

**VIAQ CODE SUMMARY**

HOUSE VENTILATION SYSTEM AND SPOT VENTILATION SYSTEMS TO COMPLY WITH 2009 WASH. STATE VIAQ CODE.

PROVIDE VENTILATION SYSTEM AS DIAGRAMMED IN DETAIL A/1.

WHOLE HOUSE VENTILATION SYSTEM MUST BE PERFORMANCE TESTED PRIOR TO THE FINAL INSPECTION BY THE INSTALLER OR A QUALIFIED THIRD PARTY. A LETTER OF COMPLIANCE ADDRESSING BOTH THE ACH AND CFM REQUIREMENTS MUST BE AVAILABLE FOR THE INSPECTOR AND A STICKER WITH THE SAME INFORMATION PLACED ON THE DUCT IN PROXIMITY TO THE FLOW DAMPER BEFORE A CERTIFICATE OF OCCUPANCY CAN BE ISSUED.

SEE FLOOR PLANS FOR LOCATION OF REQUIRED SPOT VENTILATION, WHOLE HOUSE FAN, TIMER AND RADON RECORDING EQUIPMENT.

CONSULT BOTH ELECTRICAL AND MECHANICAL CONTRACTORS REGARDING WIRING RELAYS BETWEEN VENTILATION SYSTEM COMPONENTS.

ALL GROUP R OCCUPANCIES SHALL CONFORM WITH SECTION 302.6.4 OF THE WASH. STATE VENTILATION AND INDOOR AIR QUALITY CODE WHICH STATES THAT DISTRIBUTION OF OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM, WHERE OUTDOOR AIR SUPPLIES ARE SEPARATE FROM EXHAUST POINTS BY DOORS, PROVISIONS SHALL BE MADE TO ENSURE AIR FLOW BY UNDERCUTTING DOORS, INSTALLATION OF GRILLS, TRANSOMS, OR SIMILAR MEANS WHERE PERMITTED BY THE UNIFORMED BUILDING CODE.

**ENERGY CODE SUMMARY**

ANALYSIS IS BASED ON 2015 WASHINGTON STATE ENERGY CODE, CHAPTER 6, DESIGN BY PERSCRIPTIVE REQUIREMENTS FOR GROUP R-3 OCCUPANCY (TABLE 6-1, CLIMATE ZONE 1)

**OPTION III**

PERCENTAGE OF GLAZING TO TOTAL FLOOR AREA	UNLIMITED
MAXIMUM GLAZING U-VALUE (VERTICAL)	.30
MAXIMUM GLAZING U-VALUE (OVERHEAD)	.50
MAXIMUM DOOR U-VALUE (606.6 EXCEPTION 2)	.20
CEILINGS	R-49
CEILINGS (VAULTED)	R-38
WALLS ABOVE GRADE	R-21 (NT.)
FLOORS	R-30
SLAB ON GRADE	R-10

**DESIGN LOADS:**

FLOOR	50#/ S.F. TOTAL LOAD (65 S.F. @ STONE)
ROOF	45#/ S.F. TOTAL LOAD
ROOF (TRUSSES OR VAULTED CEILING)	50#/ S.F. TOTAL LOAD
CEILING JOISTS	15#/ S.F. TOTAL LOAD
INTERIOR PARTITION WALL (2x4 STUDS @ 16" O.C.)	50#/ L.F.
INTERIOR WALL (2x6 STUDS @ 16" O.C./ 8'-0" TALL)	70#/ L.F.
EXTERIOR WALL (2x4 STUDS @ 16" O.C./ 8'-0" TALL)	90#/ L.F.
EXTERIOR WALL (2x6 STUDS @ 16" O.C./ 8'-0" TALL)	110#/ L.F.
SOIL BEARING CAPACITY (MIN.) (SEE SOILS REPORT BY BGC, PLLC)	2,500#/ S.F.
DECKS	70#/ S.F.

**DESIGN CRITERIA:**

2015 INTERNATIONAL BUILDING CODE  
 2015 INTERNATIONAL RESIDENTIAL CODE  
 R-3 OCCUPANCY GROUP  
 V-N TYPE CONSTRUCTION  
 SEISMIC ZONE #3  
 LATERAL LOAD-RESISTING FACTOR RW = 5.5  
 BASIC WIND SPEED = 80 M.P.H.  
 EXPOSURE 'C'  
 LIVE LOADS FOR EXIT FACILITIES = 40 P.S.F.

**HARDSCAPE CALCULATION:**

A. GROSS LOT AREA	14,203 S.F.
B. NET LOT AREA	12,000 S.F.
C. AREA BORROWED FROM LOT COVERAGE	0 S.F.
D. ALLOWED HARDSCAPE AREA (9% + C)	1,080 S.F.
E. ALLOWED HARDSCAPE AREA	1,080 S.F.
F. TOTAL EXISTING HARDSCAPE AREA (1-7)	0 S.F.
G. (TOTAL HARDSCAPE AREA REMOVED)	0 S.F.
H. TOTAL NEW HARDSCAPE AREA	470 S.F.
1. UNCOVERED DECKS	140 S.F.
2. UNCOVERED PATIOS	43 S.F.
3. WALKWAYS	0 S.F.
4. STAIRS	9 S.F.
5. ROCKERIES & RETAINING WALLS	0 S.F.
6. OTHER	0 S.F.
7. TOTAL NEW HARDSCAPE AREA	662 S.F.
I. TOTAL PROJECT HARDSCAPE AREA	662 S.F.
J. TOTAL PROJECT HARDSCAPE AREA	6.13%

**LOT SLOPE CALCULATION:**

HIGHEST ELEVATION	86.0'
LOWEST ELEVATION	50.0'
ELEVATION DIFFERENCE	36.0'
HORIZONTAL DIFFERENCE BETWEEN HIGHEST & LOWEST ELEVATION	186 L.F.
LOT SLOPE	19.36%

**GROSS FLOOR AREA: (GFA)**

LOT AREA (GROSS LOT=14,203 S.F.-2,203 S.F. EASEMENT)	12,000 S.F. (NET)
BUILDING FOOTPRINT PER MERCER ISLAND CALC'S (INCLUDING MAIN FLOOR, UPPER FLOOR, BASEMENT & GARAGE W/ALLOW. BASEMENT DEDUCTION OF 525 S.F.)	5,156 S.F.
ALLOWABLE PERCENTAGE OF COVERAGE (5,400 S.F.)	45 %
ACTUAL PERCENTAGE OF COVERAGE (5,156 S.F.)	42.97 %

**HEIGHT RESTRICTION:**

MAX. ALLOWABLE BUILDING HEIGHT (30')	98.06'
ACTUAL BUILDING HEIGHT (SEE EAST ELEVATION SHT. # 11)	96.50'

**LOT COVERAGE:**

A. GROSS LOT AREA	14,203 S.F.
B. NET LOT AREA	12,000 S.F.
C. ALLOWED LOT COVERAGE AREA	0 S.F.
D. ALLOWED LOT COVERAGE	4,200 S.F.
E. EXISTING LOT COVERAGE:	
1. MAIN STRUCTURE ROOF AREA	0 S.F.
2. ACCESSORY BUILDING ROOF AREA	0 S.F.
3. VEHICULAR USE (DRIVEWAY, PAVED ACCESS EASEMENTS-PORTION USED BY THE LOT-PARKING)	1,658 S.F.
4. COVERED PATIOS AND COVERED DECKS	0 S.F.
5. TOTAL EXIST'G LOT COVERAGE AREA	0 S.F.
F. TOTAL LOT COVERAGE AREA REMOVED	1,658 S.F.
G. PROPOSED ADJUSTMENT FOR SINGLE STORY	0 S.F.
H. PROPOSED ADJUSTMENT FOR FLAG LOT	0 S.F.
I. TOTAL NEW LOT COVERAGE AREA:	
1. MAIN STRUCTURE ROOF AREA	2,757 S.F.
2. ACCESSORY BUILDING ROOF AREA	0 S.F.
3. VEHICULAR USE (DRIVEWAY, PAVED ACCESS EASEMENTS-PORTION USED BY THE LOT-PARKING)	1,436 S.F.
4. COVERED PATIOS AND COVERED DECKS	0 S.F.
5. TOTAL NEW LOT COVERAGE AREA	4,193 S.F.
I. TOTAL PROJECT LOT COVERAGE AREA:	4,193 S.F.
I. PROPOSED LOT COVERAGE AREA:	34.94%

**AVERAGE GRADE CALCS.**

LENGTH	ELEVATION	TOTAL	
A	24	71.75	1722.00
B	2	74.00	148.00
C	12	75.00	900.00
D	22	76.00	1672.00
E	79.5	67.50	5366.25
F	43.5	61.60	2679.60
G	7.75	64.00	496.00
H	1	64.85	64.85
I	6	65.50	393.00
J	1	66.00	66.00
K	24.75	67.65	1674.34
L	11.5	69.40	798.10
M	5	68.60	343.00
N	6.5	68.00	442.00
O	2	68.10	136.20
P	9	67.95	611.55
Q	8	68.35	546.80
R	7.5	69.25	519.38
<b>TOTAL</b>	<b>273</b>	<b>18,579.07</b>	

18,579.07/273 = 68.06'  
 AVERAGE GRADE = 68.06'  
 MAX. BUILDING HEIGHT = 68.06' + 30' = 98.06'  
 PROPOSED BUILDING HEIGHT = 96.5'

NOTE: PARCEL NO. 5315100056

**NOTE:**  
 EXISTING ASPHALT DRIVEWAY OF EASEMENT AND TRACT 'X' MUST BE REPLACED WITH BRUSHED CONCRETE PER SHORT PLAT/FIRE REQUIREMENTS.

NOTE: THERE WILL BE APPROXIMATELY 123 CU. YRS. OF GRADING OUTSIDE OF THE BUILDING FOOTPRINT.

R-12 ZONING

PROVIDE 2:1 MAX. SLOPE @ SITE-TYP

**FIRE REQUIREMENTS NOTE:**

- 1- PROJECT TO BE NFPA 13-R MODIFIED
- 2- PROVIDE MONITORED WATER FLOW ALARM
- 3- PROVIDE FIRE RETARDANT COATING IN ATTIC AND CRAWLSPACE

**NOTE:**

PRIOR TO STAKING FOUNDATION, A LICENSED SURVEYOR MUST VERIFY THAT THE DIMENSIONS SHOWN ON ARCHITECT'S FOUNDATION PLAN PROPERLY CLOSE. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO ARCHITECT PRIOR TO PRECEEDING WITH THE WORK.

**SHEET INDEX**

**ARCHITECTURAL DRAWINGS**

- 1 SITE PLAN, ENERGY CODE COMPLIANCE, NOTES AND DETAILS
  - 2 FOUNDATION PLAN
  - 3 FOUNDATION AND GENERAL DETAILS
  - 4 LOWER FLOOR PLAN
  - 5 MAIN FLOOR FRAMING PLAN
  - 6 MAIN FLOOR PLAN
  - 7 UPPER FLOOR FRAMING PLAN
  - 8 UPPER FLOOR PLAN
  - 9 ROOF FRAMING PLAN
  - 10 ELEVATIONS
  - 11 ELEVATIONS
  - 12 BUILDING SECTIONS & NOTES TO CONSTRUCTION
  - 13 GENERAL NOTES AND DETAILS
  - 14 TJI DETAILS AND NOTES
  - 15 LOWER FLOOR ELECTRICAL PLAN
  - 16 MAIN FLOOR ELECTRICAL PLAN
  - 17 UPPER FLOOR ELECTRICAL PLAN
- STRUCTURAL ENGINEER DRAWINGS**
- S1 SHEAR WALL DETAILS, NOTES AND SCHEDULES
  - S2 SHEAR WALL DETAILS, NOTES AND SCHEDULES
  - S3 SHEAR WALL DETAILS, NOTES AND SCHEDULES
  - S4 FOUNDATION HOLDOWN & SHEAR WALL PLAN
  - S5 LOWER FLOOR SHEAR WALL PLAN
  - S6 MAIN FLOOR SHEAR WALL PLAN
  - S7 UPPER FLOOR SHEAR WALL PLAN

**AREA SUMMARY (ALL AREAS ARE APPROX.)**

LOWER FLOOR	1,503 S.F.
MAIN FLOOR	1,697 S.F.
UPPER FLOOR	1,640 S.F.
<b>TOTAL FINISHED AREA</b>	<b>4,840 S.F.</b>
OPEN DECK W/ IPE DECKING	470 S.F.
COVERED PORCH @ ENTRY	34 S.F.
GARAGE	841 S.F.

**NOTE:**  
 THE FINISHED SQUARE FOOTAGE SUMMARY HAS BEEN BASED ON THE "SQUARE FOOTAGE METHOD FOR CALCULATING" FOR SINGLE FAMILY RESIDENTIAL BUILDINGS, PER ANSI Z7765-1996 GUIDELINES. FINISHED SQUARE FOOTAGE CALCULATIONS FOR THIS RESIDENCE WERE MADE BASED ON PLAN DIMENSIONS ONLY AND MAY VARY FROM THE FINISHED SQUARE FOOTAGE OF THE HOUSE AS BUILT.

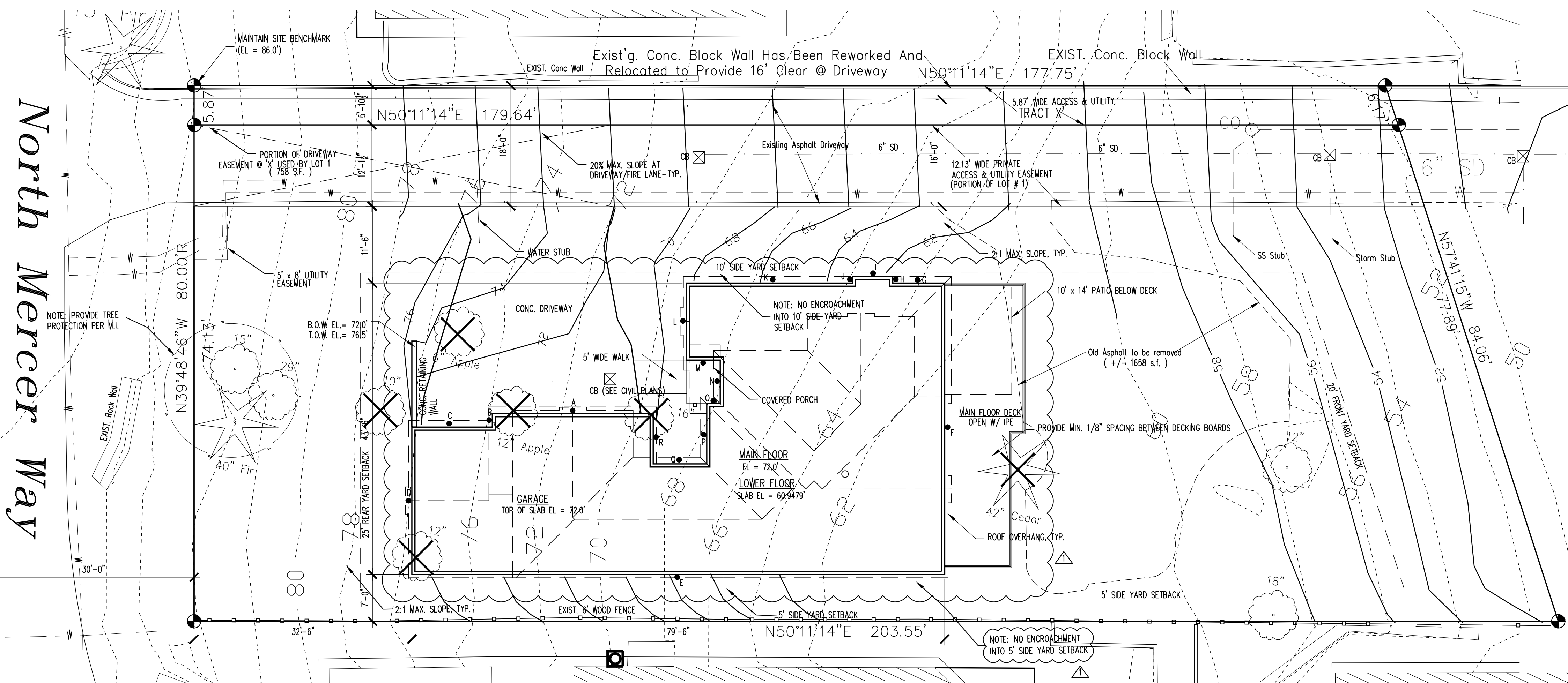
**NOTE TO SITE PLAN**

CONTENTS OF ARCHITECT'S SITE PLAN ARE FOR ORIENTATION PURPOSES ONLY AND NOT FOR CONSTRUCTION. ALL SITE PLAN DIMENSIONS AND CONDITIONS, BUILDING DIMENSIONS, AND SITE DEVELOPMENT MUST BE VERIFIED BY A PROFESSIONAL SURVEYOR PRIOR TO EXCAVATION TO PREVENT ENCROACHMENT AND ASSURE COMPLIANCE WITH BUILDING SETBACK REQUIREMENTS, BUILDING HEIGHT RESTRICTIONS, PROPERTY LINES, EASEMENTS AND OTHER SITE RESTRICTIONS WHICH APPLY.

SITE PLAN IS BASED SOLELY ON THE FOLLOWING DOCUMENTS MADE AVAILABLE TO THE ARCHITECT.

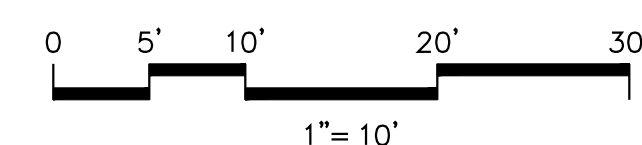
PLAT MAP	Y	DATED: 2016	BY: TRUE NORTH LAND SURVEYORS
SURVEY	Y	DATED: 2016	BY: TRUE NORTH LAND SURVEYORS
TITLE	Y	DATED: 2013	BY: CHICAGO TITLE INS. CO.

NO SEARCH OF PUBLIC RECORDS WAS MADE NOR ANY OTHER ACT PERFORMED TO DETERMINE THE POSSIBLE EXISTENCE OF ANY RECORDED OR UNRECORDED CLAIM AGAINST THE SUBJECT PROPERTY.



**DRAINAGE SWALE NOTE:**  
 PROVIDE DRAINAGE SWALE @ HOUSE PERIMETER FOR SITE DRAINAGE AWAY FROM RESIDENCE AND AWAY FROM ADJACENT PROPERTIES.

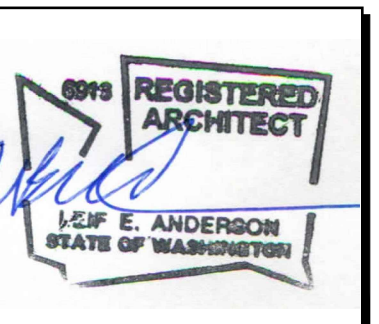
**SITE PLAN**



**NOTE:**  
 SHORT PLAT SUB13-008 HAS BEEN FINALED AND RECORDED PRIOR TO PERMIT ISSUANCE.

**NOTE:**  
 SEE CIVIL ENGINEERING DRAWINGS FOR ALL SITE DRAINAGE SPECIFICATIONS, NOTES, DETAILS AND TEMPORARY EROSION CONTROL REQUIREMENTS.

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A Custom Residence for  
**On The Rock 98040, LLC**  
 Lot 1, 7254 North Mercer Way, Mercer Island

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SHEET NO.  
**1**  
 OF 24