

PROPERTY OWNER
SAURABH KHANDELWAL & VEENA SHANKARAN
8460 SE 83RD ST MERCER ISLAND WA 98040

ARCHITECT
MARLO BROWN ARCHITECTS LLC
509 26TH AVE S SEATTLE WA 98144
CONTACT: MARLO BROWN
INFO@MARLOBROWN.COM
C. 425.577.1824

TAX LOT NUMBER
362570-0170

LEGAL DESCRIPTION
ISLAND POINT # 3 TGV UND INT IN TRACT B AND AN UND INT IN COMMUNITY TRACT PLAT BLOCK: PLAT LOT: 17

SCOPE OF WORK
REMODEL TO EXISTING SINGLE FAMILY RESIDENCE & ADDITION OF A NEW BEDROOM ABOVE EXISTING OFFICE

BUILDING CODES
2018 INTERNATIONAL RESIDENTIAL CODE, 2018 INTERNATIONAL BUILDING CODE, 2018 INTERNATIONAL EXISTING BUILDING CODE, WA STATE ENERGY CODE, 2018 UNIFORM PLUMBING CODE, 2018 INTERNATIONAL MECHANICAL CODE, 2018 INTERNATIONAL FUEL GAS CODE, 2018 INTERNATIONAL FIRE CODE, 2018 MERCER ISLAND CITY CODES & AMENDMENTS.

ZONING RESTRICTIONS

ZONE	R-15
LOT AREA	13,312 SF
NET LOT AREA	12,422 SF
NUMBER OF EXISTING DWELLINGS	1

MAX LOT COVERAGE ALLOWED

40%	5,324.8 SF
EXTG LOT COVERAGE HOUSE, GARAGE, EAVES, & GUTTERS	3,911 SF
EXTG LOT COVERAGE DRIVEWAY	568 SF
EXTG TOTAL LOT COVERAGE	4,479 SF
REMAINING AVAILABLE	845.8 SF

MAX HARDSCAPE ALLOWED

9%	1,198.8 SF
EXTG REAR YARD HARDSCAPE TO BE REMOVED	- 859 SF
EXTG FRONT YARD HARDSCAPE	90 SF
EXTG TOTAL HARDSCAPE REMAINING	90 SF
AREA BORROWED FROM HARDSCAPE	845.8
REMAINING AVAILABLE	1,953.8 SF

SETBACKS
FRONT YARD = 20 FT
REAR YARD = 25 FT

VARIABLE SIDE YARD CALCULATION REQ.
LARGEST CIRCLE = 106' DIAMETER x 17% = 18.02 TOTAL SF REQ. FOR SIDE YARD
33% of 18.02

NORTH SIDE YARD 1 = 7.5 FT
WEST SIDE YARD 2 = 10.52 FT
EAST SIDE YARD 3 = 7.5 FT

GARAGE ROOF NOT TALLER THAN 15 & 18 FT.

NON CONFORMING EAVES ON NORTH SIDE YARD SETBACK & REAR YARD SETBACK:
THE PROPOSED STRUCTURAL WORK WILL NOT EXCEED ALTERATION TO 40% OR MORE OF EXISTING EXTERIOR WALLS. THE NON-CONFORMING AREA WILL NOT BE ENLARGED IN ANY WAY INCLUDING HEIGHT.

EXISTING LINEAR FEET OF ALL EXTERIOR WALLS = 310.27 FEET
TOTAL LINEAR FEET TO BE ALTERED = 45.44 FEET
40% OF 310.27 FT = 124.108 FT
TOTAL ALTERATION WILL THEREFORE NOT EXCEED ALLOWED.

GROSS FLOOR AREA

40 %	5,324.8 SF
EXTG MAIN FLOOR HOUSE, GARAGE, MAIN FLOOR STAIR	2,933 SF
EXTG SECOND FLOOR	1,671 SF
EXTG TOTAL GROSS FLOOR AREA	4,604 SF
PROPOSED ADDITION	237 SF
PROPOSED GROSS FLOOR AREA NEW + EXISTING	4,841 SF

HEIGHT LIMIT 30 FT
FORMULA: AVERAGE BUILDING ELEVATION = (Weighted Sum of the Mid-point Elevations) ÷ (Total Length of Wall Segments)

(A×x) through (X×x) added together = 84,774.515
a through x segments = 310.27 linear feet

84,774.515 Weighted Sum of the Mid-point Elevation / 310.27 ft =
273.22 AVERAGE GRADE

ECA
SEISMIC GEOLOGICAL HAZARD AREA KZT 1.9
INFEASIBLE FOR INFILTRATION
WIND DESIGN EXPOSURE CATEGORY C

EASEMENTS
10 FT UTILITY EASEMENT CENTERED ON WEST PROPERTY LINE
5 FT UTILITY EASEMENT ALONG ROAD FRONTAGE

FIRE CODE
CONSTRUCTION TYPE: VB
ACCESS SLOPE DOES NOT EXCEED 10%
FIRE ACCESS ROAD DOES NOT EXCEED 150 FT
TURN AROUND: NONE PROVIDED BUT ACCESS IS WITHIN 150 FT OF ONE WIDTH OF EXISTING ACCESS ROAD IS 13 FT
NO ACCESS GATES OR BOLLARDS PROPOSED
HYDRANT FIRE FLOW 614 GPM AT 96 PSI. 825 REQUIRED; SEE BELOW FOR PROPOSED BEAM SPLITTER OPTIONS

- INSTALL NFPA 130 "FULL COVERAGE FIRE SPRINKLER SYSTEM" TO INCLUDE COVERAGE TO ALL CLOSETS, BATHROOMS, COVERED DECKS, STORAGE AREAS, AND GARAGE.
- INSTALL NFPA 72-CHAPTER 29 MONITORED FIRE ALARM SYSTEM THROUGHOUT THE RESIDENCE.
- PROVIDE TYPE X 1hr RATED DRYWALL TO ALL CEILINGS AND WALLS IN NEW AREAS.
- PROVIDE SOLID CORE DOORS IN NEW AREAS.
- PROVIDE FIRE RETARDANT COATING IN NEW ATTIC.

ALL NEW DOORS TO BE SOLID CORE.

CIVIL
NO INCREASE OF IMPERVIOUS SURFACE.
REPLACED IMPERVIOUS = 237 SF.
IMPERVIOUS BACKYARD PAVEN SLAB TO BE REMOVED = 859 SF

TREE REQUIREMENTS
ADDITION LESS THAN 500 SF.

TREE #3 RETAINED IN A ROLLING 5-YEAR PERIOD. THE 5-YEAR ROLLING PERIOD BEGINS 5-YEARS PRIOR TO THE DATE OF APPLICATION FOR A DEVELOPMENT APPROVAL THAT IS SUBJECT TO TREE RETENTION.

TREE #1 EXCEPTIONAL TREE WILL BE REMOVED. 6 REPLACEMENT TREES PROPOSED. TREE CREATES ANNUAL HAZARDOUS SITUATIONS IN HIGH WINDS WITH BRANCHES DAMAGING EXISTING GARAGE.

TREE #2 TREE WILL BE REMOVED. 3 REPLACEMENT TREES PROPOSED. TREE CREATES ANNUAL HAZARDOUS SITUATIONS IN HIGH WINDS WITH BRANCHES DAMAGING EXISTING GARAGE.

FOLLOWING ANY REMOVAL, NEWLY PLANTED REPLACEMENT TREES TO BE PLANTED BETWEEN OCT 1 & APRIL 1.

REPLACEMENT TREES TO BE PLANTED WITH THE BELOW:
1) LOCATION IN ORDER OF PRIORITY: ON SITE OR ADJACENT TO CRITICAL AREAS
2) PACIFIC NORTHWEST NATIVE TREE
3) CONIFEROUS TREES TO BE AT LEAST 6 FT TALL, DECIDUOUS AT LEAST 1.5" CALIPER.
4) MUST MAINTAIN HEALTH OF REPLACEMENT TREES FOR 5 YEARS AND IF IT DIES IN THAT TIME, REPLACE IT IN KIND.

BALD EAGLES
IF EAGLES ARE OBSERVED ON SITE DURING CONSTRUCTION, CONTRACTOR TO SUBMIT A REPORT IN COORDINATION WITH OWNERS PREPARED BY A WILDLIFE BIOLOGIST THAT DEMONSTRATES THAT THE PROJECT WILL NOT HAVE A NEGATIVE IMPACT ON THE EAGLES. DEVELOPMENT WILL ALSO NEED TO BE CONSISTENT WITH THE REQUIREMENTS OF THE U.S. FISH AND WILDLIFE'S NATIONAL BALD EAGLE MANAGEMENT GUIDELINES (2007).

SOLAR READINESS
275 SF RESERVED ON NEW ROOF AT ADDITION FOR SOLAR READINESS & SEE STRUCTURAL FOR ADDITIONAL LBS PER SF FOR PHOTOVOLTAIC SYSTEM GRAVITY LOAD TO BE APPLIED TO JOISTS, ROOF, ETC. IF ANY PANELS WILL BE ADDED TO OLD ROOF

TREE REQUIREMENTS
ANY ADDITION OR REMODEL GREATER THAN 500 SF REQUIRES RETENTION.

30% OF EXISTING TREES 10" OR WIDER ARE REQUIRED TO BE RETAINED IN A ROLLING 5-YEAR PERIOD. THE 5-YEAR ROLLING PERIOD BEGINS 5-YEARS PRIOR TO THE DATE OF APPLICATION FOR A DEVELOPMENT APPROVAL THAT IS SUBJECT TO TREE RETENTION.

TREE #1 WILL BE PRIORITIZED FOR RETENTION DUE TO ITS SIZE & GOOD HEALTH & IS DEFINED AS EXCEPTIONAL (DOUG FIR 30" OR GREATER IN DIAM).
TREE #1 PROTECTION WOULD BE REQUIRED, WHICH IS THE DRIP LINE.

REMOVAL OF EXCEPTIONAL TREE(S) 24" WIDE OR MORE CAN ONLY OCCUR IF:
1) RETENTION WILL CREATE A UNAVOIDABLE HAZARDOUS SITUATION OR
2) CREATE A LOSS OF BUILDABLE GROSS FLOOR AREA TO LESS THAN 85% MAX ALLOW.
3) PREVENT CREATION OF LOT THROUGH A SUBDIVISION OR SHORT SUBDIVISION THAT IS OTHERWISE ALLOWED PER MICC.

ANY TREES 10" OR WIDER IN DIAMETER TO REQUIRE PERMIT FOR REMOVAL
ANY TREES 10" OR LESS IN DIAMETER CAN BE REMOVED WITHOUT A PERMIT EXCEPT IN CRITICAL AREAS AND THEIR ASSOCIATED BUFFERS, INCLUDING PRUNING & REMOVAL OF NOXIOUS WEEDS.
FOLLOWING ANY REMOVAL, NEWLY PLANTED REPLACEMENT TREES TO BE PLANTED BETWEEN OCT 1 & APRIL 1.

TREES REMOVED AS PART ON NON-DEVELOPMENT AND EXEMPT FROM REPLACEMENT MUST BE HAZARDOUS AS DOCUMENTED BY AN ARBORIST, DISEASED, OR ITS REMOVAL WILL ENHANCE SLOPE STABILITY, AND MUST INCLUDE A RESTORATION PLAN PER MICC.

IF TREE #1 IS REMOVED, 6 REPLACEMENT TREES REQ. (NOT LIKELY TO BE ALLOWED)
IF TREE #2 IS REMOVED, 3 REPLACEMENT TREES REQ.

REPLACEMENT TREES TO BE PLANTED WITH THE BELOW:

- LOCATION IN ORDER OF PRIORITY: ON SITE OR ADJACENT TO CRITICAL AREAS
- PACIFIC NORTHWEST NATIVE TREE
- CONIFEROUS TREES TO BE AT LEAST 6 FT TALL, DECIDUOUS AT LEAST 1.5" CALIPER.
- MUST MAINTAIN HEALTH OF REPLACEMENT TREES FOR 5 YEARS AND IF IT DIES IN THAT TIME, REPLACE IT IN KIND.

HEATING SYSTEM

RESIDENTIAL ENERGY CREDIT CALCULATIONS
FUEL NORMALIZATION= SYSTEM TYPE 2 HEAT PUMP NORMALIZATION CREDITS = 1.0

ADDITIONAL REQUIREMENTS AND MODIFICATIONS CHOSEN PER SEC R406 TABLE R406.3: ADDITION LESS THAN 500 SF = 1.5 CREDITS REQUIRED

CREDIT 1.3=0.5: PRESCRIPTIVE COMPLIANCE WITH THE FOLLOWING MODIFICATIONS:
VERTICAL FENESTRATION U = 0.28
FLOOR R-38
SLAB ON GRADE R-10 CONTINUOUS

CREDIT 2.2=01.0: REDUCE AIR LEAKAGE TO 2.0 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALES AND SUPPLY HEAT RECOVERY VENT WITH EFFICIENCY OF 0.65.

MEET REQUIRED= 1.5 CREDITS

CERTIFICATIONS & TESTS

A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING. WHEN LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL, OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL LIST PREDOMINANT R-VALUES, OF INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION, BELOW GRADE WALLS, AND DUCTS OUTSIDE CONDITIONED SPACES, U-FACTORS FOR FENESTRATION AND THE SHGC OF FENESTRATION, THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING DONE ON THE BUILDING, AND THE RESULTS FROM THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FLOW RATE TEST. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL LIST THE TYPES AND EFFICIENCIES OF HEATING, COOLING, WHOLE-HOUSE MECHANICAL VENTILATION, AND SERVICE WATER HEATING APPLIANCES. WHERE GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE, OR BASEBOARD ELECTRIC HEATER IS INSTALLED IN THE RESIDENCE, THE CERTIFICATE SHALL LIST "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE. AN EFFICIENCY SHALL NOT BE LISTED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES, OR ELECTRIC BASEBOARD HEATERS. THE CODE OFFICIAL MAY REQUIRE THAT DOCUMENTATION FROM ANY REQUIRED TEST RESULTS INCLUDE AN ELECTRONIC RECORD OF THE TIME, DATE, AND LOCATION OF THE TEST. A DATE-STAMPED SMART PHONE PHOTO OR AIR LEAKAGE SOFTWARE MAY BE USED TO SATISFY THIS REQUIREMENT.

PRESCRIPTIVE APPROACH (SEE ABOVE CREDITS FOR MODIFICATIONS TO PRESCRIPTIVE APPROACH REQUIREMENTS)

FENESTRATION	U=0.30
SKYLIGHT	U=0.50
CEILING	R-49
VAULTED CEILING	R-38
WOOD FRAME WALL	R-21 int
FLOOR	R-30
BELOW GRADE WALL	R-10/15/21int+5TB
SLAB R-VALUE & DEPTH	10, 2FT

AIR LEAKAGE TESTING
THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALES). FOR THIS TEST ONLY, THE VOLUME OF THE HOME SHALL BE THE CONDITIONED FLOOR AREA IN FT SQUARED MULTIPLIED BY 8.5 FEET. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. ONCE VISUAL INSPECTION HAS CONFIRMED SEALING (SEE TABLE R402.1.1). OPERABLE WINDOWS AND DOORS MANUFACTURED BY SMALL BUSINESS SHALL BE PERMITTED TO BE SEALED OFF AT THE FRAME PRIOR TO THE TEST. SEE DETAILED CODE FOR EXCEPTIONS AND CONSIDERATIONS DURING TESTING.

AIR LEAKAGE TESTING FENESTRATION
WINDOWS, SKYLIGHTS, AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER SQ FT AND SWINGING DOORS NO MORE THAN 0.5 CFM PER SQ FT WHEN TESTED IN ACCORDANCE WITH NFRC 400 OR AAMA/WDMA/CSA 101/L.S. 2/A440 BY AN ACCREDITED LABORATORY AND LISTED AND LABELED BY THE MANUFACTURER.
EXCEPTIONS: FIELD-FABRICATED FENESTRATION PRODUCTS AND CUSTOM EXTERIOR FENESTRATION PRODUCTS MANUFACTURED BY A SMALL BUSINESS PROVIDED THEY MEET THE APPLICABLE PROVISIONS OF CHAPTER 23 OF THE INTERNATIONAL BUILDING CODE. ONCE VISUAL INSPECTION HAS CONFIRMED THE PRESENCE OF A GASKET, OPERABLE WINDOWS AND DOORS MANUFACTURED BY SMALL BUSINESS SHALL BE PERMITTED TO BE SEALED OFF AT THE FRAME PRIOR TO THE TEST.

AIR BARRIERS AND INSULATION INSTALLATION
FOR COMPONENT REQUIREMENTS OF THE MERCER RESIDENTIAL ENERGY CODE.

DUCT INSULATION AND HOT WATER PIPE INSULATION AND SEALS
DUCTS SHALL BE INSULATED WITH R-8 OR R-10 IF IN-GROUND AND SHALL NOT DISPLACE REQUIRED EXTERIOR INSULATION AND HOT WATER PIPES WITH R-3. HOT WATER HEATER TO BE PLACED UPON A SURFACE WITH INCOMPRESSIBLE R-10. REFER TO SEATTLE RESIDENTIAL ENERGY CODE OR INTERNATIONAL MECHANICAL CODE AS APPROPRIATE FOR DETAILS RELATED TO SEALING OF DUCTS, AIR HANDLERS, AND FILTER BOXES.



1 VICINITY MAP

PROGRAMMABLE THERMOSTAT

EACH DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST 1 PROGRAMMABLE THERMOSTAT FOR EACH HEATING AND COOLING SYSTEM. WHERE PRIMARY HEATING SYSTEM IS A FORCED AIR FURNACE, AT LEAST ONE T-STAT PER DWELLING UNIT SHALL BE ENERGY STAR CERTIFIED AND CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THE T-STAT SHALL ALLOW FOR AT A MINIMUM 5-2 PROGRAMMABLE SCHEDULE (WEEKDAYS/WEEKENDS) AND BE CAPABLE OF PROVIDING AT LEAST TWO PROGRAMMABLE SET-BACK/SETUP PERIODS PER DAY. THIS T-STAT SHALL INCLUDE THE CAPABILITY TO SET BACK, SET UP, OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55 DEGREES F OR UP TO 85 DEGREES. THE T-STAT SHALL INITIALLY BE PROGRAMMED BY THE MANUFACTURER WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70 DEGREES F AND A COOLING TEMPERATURE SET POINT LOWER THAN 78 DEGREES F. THE T-STAT AND/OR CONTROL SYSTEM SHALL HAVE AN ADJUSTABLE DEADBAND OF NOT LESS THAN 10 DEGREES F. EXCEPTIONS INCLUDE SYSTEMS CONTROLLED BY THE OCCUPANT SENSOR THAT IS CAPABLE OF SHUTTING THE SYSTEM OFF WHEN NO OCCUPANT IS SENSED FOR A PERIOD OF UP TO 30 MINUTES. SYSTEMS CONTROLLED SOLELY BY A MANUALLY OPERATED TIMER CAPABLE OF OPERATING THE SYSTEM FOR NO MORE THAN 2 HOURS, AND DUCTLESS MINI-SPLIT HEAT PUMPS SYSTEMS THAT HAVE AN INTEGRAL PROPRIETARY THERMOSTAT.

ATTIC ACCESS INSULATION

WEATHER STRIP AND INSULATE DOOR TO EQUIVALENT LEVEL OF INSULATION NEAR DOOR CEILING.

HIGH EFFICACY LUMINAIRES

MINIMUM 90% OF ALL INTERIOR LUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES & ALL TO BE IC-RATED.

VAPOR RETARDERS

WALL ASSEMBLIES IN THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH THE VAPOR RETARDER REQUIREMENTS OF SECTION R702.7 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 1405.3 OF THE INTERNATIONAL RESIDENTIAL BUILDING CODE, AS APPLICABLE.

NEW SOURCE SPECIFIC VENTILATION LOCATIONS PER IMC TABLE 403.3:

BATHROOM & LAUNDRY & SPA FANS: MINIMUM 50CFM (INTERMITTENT)
KITCHEN FANS: MINIMUM 100CFM (INTERMITTENT)
*SEE PLANS FOR ACTUAL SIZING. SOURCE SPECIFIC VENTILATION CONTROLLED BY MANUAL SWITCHES AND/OR TIMERS.

MAKE UP AIR

PER IRC M1503.4 MAKEUP AIR REQUIRED WHEN KITCHEN EXHAUST HOOD SYSTEMS ARE CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM & SHALL BE MECHANICALLY OR NATURALLY PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH NOT LESS THAN ONE DAMPER. EACH DAMPER SHALL BE A GRAVITY DAMPER OR AN ELECTRICALLY OPERATED DAMPER THAT AUTOMATICALLY OPENS WHEN THE EXHAUST SYSTEM OPERATES. DAMPERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR, AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION OR ANY OTHER DUCTS TO CONNECTED TO THE DAMPER BEING INSPECTED, SERVICED, REPAIRED, OR REPLACED.

KITCHEN MAKE UP AIR

KITCHEN EXHAUST MAKEUP AIR SHALL BE DISCHARGED INTO SAME ROOM IN WHICH THE EXHAUST SYSTEM IS LOCATED OR INTO ROOMS OR DUCT SYSTEMS THAT COMMUNICATE THROUGH ONE OR MORE PERMANENT OPENINGS WITH THE ROOM IN WHICH SUCH EXHAUST SYSTEM IS LOCATED. SUCH PERMANENT OPENINGS SHALL HAVE A NET CROSS-SECTIONAL AREA NOT LESS THAN THE REQUIRED AREA OF THE MAKEUP AIR SUPPLY OPENINGS.

GENERAL NOTES

CONTACT ARCHITECT IMMEDIATELY CONCERNING ANY DISCREPANCIES IN THE DRAWINGS PRIOR TO PROCEEDING WITH WORK IN THE AFFECTED AREA.

DO NOT SCALE DRAWINGS.

DIMENSIONS

DIMENSIONS ARE TO FACE OF CONCRETE AND FACE OF FRAMING UNLESS OTHERWISE NOTED. VERIFY ALL DIMENSIONS BEFORE BEGINNING WORK.

CODES

ALL APPLICABLE CODES, ORDINANCES, AND MINIMUM STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER ALL DRAWING NOTES, SPECIFICATIONS, AND SIZES.

DRAFTSTOPPING & FIREBLOCKING

PROVIDE APPROVED DRAFTSTOPPING & FIRE BLOCKING IN CONCEALED SPACE BETWEEN CEILING AND FLOOR PER IBC.

PROVIDE SOLID WOOD BLOCKING FOR SUPPORT AT ALL WALL MOUNTED FIXTURES.

FLASHING

FLASH ALL OPENINGS WITH MINIMUM 26 GAUGE GALVANIZED OR ALUMINUM.

CAULK

CAULK ALL OPENINGS COMPLETELY.

PRESSURE TREATED WOOD

ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED.

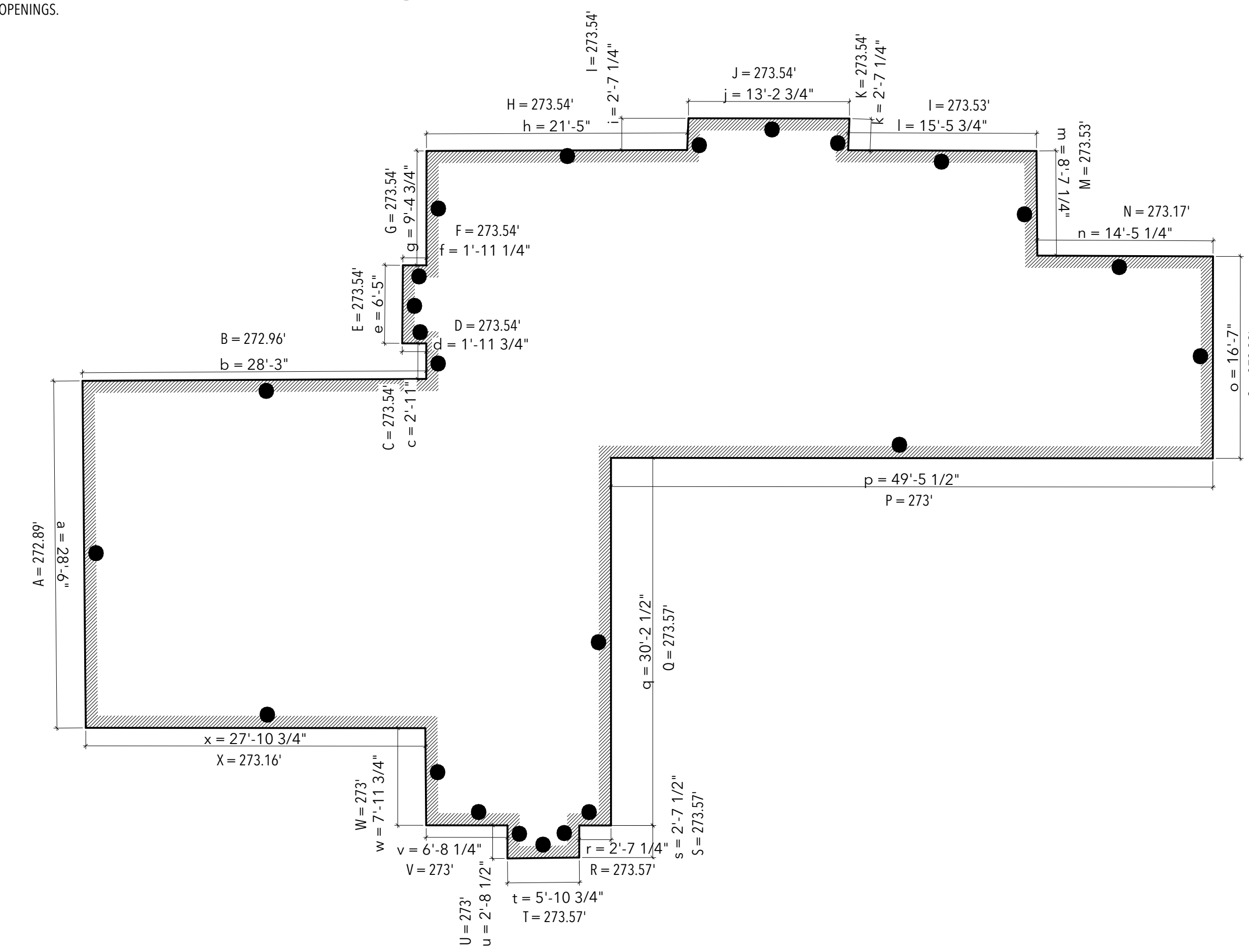
ROOF VENTING AT NEW ADDITION

PROVIDE 1 SQ FOOT OF VENTING PER 150 SQ FEET OF HEATED ROOF. 237 SF HEATED ROOF/150 SQ FT=1.58 SF* 144=227.52 SQ. IN. OF NET FREE VENTING. PROVIDE 15 LF @ 5 SQ.IN. PER FOOT OF EAVE VENTING & 13 LF OF RIDGE VENTING @ 18 SQ. IN. PER LF OF NET FREE VENTING.

CROSS VENTILATION REQUIRED. LEAVE 1" AIRSPACE ABOVE INSULATION.



3 EXTERIOR ADDITION PERSPECTIVE



2 AVG HEIGHT DIAGRAM



MARLO BROWN ARCHITECTS, LLC
509 26th AVE S
SEATTLE, WA 98144
info@marlobrown.com

PROPERTY OWNERS
KHANDELWAL HANKARAN
8460 SE 83RD ST MERCER
ISLAND WA 98040



KHANDELWAL HANKARAN HOUSE

PROJECT NOTES
PERMIT 7.18.24

A1

BUILDING DEPT STAMPS

BOUNDARY SURVEY NOTES

1. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND LEICA VIVA TS15 SMART POLE TOTAL STATION/RTK GPS.
2. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090. SURVEY WAS COMPLETED BY A FIELD TRAVERSE.
3. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.
4. ENCROACHMENTS NOTED AS "IN" OR "OUT" ARE RELATIVE TO THE SUBJECT PROPERTY.
5. FENCE DIMENSIONS ARE GENERALLY TO THE CENTERLINE OF THE FENCE UNLESS OTHERWISE NOTED.
6. STRUCTURE LOCATIONS ARE MEASURED TO THE FINISHED FASCIA UNLESS OTHERWISE NOTED.
7. TREE LOCATIONS ARE MEASURED TO THE ESTIMATED CENTER OF THE TREE.
8. ALL DIMENSIONS ARE IN DECIMAL FEET.

PROJECT INFORMATION

SURVEYOR: PLOG ENGINEERING, PLLC
P.O. BOX 412
RAVENSDALE, WA 98051
PH: (206) 420-7130

PROPERTY OWNER: SAURABH KHANDELWAL & VEENA SHANKARAN
8460 SE 83RD ST
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 362570-0170

PROJECT ADDRESS: 8460 SE 83RD ST
MERCER ISLAND, WA 98040

PARCEL AREA: 13,312 S.F. (0.306 ACRES ±)
AS SURVEYED

REFERENCE SURVEYS

P1 = PLAT OF ISLAND POINT NO. 3, VOL. 82, PGS 71-72
P1 = PLAT OF ISLAND POINT NO. 4, VOL. 96, PG 99

BASIS OF BEARINGS

PER THE PLAT OF ISLAND POINT NUMBER 3, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 67 OF PLATS, PAGE 86, RECORDS OF KING COUNTY WASHINGTON.

ACCEPTED THE BEARING OF N 4'49'04" W FOR SE 83RD ST BASED ON FOUND MONUMENTS IN CASE.

VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.

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

LEGAL DESCRIPTION

LOT 17 OF ISLAND POINT NUMBER 3, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 82 OF PLATS, PAGES 71-72, RECORDS OF KING COUNTY WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

TOPOGRAPHIC SURVEY NOTES

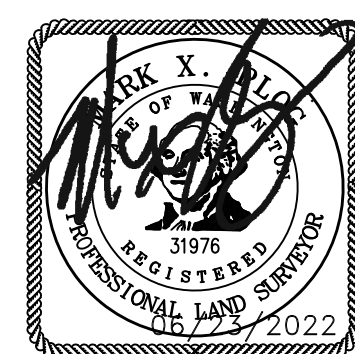
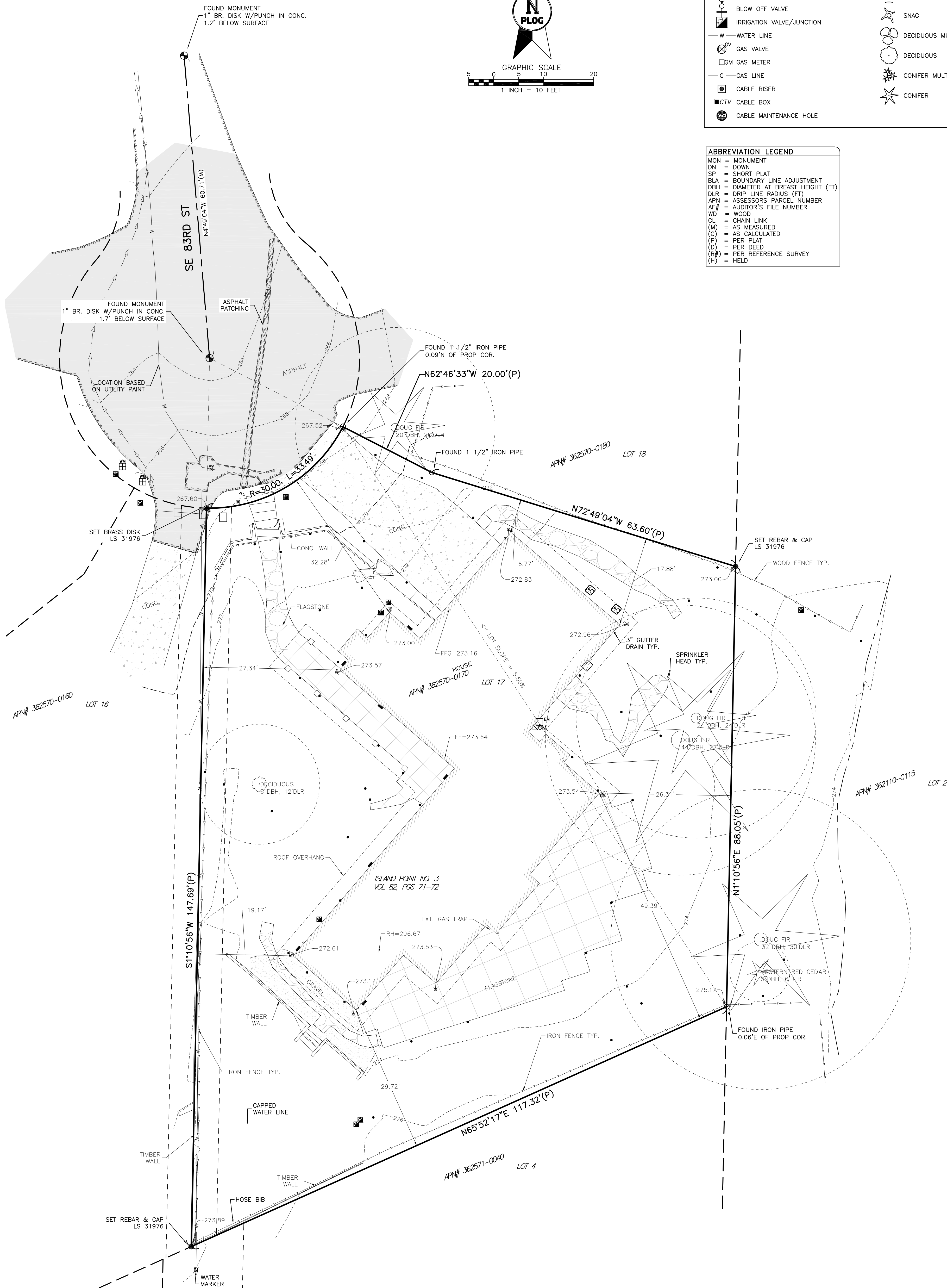
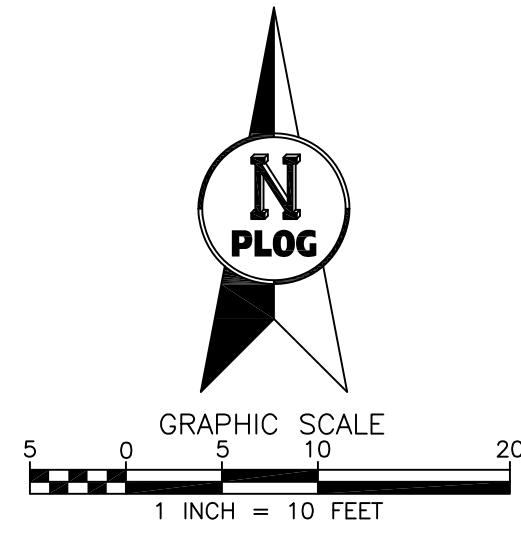
1. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS, UTILITY LOCATES BY THIRD PARTIES, AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
2. CONTOURS SHOWN ARE BASED ON A FIELD SURVEY.
3. TREE IDENTIFICATION WAS PERFORMED BY SURVEY FIELD PERSONNEL AND SHOULD BE CONSIDERED A BEST GUESS. AN ARBORIST SHOULD BE RELIED UPON FOR MORE ACCURATE AND DETAILED IDENTIFICATION OF TREE SPECIES AND HEALTH.

SYMBOL LEGEND

- MONUMENT AS NOTED
- SECTION CORNER
- QUARTER SECTION CORNER
- FOUND REBAR AS NOTED
- SET REBAR AND CAP LS 31976
- FOUND SURFACE MARKER/DISK
- SET SURFACE MARKER/DISK LS 31976
- SEWER MAINTENANCE HOLE
- SEWER CLEAN OUT
- SEPTIC MAINTENANCE HOLE
- SEWER MAINTENANCE HOLE
- SEWER LINE
- STORM DRAIN MAINTENANCE HOLE
- CATCH BASIN (TYPE 2)
- CATCH BASIN (TYPE 1)
- STORM DRAIN CLEAN OUT
- ROUND YARD DRAIN
- SQUARE YARD DRAIN
- STORM DRAIN LINE
- WATER MAINTENANCE HOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- BLOW OFF VALVE
- IRRIGATION VALVE/JUNCTION
- WATER LINE
- GAS VALVE
- GAS METER
- GAS LINE
- CABLE RISER
- CTV CABLE BOX
- CABLE MAINTENANCE HOLE
- FIBER OPTIC MAINTENANCE HOLE
- TELEPHONE MAINTENANCE HOLE
- TRAFFIC SIGNAL MAINTENANCE HOLE
- PAD MOUNTED TRANSFORMER
- HAND HOLE
- A/C COMPRESSOR
- YARD LIGHT
- POWER POLE
- GUY WIRE
- STREET LIGHT
- OVERHEAD UTILITIES (GENERAL/MIXED)
- OVERHEAD ELECTRICAL
- OVERHEAD CABLE
- OVERHEAD TELEPHONE
- UNDERGROUND UTILITIES (GENERAL/MIXED)
- UNDERGROUND ELECTRICAL
- UNDERGROUND CABLE
- UNDERGROUND TELEPHONE
- UNDERGROUND FIBER OPTIC
- BOLLARD
- MAILBOX
- SIGN
- WETLAND FLAG
- SNAG
- DECIDUOUS MULTI-TRUNK
- DECIDUOUS
- CONIFER MULTI-TRUNK
- CONIFER

ABBREVIATION LEGEND

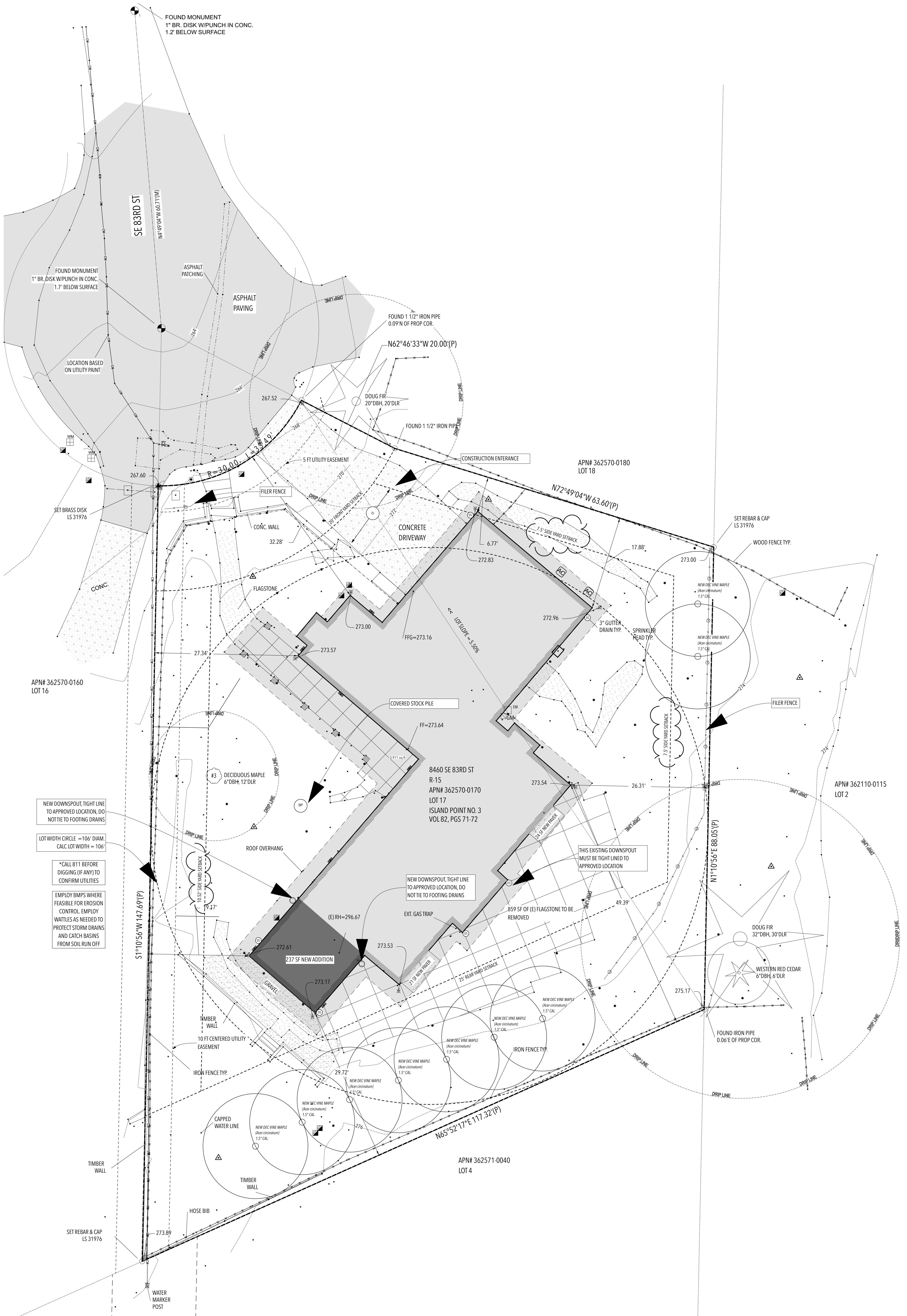
- MON = MONUMENT
- DN = DOWN
- SP = SHORT PLAT
- BLA = BOUNDARY LINE ADJUSTMENT
- DBH = DIAMETER AT BREAST HEIGHT (FT)
- DLR = DRIP LINE RADIUS (FT)
- APN = ASSESSOR'S PARCEL NUMBER
- AF# = AUDITOR'S FILE NUMBER
- WD = WOOD
- CL = CHAIN LINK
- (M) = AS MEASURED
- (C) = AS CALCULATED
- (P) = PER PLAT
- (D) = PER DEED
- (R#) = PER REFERENCE SURVEY
- (H) = HELD



PLOG ENGINEERING
Surveyors & Civil Engineers
P.O. Box 412
Ravensdale, WA 98051
(206) 420-7130
www.PlogEngineering.com

NE1/4, NE1/4, SEC 36, TWP 24N, RNG 4E, W.M.
BOUNDARY & TOPOGRAPHIC SURVEY
SAURABH KHANDELWAL
8460 SE 83RD ST
MERCER ISLAND, WA 98040

PROJECT NO.:	REVISION DATE:	REVISION NO.:	SHEET
094-22	06/23/2022	0	1 OF 1



1 SITE PLAN
SCALE: 1/8" = 1'-0"

BUILDING DEPT STAMPS

A3

KHANDELWAL HANKARAN HOUSE

SITE PLAN
PERMIT 7.18.24

10822 REGISTERED ARCHITECT

Marlo M. Brown

MARLO M. BROWN
STATE OF WASHINGTON

MARLO BROWN ARCHITECTS, LLC
509 26th AVE S
SEATTLE, WA 98144
info@marlobrown.com

PROPERTY OWNERS
KHANDELWAL HANKARAN
8460 SE 83RD ST MERCER
ISLAND WA 98040



FOUND MONUMENT
1" BR. DISK W/PUNCH IN CONC.
1.2' BELOW SURFACE

TREE PROTECTION AREA (TPZ) KEEP OUT!

DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved.
2. 30-day suspension from future permits.
3. Arbovist reports recommending mitigation.

Tree Protection Area (TPZ) Requirements:

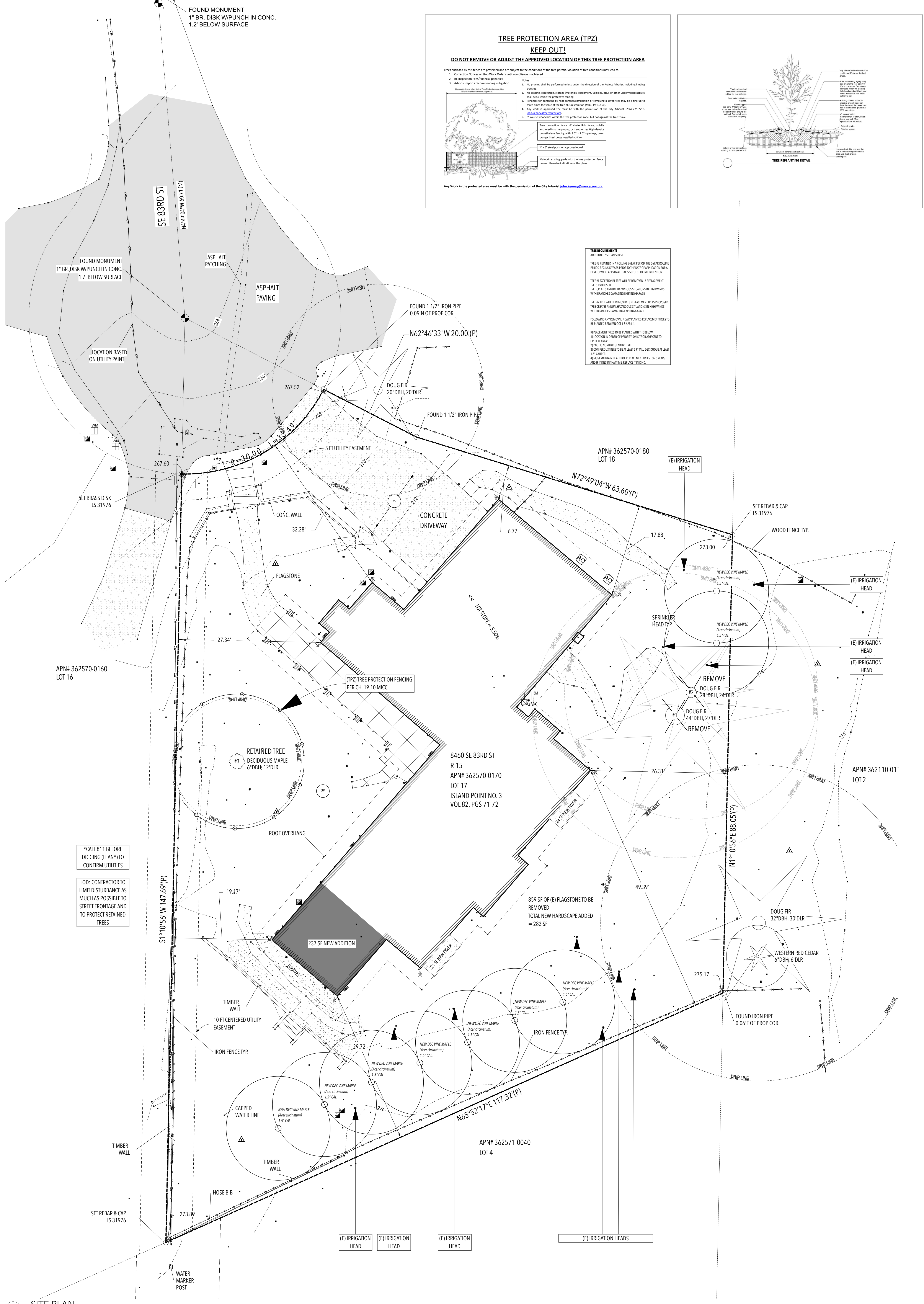
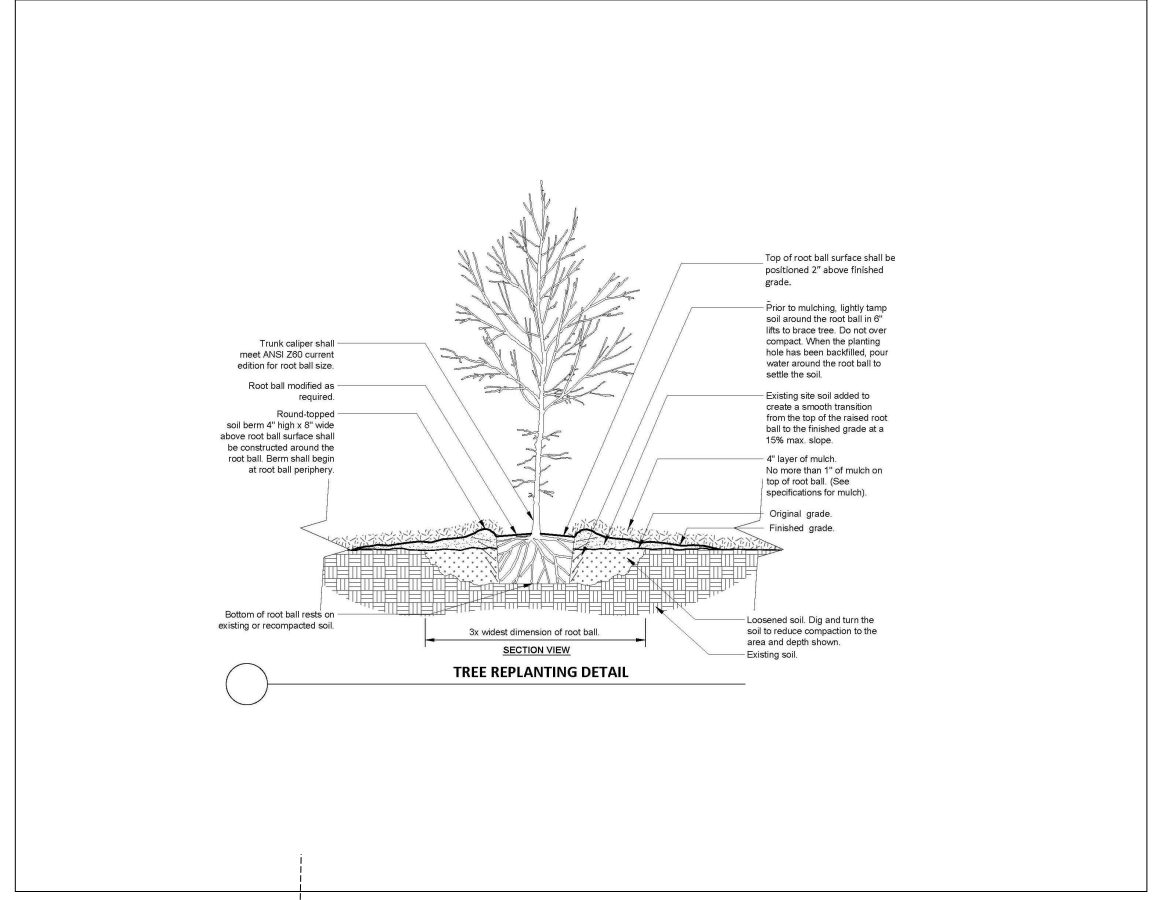
1. No pruning shall be performed unless under the direction of the Project Arbovist, including limb removal.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur within the protection zone.
3. Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MCC 19.10.010).
4. Any work in approved TPZ must be with the permission of the City Arbovist (365-2713, arbovist@seattle.gov).
5. 1" course woodchips within the tree protection zone, but not against the tree trunk.

Tree Protection Fence: 4' chain-link fence, solidly anchored into the ground, or equivalent high-density polyethylene fencing with 3.5" x 1.5" openings, outer orange. Steel posts installed at 6' o.c.

2" x 4" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indicated on the plans.

Any Work in the protected area must be with the permission of the City Arbovist john.kennedy@seattle.gov



* CALL 811 BEFORE DIGGING (IF ANY) TO CONFIRM UTILITIES

LOD: CONTRACTOR TO LIMIT DISTURBANCE AS MUCH AS POSSIBLE TO STREET FRONTAGE AND TO PROTECT RETAINED TREES

1 SITE PLAN
SCALE: 1/8" = 1'-0"

BUILDING DEPARTMENT

A4

KHANDELWAL HANKARAN HOUSE

TREE PLAN
PERMIT 7.18.24

10822 REGISTERED ARCHITECT

Marlo Brown

MARLO M. BROWN
STATE OF WASHINGTON

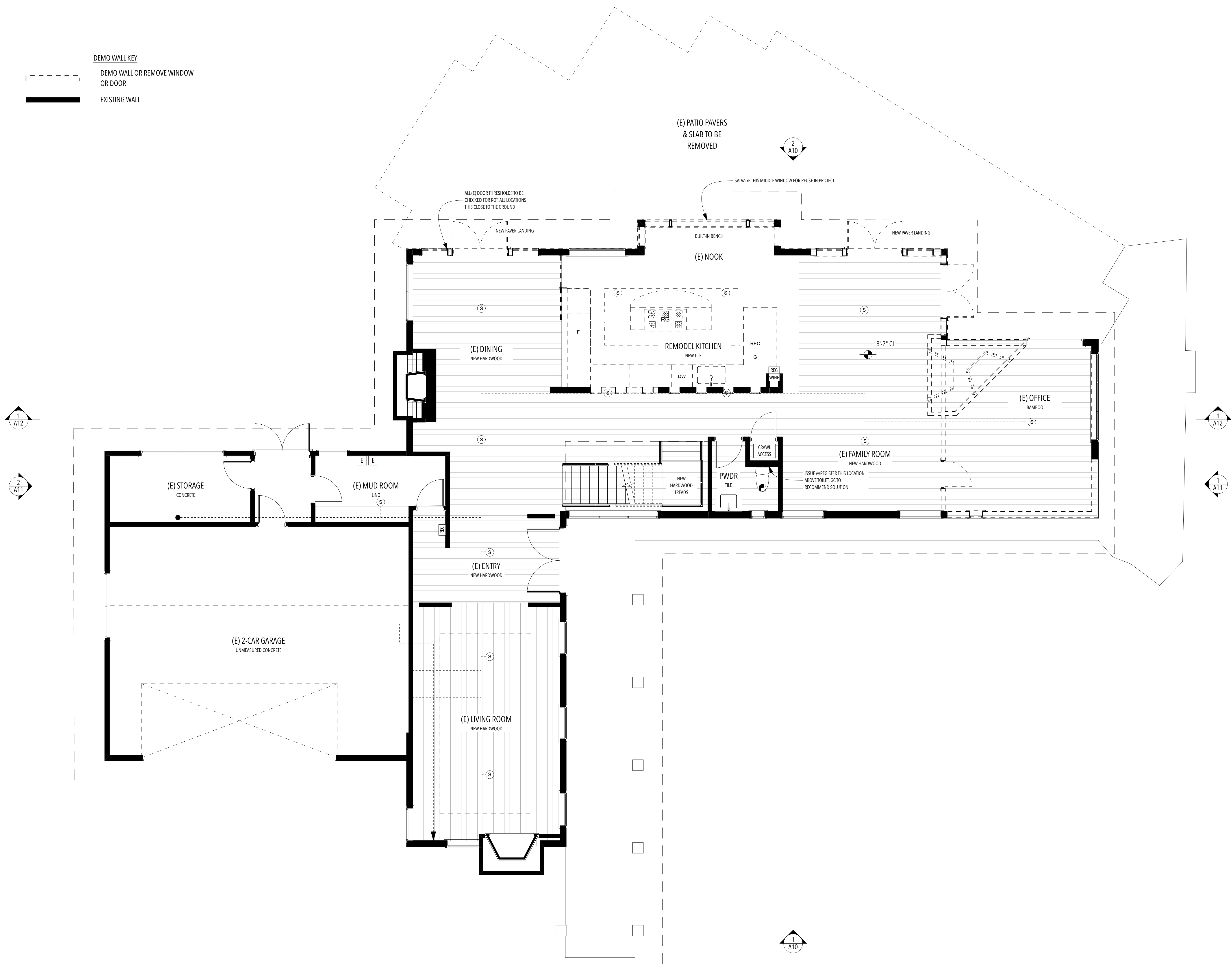
MARLO BROWN ARCHITECTS, LLC
509 26th AVE S
SEATTLE, WA 98144
info@marlobrown.com

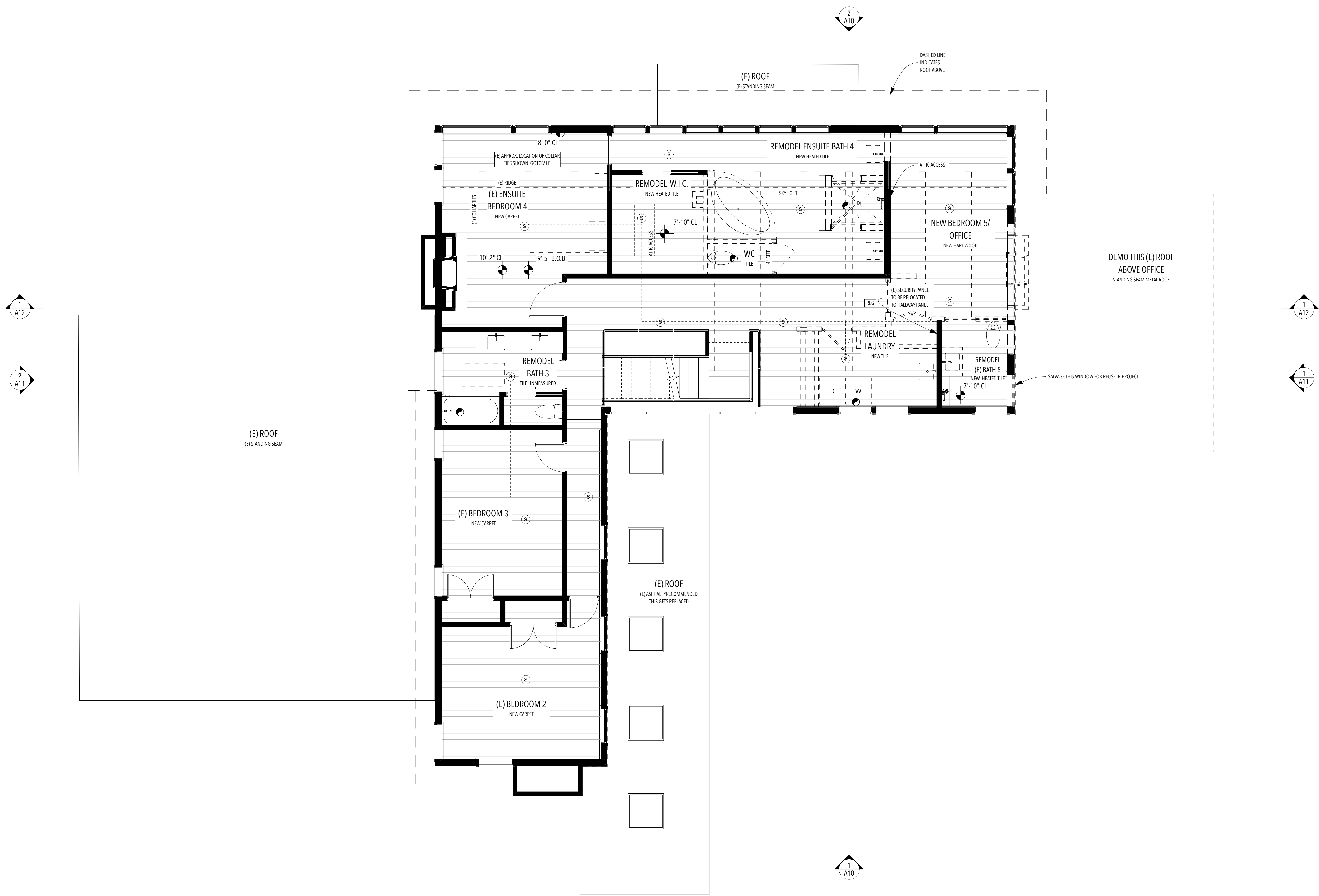
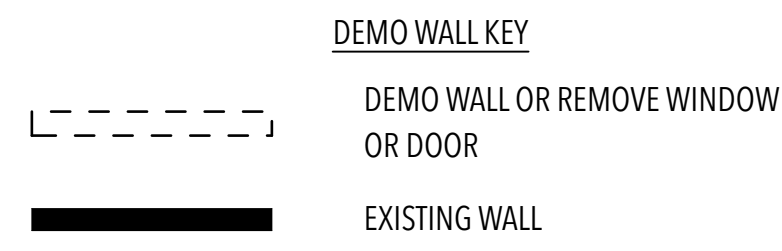
PROPERTY OWNERS
KHANDELWAL HANKARAN
8460 SE 83RD ST MERCER
ISLAND WA 98040

MB

ARCHITECTS

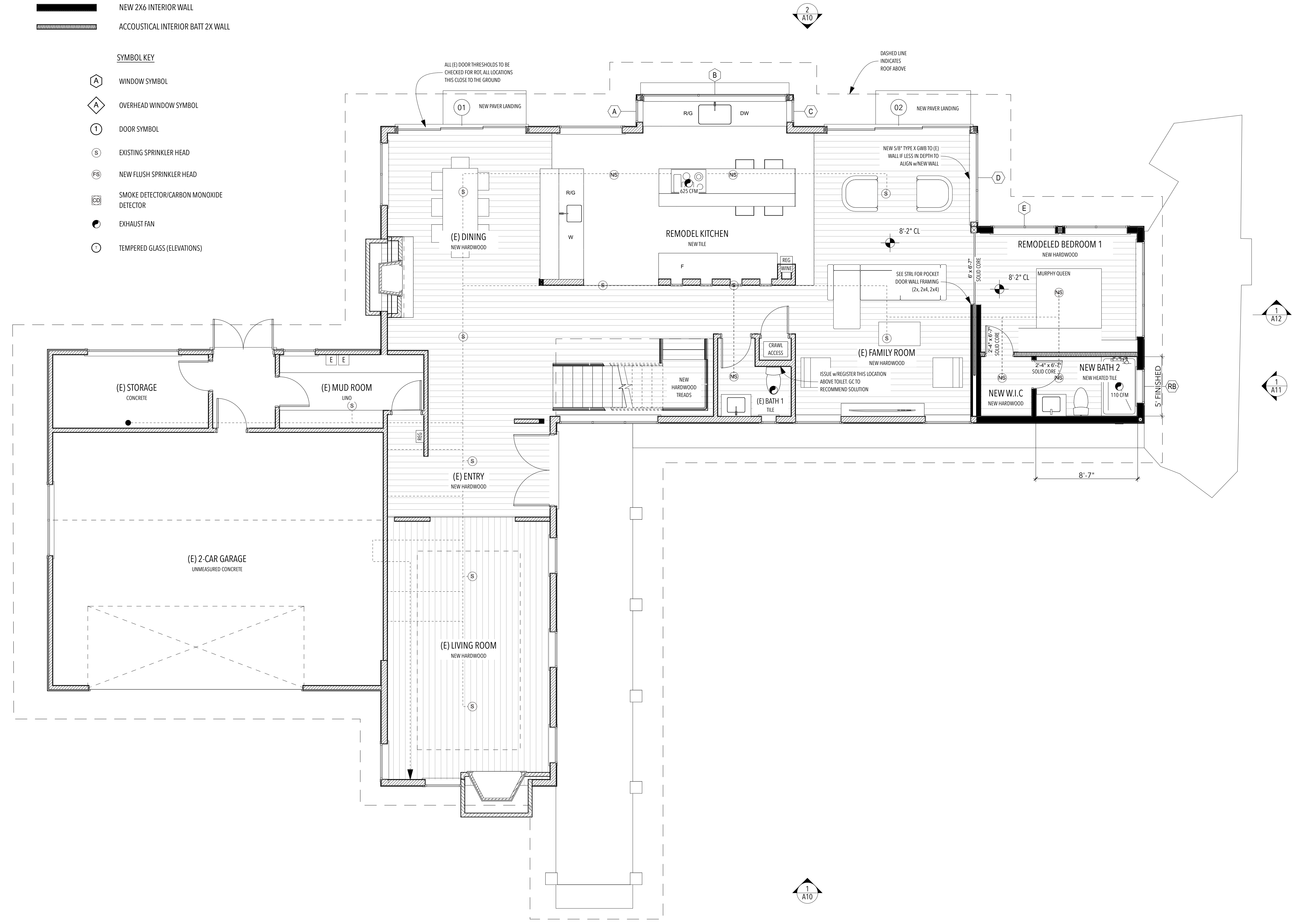
DEMO WALL KEY
 - - - - - DEMO WALL OR REMOVE WINDOW OR DOOR
 ——— EXISTING WALL





- WALL KEY**
- EXISTING 2X EXTERIOR WALL
 - EXISTING 2X4 INTERIOR WALL
 - EXISTING 2X6 INTERIOR WALL
 - NEW 2X6 EXTERIOR WALL
 - NEW 2X4 INTERIOR WALL
 - NEW 2X6 INTERIOR WALL
 - ACCOUSTICAL INTERIOR BATT 2X WALL

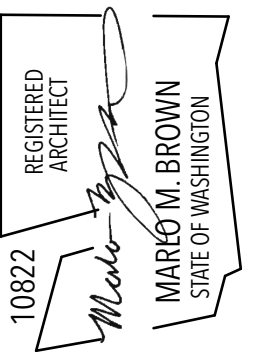
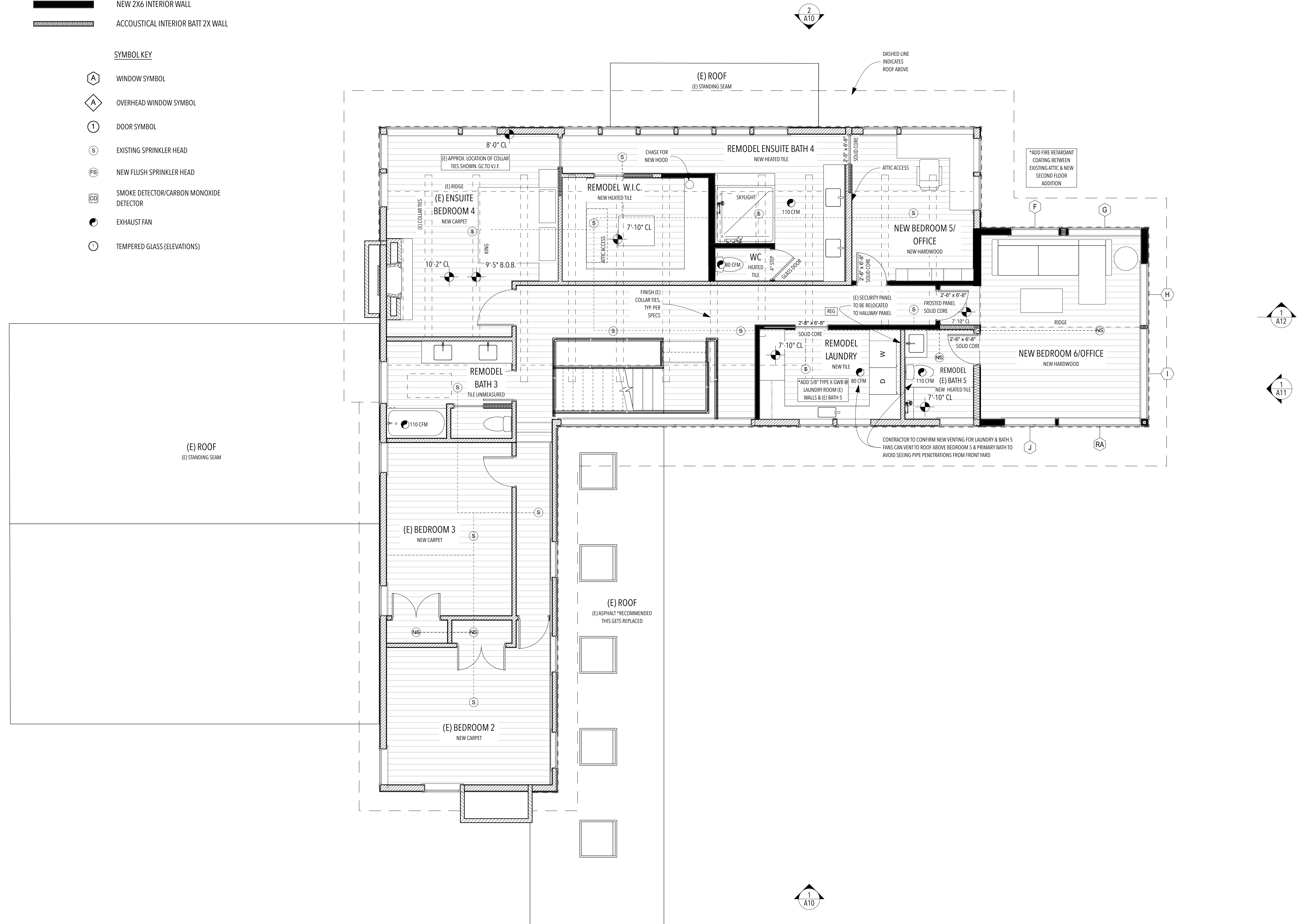
- SYMBOL KEY**
- WINDOW SYMBOL
 - OVERHEAD WINDOW SYMBOL
 - DOOR SYMBOL
 - EXISTING SPRINKLER HEAD
 - NEW FLUSH SPRINKLER HEAD
 - SMOKE DETECTOR/CARBON MONOXIDE DETECTOR
 - EXHAUST FAN
 - TEMPERED GLASS (ELEVATIONS)

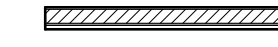
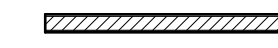
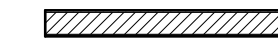



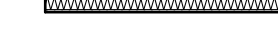










1 1ST FLOOR
SCALE: 1/4" = 1'-0"

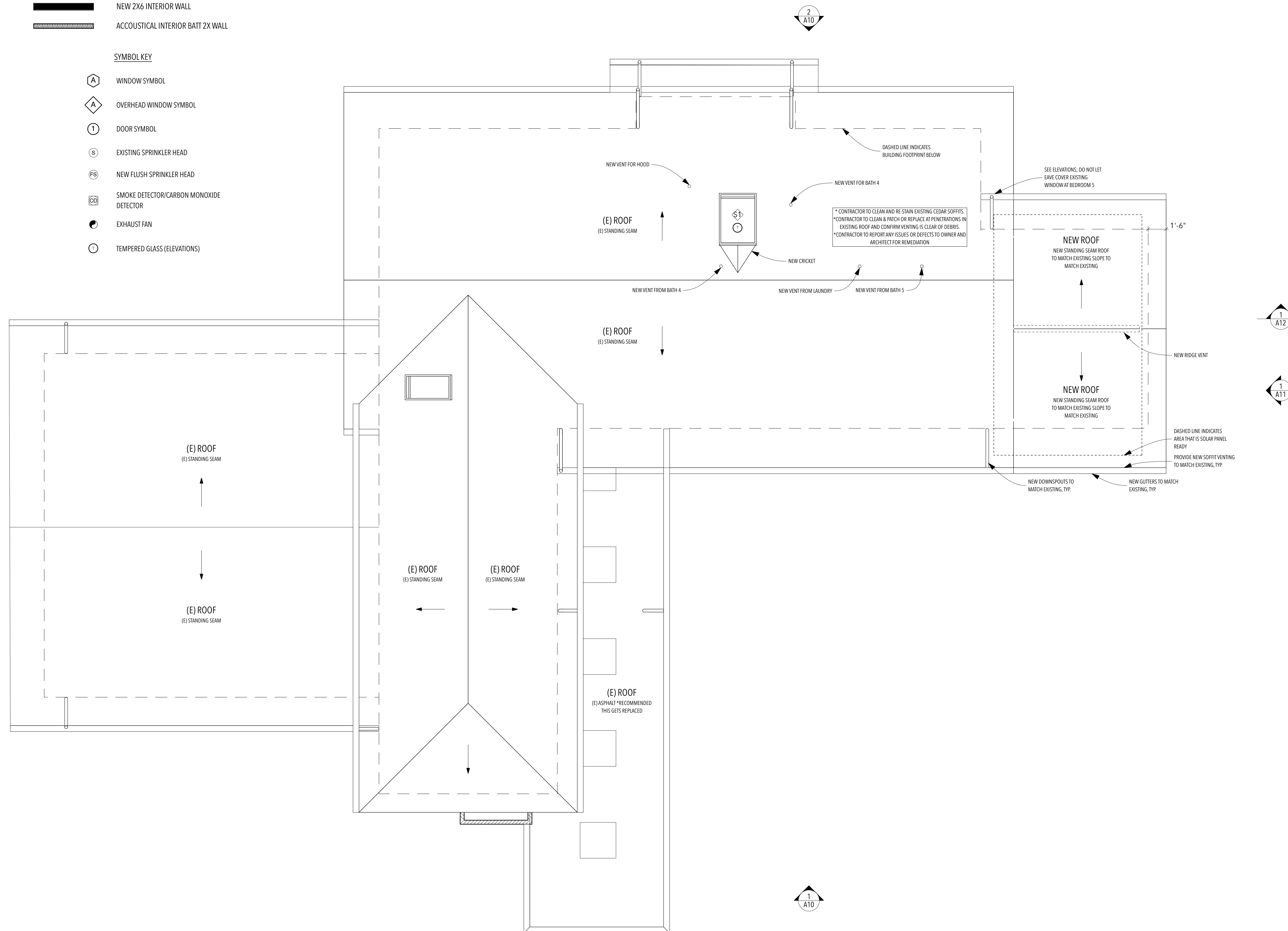
WALL KEY	
	EXISTING 2X EXTERIOR WALL
	EXISTING 2X4 INTERIOR WALL
	EXISTING 2X6 INTERIOR WALL
	NEW 2X6 EXTERIOR WALL
	NEW 2X4 INTERIOR WALL
	NEW 2X6 INTERIOR WALL
	ACCOUSTICAL INTERIOR BATT 2X WALL

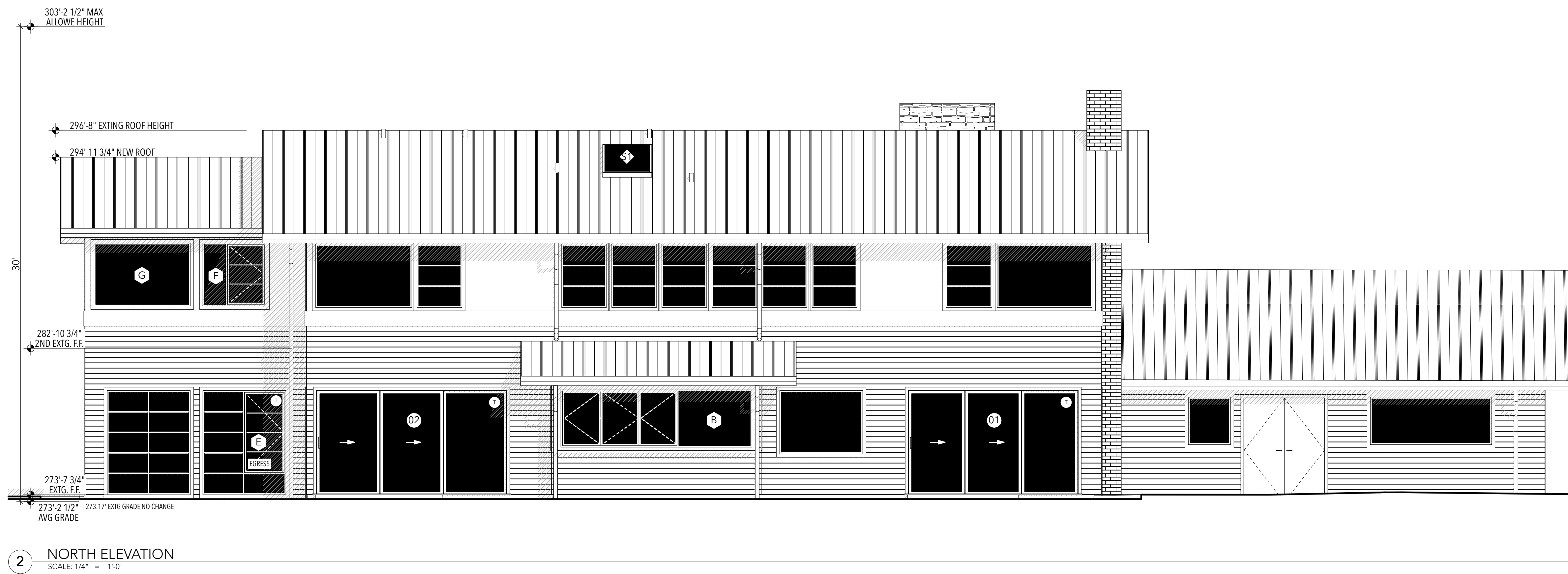
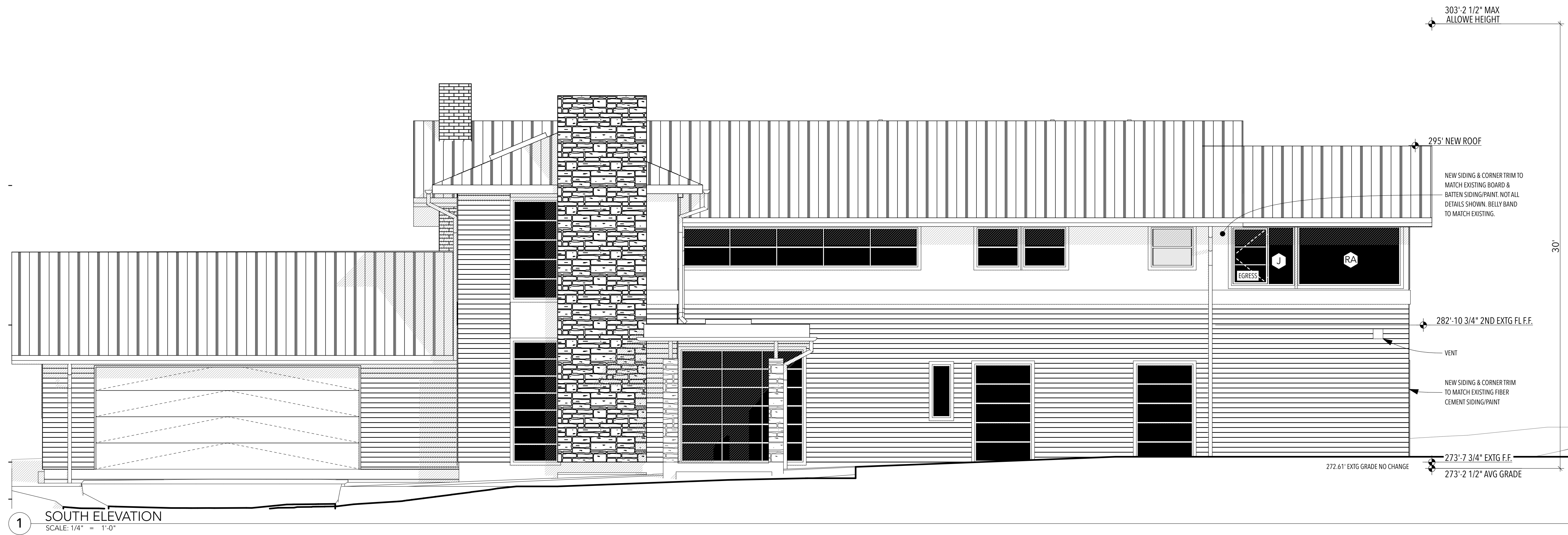
SYMBOL KEY	
	WINDOW SYMBOL
	OVERHEAD WINDOW SYMBOL
	DOOR SYMBOL
	EXISTING SPRINKLER HEAD
	NEW FLUSH SPRINKLER HEAD
	SMOKE DETECTOR/CARBON MONOXIDE DETECTOR
	EXHAUST FAN
	TEMPERED GLASS (ELEVATIONS)

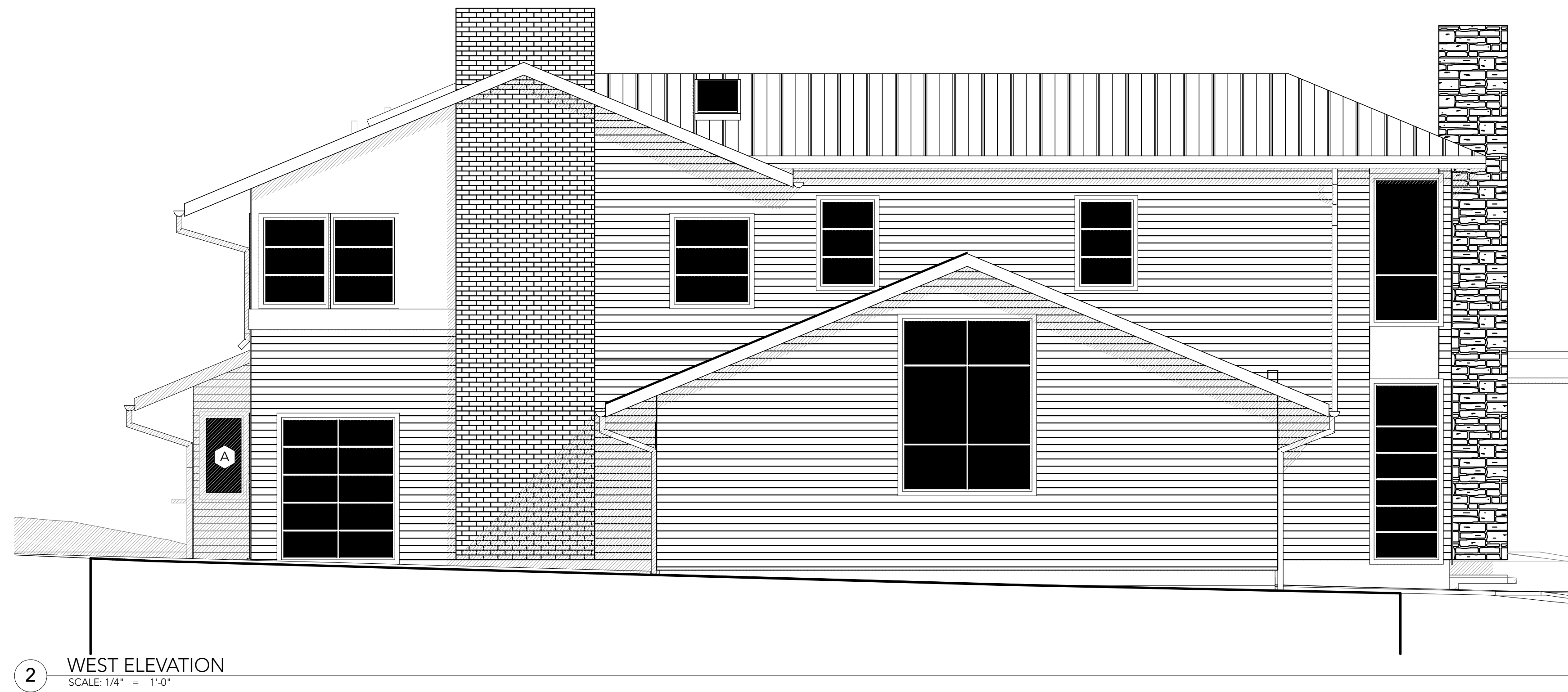


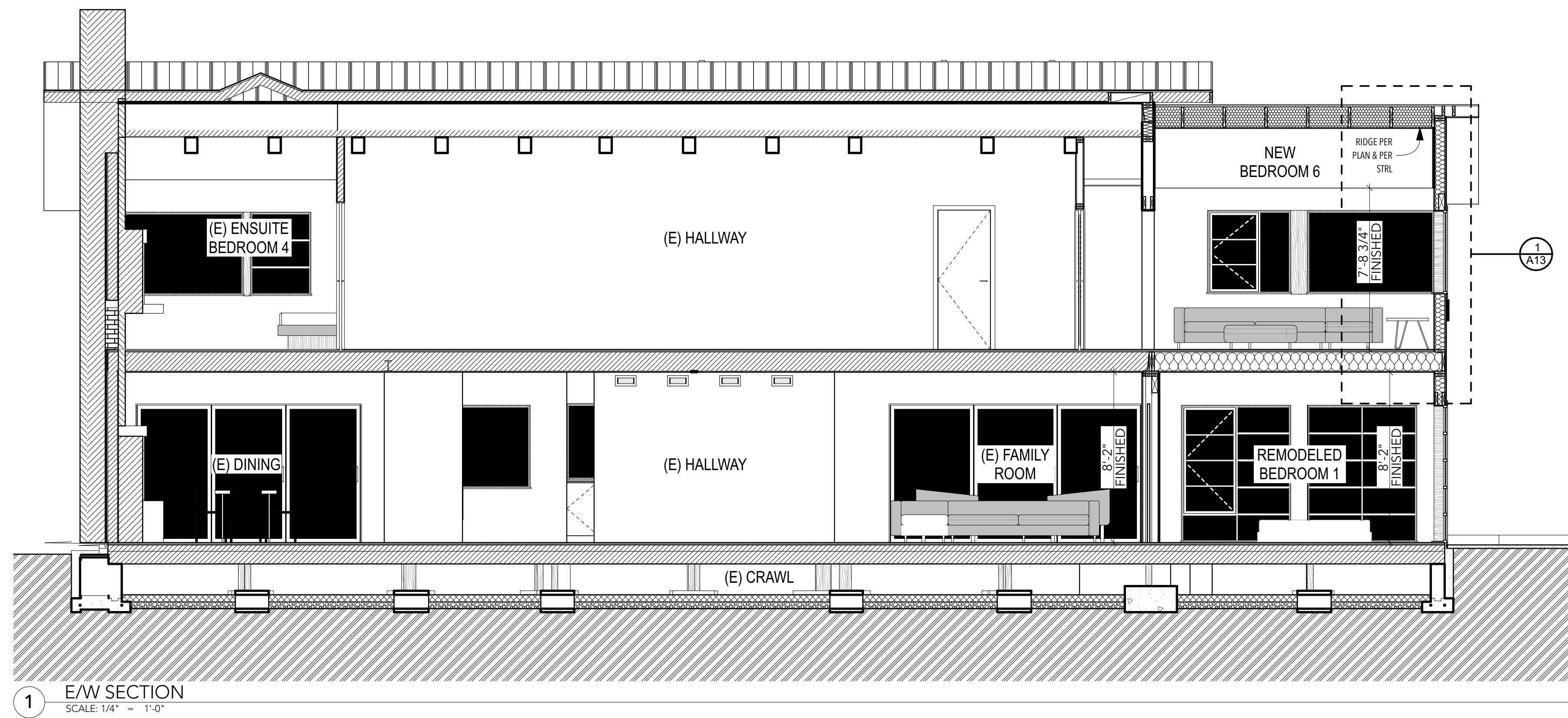
- WALL KEY**
-  EXISTING 2X EXTERIOR WALL
 -  EXISTING 2X4 INTERIOR WALL
 -  EXISTING 2X6 INTERIOR WALL
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 -  EXHAUST FAN
 -  TEMPERED GLASS (ELEVATIONS)









1 E/W SECTION
SCALE: 1/4" = 1'-0"

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information	Contact Information
SAURABH KHANDELWAL & VEENA SHANKARAN 8460 SE 83RD ST MERCER ISLAND, WA 98040	MARLO BROWN ARCHITECTS LLC 509 26TH AVE S SEATTLE, WA 98144

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative: **Marlo Brown** Digitally signed by Marlo Brown Date: 2024.02.20 13:04:17 -0800 Date: 02/20/2024

All Climate Zones (Table R402.1.1)		
	R-Value ^a	U-Factor ^a
Fenestration U-Factor ^b	n/a	0.30
Skylight U-Factor ^b	n/a	0.50
Glazed Fenestration SHGC ^{b,c}	n/a	n/a
Ceiling ^a	49 ⁱ	0.026
Wood Frame Wall ^{b,h}	21 int	0.056
Floor	30	0.029
Below Grade Wall ^{c,h}	10/15/21 int + TB	0.042
Slab ^{d,i} R-Value & Depth	10, 2 ft	n/a

^a R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.

^b The fenestration U-factor column excludes skylights.

^c "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.

^d R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.

^e For single rafter- or joist-vented ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.

^f R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.

^g For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.

^h Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

- Small Dwelling Unit: 3 credits**
Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
- Medium Dwelling Unit: 6 credits**
All dwelling units that are not included in #1 or #3
- Large Dwelling Unit: 7 credits**
Dwelling units exceeding 5,000 sf of conditioned floor area
- Additions less than 500 square feet: 1.5 credits**
All other additions shall meet 1-3 above

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

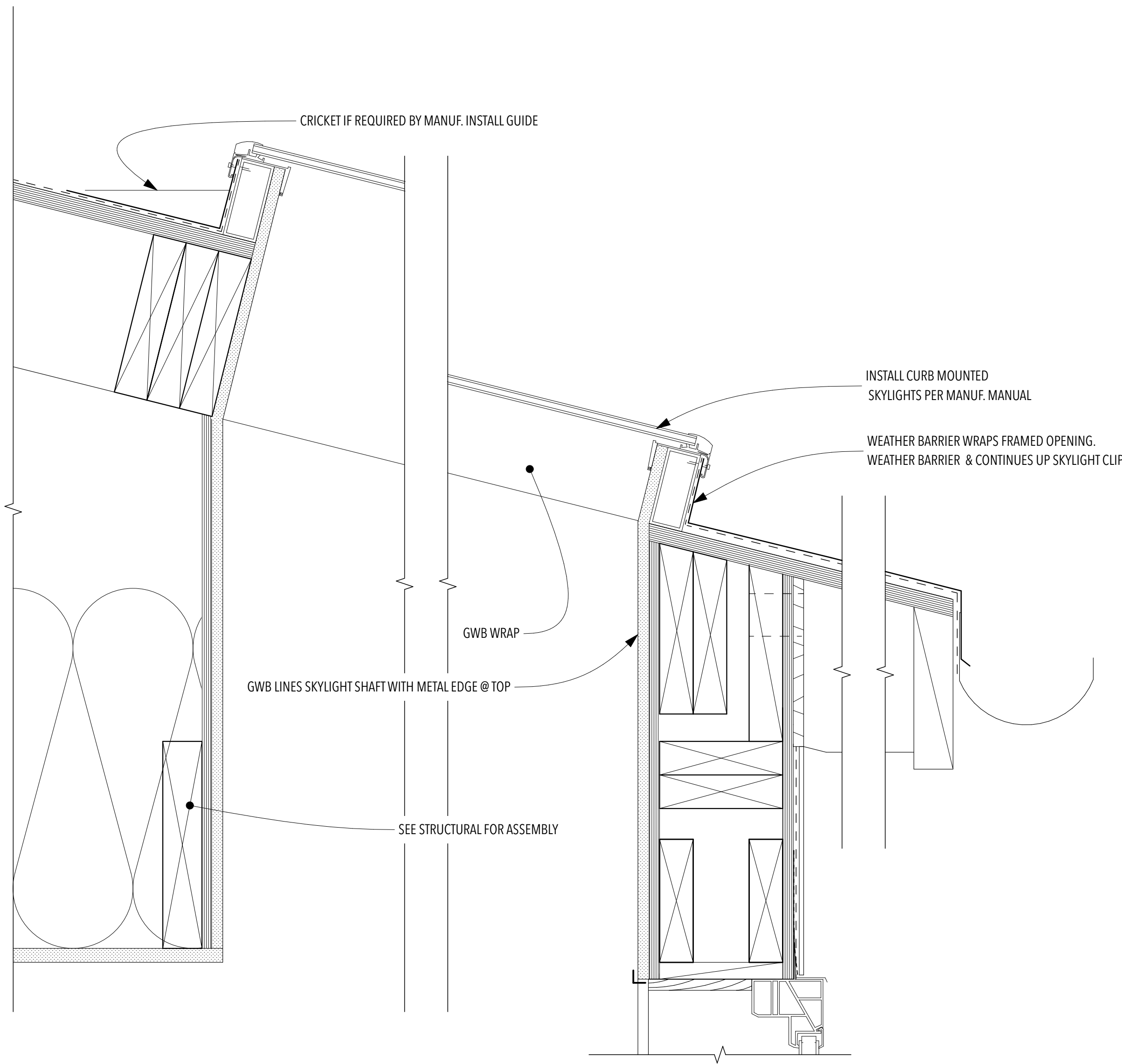
Summary of Table R406.2			
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option	User Notes
1	Combustion heating minimum NAECA ^b	0.0	<input checked="" type="checkbox"/> Existing system
2	Heat pump ^c	1.0	<input type="checkbox"/>
3	Electric resistance heat only - furnace or zonal	-1.0	<input type="checkbox"/>
4	DHP with zonal electric resistance per option 3.4	0.5	<input type="checkbox"/>
5	All other heating systems	-1.0	<input type="checkbox"/>
Energy Options	Energy Credit Option Descriptions	Credits - select ONE energy option from each category ^d	
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.2	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	0.5	<input checked="" type="checkbox"/>
1.4	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.5	Efficient Building Envelope	2.0	<input type="checkbox"/>
1.6	Efficient Building Envelope	3.0	<input type="checkbox"/>
1.7	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input type="checkbox"/>
2.2	Air Leakage Control and Efficient Ventilation	1.0	<input checked="" type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
2.4	Air Leakage Control and Efficient Ventilation	2.0	<input type="checkbox"/>
3.1*	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.2	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.3*	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.4	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.5	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.6*	High Efficiency HVAC	2.0	<input type="checkbox"/>
4.1	High Efficiency HVAC Distribution System	0.5	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

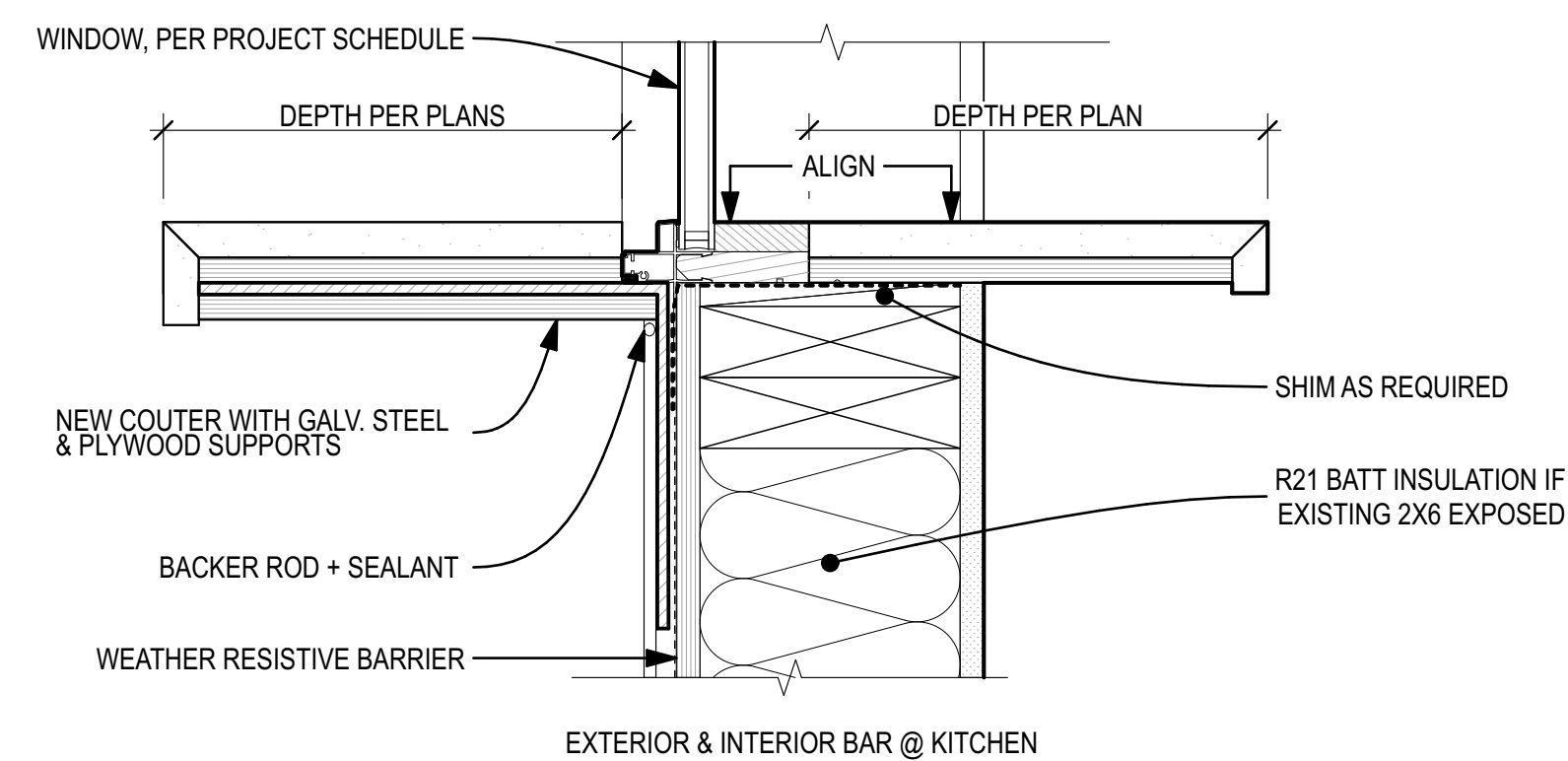
Summary of Table R406.2 (cont.)			
Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category ^d	User Notes
5.1 ^d	Efficient Water Heating	0.5	<input type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/>
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input type="checkbox"/>
5.6	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1*	Renewable Electric Energy (3 credits max)	1.0	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
Total Credits		1.5	CLEAR FORM

- An alternative heating source sized at a maximum of 0.5 W/sf (equivalent of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
- Equipment listed in Table C403.3.2(4) or C403.3.2(5)
- Equipment listed in Table C403.3.2(1) or C403.3.2(2)
- You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.
- 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max. See the complete Table R406.2 for all requirements and option descriptions.

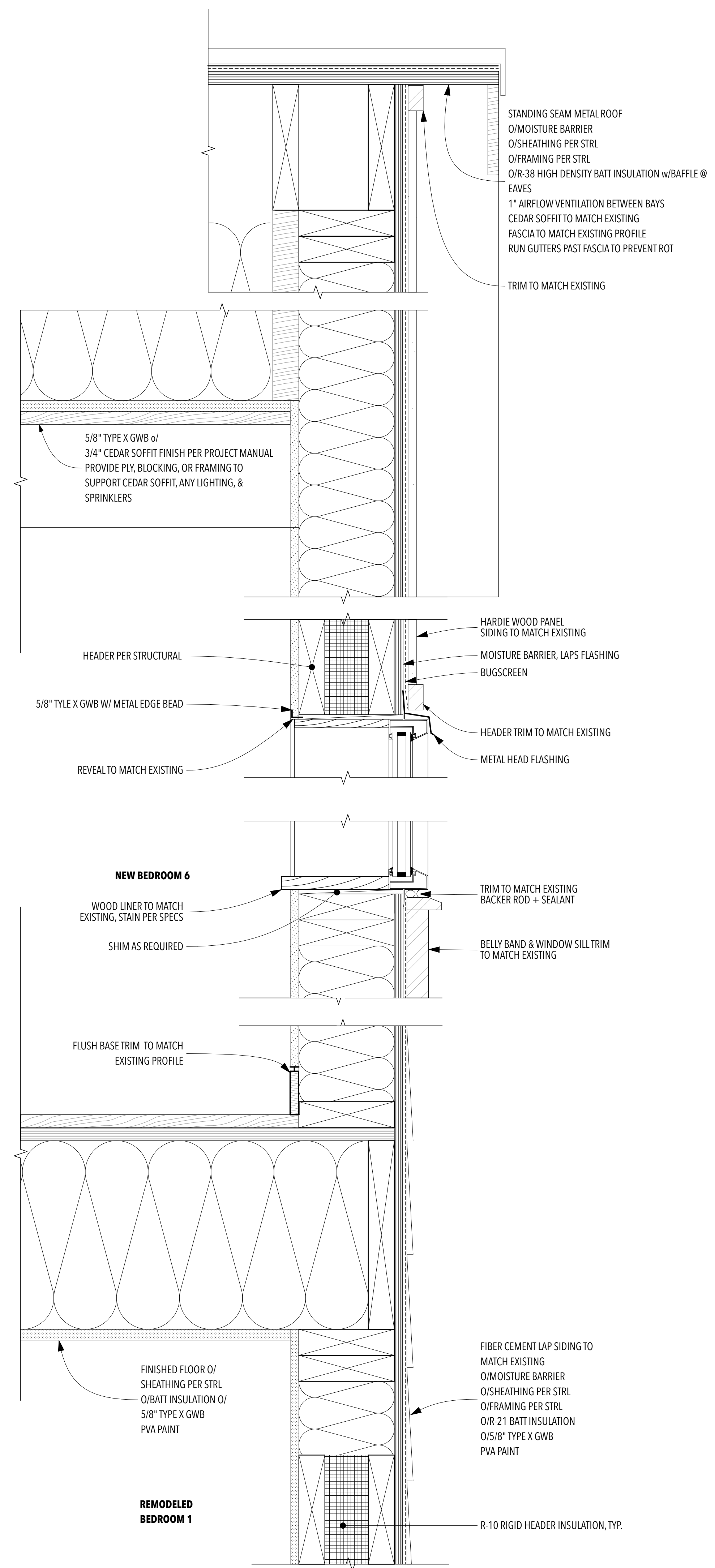
Please print only pages 1 through 3 of this worksheet for submission to your building official.



3 TYP. SKYLIGHT DETAIL
SCALE: 3" = 1'-0"



2 TYP. WINDOW DETAIL
SCALE: 3" = 1'-0"



1 EXTERIOR DECK SECTION
SCALE: 3" = 1'-0"

WINDOW SCHEDULE									
ID	QTY	R.O. SIZE		SILL HT (+/-) VERIFY	TYPE *	NOTES	U	AREA	UA Value
		WIDTH	HEIGHT						
A	1	1'-10"	3'-8"	3'	F		0.21	7	1.47
B	1	12'-1"	3'-8"	3'	F/Bi		0.28	44	12.32
C	1	1'-10"	3'-8"	3'	F		0.21	7	1.47
D	1	7'-6"	6'-7"		F/C	TEMPERED	0.28	49	13.72
E	1	5'-3"	6'-7"		F/C	TEMPERED, EGRESS	0.28	35	9.8
F	1	4'	4'	2'-8"	F/C		0.28	16	4.48
G	1	6'-1"	4'	2'-8"	F		0.21	24	5.04
H	1	5'-2 1/4"	4'	2'-8"	F		0.21	21	4.41
I	1	7'-6 3/4"	4'	2'-8"	F		0.21	30	6.3
J	1	4'-3"	4'	2'-8"	F		0.28	17	4.76
RA	1	6'-11"	4'	2'-8"	F	REUSED	0.30	28	8.4
RB	1	2'-10"	2'-8"	4'	A	REUSED/TEMPERED/OBSC.	0.30	8	2.4
							285 ft ²	74.57	

EXTERIOR DOOR SCHEDULE											
ID	QTY	R.O. SIZE (+/-)		PANELS		LEAF LEFT	LEAF RIGHT	NOTES	U	UA	AREA
		W	H	LEFT	RIGHT						
01	1	10'-10"	6'-7 3/4"	3	0	3'-6 3/4"	3'-6 3/4"	LOCKABLE, TEMPERED	0.28	20.16	72
02	1	12'-1 1/2"	6'-7 3/4"	3	0	4'	4'	LOCKABLE, TEMPERED	0.28	22.68	81
							42.84	153			

SKYLIGHT SCHEDULE							
ID	QTY	WIDTH	HEIGHT	NOTES	U	UA	AREA
S1	1	36"	54"	TEMPERED	.48	6.72	14

WINDOW & DOOR NOTES:

- ALL WINDOW DIMENSIONS ARE TO ROUGH OPENING.
ALL DOOR DIMENSIONS ARE DOOR PANEL DIMENSIONS EXCEPT BI-FOLD DOORS
- ALL NEW GLAZING AND DOOR U-VALUES PER WASHINGTON STATE ENERGY CODE TABLE R402.1.1 "INSULATION & FENESTRATION REQUIREMENTS FOR GROUP R OCCUPANCY CLIMATE ZONE 4C", 2018 EDITION.
-ALL WINDOW, DOOR, AND OVERHEAD GLAZING TO BE NFRC CERTIFIED PER MANUFACTURER.

3. VERIFY ALL ROUGH OPENINGS IN FIELD PRIOR TO ORDERING.

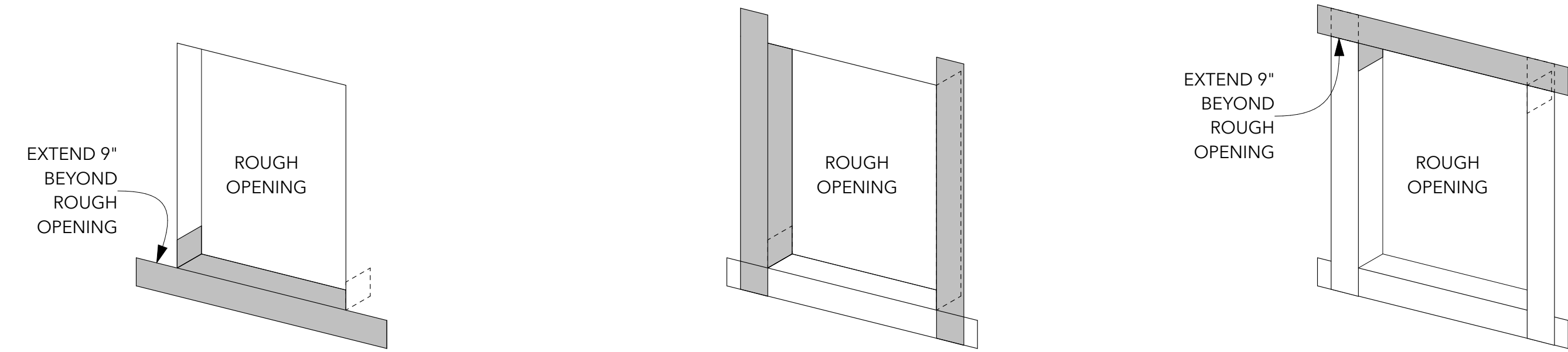
4. PROVIDE TEMPERED GLASS WHERE REQUIRED BY IRC R308.
(AT LOCATIONS INCLUDING, BUT NOT LIMITED TO THOSE MARKED TEMPERED IN THE SCHEDULE & ELEVATIONS)

* WINDOW TYPE CODES FOR REFERENCE: (VERIFY OPERATION W/ ELEVATIONS)
F = FIXED, C = CASEMENT, Bi = BIFOLD

ALL NEW VERTICAL GLAZING: TOTAL AREA = 452 SF TOTAL UA = 124.13 AVERAGE U-VALUE = .27

WINDOW & DOOR TRIM NOTES:

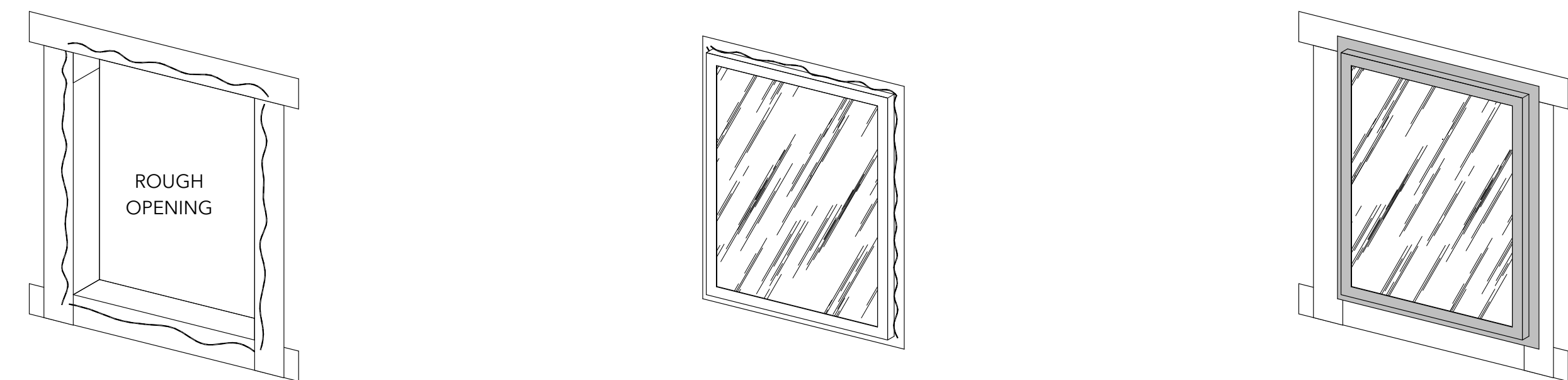
- BASEBOARD & TRIM REVEALS TO MATCH EXISTING, FINISH PER SPECIFICATIONS



STEP 1
APPLY SILL FLASHING.
PARTIALLY PULL RELEASE PAPER.

STEP 2
APPLY SIDE FLASHING

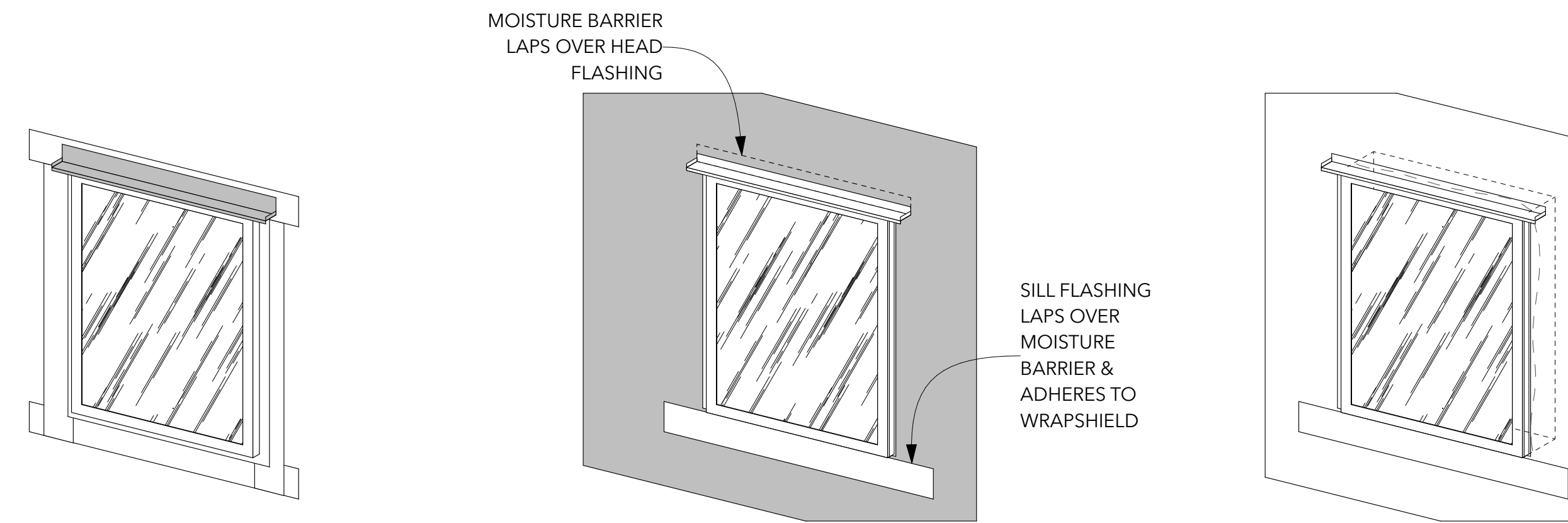
STEP 3
APPLY HEAD FLASHING



STEP 4
APPLY VAPROLUQUI-FLASH TO OPENING

STEP 5
APPLY VAPROLUQUI-FLASH TO HEAD/JAMBS OF WINDOW

STEP 6
INSTALL WINDOW



STEP 7
METAL HEAD FLASHING, SET IN DOW 758 SEALANT AND FORM FOLDED UP END DAMS

STEP 8
SEAL EDGE OF WRAPSHIELD TO WINDOW FLANGE & METAL FLASHING W/ DOW 758 SEALANT

STEP 9
APPLY DOW 758 SEALANT & BACKER ROD TO INTERIOR PRIOR TO APPLICATION OF LINER & STOOL

WINDOW FLASHING ASSEMBLY

NOT TO SCALE

CRITERIA

- 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2018 EDITION).
2. DESIGN LOADING CRITERIA: RESIDENTIAL – ONE AND TWO-FAMILY DWELLINGS
FLOOR LIVE LOAD 40 PSF
MISCELLANEOUS LOADS
DECKS 1.5 x AREA SERVED ENVIRONMENTAL LOADS
SNOW Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=20 PSF
WIND Gcpi=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "C"
EARTHQUAKE . . . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS
SITE CLASS-D (DEFAULT), Ss=1.466, Sds=0.98, S1=0.505, Sd1=0.86, Cs=0.150, SDC D, Ie=1.0, R=6.5
3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION.
4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK.
6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION.
8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION.
9. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

QUALITY ASSURANCE

- 10. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

Table with 2 columns: Item, Requirement. Includes expansion bolts and threaded expansion inserts per manufacturer.

PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.
CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

GEOTECHNICAL

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

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

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

ALLOWABLE SOIL PRESSURE. 1500 PSF

RENOVATION

- 12. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES.
13. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK.
14. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS.
A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE.
B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING.
D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DRILL AND EPOXY DOWELS MATCHING THE NEW REINFORCING INTO THE EXISTING CONCRETE WITH 6" EMBED, UNLESS OTHERWISE NOTED ON PLANS.
15. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK.

CONCRETE

- 16. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES.
17. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI.
18. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 318R-18 AND 318-14.
19. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) 2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) . . . 1-1/2"
COLUMN TIES OR SPIRALS AND BEAM STIRRUPS 1-1/2"
SLABS AND WALLS (INT. FACE). GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"
20. CONCRETE WALL REINFORCING—PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:
6" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
10" WALLS #4 @ 18 HORIZ. #4 @ 18 VERTICAL 2 CURTAINS
12" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 2 CURTAINS

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

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

Table with 2 columns: Footings and other unformed surfaces, Protection (cover) for reinforcing steel.

ANCHORAGE

- 22. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS.
23. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-36" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY.

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

- 24. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS.
32. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2021.

WOOD

- 25. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WMPA STANDARD, WESTERN LUMBER GRADING RULES 2017.

Table with 4 columns: Members, Quantity, Species, Properties. Lists joists, beams, posts, studs, plates & misc. framing with their respective materials and strengths.

- 26. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS.
27. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387.

Table with 4 columns: Product, Fb, E, Fv. Lists PSL (2.2E WS), LVL (2.0E-2600FB WS), and LSL (1.55E) with their respective properties.

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%.

- 28. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- 29. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
30. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER WMPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION.

- 31. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

Table with 3 columns: Wood Treatment, Condition, Protection. Lists requirements for wood with and without ammonia carriers under various conditions.

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%.

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

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION".

B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER.

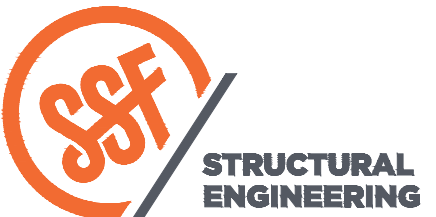
ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES.

B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH.

C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.



SEATTLE 2124 Third Avenue, Suite 100 Seattle, WA 98121
TACOMA 934 Broadway, Suite 100 Tacoma, WA 98402
CENTRAL WASHINGTON 414 N Pearl Street, Suite 8 Ellensburg, WA 98926

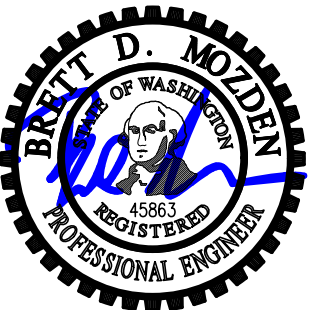


Table with 2 columns: Action, Name. Includes Design: LAN, Drawn: NHD, Checked: BDM, Approved: BDM.

Table with 3 columns: Revision, Description, Date. Lists permit revisions and framing updates.

PROJECT TITLE:

Khandelwal Shankaran House
8460 SE 83rd St
Mercer Island, WA 98040

ARCHITECT:

Marlo Brown Architects, LLC
509 26th Ave S
Seattle, WA 98144

ISSUE:

PERMIT

SHEET TITLE:

General Structural Notes

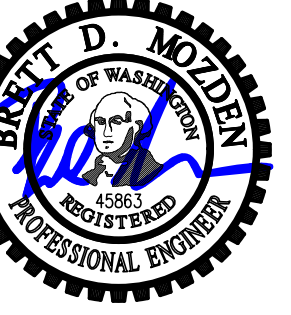
SCALE:

DATE: February 13, 2024

PROJECT NO: 11712-2022-01

SHEET NO:

S1.1

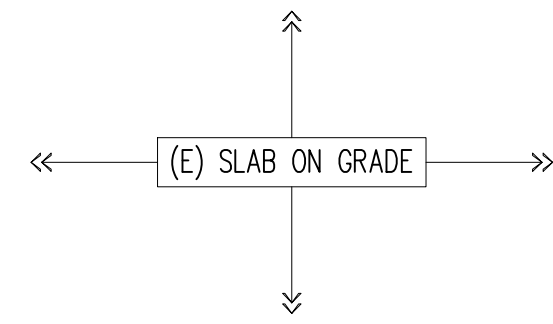
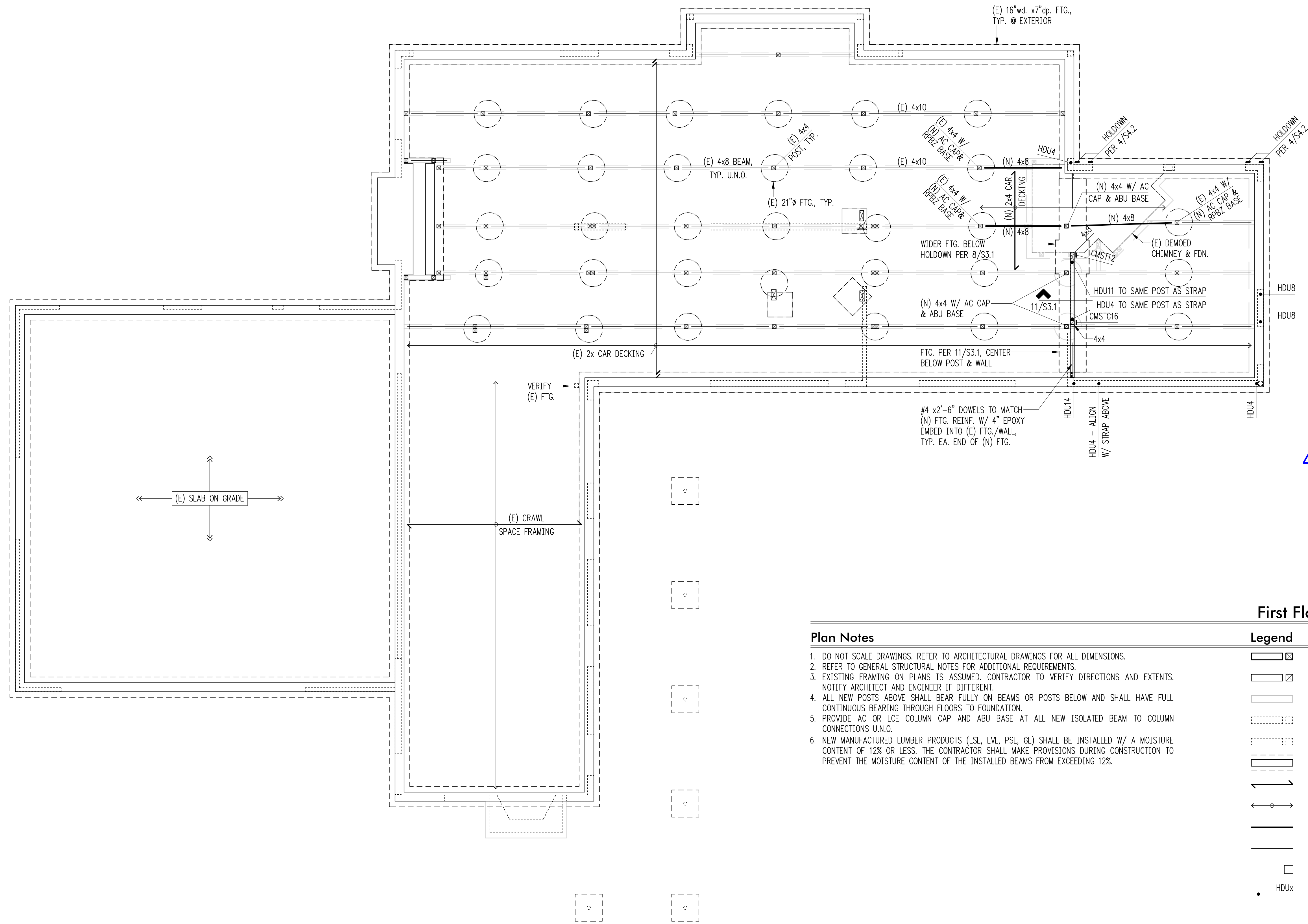


DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

DPD:



First Floor Framing/Foundation Plan

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



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
- EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
- ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
- PROVIDE AC OR LCE COLUMN CAP AND ABU BASE AT ALL NEW ISOLATED BEAM TO COLUMN CONNECTIONS U.N.O.
- NEW MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED W/ A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF THE INSTALLED BEAMS FROM EXCEEDING 12%.

Legend

- NEW STRUCTURAL WALL OR POST BELOW
- EXISTING WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- NEW STRUCTURAL WALL OR POST ABOVE
- EXISTING STRUCTURAL WALL OR POST ABOVE
- EXISTING STEM WALL & FOOTING
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- EXISTING HEADER/BEAM
- HANGER
- HDUx
 HOLDOWN PER 12/S3.1 INTO (E) CONCRETE, U.N.O.
 HOLDOWN PER 8/S3.1 INTO (N) CONCRETE, U.N.O.

PROJECT TITLE:
Khandelwal Shankaran House
 8460 SE 83rd St
 Mercer Island, WA 98040

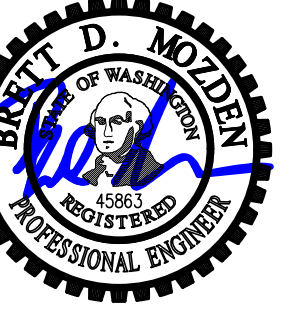
ARCHITECT:
Marlo Brown Architects, LLC
 509 26th Ave S
 Seattle, WA 98144

ISSUE:
PERMIT

SHEET TITLE:
First Floor Framing/Foundation Plan

SCALE: 1/4" = 1'-0" U.N.O.
 DATE: February 13, 2024
 PROJECT NO: 11712-2022-01
 SHEET NO:

S2.1



DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

DPD:

PROJECT TITLE:
Khandelwal Shankaran House
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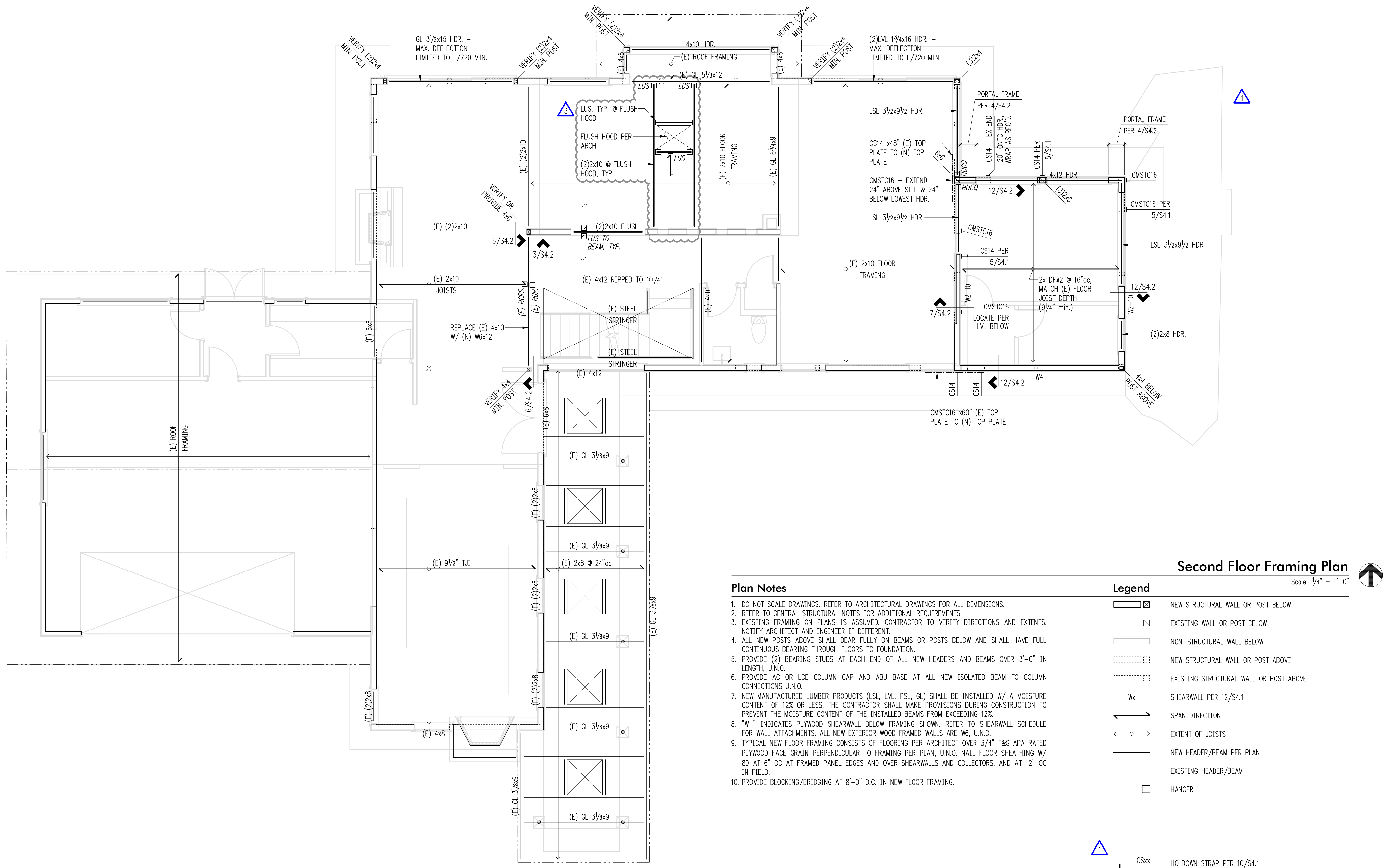
ARCHITECT:
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 509 26th Ave S
 Seattle, WA 98144

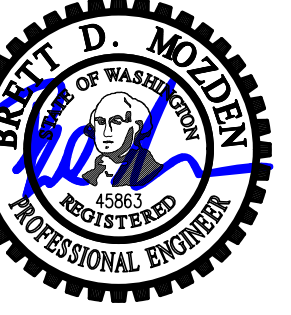
ISSUE:
PERMIT

SHEET TITLE:
Second Floor Framing Plan

SCALE:
 1/4" = 1'-0" U.N.O.
 DATE:
 February 13, 2024
 PROJECT NO:
 11712-2022-01
 SHEET NO:

S2.2

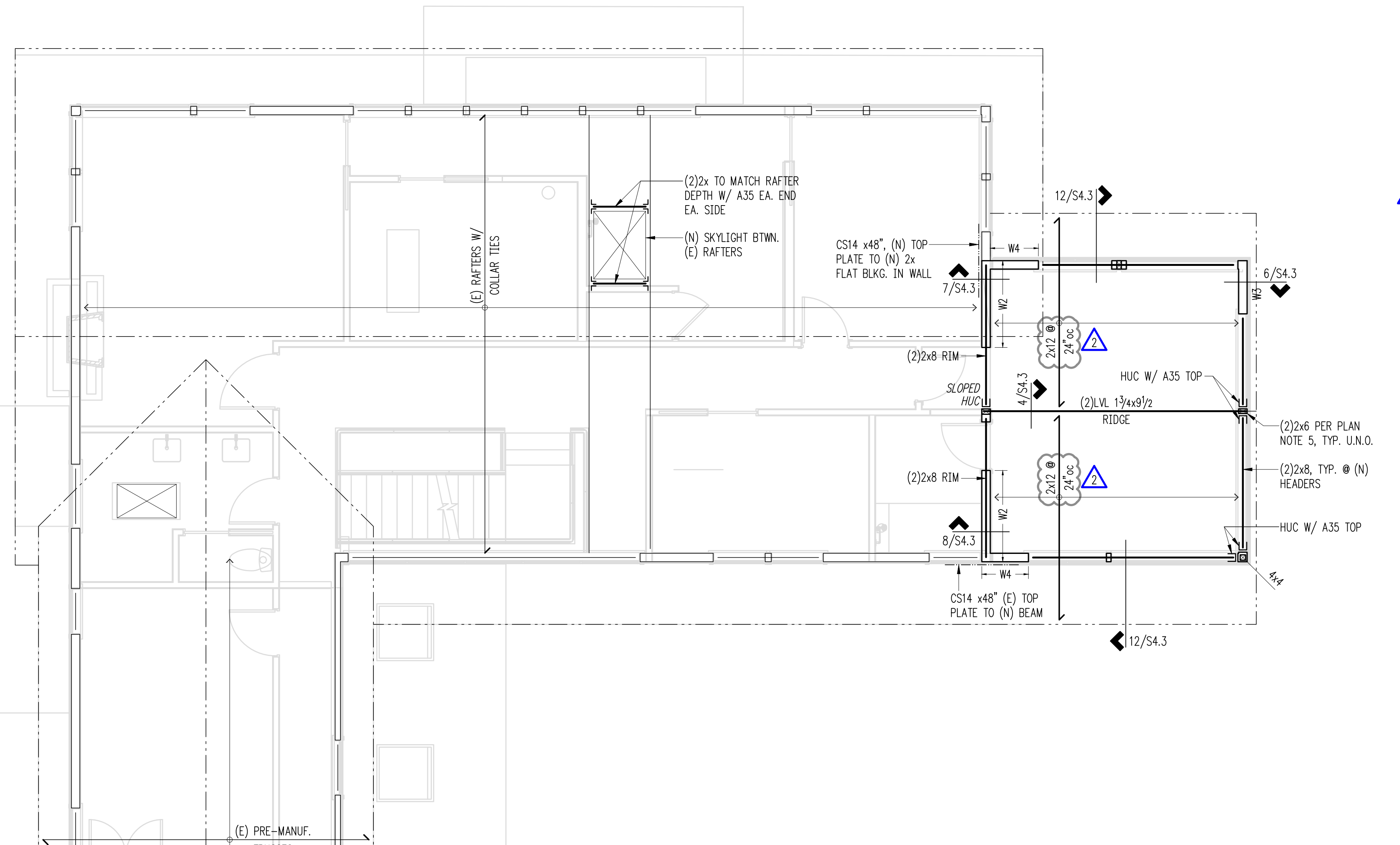




DESIGN:	LAN
DRAWN:	NHD
CHECKED:	BDM
APPROVED:	BDM

REVISIONS:		
1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

DPD:



Roof Framing Plan
 Scale: 1/4" = 1'-0"

Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
- EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
- ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
- PROVIDE (2) BEARING STUDS AT EACH END OF ALL NEW HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.N.O.
- PROVIDE AC OR LCE COLUMN CAP AND ABU BASE AT ALL NEW ISOLATED BEAM TO COLUMN CONNECTIONS U.N.O.
- NEW MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED W/ A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF THE INSTALLED BEAMS FROM EXCEEDING 12%.
- PROVIDE H1 AT ENDS OF ALL NEW RAFTERS, U.N.O.
- "W_" INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE FOR WALL ATTACHMENTS. ALL NEW EXTERIOR WOOD FRAMED WALLS ARE W6, U.N.O.
- TYPICAL NEW ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.N.O. NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS AND COLLECTORS, AND AT 12" O.C. FIELD.

Legend

- NEW STRUCTURAL WALL OR POST BELOW
- EXISTING WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- Wx SHEARWALL PER 12/S4.1
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- EXISTING HEADER/BEAM
- HANGER

PROJECT TITLE:
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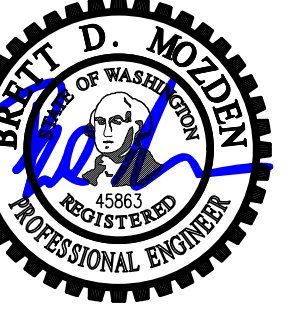
ARCHITECT:
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 509 26th Ave S
 Seattle, WA 98144

ISSUE:
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SHEET TITLE:
Roof Framing Plan

SCALE: 1/4" = 1'-0" U.N.O.
 DATE: February 13, 2024
 PROJECT NO: 11712-2022-01
 SHEET NO:

S2.3



DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

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3

4

5

6

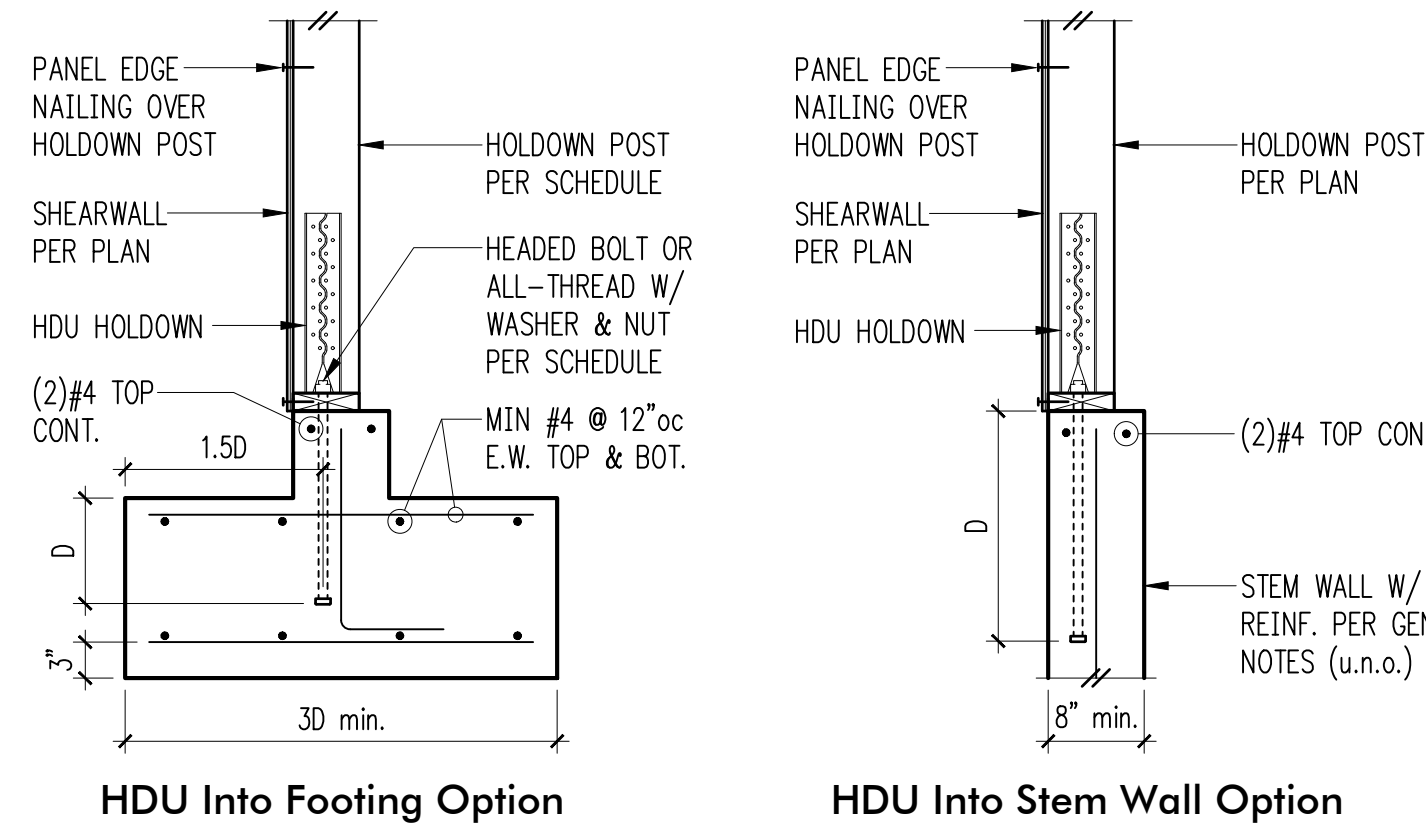
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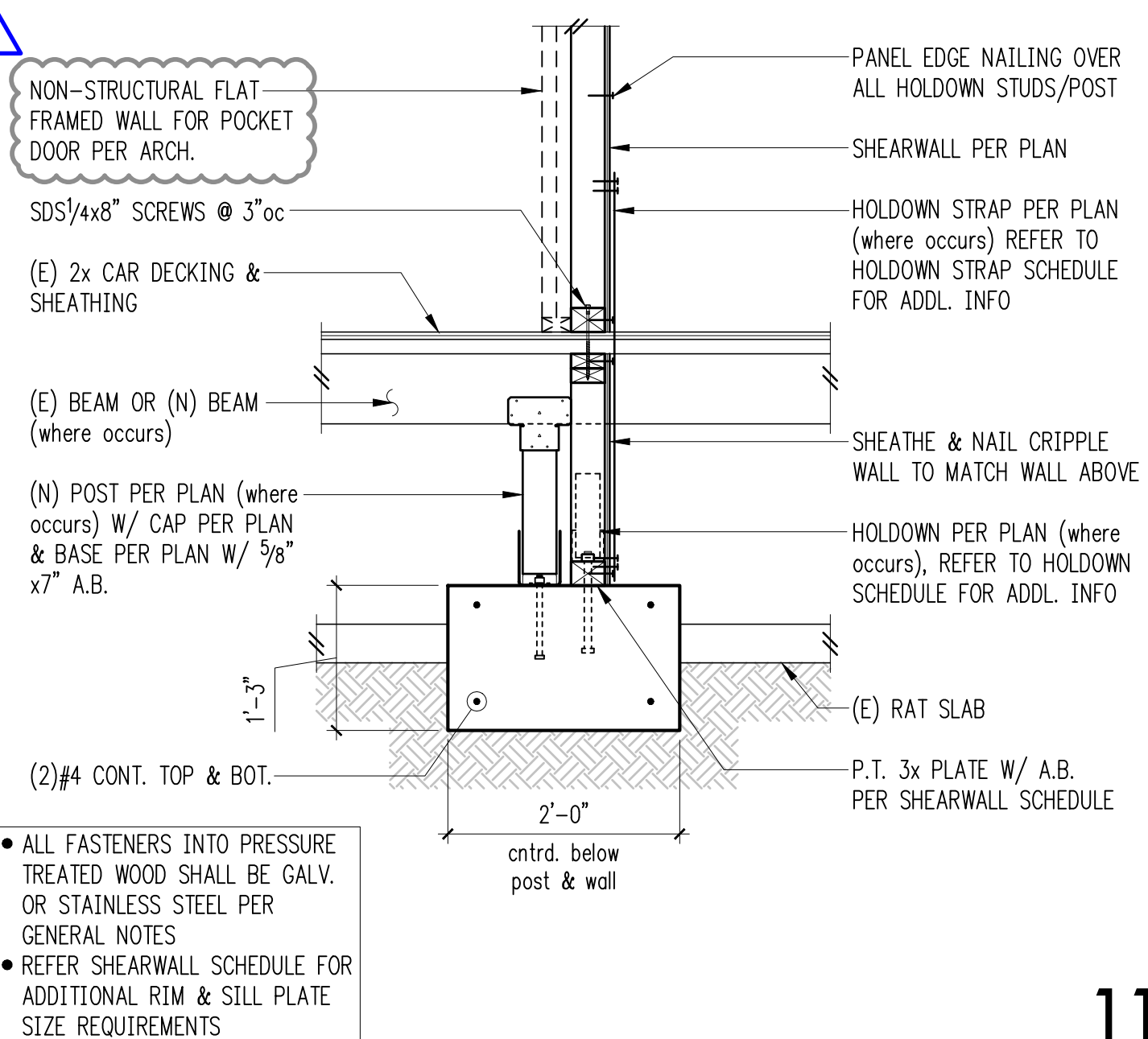
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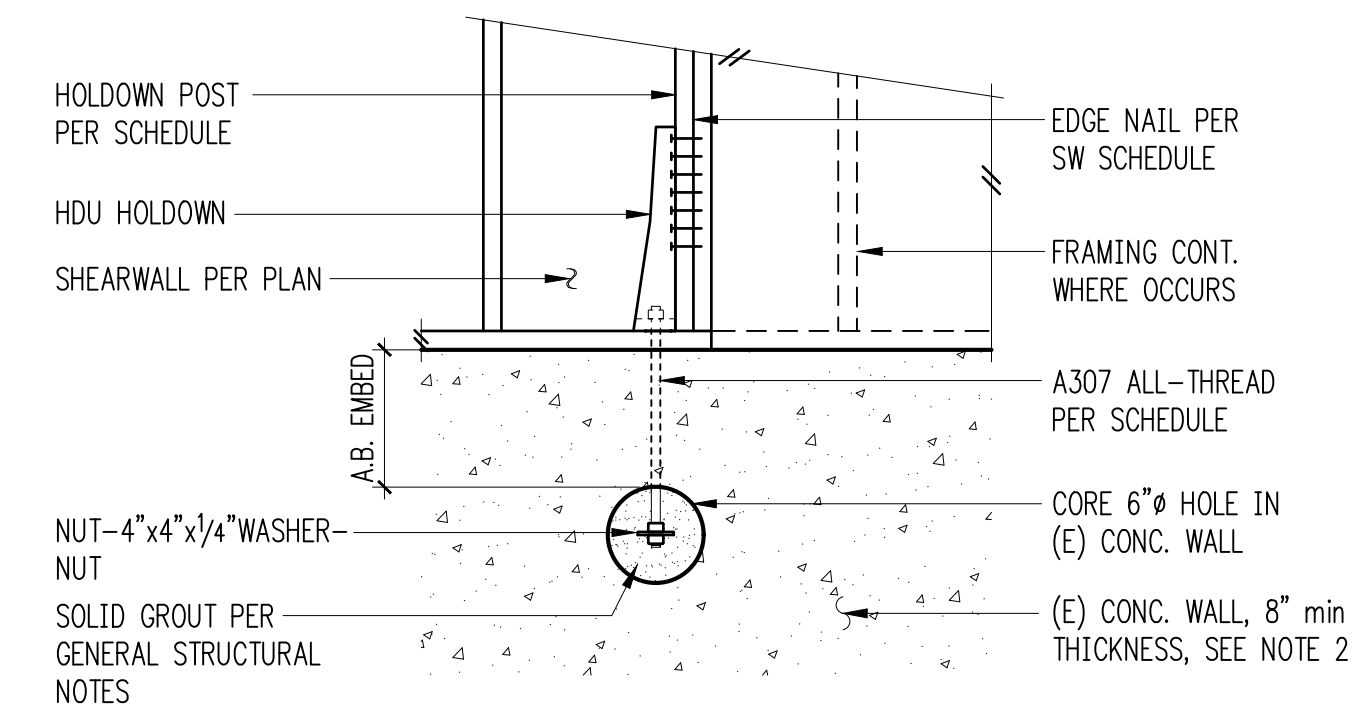
Holdown Schedule

Plan Mark	Screws	Anchor Bolt	Min. A.B. Embed (D)	Stem Wall	Footing	Holdown Post ①
						if 2x4 if 2x6
HDU2-SDS2.5	(6)SDS 1/4"x2 1/2"	5/8"φ	12"	4"		(2) 2x4 (2) 2x6
HDU4-SDS2.5	(10)SDS 1/4"x2 1/2"	5/8"φ	18"	6"		4x4 4x6
HDU5-SDS2.5	(14)SDS 1/4"x2 1/2"	5/8"φ	SB9/8x24	7"		4x4 4x6
HDU8-SDS2.5	(20)SDS 1/4"x2 1/2"	7/8"φ	SSTB28	8"		4x6 6x6
HDU11-SDS2.5	(30)SDS 1/4"x2 1/2"	1"φ	SB1x30	10"		4x8 6x6
HDU14-SDS2.5	(36)SDS 1/4"x2 1/2"	1"φ	N/A	12"		4x8 6x6

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



- ALL FASTENERS INTO PRESSURE TREATED WOOD SHALL BE GALV. OR STAINLESS STEEL PER GENERAL NOTES
- REFER SHEARWALL SCHEDULE FOR ADDITIONAL RIM & SILL PLATE SIZE REQUIREMENTS



Holdown Schedule

Plan Mark	Screws	Anchor Bolt	A.B. Embed	Holdown Post ①
				if 2x4 if 2x6
HDU4	(10)SDS 1/4"x2 1/2"	5/8"φ	12"	4x4 4x6
HDU8	(20)SDS 1/4"x2 1/2"	7/8"φ	22"	4x6 4x6
HDU11	(30)SDS 1/4"x2 1/2"	1"φ	24"	4x6 4x6
HDU14	(36)SDS 1/4"x2 1/2"	1"φ	36"	4x8 6x6

① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.
 ② FIELD VERIFY CONCRETE WALL THICKNESS. ENGINEER TO BE NOTIFIED IF EXISTING WALL THICKNESS IS LESS THAN 8".

Typical HDU Holddown at Existing Concrete Wall

- REVISIONS:
- 1 Permit Revisions Jun. 5, 2024
 - 2 Framing Updates Jun. 17, 2024
 - 3 Framing Updates Jun. 28, 2024

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ISSUE:
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 SHEET TITLE:

Foundation Details
 SCALE: 3/4" = 1'-0" U.N.O.
 DATE: February 13, 2024
 PROJECT NO: 11712-2022-01
 SHEET NO:

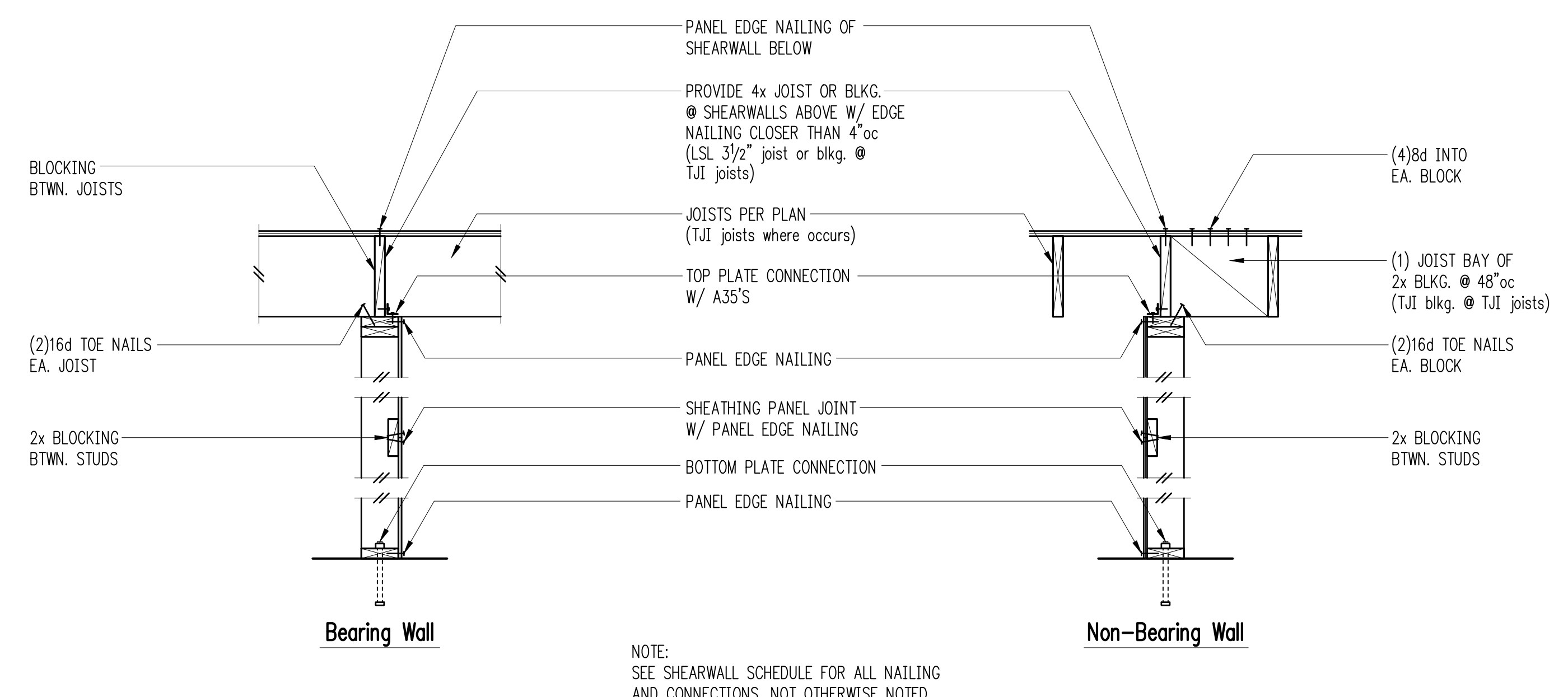
S3.1

	A	B	C
PLAN VIEW			
SECTION			
# OF WOOD BMS (LVL)	2-1 3/4"	3-1 3/4"	4-1 3/4"
SDW22 SCREW SIZE	0.220x3	0.220x5	0.220x6
# OF SDW22 SCREWS	2	2	2
SPACING OF SDW22 SCREWS	12"OC	12"OC	12"OC

NOTES:
- MIN. SCREW END DISTANCE = 6"

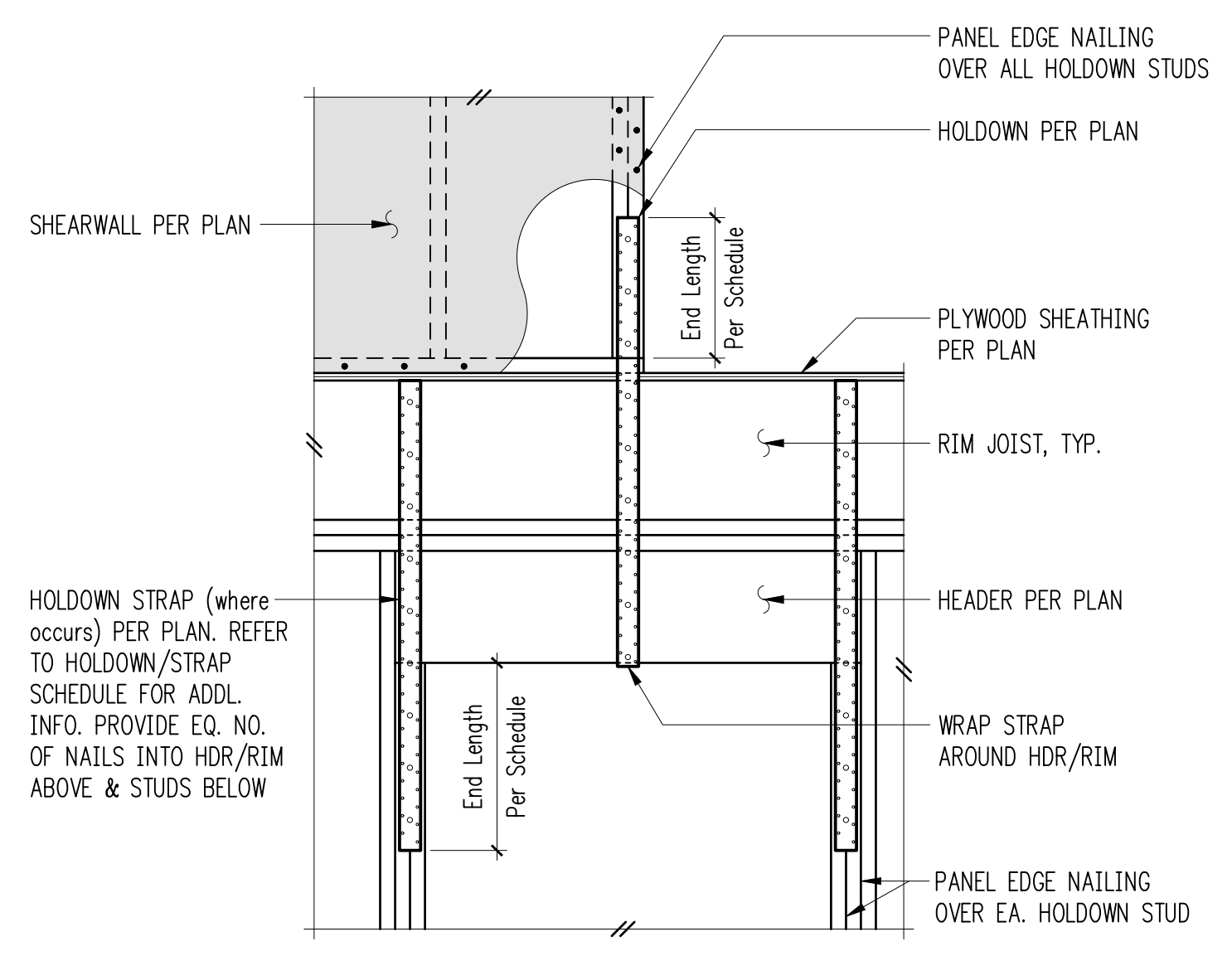
NOTE: MAY USE SDS 1/4"
@ CONTRACTORS OPTION

Sistering Schedule for Multi Beams (SDWS) 2

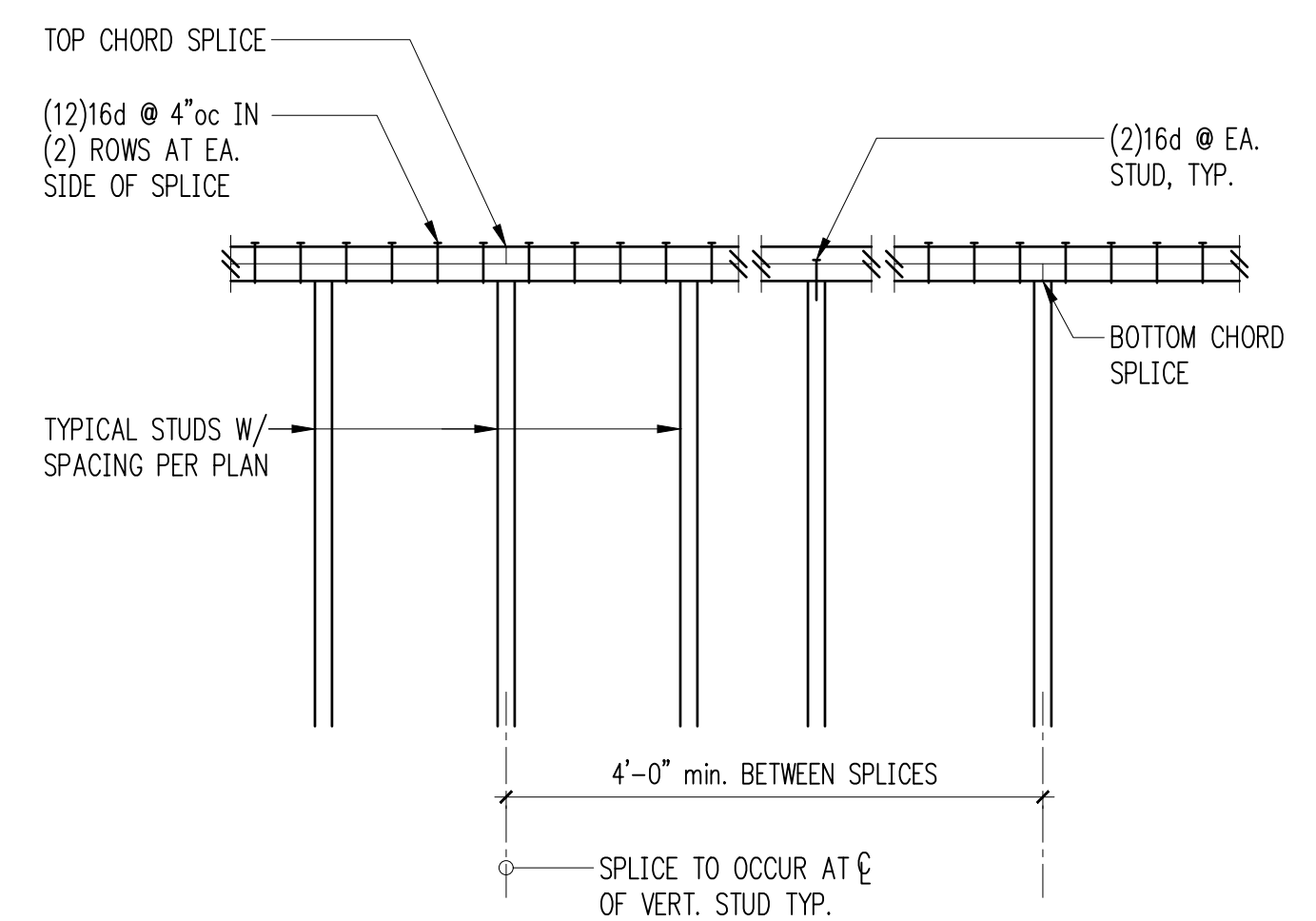


NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, NOT OTHERWISE NOTED

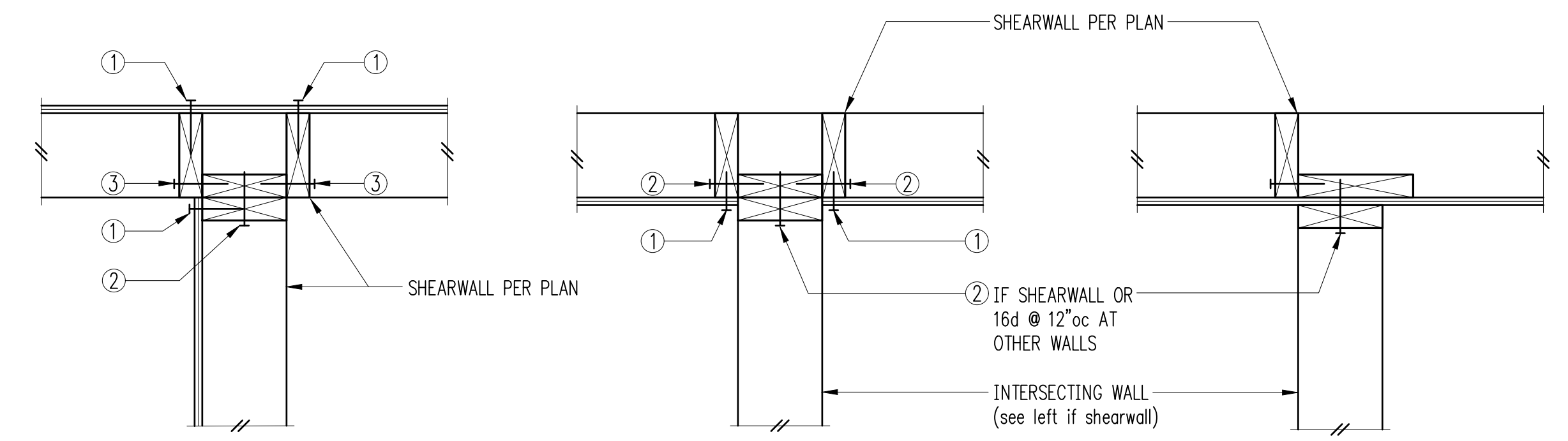
Typical Shearwall Construction 4



Typical Strap over Beam 5

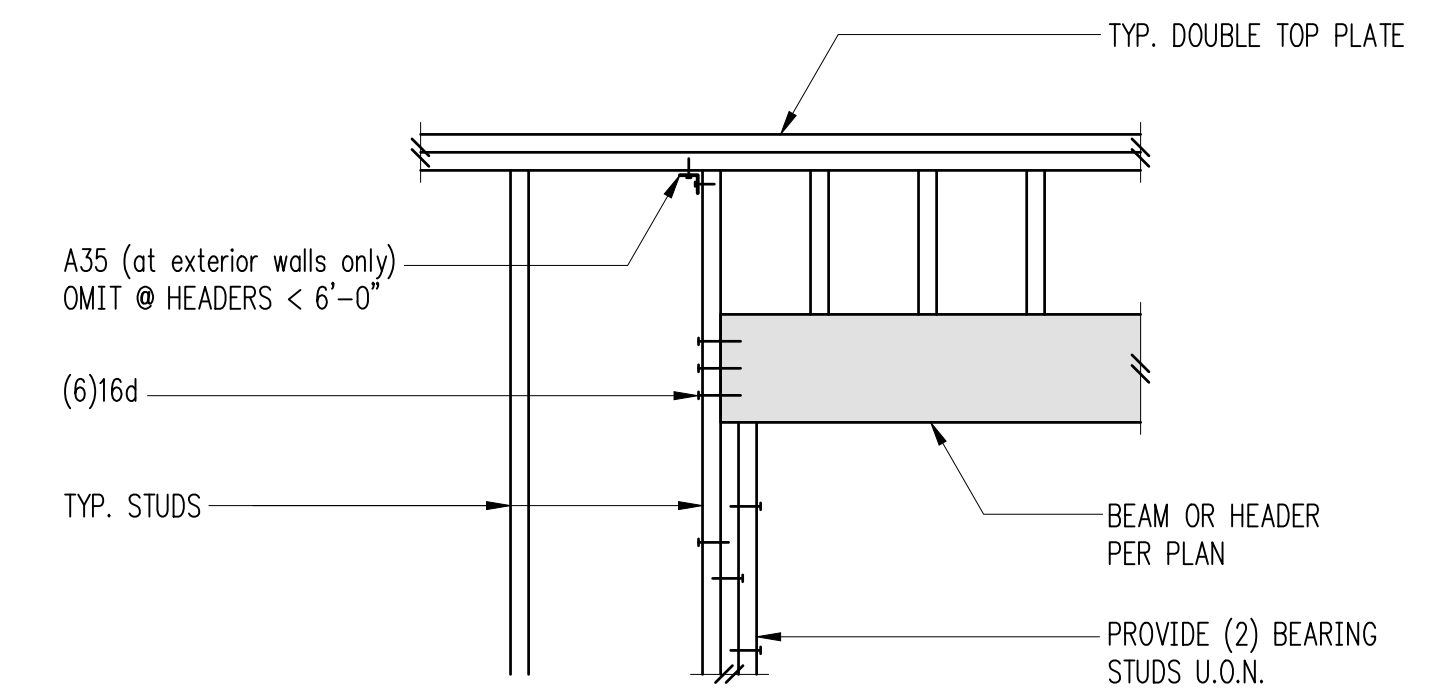


Typical Top Plate Splice 6

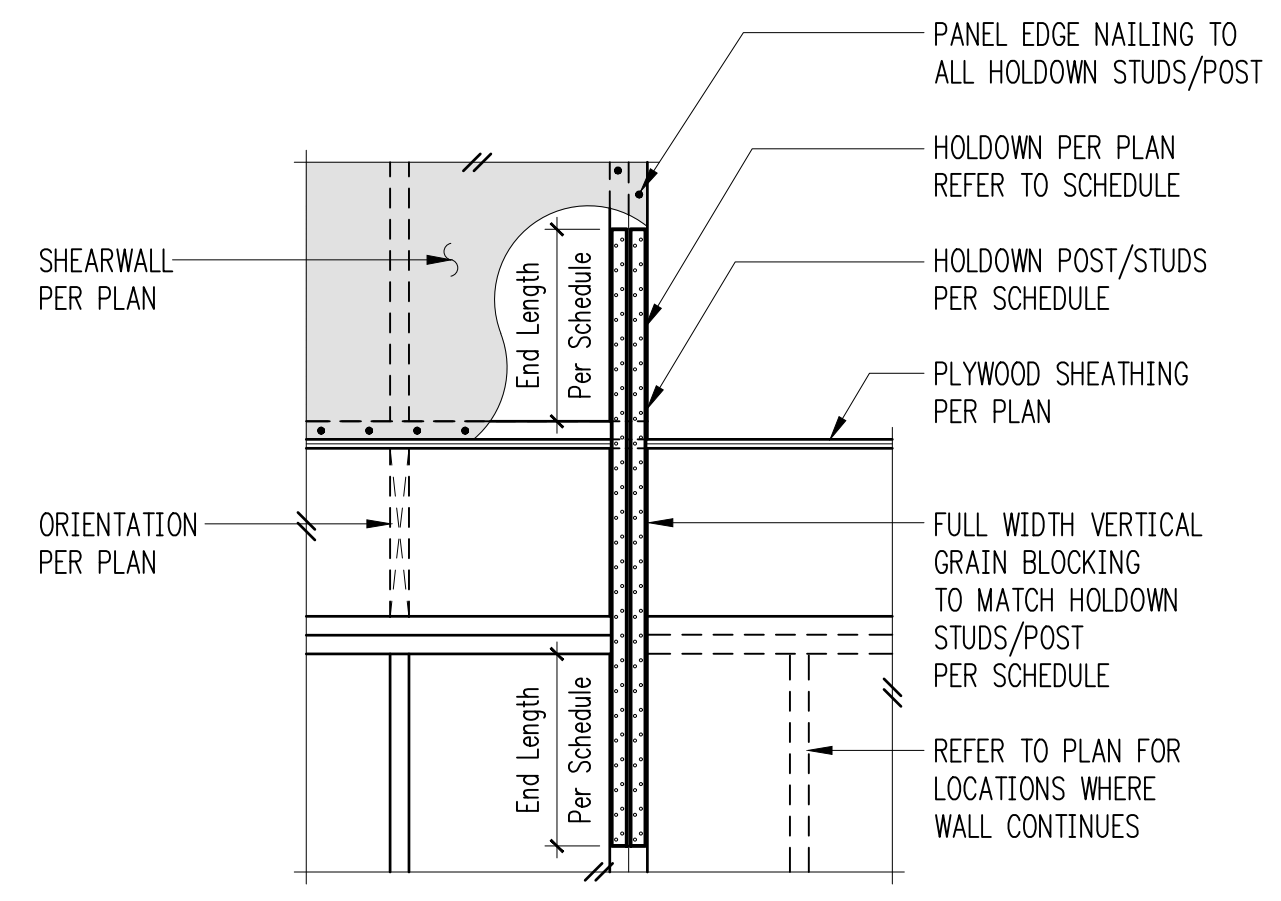


- 1 PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE
- 2 BASE PLATE NAILING PER SHEARWALL SCHEDULE
- 3 16d @ 8"oc

Typical Shearwall Intersections 8



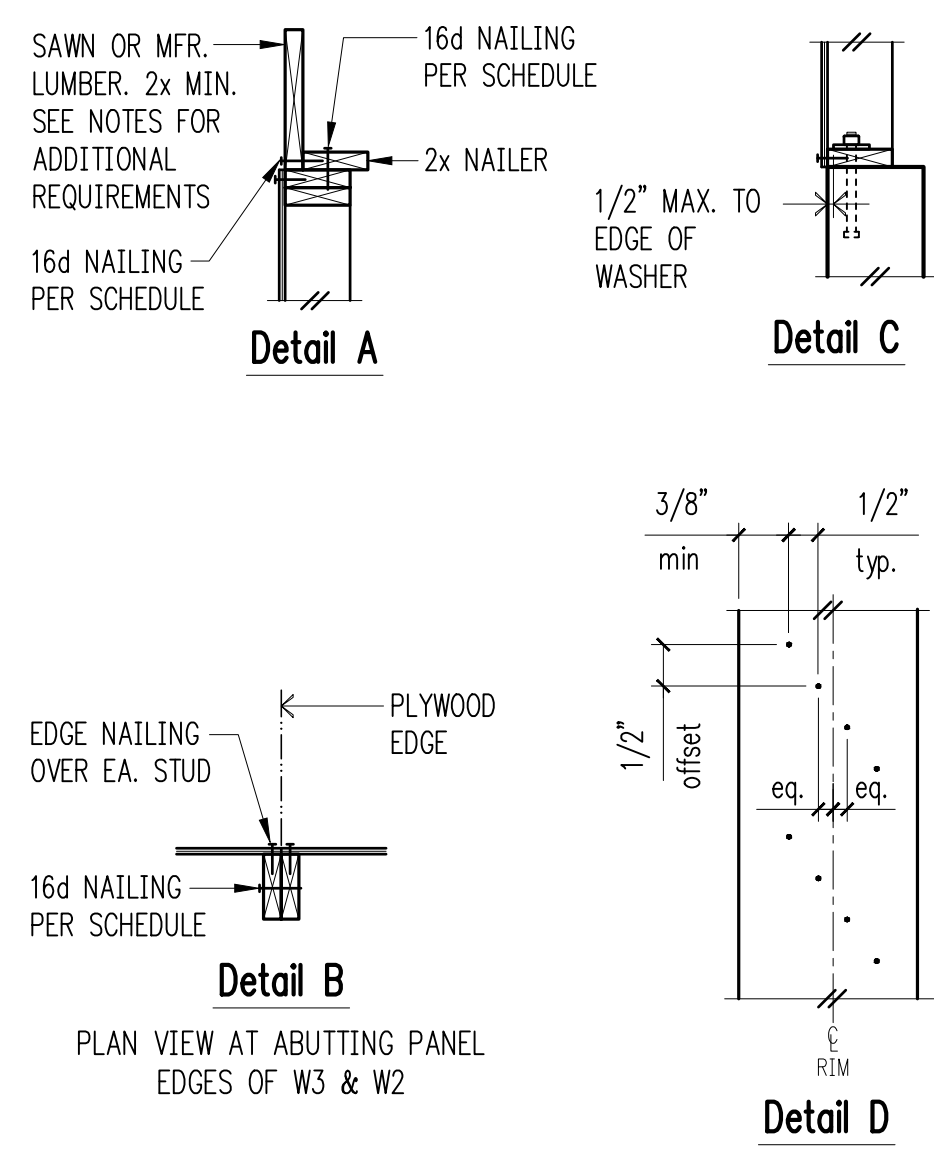
Typical Header Support w/2 Bearing Studs 9



Holdown Strap Schedule

Plan Mark	End Length	#Nails Ea. End Length	Holddown Studs/Post	
			if 2x4	if 2x6
CS14	1'-7"	(18) 8d	(2) 2x4	(2) 2x6
CMSTC16	1'-8"	(25) 12d	4x4	4x6
CMST12	2'-9"	(25) 0.162" x 2 1/2"	4x8	6x6

Typical Holdown Schedule 10

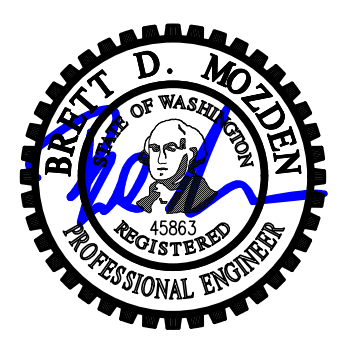


Shearwall Schedule 1 2 3 6 7

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if Wood	at Wood	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc	16d @ 6"oc	5/8" A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 32"oc
W3	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc	A35 @ 12"oc	(2)rows 16d @ 6"oc	5/8" A.B. @ 24"oc
W2	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc	A35 @ 9"oc	(2)rows 16d @ 4"oc	5/8" A.B. @ 16"oc
W2-10	15/32" CDX PLYWOOD	10d @ 2"oc	n/a	A35 @ 6"oc	(3)rows 16d @ 4"oc	5/8" A.B. @ 12"oc

- 1 BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"oc.
- 2 8d NAILS SHALL BE 0.131" x 2 1/2" (common) - 16d NAILS SHALL BE 0.135" x 3 1/2" (box) - 10d NAILS SHALL BE 0.148" x 3" (common).
- 3 EMBED ANCHOR BOLTS AT LEAST 7". DRILLED AND EPOXIED THREADED ROD MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 6" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. SEE DETAIL C.
- 4 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
- 5 3x FOUNDATION SILL PLATES ARE REQUIRED FOR W2-10. 3x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES AND PANEL JOINTS. SHALL BE OFFSET EACH SIDE OF WALL. STAGGER NAILS AT ADJOINING PANEL EDGES. 3x STUD, MIN., REQUIRED AT END OF SHEARWALL.
- 6 TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SINGLE-SIDED SHEARWALLS. ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
- 7 ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
- 8 LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- 9 A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- 10 AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
- 11 LVL RIMS PERMITTED AT SINGLE SIDED SHEAR WALLS ONLY.
- 12 PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.
- 13 MINIMUM RIM OR JOIST 3/2" WIDE BELOW SHEARWALL.

Shearwall Schedule 12



DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

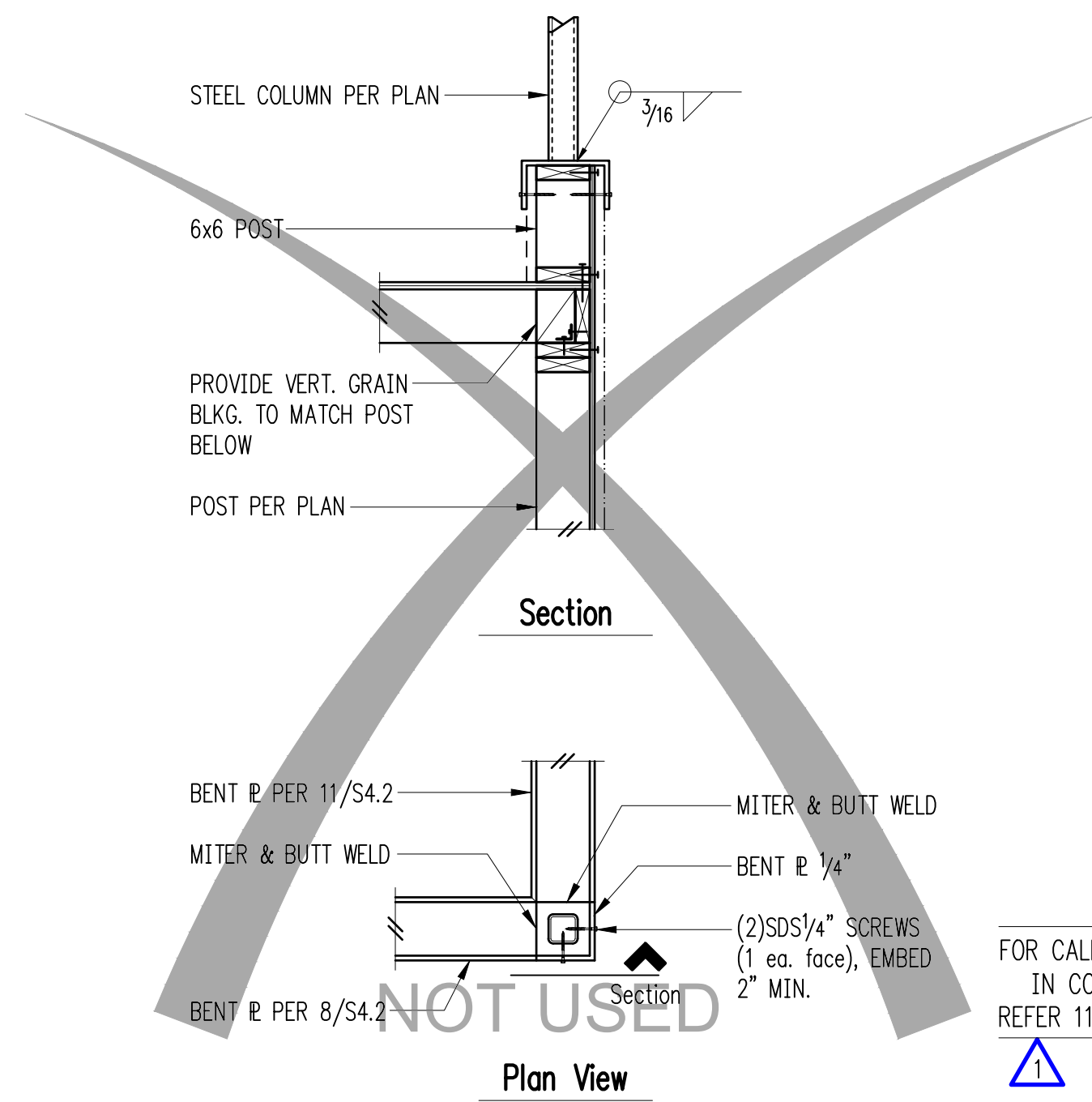
DPD:

PROJECT TITLE:
Khandelwal Shankaran House
 8460 SE 83rd St
 Mercer Island, WA 98040

ARCHITECT:
Marlo Brown Architects, LLC
 509 26th Ave S
 Seattle, WA 98144

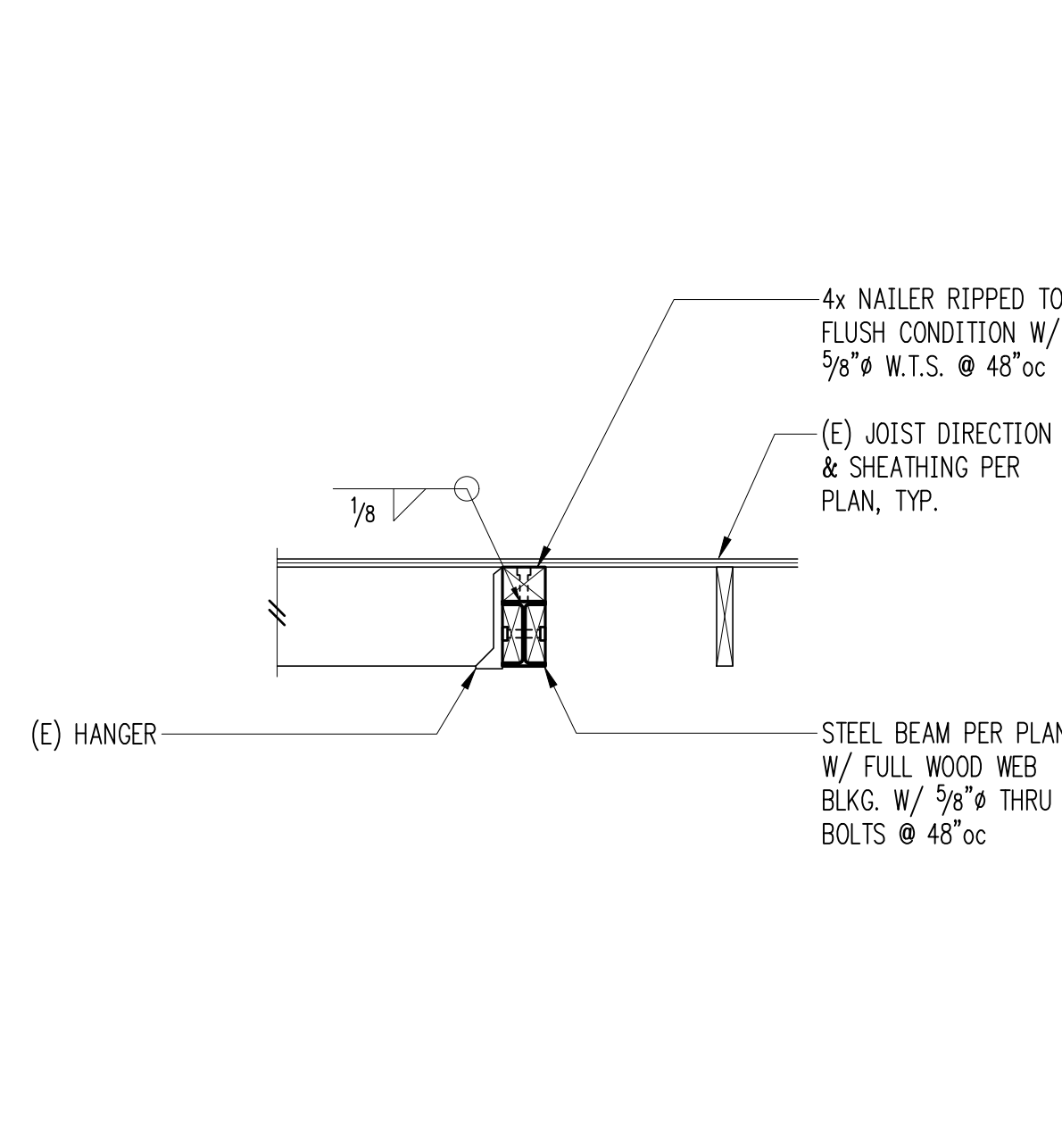
ISSUE:
PERMIT
 SHEET TITLE:

Typical Wood Framing Details
 SCALE: 3/4" = 1'-0" U.N.O.
 DATE: February 13, 2024
 PROJECT NO: 11712-2022-01
 SHEET NO:

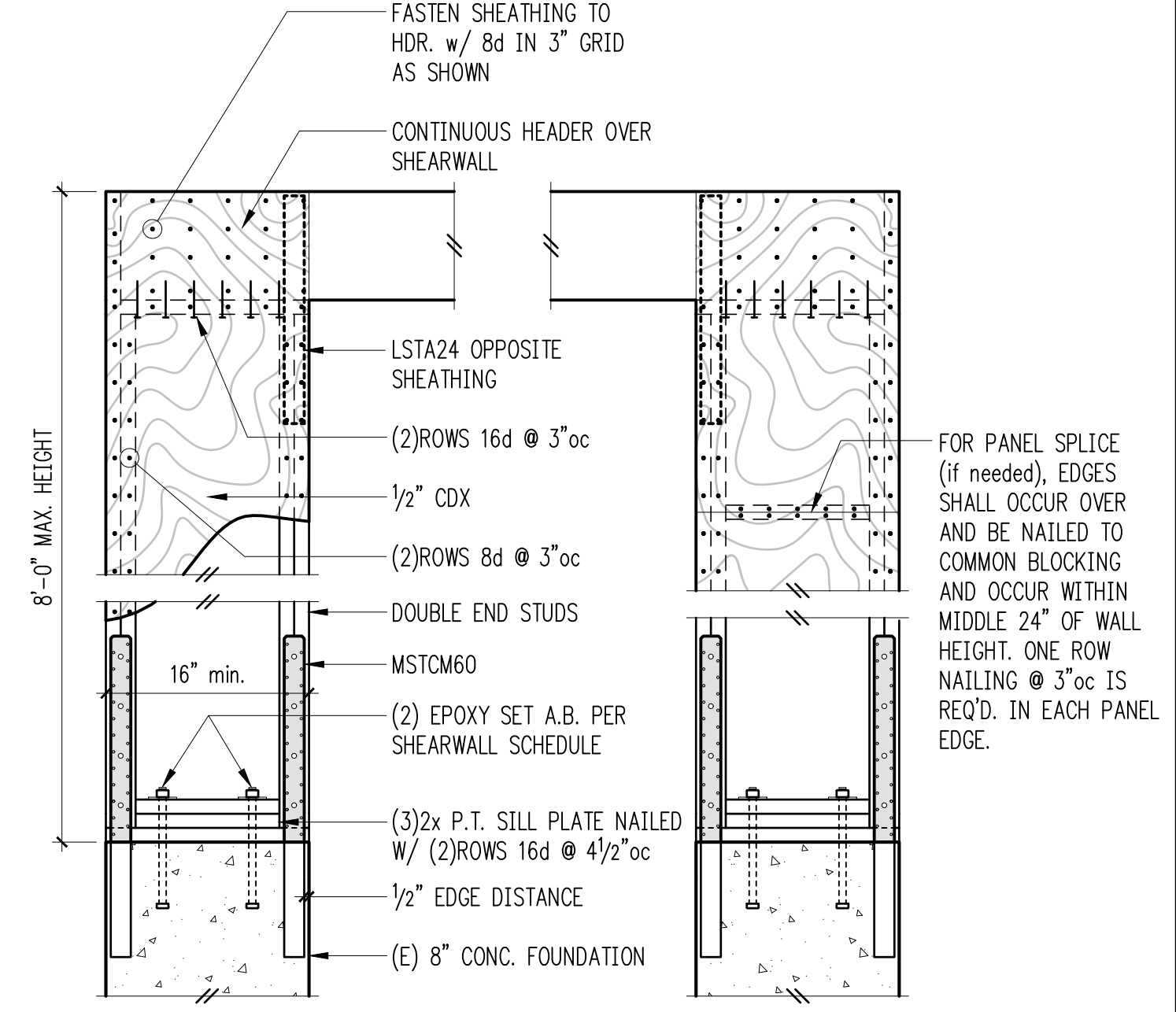


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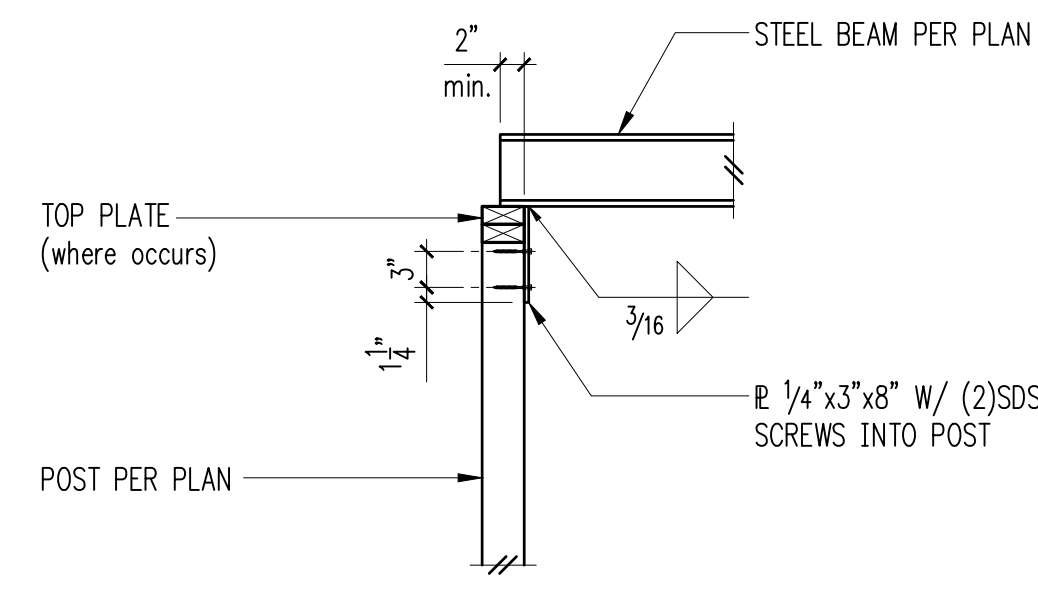
FOR CALLOUTS IN COMMON REFER 11/S4.2



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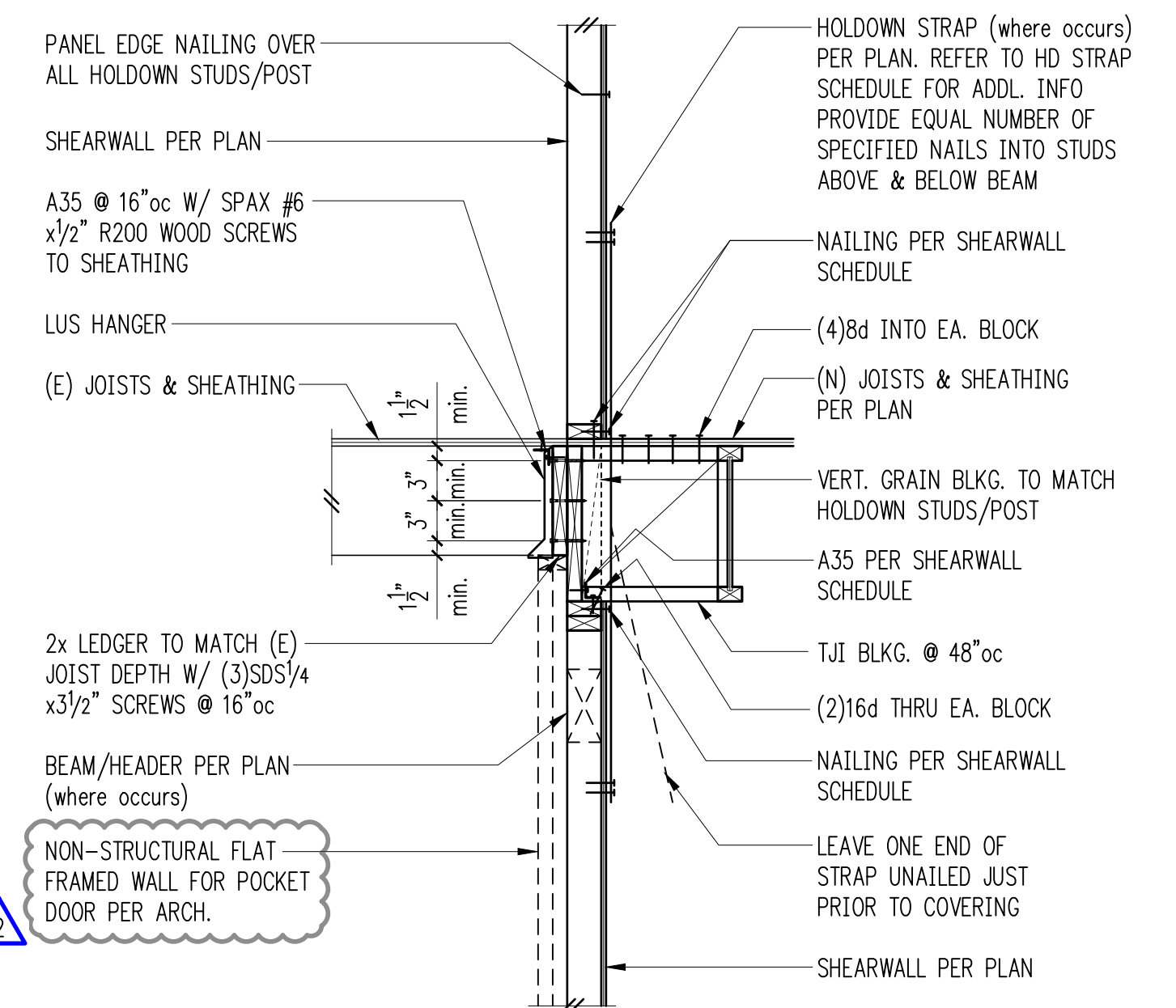


Portal Frame 4



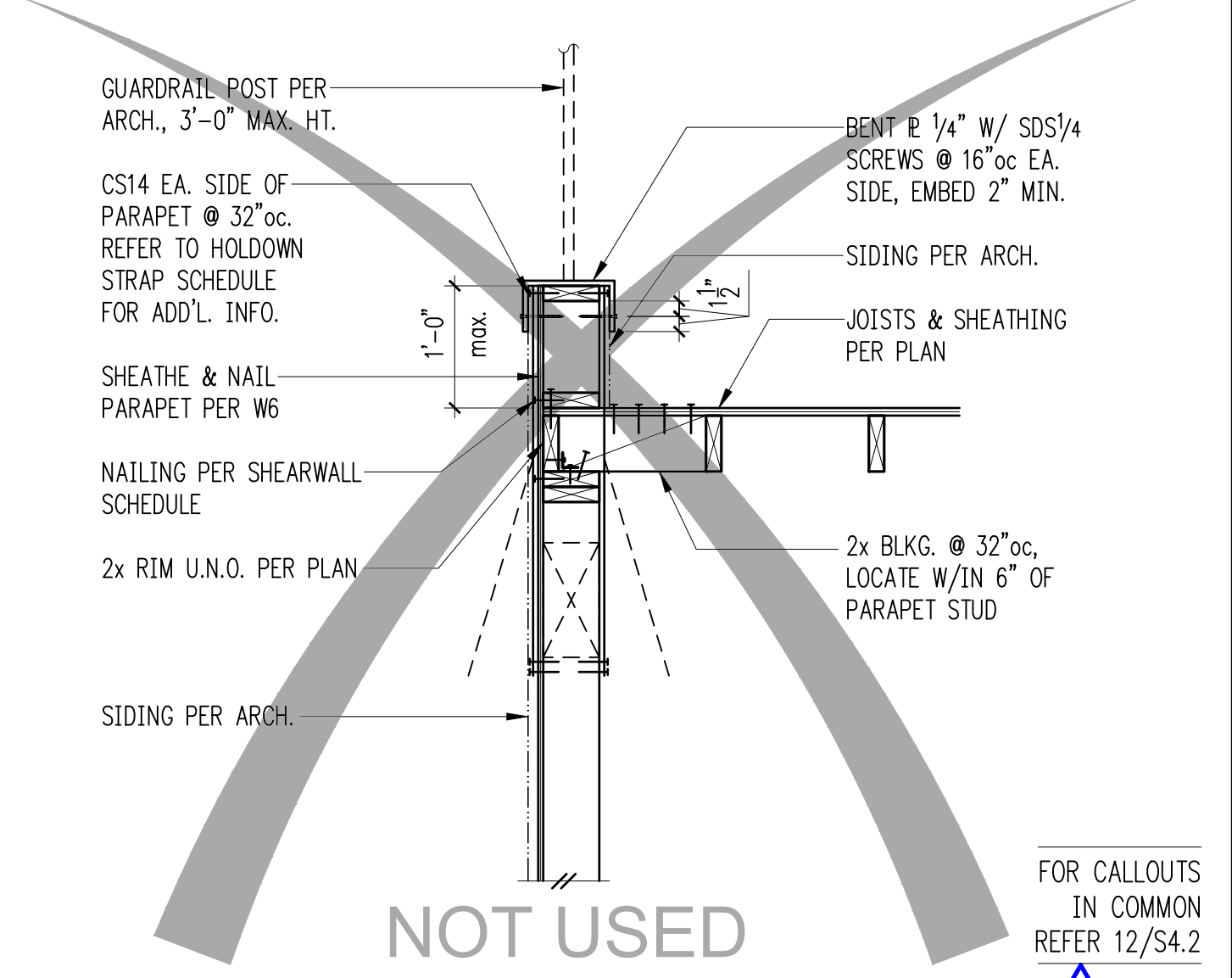
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Steel Beam on Wood Post 6

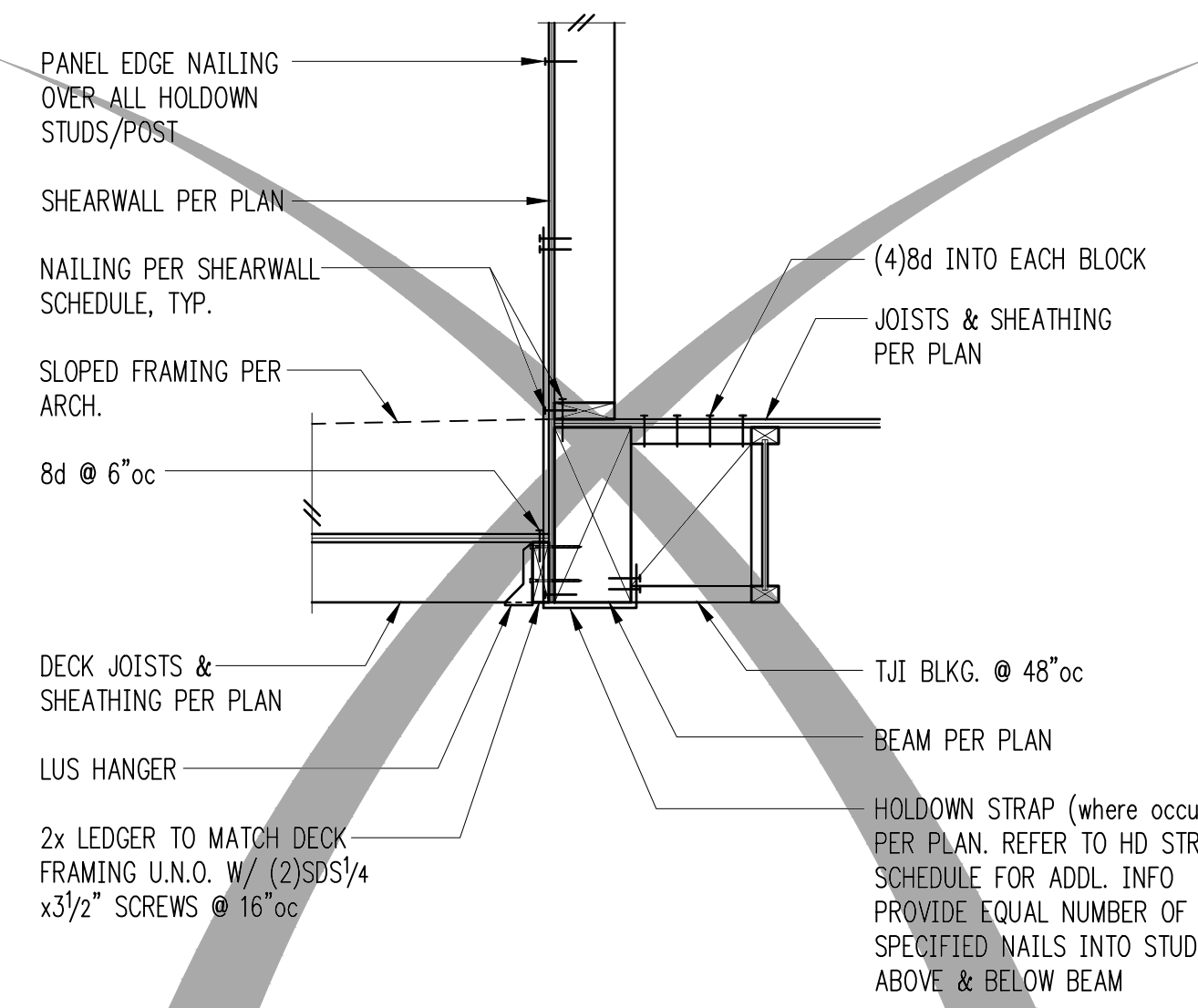


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Interior Shearwall 7

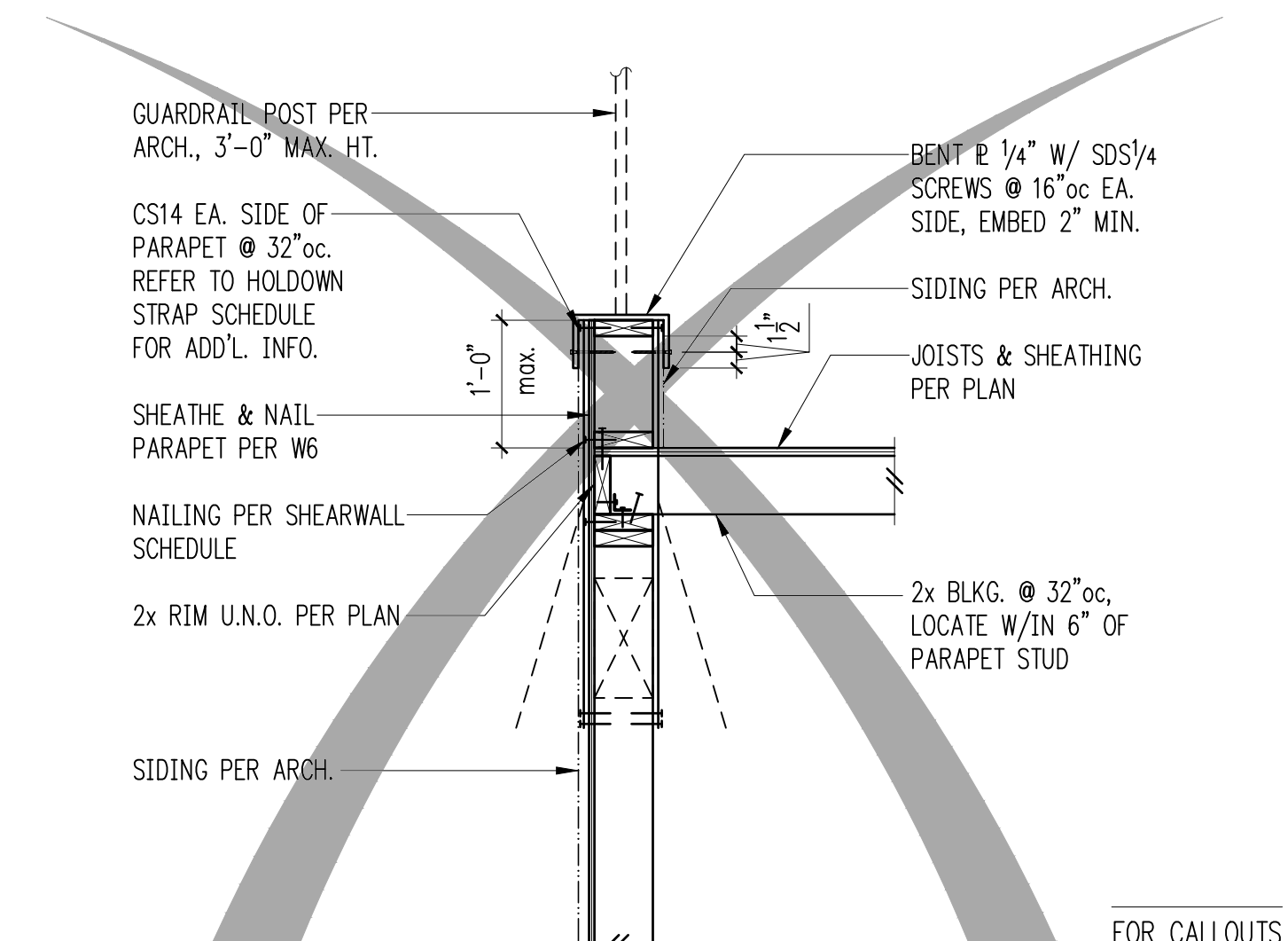


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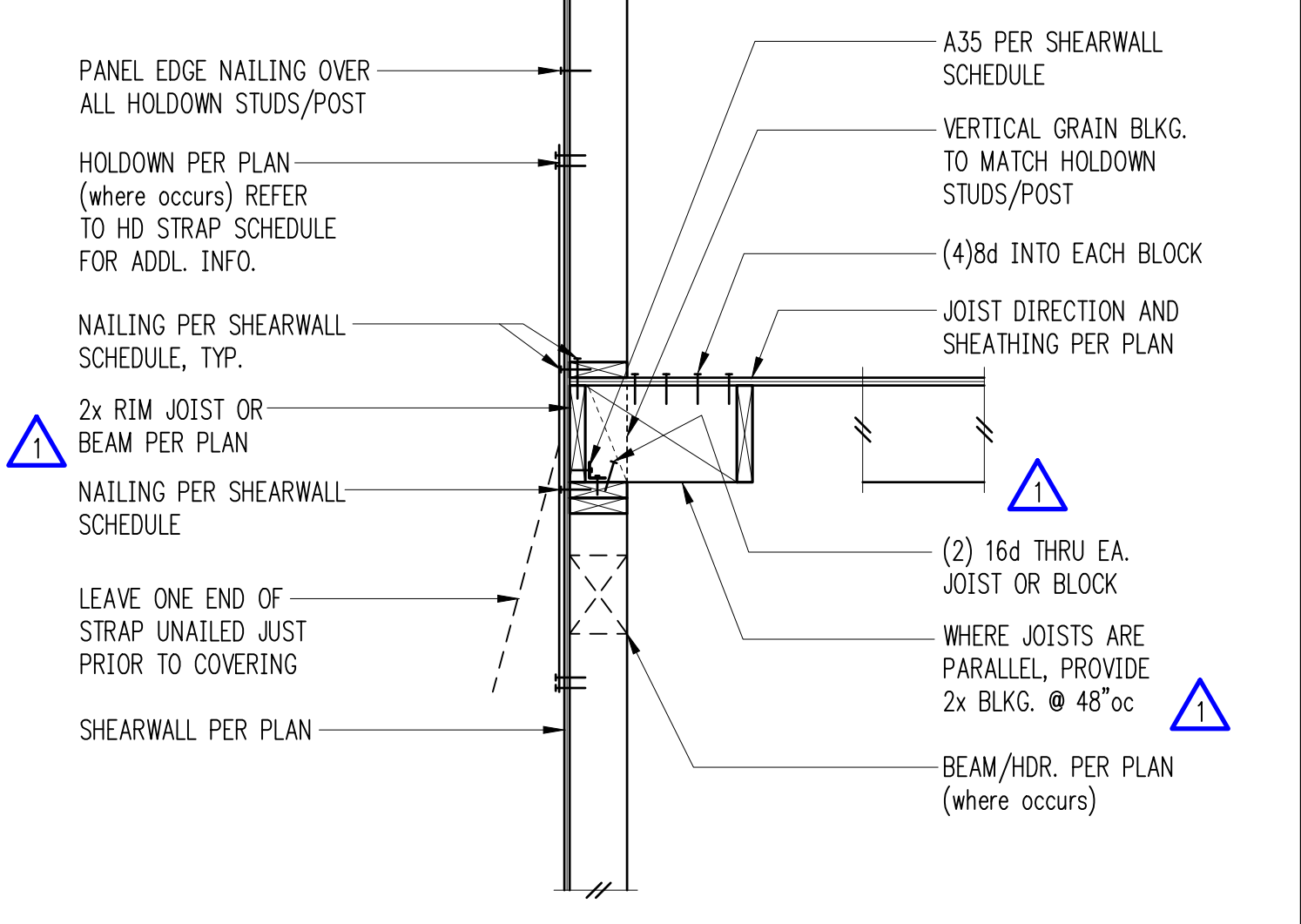


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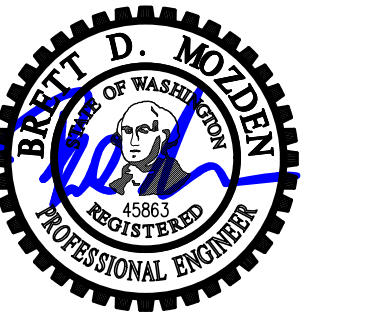
Exterior Beam w/ Deck 10



11



Exterior Floor Framing 12



DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

PROJECT TITLE:

Khandelwal Shankaran House
 8460 SE 83rd St
 Mercer Island, WA 98040

ARCHITECT:
Marlo Brown Architects, LLC
 509 26th Ave S
 Seattle, WA 98144

ISSUE: **PERMIT**

SHEET TITLE:

Wood Framing Details

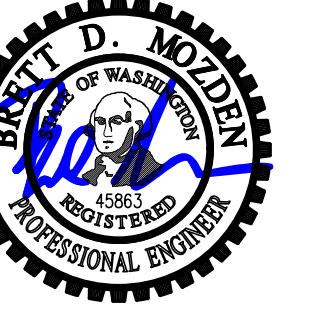
SCALE: 3/4" = 1'-0" U.N.O.

DATE: February 13, 2024

PROJECT NO: 11712-2022-01

SHEET NO:

S4.2



DESIGN: LAN
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

1	Permit Revisions	Jun. 5, 2024
2	Framing Updates	Jun. 17, 2024
3	Framing Updates	Jun. 28, 2024

DPD:

PROJECT TITLE:
Khandelwal Shankaran House
 8460 SE 83rd St
 Mercer Island, WA 98040

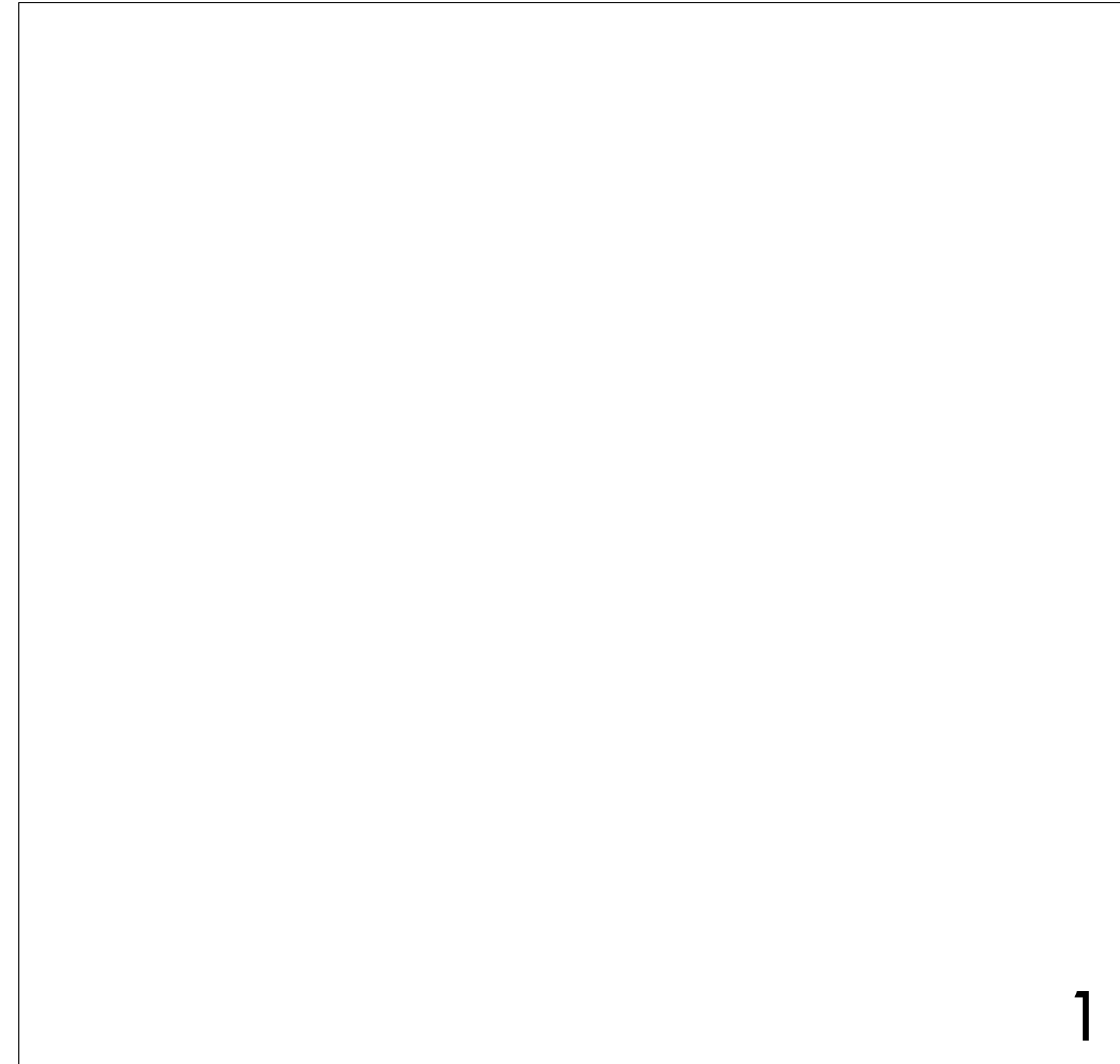
ARCHITECT:
Marlo Brown Architects, LLC
 509 26th Ave S
 Seattle, WA 98144

ISSUE:
PERMIT

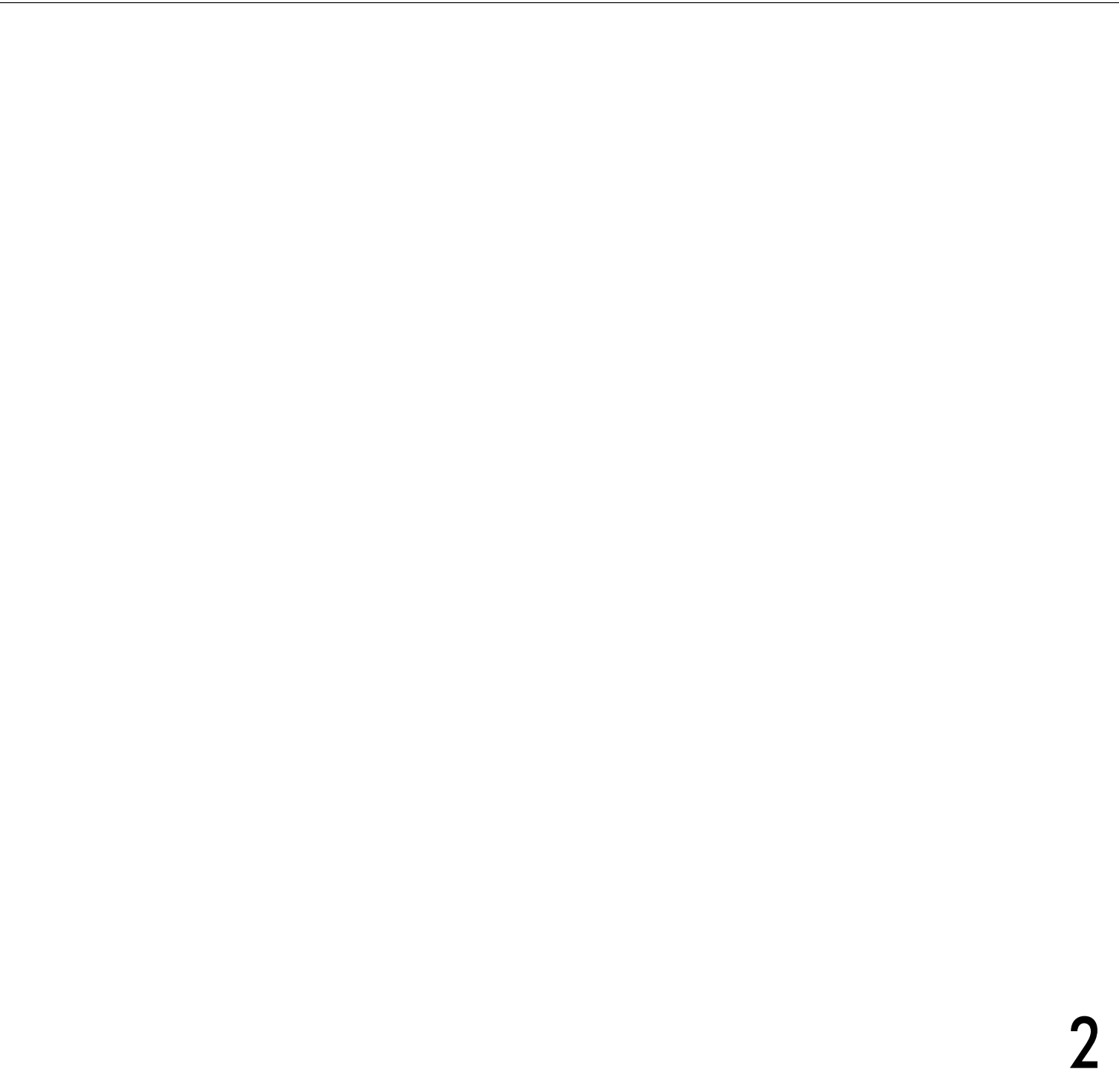
SHEET TITLE:
Wood Framing Details

SCALE: 3/4" = 1'-0" U.N.O.
 DATE: February 13, 2024
 PROJECT NO: 11712-2022-01
 SHEET NO:

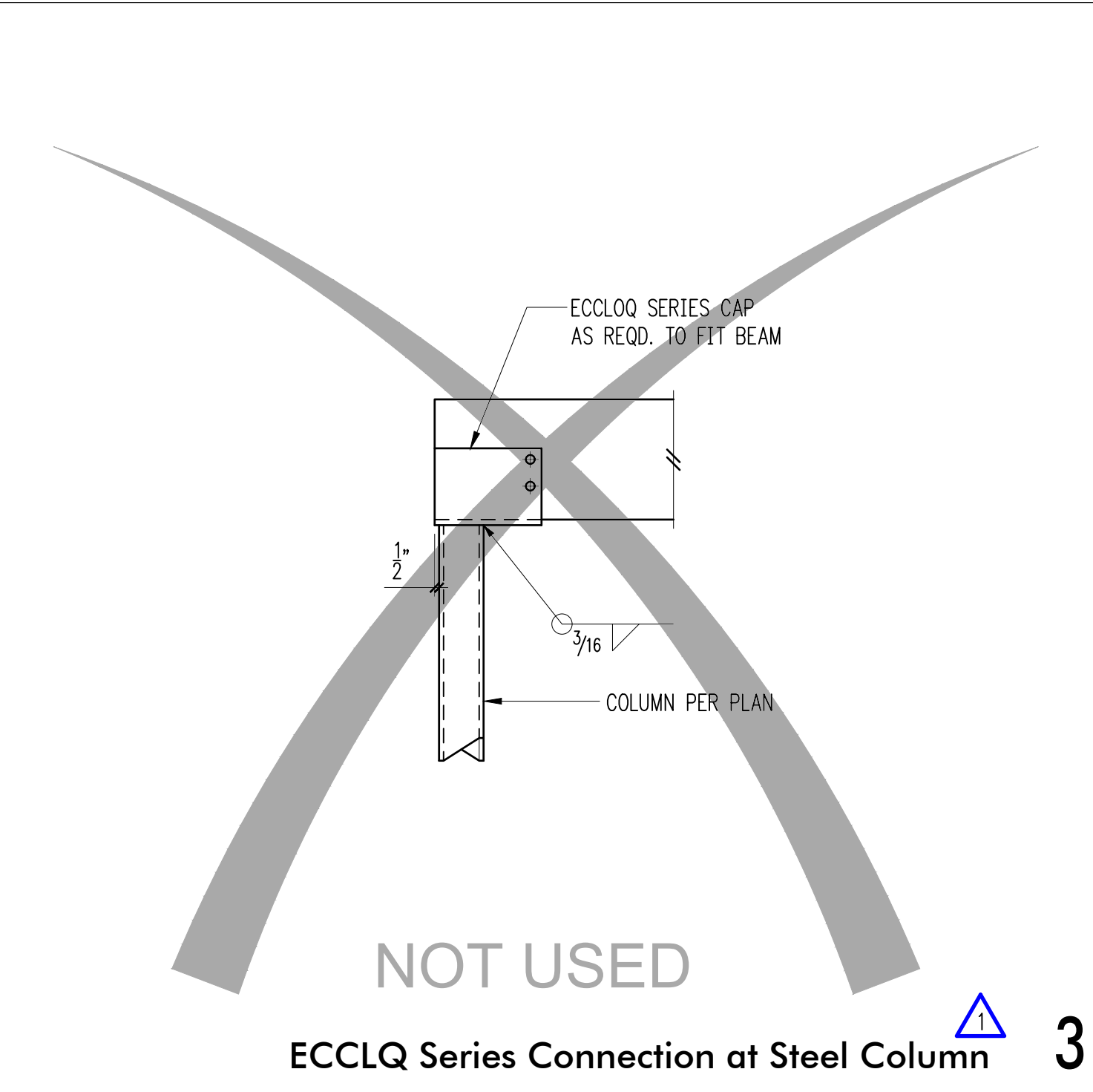
S4.3



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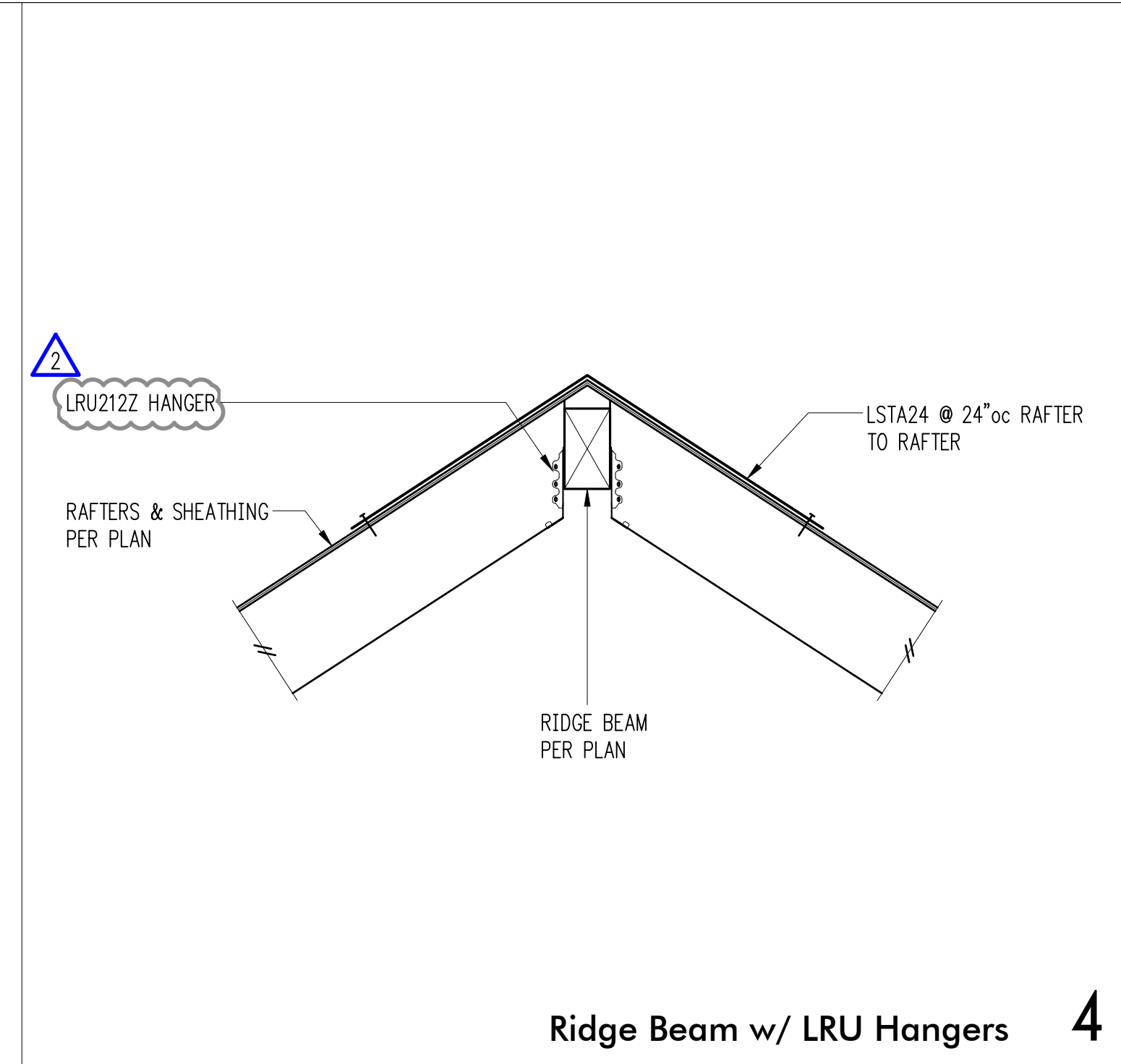


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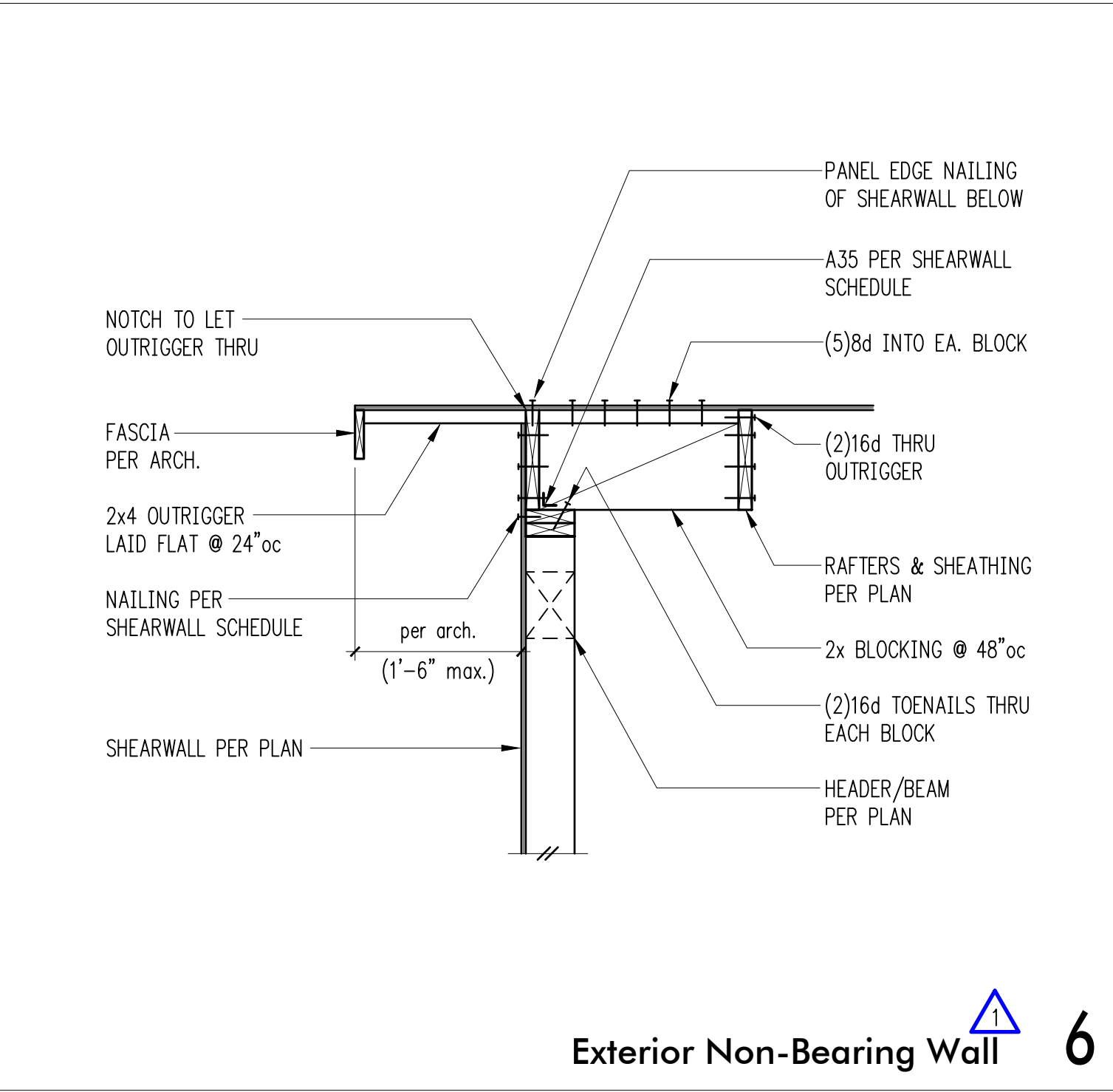


NOT USED

ECCLOQ Series Connection at Steel Column 3

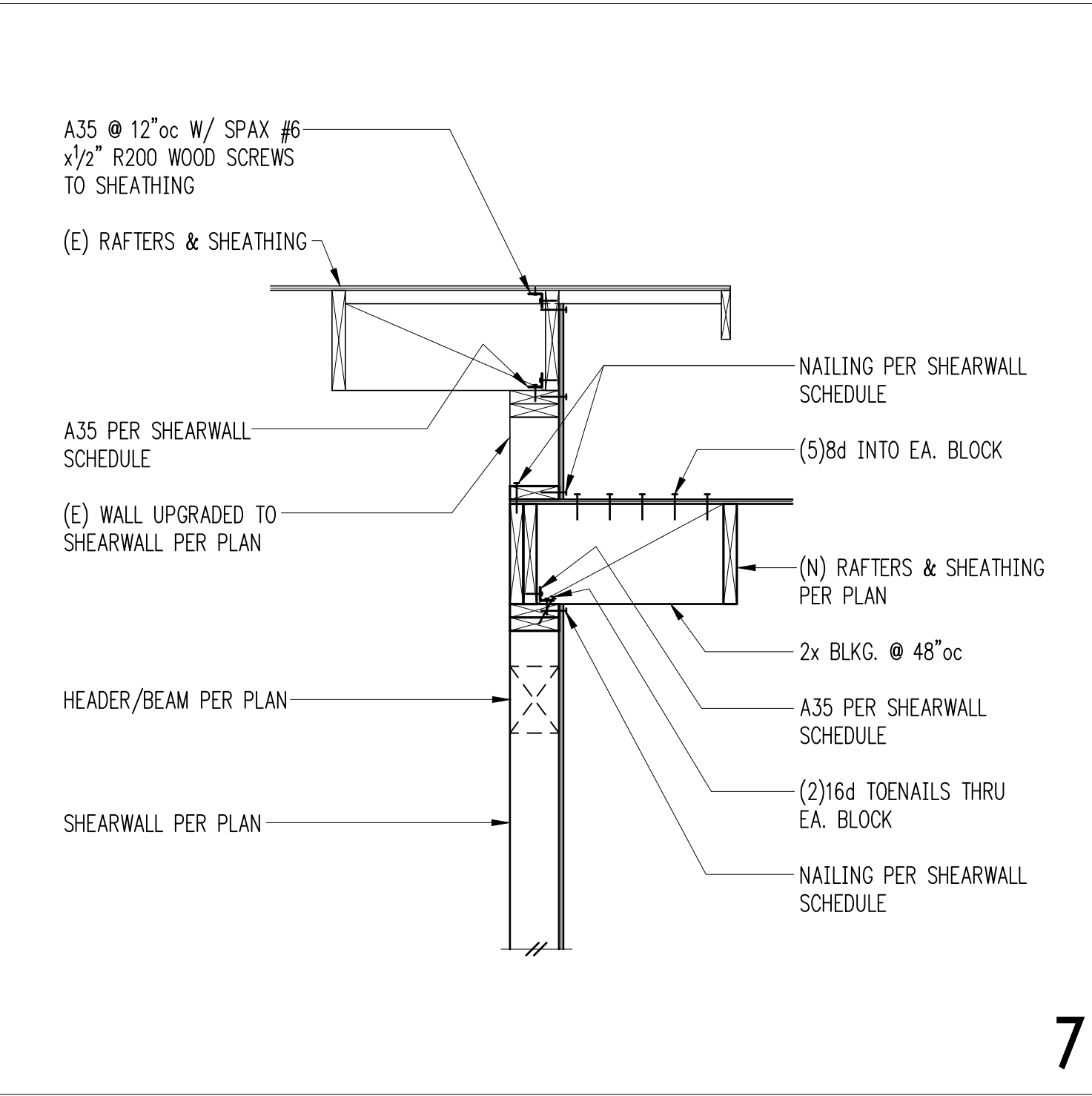


Ridge Beam w/ LRU Hangers 4



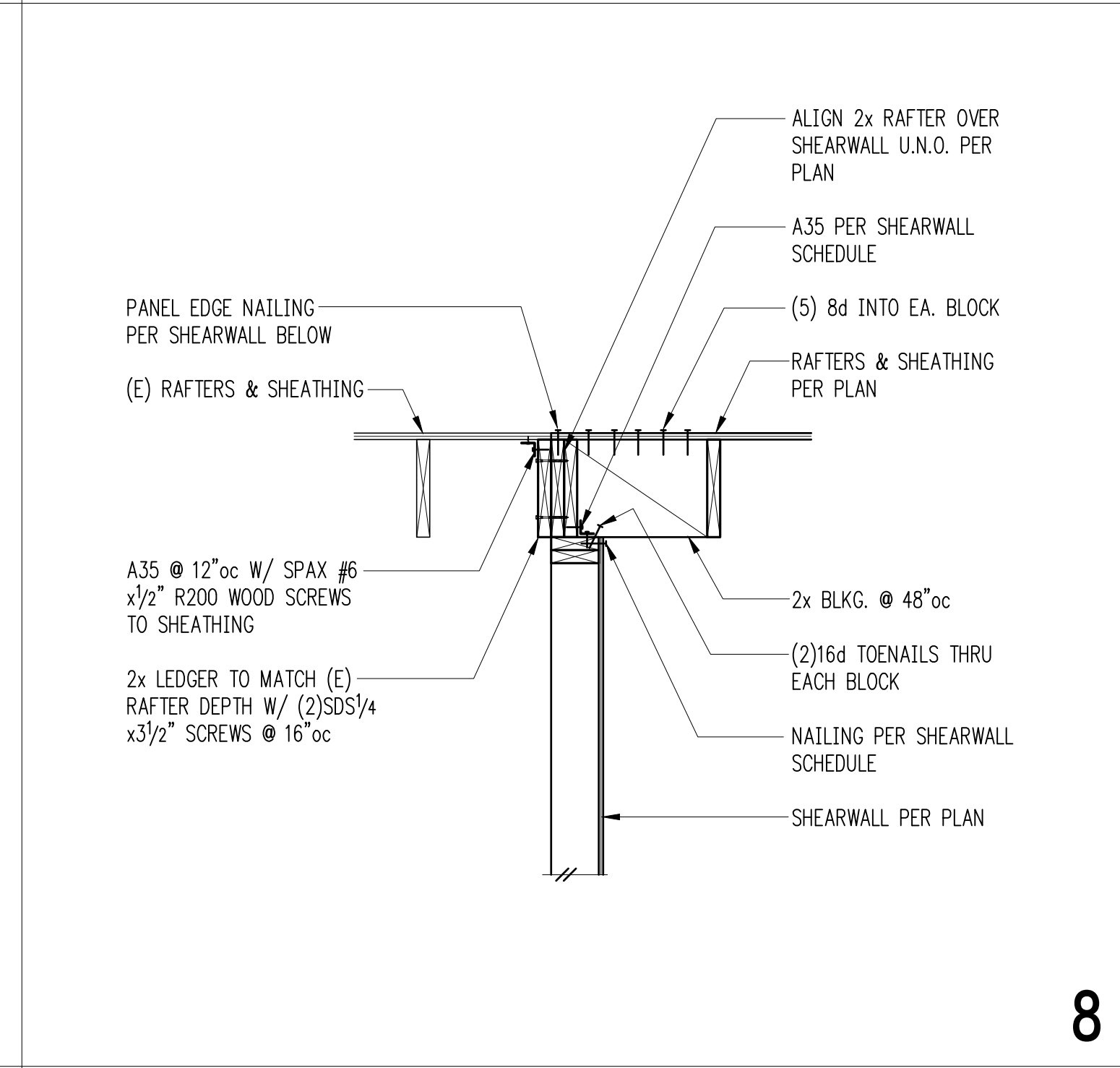
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Exterior Non-Bearing Wall 6



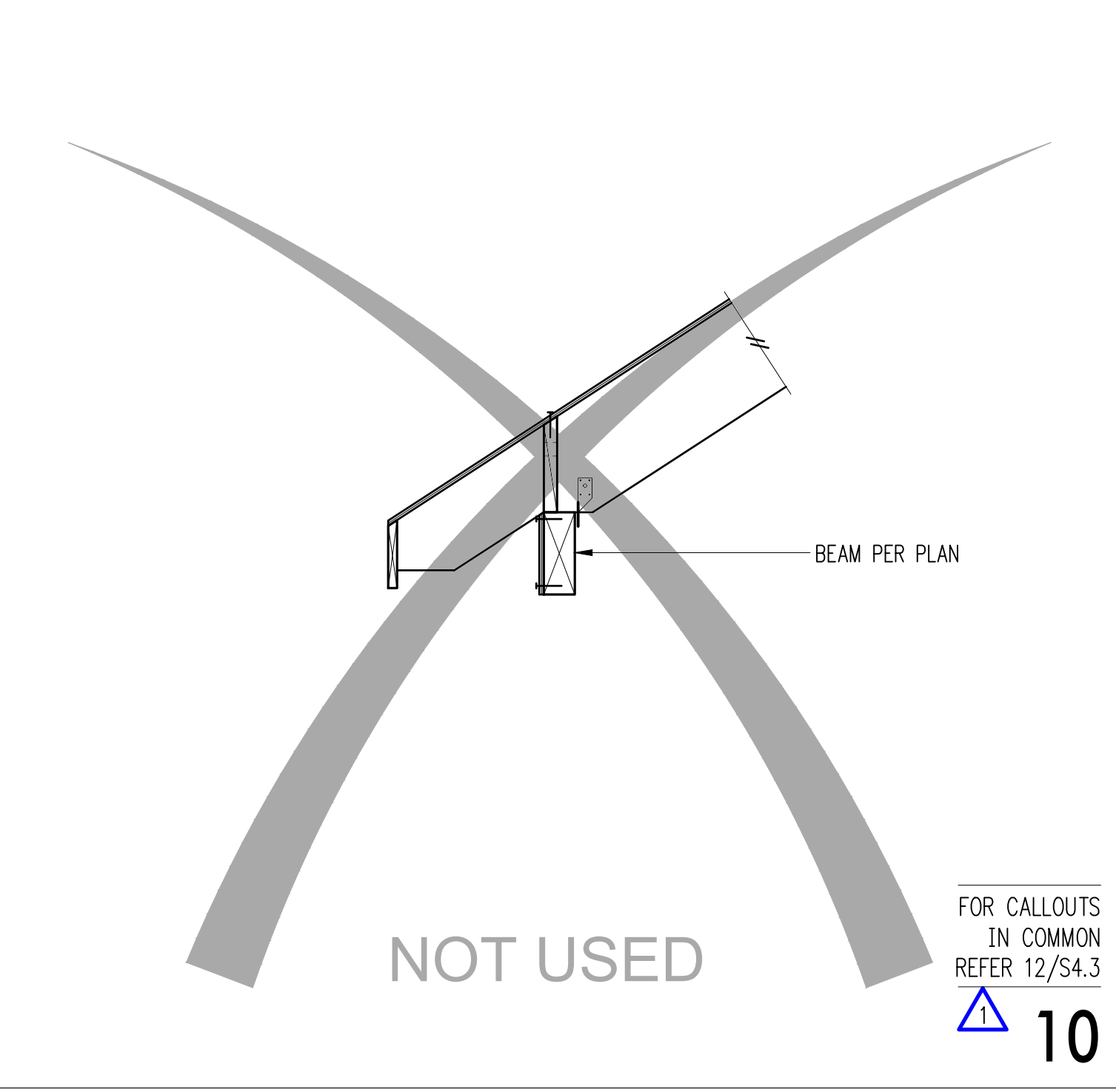
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Interior Shearwall Parallel 11

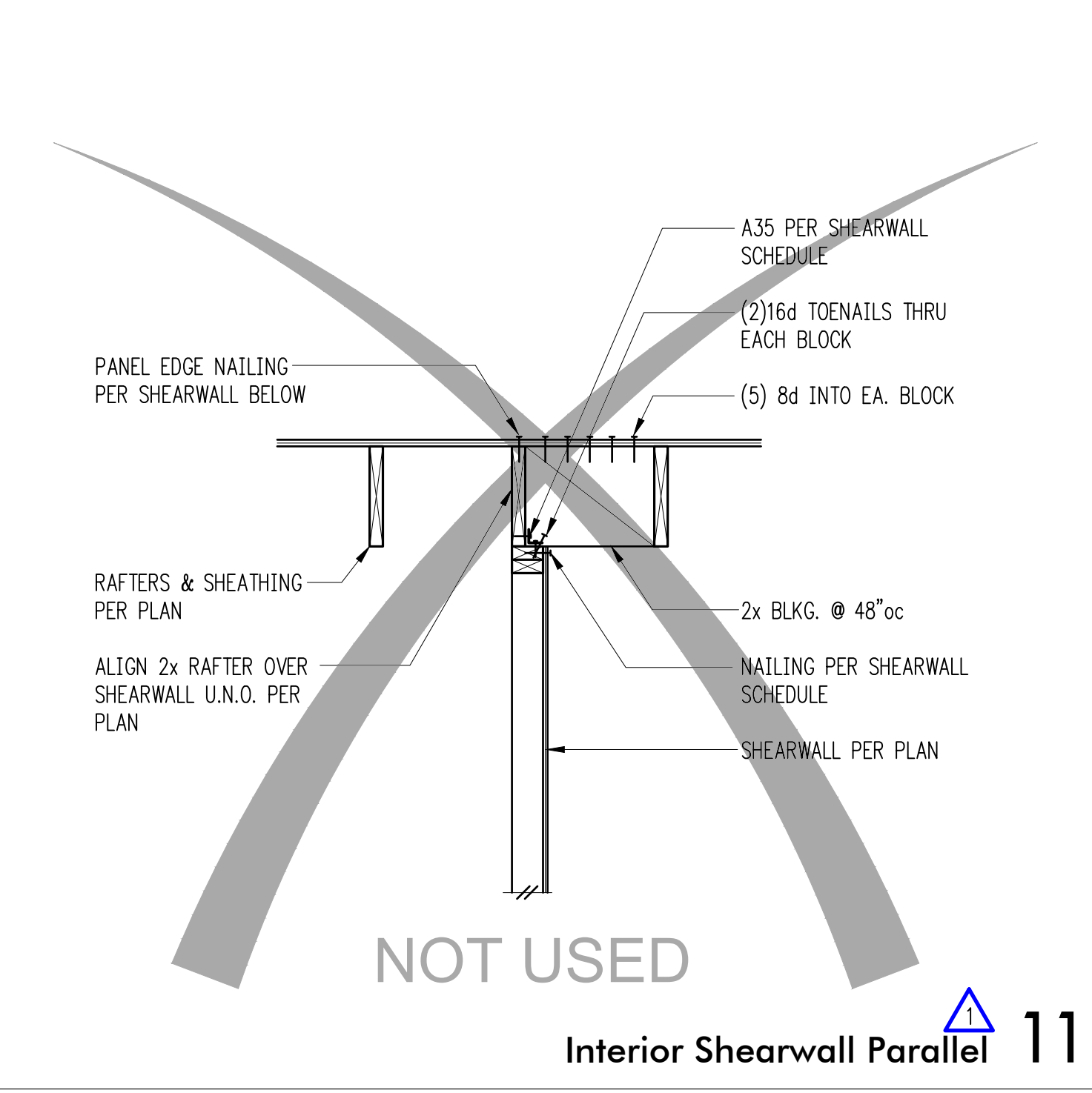


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Exterior Bearing Wall 12

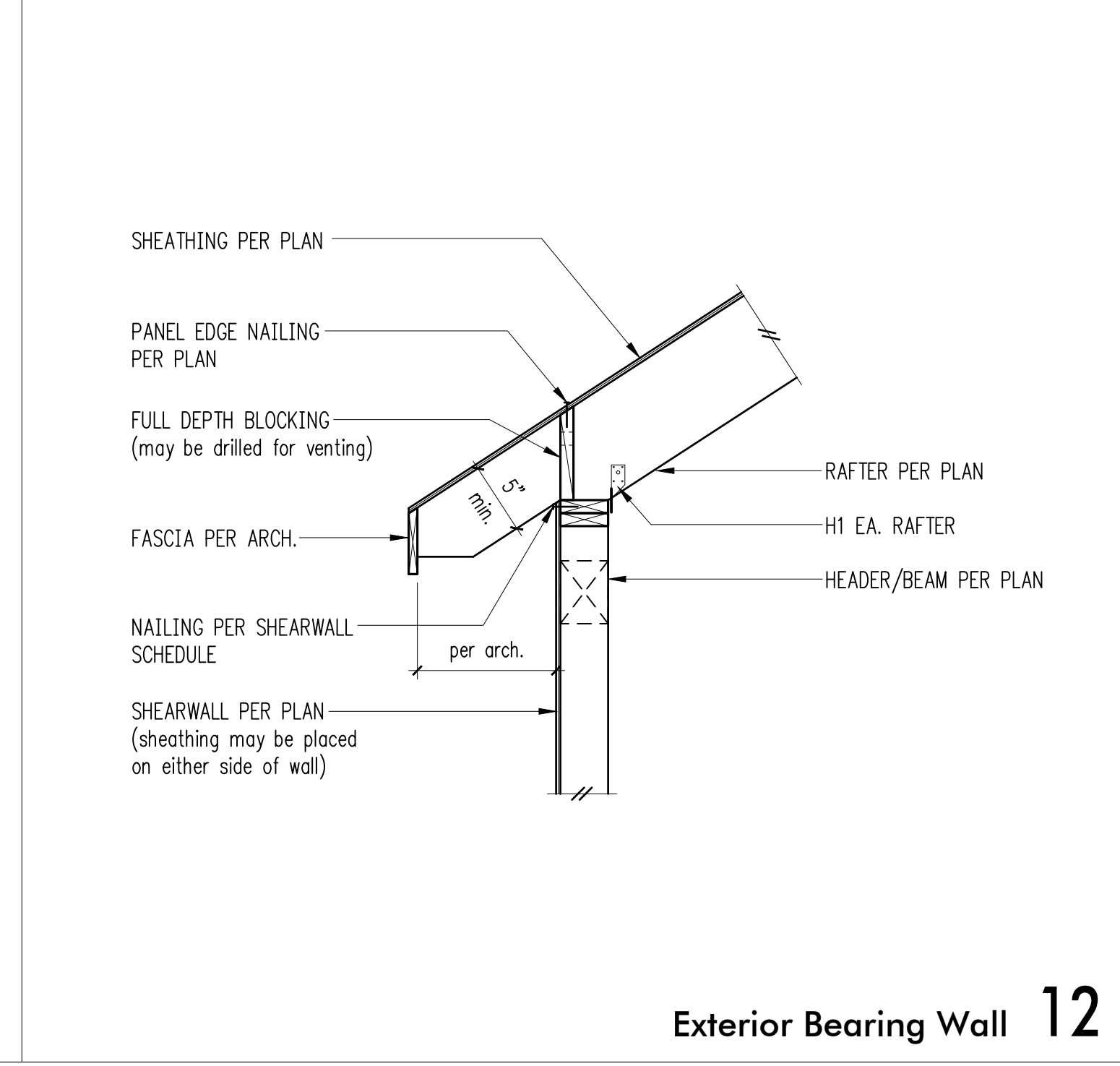


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NOT USED

Interior Shearwall Parallel 11



Exterior Bearing Wall 12

FOR CALLOUTS IN COMMON REFER 12/S4.3

10