

ZETTEL RESIDENCE

6415 SE 24TH ST MERCER ISLAND 98040

PIANO NOBILE LLC

6227 5TH AVE NW
SEATTLE, WA 98107

917 714 5968 PH
WWW.STUDIOPIANONOBILE.COM
NICK@STUDIOPIANONOBILE.COM

PROJECT NOTES:

PROJECT NUMBERS: 2009-003
PROJECT DESCRIPTION: INTERIOR ALTERATIONS-NEW MAIN FLOOR LAYOUT AND SECOND FLOOR ADDITION WITHIN BUILDING FOOTPRINT
KING COUNTY ASSESSOR
PARCEL NUMBER: 409950-0875
PROJECT ADDRESS: 6415 SE 24TH ST MERCER ISLAND 98040
LEGAL DESCRIPTION: LAKE VIEW PLACE EAST SEATTLE ALL OF 21 THRU 24 LESS CO RD & E 20 FT OF 1 THRU 4
ZONING: R-8.4
CONSTRUCTION TYPE: TYPE V-NR
LOT AREA: 13,200 SF
EXISTING LOT COVERAGE: HOUSE: 1,480SF
FRONT PORCH: 130SF
SHED: 312SF
CARPORT: 440SF
PROPOSED LOT COVERAGE: NO NEW LOT COVERAGE
MAX ALLOWED: 4620 SF
BUILDING HEIGHT: 26'-5 1/2" FROM AVERAGE GRADE
PARKING REQUIREMENTS: 1 EXISTING

PROJECT DIRECTORY:

OWNER: ZETTEL, TRAVIS +CHANTEL
6415 SE 24TH ST
MERCER ISLAND, WA 98040
ARCHITECT: PIANO NOBILE LLC
6227 5TH AVE NW
SEATTLE, WA 98107
CONTACT: NICK ROBERTSON
(917) 714-5968

SCOPE OF WORK:

1. RENOVATION OF EXISTING SINGLE FAMILY RESIDENCE

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GENERAL NOTES:

- ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE CURRENT EDITIONS OF THE INTERNATIONAL RESIDENTIAL CODE, WASHINGTON STATE ENERGY CODE, WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE, UNIFORM PLUMBING CODE, NATIONAL ELECTRIC CODE, AND WASHINGTON STATE DEPARTMENT OF LABOR AND INDUSTRIES REGULATIONS.
ALL NOTES AND SPECIFICATIONS TO COMPLY WITH THE 2006 SEATTLE IRC, AND CURRENT EDITIONS ENERGY CODE AND SEATTLE MECHANICAL CODE.
- GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE ALL EXISTING AND NEW UTILITIES AND SITE CONDITIONS BEFORE AND DURING CONSTRUCTION. INFORM ARCHITECT OF VARIATIONS BETWEEN CONTRACT DOCUMENTS AND EXISTING CONDITIONS.
- DO NOT SCALE DRAWINGS; VERIFY ALL DIMENSIONS ON THE JOB.
- DIMENSIONS ARE TO FACE OF FINISHED WALLS UNLESS OTHERWISE NOTED.
- FLOOR-TO-FLOOR DIMENSIONS FROM TOP OF SUBFLOOR TO TOP PLATES, UNLESS NOTED OTHERWISE.
- PROVIDE SOLID BLOCKING BEHIND ALL WALL HUNG FIXTURES AND ACCESSORIES.

CODE NOTES:

- OPENINGS SHALL BE CAULKED, SEALED, OR WEATHERSTRIPPED.
- SEAL TEARS AND JOINTS IN INSULATION WITH TAPE.
- MOISTURE CONTROL TO BE PROVIDED PER WA STATE ENERGY CODE.
- HOT WATER HEATERS SHALL COMPLY WITH THE NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
- PROVIDE SEISMIC STRAP FOR EXIST. WATER HEATER.
- SERVICE WATER PIPES IN UNHEATED SPACES SHALL BE INSULATED PER WA STATE ENERGY CODE.
- PROVIDE FIRE BLOCKING, DRAFTSTOPS AND FIRESTOPS PER THE SRC
- PROVIDE APPROVED SECURITY AND LOCKING DEVICES AT NEW DOORS AND WINDOWS PER SRC

ENERGY NOTES:

PRESCRIPTIVE REQUIREMENTS FOR GROUP R OCCUPANCY CLIMATE ZONE 1

OPTION	GLAZING AREA % OF FLR	DOORS U-FACTOR	CEILING	GRADE	GRADE	GRADE	GRADE
IV	UNLIMITED	.30	.58	.20	R-38	R-30	R-21
					R-10	R-30	R-10

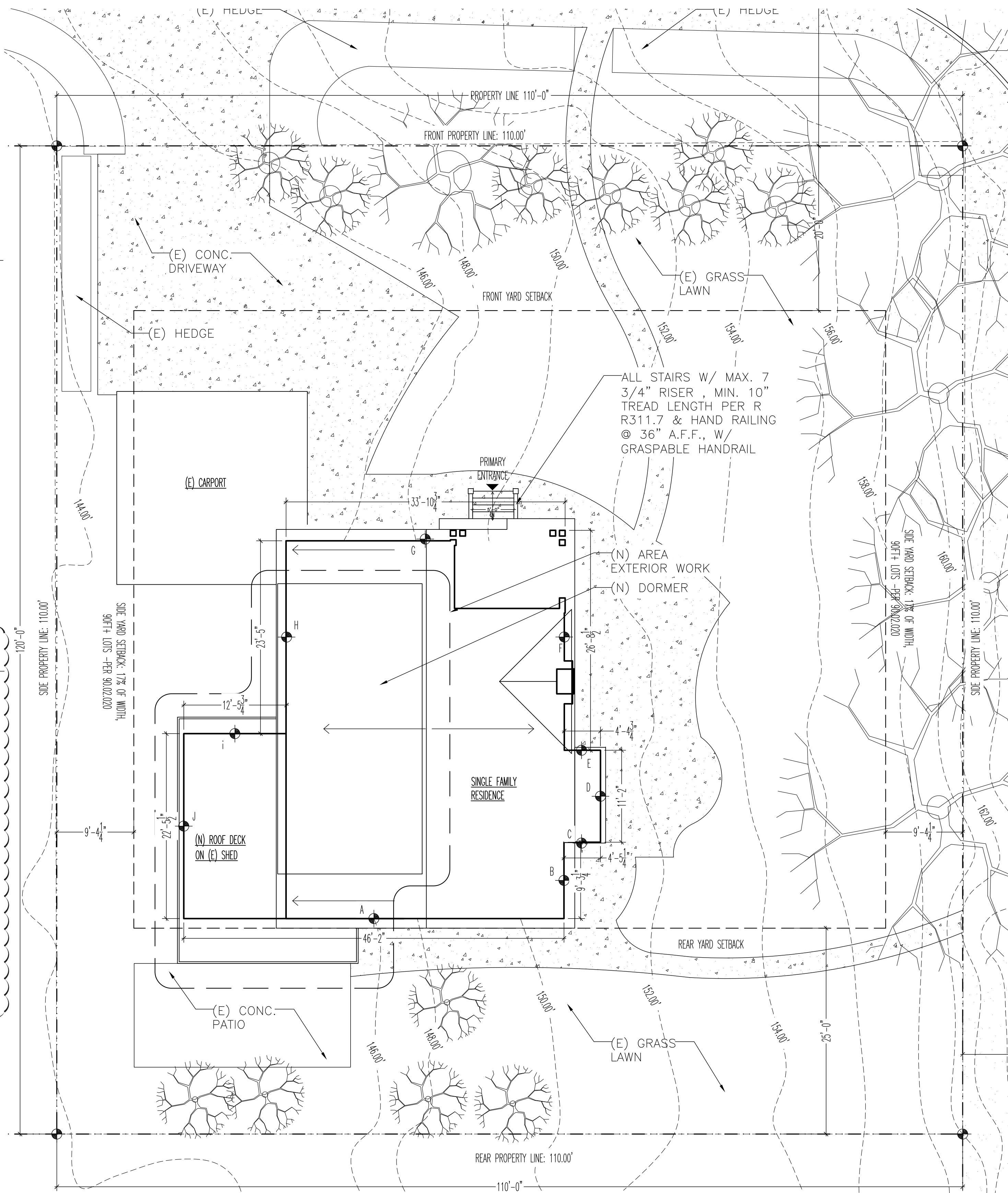
AVERAGE BUILDING ELEVATION CALCULATION

(MIDPOINT GRADE ELEVATIONS X SIDE LENGTHS)
 $(146' \times 41.17') + (150.75' \times 9.33') + (150.75' + 4.41') + (151' \times 11.17') + (150.75' \times 4.41') + (150.75' \times 26.67') + (148' \times 33.83') + (145.75' \times 23.41') + (145.5' \times 12.5') + (145' \times 22.41')$

41.17' + 9.33' + 4.41' + 11.17' + 4.41' + 26.67' + 33.83' + 23.41' + 12.5' + 22.41'
(TOTAL SIDE LENGTHS)

A:146.00'	a:41.17'
B:150.72'	b:9.33'
C:150.75'	c:4.41'
D:151.00'	d:11.17'
E:150.75'	e:4.41'
F:150.75'	f:26.67'
G:148.00'	g:33.83'
H:145.75'	h:23.41'
I:145.50'	i:12.50'
J:145.00'	j:22.41'

$\frac{27941.12}{147.59}$
AVERAGE GRADE = 147.59'



Date	Revision

6415 SE 24TH ST
MERCER ISLAND WA 98040

Drawing Title

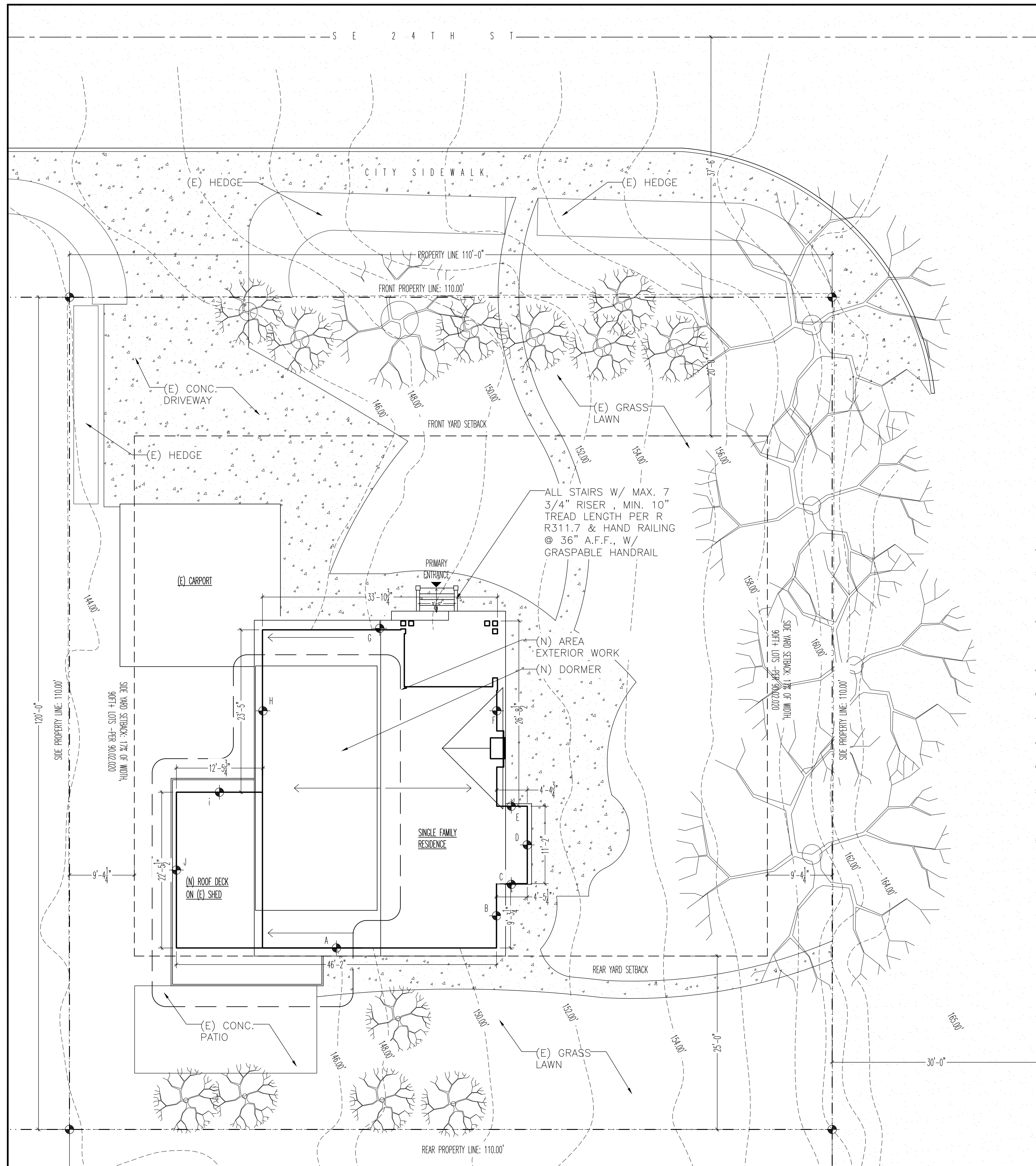
INFO AND NOTES

Drawing No.

A1

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted



AVERAGE BUILDING
ELEVATION CALCULATION

(MIDPOINT GRADE ELEVATIONS X SIDE LENGTHS)
 $(146' \times 41.17') + (150.75' \times 9.33') + (150.75' \times 4.41') +$
 $(151' \times 11.17') + (150.75' \times 4.41') +$
 $(150.75' \times 26.67') + (148' \times 33.83') + (145.75' \times 23.41') +$
 $(145.5' \times 12.5') + (145' \times 22.41')$

41.17' + 9.33' + 4.41' + 11.17' + 4.41' + 26.67'
 + 33.83' + 23.41' + 12.5' + 22.41'
 (TOTAL SIDE LENGTHS)

$(6010.82) + (1406.49) + (664.8') +$
 $(1686.67') + (664.80') +$
 $(4020.5') + (5006.84') + (3412') +$
 $(1818.75') + (3249.45')$

189.31

27941.12

147.59

AVERAGE GRADE = 147.59'

A:146.00'	a:41.17'
B:150.72'	b:9.33'
C:150.75'	c:4.41'
D:151.00'	d:11.17'
E:150.75'	e:4.41'
F:150.75'	f:26.67'
G:148.00'	g:33.83'
H:145.75'	h:23.41'
i:145.50'	i:12.50'
J:145.00'	j:22.41'

PROPERTY LINES DETERMINED BY COUNTY
RECORDS. PHYSICAL LOCATION TO BE
DETERMINED BY A CERTIFIED LAND
SURVEYOR

PROJECT: 6415 SE 24TH ST MERCER ISLAND 98040
 OWNERS: ZETTEL TRAVIS + CHANTEL
 LEGAL DESCRIPTION: LAKE VIEW PLACE EAST SEATTLE ALL OF 21
 THRU 24 LESS CO RD & E 20 FT OF 1 THRU
 4
 PLAT BLOCK: 6
 PLAT LOT: 21 THRU 24 &
 PARCEL NUMBER: 409950-0875
 SCOPE OF WORK: REMODEL AND INTERIOR ALTERATIONS
 PER PLAN
 LOT SIZE: 13,200 SQFT

A 6415 SE 24TH ST SITE PLAN
 SCALE: 1/8" = 1'-0"

Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

SITE PLAN

Drawing No.

A1.1

Job No. ZETTEL RESIDENCE

Date: 01.19.21

Scale: As Noted

ZETTEL RESIDENCE

DOOR SCHEDULE

JOB SITE ADDRESS
6415 SE 24TH ST
MERCER ISLAND WA 98

REVISION DATE 7/12/2020
EDITED BY: NICK ROBERTSON
SITE LEAD: _____
DESIGNER PHONE: _____
DESIGNER EMAIL: _____

SIMBOL	LOCATION	WIDTH IN INCHES	HEIGHT IN INCHES	STYLE	MANUFACTURER	FINISH	HARDWARE	GLAZING AREA	U VALUE	NOTES	
A	BASEMENT BATHROOM	28	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
B	BASEMENT BEDROOM	32	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
C	MECH ROOM	48	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
D	LAUNDRY	32	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			POCKET DOOR	
E	ENTRY	24	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
F	LIVING/DINNING ROOM	36	78	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			FRENCH DOOR W/ SAFETY GLASS- EXTERIOR DOOR	
G	KITCHEN	30	78	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			SAFETY GLASS- EXTERIOR DOOR	
H	MASTER BEDROOM	30	78	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
I	MASTER BEDROOM	30	78	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
J	MASTER BATHROOM	32	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			FRENCH DOOR	
K	MASTER BEDROOM	24	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
L	STAIR/HALLWAY	32	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
M	POWDER ROOM	24	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
N	2ND FLOOR STORAGE	48	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
O	2ND FLOOR BATHROOM	30	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
P	OFFICE	32	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			POCKET DOOR	
Q	2ND FLOOR BEDROOM	30	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B				
R	2NS FLOOR BEDROOM	48	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			FRENCH DOOR	
S	2NS FLOOR BEDROOM	48	80	SEE ELEVATION	FRANK LUMBER	PAINTED	10B			FRENCH DOOR	
TOTAL WINDOW GLAZING AREA IN SQFT											

ZETTEL RESIDENCE

JOB SITE ADDRESS
6415 SE 24TH ST
MERCER ISLAND WA 98040

REVISION DATE 07/12/2020
EDITED BY: NICK ROBERTSON
SITE LEAD: _____
DESIGNER PHONE: _____
DESIGNER EMAIL: _____

#	LOCATION	WIDTH IN INCHES	HEIGHT IN INCHES	MODEL	STYLE	MANUFACTURER	FINISH	HARDWARE	GLAZING AREA SQFT	U VALUE	EGRESS UNIT	NOTES
1	KITCHEN	80	41 1/2	ULTIMATE G2	SEE ELEVATION	MARVIN	WHITE	T.B.D.	23.06	0.30	NO	
2	KITCHEN	80	41 1/2	ULTIMATE G3	SEE ELEVATION	MARVIN	WHITE	T.B.D.	23.06	0.30	NO	
3	KITCHEN	80	41 1/2	ULTIMATE G4	SEE ELEVATION	MARVIN	WHITE	T.B.D.	23.06	0.30	NO	SAFETY GLASS
4	MASTER BEDROOM	39 1/2	52 1/2	ULTIMATE G5	SEE ELEVATION	MARVIN	WHITE	T.B.D.	14.40	0.30	NO	
5	MASTER BEDROOM	87	52 1/2	ULTIMATE G6	SEE ELEVATION	MARVIN	WHITE	T.B.D.	31.72	0.30	YES	
6	MASTER BEDROOM	39 1/2	52 1/2	ULTIMATE G7	SEE ELEVATION	MARVIN	WHITE	T.B.D.	14.40	0.30	NO	
7	MASTER BATHROOM	32	43 1/2	ULTIMATE G8	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.67	0.30	NO	
8	MASTER BATHROOM	32	43 1/2	ULTIMATE G9	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.67	0.30	NO	
9	2ND FLOOR BEDROOM	45	41 1/2	ULTIMATE G10	SEE ELEVATION	MARVIN	WHITE	T.B.D.	12.97	0.30	YES	
10	OFFICE	23	35 1/2	ULTIMATE G11	SEE ELEVATION	MARVIN	WHITE	T.B.D.	5.67	0.30	NO	
11	OFFICE	23	59 1/2	ULTIMATE G12	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	
12	OFFICE	47 1/2	59 1/2	ULTIMATE G13	SEE ELEVATION	MARVIN	WHITE	T.B.D.	19.63	0.30	NO	
13	OFFICE	23	59 1/2	ULTIMATE G14	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	SAFETY GLASS
14	FAMILY ROOM	23	59 1/2	ULTIMATE G15	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	SAFETY GLASS
15	FAMILY ROOM	73	59 1/2	ULTIMATE G16	SEE ELEVATION	MARVIN	WHITE	T.B.D.	30.16	0.30	NO	SAFETY GLASS
16	FAMILY ROOM	23	59 1/2	ULTIMATE G17	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	
17	FAMILY ROOM	23	59 1/2	ULTIMATE G18	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	
18	FAMILY ROOM	47 1/2	59 1/2	ULTIMATE G19	SEE ELEVATION	MARVIN	WHITE	T.B.D.	19.63	0.30	NO	
19	FAMILY ROOM	23	59 1/2	ULTIMATE G20	SEE ELEVATION	MARVIN	WHITE	T.B.D.	9.50	0.30	NO	
20	FAMILY ROOM	23	35 1/2	ULTIMATE G21	SEE ELEVATION	MARVIN	WHITE	T.B.D.	5.67	0.30	NO	
21	2ND FLOOR BATHROOM	67 1/2	43 1/2	ULTIMATE G22	SEE ELEVATION	MARVIN	WHITE	T.B.D.	20.39	0.30	NO	
TOTAL WINDOW GLAZING AREA IN SQFT									320.16			

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Date Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

DOOR AND WINDOW
SCHEDULE

Drawing No.

A2

Job No. ZETTEL RESIDENCE

Date: 01.19.21

Scale: As Noted

WALL LEGEND

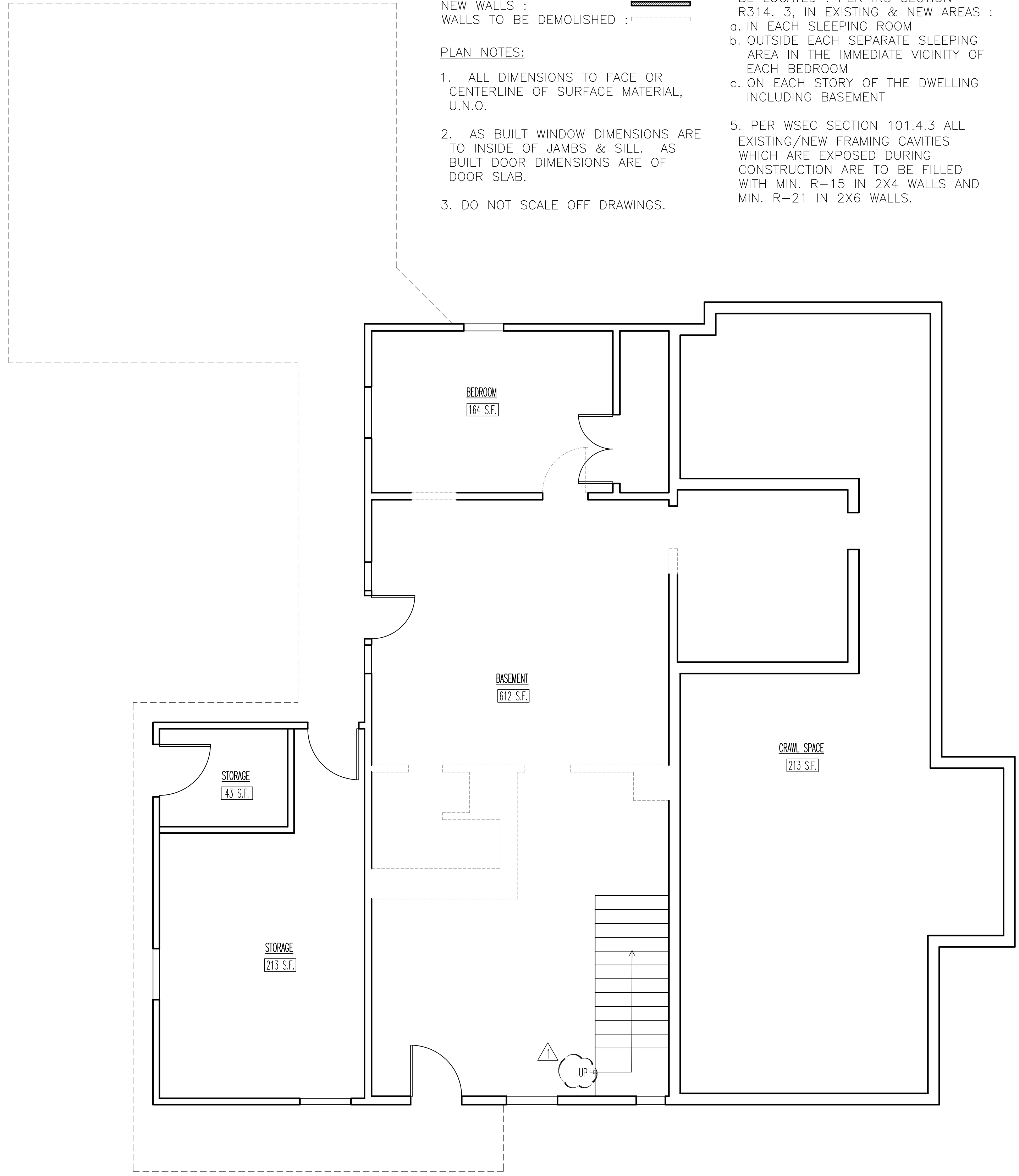
EXISTING WALLS : 
NEW WALLS : 
WALLS TO BE DEMOLISHED : 

PLAN NOTES:

1. ALL DIMENSIONS TO FACE OR CENTERLINE OF SURFACE MATERIAL, U.N.O.
2. AS BUILT WINDOW DIMENSIONS ARE TO INSIDE OF JAMBS & SILL. AS BUILT DOOR DIMENSIONS ARE OF DOOR SLAB.
3. DO NOT SCALE OFF DRAWINGS.

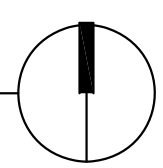
4. INTERCONNECTED SMOKE ALARMS TO BE LOCATED : PER IRC SECTION R314. 3, IN EXISTING & NEW AREAS :
 - a. IN EACH SLEEPING ROOM
 - b. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF EACH BEDROOM
 - c. ON EACH STORY OF THE DWELLING INCLUDING BASEMENT
5. PER WSEC SECTION 101.4.3 ALL EXISTING/NEW FRAMING CAVITIES WHICH ARE EXPOSED DURING CONSTRUCTION ARE TO BE FILLED WITH MIN. R-15 IN 2X4 WALLS AND MIN. R-21 IN 2X6 WALLS.

6. ENERGY CREDITS 2015 WA RESIDENTIAL ENERGY CODE R406.2.2 MEDIUM DWELLING UNIT, REQUIRED 3.5 CREDITS
 -0.5 OPTION 5B: EFFICIENT WATER HEATING, GAS, PROPANE OR OIL WATER HEATER WITH A MINIMUM EF OF 0.82



EXISTING BASEMENT FLOOR PLAN

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



Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title


EXISTING FLOOR PLANS

Drawing No.

A3

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted

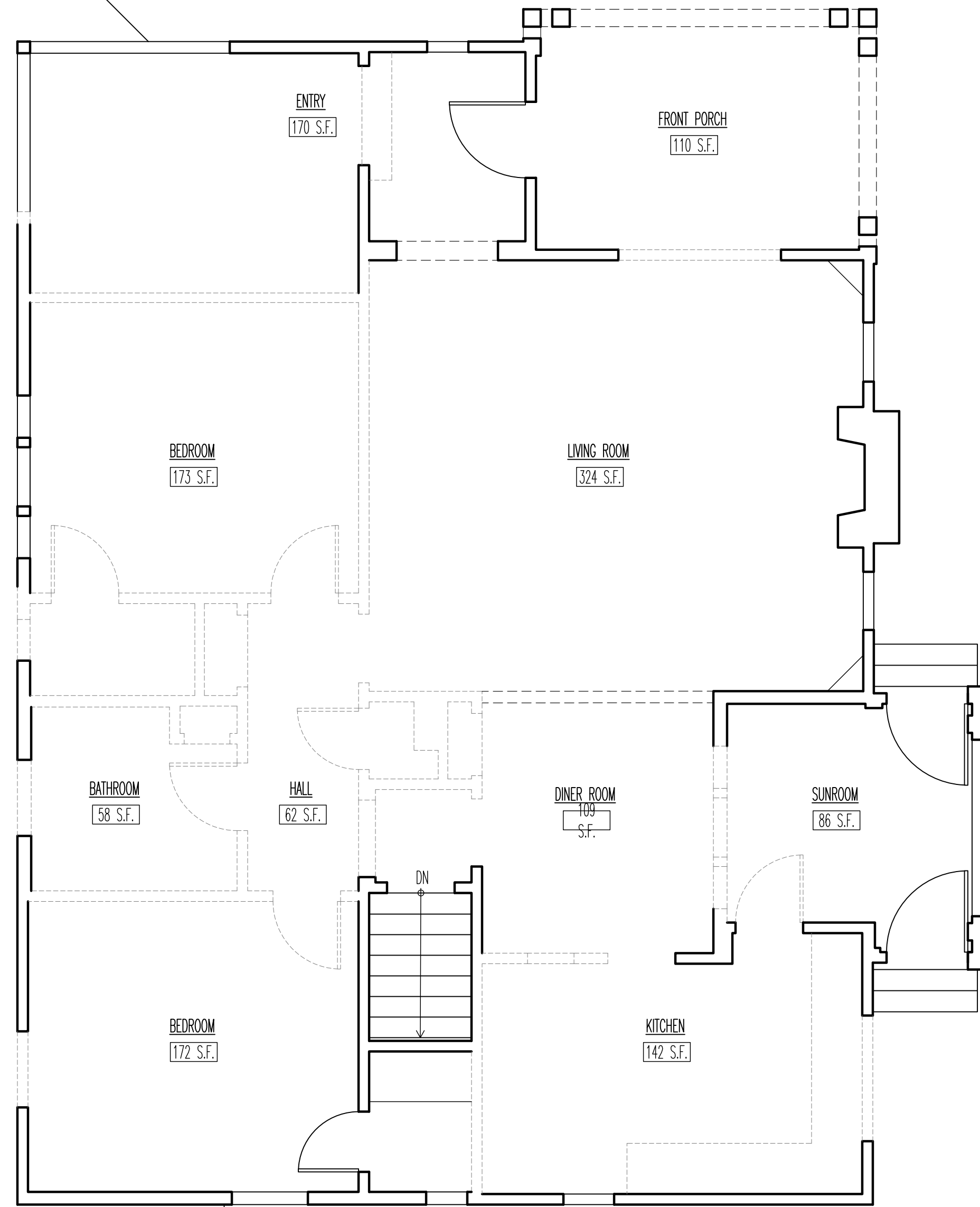
WALL LEGEND
EXISTING WALLS : 
NEW WALLS : 
WALLS TO BE DEMOLISHED : 

PLAN NOTES:

1. ALL DIMENSIONS TO FACE OR CENTERLINE OF SURFACE MATERIAL, U.N.O.
2. AS BUILT WINDOW DIMENSIONS ARE TO INSIDE OF JAMBS & SILL. AS BUILT DOOR DIMENSIONS ARE OF DOOR SLAB.
3. DO NOT SCALE OFF DRAWINGS.

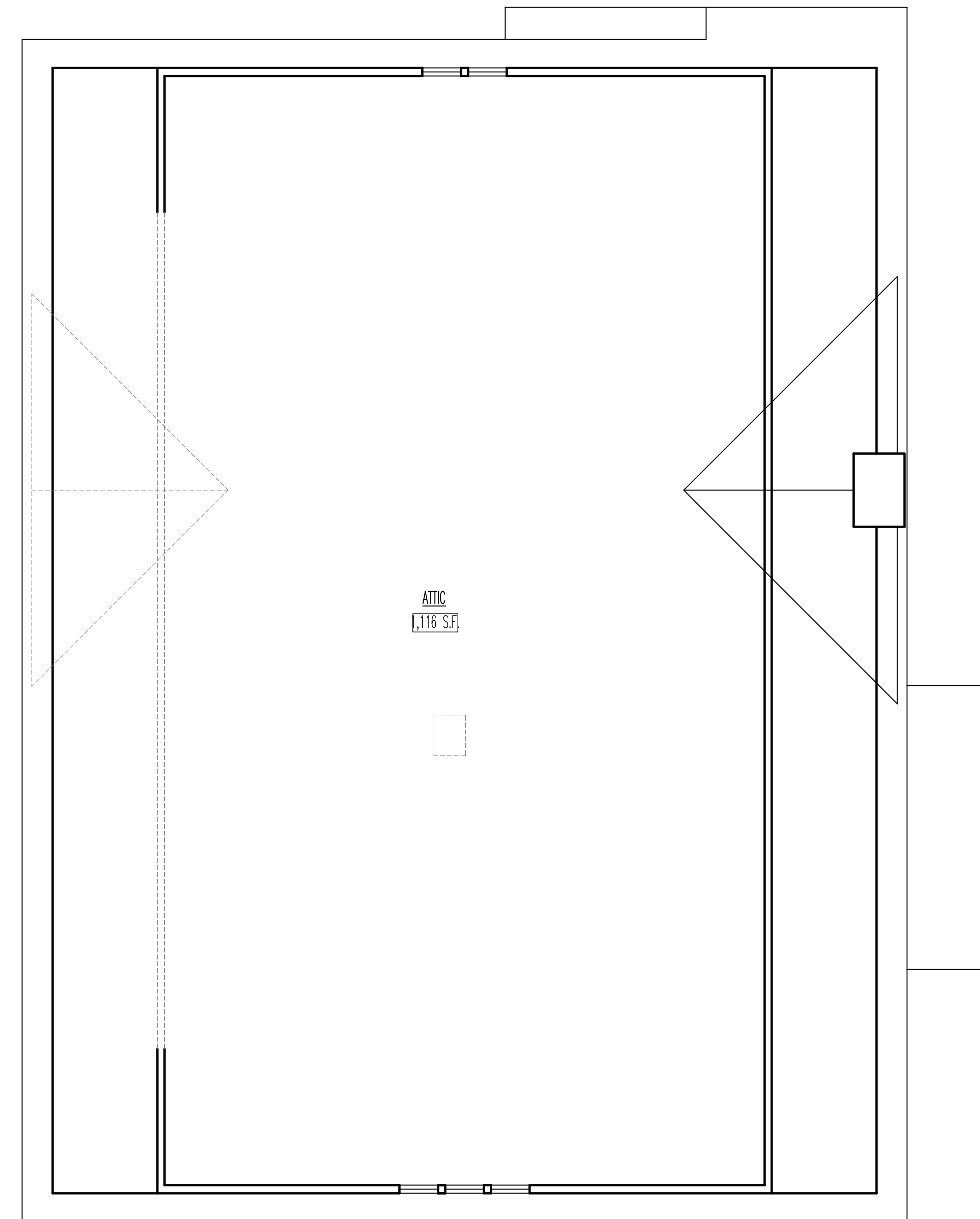
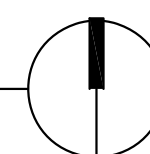
4. INTERCONNECTED SMOKE ALARMS TO BE LOCATED : PER IRC SECTION R314. 3, IN EXISTING & NEW AREAS :
 - a. IN EACH SLEEPING ROOM
 - b. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF EACH BEDROOM
 - c. ON EACH STORY OF THE DWELLING INCLUDING BASEMENT
5. PER WSEC SECTION 101.4.3 ALL EXISTING/NEW FRAMING CAVITIES WHICH ARE EXPOSED DURING CONSTRUCTION ARE TO BE FILLED WITH MIN. R-15 IN 2X4 WALLS AND MIN. R-21 IN 2X6 WALLS.

6. ENERGY CREDITS 2015 WA RESIDENTIAL ENERGY CODE R406.2.2 MEDIUM DWELLING UNIT, REQUIRED 3.5 CREDITS
 - 0.5 OPTION 5B: EFFICIENT WATER HEATING. GAS, PROPANE OR OIL WATER HEATER WITH A MINIMUM EF OF 0.82



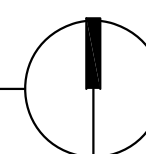
EXISTING MAIN FLOOR PLAN

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



EXISTING 2ND FLOOR PLAN

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



Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

EXISTING FLOOR PLANS

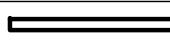

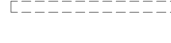
Drawing No.

A4

Job No. ZETTEL RESIDENCE

Date: 01.19.21

Scale: As Noted

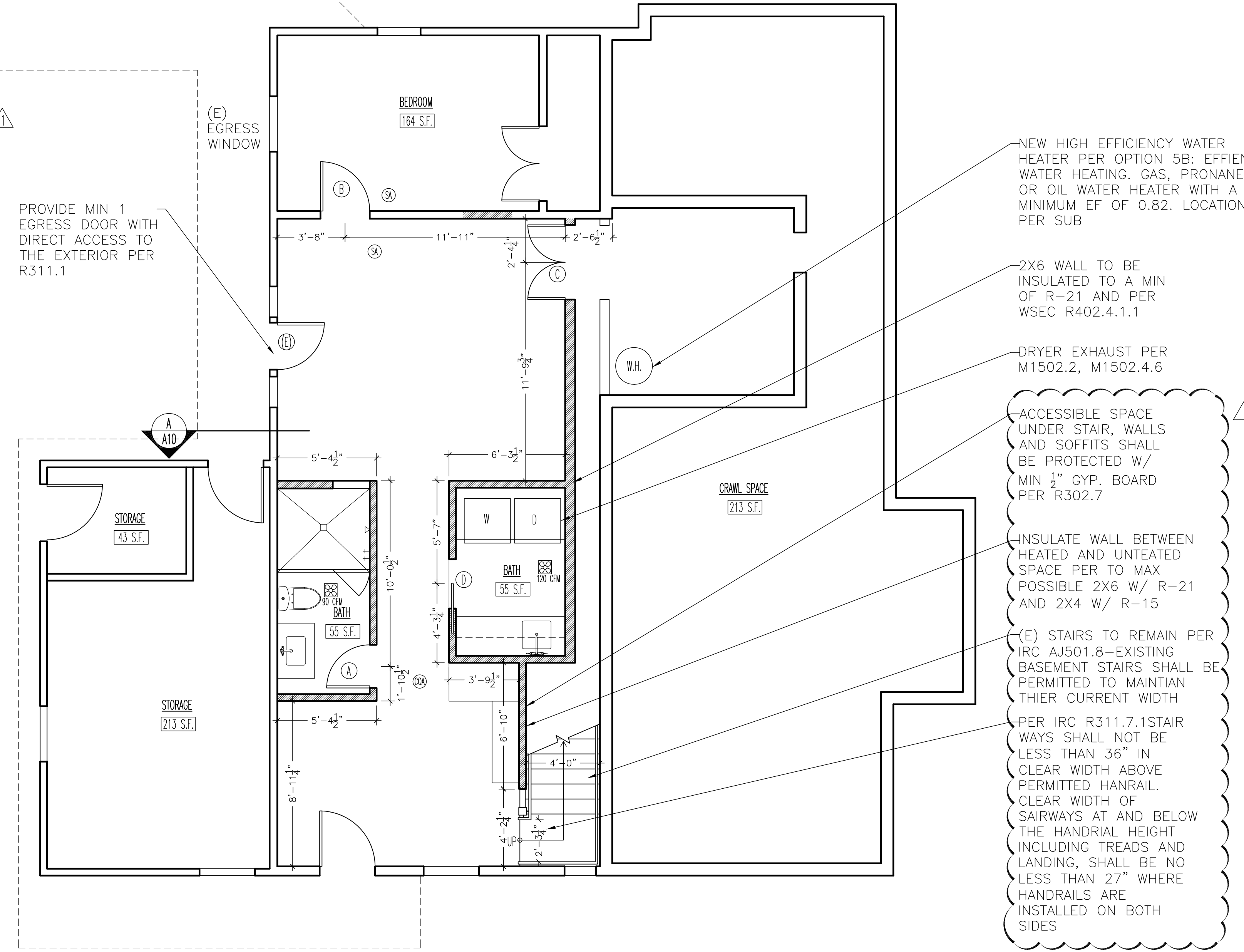
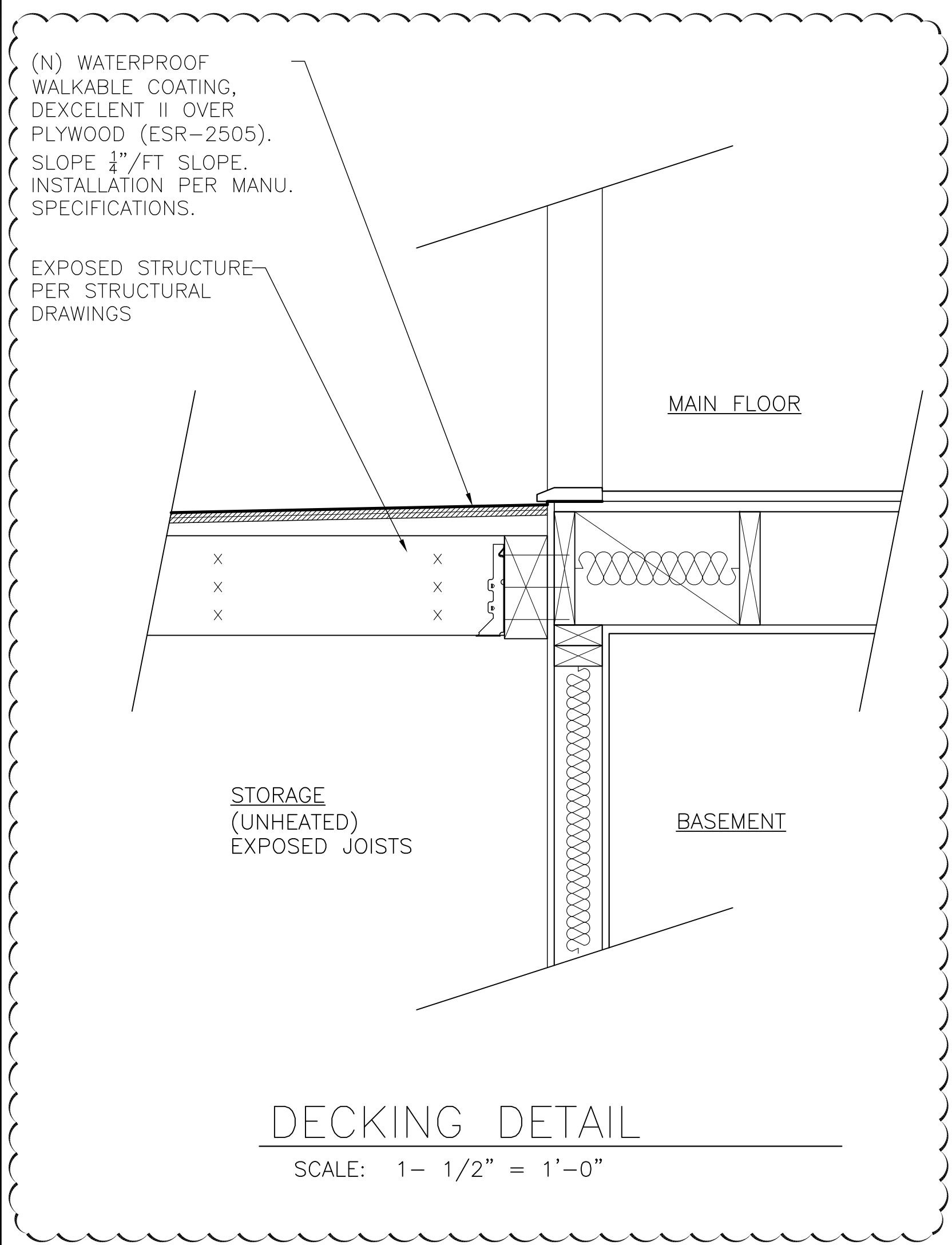
WALL LEGEND
EXISTING WALLS : 
NEW WALLS : 
WALLS TO BE DEMOLISHED : 

PLAN NOTES:

1. ALL DIMENSIONS TO FACE OR CENTERLINE OF SURFACE MATERIAL, U.N.O.
2. AS BUILT WINDOW DIMENSIONS ARE TO INSIDE OF JAMBS & SILL. AS BUILT DOOR DIMENSIONS ARE OF DOOR SLAB.
3. DO NOT SCALE OFF DRAWINGS.

4. INTERCONNECTED SMOKE ALARMS TO BE LOCATED : PER IRC SECTION R314. 3, IN EXISTING & NEW AREAS :
a. IN EACH SLEEPING ROOM
b. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF EACH BEDROOM
c. ON EACH STORY OF THE DWELLING INCLUDING BASEMENT
5. PER WSEC SECTION 101.4.3 ALL EXISTING/NEW FRAMING CAVITIES WHICH ARE EXPOSED DURING CONSTRUCTION ARE TO BE FILLED WITH MIN. R-15 IN 2X4 WALLS AND MIN. R-21 IN 2X6 WALLS.

6. ENERGY CREDITS 2015 WA RESIDENTIAL ENERGY CODE R406.2.2 MEDIUM DWELLING UNIT, REQUIRED 3.5 CREDITS
-0.5 OPTION 5B: EFFICIENT WATER HEATING. GAS, PROPANE OR OIL WATER HEATER WITH A MINIMUM EF OF 0.82



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

Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

PROPOSED FLOOR PLANS

Drawing No.

A5

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted

WALL LEGEND

EXISTING WALLS : 
NEW WALLS : 
WALLS TO BE DEMOLISHED : 

PLAN NOTES:

1. ALL DIMENSIONS TO FACE OR CENTERLINE OF SURFACE MATERIAL, U.N.O.

2. AS BUILT WINDOW DIMENSIONS ARE TO INSIDE OF JAMBS & SILL. AS BUILT DOOR DIMENSIONS ARE OF DOOR SLAB.

3. DO NOT SCALE OFF DRAWINGS.

4. INTERCONNECTED SMOKE ALARMS TO BE LOCATED : PER IRC SECTION R314.3, IN EXISTING & NEW AREAS :
a. IN EACH SLEEPING ROOM
b. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF EACH BEDROOM
c. ON EACH STORY OF THE DWELLING INCLUDING BASEMENT

5. PER WSEC SECTION 101.4.3 ALL EXISTING/NEW FRAMING CAVITIES WHICH ARE EXPOSED DURING CONSTRUCTION ARE TO BE FILLED WITH MIN. R-15 IN 2X4 WALLS AND MIN. R-21 IN 2X6 WALLS.

6. ENERGY CREDITS 2015 WA RESIDENTIAL ENERGY CODE R406.2.2 MEDIUM DWELLING UNIT, REQUIRED 3.5 CREDITS
-0.5 OPTION 5B: EFFICIENT WATER HEATING. GAS, PROPANE OR OIL WATER HEATER WITH A MINIMUM EF OF 0.82

GUARDRAIL REQUIRED ON OPEN SIDED WALKING SURFACE LOCATED MORE THAN 30" ABV. GRADE OR SURFACE PER R312.1 & R312.2. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION

EGRESS EMERGENCY ESCAPE AND RESCUE IN ALL SLEEPING AREAS, BEDROOMS PER R310.1

MINIMUM CEILING HEIGHT OF 7'-0" PER R305.1

2X6 WALL TO BE INSULATED TO A MIN OF R-21 AND PER WSEC R402.4.1.1

(N) RANGE HOOD, PROVIDE MAKE UP AIR UNIT IF OVER 400 CFM

RANGE HOODS SHALL DISCHARGE DIRECTLY TO THE OUTSIDE PER M1503
INSULATE TO MAX POSSIBLE WHERE OPENED, R-15 FOR 2X4, R-21 FOR 2X6

WHOLE HOUSE FAN TO BE PART OF AN INTEGRATED FORCED AIR HEATING AND VENTILATING.

SAFETY GLASS

SAFETY GLASS

EGRESS

(N) WATERPROOF WALKABLE COATING, DEXCELENT II OVER PLYWOOD (ESR-2505). SLOPE 1/4" / FT SLOPE. INSTALLATION PER MANU. SPECS.

SAFETY GLASS GUARDRAIL AND COMPONENTS PER R308.4.4

GUARDRAIL REQUIRED ON OPEN SIDED WALKING SURFACE LOCATED MORE THAN 30" ABV. GRADE OR SURFACE PER R312.1 & R312.2

ATTIC ACCESS TO MIN DIMENSIONS OF 22" X 30" PER R807.1, R311.4

HEATING PROVIDED BY EXTENSION OF EXISTING FORCED AIR SYSTEM, TYP.

2X6 WALL TO BE INSULATED TO A MIN OF R-21 AND PER WSEC R402.4.1.1

GUARDRAIL @ 36" A.F.F., MAX 4" BTWN VERTICALS W/ GRASPABLE HANDRAIL

ALL SMOKE ALARMS IN COMBINATION OF CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034. ALARMS SHALL BE LOCATED IN EACH SLEEPING AREA AND EVERY STORY OF THE DWELLING PER R314.2, R314.3 & R315 WAC 51510315

ALL STAIRS W/ MAX. 7 3/4" RISER, MIN. 10" TREAD LENGTH PER R 311.7 & HAND RAILING @ 36" A.F.F., W/ GRASPABLE HANDRAIL

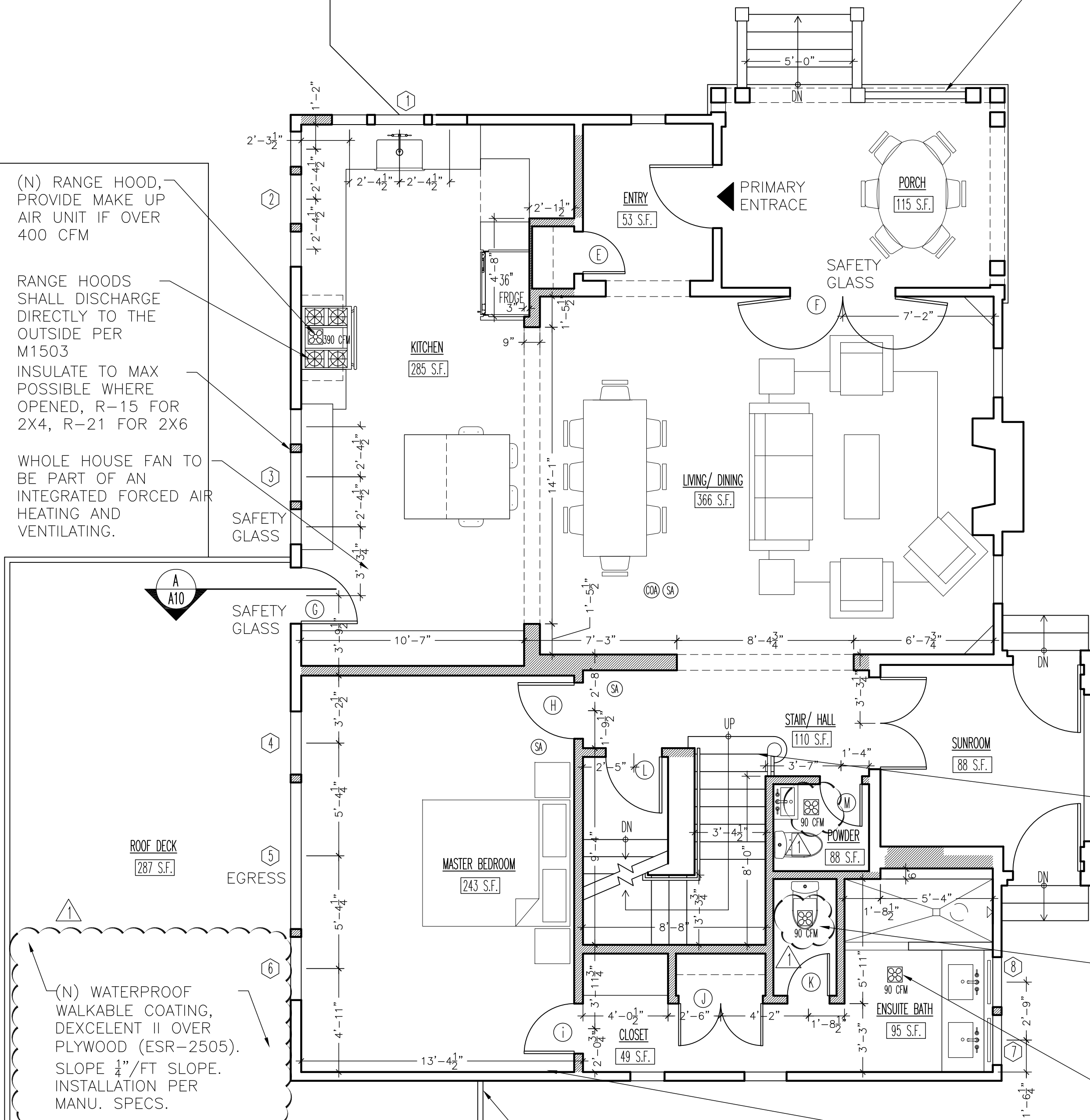
ALL BATHROOM FIXTURE CLEARANCES PER R307.2 24" IN FRONT OF A SHOWER 15" TO CENTERLINE OF TOILET

EXHAUST VENTILATION IN ALL LOCATIONS PER M 1507.1

EGRESS EMERGENCY ESCAPE AND RESCUE IN ALL SLEEPING AREAS, BEDROOMS PER R310.1

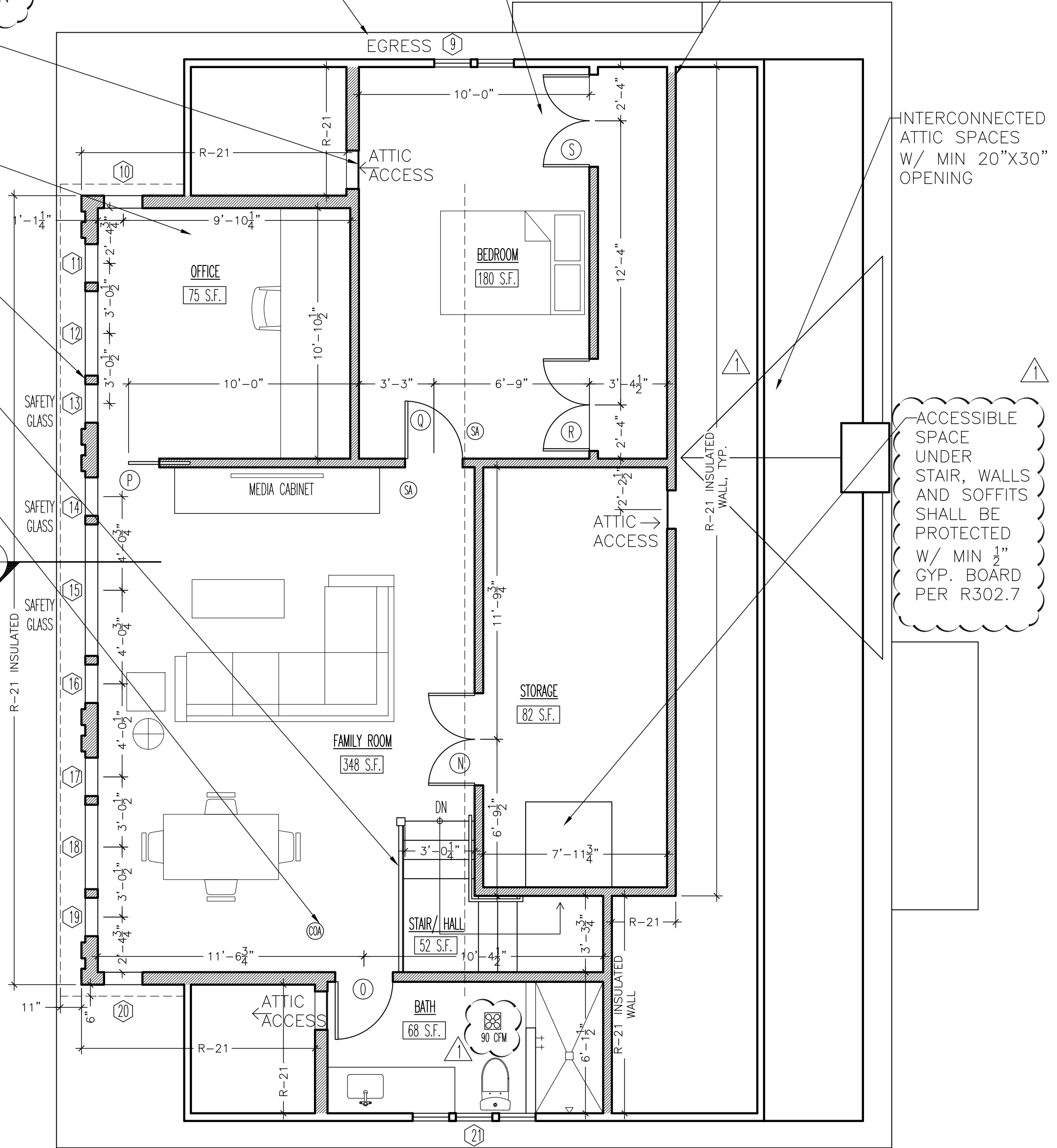
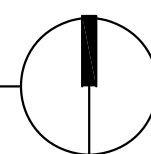
INTERCONNECTED ATTIC SPACES W/ MIN 20"X30" OPENING

ACCESSIBLE SPACE UNDER STAIR, WALLS AND SOFFITS SHALL BE PROTECTED W/ MIN 1/2" GYP. BOARD PER R302.7



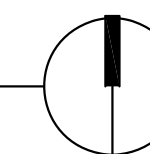
PROPOSED MAIN FLOOR PLAN

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



PROPOSED SECOND FLOOR PLAN

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



Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

PROPOSED FLOOR PLANS

Drawing No.

A6

Job No. ZETTEL RESIDENCE

Date: 01.19.21

Scale: As Noted

INSULATION CERTIFICATE:

A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR WITHIN THREE FEET OF THE ELECTRICAL DISTRIBUTION PANEL BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL. THE CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL AND SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BELOW-GRADE WALL, AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION, AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING DONE ON THE BUILDING. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL LIST THE TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT.

R806 ROOF VENTILATION.

R806.1 VENTILATION REQUIRED. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF $\frac{1}{16}$ INCH MINIMUM AND $\frac{1}{4}$ INCH MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN $\frac{1}{4}$ INCH SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF $\frac{1}{16}$ INCH MINIMUM AND $\frac{1}{4}$ INCH MAXIMUM.

R806.2 MINIMUM VENT AREA. THE MINIMUM NET FREE VENTILATING AREA SHALL BE $\frac{1}{150}$ OF THE AREA OF THE VENTED SPACE.

EXCEPTION: THE MINIMUM NET FREE VENTILATION AREA SHALL BE $\frac{1}{300}$ OF THE VENTED SPACE PROVIDED ONE OR MORE OF THE FOLLOWING CONDITIONS ARE MET:

1. IN CLIMATE ZONES 6, 7 AND 8, A CLASS I OR II VAPOR RETARDER IS INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING.
2. AT LEAST 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NO MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE SHALL BE PERMITTED.

VENTING WILL BE ACHIEVED BY:

COR-A-VENT VENTING AT RIDGE AND BIRD BLOCKING BETWEEN EACH RAFTER.

BAFFLE INSULATION WITH A MINIMUM 1" AIR SPACE BETWEEN THE RIGID INSULATION AND THE ROOF SHEATHING TO ALLOW AIR FLOW AND CROSS VENTILATION TO ROOF VENTS INSTALLED IN UPPER PORTION OF SPACE WHERE REQUIRED.

VENTING REQUIREMENTS:

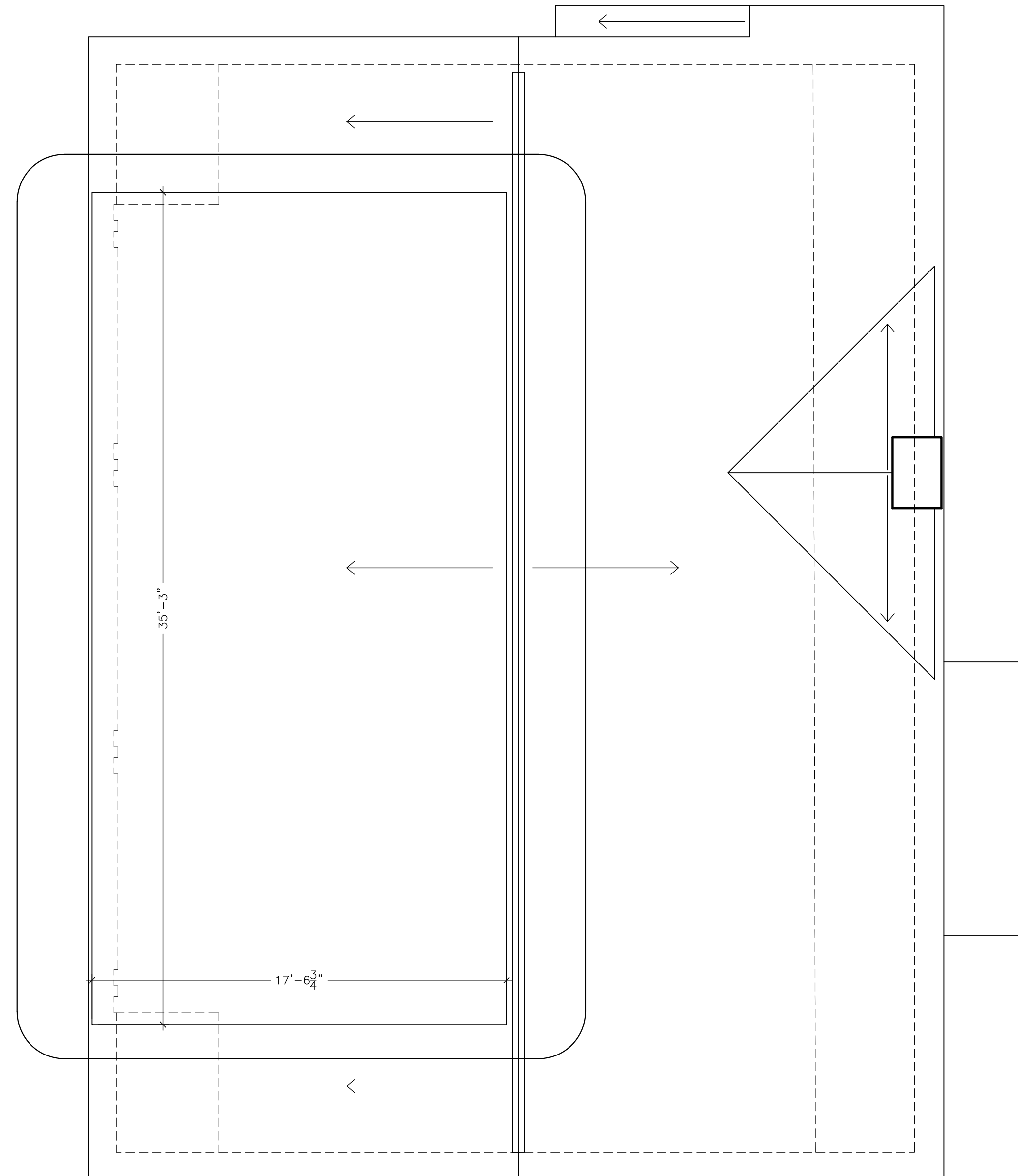
TOTAL NEW REPLACED ROOF AREA = 618 SQ FT
618 / 150 = 4.14 SF VENTING REQ'D 50% REQUIRED AT EAVES

PROPOSED ROOF VENTING:

- BIRD BLOCKING 5 SQ. IN/FT (65FT) = 27.0 S.F.
- 45 L.F. CONTINUOUS SCREENED RIDGE VENT @ 18 SQ. IN/FT = 67.5 SF

CROSS VENTILATION ACHIEVED 1" AIR GAP ABOVE INSULATION

TOTAL PROPOSED VENTING AREA: 94.8 SF



P R O P O S E D R O O F P L A N 
SCALE: $\frac{1}{4}$ " = 1'-0"

Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

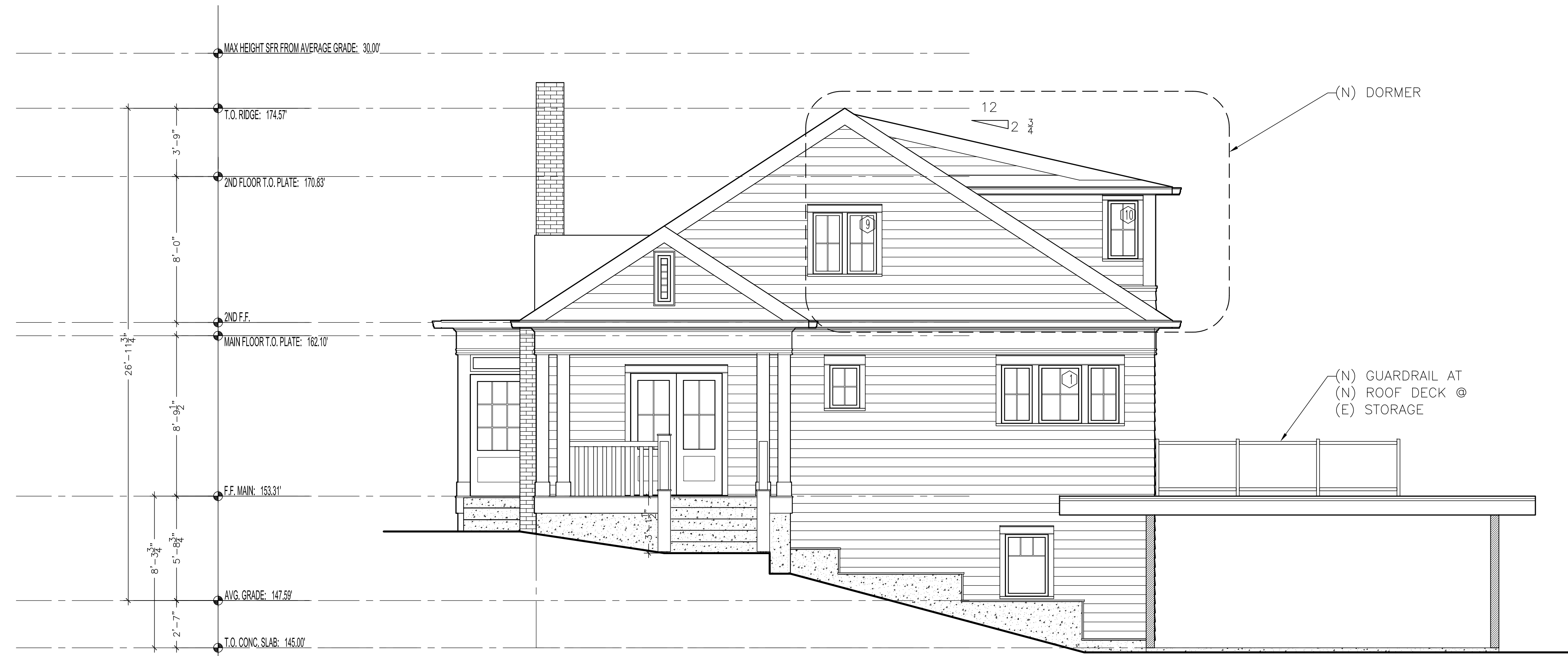
PROPOSED ROOF
PLAN

Drawing No.

A7

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted



PROPOSED NORTH EXTERIOR ELEVATION

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



PROPOSED EAST EXTERIOR ELEVATION

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

Date	Revision
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6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

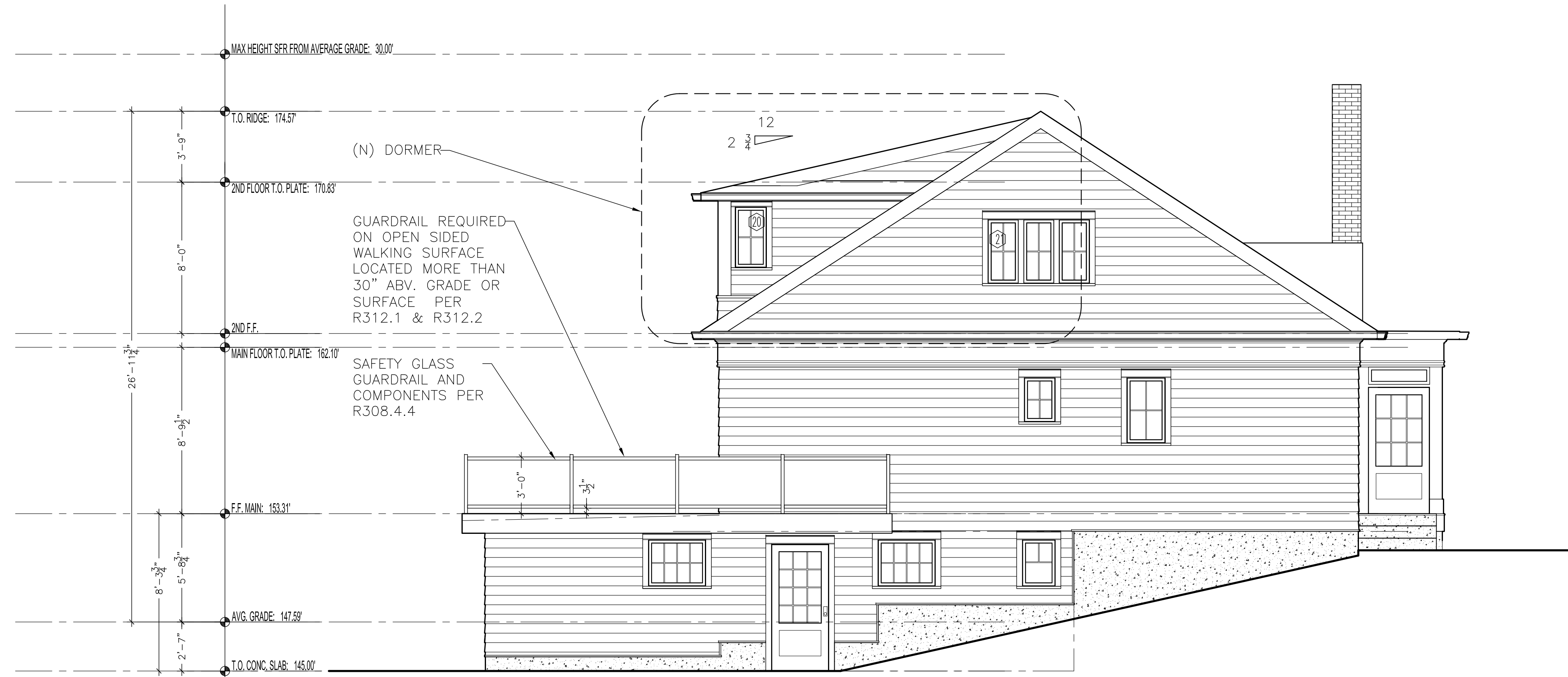
PROPOSED EXTERIOR
ELEVATIONS

Drawing No.

A8

Job No.	ZETTEL RESIDENCE
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Date:	01.19.21	Scale:	As Noted
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PROPOSED SOUTH EXTERIOR ELEVATION

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



PROPOSED WEST EXTERIOR ELEVATION

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

Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

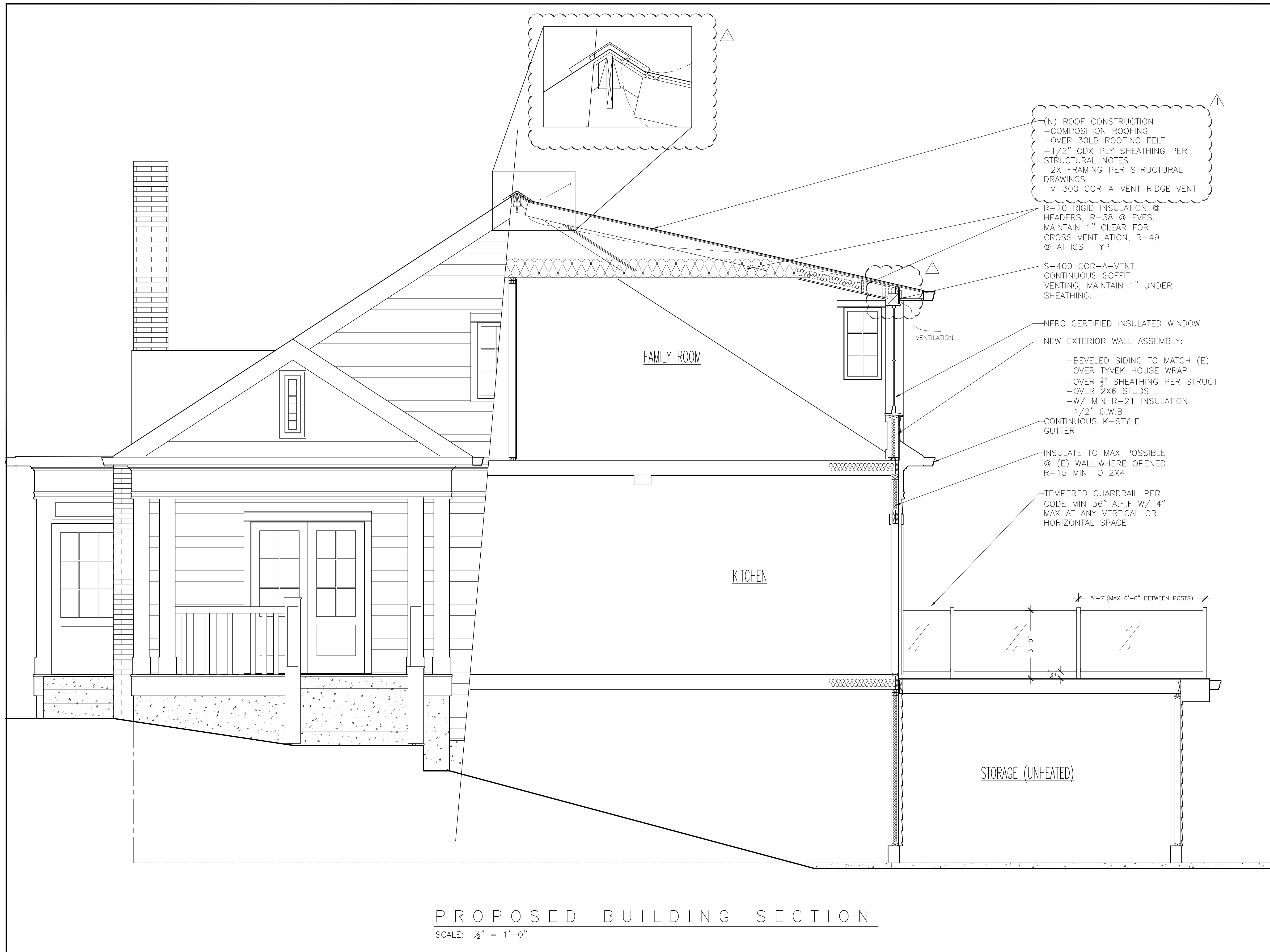
PROPOSED EXTERIOR
ELEVATIONS

Drawing No.

A9

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted



PROPOSED BUILDING SECTION

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

Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

PROPOSED BUILDING SECTION

Drawing No.

A10

Job No. ZETTEL RESIDENCE

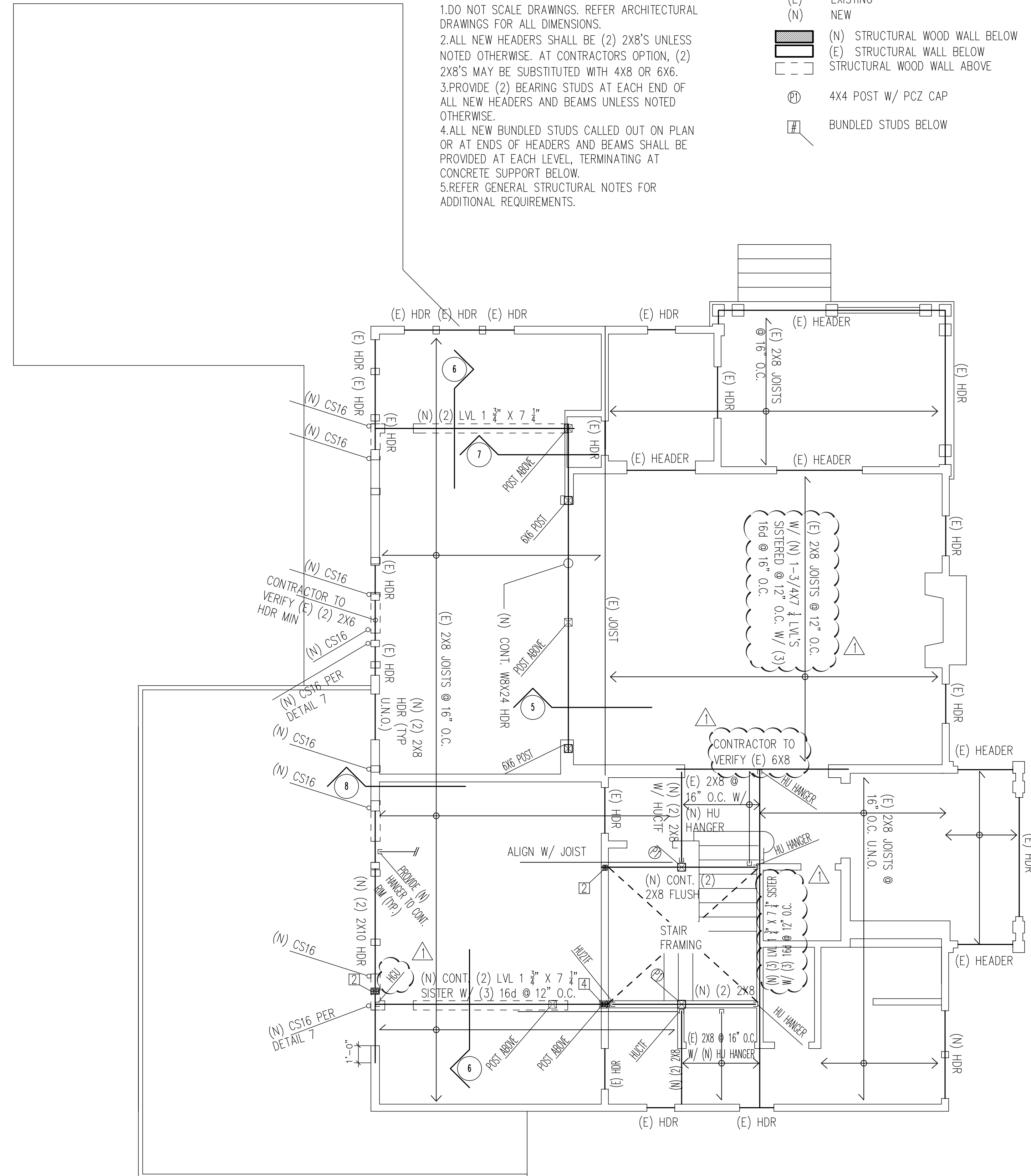
Date: 01.19.21 Scale: As Noted

UPPER FLOOR PLAN NOTES

1. DO NOT SCALE DRAWINGS. REFER ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. ALL NEW HEADERS SHALL BE (2) 2X8'S UNLESS NOTED OTHERWISE. AT CONTRACTOR'S OPTION, (2) 2X8'S MAY BE SUBSTITUTED WITH 4X8 OR 6X6.
3. PROVIDE (2) BEARING STUDS AT EACH END OF ALL NEW HEADERS AND BEAMS UNLESS NOTED OTHERWISE.
4. ALL NEW BUNDLED STUDS CALLED OUT ON PLAN OR AT ENDS OF HEADERS AND BEAMS SHALL BE PROVIDED AT EACH LEVEL, TERMINATING AT CONCRETE SUPPORT BELOW.
5. REFER GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

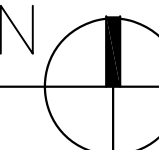
LEGEND

- (E) EXISTING
- (N) NEW
- (N) STRUCTURAL WOOD WALL BELOW
- (E) STRUCTURAL WALL BELOW
- STRUCTURAL WOOD WALL ABOVE
- 4X4 POST W/ PCZ CAP
- BUNDLED STUDS BELOW



PROPOSED UPPER FLOOR FRAMING PLAN

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



Date	Revision

6415 SE 24TH ST
MERCER ISLAND
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Drawing Title

FRAMING PLAN

Drawing No.

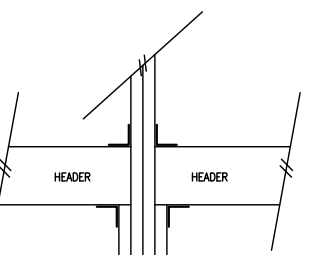
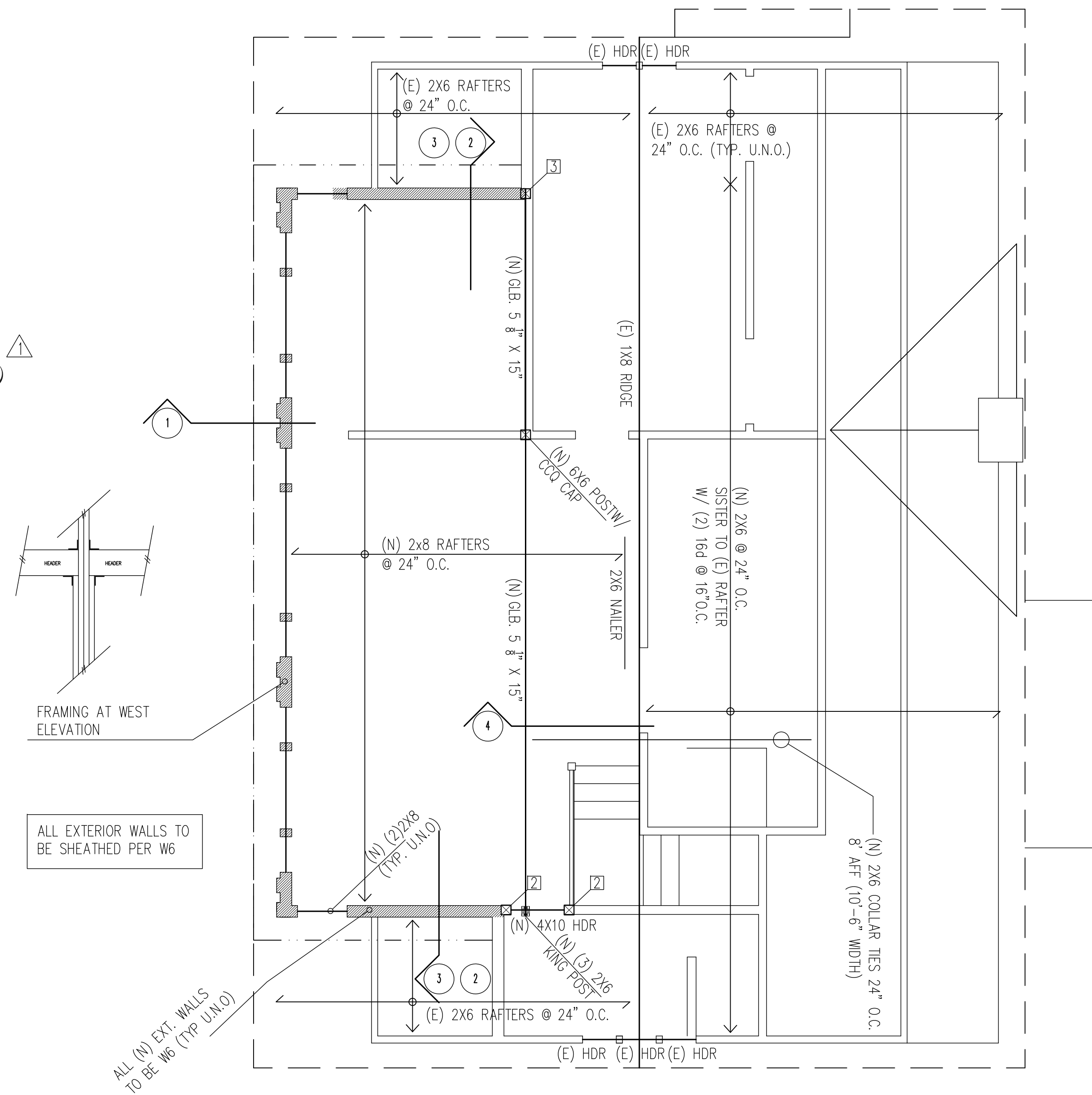
S2

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted

ROOF PLAN NOTES

1. DO NOT SCALE DRAWINGS. REFER ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. TYPICAL NEW ROOF FRAMING CONSISTS OF ROOF FRAMING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX PLYWOOD, FACE GRAIN PERPENDICULAR TO SUPPORTS OVER RAFTERS PER PLAN. NAIL SHEATHING WITH 8D @ 6" O.C. EDGES AND OVER SHEARWALLS, 12" O.C. FIELD
3. ALL NEW HEADERS SHALL BE (2) 2X8'S UNLESS NOTED OTHERWISE. AT CONTRACTORS OPTION, (2) 2X8'S MAY BE SUBSTITUTED WITH 4X8 OR 6X6.
4. PROVIDE (2) BEARING STUDS AT EACH END OF ALL NEW HEADERS AND BEAMS UNLESS NOTED OTHERWISE.
5. ALL NEW BUNDLED STUDS CALLED OUT ON PLAN OR AT ENDS OF HEADERS AND BEAMS SHALL BE PROVIDED AT EACH LEVEL, TERMINATING AT CONCRETE SUPPORT BELOW.
6. "W" INDICATES PLYWOOD SHEATHED SHEARWALL BELOW FRAMING SHOWN. REFER SHEARWALL SCHEDULE ON DETAIL 13.
7. ALL NEW EXTERIOR WALLS SHALL BE W6 UNLESS NOTED OTHERWISE.
7. REFER GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



ALL EXTERIOR WALLS TO BE SHEATHED PER W6

ALL (N) EXT. WALLS TO BE W6 (TYP. U.N.O.)

- LEGEND
- (E) EXISTING
 - (N) NEW
 - (N) STRUCTURAL WOOD WALL BELOW
 - (E) STRUCTURAL WALL BELOW
 - (N) ROOF OUTLINE
 - (E) ROOF OUTLINE
 - [#] BUNDLED STUDS BELOW

ROOF FRAMING PLAN

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

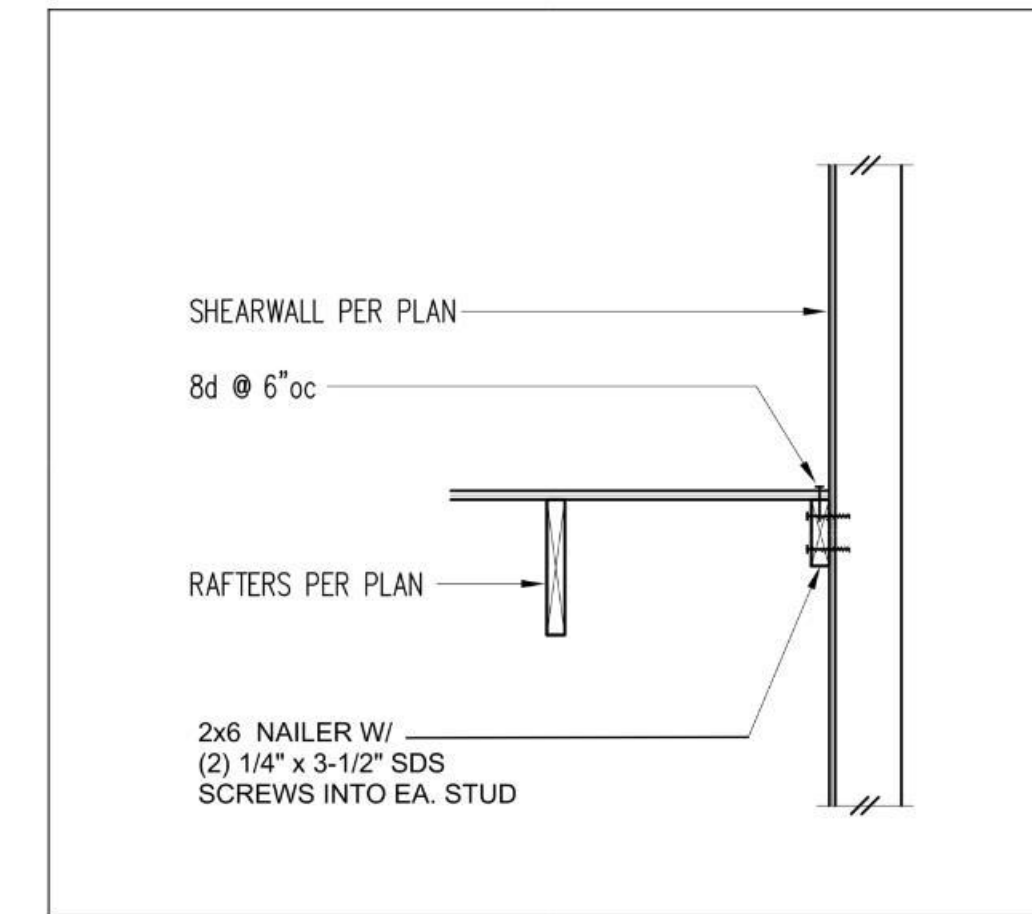
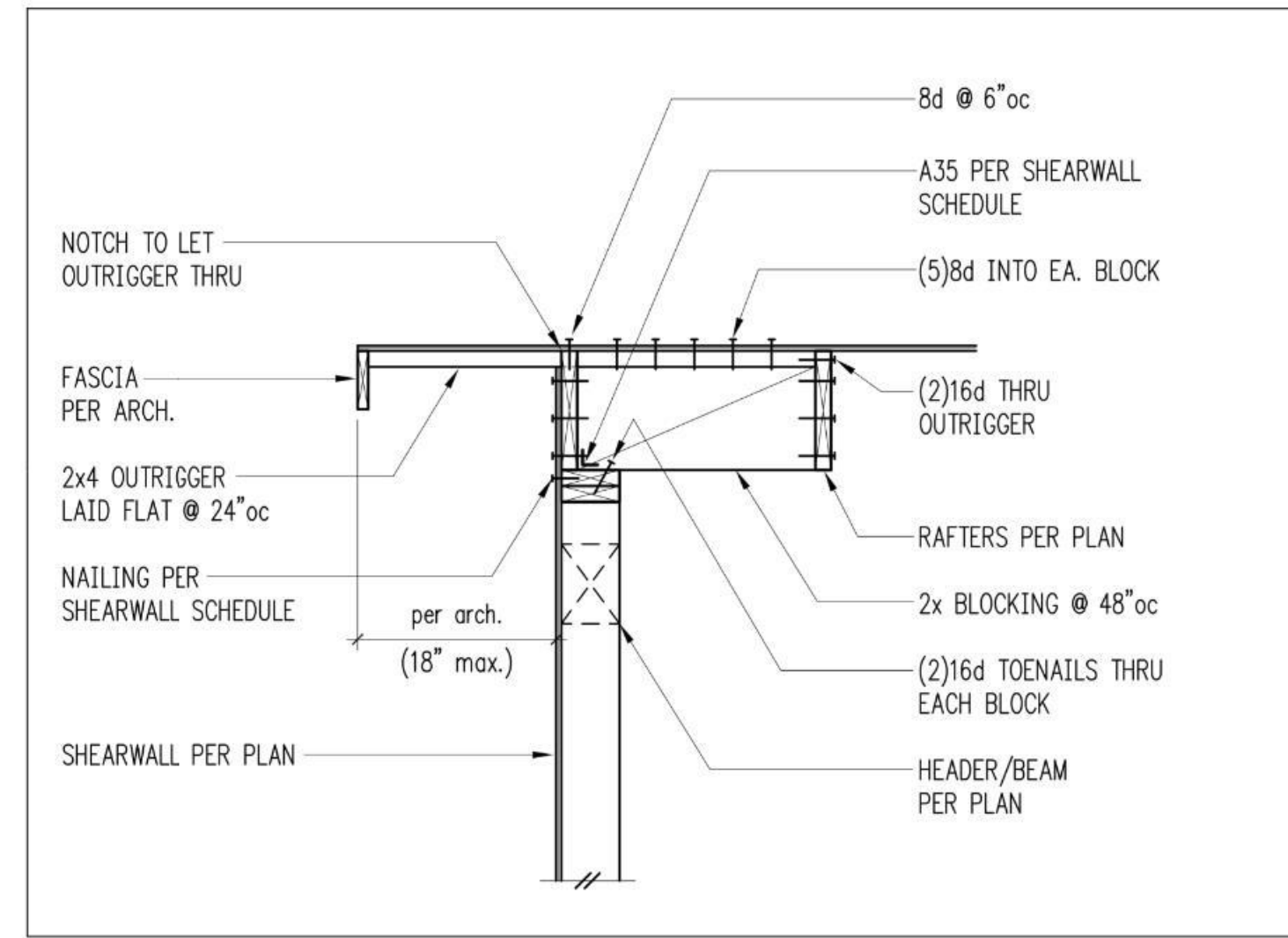
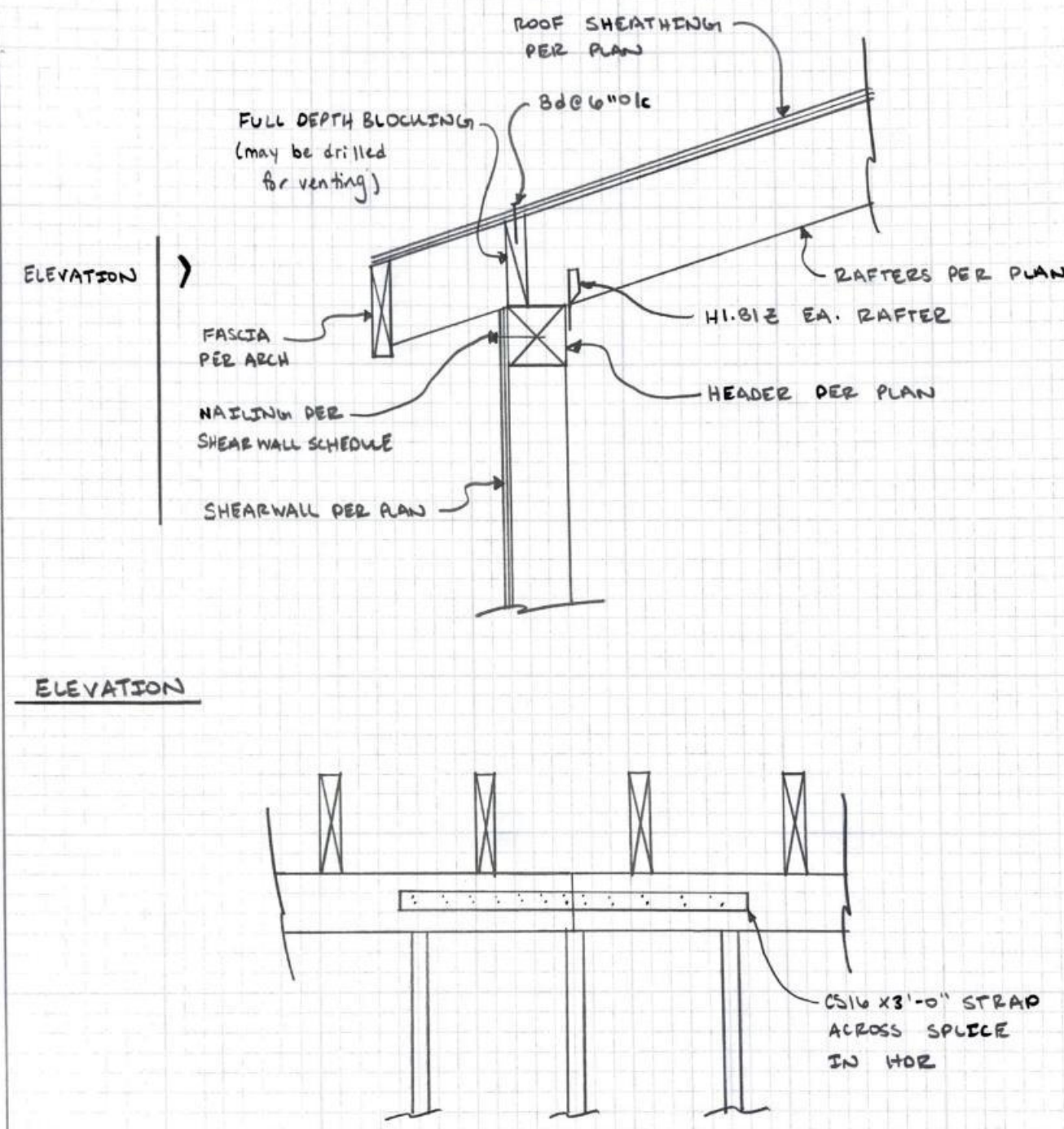
Date	Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title
FRAMING PLAN

Drawing No.
S3

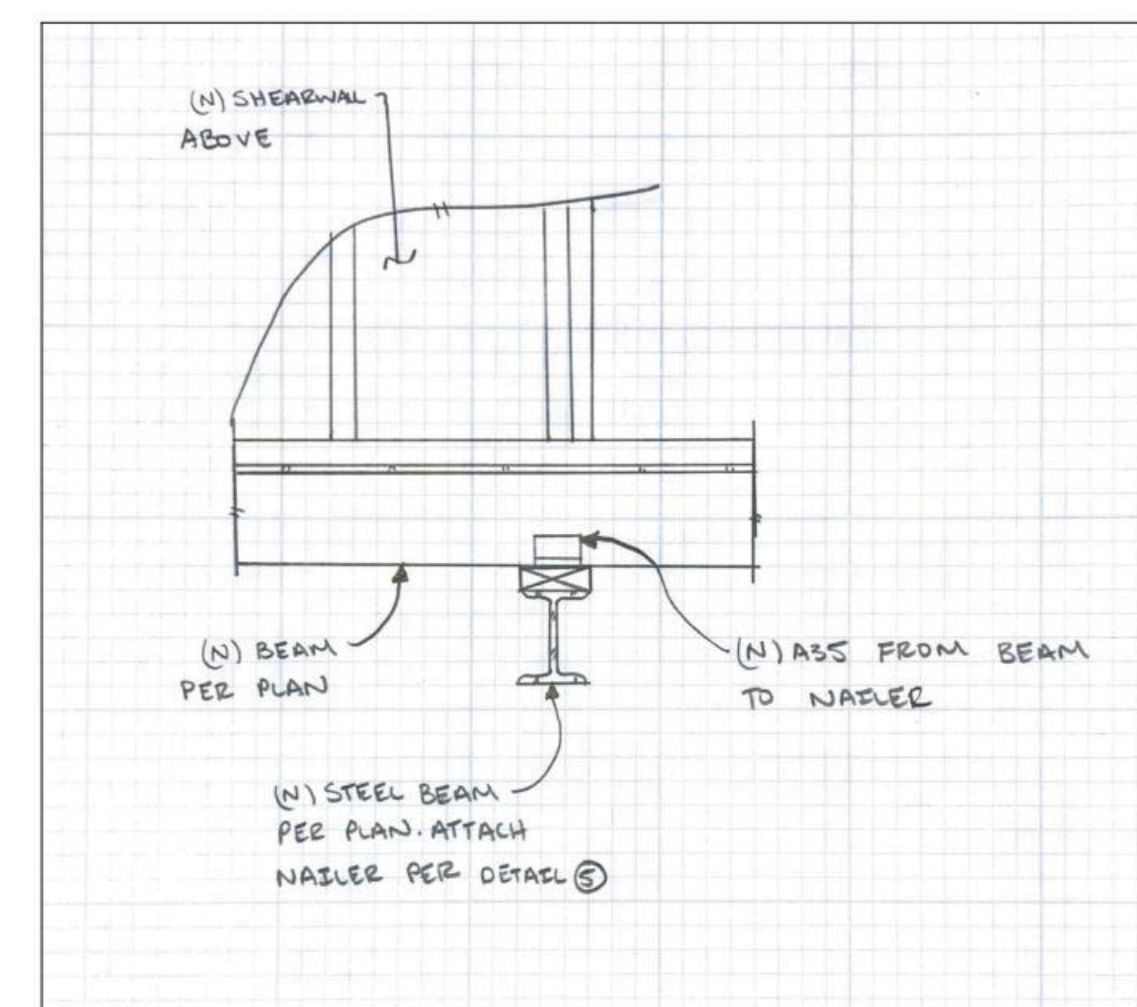
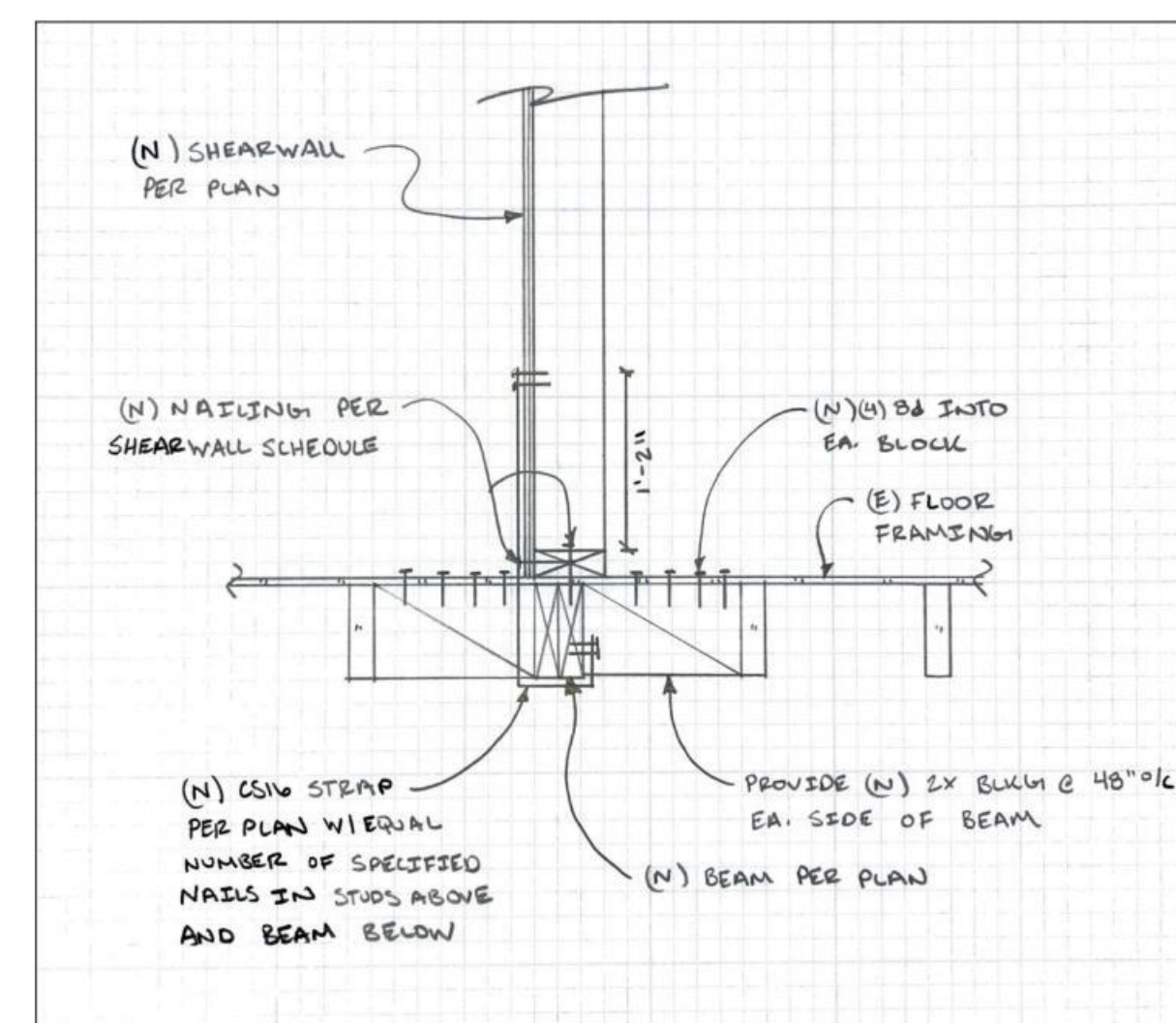
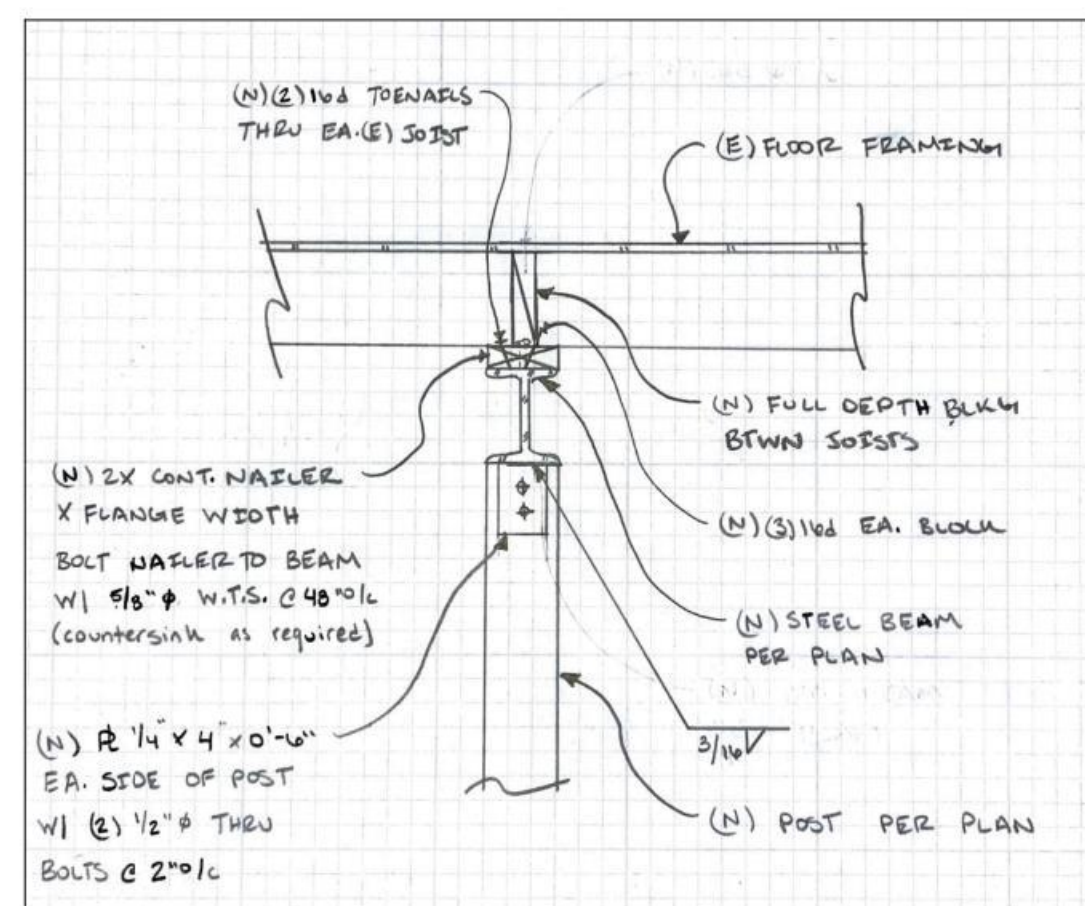
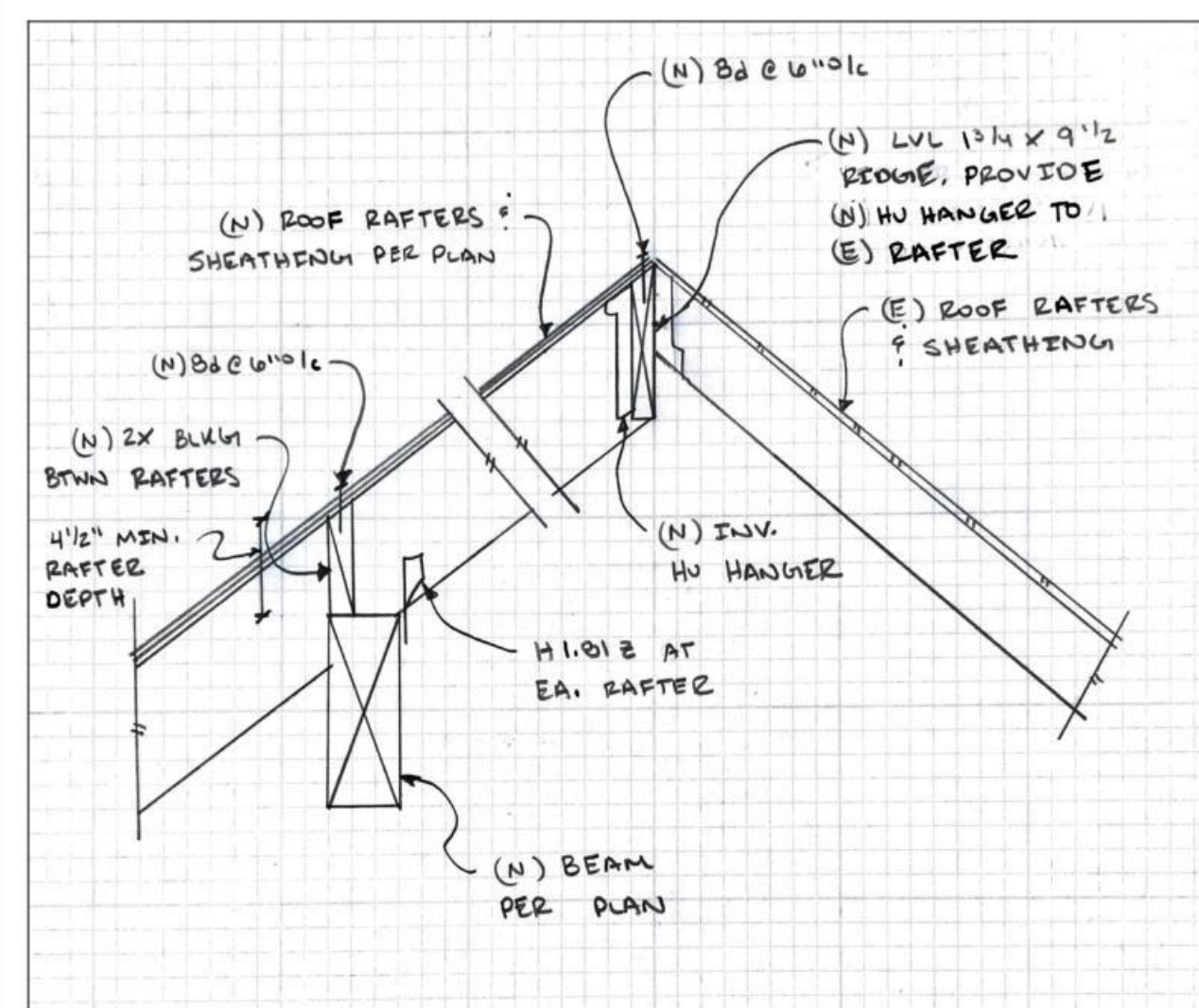
Job No. ZETTEL RESIDENCE
Date: 01.19.21 Scale: As Noted



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

2 EXTERIOR NON-BEARING WALL
SCALE: 3/4" = 1'-0"

3 RAFTER PARALLEL TO EXTERIOR WALL
SCALE: 3/4" = 1'-0"



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

5 STEEL TO POST
SCALE: 3/4" = 1'-0"

6 NEW SHEARWALL
SCALE: 3/4" = 1'-0"

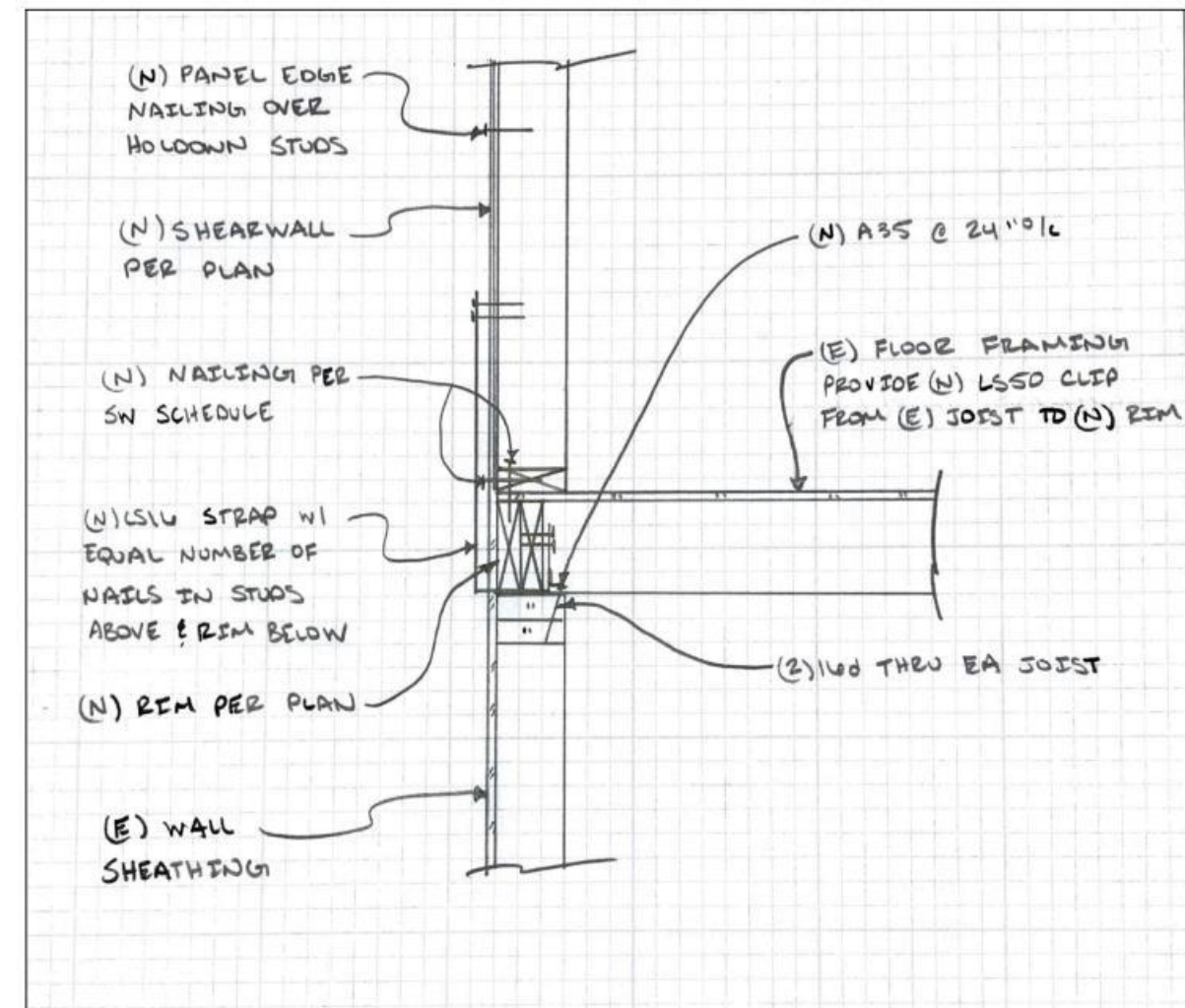
7 STEEL BEAM
SCALE: 3/4" = 1'-0"

Date	Revision

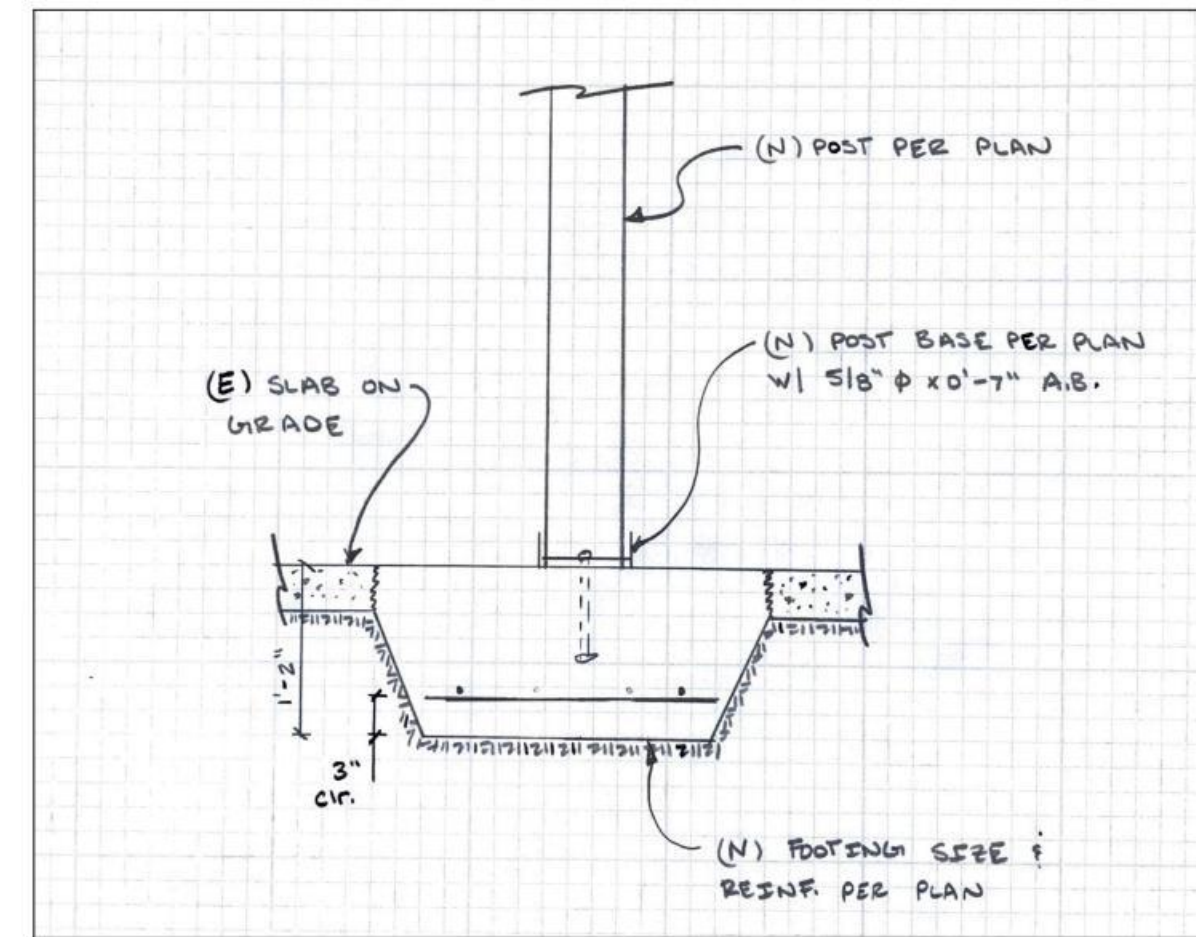
6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title
FRAMING PLAN

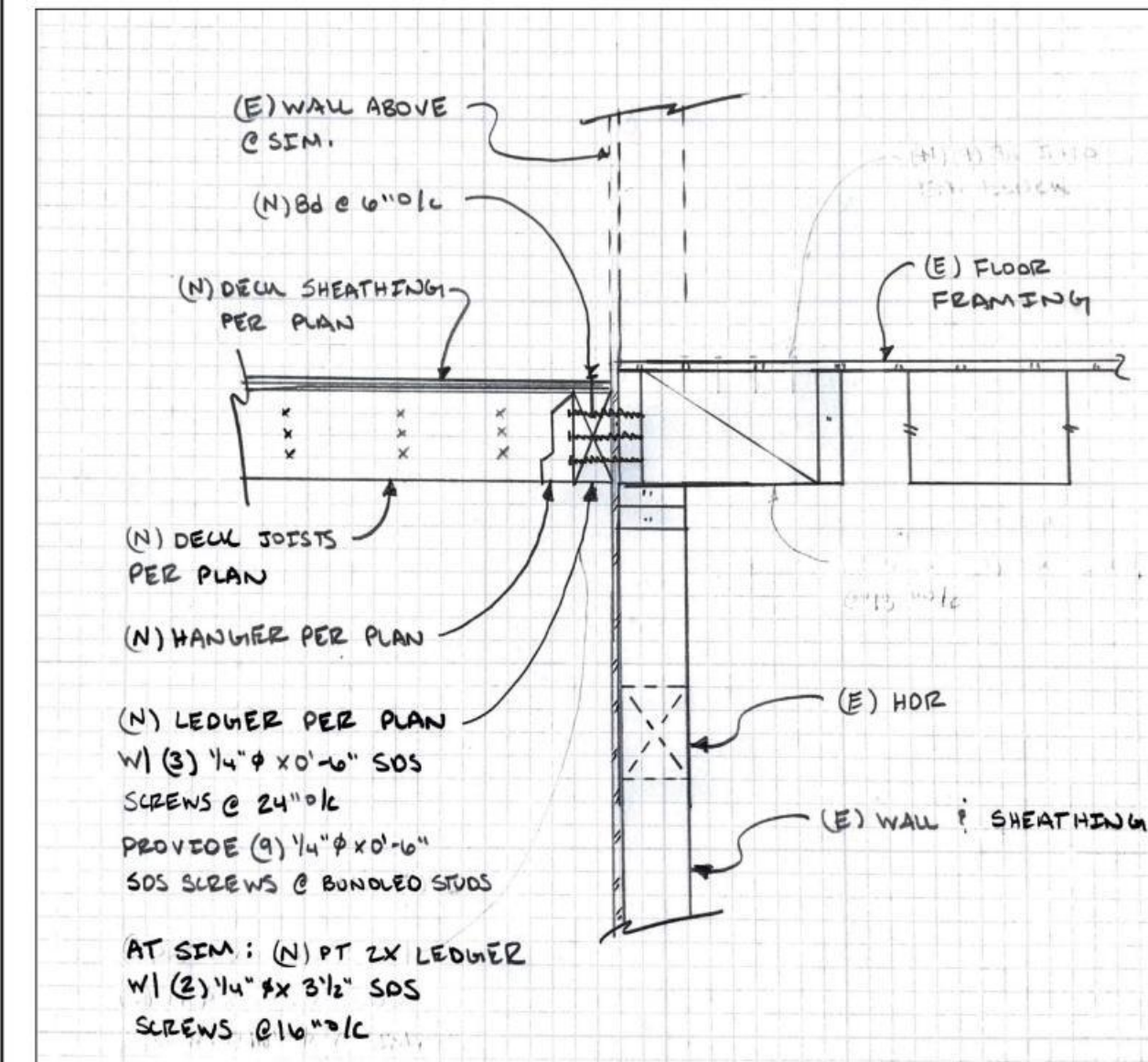
Drawing No.
S4



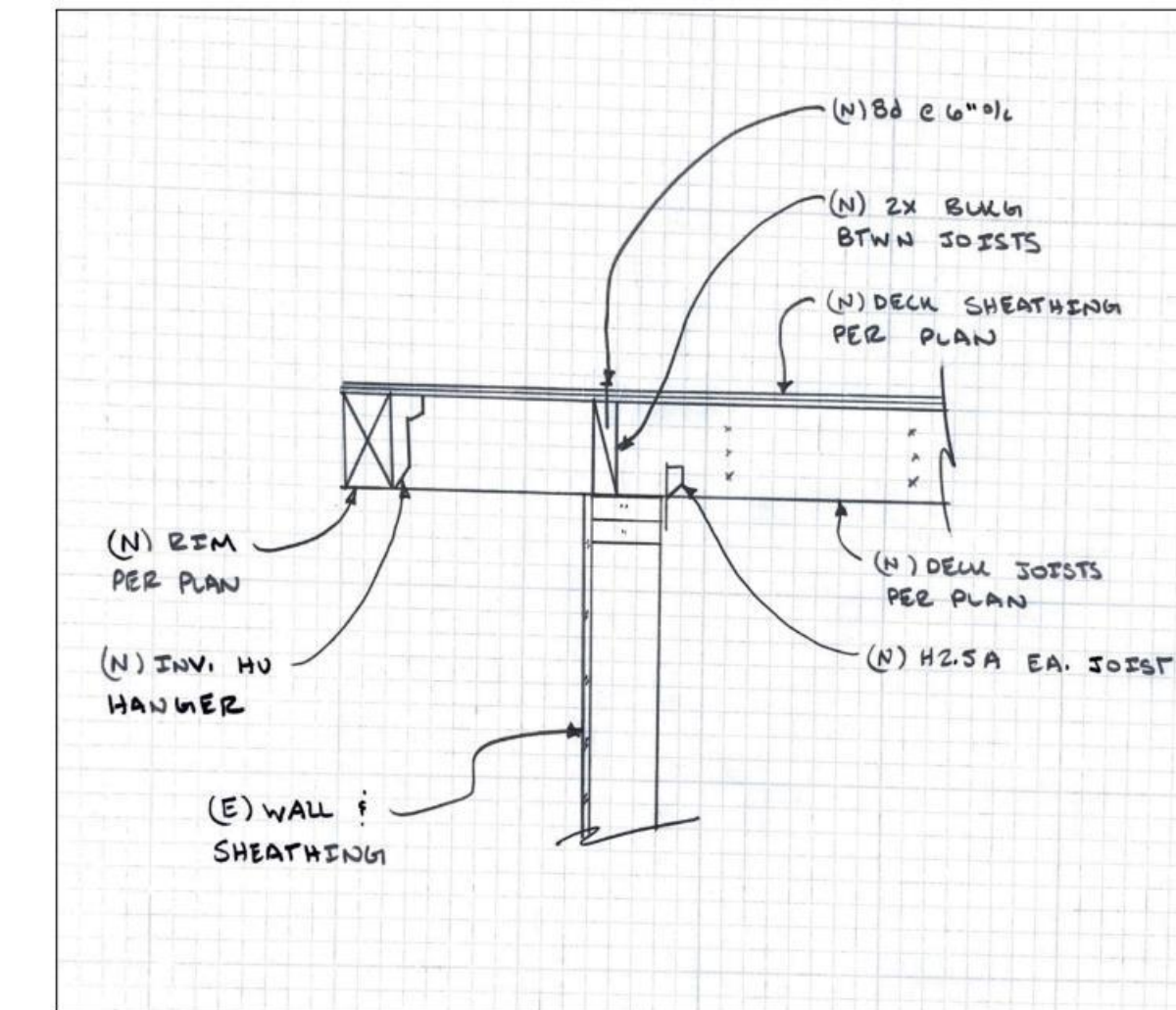
8 EXTERIOR WALL
SCALE: 3/4" = 1'-0"



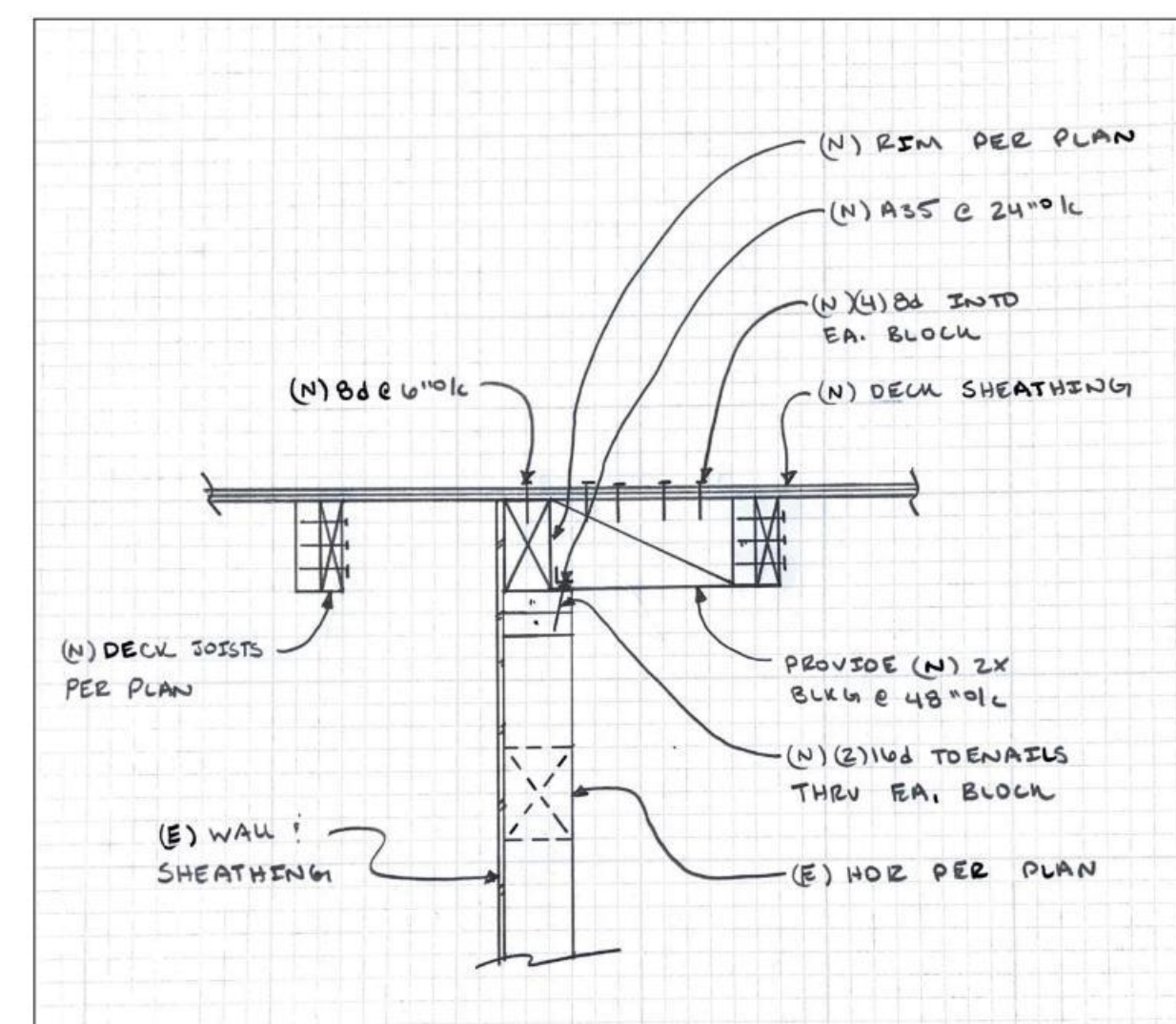
9 POST AND FOOTING
SCALE: 3/4" = 1'-0"



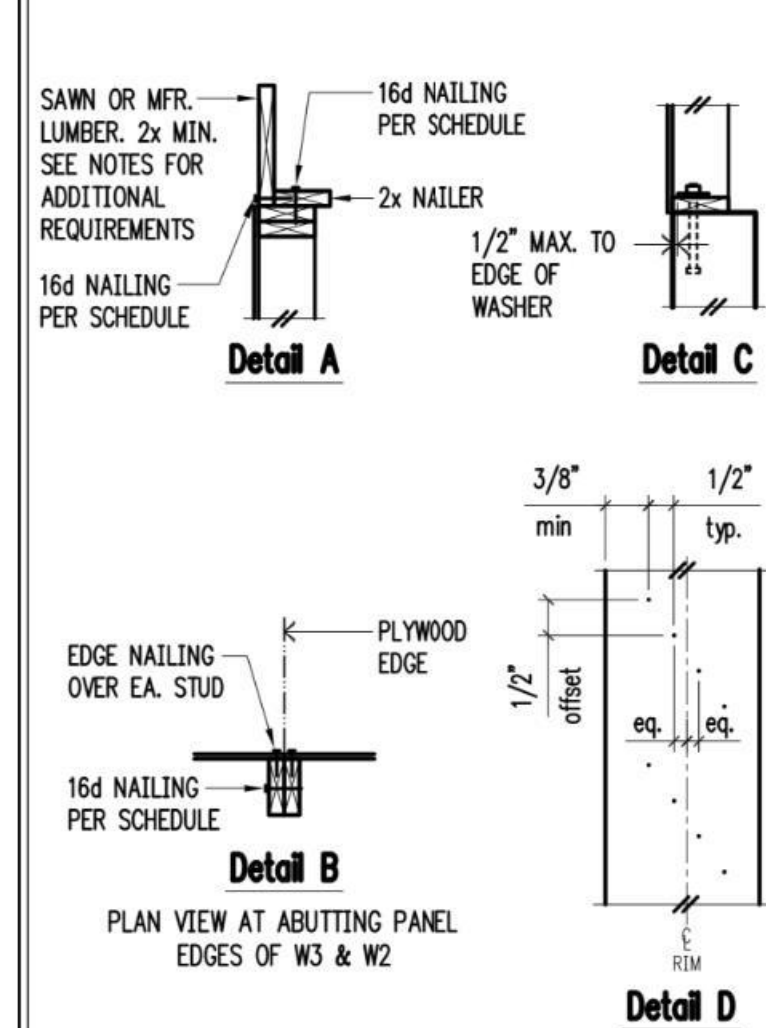
10 DECK LEDGER
SCALE: 3/4" = 1'-0"



11 DECK FRAMING
SCALE: 3/4" = 1'-0"



12 DECK FRAMING
SCALE: 3/4" = 1'-0"

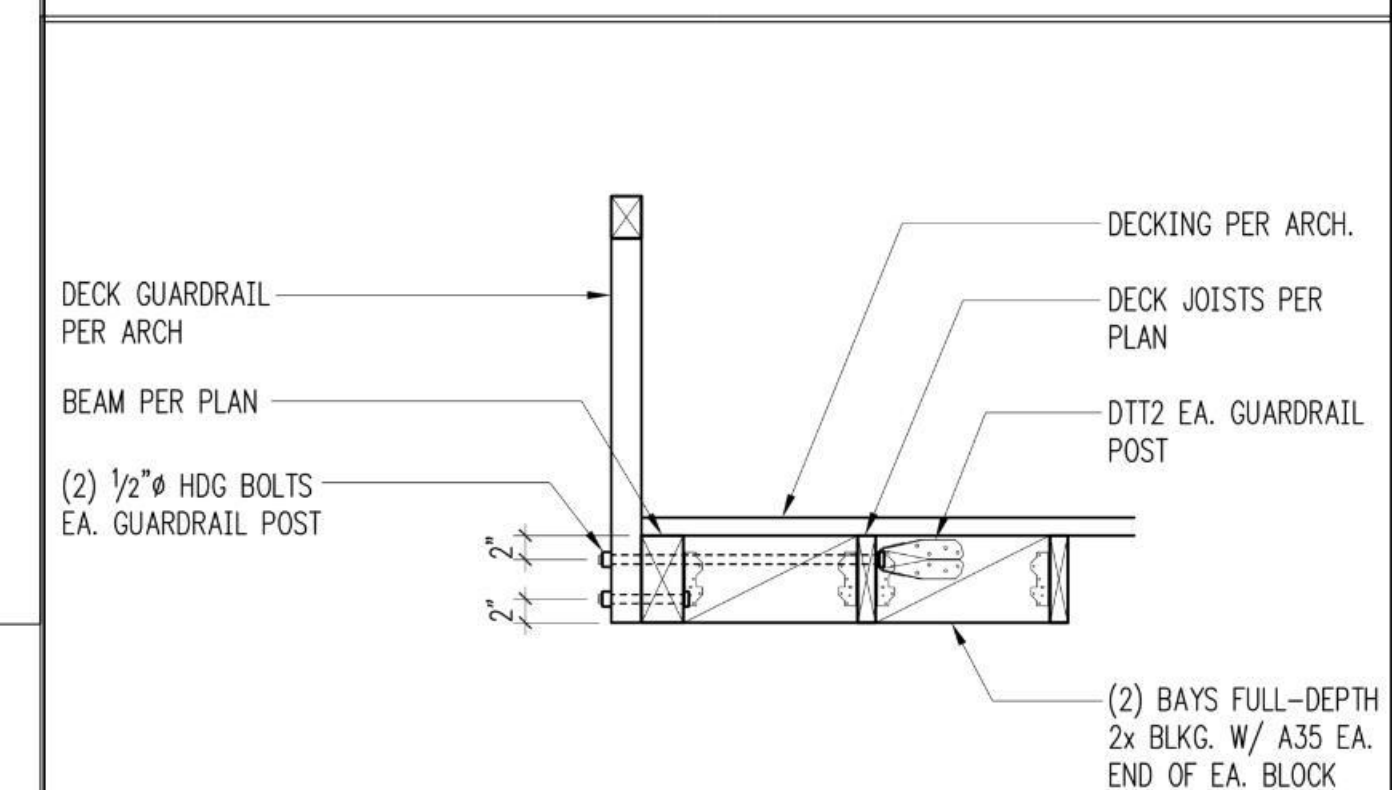
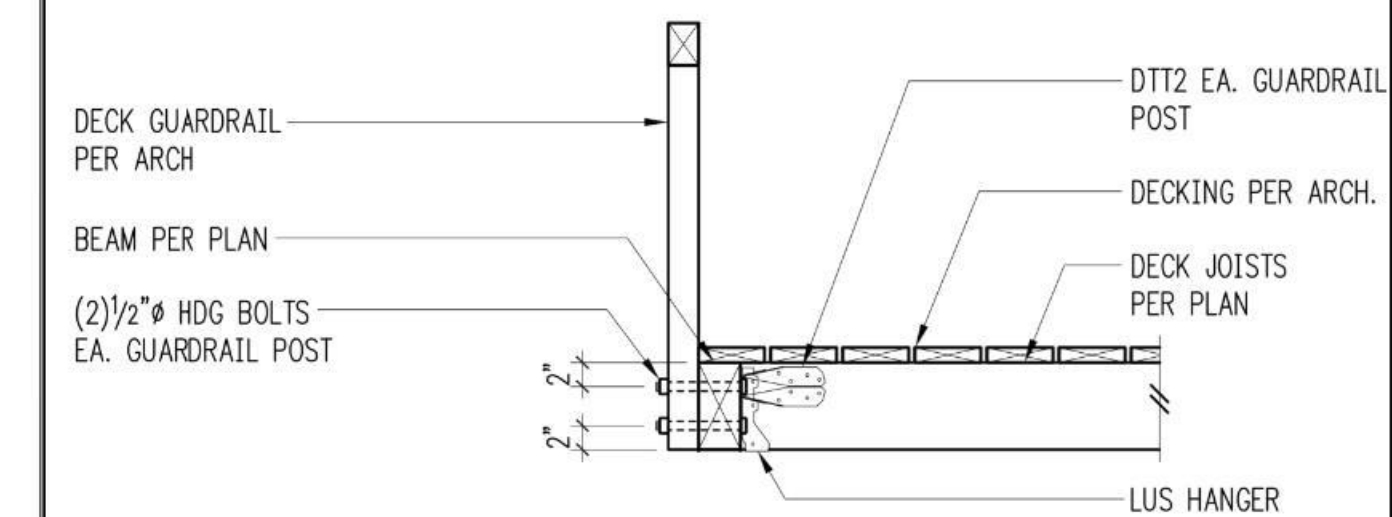


Shearwall Schedule ①②③④⑤⑥⑦

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if Wood ⑧	at Wood ⑨	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc	16d @ 6"oc	5/8" A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 32"oc
W3 ①	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc	A35 @ 12"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 24"oc
W2 ②	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc	A35 @ 9"oc	(2)rows 16d @ 4"oc ⑩	5/8" A.B. @ 16"oc

- ① BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"oc.
- ② 8d NAILS SHALL BE 0.131" x 2 1/2" (common) - 16d NAILS SHALL BE 0.135" x 3 1/2" (box)
- ③ EMBED ANCHOR BOLTS AT LEAST 7". EXPANSION BOLTS MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 4" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. SEE DETAIL C.
- ④ 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
- ⑤ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
- ⑥ ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
- ⑦ 7/16" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX.
- ⑧ LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- ⑨ A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- ⑩ AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
- ⑪ PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.

13 SHEARWALL SCHEDULE
SCALE: 3/4" = 1'-0"



14 DECK GUARDRAIL
SCALE: 3/4" = 1'-0"

Date Revision

6415 SE 24TH ST
MERCER ISLAND
WA 98040

Drawing Title

FRAMING PLAN

Drawing No.

S5

Job No. ZETTEL RESIDENCE

Date: 01.19.21

Scale: As Noted

CRITERIA

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE SEATTLE BUILDING CODE (2015 EDITION). THIS STRUCTURE DOES NOT CONFORM TO PRESENT EARTHQUAKE CODE REQUIREMENTS. IT HAS BEEN ANALYZED AND REINFORCED FOR MINIMUM MAINTENANCE IN ACCORDANCE WITH SEATTLE EXISTING BUILDING CODE, AND IS WITHIN THE CURRENT PRACTICE FOR THE RENOVATION OF EXISTING BUILDINGS OF THIS AGE AND TYPE OF CONSTRUCTION.
- DESIGN LOADING CRITERIA:
RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS
FLOOR LIVE LOAD 40 PSF
ROOF
ROOF LIVE LOAD 25 PSF
MISCELLANEOUS LOADS
DECKS 1.5
X AREA SERVED
DEFLECTION CRITERIA
LIVE LOAD DEFLECTION L/360
TOTAL LOAD DEFLECTION L/240
ENVIRONMENTAL LOADS
SNOW CE=1.0, IS=1.0, CT=1.1, PG=25 PSF, PF=20 PSF
WIND GCPI=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "B"
SEE PLANS FOR ADDITIONAL LOADING CRITERIA
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.
- ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERCTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

GLUED LAMINATED MEMBERS
MANUFACTURED LUMBER (PSL'S, LSL'S, LVL'S)

STRUCTURAL STEEL

- CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENT'S AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WALL ELEVATION DRAWINGS WITH REINFORCEMENT SHOP DRAWINGS.
- APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.
- SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
- SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.
- QUALITY ASSURANCE
- SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.
- STRUCTURAL STEEL FABRICATION AND ERECTION PER AISC 360
SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY PER TABLE 1705.6
EXPANSION BOLTS AND THREADED EXPANSION INSERTS PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS PER MANUFACTURER
- PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS. CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.
- UNLESS OTHERWISE NOTED, THE FOLLOWING ELEMENTS COMPRISE THE SEISMIC-FORCE-RESISTING SYSTEM AND ARE SUBJECT TO SPECIAL INSPECTION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH SECTION 1705.12 OF THE INTERNATIONAL BUILDING CODE.
 - STRUCTURAL WOOD SHEAR WALL SYSTEMS REQUIRE PERIODIC INSPECTION FOR FIELD GLUEING, NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SEISMIC FORCE, RESISTING SYSTEM INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLDOWNS.
- STRUCTURAL OBSERVATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 1704.6 OF THE INTERNATIONAL BUILDING CODE FOR THE FOLLOWING BUILDING ELEMENTS:

LIGHT FRAMED SHEAR WALLS
HOLDOWNS
STRUCTURAL STEEL CONSTRUCTION

THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD ADEQUATE NOTICE TO SCHEDULE APPROPRIATE SITE VISITS FOR STRUCTURAL OBSERVATION.

STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY SECTION 110, 1705, OR OTHER SECTIONS OF THE INTERNATIONAL BUILDING CODE.

THE OWNER SHALL EMPLOY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR, AND THE BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES

- WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
- GEOTECHNICAL
- FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.
- FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.
- BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.
- ALLOWABLE SOIL PRESSURE. 1500 PSF
- RENOVATION
- DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
 - CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.
 - CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.
- CONCRETE
- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF F'C = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS F'C = 2,500 PSI.
 - ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.
 - REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI.
 - DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM.
- NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
. 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) . . 1-1/2"
 - CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.
- ANCHORAGE

- EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.
 - EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2508. MINIMUM BASE MATERIAL TEMPERATURE IS 50 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.
 - STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:
 - AISC 360 AND SECTION 2205.2 OF THE INTERNATIONAL BUILDING CODE.
 - APRIL 14, 2010 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AMENDED AS FOLLOWS: AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3.1.
 - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
 - WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, FY = 50 KSI. OTHER ROLLED SHAPES INCLUDING PLATES, SHALL CONFORM TO ASTM A36, FY = 36 KSI.
 - ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
 - ALL STEEL EXPOSED TO THE WEATHER OR IN CONTACT WITH GROUND SHALL BE CORROSION PROTECTED BY GALVANIZATION OR PROVIDED WITH EXTERIOR PAINT SYSTEM, UNLESS OTHERWISE NOTED.
 - SHOP PRIME ALL STEEL EXCEPT:
 - STEEL ENCASED IN CONCRETE.
 - SURFACES TO BE WELDED.
 - CONTACT SURFACES AT HIGH-STRENGTH BOLTS.
 - MEMBERS TO BE GALVANIZED.
 - MEMBERS WHICH WILL BE CONCEALED BY INTERIOR FINISHES.
 - SURFACES TO RECEIVE SPRAYED FIREPROOFING.
 - SURFACES TO RECEIVE OTHER SPECIAL SHOP PRIMERS.
 - ALL ANCHORS EMBEDDED IN CONCRETE SHALL BE A307 HEADED BOLTS OR A36 THREADED ROD WITH AN ASTM 563 HEAVY HEX NUT TACK WELDED ON THE EMBEDDED END.
- WOOD
- FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD "GRADING RULES FOR WEST COAST LUMBER NO. 17", OR WHPA STANDARD, "WESTERN LUMBER GRADING RULES 2011". FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS (2X & 3X MEMBERS) AND BEAMS FB = 850 PSI	HEM-FIR NO. 2 MINIMUM BASE VALUE,
(4X MEMBERS)	DOUGLAS FIR-LARCH
NO. 1	MINIMUM BASE
VALUE, FB = 1000 PSI	
BEAMS (INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH
NO. 1	MINIMUM BASE
VALUE, FB = 1350 PSI	
POSTS (4X MEMBERS)	DOUGLAS FIR-LARCH
NO. 2	MINIMUM BASE
VALUE, FC = 1350 PSI	
(6X AND LARGER)	DOUGLAS FIR-LARCH
NO. 1	MINIMUM BASE
VALUE, FC = 1000 PSI	
STUDS, PLATES & MISC. FRAMING: OR HEM-FIR NO. 2	DOUGLAS-FIR-LARCH

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Drawing Title

**GENERAL
STRUCTURAL NOTES**

Drawing No.

S6

Job No. ZETTEL RESIDENCE

Date: 01.19.21 **Scale: As Noted**

34. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA-EWS CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, FB = 2,400 PSI, FV = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, FB = 2400 PSI, FV = 265 PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS, WITH SPANS OVER 30', TO 3,500' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

35. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E)	FB = 2900 PSI, E = 2000 KSI, FV = 290 PSI
LVL (2.0E)	FB = 2600 PSI, E = 2000 KSI, FV = 285 PSI
LSL (1.55E)	FB = 2325 PSI, E = 1550 KSI, FV = 310 PSI

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

36. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

37. ALL WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

38. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

39. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER GALVANIZED	INTERIOR	DRY G90
CONTAINS AMMONIA CARRIER A185 HOT DIPPED OR	INTERIOR	DRY G185 OR CONTINUOUS
HOT-GALVANIZED		PER ASTM
A653		
CONTAINS AMMONIA CARRIER 316 STAINLESS	INTERIOR	WET TYPE 304 OR
CONTAINS AMMONIA CARRIER 316 STAINLESS	EXTERIOR	TYPE 304 OR
AZCA 316 STAINLESS	ANY	TYPE 304 OR

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

40. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS

SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

41. WOOD FASTENERS

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

SIZE	LENGTH	DIAMETER
8D	2-1/2"	0.131"
16D BOX	3-1/2"	0.135"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

42. NOTCHES AND HOLES IN WOOD FRAMING:

A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

43. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2X8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE

CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

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

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16D NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16D @ 12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8D NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8D NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16D NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16D @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8D NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16D @ 12" ON-CENTER UNLESS OTHERWISE NOTED.

Date Revision

6415 SE 24TH ST
MERCER ISLAND
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Drawing Title

GENERAL
STRUCTURAL NOTES

Drawing No.

S7

Job No. ZETTEL RESIDENCE

Date: 01.19.21 Scale: As Noted