GENERAL NOTES

1. **CODE COMPLIANCE**
   ALL WORK SHALL COMPLY WITH THE 2015 IBC, 2015 IRC, 2015 IMC, 2015 IFGC, 2015 NATIONAL FUEL GAS CODE, NFPA 54, 2015 LIQUEFIED PETROLEUM GAS CODE, NFPA 58, 2015 IFC, 2015 UPC, 2015 WSEC, WAC 51-11, 2015 VIAQ, WAC 51-13, 2015 NEC, AND WITH ALL LOCAL CODES AND ORDINANCES.

2. **DIMENSIONS**
   A. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF DISCREPANCIES. IF WORK IS STARTED PRIOR TO NOTIFICATION, THE GENERAL AND SUBCONTRACTOR PROCEED AT THEIR OWN RISK.
   B. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO FACE OF STUDS OR FACE OF CONCRETE WALLS. FACE OF STONE VENEER LIES 6" +/- OUTSIDE THE FACE OF FRAMING. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED.
   C. VERIFY ALL ROUGH-IN DIMENSIONS FOR WINDOWS, DOORS, PLUMBING, ELECTRICAL FIXTURES AND APPLIANCES PRIOR TO COMMITMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OF DIMENSIONAL TOLERANCES REQUIRED.

3. **DOCUMENT REVIEW/VERIFICATION:** CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK.

4. **ROUGH OPENINGS/BACKING:** VERIFY SIZE AND LOCATION, AS WELL AS PROVIDE ALL OPENINGS THROUGH FLOORS AND WALLS, FURRING, CURBS, ANCHORS, INSERTS, EQUIPMENT BASES AND ROUGH BUCKS/BACKING FOR SURFACE-MOUNTED ITEMS.

5. **FURRING:** PROVIDE FURRING AS REQUIRED TO CONCEAL MECHANICAL AND/OR ELECTRICAL EQUIPMENT IN FINISHED AREAS. FURRING NOT SHOWN ON PLANS SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTION.

6. **GRADES:** VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).

7. **FLOOR LINES:** "FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.

8. **REPETITIVE FEATURES:** OFTEN DRAWN ONLY ONCE AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.

9. **DOORS:** DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR, ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.

10. **WOOD ON CONCRETE:** WOOD MEMBERS IN CONTACT WITH CONCRETE AND/OR EXPOSED TO WEATHER
    PROVIDE PRESSURE TREATED SILL PLATES.

11. **FRAMING:** INTERIOR FURRING & PARTITION WALLS TO BE 2x4 @ 16" O.C., U.O.N.

12. **VENTILATION:** WHERE TOILET ROOMS AND BATHROOMS ARE MECHANICALLY VENTILATED, THE VENTILATION EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH IRC, Sect. M1507.2 & TABLE M1507.3

13. **FLUES:** FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.

14. **BASEMENT:** N/A (NO BASEMENT)

15. **OTHER DOCUMENTATION:** REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES AND SYMBOLS.

16. **PROTECTION:** PROTECT ALL EXISTING FINISHES & SURFACES. ANY DAMAGE TO BE REPAIRED @ NO ADDITIONAL EXPENSE TO OWNER.

17. **PERMITS:** SEPARATE ELECTRICAL, MECHANICAL AND PLUMBING PERMITS ARE REQUIRED IN ADDITION TO THE BASIC BUILDING PERMIT.

18. **ROOFING:** SHEET METAL ROOFING PER IRC TABLE 905.10.3(1) & LOCAL ROOFING STANDARDS.

19. **FIREPLACE:** PREFABRICATED GAS FIREPLACE SHALL BE PROVIDED WITH THE FOLLOWING:
    A. PREFABRICATED FIREPLACE TO BEAR STAMP OF APPROVED TESTING LAB.
    B. TIGHT FITTING GLASS OR METAL DOORS
    C. OUTSIDE SOURCE OF COMBUSTION AIR DUCTED INTO THE FIREBOX, PER PREFAB. GAS FIREPLACE REQUIREMENTS. (6 SQ. INCHES MIN. W/OPERABLE OUTSIDE AIR DUCT DAMPER.)
    D. TIGHT FITTING FLUE DAMPERS, OPERATED BY A READILY ACCESSIBLE MANUAL

20. **NOXIOUS WEEDS**
    MICC 19.02.020(F)(3)(D) REQUIRES NOXIOUS WEEDS TO BE REMOVED DURING NEW DEVELOPMENT PROPOSALS.

    "DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION 19.02.020(F)(3)(A). NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION."

ENERGY CODE

-HEATING SYSTEM IS A NATURAL GAS FURNACE FORCED AIR SYSTEM.
-CONSTRUCTION SHALL ADHERE TO :

GLAZING RATIO	
CLIMATE ZONE : 4C – MARINE	NEW WINDOWS – 0.28 U-FACTOR
PRESCRIPTIVE PATH : 4C	NEW DOORS – 0.20 U-FACTOR

ENERGY CREDITS

WSEC 2015 – R406.2
DWELLING UNITS ARE REQUIRED TO DEVELOP 3–1/2 CREDITS FROM TABLE 9–1.

EFFICIENT BUILDING ENVELOPE (.5 Credit)
CREDIT OPTION (1a) – VERTICAL FENESTRATION U = 0.28
– FLOOR – – – – – – – – – – – = R38
– PROVIDE R–10 INSULATION BELOW ENTIRE SLAB AREA

AIR LEAKAGE CONTROL & EFFICIENT VENTILATION (.5 Credit)
CREDIT OPTION (2a) – COMPLIANCE BASE ON R402.4.1.2:
REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR MAXIMUM & ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE IRC SHALL BE MET WITH A HIGHT EFFICIENCY FAN (MAX 0.35 Watts/CFM) NOT INTERLOCKED WITH THE FURNACE FAN. VENTILATION SYSTEMS USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE.

HIGH EFFICIENT HVAC EQUIPMENT (1.0 Credit)
CREDIT OPTION (3a) – GAS, FURNCE WITH A MINIMUM "AFUE" OF 94%,
HEATING OPTION: 3a, 3b, 3c, OR 3d. WHEN A HOUSING UNIT HAS TOW PIECES OF, EQUIPMENT (IE, TWO FURNACES) BOTH MUST MEET THE STANDARD TO RECEIVE CREDIT.

HIGH EFFICIENT WATER HEATING (1.5 Credits)
CREDIT OPTION (5c) – WATER HEATING SYSTEM SHALL BE GAS HEATED

ENERGY NOTES

CODE(S): 2015 INTERNATIONAL BUILDING CODE – – – – – (IBC)
2015 INTERNATIONAL RESIDENTIAL CODE – – – – (IRC)
2015 WASHINGTON ENERGY CODE – – – – – (WEC)

CLIMATIC ZONE: 4C –MARINE

SPACE HEAT TYPE: NATURAL GAS, FORCED AIR

INSULATION VALUES: PRESCRIPTIVE METHOD (ALL NEW AREA)
WALLS: – – – – – – – – – – – – – R–21
FLAT ATTICS/CEILINGS: – – – – – – – – R–49/R–38 (ADV.)
FLOORS – – – – – – – – – – – – – R–38
(OVER UNHEATED SPACES)
VAULTED CEILINGS: – – – – – – – – – – R–38
SLAB–ON–GRADE: – – – – – – – – – – – R–10

THERMAL STANDARDS FOR OPENINGS UNLIMITED OPTION

AIR INFILTRATION: MANUFACTURED DOORS/WINDOWS:
CONFORM TO SECTION 502.1.5 OF THE WASHINGTON STATE ENERGY CODE
EXTERIOR JOINTS/OPENINGS:
SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES AND ALL OTHER SUCH OPENINGS IN THE BLDG. ENVELOPE.

MOISTURE CONTROL:
VAPOR RETARDER BONDED TO BATT INSULATION; INSTALL WITH STAPLES NOT MORE THAN 8 INCHES ON CENTER AND AND WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR, VAPOR RETARDER OF ONE PERM PERM CUP RATING (4 MIL POLYETHYLENE)
ATTICS/CEILINGS:
VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE). INSTALL CONTINUOUSLY
CRAWL SPACE:
CONT. 6 MIL POLYETHELENE

VENTILATION: WHERE TOILET ROOMS AND BATHROOMS ARE MECHANICALLY VENTILATED, THE VENTILATION EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH IRC, Sect. M1507.2 & TABLE M1507.3
ATTICS WITH LOOSE FILL: N.A.
BAFFLE VENT OPENINGS TO DEFLECT AIR ABOVE INSULATION SURFACE
ENCLOSED JOIST OR RAFTER SPACES:
PROVIDE MINIMUM OF ONE INCH CLEAR VENTED AIR SPACE ABOVE INSULATION. TAPER OR COMPRESS INSULATION AT PERIMETER TO INSURE PROPER VENTILATION

HEATING & COOLING: FORCED AIR NATURAL GAS HEATING SYSTEM.

TEMP. CONTROL: FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF BEING SET FROM 55–85 DEGREES FARENHEIT AND OF OPERATING THE HEATING/COOLING SYSTEM IN SEQUENCE.
THERMOSTAT TO BE AUTOMATIC DAY/NIGHT SETBACK TYPE.

DUCT INSULATION: THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH TABLE 406.2 OF THE 2015 WASHINGTON STATE ENERGY CODE.
a. ALL HEATING DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED WITH A MIN. OF R–8. ALL SEAM JOINTS SHALL BE TAPED, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER WSEC.

LIGHTING: RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE IC LISTED.

PIPE INSULATION: NON RECIRCULATING HOT AND COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE SHALL BE INSULATED TO R–3 MIN.

WHOLE HOUSE VENTILATION: WHOLE HOUSE VENTILATION TO BE PROVIDED BY A FORCED AIR FURNACE W/ DUCT LOCATIONS TO EACH NEW ROOM PER 2015 IRC M1507.3.5

⚠ a. FAN SIZE TO BE DESIGNED BY MECHANICAL CONTRACTOR, TO MEET CURRENT WSEC.
R403.1.1 PROGRAMMABLE THERMOSTAT. WHERE THE PRIMARY HEATING SYSTEM IS A FORCED–AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THE THERMOSTAT SHALL ALLOW FOR, AT A MINIMUM, A 5–2 PROGRAMMABLE SCHEDULE (WKDAYS/WKENDS) & BE CAPABLE OF PROVIDING AT LEAST TWO PROGRAMMABLE SETBACK PERIODS PER DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED BY THE MANUFACTURER WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70°F (21°C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78°F (26°C). THE THERMOSTAT AND/OR CONTROL SYSTEM SHALL HAVE AN ADJUSTABLE DEADBAND OF NOT LESS THAN 10°F.
EXCEPTIONS: 1. SYSTEMS CONTROLLED BY AN OCCUPANT SENSOR THAT IS CAPABLE OF SHUTTING THE SYSTEM OFF WHEN NO OCCUPANT IS IS SENSED FOR A PERIOD UP TO 30 MINUTES.
2. SYSTEMS CONTROLLED SOLELY BY A MANUALLY OPERATED TIMER CAPABLE OF OPERATING THE SYSTEM FOR NO MORE THAN TWO HOURS.

CONTINUOUS MECHANICAL MINIMUM AIR FLOW RATE PER M1507.3.3(1)
(5) BEDROOMS
4,538 S.F. HEATED SPACE = 105 cfm.
WITH RUN–TIME PERCENTAGE IN EACH 4–HR. SEGMENT AT 50%. THE INTERMITTENT MECHANICAL VENTILATION RATE FACTOR PER TABLE M1507.3.3(2) IS 2. THE FAN CAPACITY IS INCREASED TO 210 CFM.
PROVIDE DUCT INSULATION AT MINIMUM R–8

SITE INFORMATION

PARCEL No. 239600-005
LOT AREA: 18,580 S.F.
LEGAL DESCRIPTION :
(PER LOT LINE REVISION RECORDING NO. 9412229001)

THAT PORTION OF LOTS 4 AND 5, EVAN'S ADDITION ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGES 91 AND 92, IN KING COUNTY, WASHINGTON, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID LOT 4, EVAN'S ADDITION WHICH BEARS S88°41'26"E, DISTANCE 103.38' FROM THE NORTHWEST CORNER OF SAID LOT 4; THENCE S05°41'39"W A DISTANCE OF 102.56' TO THE SOUTH LINE OF SAID LOT 4 AND THE TERMINUS OF THIS LINE.

TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING AS DELINEATED ON THE FACE OF THE PLAT;

TOGETHER WITH AN UNDIVIDED INTEREST IN TRACT A (COMMUNITY BEACH) AND SECOND CLASS SHORELANDS ADJACENT TO AND ABUTTING THEREON;

AND TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND UTILITY PURPOSES OVER THE 10 FOOT PRIVATE ROAD AS DELINEATED ON THE FACE OF THE PLAT.

SUBJECT TO: ALL EASEMENTS, RESTRICTIONS AND RESERVATIONS OF RECORD, IF ANY.

GROSS FLOOR AREA

MAIN FLOOR =	2,364 s.f.
UPPER FLOOR =	2,174 s.f.
(STAIRCASE GFA MOD.) =	(-78) s.f.
GARAGE =	484 s.f.
TOTAL FLR. AREA =	4,944 s.f.

AVERAGE BLDG. ELEVATION

MARK	WALL LENGTH	ELEVATION	CALCULATION
A	12.0'	30	360
B	12.0'	31	372
C	21.0'	31.5	661.5
D	3.6'	31.8	111.3
E	10.5	32	336
F	5.5'	31	170.5
G	10.0'	29.8	298
H	25.5'	31	790.5
I	5.5'	32.5	178.8
J	22.0'	35.5	781
K	22.0'	36	792
L	44.0'	32	1408
M	3.0'	29	87
N	25.0'	28	700
O	44.0'	27.5	1210
P	7.0'	27	189
Q	16.0'	26	416
R	2.5'	27	67.5
S	13.0'	27.5	357.5
T	23.0'	28.5	655.5
TOTAL	327.0		9,942.1

A.B.E. = 327 / 9942.1 = 30.4'

LOT COVERAGE

GROSS LOT AREA :	18,580 s.f.
(– DRIVEWAY EASEMENT) =	–160 s.f.
NET LOT AREA :	18,420 s.f.
MAX. COVERAGE ; 18420 @ 40% =	7,368 s.f.
STRUCTURE :	3,740 s.f. ⚠2
DRIVEWAY (ACCESS)/EASEMENTS/PARKING :	2,511 s.f.
TOTAL COVERAGE AREA =	6,251 s.f. ⚠2
	OR 33.94%

DECK :	176 s.f.
HARDSCAPE :	
FRONT PATIO :	132 s.f.
REAR PATIO:	154 s.f.
ROCKERY:	60 s.f.
CONCRETE WALKS:	196 s.f.
FUTURE CONCRETE RAMP:	106 s.f.
TOTAL HARDSCAPE :	648 s.f.

SITE NOTES

1. NO SITE GRADING WORK OUTSIDE OF STRUCTURE AREA
2. DRIVEWAY EASEMENT REDUCED FROM CALCULATED GROSS LOT AREA TO ACHIEVE NET LOT AREA CALC. (160 s.f.)
3. DRIVEWAY SURFACE SHALL BE BRUSHED CONCRETE CEMENT. ⚠1

SITE KEY

SETBACK LINE
PROPERTY LINE
LAKE WASHINGTON
SETBACK AREA
FACADE MARK
OHWM 25' SETBACK LINE
OHWM 50' SETBACK LINE
DRIVEWAY AREA (BRUSHED CONCRETE FINISH)
GROSS LOT AREA REMOVED
ELEVATION MARK
EXISTING CONTOUR LINE
NEW CONTOUR LINE
SHORELINE ENHANCEMENT AREA
WATER–COURSE BUFFER RESTORATION MITIGATION AREA – REFER: W–3. ⚠

NOTE : RECORDED EASEMENT – DRIVEWAY ACCESS TO REMAIN WITHIN EASMENT.

SITE PLAN

NORTH
6660 MERCER WAY
Mercer Is., WA 98040
SCALE: 1/8" = 1'-0"

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PROJECT NAME: YANG RESIDENCE
PROJECT ADDRESS: 6660 East Mercer Way Mercer Island, WA 98040

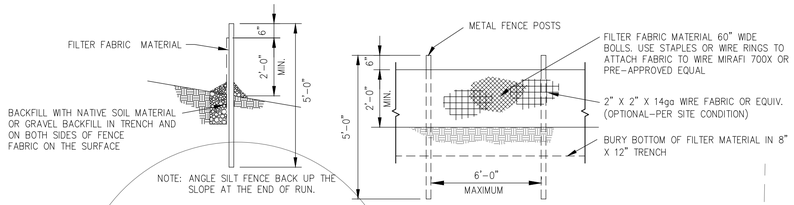
SET TITLE: PERMIT SET
SHEET TITLE: SITE PLAN

STAMP:
4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
DRAWN BY: N.F.W.
REVISIONS:

TAG	DESCRIPTION
⚠1	M.I. BLDG. DEPT. REVIEW 6-10-19
⚠2	M.I. BLDG. DEPT. REVIEW 8-21-19

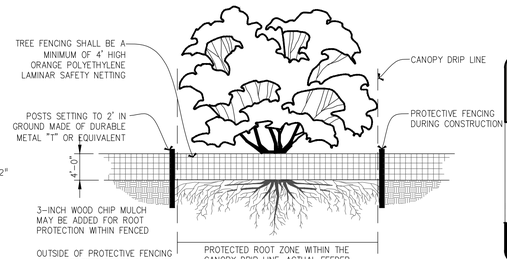
SHEET No.: A1.0



1 SILT FENCE Detail SCALE: NTS

TREE INDEX

TREE NUMBER	TYPE	STEM #	SIZE (DIAMETER)
1	CEDAR	(1)	36"
2	DECIDUOUS (APPLE)	(1)	16"
3	PINE	(1)	8"
4	DECIDUOUS	(3)	6"
5	DECIDUOUS	(3)	(4-1/2", 6" & 7-1/2") 7-1/2"
6	DECIDUOUS	(4)	(6", 6", 4" & 6") 6"
7	DECIDUOUS	(5)	(4", 3-1/2", 5", 4" & 7-1/2") 7-1/2"
8	DECIDUOUS	(1)	10"
9	DECIDUOUS	(2)	(5" & 7") 7"
10	DECIDUOUS	(1)	8"
11	PINE		8"
12	DECIDUOUS (MAGNOLIA Multi-Stem)		6"
13	PINE		10"
14	PINE		6"
15	PINE		6"
16	CEDAR	(2)	(13" & 6") 13"



2 TREE PROTECTION Detail SCALE: NTS

SITE KEY

- SETBACK LINE
- PROPERTY LINE
- LAKE WASHINGTON
- WALL BELOW
- EXISTING CONTOUR
- NEW CONTOUR LINE
- PROPERTY CORNER MARK
- ELEVATION MARK
- CONTINUOUS TREE PROTECTION FENCING
- CONTINUOUS FABRIC SILT FENCE
- EXISTING TREE REMOVED
- EXISTING DRIVEWAY TO BE REMOVED
- AREA OF NEW DRIVEWAY SURFACE (CONCRETE CEMENT PAVING W/ BRUSHED SURFACE)

TREE PLAN

NORTH

6660 MERCER WAY
Mercer Is., WA 98040
Parcel # : 239600-005

SCALE: 1/8" = 1'-0"

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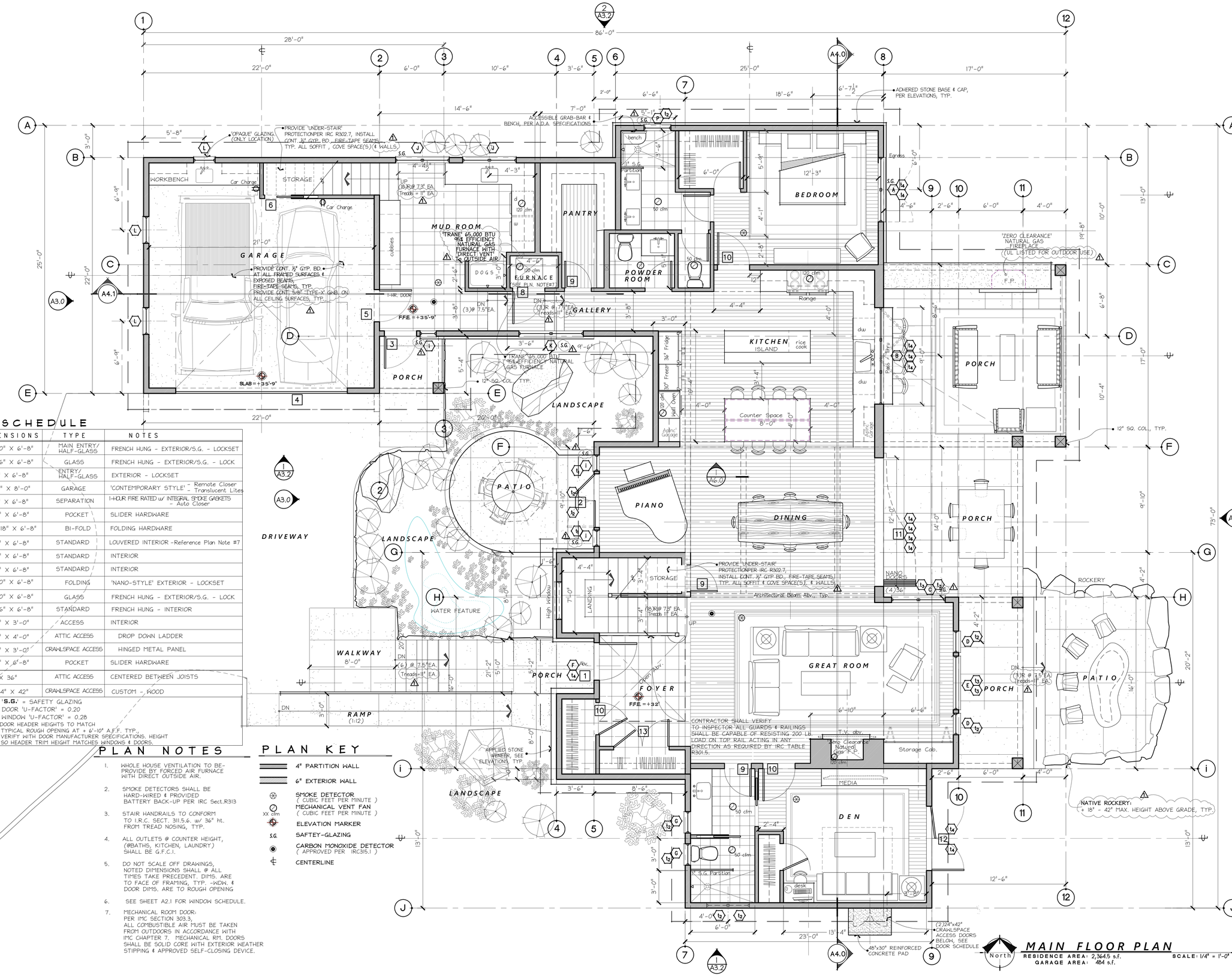
SET TITLE: PERMIT SET
SHEET TITLE: TREE PLAN

STAMP:
4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
DRAWN BY: N.F.W.
REVISIONS:

No.	Description
1	M.I. BLDG. DEPT. REVIEW 6-10-19

SHEET No.: A1.1



DOOR SCHEDULE

TAG	DIMENSIONS	TYPE	NOTES
1	(2) 3'-0" X 6'-8"	MAIN ENTRY/ HALF-GLASS	FRENCH HUNG - EXTERIOR/S.G. - LOCKSET
2	(2) 2'-6" X 6'-8"	GLASS	FRENCH HUNG - EXTERIOR/S.G. - LOCK
3	3'-0" X 6'-8"	ENTRY/ HALF-GLASS	EXTERIOR - LOCKSET
4	16'-0" X 8'-0"	GARAGE	'CONTEMPORARY STYLE' - Remote Closer - Translucent Lites
5	3'-0" X 6'-8"	SEPARATION	1-HOUR FIRE RATED w/ INTEGRAL SMOKE GASKETS - Auto Closer
6	2'-6" X 6'-8"	POCKET	SLIDER HARDWARE
7	(2) 18" X 6'-8"	BI-FOLD	FOLDING HARDWARE
8	3'-0" X 6'-8"	STANDARD	LOUVERED INTERIOR -Reference Plan Note #7
9	2'-6" X 6'-8"	STANDARD	INTERIOR
10	3'-0" X 6'-8"	STANDARD	INTERIOR
11	(4) 3'-0" X 6'-8"	FOLDING	'NANO-STYLE' EXTERIOR - LOCKSET
12	(2) 3'-0" X 6'-8"	GLASS	FRENCH HUNG - EXTERIOR/S.G. - LOCK
13	(2) 2'-6" X 6'-8"	STANDARD	FRENCH HUNG - INTERIOR
14	2'-6" X 3'-0"	ACCESS	INTERIOR
15	22.5" X 4'-0"	ATTIC ACCESS	DROP DOWN LADDER
16	2'-6" X 3'-0"	CRAWLSPACE ACCESS	HINGED METAL PANEL
17	3'-0" X 6'-8"	POCKET	SLIDER HARDWARE
18	22" X 36"	ATTIC ACCESS	CENTERED BETWEEN JOISTS
19	(2)24" X 42"	CRAWLSPACE ACCESS	CUSTOM - WOOD

NOTES: 1. 'S.G.' = SAFETY GLAZING
2. DOOR 'U-FACTOR' = 0.20
3. WINDOW 'U-FACTOR' = 0.28
4. DOOR HEADER HEIGHTS TO MATCH TYPICAL ROUGH OPENING AT + 6'-10" A.F.F. TYP., VERIFY WITH DOOR MANUFACTURER SPECIFICATIONS. HEIGHT SO HEADER TRIM HEIGHT MATCHES WINDOWS & DOORS.

PLAN NOTES

1. WHOLE HOUSE VENTILATION TO BE- PROVIDE BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
2. SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED BATTERY BACK-UP PER IRC Sect.R313
3. STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
4. ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
5. DO NOT SCALE OFF DRAWINGS, NOTED DIMENSIONS SHALL @ ALL TIMES TAKE PRECEDENT. DIMS. ARE TO FACE OF FRAMING, TYP. -WDW. & DOOR DIMS. ARE TO ROUGH OPENING
6. SEE SHEET A2.1 FOR WINDOW SCHEDULE.
7. MECHANICAL ROOM DOOR: PER IMC SECTION 303.3, ALL COMBUSTIBLE AIR MUST BE TAKEN FROM OUTDOORS IN ACCORDANCE WITH IMC CHAPTER 7. MECHANICAL RM. DOORS SHALL BE SOLID CORE WITH EXTERIOR WEATHER STIPPING & APPROVED SELF-CLOSING DEVICE.

PLAN KEY

- 4" PARTITION WALL
- 6" EXTERIOR WALL
- SMOKE DETECTOR (CUBIC FEET PER MINUTE)
- XX cfm MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- S.G. SAFTEY-GLAZING
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC315.1)
- CENTERLINE

MAIN FLOOR PLAN

RESIDENCE AREA: 2,364.5 s.f.
GARAGE AREA: 484 s.f.

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

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PROJECT NAME: YANG RESIDENCE
PROJECT ADDRESS: 6660 East Mercer Way Mercer Island, WA 98040

SET TITLE: PERMIT SET
SHEET TITLE: MAIN FLOOR PLAN

STAMP: 4884 RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
DRAWN BY: N. F. W.
REVISIONS:

Tag	Description
1	M.I. BLDG. DEPT. REVIEW 7-1-16

SHEET No.: A2.0

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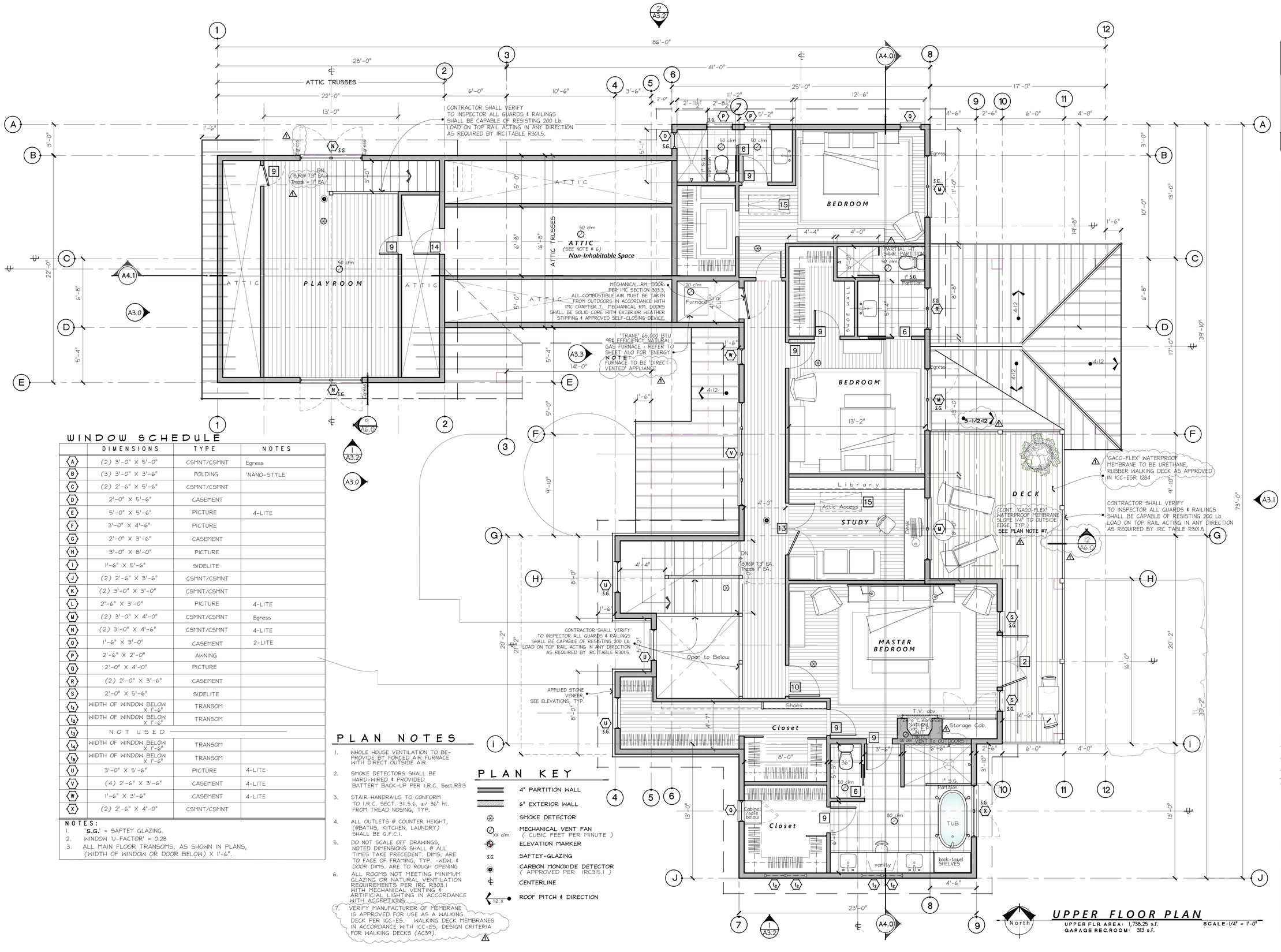

WINDOW SCHEDULE

	DIMENSIONS	TYPE	NOTES
A	(2) 3'-0" X 5'-0"	CSMNT/CSMNT	Egress
B	(3) 3'-0" X 3'-6"	FOLDING	'NANO-STYLE'
C	(2) 2'-6" X 5'-6"	CSMNT/CSMNT	
D	2'-0" X 5'-6"	CASEMENT	
E	5'-0" X 5'-6"	PICTURE	4-LITE
F	3'-0" X 4'-6"	PICTURE	
G	2'-0" X 3'-6"	CASEMENT	
H	3'-0" X 8'-0"	PICTURE	
I	1'-6" X 5'-6"	SIDELITE	
J	(2) 2'-6" X 3'-6"	CSMNT/CSMNT	
K	(2) 3'-0" X 3'-0"	CSMNT/CSMNT	
L	2'-6" X 3'-0"	PICTURE	4-LITE
M	(2) 3'-0" X 4'-0"	CSMNT/CSMNT	Egress
N	(2) 3'-0" X 4'-6"	CSMNT/CSMNT	4-LITE
O	1'-6" X 3'-0"	CASEMENT	2-LITE
P	2'-6" X 2'-0"	AWNING	
Q	2'-0" X 4'-0"	PICTURE	
R	(2) 2'-0" X 3'-6"	CASEMENT	
S	2'-0" X 5'-6"	SIDELITE	
t_1	WIDTH OF WINDOW BELOW X 1'-6"	TRANSOM	
t_2	WIDTH OF WINDOW BELOW X 1'-6"	TRANSOM	
t_3	NOT USED		
t_4	WIDTH OF WINDOW BELOW X 1'-6"	TRANSOM	
t_5	WIDTH OF WINDOW BELOW X 1'-6"	TRANSOM	
U	3'-0" X 5'-6"	PICTURE	4-LITE
V	(4) 2'-6" X 3'-6"	CASEMENT	4-LITE
W	1'-6" X 3'-6"	CASEMENT	4-LITE
X	(2) 2'-6" X 4'-0"	CSMNT/CSMNT	

NOTES:
1. 'S.G.' = SAFTEY GLAZING.
2. WINDOW 'U-FACTOR' = 0.28
3. ALL MAIN FLOOR TRANSOMS, AS SHOWN IN PLANS, (WIDTH OF WINDOW OR DOOR BELOW) X 1'-6".

PLAN NOTES

1. WHOLE HOUSE VENTILATION TO BE-PROVIDE BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
2. SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED BATTERY BACK-UP PER I.R.C. Sect.R313
3. STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
4. ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
5. DO NOT SCALE OFF DRAWINGS, NOTED DIMENSIONS SHALL @ ALL TIMES TAKE PRECEDENT. DIMS. ARE TO FACE OF FRAMING, TYP. -WDW. & DOOR DIMS. ARE TO ROUGH OPENING
6. ALL ROOMS NOT MEETING MINIMUM GLAZING OR NATURAL VENTILATION REQUIREMENTS PER IRC R303.1 WITH MECHANICAL VENTING & ARTIFICIAL LIGHTING IN ACCORDANCE WITH ACCEPTIONS.
7. VERIFY MANUFACTURER OF MEMBRANE IS APPROVED FOR USE AS A WALKING DECK PER ICC-ES. WALKING DECK MEMBRANES IN ACCORDANCE WITH ICC-ES, DESIGN CRITERIA FOR WALKING DECKS (AC39).

PLAN KEY

- 4" PARTITION WALL
- 6" EXTERIOR WALL
- SMOKE DETECTOR
- XX cfm — MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- S.G. — SAFTEY-GLAZING
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC315.1)
- CENTERLINE
- 12:X — ROOF PITCH & DIRECTION

UPPER FLOOR PLAN

UPPER FLR AREA: 1,738.25 s.f.
GARAGE REC.ROOM: 313 s.f.

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

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SET TITLE: PERMIT SET
SHEET TITLE: UPPER FLOOR PLAN

STAMP: 4884 RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
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1	M.I. BLDG. DEPT. REVIEW 7-1-16

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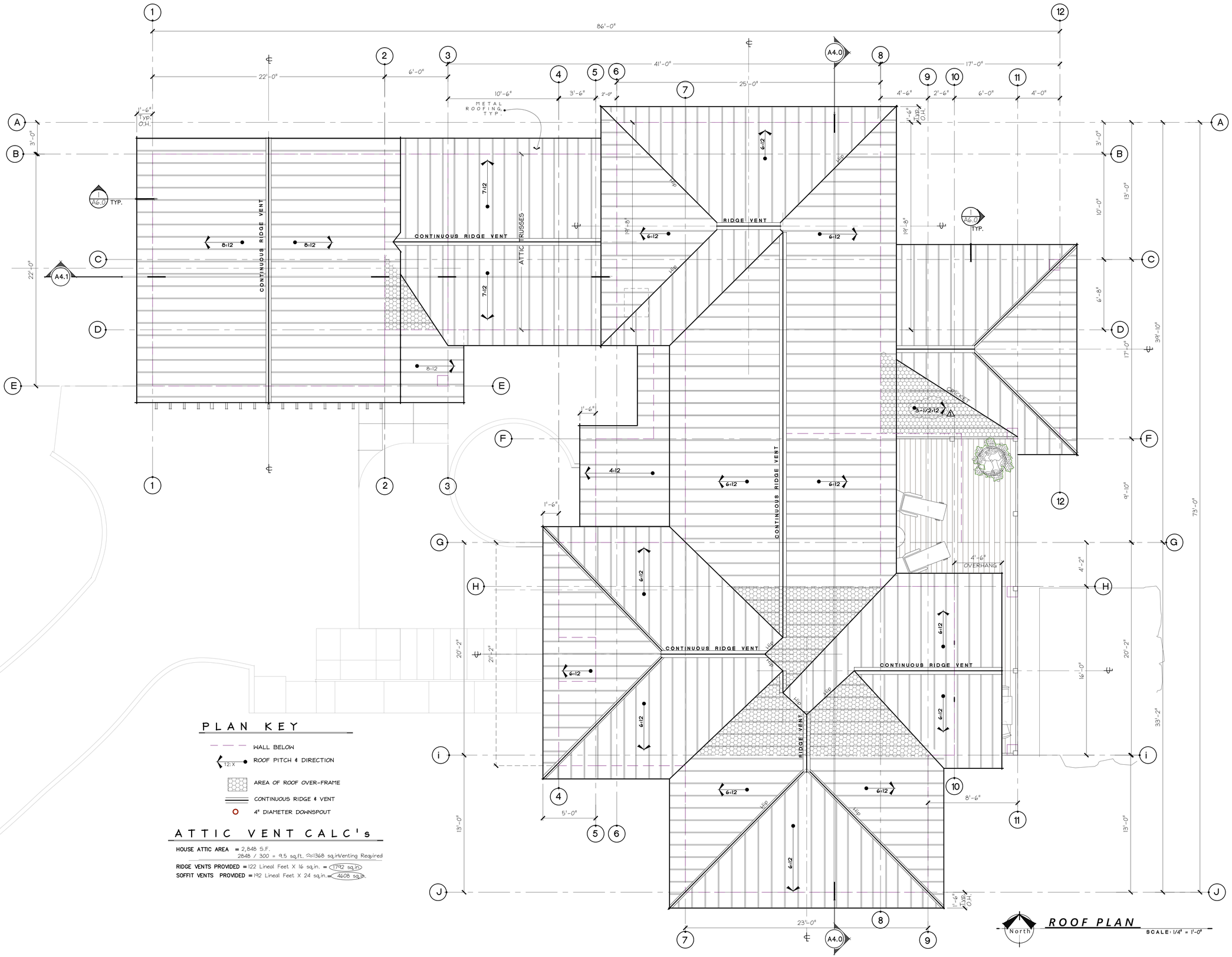

PLAN KEY

- WALL BELOW
- 12:X — ROOF PITCH & DIRECTION
- AREA OF ROOF OVER-FRAME
- CONTINUOUS RIDGE & VENT
- 4" DIAMETER DOWNSPOUT

ATTIC VENT CALC's

HOUSE ATTIC AREA = 2,848 S.F.
2848 / 300 = 9.5 sq.ft. ≈1368 sq.in Venting Required

RIDGE VENTS PROVIDED = 122 Lineal Feet X 16 sq.in. = (1792 sq.in)

SOFFIT VENTS PROVIDED = 192 Lineal Feet X 24 sq.in. = (4608 sq.in.

North

ROOF PLAN

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

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SET TITLE: PERMIT SET

SHEET TITLE: ROOF PLAN

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
DRAWN BY: N. F. W.
REVISIONS:

No.	Description
1	M.I. BLDG. DEPT. REVIEW 7-1-16

SHEET No.: A2.2

WEST ELEVATION

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

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PROJECT NAME: YANG RESIDENCE

PROJECT ADDRESS: 6660 East Mercer Way Mercer Island, WA 98040

SET TITLE: PERMIT SET

SHEET TITLE: ELEVATION

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020

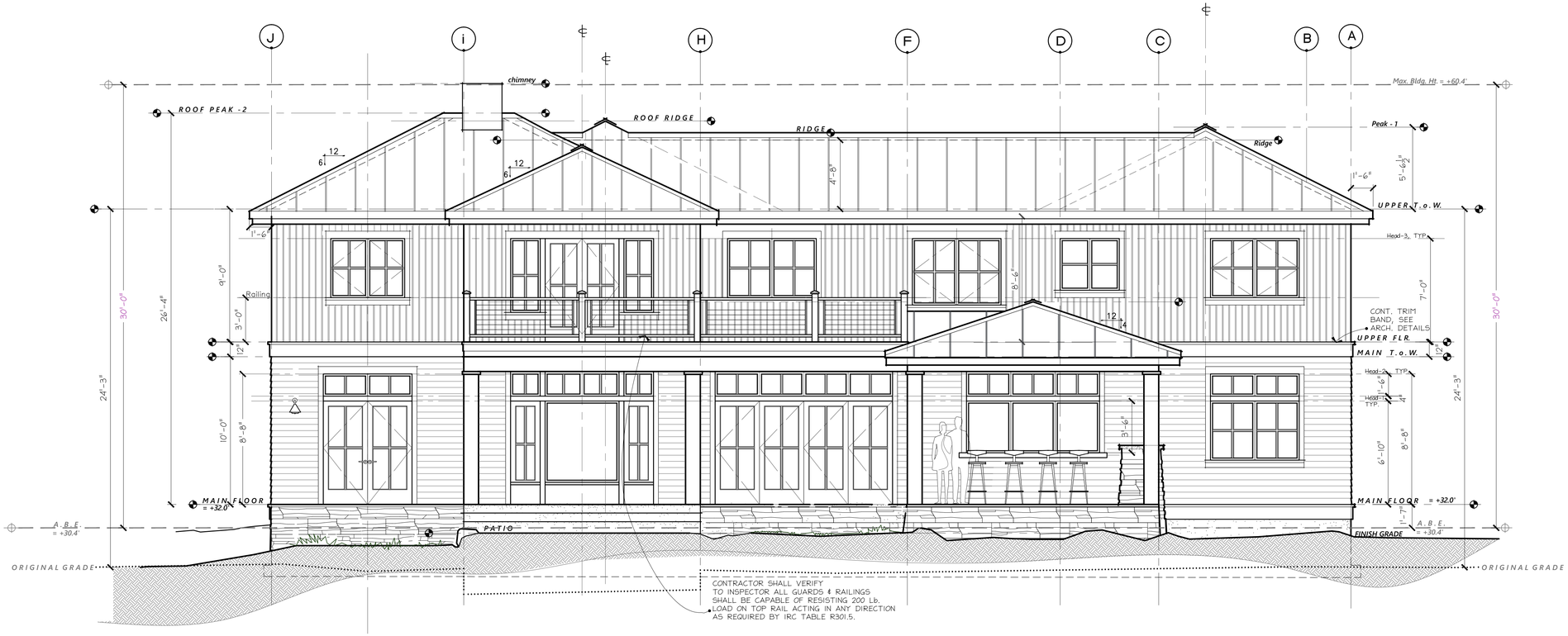
DATE: JAN. 21, 2019

DRAWN BY: N.F.W.

REVISIONS:

Tag	Description
	REVISED 6-3-19

SHEET No.: A3.0



EAST ELEVATION

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

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SET TITLE: PERMIT SET

SHEET TITLE: ELEVATION

STAMP:

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RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020

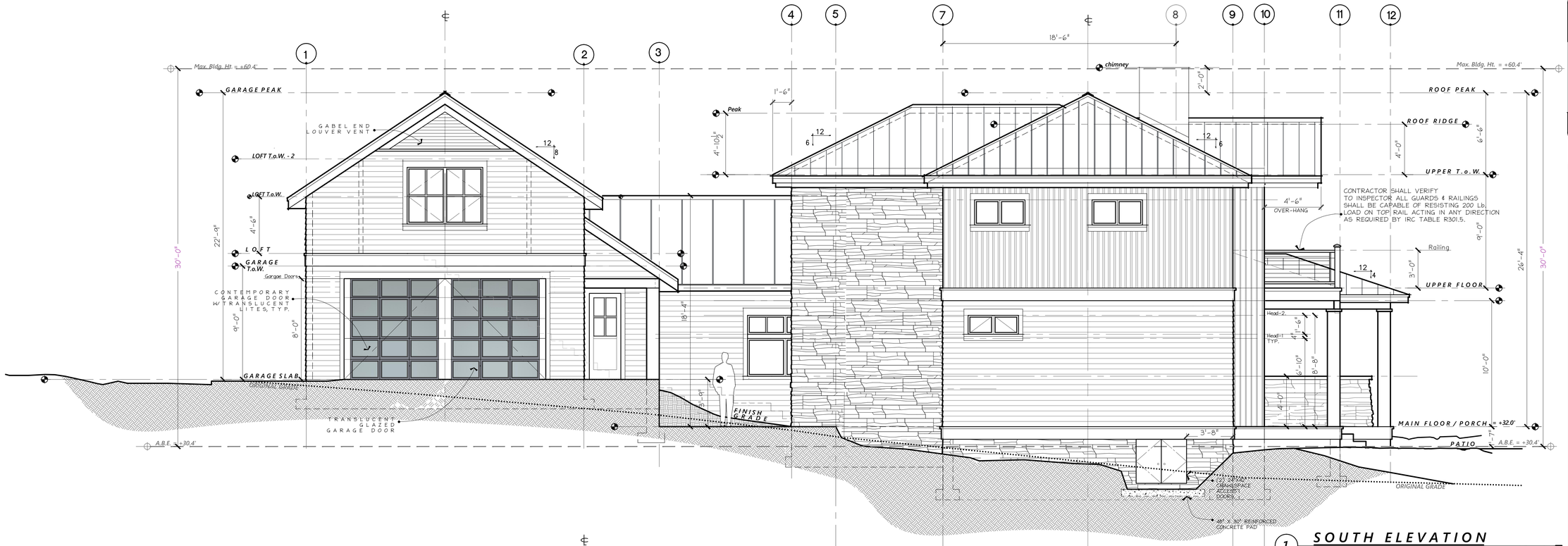
DATE: JAN. 21, 2019

DRAWN BY: N.F.W.

REVISIONS:

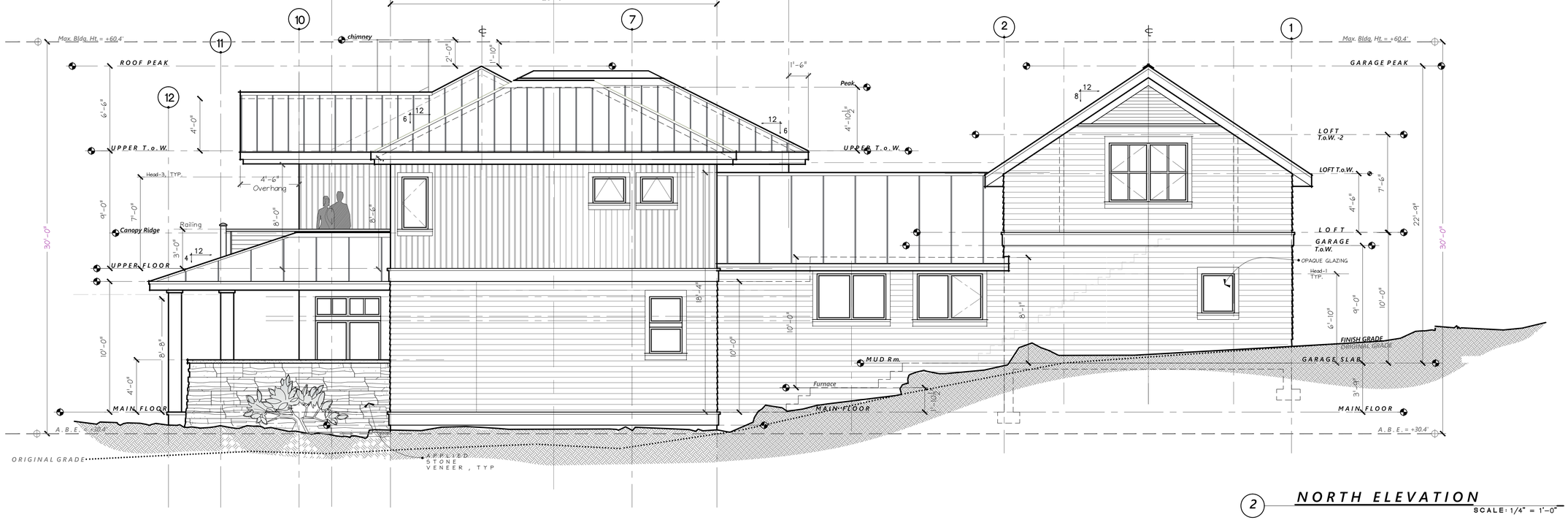
Tag	Description

SHEET No.: A3.1



1 SOUTH ELEVATION

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



2 NORTH ELEVATION

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

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PROJECT NAME: YANG RESIDENCE

PROJECT ADDRESS: 6660 East Mercer Way Mercer Island, WA 98040

SET TITLE: PERMIT SET

SHEET TITLE: ELEVATIONS

STAMP:

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RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 18020

DATE: JAN. 21, 2019

DRAWN BY: N.F.W.

REVISIONS:

Tag	Description

SHEET No.: A3.2

WEST ELEVATION

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

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SET TITLE: PERMIT SET

SHEET TITLE: ELEVATION

STAMP:

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REVISIONS:

Tag	Description

SHEET No.: A3.3

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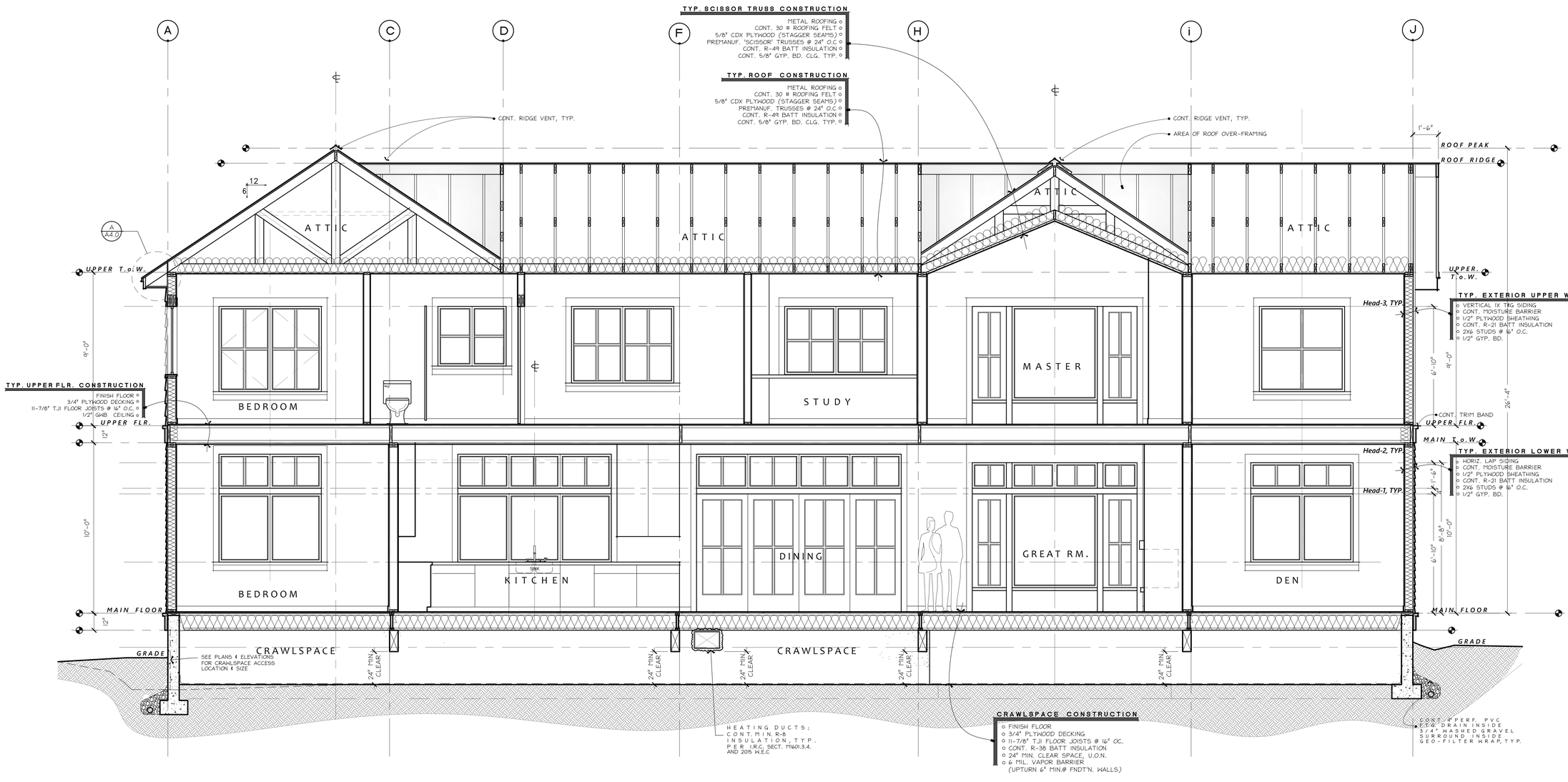

SECTION

SCALE: 3/8" = 1'-0"

NOTE:

PROVIDE 'EFFICIENT BLDG. ENVELOPE' PER WA BLDG. DEPT. ENERGY CREDIT OPTION 1-A:

1. ALL VERTICAL FENESTRATION U-Value = .28 MIN.
2. ALL FLOORS OVER CRAWLSPACE MUST BE R-38 MIN.
3. ENTIRE BASEMENT SLAB MUST HAVE MIN. R-10 BELOW.

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SET TITLE: PERMIT SET

SHEET TITLE: SECTION

STAMP:

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REVISIONS:

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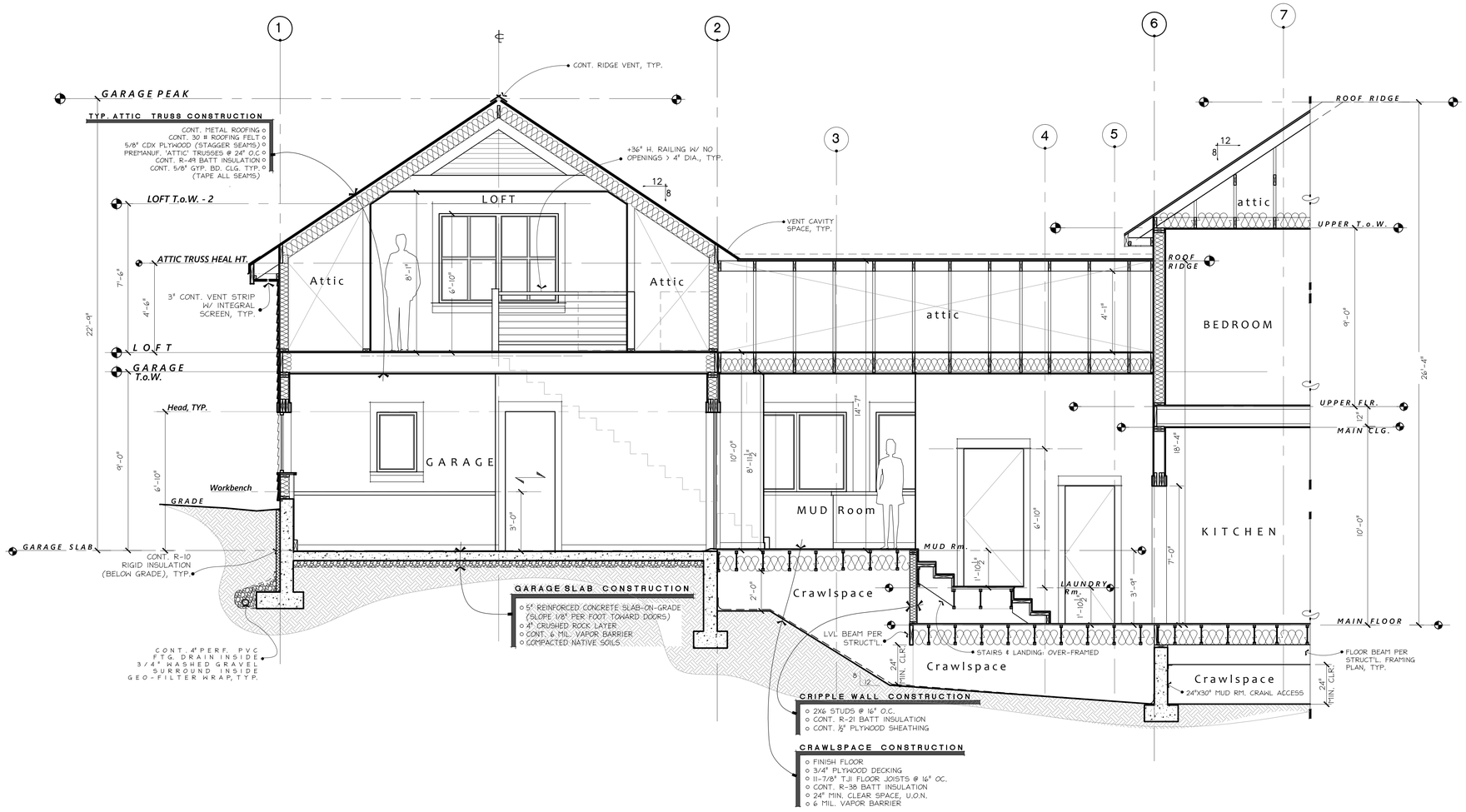
SHEET No.: A4.0



GARAGE SLAB CONSTRUCTION

- 5" REINFORCED CONCRETE SLAB-ON-GRADE (SLOPE 1/8" PER FOOT TOWARD DOORS)
- 4" CRUSHED ROCK LAYER
- CONT. 6 MIL. VAPOR BARRIER
- COMPACTED NATIVE SOILS

CRIPPLE WALL CONSTRUCTION

- 2X6 STUDS @ 16" O.C.
- CONT. R-21 BATT INSULATION
- CONT. ½" PLYWOOD SHEATHING

CRAWLSPACE CONSTRUCTION

- FINISH FLOOR
- 3/4" PLYWOOD DECKING
- 11-7/8" TJI FLOOR JOISTS @ 16" OC.
- CONT. R-38 BATT INSULATION
- 24" MIN. CLEAR SPACE, U.O.N.
- 6 MIL. VAPOR BARRIER

GARAGE / MUD Rm. SECTION

SCALE: 3/8" = 1'-0"

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SET TITLE: PERMIT SET

SHEET TITLE: GARAGE SECTION

STAMP:

4884 RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #: 18020

DATE: JAN. 21, 2019

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REVISIONS:

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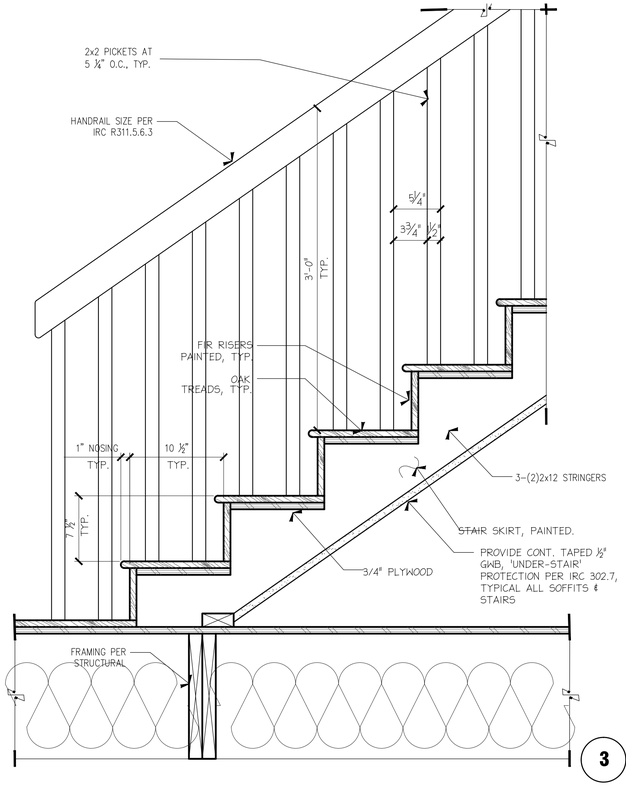
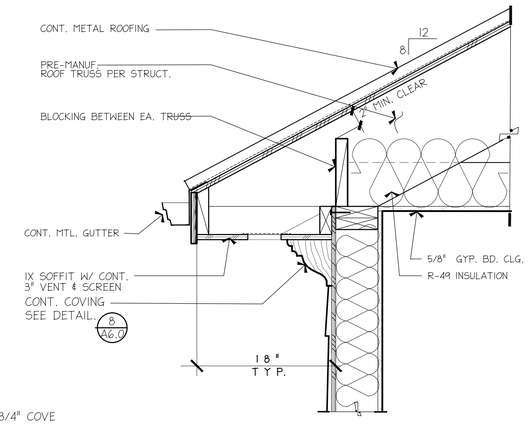
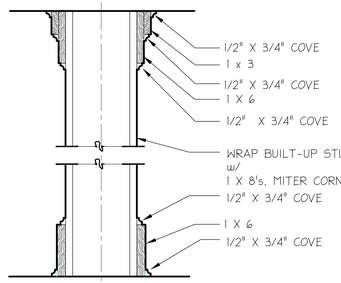


6 **STAIR FRAMING DETAIL**
SCALE: 1-1/2"=1'-0"

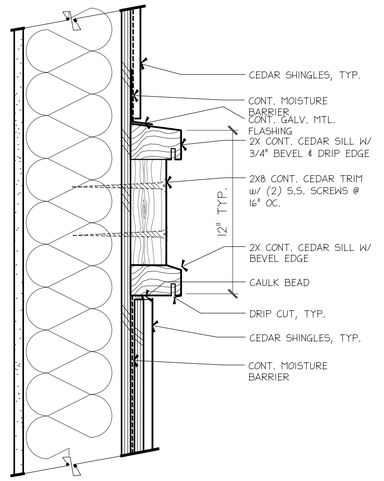


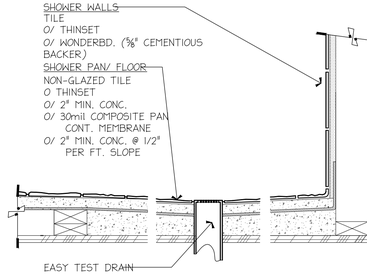
1 **TYPICAL EAVE CONSTRUCTION**
SCALE: 1"=1'-0"

NOTE:
ALL COLUMN WOOD TO BE EXTERIOR GRADE.



3 **TYPICAL BOX COLUMN TRIM**
SCALE: 1-1/2"=1'-0"

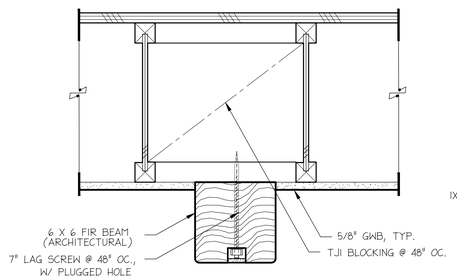




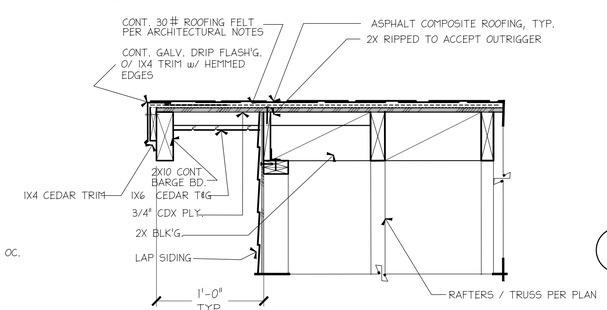
4 **TYPICAL SHOWER PAN**
SCALE: 1"=1'-0"

2 **TYPICAL TRIM BAND DETAIL**
SCALE: 3"=1'-0"

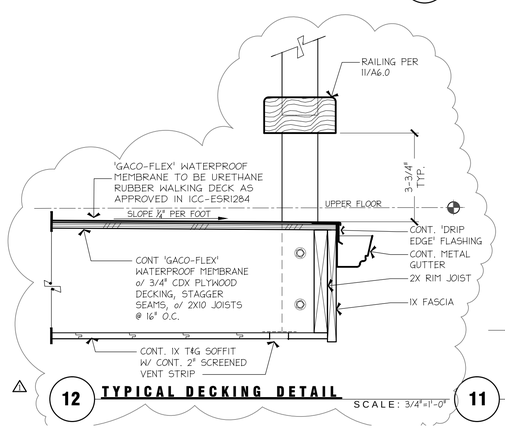
9 **NOT USED**
SCALE:



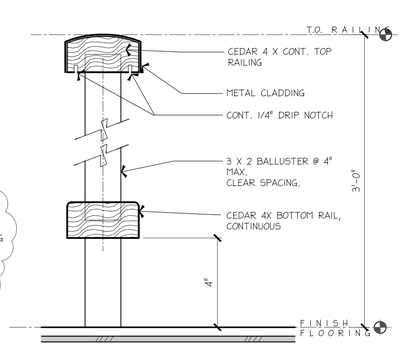
10 **TYPICAL BOX COLUMN TRIM**
SCALE: 3/4"=1'-0"



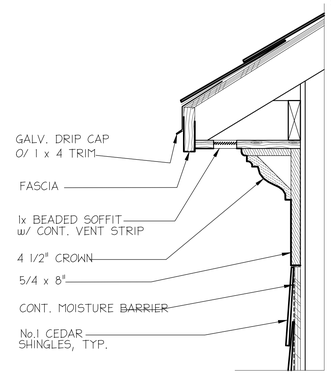
7 **TYPICAL RAKE DETAIL**
SCALE: 3/4"=1'-0"



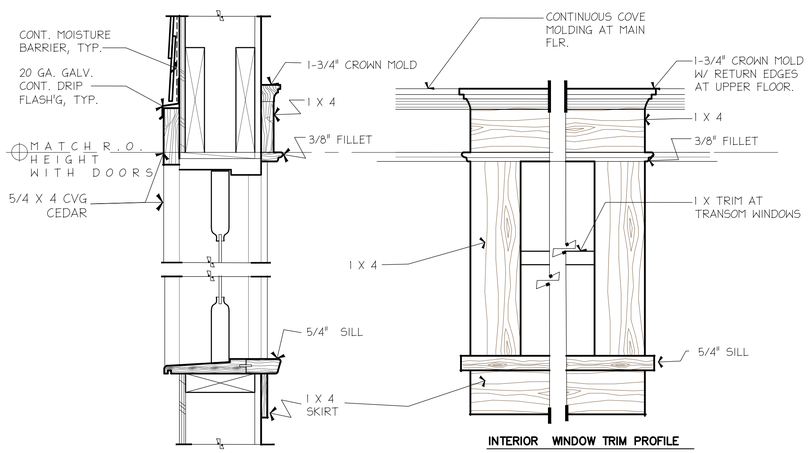
12 **TYPICAL DECKING DETAIL**
SCALE: 3/4"=1'-0"



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



8 **TYPICAL COVE TRIM**
SCALE: 3/4"=1'-0"



5 **TYPICAL WINDOW TRIM DETAIL**
SCALE: 1-1/2" = 1'-0"

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PROJECT NAME: YANG RESIDENCE
PROJECT ADDRESS: 6660 East Mercer Way Mercer Island, WA 98040

SET TITLE: PERMIT SET
SHEET TITLE: ARCHITECTURAL DETAILS

STAMP:
4884
RICHARD A FISHER
STATE OF WASHINGTON

PROJECT #: 18020
DATE: JAN. 21, 2019
DRAWN BY: N.F.W.
REVISIONS:

Tag	Description
1	M.I. BLDG. DEPT. REVIEW 6-19

SHEET No.: A6.0

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER LOT LINE REVISION RECORDING NO. 9412229001)

THAT PORTION OF LOTS 4 AND 5, EVAN'S ADDITION ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGES 91 AND 92, IN KING COUNTY, WASHINGTON, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID LOT 4, EVAN'S ADDITION WHICH BEARS S88°41'26"E, DISTANCE 103.38' FROM THE NORTHWEST CORNER OF SAID LOT 4; THENCE S05°41'39"W A DISTANCE OF 102.56' TO THE SOUTH LINE OF SAID LOT 4 AND THE TERMINUS OF THIS LINE.

TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING AS DELINEATED ON THE FACE OF THE PLAT;

TOGETHER WITH AN UNDIVIDED INTEREST IN TRACT A (COMMUNITY BEACH) AND SECOND CLASS SHORELANDS ADJACENT TO AND ABUTTING THEREON;

AND TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND UTILITY PURPOSES OVER THE 10 FOOT PRIVATE ROAD AS DELINEATED ON THE FACE OF THE PLAT.

SUBJECT TO: ALL EASEMENTS, RESTRICTIONS AND RESERVATIONS OF RECORD, IF ANY.

BASIS OF BEARINGS

A BEARING OF N 88°41'26" W ON THE MONUMENT LINE OF S.E. 68TH ST PER PLAT.

REFERENCES

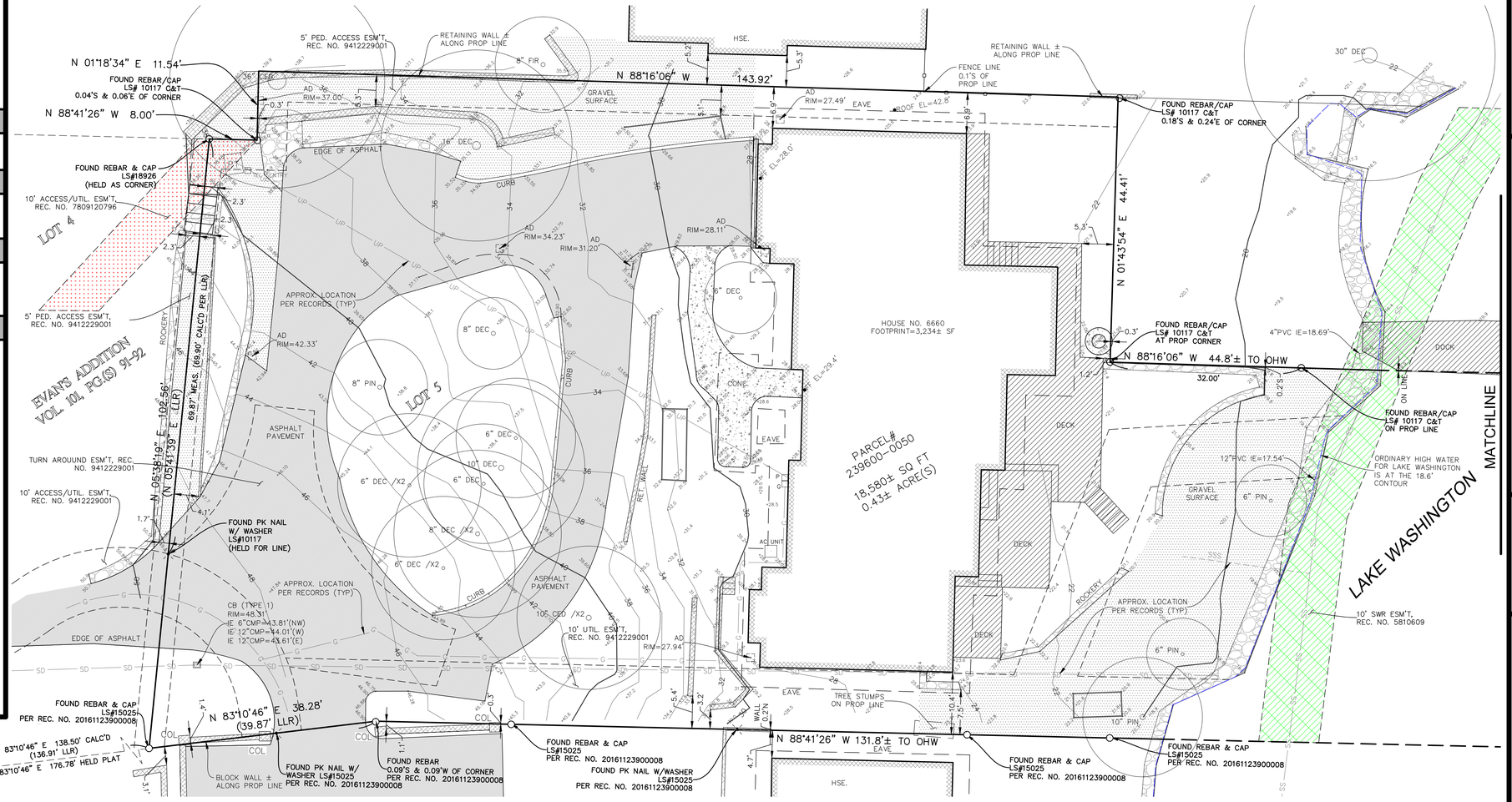
PLAT OF EVANS ADDITION, VOL. 101, PGS. 91–92;
LOT LINE REVISION, VOL 101, PG. 185;
ALL RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD 88 PER CITY OF MERCER ISLAND BENCHMARK 4135
FOUND 1/4" BRASS PIN IN CONC INTERSECTION OF E MERCER WAY & SE 68TH ST
ELEVATION ON PIN = 158.465'

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN DECEMBER OF 2017. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. TERRANE ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.
4. SUBJECT PROPERTY TAX PARCEL NO. 239600-0050
5. SUBJECT PROPERTY UPLAND AREA PER THIS SURVEY IS 18,580± S.F. (0.43± ACRES)
6. THIS SURVEY WAS PERFORMED WITH CHICAGO TITLE INSURANCE COMPANY'S GUARANTEE NO. 0119418-ETU, DATED FEBRUARY 22, 2018. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.



VICINITY MAP

N.T.S.

LEGEND

- AREA DRAIN
- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CULVERT PIPE
- CONCRETE SURFACE
- RETAINING WALL
- EASEMENT AREA
- DECK
- FENCE LINE (WOOD)
- FLAGSTONE SURFACE
- G — GAS METER
- GAS LINE
- GRAVEL SURFACE
- INLET (TYPE 1)
- IP — IRON PIPE (FOUND)
- NAIL AS NOTED
- MONUMENT IN CASE (FOUND)
- P — POWER METER
- UP — POWER (UNDERGROUND)
- PT — POWER TRANSFORMER
- REBAR AS NOTED (FOUND)
- REBAR & CAP (SET)
- ROCKERY
- SS — SEWER LINE
- SD — STORM DRAIN LINE
- TEL SENTRY — TELEPHONE SENTRY
- SIZE TYPE — TREE (AS NOTED)

measure success

TOPOGRAPHIC & BOUNDARY SURVEY
NE 1/4 OF NE 1/4 SEC. 30, TWP. 24 N., RGE. 5 E., W.M.
PARCEL NO. 239600-0050

YANG RESIDENCE
6660 E. MERCER WAY
MERCER ISLAND, WA 98040

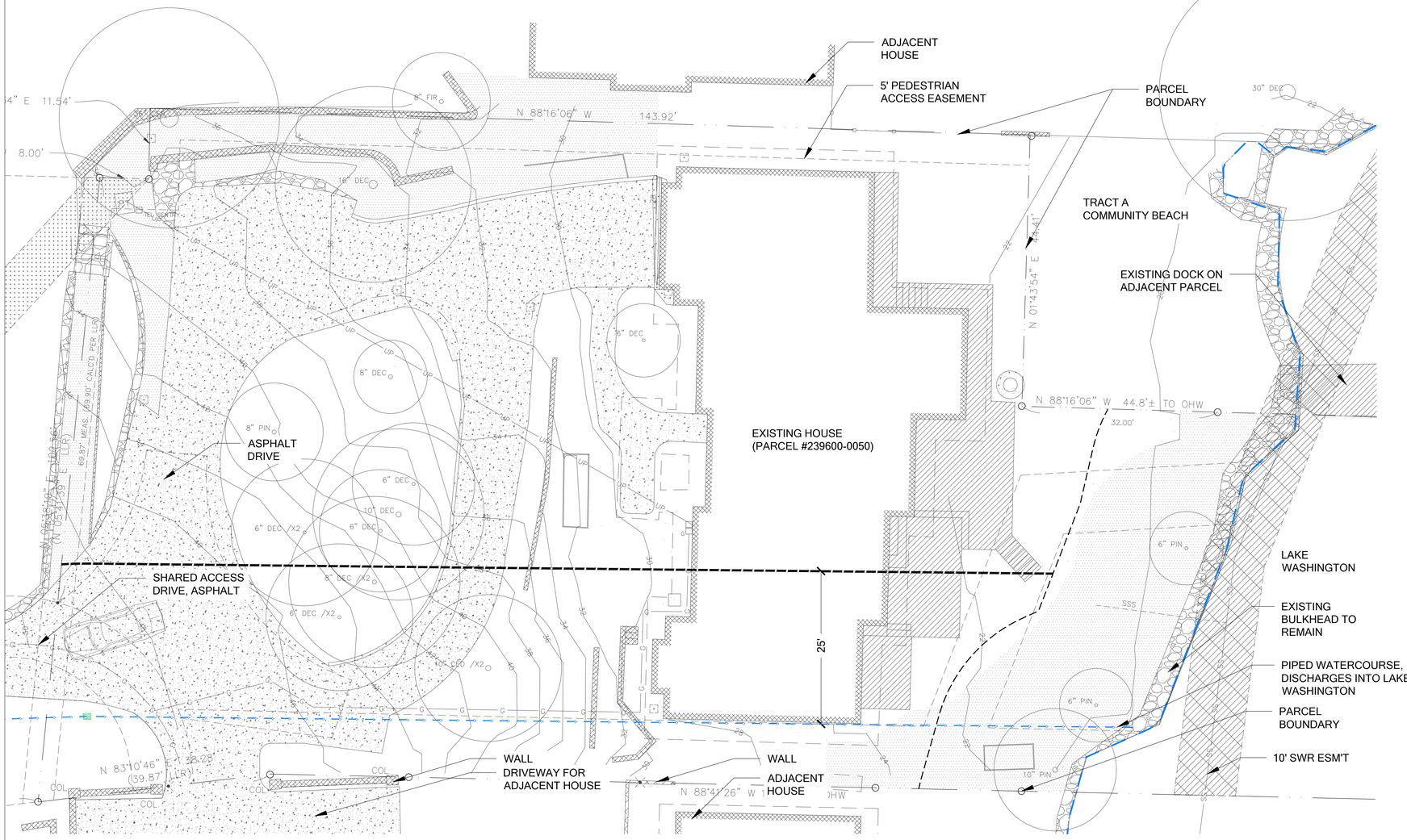
J. GREEN JR. — STATE OF WASHINGTON — REGISTERED PROFESSIONAL LAND SURVEYOR — 12/20/17

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

JOB NUMBER:	170442
DATE:	12/20/17
DRAFTED BY:	LCH
CHECKED BY:	EJG/JGM
SCALE:	1" = 10'

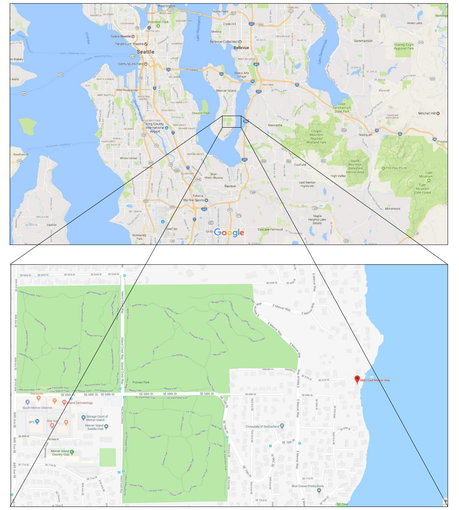
REVISION HISTORY

SHEET NUMBER
1 OF 1



EXISTING CONDITIONS

SCALE: 1" = 10'-0"



VICINITY MAPS

SHEET INDEX

1 EXISTING CONDITIONS
2 IMPACTS ASSESSMENT
3 MITIGATION PLAN
4 SITE PREPARATION PLAN
5 PLANTING PLAN
6 PLANT INSTALLATION DETAILS AND NOTES
7 MITIGATION PLAN NOTES

NOTES

1. CRITICAL AREAS DELINEATED BY THE WATERSHED COMPANY ON JUNE 19, 2018.
2. SURVEY PERFORMED DECEMBER 2017, BY TERRANE, 10801 MAIN STREET, SUITE 102, BELLEVUE, WA 98004. (425)-458-4488
3. VERTICAL DATUM: NAD88

LEGEND

- OHWM (FROM OTHERS)
- PIPED WATERCOURSE
- SHORELINE BUFFER
- WATERCOURSE BUFFER

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THE WATERSHED COMPANY

750 Sixth Street South
Kirkland WA 98033

p 425.822.5242
www.watershedco.com

Science & Design

YANG RESIDENCE

BUFFER AVERAGING PLAN
PREPARED FOR
STEVE AND SOPHIE YANG
6660 EAST MERCER WAY
MERCER ISLAND, WA 98040

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	07-11-2019	REVIEW SET	GM
2	10-04-2019	REVISIONS TO CITY COMMENTS	AAM

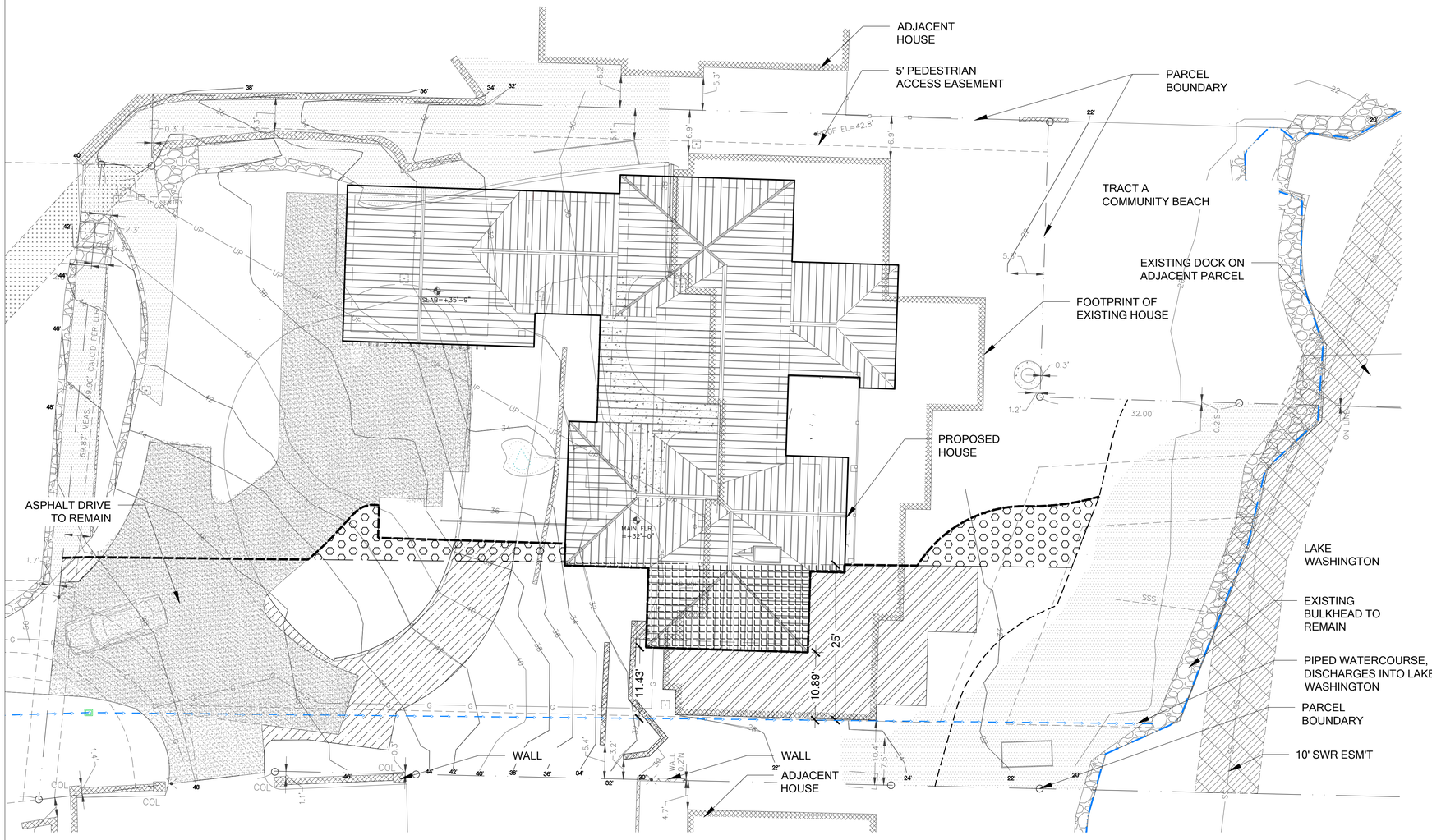
SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: RK
DESIGNED: RK/KMB/GM
DRAFTED: GM
CHECKED: RK/KMB

JOB NUMBER:
180605

SHEET NUMBER:
W1 OF 7

DATE 11/7/2018 | PRINTED BY APRIL MULCAHY | FILENAME 180605 - MERCER ISLAND YANG_BUFFER AVERAGING PLAN_20190711_REV.DWG



LEGEND

- OHWM (FROM OTHERS)
- PIPED WATERCOURSE
- SHORELINE BUFFER
- PROPOSED WATERCOURSE BUFFER

WATERCOURSE B BUFFER IMPACTS

- BUFFER TO BE REDUCED (374 SF)
- BUFFER TO BE ADDED (375 SF)
- REDUCTION OF STRUCTURE WITHIN BUFFER (812 SF)
- IMPERVIOUS TO BE REMOVED FROM BUFFER (467 SF)

IMPACTS ASSESSMENT

SCALE: 1" = 10'-0"

0 5' 10' 20' 40'

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DRAFTED: GM
CHECKED: RK/KMB
JOB NUMBER:
180605
SHEET NUMBER:
W2 OF 7

FILENAME 180605 - MERCER ISLAND YANG_ BUFFER AVERAGING PLAN_20190711_REV.DWG
PRINTED BY APRIL MULCAHY
DATE 11/1/2018

LEGEND

- OHWM (FROM OTHERS)
- PIPED WATERCOURSE
- SHORELINE BUFFER
- PROPOSED WATERCOURSE BUFFER

WATERCOURSE BUFFER MITIGATION
FOR ALLOWED RECONSTRUCTION WITHIN BUFFER
BUFFER ENHANCEMENT (3,624 SF)

SHORELINE ENHANCEMENT AREA (1,350 SF)

OWNER SELECTED LANDSCAPE AREA

EXISTING TREE TO REMAIN

MITIGATION PLAN

SCALE: 1" = 10'-0"

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ORIGINAL PLAN IS 22" x 34".
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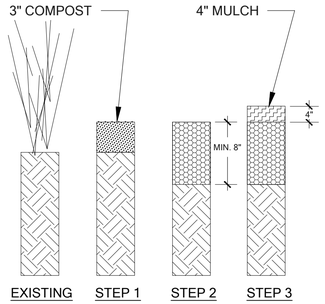
PROJECT MANAGER: RK
DESIGNED: RK/KMB/GM
DRAFTED: GM
CHECKED: RK/KMB
JOB NUMBER:
180605
SHEET NUMBER:
W3 OF 7

FILENAME 180605 - MERCER ISLAND YANG_BUFFER AVERAGING PLAN_20190711_REV.DWG
PRINTED BY APRIL MULCAHY
DATE 11/1/2018



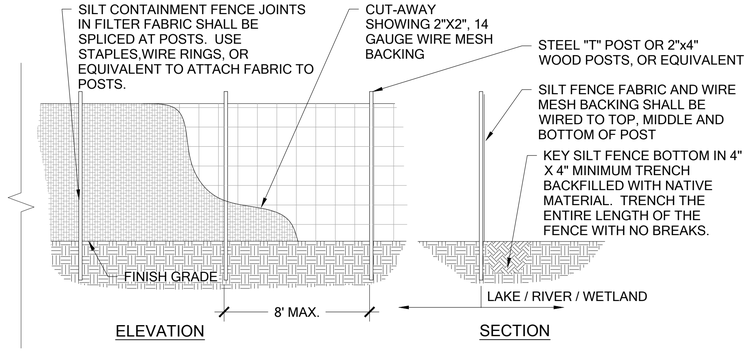
PLANTING AREA PREPARATION

STEP 1
REMOVE UNDESIRABLE SPECIES. WORK WITHIN EXISTING ROOT ZONES SHALL BE DONE BY HAND.
PLACE THREE (3) INCHES COMPOST.

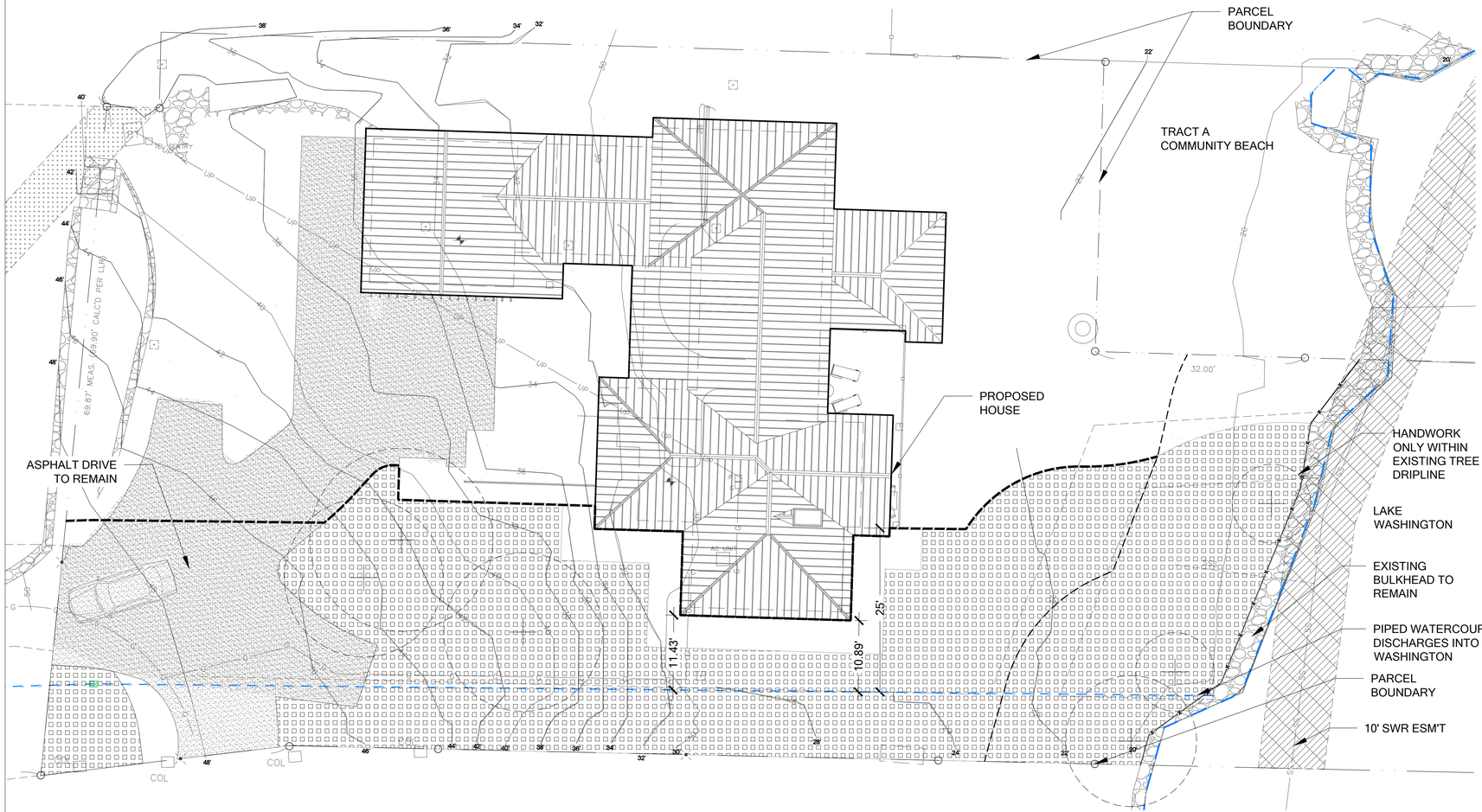
STEP 2
INCORPORATE COMPOST TO AN EIGHT (8) INCH DEPTH.

STEP 3
INSTALL MULCH LAYER FOUR (4) INCHES DEEP AND INSTALL PLANTS. (SEE PLANTING DETAIL.)

SOIL PREPARATION: AMEND EXISTING SOILS
SEQUENCE OF WORK - NOT TO SCALE



1 SILT FENCE
Scale: NTS



NOTES
1. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION EXCEEDS 6" IN DEPTH.
4. TOP DRESS SOIL BY HAND WITH COMPOST MULCH WITHIN DRIPLINES OF EXISTING TREES TO REMAIN.

LEGEND
- OHWM (FROM OTHERS)
- PIPED WATERCOURSE
- SHORELINE BUFFER
- PROPOSED WATERCOURSE BUFFER
- REDUCED WATERCOURSE B BUFFER
- SOIL PREPARATION AREA (4,973 SF)
- SILT FENCE, 73 LF (DETAIL 1 SHEET W4) — 1 / W4

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

0 5' 10' 20' 40'

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SCALE ACCORDINGLY.

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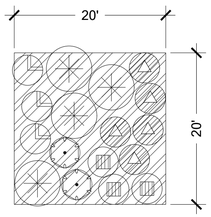
SHEET NUMBER:
W4 OF 7

DATE 11/1/2018 | PRINTED BY APRIL MULCAHY | FILENAME 180605 - MERCER ISLAND YANG_BUFFER AVERAGING PLAN_20190711_REV.DWG

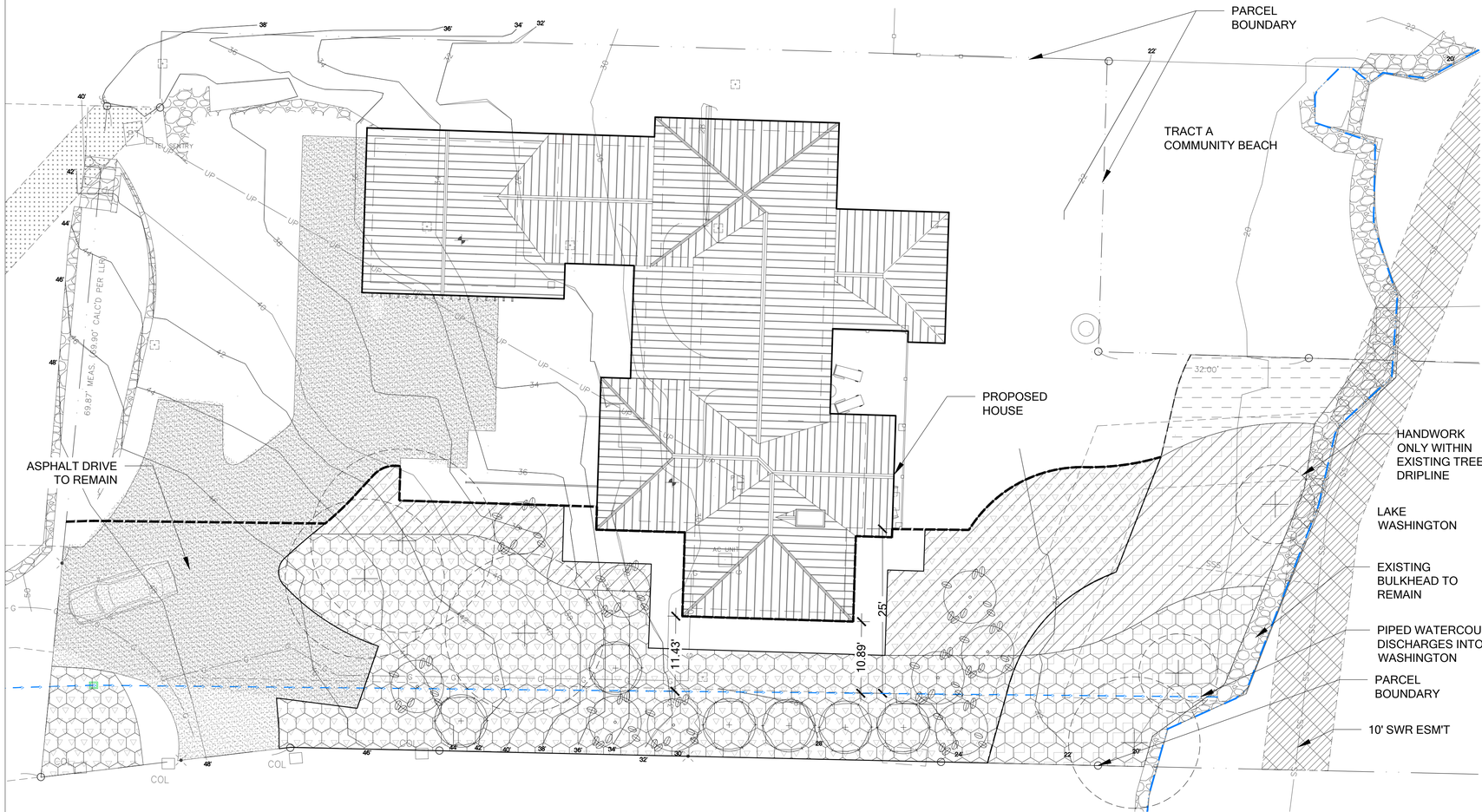
ENHANCEMENT NATIVE MIX PLANTING SCHEDULE (3,304 SF)



	QTY	SPACING	SIZE
TREES			
ACER CIRCINATUM / VINE MAPLE	9	8'	1 GAL. MIN.
RHAMNUS PURSHIANA / CASCARA	6	8'	1 GAL MIN.
SHRUBS			
CORNUS SERICEA / RED-OSIER DOGWOOD	33	6'	1 GAL. MIN.
SYMPHORICARPUS ALBUS / SNOWBERRY	25	4'	1 GAL. MIN.
RIBES SANGUINEUM / RED-FLOWERING CURRANT	17	4'	1 GAL. MIN.
VIBURNUM EDULE / HIGHBUSH CRANBERRY	42	4'	1 GAL. MIN.
VACCINIUM OVATUM / EVERGREEN HUCKLEBERRY	25	4'	1 GAL. MIN.
GROUNDCOVER **ALL SPECIES TO BE SPACED TRIANGULARLY*		48" O.C.	
MAHONIA NERVOSA / DULL MAHONIA	120		4" POT MIN.
POLYSTICHUM MUNITUM / SWORD FERN	120		4" POT MIN.
	397 TOTAL		

VIEW PRESERVATION NATIVE PLANT MIX (1,740 SF)

	QTY	SPACING	SIZE
SHRUBS **ALL SPECIES TO BE SPACED TRIANGULARLY* *NOTE: GROUP INTO SAME SPECIES CLUSTERS OF 6-8*			
SPIRAEA DENSIFLORA	74	3'	1 GAL. MIN.
GAULTHERIA SHALLON / SALAL	74	3'	1 GAL. MIN.
CORNUS SERICEA 'KELSEYI'	74	3'	1 GAL. MIN.
			.
GROUNDCOVER **ALL SPECIES TO BE SPACED TRIANGULARLY* *NOTE: GROUP INTO SAME SPECIES CLUSTERS OF 9-15*			
DELPHINIUM MENZIESII / WESTERN LARKSPUR	167	24" O.C.	4" POT MIN.
FESTUCA IDAHOENSIS / ROEMER'S FESCUE	167	24" O.C.	4" POT MIN.
ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	167	24" O.C.	4" POT MIN.
	723 TOTAL		



NOTES

1. APPLICABLE EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. REFER TO DETAIL 2, SHEET W6 FOR PLANT SPACING LAYOUT.
3. REFER TO DETAIL 1, SHEET W6 FOR CONTAINER PLANTING DETAIL.
4. INSTALL SHRUBS AROUND EXISTING TREES (6), TO REMAIN. PLANT ONLY GROUNDCOVERS WITHIN THE DRIPLINES OF EXISTING TREES TO REMAIN.
5. FINAL PLANT PLACEMENT SHOULD BE DETERMINED BY RESTORATION SPECIALIST OR LANDSCAPE DESIGNER.

LEGEND

- OHWM (FROM OTHERS)
- PIPED WATERCOURSE
- SHORELINE BUFFER
- PROPOSED WATERCOURSE BUFFER

WATERCOURSE BUFFER PLANTING AREA (3,624 SF)
NUMBER OF PLANTS WITHIN AREA = 703

SHORELINE SETBACK NATIVE PLANTING AREA (1,350 SF)
EQUALS 83% OF TOTAL SHORELINE AREA (1,627 SF)

OWNER SELECTED LANDSCAPE AREA (277 SF)

EXISTING TREE TO REMAIN

BUFFER ENHANCEMENT NATIVE PLANTS

VIEW PRESERVATION NATIVE PLANTS

Know what's **below.** **Call** before you dig.

PLANTING PLAN

SCALE: 1" = 10'-0"

0 5' 10' 20' 40'

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STEVE AND SOPHIE YANG
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SUBMITTALS & REVISIONS

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2	10-04-2019	REVISIONS TO CITY COMMENTS	AAM

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DESIGNED: RK/KMB/GM
DRAFTED: GM
CHECKED: RK/KMB
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180605
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W5 OF 7

DATE 11/7/2018 | PRINTED BY APRIL MULCAHY | FILENAME 180605 - MERCER ISLAND YANG, BUFFER AVERAGING PLAN_20190711_REV.DWG

PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE
1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 1973 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS
1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC..; SPRIGS, PLUGS, AND LINERS.
2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION
1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
2. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
3. THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS
1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

SUBMITTALS

PROPOSED PLANT SOURCES
1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES
1. PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION
CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS
1. TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
2. SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
3. HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
4. LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY
PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

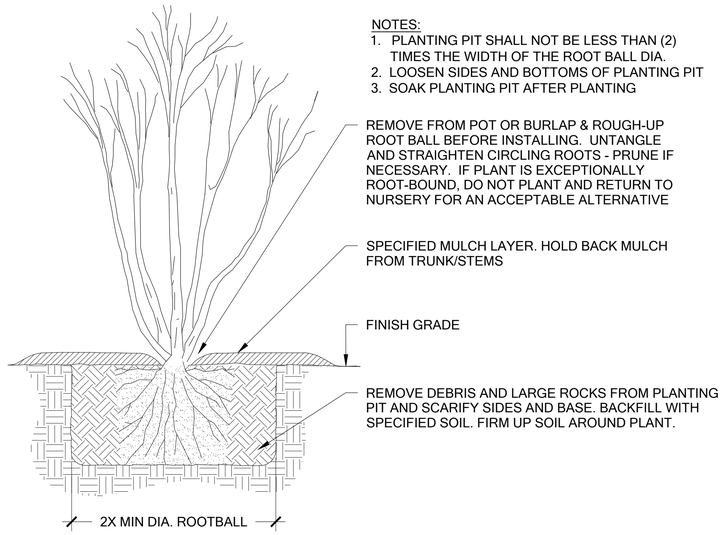
REPLACEMENT
1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL
1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

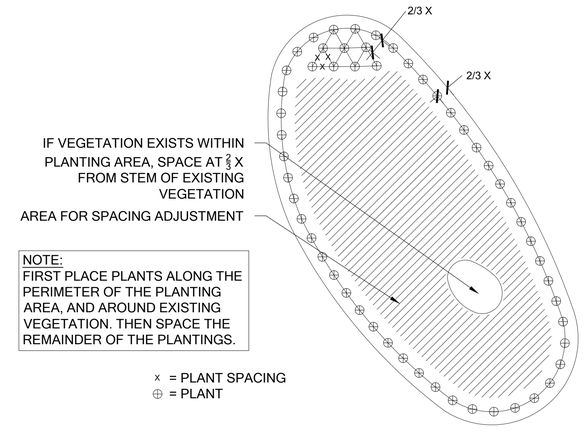
QUANTITIES
SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

ROOT TREATMENT
1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.



1 TREE AND SHRUB PLANTING

Scale: NTS



2 PLANT SPACING

Scale: NTS

PLANT INSTALLATION DETAILS AND NOTES

SCALE AS NOTED

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Science & Design

YANG RESIDENCE
BUFFER AVERAGING PLAN
PREPARED FOR
STEVE AND SOPHIE YANG
6660 EAST MERCER WAY
MERCER ISLAND, WA 98040

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	07-11-2019	REVIEW SET	GM
2	10-04-2019	REVISIONS TO CITY COMMENTS	AAM

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: RK
DESIGNED: RK/KMB/GM
DRAFTED: GM
CHECKED: RK/KMB

JOB NUMBER:
180605

SHEET NUMBER:
W6 OF 7

DATE 11/1/2018 | PRINTED BY APRIL MULCAHY | FILENAME 180605 - MERCER ISLAND YANG_BUFFER AVERAGING PLAN_20190711_REV.DWG

MITIGATION PLAN NOTES

OVERVIEW

A COMPREHENSIVE FIVE-YEAR MAINTENANCE AND MONITORING PLAN IS INCLUDED AS PART OF THE BUFFER ENHANCEMENT. THE PLAN SPECIFIES APPROPRIATE SPECIES FOR PLANTING AND PLANTING TECHNIQUES, DESCRIBES PROPER MAINTENANCE ACTIVITIES, AND SETS FORTH PERFORMANCE STANDARDS TO BE MET YEARLY DURING MONITORING. THIS WILL ENSURE THAT ENHANCEMENT/RESTORATION PLANTINGS WILL BE MAINTAINED, MONITORED, AND SUCCESSFULLY ESTABLISHED WITHIN THE FIRST FIVE YEARS FOLLOWING IMPLEMENTATION.

PROPOSED RESTORATION BEGINS WITH INCORPORATING COMPOST INTO THE ENHANCEMENT AREA. THIS WILL BE FOLLOWED BY INSTALLATION OF NATIVE TREE SHRUB AND GROUNDCOVER SPECIES SUITABLE TO THE SITE. TEN NATIVE SMALL TREE/SHRUB SPECIES AND FIVE NATIVE GROUNDCOVER SPECIES ARE PROPOSED IN THE MITIGATION AREA. THE PLAN CALLS FOR NEW PLANTINGS WITHIN THE INNER 25-FOOT SHORELINE BUFFER AREA AND THE WATERCOURSE BUFFER. NATIVE PLANTINGS ARE INTENDED TO INCREASE NATIVE PLANT COVER, IMPROVE NATIVE SPECIES DIVERSITY, INCREASE VEGETATIVE STRUCTURE, AND PROVIDE FOOD AND OTHER HABITAT RESOURCES FOR WILDLIFE.

GOALS

1. ENHANCE SHORELINE AND WATERCOURSE BUFFERS.
    a. REDUCE THE AMOUNT OF IMPERVIOUS SURFACE AREA WITHIN WATERCOURSE BUFFERS.
    b. ESTABLISH DENSE AND DIVERSE NATIVE SMALL TREE, SHRUB, AND GROUNDCOVER VEGETATION THROUGHOUT THE MITIGATION AREAS.

PERFORMANCE STANDARDS

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE PLAN OVER TIME. IF THE STANDARDS ARE MET AT THE END OF THE FIVE-YEAR MONITORING PERIOD, THE CITY SHALL ISSUE RELEASE OF THE PERFORMANCE BOND.

1. SURVIVAL:
    a. 100% SURVIVAL OF ALL INSTALLED TREES AND SHRUBS AT THE END OF YEAR ONE. THIS STANDARD MAY BE MET THROUGH ESTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
    b. 80% SURVIVAL OF ALL INSTALLED TREES AND SHRUBS AT THE END OF YEAR TWO. THIS STANDARD MAY BE MET THROUGH ESTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
    c. SURVIVAL BEYOND YEAR TWO IS DIFFICULT TO TRACK. THEREFORE, A DIVERSITY STANDARD IS PROPOSED IN PLACE OF SURVIVAL (SEE #3, BELOW).
2. NATIVE VEGETATION COVER IN PLANTED AREAS:
    a. ACHIEVE AT LEAST 60% COVER OF NATIVE PLANTS BY THE END OF YEAR 3. VOLUNTEER SPECIES MAY COUNT TOWARD THIS STANDARD. TOTAL NATIVE PLANT COVER MUST INCLUDE A MINIMUM OF 40% TREE AND SHRUB COVER.
    b. ACHIEVE AT LEAST 80% COVER OF NATIVE PLANTS BY THE END OF YEAR 5. VOLUNTEER SPECIES MAY COUNT TOWARD THIS STANDARD. TOTAL NATIVE PLANT COVER MUST INCLUDE A MINIMUM OF 60% TREE AND SHRUB COVER.
3. SPECIES DIVERSITY IN PLANTED AREAS:
    a. ESTABLISH AT LEAST SIX NATIVE SMALL TREE/SHRUB SPECIES AND FOUR NATIVE GROUNDCOVER SPECIES THROUGHOUT THE ENHANCEMENT AREAS BY YEAR 5. VOLUNTEER SPECIES MAY COUNT TOWARD THIS STANDARD. “ESTABLISHMENT” IS CONSIDERED AT LEAST FIVE HEALTHY, INDIVIDUAL PLANTS OF A GIVEN SPECIES PRESENT WITHIN THE MITIGATION AREAS.
4. INVASIVE SPECIES STANDARD: NO MORE THAN 10% COVER OF INVASIVE SPECIES IN THE PLANTING AREA IN ANY MONITORING YEAR. INVASIVE SPECIES ARE DEFINED AS ANY CLASS A, B, OR C NOXIOUS WEEDS AS LISTED BY THE KING COUNTY NOXIOUS WEED CONTROL BOARD.

MONITORING METHODS

THIS MONITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE MITIGATION SITE OVER TIME BY MEASURING THE DEGREE TO WHICH THE PERFORMANCE STANDARDS LISTED ABOVE ARE BEING MET. AN AS-BUILT PLAN WILL BE PREPARED WITHIN 30 DAYS OF SUBSTANTIALLY COMPLETE CONSTRUCTION OF THE MITIGATION AREAS. THE AS-BUILT PLAN WILL DOCUMENT CONFORMANCE WITH THESE PLANS AND WILL DISCLOSE ANY SUBSTITUTIONS OR OTHER NON-CRITICAL DEPARTURES. THE AS-BUILT PLAN WILL ESTABLISH BASELINE PLANT INSTALLATION QUANTITIES, PHOTOPOINTS, AND THREE 50-FOOT MONITORING TRANSECTS THAT WILL BE USED THROUGHOUT THE MONITORING PERIOD TO MEASURE THE PERFORMANCE STANDARDS.

MONITORING WILL OCCUR TWICE ANNUALLY FOR FIVE YEARS. THE FIRST MONITORING VISIT WILL TAKE PLACE IN THE SPRING. THIS VISIT WILL RECORD NECESSARY WEEDING, INVASIVE CONTROL, AND OTHER MAINTENANCE NEEDS. THE RESTORATION SPECIALIST WILL THEN NOTIFY THE OWNER AND/OR MAINTENANCE CREWS OF NECESSARY EARLY SEASON MAINTENANCE. THE LATE-SEASON VISIT WILL OCCUR IN LATE SUMMER OR FALL AND WILL RECORD THE FOLLOWING AND BE SUBMITTED IN AN ANNUAL REPORT TO THE CITY:

1. GENERAL SUMMARY OF THE SPRING VISIT.
2. FIRST- AND SECOND-YEAR COUNTS OF SURVIVING AND DEAD/DYING PLANTS BY SPECIES IN THE PLANTING AREAS.
3. ESTIMATES OF NATIVE SPECIES COVER USING COVER CLASS METHOD.
4. ESTIMATES OF INVASIVE SPECIES COVER USING COVER CLASS METHOD.
5. COUNTS OF ESTABLISHED NATIVE SPECIES TO DETERMINE SPECIES RICHNESS.
6. PHOTOGRAPHIC DOCUMENTATION AT PERMANENT PHOTOPOINTS.
7. INTRUSIONS INTO THE PLANTING AREAS, EROSION, VANDALISM, TRASH, AND OTHER ACTIONS DETRIMENTAL TO THE OVERALL HEALTH OF THE MITIGATION AREAS.
8. RECOMMENDATIONS FOR MAINTENANCE IN THE MITIGATION AREAS.
9. RECOMMENDATIONS FOR REPLACEMENT OF ALL DEAD OR DYING PLANT MATERIAL WITH SAME OR LIKE SPECIES AND NUMBER AS ON THE APPROVED PLAN.

CONSTRUCTION NOTES AND SPECIFICATIONS

GENERAL NOTES

THE RESTORATION SPECIALIST WILL OVERSEE THE FOLLOWING:

1. CLEARING, SOIL DECOMPACTION, AND COMPOST INCORPORATION;
2. INVASIVE WEED CLEARING; AND
3. PLANT MATERIAL INSPECTION.
    a) PLANT DELIVERY INSPECTION.
    b) 50% PLANT INSTALLATION/LAYOUT INSPECTION.
    c) 100% PLANT INSTALLATION INSPECTION.

WORK SEQUENCE

1. CLEAR THE PLANTING AREA OF ALL INVASIVE WOODY VEGETATION INCLUDING BUT NOT LIMITED TO HIMALAYAN BLACKBERRY, ENGLISH IVY, AND ENGLISH LAUREL.
2. ROTO-TILL 3 INCHES OF COMPOST INTO THE UPPER 8 INCHES OF THE SOIL.
3. ALL PLANT INSTALLATION WILL TAKE PLACE DURING THE DORMANT SEASON (OCTOBER 15TH TO MARCH 1ST).
4. LAYOUT VEGETATION TO BE INSTALLED PER THE PLANTING PLAN AND PLANT SCHEDULE.
5. PREPARE A PLANTING PIT FOR EACH PLANT AND INSTALL PER THE PLANTING DETAILS.
6. MULCH EACH TREE AND SHRUB WITH A CIRCULAR WOOD CHIP MULCH RING, 4 INCHES THICK AND EXTENDING 9 INCHES FROM THE BASE OF THE PLANT (18-INCH DIAMETER).
7. INSTALL A TEMPORARY OR PERMANENT IRRIGATION SYSTEM AS NEEDED TO ENSURE THAT ALL PLANTS RECEIVE AT LEAST ONE INCH OF WATER PER WEEK FROM JUNE 1ST - SEPTEMBER 30TH. MAINTAIN IRRIGATION SYSTEM IN WORKING CONDITION FOR AT LEAST TWO SUMMERS AFTER INITIAL PLANT INSTALLATION.

MAINTENANCE

THIS SITE WILL BE MAINTAINED FOR FIVE YEARS FOLLOWING COMPLETION OF THE PLANT INSTALLATION.

1. REPLACE EACH PLANT FOUND DEAD IN THE SUMMER MONITORING VISIT DURING THE UPCOMING FALL DORMANT SEASON (OCTOBER 15TH TO MARCH 1ST).
2. FOLLOW THE RECOMMENDATIONS NOTED IN THE SPRING MONITORING SITE VISIT.
3. INVASIVE SPECIES MAINTENANCE PLAN:
    a) HIMALAYAN BLACKBERRY, ENGLISH IVY, ENGLISH LAUREL, AND OTHER INVASIVE WOODY VEGETATION WILL BE GRUBBED OUT BY HAND ON AN ONGOING BASIS, WITH CARE TAKEN TO GRUB OUT ROOTS EXCEPT WHERE SUCH WORK WILL JEOPARDIZE THE ROOTS OF INSTALLED OR VOLUNTEER NATIVE PLANTS.
    b) IF IT IS LIKELY THAT HAND REMOVAL WILL NOT BE COMPLETELY EFFECTIVE OR WILL DAMAGE DESIRABLE SPECIES, THEN APPLICATION OF AN HERBICIDE APPROVED FOR USE IN AQUATIC AREAS MAY BE USED. HERBICIDE APPLICATIONS MUST BE CONDUCTED ONLY BY A STATE-LICENSED APPLICATOR. APPLICATIONS SHOULD BE DONE BETWEEN MID-SPRING AND MID-SUMMER TO MAXIMIZE UPTAKE BY PLANTS. APPLICATION SHOULD BE A TARGETED METHOD SUCH AS SPOT SPRAY (PREFERRED FOR HIMALAYAN BLACKBERRY), OR WICK.
4. AT LEAST TWICE YEARLY, REMOVE BY HAND ALL COMPETING WEEDS AND WEED ROOTS FROM BENEATH EACH INSTALLED PLANT AND ANY DESIRABLE VOLUNTEER VEGETATION TO A DISTANCE OF 12 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AS NEEDED DURING THE SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY AND LOWER PLANT REPLACEMENT COSTS.
5. DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
6. MULCH THE WEEDED AREAS BENEATH EACH PLANT WITH WOOD CHIP MULCH AS NECESSARY TO MAINTAIN A MINIMUM 4-INCH-THICK, 18-INCH-DIAMETER MULCH RING.
7. THE TEMPORARY IRRIGATION SYSTEM WILL BE OPERATED TO ENSURE THAT PLANTS RECEIVE A MINIMUM OF ONE INCH OF WATER PER WEEK FROM JUNE 1ST THROUGH SEPTEMBER 30TH FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION. IRRIGATION BEYOND THE SECOND YEAR MAY BE NEEDED BASED ON SITE PERFORMANCE OR SIGNIFICANT REPLANTING.

MATERIAL SPECIFICATIONS AND DEFINITIONS

1. COMPOST: CEDAR GROVE COMPOST OR EQUIVALENT PRODUCT. 100% VEGETABLE COMPOST WITH NO APPRECIABLE QUANTITIES OF SAND, GRAVEL, SAWDUST, OR OTHER NON-ORGANIC MATERIALS. QUANTITY REQUIRED: 56 CUBIC YARDS.
2. RESTORATION SPECIALIST: THE WATERSHED COMPANY [(425) 822-5242] PERSONNEL OR OTHER PERSON QUALIFIED TO EVALUATE ENVIRONMENTAL RESTORATION PROJECTS.
3. WOOD CHIP MULCH: CHIPPED WOODY MATERIAL APPROXIMATELY 1 INCH MINIMUM TO 3 INCHES IN MAXIMUM DIMENSION (NOT SAWDUST OR COARSE HOG FUEL). MULCH SHALL NOT CONTAIN APPRECIABLE QUANTITIES OF GARBAGE, PLASTIC, METAL, SOIL, AND DIMENSIONAL LUMBER OR CONSTRUCTION/ DEMOLITION DEBRIS. PACIFIC TOPSOIL [(800) 844-7645] SELLS SUITABLE WOODCHIP MULCH CALLED “WOOD CHIP MULCH” AT MANY OF THEIR LOCATIONS. NOTE: ARBORIST WOODCHIPS GENERALLY CONTAIN WEED SEEDS AND ARE NOT A RELIABLE ALTERNATIVE. QUANTITY REQUIRED: 4 CUBIC YARDS.

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MITIGATION PLAN NOTES

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YANG RESIDENCE
BUFFER AVERAGING PLAN
PREPARED FOR
STEVE AND SOPHIE YANG
6660 EAST MERCER WAY
MERCER ISLAND, WA 98040

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	07-11-2019	REVIEW SET	GM
2	10-04-2019	REVISIONS TO CITY COMMENTS	AAM

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: RK
DESIGNED: RK/KMB/GM
DRAFTED: GM
CHECKED: RK/KMB

JOB NUMBER:
180605

SHEET NUMBER:
W7 OF 7

FILENAME: 180605 - MERCER ISLAND YANG, BUFFER AVERAGING PLAN_20190711_REV.DWG
PRINTED BY: APRIL MULCAHY
DATE: 11/7/2018

A CLEARING LIMIT NOTE

ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.

B TREE DRIPLINE NOTE

WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.

EROSION CONTROL LEGEND

- LIMITS OF DISTURBANCE
- FILTER FABRIC FENCE (SILT FENCE) (SF)
- STABILIZED CONSTRUCTION ENTRANCE (CE)
- CATCH BASIN INLET PROTECTION (IP)
- INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE (IS)
- TREE PROTECTION FENCING (TP)
- STOCKPILE (ST)
- STRAW WATTLES (SW) — USE AS NEEDED
- PLASTIC COVERING (PC) — COVER EXPOSED AREAS WITHIN MERCER ISLAND TIME LIMIT
- COMPOST SOCK (CS) — SEDIMENT CONTROL OPTION RECOMMENDED IN LIEU OF SILT FENCE

EROSION CONTROL NOTES

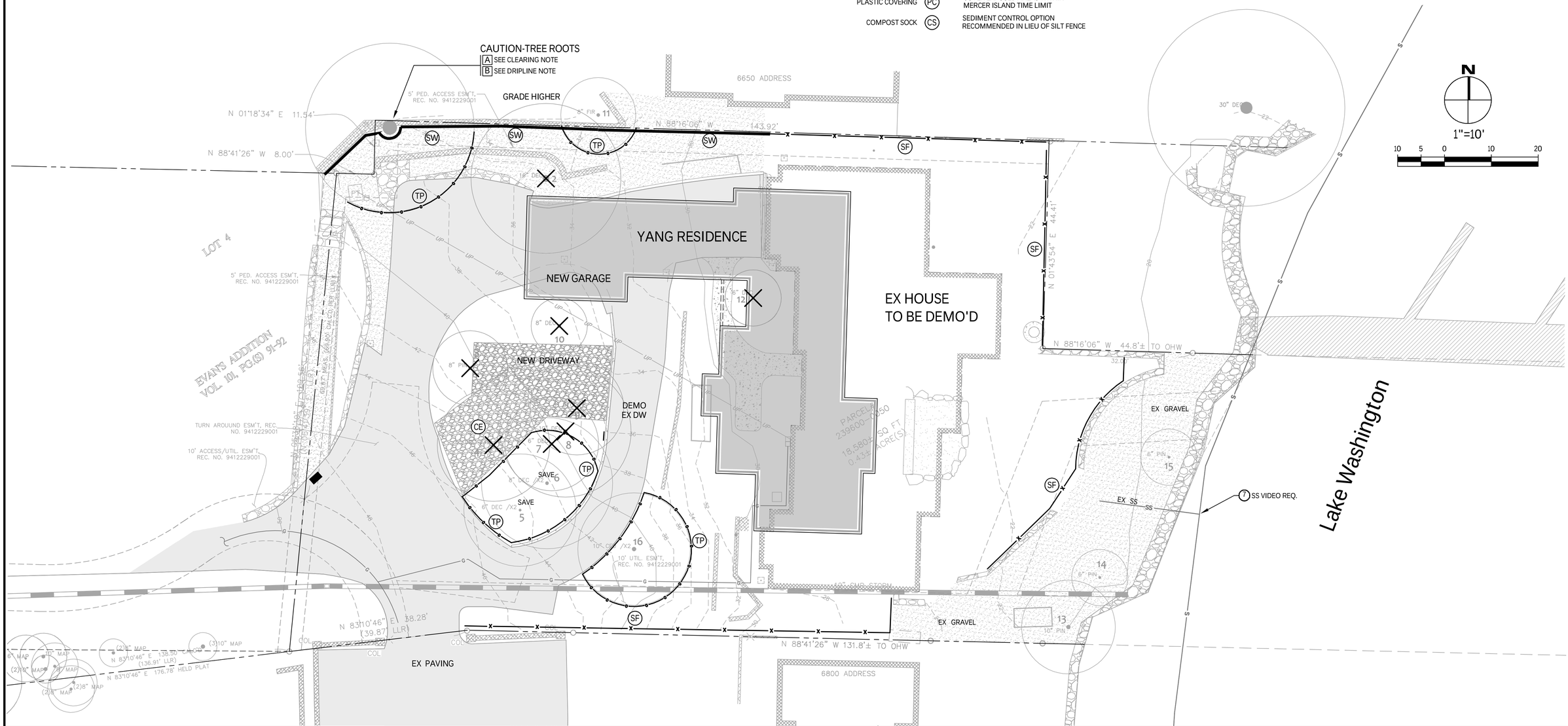
SHEET C1.2

EROSION CONTROL DETAILS

SHEET C1.2

SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.



NO.	DATE	BY	REVISIONS

APPLICANT:
STEVE YANG

811 Know what's below. Call before you dig.

DATE: Jul 08, 2019
JOB# 1739
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Jul 08, 2019 JEFFREY E. DUFFY STATE OF WASHINGTON 20766 REGISTERED PROFESSIONAL ENGINEER

CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

EROSION CONTROL PLAN

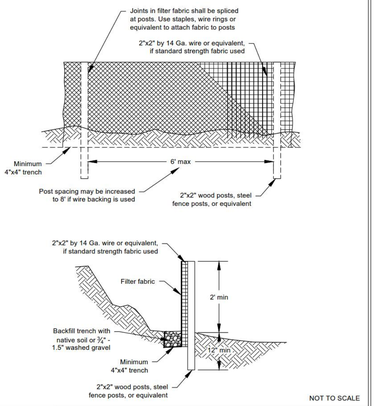
YANG RESIDENCE
6660 E. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C1.0

APN 239600-0050
1902-005

SILT FENCE DETAIL — DOE

Figure II-4.2.12 Silt Fence



DEPARTMENT OF ECOLOGY State of Washington

Figure II-4.2.12
Silt Fence

Revised October 2014

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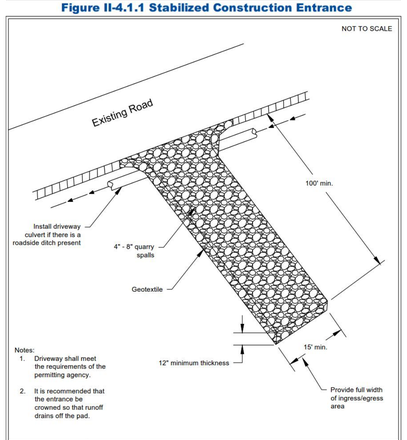
CONSTRUCTION ENTRANCE — DOE

Figure II-4.1.1 Stabilized Construction Entrance



DEPARTMENT OF ECOLOGY State of Washington

Figure II-4.1.1
Stabilized Construction Entrance

Revised June 2015

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RECOMMENDED CONSTRUCTION SEQUENCE

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).

3. FLAG OR FENCE CLEARING LIMITS.

4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.

5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).

7. CONSTRUCT SEDIMENT PONDS AND TRAPS.

8. GRADE AND STABILIZE CONSTRUCTION ROADS.

9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.

10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.

12. COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.

13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.

14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

DENUDED AREAS REQUIREMENTS

APRIL 1 TO SEPT 30
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.

OCT 1 TO MARCH 31
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

EROSION CONTROL NOTES

D.8.2 STANDARD ESC PLAN NOTES
THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.

1. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND
UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.

5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.

7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.

8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.

11. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.

12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
3. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.
5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
7. EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:
8. PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.
9. CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.
10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
11. ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.
12. INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.
13. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
14. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
17. SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.
18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.
19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
16. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.
20. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.
21. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
22. THE LIMITS AND EXTENDS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

NO.	DATE	BY	REVISIONS

APPLICANT:
STEVE YANG

811 Know what's below. Call before you dig.

DATE: Jul 08, 2019
JOB# 1739
DRAFTED: CH DESIGN: DE
DIGITAL SIGNATURE

Jul 08, 2019
JEFFREY E. HAAS — STATE OF WASHINGTON — 28766 — REGISTERED PROFESSIONAL ENGINEER

CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

TESC & CITY NOTES
TESC DETAILS

YANG RESIDENCE
6660 E. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C1.2

APN 239600-0050
1902-005

SANITARY SEWER IMPROVEMENTS

(1) -

(2) -

(3) BACKWATER VALVE ASSEMBLY (48"-Ø STRUCTURE) INSTALLED OVER REPLACED SIDE SEWER. SEE MERCER ISLAND DETAIL S-26. VALVE ELEVATION WILL NEED TO BE MIN. 2-FEET ABOVE HIGH WATER ELEVATION.

(4) SEWER CLEANOUT FOR LAKE LINE CONNECTIONS PER MERCER ISLAND DETAIL S-29 (C3.2). LOCATE SO MIN 2.0' ABOVE LAKE LEVEL. USE FOGTITE METER BOX COVER.

(7) LOCATE AND VIDEO CONDITION OF EXISTING SANITARY SIDE SEWER. REPLACE LINE IF FOUND DEFECTIVE AS DETERMINED BY CITY INSPECTOR.

WATER IMPROVEMENTS

ALSO SEE C2.1

(10) NEW SF RESIDENTIAL WATER SERVICE & METER PIT. CONFIRM REQUIRED SIZE WITH BUILDING PERMIT REVIEW. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A DEPENDING ON SIZE REQUIREMENT.

(11) MIN 2" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.

(12) -

(13) REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) DEVICE REQUIRED. PROVIDE FROST PROTECTION IN ACCORDANCE WITH UNIFORM PLUMBING CODE.

(14) -

STORM DRAIN

(20) 4" STORM DRAIN (3034 PVC) @ MIN 2% GRADE

(21) 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1% GRADE

(22) 6" STORM DRAIN (3034 PVC) @ MIN 2% GRADE

(23) -

(24) -

(25) -

(26) -

(28) -

(29) -

STORM DRAIN STRUCTURES

(30) -

(31) -

(32) -TYPE 1 CB WITH SOLID LID

(33) -

(34) -

(35) -

(36) NDS DURASLOPE CHANNEL DRAIN OR EQUAL. MINIMUM 6" CHANNEL. CLASS B VEHICLE RATED GRATE.

(39) -

(40) TYPE 40 CATCH BASIN. IN DRIVEWAY ADD WATER QUALITY RISER TEE FOR EXITING PIPE (OR DOWNTURNED ELBOW).

(41) -

(43) -

(46) -

(47) -

(48) -

STORM BMP's

COMPOSTED AMENDED SOIL IS REQUIRED FOR DISTURBED AREAS. SEE DETAIL ON C3.5.

STORM BMP'S ARE NOT PROPOSED FOR PROJECT. SEE STORM REPORT.

LEGAL DESCRIPTION

(PER LOT LINE REVISION RECORDING NO. 9412229001)

THAT PORTION OF LOTS 4 AND 5, EVAN'S ADDITION ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGES 91 AND 92, IN KING COUNTY, WASHINGTON, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID LOT 4, EVAN'S ADDITION WHICH BEARS S88°41'26"E, DISTANCE 103.38' FROM THE NORTHWEST CORNER OF SAID LOT 4; THENCE S05°41'39"W A DISTANCE OF 102.56' TO THE SOUTH LINE OF SAID LOT 4 AND THE TERMINUS OF THIS LINE.

TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING AS DELINEATED ON THE FACE OF THE PLAT;

TOGETHER WITH AN UNDIVIDED INTEREST IN TRACT A (COMMUNITY BEACH) AND SECOND CLASS SHORELANDS ADJACENT TO AND ABUTTING THEREON;

AND TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND UTILITY PURPOSES OVER THE 10 FOOT PRIVATE ROAD AS DELINEATED ON THE FACE OF THE PLAT.

SUBJECT TO: ALL EASEMENTS, RESTRICTIONS AND RESERVATIONS OF RECORD, IF ANY.

VERTICAL DATUM

NAVD 88 PER CITY OF MERCER ISLAND BENCHMARK 4135
FOUND 1/4" BRASS PIN IN CONC INTERSECTION OF E MERCER WAY & SE 68TH ST
ELEVATION ON PIN = 158.465'

SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY BY:
TERRANE LAND SURVEYING
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
PHONE 425.458.4488
WWW.TERRANE.NET

SOIL AMENDMENT REQUIRED

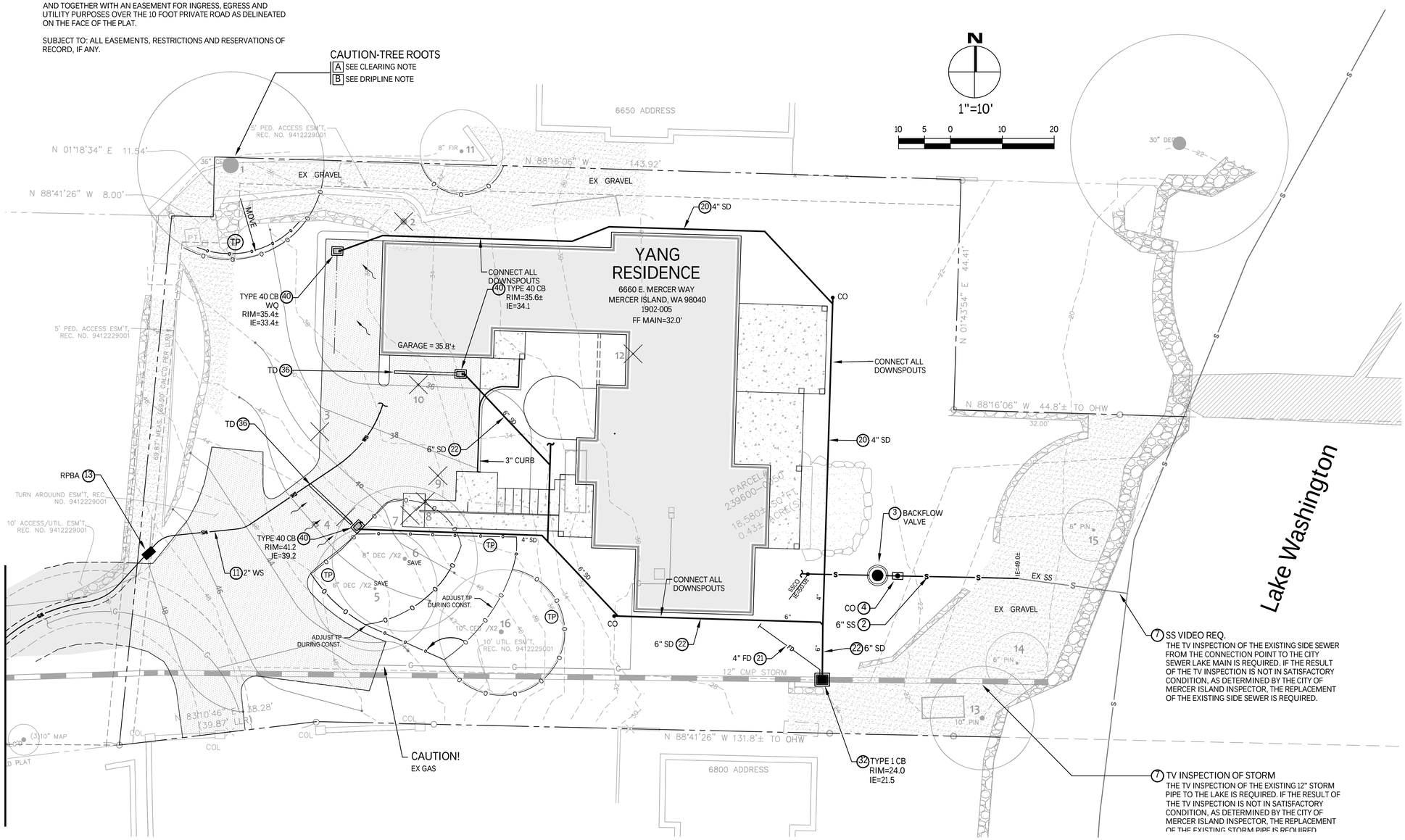
COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

[A] CLEARING LIMIT NOTE

ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.

[B] TREE DRIPLINE NOTE

WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.



NO.	DATE	BY	REVISIONS

APPLICANT:
STEVE YANG

811 Know what's below. Call before you dig.

DATE: Jul 08, 2019
JOB# 1739
DRAFTED: DE DESIGN: DE
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Jul 08, 2019
JEFFREY E. RANDALL
STATE OF WASHINGTON
19706
REGISTERED
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CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

DRAINAGE / CIVIL PLAN

YANG RESIDENCE
6660 E. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C2.0

APN 239600-0050
1902-005

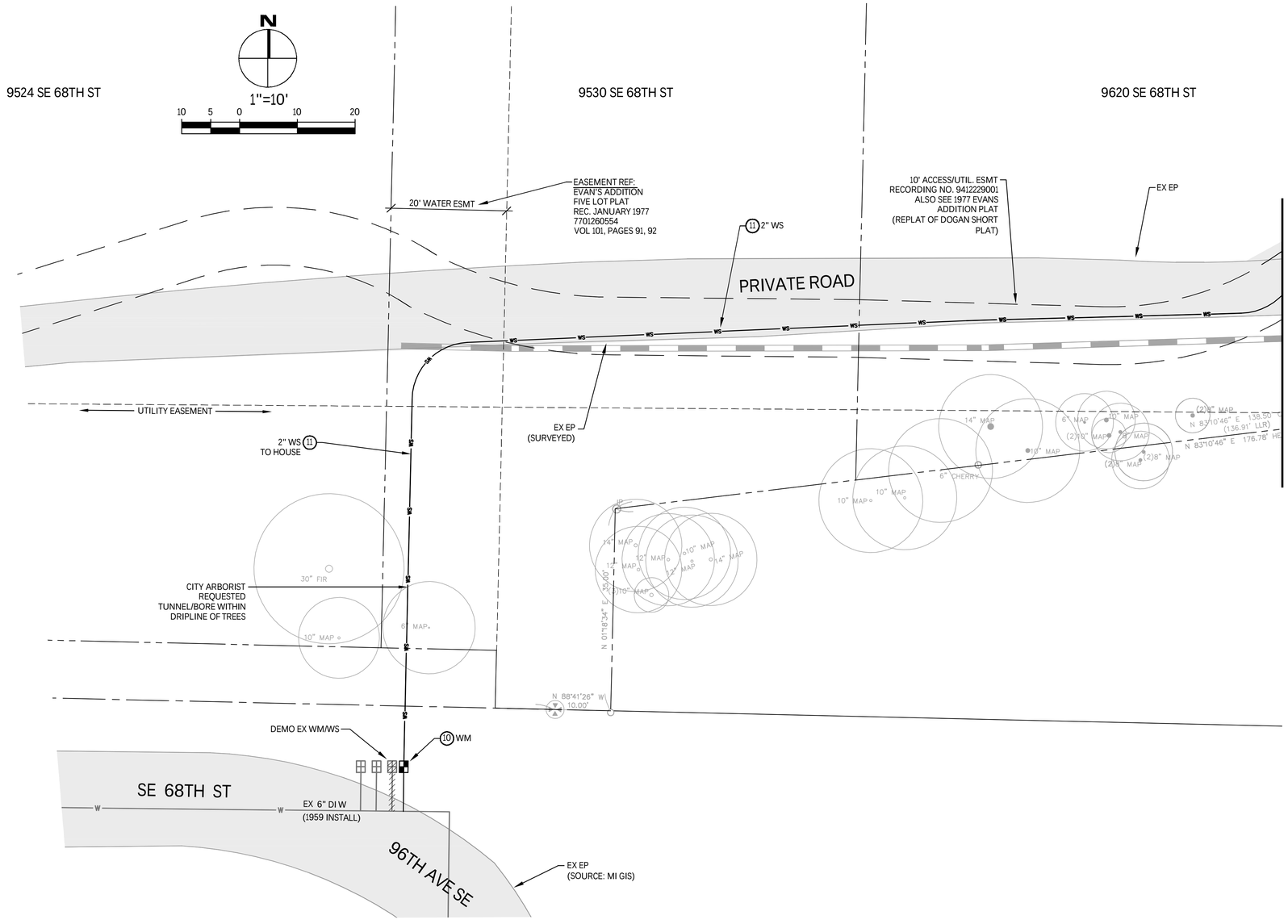
WATER IMPROVEMENTS

(10) NEW SF RESIDENTIAL WATER SERVICE & METER PIT. CONFIRM REQUIRED SIZE WITH BUILDING PERMIT REVIEW. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A DEPENDING ON SIZE REQUIREMENT.

(11) MIN 2" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.

(12) -

(14) -



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PRIVATE WATER SERVICE PLAN

YANG RESIDENCE
6660 E. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C2.1

APN 239600-0050
1902-005

TYPE 40 CB (RESIDENTIAL)

Catch Basin Type 40

Reinforcing

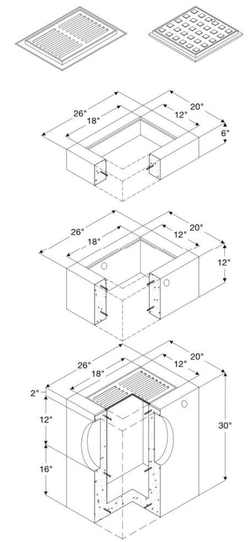
- ASTM A-615 Specifications
- All components
- #3 grade 60 reinforcing bar

Cast Iron Grate

- The 14" x 20" cast iron grate drops in the recessed area at the top of the basin or riser
- An 14" x 20" frame & grate is available

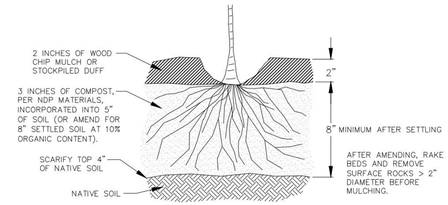
Additional Information

- The base unit has a 12" diameter knock-out on each of the four sides
- Base unit - 1000 lbs
- 6 inch Riser - 150 lbs
- 12 inch Riser - 300 lbs
- 1½ inch hole on each side for handling

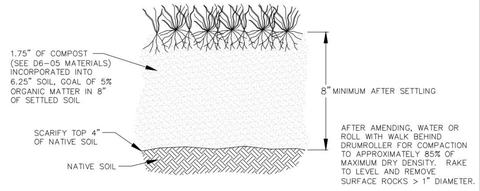


COMPOST AMENDED SOIL SPEC

AMENDMENT FOR LANDSCAPED AREAS



SOIL AMENDMENT FOR GRASS OR TURF AREAS



NOTES:

1. AMEND SOILS PER DOE MANUAL, VOL. V, 5.3.1, BMP T5.13, (2012 OR CURRENT) OR WWW.SOILSFORSALMON.ORG.
2. DO NOT AMEND SOILS IN AREAS WITH UNDISTURBED SOIL AND NATIVE VEGETATION.
3. OPTIONAL ALTERNATIVE: STOCKPILE NATIVE TOPSOIL ONSITE, AMEND IF NEEDED, AND REPLACE BEFORE PLANTING.
4. OPTIONAL ALTERNATIVE: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

JANUARY 2018 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. ~~NDP-1~~

NO.	DATE	BY	REVISIONS

APPLICANT:
STEVE YANG

811 Know what's below. Call before you dig.

DATE: Jul 08, 2019
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DRAINAGE DETAILS

YANG RESIDENCE
6660 E. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C3.5

APN 239600-0050
1902-005

BUILDING CODE: 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), AND BY REFERENCE, THE 2015 INTERNATION RESIDENTIAL CODE (IRC) AS AMENDED BY LOCAL JURISDICTION.
ROOF LIVE LOAD = 25 PSF SNOW (GROUND SNOW = 30 PSF)
ROOF DEAD LOAD = 15 PSF
FLOOR LIVE LOAD = 40 PSF (30 PSF AT SLEEPING AREAS)
FLOOR DEAD LOAD = 15 PSF
BALCONIES & DECKS = 60 PSF (LIVE LOAD) + 10 PSF (DEAD LOAD)
WIND SPEED (ULTIMATE / 3 SEC GUST) = 110 MPH (NOMINAL WIND SPEED = 85 MPH) FOR RISK CATEGORY II, EXPOSURE "C", Kzt=1.00
SOIL SITE CLASS "E", SEISMIC CATEGORY D1/D2, Ss=1.448, Sds=0.869
OCCUPANCY GROUP: R-3 CONSTRUCTION TYPE: V-B

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO ARCHITECT AND/OR ENGINEER OF RECORD FOR RESOLUTION PRIOR TO COMMENCING WORK. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS ARCHITECT AND/OR ENGINEER OF RECORD ARE NOT RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR

DEFERRED SUBMITTAL ITEMS

THE FOLLOWING IS A LIST OF ITEMS THAT ARE NOT INCLUDED IN THIS PLAN AND SHOULD BE PROVIDED BY THE BUILDER AT TIME OF APPLICATION FOR PERMIT OR AS A DEFERRED SUBMITTAL ITEM:
- ALTERNATIVE I-JOIST/BEAM MANUFACTURER PLANS.
- MANUFACTURED TRUSS DESIGNS AND LAYOUTS

GENERAL

FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING OF 1500 PSF. EXTERIOR FOOTINGS SHALL BEAR 18" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACKFILL TO BE THOROUGHLY COMPACTED.
BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH Ø2.29"x3"x3" PLATE WASHERS, WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE TO BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE.
FOUNDATION SILL BOLTS (MIN. 1" EMBED.) TO BE 5/8" DIAMETER AT 6'-0" O.C. (4'-0" AT BUILDINGS OVER 2 STORIES) U.N.O.
METAL FRAMING CONNECTORS TO BE MANUFACTURED BY SIMPSON STRONG-TIE OR USP STEEL CONNECTORS

CONCRETE

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE:

TYPE OR LOCATIONS OF CONCRETE CONSTRUCTION	MINIMUM COMPRESSIVE STRENGTH (f'c) AT 28 DAYS
	MODERATE WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATION FOOTINGS, BASEMENT SLABS, & INTERIOR SLABS ON GRADE (EXCEPT GARAGE) NOT EXPOSED TO THE WEATHER	2,500 psi
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS, PORCHES, STEPS, GARAGE & CARPORT SLABS, & OTHER CONCRETE WORK EXPOSED TO THE WEATHER	3,000 psi (6% air entrained +/- 1%)

CONCRETE MIXTURE SHALL CONTAIN AT LEAST OF 5½ SACKS OF CEMENT PER CUBIC YARD
CONCRETE "BATCH TICKET" SHALL BE AVAILABLE ON SITE FOR REVIEW BY BUILDING OFFICIAL
VERTICAL REINFORCING STEEL TO COMPLY WITH ASTM A615 GRADE 40 (GRADE 60 AT WALLS RETAINING MORE THAN 4FT OF SOIL)

CARPENTRY

GENERAL

ALL NAILING TO COMPLY WITH REQUIREMENTS OF IRC TABLE R602.3(1) AND/OR IBC TABLE 2304.10.1
ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED. FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESSURE TREATED LUMBER SHALL BE RETREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.
PER IRC 319.3, FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER.
6" MIN. CLEARANCE BETWEEN WOOD AND EARTH.
12" MIN. CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.
18" MIN. CLEARANCE BETWEEN FLOOR JOIST AND EARTH.

FASTENER DIMENSIONS

ALL NAILS SPECIFIED ON THIS PLAN SHALL BE OF THE DIAMETER AND LENGTH LISTED BELOW OR AS PER APPENDIX L OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS)
8d COMMON (Ø.131" DIA, 2-1/2" LENGTH), 8d BOX (Ø.113" DIA, 2-1/2" LONG), 10d COMMON (Ø.148" DIA, 3" LONG)
10d BOX (Ø.128" DIA, 3" LENGTH), 16d COMMON (Ø.162" DIA, 3-1/2" LONG), 16d SINKER (Ø.148 DIA, 3-1/4" LONG)
5d COOLER (Ø.086" DIA, 1-5/8" LONG), 6d COOLER (Ø.092" DIA, 1-7/8" LONG)

LUMBER GRADES

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN PRODUCTS ASSOCIATION OR THE WEST COST LUMBER INSPECTION BUREAU. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE THE FOLLOWING UNADJUSTED MINIMUM DESIGN PROPERTIES, UNLESS NOTED OTHERWISE.

JOISTS:	WOOD TYPE:
2x4 to 2x8	HF #2 - Fb=850 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi
2x10 OR LARGER	HF #2 - Fb=850 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi
BEAM	
4X	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
6X OR LARGER	DF-L #2 - Fb=875 psi, Fv=170 psi, Fc=600 psi, E=1300000psi
STUDS	
2x4 & 2x6	HF STUD - Fb=675 psi, Fv=150 psi, Fc=800 psi, E=1200000psi
2x8 OR LARGER	HF #2 - Fb=875 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi
POSTS	
4X4	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
4X6	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
6X6 OR LARGER	DF-L #1 - Fb=1200 psi, Fv=170 psi, Fc=1000 psi, E=1600000psi

GLUED-LAMINATED BEAM (GLB)

SHALL BE 24F-V4 FOR SINGLE SPANS & 24F-V8 FOR CONTINUOUS OR CANTILEVER SPANS WITH THE FOLLOWING MINIMUM PROPERTIES:
Fb = 2,400 PSI, Fv = 165 PSI, Fc = 650 PSI (PERPENDICULAR), E = 1,800,000 PSI.

ENGINEERED WOOD BEAMS AND I-JOIST

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR APPROVAL BY BUILDING OFFICIAL DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST ICC EVALUATION REPORT.

BEAMS DESIGNATED AS "LSL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb = 2,325 PSI, Fv = 310 PSI, Fc = 800 PSI (PERPENDICULAR), E = 1,550,000 PSI.

BEAMS DESIGNATED AS "LVL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb = 2,600 PSI, Fv = 285 PSI, Fc = 750 PSI (PERPENDICULAR), E = 1,900,000 PSI.

BEAMS DESIGNATED AS "PSL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb = 2,900 PSI, Fv = 290 PSI, Fc = 750 PSI (PERPENDICULAR), E = 2,000,000 PSI.

CALCULATIONS SHALL INCLUDE DEFLECTION AND CAMBER REQUIREMENTS.
DEFLECTION SHALL BE LIMTED AS FOLLOWS:
FLOOR LIVE LOAD MAXIMUM = L/480, FLOOR TOTAL LOAD MAXIMUM = L/240.

PREFABRICATED WOOD TRUSSES:

PRE-FABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOADS & IMPOSED DEAD LOADS AS STATED IN THE GENERAL NOTES. TRUSSES SHALL BE DESIGNED & STAMPED BY A REGISTERED DESIGN PROFESSIONAL AND FABRICATED ONLY FROM THOSE DESIGNS. NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD W/ AN APPROVED FASTENER (SUCH AS SIMPSON STC) TO ENSURE THAT THE TRUSS BOTTOM CHORD DOES NOT BEAR ON THE WALL. ALL PERMANENT TRUSS MEMBER BRACING SHALL BE INSTALLED PER THE TRUSS DESIGN DRAWINGS.

ROOF/WALL/FLOOR SHEATHING

ROOF SHEATHING SHALL BE MINIMUM 7/16 SHEATHING W/ 24/0 SPAN INDEX U.N.O. WALL SHEATHING, INCLUDING GABLES, SHALL BE 7/16 SHEATHING W/ 24/0 SPAN INDEX MINIMUM U.N.O. FLOOR SHEATHING SHALL BE MINIMUM 23/32 TAG SHEATHING W/ 48/24 SPAN INDEX MINIMUM U.N.O. MINIMUM NAILING SHALL BE 8d COMMON NAILS @ 6" O.C. @ PANEL EDGES & 12" O.C. IN PANEL FIELD U.N.O. ON SHEAR WALL SCHEDULE. ROOF AND FLOOR SHEATHING SHALL BE LAID OUT W/ LONG DIMENSION PERPENDICULAR TO FRAMING MEMBERS W/ END LAPS STAGGERED. WALL SHEATHING, INCLUDING GABLES, SHALL BE FULLY BLOCKED & EDGE NAILED AT ALL UNSUPPORTED SHEATHING PANEL EDGES.

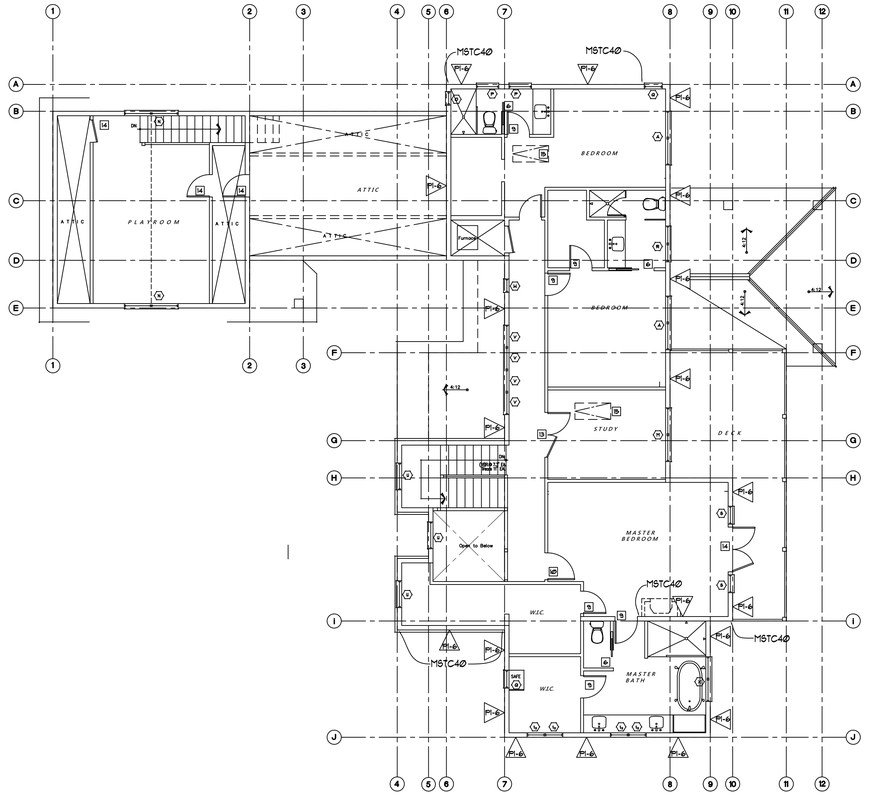
STAIR FRAMING

UNLESS NOTED OTHERWISE SPECIFIED, TYPICAL STAIR FRAMING SHALL CONSIST OF 2X12 STAIR STRINGERS SPACED AT NO MORE THAN 18" O.C. AND REINFORCED W/ 2X6 SCABS ATTACHED W/ 10d COMMON NAILS STAGGERED AT 8" O.C.. STRINGERS SHALL BE SUPPORTED AT UPPER END BY BEARING ON TOP PLATE OF WALL OR APPROVED CONNECTOR TO FLOOR BEAM SUCH AS SIMPSON LRU OR LSC. LANDINGS SHALL CONSIST OF CONVENTIONAL PLATFORM FRAMING W/ MINIMUM 2X6 JOISTS @ 16" O.C.

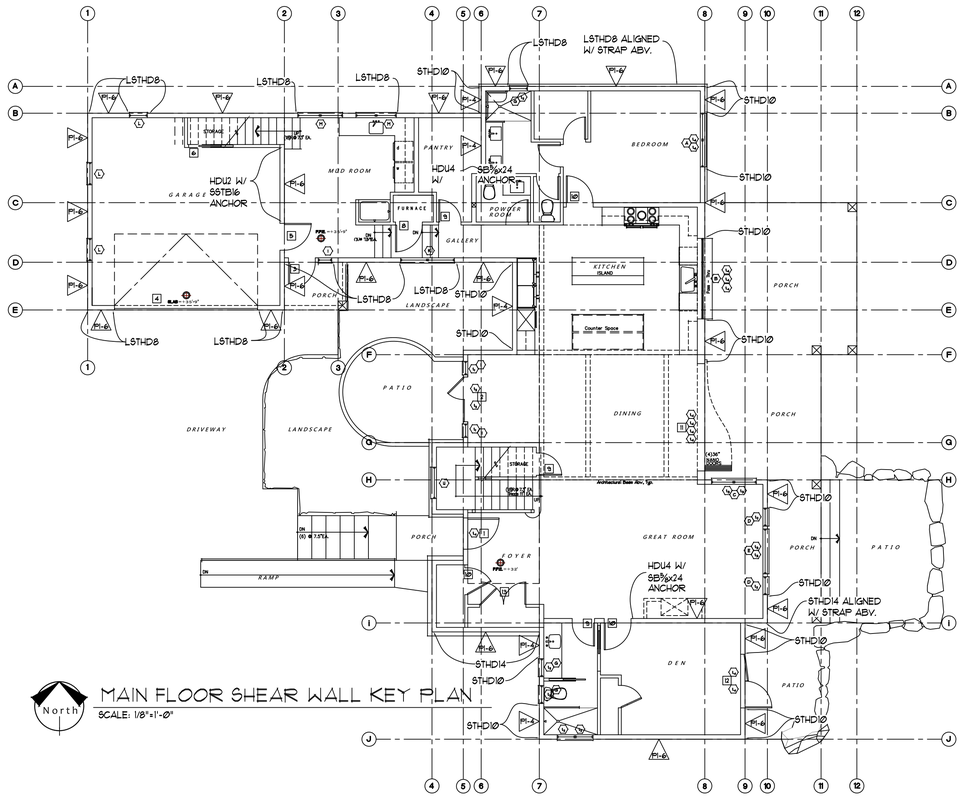
SHEAR WALL SCHEDULE

WALL MARK	SHEATHING THICKNESS	SIDES	SHEAR PANEL EDGE NAILING	FIELD NAILING	FRAMING @ ABUTTING PANEL EDGES	SOLE/BASE PLATE NAILING TO JOIST OR BLKG/RIM BELOW	ANCHOR BOLT DIA. & SPACING	SILL PLATE SIZE	POST AT ENDS OF SHEAR WALL/ HOLDOWN U.N.O.
P1-6	7/16"	ONE	8d @ 6" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 6" OC.	5/8" DIA. @ 48" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C (STAGGER)
P1-4	7/16"	ONE	8d @ 4" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 6" OC.	5/8" DIA. @ 48" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C (STAGGER)

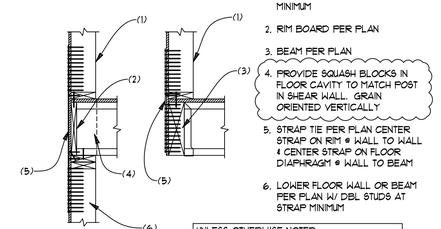
1. FRAMING SHALL BE 2X HEM-FIR @ 16" O.C. MAX UNLESS NOTED OTHERWISE IN SCHEDULE.
2. SHEATHING PANELS MAY BE LAYED VERTICAL OR HORIZONTAL. BLOCK ALL HORIZONTAL EDGES W/ 2x OR 3x BLOCKING PER SCHEDULE (U.N.O.)
3. ALL EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS SHALL RECEIVE APA RATED SHEATHING OR ALL VENEER PLYWOOD SIDING OF EQUIVALENT THICKNESS AT POINT OF FASTENING ON PANEL EDGES, FULLY BLOCKED WITH MINIMUM NAILING OF 8d @ 6" O.C. EDGE, 12" O.C. FIELD.
4. NAILING APPLIES TO ALL STUDS, TOP AND BOTTOM PLATES, AND BLOCKING. PLYWOOD JOINT AND SILL PLATE NAILING SHALL BE STAGGERED
5. ANCHOR BOLT SPACING IS 6'-0" O.C. (4'-0" AT BUILDINGS OVER 2 STORIES) UNLESS NOTED OTHERWISE IN SCHEDULE. MINIMUM OF 2 ANCHOR BOLTS PER PIECE OF FOUNDATION PLATE. ANCHOR BOLTS SPACED NO GREATER THAN 12" AND NO LESS THAN 7 TIMES THE ANCHOR BOLT DIAMETER AT ENDS AND SPLICES. PROVIDE Ø.229"x3"x3" WASHERS AT ANCHOR BOLTS. PLATE WASHERS SHALL EXTEND TO WITHIN ½" OF THE SHEATHED EDGE OF THE SILL PLATE ON WALLS W/ EDGE NAILING AT 4" O.C. OR TIGHTER. DO NOT RECESS BOLTS.
6. ALL NAILS FOR SHEAR WALLS SHALL BE COMMON OR GALVANIZED BOX NAILS (U.N.O.) ALL SPECIFIED NAILS SHALL HAVE THE FOLLOWING DIMENSIONS: 8d COMMON (Ø.131" DIA, 2½" LONG), 8d BOX (Ø.113" DIA, 2½" LONG), 10d COMMON (Ø.148" DIA, 3" LONG), 10d BOX (Ø.128" DIA, 3" LONG), 16d COMMON (Ø.162" DIA, 3½" LONG), 16d SINKER (Ø.148" DIA, 3¼" LONG), 5d COOLER (Ø.086" DIA, 1⅝" LONG), 6d COOLER (Ø.092" DIA, 1 ⅞" LONG)
7. 1¼" No. 6 DRYWALL SCREWS (TYPE W OR S) MAY BE SUBSTITUTED FOR NAILS LISTED AS 5d COOLER OR 6d COOLER FOR GYPSUM WALL BOARD SHEARWALLS
8. IN LIEU OF 3x VERTICALS AND BLOCKING AT PANEL EDGES, 2-2x'S W/ 10d (Ø.131"x3") FACE NAILS STAGGERED AT THE SAME SPACING AS PANEL EDGE NAILING MAY BE SUBSTITUTED. PLYWOOD EDGES TO BE CENTERED BETWEEN THE 2-2x MEMBERS (THIS ALTERNATIVE DOES NOT APPLY TO FOUNDATION SILL PLATES OR TO WALLS WITH 8d EDGE NAILING AT 2" OC. OR 10d EDGE NAILING AT 3" OC. OR 2" OC. OR WALLS SHEATHED ON BOTH SIDES)
9. HOLDDOWNS AND STRAPS OF EQUIVALENT UPLIFT CAPACITY WITH CURRENT ICC EVALUATION REPORT OR SIMILAR MAY BE SUBSTITUTED FOR THOSE LISTED IN THE SHEARWALL SCHEDULE WITH PRIOR APPROVAL OF BUILDING OFFICIAL OR ENGINEER OF RECORD.
10. SQUASH BLOCKS IN FLOOR JOIST CAVITY ARE REQUIRED AT ENDS OF SHEAR WALLS WHERE FULL BEARING IS NOT PROVIDED BY THE FRAMING BELOW. SQUASH BLOCKS TO MATCH WIDTH AND DEPTH OF SHEAR WALL END POSTS MINIMUM 4 GRAIN SHALL BE ORIENTED VERTICALLY
11. SIMPSON MASAP MUDSILL ANCHORS, MAY BE SUBSTITUTED (1) FOR (1) AT 2X SILL PLATES FOR THE ⅝" DIA. SILL PLATE ANCHOR BOLTS SPECIFIED.



UPPER FLOOR SHEAR WALL KEY PLAN
SCALE: 1/8"=1'-0"



MAIN FLOOR SHEAR WALL KEY PLAN
SCALE: 1/8"=1'-0"



1. UPPER FLOOR WALL PER PLAN W/ DBL STUDS AT STRAP MINIMUM
2. RIM BOARD PER PLAN
3. BEAM PER PLAN
4. PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY
5. STRAP TIE PER PLAN CENTER STRAP ON RIM @ WALL TO WALL & CENTER STRAP ON FLOOR DIAPHRAGM @ WALL TO BEAM
6. LOWER FLOOR WALL OR BEAM PER PLAN W/ DBL STUDS AT STRAP MINIMUM

UNLESS OTHERWISE NOTED:
MSTCxx & MSTCxxB3 STRAPS SHALL BE INSTALLED W/ 10d COMMON NAILS (Ø.148"x3")
ALL OTHER STRAPS SHALL BE INSTALLED W/ 16d COMMON NAILS (Ø.162"x3.5")

H1 TYPICAL STRAP TIE @ UPPER FLOORS
SCALE: ¾"=1'

SHEAR WALL & STRUCT. SPECS.

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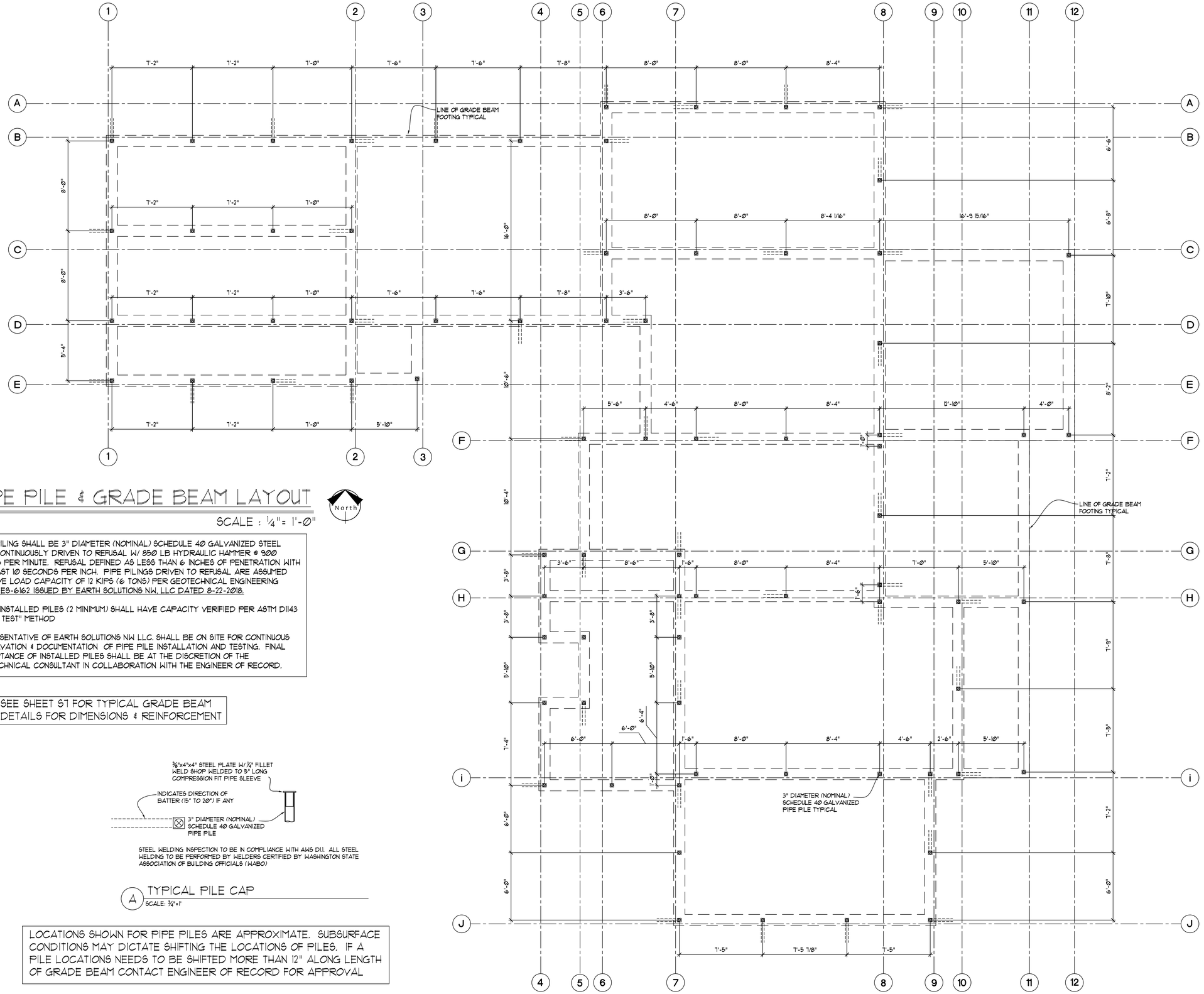

PIPE PILE & GRADE BEAM LAYOUT

SCALE : ¼"= 1'-Ø"

North

PIPE PILING SHALL BE 3" DIAMETER (NOMINAL) SCHEDULE 40 GALVANIZED STEEL PIPE CONTINUOUSLY DRIVEN TO REFUSAL W/ 850 LB HYDRAULIC HAMMER @ 900 BLOWS PER MINUTE. REFUSAL DEFINED AS LESS THAN 6 INCHES OF PENETRATION WITH AT LEAST 10 SECONDS PER INCH. PIPE PILINGS DRIVEN TO REFUSAL ARE ASSUMED TO HAVE LOAD CAPACITY OF 12 KIPS (6 TONS) PER GEOTECHNICAL ENGINEERING STUDY ES-6162 ISSUED BY EARTH SOLUTIONS NW, LLC DATED 8-22-2018.

5% OF INSTALLED PILES (2 MINIMUM) SHALL HAVE CAPACITY VERIFIED PER ASTM D1143 "QUICK TEST" METHOD

REPRESENTATIVE OF EARTH SOLUTIONS NW LLC. SHALL BE ON SITE FOR CONTINUOUS OBSERVATION & DOCUMENTATION OF PIPE PILE INSTALLATION AND TESTING. FINAL ACCEPTANCE OF INSTALLED PILES SHALL BE AT THE DISCRETION OF THE GEOTECHNICAL CONSULTANT IN COLLABORATION WITH THE ENGINEER OF RECORD.

SEE SHEET S1 FOR TYPICAL GRADE BEAM DETAILS FOR DIMENSIONS & REINFORCEMENT

STEEL WELDING INSPECTION TO BE IN COMPLIANCE WITH AWS D1.1. ALL STEEL WELDING TO BE PERFORMED BY WELDERS CERTIFIED BY WASHINGTON STATE ASSOCIATION OF BUILDING OFFICIALS (WABO)

A TYPICAL PILE CAP

SCALE: ¾"=1'

LOCATIONS SHOWN FOR PIPE PILES ARE APPROXIMATE. SUBSURFACE CONDITIONS MAY DICTATE SHIFTING THE LOCATIONS OF PILES. IF A PILE LOCATIONS NEEDS TO BE SHIFTED MORE THAN 12" ALONG LENGTH OF GRADE BEAM CONTACT ENGINEER OF RECORD FOR APPROVAL

PIPE PILE LAYOUT

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DATE: 12-28-2018
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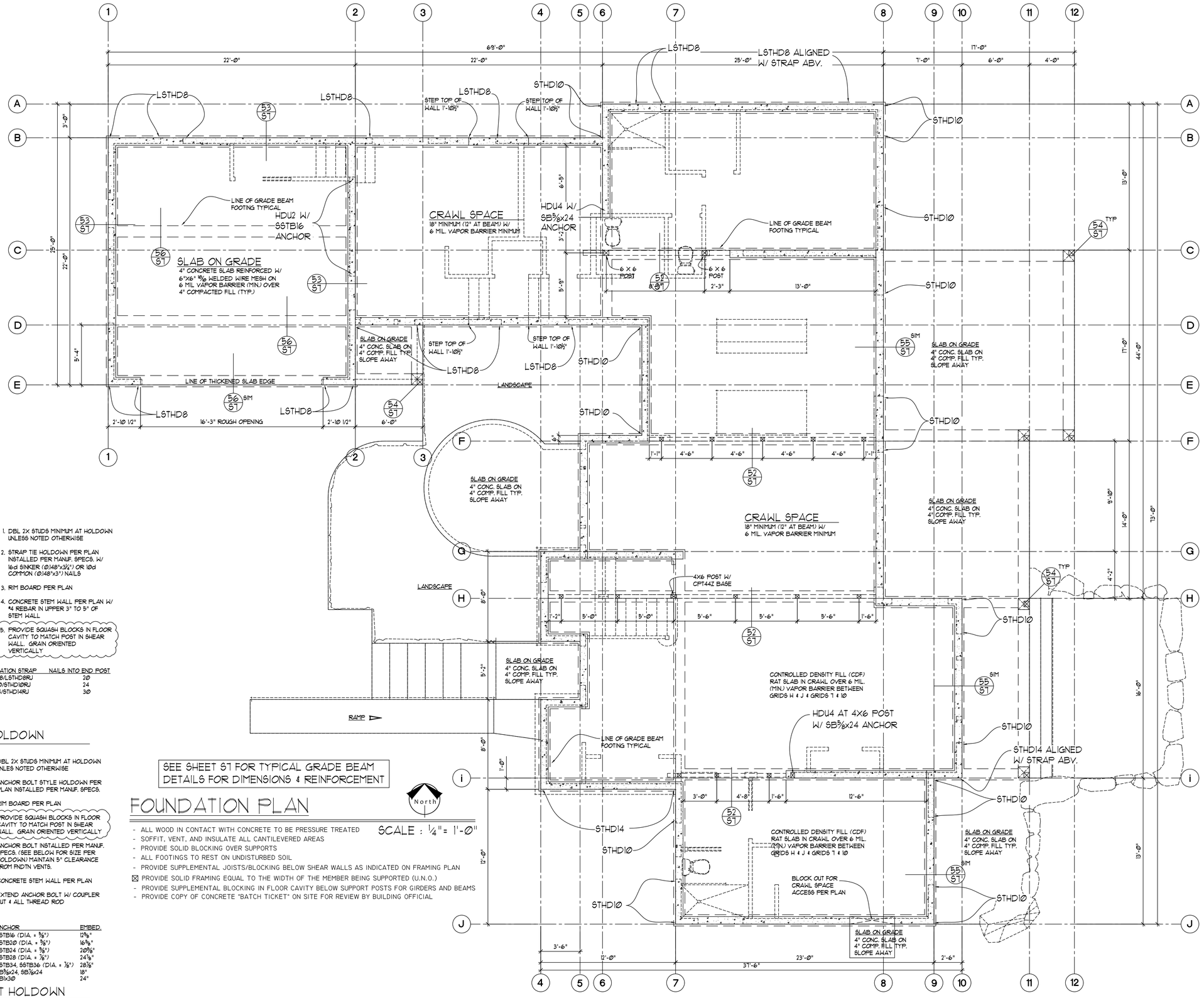

1. DBL 2X STUDS MINIMUM AT HOLDOWN UNLESS NOTED OTHERWISE
2. STRAP TIE HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS. W/ 16d SINKER (0.148"x3¼") OR 10d COMMON (0.148"x3") NAILS
3. RIM BOARD PER PLAN
4. CONCRETE STEM WALL PER PLAN W/ #4 REBAR IN UPPER 3" TO 5" OF STEM WALL
5. PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY

FOUNDATION STRAP	NAILS INTO END POST
LSTHD8/LSTHD8RJ	20
STHD10/STHD10RJ	24
STHD14/STHD14RJ	30

H2 TYPICAL STRAP TIE HOLDOWN
SCALE: ¾"=1'

1. DBL 2X STUDS MINIMUM AT HOLDOWN UNLES NOTED OTHERWISE
2. ANCHOR BOLT STYLE HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS.
3. RIM BOARD PER PLAN
4. PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY
5. ANCHOR BOLT INSTALLED PER MANUF. SPECS. (SEE BELOW FOR SIZE PER HOLDOWN) MAINTAIN 5" CLEARANCE FROM FNDTN VENTS.
6. CONCRETE STEM WALL PER PLAN
7. EXTEND ANCHOR BOLT W/ COUPLER NUT & ALL THREAD ROD

ANCHOR	EMBED.
SSTB16 (DIA. = ⅝")	12⅝"
SSTB20 (DIA. = ⅝")	16⅝"
SSTB24 (DIA. = ⅝")	20⅝"
SSTB28 (DIA. = ⅞")	24⅞"
SSTB34, SSTB36 (DIA. = ⅞")	28⅞"
SB⅝x24, SB⅞x24	18"
SB1x30	24"

H3 TYPICAL ANCHOR BOLT HOLDOWN
SCALE: ¾"=1'

SEE SHEET S7 FOR TYPICAL GRADE BEAM DETAILS FOR DIMENSIONS & REINFORCEMENT

FOUNDATION PLAN

SCALE : ¼" = 1'-0"

- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED
- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- PROVIDE SOLID BLOCKING OVER SUPPORTS
- ALL FOOTINGS TO REST ON UNDISTURBED SOIL
- PROVIDE SUPPLEMENTAL JOISTS/BLOCKING BELOW SHEAR WALLS AS INDICATED ON FRAMING PLAN
- ☒ PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- PROVIDE SUPPLEMENTAL BLOCKING IN FLOOR CAVITY BELOW SUPPORT POSTS FOR GIRDERS AND BEAMS
- PROVIDE COPY OF CONCRETE "BATCH TICKET" ON SITE FOR REVIEW BY BUILDING OFFICIAL

FOUNDATION PLAN

YANG RESIDENCE
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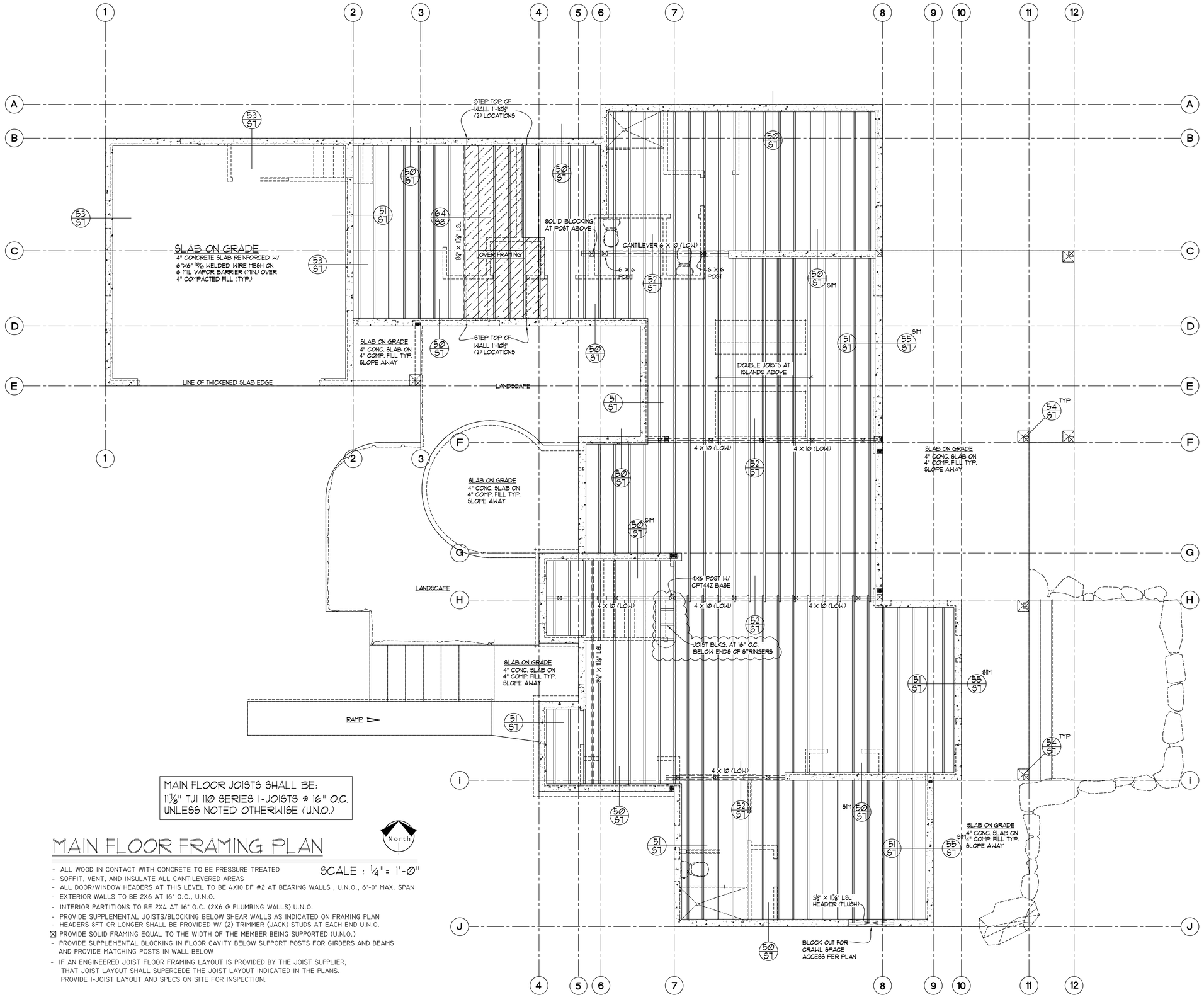

MAIN FLOOR JOISTS SHALL BE:
11⅞" TJI 110 SERIES I-JOISTS @ 16" O.C.
UNLESS NOTED OTHERWISE (U.N.O.)

MAIN FLOOR FRAMING PLAN

North

SCALE : ¼"= 1'-0"

- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED
- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- ALL DOOR/WINDOW HEADERS AT THIS LEVEL TO BE 4X10 DF #2 AT BEARING WALLS , U.N.O., 6'-0" MAX. SPAN
- EXTERIOR WALLS TO BE 2X6 AT 16" O.C., U.N.O.
- INTERIOR PARTITIONS TO BE 2X4 AT 16" O.C. (2X6 @ PLUMBING WALLS) U.N.O.
- PROVIDE SUPPLEMENTAL JOISTS/BLOCKING BELOW SHEAR WALLS AS INDICATED ON FRAMING PLAN
- HEADERS 8FT OR LONGER SHALL BE PROVIDED W/ (2) TRIMMER (JACK) STUDS AT EACH END U.N.O.
- ☒ PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- PROVIDE SUPPLEMENTAL BLOCKING IN FLOOR CAVITY BELOW SUPPORT POSTS FOR GIRDERS AND BEAMS AND PROVIDE MATCHING POSTS IN WALL BELOW
- IF AN ENGINEERED JOIST FLOOR FRAMING LAYOUT IS PROVIDED BY THE JOIST SUPPLIER, THAT JOIST LAYOUT SHALL SUPERCEDE THE JOIST LAYOUT INDICATED IN THE PLANS. PROVIDE I-JOIST LAYOUT AND SPECS ON SITE FOR INSPECTION.

MAIN FLOOR FRAMING

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6-27-2019	MM	PLAN REVIEW
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DATE: 12-29-2018
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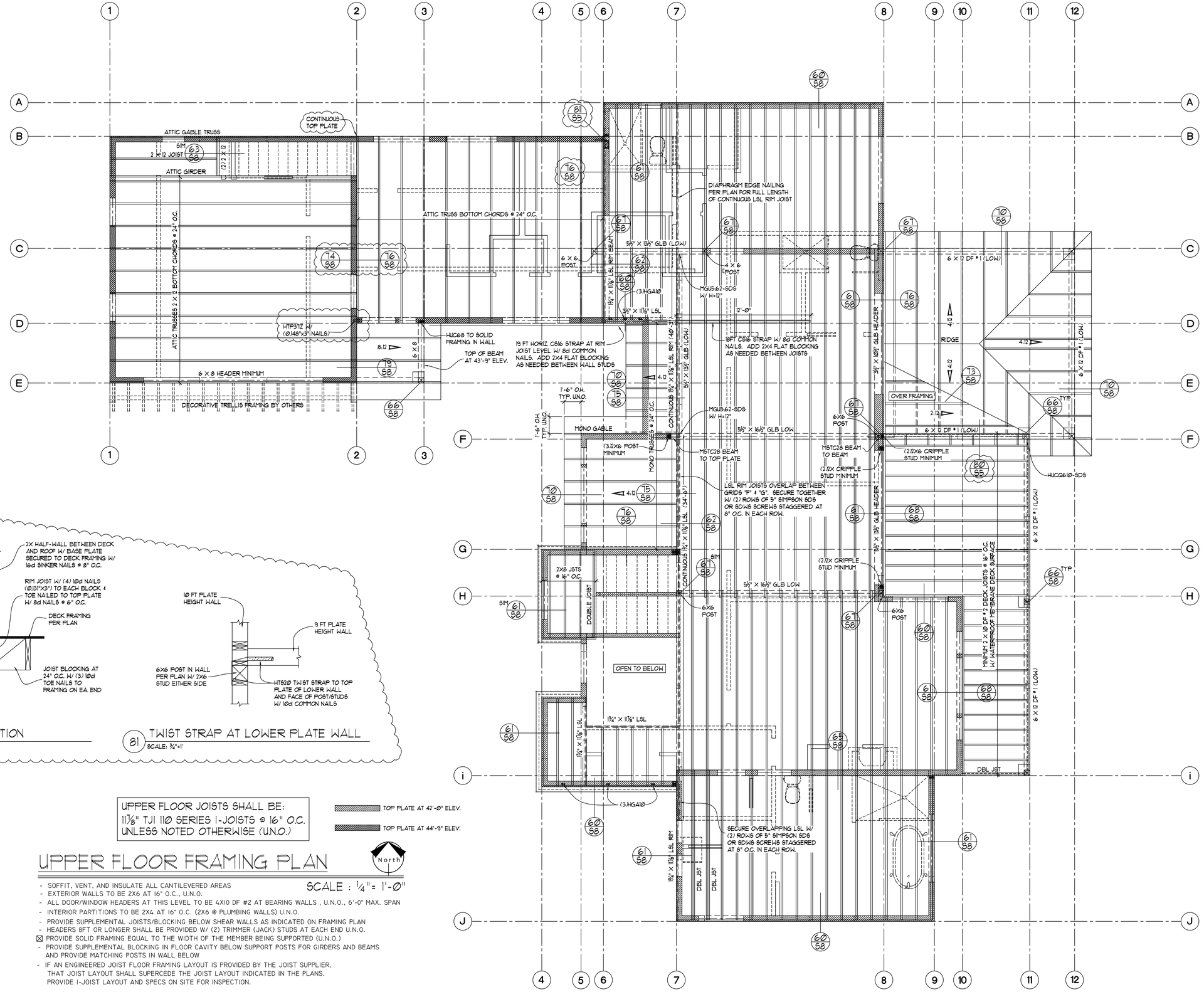

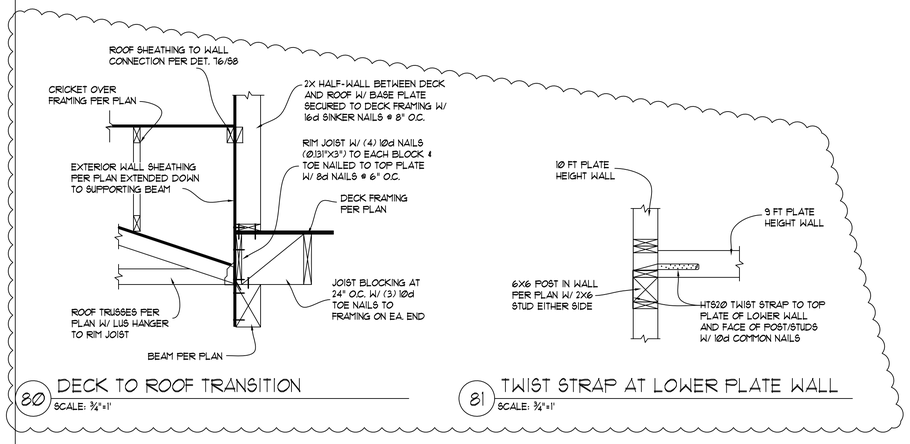

80 DECK TO ROOF TRANSITION
SCALE: ¾"=1'

81 TWIST STRAP AT LOWER PLATE WALL
SCALE: ¾"=1'

UPPER FLOOR JOISTS SHALL BE:
11⅞" TJI 110 SERIES I-JOISTS @ 16" O.C.
UNLESS NOTED OTHERWISE (U.N.O.)

TOP PLATE AT 42'-Ø" ELEV.

TOP PLATE AT 44'-9" ELEV.

North

UPPER FLOOR FRAMING PLAN

SCALE : ¼"= 1'-Ø"

- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- EXTERIOR WALLS TO BE 2X6 AT 16" O.C., U.N.O.
- ALL DOOR/WINDOW HEADERS AT THIS LEVEL TO BE 4X10 DF #2 AT BEARING WALLS , U.N.O., 6'-0" MAX. SPAN
- INTERIOR PARTITIONS TO BE 2X4 AT 16" O.C. (2X6 @ PLUMBING WALLS) U.N.O.
- PROVIDE SUPPLEMENTAL JOISTS/BLOCKING BELOW SHEAR WALLS AS INDICATED ON FRAMING PLAN
- HEADERS 8FT OR LONGER SHALL BE PROVIDED W/ (2) TRIMMER (JACK) STUDS AT EACH END U.N.O.
- ☒ PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- PROVIDE SUPPLEMENTAL BLOCKING IN FLOOR CAVITY BELOW SUPPORT POSTS FOR GIRDERS AND BEAMS AND PROVIDE MATCHING POSTS IN WALL BELOW
- IF AN ENGINEERED JOIST FLOOR FRAMING LAYOUT IS PROVIDED BY THE JOIST SUPPLIER, THAT JOIST LAYOUT SHALL SUPERCEDE THE JOIST LAYOUT INDICATED IN THE PLANS. PROVIDE I-JOIST LAYOUT AND SPECS ON SITE FOR INSPECTION.

UPPER FLOOR FRAMING

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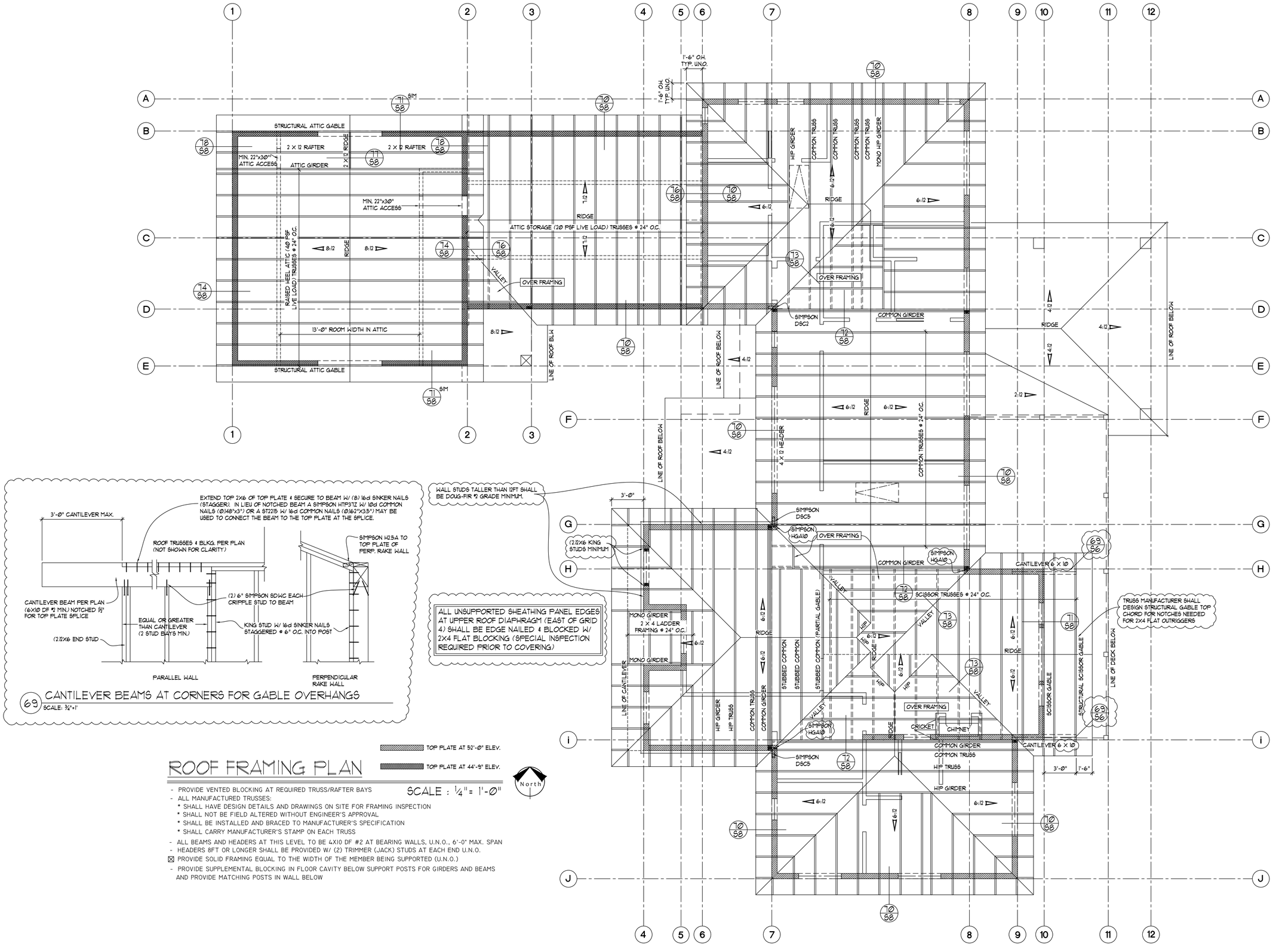

ROOF FRAMING PLAN

SCALE : ¼" = 1'-0"

- PROVIDE VENTED BLOCKING AT REQUIRED TRUSS/RAFTER BAYS
- ALL MANUFACTURED TRUSSES:
  - * SHALL HAVE DESIGN DETAILS AND DRAWINGS ON SITE FOR FRAMING INSPECTION
  - * SHALL NOT BE FIELD ALTERED WITHOUT ENGINEER'S APPROVAL
  - * SHALL BE INSTALLED AND BRACED TO MANUFACTURER'S SPECIFICATION
  - * SHALL CARRY MANUFACTURER'S STAMP ON EACH TRUSS
- ALL BEAMS AND HEADERS AT THIS LEVEL TO BE 4X10 DF #2 AT BEARING WALLS, U.N.O., 6'-0" MAX. SPAN
- HEADERS 8FT OR LONGER SHALL BE PROVIDED W/ (2) TRIMMER (JACK) STUDS AT EACH END U.N.O.
- ☒ PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- PROVIDE SUPPLEMENTAL BLOCKING IN FLOOR CAVITY BELOW SUPPORT POSTS FOR GIRDERS AND BEAMS AND PROVIDE MATCHING POSTS IN WALL BELOW

UPPER ROOF FRAMING

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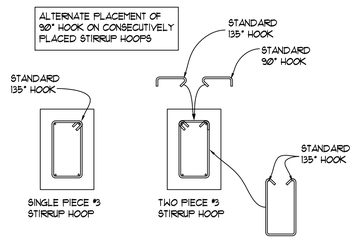
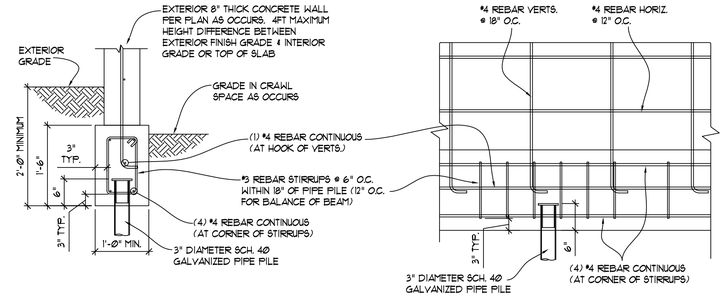
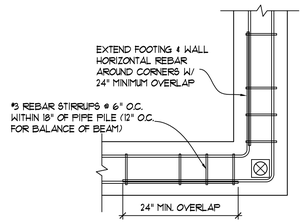


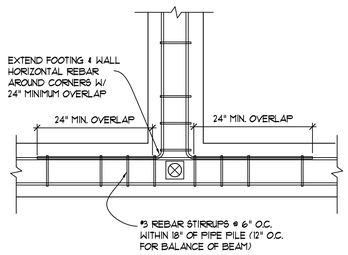
B SHEAR TIE COFIGURATION OPTIONS
SCALE: ¾"=1'



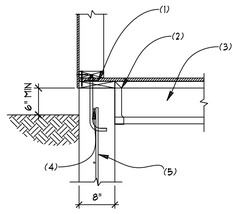
C TYPICAL PIPE PILE AT GRADE BEAM FTG.
SCALE: ¾"=1'



D TYPICAL REBAR AT CORNER
SCALE: ¾"=1'



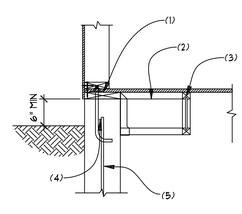
E TYPICAL REBAR AT 3 PT. INTERSECTION
SCALE: ¾"=1'



1. 2X NET WIDTH PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE W/ ⅝" DIA. ANCHOR BOLT W/ 7" MIN. EMBEDMENT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE
2. TOP FLANGE I-JOIST HANGER PER MANUF. W/ VAPOR BARRIER SEPERATING JOIST & HANGER FROM CONCRETE STEM WALL
3. FLOOR JOIST PER PLAN
4. #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 12" OF STEM WALL
5. #4 VERTICALS @ 18" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED

OPTIONAL: FACE MOUNT HANGER AT 2X10 P.T. LEDGER ATTACHED TO STEM WALL W/ ½" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

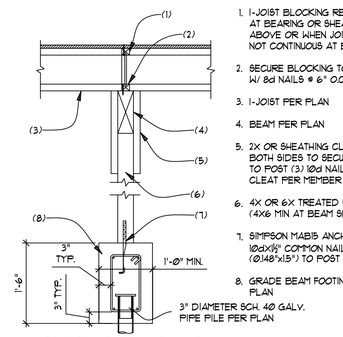
50 8" STEM WALL AT DROPPED JOISTS
SCALE: ¾"=1'



1. 2X NET WIDTH PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE W/ ⅝" DIA. ANCHOR BOLT W/ 7" MIN. EMBEDMENT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE
2. FLOOR JOIST BLOCKING @ PANEL EDGES (48" O.C.) W/ TOP FLANGE I-JOIST HANGER PER MANUF. VAPOR BARRIER REQ'D SEPERATING JOIST & HANGER FROM CONCRETE STEM WALL
3. FLOOR JOIST PER PLAN
4. #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 12" OF STEM WALL
5. #4 VERTICALS @ 18" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED

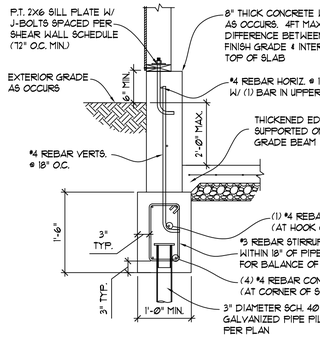
OPTIONAL: FACE MOUNT HANGER AT 2X10 P.T. LEDGER ATTACHED TO STEM WALL W/ ½" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

51 8" STEM WALL AT DROPPED JOISTS
SCALE: ¾"=1'

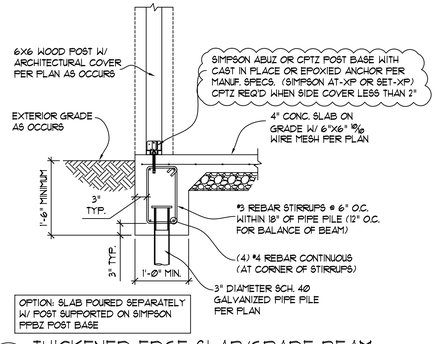


1. I-JOIST BLOCKING REQUIRED AT BEARING OR SHEAR WALLS ABOVE OR WHEN JOISTS ARE NOT CONTINUOUS AT BEAM
2. SECURE BLOCKING TO BEAM W/ 8d NAILS @ 6" O.C.
3. I-JOIST PER PLAN
4. BEAM PER PLAN
5. 2X OR SHEATHING CLEATS BOTH SIDES TO SECURE BEAM TO POST (3) 10d NAILS PER CLEAT PER MEMBER
6. 4X OR 6X TREATED POST (4X6 MIN AT BEAM SPLICE)
7. SIMPSON MAB15 ANCHOR W/ 10dx1½" COMMON NAILS (Ø.148"x1.5") TO POST
8. GRADE BEAM FOOTING PER PLAN

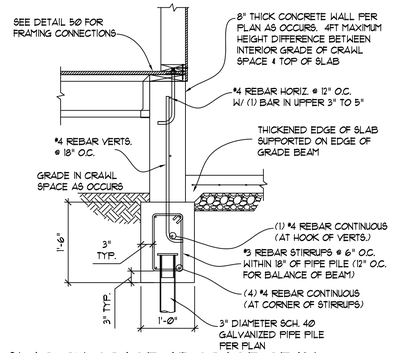
52 INTERIOR FOOTING @ BEAM LINE
SCALE: ¾"=1'



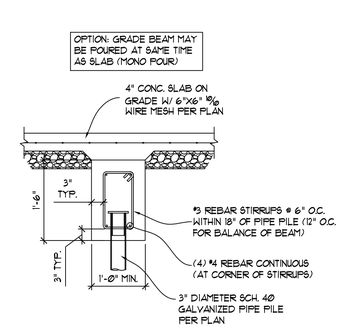
53 SLAB ON GRADE AT GRADE BEAM
SCALE: ¾"=1'



54 THICKENED EDGE SLAB/GRADE BEAM
SCALE: ¾"=1'



55 SLAB ON GRADE AT GRADE BEAM
SCALE: ¾"=1'



56 GRADE BEAM AT SLAB
SCALE: ¾"=1'

STRUCTURAL DETAILS

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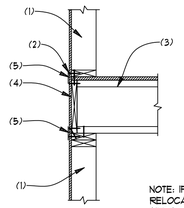
Date: 2019.06.27 13:51:53 -07'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION DATE:	INIT:	PROJECT #:
6-27-2018	MM	PLAN REVIEW

S7

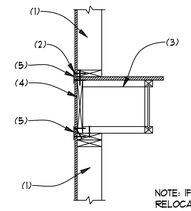
DATE: 12-28-2018
INIT: MM
PROJECT #: 2146



1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN SECURED TO TOP PLATE W/ (3) 8d NAILS
4. SOLID CONTINUOUS RIM BOARD W/ 8d NAIL TO TOP AND BOTTOM CHORD OF I-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
5. SHEATHING PANEL EDGE & EDGE NAILING PER SHEAR WALL SCHEDULE W/ SIMPSON LTP4 @ 48" O.C.

NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, THE SIMPSON LTP4 MAY BE ELIMINATED

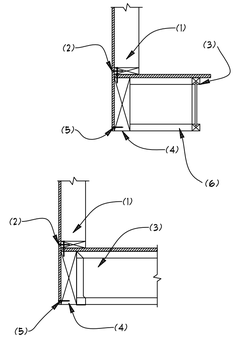
60 FLOOR JOIST BEARING AT STUD WALL
SCALE: 3/4"=1'



1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (3) 8d NAILS
4. SOLID CONTINUOUS RIM BOARD W/ 10d NAIL (Ø.131"x3") TO TOP AND BOTTOM CHORD OF I-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
5. SHEATHING PANEL EDGE & EDGE NAILING PER SHEAR WALL SCHEDULE W/ SIMPSON LTP4 @ 48" O.C.

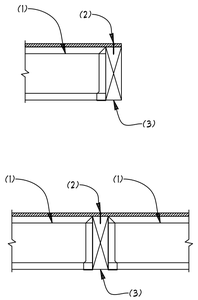
NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, THE SIMPSON LTP4 MAY BE ELIMINATED

61 FLOOR JOIST PARALLEL TO STUD WALL
SCALE: 3/4"=1'



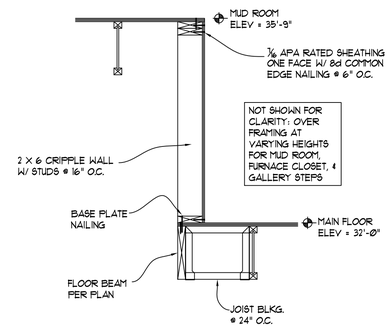
1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. FLOOR JOIST PER PLAN W/ JOIST HANGER PER MANUF.
4. BEAM PER PLAN
5. WALL SHEATHING CONTINUOUS OVER BEAM W/ EDGE NAILING PER SHEAR WALL SCHEDULE
6. I-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (3) 8d NAILS

62 FLOOR JOIST AT BEAM
SCALE: 3/4"=1'

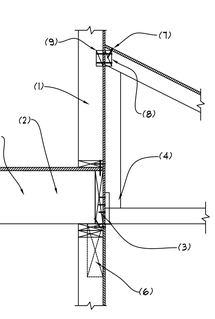


1. FLOOR JOIST (ONE OR BOTH SIDES OF BEAM) PER PLAN W/ JOIST HANGER PER MANUF.
2. EDGE DIAPHRAGM EDGE NAILING
3. BEAM PER PLAN

63 FLOOR JOIST AT BEAM
SCALE: 3/4"=1'

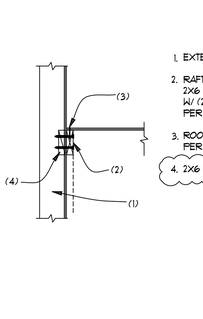


64 TRANSITION AT STEPPED DIAPHRAGM
SCALE: 3/4"=1'



1. STUD WALL ABOVE (AS OCCURS).
2. FLOOR JOIST BLOCKING SECURED TO TOP PLATE W/ 8d TOE NAILS @ 6" O.C.
3. FLOOR JOIST PER PLAN SECURE TO TOP PLATE W/ (2) 8d NAILS
4. STUD WALL OR BEAM PER PLAN

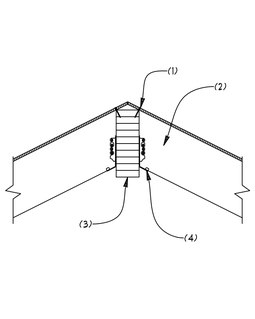
65 FLOOR JOIST AT INT. WALL OR BEAM
SCALE: 3/4"=1'



1. BEAM PER PLAN
2. WOOD POST OR COLUMN PER PLAN
3. SIMPSON AC OR ACE POST CAPS (PAIRED)
4. BEAM SPLICE AS OCCURS
5. MITER CUT BEAMS AT CORNER CONDITION

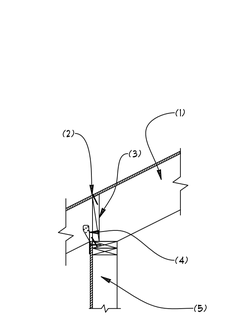
PLAN VIEW AT CORNER

66 WOOD BEAM AT WOOD POST
SCALE: 3/4"=1'



1. BEAM PER PLAN
2. NOTCH BEAM FOR CONTINUOUS TOP 2X PLATE OF DOUBLE 2X PLATE OR INSTALL SIMPSON CMSTC16 OR MSTC28 STRAP ON TOP FACE OR EXTERIOR FACE OF DISCONTINUOUS PLATES W/ MINIMUM (8) 16d SINKER NAILS EACH SIDE OF BREAK IN TOP PLATE.
3. KING STUD W/ (6)-16d SINKER NAILS TO BEAM (STAGGERED) EACH SIDE
4. SOLID POST TO MATCH WIDTH OF BEAM OR BUILT UP 2X STUDS W/ PLYWOOD OR OSB FILLER AS NEEDED. (NAIL PLIES OF BUILT UP 2X POST WITH 10d COMMON NAILS @ 12" O.C. (STAGGERED)

67 BEAM POCKET AT WALL
SCALE: 3/4"=1'



1. 2X P.T. LEDGER TO MATCH DECK JOIST W/ 1/2"X4" LAG SCREWS W/ WASHERS OR 3/16" LEDGERLOK® SCREWS STAGGERED @ 12" O.C.
2. SOLID 2x P.T. DECK JOIST PER PLAN W/ SIMPSON LUS HANGER INSTALLED USING #9 SIMPSON SD SCREWS
3. SOLID RIM BOARD, 1 1/4" THICK MIN.
4. FLOOR JOISTS PER PLAN
5. (4) SIMPSON DTTIZ OR USP ADTT EQUALLY SPACED W/ (1) WITHIN 2FT OF EACH END OF DECK SECURED TO JOIST W/ (8) Ø4dx1 1/2" NAILS
6. 3/8" DIA. HDG LAG SCREW W/ HDG WASHER

68 DECK LEDGER AT RIM BOARD
SCALE: 3/4"=1'

1. TRUSS W/ ROOF SHEATHING PER PLAN
2. DIAPHRAGM EDGE NAILING AT 2x BLOCKING TOE NAILED TO PLATE W/ (3) 8d NAILS OR ATTACHED W/ (1) SIMPSON RBC PER BLOCK
3. SIMPSON H2.5A TRUSS TIE OR SDWC TRUSS SCREW @ EACH TRUSS INSTALLED PER MFG. SPECS.
4. 2x STUD WALL OR BEAM PER PLAN

70 ROOF TRUSS AT BEARING
SCALE: 3/4"=1'

1. 2x4 OUTRIGGER @ 48" O.C. W/ FASCIA BOARD (1X MIN.) SECURED TO ENDS W/ (2) 10d NAILS (TRUSS MANUF. TO CONFIRM NOTCHED TOP CHORD ACCEPTABLE)
2. ROOF SHEATHING W/ DIAPHRAGM EDGE NAILING TO GABLE TRUSS
3. SHEATHING SPLICE AT TOP PLATE OF WALL. FULLY SHEATH GABLE END (VERTS. 24" O.C. MAX) W/ EXTERIOR WALL SHEATHING PER PLAN W/ EDGE NAILING AT TOP & BOTTOM CHORD
4. 2x DIAGONAL BRACE @ 8FT O.C.
5. SECURE BRACE AT 2x BLOCKING W/ (3) 10d NAILS
6. SIMPSON A34 AT 2x BRACE
7. ATTACH GABLE TRUSS TO BACKER BOARD W/ 10d NAILS @ 6" O.C.
8. 2x6 CONTINUOUS BACKER BOARD SECURED TO TOP PLATE W/ 10d NAILS @ 6" O.C.
9. ROOF TRUSSES @ 24" O.C. PER PLAN

71 GABLE END TRUSS
SCALE: 3/4"=1'

1. GIRDER TRUSS PER PLAN
2. VALLEY TRUSSES OR CONVENTIONAL OVER FRAMING. WHERE VALLEY TRUSSES ARE USED SECURE VALLEY TRUSS TO SUPPORTING ROOF FRAMING W/ SIMPSON VTCR CLIPS @ 48" O.C.
3. ROOF SHEATHING CONTINUOUS BELOW OVERFRAMING. TRUSS TOP CHORDS W/O SHEATHING SHALL BE BRACED W/ 2x4 @ 24" O.C. ATTACHED W/ (2) 10d NAILS PER TRUSS
4. ROOF TRUSS PER PLAN
5. SIMPSON HUS26 OR USP THD26 FACE MOUNT HANGER U.N.O. PER TRUSS MANUF.

72 GIRDER TRUSS AT OVERFRAMING
SCALE: 3/4"=1'

1. CONVENTIONAL 2x OVER FRAMING @ 24" O.C. W/ (4) 16d TOE NAILS TO VALLEY PLATE (SEE BELOW FOR RECOMMENDED SIZES BASED ON SPAN)
2. EDGE NAILING
3. 2x VALLEY BOARD TO MATCH RAFTER W/ (2) 16d NAILS PER TRUSS
4. ROOF TRUSS TOP CHORD OR RAFTER PER PLAN
5. CONTINUOUS SHEATHING BENEATH OVERFRAMING OR 2x4 BRACING @ 24" O.C. W/ 2-16d NAILS PER TRUSS.

FOR RAFTER SPANS BELOW USE THE FOLLOWING SIZES:

0'-0" TO 6'-7"	2x4
6'-8" TO 9'-7"	2x6
9'-8" TO 12'-2"	2x8
12'-3" TO 14'-10"	2x10
14'-11" TO 17'-3"	2x12

(ASSUMES RAFTERS @ 24" O.C. LL=30PSF & DL=10PSF PER TABLE R802.5.1(3) FOR HF #2)

73 VALLEY FRAMING
SCALE: 3/4"=1'

1. RAISED HEEL TRUSS W/ ROOF SHEATHING PER PLAN
2. 2X6 VENTED BLOCKING W/ (2) 8d TOE NAILS TO TRUSS CHORDS EACH END
3. WALL SHEATHING CONTINUOUS TO UNDERSIDE OF TOP CHORD
4. SIMPSON H2.5 @ EACH TRUSS INSTALLED PER MFG. SPECS.
5. STUD WALL OR BEAM PER PLAN
6. EDGE NAIL ROOF & WALL SHEATHING TO 2X6 BLOCKING

74 RAISED HEEL ROOF TRUSS AT BEARING
SCALE: 3/4"=1'

1. 2x STUD WALL W/ SHEATHING & NAILING PER SHEAR WALL SCHEDULE
2. JOIST PER PLAN SECURED TO PLATE W/ (3) 8d NAILS.
3. 2X RIM BOARD MINIMUM W/ INVERTED LUS HANGER TO JOIST
4. JACK/MONO TRUSS PER PLAN W/ LUS HANGER TO RIM
5. JOIST BLOCKING TOE NAILED TO TOP PLATE W/ 8d NAILS AT 6" O.C.
6. 2x STUD WALL OR BEAM BELOW PER PLAN
7. ROOF DIAPHRAGM EDGE NAILING PER PLAN
8. 2X BLOCKING BETWEEN TRUSSES ATTACHED TO WALL W/ 10d NAILS STAGGERED AT 6" O.C.
9. 2X BLOCKING BETWEEN STUDS W/ (2) 10d COM. TOE NAILS PER STUD

75 ROOF TRUSS TO RIM
SCALE: 3/4"=1'

1. EXTERIOR STUD WALL PER PLAN
2. RAFTER, TRUSS TOP CHORD, OR 2X6 LEDGER SECURED TO WALL W/ (2) 4" SIMPSON SDWS SCREWS PER WALL STUD (16" O.C.)
3. ROOF DIAPHRAGM EDGE NAILING PER PLAN
4. 2X6 BLOCKING BETWEEN STUDS

76 ROOF DIAPHRAGM TO WALL
SCALE: 3/4"=1'

1. EDGE NAILING
2. 2x RAFTER W/ ROOF SHEATHING PER PLAN
3. BEAM PER PLAN
4. SIMPSON LRU RAFTER HANGER

77 RAFTERS AT RIDGE BEAM
SCALE: 3/4"=1'

1. 2x RAFTER W/ ROOF SHEATHING PER PLAN
2. EDGE NAILING
3. 2x BLOCKING TOE NAILED TO TOP PLATE W/ (3) 8d NAILS
4. SIMPSON H2.5A CLIP AT EACH RAFTER
5. 2x STUD WALL OR BEAM PER PLAN

78 RAFTER AT WALL
SCALE: 3/4"=1'

1. TRUSS W/ ROOF SHEATHING PER PLAN TO BEAR ON LEDGER
2. EDGE NAILING
3. 2x BLOCKING ATTACHED W/ (2) 16d NAILS PER STUD
4. CONTINUOUS 2x LEDGER W/ (2) 1/2"x4" LAG SCREWS PER STUD
5. 2x STUD WALL PER PLAN (STUDS @ 16" O.C.)
6. SIMPSON A35 FRAMING ANGLE AT EACH TRUSS

79 MONO TRUSS TO WALL
SCALE: 3/4"=1'

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BUILDING DEPT. APPROVAL STAMPS:

REVISION DATE:	INIT:	PROJECT #:
6-27-2019	MM	PLAN REVIEW

S8

DATE: 12-29-2018
INIT: MM
PROJECT #: 2146