ENERGY NOTES

CODE(S): 2018 INTERNATIONAL BUILDING CODE – – – – (IBC)
2018 INTERNATIONAL RESIDENTIAL CODE – – – – (IRC)
2018 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
FLOORS (OVER UNHEATED SPACES) ····· R-38
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 BUILDING 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: CONTINUOUS 6 MIL. POLYETHELENE
VENTILATION: ATTICS WITH BATTS: 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 2018 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 2018 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: VENTILATION TO BE SUPPLIED BY FORCED AIR FURNACE
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 (WEEKDAYS/WEEKENDS) AND 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 SENSED FOR A PERIOD OF UP TO 30 MINUTES.
2. SYSTEMS CONTROLLED SOLELY BY A MANUALLY OPERATED TIMER CAPABLE OF OPERATING THE SYSTEM FOR NO MORE THAN TWO HOURS.

ENERGY CREDITS (PRESCRIPTIVE)

TABLE 406.2 ENERGY CREDITS (Single Family)

Option	Description	Credit
HEATING OPTIONS # 2	HEAT PUMP	= 1.0
ENERGY OPTIONS 1.3	EFFICIENT BUILDING ENVELOPE	= 0.5
2.2	AIR LEAKAGE CONTROL & EFFICIENT VENTILATION (COMPLIANCE BASED ON SECT. 402.4.1.2.)	= 1.0
3.5	AIR SOURCE, CENTRALLY DUCTED HEAT PUMP (MINIMUM HSPF OF 11.0)	= 1.5
5.5	EFFICIENCY WATER HEATER (MEETING STANDARDS OF Tier III OF NEEA'S SPEC.'5)	= 2.0
	6.0 TOTAL ENERGY CREDITS	

ENERGY CODE

–HEATING SYSTEM IS A NATURAL GAS FURNACE FORCED AIR SYSTEM
–CONSTRUCTION SHALL ADHERE TO :
GLAZING RATIO CLIMATE ZONE : **4C – MARINE**
–PERSCRIPTIVE PATH **MARINE IV** WINDOWS – 0.28 U–FACTOR
DOORS – 0.20 U–FACTOR

LOT AREA / SLOPE

LOT AREA : 14,066 S.F.
LOT SLOPE : HIGH GRADE = +92.8
LOW GRADE = +69.4 △ = +23.4
DISTANCE BETWEEN =197'
23.4/197 = 11.88%
MAX. GFA & COVERAGE:
14066 @ 40% = 5624.4

GROSS FLOOR AREA(s) (G.F. A.)

MAIN FLOOR : 2,452.75 S.F.
UPPER FLOOR : 2,030.5 S.F.
TOTAL HEATED SPACE = 4,483.25 S.F.
GARAGE : 624 S.F.
MECHANICAL ROOM : 104 S.F.
TOTAL GROSS FLOOR AREA = 5,211.25 S.F.
Or **37.0%**

LOT COVERAGE

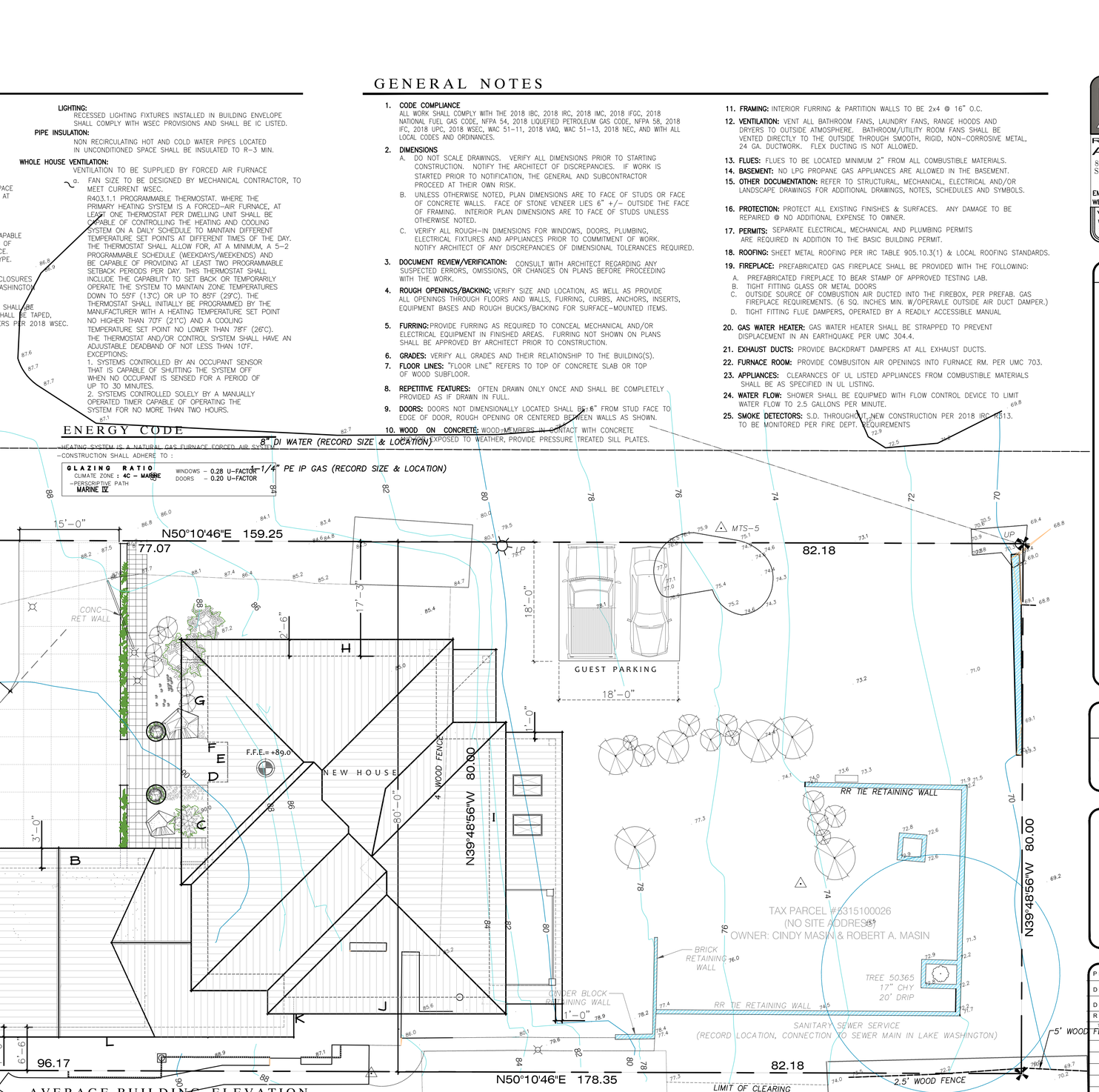
STRUCTURE : 4,129.5 S.F.
VEHICAL DRIVEWAY : 986 S.F.
PARKING PAD : 324 S.F.
TOTAL COVERAGE = 5,439.5 S.F.
Or **38.67%**

HARDSCAPE

MAX. ALLOWED:
14066 @ 9% = 1,265 S.F.
CONC. & PAVER WALKWAYS : 218 S.F.
GARBAGE / RECYCLE PAD : 48 S.F.
DECKS : 0 S.F.
TOTAL HARDSCAPE: 266 S.F. OR 19%

GENERAL NOTES

1. **CODE COMPLIANCE** ALL WORK SHALL COMPLY WITH THE 2018 IBC, 2018 IRC, 2018 IMC, 2018 IFGC, 2018 NATIONAL FUEL GAS CODE, NFPA 54, 2018 LIQUEFIED PETROLEUM GAS CODE, NFPA 58, 2018 IFC, 2018 UPC, 2018 WSEC, WAC 51–11, 2018 VIAQ, WAC 51–13, 2018 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 OR MASONRY EXPOSED TO WEATHER, PROVIDE PRESSURE TREATED SILL PLATES.
11. **FRAMING:** INTERIOR FURRING & PARTITION WALLS TO BE 2x4 @ 16" O.C.
12. **VENTILATION:** VENT ALL BATHROOM FANS, LAUNDRY FANS, RANGE HOODS AND DRYERS TO OUTSIDE ATMOSPHERE. BATHROOM/UTILITY ROOM FANS SHALL BE VENTED DIRECTLY TO THE OUTSIDE THROUGH SMOOTH, RIGID, NON–CORROSIVE METAL, 24 GA. DUCTWORK. FLEX DUCTING IS NOT ALLOWED.
13. **FLUES:** FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.
14. **BASEMENT:** NO LPG PROPANE GAS APPLIANCES ARE ALLOWED IN THE 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/OPERAVLE OUTSIDE AIR DUCT DAMPER.)
   D. TIGHT FITTING FLUE DAMPERS, OPERATED BY A READILY ACCESSIBLE MANUAL
20. **GAS WATER HEATER:** GAS WATER HEATER SHALL BE STRAPPED TO PREVENT DISPLACEMENT IN AN EARTHQUAKE PER UMC 304.4.
21. **EXHAUST DUCTS:** PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST DUCTS.
22. **FURNACE ROOM:** PROVIDE COMBUSITON AIR OPENINGS INTO FURNACE RM. PER UMC 703.
23. **APPLIANCES:** CLEARANCES OF UL LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS SPECIFIED IN UL LISTING.
24. **WATER FLOW:** SHOWER SHALL BE EQUIPMED WITH FLOW CONTROL DEVICE TO LIMIT WATER FLOW TO 2.5 GALLONS PER MINUTE.
25. **SMOKE DETECTORS:** S.D. THROUGHOUT. NEW CONSTRUCTION PER 2018 IRC R313. TO BE MONITORED PER FIRE DEPT. REQUIREMENTS



SITE INFORMATION

7208 N. MERCER WAY
MERCER ISLAND, WA 98040

PARCEL No's.
5315100025
&
5315100026

AVERAGE BUILDING ELEVATION

MARK	WALL LENGTH	GRADE / ELEVATION	CALCULATION
A	24.0"	+91.5'	2196
B	35.5'	+89'	3159.5
C	13.0'	+89'	1157
D	3.0'	+89'	267
E	6.0'	+89'	534
F	3.0	+89'	267
G	13.0'	+88.5'	1150.5
H	42.5'	+85.5'	3633.75
I	51.5'	+82.5'	4248.75
J	30.5'	+86.5'	2638.25
K	4.5'	+88'	396
L	47.5'	+90.5'	4298.75
TOTAL	=274.0'		23,946.5

CALCULATION :
274/23946.5 = 87.4 or 87' 4–3/4"
87' 4–3/4" + 30'
= +117' 4–3/4" = MAX. HT.

SITE NOTES

PLACE COMPOST SOCKS, COMPOST BERMS, FILTER FABRIC FENCING, STRAW BAILS, STRAW WATTLES, OR OTHER APPROVED PERIMETER CONTROLL BMP'S TO ELIMINATE CONSTRUCTION STORMWATER RUN–OFF.

ELLIMINATE UNCONTROLLED CONVEYANCE OF MUD & DIRT INTO THE RIGHT–OF–WAY (R.O.W)

COVER BARE SOILS WITH COMPOST BLANKETS, STRAW, MULCH, MATTING, OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN–OFF.

COVER STOCKPILES OF BARE SLOPES WITH COMPOST BLANKETS, TARPS, MATTING OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN–OFF.

MERCER ISLAND – MICC 19.02.030(F)(3)(d)
ALL JAPANESE KNOTWEED, (POLYGONUM CUSPIDATUM), & REGULATED CLASS 'A', REGULATED CLASS 'B', REGULATED CLASS 'C' WEEDS, IDENTIFIED ON KING COUNTY NOXIOUS WEED LIST SHALL BE REMOVED FROM PROPERTY PURSUANT TO SUBSECTION 19.02.020(F)(3)(a.)

North

SITE PLAN

SCALE : 1/8" = 1'–0"

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PROJECT NAME: MASIN RESIDENCE
PROJECT ADDRESS: 7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE: PERMIT SET
SHEET TITLE: SITE PLAN

STAMP:
4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 21070
DATE: OCT 18, 2021
DRAWN BY: N. F. W.
REVISIONS:
Tag | Description

SHEET No.: A1.0

WINDOW SCHEDULE

MARK	DIMENSIONS (W.x h.)	TYPE	DESCRIPTION
A	(2) 3'-0" X 6'-0"	CSMNT / CSMNT	EGRESS - 'SAFETY GLAZE'
B	(2) 2'-0" X 4'-6"	CSMNT / CSMNT	
C	(2) 2'-0" X 3'-6"	CSMNT / CSMNT	
D	(2) 2'-6" X 6'-0"	CSMNT / CSMNT	
E	(2) 2'-6" X 4'-6"	CSMNT / CSMNT	
F	(2) 3'-0" X 2'-0"	TRANSOM	
G	(2) 3'-0" X 4'-6"	CSMNT / CSMNT	
H	2'-6" X 3'-6"	CASEMENT	
I	(2) 2'-6" X 3'-6"	CSMNT / CSMNT	
J	(2) 3'-0" X 4'-0"	CSMNT / CSMNT	
K	(3) 3'-0" X 4'-0"	CSMNT / PIC / CSMNT	
L	3'-0" X 3'-6"	CASEMENT	
M	2'-6" X 3'-6"	CASEMENT	
N	4'-0" X 6'-0"	PICTURE	
O	4'-0" X 2'-6"	TRANSOM	
P	2'-6" X 4'-6"	CASEMENT	

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 IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
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 A2.0 FOR WINDOW SCHEDULE. SEE SHEET A2.1 FOR DOOR SCHEDULE.
7. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 Lb. LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5.
8. MECHANICAL RM. 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 STRIPPING & APPROVED SELF-CLOSING DEVICE.

CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 Lb. LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5. TYPICAL.

PLAN KEY

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

MAIN FLOOR PLAN

AREA: 2,495.5 s.f. SCALE: 1/4" = 1'-0"

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	MAIN FLOOR PLAN

STAMP:

4884 RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #:	21070
DATE:	OCT 18, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

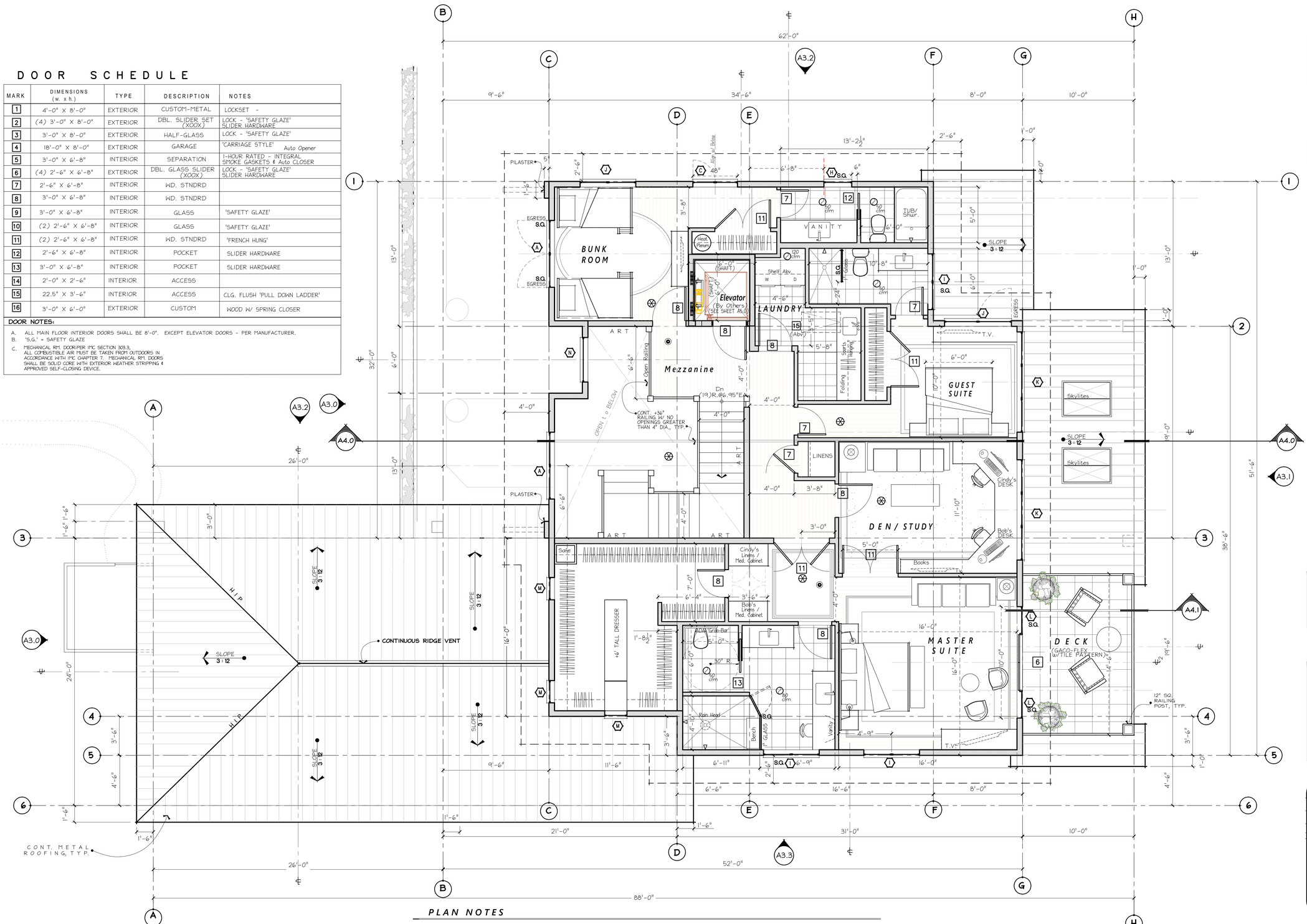
SHEET No.: A2.0

DOOR SCHEDULE

MARK	DIMENSIONS (w. x h.)	TYPE	DESCRIPTION	NOTES
1	4'-0" X 8'-0"	EXTERIOR	CUSTOM-METAL	LOCKSET -
2	(4) 3'-0" X 8'-0"	EXTERIOR	DBL. SLIDER SET (XOOX)	LOCK - 'SAFETY GLAZE' SLIDER HARDWARE
3	3'-0" X 8'-0"	EXTERIOR	HALF-GLASS	LOCK - 'SAFETY GLAZE'
4	18'-0" X 8'-0"	EXTERIOR	GARAGE	'CARRIAGE STYLE' Auto Opener
5	3'-0" X 6'-8"	INTERIOR	SEPARATION	1-HOUR RATED - INTEGRAL SMOKE GASKETS & Auto CLOSER
6	(4) 2'-6" X 6'-8"	EXTERIOR	DBL. GLASS SLIDER (XOOX)	LOCK - 'SAFETY GLAZE' SLIDER HARDWARE
7	2'-6" X 6'-8"	INTERIOR	WD. STNDRD	
8	3'-0" X 6'-8"	INTERIOR	WD. STNDRD	
9	3'-0" X 6'-8"	INTERIOR	GLASS	'SAFETY GLAZE'
10	(2) 2'-6" X 6'-8"	INTERIOR	GLASS	'SAFETY GLAZE'
11	(2) 2'-6" X 6'-8"	INTERIOR	WD. STNDRD	'FRENCH HUNG'
12	2'-6" X 6'-8"	INTERIOR	POCKET	SLIDER HARDWARE
13	3'-0" X 6'-8"	INTERIOR	POCKET	SLIDER HARDWARE
14	2'-0" X 2'-6"	INTERIOR	ACCESS	
15	22.5" X 3'-6"	INTERIOR	ACCESS	CLG. FLUSH 'PULL DOWN LADDER'
16	3'-0" X 6'-0"	EXTERIOR	CUSTOM	WOOD W/ SPRING CLOSER

DOOR NOTES:

A. ALL MAIN FLOOR INTERIOR DOORS SHALL BE 8'-0". EXCEPT ELEVATOR DOORS - PER MANUFACTURER.
B. 'S.G.' = SAFETY GLAZE
C. MECHANICAL RM. 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 STRIPPING & APPROVED SELF-CLOSING DEVICE.



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North

UPPER FLOOR PLAN

AREA: 2,030.5 s.f. SCALE: 1/4" = 1'-0"

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	UPPER FLOOR PLAN

STAMP:

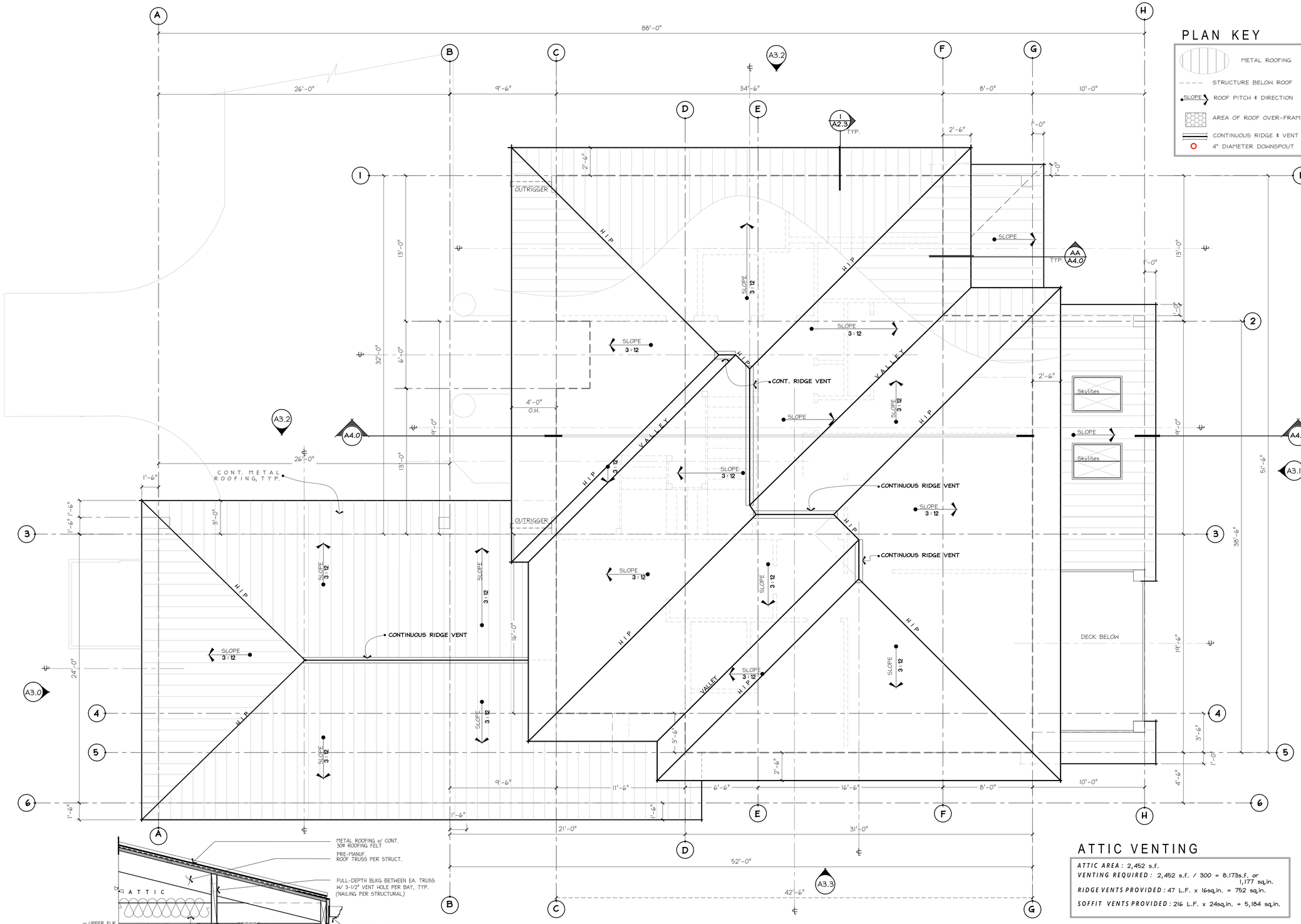
4884
RICHARD A. FISHER
STATE OF WASHINGTON

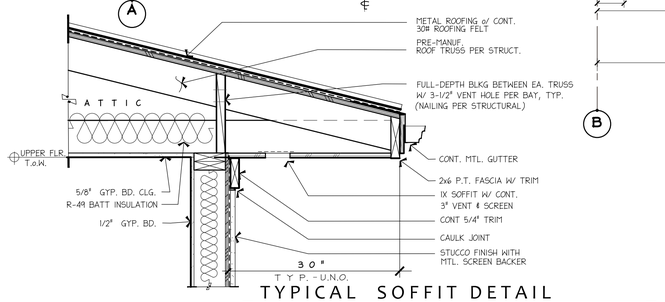
PROJECT #:	21070
DATE:	OCT 18, 2021
DRAWN BY:	N. F. W.

REVISIONS:

Tag	Description

SHEET No.: A2.1





TYPICAL SOFFIT DETAIL

SCALE: 1" = 1'-0"

PLAN KEY

- METAL ROOFING
- STRUCTURE BELOW ROOF
- SLOPE — ROOF PITCH & DIRECTION
- AREA OF ROOF OVER-FRAME
- CONTINUOUS RIDGE & VENT
- 4" DIAMETER DOWNSPOUT

ATTIC VENTING

ATTIC AREA : 2,452 s.f.
VENTING REQUIRED : 2,452 s.f. / 300 = 8.173s.f. or 1,177 sq.in.
RIDGE VENTS PROVIDED : 47 L.F. x 16sq.in. = 752 sq.in.
SOFFIT VENTS PROVIDED : 216 L.F. x 24sq.in. = 5,184 sq.in.

North

ROOF PLAN

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

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WINTHROP, WASHINGTON 98862
TEL.: (509) 996-2689

PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	ROOF PLAN

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #:	21070
DATE:	OCT 18, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

SHEET No.: A2.2

RFA
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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	ELEVATIONS

STAMP:

4884
RICHARD A. FISHER
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PROJECT #:	21070
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REVISIONS:

Tag	Description

SHEET No.:
A3.0

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

NORTHWEST ELEVATION

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

1 MECHANICAL ROOM PLAN

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

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	ELEVATIONS

STAMP:

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PROJECT #:	21070
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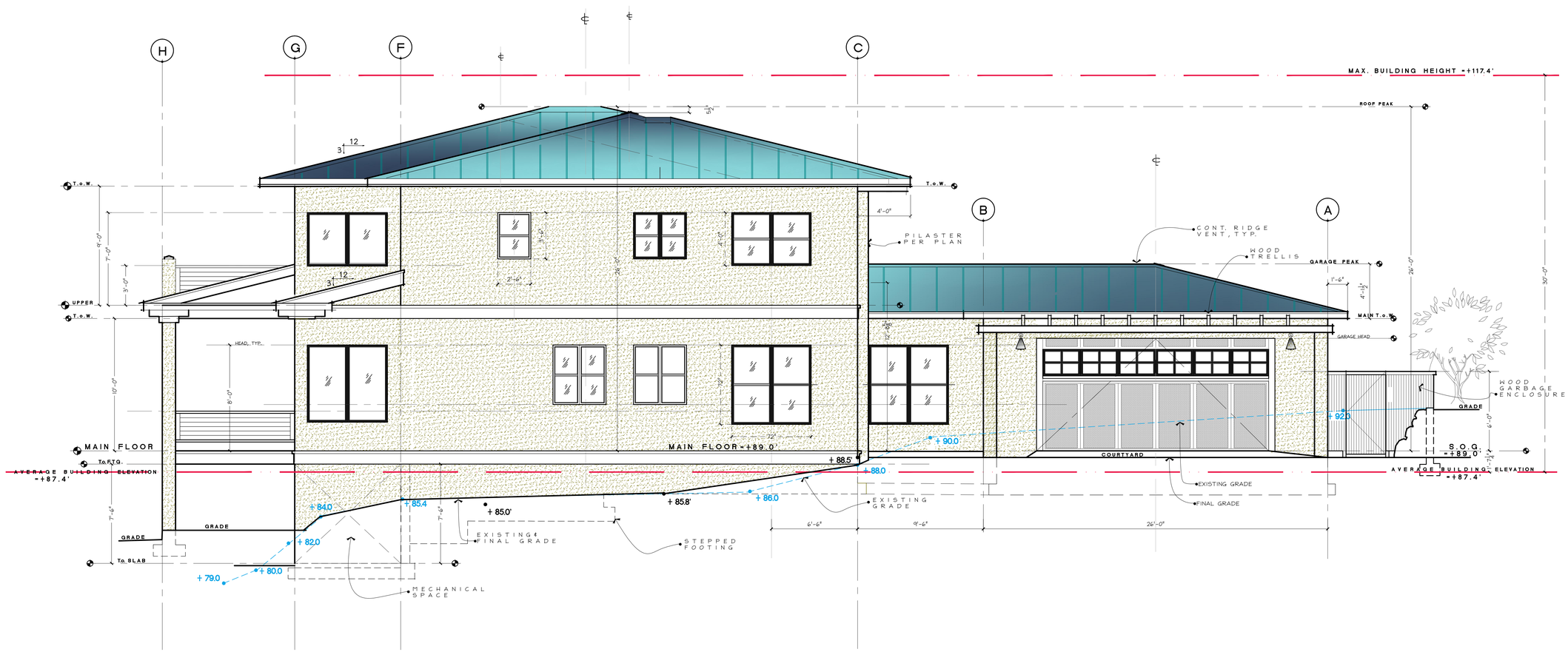
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

SHEET No.:

A3.1



SOUTHWEST ELEVATION

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

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
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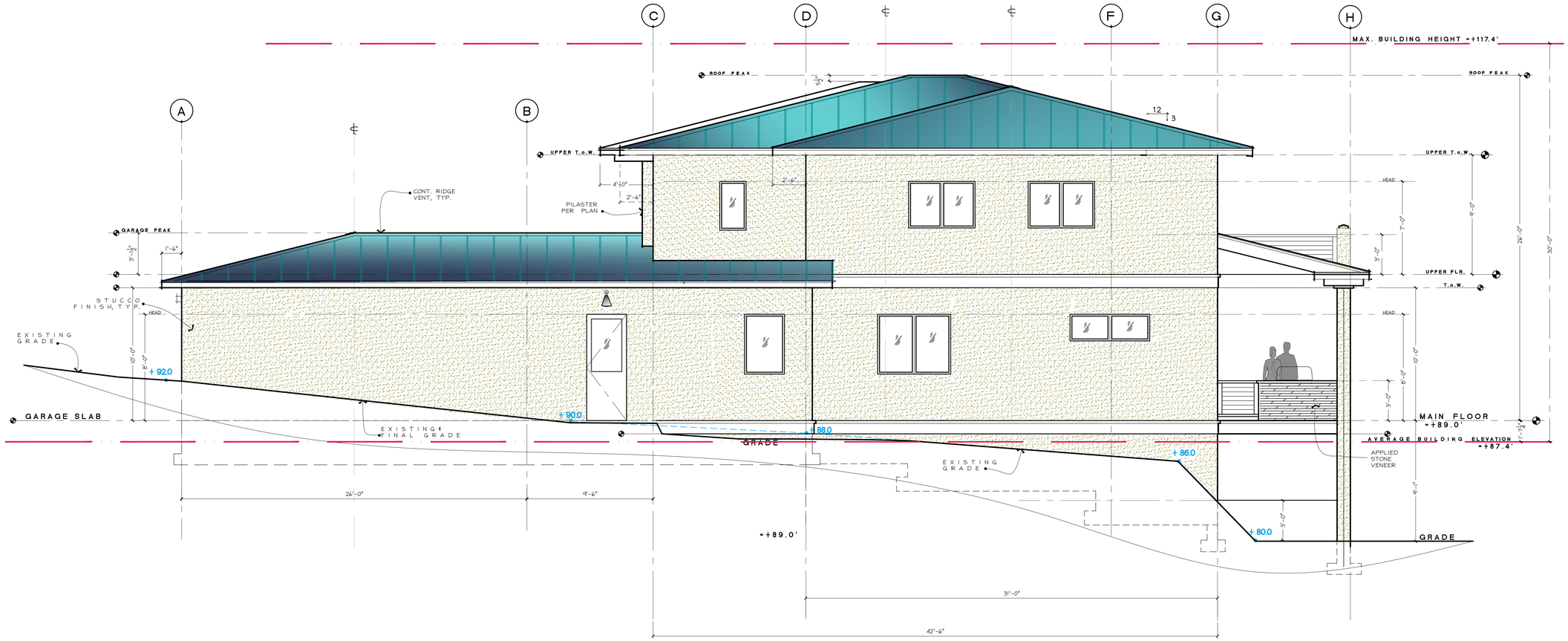


NORTHEAST ELEVATION

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

PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	ELEVATIONS

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

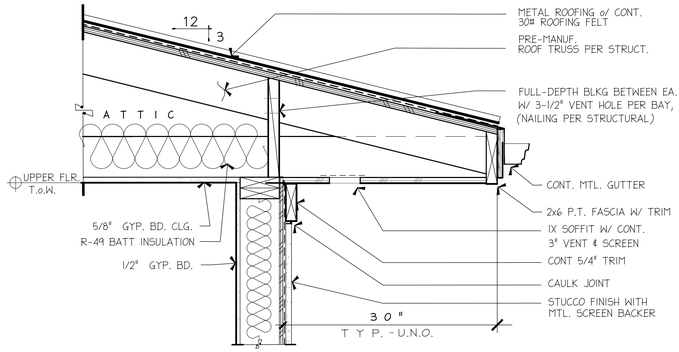
PROJECT #:	21070
DATE:	OCT 18, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

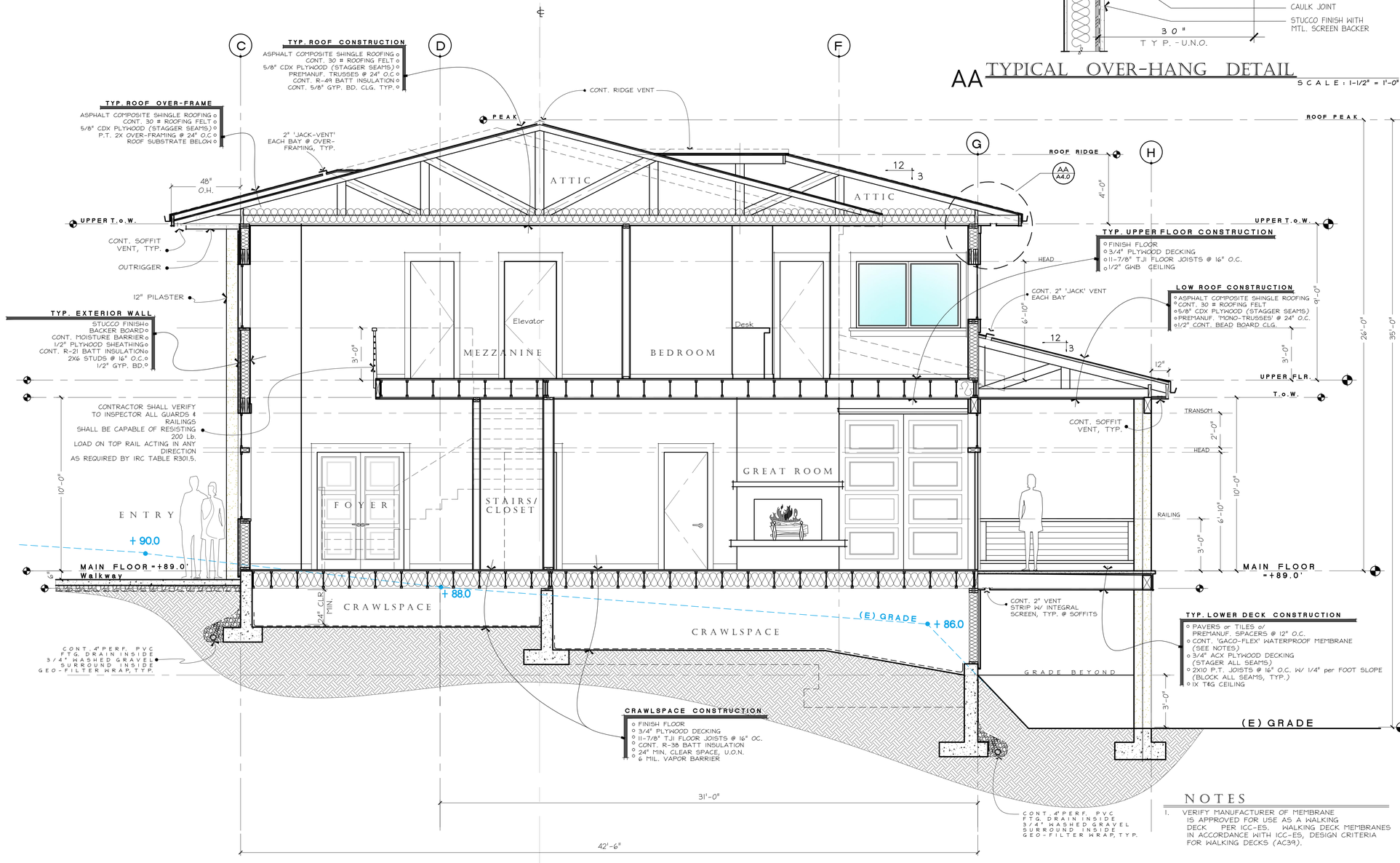
SHEET No.:

A3.3



AA TYPICAL OVER-HANG DETAIL

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



CROSS SECTION

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

NOTES

1. 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).

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	BUILDING SECTION

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

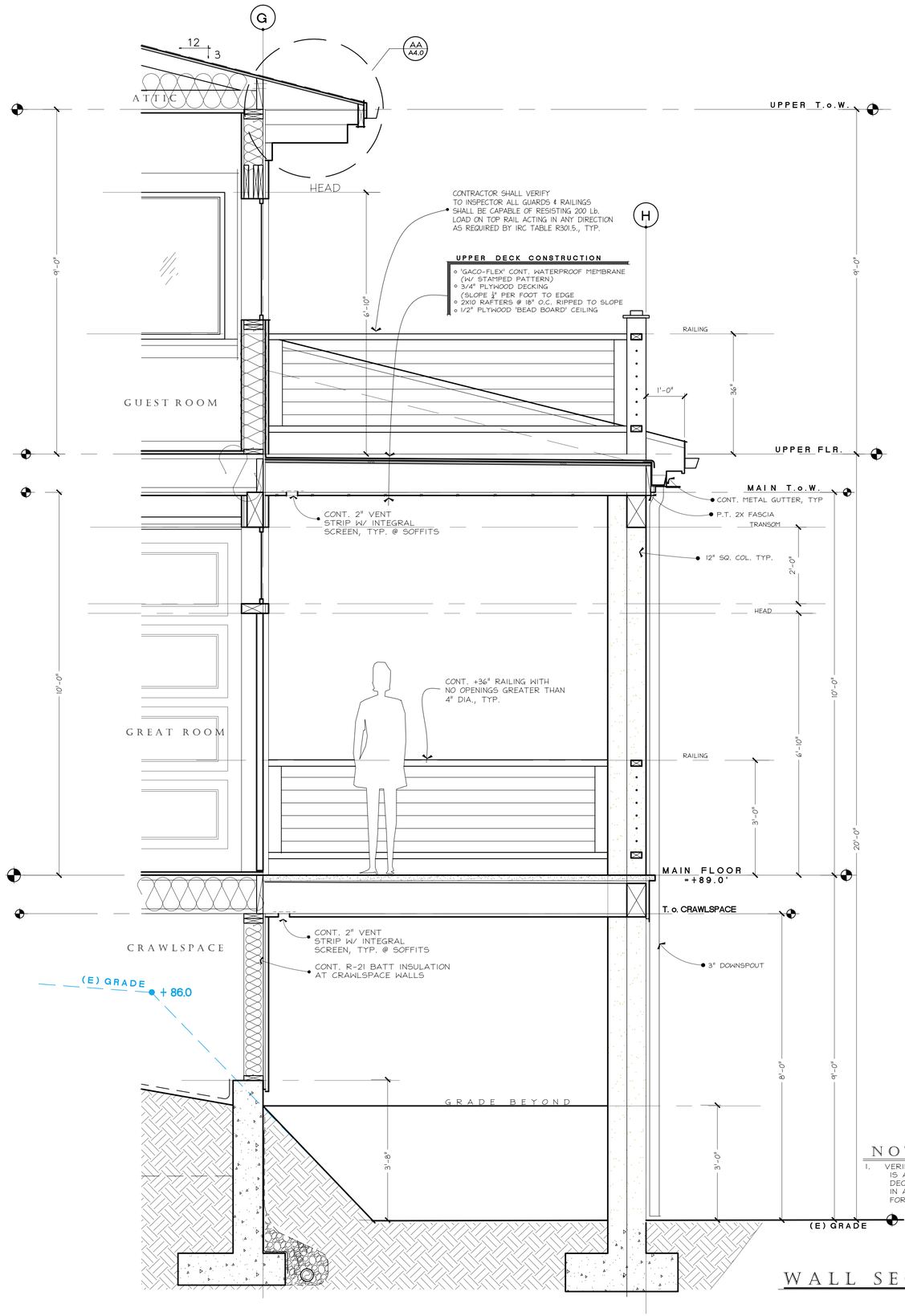
PROJECT #:	21070
DATE:	OCT 18, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

SHEET No.:

A4.0



NOTES

1. 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).

WALL SECTION

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

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PROJECT NAME:	PROJECT ADDRESS:
MASIN RESIDENCE	7208 N. Mercer Way Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	WALL SECTION

STAMP:

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RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #:	21070
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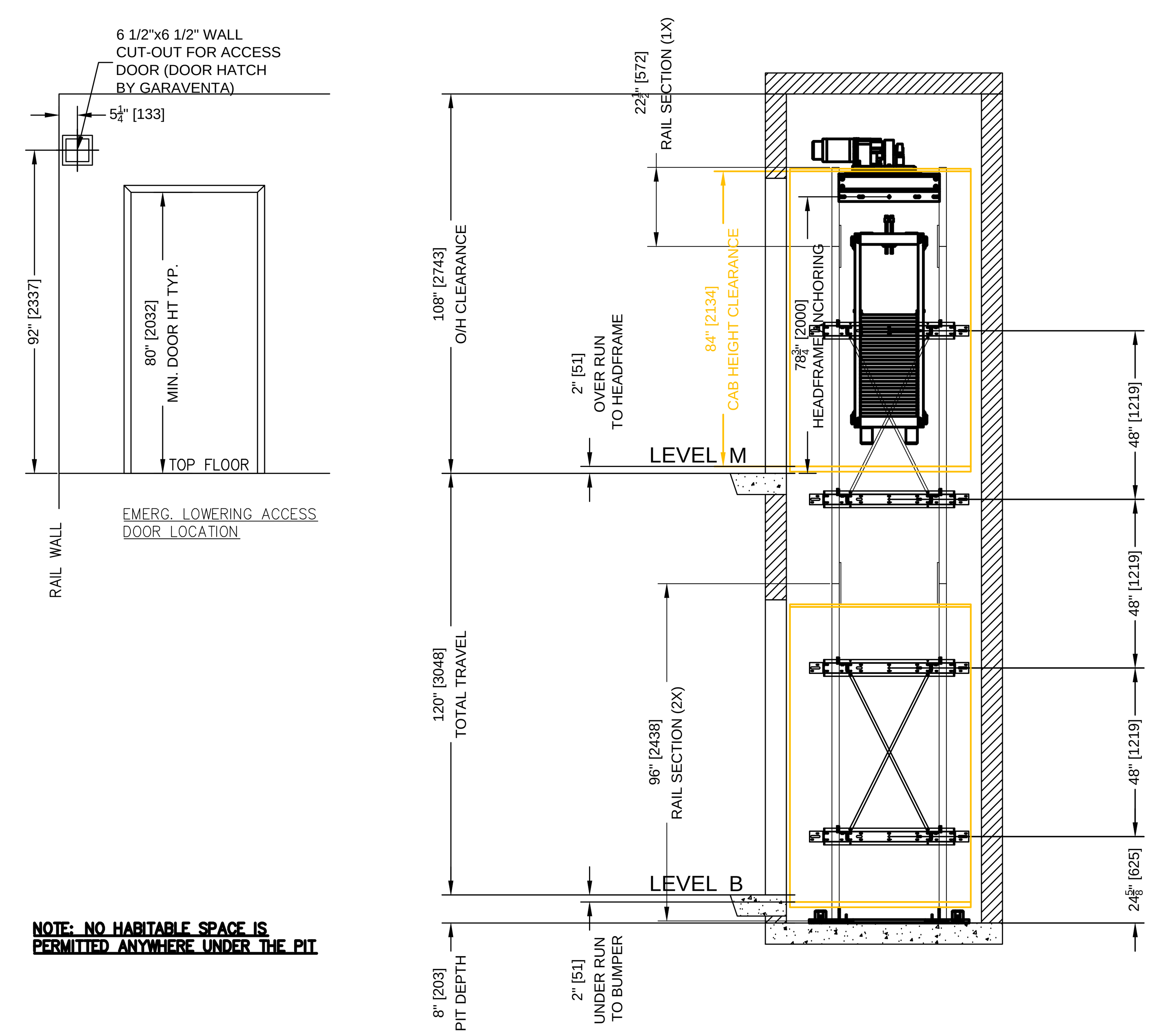
REVISIONS:

Tag	Description

SHEET No.:

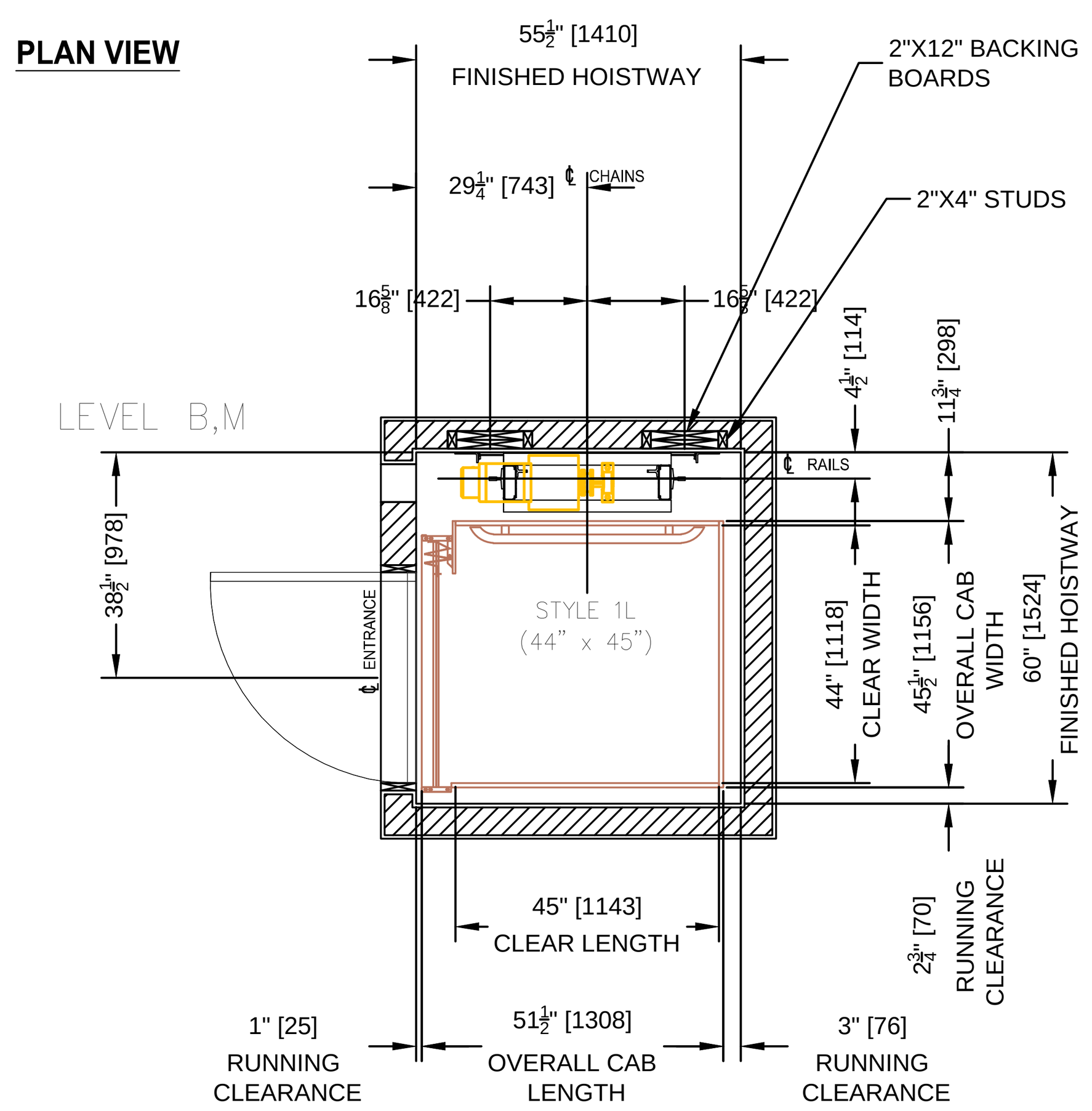
A4.1

ELEVATION VIEW



NOTE: NO HABITABLE SPACE IS PERMITTED ANYWHERE UNDER THE PIT

PLAN VIEW



GARAVENTA LIFT
GARAVENTA (CANADA) LTD.

ENGINEERING CALCULATIONS

MODEL: MR
CALCULATION VERSION:2.0

CALCULATION RESULT: N/A

JOB SPECIFIC DATA [Imperial] or [Metric]:

PIT DEPTH [in or mm]:	8.00 [203 mm]	REQUIRED CHAIN LENGTH [ft or m]:	168.00 [4267 mm]
OVERTRAVEL [in or mm]:	2.00 [51 mm]	RATED SPEED [ft/min or m/sec]:	40 [0.20 m/s]
TOTAL TRAVEL [in or mm]:	120.00 [3048 mm]	RAIL REQUIRED [ft or m]:	214.50 [65.38 m]
UNDERTRAVEL [in or mm]:	2.00 [51 mm]	RAIL WEIGHT [lbs/ft or kg/m]:	286 [130Kg]

STRUCTURAL CONFIGURATION CONSTANTS

PLANK [in or mm]:	4.00 [102 mm]	DBRv (vert. dist. between rollers) [in or mm]:	80.00 [2032 mm]
STILE [in or mm]:	88.00 [2235 mm]	PLW (platform width) [in or mm]:	44.00 [1118 mm]
CLEARANCE DELTA [in or mm]:	2.50 [64 mm]	OFS (offset to rail) [in or mm]:	6.75 [171 mm]
		PLL (platform length) [in or mm]:	45.00 [1143 mm]
		COFS (center offset) [in or mm]:	0.0 [0 mm]
		OTMREF (overturning mom. ref.) [in or mm]:	11.00 [279 mm]

COUNTERWEIGHT CALCULATION / STRUCTURAL REACTION CALCULATIONS

COUNTERWEIGHT TOTAL [lbs or kg]:	900 [408Kg]	RC (wall reaction) [Lbf or KN]:	629 [2.82 KN]
COUNTER. FRAME WEIGHT [lbs or kg]:	88.0 [40Kg]	RN (normal pit reaction) [Lbf or KN]:	3309 [14.83 KN]
QTY. COUNTERWEIGHT BRICKS:	45	RBS (safety engag. pit reaction)[Lbf or KN]:	5344 [23.95 KN]

GROSS LOAD CALCULATIONS / POWER/LOAD CALCULATIONS

CAR WEIGHT [lbs or kg]:	750 [340Kg]	HORSEPOWER [HP]:	1.57
MAXIMUM CAPACITY [lbs or kg]:	1000 [454Kg]	RAIL REACTION R1 [Lbf or KN]::	314 [1.41 KN]
SLING WEIGHT [lbs or kg]:	285 [129Kg]	RAIL REACTION R2 [Lbf or KN]::	69 [0.31 KN]
MACHINE WEIGHT [lbs or kg]:	100 [45Kg]	GROSS LOAD ON CHAINS [lbs or kg]:	2061 [935Kg]
CHAIN WEIGHT [lbs or kg]:	26 [12Kg]	CHAIN SAFETY FACTOR:	8.344

SPECIFICATIONS

THIS LIFT IS MANUFACTURED IN ACCORDANCE WITH: ASME A17.1- SEC. 5.3

CAB OPTION & FINISHES

CAB CONFIGURATION:	Style-1L
CAR GATE:	YES
CAR GATE FINISH:	Nickel/White Vinyl Solid Panels
CAR GATE OPERATION:	Manual Accordion Gate
CAR STOP/ALARM SWITCH:	Maintained Rocker Sw.
SEPARATE CAR ALARM SWITCH:	No
C.O.P. SIZE:	Standard
C.O.P. KEY SWITCH:	Keyless C.O.P.
C.O.P. FINISH:	#4 Brushed Stainless Steel
IN-CAR DIRECTION INDICATOR:	No Direction Indicator
CAR WALL PANEL FINISH:	3/4in. Unfin. Birch Vnr.
CAR CEILING PANEL FINISH:	3/4in. Unfin. Birch Vnr.
CAR PLATFORM FINISH:	Plywood (Fin. By Others)
HANDRAIL TYPE/FINISH:	Premium #4 Brushed SS
EXTRA HANDRAIL(S):	N/A
TELEPHONE:	Integral Phone in COP
TELEPHONE BOX FINISH:	N/A
CAR LIGHTING:	4 Recessed LED Lights - Black Trim
CAR HEIGHT:	84"
CAR SIZE (Width x Length):	44" x 45"
CAR ALUM. FRAME PAINT:	N/A

CONTROLS

CONTROLLER TYPE:	MR II-MOD
OPERATION:	Collective Automatic
HALL STATION TYPE:	Call Button
HALL STATION KEY:	Keyless Hall Stations
HALL STATION MOUNTING:	Flush Mount Remote
HALL STATION FINISH:	#4 Brushed Stainless Steel
POSITION INDICATORS(LANDING):	N/A
DIRECTION INDICATORS(LANDING):	N/A
PUSH BUTTON MARK FLR-1 DR-1:	B
PUSH BUTTON MARK FLR-2 DR-1:	M
PUSH BUTTON MARK FLR-3 DR-1:	
PUSH BUTTON MARK FLR-4 DR-1:	
PUSH BUTTON MARK FLR-5 DR-1:	
PUSH BUTTON MARK FLR-6 DR-1:	

CONCURRENT LANDING CONTROL CALL BUTTONS

PUSH BUTTON MARK FLR-1 DR-2:	
PUSH BUTTON MARK FLR-2 DR-2:	
PUSH BUTTON MARK FLR-3 DR-2:	
PUSH BUTTON MARK FLR-4 DR-2:	
PUSH BUTTON MARK FLR-5 DR-2:	
PUSH BUTTON MARK FLR-6 DR-2:	

DOOR OPTION & FINISHES

LANDING DOORS:	Doors by Others
DOOR FINISH:	N/A
INTERLOCKS:	PORTA EMDL
DOOR OPERATION:	Manual Doors
1st FLR. DOOR LOCATION (XYZ):	X
1st FLR. DOOR HANDING:	RH
2nd FLR. DOOR LOCATION (XYZ):	X
2nd FLR. DOOR HANDING:	RH
3rd FLR. DOOR LOCATION (XYZ):	
3rd FLR. DOOR HANDING:	
4th FLR. DOOR LOCATION (XYZ):	
4th FLR. DOOR HANDING:	
5th FLR. DOOR LOCATION (XYZ):	
5th FLR. DOOR HANDING:	
6th FLR. DOOR LOCATION (XYZ):	
6th FLR. DOOR HANDING:	

DOOR LOCATION KEY PLAN (X, Y, Z)

CONCURRENT LDG. DOORS:	No Concurrent Landing Doors
1st FLR. 2nd DOOR LOCATION (XYZ):	
1st FLR. 2nd DOOR HANDING:	
2nd FLR. 2nd DOOR LOCATION (XYZ):	
2nd FLR. 2nd DOOR HANDING:	
3rd FLR. 2nd DOOR LOCATION (XYZ):	
3rd FLR. 2nd DOOR HANDING:	
4th FLR. 2nd DOOR LOCATION (XYZ):	
4th FLR. 2nd DOOR HANDING:	
5th FLR. 2nd DOOR LOCATION (XYZ):	
5th FLR. 2nd DOOR HANDING:	
6th FLR. 2nd DOOR LOCATION (XYZ):	
6th FLR. 2nd DOOR HANDING:	

TECHNICAL DETAILS

INSTALLATION TYPE:	Private Residence
MAXIMUM CAPACITY:	1000 [454Kg]
RATED SPEED (nom.):	40 [0.20 m/s]
POWER SUPPLY:	230V 1Ph. 60 Hz
RAIL BRACKET FASTENERS:	Lag Bolts
MAXIMUM RAIL SECTION LENGTH:	8 foot [2438 mm]
EMERGENCY POWER SUPPLY:	UPS Backup
SHELF FOR UPS:	YES
# of FLOORS SERVED:	2 Stops
SYSTEM:	IN-LINE HELICAL GEARED
ROPES:	(2)- ANSI B29.1 #60 ROLLER CHAINS
CHAIN LENGTH:	168.00 [4267 mm]
SAFETIES:	TYPE 'A' (INSTANTANEOUS)
MOTOR HORSEPOWER:	2HP
GEAR DATA:	42.18:1 IN-LINE HELICAL REDUCTION GEAR
SPROCKET DATA:	#60 DOUBLE-SINGLE,16TEETH
EST. CAR WEIGHT (lbs):	750 [340Kg]
EST. SLING WEIGHT (lbs):	285 [129Kg]
GROSS LOAD (lbs):	2061 [935Kg]
COUNTERWEIGHT WEIGHT(lbs):	900 [408Kg]
DOOR MONITORING SYSTEM:	NO

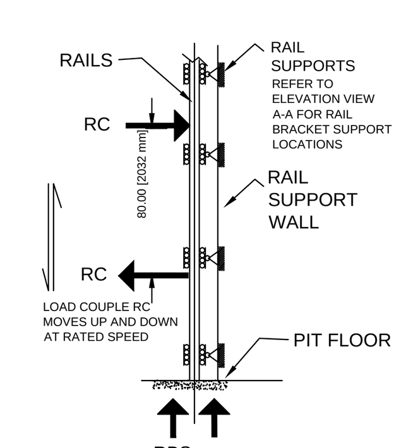
MISCELLANEOUS DETAILS

TRAVELLING CABLE LENGTH (FT):	Extra 20 ft [6 m]
TECH TOOLS:	N/A
PIT FLOAT SWITCH (MR II only):	NO
WARRANTY:	Standard 2 Year Warranty

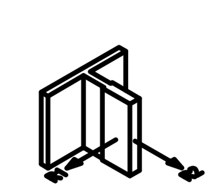
SPECIAL NOTES

-
-

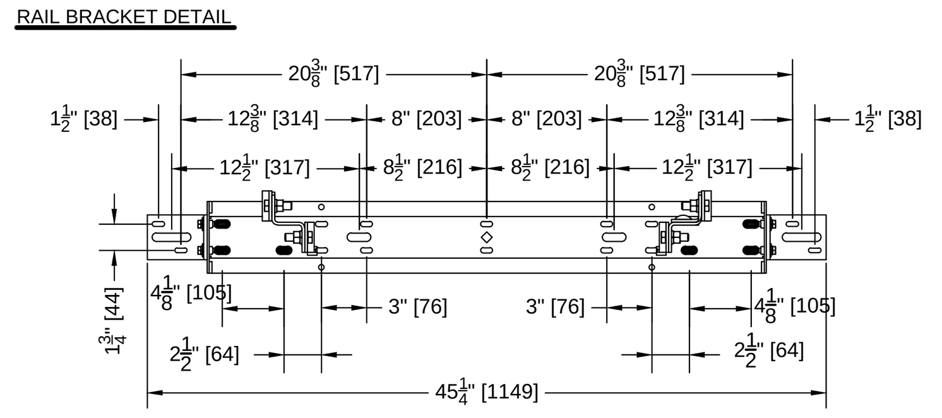
LOADING DIAGRAM - INFORMATION



LOAD	DESCRIPTION	Lbf
RBS	REACTION DUE TO BUFFER OR SAFETY ENGAGEMENT	5344 [23.95 KN]
RN	REACTION DUE TO NORMAL OPERATION	3309 [14.83 KN]
RC	LOAD IMPOSED DURING NORMAL OR EMERGENCY OPERATION MAXIMUM PULL-OUT FORCE ON RAIL SUPPORT	629 [2.82 KN]
R1	RAIL REACTION 1	314 [1.41 KN]
R2	RAIL REACTION 2	69 [0.31 KN]

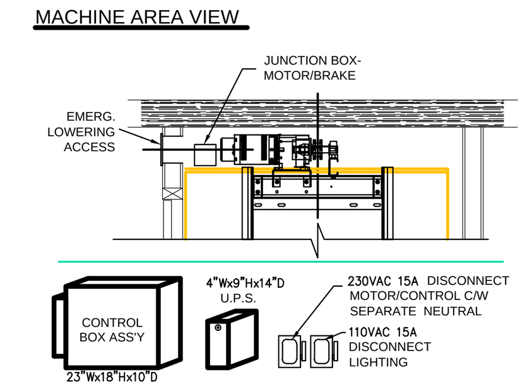


RAIL BRACKET DETAIL



SPECIAL NOTES

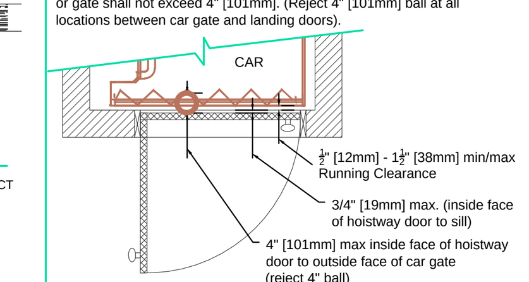
MACHINE AREA VIEW



CONTROL LOCATION:
CONTROL BOX & U.P.S. LOCATED OUTSIDE OF HOISTWAY BY OTHERS

3/4" & 4" DOOR & GATE RULE

The clearance between the hoistway doors or gates and the hoistway edges of the landing sills shall not exceed 3/4" [19mm]. The distance between the hoistway faces of the landing doors or gates and the car door or gate shall not exceed 4" [101mm]. (Reject 4" [101mm] ball at all locations between car gate and landing doors).



PROVISIONS BY OTHERS

MACHINE AREA:
1. ACCESS TO MACHINE AREA IS GAINED FROM THE TOP OF THE CAR

ELECTRICAL:
1. LOCKABLE FUSED DISCONNECT SWITCH TO BE PROVIDED FOR 230V 1Ph. POWER ALONG WITH A SEPARATE NEUTRAL WIRE c/w AUX. CONTACTS.
2. USE AUXILIARY CONTACTS IN DISCONNECT FOR EMERGENCY BACKUP. NO CONDUIT OR PIPING NOT ASSOCIATED WITH LIFT IN HOISTWAY.
3. PERMANENT POWER TO BE PROVIDED BEFORE INSTALLATION COMMENCES.

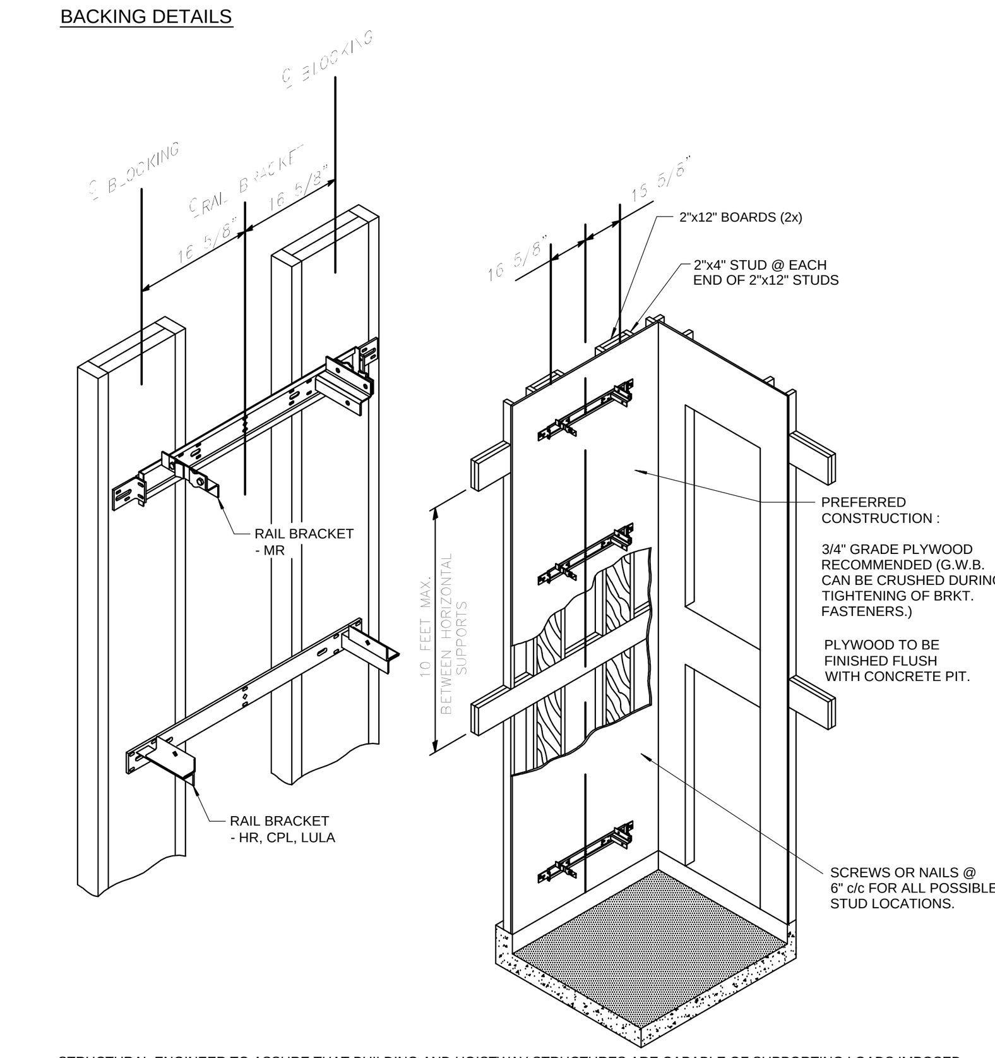
POWER SUPPLY REQUIREMENTS BY OTHERS

	VOLTS-PHASE -FREQUENCY	DISCONNECT SIZE	FUSE (DUAL ELEMENT SLOW-BLOW)	FULL LOAD CURRENT
MOTOR & EQUIP	230V 1Ph.	15A	15A	6.4 A
CAR LIGHTING SUPPLY	110V 1Ph.	15A	10A	

GENERAL:
1. RUNWAY, PIT, AND MACHINE AREA TO BE IN ACCORDANCE WITH ASME A17.1- SEC. 5.3 , AND TO EXISTING LOCAL CODES AND REGULATIONS.
2. RUNWAY TO BE PLUMB, LEVEL, AND SQUARE ...+- ¼".
3. CONTRACTOR TO PROVIDE DRYWALL, CARPENTRY, AND MASONRY WORK AS REQUIRED AS WELL AS PATCHING AND MAKING GOOD (INCLUDING FINISH PAINTING) ANY CUTTING, DRILLING, AND MODIFICATION TO THE BUILDING NECESSARY TO PERMIT PROPER INSTALLATION OF THE ELEVATOR EQUIPMENT.
4. WHERE CAR GATE IS PROVIDED, LANDING SILL TO CAR GATE CLEARANCES MUST CONFORM TO 3/4" & 4" RULE.

STRUCTURAL:
1. STRUCTURAL ENGINEER TO ASSURE THAT BUILDING AND RUNWAY STRUCTURES ARE CAPABLE OF SUPPORTING LOADS IMPOSED BY THE LIFT EQUIPMENT. (REFER TO THESE LAYOUT DRAWINGS FOR LOADS IMPOSED)

BACKING DETAILS



STRUCTURAL ENGINEER TO ASSURE THAT BUILDING AND HOISTWAY STRUCTURES ARE CAPABLE OF SUPPORTING LOADS IMPOSED BY THE ELEVATOR EQUIPMENT. (REFER TO THESE LAYOUT DRAWINGS FOR LOADS IMPOSED)

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TEL.: (509) 996-2689

PROJECT NAME: MASIN RESIDENCE
PROJECT ADDRESS: 7208 N. Mercer Way, Mercer Is., WA 98040

SET TITLE: PERMIT SET
SHEET TITLE: ELEVATOR PLANS & DETAILS

STAMP: 4884 RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #: 21070
DATE: SEPT 7, 2021
DRAWN BY: N.F.W
REVISIONS:

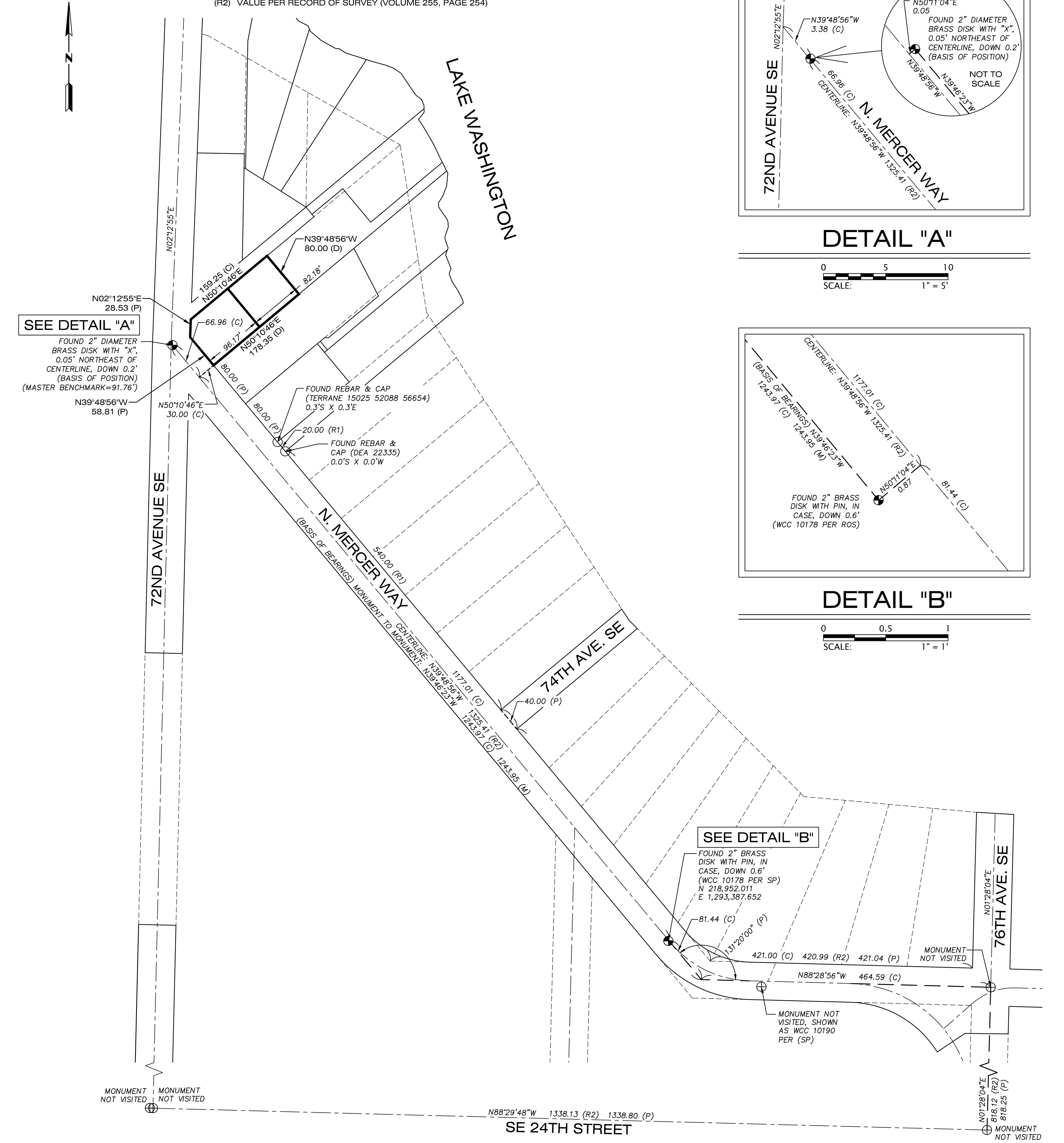
Tag	Description

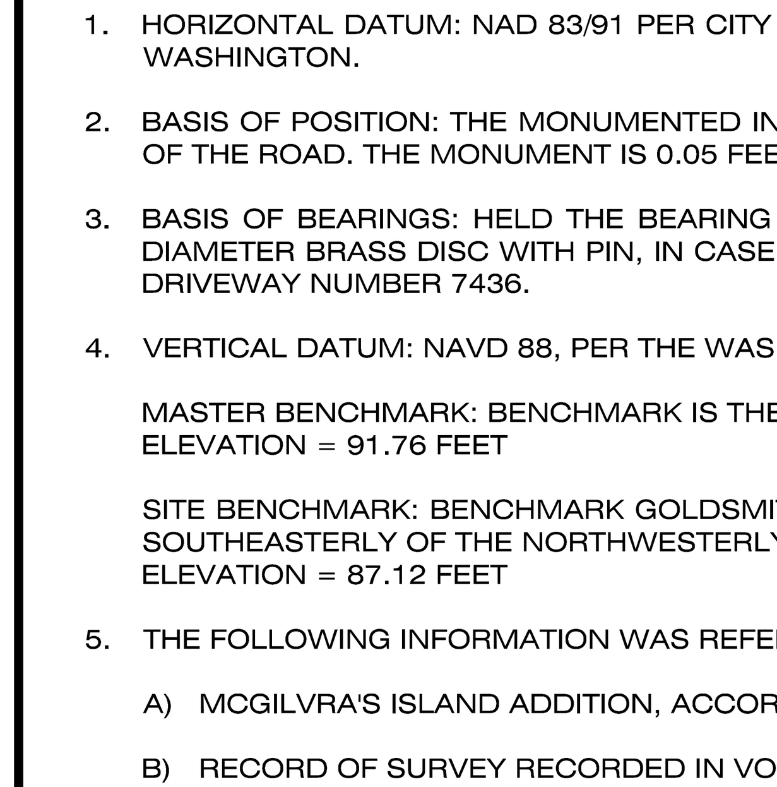
SHEET No.: A5.0

NE 1/4, SW 1/4 SECTION 1, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

SURVEY CONTROL

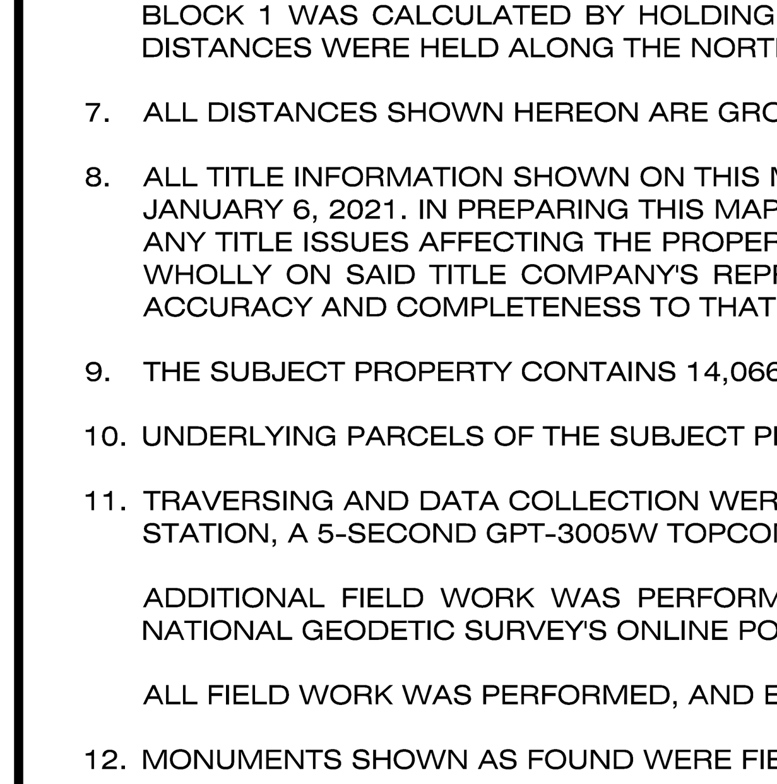
(C) CALCULATED VALUE
(M) MEASURED VALUE
(P) VALUE PER PLAT OF MCGILVRA'S ISLAND ADDITION (VOLUME 16, PAGE 58)
(SP) VALUE PER SHORT PLAT (VOLUME 348, PAGES 11-13)
(R1) VALUE PER RECORD OF SURVEY (VOLUME 412, PAGE 159)
(R2) VALUE PER RECORD OF SURVEY (VOLUME 255, PAGE 254)





DETAIL "A"

0 5 10
SCALE: 1" = 5'



DETAIL "B"

0 0.5 1
SCALE: 1" = 1'

SURVEY NOTES

1. HORIZONTAL DATUM: NAD 83/91 PER CITY OF MERCER ISLAND SHORT PLAT NO. SUB 13-008 RECORDED IN VOLUME 348 OF SURVEYS, PAGES 11 THROUGH 13, INCLUSIVE, RECORDS OF KING COUNTY, WASHINGTON.
2. BASIS OF POSITION: THE MONUMENTED INTERSECTION OF 72ND AVENUE SE AND NORTH MERCER WAY. THE MONUMENT IS A FOUND 2 INCH DIAMETER BRASS DISC AND "X", 0.2 FEET BELOW GRADE OF THE ROAD. THE MONUMENT IS 0.05 FEET NORTHEASTERLY OF THE CENTERLINE OF NORTH MERCER WAY.
3. BASIS OF BEARINGS: HELD THE BEARING BETWEEN THE ABOVE NOTED BASIS OF POSITION AND A MONUMENT ALONG N MERCER WAY TO BE S 39°46'23" E. THE MONUMENT IS A FOUND 2 INCH DIAMETER BRASS DISC WITH PIN, IN CASE, 0.6 FEET BELOW GRADE OF THE ROAD. SAID POINT IS A POINT OF CURVATURE MONUMENT 0.87 FEET SOUTHWESTERLY OF THE CENTERLINE AND OPPOSITE DRIVEWAY NUMBER 7436.
4. VERTICAL DATUM: NAVD 88, PER THE WASHINGTON STATE REFERENCE NETWORK (WSRN).

   MASTER BENCHMARK: BENCHMARK IS THE ABOVE-DESCRIBED BASIS OF POSITION.
   ELEVATION = 91.76 FEET

   SITE BENCHMARK: BENCHMARK GOLDSMITH SURVEY CONTROL POINT MTS-6 WHICH IS A MAG NAIL SET IN THE ASPHALT ROAD NORTHWESTERLY OF THE SUBJECT PROPERTY. SAID POINT IS 1.0 FEET SOUTHEASTERLY OF THE NORTHWESTERLY EDGE OF ASPHALT AND 29 FEET NORTHERLY OF A FIRE HYDRANT.
   ELEVATION = 87.12 FEET
5. THE FOLLOWING INFORMATION WAS REFERENCED IN PREPARING THIS SURVEY:
   A) MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 16 OF PLATS, PAGE 58, RECORDS OF KING COUNTY, WASHINGTON.
   B) RECORD OF SURVEY RECORDED IN VOLUME 412 OF SURVEYS, PAGE 159, RECORDS OF KING COUNTY, WASHINGTON. (R1)
   C) RECORD OF SURVEY RECORDED IN VOLUME 255 OF SURVEYS, PAGES 253 THROUGH 254, RECORDS OF KING COUNTY, WASHINGTON. (R2)
   D) RECORD OF SURVEY RECORDED IN VOLUME 35 OF SURVEYS, PAGE 14, RECORDS OF KING COUNTY, WASHINGTON.
   E) CITY OF MERCER ISLAND SHORT PLAT NO. SUB 13-008 RECORDED IN VOLUME 348 OF SURVEYS, PAGES 11 THROUGH 13, INCLUSIVE, RECORDS OF KING COUNTY, WASHINGTON. (SP)
   F) KING COUNTY QUARTER SECTION MAP FOR THE SOUTHWEST QUARTER OF SECTION 1, TOWNSHIP 24N, RANGE 4E, W.M.
6. BLOCK 1 OF MCGILVRA'S ISLAND ADDITION DOES NOT CLOSE, HOWEVER, BLOCK 2 DOES CLOSE AND WAS BUILD OFF OF RECORD OF SURVEY RECORDED IN VOLUME 255 OF SURVEYS NOTED ABOVE. BLOCK 1 WAS CALCULATED BY HOLDING THE SOUTHEASTERLY LINE OF 74TH AVENUE SE AND OFFSETTING 40 FEET NORTHWESTERLY TO DETERMINE THE NORTHWESTERLY RIGHT OF WAY. PLAT DISTANCES WERE HELD ALONG THE NORTH MERCER WAY RIGHT OF WAY TO DETERMINE THE LOTS.
7. ALL DISTANCES SHOWN HEREON ARE GROUND DISTANCES. ALL DISTANCES ARE IN U.S. SURVEY FEET.
8. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM INFORMATION CONTAINED IN FIDELITY NATIONAL TITLE COMMITMENT FOR TITLE INSURANCE ORDER NO. 611273081, DATED JANUARY 6, 2021. IN PREPARING THIS MAP, HUGH G. GOLDSMITH AND ASSOCIATES, INC. CONDUCTED NO INDEPENDENT TITLE SEARCH, NOR IS HUGH G. GOLDSMITH AND ASSOCIATES, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED COMMITMENT. HUGH G. GOLDSMITH AND ASSOCIATES, INC. HAS RELIED WHOLLY ON SAID TITLE COMPANY'S REPRESENTATION OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE HUGH G. GOLDSMITH AND ASSOCIATES, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
9. THE SUBJECT PROPERTY CONTAINS 14,066 SQUARE FEET, MORE OR LESS.
10. UNDERLYING PARCELS OF THE SUBJECT PROPERTY ARE SHOWN BASED ON ABBREVIATED DESCRIPTION BY THE KING COUNTY ASSESSOR.
11. TRAVERSING AND DATA COLLECTION WERE PERFORMED USING ONE OR MORE OF THE FOLLOWING INSTRUMENTS: A 3-SECOND GT-503 TOPCON TOTAL STATION, A 3-SECOND PS-103A TOPCON TOTAL STATION, A 5-SECOND GPT-3005W TOPCON TOTAL STATION.

    ADDITIONAL FIELD WORK WAS PERFORMED USING TOPCON HIPER HR AND/OR HEMISPHERE S321 GNSS POSITIONING SYSTEMS, THE WASHINGTON STATE REFERENCE NETWORK, AND/OR THE NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE (OPUS).

    ALL FIELD WORK WAS PERFORMED, AND EQUIPMENT MAINTAINED, IN COMPLIANCE WITH WAC 332-130.
12. MONUMENTS SHOWN AS FOUND WERE FIELD VISITED ON APRIL 14, 2021. PLANIMETRIC INFORMATION SHOWN HEREON WAS OBTAINED ON APRIL 14 AND 15, 2021.
13. THE PURPOSE OF THIS SURVEY IS TO PROVIDE INFORMATION SUFFICIENT TO PROVIDE EXISTING CONDITIONS BASE DATA FOR DESIGN AND BUILDING PERMITTING REQUIREMENTS.
14. UTILITY INFORMATION SHOWN HEREON IS PER A COMBINATION OF FIELD LOCATED SURFACE OBSERVABLE FEATURES AND RECORDS OF APPLICABLE UTILITY PURVEYORS. ALL UTILITIES SHOULD BE VERIFIED PRIOR TO ANY CONSTRUCTION.

LEGAL DESCRIPTION

THAT PORTION OF LOT 4, BLOCK 1, MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 16 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF SAID LOT 4;

THENCE NORTH 48°48'00" EAST ALONG THE SOUTHEASTERLY LINE 178.35 FEET TO AN IRON PIPE;
THENCE NORTH 41°12'00" WEST 80 FEET TO THE NORTHWESTERLY LINE OF SAID LOT 4;
THENCE SOUTH 48°48'00" WEST ALONG SAID NORTHWESTERLY LINE 157.25 FEET, MORE OR LESS, TO THE EAST MARGIN OF MERCER WAY AS NOW LOCATED;
THENCE SOUTHERLY ALONG SAID MARGIN TO THE POINT OF BEGINNING;

EXCEPT THAT PORTION CONVEYED TO KING COUNTY FOR NORTH MERCER WAY BY DEED RECORDED UNDER RECORDING NUMBER 934413.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

GOLDSMITH
LAND DEVELOPMENT SERVICES
11400 SE 8th St., Suite 450, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 www.goldsmithengineering.com

PLOTTED:	2021/05/10 16:02 EMALM
DRAWN:	EMALM
PROJ. SUR.:	MNORTON
APPROVED:	LNYQUIST
FIELD BOOK:	2110
PAGE #:	29-31

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LEE D. NYQUIST, STATE OF WASHINGTON, PROFESSIONAL LAND SURVEYOR, 5/10/2021

ROBERT & CINDY MASIN

TOPOGRAPHIC SURVEY FOR ROBERT & CINDY MASIN

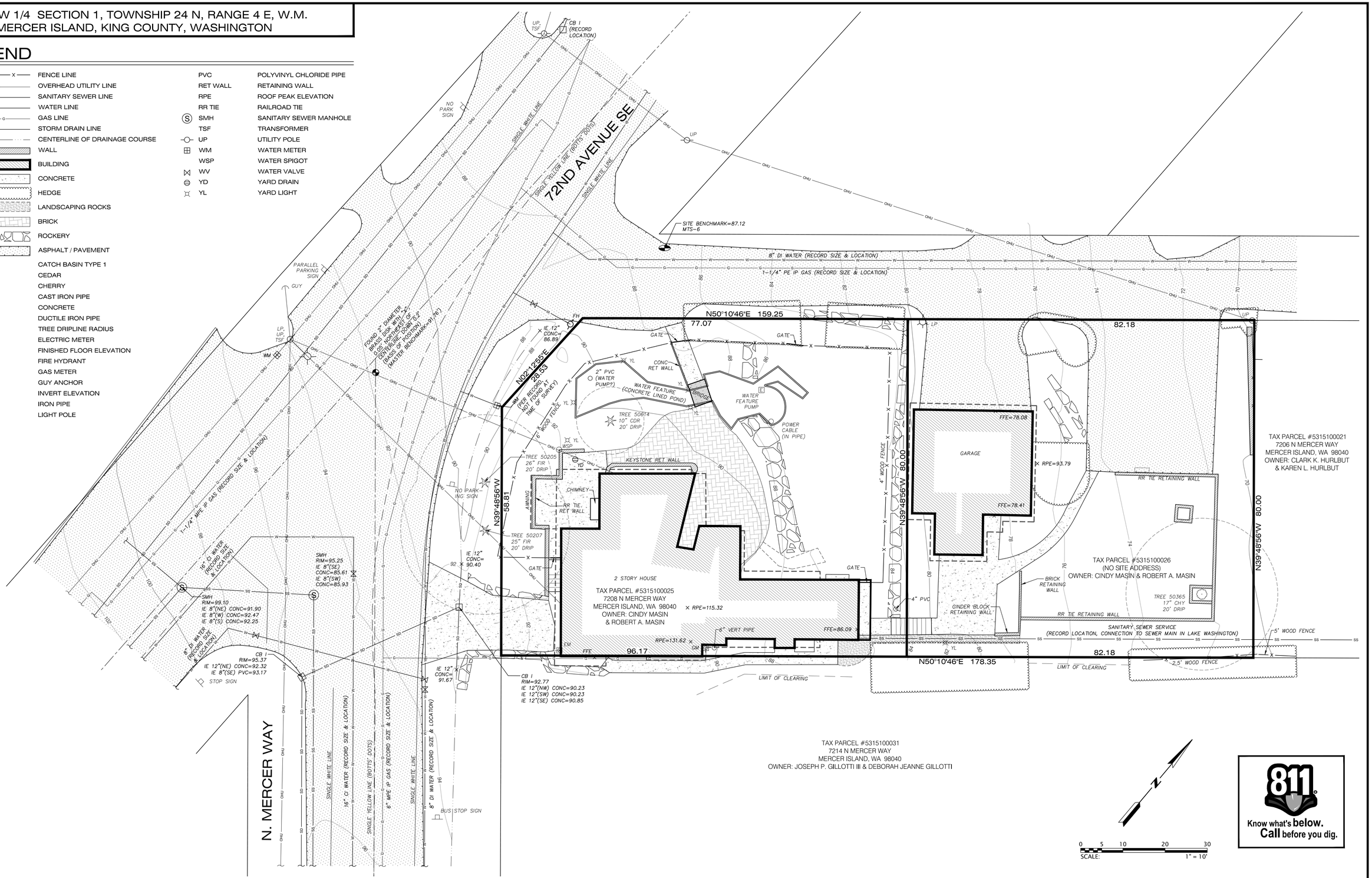
7208 N. MERCER WAY, CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

JOB NO. 21064
SHEET 1/2

NE 1/4, SW 1/4 SECTION 1, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

LEGEND

X X	FENCE LINE
OHU	OVERHEAD UTILITY LINE
SS	SANITARY SEWER LINE
W	WATER LINE
G G	GAS LINE
SD	STORM DRAIN LINE
	CENTERLINE OF DRAINAGE COURSE
	WALL
	BUILDING
	CONCRETE
	HEDGE
	LANDSCAPING ROCKS
	BRICK
	ROCKERY
	ASPHALT / PAVEMENT
CB I	CATCH BASIN TYPE 1
CDR	CEDAR
CHY	CHERRY
CI	CAST IRON PIPE
CONC	CONCRETE
DI	DUCTILE IRON PIPE
DRIP	TREE DRIPLINE RADIUS
EM	ELECTRIC METER
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
GM	GAS METER
GUY	GUY ANCHOR
IE	INVERT ELEVATION
IP	IRON PIPE
LP	LIGHT POLE
PVC	POLYVINYL CHLORIDE PIPE
RET WALL	RETAINING WALL
RPE	ROOF PEAK ELEVATION
RR TIE	RAILROAD TIE
SMH	SANITARY SEWER MANHOLE
TSF	TRANSFORMER
UP	UTILITY POLE
WM	WATER METER
WSP	WATER SPIGOT
WV	WATER VALVE
YD	YARD DRAIN
YL	YARD LIGHT



SCALE: 0 5 10 20 30 — 1" = 10'

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

GOLDSMITH
LAND DEVELOPMENT SERVICES
11400 SE 8th St., Suite 450, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 www.goldsmithengineering.com

PLOTTED:	2021/05/10 16:02 EMALM
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LEE D. NYQUIST — STATE OF WASHINGTON — 21964 — REGISTERED PROFESSIONAL LAND SURVEYOR — 5/10/2021

ROBERT & CINDY MASIN

TOPOGRAPHIC SURVEY FOR ROBERT & CINDY MASIN

7208 N. MERCER WAY, CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

JOB NO. 21064

SHEET 2/2

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE			
FILTER FABRIC FENCE (SILT FENCE)	CK E.03	SF	
STABILIZED CONSTRUCTION ENTRANCE	CK E.01	CE	
CATCH BASIN INLET PROTECTION	CK D.21	IP	
INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE		IS	
TREE PROTECTION FENCING	CK R.49	TP	
CHECK DAM		CD	
STRAW WATTLES		SW	USE AS NEEDED

LEGAL DESCRIPTION

THAT PORTION OF LOT 4, BLOCK 1, MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 16 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

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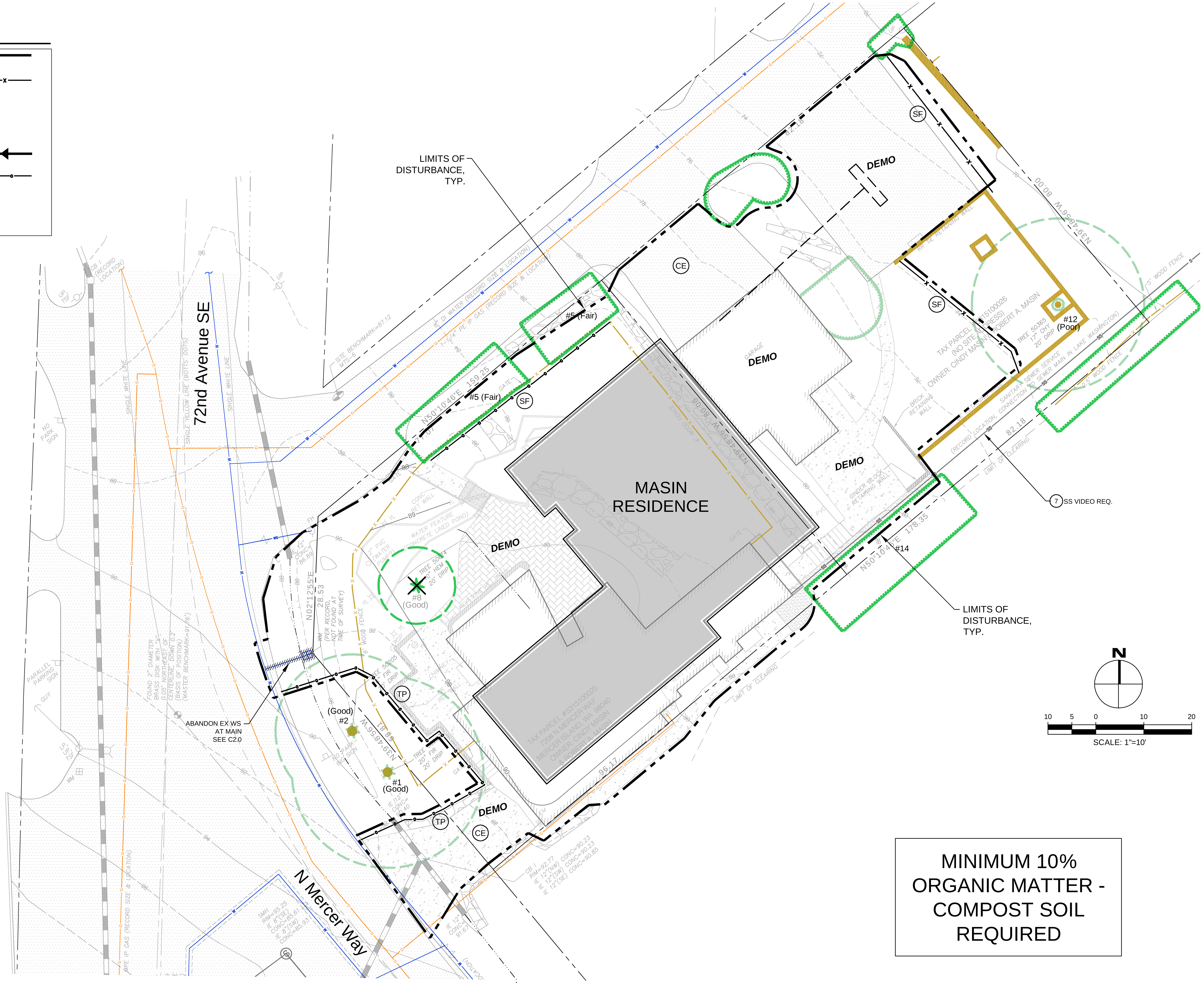
THENCE SOUTHERLY ALONG SAID MARGIN TO THE POINT OF BEGINNING;

EXCEPT THAT PORTION CONVEYED TO KING COUNTY FOR NORTH MERCER WAY BY DEED RECORDED UNDER RECORDING NUMBER 934413.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.



SOIL AMENDMENT REQUIRED

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

MINIMUM 10% ORGANIC MATTER - COMPOST SOIL REQUIRED

NO.	DATE	BY	REVISIONS

APPLICANT
CINDY AND ROBERT MASIN

DATE: Nov 16, 2021
JOB# 2003
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Nov 16, 2021
JEFFREY E. ELLIS — STATE OF WASHINGTON — 39766 REGISTERED PROFESSIONAL ENGINEER

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

TESC PLAN
TREE RETENTION PLAN

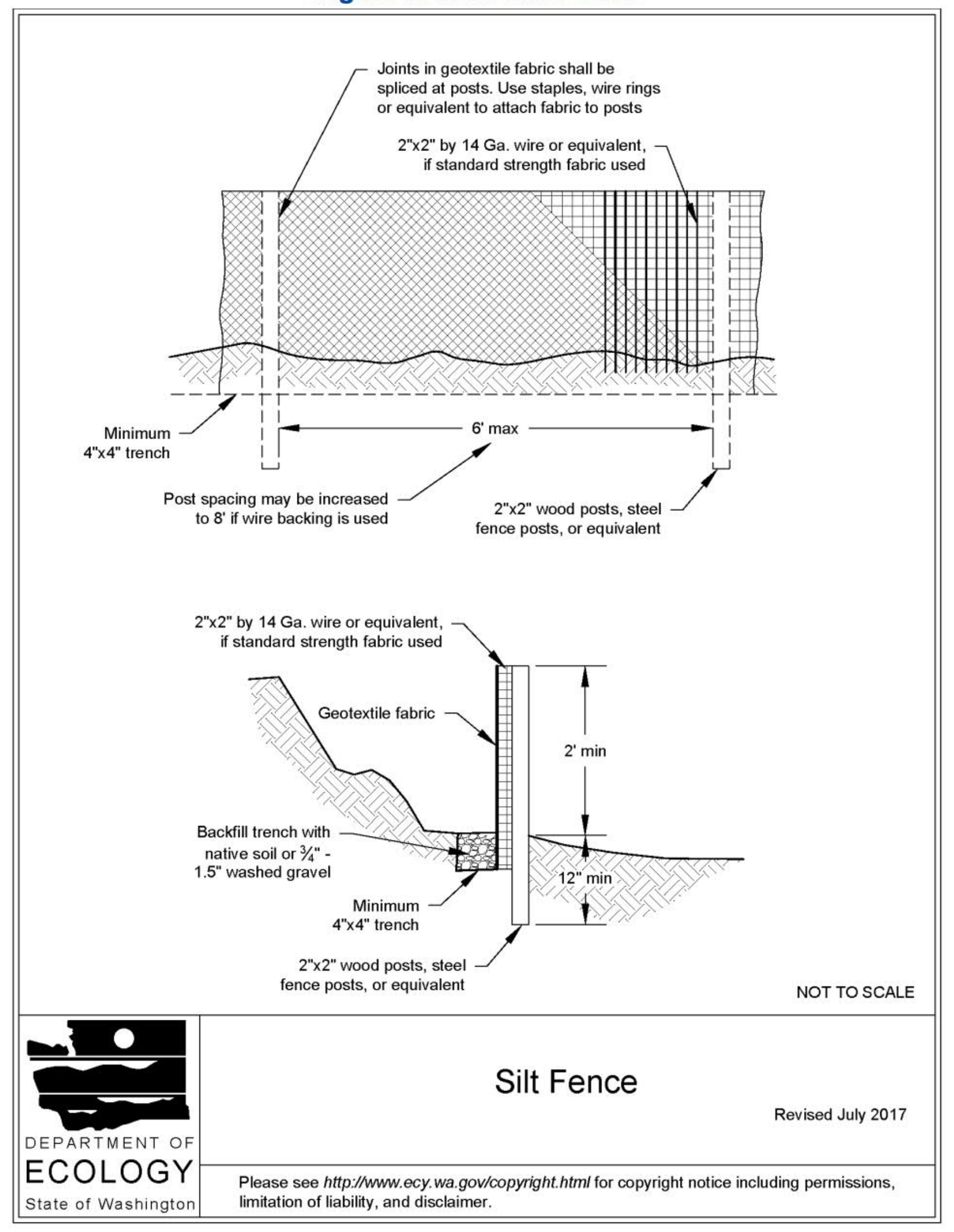
MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0

APN 531510-0025 / 531510-0026

SILT FENCE DETAIL DOE

Figure II-3.22: Silt Fence



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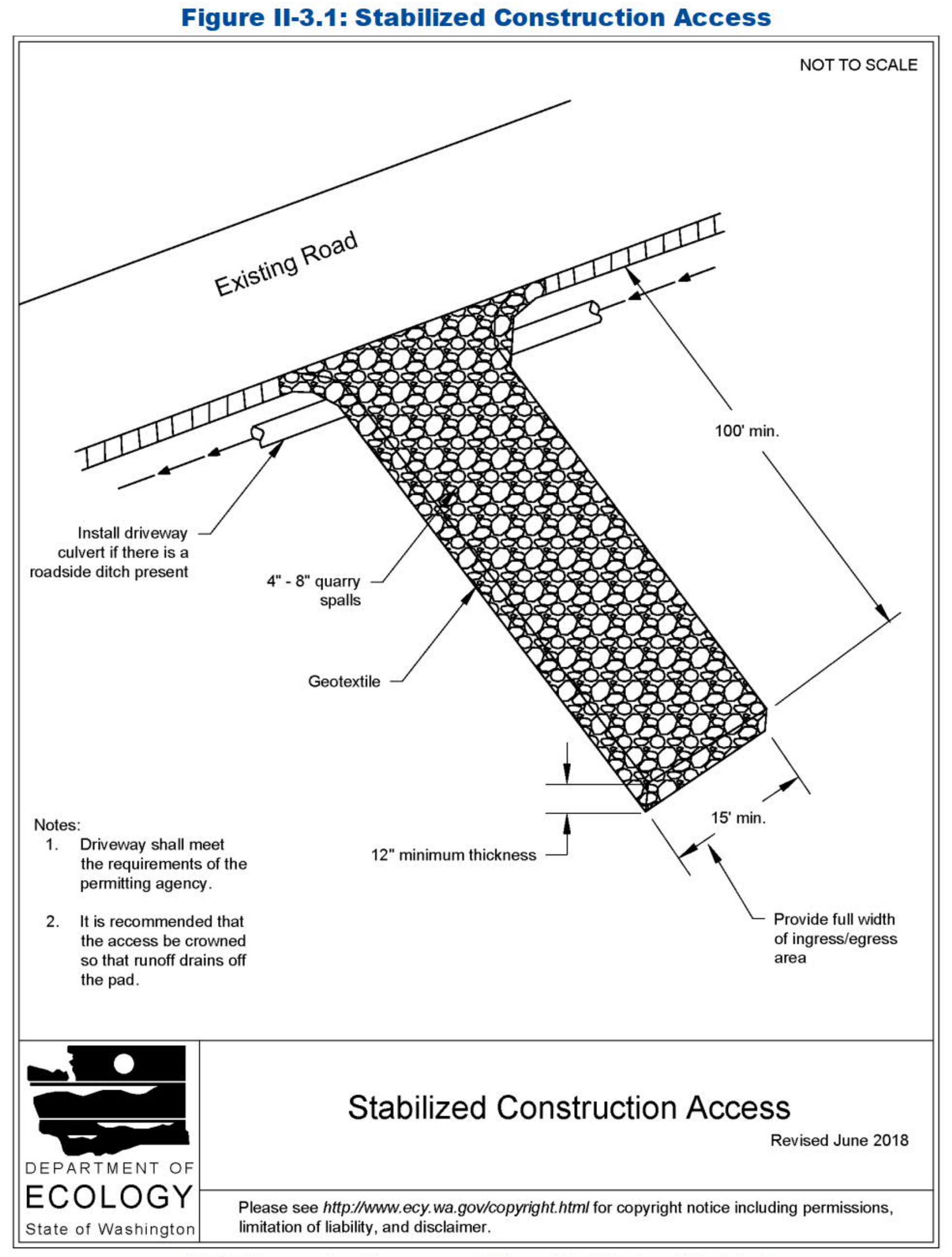
CONSTRUCTION ENTRANCE DOE

Figure II-3.1: Stabilized Construction Access



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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
CINDY AND ROBERT MASIN

DATE: Nov 16, 2021
JOB# 2003
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Nov 16, 2021
JEFFREY E. ... STATE OF WASHINGTON 39786 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

MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C1.2

APN 531510-0025 / 531510-0026

SANITARY SEWER IMPROVEMENTS

(1) -

(2) -6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.

(3) -

(4) -

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

WATER IMPROVEMENTS

(10) -MIN 1" WM WITH 1" POLY WATER SERVICE . CONFIRM REQUIRED FINAL WM SIZE WITH BUILDING PERMIT. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A

(11) -1.5" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.

(12) -

(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) -12" STORM DRAIN (HDPE N12 OR EQUAL). SEE PROFILE SHEET.

(25) -STORM DRAIN FORCE MAIN @ MIN. 30" DEPTH

(26) -

(28) -

(29) -BED & TRENCH PIPE. COMPACT TRENCH TO 95 % STD PROCTOR UNDER PAVED AREAS.

STORM DRAIN STRUCTURES

(30) -

(31) -

(32) -TYPE 1 CB WITH SOLID LID

(33) -PRIVATE TYPE 1 CB (WATER QUALITY) WITH STANDARD GRATE TOP. PROVIDE INTERNAL TEE OR TURNED-DOWN ELBOW FOR WATER QUALITY FUNCTION.

(34) -

(35) -

(36) -

(39) -

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

(41) -

(43) -

(46) -PUMPS: DUPLEX STORM PUMPS REQUIRED, SEE PLAN FOR PUMP SUGGESTION. COORDINATE PUMP PACKAGE AND CONTROLLER WITH PUMP SUPPLIER (FOWLER PUMP OR EQUAL).

(47) -

(48) -

STORM BMP's

(50) -COMPOST AMENDED SOIL TO ALL DISTURBED AREAS (SEE DETAIL SHEET C3.5). TILL 2-3" OF COMPOST INTO UPPER 8" OF SOIL. LOOSEN COMPACTED SUBSOIL, IF NEEDED BY RIPPING TO 12" DEPTH. MULCH LANDSCAPE BEDS AFTER PLANTING.

(51) -

(52) -

(53) -

(54) -

(55) -

(56) -

(57) -

(58) -

SOILS

SEE REPORT BY EARTH SOLUTIONS NW
REPORT JUNE 3, 2021
NATIVE SOIL IS GLACIAL TILL
BECOMES DENSE TO VERY DENSE BELOW 3'
SEE "LANDSLIDE HAZARD" SECTION IN REPORT REGARDING MAPPED CRITICAL AREA (LANDSLIDE HAZARD) AS NOT AN ISSUE (SITE DOES NOT MEET DEFINITION).

SURVEYOR

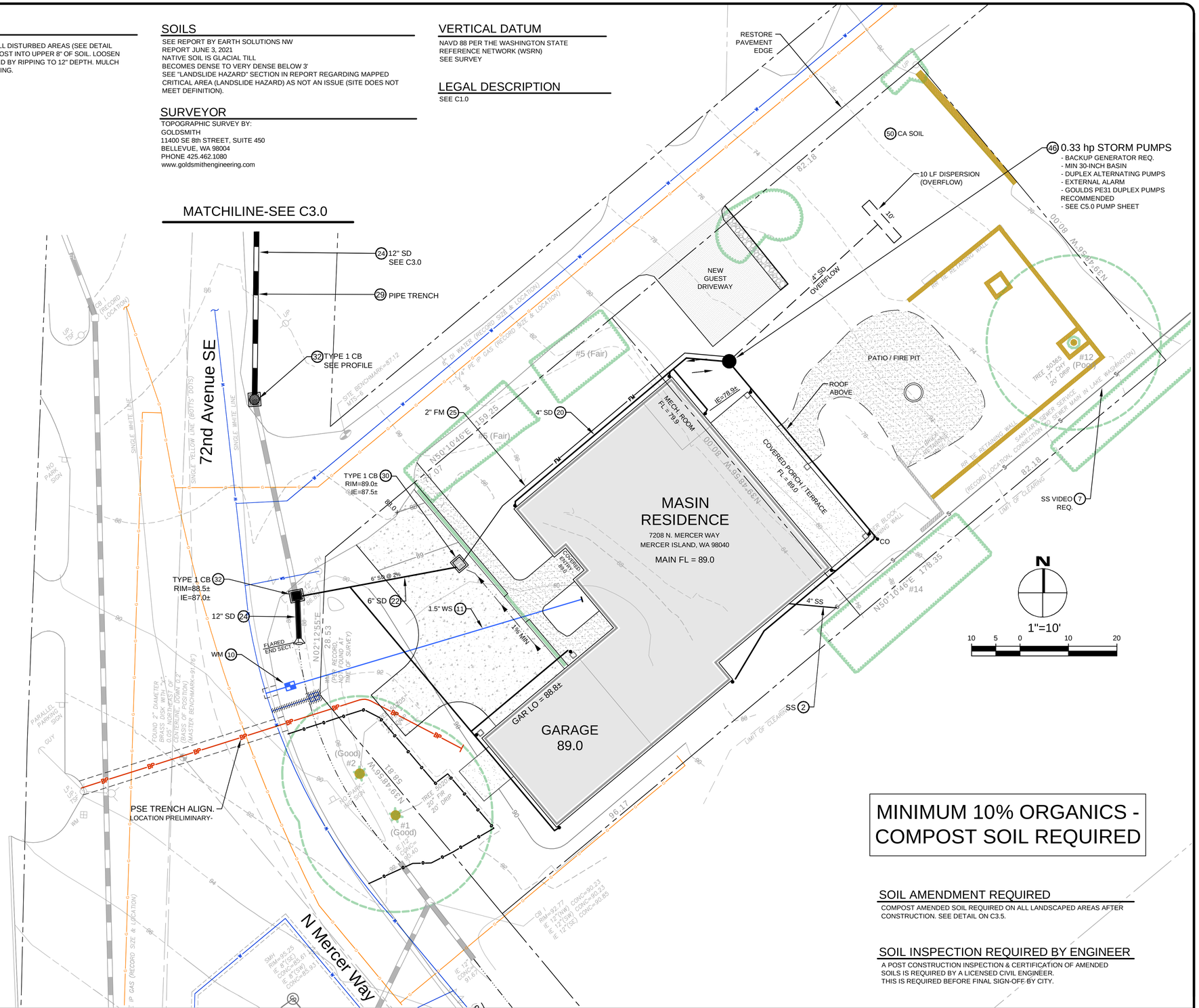
TOPOGRAPHIC SURVEY BY:
GOLDSMITH
11400 SE 8th STREET, SUITE 450
BELLEVUE, WA 98004
PHONE 425.462.1080
www.goldsmithengineering.com

VERTICAL DATUM

NAVD 88 PER THE WASHINGTON STATE REFERENCE NETWORK (WSRN)
SEE SURVEY

LEGAL DESCRIPTION

SEE C1.0



MINIMUM 10% ORGANICS - COMPOST SOIL REQUIRED

SOIL AMENDMENT REQUIRED

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

SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER.
THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

NO.	DATE	BY	REVISIONS

APPLICANT
CINDY AND ROBERT MASIN

DATE: Nov 16, 2021
JOB# 2003
DRAFTED: DE DESIGN: DE
DIGITAL SIGNATURE

Nov 16, 2021
JEFFREY E. ALLEN
STATE OF WASHINGTON
39766
REGISTERED
PROFESSIONAL ENGINEER

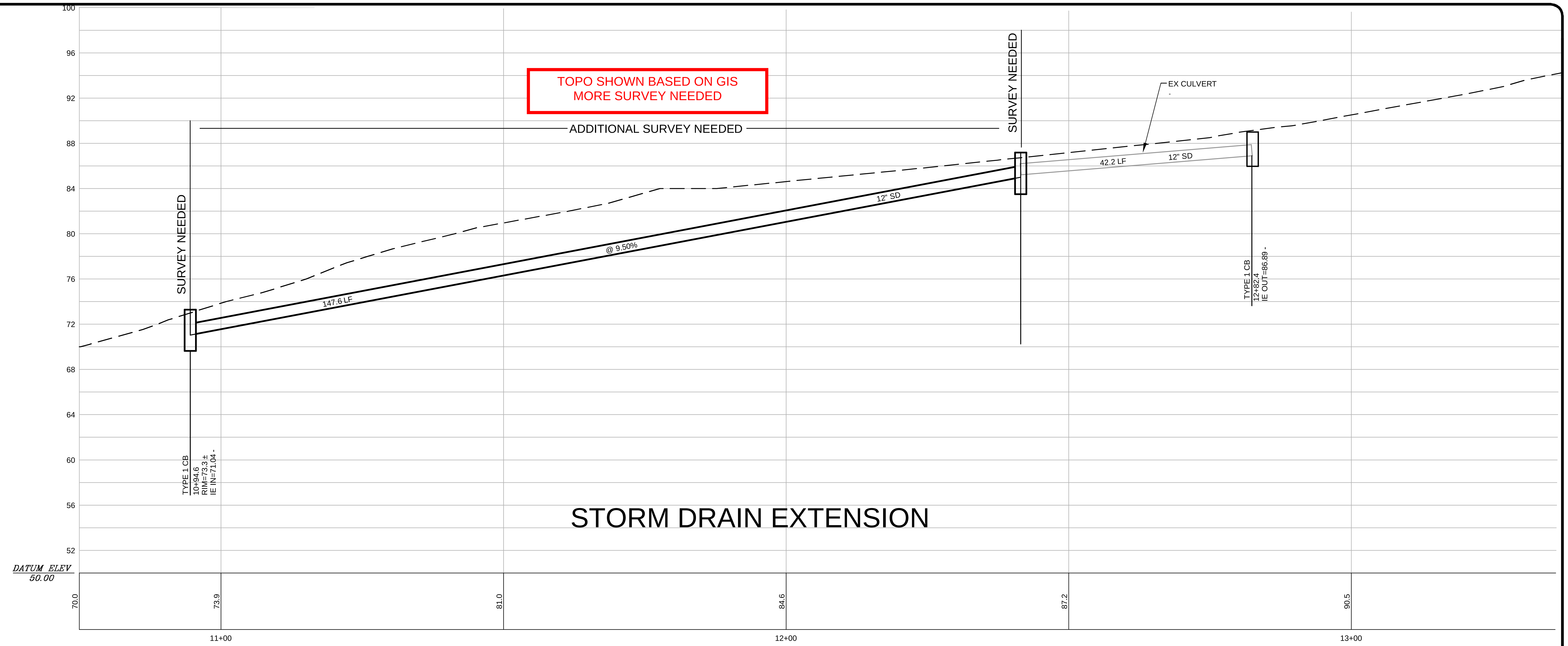
CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

DRAINAGE / CIVIL PLAN

MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C2.0

APN 531510-0025 / 531510-0026



NO.	DATE	BY	REVISIONS

APPLICANT
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DATE: Nov 16, 2021
JOB# 2003
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Nov 16, 2021

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

STORM EXTENSION

MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C3.0

APN 531510-0025 / 531510-0026

MINIMUM 10% ORGANIC -
COMPOST SOIL REQUIRED

SOIL AMENDMENT REQUIRED

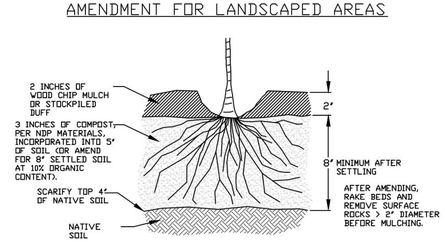
COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL BELOW.

SOIL INSPECTION REQUIRED BY ENGINEER

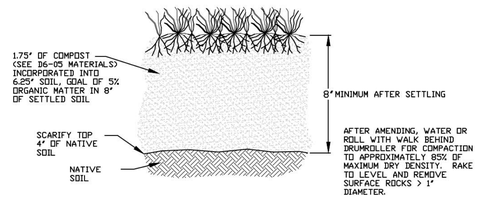
A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER.
THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

COMPOST AMENDED SOIL SPEC

AMENDMENT FOR LANDSCAPED AREAS



SOIL AMENDMENT FOR GRASS OR TURF AREAS



NOTES:

1. AMEND SOILS PER DOE MANUAL, VOL. V, S.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.

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. NDP-1

JANUARY 2019 — NO SCALE

NO.	DATE	BY	REVISIONS

APPLICANT
CINDY AND ROBERT MASIN

DATE: Nov 16, 2021
JOB# 2003
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Nov 16, 2021
JEFFREY B. DUFFY — STATE OF WASHINGTON — 39764 — REGISTERED PROFESSIONAL ENGINEER

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

BMP DETAILS

MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C3.5

APN 531510-0025 / 531510-0026

CONTROL PANEL CUT SHEET

MODEL 122 Control Panel

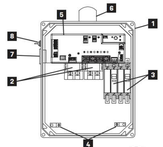
Single phase, duplex alternating pump control with override.

The Model 122 control panel is designed to alternately control two 120, 208, or 240 VAC single phase pumps in water and sewage installations. The controller is provided with a pump selector switch that can be set to alternate the pumps to equalize wear or to call either pump to activate first with the other pump to activate in lag condition. If an alarm occurs, the alarm activates the audible-visual system. The alarm conditions include: high water, float out-of-sequence, pump fail-to-run, seal failure (optional). Common applications include: lift stations, pump chambers, and irrigation systems.

PANEL COMPONENTS

1. **Enclosure** measures 12x10x6 inches (30.48x24.4x15.24). Choice of NEMA 1 (steel for indoor use) or NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use). Note: added options may change enclosure size and enclosure features.
2. **Magnetic Motor Contactors** control pumps by switching electrical lines.
3. **Circuit Breakers** (optional) provide pump disconnect and branch circuit protection.
4. **Ground Lugs**
5. **Duplex Controller** provides pump control, alternation and alarm; elevated in the enclosure for easy access and field wiring
   a. HOA switches for manual control Hand/Off/Automatic
   b. Control Power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1 lag
   g. Auxiliary alarm contacts Form C
   h. Terminal block: incoming power
   i. Terminal block: float switches
   j. **Option:** adjustable seal failure circuits and red LED indicators (must select option SE when ordering)

NOTE: Schematic Diagram is located inside the panel on enclosure cover.

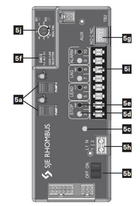


Model Shown
1221W1144X6A10E19B

STANDARD ALARM PACKAGE

6. **Red Alarm Beacon** provides 360° visual check of alarm condition.
7. **Alarm Horn** provides audible alarm warning (83 to 85 decibel rating).
8. **Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared unless the controller is programmed to manual alarm reset.

NOTE: other options available.



FEATURES

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses, no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up
- Standard package includes three 20' control switches or EZconnex® float system
- Five-year limited warranty.

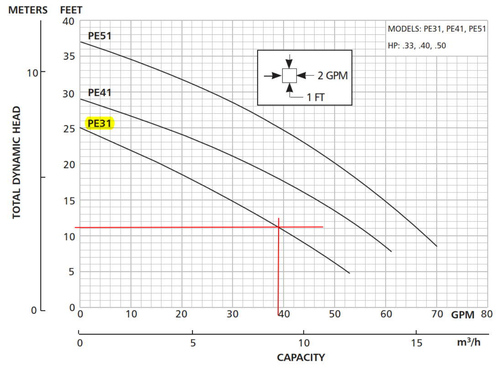
California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SEE REVERSE SIDE FOR ORDERING INFORMATION.
SEE PRICE BOOK FOR LIST PRICE.

SJE RHOMBUS
1-888-DIAL-SJE • 1-218-847-1317
1-218-847-4617 Fax
email: customer.service@sjeinc.com
www.sjerhombus.com

B.39

GOULD PE31 STORM PUMP CURVE



STORM PUMP SPEC

TECHNICAL BROCHURE
BPE

PE

SUBMERSIBLE EFFLUENT PUMP

FEATURES

Corrosion resistant construction
Cast iron body
Thermoplastic impeller and cover.
Upper sleeve and lower heavy duty ball bearing construction.
Motor is permanently lubricated for extended service life.
Powered for continuous operation.
All ratings are within the working limits of the motor.
Quick disconnect power cord, 20' standard length, heavy duty 16/3 SJTW with 115 or 230 volt grounding plug.
Complete unit is heavy duty, portable and compact.
Mechanical seal is carbon, ceramic, BUNA and stainless steel.
Stainless steel fasteners

GOULDS WATER TECHNOLOGY
a xylem brand

Goulds Water Technology

Wastewater

APPLICATIONS

Specially designed for the following uses:
- Mound Systems
- Effluent/Dosing Systems
- Low Pressure Pipe Systems
- Basement Draining
- Heavy Duty Sump/Dewatering

SPECIFICATIONS

Pump – General:
- Discharge: 1½" NPT
- Temperature: 104°F (40°C) maximum, continuous when fully submerged.
- Solids handling: ½" maximum sphere.
- Automatic models include a float switch.
- Manual models available.
- Pumping range: see performance chart or curve.

PE31 Pump:
- Maximum capacity: 53 GPM
- Maximum head: 25' TDH

PE41 Pump:
- Maximum capacity: 61 GPM
- Maximum head: 29' TDH

PE51 Pump:
- Maximum capacity: 70 GPM
- Maximum head: 37' TDH

MOTOR

General:
- Single phase
- 60 Hertz
- 115 and 230 volts
- Built-in thermal overload protection with automatic reset.
- Class B insulation
- Oil-filled design
- High strength carbon steel shaft

PE31 Motor:
- .33 HP, 3000 RPM
- 115 volts
- Shaded pole design

PE41 Motor:
- .40 HP, 3400 RPM
- 115 and 230 volts
- PSC design

PE51 Motor:
- .50 HP, 3400 RPM
- 115 and 230 volts
- PSC design

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association
File #LR38549

PUMP INFORMATION

Order No.	HP	Volts	Amps	Minimum Circuit Breaker	Phase	Float Switch Style	Cord Length	Discharge Connection	Minimum Basin Diameter	Maximum Solids Size	Shipping Weight lbs/kg
PE31M	0.33	115	12	20	1	Manual / No Switch	20'	1.5"	18"	.5"	31 / 14.1
PE31P1						Piggyback Float Switch					
PE41M	0.4		7.5	15		Manual / No Switch					
PE41P1						Piggyback Float Switch					
PE42M		230	3.7	10		Manual / No Switch					
PE42P1						Piggyback Float Switch					
PE51M	0.5	115	9.5	20		Manual / No Switch					
PE51P1						Piggyback Float Switch					
PE52M		230	4.7	10		Manual / No Switch					
PE52P1						Piggyback Float Switch					

PUMPING DEPTH CALCULATOR

Storm Pump-Float Depth / Pump Interval Calculator

	Value	Units	Comments
Input Pump Basin Diameter (feet)=	3.0	feet	
Calculate pump basin radius=	1.5	feet	
Calculate cross section Area of basin=	7.07	sf	
Input a pump depth to achieve 2 min run time=	1.5	feet	Set floats so min 18" can pump
Calculate volume of water per pump cycle=	10.6	cf	
Convert volume to gallons	79.3	gallons	convert to gallons pumped
Input pump rate based on pump curve and TDH	39	gpm	
Calculate time for pump to operate per cycle	2.0	Minutes	Ensure greater than 2 minutes

RECOMMENDED PUMP CYCLE DEPTH

PUMP DESIGN HYDROLOGY

Peak Flow Rates in Puget Sound

100 year, 24 hour storm event
I=4.0 inches/24 hours per isopluvials

		SBUH (CFS)	SBUH (GPM)	SBUH (CFS)	SBUH (GPM)	
Impervious Area	*Acres*	*Tc=6.3*		*Tc=10*		*Comments*
500	0.011	0.01	4	0.011	5	
1,000	*0.023*	*0.02*	*9*	*0.023*	*10*	
2,000	0.046	0.041	18	0.045	20	
3,000	0.069	0.062	28	0.067	30	
4,000	0.092	0.082	36	0.085	38	
5,000	0.115	0.103	46	0.112	50	
6,000	0.138	0.124	55	0.135	60	*tributary area ~ 5,100 sf*
7,000	0.161	0.143	64	0.156	69	
8,000	0.184	0.164	73	0.179	80	

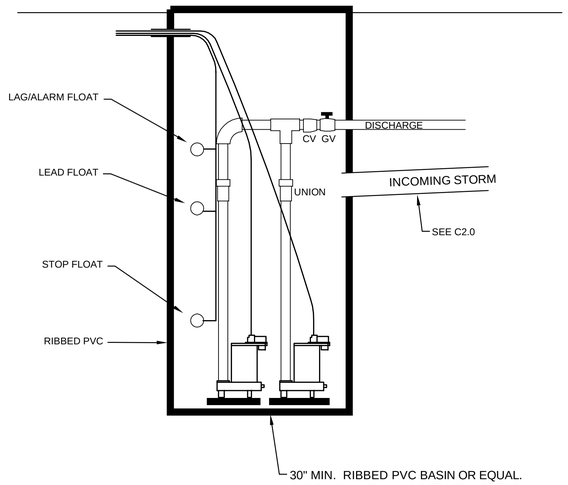
FIND PUMP FOR 50 % OF 60 GPM GOULDS PE31 RECOMMENDED DUPLEX PUMPS REQUIRED

TOTAL DYNAMIC HEAD CALCULATOR

Pump Flow Rate	Pipe Diameter(ID)	Pipe Length	Differential Elevation	Pipe Material	Total Dynamic Head (TDH)
US GPM	in.	ft.	ft.	Plastic	ft.
39	2	105	8	***Results--->***	11.111127565636382

STORM PUMP & BASIN SCHEMATIC

3-FLOAT DUPLEX



30" MIN. RIBBED PVC BASIN OR EQUAL. (36" BASIN IDEAL). USE TRAFFIC RATED FRAME & GRATE IF IN DRIVEWAY. CONTACT FOWLER PUMP FOR COMPLETE PUMP PACKAGE.

NO.	DATE	BY	REVISIONS

APPLICANT
CINDY AND ROBERT MASIN

DATE: Nov 16, 2021
JOB# 2003
DRAFTED: DE DESIGN: DE
DIGITAL SIGNATURE

Nov 16, 2021
JEFFREY E. DUFFY
STATE OF WASHINGTON
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102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

STORM PUMPS

MASIN RESIDENCE
7208 N. MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C5.0

APN 531510-0025 / 531510-0026

BUILDING CODE: 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), AND BY REFERENCE, THE 2018 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 (NOMINAL 3 SEC GUST) = 100 MPH FOR RISK CATEGORY II, EXPOSURE "D", Kzt=1.0
SOIL SITE CLASS "D" , SEISMIC CATEGORY D1/D2, Ss=1.382, Sds=1.105
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 A615M 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	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
2x10 OR LARGER	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
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	DF STUD - Fb=700 psi, Fv=180 psi, Fc=850 psi, E=1400000psi
2X8 OR LARGER	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
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 LIMITED AS FOLLOWS:
FLOOR LIVE LOAD MAXIMUM = L/480, FLOOR TOTAL LOAD MAXIMUM = L/240.

PREFABRICATED WOOD TRUSSES:

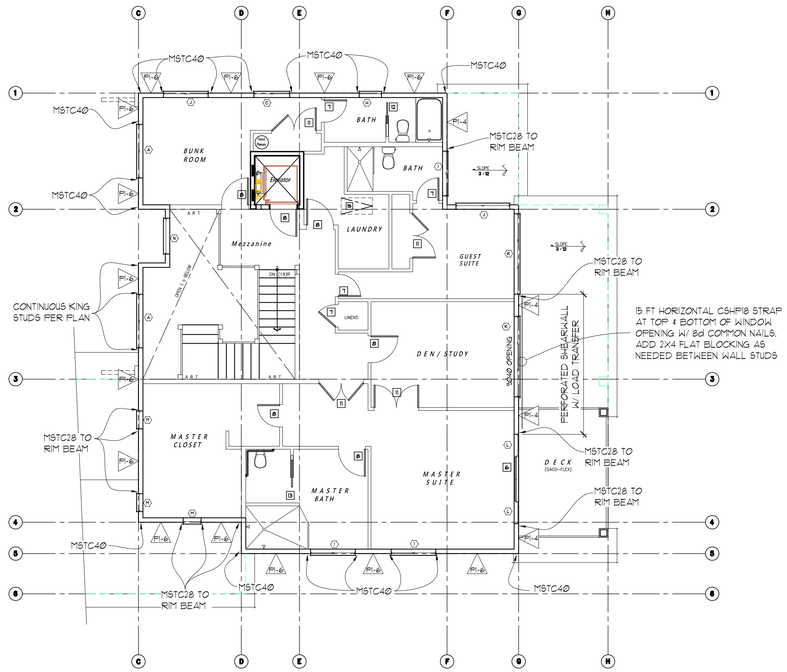
PRE-FABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOADS & IMPOSED DEAD LOADS AS STATED IN THE GENERAL NOTES. TRUSSES SHALL BE DESIGNED & STAMPED BY A REGISTERED DESIGN PROFESSIONAL AND FABRICATED ONLY FROM THOSE DESIGNS. NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS 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

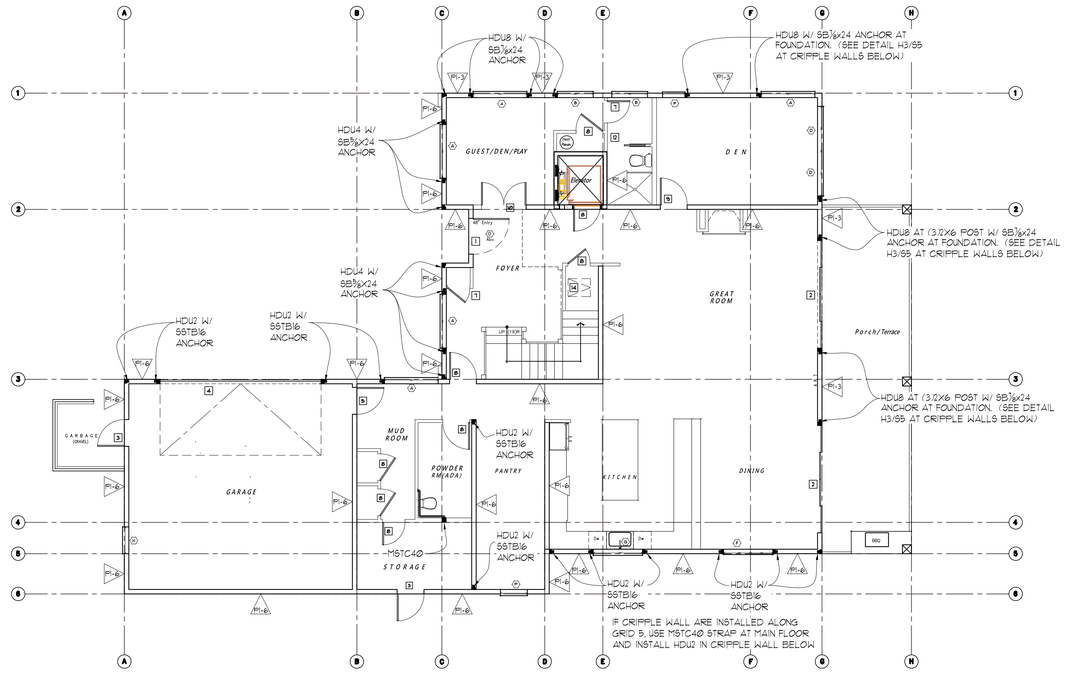
ROOF SHEATHING SHALL BE MINIMUM 7/16 SHEATHING W/ 24/16 SPAN INDEX U.N.O. WALL SHEATHING, INCLUDING GABLES, SHALL BE 7/16 SHEATHING W/ 24/16 SPAN INDEX MINIMUM U.N.O. FLOOR SHEATHING SHALL BE MINIMUM 23/32 T&G SHEATHING W/ 40/20 SPAN INDEX MINIMUM U.N.O. MINIMUM NAILING SHALL BE 8d COMMON NAILS @ 6" 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 JOINTS 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.



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



ALL CRIPPLE WALLS SHALL BE FRAMED & SHEATHED AS PER SHEAR WALL ABOVE ("PI-4" MINIMUM)

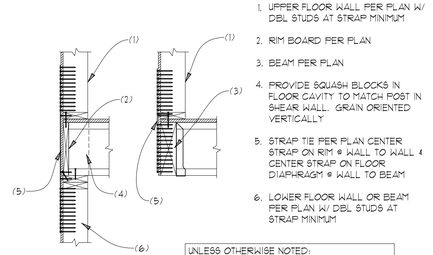
MAIN FLOOR SHEAR WALL KEY PLAN
SCALE: 1/8"=1'-0"

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.
PI-6	7/16"	ONE	8d @ 6" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 8" O.C.	5/8" DIA. @ 60" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C. (STAGGER)
PI-4	7/16"	ONE	8d @ 4" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 6" O.C.	5/8" DIA. @ 48" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C. (STAGGER)
PI-3	7/16"	ONE	8d @ 3" O.C.	12" O.C.	3X / 2-2X	16d SINKER NAILS (Ø.148"x3¼") @ 4" O.C.	5/8" DIA. @ 32" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C. (STAGGER)

1. FRAMING SHALL BE 2X DOUG-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 Ø2.29"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 7/8" 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, 2-2x9 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" O.C. OR 10d EDGE NAILING AT 3" O.C. OR 2" O.C. 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.
11. SIMPSON MASAP MUDSILL ANCHORS, MAY BE SUBSTITUTED (1) FOR (1) AT 2X SILL PLATES FOR THE 5/8" DIA. SILL PLATE ANCHOR BOLTS SPECIFIED.

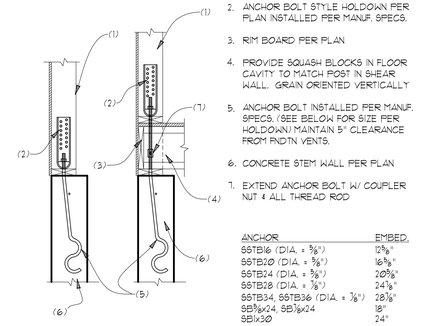
PERFORATED SHEAR WALLS: CONTINUE SHEAR WALL SHEATHING ABOVE AND BELOW ALL OPENINGS BETWEEN FULL HEIGHT WALL SEGMENTS WITH NAILING AS SHOWN IN SHEAR WALL SCHEDULE. ANY INCREASE TO HEIGHT OR WIDTH OF WINDOW OPENING MUST BE APPROVED BY ENGINEER OF RECORD.



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'



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 PNDTN VENTS.
6. CONCRETE STEM WALL PER PLAN
7. EXTEND ANCHOR BOLT W/ COUPLER NUT & ALL THREAD ROD

ANCHOR	EMBED.
SSTB16 (DIA. = 5/8")	12⅝"
SSTB20 (DIA. = 5/8")	16⅝"
SSTB24 (DIA. = 5/8")	20⅝"
SSTB28 (DIA. = 5/8")	24⅛"
SSTB34, SSTB36 (DIA. = 7/8")	28⅜"
SB5/8x24, SB7/8x24	18"
SBX30	24"

H2 TYPICAL ANCHOR BOLT HOLDOWN
SCALE: ¾"=1'

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MYERS ENGINEERING STATE OF WASHINGTON MARK R. MYERS REGISTERED PROFESSIONAL ENGINEER

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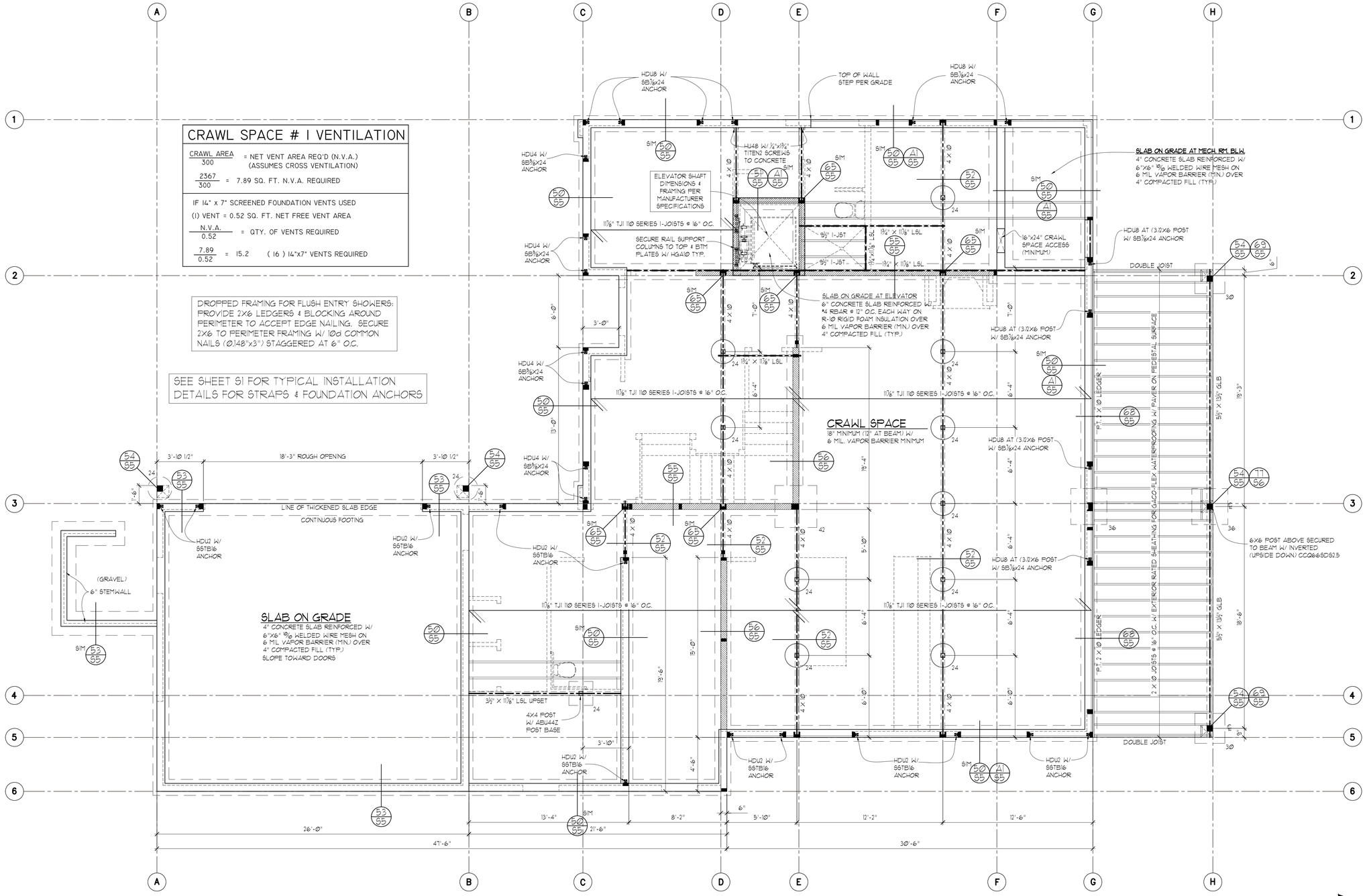
INIT: MM
PROJECT #: 2400



ALL CRIPPLE WALLS SHALL BE FRAMED & SHEATHED AS PER SHEAR WALL ABOVE ("PI-4" MINIMUM)

FOOTING SCHEDULE	NOTE: USE MIN. 6" WIDE POST BELOW BEAM SPLICES USE P.T. 4 X 4 POSTS BELOW 4 X BEAMS U.N.O. USE P.T. 6 X 6 POST BELOW 6 X BEAMS U.N.O.
● 24	P.T. POST ON 24" DIA. X 10" THICK PLAIN CONC. FOOTING
■ 24	P.T. POST ON 24" X 24" X 10" THICK CONC. FOOTING W/ 2- # 4 BARS EACH WAY
■ 30	P.T. POST ON 30" X 30" X 12" THICK CONC. FOOTING W/ 3- # 5 BARS EACH WAY
■ 36	P.T. POST ON 36" X 36" X 12" THICK CONC. FOOTING W/ 3- # 5 BARS EACH WAY
■ 42	P.T. POST ON 42" X 42" X 12" THICK CONC. FOOTING W/ 4- # 5 BARS EACH WAY
FOOTING SIZES BASED ON 1500 PSF SOIL BEARING CAPACITY	

FOUNDATION/FLOOR FRAMING PLAN

SCALE : 1/4"= 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 COPY OF CONCRETE "BATCH TICKET" ON SITE FOR REVIEW BY BUILDING OFFICIAL

■ 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, BEAMS, AND END POSTS FOR SHEAR WALLS TO MATCH FULL WIDTH OF POSTS IN WALL ABV. W/ GRAIN ORIENTED VERTICALLY

STRUCTURAL PLANS

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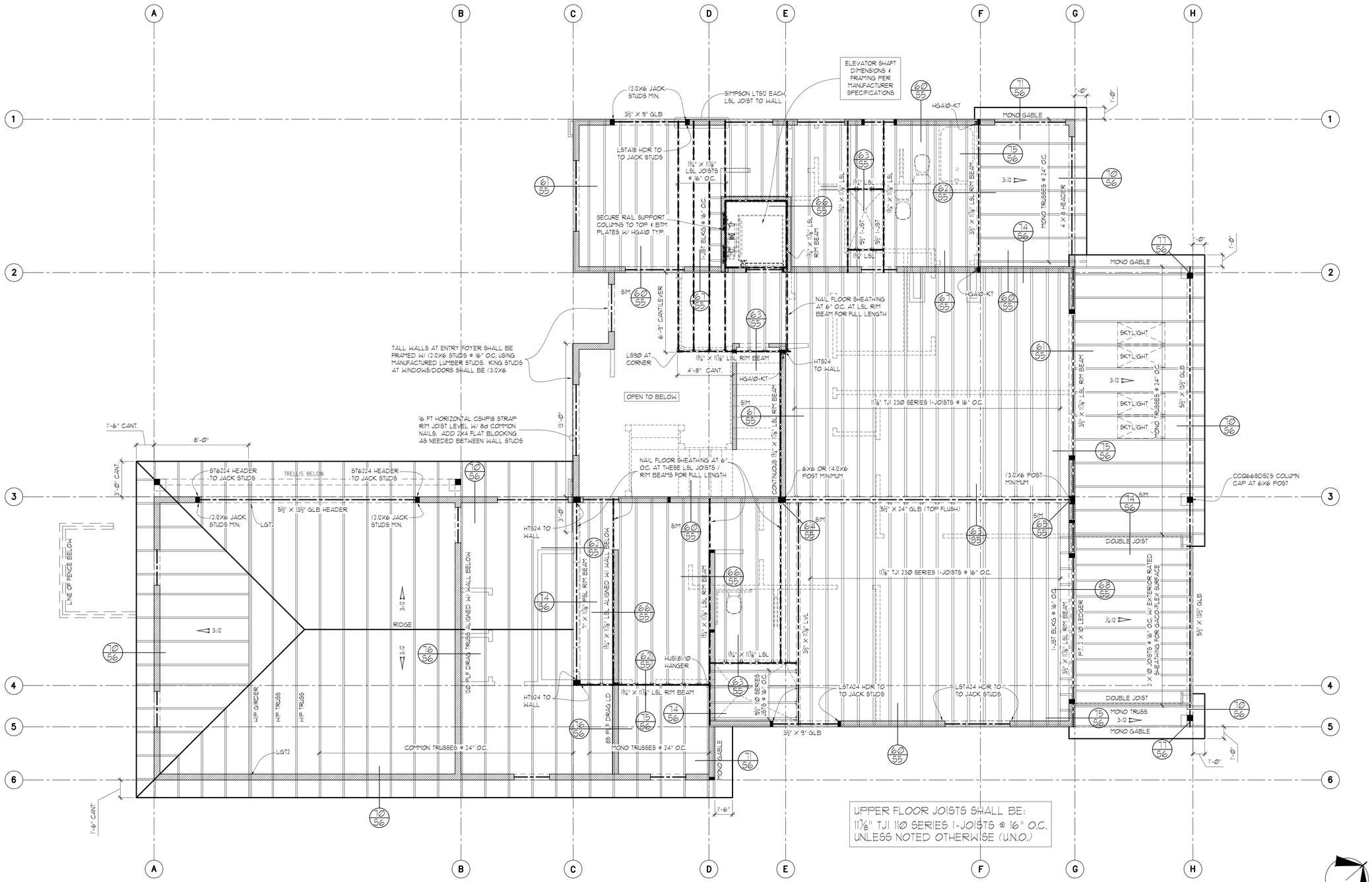

UPPER FLOOR JOISTS SHALL BE:
11⅞" TJI 110 SERIES I-JOISTS @ 16" O.C.
UNLESS NOTED OTHERWISE (U.N.O.)

DROPPED FRAMING FOR FLUSH ENTRY SHOWERS: PROVIDE 2X6 LEDGERS & BLOCKING AROUND PERIMETER TO ACCEPT EDGE NAILING. SECURE 2X6 TO PERIMETER FRAMING W/ 10d COMMON NAILS (0.148"x3") STAGGERED AT 6" O.C.

UPPER FLOOR FRAMING PLAN

SCALE : ¼" = 1'-0"

- 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.
- 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, BEAMS, AND END POSTS FOR SHEAR WALLS TO MATCH FULL WIDTH OF POSTS IN WALL ABV. W/ GRAIN ORIENTED VERTICALLY AND PROVIDE MATCHING POSTS IN WALL BELOW UNLESS LARGER POSTS ARE SPECIFIED ON PLAN
- 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

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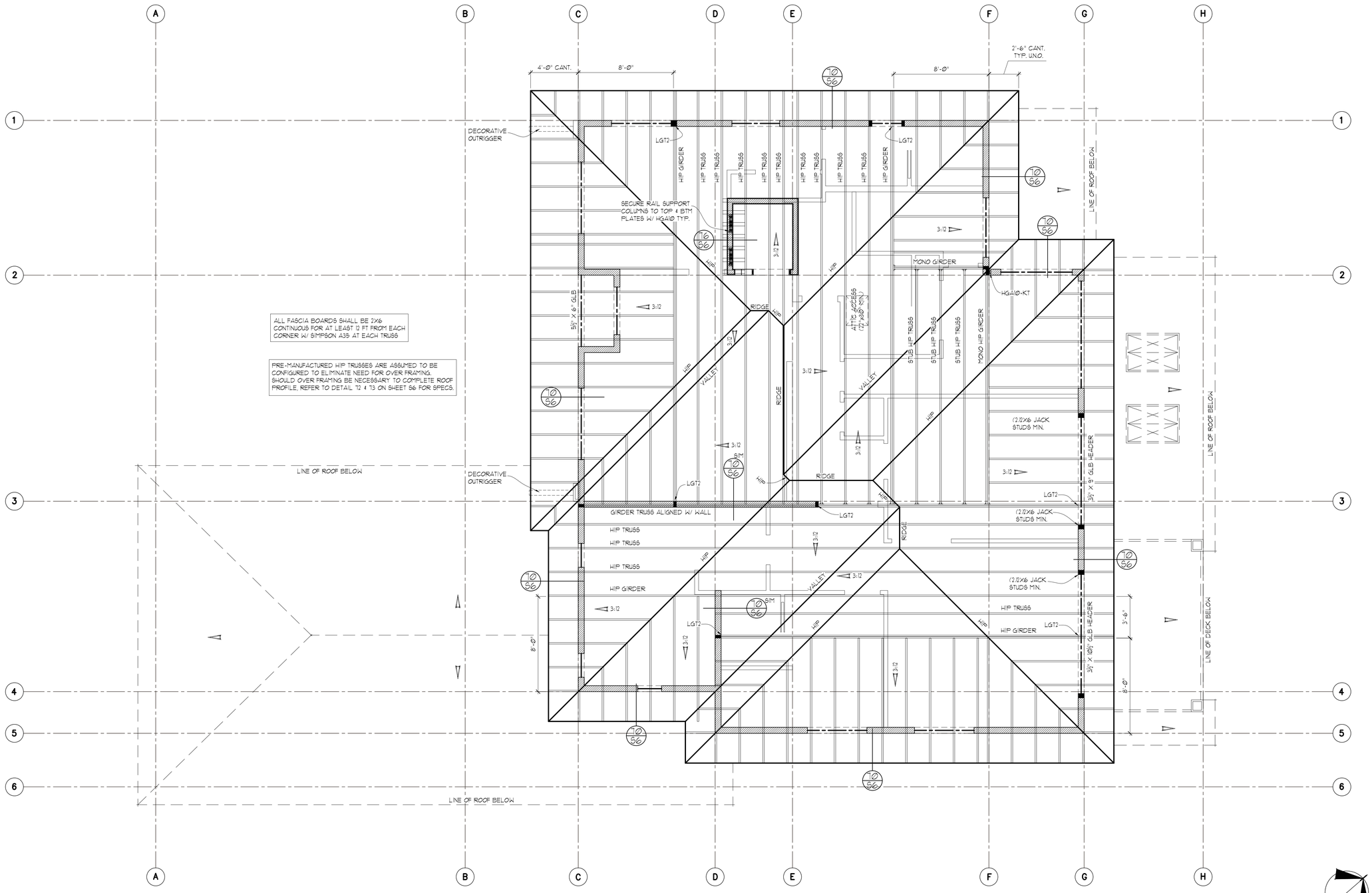

ROOF FRAMING PLAN

SCALE : ¼"= 1'-Ø"

- 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 4X8 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, BEAMS, AND END POSTS FOR SHEAR WALLS TO MATCH FULL WIDTH OF POSTS IN WALL ABV. W/ GRAIN ORIENTED VERTICALLY AND PROVIDE MATCHING POSTS IN WALL BELOW UNLESS LARGER POSTS ARE SPECIFIED ON PLAN

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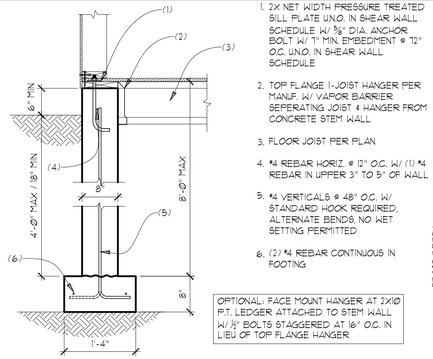
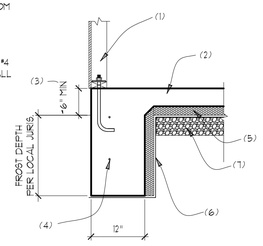


1. 2X NET WIDTH PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE W/ ⅝" DIA. ANCHOR BOLT W/ 7" MIN. EMBEDMENT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE
2. TOP FLANGE I-JOIST HANGER PER MANUF. W/ VAPOR BARRIER SEPERATING JOIST & HANGER FROM CONCRETE STEM WALL
3. FLOOR JOIST PER PLAN
4. #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
5. #4 VERTICALS @ 48" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
6. (2) #4 REBAR CONTINUOUS IN FOOTING

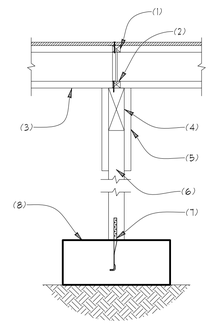
OPTIONAL: FACE MOUNT HANGER AT 2X10 P.T. LEDGER ATTACHED TO STEM WALL W/ ½" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

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



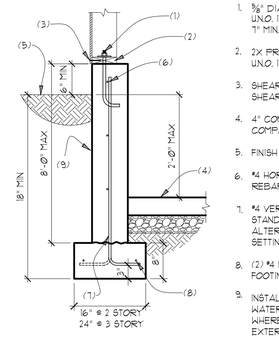
1. WALL PER PLAN W/ P.T. SILL PLATE ATTACHED TO FNDTN W/ ⅝" DIA. ANCHOR BOLT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE W/ 7" MIN. EMBEDMENT
2. CONCRETE SLAB PER PLAN
3. FINISH GRADE OR SLAB AS OCCURS
4. (2) #4 REBAR CONTINUOUS IN FOOTING
5. RIØ RIGID PERIMETER INSULATION EXTENDING A MINIMUM OF 2FT FROM EXTERIOR WALL
6. 6 MIL VAPOR BARRIER (MINIMUM)
7. 4" COMPACTED GRANULAR FILL

51 MONOLITHIC SLAB & FOOTING
SCALE: ¾"=1'



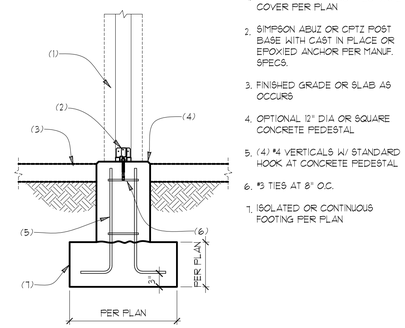
1. I-JOIST BLOCKING REQUIRED AT BEARING OR SHEAR WALLS ABOVE OR WHEN JOISTS ARE NOT CONTINUOUS AT BEAM
2. SECURE BLOCKING TO BEAM W/ 8d NAILS @ 6" O.C.
3. I-JOIST PER PLAN
4. BEAM PER PLAN
5. 2X OR SHEATHING CLEATS BOTH SIDES TO SECURE BEAM TO POST (3) ØD NAILS PER CLEAT PER MEMBER
6. 4X OR 6X TREATED POST (4X6 MIN AT BEAM SPLICE)
7. SIMPSON MABI5 ANCHOR W/ 10dx1½" COMMON NAILS (Ø.148"x1.5") TO POST
8. ISOLATED OR CONTINUOUS SPREAD FOOTING PER PLAN

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



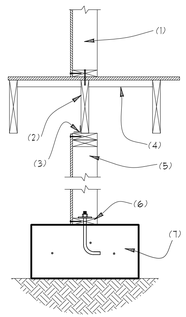
1. ⅝" DIA. ANCHOR BOLT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE W/ 7" MIN. EMBEDMENT
2. 2X PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE
3. SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE
4. 4" CONCRETE SLAB OVER 4" COMPACT FILL
5. FINISH GRADE OR SLAB AS OCCURS
6. #4 HORIZ. REBAR @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
7. #4 VERTICALS @ 18" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
8. (2) #4 REBAR CONTINUOUS IN FOOTING
9. INSTALL DAMPPROOFING OR WATERPROOFING PER IRC R4Ø6 WHERE INTERIOR SLAB IS BELOW EXTERIOR GRADE

53 8" STEM WALL AT SLAB ON GRADE
SCALE: ¾"=1'



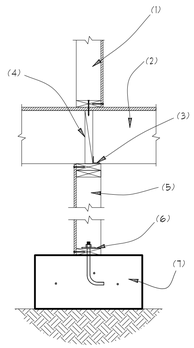
1. WOOD POST W/ ARCHITECTURAL COVER PER PLAN
2. SIMPSON ABUZ OR CPTZ POST BASE WITH CAST IN PLACE OR EPOXIED ANCHOR PER MANUF. SPECS.
3. FINISHED GRADE OR SLAB AS OCCURS
4. OPTIONAL 12" DIA OR SQUARE CONCRETE PEDESTAL
5. (4) #4 VERTICALS W/ STANDARD HOOK AT CONCRETE PEDESTAL
6. #3 TIES AT 8" O.C.
7. ISOLATED OR CONTINUOUS FOOTING PER PLAN

54 FOOTING AT WOOD COLUMN
SCALE: ¾"=1'



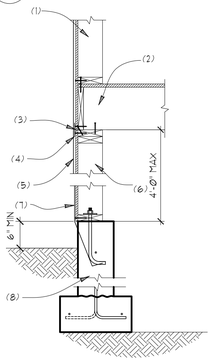
1. 2x SHEAR WALL W/ NAILING PER SHEAR WALL SCHEDULE
2. JOIST PER PLAN
3. SIMPSON A35 @ 12" O.C.
4. 2X4 FLAT BLOCKING AT 24" O.C.
5. 2x6 CRIPPLE WALL W/ STUDS @ 16" O.C. SHEATHED & NAILED W/ 8d NAILS @ 4" O.C. EDGE & 12" O.C. FIELD
6. 2X6 PRESSURE TREATED SILL PLATE
7. FOOTING PER PLAN W/ ⅝" DIA. ANCHOR BOLTS PER SHEAR WALL SHEDULE.

55 CRIPPLE WALL BELOW SHEAR WALL
SCALE: ¾"=1'



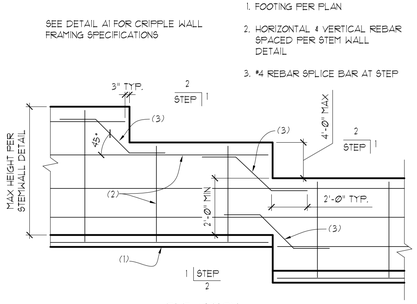
1. SHEAR WALL W/ NAILING PER SHEAR WALL SCHEDULE
2. JOIST PER PLAN
3. SIMPSON A35 @ 16" O.C.
4. 2X BLOCKING TO MATCH JOISTS
5. CRIPPLE WALL W/ STUDS @ 16" O.C. SHEATHED & NAILED PER SCHEDULE FOR SHEAR WALL ABOVE
6. PRESSURE TREATED SILL PLATE
7. FOOTING PER PLAN W/ ⅝" DIA. ANCHOR BOLTS PER SHEAR WALL SHEDULE.

56 CRIPPLE WALL BEARING WALL
SCALE: ¾"=1'



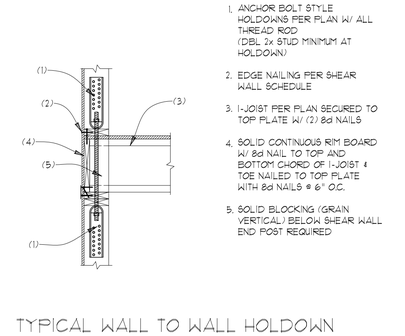
1. STUD WALL FRAMING PER PLAN
2. FLOOR JOISTS & RIM JOIST PER PLAN
3. WALL SHEATHING PANEL EDGE W/ EDGE NAILING PER SHEAR WALL SCHEDULE
4. SIMPSON LTP4 @ 48" O.C.
5. EXTEND STHD STYLE ANCHOR STRAPS WITH OVERLAPPED CMSTC16 COILED STRAP TO GET FULL NAILING AT WALL FRAMING ABOVE (BOLT STYLE HOLDOWNS TO BE EXTENDED TO WALL ABOVE W/ COUPLER NUT AND ALL THREAD ROD)
6. 2x6 CRIPPLE WALL W/ STUDS @ 16" O.C. SHEATHED & NAILED PER WALL ABOVE W/ 4" O.C. 8d COMMON EDGE NAILING MINIMUM
7. HOLDOWN PER PLAN
8. STEM WALL & FOOTING PER PLAN

A1 CRIPPLE WALL FOR SLOPED LOTS
SCALE: ¾"=1'



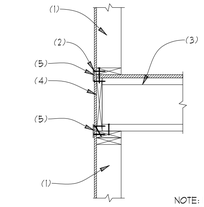
1. FOOTING PER PLAN
2. HORIZONTAL & VERTICAL REBAR SPACED PER STEM WALL DETAIL
3. #4 REBAR SPLICE BAR AT STEP

A2 STEPPED FOOTING AT SLOPED LOT
SCALE: NTS



1. ANCHOR BOLT STYLE HOLDOWN PER PLAN W/ ALL THREAD ROD (DBL 2x STUD MINIMUM AT HOLDOWN)
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN SECURED TO TOP PLATE W/ (2) 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. SOLID BLOCKING (GRAIN VERTICAL) BELOW SHEAR WALL END POST REQUIRED

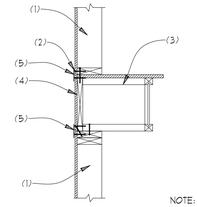
H3 TYPICAL WALL TO WALL HOLDOWN CONNECTION BETWEEN FLOORS
SCALE: ¾"=1'



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, & SHEATHING IS EDGE NAILED AT RIM JOIST & WALL PLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

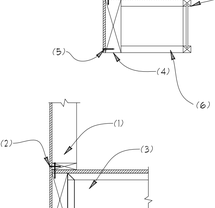
60 FLOOR JOIST BEARING AT STUD WALL
SCALE: ¾"=1'



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.

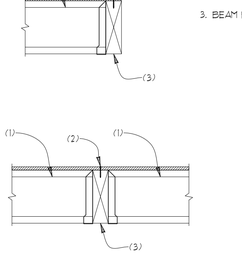
NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, & SHEATHING IS EDGE NAILED AT RIM JOIST & WALL PLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

61 FLOOR JOIST PARALLEL TO STUD WALL
SCALE: ¾"=1'



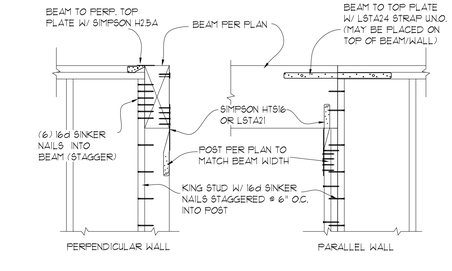
1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN W/ JOIST HANGER PER MANUF.
4. BEAM PER PLAN
5. WALL SHEATHING CONTINUOUS OVER BEAM W/ EDGE NAILING PER SHEAR WALL SCHEDULE
6. I-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.)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

62 FLOOR JOIST AT BEAM
SCALE: ¾"=1'



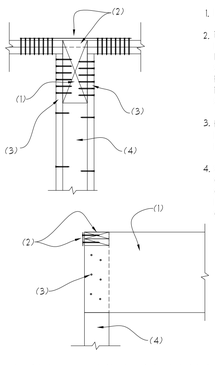
1. FLOOR JOIST (ONE OR BOTH SIDES OF BEAM) PER PLAN W/ JOIST HANGER PER MANUF.
2. FLOOR DIAPHRAGM EDGE NAILING
3. BEAM PER PLAN

63 FLOOR JOIST AT BEAM
SCALE: ¾"=1'



1. BEAM PER PLAN
2. WOOD POST OR COLUMN PER PLAN
3. SIMPSON ACE OR AC POST CAPS (PAIRED)
4. BEAM SPLICE AS OCCURS

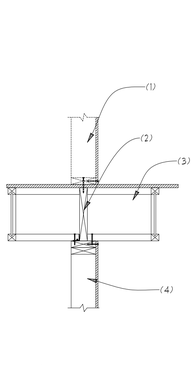
64 BEAM POCKET AT CORNER
SCALE: ¾"=1'



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.

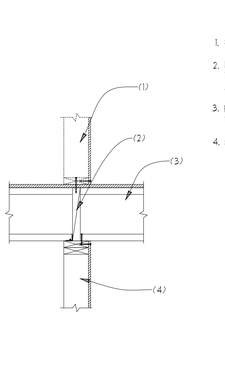
NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, & SHEATHING IS EDGE NAILED AT RIM JOIST & WALL PLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

65 BEAM POCKET AT WALL
SCALE: ¾"=1'



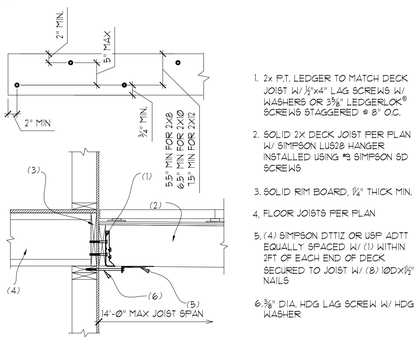
1. 2x SHEAR WALL ABOVE (AS OCCURS) PER SHEAR WALL SCHEDULE.
2. L5L JOIST PER PLAN SECURED TO TOP PLATE W/ A34 FRAMING ANGLE @ 32" O.C.
3. FLOOR JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (2) 8d NAILS
4. SHEAR WALL PER PLAN

66 JOIST PARALLEL TO SHEAR WALL
SCALE: ¾"=1'



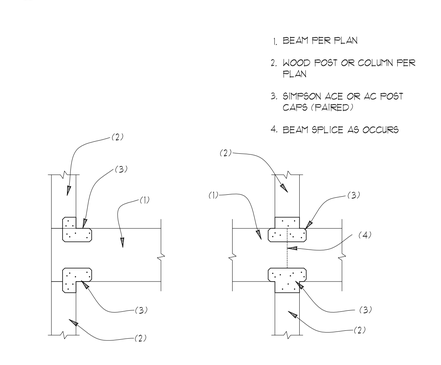
1. STUD WALL ABOVE (AS OCCURS).
2. L5L JOIST BLOCKING SECURED TO TOP PLATE W/ A34 FRAMING ANGLE
3. FLOOR JOIST PER PLAN SECURE TO TOP PLATE W/ (2) 8d NAILS
4. SHEAR WALL PER PLAN

67 FLOOR JOIST AT INT. WALL OR BEAM
SCALE: ¾"=1'



1. 2x P.T. LEDGER TO MATCH DECK JOIST W/ ½"x4" LAG SCREWS W/ WASHERS OR ⅜" LEDGERLOK® SCREWS STAGGERED @ 8" O.C.
2. SOLID 2X DECK JOIST PER PLAN W/ SIMPSON LUS28 HANGER INSTALLED USING #3 SIMPSON SD SCREWS
3. SOLID RIM BOARD, ¾" 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) ØDX1½" NAILS
6. ⅜" DIA. HDG LAG SCREW W/ HDG WASHER

68 DECK LEDGER AT RIM BOARD
SCALE: ¾"=1'



1. BEAM PER PLAN
2. WOOD POST OR COLUMN PER PLAN
3. SIMPSON ACE OR AC POST CAPS (PAIRED)
4. BEAM SPLICE AS OCCURS

69 WOOD BEAM AT WOOD POST
SCALE: ¾"=1'

STRUCTURAL PLANS

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MARK R. MYERS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

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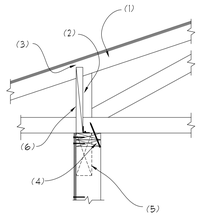
Date: 2021.10.28 13:17:06 -07'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:

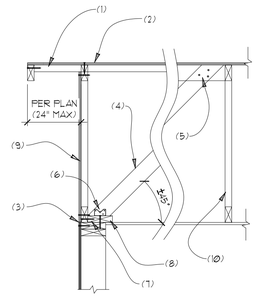
S5

DATE: 10-28-2021
INIT: MM
PROJECT #: 2400



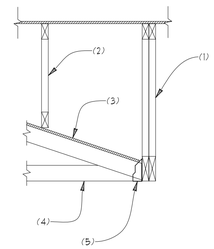
1. CANTILEVER TRUSS W/ ROOF SHEATHING PER PLAN
2. 2X12 OR 1¾" LSL OR PRE-MANUF TRUSS BLOCKING W/ SIMPSON A35 FRAMING ANGLE TO TOP PLATE
3. 1" VENTILATION GAP MAXIMUM
4. 6" SIMPSON SDWC TRUSS SCREW AT EACH TRUSS INSTALLED PER MANUFACTURER'S SPECS.
5. STUD WALL OR BEAM PER PLAN
6. WALL SHEATHING CONTINUOUS TO UNDERSIDE OF TRUSS CHORD

70 CANTILEVER HEEL AT BEARING
SCALE: ¾"=1'



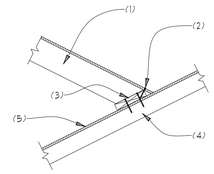
1. 2x4 OUTRIGGER @ 48" O.C. W/ FASCIA BOARD (1X MIN.) SECURED TO ENDS W/ (2) 10d NAILS
2. ROOF SHEATHING W/ DIAPHRAGM EDGE NAILING TO GABLE TRUSS
3. SHEATHING SPLICE AT TOP PLATE OF WALL. FULLY SHEATH GABLE END TRUSS W/ EXTERIOR WALL SHEATHING PER PLAN W/ EDGE NAILING AT TOP & BOTTOM CHORD
4. 2x DIAGONAL 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. GABLE END TRUSS W/ VERTS. @ 24" O.C. & TOP CHORD DESIGNED TO BE NOTCHED FOR OUTLOOKERS.
10. ROOF TRUSSES @ 24" O.C. PER PLAN

71 GABLE END TRUSS
SCALE: ¾"=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: ¾"=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: ¾"=1'

1. 2x STUD WALL W/ EXTERIO WALL SHEATHING PER PLAN
2. JOIST FRAMING PER PLAN
3. JACK/MONO TRUSS PER PLAN W/ LUS HANGER TO RIM
4. BEAM PER PLAN
5. ROOF DIAPHRAGM EDGE NAILING PER PLAN
6. 2X BLOCKING BETWEEN TRUSSES ATTACHED TO WALL W/ 10d NAILS STAGGERED AT 6" O.C.
7. 2X BLOCKING BETWEEN STUDS

75 MONO TRUSS TO WALL AT BEAM
SCALE: ¾"=1'

1. ROOF SHEATHING PER PLAN
2. EDGE NAILING WHERE APPLIES
3. ROOF TRUSSES PER PLAN
4. 2x6 FLAT BLOCKING @ 12" O.C.
5. SIMPSON A35 AT EACH BLOCK
6. SIMPSON A35 @ 12" O.C.
7. INTERIOR SHEAR WALL PER PLAN

76 ROOF SHEAR TRANSFER @ INT. WALL
SCALE: ¾"=1'

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

PLAN VIEW AT CORNER

77 WOOD BEAM AT WOOD POST
SCALE: ¾"=1'

STRUCTURAL PLANS

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MARK R. MYERS
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BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:

S6

DATE: 10-28-2021
INIT: MM
PROJECT #: 2400