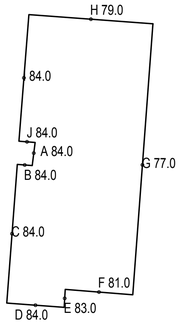


ABE Calculation

Segment	Length	Elevation	Product
A	5.1	84	428.4
B	3.4	84	285.6
C	31.1	84	2612.4
D	12.9	84	1083.6
E	4.0	83	332
F	15.1	81	1223.1
G	60.4	77	4650.8
H	27.9	79	2204.1
I	28.4	84	2385.6
J	3.6	84	302.4
Total	191.9		15508

ABE = 15508 / 191.9 = 80.8'

PROJECT DATA

OWNER

Eric and Jody Blohm

ARCHITECT

HhLodesign
215 W. Crockett St.
Seattle, WA 98119
Contact: Henry H Lo
206-229-8082

CONTRACTOR

Urban Restoration
Contact: Reg Willing
425-417-4811

STRUCTURAL ENGINEER

TBD

PROPERTY DATA

PROJECT ADDRESS

5642 E Mercer Way
Mercer Island, WA 98040

ZONING DESIGNATION

R-15

HEIGHT LIMIT

30'-0" Max Building Height

SETBACKS

Front Yard Setback	20'-0"
Rear Yard Setback	25'-0"
Side Yard Setback	17.0' Total 5.6' Min.

LOT AREA
33,451 sq ft

ASSESSOR'S TAX NUMBER
192405-9152

LEGAL DESCRIPTION
POR GL 3 BEG AT PT 2120 FT N OF S LN OF SEC & 1032.41 FT E OF N & S C/L OF SEC TH N 03-58-12 E 100.24 FT TH E 300 FT TO WLY LN OF PRIVATE RDWY TH S 03-58-12 W 100.24 FT TH W 300 FT TO BEG ALSO POR GL 3 LY BET LN S 2205 FT & 2220 FT N OF S LN OF SEC & ELY OF PRIVATE RD TGW SH LDS ADJ

CONSTRUCTION DATA

SCOPE OF WORK

Addition of 720.5 SF raised deck with stair to ground floor to existing Single Family Residence. New Roof Over Deck.

LOT SLOPE

High Point	136.0'
Low Point	60.3'
Length	322.9'
Slope	23.4%

LOT COVERAGE CALCULATIONS

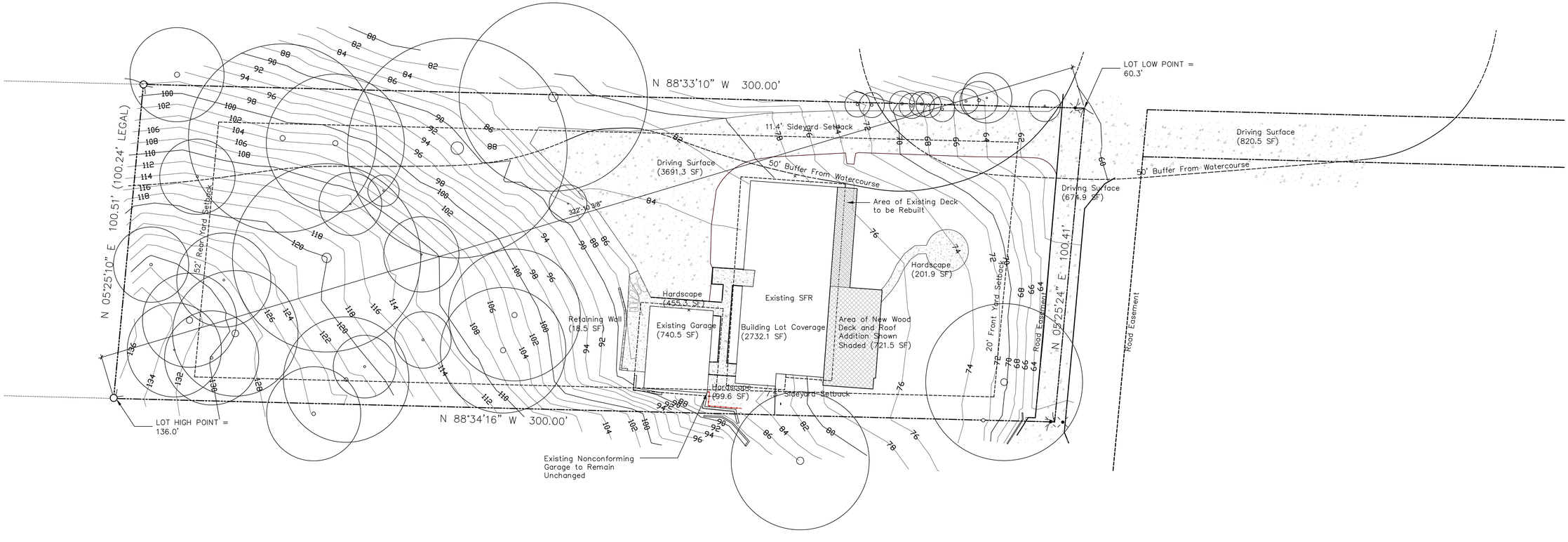
A.	Gross Lot Area	33451	Square Feet
B.	Net Lot Area	33451	Square Feet
C.	Allowed Lot Coverage Area	11707.9	Square Feet
D.	Allowed Lot Coverage	35	% of Lot
E.	Existing Lot Coverage:		
	1. Main Structure Roof Area	2732.1	Square Feet
	2. Accessory Building Roof Area	740.5	Square Feet
	3. Vehicular Use (driveway, paved access easements [portion used by the lot for access], parking	5186.7	Square Feet
	4. Covered Patios and Covered Decks	721.5	Square Feet
	5. Total Existing Lot Coverage Area (E1+E2+E3+E4)	9380.8	Square Feet
F.	(Total Lot Coverage Area Removed)	0	Square Feet
G.	Proposed Adjustment for Single Story (Area)	0	Square Feet
H.	Proposed Adjustment for Flag Lot	0	Square Feet
I.	Total New Lot Coverage Area:		
	1. Main Structure Roof Area	2732.1	Square Feet
	2. Accessory Structure Roof Area	740.5	Square Feet
	3. Vehicular Use (driveway, paved access easement [portion used by the lot for access], parking)	5186.7	Square Feet
	4. Covered Patios and Covered Decks	721.5	Square Feet
	5. Total New Lot Coverage Area (I1 + I2 + I3 + I4)	9380.8	
J.	Total Project Lot Coverage Area = (E5 - F) + I5	9380.8	Square Feet
K.	Proposed Lot Coverage Area = (J/B) x 100	28.0	% of Lot

Lot coverage calculations shown on Plan Sheet # A-1.0

HARDSCAPE CALCULATIONS

A.	Gross Lot Area	33451	Square Feet
B.	Net Lot Area	33451	Square Feet
C.	Area Borrowed from Lot Coverage	2327.1	Square Feet
D.	Allowed Hardscape Area = 9% of lot area + C	5337.7	% of Lot
E.	Allowed Hardscape Area	5337.7	Square Feet
F.	Total Existing Hardscape Area:		
	1. Uncovered Decks	0	Square Feet
	2. Uncovered Patios	99.6	Square Feet
	3. Walkways	657.2	Square Feet
	4. Stairs	0	Square Feet
	5. Rockeries and Retaining Walls	18.5	Square Feet
	6. Other	0	Square Feet
	7. Total Existing Hardscape Area (F1+F2+F3+F4+F5+F6)	775.3	Square Feet
G.	(Total Hardscape Area Removed)	0	Square Feet
H.	Total New Hardscape Area:		
	1. Uncovered Decks	0	Square Feet
	2. Uncovered Patios	0	Square Feet
	3. Walkways	0	Square Feet
	4. Stairs	0	Square Feet
	5. Rockeries and Retaining Walls	0	Square Feet
	6. Other		Square Feet
	7. Total New Hardscape Area (H1+H2+H3+H4+H5+H6)	0	Square Feet
I.	Total Project Hardscape Area = (F7 - G) + H7	775.3	Square Feet
J.	Total Project Hardscape Area = (I/B)x100	2.3%	% of Lot

Hardscape calculations shown on Plan Sheet # A-1.0



1 Site Plan
1/16" = 1'-0"

PLAN NORTH

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215 West Crockett Street
Seattle, Washington 98119
206.229.8082

DRAWN BY

DESIGN BY

CHECKED BY

APPROVED BY

DATE
August 28, 2023

REVISIONS

BLOHM DECK

5642 E Mercer Way
Mercer Island, Washington

8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Site Plan

A-1.0

GENERAL NOTES

GN-1 GENERAL NOTE
All work to comply with the following current codes:
- 2018 INTERNATIONAL BUILDING CODE (IBC)
- 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL FIRE CODE
- 2018 INTERNATIONAL FUEL GAS CODE (Natural Gas)
- 2018 UNIFORM PLUMBING CODE
- 2018 WASHINGTON STATE ENERGY CODE
- and all other applicable local codes

GN-2 GENERAL NOTE
All applicable codes, ordinances, and minimal structural requirements take precedence over drawings, notes, and specifications.

GN-3 GENERAL NOTE
Dimensions are to face of stud unless noted otherwise.

GN-4 GENERAL NOTE
Plumbing work and Electrical work is "Design/Build" and executed under separate permit.

EARTH WORK

EW-1 VERIFY SOIL CONDITIONS
Geotechnical Engineer shall field verify conformance of actual soil conditions with design assumptions

EW-2 GEOTECHNICAL ENGINEER SITE VISITS
General contractor is responsible for scheduling site visits by Geotechnical Engineer

EW-3 BEARING DEPTH
Extend excavation down to undisturbed soil of the specified strength with a minimu depth of 18" below finish grade

EW-4 COMPACTED FILL
Compacted fill to be well graded and granular with no more than 5% passing a 200 sieve. Place in 8: loose lifts and compact to 95% modified AASHO density at optimum moisture content.

EW-5 BACKFILL
Backfill behind all retauning walls with free draining granular fill and provide for subsurface drainage. (Subject to field review by Geotechnical Engineer)

MOISTURE PROTECTION

MP-1 (IRC R317.1)

Provide a minimum clearance of 12" between untreated beams & girders and earth

Provide a minimum clearance of 18" between untreated joists and earth

Provide a minimum of 8" clear between untreated framing members in contact concrete or masonry exterior walls and earth

All wood in contact with concrete or masonry exterior walls to be pressure treated

All sills and sleepers on concrete slab that is in direct contact with the earth to be pressure treated

All wood in direct contact with the ground or embedded in concrete shall be pressure treated

Wood siding, sheathing and framing shall have a clearance of 6" to earth and 2" from concrete steps, porch slabs, patio slabs and similar horizontal surfaces exposed to weather.

MP-2 (IRC R408) CRAWLSPACE VENTILATION
Crawlspace ground surface shall be covered with a Class 1 (0.1 per or less) vapor retarder material.
Provide 1 sf of net free vent area for each 300 sf of crawlspace area.
Vents shall be protected by 1/8" minimum, 1/4" maximum non-corrosive screen.

MP-3 (IRC R806) ROOF VENTILATION
Provide 1 sf of net free vent area for each 150 sf of attic area.
Venting my be reduced to 1 sf of net free vent area for each 300 sf of attic area provided at least 50% but no more than 80% of the vent area is located in the upper portion of the roof at least 3 feet above the eave.
Vents shall be protected by 1/8" minimum, 1/4" maximum non-corrosive screen or approved soffit vents.
A minimum 1" clear air space shall be provided between the insulation and the roof sheathing through the roof.
All rafter bays to be ventilated.
A vent shall be located within 3 feet of each corner.

FIRE PROTECTION cont'd.

FP-9 (IRC R315.1) CARBON MONOXIDE ALARMS
For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

FP-10 (IRC R315.3) CARBON MONOXIDE ALARM REQUIREMENTS
Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

FP-11 (IRC R302.11) FIREBLOCKING REQUIRED
Fire blocking is required in the following locations.

-In concealed spaces of stud walls and partitions including furred spaces, parallel rows of studs, staggered studs as follows:
Vertically at ceiling and floor levels
Horizontally at intervals not exceeding 10 feet
-At all interconnections between consealed vertical and horizontal spaces such as soffits, dropped ceilings, and coved ceilings
-In concealed spaces between stair stringers at the top and bottom of the run.
-At openings around vents, pipes, ducts, cables, and wire at ceiling and floor level
-At fireplaces & chimneys per IRC R1003.19
-Fireblocking cornices of a 2-family dwelling is required at the line of dwelling unit separation

SAFETY AND SECURITY

SS-1 (IRC R308.4) SAFETY GLAZING - HAZARDOUS LOCATIONS
Provide safety glazing in the following locations

- Glazing in swinging doors

- Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies

- Glazing in storm doors

-Glazing in unframed swinging doors

- Glazing in door or enclosure for hot tub, whirlpool, sauna, steam room, bathtub, and shower. Glazing in any part of the a building wall enclosing these where the the bottom edge of the glazing is less than 60" above a standing or walking surface.

- Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24" arc of the door in a closed position AND whose bottom edge is less than 60" from the floor or walking surface

- Glazing that meets all of the following conditions

  Exposed area of an individual pane larger than 9 sf
  Bottom edge less than 18" above the floor
  Top edge more than 36" above the floor
  Walking surface within 36" horizontally of the glazing

-All glazing in railings (regardless of area or height)

-Glazing in walls and fences enclosing swimming pools, hot tubs, spas where the bottom edge is less than 60" above walking surface and within 60" horizontally of the water's edge.

-Glazing adjacent to stairways, landings, and ramps within 36" horizontally of a walking surface when the exposed surface of the glass is less than 60" above the the plane of the adjacent walking surface

-Glazing adjacent to stairways within 60" horizontally of the bottom tread in any direction when the exposed surface of the glass is less than 60" above the nose of the tread

(SEE CODE SECTION FOR LIMITED LIST OF EXCEPTIONS)

SS-2 (IRC R310.1.1,2,3,4) EMERGENCY ESCAPE (EGRESS)
Emergency escape opening shall have a minimum net clear opening of 5.7 sf
Grade floor openings shall have a minimum net clear opening of 5.0 sf
- Emergency escape opening shall have a minimum net clear opening height of 24"
- Emergency escape opening shall have a minimum net clear opening width of 20"
- Emergency escape opening shall have a maximum sill height of 44"

SS-3 (IRC R311.2) EXIT DOOR
Not less than one exit door shall be provided.
Minimum size of 3'-0" x 6'-8"

SS-4 (IRC R311.7) STAIRWAYS
WIDTH
Stairway width shall be no less than 36" in clear width above the handrail height and below the required headroom height, handrails may project no more than 4.5" on either side of the stairway

HEADROOM
The minimum headroom of all parts of the stairway shall be no less than 6'-8" measured vertically from the sloped plane adjoining the tread nosings

RISER HEIGHT
The maximum riser height is 7-3/4"
The maximum discrepancy between tallest & shortest risers shall not exceed 3/8"

TREAD DEPTH
The minimum tread depth is 10" measured from nosing projection to nosing projection
The maximum discrepancy between widest & narrowest treads shall not exceed 3/8"

NOSING
Provide a nosing not less than 3/4" but not more than 1-1/4" wide on stairways with solid risers.

HANDRAIL
A continuous handrail is required on at least one side of each continuous run of treads or flight with 4 or more risers

HANDRAIL HEIGHT
Not less than 34" or more than 38" above the sloped plan adjoinging the tread nosings

HANDRAIL CONTINUITY
Handrail shall be continuous for the full length of the flight from a point ditectly above the top riser to a point directly above the bottom riser. Handrails shall be returned to the wall or terminate in a newel post or safety terminus.

HANDRAIL SPACE
There shall be a space of no less than 1-1/2" between handrail and adjacent wall surface.

HANDRAIL GRIP SIZE
Handrails with a circular cross section shall have an outside diameter of at least 1-1/4" and no more than 2". If the handrail is not circular it shall have a perimeter dimension of at least 4" and not more than 6-1/4" with a maximum cross section dimension of 2-1/4"
(See code for additional options)

SS-5 (IRC R312) GUARDS
Porches, balconies, ramps, and raised floor surfaces more than 30" above the floor or grade below shall have a guard not less than 36" in height.
Open side of stairs with a total rise of 30" or more shall shall have guards a minimum height of 34" above nosings.
Guards shall have intermediate rails or balusters spaced so as not to allow the passing of a 4" diameter sphere.
Contractor shall verify to inspector that all guards and railings shall be capable of resisting 200 lb. lo0ad on top rail acting in any direction as required by
IRC Table R301.5.

BATHROOM NOTES

BN-1 (2018 IRC 307.1) SPACE REQUIREMENTS
Toilet - Minimum 15" clear each side, Minimum 21" clear in front of bowl
Vanity - Minimum 21" clear in front
Shower - Minimum 30" x 30", 24" clear in front of opening

BN-2 (2018 IRC 307.2) TUB & SHOWER WALLS
Bathtub and shower floors and walls above bathtubs with shower heads shall be finished with a non-absorbant surface to a height of at least 6 feet above the floor.

ENERGY CODE

EC-1 CODE
All work to comply with 2018 WSEC

EC-2 (2018 R402) BUILDING ENVELOPE REQUIREMENTS

Climate Zone 4C - King County
Compliance Path: Mandatory plus Prescriptive

Table 402.1.1

Glazing U-Factor (Vertical):	0.30
Glazing U-Factor (Overhead):	0.50
Door U-Factor:	0.20
Entire Slab:	R-10
Below grade walls (interior):	10/15/21 int + TB
Below grade walls (exterior):	10/15/21 int + TB
Above grade walls:	R-21
Floor Insulation:	R-30
Ceilings:	R-49 or R-38 adv
Vaulted Ceilings:	R-38

See Table 402.1.1 for footnotes

EC-3 (2018 R406) ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS
Dwelling units shall comply with all provisions of WSEC Chapter 4 and shall comply with sufficient options from Table R406.2 so as to achieve the at least the minimum number of Energy Credits as required (WSEC R406.2).

EC-4 (2018 R402.2.4) ACCESS HATCHES & DOORS
Access hatches from conditioned spaces to crawlspaces and attics shall be weatherstripped and insulated to a level equivalent to the surrounding surfaces

EC-5 (2018 R303.1.3) FENESTRATION (DOOR & WINDOW) U-FACTOR LABELS
All products shall be identified with NFRC labels Indicating U-value, SHGC (or VT).

EC-6 (2018 402.4.1.1) AIR BARRIER
A continuous air barrier shall be installed in the building envelope. Breaks or joints in the barrier shall be sealed. Air-permeable insulation shall not be uses as a sealing material.

EC-7 GROUND COVER
A ground cover of 6 mil black polyethelyene, Class 1 (0.1 per or less), vapor retarder material shall be installed over the ground in crawlspaces. Joints should be lapped 12" and the ground cover should extend to the foundation walls. Gound cover can be omitted if crawlspaces have a concrete slab with a minimum thickness of 3-1/2"

EC-8 (2018 R402.4.3) AIR LEAKAGE OF FENESTRATION
Exterior doors and windows shall be constructed to limit air leakage and be fitted with weatherstripping. Joints around door and window frames, openings between walls and foundations, between walls and roof, and any other penetrations shall be sealed, caulked, gasketed, or weatherstripped to prevent air leakage. Windows, skylights and sliding glass doors shall have an air infiltration rate of not more than 0.3 cfm per square foot, and swinging doors no more than 0.5 cfm per square foot, and be listed and labeled by the manufacturer

EC-9 (2018 R402.4.4) RECESSED LIGHTING
Recessed light cans installed in the building envelope shall be Type IC rated and certified under ASTM 283 to have no more than 2.0 cfm air movement into the unconditioned cavity. They shall be installed with a gasket or caulk between the frame and the ceiling to prevent air leakage

EC-10 (2018 503.4) EQUIPMENT PERFORMANCE
All heating equipment shall meet the requirements of the National Appliance Energy Conservation Act and be so labeled and compy with Section 1411.

EC-11 (2018 R403.5) MECHANICAL VENTILATION
Mechanical ventilation system fans shall meet the efficacy requirements of Table R403.5.1

EC-12 (2018 R403.1) CONTROLS
Provide a programmable thermostat for regulation of temperature. Thermostat shall allow for a 5-2 programmable schedule (weekdays/weekends) and be capable of providing at least two programmable setback periods per day.

EC-13 (2018 R403.2) DUCTS
Ducts within or partial exposed to unconditioned spaces shall be insulated to a minimum of R-8 (WSEC R403.2.1). Framing cavities shall not be used as ducts or plenums. Installation of ducts in exterior walls shall not displace required envelope insulation (WSEC R403.2.3)

EC-14 (2018 R403.2.2) SEALING OF MECHANICAL SYSTEM
Ducts, air handlers, and filter boxes shall be sealed. Ducts shall be leak tested in accordance with the provisions of 2012 WSEC R403.2.2

EC-15 (2018 R403.2.2) DUCT LEAKAGE TEST
Duct leakage test results shall be provided to the building inspector and homeowner prior to an approved final inspection. A signed affidavit documenting the duct leakage test results shall be provided to the building inspector prior to an approved final inspection.

EC-16 (2018 R403.3) MECHANICAL SYSTEM PIPING
Mechanical system piping capable of carrying fluids above 105 deg. F shall be insulated to a minimum of R-6.

EC-17 (2018 R40.3.4.2) HOT WATER PIPE INSULATION
Insulation for hot water pipes shall have a minimum thermal resistance of R-4.

EC-18 (2018 R403.4.3) ELECTRIC WATER HEATER INSULATION
Electric water heaters in unconditioned space or on concrete floors shall be placed on an incompressible insulated surface with a minimum R-10.

EC-19 (2018 R404.1) LIGHTING EQUIPMENT
A minimum of 75 percent of permanently installed lamps in lighting fixtures shall be high efficacy lamps.

EC-20 (2018 402.4.1.2) AIR LEAKAGE TESTING
The building or dwelling shall be tested and verified to have an air leakage rate not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. Where required by the building official testing shall be conducted by an approved third party. Testing shall be performed any time after creation of all penetrations in the building thermal envelope. The test results shall be posted on the Residential Energy Compliance Certificate.

EC-21 (2018 401.3) ENERGY COMPLIANCE CERTIFICATE
A Residential Energy Compliance Certificate complying with SEC 105.4 is required to be completed by the design professional or builder and permanently posted within 3'-0" of the electrical panel prior to inspection.

EXHAUST SYSTEMS CODE

VC-1 CODE
All work to comply with International Residential Code (IRC), Chapter 15, Exhaust Systems

VC-2 (IRC Section M1507) MECHANICAL VENTILATION
Source Specific Exhaust Fans
- Exhaust fans providing source specific ventilation shall have a minimum fan flow rating not less than 50 cfm at 0.25 inches water gauge for bathrooms, laundries, or similar rooms and 100 cfm at 0.25 inches water gauge for kitchens.
- Source specific ventilation systems shall be controlled by manual switches, dehumidistats, timers, or other approved means.
- Source specific ventilation ducts shall terminate outside the building. Exhaust ducts shall be equipped with backdraft dampers. All ducts in unconditioned spaces shall be insulated to a minimum of R-8.

VC-3 (IRC Section M1507.3) WHOLE HOUSE VENTILATION
Intermittent Whole House Ventilation Integrated with a Forced-Air System
- Integrated whole house ventilation systems shall provide outdoor air at the rate calculated using Section M1507.3.3,4
- Integrated forced-air ventilation systems shall distribute outdoor air to each habitable room through the forced-air system ducts.
- Integrated forced-air ventilation systems shall have an outdoor air inlet duct connecting a terminal element on the outside of the building to the return air plenum of the forced air system at a point within 4 feet upstream of the air handler.
- The outdoor air inlet duct connection to the return air stream shall be located upstream of the forced-air system blower and shall not be connected directly into a furnace cabinet to prevent thermal shock to the heat exchanger.
- The system shall be equipped with a motorized damper connected to the automatic ventilation control as specified in Section M1508.5.2. The required flow rate shall be verified by field testing with a flow hood or a flow measuring station.
Controls
- The whole house ventilation system shall be controlled by a 24-hour clock timer with the capability of continuous operation, manual and automatic control. At the time of final inspection the automatic control timer shall be set to operate the whole house system for at least 8 hours a day. A label shall be affixed to the control that reads "WHOLE HOUSE VENTILATION - See operating instructions"

MECHANICAL WORK

MW-1 (IRC M1307.2) WATER HEATER ANCHORAGE
Water heater shall be strapped at points within the upper 1/3 and lower 1/3 of the appliance. Strapping shall be a minimum of 4" above the controls.

MW-2 (IRC M1307.3) ELEVATION OF IGNITION SOURCE
Appliances having an ignition source shall be elevated such that the source of the ignition is not less than 18" above the floor.

MW-3 (IRC M1307.3.1) PROTECTION FROM IMPACT
Appliances located in the garage shall be protected from impact by approved barriers.

FIRE PROTECTION

FP-1 (IRC R302.6) SEPARATION REQUIRED
The garage shall be separated from the residence and its attic by not less than 1/2" thick GWB on the garage side. Garages beneath habitable rooms above by not less than 5/8" thick GWB Type X. Where the separation is a ceiling-floor assembly the structure supporting the assembly shall also be protected by not less than 1/2" thick GWB.

FP-2 (IRC R302.5) OPENING PROTECTION
Openings between garage and residence shall be protected by either
- Solid wood door not less than 1 3/8" thick, or
- Solid or honeycomb metal door not less than 1 3/8" thick, or
- 20-minute fire rated door

FP-3 (IRC R302.5.2) DUCT PENETRATION
Ducts in the garage and ducts penetrating the walls or ceiling separating the dwelling from the garage shall be a minimum of 26 gauge sheet metal and have no openings into the garage.

FP-4 (IRC R302.7) UNDER-STAIR PROTECTION
Enclosed accessible space under stairs shall have walls and under-stair-surfaces protected on the enclosed side by not less than 1/2" thick GWB.

FP-5 (IRC R314.1) SMOKE DETECTION AND NOTIFICATION
All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of the IRC and the household fire warning equipment provisions of NFPA 72.

FP-6 (IRC R314.3) SMOKE DETECTION LOCATION
Smoke alarms shall be installed in the following locations
-In each sleeping room
-Outside each separate sleeping area in the immediate vicinity of the bedrooms
-On each additional story of the building including basements and habitable attics
When more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

FP-7 (IRC R314.3.1) SMOKE ALARMS - ALTERATIONS, REPAIRS AND ADDITIONS
When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

FP-8 (IRC R314.4) SMOKE ALARM POWER SOURCE
Smoke alarms shall receive their primary power from the building and have battery backup. Wiring shall be permamnent and without disconnecting switch other than those required for overcurrent protection

Permit Conditions:

1. Provide a residential Fire Sprinkler TI Permit for the modification, addition, or subtraction of the fire sprinkler system. A licensed fire sprinkler contractor must evaluated the current system and provide a letter stating the changes needed and if the current system has capacity.

2. Provide annual test records showing the system has been recently tested within the last 365 days.

3. Fire Sprinkler System activation must activate internal sounders or smoke alarms.

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DRAWN BY

DESIGN BY

CHECKED BY

APPROVED BY

DATE
April 04, 2023

REVISIONS

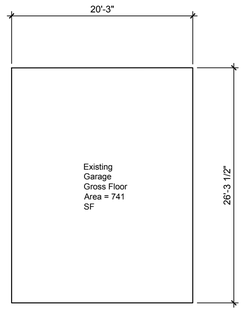
BLOHM
DECK

5642 E Mercer Way
Mercer Island, Washington

8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

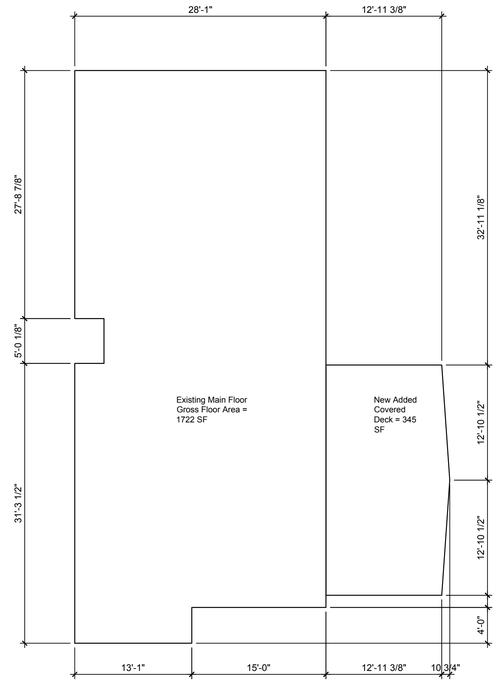
General Notes

A-1.1



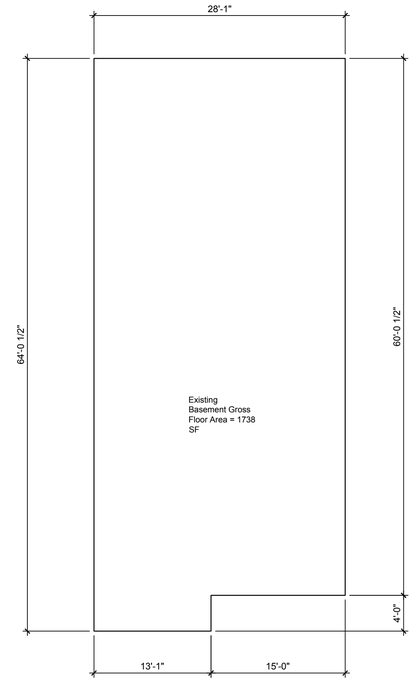
3 Garage - Gross Floor Area
1/8" = 1'-0"

PLAN NORTH



2 Main Level - Gross Floor Area
1/8" = 1'-0"

PLAN NORTH



1 Basement Level - Gross Floor Area
1/8" = 1'-0"

PLAN NORTH

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APPROVED BY

DATE
August 28, 2023

REVISIONS

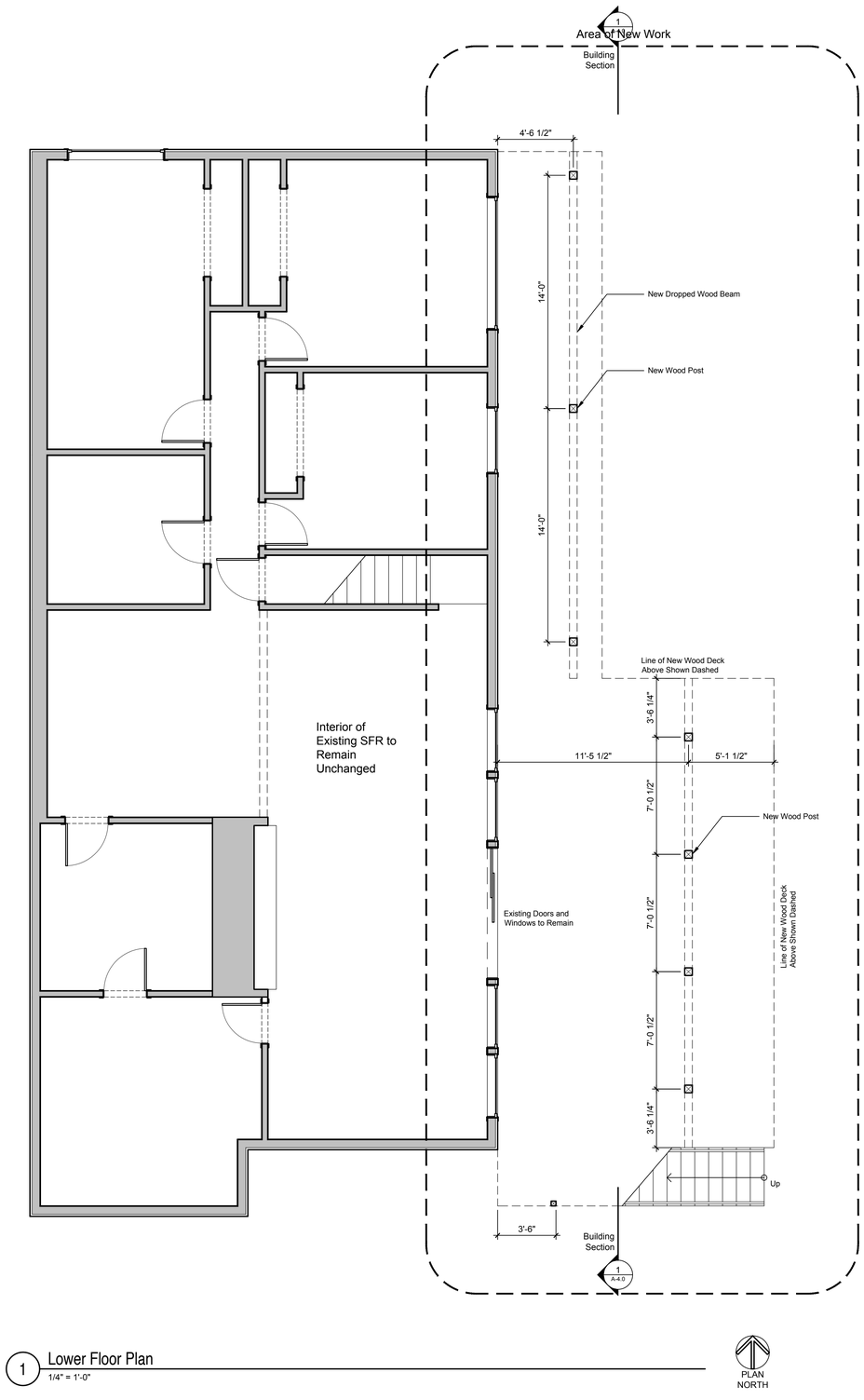
BLOHM
DECK

5642 E Mercer Way
Mercer Island, Washington

8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Gross Floor
Area Calculation

A-1.2



1 Lower Floor Plan
1/4" = 1'-0"

PLAN NORTH

H h L o d e s i g n
minimalist.spatial.creation

215 West Crockett Street
Seattle, Washington 98119
206.229.8082

DRAWN BY

DESIGN BY

CHECKED BY

APPROVED BY

DATE
April 04, 2023

REVISIONS

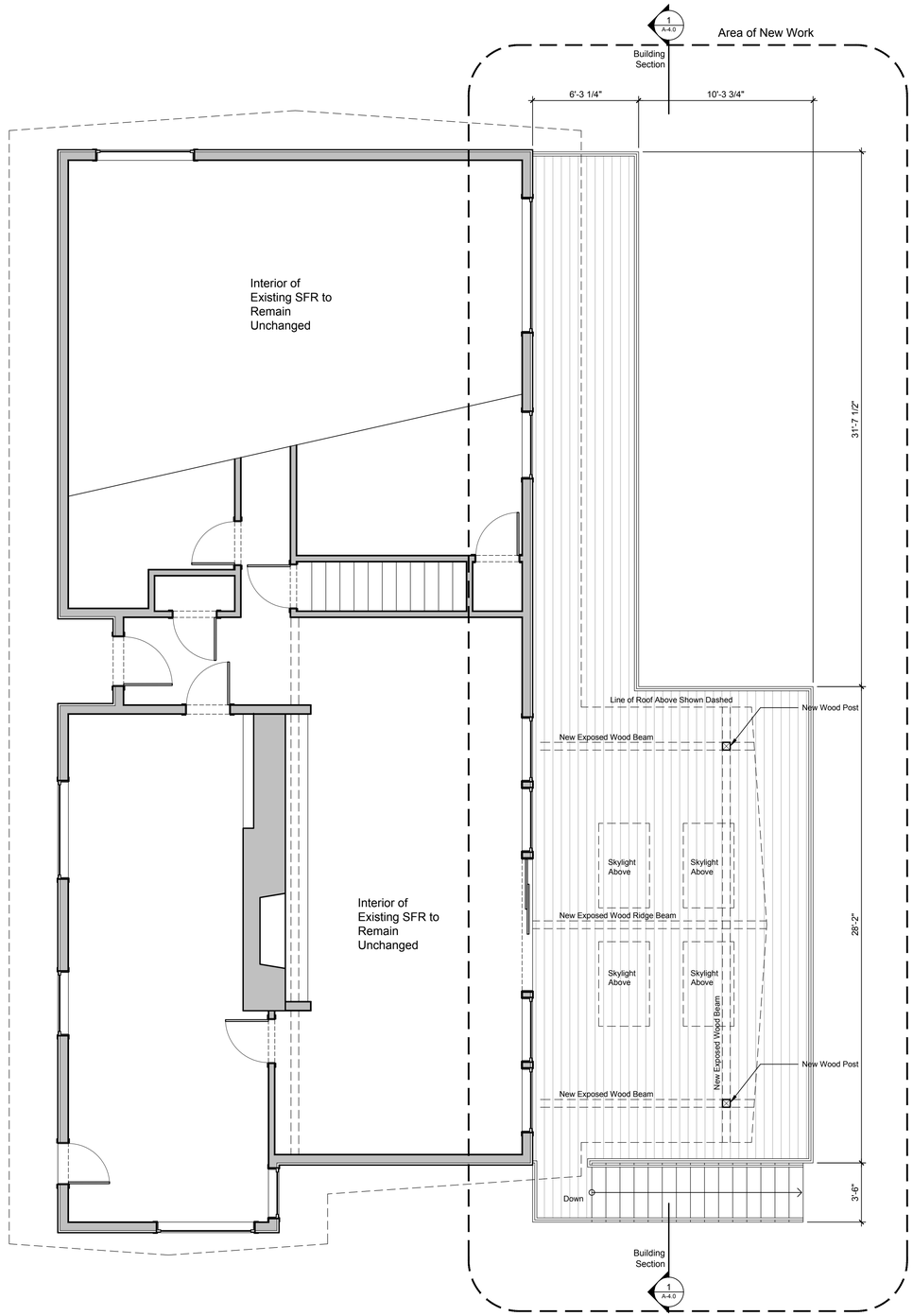
BLOHM
DECK

5642 E Mercer Way
Mercer Island, Washington

8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Lower Floor Plan

A-2.0



1 Main Floor Plan
1/4" = 1'-0"

PLAN NORTH

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215 West Crockett Street
Seattle, Washington 98119
206.229.8082

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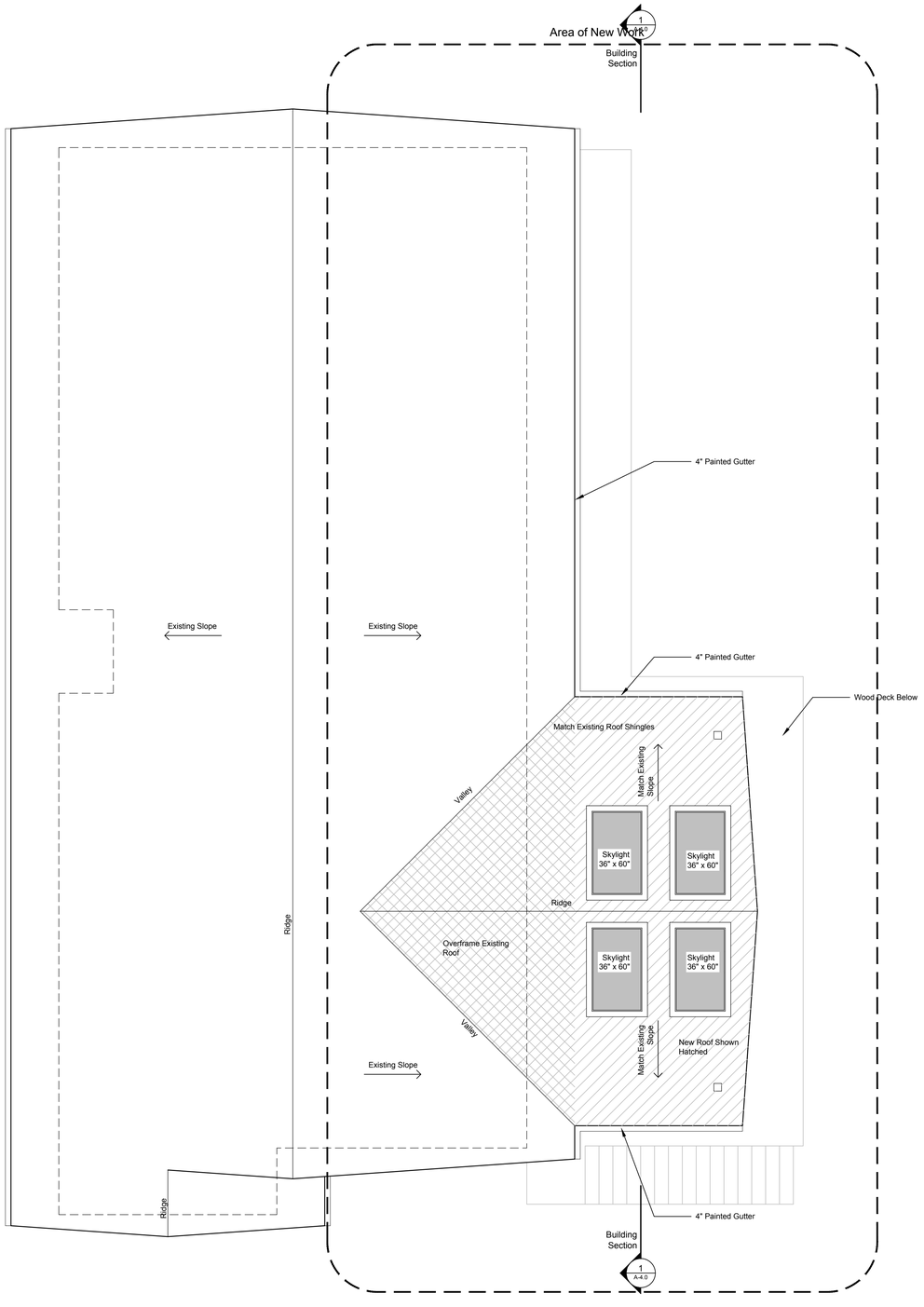
8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Main Floor Plan

A-2.1



1 Roof Plan

1/4" = 1'-0"

PLAN NORTH

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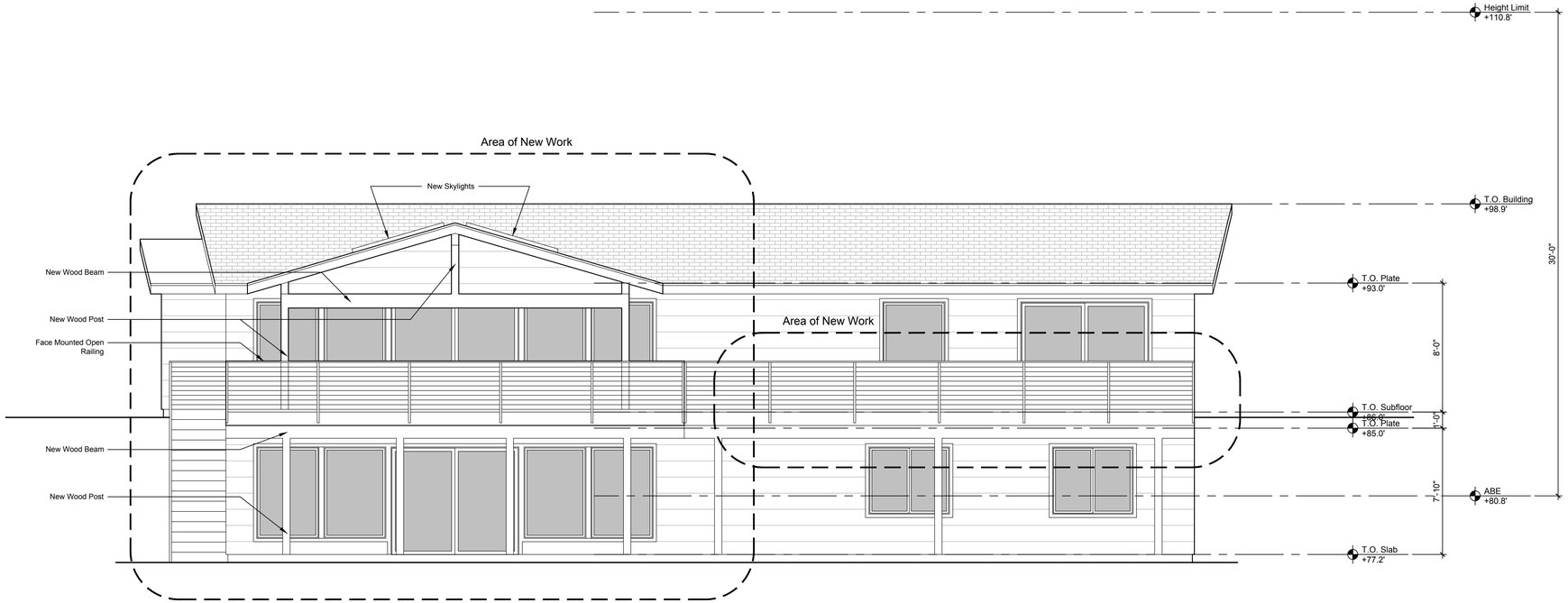
Mercer Island, Washington

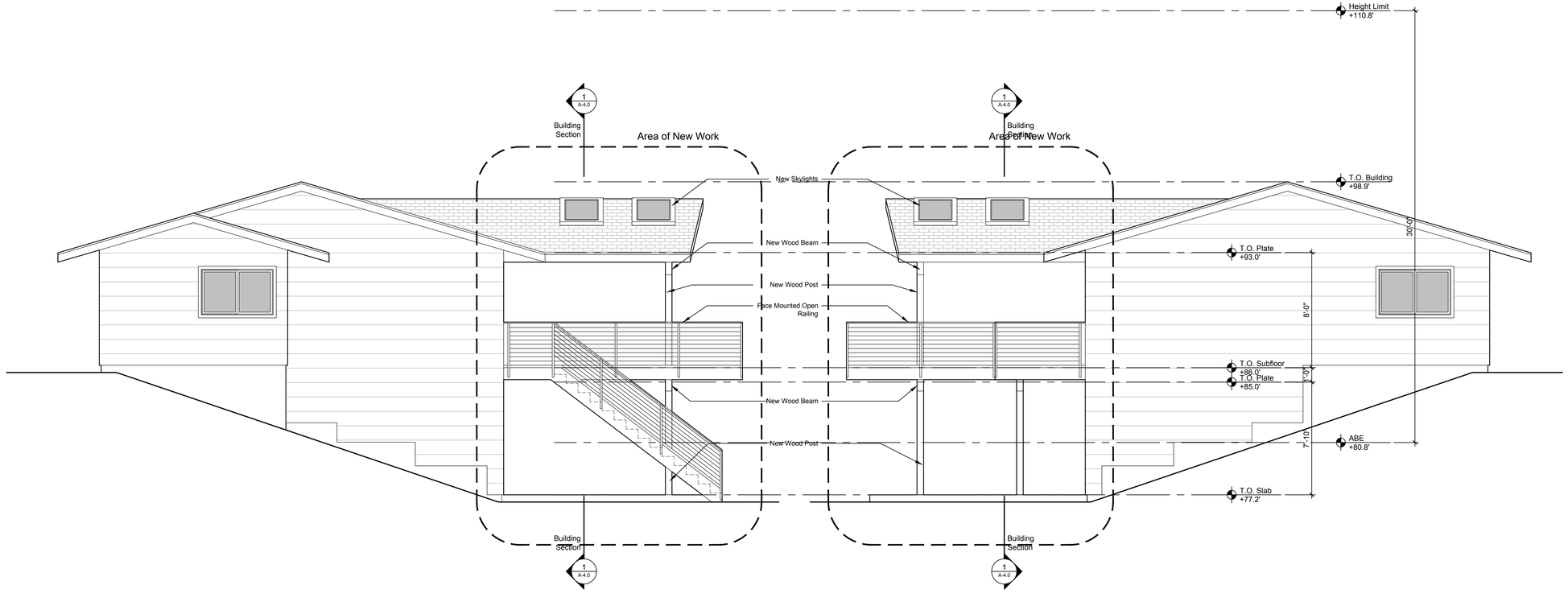
8190 REGISTERED ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Roof Plan

A-2.2



1 East Elevation
1/4" = 1'-0"



2 South Elevation
1/4" = 1'-0"

3 North Elevation
1/4" = 1'-0"

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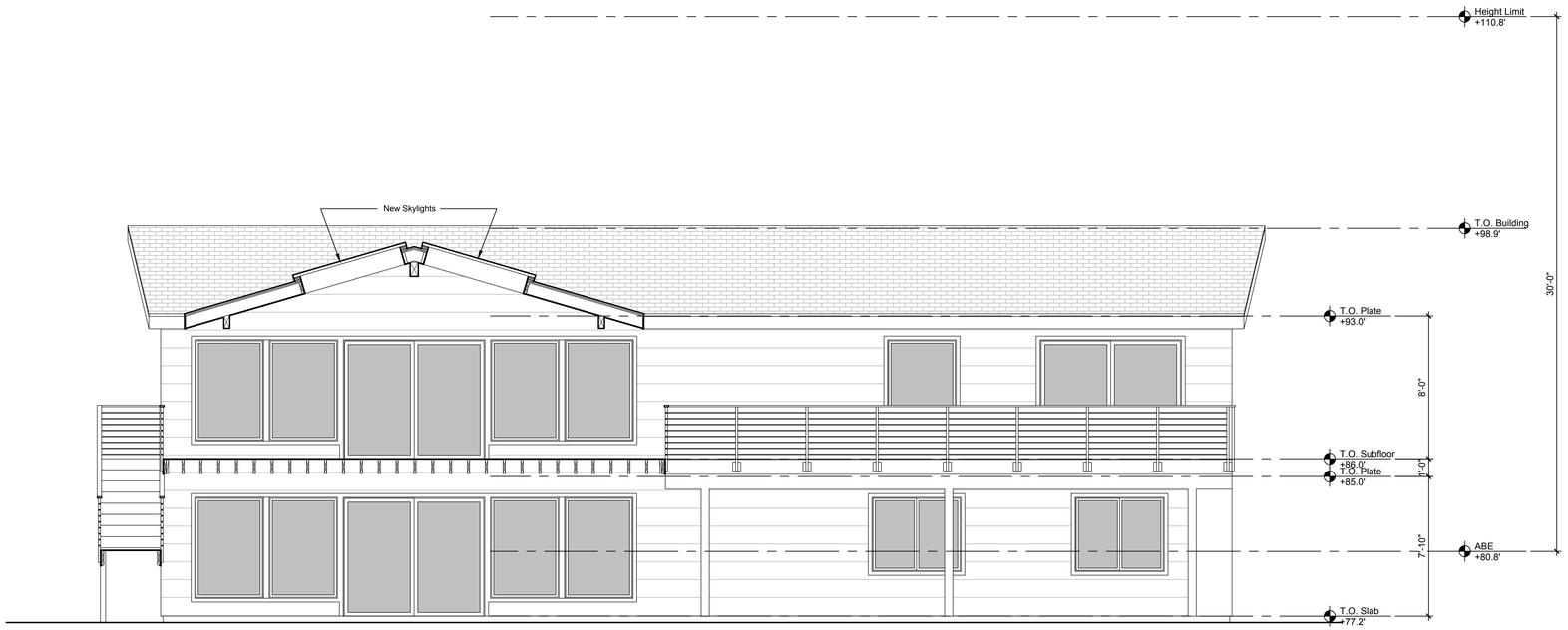
STATE OF WASHINGTON

Exterior Elevations

A-3.0



1 Building Section
1/4" = 1'-0"

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215 West Crockett Street
Seattle, Washington 98119
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Mercer Island, Washington

8190
REGISTERED
ARCHITECT
HENRY H. LO
STATE OF WASHINGTON

Building Section

A-4.0

GENERAL STRUCTURAL NOTES

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE INTERNATIONAL BUILDING CODE (IBC, 2018 EDITION) AND MODIFICATIONS TO THE INTERNATIONAL BUILDING CODE BY THE LOCAL JURISDICTION.

2. DESIGN LOAD CRITERIA

DEAD LOADS

ROOF	15 PSF
FLOORS	15 PSF
DECKS	8 PSF
EXTERIOR WALLS	10 PSF
INTERIOR WALLS	8 PSF

LIVE LOADS

ROOF	20 PSF
FLOOR / LIVING SPACE	40 PSF
DECKS / BALCONIES	60 PSF

SNOWLOADS

GROUND LOAD	25 PSF
ROOF SNOW LOAD	25 PSF

WIND

ULTIMATE DEIGN WIND SPEED		110 MPH
WIND EXPOSURE		B
IMPORTANCE FACTOR	I_W =	1.0
ADJUSTMENT FACTOR	λ =	1.0
WIND SPEED UP FACTOR		1.0

SEISMIC

SEISMIC USE GROUP		II
IMPORTANCE FACTOR I_E		1.0
SITE CLASS		D
SEISMIC DESIGN CATEGORY		D
RESPONSE FACTOR	R =	6.5
MAPPED ACCELERATION	S_S =	1.5
(PER USGS)	S_1 =	0.5

SOIL PRESSURE:

ALL SOIL PRESSURE	1,500 PSF

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER SITE ENTITIES OR PERSONS AT THE PROJECT SITE.
7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
9. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

FOUNDATIONS

10. ALL FOOTINGS AND FOUNDATIONS SHALL BE SUPPORTED BY COMPETENT NATIVE SOIL 18" BELOW FINISHED GRADE FOR EXTERIOR SIDE AND 12" FOR INTERIOR FOOTINGS, FREE OF ORGANIC MATERIALS. OVEREXCAVATION MIGHT BE NEEDED TO REACH THE COMPETENT SOIL.
11. FOOTINGS AND FOUNDATION EXCAVATION SHALL BE FREE OF LOOSE SOILS, SLOUGHS, DEBRIS, AND FREE OF WATER AT ALL TIMES.
12. FOUNDATION WALL BACKFILL SHALL BE PLACED SIMULTANEOUSLY ON BOTH SIDES OF WALL PROVIDING 4" PERFORATED PIPE (AS REQUIRED) FOR SUBSURFACE DRAINAGE.
13. U.N.O. IN AN APPROVED GEOTECHNICAL REPORT, THE FOLLOWING METHOD FOR BACKFILL PLACEMENT AND COMPACTION IS TO BE USED:

    EXCEPT FOR BACKFILL AGAINST BELOW-GRADE WALLS OR RETAINING WALLS, ALL OTHER STRUCTURAL FILL AND STRUCTURAL BACKFILL MATERIALS SHALL BE PLACED IN RELATIVELY HORIZONTAL LOOSE LIFTS NOT EXCEEDING 10 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DENSITY AT MOISTURE CONTENTS WITHIN TWO (2) PERCENT OF OPTIMUM. THE SPECIFIED COMPACTION DENSITY AND MOISTURE CONTENT OF EACH LIFT MUST BE VERIFIED BY INSPECTION, PRIOR TO PLACEMENT OF SUBSEQUENT LIFTS. BACKFILL AGIANST BELOW-GRADE WALLS AND RETAINING WALLS SHOULD BE COMPACTED AS DESCRIBDED ABOVE TO ONLY 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
14. FOOTING SIZE SHALL BE AS INDICATED ON DRAWINGS OR MIN. AS PER IBC SECTION 1806.
15. WHERE THE SURFACE IS SLOPED MORE THAN OE (1) FOOT IN TEN (10) FEET THE FOUNDATION SHALL BE LEVEL OR STEPPED SO THAT BOTH, TOP AND BOTTOM, OF SUCH FOUNDATION ARE LEVEL PER IBC.
16. WHERE STRUCTURAL COLUMNS AND POSTS ARE EXPOSED TO WATER SPLASH ABOVE, A CONCRETE SURFACE OR TO THE WEATHER, PROVIDE A MIN. OF 1" ABOVE CONCRETE SURFACE, OR 8" ABOVE THE EXPOSED EARTH PER IBC.

CONCRETE

17. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC SECTION 1905, 1906, AND ACI 301. STRENGTH AT AGE 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS, U.N.O.:

MEMBER TYPE (IN)	PSI	MAX AGGR RATIO	MAX W/C
SLABS ON GRADE	2,500	1	0.45
FOUNDATIONS	2,500	1	0.45
WALLS	2.500	1	0.50
COLUMNS, ELEVATED SLABS & BEAMS	4,500	¾	0.40

18. CONCRETE MIX FOR FOUNDATION AND SLAB:
    CEMENT: 5.5 SACK TYPE I NORMAL PORTLAND CEMENT
    1,210 LBS OF WET SAND
    1,925 LBS GRAVEL
19. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FY = 60,000 PSI, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM-185.
20. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 318-14. LAP ALL REINFORCEMENTS IN ACCORDANCE WITH "THE REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE".PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
21. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED AND APPROVED BY THE STRUCTURAL ENGINEER.
22. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

    FOOTINGS AND OTHER UNFORMED SURFACES
    CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"

    FORMED SURFACES EXPOSED TO EARTH OR WEATHER

    (NO. 6 BARS OR LARGER) 2"
    (NO 5 BARS OR SMALLER) 1-1/2"
    COLUMN TIES OR SPIRALS AND BEAM STIRRUPS 1-1/2"

    SLABS AND WALLS: GREATER OF BAR DIAMETER + 1/8 OR 3/4"
23. CAST–IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS .
24. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (2,500 PSI MIN).

PROTECTION FOR REINFORCEMENT OF CAST IN-PLACE CONCRETE	MIN. COVER
Concrete cast against and permanently exposed to earth	3"
Concrete exposed to earth or weather	
Wall panels:	
No. 6 through No. 18 bars	2"
No. 5 bars, W31 or D31 wire, and smaller	1 ½"
Concrete exposed to neither earth or weather	
Slabs, walls, and joists:	
No. 14 and no. 18 bars	1 ½"
No. 11 and smaller bars	¾"
Beams and Columns:	
Primary reinforcement, ties, stirrups, and spirals	1 ½"
Shells and folded-plate members:	
No. 6 bars and larger	¾"
No. 5 bars, W31 or D31 or smaller	¾"

FLOOR SLABS

25. INTERIOR CONCRETE SLAB-ON-GRADE FLOORS SHOULD BE UNDERLAIN BY CAPILARY BREAK CONSISTING OF AT LEAST 4 INCHES PEA GRAVEL OR COMPACTED ¾- INCH CLEAN CRUSHED ROCK (LESS THAN 3 PERCENT FINES).

ANCHORAGE

26. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BARS) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED WITH SIMPSON EPOXY "SET-XP" OR EQUAL. SPECIAL INSPECTION IS REQUIRED. RODS SHALL BE ASTM A-36 UNLESS NOTED OTHERWISE.
27. DRIVEN PINS AND OTHER POWDER ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE.
28. PERIODIC SPECIAL INSPECTION FOR EPOXIED ANCHORS AND BOLTS IS REQUIRED.

STEEL

29. STRUCTURAL STEEL FABRICATION, ERECTION AND WELDING INSPECTION SHALL COMPLY WITH THE SPECIAL INSPECTION SCHEDULE.
30. STRUCTURAL STEEL SHALL BE GRADE A-36 UNLESS NOTED OTHERWISE.
31. ARCHITECTURALLY EXPOSED STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
32. THE FOLLOWING ADHESIVE-TYPE ANCHORING SYSTEMS SHALL BE USED FOR CONCRETE AND MASONRY, AS APPLICABLE AND IN ACCORDANCE WITH CORREPSONDING CURRENT ICC ESR REPORT.

    - SIMPSON "SET-XP" – ICC ESR 2508 FOR ANCHORING TO CONCRETE
33. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND A.W.S STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS(AS DEFINED BY A.W.S.) SHALL BE USED ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT LBS AT -20 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION
34. WELDING INSPECTION SHALL BE IN COMPLIANCE WITH AWS D1.1.

WOOD

35. ALL SOLID LUMBER TO BE GRADED BY WCLIB OR WWSA. ALL LUMBER SHALL BE HEM-FIR #2 (HF #2) OR BETTER. ALL SOLID LUMBER 5" X 4" OR LARGER SHALL BE DOUGLAS FIR #2 (DF #2) U.N.O. ALL GLUE-LAMINATED LUMBER SHALL BE GLULAM 24F-1.8E WS.

    DESIGN VALUES FOR GLULAM BEAMS

FLEXURAL STRESS TENSION ZONE	2,400 PSI
FLEXURAL STRESS COMPRESSION ZONE	1,850 PSI
COMPRESSION PERPENDICULAR TO GRAIN	650 PSI
SHEAR	266 PSI
APPARENT E	1.8x16 lb-in^2
TRUE E	1.9x10 lb-in^2

36. LUMBER IN CONTACT WITH CONCRETE AND ALL EXTERIOR WOOD SHALL BE PRESSURE TREATED, ALL CONNECTORS GALVANIZED.
37. INSTALL SOLID BLOCKING BTWN JOISTS AT ALL BEARING POINTS.

    THROUGH BOLTS AND LAG BOLTS SHALL BE ASTM A307. PROVIDE MALLEABLE IRON WASHER AT ALL BOLT AND LAG BOLT LOATIONS. PROVIDE CUT WASHER FOR ALL BOLTS PROTRUDING BEARING WOOD.
38. ALL METAL (CONNECTORS, NAILS, BOLTS, ETC.) IN CONTACT WITH P.T. WOOD SHALL BE HOT DIPPED GALVANIZED.
39. U.N.O. CONNECTORS AND FASTENERS SHALL COMPLY WITH IBC TABLE 2304.9.1

OPEN WEB TRUSSES

40. THE INSTALLATION OF OPEN WEB TRUSSES SHALL COMPLY WITH THE REQUIREMENTS OF IBC 2015 TABLE 1705.2.3.
41. OPEN WEB TRUSS SHOP DRAWINGS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF WASHINGTON AND AFTER REVIEW AND APPROVAL BY ENGINEER OF RECORD SHALL BE SUBMITTED TO DCI FOR FINAL APPROVAL.

COMPARISON OF COMMON, BOX AND SINKER NAIL DIMENSIONS (inches) OF THE SAME PENNYWEIGHT.

TYPE	FEATURE	PENNYWEIGHT				
		6d	8d	10d	12d	16d
COMMON	Length	2	2-1/2	3	3-1/4	3-1/2
	Diameter	0.113	0.131	0.148	0.148	0.162
	Head	0.226	0.281	0.312	0.312	0.344
BOX	Length	2	2-1/2	3	3-1/4	3-1/2
	Diameter	0.099	0.113	0.128	0.128	0.135
	Head	0.266	0.297	0.312	0.312	0.344
SINKER	Length	1-7/8	2-3/8	2-7/8	3-1/8	3-1/4
	Diameter	0.092	0.113	0.120	0.135	0.148
	Head	0.231	0.266	0.281	0.312	0.344

Special Inspection Requirements per Chapter 17 IBC

Table 1705.3 Required Special Inspections and Tests of Concrete	Continuous Special Inspection	Periodic Special Inspection
1. Inspect reinforcement and verify placement		X
3. Inspect anchors cast in concrete		X
4. Inspect anchors post-installed in hardened concrete members		
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	X	
b. Mechanical anchors and adhesive anchors not defined in 4.a		X
5. Verify use of required design mix		X
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content specimens, and determine the temperature of the concrete	X	
7. Inspect concrete placement for proper application techniques	X	
8. Verify maintenance of specified curing temperature and techniques		X
12. Inspect formwork for shape, location and dimensions of the concrete member being formed		X

Table 1705.6 Required Special Inspections and Tests of Soils	Continuous Special Inspection	Periodic Special Inspection
1. Verify materials below sahllow foundations are adequate to achieve the design bearing capacity		X
2. Verify excavations are extended to proper depth and have reached proper material		X
3. Perform classification and testing of compacted fill material		X
4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill	X	
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly		X

ROLAND HEIMISCH
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43479
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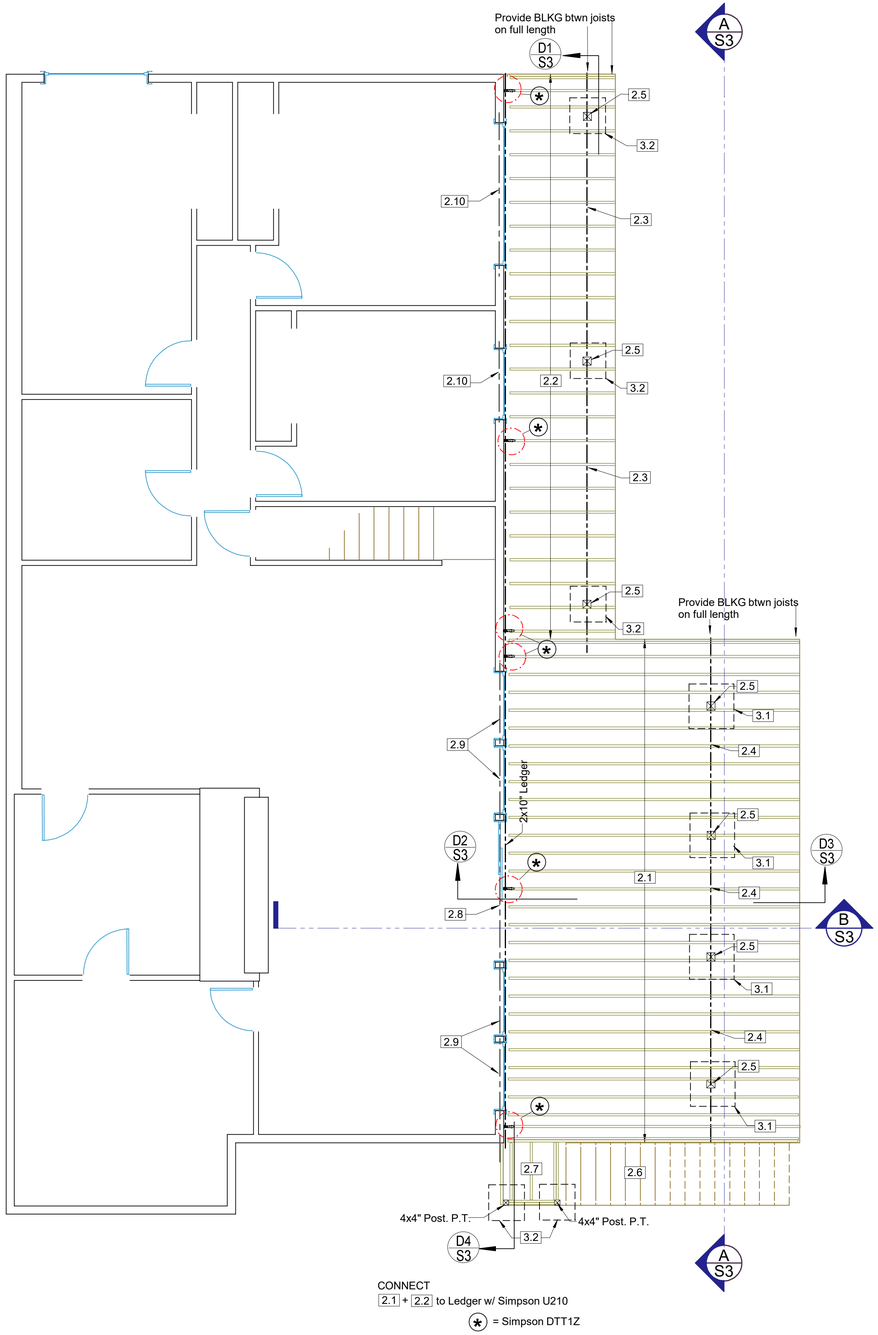
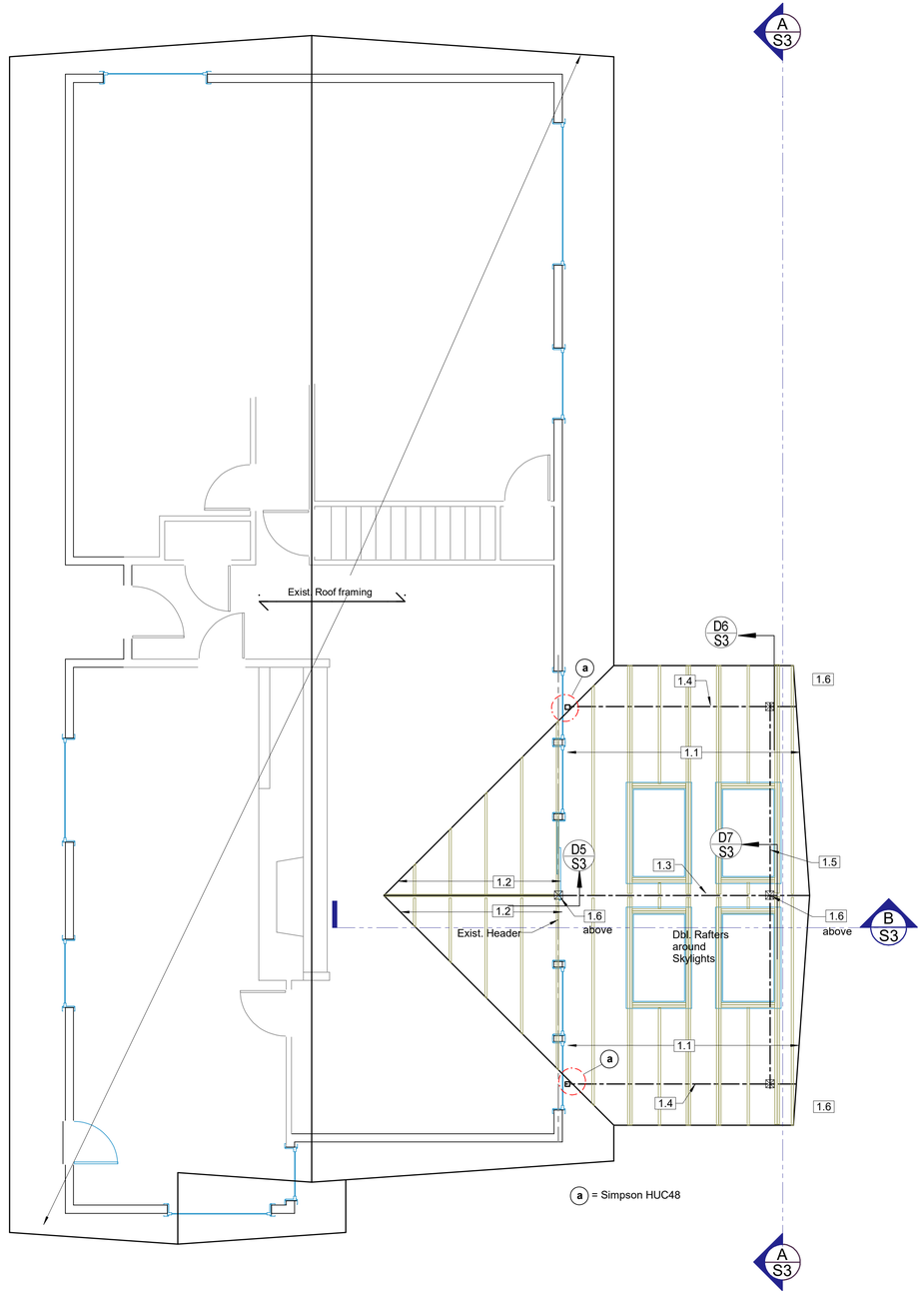
PROFESSIONAL ENGINEER

tecinstruct LLC
4111 164th St. SW #51, Lynnwood, WA 98087
Telephone (206) 553 9076 - email: www.rheimisch@yahoo.com
ENGINEERING

CLIENT:	Eric & Jodi Blohm	SHEET
JOB SITE:	5642 E Mercer Way, Mercer Island, WA	S1
PROPERTY #		
DESCRIPTION:	New Covered Deck	
DATE:	03/30/2023 SCALE: as noted	
ENGINEER:	Roland Heimisch, P. E.	



DECK FRAMING AND FOUNDATION PLAN SCALE: 1/4" = 1'-0" (1:48)



DECK COVER FRAMING PLAN SCALE: 1/4" = 1'-0" (1:48)

KEY NO.	ROOF LEVEL
1.1	Rafters, HF No.2, 2x8" @ 24" o.c.
1.2	Overframing, HF No.2, 2x6" @ 24" o.c.
1.3	Ridge Beam, DF No.2, 6x10"
1.4	Beam, DF No. 2, 4x8"
1.5	Glulam WS, 24F-1.8E, 5-1/2x10-1/2"
1.6	Post, HF No.2, 6x6", P.T.

KEY NO.	DECK
2.1	Deck Joists, HF No.2, 2x10" @ 12" o.c.
2.2	Deck Joists, HF Mo.2, 2x10" @ 16" o.c.
2.3	Beam, HF No.2, 6x12", P.T.
2.4	Beam, HF No.2, 6x12", P.T.
2.5	Post, HF No.2, 6x6", P.T.
2.6	Stair Stringers, HF No.2, 2x12" @ 12" o.c., P.T.
2.7	Landing Joists, HF No.2, 2x6" @ 16" o.c., P.T.
2.8	Exist. Header, verify min. LSL, 1.55E, 2325Fb, 3-1/2x9-1/4"
2.9	Exist. Header, DF No.2, verify min. 4x8"
2.10	Exist. Header, DF No.2, verify min. 4x6"

KEY NO.	FOUNDATION
3.1	Spread Footing, fc = 2,500 psi, 30x30x8"
3.2	Spread Footing, fc = 2,500 psi, 24x24x8"

ROLAND HEIMISCH STATE OF WASHINGTON 43479 REGISTERED PROFESSIONAL ENGINEER

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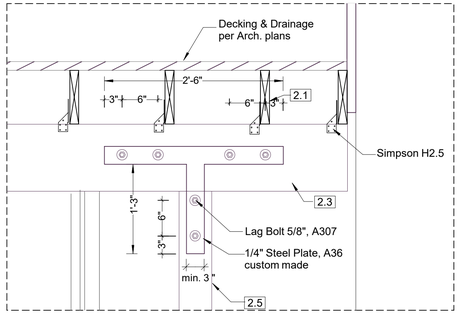
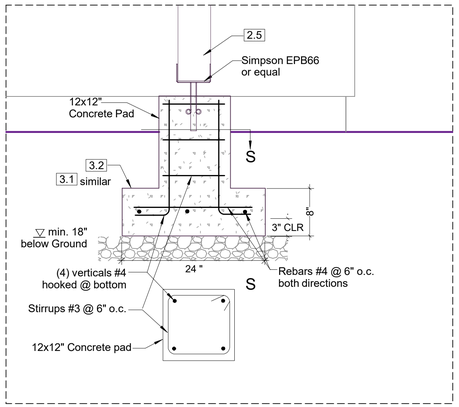
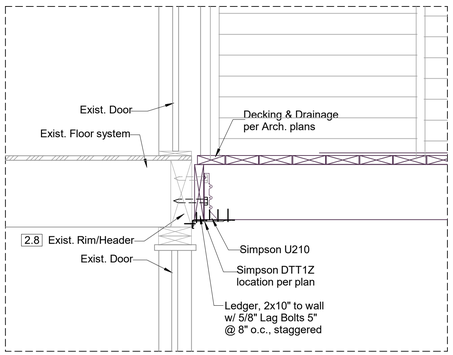
Telephone (206) 553 9076 - email: www.rheimisch@yahoo.com
ENGINEERING

CLIENT:	Eric & Jodi Blohm	SHEET
JOB SITE:	5642 E Mercer Way, Mercer Island, WA	S2
PROPERTY #		
DESCRIPTION:	New Covered Deck	
DATE:	03/30/2023 SCALE: as noted	
ENGINEER:	Roland Heimisch, P. E.	

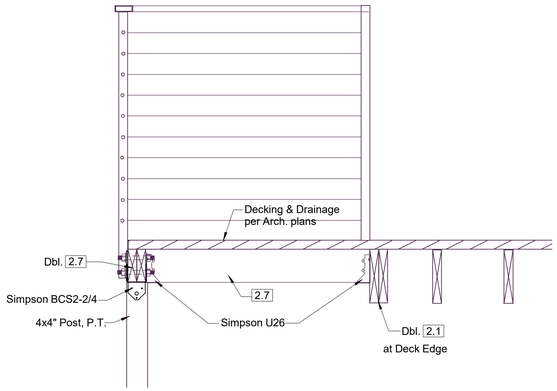




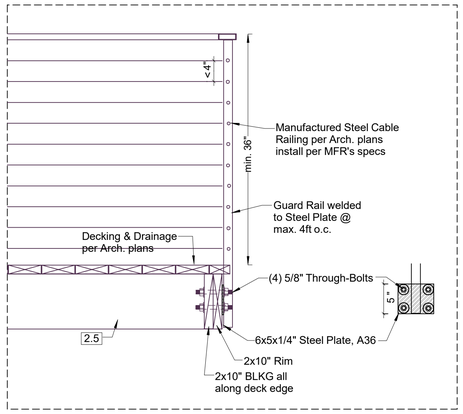
DETAIL (1) SCALE: 1" = 1'-0" (1:12)



DETAIL (2) SCALE: 1" = 1'-0" (1:12)

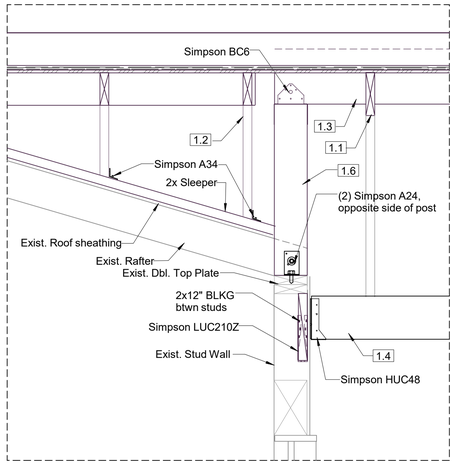


DETAIL (4) SCALE: 1" = 1'-0" (1:12)

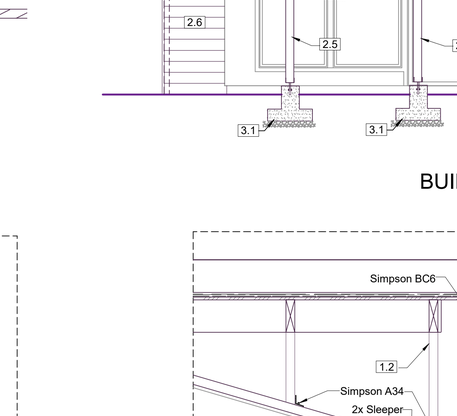


DETAIL (3) SCALE: 1" = 1'-0" (1:12)

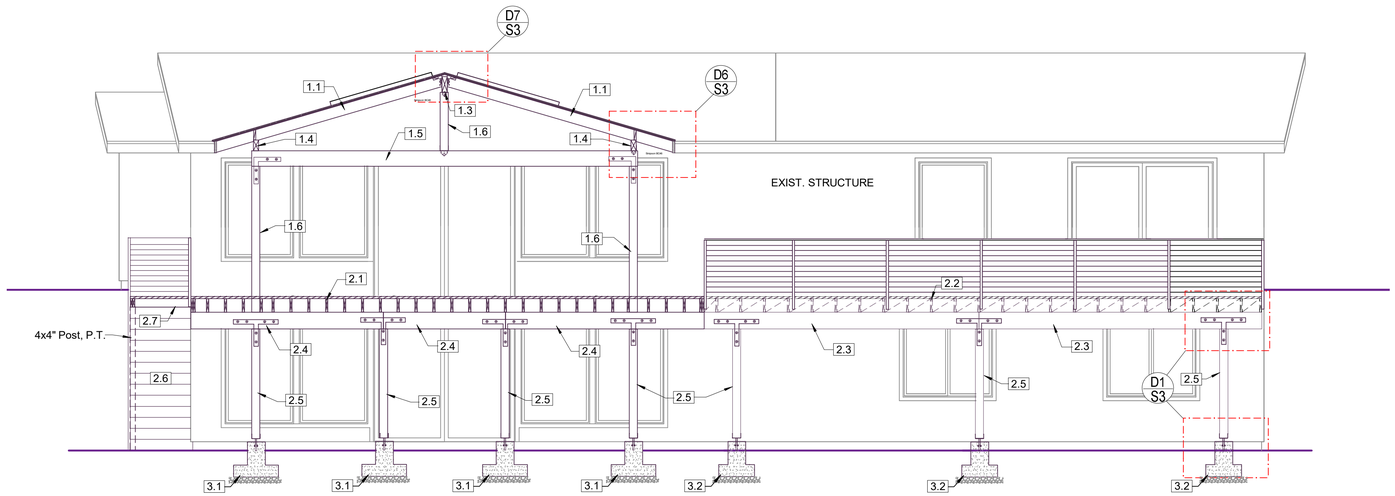
DETAIL (7) SCALE: 1" = 1'-0" (1:12)



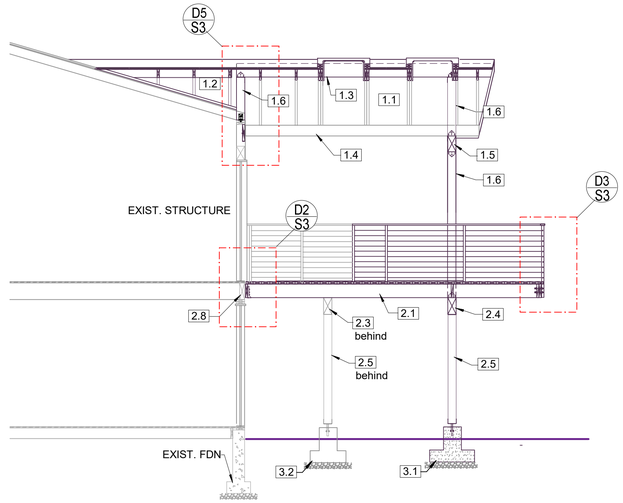
DETAIL (5) SCALE: 1" = 1'-0" (1:12)



DETAIL (6) SCALE: 1" = 1'-0" (1:12)



BUILDING SECTION A-A SCALE: 1/4" = 1'-0" (1:48)



BUILDING SECTION B SCALE: 1/4" = 1'-0" (1:48)

ROLAND HEIMISCH
STATE OF WASHINGTON
13479
REGISTERED
PROFESSIONAL ENGINEER

tecinstruct LLC
4111 164th St. SW #51, Lynnwood, WA 98087
Telephone (206) 553 9076 - email: www.rheimisch@yahoo.com
ENGINEERING

CLIENT:	Eric & Jodi Blohm	SHEET
JOB SITE:	5642 E Mercer Way, Mercer Island, WA	S3
PROPERTY #		
DESCRIPTION:	New Covered Deck	
DATE:	03/30/2023 SCALE: as noted	
ENGINEER:	Roland Heimisch, P. E.	

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED, APN NO. 20150826000882)

PARCEL A:
THAT PORTION OF GOVERNMENT LOT 3, SECTION 19, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M., RECORDS OF KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT OF A LINE 2120.00 FEET NORTH OF THE SOUTH LINE OF SAID SECTION, WHICH IS 1032.41 FEET EAST OF THE NORTH–SOUTH CENTERLINE OF SAID SECTION;
THENCE NORTH 03°58'12" EAST 100.24 FEET TO A LINE 2220.00 FEET NORTH OF THE SOUTH LINE OF SAID SECTION;
THENCE EAST 300.00 FEET TO THE WESTERLY LINE OF THAT CERTAIN PRIVATE ROADWAY ESTABLISHED AND NOW EXISTING UNDER EASEMENT RECORDED UNDER AUDITOR'S FILE NO. 4004443, RECORDS OF KING COUNTY;
THENCE SOUTH 03°58'12" WEST ALONG SAID WESTERLY LINE 100.24 FEET TO A POINT EAST OF THE POINT OF BEGINNING;
THENCE WEST 300.00 FEET TO THE POINT OF BEGINNING;

PARCEL B:
THAT PORTION OF GOVERNMENT LOT 3, SECTION 19, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M., RECORDS OF KING COUNTY, WASHINGTON, LYING BETWEEN LINES PARALLEL WITH AND 2205.00 FEET AND 2220.00 FEET NORTH OF THE SOUTH LINE OF SAID SECTION AND EASTERLY OF THE ABOVE DESCRIBED PRIVATE ROADWAY;

TOGETHER WITH SHORELANDS CONVEYED BY THE STATE OF WASHINGTON, SITUATE IN FRONT OF, ADJACENT TO, OR ABUTTING THEREON; AND TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER SAID PRIVATE ROADWAY, LYING EAST OF EAST MERCER WAY BETWEEN LINES DRAWN PARALLEL TO AND DISTANT RESPECTIVELY 1400 AND 2220 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 19, DESCRIBED AS MORE FULLY PROVIDE IN EASEMENT DATED MARCH 25, 1942 UNDER AUDITOR'S FILE NO. 3230364 AND IN EASEMENT DATED JUNE 1, 1943, RECORDED APRIL 10, 1950 UNDER AUDITOR'S FILE NO. 4004443, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

NAD 83(2011) WASHINGTON NORTH COORDINATE SYSTEM PER GPS OBSERVATIONS, THE CENTERLINE OF E MERCER WAY BEARS N 05°41'32" E BETWEEN FOUND MONUMENTS.

REFERENCES

1. UNRECORDED SURVEY BY DUFFY, LAWYER & KUMPF, INC. ENGINEERS LAND SURVEYORS, DATED DEC. 23, 1975 641/30
2. RECORD OF SURVEY, BOOK 150, AT PAGE 193, KING COUNTY, WASHINGTON.
3. RECORD OF SURVEY, VOLUME 151, PAGE 17, IN KING COUNTY, WASHINGTON.
4. RECORD OF SURVEY, VOLUME 67, PAGE 181, IN KING COUNTY, WASHINGTON.
5.
6. RECORD OF SURVEY, VOLUME 74, PAGE 224, IN KING COUNTY, WASHINGTON.
7. TIMBERLAND NO. 7 PLAT
8. KING COUNTY CONTROL SURVEY, SEC. 19, TWP. 24, RGE 05

VERTICAL DATUM

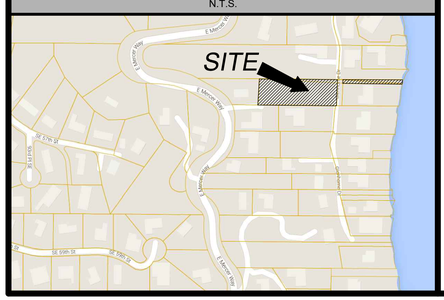
NAVD88 PER GPS OBSERVATIONS

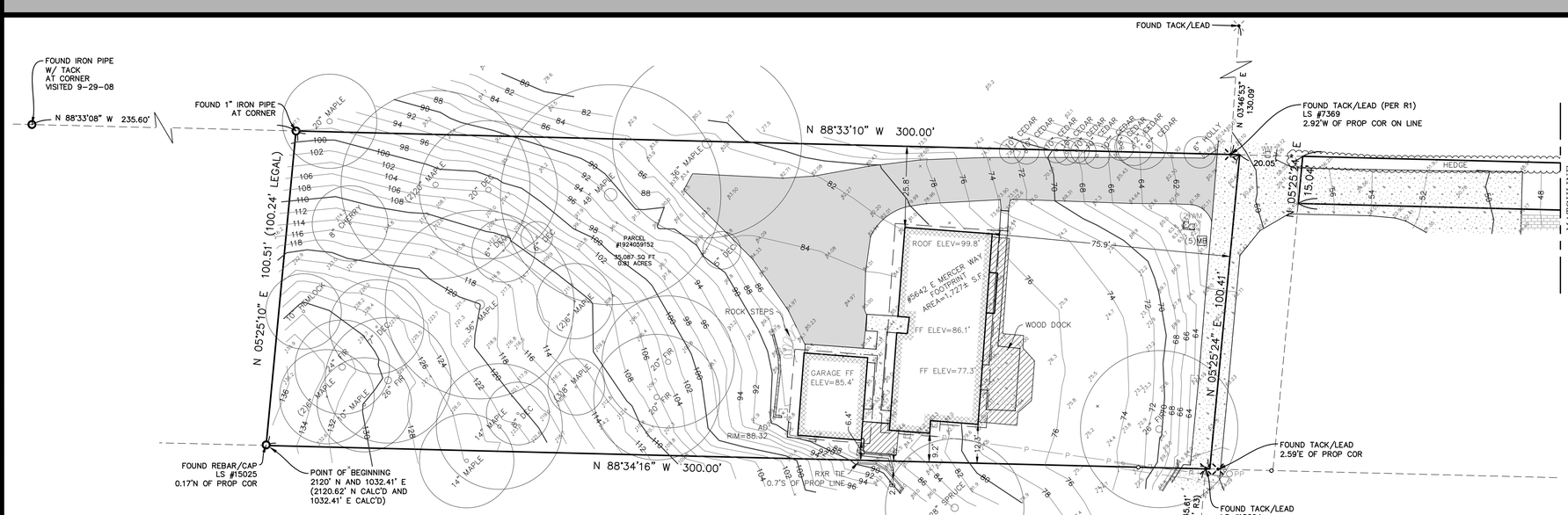
SURVEYOR'S NOTES

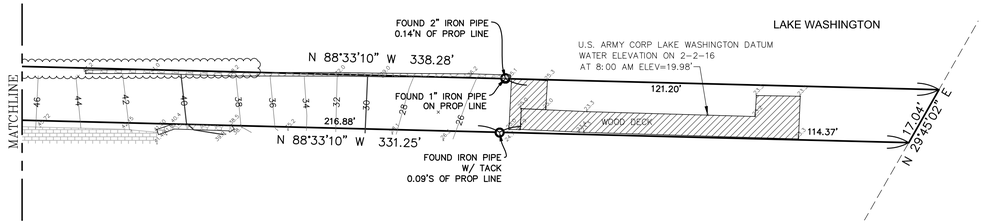
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2016. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. GEODIMENSIONS ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1–800–424–5555 BEFORE CONSTRUCTION.
3. SUBJECT PROPERTY TAX PARCEL NO. 1924059152
4. SUBJECT PROPERTY AREA PER THIS SURVEY IS 35,087± S.F. (0.81± ACRES)
5. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
6. INSTRUMENTATION FOR THIS SURVEY WAS A TRIMBLE ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS STATE STANDARDS SET BY WAC 332–130–090.

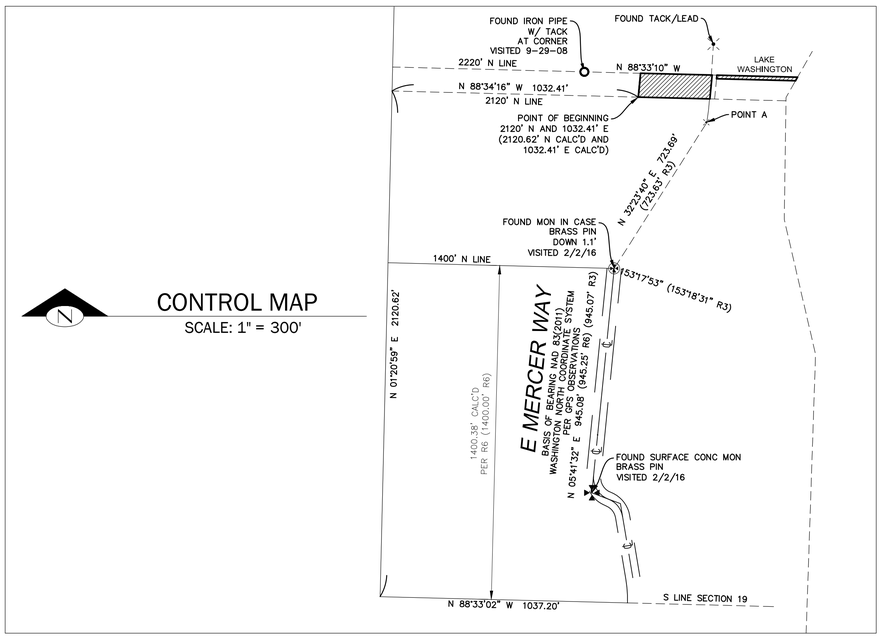
VICINITY MAP

N.T.S.









CONTROL MAP

SCALE: 1" = 300'

LEGEND

- ASPHALT SURFACE
- BUILDING
- CENTERLINE ROW
- CONCRETE SURFACE
- DECK
- GAS METER
- HEDGE ROW
- IRON PIPE (FOUND)
- SURFACE MON
- MON IN CASE (FOUND)
- NAIL AS NOTED
- POWER METER
- POWER (OVERHEAD)
- POWER POLE
- REBAR AS NOTED/FOUND
- ROCKERY
- TELEPHONE (OVERHEAD)
- TREE (AS NOTED)
- WATER METER
- WOOD FENCE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

measure success

TOPOGRAPHIC & BOUNDARY SURVEY
NE 1/4 OF SE 1/4 SEC 19, TWP. 24 N., RGE 05 E., W.M.
PARCEL NO. 1924059152

BLOHM RESIDENCE
5642 E MERCER WAY
MERCER ISLAND, WA 98040

SEAN A. PAULETTE-MILLER — STATE OF WASHINGTON — 22400 — REGISTERED LAND SURVEYOR

GeoDimensions
GeoDimensions, Inc., 10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4468 support@geodimensions.net
www.geodimensions.net

JOB NUMBER:	160011
DATE:	2/26/16
DRAFTED BY:	TGC
CHECKED BY:	SRM
SCALE:	1"= 20'

REVISION HISTORY

SHEET NUMBER
1 OF 1