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URBAN DESIGN GROUP

FRONT ELEVATION:



PREPARED FOR:

**8456 SE 40TH RESIDENCE**

PROJECT DATA:

PARCEL NO.:	502190-0190	DESIGN TEAM:	URBAN DESIGN GROUP 15445 53rd AVE. S. STE. 110 TUKWILA, WA 98188 (206) 838-8250 urbandesigncenter@yahoo.com CONTACT: PAVEL MELNIK
PROPERTY TYPE:	R, RESIDENTIAL	STRUCTURAL ENGINEER:	NN ENGINEERING P.O. BOX 39681 LAKEWOOD, WA 98449 (253) 250-6651 NNENGINEERING@COMCAST.NET CONTACT: NORM P. NAVARRO
LAND AREA:	11,930 S.F.	OWNER:	PHILIP SUDO Q LLC mackuntu@gmail.com laurieyang92@gmail.com CONTACT: KUN QIAN & LAURIE QIAN
ACRES:	0.27		
Q,S,T,R:	SN-1 -24-5		
ADDRESS:	8456 SE 40TH MERCER ISLAND, WA 98040		
ZONE:	R-8.4		
SETBACKS:	FRONT: 20 FEET REAR: 25 FEET SIDE: 5 FT. MIN. 30 FEET		
MAX HEIGHT:			
WATER:	WATER DISTRICT		
SEWER/SEPTIC:	PUBLIC		
ROAD ACCESS:	PUBLIC		
STREET SURFACE:	PAVED		

SHEET #	COVER
AO	COVER
1 OF 1	BOUNDARY/TOPOGRAPHIC SURVEY
SITE	ARCHITECTURAL SITE PLAN
	CIVIL ENGINEERING
C1.0	TESS/DEMO/CSWPPP
C1.1	DRAINAGE SITE PLAN
C1.2	DETENTION DETAIL
	ARCHITECTURAL PLAN
A1.1	GENERAL NOTES AND PLAN PREVIEW
A1.2	ENERGY CREDITS OPTIONS
A2.1	GROSS FLOOR AREA (GFA)
A2.2	PARKING
A3	MAIN FLOOR PLAN
A4	UPPER FLOOR PLAN
A5	FRONT AND REAR ELEVATIONS
A6	LEFT AND RIGHT ELEVATIONS
A7	PERSPECTIVE VIEWS
A8	BUILDING CROSS-SECTION AND DETAILS
A9	ROOF LAYOUT
A10	SCHEDULES AND NOTES
A11	DETAILS
A12	PROJECT DETAILS
A13	HARDIE PANEL SIDING DETAILS
A14	ARTISAN LAP SIDING DETAILS
	STRUCTURAL PLAN
S1.1	GENERAL NOTES
S1.2	GENERAL NOTES
S2	FOUNDATION DETAILS
S3	FRAMING DETAILS
S4	FOUNDATION/ FLOOR FRAMING
S5	UPPER FLOOR FRAMING
S6	ROOF FRAMING

3D RENDERING NOTES:

3D ELEVATIONS ARE FOR REFERENCE ONLY. THESE SHOULD NOT BE USED TO DETERMINE ANY PORTION OF THE CONSTRUCTION OTHER THAN GENERAL MATERIAL AND APPEARANCE. REFER TO ELEVATION SHEETS FOR DETAILS.

PROJECT DESCRIPTION:

SINGLE FAMILY RESIDENCE (4 016 S.F.) AND ATTACHED 2-CAR GARAGE (500 S.F.).

BUILDING DEPARTMENT NOTES:

**FIRE SPRINKLERS REQUIRED BY SEPARATE PERMIT**



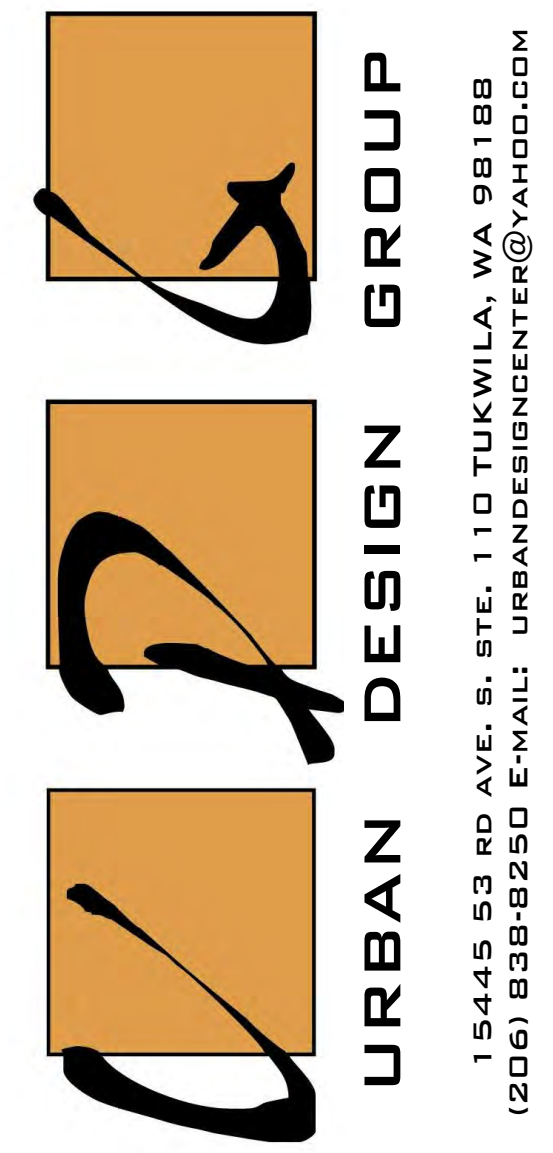
FRONT/RIGHT ELEVATION:



REAR/LEFT ELEVATION:



REAR ELEVATION:



PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE  
 8456 SE 40TH  
 MERCER ISLAND, WA 98040  
 PARCEL #: 502190-0190**

PREPARED FOR:  
**PHILIP SUDO Q LLC  
 KUN QIAN &  
 LAURIE QIAN**

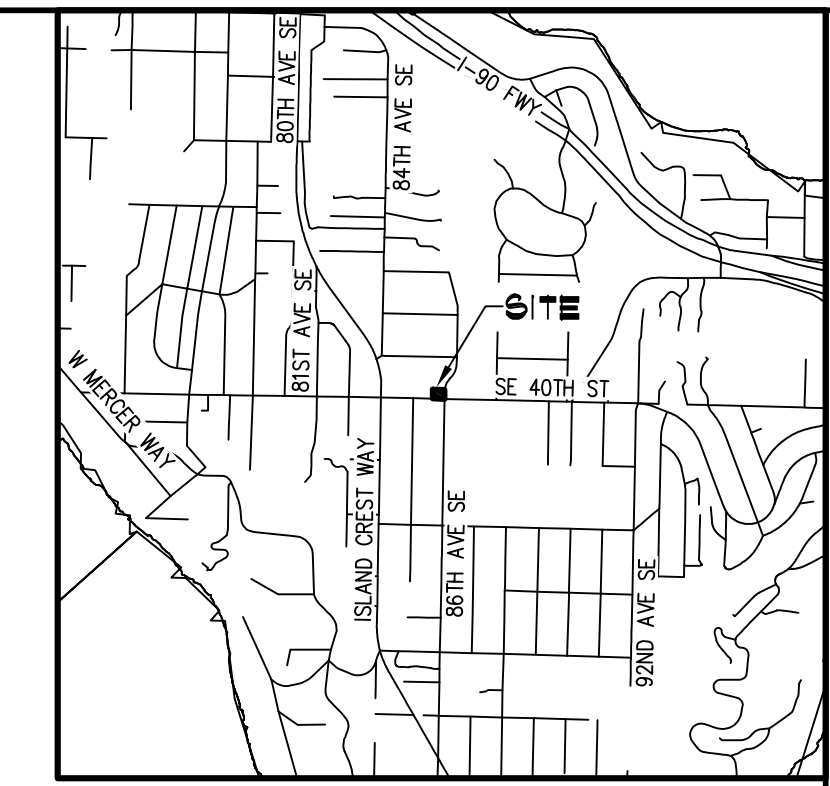
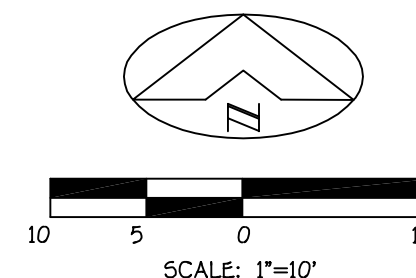
SUBMITTAL/REVISION: DATE:  
 SUBMITTED -/-/2022  
 REVISED -/-/2022  
 DESIGN BY: PAVEL MELNIK  
 DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:  
**COVER SHEET**

PROJECT NUMBER:  
**21257**

SHEET NUMBER:  
**AO**

A PORTION OF THE SW 1/4, SW 1/4 OF SECTION 7, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M.



VICINITY MAP  
SCALE: 1" = 2,000'

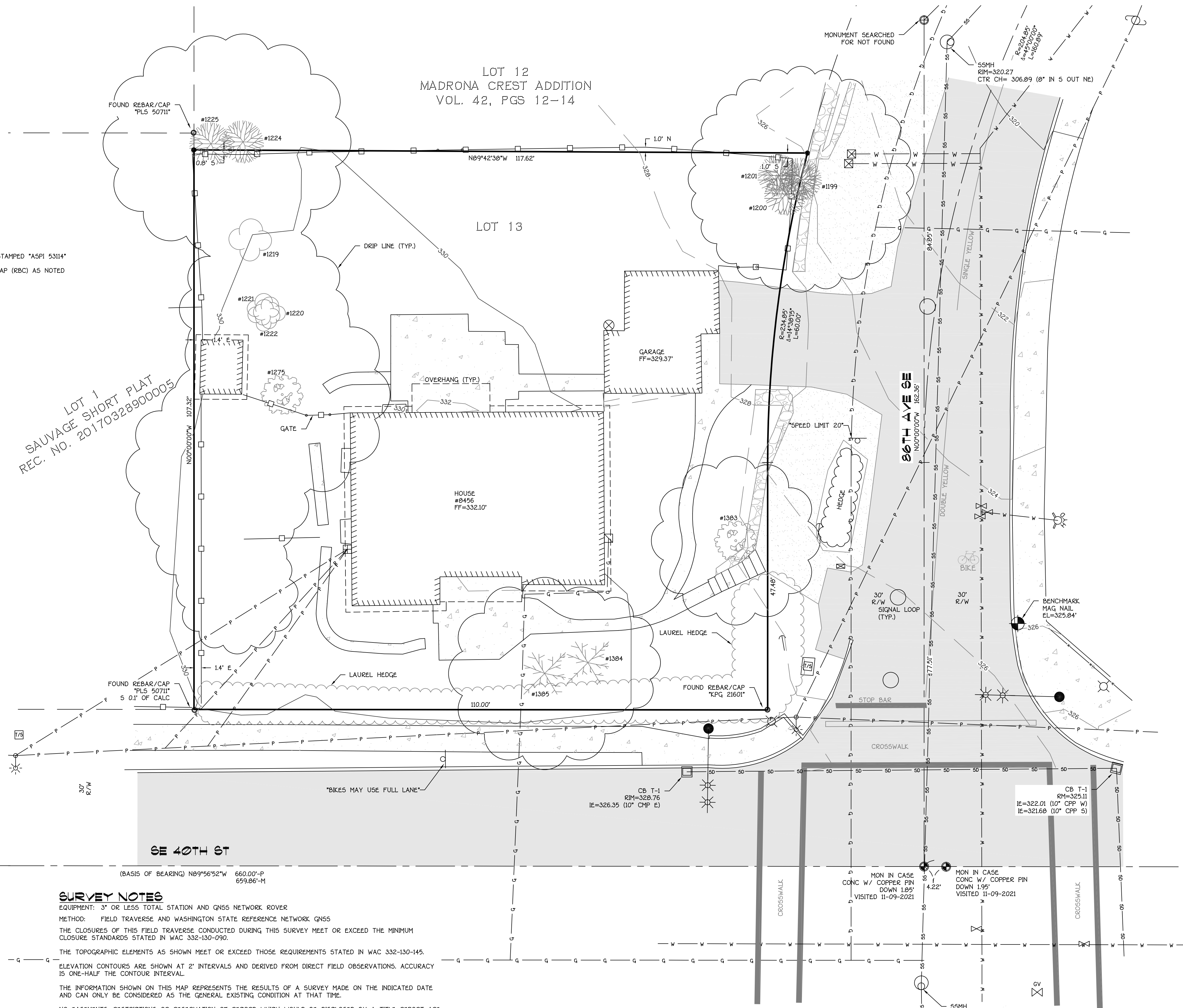
**TREE TABLE**

POINT	DESCRIPTION
1199	28" REDWOOD
1200	12" REDWOOD
1201	50" REDWOOD
1219	8" DECIDUOUS
1220	8" DECIDUOUS
1221	10" DECIDUOUS
1222	8" DECIDUOUS
1224	28" FIR
1225	22" FIR
1275	10" MAPLE
1383	18" MAPLE
1384	10" BIRCH
1385	16" BIRCH

**LEGEND**

- SET 24" X 1/2" REBAR WITH CAP STAMPED "ASPI 53114"
- FOUND IRON PIPE OR REBAR AND CAP (RBC) AS NOTED
- ⊗ WATER METER
- ⊕ WATER VALVE
- ⊙ FIRE HYDRANT
- ⊖ HOSE BIB
- ⊞ POWER METER
- ⊠ TRAFFIC SIGNAL BOX
- ⊡ PEDESTRIAN POLE PUSH BUTTON
- ⊛ TRAFFIC SIGNAL
- ⊙ UTILITY POLE
- ⊙ UTILITY POLE WITH LIGHT
- ⊙ GUY ANCHOR
- ⊙ MAILBOX
- ⊙ SIGN
- ⊙ GATE POST
- ⊙ TYPE 1 CATCH BASIN
- ⊙ SANITARY SEWER MANHOLE
- ⊙ GAS METER
- ⊙ GAS VALVE
- ⊙ WOOD FENCE
- ⊙ GAS
- ⊙ STORM DRAIN
- ⊙ OVERHEAD UTILITIES
- ⊙ SANITARY SEWER
- DECIDUOUS
- MAPLE
- COTTONWOOD
- FIR
- ASPHALT
- CONCRETE
- GRAVEL
- ROCKERY

LOT 1  
SAUVAGE SHORT PLAT  
REC. NO. 20170328900005



**LEGAL DESCRIPTION**  
LOT 13, BLOCK 7, MADRONA CREST ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 42 OF PLATS, PAGE 12 THROUGH 14, IN KING COUNTY, WASHINGTON.  
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**BASIS OF BEARING**  
589°56'52"E BETWEEN FOUND MONUMENTS ALONG CENTERLINE OF SE 40TH ST ACCORDING TO THE PLAT OF MADRONA CREST REFERENCED HEREON.

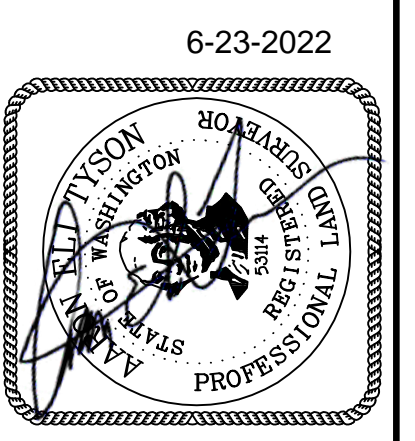
**DATUM** NAVD 88  
**BENCHMARK**  
MAG NAIL LOCATED ON EAST SIDE OF 86TH AVE SE, 0.5' EAST OF BACK OF CURB AND 5.5' WEST OF ANGLE POINT IN BACK OF SIDEWALK.  
ELEV. = 325.84'  
ELEVATION ESTABLISHED BY GPS OBSERVATIONS UTILIZING THE WASHINGTON STATE REFERENCE NETWORK.

**SURVEY REFERENCES**  
P- MADRONA CREST ADDITION, RECORDED IN VOLUME 42, PG. 12 OF PLATS SHORT PLAT AF# 20170328900005  
R- RECORD OF SURVEY AF# 20140213900001

**UTILITY NOTES**  
BASIS FOR UTILITY LINES SHOWN:  
FIELD OBSERVATIONS & AS-BUILT MAPS  
IN PROVIDING THIS SURVEY, NO ATTEMPT HAS BEEN MADE TO OBTAIN OR SHOW DATA CONCERNING CONDITION OR CAPACITY OF ANY UTILITY EXISTING ON THIS SITE, WHETHER PRIVATE, MUNICIPAL OR PUBLIC OWNED.  
UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THE SITE. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE TAKEN FROM A COMPILATION OF PUBLIC RECORDS AND VISIBLE FIELD EVIDENCE. WE ASSUME NO LIABILITY FOR THE ACCURACY OF THE PUBLIC RECORDS. UNDERGROUND UTILITY LOCATIONS ARE ONLY APPROXIMATE. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN VISIBLE SURFACE LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. FIELD VERIFICATION IS NECESSARY PRIOR TO OR DURING ANY CONSTRUCTION.  
SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT SURVEYED OR EXAMINED OR CONSIDERED AS PART OF THIS SURVEY. NO EVIDENCE OR STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONDITIONS, CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.

**SURVEY NOTES**  
EQUIPMENT: 3" OR LESS TOTAL STATION AND GNSS NETWORK ROVER  
METHOD: FIELD TRAVERSE AND WASHINGTON STATE REFERENCE NETWORK GNSS  
THE CLOSURES OF THIS FIELD TRAVERSE CONDUCTED DURING THIS SURVEY MEET OR EXCEED THE MINIMUM CLOSURE STANDARDS STATED IN WAC 332-130-090.  
THE TOPOGRAPHIC ELEMENTS AS SHOWN MEET OR EXCEED THOSE REQUIREMENTS STATED IN WAC 332-130-145.  
ELEVATION CONTOURS ARE SHOWN AT 2' INTERVALS AND DERIVED FROM DIRECT FIELD OBSERVATIONS. ACCURACY IS ONE-HALF THE CONTOUR INTERVAL.  
THE INFORMATION SHOWN ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE INDICATED DATE AND CAN ONLY BE CONSIDERED AS THE GENERAL EXISTING CONDITION AT THAT TIME.  
NO EASEMENTS, RESTRICTIONS OR RESERVATION OF RECORD WHICH WOULD BE DISCLOSED BY A TITLE REPORT ARE SHOWN.  
LEGAL DESCRIPTION IS ACCORDING TO STATUTORY WARRANTY DEED REC. NO. 20200820001869

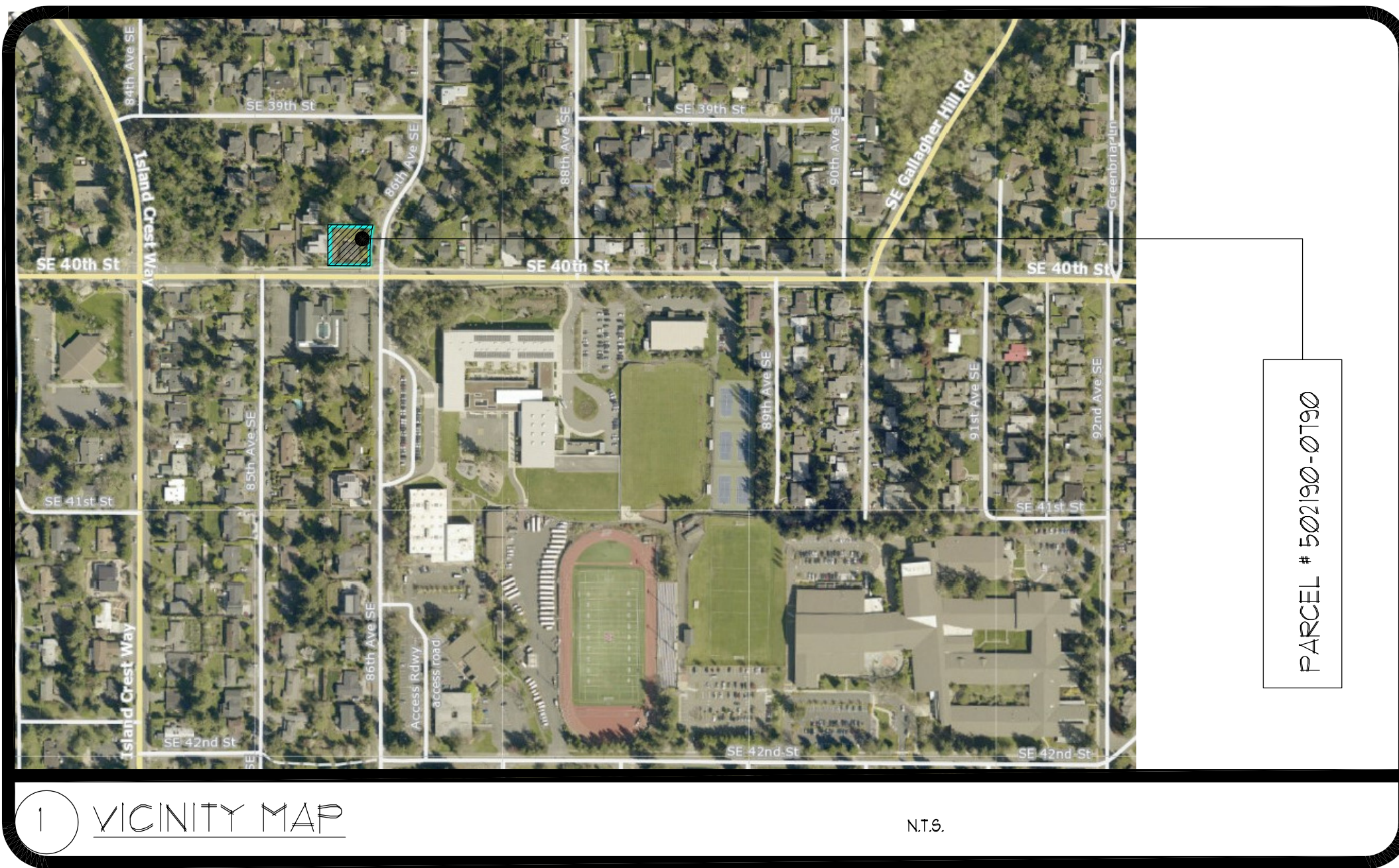
**SITE DATA**  
SITE ADDRESS: 8456 SE 40TH ST, MERCER ISLAND, WA 98040  
TAX PARCEL NUMBER: 502190-0790  
GROSS SITE AREA: 11,930 SF (0.27 ACRES)



ASPI, LLC  
LAND SURVEYING  
AND  
PLANNING  
5205 6 2ND AVE, SUITE 4  
EVERETT, WA 98203  
(425) 252-1884

BOUNDARY/TOPOGRAPHIC  
SURVEY  
FOR  
LAURIE YANG  
PORTION OF SW 1/4, SW 1/4 OF SECTION 7, TOWNSHIP 24 NORTH,  
RANGE 05 EAST, W.M.  
CITY OF MERCER ISLAND  
KING COUNTY, WASHINGTON

DRAWN BY: NJT  
DATE: 10/09/2021  
PROJECT NO.: 21-514  
SHEET NO.: 1 OF 1



1 VICINITY MAP

ZONING INFORMATION:

PARCEL NO.: 502190-0790  
 PROPERTY TYPE: R, RESIDENTIAL  
 LAND AREA: 11,930 sq. ft.  
 ACRES: 0.27  
 Q.S.T.R.: SW-1 -24-5  
 ADDRESS: 8456 SE 40TH ST  
 MERCER ISLAND, WA 98040  
 ZONING: R-2.4  
 SETBACKS: FRONT: 20 FEET  
 REAR: 25 FEET  
 SIDE: 17% OF THE LOT WIDTH OR 18.24'  
 (101.32 X 17% = 18.24')  
 MAX. HEIGHT: 30 FEET  
 MAX. LOT COVERAGE: 40% (PERCENT)  
 WATER: WATER DISTRICT  
 SEWER/SEPTIC: PUBLIC  
 ROAD ACCESS: PUBLIC  
 STREET SURFACE: PAVED

LOT COVERAGE CALCULATION

11,930 SF.	TOTAL LOT AREA
3,255 SF.	BUILDING STRUCTURE W/ COVERED PORCH, PATIO, CANTILEVERS AND ROOF OVERHANGS
1,130 SF.	CONCRETE DRIVEWAY
<b>4,394 SF/36.8%</b>	<b>TOTAL LOT COVERAGE (MAX 40%)</b>

HARDSCAPE CALCULATION

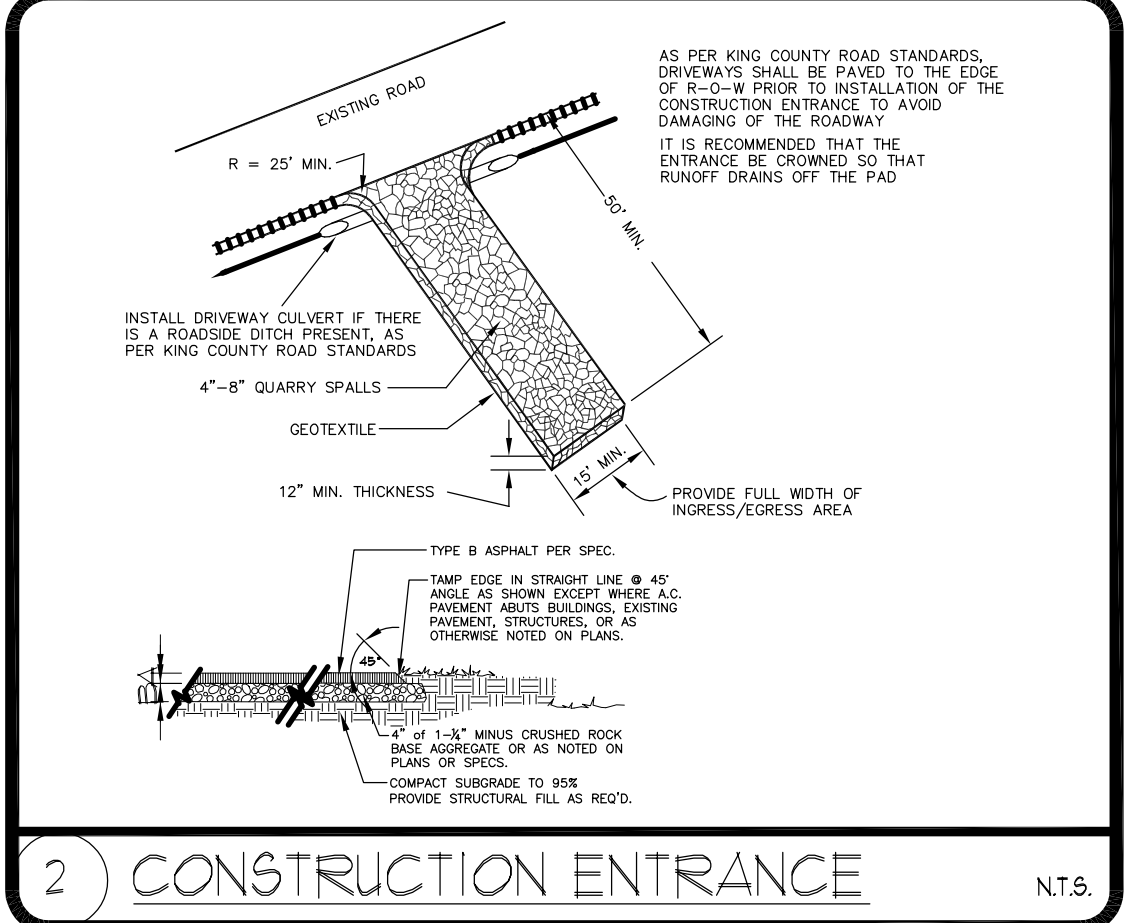
11,930 SF.	TOTAL LOT AREA
<b>9 SF/0.075%</b>	<b>CONCRETE STOOP (MAX 9%)</b>

GROSS FLOOR AREA:

LOT AREA: 11,930 s.f.  
 ALLOWED GFA: 40%  
 GFA W/ALLOWANCE (40%): 4,772 s.f.  
 MAIN FLOOR: 2,025 S.F.  
 GARAGE: 500 S.F.  
 UPPER FLOOR: 2,244 S.F.  
 STAIRCASE: EXCLUDED  
**TOTAL GROSS FLOOR AREA (GFA): 4,769 S.F. / 39.96%**

HEIGHT CALCULATION:

PT.	MID. PT. HT	Wall SEGMENT LENGTH	RESULT
A	329.3	22	7244.6
B	329.5	2	659
C	329.7	10	3297
D	329.7	4.2	1384.74
E	329.3	3.9	1284.27
F	329.2	2	658.4
G	329.5	10	3295
H	329.5	2	659
I	329.5	3.9	1285.05
J	329.5	5	1647.5
K	329.5	18.7	6161.65
L	331	22.2	7348.2
M	332	2	664
N	332	18.3	6075.6
O	331.8	2	663.6
P	331.8	2	663.6
Q	331.5	37.5	12431.25
R	331.6	2.5	829
S	331.2	16.3	5398.56
T	331	2.5	827.5
U	330.8	5.7	1885.56
V	330.5	7	2313.5
W	329.8	9	2968.2
X	329.5	24.5	8072.75
<b>TOTAL</b>	<b>235.2</b>		<b>77717.53</b>
<b>ABE</b>			<b>330.43168</b>



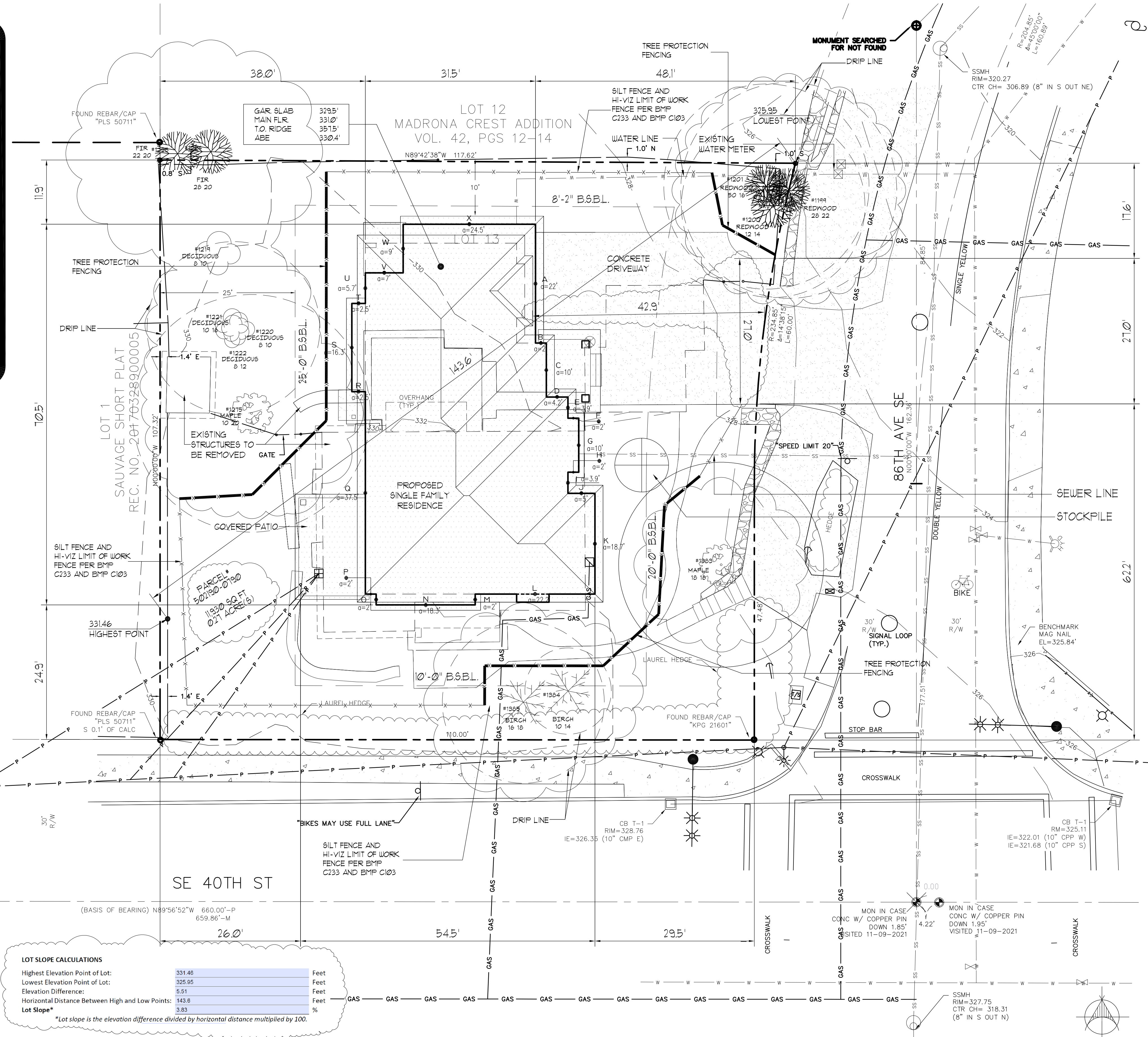
2 CONSTRUCTION ENTRANCE

TREE TABLE (ON SITE TREES)

POINT	DESCRIPTION	REMAIN?
1200	REDWOOD 12" 14'	YES
1201	REDWOOD 50" 16'	YES
1219	DECIDUOUS 8" 10'	YES
1220	DECIDUOUS 8" 10'	YES
1221	DECIDUOUS 10" 16'	YES
1222	DECIDUOUS 8" 12'	YES
1275	MAPLE 10" 20'	YES
1383	MAPLE 18" 16'	YES
1384	BIRCH 10" 14'	YES
1385	BIRCH 16" 18'	YES

TREE TABLE (NEIGHBORING TREES)

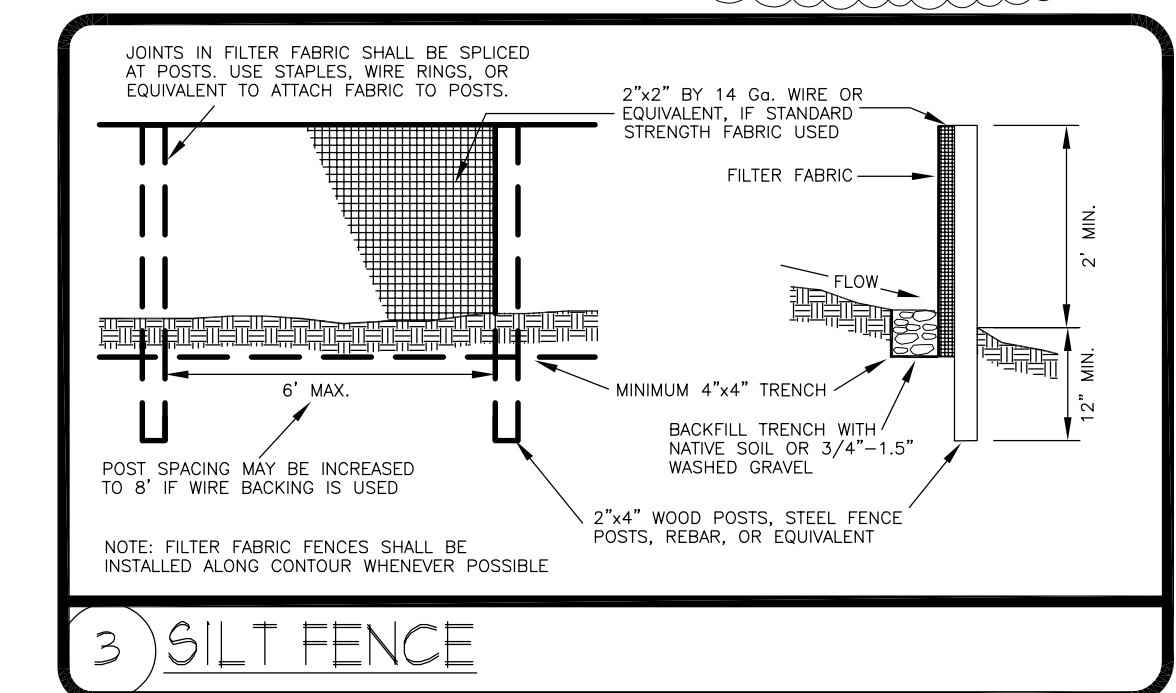
POINT	DESCRIPTION	REMAIN?
1199	REDWOOD 28" 22'	YES
1224	FIR 28" 20'	YES
1225	FIR 22" 20'	YES



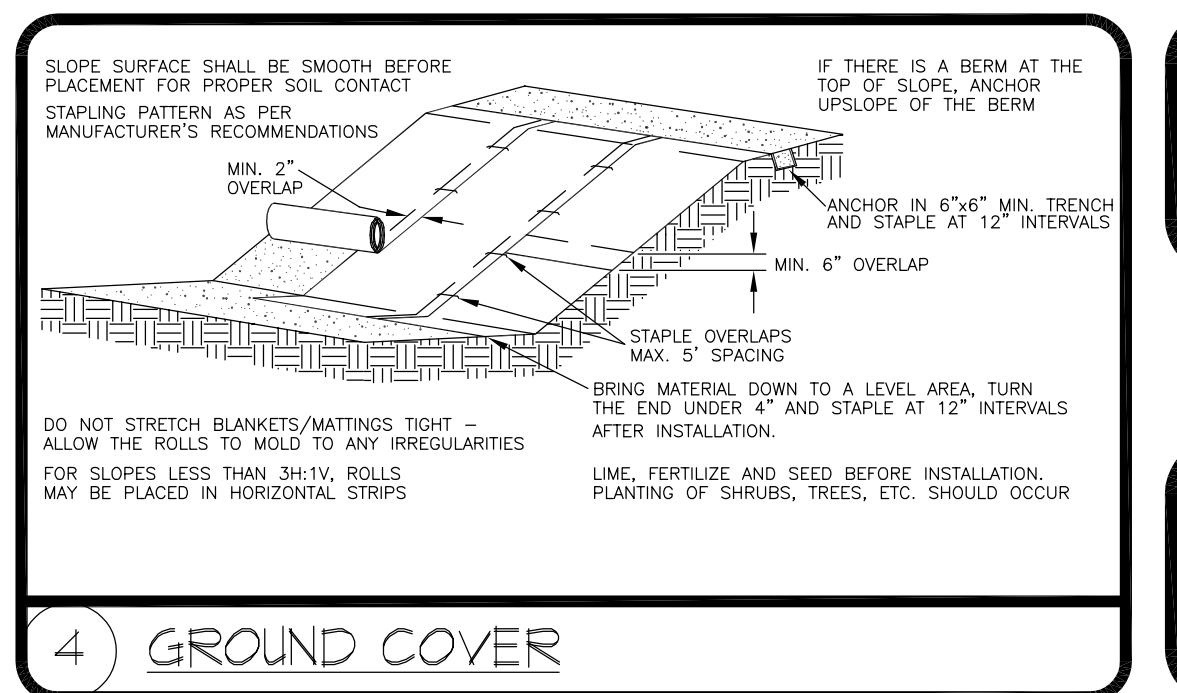
LOT SLOPE CALCULATIONS

Highest Elevation Point of Lot:	331.46	Feet
Lowest Elevation Point of Lot:	325.95	Feet
Elevation Difference:	5.51	Feet
Horizontal Distance Between High and Low Points:	143.6	Feet
Lot Slope*	3.83	%

\*Lot slope is the elevation difference divided by horizontal distance multiplied by 100.



3 SILT FENCE



4 GROUND COVER

DRAINAGE DESIGN PROVIDED BY INTERLAKEN ENGINEERING AND DESIGN, PLLC SEATTLE, WA  
 TEL: (206) 470-9572  
 CONTACT: MATTHEW HARRINGA  
 www.interlakenengineering.com

LEGAL DESCRIPTION:  
 MADRONA CREST ADD  
 Plat Block: 1  
 Plat Lot: 13

**SITE PLAN**  
 SCALE: 1" = 10'-0"



Project  
**SINGLE-FAMILY RESIDENCE**  
**PARCEL#: 502190-0790**  
**8456 SE 40TH**  
**MERCER ISLAND, WA 98040**

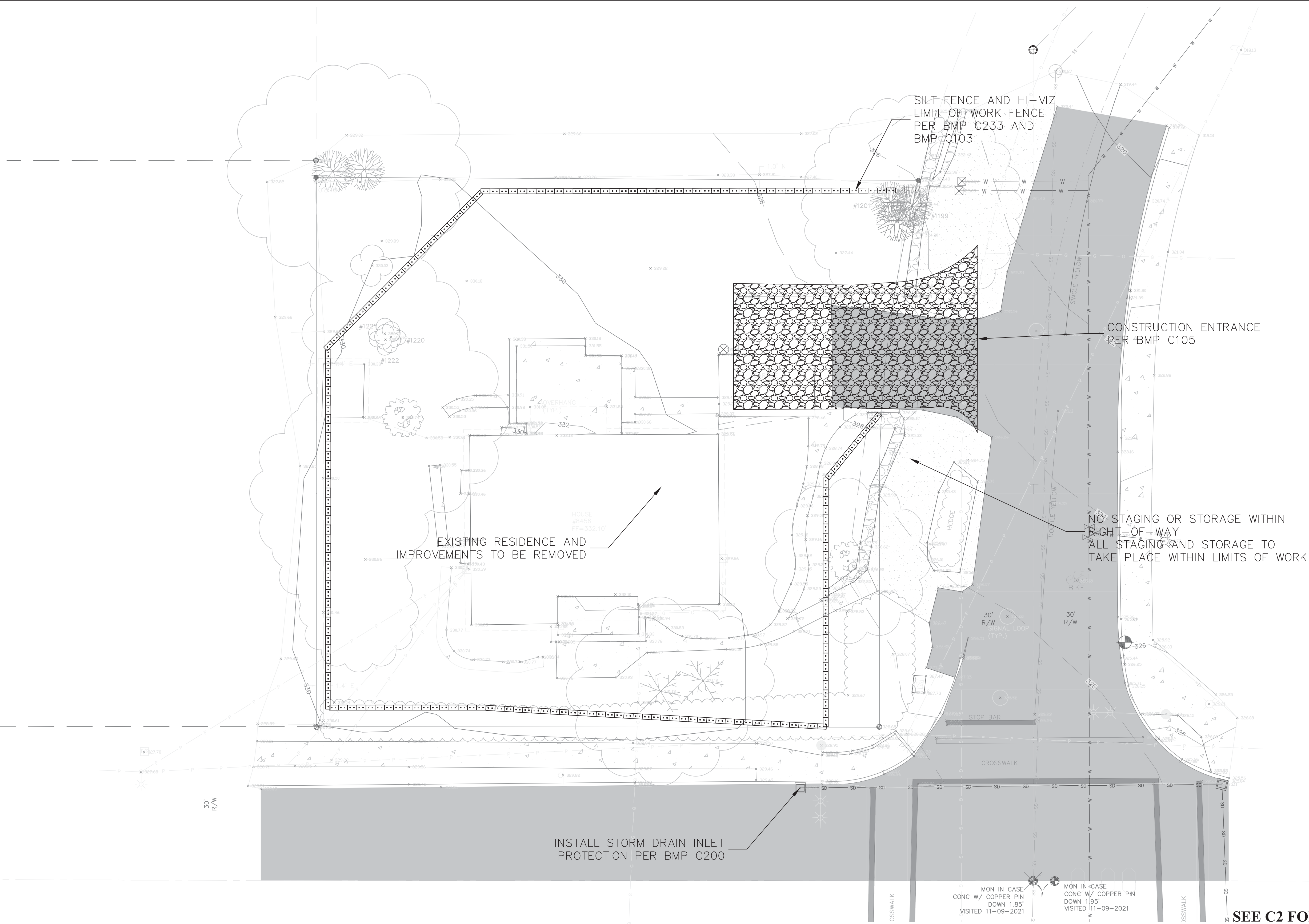
Prepared for  
**KUN GIAN & LAURIE GIAN**

URBAN DESIGN GROUP  
 18445 53rd Ave S, Ste 110 Seattle, WA 98148  
 (206) 838-9250 E-mail: urbandesign@urbandesign.com  
 PO BOX 58906 Tukwila WA 98193

ENGINEER	DESIGN BY	COMMENTS
Ivan Shvets	Ivan Shvets	
REV. DATE		

Project # :  
**21257**  
 Sheet  
**SITE**

Plot Date: 06-27-2022



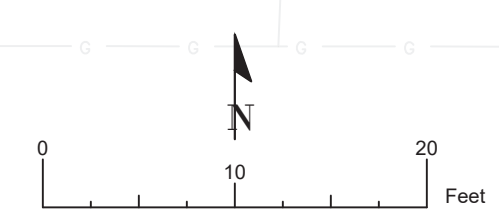
INSTALL STORM DRAIN INLET PROTECTION PER BMP C200

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

CONSTRUCTION ENTRANCE PER BMP C105

EXISTING RESIDENCE AND IMPROVEMENTS TO BE REMOVED

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



MON IN CASE CONC W/ COPPER PIN DOWN 1.85' VISITED 11-09-2021

MON IN CASE CONC W/ COPPER PIN DOWN 1.95' VISITED 11-09-2021

SEE C2 FOR DRAINAGE SITE PLAN

**Qian Yang Residence**  
 Site Address: 8456 SE 40th St  
 Jurisdiction: Mercer Island  
 Parcel No.: 502190-0790  
 Applicant: Qian Yang  
 Permit No.:  
 Interlaken Project No.: SEA-22-041



Revisions:

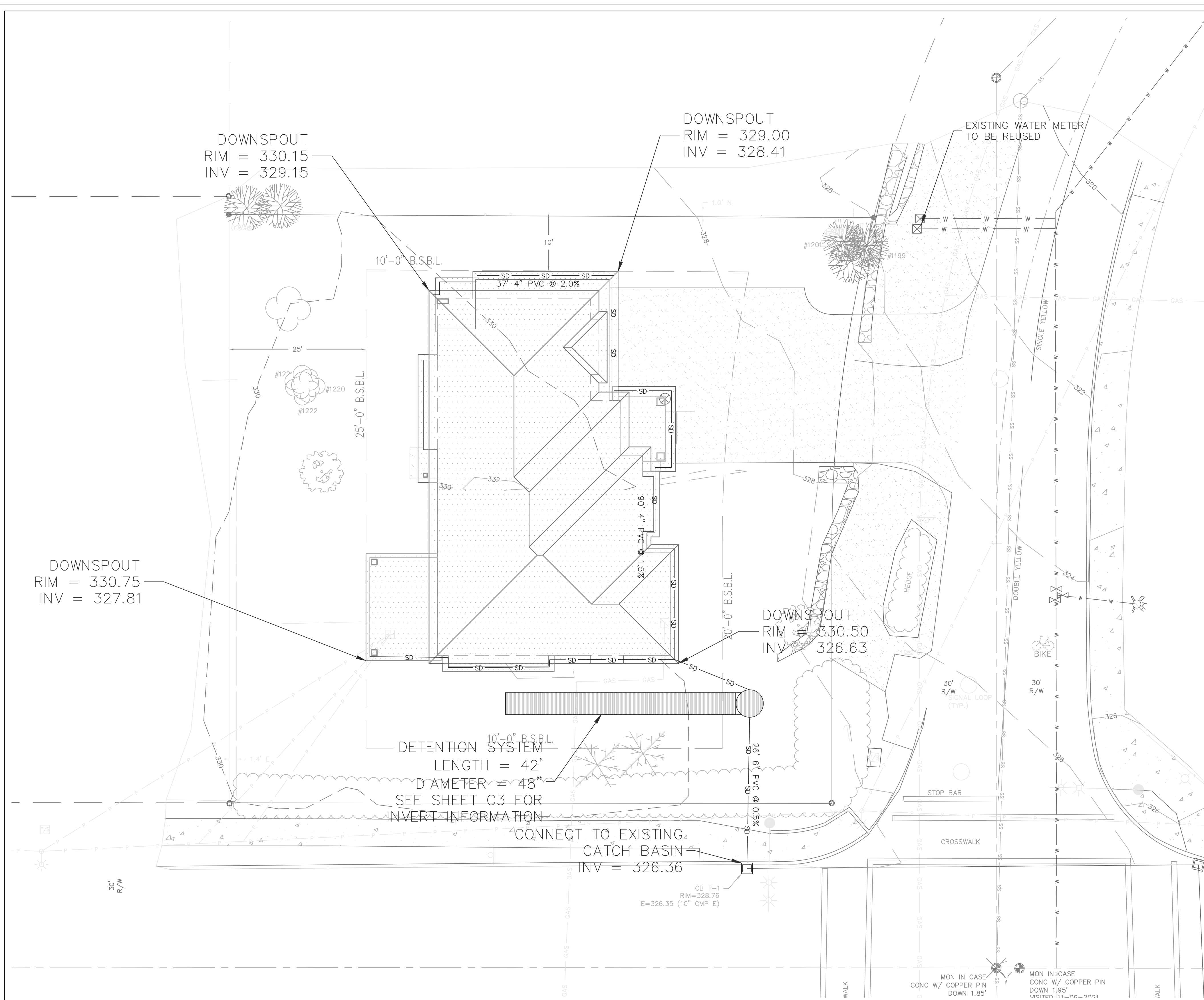
**C1**  
 TESC/ Demo/ CSWPPP  
 Scale: 1" = 10'

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP 15.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION ON THE PROJECT.

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:

1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
  2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
  3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
    - A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP 17.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
    - B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A) ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
- THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.
- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
  2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
  3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
  4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

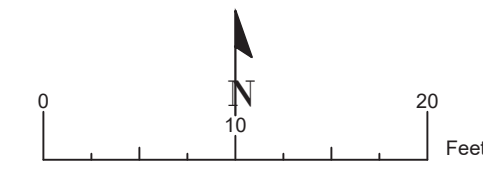
PRE-APPROVED AMENDMENT METHOD:  
 TURF: 7496 SF x 5.4 CY / 1,000 SF = 40.48 CY  
 TOTAL QUANTITY = 40.48 CY



Hard Surface Data	
Lot Size	11,930 sf
New Roof	3,255 sf
New Driveway+Walkway	1,179 sf
Total Proposed Hard Surface	4,434 sf
Proposed Vegetation	7,496 sf

SEE C1 FOR TESC/ DEMO CSWPPP

**LEGAL DESCRIPTION**  
 LOT 13, BLOCK 7, MADRONA CREST ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 42 OF PLATS, PAGE 12 THROUGH 14, IN KING COUNTY, WASHINGTON.  
 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.



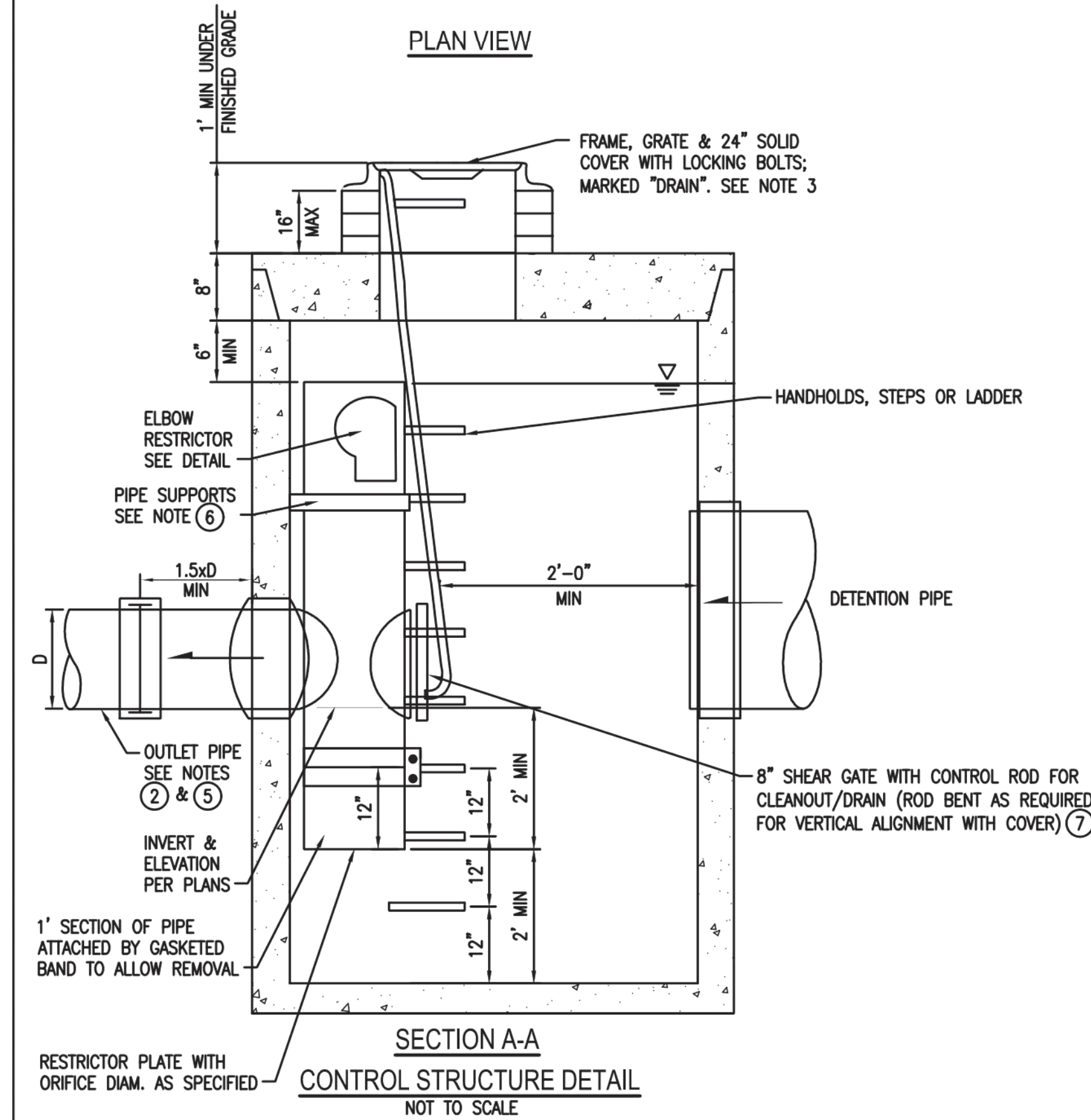
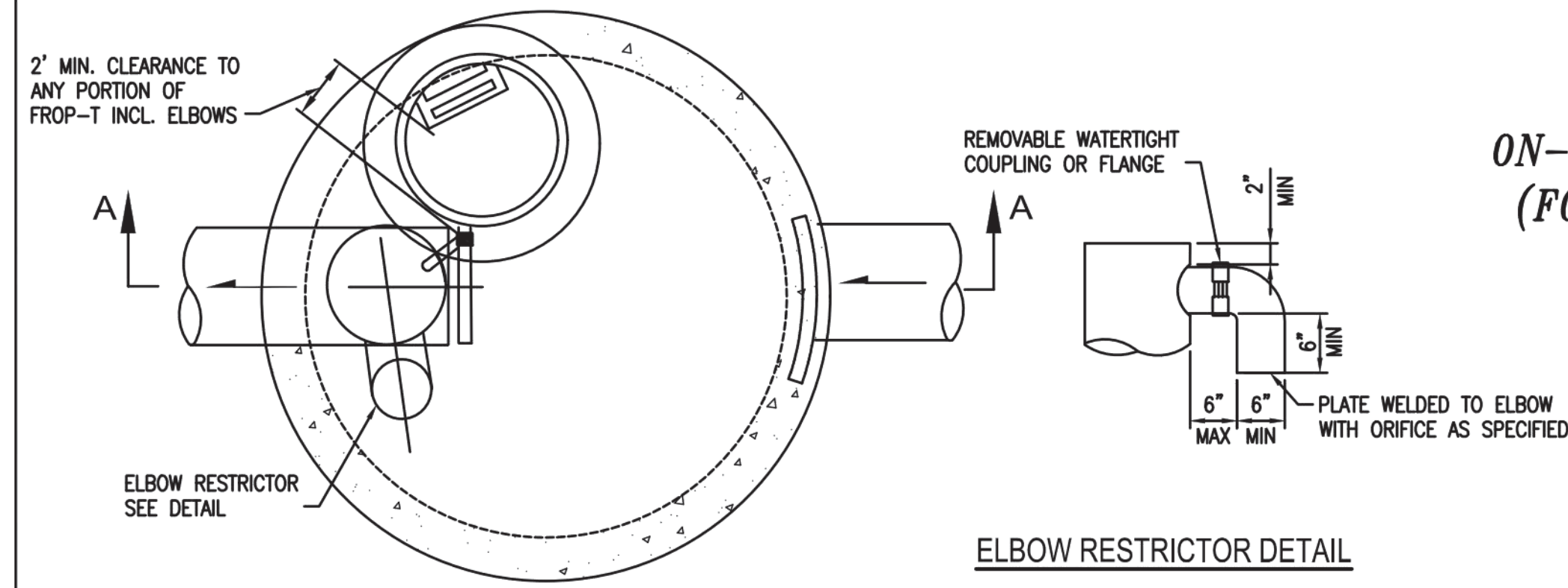
**Qian Yang Residence**  
 Site Address: 8456 SE 40th St  
 Jurisdiction: Mercer Island  
 Parcel No.: 502190-0790  
 Applicant: Qian Yang  
 Permit No.:  
 Interlaken Project No.: SEA-22-041

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

Revisions:

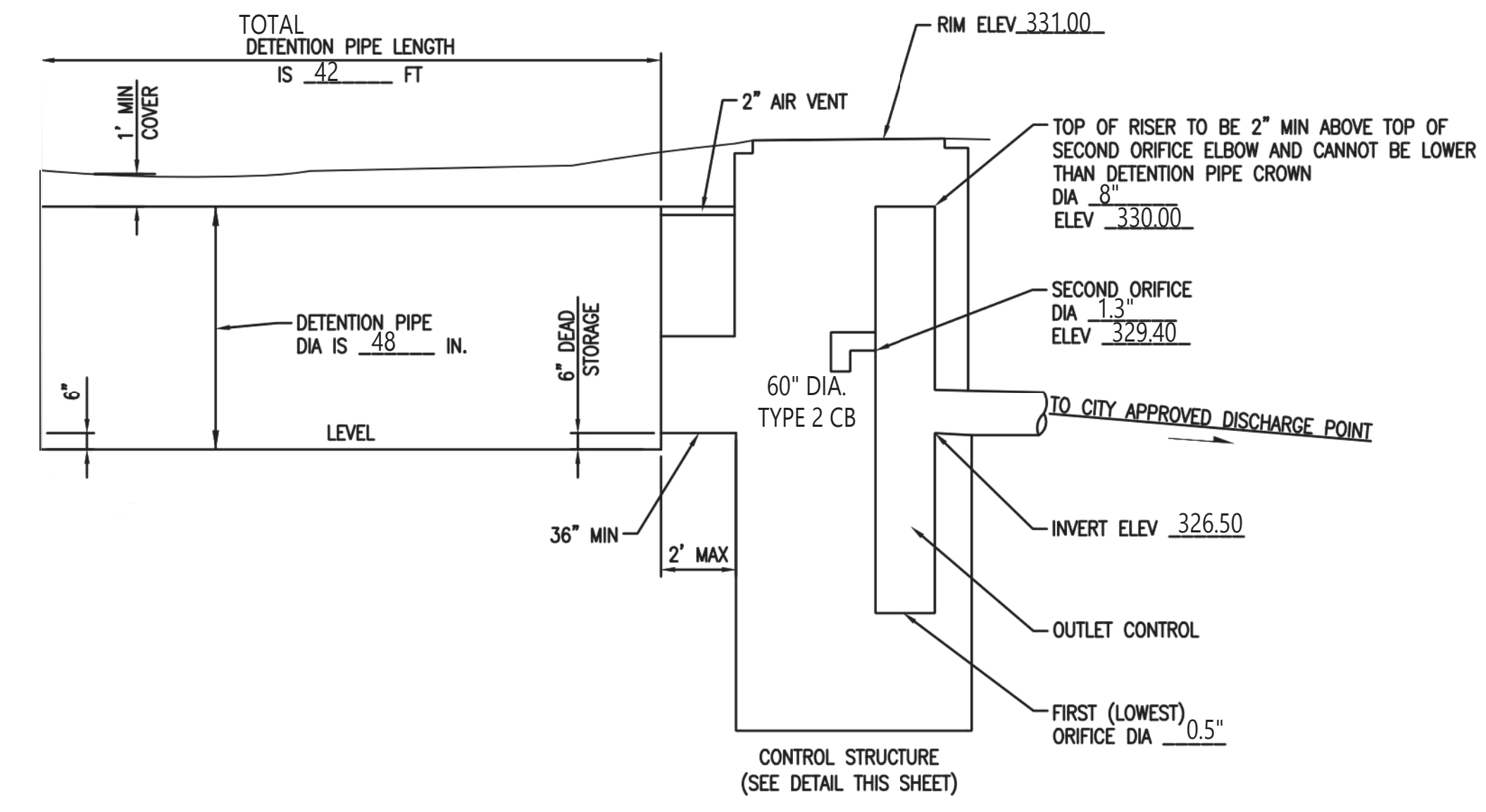

**C2**  
 Drainage Site Plan  
 Scale: 1" = 10'

**ATTACHMENT 1**  
**CITY OF MERCER ISLAND**  
**ON-SITE DETENTION SYSTEM WORKSHEET**  
**(FOR NEW PLUS REPLACED IMPERVIOUS**  
**AREA OF 9,500 SF OR LESS)**



OWNER: _____	ADDRESS: 80XX SE 20th St _____	PREPARED BY: Interlaken Engineering and Design, PLLC
PERMIT #: _____	PHONE: (206) 470-9572 _____	DATE: June 10, 2022 _____
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 9,500 sf (roof) to be detained	DETENTION PIPE DIA (INCH): 48	DETENTION PIPE LENGTH (FT): 42
SOIL TYPE: C	PIPE MATERIAL: ADS	ORIFICE #1 DIA 0.5 INCH, ELEV 324.50
		ORIFICE #2 DIA 1.3 INCH, ELEV 329.40

NO UPPER CATCH BASIN REQUIRED -  
 DETENTION PIPE LENGTH IS LESS THAN 50 FT.



**ON-SITE DETENTION SYSTEM**  
 NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

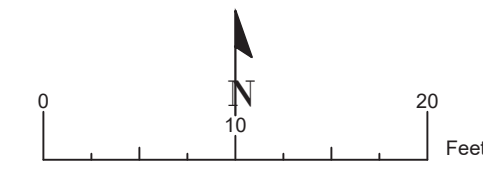
**CONTROL STRUCTURE NOTES:**

- |  |   |
|--|---|
| <p>① USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.</p> <p>② OUTLET PIPE: MIN. 6 INCH.</p> <p>③ METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.</p> <p>④ FRAME AND LADDER OR STEPS OFFSET SO:<br/>         A. CLEANOUT GATE IS VISIBLE FROM TOP;<br/>         B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;<br/>         C. FRAME IS CLEAR OF CURB.</p> <p>⑤ IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.</p> | <p>⑥ PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0\"/&gt; <p>⑦ THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.</p> <p>⑧ THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.</p> </p> |
|--|---|

**ON-SITE DETENTION SYSTEM NOTES:**

- CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
- RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
- PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
- FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

**SEE C2 FOR DRAINAGE SITE PLAN**



**Qian Yang Residence**  
 Site Address: 8456 SE 40th St  
 Jurisdiction: Mercer Island  
 Parcel No.: 502190-0790  
 Applicant: Qian Yang  
 Permit No.:  
 Interlaken Project No.: SEA-22-041

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

Revisions:

**C3**  
 Detention Detail  
 Scale: As Noted

## GENERAL NOTES

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL RESIDENTIAL CODE
- 2018 UNIFORM PLUMBING CODE
- 2018 WASHINGTON STATE ENERGY CODE
- 2018 WASHINGTON STATE AMENDMENTS

CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION & PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS HAVE BEEN INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY

REPETITIVE FEATURES NOT NOTED ON THE DRAWINGS SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL

CONTRACTOR SHALL VERIFY ALL ROUGH-IN DIMENSIONS FOR ALL EQUIPMENT TO BE INSTALLED

## SITE WORK

GENERAL  
UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1800 PSF.  
EXTERIOR FOOTINGS SHALL BEAR 18" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACK FILL TO BE THOROUGHLY COMPACTED.  
FOUNDATION VENTS SHALL NOT INTERFERE WITH DIRECT LOAD PATH OF COLUMNS.

### CONCRETE

MIX AND 28 DAY STRENGTH OF CONCRETE  
- BASEMENT WALLS & FOUNDATIONS  
& OTHER CONCRETE NOT EXPOSED TO WEATHER:

- BASEMENT SLABS & INTERIOR SLABS  
& INTERIOR SLABS ON GRADE, EXCEPT GARAGE DOOR SLABS

- BASEMENT WALLS & FOUNDATION WALLS, EXTERIOR WALLS & OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER:

- PORCHES, CARPORT SLABS & STEPS EXPOSED TO WEATHER, & GARAGE

### FLOOR SLABS:

GARAGE FLOORS TO SLOPE 1/8"/FT. MIN. TOWARDS OPENING AS REQUIRED FOR DRAINAGE. CONCRETE SLABS TO HAVE CONTROL JOINTS AT 25' FT. (MAX.) INTERVALS EA. WAY. SLABS ARE TO BE 5-AIR ENTRAINED CONCRETE SIDEWALKS TO HAVE 3/4" IN. TOOLED JOINTS AT 5' FT. (MIN.) O.C.

### CONCRETE COVER OF REINFORCING

3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.  
1 1/2" CONCRETE EXPOSED TO EARTH OR WEATHER.  
1 1/2" BEAMS AND COLUMNS NOT EXPOSED TO EARTH OR WEATHER.  
3/4" SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER.  
LAP COLUMN VERTICALS. GLASS 1" CONCRETE AND MASONRY COLUMN AND WALL VERTICALS 52 DIAMETERS. LAP ALL OTHER REINFORCING 24 DIAMETERS. SPLICES AT TENSION REGIONS SHALL NOT BE PERMITTED.

## CARPENTRY

GENERAL  
ALL FRAMING TO COMPLY WITH ENGINEERING S-SHEETS FOR NAIL SIZES AND SPACING.

ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.

6" MIN. CLEARANCE BETWEEN WOOD AND EARTH.  
18" MIN. CLEARANCE BETWEEN FLOOR JOIST AND EARTH.  
12" MIN. CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.

FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL.

REFERENCE SHEET-S1 FOR SPECIES AND GRADE. (BASE DESIGN VALUES)

BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH 3"x3"x22g PLATE WASHERS. WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2 X THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS. BETWEEN SUPPORTS PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS, JOISTS, 10'-0" FOR ROOF JOISTS. TYPICAL SILL BOLTS TO BE 5/8" DIAMETER AT 6'-0" O.C. MINIMUM 1" EMBED. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE STRONG TIE CONNECTORS AS MANUFACTURED BY SIMPSON COMPANY.

PLYWOOD  
PLYWOOD WALL AND ROOF SHEATHING SHALL BE 3/4" CDX, UNLESS OTHERWISE SPECIFIED. PLYWOOD FLOOR SHEATHING SHALL BE 3/4" CDX T&G, UNLESS OTHERWISE SPECIFIED.  
STAGGER END LAPS AT ROOF AND FLOOR SHEATHING. OSB SHEATHING PRODUCTS OF EQUIVALENT SPAN RATINGS SHALL BE ALLOWED.

WOOD TRUSSES  
ALL ROOF TRUSSES SHALL BE FRAMED AND TIED INTO THE FRAME WORK AND SUPPORTING WALLS SO AS TO FORM AN INTEGRAL PART OF THE WHOLE BUILDING. ROOF TRUSSES SHALL HAVE JOINTS WELL FITTED AND SHALL HAVE ALL TENSION MEMBERS WELL TIGHTENED BEFORE ANY LOAD IS PLACED UPON THE TRUSS. DIAGONAL AND SWAY BRACING SHALL BE USED TO BRACE ALL TRUSSES.

SEE SHEET-S1 FOR DESIGN CRITERIA

## INSULATION AND MOISTURE PROTECTION

GENERAL  
INSULATION Baffles TO MAINTAIN 1" ABOVE BATT INSULATION.  
Baffles TO EXTEND 6" ABOVE BATT INSULATION Baffles TO EXTEND 12" ABOVE LOOSE FILL INSULATION  
INSULATE BEHIND TUBS/SHOWERS, PARTITIONS AND CORNERS FACE STAPLE BATTS  
FRICTION FIT FACED BATTS  
USE 4 MIL POLY VAPOR RETARDER AT WALLS.  
\* R-10 RIGID FOAM INSULATION ON 4X EVADERS AT EXTERIOR WALLS.

### INFILTRATION CONTROL

1. EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS, OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOOR AND ROOFS, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE, INCLUDING ACCESS PANELS INTO UNHEATED SPACES, SHALL BE SEALED, CAULKED, GASKETED OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE. ALL OPENINGS SHALL BE FLASHED, APPROVED CORROSION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR WALL ENVELOPE. APPROVED CORROSION-RESISTANT FLASHING SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:
  1. AT TOP OF ALL EXTERIOR WINDOW AND DOOR OPENINGS IN SUCH A MANNER AS TO BE LEAKPROOF, EXCEPT THAT SELF-FLASHING WINDOWS HAVING A CONTINUOUS LAP OF NOT LESS THAN 1-1/8" OVER THE SHEATHING MATERIAL AROUND THE PERIMETER OF THE OPENING, INCLUDING CORNERS, DO NOT REQUIRE ADDITIONAL FLASHING; JAMB FLASHING MAY ALSO BE OMITTED WHEN SPECIFICALLY APPROVED BY THE BUILDING OFFICIALS.
  2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COFFINGS.
  3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
  4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.
  5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
  6. AT WALL AND ROOF INTERSECTIONS.
  7. AT BUILT-IN GUTTERS.

- ALL EXTERIOR DOORS, OTHER THAN FIRE-RATED DOORS, SHALL BE DESIGNED TO LIMIT AIR LEAKAGE AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION. DOORS BETWEEN RESIDENCE AND GARAGE ARE NOT CONSIDERED FIRE-RATED AND MUST MEET THE ABOVE REQUIREMENT.

- ALL EXTERIOR WINDOWS SHALL BE DESIGNED TO ADMIT INFILTRATION INTO OR FROM THE BUILDING ENVELOPE.

- RECESSED LIGHTING FIXTURES: WHEN INSTALLED IN THE BUILDING ENVELOPE, RECESSED LIGHTING FIXTURES SHALL BE TYPE IC RATED AND CERTIFIED TO HAVE NO MORE THAN 2.0 CFM AIR MOVEMENT FROM THE CONDITIONED SPACE TO THE CEILING CAVITY. THE LIGHTING FIXTURE SHALL BE TESTED AT 75 PASCALS OR 1.51 LBS/FT<sup>2</sup> PRESSURE DIFFERENCE AND HAVE A LABEL ATTACHED SHOWING COMPLIANCE WITH THIS TEST METHOD. RECESSED LIGHTING FIXTURES SHALL BE INSTALLED WITH A GASKET OR CAULK BETWEEN THE FIXTURE AND CEILING TO PREVENT AIR LEAKAGE.

VAPOR BARRIERS/ GROUND COVERS  
AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND AT EXTERIOR WALLS. INSET STAPLED BATTS WITH A PERM RATING LESS THAN ONE MAY BE INSTALLED IF THE VAPOR BARRIER IS TO THE WARM SIDE. STAPLES ARE PLACED NOT MORE THAN 8 INCHES ON CENTER AND GAPS BETWEEN THE FACING AND THE FRAMING DO NOT EXCEED 1/16 INCH.

A GROUND COVER OF 6 MIL (0.006")BLACK POLYETHYLENE OR EQUIVALENT, SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

### WINDOWS, DOORS, HVAC, & ELECT. EQUIP.

GLAZING MAXIMUM:  
ALL CLIMATE ZONES:  
GLAZING U' VALUE: VERTICAL (MAX): .28  
OVERHEAD (MAX): .50  
DOOR U' VALUE (MAX): .20  
(DOORS 1/4 MORE THAN 50 CONSIDERED A WINDOW)  
HVAC PERFORMANCE: "MED" OR AFUE + .91  
RECESSED LIGHT FIXTURES: IC RATED

### DOORS, WINDOWS AND SKYLIGHTS

GENERAL  
DOORS TO THE EXTERIOR SHALL HAVE MAX. 3" STEP TO MIN. 36" DEEP LANDING. .

BEDROOM EMERGENCY EGRESS WINDOWS MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. MIN. NET CLEAR OPENABLE WIDTH OF 20" AND MINIMUM NET CLEAR OPENING HEIGHT OF 24". MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE FLOOR.

FACTORY BUILT WINDOWS TO BE CONSTRUCTED TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER LINEAL FOOT OF OPERABLE SASH PERIMETER AS TESTED BY ASTM STANDARDS. SITE BUILT AND MILL WORK SHOP BUILT WOODEN SASH ARE EXEMPT FROM INFILTRATION CRITERIA ABOVE, BUT MUST BE MADE TIGHTLY FITTING AND WEATHER STRIPPED OR CAULKED. SLIDING GLASS DOORS TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM INFILTRATION PER SQUARE FOOT OF DOOR AREA.

SAFETY GLAZING SHALL BE LOCATED WITHIN

1. INGRESS AND EGRESS DOORS
2. SLIDING GLASS DOORS, SWINGING GLASS DOORS
3. SHOWER AND BATH TUB ENCLOSURES
4. GLAZING 1/4" THE EXPOSED EDGE WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR. IN THE CLOSED POSITION, BOTTOM EDGE IS LESS THAN 60" ABOVE THE FINISHING SURFACE. GLAZING GREATER THAN 4 S.F. LESS THAN 19" ABOVE FINISHED FLOOR.
- WINDOW SILLS: 612.2, 24" MINIMUM SILL HEIGHT EXCEPTIONS ALLOW FOR OPENING LIMITING DEVICE FOR 4" DIAMETER SPHERE AND WINDOW FALL PREVENTION DEVICE THAT COMPLIES WITH 612.3.

## STRUCTURAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CONTRACT DRAWINGS.
2. DURING THE CONSTRUCTION PERIOD THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF ENGINEER.
5. ALL DETAILS DESIGNATED AS STANDARD OR TYPICAL SHALL OCCUR IN ADDITION TO ANY OTHER SPECIFIC DETAIL CALLED OUT.
6. COORDINATE WITH MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS FOR SIZE AND LOCATION OF ALL OPENINGS REQUIRED FOR DUCTS, PIPES, AND PIPE SLEEVES, ELECTRICAL CONDUITS, AND OTHER ITEMS TO BE EMBEDDED IN CONCRETE OR OTHERWISE INCORPORATED IN STRUCTURAL WORK.
7. PROVIDE OPENINGS AND SUPPORTS, AS REQUIRED PER STANDARD DETAILS FOR HEATERS, MECHANICAL EQUIPMENT, VENTS, DUCTS, PIPING, ETC. ALL SUSPENDED MECHANICAL EQUIPMENT SHALL BE SNAY OR LATERALLY BRACED.

## TYPE OF CONSTRUCTION

V-B

UNPROTECTED WOOD FRAME (EXAMPLES OF CONSTRUCTION ARE SINGLE FAMILY HOMES AND GARAGES. THEY OFTEN HAVE EXPOSED WOOD SO THERE IS NO FIRE RESISTANCE.)



## PLAN PREVIEW

NOT TO SCALE



URBAN DESIGN GROUP

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(206) 836-8250 E-MAIL: URBANDESIGNENTER@YAHOO.COM

PROJECT NAME:  
SINGLE-FAMILY RESIDENCE  
8456 SE 40TH  
MERCER ISLAND, WA 98040  
PARCEL #: 502190-0790

PREPARED FOR:  
PHILIP SUDO & LLC  
KUN QIAN &  
LAURIE QIAN

SUBMITTAL/REVISION: DATE:  
SUBMITTED -1-/2022  
REVISED -1-/2022

DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:

GENERAL  
NOTES AND  
PLAN  
PREVIEW

PROJECT NUMBER:  
21257

SHEET NUMBER:

A1.1

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information and Contact Information table with fields for Name, Address, City, State, ZIP, Phone, and Email.

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative and Date fields.

All Climate Zones (Table R402.1.1) table with columns for R-Value, U-Factor, Fenestration U-Factor, Skylight U-Factor, Glazed Fenestration SHGC, Ceiling, Wood Frame Wall, Floor, Below Grade Wall, and Slab R-Value & Depth.

a R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits.

- Small Dwelling Unit: 3 credits
Medium Dwelling Unit: 6 credits
Large Dwelling Unit: 7 credits
Additions less than 500 square feet: 1.5 credits

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

Summary of Table R406.2 table with columns for Heating Options, Fuel Normalization Descriptions, Credits - select ONE heating option, User Notes, Energy Options, Energy Credit Option Descriptions, Credits - select ONE energy option from each category, and User Notes.

Summary of Table R406.2 (cont.) table with columns for Energy Options, Energy Credit Option Descriptions (cont.), Credits - select ONE energy option from each category, and User Notes.

- An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
Equipment listed in Table C403.3.2(4) or C403.3.2(5)
You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.

VERTICAL FENESTRATION U-Factor

FLOOR R-30

PERSPECTIVE ENERGY CREDITS

ENERGY CREDITS DESCRIPTION

Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes categories 1. EFFICIENT BUILDING ENVELOPE OPTIONS, 2. AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION OPTIONS, and 3. HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS.

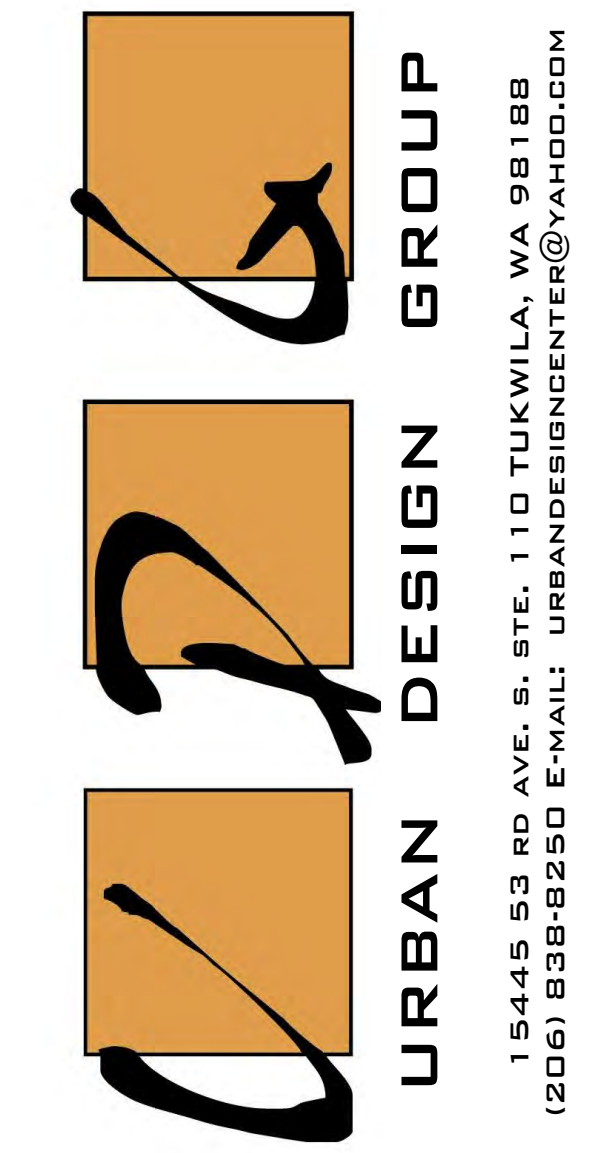
Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes categories 6. RENEWABLE ELECTRIC ENERGY OPTION and 7. APPLIANCE PACKAGE OPTION.

Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes category 4. HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS.

Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes category 5. EFFICIENT WATER HEATING OPTIONS.

Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes category 6. RENEWABLE ELECTRIC ENERGY OPTION and 7. APPLIANCE PACKAGE OPTION.

Table 406.3 - Energy Credits (Single Family) table with columns for Option, Description, and Credits: SF. Includes categories 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, and 4.2.



SINGLE-FAMILY RESIDENCE  
8456 SE 40TH  
MERCER ISLAND, WA 98040  
PARCEL #: 502190-0790

PHILIP SUDO & LLC  
KUN QIAN &  
LAURIE QIAN

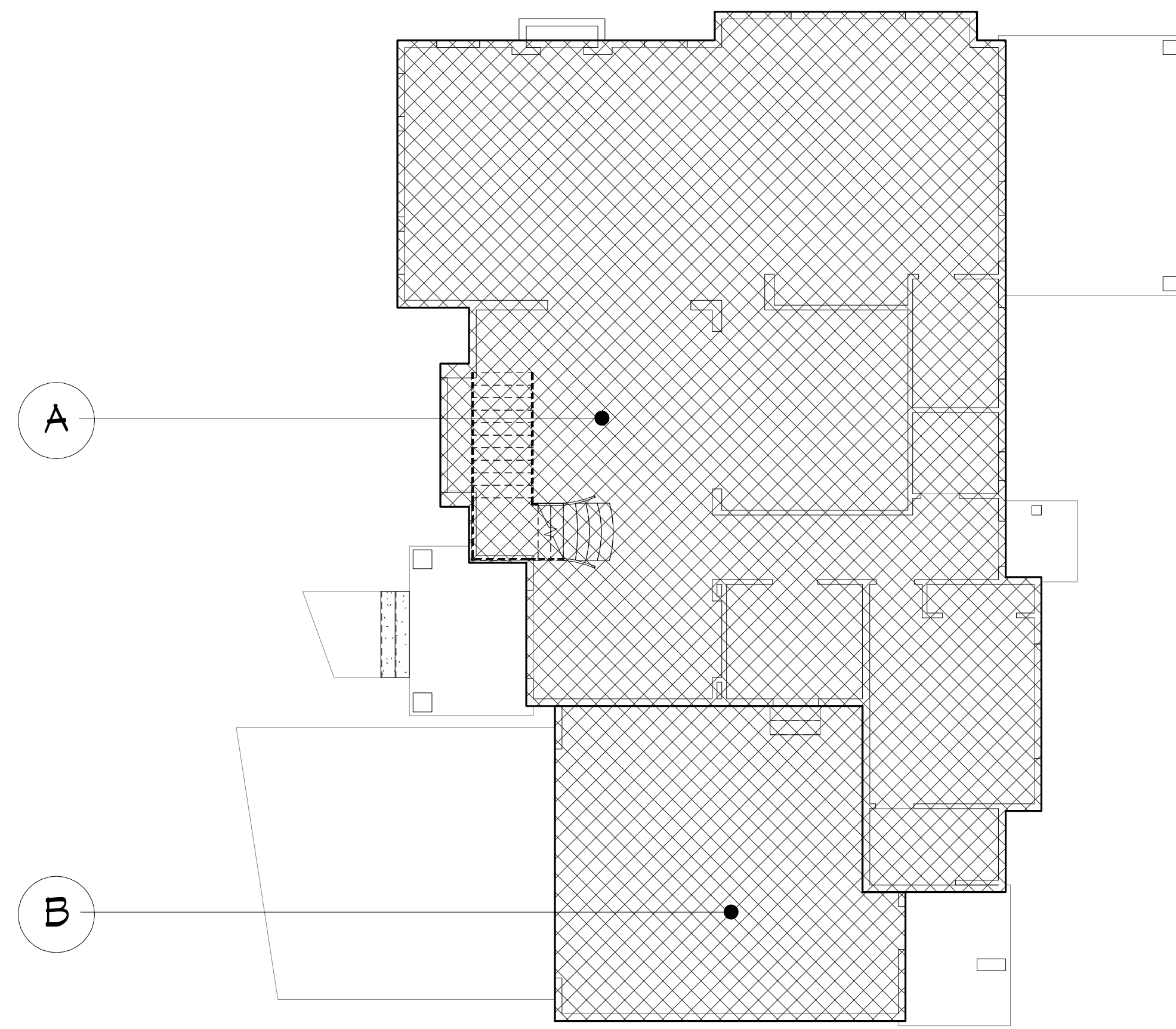
DESIGN BY: PAVEL MELNIK  
DRAWN BY: ANNA KONYAKINA

ENERGY CREDITS OPTIONS

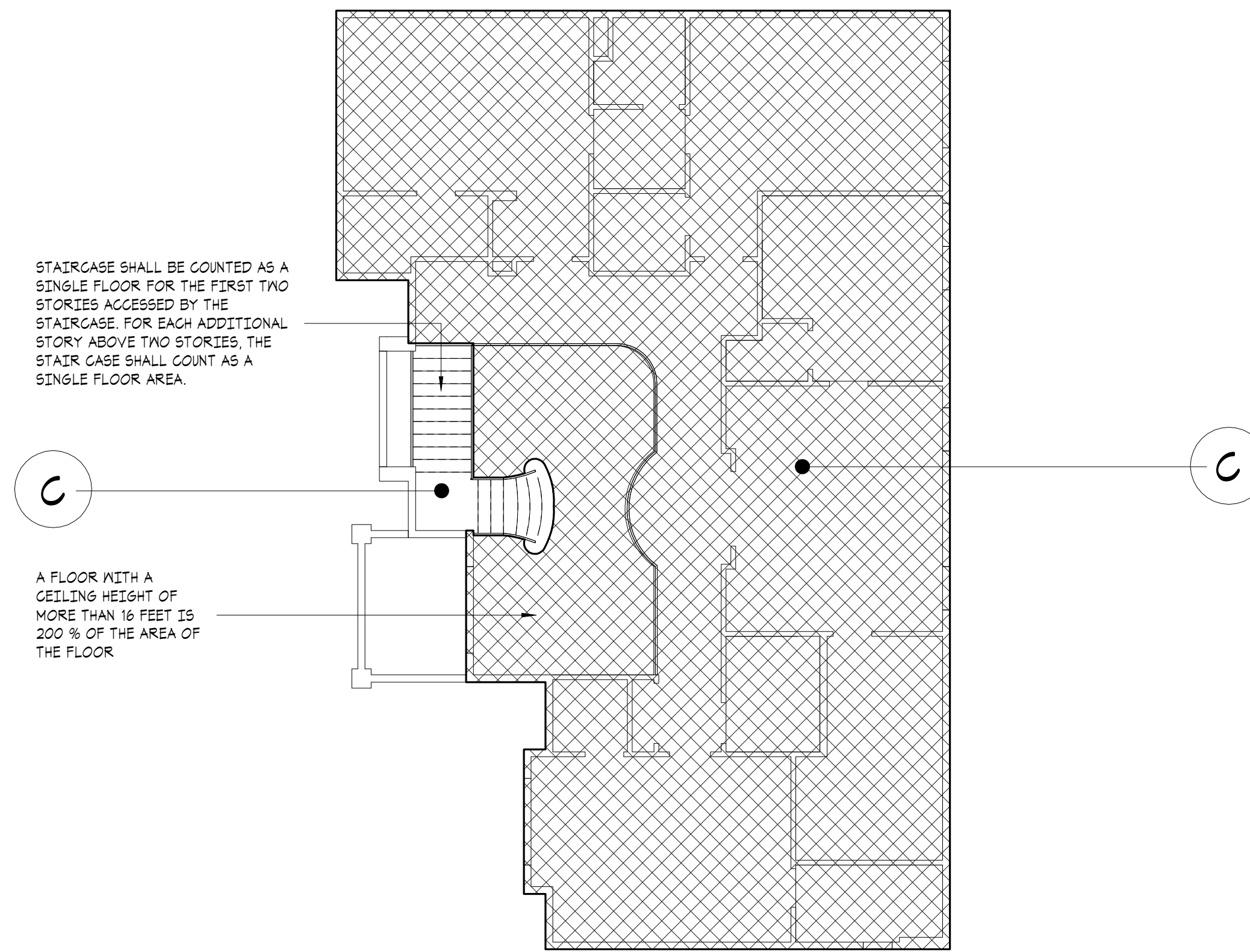
PROJECT NUMBER: 21257  
SHEET NUMBER: A1.2

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(206) 839-8250 E-MAIL: URBANDESIGNCENTER@UADGROUP.COM





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



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

STAIRCASE SHALL BE COUNTED AS A SINGLE FLOOR FOR THE FIRST TWO STORIES ACCESSED BY THE STAIRCASE. FOR EACH ADDITIONAL STORY ABOVE TWO STORIES, THE STAIR CASE SHALL COUNT AS A SINGLE FLOOR AREA.

A FLOOR WITH A CEILING HEIGHT OF MORE THAN 16 FEET IS 200 % OF THE AREA OF THE FLOOR

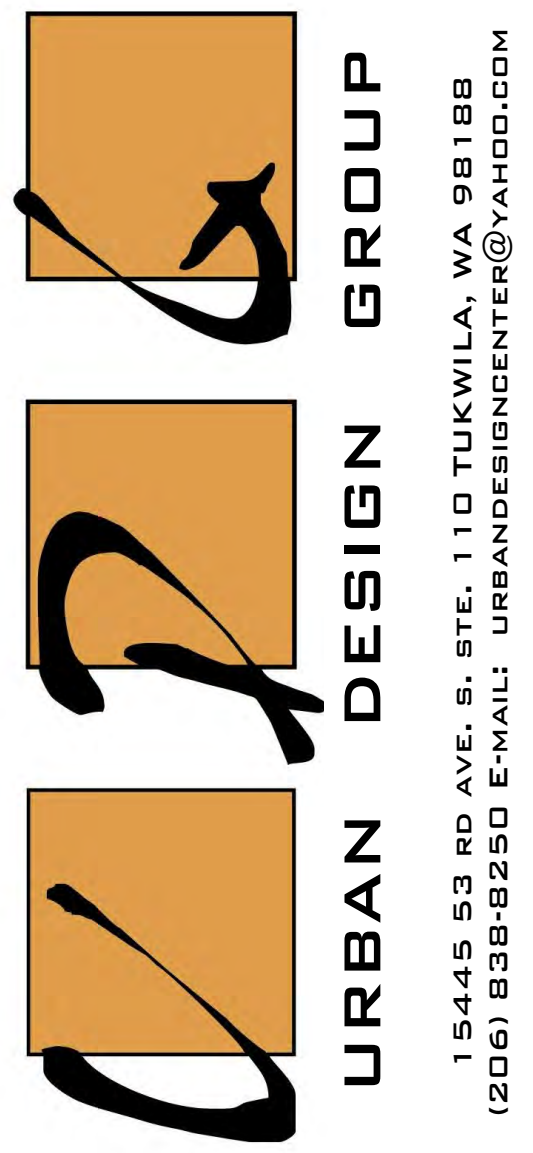
GROSS FLOOR AREA:			
(A)	MAIN FLOOR:	2 025	S.F.
(B)	GARAGE:	500	S.F.
(C)	UPPER FLOOR:	2 244	S.F.
(D)	STAIRCASE:	EXCLUDED	
TOTAL GROSS FLOOR AREA (GFA):		4 769	S.F.

GROSS FLOOR AREA:	
LOT AREA:	11 930 s.f.
ALLOWED GFA *:	40%
GFA ALLOWANCE (40%):	4 772 s.f.
TOTAL PROPOSED GFA:	4 769 S.F. / 39.96%

\* ZONING R-8.4: 5,000 SQUARE FEET OR 40% OF THE LOT AREA, WHICHEVER IS LESS.

\*\* IF AN ACCESSORY DWELLING UNIT IS PROPOSED, THE 40% ALLOWED GFA MAY BE INCREASED BY THE LESSER OF 5 PERCENTILE POINTS, OR THE FLOOR AREA OF THE ACCESSORY DWELLING UNIT, PROVIDED, THIS ALLOWANCE SHALL NOT RESULT IN A GFA OF MORE THAN 4,500 SQUARE FEET OR 45% OF THE LOT AREA, WHICHEVER IS LESS.

NOTE:  
THE GFA INCLUDES THE FLOOR AREA OF THE MAIN BUILDING, ACCESSORY BUILDINGS, GARAGES, ATTACHED ROOFED DECKS ON THE SECOND OR THIRD STORY OF A SINGLE FAMILY HOME, STAIR CASES, ETC. THE GFA DOES NOT INCLUDE SECOND- OR THIRD UNCOVERED DECKS OR UNCOVERED ROOFTOP DECKS.



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PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE**  
**8456 SE 40TH**  
**MERCER ISLAND, WA 98040**  
**PARCEL #: 502190-0790**

PREPARED FOR:  
**PHILIP SUDO & LLC**  
**KUN QIAN &**  
**Laurie Qian**

SUBMITTAL/REVISION: DATE:  
SUBMITTED -/-/2022  
REVISED -/-/2022  
DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA  
SHEET TITLE:

**GROSS FLOOR AREA (GFA)**

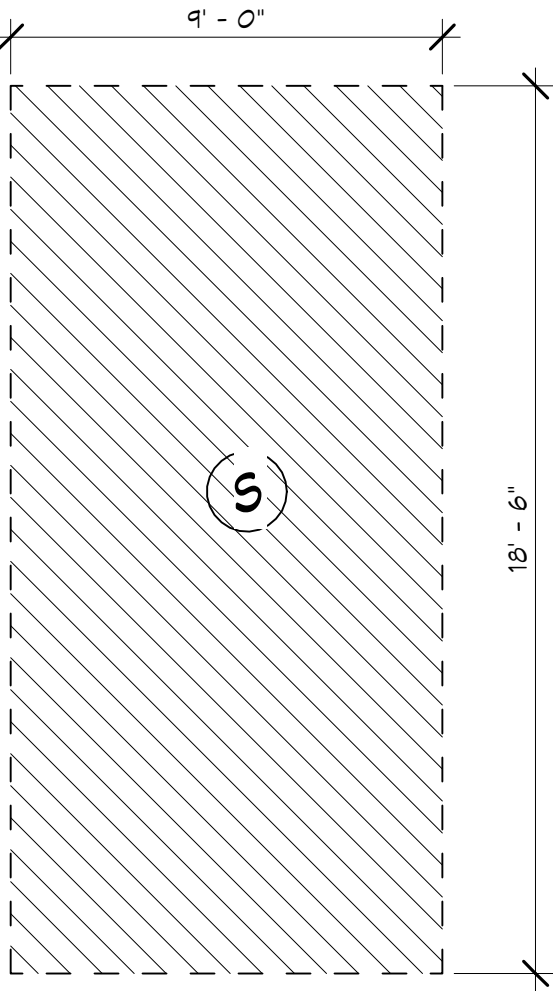
PROJECT NUMBER:  
**21257**

SHEET NUMBER:

**A2.1**

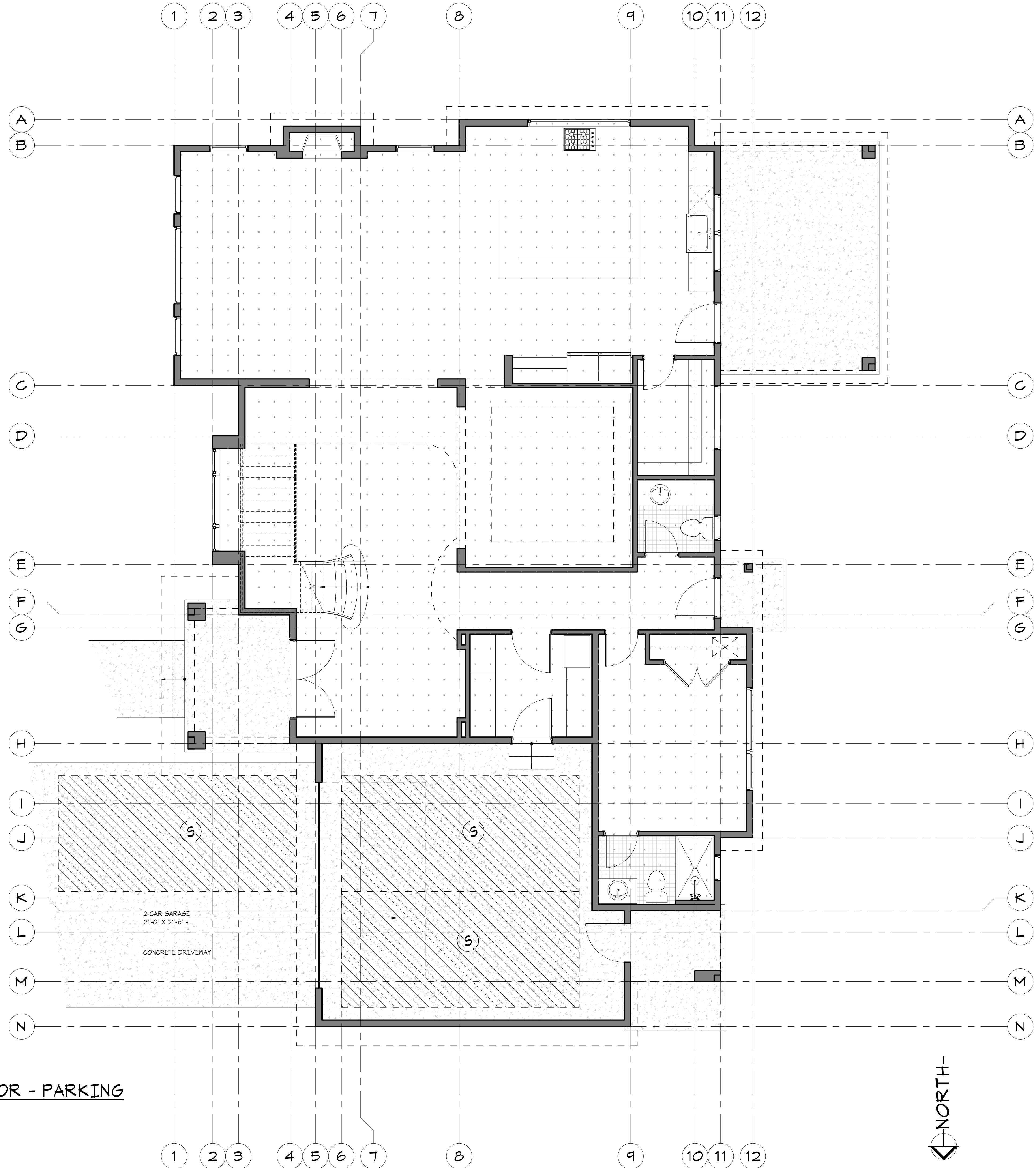
**PARKING REQUIRED (MICC 19.02.020(6)(2)(A)):**  
 A. EACH SINGLE-FAMILY DWELLING WITH A GROSS FLOOR AREA OF 3,000 SQUARE FEET OR MORE SHALL HAVE AT LEAST THREE PARKING SPACES SUFFICIENT IN SIZE TO PARK A PASSENGER AUTOMOBILE; PROVIDED, AT LEAST TWO OF THE STALLS SHALL BE COVERED STALLS.

**STANDARD PARKING STALL (9' X 18.5'):**

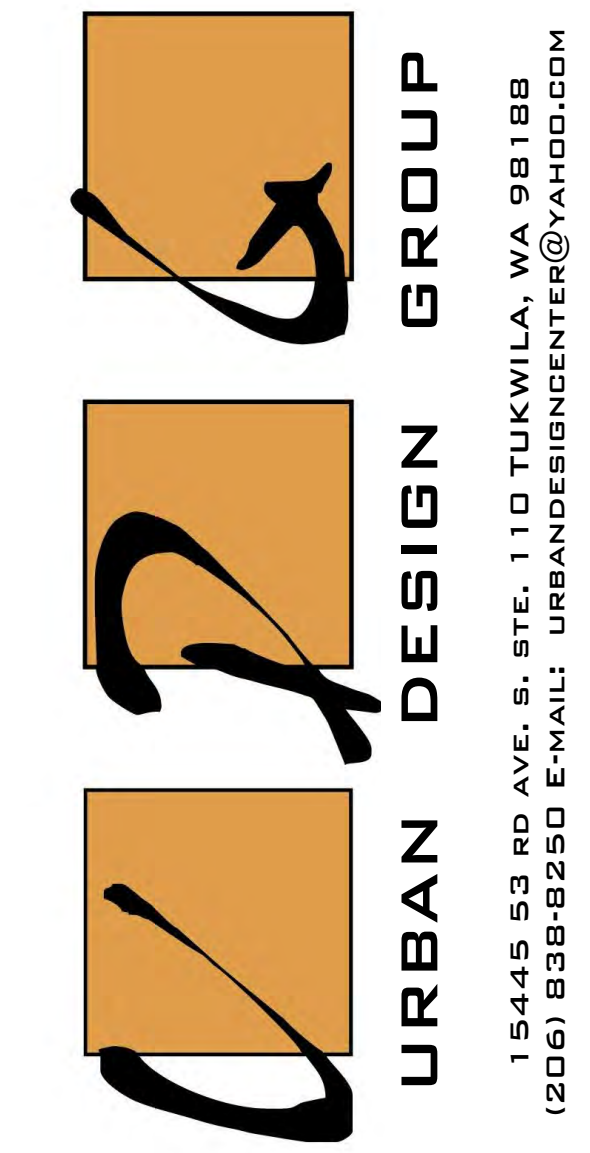


**PROVIDED PARKING:**  
 TWO (2) STANDARD SIZE COVERED PARKING SPACES IN THE GARAGE.  
 DRIVEWAY CONTAINS A MINIMUM OF ONE (1) STANDARD PARKING STALL.

**PARKING STALLS**



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



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PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE**  
**8456 SE 40TH**  
**MERCER ISLAND, WA 98040**  
**PARCEL #: 502190-0790**

PREPARED FOR:  
**PHILIP SUDO & LLC**  
**KUN QIAN &**  
**LAURIE QIAN**

SUBMITTAL/REVISION: DATE:  
 SUBMITTED -/-/2022  
 REVISED -/-/2022

DESIGN BY: PAVEL MELNIK  
 DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:

**PARKING**

PROJECT NUMBER:  
**21257**

SHEET NUMBER:  
**A2.2**

- TYPICAL FLOOR NOTES:**
- INSTALL SMOKE DETECTORS IN ALL SLEEPING ROOMS AND AT AREAS ADJACENT TO SLEEPING ROOMS, AND AT CEILINGS HEIGHT CHANGES GREATER THAN 24". SMOKE DETECTORS TO BE HARD-WIRED AND INTERCONNECTED, WITH BATTERY BACK-UP PER CODE.
  - INSTALL CARBON MONOXIDE SENSORS ADJACENT TO SLEEPING AREAS.
  - ALL INTERIOR WALLS TO BE 2X4 @ 16" O.C. (I.N.O.)
  - ALL EXTERIOR WALLS TO BE 2X6 @ 16" O.C. (I.N.O.)
  - MAIN FLOOR HEADERS PER STRUCTURAL, @ 4'-0" A.F.F. (I.N.O.)
  - WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT.
  - DOOR SIZES NOTED ARE SLABS NOT ROUGH OPENINGS.
  - PROVIDE FIREBLOCKING AT ALL PLUMBING OPENINGS.
  - PROVIDE SOLID BLOCKING OVER SUPPORTS.
  - WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF CONCEALED SPACE DOES NOT EXCEED 1000 SF. DRAFTSTOPS SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS AND SHALL BE OF 1/2" GYP BOARD OR OTHER APPROVED MATERIALS INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS PER CODE.
  - PROVIDE FIREBLOCKING TO CUT OFF ALL CONCEALED HORIZONTAL AND VERTICAL DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL CONSIST OF NOT LESS THAN 2" NOMINAL LUMBER OR OTHER APPROVED MATERIAL.
  - ASPHALT-SATURATED FELT FREE FROM HOLES OR BREAKS, WEIGHING NOT LESS THAN 14 POUNDS PER 100 SQUARE FEET AND COMPLYING WITH ASTM D 226 OR OTHER APPROVED WEATHER RESISTANT MATERIAL SHALL BE APPLIED OVER SHEATHING OF ALL EXTERIOR WALLS. APPROVED ALTERNATIVE WEATHERPROOF MEMBRANES SHALL BE USED FOR OPEN JOINT RAIN SCREEN SIDING. WEATHER RESISTANT MATERIALS SHALL BE APPLIED HORIZONTALLY PER MANUFACTURERS RECOMMENDATIONS, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES AND NOT LESS THAN 6 INCHES WHERE JOINTS OCCUR PER CODE.
  - APPROVED CORROSION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL SURFACE AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR WALL ENVELOPE. FLASHING SHALL BE INSTALLED AT, BUT NOT LIMITED TO THE FOLLOWING LOCATIONS:  
-THE TOP OF ALL EXTERIOR WINDOW & DOOR OPENINGS  
-INTERSECTIONS OF FRAME WALLS AND MASONRY OR STUCCO  
-UNDER MASONRY, WOOD OR METAL COPINGS AND SILLS  
-CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM  
-WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL  
-AT WALL AND ROOF OR SOFFIT INTERSECTIONS  
-AT BUILT-IN GUTTERS
  - EXTERIOR LOCATIONS FOR ENVIRONMENTAL AIR DUCT EXHAUST & INTAKE OPENINGS TO BE A MINIMUM OF 3'-0" FROM PROPERTY LINE & MINIMUM 3'-0" FROM BUILDING OPENINGS. EQUIP ALL DUCTS W/ BACK-DRAFT DAMPERS
  - AIR EXHAUST & INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED W/ CORROSION RESISTANT SCREENS, LOUVERS, OR GRILLS W/ 1/4" MINIMUM & 1/2" MAX OPENINGS IN ANY DIMENSION. OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS PER 2015 IRC.
  - DUCTS FOR KITCHEN RANGES SHALL BE OF METAL AND BE EQUIPPED W/ BACK-DRAFT DAMPERS PER CODE.
  - ALL INTERIOR FINISHES TO MEET MINIMUM FLAME SPREAD INDEX AND SMOKE DEVELOPMENT INDEX AS REQUIRED BY 2015 IRC.
  - UNDER FLOOR CLEANOUT NOT MORE THAN 20" FROM ACCESS DOOR WITH AN UNOBSTRUCTED 30" WIDE X 18" HIGH PATH PATHWAY. CLEANOUTS ARE ACCESSIBLE. 12" CLEARANCE REQUIRED AT LINES LESS THAN OR EQUAL TO 2'. 18" CLEARANCE AT LINES GREATER THAN 2'. (UPC 101.4)
  - GLAZING IN ALL FIXED AND OPERABLE PANELS OF SKINNING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED A HAZARDOUS LOCATION. SAFETY GLAZING.

- GARAGE NOTES:**
- GARAGES SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 5/8" TYPE X GNB APPLIED TO THE GARAGE SIDE. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT.
  - OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8" THICK, OR 20-MINUTE FIRE-RATED DOORS.
  - DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIALS AND SHALL HAVE NO OPENINGS INTO THE GARAGE. IRC R304.1.1
  - IN SEISMIC ZONES 3 & 4, WATER HEATERS SHALL BE ANCHORED TO RESIST HORIZ. DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE @ POINTS WITHIN THE UPPER ONE THIRD AND LOWER ONE THIRD PER UPC SEC. 510.5
  - PROVIDE OUTDOOR COMBUSTION AIR FOR WATER HEATER
  - GARAGE FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL AND THE AREA USED FOR THE PARKING OF AUTOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY.

**AREA SUMMARY:**

MAIN FLOOR:	2,025 SF
UPPER FLOOR:	1,991 SF
LIVING/HEATED SPACE:	4,016 SF
GARAGE:	500 SF
FRONT PORCH:	92 SF
CONCRETE LANDING:	63 SF
COVERED PATIO:	210 SF

NOTE:  
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN

NOTE:  
EACH DOOR TO BE UNDERCUT A MINIMUM OF 1/2-INCH TO ASSURE FREE FLOW OF FRESH AIR THROUGHOUT HABITABLE ROOMS

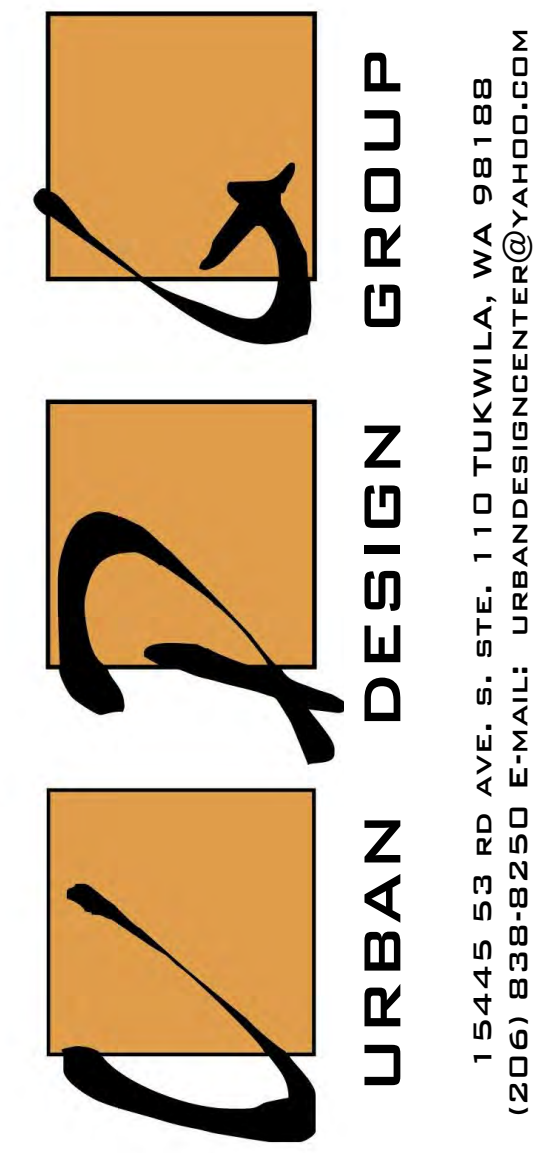
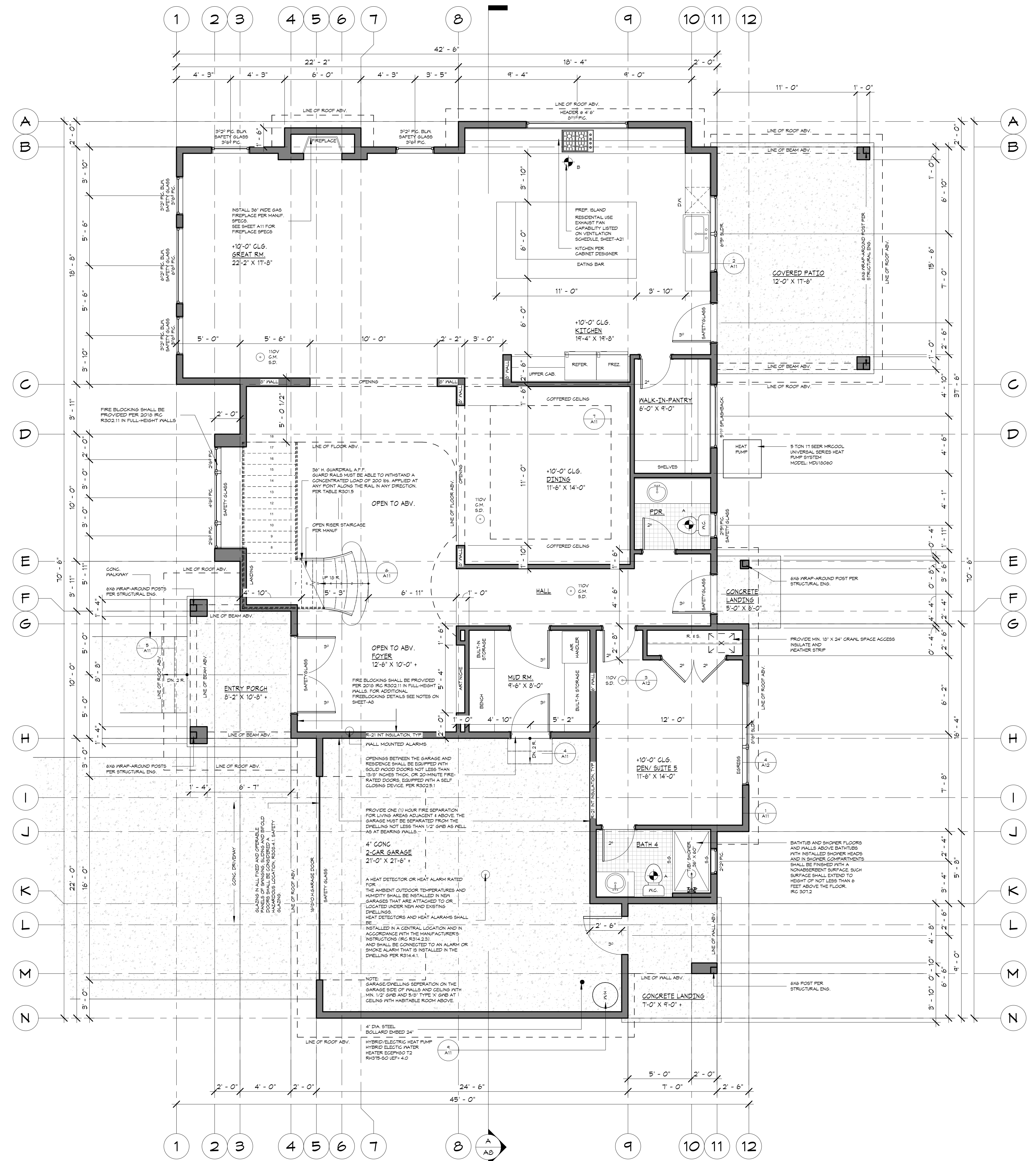
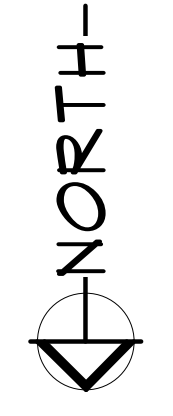
NOTE:  
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NOTE:  
THE DOOR IN THE DWELLING/GARAGE SEPARATION MUST BE EQUIPPED WITH A SELF-CLOSING OR AUTOMATED CLOSING DEVICE. PER IRC 302.5.1

FOR SMOKE & CARBON MONOXIDE ALARMS NOTES SEE SHEET A5.

**MAIN FLOOR PLAN**

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



PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE**  
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**MERCER ISLAND, WA 98040**  
**PARCEL #: 502190-0790**

PREPARED FOR:  
**PHILIP SUDO & LLC**  
**KUN QIAN &**  
**Laurie Qian**

SUBMITTAL/REVISION: DATE:  
SUBMITTED: /-/2022  
REVISED: /-/2022

DESIGN BY: PAVEL MELNIK  
ANNAN KONYAKINA

**MAIN FLOOR PLAN**

PROJECT NUMBER:  
**21257**

SHEET NUMBER:

**TYPICAL FLOOR NOTES:**

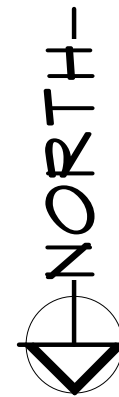
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- DOOR SIZES NOTED ARE SLABS NOT ROUGH OPENINGS.
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- PROVIDE SOLID BLOCKING OVER SUPPORTS.
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 -UNDER MASONRY, WOOD OR METAL COPINGS AND SILLS  
 -CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM  
 -WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL  
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- GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED A HAZARDOUS LOCATION. SAFETY GLAZING.

**AREA SUMMARY:**

MAIN FLOOR:	2,025	SF
UPPER FLOOR:	1,491	SF
LIVING/HEATED SPACE:	4,016	SF
GARAGE:	500	SF
FRONT PORCH:	42	SF
CONCRETE LANDING:	63	SF
COVERED PATIO:	210	SF

**UPPER FLOOR PLAN**

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



**NOTE:**  
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN

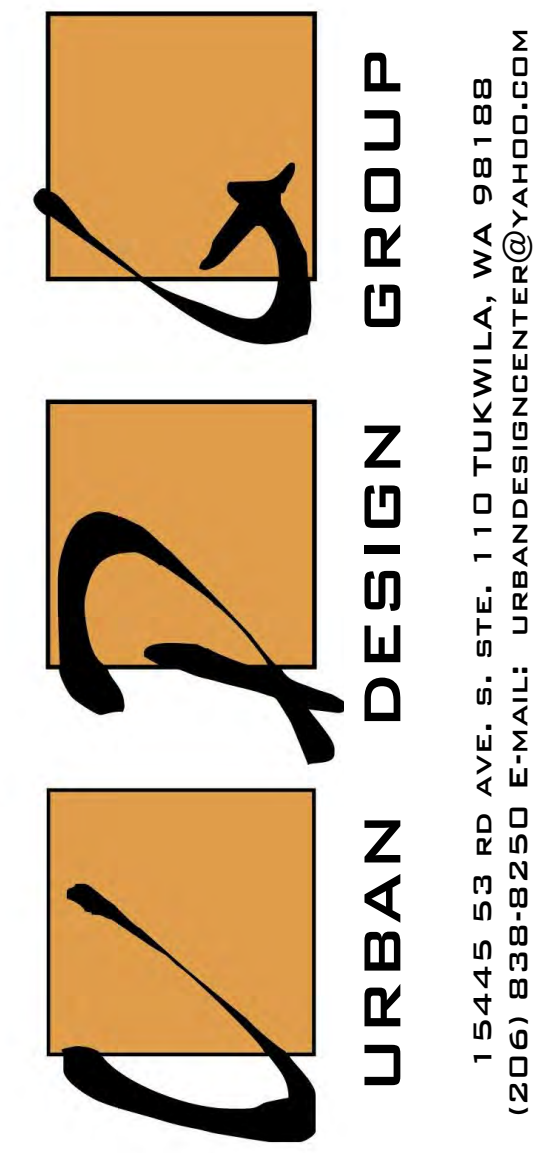
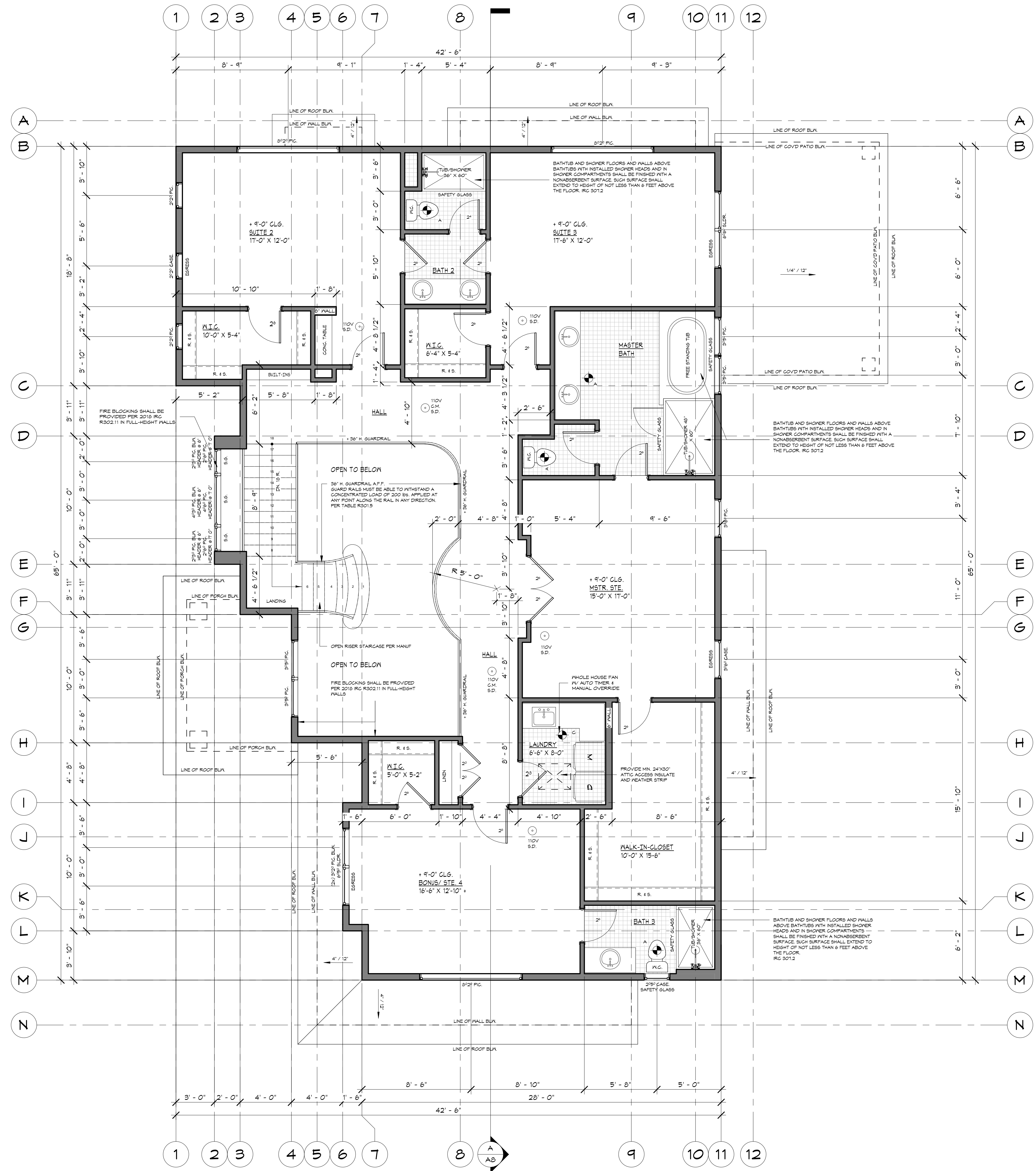
**NOTE:**  
EACH DOOR TO BE UNDERCUT A MINIMUM OF 1/2-INCH TO ASSURE FREE FLOW OF FRESH AIR THROUGHOUT HABITABLE ROOMS

**NOTE:**  
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

**NOTE:**  
THE DOOR IN THE DWELLING/GARAGE SEPARATION MUST BE EQUIPPED WITH A SELF-CLOSING OR AUTOMATED CLOSING DEVICE. PER IRC 302.5.1

FOR SMOKE & CARBON MONOXIDE ALARMS NOTES SEE SHEET A5.

**NOTE:**  
DUCT TO EXTERIOR. FOR INTERMITTENT DISTRIBUTED



PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE**  
**8456 SE 40TH**  
**MERCER ISLAND, WA 98040**  
**PARCEL #: 502190-0790**

PREPARED FOR:  
**PHILIP SUDO & LLC**  
**KUN QIAN &**  
**LAURIE GIAN**

SUBMITTAL/REVISION: DATE:  
 SUBMITTED /-/2022  
 REVISED /-/2022  
 DESIGN BY: PAVEL MELNIK  
 DRAFTED BY: ANNA KONYAKINA  
 SHEET TITLE:

**UPPER FLOOR PLAN**

PROJECT NUMBER:  
**21257**

SHEET NUMBER:

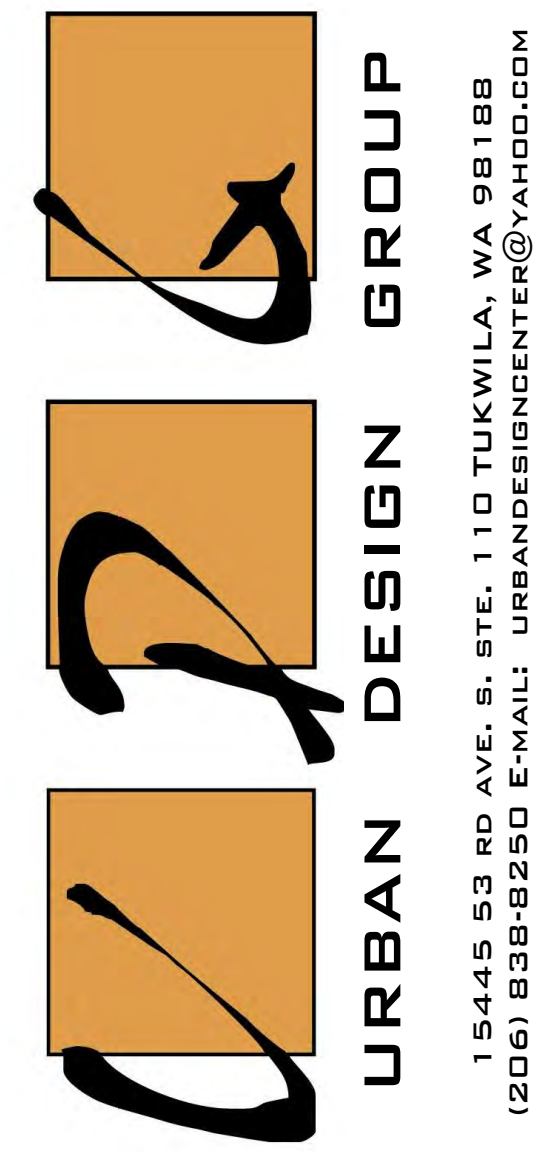
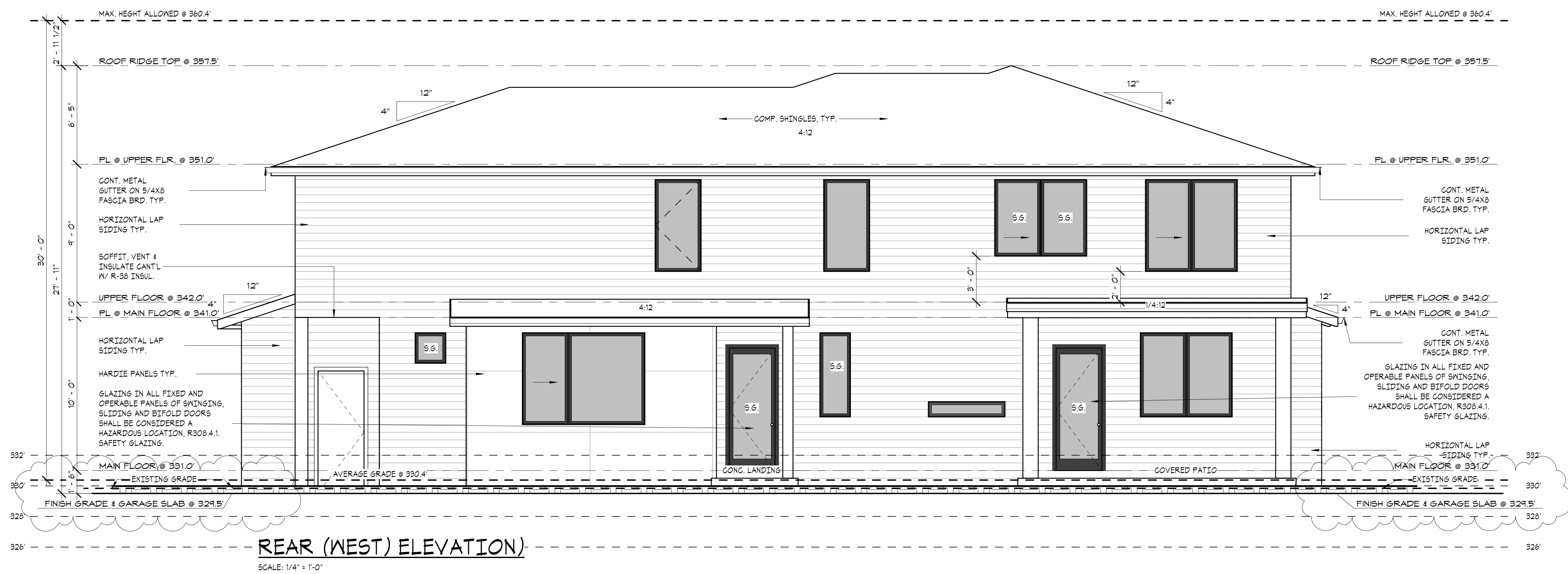
- ELEVATION NOTES:
1. VERIFY SHEAR WALL NAILING & HOLD-DOWNS PER PLAN PRIOR TO INSTALLING SIDING.
  2. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.
  3. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R103.3
  4. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R405.2.8
  5. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.
  6. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.
  7. ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE, MIN. 4' HEIGHT, 1/2" STROKE WIDTH AND CONTRASTING BACKGROUND.
  8. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.6
  9. SEE SHEET A1 FOR ADDITIONAL NOTES.
  10. PROVIDE SURFACE DRAINAGE 6" x 10" MIN. AWAY FROM HOUSE FOOTPRINT IRC R401.3

NOTE:  
NO OPERABLE WINDOW SHALL BE INSTALLED LESS THAN 24 INCHES ABOVE FINISHED FLOOR THAT IS GREATER THAN 12 INCHES ABOVE THE FINISH GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING.

NOTE:  
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

NOTE:  
FOR HARDIE PANEL DETAILS SEE SHEET A13  
FOR ARTISAN LAP SIDING DETAILS SEE SHEET A14

**SMOKE & CARBON MONOXIDE ALARMS:**  
SMOKE AND CARBON MONOXIDE ALARMS MUST BE PROVIDED IN ALL REQUIRED LOCATIONS AND MUST BE:  
\* AUDIBLE IN ALL PARTS OF THE HOUSE  
\* INSTALLED PER MANUFACTURER'S INSTRUCTIONS  
NEW HOUSES (IRC R314 & R315)  
SMOKE ALARMS AND CARBON MONOXIDE ALARMS ARE REQUIRED AND MUST BE CONNECTED TO THE MAIN ELECTRICAL SYSTEM WITH BATTERY BACKUP.  
CARBON MONOXIDE ALARMS ARE REQUIRED IN ALL NEW AND EXISTING HOMES, APARTMENTS, CONDOMINIUMS, AND OTHER MULTI-FAMILY UNITS, REQUIRED LOCATIONS  
\* SMOKE ALARMS SHALL BE LOCATED IN EACH SLEEPING ROOM AND IN HALLWAYS AREAS IN A FAMILY HOME CHILD CARE.  
\* SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL BE LOCATED OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.  
\* SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL BE LOCATED ON EVERY FLOOR LEVEL, INCLUDING BASEMENTS (DOES NOT INCLUDE CRAWLSPACE AND UNINHABITABLE ATTICS).  
\* IN SPLIT LEVEL FLOOR PLANS, AT THE UPPER LEVEL, PROVIDED THERE IS NO INTERVENING DOOR BETWEEN ADJACENT LEVELS AND THE LOWER LEVEL IS LESS THAN A FULL STORY BELOW THE UPPER LEVEL.  
\* A CARBON MONOXIDE ALARM IS REQUIRED IN A BEDROOM WHEN A FUEL-BURNING APPLIANCE IS INSTALLED IN THE BEDROOM OR ITS ATTACHED BATHROOM.  
\* A COMBINATION ALARM (COMBINED SMOKE AND CARBON MONOXIDE ALARM) IS ACCEPTABLE IN ANY REQUIRED LOCATION.  
\* WALL MOUNTED ALARMS MUST BE NOT MORE THAN 12 INCHES FROM THE ADJOINING CEILING SURFACE.  
\* AVOID PLACING ALARMS LESS THAN 3 FEET FROM SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND DO NOT PLACE ALARMS IN THE DIRECT AIRFLOW OF THE REGISTERS.  
\* AVOID PLACING ALARMS WITHIN 3 FEET HORIZONTALLY FROM DOORS TO BATHROOMS CONTAINING A BATHTUB OR SHOWER.  
\* DO NOT PLACE ALARMS IN SPACES WHERE TEMPERATURES MAY BE ABOVE OR BELOW THE ALARMS OPERATING TEMPERATURE RANGE.  
\* DO NOT PLACE ALARMS WITHIN 3 FEET OF THE BLADES OF A CEILING FAN.  
\* ALARMS IN PEAKED OR SLOPED CEILINGS MUST BE WITHIN 3 FEET OF THE PEAK, MEASURED HORIZONTALLY, BUT NOT IN THE HIGHEST 4 INCHES OF THE CEILING, MEASURED VERTICALLY.  
A. PHOTOELECTRIC SMOKE ALARMS MUST NOT BE LESS THAN 6 FEET FROM A PERMANENT COOKING APPLIANCE.  
B. IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH MUST NOT BE LESS THAN 10 FEET FROM A PERMANENT COOKING APPLIANCE.  
C. IONIZATION SMOKE ALARMS WITHOUT AN ALARM-SILENCING SWITCH MUST NOT BE LESS THAN 20 FEET FROM A PERMANENT COOKING APPLIANCE  
CARBON MONOXIDE ALARM LOCATION LIMITATIONS  
\* DO NOT PLACE ALARMS DIRECTLY ABOVE OR BESIDE FUEL-BURNING APPLIANCES.  
\* DO NOT PLACE ALARMS IN DIRECT SUNLIGHT.  
\* DO NOT PLACE ALARMS IN LOW AREAS WHERE CHILDREN CAN REACH. DO NOT PLACE ALARMS BEHIND CURTAINS OR ANY STRUCTURE THAT MIGHT PREVENT CARBON MONOXIDE FROM REACHING THE SENSOR.



15445 53 RD AVE. S. STE. 110 TUKWILA, WA 98188  
(206) 836-8250 E-MAIL: URBANDESIGNCENTER@YAHOO.COM

PROJECT NAME:  
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**8456 SE 40TH**  
**MERCER ISLAND, WA 98040**  
**PARCEL #: 502190-0790**

PREPARED FOR:  
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**Laurie Qian**

SUBMITTAL/REVISION: DATE:  
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REVISED -/-/2022  
DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA  
SHEET TITLE:

**FRONT AND REAR ELEVATIONS**

PROJECT NUMBER:  
**21257**

SHEET NUMBER:

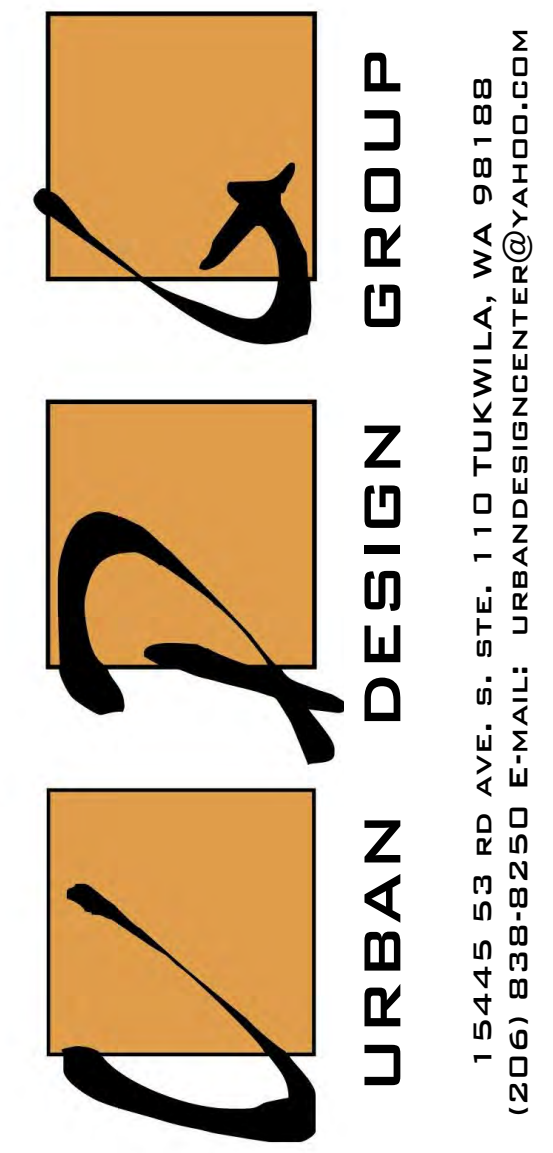
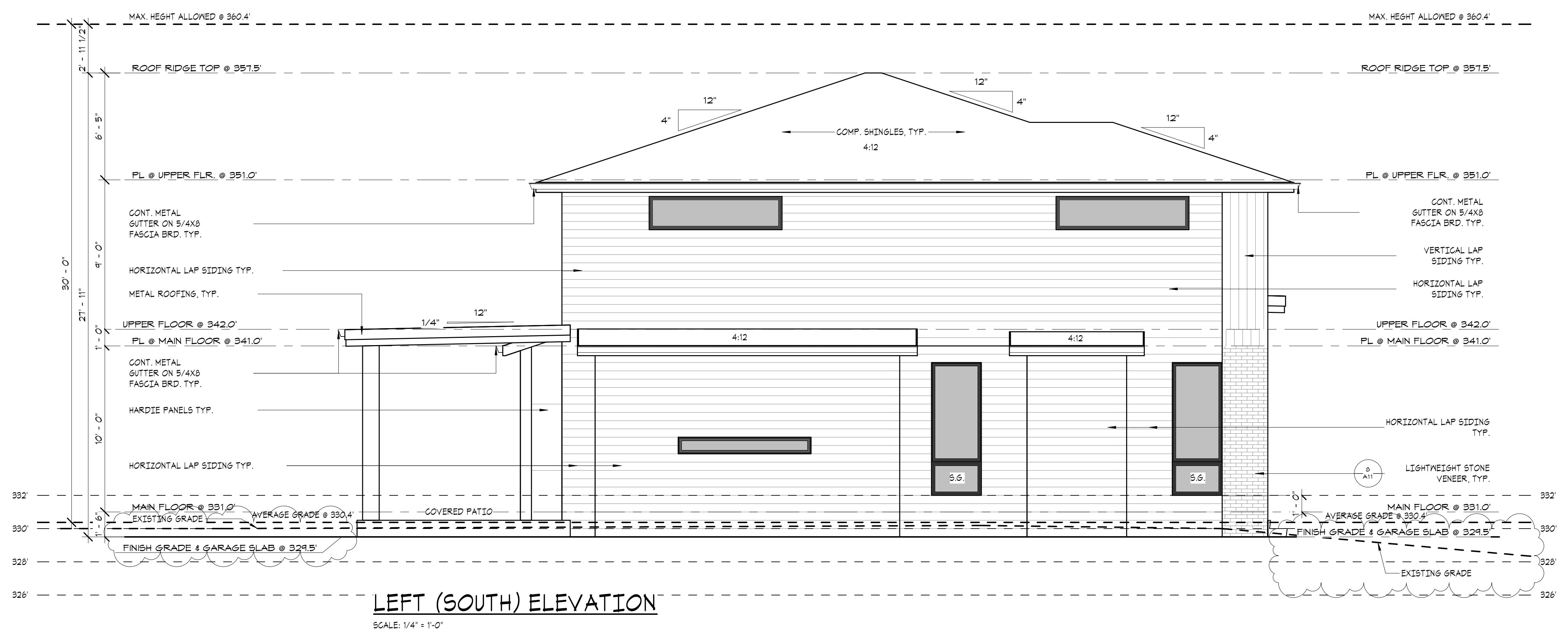
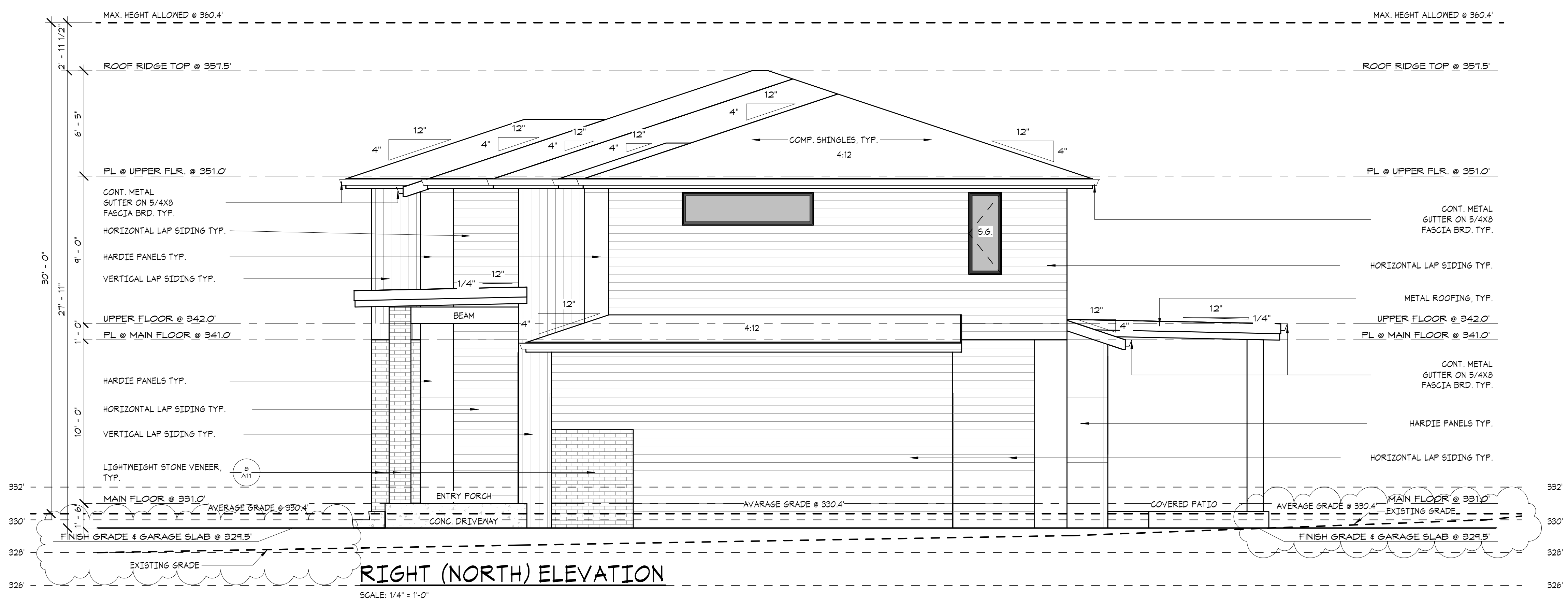
**A5**

- ELEVATION NOTES:
1. VERIFY SHEAR WALL NAILING & HOLD-DOWNS PER PLAN PRIOR TO INSTALLING SIDING
  2. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.
  3. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R103.6
  4. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R405.2.8
  5. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.
  6. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.
  7. ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE, MIN. 4" HEIGHT, 1/2" STROKE WIDTH AND CONTRASTING BACKGROUND.
  8. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.6
  9. SEE SHEET A1 FOR ADDITIONAL NOTES.
  10. PROVIDE SURFACE DRAINAGE 6" x 10" MIN. AWAY FROM HOUSE FOOTPRINT IRC R401.3

NOTE:  
NO OPERABLE WINDOW SHALL BE INSTALLED LESS THAN 24 INCHES ABOVE FINISHED FLOOR THAT IS GREATER THAN 12 INCHES ABOVE THE FINISH GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING.

NOTE:  
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

NOTE:  
FOR HARDIE PANEL DETAILS SEE SHEET A13  
FOR ARTISAN LAP SIDING DETAILS SEE SHEET A14



PROJECT NAME:  
**SINGLE-FAMILY RESIDENCE  
8456 SE 40TH  
MERCER ISLAND, WA 98040  
PARCEL #: 502190-0790**

PREPARED FOR:  
**PHILIP SUDO & LLC  
KUN QIAN &  
LAURIE QIAN**

SUBMITTAL/REVISION: DATE:  
SUBMITTED -/-/2022  
REVISED -/-/2022  
DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:  
**LEFT AND  
RIGHT  
ELEVATIONS**

PROJECT NUMBER:  
**21257**

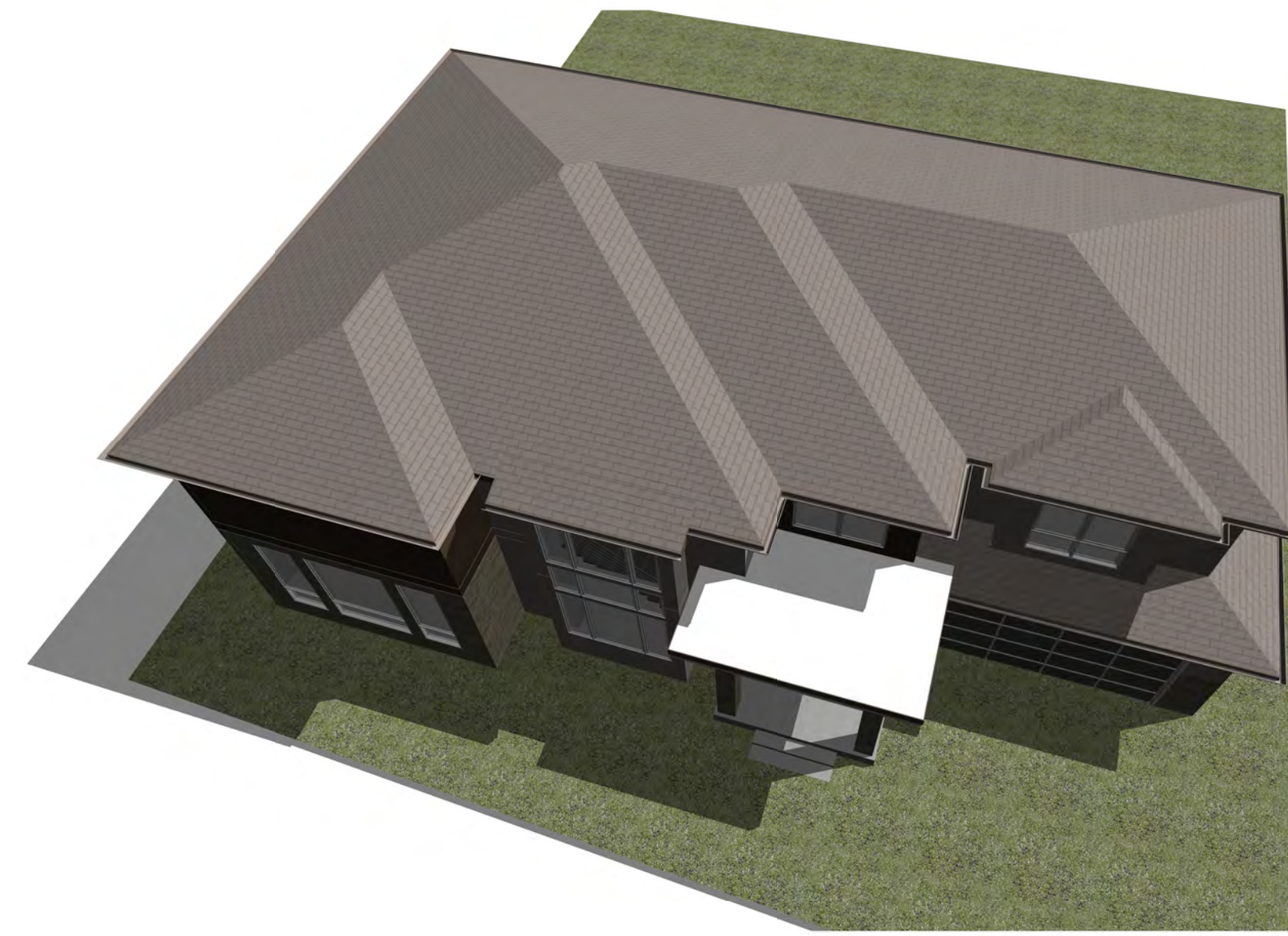
SHEET NUMBER:

**A6**

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(206) 838-8250 E-MAIL: URBANDESIGNCENTER@YAHOO.COM



PERSPECTIVE VIEW: FRONT VIEW



PERSPECTIVE VIEW: BIRD EYE VIEW



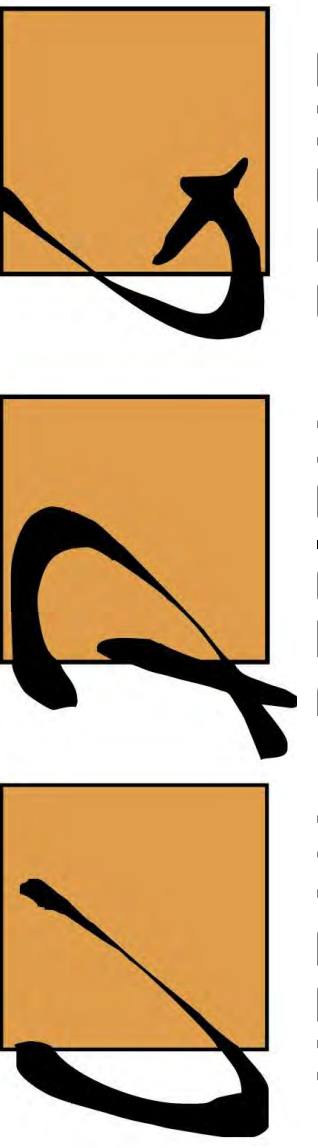
PERSPECTIVE VIEW: REAR ELEVATION



PERSPECTIVE VIEW: REAR/ LEFT ELEVATION

PERSPECTIVE VIEW:

PERSPECTIVE VIEWS ARE FOR REFERENCE ONLY. THEY SHOULD NOT BE USED TO DETERMINE ANY PORTION OF THE CONSTRUCTION OTHER THAN GENERAL MATERIAL APPEARANCE. REFER TO ELEVATION SHEETS FOR DETAILS.



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SINGLE-FAMILY RESIDENCE  
8456 SE 40TH  
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DESIGN BY: PAVEL MELNIK  
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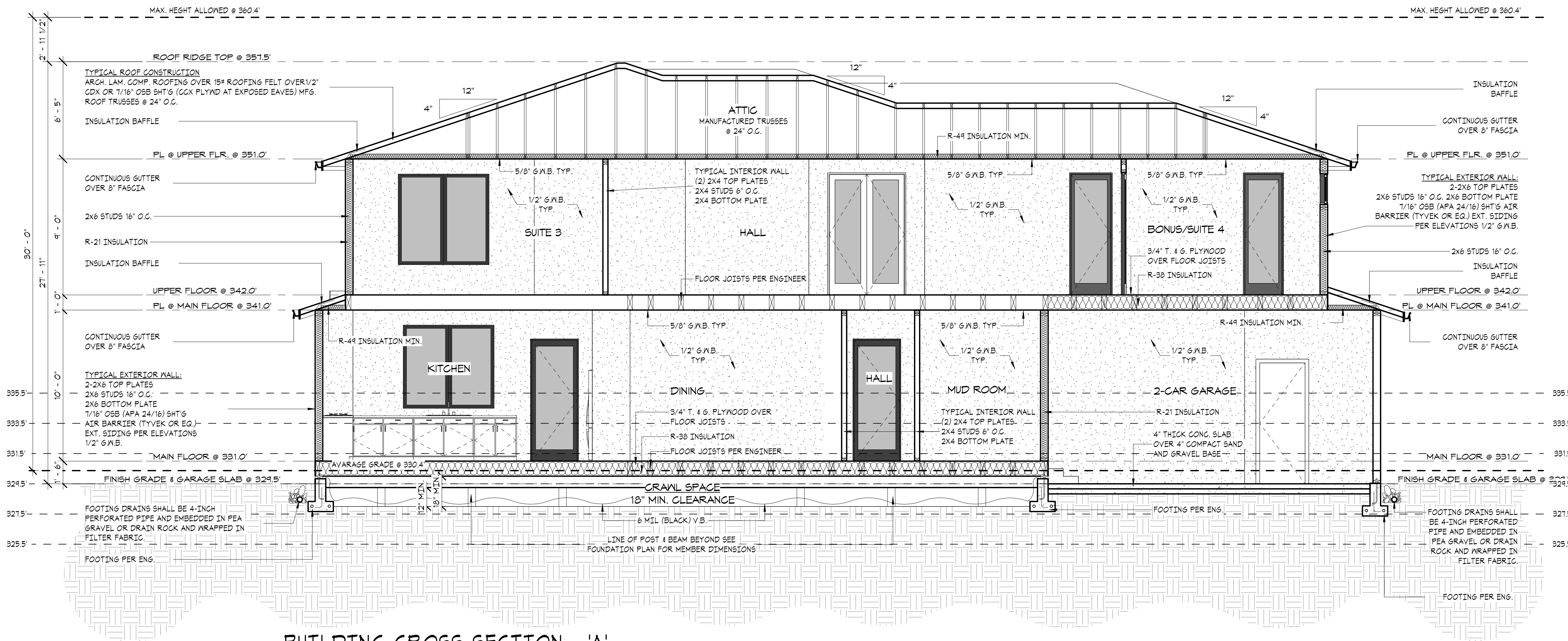
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PERSPECTIVE VIEWS

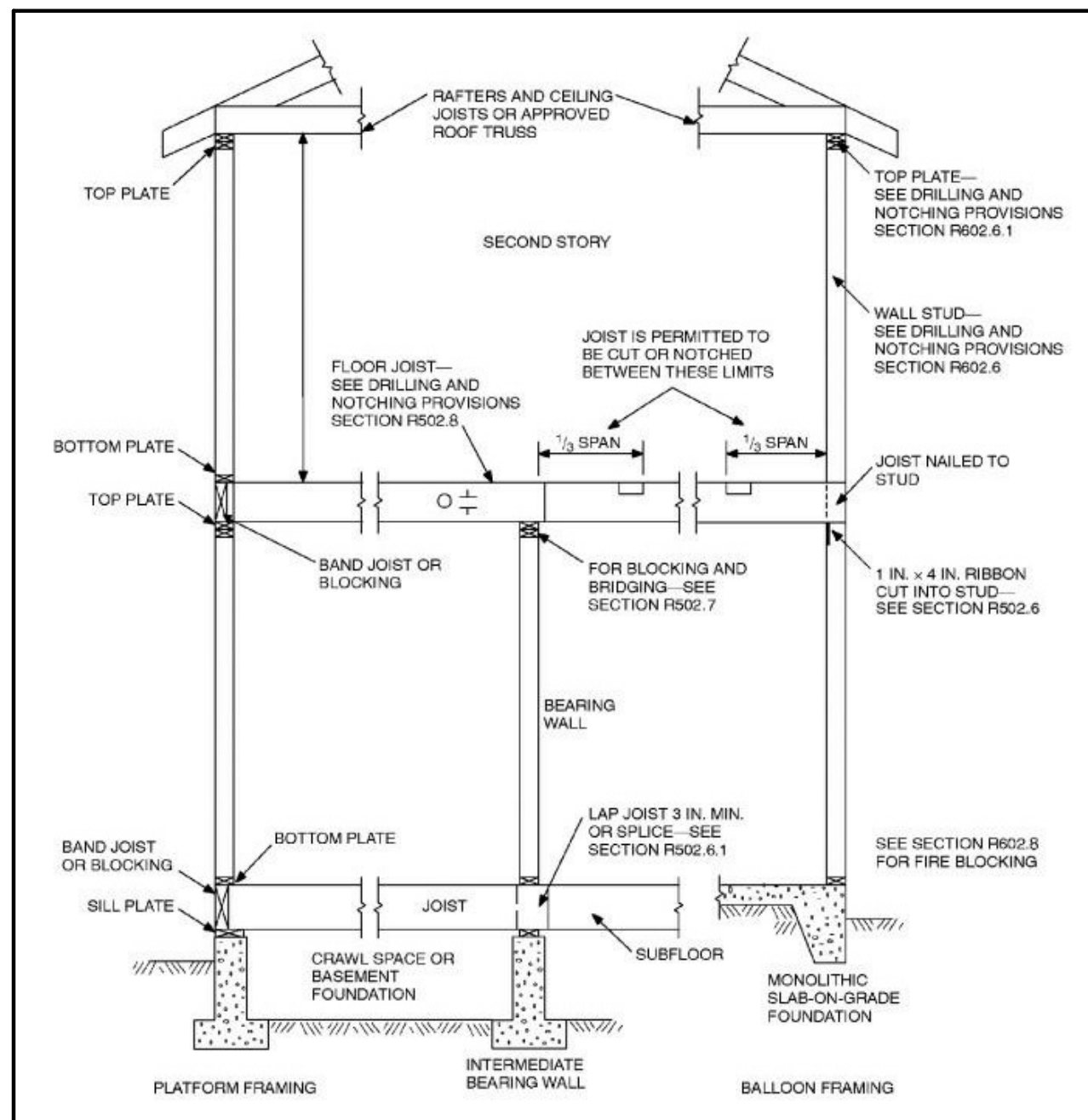
PROJECT NUMBER:  
21257

SHEET NUMBER:

A7



**BUILDING CROSS-SECTION - 'A'**  
SCALE: 1/4" = 1'-0"



**2018 IRC SECTION R302.11 FIREBLOCKING.**  
IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS AS FOLLOWS:
  - VERTICALLY AT THE CEILING AND FLOOR LEVELS.
  - HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILING AND COVE CEILING.
- IN CONCEALED SPACES AT STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E 136 REQUIREMENTS.
- FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19.
- FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. FIRE BLOCKING MATERIALS SHALL CONSIST OF MATERIAL LISTED IN SECTION R302.11.1. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED. THE INTEGRITY OF ALL FIREBLOCKS SHALL BE MAINTAINED.

**DRAFTSTOPPING:** WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW A CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPS SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. DRAFTSTOPPING MATERIALS SHALL CONSIST OF MATERIALS LISTED IN SECTION R302.12.1. DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 5/8 INCH GYPSUM, 3/8 INCH WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. THE INTEGRITY OF THE DRAFTSTOPS SHALL BE MAINTAINED.

**SECTION 312.12.1: RODENT PROOFING.**  
STRAINER PLATES ON DRAIN INLETS SHALL BE DESIGNED AND INSTALLED SO THAT NO OPENING EXCEEDS 1/2 OF AN INCH IN THE LEAST DIMENSION.

**312.12.1.1:**  
METER BOXES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT RATS CANNOT ENTER A BUILDING BY FOLLOWING THE SERVICE PIPES FROM THE BOX INTO THE BUILDING.

**312.12.2: METAL COLLARS.**  
IN OR ON BUILDINGS WHERE OPENINGS HAVE BEEN MADE IN WALLS, FLOORS, OR CEILINGS FOR THE PASSAGE OF PIPES, SUCH OPENINGS SHALL BE CLOSED AND PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS SECURELY FASTENED TO THE ADJOINING STRUCTURE.

**312.12.3: TUB WASTE OPENINGS.**  
TUB WASTE OPENINGS IN FRAMED CONSTRUCTION TO CRAWL SPACES AT OR BELOW THE FIRST FLOOR SHALL BE PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS OR METAL SCREEN SECURELY FASTENED TO THE ADJOINING STRUCTURE WITH NO OPENING GREATER THAN 1/2 OF AN INCH IN THE LEAST DIMENSION.

\* 2018 UNIFORM PLUMBING CODE WITH WASHINGTON STATE AMENDMENTS (UPC)

**CERTIFICATE (MSEC R401.3):**  
A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR WITHIN THREE FEET OF ELECTRICAL DISTRIBUTION PANEL. THE CERTIFICATE MUST LIST THE ENERGY FEATURES OF THE STRUCTURE.

**DUCTS (MSEC R403.2.2):**  
DUCTS MUST BE LEAK TESTED IN ACCORDANCE WITH MSU RS-93 USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED. DUCT TIGHTNESS MUST BE VERIFIED BY EITHER THE POSTCONSTRUCTION TEST OR ROUGH-IN TEST PER MSEC R403.2.2. TOTAL LEAKAGE MUST BE LESS THAN OR EQUAL TO 4 CFM PER 100 S.F. OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1" W.G. (25 Pa) ACROSS THE ENTIRE SYSTEM. PROVIDE GENERAL NOTES TO ADDRESS THIS REQUIREMENT.

PER MSEC R402.4, THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE(B). THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL (R402.4.1.2).

PER MSEC R403.1.1, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

PER MSEC R404.1, A MINIMUM OF 40 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.

**DUCTS (503.10.1)**

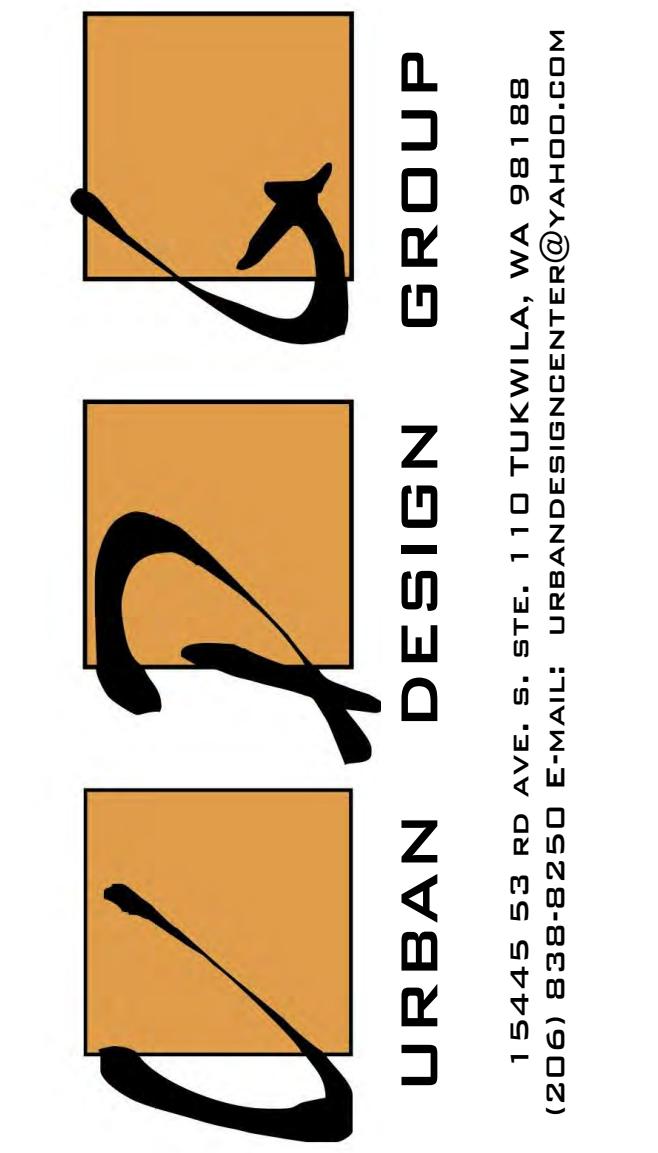
- INSTALLATION OF DUCTS IN EXTERIOR WALLS, FLOOR OR CEILING CANNOT DISPLACE REQUIRED INSULATION.
- BUILDING CAVITIES CANNOT BE USED AS DUCTS DUCT TESTING (503.10.2)
- DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST BE TESTED.

**NOTE:**  
REFER TO STRUCTURAL ENGINEERING SHEETS FOR FOUNDATION/CRAWL SPACE VENTILATION.

**NOTE:**  
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**NOTE:**  
FOR MORE DETAILS SEE STRUCTURAL ENGINEERING PLAN.

**NOTE:**  
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN



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**KUN QIAN &**  
**Laurie Qian**

SUBMITTAL/REVISION: DATE:  
SUBMITTED -/-/2022  
REVISED -/-/2022

DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:

**BUILDING**  
**CROSS-SECTION**  
**AND DETAILS**

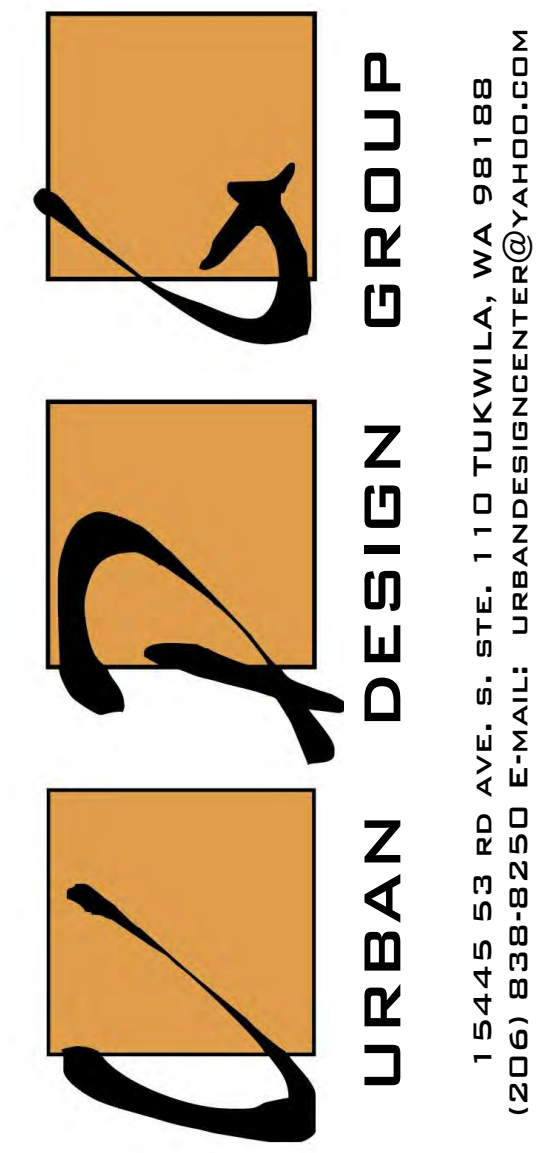
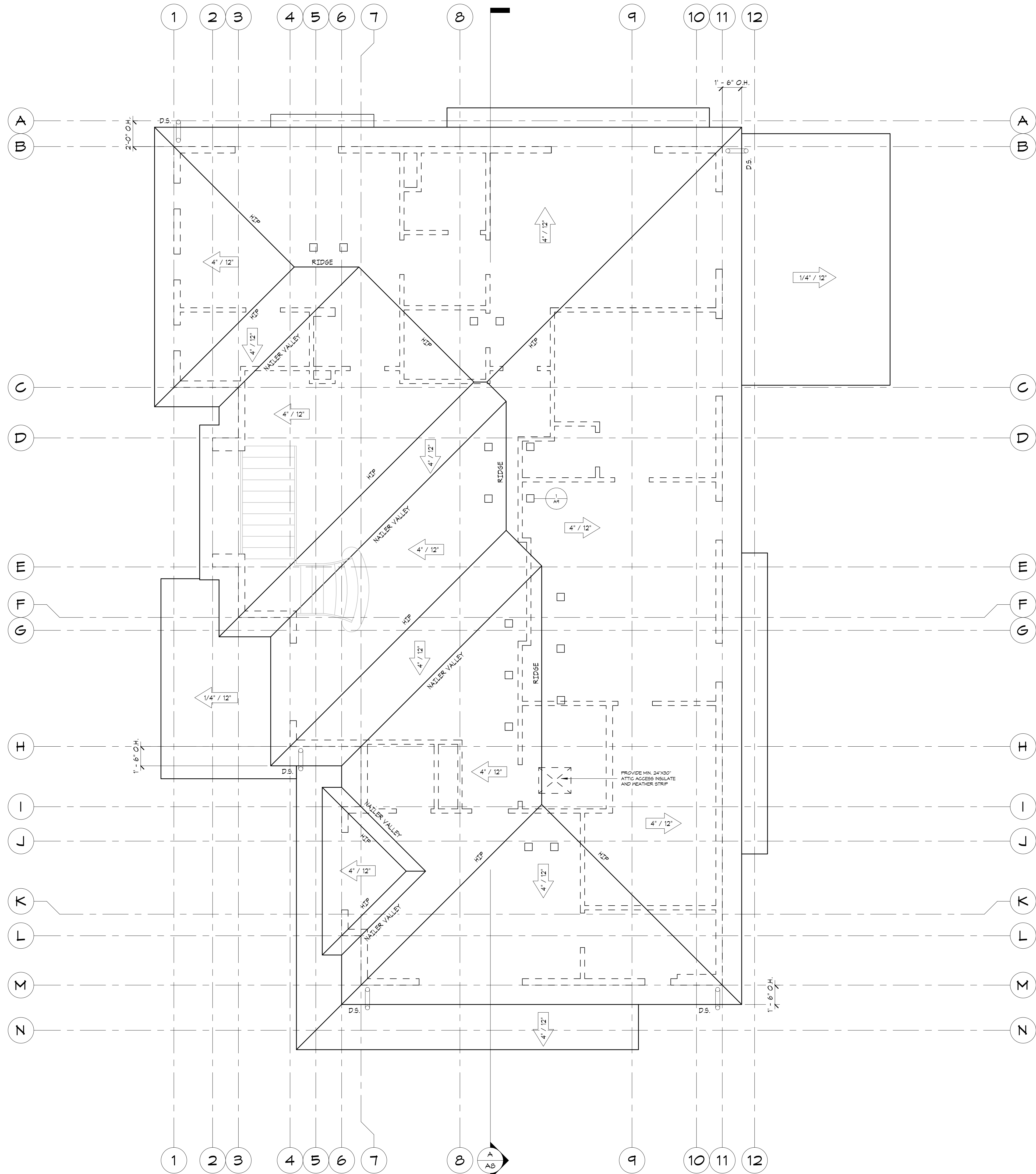
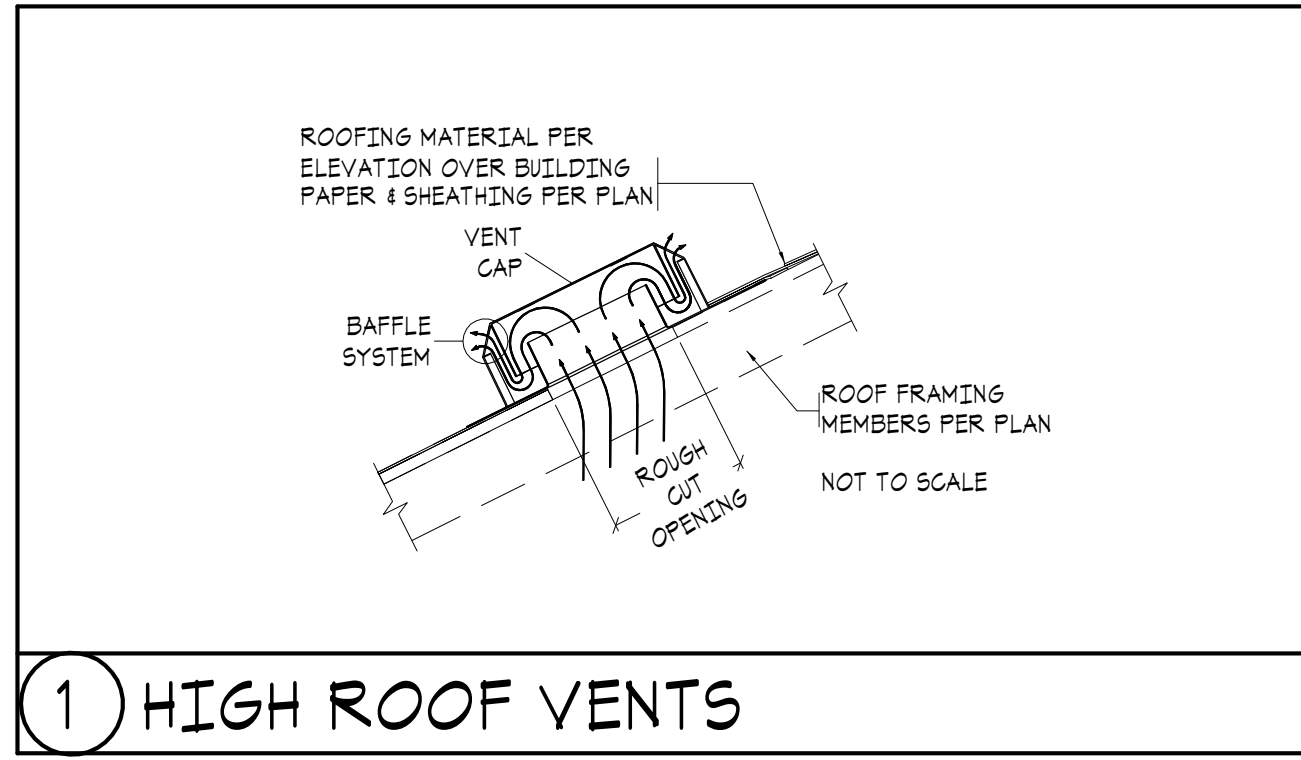
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**21257**

SHEET NUMBER:

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**ROOF LAYOUT**  
SCALE: 1/4" = 1'-0"



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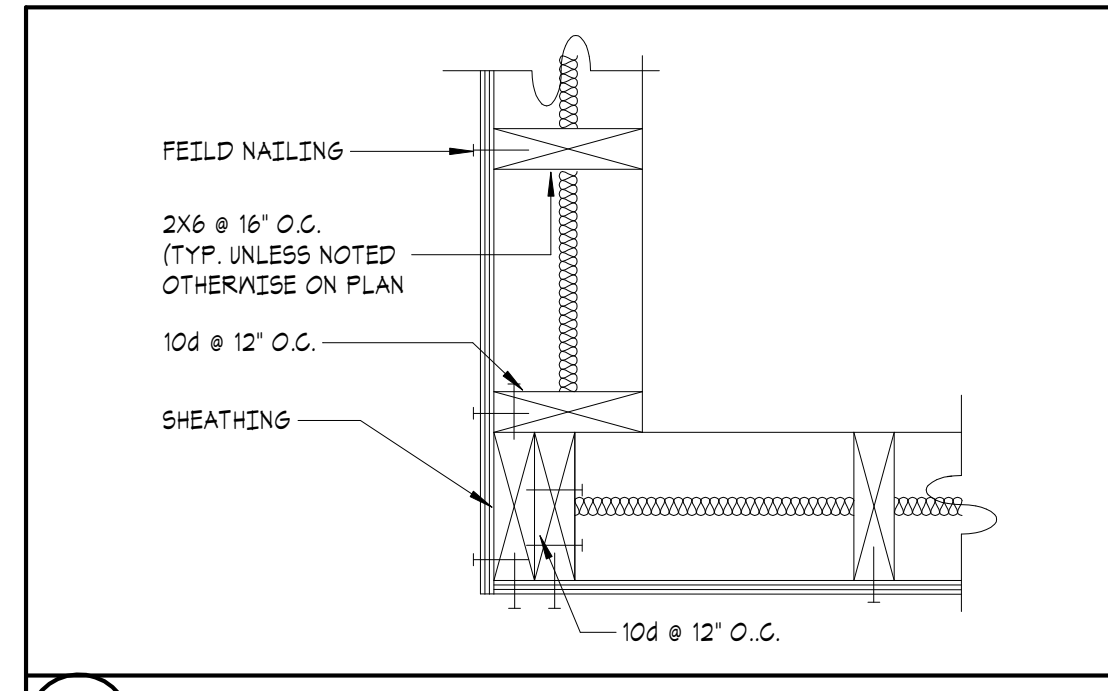
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PREPARED FOR:  
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**LAURIE QIAN**

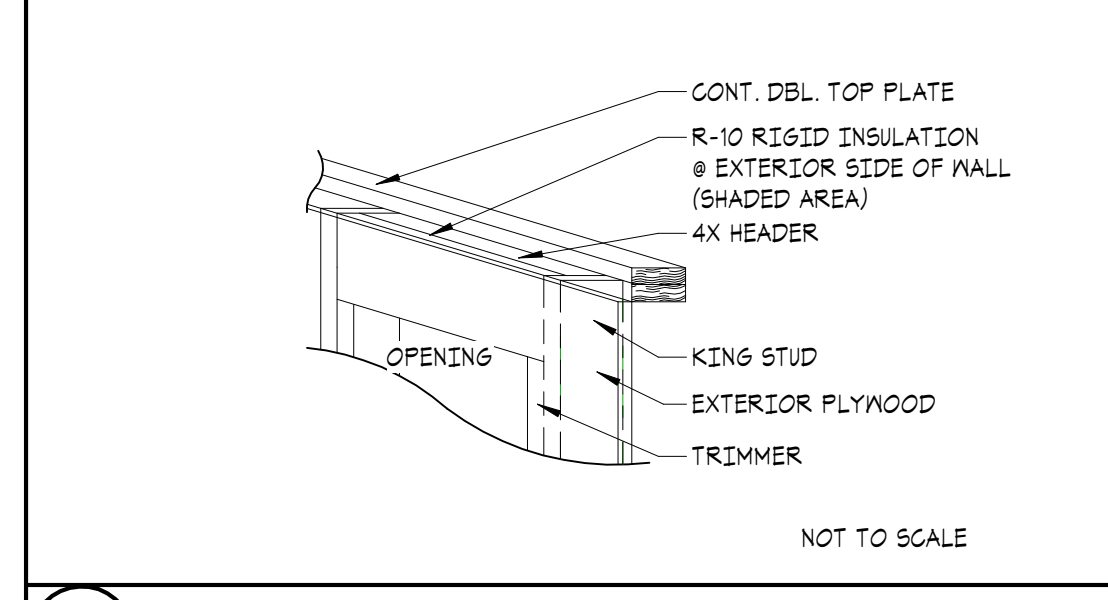
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PROJECT NUMBER:  
**21257**  
SHEET NUMBER:

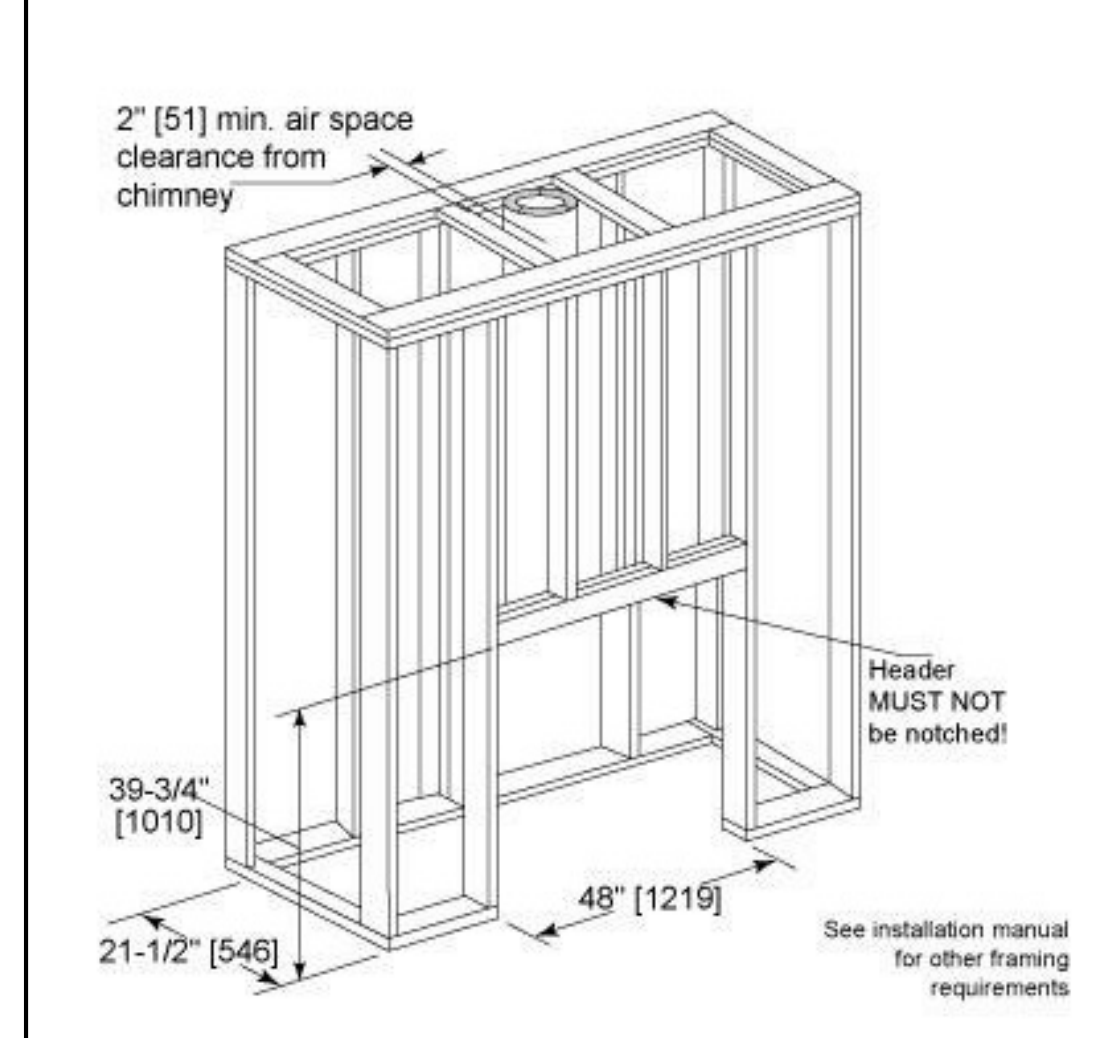




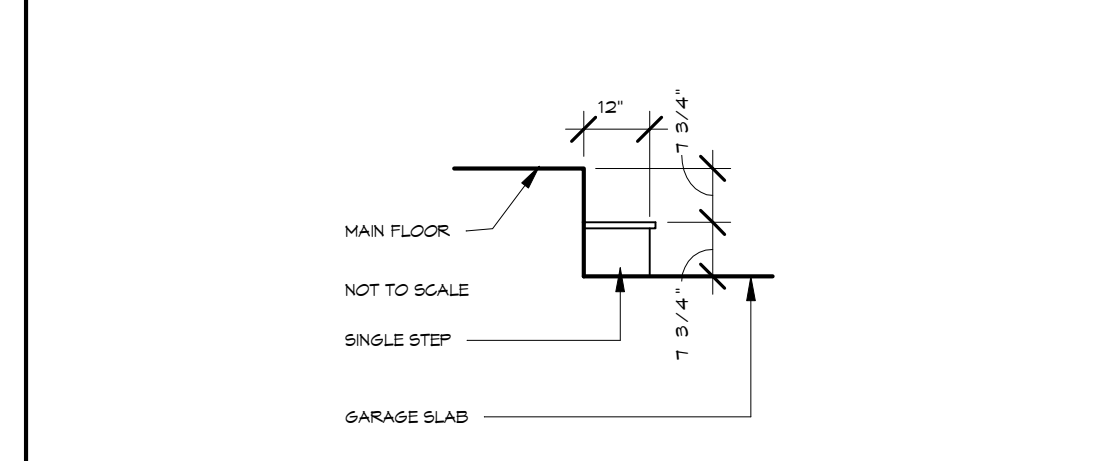
1 CORNER FRAMING



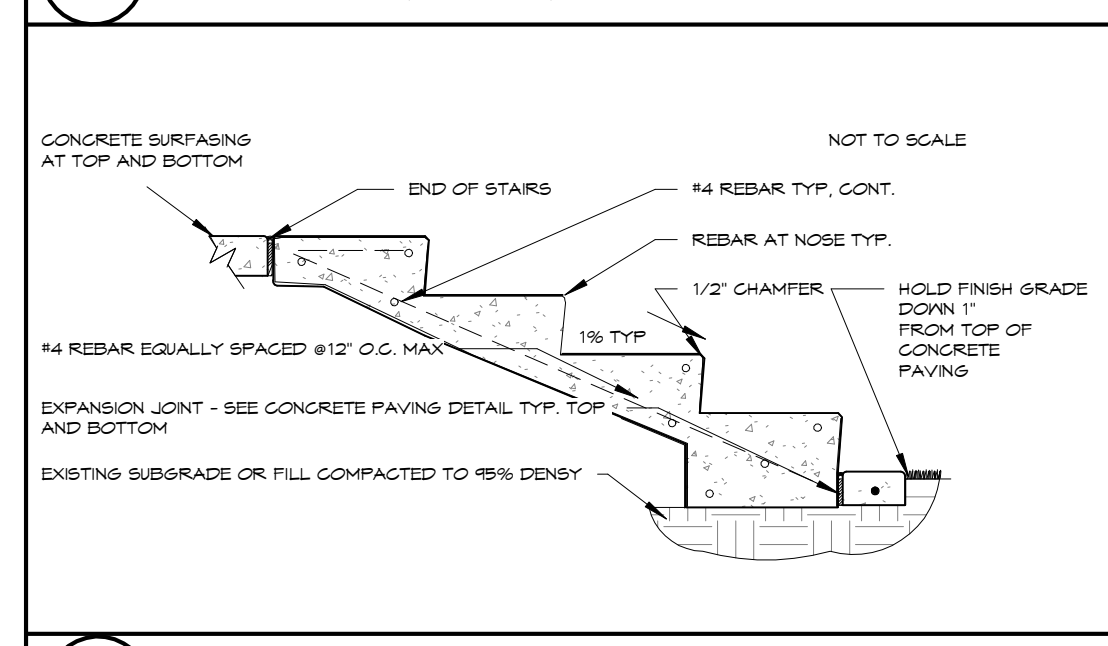
2 HEADER/ INSULATION



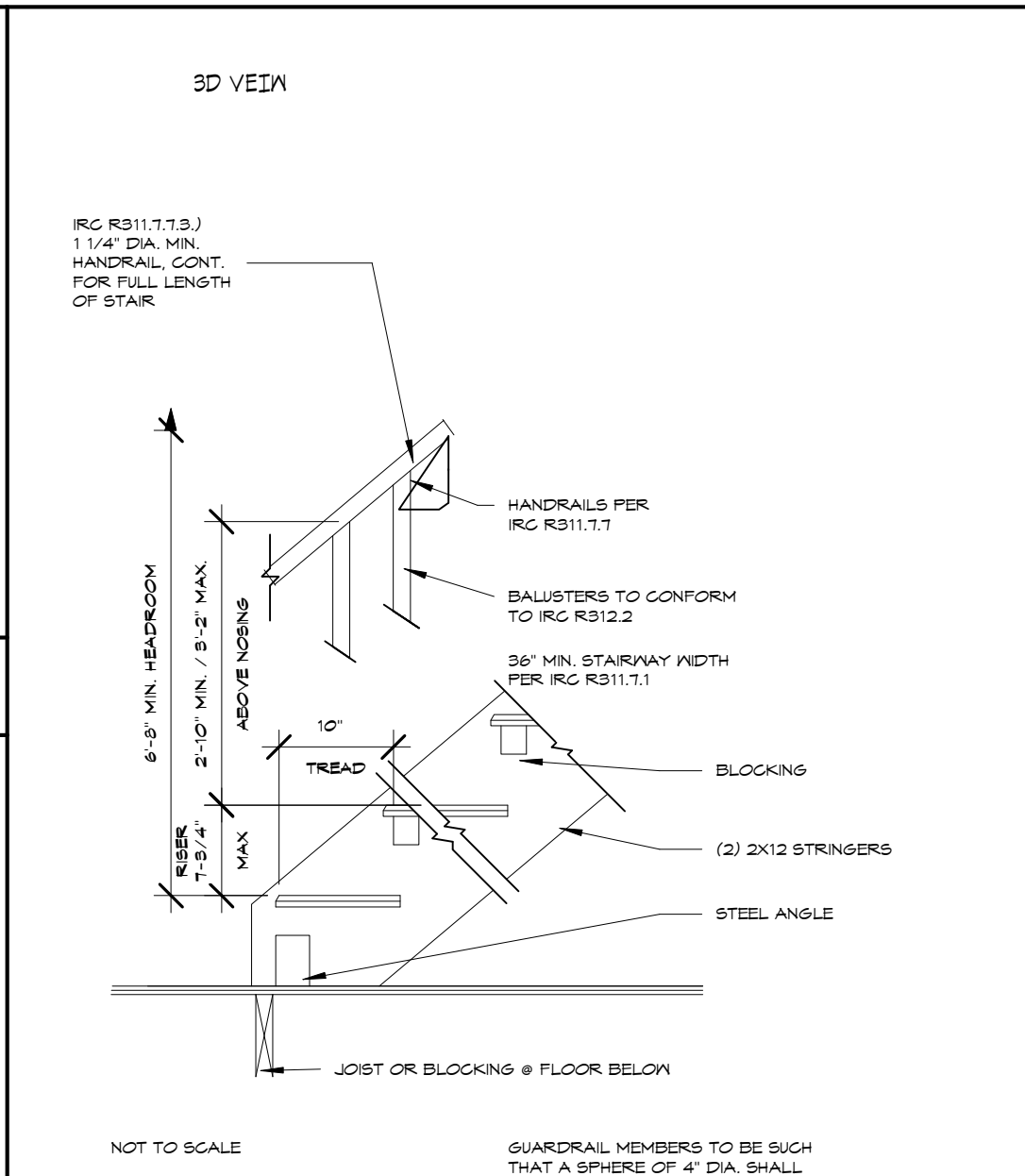
3 FIREPLACE FRAMING



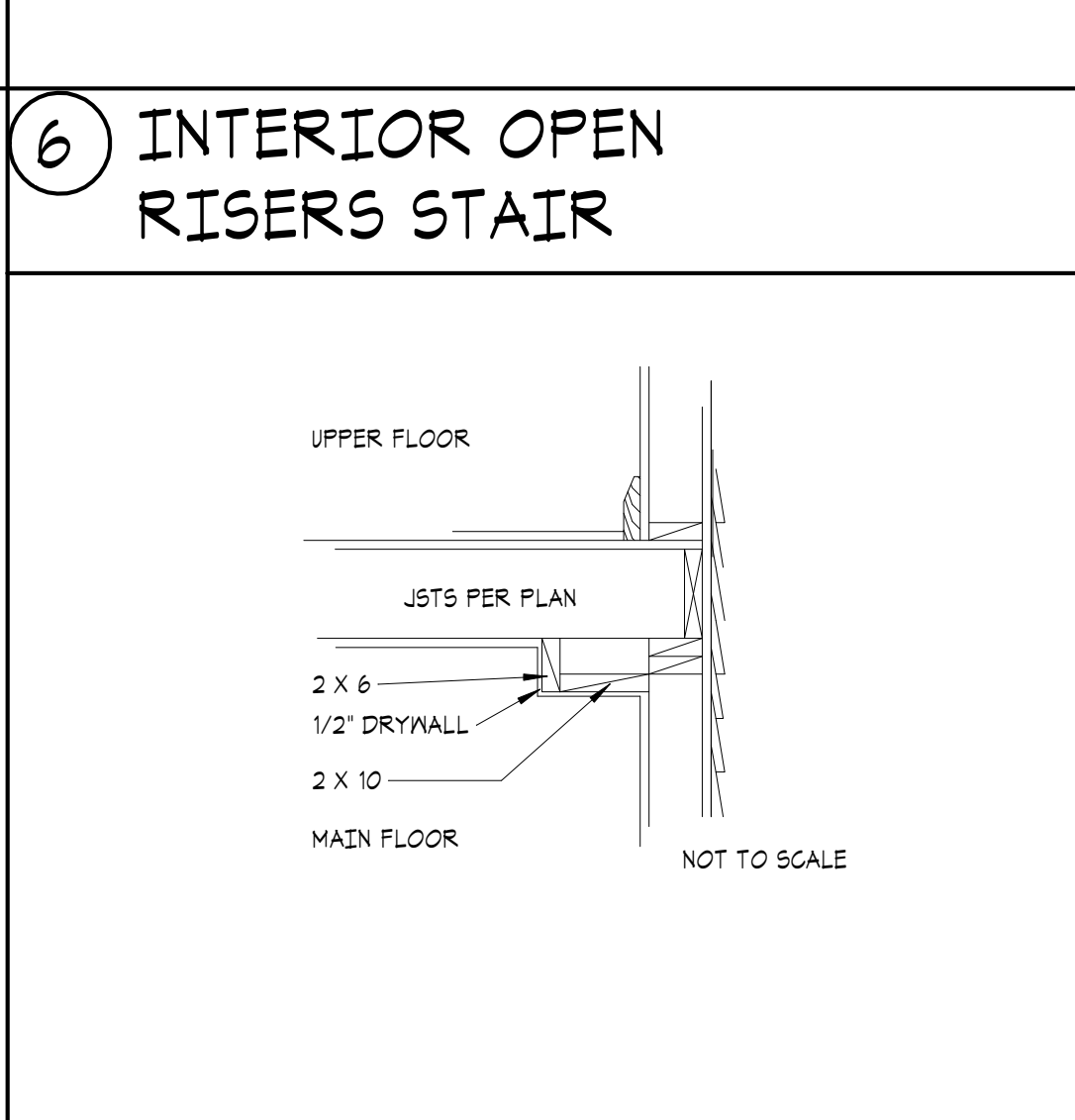
4 GARAGE STEP



5 EXTERIOR STAIR



6 INTERIOR OPEN RISERS STAIR



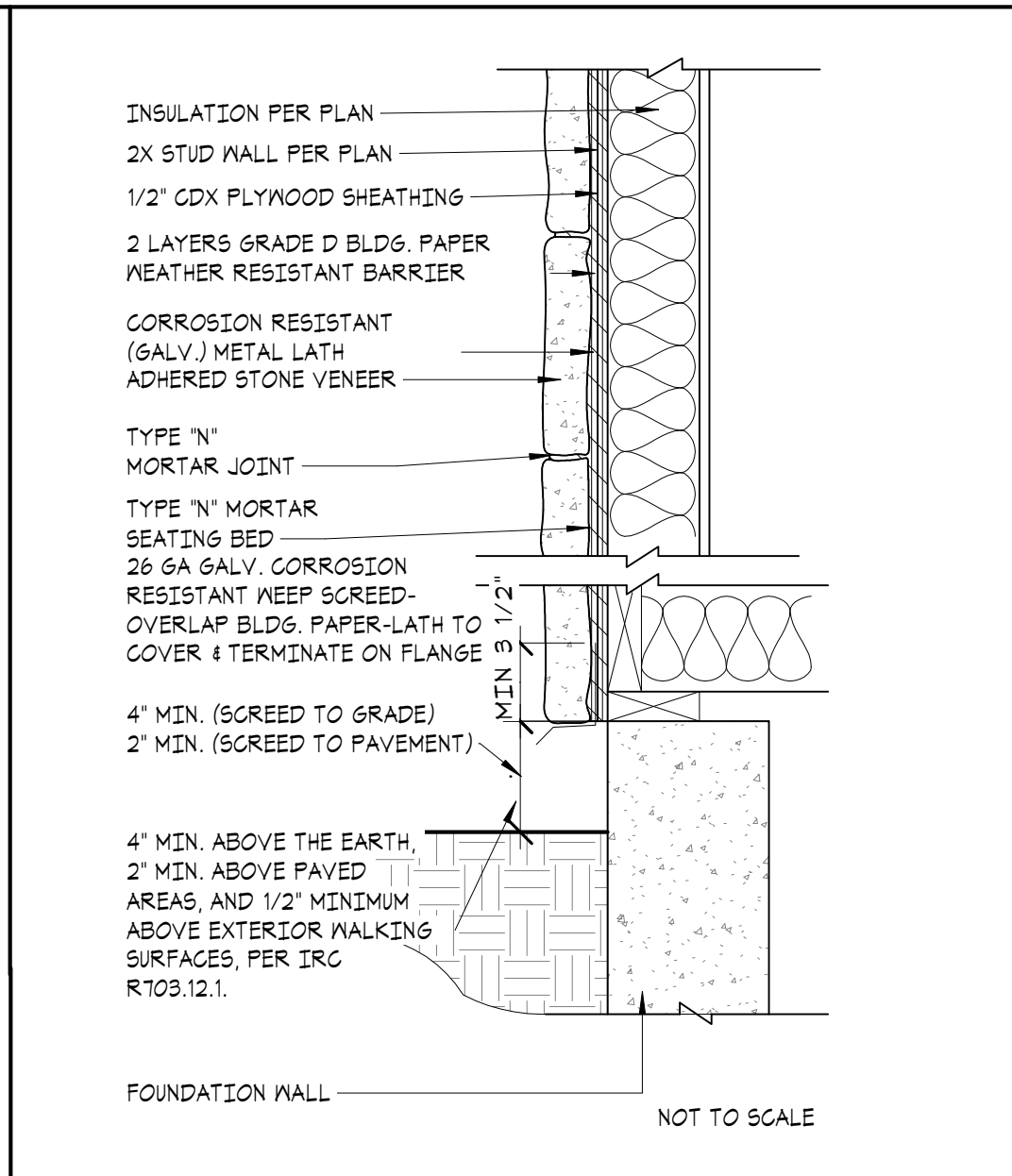
7 COFFERED CEILING



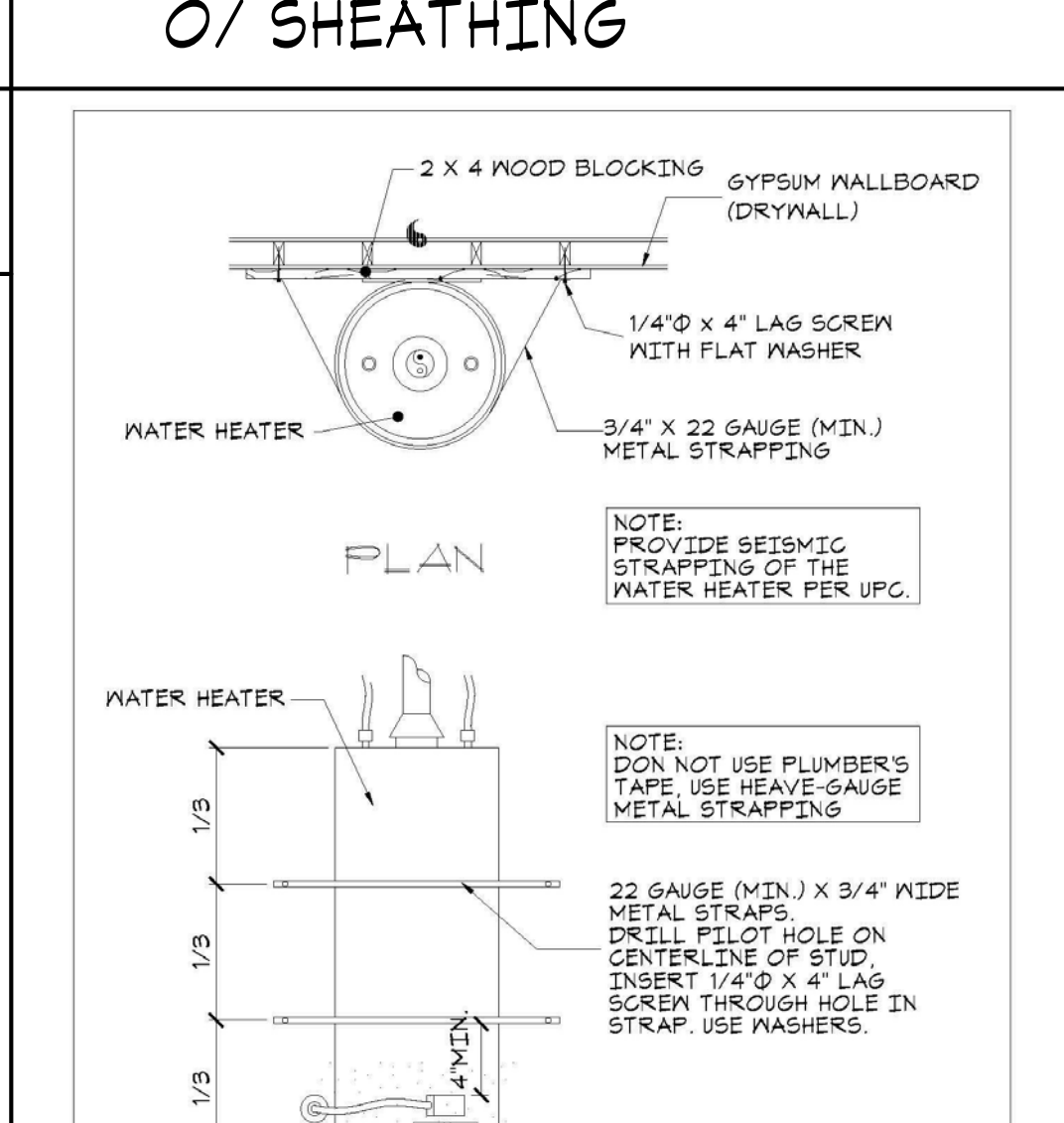
8 ADHERED VENEER O/ SHEATHING



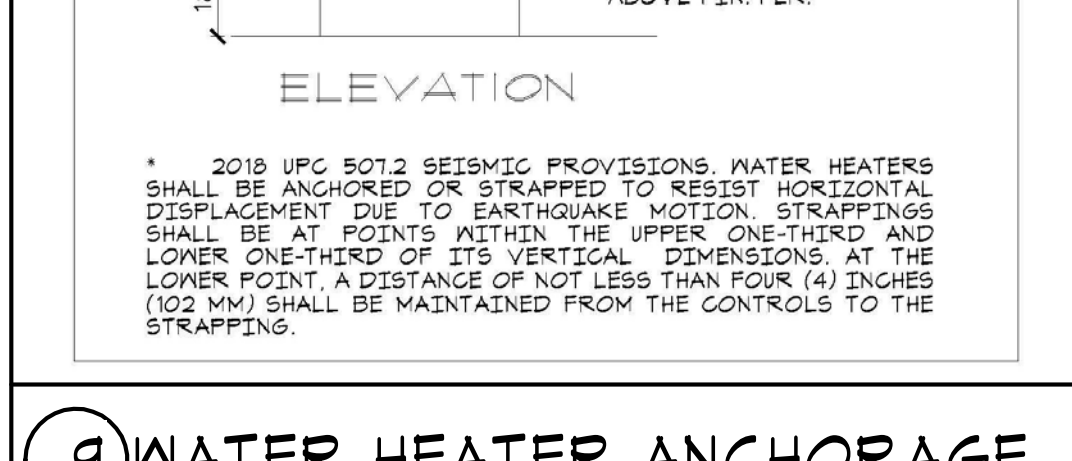
9 WATER HEATER ANCHORAGE



10 CORNER FRAMING



11 ADHERED VENEER O/ SHEATHING



12 WATER HEATER ANCHORAGE

**ALTAIR™-C & ALTAIRDLX™-C SERIES**

**DIRECT-VENT FIREPLACES**

Product Reference Information

Model	Height (inches)	Depth (inches)	Width (inches)	Weight (lbs)
ALTAIR-C	48	24	24	110
ALTAIRDLX-C	48	24	24	110

Appliance Specifications

ASTRIA FIREPLACES

**ALTAIR™-C & ALTAIRDLX™-C SERIES**

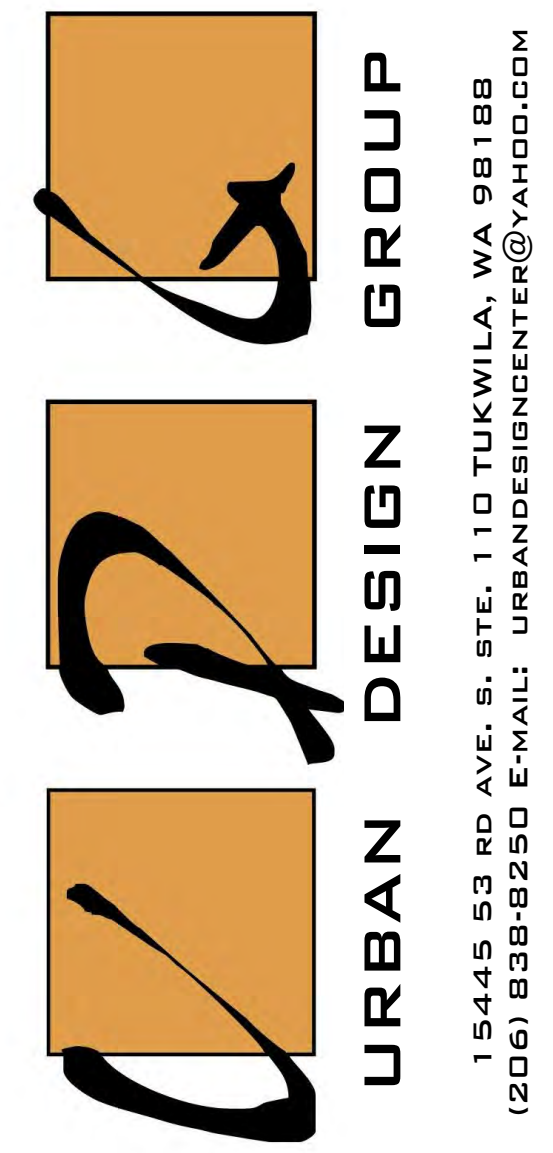
**FIREPLACE SPECS**

Product Reference Information

Model	Height (inches)	Depth (inches)	Width (inches)	Weight (lbs)
ALTAIR-C	48	24	24	110
ALTAIRDLX-C	48	24	24	110

Clearances

ASTRIA FIREPLACES



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**PARCEL #: 502190-0790**

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**Laurie Qian**

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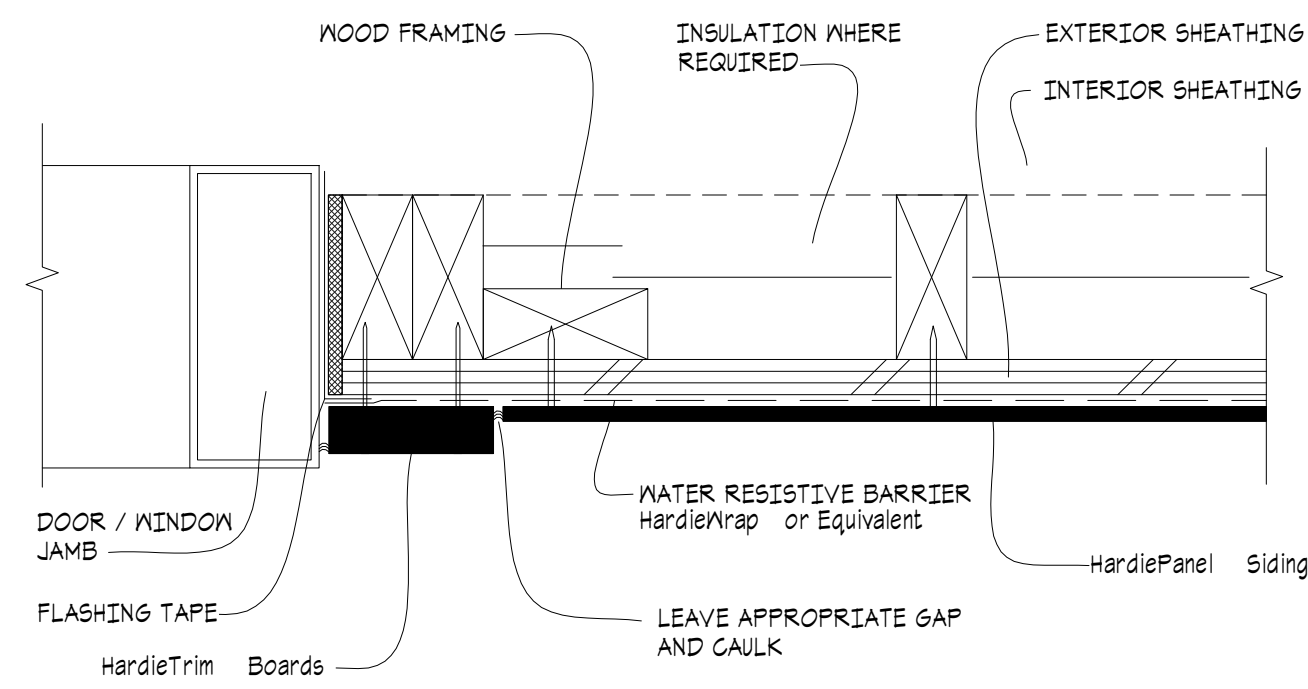
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 DRAFTED BY: ANNA KONYAKINA

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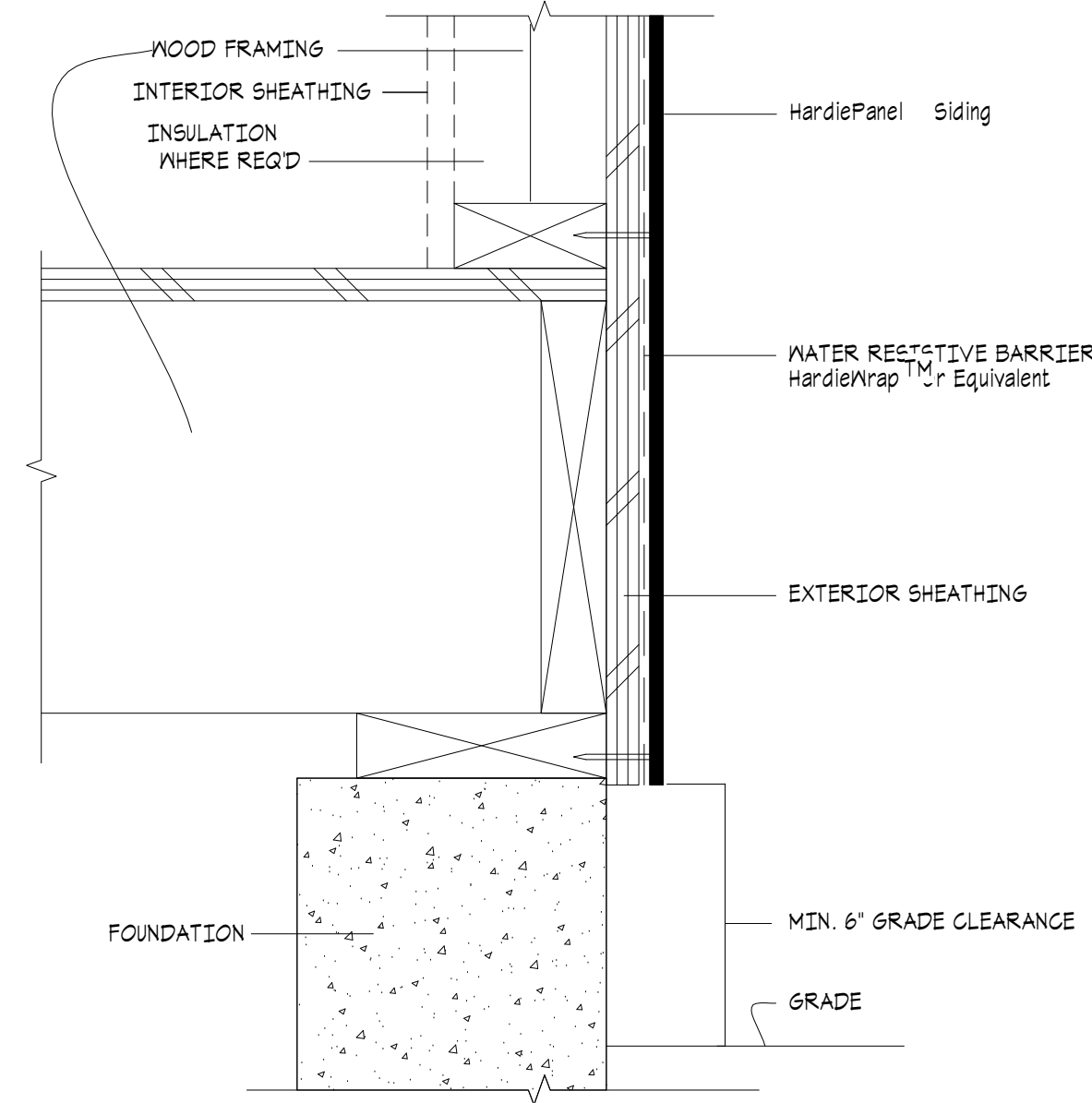
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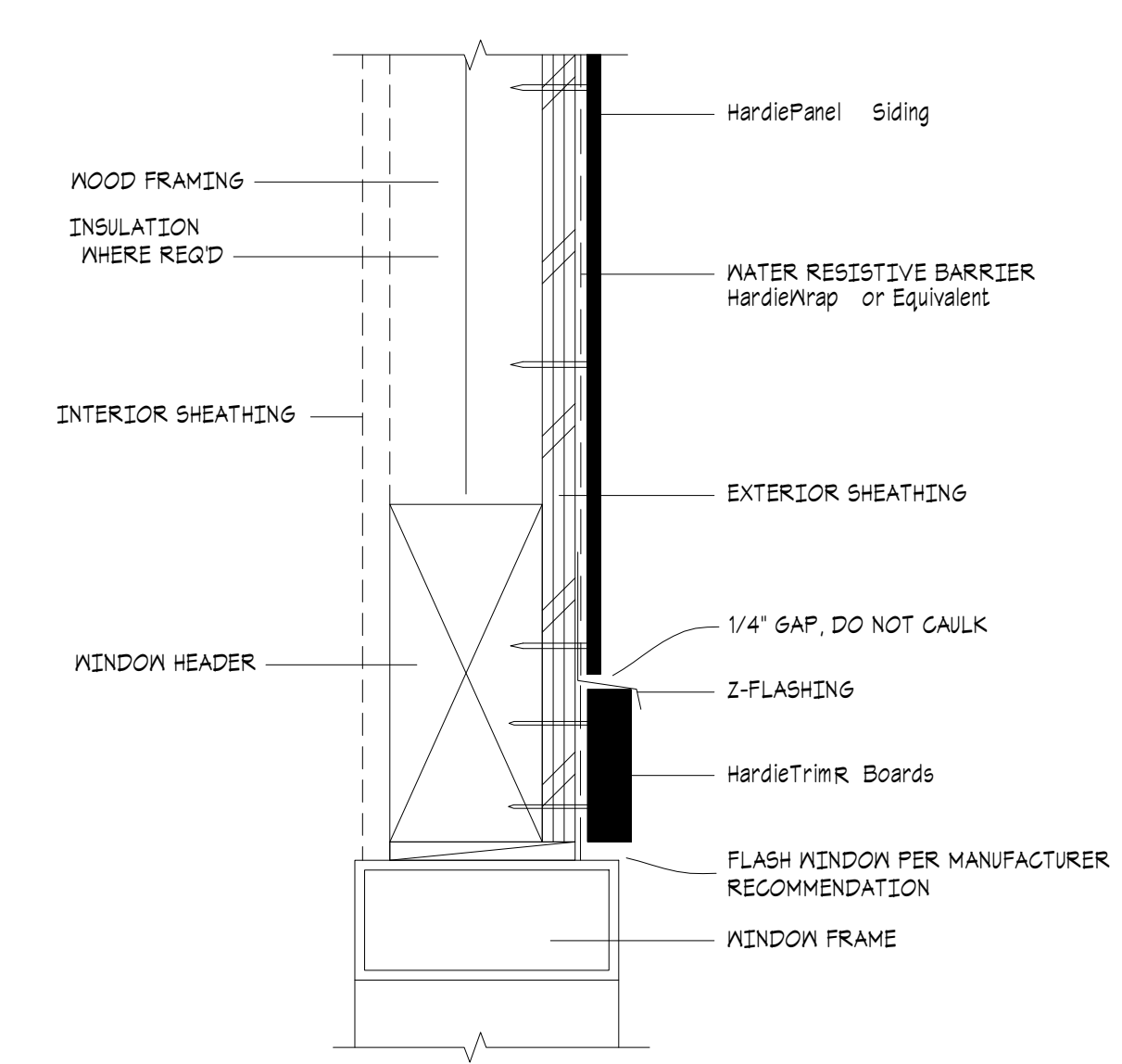




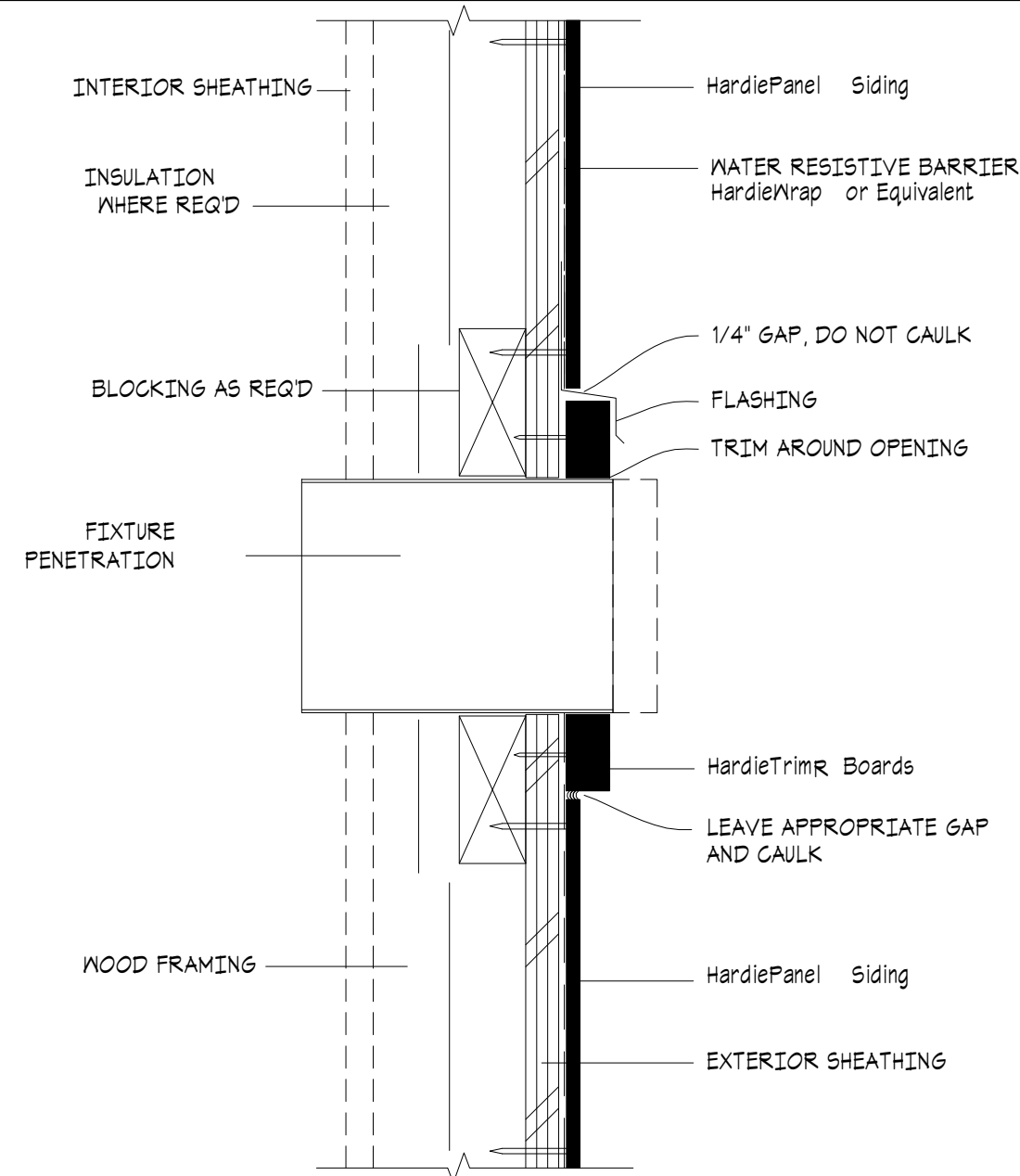
① DOOR / WINDOW JAMB



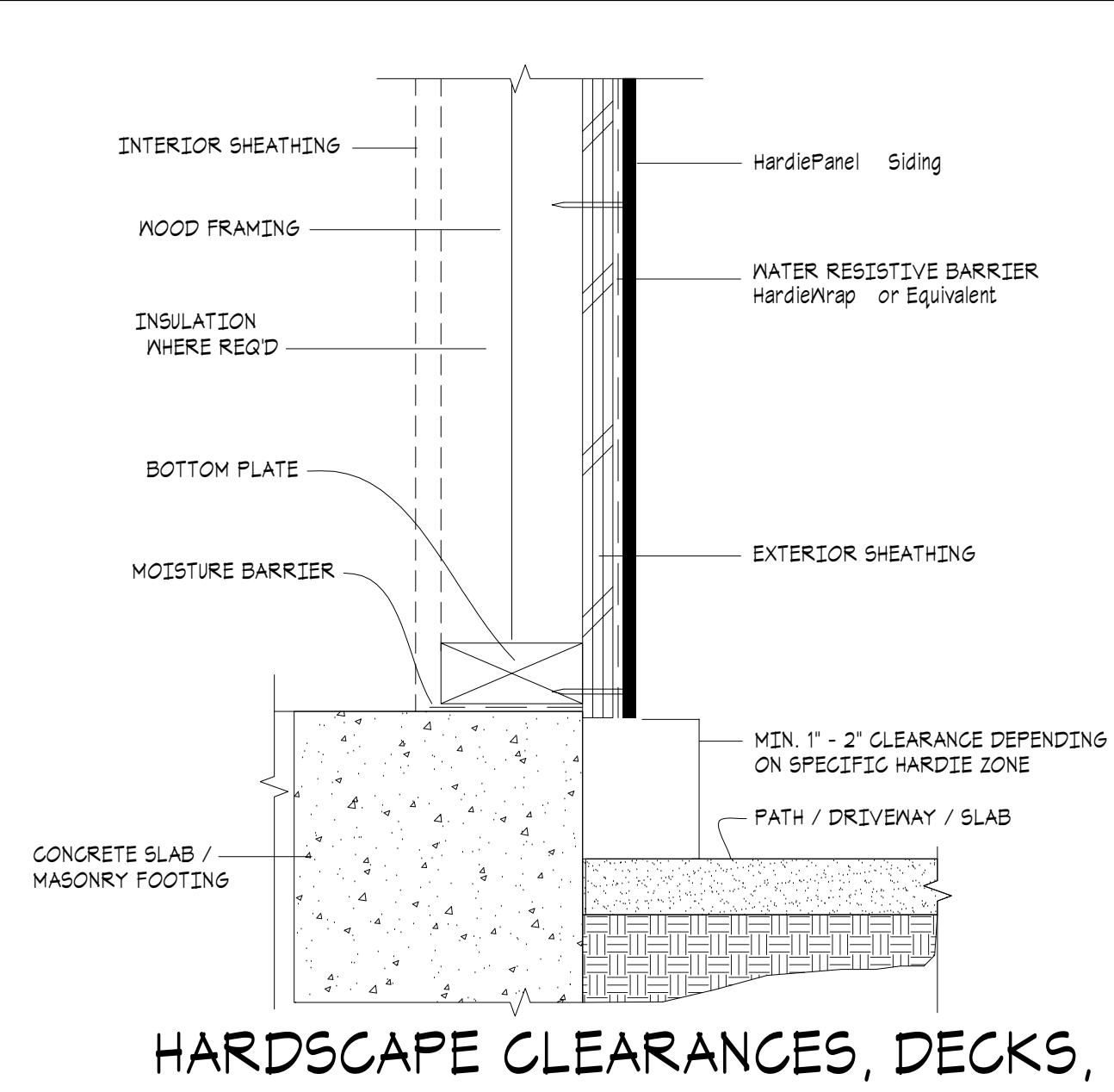
② GRADE CLEARANCE



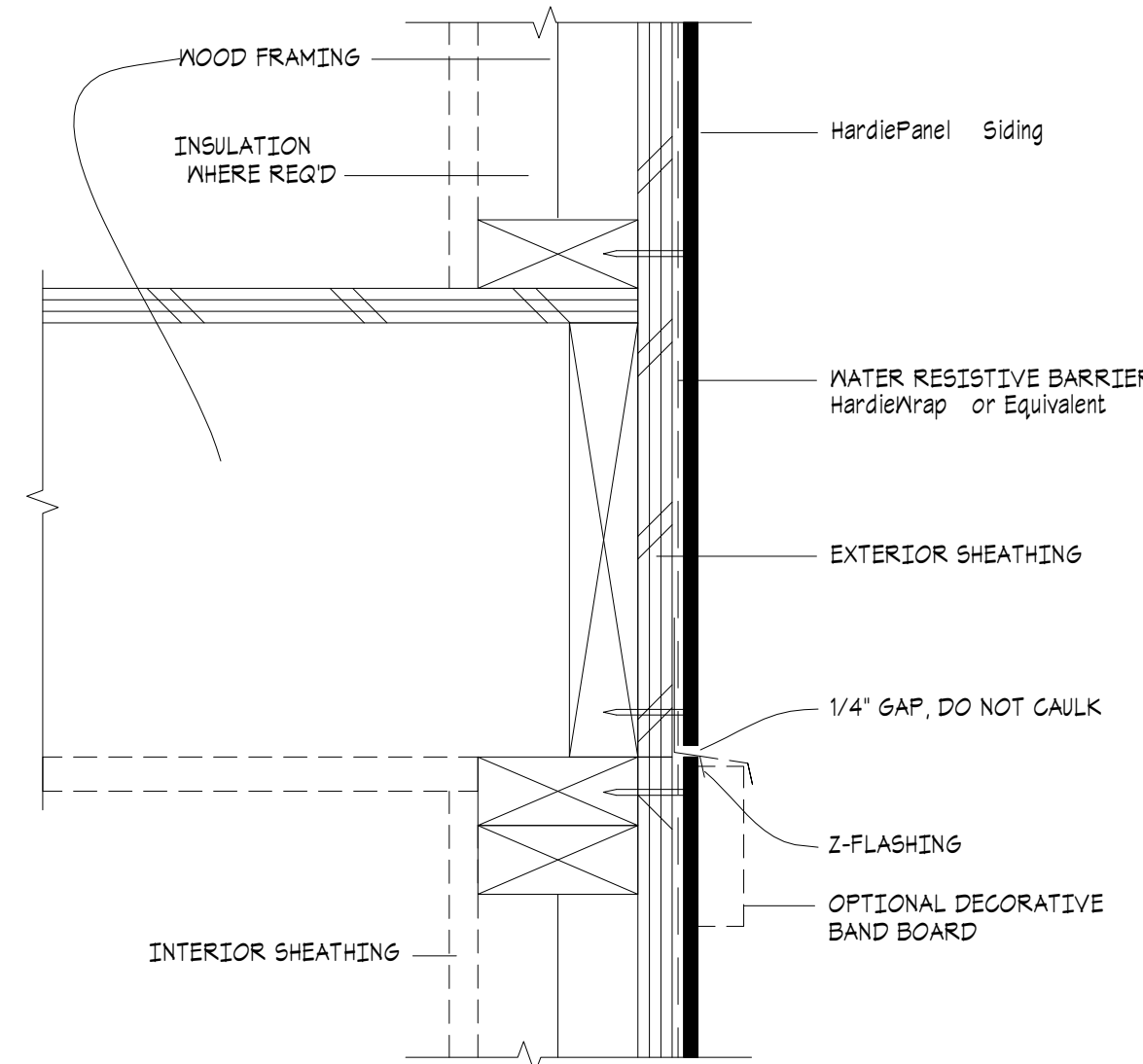
③ WINDOW/DOOR HEAD



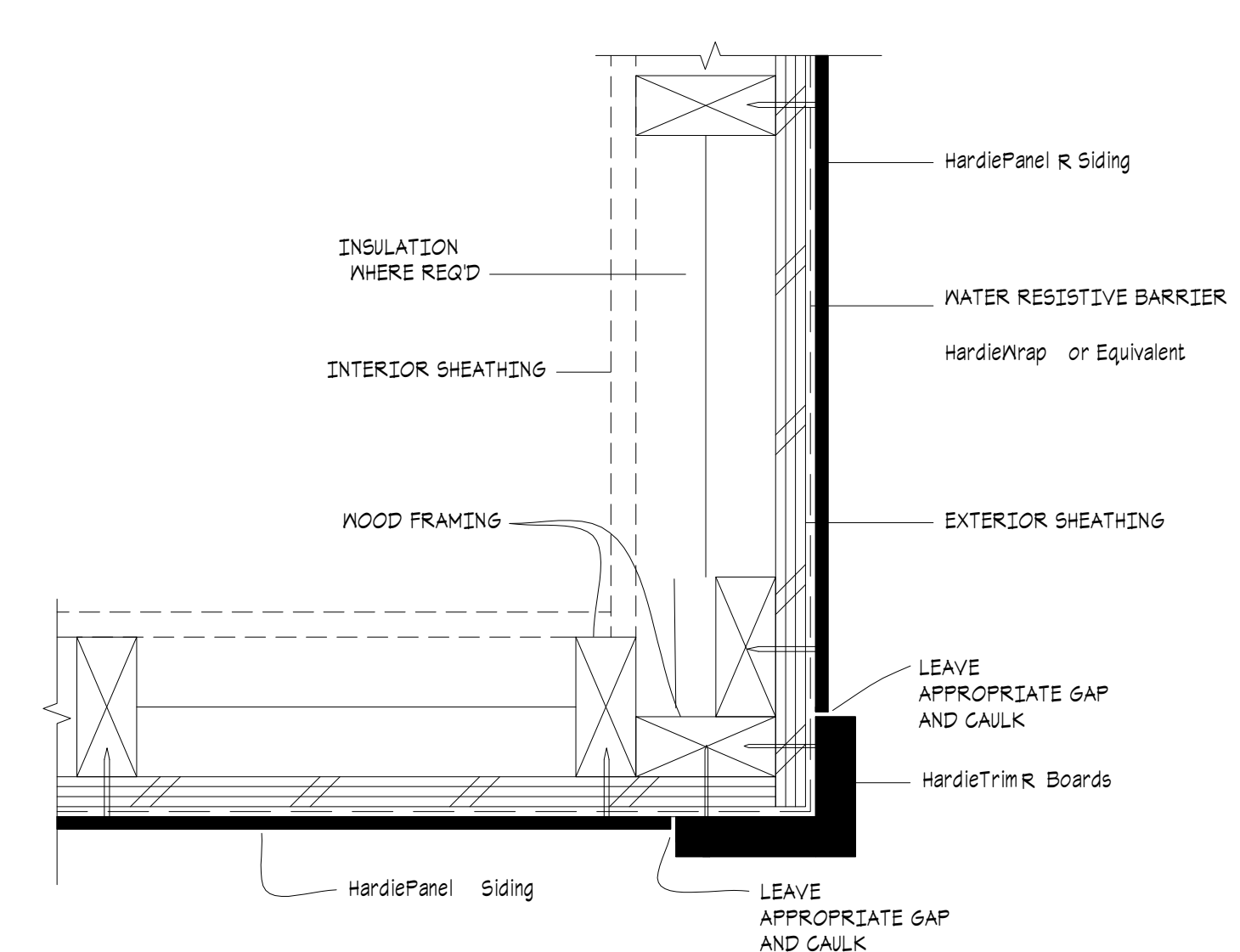
④ FIXTURE PENETRATION



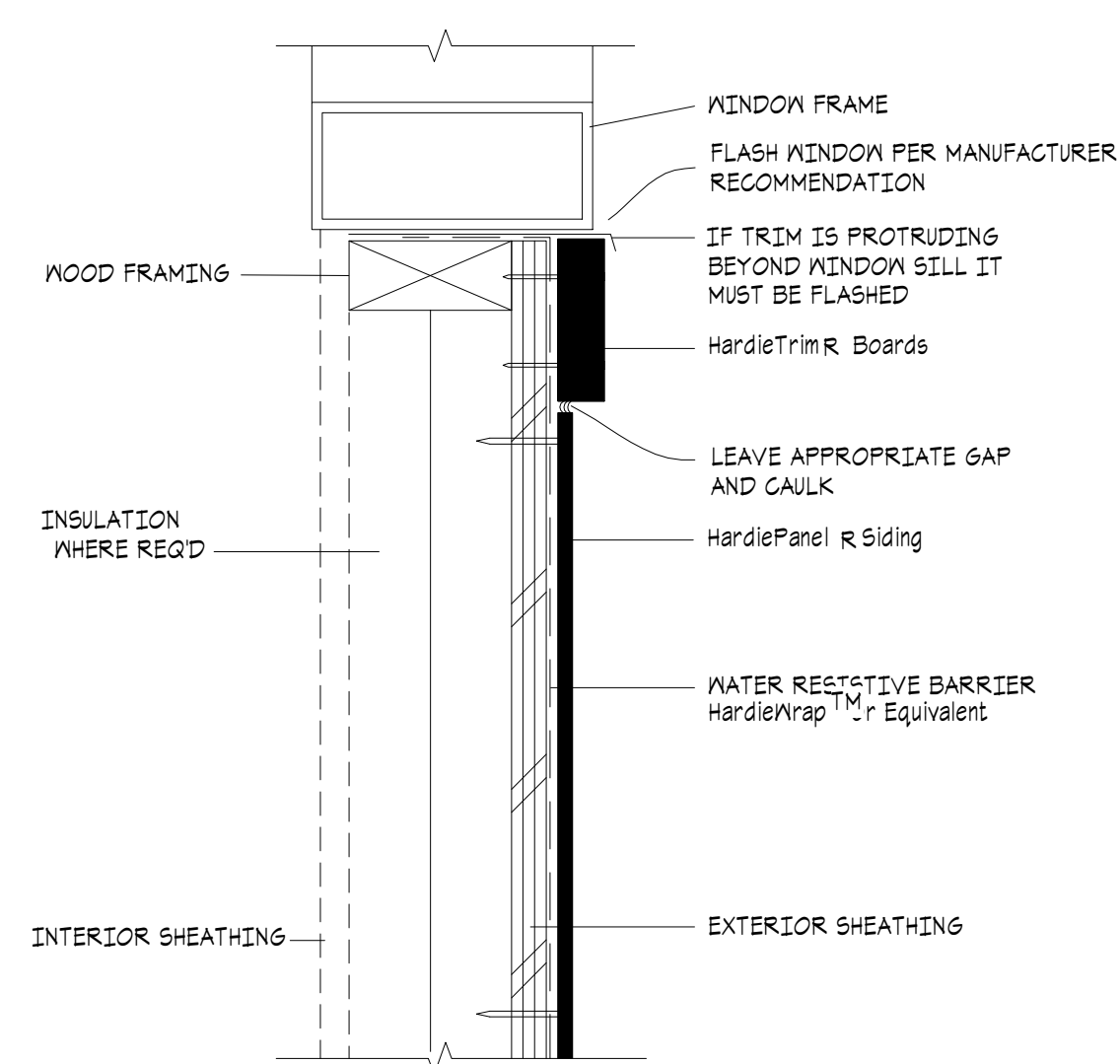
⑤ HARDSCAPE CLEARANCES, DECKS, PORCHES, PATIOS, WALKWAYS, ROOFS, ETC.



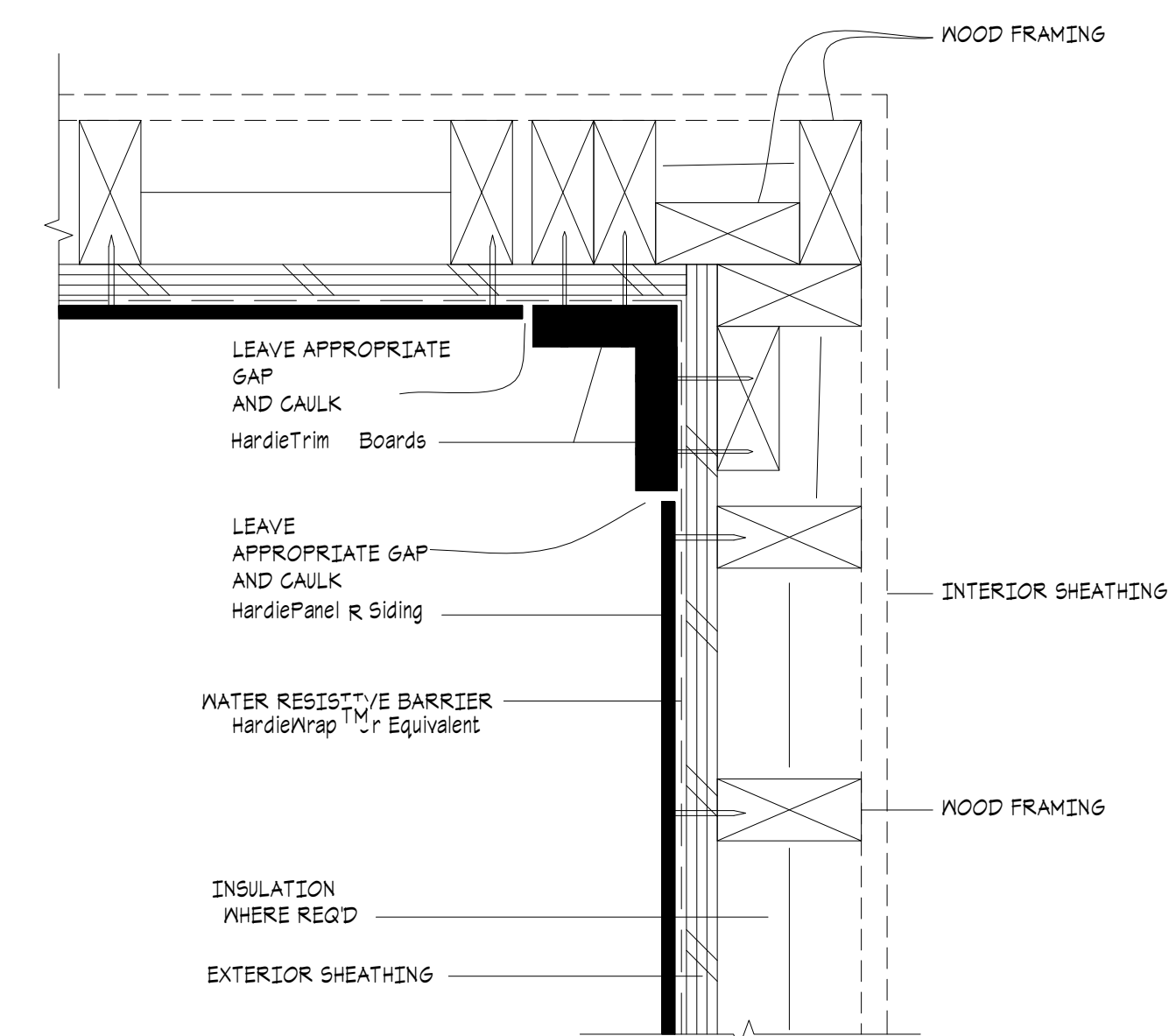
⑥ HORIZONTAL VIEW



⑦ OUTSIDE CORNER



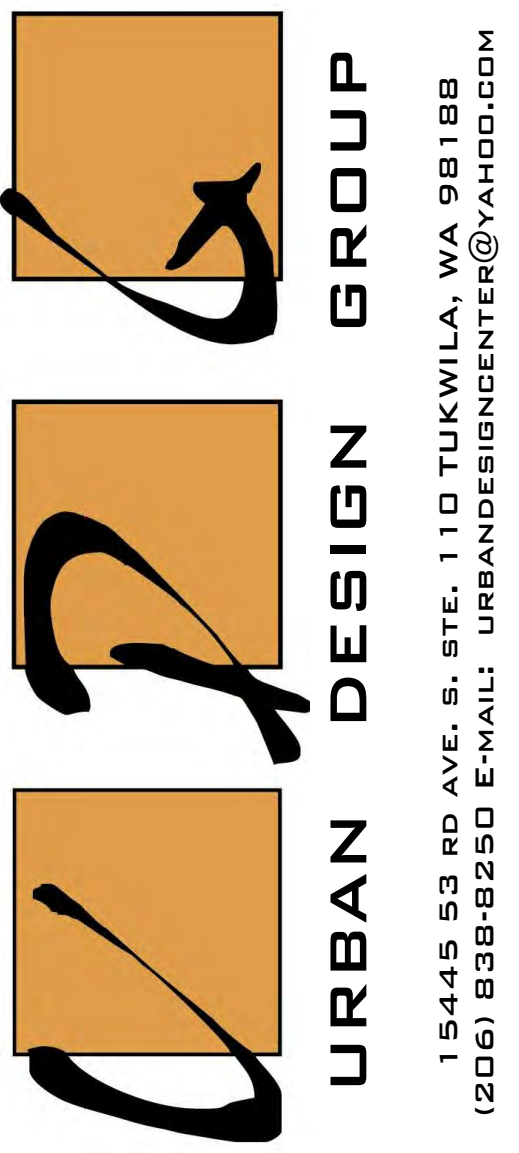
⑧ WINDOW SILL



⑨ INSIDE CORNER

# HARDIE PANEL SIDING DETAILS

SCALE: NOT TO SCALE (N.T.S.)



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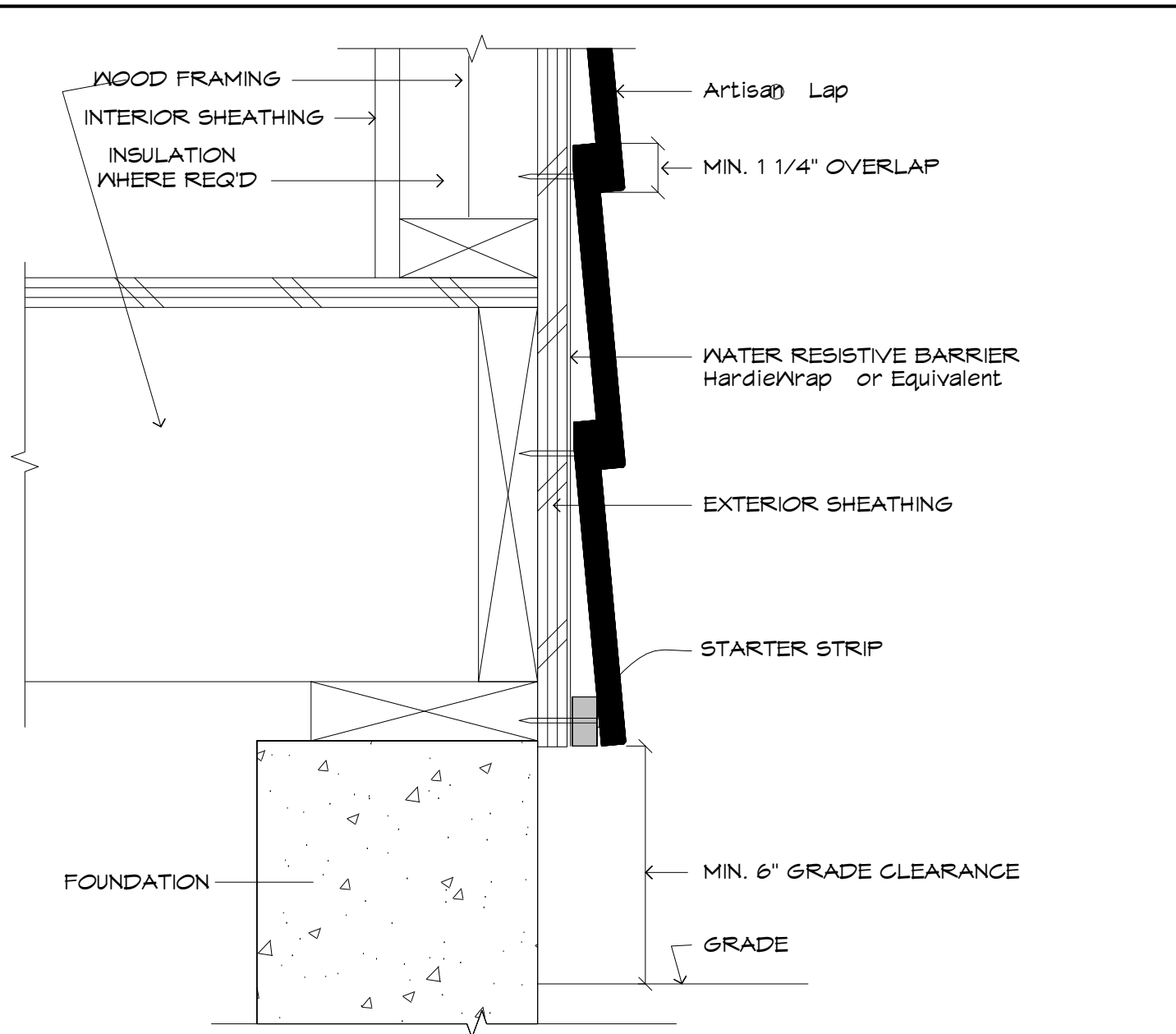
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DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:  
HARDIE  
PANEL  
SIDING  
DETAILS

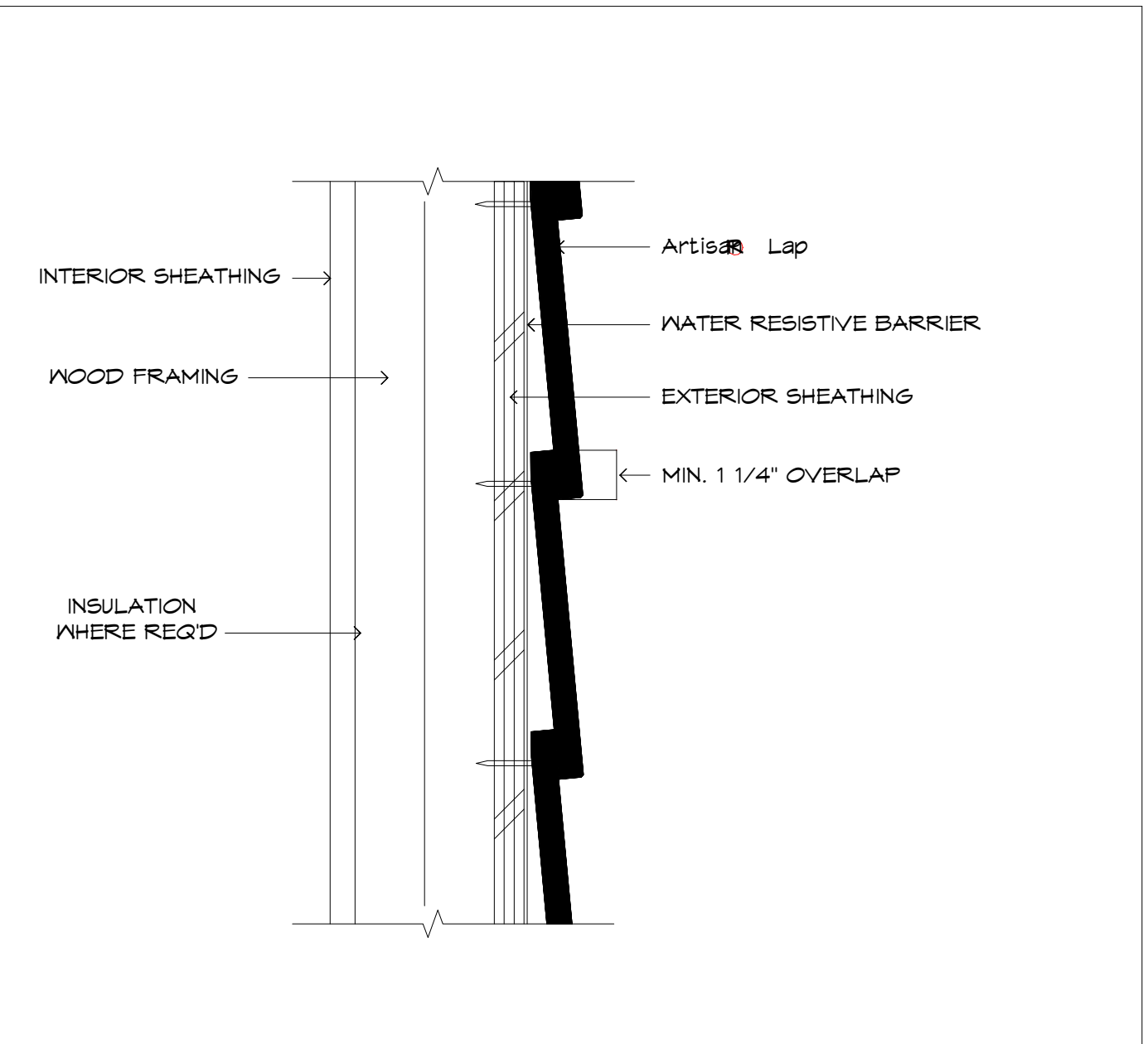
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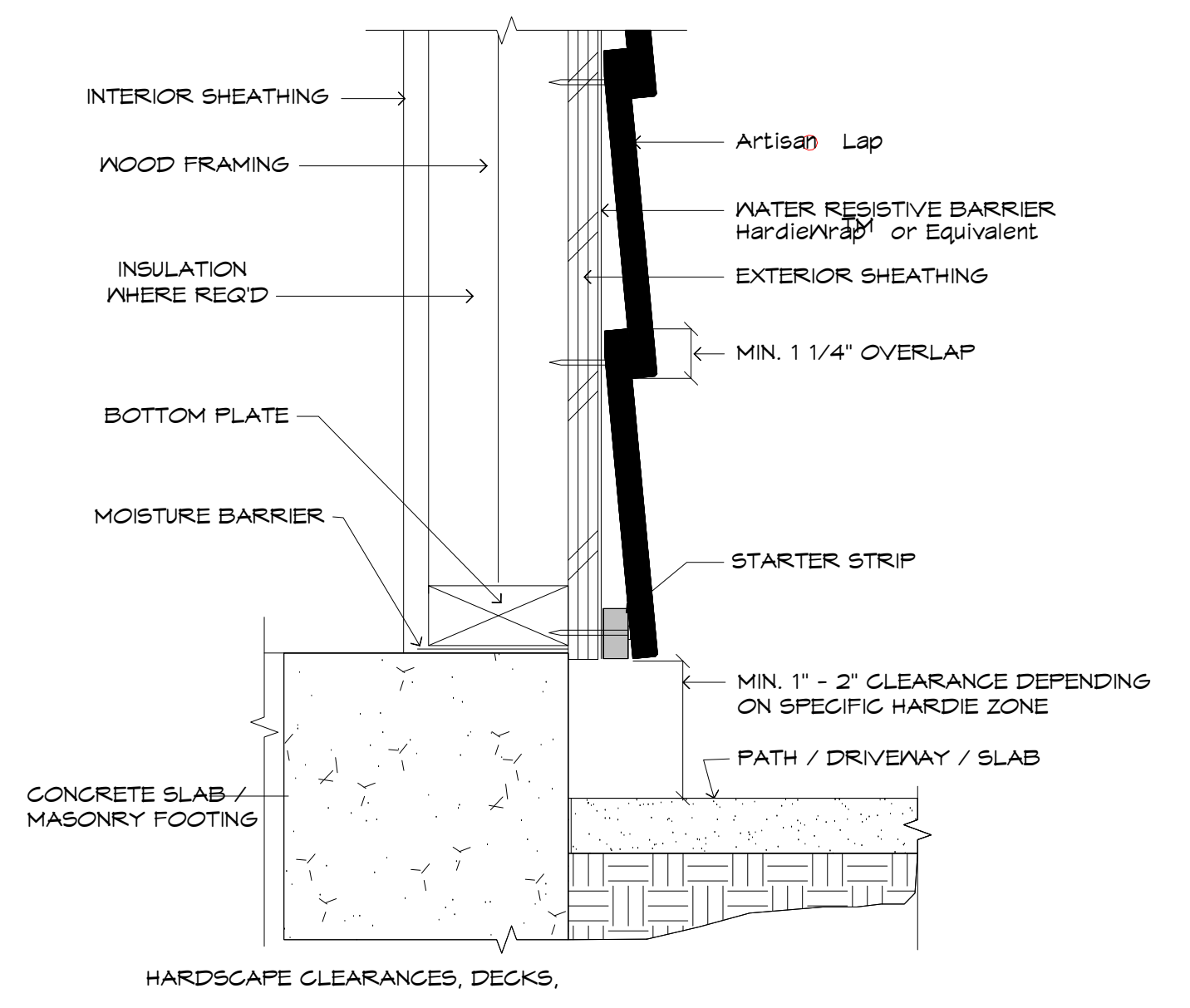
① GRADE CLEARANCE

SCALE: N.T.S.



② HORIZONTAL LAP VIEW

SCALE: N.T.S.

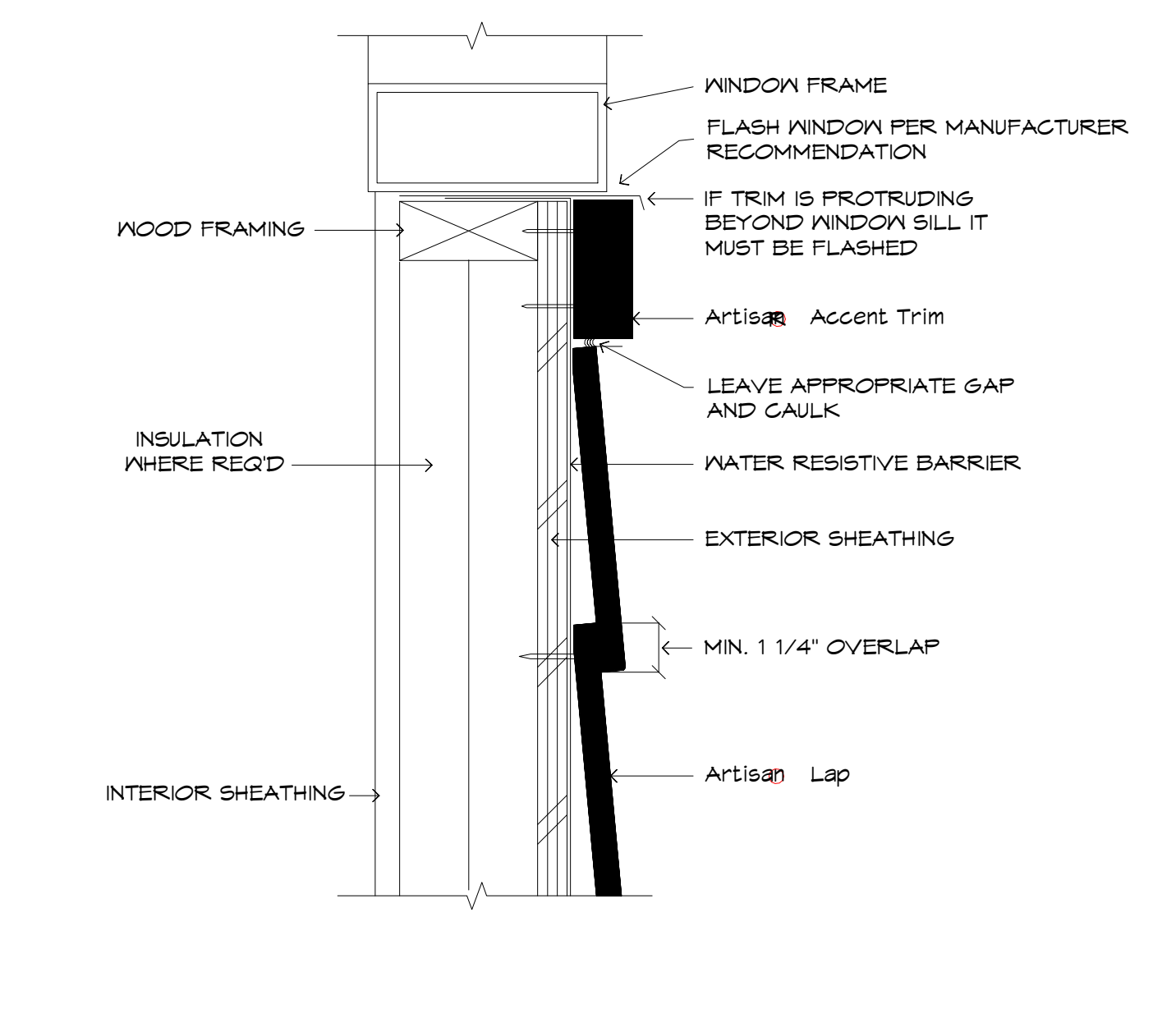


③ PORCHES, PATIOS, WALKWAYS, ROOFS, ETC.

SCALE: N.T.S.

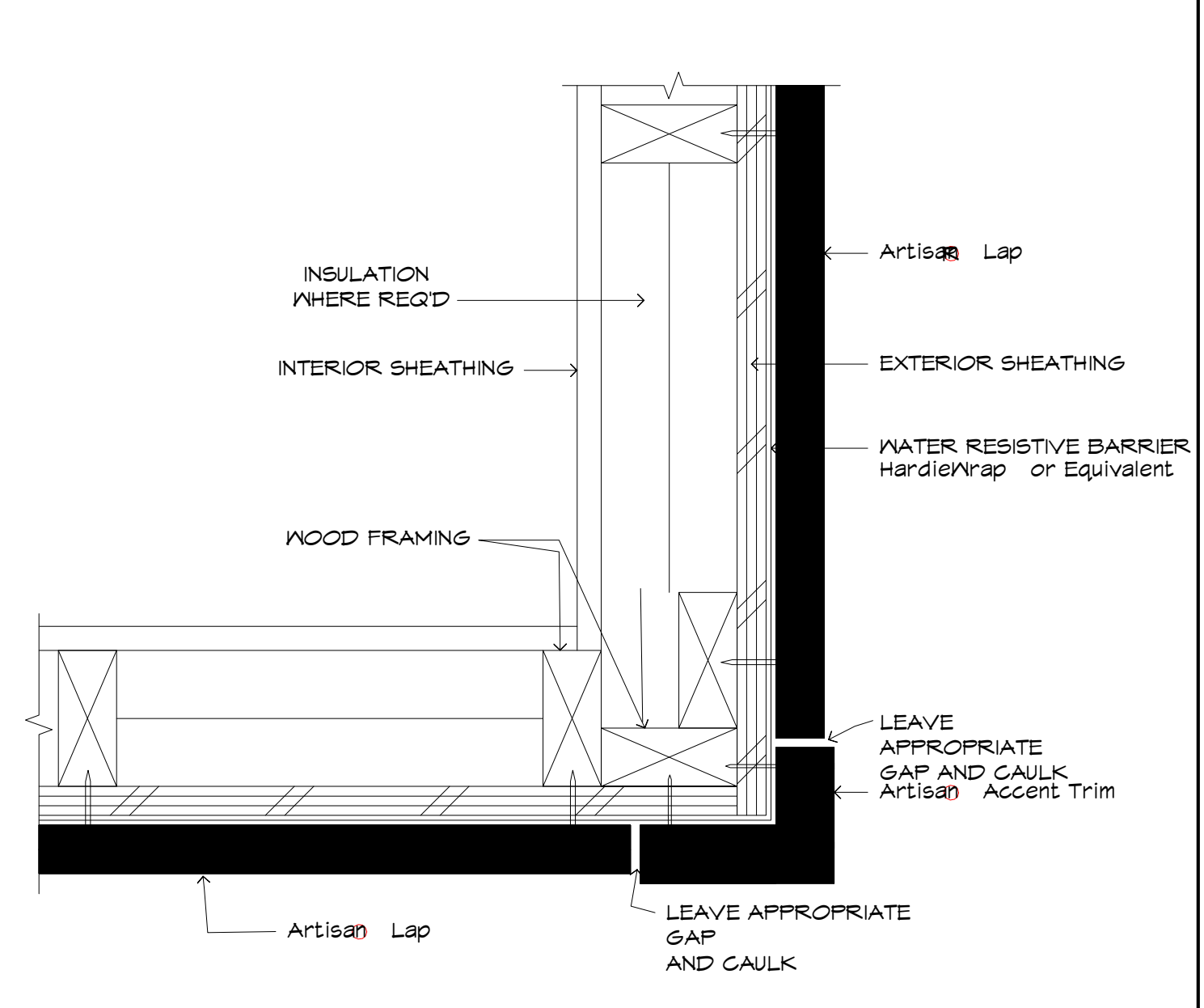
LAP SIDING DETAILS

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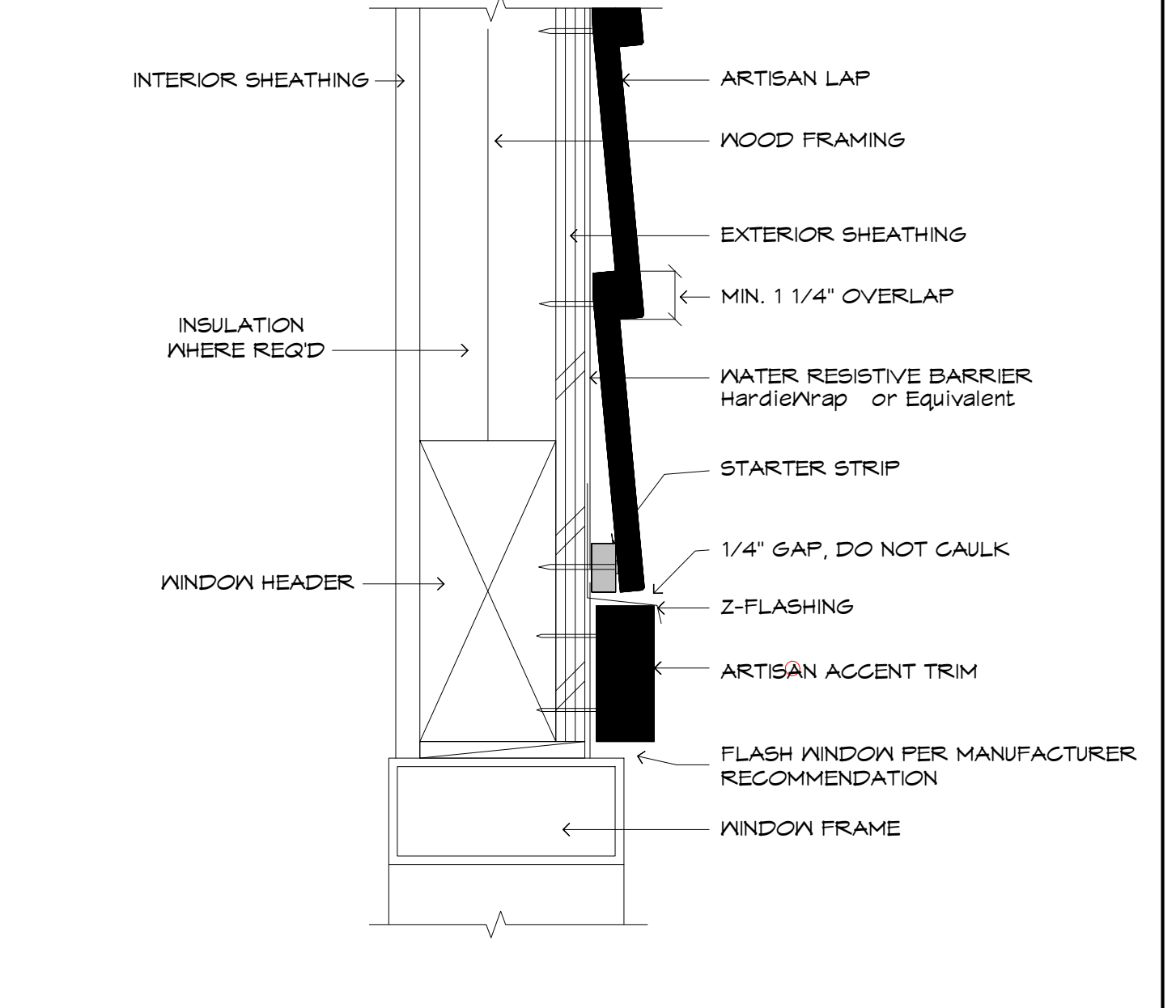
④ WINDOW SILL

SCALE: N.T.S.



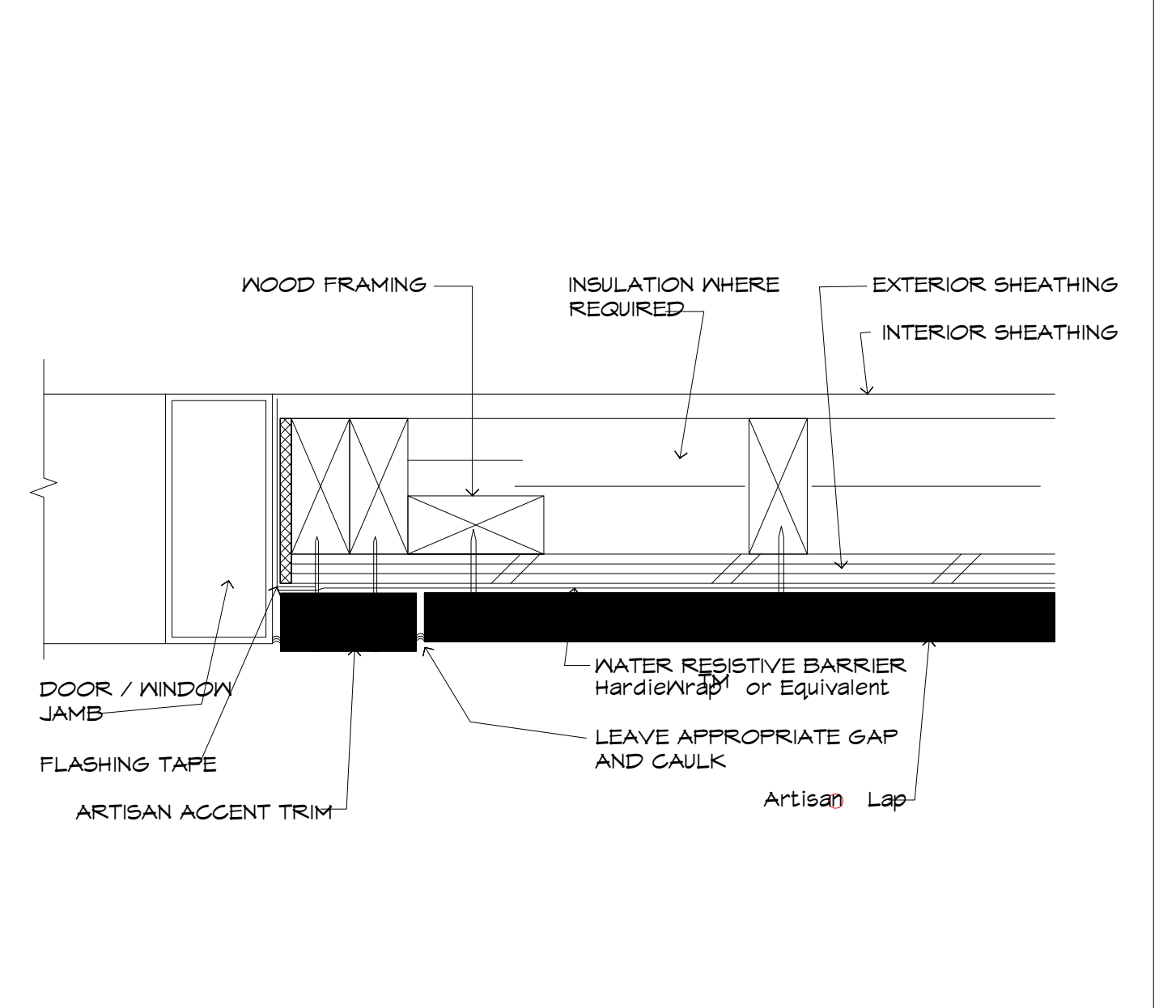
⑤ OUTSIDE CORNER

SCALE: N.T.S.



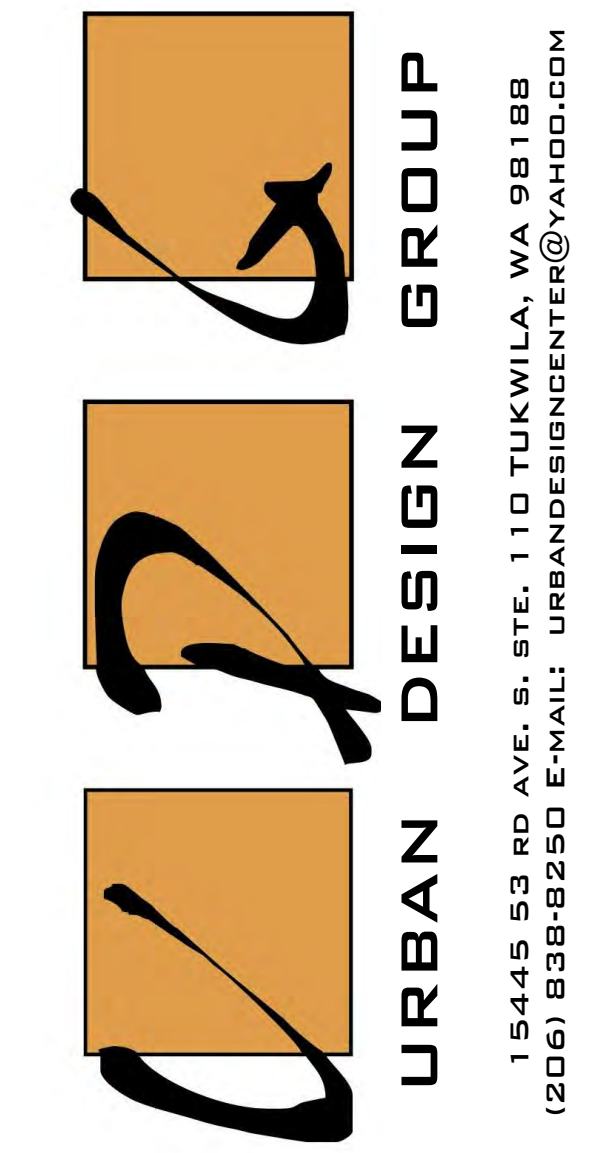
⑥ WINDOW/DOOR HEAD

SCALE: N.T.S.



⑦ DOOR / WINDOW JAMB

SCALE: N.T.S.



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LAURIE QIAN

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DESIGN BY: PAVEL MELNIK  
DRAFTED BY: ANNA KONYAKINA  
SHEET TITLE:

ARTISAN LAP SIDING DETAILS

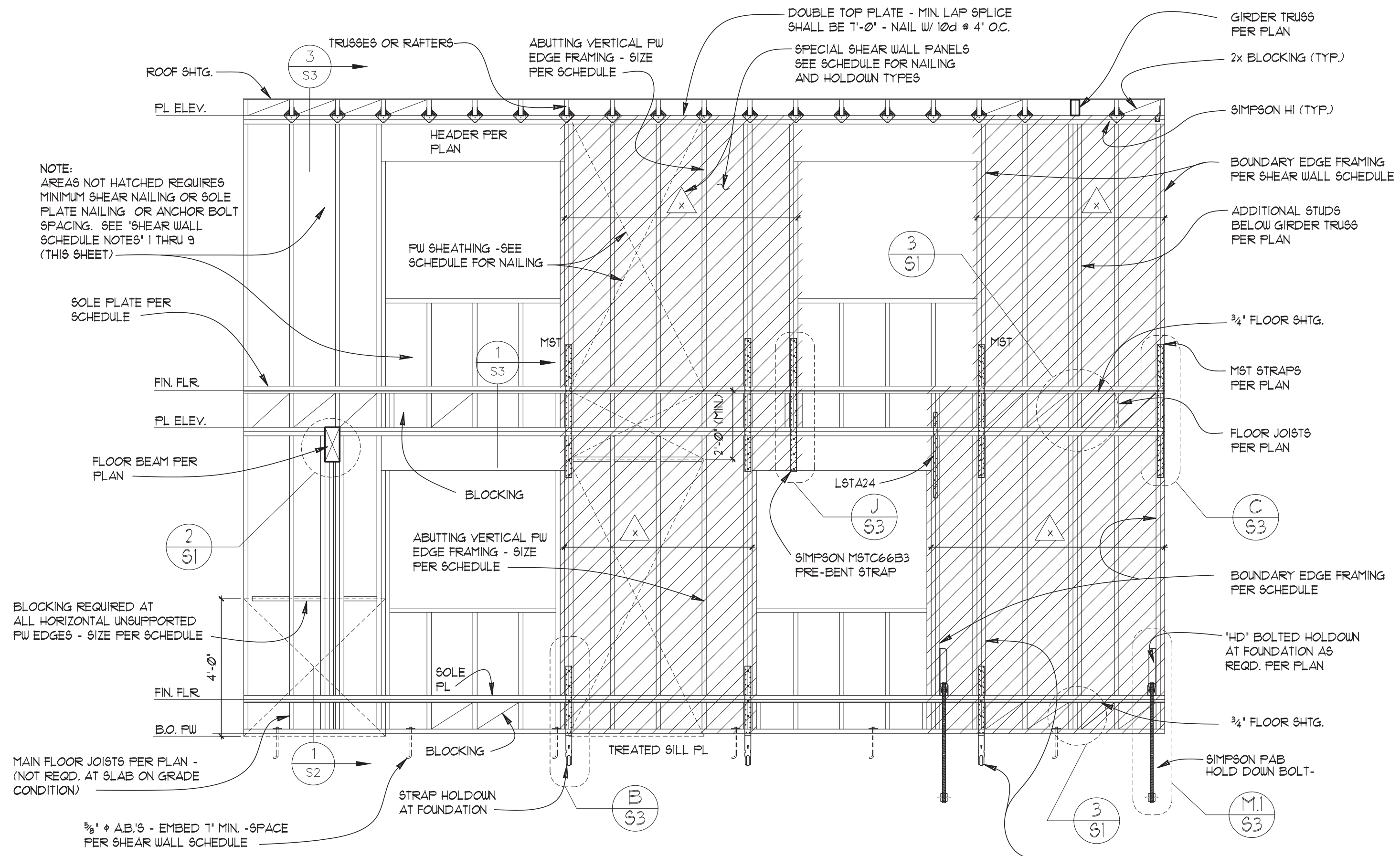
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21257

SHEET NUMBER:

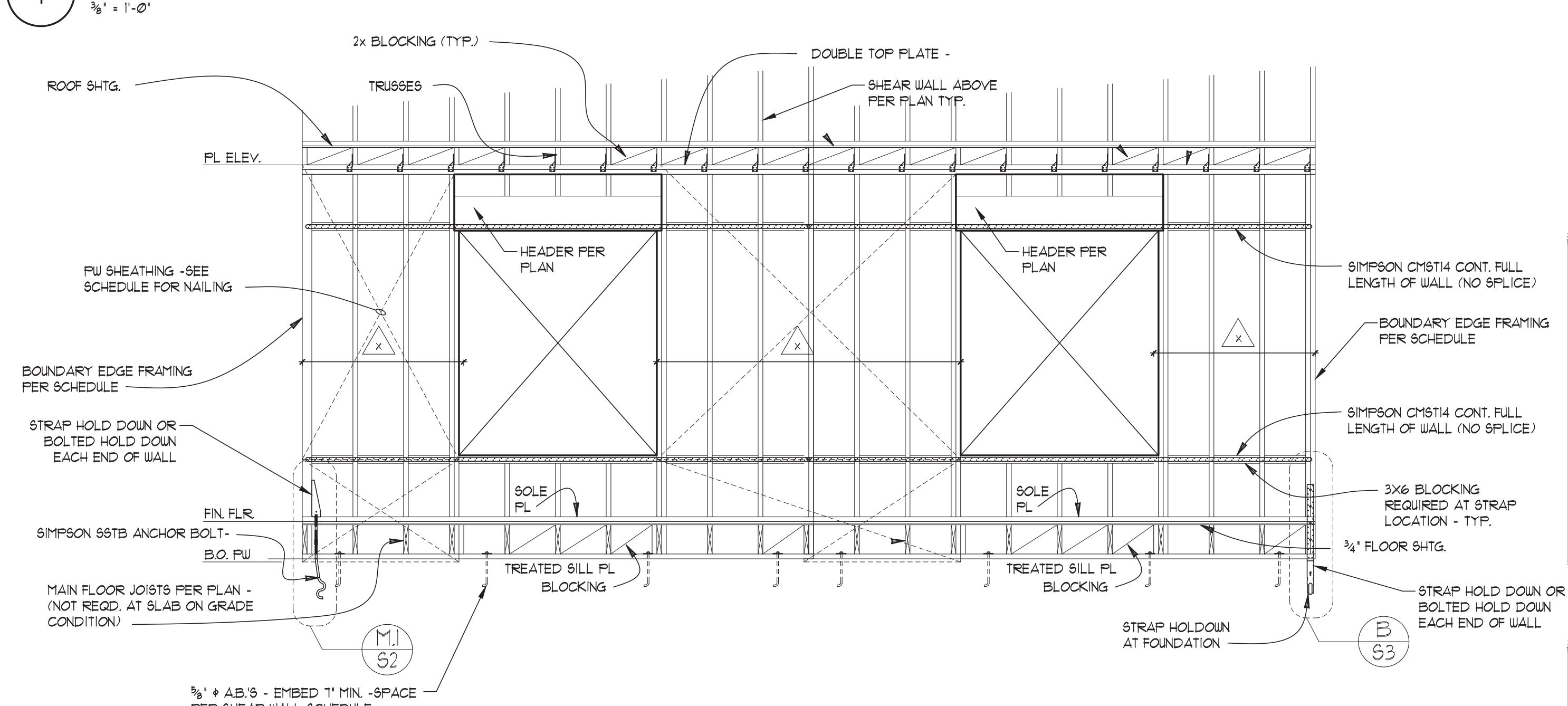


SHEARWALL SCHEDULE														
(1) (2) (4)														
WALL TYPE	(5) SHTG.	(3) EDGE NAILING LENGTH X GAGE	(6) FIELD NAILING LENGTH X GAGE	3/8" DIA. AB. SPACING SOLE PLATE NAILING (GA)	ABUTTING VERT. FW EDGES	ABUTTING HORIZ. FW EDGES	(9) SOLE PL.	MUD SILL	BOUNDARY FRAMING (VERT.)	HOLDOWN TYPES	HOLDOWN BOLTS	REMARKS / DETAILS	SHEAR (PLF)	UPLIFT FORCE
1	15/32" FW	8d @ 3' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 36" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	4x6	HDQB	5B17/8X24	(N5) S11	287 plf	4.1 k
2	15/32" FW	8d @ 3' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 24" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6	STHD14RJ		(B) S11	219 plf	2.4 k
3	15/32" O8B	8d @ 4' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 36" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6	STHD14RJ		(B) S11	214 plf	3.5 k
4	15/32" O8B	8d @ 6' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 24" O.C. 16d @ 4" O.C. (3-1/2" X 0.135")	3x6	3x6	3x6	3x6	4x6	HHDQII	5B1X30	(N4) S11	487 plf	5.6 k
5	15/32" O8B	8d @ 6' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 48" O.C. 16d @ 16" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	NONE				223 plf	0.0 k
6	15/32" FW	10d @ 3' O.C. (3" X 0.131")	10d @ 12' O.C. (3" X 0.131")	16d @ 4" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6			(C) S3 (J) S3	401 plf	4.1 k
7	15/32" FW	8d @ 3' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 36" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6			(C) S3 (J) S3	343 plf	3.4 k
8	15/32" FW	8d @ 4' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 36" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6			(C) S3 (J) S3	243 plf	3.9 k
9	15/32" FW	8d @ 4' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	3/8" AB. @ 36" O.C. 16d @ 8" O.C. (3-1/2" X 0.135")	2x6	2x6	2x6	2x6	2-2x6			(C) S3 (J) S3	150 plf	0.5 k
10	15/32" FW	8d @ 4' O.C. (2-1/2" X 0.131")	8d @ 12' O.C. (2-1/2" X 0.131")	16d @ 3" O.C. (3-1/2" X 0.135")	3x6	3x6	3x6	3x6	2-2x6	NONE			223 plf	0.0 k

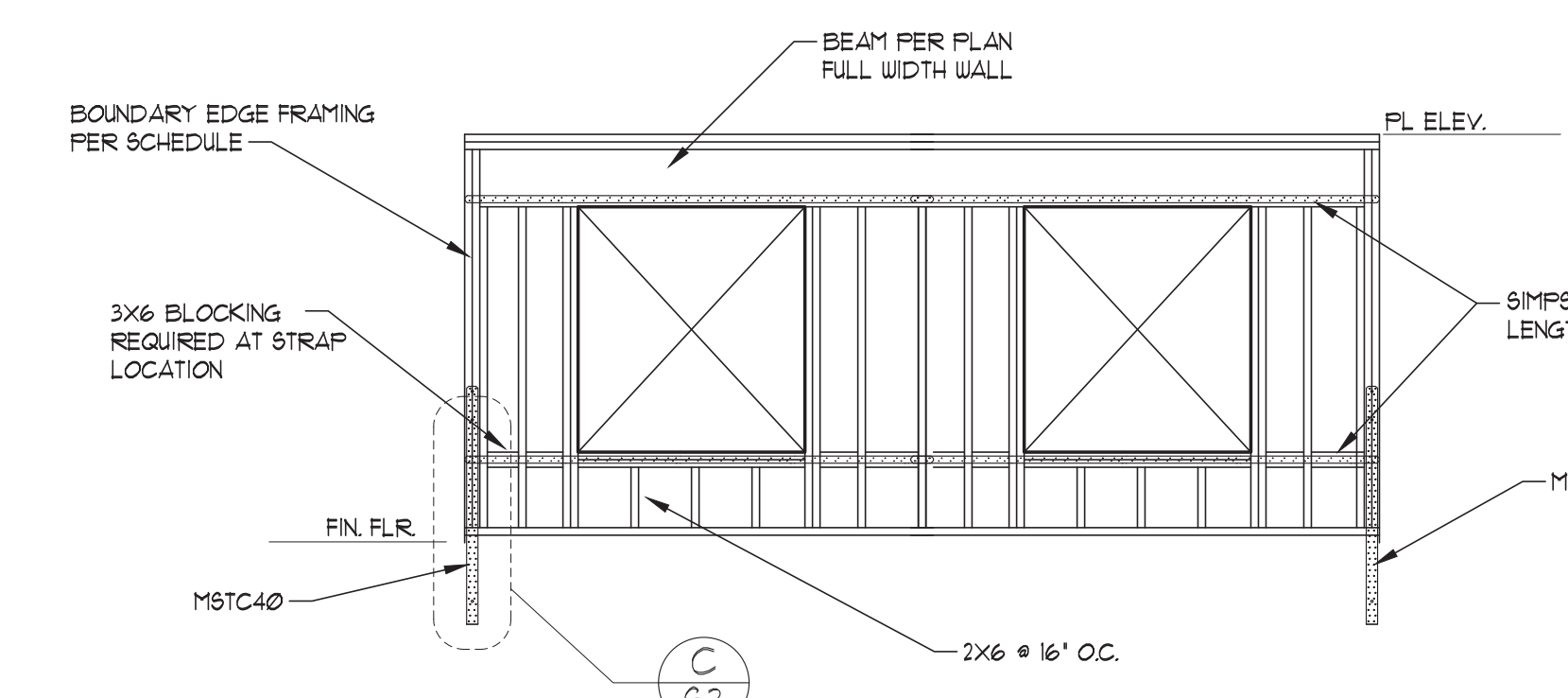
NOTE: FOR ALL OTHER EXTERIOR WALLS NOT SPECIFIED IN SCHEDULE ABOVE, SEE NOTE 2. IN 'SHEAR WALL SCHEDULE NOTES'.



1 ELEVATION - TWO STORY FRAMING OR SHEAR WALL (HATCHED)



B S12 ELEVATION - SHEAR TRANSFER SHEAR WALL - MULTIPLE WINDOWS



C S12 ELEVATION - SHEAR TRANSFER SHEAR WALL

SHEAR WALL SCHEDULE NOTES (MAIN FLOOR):

- SHEAR WALLS NOTED IN SCHEDULE ARE WALLS WITH ADDITIONAL EDGE NAILING, ABUTTING HORIZONTAL AND VERTICAL EDGE FRAMING, AND ANCHOR BOLT SPACING. FIELD NAIL SIZE SHALL MATCH THE EDGE FRAMING SPECIFIED AND BE SPACED AT 12" O.C. SHEAR NAILING APPLIES TO ALL VERTICAL AND HORIZONTAL ABUTTING SHTG. EDGES, DOUBLE TOP PLATES, AND SOLE PLATES.
- ALL EXTERIOR WALLS NOT SPECIFIED IN SHEAR WALL SCHEDULE, SHALL BE DESIGNATED AS MINIMUM SHEAR PANELS WITH EDGE NAIL SIZE MATCHING SPECIFIED NAILS IN SCHEDULE AND SPACED AT 6" O.C. FIELD NAIL SPACING SHALL BE 12" O.C.
- SHEATHING SHALL BE 1/6" O8B UNLESS SPECIFIED 15/32" STRUCTURAL #1 IN SCHEDULE.
- EXTERIOR SHEAR WALL FRAMING SHALL BE 2X6 HEM FIR #2 UNLESS NOTED 'DF' (DOUG FIR) IN SCHEDULE. FRAMING SHALL BE SPACED AT 16" O.C.
- INTERIOR SHEAR WALL FRAMING SHALL BE 2X4 (OR 2X6 PER SCHEDULE) HEM FIR #2 SPACED AT 16" O.C.
- EDGE FRAMING OR END OF SHEAR WALLS SHALL BE FRAMED WITH: (2) MINIMUM 2X6 (2X6 WALLS), (2) 2X4 (2X4 WALLS), OR SOLID SAIN POSTS AS NOTED IN THE SCHEDULE.
- BLOCK ALL UNSUPPORTED HORIZONTAL SHEATHING EDGES WITH 2X6 OR 3X6 AS NOTED IN SCHEDULE. ALL VERTICAL ABUTTING SHEATHING EDGES SHALL BE 2X6 FOR EXTERIOR WALLS OR 2X4 FOR INTERIOR WALLS OR AS NOTED IN SCHEDULE.
- SOLE PLATE SHALL BE 2X6 FOR EXTERIOR WALLS. SOLE PLATE SHALL BE 2X4 OR 2X6 FOR INTERIOR WALLS. SOLE PLATE NAILING SHALL BE 16d SPACED 12" O.C. (MAX. OR LESS AS SPECIFIED IN SCHEDULE).
- MUD SILLS SHALL BE 2X6 HF #2 F.T. CONTINUOUS AROUND PERIMETER OF FOUNDATION WALL.
- FOUNDATION ANCHOR SHALL BE 3/8" DIA. X 10" AB. FOR 2X6 MUD SILL OR 3/8" DIA. X 12" AB. FOR 3X6 MUD SILLS. IF NOT SPECIFIED BY THE SHEAR WALL SCHEDULE, ANCHOR BOLTS SHALL BE SPACED NO MORE THAN 48" O.C. ALL ANCHOR BOLTS SHALL BE EMBEDDED IN CONCRETE 1" MIN. PROVIDE (2) MINIMUM AB.'S FOR EACH MUD SILL SECTION.
- PROVIDE 3"X3"X1/4" GALV. WASHERS FOR EACH ANCHOR BOLT. THE CONTRACTOR MAY USE 3"X3"X1/4" GALV. WASHERS WITH DIAGONAL SLOTTED HOLES IF STANDARD CUT WASHERS ARE USED AND PLACED ABOVE THE SLOTTED PLATE WASHERS.

SHEAR WALL SCHEDULE NOTES (UPPER FLOOR):

- SHEAR WALLS NOTED IN SCHEDULE ARE WALLS WITH ADDITIONAL EDGE NAILING, ABUTTING HORIZONTAL AND VERTICAL EDGE FRAMING, AND ANCHOR BOLT SPACING. FIELD NAIL SIZE SHALL MATCH THE EDGE FRAMING SPECIFIED AND BE SPACED AT 12" O.C. SHEAR NAILING APPLIES TO ALL VERTICAL AND HORIZONTAL ABUTTING SHTG. EDGES, DOUBLE TOP PLATES, AND SOLE PLATES.
- ALL EXTERIOR WALLS NOT SPECIFIED IN SHEAR WALL SCHEDULE, SHALL BE DESIGNATED AS MINIMUM SHEAR PANELS WITH EDGE NAIL SIZE MATCHING SPECIFIED NAILS IN SCHEDULE AND SPACED AT 6" O.C. FIELD NAIL SPACING SHALL BE 12" O.C.
- SHEATHING SHALL BE 1/6" O8B UNLESS SPECIFIED 15/32" STRUCTURAL #1 IN SCHEDULE.
- EXTERIOR SHEAR WALL FRAMING SHALL BE 2X6 HEM FIR #2 UNLESS NOTED 'DF' (DOUG FIR) IN SCHEDULE. FRAMING SHALL BE SPACED AT 16" O.C.
- INTERIOR SHEAR WALL FRAMING SHALL BE 2X4 (OR 2X6 PER SCHEDULE) HEM FIR #2 SPACED AT 16" O.C.
- EDGE FRAMING OR END OF SHEAR WALLS SHALL BE FRAMED WITH: (2) MINIMUM 2X6 (2X6 WALLS), (2) 2X4 (2X4 WALLS), OR SOLID SAIN POSTS AS NOTED IN THE SCHEDULE.
- BLOCK ALL UNSUPPORTED HORIZONTAL SHEATHING EDGES WITH 2X6 OR 3X6 AS NOTED IN SCHEDULE. ALL VERTICAL ABUTTING SHEATHING EDGES SHALL BE 2X6 FOR EXTERIOR WALLS OR 2X4 FOR INTERIOR WALLS OR AS NOTED IN SCHEDULE.
- SOLE PLATE SHALL BE 2X6 FOR EXTERIOR WALLS. SOLE PLATE SHALL BE 2X4 OR 2X6 FOR INTERIOR WALLS. SOLE PLATE NAILING SHALL BE 16d SPACED 12" O.C. (MAX. OR LESS AS SPECIFIED IN SCHEDULE).

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LAURIE YANG  
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PC:  
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Prepared for  
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GENERAL NOTES

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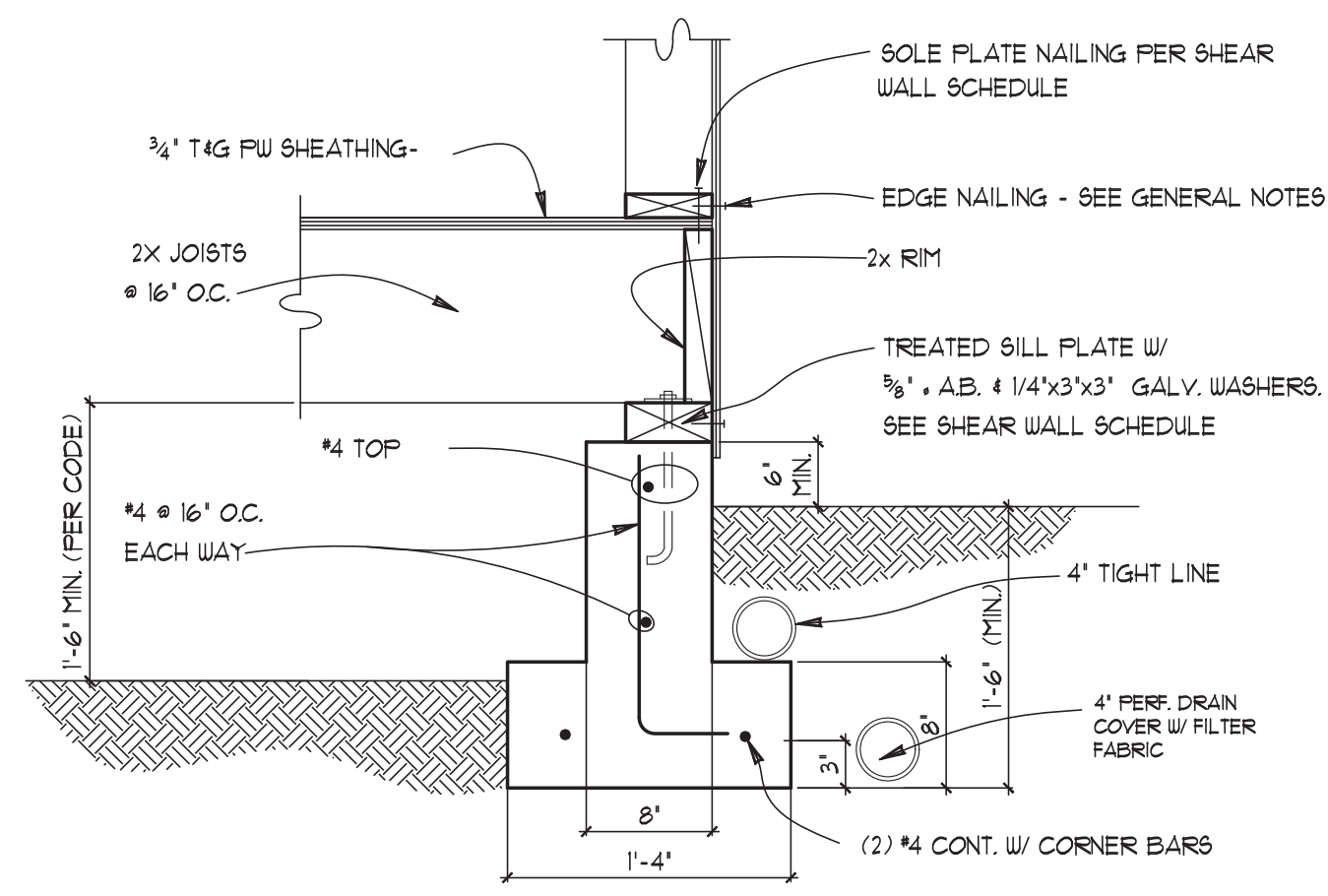
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DESIGN BY:	NFN
DATE:	06/15/2022
REV. DATE:	
COMMENTS:	

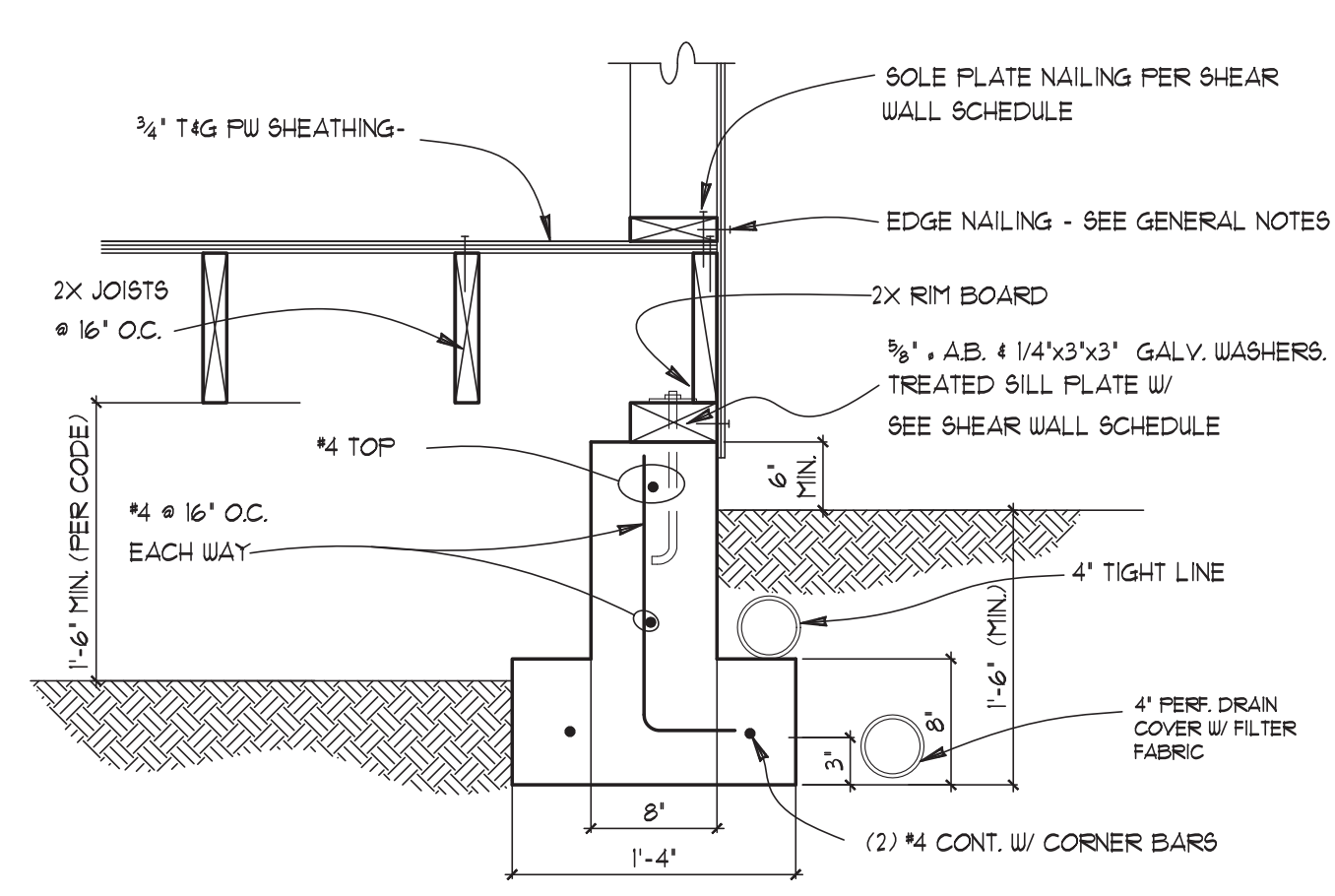
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12022  
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S1.2

DATE: 06/15/2022

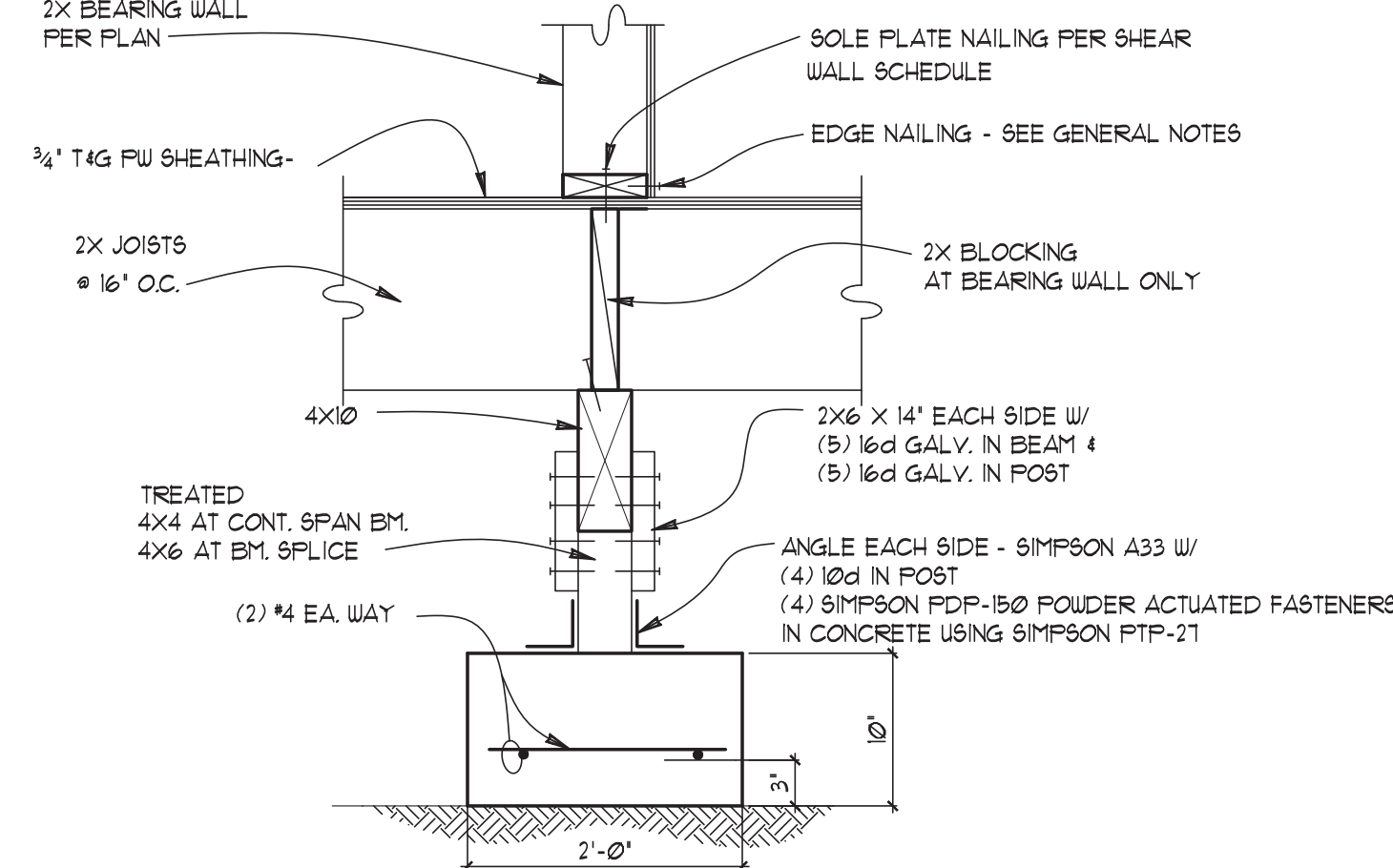




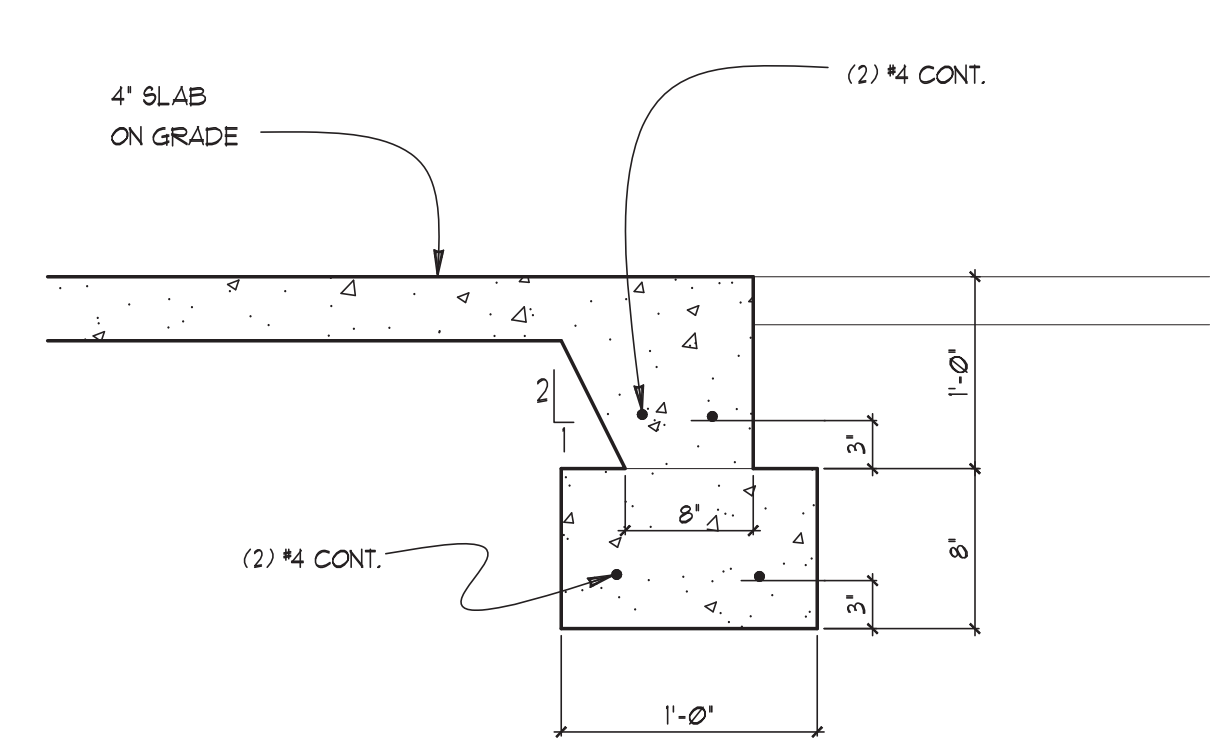
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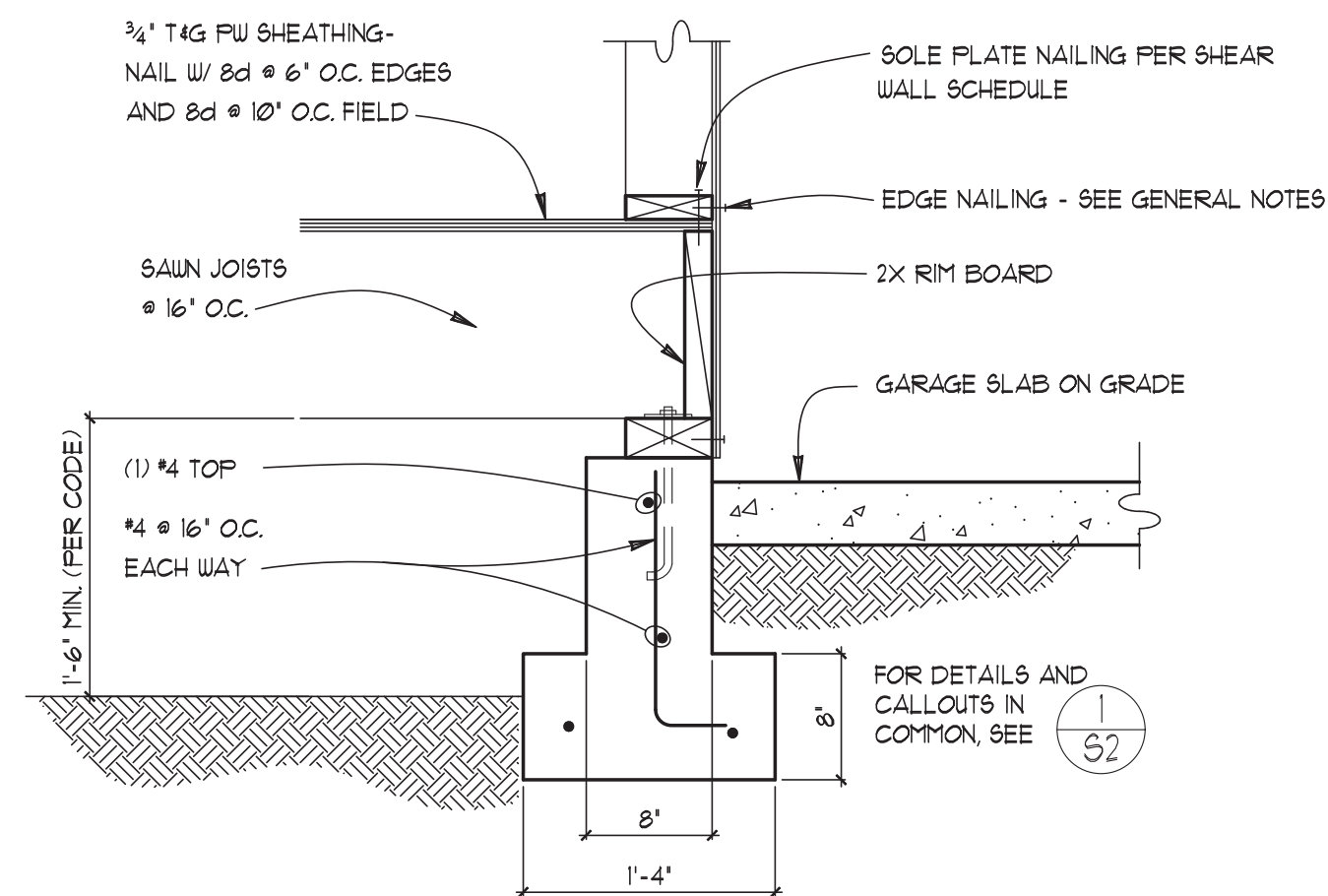
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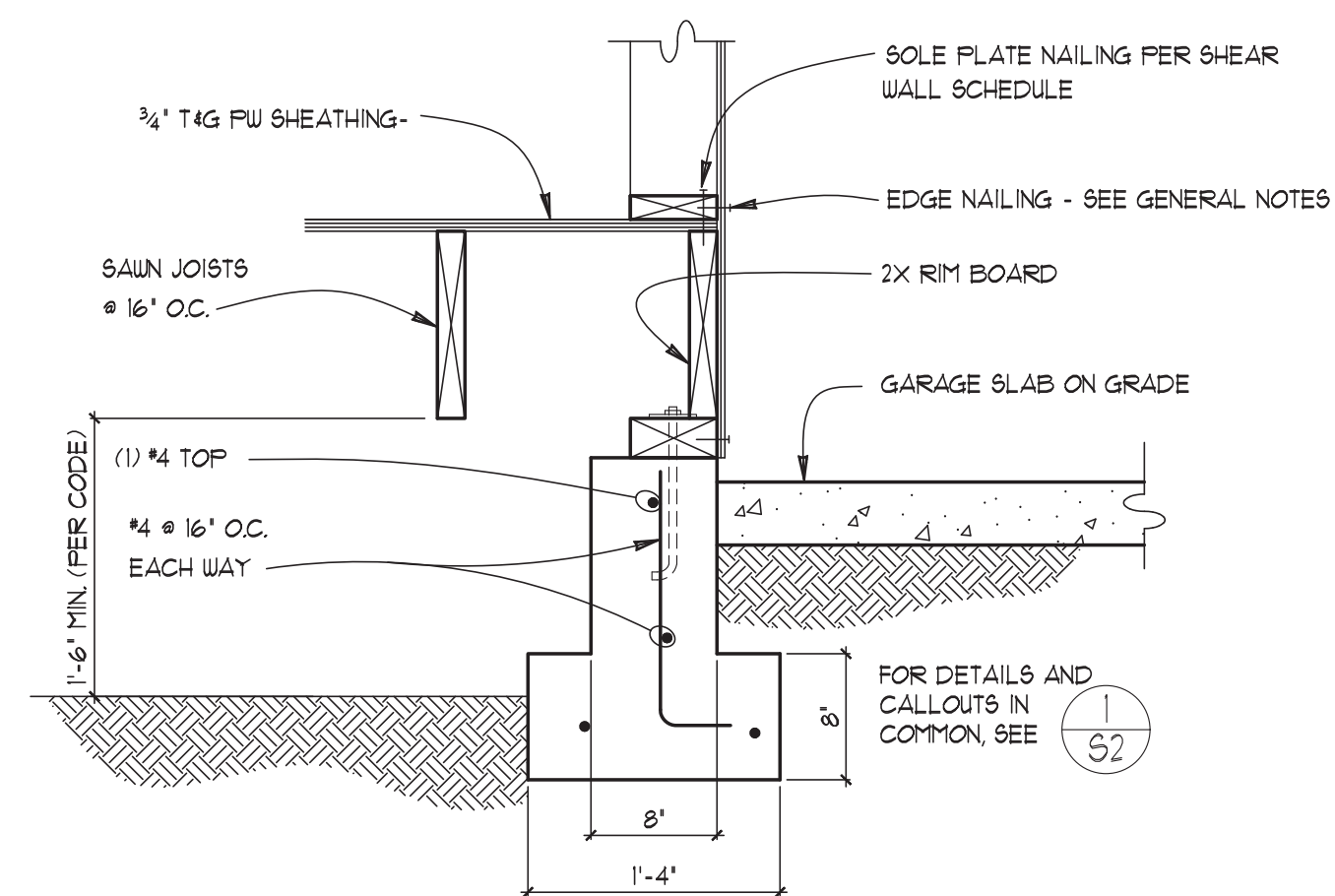
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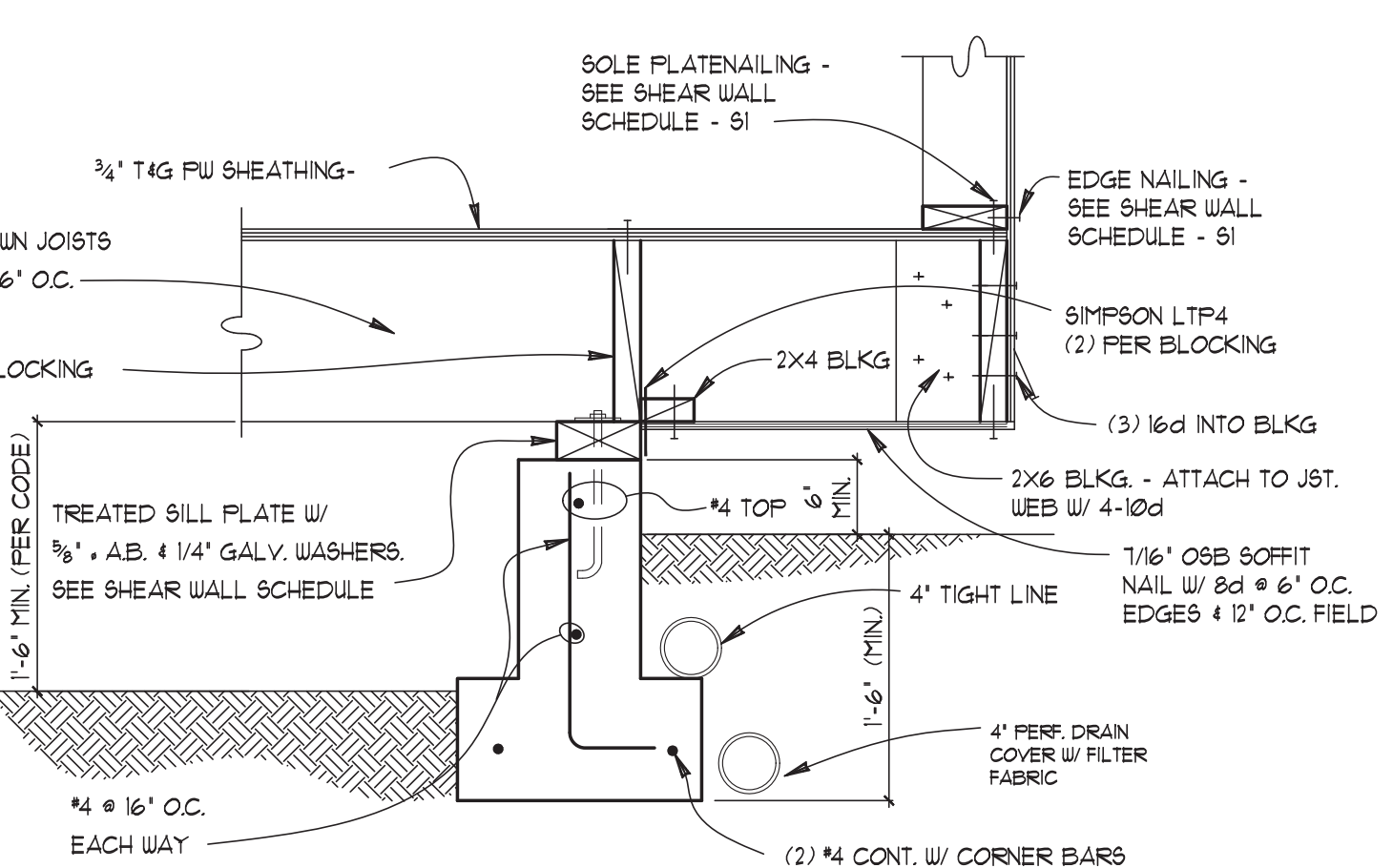
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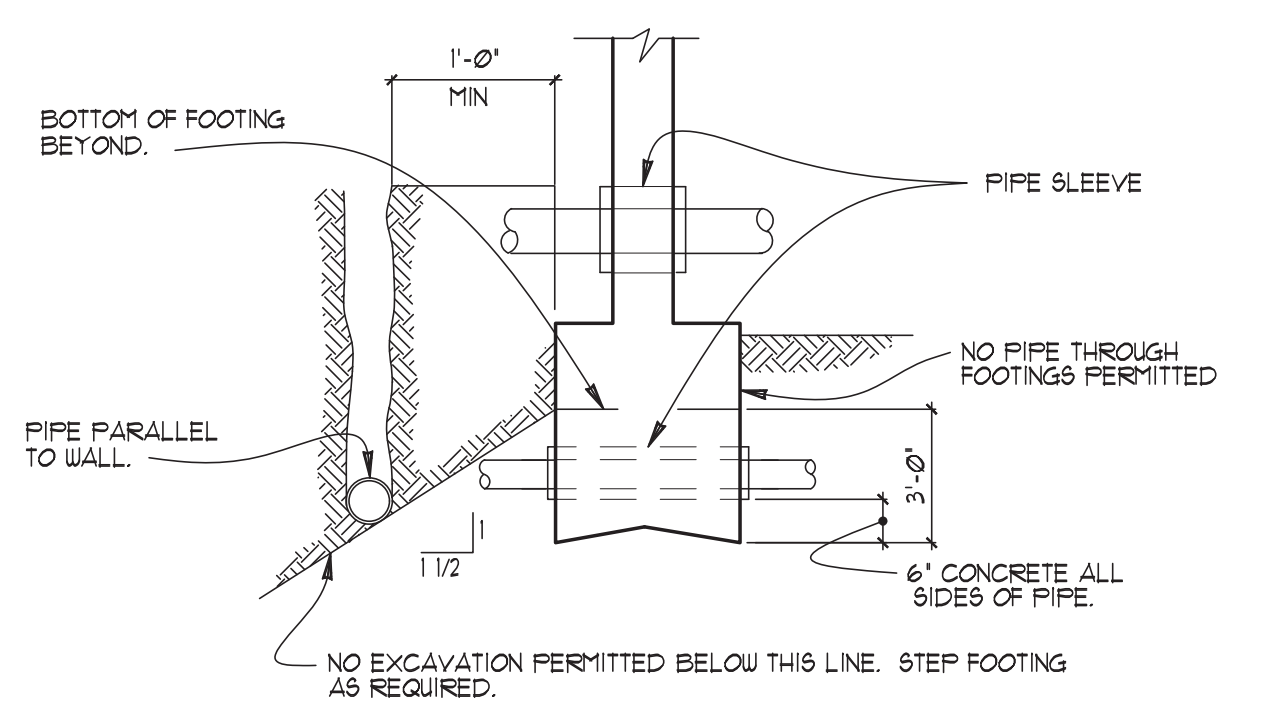
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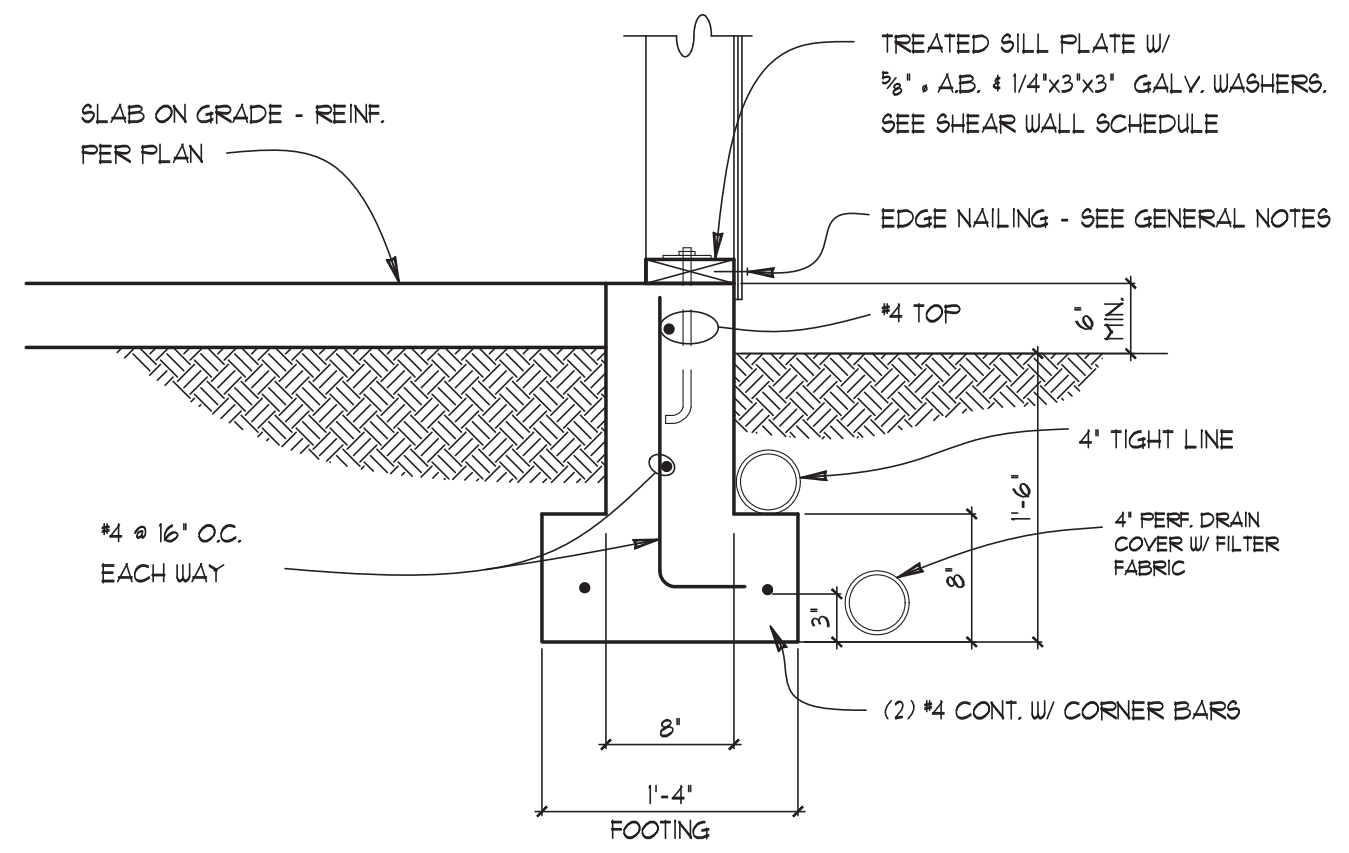
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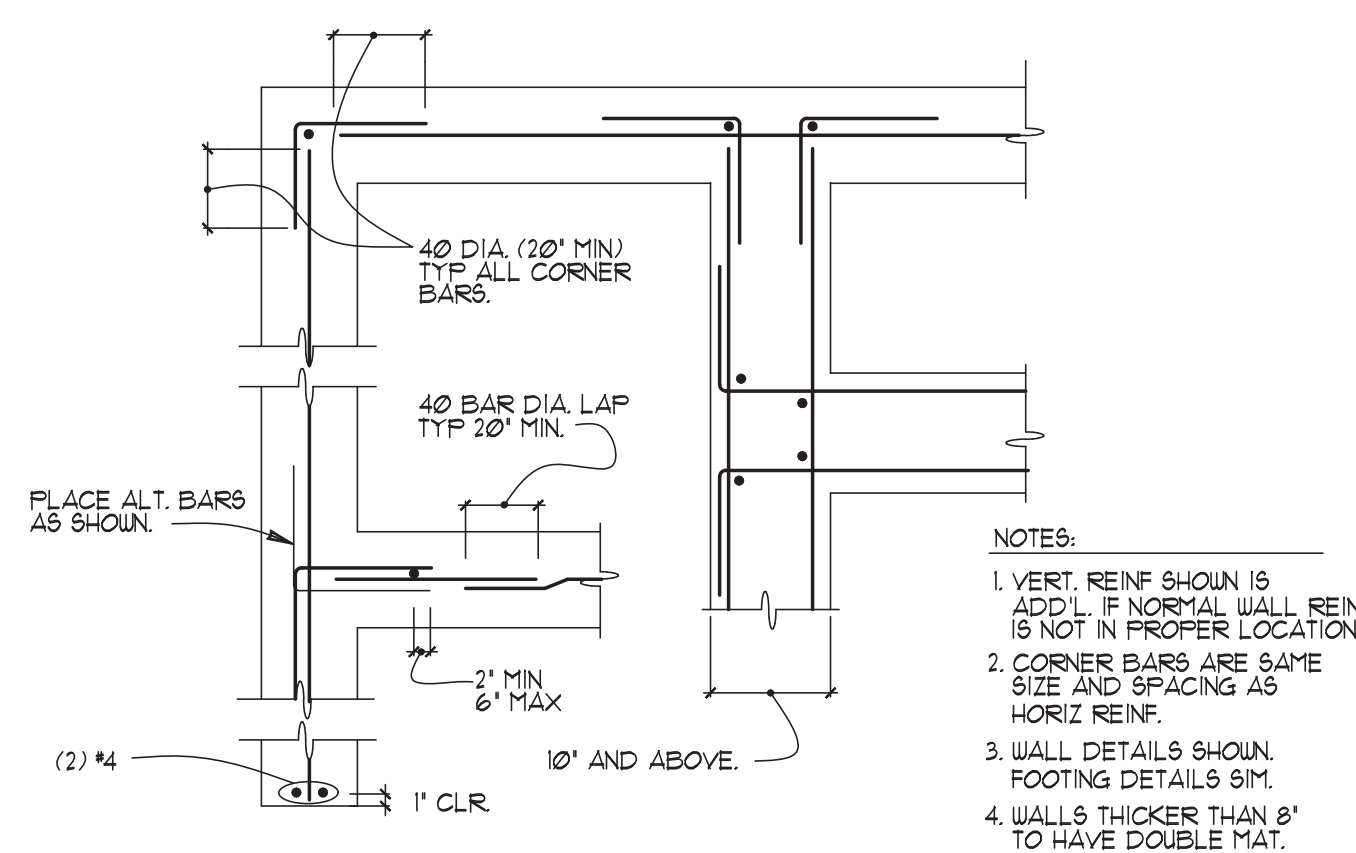
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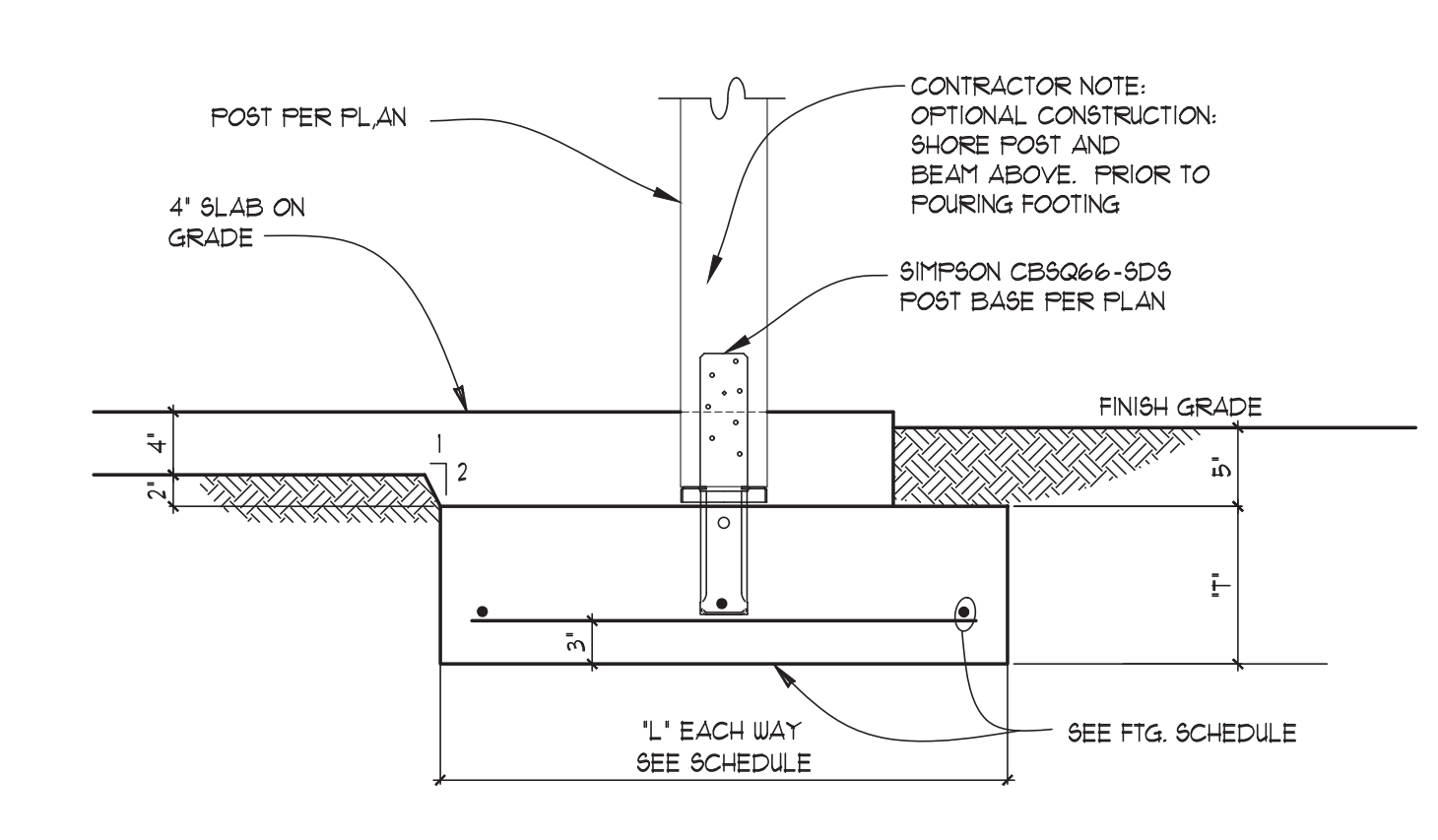
**8 SECTION**  
1' = 1'-0"



**9 SECTION**  
1' = 1'-0"

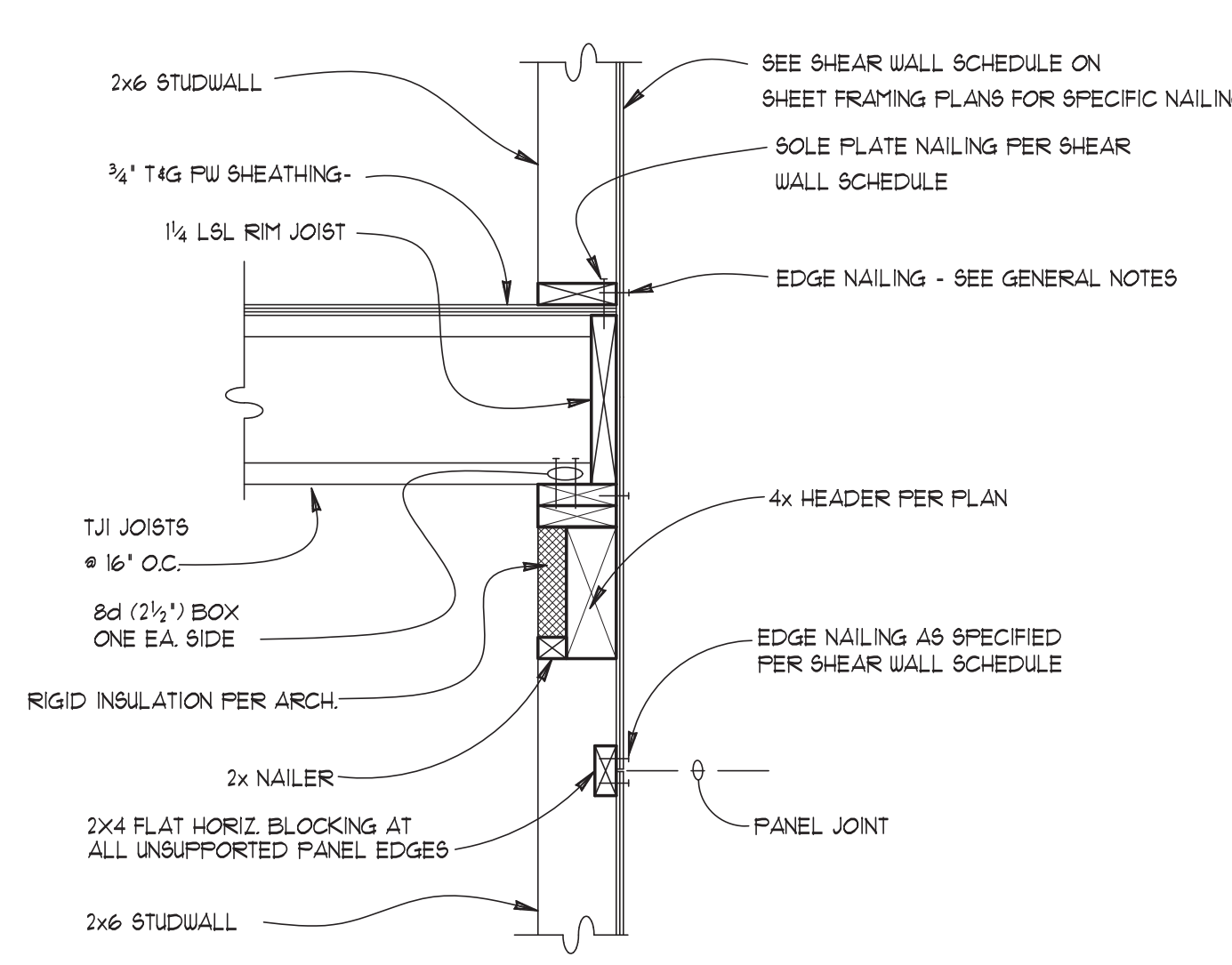


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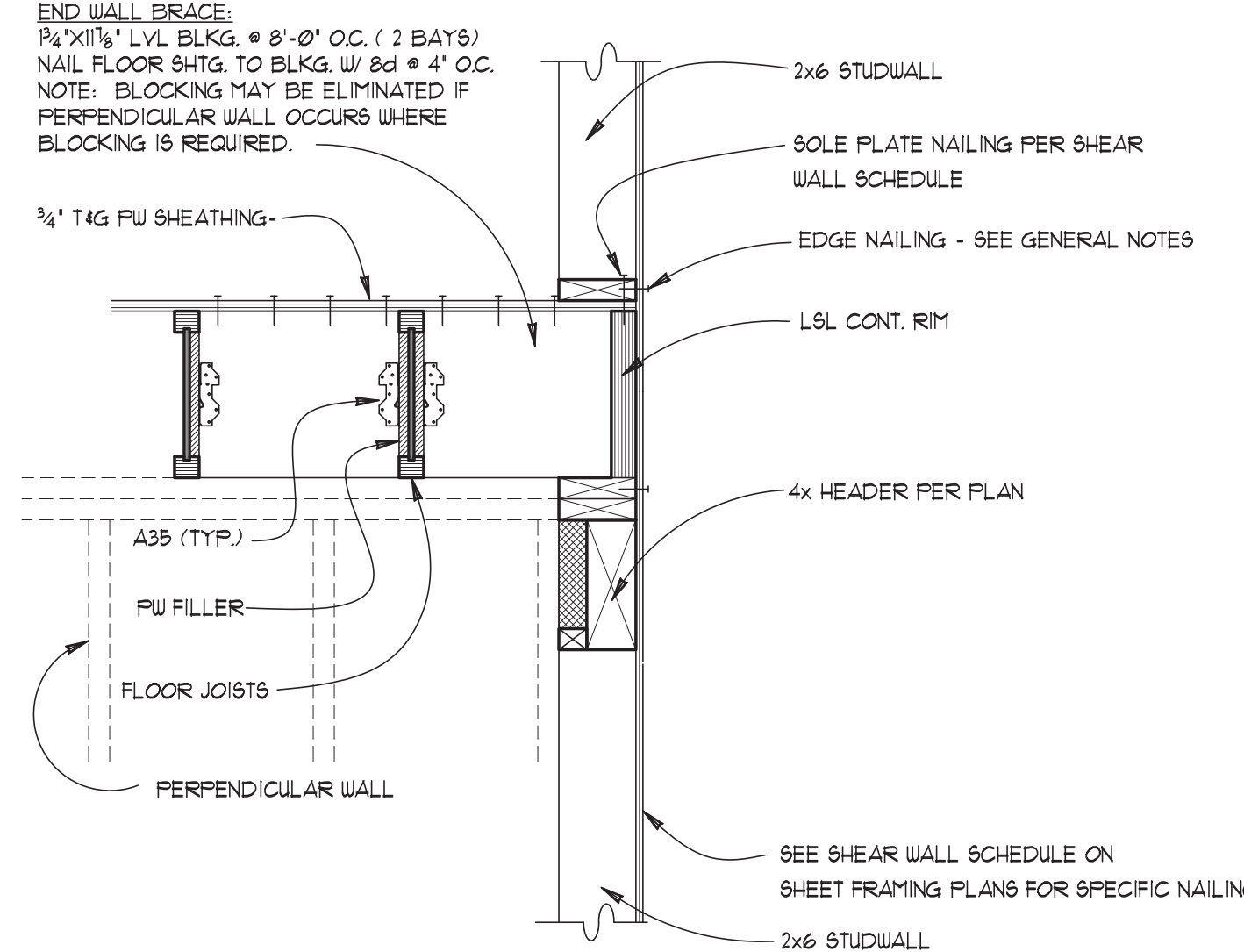


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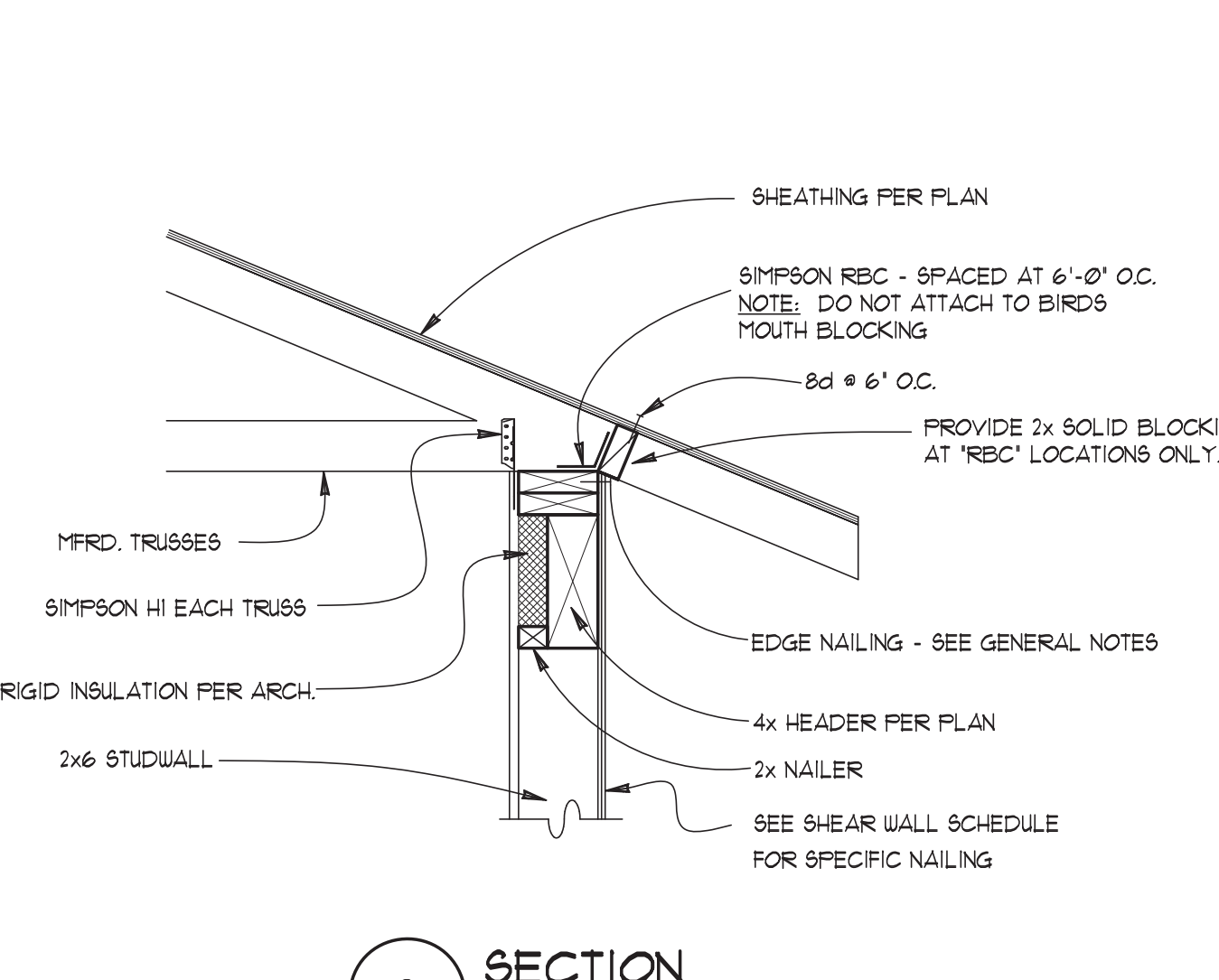
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06/15/2023	NFN
REV. DATE:	COMMENTS:



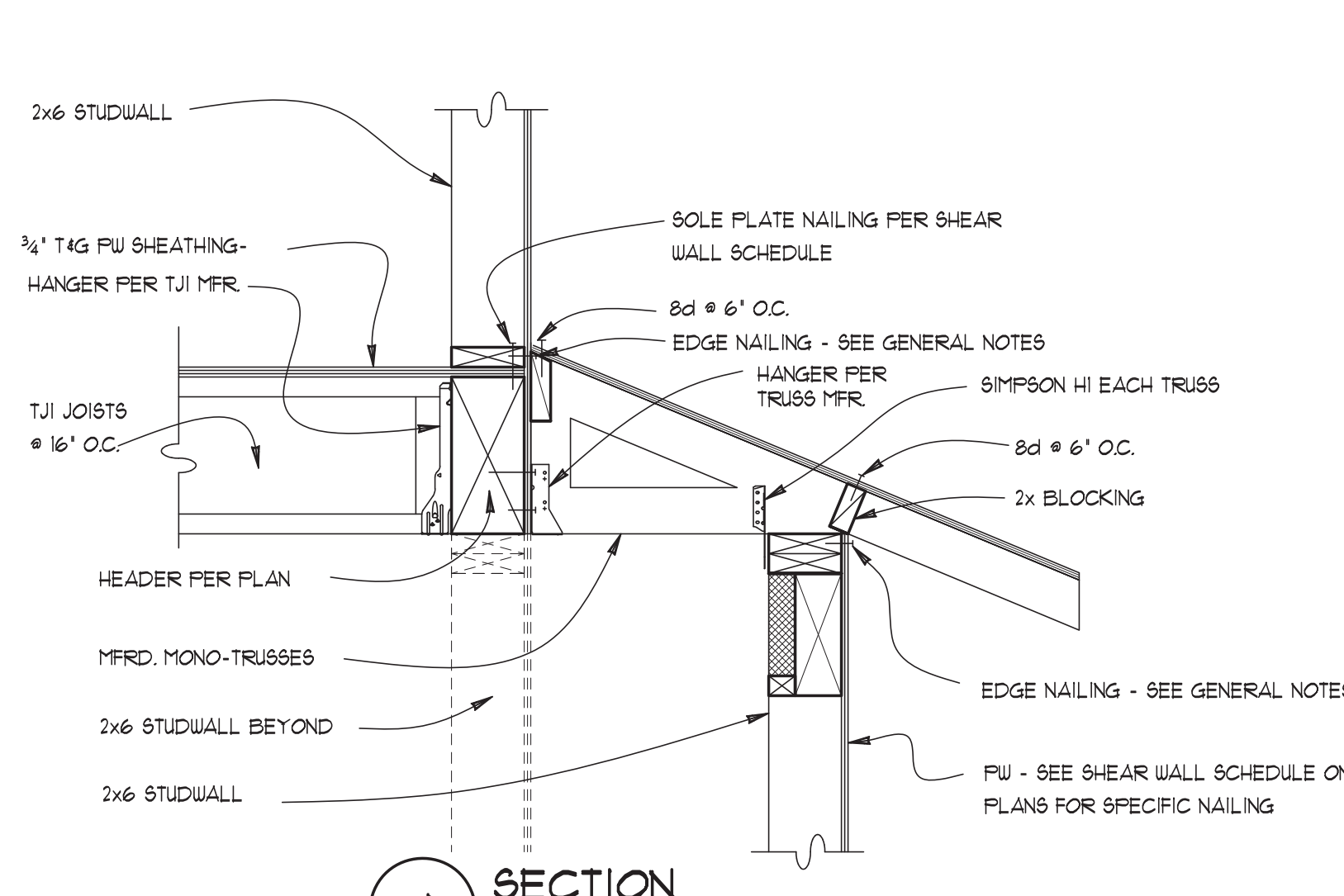
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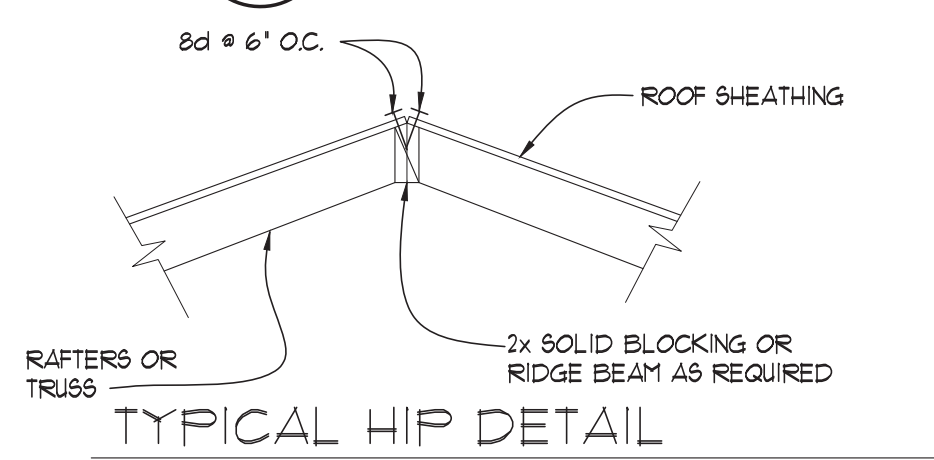
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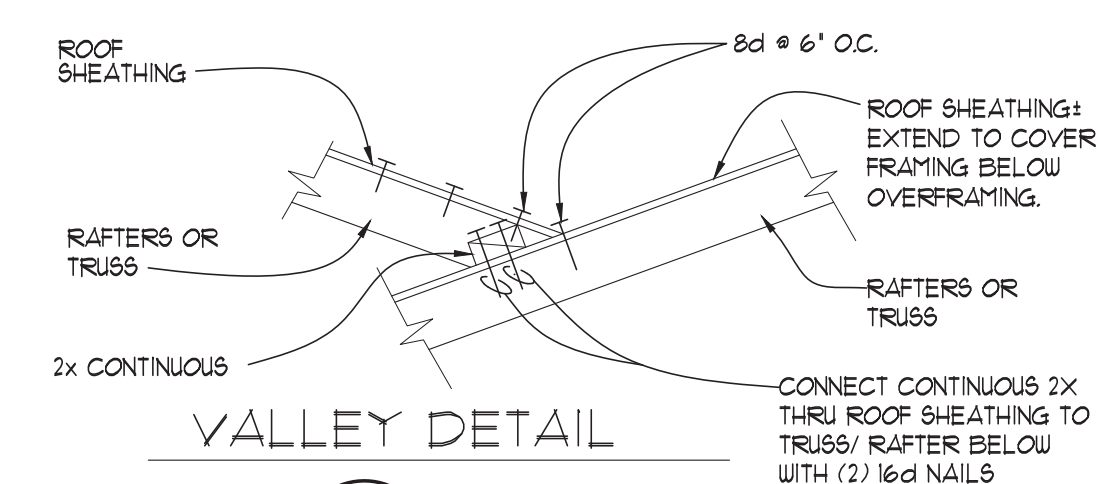
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1" = 1'-0"



**4 SECTION**  
1" = 1'-0"

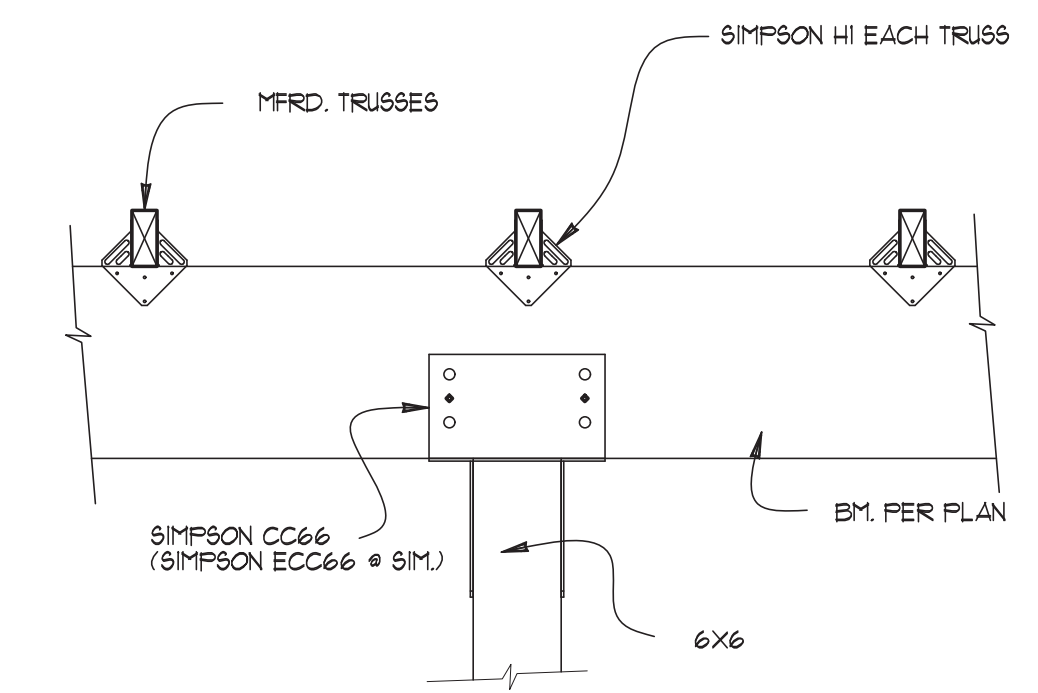


**TYPICAL HIP DETAIL**

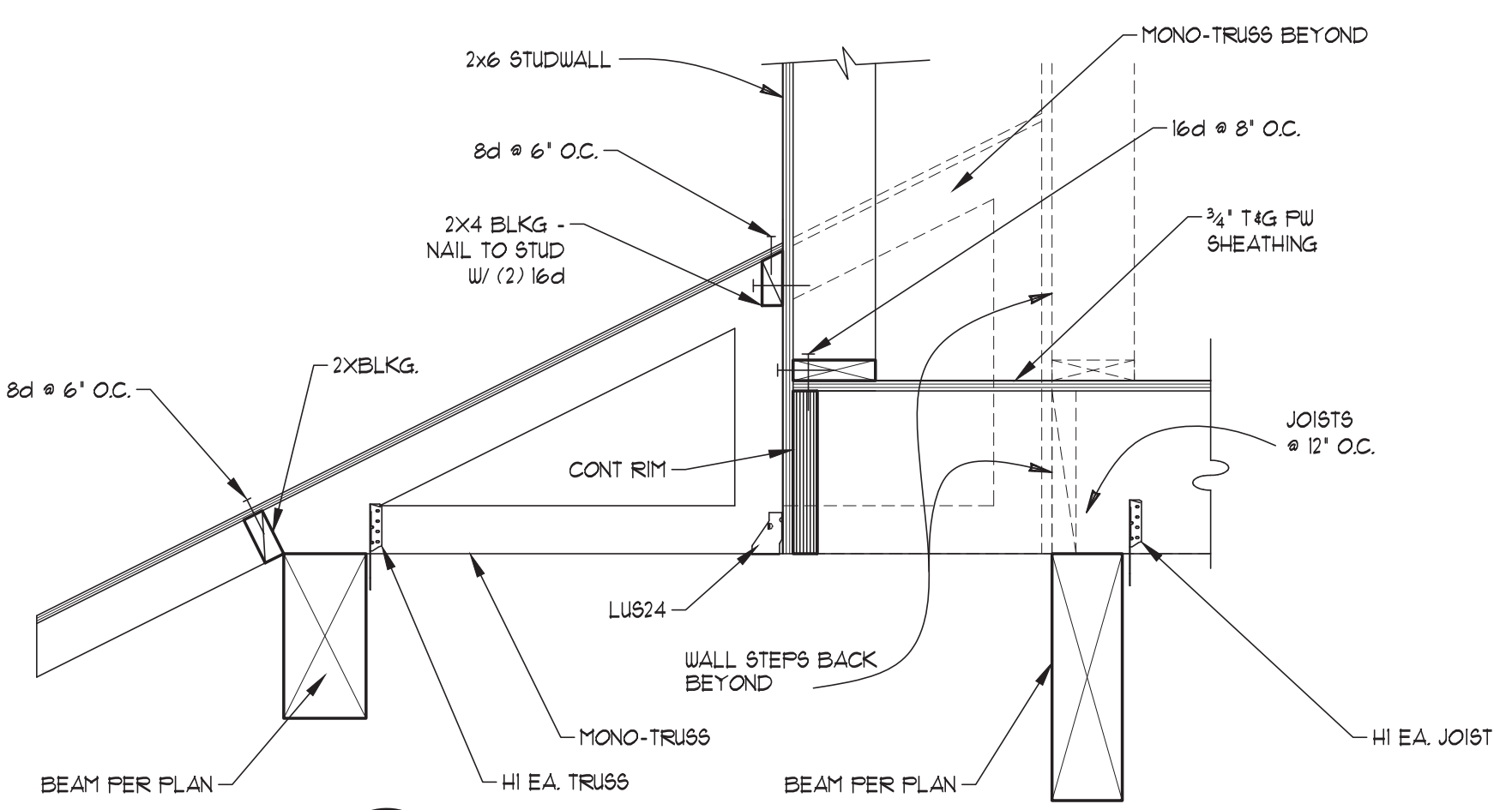


**VALLEY DETAIL**

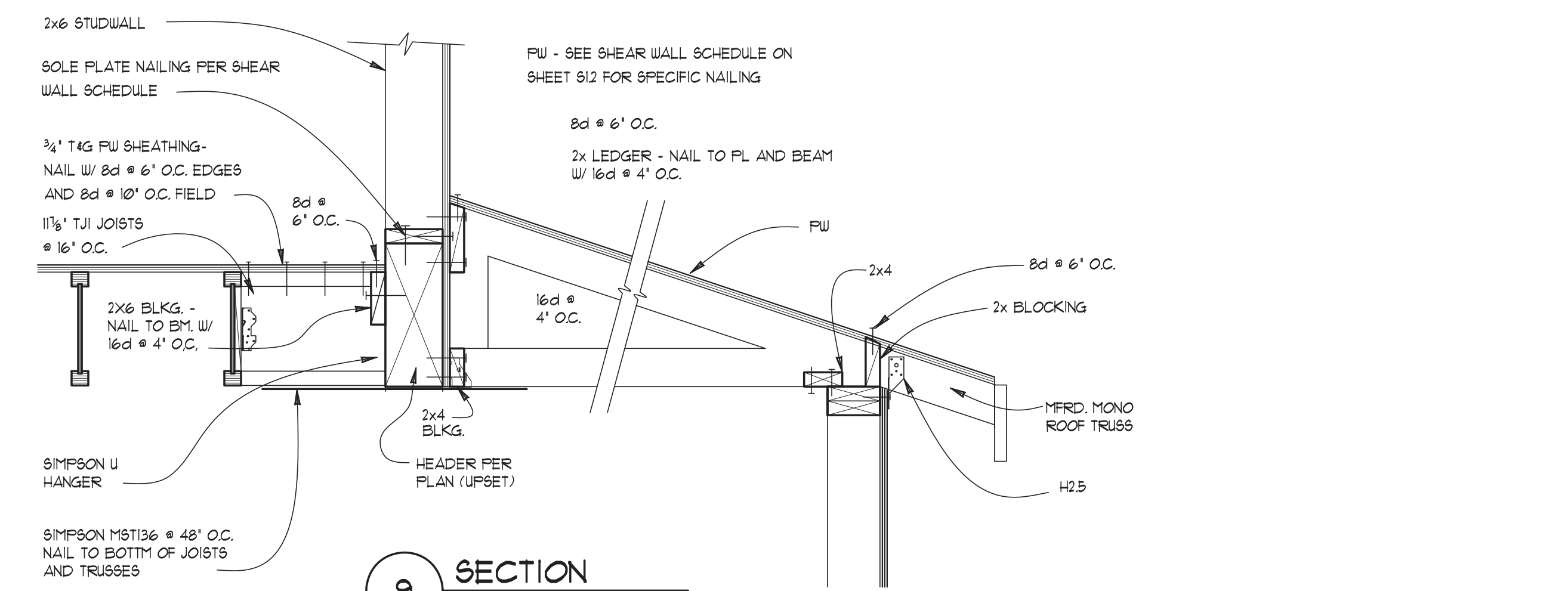
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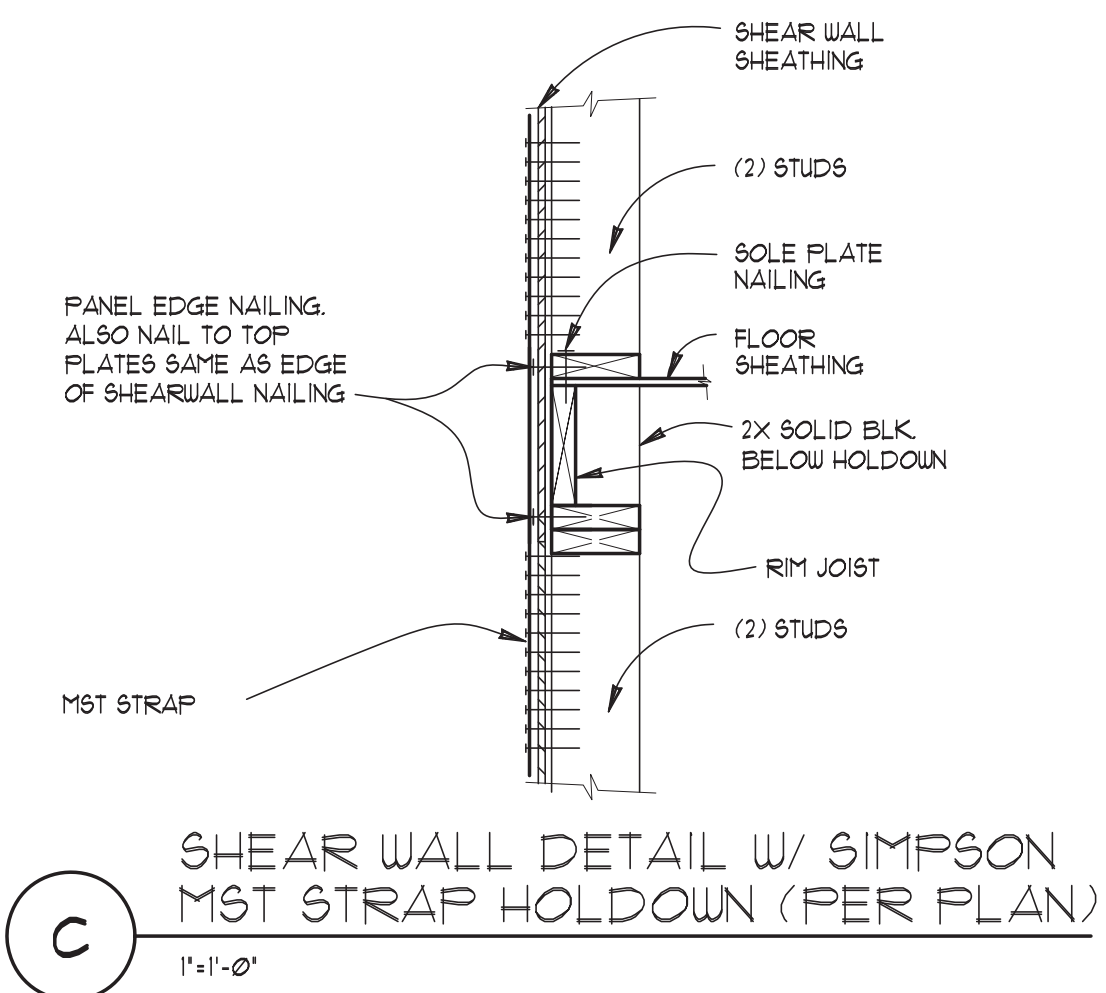
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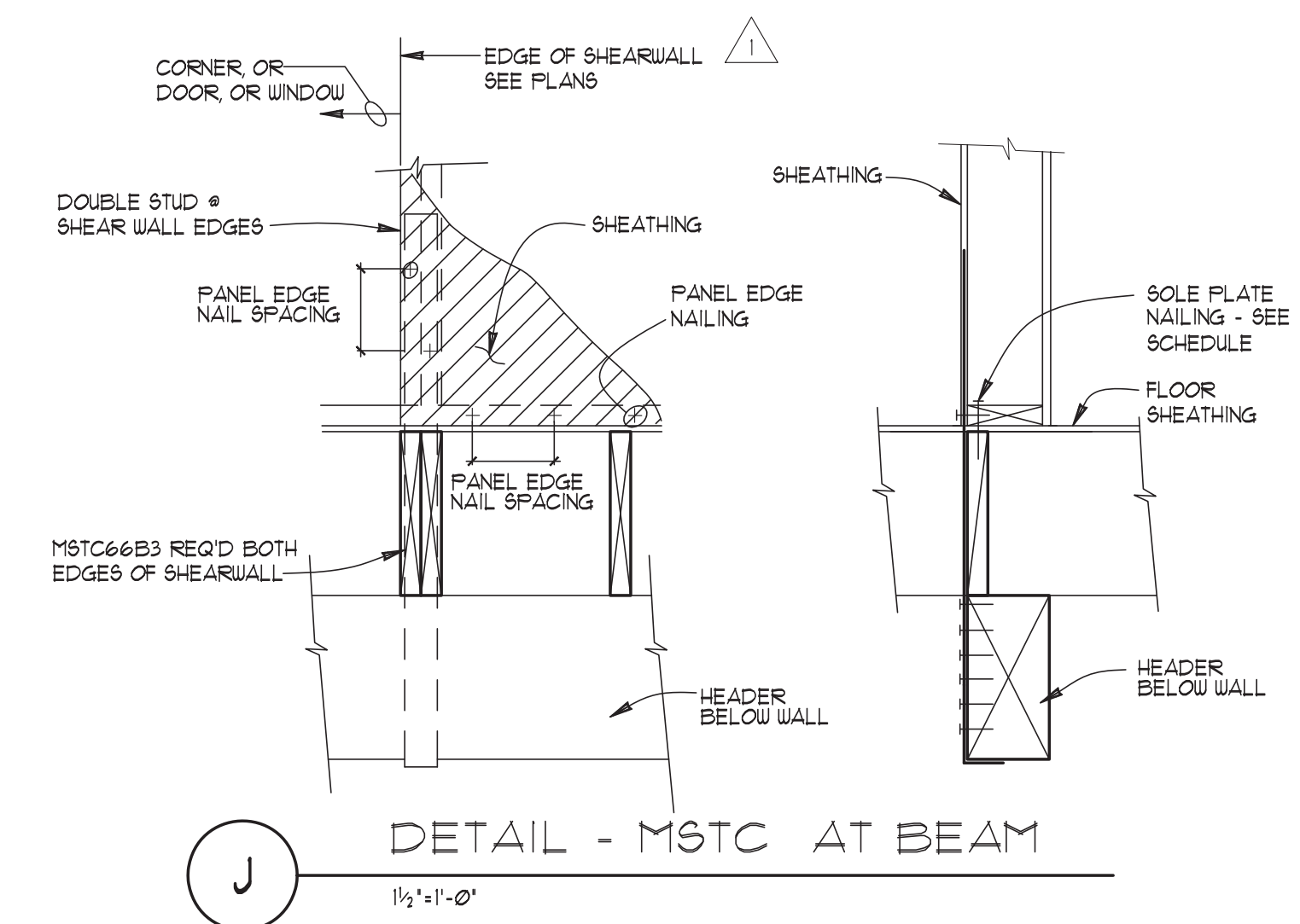
**7 SECTION**  
1" = 1'-0"



**9 SECTION**  
1" = 1'-0"



**C SECTION**  
1" = 1'-0"



**J SECTION**  
1 1/2" = 1'-0"

Project  
**MARTIN QIAN AND LAURIE YANG**  
8456 SE 40TH ST  
PC: MERCER ISLAND, WA

Prepared for  
**URBAN DESIGN GROUP**  
Contents  
**FRAMING DETAILS**

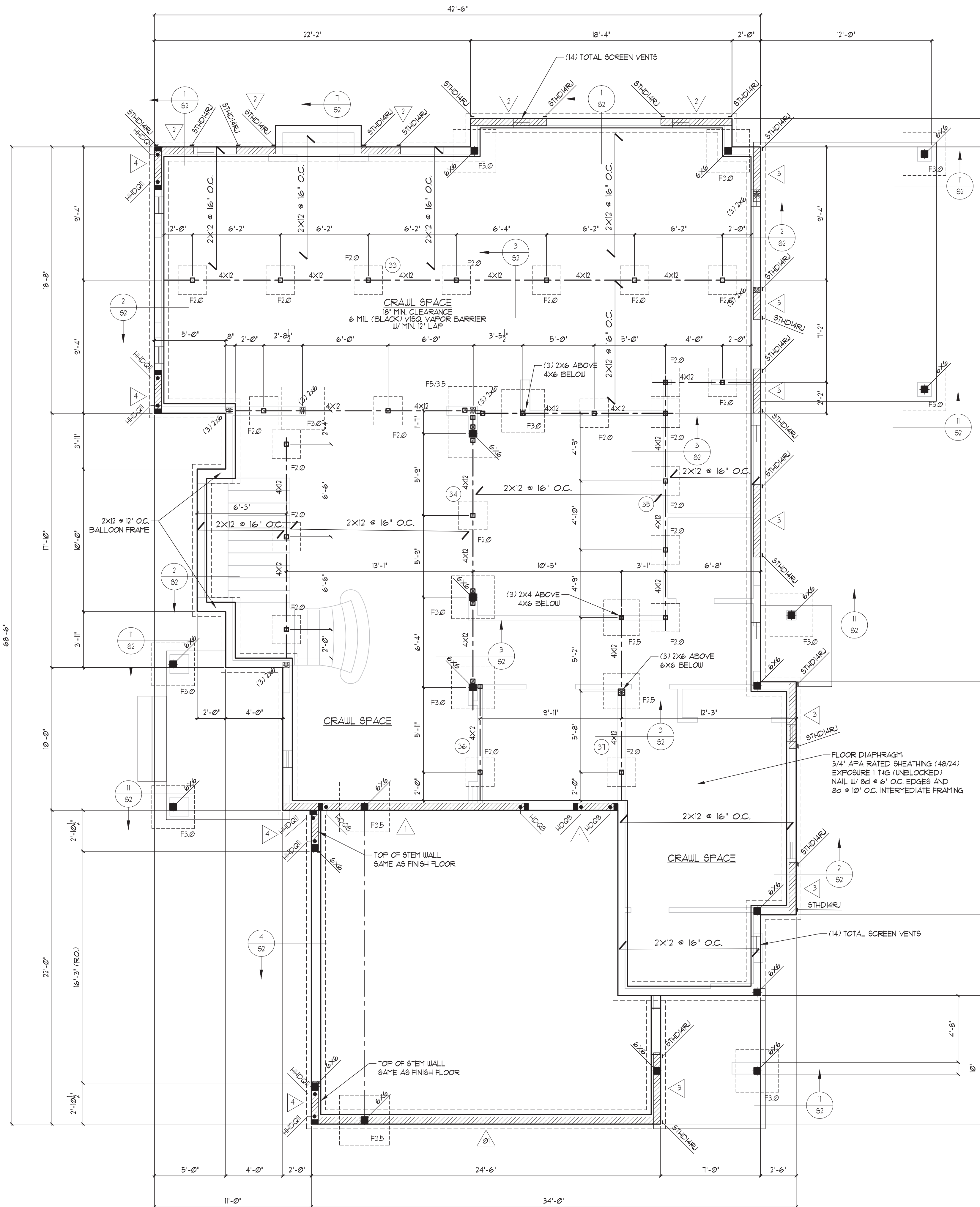
Professional Engineer  
**D. M. FARRO**  
Professional Engineer  
No. 1000000000  
State of Washington  
Exp. 12/31/2024  
R01P08 JANUARY 21, 2024

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DESIGN BY: NFN	REVISIONS:	DATE:
06/15/2023		
REV. DATE:	COMMENTS:	

Project # :  
**12022**  
Sheet  
**S3**

Plot Date: 06/15/2023



**FOUNDATION / MAIN FLOOR FRAMING PLAN**

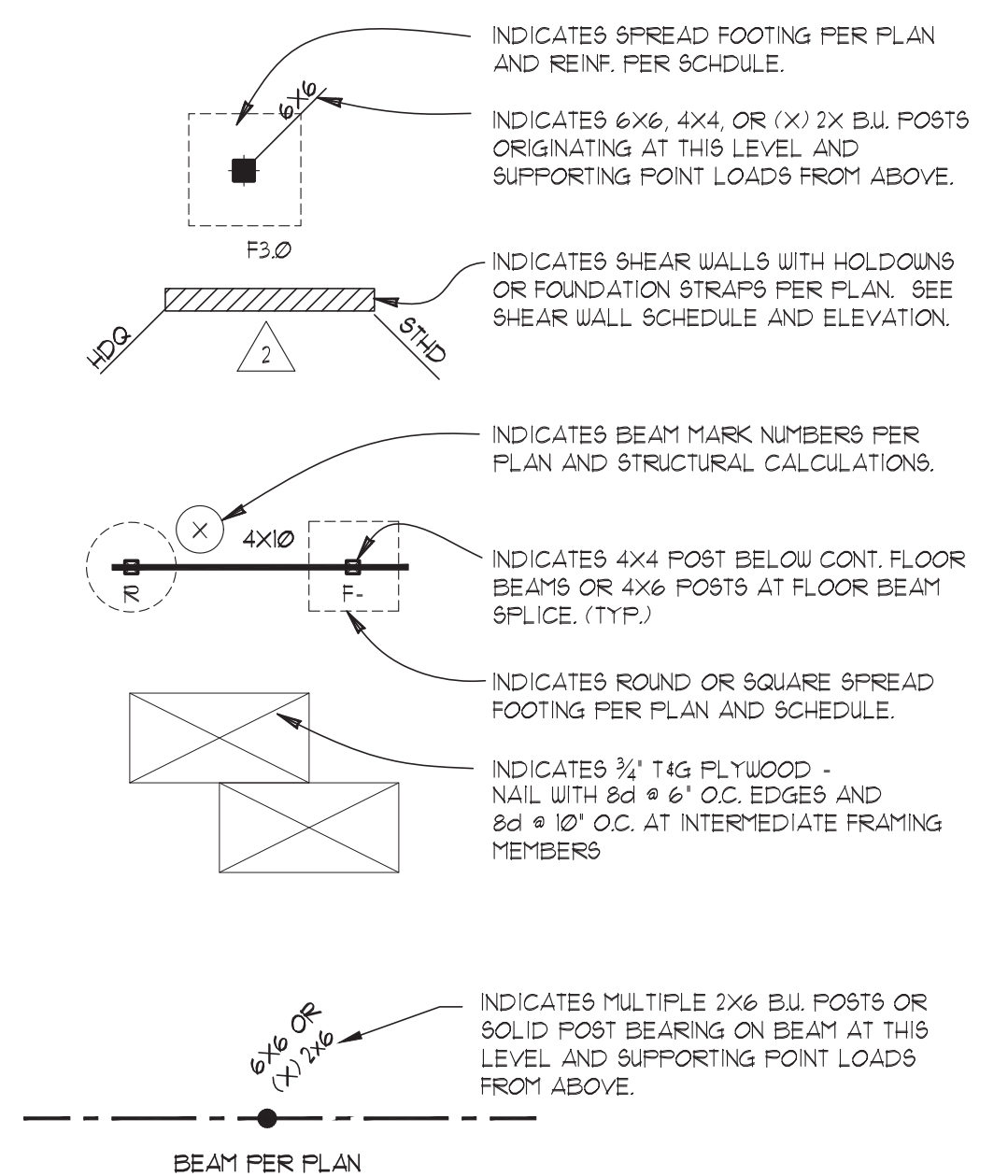
1/4" = 1'-0"  
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

**FOUNDATION VENTILATION:**  
PROVIDE CRAWL SPACE VENTILATION AS PER IBC SEC. 1203.3.1  
'CRAWLSPACE AREA' x 1/50 = TOTAL VENT AREA REQUIRED (SF.)  
QTY. OF 1'x14" VENTS REQUIRED: 13

**FOUNDATION & MAIN FLOOR FRAMING NOTES:**

- ALL FLOOR BEAMS SHALL BE 4X10 DF #2 UNLESS NOTED OTHERWISE ON PLAN. NOTE LOCATE BEAMS UNDER BEARING WALL WHERE NOTED ON PLAN.
- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED GLACIAL TILL OR STRUCTURAL FILL. SEE GENERAL NOTES FOR ASSUMED ALLOWABLE SOIL LATERAL OR VERTICAL BEARING PRESSURES.
- THE BOTTOMS OF FOOTING EXCAVATIONS SHALL BE LEVEL, CLEAN, AND FREE OF LOOSE MATERIAL OR WATER WHEN CONCRETE IS PLACED. OVER EXCAVATION SHALL BE FILLED CONCRETE THE SAME STRENGTH AS FOOTINGS.
- FINISH GRADE AROUND THE PERIMETER OF THE STRUCTURE SHALL BE DRAINED AWAY FROM THE FOUNDATION FOR RAIN OR IRRIGATION WATER.
- THE CONTRACTOR SHALL FOLLOW THE AVAILABLE GEO-TECH. REPORT FOR THE RECOMMENDED SITE PREPARATIONS BEFORE CONSTRUCTING THE FOUNDATION.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESURE TREATED WITH AN APPROVED PRESERVATIVE. ANY FIELD CUTS, NOTCHES, AND DRILLED HOLES SHALL BE RE-TREATED PER AWP#44.
- ALL FASTENERS & HARDWARE IN PRESURE TREATED OR FIRE TREATED WOOD SHALL BE SIMPSON '2"MAX' (G105 HDG PER ASTM A653).
- PROVIDE DOUBLE JOISTS OR BEAM (PER PLAN) BELOW SHEAR WALL PARALLEL TO TO JOISTS. NAIL WALL SOLE PLATE TO JOISTS OR BEAM PER SHEAR WALL SCHEDULE OR NOTE B. OF SHEAR WALL SCHEDULE NOTES.
- PROVIDE 3/4" DIA. GALV. ANCHOR BOLTS EMBED 1" MIN. IN CONCRETE. PROVIDE 1/4"x3"x3" GALVANIZED WASHERS AT EACH ANCHOR BOLT.
- PROVIDE APPROPRIATE BLOCKOUT IN STEM WALLS OR FOOTINGS FOR PLUMBING & ELECTRICAL STUB-OUTS PER ARCH. PLANS. COORDINATE WITH GENERAL CONTRACTOR.
- PROVIDE CRAWL SPACE ACCESS PER IBC AND ARCHITECTURAL PLANS. COORDINATE LOCATION IN SITE WITH CONTRACTOR.
- PROVIDE CRAWL SPACE VENTILATION PER IBC AND FOUNDATION PLANS. DO NOT LOCATE VENTS WITHIN 8" OF HOLD-DOWN STRAPS OR HOLD-DOWN BOLTS. MAINTAIN 3'-0" CLEAR FROM EACH CORNER.
- FOR TYPICAL PLACEMENT OF HORIZONTAL REINF. IN CONCRETE, SEE 14/52.
- FOR TYPICAL DETAIL FOR INSTALLATION OF PIPES NEAR FOOTINGS, SEE 8/52.
- PROVIDE SQUASH BLOCKING BELOW ALL SOLID SAUN OR BUILT-UP 2X POSTS ALONG EXTERIOR OR INTERIOR STEM WALLS PER DETAIL 4/51.

**LEGEND**



FOOTING SCHEDULE (1500 P&F BRG.) f'c = 2500 psi						
TYPE	DIMENSION (INCHES)		REINF.		ALLOWABLE LOAD (KIPS)	
	L'	W'	THK.	LONGIT.	TRANSV.	
F2.0	24"	24"	10"	(3) #4	(3) #4	5.5 K
F3.0	24" DIA.		10"	(2) #4	(2) #4	4.3 K
F3.5	36"	36"	10"	(3) #4	(3) #4	12.4 K
F4.0	42"	42"	12"	(3) #4	(3) #4	16.5 K
F5.0	48"	48"	12"	(3) #5	(3) #5	21.6 K
	60"	60"	14"	(6) #5	(6) #5	33.5 K

**SPREAD FOOTING DETAIL**

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Contents  
**FOUNDATION - FLOOR FRAMING**



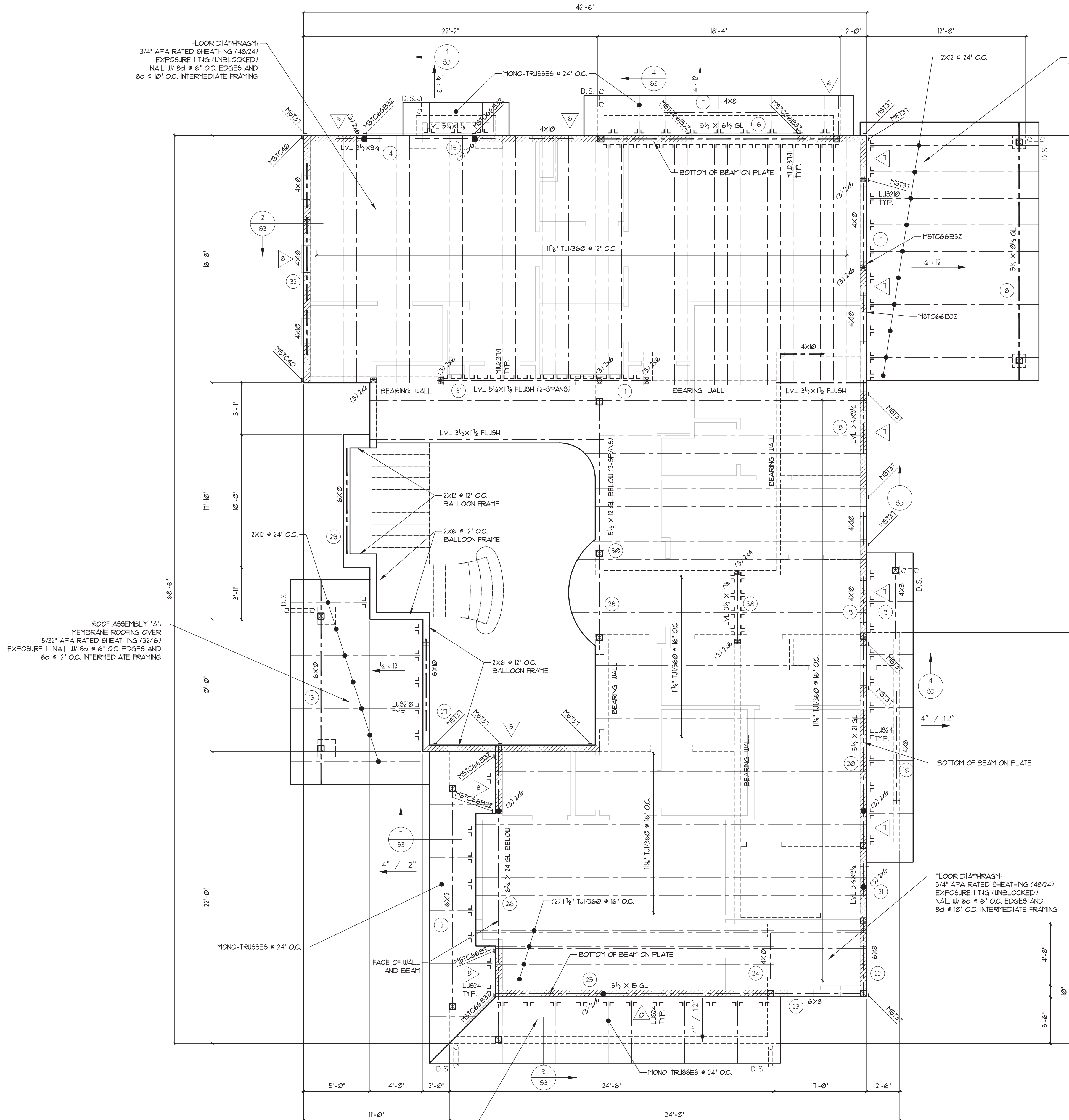
**NW ENGINEERING**  
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DESIGN BY: NPN	DESIGN BY:
REV. DATE:	COMMENTS:

Project # :  
**12022**  
Sheet  
**S4**

Plot Date: 06/15/2022

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FLOOR DIAPHRAGM:  
3/4" APA RATED SHEATHING (48/24)  
EXPOSURE 1 T4G (UNBLOCKED)  
NAIL W/ 8d @ 6" O.C. EDGES AND  
8d @ 10" O.C. INTERMEDIATE FRAMING

ROOF ASSEMBLY 'B':  
MEMBRANE ROOFING OVER  
5/32" APA RATED SHEATHING (32/16)  
EXPOSURE 1. NAIL W/ 8d @ 6" O.C. EDGES AND  
8d @ 12" O.C. INTERMEDIATE FRAMING

ROOF ASSEMBLY 'A':  
MEMBRANE ROOFING OVER  
5/32" APA RATED SHEATHING (32/16)  
EXPOSURE 1. NAIL W/ 8d @ 6" O.C. EDGES AND  
8d @ 12" O.C. INTERMEDIATE FRAMING

ROOF ASSEMBLY 'A':  
MEMBRANE ROOFING OVER  
5/32" APA RATED SHEATHING (32/16)  
EXPOSURE 1. NAIL W/ 8d @ 6" O.C. EDGES AND  
8d @ 12" O.C. INTERMEDIATE FRAMING

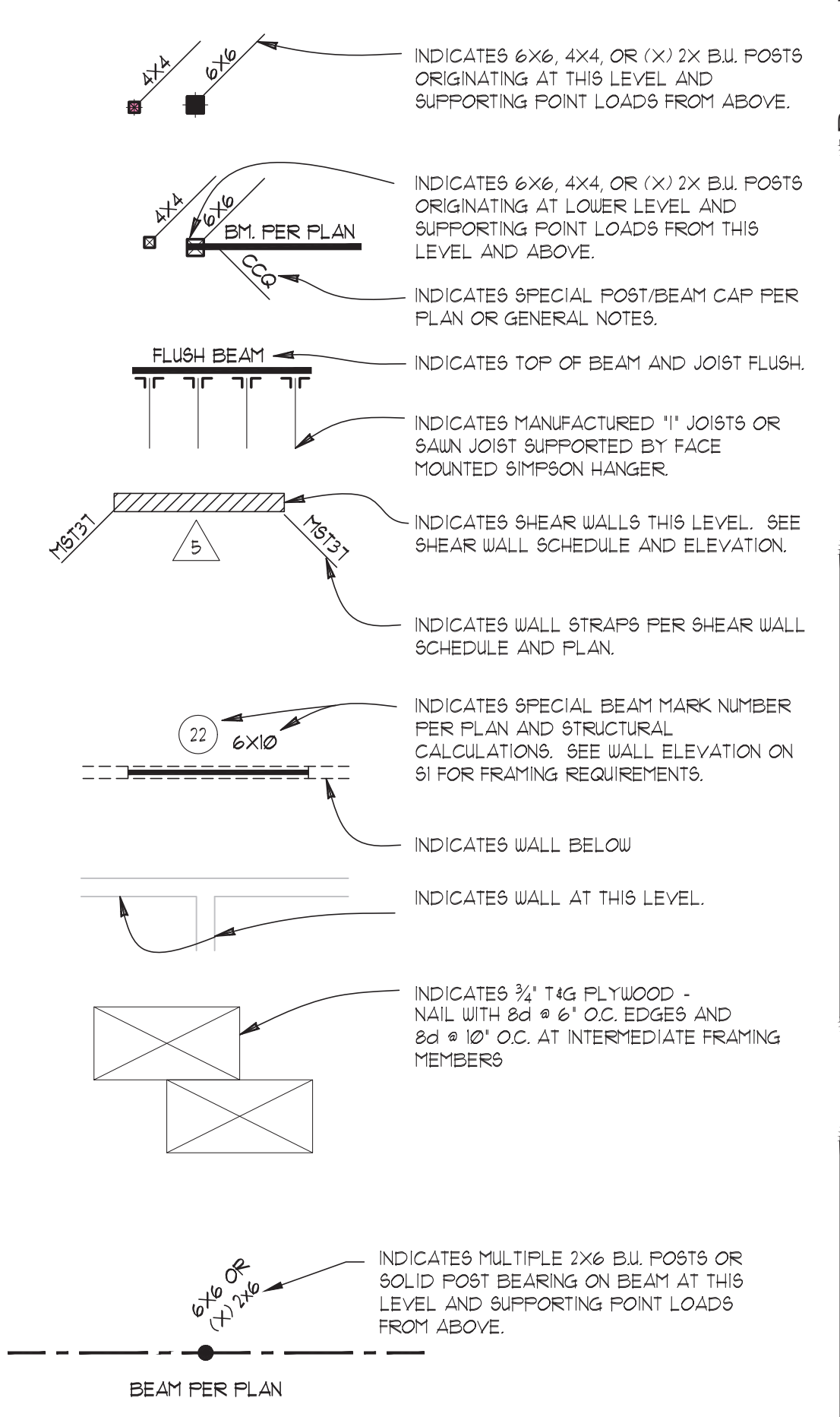
### UPPER FLOOR FRAMING PLAN

1/4" = 1'-0"  
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS  
WITH ARCHITECTURAL DRAWINGS.

#### FLOOR FRAMING NOTES:

- ALL EXTERIOR HEADERS SHALL BE 6X10 DP2 UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR HEADERS SHALL BE 4X10 DP2 UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WALL STUDS SHALL BE 2X6 HEM-FIR #2 SPACED AT 16" O.C. UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR WALL STUDS SHALL BE 2X4 HEM-FIR #2 SPACED AT 16" O.C. UNLESS NOTED OTHERWISE.
- FOR TYPICAL WALL FRAMING OR SHEAR WALL FRAMING SEE ELEVATION ON SHEET S1.
- PROVIDE SOLID BLOCKING BELOW BEARING WALL OR SHEAR WALL PERPENDICULAR TO JOISTS. NAIL WALL SOLE PLATE TO JOISTS OR BEAM PER SHEAR WALL SCHEDULE OR NOTE 8. OR SHEAR WALL SCHEDULE NOTES.
- PROVIDE DOUBLE JOISTS OR BEAM (PER PLAN) BELOW SHEAR WALL PARALLEL TO TO JOISTS. NAIL WALL SOLE PLATE TO JOISTS OR BEAM PER SHEAR WALL SCHEDULE OR NOTE 10. OF SHEAR WALL SCHEDULE NOTES.
- PROVIDE JOIST BRIDGING PER JOIST MFR'S RECOMMENDATIONS.
- PROVIDE SOLID 2X OR LVL RIM JOIST AT EXTERIOR WALL PER DETAIL AND PLAN. NAIL WALL SOLE PLATE TO RIM WITH PER SHEAR WALL SCHEDULE OR NOTE 10. OF SHEAR WALL SCHEDULE NOTES.
- FOR JOIST CONNECTION TO FLUSH OR UPSET BEAM ON ONE OR TWO SIDES, SEE DETAIL 1/51.
- FOR SOLID POST OR BUILT UP 2X POST BEARING ON EXTERIOR OR INTERIOR WALL, SEE DETAIL 3/51.
- NAIL JOISTS TO BEARING WALL TOP PLATES OR TOP OF BEAM WITH (2) 10d TOE NAIL EACH SIDE.
- PROVIDE WEB STIFFENERS AT 1' JOIST BEARING PER MFR'S RECOMMENDATIONS.
- NOTCHING IN 1" JOISTS NOT PERMITTED WITHOUT MFR'S APPROVAL.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE. ANY FIELD CUTS, NOTCHES, OR DRILLED HOLES SHALL BE RE-TREATED WITH AUFAM4.
- ALL FASTENERS & HARDWARE IN PRESSURE TREATED WOOD OR FIRE-RETARDANT WOOD SHALL BE 12MAX(G105 HDG PER ASTM A653).

#### LEGEND



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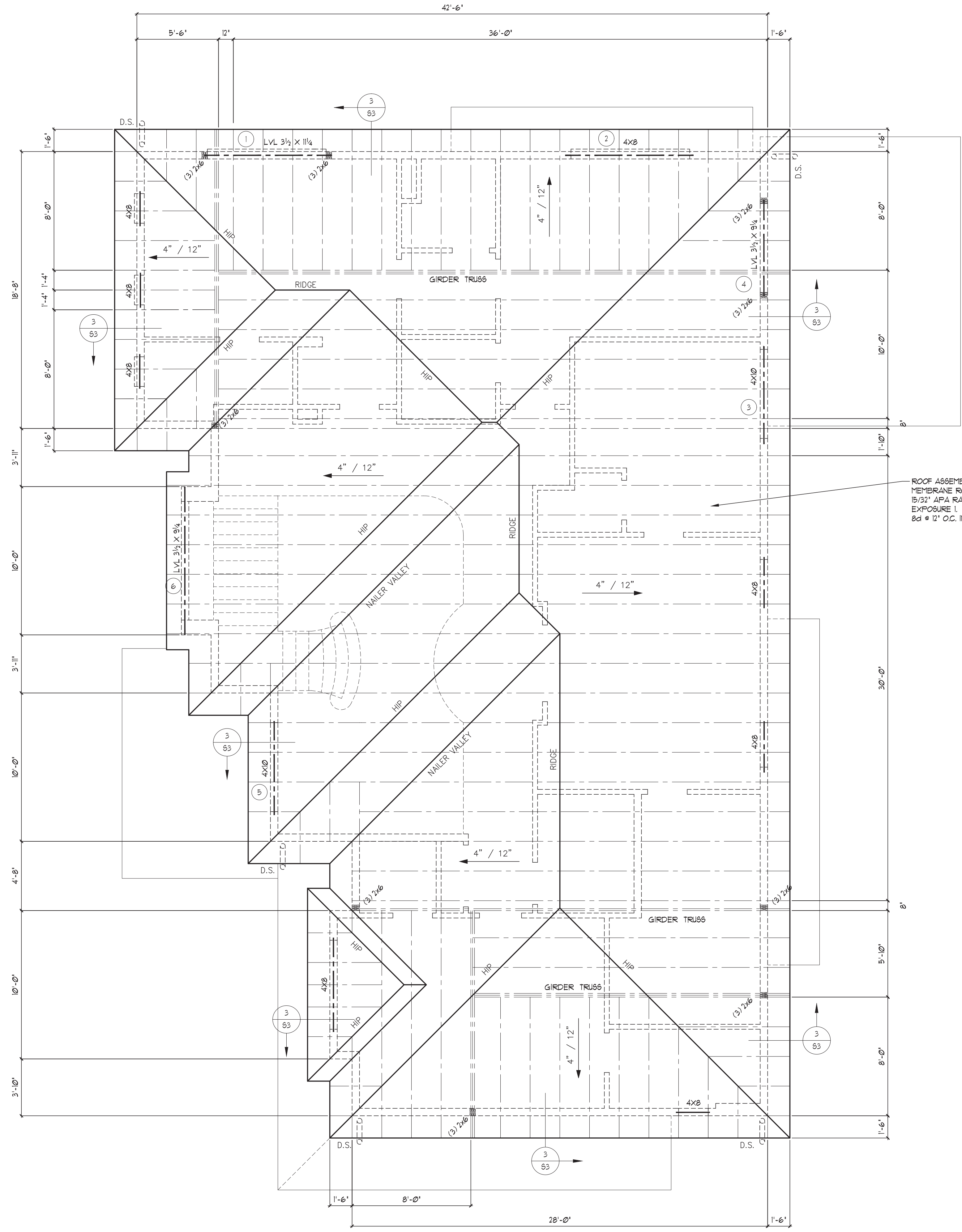
Prepared for  
**URBAN DESIGN GROUP**  
Contents  
**UPPER FLOOR FRAMING**

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EXPIRES JANUARY 31, 2024

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**ROOF FRAMING PLAN**

1/4" = 1'-0" DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

**ROOF FRAMING NOTES:**

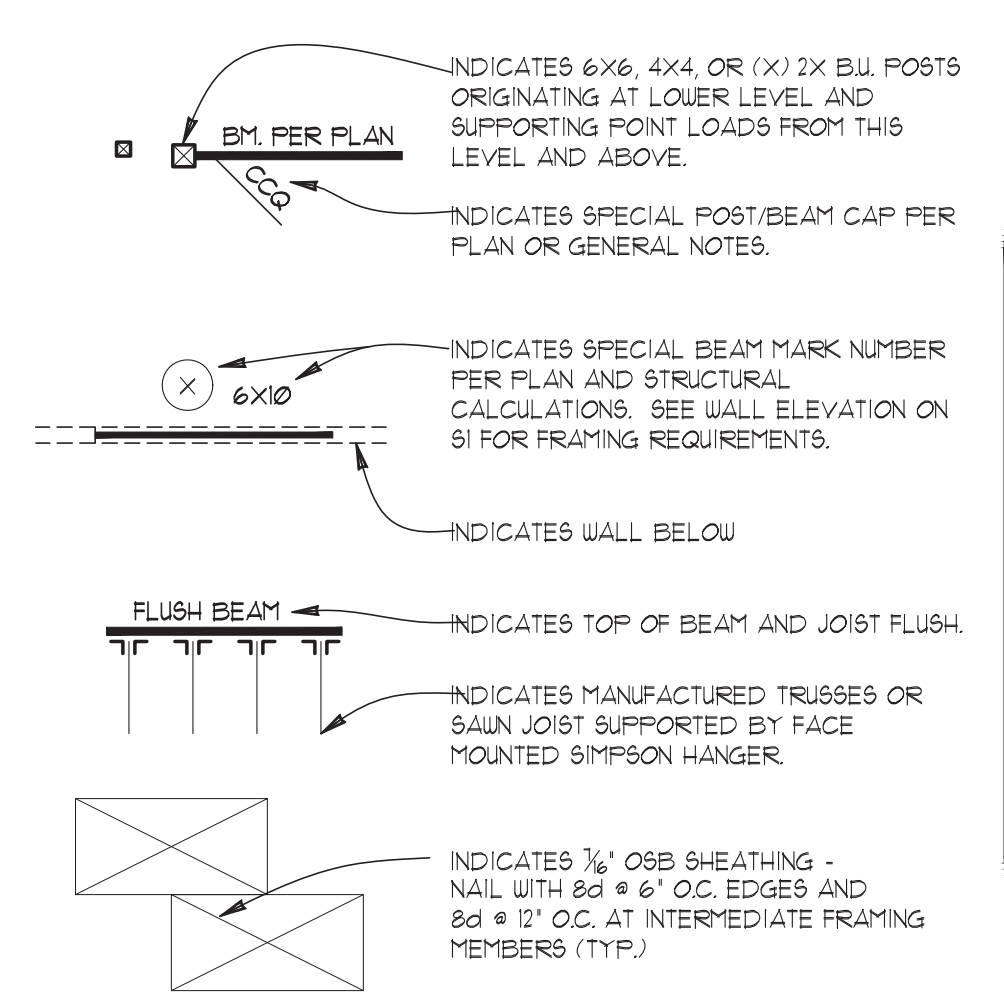
- ALL EXTERIOR HEADERS SHALL BE 6x8 DP2 UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR HEADERS SHALL BE 4x10 DP2 UNLESS NOTED OTHERWISE ON PLAN.
- SEE GENERAL NOTES AND TRUSS NOTES BELOW FOR TRUSS DESIGN SPECIFICATIONS.
- ALL SAUN ROOF JOISTS SHALL BE HP2 OR BETTER AND SPACED AT 24" O.C. UNLESS NOTED OTHERWISE.
- PRE-FRDR. TJ JOISTS SHALL BE OF THE SIZE AND SERIES SPECIFIED ON THE PLAN. VERIFY MFRD. PLACEMENT PLAN WITH STRUCTURAL. NOTIFY THIS OFFICE OF ANY CONFLICTS IN LAYOUT BEFORE INSTALLATION.
- PROVIDE ROOF VENTILATION PER CURRENT IRC OR IBC. SEE ARCHITECTURAL PLANS FOR SPECIFIC REQUIREMENTS.
- PROVIDE ATTIC ACCESS PANEL PER CURRENT IRC, IBC, AND ARCHITECTURAL PLANS FOR SPECIFIC REQUIREMENTS.

**WOOD TRUSSES (IBC 2303.4) SHALL BE:**

- DESIGNED PER IBC 2303.4.1 TO CARRY LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL POINT LOADS, UNIFORM LOADS, OR DRAG STRUT FORCES NOTED ON FRAMING PLANS.
- NON-ATTIC STORAGE TRUSSES SHALL BE DESIGNED WITH A LIVE LOAD OF 20 PBF LOCATED IN THE PLANE OF THE TRUSS. THE MAXIMUM STORAGE SPACE ABOVE THE BOTTOM CHORD SHALL BE LESS THAN 42" HIGH AND 24" WIDE.
- ATTIC TRUSSES SHALL BE DESIGNED FOR FLOOR LOADS LISTED IN THE DESIGN CRITERION AND LOCATED IN AREAS NOTED ON THE FRAMING PLANS.
- TRUSS DESIGN DRAWINGS AND DOCUMENT SUBMITTAL (2303.4.1) SHALL INCLUDE STRESS ANALYSIS AND PICTORIAL DEPICTION OF EACH TRUSS TYPE FOR THE PROJECT AND INCLUDING A TRUSS PLACEMENT DIAGRAM (2303.4.2). TRUSS INSTALLATION DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A LICENSED ENGINEER IN THE STATE OF WASHINGTON. APPROVED TRUSS DOCUMENTS SHALL REMAIN ON THE JOB SITE FOR INSPECTION.
- ALTERATIONS (2303.4.5) TRUSS MEMBERS SHALL NOT BE NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGNER. ALTERATIONS RESULTING IN THE ADDITION OF LOADS TO ANY MEMBER (E.G. HVAC EQUIPMENT, PIPING, ETC.) SHALL NOT BE PERMITTED WITHOUT APPROVAL OF TRUSS DESIGNER.
- TELL SPECIFICATIONS: THE DESIGN, MANUFACTURE, FABRICATION, AND QUALITY ASSURANCE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH TPI 1.
- TRUSSES SHALL BE BRACED TO MANUFACTURE'S SPECIFICATIONS.
- UNLESS NOTED OTHERWISE ON PLANS, ALL TRUSSES SHALL HAVE SIMPSON H-1 CLIPS AT EXTERIOR BEARING WALLS. AT GABLE END TRUSSES, PROVIDE SIMPSON A35 AT 24" O.C.
- PROVIDE 5TC CLIPS AT ALL TRUSSES OVER NON-BEARING WALLS.

ROOF ASSEMBLY 'A':  
MEMBRANE ROOFING OVER  
5/8" APA RATED SHEATHING (32/16)  
EXPOSURE 1. NAIL W/ 8d @ 6" O.C. EDGES AND  
8d @ 12" O.C. INTERMEDIATE FRAMING

**LEGEND**



COORDINATION OF CONSTRUCTION, INCLUDING VERIFICATION OF DIMENSIONS & FIELD CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO CONSTRUCTION.

**CONTRACTOR NOTE:**  
REFER TO TRUSS MANUFACTURER DWG. FOR TRUSS LAYOUT AND TYPES. USE THIS DRAWING FOR LOCATION OF SPECIAL BEAM SIZES, GIRDER TRUSS AND BUILT-UP POST LOCATIONS.

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