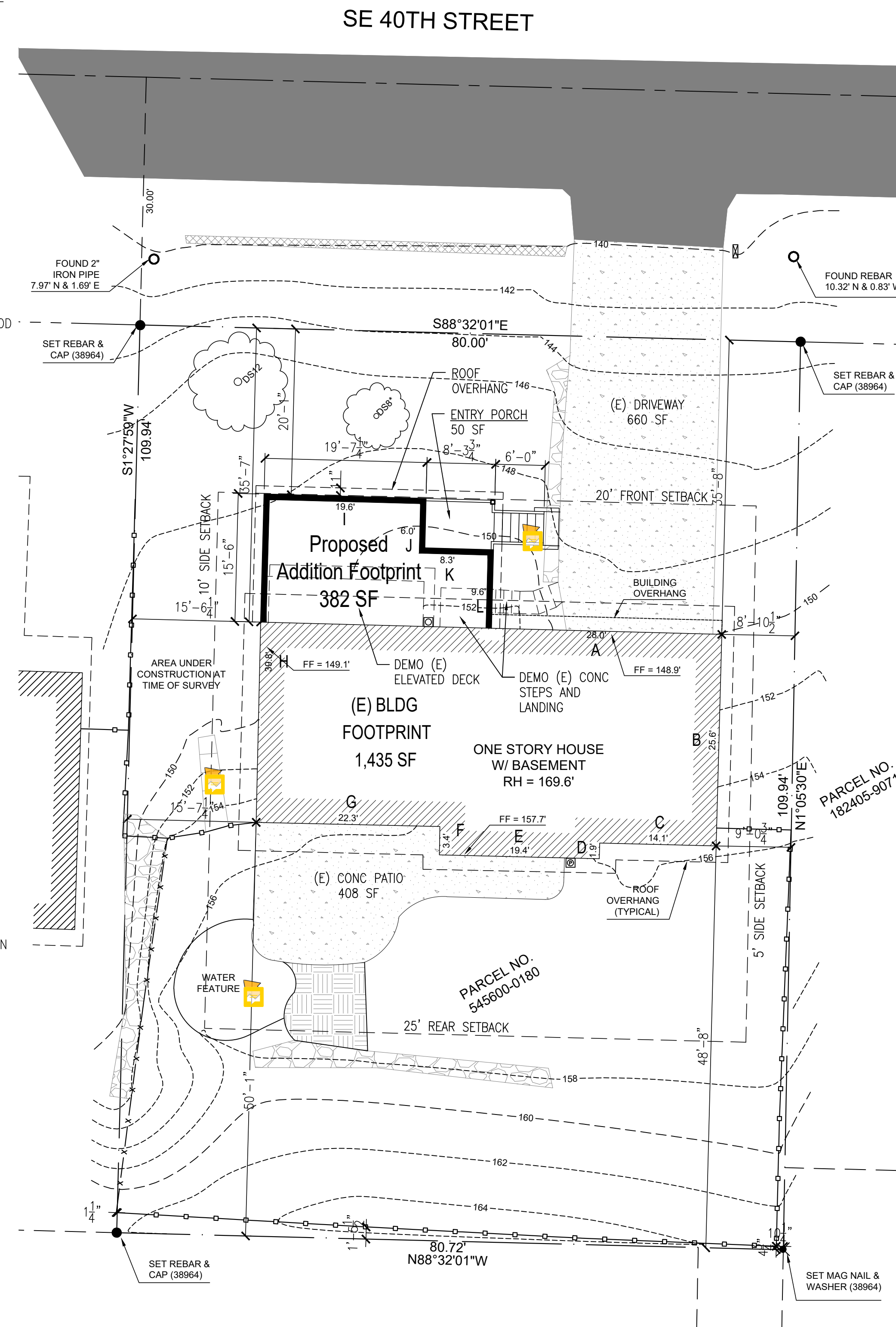


# Sterba Mironova Addition

TAM Design  
10040 Sand Point Way NE  
Seattle, WA 98125  
calvint006@gmail.com

## ABBREVIATIONS:

ABV	ABOVE	LBS	POUNDS
AFF	ABOVE FINISH FLOOR	LF	LINEAR FEET
BLDG	BUILDING	LO	LOW
BLKG	BLOCKING	MAX	MAXIMUM
BM	BEAM	MFR	MANUFACTURER
BOT	BOTTOM	MIN	MINIMUM
CIPC	CAST-IN-PLACE CONCRETE	(N)	NEW
CL	CENTERLINE	N/A	NOT APPLICABLE
CLG	CEILING	NIC	NOT IN CONTRACT
CLR	CLEAR	O/	OVER
CMD	CARBON MONOXIDE DETECTOR	OC	ON CENTER
CO	CLEANOUT	OG	OBSOLETE GLAZING
CONC	CONCRETE	OH	OVERHANG
CONT	CONTINUOUS	P.L.	PROPERTY LINE
D	DRYER	PL	PLATE
DBLE	DOUBLE	PT	POINT
DEMO	DEMOLISH	PTW	PRESERVATIVE TREATED WOOD
DIA	DIAMETER	REBAR	REINFORCEMENT BAR
DN	DOWN	REFR	REFRIGERATOR
DP	DEEP	REQD	REQUIRED
DP	DIMENSION POINT	REQTS	REQUIREMENTS
DS	DOWNSPOUT	RAFT	RAFTER
DTL	DETAIL	RO	ROUGH OPENING
DW	DISHWASHER	R.O.W.	RIGHT-OF-WAY
(E)	EXISTING	RFT	RIP-TO-FIT
EA	EACH	RTS	RIP-TO-SLOPE
ELEV	ELEVATION	RV	RIM VENT
EQ	EQUAL	SC	SOLID CORNER
EXT	EXTERIOR	SD	SMOKE DETECTOR
EW	EACH WAY	SF	SQUARE FEET
*EW	EGRESS WINDOW	SG	SAFETY GLAZING
FDN	FOUNDATION	SHWR	SHOWER
FG	FINISH GRADE	SIM	SIMILAR
FIN	FINISH	SPEC	SPECIFICATIONS
FL	FLUSH	SQ FT	SQUARE FEET
FLR	FLOOR	SQ IN	SQUARE INCHES
FOF	FACE OF FINISH	STD	STANDARD
FOS	FACE OF STUD	SUBFLR	SUBFLOOR
FRMG	FRAMING	T&G	TONGUE & GROOVE
FRZR	FREEZER	THK	THICK
FT	FOOT	TOPO	TOPOGRAPHY
FTG	FOOTING	TOW	TOP OF WALL
FV	FIELD VERIFY	TYP	TYPICAL
FV	FOUNDATION VENT	UNO	UNLESS NOTED OTHERWISE
GA	GAUGE	VTO	VENT TO OUTSIDE
GB	GYP-SUM BOARD	w	WIDE
GLB	GLULAM BEAM	w	WASHER
GSM	GALVANIZED SHEET METAL	w/	WITH
HDR	HEADER	WC	WATER CLOSET
HGR	HANGER	WFC	WOOD FRAME CONSTRUCTION
h	HIGH	WH	WATER HEATER
HT	HEIGHT	WIC	WALK-IN-CLOSET
HVAC	HEATING, VENTILATION, & AIR-CONDITIONING	WP	WORK POINT
IG	INSULATED GLASS	WWF	WELDED WIRE FABRIC
INT	INTERIOR		
LAV	LAVATORY		



**A EXISTING SITE PLAN**  
SCALE: 1"=10'

## AVERAGE GRADE CALCULATIONS:

$$\text{AVERAGE GRADE} = \frac{(\text{Axa}) + (\text{Bxb}) + (\text{Cxc}) + (\text{Dxd}) + (\text{Exe}) + (\text{Fxf}) + (\text{Gxg}) + (\text{Hxh}) + (\text{Ixi}) + (\text{Jxj}) + (\text{Kxk}) + (\text{Lxl})}{\text{CALCULATION}} \div \text{CALCULATION}$$

$$\frac{(149.4 \times 28.0) + (152.8 \times 25.6) + (155.2 \times 14.1) + (156.0 \times 1.9) + (156.0 \times 19.4) + (156.0 \times 3.4) + (155.6 \times 22.3) + (149.2 \times 39.8) + (148.7 \times 19.6) + (150.0 \times 6.0) + (150.4 \times 8.3) + (151.2 \times 9.6)}{28.0 + 25.6 + 14.1 + 1.9 + 19.4 + 3.4 + 22.3 + 39.8 + 19.6 + 6.0 + 8.3 + 9.6}$$

$$= \frac{(4,183.2) + (3,911.7) + (2,188.3) + (296.4) + (3,026.4) + (530.4) + (3,469.9) + (5,938.2) + (2,914.5) + (900.0) + (1,248.3) + (1,451.5)}{198.0}$$

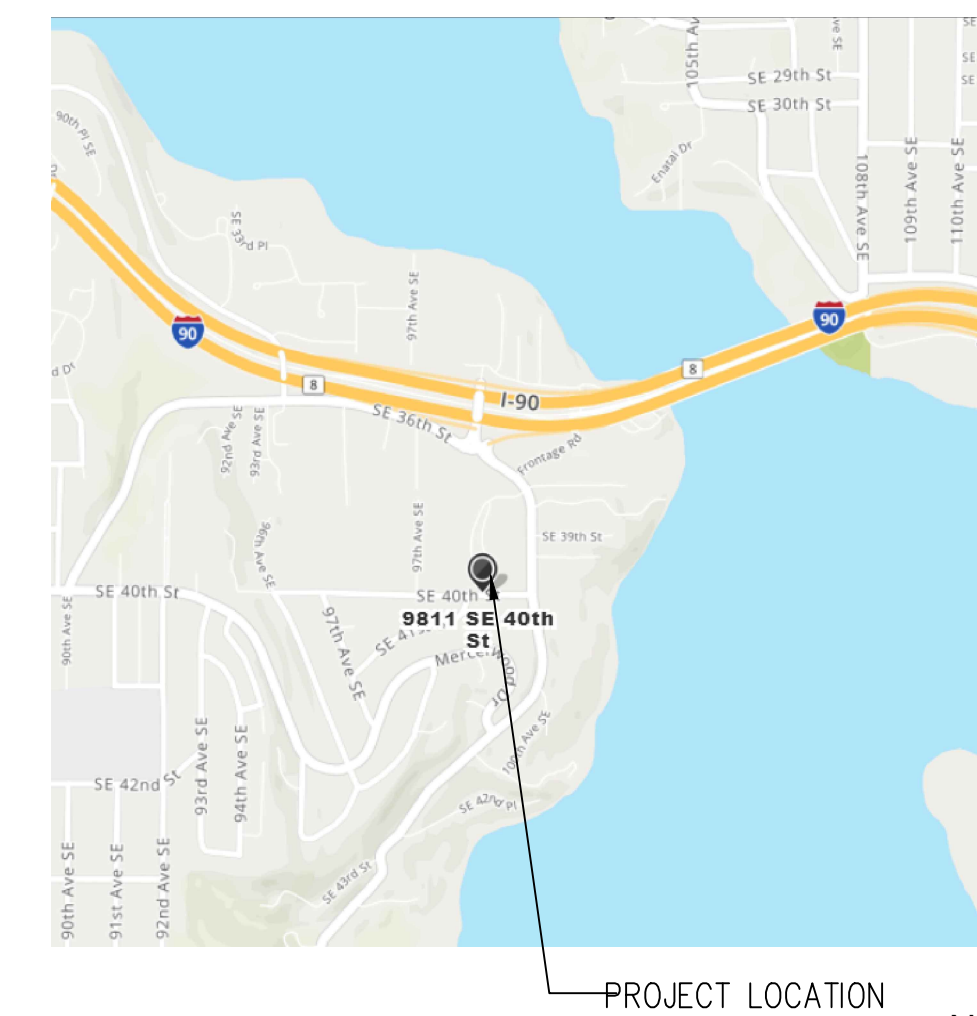
$$\text{AVERAGE GRADE} = 151.8'$$

NOTE: REFER TO ELEVATIONS ON SHEET 'A6.0' FOR GRAPHICAL DEPICTION OF COMPLIANCE WITH MAXIMUM ALLOWABLE HEIGHT LIMITS

WALL SEGMENT	LENGTH X	COVERAGE	RESULT
A	28.0'	0%	0%
B	25.6'	25%	6.4%
C	14.1'	100%	14.1%
D	1.9'	100%	1.9%
E	19.4'	100%	19.4%
F	3.4'	100%	3.4%
G	22.3'	100%	22.3%
H	39.8'	25%	9.95%
I	19.6'	0%	0%
J	6.0'	0%	0%
K	8.3'	0%	0%
L	9.6'	0%	0%
TOTAL	198.00	N/A	77.45%

$$(0) + (163.84) + (197.81) + (3.61) + (376.36) + (11.56) + (497.29) + (396.01) + (0) + (0) + (0) + (0) + (0) = 198.00'$$

$$1,644 \text{ SF (TOTAL BASEMENT)} \times 8.32\% = 136.78 \text{ SF EXCLUDED FROM GROSS FLOOR AREA}$$



## VICINITY PLAN:

SCALE: NOT TO SCALE

## SITE LOT AREA

LOT AREA: (0.20 ACRES) 8,834 S.F.

LEVEL	AREA (SF)
(E) HOUSE FIRST FLOOR LEVEL	1,510 SF
(E) HOUSE BASEMENT FLOOR LEVEL ABOVE GRADE	790 SF
(E) BASEMENT FLOOR LEVEL BELOW GRADE	-136 SF
(E) BASEMENT ATTACHED GARAGE	550 SF
PROPOSED FIRST FLOOR LEVEL ADDITION	382 SF
PROPOSED BASEMENT FLOOR LEVEL ADDITION	304 SF
TOTAL GROSS FLOOR AREA:	3,400 SF
TOTAL LOT SF:	8,834 SF
% OF LOT:	38.5% OKAY
MAXIMUM ALLOWABLE GROSS AREA:	40%

LEVEL	AREA (SF)
(E) HOUSE ROOF	1,860 SF
PROPOSED ADDITION ROOF INCLUDING ENTRY PORCH	404 SF
(E) DRIVEWAY PAVING	660 SF
TOTAL LOT COVERAGE:	2,924 SF
TOTAL LOT SF:	8,834 SF
% OF LOT:	33.0% OKAY
MAXIMUM LOT COVERAGE:	35%

## LOT SLOPE CALCULATIONS:

(HIGHEST ELEVATION POINT OF LOT - LOWEST ELEVATION POINT OF LOT) / HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS = LOT SLOPE

$$(164 - 144) / 110 = 18.2\% \text{ LOT SLOPE}$$

## PROJECT CONTACT INFORMATION:

**OWNER:**  
Pavel Sterba &  
Anastasia Mironova  
9811 SE 40th St  
Mercer Island, WA 98040

**DESIGNER:**  
Colvin Tam  
10040 Sand Point Way NE  
Seattle, WA 98125

## PROJECT PROPERTY INFORMATION:

**PROJECT ADDRESS:**  
9811 SE 40th St  
Mercer Island, WA 98040

**LEGAL DESCRIPTION:**  
MERCER WOOD ADD  
Plot Block: J  
Plot Lot: 2

**ASSESSOR'S TAX NUMBER:**  
545600-0180

**LAND USE ZONE:**  
R-8.4

**PROJECT DESCRIPTION:**  
2 STORY ADDITION TO EXISTING SINGLE FAMILY RESIDENCE. SCOPE OF WORK TO INCLUDE ADDITION TO EXISTING LIVING SPACE ON MAIN FLOOR, NEW BEDROOM ON BASEMENT LEVEL AND NEW ENTRY PORCH AND STAIRS.

## CODE INFORMATION:

APPLICABLE CODES (AS AMENDED BY WA STATE, SNOHOMISH COUNTY & LOCAL JURISDICTION):

- 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2018 NATIONAL ELECTRICAL CODE
- 2018 UNIFORM PLUMBING CODE (UPC)
- MECHANICAL CODE PER 2018 (IRC)
- WASHINGTON STATE ENERGY CODE, 2018 EDITION (WSEC)
- WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE, 2018 EDITION (VIAQ)

OCCUPANCY: GROUP R-3 (SINGLE-FAMILY RESIDENTIAL)

## PROJECT SQUARE FOOTAGES:

EXISTING RESIDENCE	AREA (SF)
(E) FIRST FLOOR LEVEL:	1,510 SF
(E) BASEMENT FLOOR LEVEL:	790 SF
(E) ATTACHED BASEMENT GARAGE:	550 SF
EXISTING TOTAL LIVING AREA:	2,300 SF

## TOTAL EXISTING RESIDENCE & PROPOSED ALTERATION

LEVEL	AREA (SF)
(E) FIRST FLOOR LEVEL:	1,510 SF
(E) BASEMENT FLOOR LEVEL:	790 SF
(E) ATTACHED BASEMENT GARAGE:	550 SF
PROPOSED FIRST FLOOR LEVEL ADDITION:	382 SF
PROPOSED BASEMENT FLOOR LEVEL ADDITION:	304 SF
PROPOSED ENTRY PORCH AREA:	50 SF
PROPOSED TOTAL LIVING AREA:	2,986 SF

## INDEX OF DRAWINGS:

- T1.0 GENERAL INFORMATION & SITE PLAN
- T2.0 TESC & SOIL PLAN
- 1 OF 1 SURVEY
- A1.0 SCHEDULES & DETAILS
- A2.0 DEMOLITION PLANS
- A3.0 BASEMENT FLOOR PLAN & DETAILS
- A4.0 FIRST FLOOR PLAN & DETAILS
- A5.0 ROOF PLAN & DETAILS
- A6.0 ELEVATIONS & DETAILS
- A7.0 SECTIONS & DETAILS
- S1.1 STRUCTURAL GENERAL NOTES
- S1.2 SHEARWALL SCHEDULE & NOTES
- S1.3 HOLD DOWN SCHEDULE & NOTES
- S2.1 FOUNDATION PLAN
- S3.1 MAIN FLOOR FRAMING PLAN
- S4.1 ROOF FRAMING PLAN
- S6.1 FOUNDATION DETAILS
- S9.1 FRAMING DETAILS

Sterba Mironova  
Residence  
Addition  
9811 SE 40th St  
Mercer Island, WA 98040

## Permit Set

Date:	Description:
6/4/21	Permit Intake

Project No.: 2105.00  
Drawn:

## GENERAL INFORMATION & SITE PLAN

Sheet No:

T1.0



**CONSTRUCTION STORMWATER CONTROL (CSC) GENERAL NOTES**

1. VERIFY WITH LOCAL JURISDICTION IF A FIRST GROUND DISTURBANCE INSPECTION IS REQUIRED PRIOR TO START OF WORK ON ALL SITES WITH LAND DISTURBING ACTIVITY.
2. THE APPLICANT SHALL DESIGNATE AN EROSION AND SEDIMENT CONTROL (ESC) SUPERVISOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs). FOR LARGE CONSTRUCTION PROJECTS, THE ESC SUPERVISOR SHOULD BE A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL). PROVIDE THE NAME AND PHONE NUMBER OF THE ESC SUPERVISOR TO THE SITE INSPECTOR AT THE FIRST GROUND DISTURBANCE INSPECTION.
3. BMPs SHALL BE INSTALLED PRIOR TO STARTING CONSTRUCTION TO ENSURE SEDIMENT-LADEN WATER DOES NOT LEAVE THE PROJECT SITE OR ENTER ROADSIDE DITCHES, STORM DRAINS, SURFACE WATERS, OR WETLANDS.
4. THE BMPs INCLUDED IN THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. THE APPLICANT IS RESPONSIBLE FOR ENSURING THAT BMPs ARE MODIFIED AS NEEDED FOR UNEXPECTED STORM EVENTS OR OTHER UNFORESEEN CIRCUMSTANCES, AND TO ACCOUNT FOR CHANGING SITE CONDITIONS.
5. ANY AREAS OF DISTURBED SOIL THAT WILL NOT BE WORKED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) SHALL BE IMMEDIATELY STABILIZED WITH APPROVED BMPs METHODS (E.G. STRAW, MULCH, PLASTIC COVERING, COLD MIX, ETC.).
6. GRADING AND/OR SOIL DISTURBING ACTIVITIES MAY BE LIMITED OR PROHIBITED FOR CERTAIN SITES SUBJECT TO ECA STANDARDS (I.E. ECA STEEP SLOPES, LANDSLIDE PRONE AREAS, ETC.) BETWEEN OCTOBER 31ST AND APRIL 1ST. VERIFY WITH LOCAL JURISDICTION FOR COMPLIANCE REQUIREMENTS.
7. CITY STREETS AND SIDEWALKS SHALL BE KEPT CLEAN AT ALL TIMES. NO MATERIAL SHALL BE STORED ON CITY STREETS OR SIDEWALKS.
8. POLLUTION CONTROL MEASURES SHALL BE FOLLOWED TO ENSURE THAT NO LIQUID PRODUCTS OR CONTAMINATED WATER ENTERS ANY STORM DRAINAGE FACILITIES OR OTHERWISE LEAVES THE PROJECT SITE. ANY HAZARDOUS MATERIALS OR LIQUID PRODUCTS THAT HAVE THE POTENTIAL TO POLLUTE RUNOFF SHALL BE STORED AND DISPOSED OF PROPERLY.
9. ENSURE THAT WASHOUT FROM CONCRETE TRUCKS IS PERFORMED OFF-SITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY. DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR TO STORM DRAINS OR OPEN DITCHES. DO NOT DUMP EXCESS CONCRETE ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
10. ALL AREAS OF DISTURBED SOIL SHALL BE FULLY STABILIZED WITH THE APPROPRIATE SOIL AMENDMENT AND COVER MEASURES AT COMPLETION OF THE PROJECT. TYPICAL COVER MEASURES INCLUDE LANDSCAPING OR HYDROSEED WITH MULCH.

**CONSTRUCTION STORMWATER CONTROL (CSC) PLAN REQUIREMENTS / NARRATIVE**

THIS PLAN IS REQUIRED FOR ALL PROJECTS WITH GREATER THAN 750 SQUARE FEET OF LAND DISTURBING ACTIVITIES.

SHOW TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES (BMPs) IN THE PLAN VIEW OF THIS SHEET THAT WILL ACCOMPLISH THE MINIMUM REQUIREMENTS DESCRIBED IN THE NARRATIVE BELOW.

THE BMPs SHOWN IN THE PLAN VIEW OF THIS PLAN ARE THE MINIMUM REQUIRED. ADDITIONAL BMPs ARE REQUIRED WHEN MINIMUM CONTROLS ARE NOT SUFFICIENT TO PREVENT EROSION OR TRANSPORT OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE.

- MARK CLEARING LIMITS
- DELINEATE ENVIRONMENTALLY CRITICAL AREAS
- RETAIN TOP LAYER AND NATIVE VEGETATION
- ESTABLISH CONSTRUCTION ACCESS
- PROTECT DOWNSTREAM PROPERTIES AND RECEIVING WATERS
- PREVENT EROSION AND SEDIMENT TRANSPORT FROM THE SITE
- STABILIZE SOILS
- PROTECT SLOPES
- PROTECT STORM DRAINS
- STABILIZE CHANNEL AND OUTLETS
- CONTROL POLLUTANTS
- CONTROL DEWATERING
- MAINTAIN AND INSPECT BMPs
- EXECUTE CONSTRUCTION STORMWATER CONTROL PLAN
- MINIMIZE OPEN TRENCHES
- PHASE THE PROJECT
- INSTALL PERMANENT FLOW CONTROL AND WATER QUALITY FACILITIES
- PROTECT STORMWATER BMPs PRIOR TO, DURING, AND AFTER CONSTRUCTION

**POST CONSTRUCTION SOIL MANAGEMENT PLAN**

AT THE END OF PROJECT, ALL AREAS DISTURBED AND NOT COVERED WITH A HARD SURFACE MUST BE AMENDED PER THE SOIL AMENDMENT DETAIL BELOW AND PROBE TO 12-INCHES AT THE SITE FINAL INSPECTION.

LABEL ALL AREAS DISTURBED AND NOT COVERED WITH A HARD SURFACE WITHIN THE SITE AS ONE OF THE FOLLOWING: SA (SOIL AMENDMENT AREA) OR ND (NON-DISTURBED AREA). SEE DEFINITIONS BELOW. DO NOT REFERENCE AN ALTERNATE PLAN SHEET.

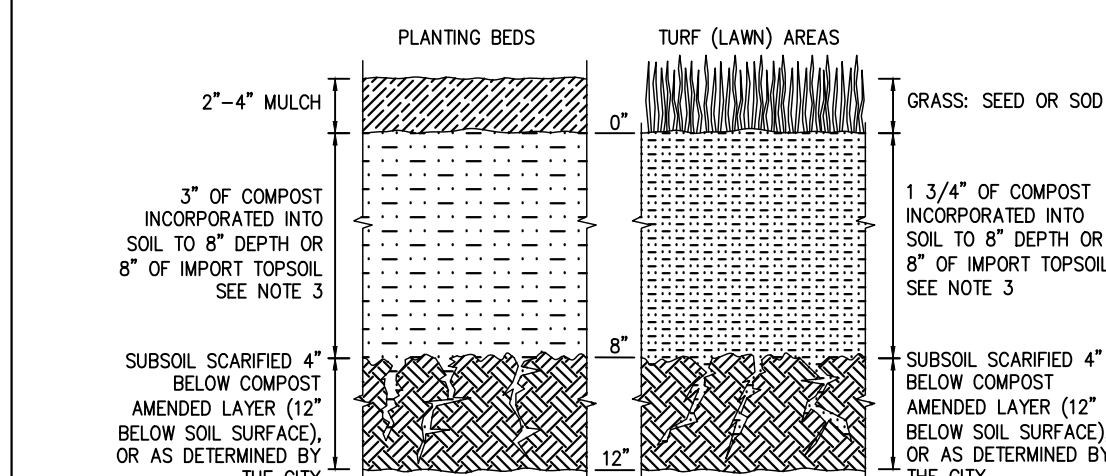
**DEFINITIONS:**

- NON-DISTURBED AREA (ND): VEGETATED AREAS THAT WILL NOT BE SUBJECT TO LAND DISTURBING ACTIVITY DO NOT REQUIRE SOIL AMENDMENT IF THEY ARE FENCED AND CONTINUOUSLY PROTECTED THROUGHOUT CONSTRUCTION. THE FENCING MUST BE IN PLACE AT THE FIRST GROUND DISTURBANCE INSPECTION. THIS WILL BE MONITORED BY THE DPD SITE INSPECTOR. NO DISTURBANCE, INCLUDING VEHICLE TRAFFIC OR MATERIAL STORAGE, IS ALLOWED IN THESE AREAS UNTIL FINAL INSPECTION. LABEL THESE AREAS AS (ND) IN THE PLAN VIEW.
- SOIL AMENDMENT AREA (SA): VEGETATED OR COMPOST AREAS (TURF AND LANDSCAPE) MUST BE AMENDED PER THE SOIL AMENDMENT DETAIL AND THE SUBSOIL MUST BE LOOSENOED SO IT WILL PROBE TO A DEPTH OF 12 INCHES PRIOR TO SITE FINAL INSPECTION. THIS INCLUDES AREAS IMPACTED BY CLEARING AND GRADING, STOCKPILING, SITE ACCESS, PATHWAYS AND MATERIALS OR EQUIPMENT STORAGE. LABEL THESE AREAS AS (SA) IN THE PLAN VIEW.

**ESTIMATED COMPOST REQUIRED FOR SOIL AMENDMENT**

AREA REQUIRING AMENDMENT (SA) (SQUARE FEET) X 0.0062 = REQUIRED COMPOST (CUBIC YARDS)

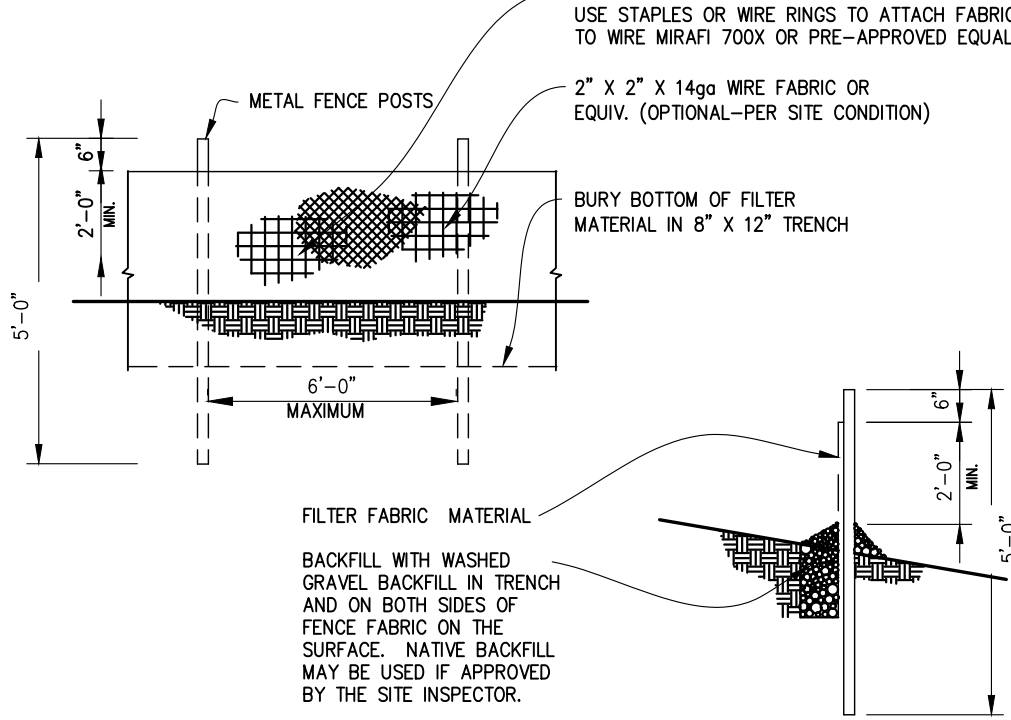
**SOIL AMENDMENT**



- NOTES:**
1. POST CONSTRUCTION SOIL AMENDMENT IS REQUIRED ON ALL AREAS NOT COVERED BY IMPERVIOUS SURFACE WHERE SOIL IS DISTURBED DURING CONSTRUCTION.
  2. SOIL AMENDMENT MUST PASS A 12 INCH MINIMUM PROBE TEST.
  3. IMPORT TOPSOIL, IF USED, MUST MEET THE REQUIREMENTS OF THE 2016 SEATTLE STORMWATER MANUAL, VOL. 1, SECTIONS 5.1.5.1 AND 5.1.5.3.

SYMBOL: (SA) AREA REQUIRING SOIL AMENDMENT (ND) NON-DISTURBED AREA (SOIL AMENDMENT NOT REQUIRED)

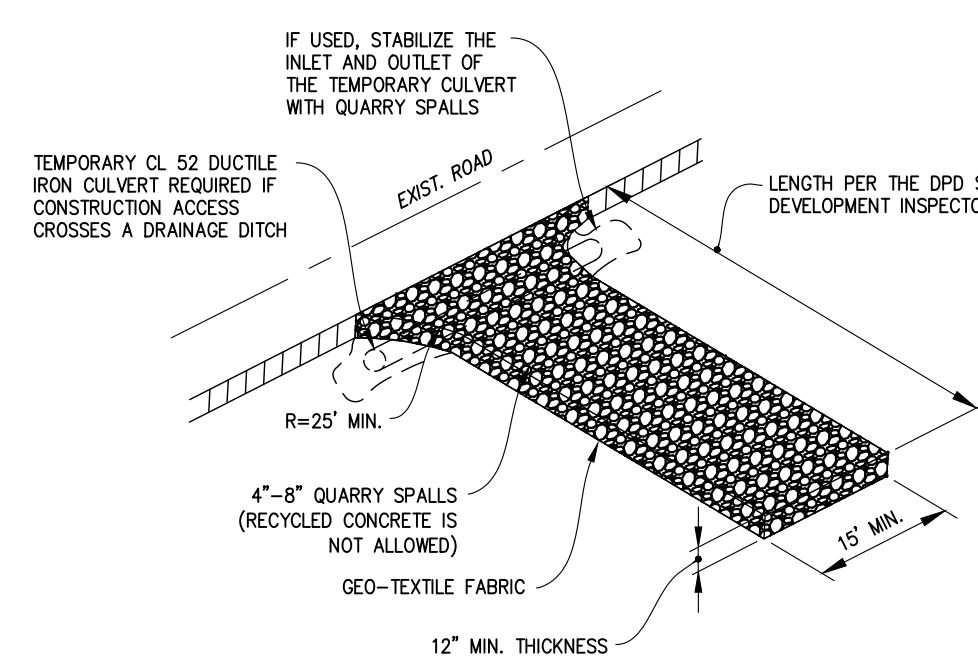
**FILTER FENCE**



NOTE: ANGLE SILT FENCE BACK UP THE SLOPE AT THE END OF RUN.

SYMBOL: [Symbol]

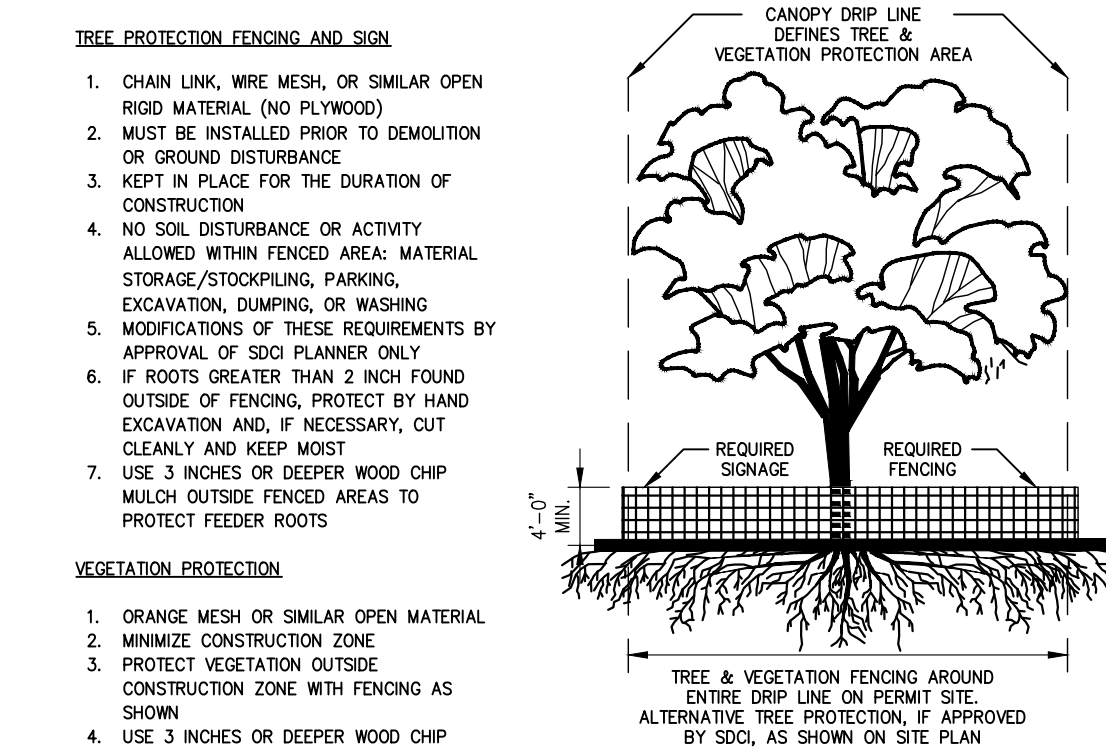
**STABILIZED CONSTRUCTION ACCESS**



STABILIZED ACCESS SHALL BE USED IN ALL AREAS OF THE SITE WITH VEHICLE TRAFFIC AND PARKING, INCLUDING PLANTING STRIPS. RECYCLED CONCRETE IS NOT ALLOWED.

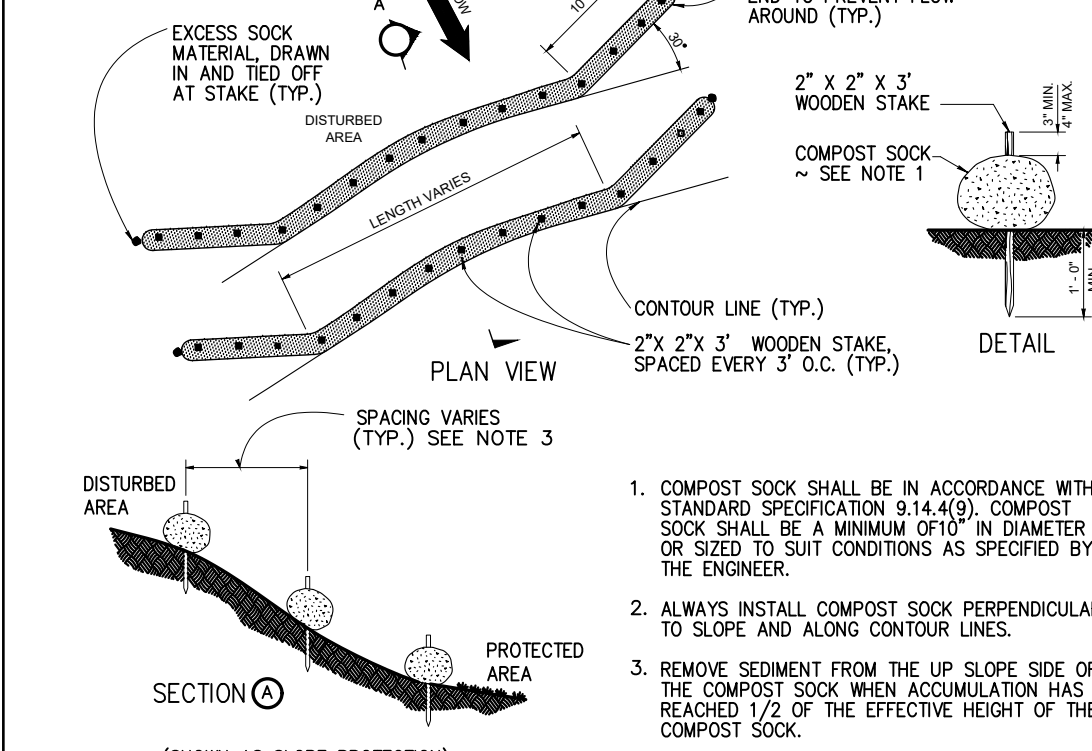
SYMBOL: [Symbol]

**TREE & VEGETATION PROTECTION**



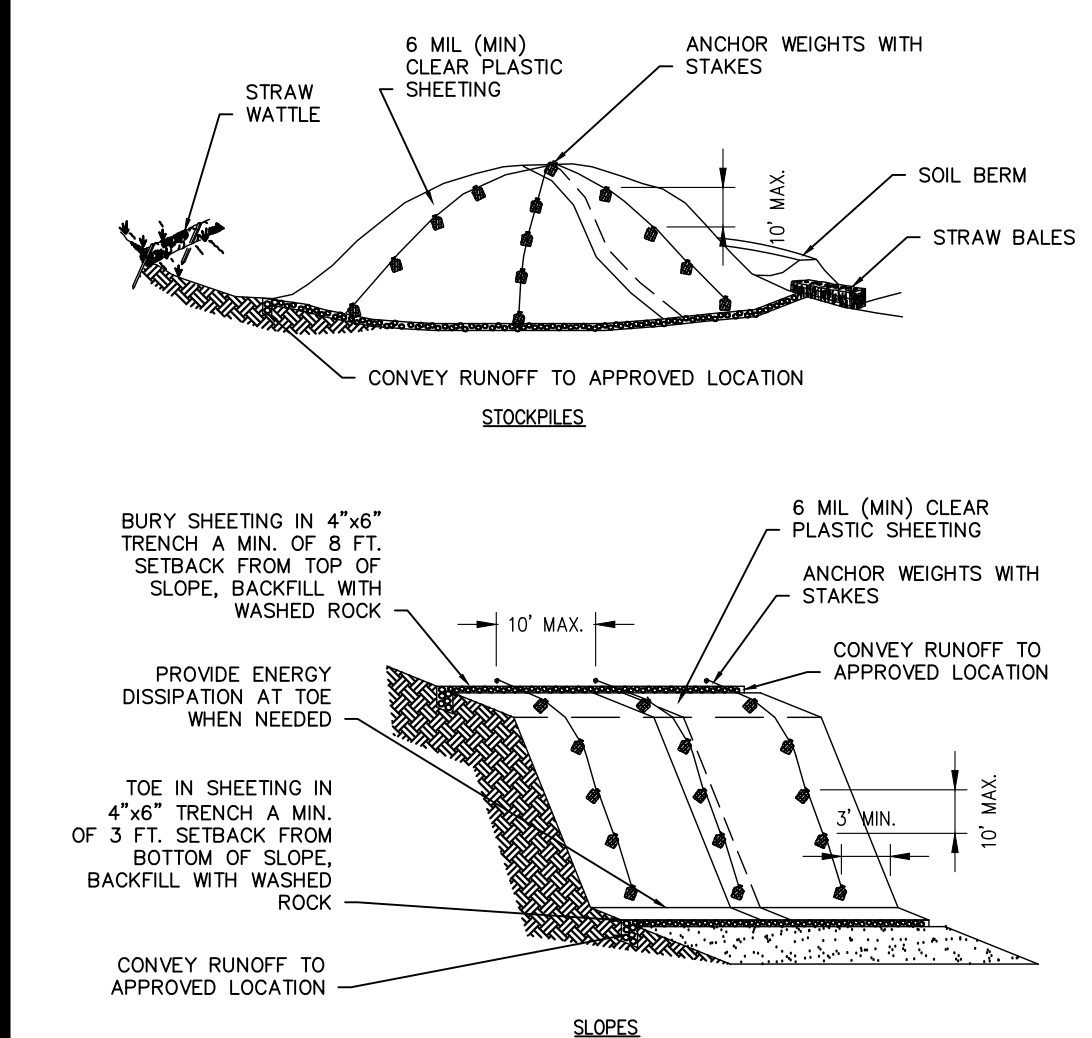
SYMBOL: [Symbol]

**COMPOST SOCK**

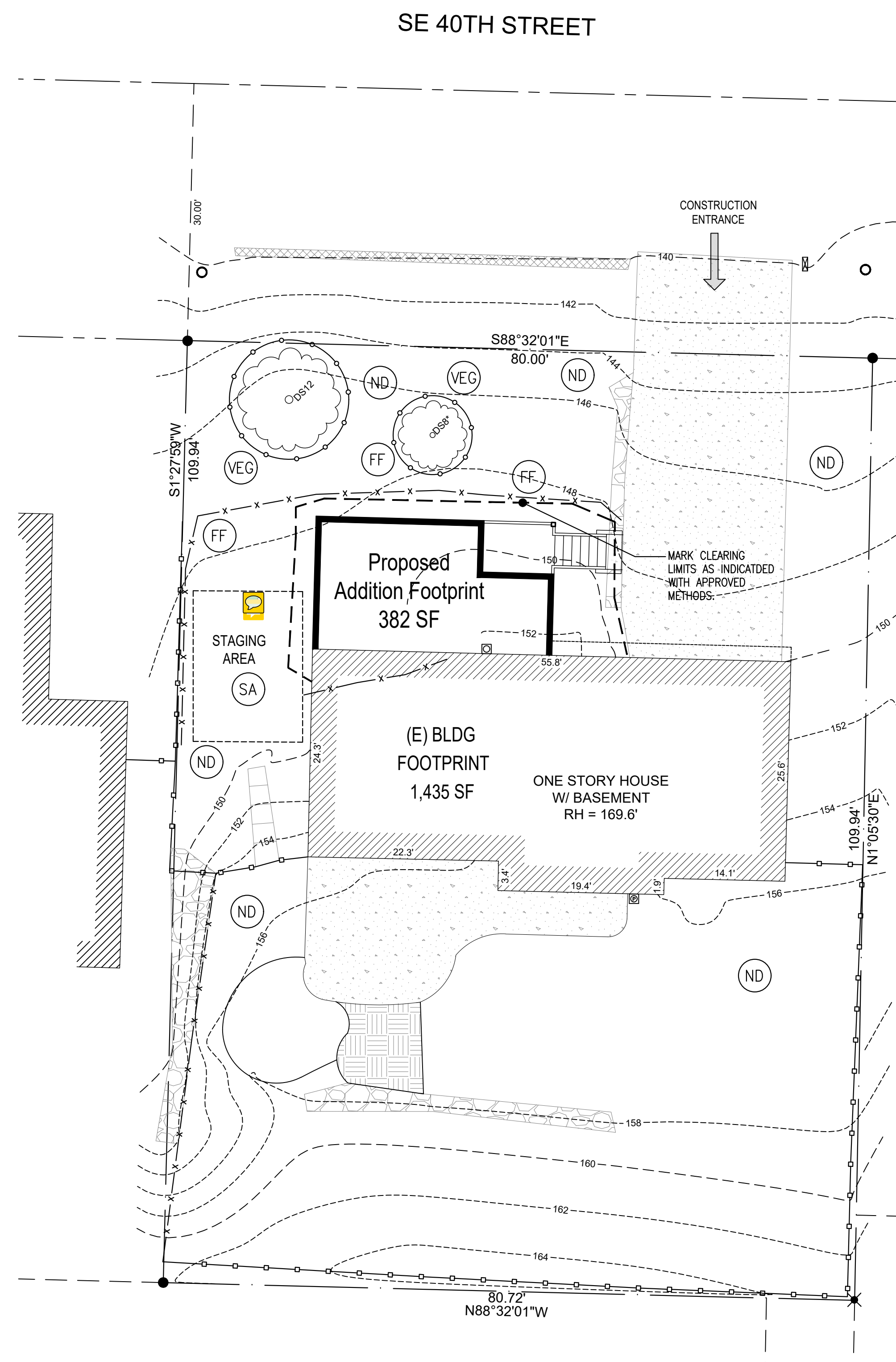


SYMBOL: [Symbol]

**STOCKPILE AND EXPOSED SLOPE COVERING**



SYMBOL: [Symbol]



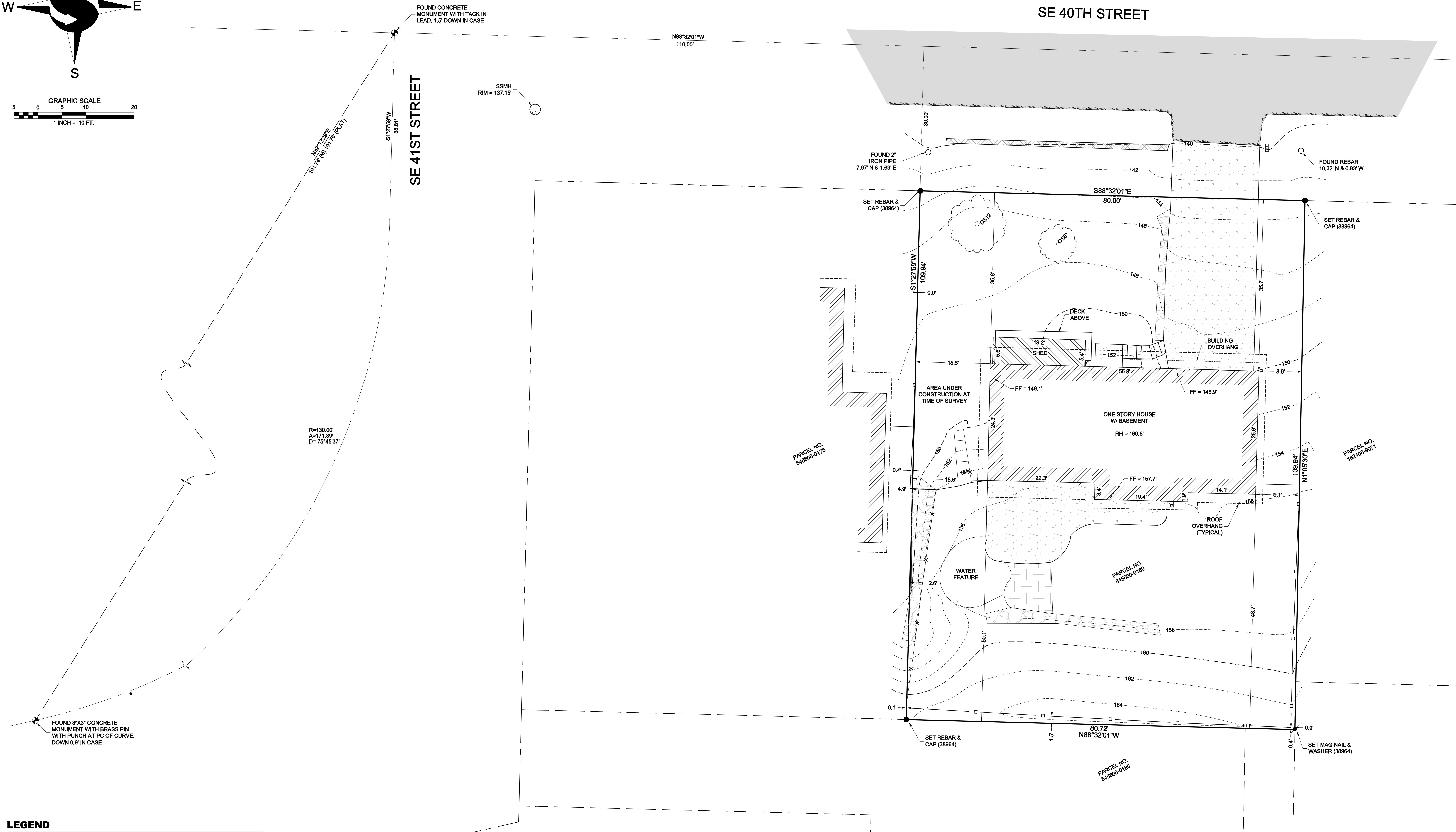
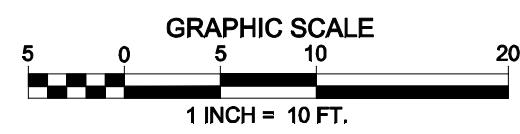
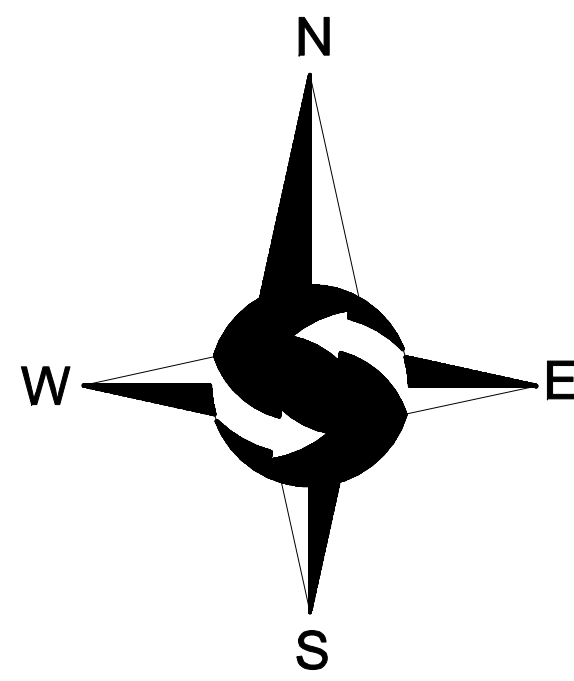
**TEMPORARY EROSION & SEDIMENT CONTROL PLAN & POST CONSTRUCTION SOIL MANAGEMENT PLAN**

NOTE: THIS PLAN IDENTIFIES THE MINIMUM MEASURES REQUIRED; ADDITIONAL MEASURES MAY BE REQUIRED BASED ON CONSTRUCTION METHODS AND ACTUAL AREA OF DISTURBANCE.

Date:	Description:
6/4/21	Permit Intake

Project No.: 2105.00  
Drawn:





**LEGEND**

	FOUND MONUMENT AS DESCRIBED		CHAINLINK FENCE
	FOUND REBAR AS DESCRIBED		WOOD FENCE
	SET MAG NAIL AS DESCRIBED		CONCRETE WALL
	SET 5/8" X 24" IRON ROD WITH YELLOW PLASTIC CAP		ROCKERY
	POWER METER		ASPHALT SURFACE
	GAS METER		CONCRETE SURFACE
	SANITARY SEWER MANHOLE		FLAGSTONE SURFACE
	WATER VALVE		DS DECIDUOUS
	FIRE HYDRANT		* INDICATES MULTI-TRUNK
	WATER METER		
	GAS VALVE		
	MAILBOX		

**LEGAL DESCRIPTION**

LOT 2 IN BLOCK J OF MERCERWOOD, AS PER PLAT RECORDED IN VOLUME 52 OF PLATS, PAGES 32 AND 33, RECORDS OF KING COUNTY AUDITOR;  
SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

THE PLAT OF MERCERWOOD, AS PER PLAT RECORDED IN VOLUME 52 OF PLATS, PAGES 32 AND 33, RECORDS OF KING COUNTY AUDITOR.

**VERTICAL DATUM & CONTOUR INTERVAL**

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A CONCRETE MONUMENT WITH TACK IN LEAD IN CASE AT THE INTERSECTION OF SE 40TH STREET AND SE 41ST STREET.

POINT ID NO. 4019;  
ELEVATION: 135.118 FEET (41.184 METERS) NAVD 88  
2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.

**GENERAL NOTES**

- THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
- INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
- THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN APRIL 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
- ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

**PROJECT INFORMATION**

SURVEYOR: SITE SURVEYING, INC.  
21923 NE 11TH ST  
SAMMAMISH, WA 98074  
PHONE: 425-298-4412

PROPERTY OWNER: PAVEL STERBA AND ANASTASIA MIRONOVA  
9811 SE 40TH STREET  
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 545600-0180

PROJECT ADDRESS: 9811 SE 40TH STREET  
MERCER ISLAND, WA 98040

ZONING: R-8.4

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: 8,835 S.F. (0.203 ACRES) AS SURVEYED

TOPOGRAPHIC SURVEY  
PAVEL STERBA & ANASTASIA MIRONOVA  
9811 SE 40TH STREET  
MERCER ISLAND, WA 98040

PROJECT NO. 21-174  
DRAWN BY: EFJ  
CHECKED BY: TNW  
DATE: 4/19/2021  
SHEET 1 OF 1

NE 1/4, NE 1/4, SEC 18, TWP 24N, RNG 5E, W.M.



DATE	REVISION	DRN

© 2021, SITE SURVEYING, INC. ALL RIGHTS RESERVED.



www.sitesurveying.com  
21923 NE 11th Street Sammamish, WA 98074  
Phone: 425.298.4412

**ABBREVIATIONS:**

ABV ABOVE	DTL DETAIL	GA GAUGE	O/ OVER	SHWR SHOWER
AFF ABOVE FINISH FLOOR	DW DISHWASHER	GB GYPSUM BOARD	OC ON CENTER	SIM SIMILAR
BLDG BUILDING	(E) EXISTING	GLB GLULAM BEAM	OG OBSCURE GLAZING	SPEC SPECIFICATIONS
BLKG BLOCKING	EA EACH	GSM GALVANIZED SHEET METAL	OH OVERHANG	SQ FT SQUARE FEET
BM BEAM	ELEV ELEVATION	HDR HEADER	PL PROPERTY LINE	SQ IN SQUARE INCHES
BOT BOTTOM	EQ EQUAL	HGR HANGER	PL PLATE	STD STANDARD
CIPC CAST-IN-PLACE CONCRETE	EXT EXTERIOR	h HIGH	PT POINT	SUBFLR SUBFLOOR
CL CENTERLINE	EW EACH WAY	HT HEIGHT	PTW PRESERVATIVE TREATED WOOD	T&G TONGUE & GROOVE
CLG CEILING	*EW EGRESS WINDOW	HVAC HEATING, VENTILATION, & AIR-CONDITIONING	REBAR REINFORCEMENT BAR	THK THICK
CLR CLEAR	FDN FOUNDATION	IG INSULATED GLASS	REFR REFRIGERATOR	TOPO TOPOGRAPHY
CMD CARBON MONOXIDE DETECTOR	FG FINISH GRADE	INT INTERIOR	REQD REQUIRED	TOW TOP OF WALL
CO CLEANOUT	FIN FINISH	LAV LAVATORY	REQTS REQUIREMENTS	TYP TYPICAL
CONC CONCRETE	FL FLUSH	LBS POUNDS	RAFT RAFTER	UNO UNLESS NOTED OTHERWISE
CONT CONTINUOUS	FLR FLOOR	LF LINEAR FEET	RO ROUGH OPENING	VTO VENT TO OUTSIDE
D DRYER	FOF FACE OF FINISH	LO LOW	R.O.W. RIGHT-OF-WAY	w WIDE
DBLE DOUBLE	FOS FACE OF STUD	MAX MAXIMUM	RFT RIP-TO-FIT	W WASHER
DEMO DEMOLISH	FRMG FRAMING	MFR MANUFACTURER	RTS RIP-TO-SLOPE	W/ WITH
DIA DIAMETER	FRZR FREEZER	MIN MINIMUM	RV RIM VENT	WC WATER CLOSET
DN DOWN	FT FOOT	(N) NEW	SC SOLID CORNER	WFC WOOD FRAME CONSTRUCTION
DP DEEP	FTG FOOTING	N/A NOT APPLICABLE	SD SMOKE DETECTOR	WH WATER HEATER
DP DIMENSION POINT	FV FIELD VERIFY	NIC NOT IN CONTRACT	SF SQUARE FEET	WIC WALK-IN-CLOSET
DS DOWNSPOUT	FV FOUNDATION VENT		SG SAFETY GLAZING	WP WORK POINT
				WWF WELDED WIRE FABRIC

**WHOLE HOUSE MECHANICAL VENTILATION (M1505.4):**

**M1505.4.1 SYSTEM DESIGN**  
 THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH, AND ASSOCIATED DUCTS AND CONTROLS. LOCAL EXHAUST OR SUPPLY FANS ARE PERMITTED TO SERVE AS SUCH A SYSTEM. OUTDOOR AIR DUCTS CONNECTED TO THE RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED TO PROVIDE SUPPLY VENTILATION.

**M1505.4.2 SYSTEM CONTROLS**  
 THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE.

**M1505.4.3 MECHANICAL VENTILATION RATE**  
 THE WHOLEHOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1) OR EQUATION 15-1. VENTILATION RATE IN CUBIC FEET PER MINUTE = (0.01 x TOTAL SQUARE FOOT AREA OF HOUSE) + [7.5 x (NUMBER OF BEDROOMS + 1)]

**EXCEPTION:** THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITTED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25 PERCENT OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TABLE M1505.4.3(1) IS MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(2).

**M1505.4.4 LOCAL EXHAUST RATES**  
 LOCAL EXHAUST SYSTEM SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4.

TABLE M1505.4.4  
 MINIMUM REQUIRED LOCAL EXHAUST RATES FOR ONE- AND TWO-FAMILY DWELLINGS

AREA OF EXHAUST	EXHAUST RATES
KITCHEN	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS
BATHROOM - TOILET ROOMS	50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

For SI: 1 cubic foot per minute = 0.0004719 m³/s.

TABLE M1505.4.3(1)  
 CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (SQUARE FEET)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-7	> 7
< 1,500	30	45	60	75	90
1,501-3,000	45	60	75	90	105
3,001-4,500	60	75	90	105	120
4,501-6,000	75	90	105	120	135
6,001-7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

For SI: 1 square foot = 0.0929 m², 1 cubic foot per minute = 0.0004719 m³/s.

TABLE M1505.4.3(2)  
 INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS<sup>a, b</sup>

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
FACTOR <sup>a</sup>	4	3	2	1.5	1.3	1.0

- a. For ventilation system run time values between those given, the factors are permitted to be determined by interpolation.
- b. Extrapolation beyond the table is prohibited.

**ENERGY CODE COMPLIANCE NOTES:**

2018 WASHINGTON STATE ENERGY CODE CHAPTER 4  
 PRESCRIPTIVE COMPONENT TABLE R402.1.1 - ZONE 4C

LOCATION	INSULATION REQUIREMENTS
FENESTRATION (UNLIMITED)	U=0.30 OR BETTER
SKYLIGHT (UNLIMITED)	U=0.50 OR BETTER
GLAZING FENESTRATION SHGC	NR
CEILING	R-49
CEILING VAULTED	R-38
WOOD FRAME WALL	R-21 INT
MASS WALL	R-21
FLOOR	R-30
BELOW-GRADE WALL	R-10/15/21 INT-TB
SLAB	R-10, 2 FT.
WINDOW & DOOR HEADERS	R-10 MIN

NOTE:  
 1) R-10 CONTINUOUS INSULATION IS REQUIRED UNDER HEATED SLAB ON GRADE FLOORS. SEE SECTION R402.2.9.1.  
 2) R7.5 CONTINUOUS INSULATION INSTALLED OVER AN EXISTING SLAB IS DEEMED TO BE EQUIVALENT TO THE REQUIRED PERIMETER SLAB INSULATION WHEN APPLIED TO EXISTING SLABS COMPLYING WITH SECTION R503.1.1.

**ENERGY CREDITS CODE COMPLIANCE NOTES:**

2018 WASHINGTON STATE ENERGY CODE CHAPTER 4  
 ADDITIONAL ENERGY EFFICIENCY REQUIREMENT PER SECTION R406.2

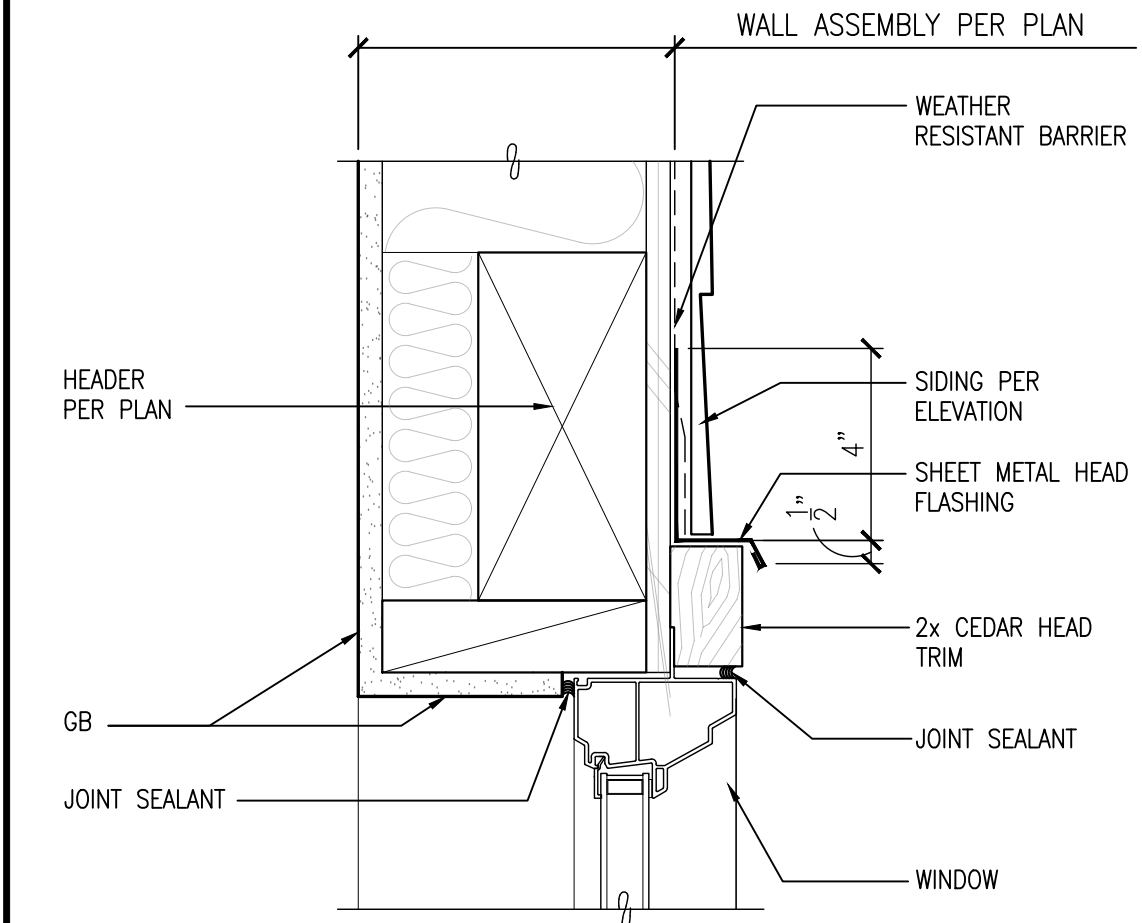
PROJECT TO MEET "SMALL DWELLING UNIT" REQUIREMENTS OF **3.0 CREDITS**

FROM TABLE 406.2 ENERGY CREDITS:

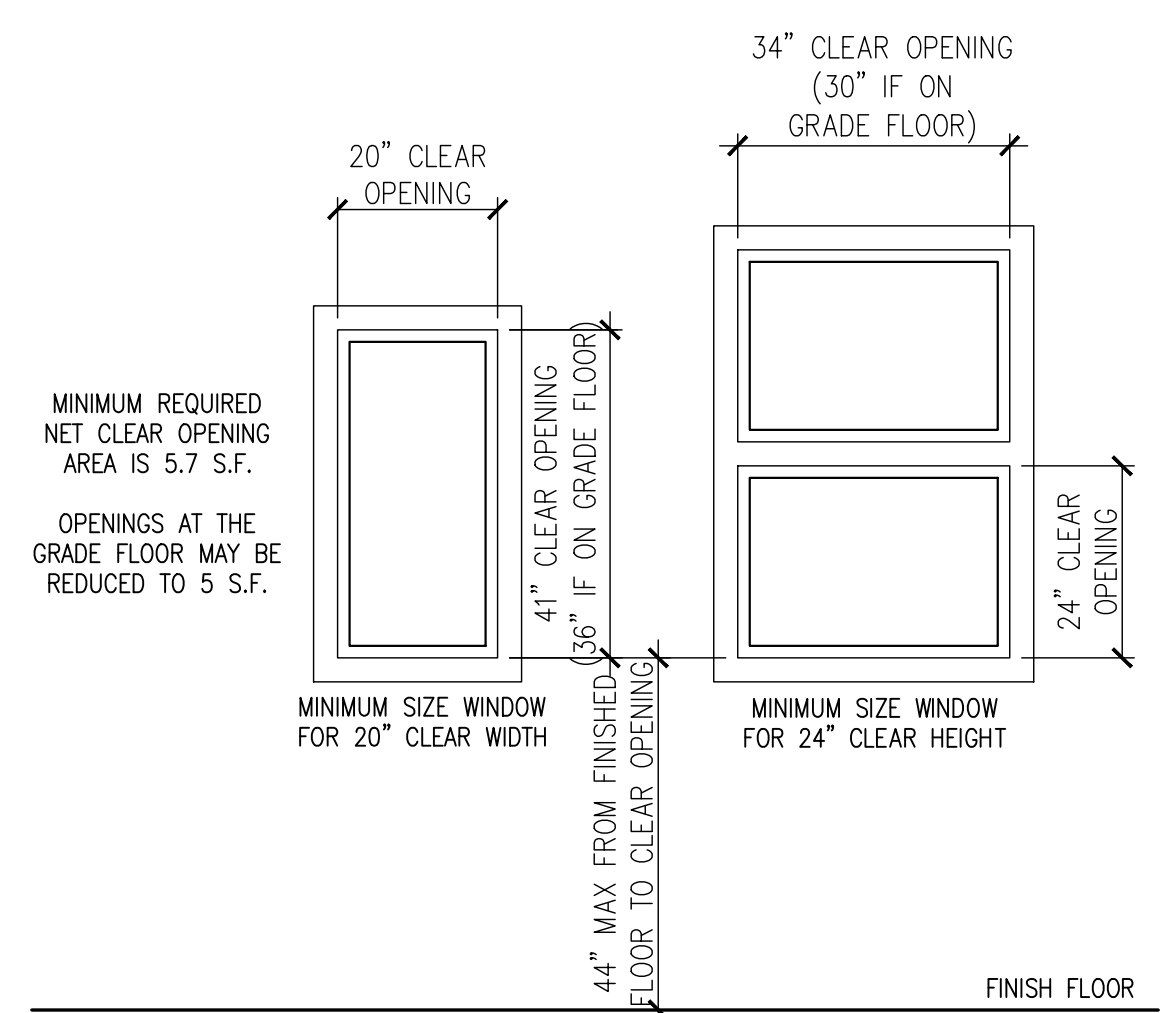
OPTION 4: DHP WITH ZONAL ELECTRIC RESISTANCE PER OPTION 3.4 **0.5 CREDITS**

OPTION 3.4: HIGH EFFICIENCY HVAC **1.5 CREDITS**  
 DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM, ZONAL CONTROL: IN HOMES WHERE THE PRIMARY SPACE HEATING SYSTEM IS ZONAL ELECTRIC HEATING, A DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM WITH A MINIMUM HSPF OF 10.0 SHALL BE INSTALLED AND PROVIDE HEATING TO THE LARGEST ZONE OF THE HOUSING UNIT.

OPTION 5.1: EFFICIENT WATER HEATING **1.0 CREDITS**  
 WATER HEATING SYSTEM SHALL BE ENERGY STAR RATED GAS OR PROPANE HEATER WITH MINIMUM UEF OF 0.91

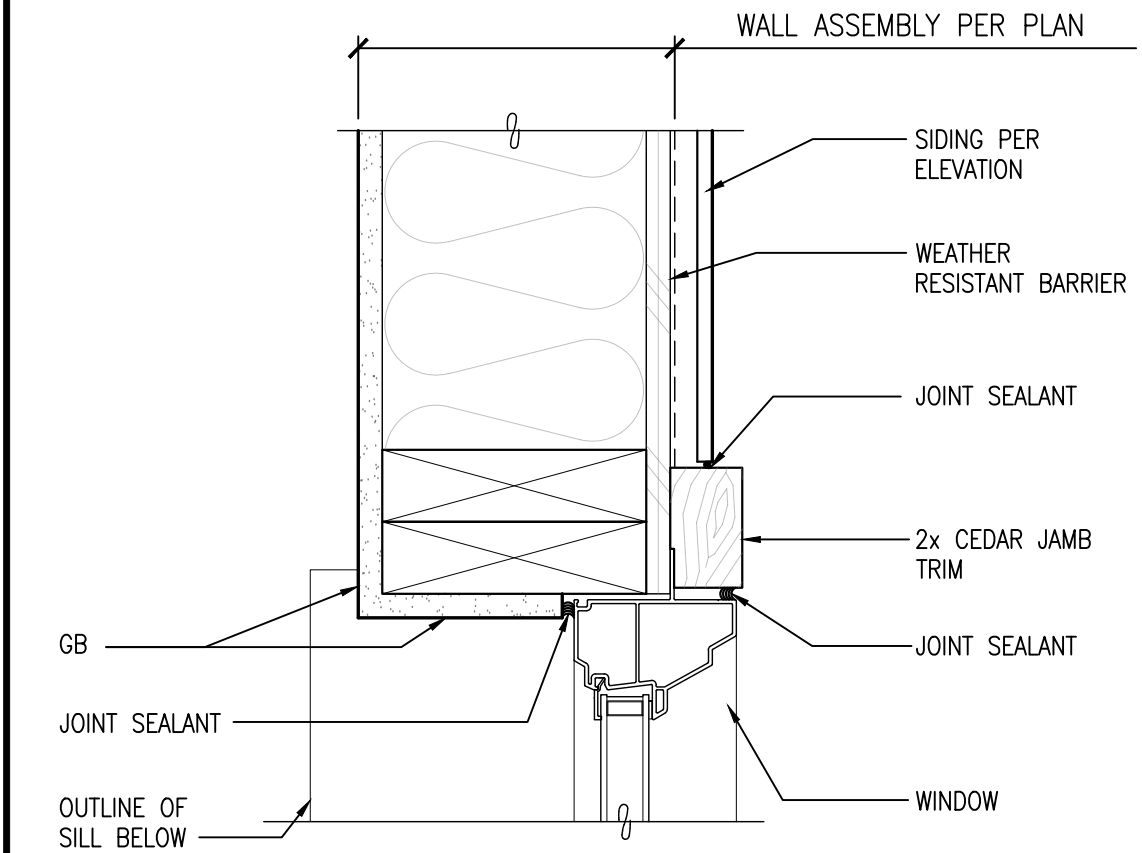


**4 HEAD DETAIL**  
 SCALE: 3"=1'-0"

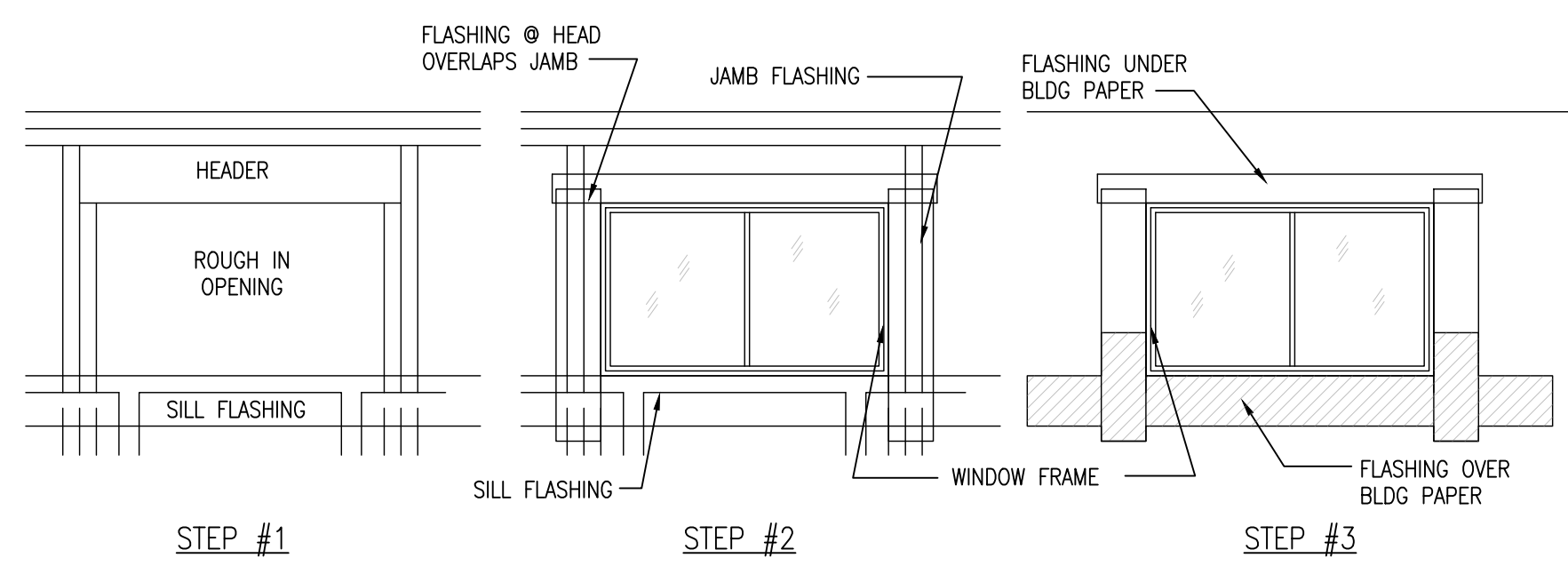


BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL NOT HAVE LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A COURT OR YARD THAT OPENS TO A PUBLIC WAY.

**A MINIMUM RESIDENTIAL EGRESS OPENING REQUIREMENTS**  
 SCALE: 1/2"=1'-0"



**3 JAMB DETAIL**  
 SCALE: 3"=1'-0"



**FLASHING OF EXTERIOR WALL OPENINGS:**  
 INDIVIDUALLY FLASH ALL EXTERIOR OPENINGS FOR FIXTURE SUCH AS WINDOWS, DOORS, AND VENTS TO MAKE THEM WATERPROOF. FLASHING MATERIAL SHALL BE MOISTOP BY MANUF. SEALANT SHALL BE COMPATIBLE AND APPROVED BY MANUF. IN HIGH WIND AREAS W.R. GRACE ICE & WATER SHIELD SHALL BE USED, OVER SOLID BACKING. FLASHING MATERIAL AT LEAST 9" WIDE SHALL BE APPLIED IN A WEATHER BOARD FASHION, BEGINNING WITH THE SILL WITH A STRIP LONG ENOUGH TO PROJECT BEYOND THE JAMB FLASHING TO BE APPLIED. THE TWO JAMB FLASHING ARE THEN APPLIED WITH SUFFICIENT LENGTH TO EXTEND BEYOND THE SILL FLASHING, AND WITH THE SAME DISTANCE AT THE TOP.

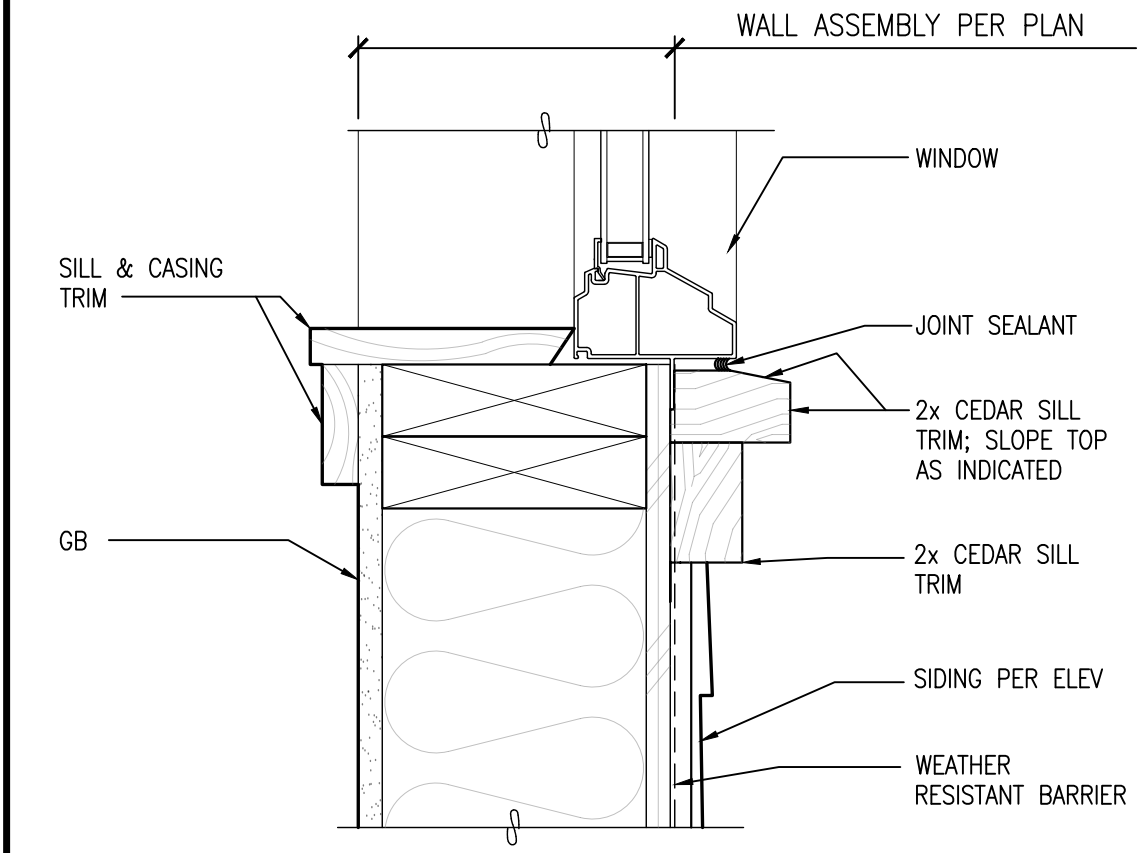
FOR FIXTURES WITHOUT NAIL-ON FLANGES, THE FLASHING SHALL BE 12" MIN. WIDTH AND EXTEND INTO THE ROUGH FRAME AT THE SILL AND JAMB.

FOR NAIL-ON FLANGE FIXTURE, INSTALL BY PRESSING FLANGE POSITIVELY INTO A CONTINUOUS BEAD OF SEALANT WHICH EXTENDS AROUND THE BOTTOM AND SIDES OF THE FIXTURE.

APPLY THE TOP HORIZONTAL FLASHING LAST, WITH SUFFICIENT LENGTH TO EXTEND BEYOND THE JAMB FLASHING. OVERLAP AND SEAL AGAINST THE TOP NAILING FLANGE OR G.S.M. HEAD FLASHING WITH A CONTINUOUS BEAD OF SEALANT.

APPLY REMAINING WALL SHEATHING PAPER IN A WEATHERBOARD FASHION WITH THE SILL FLASHING LAPPING OVER THE TOP AND THE HEAD AND JAMB FLASHING BELOW.

**1 TYPICAL WINDOW OPENING FLASHING REQUIREMENTS**  
 SCALE: NTS



**2 SILL DETAIL**  
 SCALE: 3"=1'-0"

**DOOR SCHEDULE (MFR & MODEL OR EQUAL)**

IDEN	TYPE	DOOR SIZE		ROUGH OPENING		MATERIAL	QUANTITY	TOTAL AREA	U-FACTOR (MIN OR BETTER NFRC-CERTIFIED)	MFR	NOTES
		WIDTH	HEIGHT	WIDTH	HEIGHT						
D01	PAIRED PANEL	5'-6"	6'-8"	5'-8"	6'-10"	FIBERGLASS WOODCLAD	1	36.7 SF	0.30	TBD	FULL LITE; SAFETY GLAZING
D02	PAIRED PANEL	5'-0"	6'-8"	5'-2"	6'-10"	WOOD	1	-	-	TBD	
D03	PAIRED BI-FOLD	5'-0"	6'-8"	5'-1"	6'-10"	WOOD	1	-	-	TBD	
D04	BI-FOLD	3'-0"	6'-8"	3'-1"	6'-10"	WOOD	1	-	-	TBD	

NOTES: (1)  
 SPECIFICATION: (A)

**WINDOW SCHEDULE (MFR & MODEL OR EQUAL)**

IDEN	TYPE	MATERIAL	SIZE		ROUGH OPENING		QUANTITY	TOTAL AREA	SPEC	DESCRIPTION
			WIDTH	HEIGHT	WIDTH	HEIGHT				
W01	COMBO	VINYL	2'-6"	VARIABLES	2'-6"	VARIABLES	1	19.23 SF	(A)	REFER TO ELEVATION ON SHEET A6.0 - CASEMENT/FIXED (SAFETY GLAZING)
W02	COMBO	VINYL	4'-0"	VARIABLES	4'-0"	VARIABLES	1	33.42 SF	(A)	REFER TO ELEVATION ON SHEET A6.0 - FIXED/FIXED (SAFETY GLAZING)
W03	COMBO	VINYL	4'-0"	VARIABLES	4'-0"	VARIABLES	1	33.42 SF	(A)	REFER TO ELEVATION ON SHEET A6.0 - FIXED/FIXED (SAFETY GLAZING)
W04	COMBO	VINYL	2'-6"	VARIABLES	2'-6"	VARIABLES	1	19.23 SF	(A)	REFER TO ELEVATION ON SHEET A6.0 - CASEMENT/FIXED (SAFETY GLAZING)
W05	CASEMENT	VINYL	2'-6"	5'-0"	2'-6"	5'-0"	1	12.50 SF	(A)	
W06	FIXED	VINYL	6'-0"	8'-5.5"	6'-0"	8'-5.5"	1	42.29 SF	(A)	
W07	CASEMENT	VINYL	2'-6"	5'-0"	2'-6"	5'-0"	1	12.50 SF	(A)	
W08	FIXED	VINYL	5'-6"	2'-0"	5'-6"	2'-0"	1	11.00 SF	(A)	
W09	FIXED	VINYL	3'-0"	5'-8"	3'-0"	5'-8"	1	17.00 SF	(A)	(SAFETY GLAZING)
W10	FIXED	VINYL	3'-0"	6'-6"	3'-0"	6'-6"	1	19.50 SF	(A)	

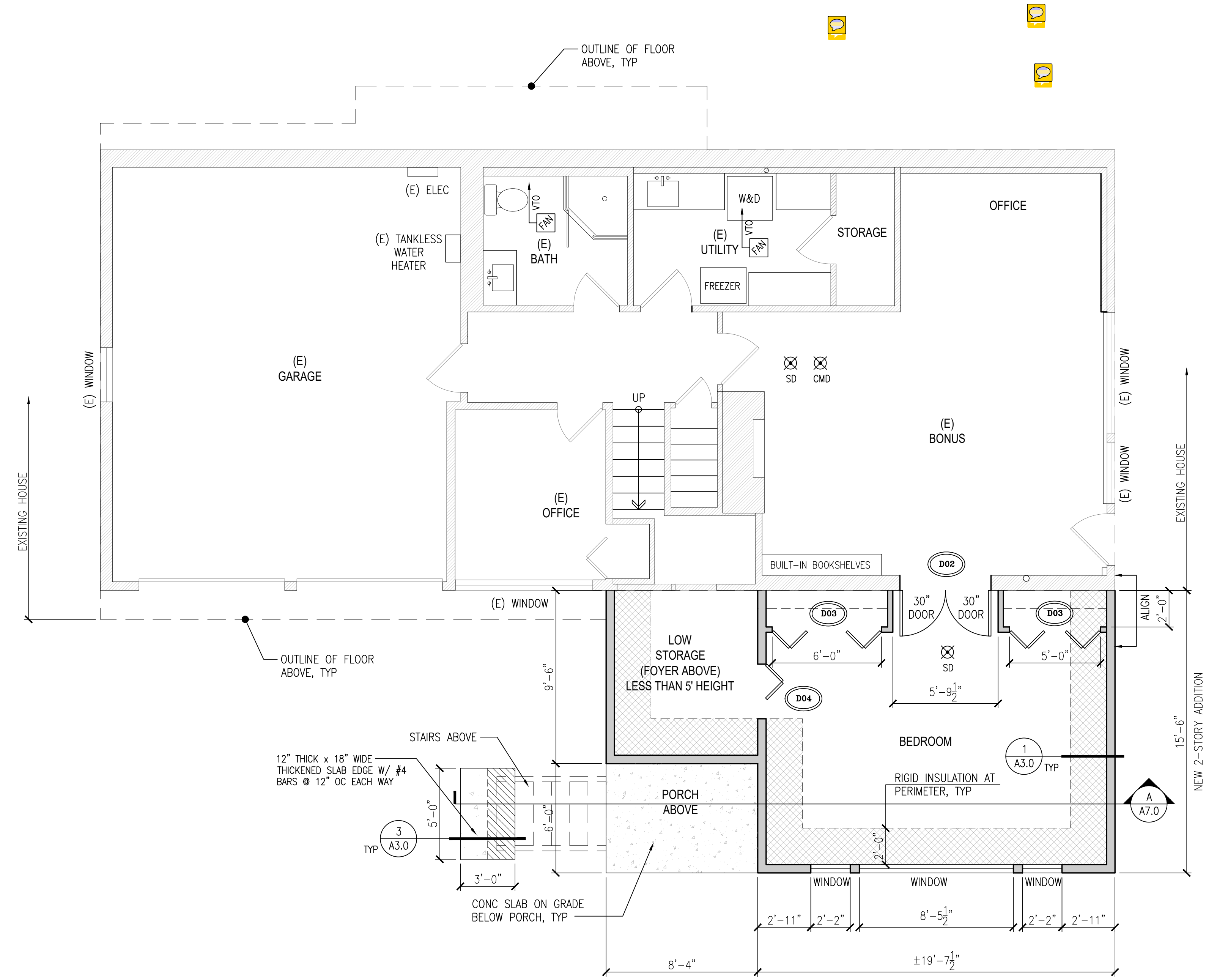
TOTAL QUANTITY: 10  
 TOTAL AREA (SQUARE FEET): 220.09 SF

NOTES: (1)  
 SPECIFICATION: (A)  
 (A) ALL GLAZING TO HAVE U-FACTOR = 0.30 MAX OR BETTER; NFRC-CERTIFIED (ENERGY CREDIT OPTION 1.3)









**FLOOR PLAN NOTES:**

**MATERIALS**

- A. ALL EXTERIOR WALLS TO BE 2x6 STUDS @ 16" OC.
- B. ALL INTERIOR WALLS TO BE 2x4 STUDS @ 16" OC.
- C. ALL FRAMING HARDWARE TO BE "SIMPSON" OR EQUAL.
- D. WALL SHEATHING TO BE 1/2" PLYWOOD WITH SPAN RATING OF 24/16.
- E. ALL HDR PER STRUCTURAL.

**REQUIREMENTS**

- 1. PROVIDE FIREBLOCKING PER SECTION R602.8.
- 2. INTERCONNECT SMOKE ALARMS AND PROVIDE PRIMARY & BACKUP POWER PER SECTION R313.

**LEGEND**

(E) WALL TO REMAIN

NEW 2x WOOD FRAME CONSTRUCTION

SMOKE DETECTOR (IRC - SECTION R314)

CARBON MONOXIDE DETECTOR (IRC - SECTION R315)

EXHAUST FANS: MIN. 50 CFM FOR BATHROOM AND LAUNDRY; MIN. 100 CFM FOR KITCHEN, WITH DIRECT VENT TO EXTERIOR

**FOUNDATION PLAN NOTES:**

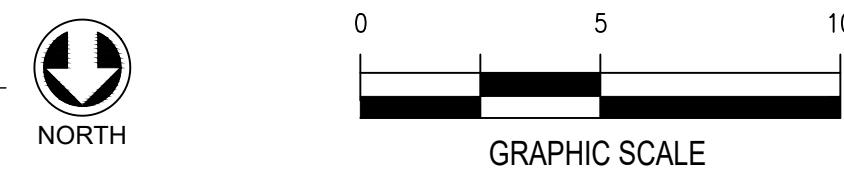
**MATERIALS**

- A. LUMBER IN CONTACT WITH CONCRETE TO BE PRESERVATIVE TREATED WOOD.
- B. ALL FRAMING HARDWARE TO BE "SIMPSON" OR EQUAL.

**REQUIREMENTS**

- 1. ALL FOOTINGS TO BEAR ON UNDISTURBED SOIL.
- 2. REROUTE & EXTEND EXISTING STORMWATER TIGHTLINE SYSTEM AS NECESSARY TO ACCOMMODATE NEW AND ABANDONED DOWNSPOUTS.
- 3. PROVIDE FOUNDATION DRAINAGE SYSTEM ALONG EXTERIOR PERIMETER OF ALL FOUNDATION WALLS ENCLOSING THE NEW SPACE. INTEGRATE WITH AND ADJUST EXISTING FOUNDATION DRAINAGE SYSTEM AS APPLICABLE. CONNECT TO STORM WATER TIGHTLINE SYSTEM DOWNSTREAM FROM TIGHTLINE SERVING DOWNSPOUTS.

**A BASEMENT FLOOR ADDITION PLAN**  
 SCALE: 1/4"=1'-0"



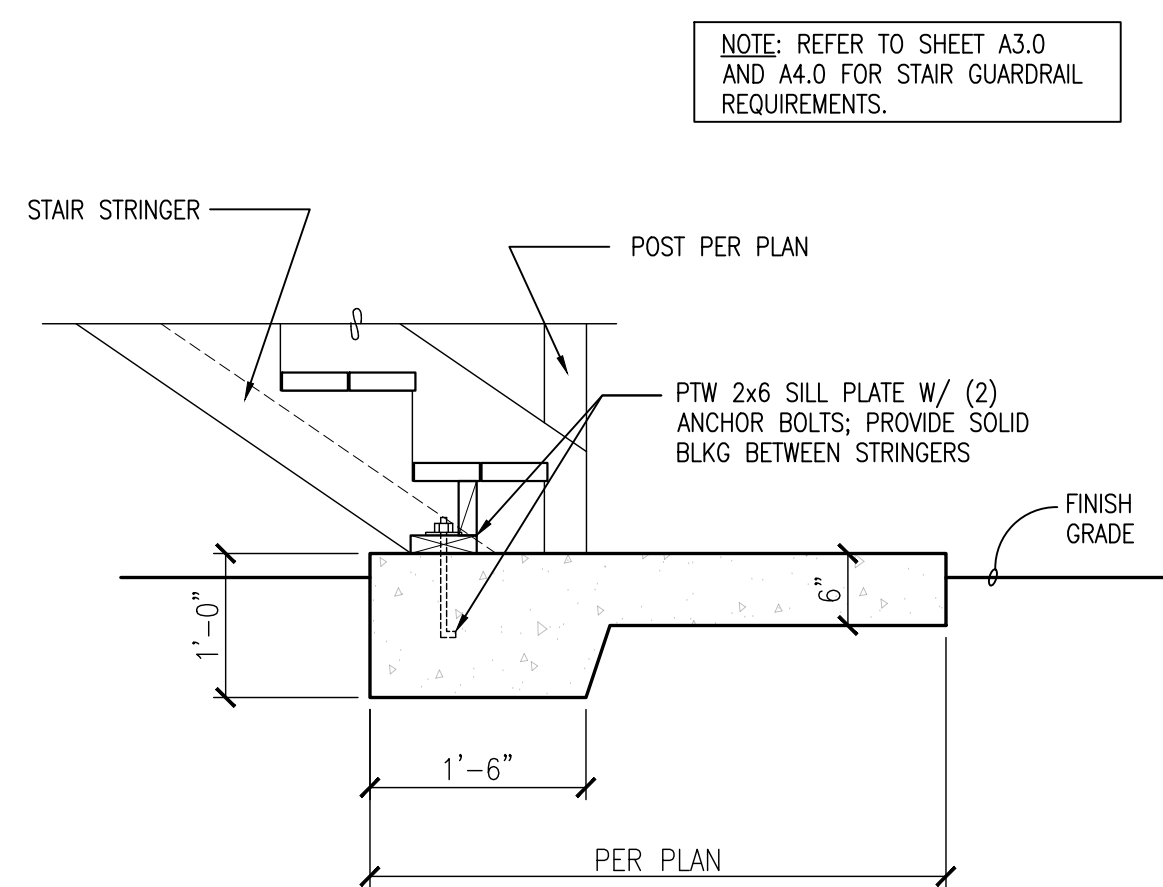
**Sterba Mironova Residence Addition**

9811 SE 40th St  
 Mercer Island, WA 98040

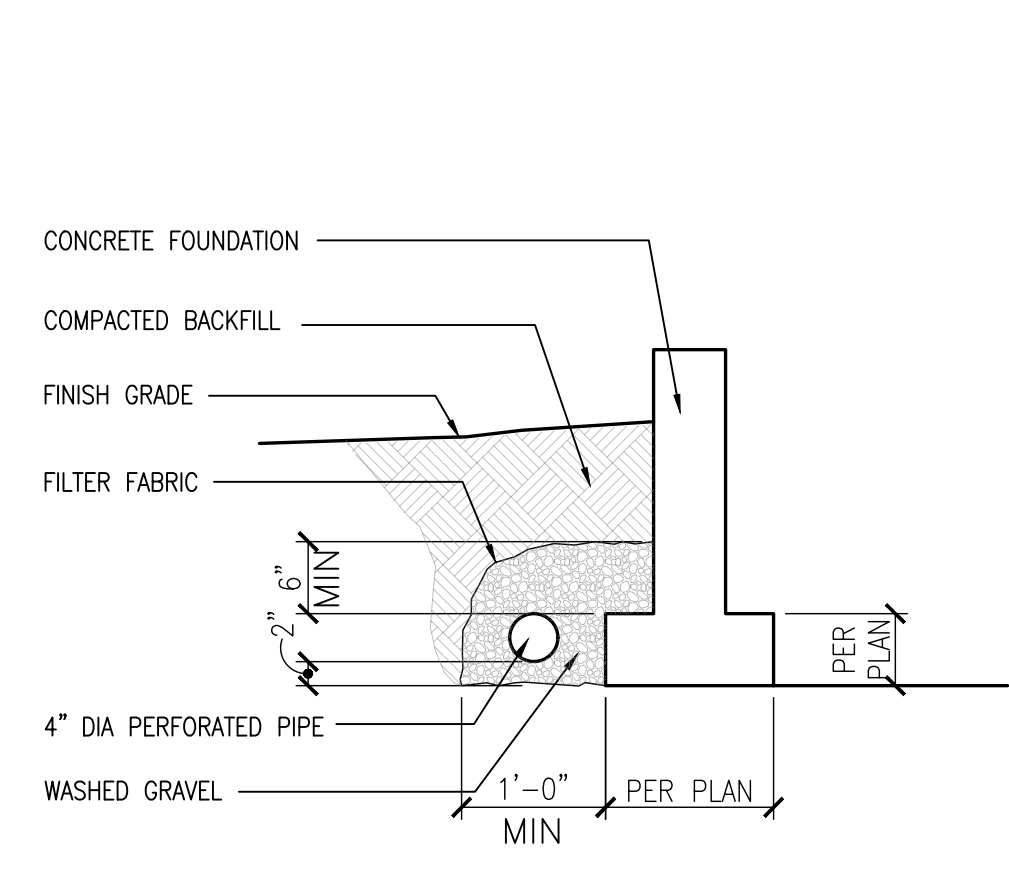
**Permit Set**

Date:	Description:
6/4/21	Permit Intake

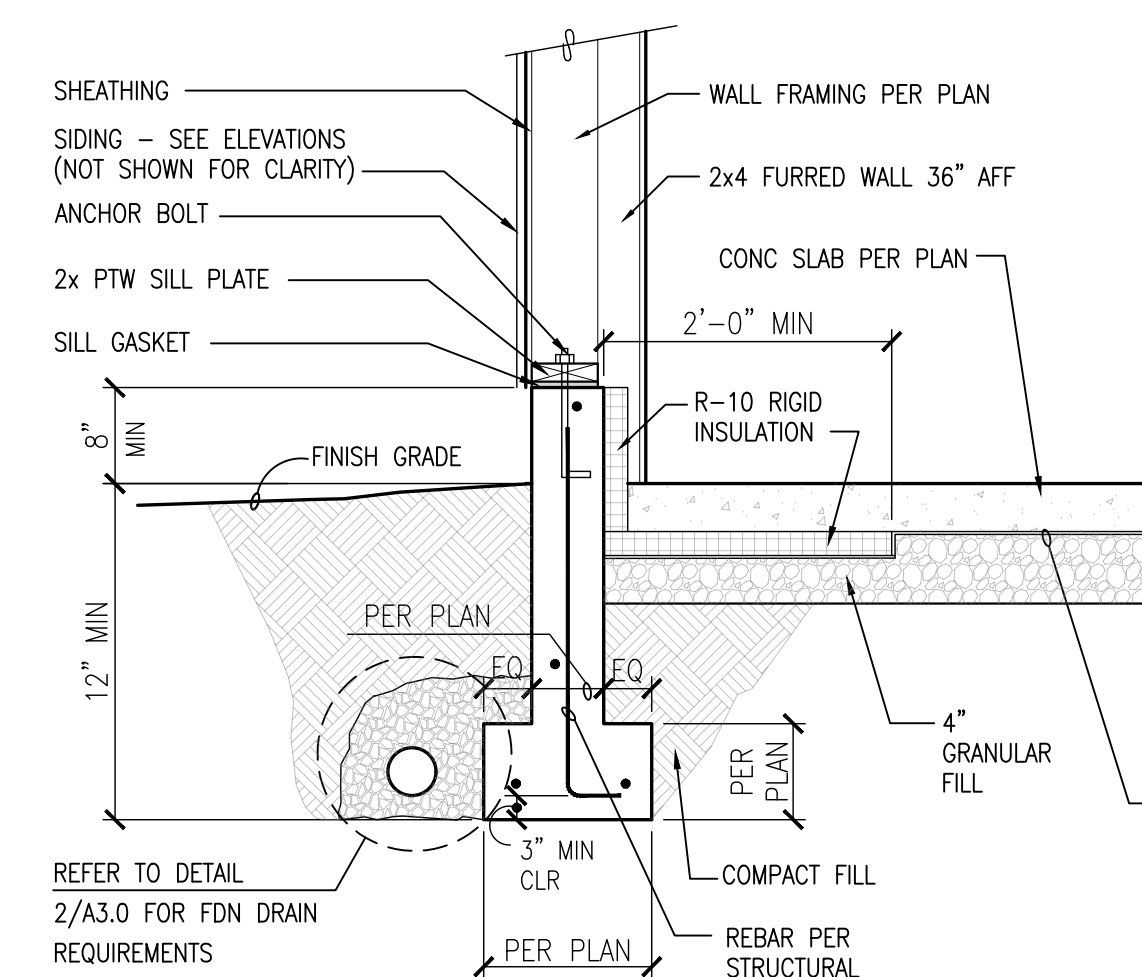
Project No.: 2105.00  
 Drawn:



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



**2 FOUNDATION DRAINAGE SYSTEM**  
 SCALE: 3/4"=1'-0"



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

**REINFORCEMENT SPECIFICATIONS:**

- HORIZONTAL STEEL:** PER STRUCTURAL DETAILS
- VERTICAL STEEL:** PER STRUCTURAL DETAILS
- SILL ANCHORAGE:** 5/8" DIA x 10" LONG GALVANIZED ANCHOR BOLTS @ 6'-0" OC MAX. PROVIDE 1/4" THK x 3" SQUARE PLATE WASHERS BETWEEN SILL PLATE AND NUT TYP. UNO IN SHEARWALL SCHEDULE

**NOTES:**

- 1. STEEL SHALL BE PLACED WITHIN CENTER OF FOUNDATION WALL.
- 2. THERE SHALL BE A MINIMUM OF (2) ANCHOR BOLTS PER FOUNDATION SILL PLATE WITH ONE BOLT LOCATED WITHIN 12" OF EACH END OF EACH FOUNDATION SILL PLATE BUT NO CLOSER THAN 4". EMBED ANCHOR BOLTS 7" MIN.

**BASEMENT FLOOR PLAN & DETAILS**

Sheet No:

**A3.0**



**FLOOR PLAN NOTES:**

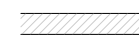




**MATERIALS**

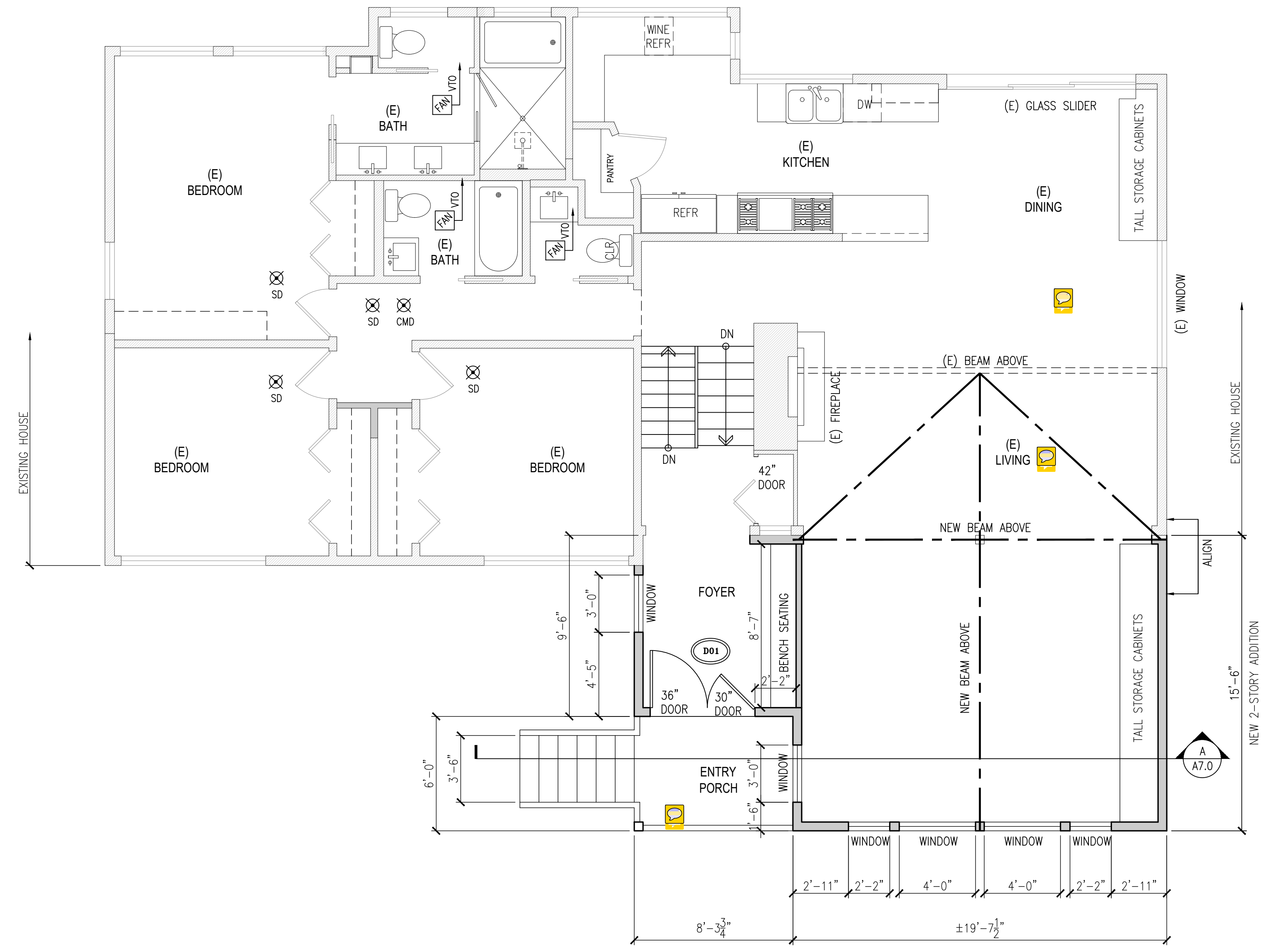
- A. ALL EXTERIOR WALLS TO BE 2x6 STUDS @ 16" OC.
- B. ALL INTERIOR WALLS TO BE 2x4 STUDS @ 16" OC.
- C. ALL FRAMING HARDWARE TO BE "SIMPSON" OR EQUAL.
- D. WALL SHEATHING TO BE 1/2" PLYWOOD WITH SPAN RATING OF 24/16.
- E. ALL HDR PER STRUCTURAL.

**REQUIREMENTS**

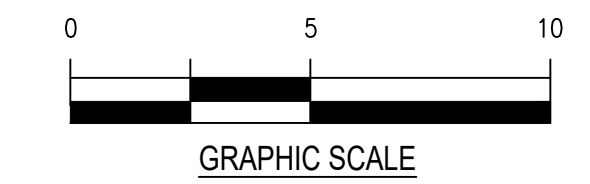
- 1. PROVIDE FIREBLOCKING PER SECTION R602.8.
- 2. INTERCONNECT SMOKE ALARMS AND PROVIDE PRIMARY & BACKUP POWER PER SECTION R313.

**LEGEND**

-  (E) WALL TO REMAIN
-  NEW 2x WOOD FRAME CONSTRUCTION
-  SMOKE DETECTOR (IRC - SECTION R314)
-  CARBON MONOXIDE DETECTOR (IRC - SECTION R315)
-  EXHAUST FANS: MIN. 50 CFM FOR BATHROOM AND LAUNDRY; MIN. 100 CFM FOR KITCHEN, WITH DIRECT VENT TO EXTERIOR



**A FIRST FLOOR ADDITION PLAN**  
 SCALE: 1/4"=1'-0"



Sterba Mironova  
 Residence  
 Addition  
 9811 SE 40th St  
 Mercer Island, WA 98040

**Permit Set**

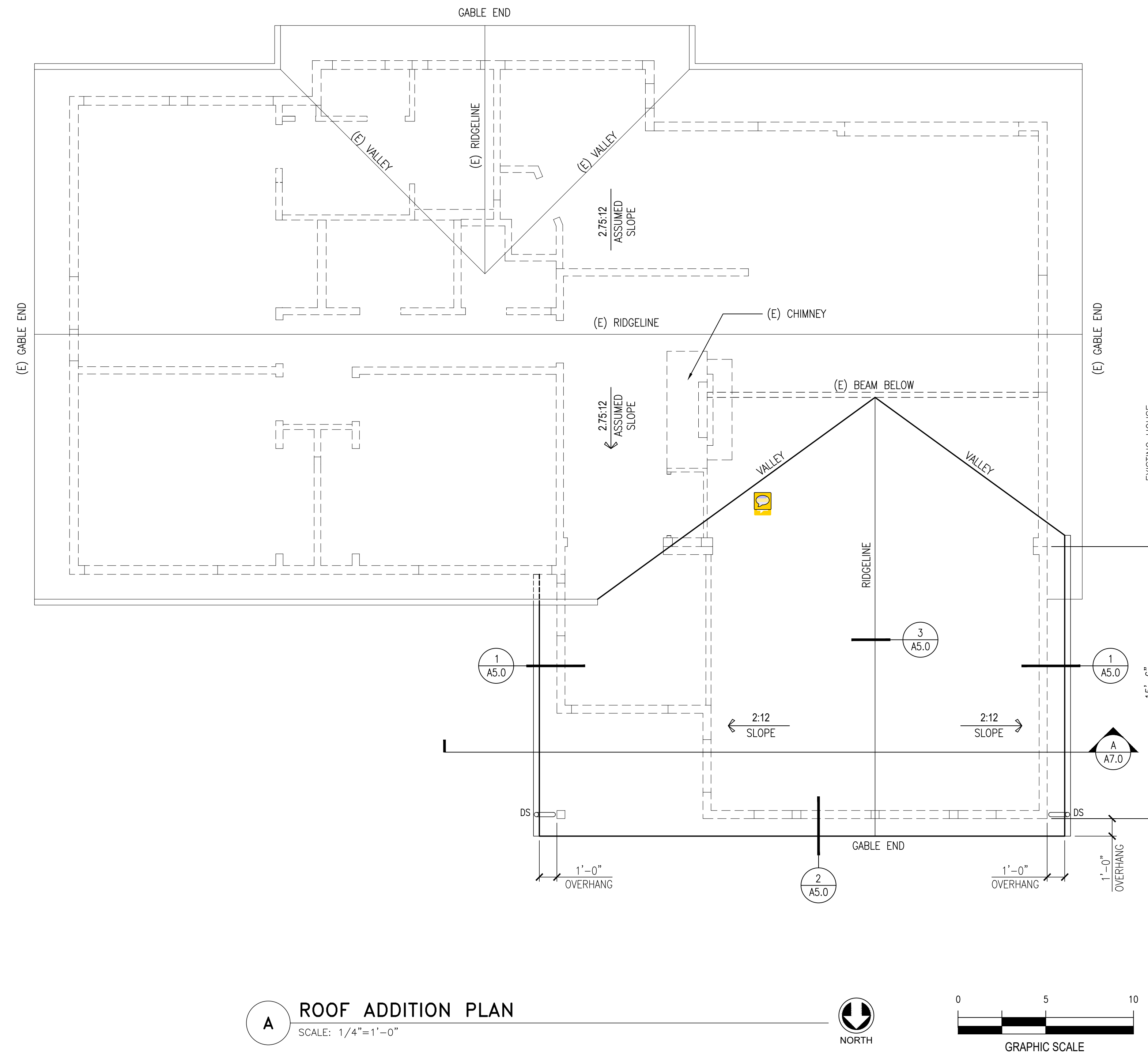
Date:	Description:
6/4/21	Permit Intake
Project No.:	2105.00
Drawn:	

**FIRST FLOOR  
 PLAN &  
 DETAILS**

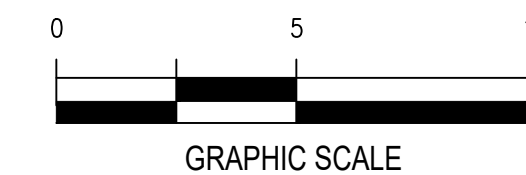
Sheet No:

**A4.0**





**A ROOF ADDITION PLAN**  
SCALE: 1/4"=1'-0"



**ROOF PLAN NOTES:**

**MATERIALS**

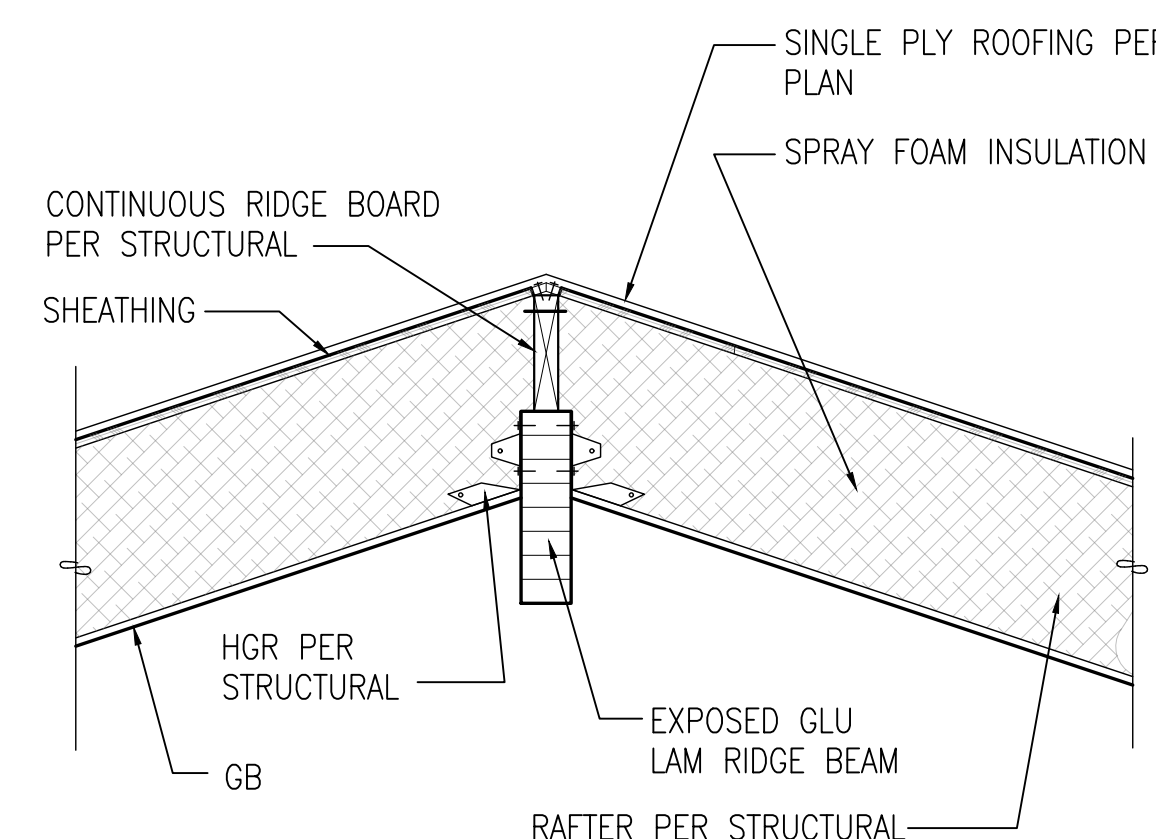
- A. NEW TPO SINGLE PLY MEMBRANE INSTALL PER MFR'S REQUIREMENTS.
- B. ROOF FRAMING – MEMBER SIZE AND SPACING PER PLAN & DETAILS.
- C. ROOF DECKING TO BE 1/2" EXTERIOR GRADE ROOF SHEATHING WITH 32/16 SPAN RATING.
- D. ALL FRAMING HARDWARE TO BE "SIMPSON" OR EQUAL.

**REQUIREMENTS**

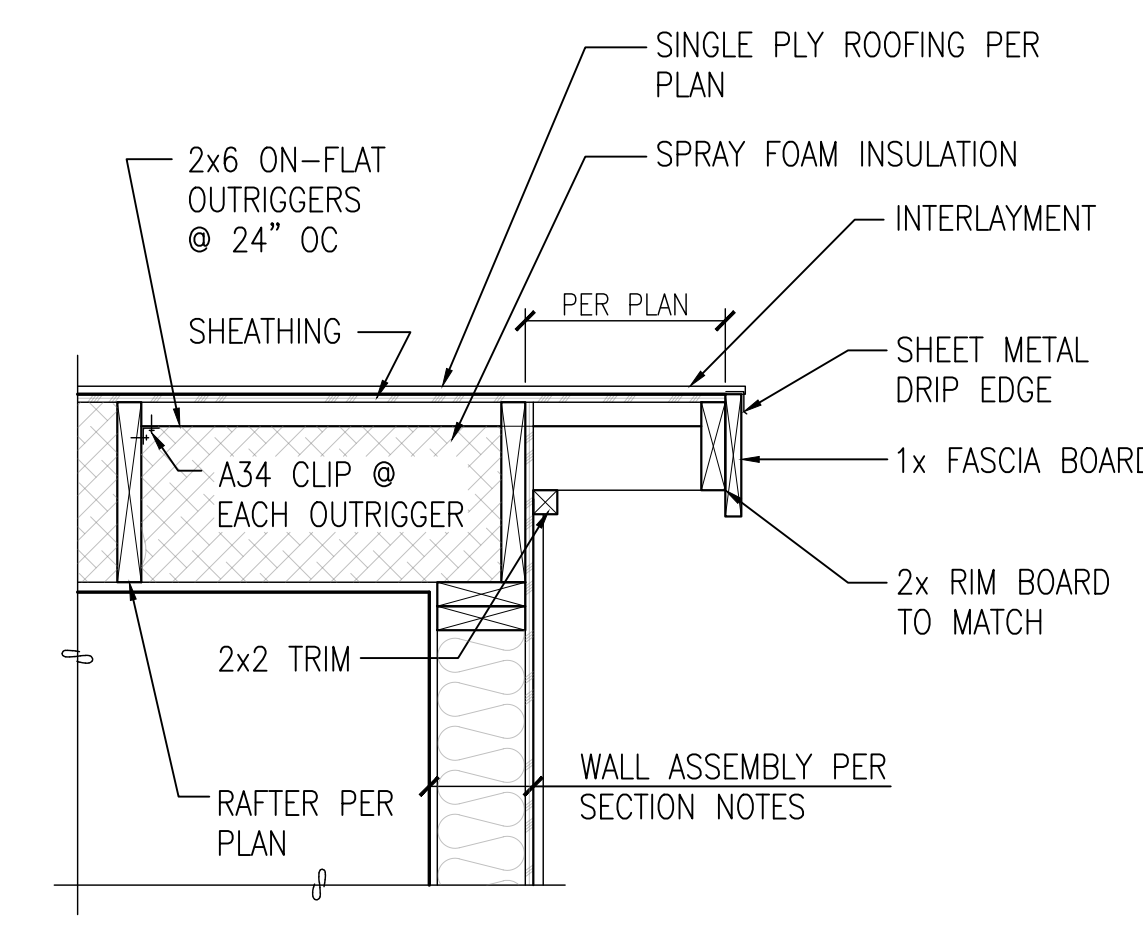
- 1. THERMOPLASTIC SINGLE-PLY ROOFING SHALL COMPLY WITH R905.13.
- 2. THERMOPLASTIC SINGLE-PLY MEMBRANE ROOFS SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE).
- 3. THERMOPLASTIC SINGLE-PLY ROOF COVERING SHALL COMPLY WITH ASTM D4434, D6754 OR D6878.
- 4. UNDERLAYMENT PER MANUFACTURER'S REQUIREMENTS.
- 5. SPRAYED POLYURETHANE FOAM ROOFING SHALL COMPLY WITH R905.14 AND MANUFACTURER'S REQUIREMENTS.
- 6. SPRAYED-APPLIED POLYURETHANE FOAM INSULATION SHALL COMPLY WITH ASTM C1029, TYPE III OR IV OR ASTM D7425.
- 7. PROVIDE FIREBLOCKING PER SECTION R602.8.

**ROOF VENTILATION CALCULATION:**

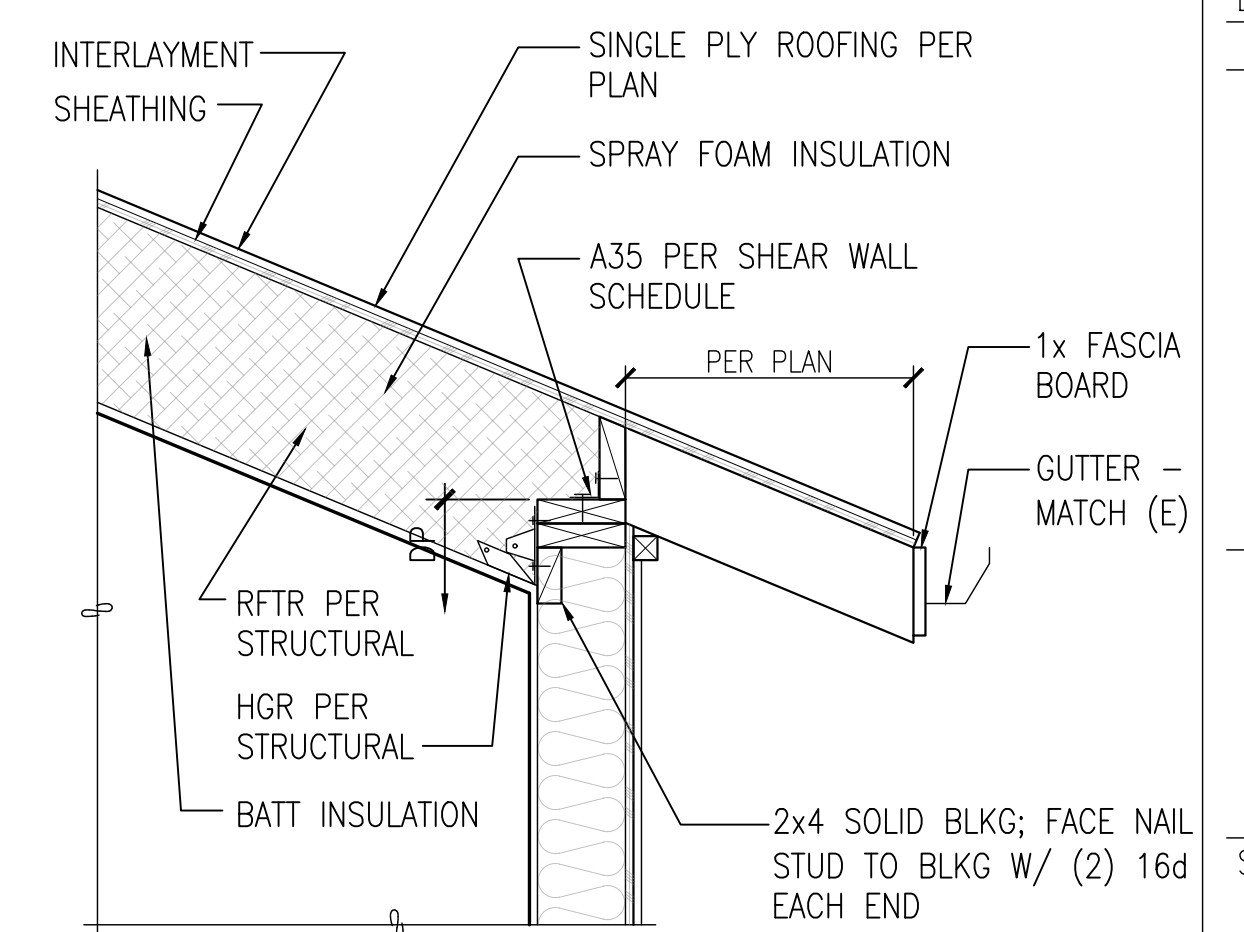
2018 INTERNATIONAL RESIDENTIAL CODE (SECTION R806 ROOF VENTILATION)  
SPRAYED POLYURETHANE FOAM WILL BE USED FOR ROOF INSULATION REQUIREMENT ON THIS PROJECT. ROOF VENTILATION NOT REQUIRED.



**3 DETAIL**  
SCALE: 1"=1'-0"



**2 DETAIL**  
SCALE: 1"=1'-0"



**1 DETAIL**  
SCALE: 1"=1'-0"

**Sterba Mironova Residence Addition**

9811 SE 40th St  
Mercer Island, WA 98040

**Permit Set**

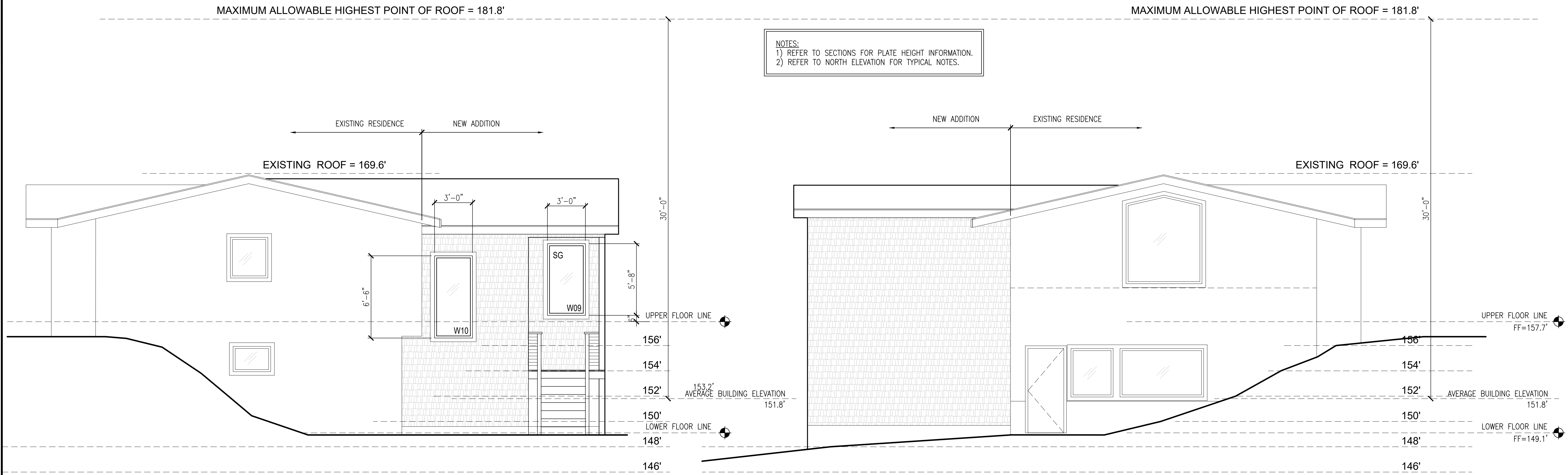
Date:	Description:
6/4/21	Permit Intake
Project No.:	2105.00
Drawn:	

**ROOF PLAN & DETAILS**

Sheet No:

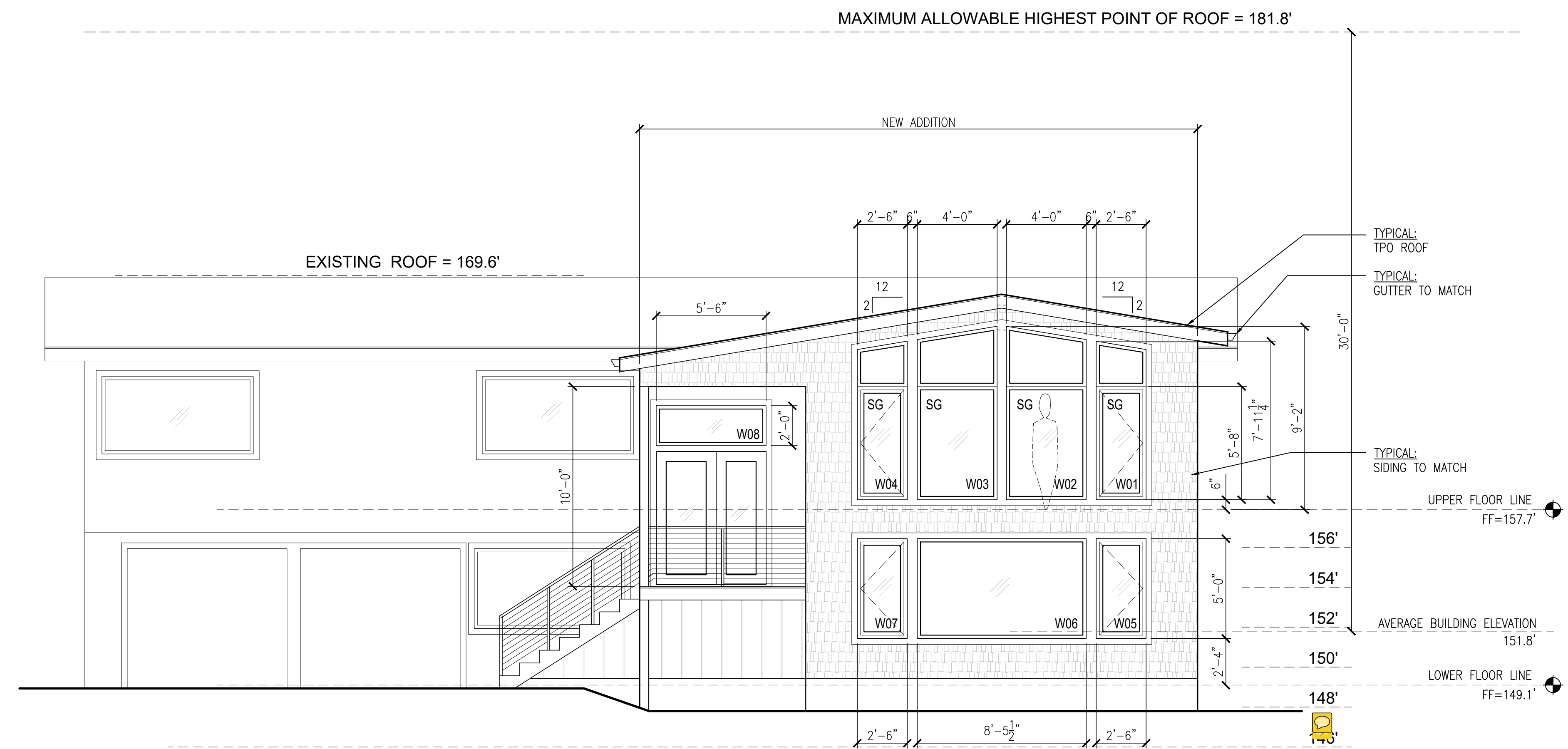
A5.0





**C EAST ELEVATION**  
 SCALE: 1/4"=1'-0"

**B WEST ELEVATION**  
 SCALE: 1/4"=1'-0"



**A NORTH ELEVATION**  
 SCALE: 1/4"=1'-0"

**Sterba Mironova  
 Residence  
 Addition**  
 9811 SE 40th St  
 Mercer Island, WA 98040

**Permit  
 Set**

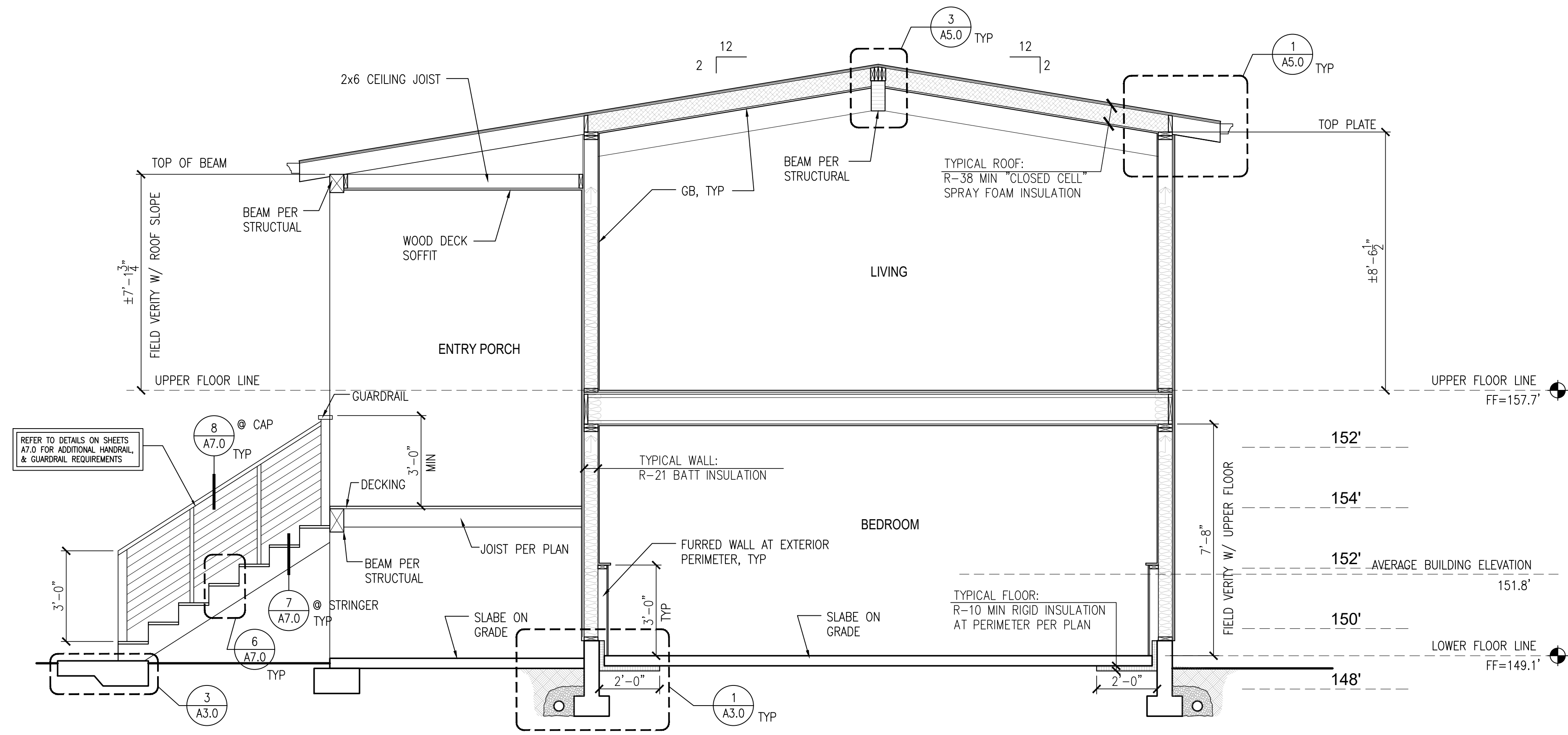
Date:	Description:
6/4/21	Permit Intake
Project No.:	2105.00
Drawn:	

**ELEVATIONS  
 &  
 DETAILS**

Sheet No:

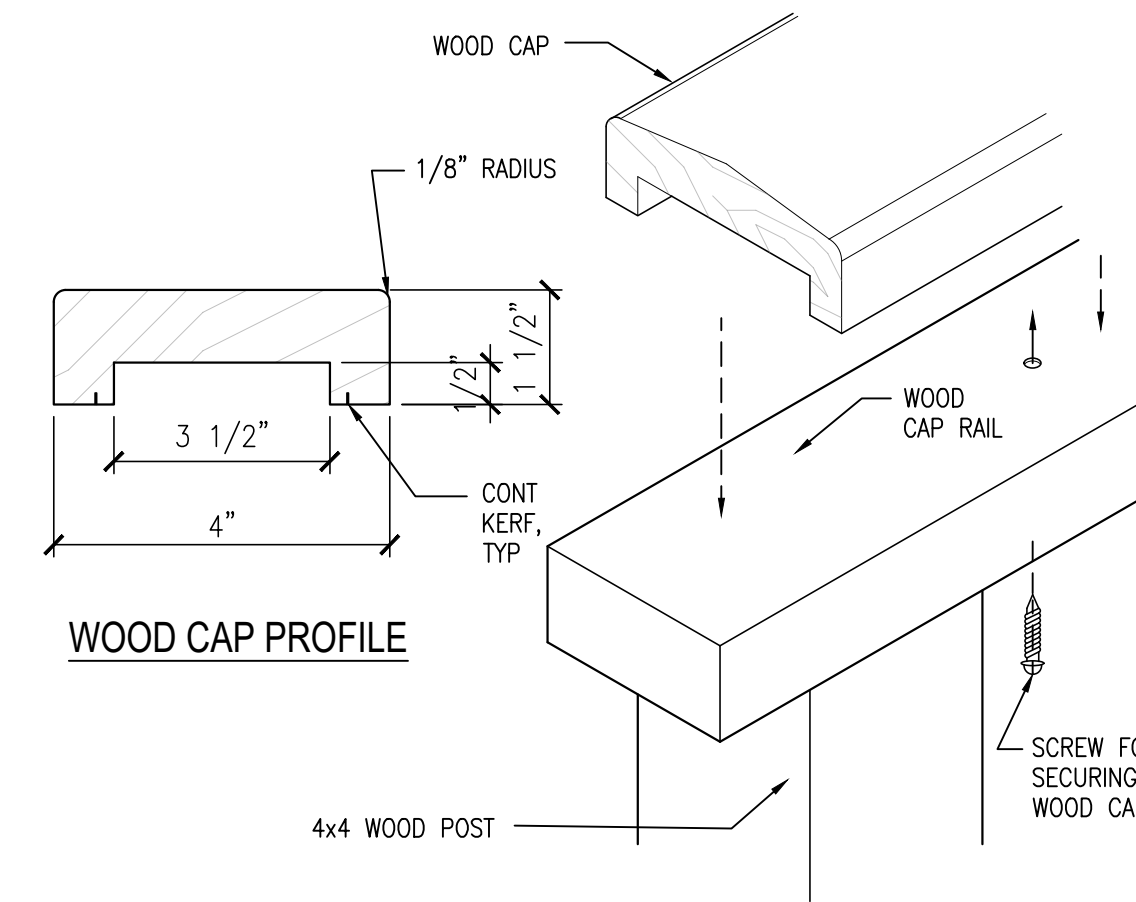
**A6.0**



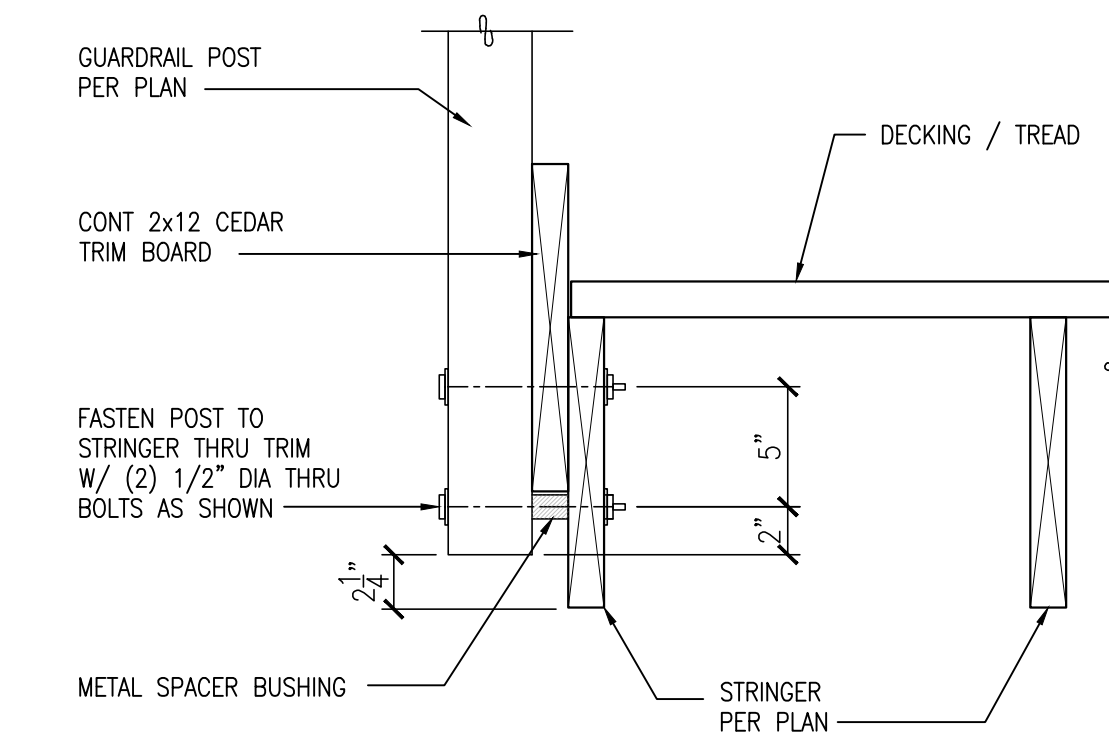


**A** DETAIL  
 SCALE: 3/4"=1'-0"

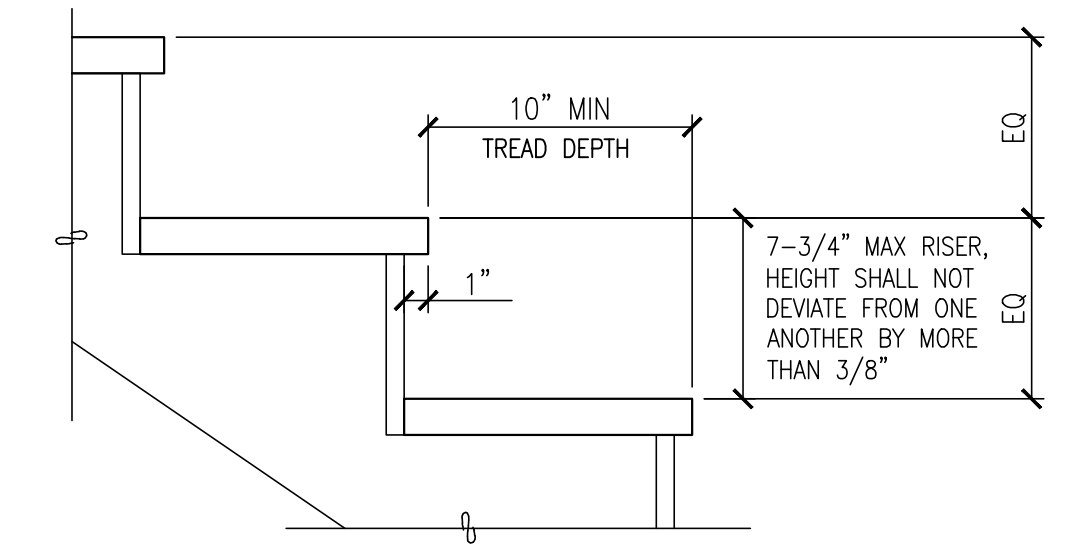
- SECTION NOTES:**
- TYPICAL ROOF CONSTRUCTION**
- THEMOPLASTIC SINGLE-PLY ROOFING (PER R905.13).
  - (1) LAYER OF UNDERLAYMENT (PER R905.2.2).
  - 1/2" EXTERIOR GRADE ROOF SHEATHING.
  - ROOF FRAMING PER PLAN.
  - R-38 SPRAY FOAM INSULATION AT RAFTERS.
  - 5/8" GB.
- TYPICAL WALL CONSTRUCTION**
- SIDING PER ELEVATIONS.
  - WEATHER-RESISTANT BARRIER MEMBRANE.
  - 1/2" EXTERIOR GRADE SHEATHING.
  - 2x STUDS @ 16" OC (SEE PLAN FOR SIZE).
  - R-21 BATT INSULATION.
  - 1/2" GB.
- TYPICAL FLOOR/CEILING CONSTRUCTION**
- FLOOR FINISHES PER OWNER.
  - 3/4" T&G PLYWOOD SUBFLOOR GLUED AND NAILED OVER FLOOR JOISTS.
  - FLOOR JOISTS PER PLAN.
  - 5/8" GB.
- TYPICAL FLOOR CONSTRUCTION**
- FLOOR FINISHES PER OWNER.
  - 4" CONCRETE SLAB ON GRADE.
  - 6 MIL VAPOR RETARDER.
  - 4" GRANULAR FILL.
  - COMPACT FILL.



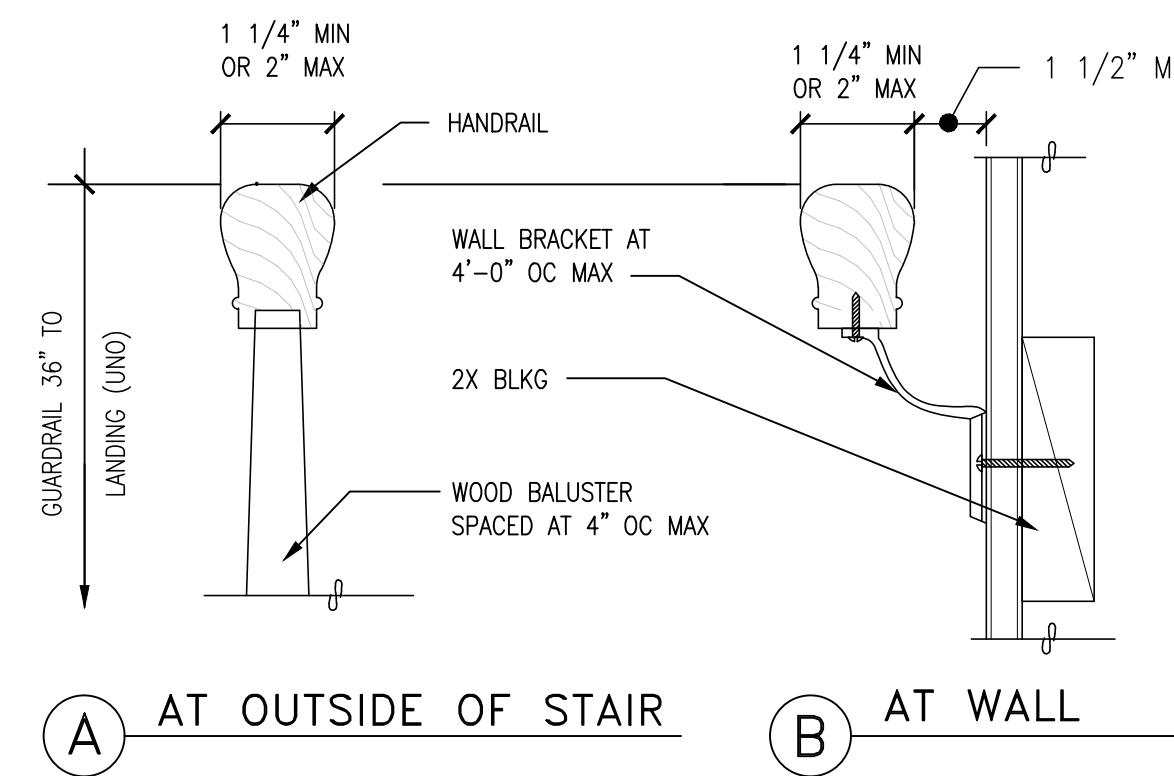
**8** DETAIL - CAP AND CAP SUPPORT  
 SCALE: NTS



**7** STRINGER DETAIL  
 SCALE: 1-1/2"=1'-0"



**6** TYPICAL TREAD/RISER DETAIL  
 SCALE: 1-1/2"=1'-0"



**3** TYPICAL HANDRAIL REQUIREMENT  
 SCALE: NTS

**HANDRAIL AND GUARDRAILS SHALL BE CONSTRUCTED AS FOLLOWS:**

GUARDRAILS SHALL NOT BE LESS THAN 36" IN HEIGHT. HANDRAILS SHALL NOT BE LESS THAN 34" OR MORE THAN 38" IN HEIGHT ABOVE THE STAIR NOSING.

OPEN RAILS SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH AS A 4" DIAMETER SPHERE CANNOT PASS THROUGH.

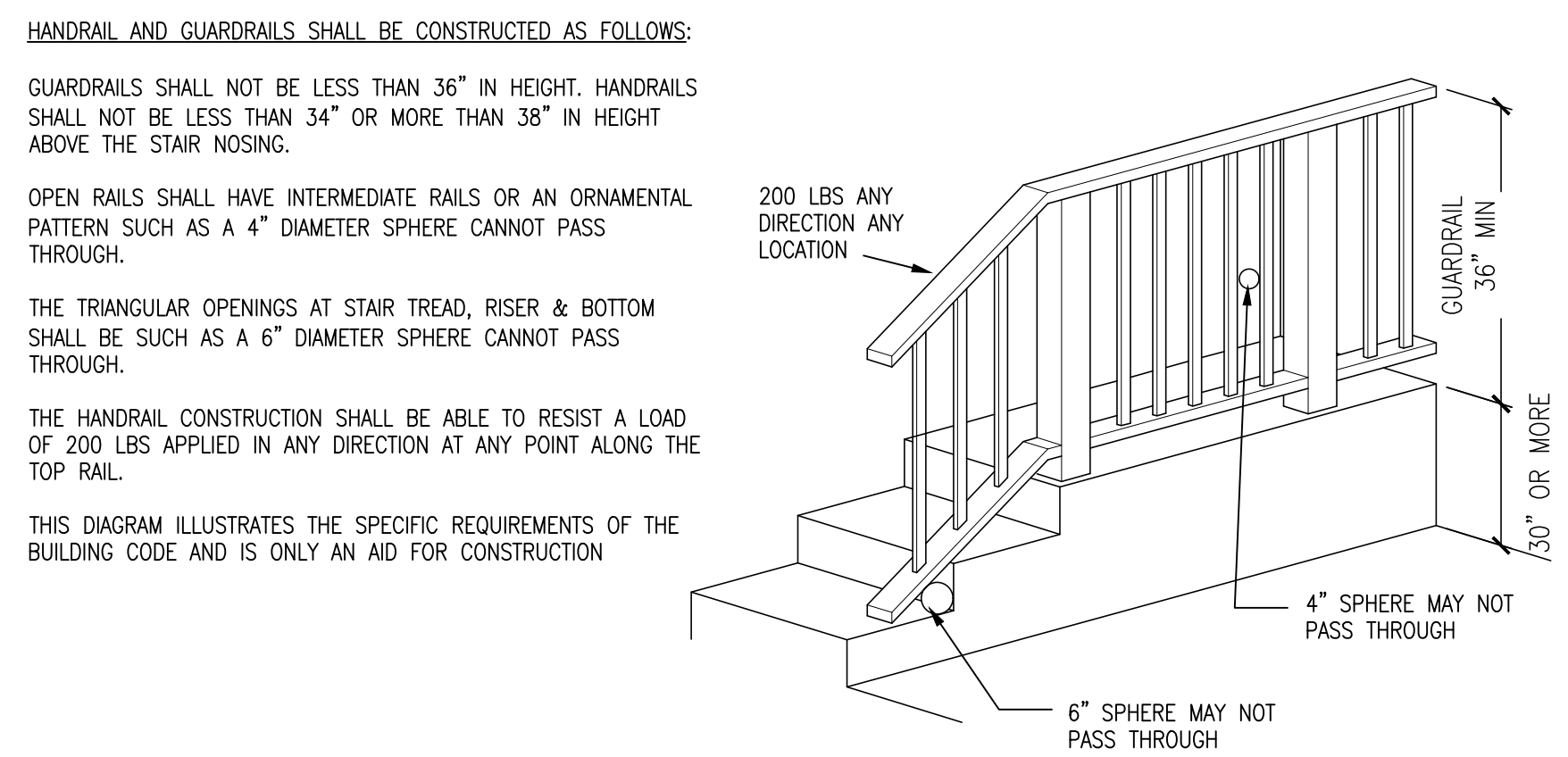
THE TRIANGULAR OPENINGS AT STAIR TREAD, RISER & BOTTOM SHALL BE SUCH AS A 6" DIAMETER SPHERE CANNOT PASS THROUGH.

THE HANDRAIL CONSTRUCTION SHALL BE ABLE TO RESIST A LOAD OF 200 LBS APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL.

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THE BUILDING CODE AND IS ONLY AN AID FOR CONSTRUCTION

**C** PLAN

NOTE: HANDRAIL & INSTALLATION SHALL MEET THE REQTS OF THE 2018 IRC. FOR SPECIFIC CODE REQTS FOR GUARD & HANDRAILS SEE DETAILS THIS PAGE



**2** TYPICAL HANDRAIL / GUARDRAIL DETAIL  
 SCALE: NTS

Sterba Mironova  
 Residence  
 Addition  
 9811 SE 40th St  
 Mercer Island, WA 98040

Permit  
 Set

Date:	Description:
6/4/21	Permit Intake
Project No.:	2105.00
Drawn:	

SECTION  
 &  
 DETAILS

Sheet No:  
 A7.0



# STRUCTURAL NOTES

**01000: GENERAL REQUIREMENTS**  
THE STRUCTURAL NOTES SUPPLEMENT THE PLANS AND SPECIFICATIONS. ANY DISCREPANCY FOUND BETWEEN THE DRAWINGS, NOTES, SPECIFICATIONS, SITE CONDITIONS, AND ARCHITECTURAL PLANS SHALL BE REPORTED TO THE ARCHITECT WHO SHALL CORRECT THE DISCREPANCY IN WRITING. ANY WORK COMPLETED AFTER DISCOVERY OF THE DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK. REFER TO ARCHITECTURAL PLANS FOR OPENINGS, ARCHITECTURAL TREATMENTS, AND DIMENSIONS NOT SHOWN. CONSULT MECHANICAL PLANS FOR DUCTS AND PIPES ETC. NOT SHOWN.

THE CONTRACTOR SHALL PROVIDE BRACING AND SUPPORT REQUIRED FOR TEMPORARY CONSTRUCTION LOADS AND FOR STRUCTURAL COMPONENTS AS REQUIRED DURING ERECTION. BACKFILL BEHIND WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE EXCAVATION, SHORING, AND OTHER WORK WITH ALL UTILITIES AND ADJACENT PROPERTIES. CALL THE UTILITY LOCATE SERVICE PRIOR TO ANY WORK AT 1-800-424-5555.

01100: CODE REQUIREMENTS  
ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AS ADOPTED BY THE CITY OF MERCER ISLAND.

01200: DESIGN LOADS (RE: S9.1)

LIVE LOADS  
ROOF LIVE 20 PSF  
FLOORS (RESIDENTIAL) 40 PSF  
DECK 60 PSF

SNOW LOAD DESIGN DATA:  
Pg = 20 PSF, Pf = 14 PSF, Cg = 1.0, Is = 1.0, Ct = 1.0  
ROOF RAIN-ON-SNOW 25 PSF

AUXILIARY LOAD:  
ROOF SOLAR-READY 5 PSF (ENTIRE ROOF)

WIND DESIGN DATA:  
BASIC WIND SPEED: 110 MPH (3-SECOND GUST)  
WIND IMPORTANCE FACTOR: Iw = 1.0  
WIND EXPOSURE: EXPOSURE C  
TOPOGRAPHICAL FACTOR: Kzt = 1.3  
INTERNAL PRESSURE COEFFICIENT: GCpi = +/- 0.18  
COMPONENT/CLADDING WIND PRESSURE: P(C) = 42 PSF\*Kzt (ULT)

EARTHQUAKE DESIGN DATA (BOTH BUILDINGS):  
SEISMIC IMPORTANCE FACTOR: Ie = 1.0  
SPECTRAL RESPONSE ACCELERATIONS: Sa = 1.402, S1 = 0.488  
SITE CLASS: SITE CLASS D  
SPECTRAL RESPONSE COEFFICIENTS: SDS = 1.122, SD1 = NULL  
SEISMIC DESIGN CATEGORY: SEISMIC DESIGN CATEGORY D  
BASIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM  
RESPONSE MODIFICATION FACTOR: R = 6.5 (LIGHT FRAME WALLS)  
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

**01300: FOUNDATIONS**  
ASSUMED 1500 PSF ALLOWABLE SOIL BEARING PRESSURE. FILLS TO BE 95% MODIFIED PROCTOR PER ASTM D-1557. ALL NEW EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 18 INCHES BELOW LOWEST ADJACENT GRADE. PROVIDE A MINIMUM OF 8" FROM EXISTING GRADE TO WOOD SIDING OR PLATES THAT DO NOT HAVE A NATURAL RESISTANCE TO DECAY. ALL FOUNDATIONS SHALL BE FOUNDED ON COMPETENT NATIVE MATERIAL.

FOUNDATIONS HAVE BEEN DESIGNED WITH THE FOLLOWING PARAMETERS:  
ACTIVE EARTH PRESSURE (YIELDING) 35 PCF  
ACTIVE EARTH PRESSURE (AT-REST) 55 PCF  
PASSIVE EARTH PRESSURE 250 PCF  
COEFFICIENT OF FRICTION 0.35  
SOIL PROFILE SITE CLASS D

NO FOOTINGS SHALL BE FOUNDED ON OR ABOVE LOOSE, ORGANIC OR EXISTING FILL SOILS. THE SAND SUBGRADE SHALL BE COMPACTED OR CLEANED OF LOOSE OR DISTURBED SOIL.

**01330: SHOP DRAWING SUBMITTAL PROCESS**  
SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION. IF SHOP DRAWINGS DIFFER FROM THE APPROVED DESIGN DRAWINGS, NEW DESIGN DRAWINGS BEARING THE SEAL AND SIGNATURE OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER SHALL BE SUBMITTED ALONG WITH THE SHOP DRAWINGS TO THE APPROPRIATE JURISDICTION FOR APPROVAL PRIOR TO FABRICATION.

SHOP DRAWINGS SHALL BE REQUIRED FOR THE FOLLOWING:  
1. PREFABRICATED WOOD I-JOIST

CALCULATIONS BEARING THE SEAL AND SIGNATURE OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER SHALL BE SUBMITTED ALONG WITH THE SHOP DRAWINGS FOR PREFABRICATED PLATED WOOD TRUSSES.

**01400: INSPECTIONS AND SPECIAL INSPECTIONS**  
THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT.

SPECIAL INSPECTIONS ARE NOT REQUIRED FOR GROUP R-3 OCCUPANCIES UNLESS OTHERWISE REQUIRED BY THE BUILDING OFFICIAL.

**01401: STRUCTURAL OBSERVATION**  
STRUCTURAL OBSERVATION IS NOT REQUIRED.

**01700: EXECUTION REQUIREMENTS**  
INSTALLATION OF ALL STRUCTURAL COMPONENTS SHALL BE AS REQUIRED PER ALL LOCAL CODES.

**02000: SITE CONSTRUCTION**  
ALL SITE CONSTRUCTION SHALL BE CONSISTENT WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS AS NOTED IN THE GEOTECHNICAL ENGINEERING REPORT (SEE SECTION 01300) AND IN SUBSEQUENT DIRECTIVES.

**02260: EXCAVATION SUPPORT AND PROTECTION**  
EXCAVATION FOR FOUNDATIONS SHALL BE PER PLAN DOWN TO UNDISTURBED NATIVE MATERIAL PER THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH LEAN CONCRETE OR PER GEOTECHNICAL RECOMMENDATIONS AT THE CONTRACTOR'S EXPENSE.

EXCAVATION SLOPES SHALL BE SAFE AND SHALL NOT BE GREATER THAN THE LIMITS SPECIFIED BY LOCAL, STATE, AND NATIONAL SAFETY REGULATIONS.

INSTALLATION OF CONSTRUCTION SHORING, IF REQUIRED, SHALL BE PER THE SHORING DRAWINGS, NOTES, AND SPECIFICATIONS.

**02300: BACKFILL AND COMPACTION**  
BACKFILL SHALL NOT BE PLACED UNTIL THE REMOVAL OF FORMWORK AND OF ANY DEBRIS. BACKFILL BEHIND ALL WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED. ALL BACKFILL MATERIAL AND PLACEMENT PROCEDURES SHALL BE CONSISTENT WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS.

**02832: SEGMENTAL RETAINING WALLS**  
SEGMENTAL RETAINING WALLS AND MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS SHALL BE DESIGNED BY OTHERS.

**03000: CONCRETE**  
CONCRETE CONSTRUCTION SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE STANDARD ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

CEMENT AND CONCRETE SHALL CONFORM TO IBC SECTION 1903. ADMIXTURES SHALL BE APPROVED BY THE ENGINEER OF RECORD AND SHALL COMPLY WITH ACI 318 SECTION 3.6. CONCRETE EXPOSED TO FREEZING AND THAWING SHALL HAVE AN AIR ENTRAINING ADMIXTURE CONFORMING TO IBC SECTION 1904.2. THE USE OF WATER SOLUBLE CHLORIDE ION SHALL NOT BE USED.

THE CONTRACTOR SHALL SUBMIT MIX DESIGNS TO ENGINEER OF RECORD FOR APPROVAL FOUR WEEKS PRIOR TO PLACING CONCRETE. MIX DESIGNS SHALL BE REVIEWED FOR CONFORMANCE TO IBC SECTIONS 1904 AND 1905.

CONCRETE HAS BEEN DESIGNED FOR  $f_c=2500$  PSI. FOR QUALITY ASSURANCE, CONCRETE MIX DESIGNS SHALL MEET THE FOLLOWING REQUIREMENTS:

28 DAY STRENGTH $f_c$ (PSI) RATIO	MAX. W/C	AIR ENTRAINMENT (%)	SPECIAL INSPECTION	LOCATION
3000	0.45	4±1	0±1	NO FOOTINGS
3000	0.45	4±1	5±1	NO FOUNDATION WALLS
3000	0.45	4±1	5±1	NO SLAB ON GRADE, PATIOS
3000	0.45	4±1	5±1	NO CURBS, WALKS, DRIVES

ONE COMPRESSION TEST MINIMUM SHALL BE COMPILED FOR EVERY 150 CUBIC YARDS OR 5000 SQUARE FEET OF SURFACE AREA FOR EACH MIX DESIGN PLACED EACH DAY. A TEST SHALL BE THE AVERAGE STRENGTH OF TWO CYLINDERS MADE FROM THE SAME SAMPLE AND TESTED AT THE SPECIFIED AGE. ADDITIONAL CYLINDERS MAY BE MADE FOR INFORMATION REGARDING POST TENSIONING, FORM REMOVAL, STRENGTH DEVELOPMENT, OR OTHER PURPOSES. CONCRETE SHALL BE ACCEPTABLE IF:  
1. NO TEST FALLS 500 PSI BELOW THE SPECIFIED STRENGTH  
2. THE AVERAGE OF ALL SETS OF 3 CONSECUTIVE TESTS DOES NOT FALL BELOW THE SPECIFIED STRENGTH.

CONCRETE NOT MEETING THE ABOVE CRITERIA SHALL BE SUBJECT TO FURTHER TESTING AT NO ADDITIONAL EXPENSE TO THE OWNER.

RESHORING, WHERE REQUIRED, SHALL CONFORM TO ACI 301 SECTION 4.6. SUBMIT PROPOSED RESHORING PLANS TO THE ENGINEER OF RECORD FOR REVIEW.

CHAMFER ALL EXPOSED CORNERS PER THE ARCHITECTURAL PLANS OR 3/4 INCH IF NOT SPECIFIED BY THE ARCHITECT.

REFER TO "01300" FOR APPROVAL PRIOR TO FORMWORK.

**03100: REINFORCING STEEL**  
REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL BE PER ACI 318. REINFORCING STEEL SHALL MEET THE FOLLOWING REQUIREMENTS:

ASTM A-615 DEFORMED BARS GRADE 40 (fy=40 KSI) FOR #3 BARS ONLY  
ASTM A-615 DEFORMED BARS GRADE 60 (fy=60 KSI) FOR #4 BARS AND LARGER  
ASTM A-706 DEFORMED BARS GRADE 60 (fy=60 KSI) FOR ALL WELDABLE BARS  
ASTM A-185 SMOOTH BAR (fy=60 KSI) FOR WELDED WIRE FABRIC

REINFORCING FOR SLABS ON GRADE SHALL BE 12X12 W5X5 WELDED WIRE FABRIC OR FIBER MESH UNLESS NOTED OTHERWISE. PROVIDE LAP SPLICES PER THE LAP SPLICE SCHEDULE ON SHEET S6.1. REINFORCING STEEL AT ALL WALLS, SLABS, AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS ELSE CORNER BARS SHALL BE PROVIDED.

COVER REQUIREMENTS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST EARTH  
ALL BAR SIZES . . . . . 3"  
FORMED SURFACE EXPOSED TO EARTH OR WEATHER  
#6 AND LARGER . . . . . 2"  
#5 AND SMALLER . . . . . 1 1/2"  
CONCRETE NOT EXPOSED TO EARTH OR WEATHER  
WALLS AND JOISTS  
#14 AND #18 BARS . . . . . 1 1/2"  
#11 BARS AND SMALLER . . . . . 3/4"  
SLABS AND JOISTS  
#14 AND #18 BARS . . . . . 1 1/2"  
#11 BARS AND SMALLER . . . . . 1"  
BEAMS, COLUMNS  
PRIMARY REINFORCEMENT . . . . . 1 1/2"  
TIES, STIRRUPS, AND SPIRALS . . . . . 1 1/2"

REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SECURED IN PLACE PRIOR TO CONCRETE PLACEMENT. REINFORCING STEEL SHALL NOT BE FIELD BENT EXCEPT AS NOTED IN THE DESIGN DRAWINGS. WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD EXCEPT AS NOTED ON THE DESIGN DRAWINGS.

**06071: PRESERVATIVE TREATED WOOD PRODUCTS**  
PRESERVATIVE TREATED WOOD SHALL BE REQUIRED FOR:

ALL WOOD THAT FORMS THE STRUCTURAL SUPPORT OF THE BUILDING, BALCONIES PORCHES, OR SIMILAR PERMANENT BUILDING APPURTENANCES THAT ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A ROOF, EAVE, OVERHANG OR OTHER COVERING TO PREVENT MOISTURE OR WATER ACCUMULATION AT THE SURFACE OR AT JOINTS BETWEEN MEMBERS.

ALL WOOD INSTALLED ABOVE GROUND AND RESTING ON AN EXTERIOR CONCRETE OR MASONRY FOUNDATION WALL LESS THAN 8 INCHES FROM EXPOSED EARTH.

POSTS OR COLUMNS SUPPORTING PERMANENT STRUCTURES AND SUPPORTED BY A CONCRETE SLAB OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH. EXCEPT:

- IF LOCATED IN BASEMENTS ON A CONCRETE PIER OR METAL PEDESTAL 1 INCH ABOVE THE SLAB AND SEPARATED THEREFROM BY AN IMPERVIOUS MOISTURE BARRIER.
- IF IN AN ENCLOSED CRAWL SPACE OR AN UNEXCAVATED AREA WITHIN THE BUILDING PERIPHERY AND SUPPORTED BY A CONCRETE PIER OR PEDESTAL MORE THAN 8 INCHES FROM EXPOSED GROUND AND SEPARATED THEREFROM BY AN IMPERVIOUS MOISTURE BARRIER.
- SLEEPERS AND SILLS ON A CONCRETE SLAB ON GRADE THAT DOES NOT HAVE AN IMPERVIOUS MOISTURE BARRIER SEPARATION WITH EXPOSED EARTH.
- LEDGERS AND FURRING ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR CONCRETE OR MASONRY WALLS BELOW GRADE.

PRESERVATIVE TREATMENT SHALL BE PER AMERICAN WOOD PRESERVERS' ASSOCIATION (AWPA) SPECIFICATION C2 AND C9 OR APPLICABLE STANDARDS.

ALL FASTENERS (NAILS, BOLTS, MASAS, ANCHORS, PLATES, HANGERS, ETC.) IN CONTACT WITH TREATED LUMBER SHALL BE CORROSION RESISTANT G-185 HOT DIPPED GALVANIZED PER ASTM A153 OR STAINLESS STEEL.

**06100: ROUGH FRAMING**  
SAWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU (WCLIB) "GRADING AND DRESSING RULES" NO. 17 LATEST EDITION. SAWN LUMBER SHALL BE S4S AND SURFACED DRIED, 19 PERCENT MAXIMUM MOISTURE CONTENT. PROTECT LUMBER FROM WEATHER AND PROVIDE FURTHER DRYING OF ASSEMBLED FRAMING TO MINIMIZE WOOD SHRINKAGE POTENTIAL. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED U.N.O. PER PLAN. LUMBER SPECIES, GRADE, AND PROPERTIES FOR EACH USE/LOCATION SHALL BE AS FOLLOWS U.N.O. PER PLAN/SCHEDULE:

SIZE	SPECIES	GRADE	Fb (Psi)	Fv (Psi)	Fcp (Psi)	Fc (Psi)	E (Psi)
2X,4X	DOUGLAS FIR-LARCH	NO. 2	900	180	625	1350	1.668
6X	DOUGLAS FIR-LARCH	NO. 1	1200	170	625	1000	1.668

**06101: STRUCTURAL FINGER JOINTED LUMBER**  
STRUCTURAL FINGER JOINTED LUMBER SHALL BE PERMITTED TO BE USED INTERCHANGEABLY WITH SAWN LUMBER MEMBERS OF THE SAME SPECIES AND GRADE. STRUCTURAL FINGER JOINTED LUMBER SHALL BE GRADED UNDER AMERICAN LUMBER STANDARD COMMITTEE "PRODUCT STANDARD PS 20-99" LUMBER CLASSIFIED AS STUD USE ONLY SHALL BE LIMITED TO VERTICAL APPLICATIONS ONLY. LUMBER WITH CERTIFIED EXTERIOR JOINTS IS NOT RESTRICTED TO ANY TYPE OF LOADING.

**06102: FRAMING NOTES**  
FRAMING CONNECTORS, ACCESSORIES, AND FASTENERS AS NOTED IN THE PLANS AND DETAILS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE. EQUIVALENT HARDWARE MAY BE USED WITH PRIOR APPROVAL BY ENGINEER OF RECORD. INSTALL ALL HARDWARE PER MANUFACTURERS' SPECIFICATIONS. WHERE STRAPS CONNECT TWO MEMBERS TOGETHER, PLACE HALF OF THE REQUIRED FASTENERS INTO EACH MEMBER. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. SEE SECTION 06071 FOR FASTENER REQUIREMENTS AT TREATED LUMBER. TYPICAL NAILING NOT SHOWN PER PLAN, DETAIL, OR SCHEDULE SHALL CONFORM TO FASTENING SCHEDULE PER IBC TABLE 2304.10.1 OR TO THE FASTENING SCHEDULE ON SHEET S1.0.

NAILS SHALL BE COMMON UNLESS NOTED OTHERWISE COMMON NAIL DIMENSIONS ARE AS FOLLOWS:

NAIL SIZE	DIAMETER	LENGTH
8d	0.131"	2.5"
10d	0.148"	3.0"
12d	0.148"	3.25"
16d	0.162"	3.5"

UNLESS NOTED OTHERWISE PER SHEARWALL SCHEDULE OR PLANS, MASA AT SILL PLATES SHALL BE PLACED AT 48" O.C. PER 5/S1.2. THERE SHALL BE A MINIMUM OF MASA PER SILL PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES NOR LESS THAN 8 INCHES FROM EACH END OF THE PIECE.

**06103: JOIST AND BEAM HANGERS**  
JOIST AND BEAM HANGERS AS NOTED IN THE PLANS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE. EQUIVALENT HARDWARE MAY BE USED WITH PRIOR APPROVAL BY ENGINEER OF RECORD. JOIST AND BEAM HANGERS SHALL BE INSTALLED PER MANUFACTURERS' SPECIFICATIONS AND SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE PER PLANS OR DETAILS:

MEMBER SIZE	HANGER
SAWN LUMBER	"LUS" SERIES TO MATCH LUMBER SIZE
MANUFACTURED WOOD "I" JOIST	"IUS" SERIES TO MATCH "I" JOIST SIZE
1.75" WIDE PSL OR LVL BEAM	"LBV" SERIES TO MATCH DEPTH
2.69" WIDE PSL BEAM	"LBV" SERIES TO MATCH DEPTH
3.5" WIDE PSL OR LVL BEAM	"GLTV" SERIES TO MATCH DEPTH
5.25" WIDE PSL OR LVL BEAM	"GLTV" SERIES TO MATCH DEPTH
7" WIDE PSL BEAM	"HGLTV" SERIES TO MATCH DEPTH

**06104: SHRINKAGE OF WOOD FRAMING**  
SHRINKAGE IN WOOD FRAMING IS DUE TO LOSS OF MOISTURE CONTENT AND TO COMPRESSION OF ASSEMBLES OF WOOD COMPONENTS. PLUMBING, ELECTRICAL, AND MECHANICAL SYSTEMS AS WELL AS EXTERIOR FINISHES SHALL BE DESIGNED AND BUILT TO ACCOMMODATE 3/8 INCH PER FLOOR WOOD SHRINKAGE. THE USE OF KILN DRIED LUMBER AND PROVIDING A DRYING PROCESS TO THE FRAMING MEMBERS PRIOR TO APPLICATION OF FINISHES WILL HELP CONTROL BUT WILL NOT ELIMINATE SHRINKAGE.

**06160: WOOD SHEATHING**  
WOOD STRUCTURAL PANELS (WSP) SHALL HAVE APA GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. WOOD SHEATHING PANELS SHALL BE C-D INT APA WITH EXTERIOR GLUE (CDX). ORIENTED STRAND BOARD (OSB) PANELS SHALL BE EXPOSURE 1. PANELS SHALL HAVE THE FOLLOWING THICKNESS, SPAN RATING, AND FASTENING UNLESS NOTED OTHERWISE PER PLAN:

ROOF:	EDGE NAILS	FIELD NAILS
APA 40-20 C-D W/EXTERIOR GLUE	10d AT 6"	10d AT 12"
ROOF DECKS		
STURD-I-FLOOR OSB 48/24 T&G	10d AT 6"	10d AT 12"
SHEARWALL:		
C-D W/EXTERIOR GLUE, U.N.O.	RE: SCHEDULE SHEET S1.2	

ALL ROOF AND FLOOR SHEATHING PANELS SHALL BE INSTALLED FACE GRAIN PERPENDICULAR TO SUPPORTS AND IN A STAGGERED PATTERN UNLESS NOTED OTHERWISE PER PLAN. BLOCKING AT INTERMEDIATE FLOOR AND ROOF SHEATHING JOINTS SHALL NOT BE REQUIRED UNLESS NOTED OTHERWISE PER PLAN. SHEARWALL SHEATHING SHALL BE BLOCKED AT ALL EDGES WITH 2X OR 3X FRAMING PER SHEARWALL SCHEDULE. WHERE FRT ROOF PLY IS REQUIRED AT PARTY WALL STRENGTH PER MFR. SHALL BE EQUAL OR BETTER THAN 24/16 APA-RATED SPAN.

**06165: STRUCTURAL GLUED LAMINATED TIMBER**  
GLUED LAMINATED MEMBERS SHALL HAVE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) IDENTIFICATION MARK. EXPOSED MEMBERS SHALL RECEIVE ONE COAT OF END SEALER APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. SHOP DRAWINGS SHALL BE SUBMITTED PER THE REQUIREMENTS OF SECTION 01330. DESIGN MATERIAL PROPERTIES SHALL BE AS FOLLOWS:

USE	COMBINATION	SPECIES	LAYOUT
SIMPLE SPAN BEAM	24F-V4	DF/DF	STANDARD
CONTINUOUS BEAM	24F-V8	DF/DF	BALANCED
CANTILEVER BEAM	24F-V8	DF/DF	BALANCED

UNEXPOSED GLUED LAMINATED TIMBER SHALL BE INDUSTRIAL GRADE. TYPICAL, UNLESS NOTED OTHERWISE. EXPOSED GLUED LAMINATED TIMBER SHALL BE APPEARANCE CLASS PER ARCHITECT.

**06190: MANUFACTURED WOOD BEAMS**  
MANUFACTURED/ENGINEERED WOOD BEAMS SHALL BE THE SIZE AND TYPE SHOWN ON THE DRAWINGS AS MANUFACTURED BY TRUS-JOIST OR APPROVED EQUIVALENT STORAGE, ERECTION, AND INSTALLATION SHALL BE PER MANUFACTURER SPECIFICATIONS. MICROLAM AND PARALLAM MEMBERS SHALL NOT HAVE NOTCHES OR DRILLED HOLES WITHOUT PRIOR ENGINEER OF RECORD APPROVAL. SHOP DRAWINGS SHALL BE SUBMITTED PER THE REQUIREMENTS OF SECTION 01330. DESIGN MATERIAL PROPERTIES SHALL BE AS FOLLOWS:

MEMBER	E	Fb	Fcp	Fv	E MIN.
LVL (MICROLAM)	1.96E	2600	750	285	965,710
PSL (PARALLAM)	2.06E	2900	750	290	1,016,535
1.55E LSL (TIMBERSTRAND)	1.556E	2325	800	310	787,815
LSL RM (TIMBERSTRAND)	1.36E	1700	680	400	660,750

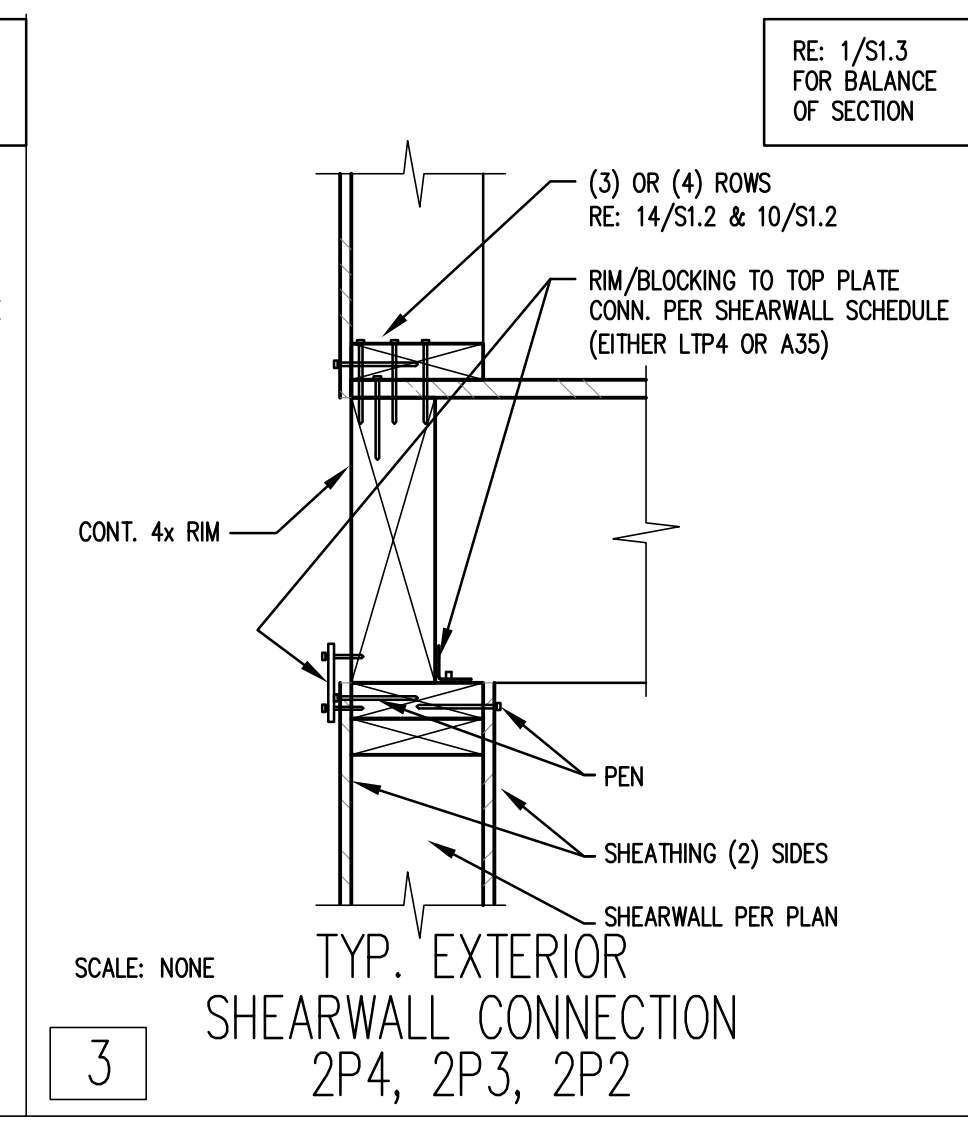
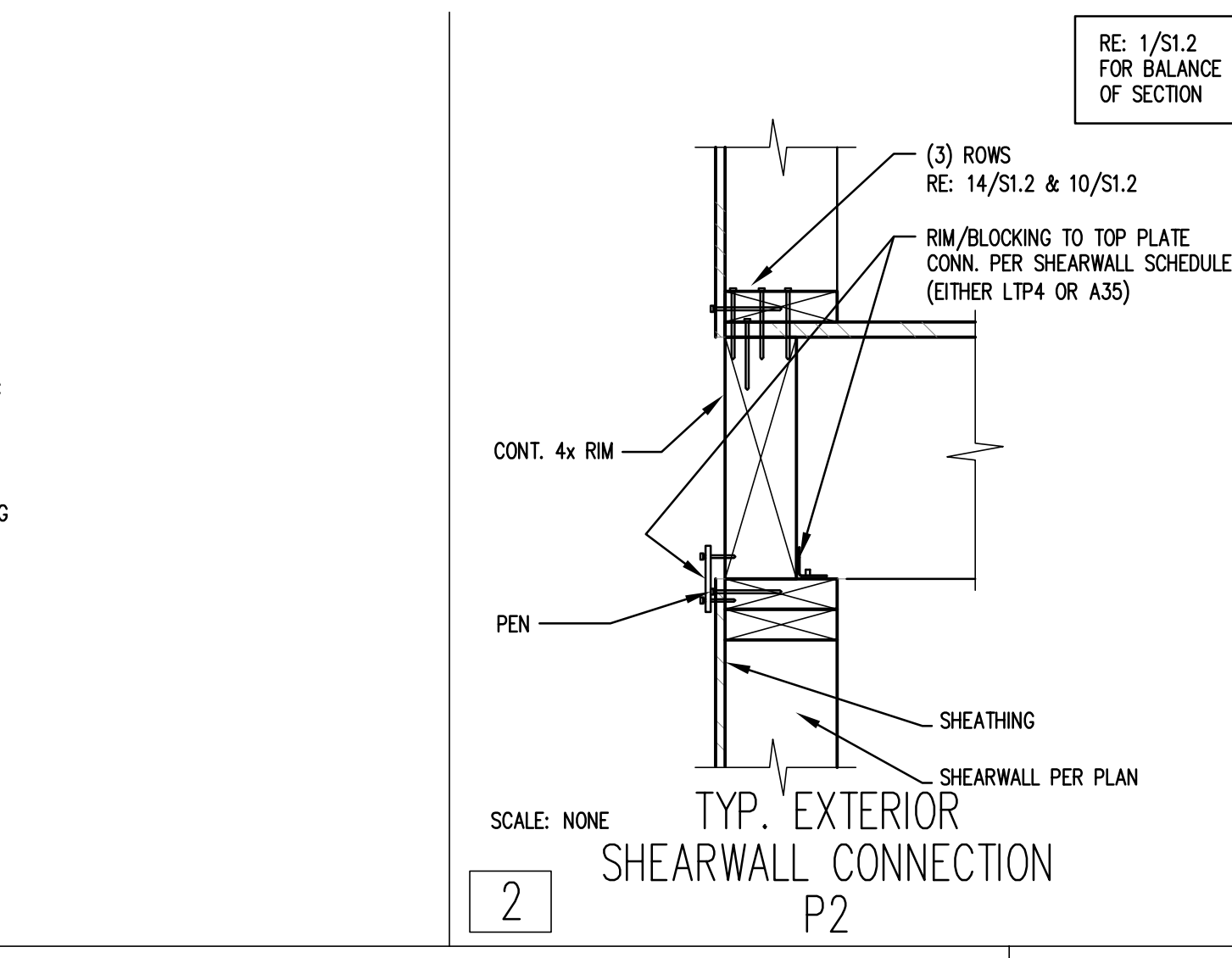
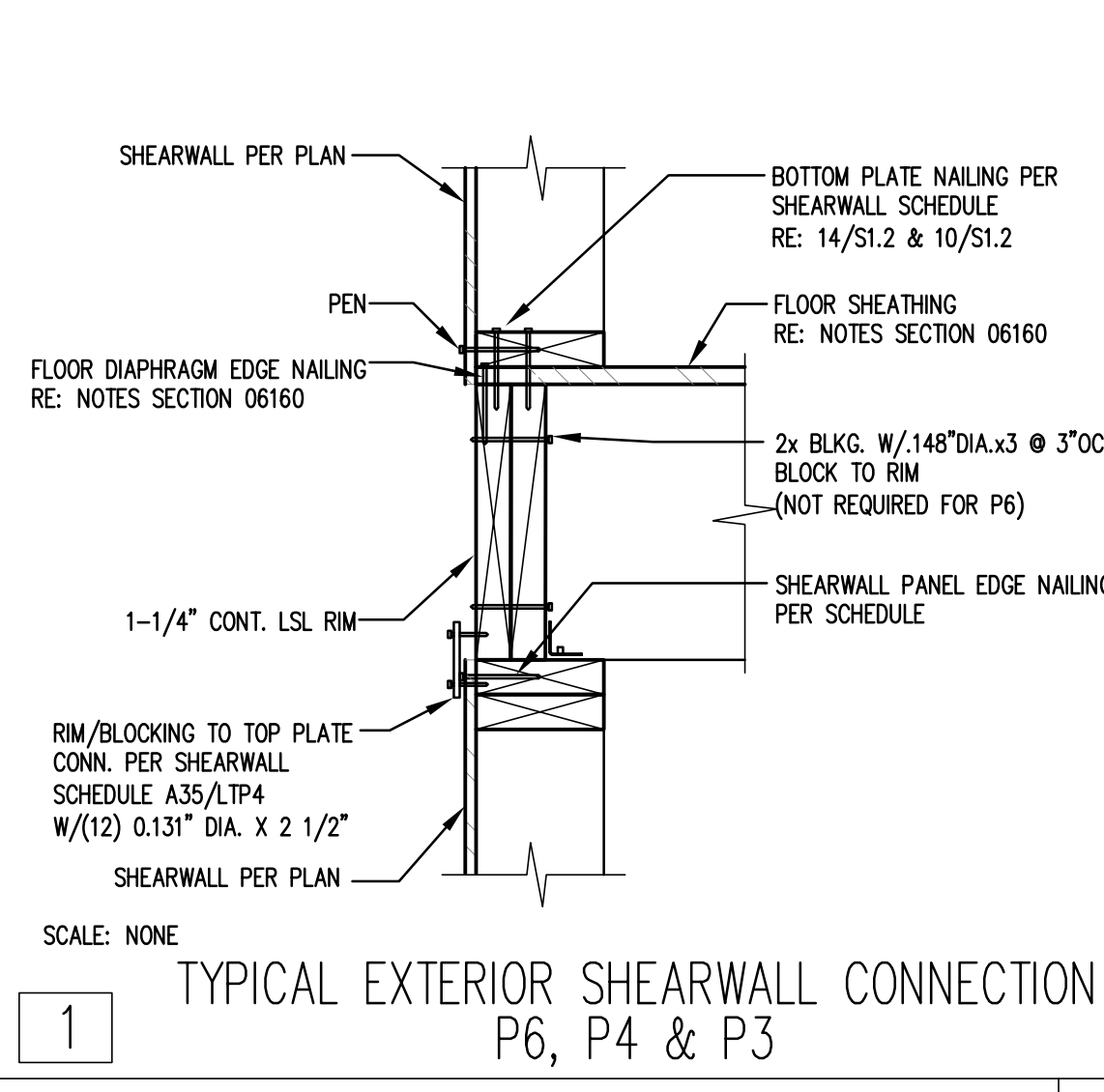
## STRUCTURAL DETAILS & NOTES SHEET INDEX

SHEET	DESCRIPTION	DATE
S1.1	STRUCTURAL GENERAL NOTES	05/17/21
S1.2	SHEARWALL SCHEDULE AND NOTES	05/17/21
S1.3	HOLD DOWN SCHEDULE AND NOTES	05/17/21
S2.1	FOUNDATION PLAN	05/17/21
S3.1	MAIN FLOOR FRAMING PLAN	05/17/21
S4.1	ROOF FRAMING PLAN	05/17/21
DETAILS		
S6.1	FOUNDATION DETAILS	05/17/21
S9.1	FRAMING DETAILS	05/17/21

## ABBREVIATIONS

&	AND	IN.	INCH(S)
@	AT	INFO.	INFORMATION
'	FEET(FOOT)	INT.	INTERIOR
"	INCH (INCHES)		
#	POUND(S), NUMBER	JST.	JOIST
=	EQUAL(S)	JOINT	JOINT
/	PER	K	KIPS(1000)
A.B.	ANCHOR BOLT	LAT.	LATERAL
ABV.	ABOVE	LB.	POUND(S)
ADD.	ADDITIONAL	L.B.	LAG BOLT(S)
ADJ.	ADJACENT	L.G.	LONG(TUDINAL)
ALUM.	ALUMINUM	LGTH.	LENGTH
ALT.	ALTERNATE	LGTH.	LIGHT GAUGE METAL FRAMING
APPRX.	APPROXIMATE(LY)	LMF	LONG LEG HORIZONTAL
ARCH.	ARCHITECT(URAL)	LLV	LONG LEG VERTICAL
ASSY.	ASSEMBLY	LSH	LONG SLOTTED HOLE(S)
B.	BOTTOM	L.T. WT.	LIGHT WEIGHT
BEL.	BELOW	L.W.	LIGHT WEIGHT
BEN.	BOUNDARY EDGE NAILING	MAS.	MASONRY
B.F.	BRACED FRAME	MASN.	MASONRY
BLDG.	BUILDING	MAT.	MATERIAL
BLK.	BLOCKING	MAX.	MAXIMUM
BLG.	BLOCKING	M.B.	MACHINE BOLT
BLW.	BELOW	MBM	METAL BUILDING MANUFACTURER
BM.	BEAM	MECH.	MECHANICAL
BMU	BRICK MASONRY UNIT	M.E.J.	MASONRY EXPANSION JOINT
BN	BOUNDARY NAILING	MEZZ.	MEZZANINE
BNDRY.	BOUNDARY	MFR.	MANUFACTURER
B.O.	BOTTOM OF	MIN.	MINIMUM
B.O.E.	BOTTOM OF EXCAVATION	MISC.	MISCELLANEOUS
B.O.F.	BOTTOM OF FOOTING	MTL.	METAL
BRDG.	BRIDGE(ING)	(N)	NEW
BRG.	BEARING	N/A	NOT APPLICABLE
BTTM.	BOTTOM	N.L.B.	NON-LOAD BEARING
B.TWN.	BETWEEN	NO.	NUMBER
C	CAMBER	N.S.	NEAR SIDE
CAMB.	CAMBER(ED)	N.T.S.	NOT TO SCALE
CANT.	CANTILEVER(ED)	N.W.C.	NORMAL WEIGHT CONCRETE
CF.	CUBIC FOOT	O.C.	ON CENTER
C.I.P.	CAST IN PLACE	O.D.	OUTSIDE DIAMETER
C.J.	CONSTRUCTION JOINT	O.F.	OPPOSITE FACE
CL	CENTER LINE	O.H.	OPPOSITE HAND
CLG.	CEILING	OPNG.	OPENING
CLR.	CLEAR	OPP.	OPPOSITE
COL.	COLUMN	ORNT.	ORIENTED(ION)
CONC.	CONCRETE	OSB.	ORIENTED STRAND BOARD
CONN.	CONNECTION	O.W.J.	OPEN WEB JOIST
CONST.	CONSTRUCTION	O.W.T.	OPEN WEB TRUSS
CONT.	CONTINUOUS	PAF	POWDER ACTUATED FASTENER
CTSK.	COUNTERSINK	PAR.	PARALLEL
CTR.	CENTER(ED)	P/C	PRECAST
CV	COVER VERTICAL REINF.	PEN	PANEL EDGE NAIL
CY	CUBIC YARD	PERP.	PERPENDICULAR
d	PENNY(NAILS)	PL.	PLATE
DB	DROPPED BEAM	PL	PROPERTY LINE
DBA	DEFORMED BAR ANCHORS	PLN	PLAN
DBL	DOUBLE	PLMBG.	PLUMBING
DOW	DEMAND CRITICAL WELD	PLYWD.	PLYWOOD
DEPT.	DEPARTMENT	PSF	POUNDS PER SQUARE FOOT
DET.	DETAIL	PSI	POUNDS PER SQUARE INCH
DF	DOUGLAS FIR	P.T.	PRESERVATIVE TREATED
DIA.	DIAMETER	PT	POST TENSION(ED)
DIAG.	DIAGONAL	QTY.	QUANTITY
DIAPH.	DIAPHRAGM	R.	

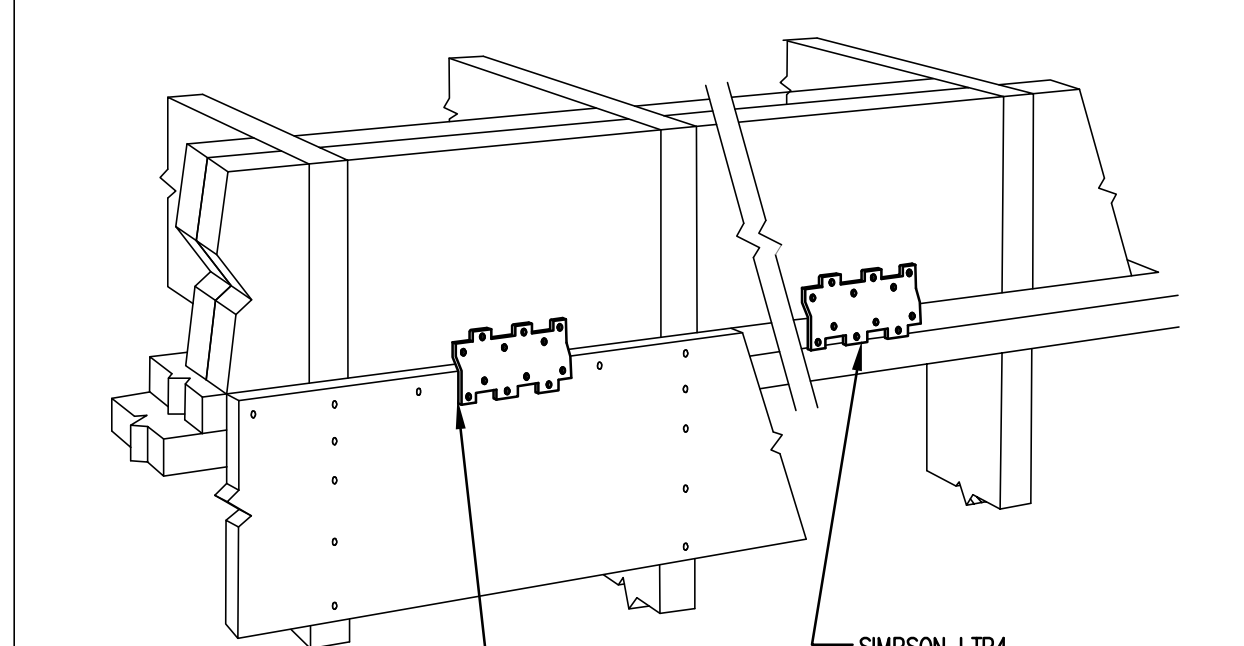
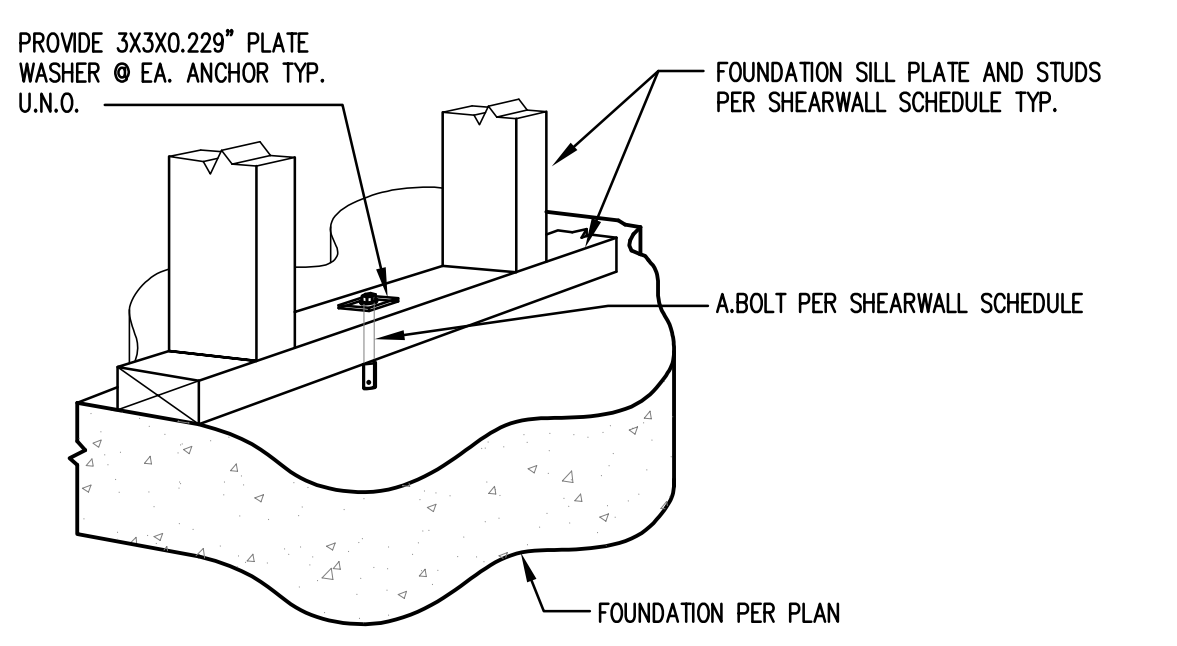




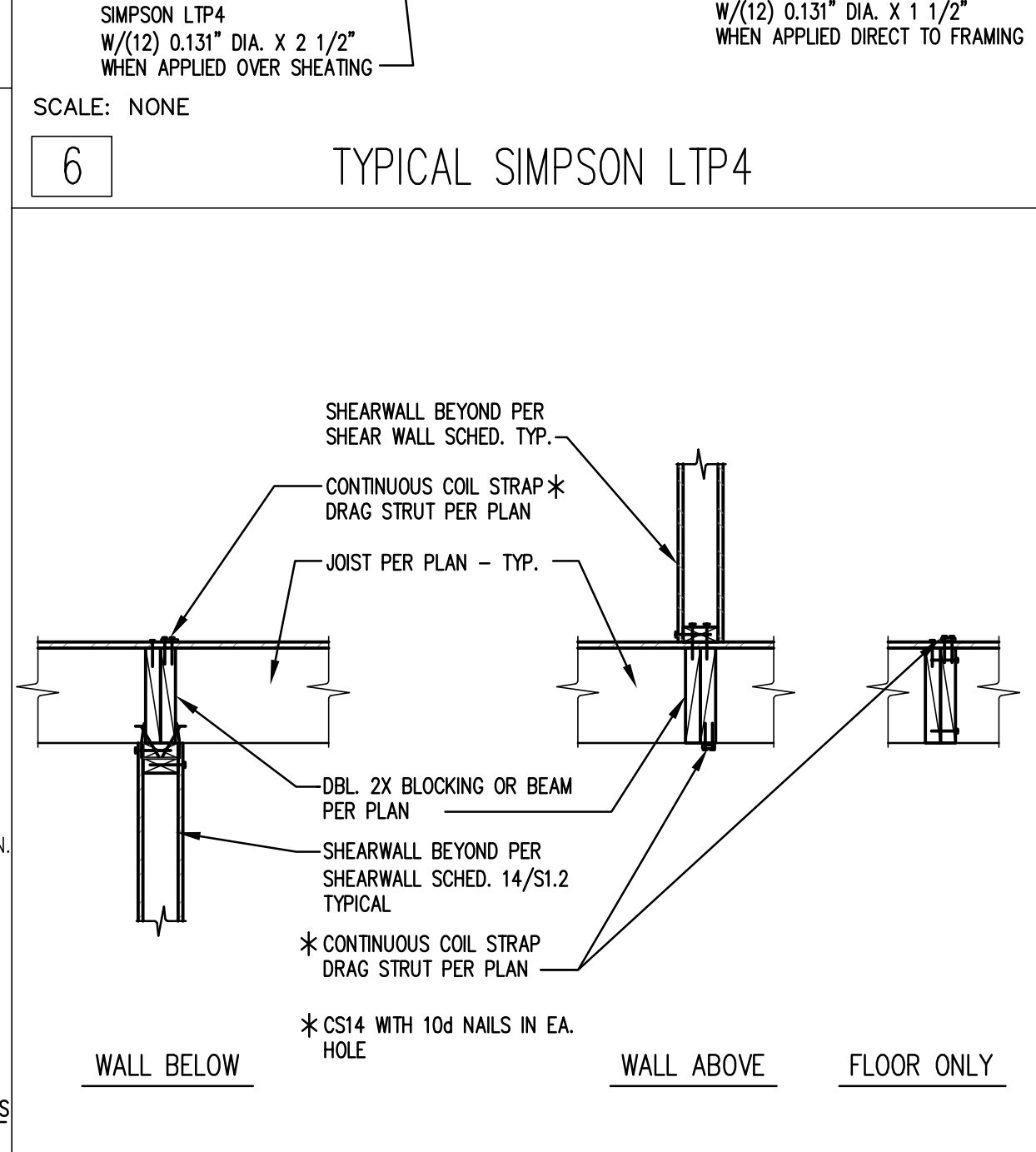
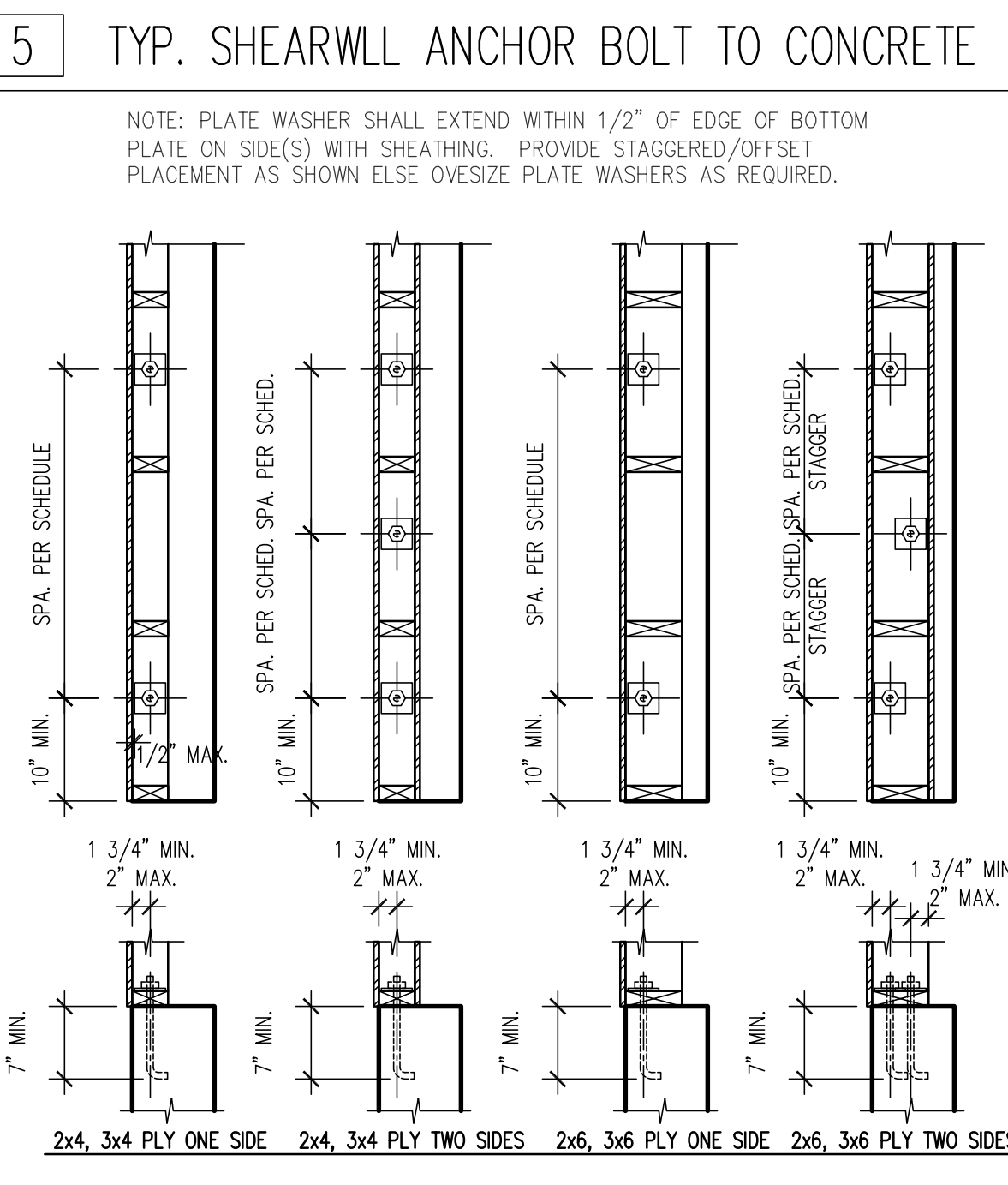
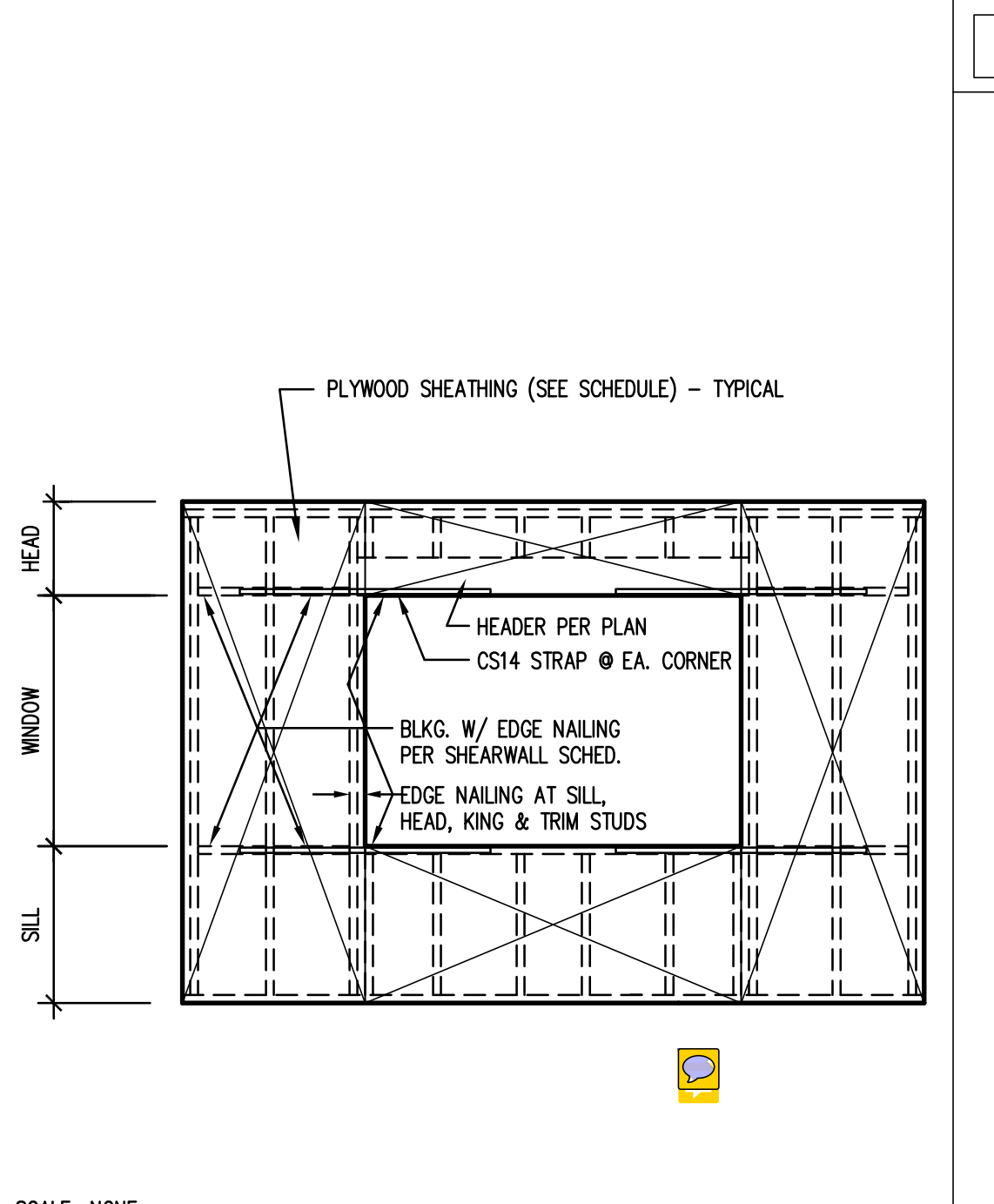
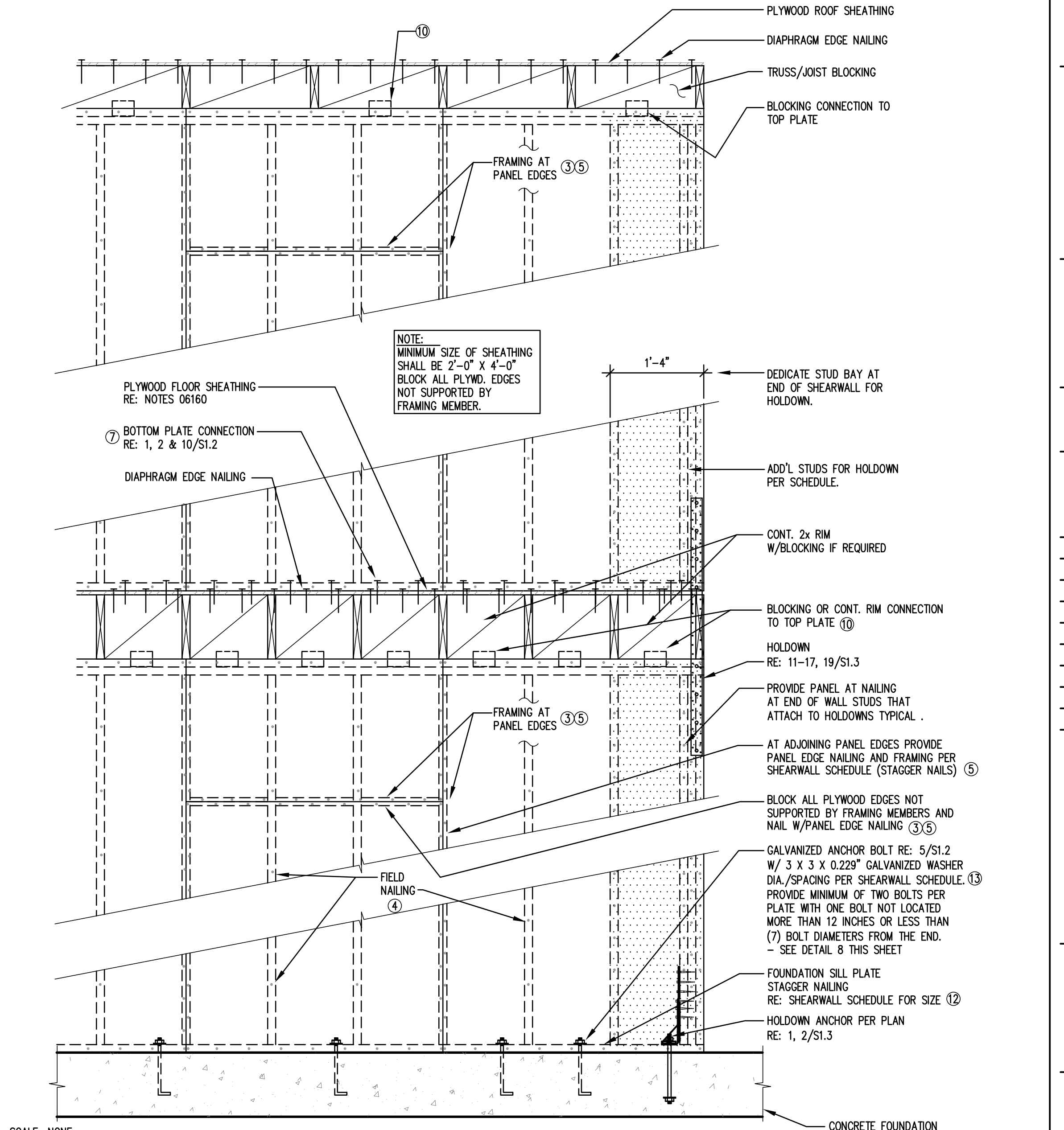
**SHEARWALL SCHEDULE - 7/16" APA RATED SHEATHING**

WALL TYPE	SHEATHING	PANEL EDGE NAILING ③	FIELD NAILING ④	BOTTOM PLATE NAILING ⑦		RIM OR BLOCKING TO TOP PLATE CONN.			FRAMING AT ADJOINING PANEL EDGES ⑤	FOUNDATION SILL PLATE ⑫	ANCHOR BOLT SPACING 5/8" DIA. 7" EMBED ⑬
				ROWS	SPACING	0.148"x3.25" TOENAIL	LTP4 DIRECT TO FRAMING	A35 ONLY ⑩			
UNMARKED EXTERIOR	7/16" SHT. ONE SIDE	6" O.C.	12" O.C.	(1)	4" O.C.	N/A	24" O.C.	16" O.C.	2x	2x 3x	48" O.C.
P6	7/16" SHT. ONE SIDE	6" O.C.	12" O.C.	(1)	4" O.C.	N/A	24" O.C.	16" O.C.	2x	2x 3x	48" O.C.
P4	7/16" SHT. ONE SIDE	4" O.C.	12" O.C.	(2)	6" O.C.	N/A	16" O.C.	12" O.C.	(2)2x OR 3x	2x 3x	32" O.C.
P3	7/16" SHT. ONE SIDE	3" O.C.	12" O.C.	(2)	4" O.C.	N/A	12" O.C.	10" O.C.	(2)2x OR 3x	2x 3x	24" O.C.
P2	7/16" SHT. ONE SIDE	2" O.C.	12" O.C.	(3)	6" O.C.	N/A	10" O.C.	10" O.C.	(2)2x OR 3x	2x 3x	18" O.C.
2P4	7/16" SHT. BOTH SIDES	4" O.C.	12" O.C.	(3)	5" O.C.	N/A	10" O.C.	10" O.C.	(2)2x OR 3x	2x 3x	16" O.C.
2P3	7/16" SHT. BOTH SIDES	3" O.C.	12" O.C.	(3)	4" O.C.	N/A	8" O.C.	8" O.C.	(2)2x OR 3x	2x 3x	12" O.C.
2P2	7/16" SHT. BOTH SIDES	2" O.C.	12" O.C.	(3)	3" O.C.	N/A	6" O.C.	6" O.C.	(2)2x OR 3x	2x 3x	8" O.C.

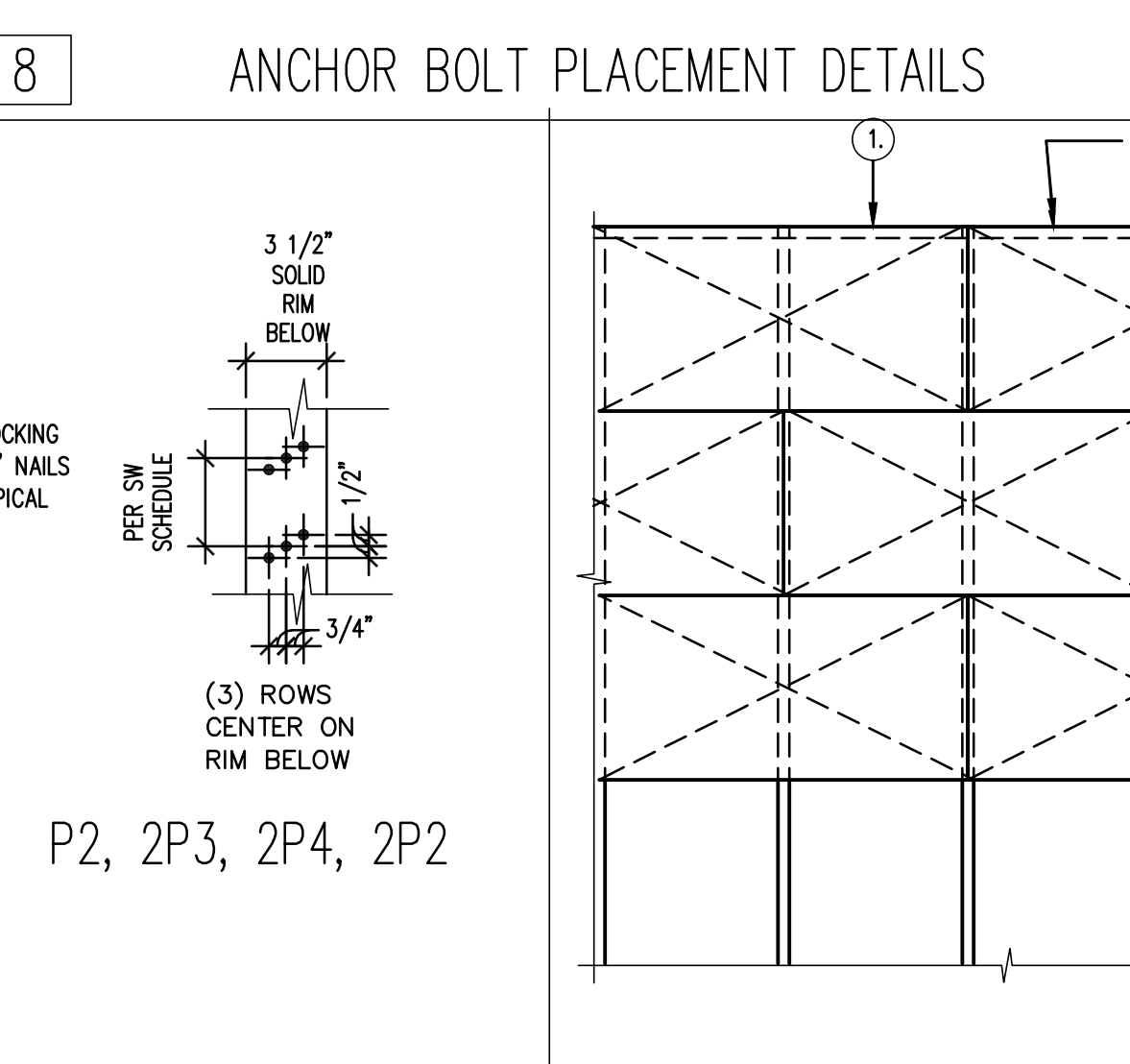
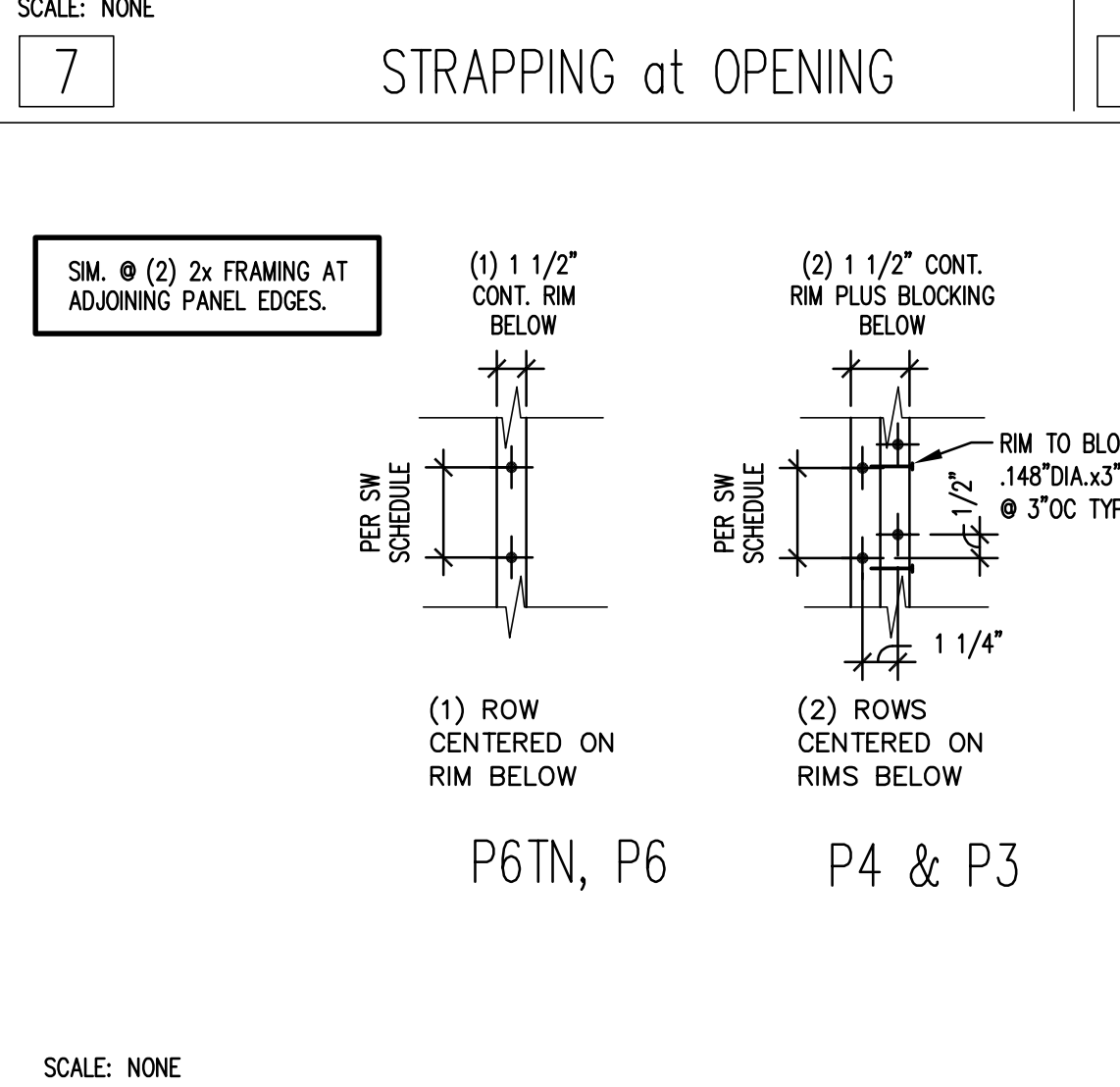
- SHEARWALL SCHEDULE NOTES:**
- STUDS SHALL NOT BE SPACED MORE THAN 16" O.C.
  - RE: S1.1 SECTION 06100 "ROUGH FRAMING" FOR REQUIRED WALL STUD AND PLATE SPECIES AND GRADE.
  - RE: S1.1 SECTION 06160 "WOOD SHEATHING" FOR REQUIRED SHEAR WALL SHEATHING, THICKNESS AND GRADE. ALL SHEAR WALL PANELS SHALL BE APPLIED DIRECTLY TO FRAMING.
  - SHEATHING PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY WITH ALL PANEL EDGES BACKED/BLOCKED WITH 2" NOMINAL OR WIDER FRAMING. SEE NOTE 5.
  - FRAMING MEMBERS RECEIVING EDGE NAILING FROM ADJUTING PANELS SHALL NOT BE LESS THAN 3" NOMINAL AND NAILS SHALL BE STAGGERED FOR ALL SHEARWALL MARKS EXCEPT "P6".
  - WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS SHALL BE STAGGERED.
  - NAILS FOR PLYWOOD AND OSB PANEL EDGE AND FIELD NAILING SHALL BE 8d COMMON (0.131" X 2 1/2").
  - NAILS FOR BOTTOM PLATE FRAMING SHALL BE 12d COMMON (0.148" X 3.25").
  - FLOOR DIAPHRAGM NAILING SHALL BE PLACED BETWEEN THE SPACING CALLED OUT FOR BOTTOM PLATE NAILING. DO NOT OVER NAIL THE BLOCKING.
  - ANCHOR BOLTS SHALL BE GALVANIZED 5/8" DIAMETER X 7" TITEN HD ANCHORS POST-INSTALLED INTO CONCRETE.
  - GALVANIZED 3" X 3" X 0.229" (MIN.) PLATE WASHERS ARE REQUIRED AT EACH ANCHOR BOLT - SEE DETAIL 8 THIS SHEET FOR PLACEMENT DETAILS. RECESSING PLATE WASHERS IN PLATES IS NOT ALLOWED.
  - LTP4 FRAMING PLATES SHALL BE INSTALLED WITH 12-8d X 1 1/2" (0.131" X 2 1/2") NAILS. RE: DETAILS 1, 2, 3 & 6/S1.2.
  - A35 FRAMING ANGLES SHALL BE INSTALLED WITH 12-8d X 1 1/2" (0.131" X 2 1/2") NAILS. RE: DETAILS 1, 2 & 3/S1.2.
  - ALL NAILS INTO PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED CONFORMING TO ASTM 153 OR STAINLESS STEEL.
  - ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED.
  - WHERE BOTTOM PLATE NAILING SPECIFIES A SPACING OF 4 INCHES OR LESS NAILS SHALL BE INSTALLED IN TWO ROWS OFFSET 1/2 INCH AND STAGGERED.
  - GALVANIZED EXPANSION ANCHORS OF SIMILAR DIAMETER AND EMBEDMENT ALLOWED AT INTERIOR BEARING AND PARTY WALLS.
  - 2-2x'S IN LIEU OF 3x'S AT PANEL EDGES ACCEPTABLE PROVIDED STUDS ARE ATTACHED PER 10/S1.2 SIM. AND BOTTOM PLATE NAILING.
  - WHERE BUILDING OFFICIALS ALLOW, OSB SHEATHING MAY BE APPLIED OVER 1/2" OR 3/8" GYPSUM WALL BOARD PROVIDED SHEATHING IS NAILED WITH 10d NAILS (0.148" DIA X 3" LONG)



**14 SHEARWALL SCHEDULE**



**14 SHEARWALL SCHEDULE**

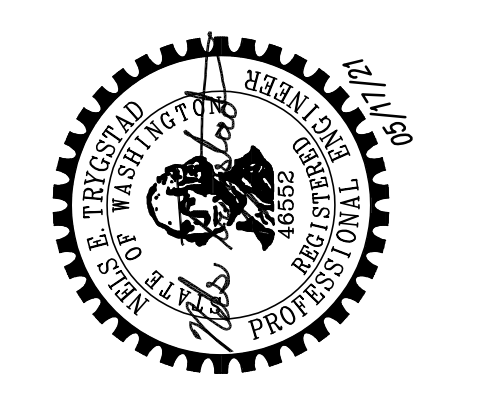


- ROOF/FLOOR SHEATHING NOTES**
- BOUNDARY NAILING AT ROOF/FLOOR PERIMETER, AT CONT. PANEL EDGES (B.N.)
  - EDGE NAILING (E.N.) AT ALL EDGES OF ALL PLYWOOD SHEETS AT SUPPORTS AND AT INTERIOR SHEARWALLS
  - INTERIOR FIELD NAILING (F.N.) 12" O.C. AT BEARING SUPPORTS
  - SEE PLANS FOR PLYWOOD THICKNESS & NAILING SCHEDULE
  - LONG DIMENSION OF PLYWOOD SHALL RUN PERPENDICULAR TO TRUSS SYSTEM FRAMING & FLOOR FRAMING.
  - MIN. EDGE DISTANCE FOR NAILS SHALL BE 3/8"
  - MINIMUM PLYWOOD SHEET SIZE 2'-0" X 4'-0"
  - NAILS SHALL NOT BE OVER DRIVEN

**12 TYPICAL SHEARWALL NOMENCLATURE (ELEVATION)**

**CT ENGINEERING INC.**

Structural Engineers  
180 Nickerson Street Suite 302  
206.285.4512 (Y)  
206.285.0618 (F)  
Seattle, WA 98109



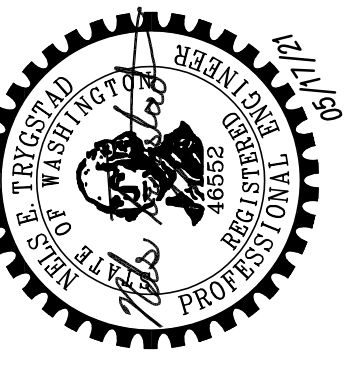
**Sterba Mironova Addition**  
9811 SE 40th St  
Mercer Island, WA 98040

**Permit Set**

Date:	Description:
05/17/21	Permit Set
Project No.:	CTE#21056
Drawn:	

**SHEARWALL SCHEDULE & NOTES**





Sterba  
 Mironova  
 Addition  
 9811 SE 40th St  
 Mercer Island, WA 98040

Permit  
 Set  
 Date: 05/17/21 Description: Permit Set

Project No.: CTE#21056  
 Drawn:

HOLD DOWN  
 SCHEDULE  
 & NOTES

Sheet No:  
**S1.3**

**HOLDDOWN & FASTENER SCHEDULE: HF STUDS**

HARDWARE TYPE	WOOD MEMBER/POST		FASTENERS	NOTES	DETAILS
	2X4 WALL	2X6 WALL			
MST48	2X4	2X6	(50) 16d	CENTER ON RIM	15/S1.3
STHD14	(2)2X4	(2)2X6	(30) 12d	16" MIN. LAP PER END	14/S1.3
HTT4	(2)2X4	(2)2X6	(18)SD#10X1-1/2"	5/8" DIA. A.B.	13/S1.3

- HOLDDOWN & FASTENER NOTES:**
- HOLDOWNS SHALL BE AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY.
  - 16D = .162" DIA. X 3 1/2" LONG.
  - HTTS ANCHOR MAY BE REPLACED WITH POST-INSTALLED 3/8" DIA. THREADED ROD EMBEDDED IN 3/4" DRILLED, CLEANED HOLE X 15" DEEP WITH SIMPSON "SET" OR "AT" ADHESIVE (RE: TEMPERATURE LIMITS ON PRODUCT); HDUB HOLD DOWN AND ANCHOR IS TO BE REPLACED WITH POST-INSTALLED STRAPS INSTALLED PER DETAIL 6.
  - SCREWS ARE SDS 1/4" X 2 1/2" MANUFACTURED BY SIMPSON STRONG-TIE COMPANY.
  - HOLDOWNS ANCHORS SHALL BE SECURED IN PLACE PRIOR TO PLACING CONCRETE.
  - ANCHOR BOLT NUT SHOULD BE FINGER-TIGHT PLUS 1/3 - 1/2" TURN WITH HAND WRENCH. CARE SHOULD BE TAKEN TO NOT OVER-TORQUE THE NUT. IMPACT WRENCHES SHOULD NOT BE USED.
  - HDU HOLDOWNS SHALL BE INSTALLED CENTERED ALONG THE WIDTH OF THE ATTACHED POST.
  - RE: NOTES SECTION 06100 "ROUGH FRAMING" FOR THE REQUIRED POST SPECIES AND GRADE.
  - HOLDOWNS ATTACH TO SHEARWALL END POST OR TO POST WITH STRAP ABOVE. LOCATE PER STRUCTURAL PLANS AND ARCHITECTURAL DIMENSIONS. INSTALL PER SIMPSON INSTALLATION RECOMMENDATIONS.

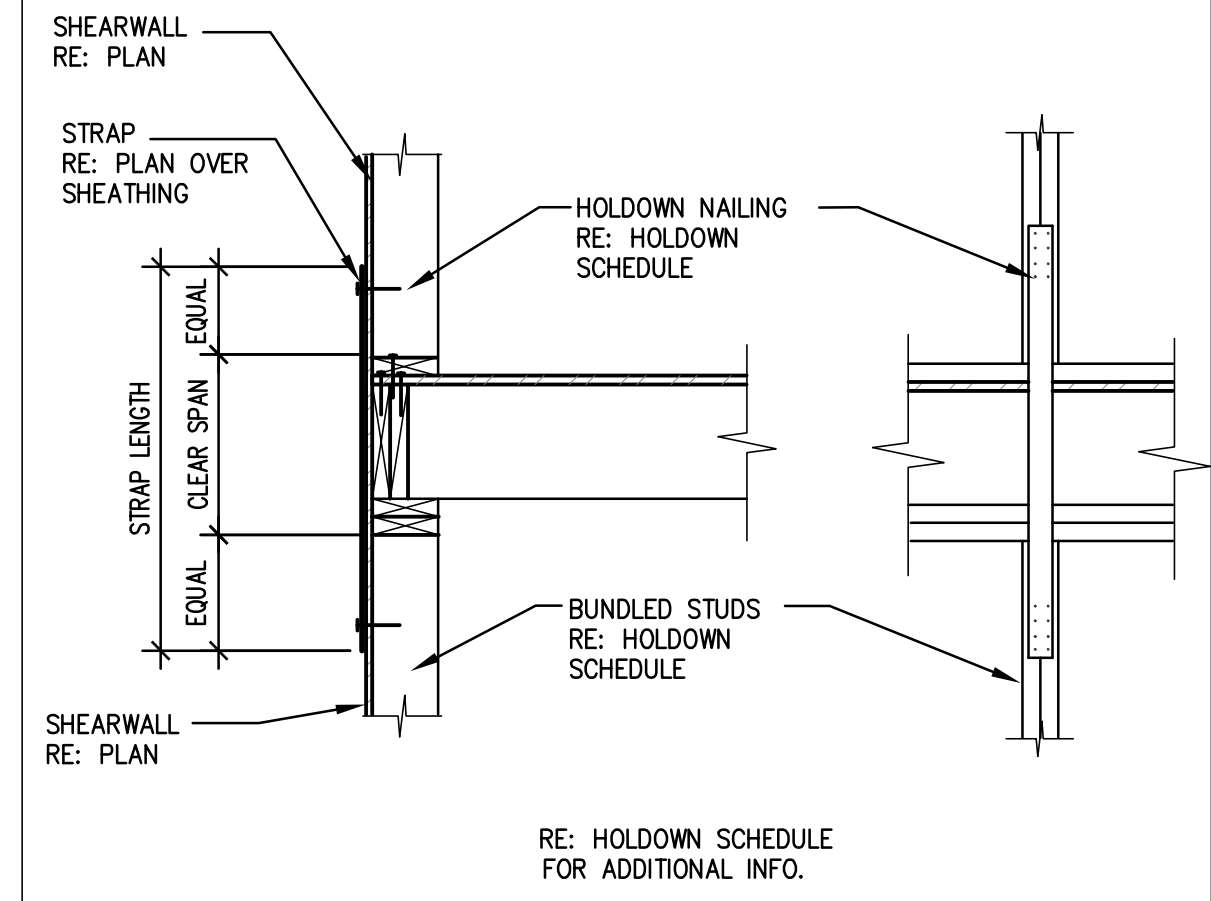
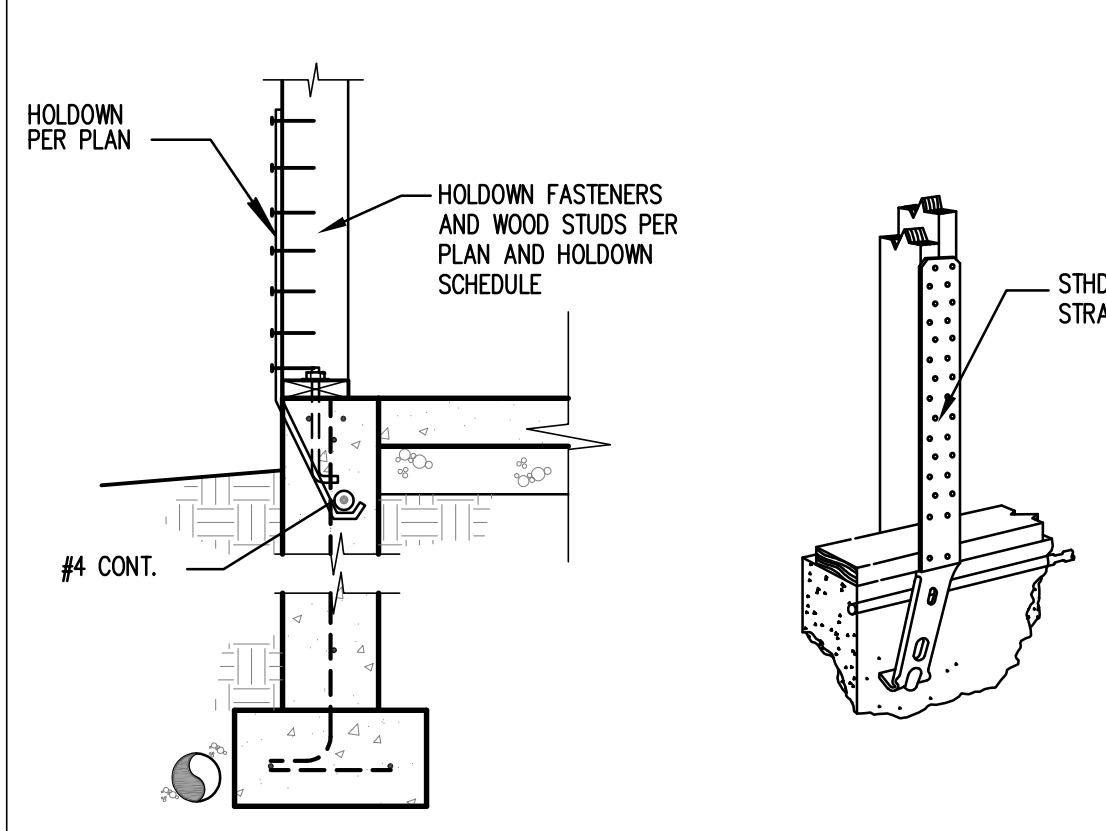
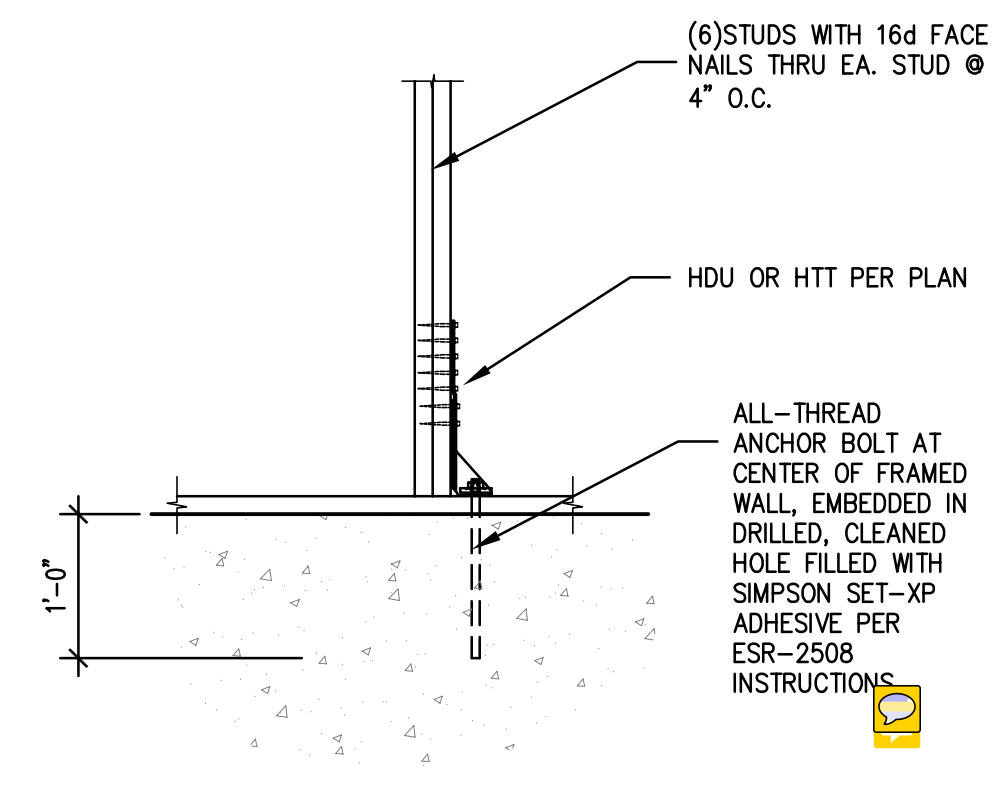
**HOLDDOWN & FASTENER SCHEDULE**

6

7

8

10



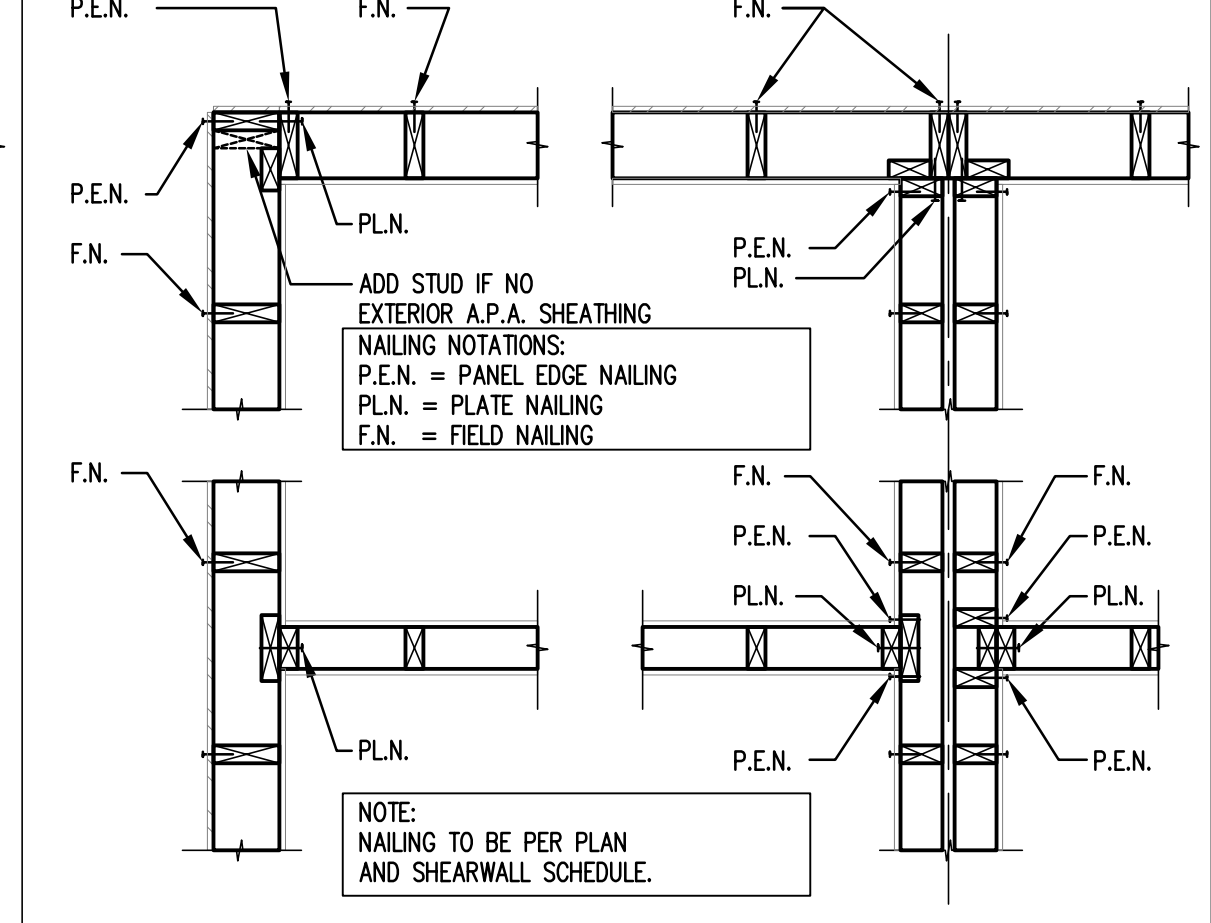
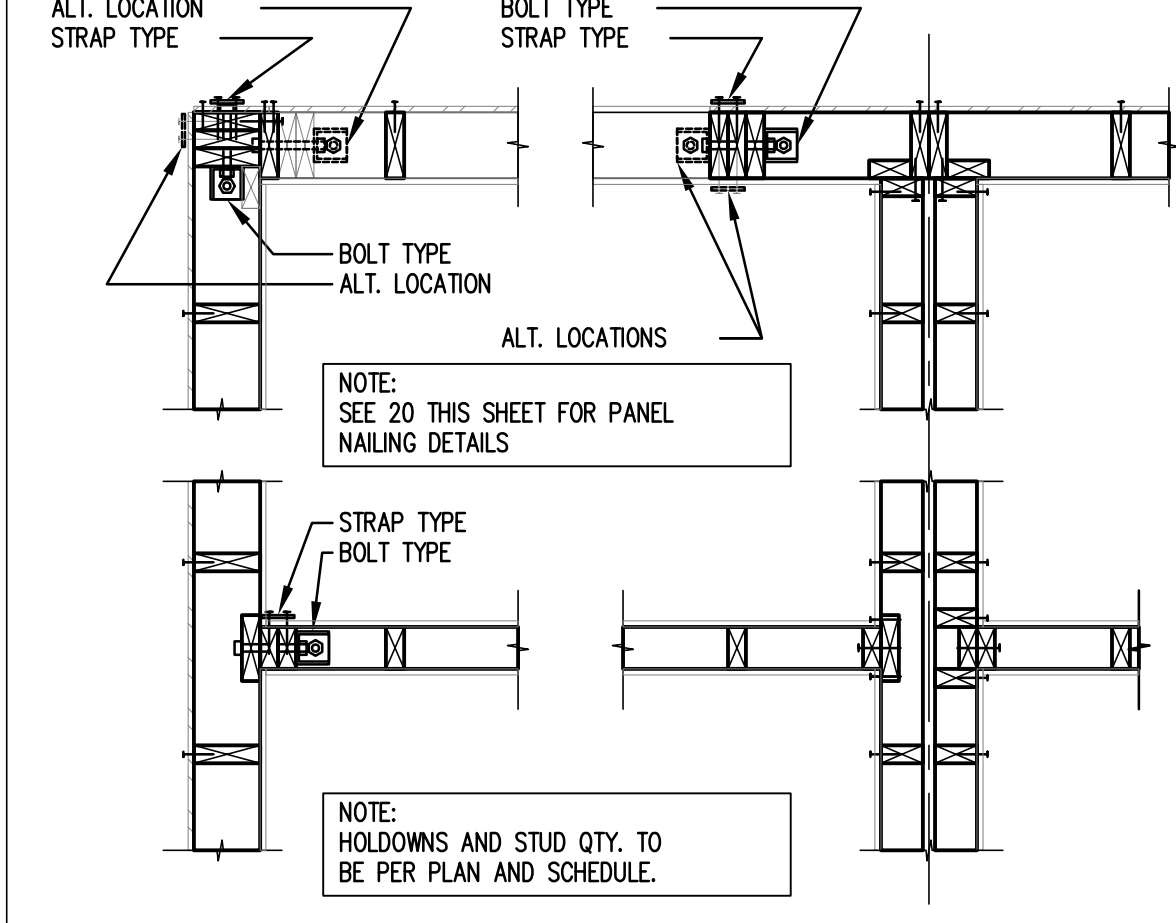
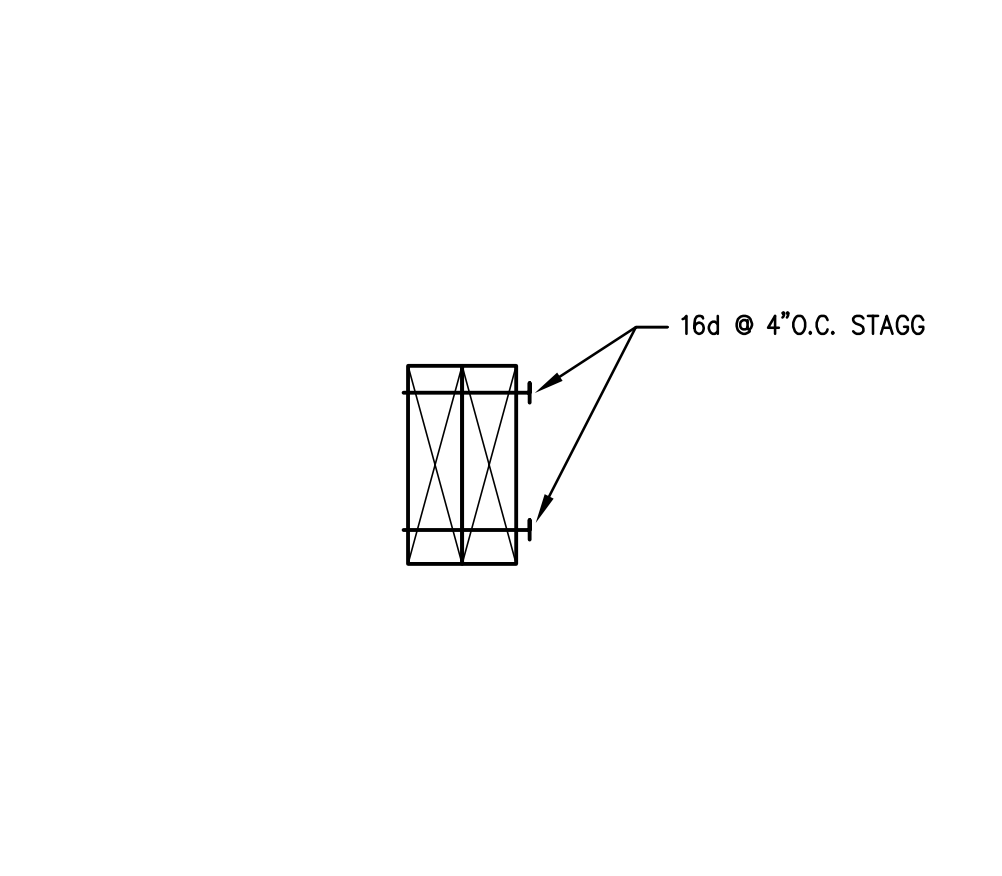
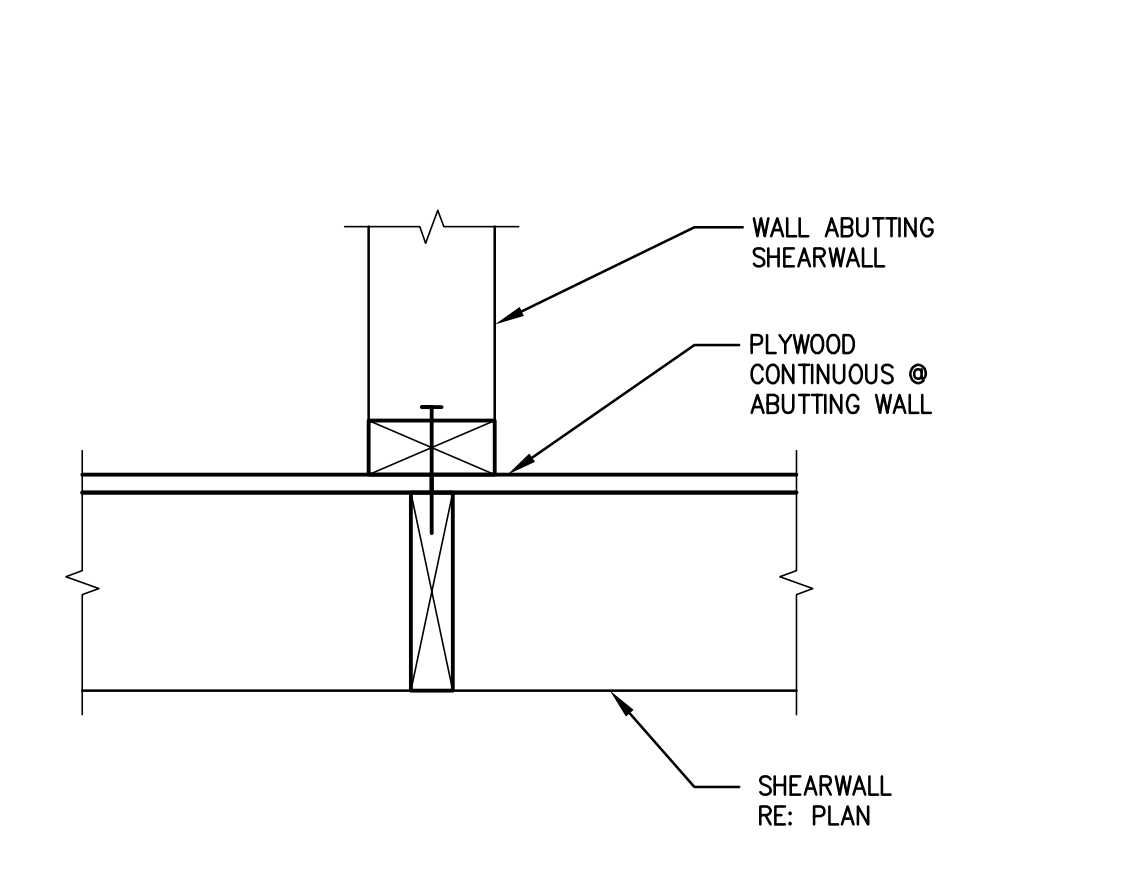
11

12

13

14

15



16

17

18

19

20

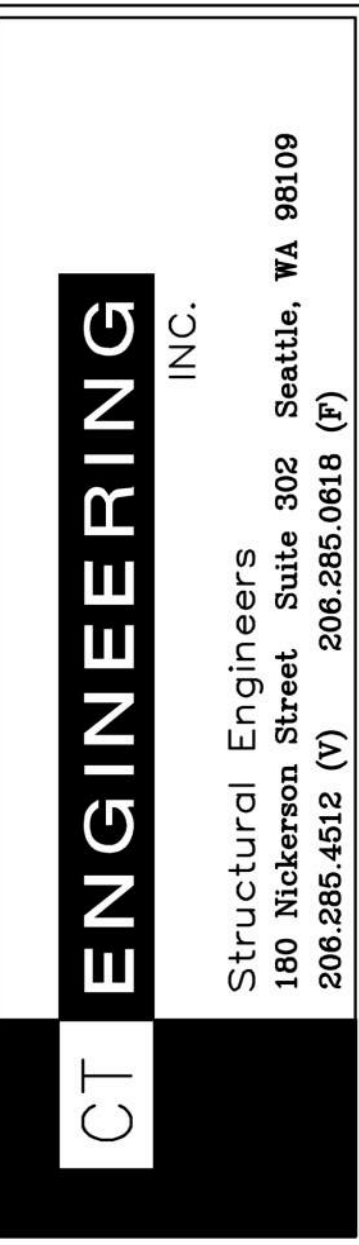
TYP. ABUTTING WALL

TYP. MULTIPLE STUD ATTACHMENT

HOLDDOWN PLACEMENTS

STRUCTURAL SHEARWALL INTERSECTIONS





Sterba  
 Mironova  
 Addition  
 9811 SE 40th St  
 Mercer Island, WA 98040

Permit  
 Set

Date:	Description:
05/17/21	Permit Set

Project No.: CTE#21056  
 Drawn:

FOUNDATION  
 PLAN

Sheet No:

S2.1

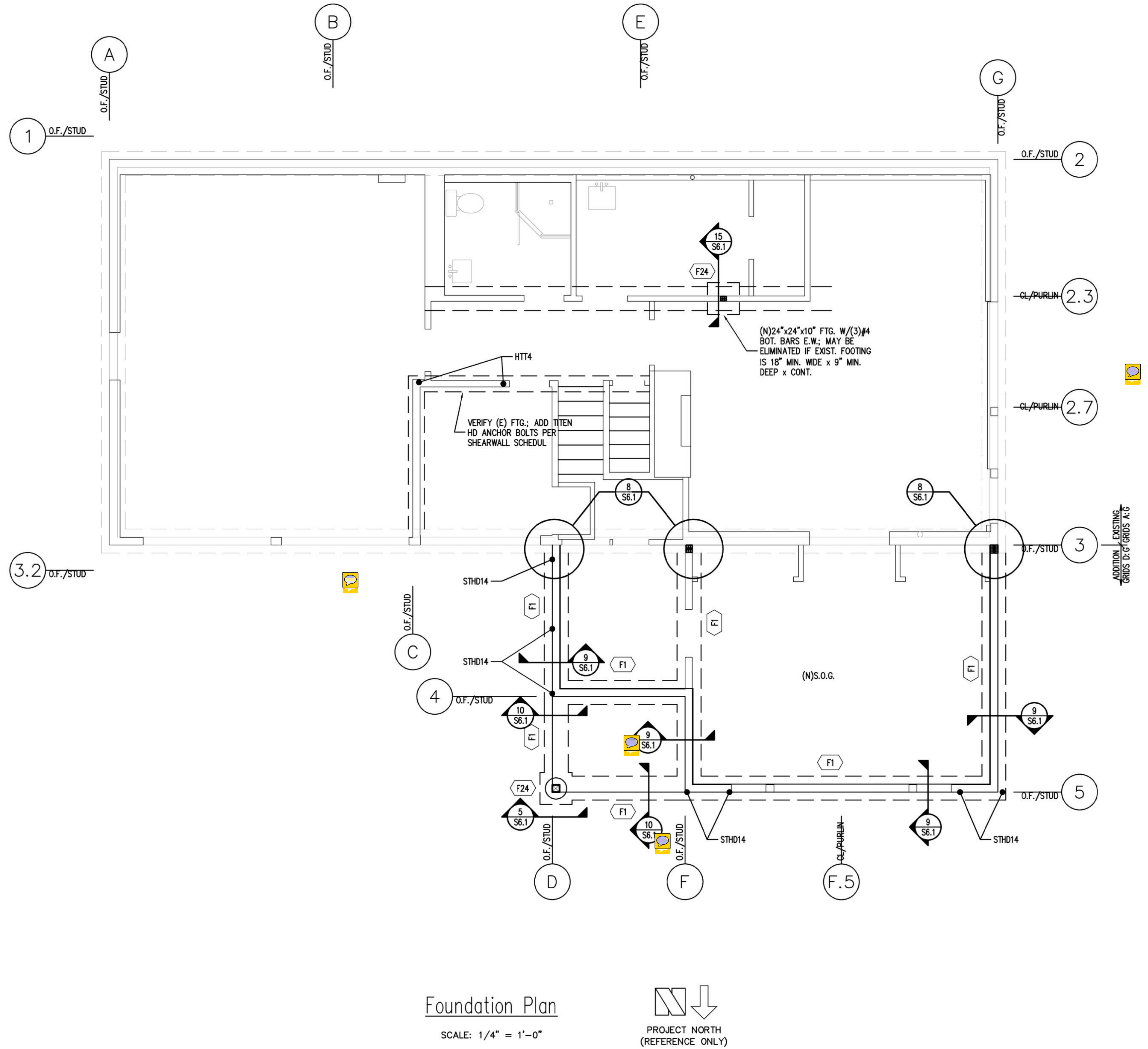
CALL 48 HOURS  
 BEFORE YOU DIG  
 1-800-424-5555

Footing Schedule					
TYPE	MARK	WIDTH	LENGTH	DEPTH	REINF
SPOT	F24	2'-0"	2'-0"	10"	(3)#4 BOT. E/W
CONT.	F1	1'-6"	CONT.	10"	(2)#4BOT. CONT.

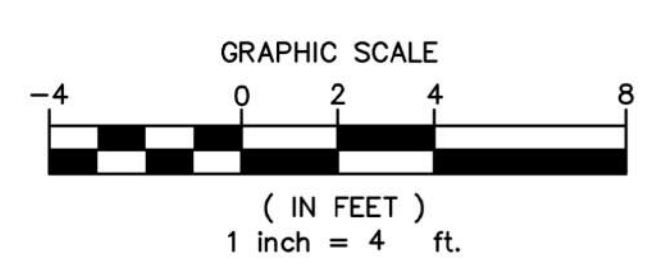
Foundation Legend

◀ HOLDOWN PER 10/S1.3  
 F2 FOOTING PER SCHEDULE ABOVE

- Foundation Notes
- REFER TO SECTION 01303 OF S1.1 FOR GENERAL INFORMATION.
  - CENTER SPOT FOOTING BELOW COLUMN U.N.O.; CENTER STEM WALLS ON FOOTING BELOW.
  - VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND BLDG ALIGNMENT W/PROPERTY LINES PER ARCHITECT.
  - SEE ARCHITECTURAL AND CIVIL SHEETS FOR WALL AND FLOOR DRAIN LOCATIONS.
  - ALL CONCRETE STEM WALLS SHALL BE 6" THICK, TYPICAL U.N.O. (48" MAX. TALL)
  - REFER TO SHEET S6.1 FOR TYP. FOUNDATION DETAILS
  - USE 1/2" DIA. x 10" J-BOLTS OR 1/2" DIA. x 6" TITEN HD SCREWS IN STEM WALLS @ 48" O.C. UNLESS NOTED OTHERWISE IN SHEARWALL SCHEDULE
  - 4" CONCRETE SLAB ON GRADE (S.O.G.) SHALL HAVE 6x6-W1.4xW1.4 W.W.F. WITH JOINTS PER 2 & 3 OF S6.1.



Note:  
 PLANS PREPARED USING  
 ARCHITECTURAL BACKGROUNDS  
 RECEIVED 04/28/2021









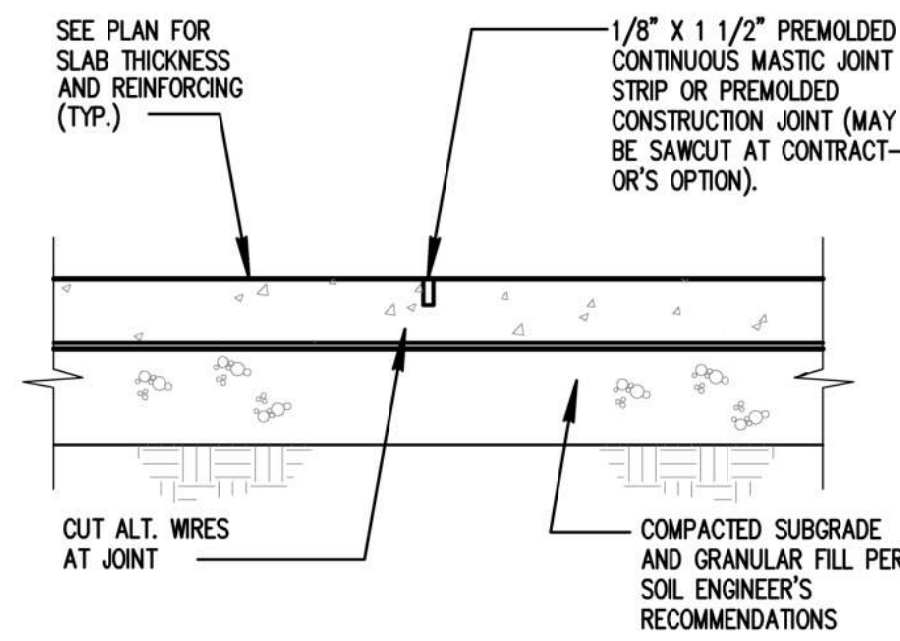




BAR SIZE	LAP CLASS	F <sub>c</sub> = 3000PSI		F <sub>c</sub> = 4000PSI		F <sub>c</sub> = 5000PSI	
		TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	A	17	14	15	12	14	12
	B	23	17	20	15	18	14
#4	A	23	18	20	16	18	14
	B	30	23	26	20	23	18
#5	A	29	22	25	19	22	17
	B	37	29	32	25	29	22
#6	A	35	27	30	23	27	21
	B	45	35	39	30	35	27
#7	A	63	48	54	42	49	37
	B	81	63	70	54	63	49
#8	A	72	55	62	48	55	43
	B	93	72	80	62	72	55
#9	A	81	62	70	54	63	48
	B	105	81	91	70	81	63

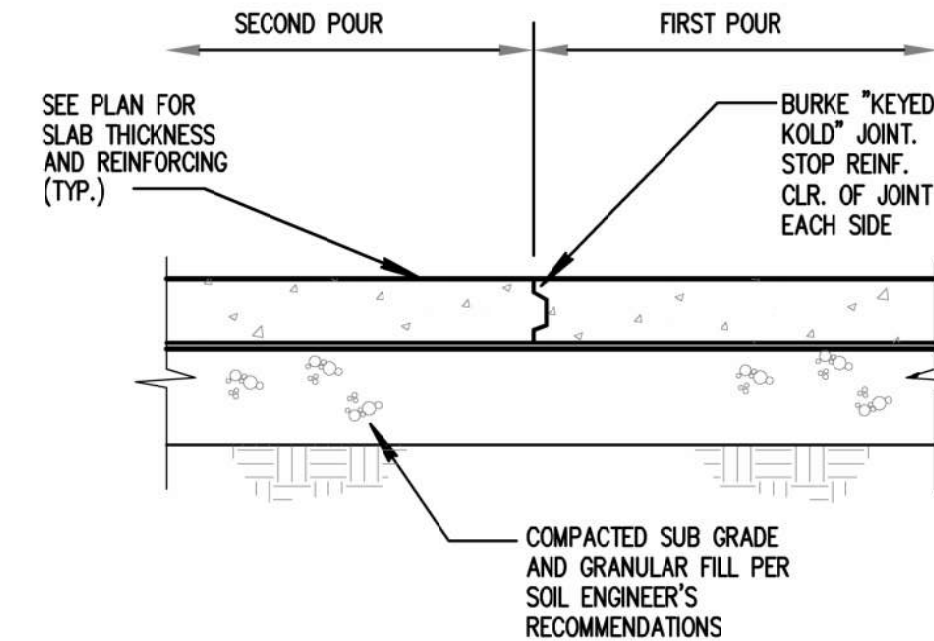
- LENGTHS SHOWN ARE IN INCHES.
- TENSION LAP SPLICES SHALL BE CLASS B UNLESS ONE HALF OR LESS OF THE TOTAL REINFORCEMENT IS SPLICED WITHIN THE REQUIRED LAP LENGTH.
- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
- TENSION LAP SPLICE SHOWN ABOVE ARE FOR CONCRETE COVER GREATER THAN OR EQUAL TO BAR DIAMETER AND CENTER TO CENTER SPACING GREATER THAN TWO BAR DIAMETERS (SPACING AND COVER CASE 1).
- INCREASE LAP SPLICE LENGTH BY 1.5 FOR EPOXY COATED REINFORCEMENT.
- INCREASE LAP SPLICE LENGTH BY 1.3 FOR LIGHT WEIGHT CONCRETE.
- COMPRESSION LAP SPLICES SHALL BE A MINIMUM OF 30 BAR DIAMETERS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

1 LAP SPLICE SCHEDULE



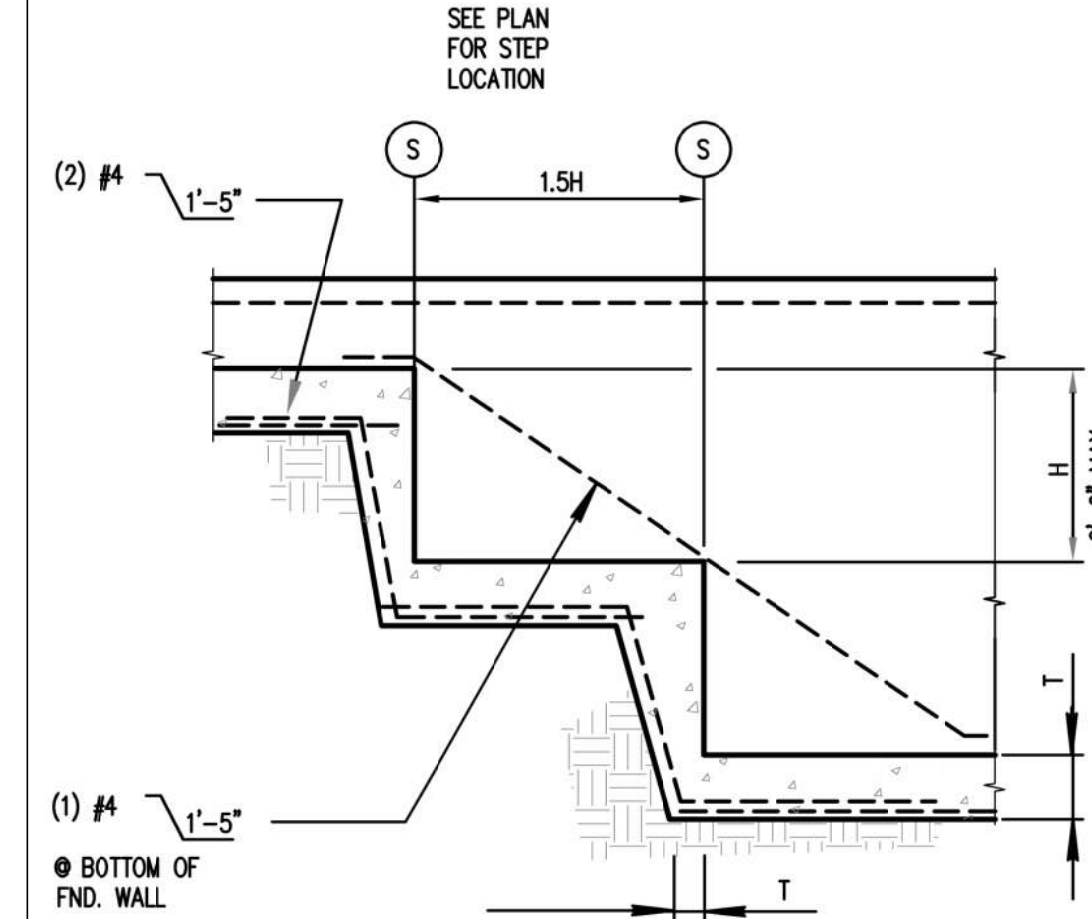
PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 400 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

2 TYPICAL CONTROL JOINT

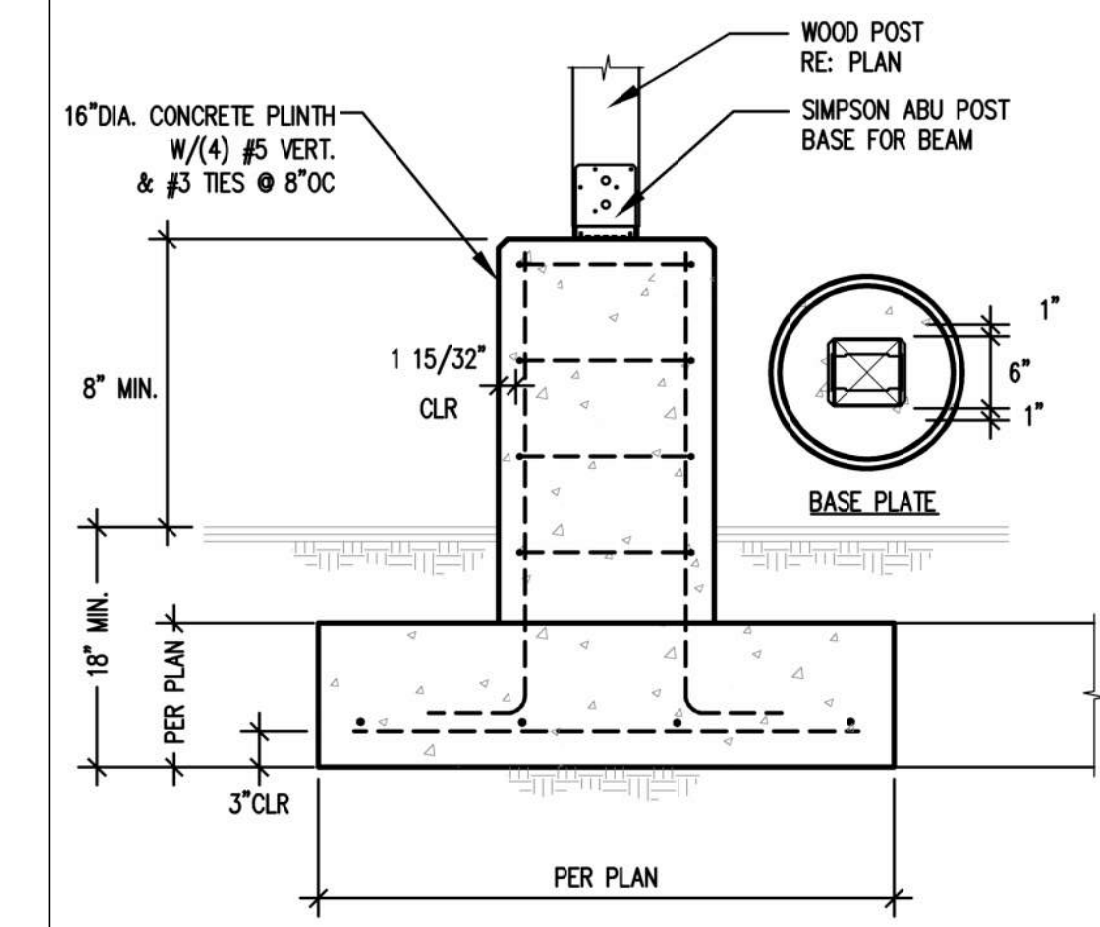


PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 400 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

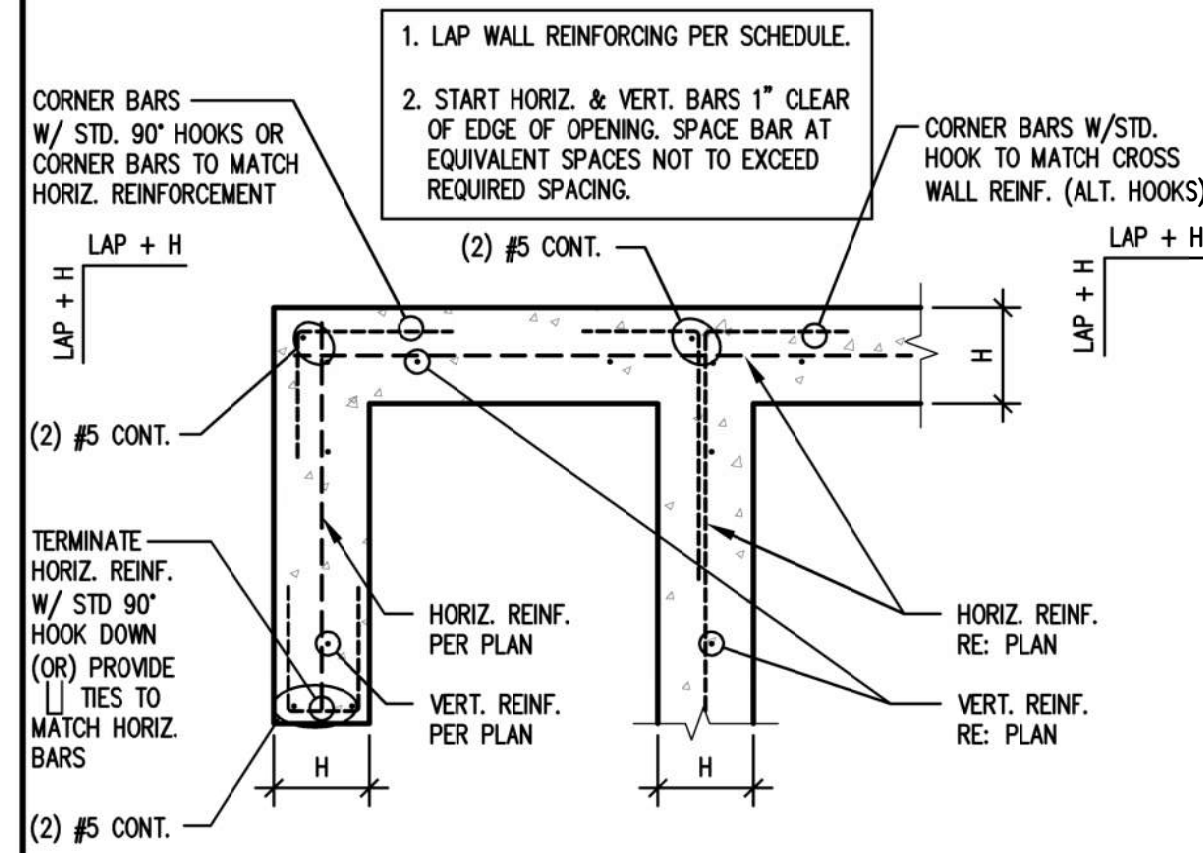
3 TYPICAL CONSTRUCTION JOINT



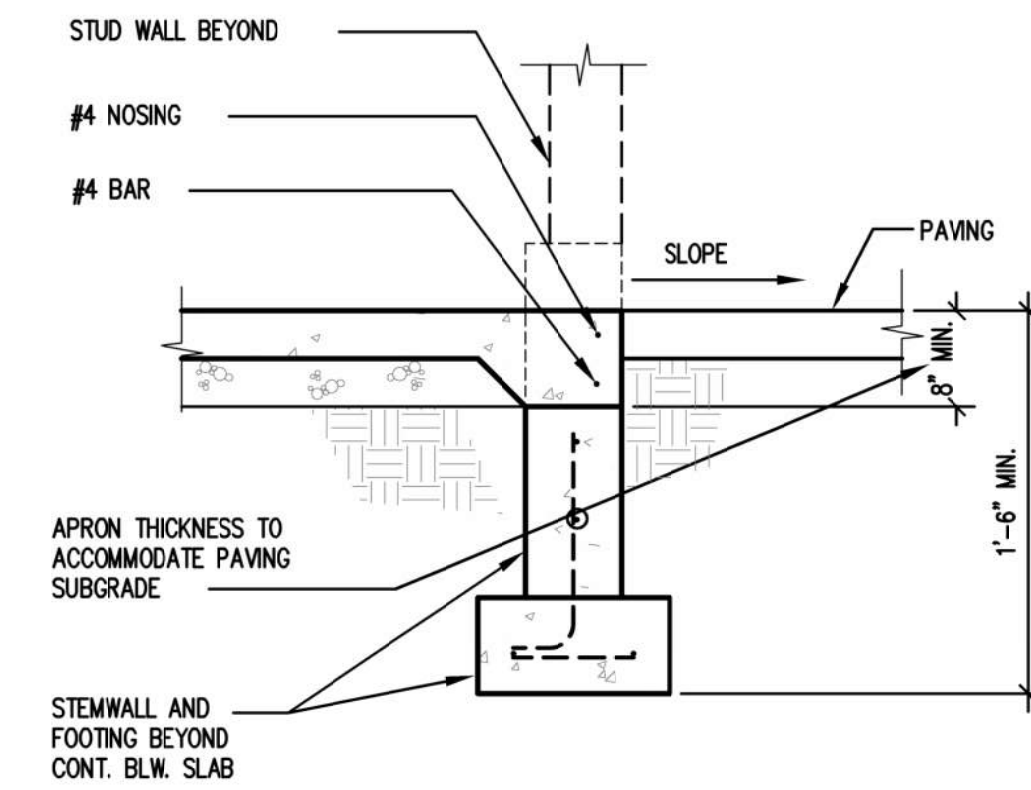
4 TYPICAL STEPPED FOOTING



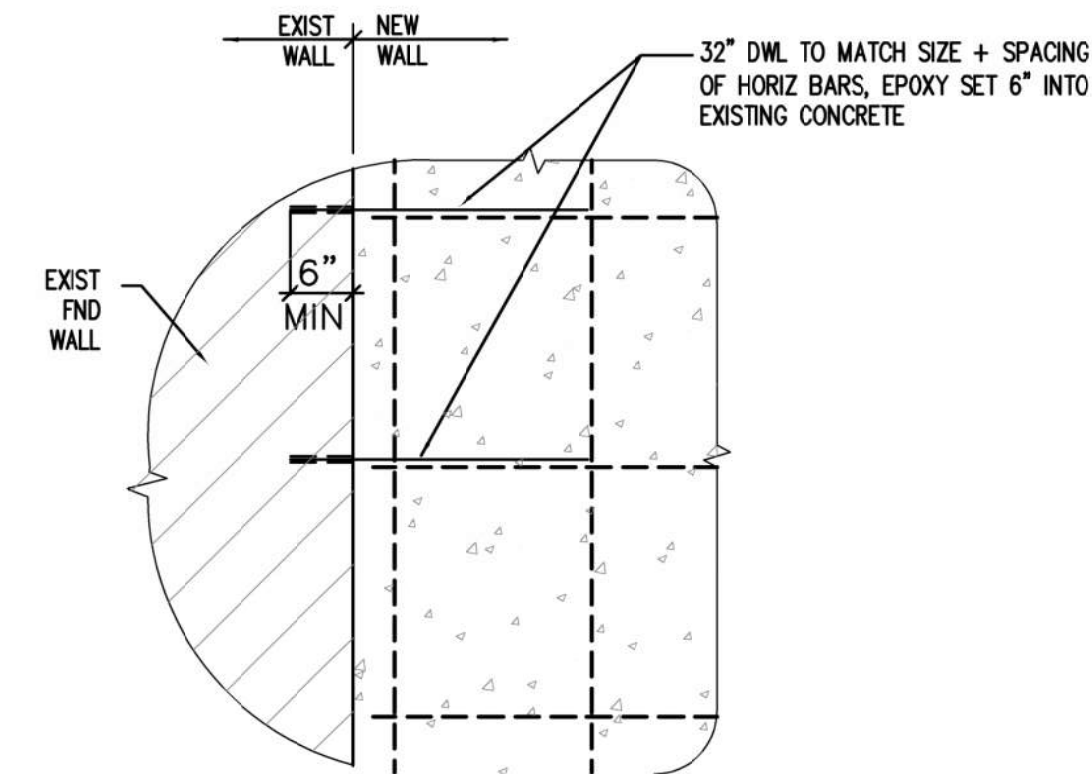
5 NEW ISOLATED PIER FOOTING



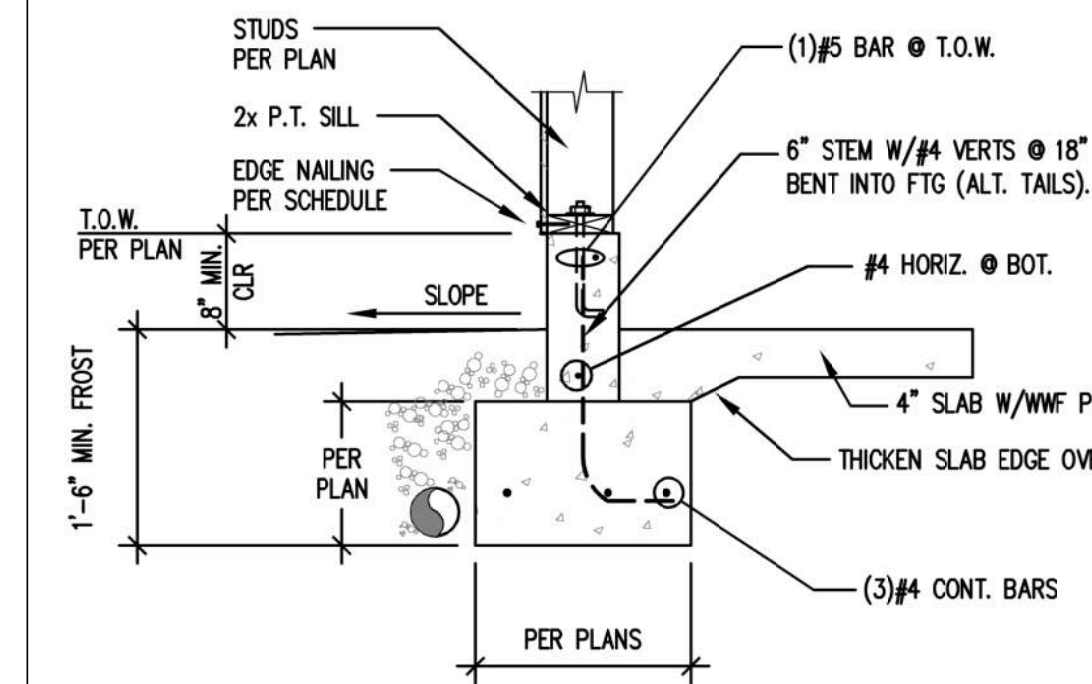
6 SINGLE CURTAIN WALL REINFORCEMENT PLACEMENT



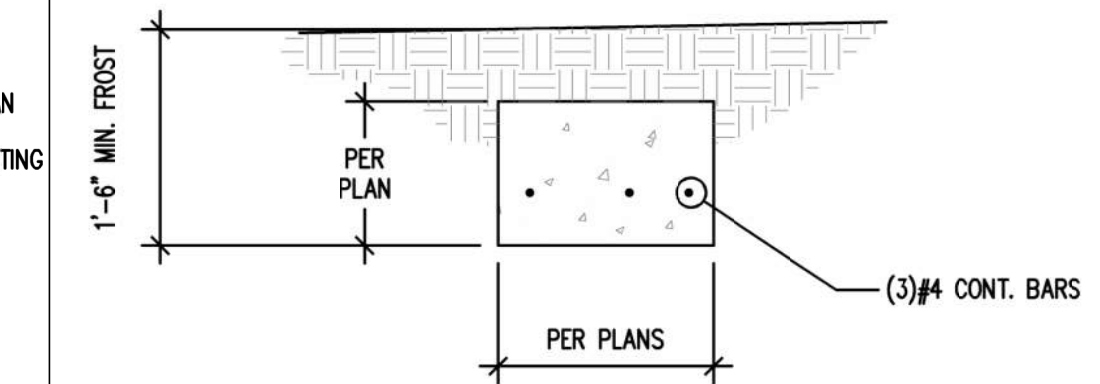
7 GARAGE APRON



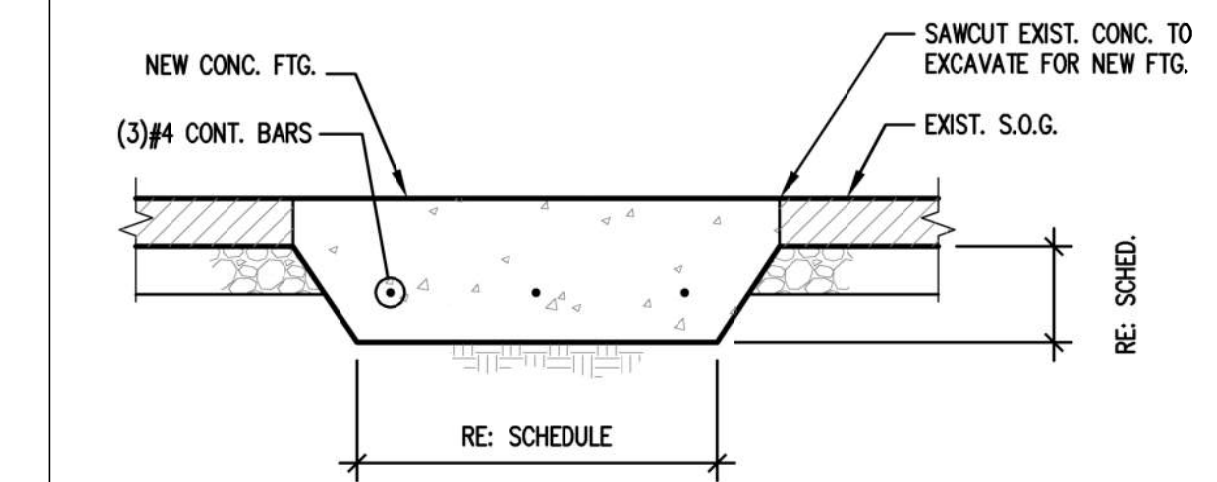
8 NEW FOUNDATION TO EXIST. FND CONN.



9 TYP. EXTERIOR FOOTING AROUND S.O.G.



10 TIE GRADE BEAM



15 TYPICAL INTERIOR POST ON SLAB



Permit Set

Date:	Description:
05/17/21	Permit Set

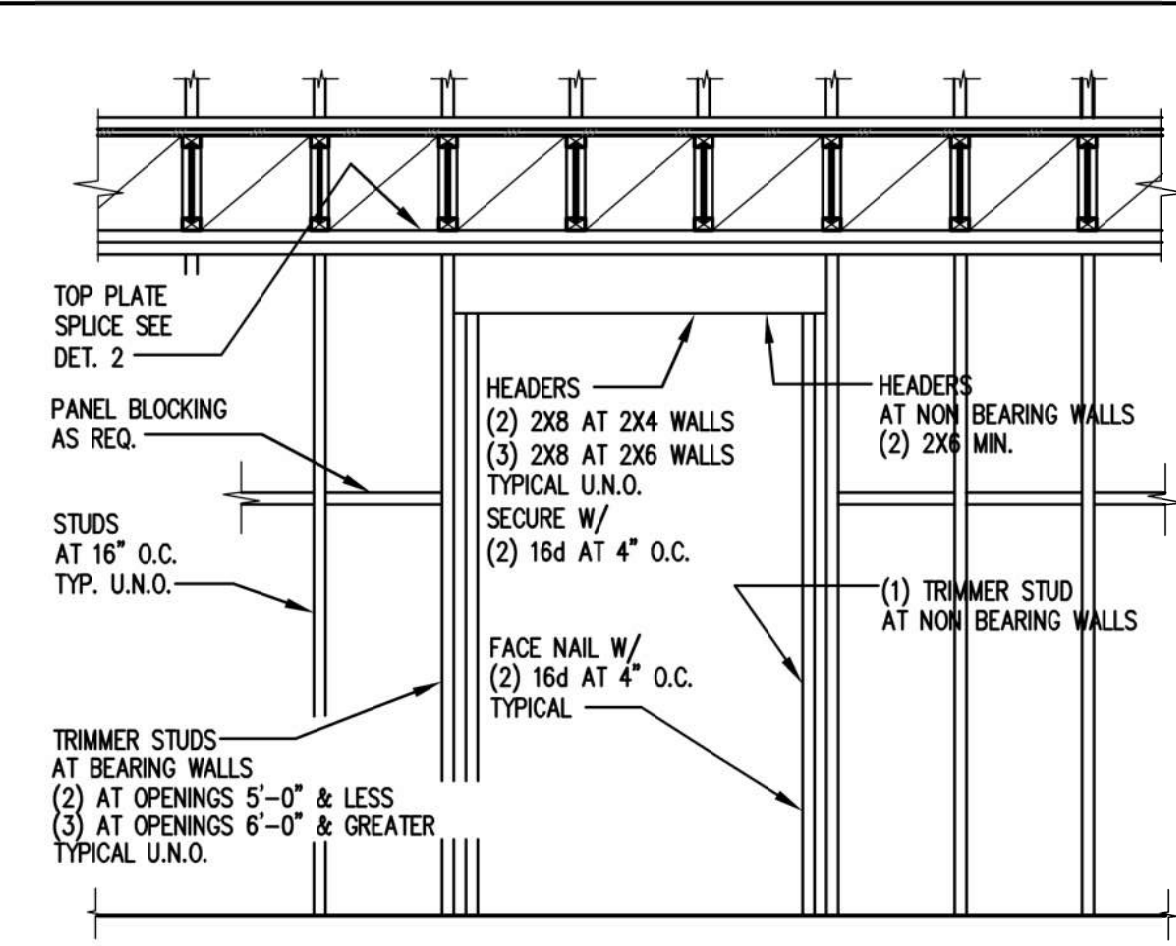
Project No.: CTE#21056  
Drawn:

FOUNDATION DETAILS

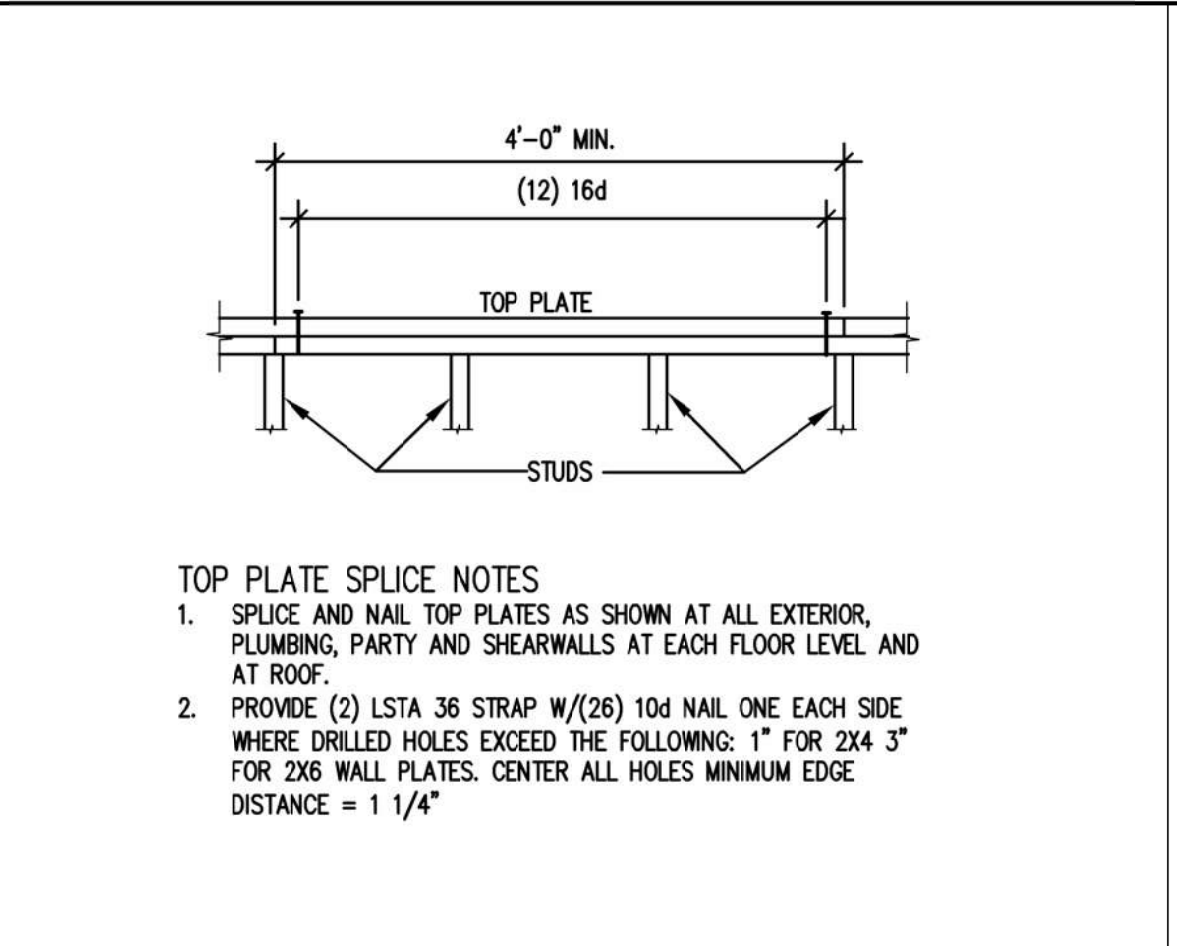
Sheet No:

S6.1

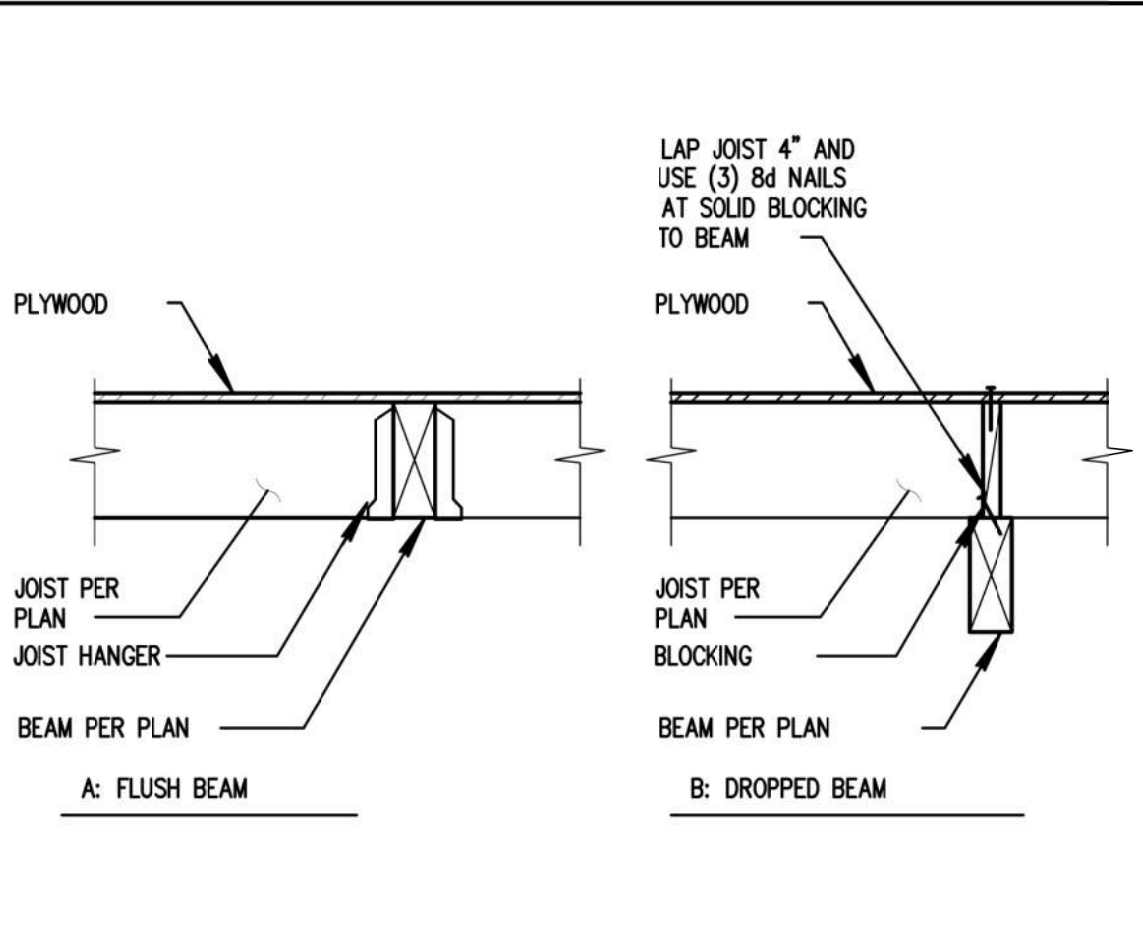




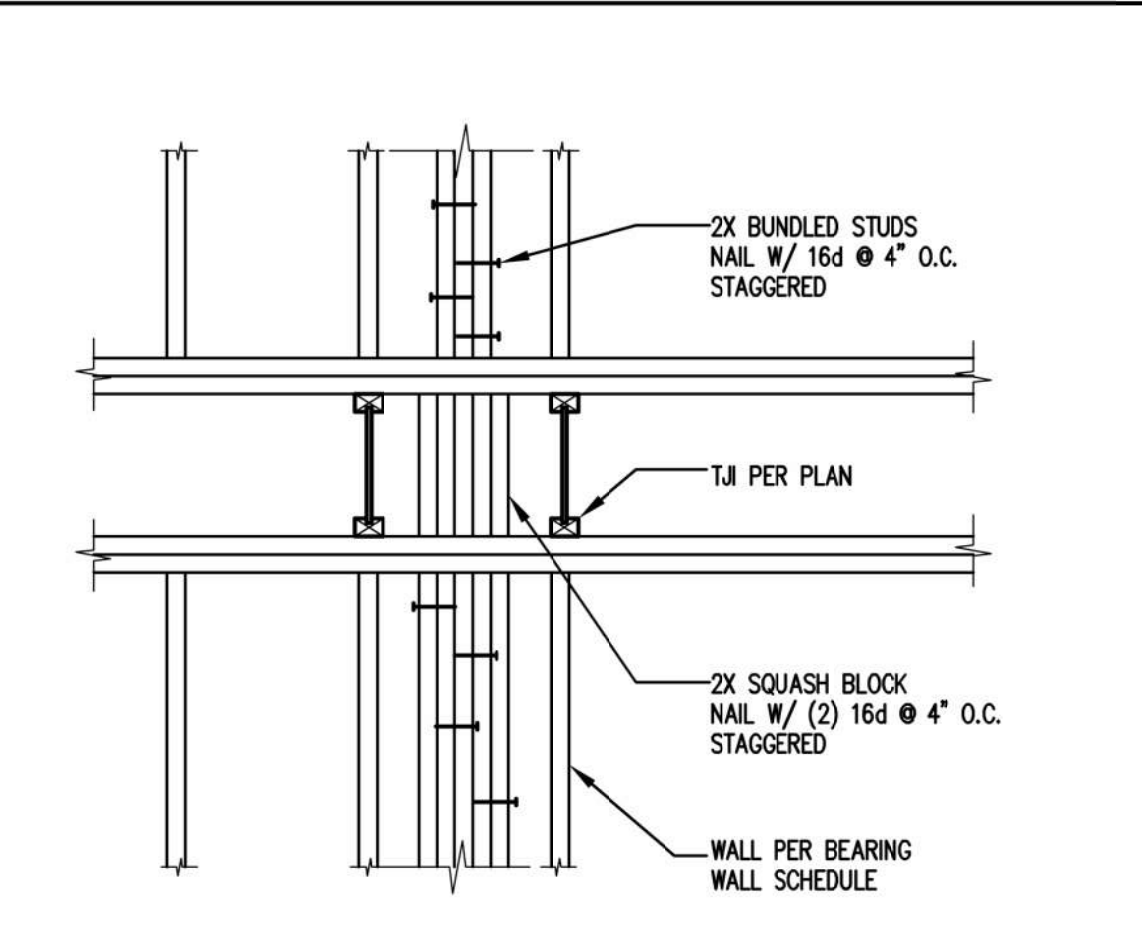
1 TYPICAL HEADER at WALL



2 TYPICAL TOP PLATE SPICE



3 TYPICAL CONNECTION TO WOOD BEAM

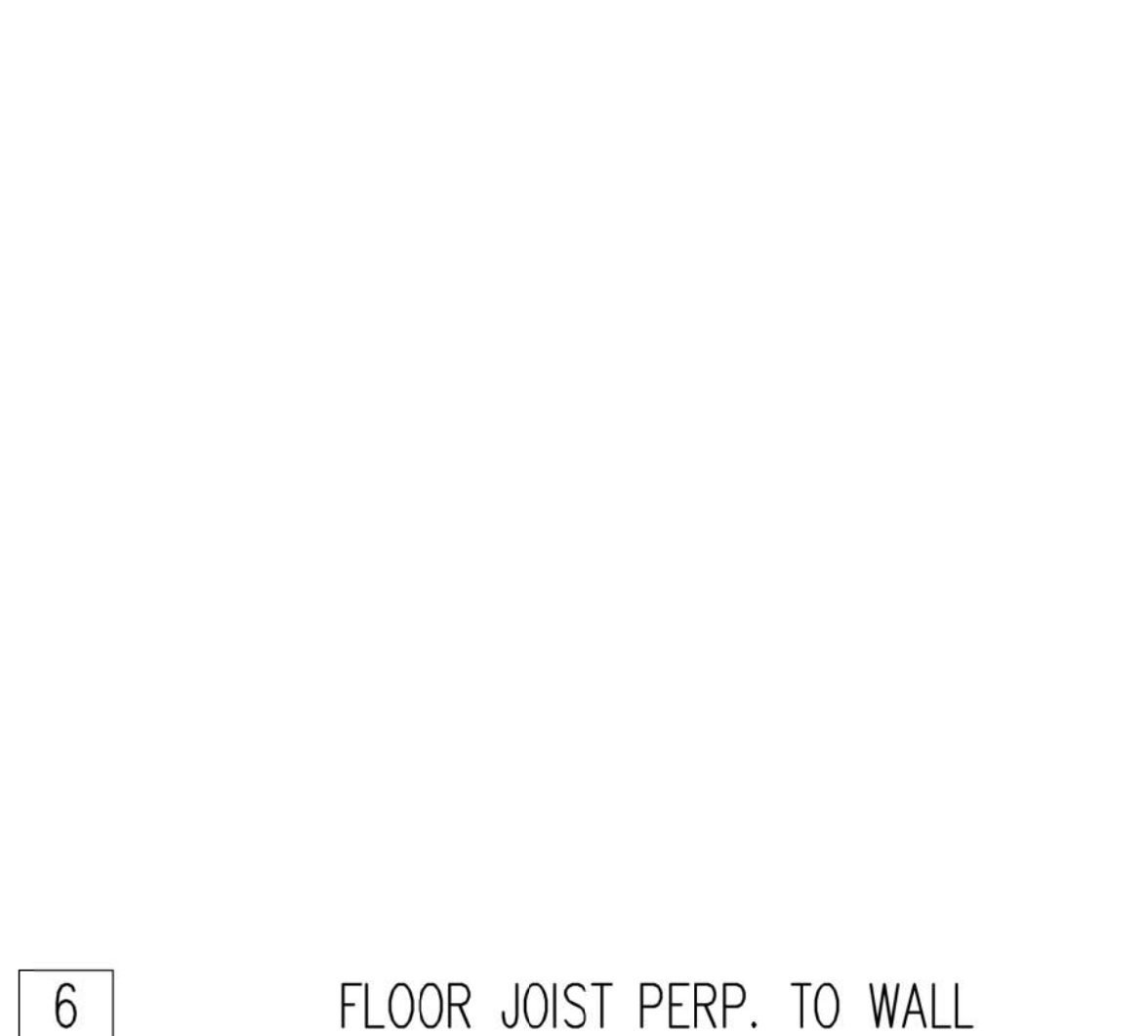


4 TYPICAL BLOCKING at BUNDLED STUDS

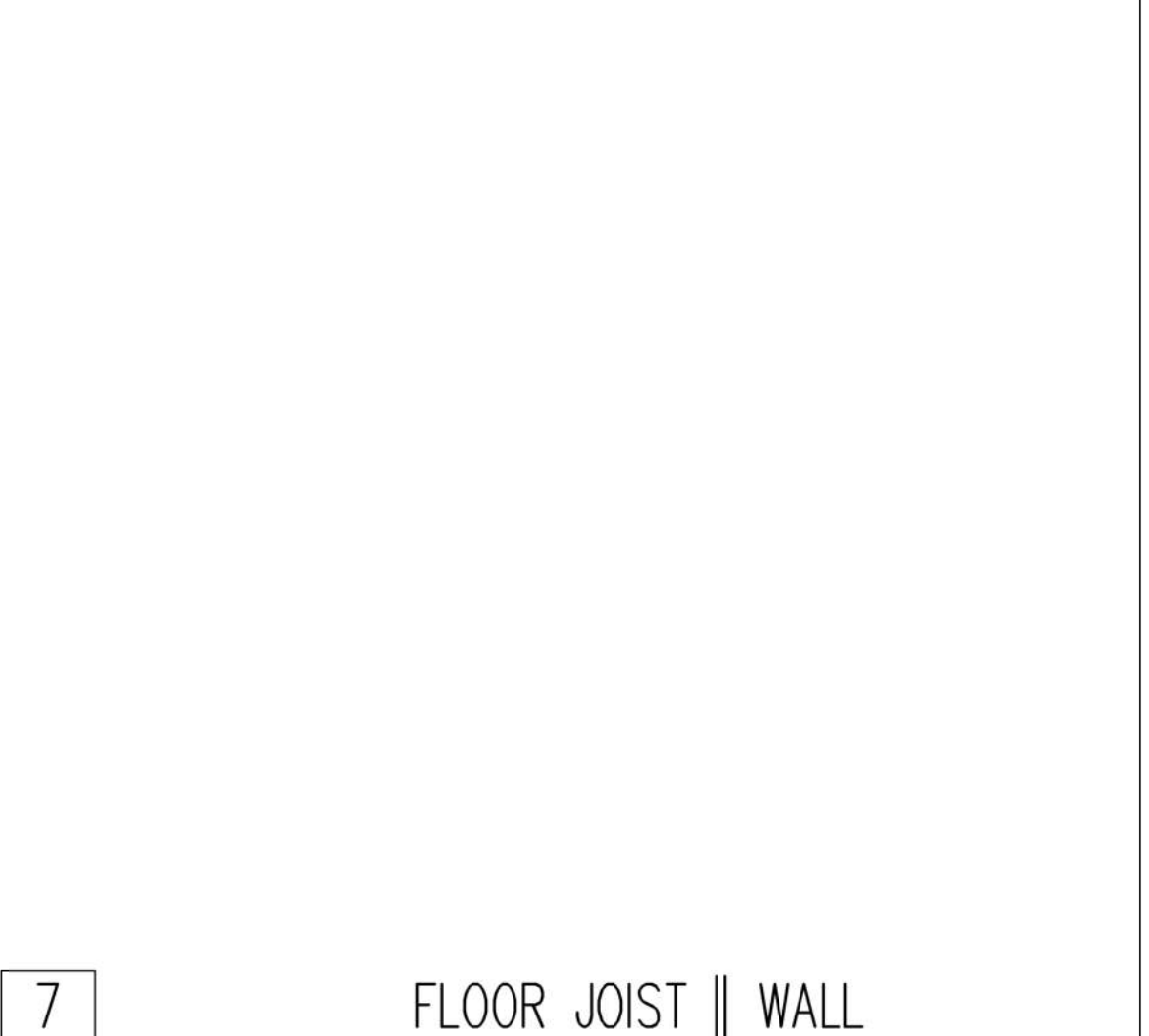
NOTE: MOST STRUCTURAL SHEARWALLS SHOWN ON THESE PLANS WILL REQUIRE ADDITIONAL FASTENERS.

**FASTENING SCHEDULE (BC TABLE 2304.10.1)**

CONNECTION	FASTENING (a, m)	LOCATION
1. JOIST TO SILL OR GIRDER	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
2. BRIDGING TO JOIST	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL EA. END TOENAIL EA. END TOENAIL EA. END
3. 1X6 OR LESS SUBFLOOR TO JST.	(2) 8d COMMON	FACE NAIL
4. 1X6 OR LESS SUBFLOOR TO JST.	(3) 8d COMMON	FACE NAIL
5. 2" SUBFLOOR TO JST./GRDR	(2) 16d COMMON	BLIND & FACE NAIL
6. SOLE PLATE TO JST. OR BLKG.	16d AT 16" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 12"	TYP. FACE NAIL TYP. FACE NAIL TYP. FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	(3) 16d COMMON AT 16" O.C. (4) 3" X 0.131" NAILS AT 16" O.C. (4) 3" 14 GAGE STAPLES PER 16"	BRACED WALL PANELS BRACED WALL PANELS BRACED WALL PANELS
7. TOP PLATE TO STUD	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	END NAIL END NAIL END NAIL
8. STUD TO SOLE PLATE	(4) 8d COMMON (4) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLE	TOENAIL TOENAIL TOENAIL
9. DOUBLE STUDS	16d COMMON AT 24" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 8"	FACE NAIL FACE NAIL FACE NAIL
10. DOUBLE TOP PLATES	16d COMMON AT 16" O.C. 3" X 0.131" NAIL AT 12" O.C. 3" 14 GAGE STAPLES AT 12"	TYP. FACE NAIL TYP. FACE NAIL TYP. FACE NAIL
DOUBLE TOP PLATE SPICE	(8) 16d COMMON (12) 3" X 0.131" NAILS (12) 3" 14 GAGE STAPLES FACE NAIL	LAP SPICE LAP SPICE LAP SPICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
12. RIM JOIST TO TOP PLATE	8d COMMON AT 6" O.C. 3" X 0.131" NAILS AT 6" O.C. 3" 14 GAGE STAPLES AT 6"	TOENAIL TOENAIL TOENAIL
13. TOP PLATES, CORNER LAPS AND INTERSECTIONS	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON AT 16" O.C.	ALONG EDGE
15. CEILING JOISTS TO PLATE	(3) 8d COMMON (5) 3" X 0.131" NAILS (5) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
16. CONTINUOUS HEADER TO STUD	(4) 8d COMMON	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS (SECTION 2308.10.4.1)	(3) 16d COMMON MIN. TABLE 2308.10.4.1 (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS (SECTION 2308.10.4.1)	(3) 16d COMMON MIN. TABLE 2308.10.4.1 (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
19. RAFTER TO PLATE (SECTION 2308.10.1) (TABLE 2308.10.1)	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	(2) 8d COMMON (2) 3" X 0.131" NAILS (2) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
21. 1"X8" SHEATHING TO EACH BEARING	(2) 8d COMMON	FACE NAIL
22. WIDER THAN 1"X8" SHEATHING TO EACH BEARING	(3) 8d COMMON	FACE NAIL
23. BUILT UP CORNER STUDS	16d COMMON 3" X 0.131" NAILS 3" 14 GAGE STAPLES	24" O.C. 16" O.C. 16" O.C.
24. BUILT UP GIRDER AND BEAMS	16d COMMON AT 32" O.C. 3" X 0.131" NAILS AT 24" O.C. 3" 14 GAGE STAPLES AT 24" O.C.	FACE NAIL TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
25. 2" PLANKS	(2) 20d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL AT ENDS AND EACH SPICE
26. COLLAR TIE TO RAFTER	16d COMMON (3) 10d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	AT EACH BEARING FACE NAIL FACE NAIL FACE NAIL
27. JACK RAFTER TO HIP	(3) 10d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
28. ROOF RAFTER TO 2-BY RIDGE BEAM	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
29. JOIST TO BAND JOIST	(3) 16d COMMON (3) 3" X 0.131" NAILS (5) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
30. LEDGER STRIP	(3) 16d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
31. WOOD STRUCTURAL PANELS TO FRAMING SUBFLOOR TO FRAMING	SEE SHEARWALL SCHEDULE SEE STRUCTURAL NOTES	SHEET S1.10 SECTION 06160



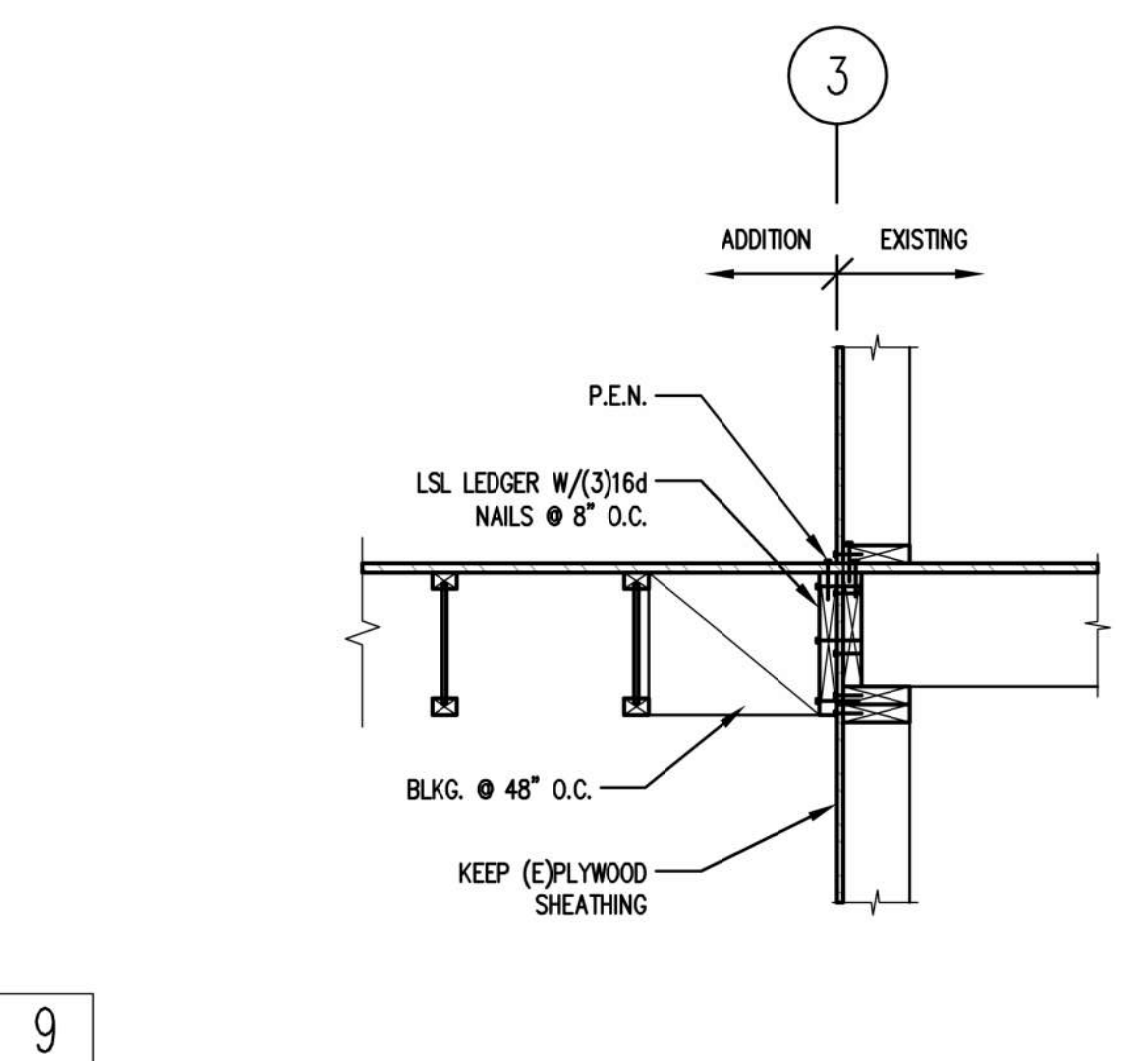
6 FLOOR JOIST PERP. TO WALL



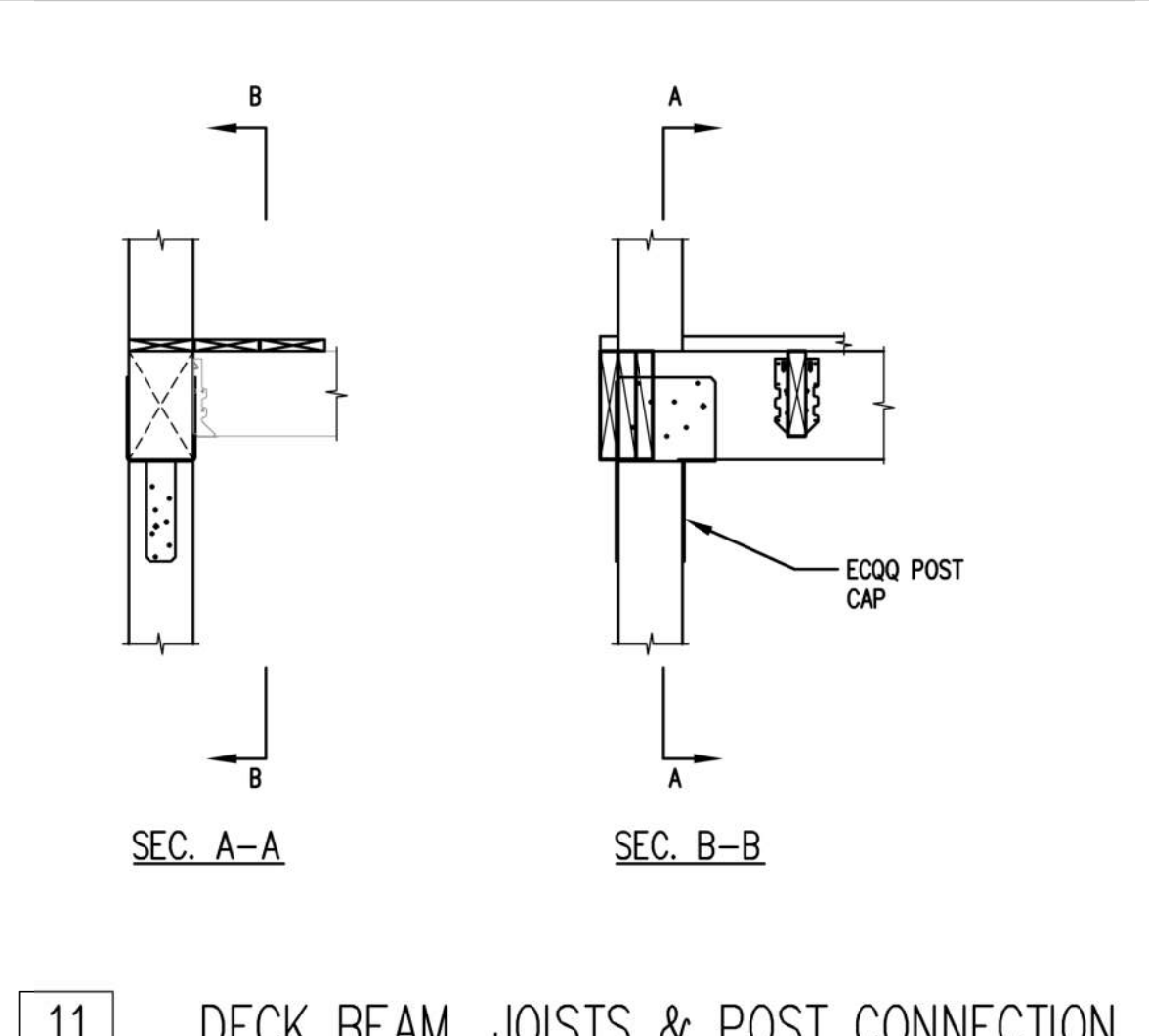
7 FLOOR JOIST || WALL



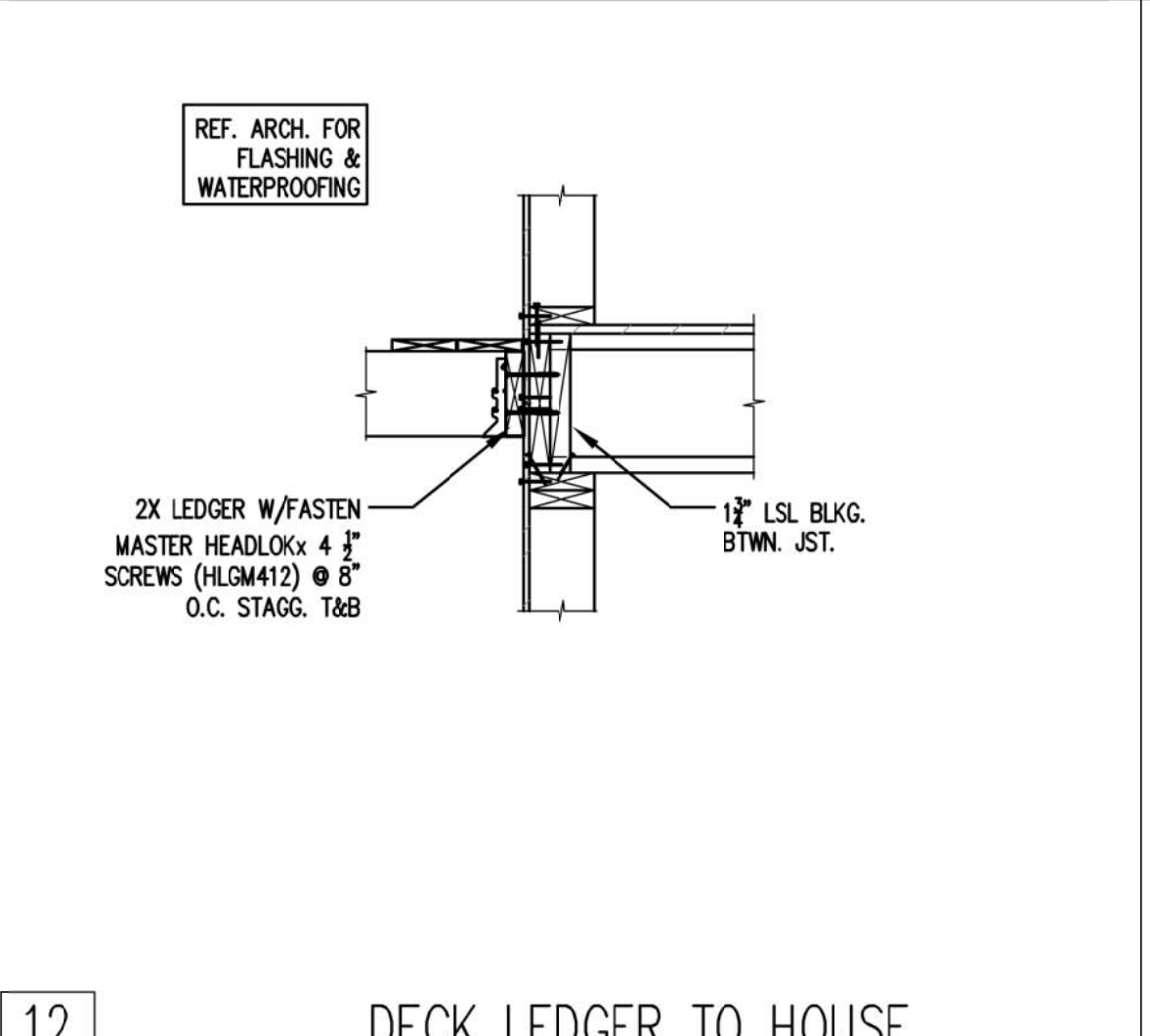
8 MIN. NAILING: REFER TO S1.2 FOR STRICTER REQUIREMENTS



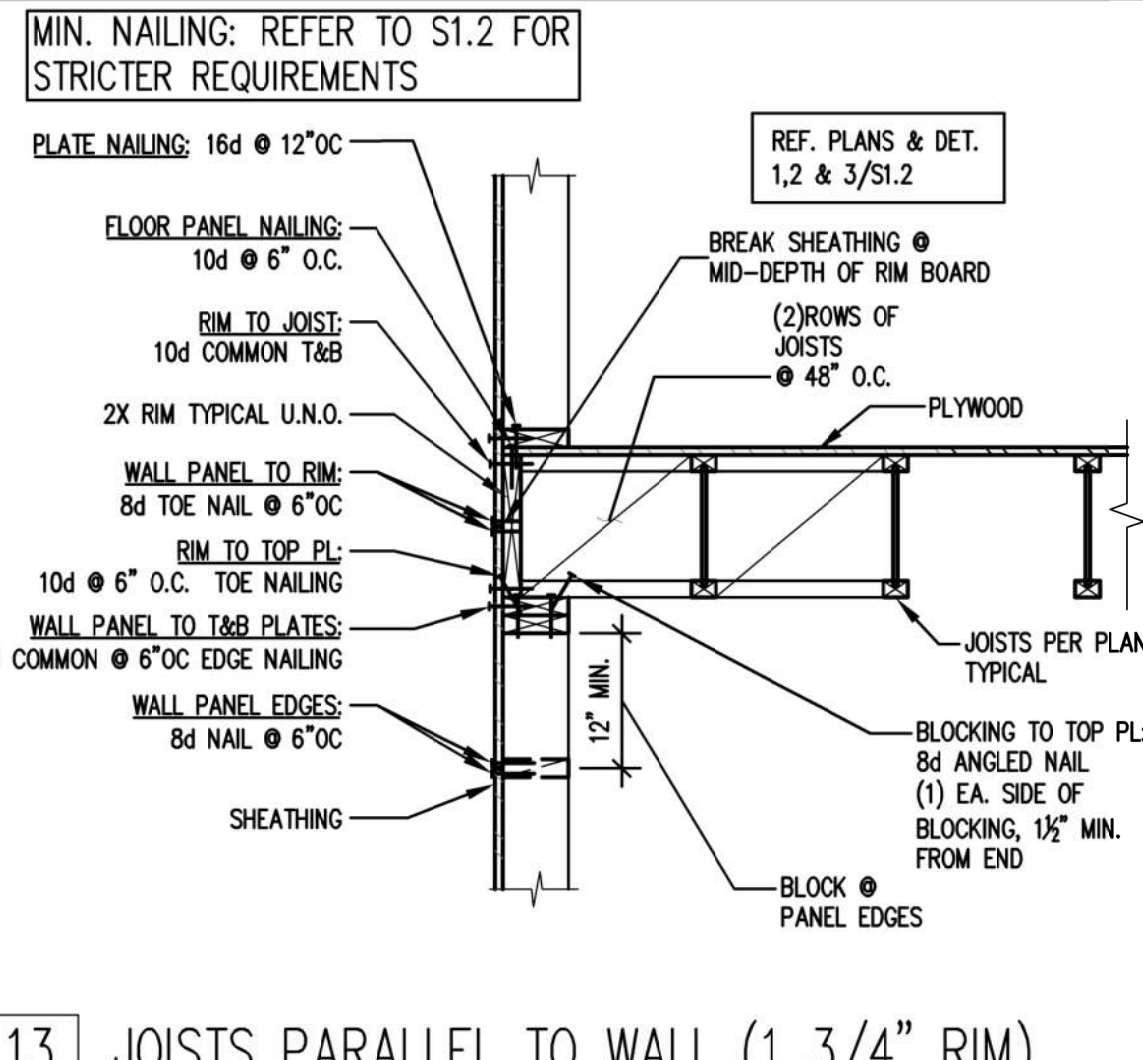
9 MIN. NAILING: REFER TO S1.2 FOR STRICTER REQUIREMENTS



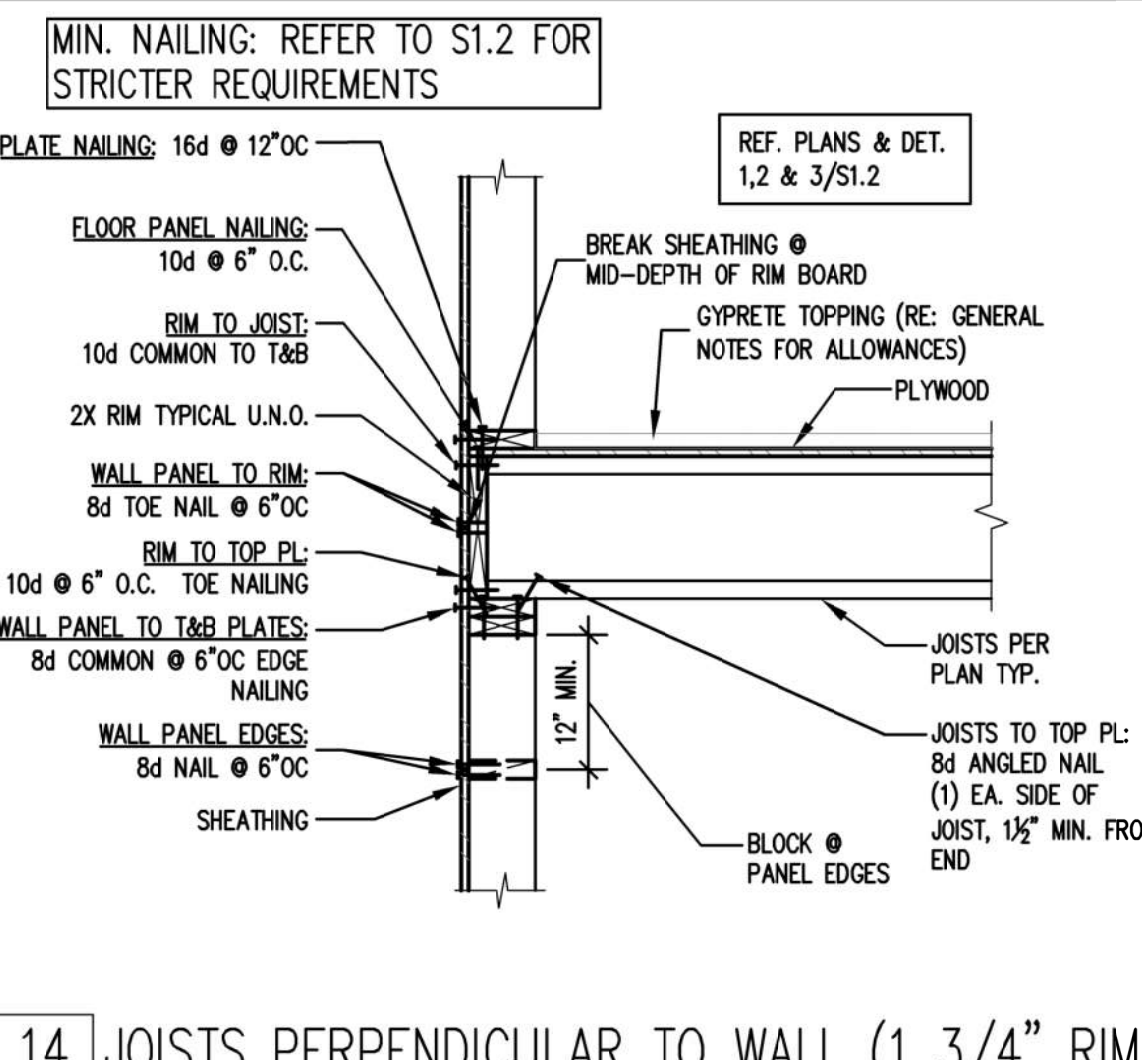
11 DECK BEAM, JOISTS & POST CONNECTION



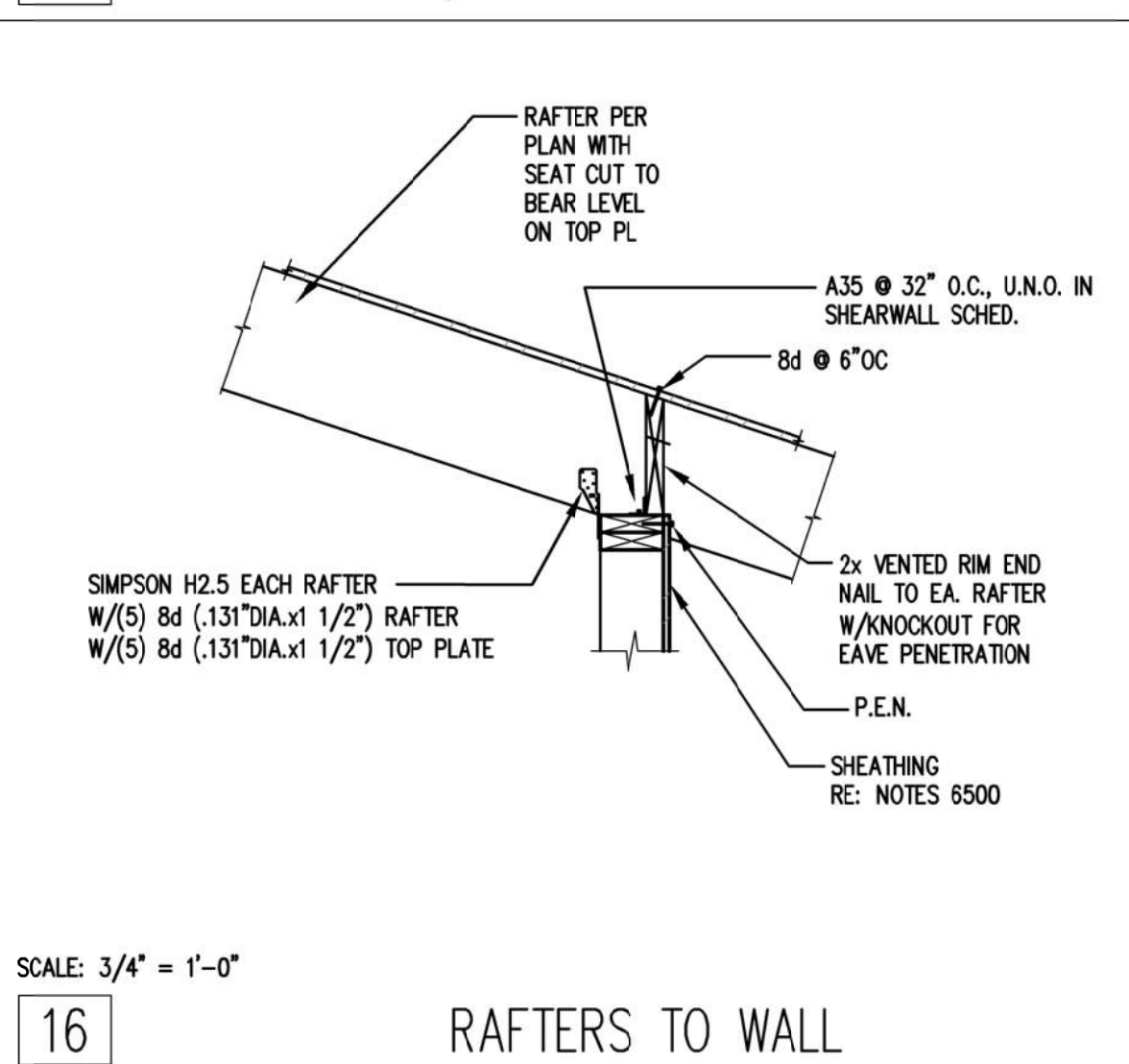
12 DECK LEDGER TO HOUSE



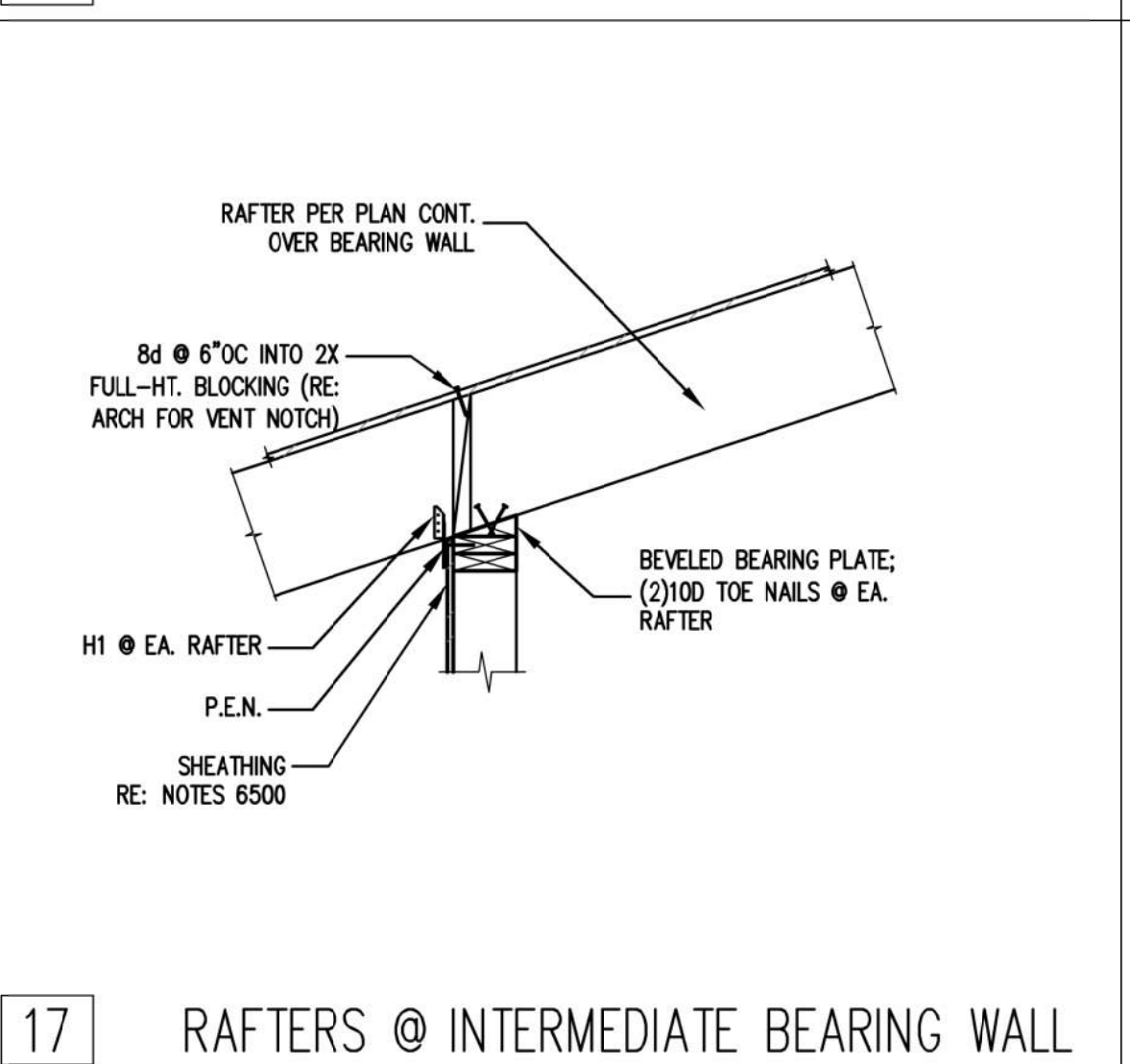
13 JOISTS PARALLEL TO WALL (1 3/4" RIM)



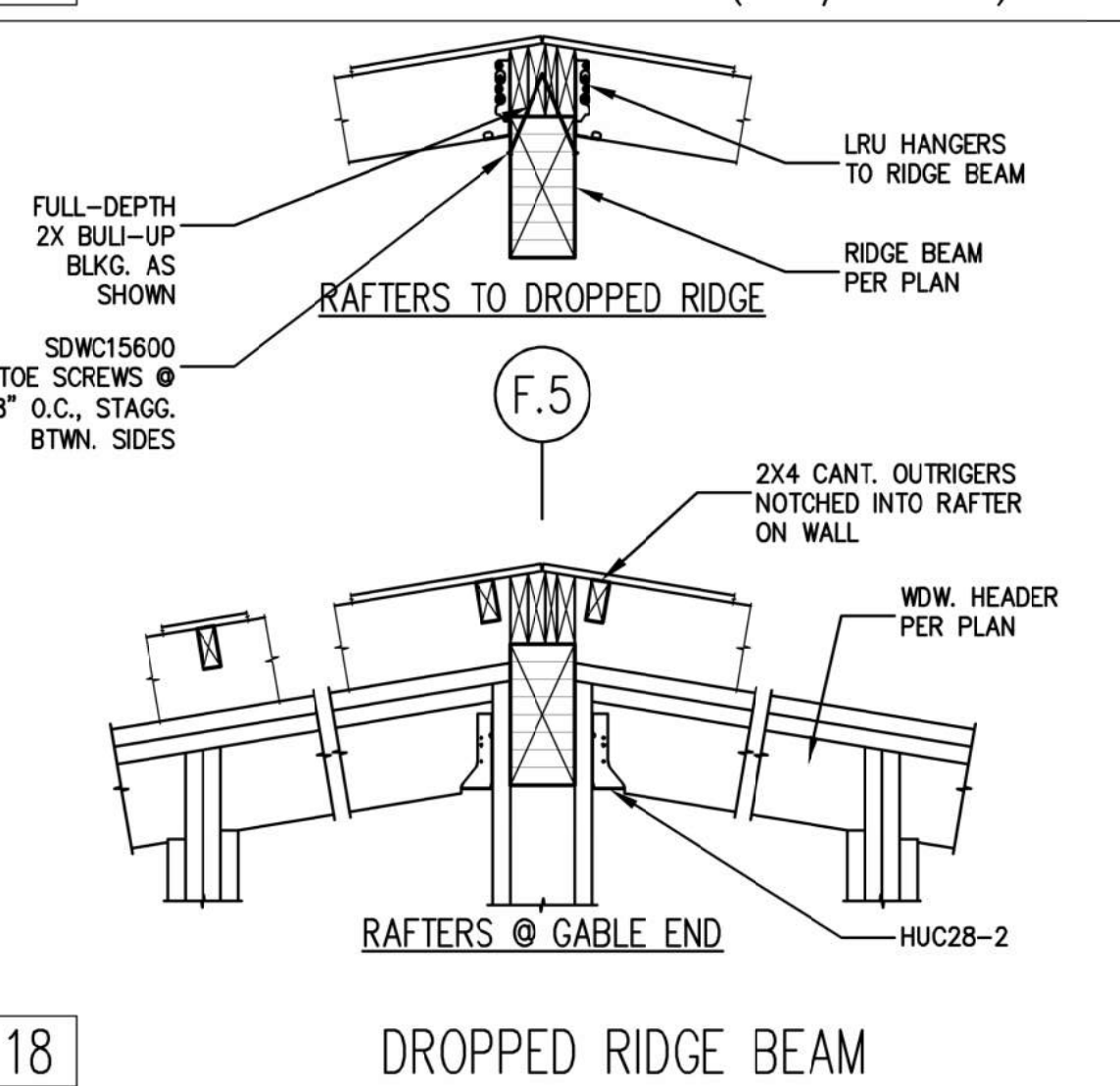
14 JOISTS PERPENDICULAR TO WALL (1 3/4" RIM)



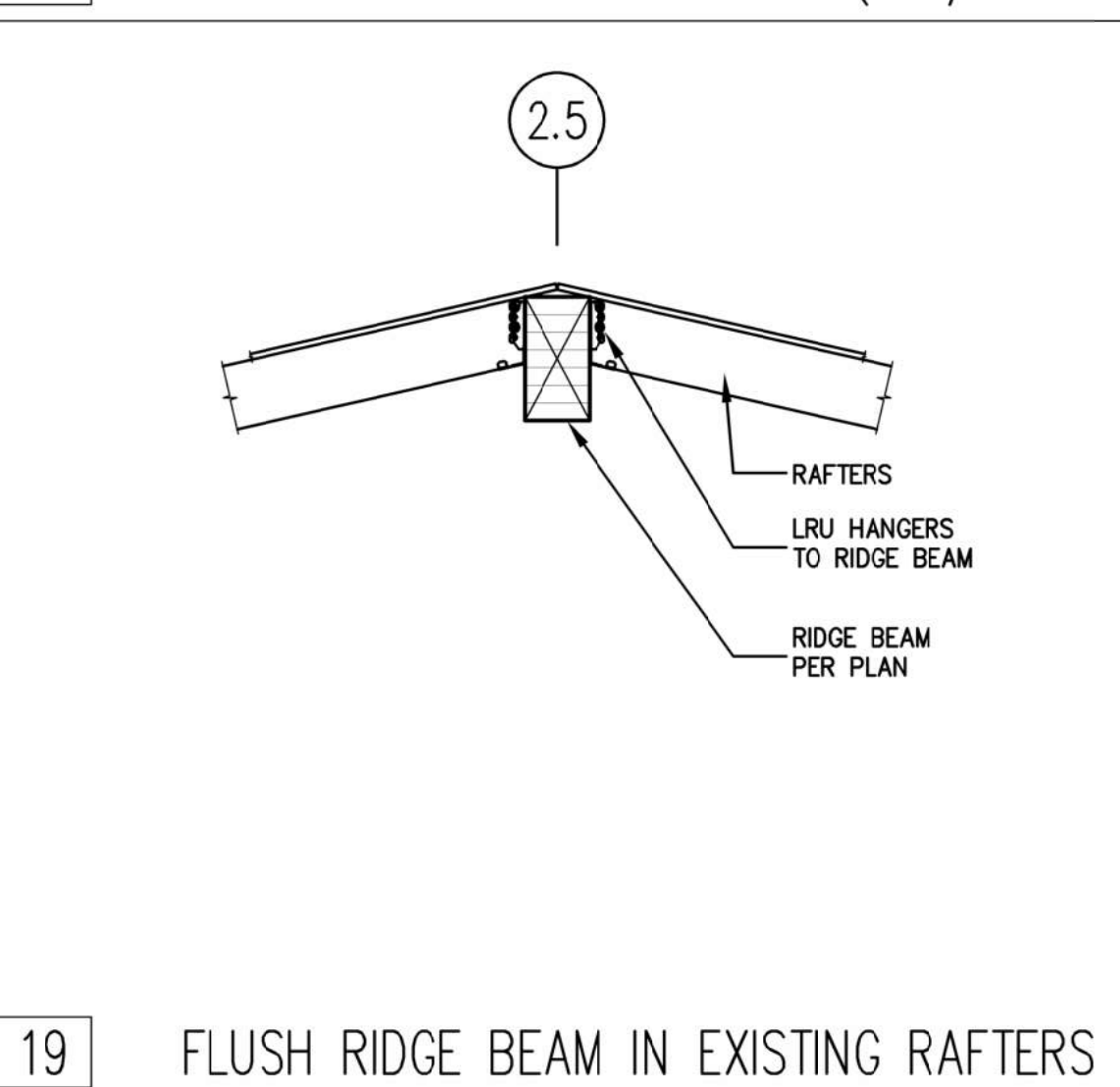
16 RAFTERS TO WALL



17 RAFTERS @ INTERMEDIATE BEARING WALL



18 DROPPED RIDGE BEAM



19 FLUSH RIDGE BEAM IN EXISTING RAFTERS

NOTE: MOST STRUCTURAL SHEARWALLS SHOWN ON THESE PLANS WILL REQUIRE ADDITIONAL FASTENERS.

**FASTENING SCHEDULE (BC TABLE 2304.10.1)**

CONNECTION	FASTENING (a, m)	LOCATION
1. JOIST TO SILL OR GIRDER	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
2. BRIDGING TO JOIST	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL EA. END TOENAIL EA. END TOENAIL EA. END
3. 1X6 OR LESS SUBFLOOR TO JST.	(2) 8d COMMON	FACE NAIL
4. 1X6 OR LESS SUBFLOOR TO JST.	(3) 8d COMMON	FACE NAIL
5. 2" SUBFLOOR TO JST./GRDR	(2) 16d COMMON	BLIND & FACE NAIL
6. SOLE PLATE TO JST. OR BLKG.	16d AT 16" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 12"	TYP. FACE NAIL TYP. FACE NAIL TYP. FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	(3) 16d COMMON AT 16" O.C. (4) 3" X 0.131" NAILS AT 16" O.C. (4) 3" 14 GAGE STAPLES PER 16"	BRACED WALL PANELS BRACED WALL PANELS BRACED WALL PANELS
7. TOP PLATE TO STUD	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	END NAIL END NAIL END NAIL
8. STUD TO SOLE PLATE	(4) 8d COMMON (4) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLE	TOENAIL TOENAIL TOENAIL
9. DOUBLE STUDS	16d COMMON AT 24" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 8"	FACE NAIL FACE NAIL FACE NAIL
10. DOUBLE TOP PLATES	16d COMMON AT 16" O.C. 3" X 0.131" NAIL AT 12" O.C. 3" 14 GAGE STAPLES AT 12"	TYP. FACE NAIL TYP. FACE NAIL TYP. FACE NAIL
DOUBLE TOP PLATE SPICE	(8) 16d COMMON (12) 3" X 0.131" NAILS (12) 3" 14 GAGE STAPLES FACE NAIL	LAP SPICE LAP SPICE LAP SPICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
12. RIM JOIST TO TOP PLATE	8d COMMON AT 6" O.C. 3" X 0.131" NAILS AT 6" O.C. 3" 14 GAGE STAPLES AT 6"	TOENAIL TOENAIL TOENAIL
13. TOP PLATES, CORNER LAPS AND INTERSECTIONS	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON AT 16" O.C.	ALONG EDGE
15. CEILING JOISTS TO PLATE	(3) 8d COMMON (5) 3" X 0.131" NAILS (5) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
16. CONTINUOUS HEADER TO STUD	(4) 8d COMMON	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS (SECTION 2308.10.4.1)	(3) 16d COMMON MIN. TABLE 2308.10.4.1 (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS (SECTION 2308.10.4.1)	(3) 16d COMMON MIN. TABLE 2308.10.4.1 (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
19. RAFTER TO PLATE (SECTION 2308.10.1) (TABLE 2308.10.1)	(3) 8d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	(2) 8d COMMON (2) 3" X 0.131" NAILS (2) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
21. 1"X8" SHEATHING TO EACH BEARING	(2) 8d COMMON	FACE NAIL
22. WIDER THAN 1"X8" SHEATHING TO EACH BEARING	(3) 8d COMMON	FACE NAIL
23. BUILT UP CORNER STUDS	16d COMMON 3" X 0.131" NAILS 3" 14 GAGE STAPLES	24" O.C. 16" O.C. 16" O.C.
24. BUILT UP GIRDER AND BEAMS	16d COMMON AT 32" O.C. 3" X 0.131" NAILS AT 24" O.C. 3" 14 GAGE STAPLES AT 24" O.C.	FACE NAIL TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
25. 2" PLANKS	(2) 20d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL AT ENDS AND EACH SPICE
26. COLLAR TIE TO RAFTER	16d COMMON (3) 10d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	AT EACH BEARING FACE NAIL FACE NAIL FACE NAIL
27. JACK RAFTER TO HIP	(3) 10d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	TOENAIL TOENAIL TOENAIL
28. ROOF RAFTER TO 2-BY RIDGE BEAM	(2) 16d COMMON (3) 3" X 0.131" NAILS (3) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
29. JOIST TO BAND JOIST	(3) 16d COMMON (3) 3" X 0.131" NAILS (5) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
30. LEDGER STRIP	(3) 16d COMMON (4) 3" X 0.131" NAILS (4) 3" 14 GAGE STAPLES	FACE NAIL FACE NAIL FACE NAIL
31. WOOD STRUCTURAL PANELS TO FRAMING SUBFLOOR TO FRAMING	SEE SHEARWALL SCHEDULE SEE STRUCTURAL NOTES	SHEET S1.10 SECTION 06160

**CT ENGINEERING INC.**  
Structural Engineers  
180 Nickerson Street, Suite 302  
206.285.4512 (Y)  
206.285.0618 (F)  
Seattle, WA 98109



Sterba Mironova Addition  
9811 SE 40th St  
Mercer Island, WA 98040

Permit Set

Date:	Description:
05/17/21	Permit Set

Project No.: CTE#21056  
Drawn: \_\_\_\_\_