

GENERAL NOTES

1. APPLICABLE CODES AND REGULATIONS:

BUILDING:	2021 IRC + WA STATE RESIDENTIAL CODE
ELECTRICAL:	2023 WA CITIES ELECTRICAL CODE
ENERGY:	2021 WA STATE ENERGY CODE
MECHANICAL:	2021 IMC
PLUMBING:	2021 UPC
LAND USE:	MERCER ISLAND CITY CODE TITLE 19

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE COMPLIANCE AND CONFORMANCE WITH THE VARIOUS PROVISIONS WITHIN ORDINANCES AND CODES LISTED ABOVE IN ALL OF THE WORK.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.

4. PROJECT DRAWINGS INDICATE GENERAL CONFIGURATION OF CONSTRUCTION. WHERE CONDITIONS REQUIRE SPECIFIC DETAIL INFORMATION NOT INCLUDED WITH THESE DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM INTENT WITH THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.

5. THE ARCHITECT MAKES NO REPRESENTATIONS, WARRANTY, OR GUARANTEE AS TO THE PHYSICAL CHARACTERISTICS OF THE SOILS.

6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS BEFORE COMMENCING WITH WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING OR CONTINUING ANY CONSTRUCTION IN THE AREA OF CONCERN. HOLD INDICATED DIMENSIONS. DO NOT SCALE DRAWINGS.

7. IN THE EVENT OF DISCREPANCIES OR CONTRADICTIONARY INFORMATION IN OR AMONG THE DRAWINGS, NOTES, OR SPECIFICATIONS, IT IS THE OBLIGATION OF THE CONTRACTOR TO NOTIFY THE ARCHITECT OF SAME AND TO OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. ANY WORK DONE BY THE CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK.

8. ALL CONTRACT DOCUMENTS PERTAINING TO THIS PROJECT ARE TO BE CONSIDERED AND INTERPRETED FOR BIDDING AND CONSTRUCTION PURPOSES AS A COMPLETE WHOLE. NO PART OF THE CONTRACT DOCUMENTS SHALL BE DISTRIBUTED, CONSIDERED, OR USED IN ANY WAY INDEPENDENT OF THE COMPLETE SET OF DOCUMENTS.

9. ARCHITECT SHALL HAVE FINAL AUTHORITY WITH REGARD TO INTERPRETATION OF THE INTENT OF THE CONTRACT DOCUMENTS.

10. MECHANICAL SYSTEMS, ELECTRICAL SYSTEMS, PLUMBING SYSTEMS, AND FIRE PROTECTION SYSTEMS TO BE BIDDER DESIGNED. SUB-CONTRACTORS DESIGNATED TO ACCOMPLISH THE ABOVE WILL BE RESPONSIBLE FOR THE PREPARATION OF DRAWINGS AND APPLICATIONS FOR APPROPRIATE REQUIRED PERMITS. ALL MECHANICAL, ELECTRICAL, AND PLUMBING WORK TO COMPLY WITH APPLICABLE CODES.

11. APPLICATION AND INSTALLATION OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH CURRENT WASHINGTON STATE THERMAL INSULATION STANDARDS.

12. NON-RECIRCULATING HOT AND COLD WATER PIPES LOCATED IN UNCONDITIONED SPACES SHALL BE INSULATED TO R-3 MINIMUM (WSEC SEC 503.11).

13. SAFETY GLAZING SHALL BE INSTALLED IN AREAS SUBJECT TO HUMAN IMPACT ACCORDING TO INTERNATIONAL RESIDENTIAL CODE.

14. ALL EXTERIOR WALL GLAZING SHALL BE DOUBLE-GLAZED, UNLESS NOTED OTHERWISE, AND COMPLY WITH THE WASHINGTON STATE ENERGY CODE REQUIREMENTS.

15. FIREBLOCKING AND DRAFTSTOPPING SHALL BE INSTALLED IN COMBUSTIBLE LOCATIONS IN ACCORDANCE WITH APPLICABLE CODES.

16. GUARDRAILS SHALL BE PLACED AT ALL UNENCLOSED FLOOR AND ROOF OPENINGS, LANDING RAMPS, BALCONIES, DECKS OR PORCHES WHICH ARE MORE THAN 30" ABOVE FINISHED GRADE OR FLOOR BELOW. TOP OF GUARDRAILS SHALL NOT BE LESS THAN 36" IN HEIGHT. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERNING WHICH WILL NOT ALLOW THE PASSAGE OF A 4" SPHERE.

17. ONE HANDRAIL SHALL BE PROVIDED AT EVERY STAIRWAY HAVING FOUR OR MORE RISERS. TOPS OF HANDRAILS SHALL BE NOT LESS THAN 34" NOR MORE THAN 38" ABOVE THE NOSING OF TREADS. HANDGRIP PORTIONS OF HANDRAILS SHALL BE NOT LESS THAN 1 1/2", NOR MORE THAN 2" IN CROSS-SECTIONAL DIMENSION AND SHALL TERMINATE IN WALLS OR NEWEL POSTS.

18. PROVIDE WOOD OR METAL BLOCKING AT PARTITIONS, CEILINGS, AND WALLS FOR ALL MOUNTED ACCESSORIES/ART AS REQUIRED.

19. EXHAUST FANS VENTED TO THE EXTERIOR ARE REQUIRED IN ALL OF THE FOLLOWING LOCATIONS: BATHROOMS, POWDER ROOMS, LAUNDRY ROOMS, AND KITCHENS. VENTING TO BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES.

20. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING ALL WORK INCLUDING ADDITIONAL PERMITS AND SUBCONTRACTOR WORK.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL BUILDING INSPECTIONS WITH LOCAL JURISDICTION IN AUTHORITY.

22. CONTRACTOR SHALL CLEAN ALL SURFACES PRIOR TO OCCUPANCY.

23. ALL EXTERIOR JOINTS SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE IN THE FOLLOWING LOCATIONS, PER WASHINGTON STATE ENERGY CODE: WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF, OPENINGS AT PENETRATION OF UTILITY SERVICES, ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.

24. ALL EXISTING CONSTRUCTION AND LANDSCAPE FEATURES THAT ARE TO REMAIN AS PART OF THE PROJECT SHALL BE PROTECTED FROM DAMAGE THROUGHOUT THE PERIOD OF CONSTRUCTION WORK. ANY DAMAGED CONSTRUCTION OR FEATURES SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER, WITH MATERIALS EQUIVALENT OR SUPERIOR TO THE ORIGINAL ITEM(S).

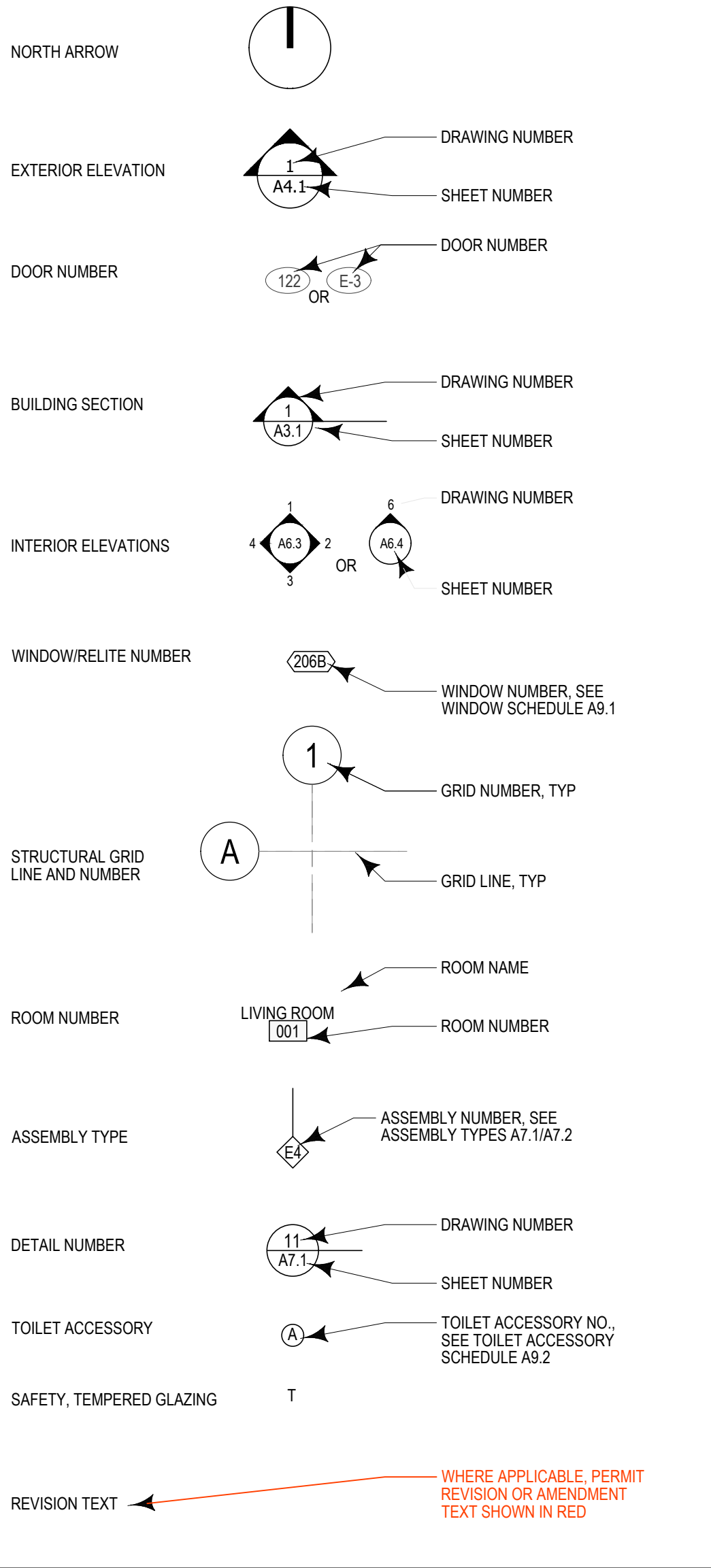
25. GRADING AND PAVING ADJACENT TO THE PERIMETER OF THE BUILDING SHALL SLOPE AWAY FROM THE BUILDING AT A MINIMUM OF ¼ INCH PER FOOT UNLESS OTHERWISE NOTED.

26. ALL ELECTRICAL OUTLETS, COMPUTER AND TELEPHONE OUTLETS/JACKS, SWITCHES, PULL STATIONS, THERMOSTATS, EXIT LIGHTS, AND ALL OTHER WALL MOUNTED ACCESSORIES SHALL BE ALIGNED VERTICALLY OR HORIZONTALLY WHEN IN CLOSE PROXIMITY. COORDINATION OF THIS ALIGNMENT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LOCATIONS SHALL BE APPROVED BY THE ARCHITECT.

27. THE EXISTING CONDITION INFORMATION INDICATED IS BASED ON A SURVEY PROVIDED BY THE OWNER AND OTHER DOCUMENTS PROVIDED TO THE ARCHITECT BY THE OWNER. THE INFORMATION IS NOT GUARANTEED AS TO ITS COMPLETENESS OR ACCURACY. THE CONTRACTOR SHALL BE OBLIGATED AS A MATTER OF COURSE TO VERIFY, BY FIELD MEASUREMENTS, ALL SURVEY INFORMATION GIVEN. THE EXISTENCE AND LOCATIONS OF UNDERGROUND UTILITIES INDICATED ON THE DRAWINGS ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING ANY WORK.

28. ALL DIMENSIONS ARE TAKEN FROM FACE OF FRAMING UNLESS NOTED OTHERWISE.

LEGEND



BUILDING PERMIT FORMS & REPORTS

DOCUMENT	REV. #
REVISION / DEFERRED SUBMITTAL FORM	1
INTAKE SCREENING FORM	
BUILDING PERMIT APPLICATION	
SINGLE FAMILY PLAN COVERSHEET	
SITE DEVELOPMENT INFO	1
RESIDENTIAL WATER METER SIZING WORKSHEET	
FIRE AREA AND VALUATION FORM	
TREE INVENTORY AND REPLACEMENT SUBMITTAL INFORMATION FORM	
ENERGY CODE WORKSHEET	
GEOTECHNICAL REPORT	2
GEOTECHNICAL LETTER	2
STRUCTURAL CALCULATIONS	1
ARBORIST REPORT AND TREE INVENTORY / REPLACEMENT FORM	
ARBORIST LETTER	2

CAR 2 FORMS & DOCUMENTS

DOCUMENT
DEVELOPMENT APPLICATION FORM
CONCURRENT REVIEW FORM
CRITICAL AREA 2 NARRATIVE
FOUNDATION AND CRITICAL AREA CONSIDERATIONS (GEOTECH REPORT)
CRITICAL AREA STUDY (NP WATERCOURSE STUDY)
TITLE REPORT
SURVEY
CAR 2 SITE PLAN
BUFFER IMPACT MITIGATION
PLANTING PLAN AND DETAIL
FULL PERMIT DRAWING SET

SHEET LIST

Sheet Number	Sheet Title	REV. #
GENERAL		
G0.0	COVERSHEET & PROJECT INFO	2
1 of 2	SITE SURVEY	
2 of 2	SITE SURVEY	
ARCHITECTURAL		
A0.2	AS-BUILTS & DEMO	1
A0.3	AS-BUILT ELEVATIONS	
A1.1	PROPOSED SITE PLAN	2
A1.2a	EXISTING & DEMO SITE PLAN	2
A1.2b	PROPOSED HARDSCAPE SITE PLAN	2
A1.3	CAR 2 SITE PLAN	
A1.4	BUFFER IMPACT & MITIGATION	
A1.5	PLANTING PLAN & DETAIL	
A1.6	LANDSCAPE GENERAL PLAN	
A1.7	LANDSCAPING GENERAL LAYOUT	
A1.8	LANDSCAPING DETAILS & SPECIFICATIONS	
A2.0	LOWER LEVEL PLAN	2
A2.1	MAIN LEVEL PLAN	2
A2.2	UPPER LEVEL PLAN	2
A2.3	ROOF PLAN	1
A3.1	ELEVATIONS	1
A3.2	ELEVATIONS	1
A3.3	ELEVATIONS	1
A3.4	ELEVATIONS	1
A4.1	BUILDING SECTION	2
A4.2	BUILDING SECTION	2
A4.3	BUILDING SECTION	2
A4.4	BUILDING SECTION	1
A5.1	WALL SECTIONS	1
A7.1	FLOOR AND ROOF ASSEMBLIES	2
A7.2	INT & EXT WALL ASSEMBLIES	2
A9.1	SCHEDULES	1
ELECTRICAL		
E2.0	LOWER LEVEL ELECTRICAL PLAN	2
E2.1	MAIN LEVEL ELECTRICAL PLAN	2
E2.2	UPPER LEVEL ELECTRICAL PLAN	2
STRUCTURAL		
S1.0	GENERAL NOTES	1
S1.1	GENERAL NOTES	1
S2.0	FOUNDATION PLAN	1
S2.1	MAIN FLOOR FRAMING PLAN	2
S2.2	UPPER FLOOR FRAMING PLAN	2
S2.3	ROOF FRAMING PLAN	2
S3.0	CONCRETE DETAILS	2
S3.1	CONCRETE DETAILS	1
S5.0	STEEL DETAILS	1
S5.1	MOMENT FRAME DETAILS	1
S6.0	WOOD DETAILS	1
S6.1	WOOD DETAILS	1
S6.2	WOOD DETAILS	1
S6.3	WOOD DETAILS	2

VICINITY MAP (NOT TO SCALE)



NESTLER-SPARE RESIDENCE

ARCHITECTURAL DRAWINGS FOR PERMIT

8265 SE 61ST STREET, MERCER ISLAND, WA 98040

PARCEL NUMBER: 1922800210

STUDIO DIAA PROJECT NO: 2401

PROJECT TEAM

ARCHITECT STUDIO DIAA 3125 EASTLAKE AVE E SUITE C SEATTLE, WA 98102 206.788.8838 WWW.STUDIODIAA.COM	GEOTECHNICAL ENGINEER GEOTECH CONSULTANTS, INC. MARC R. MCGINNIS 2401 10TH AVE EAST SEATTLE, WA 98102 MARCM@GEOTECHNW.COM 425.260.1116
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STRUCTURAL ENGINEER CARTER QUINN NORLIN, INC. NICHOLAS CARTER 2033 6TH AVE, SUITE 995 SEATTLE, WA 98121 206.264.7784 ext. 203 NVC@CQN-SE.COM	

PROJECT INFORMATION

PROJECT ADDRESS 8265 E 61ST ST MERCER ISLAND, WA 98040	BUILDING CODE INFORMATION BUILDING CODE: IRC 2021 + WASHINGTON STATE RESIDENTIAL CODE 2021 OCCUPANCY: GROUP R-3 SINGLE FAMILY RESIDENCE & GROUP U GARAGE CONSTRUCTION TYPE: TYPE VB FIRE PROTECTION: NFPA 13R SPRINKLER SYSTEM THROUGHOUT
TAX PARCEL NUMBER 1922800210	ENERGY CODE INFORMATION ENERGY CONSERVATION: COMPONENT PERFORMANCE PER WSEC TABLE R402.1.3:
LEGAL DESCRIPTION LOT 21, DAWN VILLA, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 87 OF PLATS, PAGE(S) 82 AND 83 IN KING COUNTY, WASHINGTON.	ENERGY CREDITS: 8 TOTAL CREDITS - SEE OUTLINED BELOW. - ENERGY EQUALIZATION OPTION 4: AIR TO WATER HEAT PUMP CONFIGURED TO PROVIDE BOTH HEATING AND COOLING AND ARE RATED IN ACCORDANCE WITH AHRI 550 / 590 = 3.0 CREDITS 1.2 - EFFICIENT BUILDING ENVELOPE: 0.25 U-VALUE FOR ALL VERTICAL FENESTRATION. X U-VALUE FOR ALL SKYLIGHTS. SLAB ON GRADE R10 PERIMETER AND UNDER ENTIRE NEW SLABS. = 1.0 CREDIT 3.7 - HIGH EFFICIENCY HVAC: - DUCTLESS SPLIT SYSTEM HEAT PUMPS WITH NO ELECTRIC RESISTANCE HEATING IN THE PRIMARY LIVING AREAS. DEFERRED SUBMITTAL: HVAC SUB SHALL SUBMIT NECESSARY CALCULATIONS AND EQUIPMENT SPECIFICATIONS. 5.6 - EFFICIENT WATER HEATING: - ELECTRIC HEAT PUMP WATER HEATER MEETING TIER III STANDARD. MINIMUM UEF 2.9. UTILIZING SPLIT SYSTEM CONFIGURATION WITH THE AIR-TO-REFRIGERANT HEAT EXCHANGE LOCATED OUTDOORS. ALL EQUIPMENT SHALL MEET SECTION 4 OF NEEA STANDARD ADVANCED WATER HEATING SPECIFICATION WITH UEF NOTED ABOVE. DEFERRED SUBMITTAL: PLUMBING AND HVAC SUBS SHALL SUBMIT NECESSARY CALCULATIONS AND EQUIPMENT SPECIFICATIONS.
PERMIT NUMBERS PRE-APP: PRE21-009 BUILDING PERMIT: 2404-165 CAR2: CA024-17	WHOLE HOUSE VENTILATION: BALANCED WHOLE HOUSE VENTILATION SYSTEM PER WSRC 1505.4.1.4
PROJECT DESCRIPTION SELECTIVE DEMOLITION AND REMODEL OF AN EXISTING SINGLE FAMILY RESIDENCE, INCLUDING AN ADDITION AT THE UPPER LEVEL THAT CONNECTS THE GARAGE AND MAIN HOUSE. SITE IS SUBJECT TO CRITICAL AREAS THAT INCLUDE AN NP WATERCOURSE ON THE NEIGHBORING PROPERTY AND CONSTRUCTION IN GEOLOGICALLY HAZARDOUS AREA.	
GOVERNING AUTHORITY CITY OF MERCER ISLAND	
ZONING CODE INFORMATION ZONE: R-15 CRITICAL AREA REVIEW: 2 LOT SLOPE: 28% - SEE SHEET A1.1 FOR CALCS. ALLOWED LOT COVERAGE: SEE SHEET A1.1 PROPOSED LOT COVERAGE: SEE SHEET A1.1 SIDE YARD CALCULATIONS: SEE SHEET A1.1 AVERAGE BUILDING ELEVATION: SEE SHEET A1.2B ALLOWABLE GROSS FLOOR AREA: SEE SHEET A0.2 PROPOSED GROSS FLOOR AREA: SEE SHEET A0.2 ALLOWED HARDSCAPE: SEE SHEET A1.2b GROSS REDUCED HARDSCAPE: SEE SHEET A1.2a GROSS INCREASED HARDSCAPE: SEE SHEET A1.2b PROPOSED HARDSCAPE: SEE SHEET A1.2b	

NOT FOR CONSTRUCTION

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Revision:	Date:
MERCER ISLAND BUILDING PERMIT REV 1	04.17.2025
MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

Stamp:

STUDIO DIAA

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seattle, washington 98102
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w w w . s t u d i o d i a a . c o m

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

COVERSHEET & PROJECT INFO

Date: June 12, 2025

Issued For: Permit Set - Rev 2 (not for construction)

Drawn By: mm, ge, ls

Checked By: ss

Scale:

Sheet No.:

GO.0

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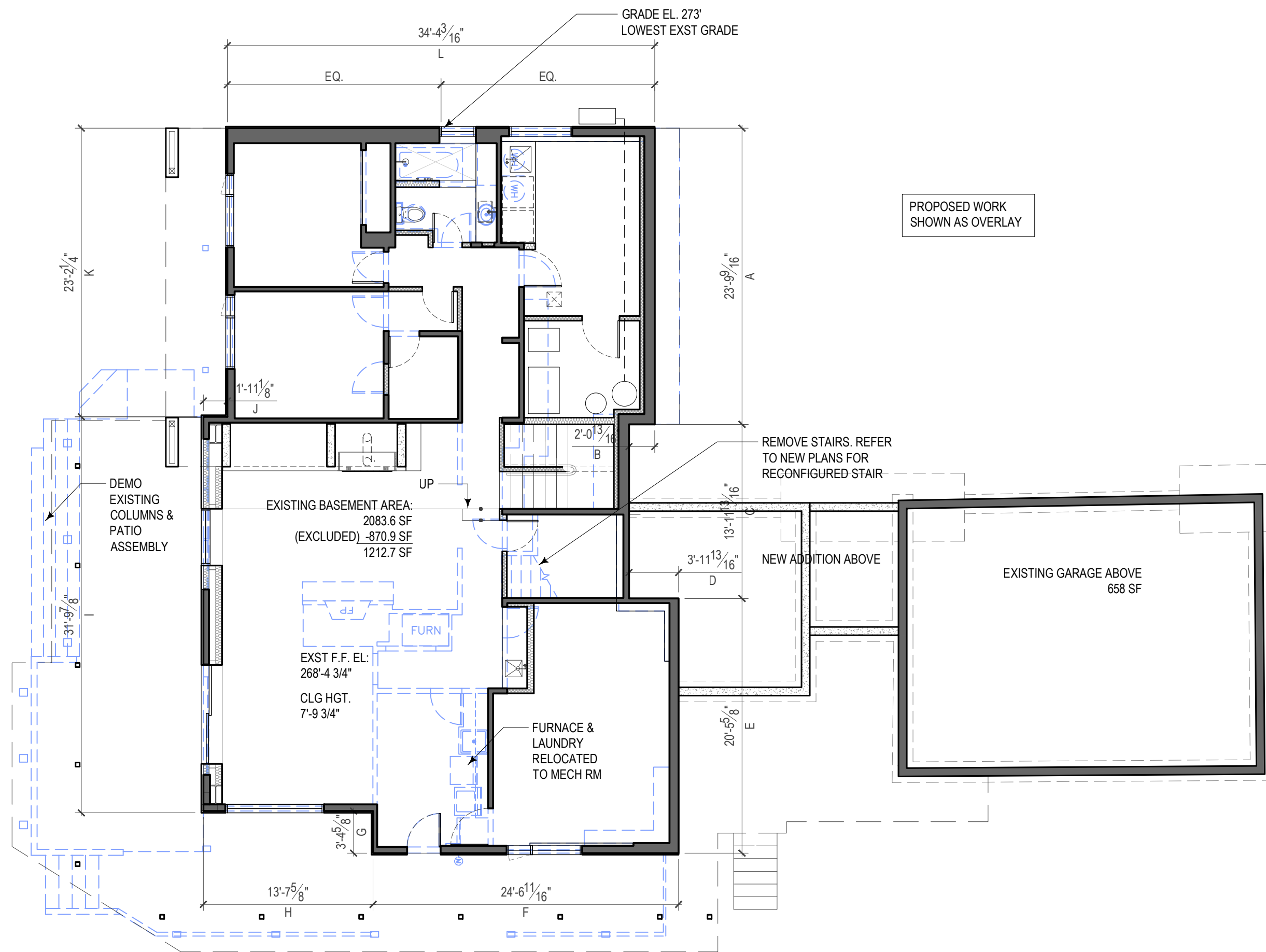
Date:

MERCER ISLAND
BUILDING PERMIT REV 1 04.17.2025

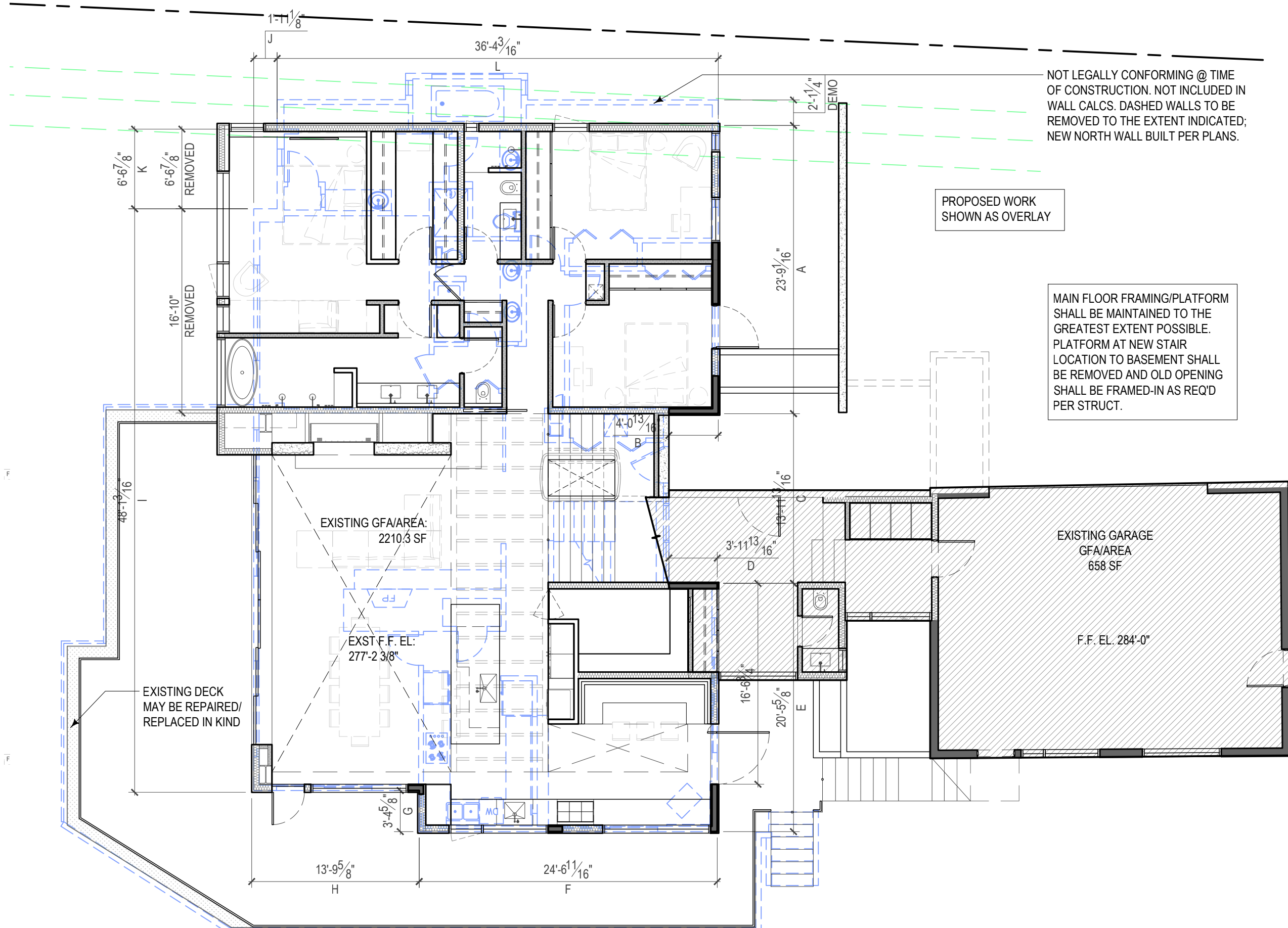
- CONCRETE/MASS WALL
NEW FRAMED WALL
EXISTING WALL TO REMAIN
EXISTING ELEMENT TO BE REMOVED

GENERAL PLAN NOTES

- CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS
- NEW EXTERIOR WALLS SHALL BE FRAMED WITH 2X6 STUDS UNLESS NOTED OTHERWISE
- NEW INTERIOR PARTITION WALLS SHALL BE FRAMED WITH 2X4 STUDS UNLESS NOTED OTHERWISE
- ANY EXISTING FRAMING AND ASSEMBLIES IN ACCEPTABLE CONDITION SHALL REMAIN AND AUGMENTED AS REQ'D BY STRUCTURAL ENGINEER



1
A0.2 lower level demo plan
1/8" = 1'-0"



2
A0.2 main level demo plan
1/8" = 1'-0"

ALTERATION CALCULATIONS - REFER TO DEMO PLANS ABOVE

% EXTERIOR MAIN LEVEL WALLS - ALTERED CALCS			
WALL	LENGTH	% ALTERED	RESULT
A	25.6'	7.8%	23.8'
B	2.1'	0%	2.1'
C	14.0'	100%	0.0'
D	4.0'	0%	4.0'
E	20.5'	0%	20.5'
F	24.6'	0%	24.6'
G	3.4'	0%	3.4'
H	13.8'	0%	13.8'
I	48.1'	35%	31.3'
J	1.9'	100%	0.0'
K	6.9'	100%	0.0'
L	36.3'	100%	0.0'
TOTALS	201.4'		123.4'

% EXTERIOR BSMT WALLS - ALTERED CALCS			
WALL	LENGTH	% ALTERED	RESULT
A	23.8'	0%	23.8'
B	2.1'	0%	2.1'
C	14.0'	0%	14.0'
D	4.0'	0%	4.0'
E	20.5'	0%	20.5'
F	24.6'	0%	24.6'
G	3.4'	0%	3.4'
H	13.8'	0%	13.8'
I	31.8'	0%	31.8'
J	1.9'	0%	1.9'
K	23.2'	0%	23.2'
L	34.3'	0%	34.3'
TOTALS	197.3'		197.3'

MICC 19.01.050.D.1: INTENTIONAL EXTERIOR ALTERATION OR ENLARGEMENT OF A LEGALLY NON-CONFORMING STRUCTURE 40% THRESHOLD CALCULATION

TOTAL WALL EXISTING LENGTH: 197.3' + 201.4' = 398.7'
TOTAL WALL MAINTAINED: 197.3' + 123.4' = 320.7'

(320.7 / 398.7) x 100 = 80.44%

80.44% WALLS MAINTAINED | 19.56% ALTERED < 40% ALLOWED

GFA CALCULATIONS

BSMT WALLS - GFA EXCLUSION			
WALL	LENGTH	% COVERAGE	RESULT
A	23.8'	100%	23.8'
B	2.1'	100%	2.1'
C	14.0'	100%	14.0'
D	4.0'	100%	4.0'
E	20.5'	100%	20.5'
F	24.6'	0%	0.0'
G	3.4'	0%	0.0'
H	13.8'	0%	0.0'
I	31.8'	0%	0.0'
J	1.9'	0%	0.0'
K	23.2'	0%	0.0'
L	34.3'	53%	18.3'
TOTALS	197.3'		82.6'

REFER TO A0.3 FOR EXISTING ELEVATION DIAGRAMS

BASEMENT EXCLUDED AREA
41.8% * 2083.6SF = 870.9 SF

BASEMENT		
x1	(E) GROSS AREA	2080.2 SF
	BASEMENT EXCLUDED AREA	-870.9 SF
	NET BASEMENT AREA	1209.3 SF

MAIN LEVEL		
x1	(E) GROSS AREA	2208.74 SF
	MAIN LEVEL REMOVED AREA	-99.3 SF
	MAIN LEVEL EXST. AREA	2109.44 SF

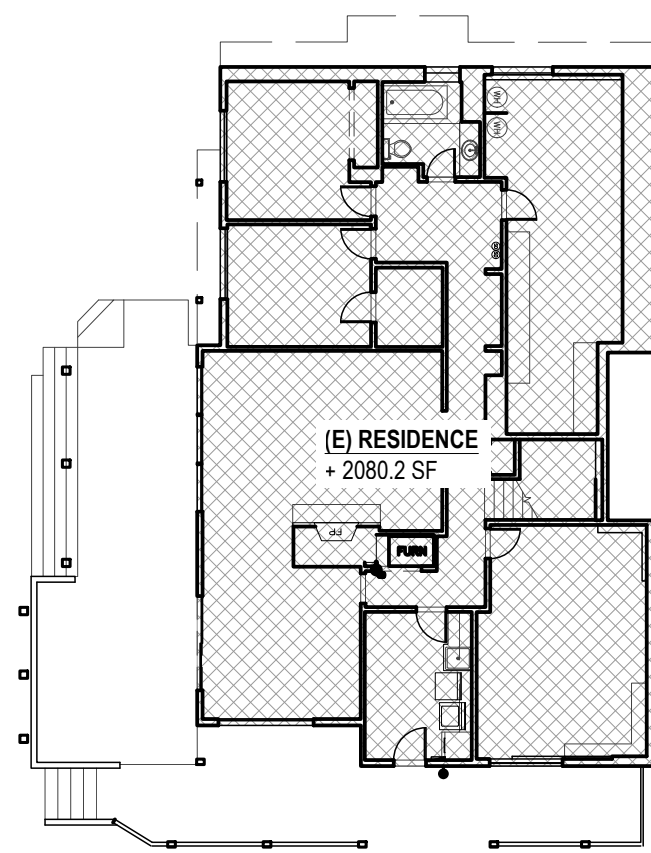
x1	ADDITION A	90.7 SF
x1.5	STAIR	19.6 SF
	12'<HT<16' [150%] (39.1x1.5)	
x2	LIVING RM	427 SF
	HT>16' [200%] (427x1)	
x2	KITCHEN	46 SF
	HT>16' [200%] (46x1)	
	NEW MAIN LEVEL AREA	583.3 SF
	NET MAIN LEVEL AREA	2692.74 SF

UPPER LEVEL - NEW & EXISTING		
x1	OFFICE ADDITION	432.1 SF
	ENTRY & STAIR ADDITION	389.6 SF
	GARAGE (EXISTING)	656 SF
	NET UPPER LEVEL AREA	1477.7 SF

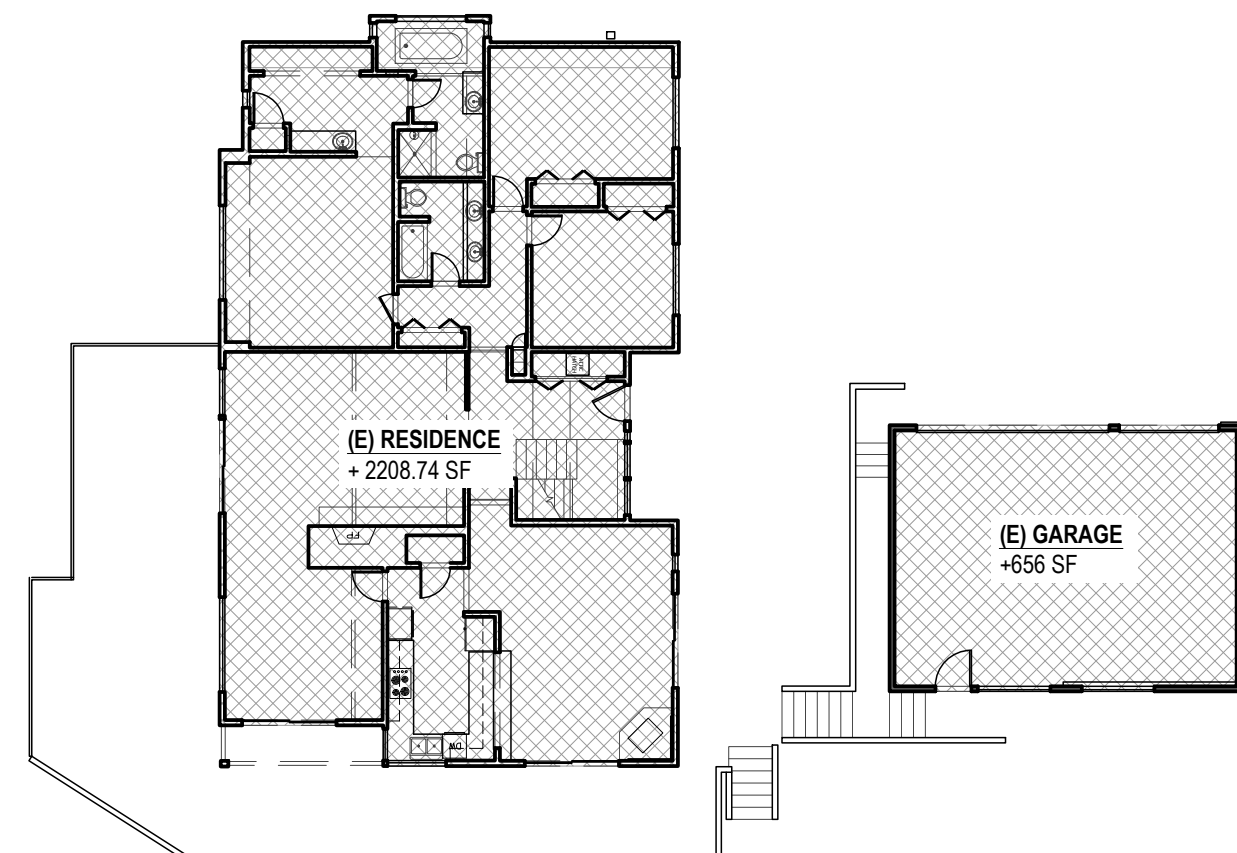
NET BASEMENT AREA	1209.3 SF
NET MAIN LEVEL AREA	2692.74 SF
NET UPPER LEVEL AREA	1477.7 SF
PROPOSED TOTAL GFA	5379.74 SF

ALLOWABLE GFA
14817 LOT AREA x 40% = 5926.8 SF

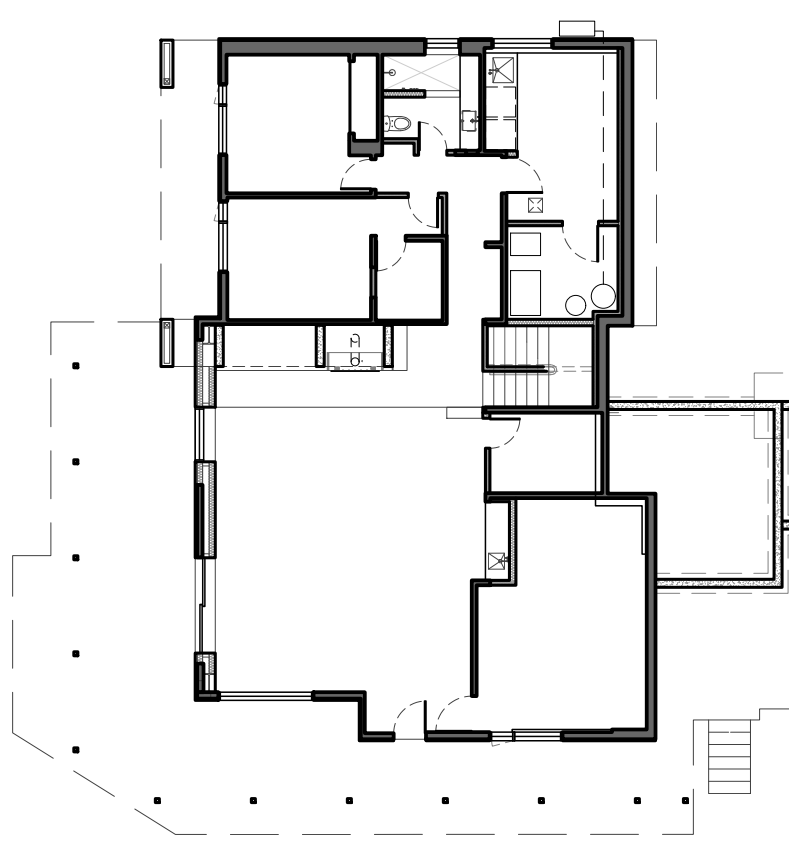
5379.74 SF PROPOSED	<	5926.8 SF ALLOWED
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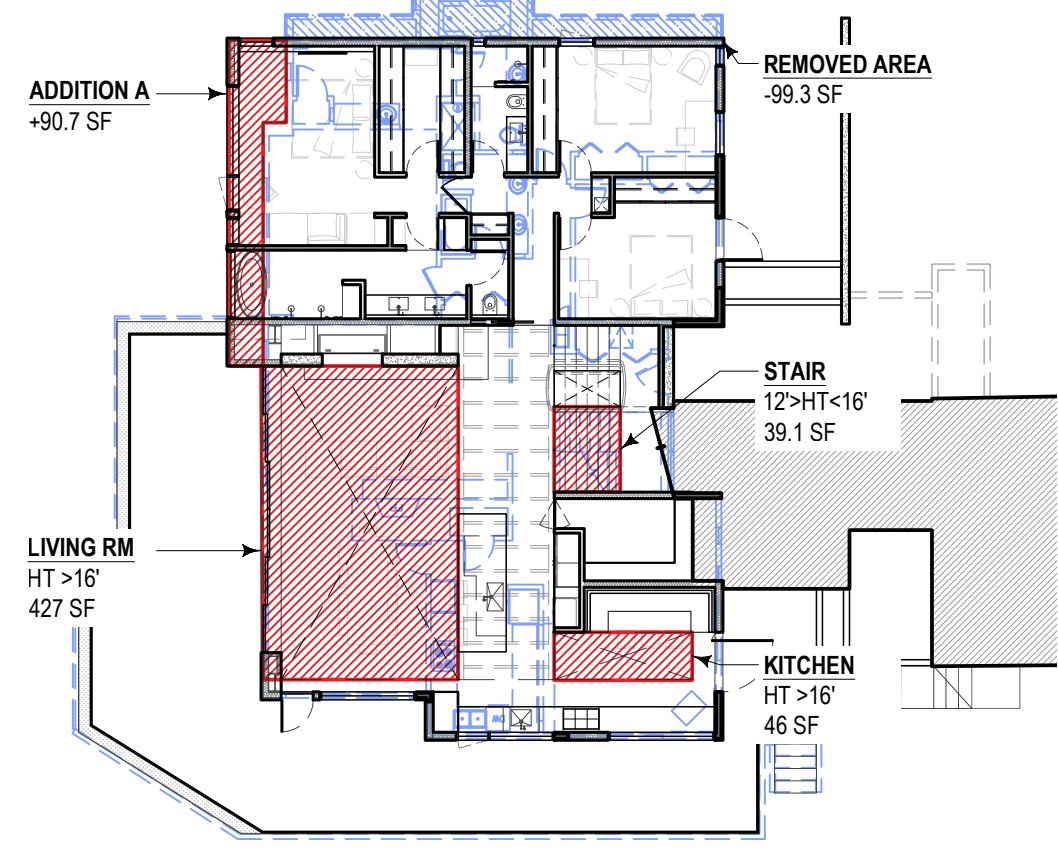
3
A0.2 existing lower level GFA plan
1/16" = 1'-0"



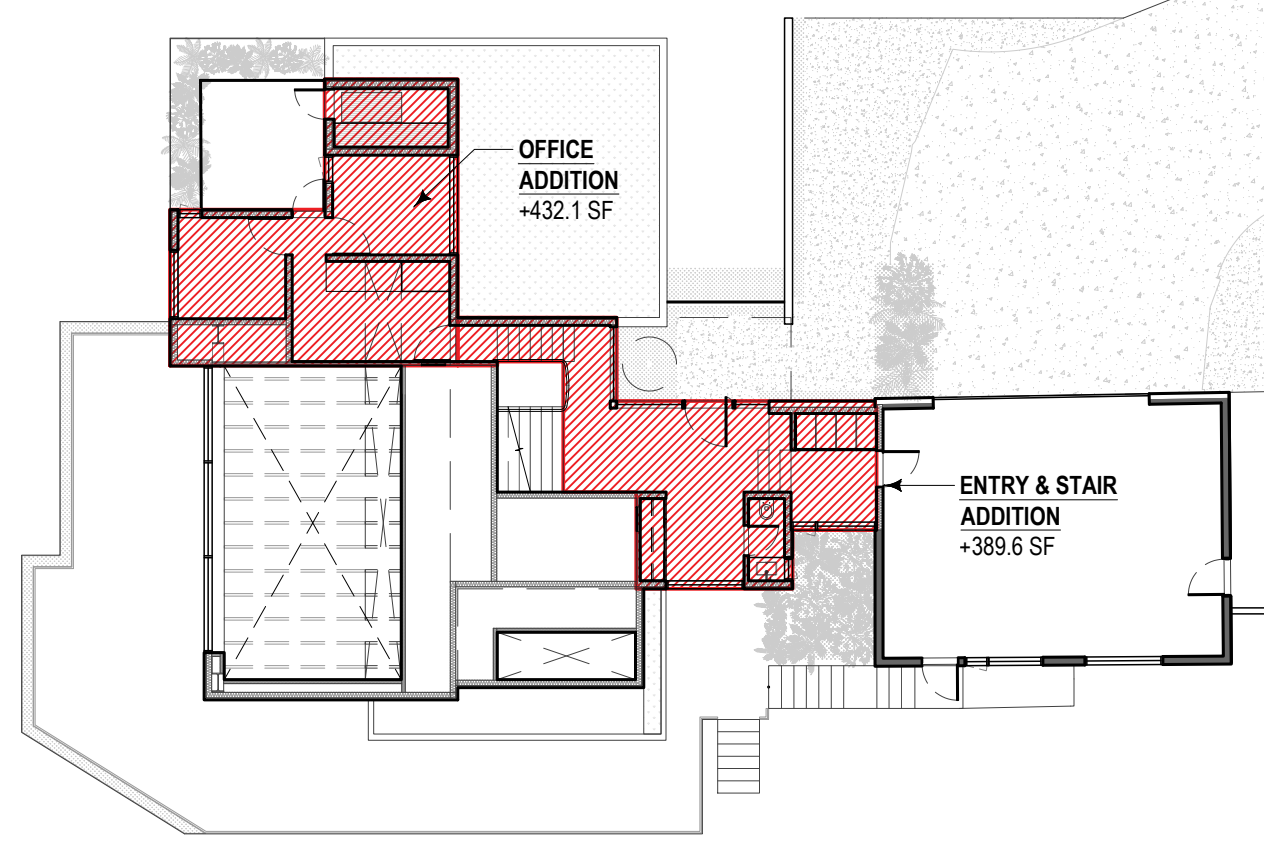
4
A0.2 existing main level GFA plan
1/16" = 1'-0"



5
A0.2 new lower level GFA plan
1/16" = 1'-0"



6
A0.2 new main level GFA plan
1/16" = 1'-0"



7
A0.2 new upper level GFA plan
1/16" = 1'-0"

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

AS-BUILTS & DEMO

Date: April 17, 2025

Issued For: Permit Set - Rev 1
(not for construction)

Drawn By: mm, ge, ls

Checked By: ss

Scale:

Sheet No.:

A0.2

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Revision:	Date:
MERCER ISLAND BUILDING PERMIT REV 1	04.17.2025
MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

Stamp:

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seattle, washington 98102
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structural engineer
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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

PROPOSED SITE PLAN

Date: June 12, 2025

Issued For: Permit Set - Rev 2
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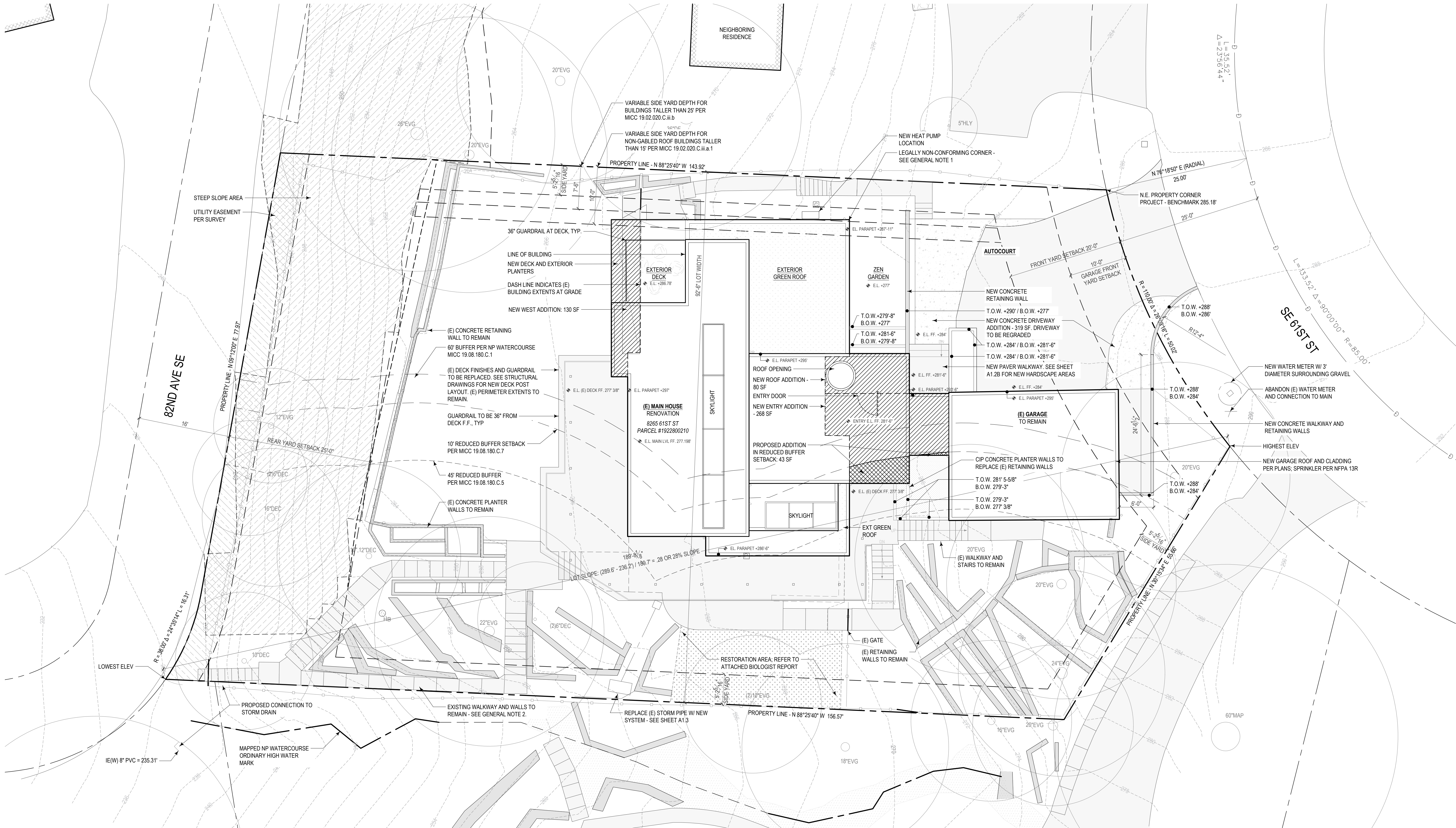
Drawn By: mm, ge, ls

Checked By: ss

Scale:

Sheet No.:

A1.1



1
A1.1
proposed site plan
1/8" = 1'-0"

GENERAL SITE PLAN NOTES

- LEGALLY NON-CONFORMING: ORIGINAL BUILDING PERMIT ISSUED 10.07.1970. CITY OF MERCER ISLAND ZONING ORDINANCE ADOPTED AUGUST 1970.
- SEE SHEET A1.2a FOR EXISTING SITE PLAN, EXISTING AND DEMO HARDSCAPE CALCULATIONS, AND REMOVED TREES.
- SEE SHEET A1.2b FOR PROPOSED HARDSCAPE SITE PLAN WITH HARDSCAPE CALCULATIONS.
- SEE SHEET A1.3 FOR THE CRITICAL AREA SITE PLAN.
- ALL PREVIOUSLY SUBMITTED ARBORIST, ENVIRONMENTAL, GEOTECHNICAL, OR OTHER REPORTS SHALL BE REFERENCED AS REQUIRED. CONTACT OWNER FOR ADDITIONAL DOCUMENTATION AS NEEDED.
- TOPOGRAPHY GRADE LINES AND ELEVATION MARKERS SHOW EXISTING PER SURVEY.
- NEW RETAINING WALLS AND ROCKERIES TO COMPLY WITH MERCER ISLAND CITY CODE 19.02.050.D.

SETBACKS

FRONT YARD	20'
REAR YARD	25'
SIDE YARD DETERMINATION	
• TOTAL SIDE YARD WIDTH (SUM OF SIDE YARDS) =	15.725'
• SITE WIDTH X 17% OF 92'-6"	15.19'
• 15.725' X 33% (FOR 3 SIDE-YARD SETBACKS)	

LOT COVERAGE

NET LOT AREA	14,817 SF
REQUIRED MAX LOT COVERAGE: 35% OF NET LOT AREA	5,186 SF
REFERENCED CODE SECTION: MICC 19.02.020.A	
EXISTING MAIN HOUSE BLDG AREA TO REMAIN	2070 SF
EXISTING GARAGE BLDG AREA TO REMAIN	653 SF
NEW ENTRY	268 SF
NEW WEST ADDITION	130 SF
EXISTING DRIVEWAY	998 SF
NEW CONCRETE DRIVEWAY ADDITION	319 SF
TOTAL LOT COVERAGE	4,438 SF

4,438 SF < 5,186 SF = LOT COVERAGE IS COMPLIANT

LEGEND

NEW ROOF / BUILDING AREA
STEEP SLOPE AREA
UTILITY EASEMENT AREA
NEW DRIVEWAY AREA

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MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

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EXISTING & DEMO SITE
PLAN

Date: June 12, 2025

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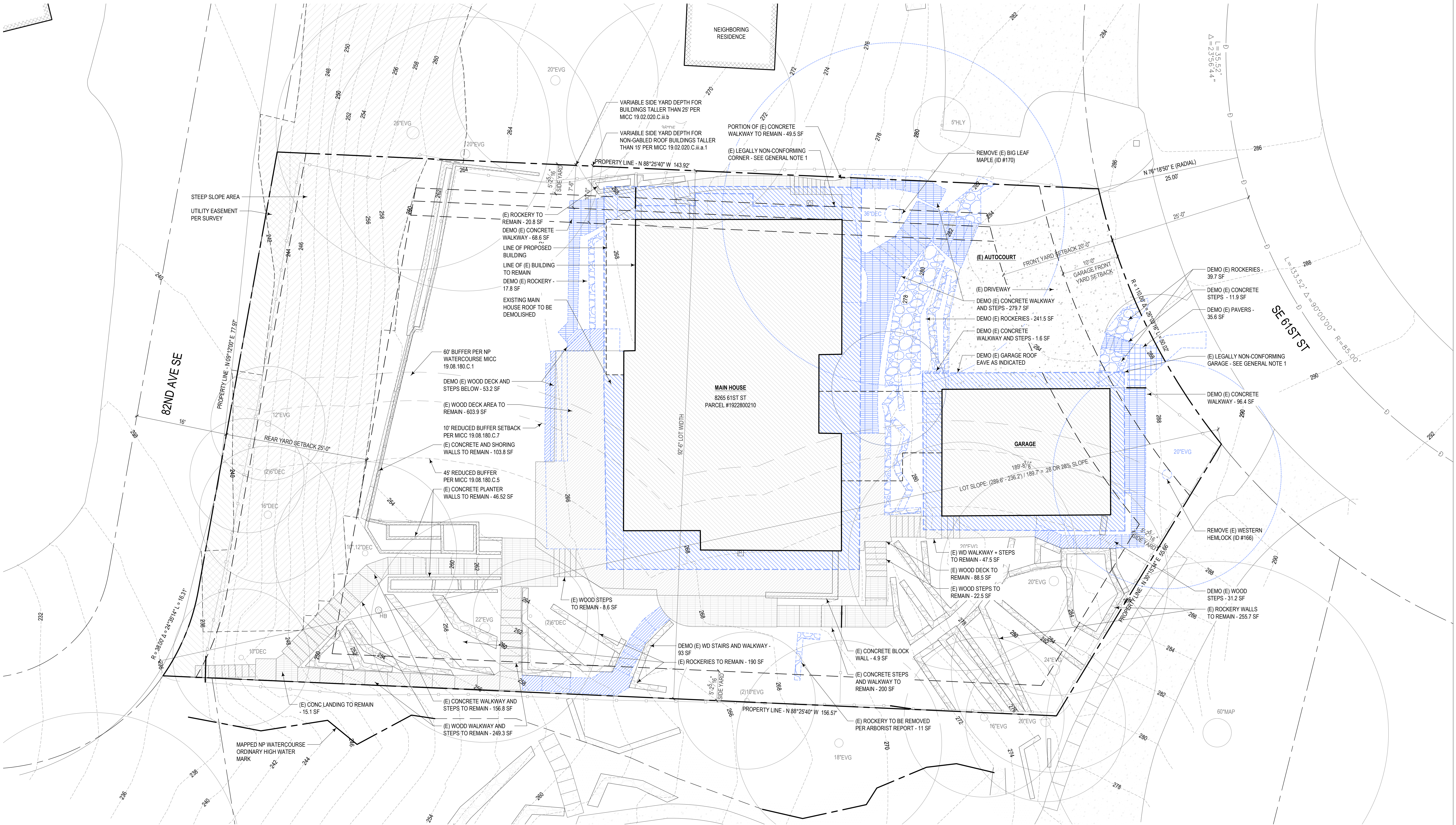
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A1.2A



1 existing & demo site plan
A1.2a 1/8" = 1'-0"

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EXISTING HARDSCAPE CALCULATIONS

REQUIRED MAX HARDSCAPE AREA: 9% OF NET LOT AREA	1,333.53 SF
REFERENCED CODE SECTION: MICC 19.02.020.F.3.b	
CONCRETE WALKWAYS / STEPS	879.8 SF
ROCKERIES	765.5 SF
CONCRETE RETAINING + PLANTER WALLS	155.2 SF
WOOD DECK	692.4 SF
WOOD WALKWAYS / STEPS	505.3 SF
PAVERS	35.6 SF

TOTAL EXISTING HARDSCAPE AREA: 3,033.8 SF

REFERENCED CODE SECTION: MICC 19.16
HARDSCAPE AREAS DO NOT INCLUDE DRIVING SURFACES OR BUILDINGS.

3,033.8 SF > 1,333.53 SF
EXISTING HARDSCAPE IS NONCONFORMING

DEMOLISHED AREAS

MAIN HOUSE ROOF AREA	807 SF
GARAGE ROOF AREA	320 SF

TOTAL DEMOLISHED BUILDING AREA: 1,127 SF

CONCRETE WALKWAYS / STEPS	458.4 SF
ROCKERIES	310 SF
CONCRETE RETAINING WALLS	-
WOOD DECK / STEPS	177.4 SF
PAVERS	35.6 SF

TOTAL DEMOLISHED HARDSCAPE AREA: 981.4 SF

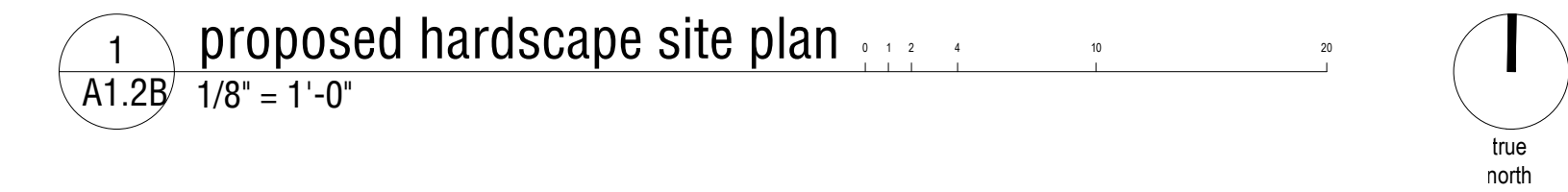
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AREAS TO BE DEMOLISHED

- (E) ROOF AREA
- (E) CONCRETE WALKWAY / STEPS
- (E) ROCKERIES
- (E) CONCRETE RETAINING WALLS
- (E) WOOD DECK / STEPS
- (E) PAVERS
- (E) PLANTERS

AREAS TO REMAIN

- (E) BLDG TO REMAIN
- (E) CONC DRIVEWAY
- (E) CONCRETE WALKWAY / STEPS
- (E) ROCKERIES
- (E) CONCRETE RETAINING WALLS
- (E) WOOD DECK / STEPS
- (E) PAVERS
- (E) PLANTERS



GENERAL SITE PLAN NOTES

- ### LEGEND

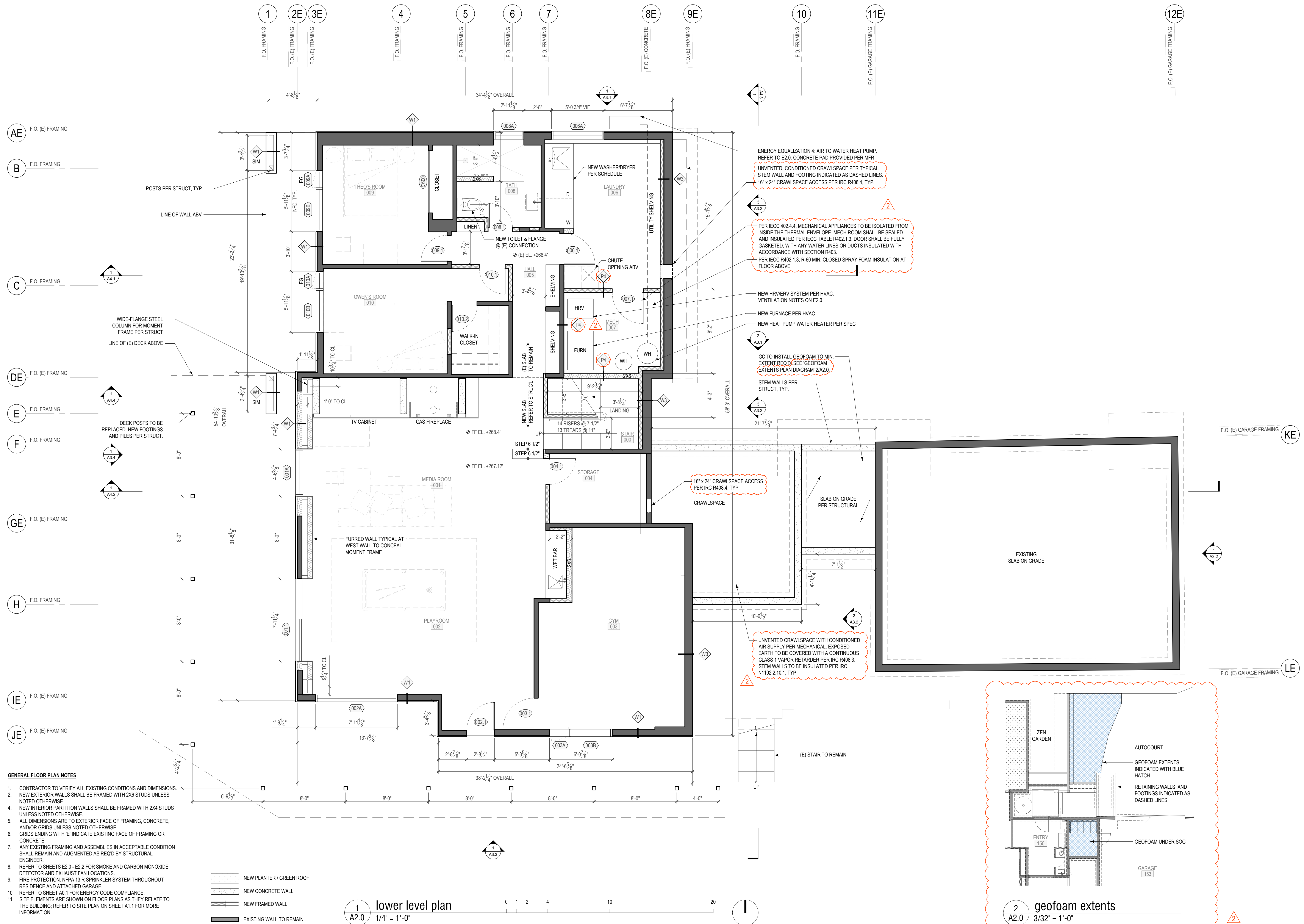
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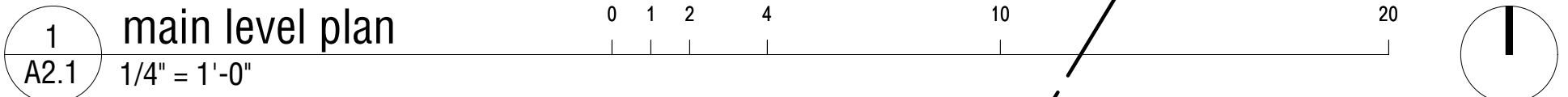
-  (E) BLDG TO REMAIN
-  (E) CONC DRIVEWAY
-  (E) CONCRETE WALKWAY / STEPS
-  (E) ROCKERIES
-  (E) CONCRETE RETAINING WALLS
-  (E) WOOD DECK / STEPS
-  (E) PAVERS
-  (E) PLANTERS

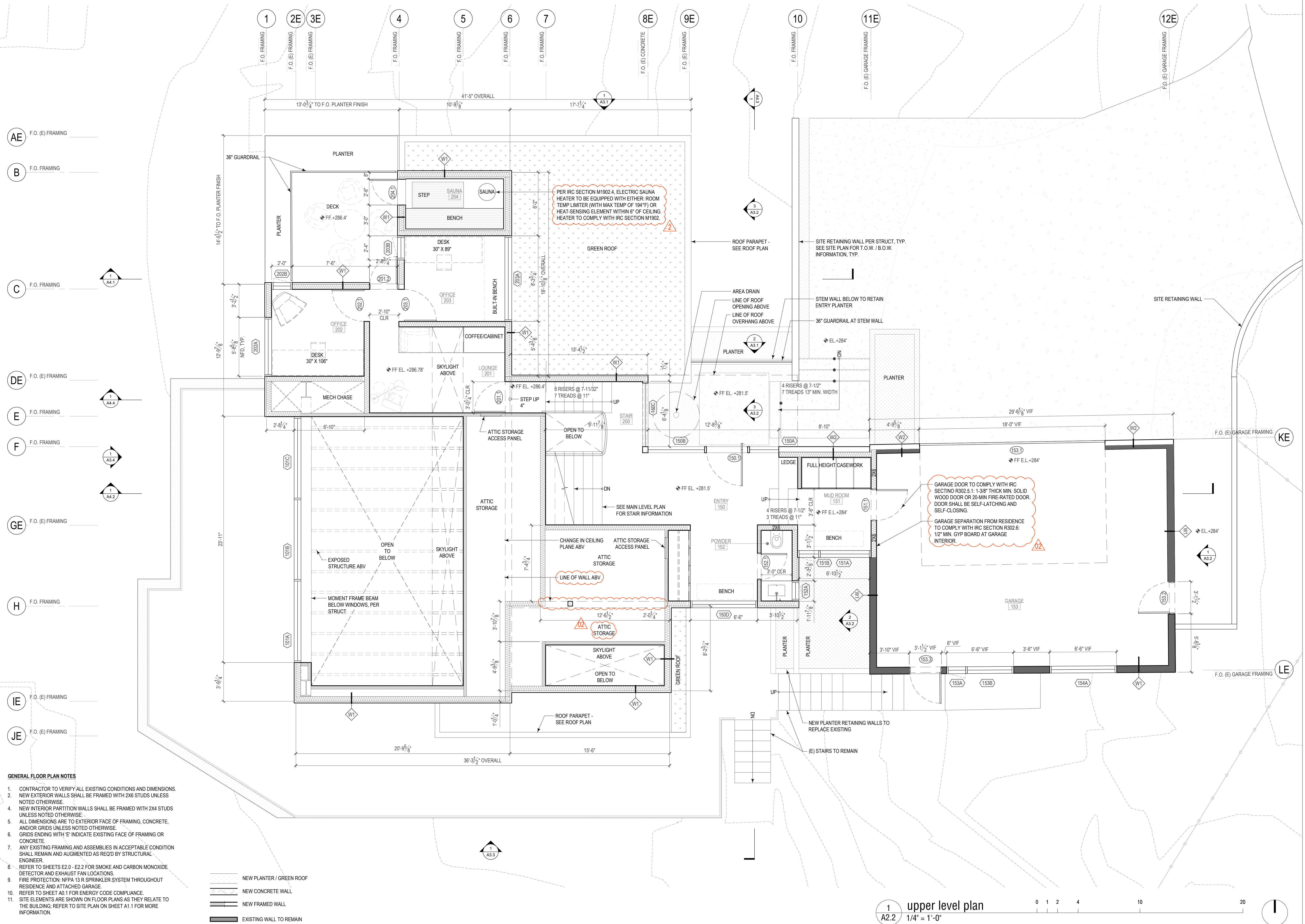


AVERAGE BUILDING ELEVATION

$$89278.9 / 324.5 = 275.13' \text{ AVERAGE BLDG ELEV}$$







- AE

F.O. (E) FRAMING
- B

F.O. FRAMING
- C

F.O. FRAMING
- DE

F.O. (E) FRAMING
- E

F.O. FRAMING
- F

F.O. FRAMING
- GE

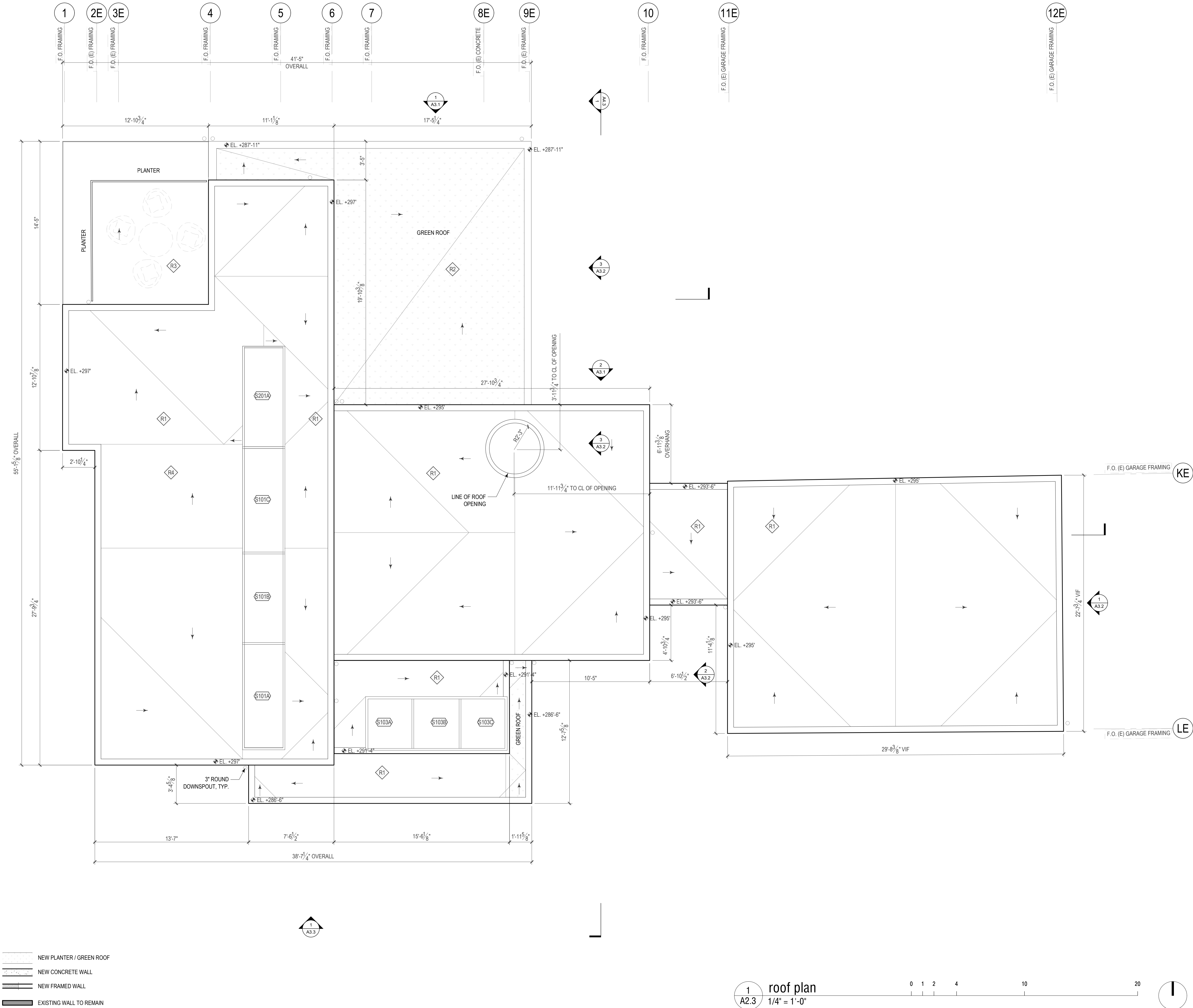
F.O. (E) FRAMING
- H

F.O. FRAMING
- IE

F.O. (E) FRAMING
- JE

F.O. (E) FRAMING

- GENERAL FLOOR PLAN NOTES
- CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
 - NEW EXTERIOR WALLS SHALL BE FRAMED WITH 2X6 STUDS UNLESS NOTED OTHERWISE.
 - NEW INTERIOR PARTITION WALLS SHALL BE FRAMED WITH 2X4 STUDS UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE TO EXTERIOR FACE OF FRAMING, CONCRETE, AND/OR GRIDS UNLESS NOTED OTHERWISE.
 - GRIDS ENDING WITH 'E' INDICATE EXISTING FACE OF FRAMING OR CONCRETE.
 - ANY EXISTING FRAMING AND ASSEMBLIES IN ACCEPTABLE CONDITION SHALL REMAIN AND AUGMENTED AS REQ'D BY STRUCTURAL ENGINEER.
 - REFER TO SHEETS E2.0 - E2.2 FOR SMOKE AND CARBON MONOXIDE DETECTOR AND EXHAUST FAN LOCATIONS.
 - FIRE PROTECTION: NFPA 13 R SPRINKLER SYSTEM THROUGHOUT RESIDENCE AND ATTACHED GARAGE.
 - REFER TO SHEET A0.1 FOR ENERGY CODE COMPLIANCE.
 - SITE ELEMENTS ARE SHOWN ON FLOOR PLANS AS THEY RELATE TO THE BUILDING. REFER TO SITE PLAN ON SHEET A1.1 FOR MORE INFORMATION.



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Project:

NS Residence
project no. 2401

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Drawing Title:

ROOF PLAN

Date: April 17, 2025

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A2.3

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Drawing Title:

ELEVATIONS

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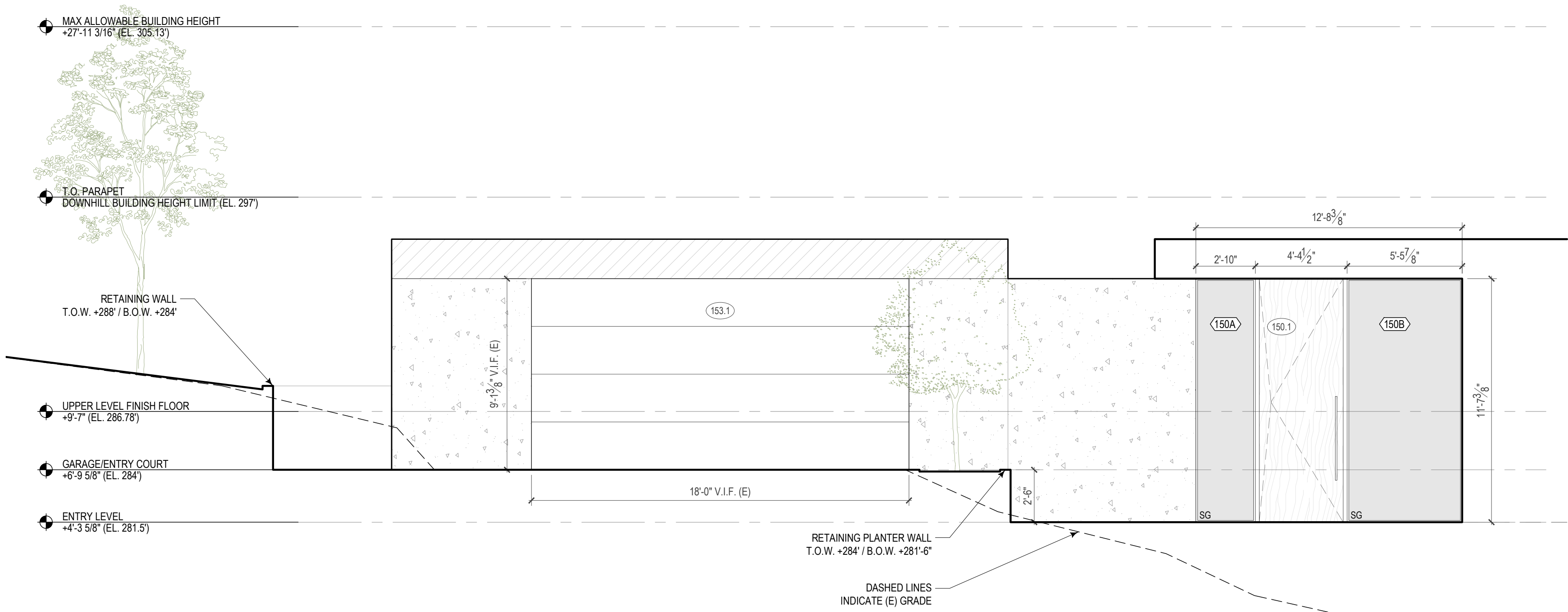
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Checked By: ss

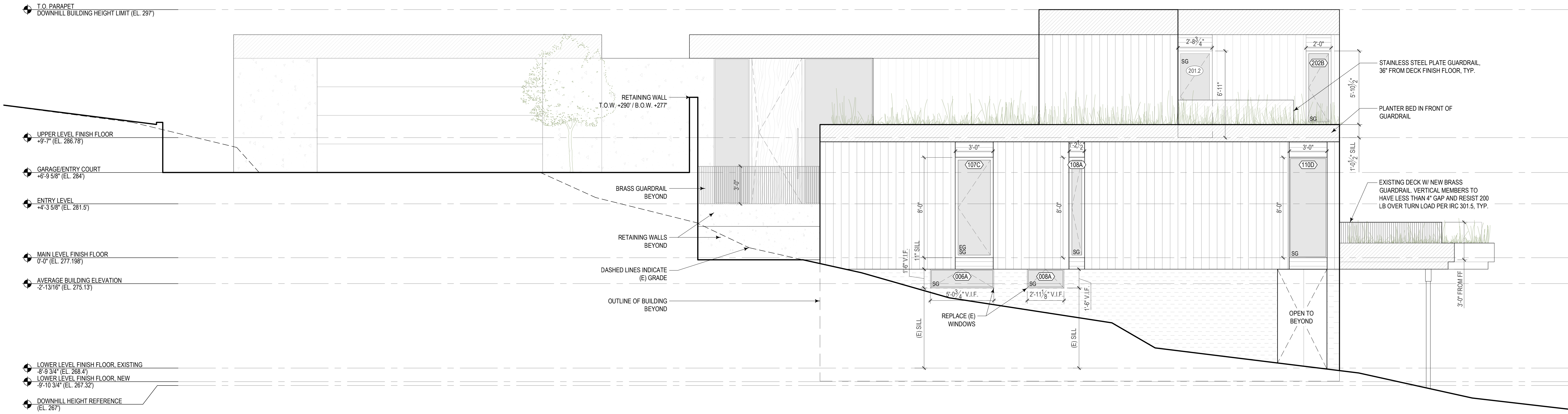
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A3.1



2 partial elevation: north @ entry
A3.1 1/4" = 1'-0"

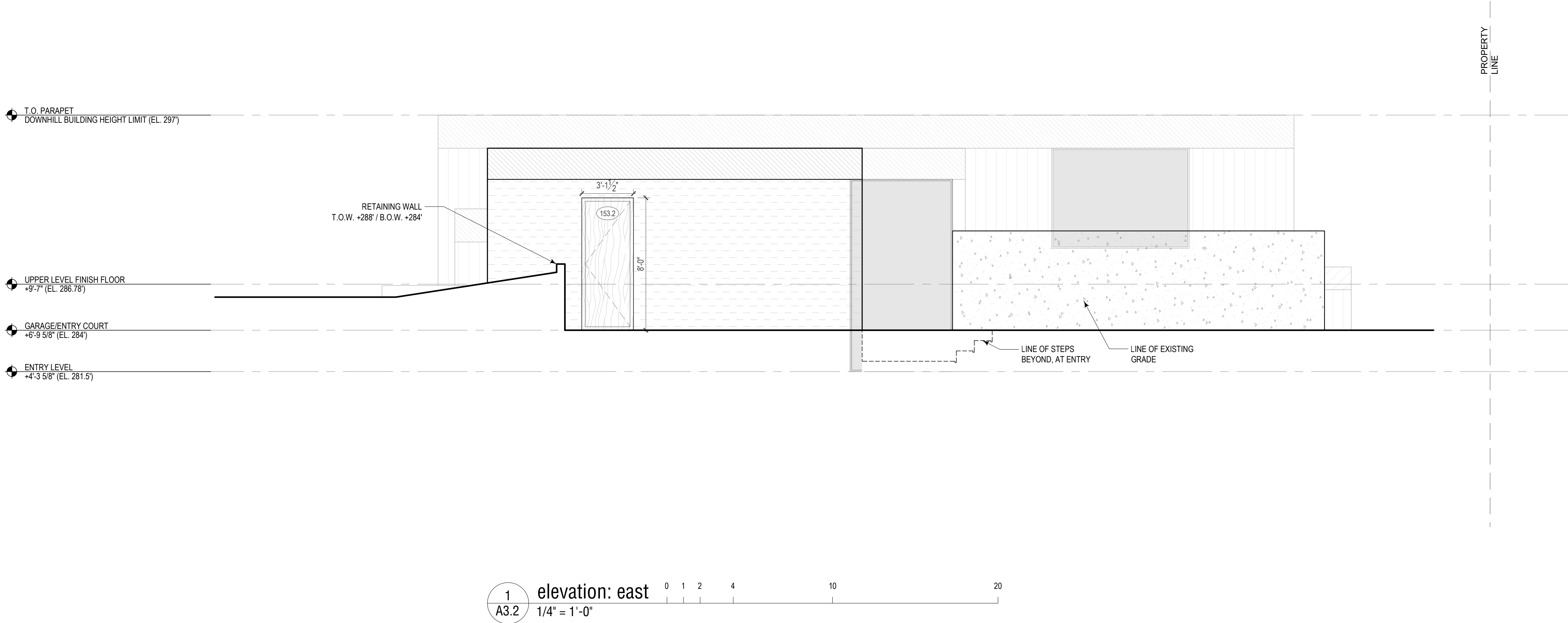


1 elevation: north
A3.1 1/4" = 1'-0"



MATERIAL LEGEND	
	16 GAUGE MTL FASCIA W/ CUSTOM PATINAED ZINC FINISH
	STAINLESS STEEL PLATE GUARDRAIL / PLANTER
	SANDBLASTED CONCRETE W/ EXPOSED AGGREGATE
	CEMENT BOARD TBD
	1X CEDAR T&G SIDING - VERTICAL ORIENTATION
	1X CEDAR T&G SIDING - HORIZONTAL ORIENTATION
SG	SAFETY GLAZING
EG	EGRESS DOOR / WINDOW

- GENERAL ELEVATION NOTES**
- REFER TO SHEET A9.1 FOR GLAZING FENESTRATION SCHEDULE.
 - REFER TO SHEET A1.1 SITE PLAN FOR TOP OF WALL / BOTTOM OF WALL HEIGHTS.
 - ALL GUARDRAILS TO BE 36" FROM FINISH FLOOR, TYPICAL.



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Project:
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project no. 2401

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ELEVATIONS

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Drawing Title:

ELEVATIONS

Date: April 17, 2025

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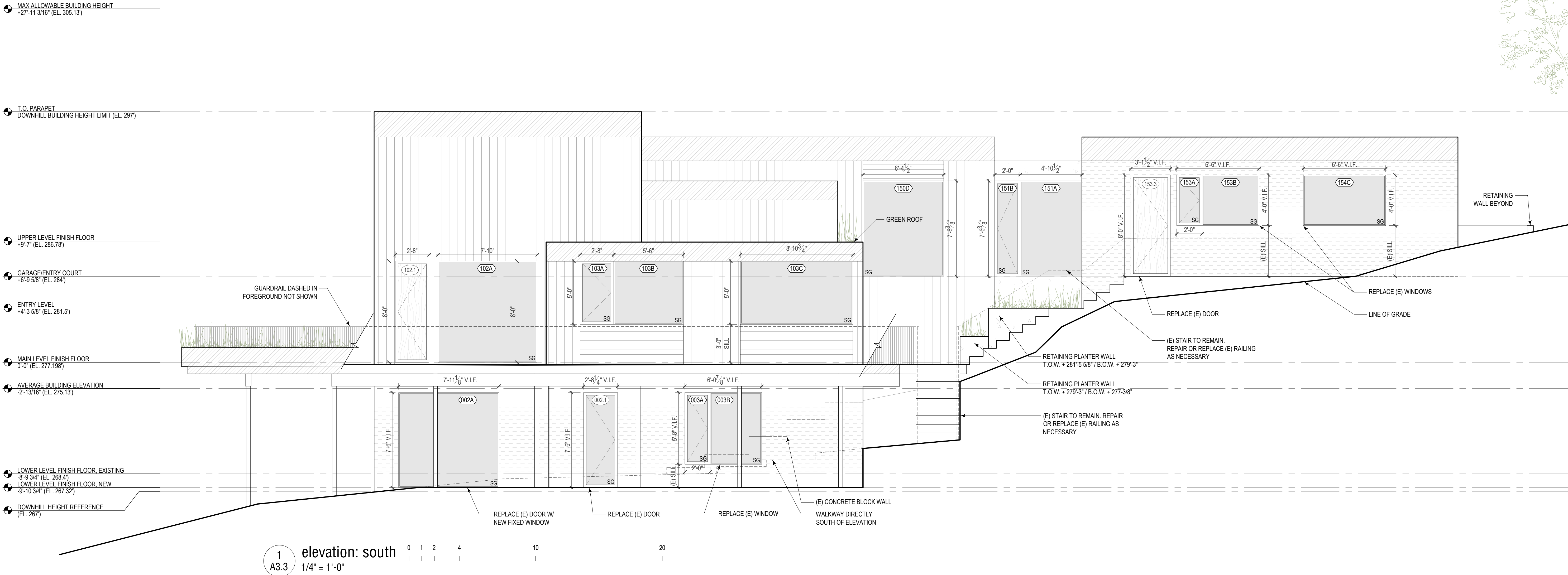
A3.3

MATERIAL LEGEND

	16 GAUGE MTL FASCIA W/ CUSTOM PATINAED ZINC FINISH
	STAINLESS STEEL PLATE GUARDRAIL / PLANTER
	SANDBLASTED CONCRETE W/ EXPOSED AGGREGATE
	CEMENT BOARD TBD
	1X CEDAR T&G SIDING - VERTICAL ORIENTATION
	1X CEDAR T&G SIDING - HORIZONTAL ORIENTATION
SG	SAFETY GLAZING
EG	EGRESS DOOR / WINDOW

GENERAL ELEVATION NOTES

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- ALL GUARDRAILS TO BE 36" FROM FINISH FLOOR, TYPICAL.



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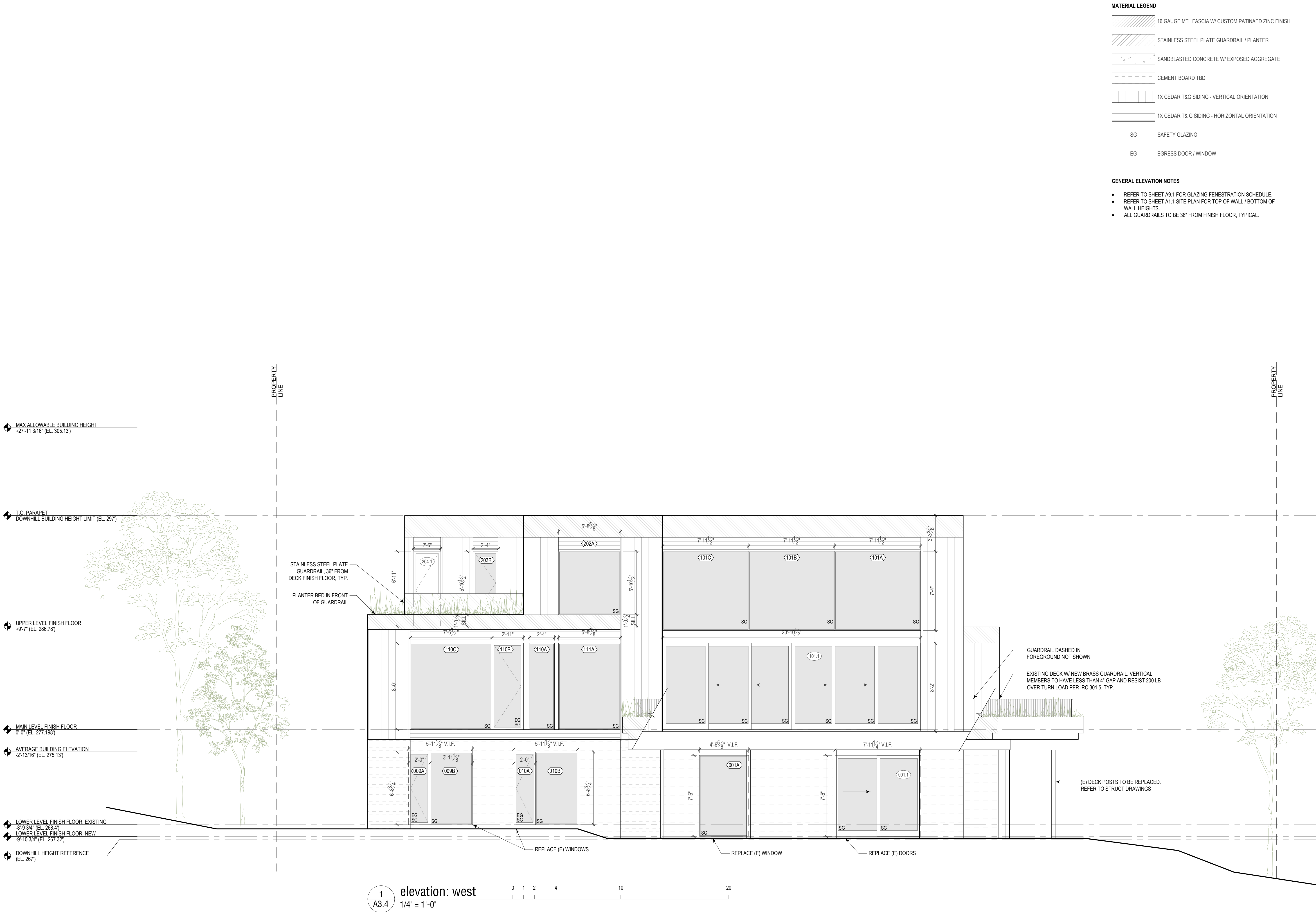
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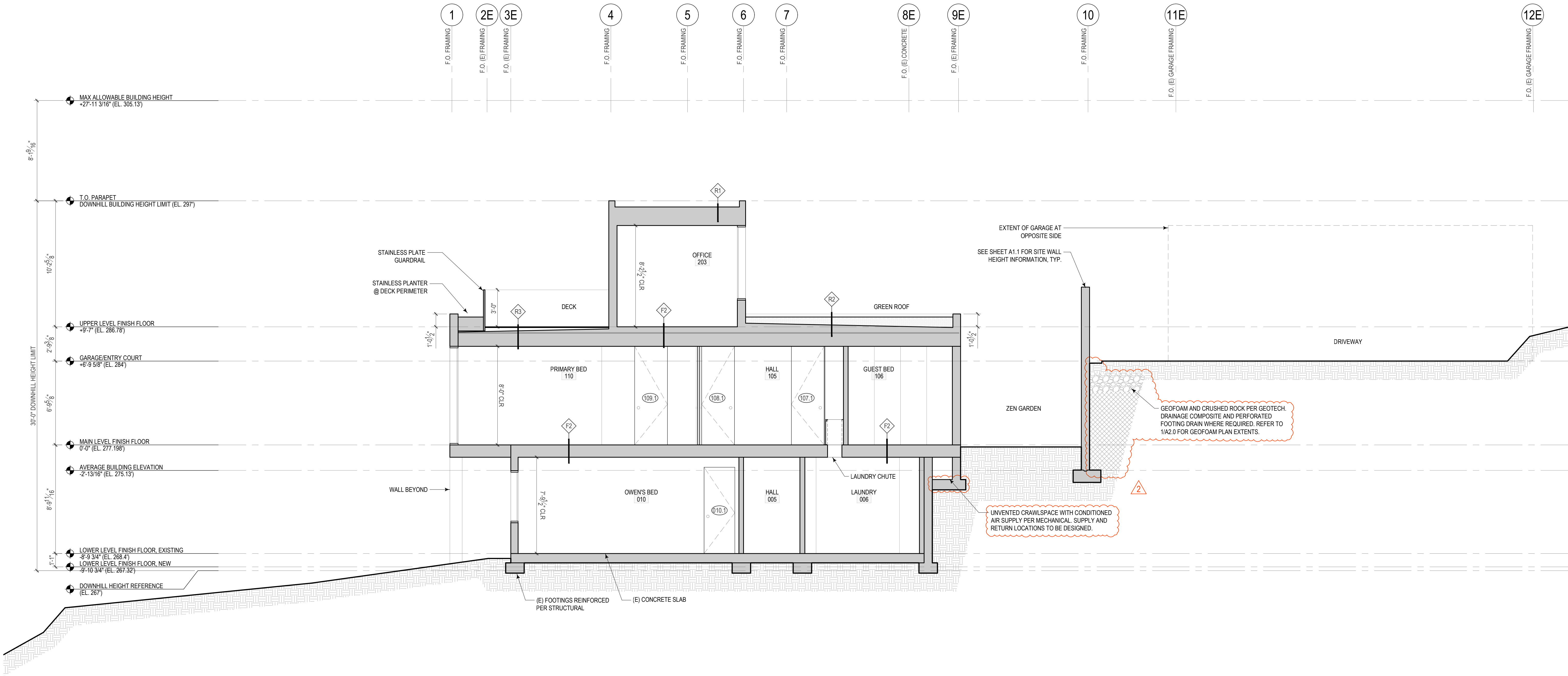
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Drawing Title:
BUILDING SECTION

Date: June 12, 2025
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A4.1



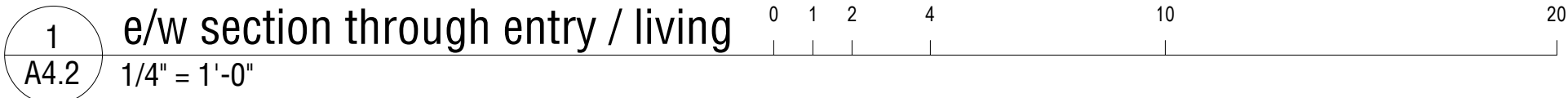
1 e/w section through primary bed
A4.1 1/4" = 1'-0"

stamp:



Project:
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 project no. 2401
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 Mercer Island, WA 98040

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BUILDING SECTION

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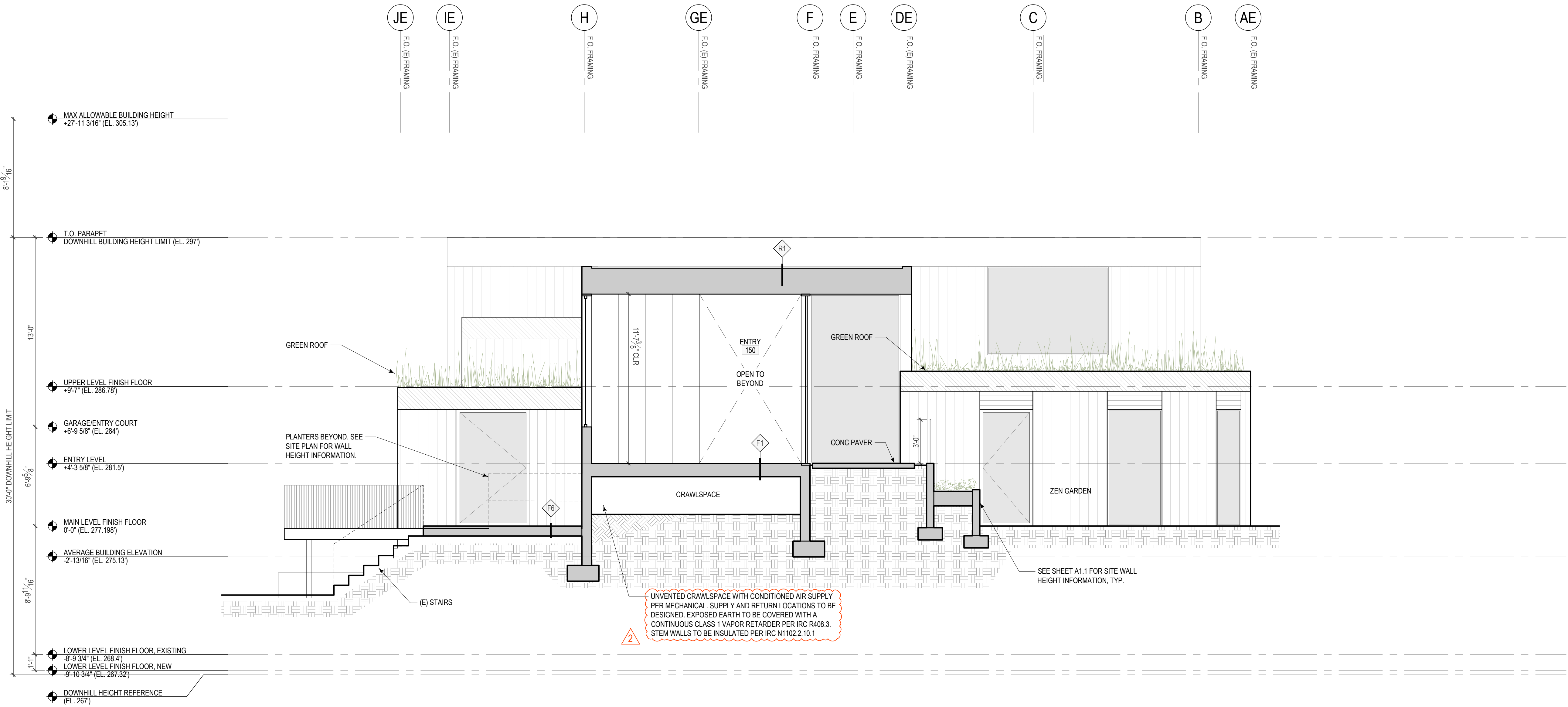
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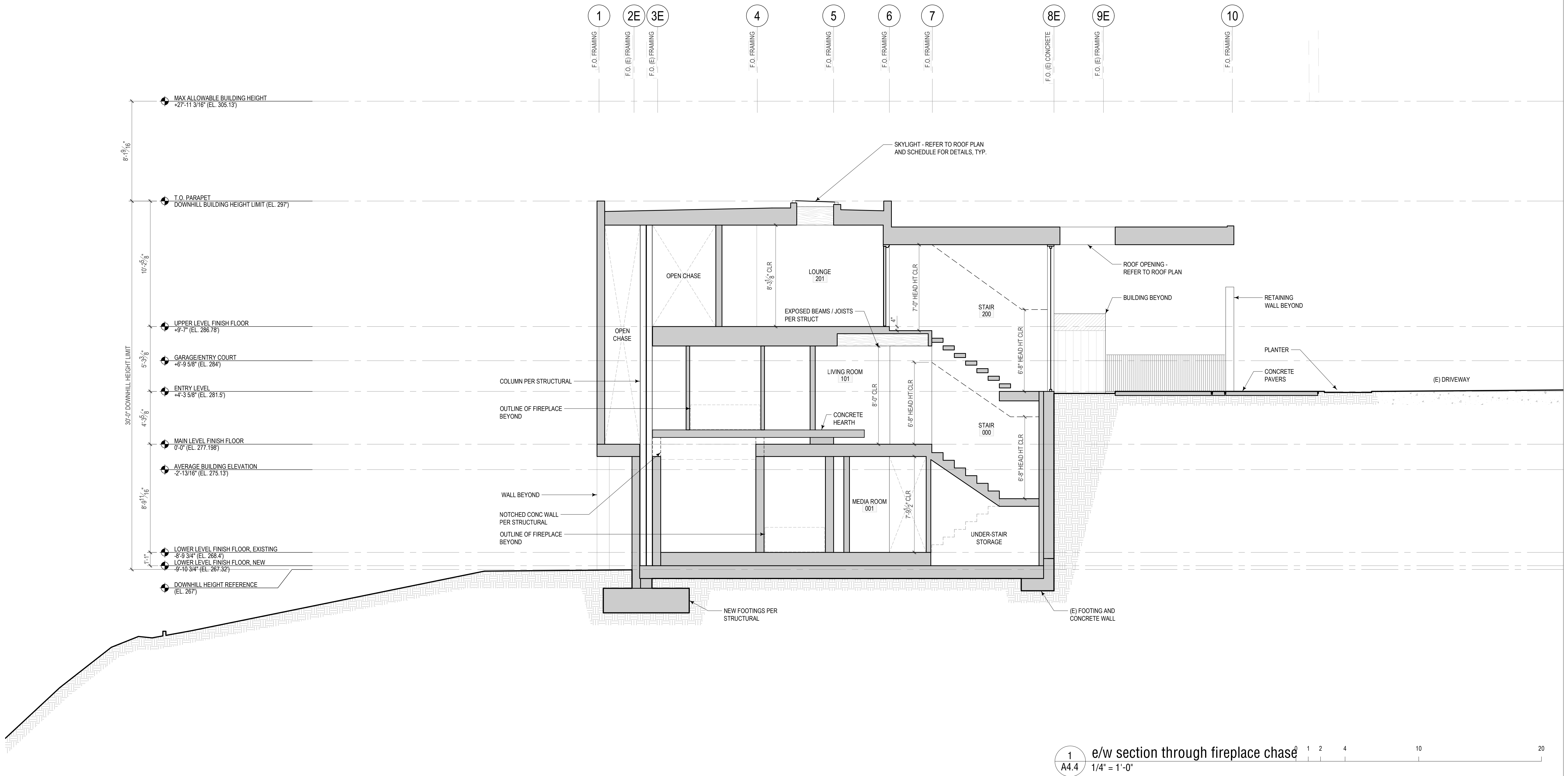
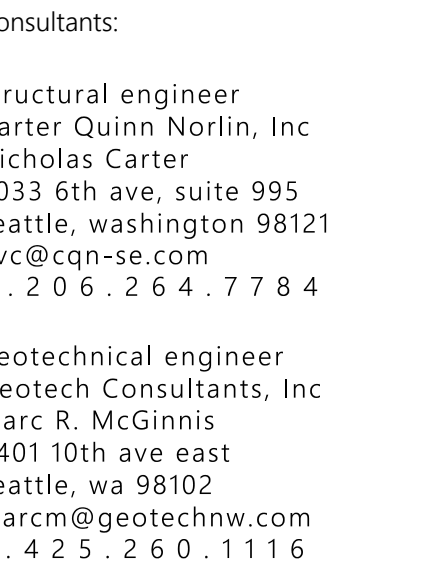
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A4.3



1
A4.3 n/s section through entry
1/4" = 1'-0"

0 1 2 4 10 20



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Drawing Title:

WALL SECTIONS

Date: June 12, 2025

Issued For: Permit Set - Rev 2
(not for construction)

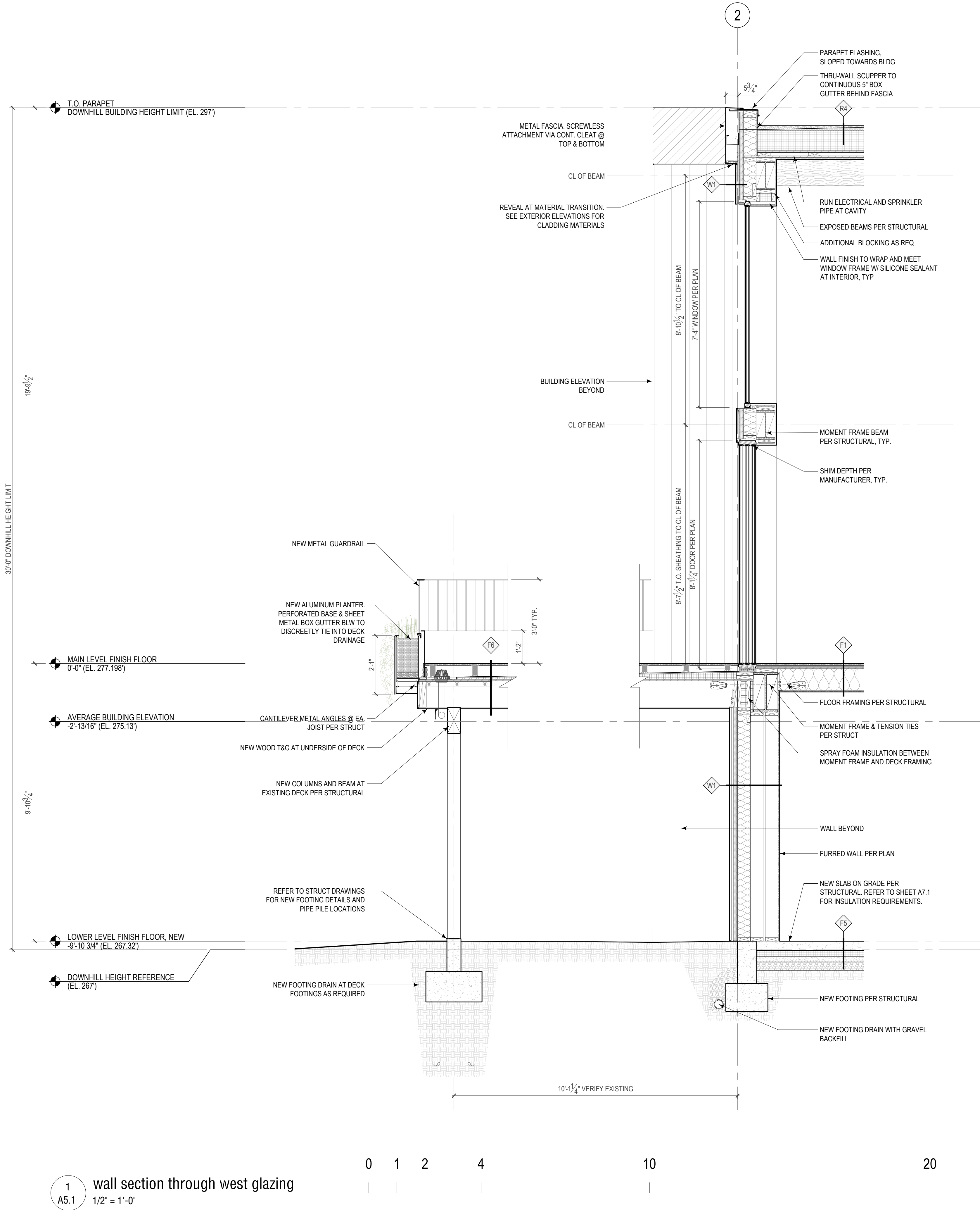
Drawn By: mm, ge, ls

Checked By: ss

Scale:

Sheet No.:

A5.1



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Revision:	Date:
△ MERCER ISLAND BUILDING PERMIT REV 1	04.17.2025
△ MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

Stamp:

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seattle, washington 98102
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w w w . s t u d i o d i a a . c o m

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

FLOOR AND ROOF ASSEMBLIES

Date: June 12, 2025

Issued For: Permit Set - Rev 2
(not for construction)

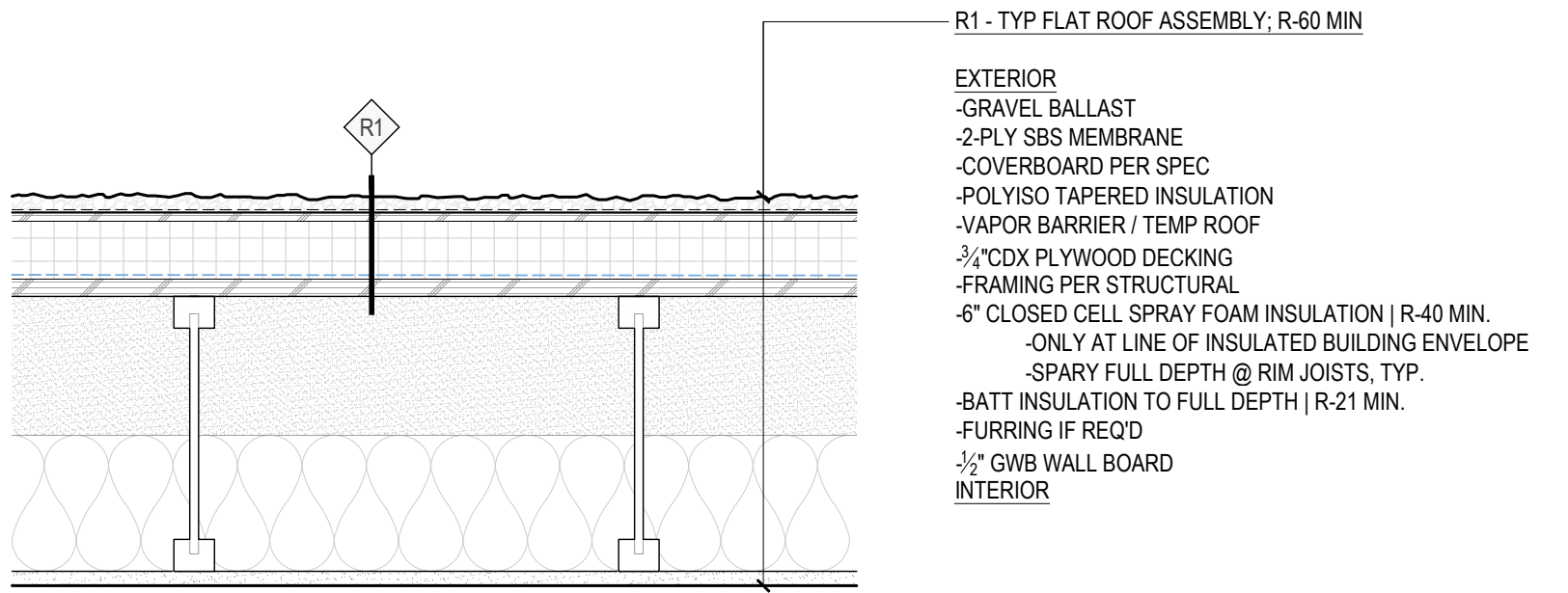
Drawn By: mm, ge, ls

Checked By: ss

Scale:

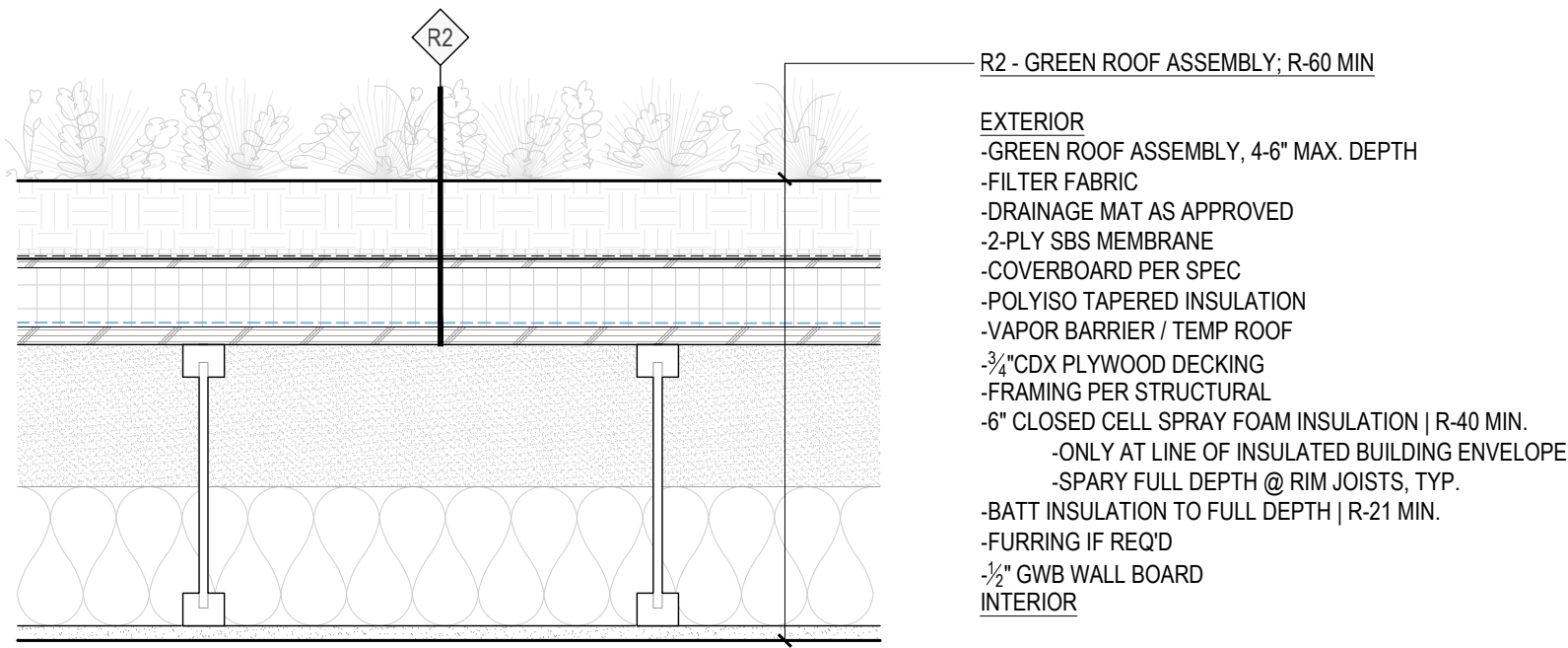
Sheet No.:

A7.1



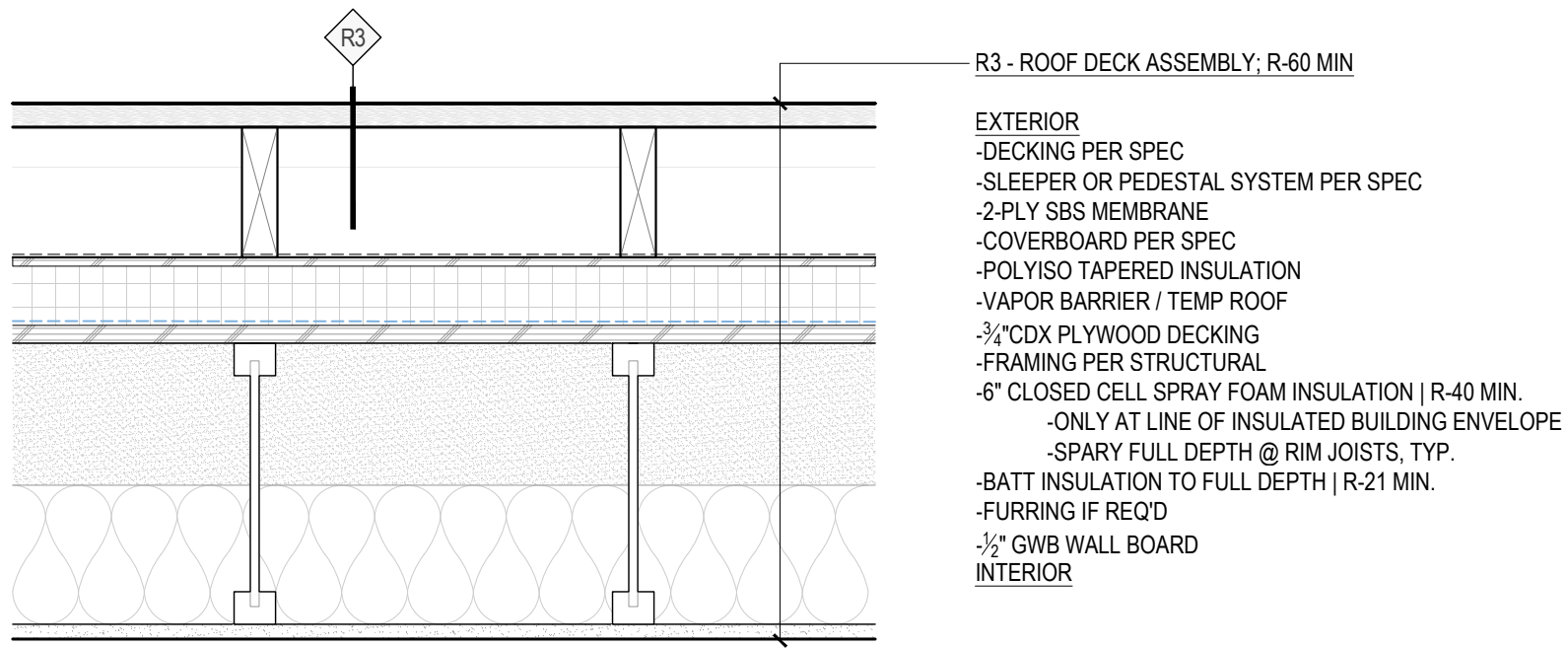
ROOF TYPE R1

1-1/2" = 1'-0"



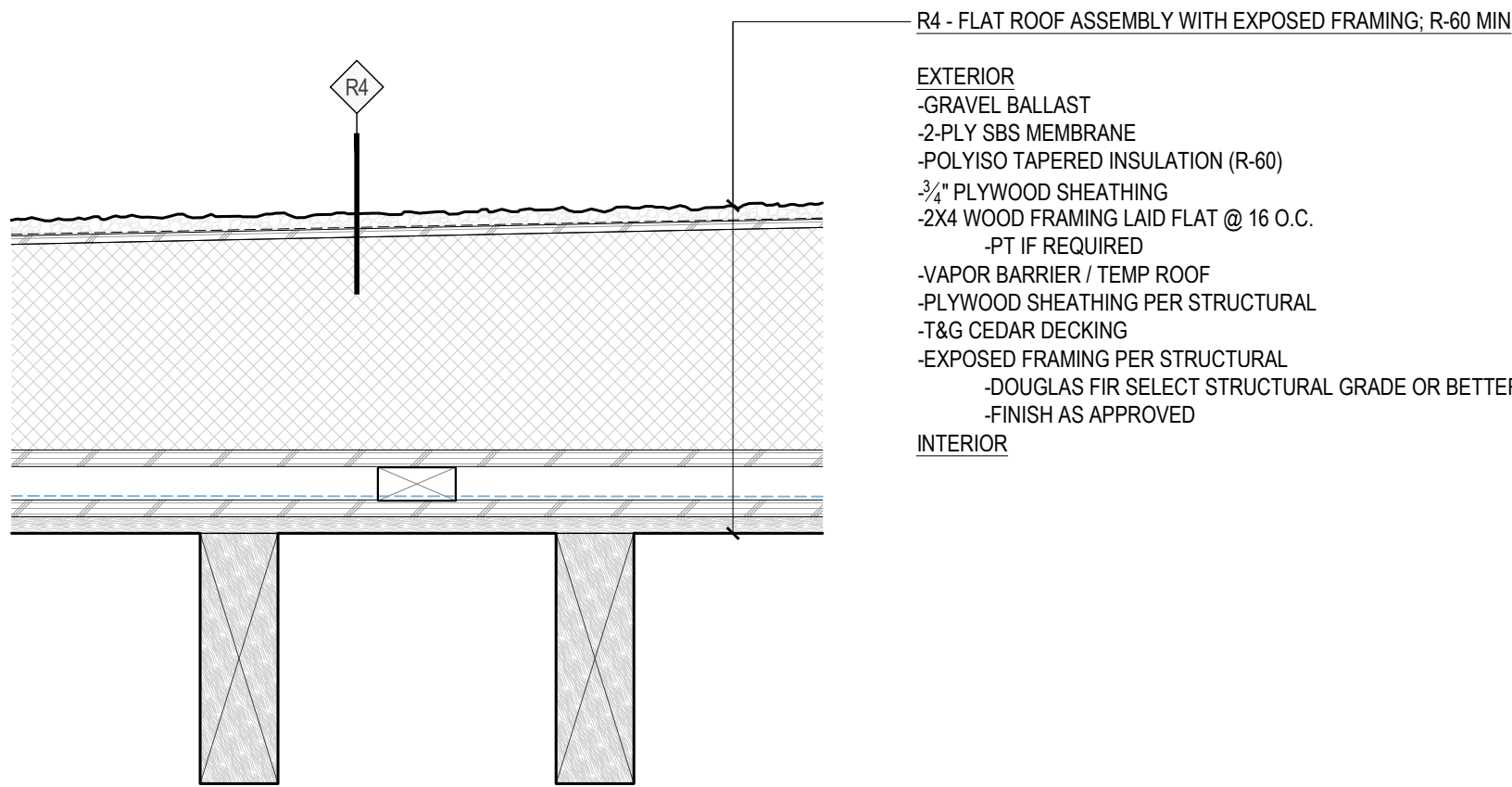
ROOF TYPE R2

1-1/2" = 1'-0"



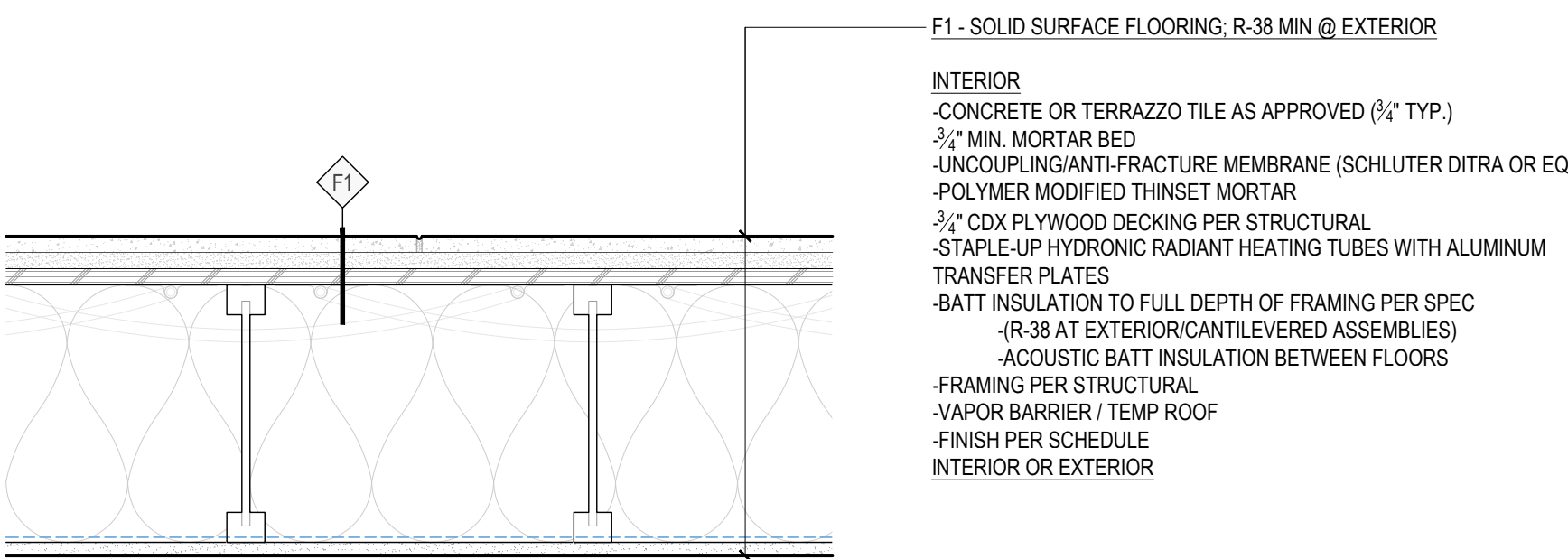
ROOF TYPE R3

1-1/2" = 1'-0"



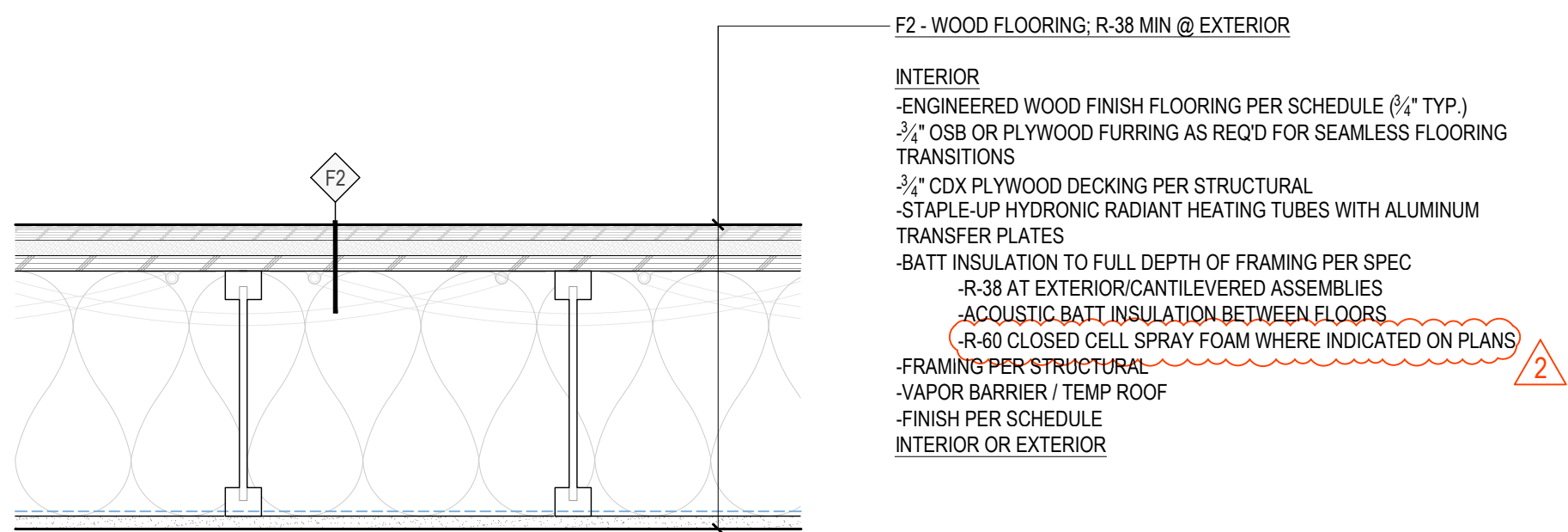
ROOF TYPE R4

1-1/2" = 1'-0"



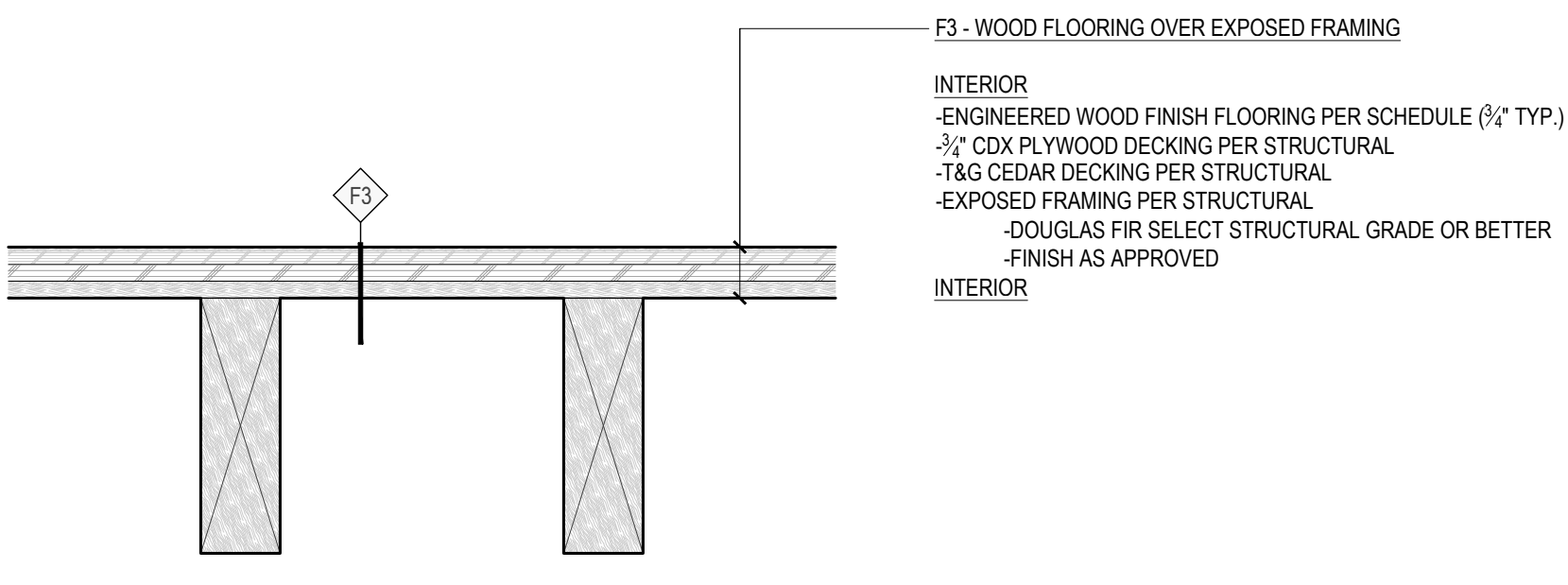
FLOOR TYPE F1

1-1/2" = 1'-0"



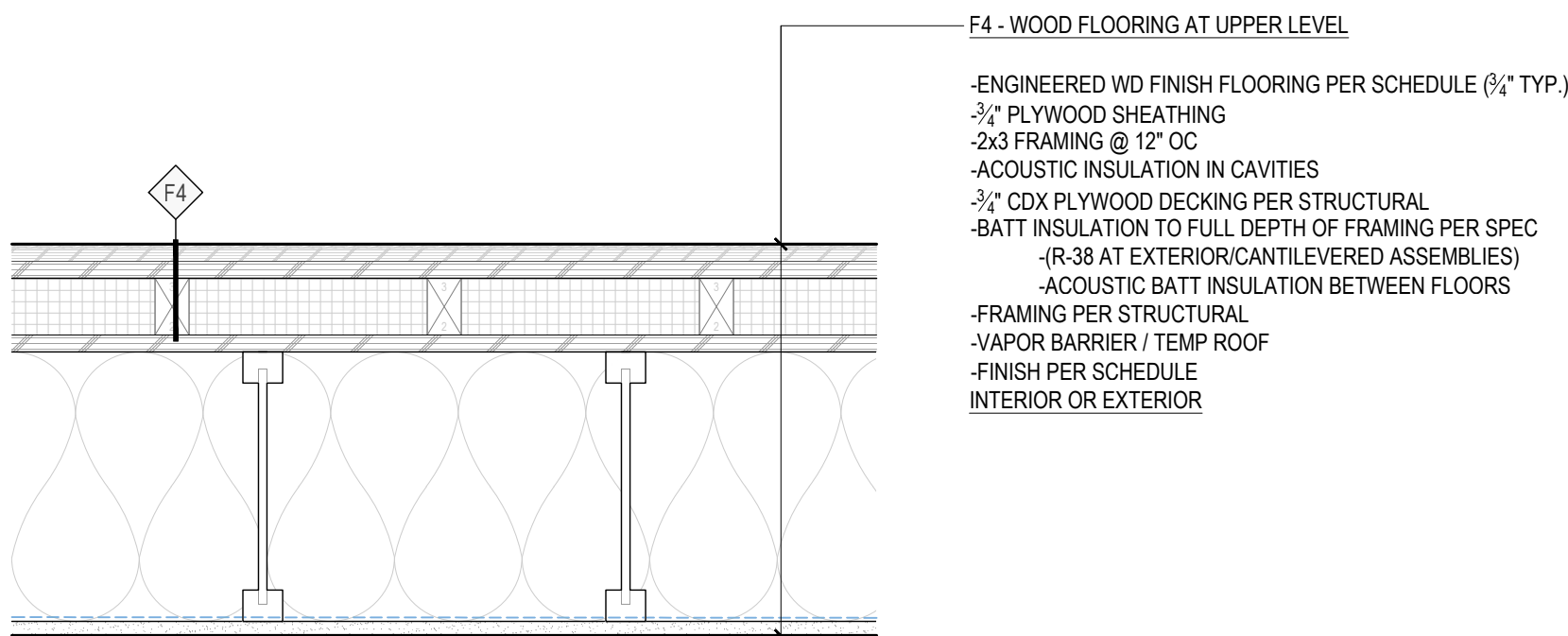
FLOOR TYPE F2

1-1/2" = 1'-0"



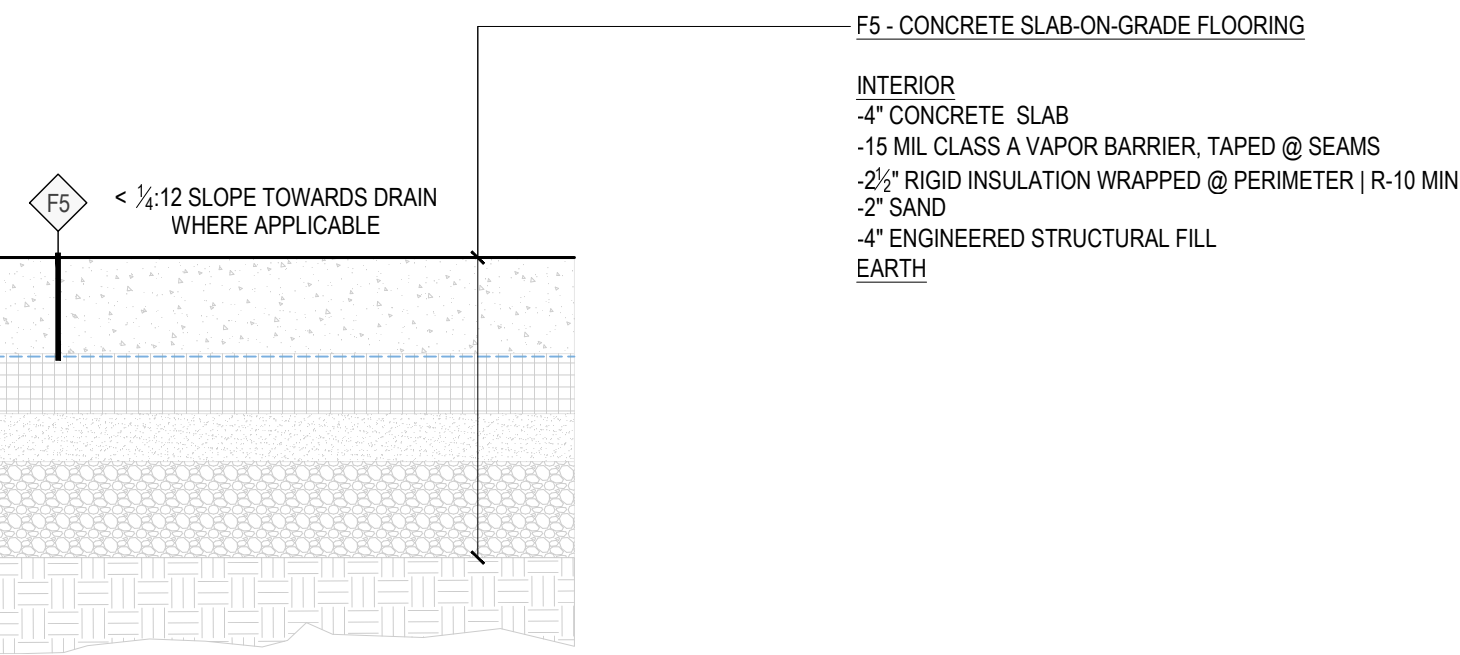
FLOOR TYPE F3

1-1/2" = 1'-0"



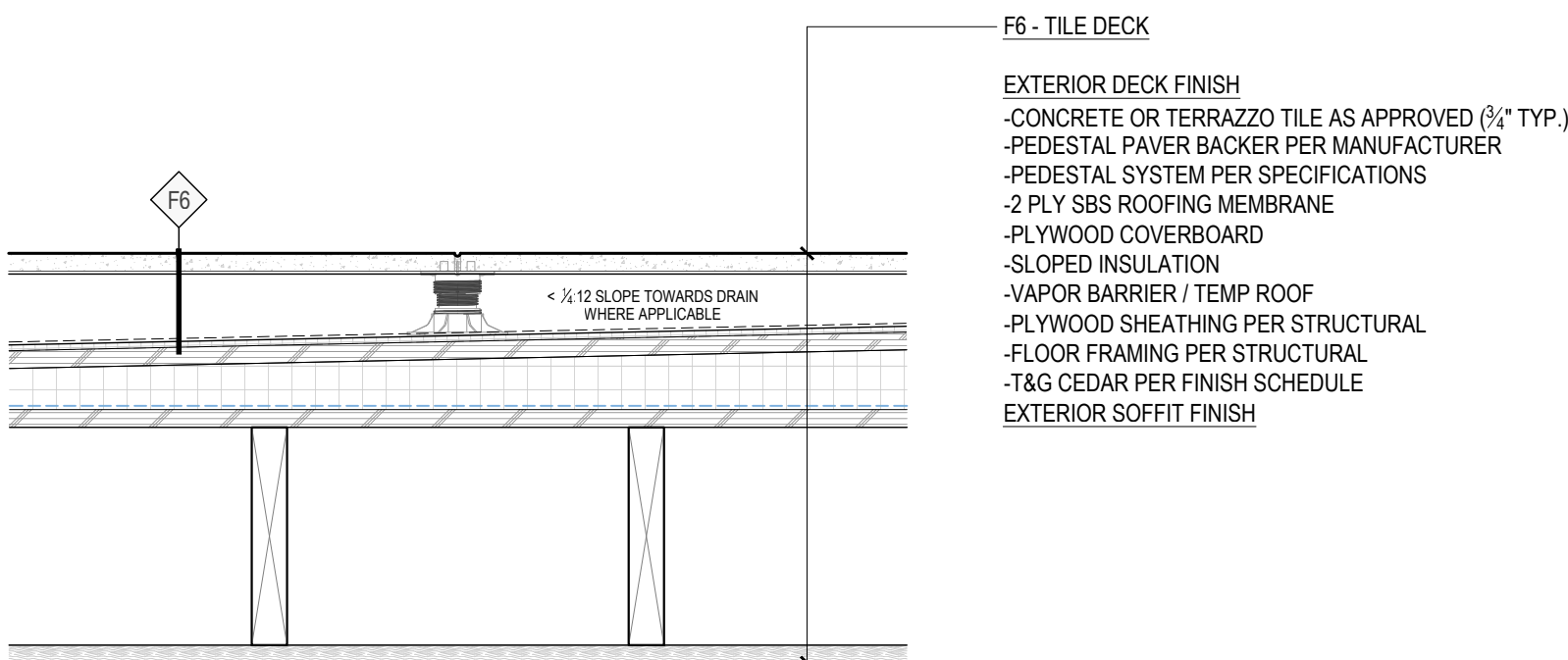
FLOOR TYPE F4

1-1/2" = 1'-0"



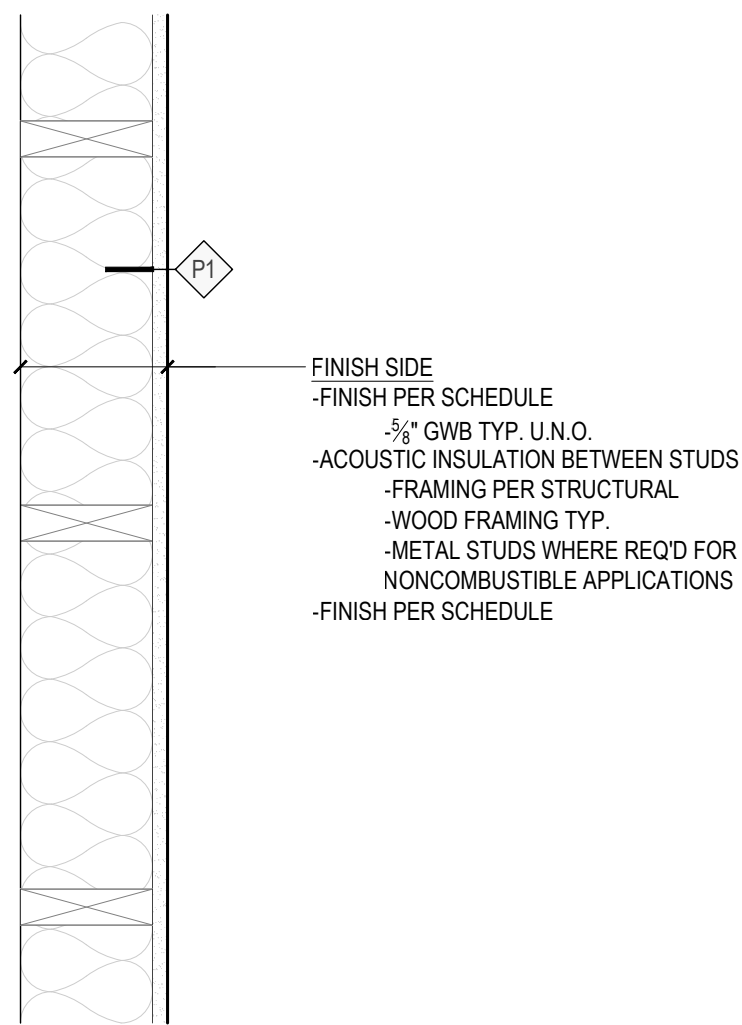
FLOOR TYPE F5

1-1/2" = 1'-0"



FLOOR TYPE F6

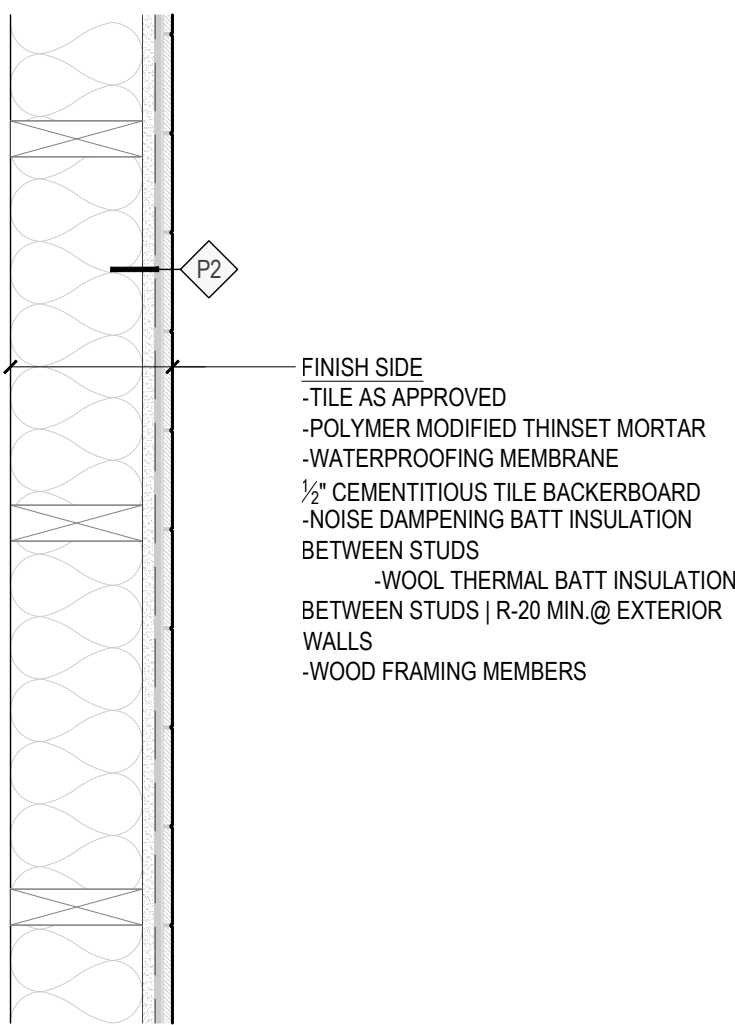
1-1/2" = 1'-0"



FINISH SIDE
-FINISH PER SCHEDULE
-5/8" GWB TYP. U.N.O.
-ACOUSTIC INSULATION BETWEEN STUDS
-FRAMING PER STRUCTURAL
-WOOD FRAMING TYP.
-METAL STUDS WHERE REQ'D FOR
NONCOMBUSTIBLE APPLICATIONS
-FINISH PER SCHEDULE

INT WALL TYPE P1

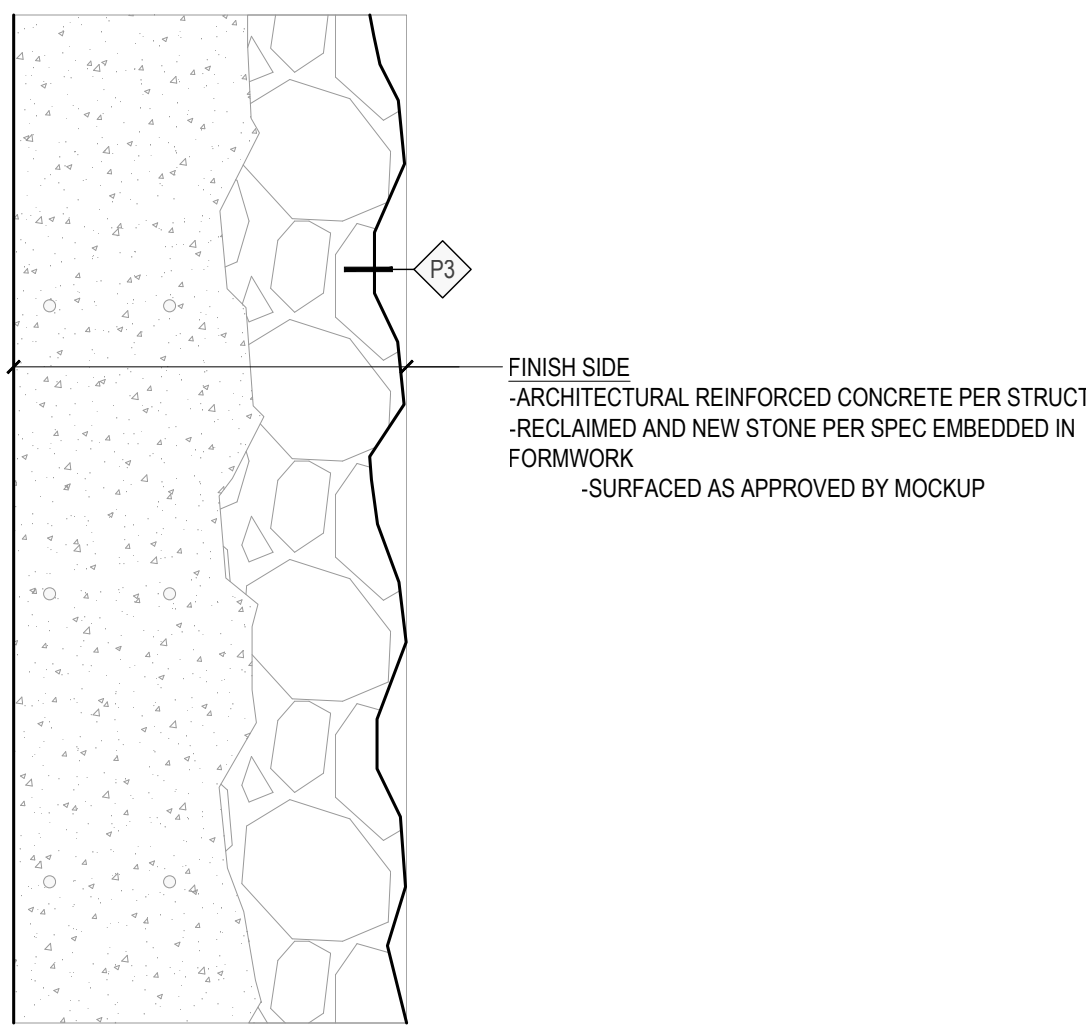
1'-1/2" = 1'-0"



FINISH SIDE
-TILE AS APPROVED
-POLYMER MODIFIED THINSET MORTAR
-WATERPROOFING MEMBRANE
-1/2" CEMENTITIOUS TILE BACKERBOARD
-NOISE DAMPENING BATT INSULATION
BETWEEN STUDS
-WOOL THERMAL BATT INSULATION
BETWEEN STUDS | R-20 MIN @ EXTERIOR
WALLS
-WOOD FRAMING MEMBERS

INT WALL TYPE P2

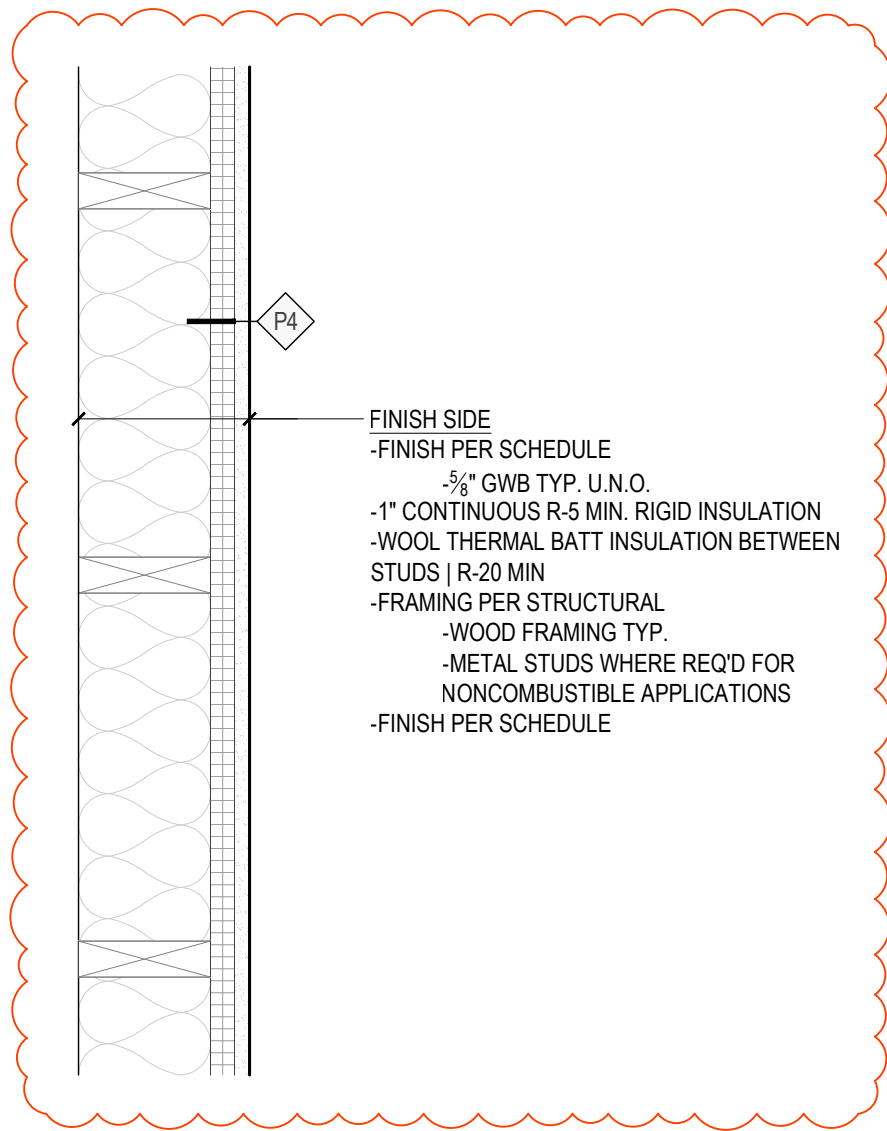
1'-1/2" = 1'-0"



FINISH SIDE
-ARCHITECTURAL REINFORCED CONCRETE PER STRUCT
-RECLAIMED AND NEW STONE PER SPEC EMBEDDED IN
FORMWORK
-SURFACED AS APPROVED BY MOCKUP

INT WALL TYPE P3

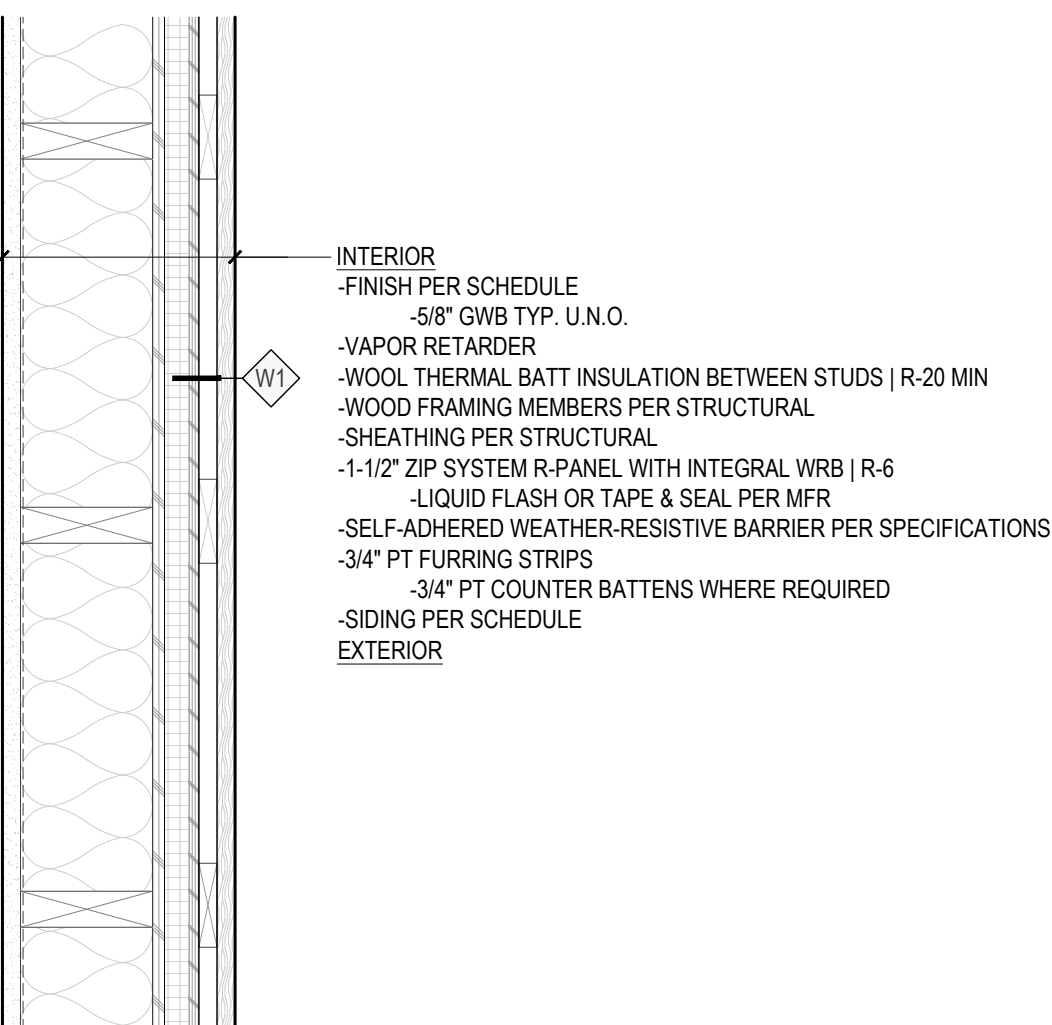
1'-1/2" = 1'-0"



FINISH SIDE
-FINISH PER SCHEDULE
-5/8" GWB TYP. U.N.O.
-1" CONTINUOUS R-5 MIN. RIGID INSULATION
-WOOL THERMAL BATT INSULATION BETWEEN
STUDS | R-20 MIN
-FRAMING PER STRUCTURAL
-WOOD FRAMING TYP.
-METAL STUDS WHERE REQ'D FOR
NONCOMBUSTIBLE APPLICATIONS
-FINISH PER SCHEDULE

INT WALL TYPE P4

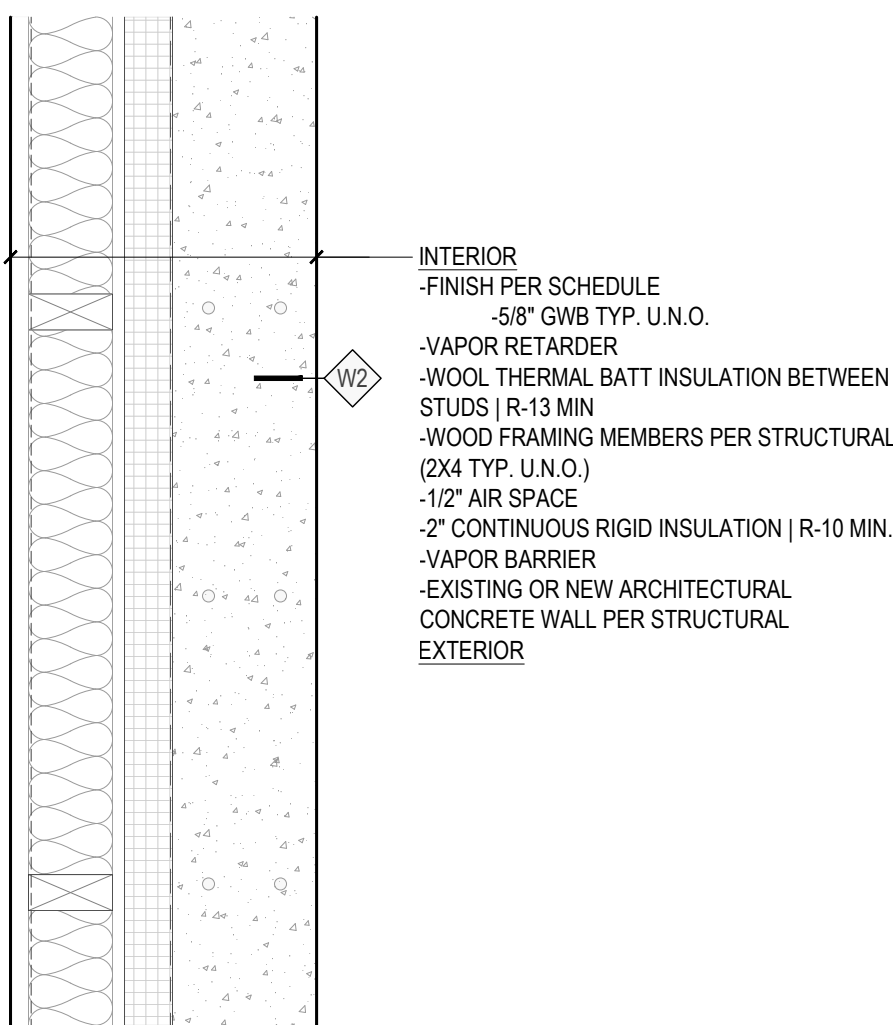
1'-1/2" = 1'-0"



INTERIOR
-FINISH PER SCHEDULE
-5/8" GWB TYP. U.N.O.
-VAPOR RETARDER
-WOOL THERMAL BATT INSULATION BETWEEN STUDS | R-20 MIN
-WOOD FRAMING MEMBERS PER STRUCTURAL
-SHEATHING PER STRUCTURAL
-1-1/2" ZIP SYSTEM R-PANEL WITH INTEGRAL WRB | R-6
-LIQUID FLASH OR TAPE & SEAL PER MFR
-SELF-ADHERED WEATHER-RESISTIVE BARRIER PER SPECIFICATIONS
-3/4" PT FURRING STRIPS
-3/4" PT COUNTER BATTENS WHERE REQUIRED
-SIDING PER SCHEDULE
EXTERIOR

EXT WALL TYPE W1

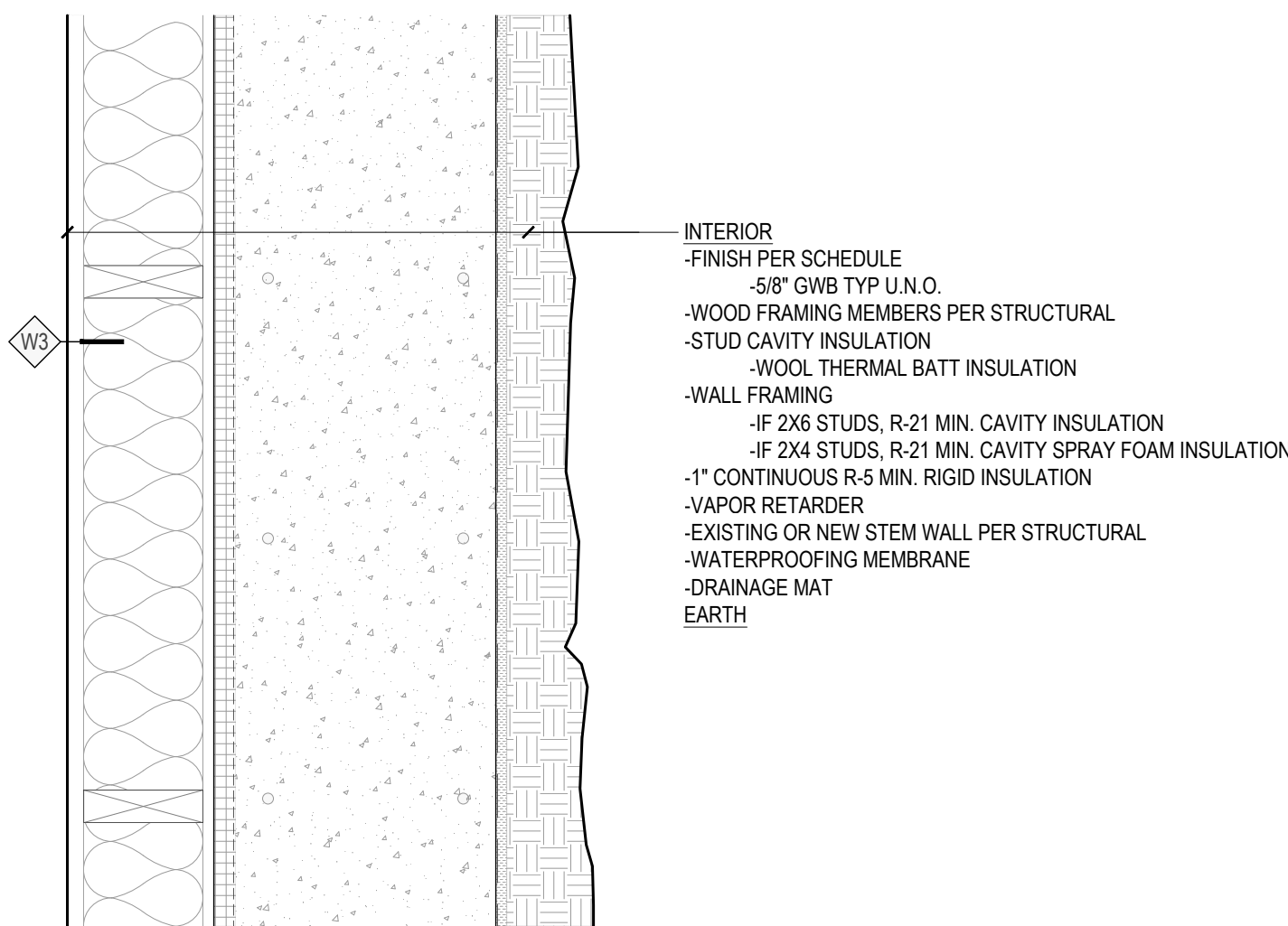
1'-1/2" = 1'-0"



INTERIOR
-FINISH PER SCHEDULE
-5/8" GWB TYP. U.N.O.
-VAPOR RETARDER
-WOOL THERMAL BATT INSULATION BETWEEN
STUDS | R-13 MIN
-WOOD FRAMING MEMBERS PER STRUCTURAL
(2X4 TYP. U.N.O.)
-1/2" AIR SPACE
-2" CONTINUOUS RIGID INSULATION | R-10 MIN.
-VAPOR BARRIER
-EXISTING OR NEW ARCHITECTURAL
CONCRETE WALL PER STRUCTURAL
EXTERIOR

EXT WALL TYPE W2

1'-1/2" = 1'-0"



INTERIOR
-FINISH PER SCHEDULE
-5/8" GWB TYP. U.N.O.
-WOOD FRAMING MEMBERS PER STRUCTURAL
-STUD CAVITY INSULATION
-WOOL THERMAL BATT INSULATION
-WALL FRAMING
-IF 2X6 STUDS, R-21 MIN. CAVITY INSULATION
-IF 2X4 STUDS, R-21 MIN. CAVITY SPRAY FOAM INSULATION
-1" CONTINUOUS R-5 MIN. RIGID INSULATION
-VAPOR RETARDER
-EXISTING OR NEW STEM WALL PER STRUCTURAL
-WATERPROOFING MEMBRANE
-DRAINAGE MAT
EARTH

EXT WALL TYPE W3

1'-1/2" = 1'-0"

NOT FOR CONSTRUCTION

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Revision:

△ MERCER ISLAND
BUILDING PERMIT REV 1

Date:
04.17.2025

△ MERCER ISLAND
BUILDING PERMIT REV 2

06.12.2025

Stamp:

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

INT & EXT WALL
ASSEMBLIES

Date: June 12, 2025

Issued For: Permit Set - Rev 2
(not for construction)

Drawn By: mm, ge, ls

Checked By: ss

Scale:

Sheet No.:

A7.2

GENERAL PROPERTIES - AREA-WEIGHTED GLAZING U-FACTOR MUST BE 0.25 OR BETTER																				ENERGY DATA				
TAG	LOCATION	MFR	DESCRIPTION/TYPE	FRAME SIZE (W x H)		ROUGH OPENING (W x H)		UNIT AREA	FRAME MATERIAL	EXT FRAME FINISH	GLASS	FILL	TDL SOL	SAFETY GLAZING	COMMON MULLION	WT	HAND	HARDWARE TYPE	STOP OR HOLD-OPEN	NOTES	NFRC CPD#	U-FACTOR	AREA	AREA-WEIGHTED U-FACTOR
001.1	MEDIA ROOM 001	OTIMA	SLIDING DOOR	7'-11 1/4"	7'-6"	7'-11 3/4"	7'-6 1/2"	714.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	60.18 SF	15.04
001A	MEDIA ROOM 001	OTIMA	PICTURE	4'-6 5/8"	7'-6"	4'-7 1/8"	7'-6 1/2"	409.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	34.64 SF	8.66
002.1	PLAYROOM 002	OTIMA	SWING DOOR	2'-8 1/4"	7'-6"	2'-8 3/4"	7'-6 1/2"	241.9 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	20.58 SF	5.15
002A	PLAYROOM 002	OTIMA	PICTURE	7'-11 1/8"	7'-6"	7'-11 5/8"	7'-6 1/2"	713.4 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	60.10 SF	15.02
003A	GYM 003	OTIMA	CASEMENT	2'-0"	5'-8"	2'-0 1/2"	5'-8 1/2"	136.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	11.65 SF	2.91
003B	GYM 003	OTIMA	PICTURE	4'-0 1/2"	5'-8"	4'-1 3/8"	5'-8 1/2"	276.9 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	23.49 SF	5.87
006A	LAUNDRY 006	OTIMA	AWNING	5'-0 3/4"	1'-6"	5'-1 1/4"	1'-6 1/2"	91.1 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	7.87 SF	1.97
006B	BATH 008	OTIMA	AWNING	2'-11 1/2"	1'-6"	2'-11 5/8"	1'-6 1/2"	52.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	4.58 SF	1.14
009A	THEO'S ROOM 009	OTIMA	CASEMENT	2'-0"	5'-11 1/8"	2'-0 1/2"	5'-11 5/8"	142.2 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	12.19 SF	3.05
009B	THEO'S ROOM 009	OTIMA	PICTURE	3'-11 1/8"	5'-11 1/8"	3'-11 5/8"	5'-11 5/8"	279.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	23.69 SF	5.92
010A	OWENS ROOM 010	OTIMA	CASEMENT	2'-0"	5'-11 1/8"	2'-0 1/2"	5'-11 5/8"	142.2 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	12.19 SF	3.05
010B	OWENS ROOM 010	OTIMA	PICTURE	3'-11 1/8"	5'-11 1/8"	3'-11 5/8"	5'-11 5/8"	279.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	23.69 SF	5.92
101.1	LIVING ROOM 101	OTIMA	SLIDING DOOR	23'-10 1/2"	8'-2"	23'-11"	8'-2 1/2"	2339.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	196.32 SF	49.08
101A	LIVING ROOM 101	OTIMA	PICTURE	7'-11 1/2"	7'-4"	8'-0"	7'-4 1/2"	700.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	59.00 SF	14.75
101B	LIVING ROOM 101	OTIMA	PICTURE	7'-11 1/2"	7'-4"	8'-0"	7'-4 1/2"	700.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	59.00 SF	14.75
101C	LIVING ROOM 101	OTIMA	PICTURE	7'-11 1/2"	7'-4"	8'-0"	7'-4 1/2"	700.3 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	59.00 SF	14.75
102A	DINING ROOM 102	QUANTUM	PICTURE	7'-10"	8'-0"	7'-10 1/2"	8'-0 1/2"	752.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	63.33 SF	15.83
103.1	KITCHEN 103	OTIMA	PIVOT DOOR	4'-11 5/8"	8'-0"	5'-0 1/8"	8'-0 1/2"	476.5 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	40.25 SF	10.06
103A	KITCHEN 103	OTIMA	CASEMENT	2'-8"	5'-0"	2'-8 1/2"	5'-0 1/2"	160.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	13.65 SF	3.41
103B	KITCHEN 103	OTIMA	PICTURE	5'-6"	5'-0"	5'-6 1/2"	5'-0 1/2"	330.5 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	27.94 SF	6.98
103C	KITCHEN 103	OTIMA	PICTURE	8'-10 3/4"	5'-0"	8'-11 1/4"	5'-0 1/2"	533.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	45.06 SF	11.26
106.2	GUEST BED 106	OTIMA	SWING DOOR	3'-7 1/2"	8'-0"	3'-8"	8'-0 1/2"	348.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	29.49 SF	7.37
107A	NOA'S ROOM 107	OTIMA	PICTURE	3'-8 1/2"	8'-0"	3'-9"	8'-0 1/2"	356.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	30.16 SF	7.54
107B	NOA'S ROOM 107	OTIMA	PICTURE	1'-8 1/8"	8'-0"	1'-8 5/8"	8'-0 1/2"	161.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	13.82 SF	3.46
107C	NOA'S ROOM 107	OTIMA	CASEMENT	3'-0"	8'-0"	3'-0 1/2"	8'-0 1/2"	288.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	24.46 SF	6.12
108A	GUEST BATH 108	OTIMA	CASEMENT	1'-2 1/2"	8'-0"	1'-3"	8'-0 1/2"	116.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	10.05 SF	2.51
110A	PRIMARY BED 110	OTIMA	PICTURE	2'-4"	8'-0"	2'-4 1/2"	8'-0 1/2"	224.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	18.10 SF	4.77
110B	PRIMARY BED 110	OTIMA	CASEMENT	2'-11"	8'-0"	2'-11 1/2"	8'-0 1/2"	280.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	23.79 SF	5.95
110C	PRIMARY BED 110	OTIMA	PICTURE	7'-6 3/4"	8'-0"	7'-7 1/4"	8'-0 1/2"	726.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	61.15 SF	15.29
110D	PRIMARY BED 110	OTIMA	PICTURE	3'-0"	8'-0"	3'-0 1/2"	8'-0 1/2"	288.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	24.46 SF	6.12
111A	PRIMARY BATH 111	OTIMA	PICTURE	5'-8 5/8"	8'-0"	5'-9 1/8"	8'-0 1/2"	549.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	46.32 SF	11.58
150A	FOYER 150	OTIMA	PICTURE	2'-10"	11'-7 3/8"	2'-10 1/2"	11'-7 7/8"	394.9 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	33.51 SF	8.38
150B	FOYER 150	OTIMA	PICTURE	5'-5 7/8"	11'-7 3/8"	5'-6 5/16"	11'-7 7/8"	784.4 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	64.41 SF	16.10
150C	FOYER 150	OTIMA	PICTURE	6'-1 7/8"	11'-7 3/8"	6'-2 3/8"	11'-7 7/8"	858.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	72.24 SF	18.06
150D	FOYER 150	OTIMA	PICTURE	6'-4 1/2"	7'-6 3/8"	6'-5"	7'-6 7/8"	576.1 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	48.59 SF	12.15
151A	MUD ROOM 151	OTIMA	PICTURE	4'-10 1/2"	7'-6 3/8"	4'-11"	7'-6 7/8"	440.6 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	37.23 SF	9.31
151B	MUD ROOM 151	OTIMA	CASEMENT	2'-0"	7'-6 3/8"	2'-0 1/2"	7'-6 7/8"	180.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	15.46 SF	3.87
152A	POWDER 152	OTIMA	CASEMENT	1'-11 3/8"	7'-6 3/8"	1'-11 7/8"	7'-6 7/8"	176.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	15.07 SF	3.77
153A	GARAGE 153	OTIMA	CASEMENT	2'-0"	4'-0"	2'-0 1/2"	4'-0 1/2"	96.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	8.25 SF	2.06
153B	GARAGE 153	OTIMA	PICTURE	4'-8"	4'-0"	4'-6 1/2"	4'-0 1/2"	216.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	18.36 SF	4.59
153C	GARAGE 153	OTIMA	PICTURE	6'-6"	4'-0"	6'-6 1/2"	4'-0 1/2"	312.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-	REPLACE EXISTING; VERIFY R.O. IN FIELD	PER MANUF.	0.25	26.44 SF	6.61
201.2	LOUNGE 201	OTIMA	SWING DOOR	2'-8 3/4"	6'-11"	2'-9 1/4"	6'-11 1/2"	226.5 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	19.28 SF	4.82
202A	OFFICE 202	OTIMA	PICTURE	5'-8 5/8"	5'-10 1/2"	5'-9 1/8"	5'-11"	403.2 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	34.08 SF	8.52
202B	OFFICE 202	OTIMA	CASEMENT	2'-0"	5'-10 1/2"	2'-0 1/2"	5'-11"	141.0 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	12.08 SF	3.02
203A	OFFICE 203	OTIMA	PICTURE	8'-3 3/4"	6'-0 5/8"	8'-4 1/4"	6'-1 1/8"	603.7 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	50.91 SF	12.73
203B	OFFICE 203	OTIMA	CASEMENT	2'-4"	5'-10 1/2"	2'-4 1/2"	5'-11"	164.5 SF	ALUMINUM	CLEAR ANODIZED	LOW E-2 GLASS	ARGON	-	Y	-	-	-	-	-		PER MANUF.	0.25	14.05 SF	3.51

OPAQUE FENESTRATION SCHEDULE																								
TAG	LOCATION	MFR	DESCRIPTION/TYPE	FRAME SIZE (W x H)		ROUGH OPENING (W x H)		UNIT AREA	FRAME FINISH		FINISH	THICKNESS		FIRE RATING	COMMON MULLION	WT	HAND	HARDWARE TYPE	STOP OR HOLD-OPEN	NOTES	NFRC CPD#	U-FACTOR	AREA	AREA-WEIGHTED U-FACTOR
102.1	DINING ROOM 102	QUANTUM	SWING DOOR	2'-8"	8'-0"	2'-8 1/2"	8'-0 1/2"	256.0 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-						
150.1	FOYER 150	TBD	PIVOT DOOR	4'-4 3/8"	11'-7 3/8"	4'-4 7/8"	9'-1 7/8"	688.3 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-						
153.1	GARAGE 153	TBD	GARAGE OVERHEAD	18'-0"	9'-1 3/8"	18'-0 1/2"	8'-0 1/2"	1968.7 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-		REPLACE EXISTING; VERIFY R.O. IN FIELD.				
153.2	GARAGE 153	TBD	SWING DOOR	3'-1 1/2"	8'-0"	3'-2"	8'-0 1/2"	300.0 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-						
153.3	GARAGE 153	TBD	SWING DOOR	3'-1 1/2"	8'-0"	3'-2"	8'-11 1/2"	300.0 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-		REPLACE EXISTING; VERIFY R.O. IN FIELD.				
204.1	SAUNA 204	TBD	SWING DOOR	2'-6"	6'-11"	2'-6 1/2"	0'-0 1/2"	207.5 SF	ALUMINUM	CLEAR ANODIZED	TBD			-	-	-	-	-						

NOTES:

1. FACTORY-BUILT COMMON MULLIONS; WIDTH DIMENSION FROM CENTER OF MULLION TO EDGE OF FRAME
2. ALL WINDOW CONTROL DEVICES COMPLY WITH ASTM D2900 FOR WINDOWS THAT ARE EMERGENCY EGRESS WINDOWS
3. WIDTH DIMENSION FOR POCKETING DOORS DEFINED AS NET OPENING. REFER TO DETAILS
4. WIDTH DIMENSION FOR POCKETING CORNER DOORS DEFINED AS "FINISHED OPENING" FROM MFR. REFER TO DETAILS
5. FINAL WINDOW & DOOR SIZES SUBJECT TO APPROVAL OF MANUFACTURER'S SHOP DRAWINGS

SKYLIGHT SCHEDULE																					
GENERAL PROPERTIES - AREA-WEIGHTED SKYLIGHT U-FACTOR MUST BE 0.5 OR BETTER															ENERGY DATA						
TAG	LOCATION	MFR	DESCRIPTION/TYPE	ROUGH OPENING (W x L)		OVERALL FRAME SIZE (W x L)		MATERIAL	FINISH	GLASS	FILL	SPACER BAR	TDL/SDL	SAFETY GLAZING	INSECT SCREEN	STOP OR HOLD-OPEN	NOTES	NFRC CPG#	U-FACTOR	AREA	AREA-WEIGHTED U-FACTOR
S101A	LIVING ROOM 101	TBD	FIXED SKYLIGHT	3'-1 1/2"	9'-4 3/4"	3'-10 1/2"	26'-11"	ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50	104.30 SF	52.15
S101B	LIVING ROOM 101	TBD	FIXED SKYLIGHT	3'-1 1/2"	8'-0"	3'-10 1/2"		ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50		
S101C	LIVING ROOM 101	TBD	FIXED SKYLIGHT	3'-1 1/2"	9'-4 3/4"	3'-10 1/2"		ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50		
S103A	KITCHEN 103	TBD	FIXED SKYLIGHT	4'-0"	3'-10"	4'-9"	4'-7"	ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50	21.77 SF	10.89
S103B	KITCHEN 103	TBD	FIXED SKYLIGHT	4'-0"	3'-10"	4'-9"	4'-7"	ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50	21.77 SF	10.89
S103C	KITCHEN 103	TBD	FIXED SKYLIGHT	4'-0"	3'-10"	4'-9"	0'-9"	ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-		PER MANUF.	0.50	3.56 SF	1.78
S201A	LOUNGE 201	TBD	FIXED SKYLIGHT	3'-1 1/2"	8'-11 5/8"	3'-10 1/2"		ALUMINUM	CLEAR ANODIZED	TBD	TBD	-	-	Y	-	-	CONTINUOUS RAIL FROM SKYLIGHTS 101A/B/C/D	PER MANUF.	0.50		

	AVERAGE GLAZING U-FACTOR = (TOTAL AREA-WEIGHTED U-FACTOR / TOTAL AREA)	151.41 SF	75.70	0.50
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WINDOW AND DOOR NOTES

- CONTRACTOR SHALL MEASURE ACTUAL FRAME OPENINGS PRIOR TO ORDERING UNITS. ROUGH OPENING PER MANUF REQUIREMENTS.
- SAFETY TEMPERED GLASS WHERE: GLAZING WITHIN 18" FROM FLOOR, WET LOCATIONS SUCH AS SHOWERS, TUBS, SPAS AND OTHER SLIPPERY LOCATIONS WITHIN 60" FROM FLOOR, OTHER HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC 308.4.
- EGRESS WINDOWS AT SLEEPING ROOMS SHALL MEET IRC 310.2
- PER ENERGY CODE CREDIT SELECTIONS, ALL NEW VERTICAL EXTERIOR WINDOWS SHALL MEET U-25 MINIMUM COMPLIANCE.
- ALL OPERABLE WINDOWS CONNECTED TO WHOLE-HOUSE SECURITY SYSTEM.

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Revision

Date: _____


MERCER ISLAND
BUILDING PERMIT REV 1

04.17.2025

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98041

Drawing Title:

SCHEDULES

Date: April 17, 2025

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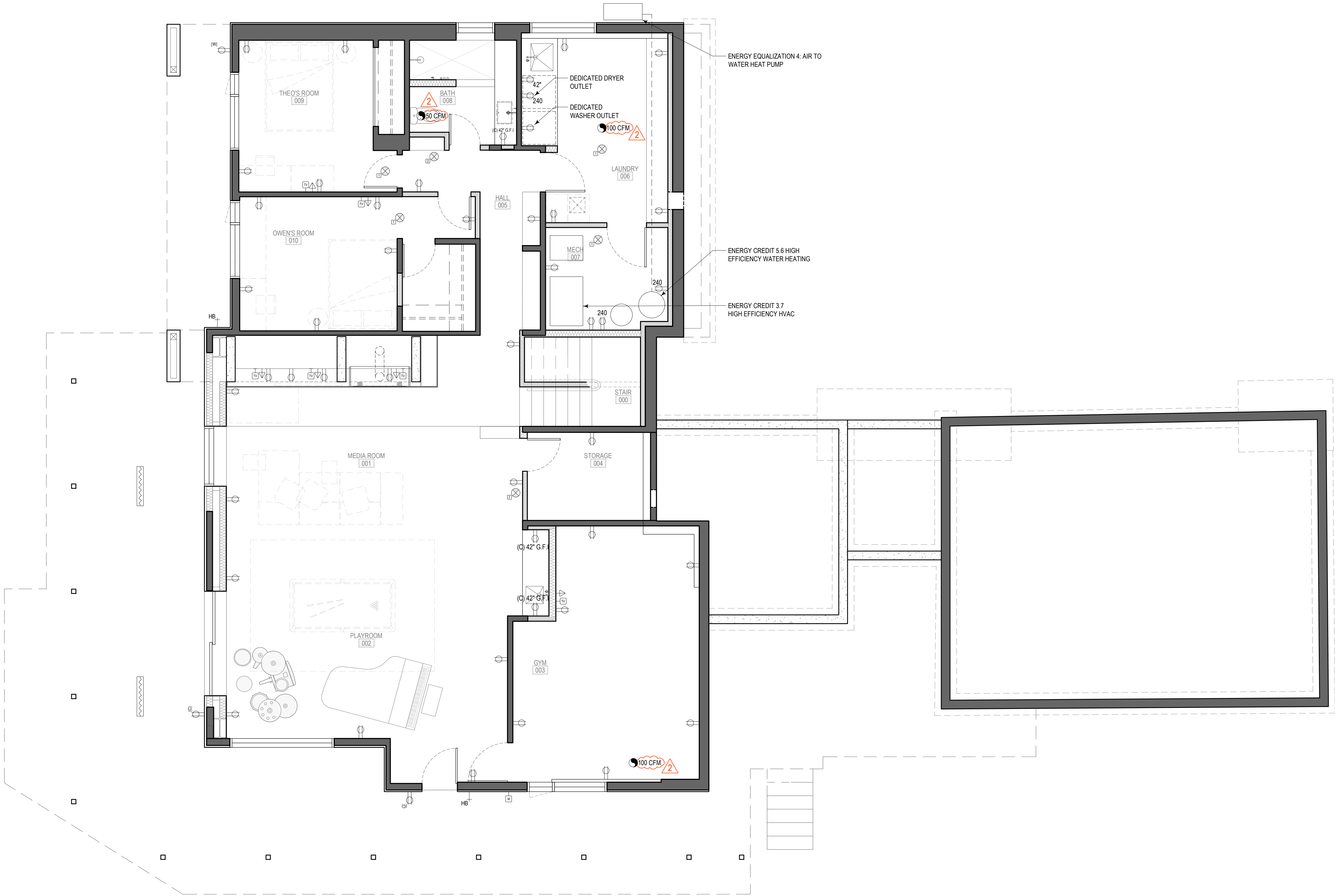
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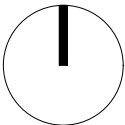


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- NEW ROOF
- NEW GREEN ROOF
- NEW CONCRETE WALL
- NEW FRAMED WALL
- EXISTING WALL TO REMAIN
- EXISTING ELEMENT TO BE REMOVED

MECHANICAL / ELECTRICAL LEGEND	
SYMBOL	TITLE
	DUPLEX OUTLET
	DUPLEX OUTLET (VOLTAGE)
	DUPLEX OUTLET (FLOOR MOUNTED)
	DUPLEX OUTLET (FLOOR - 1/2 SWITCHED)
	DUPLEX OUTLET (GROUND-FAULT CIRCUIT-INTERRUPTER)
	QUADPLEX OUTLET
	PLUG MOULD
	SWITCH (2-WAY)
	SWITCH (3-WAY)
	SWITCH (DIMMER)
	SWITCH (W/ WATERPROOF COVER)
	SWITCH (W/ 10-20-30-60 TIMER)
	JAMB-ACTIVATED SWITCH
	MOTION SENSOR
	PHOTOCELL SENSOR
	GARAGE DOOR OPENER
	RECESSED DOWNLIGHT
	RECESSED DOWNLIGHT, WET RATED
	RECESSED DIRECTIONAL LIGHT
	CEILING MOUNTED LIGHT
	WALL MOUNTED LIGHT
	WALL MOUNTED LIGHT, WET RATED
	LIGHT ABOVE STEEL BEAM
	UNDER CABINET PUCK LIGHT
	GROUND/FLOOR RECESSED LIGHT
	GROUND/FLOOR RECESSED LIGHT, DIRECTIONAL
	FLUORESCENT LIGHT
	LINEAR LED LIGHT
	INTEGRAL CABINET LIGHT (VERTICAL U.N.O.)
	EXHAUST FAN
	WALL MOUNTED EXHAUST FAN
	FLOOR GRILLE (OPEN TO CRAWLSPACE)
	TELEVISION OUTLET (CABLE)
	THERMOSTAT (F = FIREPLACE; M = MINI-SPLIT; R = RADIANT)
	HOSE BIB
	SMOKE DETECTOR
	COMBINATION SMOKE/CO DETECTOR
	COMBINATION SMOKE/HEAT DETECTOR
	INFRARED HEATER (CEILING MOUNT)
	FLOOR DRAIN
	STEREO SPEAKER OUTLET
	TELEPHONE
	COMBINATION TELEPHONE / DATA
	DATA OUTLET (CAT-6 CABLE)
	VENTILATION AIR FLOW (R = RETURN; S = SUPPLY)
	ELECT FIXTURE NO. (SEE ELECT SCHED)
	NATURAL GAS STUB OUT

1 lower level electrical plan
1/4" = 1'-0"

0 1 2 4 10 20



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Revision:	Date:
MERCER ISLAND BUILDING PERMIT REV 1	04.17.2025
MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

LOWER LEVEL ELECTRICAL
PLAN

Date: June 12, 2025

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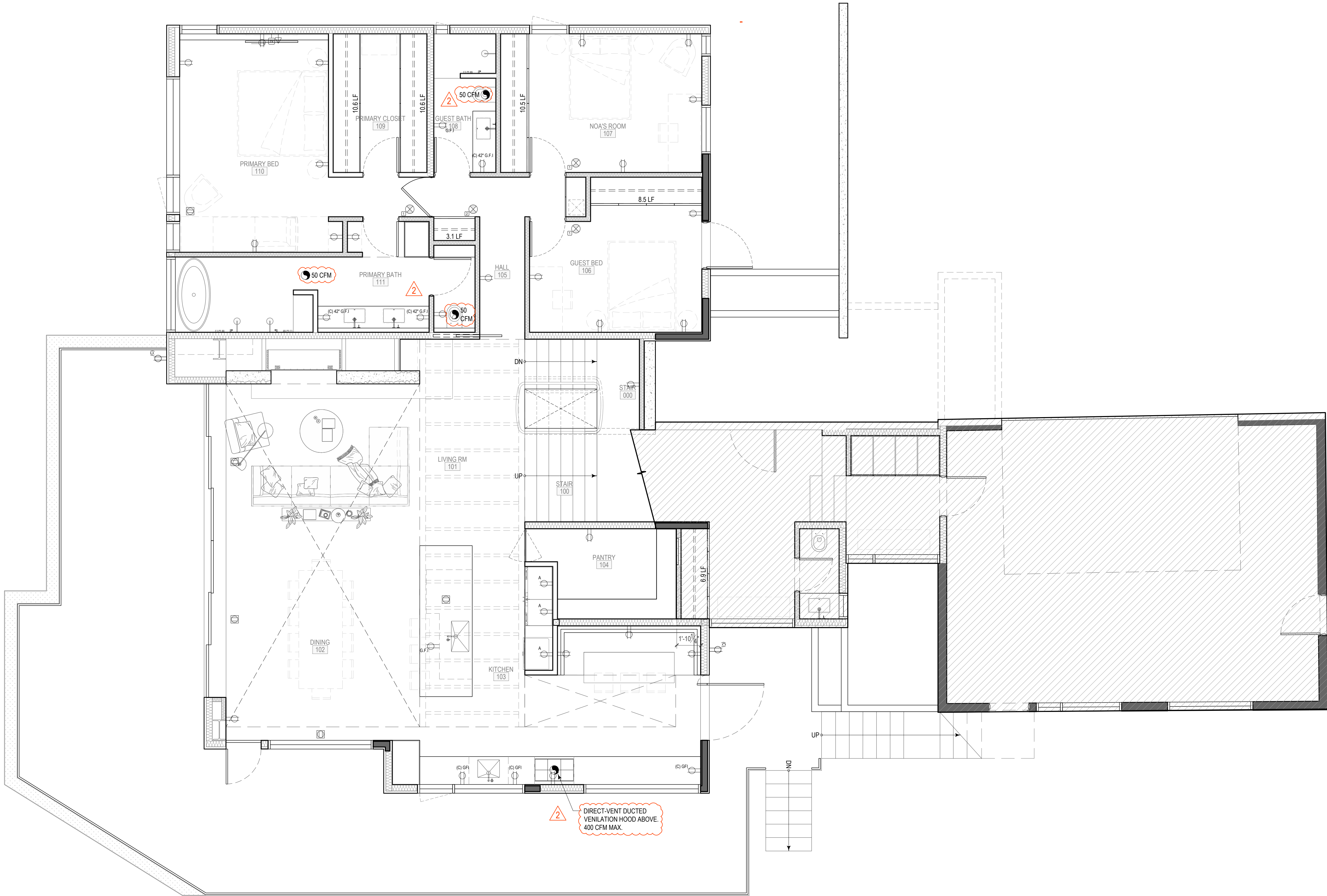
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- NEW ROOF
- NEW GREEN ROOF
- NEW CONCRETE WALL
- NEW FRAMED WALL
- EXISTING WALL TO REMAIN
- EXISTING ELEMENT TO BE REMOVED

MECHANICAL / ELECTRICAL LEGEND	
SYMBOL	TITLE
	DUPLEX OUTLET
	DUPLEX OUTLET (VOLTAGE)
	DUPLEX OUTLET (FLOOR MOUNTED)
	DUPLEX OUTLET (FLOOR - 1/2 SWITCHED)
	DUPLEX OUTLET (GROUND-FAULT CIRCUIT-INTERRUPTER)
	QUADPLEX OUTLET
	PLUG MOULD
	SWITCH (2-WAY)
	SWITCH (3-WAY)
	SWITCH (DIMMER)
	SWITCH (W WATERPROOF COVER)
	SWITCH (W 10-20-30-60 TIMER)
	JAMB-ACTIVATED SWITCH
	MOTION SENSOR
	PHOTOCELL SENSOR
	GARAGE DOOR OPENER
	RECESSED DOWNLIGHT
	RECESSED DOWNLIGHT, WET RATED
	RECESSED DIRECTIONAL LIGHT
	CEILING MOUNTED LIGHT
	WALL MOUNTED LIGHT
	WALL MOUNTED LIGHT, WET RATED
	LIGHT ABOVE STEEL BEAM
	UNDER CABINET PUCK LIGHT
	GROUND/FLOOR RECESSED LIGHT
	GROUND/FLOOR RECESSED LIGHT, DIRECTIONAL
	FLUORESCENT LIGHT
	LINEAR LED LIGHT
	INTEGRAL CABINET LIGHT (VERTICAL U.N.O.)
	EXHAUST FAN
	WALL MOUNTED EXHAUST FAN
	FLOOR GRILLE (OPEN TO CRAWLSPACE)
	TELEVISION OUTLET (CABLE)
	THERMOSTAT (F = FIREPLACE; M = MINI-SPLIT; R = RADIANT)
	HOSE BIB
	SMOKE DETECTOR
	COMBINATION SMOKE/CO DETECTOR
	COMBINATION SMOKE/HEAT DETECTOR
	INFRARED HEATER (CEILING MOUNT)
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	TELEPHONE
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	DATA OUTLET (CAT-6 CABLE)
	VENTILATION AIR FLOW (R = RETURN; S = SUPPLY)
	ELECT FIXTURE NO. (SEE ELECT SCHED)
	NATURAL GAS STUB OUT

1 main level electrical plan
E2.1 1/4" = 1'-0"

0 1 2 4 10 20

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Revision:	Date:
MERCER ISLAND BUILDING PERMIT REV 1	04.17.2025
MERCER ISLAND BUILDING PERMIT REV 2	06.12.2025

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project no. 2401

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Drawing Title:
MAIN LEVEL ELECTRICAL
PLAN

Date: June 12, 2025

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project no. 2401
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Drawing Title:
UPPER LEVEL ELECTRICAL
PLAN

Date: June 12, 2025
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	DUPLEX OUTLET (FLOOR MOUNTED)
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	DUPLEX OUTLET (GROUND-FAULT CIRCUIT-INTERRUPTER)
	QUADPLEX OUTLET
	PLUG MOULD
	SWITCH (2-WAY)
	SWITCH (3-WAY)
	SWITCH (DIMMER)
	SWITCH (W/ WATERPROOF COVER)
	SWITCH (W/ 10-20-30-60 TIMER)
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	MOTION SENSOR
	PHOTOCELL SENSOR
	GARAGE DOOR OPENER
	RECESSED DOWNLIGHT
	RECESSED DOWNLIGHT, WET RATED
	RECESSED DIRECTIONAL LIGHT
	CEILING MOUNTED LIGHT
	WALL MOUNTED LIGHT
	WALL MOUNTED LIGHT, WET RATED
	LIGHT ABOVE STEEL BEAM
	UNDER CABINET PUCK LIGHT
	GROUND/FLOOR RECESSED LIGHT
	GROUND/FLOOR RECESSED LIGHT, DIRECTIONAL
	FLUORESCENT LIGHT
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	TELEVISION OUTLET (CABLE)
	THERMOSTAT (F = FIREPLACE; M = MINI-SPLIT; R = RADIANT)
	HOSE BIB
	SMOKE DETECTOR
	COMBINATION SMOKE/CO DETECTOR
	COMBINATION SMOKE/HEAT DETECTOR
	INFRARED HEATER (CEILING MOUNT)
	FLOOR DRAIN
	STEREO SPEAKER OUTLET
	TELEPHONE
	COMBINATION TELEPHONE / DATA
	DATA OUTLET (CAT-6 CABLE)
	VENTILATION AIR FLOW (R = RETURN; S = SUPPLY)
	ELECT FIXTURE NO. (SEE ELECT SCHED)
	NATURAL GAS STUB OUT

1 upper level electrical plan
E2.2 1/4" = 1'-0"

0 1 2 4 10 20

1

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1. ALL MATERIALS WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2021 INTERNATIONAL BUILDING CODE (IBC) INCLUDING WASHINGTON STATE MODIFICATIONS.
2. DESIGN LOADING CRITERIA

SNOW LOAD	GROUND SNOW LOAD, P _s = 25 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF
FLOOR LIVE LOAD (RESIDENTIAL BALCONIES AND DECKS)	60 PSF
WIND (MAIN WIND FORCE RESISTING SYSTEM)	BASIC WIND SPEED = 98 MPH
	ALLOWABLE STRESS DESIGN WIND SPEED = 76
	IMPORTANCE FACTOR, I _w = 1.0
	RISK CATEGORY = II
	TOPOGRAPHIC FACTOR, K _{zt} = 1.6
	EXPOSURE CATEGORY = C
	INTERNAL PRESSURE COEFFICIENT, (GC _p) = 0.18/-0.18
	WIND BASE SHEAR = 29.0 KIPS

EARTHQUAKE (EQUIVALENT LATERAL FORCE PROCEDURE)	S _s = 1.464 S _{ah} = 0.976 S ₁ = 0.508 S _{u1} = 0.610 IMPORTANCE FACTOR, I _e = 1.0 SITE CLASS D SEISMIC DESIGN CATEGORY = D RISK CATEGORY = II R = 6.5 FOR WOOD SHEAR WALLS / 3.5 FOR STEEL ORDINARY MOMENT FRAME OVER STRENGTH FACTOR, O _b = 2.5 / 3.0 (OMF) DEFLECTION AMPLIFICATION FACTOR, C _d = 4.0 / 3.0 (OMF) REDUNDANCY FACTOR = 1.0 SEISMIC RESPONSE COEFFICIENT, C _s = 0.150 / 0.279 (OMF) SEISMIC BASE SHEAR = 39.2k / 72.8k (OMF)
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3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
9. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
10. SUBMITTAL REVIEW PERIOD: SUBMITTALS SHALL BE MADE IN TIME TO ALLOW MINIMUM OF TWO WEEKS FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO FABRICATION.
11. GENERAL CONTRACTOR'S PRIOR REVIEW OF SUBMITTALS: PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR COMPLETENESS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER AND THEREFORE MUST BE VERIFIED BY THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DIMENSIONAL INFORMATION REQUESTED BY THE DETAILER AND SHALL PROVIDE THE GENERAL CONTRACTOR'S REVIEW STAMP AND SIGNATURE PRIOR TO FORWARDING THE SUBMITTAL TO THE ARCHITECT/ENGINEER.

12. SHOP DRAWINGS FOR:
A. STRUCTURAL STEEL
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. CONTRACTOR SHALL ALSO SUBMIT SHOP DRAWINGS TO THE BUILDING DEPARTMENT AS REQUIRED. SHOP DRAWINGS FOR CONNECTOR PLATE WOOD ROOF TRUSSES SHALL ALSO BE SUBMITTED TO THE MECHANICAL ENGINEER FOR COORDINATION.
- CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING CONNECTION EMBEDMENTS AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH REINFORCEMENT SHOP DRAWINGS.

13. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD. THEREFORE, MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL, THERETO.

SHOP DRAWINGS SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

DEFERRED SUBMITTALS FOR BUILDING COMPONENTS INCLUDING, BUT NOT IMITATED TO, STAIRS, PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES, AND EXTERIOR CLADDING SHALL INCLUDE THE ENGINEER'S STAMP FOR THE STATE OF WASHINGTON AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL.

14. STATEMENT SPECIAL INSPECTIONS: THE FOLLOWING CONSTRUCTION TYPES ARE TO BE REVIEWED BY A SPECIAL INSPECTOR DESIGNATED BY THE OWNER OR ARCHITECT. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. SPECIAL INSPECTION SHALL CONFORM TO SECTION 1704 OF THE 2018 INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION AGENCY SHALL BE RESPONSIBLE FOR KEEPING RECORDS OF SPECIAL INSPECTIONS AND TESTS. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION REPORTS AND TEST RESULTS.

SOILS: SHALL BE SPECIAL INSPECTED AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 1705.6 AND AS DIRECTED IN THE GEOTECHNICAL REPORT.

HELICAL PILE FOUNDATIONS: PROVIDE CONTINUOUS SPECIAL INSPECTIONS DURING INSTALLATION AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 1705.9.

STEEL CONSTRUCTION AND WELDING: SHALL BE SPECIAL INSPECTED AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 1705.2, AISC 360-16, AISC 341-16, AWS D1.1, AND AWS D1.8.

WOOD CONSTRUCTION: SPECIAL INSPECTIONS SHALL BE PROVIDED AS REQUIRED BY THE INTERNATIONAL BUILDING CODE SECTION 1705.5 AS FOLLOWS:

1. PERIODIC SPECIAL INSPECTION OF NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS OF THE LATERAL-LOAD-RESISTING SYSTEM WHERE NAIL SPACING IS 4 INCHES OR LESS. THIS INCLUDES SHEAR WALLS, DIAPHRAGMS, BRACES, HOLD-DOWNS, AND SHEAR PANELS.

POST INSTALLED ANCHORS: PERIODIC SPECIAL INSPECTION IN ACCORDANCE WITH THE PRODUCTS APPROVED ICC-ES REPORT.

15. THE CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, DESIGNATED WIND OR SEISMIC SYSTEM, OR SEISMIC FORCE RESISTING COMPONENT SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK AS REQUIRED BY SECTION 1704.4 OF THE INTERNATIONAL BUILDING CODE.

GEOTECHNICAL

16. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY. THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.
- | | |
|--|-----------------------------------|
| LATERAL EARTH PRESSURE (UNRESTRAINED) | 40 PCF / 5 PCF (GEOFOAM BACKFILL) |
| LATERAL EARTH PRESSURE (SEISMIC) | 8H (ULTIMATE LOAD) |
| PASSIVE EARTH PRESSURE (INCLUDES FACTOR OF SAFETY = 1.5) | 300 PCF |

SOILS REPORT REFERENCE: PROJECT NO. JN 23440, PREPARED BY GEOTECH CONSULTANTS, INC, DATED DECEMBER 21, 2023

17. ALL PILE SIZES, EXCEPT 2-INCH DIAMETER PILES, SHALL BE SUBJECT TO ASTM LOAD TESTING ON A MINIMUM OF 3% OF PILES, UP TO 5 PILES MAXIMUM (1 MINIMUM). TESTING SHALL BE IN ACCORDANCE WITH ASTM STANDARD D1143-81 FOR PILES UNDER STATIC AXIAL COMPRESSIVE LOAD.

AS INDICATED IN THE GEOTECHNICAL REPORT PIPE PILES DRIVEN USING HAMMERS AND DRIVING RATES SHOWN BELOW MAY BE ASSIGNED THE FOLLOWING COMPRESSIVE CAPACITIES.

PILE DIAMETER	FINAL DRIVING RATE	JACK-HAMMER WEIGHT	CAPACITY
3-INCH DIAMETER PILE (COMPRESSION)	10 SEC/INCH	850 POUND HAMMER	6 TONS
2-INCH DIAMETER PILE (COMPRESSION)	60 SEC/INCH	90 POUND HAMMER	3 TONS

THE DRIVING CRITERIA, FOR 3-INCH DIAMETER PILES, IS VALID ONLY FOR HYDRAULIC HAMMERS MOUNTED ON SLIDING LEADS THAT ALLOW THE HAMMER TO SIT ON TOP OF THE PILE DURING INSTALLATION.

MINIMUM PILE EMBEDMENT SHALL NOT BE LESS THAN 6'-0" AND FINAL LENGTH OF 2-INCH DIAMETER PIPE PILES SHALL NOT EXCEED 30'-0". INDIVIDUAL PILE SECTIONS SHALL BE CONNECTED USING SLEEVE COUPLERS INSTALLED BY WABO CERTIFIED WELDERS. ALTERNATE COUPLING METHODS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

STEEL PIPE SHALL CONFORM TO ASTM A 53, TYPE E OR S, GRADE B, F_y = 35 KSI. MINIMUM PILE WEIGHT FOR 2-INCH DIAMETER PIPE SHALL BE EXTRA STRONG (SCHEDULE 80) AS NOTED IN THE AISC STEEL CONSTRUCTION MANUAL. MINIMUM PIPE WEIGHT FOR ALL OTHER PILES SHALL BE AS RECOMMENDED IN THE GEOTECHNICAL REPORT. PIPE PILES SHALL BE GALVANIZED.

8" DIAMETER HELICAL PILES HAVE A TYPICAL 12 KIPS COMPRESSION / 10 KIPS TENSION CAPACITY. PER THE GEOTECHNICAL REPORT, AT LEAST ONE HELICAL PILE SHOULD BE LOAD TESTED TO AT LEAST 200 PERCENT OF THE DESIGN LOAD TO VERIFY THE ALLOWABLE CAPACITY. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

PILE INSTALLATION AND TESTING SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER.

RENOVATION

18. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED, AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
- a. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. OVERCUTTING AT CORNERS SHALL NOT BE PERMITTED.
- b. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
- c. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING, IF POSSIBLE.
- d. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, THREADED BARS INTO THREADED EXPANSION INSERTS IN EXISTING CONCRETE SHALL BE PROVIDED TO MATCH HORIZONTAL REINFORCING, UNLESS OTHERWISE NOTED ON PLANS.

19. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWING WATER STAINS, AND ALL WOOD MEMBERS IN BASEMENT AND CRAWL SPACES. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER.

20. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL BRING ALL CONFLICTS AND DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER.

CONCRETE

21. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, AND PLACED IN ACCORDANCE WITH ACI 318-14 AND ACI 301-16. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH (f_c) OF 3500 PSI BASED ON EXPOSURE CLASS F1, SHALL CONTAIN NO LESS THAN 5-1/2 SACKS OF CEMENT, HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45, MAXIMUM AGGREGATE OF ¾-INCH, AND A SLUMP OF 5 INCHES OR LESS. CONCRETE HAS BEEN DESIGNED BASED ON A CONCRETE STRENGTH (f_c) OF 2500 PSI PER INTERNATIONAL BUILDING CODE SECTION 1705.3 EXCEPTION 2.3 TO AVOID SPECIAL INSPECTIONS AND MATERIAL TESTING.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494M, AND C618. UNLESS OTHERWISE NOTED THE TOTAL AIR CONTENT SHALL BE 5%. AIR CONTENT SHALL BE SAMPLED IN ACCORDANCE WITH ASTM C172 AND AIR CONTENT MEASURED IN ACCORDANCE WITH ASTM C231 OR C173.

22. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENTS S1), GRADE 60, F_y = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, F_y = 40,000 PSI.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185

23. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI SP-66-04 AND ACI 318-14 CHAPTER 25. LAP LAP REINFORCEMENTS AS FOLLOWS:

BAR SIZE	MINIMUM LAP LENGTH	MINIMUM HOOK EMBEDMENT
#3	24-INCHES	6-INCHES
#4	31-INCHES	8-INCHES
#5	39-INCHES	11-INCHES

PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. FIELD BENDING OF GRADE 60 REINFORCEMENT SHALL NOT BE ALLOWED.

24. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
- FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" 1-1/2E
- ALL OTHER CASES
25. SLABS ON-GRADE: UNLESS NOTED OTHERWISE SHALL BE 4" CONCRETE, REINFORCED WITH 6X6 W1.4XW1.4 WELDED WIRE FABRIC CENTERED IN SLAB. UNLESS OTHERWISE DIRECTED BY SOILS REPORT PROVIDE MINIMUM 10 MIL VAPOR BARRIER OVER 4" OF COMPACTED SAND OR GRAVEL.
26. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES. TOLERANCES FOR ALL STRUCTURAL CONCRETE AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 117-10 AND ACI 117.1R-14.

27. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).

POST INSTALLED ANCHORS

28. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER—OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCEMENT. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND ICC-ES REPORT. SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE INTERNATIONAL BUILDING CODE. SUBSTITUTIONS SHALL HAVE CURRENT ICC-ES APPROVAL.

A. CONCRETE ANCHORS

1. MECHANICAL ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
- a. SIMPSON STRONG-TIE "STRONG-BOLT Z" (ICC-ES ESR-3037)
- b. SIMPSON STRONG-TIE "TITEN-HO" (ICC-ES ESR-2713)
- c. HILTI "KWIK BOLT TZ" (ICC-ES ESR-1917)

2. ADHESIVE ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
- a. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
- b. SIMPSON STRONG-TIE "AT-3G" (ICC-ES ESR-4057)
- c. HILTI "HIT-RE 500-V3" (ICC-ES ESR-3814)
- d. HILTI "HIT-HY 200" (ICC-ES ESR-3187)

STEEL

29. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES AS FOLLOWS:

1. AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
2. AISC 303-16 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AMENDED BY THE DELETION OF THE FOLLOWING SENTENCE IN PARAGRAPH 4.2.1: "THIS APPROVAL CONSTITUTES THE OWNER'S ACCEPTANCE OF ALL RESPONSIBILITY FOR THE DESIGN ADEQUACY OF ANY DETAIL CONFIGURATION OF CONNECTIONS DEVELOPED BY THE FABRICATOR AS PART OF HIS PREPARATION OF THESE SHOP DRAWINGS."
3. AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
4. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
5. AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE D1.1 AND D1.4

30. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	F _y
A. PLATES, ANGLES, AND RODS	A36	36 KSI
B. WIDE FLANGE SHAPES AND CHANNELS	A992	50 KSI
C. STRUCTURAL TUBING (SQUARE OR RECTANGULAR)	A500 (GRADE B)	46 KSI
D. ANCHOR BOLTS (EMBEDDED IN MASONRY OR CONCRETE)	A307	
E. CONNECTION BOLTS (¾" ROUND, UNLESS SHOWN OTHERWISE)	A325-N	
F. THREADED RODS FOR EPOXY GROUTED CONNECTIONS	A36 OR A307 GRADE C	36 KSI

31. ALL BEAM PENETRATIONS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.
32. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC 303-10. ANY STRUCTURAL STEEL THAT IS EXPOSED TO VIEW UPON COMPLETION OF THE PROJECT SHALL BE CONSIDERED ARCHITECTURALLY EXPOSED. SEE PROJECT SPECIFICATIONS FOR SPECIFIC FABRICATION AND ERECTION REQUIREMENTS.
33. ALL A-325 CONNECTION BOLTS SHALL BE INSTALLED TO THE SNUG-TIGHT CONDITION PER AISC SPECIFICATIONS. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS.
34. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70 XX ELECTRODES UNLESS OTHERWISE NOTED. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

35. ORDINARY MOMENT RESISTING FRAME SYSTEMS

- A. SUBMITTALS: IN ADDITION TO THE REQUIRED SHOP DRAWINGS THE FOLLOWING INFORMATION SHALL BE PROVIDED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION:
- a. WELDING PROCEDURE SPECIFICATIONS
- b. COPIES OF MANUFACTURE'S TYPICAL CERTIFICATE OF CONFORMANCE FOR ALL ELECTRODES, FLUXES, AND SHIELDING GASSES.
- c. MANUFACTURER'S CERTIFICATION THAT THE FILLER METAL MEETS THE SUPPLEMENTAL NOTCH TOUGHNESS REQUIREMENTS FOR DEMAND CRITICAL WELDS.
- d. MANUFACTURER'S PRODUCT DATA SHEETS OR CATALOG DATA FOR SMAW, FCAW, AND GMAW COMPOSITE FILLER METALS.
- C. WELD MATERIAL SHALL HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-POUNDS AT ZERO DEGREES FAHRENHEIT. WHERE WELDS ARE DESIGNATED AS DEMAND CRITICAL, WELD MATERIAL SHALL HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-POUNDS AT -20 DEGREES FAHRENHEIT AND 40 FT-POUNDS AT 70 DEGREES FAHRENHEIT. IN ADDITION, WELDS SHALL CONFORM TO THE REQUIREMENTS OF AISC 341-16, AWS D1.1, AND AWS D1.8.
- E. AGENCY RESPONSIBLE FOR QUALITY ASSURANCE SHALL SUBMIT THE FOLLOWING DOCUMENTS TO THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT:
- a. AGENCY'S WRITTEN PRACTICES FOR MONITORING AND CONTROL OF THE AGENCY'S OPERATIONS. WRITTEN PRACTICES SHALL INCLUDE THE AGENCY'S PROCEDURES FOR THE SELECTION AND ADMINISTRATION OF INSPECTION PERSONNEL, DESCRIPTION OF TRAINING, EXPERIENCE AND EXAMINATION REQUIREMENTS, AND AGENCY INSPECTION PROCEDURES.
- b. QUALIFICATIONS OF MANAGEMENT AND INSPECTION PERSONNEL DESIGNATED TO THE PROJECT.
- c. QUALIFICATION RECORDS FOR INSPECTORS AND NON-DESTRUCTIVE TESTING TECHNICIANS DESIGNATED TO THE PROJECT.
- d. NON-DESTRUCTIVE TESTING PROCEDURES AND EQUIPMENT CALIBRATION RECORDS FOR TESTING TO BE PERFORMED AND EQUIPMENT TO BE USED FOR THIS PROJECT.
- e. DAILY OR WEEKLY INSPECTION REPORTS.
- f. NON-CONFORMANCE REPORTS.

WOOD

36. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLBI STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS.

JOISTS: (2X, 3X, AND 4X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, F _b = 850 PSI
BEAM AND STRINGERS: (6 X AND LARGER MEMBERS)	DOUGLAS FIR LARCH NO. 1 MINIMUM BASIC DESIGN STRESS, F _b = 1,350 PSI
POSTS AND TIMBERS: (6 X AND LARGER MEMBERS)	DOUGLAS FIR LARCH NO. 1 MINIMUM BASIC DESIGN STRESS, F _b = 1,200 PSI, F _c = 1,000 PSI
STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING	DOUGLAS FIR LARCH OR HEM-FIR NO. 2 MINIMUM BASIC DESIGN STRESS F _b = 850 PSI, F _c = 1,300 PSI
2X AND 3X TONGUE AND GROOVE DECKING	HEM-FIR COMMERCIAL DEX, F _b = 1,350 PSI

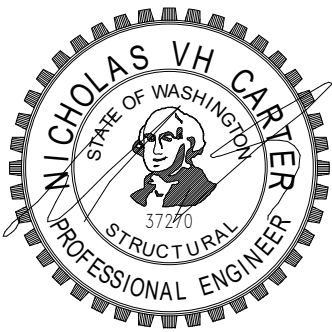
37. PARALLEL STRAND LUMBER (PSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2900 PSI, E = 2000,000 PSI, F_v = 290 PSI.

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MERCER ISLAND BUILDING PERMIT REV 1	03.28.25
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NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:

General Notes

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GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

38. **LAMINATED VENEER LUMBER (LVL):** EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2600 PSI, F_v = 285 PSI, E = 2,000,000 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

39. **LAMINATED STRAND LUMBER (LSL):** EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2325 PSI, F_v = 310 PSI, E = 1,550,000 PSI.

LSL RIM JOISTS SHALL CONFORM TO ANSI/APA PRR 410 AND SHALL BE MARKED IN ACCORDANCE WITH THE STANDARD.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

40. **PREFABRICATED PLYWOOD WEB JOIST DESIGN** SHOWN ON PLANS IS BASED ON JOIST MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

41. **PLYWOOD SHEATHING** SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-18 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

42. **ALL WOOD PLATES** IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A AS INDICATED BELOW OR HAVE EQUIVALENT ICC-ES APPROVAL.

PROPOSED USE		AWPA USE CATEGORY
RESIDENTIAL DECKS	DECKING	3B
	JOISTS ABOVE GROUND	3B
	JOISTS IN CONTACT WITH GROUND	4A
	POSTS	4A
	RAILING	3B
SAWN LUMBER	LEDGERS	3B
	ABOVE GROUND	3B
	GROUND CONTACT	4A
PLYWOOD	DAMP ABOVE GROUND	2
	EXTERIOR ABOVE GROUND	3B
	GROUND CONTACT	4A
SILL PLATES	IN CONTACT WITH CONCRETE OR MASONRY	2
INTERIOR LEDGERS	IN CONTACT WITH CONCRETE OR MASONRY	2

ALL TREATED LUMBER SHALL BEAR THE QUALITY MARK OF AN ACCREDITED INSPECTION AGENCY. THE QUALITY MARK SHALL INCLUDE:

- A. IDENTIFICATION OF TREATING MANUFACTURER
B. TYPE OF PRESERVATIVE USED
C. MINIMUM PRESERVATIVE RETENTION (PCF)
D. END USE FOR WHICH THE PRODUCT IS TREATED
E. IDENTITY OF THE ACCREDITED INSPECTION AGENCY
F. STANDARD TO WHICH THE PRODUCT IS TREATED
43. **TIMBER CONNECTORS** CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2024. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER TO ACHIEVE THE MAXIMUM PUBLISHED ALLOWABLE LOAD. ALL CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. SHIMS, WHERE REQUIRED, SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL LAG SCREWS SHALL BE INSTALLED IN PRE-DRILLED HOLES.

UNLESS NOTED OTHERWISE ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS.

ALL CONNECTIONS/FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS G-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SST300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

44. **WOOD FASTENERS:**

A. **NAIL SIZES** SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

- B. **NAILS** — PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.
45. **WOOD FRAMING NOTES** — THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:
- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 12.1.3 AND 12.1.4 OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.12 OF THE INTERNATIONAL BUILDING CODE.

- B. **WALL FRAMING:** ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID_HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8E	1-3/8E
2X6	1-3/8E	2-1/8E

BORED HOLES SHALL NOT BE LOCATED WITH 5/8" FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7" MINIMUM EMBEDMENT) @ 4' 0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3"x3" x1/4" HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.

- C. **FLOOR AND ROOF FRAMING:** PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2" FROM THE TOP OR BOTTOM EDGE.

TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS OF 16d @ 12" O.C. ATTACH RAFTERS AND ROOF TRUSSES AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE INDICATED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND ATTACHED WITH 10d NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND FASTEN SHEATHING TO FRAMING/BLOCKING AS SPECIFIED.

TONGUE AND GROOVE STRUCTURAL ROOF AND FLOOR DECKING SHALL BE INSTALLED AS FOLLOWS:

- B. 3X AND 4X DECKING SHALL BE TOENAILED WITH ONE 40d NAIL AND FACE NAILED WITH ONE 60d NAIL PER SUPPORT. COURSES SHALL BE SPIKED TOGETHER WITH 8" SPIKES AT 30" O.C. (MAXIMUM) AND AT 10" (MAXIMUM) FROM EACH END OF EACH PIECE. SPIKES SHALL BE INSTALLED IN PREDRILLED EDGE HOLES.

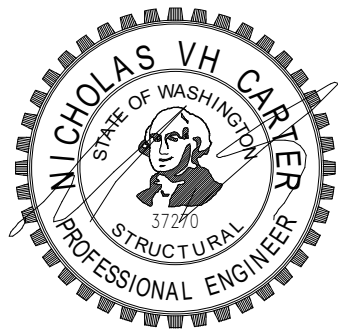
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Revision: Date:
MERCER ISLAND 03.28.25
BUILDING PERMIT REV 1

MERCER ISLAND 06.10.25
BUILDING PERMIT REV 2

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Project:

NS Residence
project no. 2401

8265 SE 61st St
Mercer Island, WA 98040

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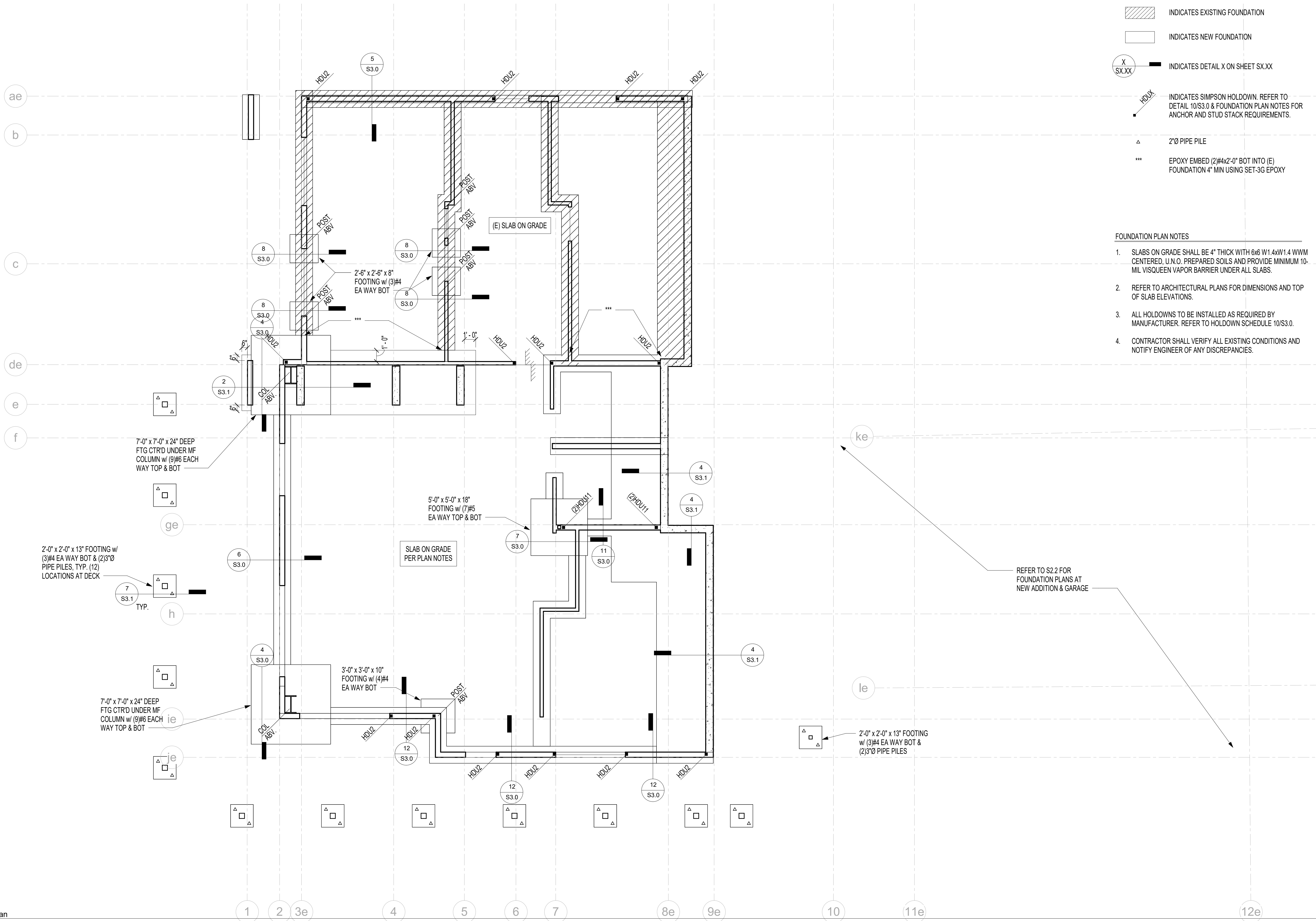
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FOUNDATION PLAN LEGEND

- ABRUPT CHANGE IN SLAB/FRAMING ELEVATION
- INDICATES EXISTING FOUNDATION
- INDICATES NEW FOUNDATION
- INDICATES DETAIL X ON SHEET SX.XX
- INDICATES SIMPSON HOLDOWN. REFER TO DETAIL 10/S3.0 & FOUNDATION PLAN NOTES FOR ANCHOR AND STUD STACK REQUIREMENTS.
- 2"Ø PIPE PILE
- EPOXY EMBED (2#4x2'-0" BOT INTO (E) FOUNDATION 4" MIN USING SET-3G EPOXY

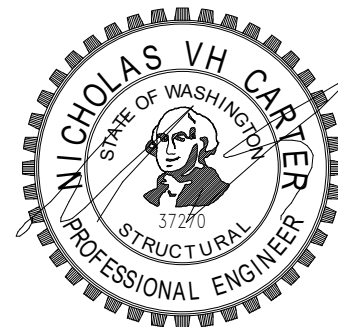
FOUNDATION PLAN NOTES

- SLABS ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4xW1.4 WWM CENTERED, U.N.O. PREPARED SOILS AND PROVIDE MINIMUM 10-MIL VISQUEEN VAPOR BARRIER UNDER ALL SLABS.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS AND TOP OF SLAB ELEVATIONS.
- ALL HOLDOWNS TO BE INSTALLED AS REQUIRED BY MANUFACTURER. REFER TO HOLDOWN SCHEDULE 10/S3.0.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

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8265 SE 61st St
Mercer Island, WA 98040

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Foundation Plan

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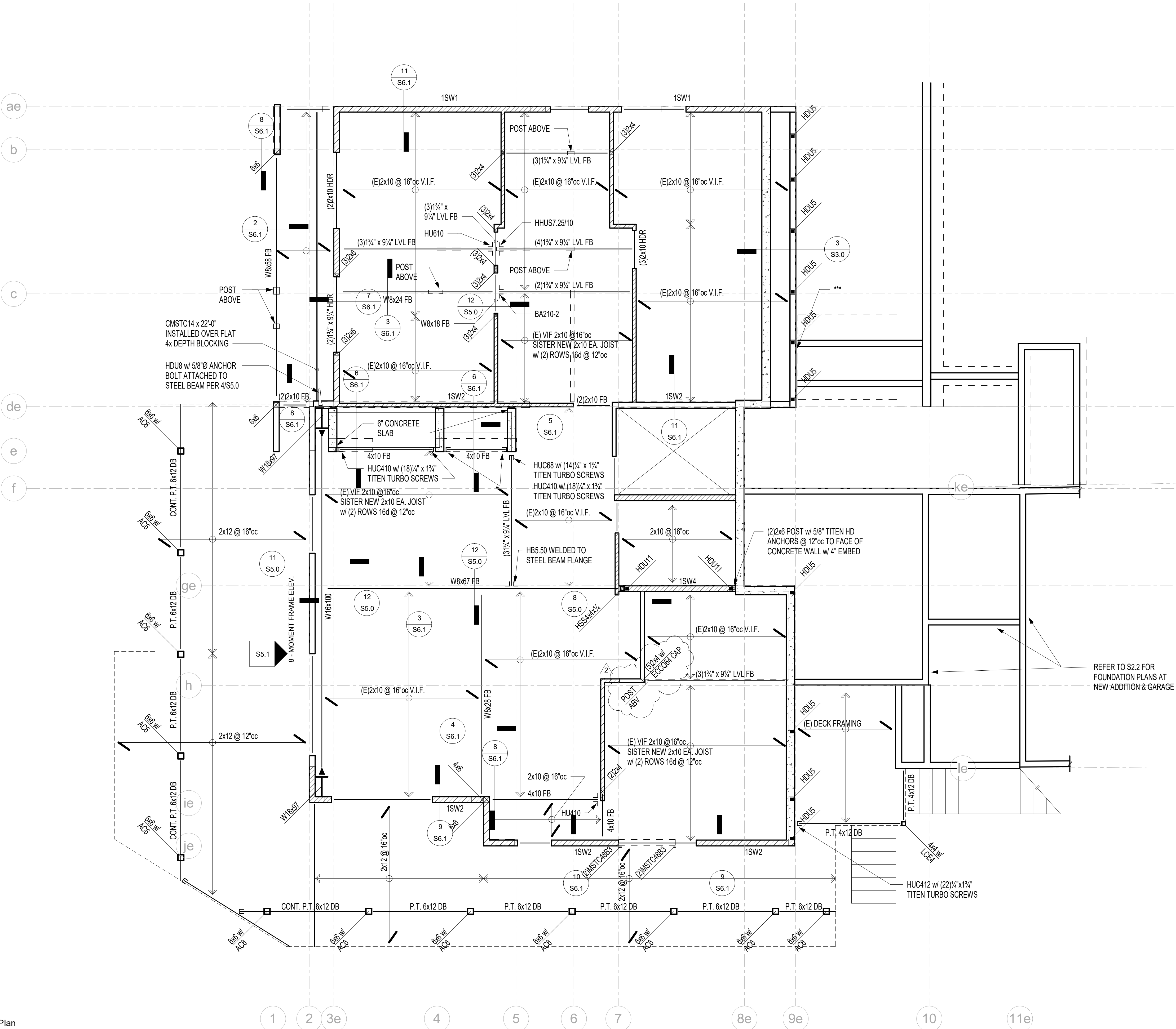
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- FOUNDATION PLAN LEGEND
- ABRUPT CHANGE IN SLAB/FRAMING ELEVATION
 - INDICATES EXISTING FOUNDATION
 - INDICATES NEW FOUNDATION
 - INDICATES DETAIL X ON SHEET SX.XX
 - INDICATES SIMPSON HOLDOWN. REFER TO DETAIL 10/S3.0 & FOUNDATION PLAN NOTES FOR ANCHOR AND STUD STACK REQUIREMENTS.
 - 2"Ø PIPE PILE
 - EPOXY EMBED (2#4x2'-0" BOT INTO (E) FOUNDATION 4" MIN USING SET-3G EPOXY

- FOUNDATION PLAN NOTES
- SLABS ON GRADE SHALL BE 4" THICK WITH 6x6 W1.4xW1.4 WWM CENTERED, U.N.O. PREPARED SOILS AND PROVIDE MINIMUM 10-MIL VISQUEEN VAPOR BARRIER UNDER ALL SLABS.
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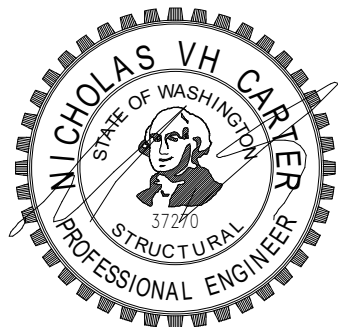
- FRAMING PLAN LEGEND
- WALLS BELOW
 - COLUMNS BELOW
 - HANGER
 - ABRUPT CHANGE IN SLAB/FRAMING ELEVATION
 - INDICATES DETAIL X ON SHEET SX.XX
 - FRAMING SPAN AND EXTENTS
 - INDICATES DROPPED BEAM
 - INDICATES FLUSH BEAM
 - TYP. UNO TYPICAL UNLESS NOTED OTHERWISE

- FRAMING PLAN NOTES (TYPICAL UNLESS NOTED OTHERWISE)
- FLOOR SHEATHING SHALL BE 23/32" TONGUE AND GROOVE APA RATED SHEATHING (SPAN RATING 40/20). NAIL AT ALL FRAMED PANEL EDGES AND OVER SHEAR WALLS w/ 10d @ 6"oc AND 12"oc TO ALL INTERMEDIATE FRAMING.
 - ROOF SHEATHING SHALL BE 15/32" APA RATED SHEATHING (SPAN RATING 24/0). NAIL AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS w/ 8d @ 6"oc AND 12"oc TO ALL INTERMEDIATE FRAMING.
 - 3/4" T&G DECKING SHALL BE NAILED TO FRAMING BELOW WITH 10d @ 6"oc. MINIMUM (2) NAILS PER DECKING BOARD.
 - 1SWX INDICATES SHEAR WALL PER SCHEDULE 12/S6.0.
 - 2SWX INDICATES DOUBLE SIDED SHEAR WALL PER SCHEDULE 12/S6.0.
 - ALL HEADERS SHALL BE (2)2x8 U.N.O. REFER TO NOTE 5 FOR SUPPORT REQUIREMENTS.
 - COLUMNS SHALL BE DOUBLE STUDS MINIMUM, U.N.O., WITH BEAM OR HEADER BEARING FULLY ON COLUMN.
 - WHERE FULL HEIGHT LSL STUDS ARE CALLED OUT, INSTALL 1.3E 1 1/2" x 3 1/2" LSL STUDS @ 16"oc.

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8265 SE 61st St
Mercer Island, WA 98040

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Main Floor Framing
Plan

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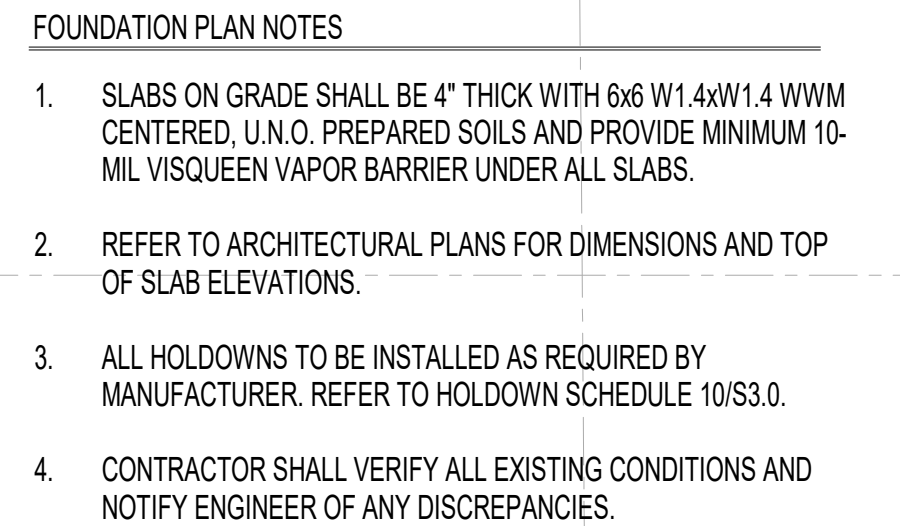
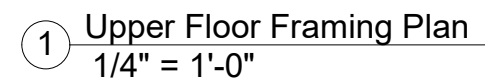
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MERCER ISLAND BUILDING PERMIT REV 2	06.10.25

CQN
CARTER
QUINN
NORLIN
STRUCTURAL
ENGINEERING

Consultants:

NS Residence
project no. 2401

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Mercer Island, WA 98040

Upper Floor Framing Plan

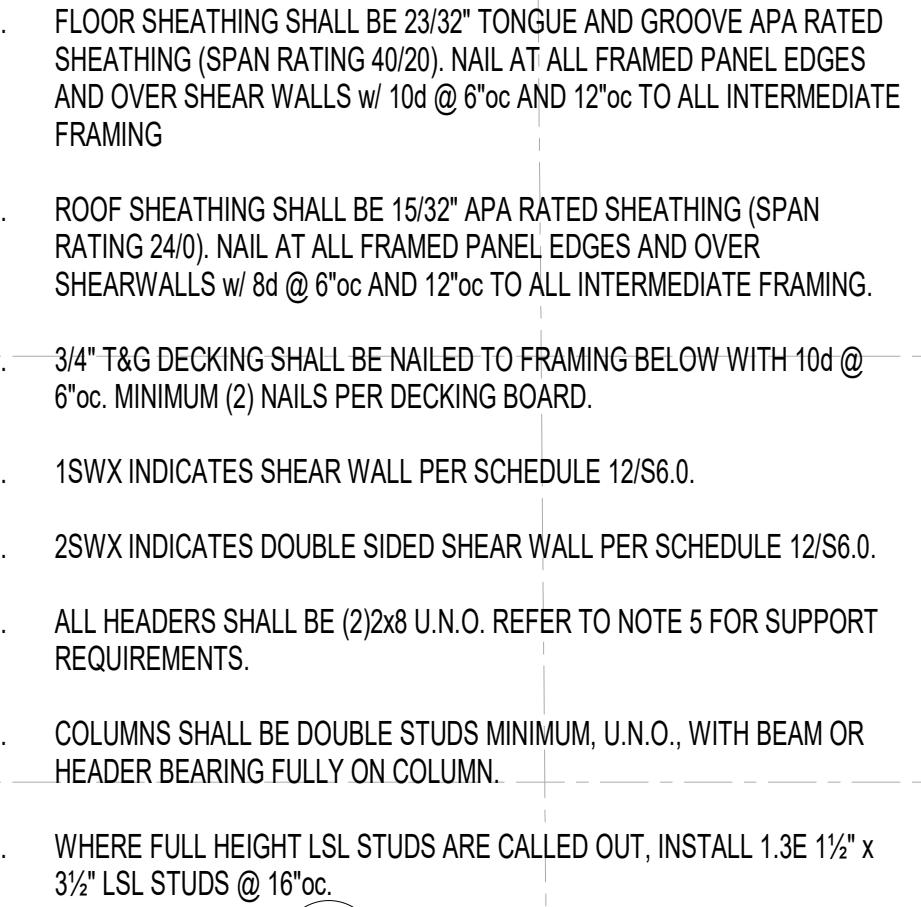
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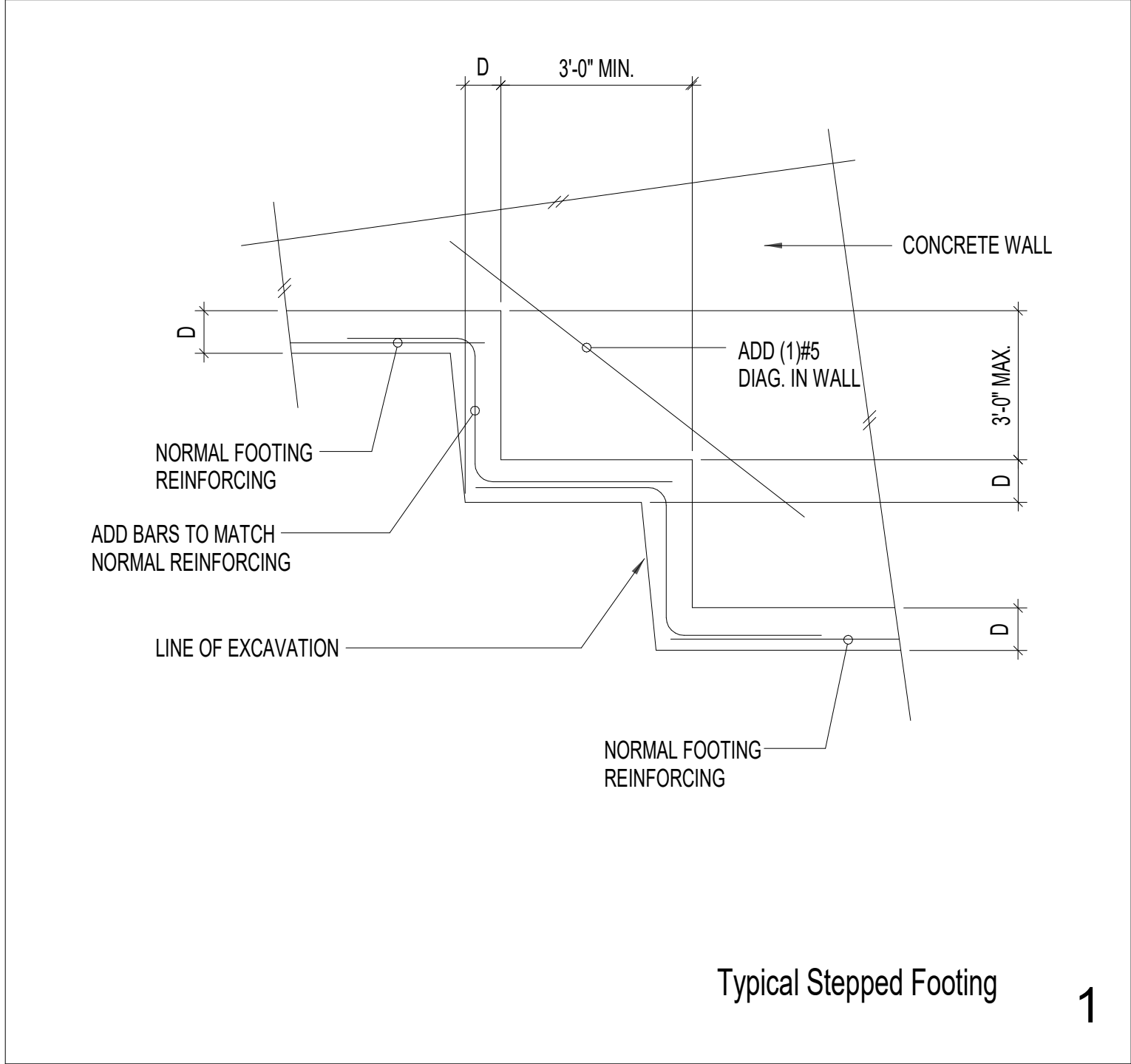
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CONCLUSIONS

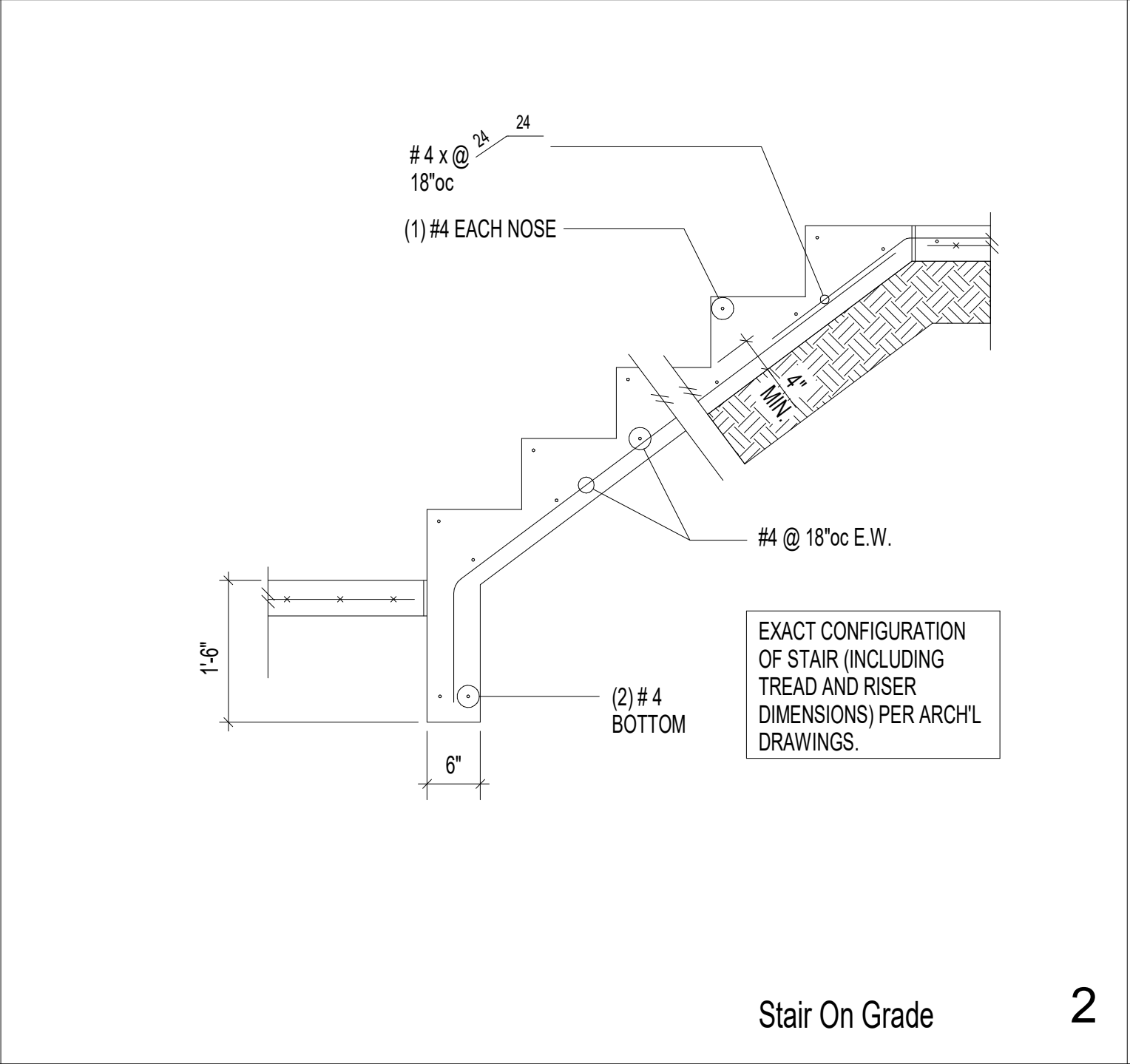


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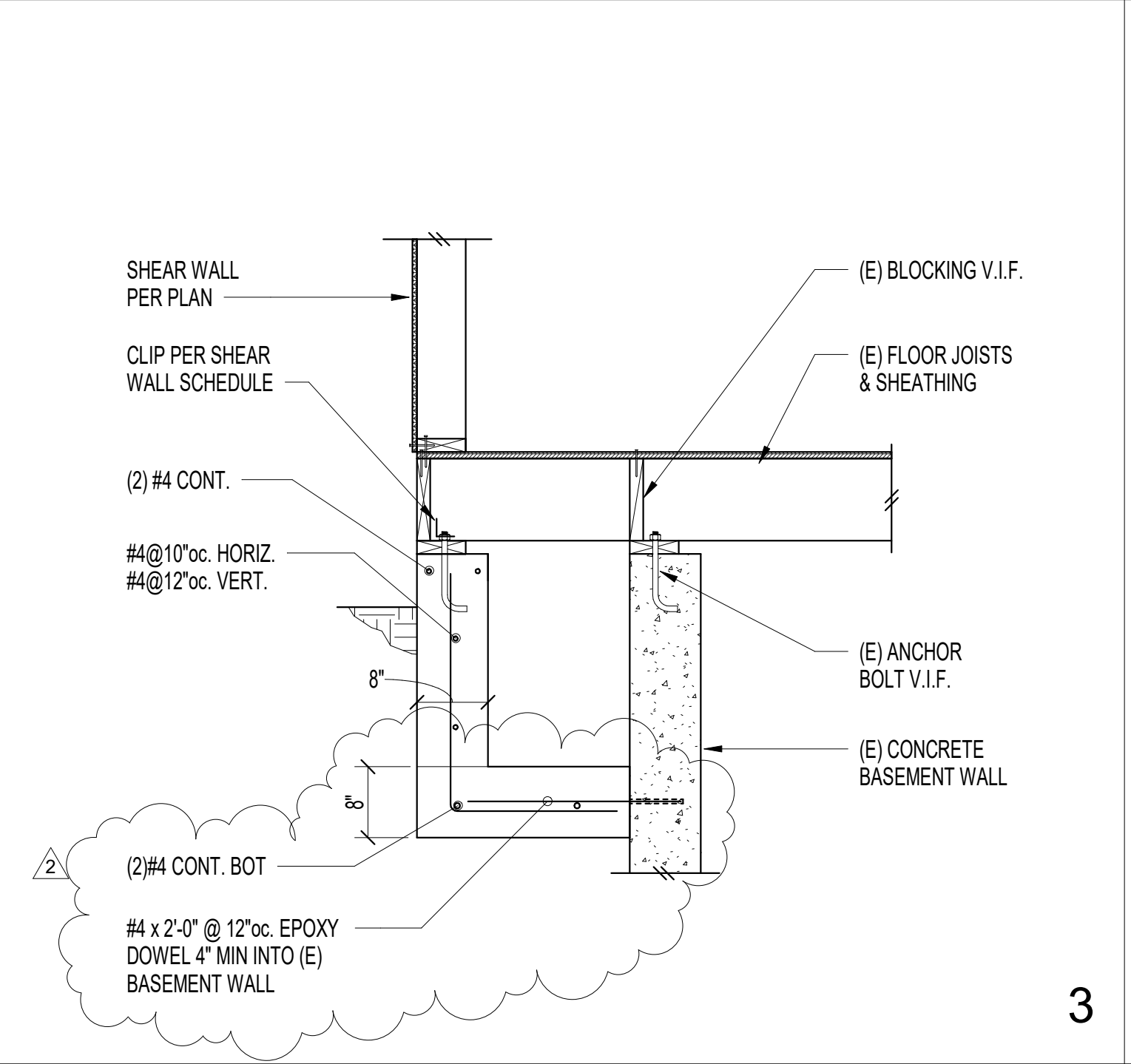
1 Roof Framing Plan
1/4" = 1'-0"



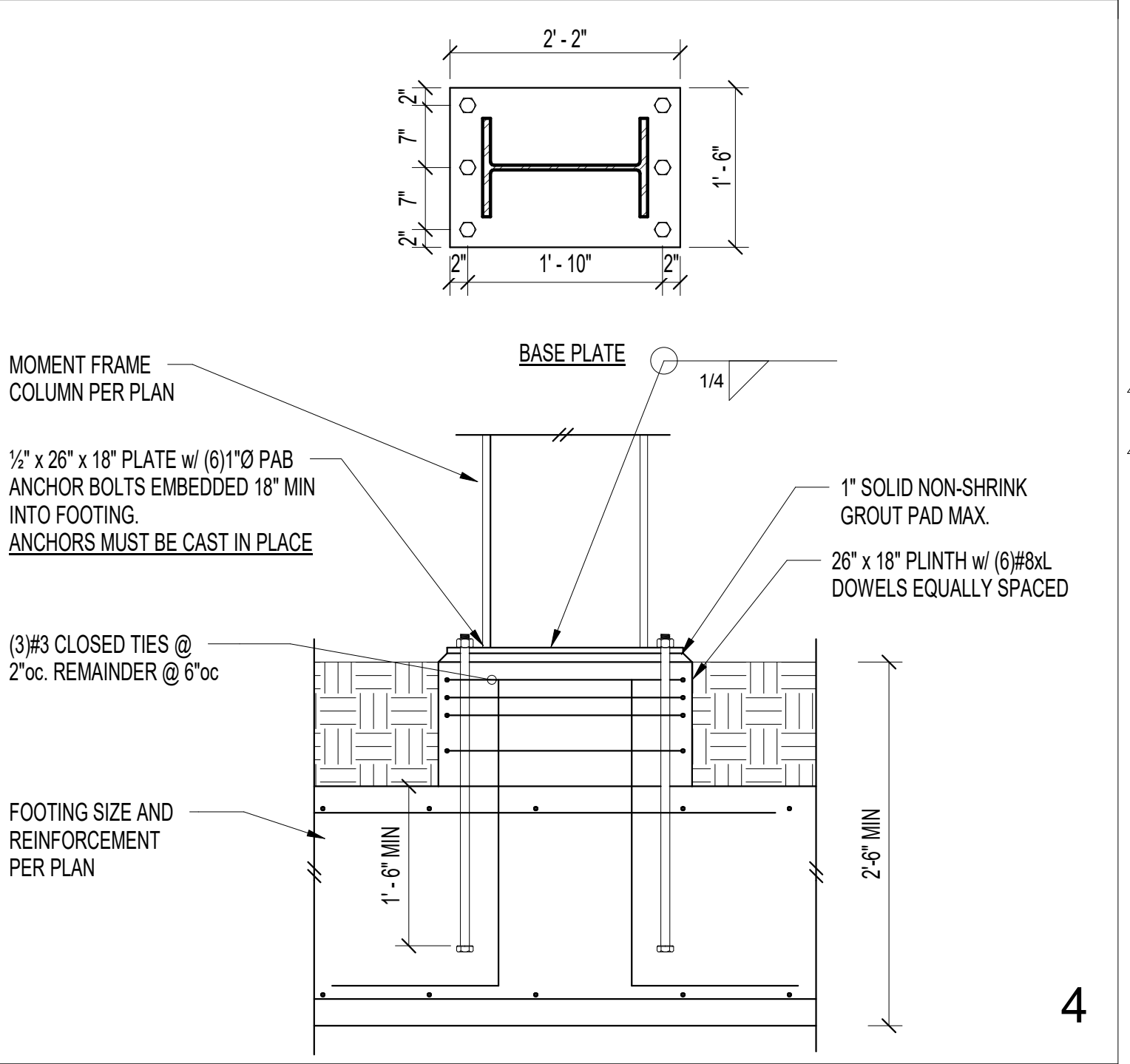
Typical Stepped Footing 1



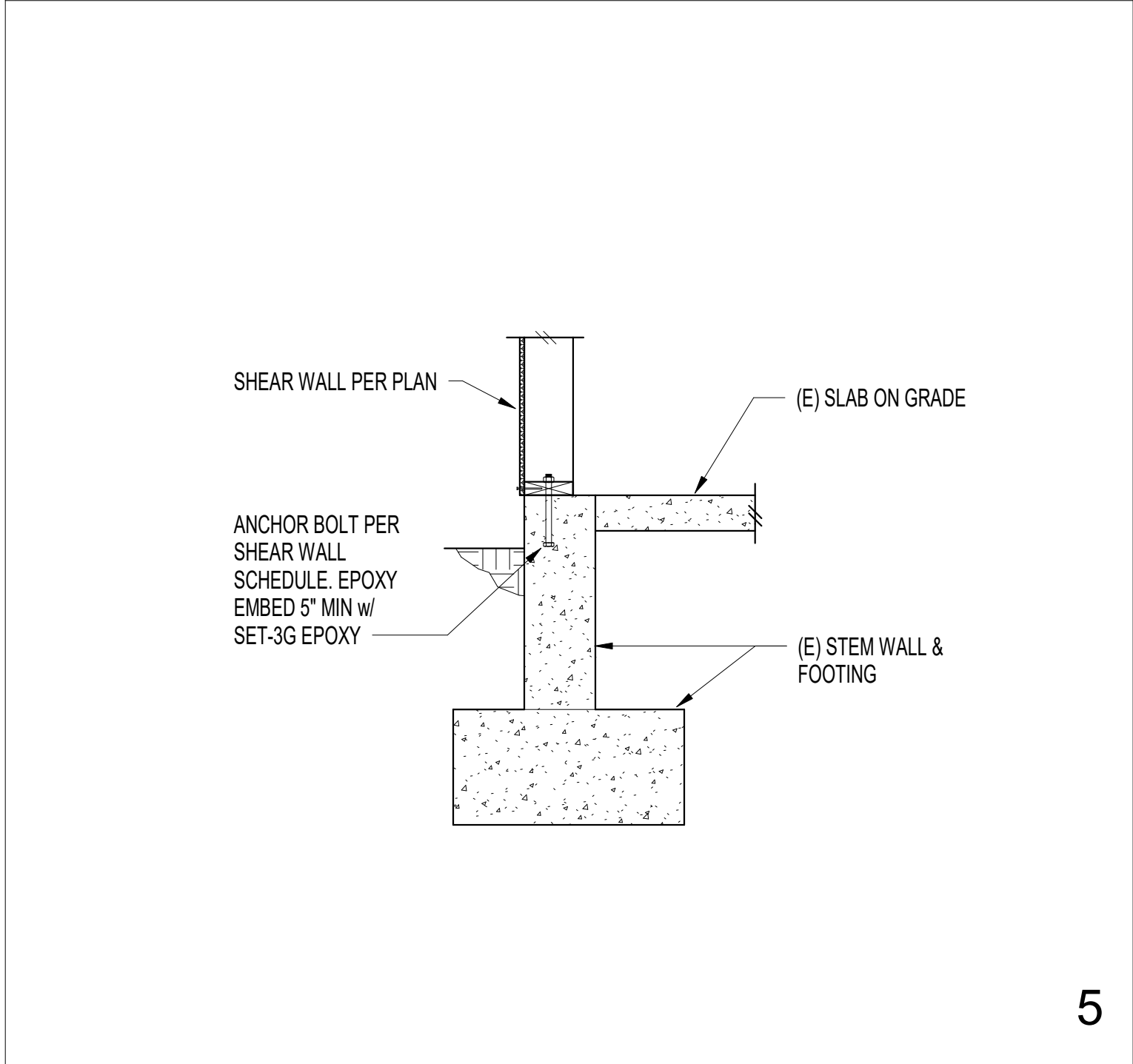
Stair On Grade 2



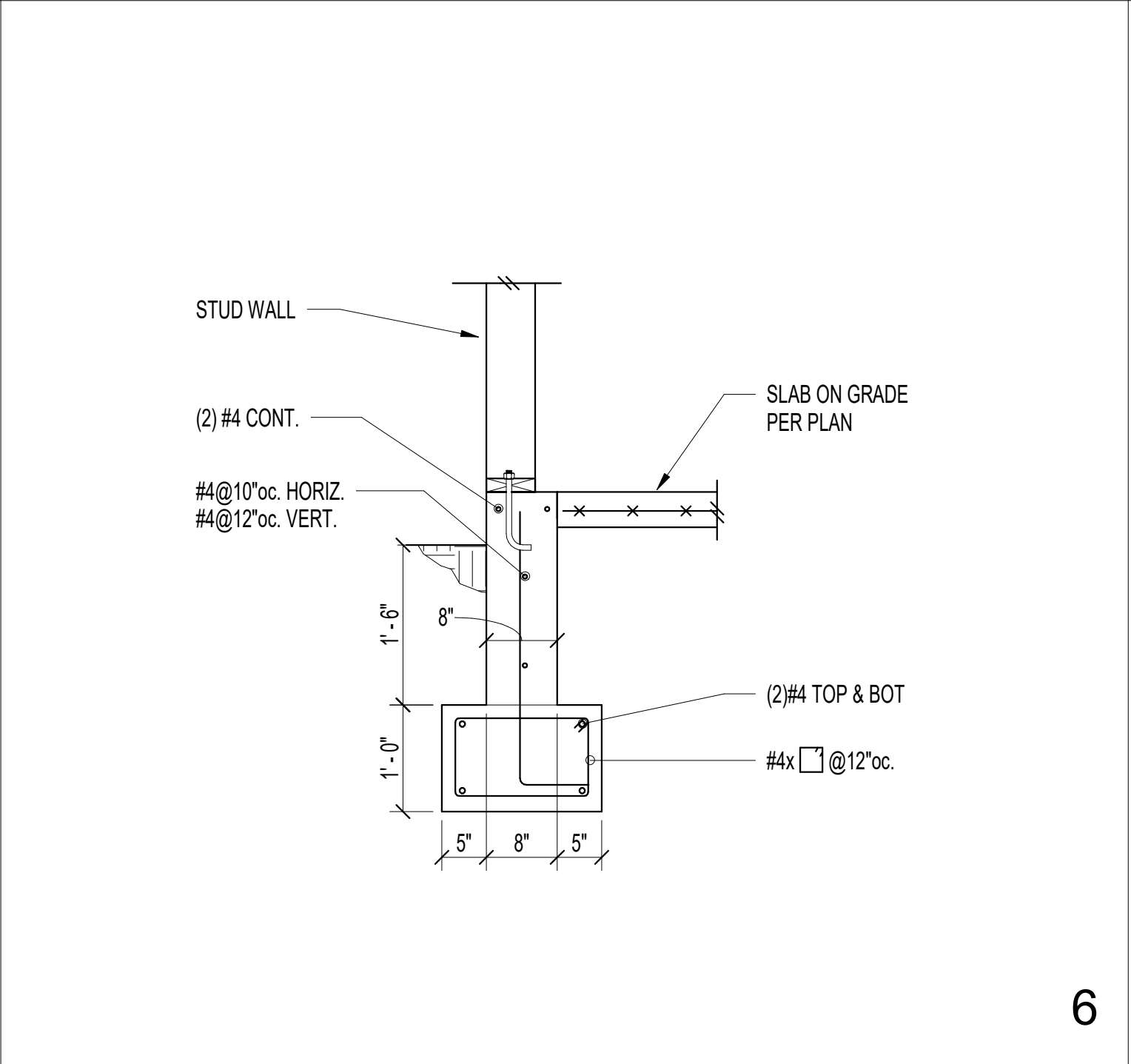
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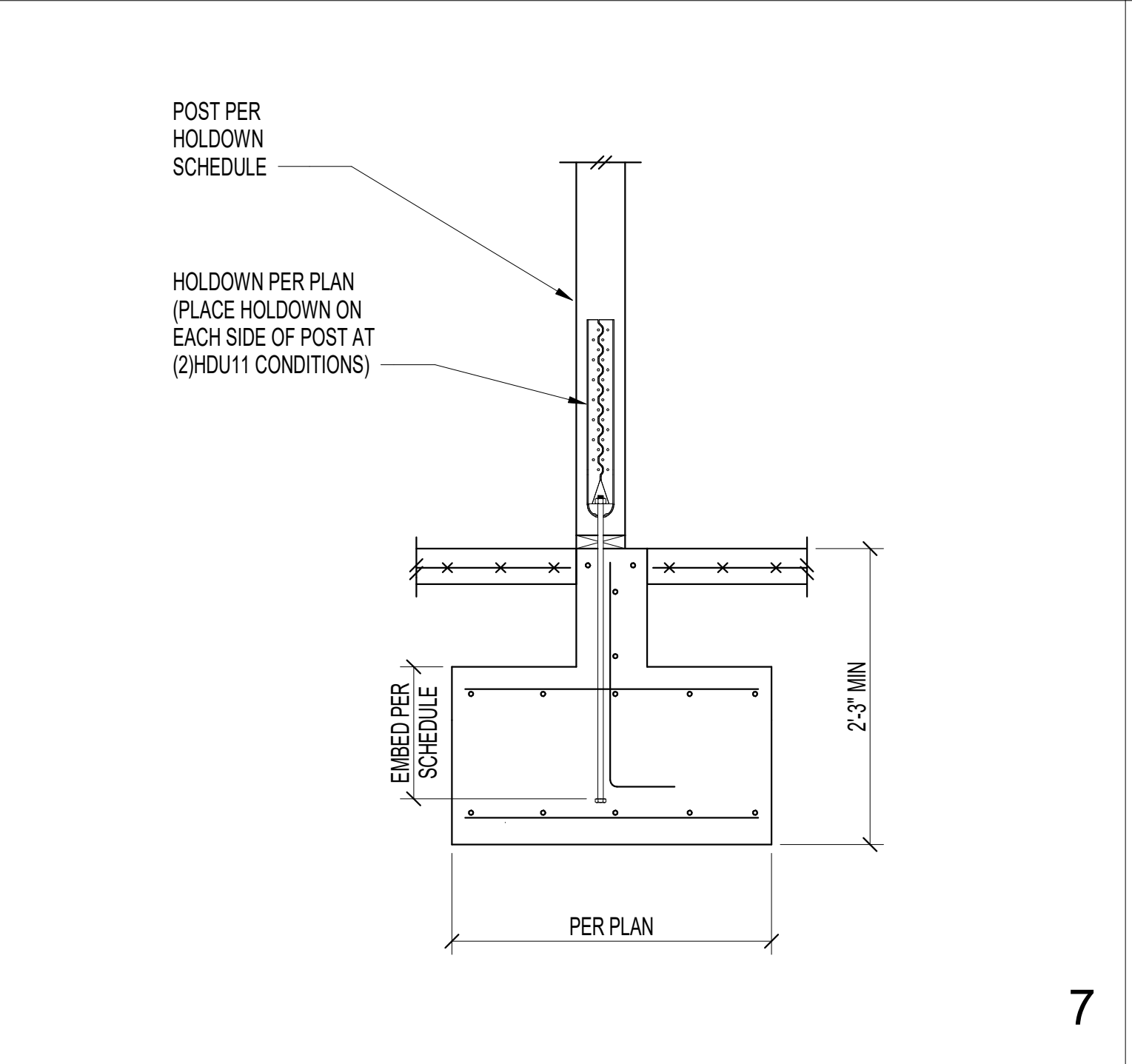
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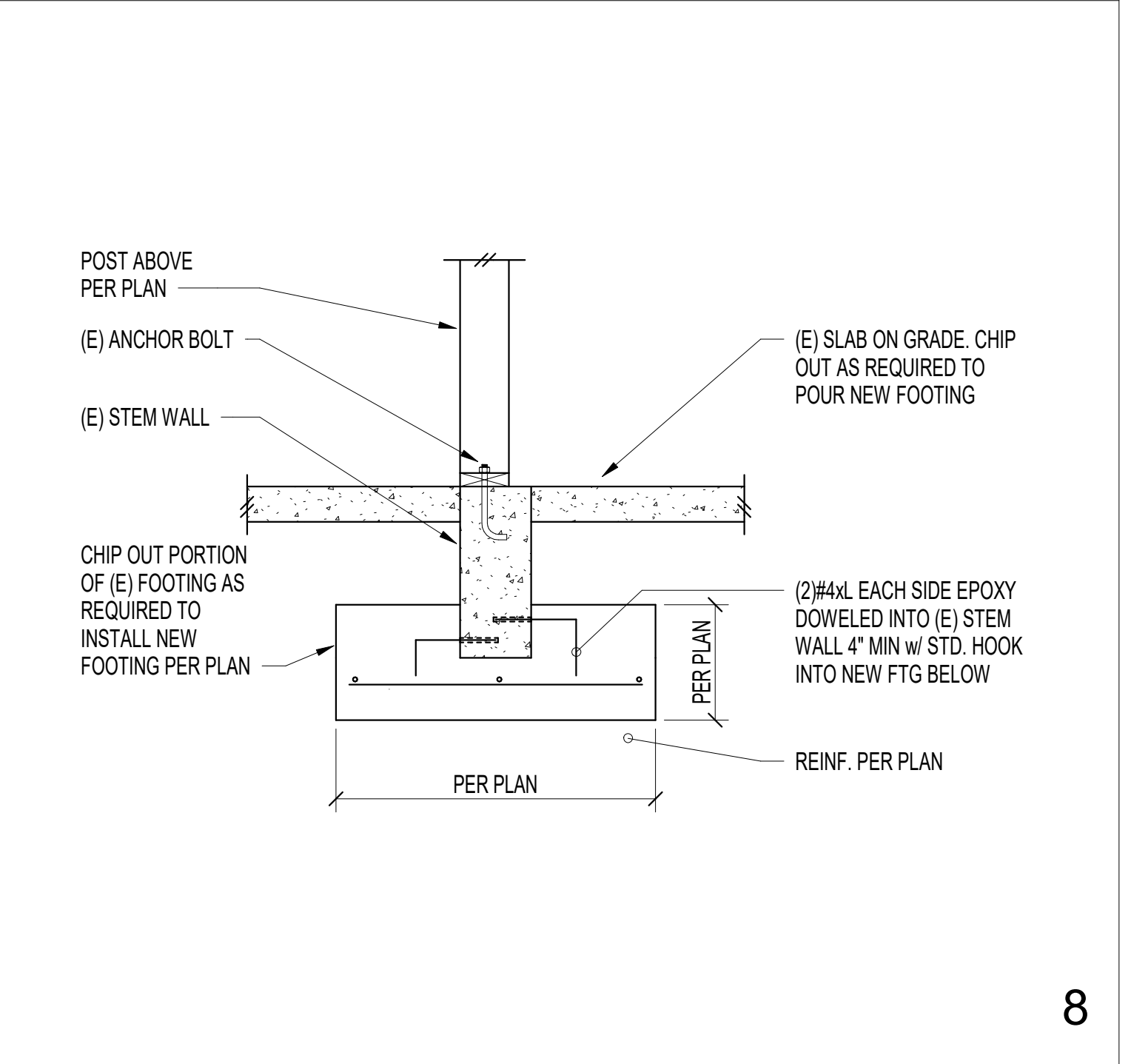
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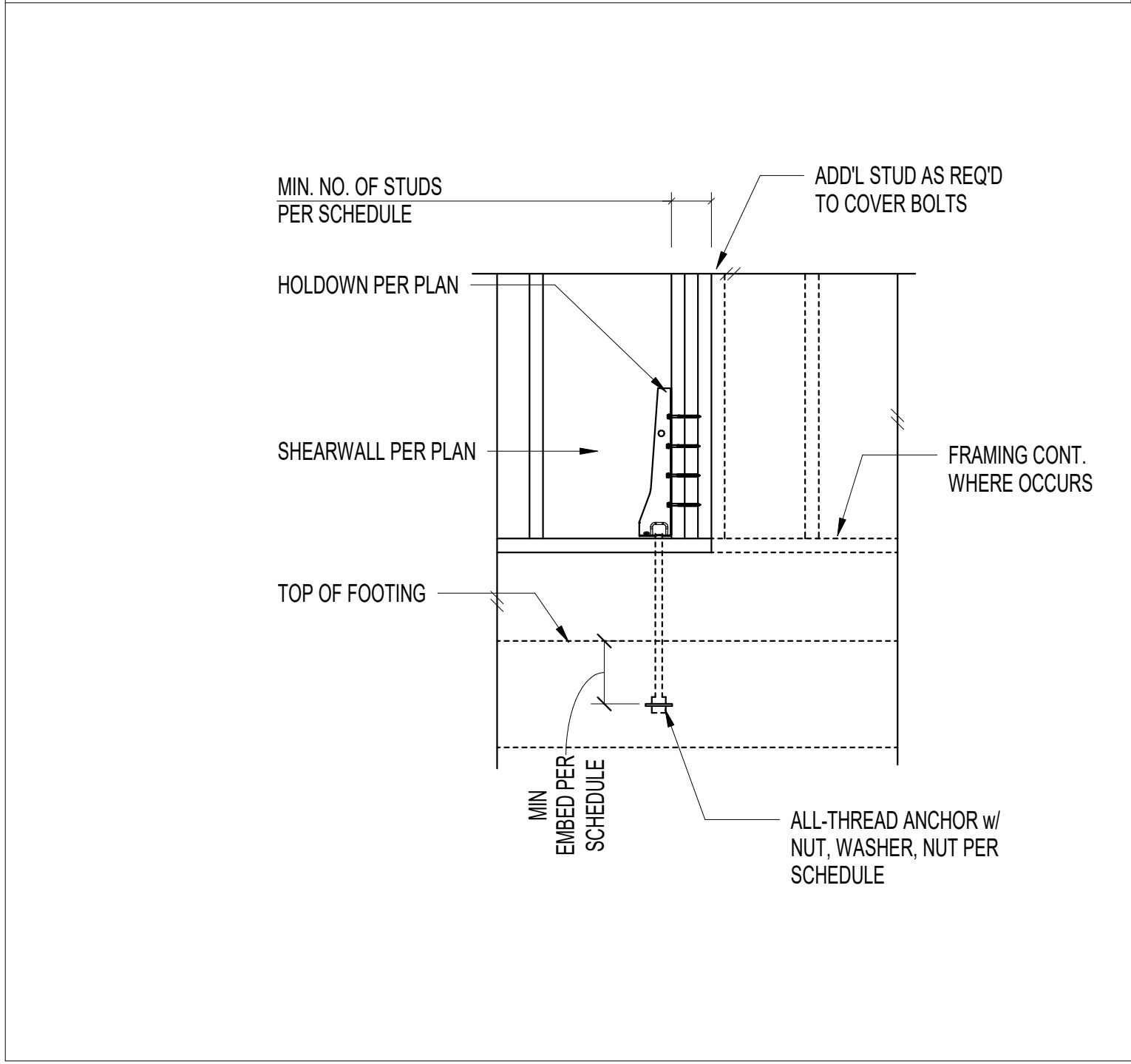
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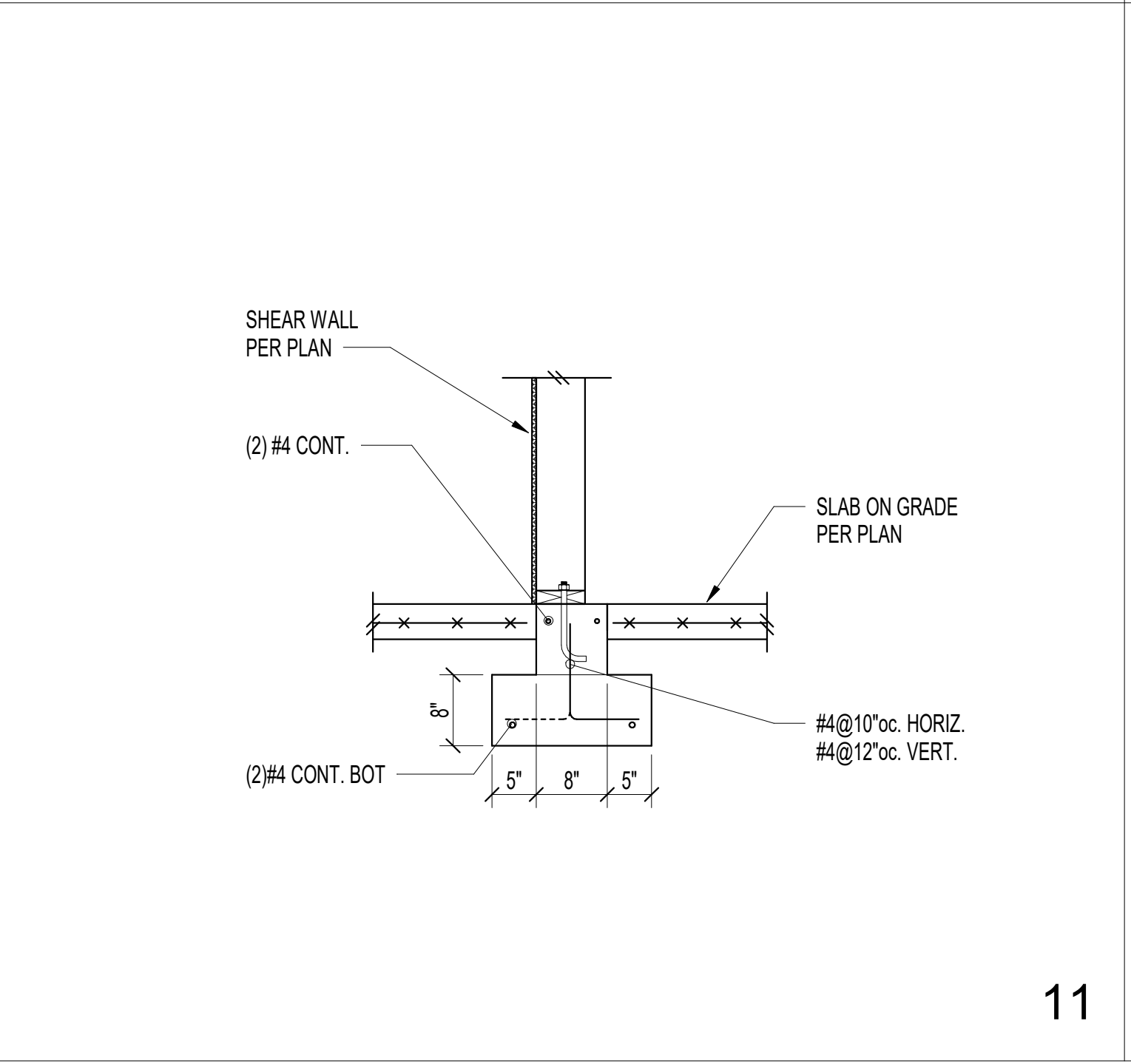


HOLDOWN SCHEDULE				
PLAN MARK	ANCHOR BOLT	EPOXY EMBED	CAST-IN-PLACE ②	MIN. NO. OF END STUDS ①
H DU2	5/8"Ø	7"	7"	2
H DU5	5/8"Ø	12"	7"	3
(2)H DU11	PAB8	-	15" ③	6x8

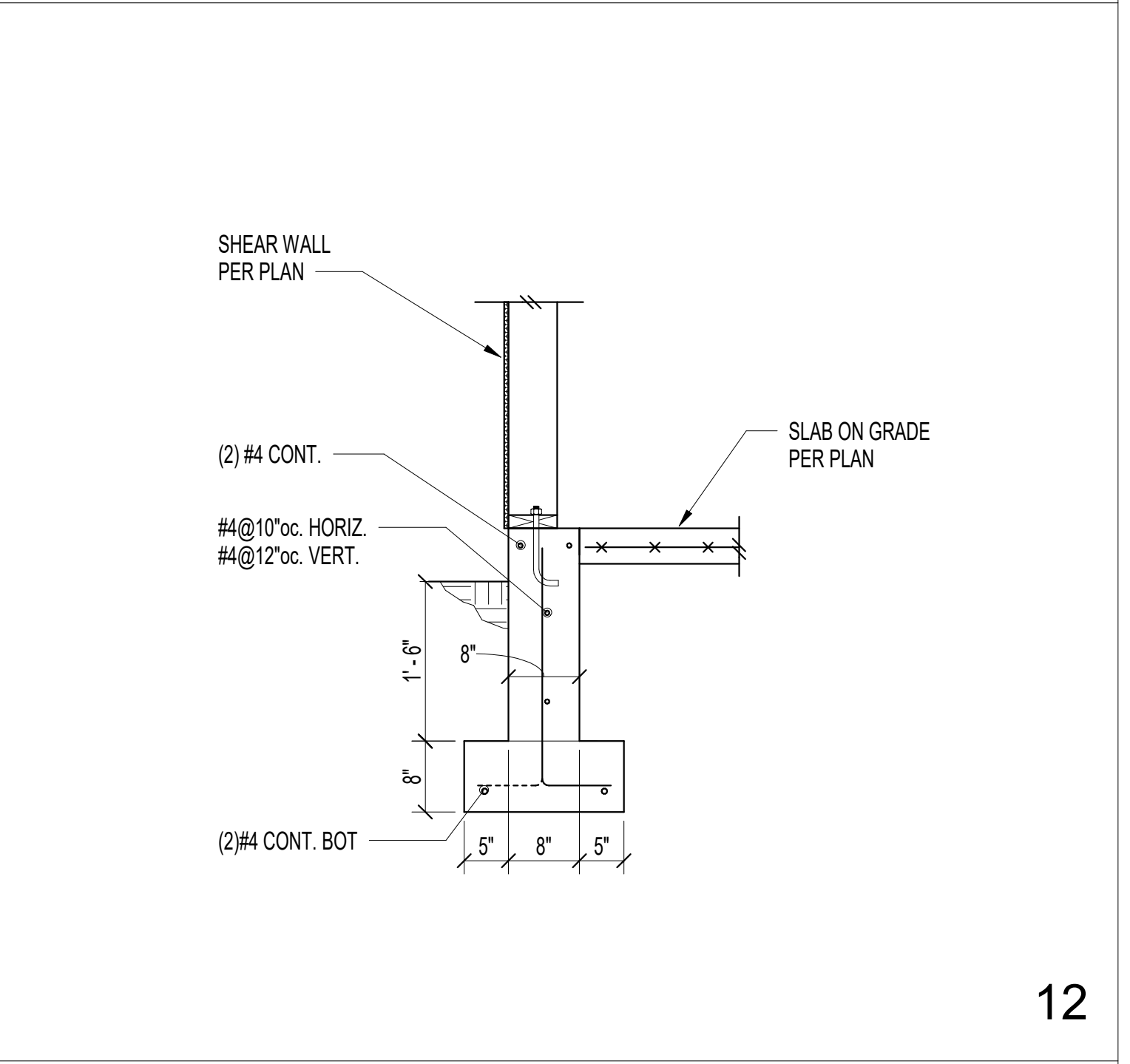
- ① MINIMUM NO. OF STUDS AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.
- ② CAST IN PLACE ALL THREAD w/ NUT/ WASHER/ NUT EMBEDDED IN CONCRETE. PLATE WASHER 1 1/4"x1 1/2"x1/2" MIN.
- ③ (2) H DU11 SHALL BE EMBEDDED INTO NEW FOOTING PER 7/S3.0

Typical Hold-down Anchor

10



11

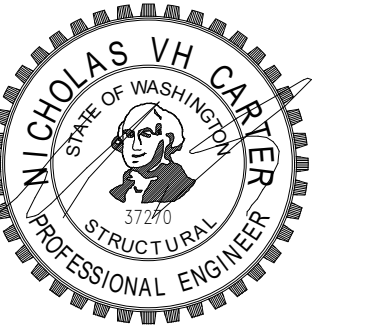


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MERCER ISLAND BUILDING PERMIT REV 2 06.10.25

Stamp:



CQN CARTER QUINN NORLIN
STRUCTURAL ENGINEERING

Consultants:

Project:
NS Residence
project no. 2401
8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:
Concrete Details

Date: June 9, 2025

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

Sheet No.:

S3.0



6



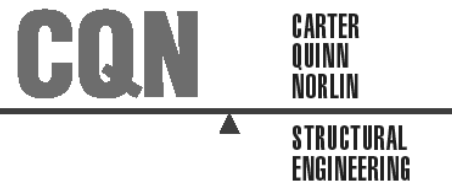
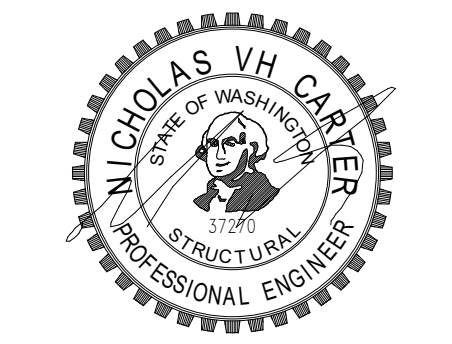
S3.1

1	2	3	4
5	6	7	8
9	10	11	Typical Beam To Beam Connection 12

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Stamp:



Consultants:

Project:
NS Residence
project no. 2401
8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:
Steel Details

Date: June 9, 2025

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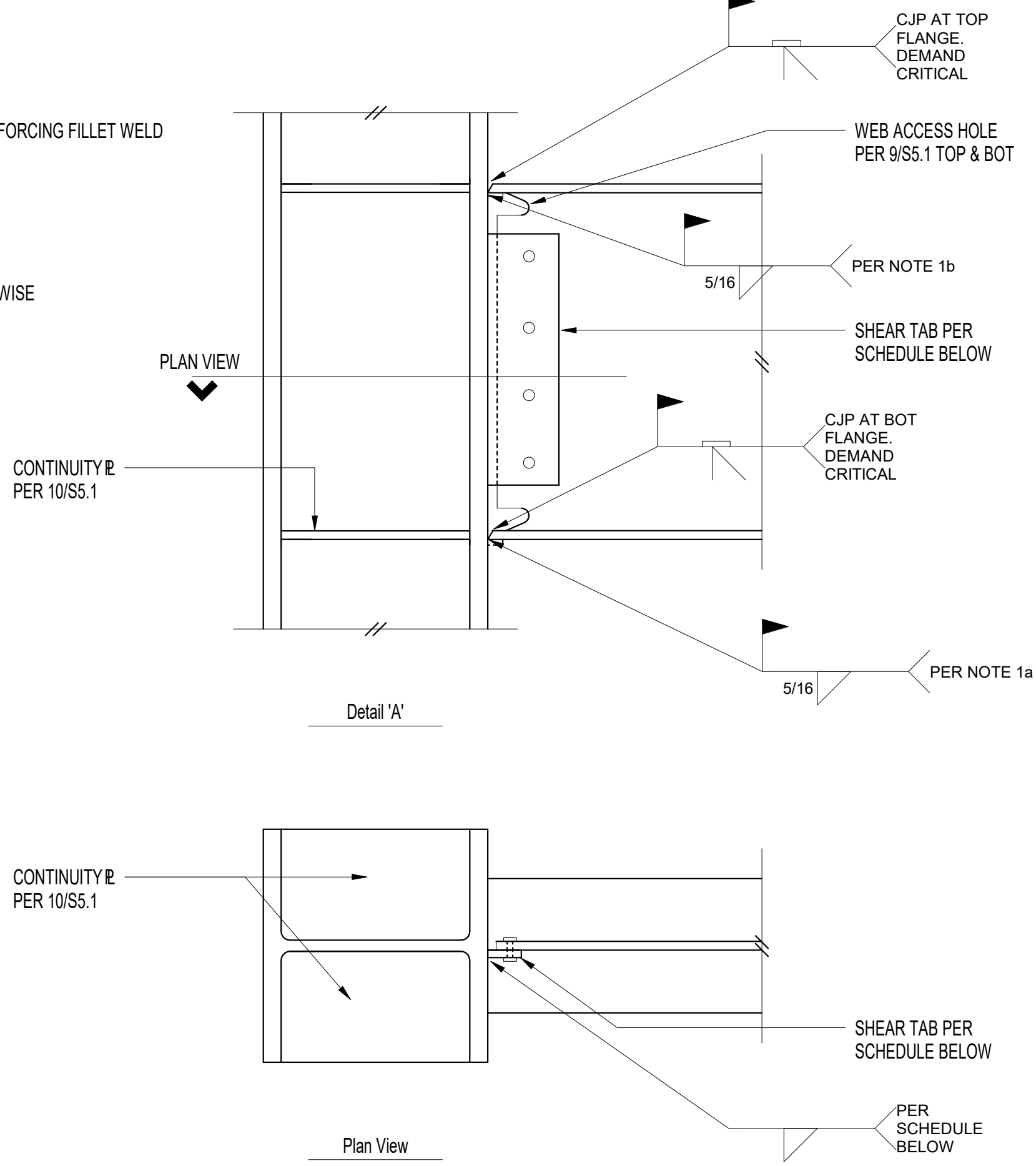
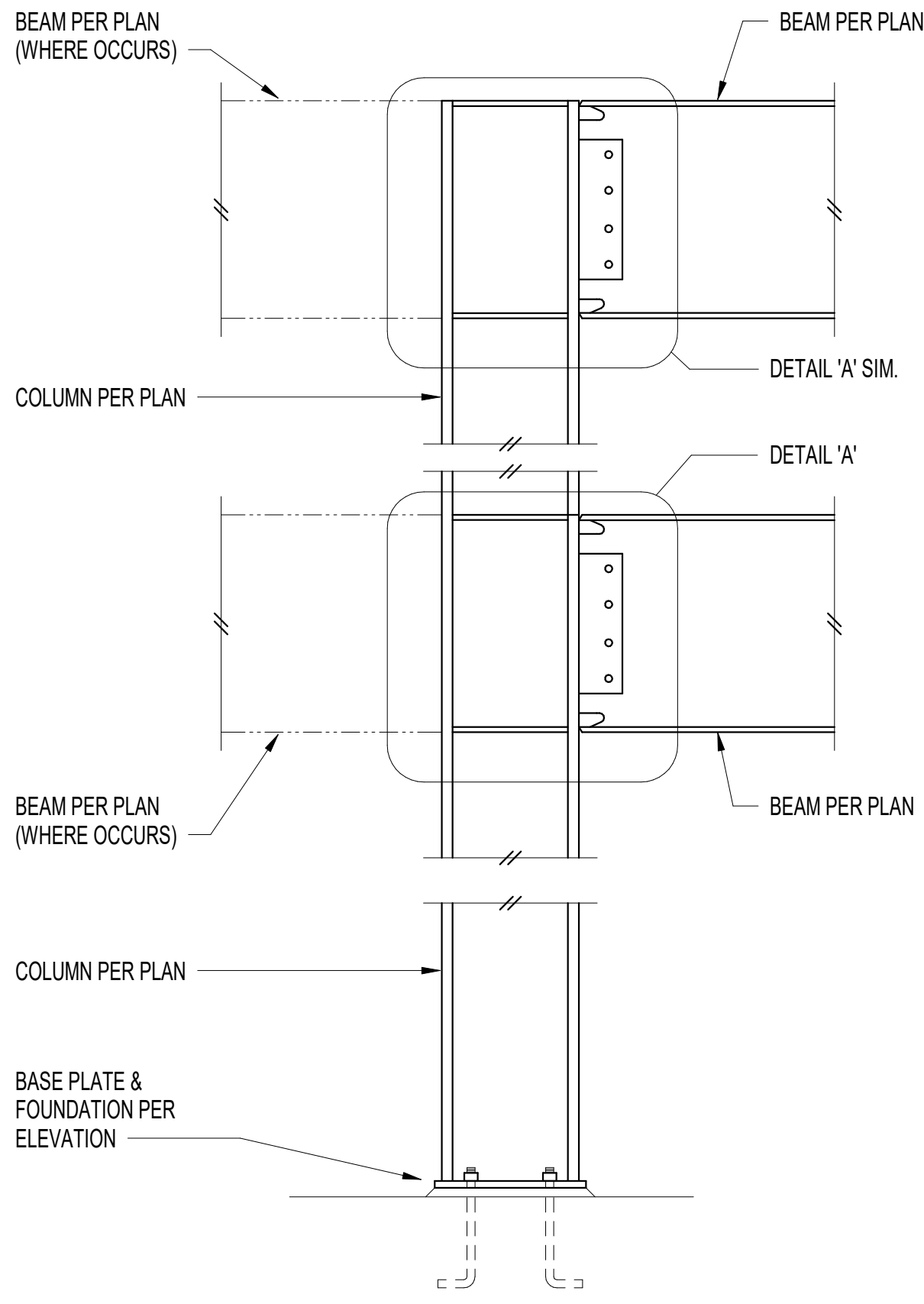
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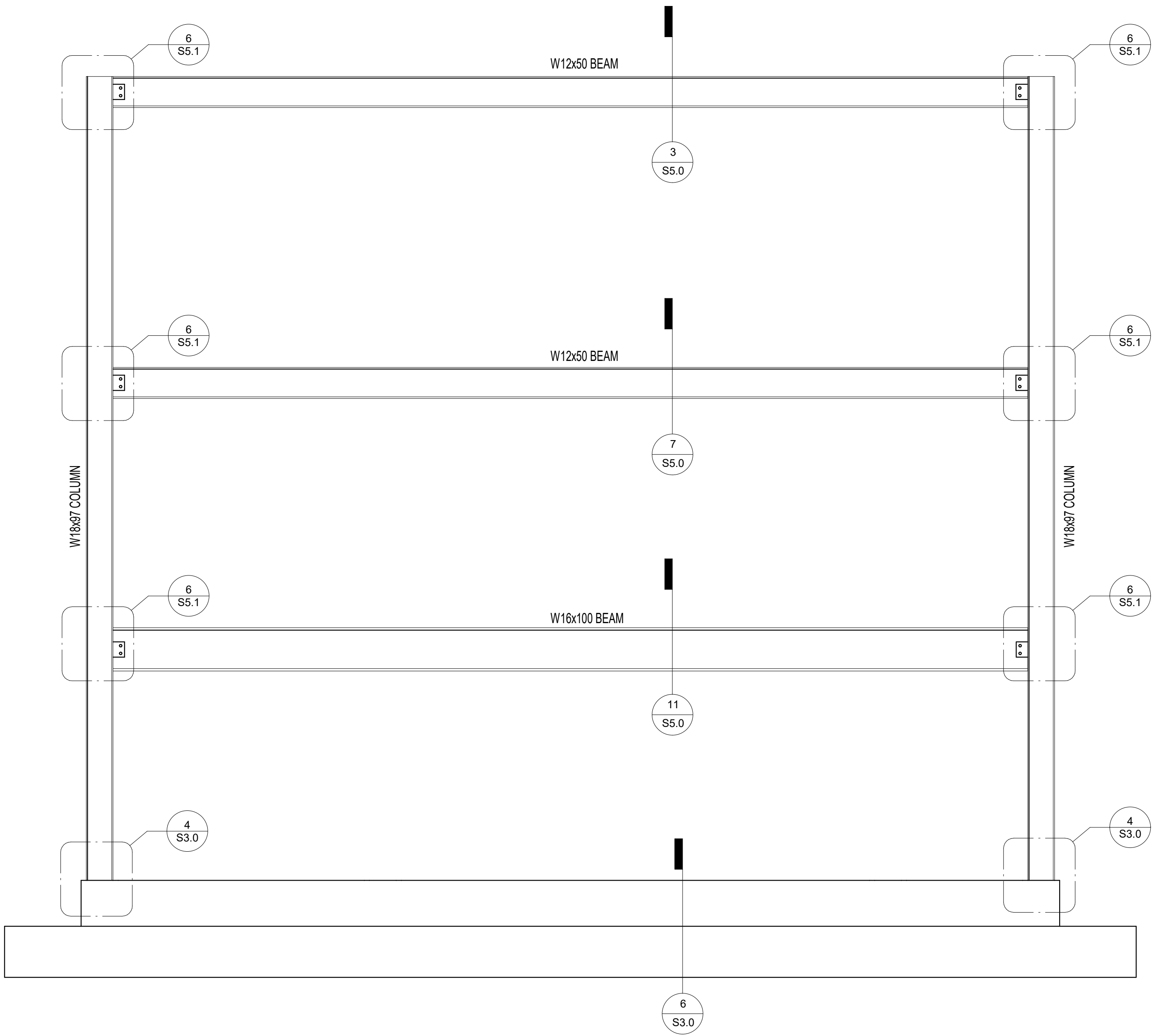
S5.0

- CONNECTION NOTES :
1. a) REMOVE WELD BACKING, BACKGOUGE TO SOUND WELD MATERIAL, AND ADD 5/16" REINFORCING FILLET WELD
b) BACKING BAR MAY REMAIN IN PLACE. PROVIDE 5/16" FILLET WELD AT FACE OF COLUMN.
 2. COMPLETE JOINT PENETRATION GROOVE WELD BETWEEN WEB ACCESS HOLES. PROVIDE NON-FUSIBLE WELD TABS. REMOVE WELD TABS AFTER WELDING AND GRIND END OF WELD SMOOTH AT WEB ACCESS HOLE.
 3. ALL PLATES AND SHAPES SHALL BE ASTM A36 Fy = 50 ksi MATERIAL UNLESS NOTED OTHERWISE
 4. REFER TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
 5. REFER TO GENERAL NOTES FOR WELD INSPECTION AND MATERIAL REQUIREMENTS.



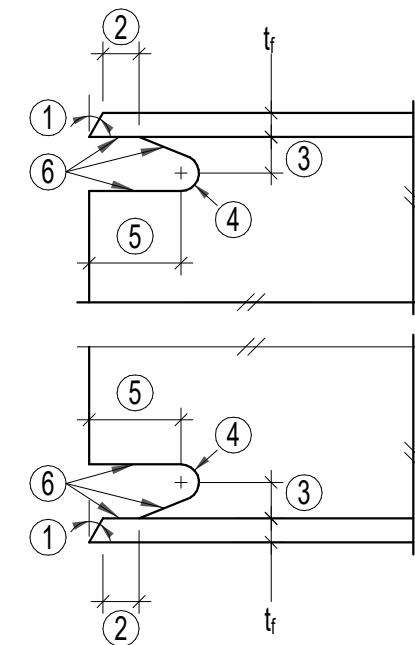
SCHEDULE :				
BEAM	COLUMN	SHEAR TAB	CONTINUITY PLATE THICKNESS	CONTINUITY PLATE WELD
W12x50	W18x97	REFER TO DETAIL 12/S5.1	3/8"	5/16"
W16x100	W18x97	REFER TO DETAIL 12/S5.1	1/2"	3/8"

Typical Moment Frame Connection 6



8

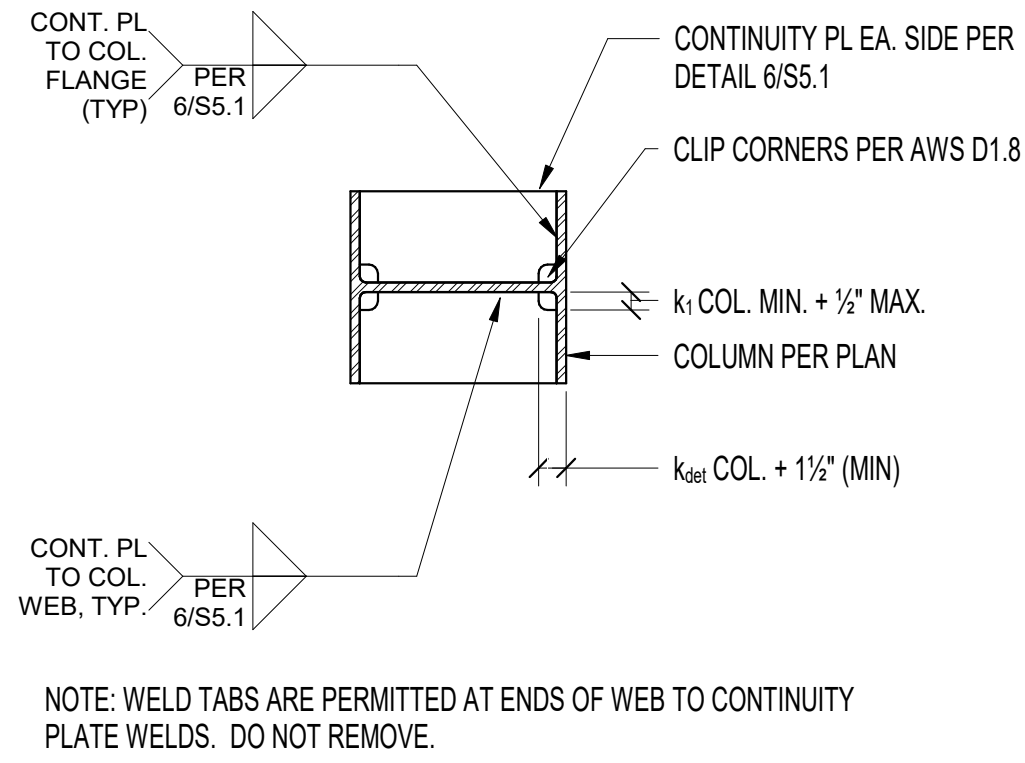
TOLERANCES SHALL NOT ACCUMULATE TO THE EXTENT THAT ANGLE OF THE ACCESS HOLE CUT TO THE FLANGE SURFACE EXCEEDS 25°.



REQUIRED WEB ACCESS HOLE DIMENSIONS :					
BEAM	①	②	③	④	⑤
W12x50	30 DEGREES	3/4"	1"	1/2" RADIUS	2 1/2"
W16x100	30 DEGREES	1"	1-1/4"	1/2" RADIUS	3 1/2"

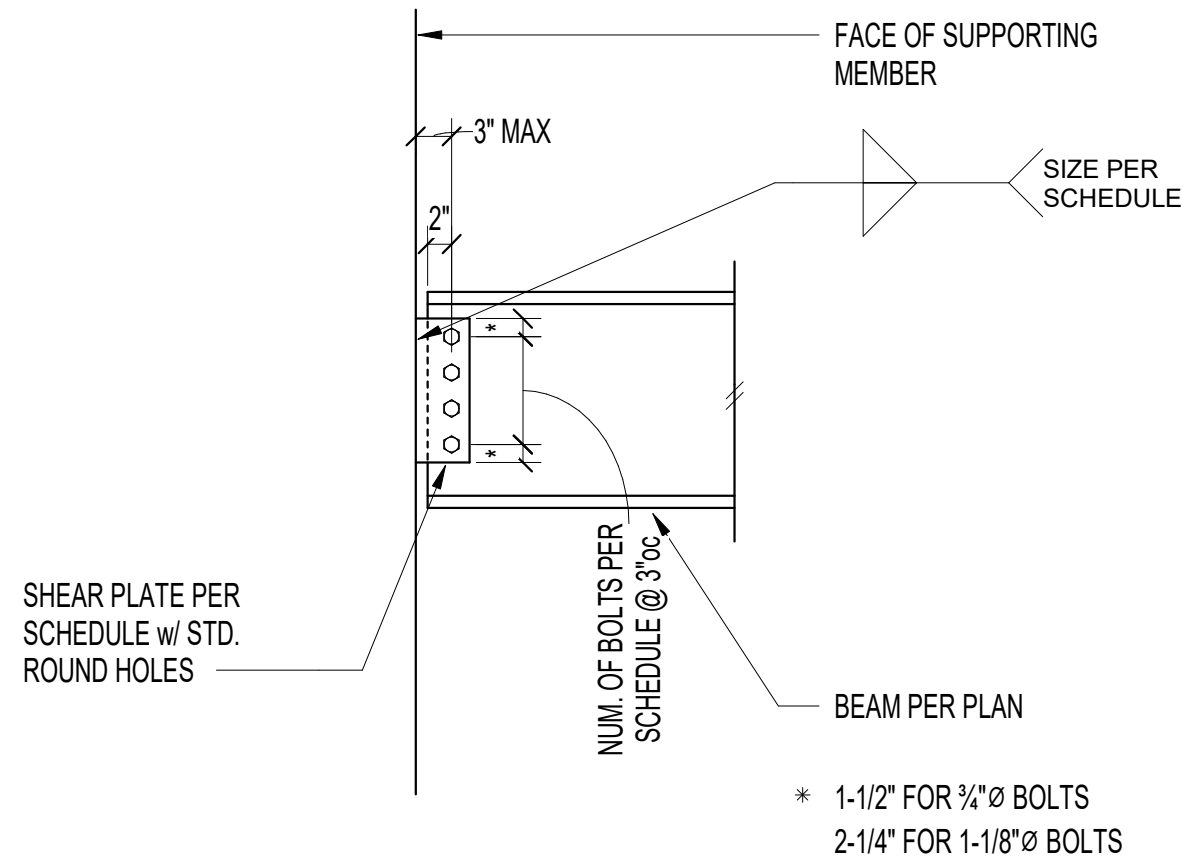
NOTE: WELD ACCESS HOLES MUST CONFORM TO THE REQUIREMENTS OF AWS D1.8, SECTION 6.11.1.2.

Web Access Hole 9



NOTE: WELD TABS ARE PERMITTED AT ENDS OF WEB TO CONTINUITY PLATE WELDS. DO NOT REMOVE.

Continuity Plate Attachment to Column 10



SHEAR PLATE SCHEDULE				
BEAM SIZE	NO. OF BOLTS	BOLT SIZE*	PLATE THICKNESS	WELD SIZE
W12x50	3	3/4" Ø	3/8"	1/4"
W16x100	4	1-1/8" Ø	5/8"	7/16"

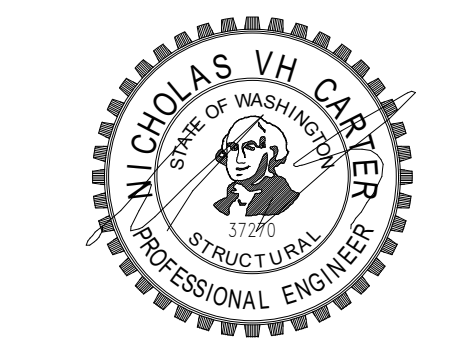
* BOLT TYPE = A325N
MATERIAL = A36

Moment Frame Single Shear Plate Connection 12

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project no. 2401

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Mercer Island, WA 98040

Drawing Title:

Moment Frame Details

Date: June 9, 2025

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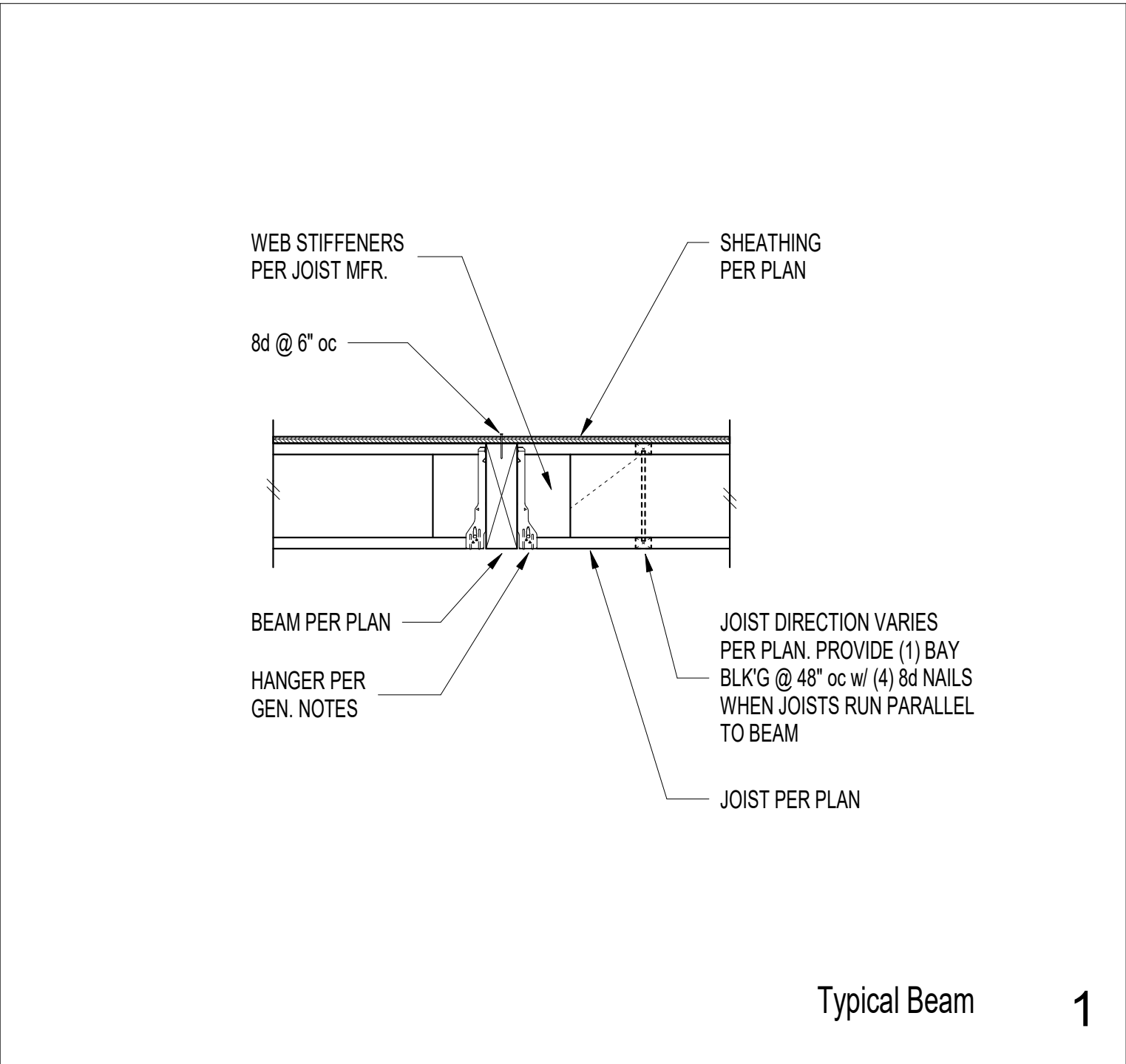
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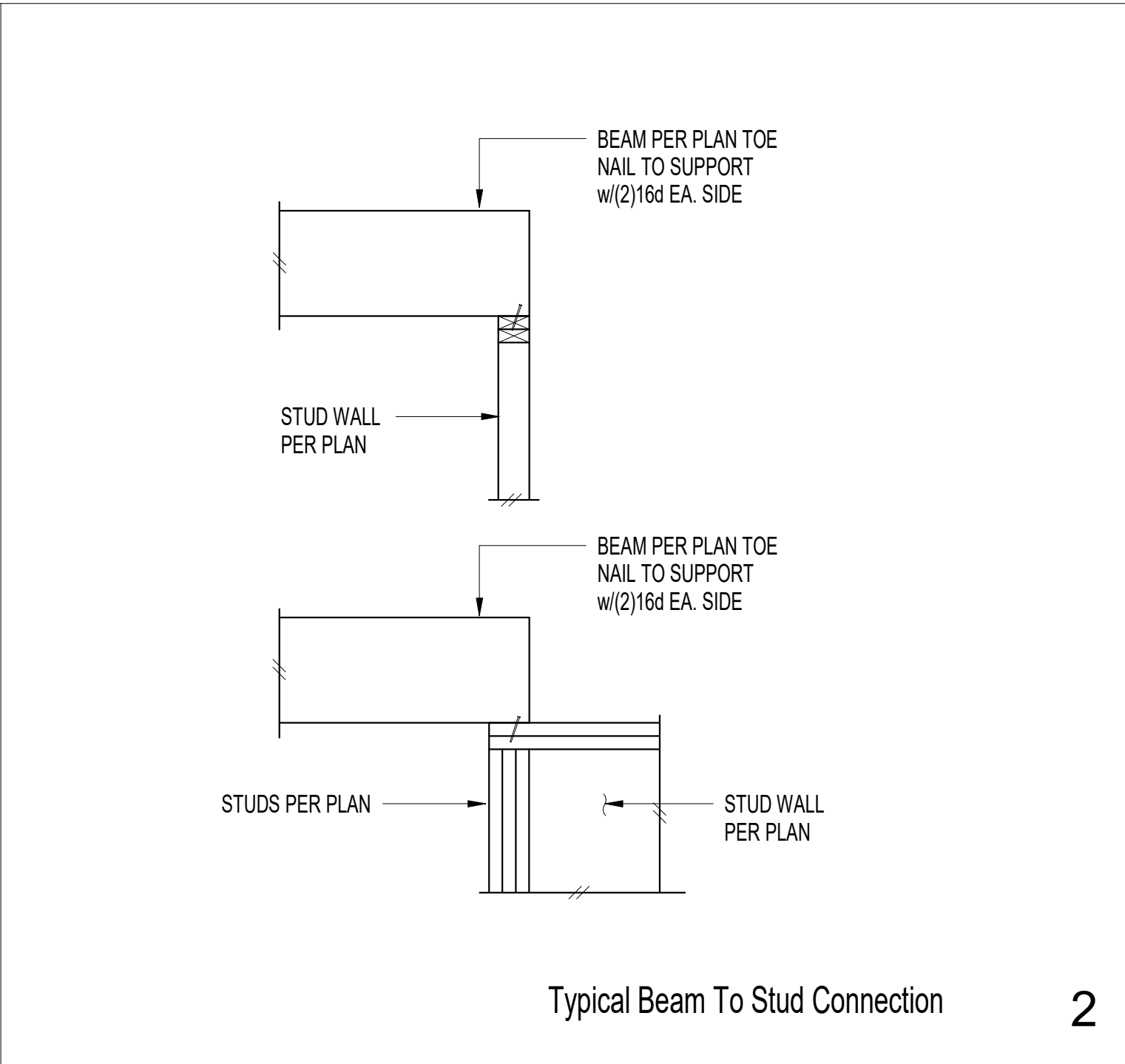
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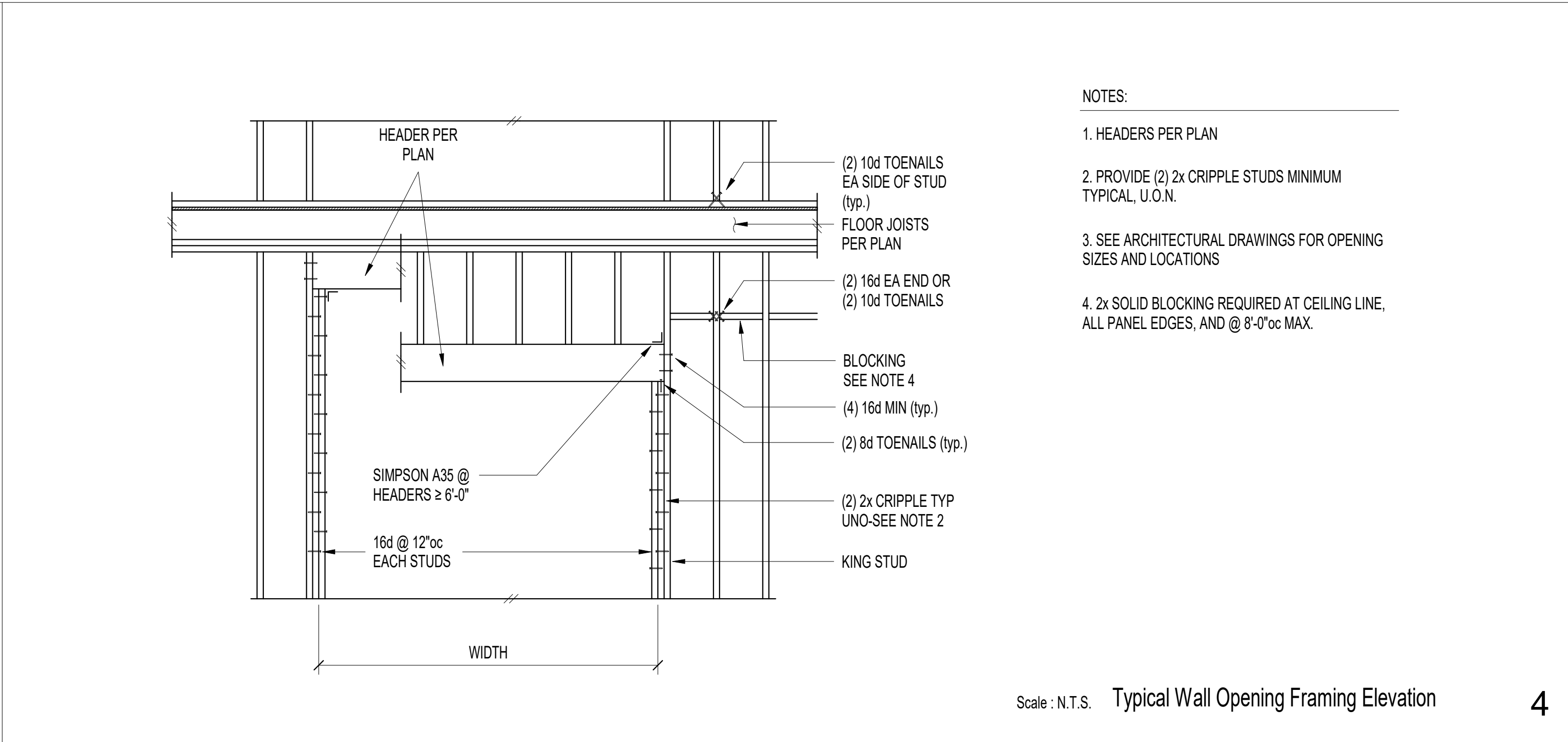
S5.1



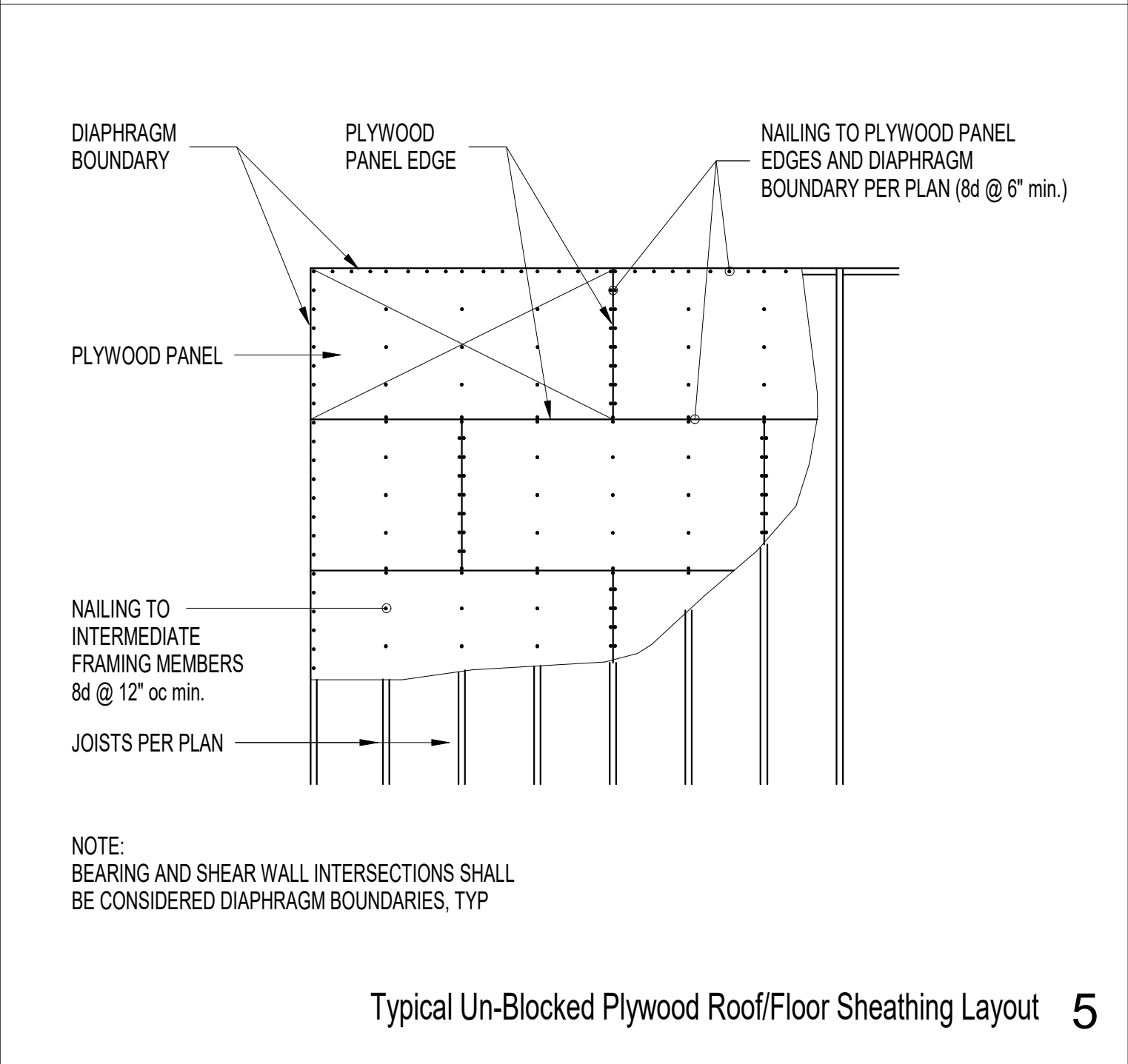
Typical Beam 1



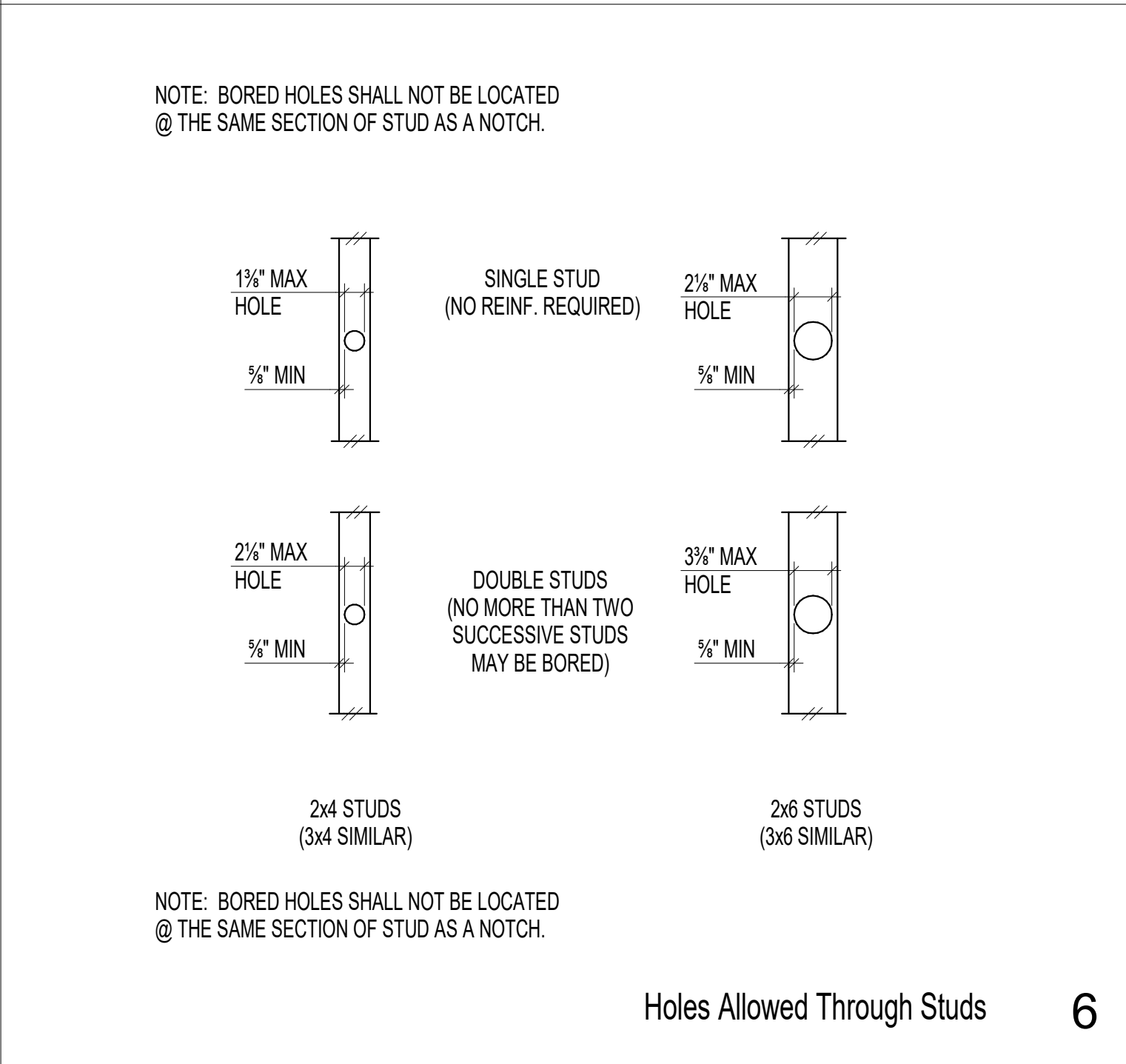
Typical Beam To Stud Connection 2



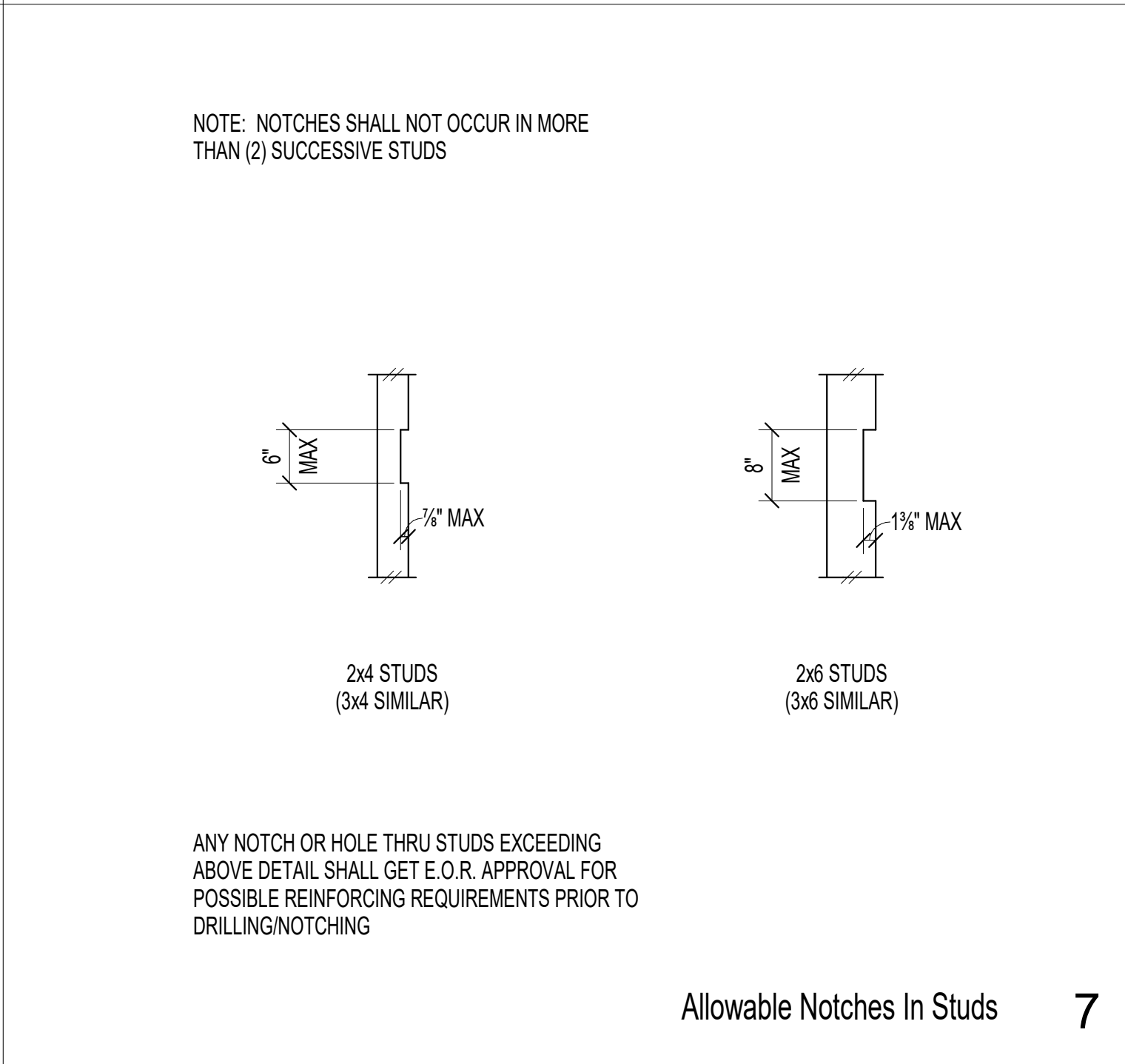
Scale : N.T.S. Typical Wall Opening Framing Elevation 4



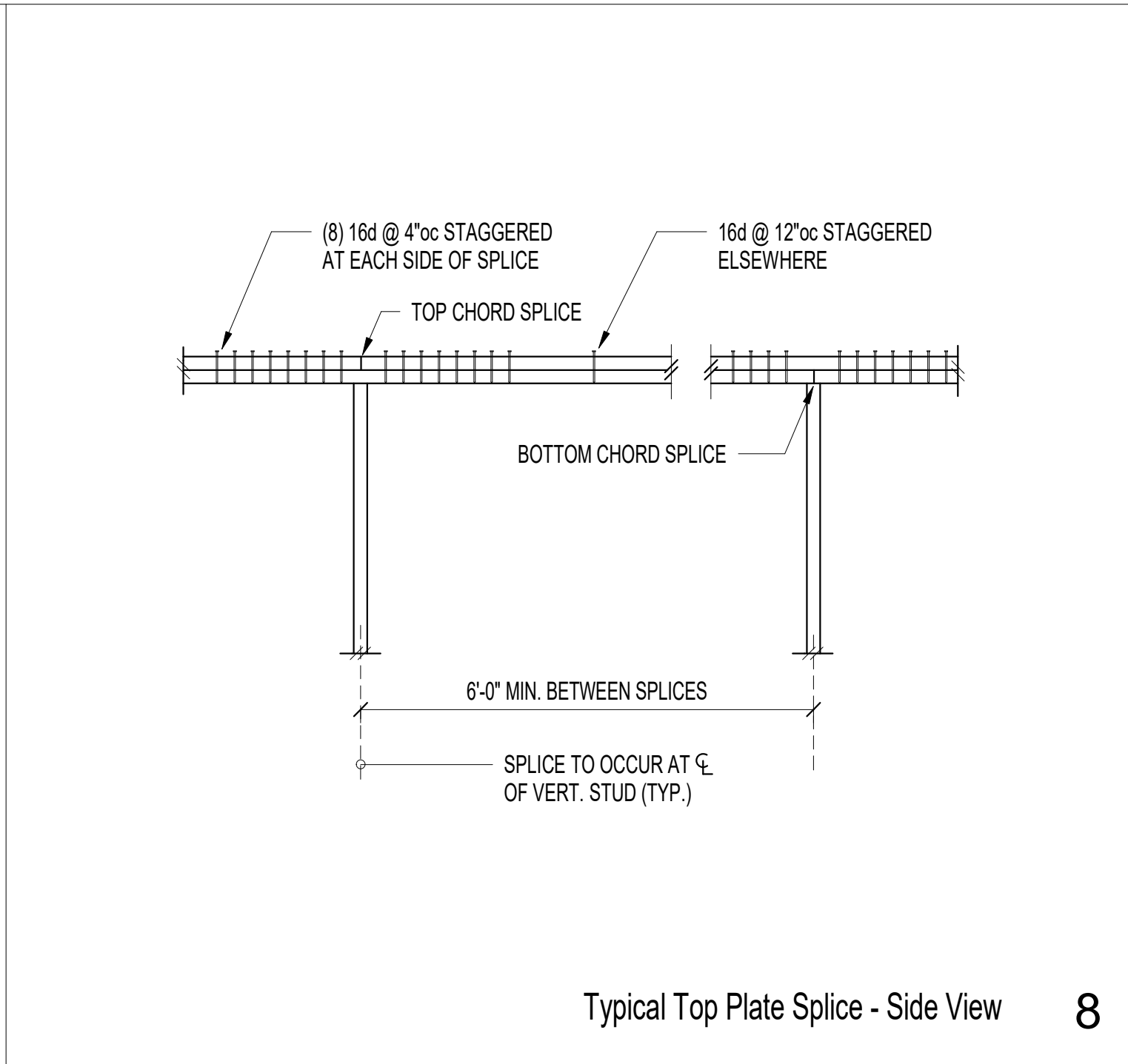
Typical Un-Blocked Plywood Roof/Floor Sheathing Layout 5



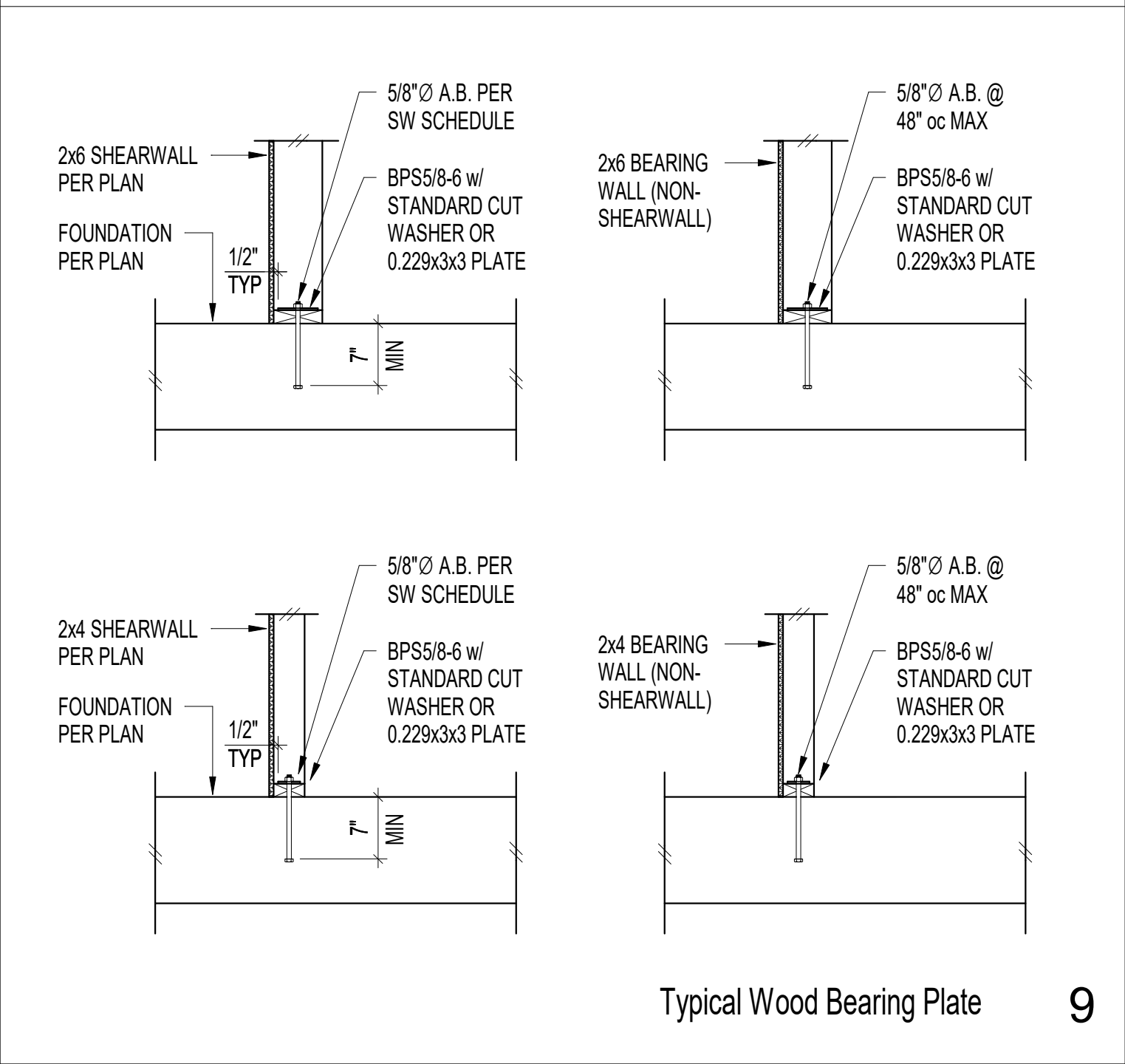
Holes Allowed Through Studs 6



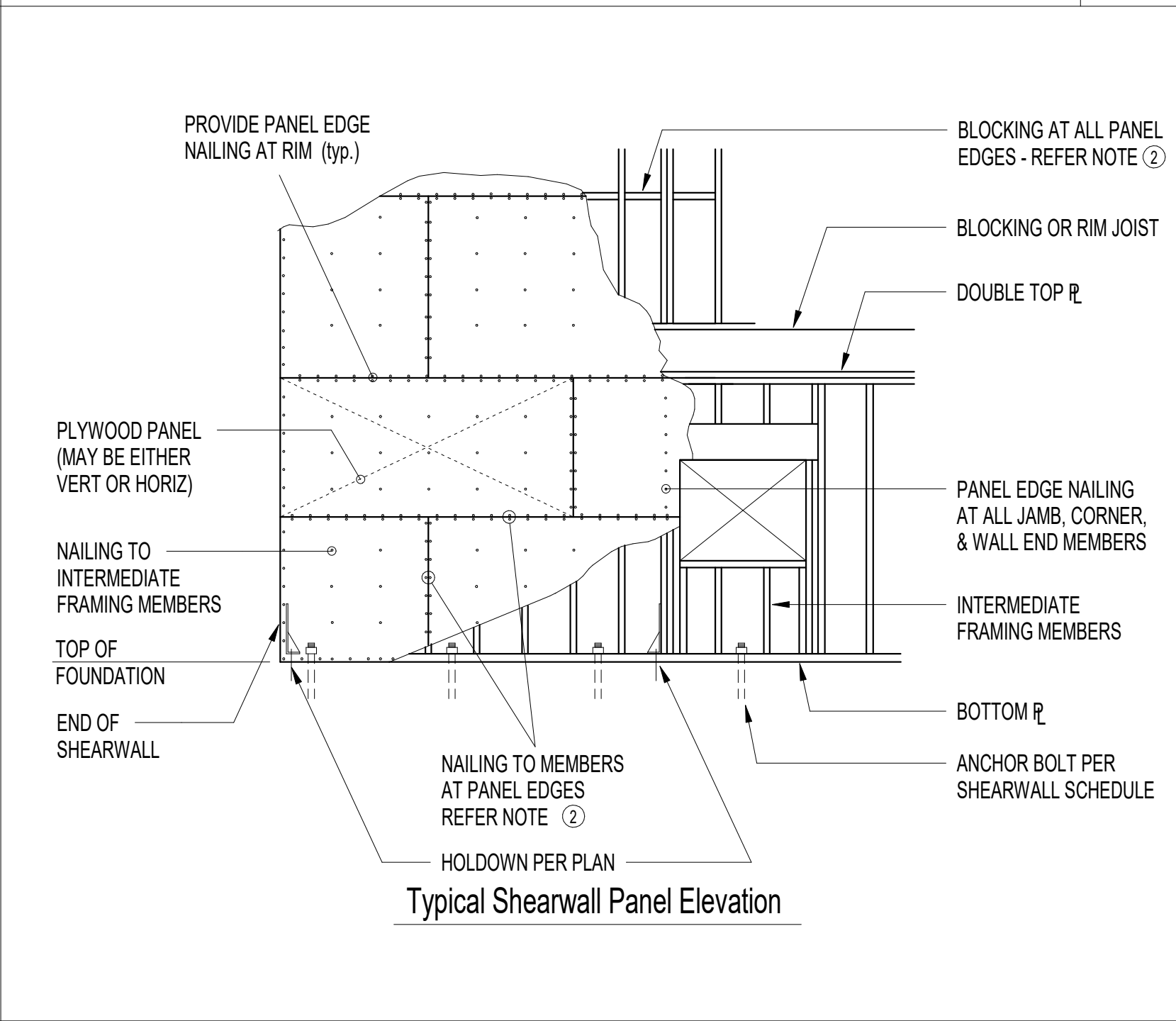
Allowable Notches In Studs 7



Typical Top Plate Splice - Side View 8



Typical Wood Bearing Plate 9



Typical Shearwall Panel Elevation

SHEAR WALL SCHEDULE								
#SW#	SHEATHING	BLOCKING	PANEL EDGE NAILING ①	ATTACHMENT TO TOP PLATE ③	BOTTOM PLATE ATTACHMENT			CAPACITY (plf) SEISMIC
					LSL RIM JOIST REQ'D.	FACENAILING TO WOOD BELOW ⑤	ANCHOR BOLTING TO CONC. BELOW ⑥	
1SW1	15/32" APA RATED SHEATHING	YES	8d @ 6"oc	CLIP @ 16"oc	1 1/2" LSL	NAILS @ 6"oc	5/8" @ 48"oc	240 PLF
1SW2	15/32" APA RATED SHEATHING	YES	8d @ 4"oc	CLIP @ 16"oc	1 1/2" LSL	NAILS @ 4 1/2"oc	5/8" @ 48"oc	355 PLF
1SW3	15/32" APA RATED SHEATHING	YES	8d @ 3"oc	CLIP @ 12"oc	1 1/2" LSL	NAILS @ 3 1/2"oc	5/8" @ 36"oc	455 PLF
1SW4	15/32" APA RATED SHEATHING	YES	8d @ 2"oc ②	CLIP @ 12"oc	3 1/2" LSL ④	(2) ROWS NAILS @ 5 1/2"oc	5/8" @ 24"oc	595 PLF
2SW5	15/32" APA RATED SHEATHING (EACH SIDE)	YES	8d @ 4"oc ②	CLIP @ 9"oc	3 1/2" LSL ④	(2) ROWS NAILS @ 4 1/2"oc	5/8" @ 24"oc	705 PLF
2SW6	15/32" APA RATED SHEATHING (EACH SIDE)	YES	8d @ 3"oc ②	CLIP @ 7"oc	3 1/2" LSL ④	(2) ROWS NAILS @ 3 1/2"oc	5/8" @ 18"oc	910 PLF
2SW7	15/32" APA RATED SHEATHING (EACH SIDE)	YES	8d @ 2"oc ②	CLIP @ 5"oc	3 1/2" LSL ④	SCREWS @ 4"oc	5/8" @ 12"oc	1190 PLF

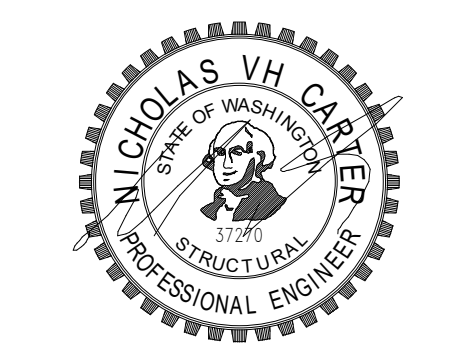
- ① NAILS SHALL BE 8d OR 10d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES), TOP & BOTTOM PLATES AND BLOCKING. NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 8d OR 10d @ 12"oc. (NOTE: WHERE STUD SPACING IS 24" oc, NAIL TO INTERMEDIATE FRAMING MEMBERS @ 6" oc)
- ② FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- ③ CLIP SHALL BE EITHER A35 OR LTP4.
- ④ ROWS MUST BE OFFSET AT LEAST 1/2" AND STAGGERED.
- ⑤ NAILS SHALL BE 10d COMMON (0.1480 x 3 1/2") SCREWS SHALL BE SIMPSON SDS25500 (1/4" x 5" MIN.)
- ⑥ PROVIDE BEARING PLATE PER 9/S6.0
- ⑦ ALTERNATE PLATE WASHERS TO PROVIDE 1/2" DIMENSION ON EACH SIDE OF THE SHEARWALL

Shearwall Schedule 12

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project no. 2401
8265 SE 61st St
Mercer Island, WA 98040

Drawing Title:
Wood Details

Date: June 9, 2025

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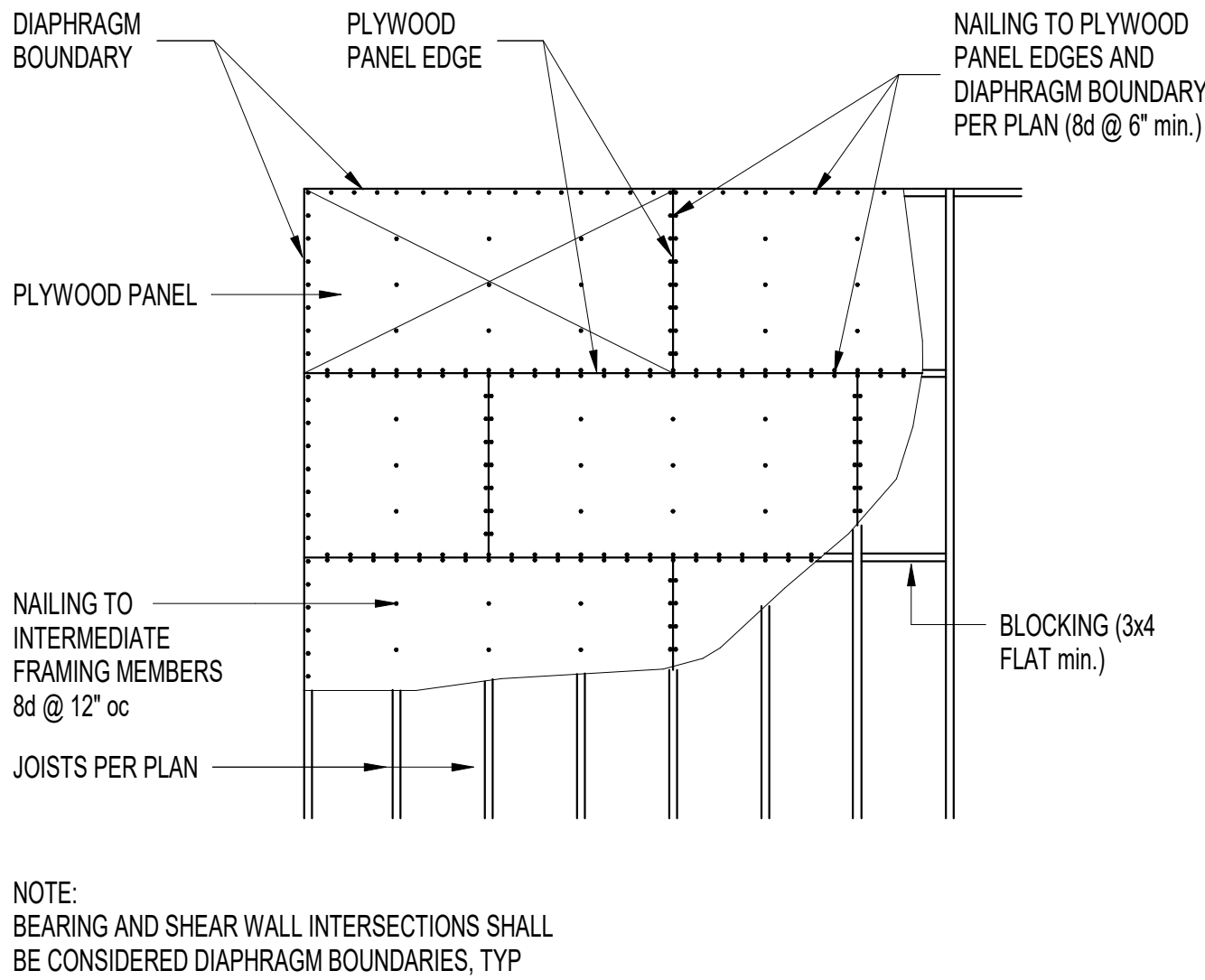
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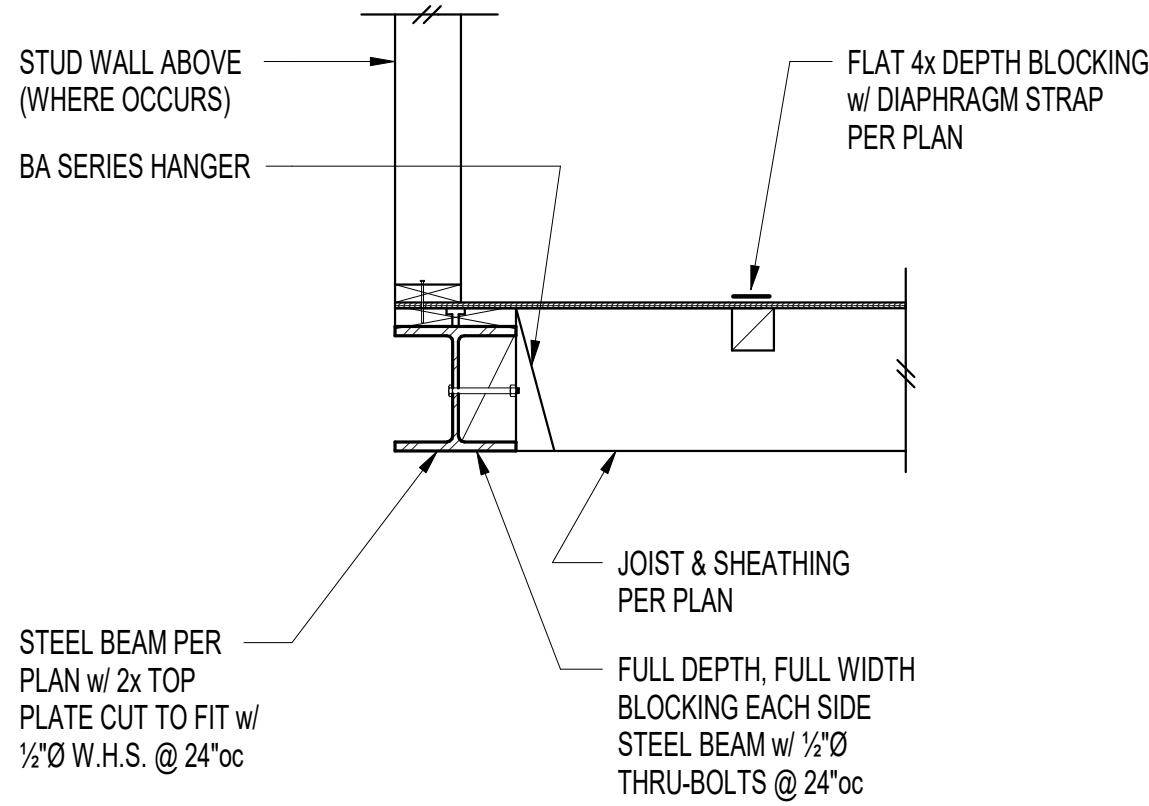
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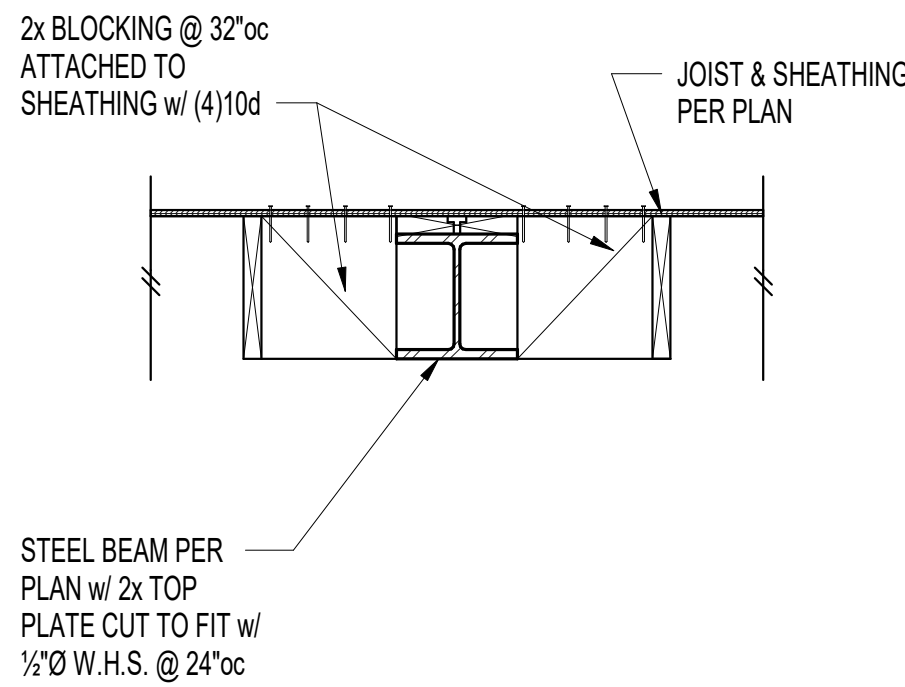
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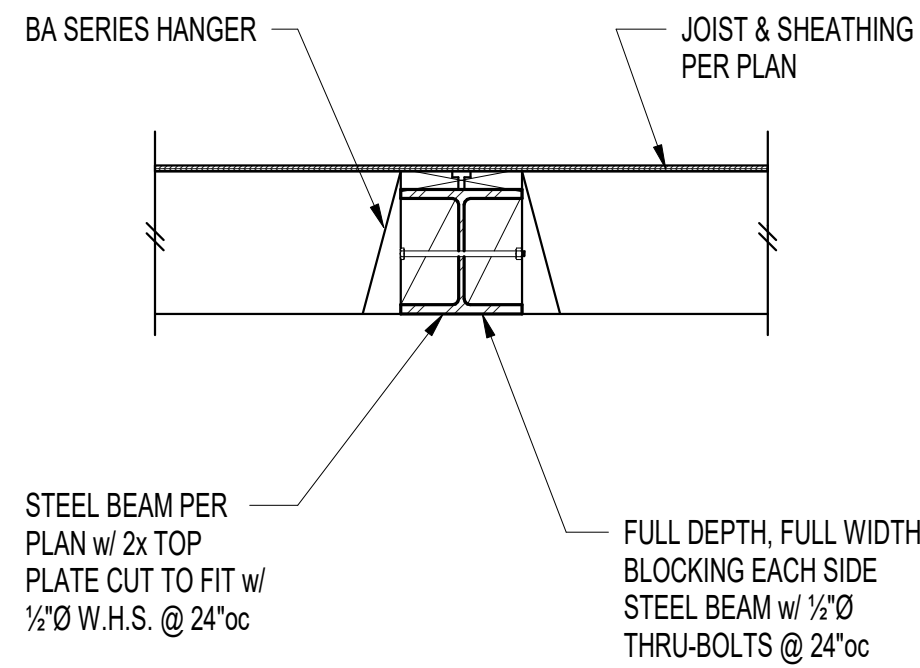
Typical Blocked Plywood Roof/Floor Sheathing Layout 1



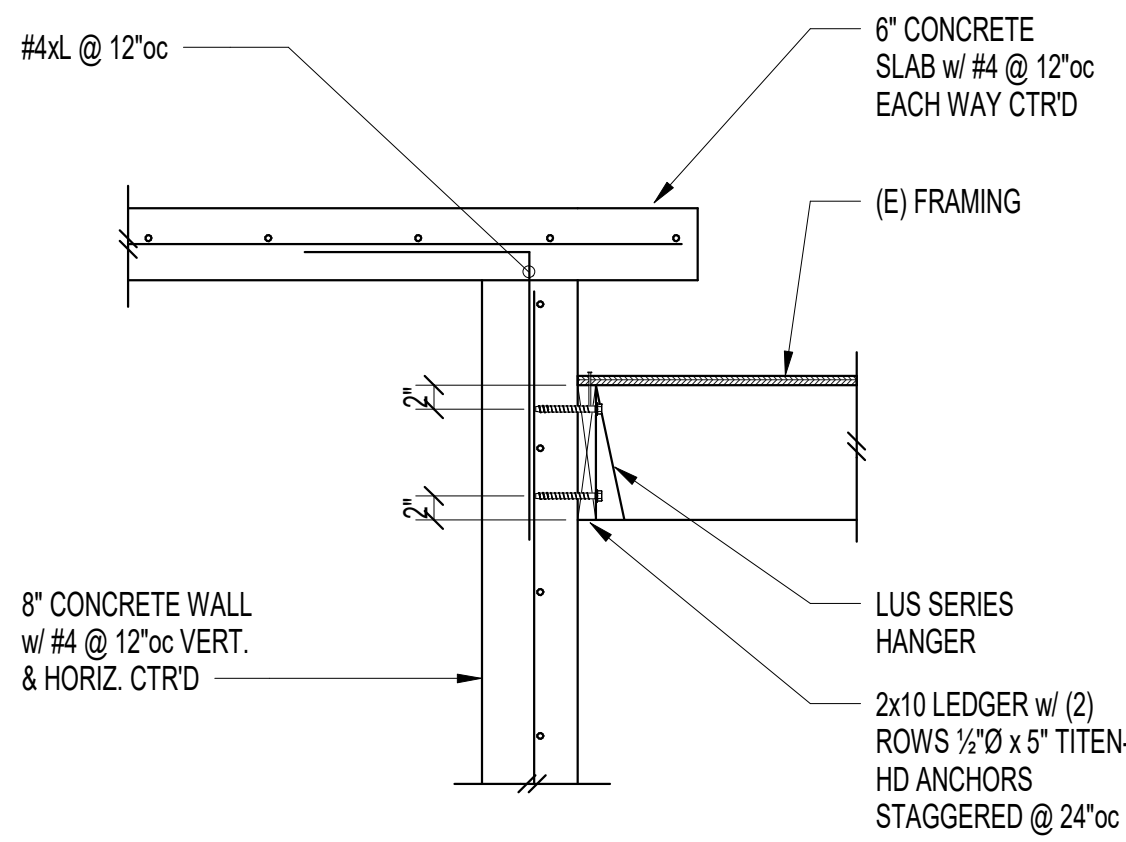
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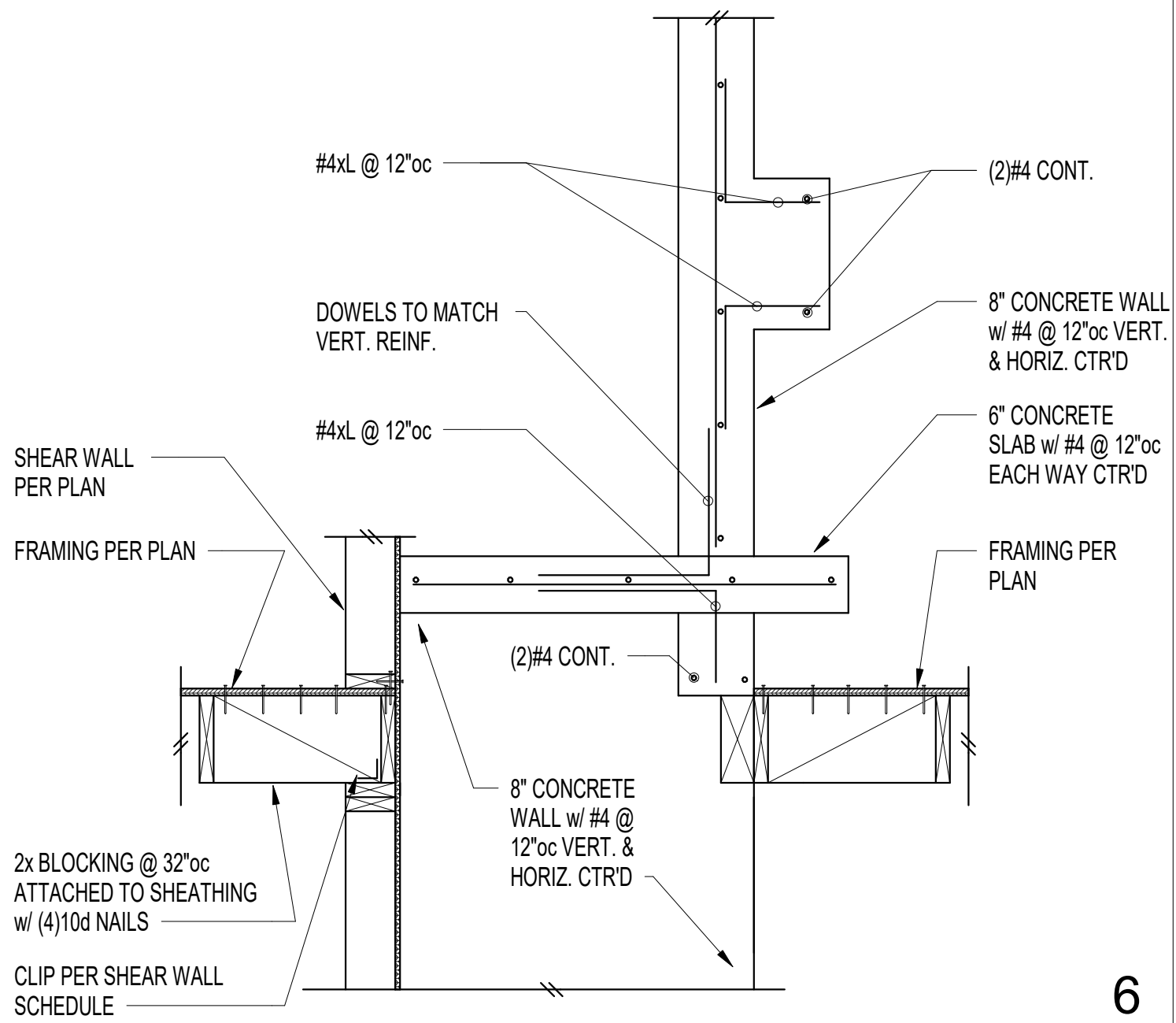
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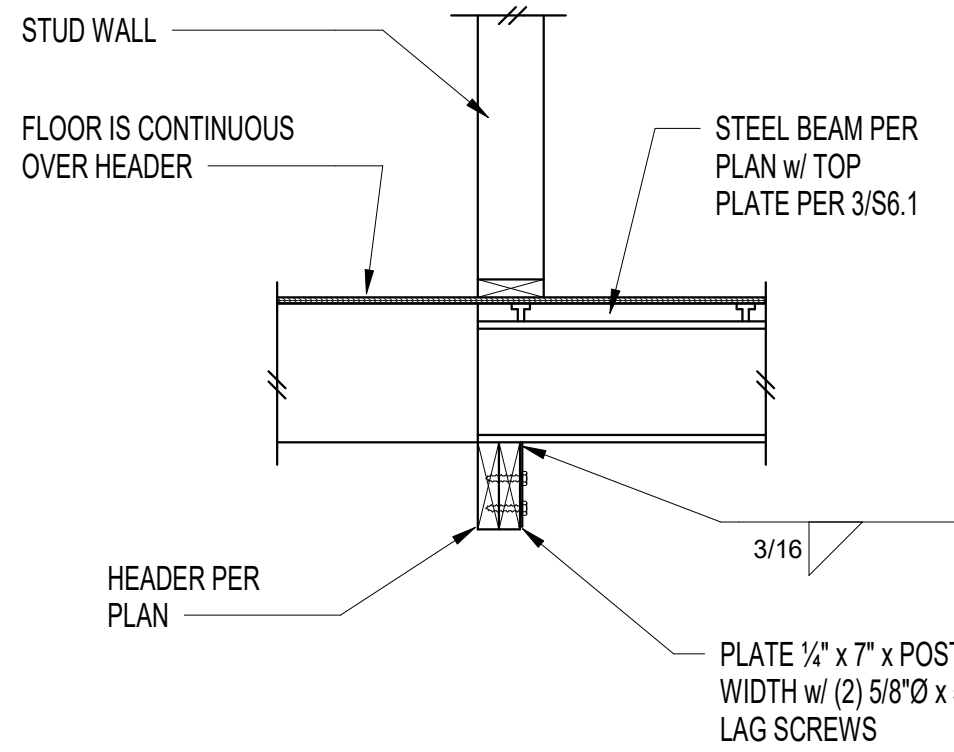
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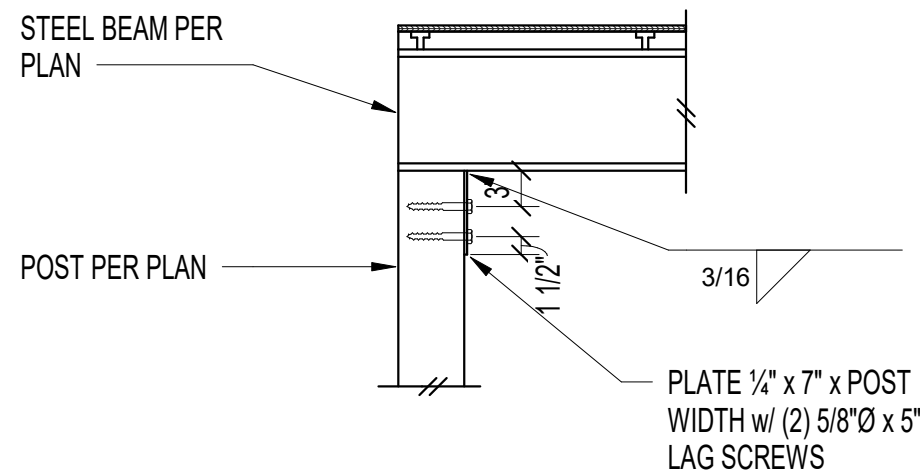
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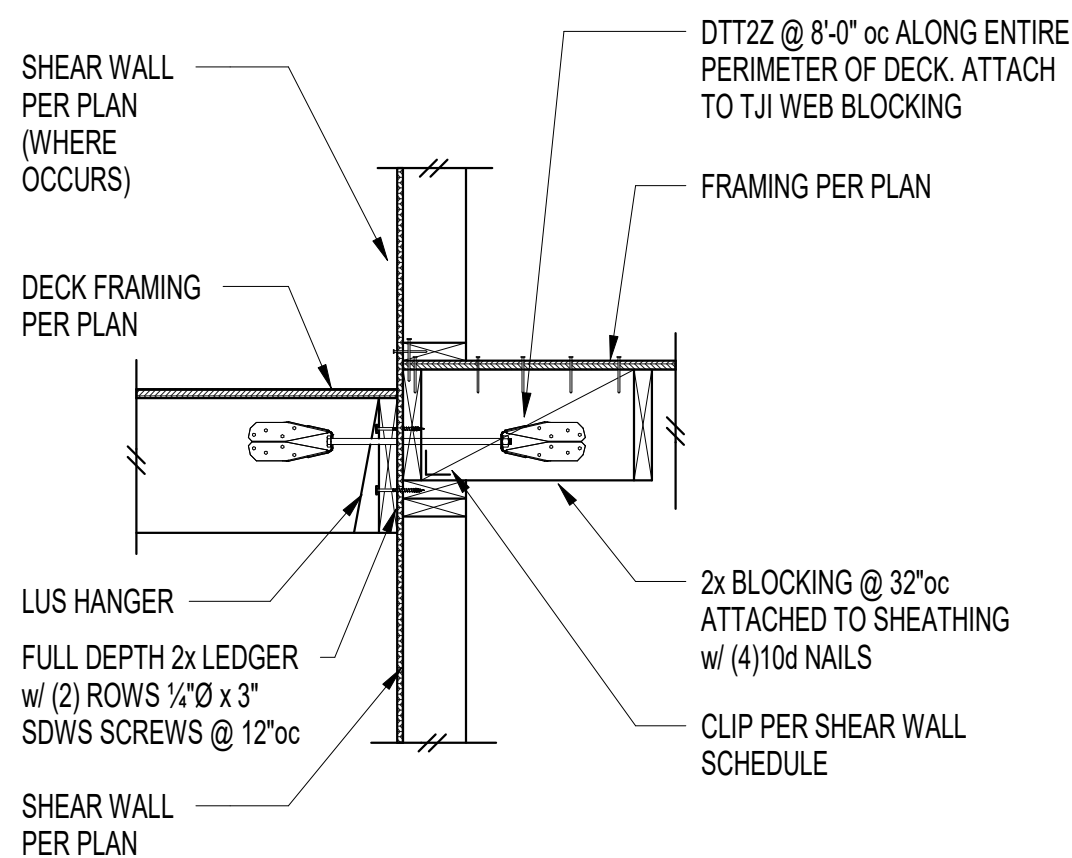
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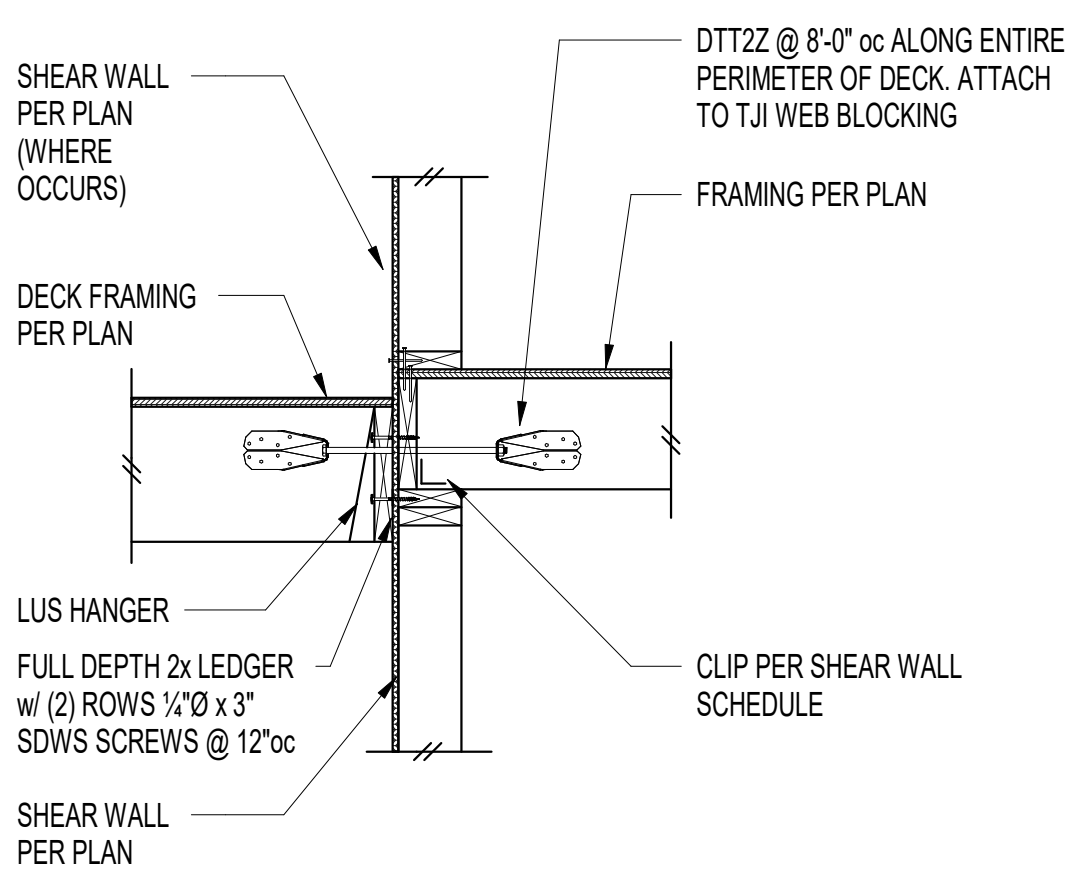
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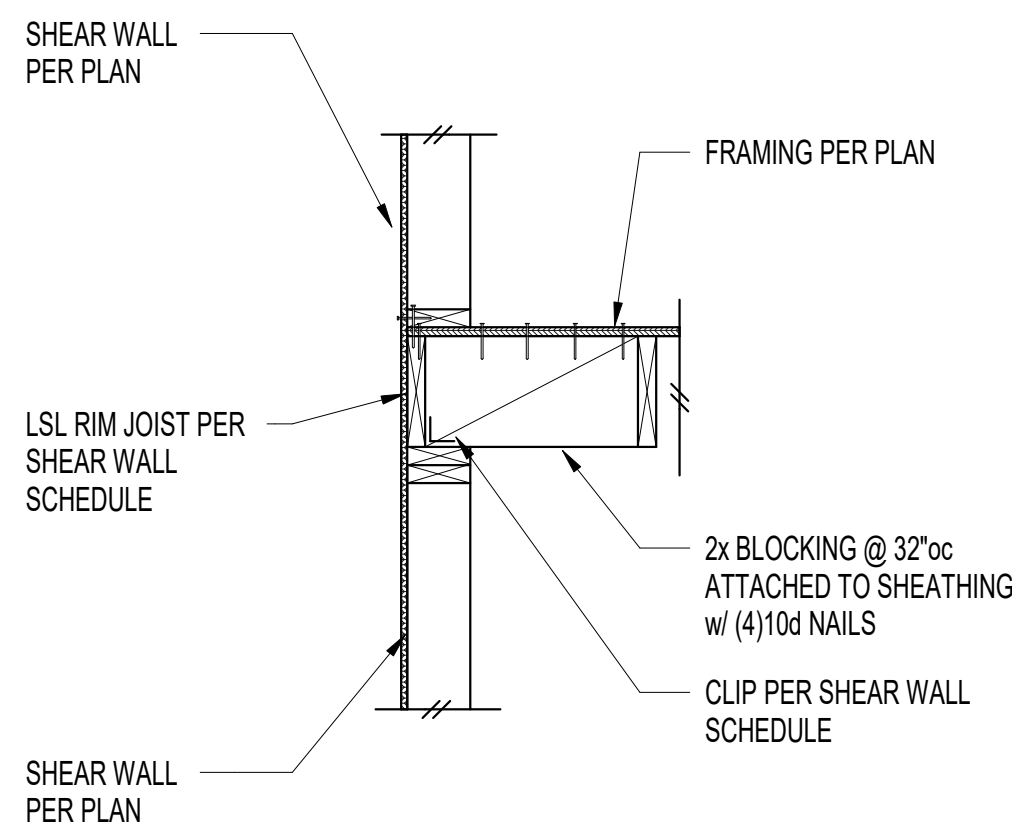
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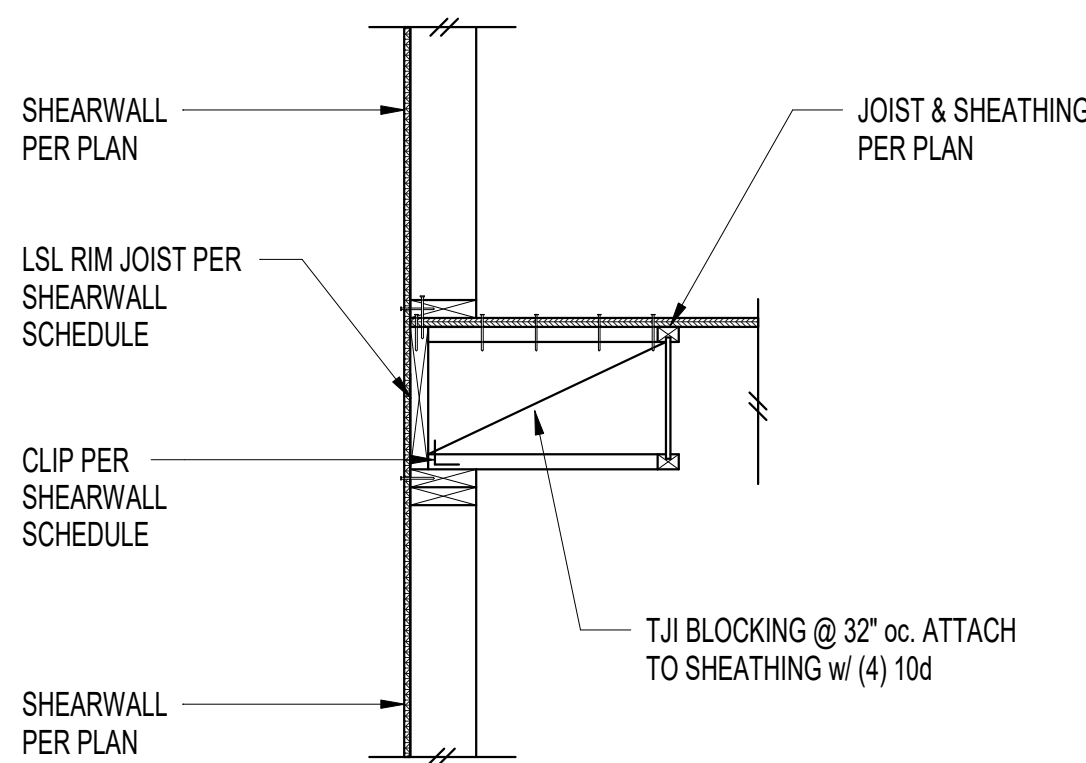
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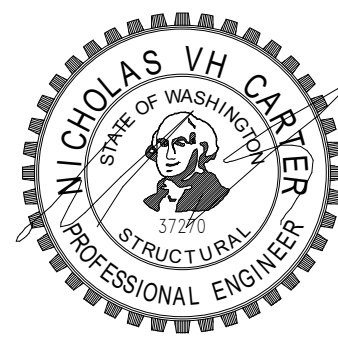


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MERCER ISLAND 06.10.25
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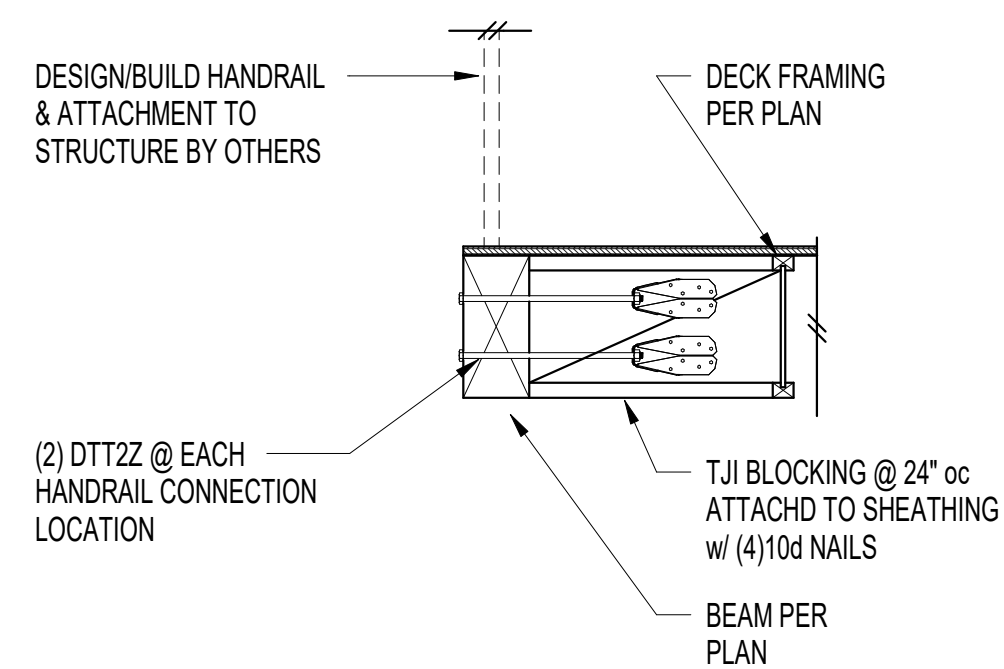
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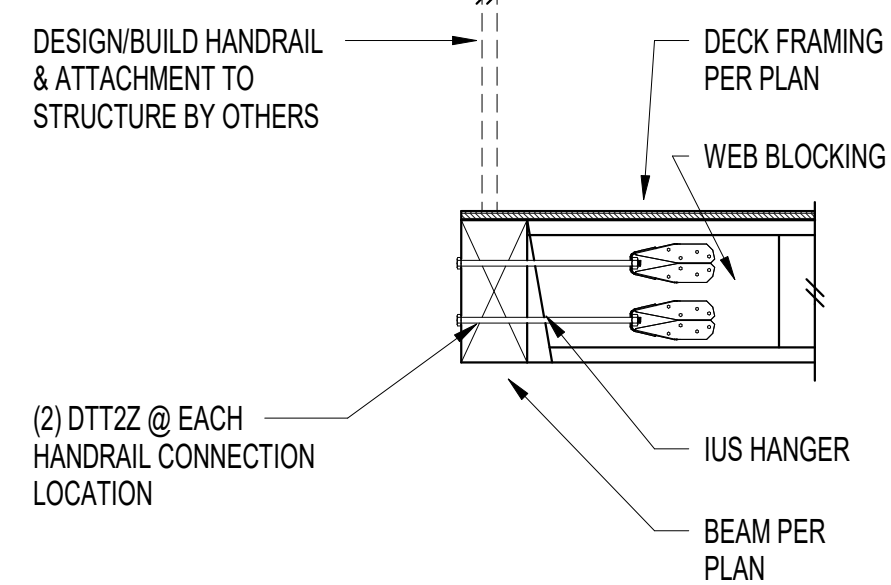
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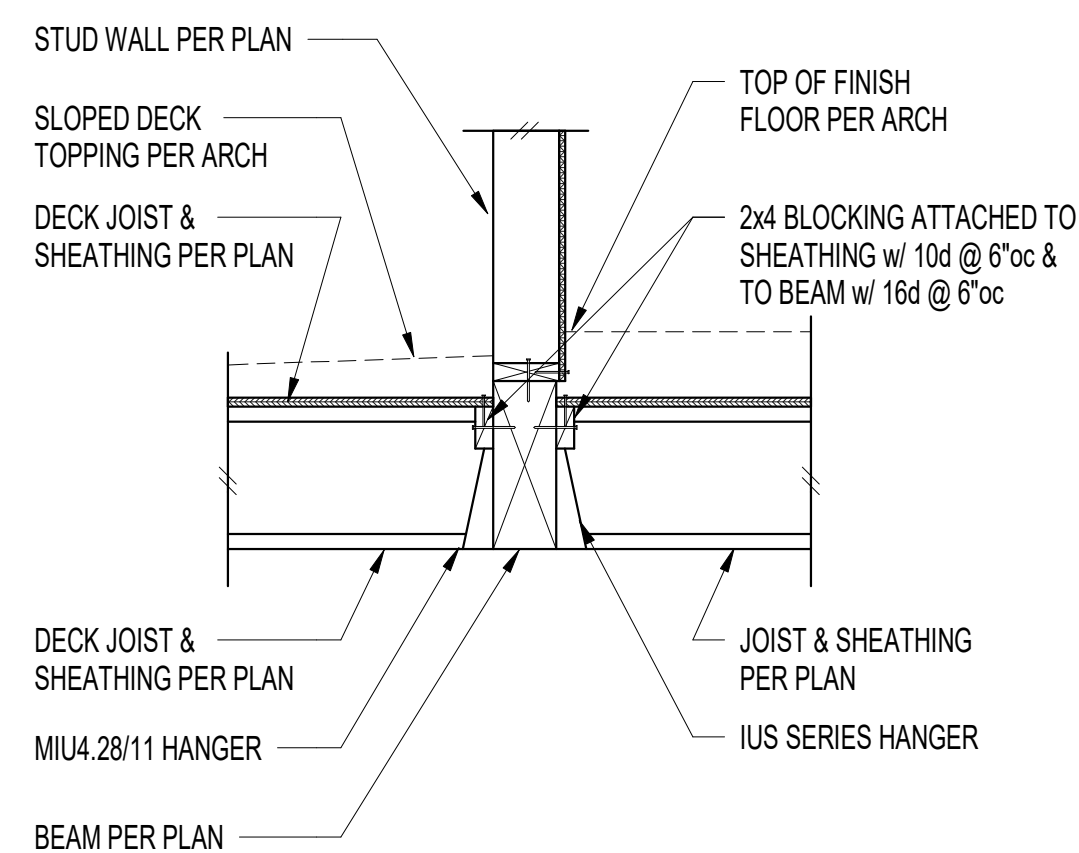
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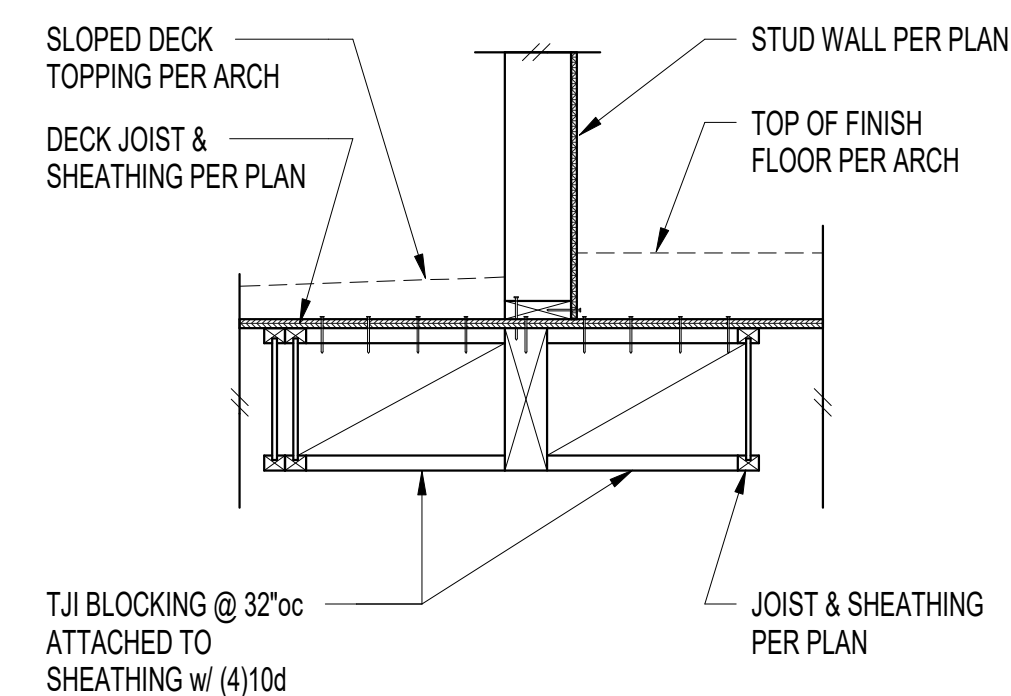
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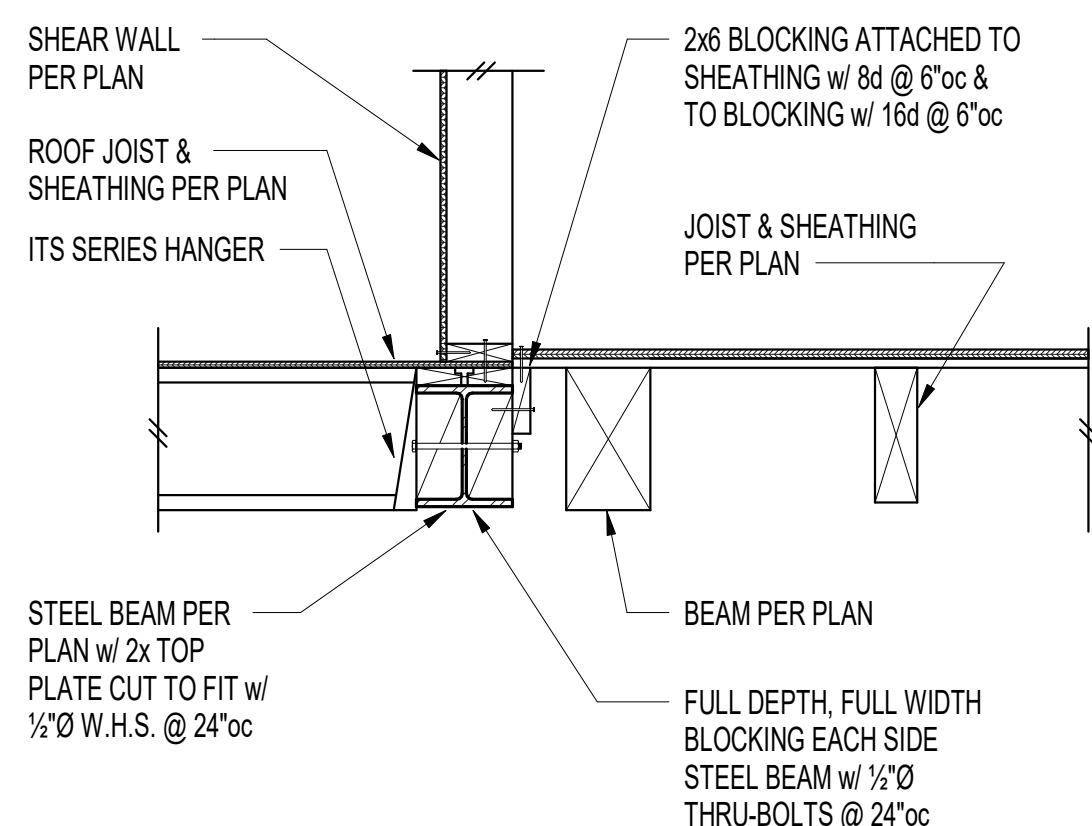
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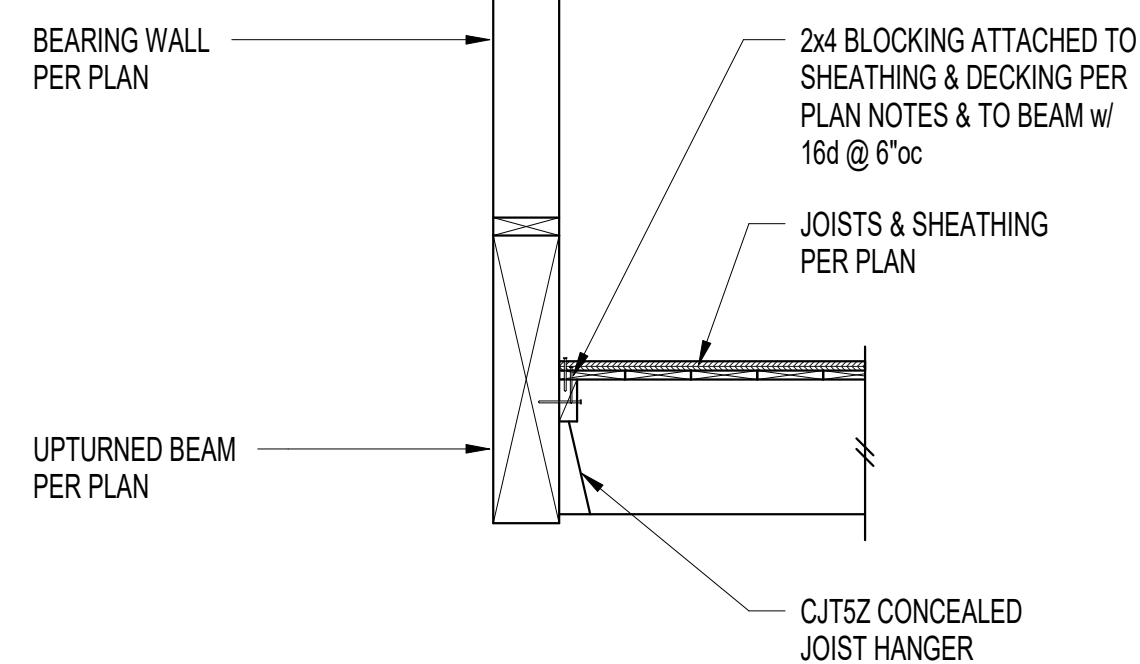
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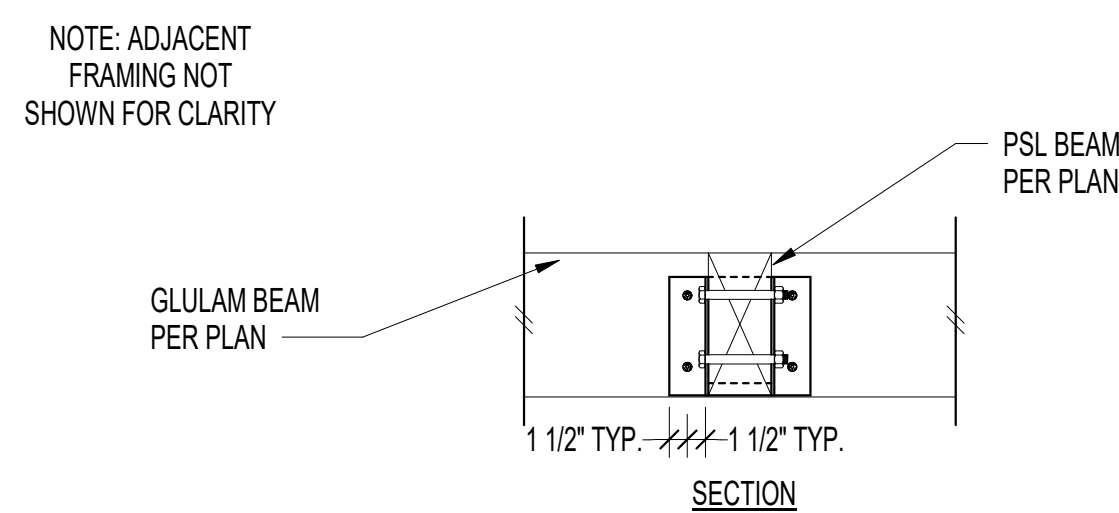
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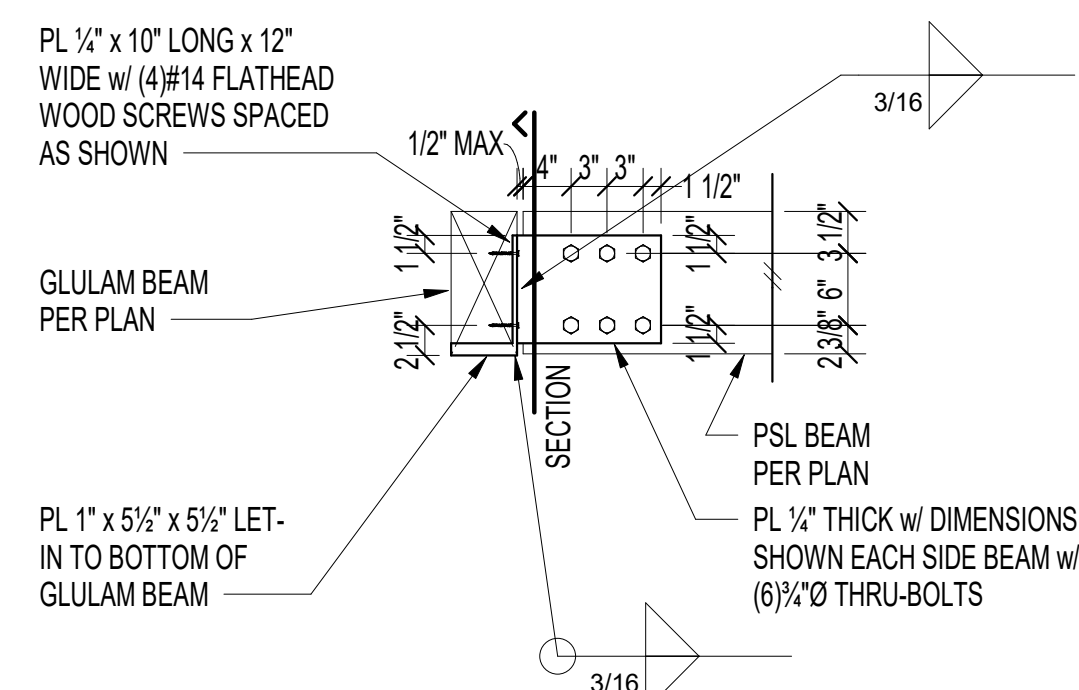
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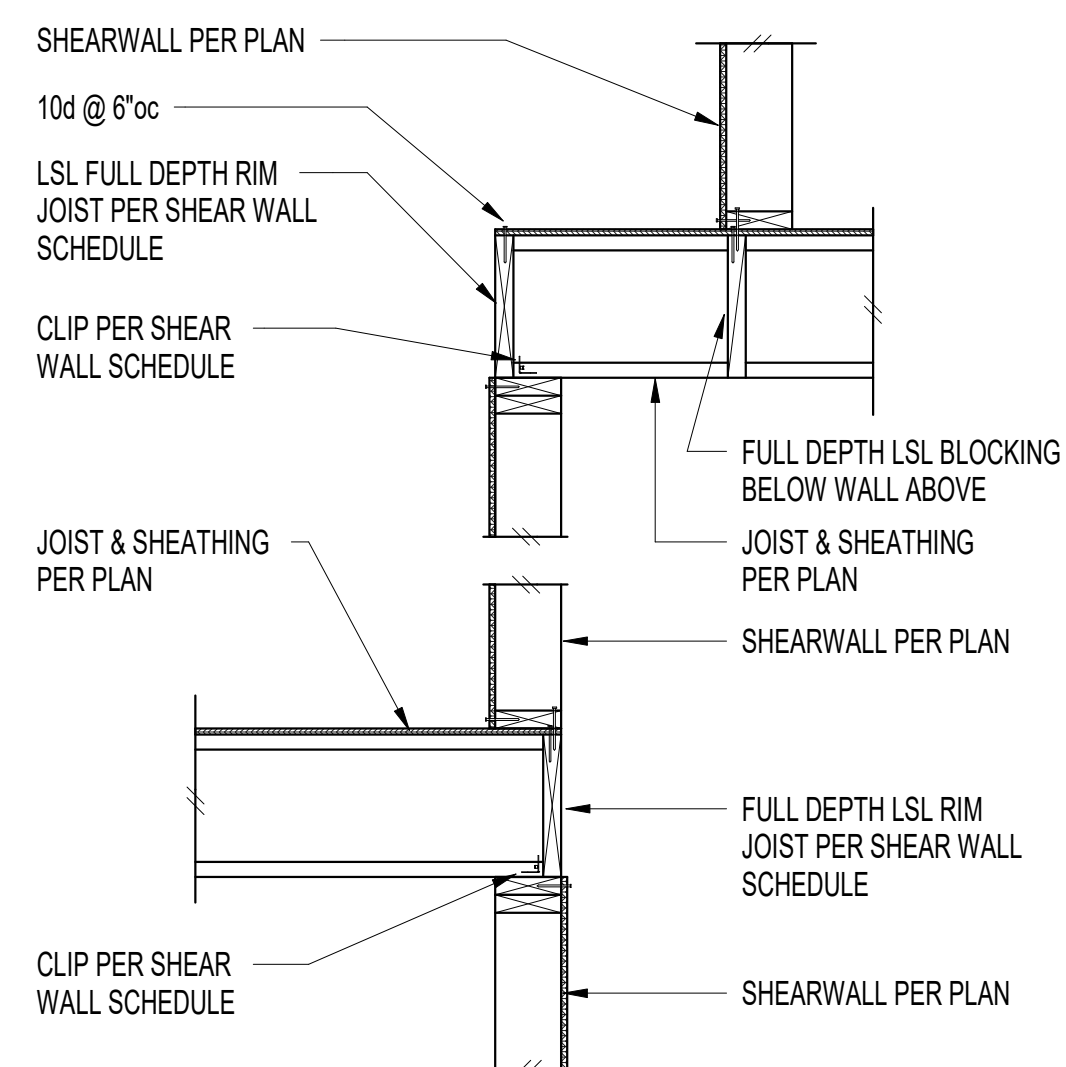
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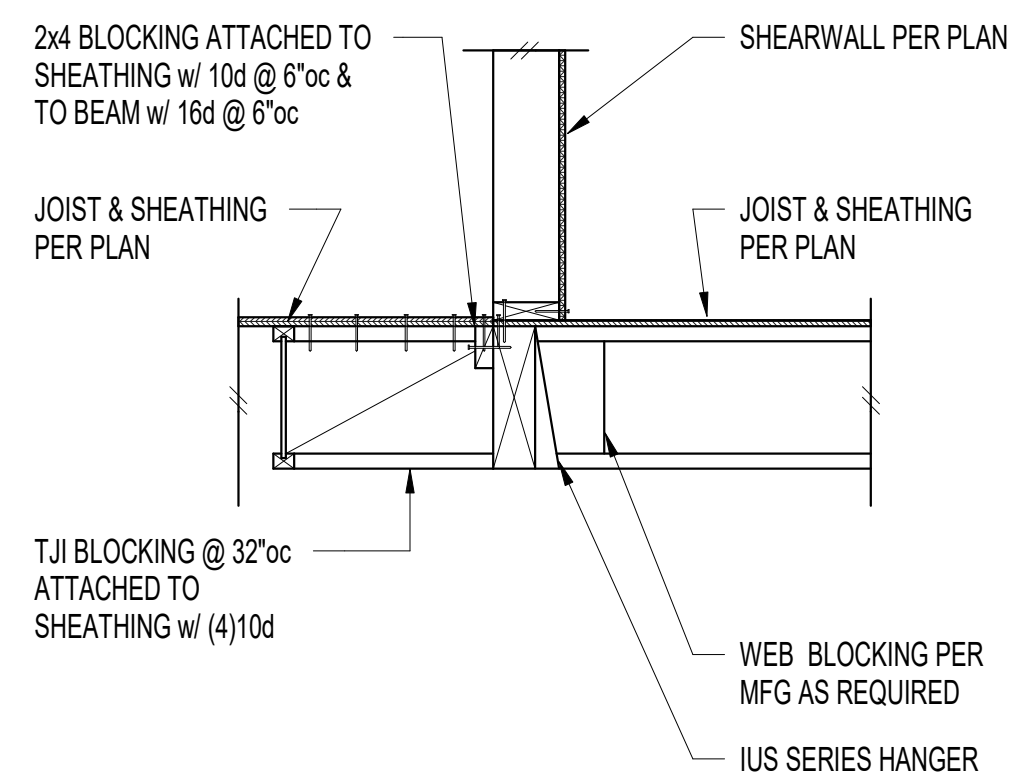
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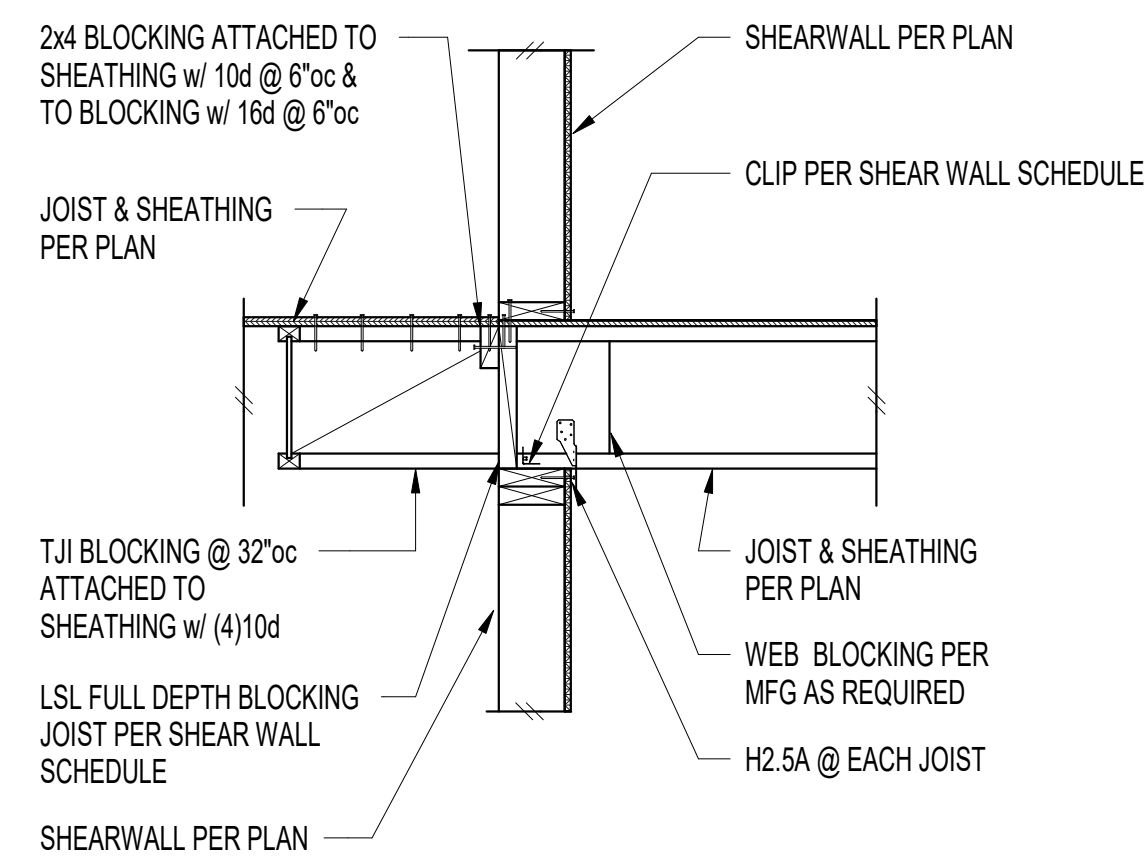
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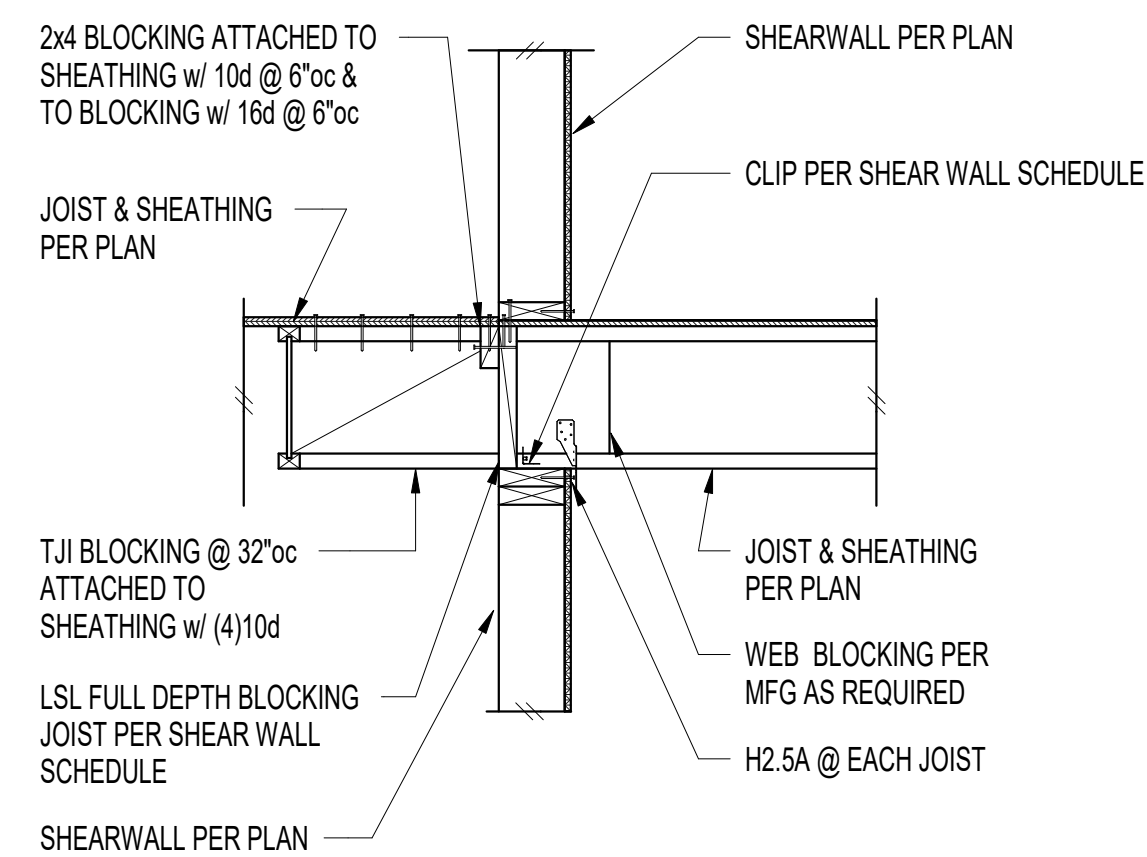
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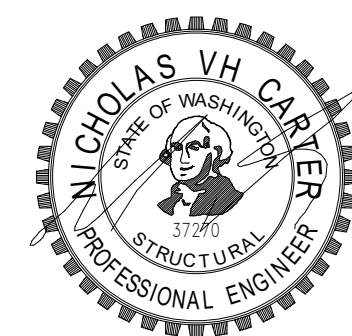
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Drawing Title:

Wood Details

Date: June 9, 2025

Issued For: Permit Comments #2

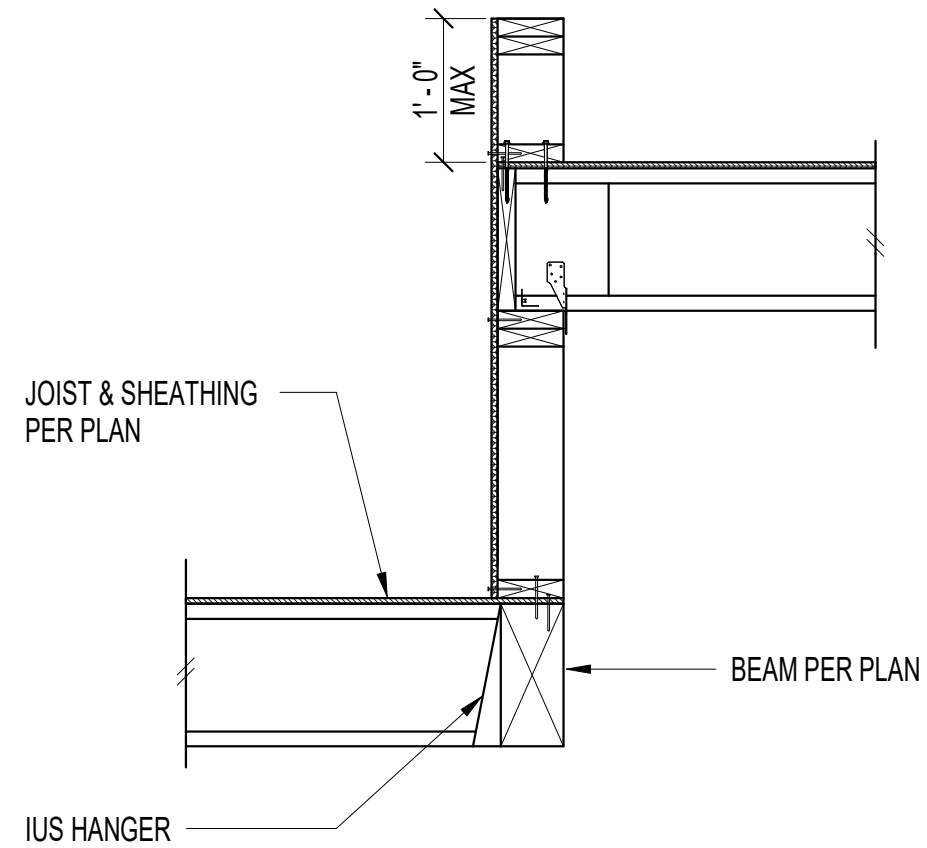
Drawn By: _____

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Scale: $3/4" = 1'-0"$

Sheet No.:

S6.2



2x6 @ 16"oc STUD WALL
SHEATHED & NAILED
BOTH SIDES PER 1SW1

2'-0" MAX

MSTA49 @ 48"oc

CLIP PER SHEAR
WALL SCHEDULE

1 1/2" MIN

DTT1Z @ 48"oc w/ 3/8"oc
LAG SCREWS w/ 5"
EMBED INTO BEAM

JOIST & SHEATHING
PER PLAN

5/8"dia x 6" LAG
SCREW @ 12"oc

SHEARWALL PER PLAN

EDGE NAILING PER FRAMING PLAN NOTES

T&G DECKING PER ARCH

BREAK IN SHEATHING AT SKYLIGHT

EDGE NAILING PER FRAMING PLAN NOTES

JOIST & SHEATHING PER PLAN

FULL DEPTH 2x BLOCKING

BEARING WALL

FULL DEPTH 2x BLOCKING

DTT12 @ 48"oc w/ 3/8"Ø LAG SCREWS w/ 5" EMBED INTO BEAM

2" x 4" MAX PER ARCH

2x6 @ 16"oc PARAPET WALL SHEATHED & NAILED BOTH SIDES PER 1SW1

HRS12 @ 48"oc

2x4 BLOCKING ATTACHED TO SHEATHING w/ 8d @ 6"oc & TO BEAM w/ 16d @ 6"oc

1 1/2" MIN

ROOF JOIST PER PLAN

IUS SERIES HANGER

JOIST & SHEATHING PER PLAN

TJ1 BLOCKING @ 48"oc ATTACHED TO SHEATHING w/ (4)8d NAILS

	Revision:	Date:
1	MERCER ISLAND BUILDING PERMIT REV 1	03.28.25
2	MERCER ISLAND BUILDING PERMIT REV 2	06.10.25

CQN
CARTER
QUINN
NORLIN
▲
STRUCTURAL
ENGINEERING

BEARING WALL ABOVE

JOIST & SHEATHING PER PLAN

(3)2x12 FACE NAILED TO DOUBLE JOIST w/ (2) ROWS 16d @ 12"oc EACH 2x

DOUBLE JOIST ALIGNED WITH FACE OF WALL ABOVE. ATTACH TOGETHER PER MFG

Technical drawing showing a cross-section of a parapet wall and its connection to a concrete slab. The drawing includes the following details and labels:

- 8d @ 6"oc TYP.**: Top reinforcement bars in the slab.
- 2x6 BLOCKING w/ 1/2"Ø TITEN-HD ANCHOR w/ 2" EMBED INTO CONCRETE**: Vertical support for the parapet.
- PARAPET @ 24"oc**: Vertical reinforcement in the parapet wall.
- 4" PARAPET EXTENSION w/ #4 @ 18"oc VERT. & HORIZ.**: Extension of the parapet wall.
- 1'-0" MAX**: Maximum height of the parapet extension.
- 4"**: Width of the parapet extension.
- FULL DEPTH 1 1/4" LSL BLOCKING**: Lateral support for the parapet.
- 8" FULL HEIGHT CONCRETE WALL w/ #4 @ 12"oc VERT. & HORIZ.**: Main parapet wall section.
- TJI BLOCKING @ 24"oc w/ WEB BLOCKING AS REQ'D**: Horizontal support for the slab.
- STRAP PER PLAN**: Lateral restraint for the slab.
- HGA10 CLIP @ EACH JOIST**: Clip connecting the parapet to the joist.
- 5/8"Ø ANCHOR BOLT @ 24"oc**: Anchor bolt for the parapet.
- (2) #4 CONT.**: Continuation of reinforcement bars.

Technical drawing of a parapet wall cross-section. The drawing shows a vertical wall on the left and a horizontal parapet on the right. Key components and dimensions include:

- 4" PARAPET EXTENSION w/ #4 @ 18"oc VERT. & HORIZ.**: Points to the top horizontal section of the parapet.
- FULL DEPTH 1 1/2" LSL BLOCKING**: Points to the vertical blocking within the parapet.
- 8" FULL HEIGHT CONCRETE WALL w/ #4 @ 12"oc VERT. & HORIZ.**: Points to the main vertical wall section.
- 4"**: Dimension for the parapet extension width.
- 1'-0" MAX.**: Dimension for the total height of the parapet extension.
- 8d @ 6"oc TYP.**: Points to the top horizontal reinforcement.
- 2x6 BLOCKING w/ 1/2"Ø TITEN-HD ANCHOR w/ 2" EMBED INTO CONCRETE PARAPET @ 24"oc**: Points to the vertical blocking within the main wall.
- WEB BLOCKING PER MFG AS REQ'D**: Points to the horizontal blocking within the main wall.
- STRAP PER PLAN**: Points to a horizontal strap connecting the parapet to the main wall.
- HGA10 CLIP @ EACH JOIST**: Points to a clip connecting the parapet to the joist.
- 5/8"Ø ANCHOR BOLT @ 24"oc**: Points to the anchor bolt connecting the parapet to the joist.
- (2) #4 CONT.**: Points to the bottom horizontal reinforcement.

2x6 @ 16"oc STUD WALL. ATTACH TO ROOF w/ (2) ROWS 1/2"x5" SDS SCREWS @ 24"oc

1" -0" MAX

CLIP PER SHEAR WALL SCHEDULE

LSL FULL DEPTH RIM JOIST PER SHEAR WALL SCHEDULE

JOIST & SHEATHING PER PLAN

PER ARCH

JOIST & SHEATHING PER PLAN

TJI BLOCKING @ 48"oc ATTACHED TO SHEATHING w/ (4)8d NAILS

LSL FULL DEPTH BLOCKING PER SHEAR WALL SCHEDULE

SHEATHING IN FILL WALL TO MATCH SHEAR WALL BELOW

CLIP PER SHEAR WALL SCHEDULE

SHEARWALL PER PLAN

8d @ 6"oc TYP.

CLIP PER SHEAR WALL SCHEDULE

LSL FULL DEPTH RIM JOIST PER SHEAR WALL SCHEDULE

JOIST & SHEATHING PER PLAN

TJ1 BLOCKING @ 48"oc ATTACHED TO SHEATHING w/ (4)8d NAILS

SHEAR WALL PER PLAN

8d @6"oc TYP.

CLIP PER SHEAR WALL SCHEDULE

LSL FULL DEPTH BLK'G PER SW SCHEDULE

SHEARWALL PER PLAN

JOIST & SHEATHING PER PLAN

WEB BLOCKING PER MFG AS REQUIRED

H2.5A @ EACH JOIST

This diagram shows a cross-section of a structural assembly. A vertical shear wall is shown on the left, with a horizontal joist and its sheathing on top. The wall is reinforced with 8d bars at 6 inches on center. The joist is supported by a full-depth blocking. The wall is connected to the joist using clips. The joist and sheathing are shown in plan view. The web blocking is shown as required by the manufacturer. The H2.5A is shown at each joist.

S6.3