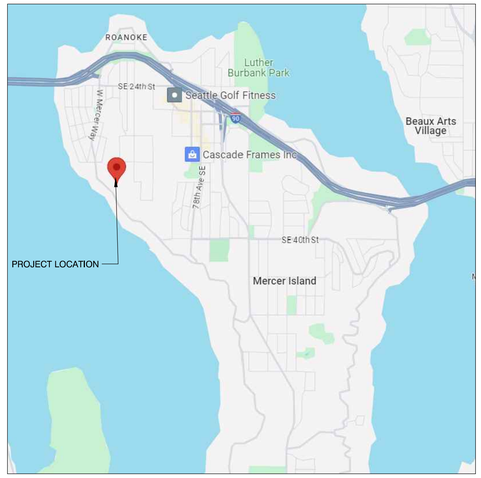
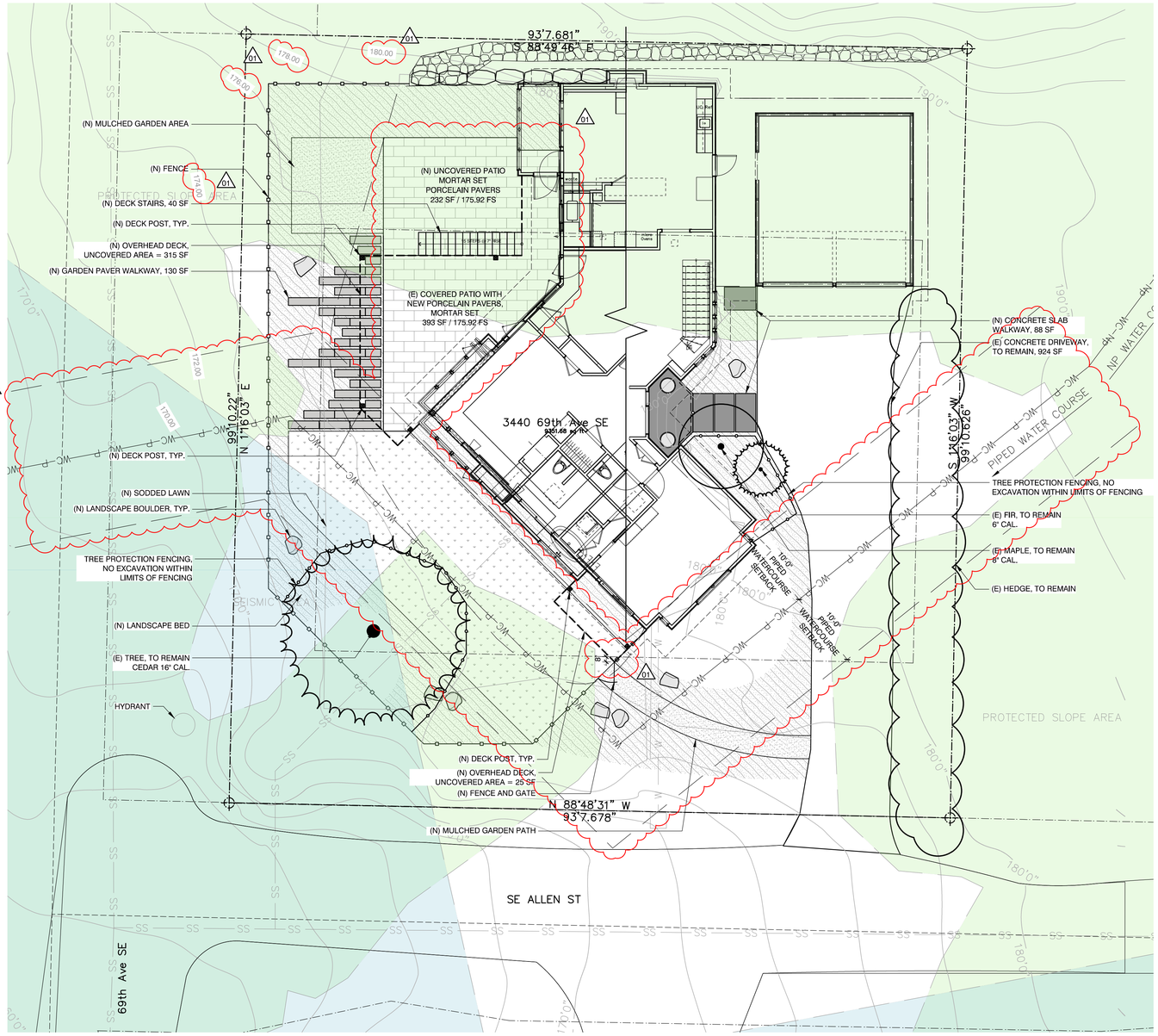
VICINITY MAP





1 SITE PLAN

1/8"=1'-0"

PROJECT INFORMATION

PROJECT CONTACT
LAUREN GALANTE
STUDIO TERRAIN, LLC.
18040 DES MOINES MEMORIAL DR. S.
SEATAC, WA 98148
206-909-2321

OWNERS
HYUNGTAE KIM & HANA UM
3440 69TH AVE SE MERCER ISLAND, WA 98040

SITE AREA
9352 SF

PARCEL NUMBER
935090-0120

JURISDICTION
MERCER ISLAND

ZONING
R-8.4

OCCUPANCY CLASS
SINGLE FAMILY

LEGAL DESCRIP.
WHITE BROS 1ST TO EAST SEATTLE W 7.36 FT OF 22 ALL 23-24-25 & POR OF 26 LY E OF LN BEG 10.28 FT W OF SE COR TH N 00-10-38 E TO N LN OF SD LOT

DEVELOPMENT STANDARDS
YARDS:
FRONT - 20 FT,
REAR - 25 FT
SIDE - PER PLAN

CODE INFORMATION
COMPLY WITH ALL APPLICABLE CODES AND LAWS:
2018 INTERNATIONAL BUILDING CODE (IBC)
2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
2018 INTERNATIONAL MECHANICAL CODE (IMC)
2018 INTERNATIONAL FUEL GAS CODE (IFGxC)
2018 UNIFORM PLUMBING CODE (UPC)
2018 INTERNATIONAL FIRE CODE (IFC)
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL SWIMMING POOL & SPA CODE
WASHINGTON STATE ENDERGY CODE (WCEC)

LOT SLOPE CALCULATIONS

HIGHEST POINT OF LOT:	195.0 FT.
LOWEST POINT OF LOT:	165.0 FT.
ELEVATION DIFFERENCE:	30.0 FT.
HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS:	137.0 FT
LOT SLOPE %:	**22%**

LOT CALCULATIONS

A.	GROSS LOT AREA:	9,352 SF
B.	NET LOT AREA:	9,352 SF
C.	ALLOWED LOT COVERAGE AREA:	3,273 SF
D.	ALLOWED LOT COVERAGE:	35%
E.	EXISTING LOT COVERAGE AREA:	
E.1.	MAIN STRUCTURE ROOF AREA:	2,192 SF
E.2.	ACCESSORY BUILDING ROOF AREA:	715 SF
E.3.	VEHICULAR USE:	924 SF
E.4.	COVERED PATIOS AND COVERED DECKS:	393 SF
E.5.	TOTAL EXISTING LOT COVERAGE:	4,224 SF
F.	TOTAL LOT COVERAGE REMOVED:	0 SF
G.	PROPOSED ADJUSTMENT FOR SINGLE STORY:	0 SF
H.	PROPOSED ADJUSTMENT FOR FLAG LOT:	0 SF
I.	TOTAL NEW LOT COVERAGE AREA:	
I.1.	MAIN STRUCTURE ROOF AREA:	0 SF
I.2.	ACCESSORY STRUCTURE ROOF AREA:	0 SF
I.3.	VEHICULAR USE:	0 SF
I.4.	COVERED PATIOS AND COVERED DECKS:	0 SF
I.5.	TOTAL NEW LOT COVERAGE AREA:	0 SF
J.	TOTAL PROJECT LOT COVERAGE AREA:	4,224 SF
K.	PROPOSED LOT COVERAGE AREA:	45% OF LOT

HARDSCAPE CALCULATIONS

A.	GROSS LOT AREA:	9,352 SF
B.	NET LOT AREA:	9,352 SF
C.	AREA BORROWED FROM LOT COVERAGE:	0 SF
D.	ALLOWED HARDSCAPE AREA = 9% OF LOT + C	9%
E.	ALLOWED HARDSCAPE AREA	842 SF
F.	TOTAL EXISTING HARDSCAPE AREA:	
F.1.	UNCOVERED DECKS:	287 SF
F.2.	UNCOVERED PATIOS:	0 SF
F.3.	WALKWAYS:	70 SF
F.4.	STAIRS:	46 SF
F.5.	ROCKERIES & RETAILING WALLS:	0 SF
F.6.	OTHER	0 SF
F.7.	TOTAL EXISTING HARDSCAPE AREA:	403 SF
G.	TOTAL HARDSCAPE REMOVED:	403 SF
H.	TOTAL NEW HARDSCAPE AREA:	
H.1.	UNCOVERED DECKS:	338 SF
H.2.	UNCOVERED PATIOS:	232 SF
H.3.	WALKWAYS:	230 SF
H.4.	STAIRS:	40 SF
H.5.	ROCKERIES & RETAINING WALLS:	0 SF
H.6.	OTHER:	0 SF
H.7.	TOTAL NEW HARDSCAPE:	840 SF
I.	TOTAL PROJECT HARDSCAPE AREA:	840 SF
J.	TOTAL PROJECT HARDSCAPE AREA (%):	9%

LANDSCAPE CALCULATIONS

A.	EXISTING LANDSCAPING TO REMAIN:	2,624 SF
B.	PROPOSED LANDSCAPING:	1,676 SF
C.	TOTAL LANDSCAPED AREA:	4,300 SF
D.	TOTAL TREES ON SITE:	3 EA
E.	TOTAL TREES TO BE REMOVED:	0 EA
F.	TOTAL TREES TO BE PLANTED:	0 EA

SHEET INDEX

0 8 16 24 32 feet

1/8" = 1'-0"

STUDIOTERRAIN
LANDSCAPE ARCHITECTURE
18040 Des Moines Memorial Drive S
Suite 103
SeaTac, WA 98148

KIM-UM RESIDENCE

SITE PLAN

3440 69TH AVE SE MERCER ISLAND, WA 98040

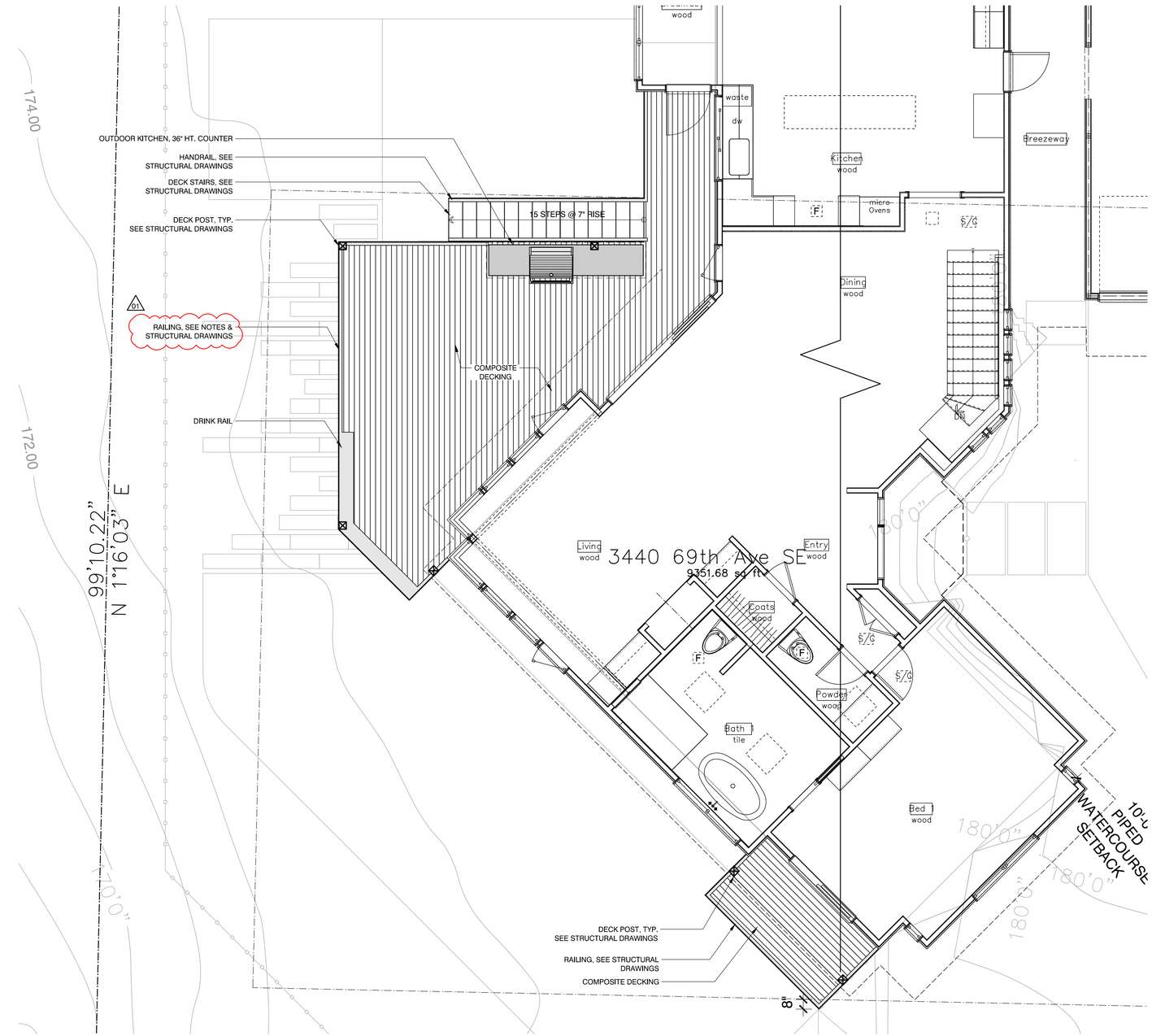
SEAL:

NO.	DESCRIPTION	DATE
01	REV. COMMENTS FROM CITY	04.10.24

03.27.24

1/8"= 1'-0"

L1.1



1 DECK PLAN

1/4"=1'-0"

DECK NOTES:

1. RAILING TO BE LOCATED ON ALL ON ALL DECKING SURFACES WITH A HEIGHT FROM FINISH GRADE 30" OR GREATER.
2. RAILING TO BE STEEL WITH HORIZONTAL PICKETS, 36" HT. MIN.
3. GUARDRAIL SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A 4" DIAMETER SPHERE.
4. HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH FLIGHT OF STAIRS WITH FOUR OR MORE RISERS.
5. HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.
6. ALL HANDRAIL AND GUARDRAILS SHALL COMPLY WITH INTERNATIONAL RESIDENTIAL CODE (IRC).

0 4 8 12 16 feet

1/4" = 1'-0"

STUDIOTERRAIN
LANDSCAPE ARCHITECTURE
18040 Des Moines Memorial Drive S
Suite 103
SeaTac, WA 98148

KIM-UM RESIDENCE

DECK PLAN

3440 69TH AVE SE MERCER ISLAND, WA 98040

SEAL:

NO.	DESCRIPTION	DATE
01	REV. COMMENTS FROM CITY	04.10.24

03.27.24

1/4" = 1'-0"

L1.2

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

-CRITERIA

1. ALL MATERIALS WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2018 INTERNATIONAL BUILDING CODE (IBC) INCLUDING WASHINGTON STATE MODIFICATIONS.

2. DESIGN LOADING CRITERIA

SNOW LOAD	GROUND SNOW LOAD, P_g = 25 PSF
FLOOR LIVE LOAD (RESIDENTIAL BALCONIES AND DECKS)	60 PSF
GUARDRAILS/BALCONY RAILS	50 PLF OR 200 LBS.

EARTHQUAKE (EQUIVALENT LATERAL FORCE PROCEDURE)

S_s=1.412
S_{ds} = 1.130
S_1=0.491
S_{d1} = 0.592
IMPORTANCE FACTOR, I_e= 1.0
SITE CLASS D
SEISMIC DESIGN CATEGORY= D
RISK CATEGORY = II
R = 1.5 FOR *(TIMBER FRAME CANTILEVERED COLUMNS)*
OVER STRENGTH FACTOR, Ω_o = 1.5
DEFLECTION AMPLIFICATION FACTOR, C_d =1.5
REDUNDANCY FACTOR = 1.0
SEISMIC RESPONSE COEFFICIENT, C_s = 0.753
SEISMIC BASE SHEAR = 3.5 KIPS

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE STRUCTURAL 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 WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER 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. SUBMITTAL REVIEW PERIOD: SUBMITTALS SHALL BE MADE IN TIME TO ALLOW MINIMUM OF TWO WEEKS FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO FABRICATION.

11. GENERAL CONTRACTOR'S PRIOR REVIEW OF SUBMITTALS: PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR COMPLETENESS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER AND THEREFORE MUST BE VERIFIED BY THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DIMENSIONAL INFORMATION REQUESTED BY THE DETAILER AND SHALL PROVIDE THE GENERAL CONTRACTOR'S REVIEW STAMP AND SIGNATURE PRIOR TO FORWARDING THE SUBMITTAL TO THE ARCHITECT/ENGINEER.

12. SHOP DRAWINGS FOR:
A. STRUCTURAL STEEL

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. CONTRACTOR SHALL ALSO SUBMIT SHOP DRAWINGS TO THE BUILDING DEPARTMENT AS REQUIRED. SHOP DRAWINGS FOR CONNECTOR PLATE WOOD ROOF TRUSSES SHALL ALSO BE SUBMITTED TO THE MECHANICAL ENGINEER FOR COORDINATION.

CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING CONNECTION EMBEDMENTS AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH REINFORCEMENT SHOP DRAWINGS.

13. 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.

SHOP DRAWINGS 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.

DEFERRED SUBMITTALS FOR BUILDING COMPONENTS INCLUDING, BUT NOT IMITATED TO, STAIRS, PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES, AND EXTERIOR CLADDING SHALL INCLUDE THE ENGINEER'S STAMP FOR THE STATE OF WASHINGTON AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL.

14. STATEMENT SPECIAL INSPECTIONS:
THE FOLLOWING CONSTRUCTION TYPES ARE TO BE REVIEWED BY A SPECIAL INSPECTOR DESIGNATED BY THE OWNER OR ARCHITECT. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. SPECIAL INSPECTION SHALL CONFORM TO SECTION 1704 OF THE 2018 INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION AGENCY SHALL BE RESPONSIBLE FOR KEEPING RECORDS OF SPECIAL INSPECTIONS AND TESTS. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION REPORTS AND TEST RESULTS.

STEEL CONSTRUCTION AND WELDING: SHALL BE SPECIAL INSPECTED AS REQUIRED IN THE INTERNATIONAL BUILDING CODE SECTION 1705.2, AISC 360-16, AISC 341-16, AWS D1.1, AND AWS D1.8.

POST INSTALLED ANCHORS: PERIODIC SPECIAL INSPECTION IN ACCORDANCE WITH THE PRODUCTS APPROVED ICC-ES REPORT.

GEOTECHNICAL

15. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND, THEREFORE, MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE, UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE. \

ALLOWABLE SOIL PRESSURE	2,000 PSF
PASSIVE EARTH PRESSURE	300 PCF
COEFFICIENT OF FRICTION	0.40

1

SOILS REPORT REFERENCE: PROJECT NO. JN 23353 PREPARED BY GEOTECH CONSULTANTS, INC., DATED JANUARY 19, 2024

RENOVATION

16. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED, AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

a. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. OVERCUTTING AT CORNERS SHALL NOT BE PERMITTED.
b. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
c. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING, IF POSSIBLE.
d. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, THREADED BARS INTO THREADED EXPANSION INSERTS IN EXISTING CONCRETE SHALL BE PROVIDED TO MATCH HORIZONTAL REINFORCING, UNLESS OTHERWISE NOTED ON PLANS.

17. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWING WATER STAINS, AND ALL WOOD MEMBERS IN BASEMENT AND CRAWL SPACES. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER.

18. 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. THE CONTRACTOR SHALL BRING ALL CONFLICTS AND DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER.

CONCRETE

19. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, AND PLACED IN ACCORDANCE WITH ACI 318-14 AND ACI 301-16. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH (f'c) OF 3500 PSI BASED ON EXPOSURE CLASS F1, SHALL CONTAIN NO LESS THAN 5-1/2 SACKS OF CEMENT, HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45, MAXIMUM AGGREGATE OF ¾-INCH, AND A SLUMP OF 5 INCHES OR LESS. CONCRETE HAS BEEN DESIGNED BASED ON A CONCRETE STRENGTH (f'c) OF 2500 PSI PER INTERNATIONAL BUILDING CODE SECTION 1705.3 EXCEPTION 2.3 TO AVOID SPECIAL INSPECTIONS AND MATERIAL TESTING.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494M, AND C618. UNLESS OTHERWISE NOTED THE TOTAL AIR CONTENT SHALL BE 5%. AIR CONTENT SHALL BE SAMPLED IN ACCORDANCE WITH ASTM C172 AND AIR CONTENT MEASURED IN ACCORDANCE WITH ASTM C231 OR C173.

20. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENTS 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

21. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI SP-66-04 AND ACI 318-14 CHAPTER 25. LAP ALL REINFORCEMENTS AS FOLLOWS:

BAR SIZE	MINIMUM LAP LENGTH	MINIMUM HOOK EMBEDMENT
#3	24-INCHES	6-INCHES
#4	31-INCHES	8-INCHES
#5	39-INCHES	11-INCHES

PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. FIELD BENDING OF GRADE 60 REINFORCEMENT SHALL NOT BE ALLOWED.

22. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
ALL OTHER CASES	1-1/2"

23. SLABS-ON-GRADE: UNLESS NOTED OTHERWISE SHALL BE 4" CONCRETE, REINFORCED WITH 6X6 W1.4XW1.4 WELDED WIRE FABRIC CENTERED IN SLAB. UNLESS OTHERWISE DIRECTED BY SOILS REPORT PROVIDE MINIMUM 10 MIL VAPOR BARRIER OVER 4" OF COMPACTED SAND OR GRAVEL.

24. 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 SURFACES. TOLERANCES FOR ALL STRUCTURAL CONCRETE AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 117-10 AND ACI 117.1R-14.

POST INSTALLED ANCHORS

25. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER—OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCEMENT. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND ICC-ES REPORT. SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE INTERNATIONAL BUILDING CODE. SUBSTITUTIONS SHALL HAVE CURRENT ICC-ES APPROVAL.

A. CONCRETE ANCHORS
1. MECHANICAL ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
a. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
b. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713)
c. HILTI "KWIK BOLT TZ" (ICC-ES ESR-1917)

2. ADHESIVE ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
a. SIMPSON STRONG-TIE "ET-3G" (ICC-ES ESR-5334)
b. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
c. SIMPSON STRONG-TIE "AT-3G" (ICC-ES ESR-4057)
d. HILTI "HIT-RE 500-V3" (ICC-ES ESR-3814)
e. HILTI "HIT-HY 200" (ICC-ES ESR-3187)

STEEL

26. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES AS FOLLOWS:

1. AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
2. AISC 303-16 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AMENDED BY THE DELETION OF THE FOLLOWING SENTENCE IN PARAGRAPH 4.2.1: "THIS APPROVAL CONSTITUTES THE OWNER'S ACCEPTANCE OF ALL RESPONSIBILITY FOR THE DESIGN ADEQUACY OF ANY DETAIL CONFIGURATION OF CONNECTIONS DEVELOPED BY THE FABRICATOR AS PART OF HIS PREPARATION OF THESE SHOP DRAWINGS."
3. AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
4. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
5. AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE D1.1 AND D1.4

27. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
A. PLATES, ANGLES, AND RODS	A36	36 KSI
B. STRUCTURAL TUBING (SQUARE OR RECTANGULAR)	A500 (GRADE B)	46 KSI
C. ANCHOR BOLTS (EMBEDDED IN MASONRY OR CONCRETE)	A307	
D. CONNECTION BOLTS (3/4" ROUND, UNLESS SHOWN OTHERWISE)	A325-N	
E. THREADED RODS FOR EPOXY GROUTED CONNECTIONS	A36 OR A307 GRADE C	36 KSI

28. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC 303-10. ANY STRUCTURAL STEEL THAT IS EXPOSED TO VIEW UPON COMPLETION OF THE PROJECT SHALL BE CONSIDERED ARCHITECTURALLY EXPOSED. SEE PROJECT SPECIFICATIONS FOR SPECIFIC FABRICATION AND ERECTION REQUIREMENTS.

29. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70 XX ELECTRODES UNLESS OTHERWISE NOTED. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

WOOD

30. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS.

JOISTS: (2X, 3X, AND 4X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, F_b = 850 PSI
BEAM AND STRINGERS: (6 X AND LARGER MEMBERS)	DOUGLAS FIR LARCH NO. 1 MINIMUM BASIC DESIGN STRESS, F_b = 1,350 PSI
POSTS AND TIMBERS: (6 X AND LARGER MEMBERS)	DOUGLAS FIR LARCH NO. 1 MINIMUM BASIC DESIGN STRESS, F_b = 1,200 PSI, F_C = 1,000 PSI
STUDS PLATES & MISCELLANEOUS LIGHT FRAMING	DOUGLAS FIR LARCH OR HEM-FIR NO. 2, MINIMUM BASIC DESIGN STRESS F_b = 850 PSI, F_C = 1,300 PSI
2X AND 3X TONGUE AND GROOVE DECKING	HEM-FIR COMMERCIAL DEX, F_b = 1,350 PSI

31. GLUED LAMINATED MEMBERS SHALL BE FABRICATED AND IDENTIFIED AS REQUIRED BY ASTM D3737 AND AITC A190.1. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE. ALL GLUED LAMINATED MEMBERS SHALL CONFORM TO APA PERFORMANCE STANDARD PRG-305. UNLESS OTHERWISE NOTED ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, F_b = 2,400 PSI, F_V = 265 PSI, E = 1,800,000 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, F_b = 2,400 PSI, F_v= 265 PSI, E = 1,800,000 PSI.

GLUED LAMINATED COLUMNS SHALL BE COMBINATION 2-DF-L2 AS FOLLOWS:

TWO LAMINATIONS	F_c = 1600 PSI, F_t = 1250 PSI, Fbx = 1700 PSI, Fby = 1300 PSI, E_{axial} = 1,600,000 PSI
THREE LAMINATIONS	F_c = 1600 PSI, F_t = 1250 PSI, Fbx = 1700 PSI, Fby = 1600 PSI, E_{axial} = 1,600,000 PSI
FOUR OR MORE LAMINATIONS	F_c = 1950 PSI, F_t = 1250 PSI, Fbx = 1700 PSI, Fby = 1800 PSI, E_{axial} = 1,600,000 PSI

WHERE REQUIRED BEAMS AND COLUMNS SHALL BE PRESSURE TREATED AFTER MANUFACTURE IN ACCORDANCE WITH AMERICAN WOOD-PRESERVATIVES ASSOCIATION STANDARD U1.

32. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-18 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

33. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A AS INDICATED BELOW OR HAVE EQUIVALENT ICC-ES APPROVAL.

PROPOSED USE		AWPA USE CATEGORY
RESIDENTIAL DECKS	DECKING	3B
	JOISTS ABOVE GROUND	3B
	JOISTS IN CONTACT WITH GROUND	4A
	POSTS	4A
	RAILING	3B
	LEDGERS	3B
SAWN LUMBER	ABOVE GROUND	3B
	GROUND CONTACT	4A
PLYWOOD	DAMP ABOVE GROUND	2
	EXTERIOR ABOVE GROUND	3B
	GROUND CONTACT	4A
SILL PLATES	IN CONTACT WITH CONCRETE OR MASONRY	2
INTERIOR LEDGERS	IN CONTACT WITH CONCRETE OR MASONRY	2

ALL TREATED LUMBER SHALL BEAR THE QUALITY MARK OF AN ACCREDITED INSPECTION AGENCY. THE QUALITY MARK SHALL INCLUDE:

A. IDENTIFICATION OF TREATING MANUFACTURER
B. TYPE OF PRESERVATIVE USED
C. MINIMUM PRESERVATIVE RETENTION (PCF)
D. END USE FOR WHICH THE PRODUCT IS TREATED
E. IDENTITY OF THE ACCREDITED INSPECTION AGENCY
F. STANDARD TO WHICH THE PRODUCT IS TREATED

34. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2024. 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 TO ACHIEVE THE MAXIMUM PUBLISHED ALLOWABLE LOAD. ALL CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. SHIMS, WHERE REQUIRED, SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL LAG SCREWS SHALL BE INSTALLED IN PRE-DRILLED HOLES.

UNLESS NOTED OTHERWISE ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS.

ALL CONNECTIONS/FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS G-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SST300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

35. WOOD FASTENERS:

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

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

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

36. 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 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 12.1.3 AND 12.1.4 OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.12 OF THE INTERNATIONAL BUILDING CODE.

B. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID_HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8J	1-3/8J
2X6	1-3/8J	2-1/8J

BORED HOLES SHALL NOT BE LOCATED WITH 5/8L FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

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 AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7L MINIMUM EMBEDMENT) @ 4'_0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3Lx3" x1/4L HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT_UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND 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.

NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2L FROM THE TOP OR BOTTOM EDGE.

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 OF 16d @ 12" O.C. ATTACH RAFTERS AND ROOF TRUSSES AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE INDICATED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND ATTACHED WITH 10d NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE_AND_GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND FASTEN SHEATHING TO FRAMING/BLOCKING AS SPECIFIED.

TONGUE AND GROOVE STRUCTURAL ROOF AND FLOOR DECKING SHALL BE INSTALLED AS FOLLOWS:

B. 3X AND 4X DECKING SHALL BE TOENAILED WITH ONE 40d NAIL AND FACE NAILED WITH ONE 60d NAIL PER SUPPORT. COURSES SHALL BE SPIKED TOGETHER WITH 8" SPIKES AT 30" O.C. (MAXIMUM) AND AT 10" (MAXIMUM) FROM EACH END OF EACH PIECE. SPIKES SHALL BE INSTALLED IN PREDRILLED EDGE HOLES.

CARTER QUINN NORLIN
STRUCTURAL ENGINEERING
CQN
2033 6th Ave Suite 995
Seattle, WA 98121
(206)264-7784

NICHOLAS VH CARTER
STATE OF WASHINGTON
37270
STRUCTURAL
PROFESSIONAL ENGINEER

KIM-UM RESIDENCE

GENERAL STRUCTURAL NOTES

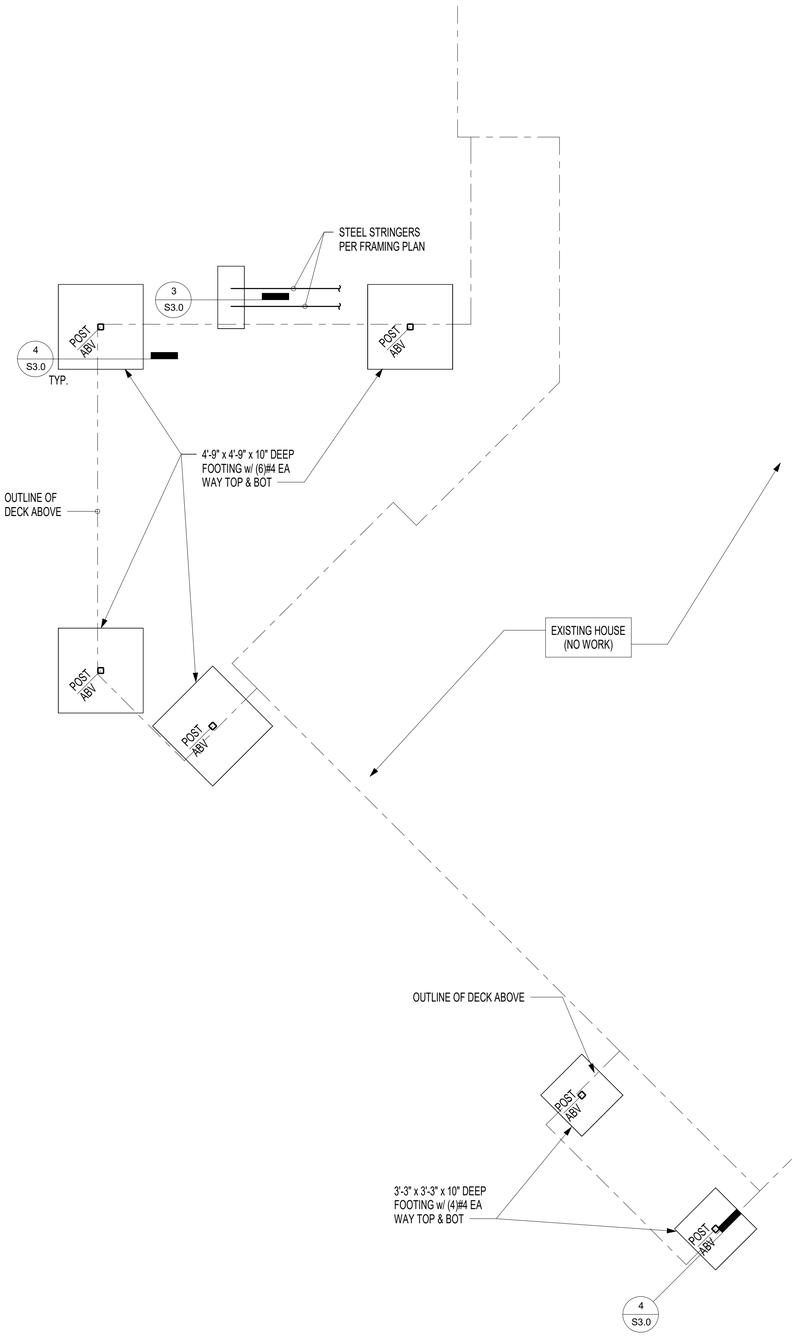
3440 69TH AVE SE MERCER ISLAND, WA 98040

SEAL:

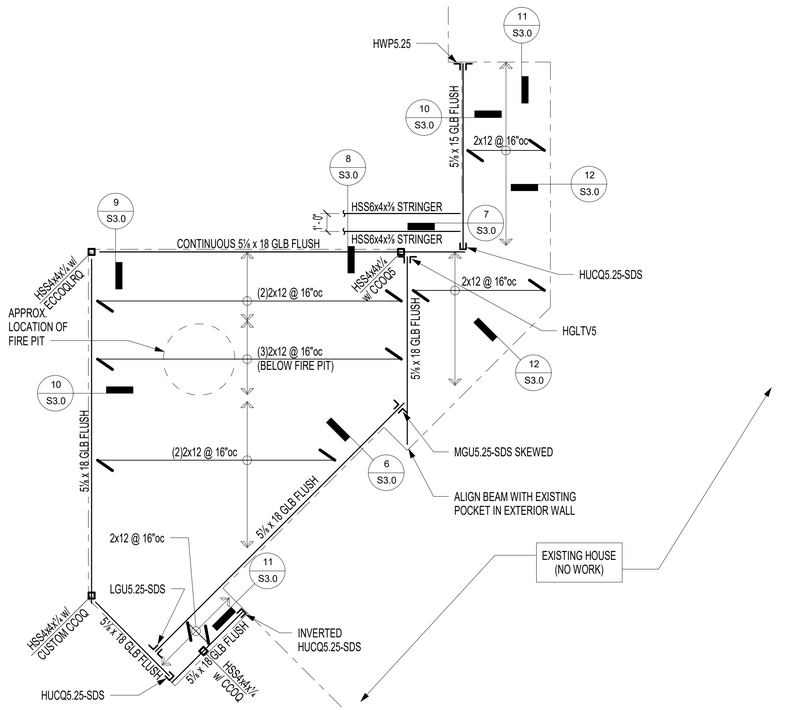
NO.	DESCRIPTION	DATE
1	REV. COMMENTS FROM CITY	04.10.24

03.13.24

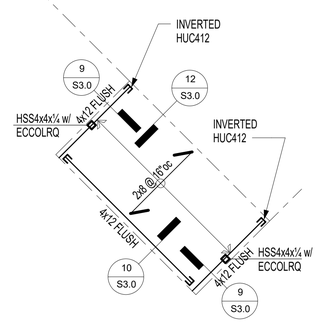
S1.0



1 FOUNDATION PLAN
1/4" = 1'-0"



2 DECK FRAMING PLAN
1/4" = 1'-0"



LEGEND

- HANGER
- WALL/ COLUMN
- SPAN AND EXTENTS
- X / SX.X — INDICATES DETAIL X ON SHEET SX.XX

FRAMING PLAN NOTES

1. DECK SHEATHING SHALL BE 23/32" TONGUE AND GROOVE APA RATED STRUCTURAL PLYWOOD SHEATHING WITH PANEL INDEX 48/24. ATTACH TO FRAMING WITH 10d NAILS AT 6" oc AT FRAMED PANEL EDGES AND WALLS AND 12" oc AT INTERMDIATE FRAMING UNO. PROVIDE BLOCKING AND PANEL EDGE NAILING PER DETAIL 2/S6.04 AT ALL PANEL EDGES UNO.
2. SIMPSON CCOQ SERIES COLUMNS CAPS CALLED OUT ON THE PLANS ARE THE "NO STRAP" VERSION AND SHALL BE BE WELDED TO THE TOP OF HSS COLUMNS WITH 3/16" FILLET WELDS ON ALL SIDES.
3. GUARDRAILS AND ATTACHMENT TO STRUCTURE HAVE BEEN DESIGNED TO RESIST A 200# POINT LOAD ON THE TOP RAIL ACTING IN ANY DIRECTION. IF A DIFFERENT GUARDRAIL SYSTEM IS INSTALLED, CONTRACTOR SHALL VERIFY TO THE INSPECTOR THAT ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200# POINT LOAD ON THE TOP RAIL ACTING IN ANY DIRECTION AS REQURIED BY IRC TABLE R301.5.

CARTER QUINN MOULIN STRUCTURAL ENGINEERING
CQN
2033 6th Ave Suite 995
Seattle, WA 98121
(206)264-7784

NICHOLAS VH CARTER — STATE OF WASHINGTON — 37276 — STRUCTURAL — PROFESSIONAL ENGINEER

KIM-UM RESIDENCE

FOUNDATION & FRAMING PLAN

3440 69TH AVE SE MERCER ISLAND, WA 98040

SEAL:

NO.	DESCRIPTION	DATE
1	REV. COMMENTS FROM CITY	04.10.24

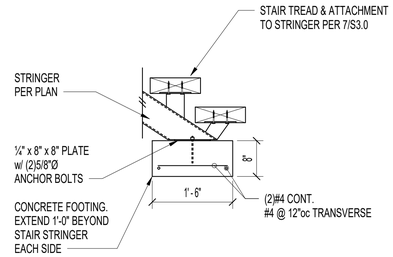
03.13.24

As indicated

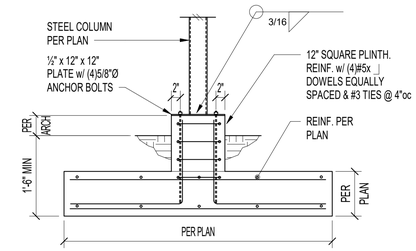
S2.0

1

2



3



4

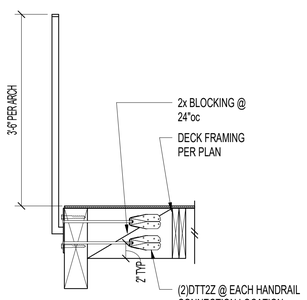
CQN
CARTER QUINN MOULIN STRUCTURAL ENGINEERING
2033 6th Ave Suite 995
Seattle, WA 98121
(206)264-7784

KIM-UM RESIDENCE

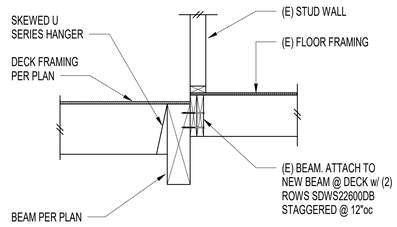
STRUCTURAL DETAILS

3440 69TH AVE SE MERCER ISLAND, WA 98040

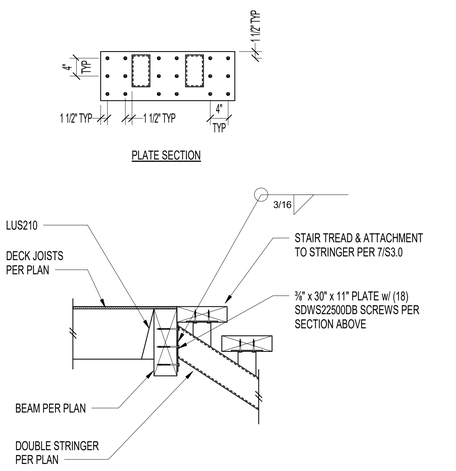
5



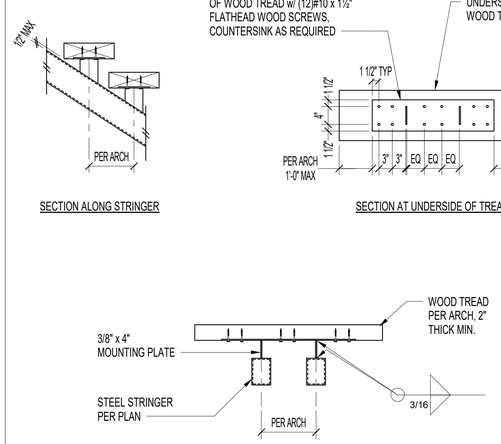
6



7



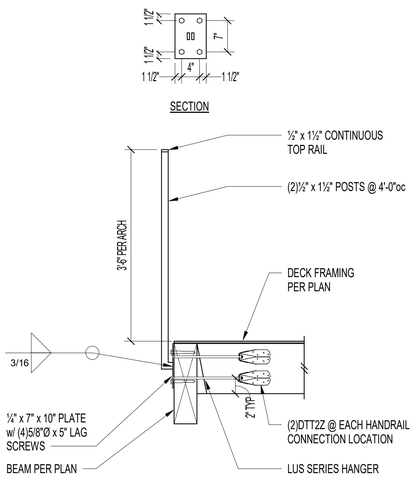
8



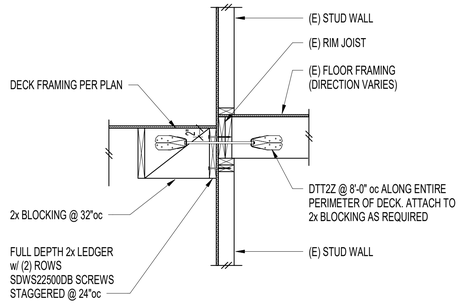
REFER TO 10/S3.0 FOR
CALLOUTS IN COMMON

9

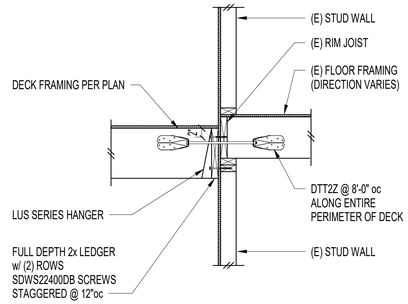
10



11



12



SEAL:

NO.	DESCRIPTION	DATE
1	REV. COMMENTS FROM CITY	04.10.24

03.13.24

3/4" = 1'-0"

S3.0