# ABBREVIATIONS:

AFF

BLW

BLK

BOW CAE

CLG

COL

CONT

FN

FRZF

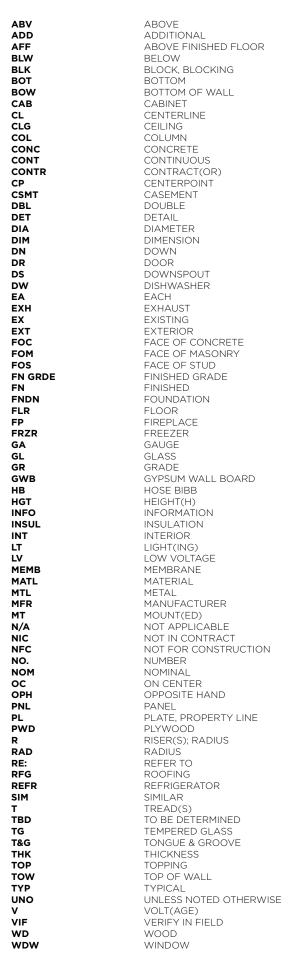
INFO

INSUL

MEME

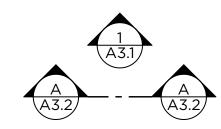
MATL

WDW



# FLOOR PLAN LEGEND:

EXISTING WALL TO REMAIN NEW FULL-HEIGHT WALL NEW FULL-HEIGHT CONCRETE Þ W/A11 PROPERTY LINE \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ BUILDING / STRUCTURE ABOVE \_\_\_\_\_



PARTIAL-HEIGHT WALL

BUILDING / STRUCTURE BELOW

CENTERLINE

AREA OF DRAWING REVISION

ELEVATION MARKER



## GENERAL PROJECT NOTES:

Ε

1. DO NOT SCALE DRAWINGS.

2. THIS PROJECT SHALL COMPLY WITH ALL GOVERNING REGULATIONS, ORDINANCES, BUILDING CODES, OR COVENANTS OF THE AREA IN WHICH IT IS BUILT.

3. APPROVAL BY AN INSPECTOR DOES NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS OR SPECIFICATIONS. 4. THE CONTRACTOR SHALL SCHEDULE WALK-THROUGHS AT EACH OF BELOW NOTED INTERVALS:

A. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. B. PRIOR TO THE COMMENCEMENT OF ALL MECHANICAL + ELECTRICAL

WORK. 5. PROVIDE ALL NECESSARY BARRICADES, WARNING SIGNS, + DEVICES TO PROTECT PUBLIC + CONSTRUCTION PERSONNEL DURING CONSTRUCTION.

6. MAINTAIN ALL REQUIRED ACCESS + EGRESS DURING CONSTRUCTION.

# DUTY OF COOPERATION:

RELEASE + ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, THE CONTRACTOR, + RIPPLE DESIGN STUDIO. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED BY THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO RIPPLE DESIGN STUDIO. FAILURE TO DO SO SHALL RELIEVE RIPPLE DESIGN STUDIO FROM ANY RESPONSIBILITY OF THE CONSEQUENCES.

ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT THE CONSENT OF RIPPLE DESIGN STUDIO ARE UNAUTHORIZED. FAILURE TO OBSERVE THESE PROCEDURES SHALL RELIEVE RIPPLE DESIGN STUDIO OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH ACTIONS.

## MERCER PARCEL 3 8379 E. MERCER WAY MERCER ISLAND

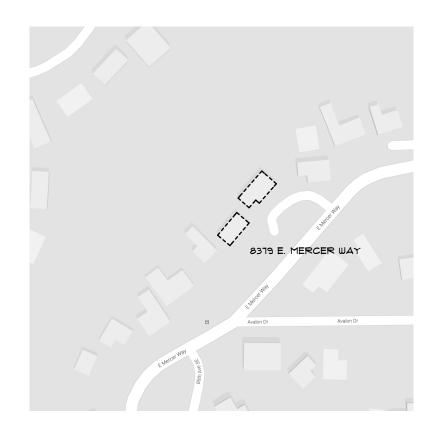
## WSEC 2015 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2015 PRESCRIPTIVE METHOD.

2. INSULATION VALUES SHALL BE AS FOLLOWS:

- A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
- B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX. C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
- D. ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
- E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN. F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT
- INSULATION MIN. G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
- H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
- I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
- J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
- 3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS. 4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE
- VENTILATION @ KITCHEN. 5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION
- @ ALL BATHS + LAUNDRY. 6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM
- EF OF 0.91 (WSEC 406.2, CREDIT 5c). 7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL
- NOT BE LESS THAN 1 FT<sup>2</sup> FOR EACH 300 FT<sup>2</sup> OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE, EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
- 8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
- 9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

## VICINITY MAP:



## IMPERVIOUS SURFACE CALCULATIONS:

LOT AREA: ALLOWABLE LOT COVERAGE: (LOT SLOPE IS BETWEEN 15% AND 30%)

PROPOSED RESIDENCE ROOF AREA: PROPOSED DRIVES + WALK AREA: EXISTING WETLAND AREA TO REMAIN:

TOTAL IMPERVIOUS SURFACE UPON COMPLETION:

2,748 FT<sup>2</sup> 1,127 FT<sup>2</sup> 1,948 FT<sup>2</sup> 5,823 FT<sup>2</sup> (22.35%)

26,053 FT<sup>2</sup>

9,119 FT² (35%)

# PROJECT INFO:

PROJECT ADDRESS: 8379 E. MERCER WAY PARCEL 3 MERCER ISLAND, WA 98040

SCOPE OF WORK: NEW SINGLE FAMILY RESIDENCE

ZONE: R-8.4 + R-9.6

LEGAL DESCRIPTION:

ACCESSOR'S PARCEL NUMBER: #Project Status

BUILDING CODE + OCCUPANCY: 2012 IRC (ARCHITECTURAL) + 2012 IBC (STRUCTURAL) R-3 SINGLE-FAMILY RESIDENTIAL (RESIDENCE) U STORAGE (GARAGE, STORAGE)

TYPE OF CONSTRUCTION: TYPE-V-N NON-SPRINKLERED

OCCUPANT LOAD CALCULATIONS: PROPOSED BASEMENT GROSS FLOOR AREA: OCCUPANT LOAD FACTOR (ACCESSORY STORAGE): BASEMENT OCCUPANT LOAD: PROPOSED FIRST FLOOR GROSS FLOOR AREA: OCCUPANT LOAD FACTOR (ACCESSORY STORAGE): FIRST FLOOR OCCUPANT LOAD: PROPOSED SECOND FLOOR GROSS FLOOR AREA: OCCUPANT LOAD FACTOR (RESIDENTIAL): SECOND FLOOR OCCUPANT LOAD: TOTAL OCCUPANT LOAD:

GROSS FLOOR AREA CALCULATIONS:

LOT AREA: MAX ALLOWABLE BUILDING GROSS FLOOR AREA:

PROPOSED BASEMENT AREA: PROPOSED FIRST FLOOR: PROPOSED GARAGE: PROPOSED SECOND FLOOR: TOTAL BUILDING GROSS FLOOR AREA:

## W A 98040

AVALON PARK ADD & SELY 40 FT OF POR OF NW 1/4 NWLY LN OF SD 7 & BET SWLY & NELY LNS THOF EXTND WLY

1,246 FT<sup>2</sup> 2,083 FT<sup>2</sup> 953 FT<sup>2</sup> 1,943 FT<sup>2</sup> 6,225 FT<sup>2</sup> (23.8%)

1,145 FT<sup>2</sup>

1 PER 200 FT<sup>2</sup>

6 OCCUPANTS

1 PER 200 FT<sup>2</sup>

10 OCCUPANTS

1 PER 200 FT<sup>2</sup>

10 OCCUPANTS

26,053 FT<sup>2</sup>

11,723.85 FT<sup>2</sup> (45%)

26 OCCUPANTS

1,898 FT<sup>2</sup>

1,843 FT<sup>2</sup>

PAGE:	SHEET NAME:
A1.0	PROJECT INFORMATION
	SURVEY 1
	SURVEY 2
	SURVEY 3
	SURVEY 4
A1.1	SITE PLAN
A2.0	BASEMENT PLAN
A2.1	FIRST FLOOR PLAN
A2.2	SECOND FLOOR PLAN
A2.3	ROOF PLAN
A3.1	NORTH + SOUTH BUILDING ELEVATIONS
A3.2	EAST BUILDING ELEVATION
A3.3	WEST BUILDING ELEVATIONS
A3.4	BUILDING SECTIONS A-A THROUGH B-B
A4.1	DOOR + WINDOW SCHEDULES
S1.1	GENERAL STRUCTURAL NOTES
S2.0	BASEMENT / FOUNDATION PLAN
S2.1	FIRST FLOOR FRAMING PLAN
S2.2	SECOND FLOOR FRAMING PLAN
S2.3	ROOF FRAMING PLAN
S3.1	CONCRETE DETAILS

CONCRETE DETAILS

FLOOR FRAMING DETAILS

FLOOR FRAMING DETAILS

FLOOR FRAMING DETAILS

ROOF FRAMING DETAILS

S3.2

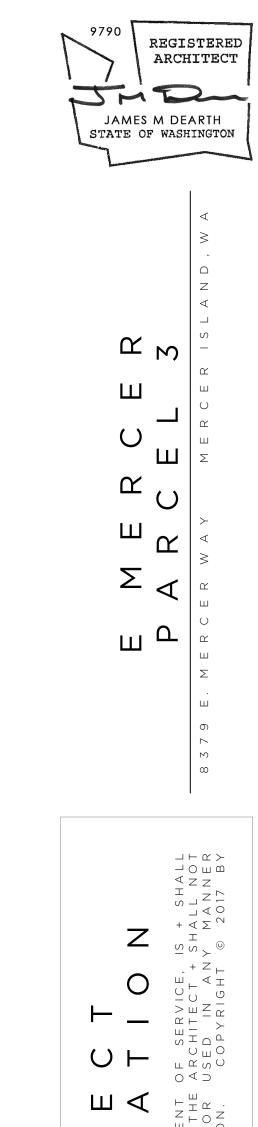
S4.1

S4.2

S4.3

SHEET INDEX:





# PROJECT TEAM:

CLIENT:

NEW HORIZON REAL ESTATE DEVELOPMENT 8744 126TH AVE NE KIRKLAND, WA 206.557.0772

### ARCHITECT / APPLICANT: RIPPLE DESIGN STUDIO. INC. - JIM DEARTH 4303 STONE WAY N SEATTLE, WA 98103 206.913.2333

SURVEYOR: GEODIMENSIONS, INC. - KEN GREEN 10801 MAIN STREET, SUITE 102 BELLEVUE, WA 98004 425.458.4488

GEOTECHNICAL ENGINEER: PANGEO, INC. - MICHAEL XUE 3213 EASTLAKE AVE E SUITE B SEATTLE, WA 98102 206.262.0307

CIVIL ENGINEER: CIVIL ENGINEERING SOLUTIONS - JEFFREY ELLIS 2244 NW MARKET ST UNIT B SEATTLE, WA 98107 206.930.0342

STRUCTURAL ENGINEER: BUKER ENGINEERING - DANIEL BUKER PO BOX 28531 SEATTLE, WA 98118 206.310.3559

CONTRACTOR: TBD



E MERCER PARCEL 3

## **RUN YONG USA** MERCER ISLAND LOT LINE REVISION NO. SUB 16-004

### DECLARATION

WE THE UNDERSIGNED OWNER(S) IN FEE SIMPLE [AND CONTRACT PURCHASER(S)] OF THE LAND HEREIN DESCRIBED, DO HEREBY MAKE A LOT LINE REVISION THEREOF PURSUANT TO RCW 58.17.060 AND DECLARE THIS LOT LINE REVISION TO BE THE GRAPHIC REPRESENTATION OF THE SAME, AND THAT SAID SHORT SUBDIVISION IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE OWNER(S).

IN WITNESS WHEREOF WE HAVE SET OUR HANDS AND SEALS.

} SS.

### BY: \_\_\_\_

RUN YONG USA

### ACKNOWLEDGEMENTS

STATE OF WASHINGTON }

COUNTY OF KING }

I CERTIFY THAT I KNOW OR HAVE SATISFACTORY EVIDENCE THAT \_\_\_\_\_ IS THE PERSON WHO APPEARED

BEFORE ME, AND SAID PERSON ACKNOWLEDGED THAT HE/SHE SIGNED THIS INSTRUMENT, ON OATH STATED THAT HE/SHE WAS AUTHORIZED TO EXECUTE THE INSTRUMENT AND ACKNOWLEDGED IT AS THE\_\_\_\_\_

OF RUN YONG USA, TO BE THE FREE AND VOLUNTARY ACT OF SUCH PARTY FOR THE USES AND PURPOSES MENTIONED IN THE INSTRUMENT.

(BASIS OF BEARING)

N87º10'24"E 653.26'(MEAS)(CALC)

GIVEN UNDER MY HAND AND OFFICIAL SEAL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016.

NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON

FD REBAR W/CAP

CONTROL MAP

SCALE: 1" = 60'

#28101, HELD

PRINTED NAME MY COMMISSION EXPIRES \_\_\_\_

### CITY OF MERCER ISLAND APPROVALS

EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016.

### CODE OFFICIAL

EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016.

### CITY ENGINEER

KING COUNTY DEPARTMENT OF ASSESSMENTS

EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016.

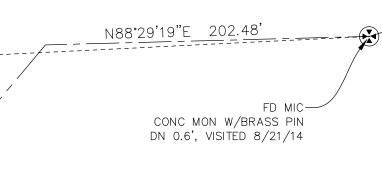
ASSESSOR

### BASIS OF BEARINGS

PER PLAT OF AVALON PARK, VOL. 49, PAGE(S) 64 & 65, RECORDS OF KING COUNTY, WASHINGTON.

### SURVEY NOTES:

- 1. THE SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2014. 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.
- 2. INSTRUMENTATION FOR THIS SURVEY WAS A LEICA TOTAL STATION UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS WASHINGTON STATE STANDARDS SET BY WAC 332-130-090.
- 3. SEWER AND WATER UTILITIES FROM PUBLIC SERVICE.



### APPROVAL NOTE:

9

NR

19

MERCER

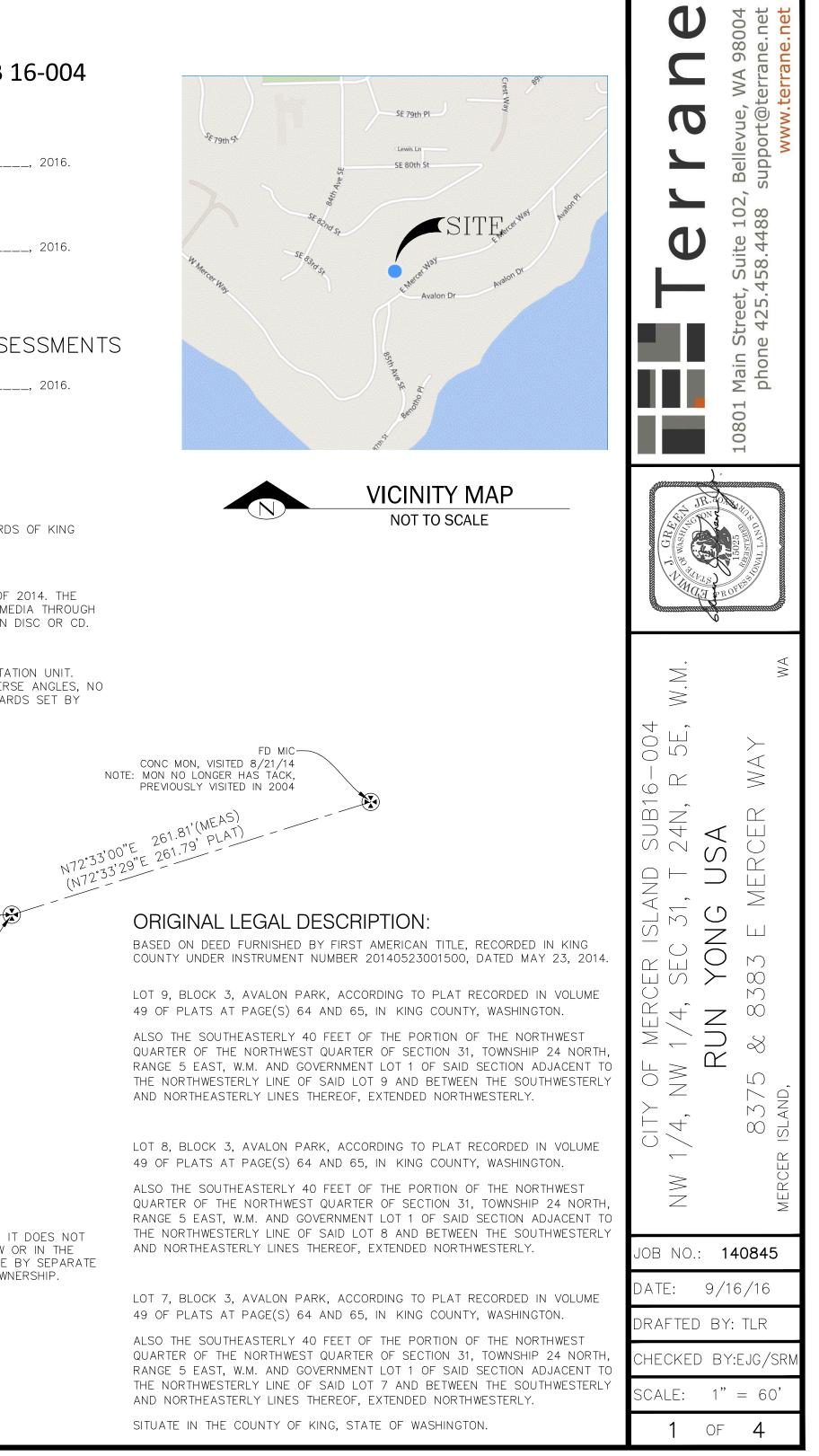
8

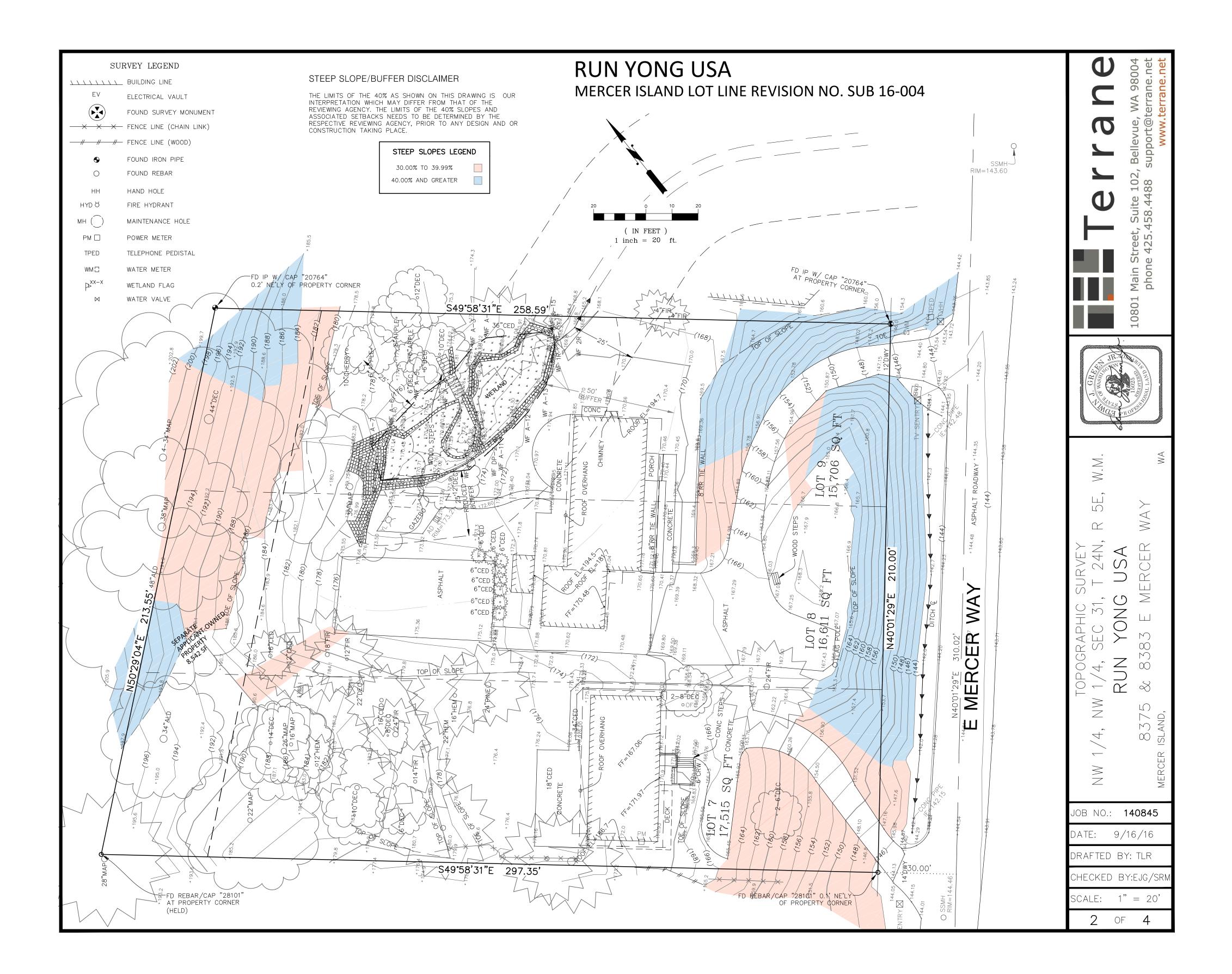
NACO (

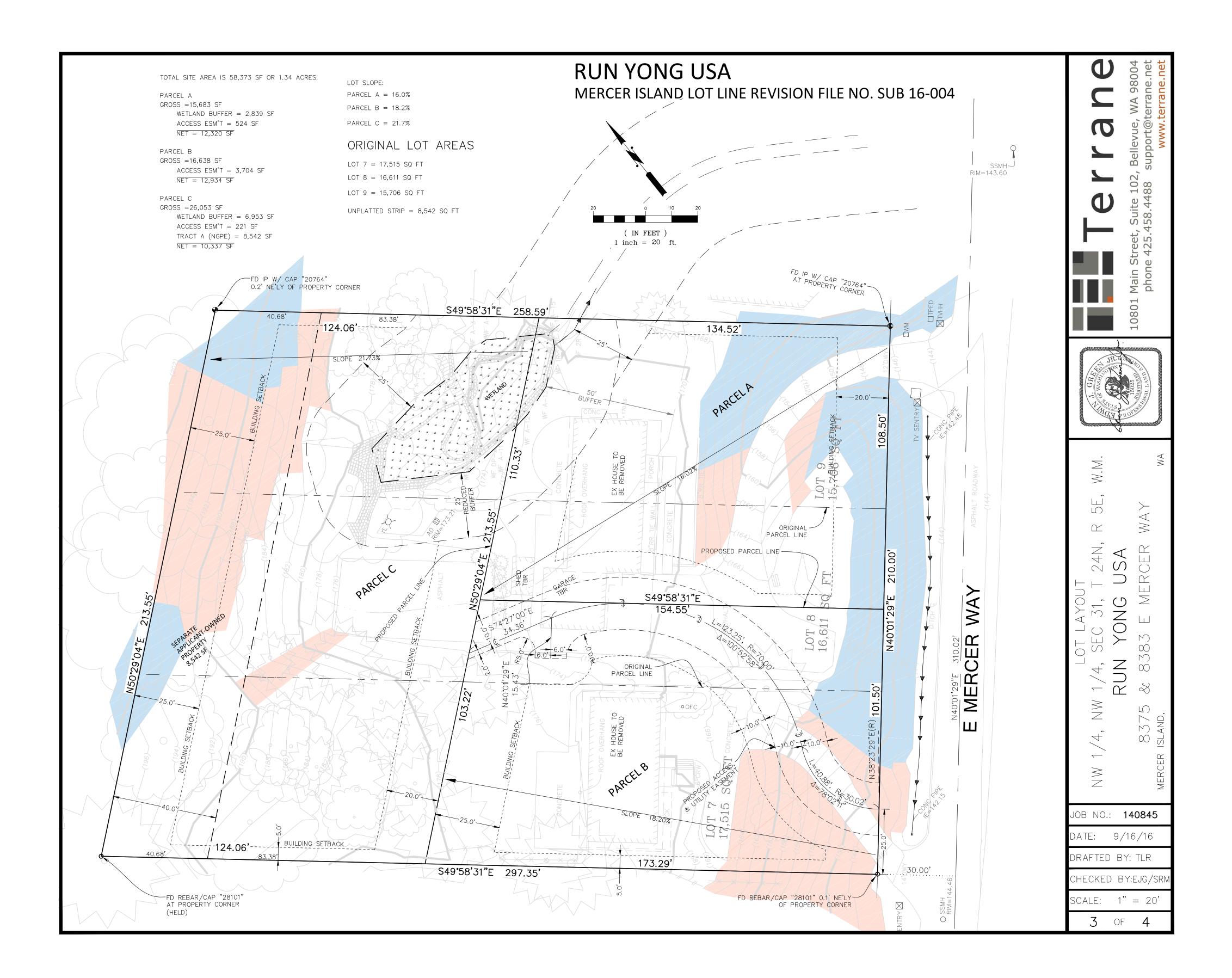
4

10<sup>5</sup>

THIS REQUEST QUALIFIES FOR EXEMPTION UNDER RCW 58.17.040. IT DOES NOT GUARANTEE THE LOTS WILL BE SUITABLE FOR DEVELOPMENT NOW OR IN THE FUTURE. THE LEGAL TRANSFER OF THE PROPERTY MUST BE DONE BY SEPARATE INSTRUMENT UNLESS ALL LOTS HEREIN ARE UNDER THE SAME OWNERSHIP.







# RUN YONG USA MERCER ISLAND LOT LINE REVISION FILE NO. SUB 16-004

### NEW LEGAL DESCRIPTIONS:

### <u>parcel a</u>

LOT 9 AND THE NORTHEASTERLY 38.50 FEET OF LOT 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON, EXCEPT THE NORTHWESTERLY 82.00 FEET THEREOF.

LOTS 7 AND 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT

### <u>parcel b</u>

PAGES 64 AND 65, IN KING COUNTY, WASHINGTON,

### EXCEPT THE NORTHEASTERLY 38.50 FEET OF SAID LOT 8;

### AND EXCEPT THE NORTHWESTERLY 82.00 FEET THEREOF.

<u>Parcel c</u>

THE NORTHWESTERLY 82.00 FEET OF LOTS 7, 8 AND 9, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON;

TOGETHER WITH THE SOUTHEASTERLY 40 FEET OF THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M. AND GOVERNMENT LOT 1 OF SAID SECTION LYING BETWEEN THE SOUTHWESTERLY LINE OF LOT 7 IN BLOCK 3 OF SAID PLAT EXTENDED NORTHWESTERLY AND THE NORTHEASTERLY LINE OF LOT 9 IN BLOCK 3 OF SAID PLAT EXTENDED NORTHWESTERLY.

### ACCESS AND UTILITY EASEMENT

THAT PORTION OF LOTS 7 AND 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

A STRIP OF LAND, 20.00 FEET IN WIDTH, HAVING 10.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE MOST SOUTHERLY CORNER OF SAID LOT 7; THENCE NORTH 40°01'29" EAST, ALONG THE SOUTHEASTERLY LINE OF SAID LOT 7, A DISTANCE OF 25.00 FEET, TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT FROM WHICH THE CENTER BEARS NORTH

38°23'29" EAST, 30.02 FEET DISTANT, AND THE POINT OF BEGINNING OF THIS CENTERLINE DESCRIPTION; THENCE NORTHWESTERLY, NORTHERLY AND NORTHEASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 78°02'11" AND AN ARC DISTANCE OF 40.88 FEET, TO A POINT OF REVERSE CURVATURE HAVING A RADIUS OF 70.00 FEET; THENCE NORTHEASTERLY, NORTHERLY AND NORTHWESTERLY, ALONG SAID CURVE, THROUGH A CENTRAL

ANGLE OF 100'52'58" AND AN ARC DISTANCE OF 123.25 FEET, TO A POINT HEREINAFTER REFERRED TO AS POINT "A" AND THE TERMINUS OF THIS CENTERLINE DESCRIPTION;

TOGETHER WITH A STRIP OF LAND, 12.00 FEET IN WIDTH, HAVING 6.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

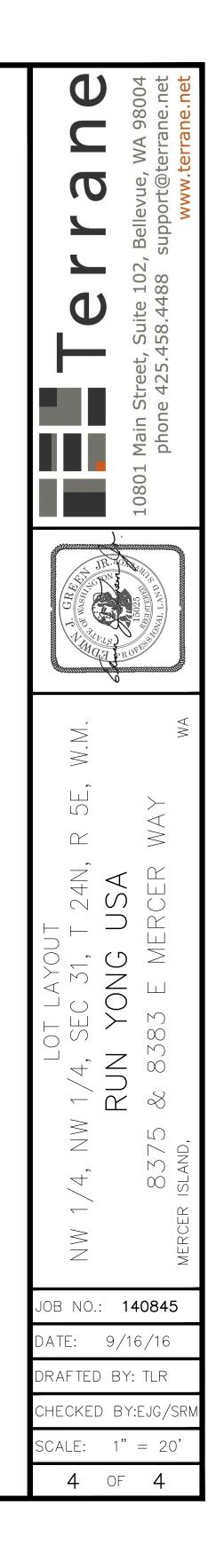
BEGINNING AT THE HEREINBEFORE REFERENCED POINT "A"; THENCE SOUTH 40°01'29" WEST 15.43 FEET, TO THE TERMINUS OF THIS CENTERLINE DESCRIPTION;

TOGETHER WITH THAT PORTION OF SAID LOT 8, LYING NORTHERLY OF A FILLETED CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 10.00 FEET BETWEEN THE SOUTHEASTERLY LINE OF SAID 12.00 FOOT STRIP AND THE SOUTHERLY LINE OF SAID 20.00 FOOT STRIP;

TOGETHER WITH A STRIP OF LAND, 12.00 FEET IN WIDTH, HAVING 10.00 FEET ON THE NORTH SIDE AND 2.00 FEET ON THE SOUTH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE; BEGINNING AT THE HEREINBEFORE REFERENCED POINT "A";

THENCE NORTH 74°27'00" WEST 34.36 FEET, TO THE TERMINUS OF THIS CENTERLINE DESCRIPTION, AND A POINT ON THE SOUTHEASTERLY LINE OF THE NORTHWESTERLY 82.00 FEET OF SAID LOTS 7 AND 8;

TOGETHER WITH THAT PORTION OF SAID LOT 8, LYING NORTHERLY OF A FILLETED CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 5.00 FEET BETWEEN THE SOUTHWESTERLY LINE OF SAID 12.00 FOOT STRIP AND THE NORTHWESTERLY LINE OF SAID 12.00 FOOT STRIP;



# SITE NOTES:

1. ALL IMMEDIATE AREAS AFFECTED BY NEW DEVELOPMENT SHALL BE GRADED AWAY FROM FOUNDATIONS + ADJACENT PROPERTIES @ 10% AS POSSIBLE, 2% MIN.

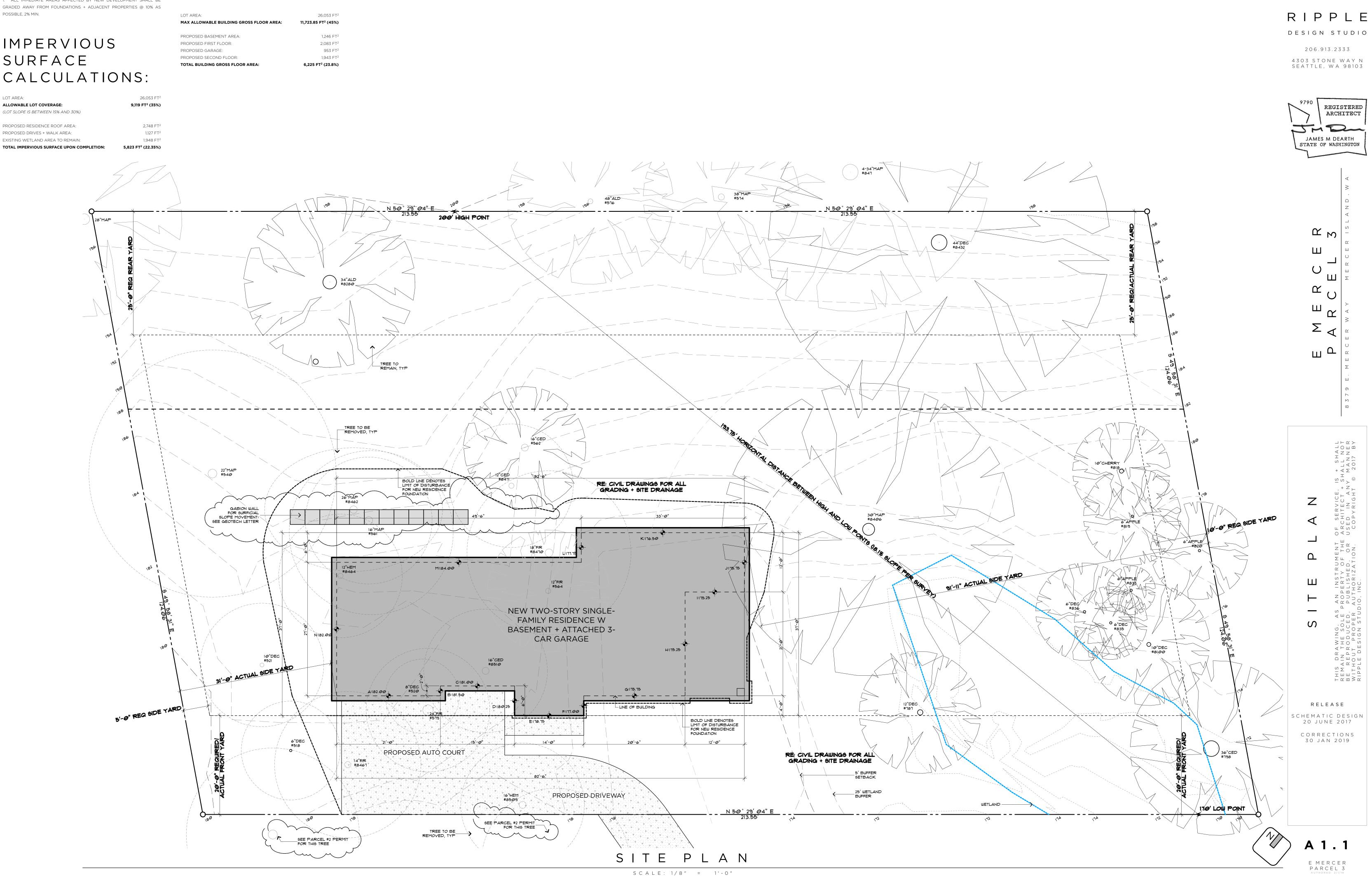
# IMPERVIOUS SURFACE CALCULATIONS:

LOT AREA:
ALLOWABLE LOT COVERAGE:
(LOT SLOPE IS BETWEEN 15% AND 30%)
PROPOSED RESIDENCE ROOF AREA:
PROPOSED DRIVES + WALK AREA:
EXISTING WETLAND AREA TO REMAIN:

# AREA CALCULATIONS:

11,723.85 FT<sup>2</sup> (45%) 1,246 FT<sup>2</sup> 2,083 FT<sup>2</sup>

953 FT<sup>2</sup> 1,943 FT<sup>2</sup>



TREE TABLE

BY AMERICAN FOREST MANAGEMENT

Tree Summary Table

For: 8383 E Mercer Way

American Forest Management, Inc.

Date: 8/29/14 Inspector: Wilkinson

4 / 4 good viable

8 / 4 good viable

Tree DBH Height Drip-Line/Limits of Disturbance (feet) Condition Viability Comments Tag # Species (inches) (feet) N 
 15 / 12
 good
 viable
 driveway is 12' south of tree, good taper, was crown thinned in the past

 10 / 8
 12 / 8
 good
 viable
 forks at 2', was topped
 Douglas fir 17/12 10/8 15/8 deciduous ornamental 18 / 12 fair-poor borderline was topped in the past, lots of new leaders, pink ribbon - 507 was topped in the past, lots of new leaders, pink ribbon - 422, 13/12 vestern red cedar fair-poor borderline co-dominant stem forks at 1' 14/12 16/12 estern red cedar 22/15 23 / 15 13 / 15 fair viable hemlock woolly adelgid western hemlock good viable deciduous 518 fair viable foliage dieback, co dominant stems fork at 40', minor bleeding on trunk sitka spruce 6/10 16/10 20/10 4/10 12/6 12/6 fair viable suppressed Washington hawthorne 14/12 11/12 6/12 good viable no concerns 125 Douglas fir 10/6 13/6 viable co-dominant forks at 10' European mountain asl 15/6 good 15 / 12 12 / 12 14 / 12 8 / 12 fair viable was crown thinned, poor form, spike knot 8509 western hemlock 12 / 12 18 / 12 15 / 10 12 / 12 fair viable was pruned western white pine viable ribbon - 841, 15 deg lean NW, lean self correcting 11/10 12/10 5/10 11/10 fair western red cedar fairviableribbon - 535, covered in ivy, crown thinnedfairviableivy covering the trunkfairviableribbon - 560, forks at 1', dead co-dominant stem western hemlock 10/8 2/8 8464 big leaf maple 12/10 8462 big leaf maple 5/10 18/10 
 25 / 15
 25 / 15
 17 / 15
 10 / 15
 good
 viable
 some past branch failure, good form

 8
 10
 5
 5
 fair
 viable
 big leaf maple deciduous red alder poor non-viable ribbon - 548 Neighboring Trees 16 / 15 good viable good form, full crown, no concerns 20 / 15 big leaf maple 26 Tree/ DBH Height Drip-Line/Limits of Disturbance (feet) Condition Viability Comments Tag # Species (inches) (feet) 10 / 8 10 / 8 12 / 8 9 / 8 good viable ribbon - 542 western red cedar 50 8432 100 38/20 35/20 fair viable ribbon - 837, leans SE, some dead branches big leaf maple fair viable Pyramidalis arborvitae 839 25 fair-poor borderline topped, co dominant stems, ribbon - 840 15 8497 Pyramidalis arborvitae 28 fair Pyramidalis arborvitae viable Drip-lines range from 2-3', fair Pyramidalis arborvitae 30 viable 30 limiting distance for all sides is 3' fair viable Pyramidalis arborvitae 30 fair viable ribbon - 844 8498 Pyramidalis arborvitae Pyramidalis arborvitae 35 fair viable fair 35 Pyramidalis arborvitae viable 7/8 10/8 4/8 Douglas-fir 92 good viable good taper 12 / 86 / 8goodviableribbon - 563, good taper15 / 125 / 10goodviableno concerns Douglas-fir 12/8 8470 95 western red cedar 11/10 20 / 18 25 / 10 29 / 10 26 / 18 fair viable ribbon - 645, some past branch failures, pond is adjacent and SE big leaf maple poornon viablegrowthsfair-poorborderlineribbon - 834, leans south, foliage discoloration cherry 4/4 15/4 4/4 deciduous 5/4 4/4 8/4 fair viable fruit 
 18
 5/4
 2/4
 4/4
 4/4

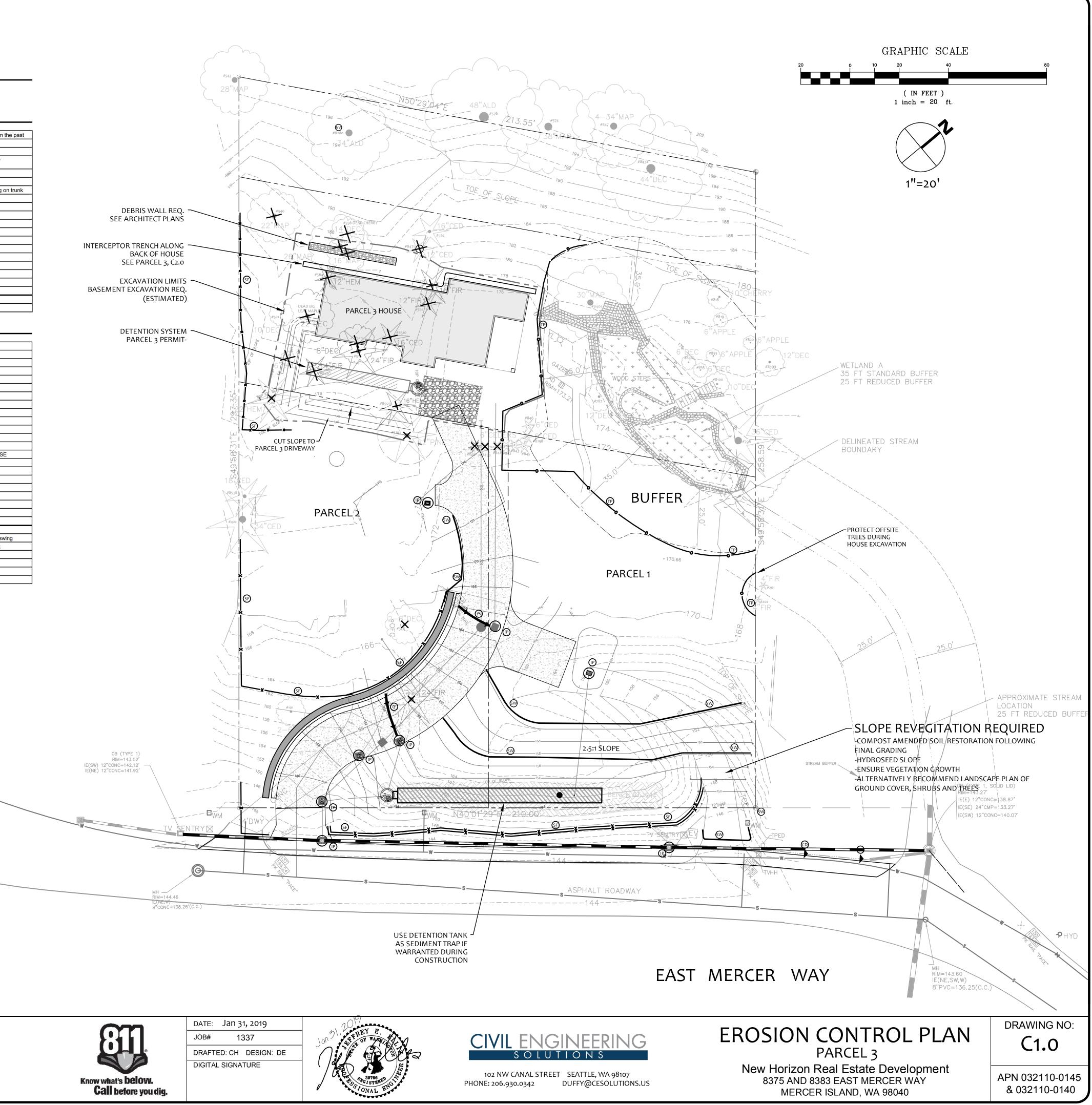
 15
 4/4
 10/4
 5/4
 5/4
 fair viable apple fair viable fruit tree 10 / 8 fair viable cherry gummosis, heavy pruning cherry 
 5, 2
 12
 2 / 4
 8 / 4
 4 / 4

 26
 70
 10 / 12
 15 / 12
 15 / 12
 6/4 viable pruned fair fruit tree 18 / 12 fair viable growing on a stump, picture western red cedar **Neighboring Trees** big leaf maple 38, 22, 30, 25 39/20 31/20 fair viable four co dominant stems, ivy covering the trunk, SE lean, rope swing red alder 15, 32 38 fair-poor borderline past stem failure, included bark, pockets of decay, ivy on trunk red alder 12, 9 , 34 poor non-viable severe foliage dieback, broken top 576 , 11, 4 8 / 5 fair viable ribbon - 807, pruned 8399 cherry

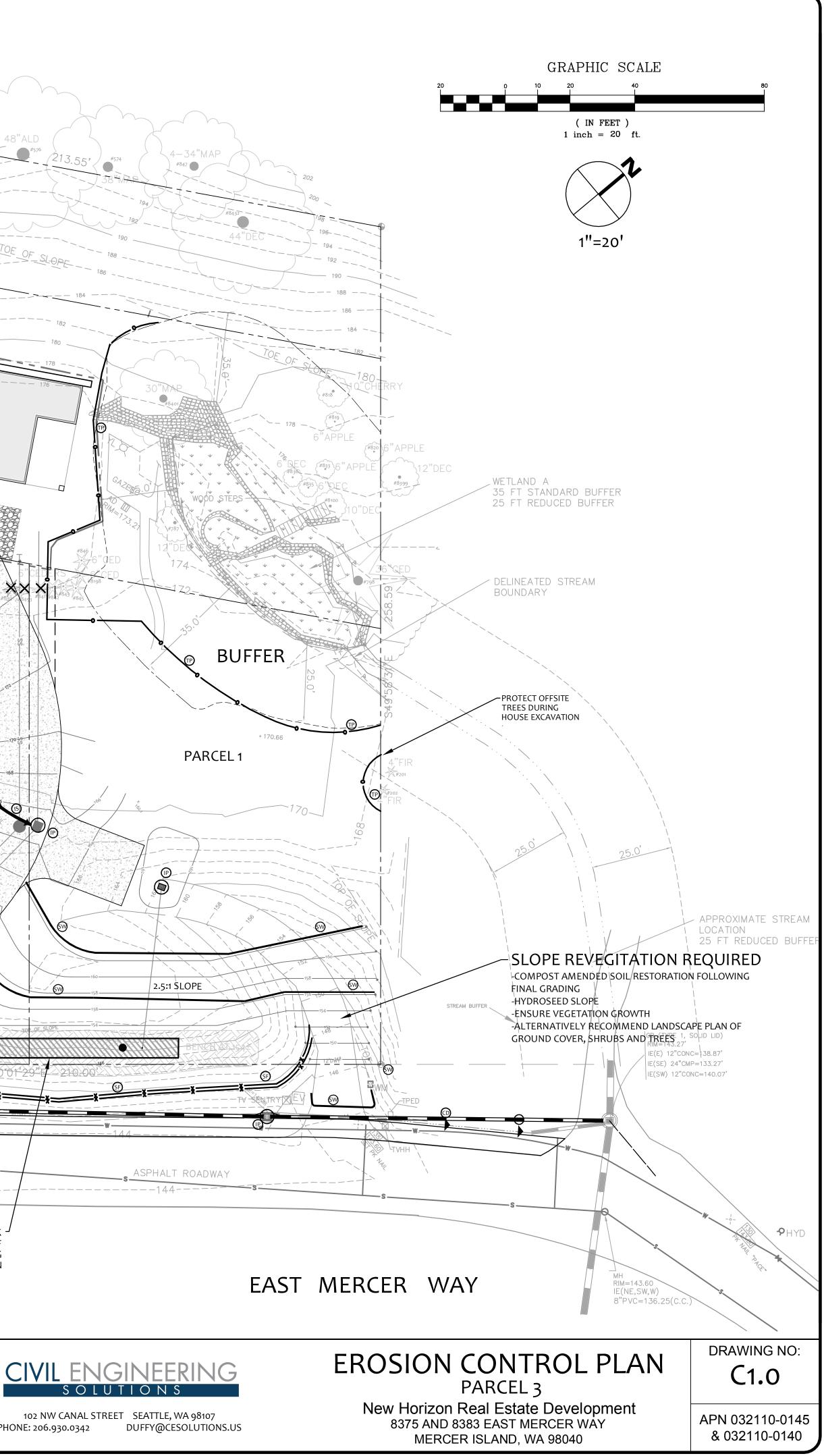
Drip-Line and Limits of Disturbance measurements from face of trunk Trees on neighboring properties - Drip-line and Limits of Disturbance measurements from property lines

Douglas-fir Douglas-fir

NO. DATE BY REVISIONS APPLICANT New Horizon Real Estate Development 8744 126th Ave NE Kirkland, WA 98033







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

30 DAYS.

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.

	1			
NO.	DATE	BY	REVISIONS	
				APPLICANT New Horizon Real Estate Development 8744 126th Ave NE Kirkland, WA 98033

### 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.

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

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.

### **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 NO CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTIL ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTEN 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 CLEARING LIMITS SHOWN SHALL SHOWN ON THIS PLAN SHALL BE CLEARING LIMITS SHOWN SHALL SHOWN ON THIS PLAN SHALL SHOWN SH FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (S APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINE THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITION MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO 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 I CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACE PROPERTIES IS MINIMIZED.

6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FO 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 SUPERVISO AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECOF SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.

8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WIL BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVE METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTI 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 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 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 SET BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AN SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROU GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FI GRADE OF THE PERMANENT FACILITY.

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

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS 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.



DATE: Jan 31, 2019 JOB# 1337

DRAFTED: CH DESIGN: DE DIGITAL SIGNATURE





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

### CITY NOTES

REVISION.

CAUSED FROM THIS CONSTRUCTION.

IOT E AND LITIES,	2	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.
IANCE,	4.	CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.
SC	5.	AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
ARLY WDM	6.	DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
E ED BY	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:
G OF IAL BE O ROAD	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.
IN ENT		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.
OR )	10.	PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
		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.
OR RDS LL NOT DAYS		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.
O ESC ON A E WET	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.
SHALL	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.
TLING	15.	REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
ND UGH		ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND ECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
INAL	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.
SHALL	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.

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A

2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES



**TESCP NOTES** PARCEL 1-3

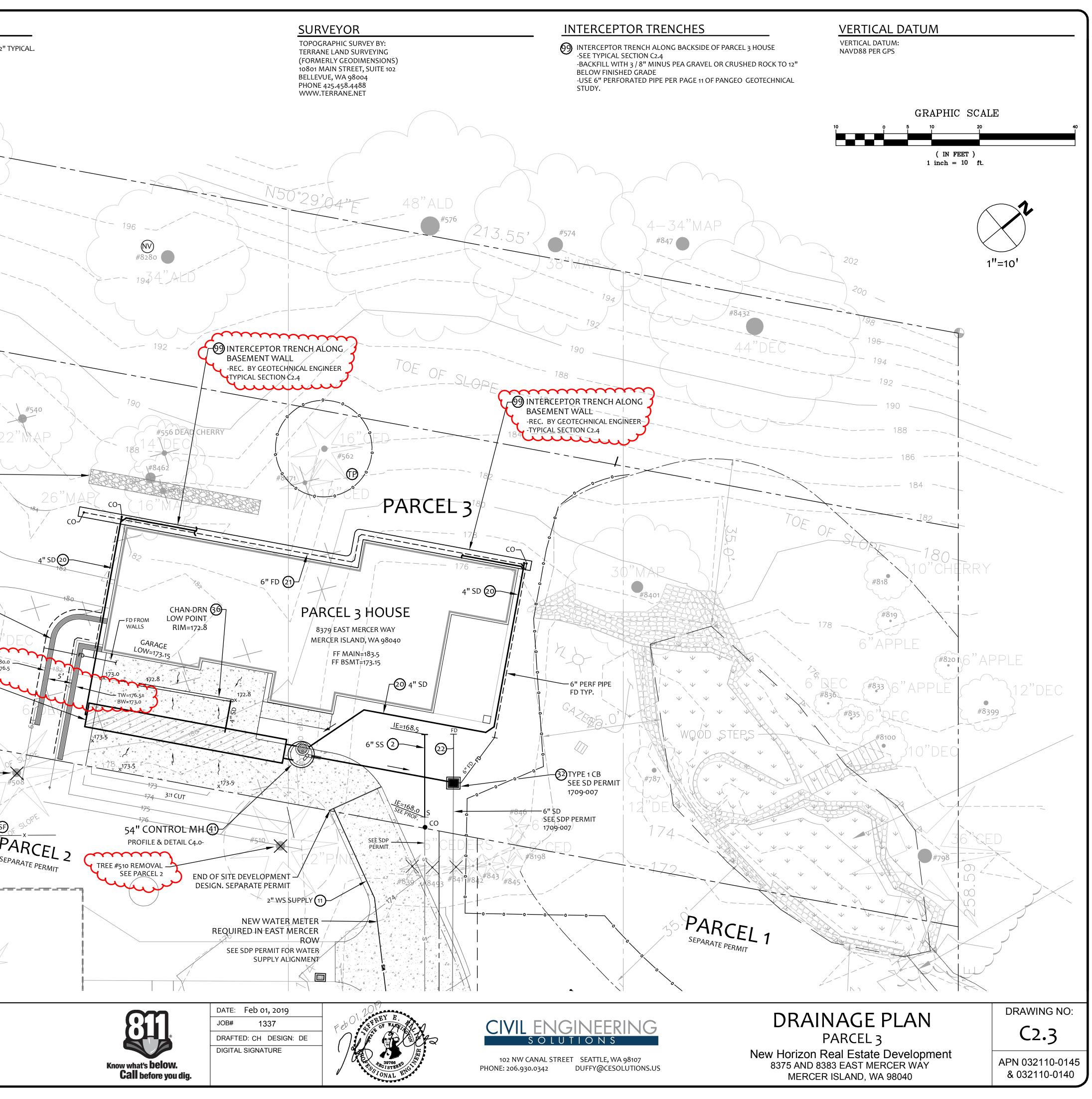
New Horizon Real Estate Development 8375 AND 8383 EAST MERCER WAY MERCER ISLAND, WA 98040

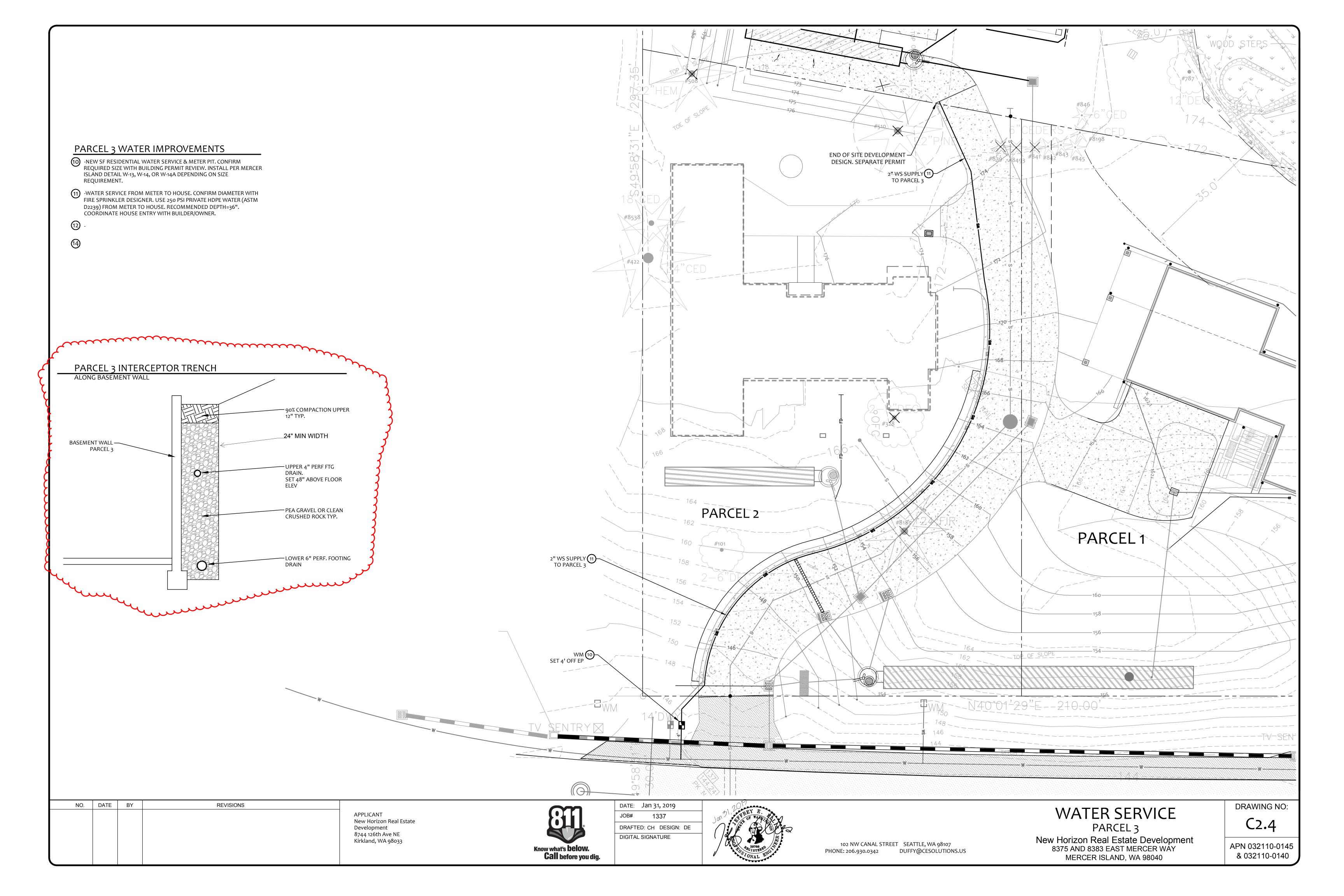
C1.2

**DRAWING NO:** 

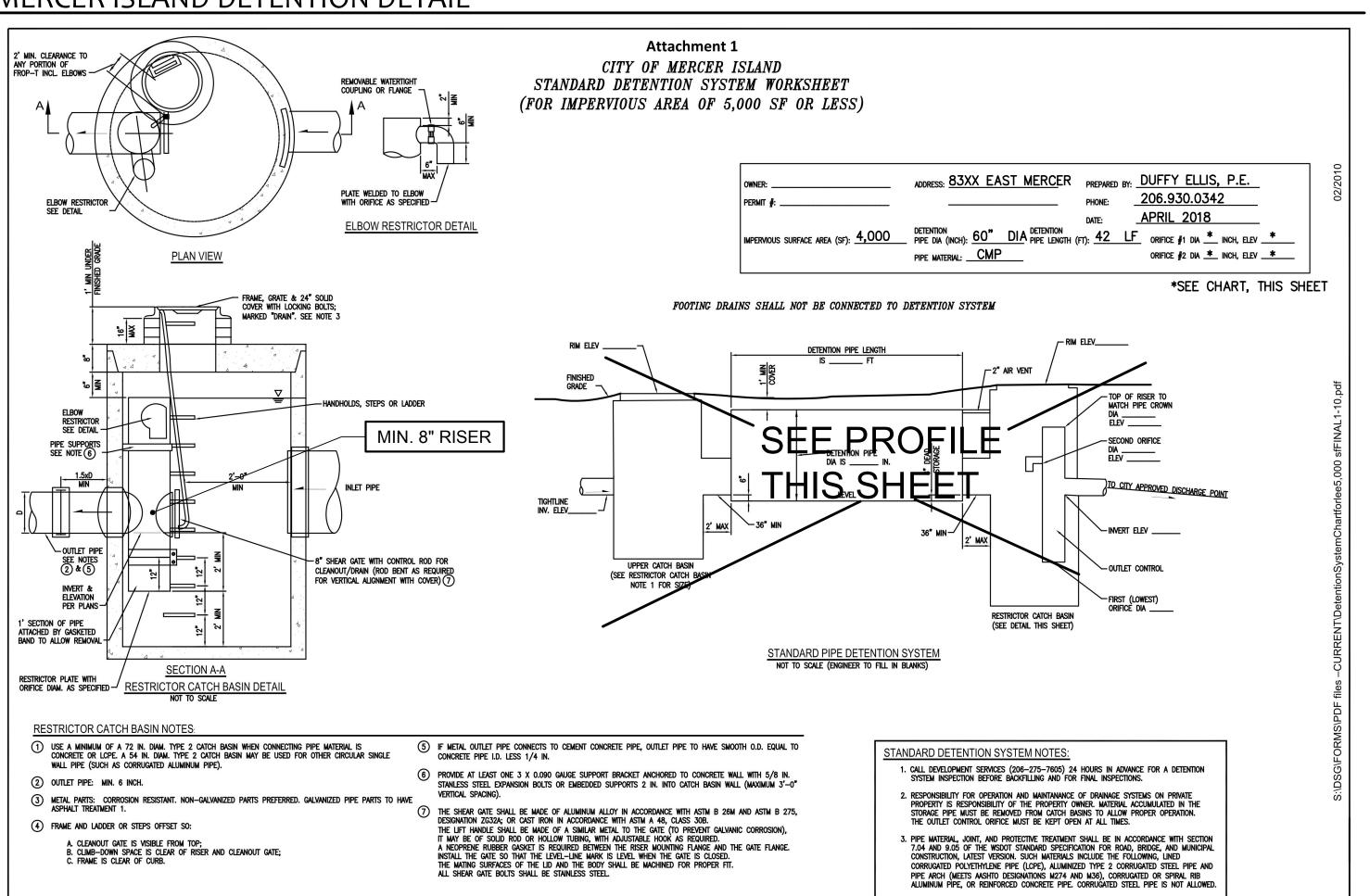
APN 032110-0145 & 032110-0140

SANITARY SEWER IMPROVEMENTS	MISC IMPROVEMENTS
1 -	-LANDSCAPE BLOCK WALLS (GRAVITY). MAX HEIGHT=42" TYPIC
2 -6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0%.	
<ul> <li>3 -</li> <li>4 -6" SEWER CLEANOUT</li> </ul>	
<ul> <li>(4) -6" SEWER CLEANOUT</li> <li>(7) -</li> </ul>	
8 -	#543
WATER IMPROVEMENTS	28"MAP
$\sim$	
1) -WATER SERVICE FROM METER TO HOUSE. CONFIRM DIAMETER WITH FIRE SPRINKLER DESIGNER. USE 250 PSI PRIVATE HDPE WATER (ASTM	
D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.	
12 -	
14	
STORM DRAIN	*97
20 4" STORM DRAIN (3034 PVC) @ MIN 1% GRADE.	
4" FOUNDATION DRAIN (3034 PVC) @ MIN 1% GRADE.	×88
22) 6" STORM DRAIN (3034 PVC) @ MIN 1% GRADE.	
- 3 -	
2 <b>4</b> -	
29 ·	
20 ·	22"
	GABION DEBRIS WALL
29 -	REQ. BY GEOTECH SEE ARCHITECT PLANS FOR MORE DETAILS.
STORM DRAIN STRUCTURES	Lun Jo
<u>ع</u> ع -	
3) -	
32 -TYPE 1 CB WITH SOLID LID	
3 ·	MAX HT=42"
GA -	WALLS
84) - 85) -	
36 -DURASLOPE CHANNEL / TRENCH DRAIN OR EQUAL: MIN 6" DEEP	> $/10$
CHANNEL.	42 LF 60" DETENTION PIPE 4
<sup>9</sup> -	42 LF OU DETENTION FIFE (4) SEE PROFILE C4.3 - SIZED FOR 4,000 SF IMPERVIOUS -
€O -	GROUP B SOILS-
4 54" ID TYPE 2 MH CONTROL STRUCTURE WITH SOLID LID. SEE ALL DETAILS AND PROFILE C4.0.	
43 <sup></sup>	
	see parcel 2 4/ MD #508
47 DETENTION PIPE: ALUMINIZED CMP @ 0.5% GRADE. SEE PLAN FOR SIZE	
DETENTION PIPE: ALUMINIZED CMP @ 0.5% GRADE. SEE PLAN FOR SIZE AND CONFIGURATION. SEE PROFILE, NOTES, AND DETAILS ON C4.0.	
CLEARING LIMIT NOTE	SEPARA
ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE	
DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED	
MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.	
TREE DRIPLINE NOTE WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER	#8538
THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.	
NO. DATE BY REVISIONS	APPLICANT
	New Horizon Real Estate Development
	8744 126th Ave NE Kirkland, WA 98033



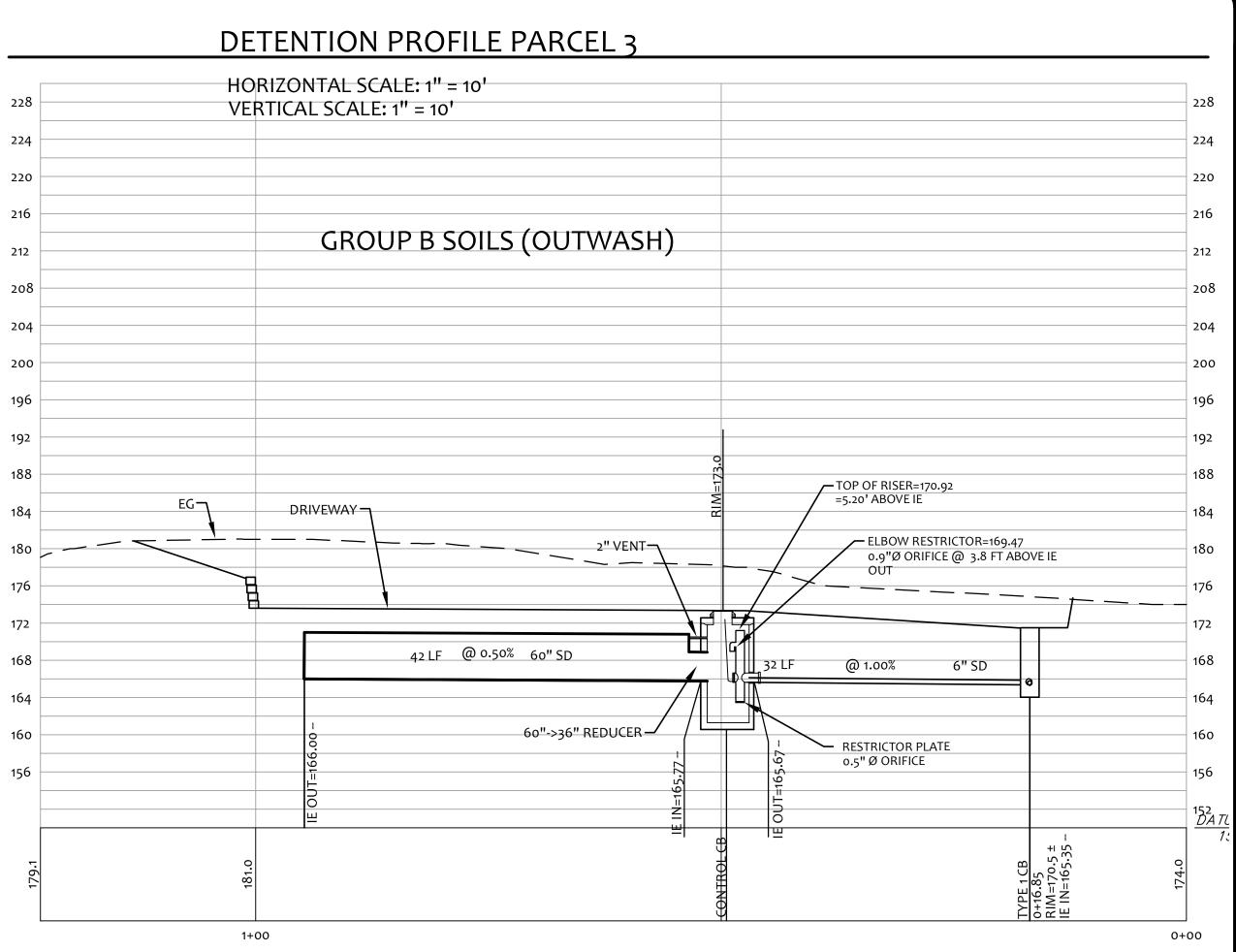


## MERCER ISLAND DETENTION DETAIL



_
Gross Site ar
Existing Impe
Ex House
Ex drivewa
-
Proposed Im
Roof
Exposed, or
Exposed, of
2
Proposed Im
New Drive

NO.	DATE	BY	REVISIONS	
				APPLICANT New Horizon Real Estate Development 8744 126th Ave NE Kirkland, WA 98033



## PARCEL 3 IMPERVIOUS TABLE

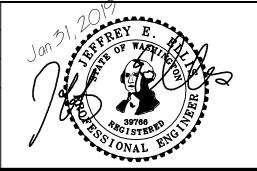
Impervious Area	Spread	sheet
Parcel 3, East	Mercer	
ea	26,053	sf
	0.598	acres
ervious Area		
	-	sf
y, on-site	- 	sf
total existing =	0	sf
pervious Area (on-site)		
	2,748	sf
n-site driveway	1,127	sf
total on-site proposed =	3,875	sf
total on-site new + replaced =	3,875	sf
pervious Area (off-site)		
way	-	sf
total off-site proposed =	0	sf
total proposed =	3,875	Size detention, use Group B Soils



New and Replaced		Detenti Lengt	18	0.0000000000000000000000000000000000000	Orifice er (in) <sup>(3)</sup>		Outlet Invert Orifice (ft)		Orifice ter (in)
Impervious Surface Area (sf)	Detention Pipe Diameter (in)	B soils	C soils	<b>B</b> soils	C soils	<b>B</b> soils	C soils	B soils	C soils
	36"	30	22	0.5	0.5	2.2	2.0	0.5	<mark>0.8</mark>
500 to 1,000 sf	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
1,001 to 2,000 sf	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	<mark>6</mark> 0"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
2,001 to 3,000 sf	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
3,001 to 4,000 sf	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5
4,001 to 5,000 sf	48"	73	49	0.5	0.5	3.6	2.9	1.6	1.5
	60"	46	31	0.5	0.5	4.6	3.5	1.6	1.3
	36"	<mark>16</mark> 2	109	<mark>0.5</mark>	0.5	2.7	2.2	1.8	<mark>1.6</mark>
5,001 to 6,000 sf	48"	90	59	0.5	0.5	3.5	2.9	1.7	1.5
	60"	54	37	0.5	0.5	4.6	3.6	1.6	1.4
	36"	192	128	0.5	0.5	2.7	2.2	1.9	1.8
6,001 to 7,000 sf	48"	102	68	0.5	0.5	3.7	2.9	1.9	1.6
	60"	64	43	<mark>0.5</mark>	0.5	4.6	3.6	1.8	<b>1.5</b>
	36"	216	146	0.5	0.5	2.8	2.2	2.0	1.9
7,001 to 8,000 sf	48"	119	79	0.5	0.5	3.8	2.9	2.2	1.7
10 2000	60"	73	49	0.5	0.5	4.5	3.6	2.0	1.6
	36"	228	155	0.5	0.5	2.8	2.2	2.1	1.9
8,001 to 8,500 sf <sup>(1)</sup>	48"	124	84	0.5	0.5	3.7	2.9	1.9	1.8
9204 No.	60"	77	53	0.5	0.5	4.6	3.6	2.0	1.6
8,501 to 9,000 sf	36"	NA (1)	164	0.5	0.5	NA <sup>(1)</sup>	2.2	NA <sup>(1)</sup>	1.9
	48"	NA (1)	89	0.5	0.5	NA (1)	2.9	NA (1)	1.9
	60"	NA <sup>(1)</sup>	55	0.5	0.5	NA <sup>(1)</sup>	3.6	NA (1)	1.7
	36"	NA (1)	174	0.5	0.5	NA <sup>(1)</sup>	2.2	NA (1)	2.1
9,001 to 9,500 sf <sup>(2)</sup>	48"	NA (1)	94	0.5	0.5	NA (1)	2.9	NA (1)	2.0
-,,	60"	NA <sup>(1)</sup>	58	0.5	0.5	NA (1)	3.7	NA (1)	1.7



DATE: Jan 31, 2019 1337 JOB# DRAFTED: DE DESIGN: DE DIGITAL SIGNATURE





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

DETENTION PROFILE AND DETAIL PARCEL 3 New Horizon Real Estate Development 8375 AND 8383 EAST MERCER WAY MERCER ISLAND, WA 98040

DRAWING NO:
C4.3

APN 032110-0145 & 032110-0140

# FLOOR PLAN NOTES:

1. THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL

- COMPLIANCE W/ ALL CODES + REGULATIONS.
- 2. ALL EXTERIOR WALLS SHALL BE 2x6 UNO.
- 3. ALL INTERIOR WALLS SHALL BE 2x6 UNO. 4. ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A
- GRASP DIMENSION BETWEEN 11/4" 2". 5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.

6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.

7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.

- 8. 5/8" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS. 9. ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM PER 302.7.
- 10. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE
- CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.1.1. 11. A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN
- LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS. 12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT
- SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.
- 13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M1501.1 AND M1506.2.
- 14. CLOTHES DRYER SHALL BE EXHAUSTED TO THE OUTSIDE PER M1502.1 15. ALL STAIRS SHALL MEET FOLLOWING REQUIREMENTS;
- A. MINIMUM 36" WIDTH.
- B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
- C. MINIMUM 6'-8" HEAD ROOM D. MINIUM LANDING LENGTH 36"

16. A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 2.0 AIR CHANGES/HOUR.

17. WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER IRC M1507.3.5 AND SHALL RUN INTERMITTENTLY. 18. FIRE-BLOCKING SHALL BE PROVIDED IN THE FOLLOWING AREAS;

A. CONCEALED SPACES OF STUD WALLS VERTICALLY BETWEEN CEILING AND FLOOR LEVELS + HORIZONTALLY AT INTERVALS NOT EXCEEDING 10FT

CONDITIONED SPACE CALCULATIONS: (PER 2015 WASHINGTON STATE ENERGY CODE)

PROPOSED BASEMENT AREA: PROPOSED FIRST FLOOR: PROPOSED SECOND FLOOR: TOTAL CONDITIONED FLOOR AREA:

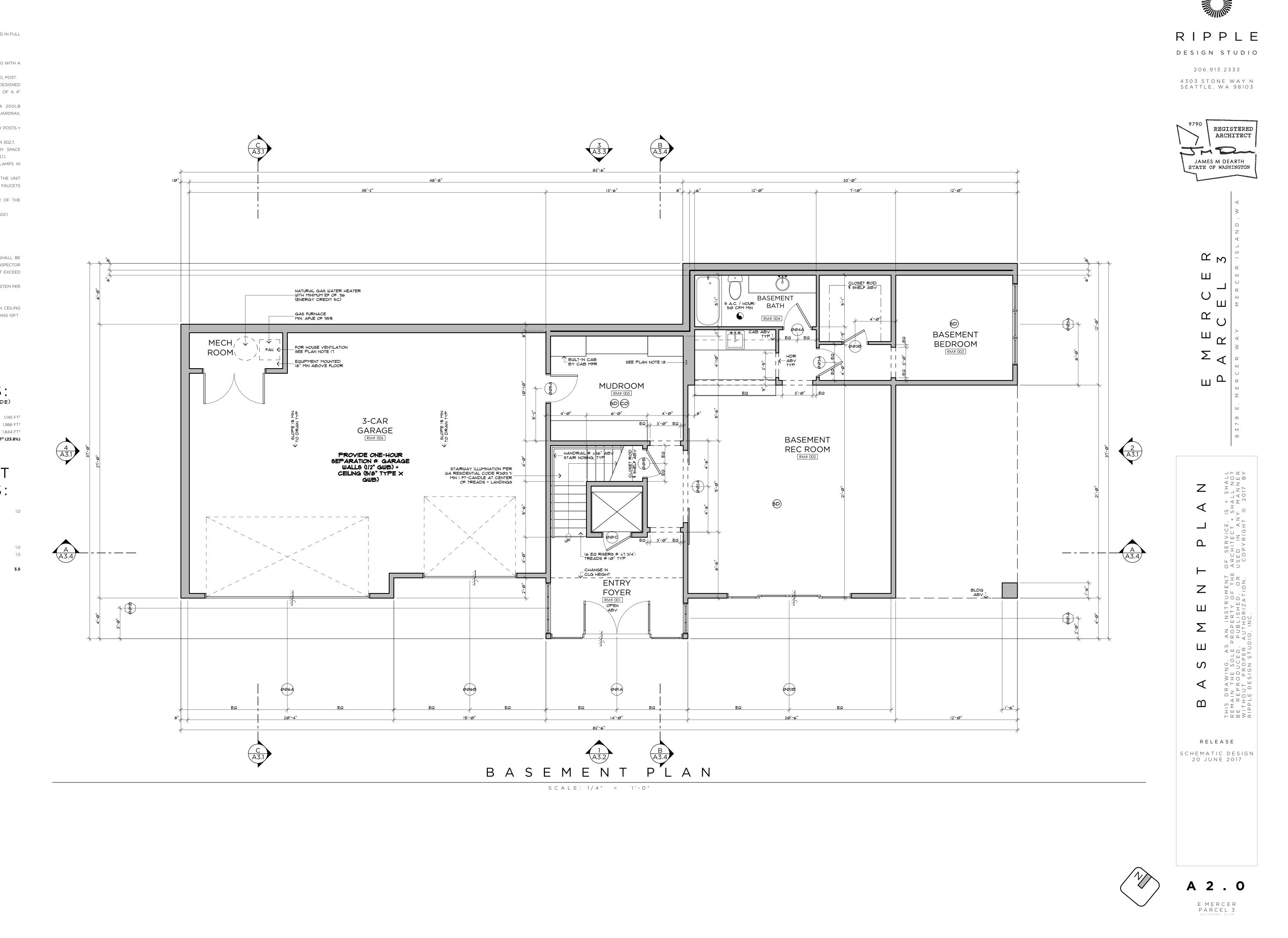
1,986 FT<sup>2</sup> 1,844 FT<sup>2</sup> 4,975 FT<sup>2</sup> (23.8%)

# ENERGY CREDIT CALCULATIONS:

2b. A. TESTED AIR LEAKAGE SHALL BE 2.0 AIR CHANGES PER HOUR MAXIMUM. B. HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70.

3a. PROPANE FURNACE WITH MINIMUM AFUE OF 94%. 5c. PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.

TOTAL CREDITS:



# FLOOR PLAN NOTES:

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   ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A
- 4. ALL HANDRAILS SHALL BE LOCA
- GRASP DIMENSION BETWEEN 1<sup>1/4"</sup> 2". 5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.

6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.

7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.

 5/8" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.
 ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM PER 302.7.

 ACCESSIBLE AREA ONDER STAIR STALE BE 1/2 OWB MINIMON PER SOL.
 PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.1.1.

- A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
- 12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS
- SHALL BE RATED AT 1.0 GPM OR LESS.
- 13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M1501.1 AND M1506.2.
- 14. CLOTHES DRYER SHALL BE EXHAUSTED TO THE OUTSIDE PER M1502.115. ALL STAIRS SHALL MEET FOLLOWING REQUIREMENTS;
- A. MINIMUM 36" WIDTH.
- B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
- C. MINIMUM 6'-8" HEAD ROOM D. MINIUM LANDING LENGTH 36"

16. A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 2.0 AIR CHANGES/HOUR.

 WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER IRC M1507.3.5 AND SHALL RUN INTERMITTENTLY.
 FIRE-BLOCKING SHALL BE PROVIDED IN THE FOLLOWING AREAS;

A. CONCEALED SPACES OF STUD WALLS VERTICALLY BETWEEN CEILING
 AND FLOOR LEVELS + HORIZONTALLY AT INTERVALS NOT EXCEEDING 10FT

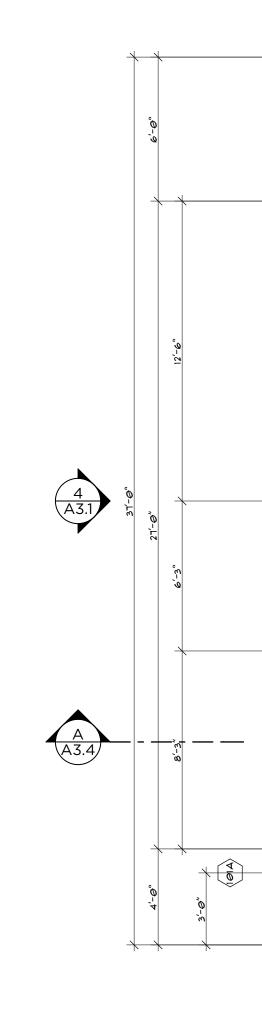
# ENERGY CREDIT CALCULATIONS:

2b. A. TESTED AIR LEAKAGE SHALL BE 2.0 AIR CHANGES PER HOUR MAXIMUM.

 B. HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70.

3a. PROPANE FURNACE WITH MINIMUM AFUE OF 94%.5c. PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.

TOTAL CREDITS:

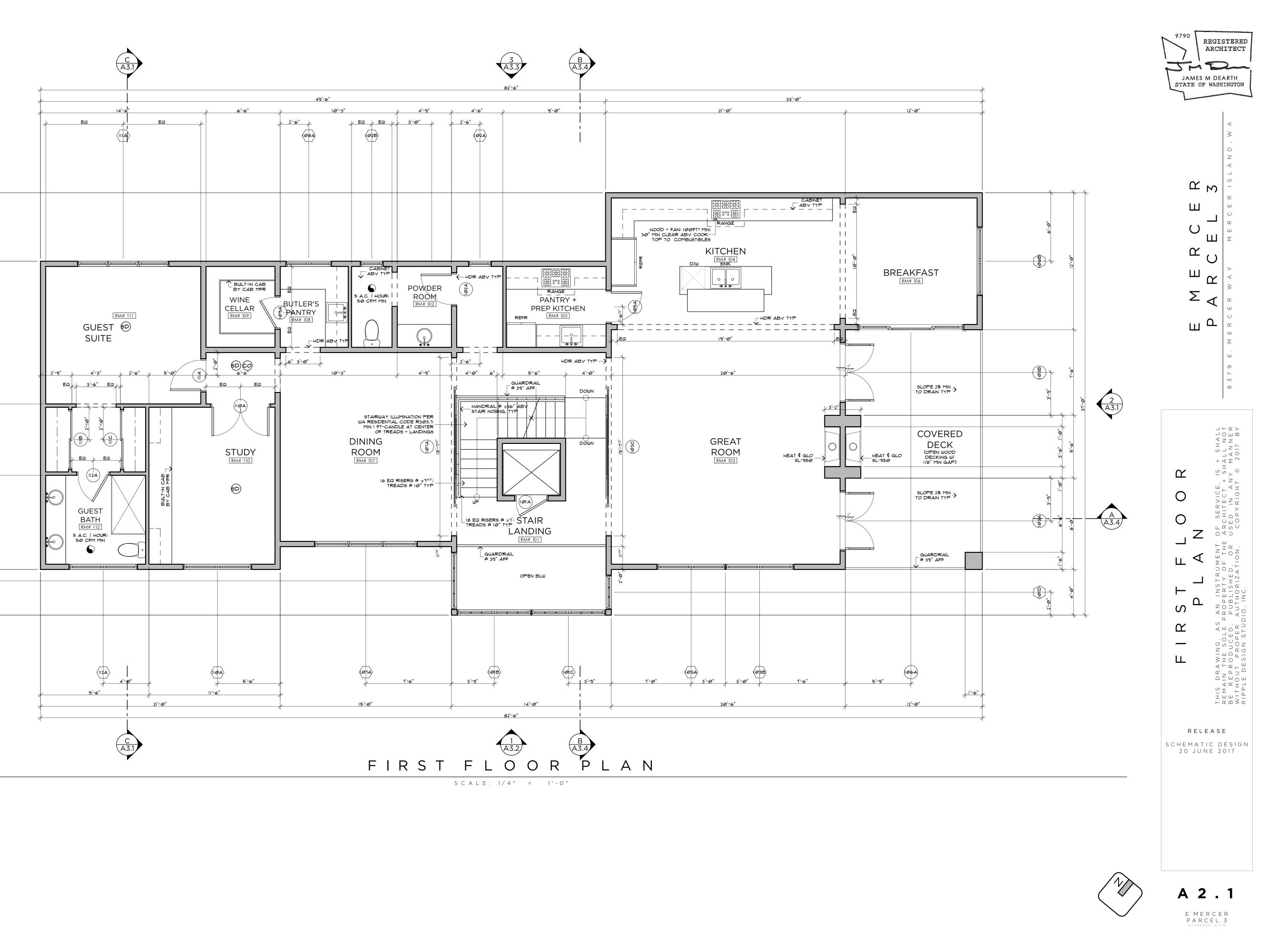


1.0

1.0

1.5

3.5





# FLOOR PLAN NOTES:

1. THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL

- COMPLIANCE W/ ALL CODES + REGULATIONS.
- 2. ALL EXTERIOR WALLS SHALL BE 2x6 UNO.
- ALL INTERIOR WALLS SHALL BE 2x6 UNO.
   ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A
- 4. ALL HANDRAILS SHALL BE LOCA
- GRASP DIMENSION BETWEEN 1<sup>1/4"</sup> 2". 5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.

6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.

7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.

- 8. 5/8" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.9. ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM PER 302.7.
- ACCESSIBLE AREA ONDER STAIR STALE BE 1/2 GWB MINIMON PER SO2.7.
   PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN FACILIDINE LINE LINE FOR THE PRIMARY SPACE
- CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.1.1. 11. A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN
- LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS. 12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT
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- 13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M1501.1 AND M1506.2.
- 14. CLOTHES DRYER SHALL BE EXHAUSTED TO THE OUTSIDE PER M1502.1 15. ALL STAIRS SHALL MEET FOLLOWING REQUIREMENTS;
- A. MINIMUM 36" WIDTH.
- B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
- C. MINIMUM 6'-8" HEAD ROOM D. MINIUM LANDING LENGTH 36"

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17. WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER IRC M1507.3.5 AND SHALL RUN INTERMITTENTLY.

18. FIRE-BLOCKING SHALL BE PROVIDED IN THE FOLLOWING AREAS;A. CONCEALED SPACES OF STUD WALLS VERTICALLY BETWEEN CEILING AND FLOOR LEVELS + HORIZONTALLY AT INTERVALS NOT EXCEEDING 10FT

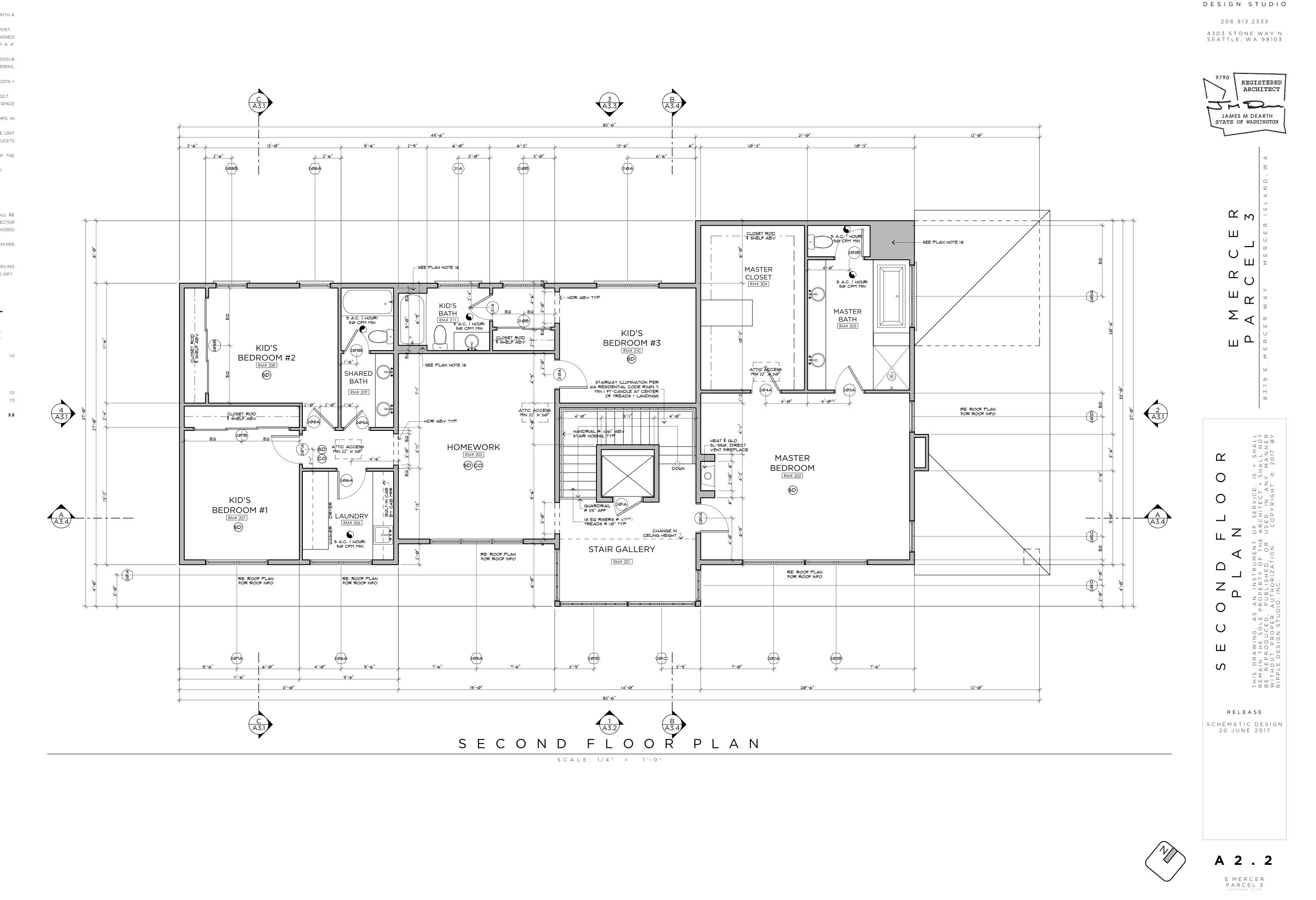
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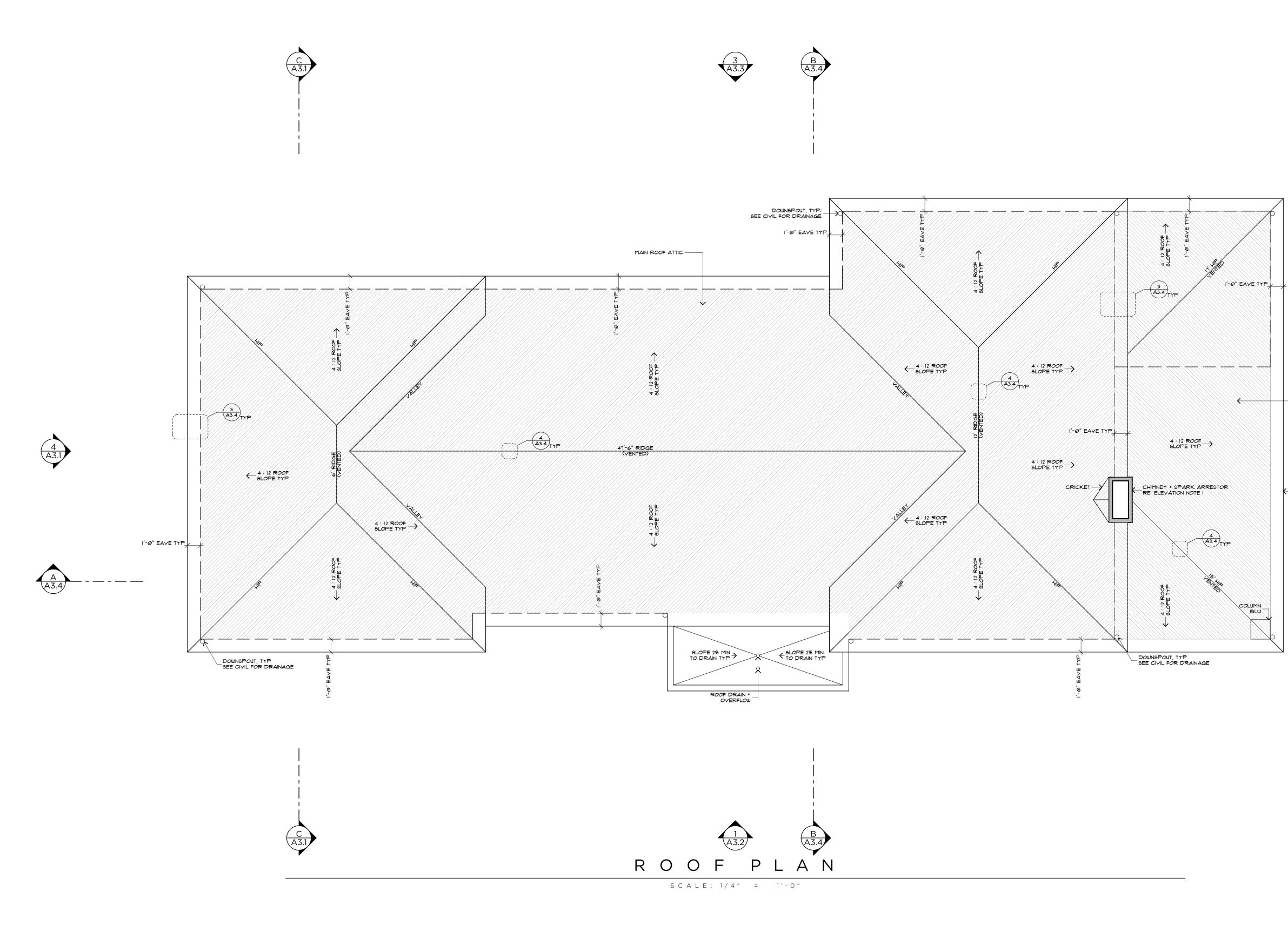
 B. HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70.

3a. PROPANE FURNACE WITH MINIMUM AFUE OF 94%.5c. PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.

TOTAL CREDITS:



RIPPLE





## 1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN

ROOF NOTES:

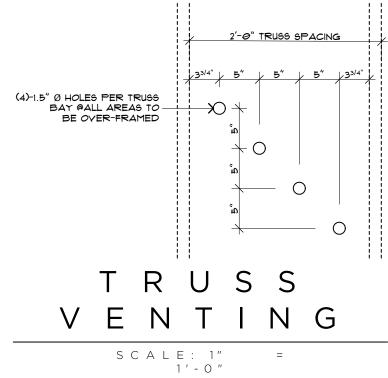
10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL
CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY
FLU + SPARK ARRESTOR MFR APPROVAL.
2. COORDINATE DOWNSPOUT LOCATION W/ RIPPLE DESIGN STUDIO, INC.
PRIOR TO INSTALLATION.

 ALL VENTS SHALL BE LOCATED AWAY FROM VISIBILITY @ PUBLIC RIGHT-OF-WAY.

4. TRUSS MANUFACTURERS TO PROVIDE TRUSS SHOP DRAWINGS TO RIPPLE
DESIGN STUDIO FOR DESIGN APPROVAL PRIOR TO TRUSS MANUFACTURING.
5. ATTIC SHALL BE VENTED THROUGH EAVE, RIDGE, AND HIP VENTS AS WELL
AS VENTILATION HOLES IN SHEATHING BETWEEN ATTIC SPACES.

# ATTIC VENTILATION CALCULATIONS:

ATTIC AREA - MAIN ROOF	1,972.00
REQUIRED VENTING (1/150)	13.15
LINEAR FEET OF RIDGE / HIP VENTING	65.50
PROPOSED RIDGE / HIP VENTING	6.14
(@13.5 sq in NET/ FOOT [COR-A-VENT V-300])	
LINEAR FEET OF EAVE VENTING	193.00
PROPOSED EAVE VENTING	8.42
(@3.14 sq in PER 2" HOLE @ BLOCKING, 2 HOLES / FT = 6.28 sq in / FT)	
TOTAL PROPOSED VENTILATION	14.56
ATTIC AREA - LOWER ROOF	396.00
REQUIRED VENTING (1/150)	2.64
LINEAR FEET OF HIP VENTING	32.00
PROPOSED HIP VENTING	3.00
(@13.5 sq in NET/ FOOT)	
LINEAR FEET OF EAVE VENTING	57.00
PROPOSED EAVE VENTING	2.49
(@3.14 sq in PER 2" HOLE @ BLOCKING, 2 HOLES / FT = 6.28 sq in / FT)	
TOTAL PROPOSED VENTILATION	5.49
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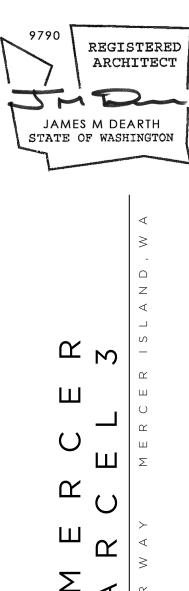


-LOWER ROOF ATTIC

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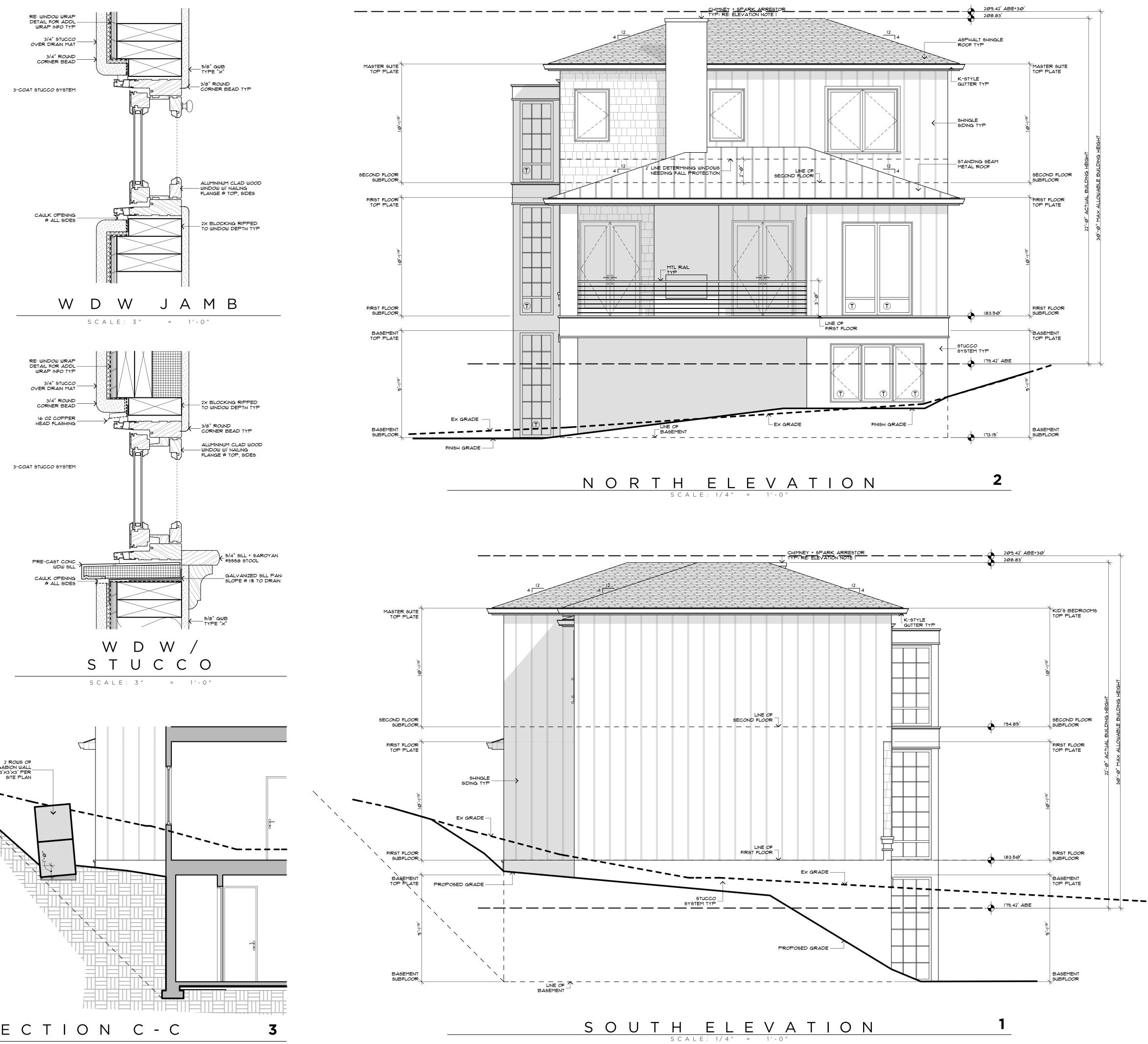
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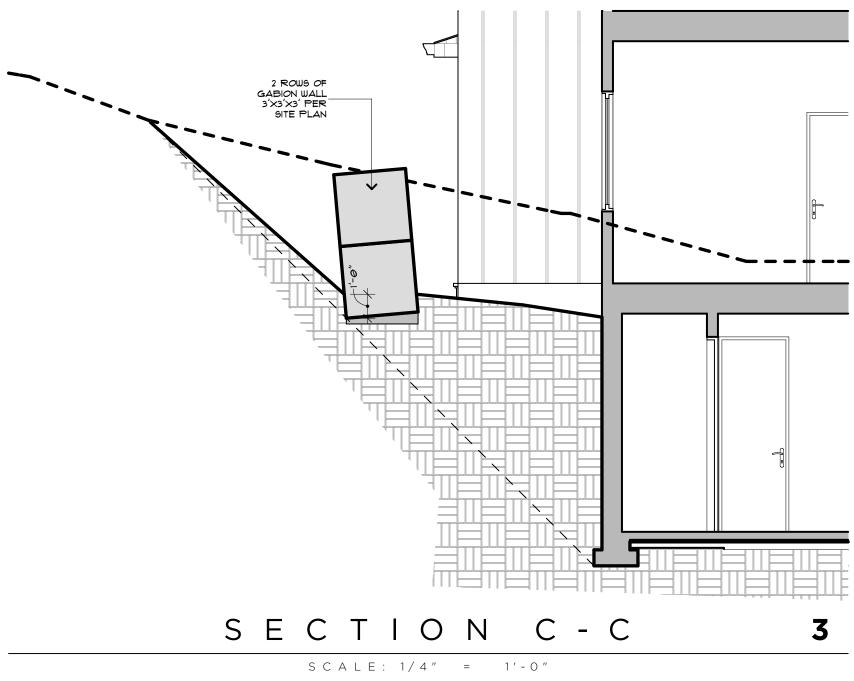
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RELEASE SCHEMATIC DESIGN 20 JUNE 2017







# ELEVATION + SECTION NOTES:

1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL. 2. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

A V E R A G E B U I L D I N G E L E V A T I O C A L C . S: ELEVATION @ POINT A: SEGMENT LENGTH @ POINT A:	N 182.00' 21.00'
ELEVATION @ POINT B: SEGMENT LENGTH @ POINT B:	(3,822.00' @ ELEV × LENGTH) 181.50' 2.00'
-	(363.00' @ ELEV x LENGTH) 181.00'
ELEVATION @ POINT C: SEGMENT LENGTH @ POINT C:	181.00 15' (2,715.00' @ ELEV × LENGTH)
ELEVATION @ POINT D: SEGMENT LENGTH @ POINT D:	180.25′ 6.00′ (1,081.50′ @ ELEV × LENGTH)
ELEVATION @ POINT E: SEGMENT LENGTH @ POINT E:	178.75' 14.00' (2,502.50' @ ELEV × LENGTH)
ELEVATION @ POINT F: SEGMENT LENGTH @ POINT F:	177.00' 4.00' (708.00' @ ELEV x LENGTH)
ELEVATION @ POINT G: SEGMENT LENGTH @ POINT G:	175.75' 20.50' (3,602.88' @ ELEV × LENGTH)
ELEVATION @ POINT H: SEGMENT LENGTH @ POINT H:	175.25' 21.00' (3,680.25' @ ELEV x LENGTH)
ELEVATION @ POINT I: SEGMENT LENGTH @ POINT I:	175.25' 12.00' (2,103.00' @ ELEV x LENGTH)
ELEVATION @ POINT J: SEGMENT LENGTH @ POINT J:	175.75' 12.00' (2,109.00' @ ELEV x LENGTH)
ELEVATION @ POINT K: SEGMENT LENGTH @ POINT K:	176.50' 33.00' (5,824.50' @ ELEV × LENGTH)
ELEVATION @ POINT L: SEGMENT LENGTH @ POINT L:	177.75' 6.00' (1,066.50' @ ELEV × LENGTH)
ELEVATION @ POINT M: SEGMENT LENGTH @ POINT M:	184.00' 49.50' (9,108.00' @ ELEV × LENGTH)
ELEVATION @ POINT N: SEGMENT LENGTH @ POINT N:	182.00' 27.00' (4,914.00' @ ELEV x LENGTH)
TOTAL ELEVs x SEGMENT LENGTHS:	43,600.13'

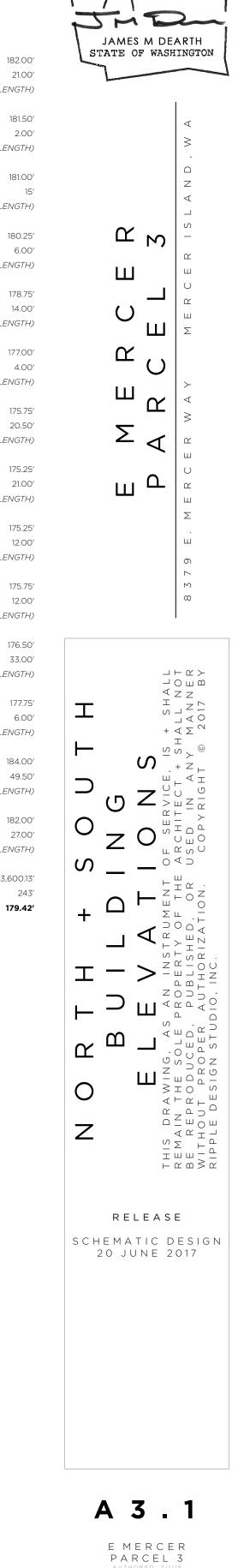
OTAL ELEVs × SEGMENT LENGTHs: TOTAL SEGMENT LENGTHS: AVERAGE BUILDING ELEVATION (ABE):

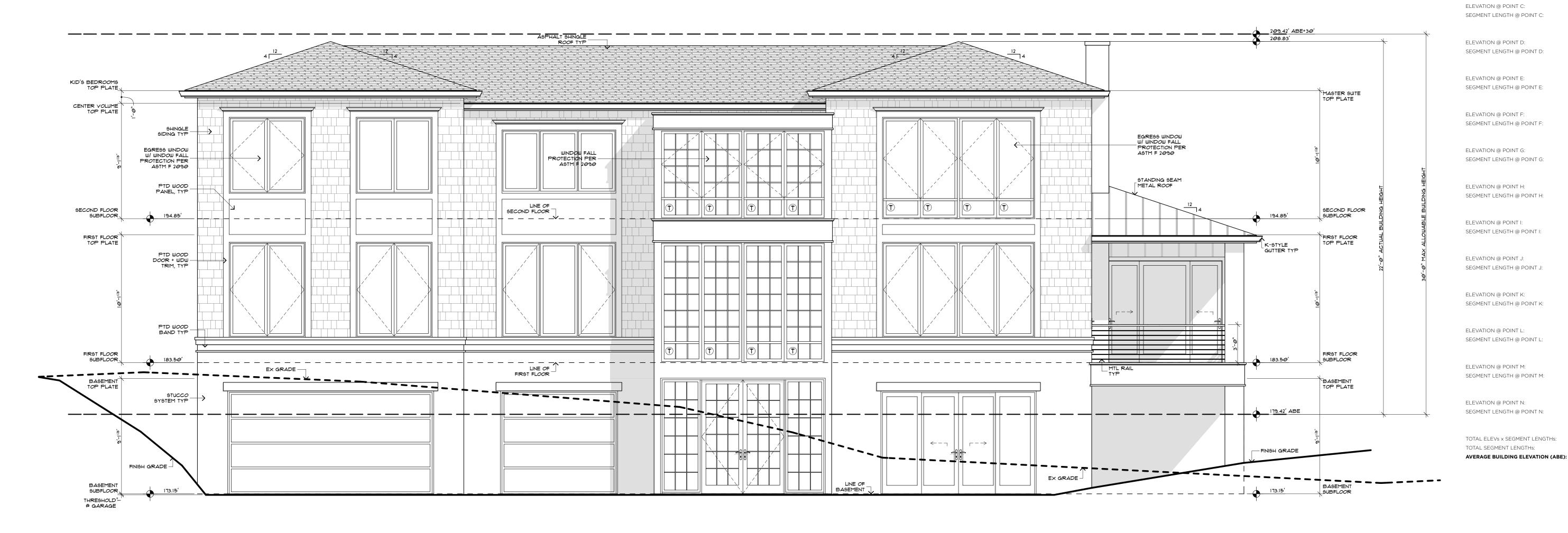


REGISTERED

ARCHITECT

9790





## EAST ELEVATION

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



# ELEVATION + SECTION NOTES:

1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL. 2. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

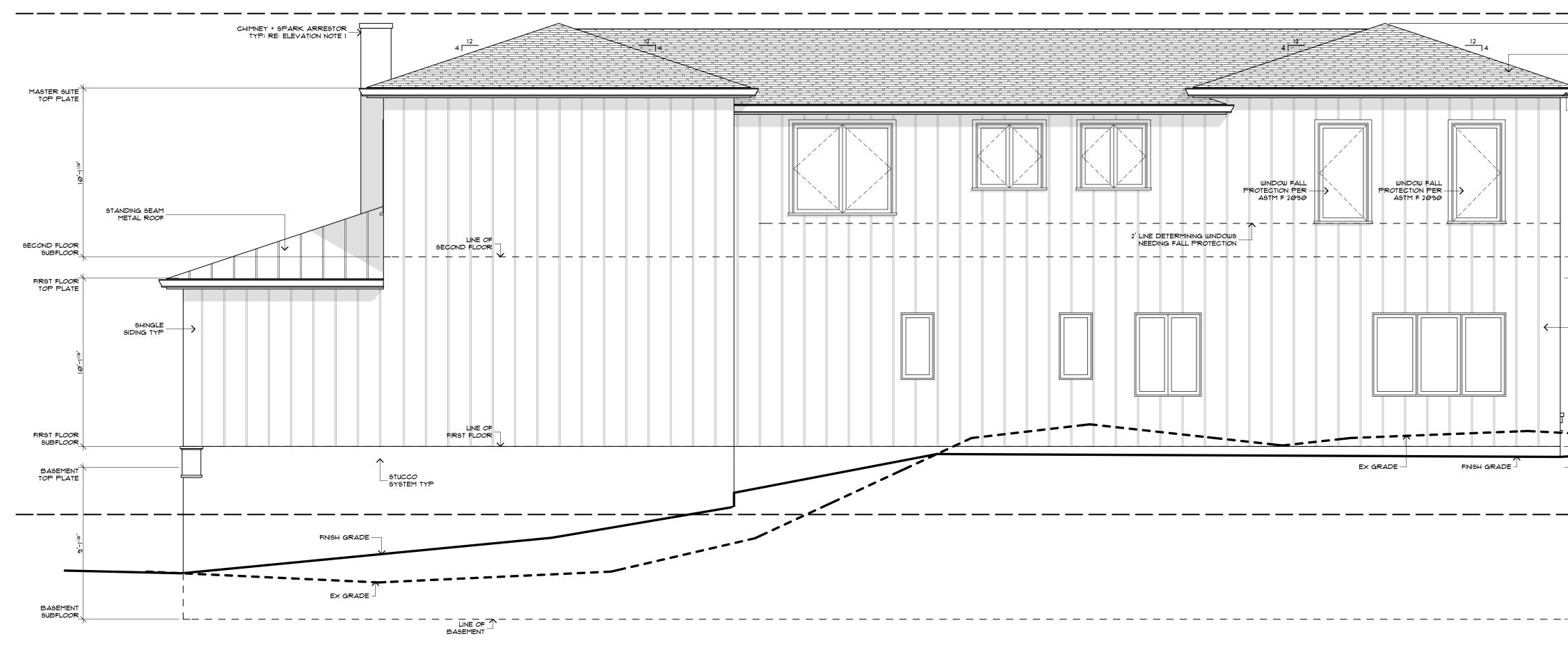
### AVERAGE BUILDING 9790 REGISTERED ARCHITECT ELEVATION JMD CALC.S: JAMES M DEARTH ELEVATION @ POINT A: 182.00′ 21.00′ SEGMENT LENGTH @ POINT A: (3,822.00' @ ELEV x LENGTH) ELEVATION @ POINT B: 181.50′ SEGMENT LENGTH @ POINT B: 2.00′ (363.00' @ ELEV x LENGTH) ELEVATION @ POINT C: 181.00′ SEGMENT LENGTH @ POINT C: 15′ (2,715.00' @ ELEV x LENGTH) ELEVATION @ POINT D: 180.25′ 6.00′ SEGMENT LENGTH @ POINT D: Ш (1,081.50' @ ELEV x LENGTH) ELEVATION @ POINT E: 178.75′ $\bigcirc$ SEGMENT LENGTH @ POINT E: 14.00′ (2,502.50' @ ELEV x LENGTH) $\mathbf{C}$ 177.00′ ELEVATION @ POINT F: SEGMENT LENGTH @ POINT F: 4.00′ Ш (708.00' @ ELEV x LENGTH) ELEVATION @ POINT G: 175.75′ Σ 20.50′ SEGMENT LENGTH @ POINT G: (3,602.88' @ ELEV x LENGTH) 175.25′ ELEVATION @ POINT H: Ш SEGMENT LENGTH @ POINT H: 21.00′ (3,680.25' @ ELEV x LENGTH) ELEVATION @ POINT I: 175.25′ SEGMENT LENGTH @ POINT I: 12.00′ (2,103.00' @ ELEV x LENGTH) 175.75′ ELEVATION @ POINT J: SEGMENT LENGTH @ POINT J: 12.00′ (2,109.00' @ ELEV x LENGTH) ELEVATION @ POINT K: 176.50′ SEGMENT LENGTH @ POINT K: 33.00′ (5,824.50' @ ELEV x LENGTH) ELEVATION @ POINT L: 177.75′ Ċ SEGMENT LENGTH @ POINT L: 6.00′ (1,066.50' @ ELEV x LENGTH) Ζ ELEVATION @ POINT M: 184.00′ Ζ SEGMENT LENGTH @ POINT M: 49.50′ \_\_\_\_ (9,108.00' @ ELEV x LENGTH) ΔΟ ELEVATION @ POINT N: 182.00′ SEGMENT LENGTH @ POINT N: 27.00′ (4,914.00' @ ELEV x LENGTH) TOTAL ELEVs x SEGMENT LENGTHS: 43,600.13′



243'

179.42'

A 3.2 E MERCER PARCEL 3



## WEST ELEVATION

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



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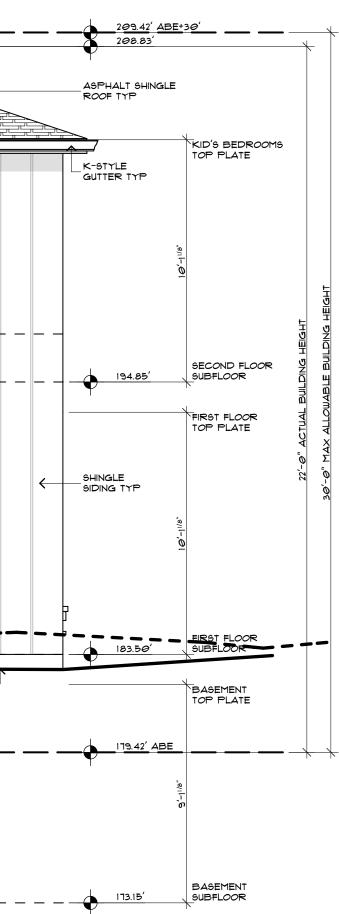
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RELEASE

SCHEMATIC DESIGN 20 JUNE 2017

AVERAGE BUILDING ELEVATIC	1	9790 REGISTERED ARCHITECT
CALC.S: ELEVATION @ POINT A: SEGMENT LENGTH @ POINT A:	182.00' 21.00' (3,822.00' @ ELEV × LENGTH)	JAMES M DEARTH STATE OF WASHINGTON
ELEVATION @ POINT B: SEGMENT LENGTH @ POINT B:	181.50' 2.00' (363.00' @ ELEV × LENGTH)	<ul> <li></li> <li><!--</td--></li></ul>
ELEVATION @ POINT C: SEGMENT LENGTH @ POINT C:	181.00' 15' (2,715.00' @ ELEV x LENGTH)	
ELEVATION @ POINT D: SEGMENT LENGTH @ POINT D:	180.25′ 6.00′ (1,081.50′ @ ELEV x LENGTH)	
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ELEVATION @ POINT M: SEGMENT LENGTH @ POINT M:	184.00' 49.50' (9,108.00' @ ELEV x LENGTH)	V RIGHT O Z V V RIGHT O Z V V RIGHT O Z V O Z V V V V V V V V V V V V V V V V V V
ELEVATION @ POINT N: SEGMENT LENGTH @ POINT N:	182.00' 27.00' (4,914.00' @ ELEV x LENGTH)	
TOTAL ELEVs x SEGMENT LENGTHS:	43,600.13' 243'	

TOTAL SEGMENT LENGTHS: AVERAGE BUILDING ELEVATION (ABE):



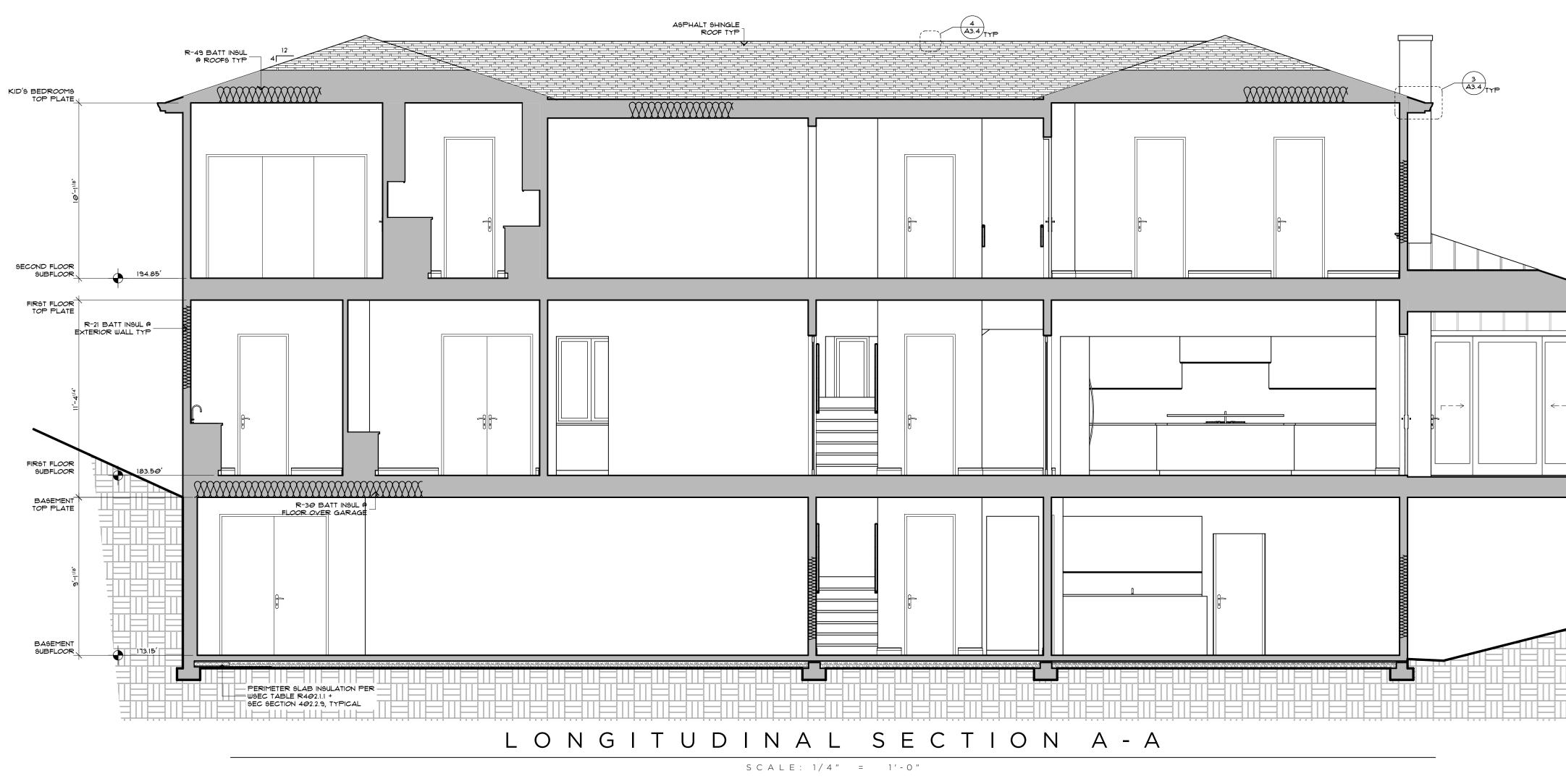


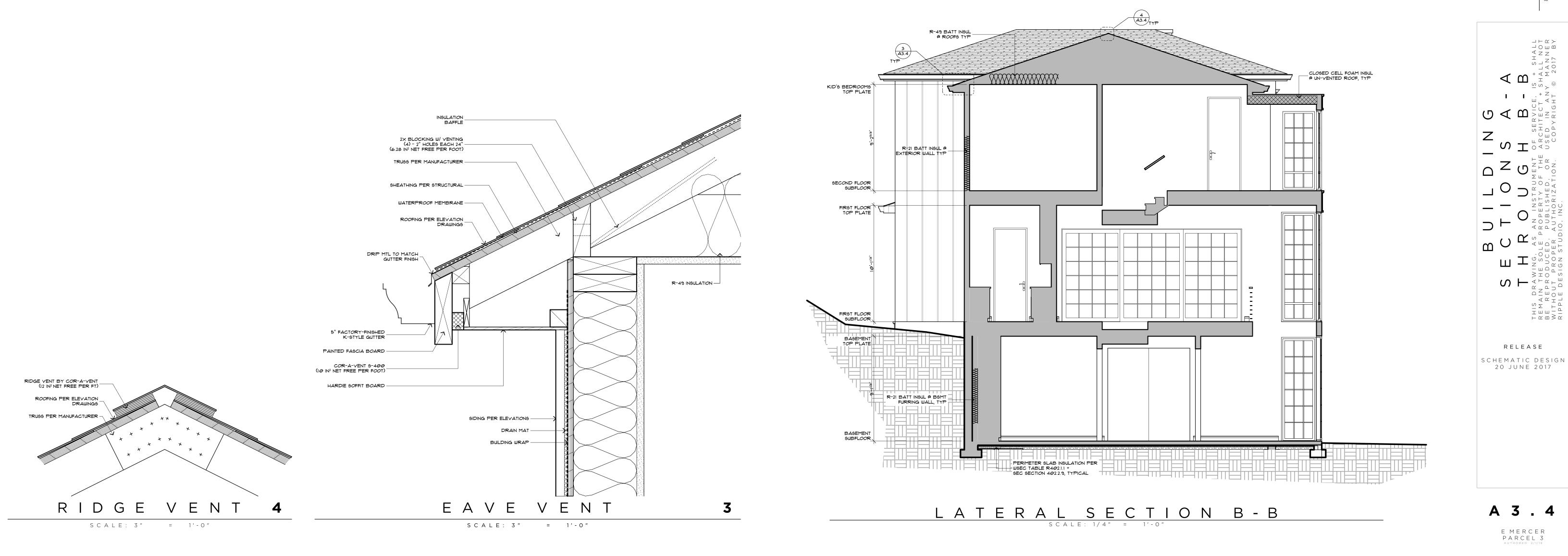
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1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL. 2. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL

PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

43,600.13′ 243′ 179.42'







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 OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL

## WSEC 2015 NOTES:

PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

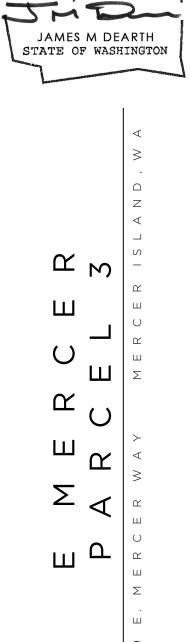
- THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2015 PRESCRIPTIVE METHOD.
   INSULATION VALUES SHALL BE AS FOLLOWS:
- A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
- C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO
- UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN. D. ALL CEILINGS UNCONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
- E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
- F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
- G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN
  @ INTERIOR FRAMED WALL.
  H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT
- INSULATION MIN.
- I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
- J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
- RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
   PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
- 5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
   6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91
- (WSEC 406.2, CREDIT 5c).
  7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE
  LESS THAN 1 FT<sup>2</sup> FOR EACH 300 FT<sup>2</sup> OF UNDER-FLOOR AREA. ONE VENTILATION
- OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE, EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
- 8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE
  IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH
  R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED
  BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS
  SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
  9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF
- CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

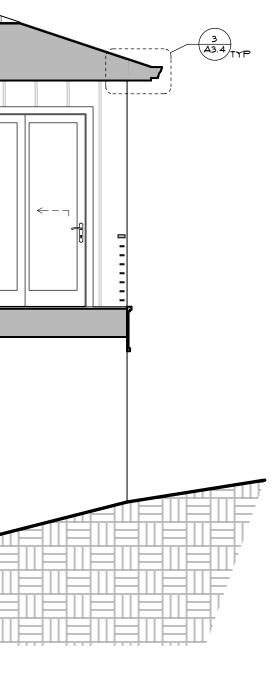


REGISTERED

ARCHITECT

9790





# DOOR SCHEDULE:

DOOR NO.	WIDTH	HEIGHT	ТҮРЕ	MATERIAL	FINISH	REMARKS
001A	6'-6"	9'-0"	FRENCH	CLAD WOOD / GLASS	THAISH	PAIR, DIVIDED LIGHT, W/ 3'-3" SIDELIGHTS
001A 001B	2'-8"	<u> </u>	PANEL	WOOD		PAIR, DIVIDED EIGHT, W/ 3-3 SIDELIGHTS
001D	2'-8"	8'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
002A	7'-0"	8'-0"	SURFACE SLIDER	WOOD		BARN STYLE SLIDING DOOR
002B	12'-0"	8'-0"	FRENCH SLIDER	CLAD WOOD / GLASS		4-PANEL, DIVIDED LIGHT
003A	2'-8"	7'-0"	PANEL	WOOD		
003B	2'-4"	7'-0"	PANEL	WOOD		
004A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY LOCK
005A	2'-8"	8'-0"	PANEL	WOOD		20-MINUTE RATED, AUTO-CLOSER
005A	6'-0"	8'-0"	PANEL	WOOD		20-MINUTE RATED, AUTO-CLOSER
006A	16'-0"	8'-0"	OVERHEAD	WOOD		GARAGE DOOR
006B	9'-0"	8'-0"	OVERHEAD	WOOD		GARAGE DOOR
101A	2'-8"	8'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
102A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY LOCK
103A	5'-0"	8'-0"	FRENCH	CLAD WOOD / GLASS		PAIR, DIVIDED LIGHT
103B	5'-0"	8'-0"	FRENCH	CLAD WOOD / GLASS		PAIR, DIVIDED LIGHT
103C	15'-6"	8'-0"	SLIDER	WOOD		3-PANEL, 2 OUTBOARD OPERABLE
105A	2'-8"	8'-0"	PANEL	WOOD		
106A	9'-0"	8'-0"	SLIDER	CLAD WOOD / GLASS		3-PANEL, DIVIDED LIGHT
107A	15'-6"	8'-0"	SLIDER	WOOD		3-PANEL, 2 OUTBOARD OPERABLE
109A	2'-8"	8'-0"	PANEL	WOOD		
110A	5'-0"	8'-0"	PANEL	WOOD		PAIR
111A	2'-8"	7'-0"	PANEL	WOOD		
111B	5'-0"	7'-0"	SLIDER	WOOD		PAIR, BY-PASS CLOSET
111C	5'-0"	7'-0"	SLIDER	WOOD		PAIR, BY-PASS CLOSET
112A	2'-8"	8'-0"	PANEL	WOOD		
201A	2'-8"	7'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
202A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY
203A	2'-8"	8'-0"		WOOD		
203B	2'-8"	8'-0"		WOOD		
204A	2'-8"	8'-0"		WOOD		
206A	2'-8"	8'-0"	PANEL	WOOD		
207A	2'-8"	7'-0"	PANEL	WOOD		
207B	9'-0"	7'-0"	SLIDER	WOOD		TRIPLE BY-PASS CLOSET
208A	2'-8"	7'-0"	PANEL	WOOD		
208B	9'-0"	7'-0"	SLIDER	WOOD		TRIPLE BY-PASS CLOSET
209A	2'-4"	7'-0"	PANEL	WOOD		PRIVACY LOCK
209B	2'-4"	7'-0"	PANEL	WOOD		PRIVACY LOCK
210A	2'-8"	7'-0"		WOOD		
210B	5'-0"	7'-0"	SLIDER	WOOD		BY-PASS CLOSET
211A	2'-4"	7'-O''	PANEL	WOOD		

# WINDOW SCHEDULE:

WINDOW NO.	WIDTH	HEIGHT	HEADER	ТҮРЕ	MATERIAL	FINISH	REMARKS
001A	3'-0''	9'-0''	9'-0''	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING
001B	5'-0''	9'-0''	9'-0''	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING
003A	8'-0''	5'-0''	8'-0''	CASEMENT	ALUMINUM		TRIPLE, DIVIDED LIGHT, SAFETY GLAZING, EGRESS
101A	5'-0''	9'-6"	9'-6''	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING
101B	6'-6"	9'-6''	9'-6"	FIXED	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING
101C	6'-6"	9'-6''	9'-6''	FIXED	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING
101D	3'-0''	9'-6''	9'-6"	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING
102A	2'-0''	4'-0''	8'-0''	FIXED	ALUMINUM		DIVIDED LIGHT
102B	2'-0''	4'-0''	8'-0''	CASEMENT	ALUMINUM		DIVIDED LIGHT
103A	6'-0''	7'-6"	9'-6''	FIXED	ALUMINUM		PAIR, DIVIDED LIGHT, SAFETY GLAZING
103B	6'-0''	7'-6"	9'-6''	FIXED	ALUMINUM		PAIR, DIVIDED LIGHT, SAFETY GLAZING
106B	6'-0''	8'-0''	8'-0''	CASEMENT	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING, FALL PROTECTION, EGRESS
107A	9'-0''	7'-6"	9'-6''	FIXED	ALUMINUM		TRIPLE, DIVIDED LIGHT, SAFETY GLAZING
108A	4'-0''	5'-0''	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT
110A	6'-0''	7'-6"	9'-6''	FIXED	ALUMINUM		PAIR, DIVIDED LIGHT, SAFETY GLAZING
111A	8'-0''	5'-0''	8'-0''	CASEMENT	ALUMINUM		TRIPLE, DIVIDED LIGHT, EGRESS
112A	6'-0''	7'-6"	9'-6''	FIXED	ALUMINUM		PAIR, DIVIDED LIGHT, FROSTED GLASS
201A	5'-0''	7'-0''	7'-0''	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING
201B	6'-6''	7'-0''	7'-0''	FIXED	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING
201C	6'-6"	7'-0''	7'-0''	FIXED	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING
201D	3'-0"	7'-0''	7'-0''	FIXED	ALUMINUM		DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING
202A	6'-0''	8'-0''	8'-0''	CASEMENT	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING, FALL PROTECTION, EGRESS
202B	6'-0''	8'-0''	8'-0''	CASEMENT	ALUMINUM		DOUBLE, DIVIDED LIGHT, SAFETY GLAZING @ LOWER AWNING, FALL PROTECTION, EGRESS
202C	3'-0''	4'-6''	8'-0''	CASEMENT	ALUMINUM		DIVIDED LIGHT, EGRESS
202D	3'-0''	4'-6"	8'-0''	CASEMENT	ALUMINUM		DIVIDED LIGHT, EGRESS
203A	6'-0''	5'-6"	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT, SAFETY GLAZING
205A	9'-0''	5'-0''	7'-0''	FIXED	ALUMINUM		TRIPLE, DIVIDED LIGHT
206A	6'-0''	6'-0''	8'-0''	FIXED	ALUMINUM		PAIR, DIVIDED LIGHT
207A	6'-0''	6'-0''	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT, EGRESS
208A	3'-0''	6'-0''	8'-0''	CASEMENT	ALUMINUM		DIVIDED LIGHT, EGRESS
208B	3'-0''	6'-0''	8'-0''	CASEMENT	ALUMINUM		DIVIDED LIGHT, EGRESS
210A	6'-0''	5'-6"	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT, EGRESS
210B	4'-0''	4'-0''	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT
211A	4'-0''	4'-0''	8'-0''	CASEMENT	ALUMINUM		PAIR, DIVIDED LIGHT, SAFETY GLAZING

## WSEC 2015 NOTES:

THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2015 PRESCRIPTIVE METHOD.
 INSULATION VALUES SHALL BE AS FOLLOWS:

A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.

C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO DESIGN STUDIO

UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN. D. ALL CEILINGS UNCONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN

INSULATION MIN.

E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.

F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN. G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN

@ INTERIOR FRAMED WALL. H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT

INSULATION MIN. I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.

J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.

3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS. 4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @

KITCHEN. 5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL

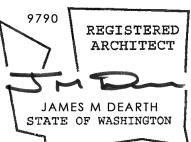
BATHS + LAUNDRY. 6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).

7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT<sup>2</sup> FOR EACH 300 FT<sup>2</sup> OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE, EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.

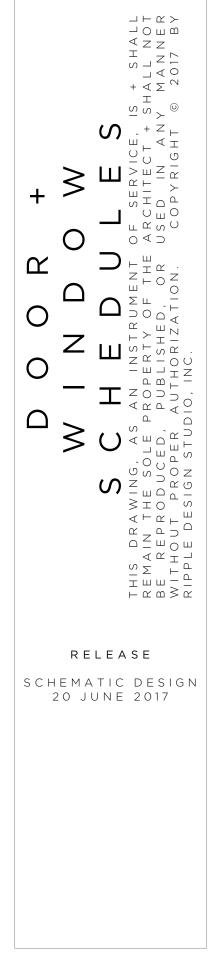
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.

 9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.











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### Criteria

WIND

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2015 INTERNATIONAL BUILDING CODE

2. DESIGN LOAD CRITERIA FLOOR LIVE LOAD (RESIDENTIAL) FLOOR LIVE LOAD (RESIDENTIAL DECKS) SNOW

> EARTHQUAKE ANALYSIS PROCEDURE: LATERAL SYSTEM: BASE SHEAR (ULTIMATE)

SITE CRITERIA

40 PSF 60 PSF Pf=25 PSF lw=1.0, GCpi=0.18, 110 MPH (ULTIMATE), EXPOSURE "B", KZT=1.84

EQUIVALENT LATERAL FORCE PROCEDURE LIGHT FRAMED SHEAR WALLS V=21.30 KIPS SITE CLASS=D, Ss=1.461, Sds=0.974, S1=0.556, SD1=0.556, Cs=0.150 SDC D, le=1.0, R=6.5

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

- 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 OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
- 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 TO THE OWNER, CONTRACTORS, OR OTHER 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.
- 10. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. CONNECTOR PLATE WOOD ROOF TRUSSES
- CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8"=1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENTS AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH REINFORCEMENT SHOP DRAWINGS.
- APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.
- 11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

### Quality Assurance

- 1. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1704 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION IS REQUIRED OF THE FOLLOWING TYPES OF CONSTRUCTION:
- EXPANSION BOLTS AND THREADED EXPANSION INSERTS PER MANUFACTURER
- EPOXY GROUTED INSTALLATIONS PER MANUFACTURER 2. UNLESS OTHERWISE NOTED, THE FOLLOWING ELEMENTS COMPRISE THE SEISMIC-FORCE-RESISTING SYSTEM AND ARE SUBJECT TO SPECIAL INSPECTION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH SECTION 1705.12 OF THE INTERNATIONAL BUILDING CODE.
- A. STRUCTURAL WOOD SHEAR WALL SYSTEMS REQUIRE PERIODIC INSPECTION FOR NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SEISMIC FORCE RESISTING SYSTEM INCLUDING DRAG STRUTS, BRACES AND HOLDOWNS.
- 3. STRUCTURAL OBSERVATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 1704 OF THE INTERNATIONAL BUILDING CODE FOR THE FOLLOWING BUILDING ELEMENTS: SHEARWALLS

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

STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY SECTION 109 OR OTHER SECTIONS OF THE INTERNATIONAL BUILDING CODE.

THE OWNER SHALL EMPLOY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUC-TURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPEC-TOR, CONTRACTOR, AND THE BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

### Geotechnical

- ALLOWABLE SOIL PRESSURE
- LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) COEFICIENT OF FRICTION (FACTOR OF SAFETY OF 1.5 INCLUDED)
- PILE CAPACITY (COMPRESSION/TENSION/LATERAL)
- FOUNDATIONS.

### Concrete

- 1705.3.2.3, SPECIAL INSPECTION IS NOT REQUIRED.)
- SPECIFIED PERFORMANCE.
- WITH TABLE ACI 318 TABLE 4.2.1 MODERATE EXPOSURE.
- PSI.
- FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
- 6. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS: FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSEDTO EARTH FORMED SURFACES EXPOSED TO EARTH
  - OR WEATHER (#5 BARS OR SMALLER) SLABS AND WALLS (INT. FACE)
- 6" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN 8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
- SURFACES, BOTH CAST-IN-PLACE AND PRECAST.
- WHICH IT IS PLACED (3000 PSI MINIMUM).

### Anchorage

# General Structural Notes

The Following Apply Unless Noted Otherwise on the Drawings

1. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ONPLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT. 2000 PSF

55 PCF/35 PCF

0.3

SOILS REPORT REFERENCE: PanGEO, Inc. Project #14-206, Dated 2/4/16

FOUNDATION DESIGN IS BASED ON THE INSTALLATION OF AGGREGATE PIERS IN ACCORDANCE WITH RECOMMENDATIONS OF GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE ALL SOIL CONDITIONS PRIOR TO FORMING

1. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC SECTION 1905, 1906 AND ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c=3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. (STRUCTURAL DESIGN OF FOUNDATION IS BASED ON A f'c=2,500 PSI, PER IBC

2. THE MINIMUM AMOUNTS OF CEMENT MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH IBC 1905.6. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO THE CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR

3. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE

4. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy=60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy=40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy=60,000

5. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 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

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

3"

1-1/2" GREATER OF BAR DIAMETER

PLUS 1/8" OR 3/4" 7. CONCRETE WALL REINFORCING - PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

8. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE

9. 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 Wood

•			
•	CONFORMANCE WI		MC-19, AND GRADED AND MARKED IN IG RULES FOR WEST COAST LUMBER NO.17. DS:
	JOISTS	(2X & 3X MEMBERS)	DOUGLAS FIR-LARCH NO. 2
	AND BEAMS:		MINIMUM BASE VALUE, Fb=900 PSI
		(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2
			MINIMUM BASE VALUE, Fb=900 PSI
	BEAMS:	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1
			MINIMUM BASE VALUE, Fb=1350 PSI
	POSTS:	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2
			MINIMUM BASE VALUE, Fc=1350 PSI
		(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1
			MINIMUM BASE VALUE, Fc=1000 PSI

STUDS, PLATES & MISC. FRAMING:

MANUFACTURED LUMBER, PSL, LVL, AND LSL, SHALL BE MANUFACTURED UNDER A PROCESS APPROVED BY THE NATIONAL RESEARCH BOARD. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE NATIONAL RESEARCH BOARD NUMBER, AND THE QUALITY CONTROL AGENCY. ALL PSL, LVL, AND LSL LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ICC-ES REPORT ESR-1387 USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. THE MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: PSL (2.0E)

DOUGLAS-FIR-LARCH NO. 2

- Fb=2900 PSI, E=2000 KSI, Fv=290 PSI LVL (1.9E) Fb=2600 PSI ,E=1900 KSI, Fv=285 PSI
- Fb=2325 PSI ,E=1550 KSI, Fv=310 PSI LSL (1.55E)

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER, ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

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

- PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.B.O. APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.
- PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS

25 PSF

TOLLOWS.	
TOP CHORD LIVE LOAD	
TOP CHORD DEAD LOAD	
BOTTOM CHORD DEAD LOAD	
TOTAL LOAD	
WIND UPLIFT (TOP CHORD)	

10 PSF
5 PSF
40 PSF
5 PSF

BOTTOM CHORD LIVE LOAD 10 PSF (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURENTLY WITH THE ROOF LIVE LOAD) WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. THE EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

- PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.
- A. ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.
- B. FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.
- C. WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.
- D. REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

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

PRESSURE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD. PRESSURE TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO A RENTION OF 0.25 PCF. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO A RETENTION OF 0.40 PCF. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO A RETENTION OF 0.60 PCF. SODIUM BORATE (SBX) TREATED WOOD SHALL NOT BE USED WHERE EXPOSED TO WEATHER. FASTENERS AND TIMBER CONNECTORS IN DIRECT CONTACT WITH ACQ-A, CBA-A, CA-B, OR SBX TREATED WOOD SHALL BE G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653. FASTENERS AND TIMBER CONNECTORS IN DIRECT CONTACT WITH ACZA TREATED WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL.

### Wood (Con't)

TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2015. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

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

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

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

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

8d	2-1/2"	0.131"
10d	3"	0.148"
16d BOX	3-1/2"	0.135"

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

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION) WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

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

- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.
- B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

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

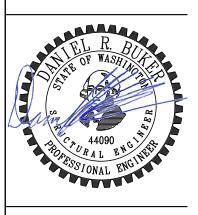
ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED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

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

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



Seattle, WA 98155



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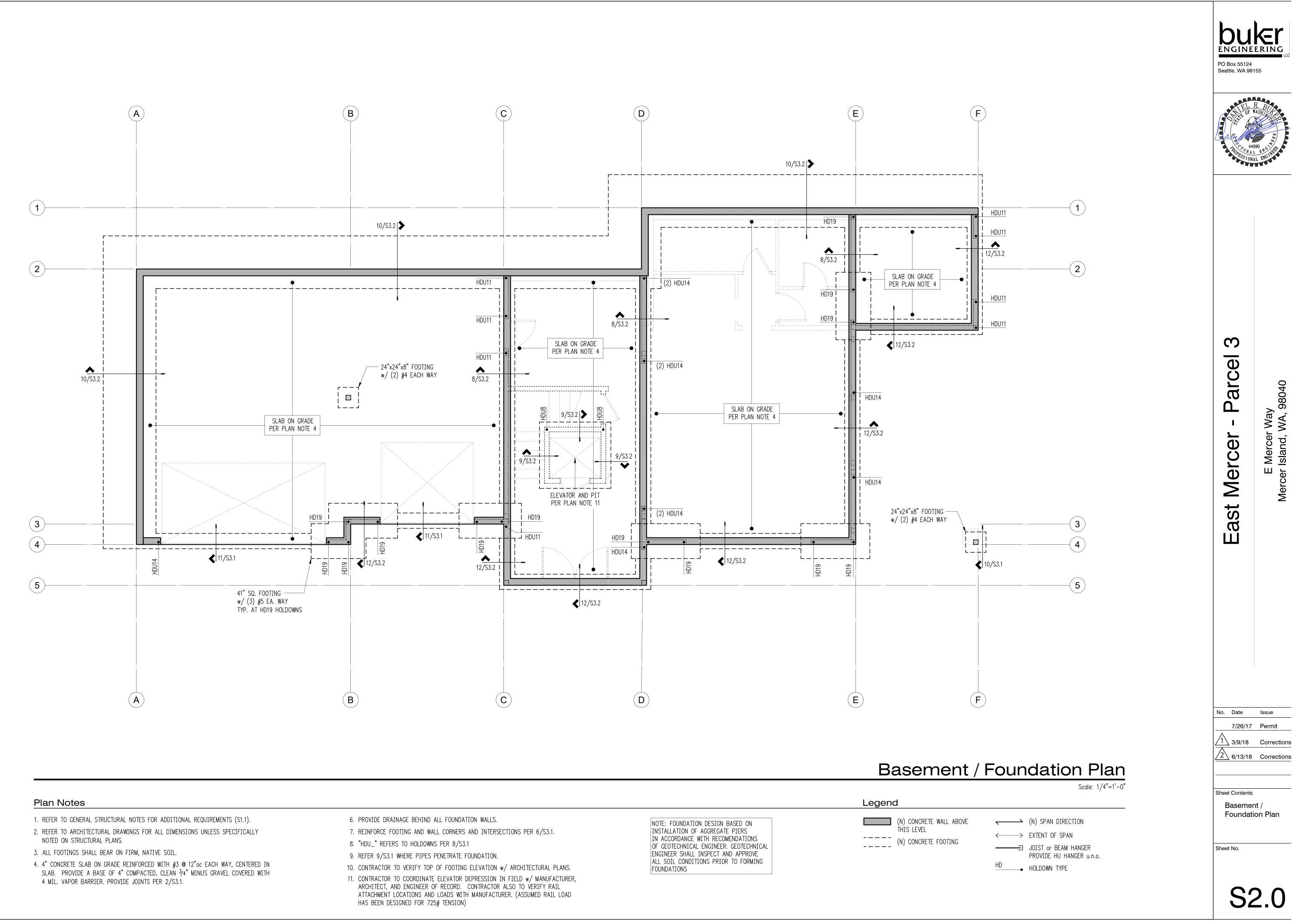
General Structural Notes

Sheet Contents

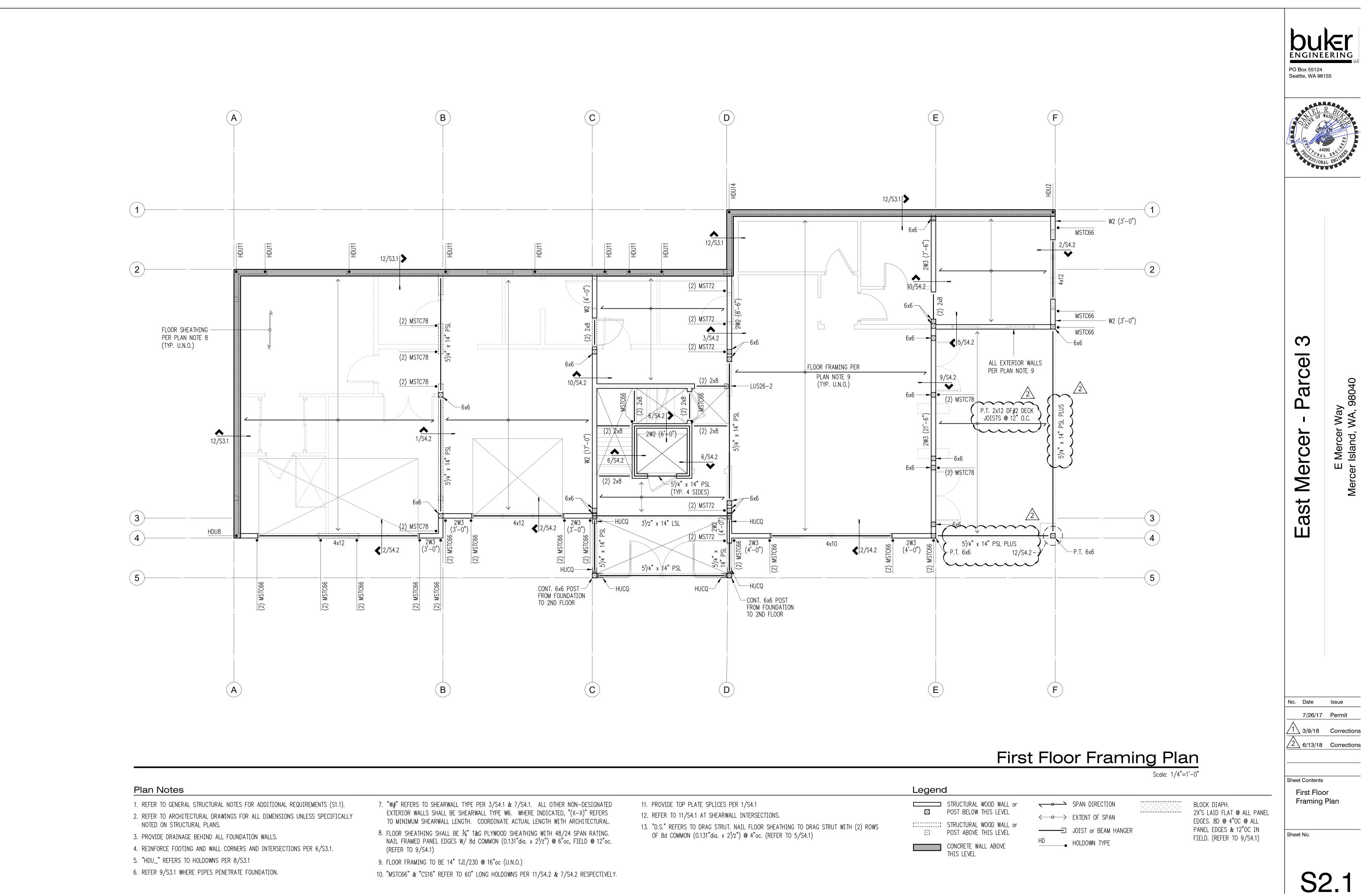
Sheet No.

<sup>1.</sup> EXPANSION BOLTS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "KWIK BOLT TZ" AS MANUFACTURED BY THE HILTI CORP., INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-1917, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL EXPANSION BOLT INSTALLATION.

<sup>2.</sup> EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "HIT RE 500-V3" AS MANUFACTURED BY HILTI CORP. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2322. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED.

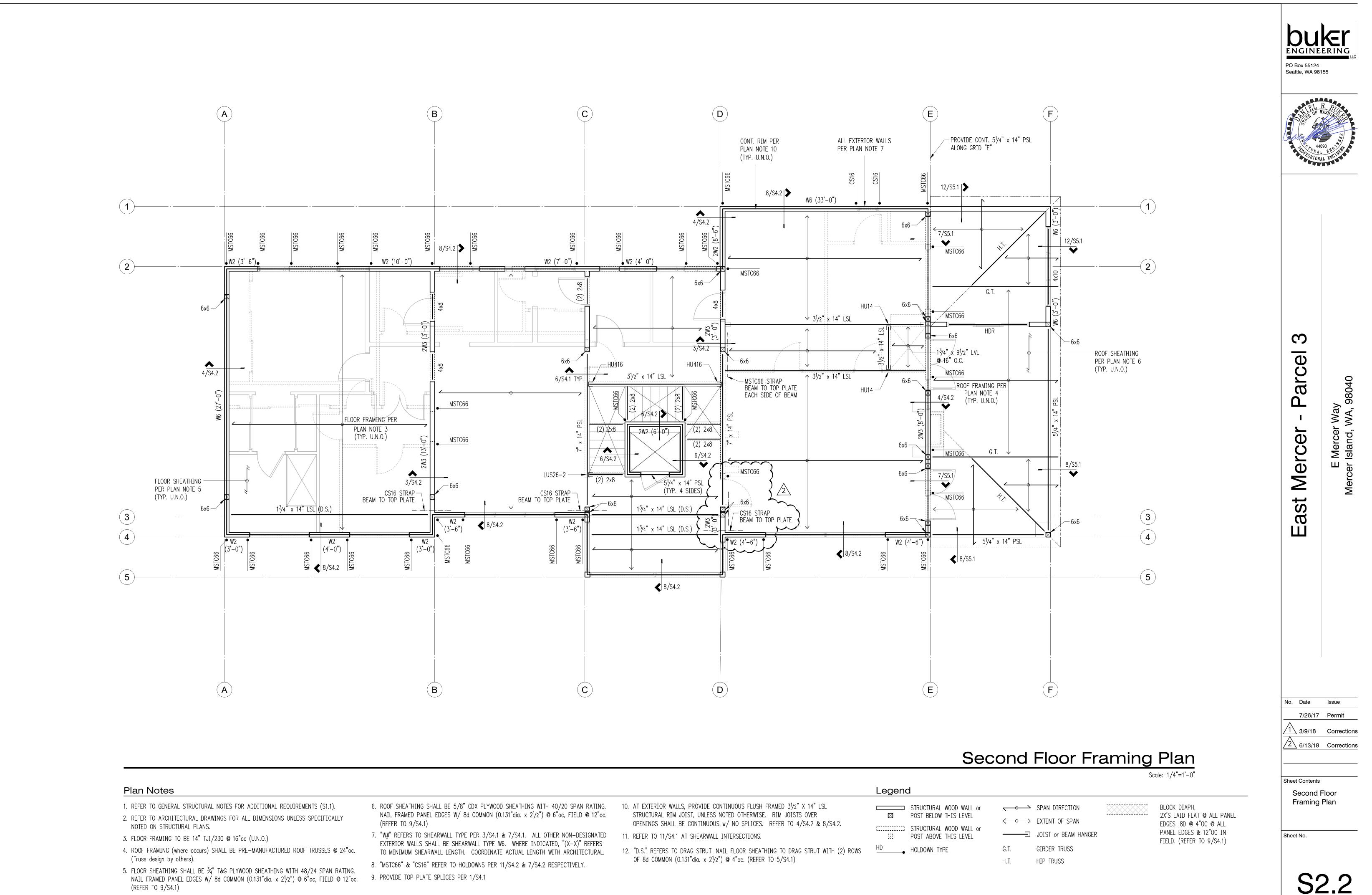


1.	REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS (S1.1).	6.	PR
2.		7.	RE
		8.	"Н
		9.	RE
	4" CONCRETE SLAB ON GRADE REINFORCED WITH #3 @ 12"oc EACH WAY, CENTERED IN	0.	СС
	SLAB. PROVIDE A BASE OF 4" COMPACTED, CLEAN $\frac{3}{4}$ " MINUS GRAVEL COVERED WITH 4 MIL, VAPOR BARRIER, PROVIDE JOINTS PER 2/S.3.1.	11.	СС



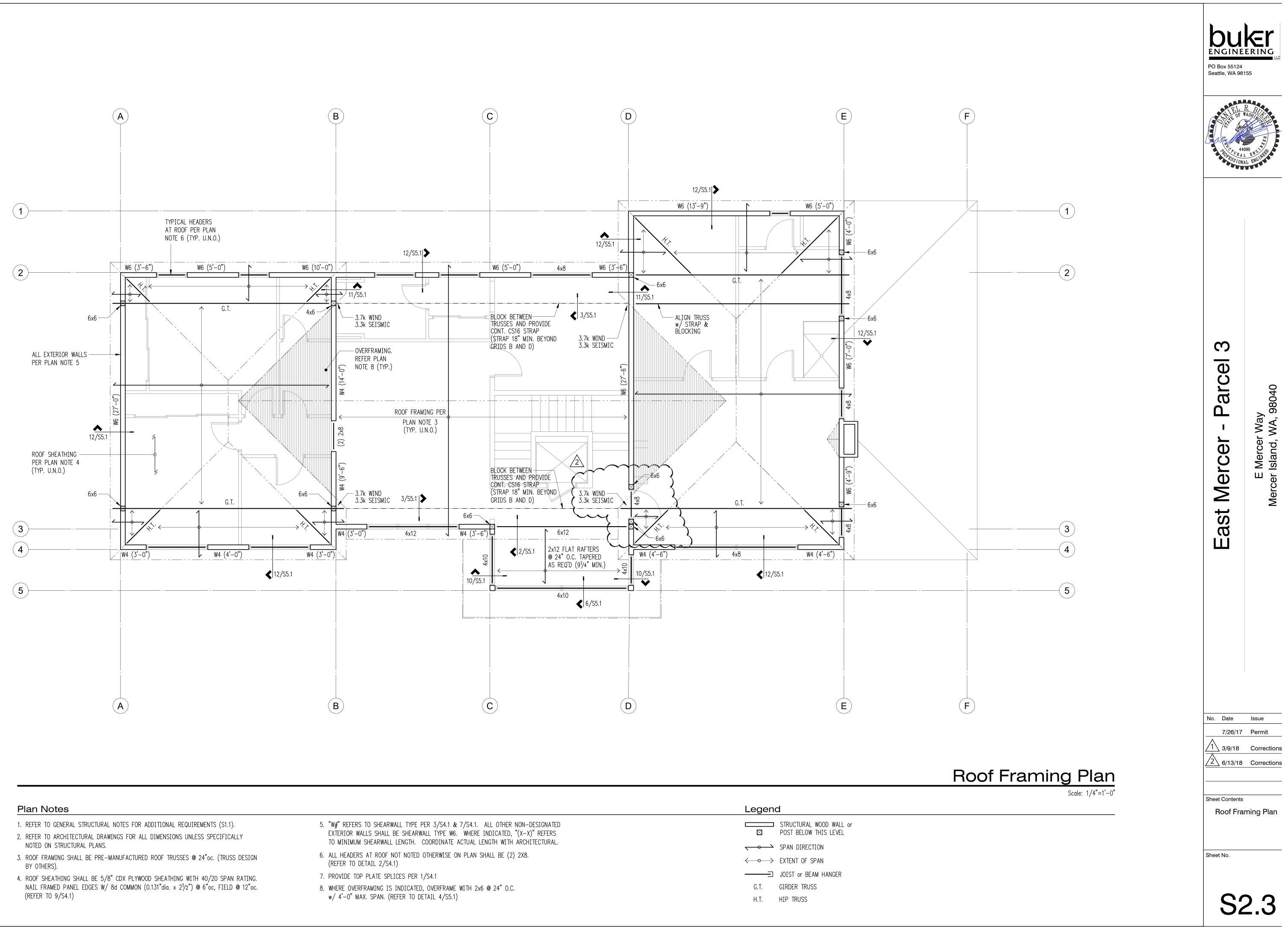
- 6. REFER 9/S3.1 WHERE PIPES PENETRATE FOUNDATION.

10. "MSTC66" & "CS16" REFER TO 60" LONG HOLDOWNS PER 11/S4.2 & 7/S4.2 RESPECTIVELY.



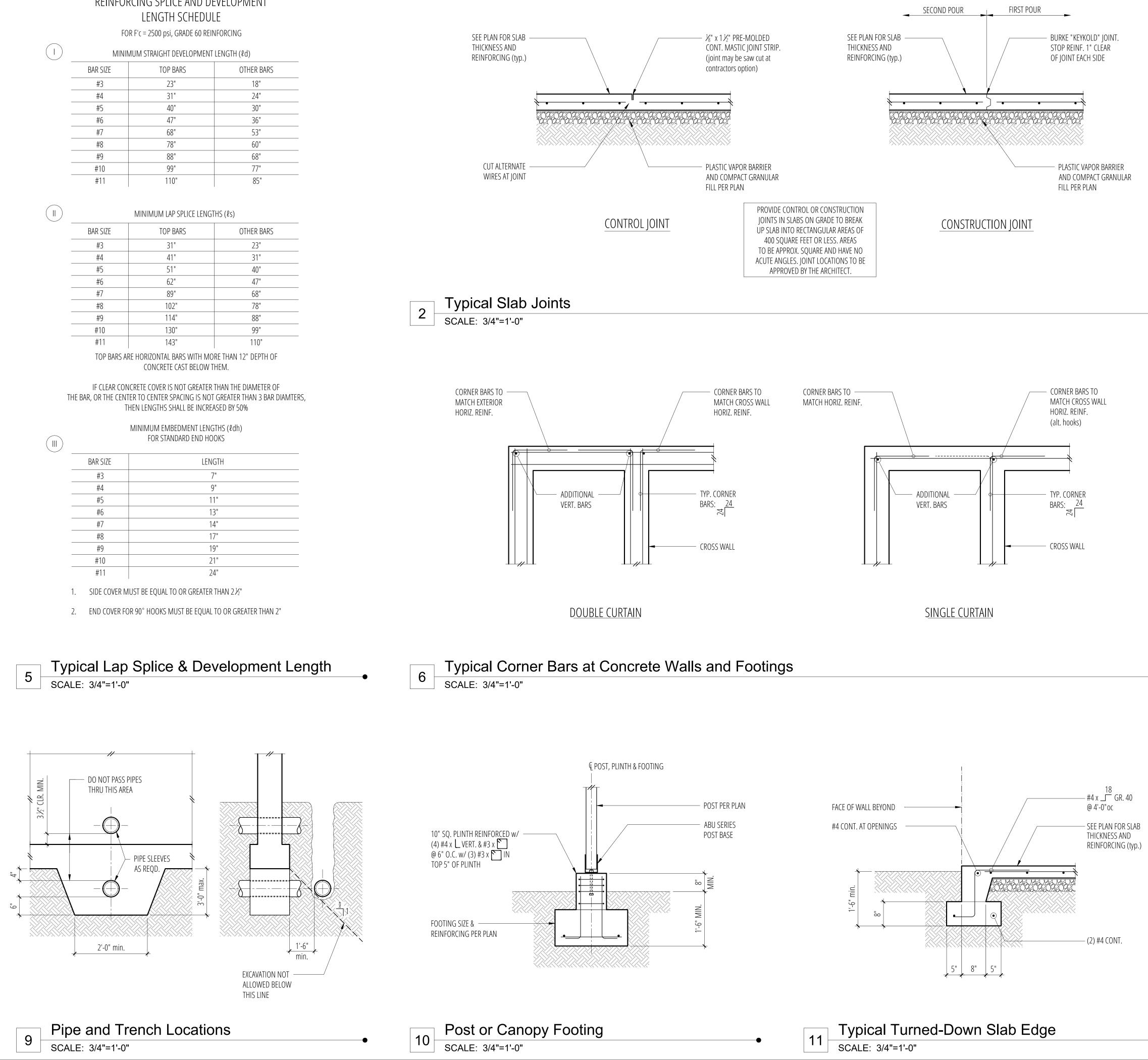
- (REFER TO 9/S4.1)

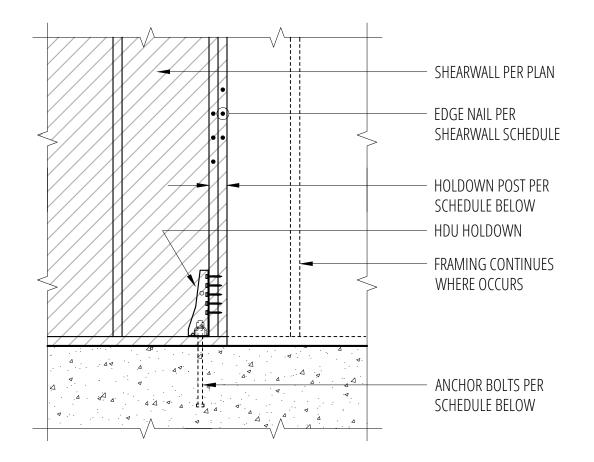
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	STRUCTURAL WOOD WALL or POST BELOW THIS LEVEL
	SPAN DIRECTION
$\langle \rightarrow \rangle$	EXTENT OF SPAN
]	JOIST or BEAM HANGER
G.T.	GIRDER TRUSS
H.T.	HIP TRUSS

### REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE





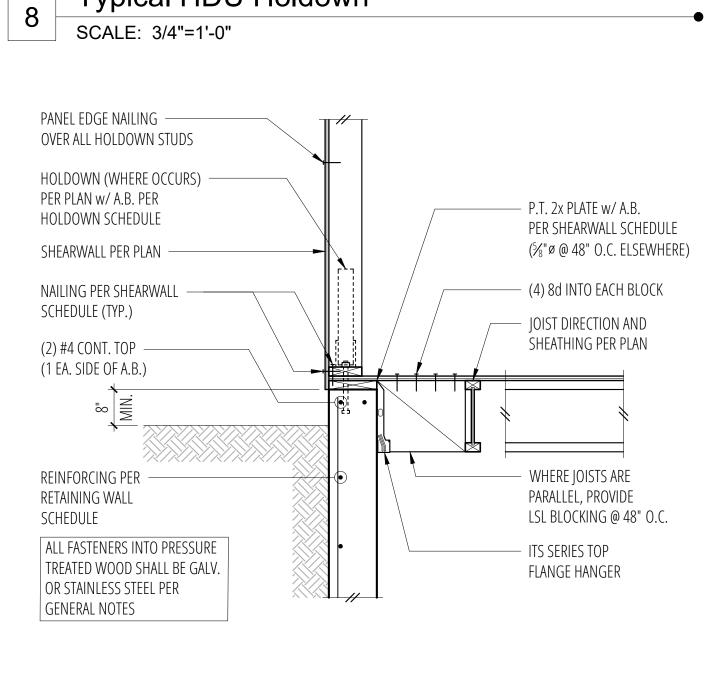
### Holdown Schedule

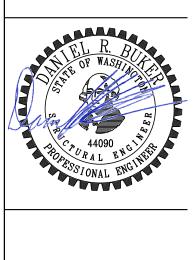
Plan Mark	Screws	Anchor Bolt ②	A.B. Embed	Holdowi IF 2x4	n Post ① IF 2x6	Capacity #
HDU2-SDS2.5	(6) SDS ¼" x 2 ½"	SSTB16	12 5⁄8"	(2) 2x4	4x6	2215/3075
HDU4-SDS2.5	(10) SDS ¼" x 2 ½"	SB ⅔ x 24	18"	4x4	4x6	4565
HDU5-SDS2.5	(14) SDS ¼" x 2 ½"	SB ⅔ x 24	18"	4x4	4x6	5645
HDU8-SDS2.5	(20) SDS ¼" x 2 ½"	SB ⅔ x 24	18"	4x4	4x6	6970
HDU11-SDS2.5	(30) SDS ¼" x 2 ½"	SB 1 x 30	24"	4x8	бхб	9535
HDU14-SDS2.5	(36) SDS¼" x 2½"	SB½ x 30	24"	4x8	6x6	10770
HD19	(5) 1"Ø THRU BOLTS	PAB10H	21"	N/A	6x6	26690+

① MINIMUM SIZE OF POST AT END OF WALL UNLESS NOTED OTHERWISE ON FRAMING PLANS.

② "SSTB" & "SB" REFER TO ANCHOR BOLTS BY SIMPSON STRONG-TIE. INSTALL PER MANUFACTURER.

Typical HDU Holdown





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PO Box 55124

Seattle, WA 98155

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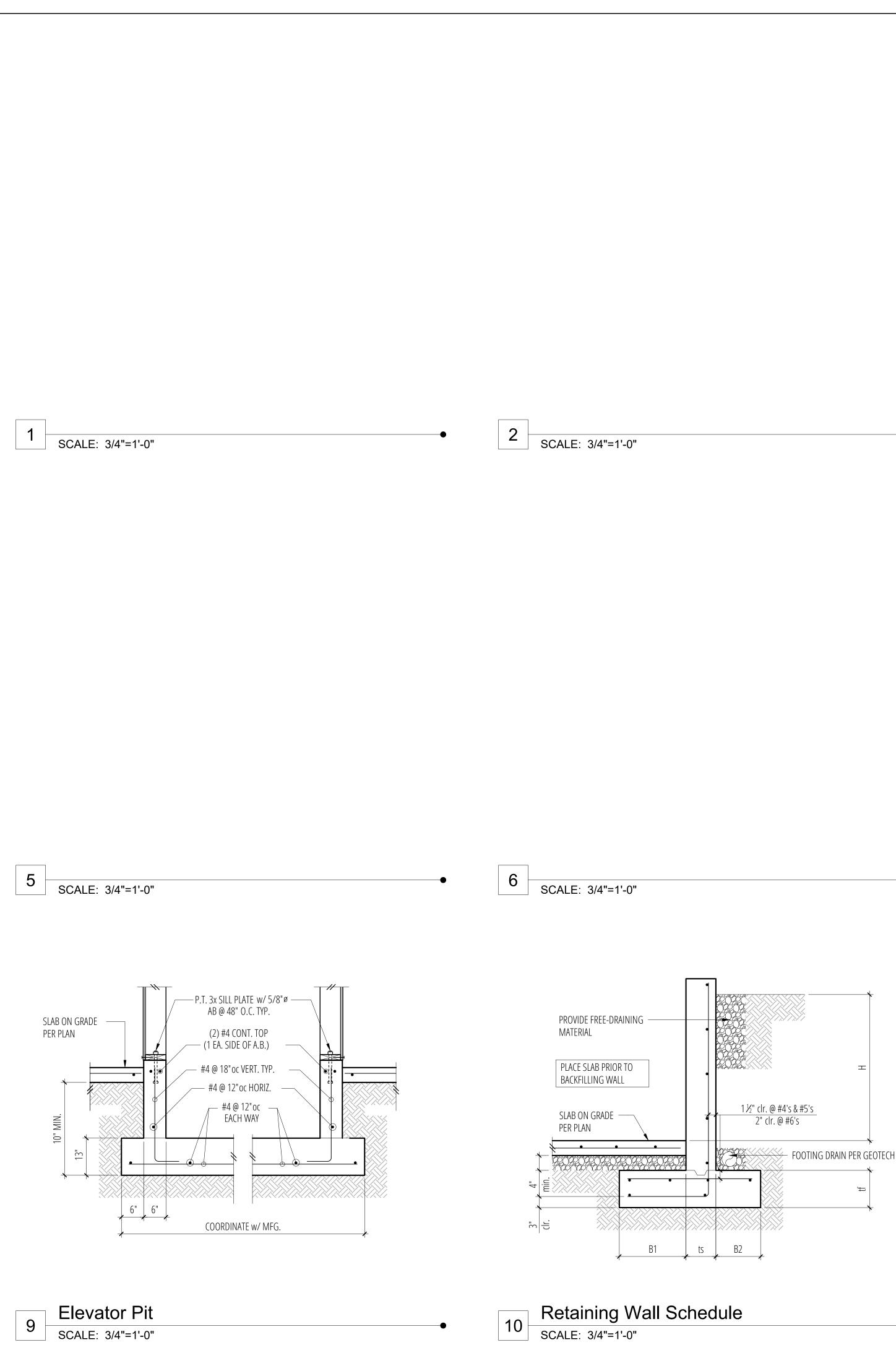
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Sheet Contents **Concrete Details** 

Sheet No.



Exterior Framing at Basement (Dropped Joist) 12 SCALE: 3/4"=1'-0"

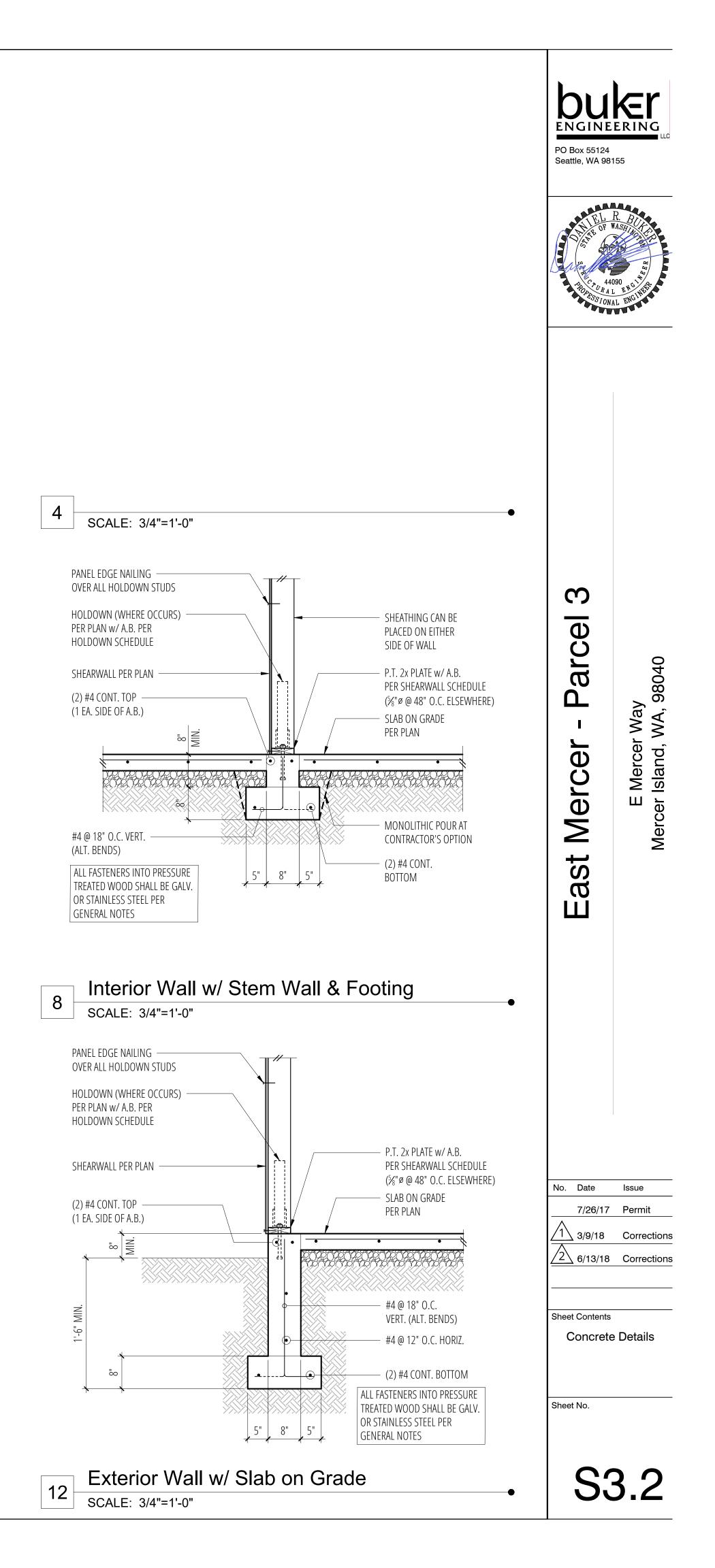


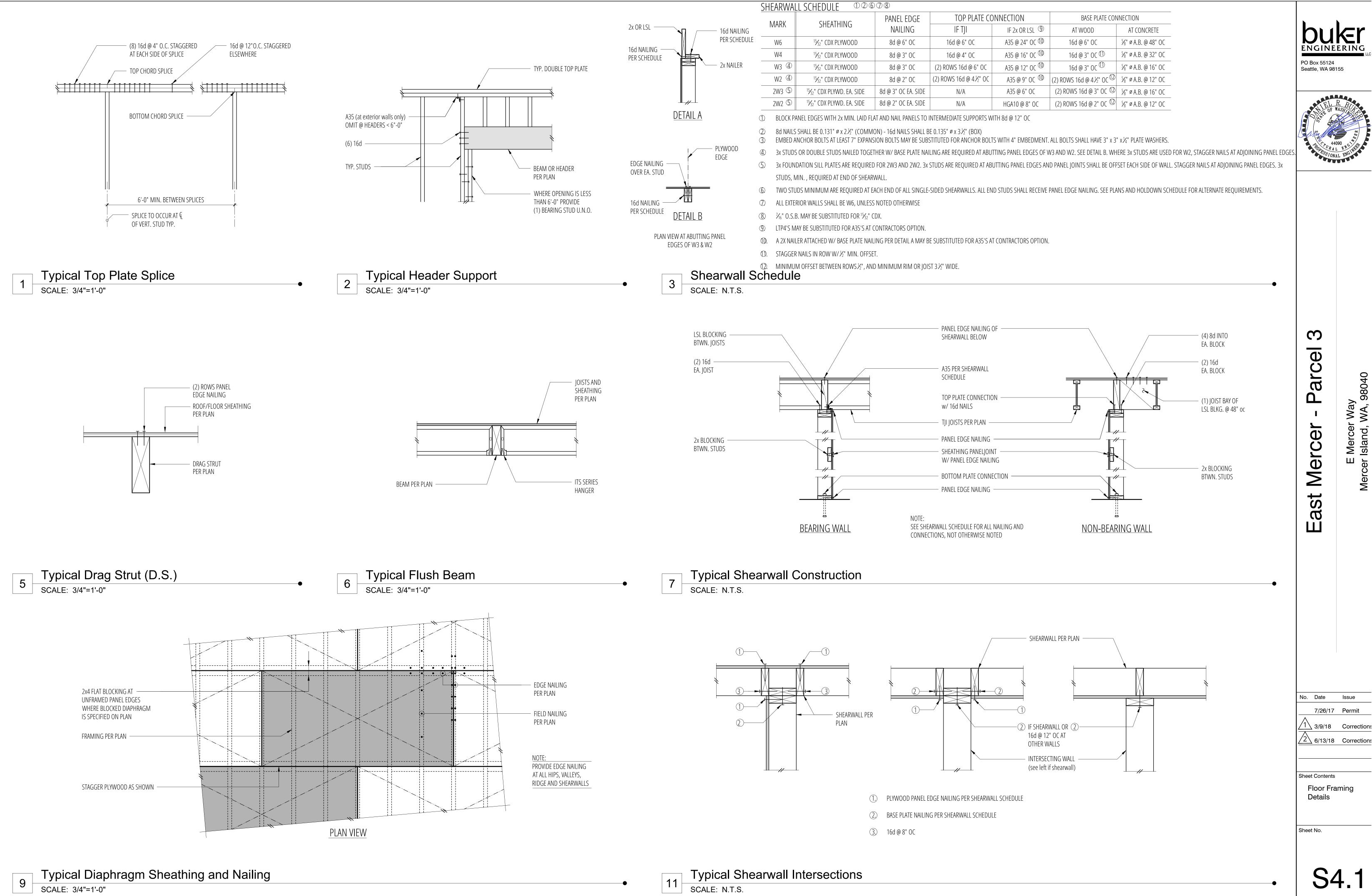
## RETAINING WALL SCHEDLILE W/ SLAB

KETAINING	J VVALL .	ος περυ	LL W/ J	LAD				
H (ft.) B1	tc	B2	tf	STEM REINFORCING		FOOTING REINFORCING		
11 (IL.)	H (ft.) B1 ts			VERT.	HORIZ.	TOP	LONGIT.	
3'-0"	5"	8"	5"	8"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(2) #4
4'-0"	1'-0"	8"	5"	8"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(2) #4
5'-0"	1'-6"	8"	5"	10"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(3) #4
6'-0"	2'-3"	8"	5"	10"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(4) #4
7'-0"	2'-6"	8"	9"	10"	#4@9"0.C.	#4 @ 9" O.C.	-	(5) #4
8'-0"	2'-9"	8"	1'-0"	12"	#5 @ 12" O.C.	#4 @ 12" O.C.	#5 @ 18" O.C.	(5) #5
9'-0"	3'-3"	8"	1'-3"	13"	#5 @ 9" O.C.	#4 @ 9" O.C.	#4 @ 18" O.C.	(6) #5
10'-0"	4'-3"	10"	1'-6"	15"	#6 @ 9" O.C.	#4 @ 9" O.C.	#4 @ 18" O.C.	(7) #5
11'-0"	4'-6"	10"	2'-0"	15"	#6 @ 9" O.C.	#4 @ 9" O.C.	#4 @ 18" O.C.	(8) #5

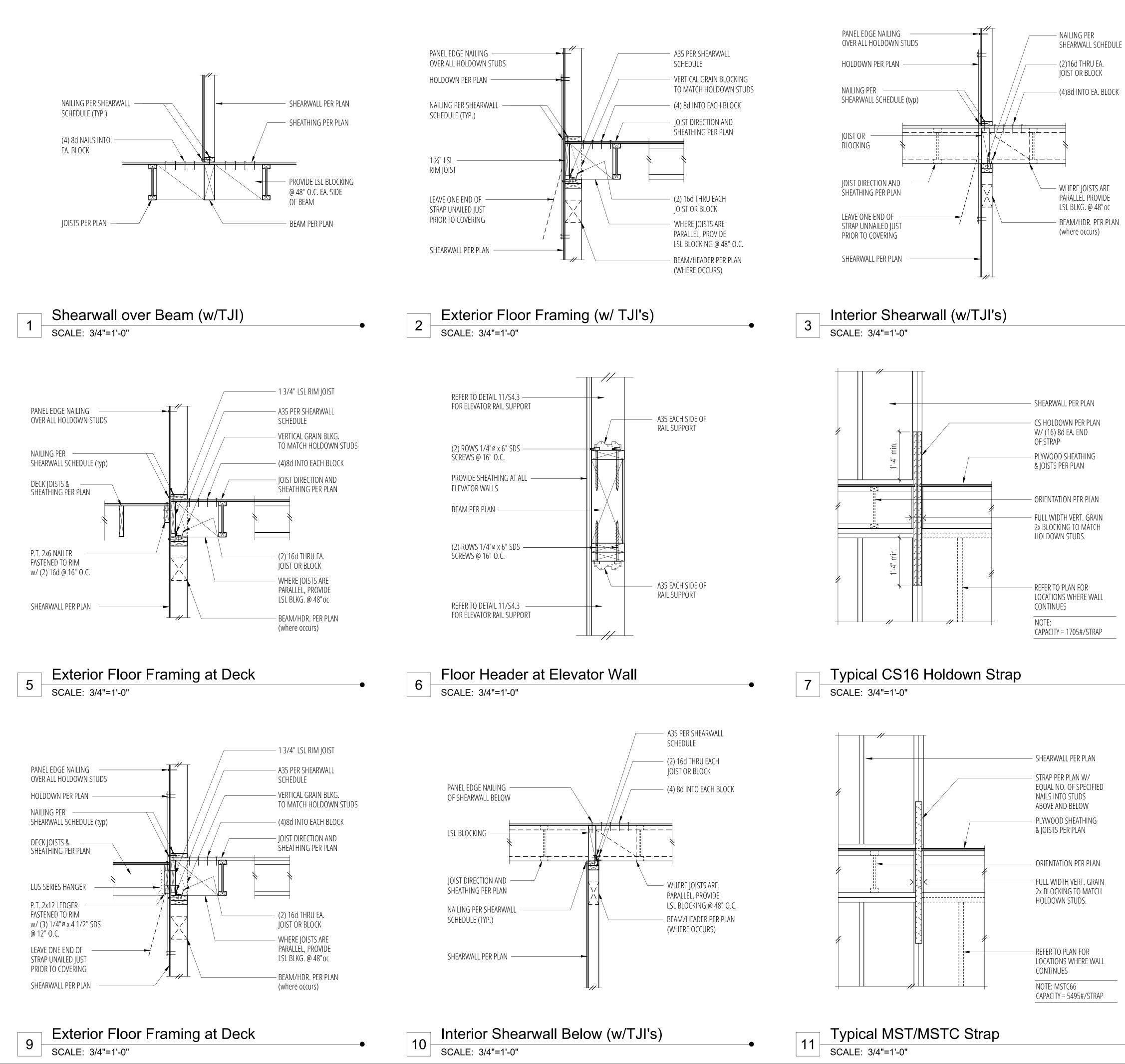
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	1	SCALE: 3/4"=1'-0"

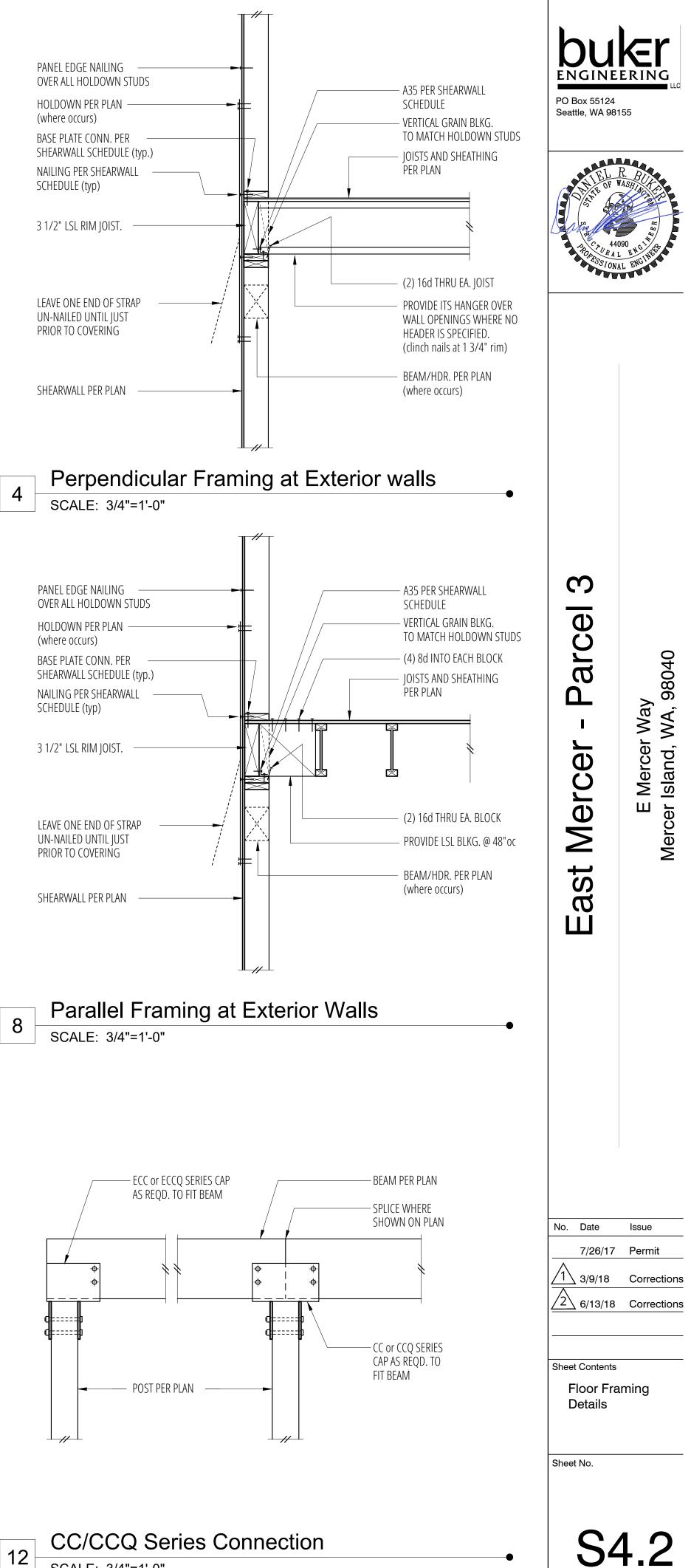
3 SCALE: 3/4"=1'-0"





TOP PLATE CONNECTION		BASE PLATE CONNECTION		
IF TJI	IF 2x OR LSL (9)	AT WOOD	AT CONCRETE	
d@6"0C	A35 @ 24" OC 🛈	16d @ 6" OC	5∕8" ø A.B. @ 48" OC	
d@4"0C	A35 @ 16" OC 🛈	16d @ 3" OC 🛈	5∕8" ø A.B. @ 32" OC	
/S 16d @ 6" OC	A35 @ 12" OC 🔟	16d @ 3" OC <sup>🕕</sup>	%" ø A.B. @ 16" OC	
5 16d @ 4½" OC	A35 @ 9" OC 🔟	(2) ROWS 16d @ 4½" OC <sup>⑦</sup>	5∕8" ø A.B. @ 12" OC	
N/A	A35 @ 6" OC	(2) ROWS 16d @ 3" OC 🛈	%" ø A.B. @ 16" OC	
N/A	HGA10 @ 8" OC	(2) ROWS 16d @ 2" OC 🗘	5∕8" ø A.B. @ 12" OC	
d @ 4" OC /S 16d @ 6" OC 5 16d @ 4½" OC N/A	A35 @ 16" OC <sup>(1)</sup> A35 @ 12" OC <sup>(1)</sup> A35 @ 9" OC <sup>(1)</sup> A35 @ 6" OC	16d @ 3" OC ① 16d @ 3" OC ① (2) ROWS 16d @ 4½" OC ② (2) ROWS 16d @ 3" OC ②	5%" Ø A.B. @ 32" OC         5%" Ø A.B. @ 16" OC         5%" Ø A.B. @ 12" OC         5%" Ø A.B. @ 16" OC	





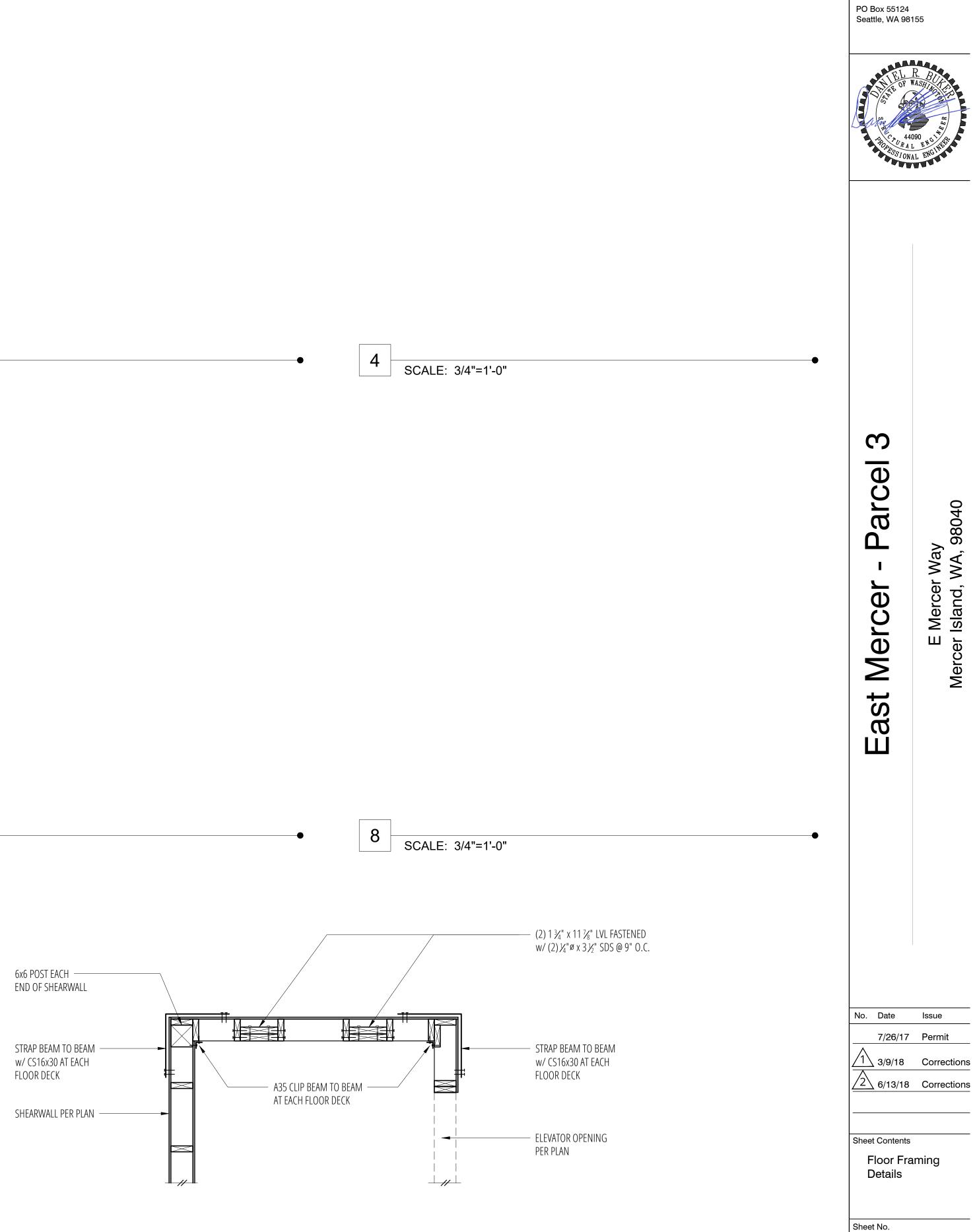
SCALE: 3/4"=1'-0"

1 SCALE: 3/4"=1'-0"	2 SCALE: 3/4"=1'-0"
5 SCALE: 3/4"=1'-0"	6 SCALE: 3/4"=1'-0"
9 SCALE: 3/4"=1'-0"	10 SCALE: 3/4"=1'-0"

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

7 SCALE: 3/4"=1'-0" -•

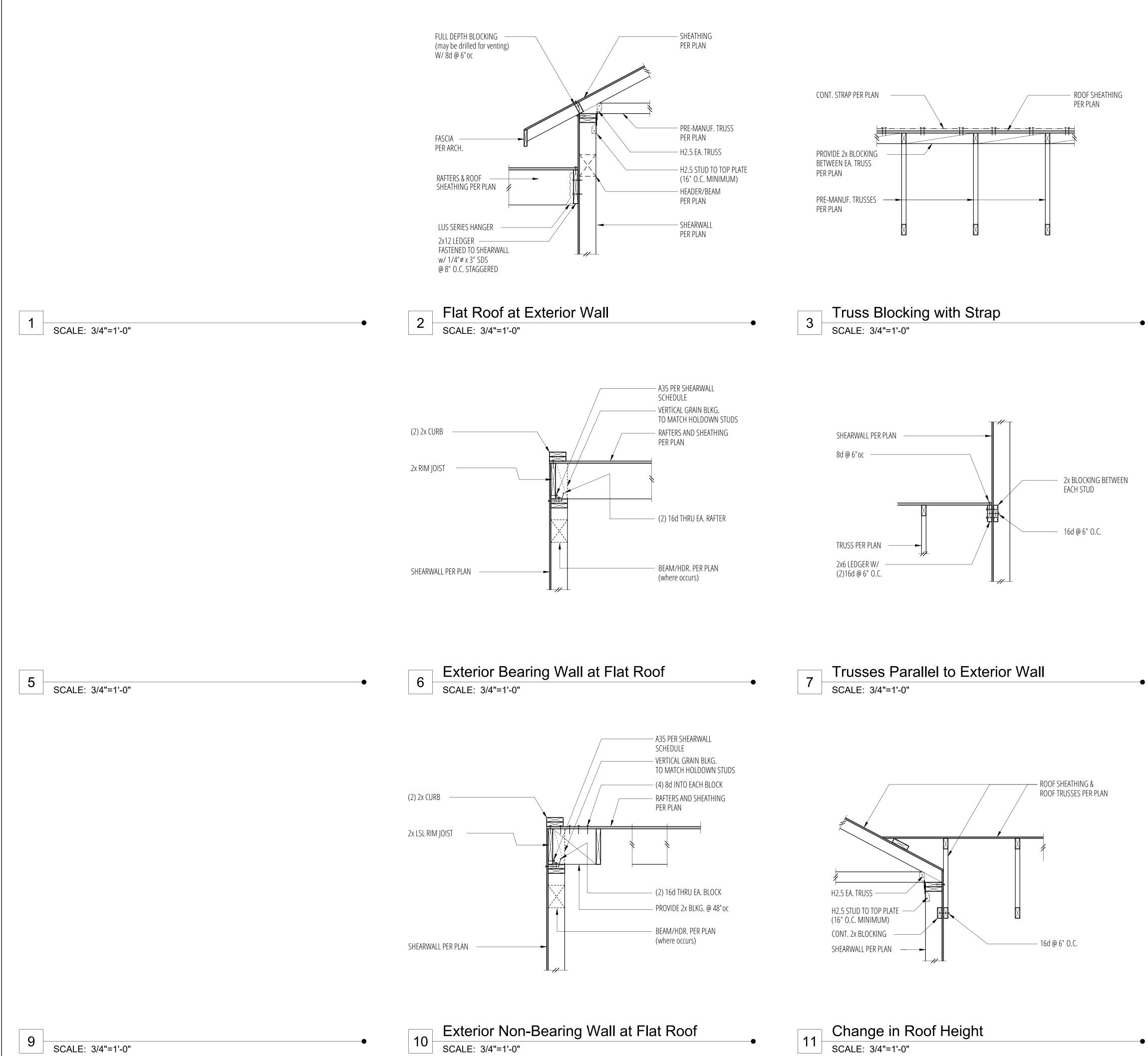
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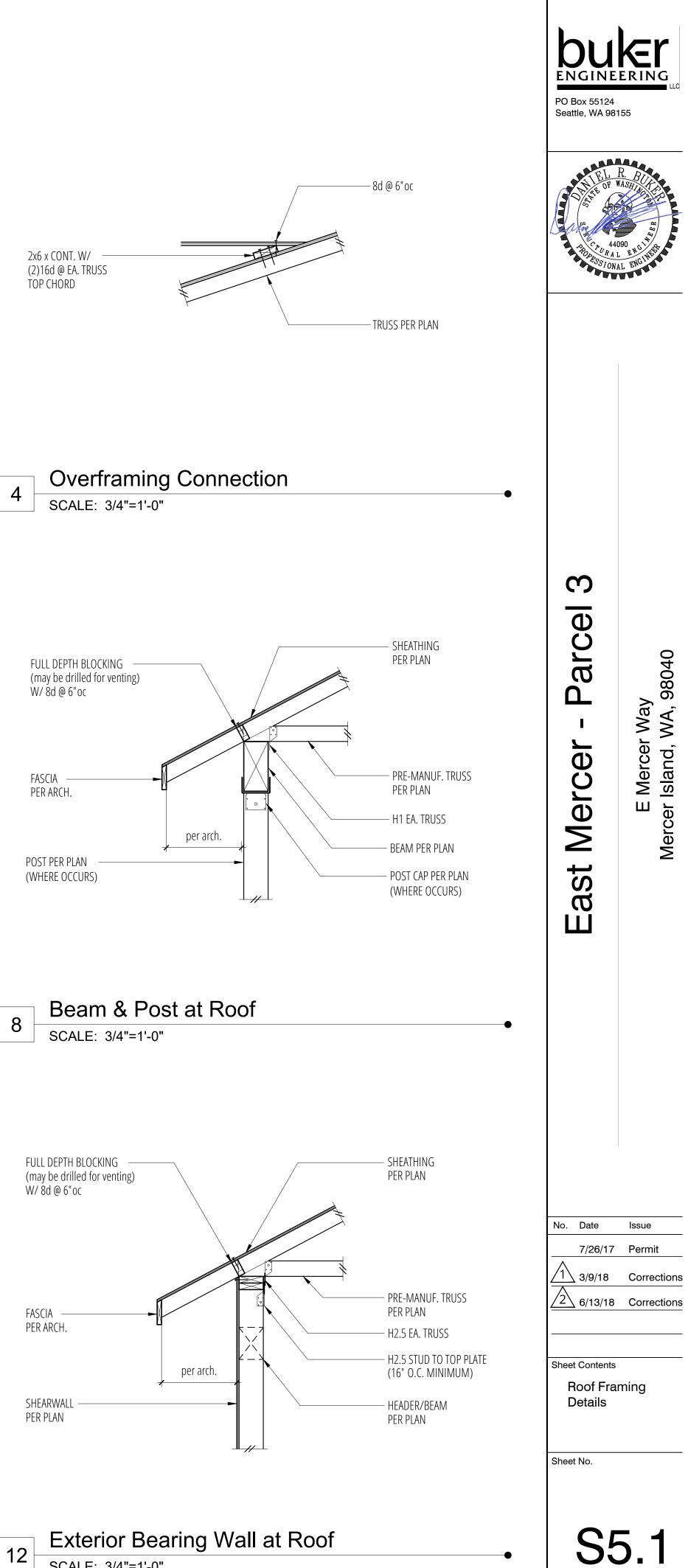


11 Elevator Wall Framing and Rail Support (Plan View) SCALE: 3/4"=1'-0"



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Exterior Bearing Wall at Roof SCALE: 3/4"=1'-0" 12