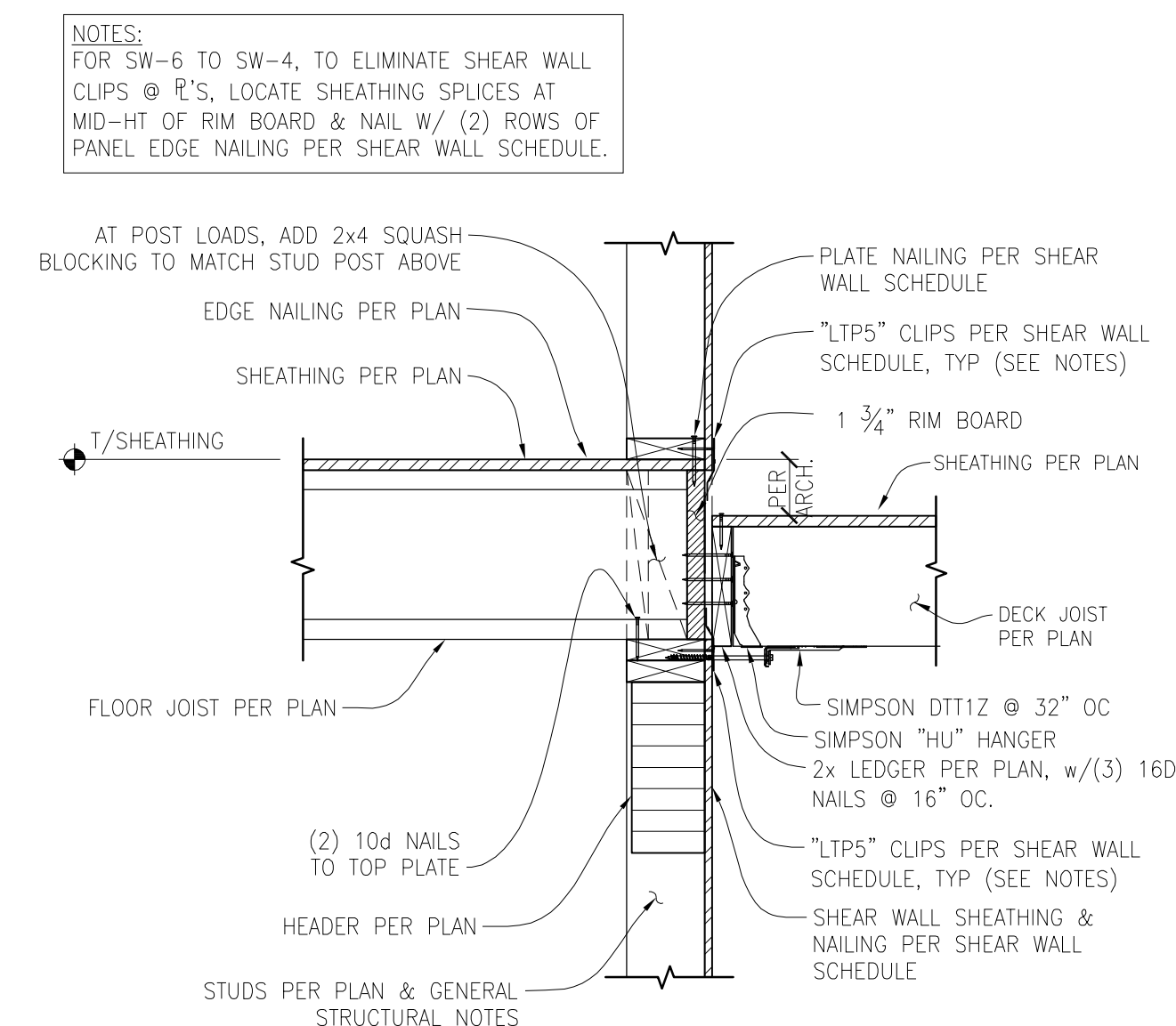
5



UPPER FLOOR SHEAR WALL TO UPPER FLOOR BEAM CONNECTION

SCALE: 3/4" = 1'-0"

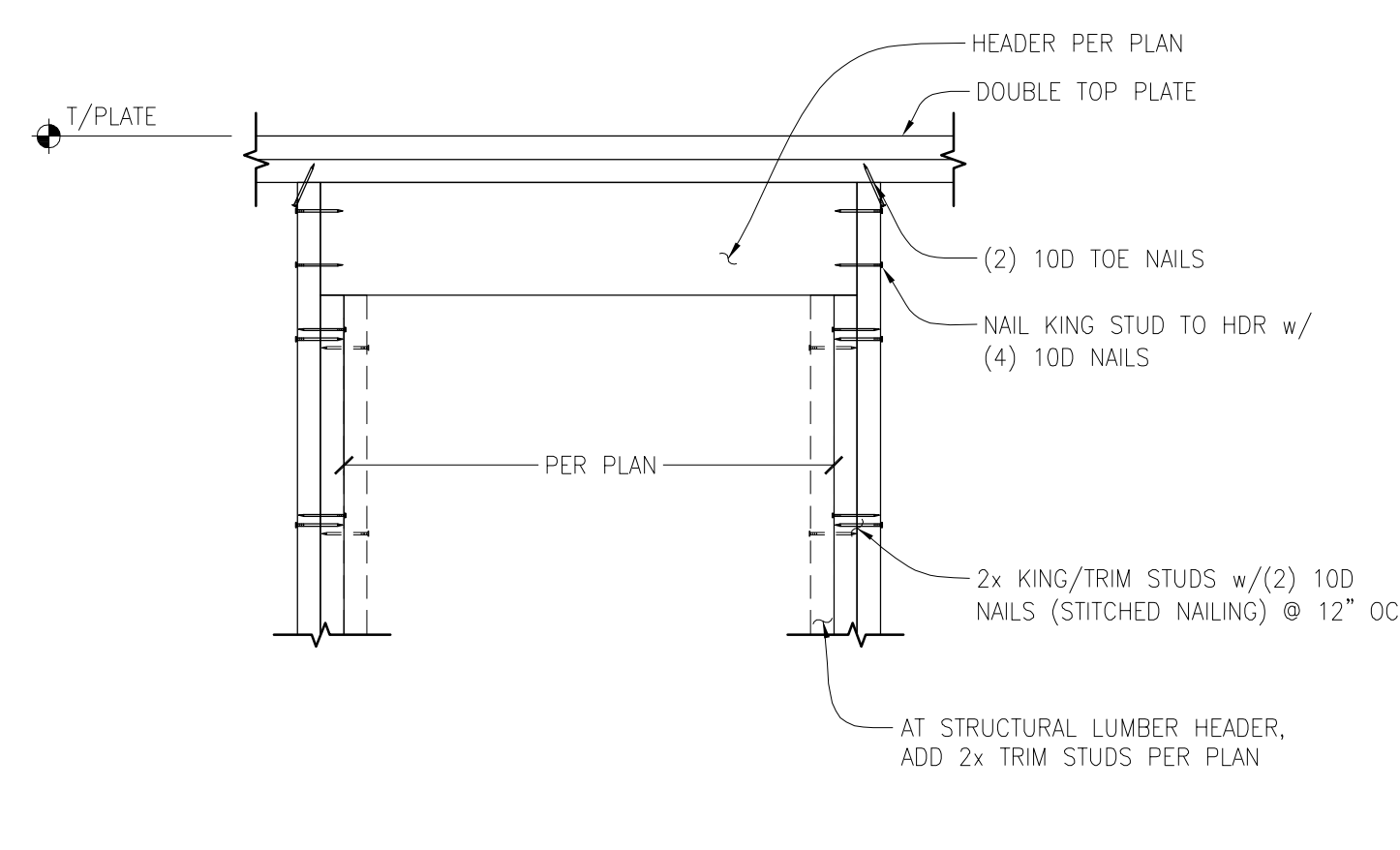
6



LEDGER TO RIM JOIST CONNECTION

SCALE: 1" = 1'-0"

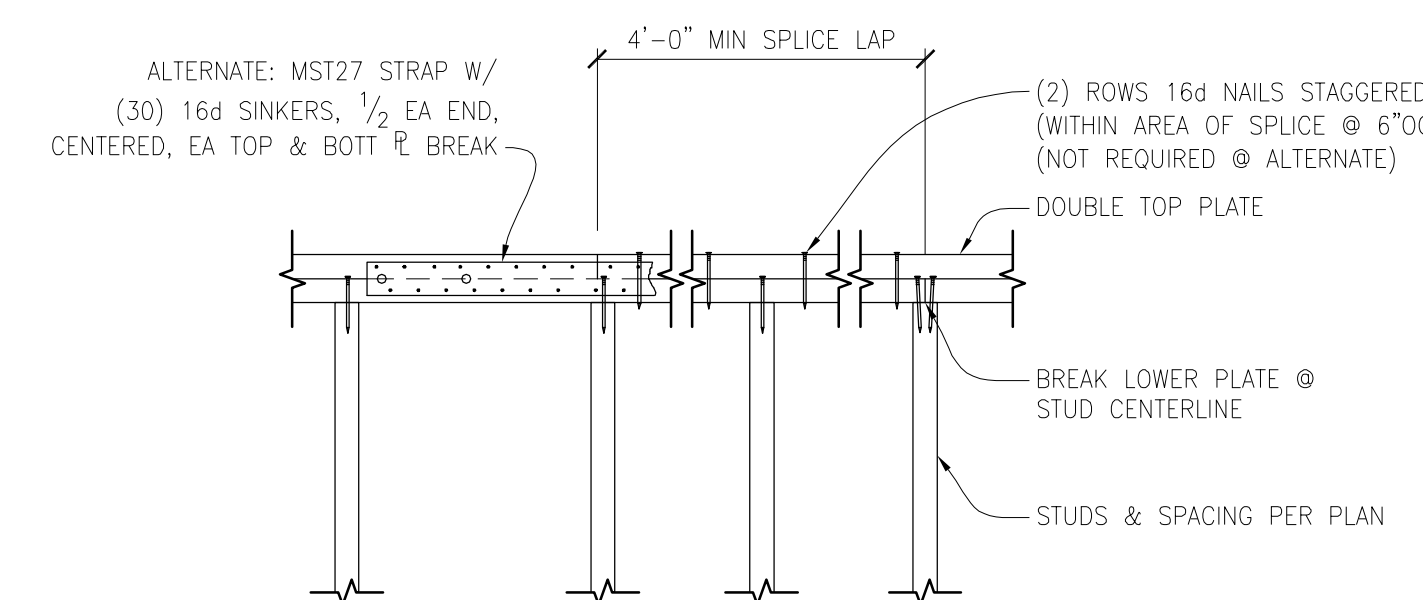
7



TYPICAL HEADER CONNECTION

SCALE: N.T.S.

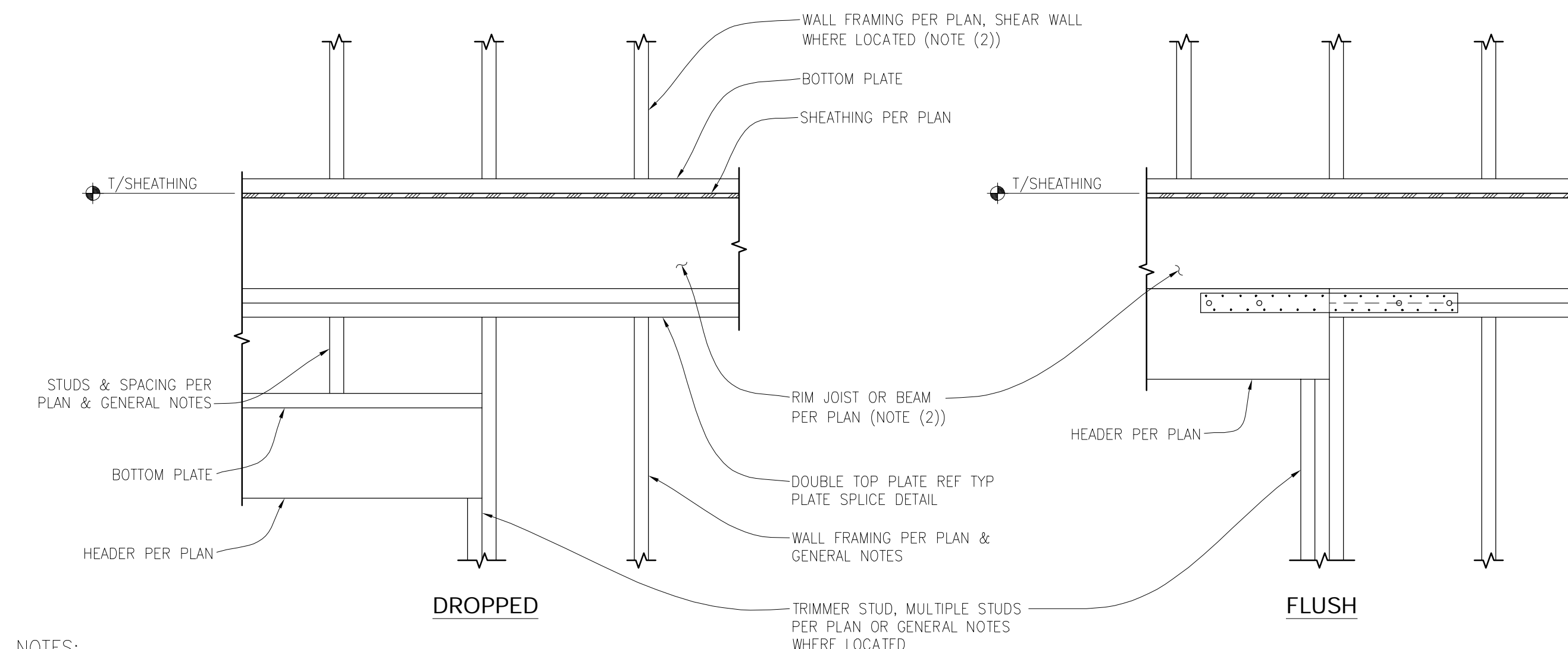
8



TYPICAL PLATE SPLICE DETAIL

SCALE: N.T.S.

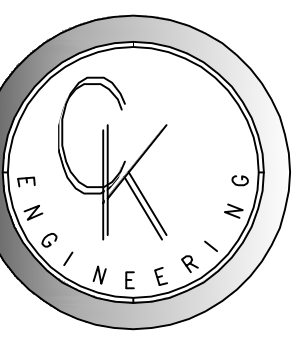
9



TYPICAL HEADER FRAMING

SCALE: 1" = 1'-0"

11



CK ENGINEERING LLC
PROFESSIONAL STRUCTURAL ENGINEERING SERVICES
19229 38th Pl NE
Lake Forest Park, WA 98155
Phone: (206) 417-0670



6/10/2022

LIU RESIDENCE
3705 77TH PL SE
MERCER ISLAND, WA 98040

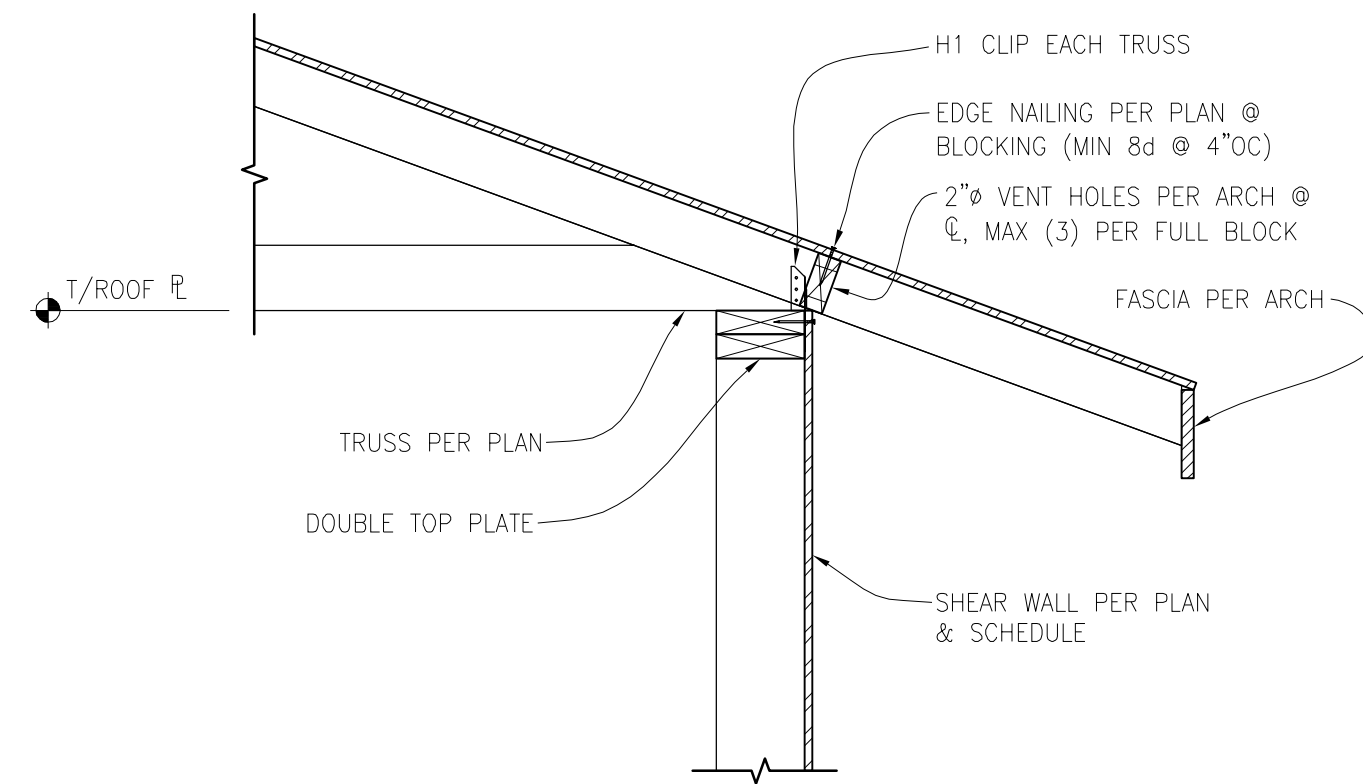
REVISION #	DATE	DESCRIPTION

Drawn By: PK
Checked By: SC
Date: 06-10-2022

CK JOB NO.
22-028

STRUCTURAL
DETAILS

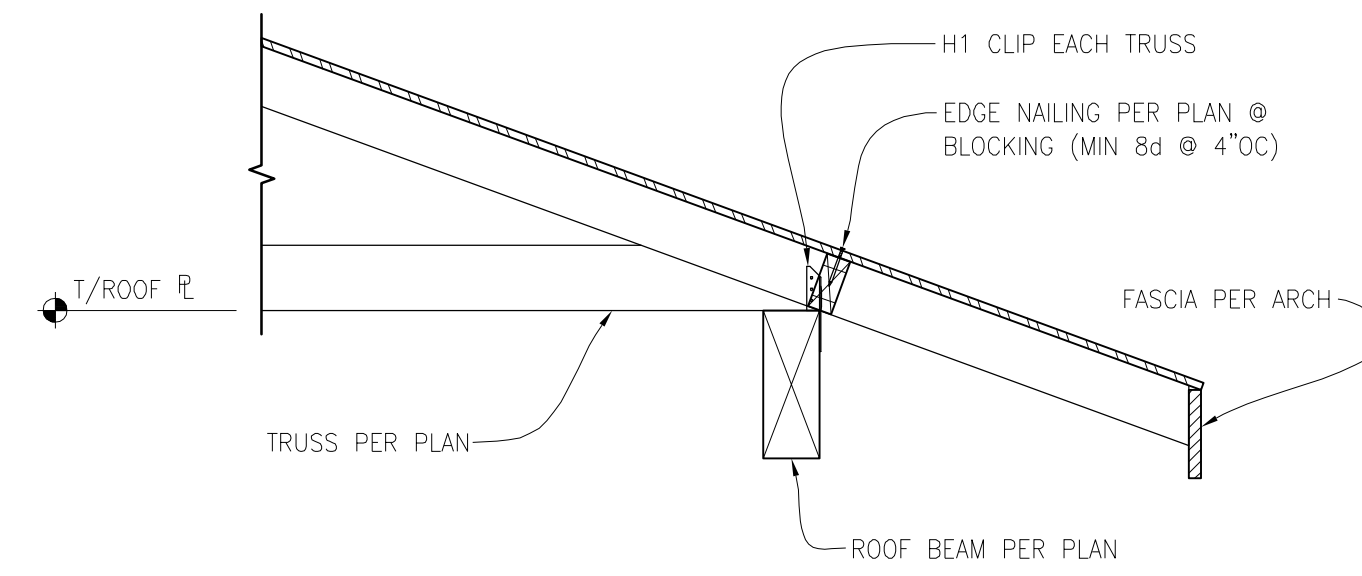
S-3.0



EXTERIOR SHEAR WALL PERPENDICULAR TO ROOF TRUSS

SCALE: 1" = 1'-0"

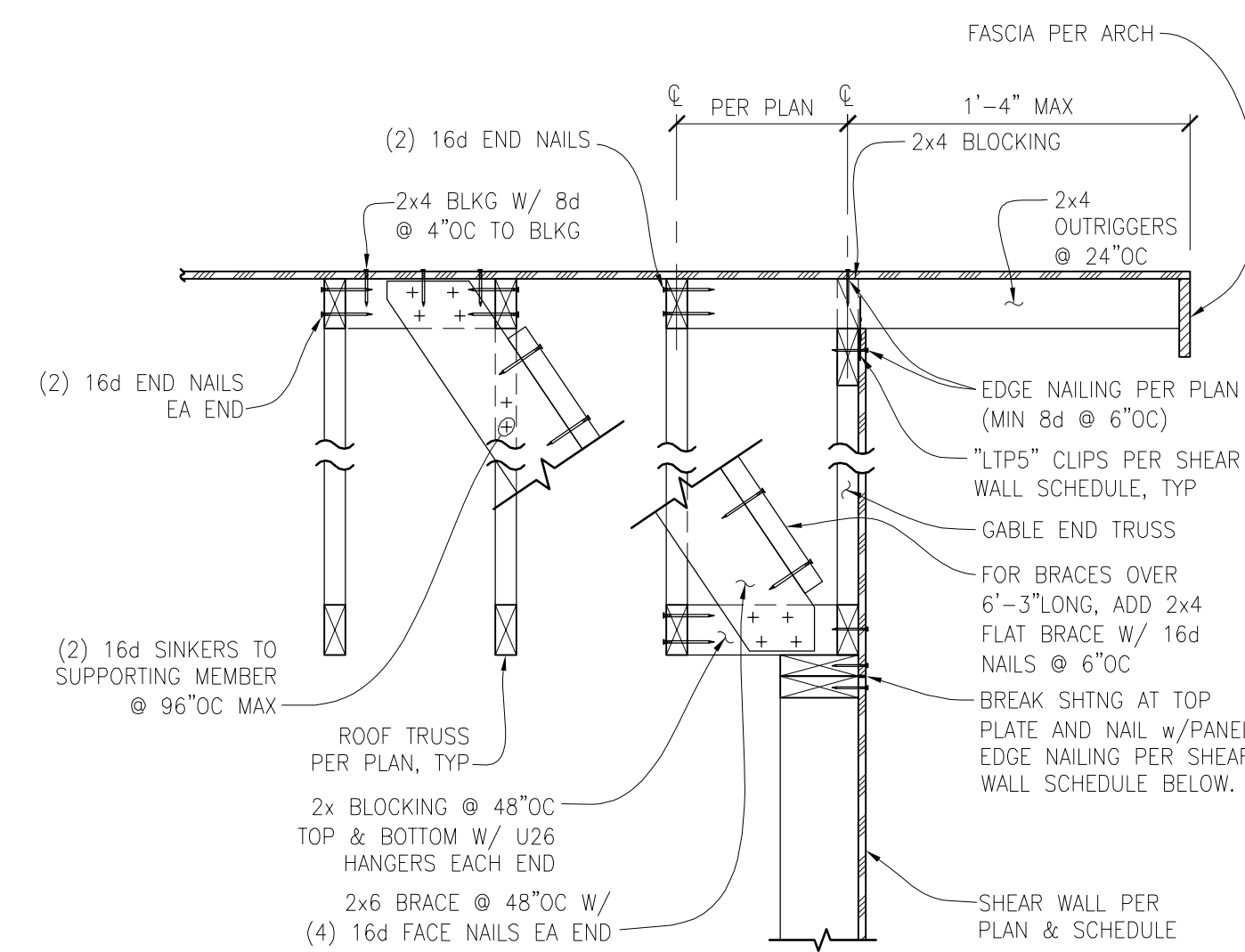
1



EXTERIOR ROOF TRUSS BEAM CONNECTION

SCALE: 1" = 1'-0"

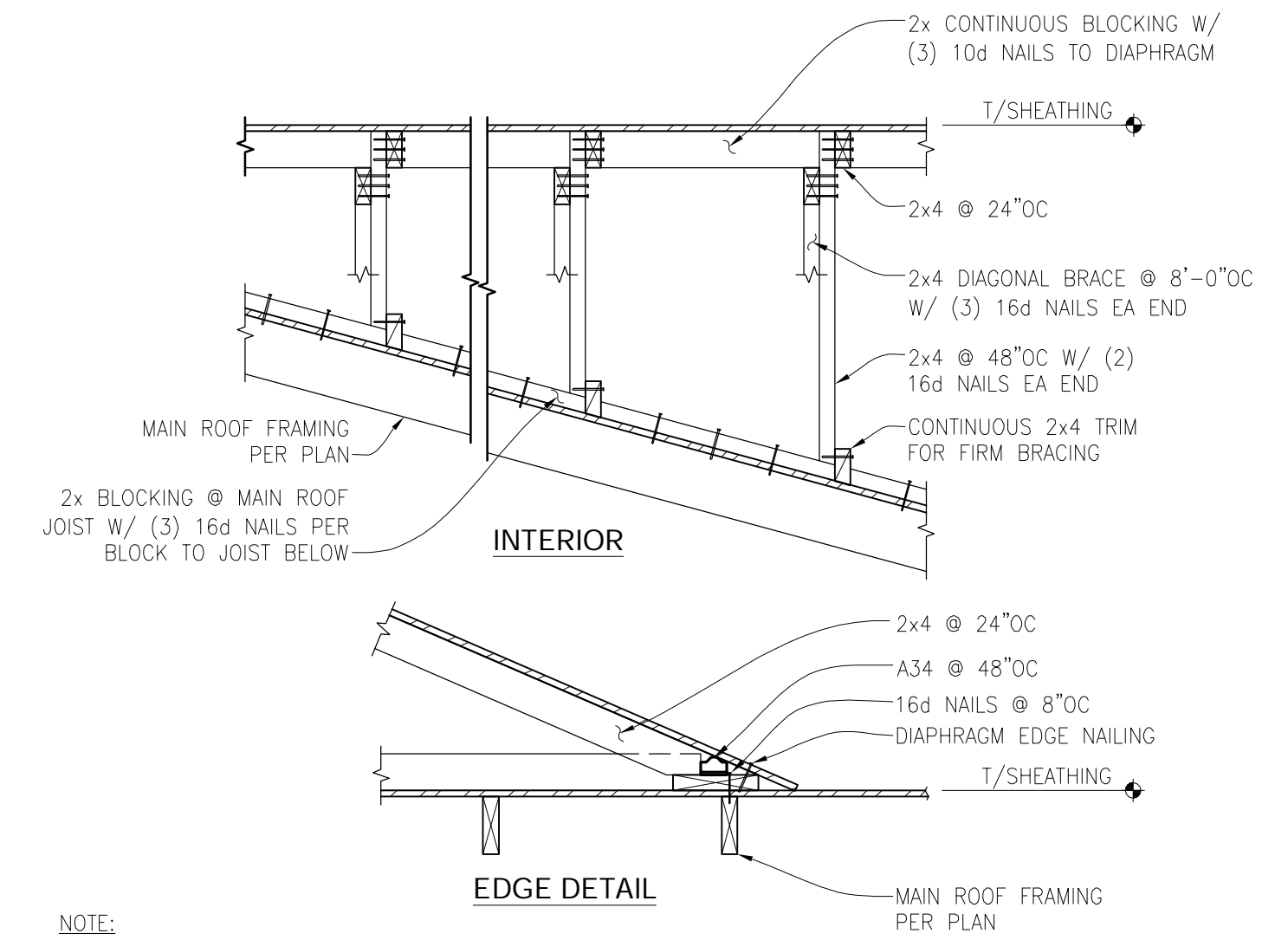
2



EXTERIOR SHEAR WALL PARALLEL TO ROOF TRUSS

SCALE: N.T.S.

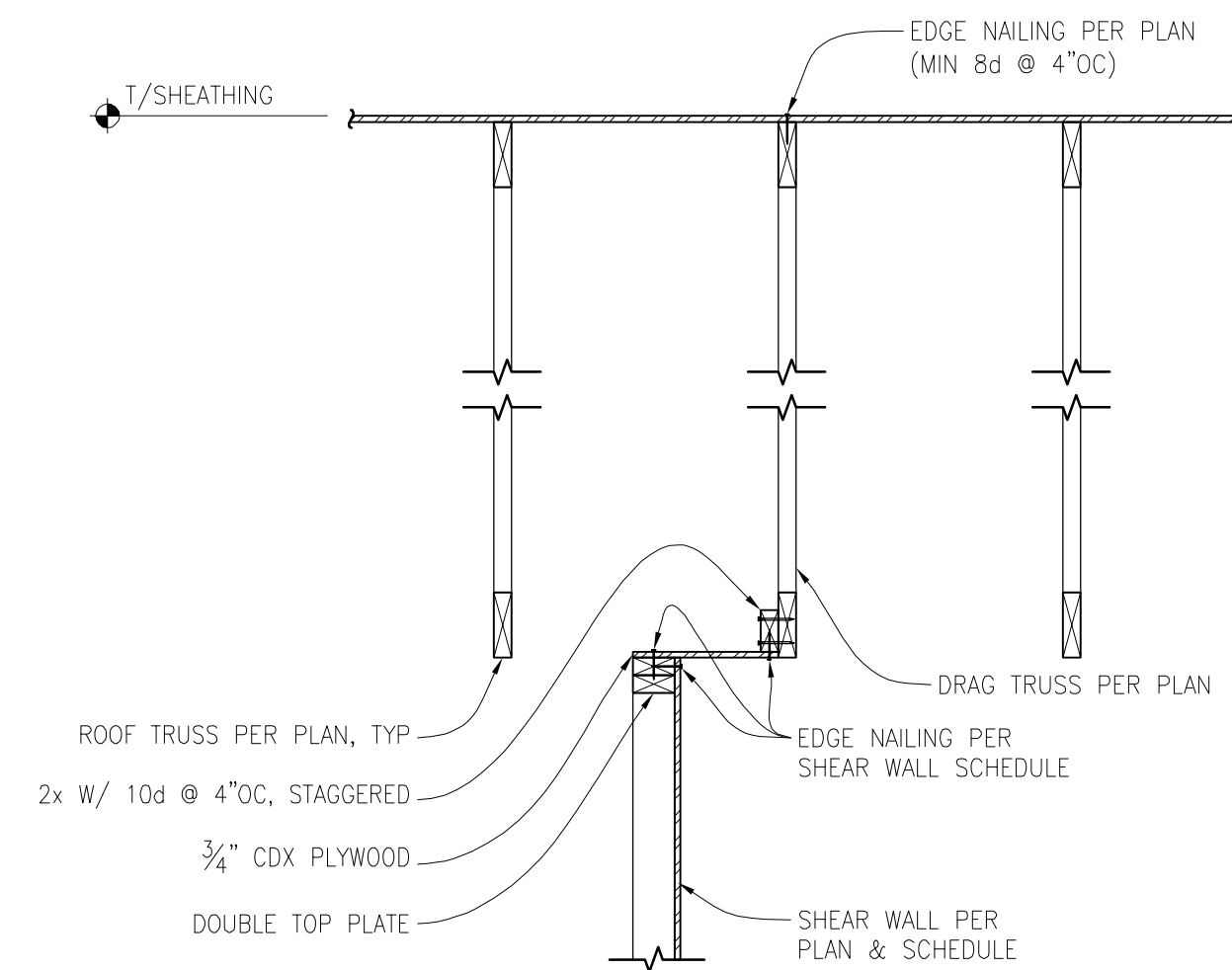
3



TYPICAL ROOF OVERFRAMING DETAIL

SCALE: N.T.S.

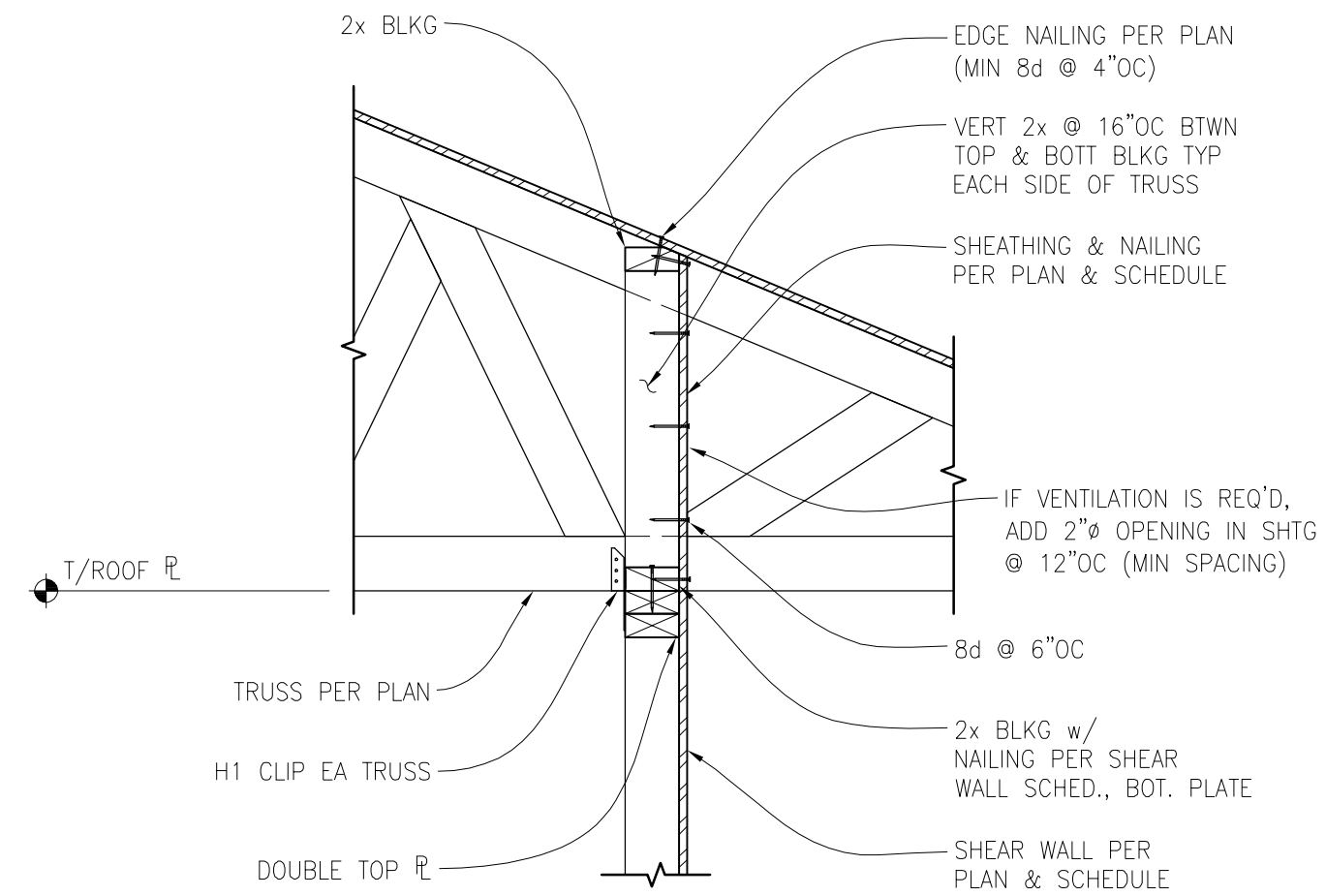
4



INTERIOR SHEAR WALL PARALLEL TO ROOF TRUSS CONNECTION

SCALE: 3/4" = 1'-0"

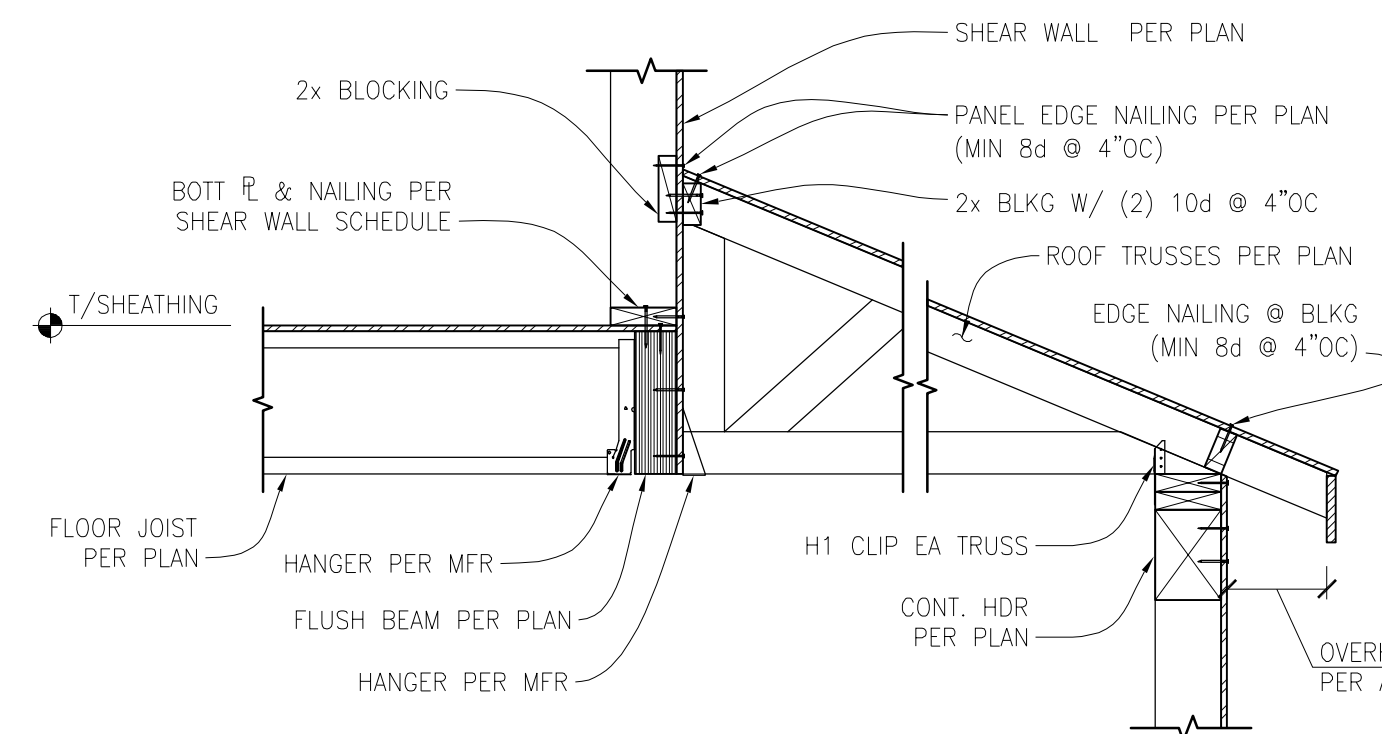
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INTERIOR SHEAR WALL PERPENDICULAR TO ROOF TRUSS

SCALE: 1" = 1'-0"

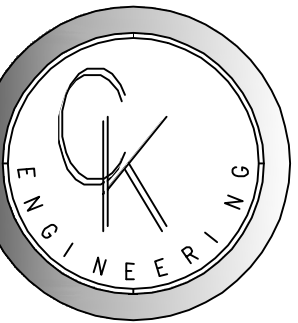
6



UPPER FLOOR SHEAR WALL TO MAIN FLOOR SHEAR WALL CONNECTION

SCALE: 3/4" = 1'-0"

7



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19229 38th Pl. NE
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6/10/2022

LIU RESIDENCE
3705 77TH PL SE
MERCER ISLAND, WA 98040

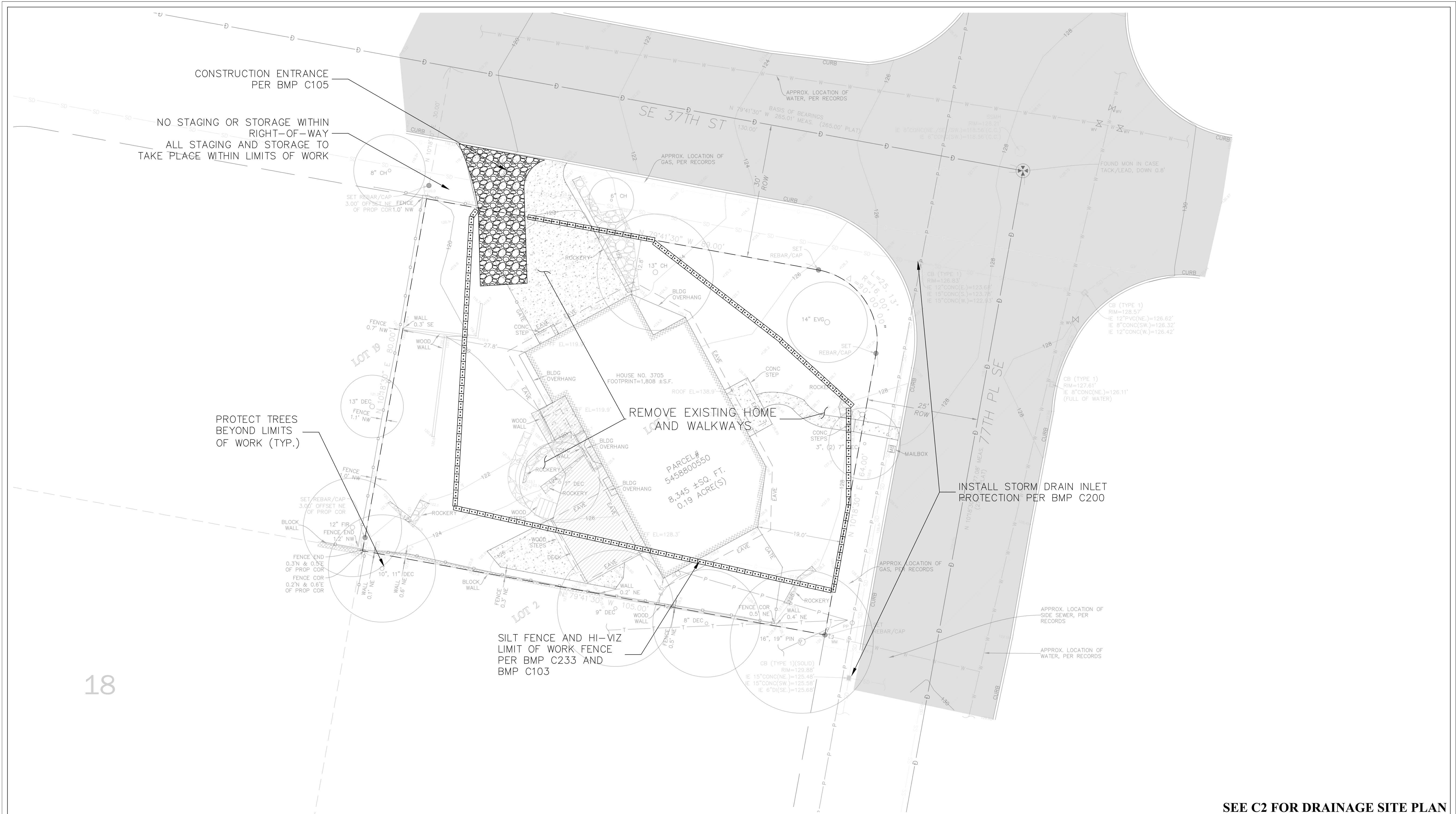
REVISION #	DATE	DESCRIPTION

Drawn By: PK
Checked By: SC
Date: 06-10-2022

CK JOB NO.
22-028

STRUCTURAL
DETAILS

S-4.0



CONSTRUCTION ENTRANCE
PER BMP C105

NO STAGING OR STORAGE WITHIN
RIGHT-OF-WAY
ALL STAGING AND STORAGE TO
TAKE PLACE WITHIN LIMITS OF WORK

PROTECT TREES
BEYOND LIMITS
OF WORK (TYP.)

REMOVE EXISTING HOME
AND WALKWAYS

INSTALL STORM DRAIN INLET
PROTECTION PER BMP C200

SILT FENCE AND HI-VIZ
LIMIT OF WORK FENCE
PER BMP C233 AND
BMP C103

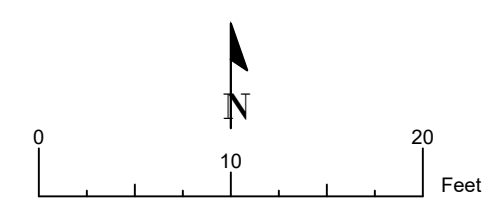
PARCEL#
5458800550
8,345 ± SQ. FT.
0.19 ACRE(S)

SE 37TH ST

77TH PI SE

18

SEE C2 FOR DRAINAGE SITE PLAN



77th PI SE SFR
 Site Address: 3705 77th PI SE
 Jurisdiction: Mercer Island
 Parcel No.: 545880-0550
 Applicant: Charlie Chen
 Permit No.:
 Interlaken Project No.: SEA-22-074

Interlaken Engineering and Design, PLLC
 Seattle, WA | (206) 470-9572
 www.interlakenengineering.com

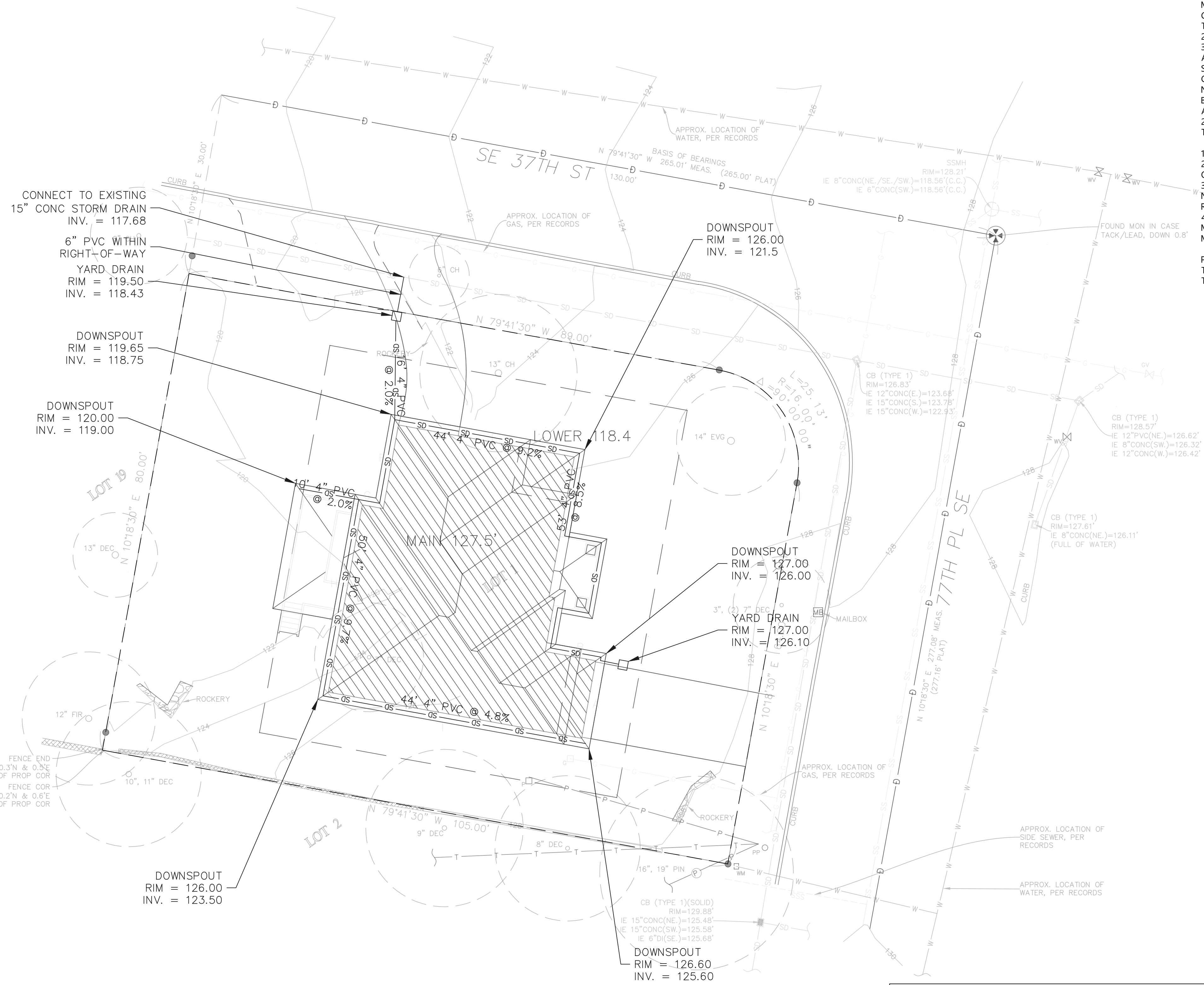
Revisions:

C1
 TESC/ Demo/ CSWPPP
 Scale: 1" = 10'

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP T5.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION ON THE PROJECT.

- ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
 2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
 3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
 - A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
 - B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A) ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
 - THE RESULTING SOIL SHOULD BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.
 - IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
 1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
 3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
 4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

PRE-APPROVED AMENDMENT METHOD:
 TURF: 6247 SF x 5.4 CY / 1,000 SF = 33.73 CY
 TOTAL QUANTITY = 33.73 CY

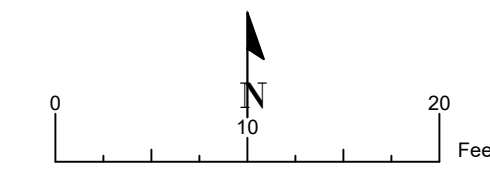


Hard Surface Data	
Lot Size	8345 sf
New Roof	1939 sf
New Driveway/ Walkway	496 sf
New Patio	222 sf
Total Proposed Hard Surface	2657 sf
Proposed Vegetation	5688 sf

SEE C1 FOR TESC/ DEMO CSWPPP

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING # 199411230981)
 LOT 1, BLOCK 7, MERCERDALE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 59 OF PLATS, PAGES 94, 95 AND 96, IN KING COUNTY, WASHINGTON.



77th PI SE SFR
 Site Address: 3705 77th PI SE
 Jurisdiction: Mercer Island
 Parcel No.: 545880-0550
 Applicant: Charlie Chen
 Permit No.:
 Interlaken Project No.: SEA-22-074

Interlaken Engineering and Design, PLLC
 Seattle, WA | (206) 470-9572
 www.interlakenengineering.com

Revisions:

C2
 Drainage Site Plan
 Scale: 1" = 10'