

CONTRACTOR NOTES

- 1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL BONDS, CASH DEPOSITS, ETC. THAT THE CITY WILL REQUIRE TO FACILITATE CONSTRUCTION OF THE PROJECT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIALS IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, AND LOCAL BUILDING AND FIRE CODES AS REQUIRED.
3. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND RESTRICTIONS ENFORCED BY AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS OTHER THAN THE BUILDING PERMIT. ADDITIONALLY, CONTRACTOR SHALL PAY FOR ALL OTHER CHARGES, FEES OR COSTS ASSOCIATED WITH THE WORK AND CHARGED BY THE MUNICIPALITY, UTILITIES, OR PRIVATE COMPANIES. SEPARATE PERMITS ARE REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING.
5. GENERAL CONTRACTOR SHALL VISIT JOB SITE AND VERIFY ALL EXISTING FIELD CONDITIONS PRIOR TO COMMENCING WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK. ANY CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND APPROVED BEFORE COMMENCING WORK.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL FROM THE CONSTRUCTION SITE ALL CONSTRUCTION DEBRIS AND/OR ITEMS NOT RETAINED BY THE OWNER'S REPRESENTATIVE.
7. GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR STRUCTURES UNTIL ALL FINAL CONNECTIONS ARE INSTALLED.
8. UNLESS QUALIFIED, NO PRODUCT SUBSTITUTIONS "OR EQUAL" PRODUCTS, EQUIPMENT OR MATERIALS SHALL BE ALLOWED.
9. GENERAL CONTRACTOR HAS RESEARCHED AND VERIFIED ALL TRASH, DEBRIS, AND RECYCLING REQUIREMENTS FOR THE CITY IN WHICH THIS WORK WILL BE PERFORMED AND HAS INCLUDED SUCH COSTS INTO THIS PROPOSAL.
10. GENERAL CONTRACTOR IS RESPONSIBLE FOR SITE SURVEYING AND LAYOUT, OWNER TO PROVIDE ONE (1) BENCHMARK FOR GENERAL CONTRACTOR'S USE.
11. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE, FURNISH AND INSTALL ALL FRAMING, BACKING AND DEADWOOD REQUIREMENTS FOR EQUIPMENT AND MATERIALS INSTALLED IN THE BUILDING.
12. TRUSS MANUFACTURER SHALL SUPPLY SHOP DRAWINGS FOR REVIEW AND APPROVAL BEFORE FABRICATION.
13. APPLIANCES - GENERALLY, THIS EQUIPMENT IS DELIVERED FACTORY DIRECT. MOUNTING AND CONNECTIONS NOT INCLUDED. GENERAL CONTRACTOR SHALL MOUNT AND MAKE UP ALL REQUIRED CONNECTIONS TO MAKE THE EQUIPMENT FUNCTION PROPERLY.
14. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SET OF DRAWINGS TO EACH SUBCONTRACTOR AND FOR INSURING THAT THE WORK OF EACH SUBCONTRACTOR IS COORDINATED WITH THE WORK OF ALL OTHER SUBCONTRACTORS.
15. THE LAST DATED REVISION VOIDS AND SUPERSEDES ANY AND ALL PREVIOUS DRAWINGS WITH THE SAME SHEET NUMBER. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RECOVER AN DISPOSE OF ALL SUPERSEDED / PREVIOUSLY ISSUED PLANS FROM ALL SUBCONTRACTORS, SUPPLIES AND MATERIAL PERSONS. ALL COSTS RESULTING FROM A FAILURE TO ISSUE REVISED SHEETS, AND RECOVERY / DISPOSAL OF SUPERSEDED SHEETS IN A TIMELY MANNER, SHALL BE ABSORBED BY THE GENERAL CONTRACTOR. THE OWNER AND ARCHITECT WILL NOT BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE ABOVE.
16. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE, THE CONTRACTOR SHALL BEAR ALL EXPENSES OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK. ALL FINAL CONNECTIONS TO EXISTING UTILITIES SHALL BE BY THE CONTRACTOR.
17. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
18. GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AS REQUIRED BY GENERAL CONDITIONS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
19. DO NOT OBSTRUCT STREETS, SIDEWALKS, ALLEYS OR OTHER RIGHT-OF-WAYS WITHOUT FIRST OBTAINING PROPER PERMITS.
20. ALL FIRE RATED CONSTRUCTION SHALL CONFORM WITH CURRENT UL TESTED STANDARD AND/OR LOCAL REQUIREMENTS.
21. IF USED, SPECIALTY STAIR CONTRACTOR TO PROVIDE SIGNED & SEALED SHOP DRAWINGS BY A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER.
22. PROVIDE SOLID BLOCKING UNDER ALL BEARING WALLS.
23. JOINT SEALERS SHALL BE REQUIRED AT THE INTERSECTION OF ALL DISSIMILAR MATERIALS IN INTERIOR AND EXTERIOR CONDITIONS.
24. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL PENETRATIONS OF THE BUILDING ENVELOPE INCLUDING EXTERIOR WINDOWS, GRILLES, HVAC DUCTWORK, AND CONDUIT AS REQUIRED THROUGH THE EXTERIOR WALLS, ROOF DECKS, VERTICAL ROOF AND MANSARD WALLS SHALL REQUIRE MECHANICAL FLASHING IN ADDITION TO APPROPRIATE EXTERIOR SEALANTS TO PROVIDE AND ENSURE WATERTIGHT CONDITIONS AT THESE LOCATIONS.
25. GUTTERS, DOWNSPOUTS AND ALL EXTERIOR SHEET METALS ARE TO BE PRE-FINISHED AT THE FACTORY. COLOR SHALL BE SELECTED FROM THE MANUFACTURER'S FULL RANGE OF COLOR OPTIONS BY THE ARCHITECT. NO FIELD PAINTING TO BE ALLOWED.
26. ALL NEW EXTERIOR WARM WALLS TO BE 2X6 STUDS 16" O.C. TYPICAL, WITH R-21 INSULATION UNLESS NOTED OTHERWISE.
27. ALL EXTERIOR LOUVER GRILLES SHALL BE FACTORY PAINTED WITH KYNAR FINISH TO MATCH THE EXTERIOR FIELD COLOR IN WHICH THEY ARE LOCATED.
28. ALL EXTERIOR METALS SHALL BE GALVANIZED, PRE-FINISHED OR FIELD PAINTED PER ARCHITECT COORDINATION. GENERAL CONTRACTOR SHALL ASSUME THE MOST STRINGENT FINISH IF NOT INDICATED ON DOCUMENTS.
29. ALL GUARDRAILS INSTALLED PER MANUFACTURERS SPECIFICATIONS, SUPPORTS CAPABLE OF RESISTING A SINGLE CONCENTRATED LOAD OF 200 POUNDS, APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP OF THE RAIL.
30. ALL GUARDRAILS TO BE 36" ABOVE ADJACENT WALKING SURFACE, MAXIMUM OPENING TO BE < 4".
31. FASTENERS INTO OR IN CONTACT WITH PRESSURE-TREATED OR FIRE-RETARDANT WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. EXCEPTION 1/2" DIAMETER OR GREATER STEEL BOLTS.
32. FURR OUT HEADERS TO MATCH 2x6 WALLS. INSULATE WALL CAVITY AT HEADERS TO R-10 MIN. INSULATION.
33. PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, AND ON EACH ADDITIONAL STORY OF THE DWELLING. ALL SMOKE ALARMS TO BE HARD WIRED WITH BATTERY BACKUP.
34. PROVIDE A CARBON MONOXIDE ALARM OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. ALL CARBON MONOXIDE ALARMS TO BE HARD WIRED WITH BATTERY BACKUP.

GENERAL NOTES

- DRAWINGS:
1. INFORMATION CONTAINED WITHIN THESE DRAWINGS WITH REGARD TO EXISTING CONDITIONS IS PROVIDED FOR THE CONVENIENCE OF THE GENERAL CONTRACTOR. DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS ARE PROVIDED BY THE ARCHITECT BASED ON AVAILABLE INFORMATION. ALL ATTEMPTS HAVE BEEN MADE TO ACCURATELY REPRESENT THE EXISTING CONDITIONS AND SURROUNDINGS VIA OWNER SUPPLIED AS-BUILTS AND FIELD VERIFICATION.
2. ALL DRAWINGS OF EXISTING CONDITIONS ARE FOR REFERENCE ONLY. THE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTIONS TO AVOID UNREASONABLE DELAYS TO THE SCHEDULE. PROVIDE WRITTEN NOTIFICATION TO THE ARCHITECT OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE DRAWINGS. THE ARCHITECT WILL ISSUE A WRITTEN DIRECTIVE IF FURTHER CLARIFICATION IS REQUIRED.
3. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE. DRAWINGS HAVE BEEN PREPARED ON AN ORIGINAL SHEET SIZE OF 24" X 36".
4. THE TYPICAL EXTERIOR DIMENSIONS ARE TO FACE OF CONCRETE AND/OR FACE OF FRAMING, UNLESS NOTED OTHERWISE. INTERIOR DIMENSIONS ARE TO FACE OF FRAMING, UNLESS OTHERWISE INDICATED.
5. THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF STUDIO19 ARCHITECTS, AND HAVE BEEN PREPARED FOR THE USE IN THE EXECUTION OF THE ENCLOSED PROJECT. USE OR REPRODUCTION FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF STUDIO19 ARCHITECTS IS PROHIBITED.
6. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY
7. LEGENDS ON THE PLANS AND SCHEDULE IN THE SPECS SHALL BE COMPLEMENTARY.
8. SEE SHEET G0.03 FOR BUILDING AREAS AND LOT COVERAGE CALCULATIONS.
9. SEE SHEET A8.01 FOR WALL, FLOOR, AND ROOF ASSEMBLIES.
10. SEE SHEETS A9.01 THROUGH A9.03 FOR WINDOW AND DOOR SCHEDULES.
11. ALIGNMENT OF PARTITIONS AND FINISHES AS SCHEDULED SHALL BE STRAIGHT, TRUE & PLUMB. DIMENSIONAL LAYOUT SHALL BE IN THE FOLLOWING PRIORITY ORDER:
A. STRUCTURAL DRAWINGS
B. LARGE SCALE DETAILS
C. SMALL SCALE DETAILS
D. ENLARGED PLANS AND SECTIONS
E. FLOOR PLANS
12. DIMENSIONS ARE INDICATED TO THE CENTERLINE OF STRUCTURAL GRID, FACE OF CONCRETE, OR FACE OF STUDS UNLESS NOTED OTHERWISE.
13. REQUIRED SIZE, CLEARANCES, AND RELATIONSHIPS ARE INDICATED BY DIMENSIONS AS NOTED.
MECHANICAL / ELECTRICAL:
1. VERIFY ELECTRICAL AND HEAT LAYOUTS WITH INSTALLER BEFORE INSTALLATION.
2. ALL WASTE LINES TO BE INSULATED WITH ACOUSTIC INSULATION.
3. ELECTRICAL WIRING SHALL CONFORM TO THE 2017 WASHINGTON CITIES ELECTRICAL CODE.
4. INSTALL OUTLETS AND SWITCHES AT HEIGHTS AND LOCATIONS REQUIRED BY 2015 INTERNATIONAL RESIDENTIAL CODE, AND THE 2017 WASHINGTON CITIES ELECTRICAL CODE.
5. LIGHTING WATTAGE SHALL MEET THE 2017 WASHINGTON CITIES ELECTRICAL CODE.
6. PROVIDE SMOKE DETECTORS AND FIRE SUPPRESSION SYSTEMS TO MEET THE 2015 INTERNATIONAL RESIDENTIAL CODE AND 2015 INTERNATIONAL FIRE CODE.
VENTILATION:
1. PROVIDE PROPER ROOF & CRAWL SPACE VENTILATION PER IBC.
2. PROVIDE EQUIPMENT VENTILATION PER THE FOLLOWING MINIMUM STANDARDS.
- VENT DRYER TO OUTSIDE PER MECHANICAL CODE.
- VENT ALL FANS TO OUTSIDE W/ 3' MIN. SEPARATION TO BUILDING OPENINGS.
- VENT HOT WATER TANK TO EXPANSION TANK.
- VENT DISHWASHER AT SINK.
3. EXHAUST MINIMUMS:
PROVIDE SOURCE SPECIFIC INTERMITTENT OPERATION EXHAUST FANS AS IDENTIFIED ON PLANS. SPECIFIED FANS MAY EXCEED THE FOLLOWING MINIMUM STANDARDS:
- BATHROOMS / LAUNDRY ROOMS: 50 CFM AT 0.25" W.G.
- KITCHEN HOODS & DOWNDRAFTS: 100 CFM AT 0.10" W.G.
- KITCHEN HOODS GREATER THAN 400 CFM SHALL BE EQUIPPED WITH MAKE-UP AIR.
4. PROVIDE INTERMITTENTLY OPERATED WHOLE HOUSE VENTILATION FAN. WHOLE HOUSE VENTILATION SYSTEM SHALL CONFORM WITH WASHINGTON STATE ENERGY CODE - CURRENT EDITION AND SHALL BE CAPABLE WITH THE FOLLOWING MINIMUM STANDARDS:
- BE SIZED FOR A MAXIMUM SOUND RATING OF 1.0 SONES
- BE CONTROLLED BY READILY ACCESSIBLE 24 HR TIMER CAPABLE OF CONTINUOUS OPERATION WITH MANUAL & AUTOMATIC CONTROL.
5. EXHAUST FANS LARGER THAN 50 CFM MAY BE CONNECTED TO 4" DIAMETER SMOOTH WALL VENT PIPE IF RUNS DO NOT EXCEED 20' IN LENGTH. THE MINIMUM SIZE OF FLEX DUCT IS 5" DIAMETER WITH A MAXIMUM RUN OF 15'.
6. ALL BATHROOM FANS, KITCHEN HOODS, AND DRYER DUCTS SHALL BE EXHAUSTED TO THE ROOF OR THRU THE FLOOR SYSTEM TO AN OUTSIDE WALL. ALL WALL DUCTS SHALL TERMINATE AT LEAST 36" FROM A WINDOW OPENING.
7. COMBUSTION AIR REQUIRED FOR ALL FUEL BURNING APPLIANCES.
INTERIOR FINISHES:
1. THE FACING OF ANY EXPOSED INSULATION MUST MEET A FLAME SPREAD INDEX OF 25 OR LESS IBC SECTION 719.2).
2. REFER TO TABLE 721.1 FOR RATED FIRE RESISTANCE PERIODS FOR WALLS AND PARTITIONS (2015 IBC)
3. THE MAXIMUM FLAME-SPREAD CLASS OF FINISH MATERIALS USED ON INTERIOR WALLS & CEILINGS SHALL NOT EXCEED THE FLAME-SPREAD LIMITATIONS OF IBC TABLE 803.9)
4. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL MEET WITH ASTM E84 OR UL 723'
5. INTERIOR FLOOR FINISHES TO COMPLY WITH 2015 IBC SECTION 804, AND NFPA 253
6. INSULATION TO COMPLY WITH 2015 IBC SECTION 720
7. DECORATIVE MATERIALS AND TRIMS SHALL BE RESTRICTED BY COMBUSTIBILITY AND THE FLAME PROPAGATION PERFORMANCE CRITERIA OF NFPA 701, IN ACCORDANCE WITH SECTION 806 (2015 IBC)

APPLICABLE CODE ANALYSIS

Table with columns: CODE REFERENCES, AS OF JULY 1, 2016 THE CITY OF MERCER ISLAND WILL BE USING THE FOLLOWING CODES (RCW 19.27): 2015 INTERNATIONAL BUILDING CODE WITH STATEWIDE AND CITY AMENDMENT - WAC 51-50, 2015 INTERNATIONAL RESIDENTIAL CODE WITH STATEWIDE AND CITY AMENDMENT - WAC 51-51, 2015 INTERNATIONAL MECHANICAL CODE WITH STATEWIDE AND CITY AMENDMENT - WAC 51-52, 2014 NFPA 54, NATIONAL FUEL GAS CODE WITH STATEWIDE AND CITY AMENDMENT - WAC 51-52-21000, 2015 EDITION OF NFPA 58, LIQUEFIED PETROLEUM GAS CODE - WAC 51-52, 2015 INTERNATIONAL FIRE CODE WITH STATEWIDE AND CITY AMENDMENT - WAC 51-54, 2015 UNIFORM PLUMBING CODE & STANDARDS WITH STATEWIDE AND CITY AMENDMENT - WAC 51-56 AND WAC 51-57, 2015 WASHINGTON STATE ENERGY CODE - (INTERNATIONAL ENERGY CONSERVATION CODE) - WAC 51-11, 2017 WASHINGTON CITIES ELECTRICAL CODE

ZONING CODE ANALYSIS

Table with columns: SECTION, EXISTING / REQUIRED, PROPOSED, COMPLIES, SHEET. Rows include ZONING (R-9.6), LOT SIZE (9,850 SF), MAXIMUM LOT COVERAGE (3,447.5 SF), CRITICAL AREAS (LANDSLIDE, SEISMIC, EROSION), MAX HARDSCAPE COVERAGE (886.5 SF), BUILDING HEIGHT LIMIT (30' FROM AVERAGE BUILDING GRADE TO TOP OF ROOF), BUILDING SETBACKS (20' FRONT YARD, 25' REAR YARD, 5.61' MINIMUM SIDE YARD, 17' COMBINE SIDE YARD), PROJECTIONS (18" ROOF EAVES), PARKING (3 PARKING SPACE), LANDSCAPING (6,402.5 SF), FIRE SPRINKLERS (PER NFPA 13D), CONSTRUCTION TYPE (RESIDENTIAL - TYPE VA), WATER (WATER DISTRICT), SEWER / SEPTIC (PUBLIC), ROAD ACCESS (PRIVATE), STREET SURFACE (PAVED)

ENERGY CODE ANALYSIS

Table with columns: PERFORMANCE REQUIREMENT, MEET OR EXCEED THE 2015 WASHINGTON STATE ENERGY CODE, PROPOSED. Rows include TOTAL HEATED FLOOR AREA (GROSS) (3,471 SF), CLIMATE ZONE (MARINE 4), FENESTRATION U-FACTOR (0.30), CEILING R-VALUE (R-49 OR R-38), WOOD FRAME WALL ABOVE GRADE R-VALUE (R-21), FLOOR R-VALUE / U-FACTOR (R = 30 / U = 0.029), SLAB ON GRADE R-VALUE (R = 10, 2'), BELOW GRADE U-FACTOR (0.042), DOOR U-FACTOR (0.65)

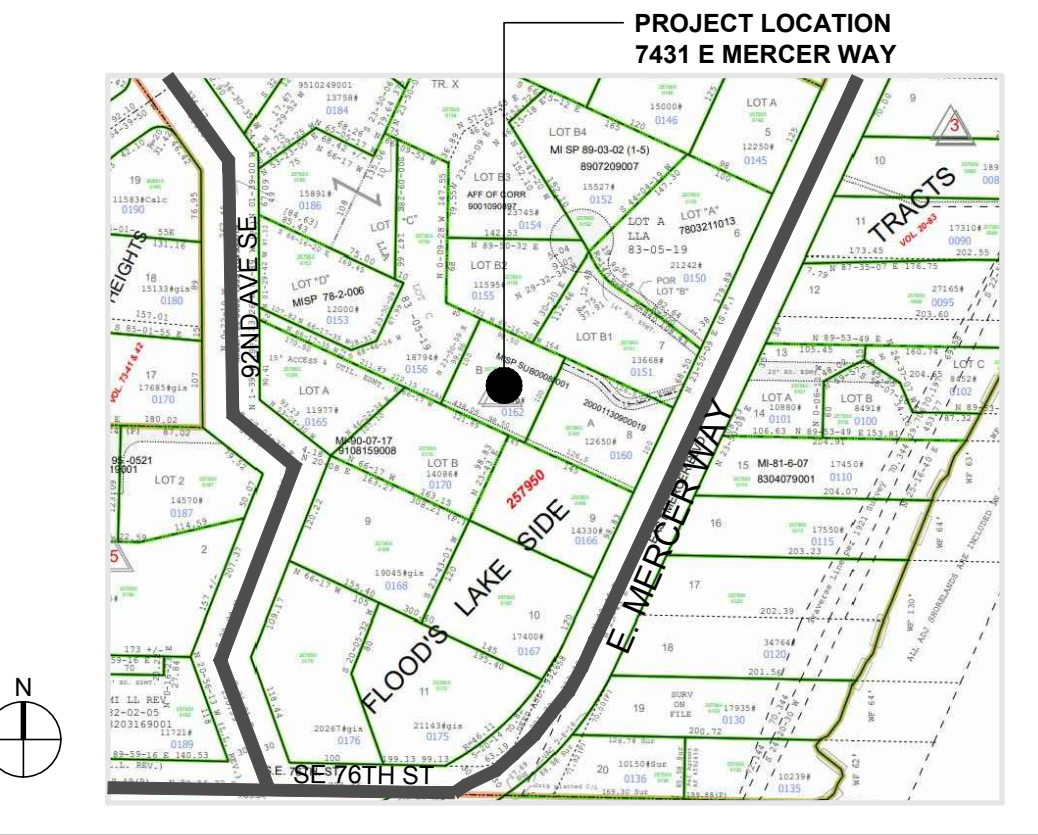
VENTILATION CODE NOTES

- WAC 51-07, WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE AND INTERNATIONAL MECHANICAL CODE, CHAPTER 15
1. WHOLE HOUSE VENTILATION SYSTEM MINIMUM VENTILATION RATE = 90, PER TABLE M1507.3.3(1) USING EXHAUST FANS & FRESH AIR INLETS (IRC M1507.3.4).
2. NOISE: WHOLE HOUSE FANS LOCATED FOUR FEET OR LESS FROM THE INTERIOR GRILLE SHALL HAVE A SONE RATING OF 1.0 OR LESS.
3. EXHAUST DUCTS SHALL TERMINATE OUTSIDE OF THE BUILDING.
4. OUTDOOR AIR DISTRIBUTION: OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY MEANS SUCH AS INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM.
5. DOORS SHALL BE UNDERCUT TO A MINIMUM OF ONE-HALF INCH ABOVE THE SURFACE OF THE FINISH FLOOR COVERING. DOORS AND OPERABLE LITES IN WINDOWS ARE DEEMED NOT TO MEET THE OUTDOOR AIR SUPPLY INTAKE REQUIREMENTS.
6. SOURCE SPECIFIC VENTILATION: INTERMITTENTLY OPERATING MINIMUM EXHAUST RATES FOR BATHROOMS = 50 CFM, KITCHENS = 100 CFM. SYSTEMS OVER 400 CFM'S VENTED TO OUTSIDE AIR MUST PROVIDE MAKE UP AIR PER SECTION M1503.8. EXHAUST SHALL BE DISTCHARGED OUTSIDE AND BACKDRAFT DAMPERS ARE REQUIRED.

ENERGY CODE NOTES

- 2015 WASHINGTON STATE ENERGY CODE (INTERNATIONAL ENERGY CONSERVATION CODE)
1. BUILDING AIR LEAKAGE TESTING, DEMONSTRATING SPECIFIC LEAKAGE AREA IS <= 0.00030 (SEC 502.4.5), IS REQUIRED PRIOR TO FINAL INSPECTION. THE TEST RESULTS SHALL BE POSTED ON THE RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE.
2. A SIGNED AFFIDAVIT DOCUMENTING THE DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION (SEC 503.10.2).
3. DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR AND HOMEOWNER PRIOR TO APPROVED FINAL INSPECTION (SEC 101.3.2.6 AND 503.10.2).
4. DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR REGULATION OF TEMPERATURE (SEC 503.8.1).
5. MINIMUM 50% OF ALL INTERIOR LUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES, AND ALL EXTERIOR LIGHTING SHALL BE HIGH EFFICACY LUMINAIRES (SEC 505).
6. ALL HEADERS IN EXTERIOR WALLS TO HAVE A MINIMUM R-10 INSULATION.
7. ALL DUCTS NOT LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE DUCTS SHALL BE INSULATED TO A MINIMUM OF R-8.

VICINTY MAP



SITE INFORMATION

Table with columns: PARCEL #, LEGAL DESCRIPTION, ZONE, LOT SIZE, MAX GFA, MAX LOT COVERAGE, PROPOSED LOT COVERAGE, CRITICAL AREAS, ACCESS, EASEMENTS, SETBACKS, LOT SLOPE, MAX. HEIGHT. Includes details for parcel 257950-0162, R-9.6 zone, 9,850 S.F. lot size, and proposed lot coverage of 3,431 SF (34%).

PROJECT INFORMATION

Table with columns: PROPERTY ADDRESS, PROJECT DESCRIPTION, IMPERVIOUS AREAS, BUILDING AREAS. Includes address 7431 E Mercer Way, Mercer Island, WA 98040, and area breakdowns for roof, floor, and courtyard.

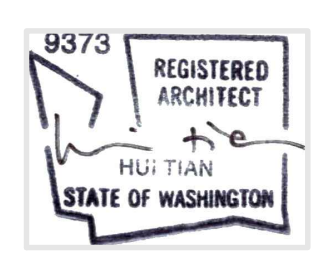
GROSS FLOOR AREA

Table with columns: NET LOT AREA, ALLOWED GROSS FLOOR AREA (40%), PROPOSED GROSS FLOOR AREA, PROPOSED % OF LOT AREA. Shows 9,850 SQ. FT. lot area and 3,928 SQ. FT. proposed floor area (40%).



CONSULTANT:

PROFESSIONAL SEAL:



PROJECT:

YANG RESIDENCE

7431 E MERCER WAY MERCER ISLAND, WA 98040 USA

SHEET ISSUE:

Table with columns: DATE, DESCRIPTION. Row: 07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE:

CODE SUMMARY GENERAL NOTES

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: G0.02

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

CALCULATIONS
 SPOT ELEVATIONS

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

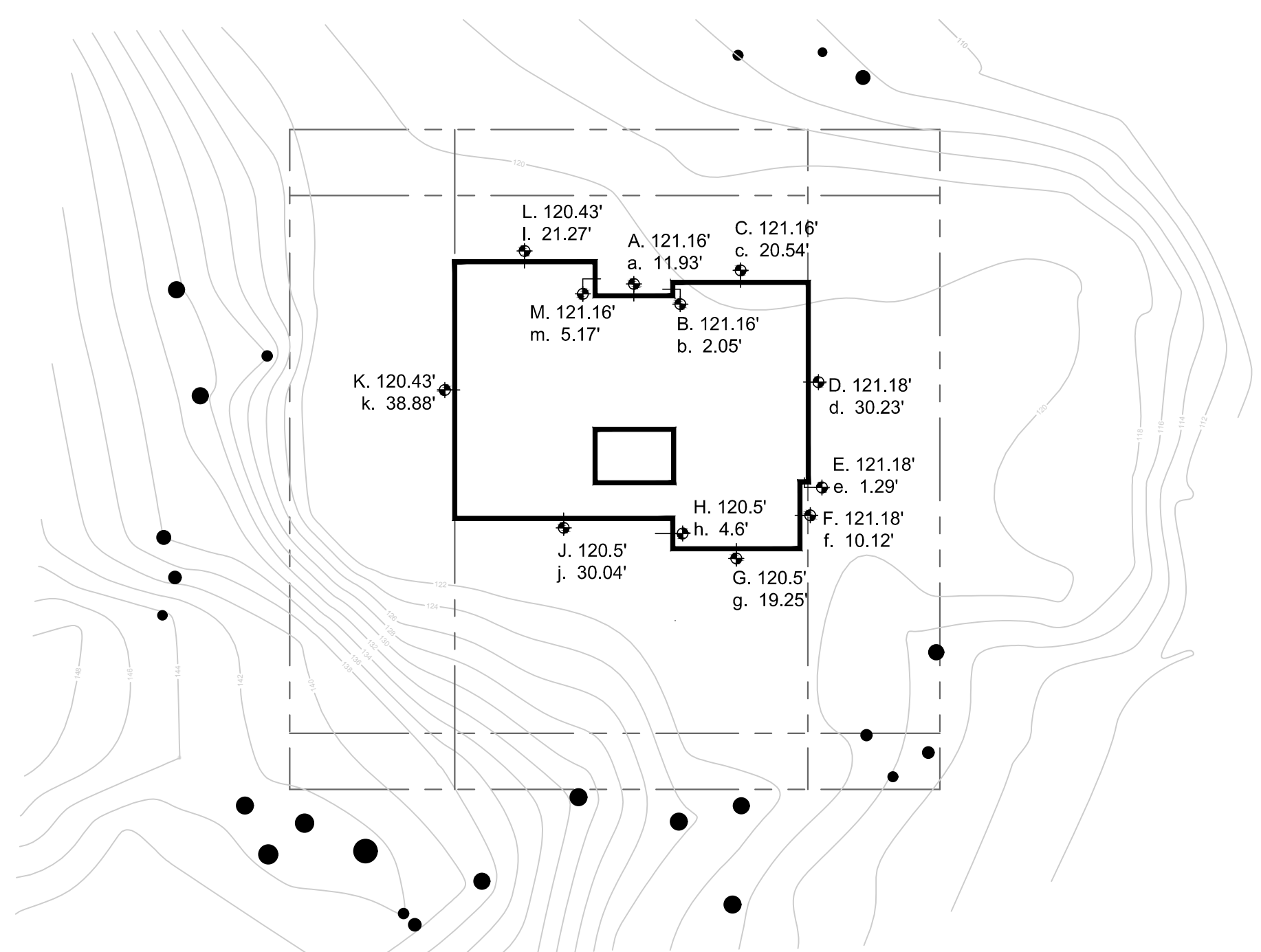
TREE INVENTORY			
EXISTING TREES ON SITE			
TREE TAG #	SPECIES	DBH	RETENTION NOTES
1	SCOTCH PINE	7	RETAIN
2	SCOTCH PINE	18.5	RETAIN
3	SCOTCH PINE	7.5	RETAIN
4	DOUGLAS FIR	8.5	RETAIN
5	GIANT SEQUOIA	18	RETAIN
6	DOUGLAS FIR	7.5	RETAIN
7	GIANT SEQUOIA	28	RETAIN
8	DOUGLAS FIR	9	RETAIN
9	SPRUCE	5.5	RETAIN
10	WESTERN HEMLOCK	13	REMOVE
11	WESTERN HEMLOCK	14.5	REMOVE
12	WESTERN HEMLOCK	14.5	REMOVE
13	AUSTRIAN PINE	22	REMOVE
14	RED ALDER	18.5	REMOVE
18	BIG LEAF MAPLE	17	REMOVE-DEAD
19	DOUGLAS FIR	15.6	RETAIN
20	WEST RED CEDAR	16.5	RETAIN
21	WEST RED CEDAR	23	RETAIN
30	WHITE FIR	12.5	RETAIN
31	DECIDUOUS MEDIUM	14	RETAIN
32	BIG LEAF MAPLE	18	RETAIN
33	BIG LEAF MAPLE	22	RETAIN
34	BIG LEAF MAPLE	20	RETAIN
35	BIG LEAF MAPLE	20	RETAIN
36	RED ALDER	22	RETAIN
37	BIG LEAF MAPLE	12	RETAIN
38	BIG LEAF MAPLE	16	RETAIN
39	BIG LEAF MAPLE	11	RETAIN
40	BIG LEAF MAPLE	17.8	RETAIN
41	BIG LEAF MAPLE	17.8	RETAIN
42	DOUGLAS FIR	23	RETAIN
43	SCOTCH PINE	8.5	RETAIN
44	SCOTCH PINE	10.5	RETAIN
45	SCOTCH PINE	10.5	RETAIN

TREE INVENTORY			
EXISTING TREES OFF SITE			
TREE TAG #	SPECIES	DBH	RETENTION NOTES
15	RED ALDER	13	VIABLE
16	RED ALDER	11	VIABLE
17	BIG LEAF MAPLE	20	NEEDS ASSESSMENT
22	BIG LEAF MAPLE	22	NEEDS ASSESSMENT
23	RED ALDER	18	NEEDS ASSESSMENT
24	BIG LEAF MAPLE	13	NEEDS ASSESSMENT
25	BIG LEAF MAPLE	15	NEEDS ASSESSMENT
26	BIG LEAF MAPLE	22	NEEDS ASSESSMENT
27	BIG LEAF MAPLE	25	VIABLE
28	BIG LEAF MAPLE	38.74	EXCEPT VIABLE
29	WEST RED CEDAR	13	VIABLE

LOT COVERAGE CALCULATIONS	
NET LOT AREA:	9,850 SF
ALLOWED LOT COVERAGE:	3,447.5 SF (35% BASED ON LOT SLOPE)
MAIN STRUCTURE ROOF AREA:	2,351 SF
VEHICULAR USE AREA:	1,080 SF
TOTAL:	3,431 SF (34%)

HARD SURFACE CALCULATIONS	
NET LOT AREA:	9,850 SF
MAX HARDSCAPE:	886.5 SF (9% OF LOT AREA)
PROPOSED:	835 SF (8%)

LANDSCAPING CALCULATIONS	
NET LOT AREA:	9,850 SF
REQUIRED LANDSCAPING AREA:	6,402.5 SF (65% OF LOT AREA)
PROPOSED:	6,950 SF (70%)



AVERAGE BUILDING ELEVATION CALCULATION

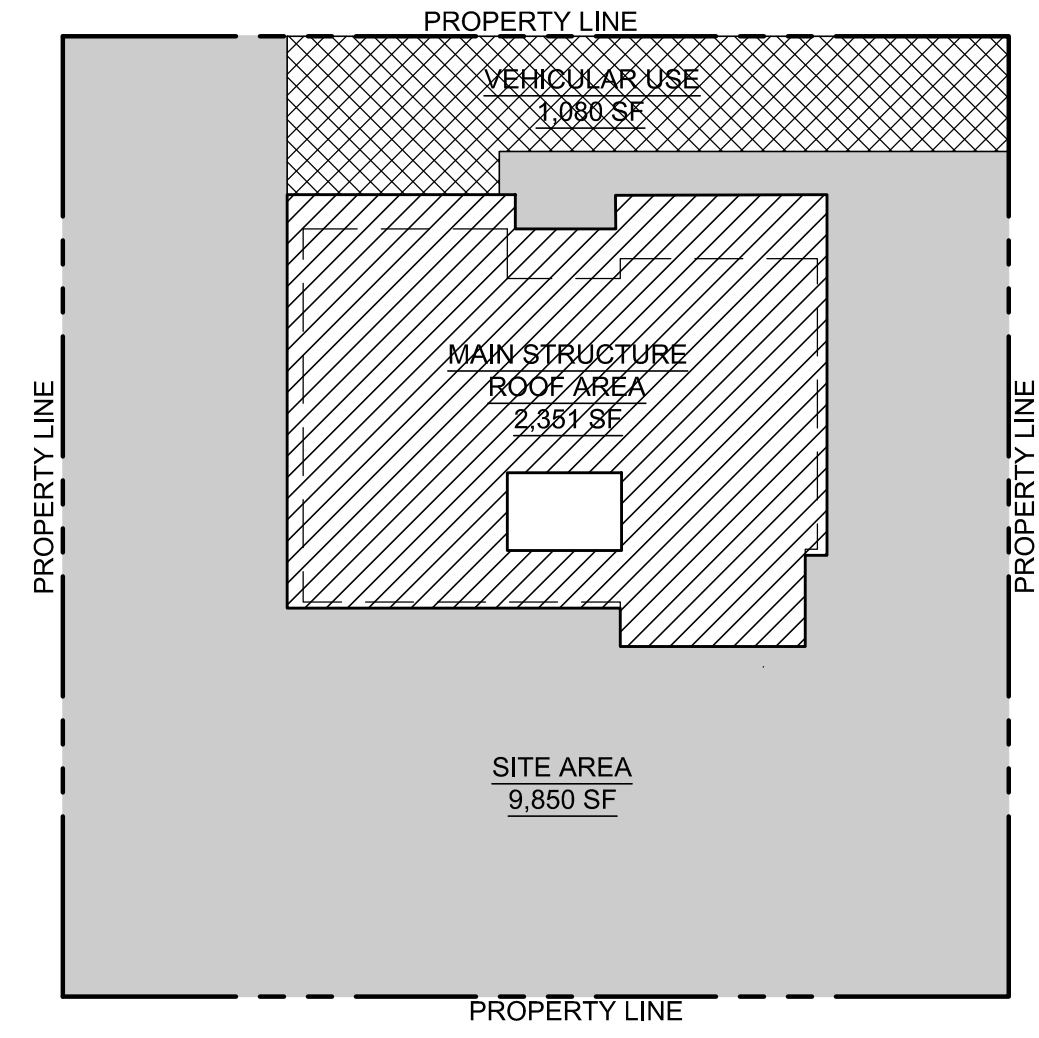
$$\frac{(Axa)+(Bxb)+(Cxc)+(Dxd)+(Exe)+(Fxf)+(Gxg)+(Hxh)+(Jxj)+(Kxk)+(Lxl)+(Mxm)}{a+b+c+d+e+f+g+h+j+k+l+m}$$

$$\frac{(121.16 \times 11.93) + (121.16 \times 2.05) + (121.16 \times 20.54) + (121.18 \times 30.23) + (121.18 \times 1.29) + (121.18 \times 10.12) + (120.5 \times 19.25) + (120.5 \times 4.6) + (120.5 \times 30.04) + (120.4 \times 38.88) + (120.43 \times 21.27) + (121.16 \times 5.17)}{11.93 + 2.05 + 20.54 + 30.23 + 1.29 + 10.12 + 19.25 + 4.6 + 30.04 + 38.88 + 21.27 + 5.17}$$

$$\frac{23591.17'}{195.37'} \\ \text{A.B.E.} = 120.75'$$

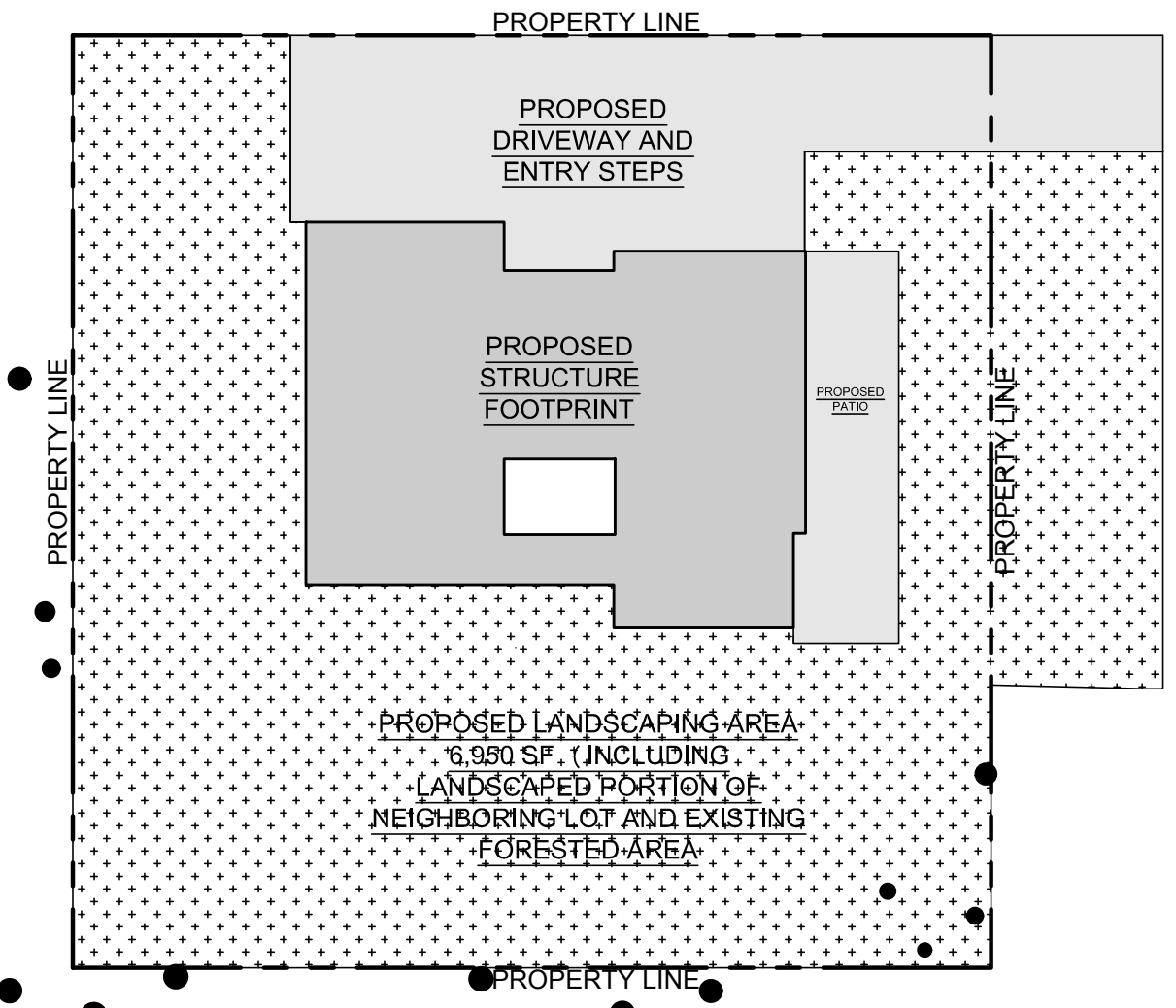
SPOT ELEVATIONS FOR HEIGHT CALCULATIONS

SCALE: 1" = 20'-0"



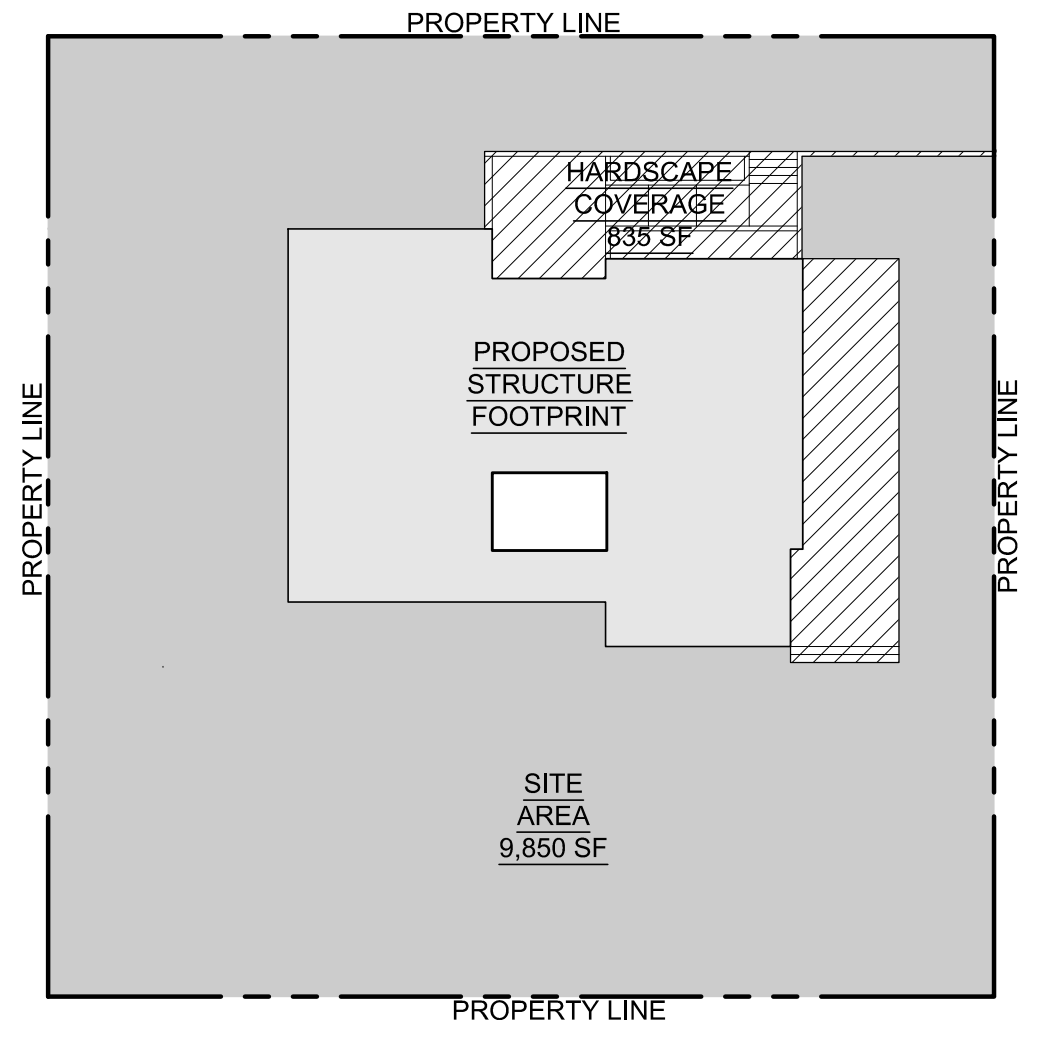
LOT COVERAGE CALCULATIONS

SCALE: 1" = 20'-0"



LANDSCAPE COVERAGE CALCULATIONS

SCALE: 1" = 20'-0"



HARDSCAPE COVERAGE CALCULATIONS

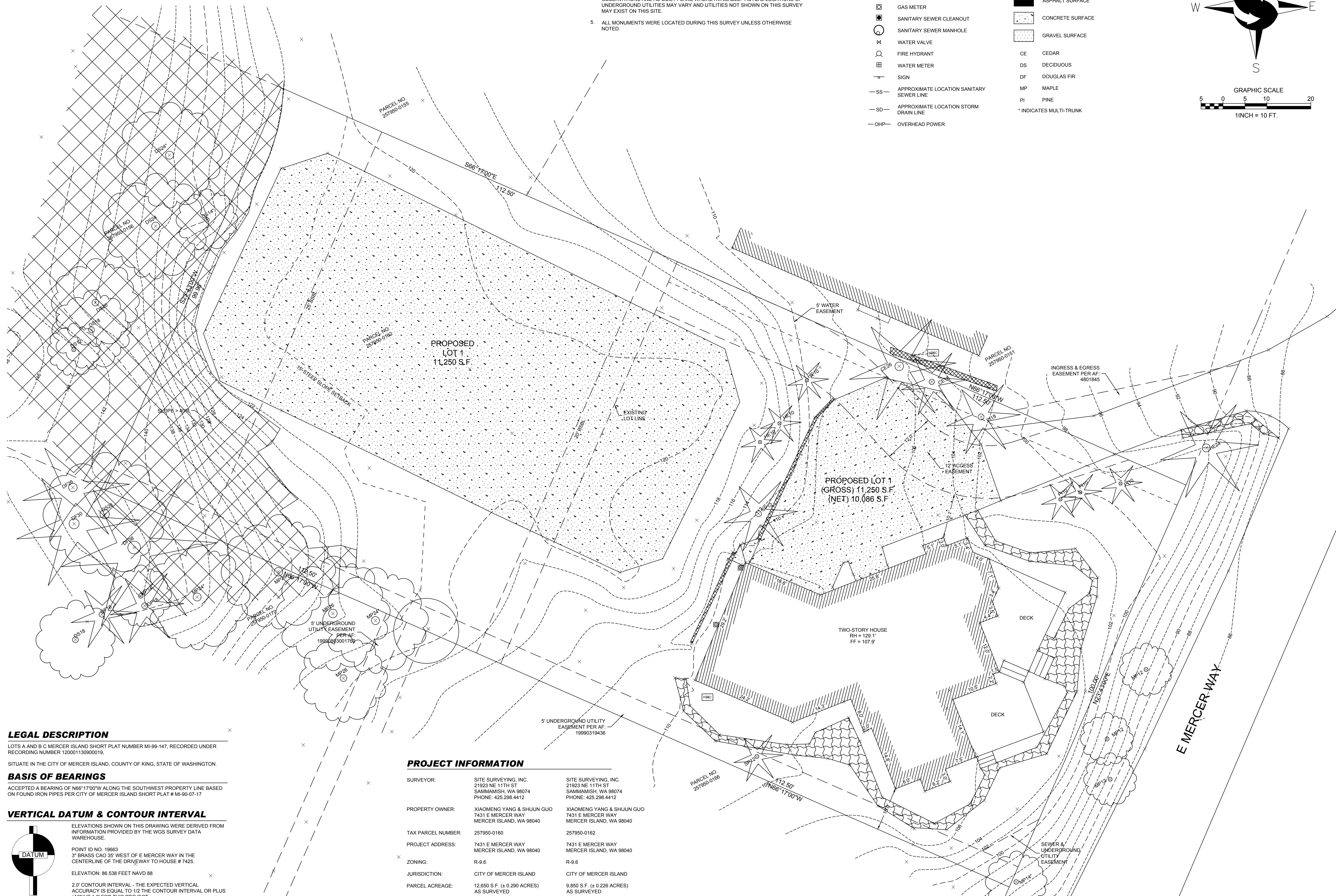
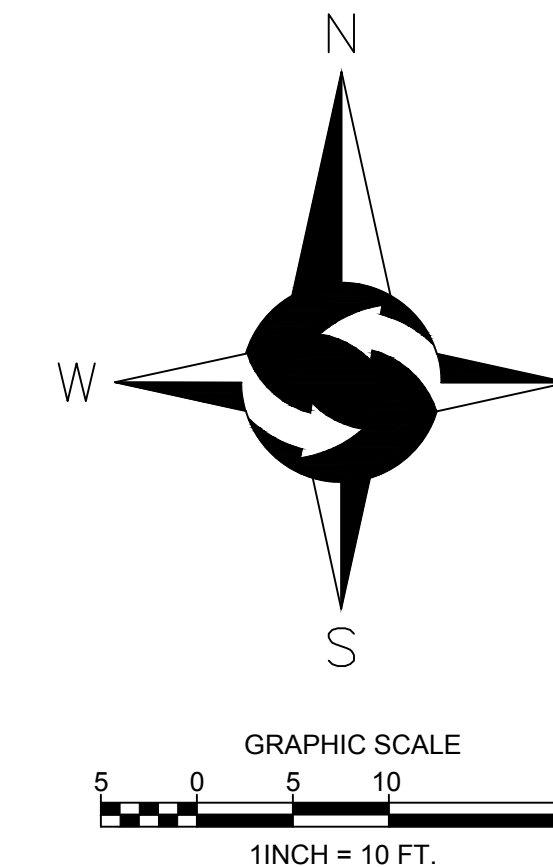
SCALE: 1" = 20'-0"

GENERAL NOTES

- THIS SURVEY WAS BASED ON WFG NATIONAL TITLE COMPANY ORDER NO. 18-229313 DATED OCTOBER 29, 2018 AT 8:00 AM.
- INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NIV0 S.C TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
- THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN DECEMBER 2018 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
- ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

LEGEND

- FOUND MONUMENT AS DESCRIBED
- FOUND REBAR AS DESCRIBED
- ⊗ TACK IN LEAD FOUND
- SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP
- ⊠ POWER METER
- ⊕ UTILITY POLE
- ⊕ GAS METER
- ⊕ SANITARY SEWER CLEANOUT
- ⊕ SANITARY SEWER MANHOLE
- ⊕ WATER VALVE
- ⊕ FIRE HYDRANT
- ⊕ WATER METER
- ⊕ SIGN
- SS— APPROXIMATE LOCATION SANITARY SEWER LINE
- SD— APPROXIMATE LOCATION STORM DRAIN LINE
- OHP— OVERHEAD POWER
- OHU— OVERHEAD UTILITIES
- X— CHAINLINK FENCE
- WOOD FENCE
- ▨ CONCRETE WALL
- ⊠ ROCKERY
- ASPHALT SURFACE
- ▨ CONCRETE SURFACE
- ▨ GRAVEL SURFACE
- CE CEDAR
- DS DECIDUOUS
- DF DOUGLAS FIR
- MP MAPLE
- PI PINE
- * INDICATES MULTI-TRUNK



LEGAL DESCRIPTION

LOTS A AND B OF MERCER ISLAND SHORT PLAT NUMBER MI-99-147, RECORDED UNDER RECORDING NUMBER 120001130900019.

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

BASIS OF BEARINGS

ACCEPTED A BEARING OF N66°17'00"W ALONG THE SOUTHWEST PROPERTY LINE BASED ON FOUND IRON PIPES PER CITY OF MERCER ISLAND SHORT PLAT # MI-90-07-17

VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY THE WGS SURVEY DATA WAREHOUSE.

POINT ID NO. 19683
3" BRASS CAO 35' WEST OF E MERCER WAY IN THE CENTERLINE OF THE DRIVEWAY TO HOUSE # 7425.

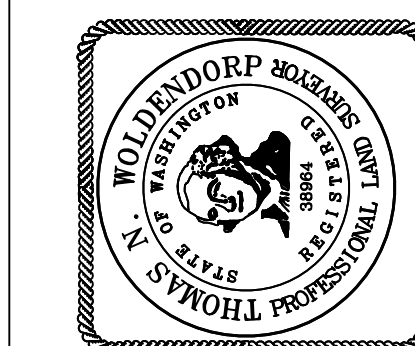
ELEVATION: 86.538 FEET NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.

PROJECT INFORMATION

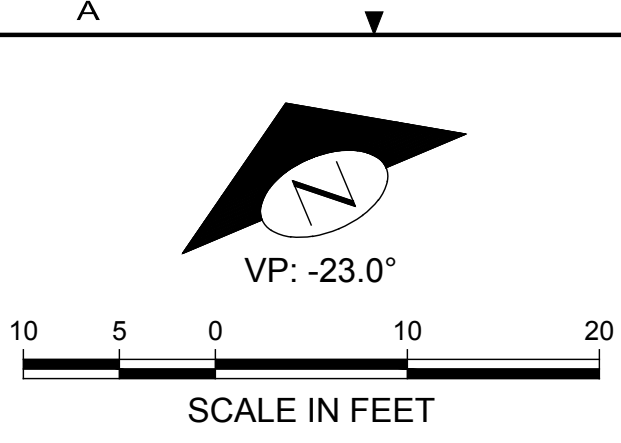
SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	XIAOMENG YANG & SHIJUN GUO 7431 E MERCER WAY MERCER ISLAND, WA 98040	XIAOMENG YANG & SHIJUN GUO 7431 E MERCER WAY MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	257950-0160	257950-0162
PROJECT ADDRESS:	7431 E MERCER WAY MERCER ISLAND, WA 98040	7431 E MERCER WAY MERCER ISLAND, WA 98040
ZONING:	R-9.6	R-9.6
JURISDICTION:	CITY OF MERCER ISLAND	CITY OF MERCER ISLAND
PARCEL ACREAGE:	12,650 S.F. (± 0.290 ACRES) AS SURVEYED	9,850 S.F. (± 0.226 ACRES) AS SURVEYED

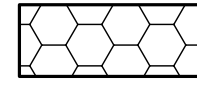
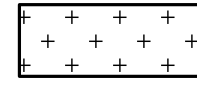
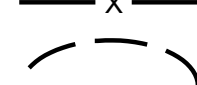
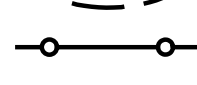

NW 1/4, SE 1/4, SEC 30, TWP 24N, RNG 5E, W.M.



PRELIMINARY BOUNDARY LINE ADJUSTMENT
XIAOMENG YANG & SHIJUN GUO
7431 E MERCER WAY
MERCER ISLAND, WA 98040

PROJECT NO.	15-526
DRAWN BY:	EFJ
CHECKED BY:	TNW
DATE:	12-4-2016
SHEET	1 OF 1



- LEGEND:**
-  STABILIZED CONSTRUCTION ENTRANCE
 -  SOIL AMENDMENT
 -  PERIMETER PROTECTION
 -  STOCKPILE LOCATION
 -  TREE PROTECTION FENCING

PROJECT INFORMATION:
 7431 E MERCER WAY
 MERCER ISLAND, WA 98040

OWNER/APPLICANT:
 MELISSA YANG
 7431 E MERCER WAY
 MERCER ISLAND, WA 98040

ARCHITECT:
 STUDIO 19 ARCHITECTS
 207 1ST AVE S, SUITE 300
 SEATTLE, WA 98104
 PH: (206) 466.1225

CIVIL ENGINEER:
 DAVIDO CONSULTING GROUP, INC.
 9706 4TH AVE NE, SUITE 300
 SEATTLE, WA 98115
 PH: (206) 523.0024
 CONTACT: BEN IDDINS, P.E.

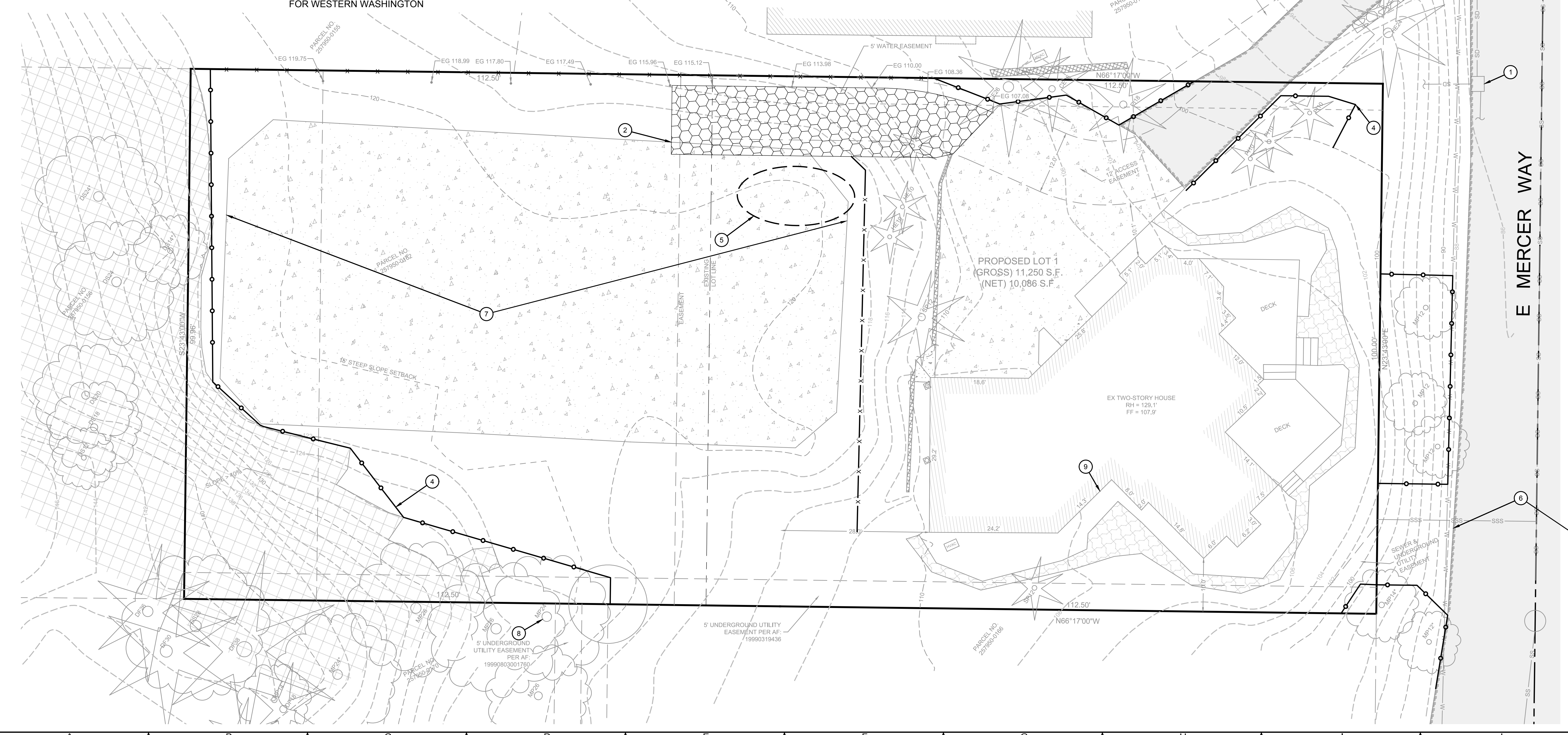
GEOTECHNICAL ENGINEER:
 CASCADE GEOTECHNHW
 4957 LAKEMONT BLVD SE, C-4, #325
 BELLEVUE, WA 98006
 PH: (206) 491.0081

SURVEYOR:
 SITE SURVEYING, INC
 21923 NE 11TH ST
 SAMAMMISH, WA 98074
 PH: (425) 298.4412

KEY NOTES:		
KEY	NOTE:	DETAIL/SHEET
1	INSTALL TEMPORARY INLET PROTECTION ON EX SD INLET OR CLOSEST SD INLET DOWNSTREAM OF SITE	B/C06
2	INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE OFF EDGE OF EX DWY	C/C06
3	INSTALL APPROX 225 LF PERIMETER PROTECTION*	A/C06
4	TREE PROTECTION FENCING (TYP)	TP/C02
5	PROPOSED STOCKPILE LOCATION. CONTRACTOR TO DETERMINE FINAL LOCATION IN FIELD	-

6	CONTRACTOR TO SWEEP STREET DAILY OR MORE OFTEN IF NECESSARY TO REMOVE TRACKED SEDIMENT	-
7	EX CONCRETE PAD TO BE REMOVED	-
8	ALL EXISTING TREES TO REMAIN EXCEPT AS NOTED ON SHEET C02. CONSULT WITH ARBORIST IF TREE REMOVAL IS REQUIRED OR IF DISTURBANCE WILL OCCUR WITHIN DRIPLINE OF EX TREES (TYP)	-
9	EX SFR AND DRIVEWAY TO REMAIN AND BE PROTECTED DURING CONSTRUCTION EXCEPT WHERE NOTED ON	-

* INSTALL PERIMETER PROTECTION, SUCH AS SILT FENCING, COMPOST SOCKS, OR STRAW WATTLES IN ACCORDANCE WITH VOL II OF THE 2014 DOE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON



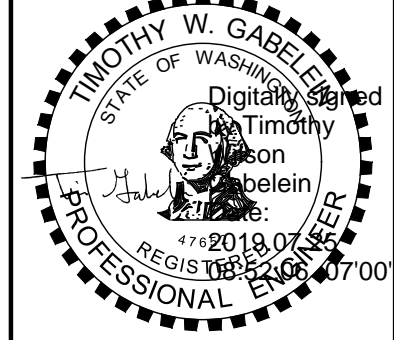
CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO 19\7431 E MERCER WAY\MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY - 18.DWG
 DATE: 7/24/2019 4:36 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED (11.00 X 22.00 INCHES)
 AUTOCAD VERSION: CIVIL 3D 2016

No.	DATE	BY	REVISION

9706 4th Ave NE
 Suite 300
 Seattle, WA 98115
 P: 206.523.0024
 F: 206.523.1012
 www.dcgengr.com



CALL 811
 2 BUSINESS DAYS
 BEFORE YOU DIG
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)



BASE MAP TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

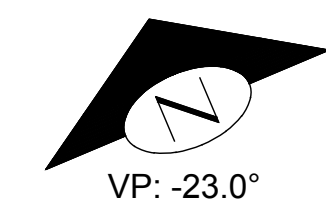
OWNER:
 YANG RESIDENCE
 7431 E MERCER WAY
 MERCER ISLAND, WA 98040

PROJECT:
 7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 SMALL PARCEL ESC PLAN

PROJ. MANAGER:	BI
DESIGNED BY:	BI, LG
DRAWN BY:	GR
CHECKED BY:	BI, TG
SCALE:	SCALE
DATE:	REV. SHEET
7/24/2019	A 1 OF 7

SHEET NUMBER
 C01

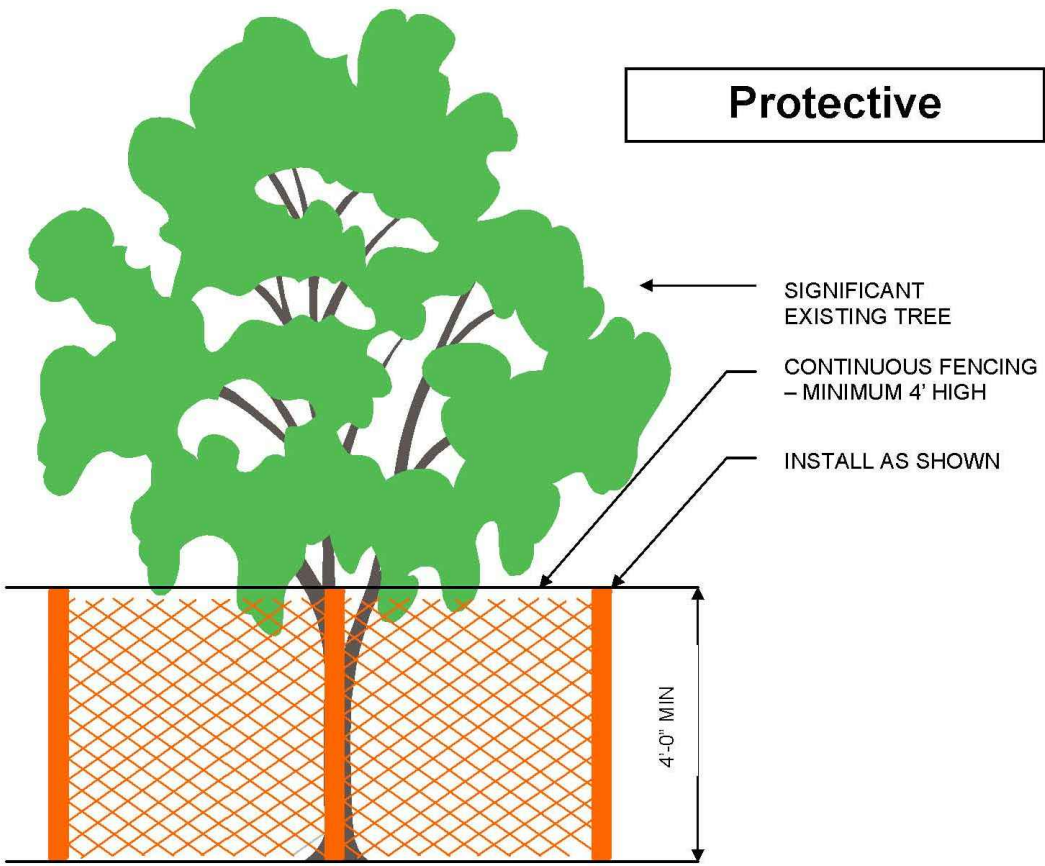
A B C D E F G H I J



SCALE IN FEET

KEY NOTES:

KEY	NOTE:	DETAIL/SHEET
①	EX TREE TO BE REMOVED (TYP)	-
②	EX TREE TO BE PROTECTED. NEW UTILITIES TO AVOID TREE ROOTS AND TUNNEL UNDER TREE IF NECESSARY. A.B.C ARBORISTS LLC TO SUPERVISE TUNNELING	-
③	TREE PROTECTION FENCING	TP/C02
④	TREE 14, LISTED IN ARBORIST REPORT, TO BE REMOVED (TREE NOT SURVEYED)	-



1. PROTECTIVE FENCING SHALL BE LOCATED WHERE SHOWN ON PLANS. FENCE SHALL COMPLETELY ENCIRCLE TREE(S) AT THE DRIPLINE OR BEYOND. AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS. FENCE MUST REMAIN UP THROUGHOUT PROJECT.
2. NO STOCKPIILING OF MATERIALS, GRADE CHANGES, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. PLEASE CALL ARBORIST FOR MITIGATION MEASURES IF FENCING MUST COME DOWN.
3. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER 1" IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP WITH CONTINUOUS IRRIGATION, TO PREVENT DRYING. COVER WITH SOIL AS SOON AS POSSIBLE - 3" OF MULCH RECOMMENDED.

S:\DS\FORMS\TreeFencing 08/2009

GENERAL NOTES:

TREE DATA INCLUDING TREE SPECIES AND TREE RETENTION STATUS PER ARBORIST REPORT CREATED BY A.B.C CONSULTING ARBORISTS LLC DATED 3/1/2019. ARBORIST SHOULD BE ONSITE DURING CLEARING TO VERIFY TREES TO REMAIN VS REMOVED. TREE PROTECTION FENCING SHALL BE LOCATED AS DESCRIBED IN THE ARBORIST REPORT UNLESS DIRECTED OTHERWISE BY THE ARBORIST.

TREE PROTECTION STANDARDS:

1. TREE PROTECTION FENCING SHALL BE ERECTED AT PRESCRIBED DISTANCE PER ARBORIST REPORT. FENCES SHALL BE CONSTRUCTED OF CHAIN LINK AND BE AT LEAST 4 FEET HIGH.
2. INSTALL HIGHLY VISIBLE SIGNS ON PROTECTION FENCING SPACED NO FURTHER THAN 15 FEET APART. SIGNS SHALL STATE "TREE PROTECTION AREA-ENTRANCE PROHIBITED", AND "CITY OF MERCER ISLAND" CODE ENFORCEMENT PHONE NUMBER.
3. NO WORK SHALL BE PERFORMED WITHIN PROTECTION FENCING UNLESS APPROVED BY PLANNING OFFICIAL. IN SUCH CASES, ACTIVITIES WILL BE APPROVED AND SUPERVISED BY A "QUALIFIED TREE PROFESSIONAL".
4. THE ORIGINAL GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN PROTECTION FENCING WITHOUT THE PLANNING OFFICIAL AUTHORIZATION BASED ON RECOMMENDATIONS FROM A QUALIFIED PROFESSIONAL.

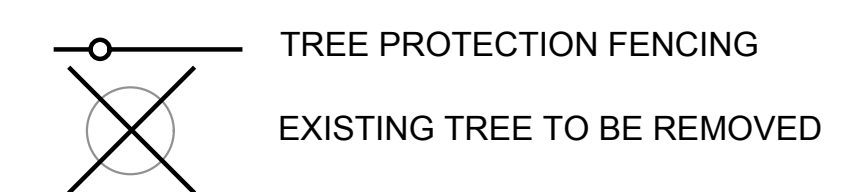
TREE PROTECTION STANDARDS (CONTINUED):

5. NO BUILDING MATERIALS, SPOILS, CHEMICALS OR SUBSTANCES OF ANY KIND WILL BE PERMITTED WITHIN PROTECTION FENCING.
6. PROTECTION FENCING SHALL BE MAINTAINED UNTIL THE PLANNING OFFICIAL AUTHORIZES ITS REMOVAL.
7. ENSURE THAT ANY APPROVED LANDSCAPING WITHIN THE PROTECTED ZONE SUBSEQUENT TO THE APPROVED REMOVAL OF PROTECTION FENCING BE PERFORMED WITH HAND LABOR.

IN ADDITION TO THE ABOVE, THE PLANNING OFFICIAL MAY REQUIRE THE FOLLOWING:

- A. IF EQUIPMENT IS AUTHORIZED TO OPERATE WITHIN THE ROOT ZONE, THE AREA WILL BE MULCHED TO A DEPTH OF 6" OR COVERED WITH PLYWOOD OR SIMILAR MATERIAL TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT.
- B. MINIMIZE ROOT DAMAGE BY EXCAVATING A 2-FOOT DEEP TRENCH, AT EDGE OF PROTECTION FENCING TO CLEANLY SEVER THE ROOTS OF PROTECTED TREES.
- C. CORRECTIVE PRUNING TO AVOID DAMAGE FROM MACHINERY OR BUILDING ACTIVITY.
- D. MAINTENANCE OF TREES THROUGHOUT CONSTRUCTION PERIOD BY WATERING AND FERTILIZATION.

LEGEND:



TREE PROTECTION FENCING TP
NOT TO SCALE C01 & C02



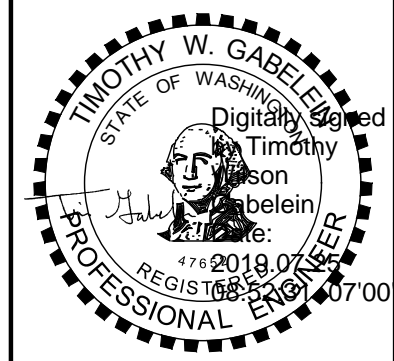
CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\19\7431 E MERCER WAY MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY - 18.DWG
PLOT DATE: 7/24/2019 4:38 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)
AUTOCAD VERSION: CIVIL 3D 2016

No.	DATE	BY	REVISION

9706 4th Ave NE
Suite 300
Seattle, WA 98115
P: 206.523.0024
F: 206.523.1012
www.dcgengr.com



CALL 811
2 BUSINESS DAYS
BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

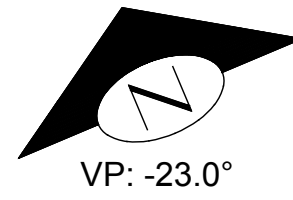


BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

OWNER: YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040
PROJECT: 7431 E MERCER WAY
MERCER ISLAND, WA 98040
TREE RETENTION PLAN

PROJ. MANAGER:	BI
DESIGNED BY:	BI, LG
DRAWN BY:	GR
CHECKED BY:	BI, TG
SCALE:	SCALE
DATE:	REV.
7/24/2019	A
SHEET	2
OF	7

SHEET NUMBER
C02

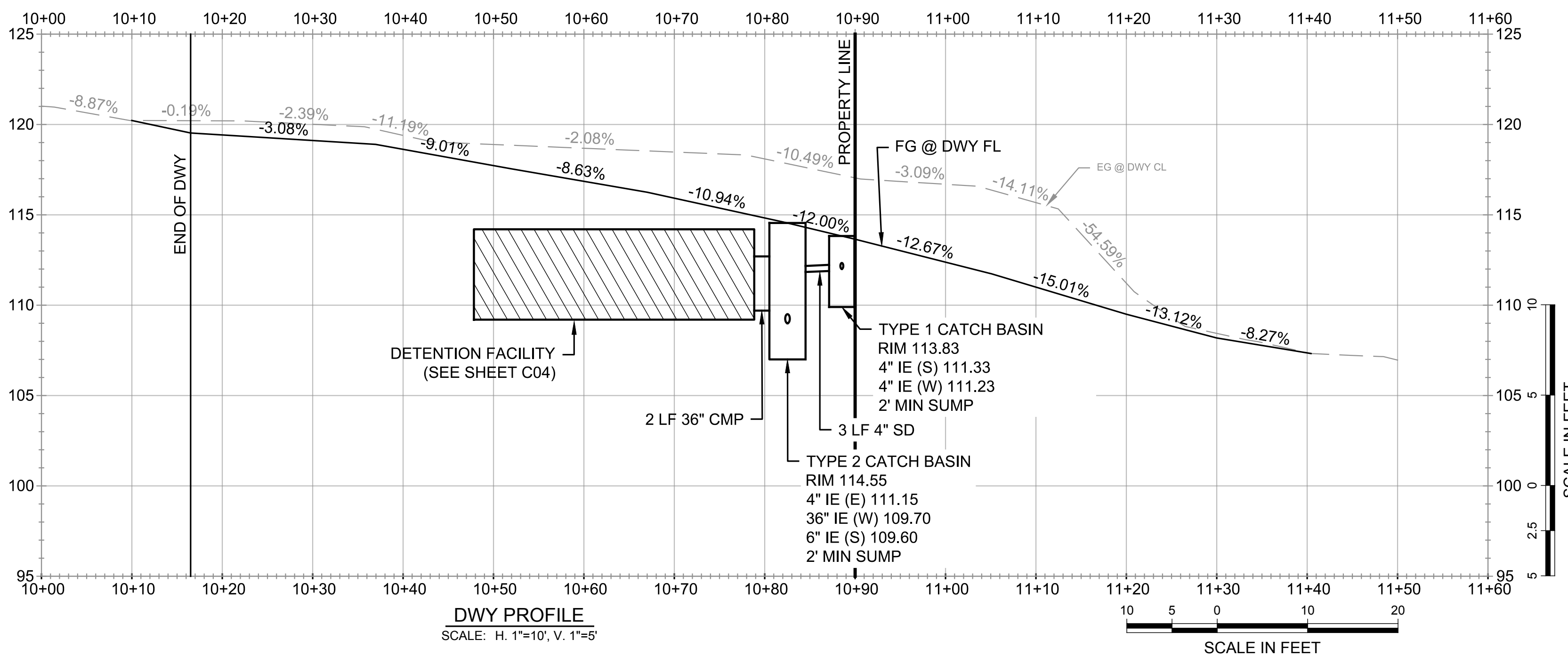


LEGEND:

[Pattern]	ASPHALT
[Pattern]	CONCRETE
[Pattern]	LANDSCAPE
[Pattern]	TRENCH DRAIN
[Symbol]	TREE PROTECTION FENCING

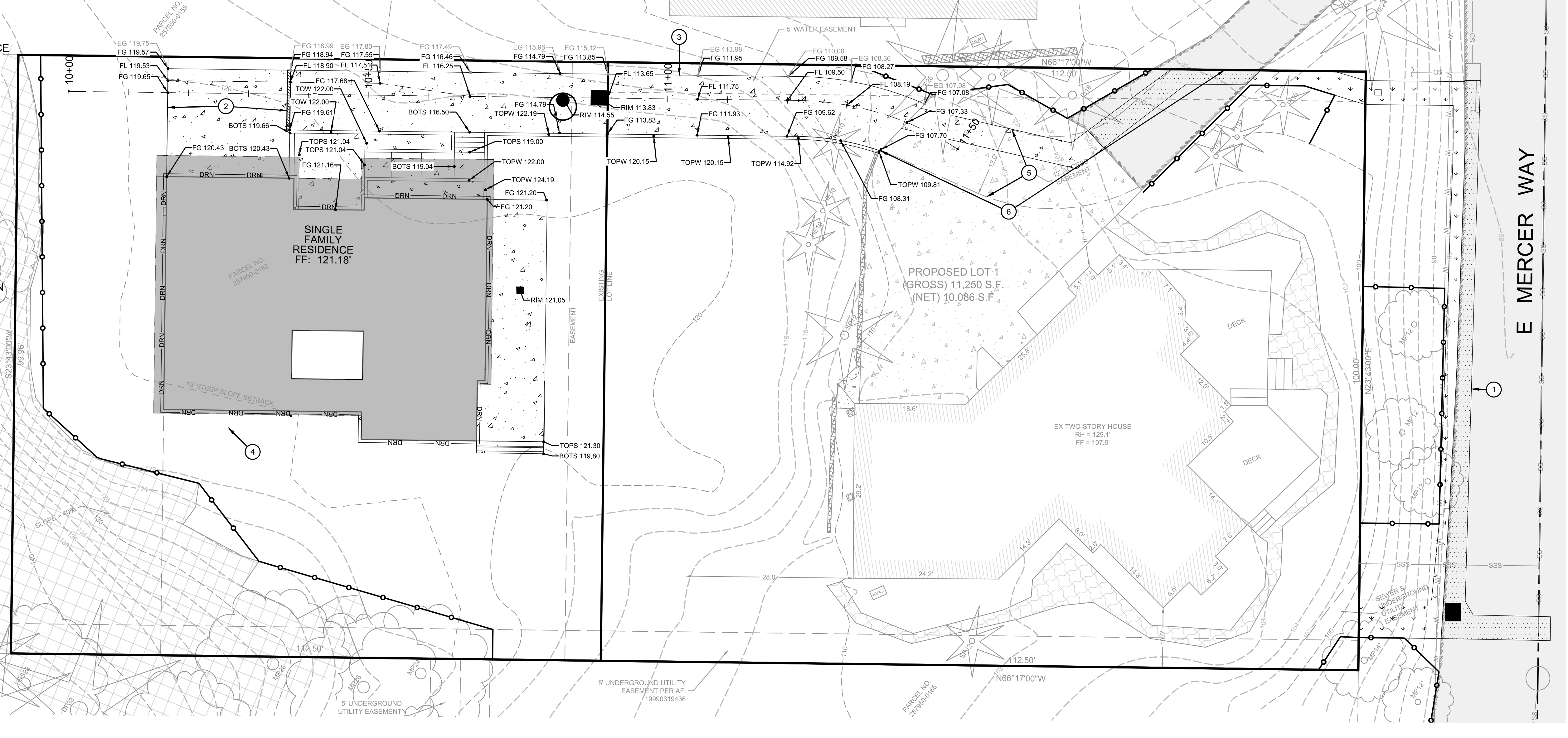
ABBREVIATIONS:

AIC	AERIAL INTERCONNECT CABLE
BOC	BEGINNING OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CB	CATCH BASIN
CL	CENTER LINE
CONC	CONCRETE
COS	CITY OF SEATTLE
CW	CONCRETE WALK
DCI	DEPARTMENT OF CONSTRUCTION & INSPECTION
EG	EXISTING GRADE ELEVATION
EL/ELEV	ELEVATION
EOC	END OF CURB
EOP	EDGE OF PAVEMENT
ESC	EROSION & SEDIMENTATION CONTROL
EX	EXISTING
FF	FINISHED FLOOR, FILTER FENCE
FFE	FINISHED FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOWLINE
IE	INVERT ELEVATION
LSCAPE	LANDSCAPING
LT	LEFT
MIC	MONUMENT IN CASE/ CONCRETE
NO	NUMBER
PC	POINT OF CURVE
PT	POINT OF TANGENT
RT	RIGHT
SD	STORM DRAIN
SDFM	STORM DRAIN FORCE MAIN
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSFM	SANITARY SEWER FORCE MAIN
SSMH	SANITARY SEWER MANHOLE
SSS	SANITARY SIDE SEWER
STA	STATION
STD	STANDARD
TOC	TOP OF CURB
TOEW	TOE OF WALL
TOP	TOP OF PAVEMENT
TOPW	TOP OF WALL
TYP	TYPICAL
UIC	UNDERGROUND INTERCONNECT CABLE
W	WATER
W/W	WITH WATER METER



KEY NOTES

KEY	DESCRIPTION	DETAIL/SHEET
①	SAWCUT AND MATCH EG	-
②	SLOPE DWY TOWARDS TRENCH DRAIN (TYP)	-
③	DWY CONSTRUCTION WILL NOT IMPEDE ON THE NEIGHBORING PROPERTY	-
④	SLOPE ALL LANDSCAPING AWAY FROM SFR @ 2.00% MIN SLOPE FOR MIN 5'	-
⑤	EX 12'-WIDE ACCESS EASEMENT	-
⑥	EX DRIVEWAY TO REMAIN OTHER THAN REPLACEMENT IN-KIND FOR UTILITY TRENCHING	-



<p>CALL 811 2 BUSINESS DAYS BEFORE YOU DIG <small>(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)</small></p>	
<p><small>BASE MAP TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EXISTING FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.</small></p>	
<p>OWNER: YANG RESIDENCE 7431 E MERCER WAY MERCER ISLAND, WA 98040</p>	<p>PROJECT: 7431 E MERCER WAY MERCER ISLAND, WA 98040 GRADING PLAN</p>
<p>PROJ. MANAGER: BI</p>	<p>DESIGNED BY: BI, LG</p>
<p>DRAWN BY: GR</p>	<p>CHECKED BY: BI, TG</p>
<p>SCALE: DATE: 7/24/2019</p>	<p>SCALE: SHEET 3 OF 7 REV. A</p>
<p>SHEET NUMBER C03</p>	

CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\19\7431 E MERCER WAY\MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY_18.DWG
 DATE: 7/24/2019 4:38 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)
 AUTOCAD VERSION: CIVIL 3D 2016

KEY NOTES		
KEY	DESCRIPTION	DETAIL/SHEET
1	4" ROOF DOWNSPOUT (TYP)	-
2	4" ROOF DOWNSPOUT TIGHTLINE @ 2.00% MIN SLOPE AND 2' MIN COVER	-
3	4" SDCO RIM 119.05 4" IE 117.25	E/C06
4	47 LF 4" SD @ 2.00% MIN SLOPE	-
5	4" SDCO RIM 120.94 4" IE 118.50	E/C06
6	41 LF 4" SD @ 2.00% MIN SLOPE	-
7	4" SDCO RIM 119.75 4" IE 117.00	E/C06
8	54 LF 4" SD @ 2.00% MIN SLOPE. INSTALL VERTICAL BENDS AS NECESSARY TO ROUTE PIPE BELOW DRIVEWAY RETAINING WALL WHILE MAINTAINING 2% MIN SLOPE & 2' MIN COVER	-
9	4" SDCO RIM 113.83 4" IE 111.50	E/C06
10	4 LF 4" SD @ 2.00% MIN SLOPE	-
11	54"Ø TYPE 2 CATCH BASIN W/ FLOW CONTROL STRUCTURE RIM 114.55 4" IE (E) 111.15 36" IE (W) 109.70 6" IE (S) 109.70 (OUTLET) FLOW CONTROL STRUCTURE INFO: 6" OVERFLOW ELEV 114.20 ORIFICE #2: 1.3"Ø @ ELEV 113.20 ORIFICE #1: 0.5"Ø @ ELEV 107.70	G/C06 & H/C07
12	DETENTION FACILITY 5'Ø X 31'L PIPE LAID FLAT TOP OF 60" PIPE 114.20 36" IE (E) 109.70 60" IE 109.20	H/C07
13	88 LF 6" SD @ 2.00% MIN SLOPE	-
14	6" SDCO RIM 117.00 6" IE 107.94	E/C06
15	125 LF 6" SD @ 2.00% MIN SLOPE	-
16	9 LF 6" SD @ 2.00% MIN SLOPE	-
17	20 LF 6" SD @ 2.00% MIN SLOPE	-
18	TYPE 1 CATCH BASIN W/ SOLID LOCKING LID RIM 87.21 6" IE (W) 84.71 12" IE (N) 84.21 2' MIN SUMP CONTRACTOR TO DETERMINE LOCATION OF WATERMAIN PRIOR TO SETTING CB. PROTECT WATERMAIN DURING CONSTRUCTION AND INSTALL ETHAFOAM CUSHION BETWEEN WATERMAIN AND CB IF LESS THAN 1' SEPARATION	F/C06
19	88 LF 12" SD @ 1.00% MIN SLOPE	-
20	EX CB - TYPE 1 RIM 85.80 4" IE (W) 83.47 6" IE (S) 82.93 12" IE (S) 83.30 6" IE (N) 82.93	-
21	APPROX LOCATION OF EX WATER MAIN (NOT SURVEYED). CONTRACTOR TO POTHOLE WATERMAIN TO DETERMINE LOCATION AND DEPTH PRIOR TO INSTALLATION OF UTILITIES WITHIN ROW	-

22	ROOF OVERHANG (TYP)	-
20	EX CB - TYPE 1 RIM 85.80 4" IE (W) 83.47 6" IE (S) 82.93 12" IE (S) 83.30 6" IE (N) 82.93	-
21	APPROX LOCATION OF EX WATER MAIN (NOT SURVEYED). CONTRACTOR TO POTHOLE WATERMAIN TO DETERMINE LOCATION AND DEPTH PRIOR TO INSTALLATION OF UTILITIES WITHIN ROW	-
20	EX CB - TYPE 1 RIM 85.80 4" IE (W) 83.47 6" IE (S) 82.93 12" IE (S) 83.30 6" IE (N) 82.93	-
21	APPROX LOCATION OF EX WATER MAIN (NOT SURVEYED). CONTRACTOR TO POTHOLE WATERMAIN TO DETERMINE LOCATION AND DEPTH PRIOR TO INSTALLATION OF UTILITIES WITHIN ROW	-
28	2 LF 4" SD @ 2.00% MIN SLOPE	-

29	12" AREA DRAIN RIM 121.05 4" IE (W) 118.60 (FTG DRN) 4" IE (E) 118.50 2' MIN SUMP	-
30	10 LF 6" TRENCH DRAIN RIM VARIES (SEE SHEET C02) 4" IE (E) 117.50	-
31	10 LF 4" SD @ 2.00% MIN SLOPE	-
32	4" SOLID WALL PVC FOOTING DRAIN TIGHTLINE @ 2.00% MIN SLOPE	-
33	SAWCUT AND MATCH EG. REPLACE EX ASPHALT PAVEMENT SECTION IN-KIND	-
34	EX UTILITY EASEMENT EXTENTS	-
35	EX 5' UNDERGROUND UTILITY EASEMENT PER AF: 19990319436	-
36	CONTRACTOR TO DETERMINE WHERE EXISTING INLET DRAINS FROM AND REMOVE PIPE IF IT HAS BEEN ABANDONED. IF PIPE CONVEYS DRAINAGE FROM AN UPSTREAM LOCATION, CONTACT ENGINEER OF RECORD WITH DETAILS	-
37	PROTECT EX SSS DURING CONSTRUCTION. CONTRACTOR TO POTHOLE SSS PRIOR TO INSTALLATION OF SD TO DETERMINE DEPTH. CONTACT ENGINEER OF RECORD IF CONFLICT OCCURS	-

DRAINAGE NOTES:

ROOF DRAINS:
1. NUMBER AND SIZE SHALL BE IN CONFORMANCE WITH THE UNIFORM PLUMBING CODE.

2. DOWNSPOUTS SHALL BE TIED INTO A NON-PERFORATED, RIGID, SMOOTH-BORE PIPE, WHICH DRAINS TO AN APPROVED STORM SYSTEM.

3. DRAINPIPE SHALL MEET MATERIAL STANDARDS FOR D2729 FOR P.V.C. PIPE, GR F-405 FOR SMOOTH-BORE H.D.P.E. PIPE.

4. PROVIDE CLEANOUTS AT THE UPPER END OF THE SYSTEM AND AT EACH CUMULATIVE CHANGE OF DIRECTION IN EXCESS OF 135 DEGREES.

5. ALL PIPE FITTINGS SHALL BE MADE OF THE SAME MATERIAL AS THE STRAIGHT PIPE. GLOUED JOINTS SHALL USE A BONDING AGENT RECOMMENDED BY THE PIPE MANUFACTURER.

FOOTING DRAINS:
1. FOOTING DRAINS SHALL BE INSTALLED AROUND ALL FOUNDATIONS WHICH ENCLOSE A CRAWL SPACE, CELLAR, BASEMENT, GARAGE OR OTHER BUILDING SPACE.

2. DRAINS SHALL BE CONSTRUCTED OF PERFORATED PIPE INSTALLED AT THE BASE OF THE FOOTING.

3. DRAIN PIPE SHALL MEET MATERIAL STANDARDS FOR D2729 FOR P.V.C. PIPE, WITH THE PERFORATIONS DIRECTED DOWNWARD.

4. GRANULAR BACKFILL SHALL BE PLACED AROUND AND ABOVE THE FOOTING DRAIN TO A DEPTH OF 2/3 OF THE HEIGHT OF THE WALL.

5. A FILTER FABRIC SHALL BE USED TO PREVENT SOIL PARTICLES FROM ENTERING THE FOOTING DRAIN. IT IS PREFERABLE THAT THE FABRIC BE PLACED BETWEEN THE GRANULAR BACKFILL AND THE NATIVE SOILS.

DRIVEWAY/PARKING AREA DRAINS:
1. LARGE IMPERVIOUS AREAS USED FOR PARKING OR MANEUVERING OF VEHICLES SHALL BE SLOPED TO DRAIN TO ONE OR MORE CATCH BASINS.

2. THE BASINS SHALL BE TIED INTO THE ON-SITE STORM DRAINAGE SYSTEM USING NON-PERFORATED PIPE OF THE SAME MATERIALS.

3. AT LEAST ONE CATCH BASIN SHALL HAVE AN OIL SEPARATOR TO CLEAN THE WATER, OIL AND SILT PRIOR TO ENTERING THE APPROVED STORM SYSTEM.

4. IN AREAS WHERE THE OFF-SITE STORM SYSTEM IS INADEQUATE, ON-SITE DETENTION OF RUNOFF MAY BE REQUIRED. (CONTACT THE DEVELOPMENT ENGINEER FOR MORE INFORMATION).

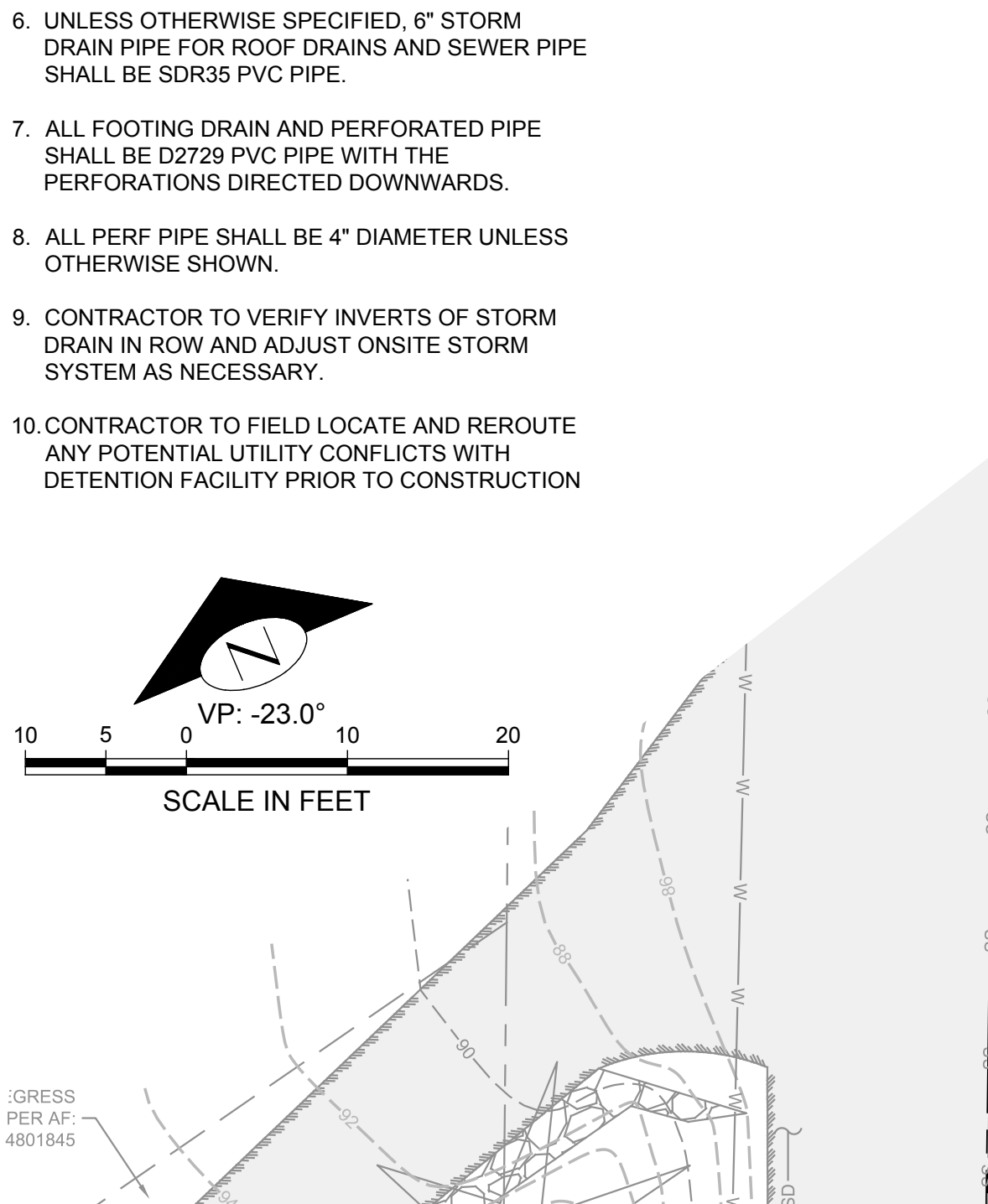
GENERAL:
1. SLOPE ALL DRAIN LINES AT 2% MINIMUM TOWARD THE OUTLET.

2. PROVIDE CLEANOUTS OR CONTROL STRUCTURES AS APPROPRIATE.

3. ALL DRAINAGE PIPING AND STRUCTURES ARE SUBJECT TO INSPECTION PRIOR TO BACKFILLING.

4. ROOF AND FOOTING DRAINS MAY BE COMBINED BEYOND THE LOWEST POINT OF THE FOOTING DRAIN.

5. USE SAND COLLARS AT CB CONNECTIONS TO P.V.C. PIPE.



LEGEND:

	ASPHALT		DETENTION TANK
	CONCRETE		TRENCH DRAIN
	LANDSCAPE		
	TREE PROTECTION FENCING		

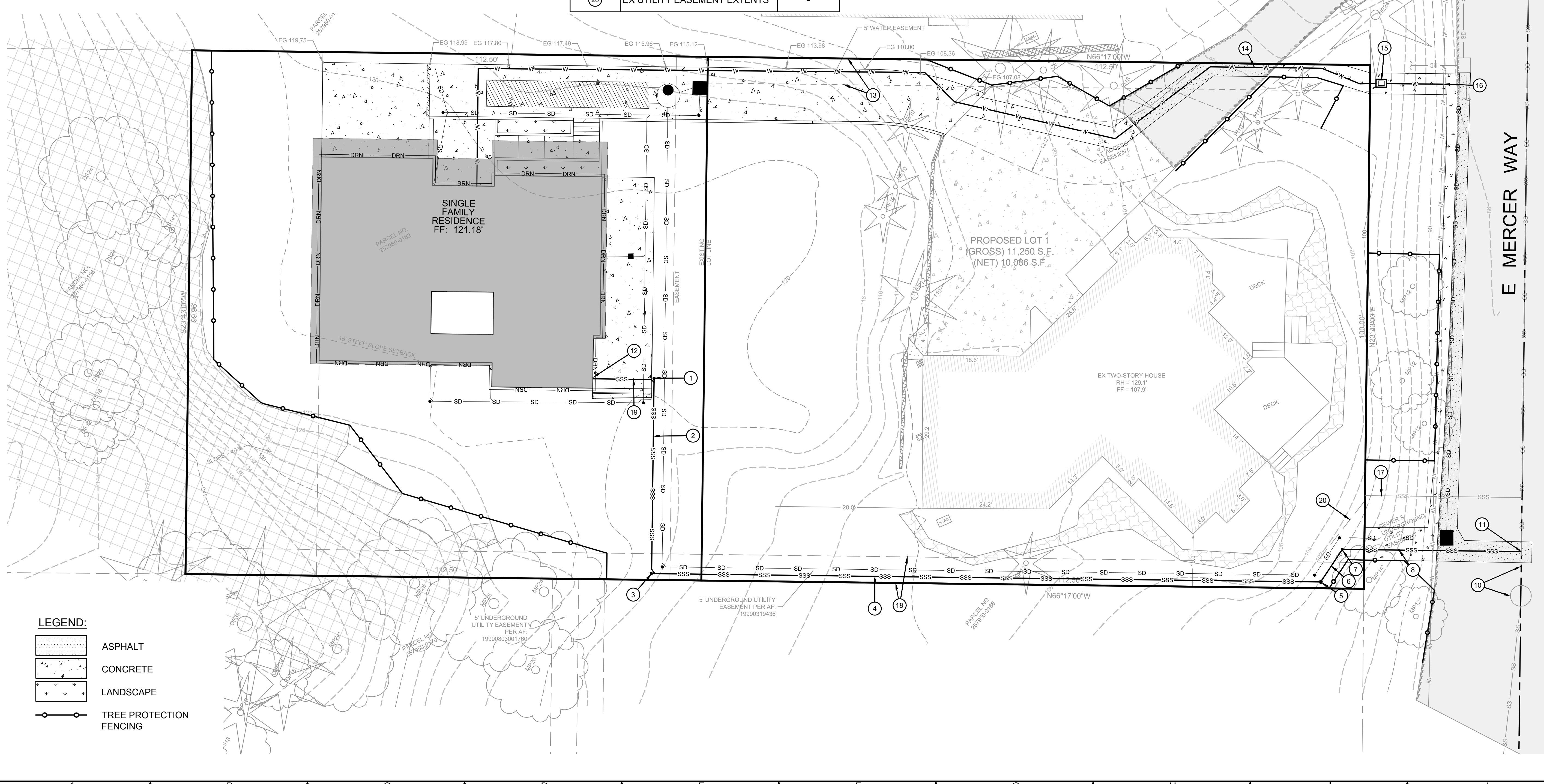
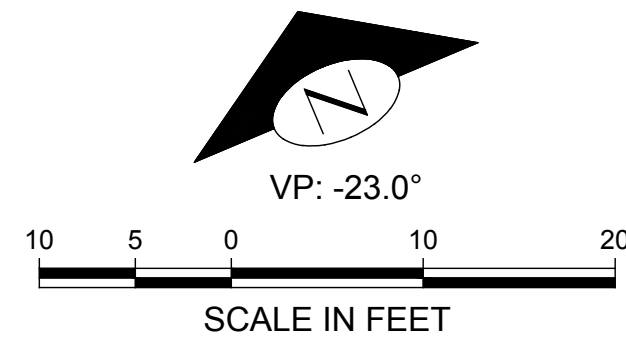
 9706 4th Ave NE Suite 300 Seattle, WA 98115 P: 206.523.0024 F: 206.523.1012 www.dccgengr.com	
CALL 811 2 BUSINESS DAYS BEFORE YOU DIG <small>(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)</small>	
 TIMOTHY W. GABEL STATE OF WASHINGTON Timothy W. Gabel 19990319436 REGISTERED PROFESSIONAL ENGINEER REGISTRATION NUMBER: 19990319436 EXPIRES: 12/31/2026	
<small>BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCCG PRIOR TO CONSTRUCTION.</small>	
OWNER: YANG RESIDENCE 7431 E MERCER WAY MERCER ISLAND, WA 98040	PROJECT: 7431 E MERCER WAY MERCER ISLAND, WA 98040 DRAINAGE PLAN
PROJ. MANAGER: BI DESIGNED BY: BI, LG DRAWN BY: GR CHECKED BY: BI, TG	SCALE: BI, LG SHEET: GR DATE: 7/24/2019 REV: A SCALE: 4 OF 7 SHEET NUMBER: C04

CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\1919431 E MERCER WAY MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY - 18.DWG
 PLOT DATE: 7/24/2019 4:36 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED (17.00 X 22.00 INCHES)
 AUTOCAD VERSION: CIVIL 3D 2016

KEY NOTES		
KEY	DESCRIPTION	DETAIL/SHEET
①	4" SSSCO RIM 120.40 4" IE 117.40	E/C06
②	38 LF 4" SSS @ 2.00% MIN SLOPE	-
③	4" SSSCO RIM 118.50 4" IE 116.60	E/C06
④	128 LF 4" SSS @ 2.00% MIN SLOPE	-
⑤	4" SSSCO RIM 100.00 4" IE 97.00	E/C06

⑥	8 LF 4" SSS @ 2.00% MIN SLOPE	-
⑦	4" SSSCO RIM 100.00 4" IE 96.75	E/C06
⑧	34 LF 4" SSS @ 2.00% MIN SLOPE. INSTALL VERTICAL BENDS AS NECESSARY TO MAINTAIN 2.00% MIN SLOPE & 2' MIN COVER	-
⑨	APPROX LOCATION OF EX WATER MAIN PER CITY OF MERCER ISLAND ONLINE GIS MAPPING (NOT SURVEYED)	-
⑩	APPROXIMATE LOCATION OF EX SEWER MH AND 12" SS MAIN PER CITY OF MERCER ISLAND ONLINE GIS MAPPING (NOT SURVEYED)	-
⑪	NEW 4" SSS CONNECTION TO EXISTING 12" SS MAIN. CONTRACTOR TO POTHOLE SEWER MAIN PRIOR TO INSTALLATION OF NEW SSS TO DETERMINE LOCATION AND DEPTH	-
⑫	4" SSS IE 118.00	-

⑬	EX 5' WATER EASEMENT	-
⑭	INSTALL NEW 1" WATER SERVICE (SIZE TO BE CONFIRMED BY OTHERS). WATER SERVICE TO BE LOCATED WITHIN EX 5' WATER EASEMENT OTHER THAN WHERE REQUIRED TO BE OUTSIDE OF EASEMENT TO PROTECT EX TREES BASED ON ARBORIST DISCRETION	-
⑮	NEW 1" DOMESTIC WATER METER (SIZE TO BE CONFIRMED BY OTHERS)	-
⑯	CONNECT NEW 1" WATER SERVICE TO EX WATERMAIN (SIZE TO BE CONFIRMED BY OTHERS)	-
⑰	EX SSS SERVING EX SFR TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION	-
⑱	EX 5' UNDERGROUND UTILITY EASEMENT PER AF: 19990319436	-
⑲	12 LF 4" SSS @ 2.00% MIN SLOPE	-
⑳	EX UTILITY EASEMENT EXTENTS	-



LEGEND:	
	ASPHALT
	CONCRETE
	LANDSCAPE
	TREE PROTECTION FENCING

CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\19\7431 E MERCER WAY\MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY - 18.DWG
 DATE: 7/24/2019 4:36 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED (7.625 X 22.00 INCHES)
 AUTOCAD VERSION: CIVIL 3D 2016

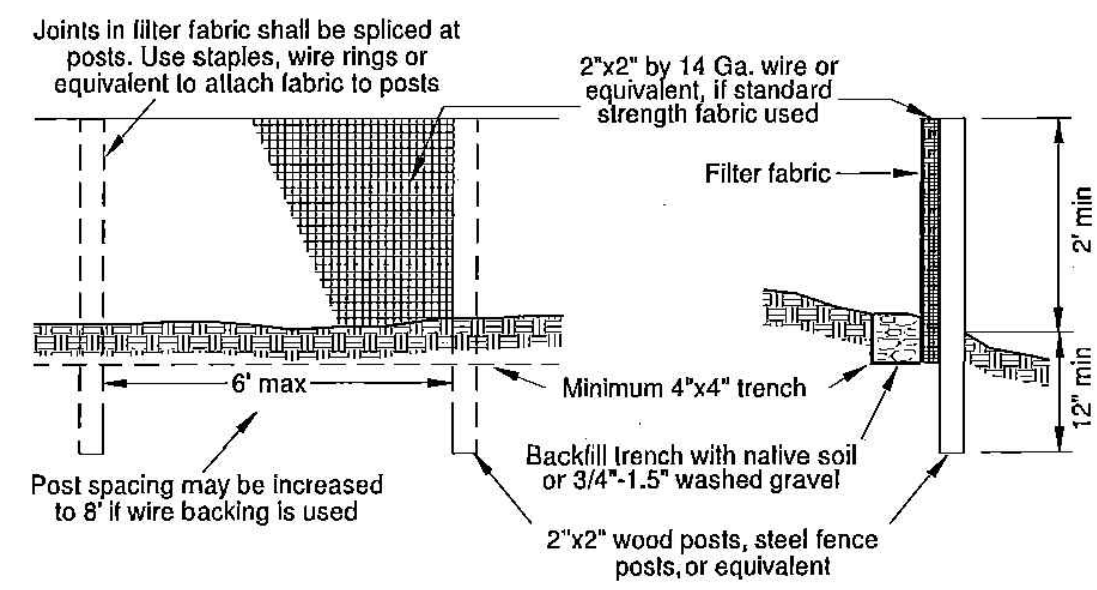
CALL 811 2 BUSINESS DAYS BEFORE YOU DIG <small>(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)</small>	
<small>BASE MAP TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.</small>	
OWNER: YANG RESIDENCE 7431 E MERCER WAY MERCER ISLAND, WA 98040	PROJECT: 7431 E MERCER WAY MERCER ISLAND, WA 98040 UTILITY PLAN
PROJ. MANAGER: BI DESIGNED BY: BI, LG DRAWN BY: GR CHECKED BY: BI, TG	SCALE: SCALE DATE: 7/24/2019 REV: A SHEET 5 OF 7
<h1>C05</h1>	

No.	DATE	BY	REVISION

9706 4th Ave NE
 Suite 300
 Seattle, WA 98115
 P: 206.523.0024
 F: 206.523.1012
 www.dcgengr.com

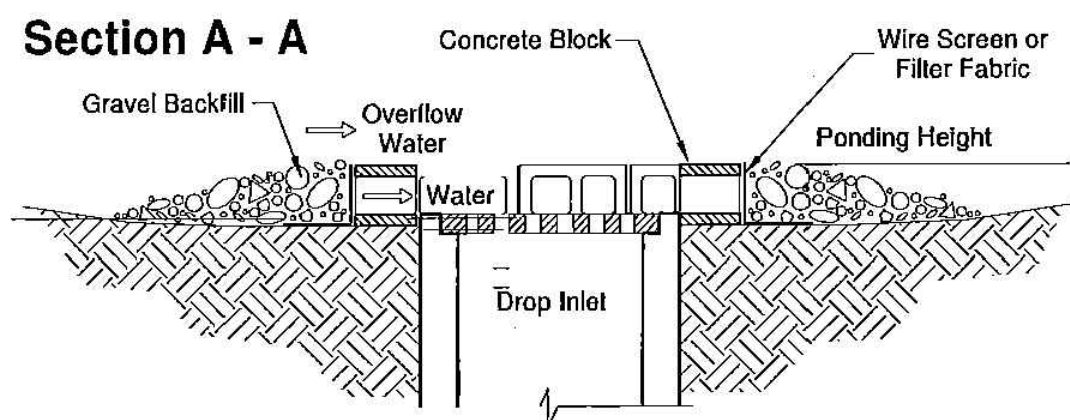
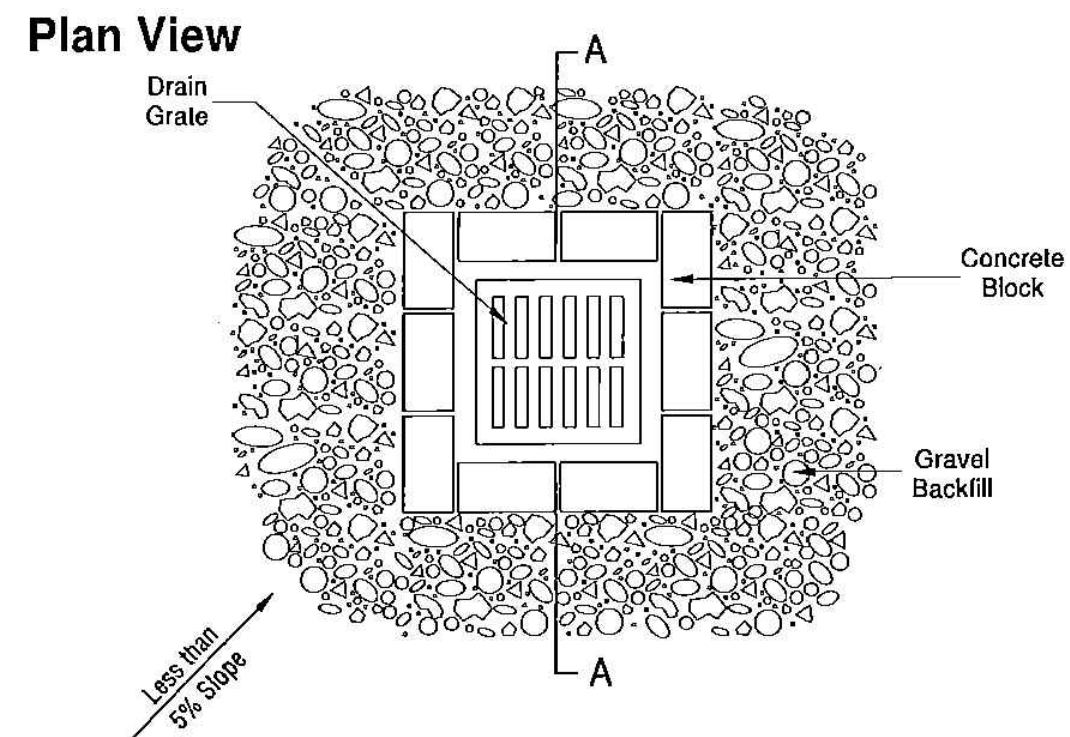
DCG
 CIVIL STRUCTURAL

LEED AP
LEED ACCREDITED PROFESSIONAL & THE RELATED WORKS OWNED BY THE U.S. GREEN BUILDING COUNCIL & ARE AWARDED TO INDIVIDUALS UNDER LICENSE BY THE GREEN BUILDING CERTIFICATION INSTITUTE.



SILT FENCE
D.O.E. FIGURE 4.20
NOT TO SCALE

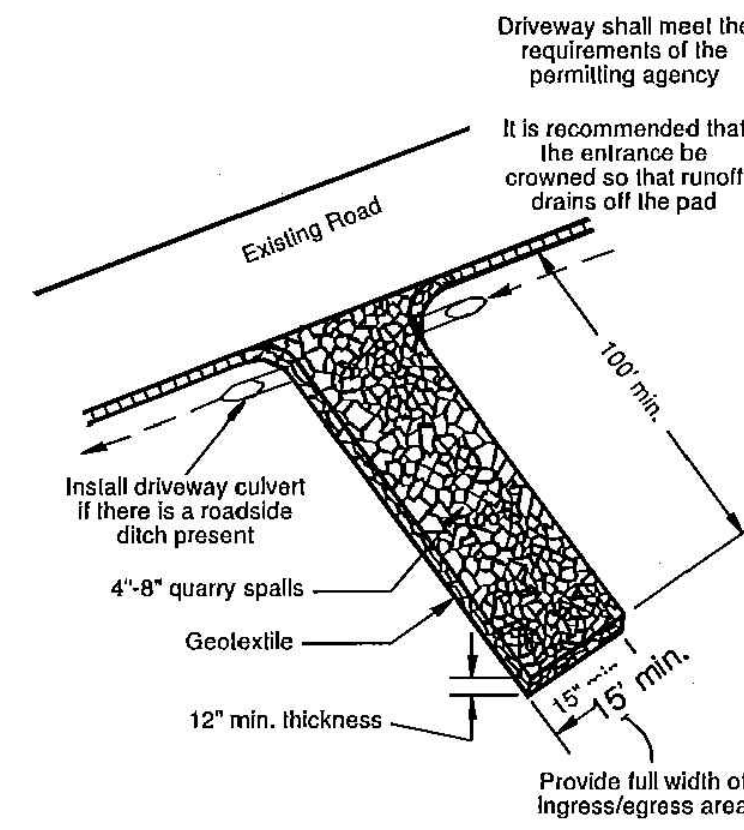
A
C01



- Notes:**
1. Drop inlet sediment barriers are to be used for small, nearly level drainage areas. (less than 5%)
 2. Excavate a basin of sufficient size adjacent to the drop inlet.
 3. The top of the structure (ponding height) must be well below the ground elevation downslope to prevent runoff from bypassing the inlet. A temporary dike may be necessary on the downslope side of the structure.

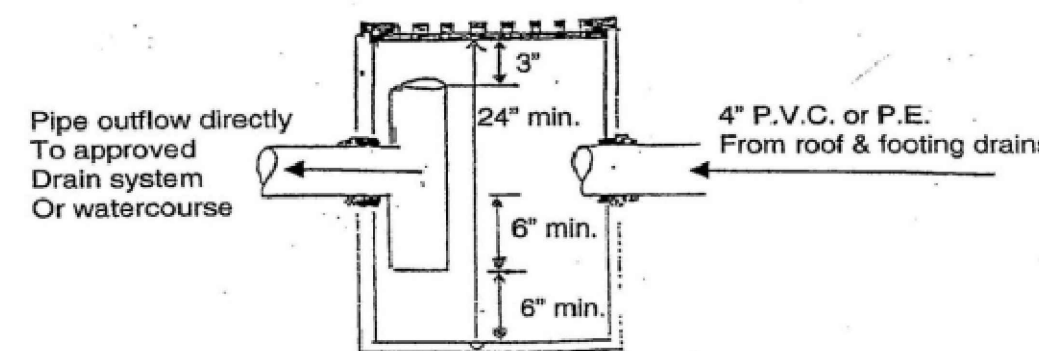
TEMPORARY INLET PROTECTION
NOT TO SCALE

B
C01



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

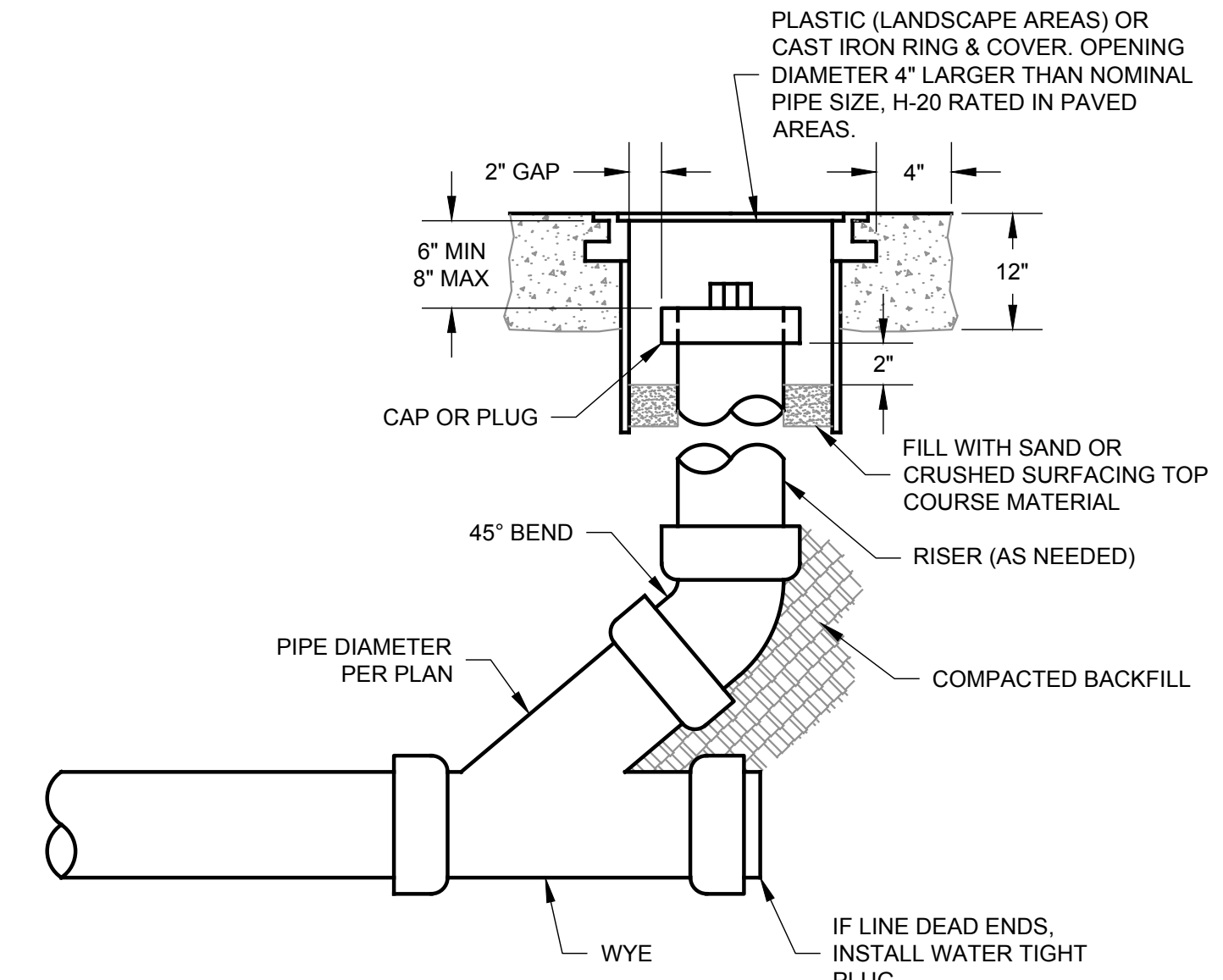
C
C01



Catch Basin with Oil Separator

CB W/ OIL/WATER SEPARATOR
NOT TO SCALE

D
C04

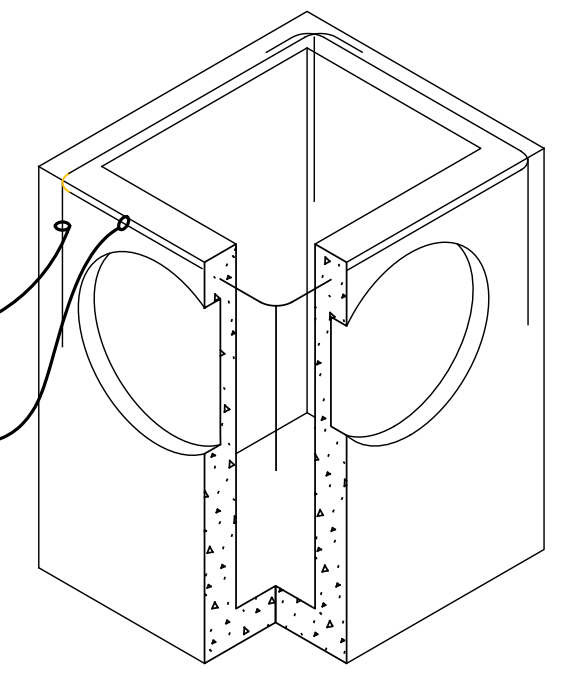
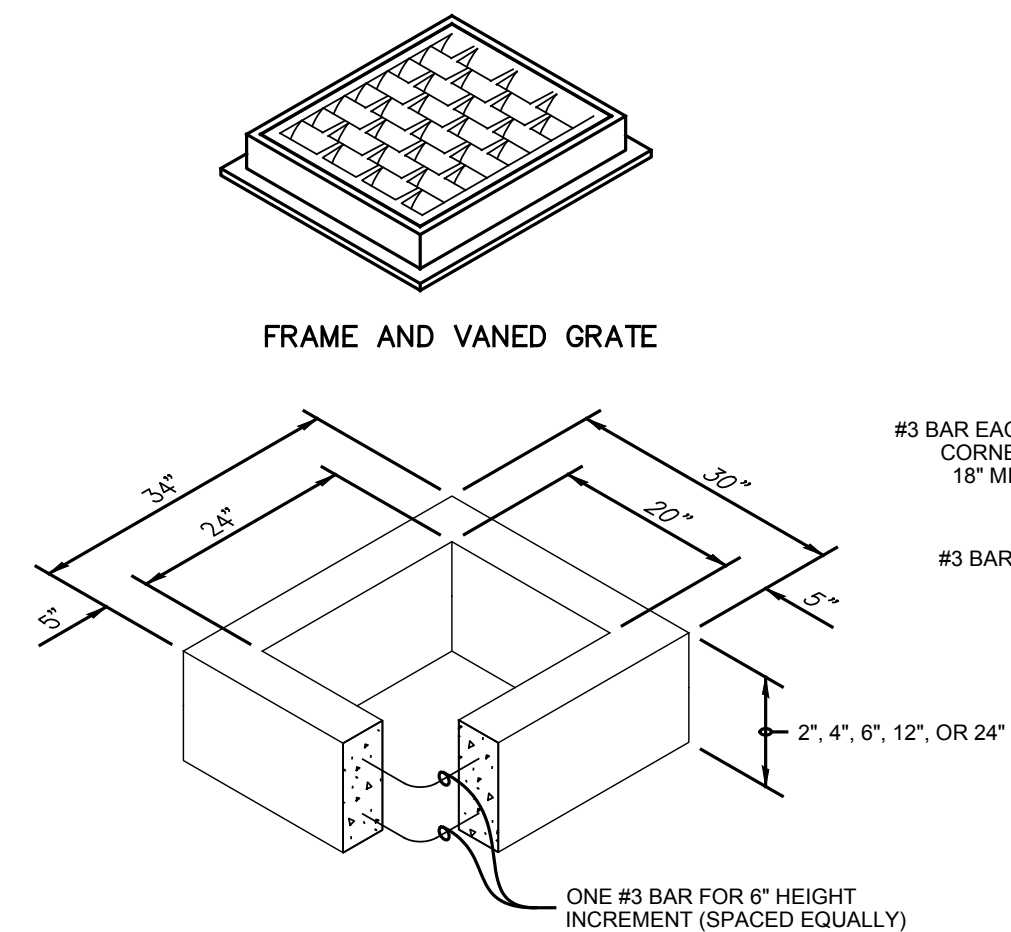


STORM DRAIN & SEWER CLEANOUT
NOT TO SCALE

C04 & C05

NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
4. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification Section 9-04.3.



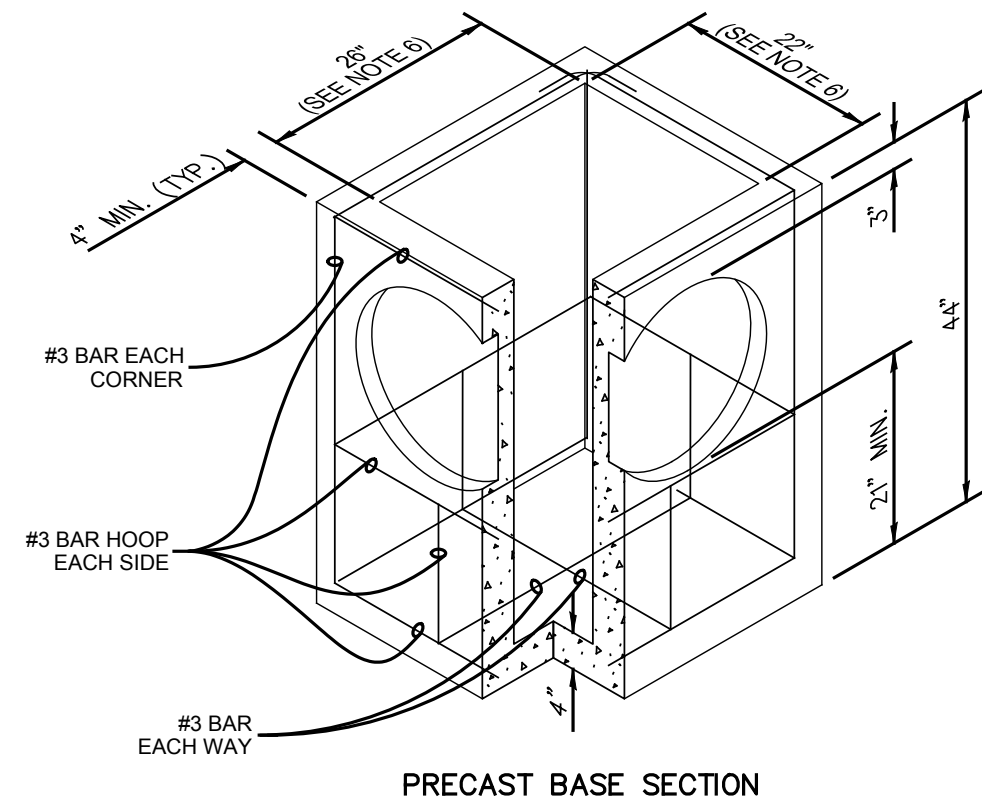
ALTERNATIVE PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP* (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

* CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES

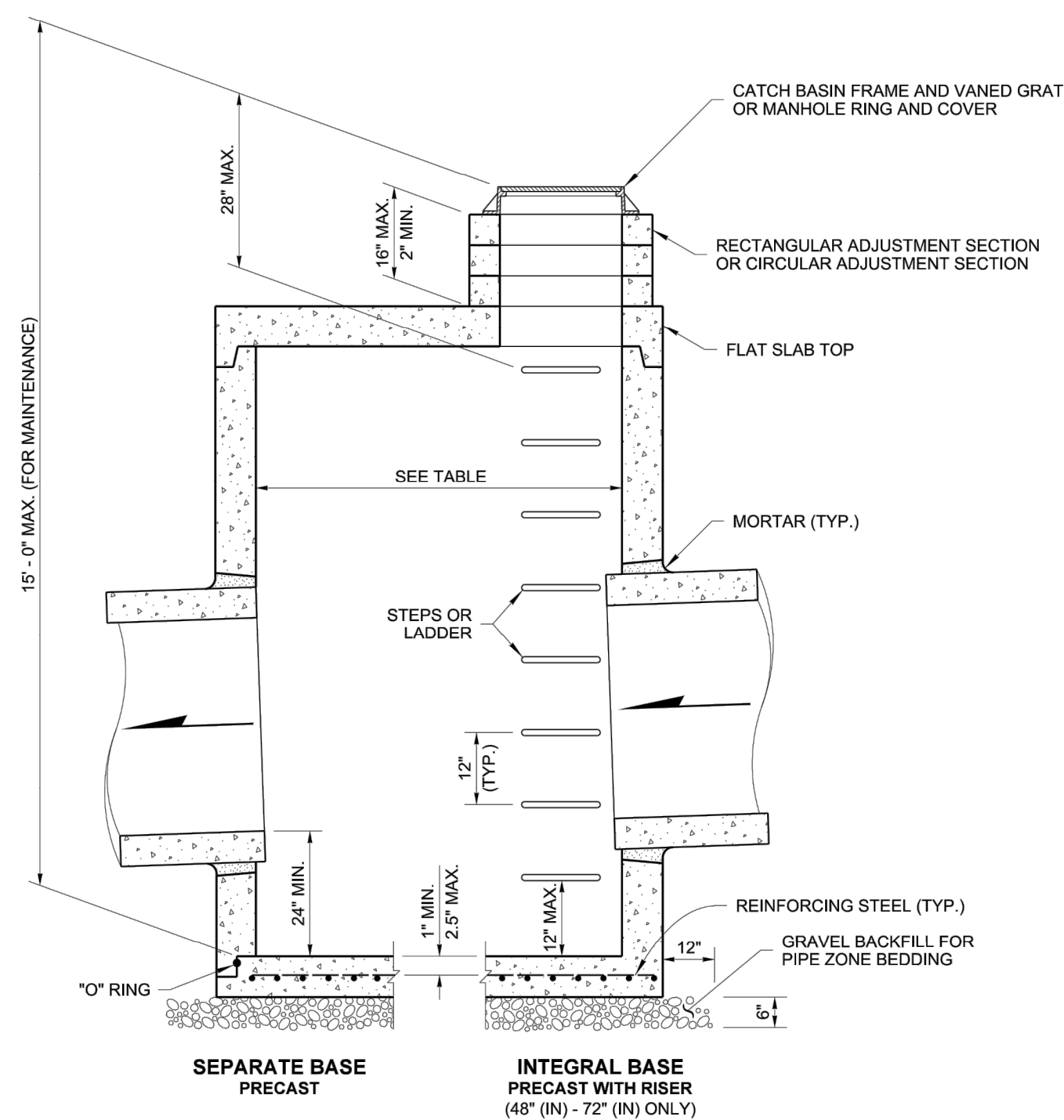
1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20". Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification 9-04.3.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5'.
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1:24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.



PRECAST BASE SECTION

CATCH BASIN TYPE 1
PER WSDOT STD PLAN B-5.20-00
NOT TO SCALE

F
C04



TYPE 2 CATCH BASIN
WSDOT B10.20-02E
NOT TO SCALE

G
C04

CATCH BASIN DIMENSIONS				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

CATCH BASIN DIAMETER	PIPE ALLOWANCES				
	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER	CONCRETE	ALL METAL	CPSSP ①	SOLID WALL PVC ②
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

- ① Corrugated Polyethylene Storm Sewer Pipe (See Standard Specification Section 9-05.20)
- ② (See Standard Specification Section 9-05.12(1))
- ③ (See Standard Specification Section 9-05.12(2))
- ④ Polypropylene Pipe (See Standard Specification Section 9-05.24)

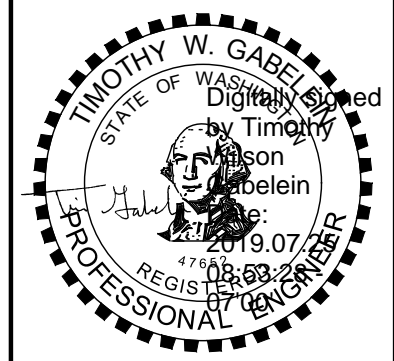
CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\19\7431 E MERCER WAY MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY - 18.DWG
 PROJECT NUMBER: 7431 E MERCER WAY
 SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (36.00 X 22.00 INCHES)
 AUTOCAD VERSION: CIVIL 3D 2016

NO.	DATE	BY	REVISION

9706 4th Ave NE
 Suite 300
 Seattle, WA 98115
 P: 206.523.0024
 F: 206.523.1012
 www.dcgengr.com



CALL 811
2 BUSINESS DAYS
BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)



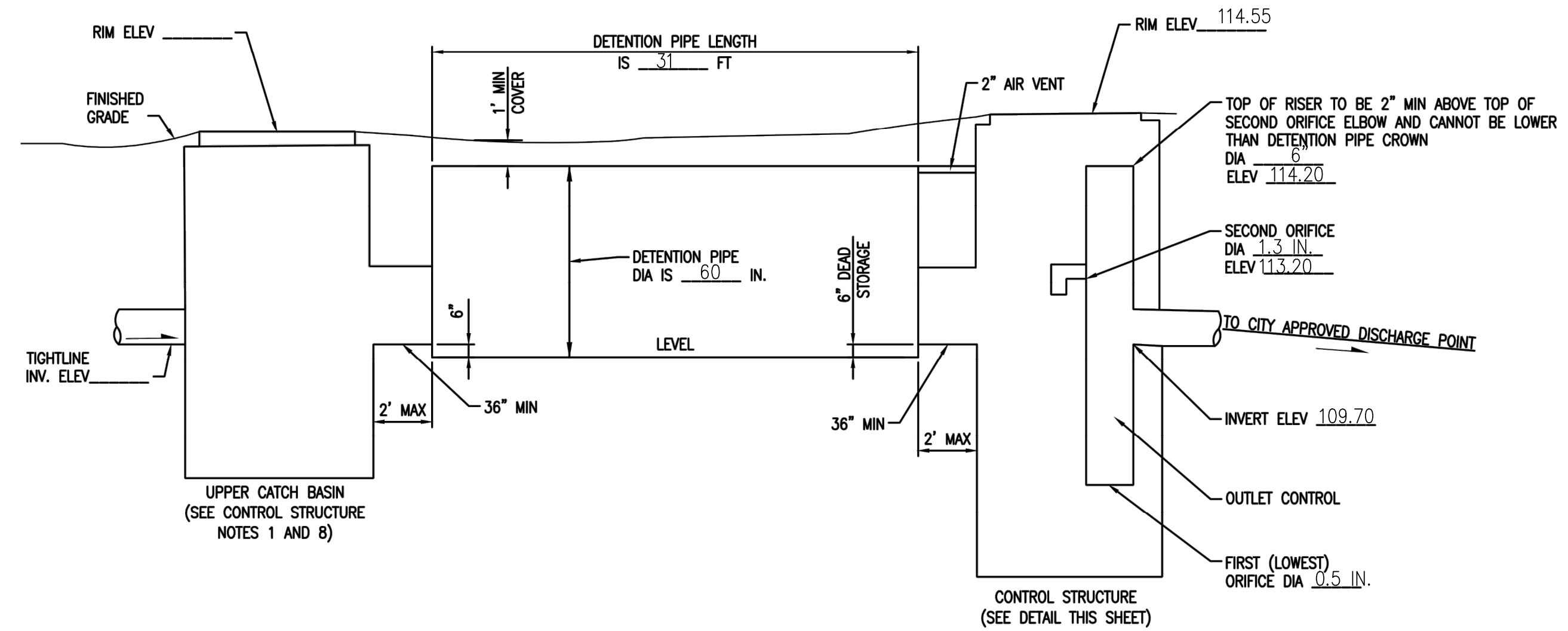
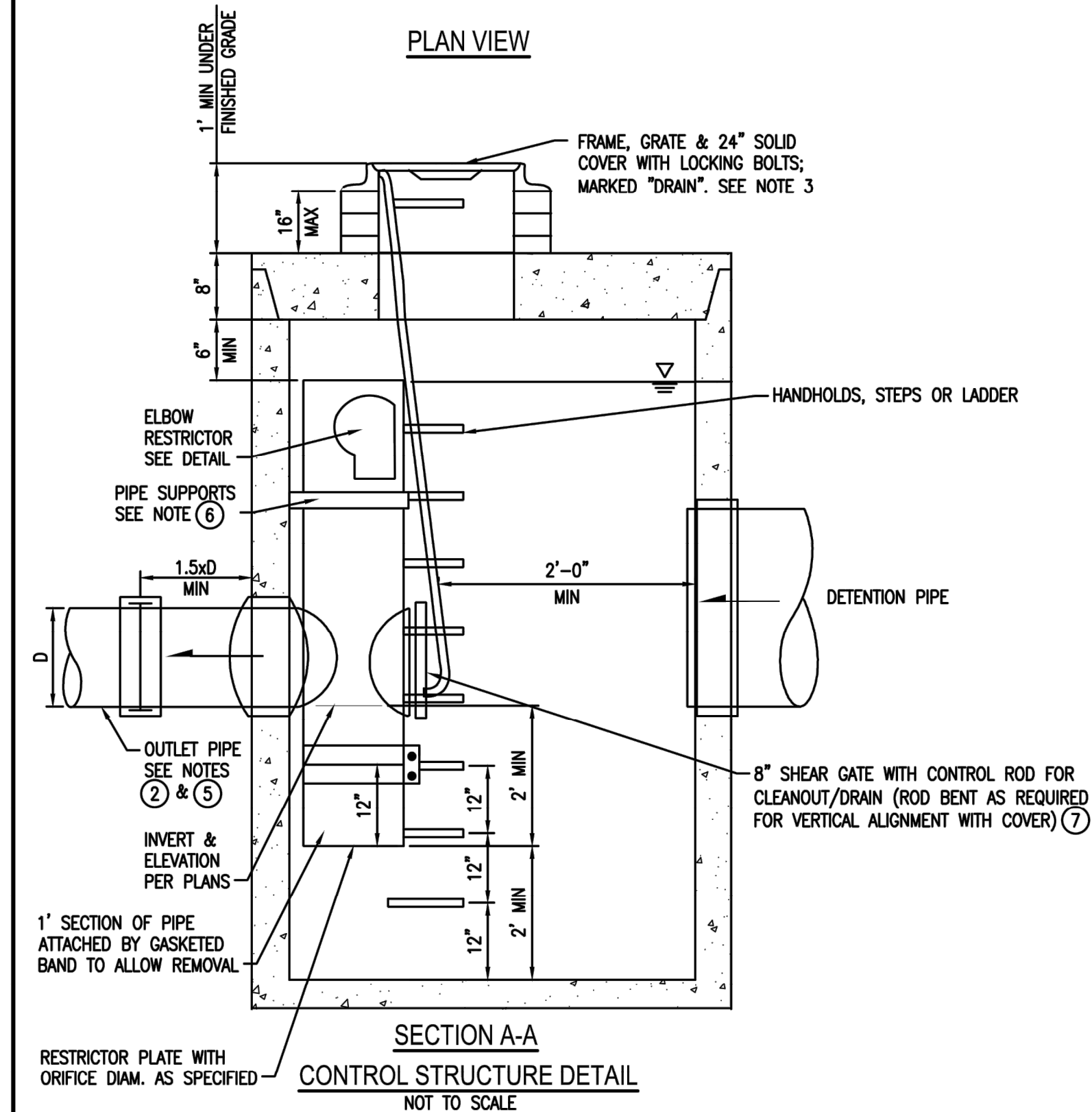
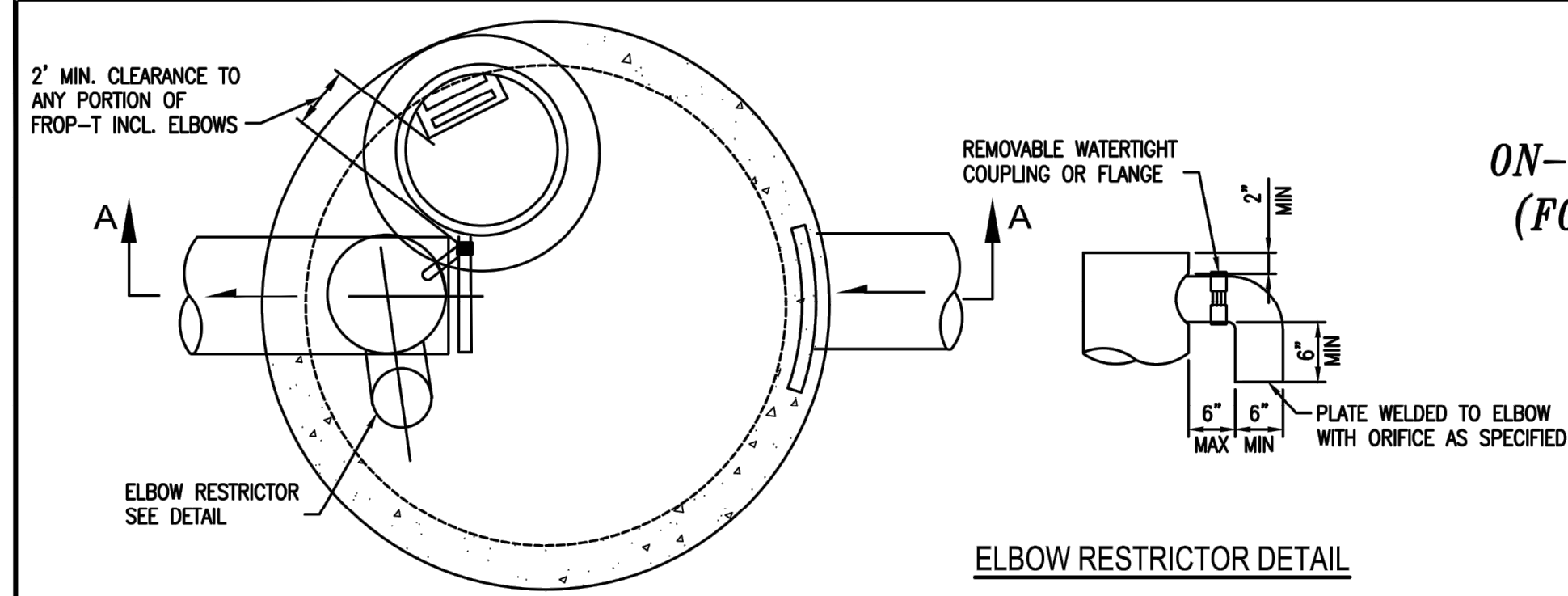
BASE MAP TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER KEY FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

OWNER: YANG RESIDENCE
 7431 E MERCER WAY
 MERCER ISLAND, WA 98040
PROJECT: 7431 E MERCER WAY
 MERCER ISLAND, WA 98040
ESC & DRAINAGE DETAILS

PROJ. MANAGER: BI
DESIGNED BY: BI, LG
DRAWN BY: GR
CHECKED BY: BI, TG
SCALE: SCALE
DATE: 7/24/2019
REV. SHEET
A 6 OF 7

SHEET NUMBER
C06

**ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS
AREA OF 9,500 SF OR LESS)**



OWNER: MELISSA YANG	ADDRESS: 7431 E MERCER WAY	PREPARED BY: BEN IDDINS, P.E.
PERMIT #: TBD	MERCER ISLAND	PHONE: 206-523-0024
		DATE: 06/26/2019
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 4,519	DETENTION PIPE DIA (INCH): 60	DETENTION PIPE LENGTH (FT): 31
SOIL TYPE: C	PIPE MATERIAL: ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE	ORIFICE #1 DIA 0.5 INCH, ELEV 107.70
		ORIFICE #2 DIA 1.3 INCH, ELEV 113.20

CONTROL STRUCTURE NOTES:

- 1 USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
- 2 OUTLET PIPE: MIN. 6 INCH.
- 3 METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
- 4 FRAME AND LADDER OR STEPS OFFSET SO:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP;
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
 - C. FRAME IS CLEAR OF CURB.
- 5 IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
- 6 PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
- 7 THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
- 8 THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7805) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

**DETENTION FACILITY
NOT TO SCALE**

**H
C04**

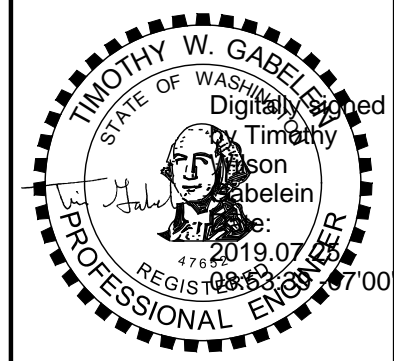
CAD FILE NUMBER: P:\CLIENTS\CIVIL\STUDIO\1917431 E MERCER WAY\MERCER ISLAND\DWG\DRAWING\7431 E MERCER WAY_18.DWG
DATE: 7/24/2019 4:38 PM - SHEET SET: XXXX - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)
AUTOCAD VERSION: CIVIL_3D_2016

NO.	DATE	BY	REVISION

9706 4th Ave NE
Suite 300
Seattle, WA 98115
P: 206.523.0024
F: 206.523.1012
www.dcgengr.com

DCG
civil structural

**CALL 811
2 BUSINESS DAYS
BEFORE YOU DIG**
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)



BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER KEY FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

OWNER: YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040

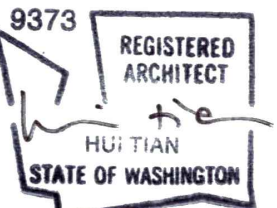
PROJECT: 7431 E MERCER WAY
MERCER ISLAND, WA 98040
DETAILS

PROJ. MANAGER:	BI
DESIGNED BY:	BI, LG
DRAWN BY:	GR
CHECKED BY:	BI, TG
SCALE:	SCALE
DATE:	REV. SHEET
7/24/2019	A 7 OF 7

**SHEET NUMBER
C07**

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

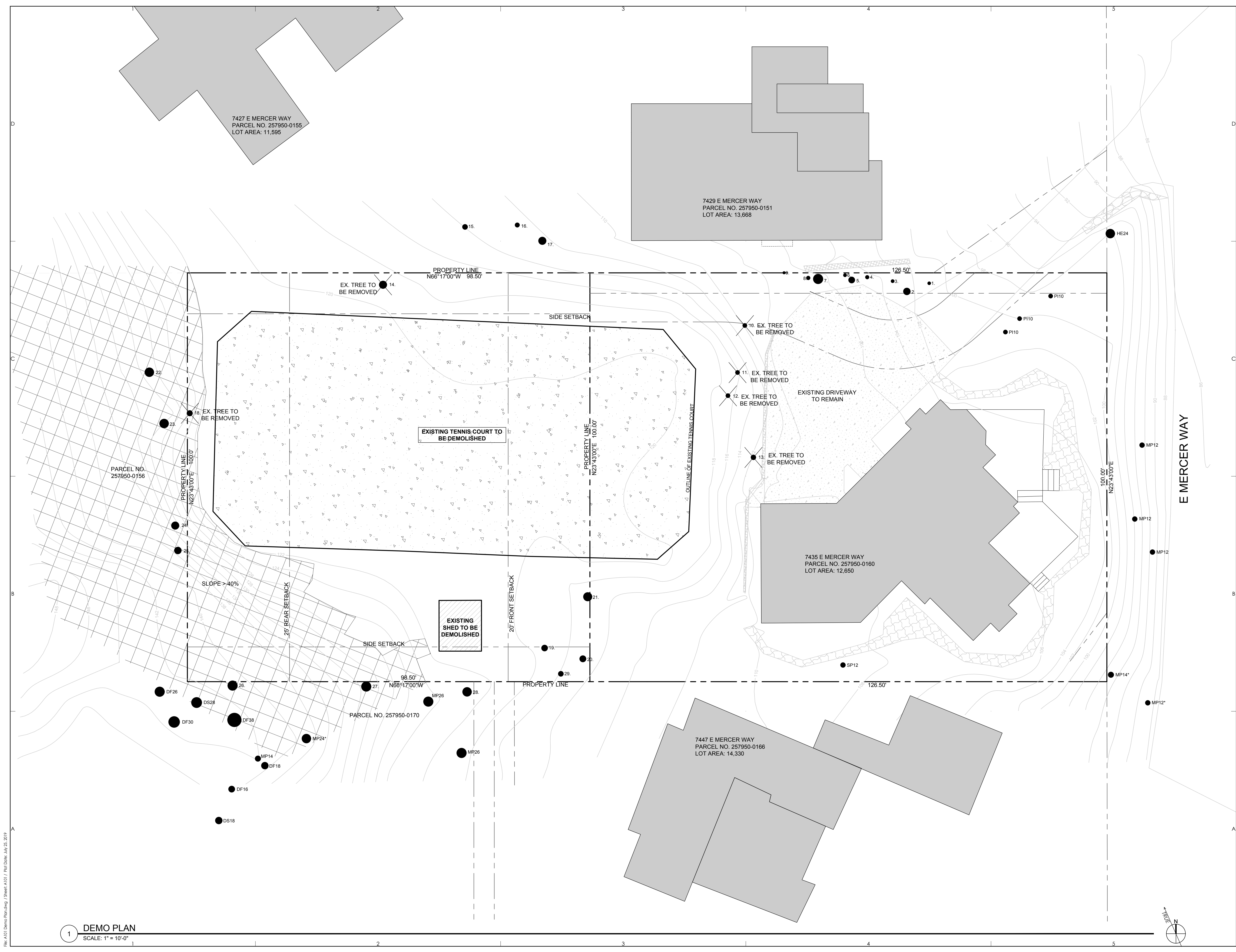
SHEET TITLE: _____

DEMOLITION SITE PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



1 DEMO PLAN
 SCALE: 1" = 10'-0"

File: A101 Demolition.dwg | Sheet: A101 | Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

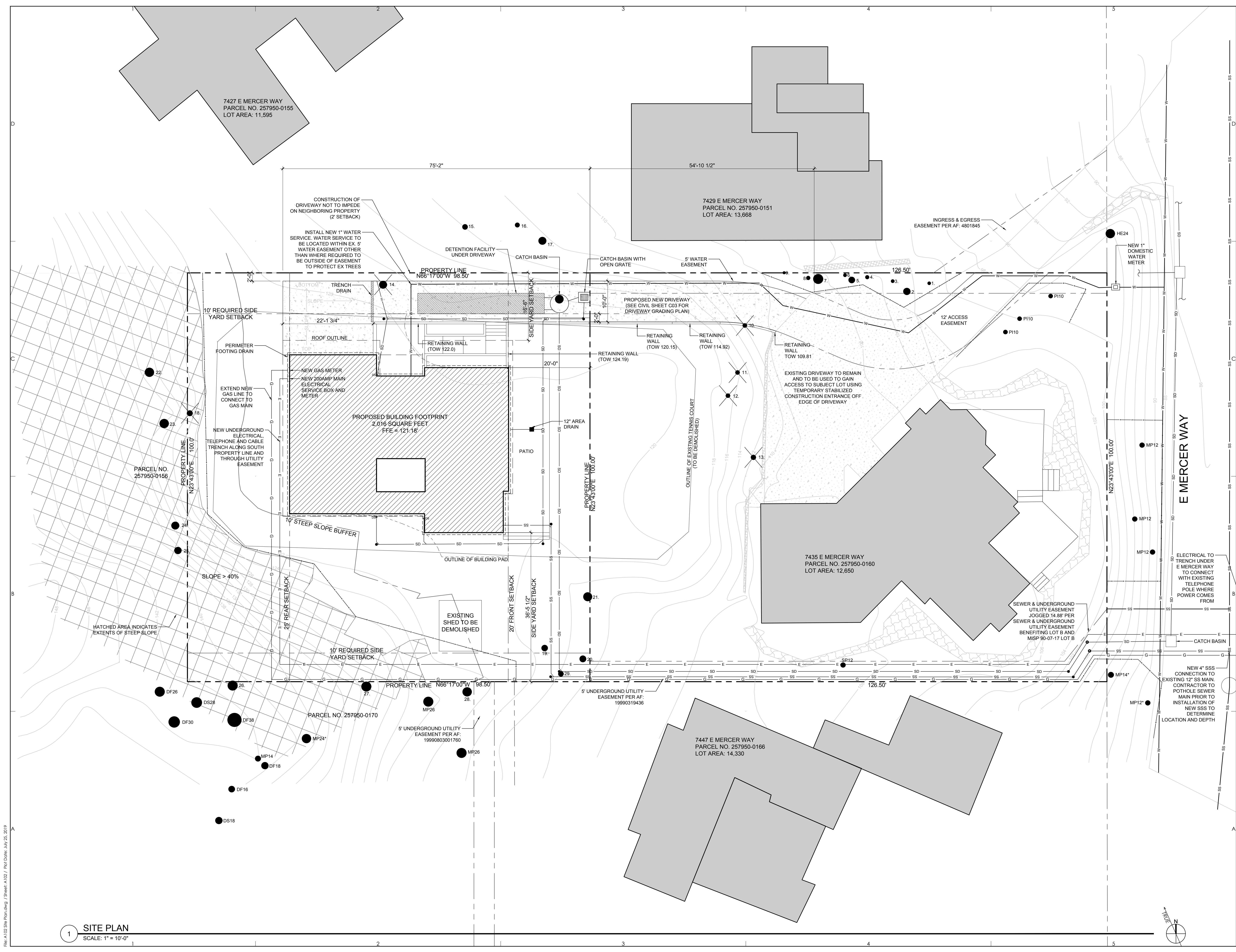
SITE PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A1.02



1 SITE PLAN
 SCALE: 1" = 10'-0"

file: A1.02_SitePlan.dwg | sheet: A1.02 | Proj Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

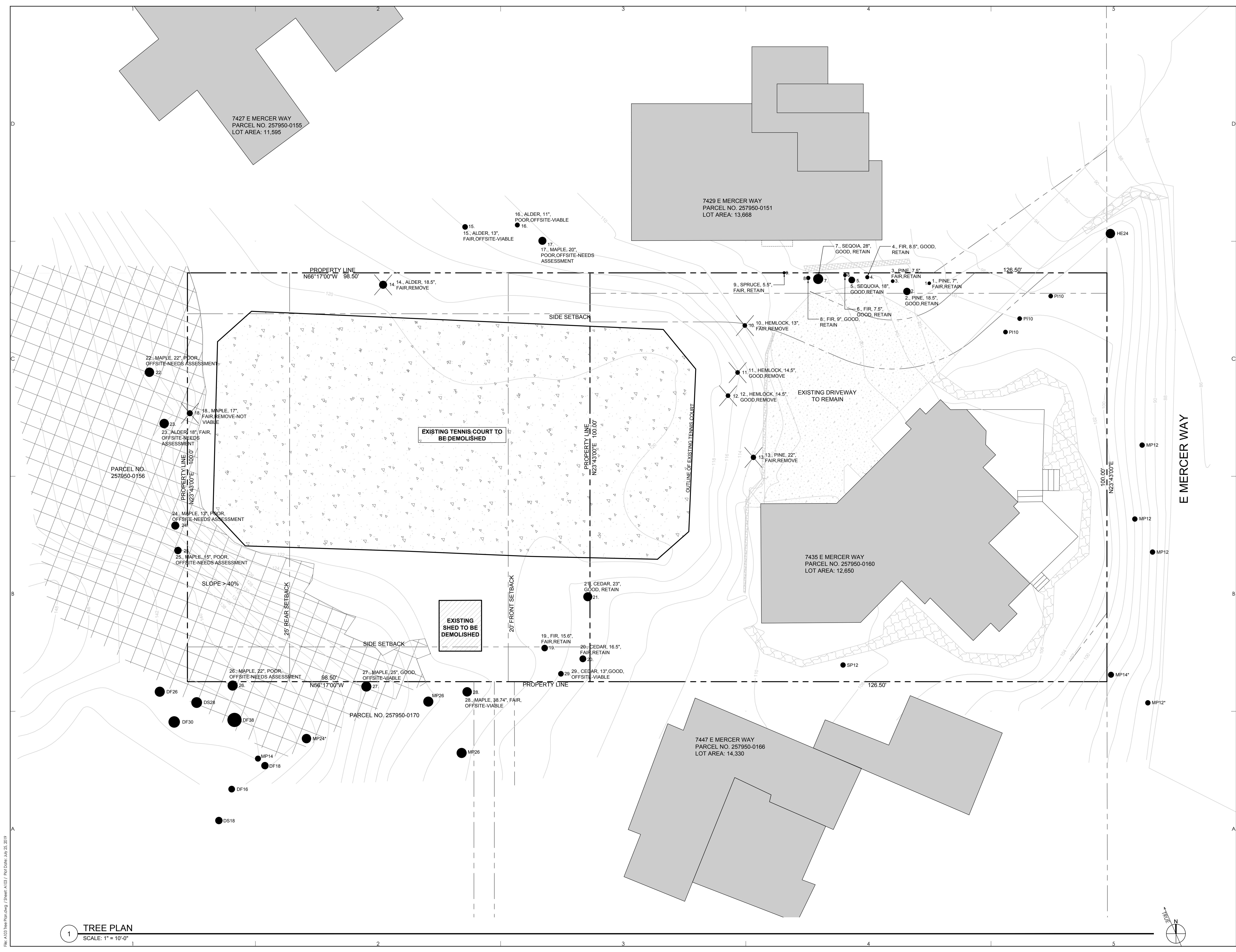
SHEET TITLE: _____

TREE PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



1 TREE PLAN
 SCALE: 1" = 10'-0"

File: A103 Tree Plan.dwg / Sheet: A103 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

SHEET TITLE: _____

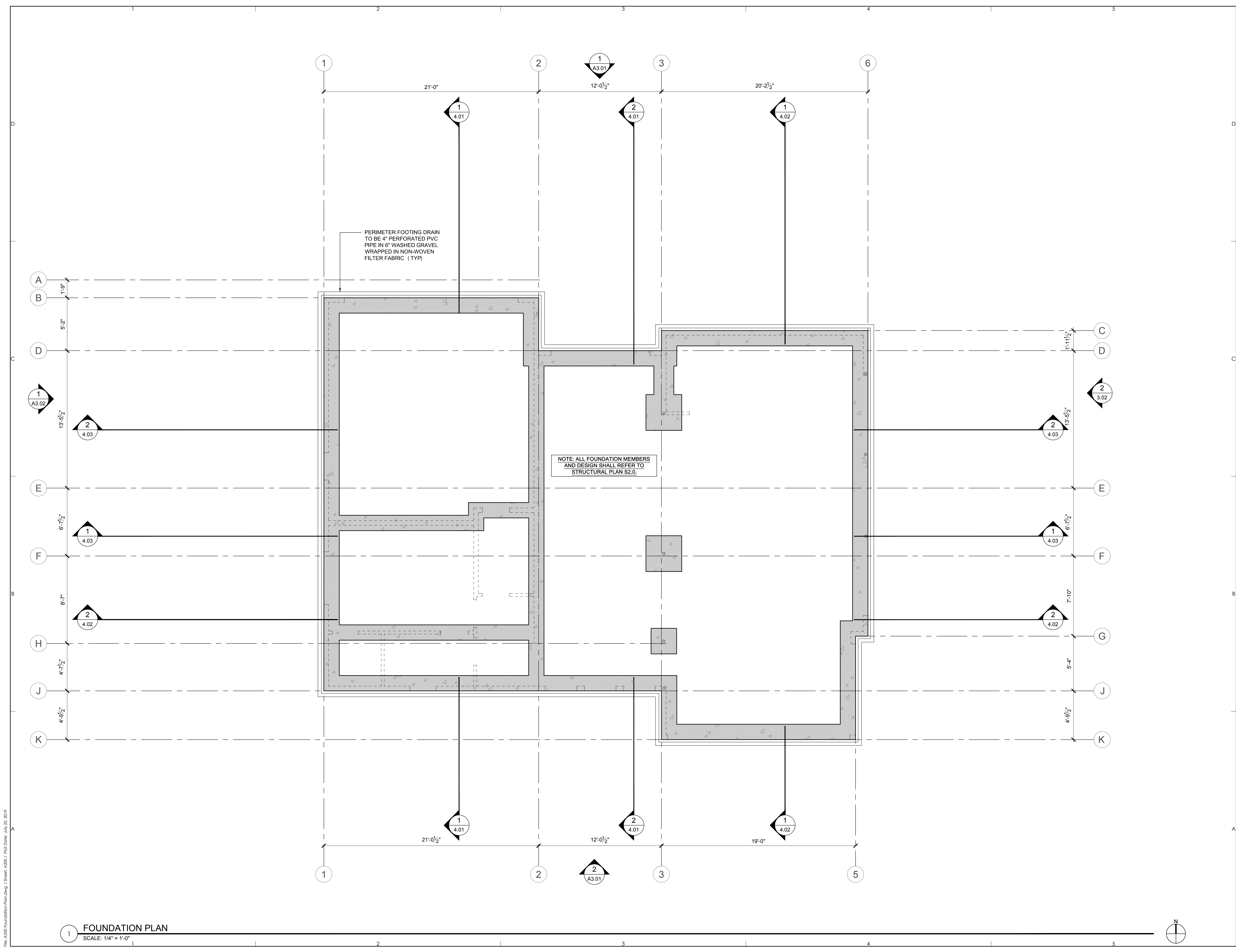
FOUNDATION PLAN

PROJECT NO.: 20190130

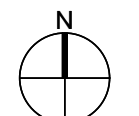
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.00



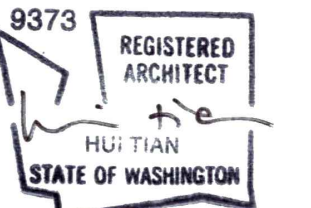
1 FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"



File: A201 Foundation Plan.dwg / Sheet: A201 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

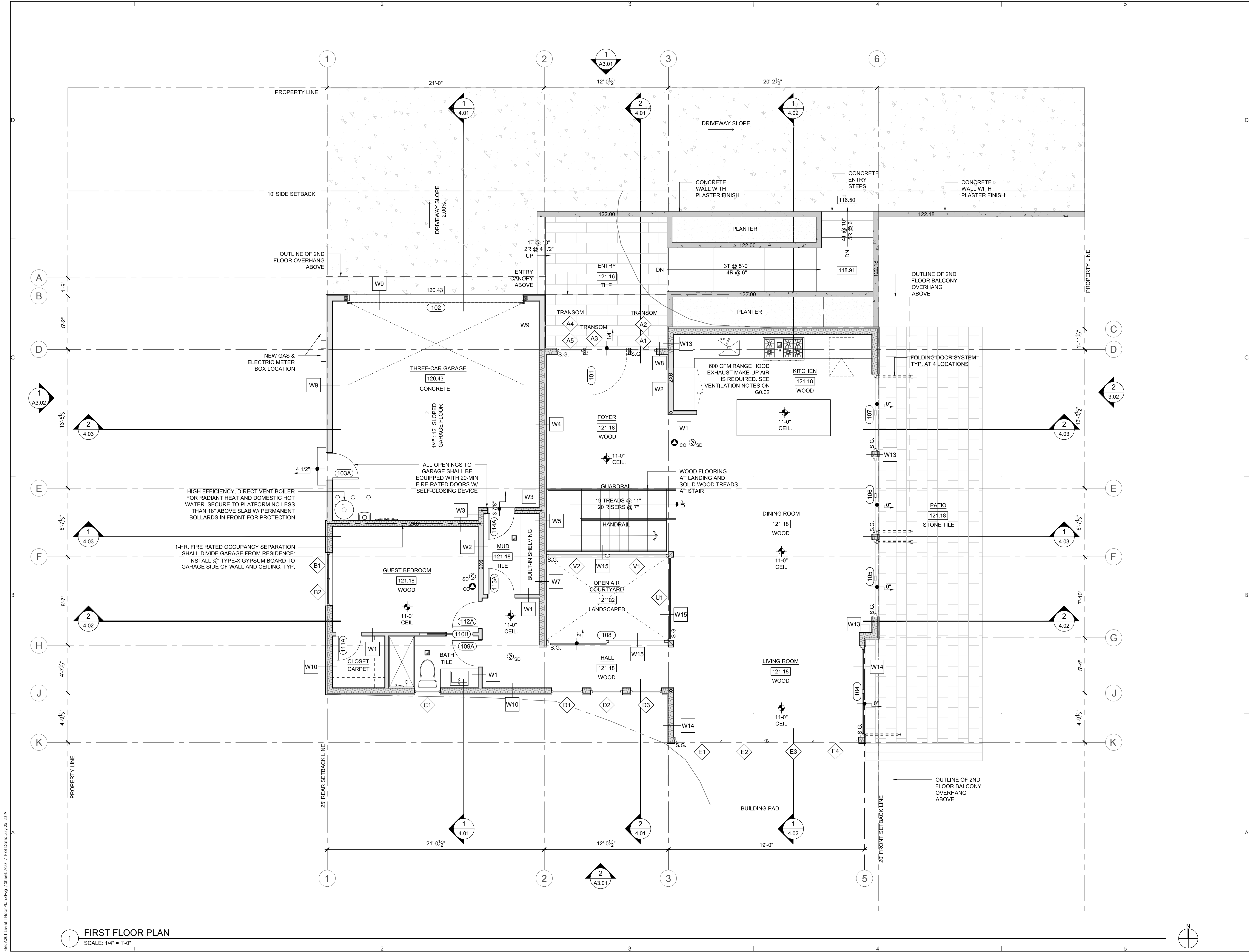
LEVEL 1 FLOOR PLAN

PROJECT NO.: 20190130

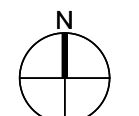
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.01



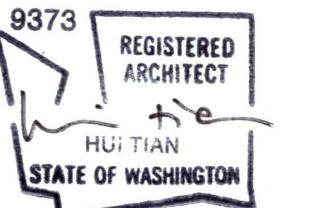
1 FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"



File: A201 Level 1 Floor Plan.dwg / Sheet: A201 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

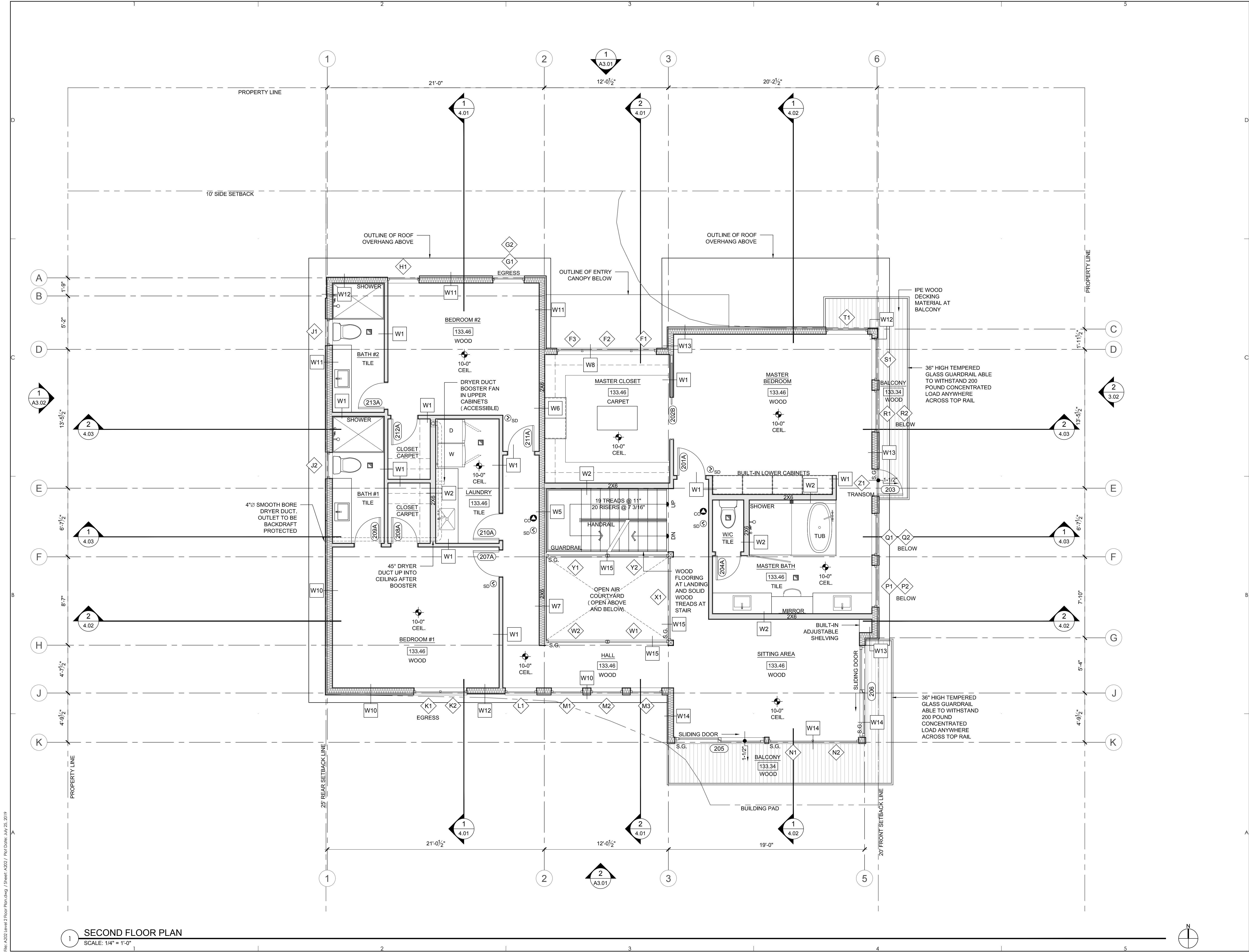
LEVEL 2 FLOOR PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.02

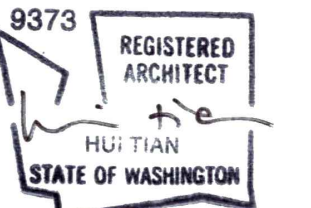


1 SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"

File: A202 Level 2 Floor Plan.dwg / Sheet: A202 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

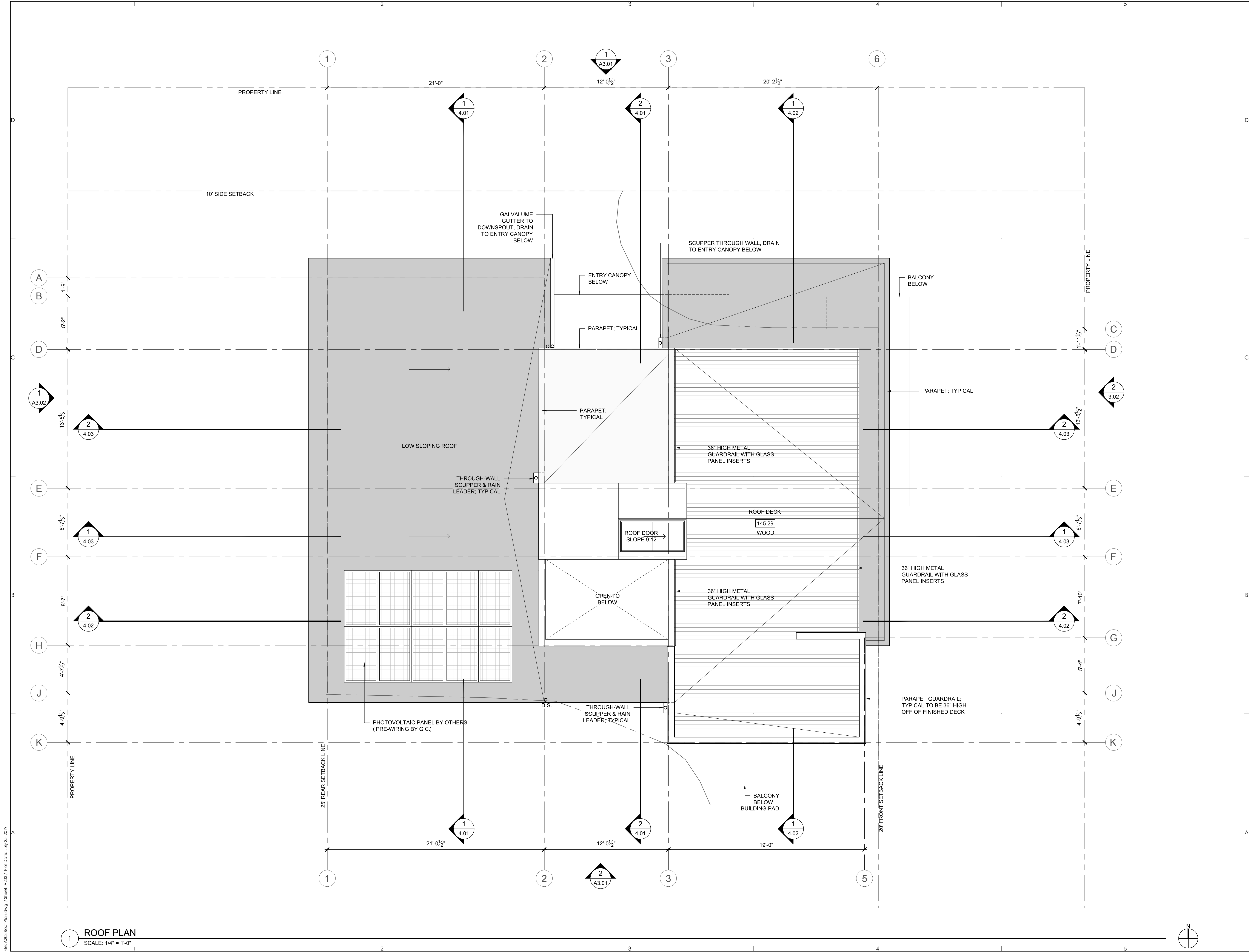
ROOF PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.03

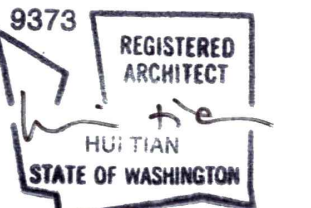


1 ROOF PLAN
 SCALE: 1/4" = 1'-0"

File: A203 Roof Plan.dwg / Sheet: A203 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

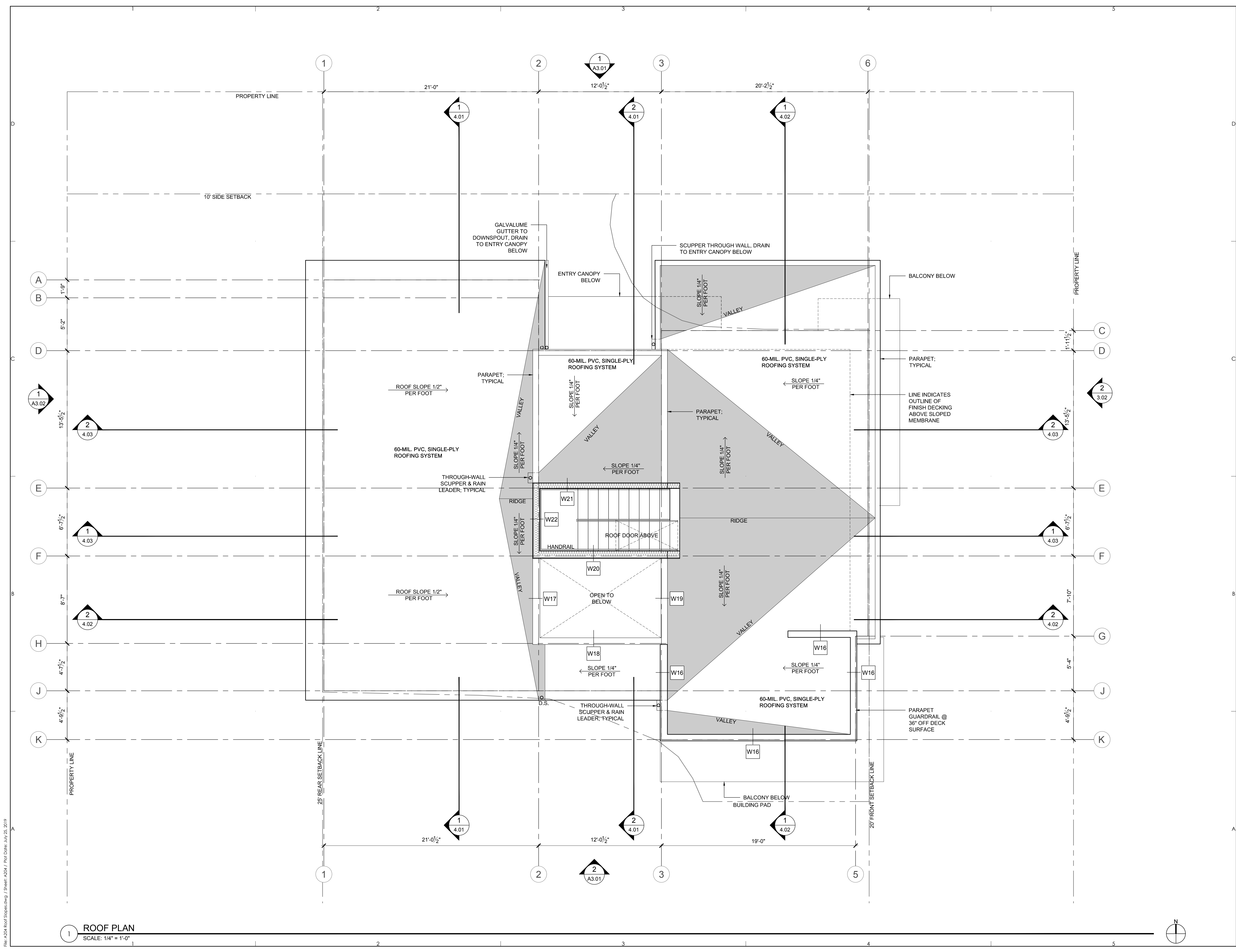
ROOF SLOPE PLAN

PROJECT NO.: 20190130

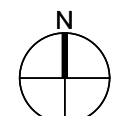
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.04



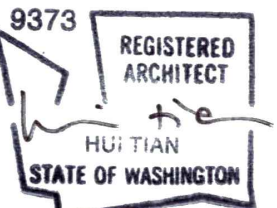
1 ROOF PLAN
 SCALE: 1/4" = 1'-0"



File: A204 Roof Slope.dwg / Print: A04 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

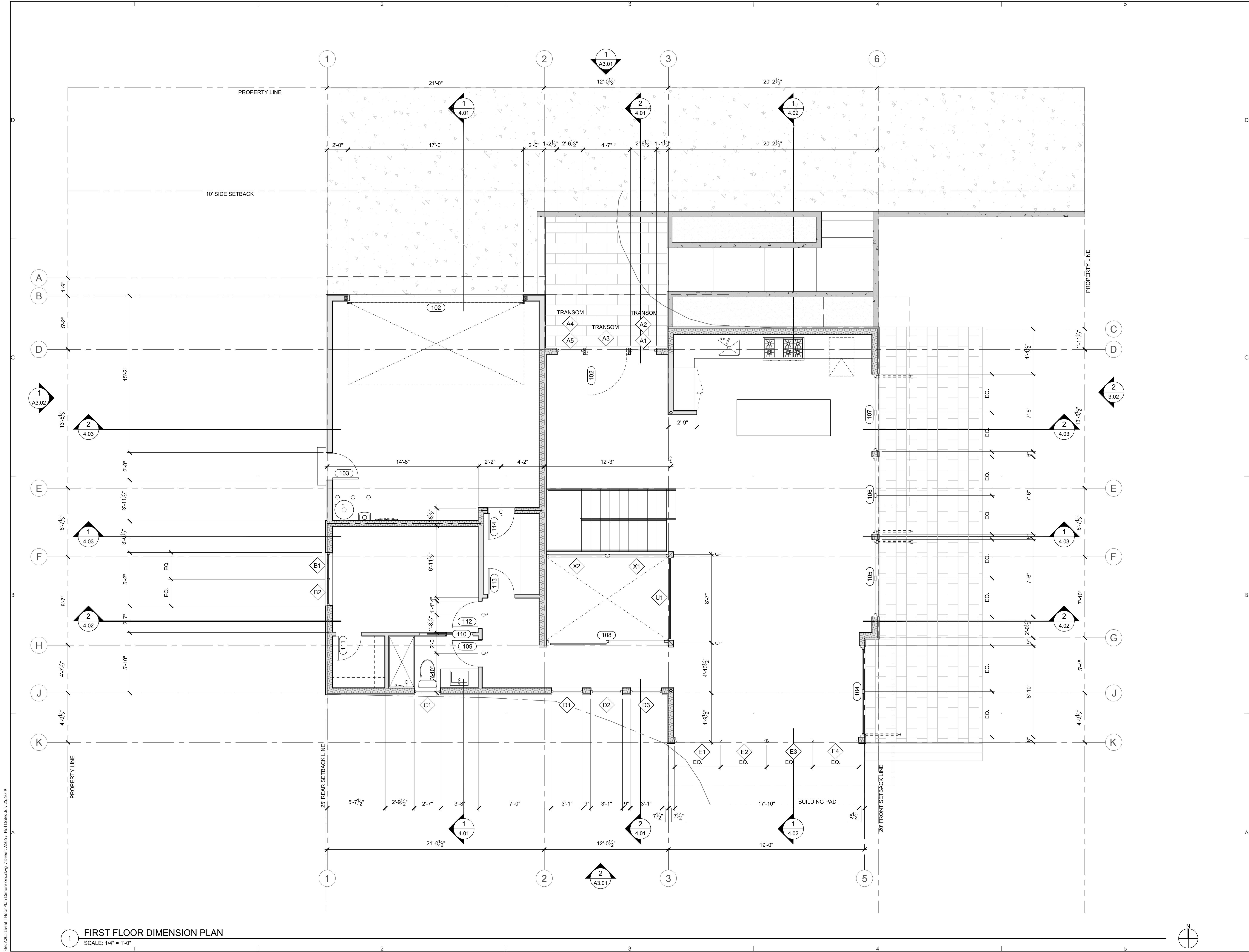
FIRST FLOOR
 DIMENSION PLAN

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.05



1 FIRST FLOOR DIMENSION PLAN
 SCALE: 1/4" = 1'-0"

File: A205 Level 1 Floor Plan Dimensions.dwg / Sheet: A205 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

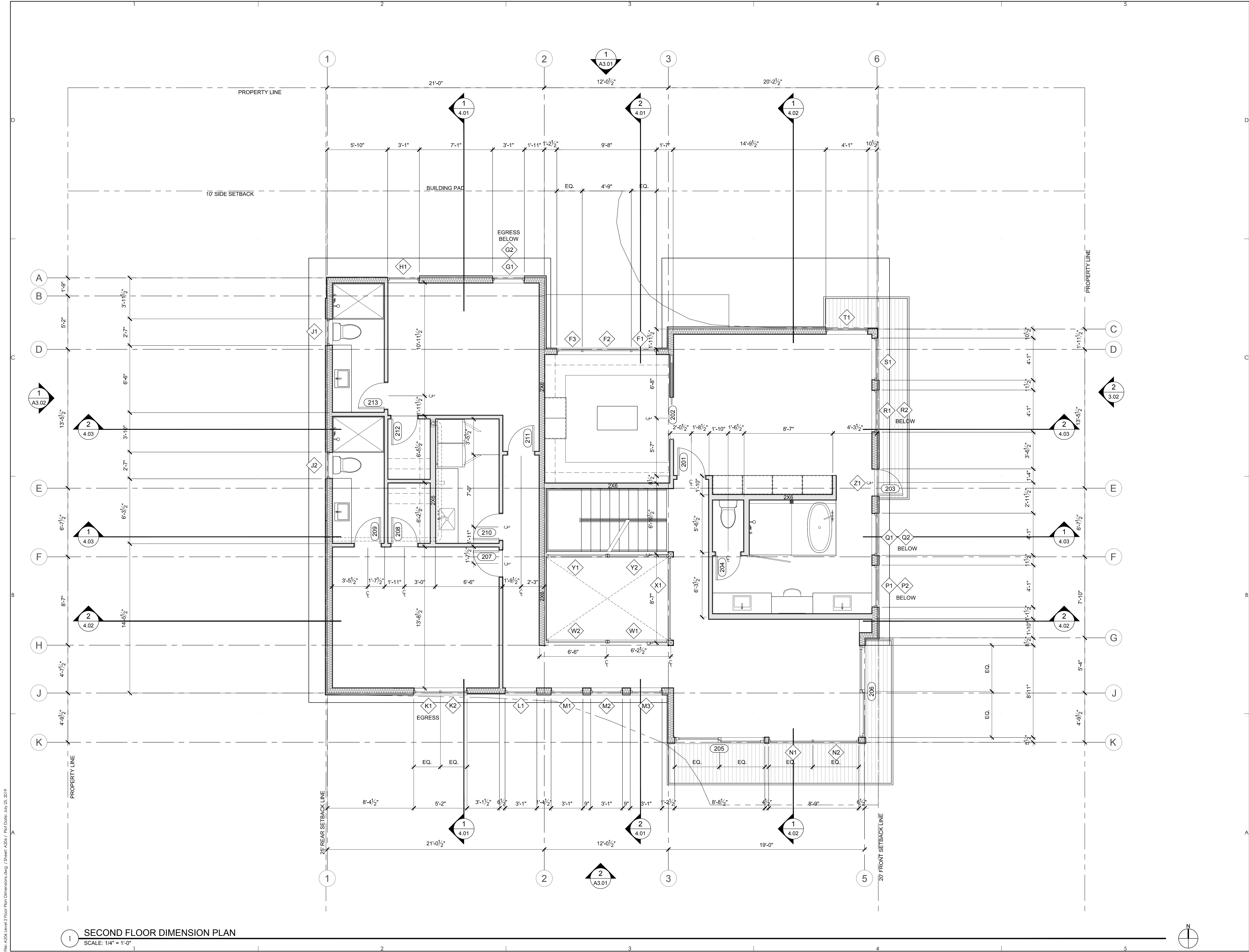
SECOND FLOOR
 DIMENSION PLAN

PROJECT NO.: 20190130

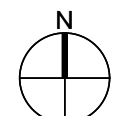
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A2.06



1 SECOND FLOOR DIMENSION PLAN
 SCALE: 1/4" = 1'-0"



File: A206 Level 2 Floor Plan Dimensions.dwg / Sheet: A206 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

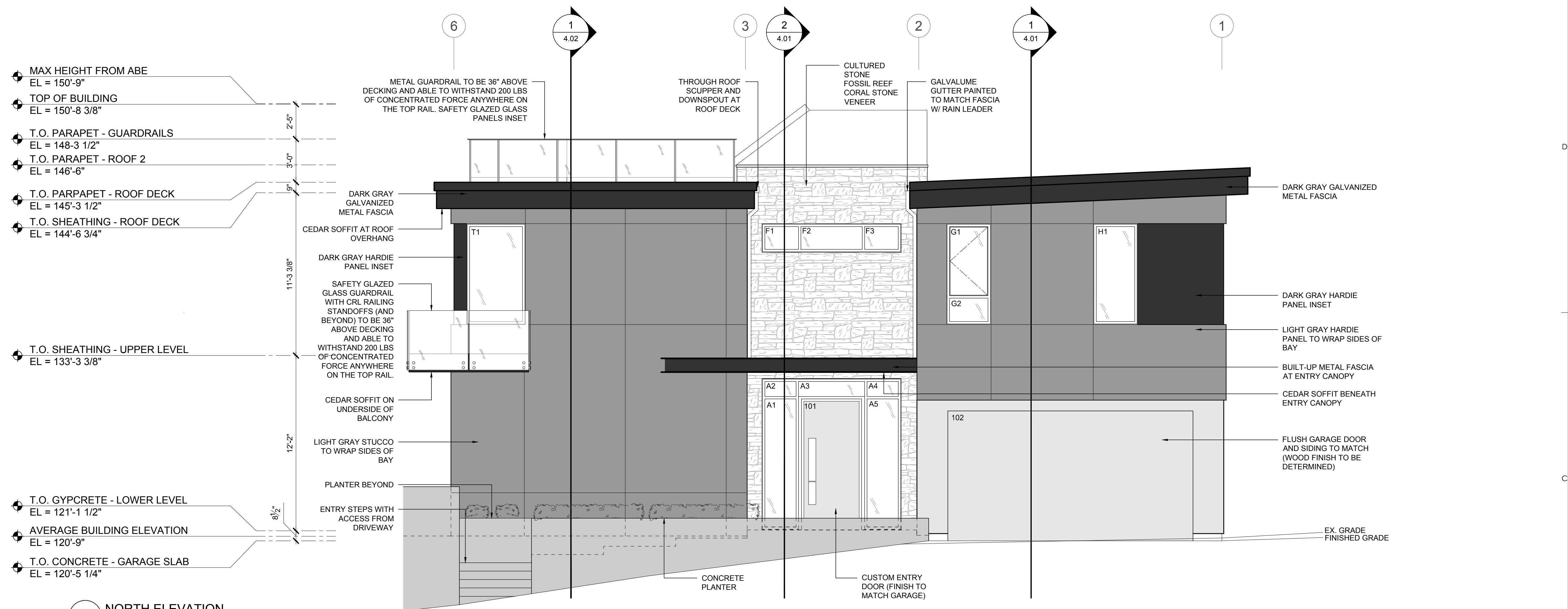
NORTH & SOUTH EXTERIOR ELEVATIONS

PROJECT NO.: 20190130

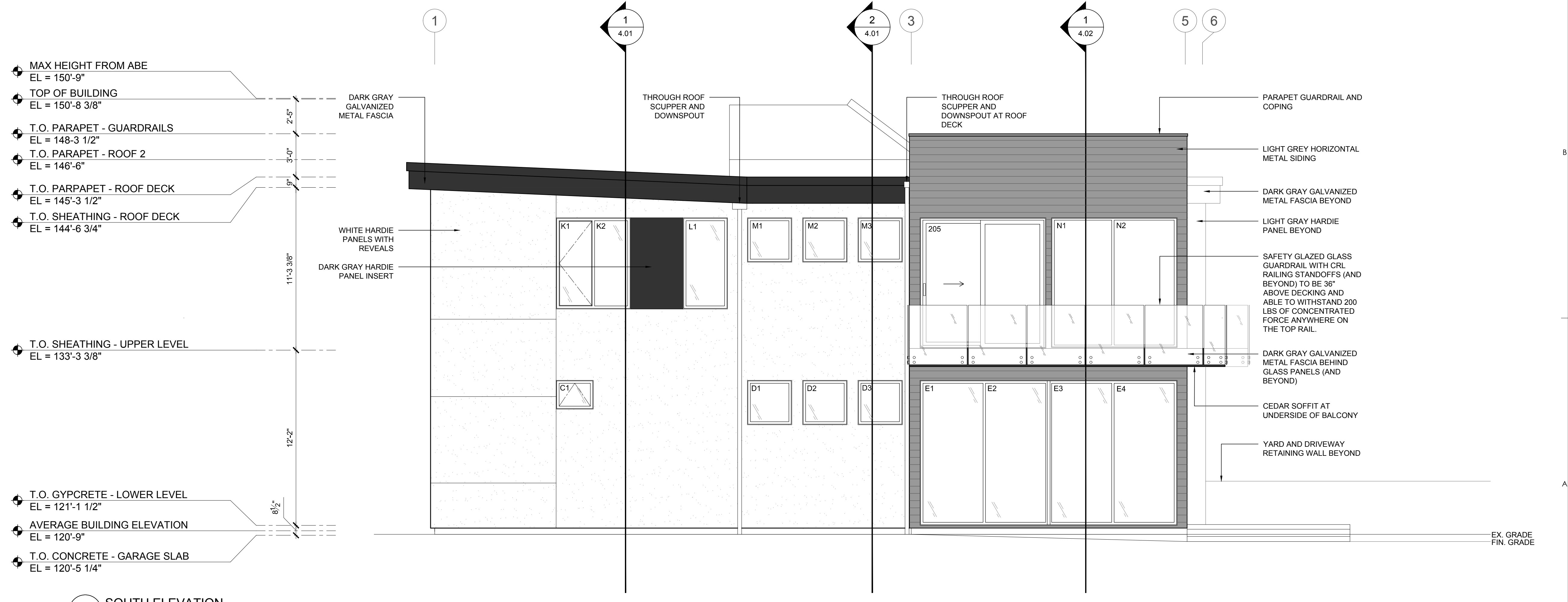
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A3.01

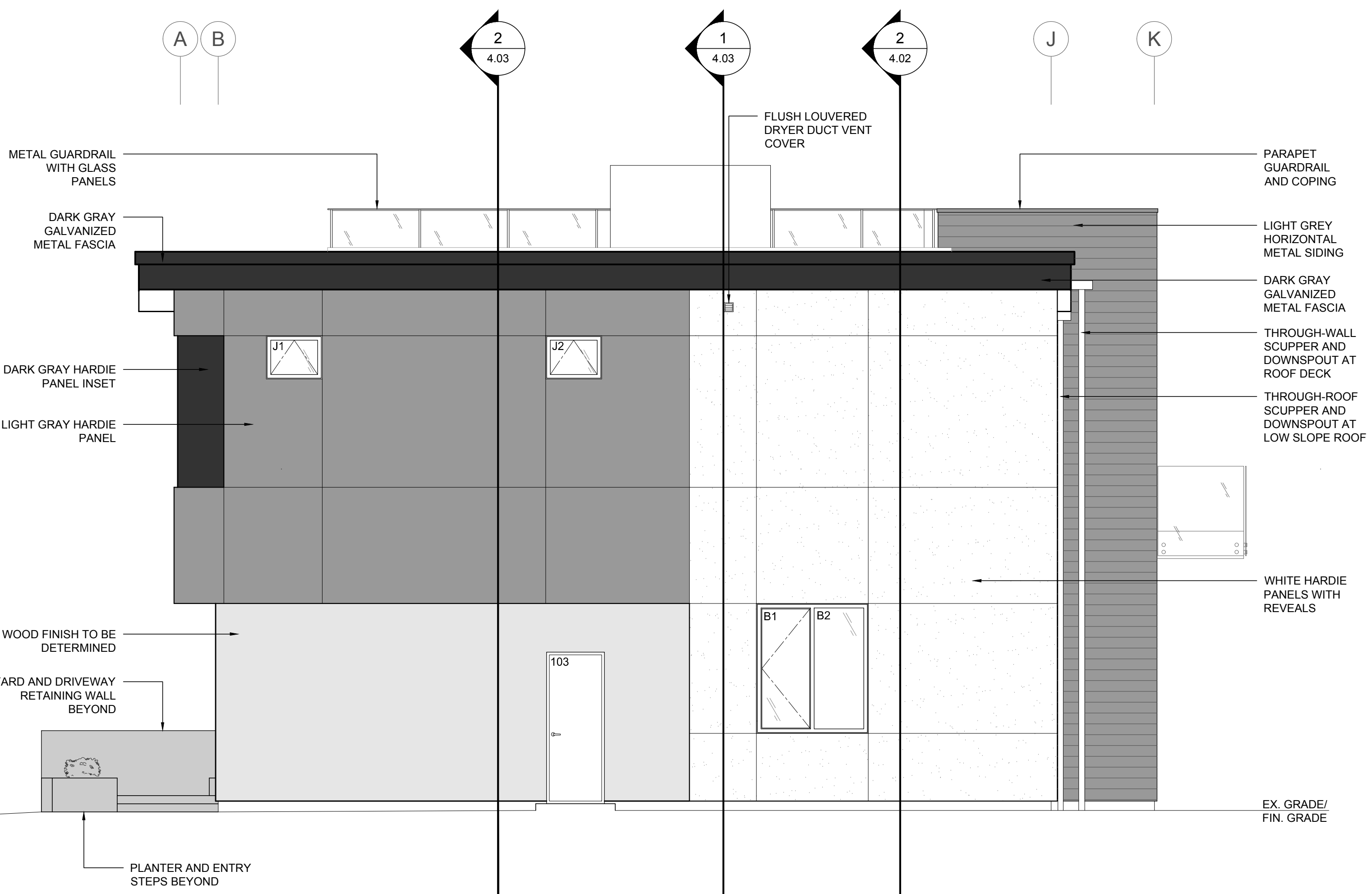


1 NORTH ELEVATION
 SCALE: 1/4" = 1'-0"



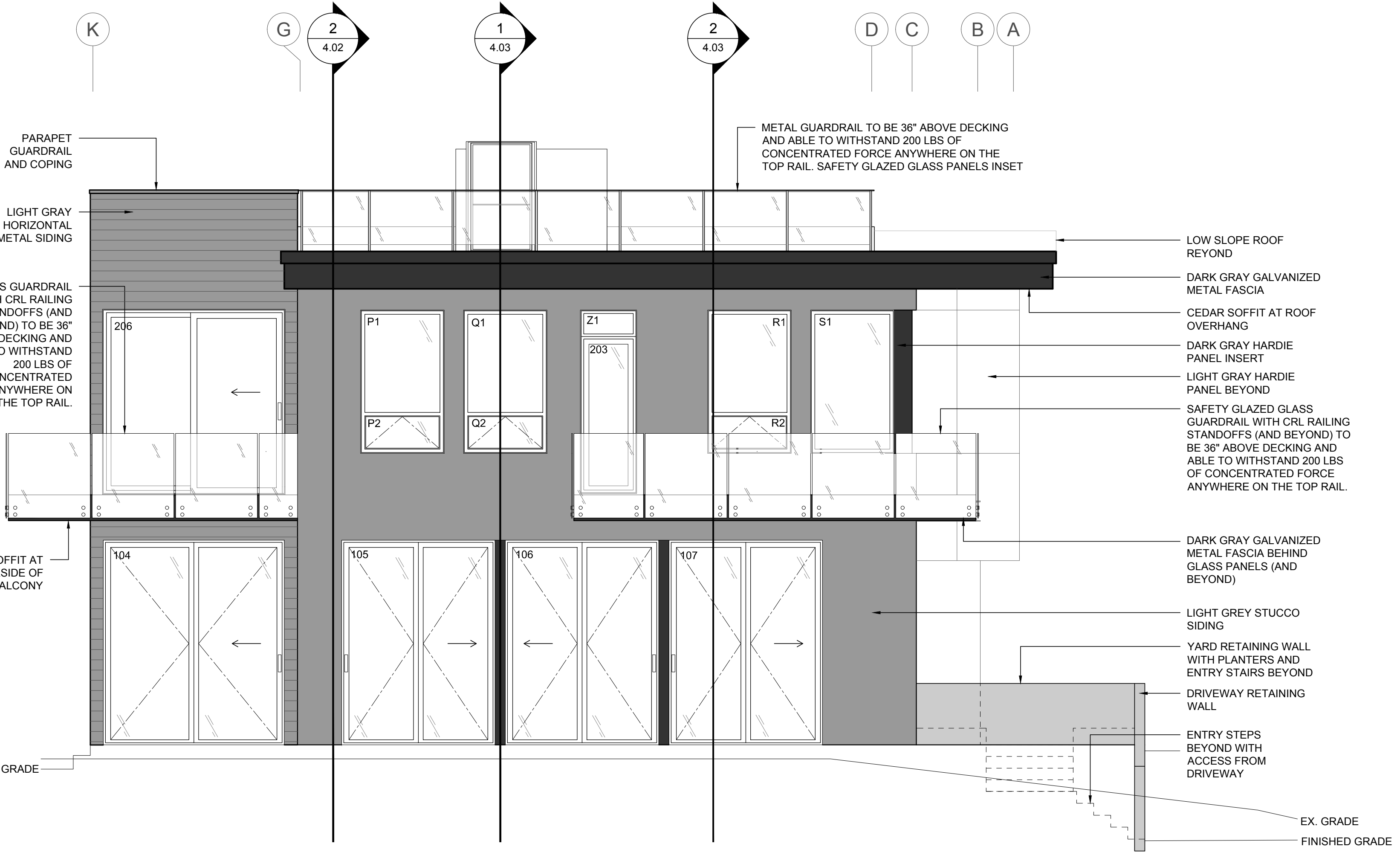
2 SOUTH ELEVATION
 SCALE: 1/4" = 1'-0"

- MAX HEIGHT FROM ABE
EL = 150'-9"
- TOP OF BUILDING
EL = 150'-8 3/8"
- T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
- T.O. PARAPET - ROOF 2
EL = 146'-6"
- T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
- T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
- AVERAGE BUILDING ELEVATION
EL = 120'-9"
- T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



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

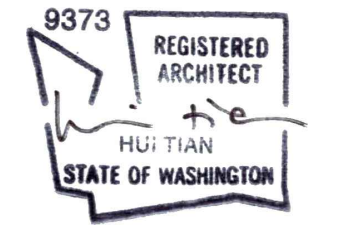
- MAX HEIGHT FROM ABE
EL = 150'-9"
- TOP OF BUILDING
EL = 150'-8 3/8"
- T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
- T.O. PARAPET - ROOF 2
EL = 146'-6"
- T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
- T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
- AVERAGE BUILDING ELEVATION
EL = 120'-9"
- T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



2 EAST ELEVATION
 SCALE: 1/4" = 1'-0"

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019	PERMIT SUBMITTAL
------------	------------------

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

EAST & WEST
 EXTERIOR ELEVATIONS

PROJECT NO.: 20190130

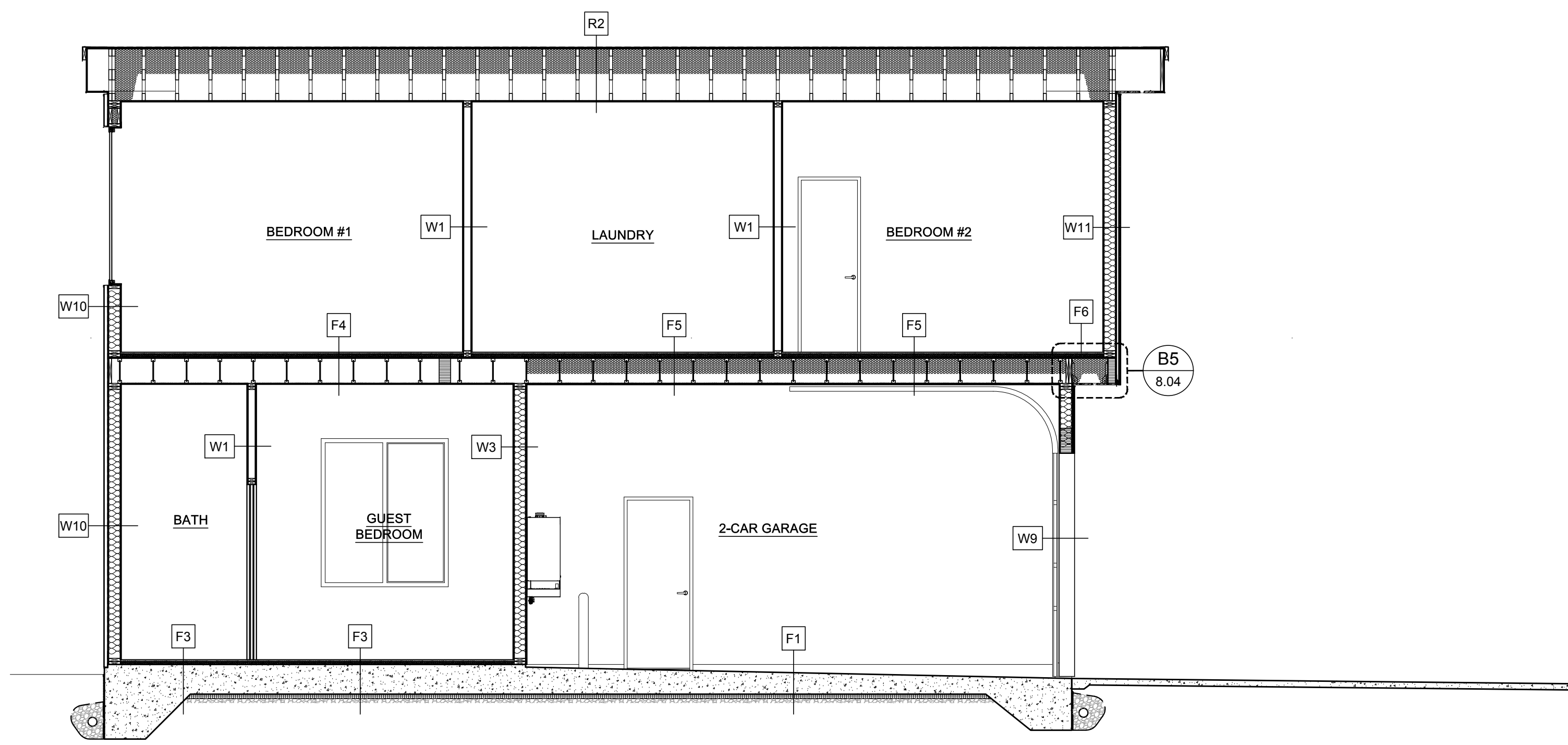
DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

A3.02

- MAX HEIGHT FROM ABE
EL = 150'-9"
- TOP OF BUILDING
EL = 150'-8 3/8"
- T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
- T.O. PARAPET - ROOF 2
EL = 146'-6"
- T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
- T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"

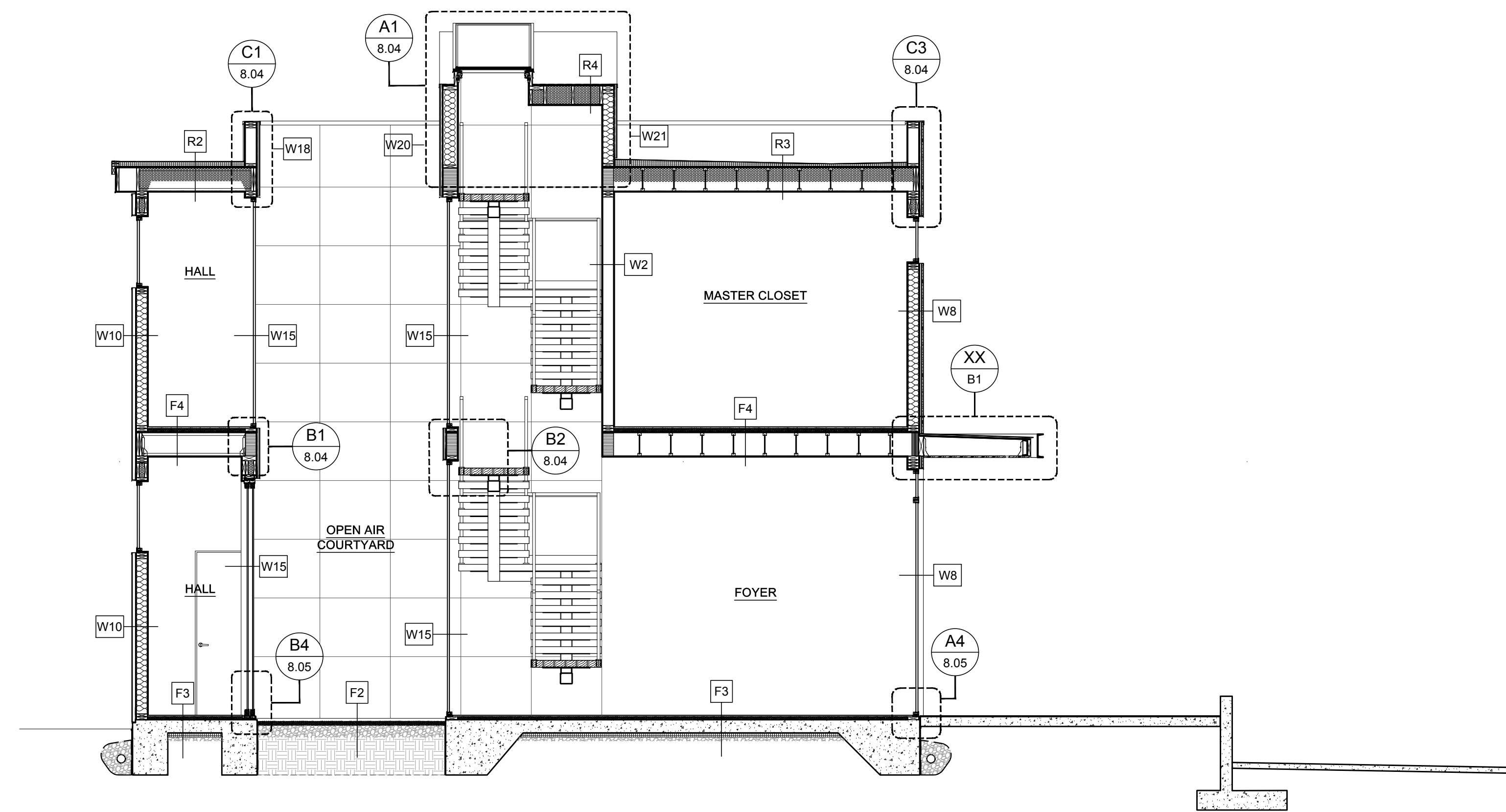
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
- AVERAGE BUILDING ELEVATION
EL = 120'-9"
- T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



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

- MAX HEIGHT FROM ABE
EL = 150'-9"
- TOP OF BUILDING
EL = 150'-8 3/8"
- T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
- T.O. PARAPET - ROOF 2
EL = 146'-6"
- T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
- T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"

- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
- AVERAGE BUILDING ELEVATION
EL = 120'-9"
- T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



2 BUILDING SECTION
SCALE: 1/4" = 1'-0"

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019	PERMIT SUBMITTAL

MARK DATE DESCRIPTION

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

SHEET TITLE: _____

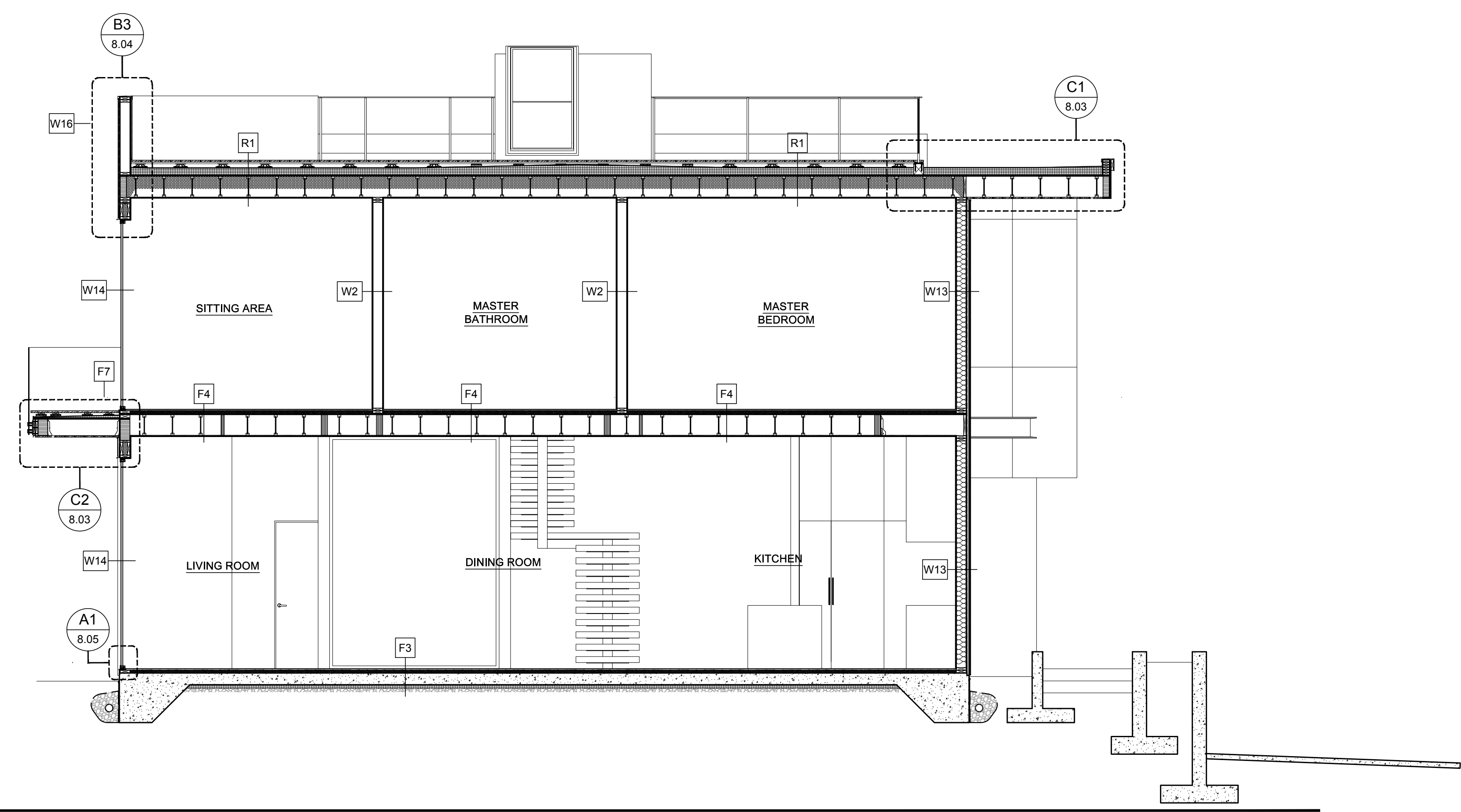
BUILDING SECTIONS

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

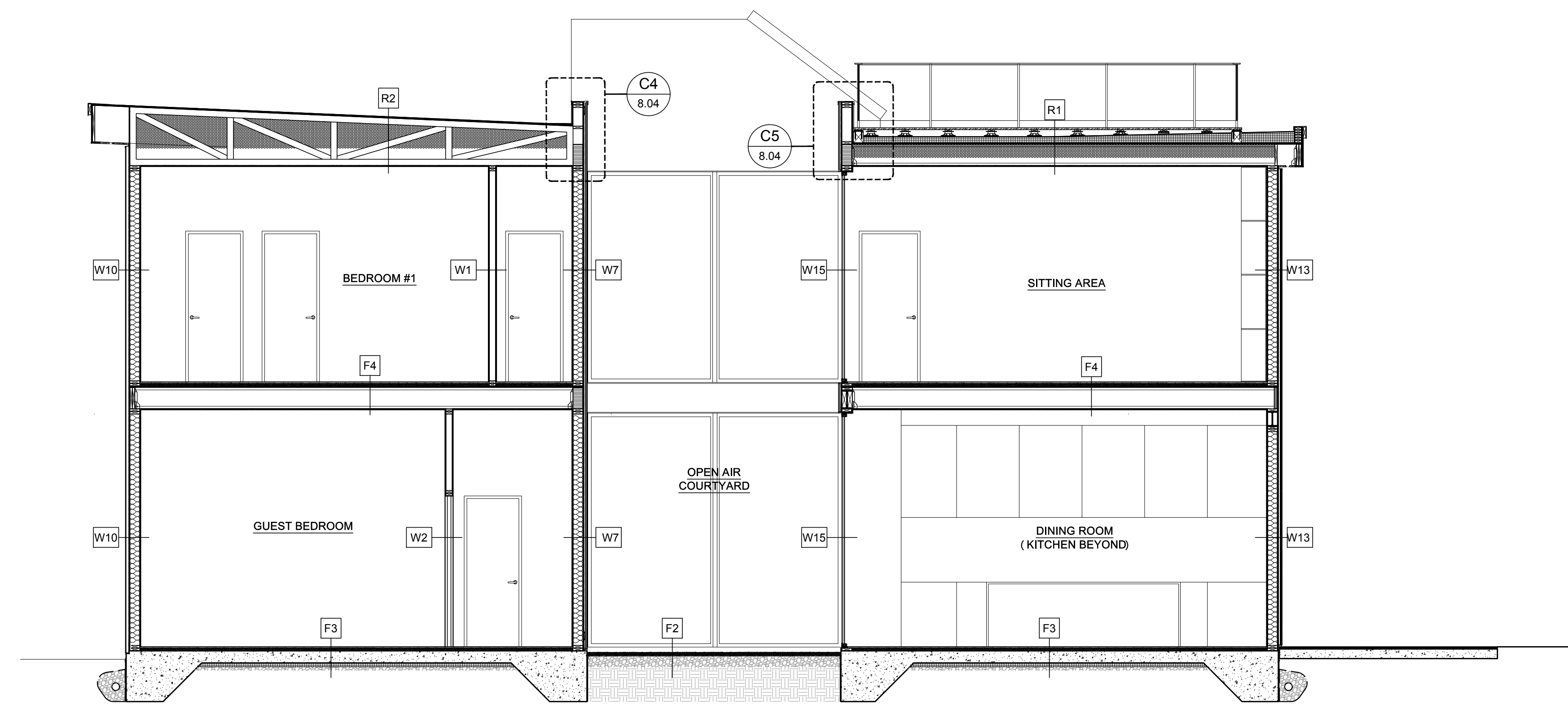
SHEET NUMBER: _____

- MAX HEIGHT FROM ABE
EL = 150'-9"
 - TOP OF BUILDING
EL = 150'-8 3/8"
 - T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
 - T.O. PARAPET - ROOF 2
EL = 146'-6"
 - T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
 - T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- 11'-3 3/8"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- 12'-2"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
 - AVERAGE BUILDING ELEVATION
EL = 120'-9"
 - T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



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

- MAX HEIGHT FROM ABE
EL = 150'-9"
 - TOP OF BUILDING
EL = 150'-8 3/8"
 - T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
 - T.O. PARAPET - ROOF 2
EL = 146'-6"
 - T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
 - T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- 11'-3 3/8"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- 12'-2"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
 - AVERAGE BUILDING ELEVATION
EL = 120'-9"
 - T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"



2 BUILDING SECTION
SCALE: 1/4" = 1'-0"

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

BUILDING SECTIONS

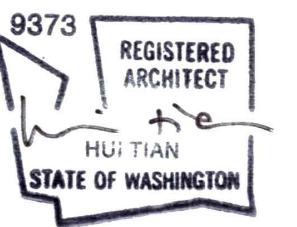
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MARK DATE DESCRIPTION

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

BUILDING SECTIONS

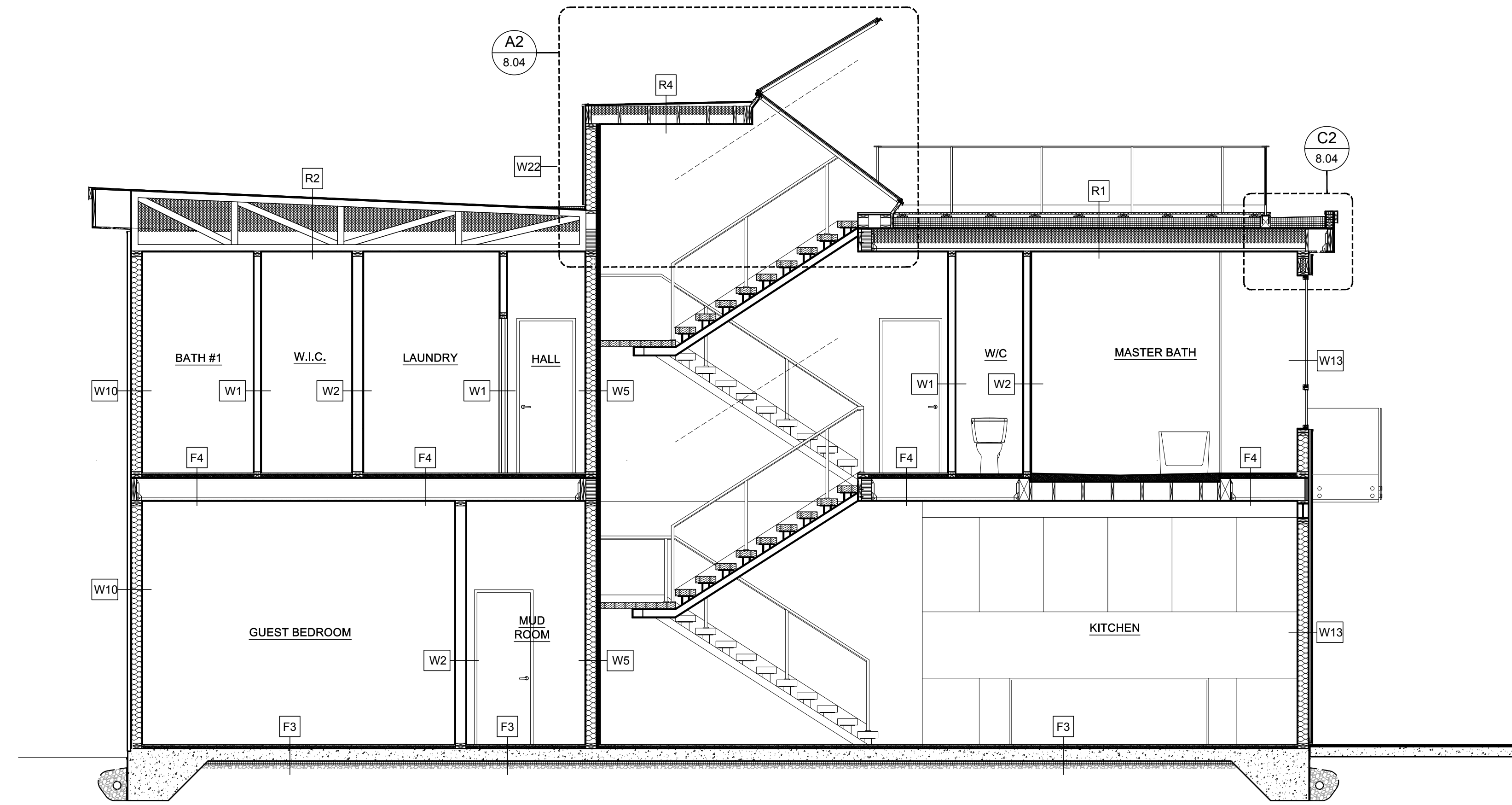
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

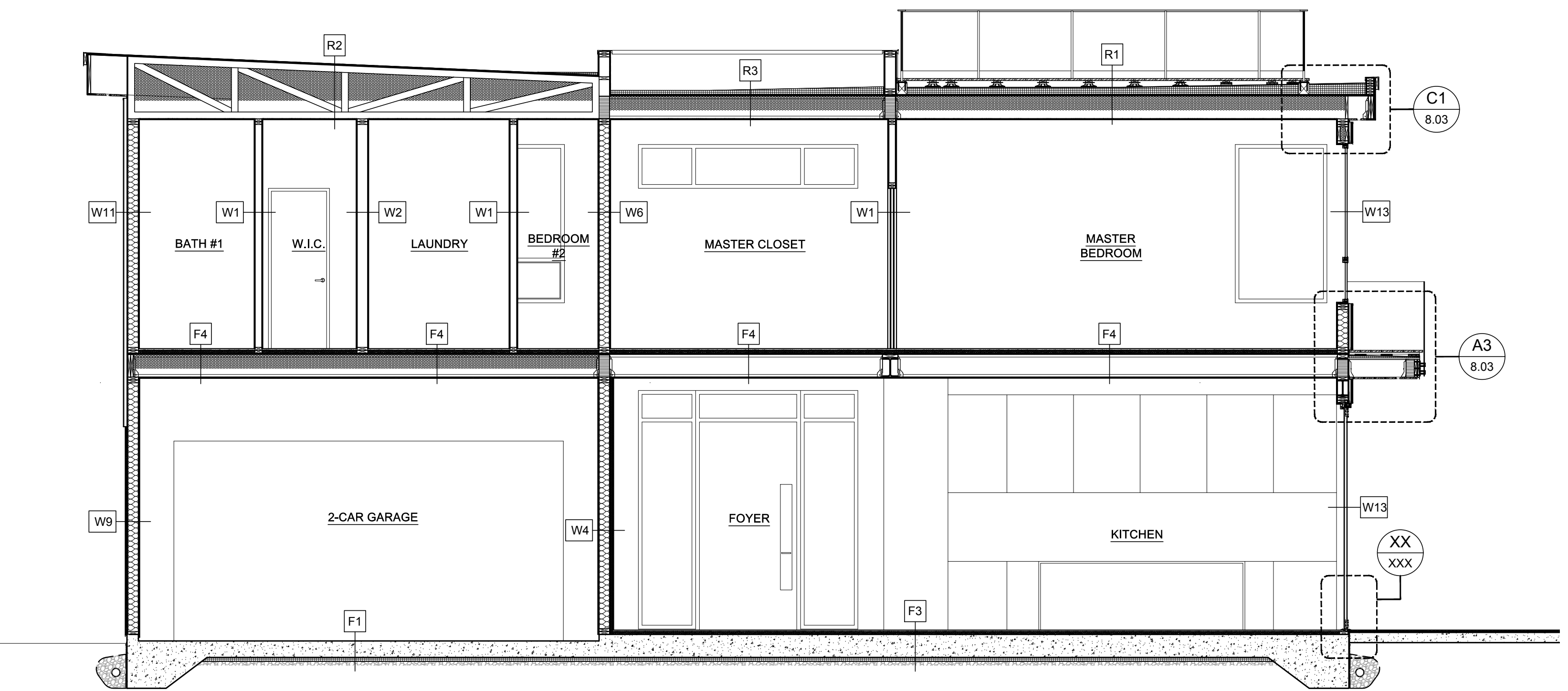
- MAX HEIGHT FROM ABE
EL = 150'-9"
 - TOP OF BUILDING
EL = 150'-8 3/8"
 - T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
 - T.O. PARAPET - ROOF 2
EL = 146'-6"
 - T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
 - T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- 11'-3 3/8"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- 12'-2"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
 - AVERAGE BUILDING ELEVATION
EL = 120'-9"
 - T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"
- 8 1/2"

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



- MAX HEIGHT FROM ABE
EL = 150'-9"
 - TOP OF BUILDING
EL = 150'-8 3/8"
 - T.O. PARAPET - GUARDRAILS
EL = 148'-3 1/2"
 - T.O. PARAPET - ROOF 2
EL = 146'-6"
 - T.O. PARAPET - ROOF DECK
EL = 145'-3 1/2"
 - T.O. SHEATHING - ROOF DECK
EL = 144'-6 3/4"
- 11'-3 3/8"
- T.O. SHEATHING - UPPER LEVEL
EL = 133'-3 3/8"
- 12'-2"
- T.O. GYPCRETE - LOWER LEVEL
EL = 121'-1 1/2"
 - AVERAGE BUILDING ELEVATION
EL = 120'-9"
 - T.O. CONCRETE - GARAGE SLAB
EL = 120'-5 1/4"
- 8 1/2"

2 BUILDING SECTION
 SCALE: 1/4" = 1'-0"



CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

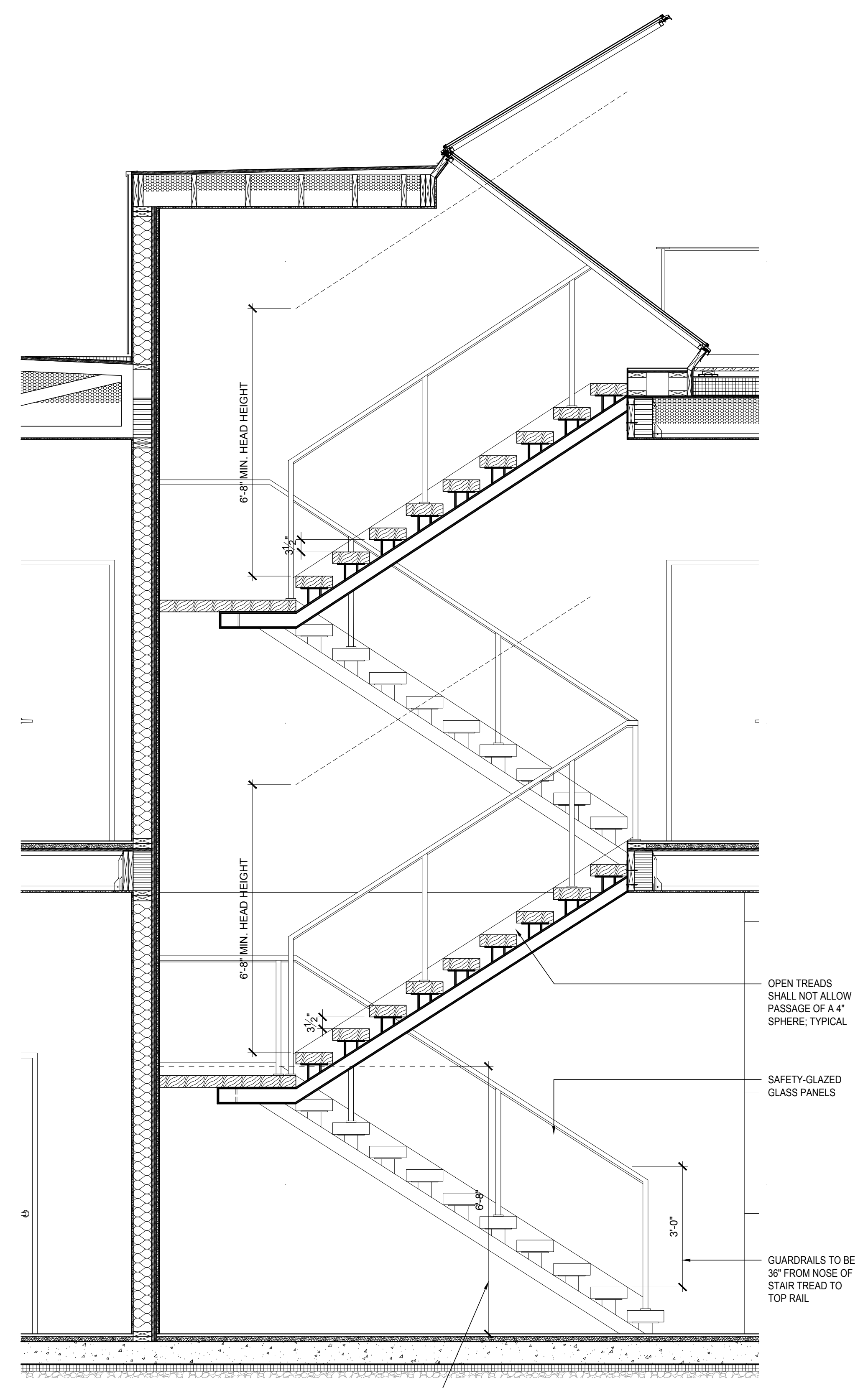
SHEET TITLE: _____

STAIR SECTIONS

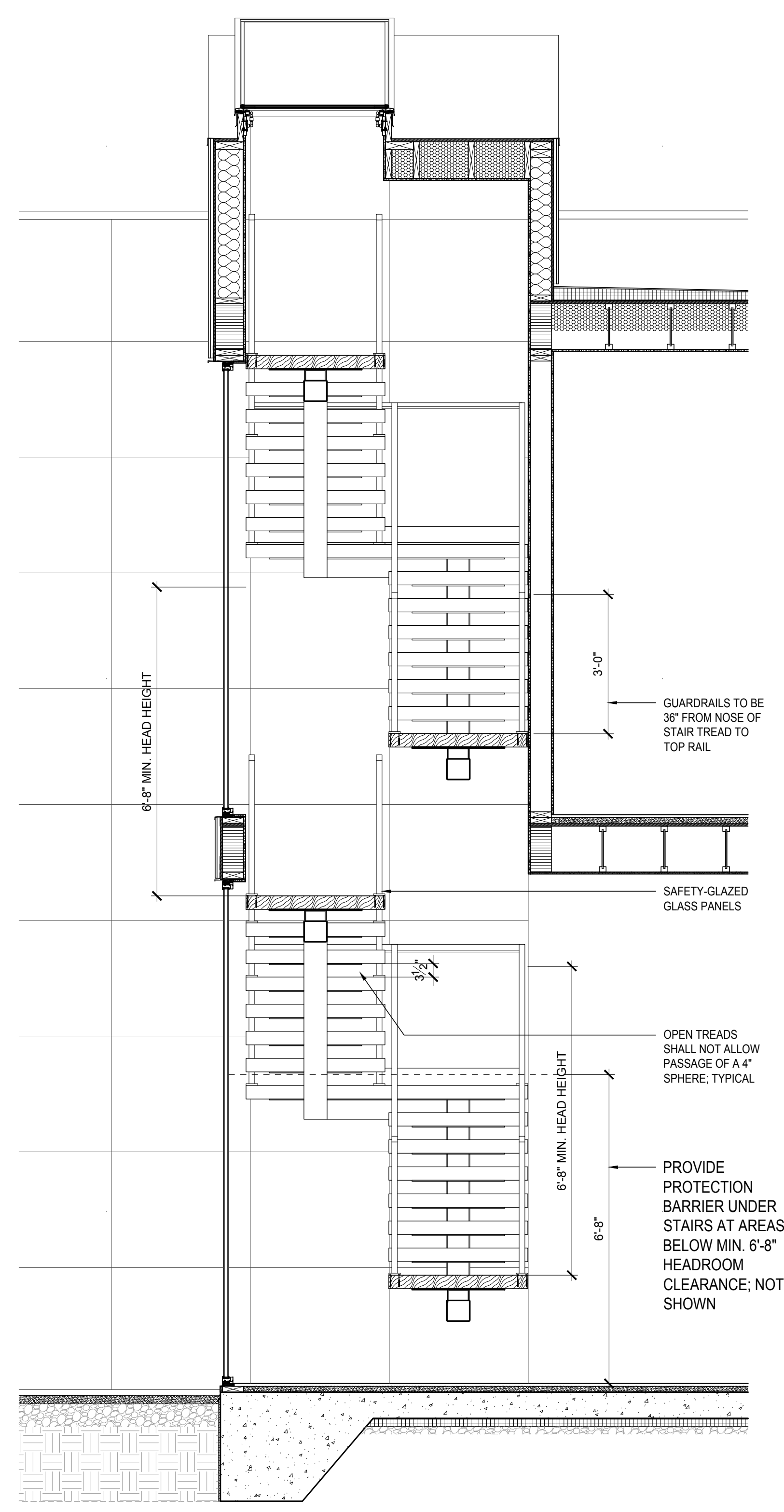
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



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



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

WALL, FLOOR AND ROOF ASSEMBLY SCHEDULE

WALL ASSEMBLIES

W1	1/2" GYPSUM BOARD 2X4 STUDS @ 16" O.C. 1/2" GYPSUM BOARD	W13	3-COAT STUCCO SIDING - FINISH COAT PAINTED LIGHT GRAY - 3/8" BROWN COAT - 3/8" SCRATCH COAT PAPER BACKED METAL LATH 1" P.T. LUMBER FURRING STRIPS (2) LAYERS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W2	1/2" GYPSUM BOARD 2X6 STUDS @ 16" O.C. 1/2" GYPSUM BOARD	W14	DARK GRAY HORIZONTAL METAL SIDING ALUMINUM RAINSCREEN SYSTEM WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W3	DWELLING-GARAGE FIRE SEPARATION (IRC 302.6) 1/2" GYPSUM BOARD 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 5/8" IMPACT RESISTANT GYPSUM BOARD	W15	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 3/4" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W4	5/8" GYPSUM BOARD (2) LAYERS 3/4" PLYWOOD SHEATHING (TO ALIGN TILE FLUSH) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" PLYWOOD SHEATHING (PER STRUCTURAL) 5/8" IMPACT RESISTANT GYPSUM BOARD	W16	DARK GRAY HORIZONTAL METAL SIDING ALUMINUM RAINSCREEN SYSTEM WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W5	PORCELANOSA XLIGHT THIN PORCELAIN TILE WITH HIDDEN FIXING PLATES THIN SET MORTAR 5/8" GLASS MAT WATER RESISTANT GYPSUM BACKER BOARD (2) LAYERS 1/2" PLYWOOD SHEATHING TO FURR WALL 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD (5/8" IMPACT RESISTANT GYP USED ON GARAGE SIDE WHERE INSTANCE OCCURS)	W17	60 MIL. PVC SINGLE PLY ROOFING UP WALL WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. PLYWOOD SHEATHING (PER STRUCTURAL) WEATHER RESISTIVE BARRIER HORIZONTAL OMEGA PROFILE VERTICAL OMEGA PROFILE ADHESIVE PORCELANOSA XLIGHT THIN PORCELAIN TILES WITH HIDDEN FIXING PLATES
W6	1/2" GYPSUM BOARD 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD	W18	(OPTIONAL SIDING) 60 MIL. PVC, SINGLE PLY ROOFING UP WALL WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. PLYWOOD SHEATHING (PER STRUCTURAL) WEATHER RESISTIVE BARRIER 3/4" P.T. LUMBER FURRING STRIPS TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING
W7	PORCELANOSA XLIGHT THIN PORCELAIN TILE WITH HIDDEN FIXING PLATES ADHESIVE VERTICAL OMEGA PROFILE HORIZONTAL OMEGA PROFILE WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER	W19	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. PLYWOOD SHEATHING WEATHER RESISTIVE BARRIER 60 MIL. PVC SINGLE PLY ROOFING RUNNING UP WALL DARK GRAY HORIZONTAL METAL SIDING
W8	CULTURED STONE FOSSIL REEF CORAL STONE VENEER W/ MORTAR JOINT MORTAR SETTING BED SCRATCH COAT GALVANIZED METAL LATH 1/4" P.T. LUMBER FURRING STRIPS (2) LAYERS OF WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER	W20	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 8" R-25 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W9	PORCELANOSA XLIGHT EWOOD NUT NATURE THIN TILE WITH HIDDEN FIXING PLATES THIN SET MORTAR 1/2" CEMENT BOARD WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 5/8" IMPACT RESISTANT GYPSUM BOARD	W21	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BALL INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W10	WHITE HARDIE PANELS WITH COLOR MATCHED FASTENERS 1 1/2" P.T. LUMBER FURRING STRIPS DELTA FACADE S - UV RESISTANT WEATHER RESISTIVE BARRIER FOR OPEN JOINT CLADDING PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER	W22	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BALL INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W11	LIGHT GRAY HARDIE PANELS WITH COLOR MATCHED FASTENERS 1 1/2" P.T. LUMBER FURRING STRIPS DELTA FACADE S - UV RESISTANT WEATHER RESISTIVE BARRIER FOR OPEN JOINT CLADDING PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER	W23	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BALL INSULATION 1/2" GYPSUM BOARD PVA PRIMER
W12	DARK GRAY HARDIE PANELS WITH COLOR MATCHED FASTENERS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 5 1/2" R-21 UNFACED THERMAL BATT INSULATION 1/2" GYPSUM BOARD PVA PRIMER	W24	TONGUE AND GROOVE HORIZONTAL STAINED CEDAR SIDING 1/2" P.T. LUMBER FURRING STRIPS WEATHER RESISTIVE BARRIER PLYWOOD SHEATHING (PER STRUCTURAL) 2X6 STUDS @ 16" O.C. 8" R-25 UNFACED THERMAL BALL INSULATION PLYWOOD SHEATHING (PER STRUCTURAL) 1/2" GLASS MAT WATER RESISTANT GYPSUM BACKER BOARD THIN SET MORTAR PORCELANOSA XLIGHT THIN PORCELAIN TILE WITH HIDDEN FIXING PLATES

FLOOR ASSEMBLIES

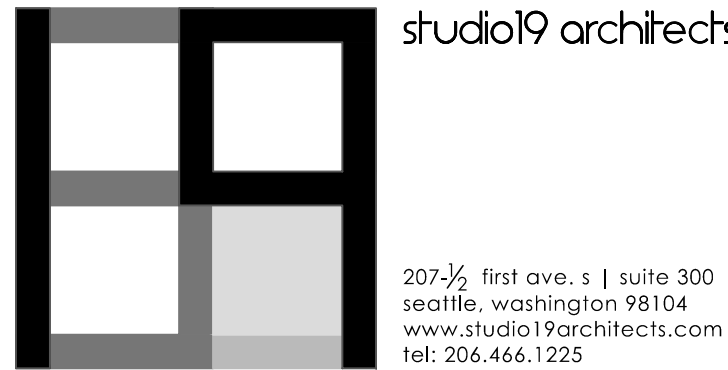
F1	CONCRETE SEALER REINFORCED CONCRETE SLAB (PER STRUCTURAL) SLOPED 1/4" PER FOOT TOWARDS DRIVEWAY 10 MIL POLYETHYLENE VAPOR BARRIER 2" R-10 EXTRUDED XPS FOAM INSULATION 12" F STRUCTURAL FILL (PER GEOTECH) COMPACTED NATIVE DENSE SOIL OR STRUCTURAL FILL
F2	PORCELAIN PAVERS 1" SAND SETTING BED 12" MINIMUM BASE COURSE GEOTEXTILE BARRIER FABRIC COMPACTED NATIVE DENSE SOIL OR STRUCTURAL FILL
F3	FLOOR FINISH PER INTERIORS 1 1/2" GYPSUM CEMENT UNDERLAYMENT WITH HYDRAULIC HEATING SYSTEM WATERPROOF MEMBRANE REINFORCED CONCRETE SLAB (PER STRUCTURAL) 10 MIL POLYETHYLENE VAPOR BARRIER 2" R-10 EXTRUDED XPS FOAM INSULATION 12" STRUCTURAL FILL COMPACTED NATIVE DENSE SOIL OR STRUCTURAL FILL
F4	FLOOR FINISH PER INTERIORS 1 1/2" GYPSUM CEMENT UNDERLAYMENT WITH HYDRAULIC HEATING SYSTEM FLOOR SHEATHING (PER STRUCTURAL) ; GLUED & SCREWED FLOOR JOISTS (PER STRUCTURAL) 5/8" GYPSUM BOARD
F5	FLOOR FINISH PER INTERIORS 1 1/2" GYPSUM CEMENT UNDERLAYMENT WITH HYDRAULIC HEATING SYSTEM FLOOR SHEATHING (PER STRUCTURAL) ; GLUED & SCREWED FLOOR JOISTS (PER STRUCTURAL) 8 1/2" R-30 BATT INSULATION VAPOR BARRIER 5/8" GYPSUM BOARD
F6	FLOOR FINISH PER INTERIORS 1 1/2" GYPSUM CEMENT UNDERLAYMENT WITH HYDRAULIC HEATING SYSTEM FLOOR SHEATHING (PER STRUCTURAL) ; GLUED & SCREWED FLOOR JOISTS (PER STRUCTURAL) 8 1/2" R-30 BATT INSULATION VAPOR BARRIER EXTERIOR TONGUE AND GROOVE CEDAR SOFFIT (SMOOTH FACE EXPOSED)
F7	5/4 X 6 IPE DECKING WITH HIDDEN FASTENERS 5/4 X 4 IPE JOISTS LAID FLAT @ 16" O.C. ON PEDESTAL SYSTEM PROTECTION COURSE SINGLE PLY ROOFING MEMBRANE 1/4" DENSDECK COVER BOARD 1/2" MINIMUM CLOSED CELL POLYISO TAPERED INSULATION 2X6 STUDS @ 16" O.C. FLOOR SHEATHING (PER STRUCTURAL) VAPOR BARRIER FLOOR JOISTS (PER STRUCTURAL) 1X6 TONGUE AND GROOVE CEDAR SOFFIT (SMOOTH FACE EXPOSED)

BUILDING ASSEMBLIES SCHEDULE NOTES

- PROVIDE 3 1/2" SOUND ATTENUATION BATT INSULATION AT ALL BEDROOMS, BATHROOMS, LAUNDRY ROOMS, MECHANICAL ROOMS AND AS NOTED.
- SUBSTITUTE MOISTURE RESISTANT GYPSUM BOARD AT KITCHENS, BATHROOMS, LAUNDRY ROOMS, MECHANICAL ROOMS, STORAGE ROOMS AND OTHER MOISTURE PRONE AREAS.
- PROVIDE COATED GLASS MAT WATER RESISTANT GYPSUM BACKER BOARD AT INTERIOR TILE FINISH.
- SUBSTITUTE IMPACT RESISTANT GYPSUM BOARD AT GARAGE.
- PROVIDE DRAFT STOPS, FIRE BLOCKING AND FIRE STOPS AS REQUIRED BY THE IRC.
- CONTRACTOR SHALL PROVIDE BLOCKING FOR ALL WALL-MOUNTED HARDWARE, TOILET ACCESSORIES, TOWEL BARS, LIGHT FIXTURES, CASEWORK, SHELVEING AND OTHER LOCATIONS WHERE REQUIRED PER MANUFACTURER'S RECOMMENDATIONS OF INDUSTRY STANDARDS.
- PROVIDE THRU-PENETRATION FIRESTOP SYSTEMS FOR PENETRATIONS IN WALLS OR PARTITIONS ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING.
- PENETRATIONS BY POWER AND LIGHTING FIXTURES INTO FIRE-RESISTANCE-SHEATED ASSEMBLIES REQUIRE LISTED ELECTRICAL BOXES AND SHALL BE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING AND INSTALLED SUCH THAT THE REQUIRED FIRE-RESISTANCE WILL NOT BE REDUCED.
- COORDINATE BETWEEN THE SCOPE SHOWN BY THE STRUCTURAL DRAWINGS AND THE ARCHITECTURAL ASSEMBLIES AS INDICATED.

ROOF ASSEMBLIES

R1	5/4X6 IPE DECKING WITH HIDDEN FASTENERS 5/4X4 IPE JOISTS LAID FLAT @16" O.C. ON PEDESTAL SYSTEM PROTECTION COURSE SINGLE PLY ROOFING MEMBRANE 1/4" DENSDECK COVER BOARD 1/2" MINIMUM CLOSED CELL POLYISO TAPERED INSULATION SELF ADHERED VAPOR BARRIER ROOF SHEATHING (PER STRUCTURAL) ROOF JOISTS (PER STRUCTURAL) 3" R-19 CLOSED CELL SPRAY FOAM INSULATION 9 1/2" R-30 UNFACED THERMAL BATT INSULATION 5/8" GYPSUM BOARD
R2	SINGLE PLY ROOFING MEMBRANE 1/4" DENSDECK COVER BOARD 1/2" MINIMUM CLOSED CELL POLYISO TAPERED INSULATION (WHERE DRAINAGE SLOPE IS NEEDED) SELF ADHERED VAPOR BARRIER ROOF SHEATHING (PER STRUCTURAL) ROOF TRUSSES (PER STRUCTURAL) 3" R-19 CLOSED CELL SPRAY FOAM INSULATION 9 1/2" R-30 UNFACED THERMAL BATT INSULATION 5/8" GYPSUM BOARD
R3	SINGLE PLY ROOFING MEMBRANE 1/4" DENSDECK COVER BOARD 1/2" MINIMUM CLOSED CELL POLYISO TAPERED INSULATION SELF ADHERED VAPOR BARRIER ROOF SHEATHING (PER STRUCTURAL) ROOF FRAMING (PER STRUCTURAL) 3" R-19 CLOSED CELL SPRAY FOAM INSULATION 9 1/2" R-30 UNFACED THERMAL BATT INSULATION 5/8" GYPSUM BOARD
R4	SINGLE PLY ROOFING MEMBRANE 1/4" DENSDECK COVER BOARD SELF ADHERED VAPOR BARRIER ROOF SHEATHING (PER STRUCTURAL) ROOF FRAMING (PER STRUCTURAL) 6" R-19 CLOSED CELL SPRAY FOAM INSULATION 5/8" GYPSUM BOARD



CONSULTANT:

PROFESSIONAL SEAL:



PROJECT:

YANG RESIDENCE

7431 E MERCER WAY
MERCER ISLAND, WA 98040
USA

SHEET ISSUE:

07/25/2019	PERMIT SUBMITTAL
------------	------------------

MUNICIPALITY REVIEW:
CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE:

WALL, FLOOR, & ROOF ASSEMBLIES
MATERIAL NOTES

PROJECT NO.: 20190130

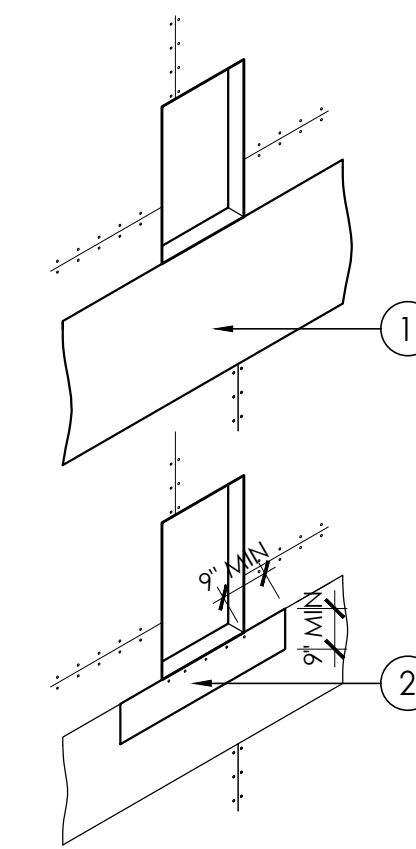
DATE ISSUED: 07/25/2019

SHEET NUMBER:

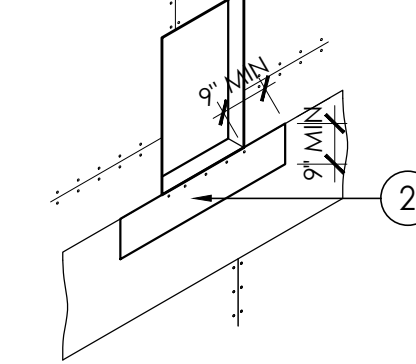
A8.01

W.R.B. & FLASHING SEQUENCE AT BUILDING PENETRATIONS

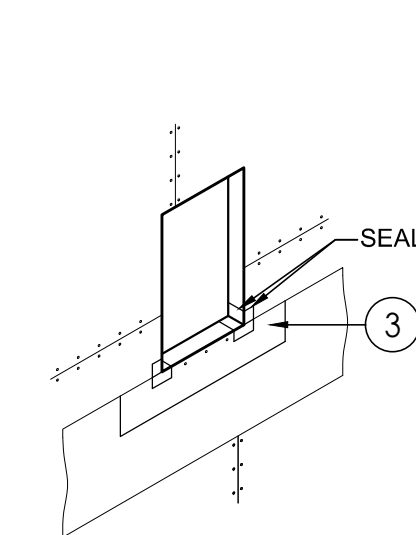
***NOTE:**
CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL MATERIALS USED IN PENETRATION FLASHING SEQUENCE. USE SIMILAR METHODS AT EACH BUILDING PENETRATION.



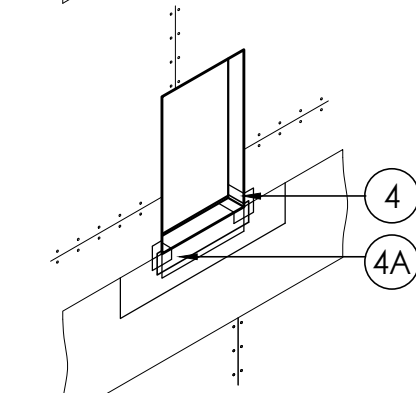
1 WEATHER-RESISTIVE BARRIER MATERIAL AT SILL:
INSTALL ONE COURSE OF WEATHER-RESISTIVE BARRIER AT SILL. FASTEN ONLY THE TOP OF WEATHER-RESISTIVE BARRIER TO SUBSTRATE, TO ALLOW (FOLLOWING) LOWER COURSE OF WEATHER RESISTIVE BARRIER TO GO UNDERNEATH.



2 BASE FLASHING - SILL:
INSTALL WATER-RESISTANT BASE FLASHING (FORTIFIBER "NEXT") AT SILL, ON TOP OF WEATHER-RESISTIVE BARRIER.



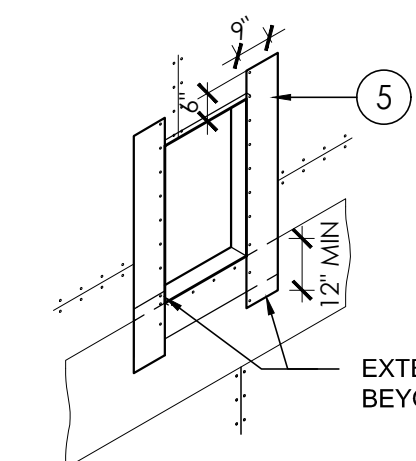
3 CORNER SHIELD:
FASTEN PRE-FORMED CORNER SHIELDS IN BEAD OF SEALANT AT JAMB TO FRAMING. CUT TO FIT TIGHT TO EXISTING LINER. DO NOT NAIL THROUGH SILL.



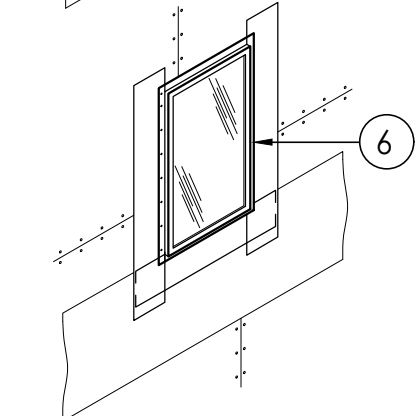
4 SILL WRAP:
INSTALL SELF-ADHESIVE SILL WRAP FLASHING (FORTIFIBER "FORTIFLASH") AT SILL, ON TOP OF BASE FLASHING AND CORNER SHIELDS. INSTALL UP TO LINER.



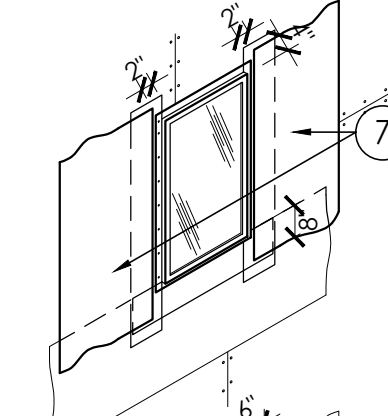
4A SILL PAN:
METAL SILL PAN WITH VERTICAL INTERIOR LIP OVER SILL WRAP



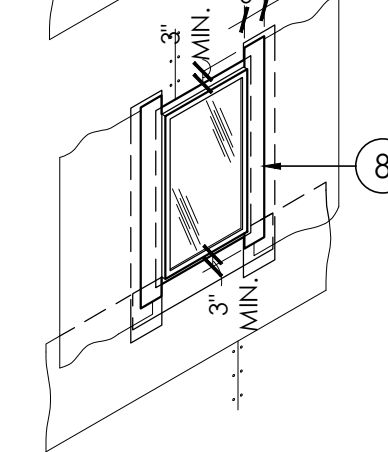
5 VERTICAL BASE FLASHING-JAMB:
INSTALL VERTICAL BASE FLASHING (FORTIFIBER "MOISTOP") OVER SILL FLASHING.
EXTEND JAMB FLASHING BEYOND SILL FLASHING



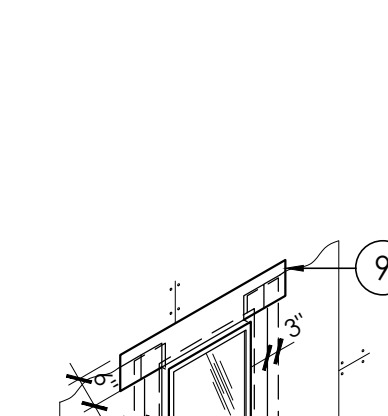
6 WINDOW FLANGE W/ SILICONE SEALANT:
APPLY CONTINUOUS BEAD OF SILICONE SEALANT (ASTM C-920 TYPE "3" GRADE N.S. CLASS 25) ALONG TOP, SIDES AND BOTTOM OF WINDOW FLANGE. DO NOT NAIL AT WINDOW HEAD. INSTALL WINDOW IN OPENING PER MANUFACTURER'S SPECIFICATIONS.



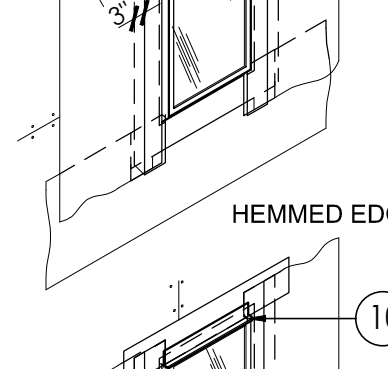
7 BLEEDER STRIPS AT JAMBS:
INSTALL ONE COURSE OF WEATHER-RESISTIVE BARRIER VERTICALLY AT JAMBS. OFFSET EDGE OF WEATHER-RESISTIVE BARRIER 2" FROM ROUGH OPENING.



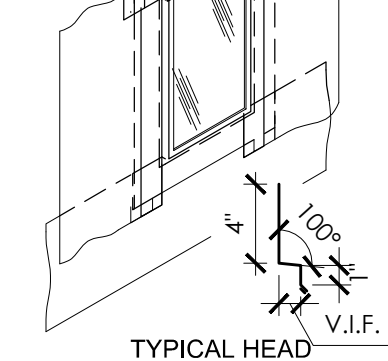
8 SELF-ADHESIVE JAMB FLASHING:
WIPE CLEAN NAILING FLANGE AND BASE FLASHING. APPLY 6" WIDE SELF-ADHESIVE JAMB FLASHING (FORTIFIBER "MOISTOP FORTIFLASH") OVER NAILING FLANGE. APPLY FIRM PRESSURE WITH A ROLLER ALONG ENTIRE SELF-ADHESIVE STRIP TO ENSURE A CONTINUOUS SEAL.



9 SELF-ADHESIVE HEAD MEMBRANE FLASHING:
WIPE CLEAN THE WINDOW FLANGE, PREVIOUS FLASHING LAYERS AND SUBSTRATE. APPLY 9" WIDE SELF-ADHESIVE HEAD FLASHING (FORTIFIBER "MOISTOP EZ-SEAL") OVER THE WINDOW FLANGE, BASE FLASHING AND SELF-ADHESIVE JAMB FLASHING. USING A ROLLER, APPLY FIRM PRESSURE ALONG THE ENTIRE SELF-ADHESIVE STRIP TO ENSURE A CONTINUOUS SEAL.



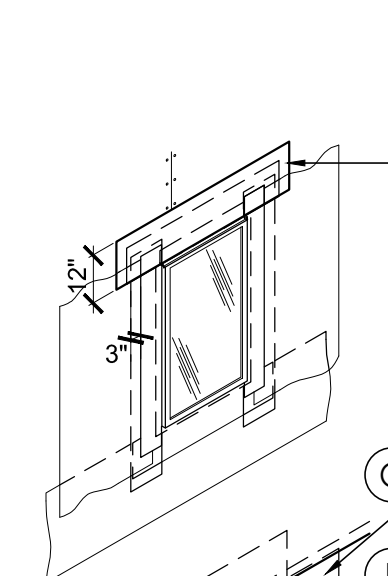
10 TYPICAL 24 GA. METAL HEAD FLASHING:
PROVIDE END DAM AT BOTH ENDS OF HEAD FLASHING (SEE WINDOW HEAD DETAIL)



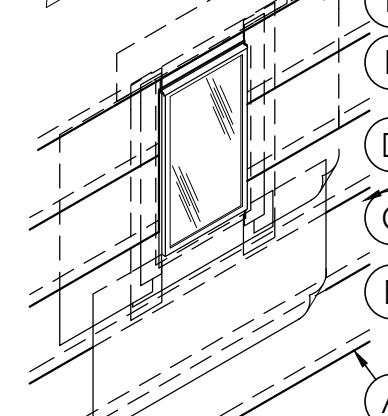
METAL SIDING APPLICATION:
APPLY METAL FLASHING DIRECTLY ABOVE WINDOW. EXTEND FLASHING BEYOND WINDOW FRAME 3/4" EACH SIDE, OR THE MINIMUM REQUIRED TO COVER 1/2" SEALANT JOINT.



TYPICAL HEAD FLASHING PROFILE



11 WATERPROOF HEAD FLASHING MEMBRANE:
INSTALL MEMBRANE (FORTIFIBER "FORTIFLASH") OVER METAL HEAD FLASHING. APPLY FIRM PRESSURE WITH A ROLLER ALONG THE ENTIRE SELF-ADHESIVE STRIP TO ENSURE A CONTINUOUS SEAL. FASTEN AT CORNERS AND MIDPOINT.

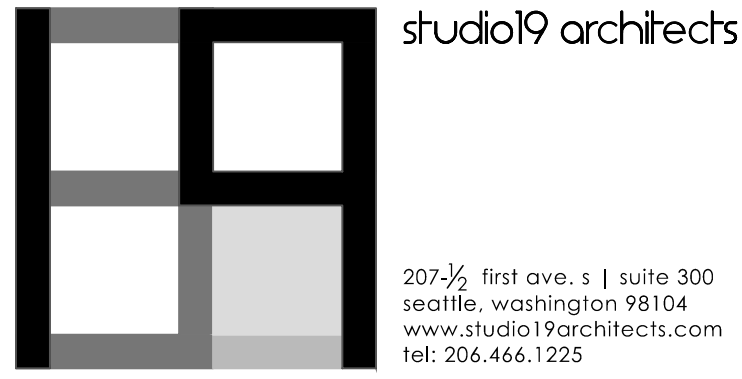


12 WEATHER-RESISTIVE BARRIER:
START AT THE BOTTOM OF THE WALL. LAY WEATHER-RESISTIVE BARRIER UP THE WALL, OVERLAPPING 1/2" ROLL + 4" MIN. HORIZ. AND 6" VERTICAL IN WEATHERBOARD FASHION. MAKE SURE THAT COURSE 'C' AND 'D' ARE PLACED UNDER THE SILL STRIP FLASHING AND JAMB FLASHING. ALIGN VERTICAL EDGE OF W.R.B. WITH SIDES OF HEAD FLASHING. (LETTERS REFER TO ORDER OF INSTALLATION)

MATERIAL NOTES

MATERIALS / SEQUENCING / INSTALLATION:

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIALS IN ACCORDANCE WITH ALL APPLICABLE COUNTY, AND LOCAL BUILDING AND FIRE CODES AS REQUIRED.
- ALL WOOD AND SONITUBE FORMS USED FOR CONCRETE IN THE GROUND OR BETWEEN FOUNDATION SILLS & THE GROUND SHALL BE REMOVED.
- WALL SILL PLATES SHALL BE PRESSURE TREATED WOOD AND MARKED BY AN APPROVED TESTING AGENCY. SILL PLATE TO BE CAULKED OR GASKETED TO FLOOR ASSEMBLY.
- FOUNDATION SILLS AND ALL OTHER WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED WOOD AND MARKED BY AN APPROVED TESTING AGENCY OR FOUNDATION GRADE CEDAR OR REDWOOD. PROVIDE POLYETHYLENE FOAM SILL GASKET BETWEEN FOUNDATION SILLS & CONCRETE.
- PROVIDE 90# FELT BETWEEN POSTS & CONCRETE.
- FLASHING AND COUNTER FLASHING TO BE MIN. 24 GAUGE OF CORROSION-RESISTANT METAL, AND SHALL BE INSTALLED IN COMPLIANCE WITH LOCAL BUILDING CODES AND MANUFACTURERS RECOMMENDATIONS.
- ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED OR CEDAR.
- ALL STRUCTURAL PANEL COMPONENTS OF THE RESIDENCE SHALL COMPLY WITH APPROPRIATE STANDARDS FOR THE EMISSION OF FORMALDEHYDE. THE BACK-DRAFTING OF COMBUSTION BY-PRODUCTS FROM COMBUSTION APPLIANCES SHALL BE MINIMIZED THROUGH THE USE OF DAMPERS, VENTS, OUTSIDE COMBUSTION AIR SOURCES, OR OTHER APPROPRIATE TECHNOLOGIES (RCW 19.27.19.1E)
- MOISTURE LEVELS OF ROOF STRUCTURE IN UNVENTED ASSEMBLIES TO BE CONTROLLED TO ENSURE A MOISTURE CONTENT LESS THAN 18% AT TIME OF COVERING.
- WATER PENETRATION OF ROOF IN UNVENTED ASSEMBLIES TO BE TESTED WITH A WATER-SPRAY TEST.

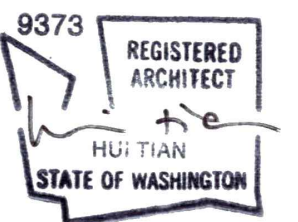


studio19 architects

207 1/2 first ave. s | suite 300
seattle, washington 98104
www.studio19architects.com
tel: 206.466.1225

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
MERCER ISLAND, WA 98040
USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MARK DATE DESCRIPTION

MUNICIPALITY REVIEW:
CITY OF MERCER ISLAND

PROJECT # 1907-103

SHEET TITLE: _____

WRB DETAILS

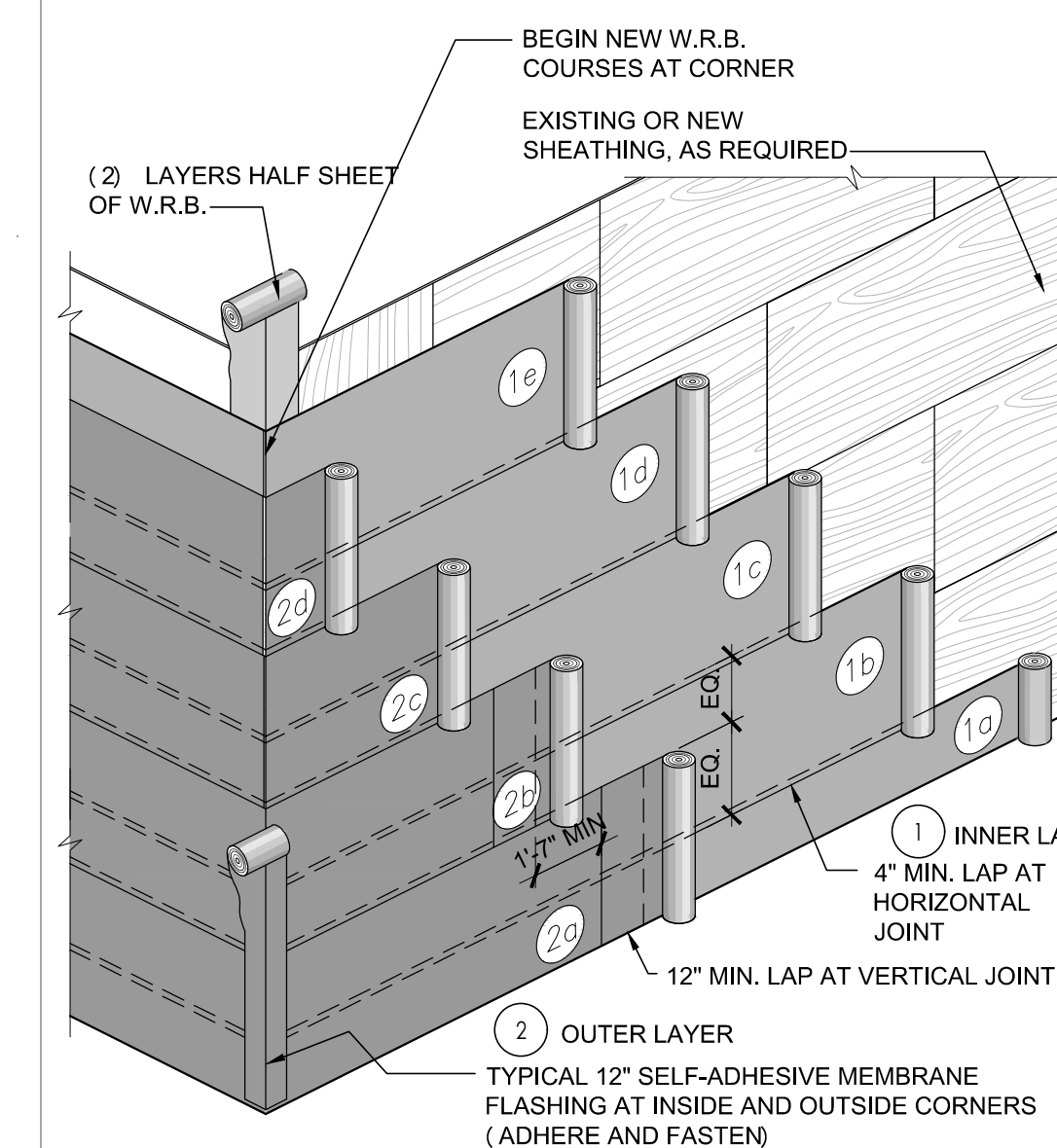
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

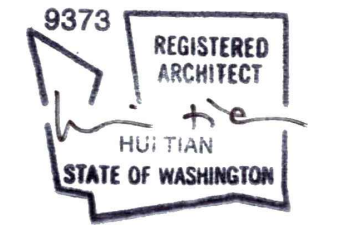
A8.02

TYPICAL SEQUENCING OF WEATHER RESISTIVE MEMBRANE PRIOR TO INSTALLATION OF EXTERIOR FINISH MATERIAL



CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

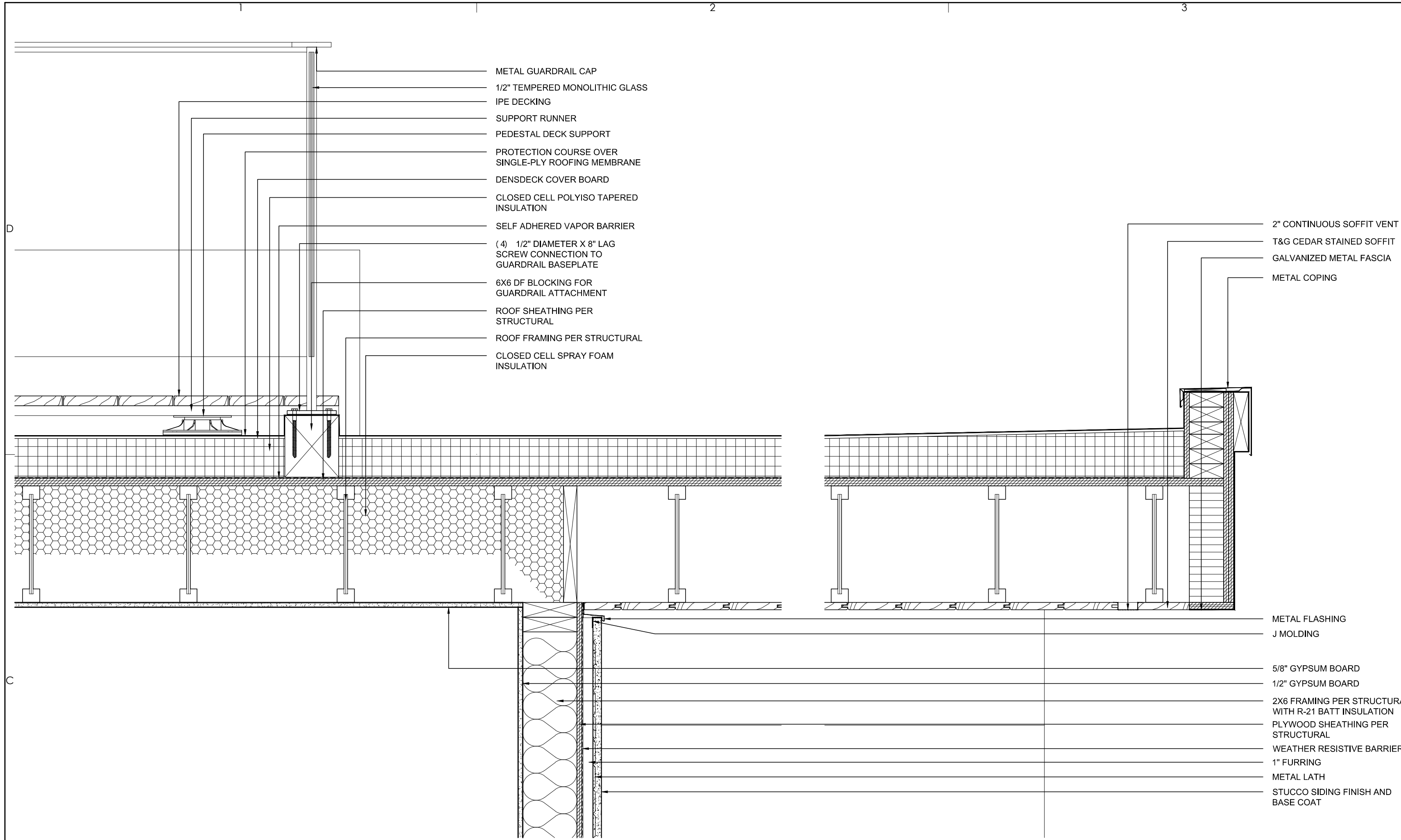
SHEET TITLE: _____

DETAILS

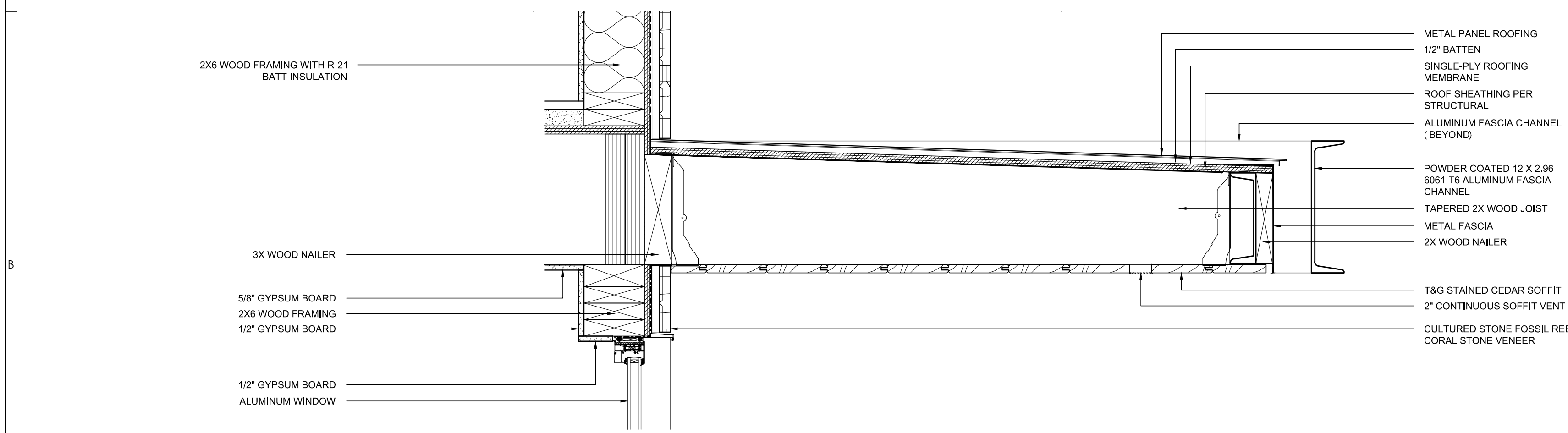
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

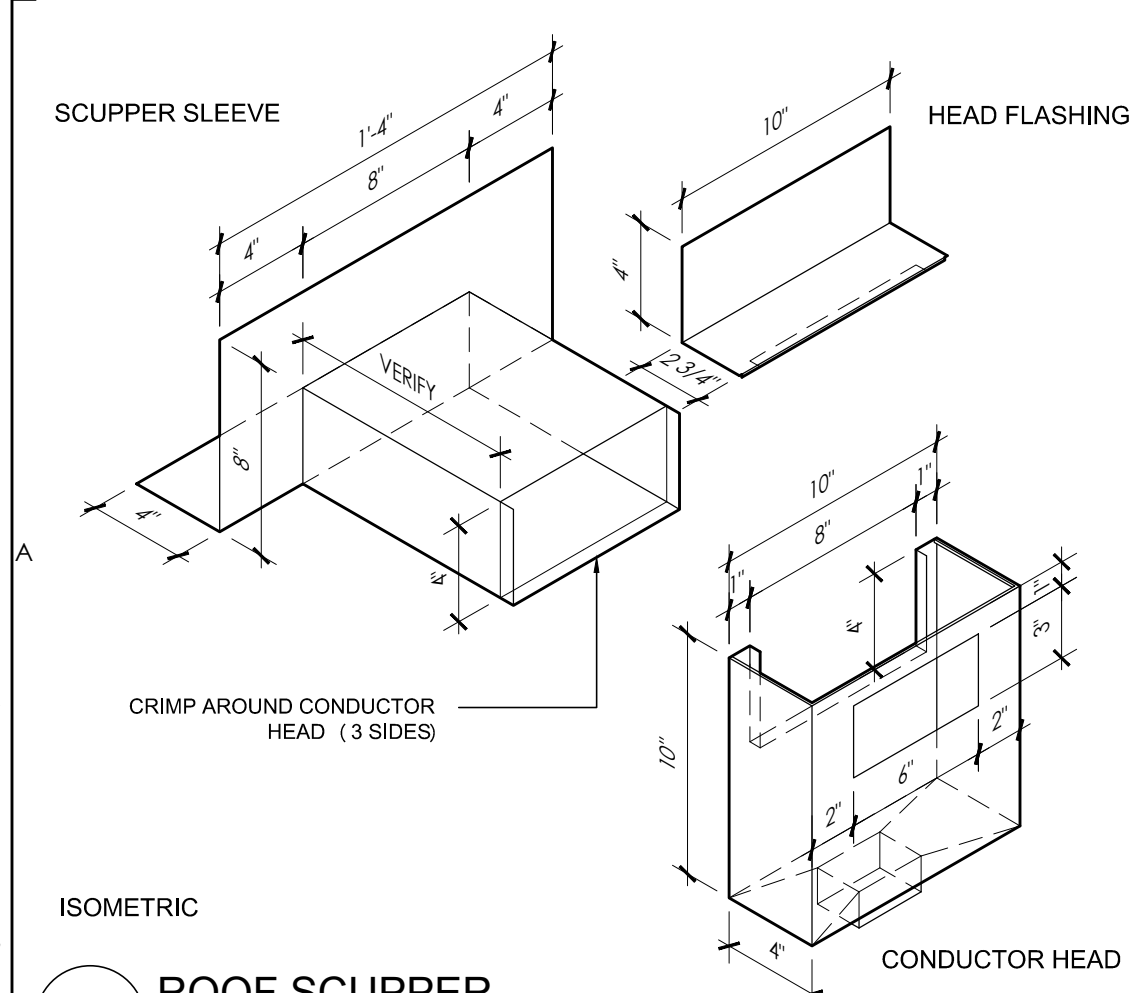
SHEET NUMBER: _____



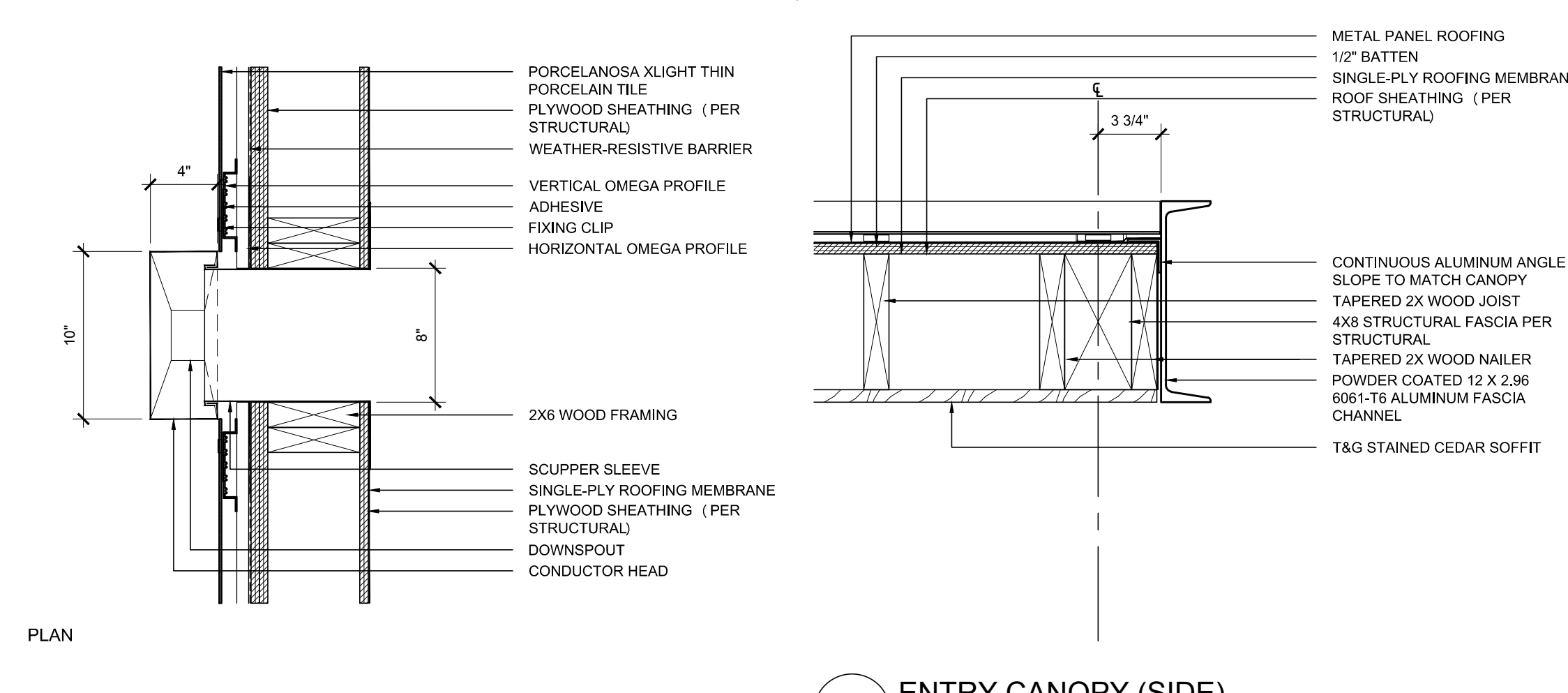
C1 RAILING AT ROOF DECK & ROOF OVERHANG
 SCALE: 1 1/2" = 1'-0"



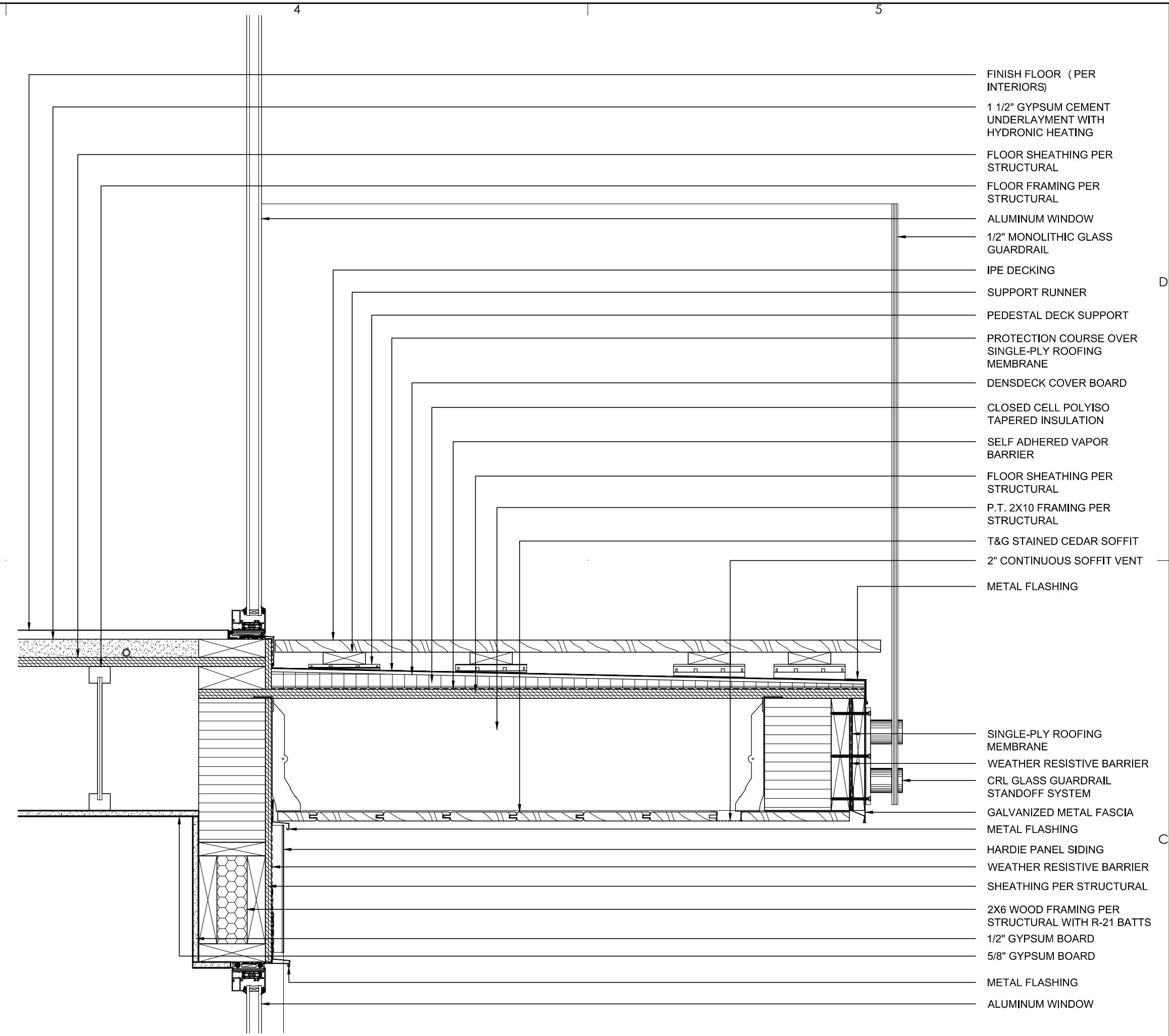
B1 ENTRY CANOPY
 SCALE: 1 1/2" = 1'-0"



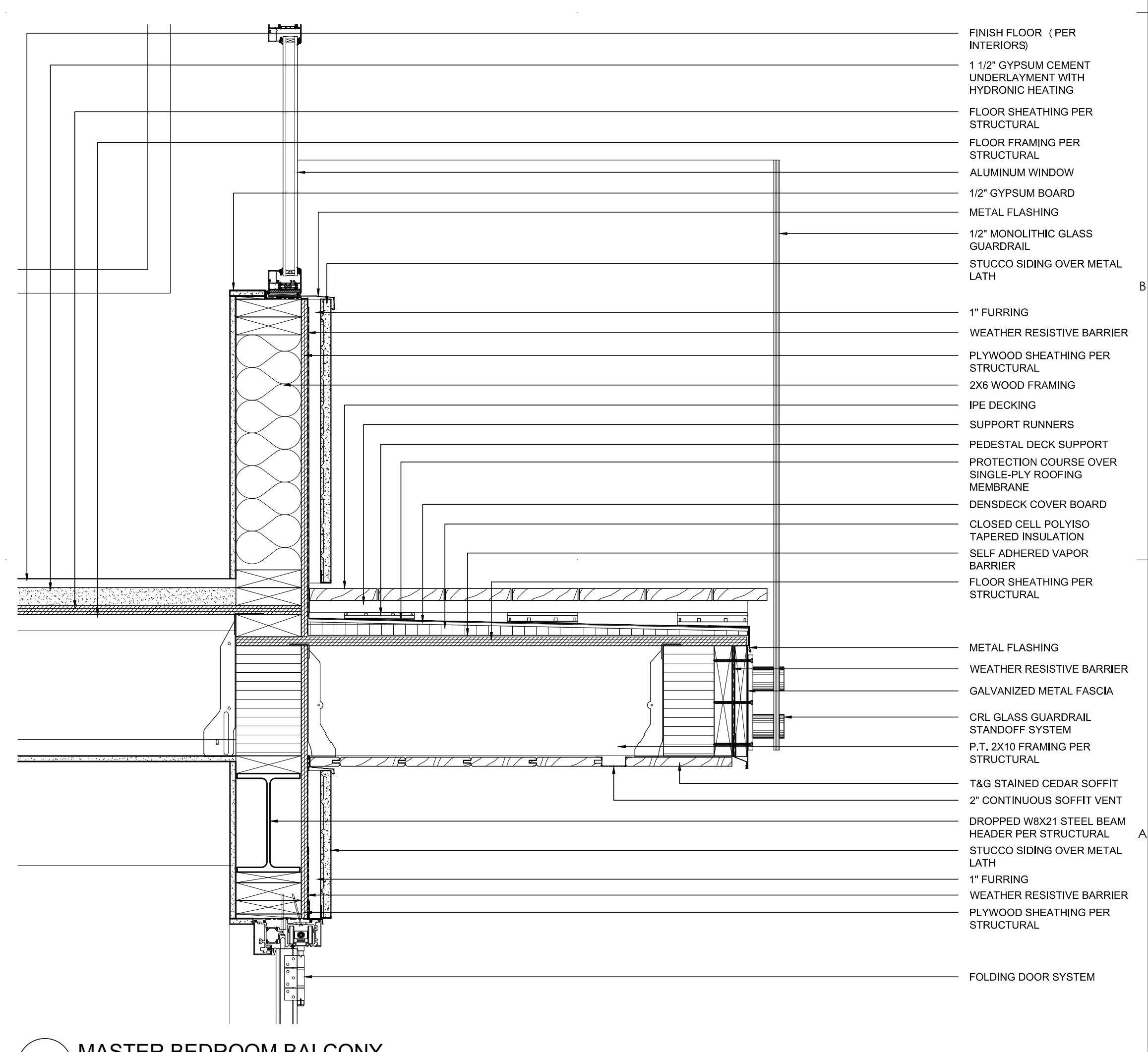
A1 ROOF SCUPPER
 SCALE: 1 1/2" = 1'-0"



A2 ENTRY CANOPY (SIDE)
 SCALE: 1 1/2" = 1'-0"

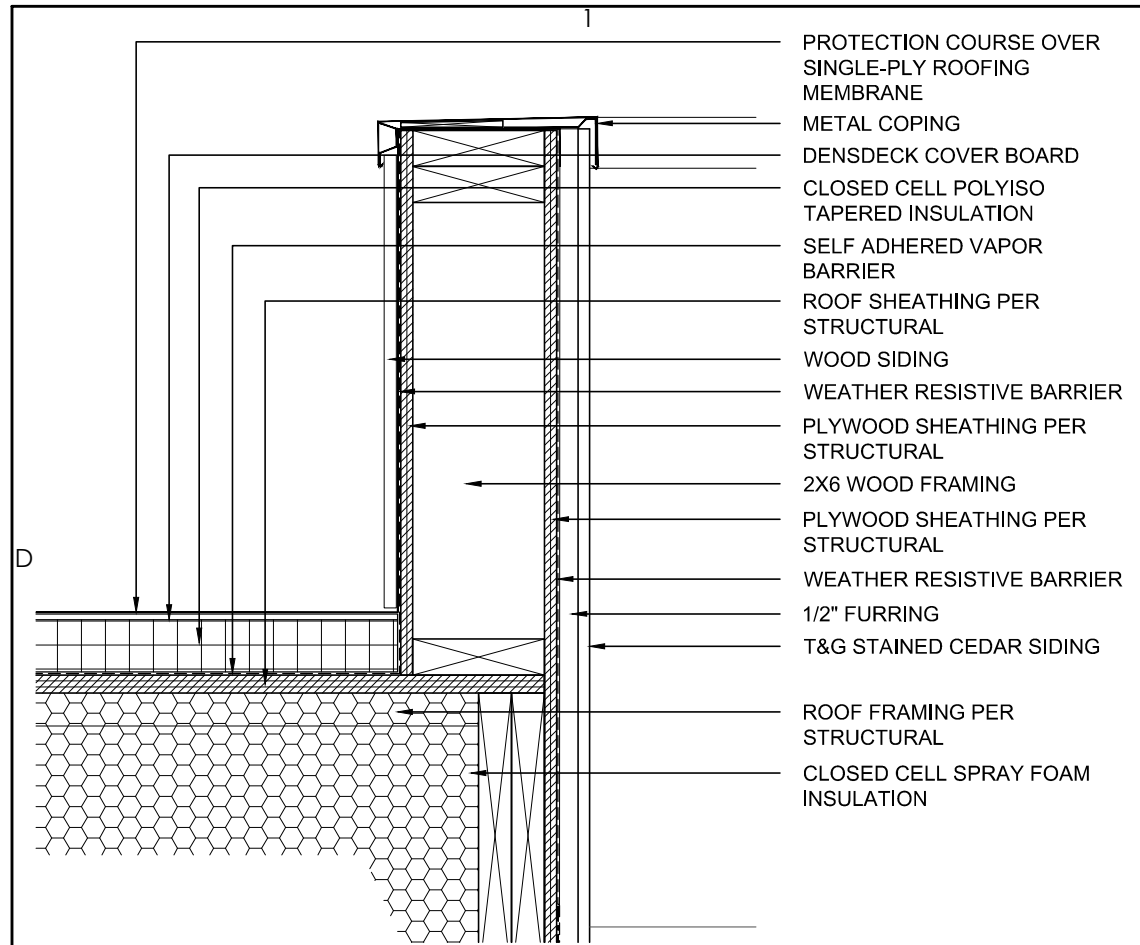


C2 SITTING AREA BALCONY
 SCALE: 1 1/2" = 1'-0"

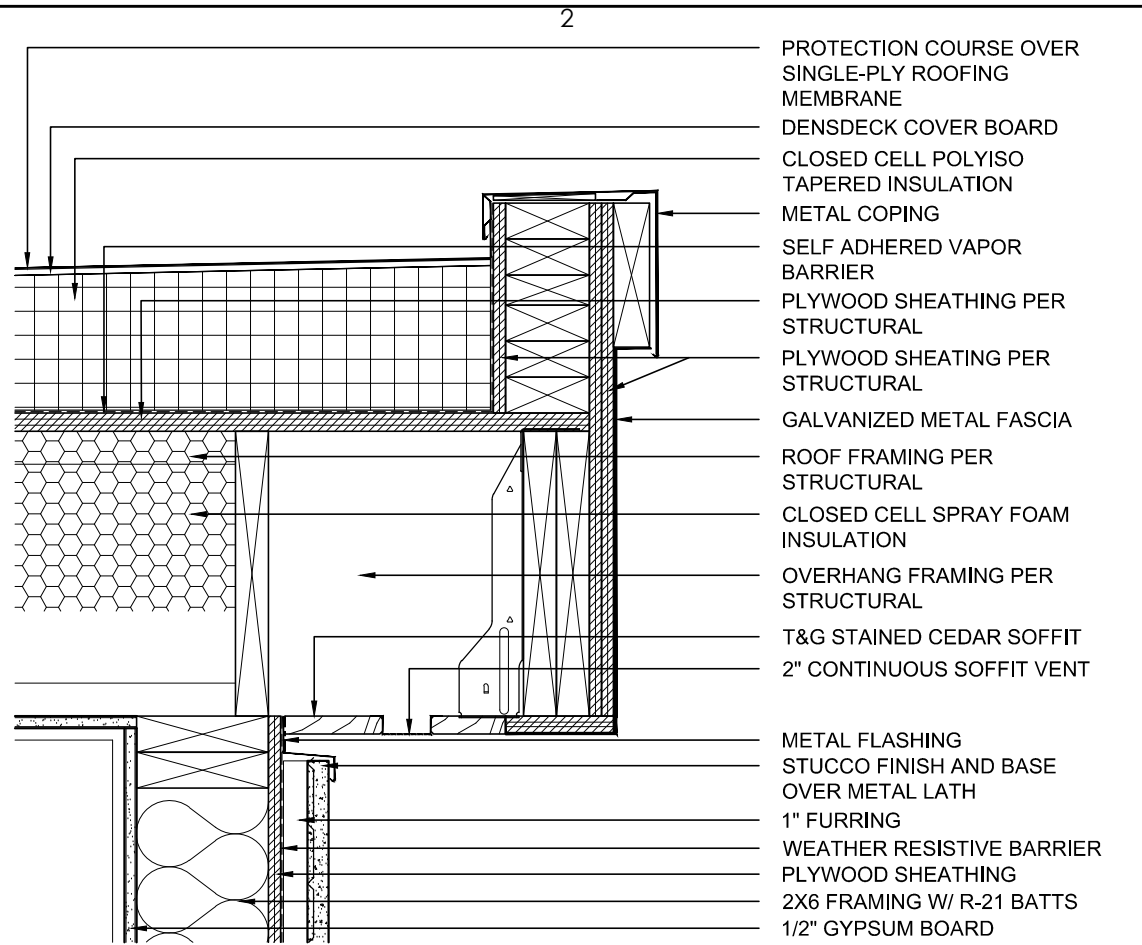


A3 MASTER BEDROOM BALCONY
 SCALE: 1 1/2" = 1'-0"

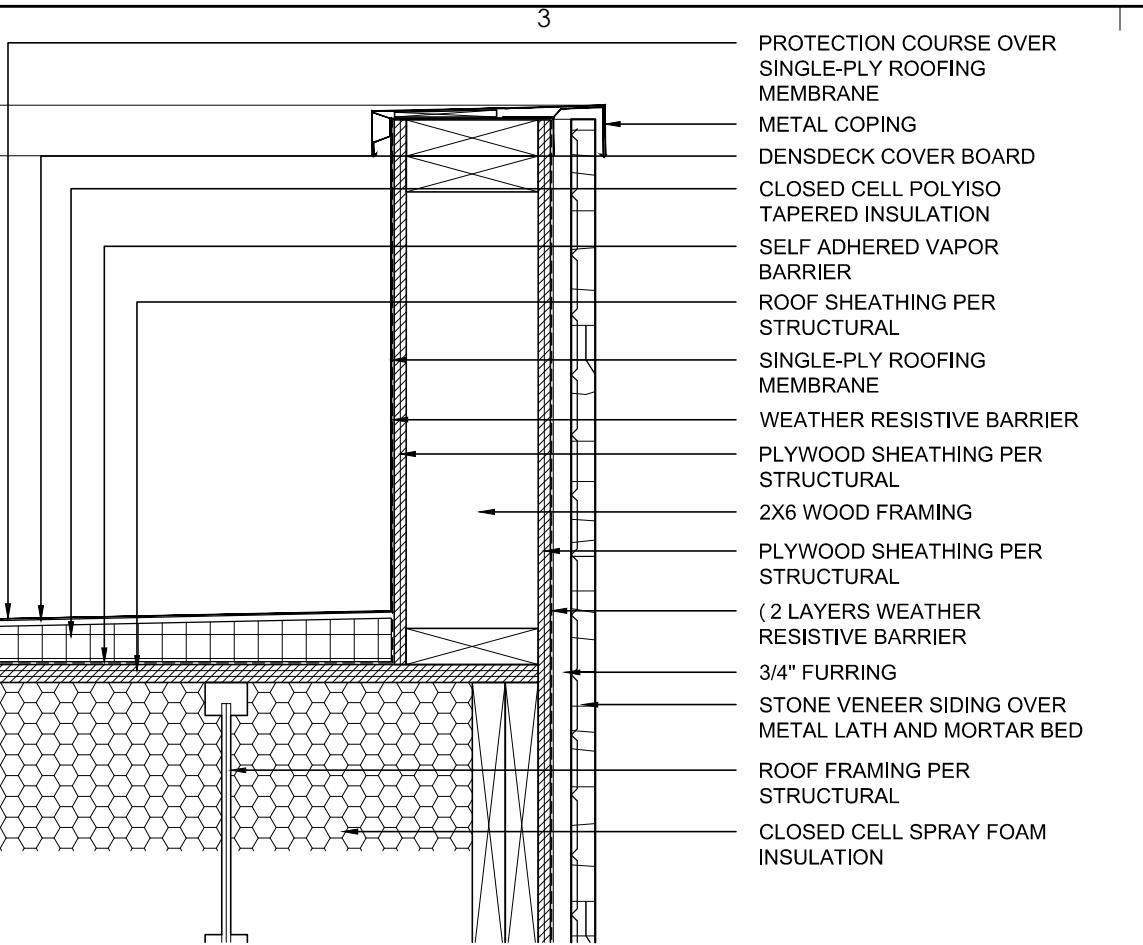
File: A802 Detail.dwg / Sheet: A802 / Plot Date: July 25, 2019



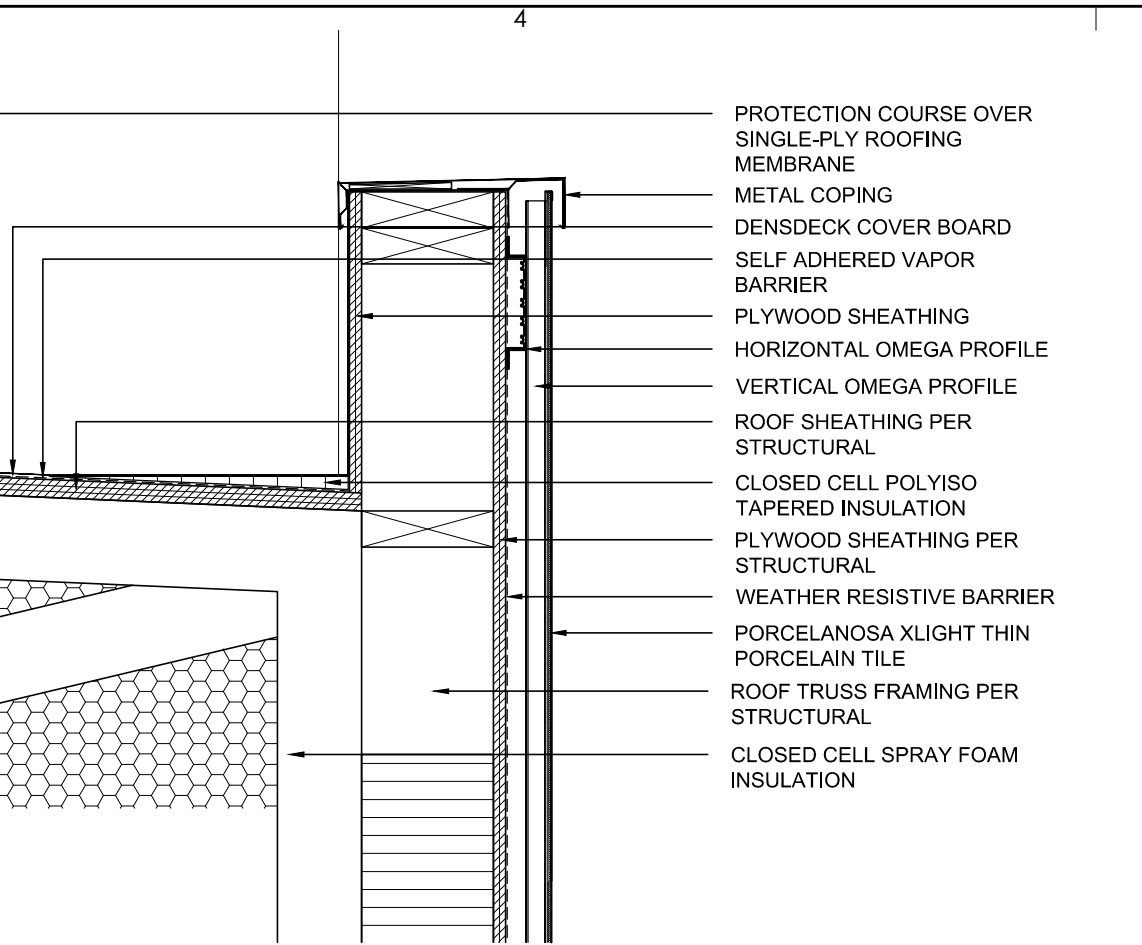
C1 PARAPET @ COURTYARD WOOD SIDING
 SCALE: 1 1/2" = 1'-0"



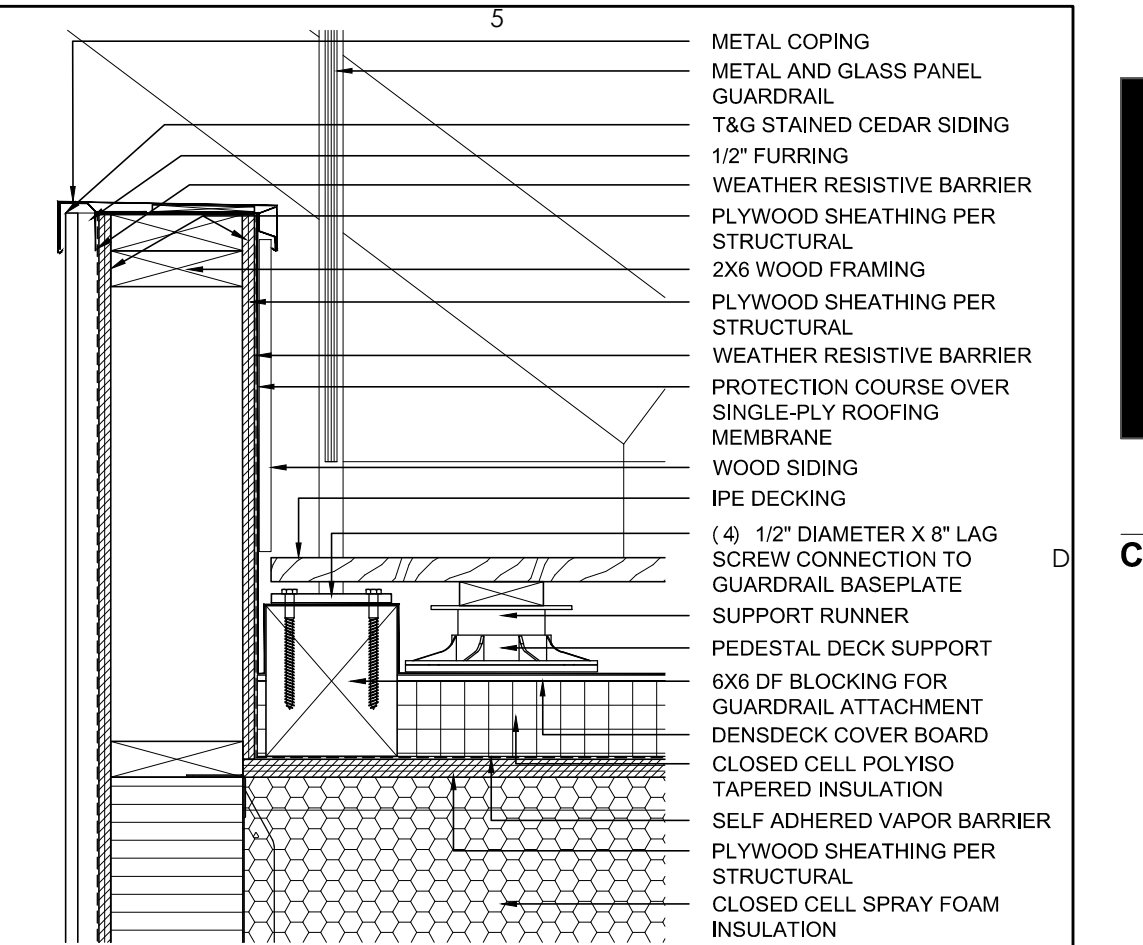
C2 EAST ROOF OVERHANG
 SCALE: 1 1/2" = 1'-0"



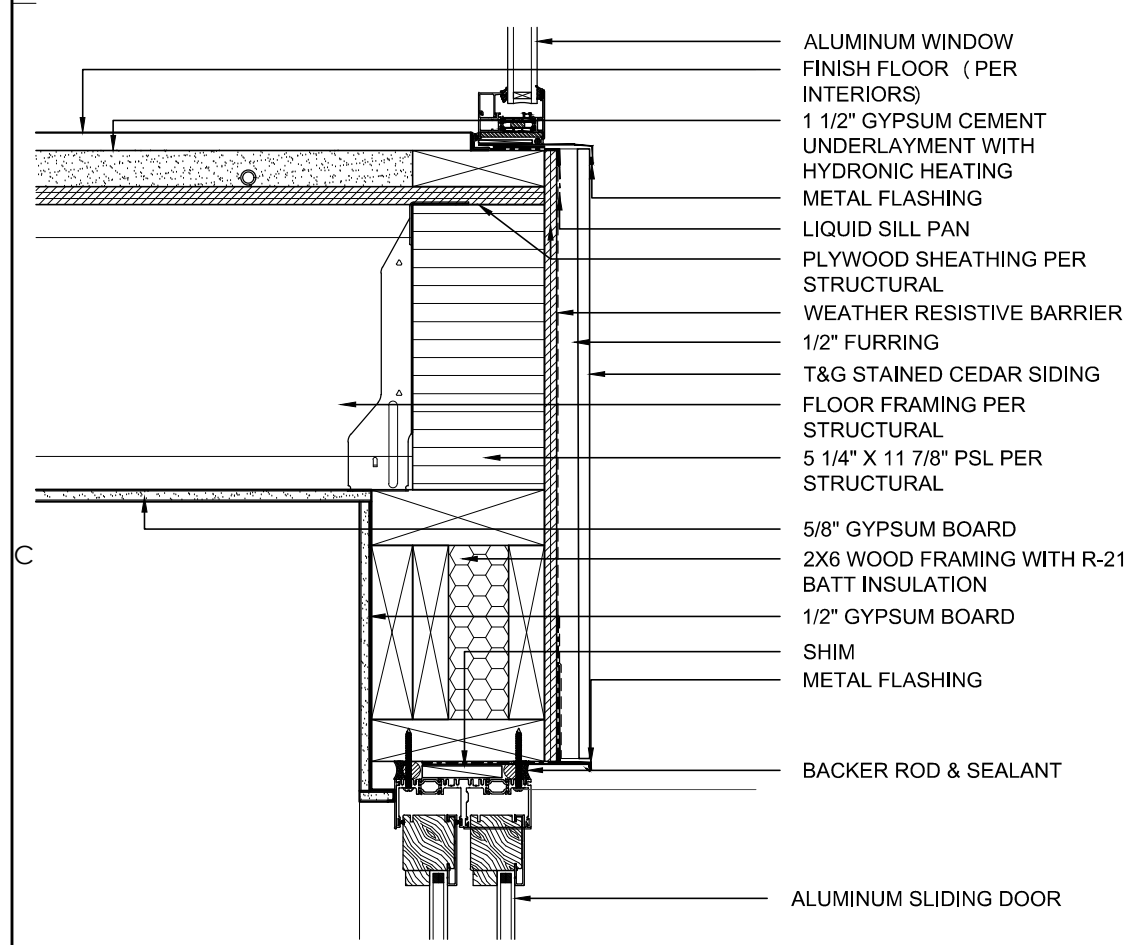
C3 PARAPET @ STONE VENEER
 SCALE: 1 1/2" = 1'-0"



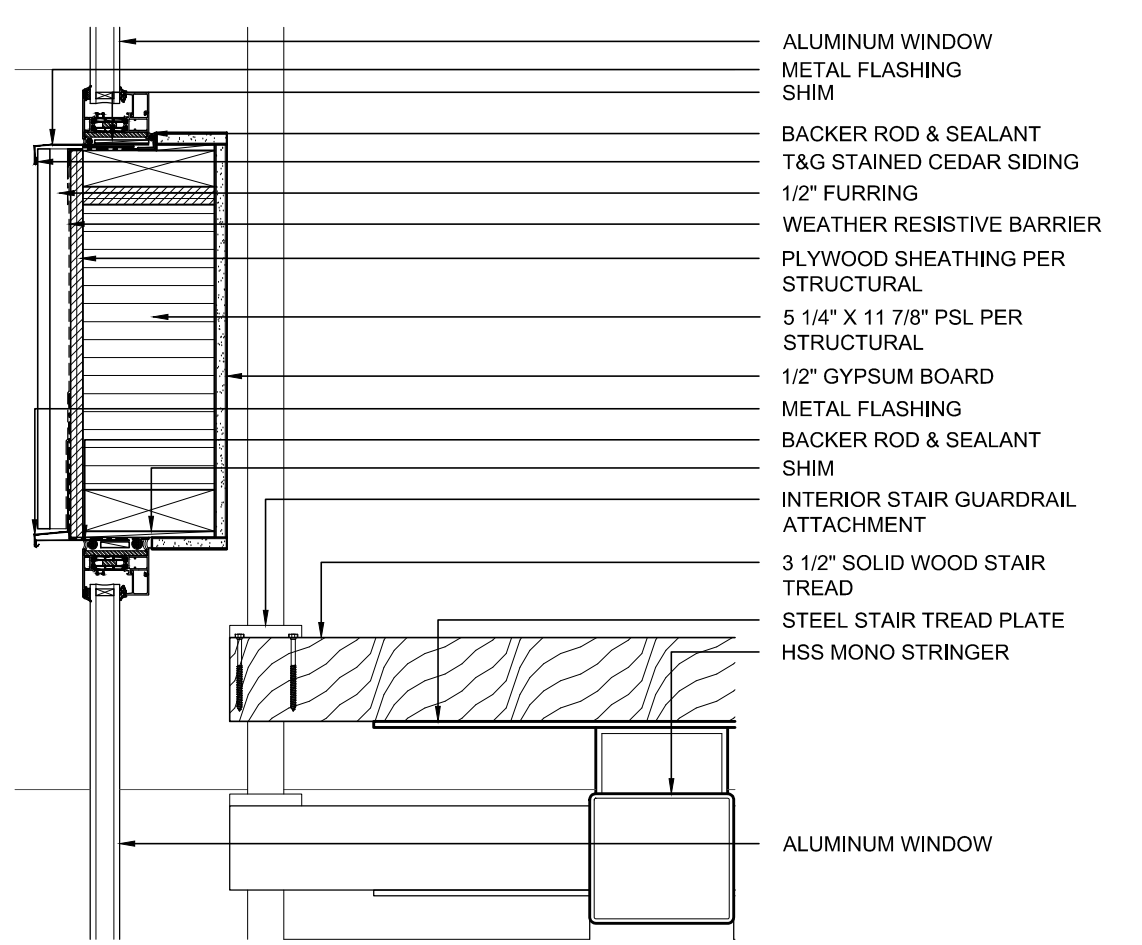
C4 PARAPET @ COURTYARD TILE SIDING
 SCALE: 1 1/2" = 1'-0"



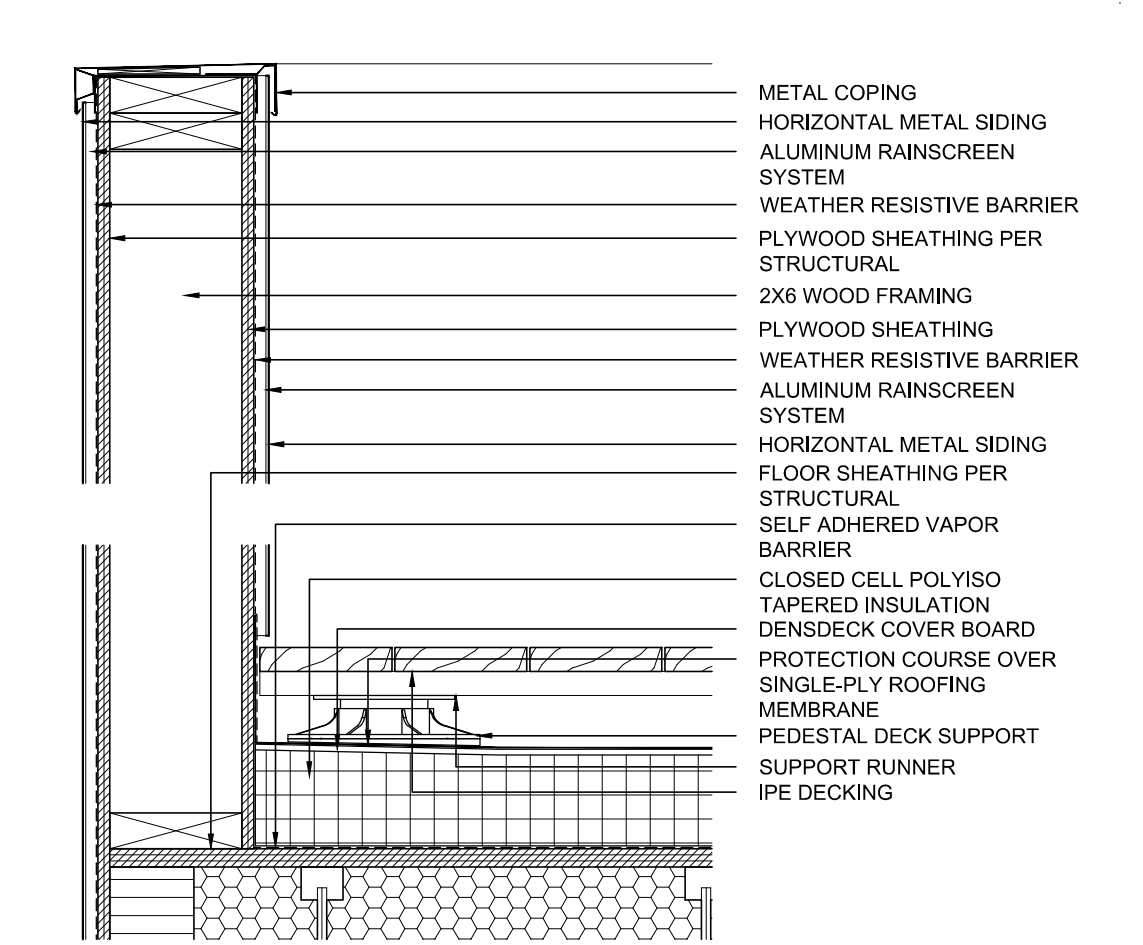
C5 PARAPET @ COURTYARD & ROOF DECK
 SCALE: 1 1/2" = 1'-0"



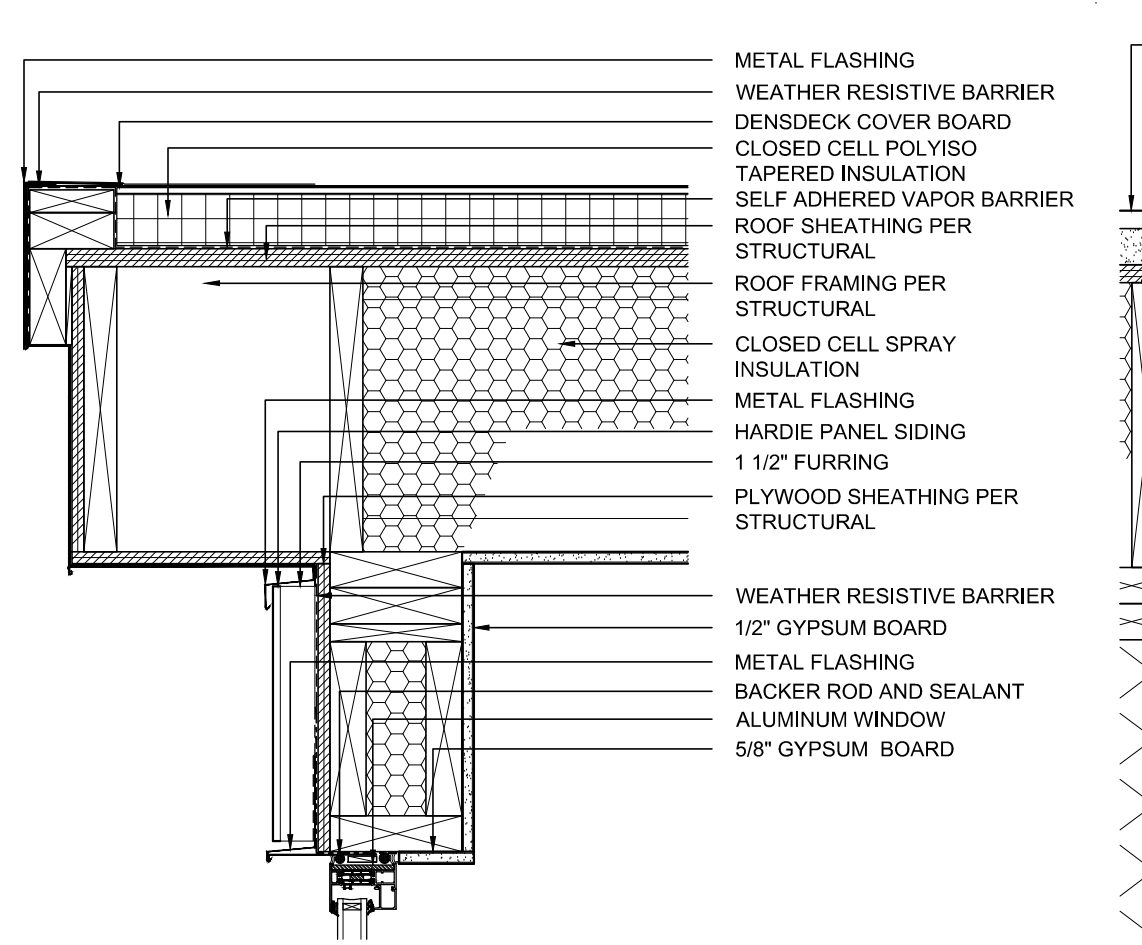
B1 COURTYARD WOOD SIDING (SOUTH)
 SCALE: 1 1/2" = 1'-0"



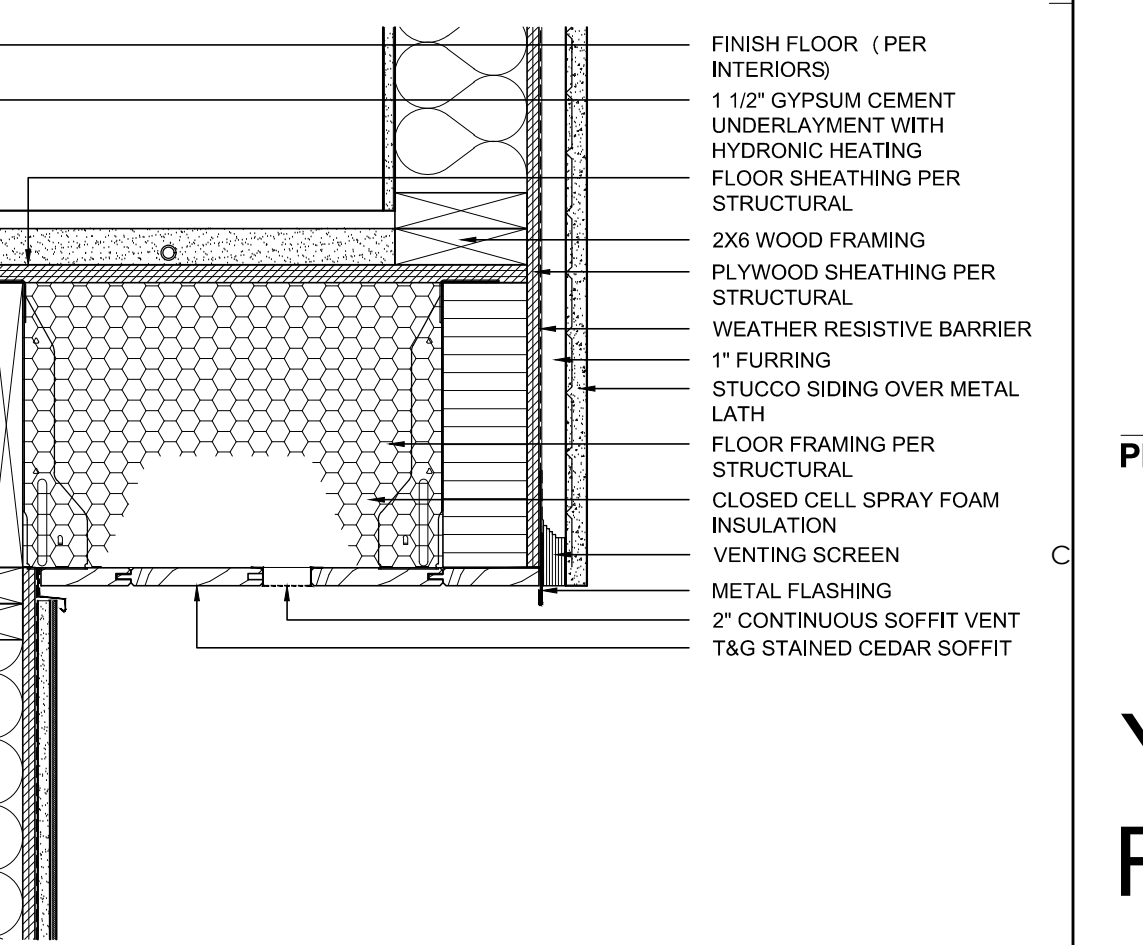
B2 COURTYARD WOOD SIDING (NORTH)
 SCALE: 1 1/2" = 1'-0"



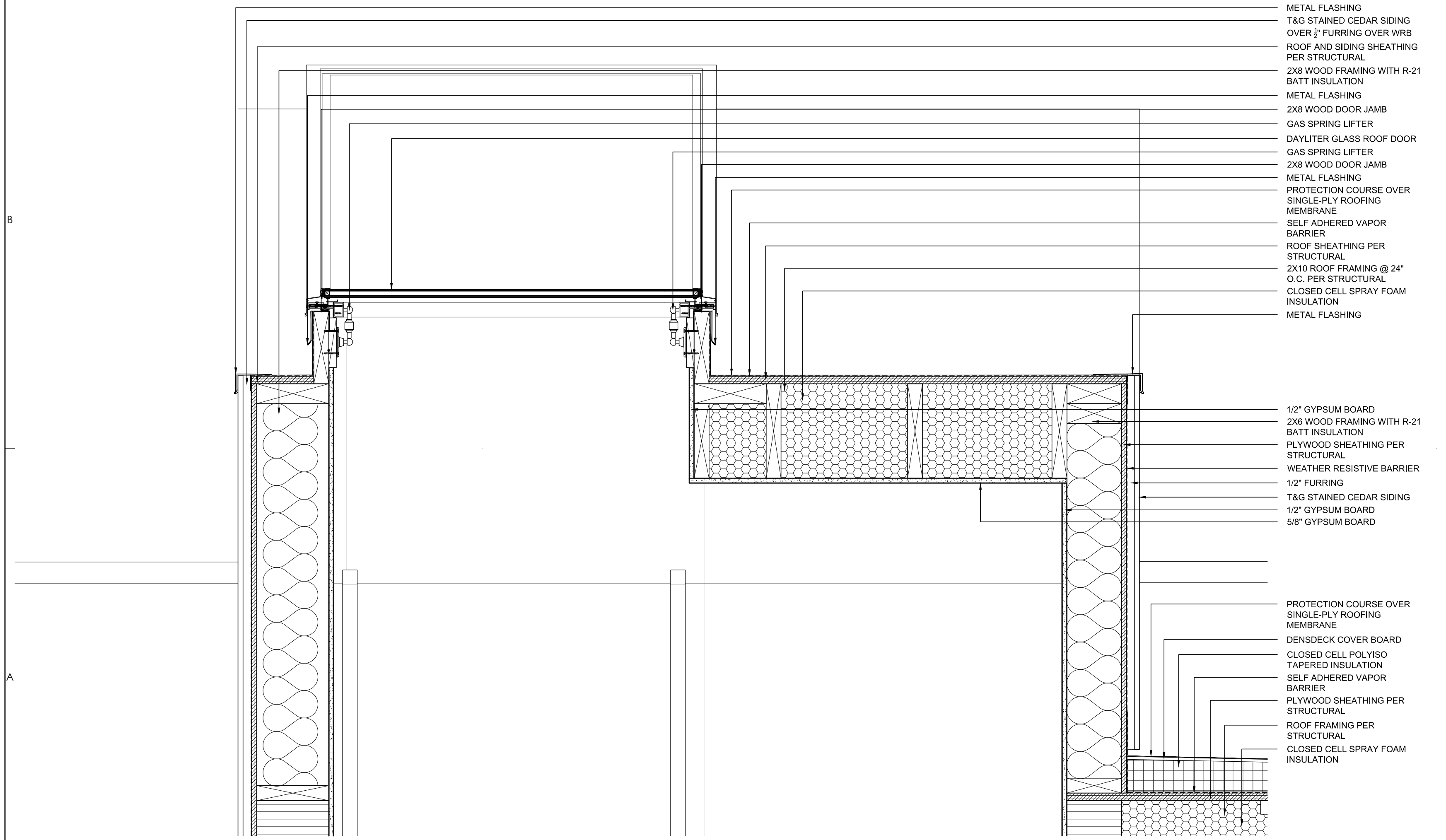
B3 PARAPET GUARDRAIL @ ROOF DECK
 SCALE: 1 1/2" = 1'-0"



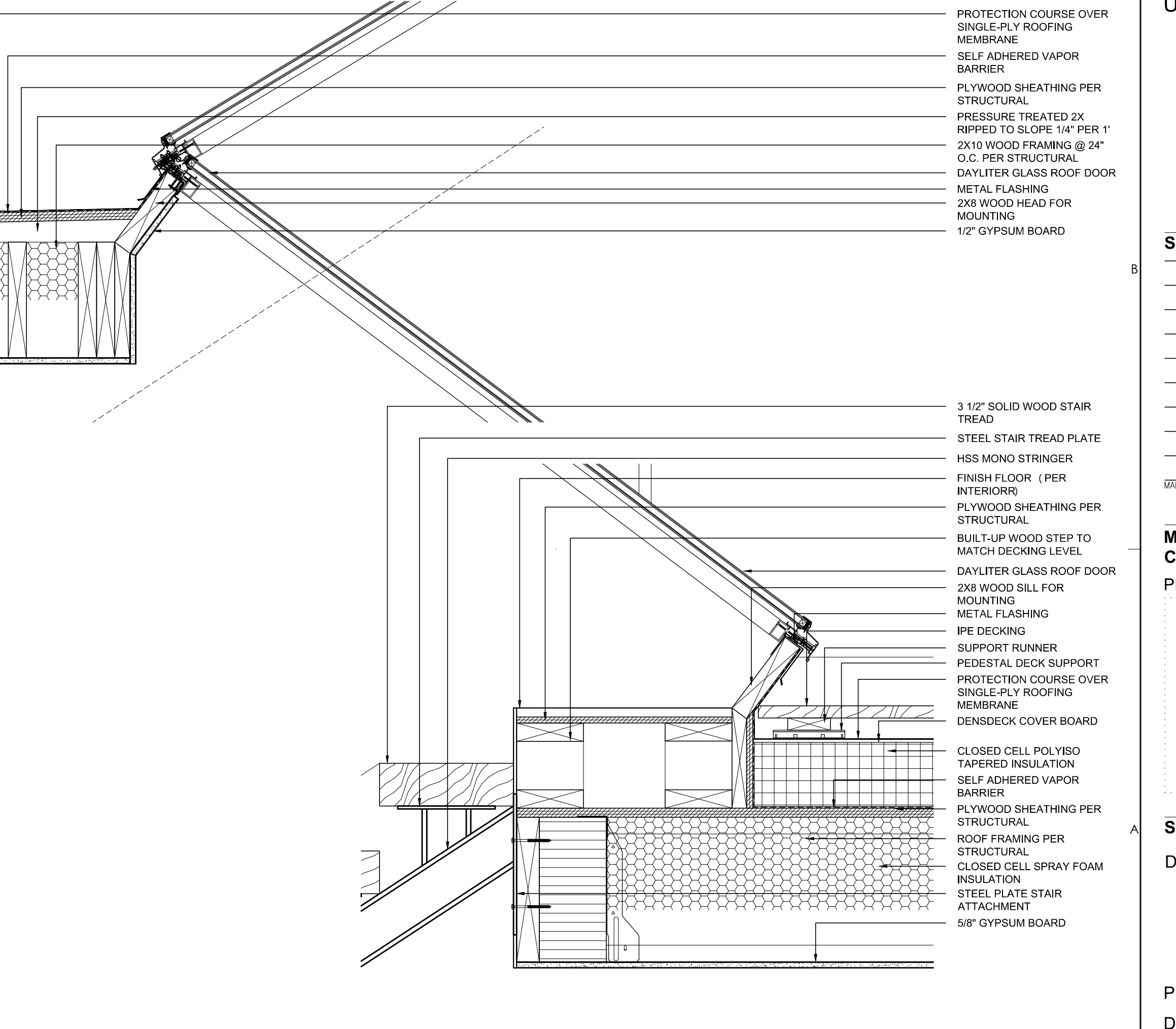
B4 SOUTH FLAT ROOF OVERHANG
 SCALE: 1 1/2" = 1'-0"



B5 HEATED SPACE OVER EXTERIOR
 SCALE: 1 1/2" = 1'-0"



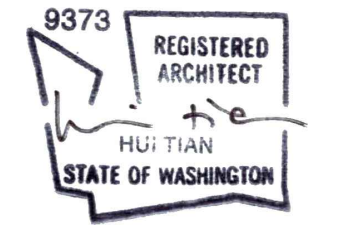
A1 ROOF DOOR SECTION
 SCALE: 1 1/2" = 1'-0"



A2 ROOF DOOR SECTION
 SCALE: 1 1/2" = 1'-0"

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND
 PROJECT # 1907-103

SHEET TITLE: _____

DETAILS

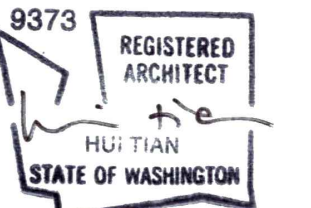
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

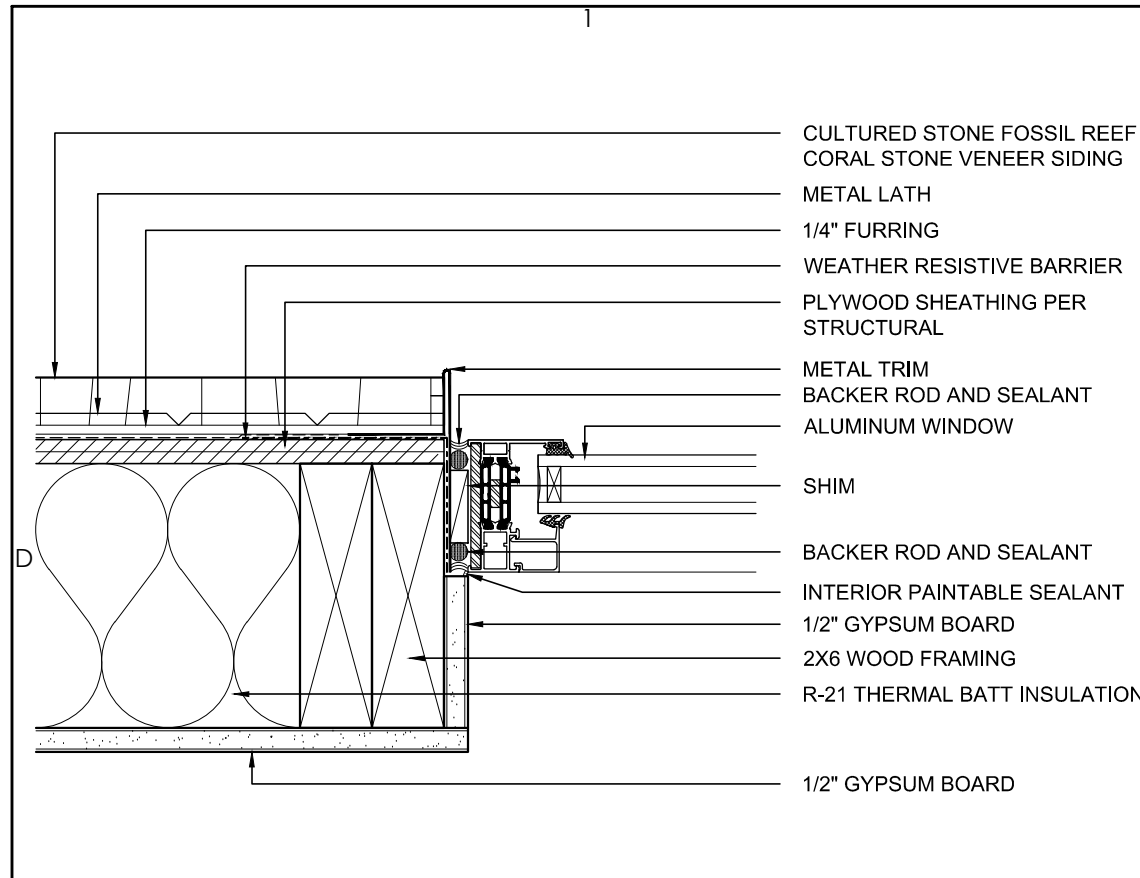
SHEET TITLE: _____

DETAILS

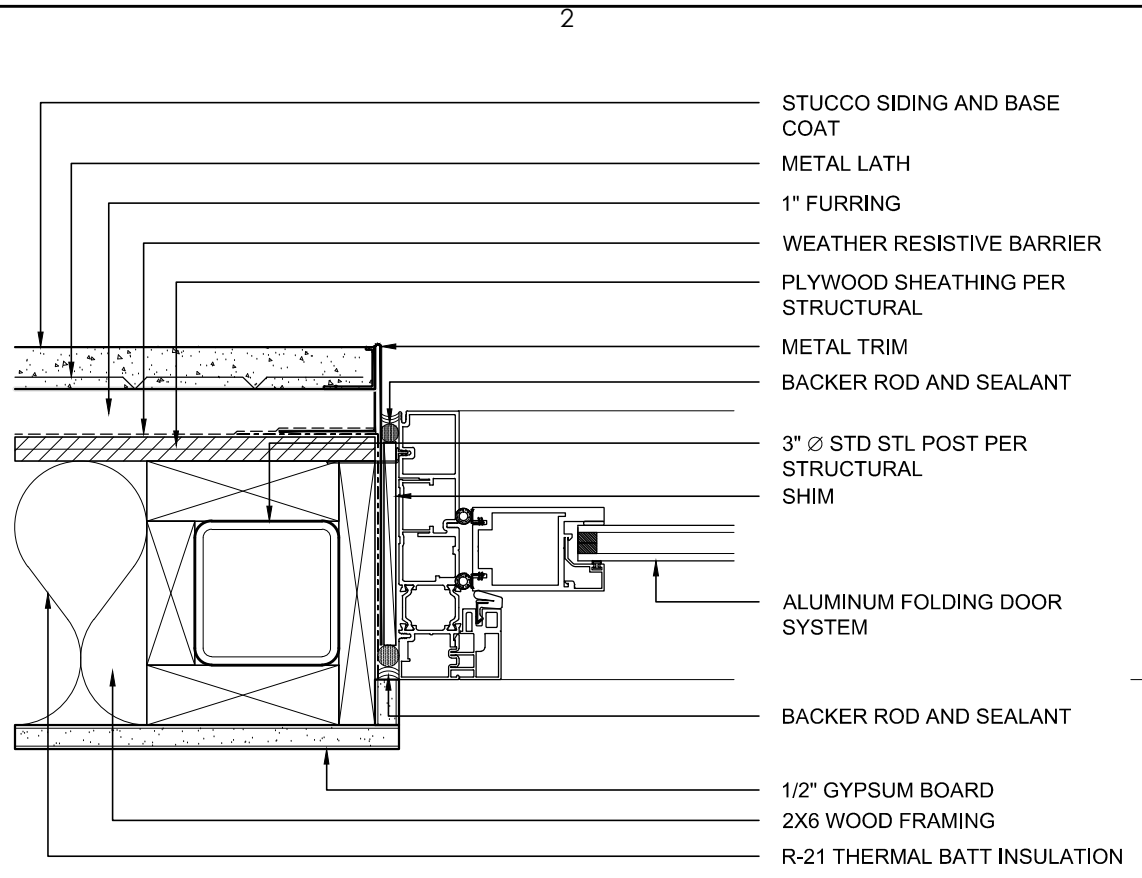
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

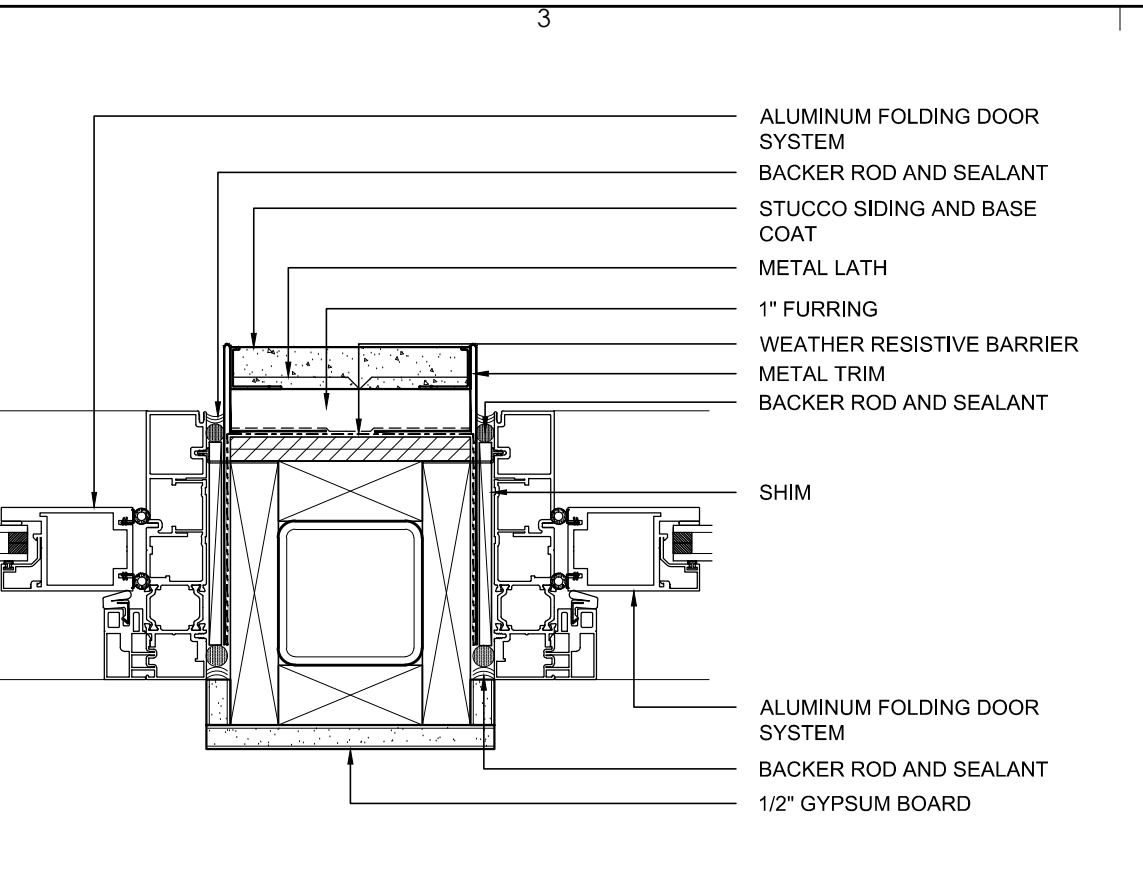
SHEET NUMBER: _____



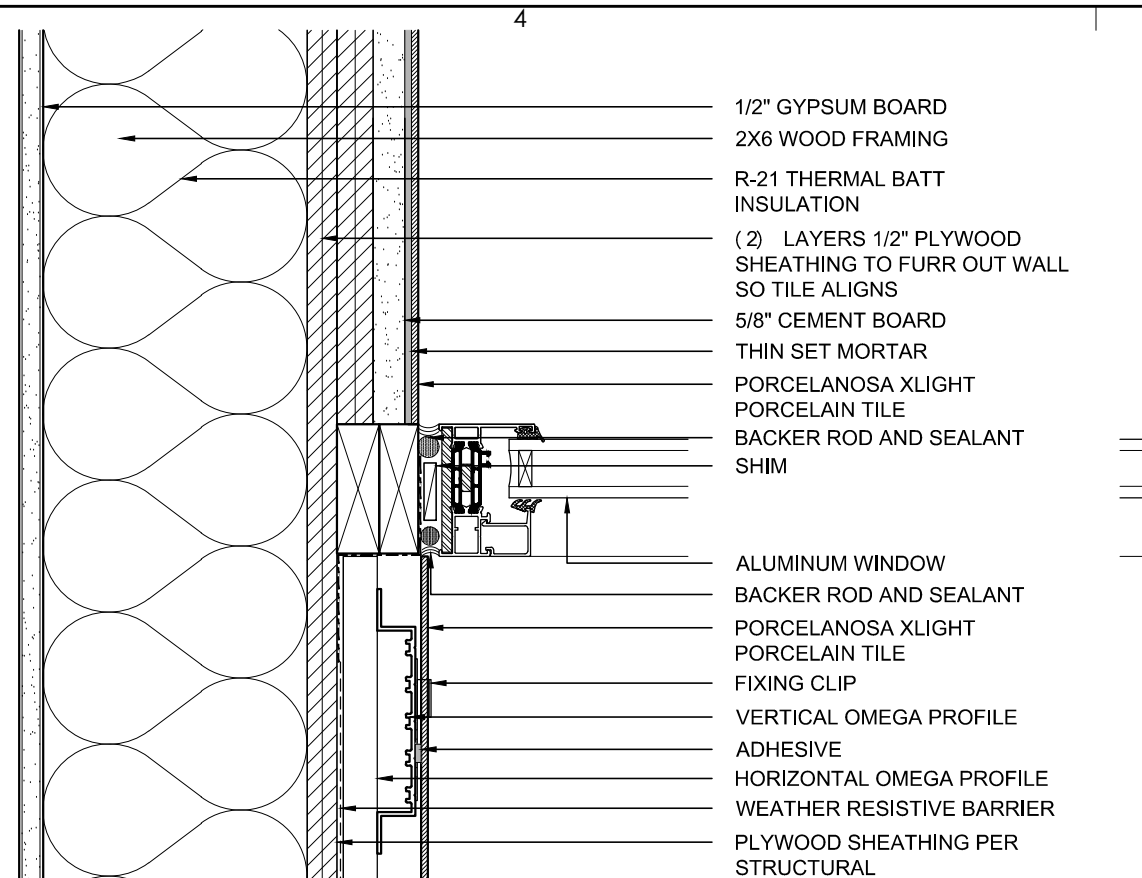
D1 WINDOW JAMB AT STONE VENEER
 SCALE: 3" = 1'-0"



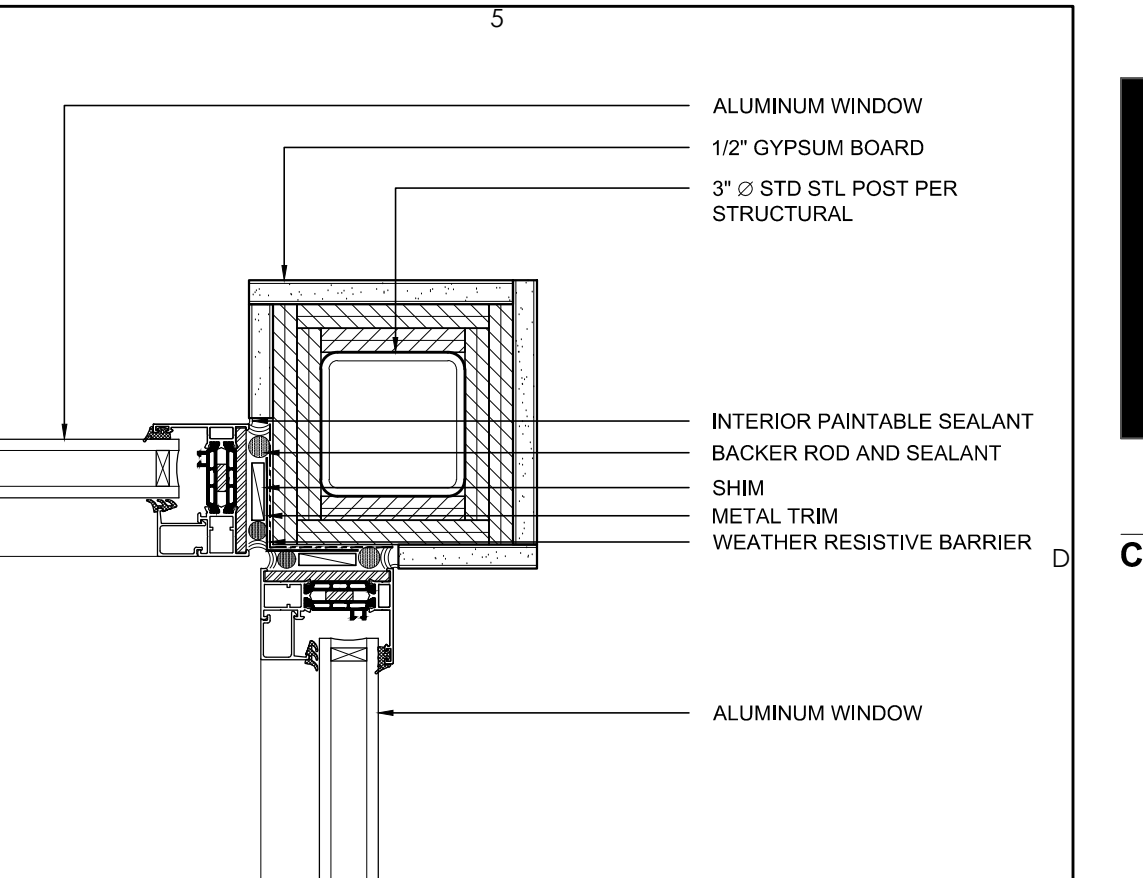
D2 FOLDING DOOR JAMB AT STUCCO
 SCALE: 3" = 1'-0"



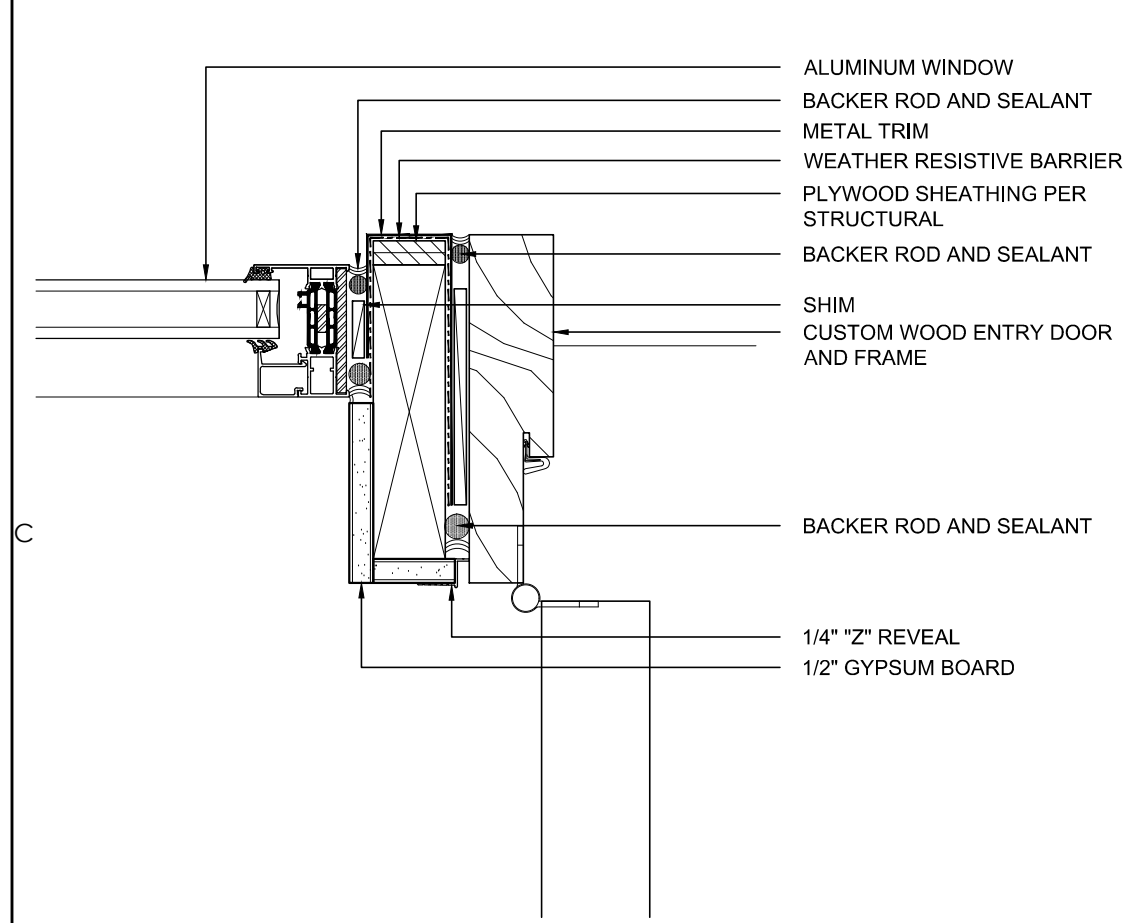
D3 FOLDING DOOR JAMBS AT METAL POST
 SCALE: 3" = 1'-0"



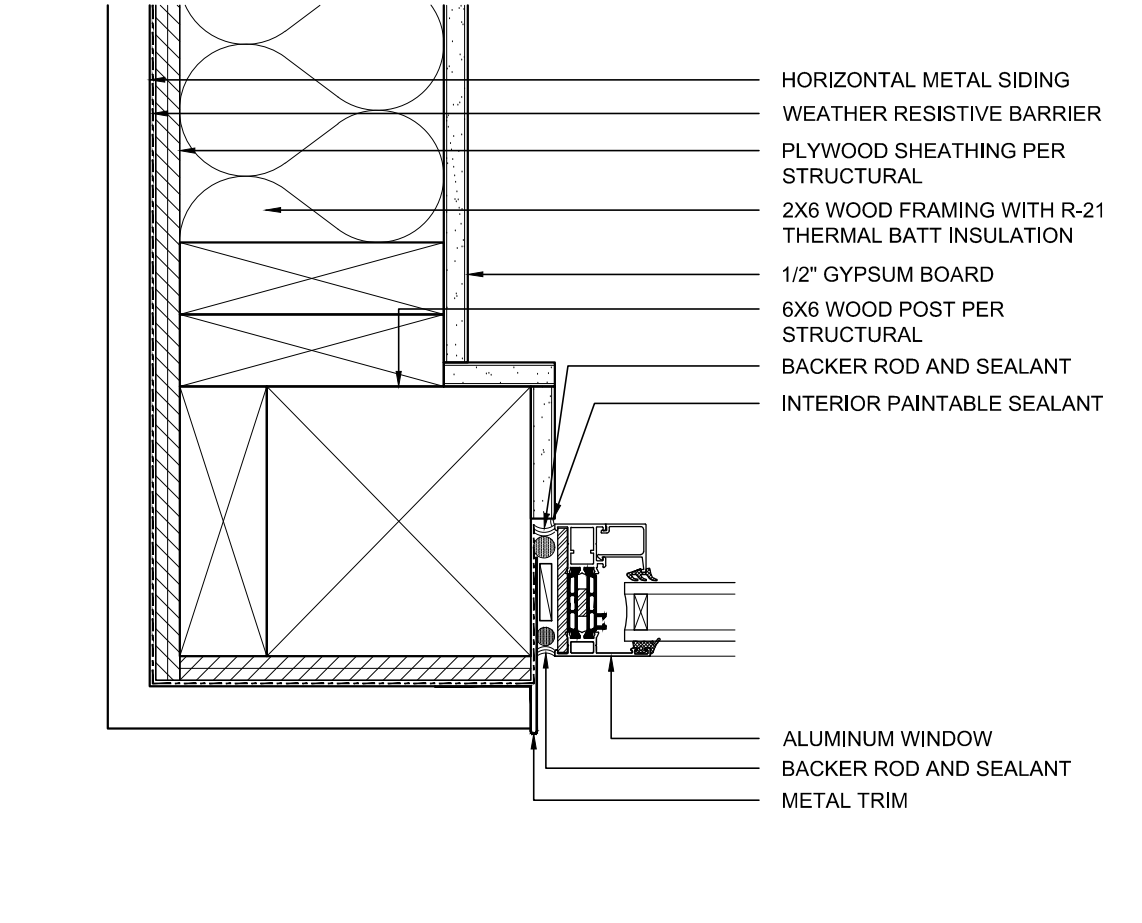
D4 WINDOW JAMB AT TILE TRANSITION
 SCALE: 3" = 1'-0"



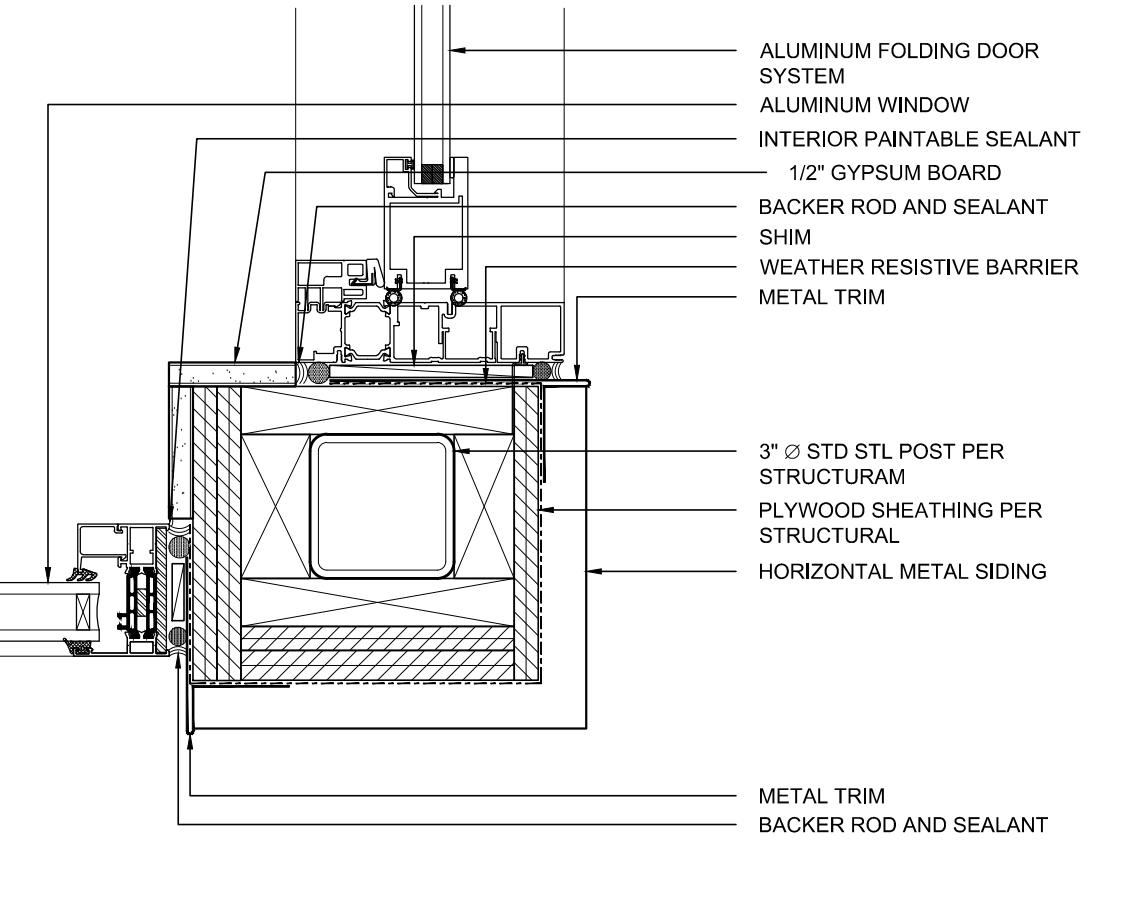
D5 WINDOW JAMBS AT INTERIOR POST
 SCALE: 3" = 1'-0"



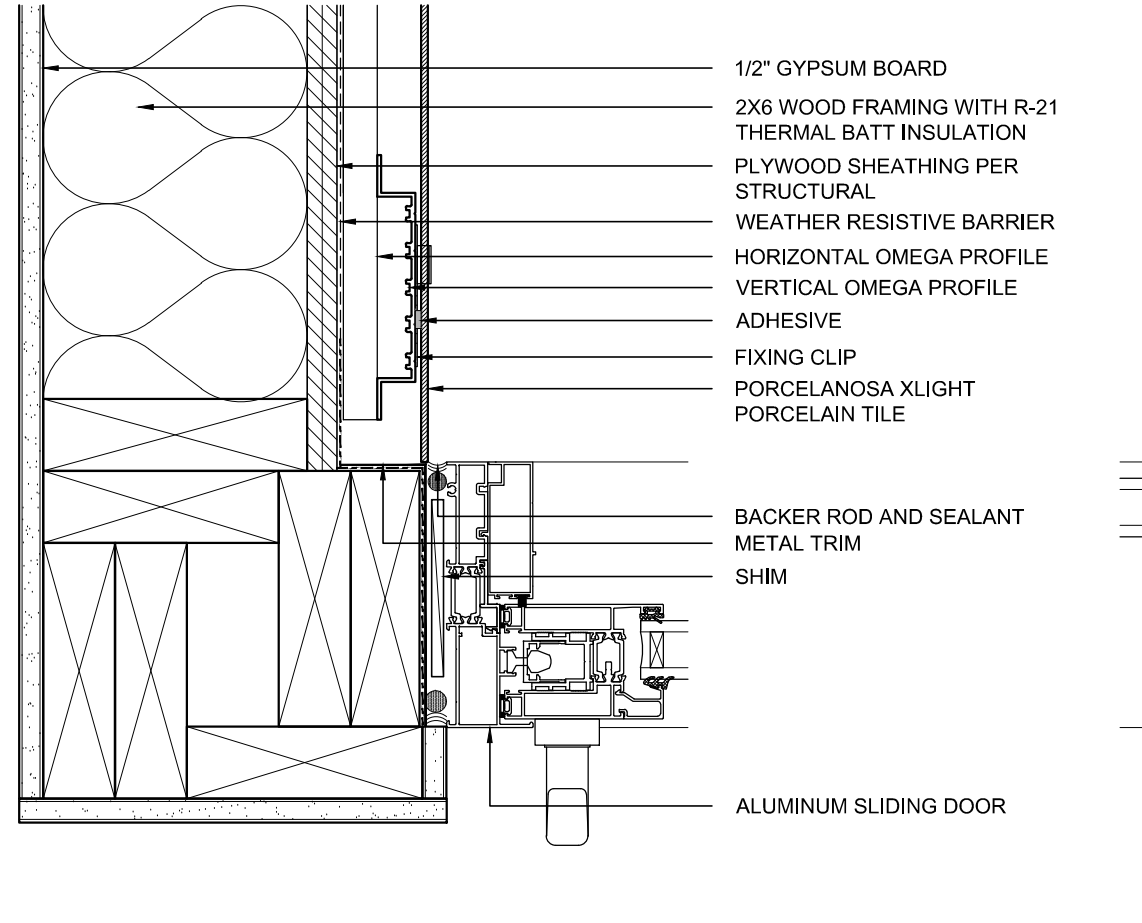
C1 WOOD ENTRY DOOR JAMB
 SCALE: 3" = 1'-0"



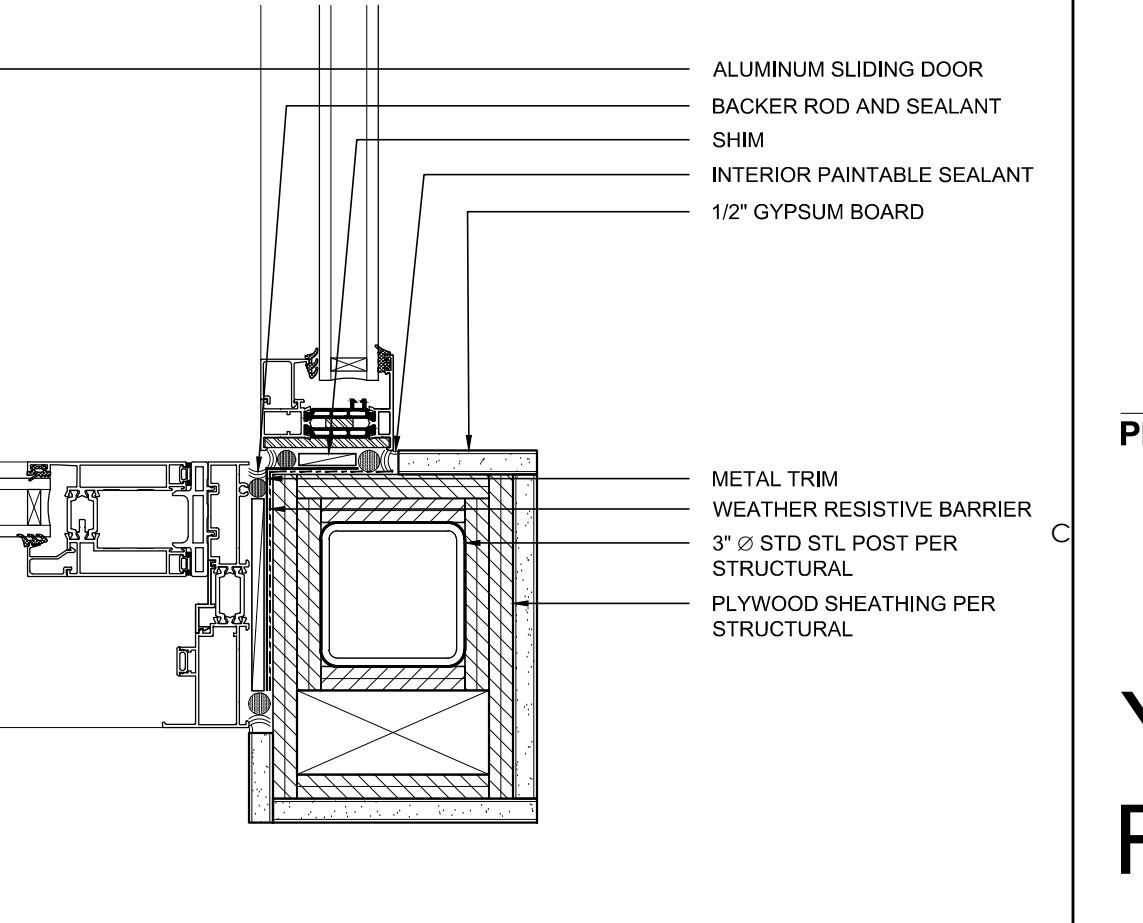
C2 WINDOW JAMB AT METAL SIDING
 SCALE: 3" = 1'-0"



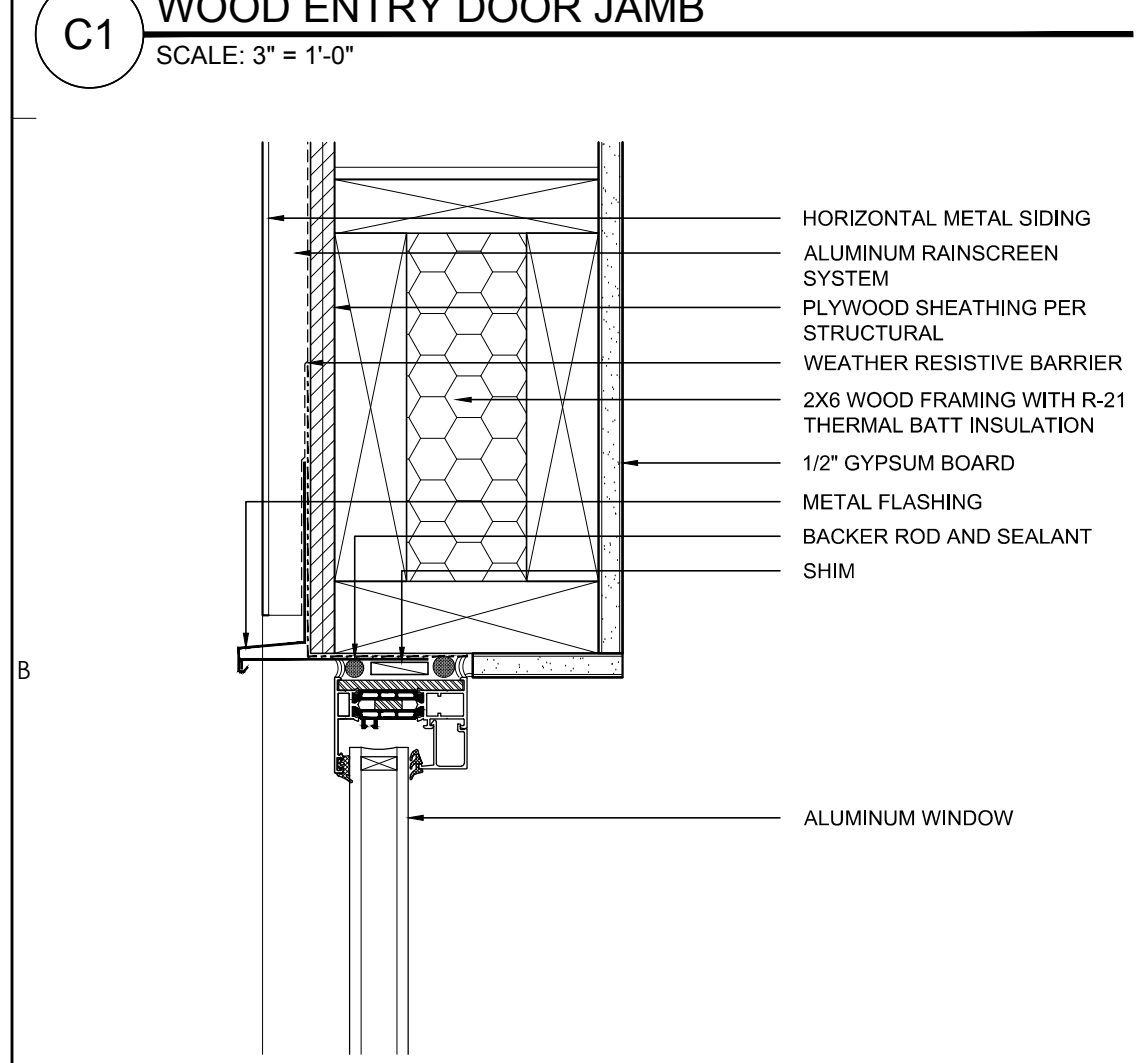
C3 DOOR/WINDOW JAMBS AT POST
 SCALE: 3" = 1'-0"



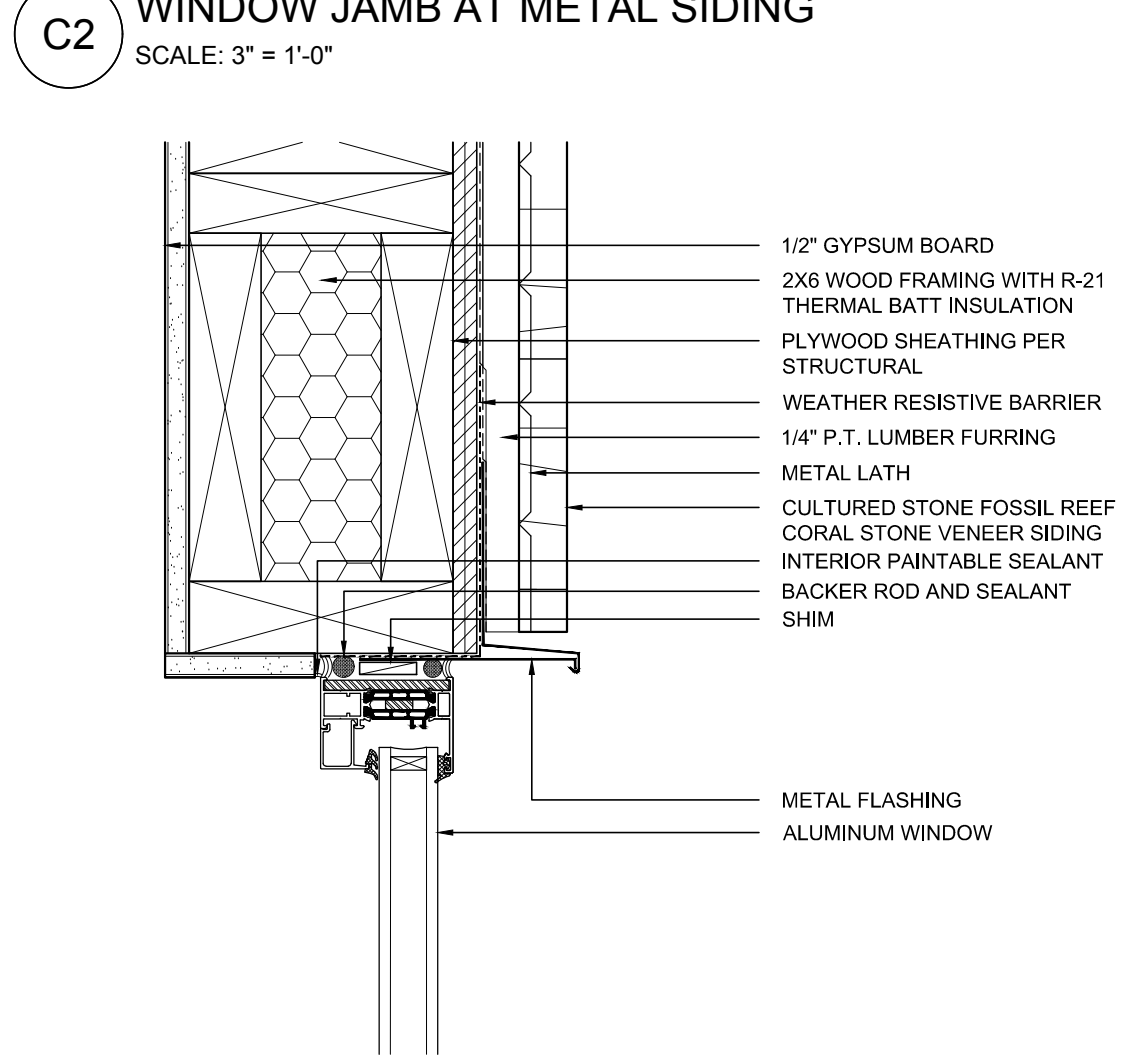
C4 COURTYARD SLIDER JAMB
 SCALE: 3" = 1'-0"



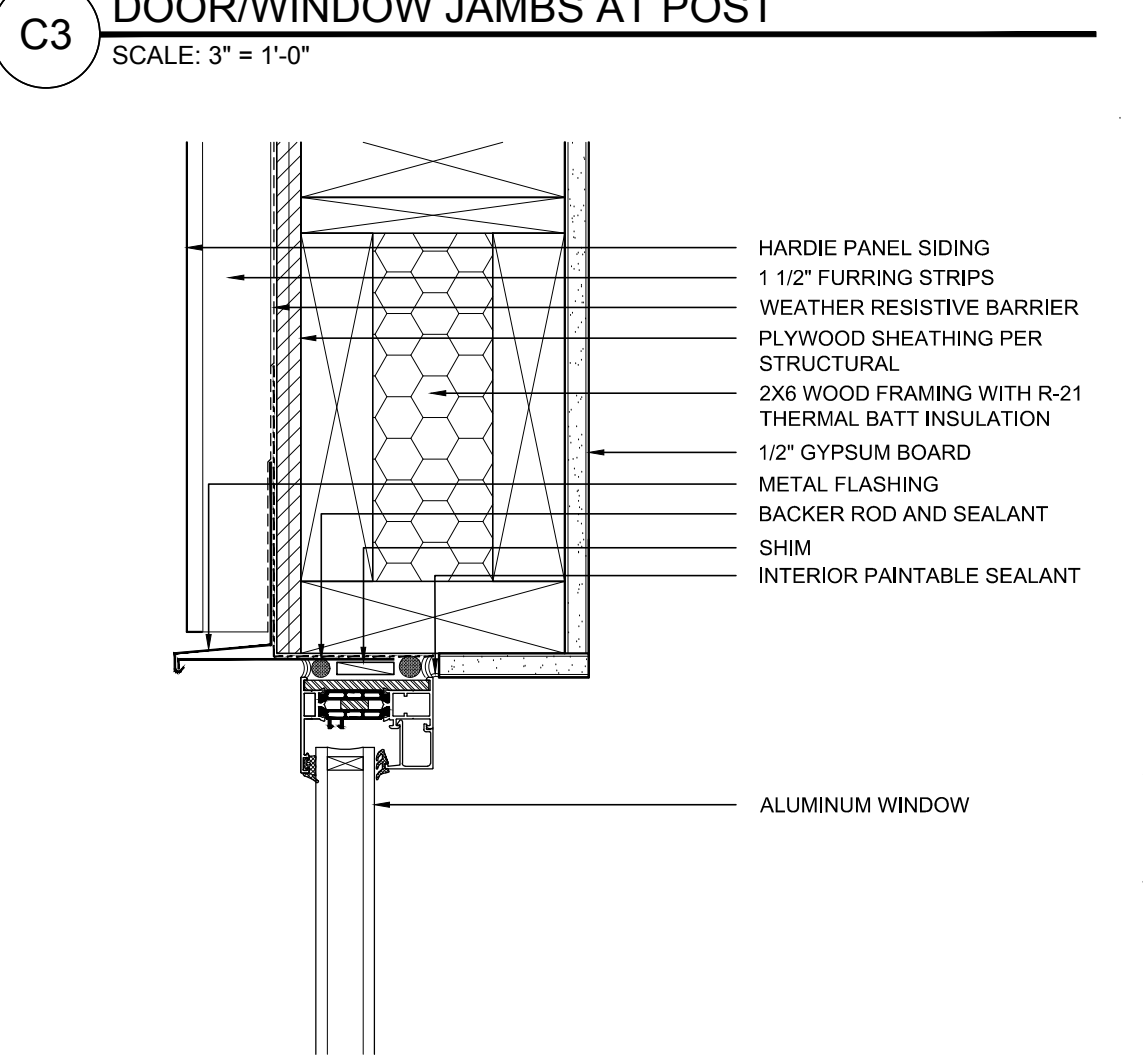
C5 SLIDER/WINDOW JAMBS AT INTERIOR POST
 SCALE: 3" = 1'-0"



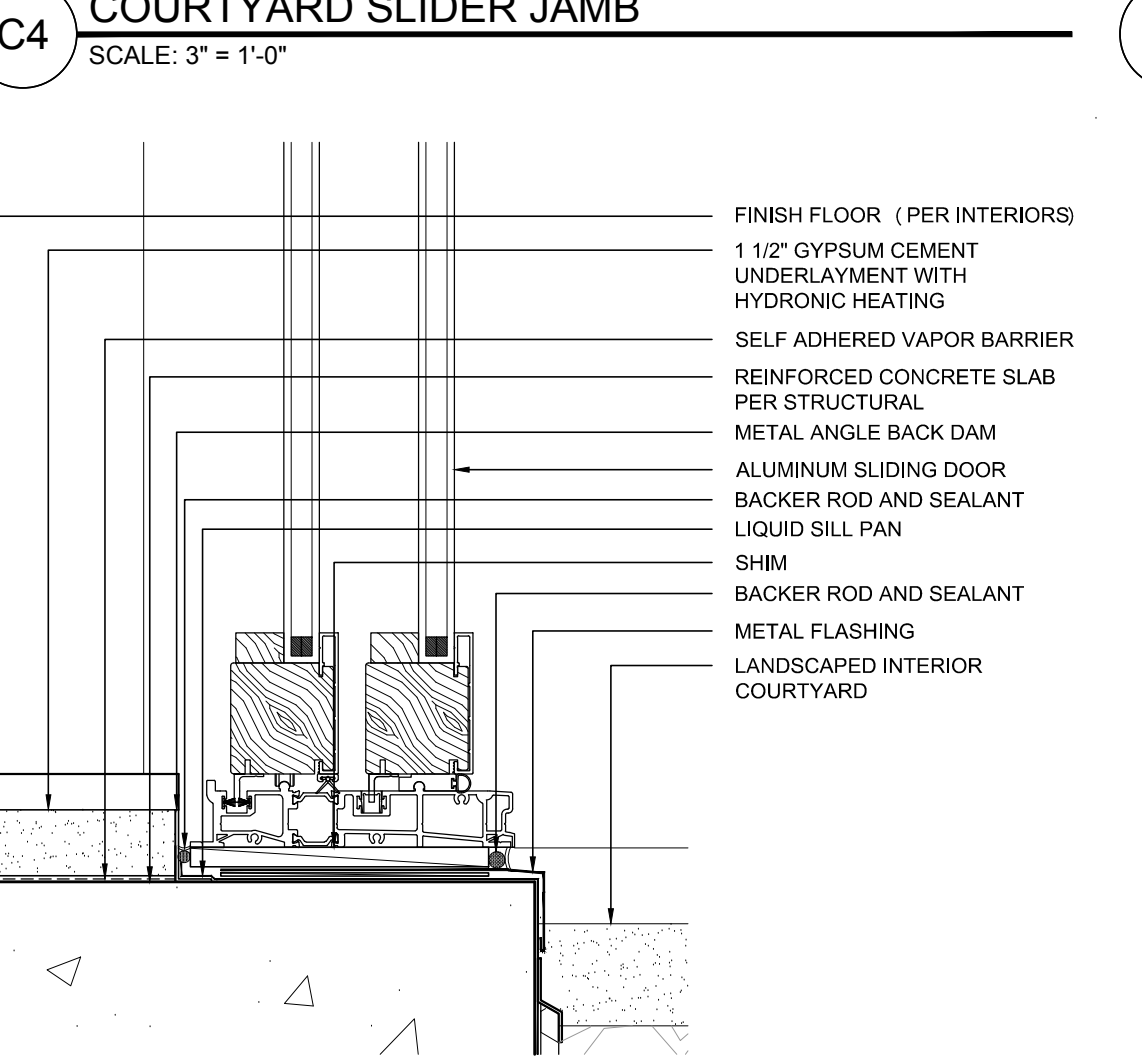
B1 WINDOW HEAD AT METAL SIDING
 SCALE: 3" = 1'-0"



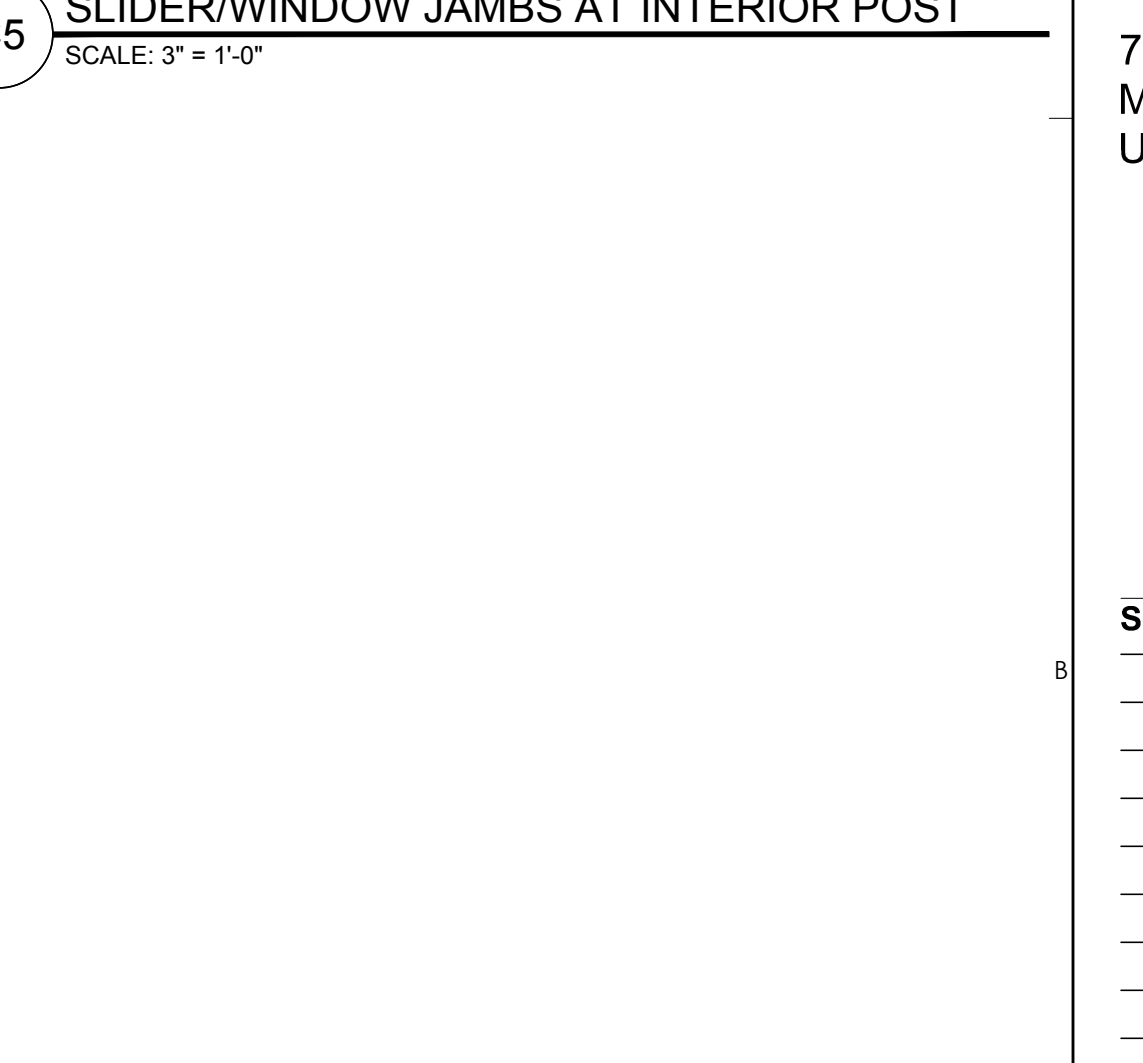
B2 WINDOW HEAD AT STONE VENEER
 SCALE: 3" = 1'-0"



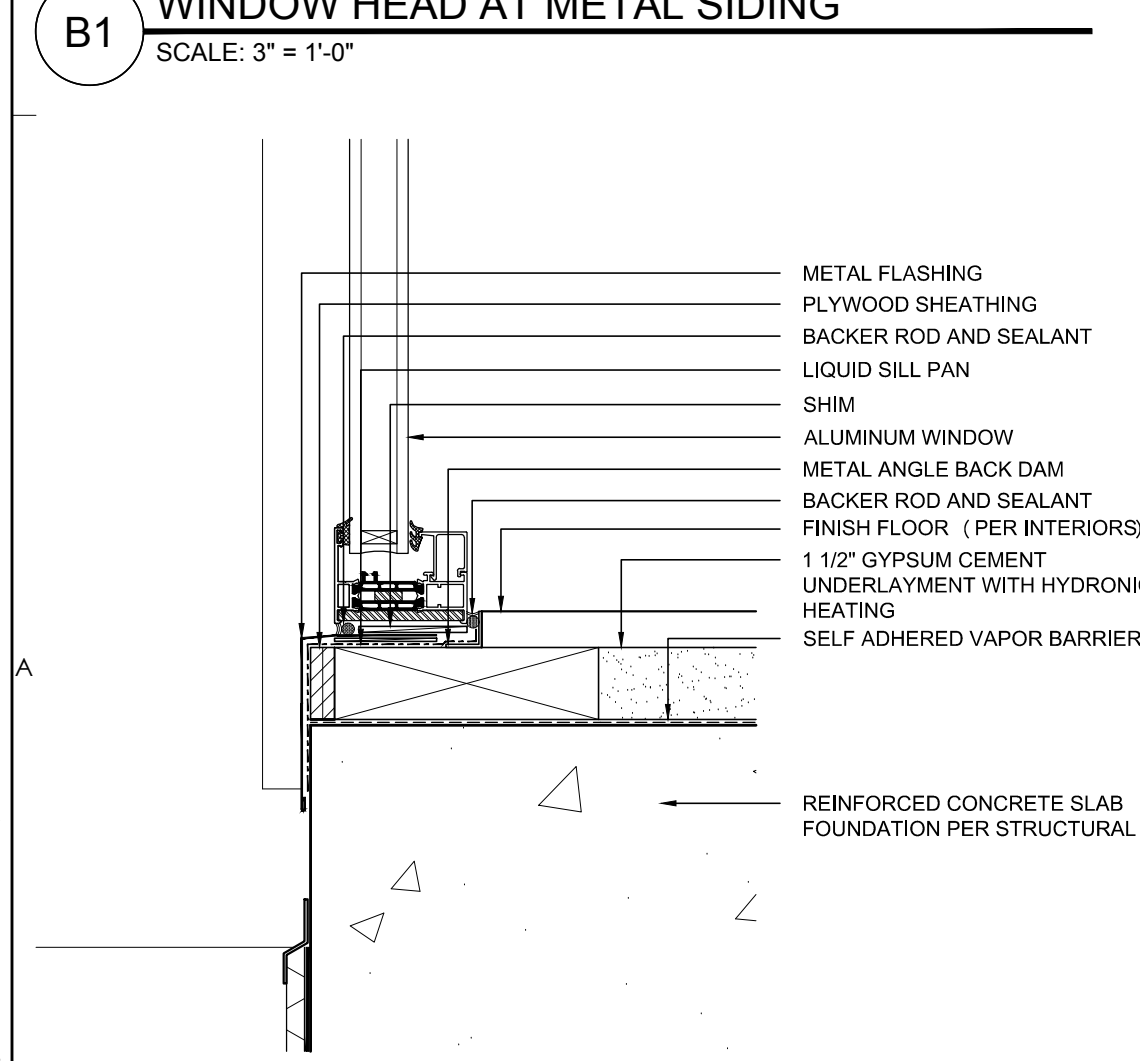
B3 WINDOW HEAD AT HARDIE PANEL
 SCALE: 3" = 1'-0"



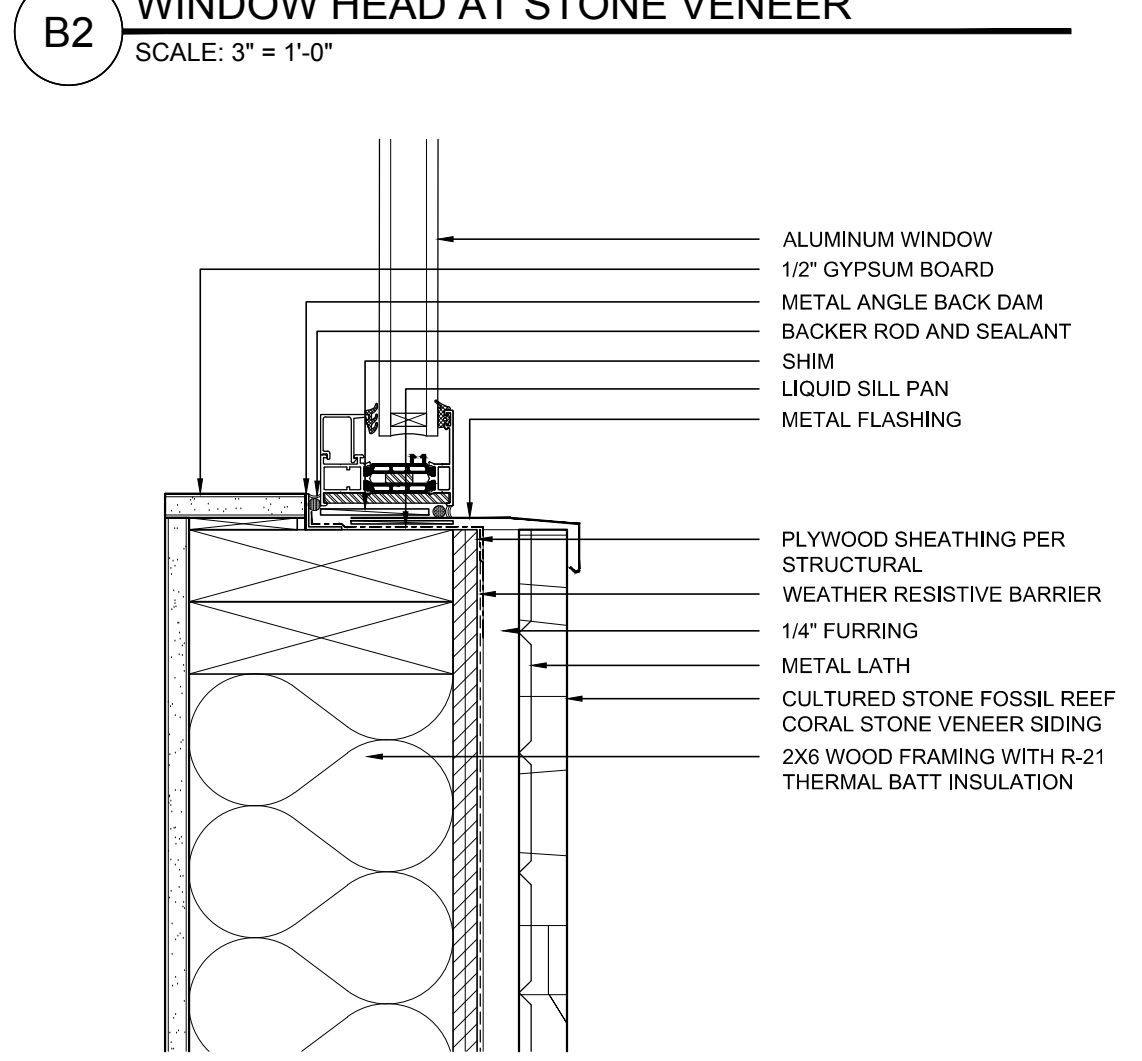
B4 SLIDER SILL AT COURTYARD
 SCALE: 3" = 1'-0"



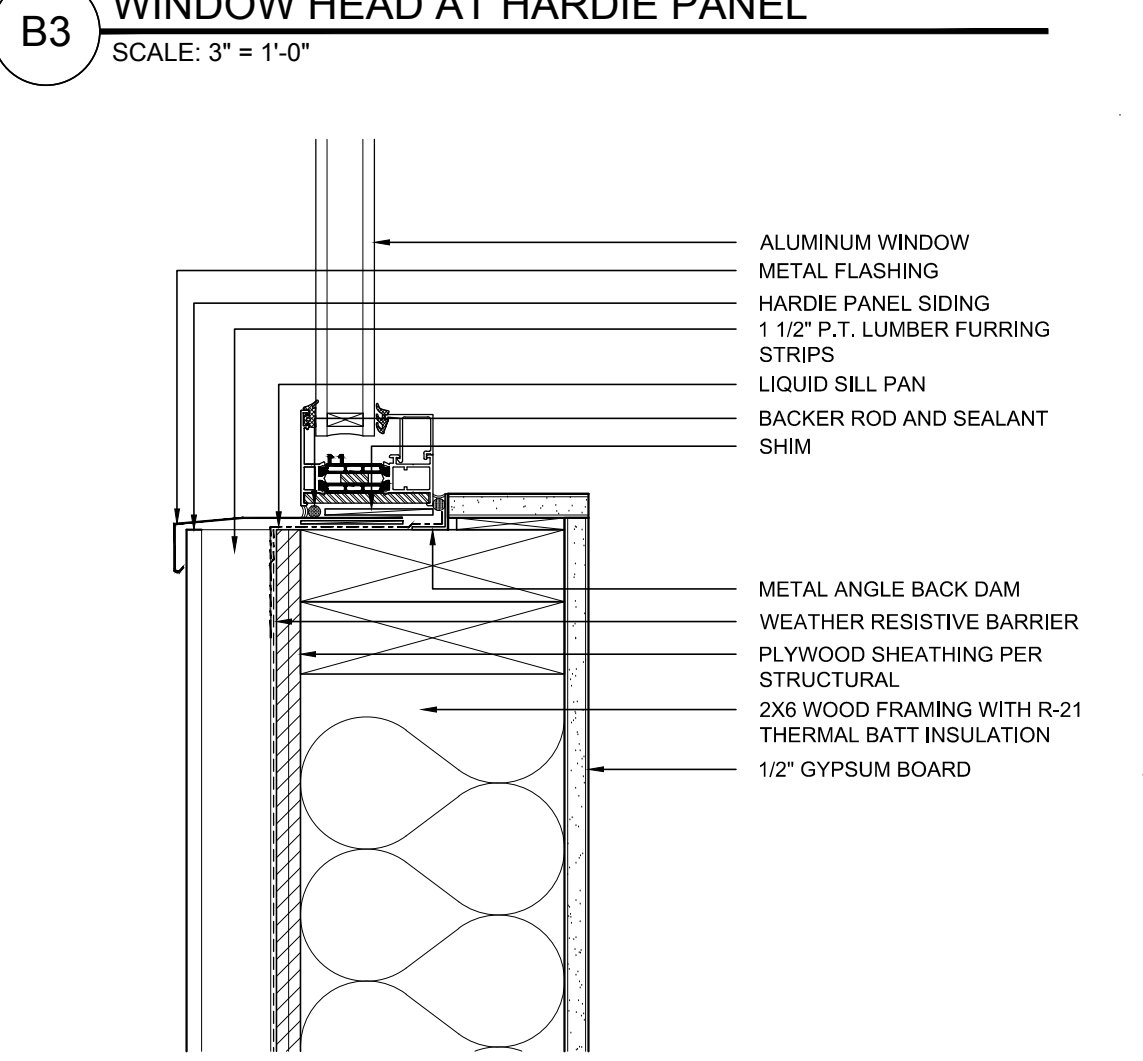
B5 SLIDER/WINDOW JAMBS AT INTERIOR POST
 SCALE: 3" = 1'-0"



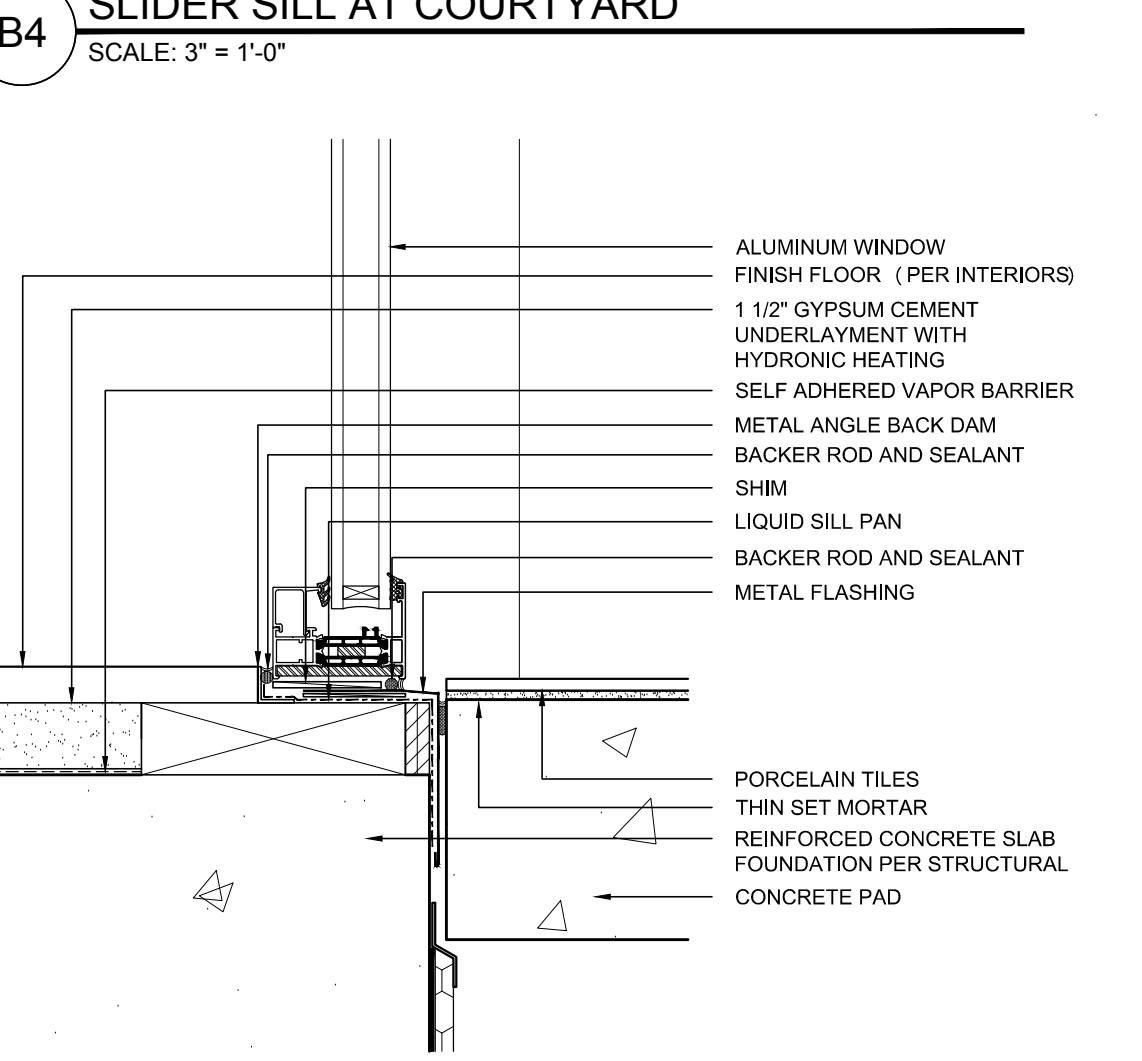
A1 WINDOW SILL AT METAL SIDING
 SCALE: 3" = 1'-0"



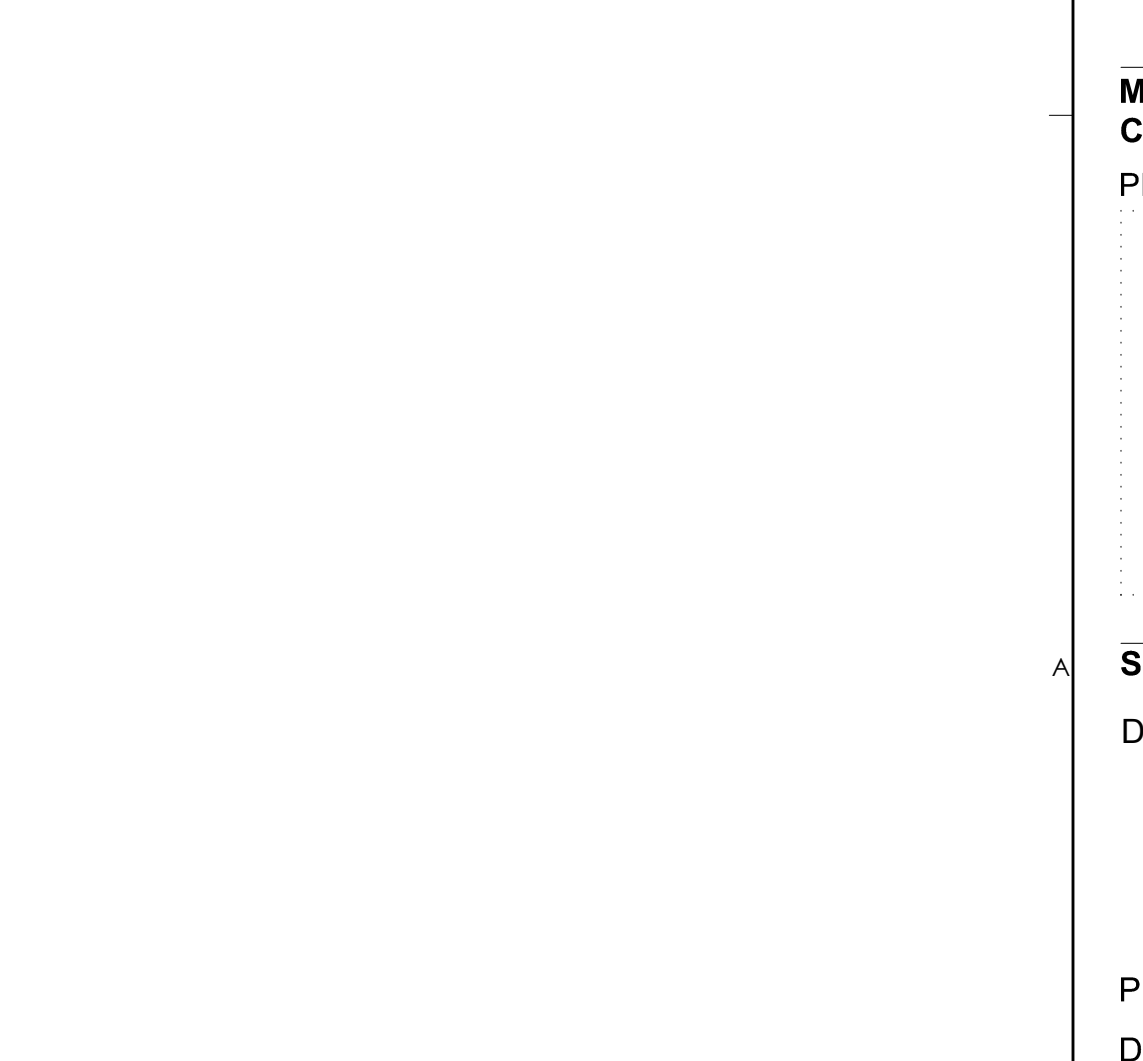
A2 WINDOW SILL AT STONE VENEER
 SCALE: 3" = 1'-0"



A3 WINDOW SILL AT HARDIE PANEL
 SCALE: 3" = 1'-0"



A4 WINDOW SILL AT ENTRY
 SCALE: 3" = 1'-0"



A5 SLIDER SILL AT ENTRY
 SCALE: 3" = 1'-0"

File: A802 Details.dwg / Sheet: A802 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

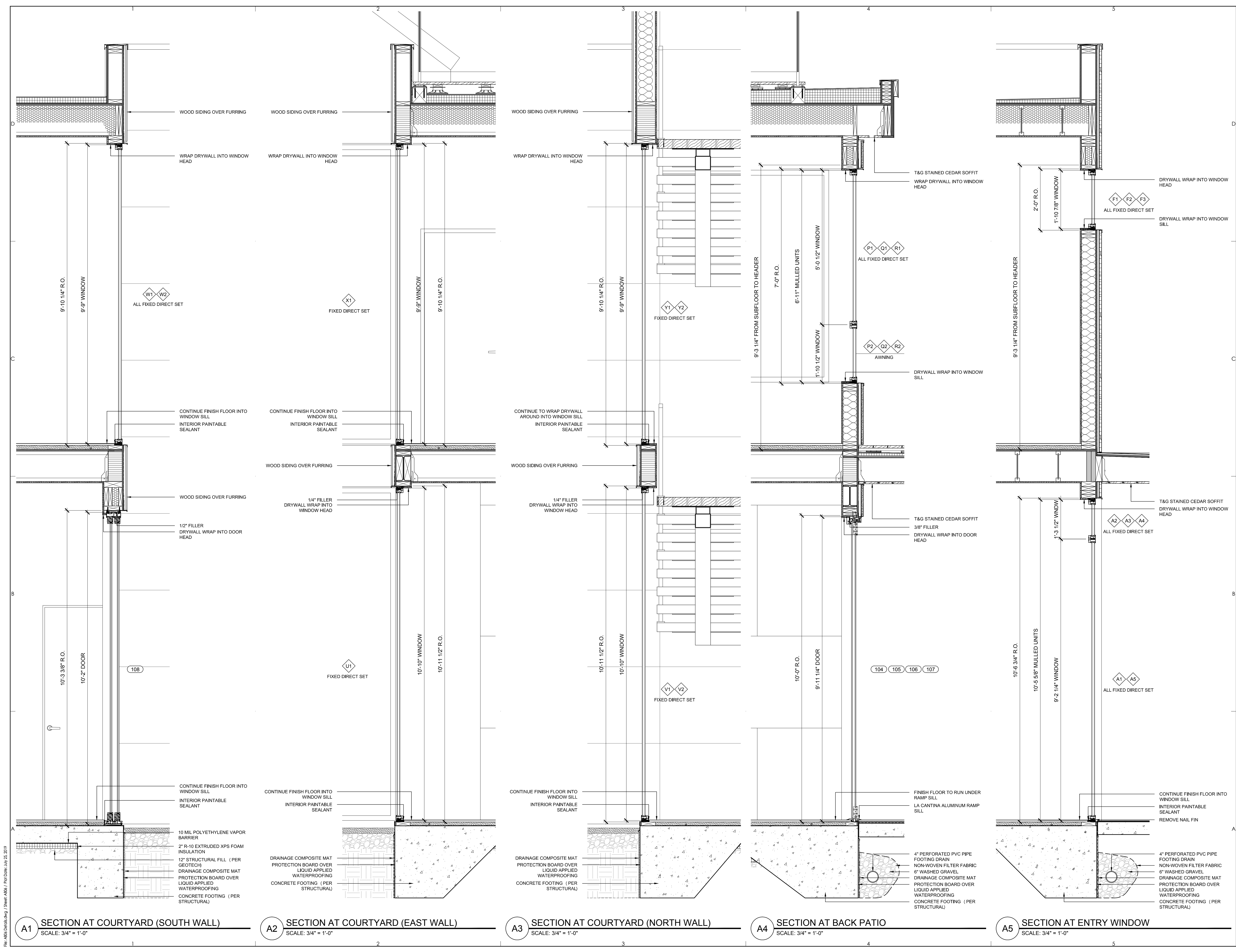
SHEET TITLE: _____

DOOR & WINDOW DETAILS

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

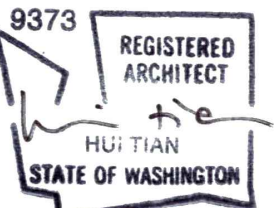
SHEET NUMBER: _____



File: A808 Detail.dwg / Sheet: A806 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

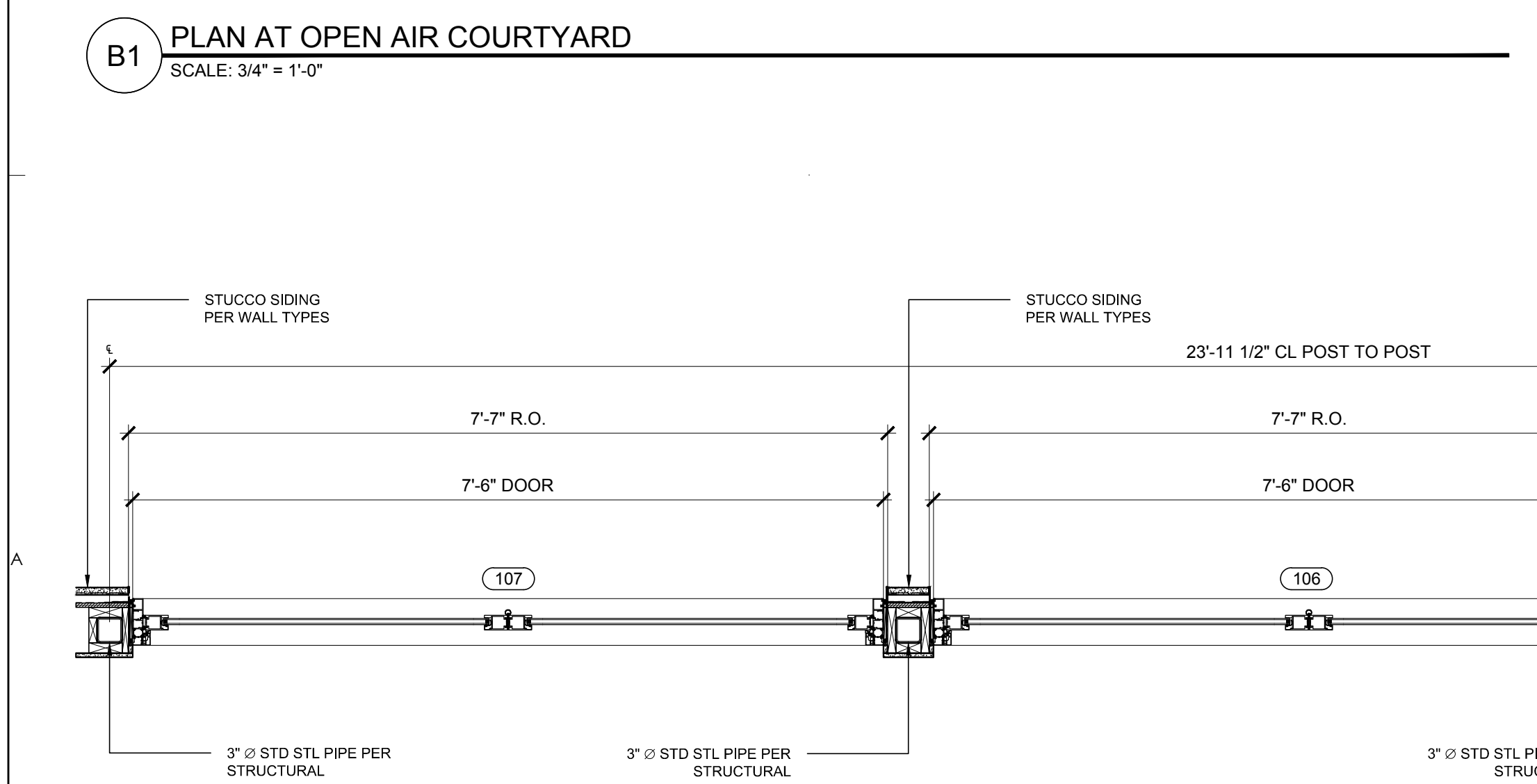
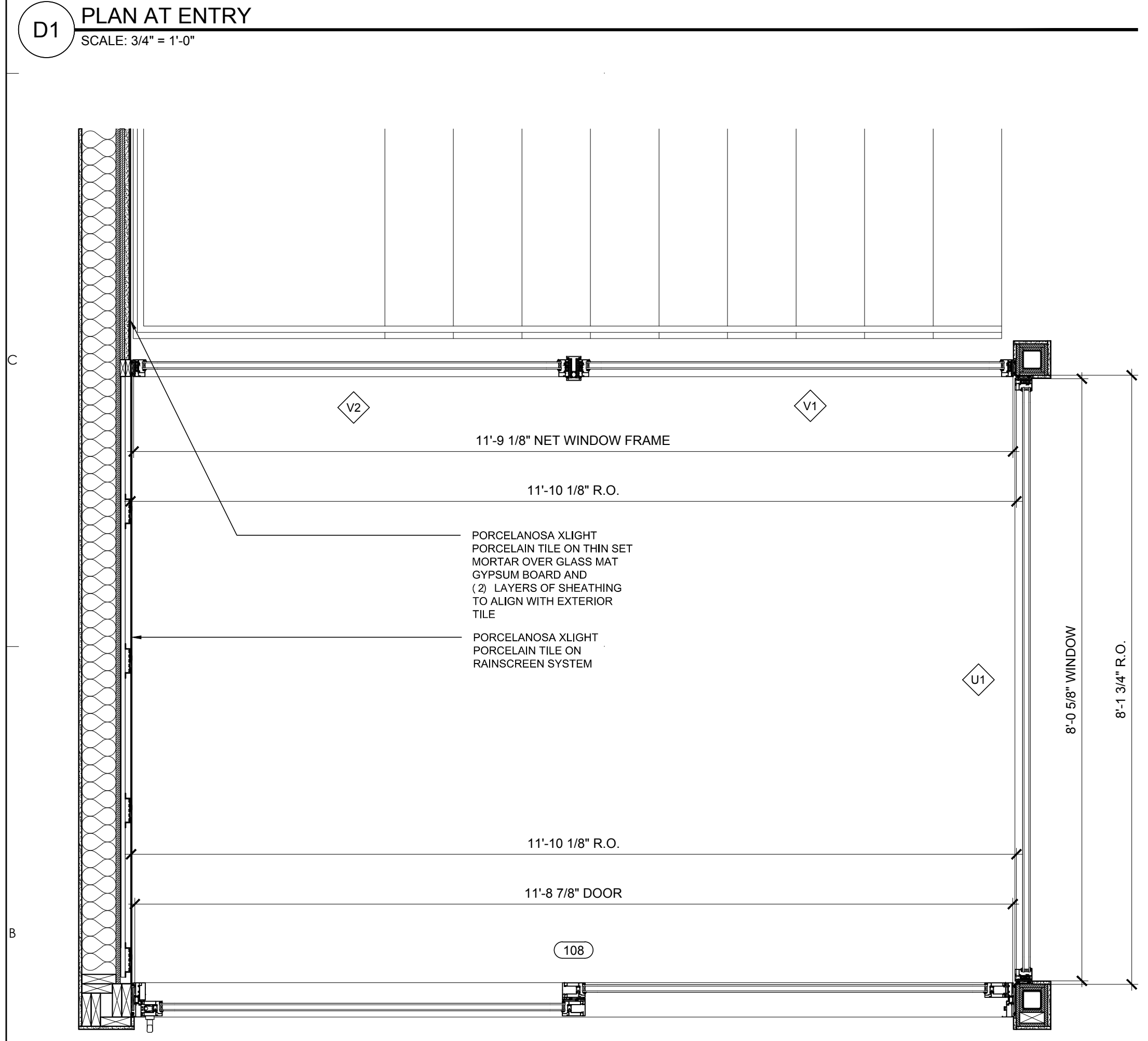
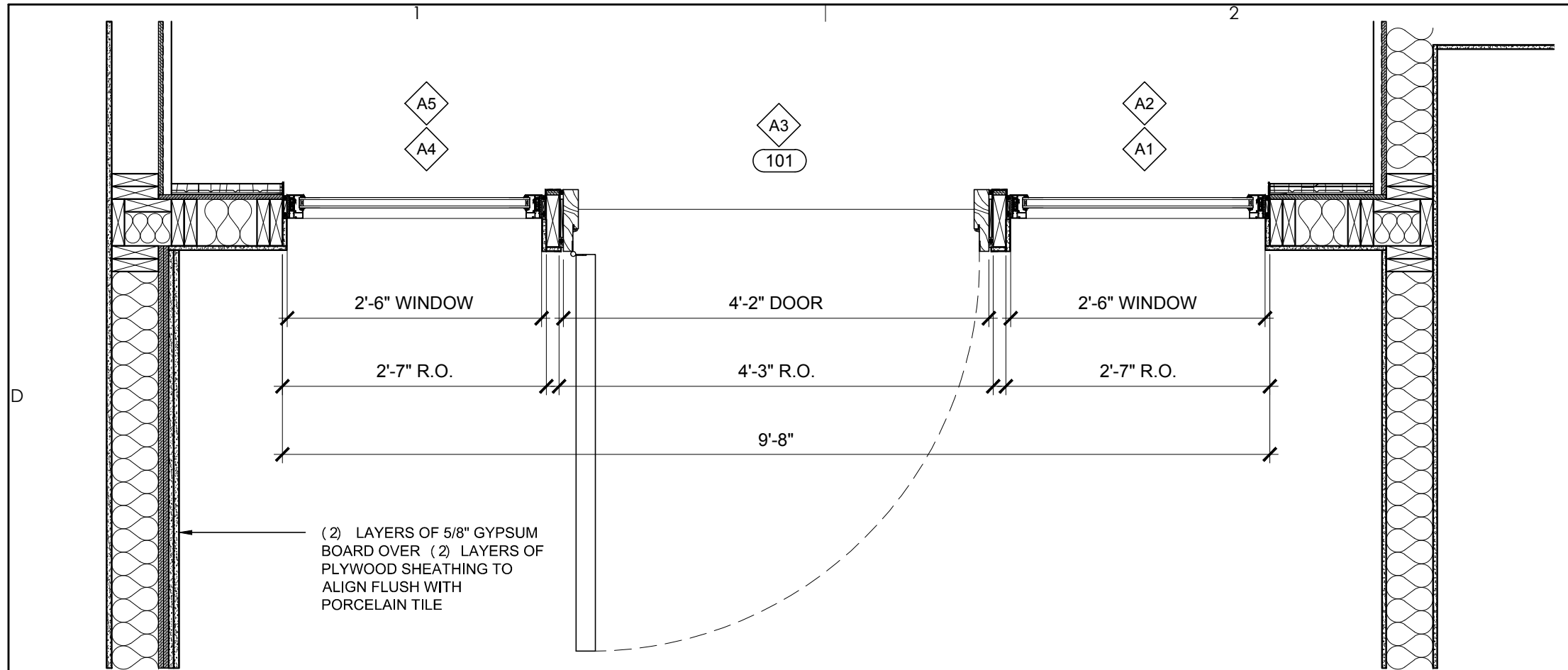
SHEET TITLE: _____

DOOR & WINDOW DETAILS

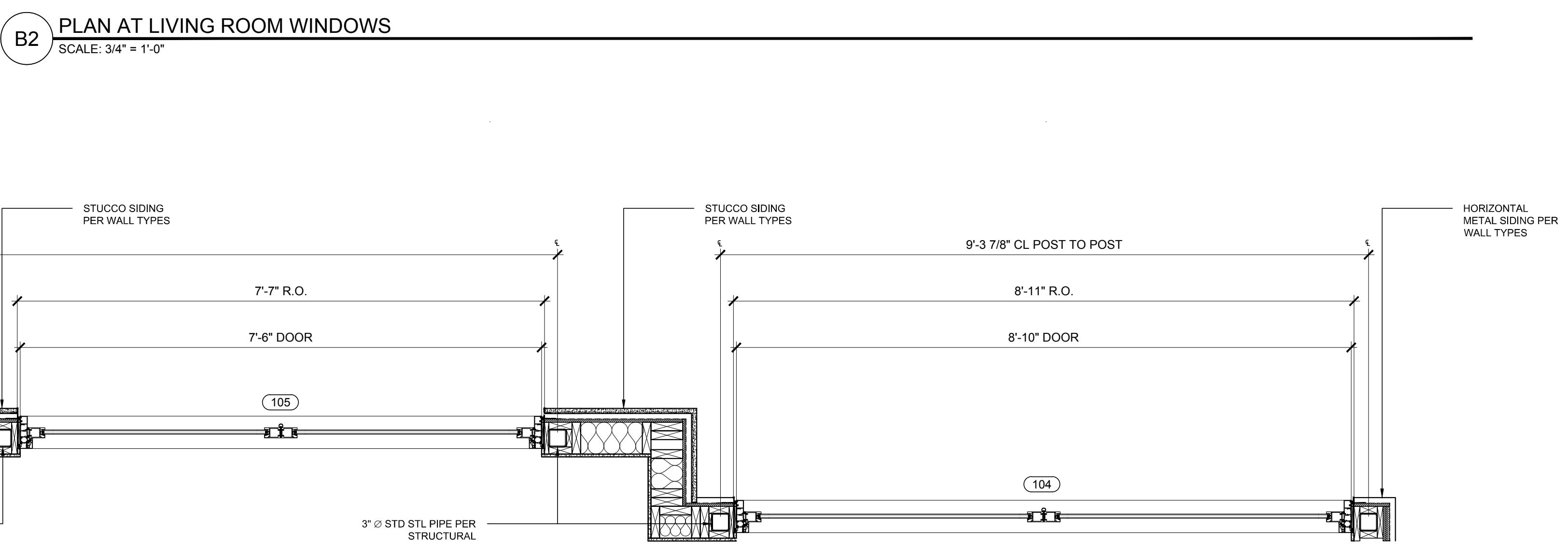
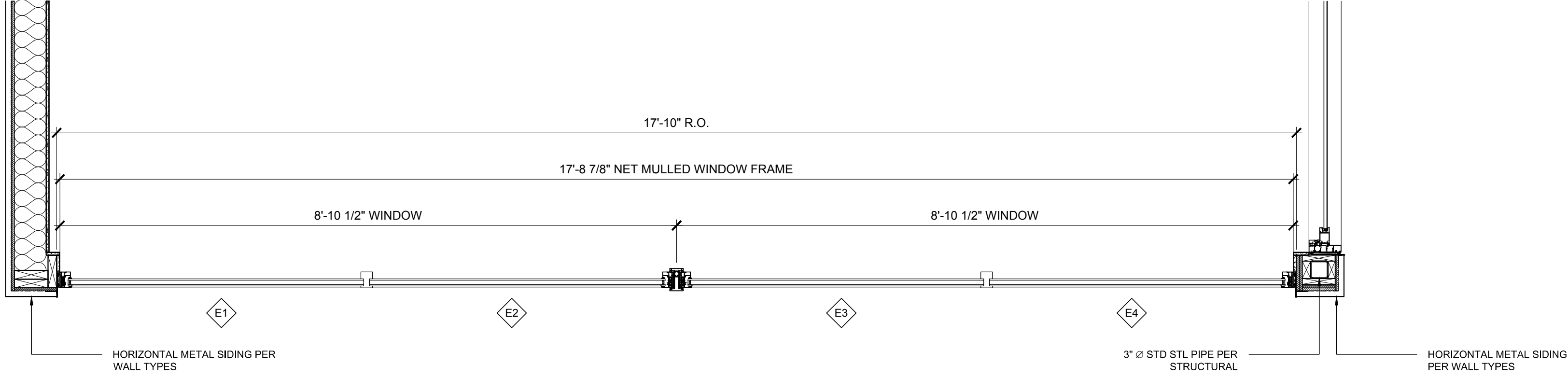
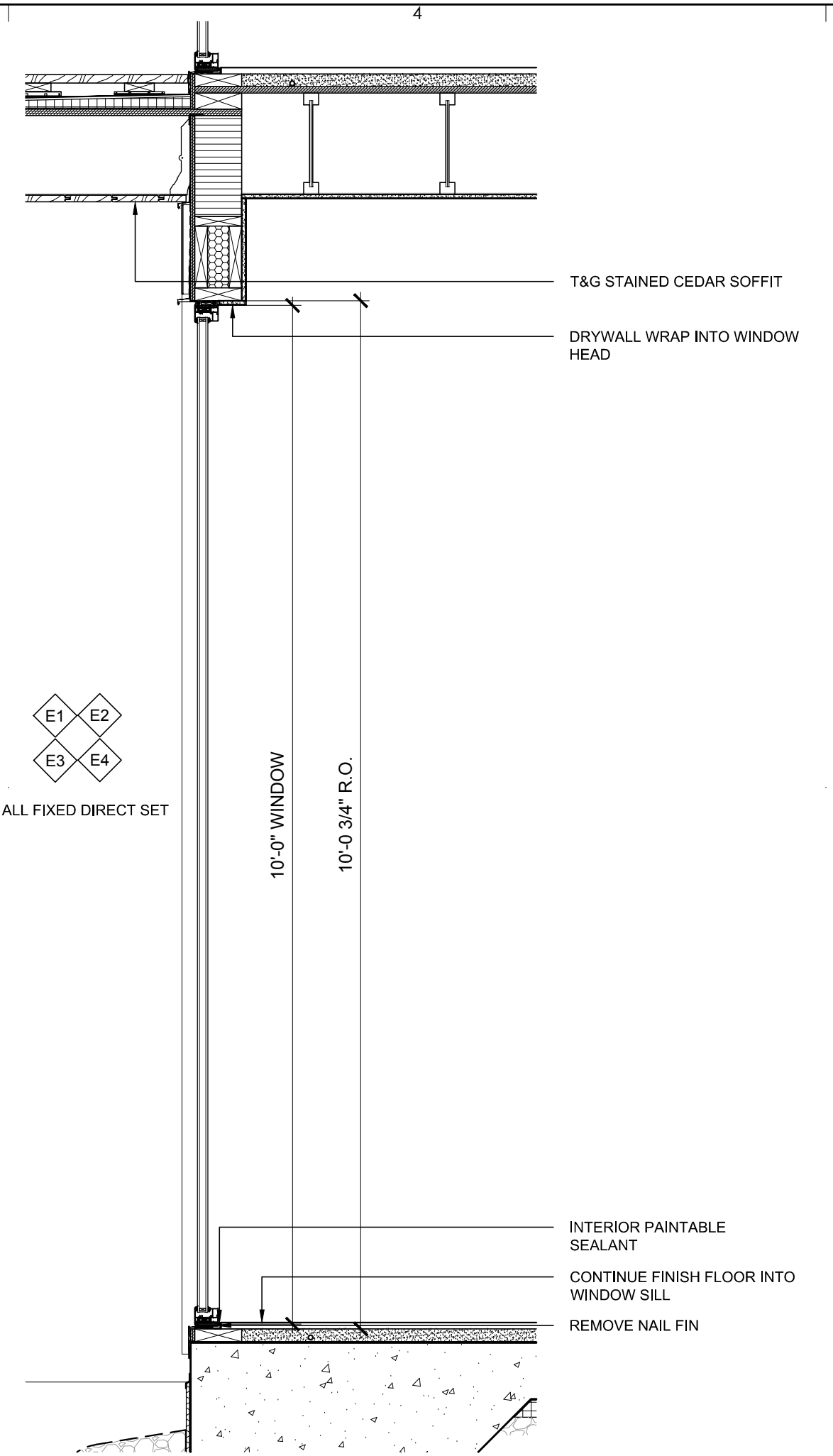
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



A1 PLAN AT BACK PATIO FOLDING DOORS
 SCALE: 3/4" = 1'-0"

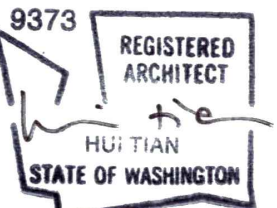


B2 PLAN AT LIVING ROOM WINDOWS
 SCALE: 3/4" = 1'-0"

File: A8.07 Detail.dwg / Sheet: A8.07 / Plot Date: July 25, 2019

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND

PROJECT # 1907-103

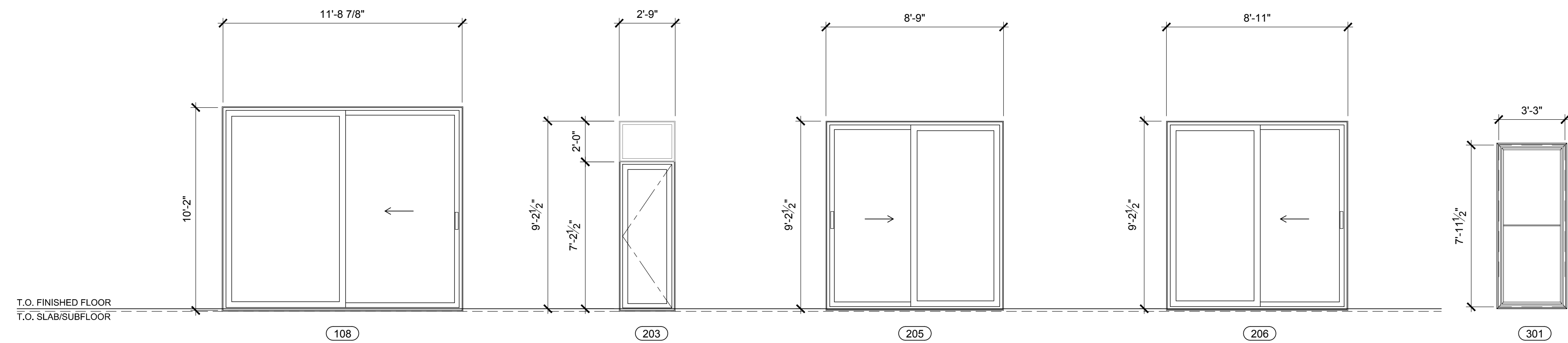
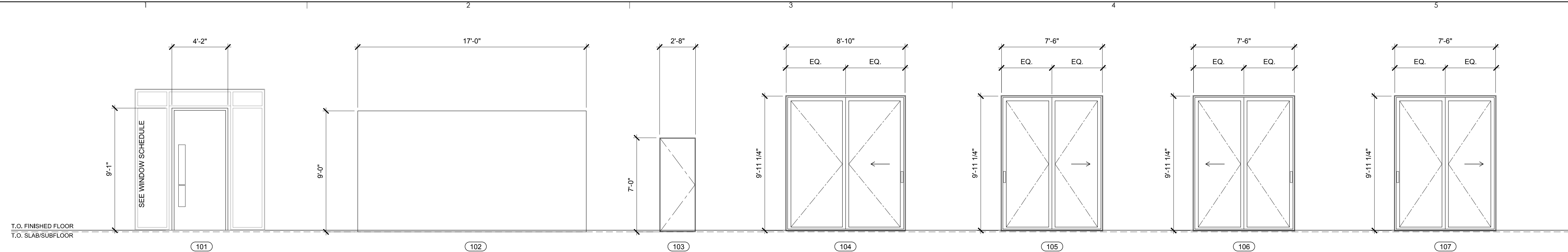
SHEET TITLE: _____

DOOR LEGEND

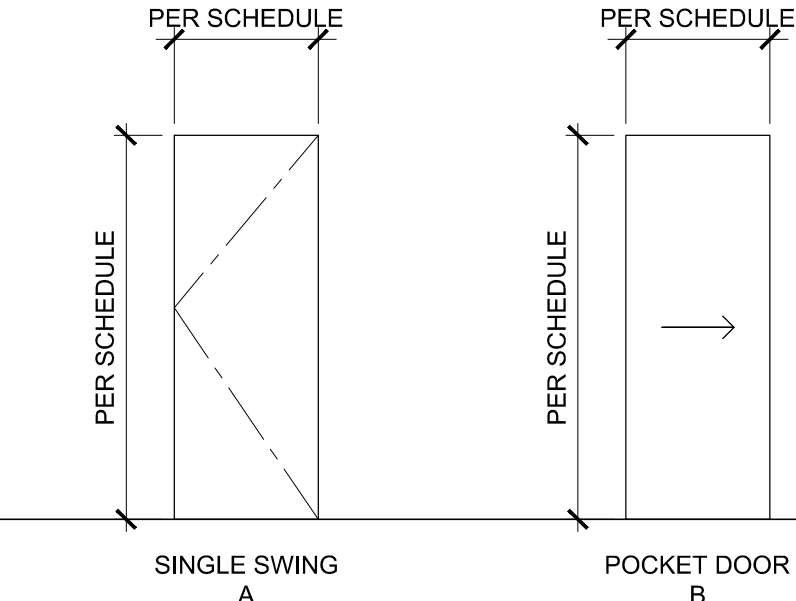
PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



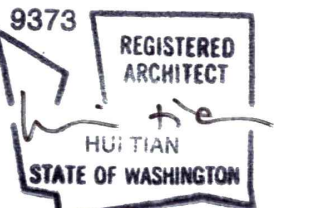
C1 EXTERIOR DOOR LEGEND
 SCALE: 1/4" = 1'-0"



B1 INTERIOR DOOR LEGEND
 SCALE: 1/4" = 1'-0"

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW: _____

CITY OF MERCER ISLAND
 PROJECT # 1907-103

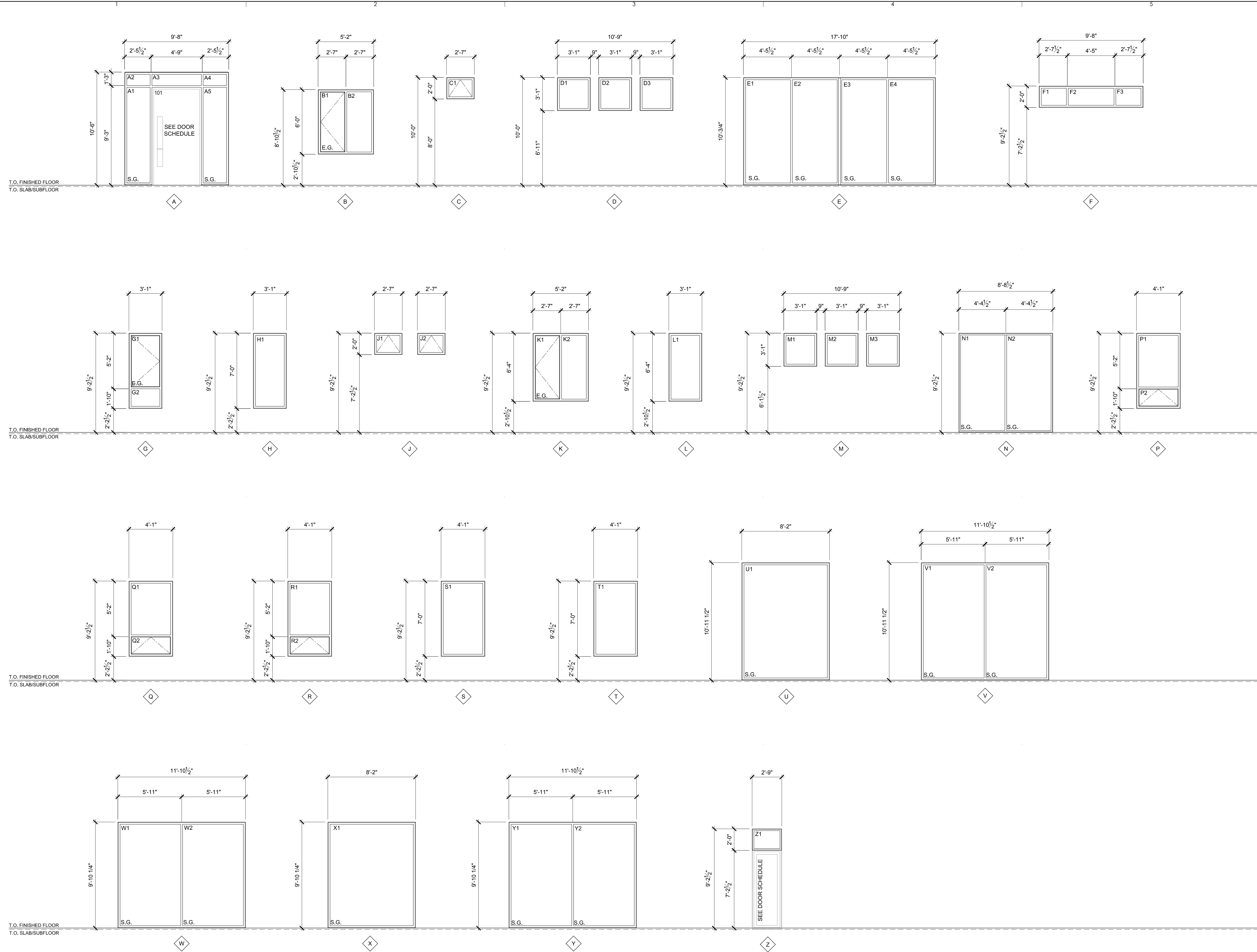
SHEET TITLE: _____

WINDOW LEGEND

PROJECT NO.: 20190130

DATE ISSUED: 07/25/2019

SHEET NUMBER: _____



A1 WINDOW LEGEND
 SCALE: 1/4" = 1'-0"

File: #003 Window Legend.dwg / Sheet: #003 / Plot Date: July 25, 2019

Window, Skylight and Door Schedule

Project Information: Yang Residence, 7431 E Mercer Way, Mercer Island, WA 98040
 Contact Information: Studio 19 Architects, 207 1/2 1st Ave S, Seattle, WA 98104, Attn: Steven Long (206)466-1225

Component	Description	Ref.	U-factor	Qt.	Feet	Height	Feet	Area	UA
Exempt Swinging Door (24 sq. ft. max.)									
Exempt Glazed Fenestration (15 sq. ft. max.)									
Vertical Fenestration (Windows and doors)									
MAIN LEVEL									
NORTH WALL									
Picture Window A1 0.28									
Picture Window A2 0.28									
Picture Window A3 0.28									
Picture Window A4 0.28									
Picture Window A5 0.28									
EAST WALL									
Folding Door System 104 0.31									
Folding Door System 105 0.31									
Folding Door System 106 0.31									
Folding Door System 107 0.31									
SOUTH WALL									
Awning Window C1 0.28									
Picture Window D1 0.28									
Picture Window D2 0.28									
Picture Window D3 0.28									
Picture Window E1 0.28									
Picture Window E2 0.28									
Picture Window E3 0.28									
Picture Window E4 0.28									
WEST WALL									
Casement Window B1 0.28									
Picture Window B2 0.28									
INTERIOR									
Glass Sliding Door 108 0.31									
Picture Window U1 0.28									
Picture Window V1 0.28									
Picture Window V2 0.28									
Sum of Vertical Fenestration Area and UA									
Vertical Fenestration Area Weighted U = UA/Area									
Overhead Glazing (Skylights)									
Sum of Overhead Glazing Area and UA									
Overhead Glazing Area Weighted U = UA/Area									
Total Sum of Fenestration Area and UA (for heating system sizing calculations)									

Window, Skylight and Door Schedule

Project Information: Yang Residence, 7431 E Mercer Way, Mercer Island, WA 98040
 Contact Information: Studio 19 Architects, 207 1/2 1st Ave S, Seattle, WA 98104, Attn: Steven Long (206)466-1225

Component	Description	Ref.	U-factor	Qt.	Feet	Height	Feet	Area	UA
Exempt Swinging Door (24 sq. ft. max.)									
Exempt Glazed Fenestration (15 sq. ft. max.)									
Vertical Fenestration (Windows and doors)									
UPPER LEVEL									
NORTH WALL									
Picture Window T1 0.28									
Picture Window F1 0.28									
Picture Window F2 0.28									
Picture Window F3 0.28									
Casement Window G1 0.28									
Picture Window G2 0.28									
Picture Window H1 0.28									
EAST WALL									
Glass Sliding Door 206 0.31									
Picture Window P1 0.28									
Awning Window P2 0.28									
Picture Window Q1 0.28									
Awning Window Q2 0.28									
Picture Window R1 0.28									
Awning Window R2 0.28									
Picture Window S1 0.28									
Picture Window S2 0.28									
SOUTH WALL									
Casement Window K1 0.28									
Picture Window K2 0.28									
Picture Window L1 0.28									
Picture Window M1 0.28									
Picture Window M2 0.28									
Picture Window M3 0.28									
Glass Sliding Door 205 0.31									
Picture Window N1 0.28									
Picture Window N2 0.28									
WEST WALL									
Awning Window J1 0.28									
Awning Window J2 0.28									
INTERIOR									
Picture Window W1 0.28									
Picture Window W2 0.28									
Picture Window X1 0.28									
Picture Window Y1 0.28									
Picture Window Y2 0.28									
Sum of Vertical Fenestration Area and UA									
Vertical Fenestration Area Weighted U = UA/Area									
Overhead Glazing (Skylights)									
Glass Roof Skylight Door 301 0.50									
Sum of Overhead Glazing Area and UA									
Overhead Glazing Area Weighted U = UA/Area									
Total Sum of Fenestration Area and UA (for heating system sizing calculations)									

Simple Heating System Size: Washington State
 This heating system sizing calculator is based on the Prescriptive Requirements of the 2015 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This calculator will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads. The glazing (window) and door portion of this calculator assumes the installed glazing and door products have an area weighted average U-factor of 0.30. The incorporated insulation requirements are the minimum prescriptive amounts specified by the 2015 WSEC. Please fill out all of the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please call the WSU Energy Extension Program at (360) 956-2042 for assistance.

Project Information: Yang Residence, 7431 E Mercer Way, Mercer Island, WA 98040
 Contact Information: Studio 19 Architects, 207 1/2 1st Ave S, Seattle, WA 98104, Attn: Steven Long (206)466-1225

Heating System Type: All Other Systems Heat Pump

To see detailed instructions for each section, place your cursor on the word "Instructions".

Design Temperature
 Instructions: Mercer Island
 Design Temperature Difference (ΔT): 45
 ΔT = Indoor (70 degrees) - Outdoor Design Temp

Area of Building
 Instructions: Conditioned Floor Area (sq ft): 3,471
 Average Ceiling Height: 10.5
 Conditioned Volume: 36,446

Glazing and Doors
 Instructions: U-Factor X Area = UA
 0.30 X 1,816 = 544.65

Skylights
 Instructions: U-Factor X Area = UA
 0.50 X 26 = 12.95

Insulation
 Attic: Instructions: R-49
 U-Factor X Area = UA
 0.026 X 1,972 = 51.27

Single Rafter or Joist Vaulted Ceilings
 Instructions: Select R-Value
 No selection
 U-Factor X Area = UA
 0 X 0 = 0

Above Grade Walls (see Figure 1)
 Instructions: R-21 Intermediate
 U-Factor X Area = UA
 0.056 X 2,402 = 134.51

Floors
 Instructions: R-30
 U-Factor X Area = UA
 0.029 X 1,907 = 55.30

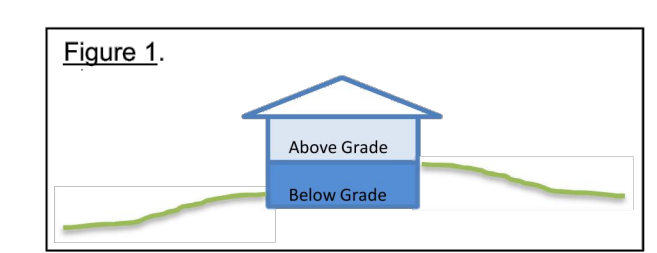
Below Grade Walls (see Figure 1)
 Instructions: No Below Grade Walls in this project
 U-Factor X Area = UA
 --- X 0 = 0

Slab Below Grade (see Figure 1)
 Instructions: No Slab Below Grade in this project
 F-Factor X Length = UA
 --- X 0 = 0

Slab on Grade (see Figure 1)
 Instructions: R-10 Fully Insulated
 F-Factor X Length = UA
 0.360 X 1,484 = 534.24

Location of Ducts
 Instructions: Unconditioned Space
 Duct Leakage Coefficient: 1.10

Sum of UA: 1332.93
Envelope Heat Load: 59,982 Btu / Hour
Air Leakage Heat Load: 17,713 Btu / Hour
Building Design Heat Load: 77,694 Btu / Hour
Building and Duct Heat Load: 85,464 Btu / Hour
Maximum Heat Equipment Output: 106,830 Btu / Hour



Prescriptive Energy Code Compliance for All Climate Zones in Washington

Project Information: Yang Residence, 7431 E Mercer Way, Mercer Island, WA 98040
 Contact Information: Studio 19 Architects, 207 1/2 1st Ave S, Seattle, WA 98104, Attn: Steven Long (206)466-1225

This project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. In addition, based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Authorized Representative: [Signature] Date: 6/15/19

All Climate Zones	R-Value ^a	U-Factor ^b
Fenestration U-Factor ^a	n/a	0.30
Skylight U-Factor	n/a	0.50
Glazed Fenestration SHGC ^a	n/a	n/a
Ceiling ^a	49'	0.028
Wood Frame Wall ^{min}	21 int	0.056
Mass Wall R-Value ^a	21/2+*	0.056
Floor	30'	0.029
Below Grade Wall ^{min}	10'/15/21 int + TB	0.042
Slab ^a R-Value & Depth	10, 2 ft	n/a

*Table R402.1.1 and Table R402.1.3 Footnotes included on Page 2.

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 so as to achieve the following minimum number of credits:

- Small Dwelling Unit: 1.5 credits
- Medium Dwelling Unit: 3.5 credits
- Large Dwelling Unit: 4.5 credits
- Additions less than 500 square feet: 5 credits

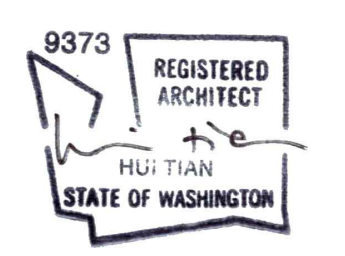
Option	Description	Credit(s)
1a	Efficient Building Envelope 1a	0.5
1b	Efficient Building Envelope 1b	1.0
1c	Efficient Building Envelope 1c	2.0
1d	Efficient Building Envelope 1d	0.5
2a	Air Leakage Control and Efficient Ventilation 2a	0.5
2b	Air Leakage Control and Efficient Ventilation 2b	1.0
2c	Air Leakage Control and Efficient Ventilation 2c	1.5
3a	High Efficiency HVAC 3a	1.0
3b	High Efficiency HVAC 3b	1.0
3c	High Efficiency HVAC 3c	1.5
3d	High Efficiency HVAC 3d	1.0
4	High Efficiency HVAC Distribution System	1.0
5a	Efficient Water Heating 5a	0.5
5b	Efficient Water Heating 5b	1.0
5c	Efficient Water Heating 5c	1.5
5d	Efficient Water Heating 5d	0.5
6	Renewable Electric Energy	0.5
Total Credits		3.50

*Please refer to Table R406.2 for complete option descriptions

(07/01/13)

CONSULTANT: _____

PROFESSIONAL SEAL: _____



PROJECT: _____

YANG RESIDENCE

7431 E MERCER WAY
 MERCER ISLAND, WA 98040
 USA

SHEET ISSUE: _____

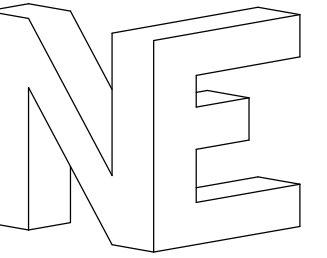
07/25/2019 PERMIT SUBMITTAL

MUNICIPALITY REVIEW:
 CITY OF MERCER ISLAND
 PROJECT # 1907-103

SHEET TITLE:
 ENERGY SUMMARY

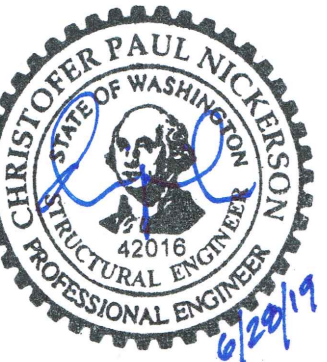
PROJECT NO.: 20190130
 DATE ISSUED: 07/25/2019

SHEET NUMBER: _____ **A9.04**

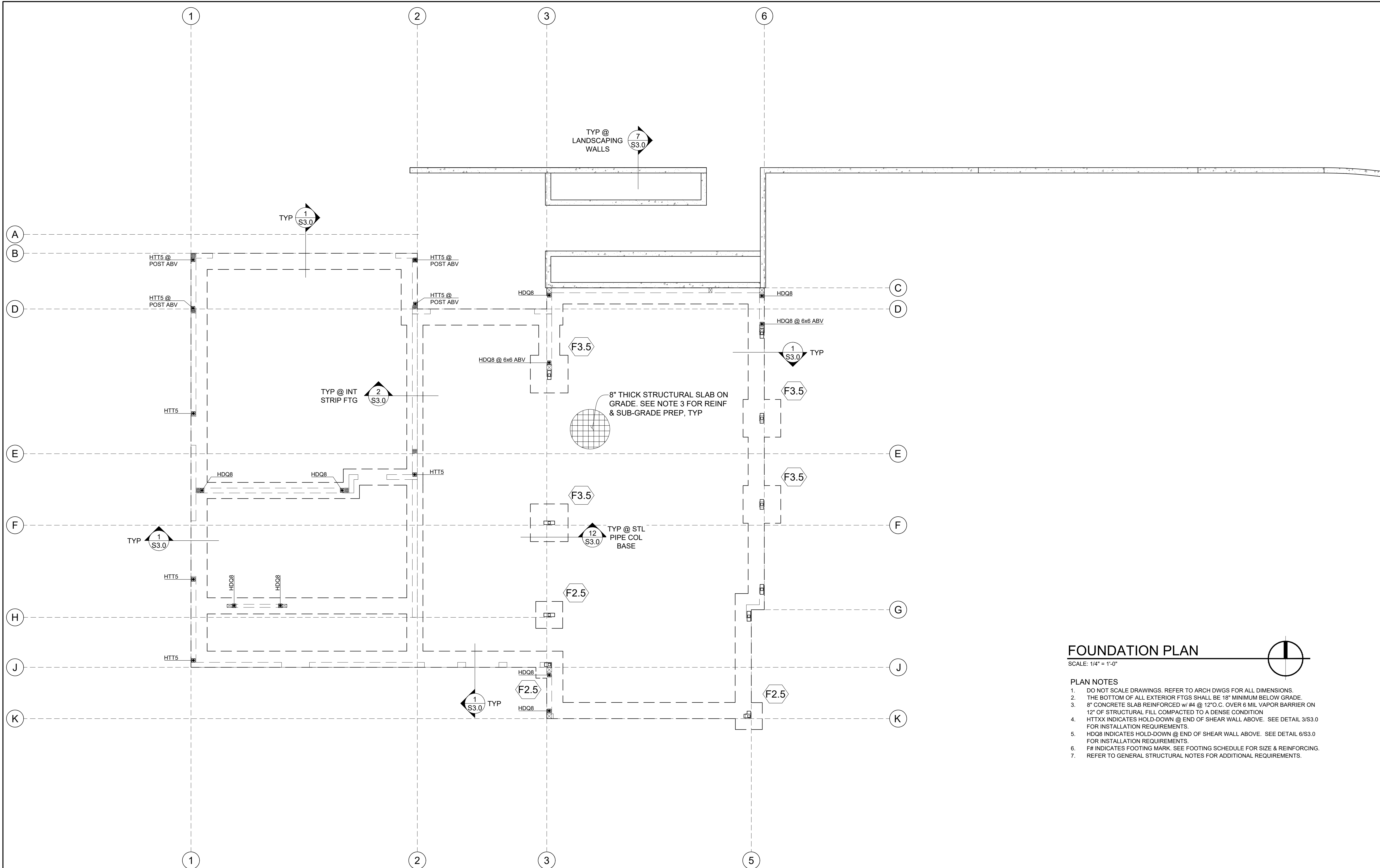


nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019. These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.
Stated drawing scale is based on 36" x 24" sheet.

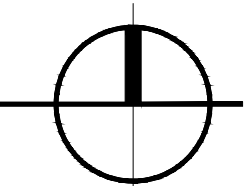


YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



FOUNDATION PLAN

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



PLAN NOTES

- DO NOT SCALE DRAWINGS. REFER TO ARCH DWGS FOR ALL DIMENSIONS.
- THE BOTTOM OF ALL EXTERIOR FTGS SHALL BE 18" MINIMUM BELOW GRADE.
- 8" CONCRETE SLAB REINFORCED w/ #4 @ 12" O.C. OVER 6 MIL VAPOR BARRIER ON 12" OF STRUCTURAL FILL COMPACTED TO A DENSE CONDITION
- HTTX INDICATES HOLD-DOWN @ END OF SHEAR WALL ABOVE. SEE DETAIL 3/S3.0 FOR INSTALLATION REQUIREMENTS.
- HDQ8 INDICATES HOLD-DOWN @ END OF SHEAR WALL ABOVE. SEE DETAIL 6/S3.0 FOR INSTALLATION REQUIREMENTS.
- F# INDICATES FOOTING MARK. SEE FOOTING SCHEDULE FOR SIZE & REINFORCING.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
D	06.28.19	Building Permit

Sheet Contents

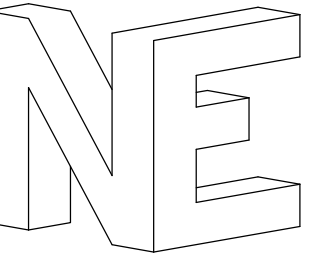
FOUNDATION PLAN

Job No. 19-065

Sheet No.

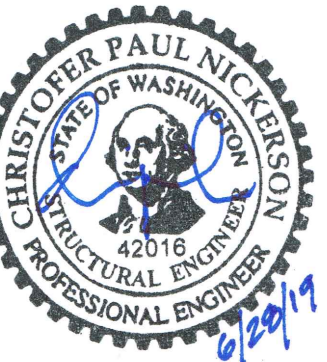
FOOTING SCHEDULE		
MARK	SIZE	REINFORCEMENT
F2.5	2'-6" x 2'-6" x 18" DP	(4)#4 EW 3" FROM BOT
F3.5	3'-6" x 3'-6" x 18" DP	(4)#4 EW 3" FROM BOT

S2.0

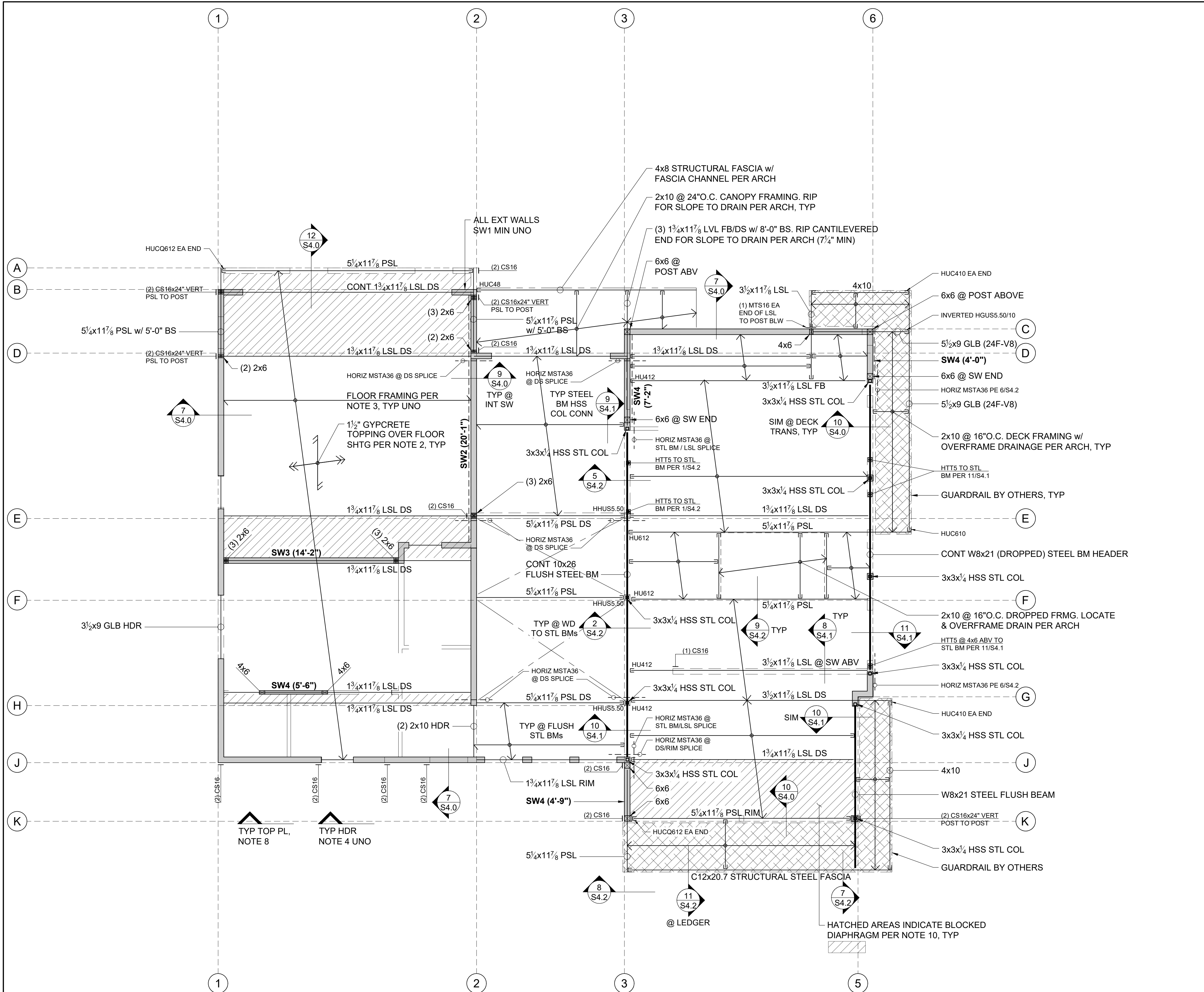


nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019. These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.
Stated drawing scale is based on 36" x 24" sheet.



YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



UPPER FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

- PLAN NOTES**
- DO NOT SCALE DRAWINGS. REFER TO ARCH DWGS FOR ALL DIMENSIONS.
 - FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL @ ALL FRAMED PANEL EDGES WITH 8d @ 6" OC AND TO ALL INTERMEDIATE FRAMING @ 12" OC.
 - FLOOR JOISTS SHALL BE 11 7/8" TJI 560's @ 16" OC U.N.O. TYPICAL JOIST HANGERS TO BE SIMPSON ITS OR IUS, UNO.
 - HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2) 2x8 MINIMUM. PROVIDE (2) TRIMMER STUDS MIN @ EA END OF ALL HEADERS U.N.O. SEE DETAIL 4/S4.0 FOR TYPICAL INSTALLATION.
 - PROVIDE (2) STUDS MINIMUM @ EACH END OF ALL BEAMS U.N.O. ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN & PROVIDE POSITIVE CONNECTION BY EITHER A35 OR LTP4 CLIPS ON EA SIDE OF BEAM OR W/ AN AC, PC, OR LPC CAP.
 - SW# (X-X) INDICATES SHEAR WALL TYPE AND APPROXIMATE LENGTH. SEE 1/S4.0 FOR CONSTRUCTION REQUIREMENTS.
 - ALL EXTERIOR WALLS SHALL BE SW1, U.N.O. ON PLANS.
 - TYPICAL TOP PLATE CONSTRUCTION PER 3/S4.0.
 - (X)CS16 INDICATES VERTICAL HOLD-DOWN STRAP @ END OF SHEAR WALL ABOVE. (X) INDICATES STRAP QTY. SEE DETAIL 8/S4.0 FOR INSTALLATION REQUIREMENTS.
 - BLOCKED DIAPHRAGM: IN AREAS NOTED ON PLAN, PROVIDE 2X FLAT BLKG @ ALL UNSUPPORTED PANEL EDGES & NAIL SHEATHING WITH 8d @ 6" @ PANEL EDGES AND 8d @ 12" OC FIELD.
 - DRAGSTRUT (D.S.): PROVIDE PANEL EDGE NAILING ALONG FULL LENGTH OF MEMBER. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

NOTE: REFER TO 10/S4.2 FOR ALTERNATE HORIZONTAL DTT2Z HOLD-DOWN DRAGSTRUT CONNECTION TO LIEU OF HORIZONTAL MSTA36 STRAP @ DS/RIM SPLICE

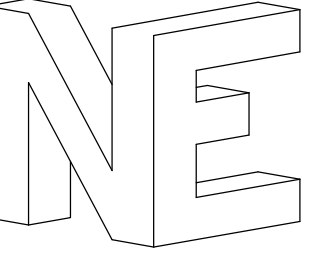
No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
D	06.28.19	Building Permit

Sheet Contents
UPPER FLOOR FRAMING PLAN

Job No. 19-065

Sheet No.

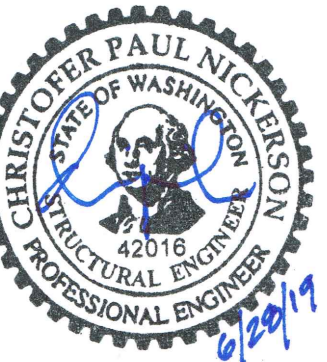
S2.1



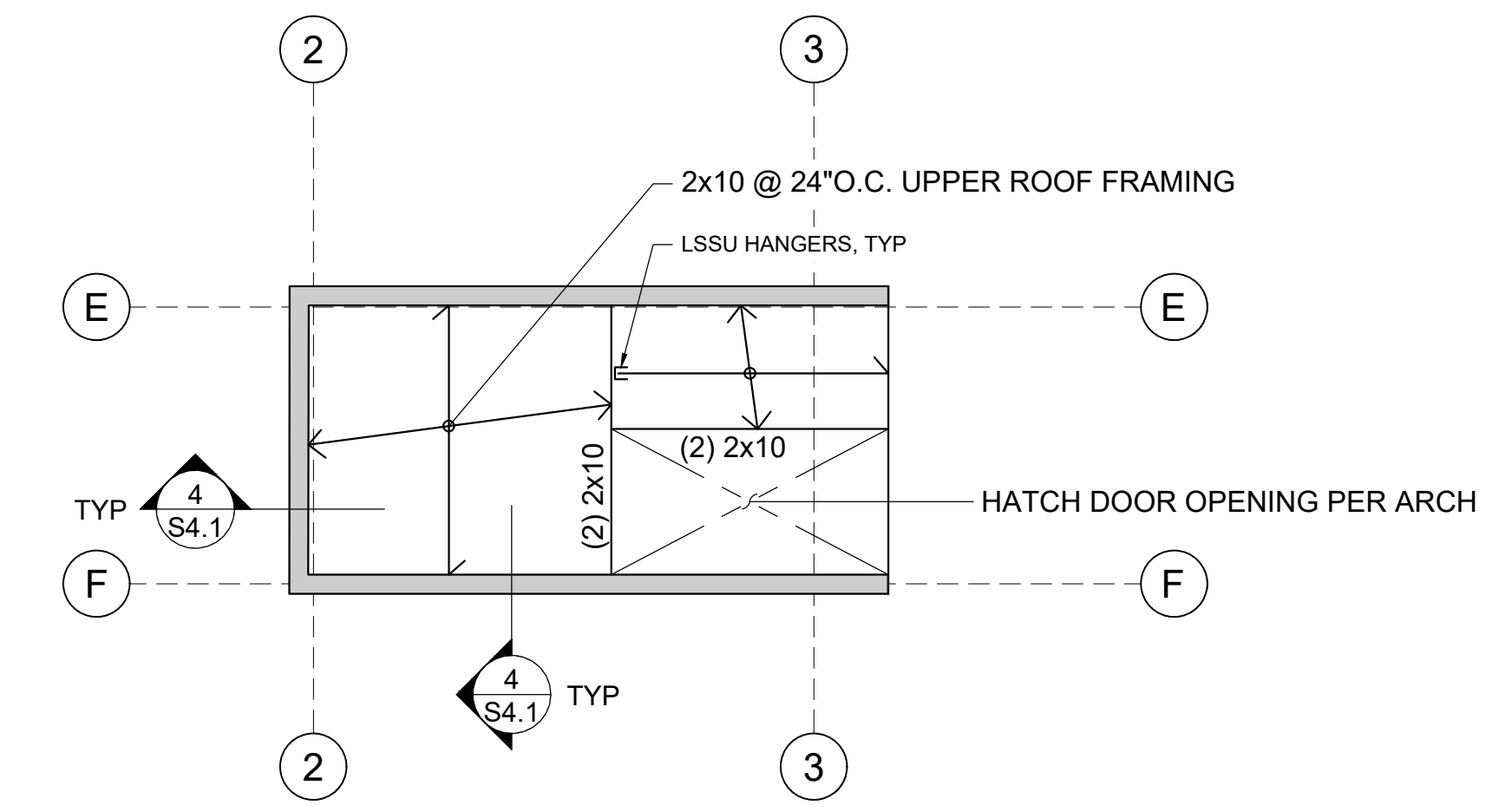
nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019. These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.

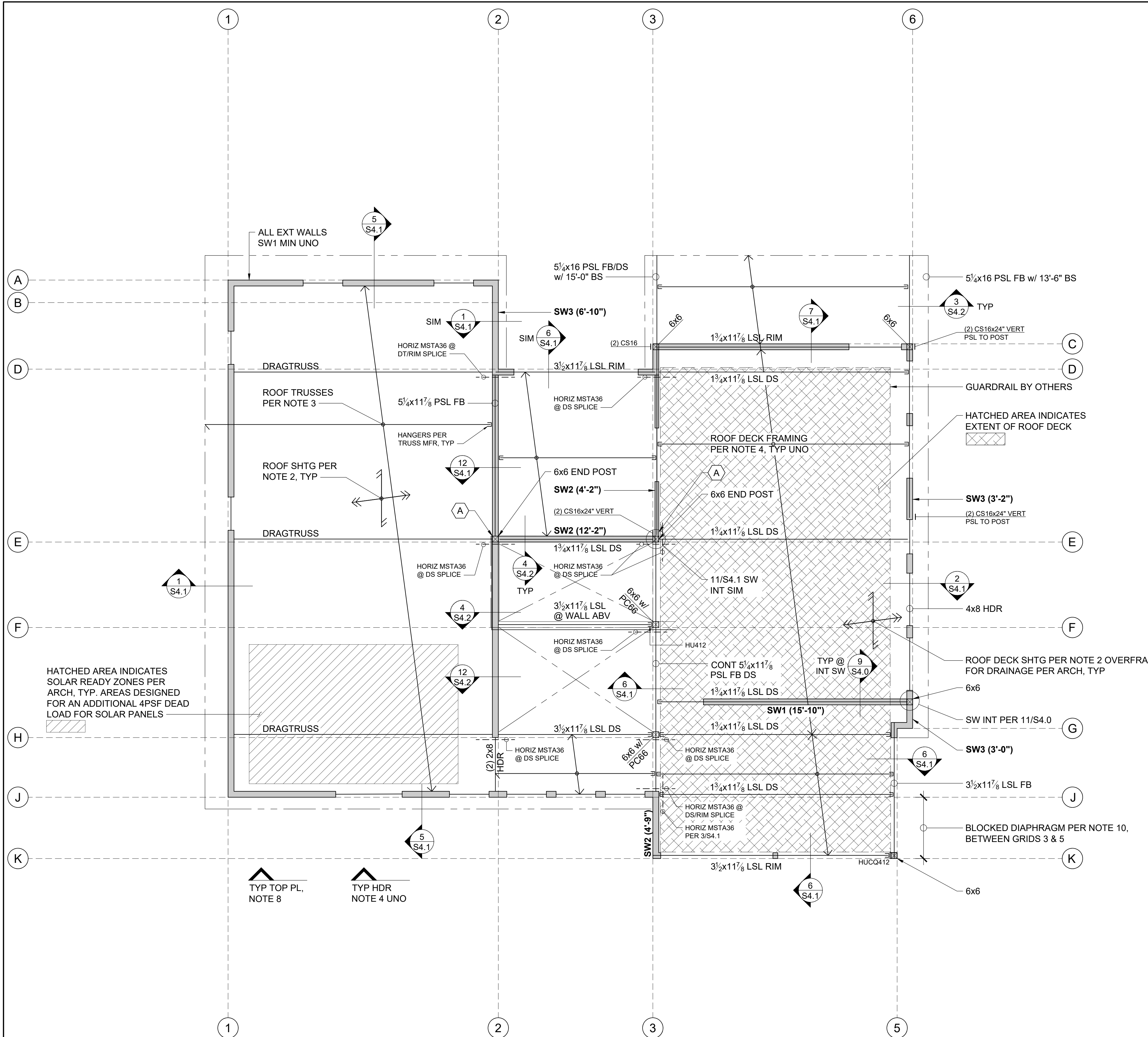
Stated drawing scale is based on 36" x 24" sheet.



YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



RAISED ROOF AT DECK ACCESS
SCALE: 1/4" = 1'-0"



ROOF DECK FRAMING PLAN
SCALE: 1/4" = 1'-0"

- PLAN NOTES**
- DO NOT SCALE DRAWINGS. REFER TO ARCH DWGS FOR ALL DIMENSIONS.
 - ROOF DECK SHEATHING SHALL BE 3/4" TONGUE AND GROOVE A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL @ ALL FRAMED PANEL EDGES WITH 8d @ 6" OC AND TO ALL INTERMEDIATE FRAMING @ 12" OC
 - ROOF FRAMING SHALL BE PREFABRICATED ROOF TRUSSES @ 24" OC. TRUSS DESIGN TO BE PROVIDED BY OTHERS. SEE STRUCTURAL NOTES FOR DESIGN REQUIREMENTS.
 - ROOF DECK JOISTS SHALL BE 11 7/8" TJI 580s @ 16" OC U.N.O. TYPICAL JOIST HANGERS TO BE SIMPSON ITS OR IUS, UNO.
 - HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2) 2x8 MINIMUM. PROVIDE (2) TRIMMER STUDS MIN @ EA END OF ALL HEADERS U.N.O. SEE DETAIL 4/S4.0 FOR TYPICAL INSTALLATION.
 - PROVIDE (2) STUDS MINIMUM @ EACH END OF ALL BEAMS U.N.O. ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN & PROVIDE POSITIVE CONNECTION BY EITHER A35 OR LTP4 CLIPS ON EA SIDE OF BEAM OR W/ AN AC, PC, OR LPC CAP.
 - SW# (X'-X") INDICATES SHEAR WALL TYPE AND APPROXIMATE LENGTH. SEE 1/S4.0 FOR CONSTRUCTION REQUIREMENTS.
 - ALL EXTERIOR WALLS SHALL BE SW1, U.N.O. ON PLANS.
 - TYPICAL TOP PLATE CONSTRUCTION PER 3/S4.0.
 - BLOCKED DIAPHRAGM: IN AREAS NOTED ON PLAN, PROVIDE 2X FLAT BLKG @ ALL UNSUPPORTED PANEL EDGES & NAIL SHEATHING WITH 8d @ 6" @ PANEL EDGES AND 8d @ 12" OC FIELD.
 - DRAGSTRUT (D.S.): PROVIDE PANEL EDGE NAILING ALONG FULL LENGTH OF MEMBER.
 - DRAGTRUSS (D.T.): PROVIDE PANEL EDGE NAILING ALONG FULL LENGTH OF TOP CHORD.
 - REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

ⓐ SHEARWALL SHTG CONTINUOUS TO END OF SW POST

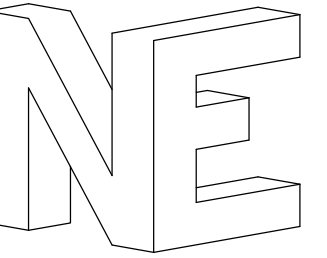
No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
D	06.28.19	Building Permit

Sheet Contents
ROOF DECK FRAMING PLAN

Job No. 19-065

Sheet No.

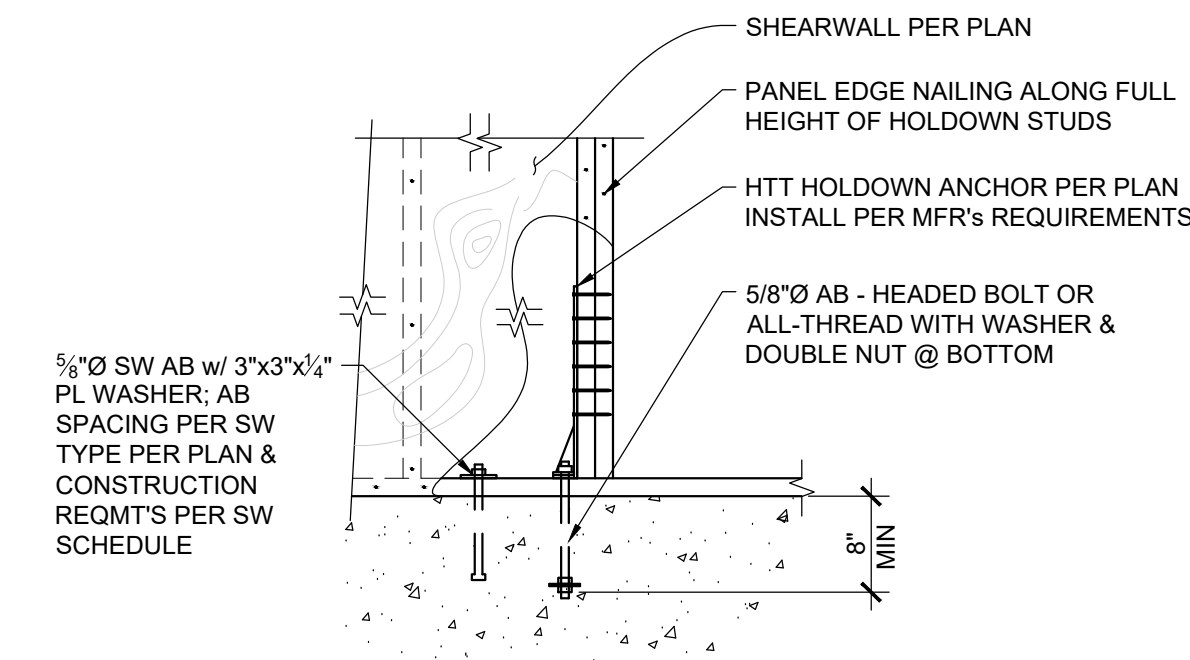
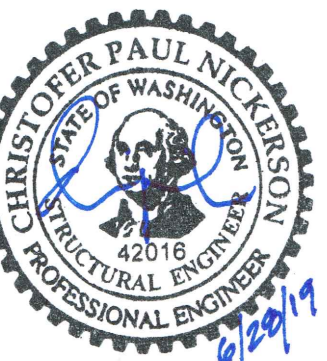
S2.2



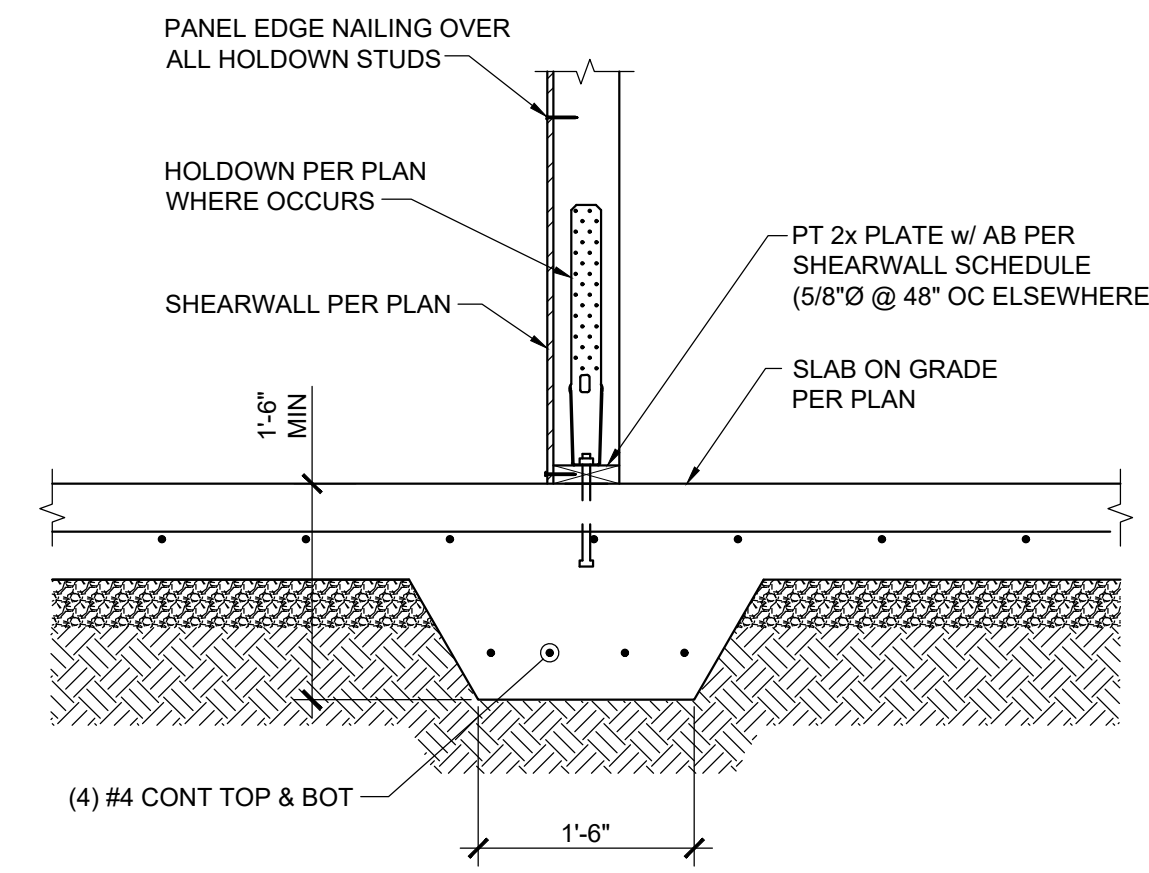
nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019 These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.

Stated drawing scale is based on 36" x 24" sheet.

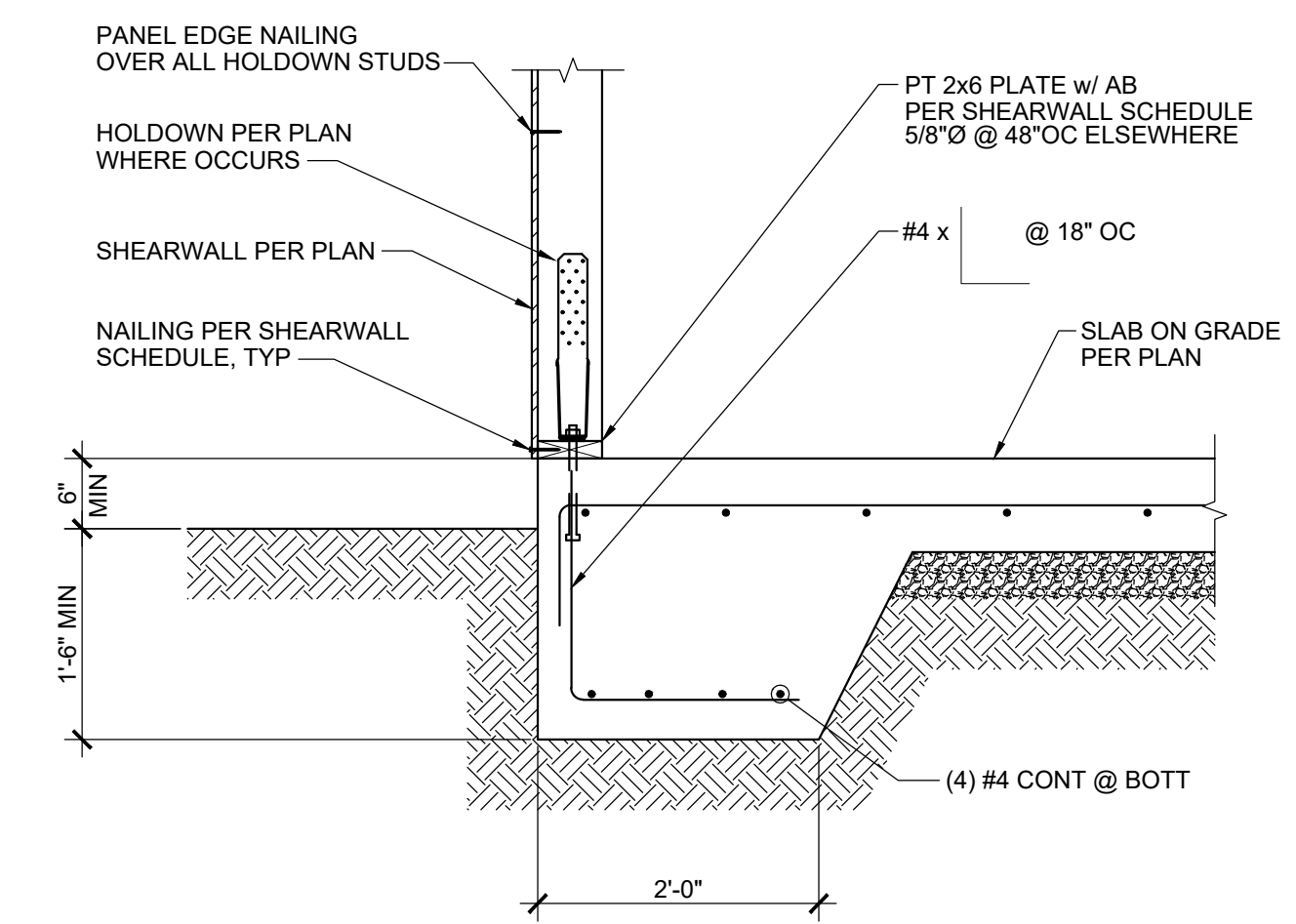


TYPICAL HTT HOLD-DOWN ANCHOR 3
SCALE: 3/4" = 1'-0" S3.0



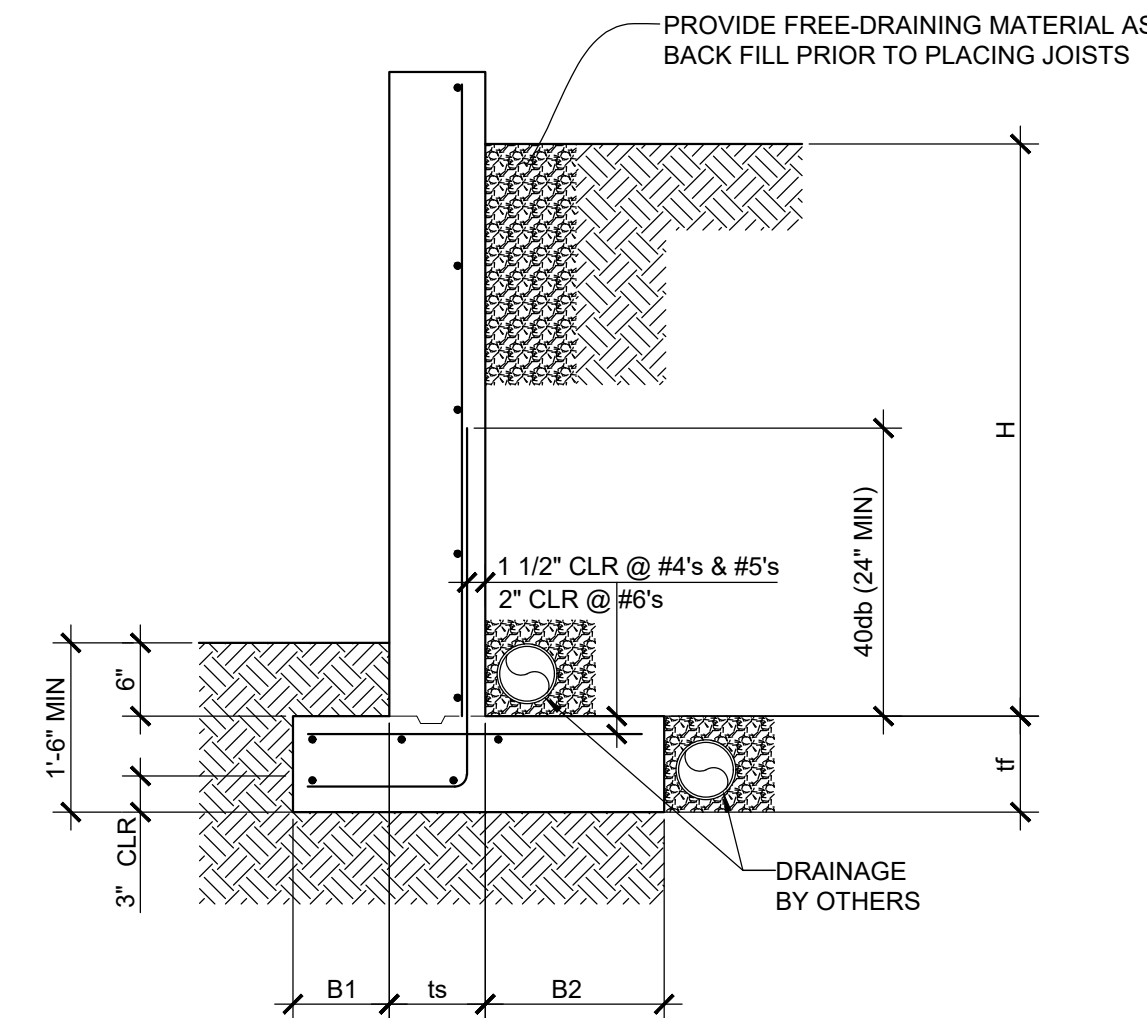
ALL FASTENERS INTO PRESSURE TREATED WOOD SHALL BE GALV OR STAINLESS STEEL PER GENERAL STRUCTURAL NOTES

INTERIOR STRIP FOOTING AT SLAB 4
SCALE: 3/4" = 1'-0" S3.0



ALL FASTENERS INTO PRESSURE TREATED WOOD SHALL BE GALV OR STAINLESS STEEL PER GENERAL STRUCTURAL NOTES

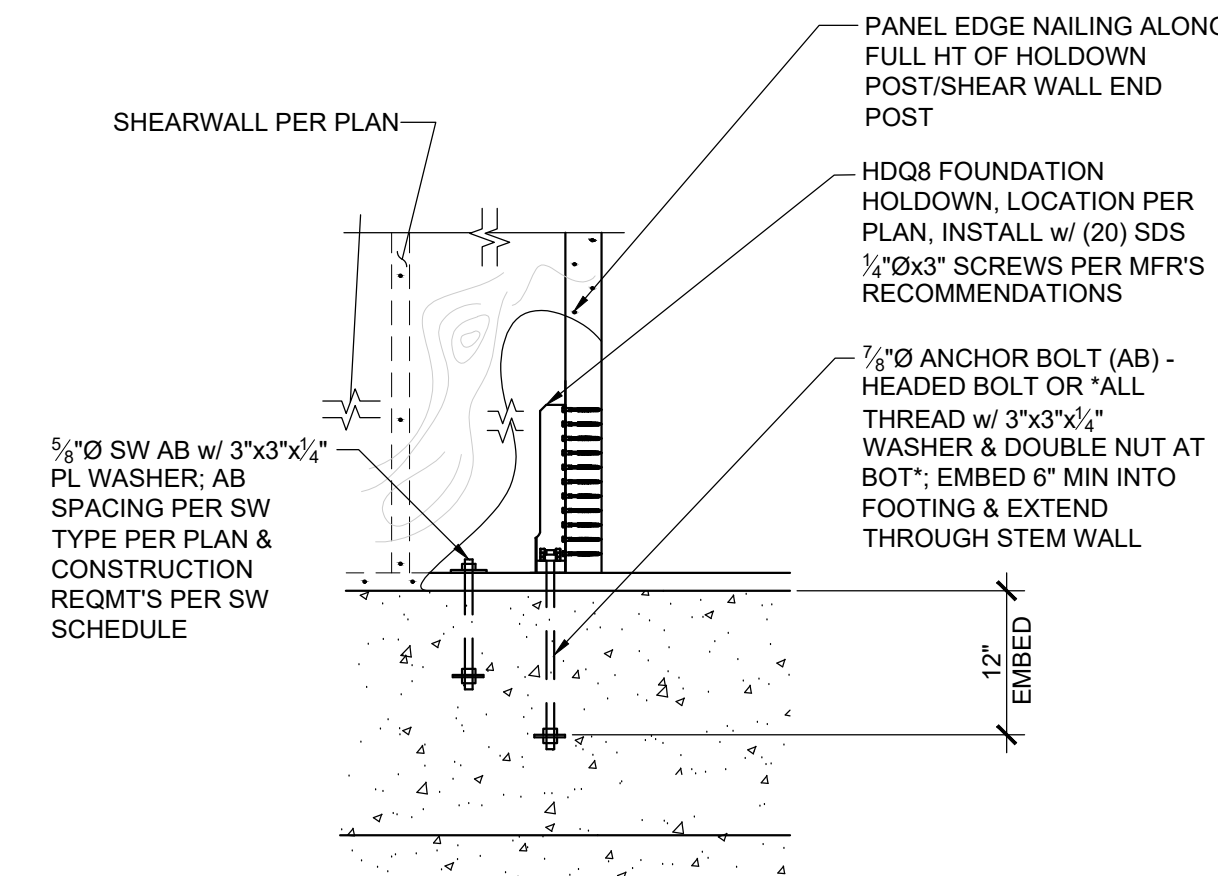
FOUNDATION @ SLAB ON GRADE 1
SCALE: 3/4" = 1'-0" S3.0



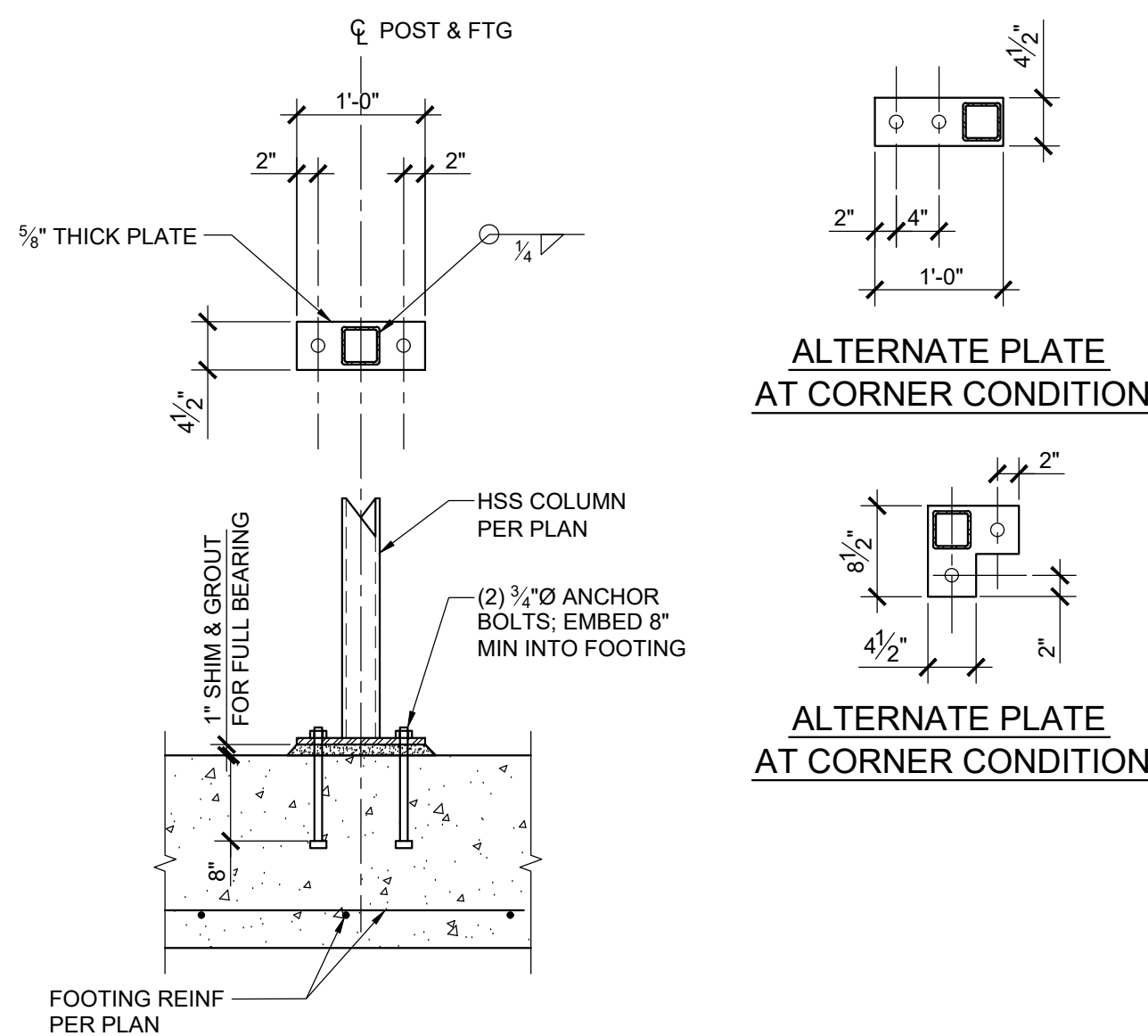
RETAINING WALL SCHEDULE

H (ft)	B1	ts	B2	tf	STEM REINFORCING		FOOTING REINFORCING	
					VERTICAL	HORIZONTAL	TOP	LONGITUDINAL
4'-0"	9"	8"	1'-3"	12"	#4 @ 12"OC	#4 @ 12"OC	#4 @ 18"OC	(4) #4
5'-0"	1'-0"	8"	1'-6"	12"	#4 @ 12"OC	#4 @ 12"OC	#4 @ 18"OC	(5) #4
6'-0"	1'-0"	8"	2'-0"	12"	#4 @ 12"OC	#4 @ 12"OC	#4 @ 18"OC	(5) #4
7'-0"	1'-6"	8"	2'-3"	12"	#4 @ 10"OC	#4 @ 12"OC	#4 @ 18"OC	(6) #4

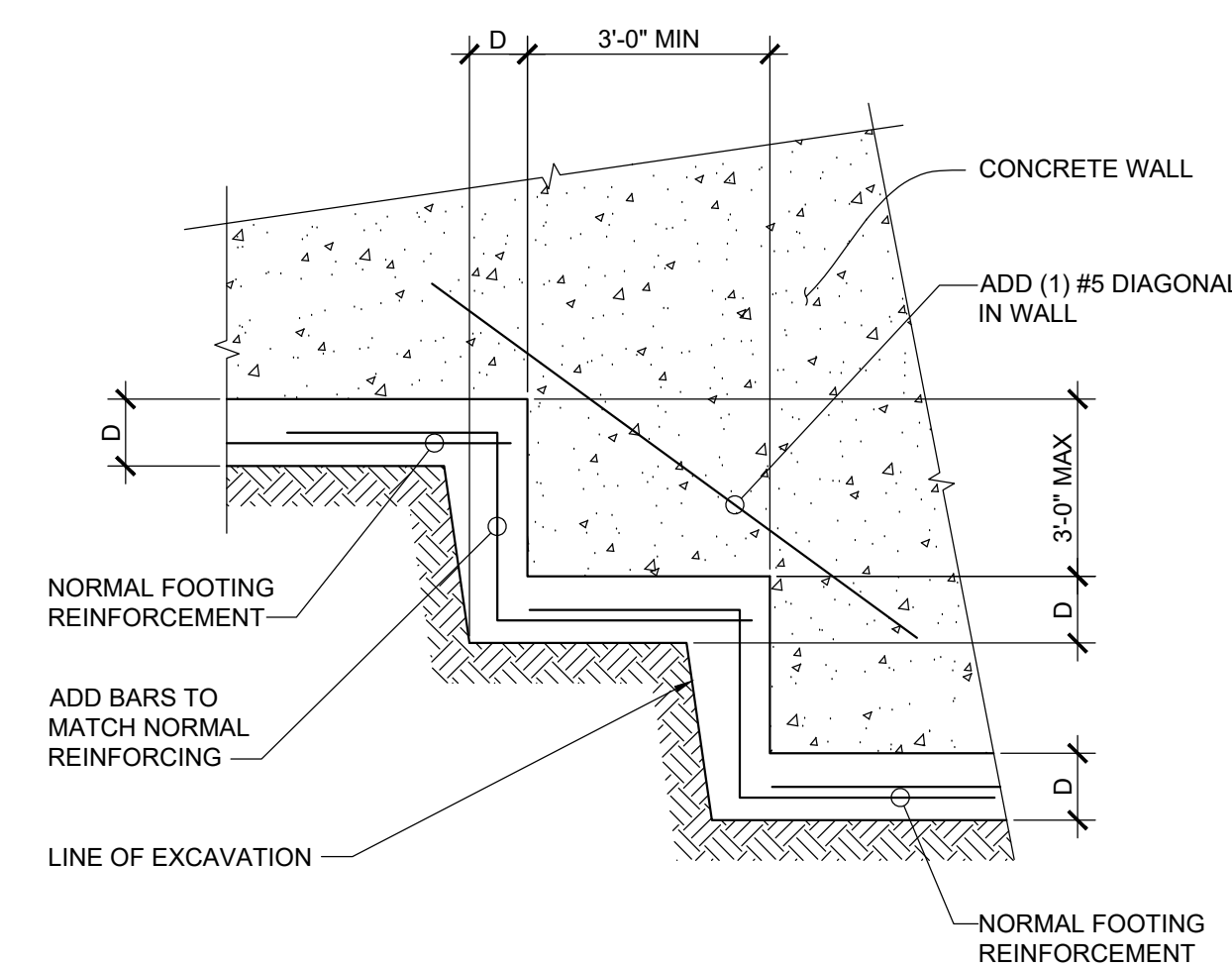
SITE RETAINING WALLS 7
SCALE: 3/4" = 1'-0" S3.0



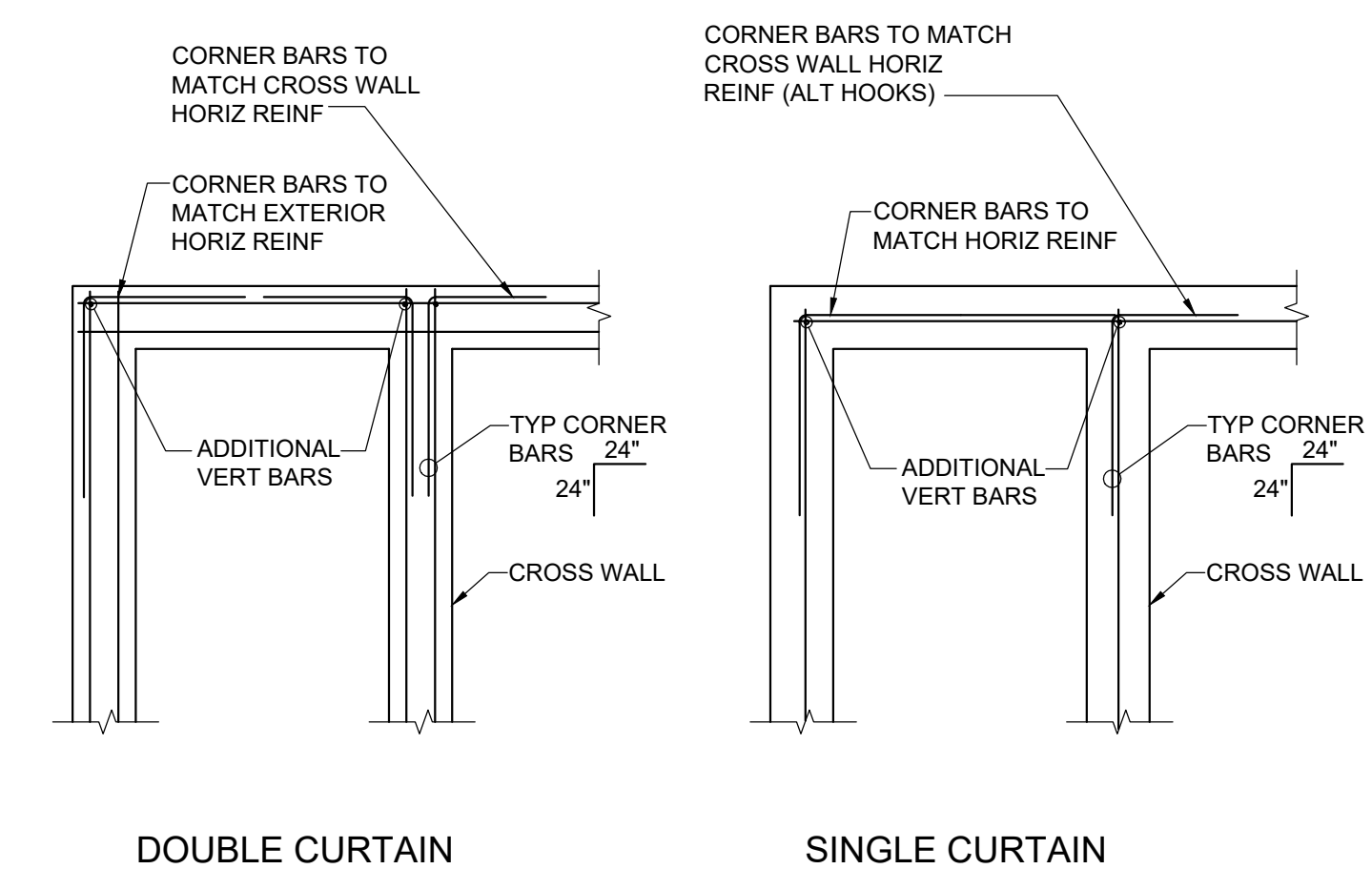
TYPICAL HDQ8 HOLD-DOWN ANCHOR 6
SCALE: 3/4" = 1'-0" S3.0



BASE PLATE - HSS COLUMN 12
SCALE: 3/4" = 1'-0" S3.0



TYPICAL STEPPED FOOTING 11
SCALE: 3/4" = 1'-0" S3.0



TYP CORNER BARS @ CONC WALLS & FTGS 9
SCALE: 3/4" = 1'-0" S3.0

YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040

No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
D	06.28.19	Building Permit

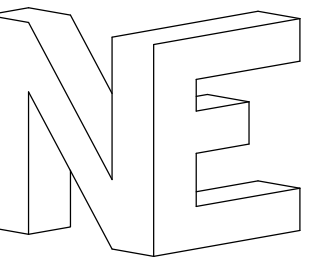
Sheet Contents

FOUNDATION DETAILS

Job No. 19-065

Sheet No.

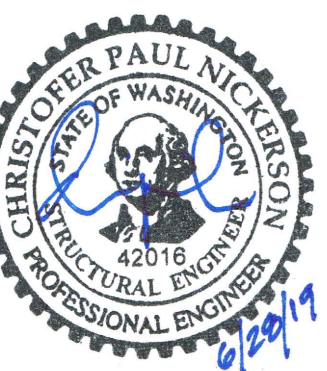
S3.0



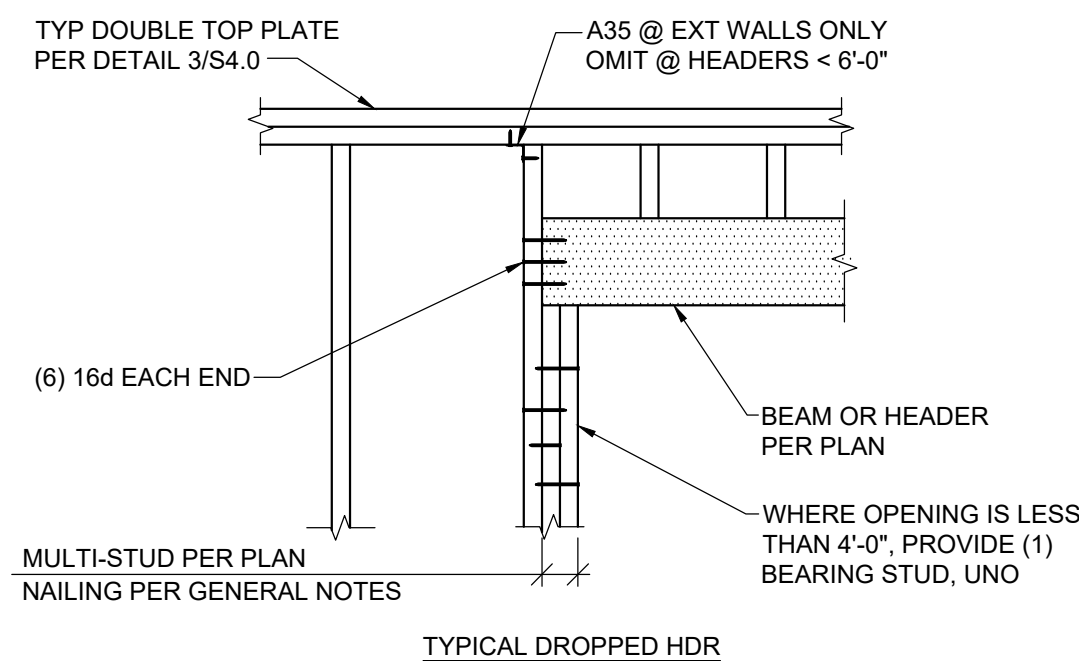
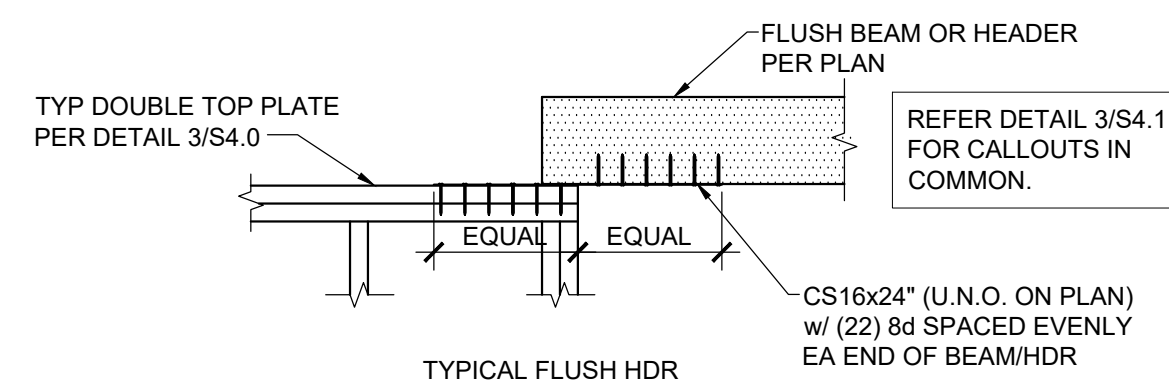
nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019 These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.

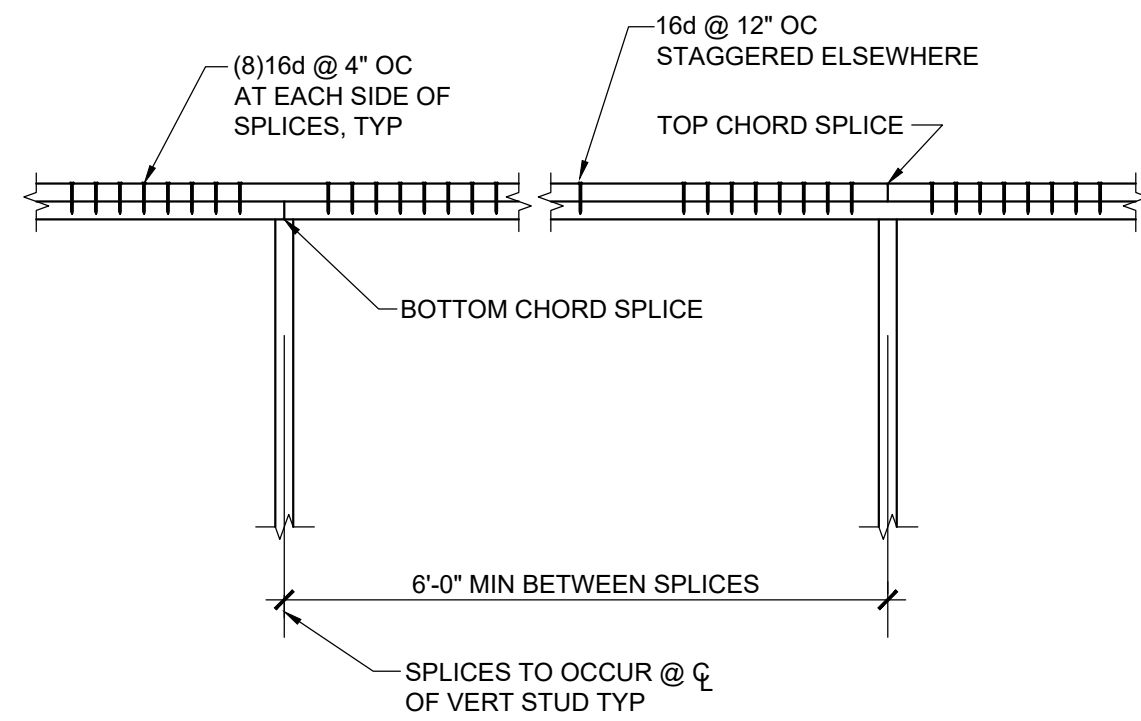
Stated drawing scale is based on 36" x 24" sheet.



YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



TYPICAL HEADER SUPPORT 4 S4.0
SCALE: 3/4" = 1'-0"

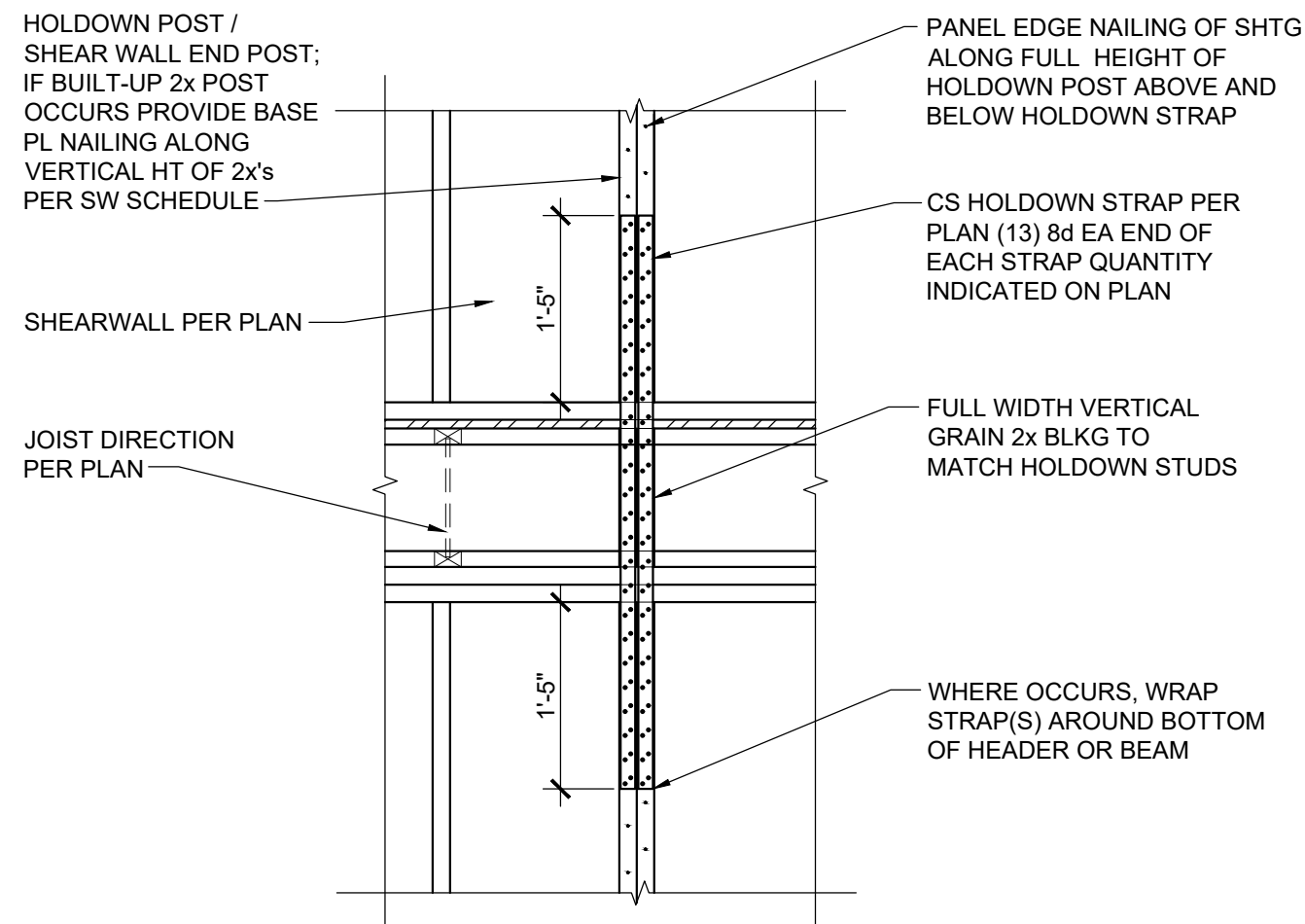


TYPICAL TOP PLATE SPLICE 3 S4.0
SCALE: 3/4" = 1'-0"

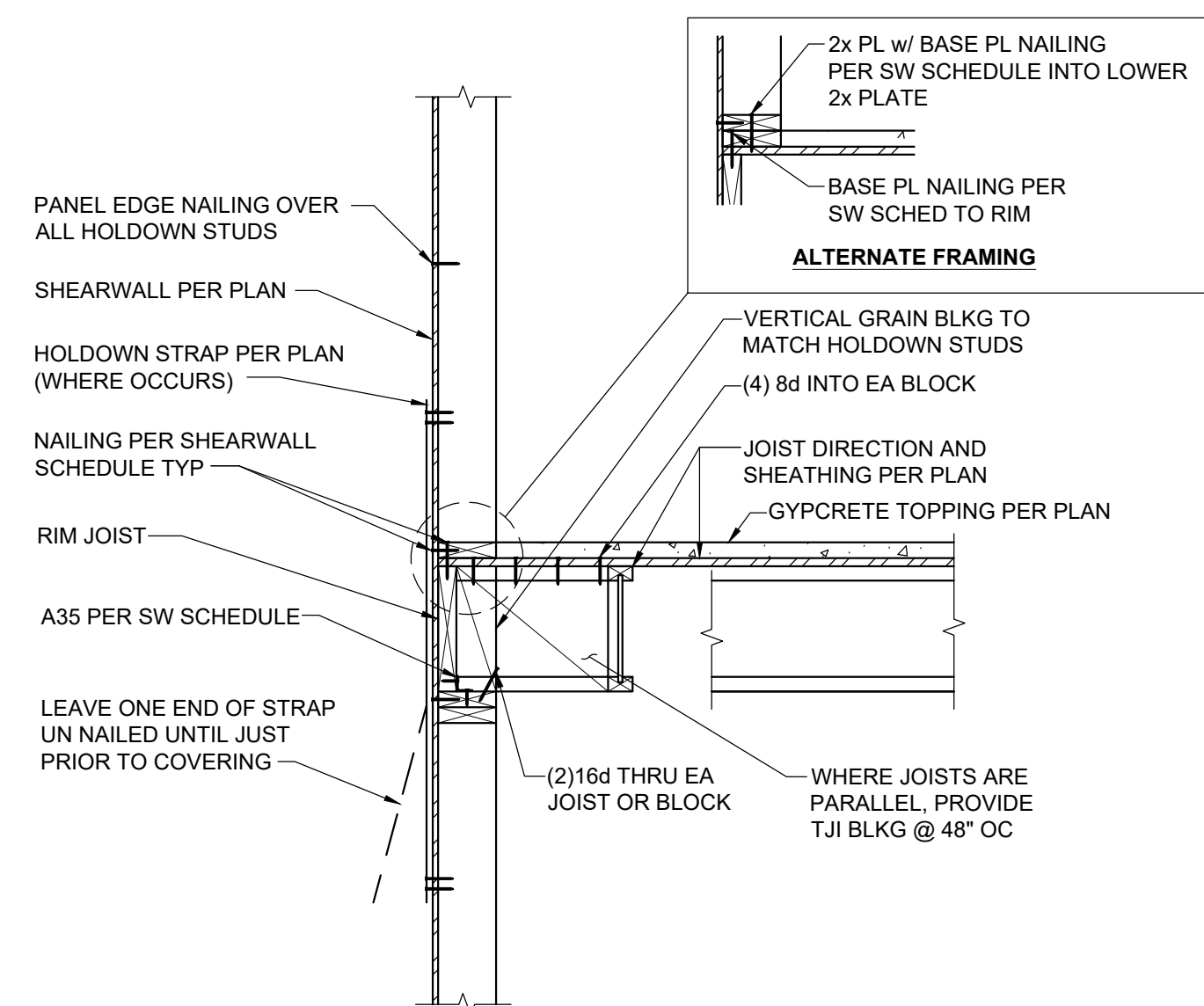
SHEARWALL (SW) SCHEDULE ①④⑦

MARK	SHEATHING ⑨	PANEL EDGE NAILING ②	TOP PLATE CONNECTION ⑧ ⑩		BASE PLATE CONNECTION	
			at TJI	LSL	at WOOD	at CONCRETE ③
SW1	1/2" PLYWOOD	8d @ 6"OC	16d @ 6"OC	A35 @ 24"OC	16d @ 6"OC	3/4" AB @ 48"OC
SW2	1/2" PLYWOOD	8d @ 4"OC	16d @ 4"OC	A35 @ 16"OC	16d @ 4"OC	3/4" AB @ 32"OC
SW3 ⑤	1/2" PLYWOOD	8d @ 3"OC	(2) ROWS 16d @ 6"OC	A35 @ 12"OC	16d @ 3"OC	3/4" AB @ 16"OC ⑥
SW4 ⑤	1/2" PLYWOOD	8d @ 2"OC	(2) ROWS 16d @ 4 1/2"OC	A35 @ 8"OC	(2) ROWS 16d @ 4 1/2"OC	3/4" AB @ 12"OC ⑥

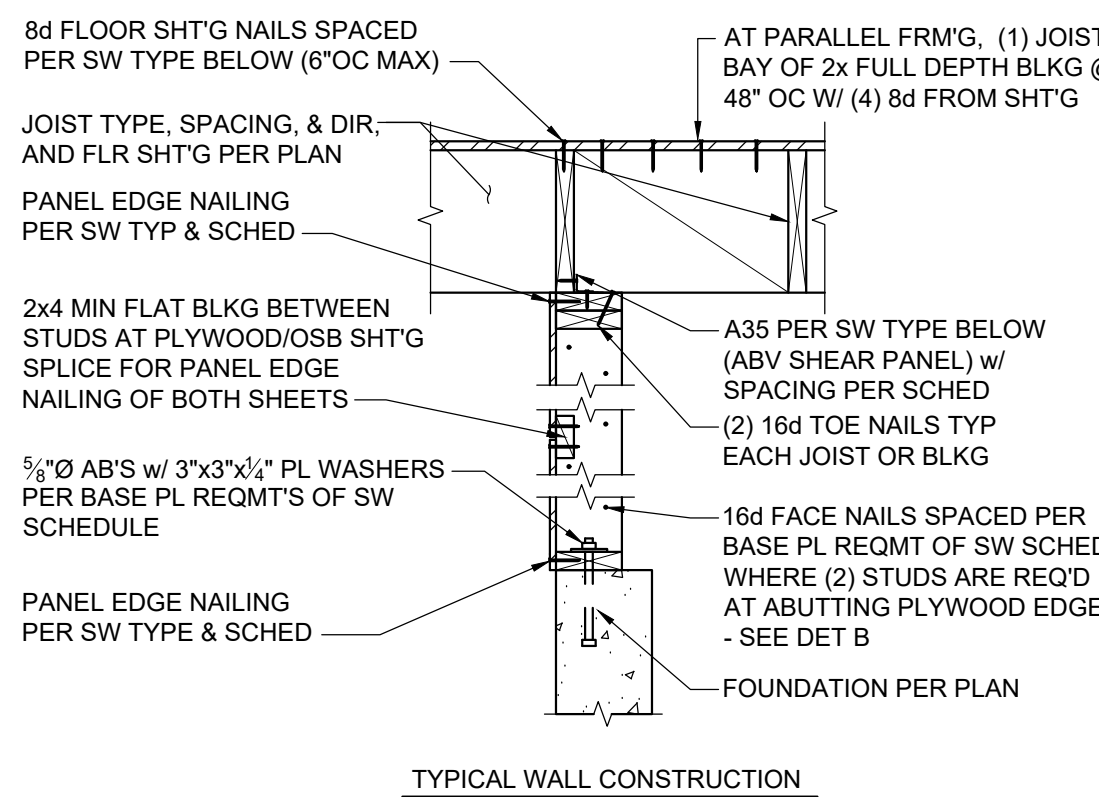
- BLOCK PANEL EDGES WITH 2x LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"OC.
- 8d NAILS SHALL BE 0.131"Ø x 2 1/2" (COMMON); ACCEPTABLE SUBSTITUTE FOR 8d's ARE 10d's OF 0.131"Ø x 3" AT CONTRACTORS OPTION; 16d NAILS SHALL BE 0.135"Ø x 3 1/2" (BOX), 0.148"Ø x 3" (SINKER), OR 0.162"Ø x 3" (COMMON WIRE)
- EMBED ANCHOR BOLTS (AB'S) 7" MIN & PROVIDE 3"x3"x1/4" PL WASHER AT EA AB; EXPANSION BOLTS, TITEN HD ANCHORS, OR EPOXY EMBEDDED THREADED RODS MAY BE POST INSTALLED IN LIEU OF AB'S. ALL POST INSTALLED ANCHORS SHALL HAVE 3"x3"x1/4" PL WASHER; EPOXY EMBEDDED OPTION SHALL UTILIZE SIMPSON SET-XP EPOXY.
- (2)2x STUDS MIN ARE REQUIRED AT THE END OF ALL SHEAR WALL PANELS TO RECEIVE THE PANEL EDGE NAILING; BUILT UP 2x STUDS SHOULD FACE NAILED w/ 10d OR 16d NAILS PER THE BASE PL NAILING REQMT'S OF THE SPECIFIC SW TYPE (PER PLAN); SEE DETAIL B
- SW3, SW4 & SW5 REQUIREMENTS: 3x STUDS OR (2) 2x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES WHERE (2)2x STUDS ARE UTILIZED PROVIDE BASE PL NAILING ALONG FULL VERTICAL FACE OF 2x'S. EACH ROW OF PANEL EDGE NAILING TO BE STAGGERED HORIZONTALLY. FOR SW5, ABUTTING PANEL EDGES SHALL BE OFFSET EACH SIDE OF WALL.
- SW3, SW4 & SW5 ANCHOR BOLT & PLATE WASHER PLACEMENT - PLATE WASHERS SHALL BE NO MORE THAN 1/2" FROM INTERIOR FACE OF SHEATHING/SILL PLATE EDGE WHERE NAILING OCCURS - SEE DETAIL C. AT SW5, ANCHOR BOLTS TO BE STAGGERED.
- ALL EXTERIOR WALLS SHALL BE SW1, UNLESS NOTED OTHERWISE.
- ALTERNATIVE CONNECTIONS FOR A35'S: LTP4 FLAT PL'S AT SAME SPACING FROM RIM/BLOCKING/BEAM TO TOP PL'S; A 2x NAILER FOR CEILING CONNECTION, OR THE HORIZONTAL SHEATHING SPLICE/JUNCTION TO OCCUR ON RIM/BLKG/BEAM (ABOVE TOP PL'S & BELOW BOTTOM PL) - SEE DETAIL A
- 3/4" OSB IS ACCEPTABLE SUBSTITUTE FOR 1/2" CDX PLYWOOD w/ SIMILAR SPAN RATING.
- ALL RIMS TO BE LSL 1 1/2" x 1 1/2" UNO ON PLAN.



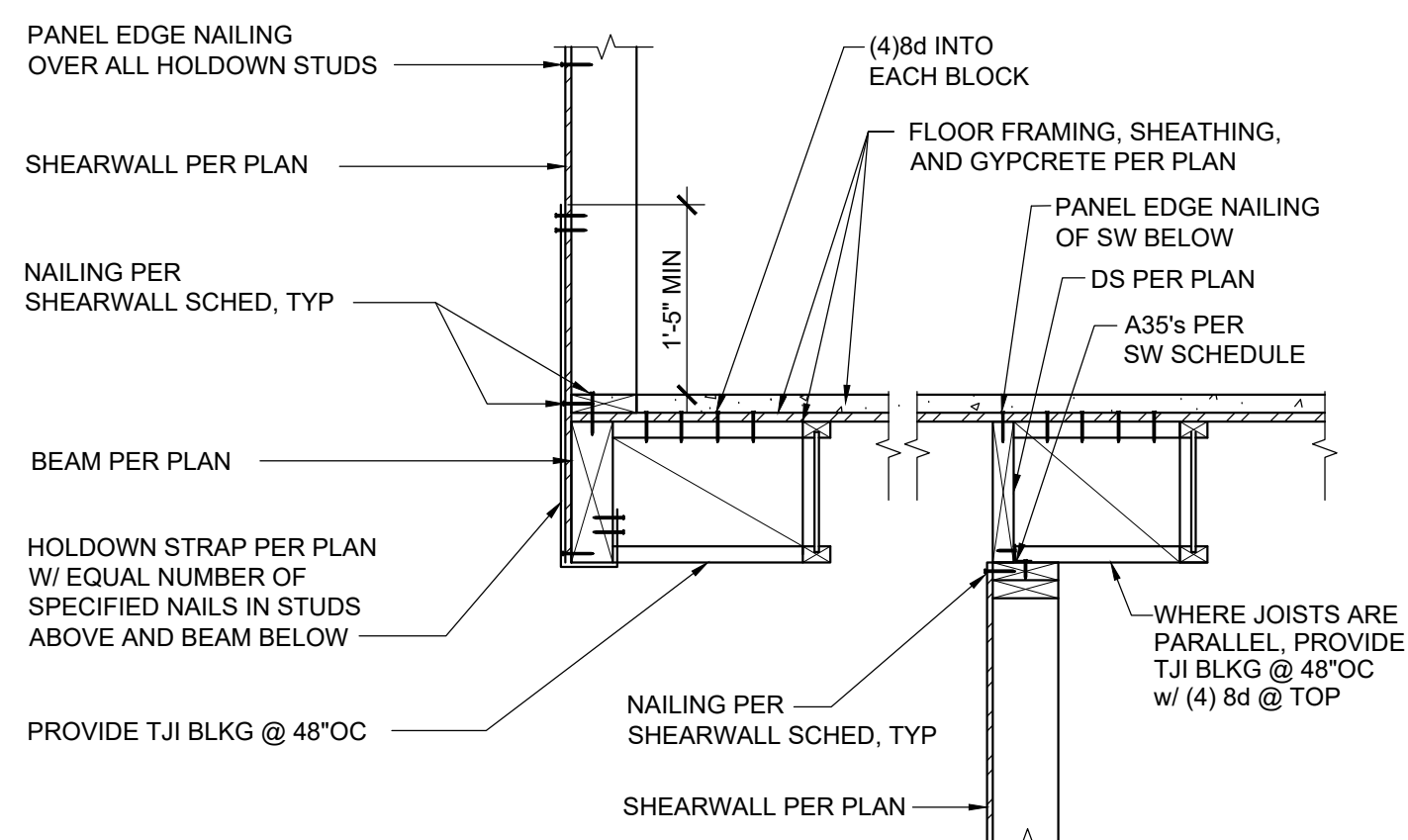
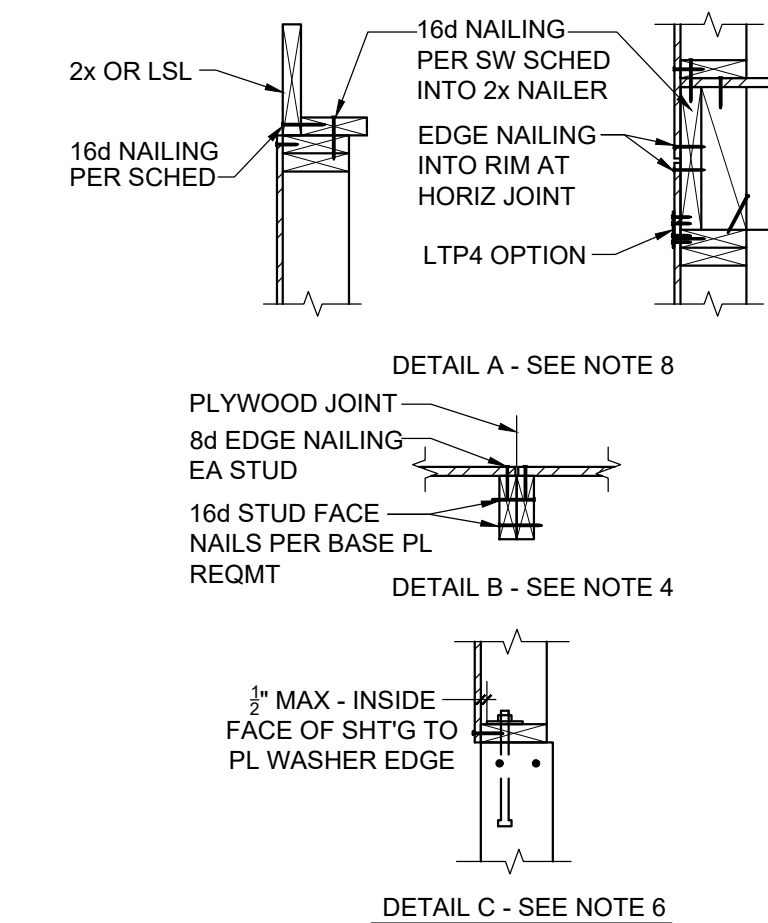
TYPICAL CS HOLDOWN STRAP 8 S4.0
SCALE: 3/4" = 1'-0"



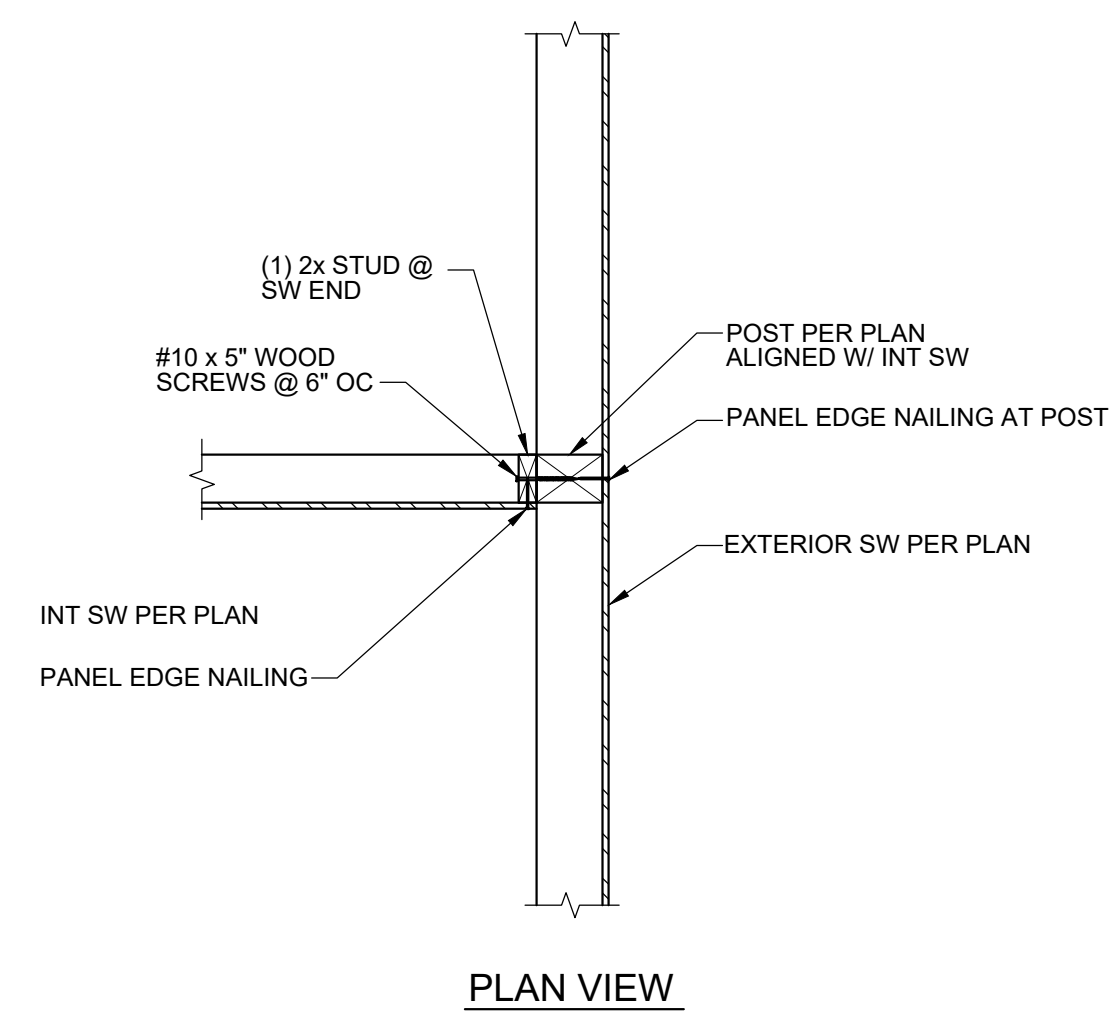
EXTERIOR WALL @ FLOOR 7 S4.0
SCALE: 3/4" = 1'-0"



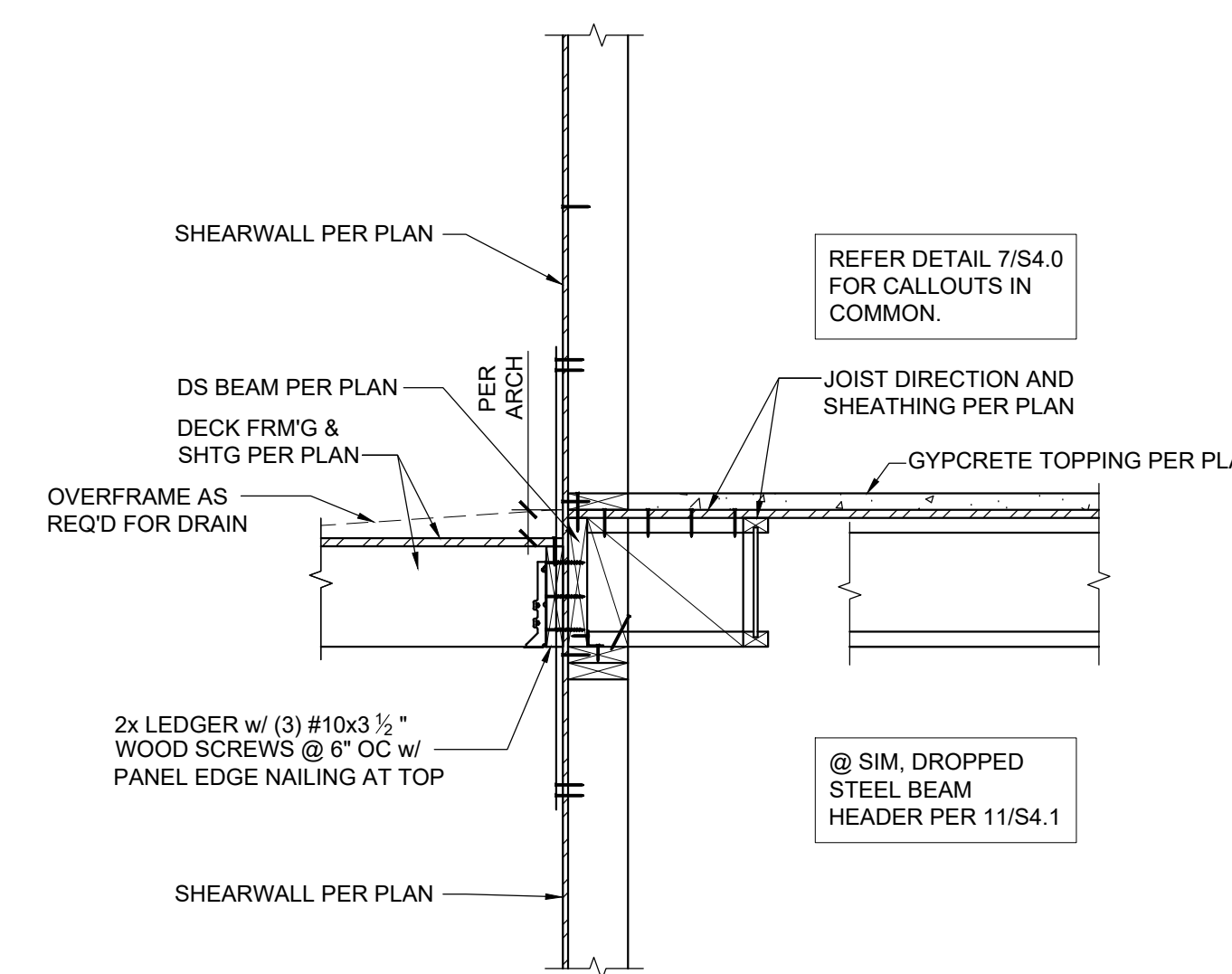
SHEARWALL SCHEDULE AND TYPICAL CONSTRUCTION 1 S4.0
SCALE: NTS



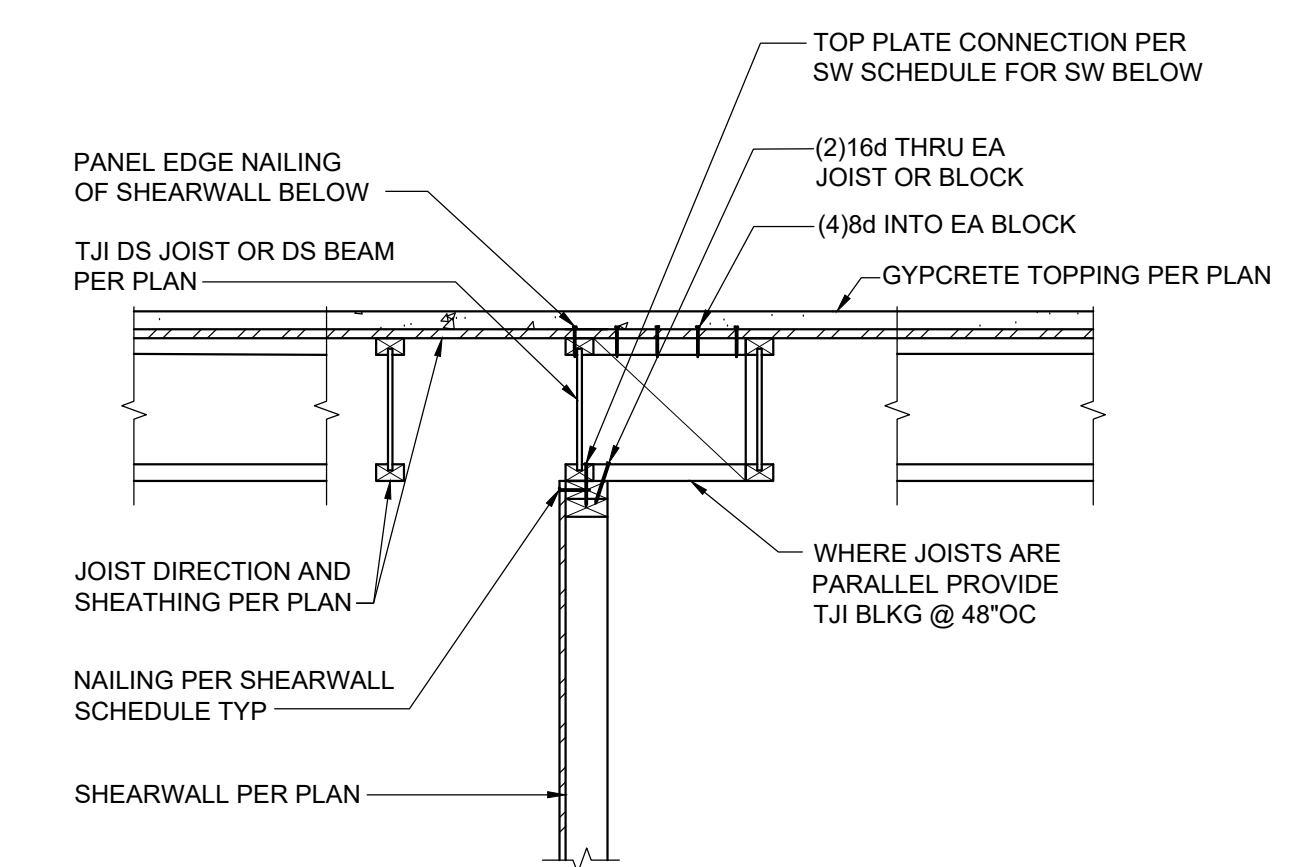
EXTERIOR WALL @ CANTILEVER FLOOR 12 S4.0
SCALE: 3/4" = 1'-0"



SHEAR WALL INTERSECTION 11 S4.0
SCALE: 3/4" = 1'-0"



FRAMING AT DECK TRANSITION 10 S4.0
SCALE: 3/4" = 1'-0"



INTERIOR SHEARWALL BELOW w/ TJI's 9 S4.0
SCALE: 3/4" = 1'-0"

No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
0	06.28.19	Building Permit

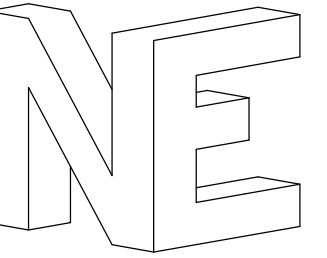
Sheet Contents

FRAMING DETAILS

Job No. 19-065

Sheet No.

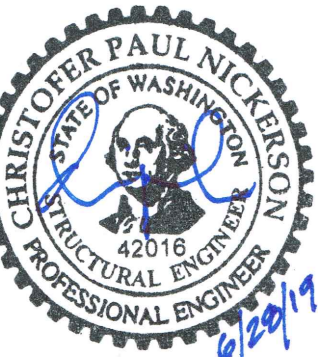
S4.0



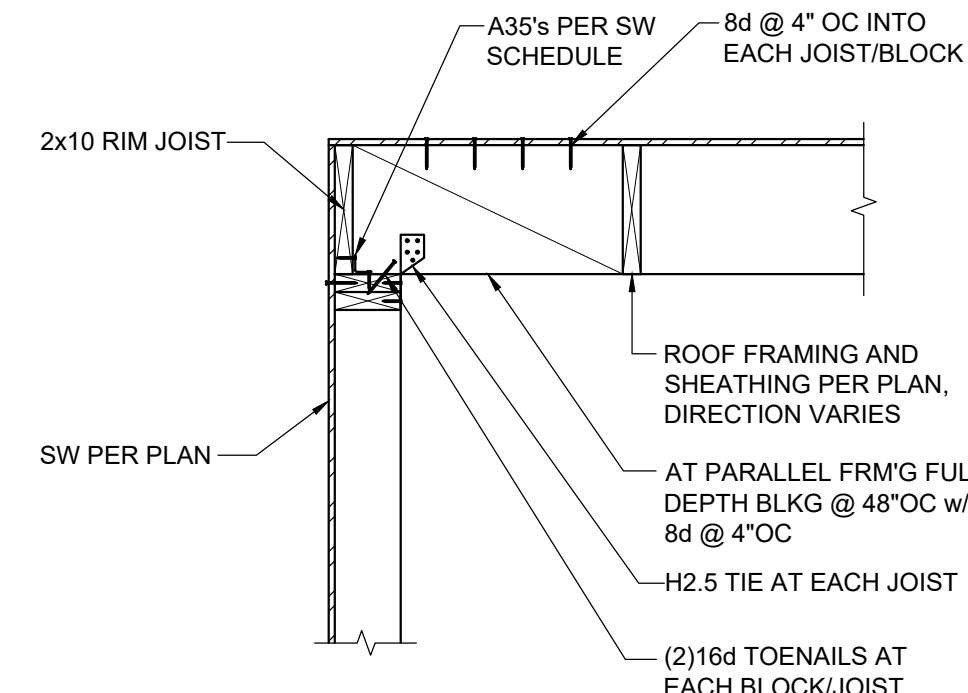
nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019 These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.

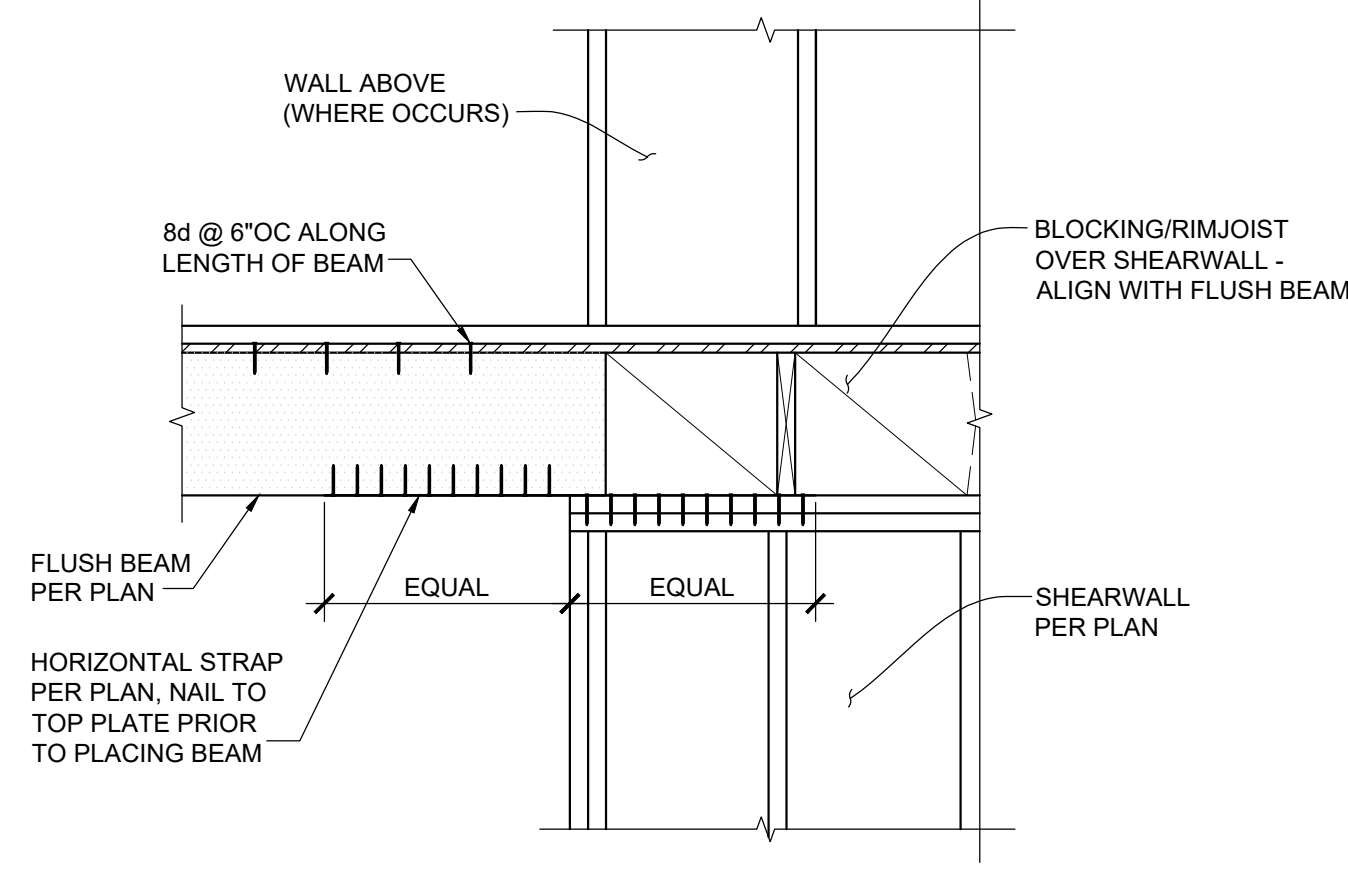
Stated drawing scale is based on 36" x 24" sheet.



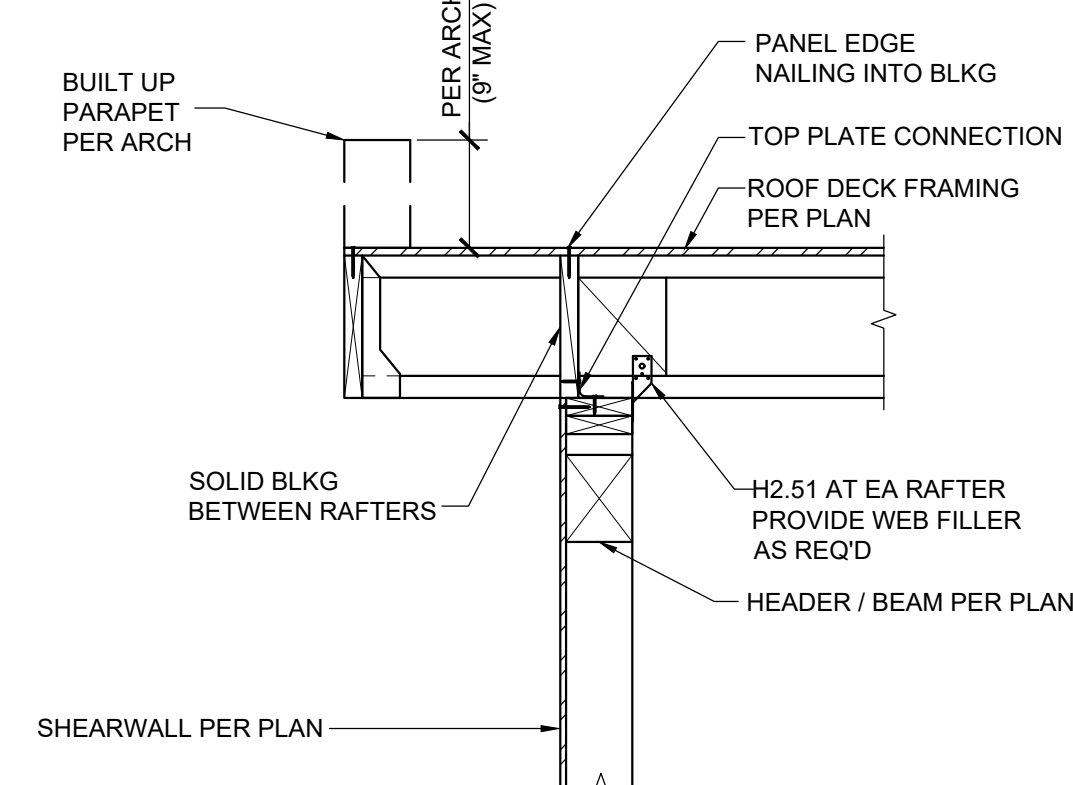
YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



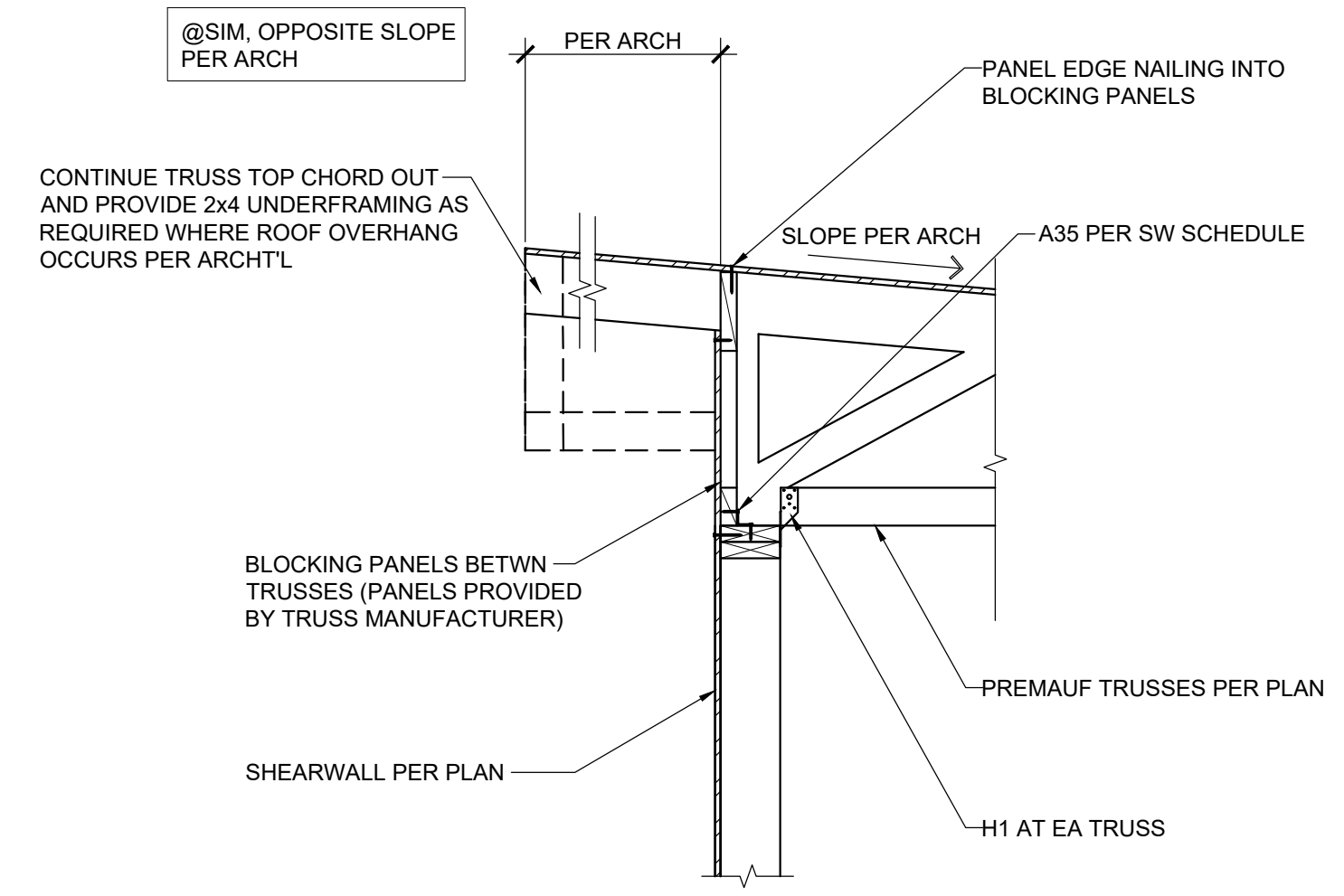
RAISED ROOF FRAMING SECTION 4
SCALE: 3/4" = 1'-0"
S4.1



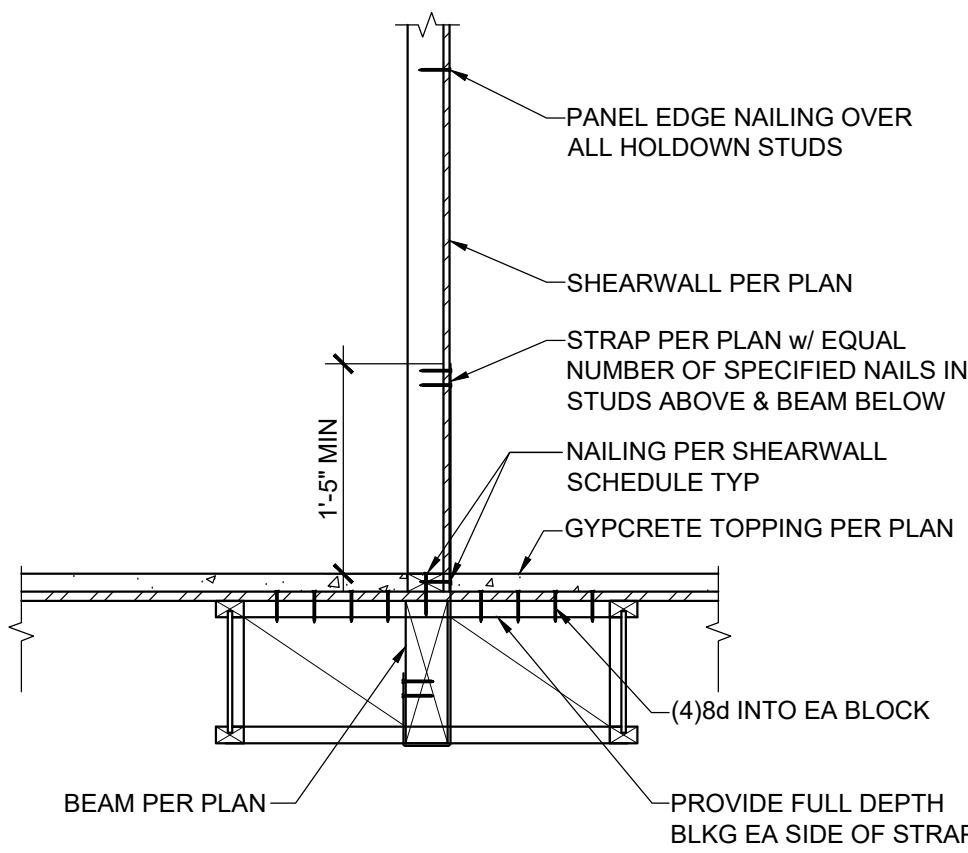
TYPICAL DRAG STRUT STRAP 3
SCALE: 3/4" = 1'-0"
S4.1



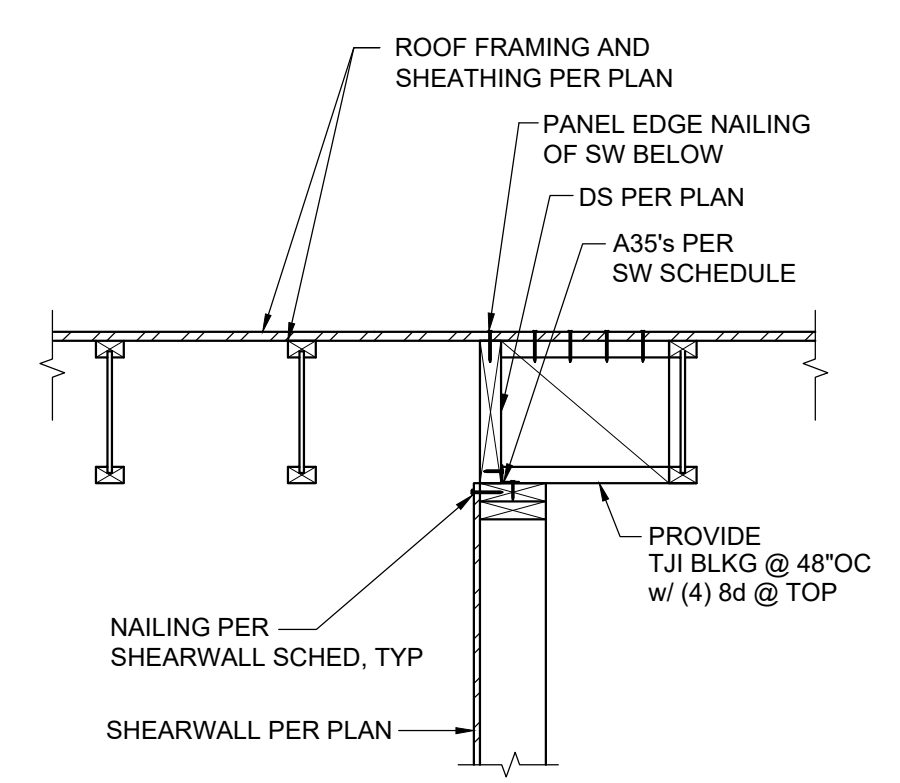
HIGH ROOF CONNECTION 2
SCALE: 3/4" = 1'-0"
S4.1



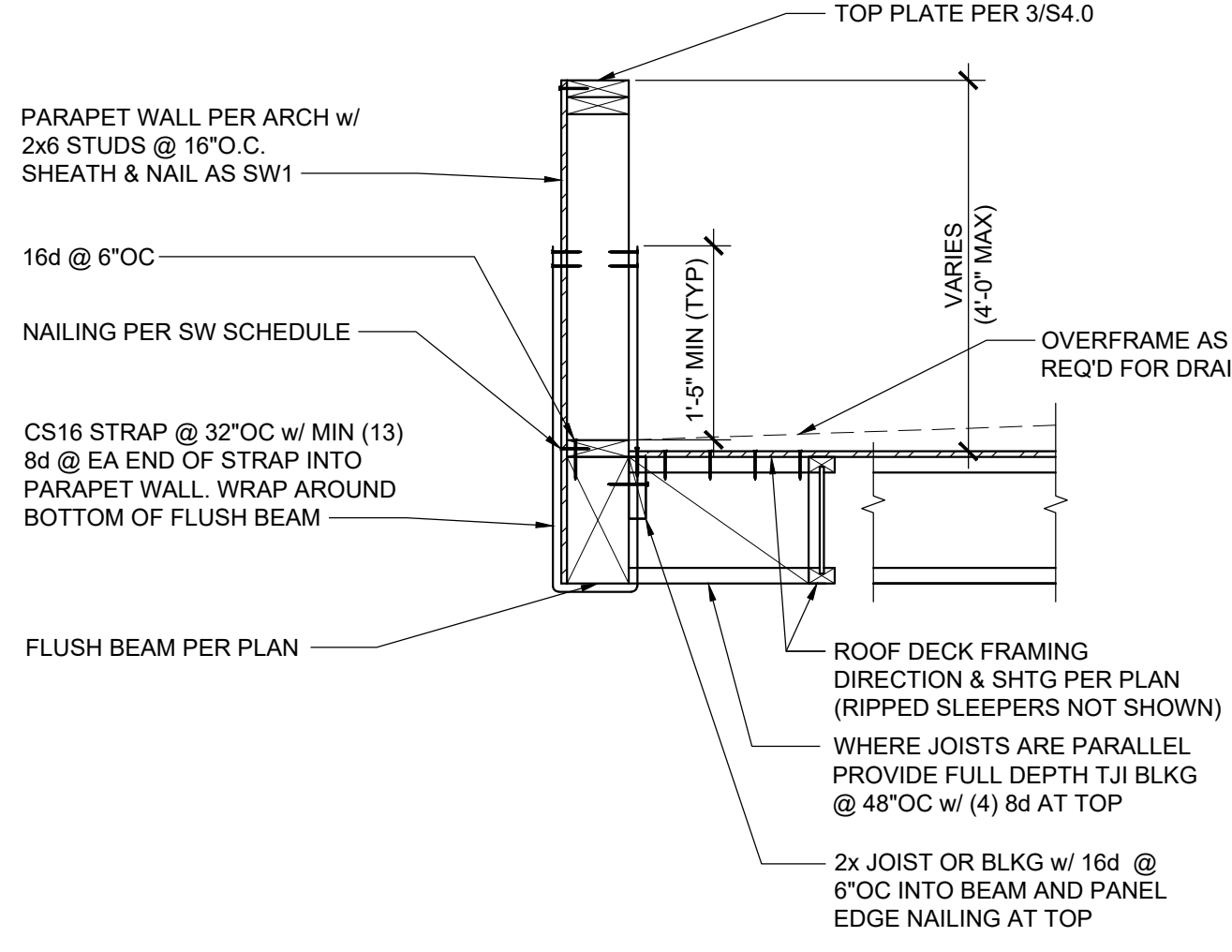
EXTERIOR BEARING WALL @ ROOF 1
SCALE: 3/4" = 1'-0"
S4.1



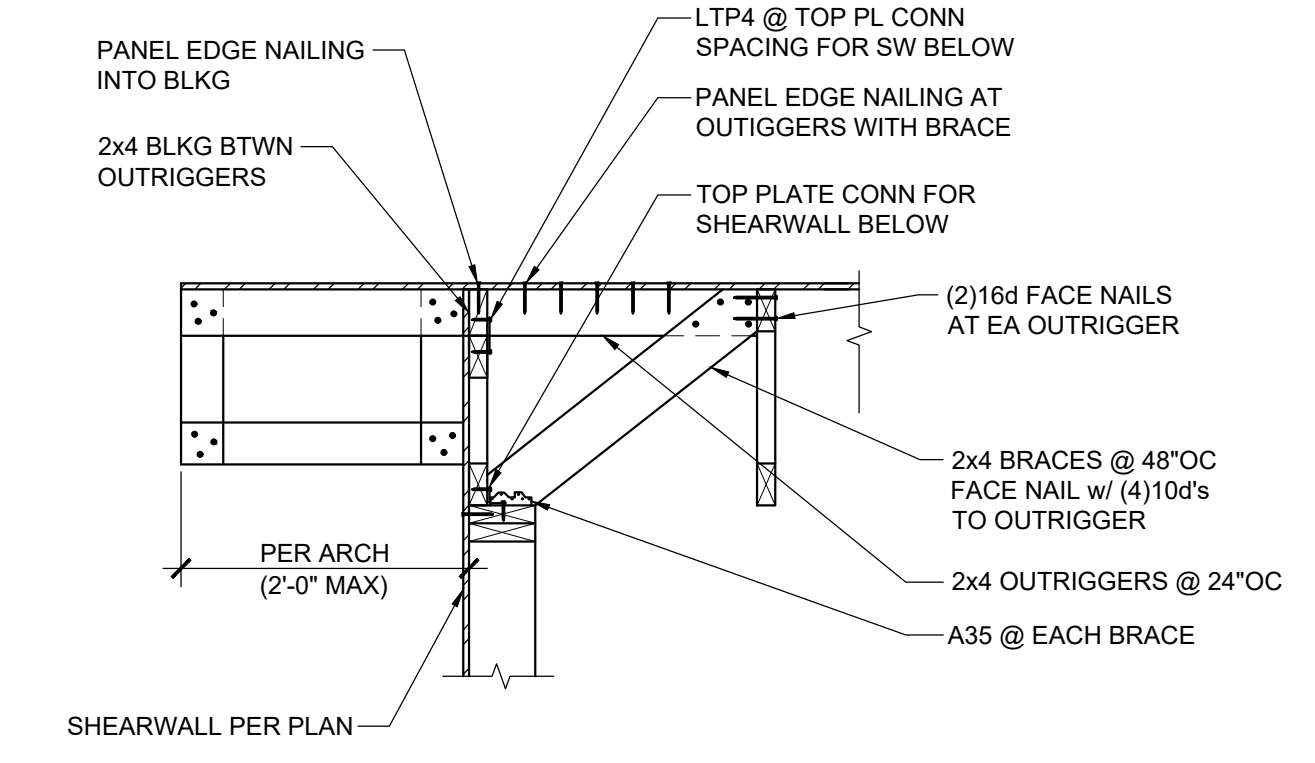
DISCONTINUOUS SHEAR WALL 8
SCALE: 3/4" = 1'-0"
S4.1



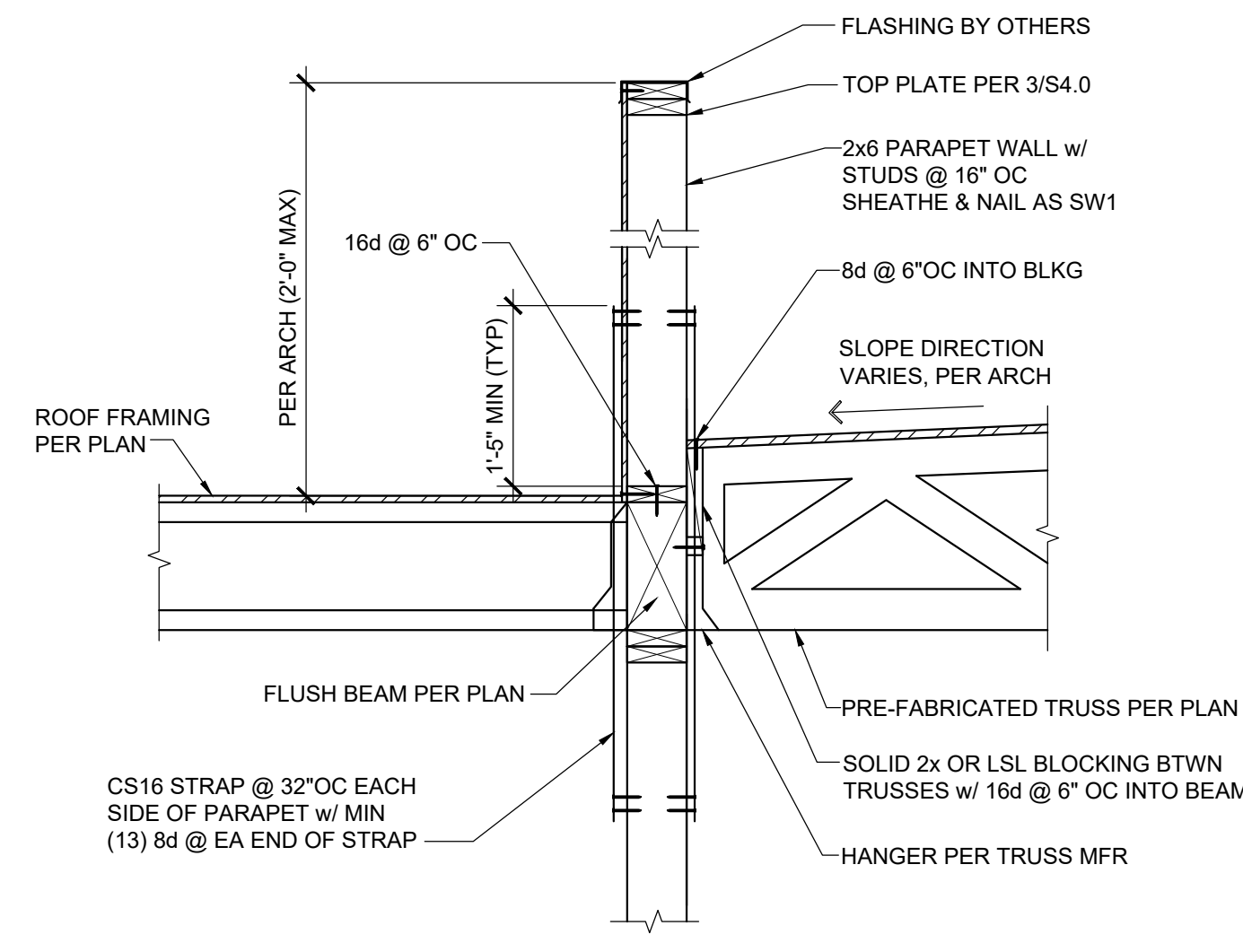
EXTERIOR WALL @ CANTILEVER ROOF 7
SCALE: 3/4" = 1'-0"
S4.1



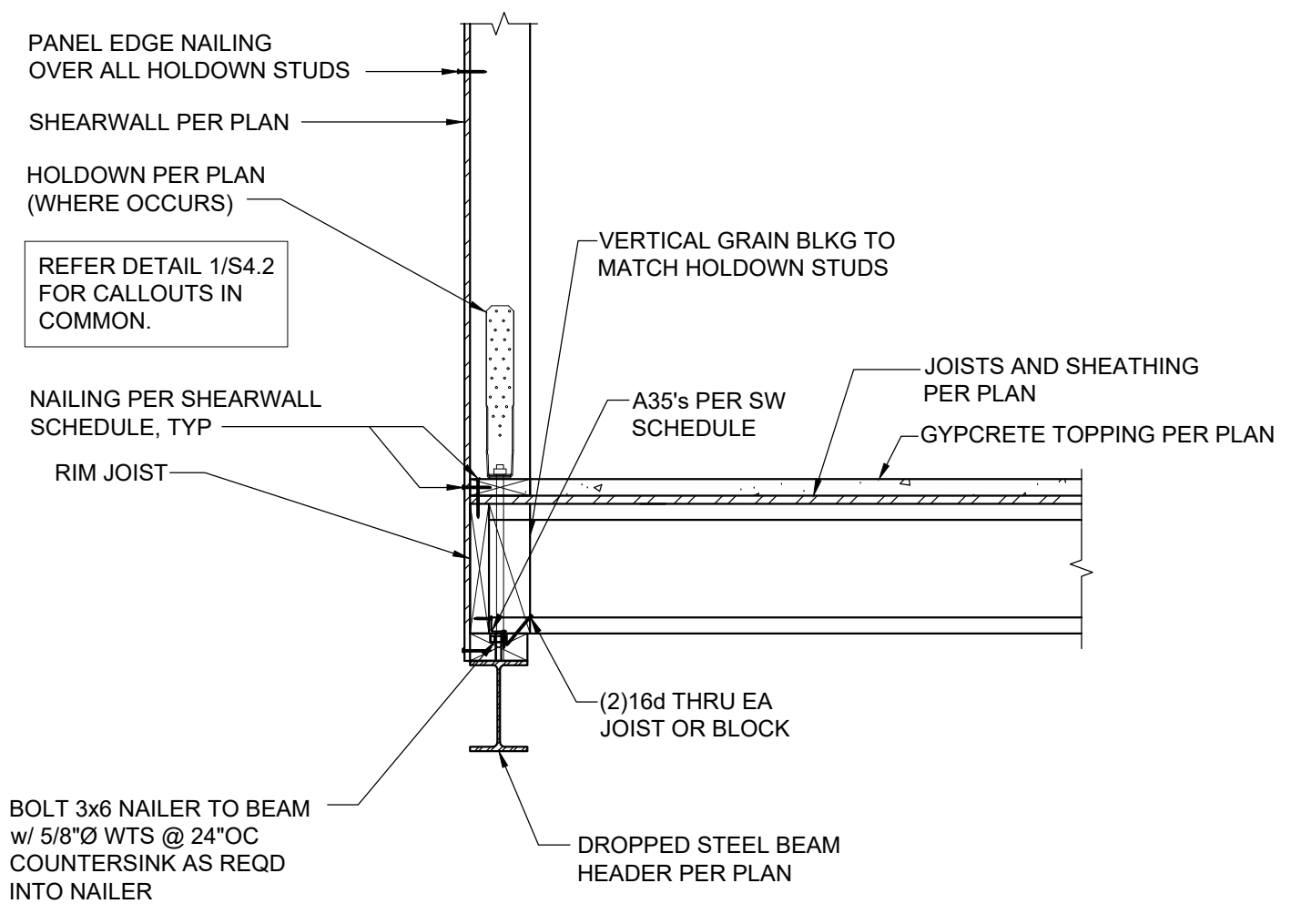
PARAPET GUARD @ FLUSH BEAM w/ TJI's 6
SCALE: 3/4" = 1'-0"
S4.1



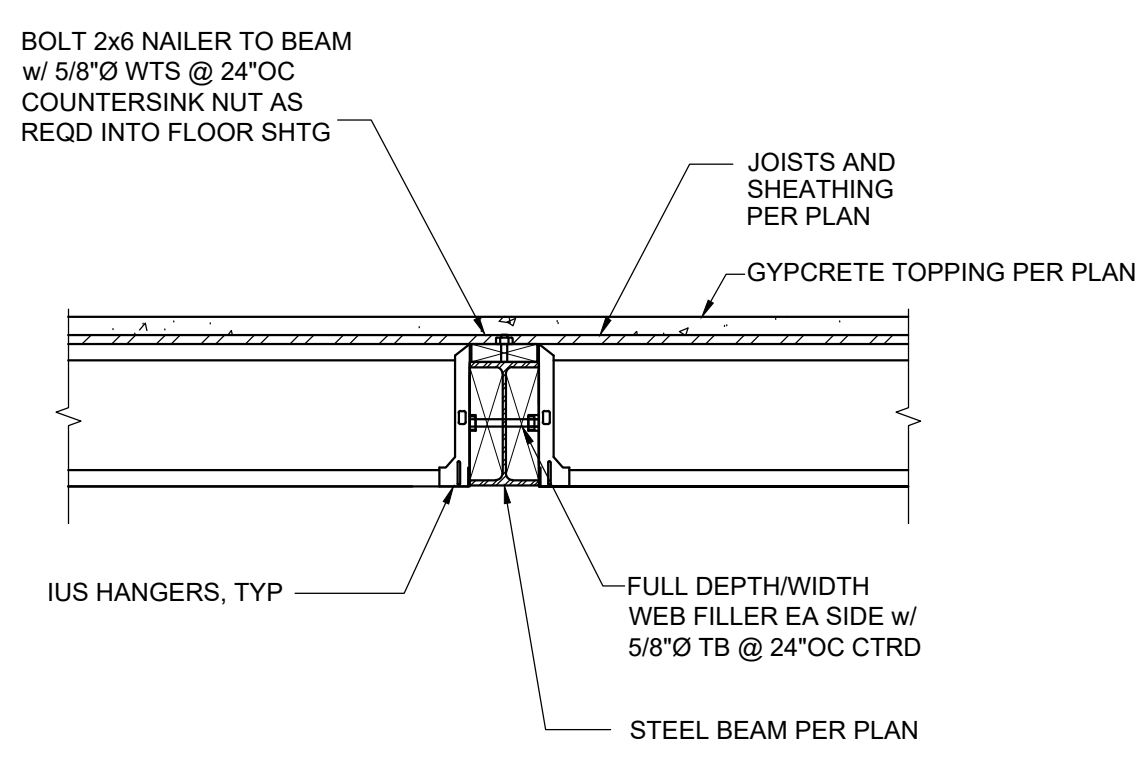
ROOF TRUSS PARALLEL TO EXT WALL 5
SCALE: 3/4" = 1'-0"
S4.1



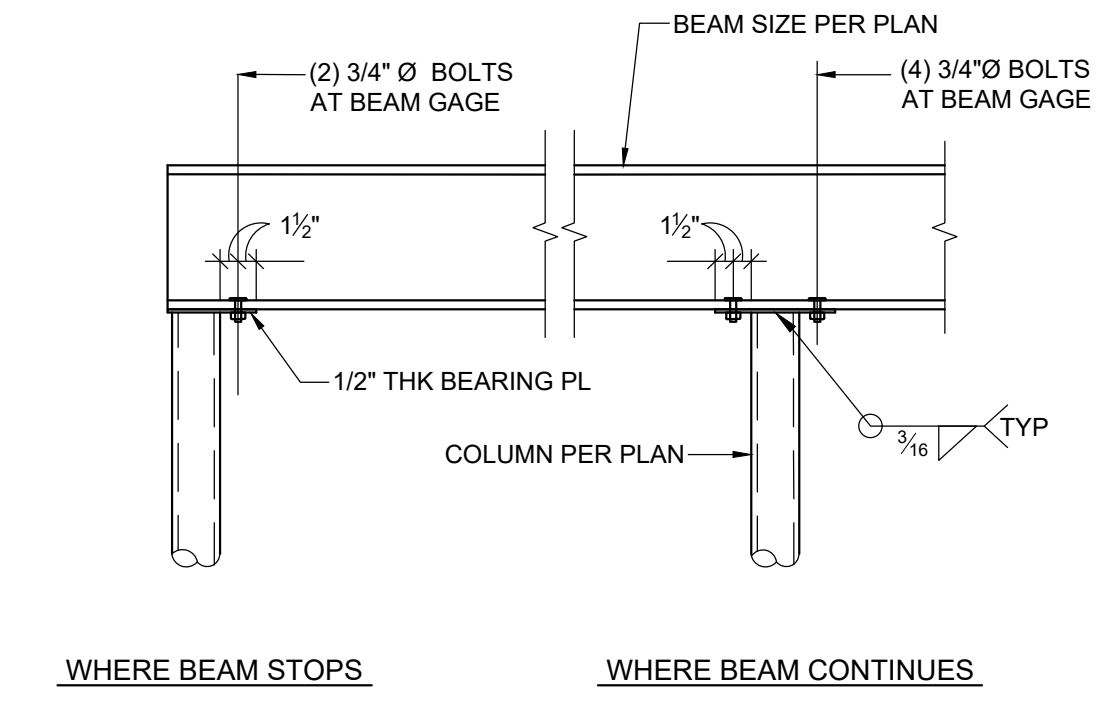
ROOF FRAMING AT INTERIOR BEARING WALL 12
SCALE: 3/4" = 1'-0"
S4.1



DROPPED STEEL HEADER AT EXTERIOR WALL 11
SCALE: 3/4" = 1'-0"
S4.1



FLUSH STEEL BEAM 10
SCALE: 3/4" = 1'-0"
S4.1



BEAM BEARING ON HSS COLUMN 9
SCALE: 3/4" = 1'-0"
S4.1

No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
0	06.28.19	Building Permit

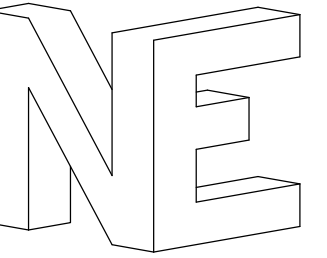
Sheet Contents

FRAMING DETAILS

Job No. 19-065

Sheet No.

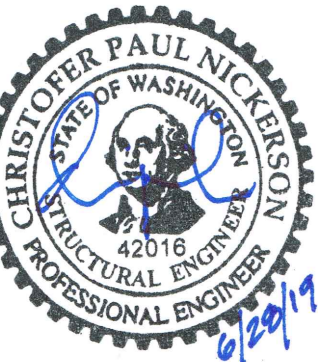
S4.1



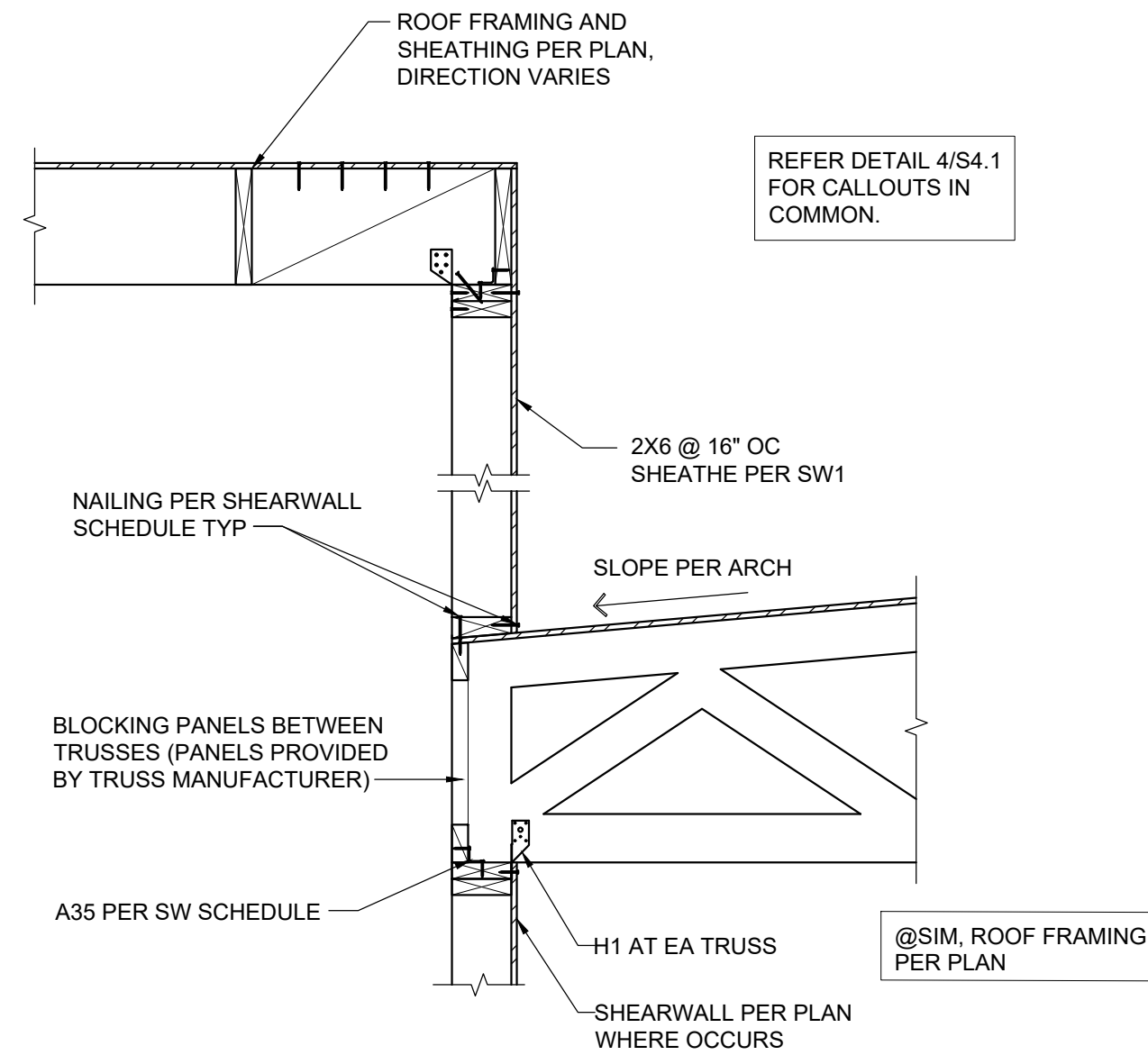
nickerson engineering
2221 Everett Ave #202
Everett, WA 98201
425.610.4425

© Nickerson Engineering, LLC 2019 These drawings were prepared for the "YANG RESIDENCE" project in MERCER ISLAND, WA. They are not intended for use on any other project.

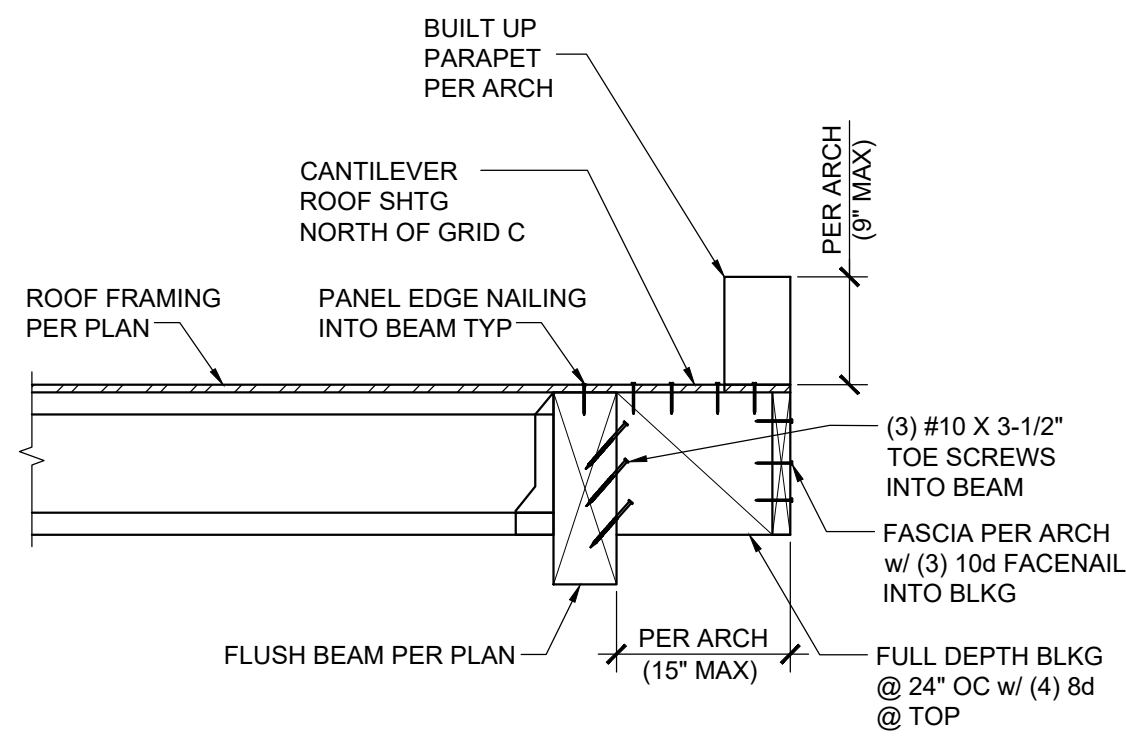
Stated drawing scale is based on 36" x 24" sheet.



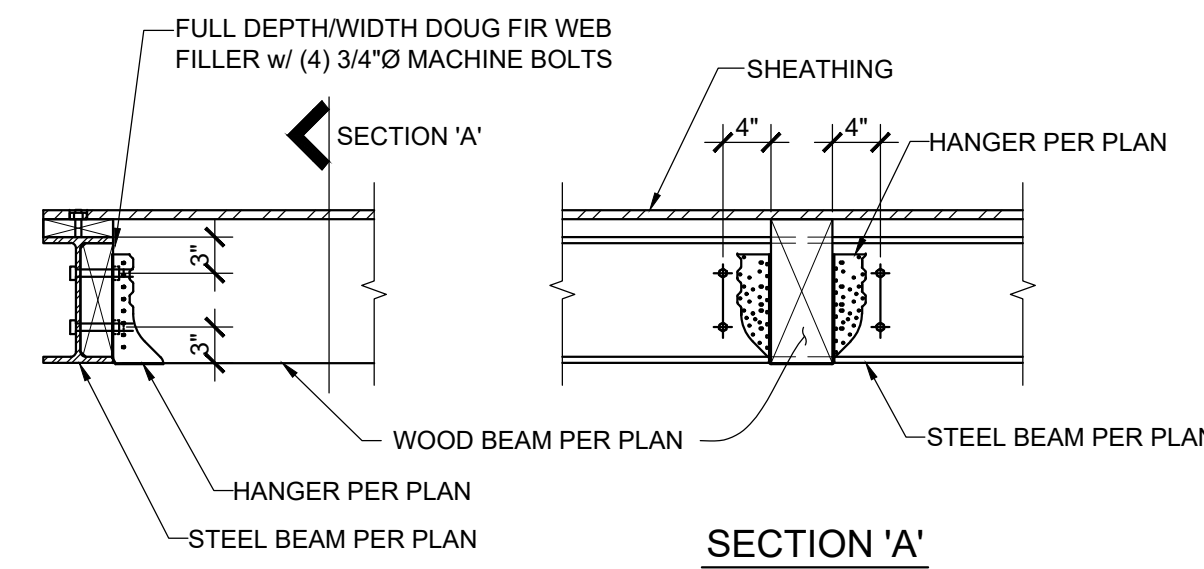
YANG RESIDENCE
7431 E MERCER WAY
MERCER ISLAND, WA 98040



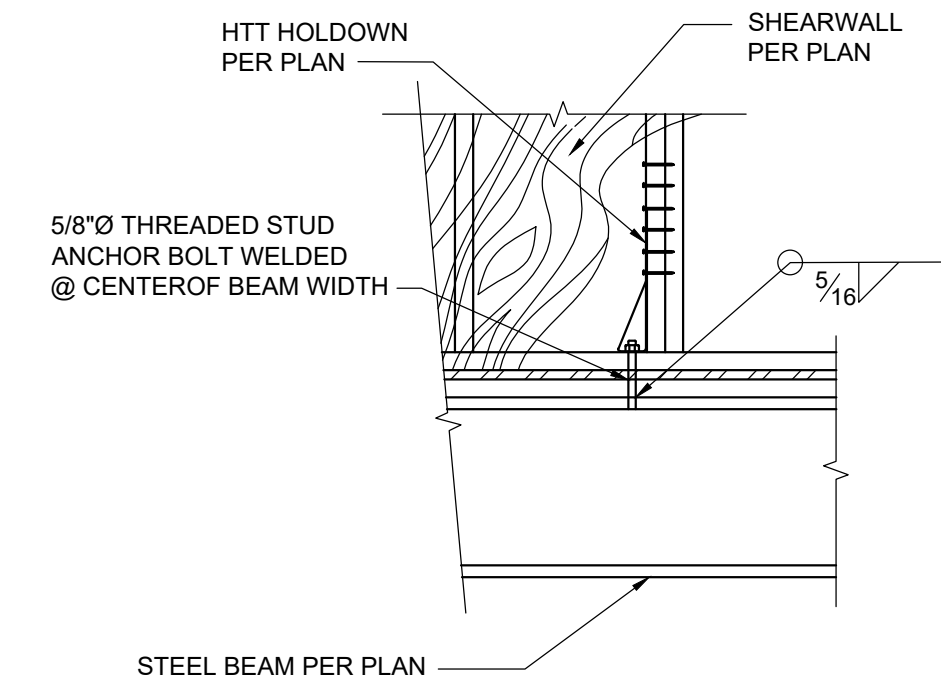
ROOF TRUSS AT UPPER ROOF 4
SCALE: 3/4" = 1'-0" S4.2



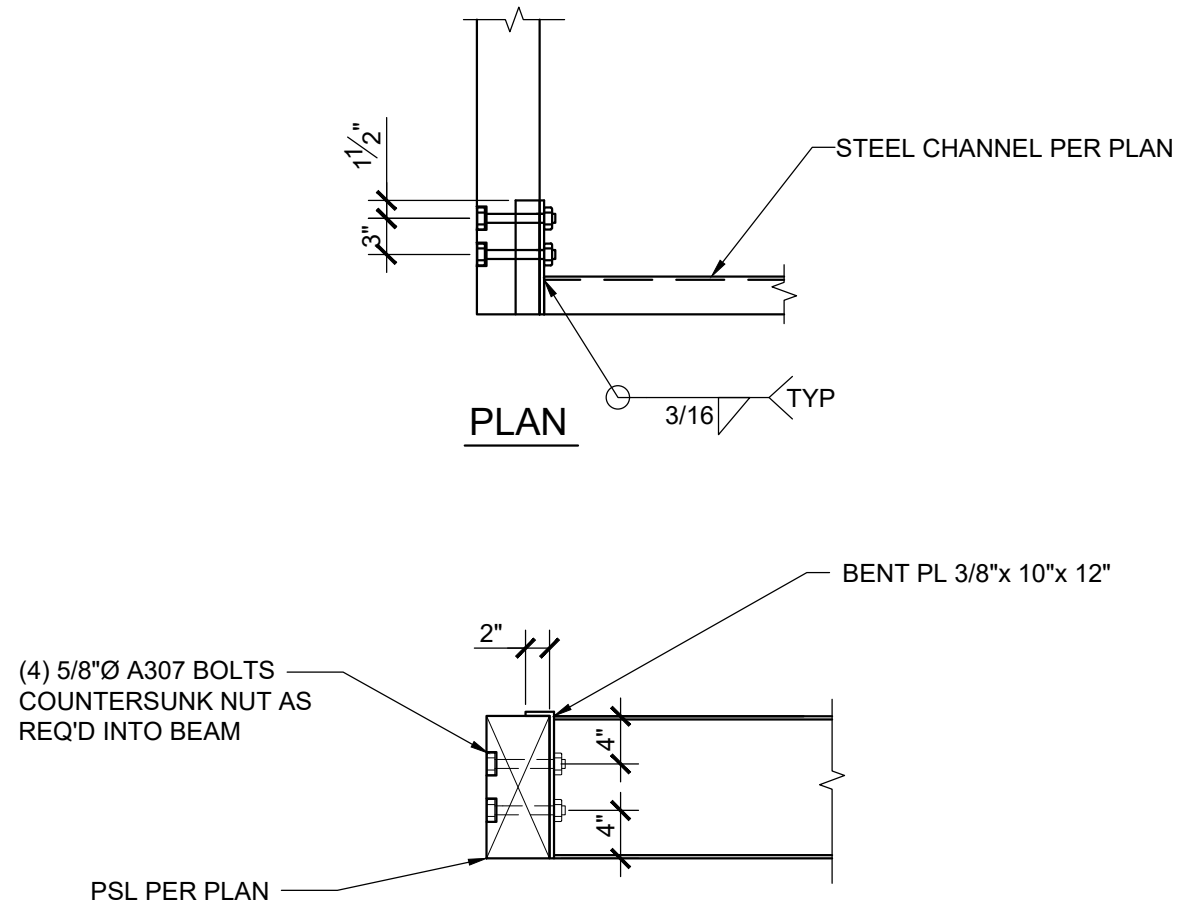
ROOF OVERHANG/ PSL BEAM @ ROOF 3
SCALE: 3/4" = 1'-0" S4.2



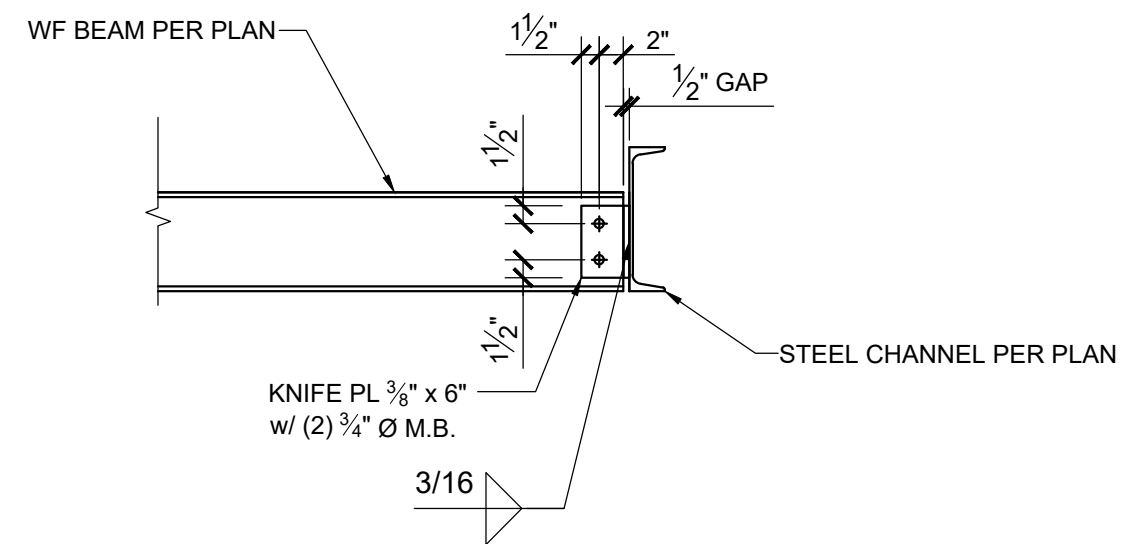
WOOD BEAM TO STEEL BEAM CONNECTION 2
SCALE: 3/4" = 1'-0" S4.2



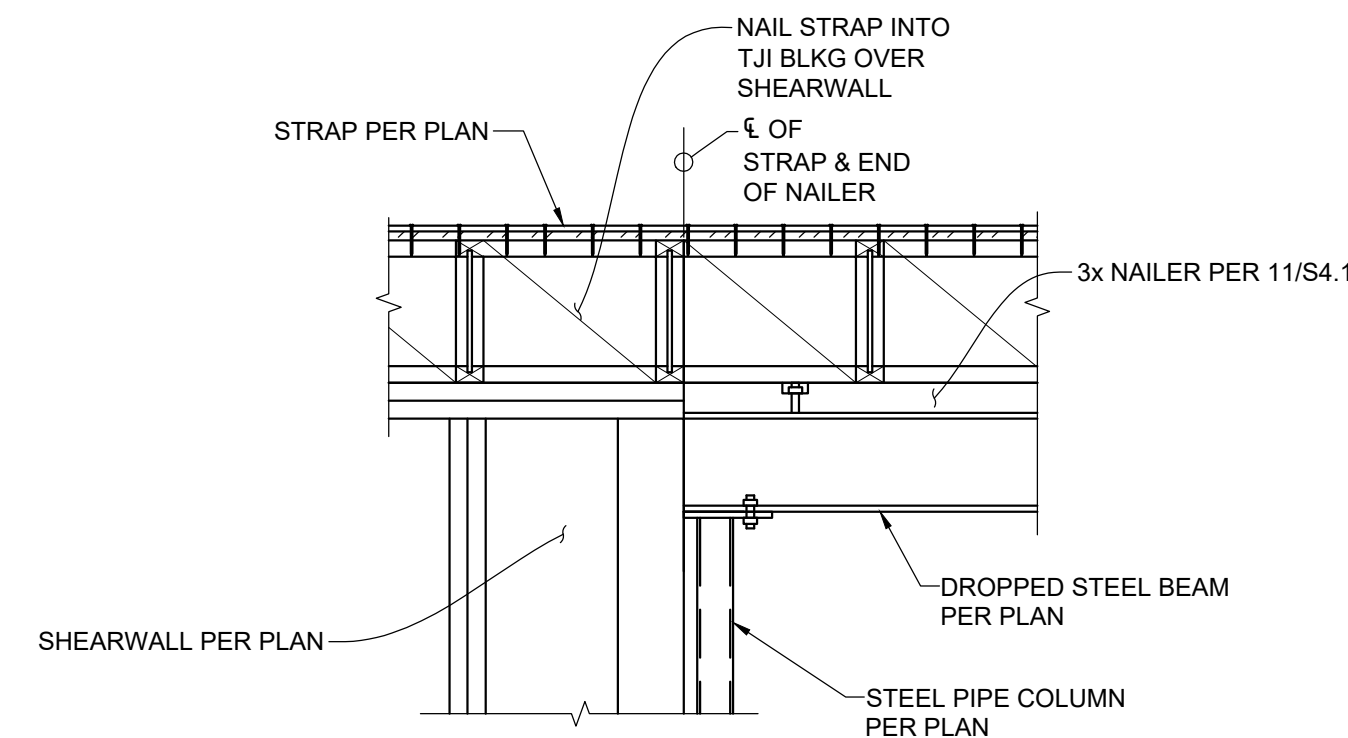
HTT HOLDOWN AT WF BEAM 1
SCALE: 3/4" = 1'-0" S4.2



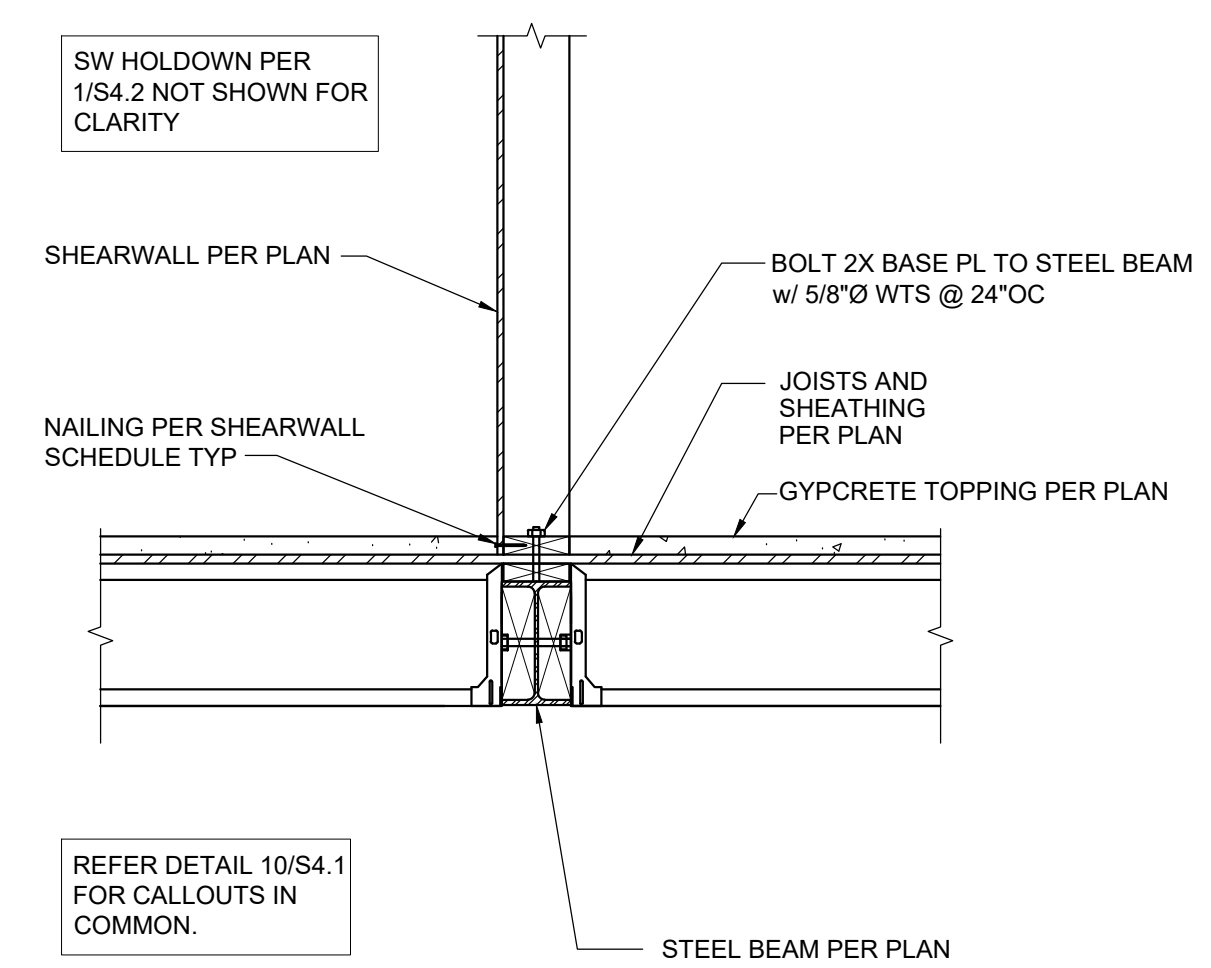
STEEL CHANNEL TO PSL CONNECTION 8
SCALE: 3/4" = 1'-0" S4.2



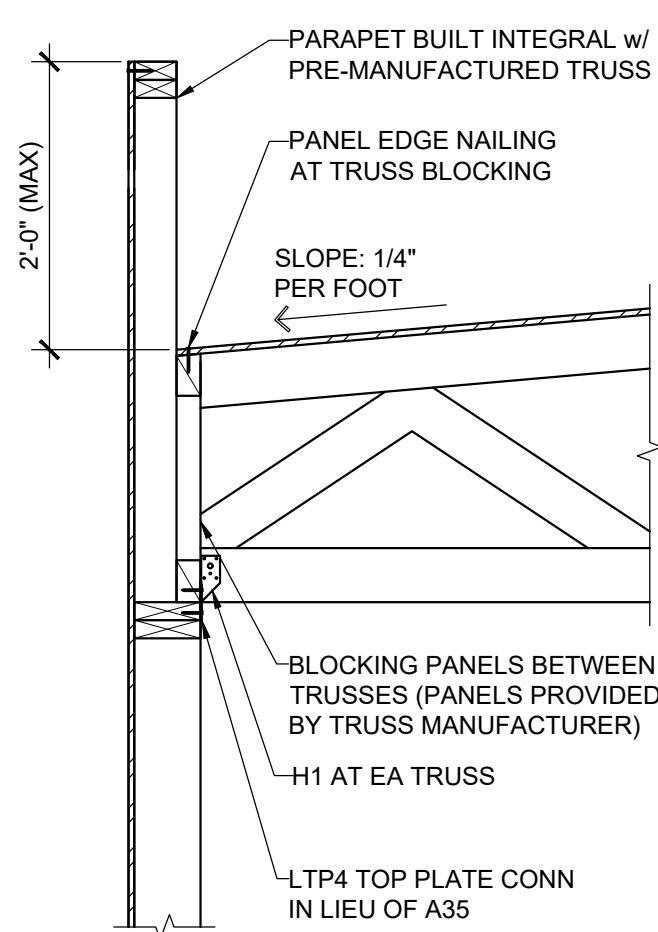
STEEL CHANNEL TO WF CONNECTION 7
SCALE: 3/4" = 1'-0" S4.2



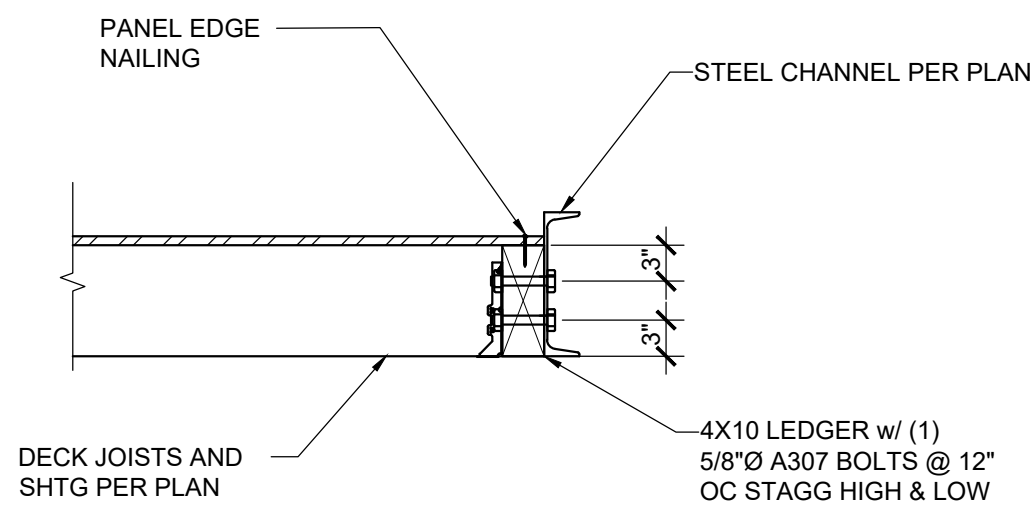
DRAGSTRUT CONNECTION W/ STEEL BEAM 6
SCALE: 3/4" = 1'-0" S4.2



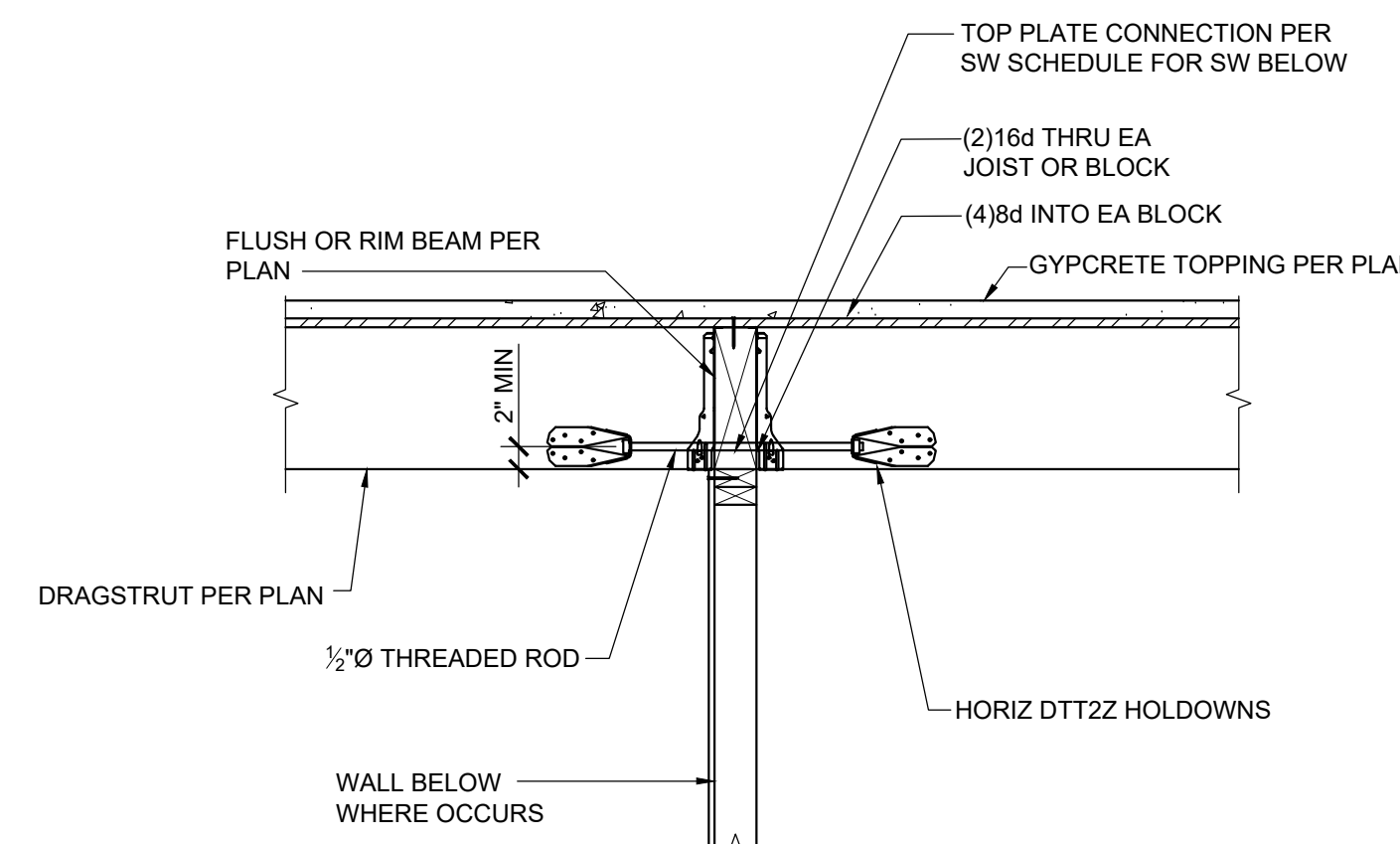
FLUSH STEEL BEAM 5
SCALE: 3/4" = 1'-0" S4.2



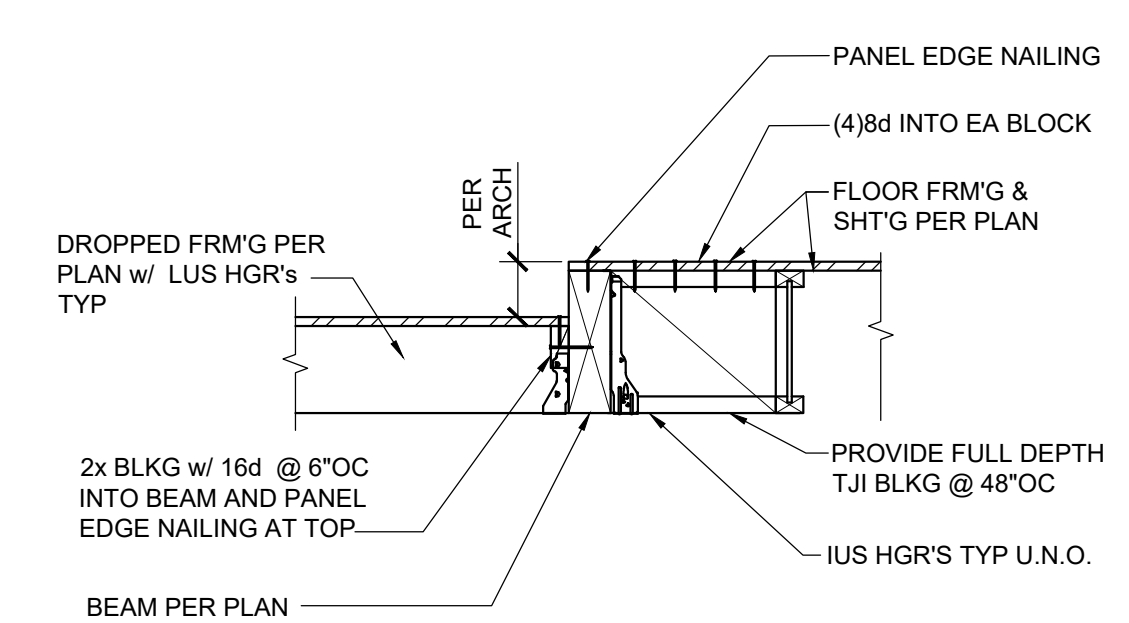
ROOF TRUSS W/ PARAPET 12
SCALE: 3/4" = 1'-0" S4.2



DECK JOISTS AT STEEL CHANNEL 11
SCALE: 3/4" = 1'-0" S4.2



ALTERNATE DRAGSTRUT CONNECTION 10
SCALE: 3/4" = 1'-0" S4.2



DROPPED FLOOR FRAMING TRANSITION 9
SCALE: 3/4" = 1'-0" S4.2

No.	Date	Issue
A	06.20.19	Preliminary
B	06.26.19	Preliminary
D	06.28.19	Building Permit

Sheet Contents

FRAMING DETAILS

Job No. 19-065

Sheet No.

S4.2