STANDARDS:

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM WITH:

2018 Inattentional Residential Code 2018 Inattentional Mechanical Code

2018 Inattentional Fuel Gas Code 2018 Inattentional Fire Code

2018 Uniform Plumbing Code Washington State Energy Code

Washington Cities Electrical Code LATEST ADOPTED EDITIONS AS AMENDED AND ADOPTED BY THE APPLICABLE

CITY REVIEWS:

JURISDICTION.

CA015-001 \$ VAR18-002

TYPE OF CONSTRUCTION:

TYPE V-N SPRINKLERED NFPA 13D

PREMISES IDENTIFICATION:

PROVIDE ADDRESS OR HOUSE NUMBER PER R319.1 IRC. APPROVED NUMBERS OR ADDRESSES SHALL BE PROVIDED FOR ALL NEW BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.

FORMALDEHYDE REDUCTION MEASURES:

ALL STRUCTURAL PANEL COMPONENTS OF THE HOUSE SUCH AS SOFTWOOD PLYWOOD, PARTICLE BOARD, WAFER BOARD, AND ORIENTED STRAND BOARD SHALL BE IDENTIFIED AS "EXPOSURE I", "EXTERIOR" OR "HUD APPROVED".

EXTERIOR WALL FLASHING:

APPROVED CORROSION-RESISTIVE FLASHING SHALL BE APPLIED SHINGLE FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER INTO THE BUILDING STRUCTURAL FRAMING COMPONENTS, SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA TII, THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH, APPROVED CORROSION-RESISTANT FLASHING SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:

I, EXTERIOR WINDOW AND DOOR OPENINGS, FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. 2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.

3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS. 4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM. 5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO OF WOOD-FRAME CONSTRUCTION 6. AT WALLS AND ROOF INTERSECTIONS

FIREBLOCKING:

T. AT BUILT-IN GUTTERS

FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH YERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS: I. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS: 1.1 YERTICALLY AT THE CEILING AND FLOOR LEVELS.

1.2 HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET. 2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED YERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS. 3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7. 4, AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILING AND FLOOR LEYEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND

PRODUCTS OF COMBUSTION, THE MATERIAL FILLING THIS ANNUAL SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E 136 REQUIREMENTS. 5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19.

RATPROOFING:

STRAINER PLATES ON DRAIN INLETS SHALL BE DESIGNED AND INSTALLED SO THAT NO OPENING IS GRATER THAN 12-INCH IN THE LEAST DIMENSION, METER BOXES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT RATS CANNOT ENTER A BUILDING BY FOLLOWING THE SERVICE PIPES FROM THE BOX INTO THE BUILDING. IN OR ON BUILDINGS WHERE OPENINGS HAVE BEEN MADE IN WALLS, FLOORS, OR CEILINGS FOR THE PASSAGE OF PIPES, SUCH OPENINGS SHALL BE CLOSED AND PROTECTED BY THE INSTALLATION OF APPROYED METAL COLLARS SECURELY FASTENED TO THE ADJOINING STRUCTURE. TUB WASTE OPENINGS IN FRAMED CONSTRUCTION TO CRAWL SPACES AT OR BELOW THE FIRST FLOOR SHALL BE PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS OR METAL SCREEN SECURELY FASTENED TO THE ADJOINING STRUCTURE WITH NO OPENING GREATER THAN 12-INCH IN

GARAGE SEPARATION:

GARAGES, SHOPS, AND SIMILAR AREAS SHALL BE SEPARATED FROM THE DWELLING BY (1/2" GWB) ON THE GARAGE SIDE WALLS AND SUPPORTING POSTS AND BEAMS. THE MATERIALS SHALL EXTEND FROM THE FOUNDATION TO THE ROOF SHEATHING, WHERE A LIVING AREA IS ABOVE THE GARAGE, THE CEILING SHALL BE PROTECTED WITH ONE LAYER OF 5/8" TYPE "X" GYPSUM WALLBOARD, PER SECTION R302.6.

TUBS AND SHOWERS:

TUB AND SHOWER WALLS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE TO A HEIGHT OF NOT LESS THAN 6' ABOVE THE FLOOR, MATERIAL OTHER THAN STRUCTURAL ELEMENTS USED IN SUCH WALLS SHALL BE OF A TYPE NOT ADVERSELY AFFECTED BY MOISTURE. ALL GLAZING INCLUDING WINDOWS WITHIN 60 INCHES OF THE DRAIN INLET SHALL BE SAFETY GLASS, DOORS SHALL SWING OUT, FIREBLOCK BETWEEN STUDS.

GAS ZERO-CLEARANCE FIREPLACES SHALL BE UL APPROVED. THEY SHALL BE INSTALLED IN ACCORDANCE WITH THE IBC AND THE MANUFACTURERS SPECIFICATIONS. THEY SHALL BE FITTED WITH A TIGHT FITTING FLUE DAMPER, & OPERATED WITH A READILY ACCESSIBLE MANUAL OR APPROYED AUTOMATIC CONTROL. ALL FIREPLACES SHALL BE PROVIDED WITH FRESH AIR FROM THE OUTSIDE TO THE FIRE BOX, FRESH AIR INTAKES SHALL BE A MINIMUM OF 6 SQUARE INCHES AND SHALL BE FITTED WITH A READILY OPERABLE DAMPER. THEY SHALL HAVE TIGHT FITTING GLASS OR METAL DOORS, OR FLUE DRAFT INDUCTION FAN.

CRAWL ACCESS SHALL BE A MINIMUM OF 18"x24" (DOOR FROM GARAGE). IT SHALL BE UNOBSTRUCTED.

HOT WATER TANK:

ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION

HOT WATER TEMPERATURE MAXIMUM:

MAXIMUM HOT WATER TEMPERATURE SHALL BE LIMITED TO

STAIR NOTES:

120 DEGREES FAHRENHEIT.

MINIMUM STAIR WIDTH 36" CLEAR MINIMUM HEADROOM 6'-8" CLEAR. STAIR RISE AND RUN PER THE PLANS (7-3/4" MAX RISE/IO" MIN RUN). THE MAX RISE SHALL NOT EXCEED THE MIN RISE BY MORE THAN 3/8". INSTALL FIRESTOPS IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN THE STUDS ALONG AND IN LINE WITH THE RUN OF THE STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED. COYER ANY USABLE SPACE UNDER THE STAIRS WITH GYP, BOARD, THE HANDRAILS SHALL BE BETWEEN 1-1/2" AND 2" IN CROSS SECTION. IT SHALL BE MOUNTED BETWEEN 34" AND 38" ABOVE THE STAIR NOSING, AND BETWEEN 1-1/2" AND 3-1/2" FROM THE WALL. THE ENDS OF THE HANDRAIL SHALL RETURN TO THE WALL.

SMOKE ALARMS:

A NFPA 12 MONITORED "CHAPTER 29" FIRE ALARM SYSTEM IS REQUIRED, IT SHALL BE "

FIRE SPRINKLER SYSTEM:

A NFPA 13R FIRE SPRINKLER SYSTEM IS REQUIRED

EYERY SLEEPING ROOM SHALL BE PROVIDED WITH AT LEAST ONE OPERABLE DOOR OR WINDOW WITH A NET CLEAR OPENING OF 5.7 SQUARE FEET. THE OPENING HEIGHT SHALL BE AT LEAST 24" AND THE WIDTH AT LEAST 20" WITH A FINISHED SILL HEIGHT NOT MORE THAN 42"

RECESSED LIGHTING FIXTURES:

WHEN INSTALLED, RECESSED LIGHTING FIXTURES SHALL MEET ONE OF THE FOLLOWING 1. TYPE IC RATED, MANUFACTURED WITH NO PENETRATIONS BETWEEN THE INSIDE OF THE RECESSED FIXTURE AND CEILING CAVITY AND SEALED OR GASKETED TO PREVENT AIR

LEAKAGE INTO THE UNCONDITIONED SPACE. 2. TYPE IC OR NON-IC RATED. INSTALLED INSIDE A SEALED BOX CONSTRUCTED FROM A MINIMUM ONE HALF INCH GYPSUM WALL BOARD OR CONSTRUCTED FROM A PREFORMED POLYMERIC VAPOR BARRIER, OR OTHER AIR TIGHT ASSEMBLY MANUFACTURED FOR THIS PURPOSE, WHILE MAINTAINING REQUIRED CLEARANCES OF NOT LESS THAN ONE HALF INCH FROM COMBUSTIBLE MATERIAL AND NOT LESS THAN THREE INCHES FROM INSULATION MATERIAL. 3, TYPE IC RATED, CERTIFIED UNDER ASTM E283 TO HAVE NO MORE THAN 2.0 CFM AIR MOVEMENT FROM THE CONDITIONED SPACE TO THE CEILING CAVITY, THE LIGHTING FIXTURE SHALL BE TESTED AT SEVENTYFIVE PASCALS OR 1.57 LBS/SF PRESSURE DIFFERENCE AND HAVE A LABEL ATTACHED, SHOWING COMPLIANCE.

WATER EFFICIENCY STANDARDS:

 $\verb|MAXIMUM WATER USE ALLOWED MEASURED IN GALLONS PER MINUTE (GPM): \\$ 1.75 GPM

SHOWERHEADS 1,75 GPM LAYATORY FAUCETS 1.0 GPM KITCHEN FAUCETS 1.75 GPM

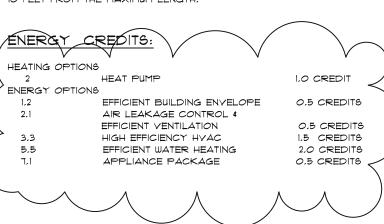
BATH, POWDER ROOM AND LAUNDRY ROOM FANG SHALL HAVE A MINIMUM CAPACITY OF 50 CFM. THE FANS SHALL BE VENTED TO THE EXTERIOR AND SHALL HAVE A BACK FLOW PREVENTER, EXHAUST DUCTS IN UNCONDITIONED SPACE SHALL BE INSULATED TO A MINIMUM OF R-4, EXHAUST DUCTS SHALL BE SIZED IN ACCORDANCE WITH THESE GENERAL NOTES, SEE "PRESCRIPTIVE DUCT SIZING". FANS SHALL BE FLOW RATED AT 0.25 W.G. STATIC PRESSURE. MINIMUM EFFICACY 1.4 CFM/WATT

RANGE HOODS SHALL HAVE A MINIMUM CAPACITY OF 100 CFM AND SHALL YENT TO THE OUTSIDE AND SHALL HAVE A BACK FLOW PREVENTER. EXHAUST DUCTS IN UNCONDITIONED SPACE SHALL BE INSULATED TO A MINIMUM OF R-4. EXHAUST DUCTS SHALL BE SIZED IN ACCORDANCE WITH THESE GENERAL NOTES, SEE "PRESCRIPTIVE DUCT SIZING, FANS SHALL BE FLOW RATED AT 0.25 W.G. STATIC PRESSURE, MINIMUM EFFICACY 2.8CFM/WATT

PRESCRIPTIVE DUCT SIZING:

FAN CFM	FLEX DIA,	MAX LENGTH	SMOOTH DIA.	PLY DUCTS, MAX LENGTH
50	4 INCH	25'	4 INCH	70'
50	5 INCH	<i>90'</i>	5 INCH	100'
50	6 INCH	NO LIMIT	6 INCH	NO LIMIT
80	4 INCH	NOT ALLOWED	O 4 INCH	20'
80	5 INCH	15'	5 INCH	100'
80	6 INCH	<i>90</i> '	6 INCH	NO LIMIT
100	5 INCH	NOT ALLOWED	5 INCH	50'
100	6 INCH	45'	6 INCH	NO LIMIT
125	6 INCH	15'	6 INCH	NO LIMIT
125	7 INCH	7 ⊘ '	7 INCH	NO LIMIT

E SUBTRACT 10 FEET FROM THE MAXIMUM LENGTH.



WHOLE HOUSE VENTILATION (INTEGRATED):

THE INTEGRATED WHOLE HOUSE VENTILATION SYSTEMS SHALL PROVIDE OUTDOOR AIR AT THE RATE CALCULATED USING SECTION MI508.3, INTEGRATED FORCED-AIR VENTILATION SYSTEMS SHALL DISTRIBUTE OUTDOOR AIR TO EACH HABITABLE ROOM THROUGH THE FORCED-AIR SYSTEM DUCTS, INTEGRATED FORCED-AIR VENTILATION SYSTEMS SHALL HAVE AN OUTDOOR AIR INLET DUCT CONNECTING A TERMINAL ELEMENT ON THE OUTSIDE OF THE BUILDING TO THE RETURN AIR PLENUM OF THE FORCED AIR SYSTEM, AT A POINT WITHIN 4 FEET UPSTREAM OF THE AIR HANDLER. THE OUTDOOR AIR INI ET DUCT CONNECTION TO THE RETURN AIR STREAM SHALL BE LOCATED UPSTREAM OF THE FORCED-AIR SYSTEM BLOWER AND SHALL NOT BE CONNECTED DIRECTLY INTO A FURNACE CABINET TO PREVENT THERMAL SHOCK TO THE HEAT EXCHANGER. THE SYSTEM WILL BE EQUIPPED WITH A MOTORIZED DAMPER CONNECTED TO THE AUTOMATIC VENTILATION CONTROL AS SPECIFIED IN SECTION MI508.5.2. THE REQUIRED FLOW RATE SHALL BE YERIFIED BY FIELD TESTING WITH A FLOW HOOD OR A FLOW MEASURING STATION.

THE WHOLE HOUSE VENTILATION SYSTEM SHALL BE CONTROLLED BY A 24-HOUR CLOCK TIMER WITH THE CAPABILITY OF CONTINUOUS OPERATION, MANUAL AND AUTOMATIC CONTROL. THE CONTROL WILL CONTROL THE FORCED AIR SYSTEM BLOWER AND THE AUTOMATIC DAMPER. THE 24-HOUR TIMER SHALL BE READILY ACCESSIBLE, THE 24-HOUR TIMER SHALL BE CAPABLE OF OPERATING THE WHOLE HOUSE YENTILATION SYSTEM WITHOUT ENERGIZING OTHER ENERGY-CONSUMING APPLIANCES. AT THE TIME OF FINAL INSPECTION, THE AUTOMATIC CONTROL TIMER SHALL BE SET TO OPERATE THE WHOLE HOUSE SYSTEM FOR A LEAST 8 HOURS A DAY, A LABEL SHALL BE AFFIXED TO THE CONTROL THAT READS "WHOLE HOUSE VENTILATION (SEE OPERATING INSTRUCTIONS)",

WHOLE HOUSE EXHAUST FANS SHALL BE RATED AT 0.25 W.G. AND MAX. I.O SONE RATING THE OUTDOOR AIR CONNECTION TO THE RETURN AIR STREAM SHALL BE LOCATED TO PREVENT THERMAL SHOCK TO THE HEAT EXCHANGER THE OUTDOOR AIR INLET SHALL BE SCREENED OR OTHERWISE PROTECTED FROM ENTRY BY INSECTS, LEAVES, OR OTHER MATERIAL, THE INLETS SHALL BE LOCATED SO AS NOT TO TAKE AIR FROM THE FOLLOWING AREAS:

A) CLOSER THAN 10 FEET FROM AN APPLIANCE VENT OUTLET, UNLESS SUCH YENT OUTLET IS 3 FEET ABOVE THE OUTDOOR AIR INLET. B) WHERE IT WILL PICK UP OBJECTIONABLE ODORS, FUMES OR FLAMMABLE

C) A HAZARDOUS OR UNGANITARY LOCATION.

D) A ROOM OR SPACE HAVING ANY FUEL-BURNING APPLIANCE THEREIN. E) CLOSER THAN 10 FEET FROM A VENT OPENING OF A PLUMBING DRAINAGE SYSTEM UNLESS SUCH YENT OPENING IS AT LEAST 3 FEET ABOVE THE AIR INLET. THE DUCT SHALL BE INSULATED TO R-4 WHERE PASSING THROUGH UNCONDITIONED SPACE.

A WHOLE HOUSE EXHAUST FAN SHALL BE LOCATED IN THE CEILING, AND SIZED AS PER TABLE MI508.2 OF THE IRC.

THE HYAC SHALL BE CAPABLE OF MAINTAINING 68 DEGREES FAHRENHEIT AT A POINT THREE FEET OFF THE FLOOR AND 2' FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS WHEN THE OUTSIDE TEMPERATURE IS AS SET FORTH IN THE WASHINGTON STATE ENERGY CODE. THE HVAC SYSTEM SHALL BE A GEOTHERMAL HEAT PUMP, WATER FURNACE 5 SERIES NDV 060, GLHP 30 EER, 5 COP. THE INSTALLED HYAC SIZE SHALL BE BASED ON THE CALCULATED HEAT LOSS AND SHALL NOT EXCEED 150% OF THE CALCULATED HEAT LOSS, A NIGHT SETBACK THERMOSTAT IS REQUIRED.

ENERGY CODE DATA:

THIS BUILDING IS DESIGNED IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE INSULATION VALUES:

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT			
	GLIMATE ZONE 5 AND MARINE	≣ 4	
		REQUIRED	ACTUAL
	Fenestration U-Factor	0.30	0.24
	Skylight U-Factor	0.50	no skylights
	Ceiling R-Value	49 (NOTE 1)	38
	Wood Frame Wall R-Value	21 intermediate (NOTE 3)	21 intermediate
	Floor R-Value	3 <i>O</i>	30
	Below-Grade Wall R-value	10/15/21 int + 5TB (NOTE 2)	21 with no heated slab

NOTE I For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the fill insulation depth extends over the top plate of the exterior wall. NOTE 2 "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 bermitted to be met with R-13 cavity insulation on the interior of the basement wall blue P-5 continuous insulation on the interior or exterior of the wall "STR" means P-5 thermal break between floor slab and basement wall. NOTE 3 Int. (intermediate framing) denotes framing and insulation as described in Section

A103.2.2 including standard framing 16 inches on center, 78 percent of the wall cavity

insulated and headers insulated with a minimum of R-10 insulation.

OUTDOOR LIGHTING FIXTURES THAT ARE PERMANENTLY MOUNTED TO THE STRUCTURE OR OTHER STRUCTURES UPON THE SAME LOT SHALL BE HIGH EFFICIENCY LUMINARIES UNLESS CONTROLLED BY A MOTION SENSOR WITH AN INTEGRAL PHOTO SENSOR.

INFILTRATION CONTROL:

EXTERIOR JOINTS AROUND SOLE PLATES, WIRING, PLUMBING, DUCTS, RIM JOISTS, MUDSILLS, FLUES, LIGHT FIXTURES, AND PARTITION STUD PENETRATIONS, THROUGH WALLS, FLOORS, AND ROOFS; AND ALL OTHER SUCH OPENINGS INTO THE BUILDING ENVELOPE SHALL BE SEALED CAULKED, GASKETED, OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE. COMPLY W/ R402.1.2 REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR MAX, AT 50 PARCALS YAPOR BARRIERS:

AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF RAFTERS, AND AT EXTERIOR WALLS.

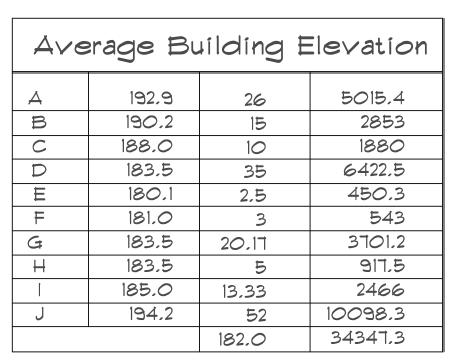
GROUND COVERS:

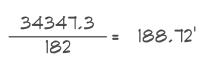
A GROUND COVER OF 6 MIL, BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES AND UNDER ALL FLOOR SLABS EXCEPT GARAGE FLOOR SLABS, THE GROUND FLOOR COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

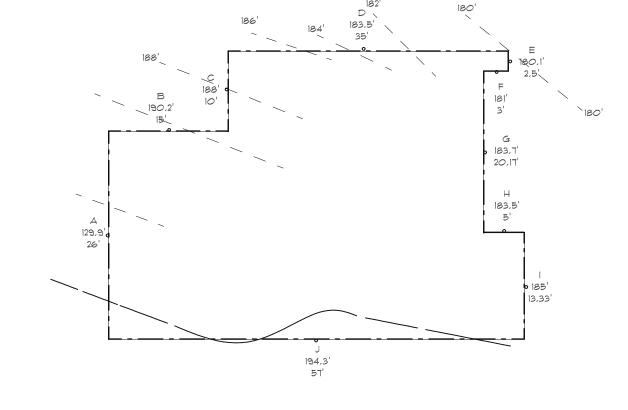
APPLIANCE PACKAGE:

DISHWASHER ENERGY STAR RATED REFRIGERATOR ENERGY STAR RATED

WASHING MACH, ENERGY STAR RATED ENERGY STAR RATED, VENTLESS DRYER W/ MIN. CEF RATING OF 5.2







ARCHITECTURAL PLANS

A 1.0	GENERAL NOTES
Д 2.1 Д 2.2	FOUNDATION GARAGE PLAN MAIN FLOOR PLAN UPPER FLOOR PLAN ROOF PLAN
Д 3.2 Д 3.3	EAST ELEVATION WEST ELEVATION SOUTH ELEVATION NORTH ELEVATION
Д 4.2 Д 4.3	SECTION "A-A" SECTION "B-B" SECTION "C-C" SECTION "D-D"
	DETAILS DETAILS DETAILS STAIRS
A 6.3	CABINETS GARAGE FLOOR ELECTRICAL MAIN FLOOR ELECTRICAL UPPER FLOOR ELECTRICAL

STRUCTURAL PLANS

CIYIL	ENGINEERING PLA
S 4.3	FRAMING DETAILS
S 4.2	FRAMING DETAILS
S 4.1	FRAMING DETAILS
S 4.0	FRAMING DETAILS
5 3.2	FOUNDATION DETAILS
S 3.1	FOUNDATION DETAILS
S 3.0	FOUNDATION DETAILS
S 2.4	ROOF FRAMING PLAN
	UPPER FLOOR FRAMING PI
S 2.2	MAIN FLOOR FRAMING PLA
S 2.1	ENTRY FLOOR FRAMING
S 2.0	FOUNDATION PLAN
S 1.0	STRUCTURAL NOTES
P 2.0	SHORING PIN PILE PLAN
P 1.1	SHORING PIN PILE DETAILS
P 1.0	SHORING PIN PILE DETAILS
- 10	

C1.01	COYER SHEET
C1.02	TOPOGRAPHIC PLAN
C1.03	BMP NOTES
C2.01	TESC & TREE RETENTION
C4.01	STORM, UTILITIES & GRADIN
C4.31	STORM DRAINAGE DETAILS
C4.32	WATER & SEWER DETAILS
L1.01	TREE RETENTION PLAN

WETLAND PLANS

CRITICAL ENHANCEMENT PLAN CRITICAL ENHANCEMENT PLAN

4

4-13-2022 10-5-2022

PROJECT NO.

SHEET NO.

DATE 4-13-2022 10-5-2022 4-1-2023

PROJECT NO.

SHEET NO.

A2.0,

A A B 9 -4 -6 -16 8

ALLIANCE 4R, AZ, 85395 - (425) 44

4-1-2023 PROJECT NO.

SHEET NO.

BASEMENT FLOOR LIVING 273 SF GARAGE 958 SF STORAGE 390 SF 1621 SF TOTAL 73 SF PORCH BUILDING FOOTPRINT 1694 SF ig(4-1-2023 REVISED FOR FULL BASEMENT ${}^{\circ}$

35'-0"

PROVIDE A 1-3/8" SOLID WOOD / SOLID OR HONEYCOMB-CORE

STEEL / 20-MINUTE FIRE-RATED

ALL OPTIONS TO BE SELF CLOSING DOOR

A HEAT DETECTOR OR HEAT ALARM RATED FOR THE AMBIENT OUTDOOR TEMPERATURE AND HUMIDITY, INSTALL PER MFR'S INSTRUCTIONS DRIVE GARAGE 7-20-2022 SLOPE 10 A5.1 A5.1 STORAGE UP 2 RISERS A5.3 ENTRY STEPS ABOVE FFE 185.2' CEILING > 16' HANDLER 9 A5.1 WATER A5.1 1/2" GWB REQUIRED UNDER STAIRS 2 A5.5 4 A5.1 PLANTER RETAINING WALL W/ STONE FACING SLOPE WALL TO MATCH GRADE 4'-7" 14'-0" 9'-9" 15'-0" 14'-4" 22'-8"

35'-0"

GARAGES SHALL BE SEPARATED FROM THE DWELLING BY 1/2" GWB ON THE GARAGE SIDE WALLS AND SUPPORTING POSTS AND BEAMS AND THE CEILING SHALL BE PROTECTED WITH ONE LAYER OF 5/8" TYPE "X" GYPSUM WALLBOARD.

16'-6"

, 3'-0"

21'**-**3¼"

18'-6"

4040 SLD

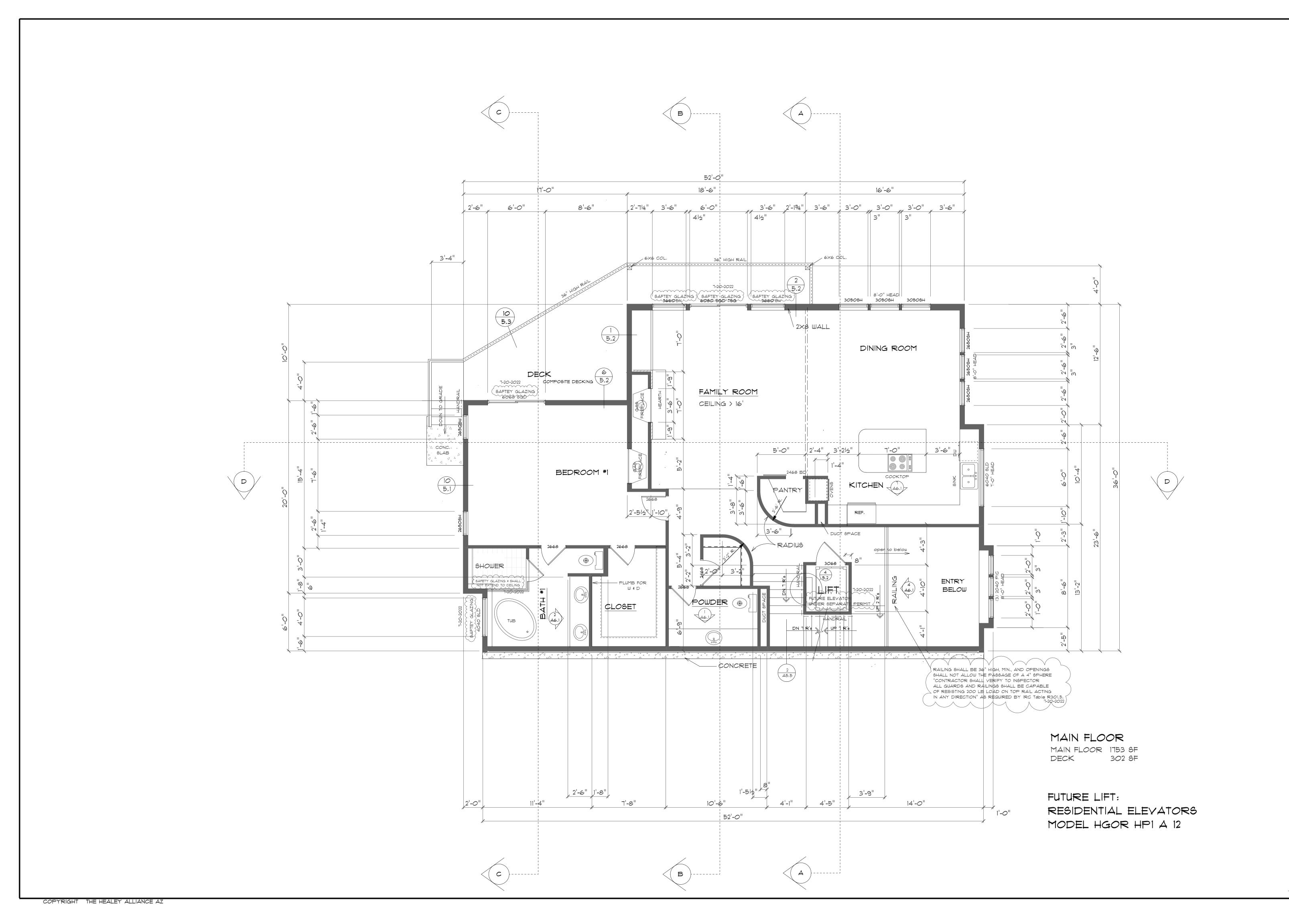
52'-0"

A5.2

A5.2

3 A5.2

15'-0"



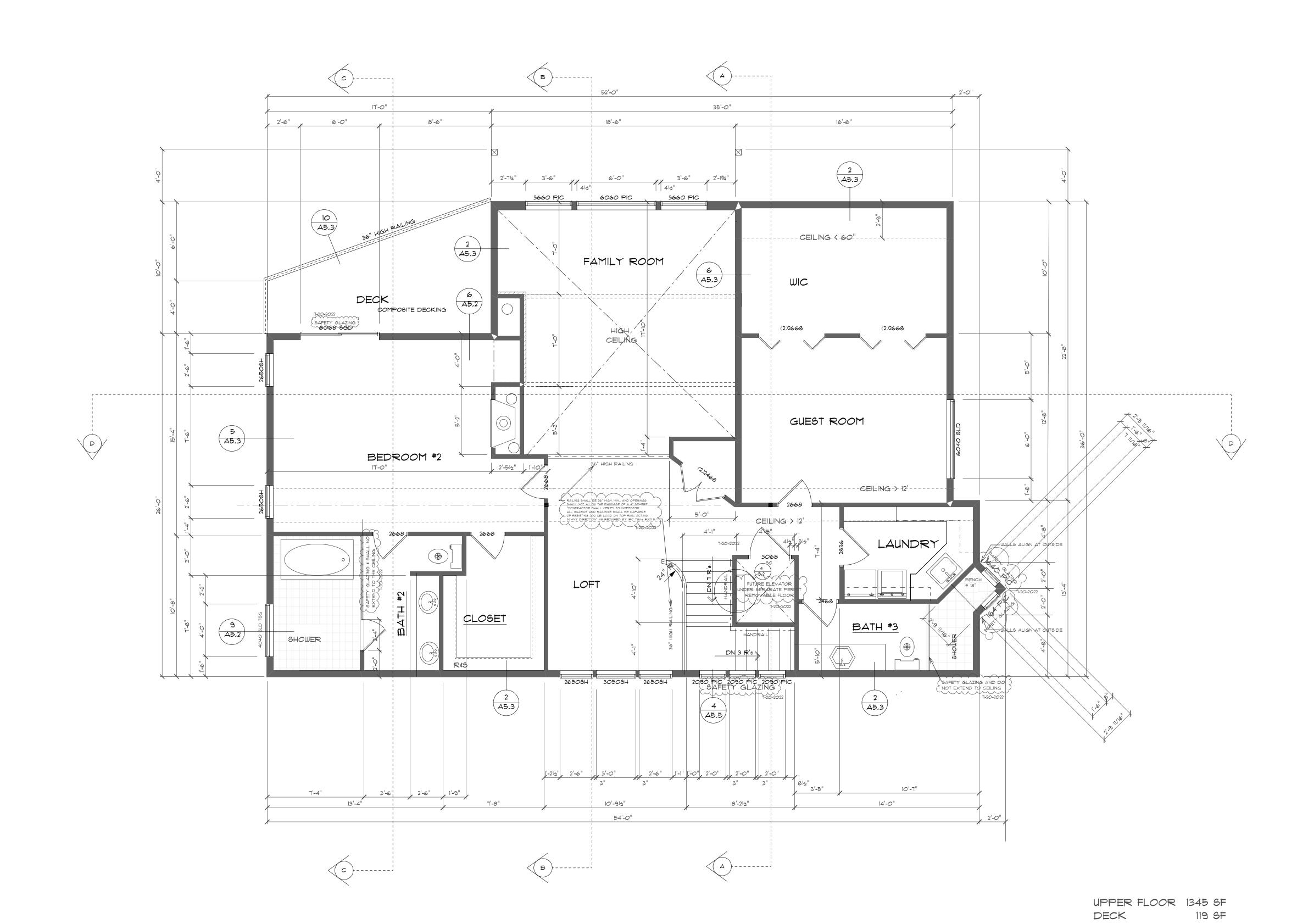
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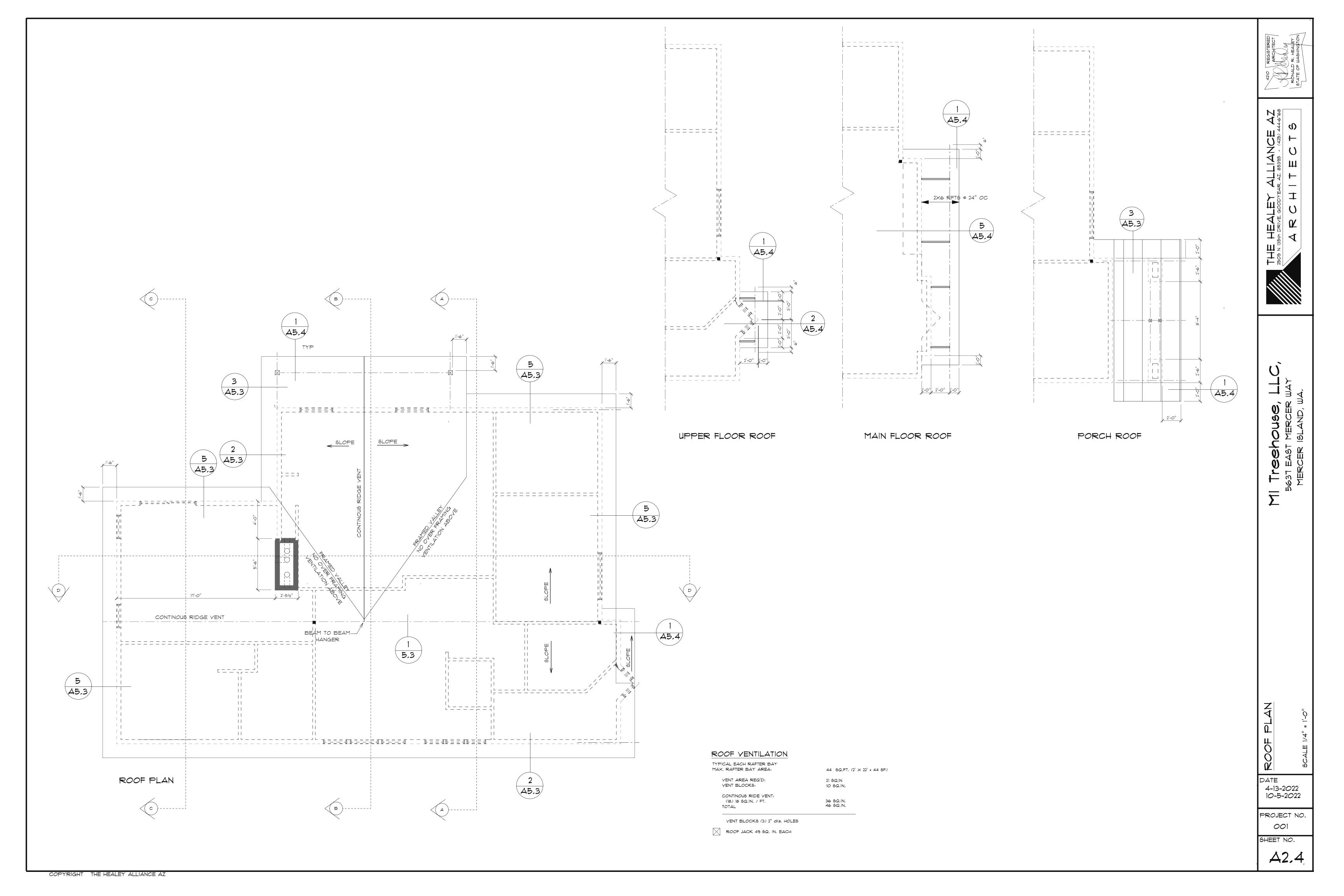
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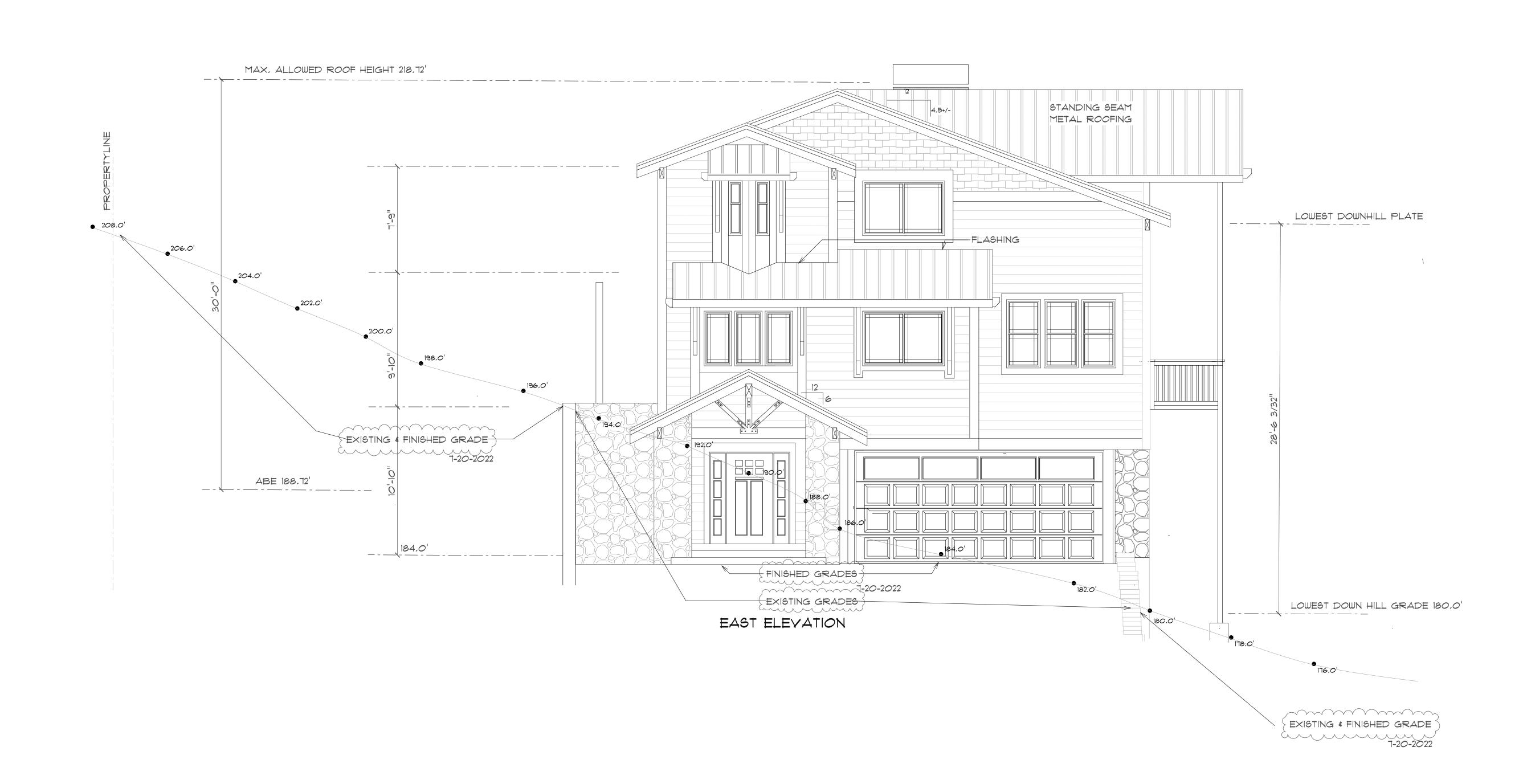




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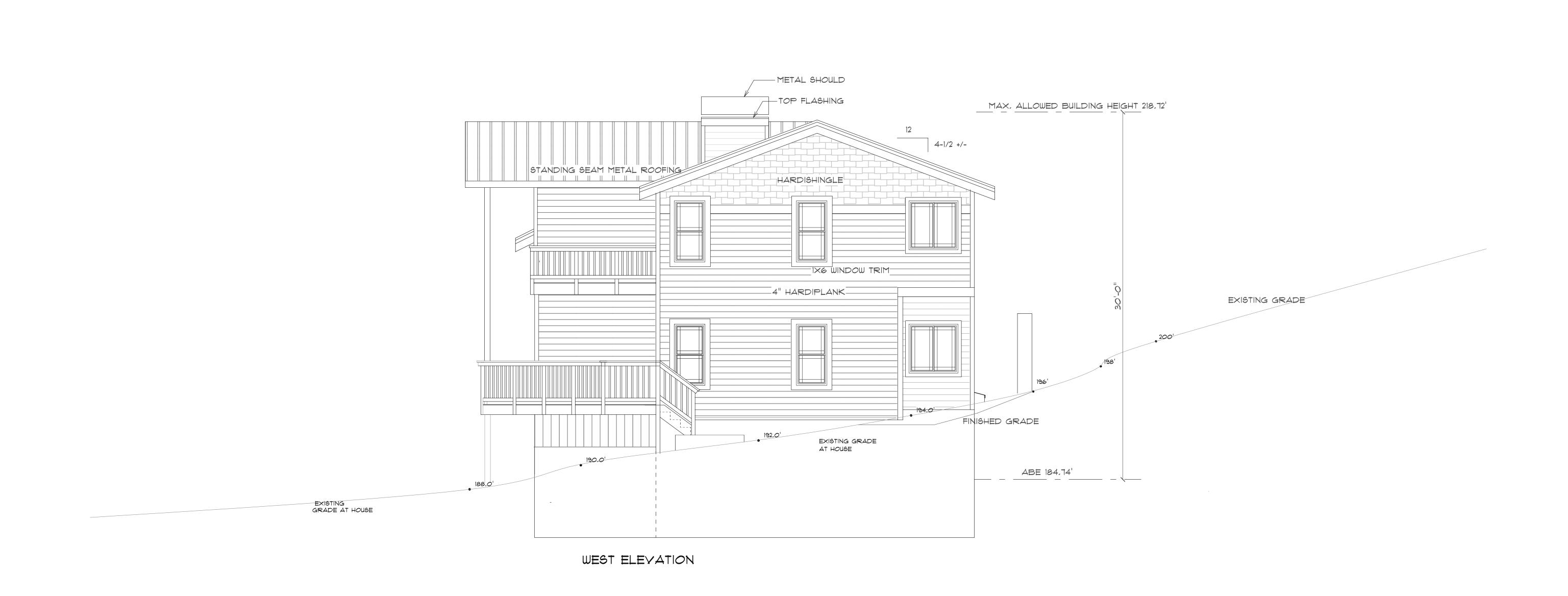
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04-13-2022 10-5-2022 PROJECT NO.

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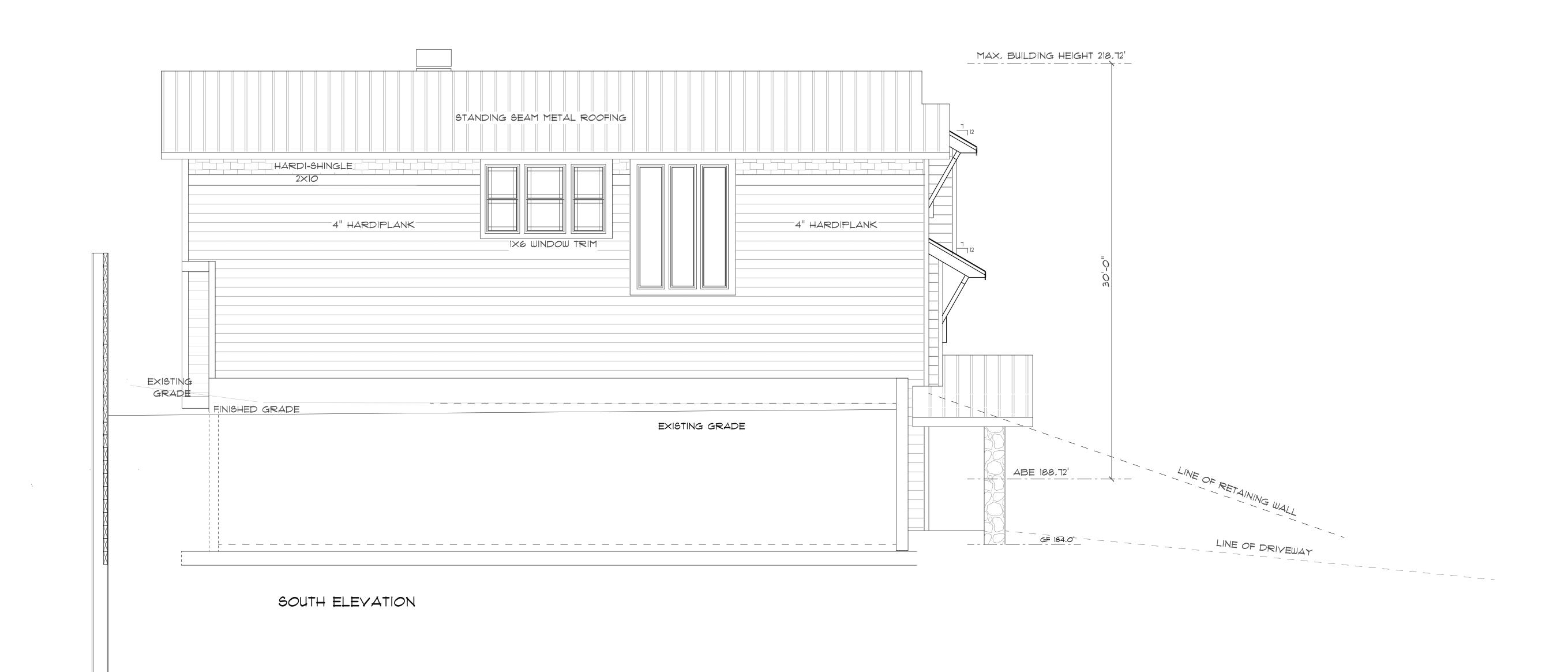


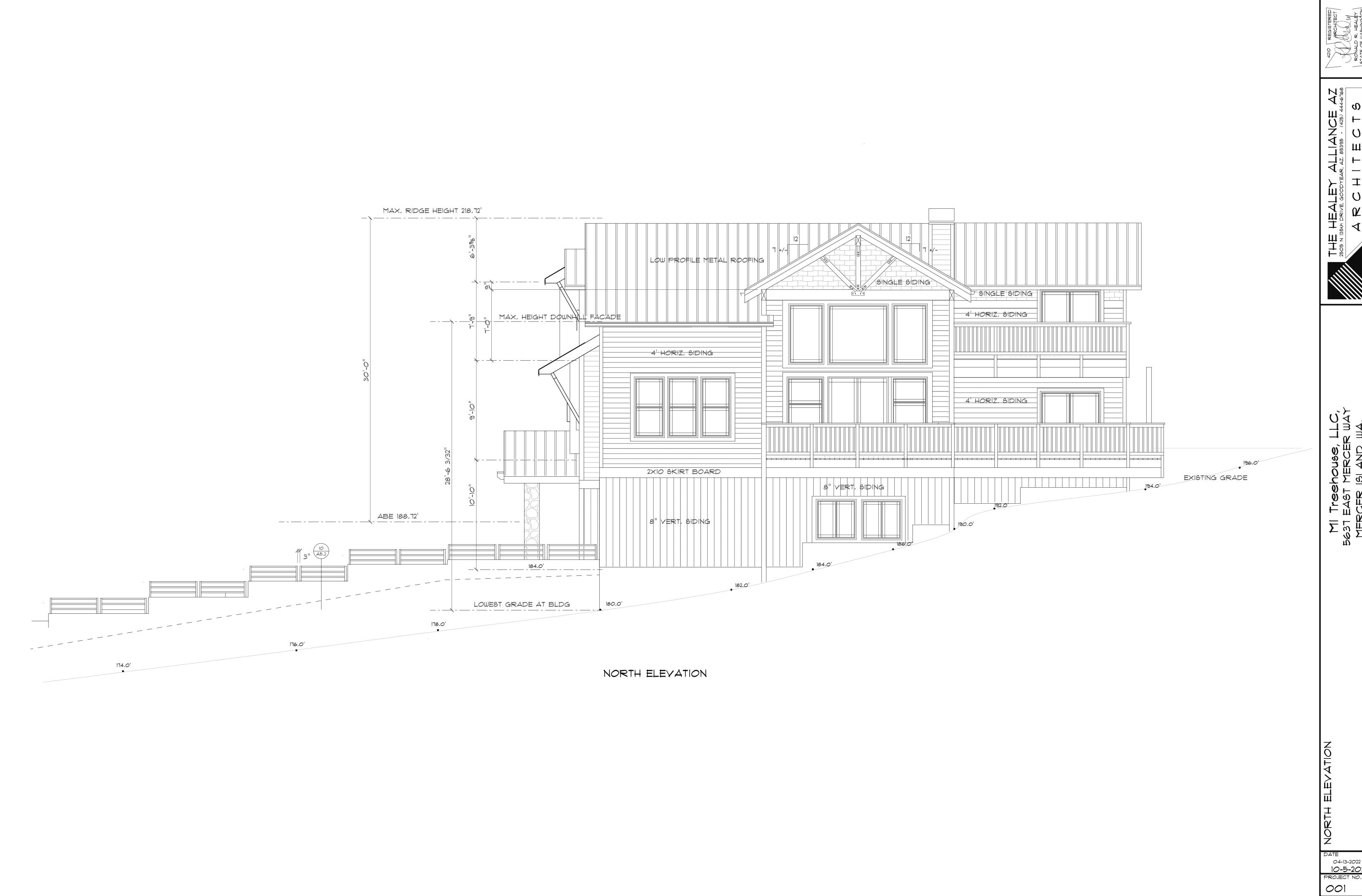
DATE 04-13-2022 10-5-2022 4-1-2023

4-1-2023 REVISED FOR FULL BASEMENT

PROJECT NO. 001

SHEET NO.





04-13-2022 10-5-2022 PROJECT NO.

MI Treehouse, LLC, 5631 EAST MERCER WAY

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DATE 04-13-2022 10-5-2022 PROJECT NO.

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THE HEALEY ALLIANCE AZ
2505 N 135th DRIVE, GOODYEAR, AZ, 85395 - (425) 444-6768

ARCHITECTS

MI Trechouse, LLC 5637 EAST MERCER WAY MERCER ISLAND, WA.

SECTION "B-B"

DATE 04-13-2022 10-5-2022

PROJECT NO.

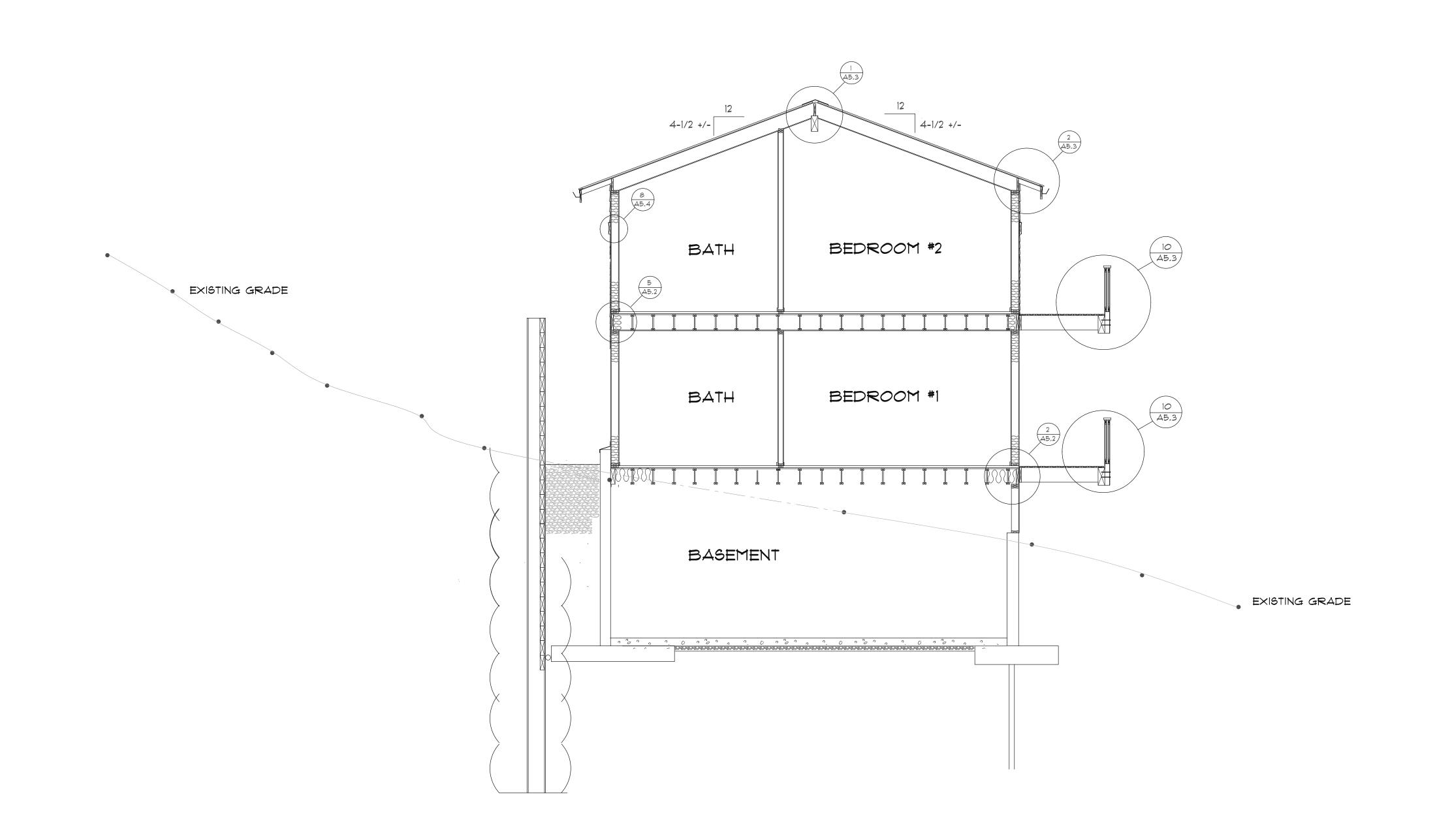
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PROJECT NO.

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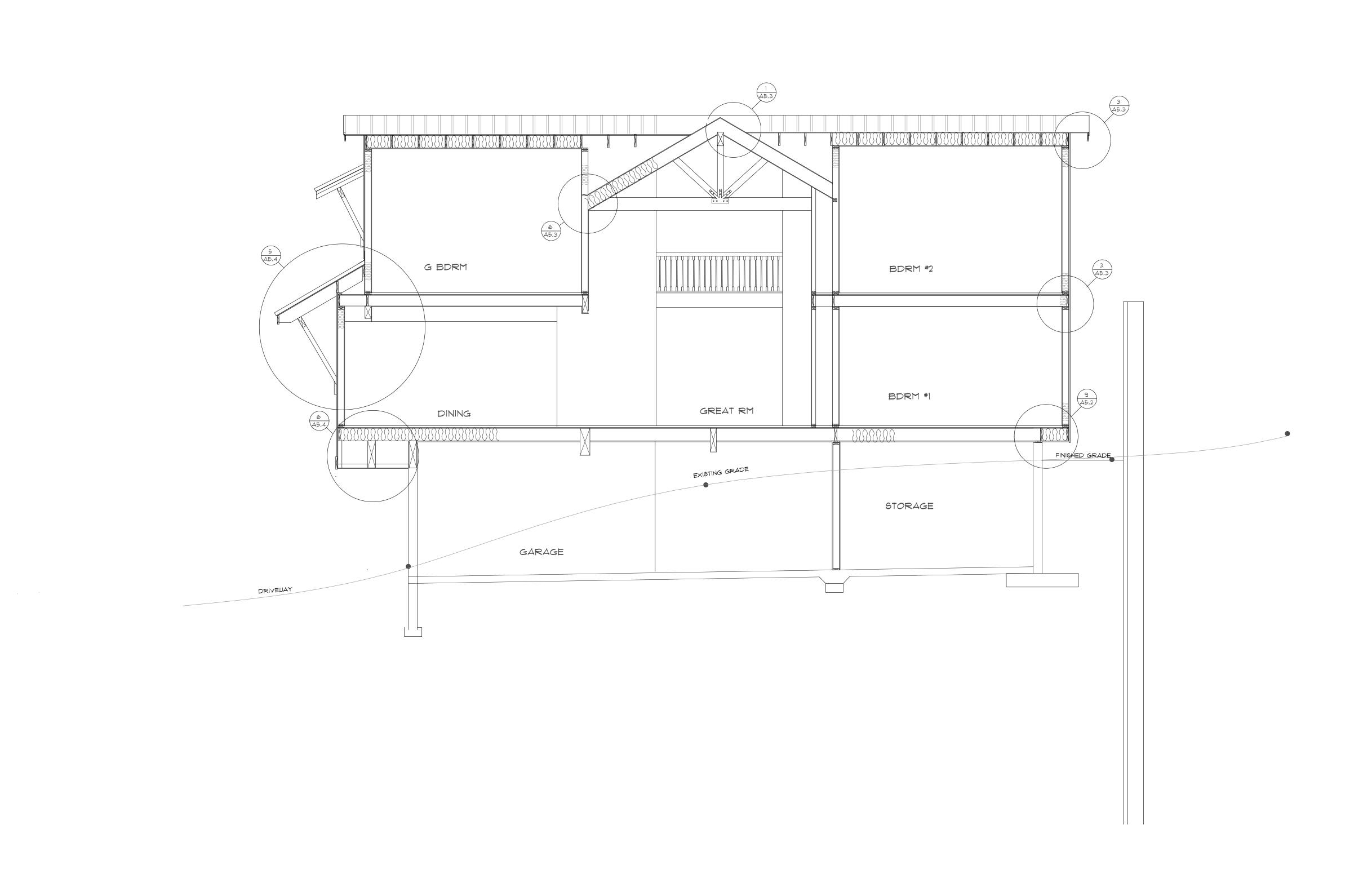
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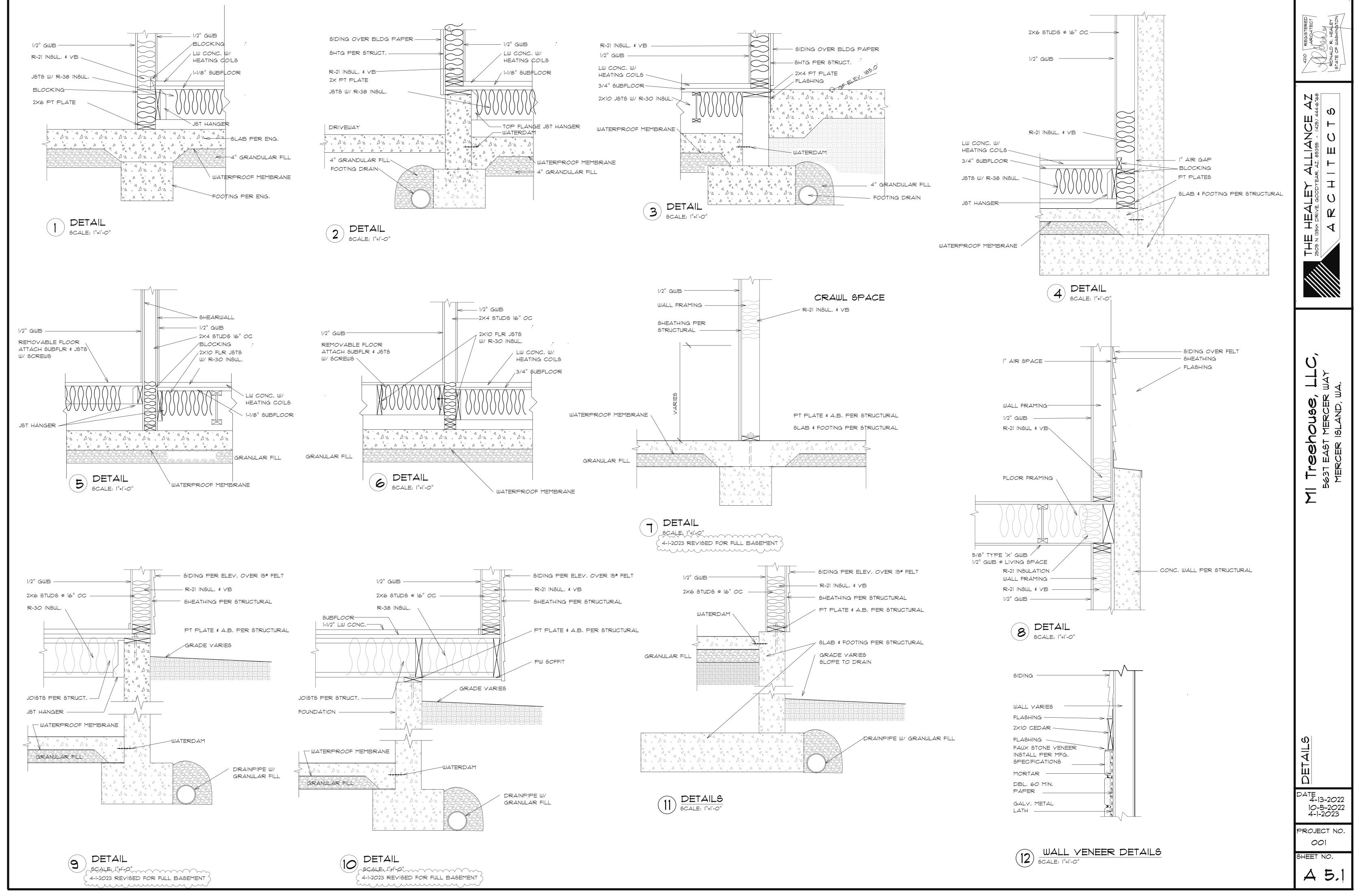
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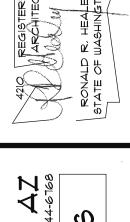
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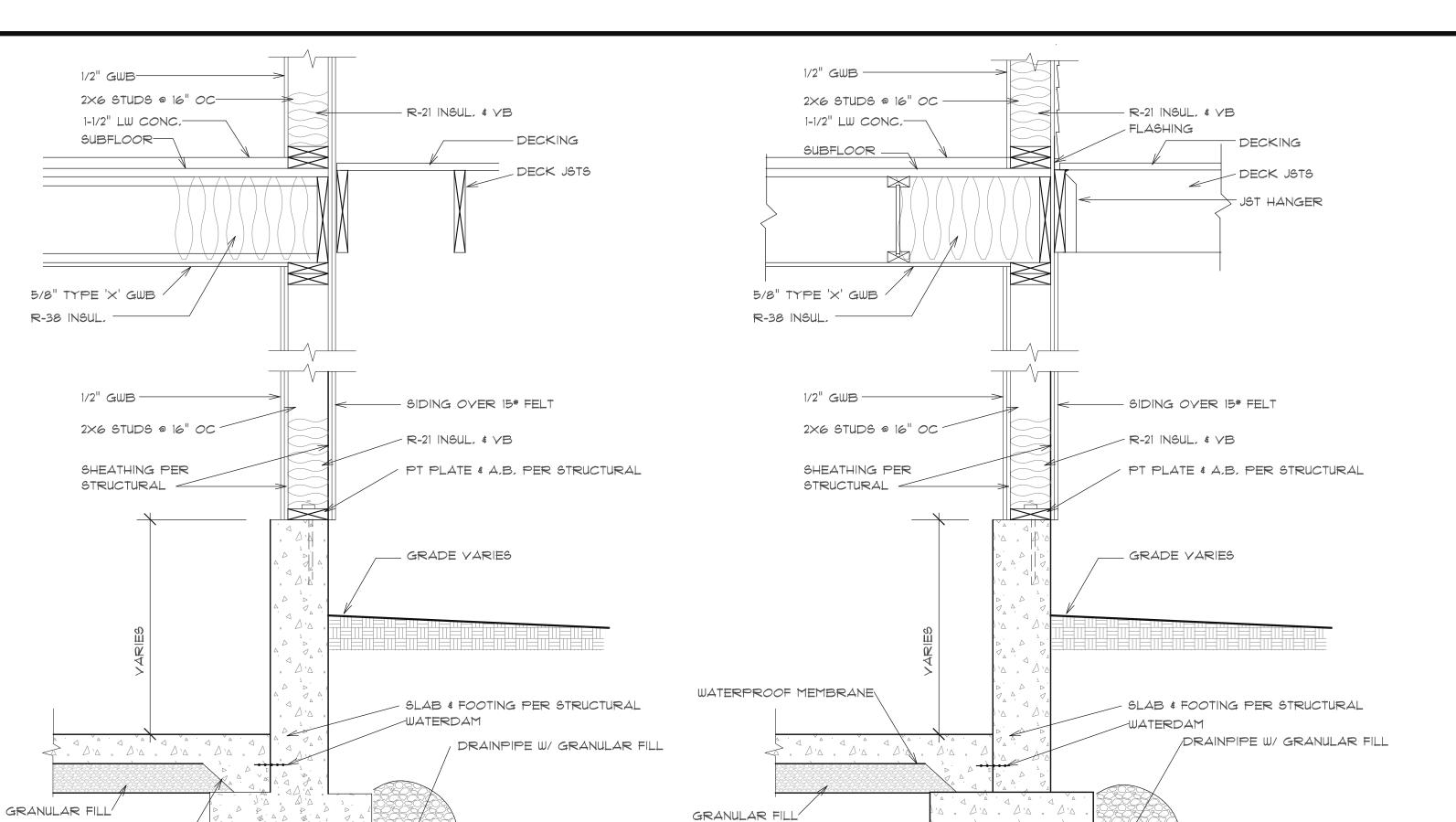
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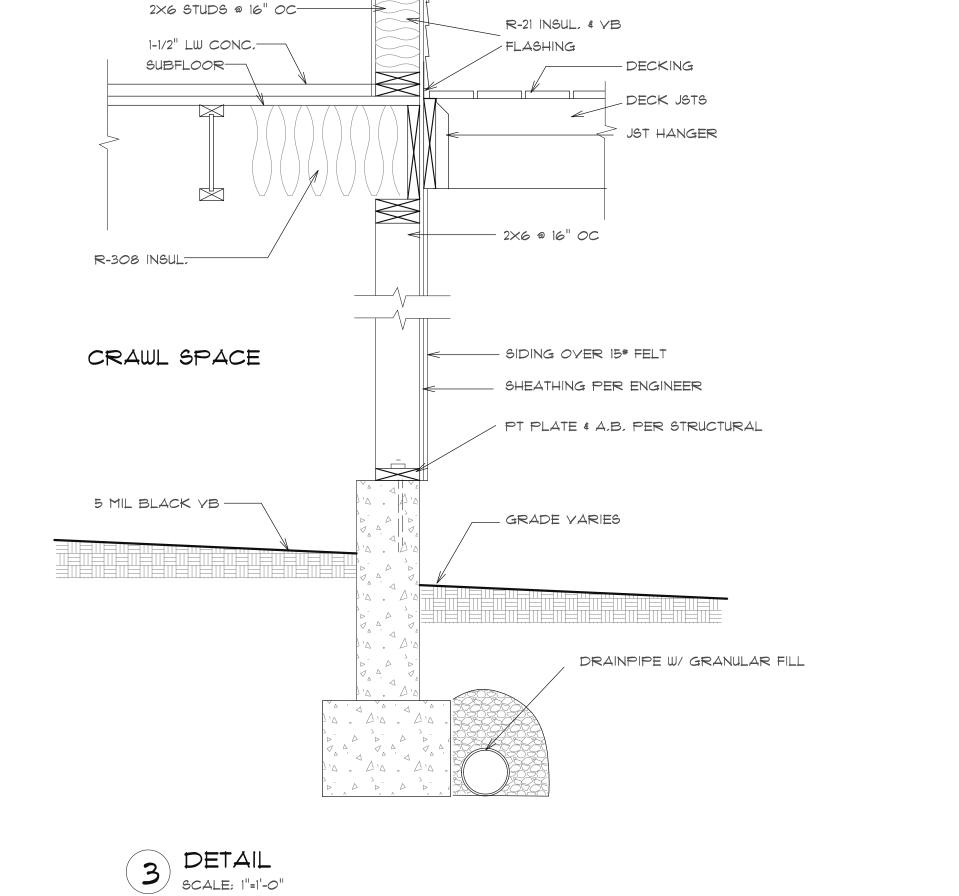
MI Treehouse, LLC, 5631 EAST MERCER WAY MERCER ISLAND, WA.

DETAILS

DATE 4-13-2022 10-5-2022 PROJECT NO.

901 SHEET NO.

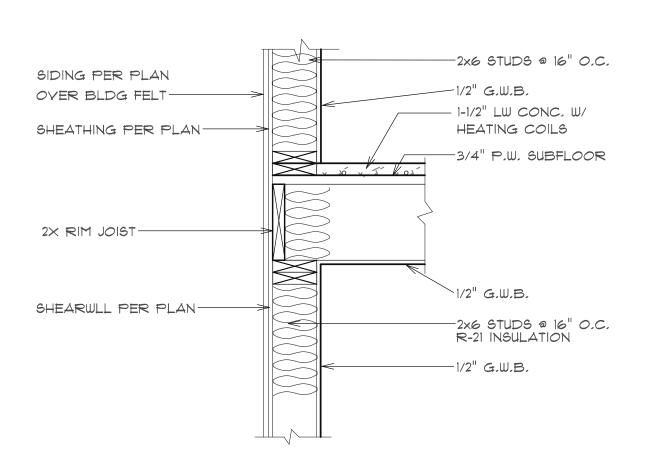




1/2" GWB —

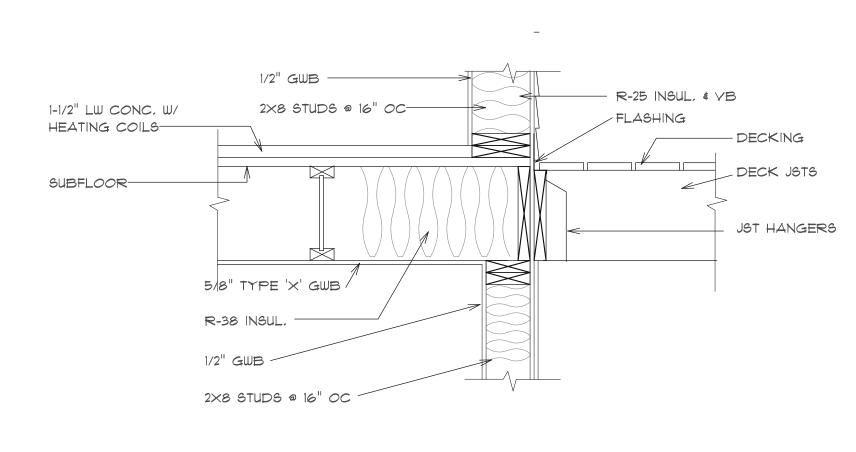
DETAIL SCALE: 1"=1'-0"

WATERPROOF MEMBRANE

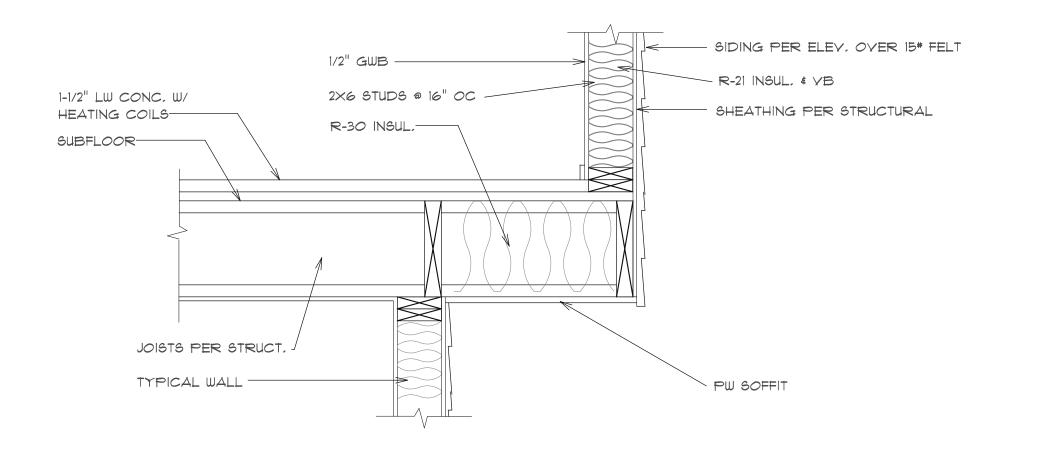




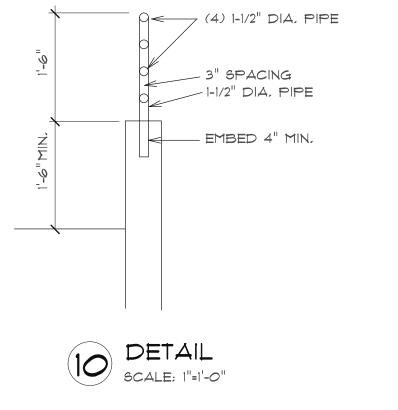




DETAIL SCALE: 1"=1'-0"



9 DETAIL SCALE: 1"=1'-0"



4 DETAIL SCALE: 1/2"=1'-0"

SUPPORT FOR FUTURE LIFT

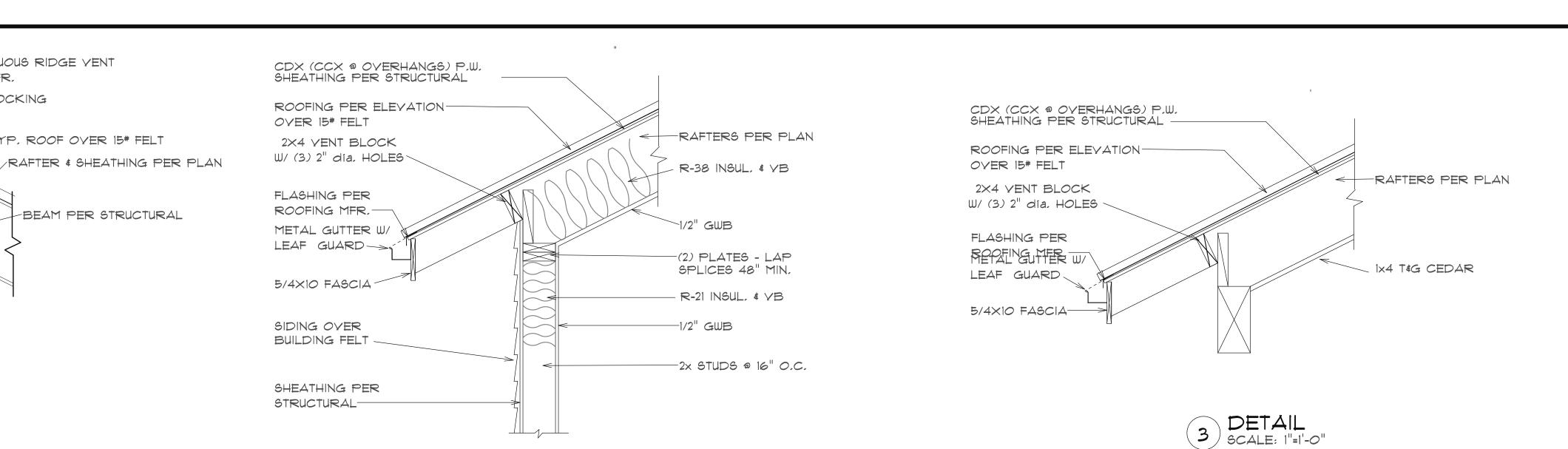


- Tr 5637 MER

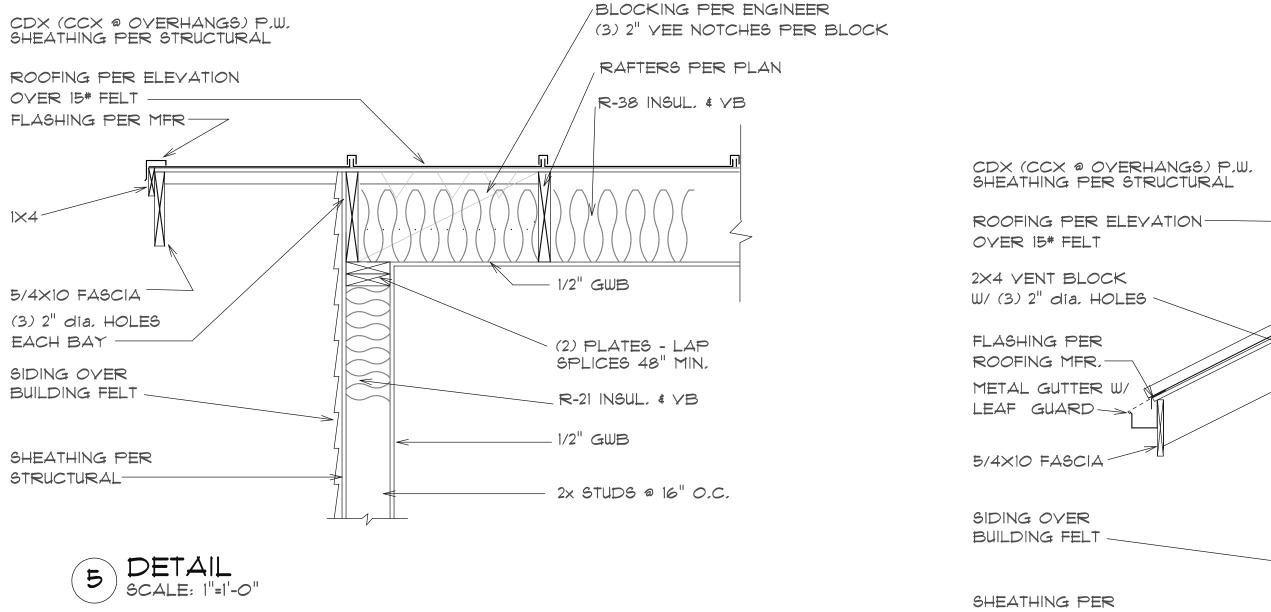
DATE 4-13-2*0*22 10-5-2022

PROJECT NO. 001

SHEET NO. A-5.3



2 DETAIL SCALE: 1"=1'-0"



CONTINUOUS RIDGE YENT

TYP, ROOF OVER 15# FELT

-BEAM PER STRUCTURAL

PER MFR.

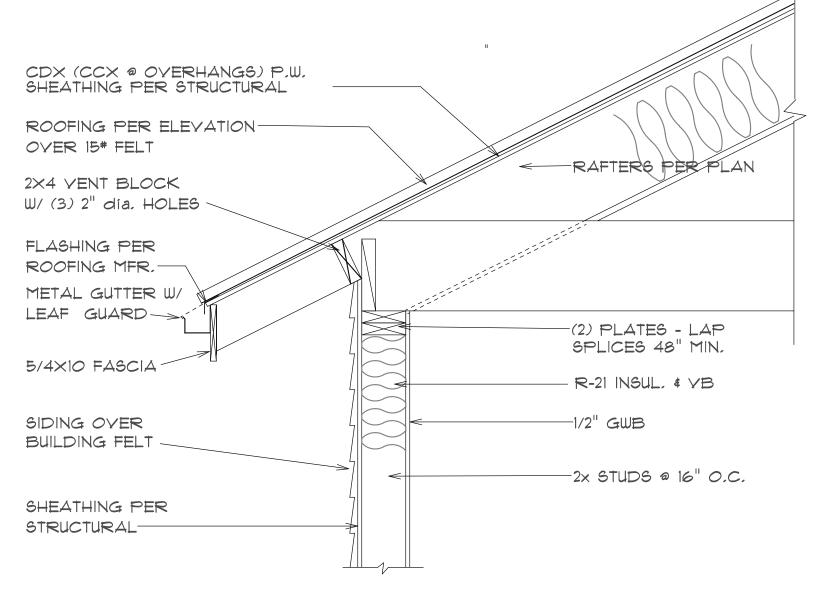
R-38 INSUL, & YB

1/2" GWB

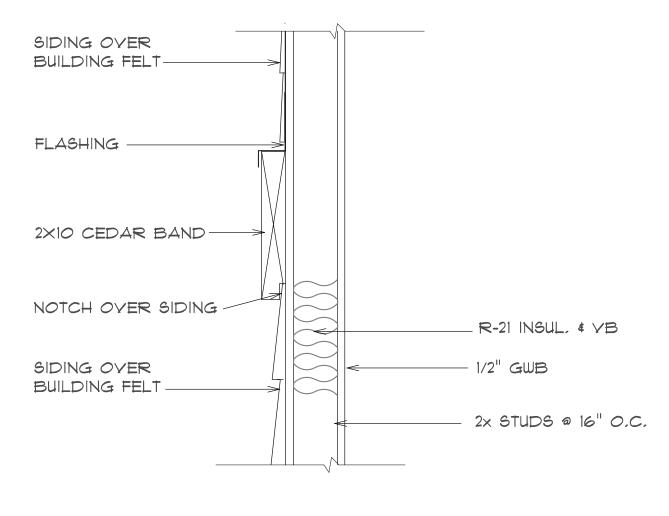
DETAIL

SCALE: 1"=1'-0"

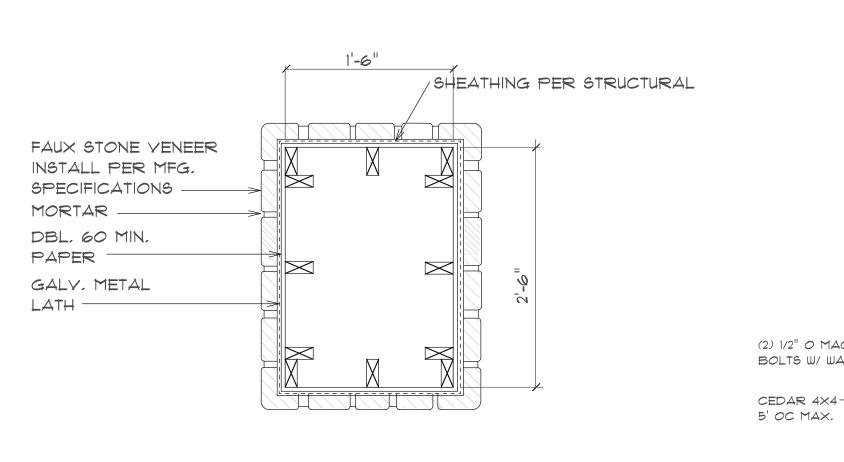
/2X10 BLOCKING

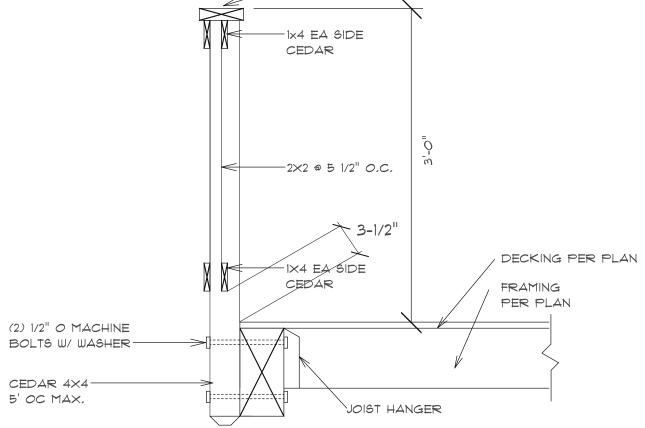


6 DETAIL SCALE: 1"=1'-0"



S DETAIL SCALE: 1"=1'-0"

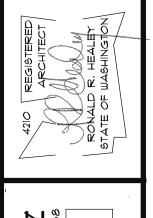




DECK RAILING

-2x6 CEDAR

9 DETAIL SCALE: 1"=1'-0"

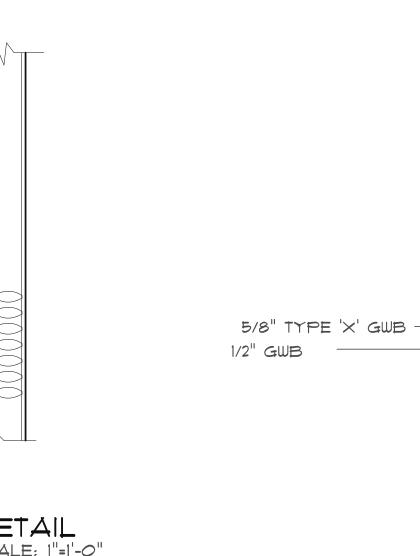


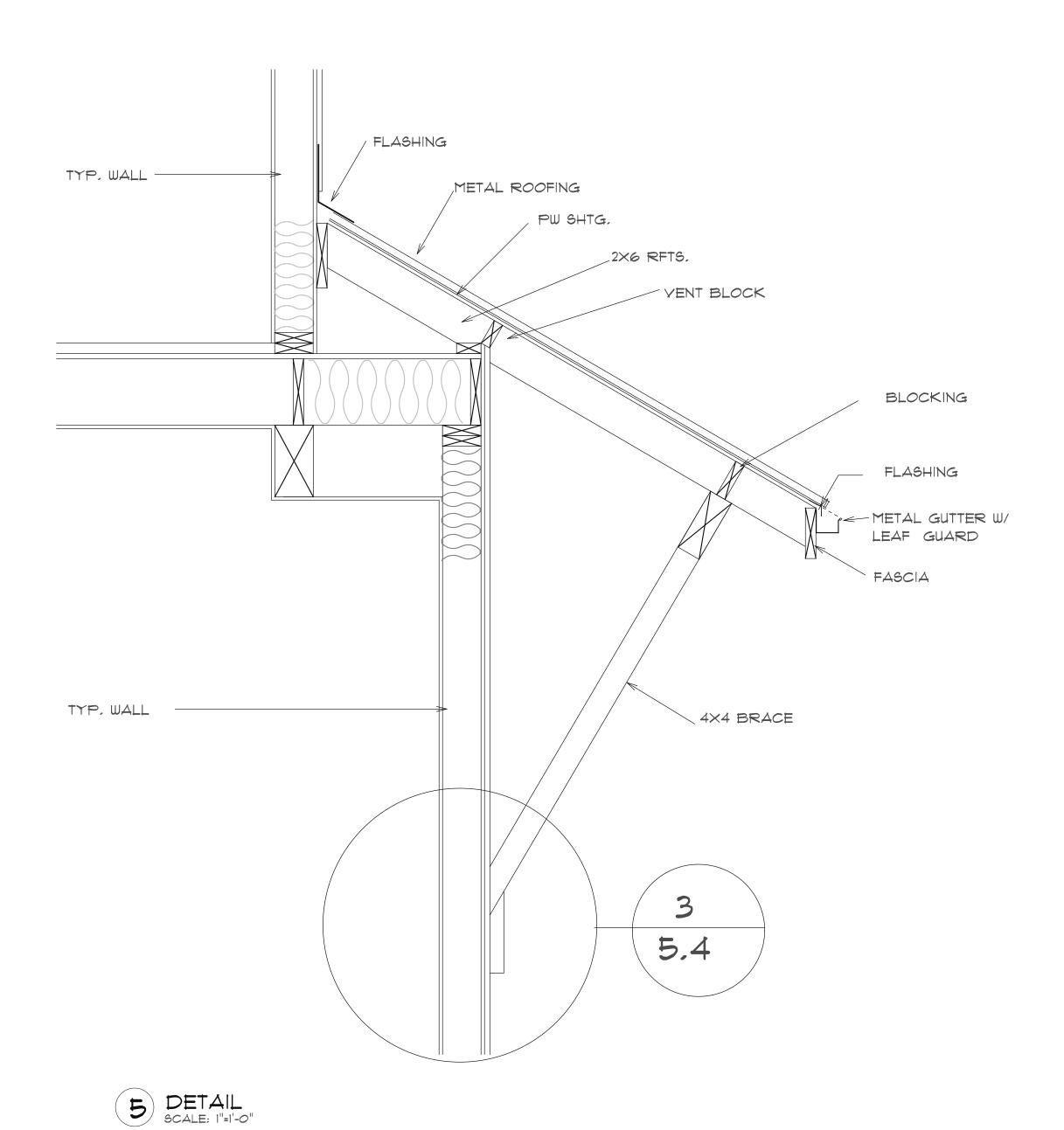
DATE 4-13-2022 10-5-2022

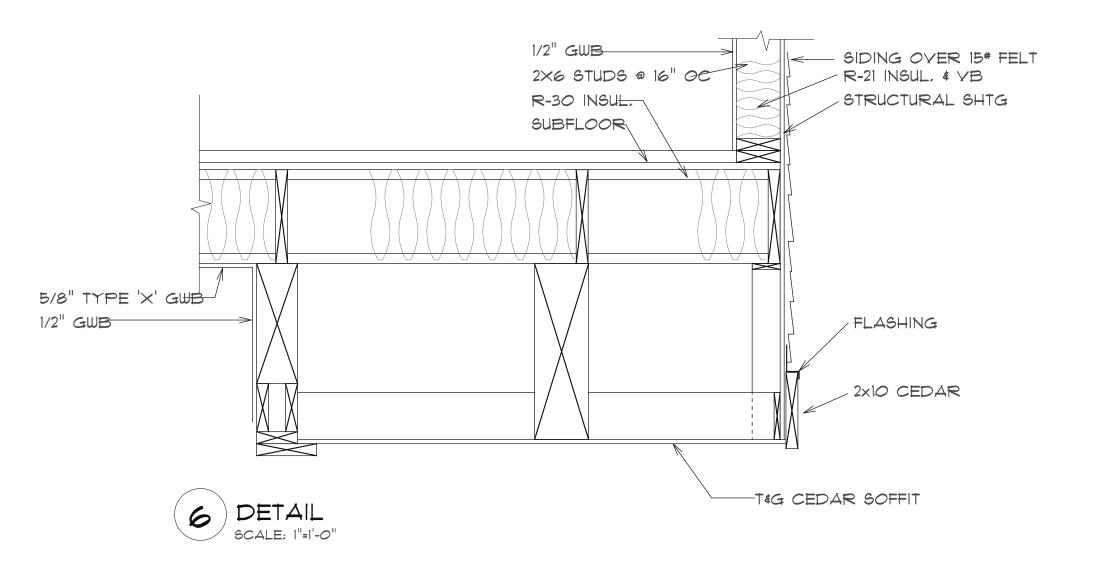
PROJECT NO. 001

4-5,4

ROOF PER MFR-FLASHING ROOF PER EDGE MFR-METAL ROOFING TYP, WALL 1X4 CEDAR-PW SHTG. 5/4×12 FASCIA — 4X4 CEDAR / 2×6 RFTS. BEAM CAP FLASHING -YENT BLOCK BEAM - FLASHING METAL GUTTER W/ LEAF GUARD FASCIA DETAIL SCALE: 1"=1'-0" 3 DETAIL SCALE: 1"=1'-0" DETAIL SCALE: 1"=1'-0"







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

2×6 STUDS @ 16" OC -

R-30 INSUL.

1-1/2" LW CONC.-

SUBFLOOR -

SIDING OVER 15# FELT R-21 INSUL, \$ VB

STRUCTURAL SHTG

/ FLASHING

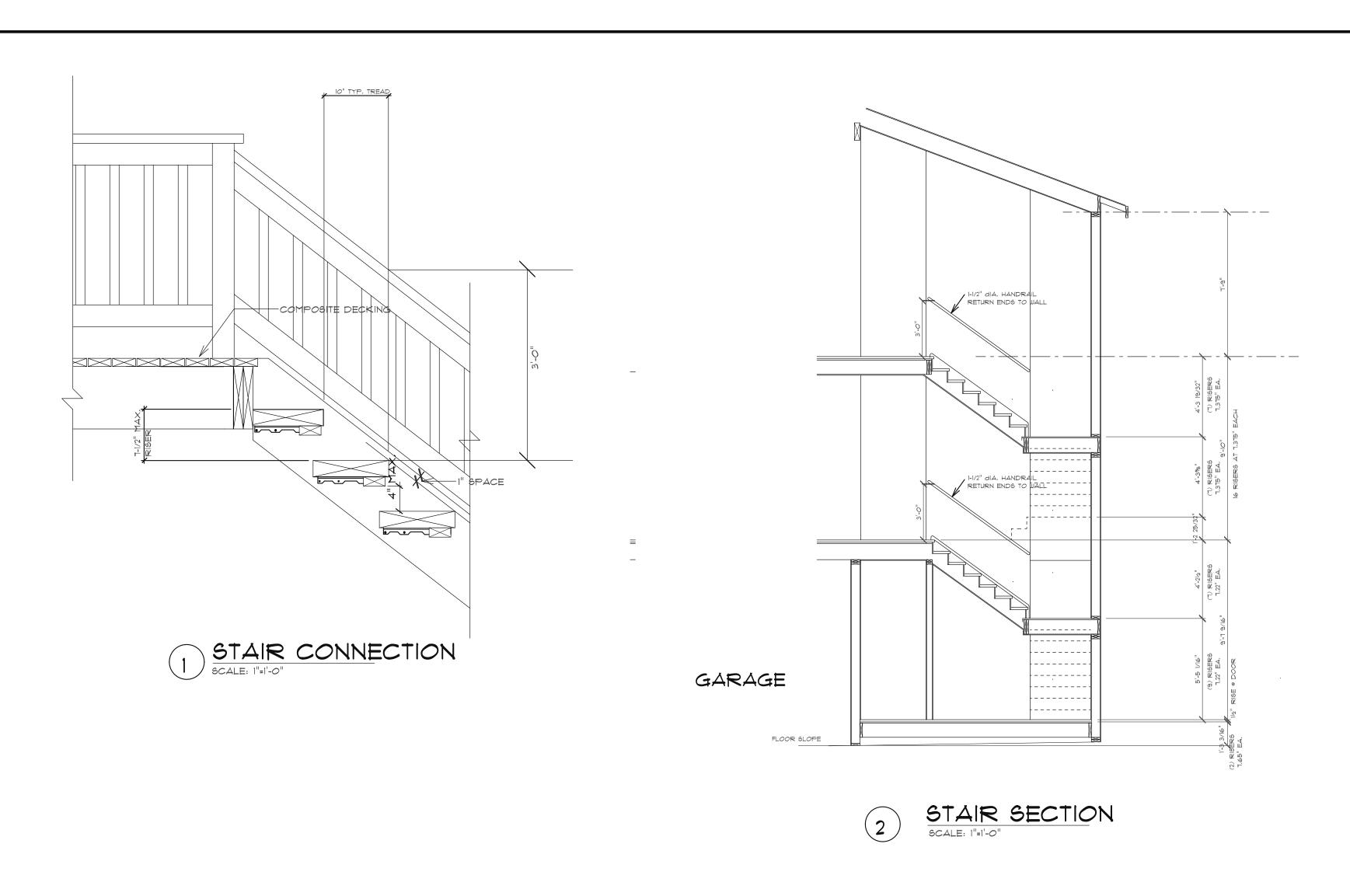
2×10 CEDAR

TIG CEDAR SOFFIT

STAIRS SECTION & DETAILS DATE 4-13-2022 10-5-2022

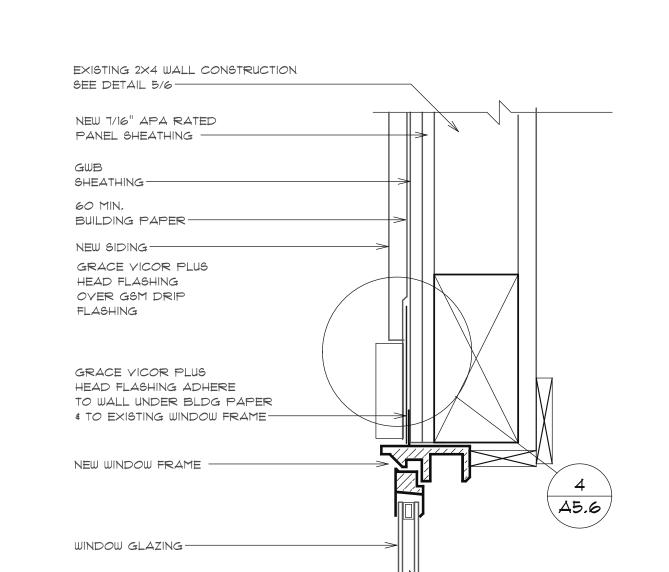
PROJECT NO.

SHEET NO.



PROJECT NO.

SHEET NO.





GRACE VICOR PLUS FLASHING SEAL TO WINDOW FRAME & SHEATHING INSTALL OVER JAMB FLASHING INSTALL BLDG PAPER OVER FLASHING

GRACE VICOR PLUS FLASHING

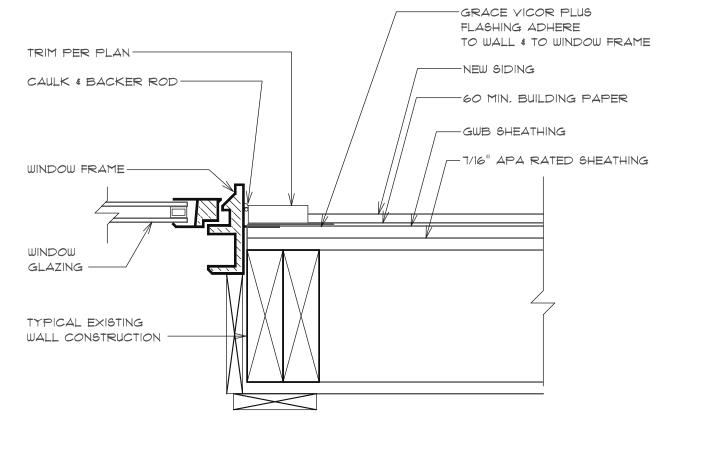
INSTALL OVER SILL FLASHING

SEAL TO WINDOW FRAME & SHEATHING

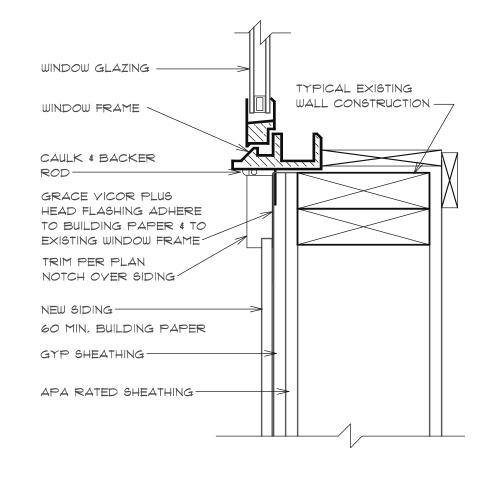
INSTALL BLDG PAPER OVER FLASHING

A5.6

GRACE VICOR PLUS FLASHING SEAL TO WINDOW FRAME & INSTALL OVER BLDG PAPER

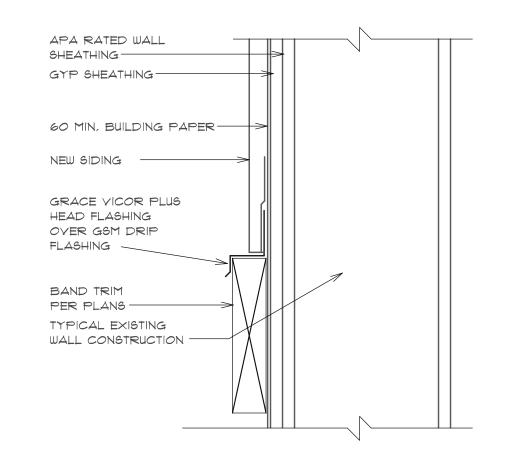


DETAIL #2SCALE 3" = 1'-0"



DETAIL #3

6CALE 3" = 1'-0"



3 45.6

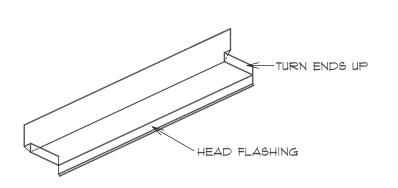
WINDOW FLASHING FOR

ALL WINDOWS

DETAIL #4

SCALE 3" = 1'-0"

2 A5.6

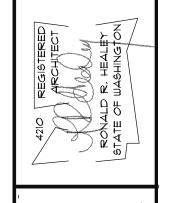


DETAIL #5

SCALE 1" = 1'-0"

WINDOW SCHEDULE

LOCATION TYPE QTY SIZE U-FACTOR AREA	
KITCHEN SLD 1 6040 0.28 24 DINING SH 3 2650 0.28 31.5 DINING SH 3 3050 0.28 45 FAMILY SH 2 0.28 0.28 42 FAMILY SGD 1 6080 0.28 48 FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *1 SGD 1 6068 0.28 42 BDRM *1 SH 2 2650 0.28 25 BATH *1 SLD 1 4040 0.28 16 BDRM *2 SGD 1 6068 0.28 42 BDRM *2 SGD 1 6068 0.28 42	
DINING SH 3 2650 0.28 31.5 DINING SH 3 3050 0.28 45 FAMILY SH 2 0.28 0.28 42 FAMILY SGD 1 6080 0.28 48 FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *I SGD 1 6068 0.28 42 BDRM *I SH 2 2650 0.28 25 BDRM *2 SGD 1 6068 0.28 42 BDRM *2 SH 2 2650 0.28 25 FALL PREVENTION	
DINING \$H 3 3050 0.28 45 FAMILY \$H 2 0.28 0.28 42 FAMILY \$GD 1 6080 0.28 48 FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *I \$GD 1 6068 0.28 42 BDRM *I \$H 2 2650 0.28 25 BATH *I \$GD 1 4040 0.28 16 BDRM *2 \$GD 1 6068 0.28 42 BDRM *2 \$H 2 2650 0.28 25 FALL PREVENTION FALL PREVENTION FALL PREVENTION	
FAMILY \$H 2 0.28 42 FAMILY \$GD 1 6080 0.28 48 FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *I \$GD 1 6068 0.28 42 BDRM *I \$H 2 2650 0.28 25 BATH *I \$GD 1 4040 0.28 16 BDRM *2 \$GD 1 6068 0.28 42 BDRM *2 \$H 2 2650 0.28 25 FALL PREVENTION	
FAMILY \$GD 1 6080 0.28 48 FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *I \$GD 1 6068 0.28 42 BDRM *I \$H 2 2650 0.28 25 BATH *I \$LD 1 4040 0.28 16 BDRM *2 \$GD 1 6068 0.28 42 BDRM *2 \$H 2 2650 0.28 25 FALL PREVENTION	
FAMILY PIC 1 6060 0.28 36 FAMILY PIC 2 3660 0.28 42 BDRM *I \$GD 1 6068 0.28 42 BDRM *I \$H 2 2650 0.28 25 BATH *I \$LD 1 4040 0.28 16 BDRM *2 \$GD 1 6068 0.28 42 BDRM *2 \$H 2 2650 0.28 25 FALL PREVENTION	
FAMILY PIC 2 3660 0.28 42 BDRM *I \$GD 1 6068 0.28 42 BDRM *I \$H 2 2650 0.28 25 BATH *I \$LD 1 4040 0.28 16 BDRM *2 \$GD 1 6068 0.28 42 BDRM *2 \$H \$H 2 2650 0.28 25 FALL PREVENTION	
BDRM *I SGD I 6068 0.28 42 BDRM *I SH 2 2650 0.28 25 BATH *I SLD I 4040 0.28 I6 BDRM *2 SGD I 6068 0.28 42 BDRM *2 SH 2 2650 0.28 25 FALL PREVENTION	
BDRM *1 SH 2 2650 0.28 25 BATH *1 SLD 1 4040 0.28 16 BDRM *2 SGD 1 6068 0.28 42 BDRM *2 SH 2 2650 0.28 25 FALL PREVENTION	
BATH *1 SLD 1 4040 0.28 16 BDRM *2 SGD 1 6068 0.28 42 BDRM *2 SH 2 2650 0.28 25 FALL PREVENTION	
BDRM #2 SGD 1 6068 0.28 42 BDRM #2 SH 2 2650 0.28 25 FALL PREVENTION	
BDRM #2 SH 2 2650 0.28 25 FALL PREVENTION	
BATH #2 SLD 1 4040 0.28 16	'ION
LOFT SH 2 2650 0.28 25 FALL PREVENTION	10N
LOFT SH 1 3050 0.28 15 FALL PREVENTION	10N
STAIRS PIC 3 2090 0.28 54	
BATH *3 PIC 2 1640 0.28 12	
BDRM *3 SGD 1 6040 0.28 24	
GARAGE SLD 2 4040 NA NA	

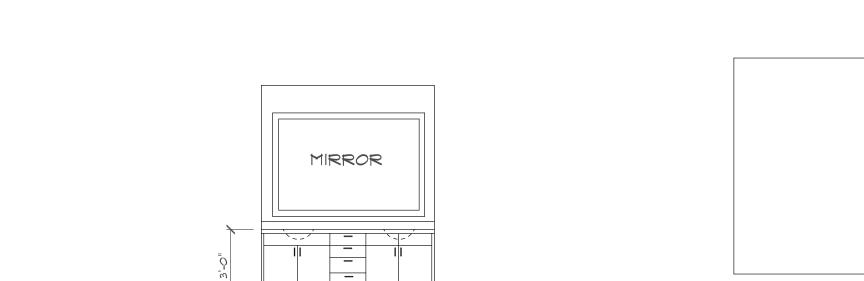


MI Trechouse, 5631 EAST MERCER U MERCER ISLAND, WA

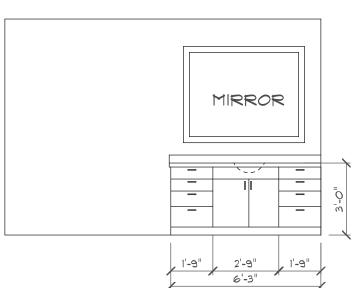
CABINETS DATE 4-13-2022 10-5-2022

PROJECT NO. 001

SHEET NO. A-6.1







FUTURE LIFT

TOWER

LIFT

TOWER

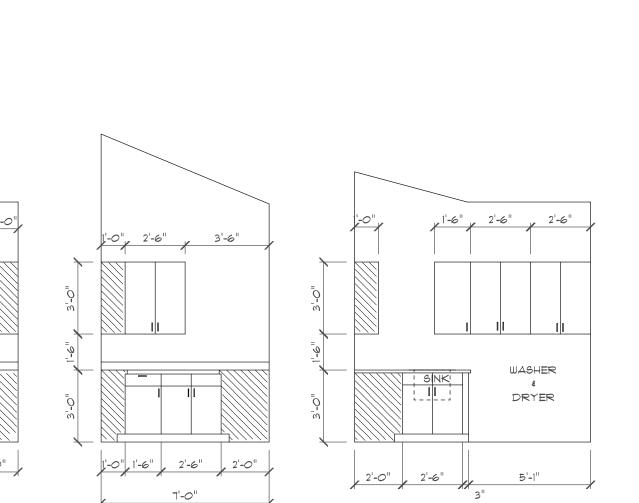
5) FAMILY ROOM

STAIRS

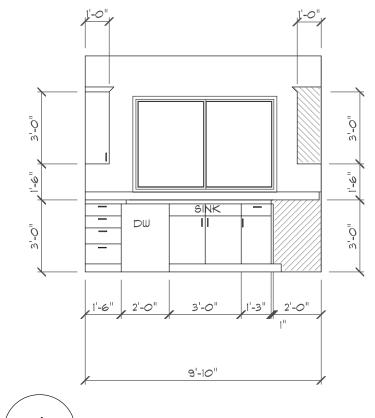
STAIRS FUTURE

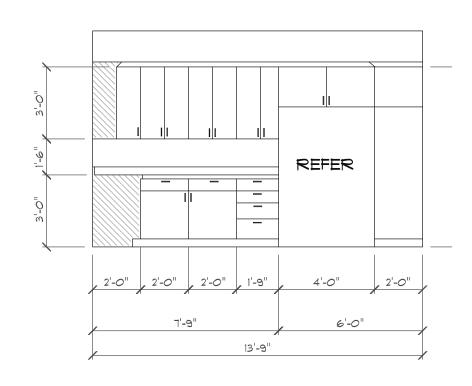
ENTRY

BATH CABINETS BDRM #3



6 LAUNDRY ROOM





1'-9" 2'-6" 1'-9"

MIRROR

1'-3" 2'-6" 1'-3"

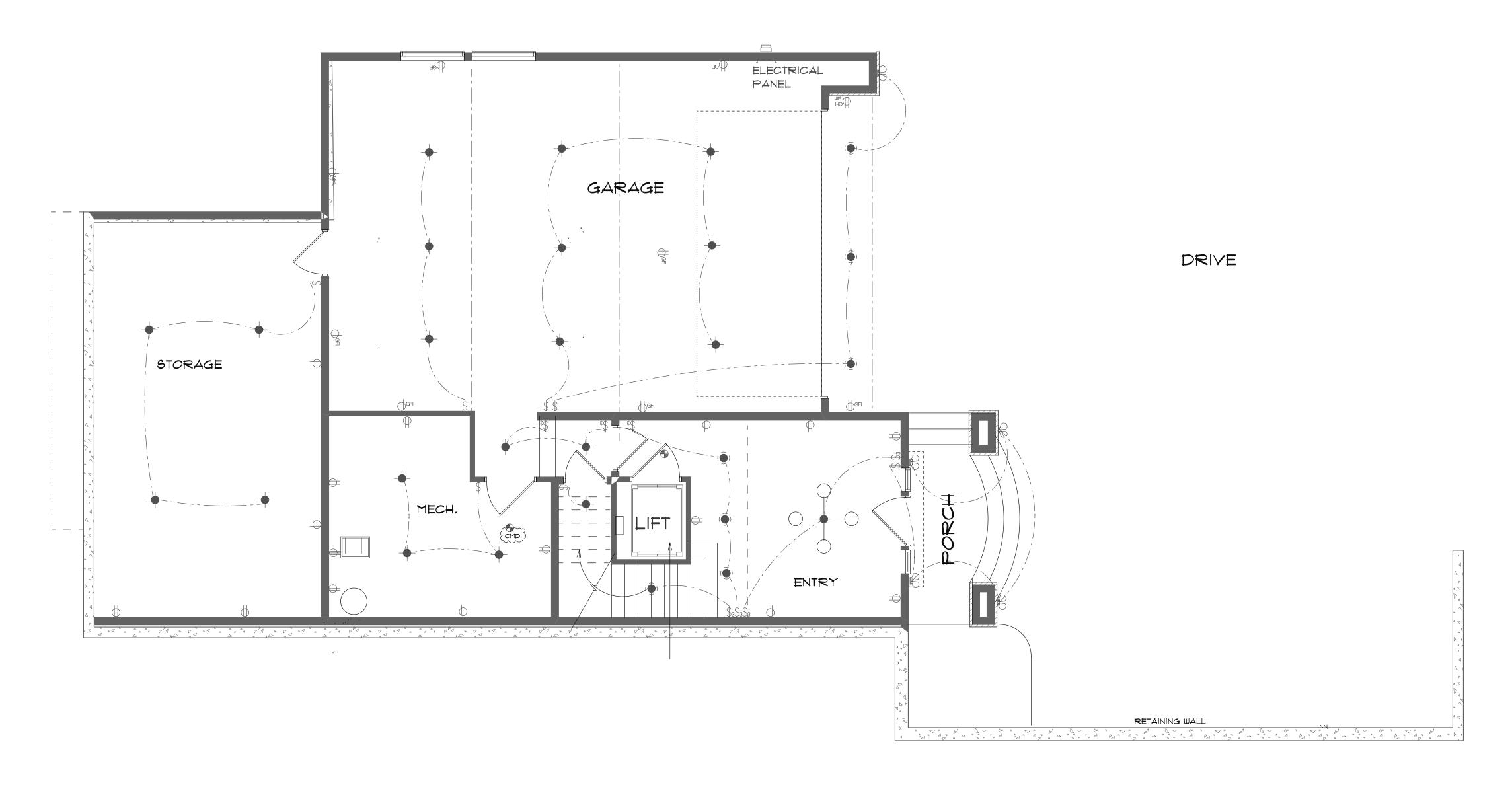
POWDER ROOM

2'-5" 5'-0" 2'-5"

4-13-2022 10-5-2022 PROJECT NO.

SHEET NO.

ELECTRICAL METER

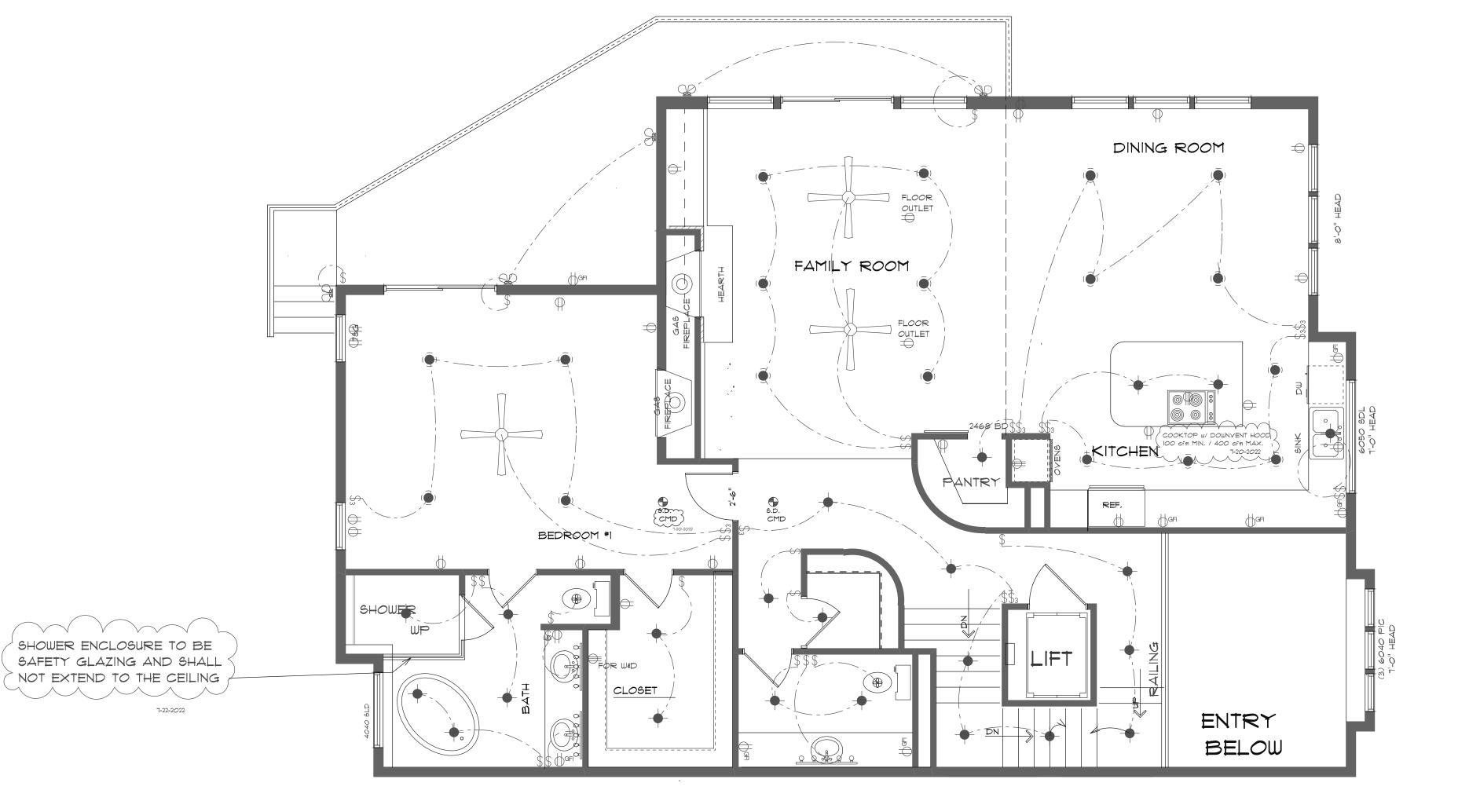


ELECTRICAL	SYMBOL
110 v direct connection	φ
Outlet 110 gfi wp	
Recessed can	()
Recessed directional	ф
Surface mount	
Wall Mount Flood	Q.D
emoke detector ¢ carbon monoxide det	CMD
Wall mount	-
fan	₩
outlet	Ф
220~	•
outlet gfi	∂ GFI
smoke detector	•
split receptacle	•
ewitch	\$
switch 3 way	\$3

PROJECT NO.

001 SHEET NO.

A6.3



	ELECTRICAL	SYMBOL
	110 v direct connection	Φ
	Outlet 110 gfi wp	
	Recessed can	()
	Recessed directional	ф
	Surface mount	
	Wall Mount Flood	Q.P
	smoke detector \$ carbon monoxide det	CMD •
/	Wall mount	-
	Fan 50 CFM min, 3-20-202	2
	outlet	Ф
	220∨	•
	outlet gfi	⊕ GFI
	smoke detector	•
	split receptacle	
	switch	\$
	switch 3 way	\$3

110Y, SMOKE DETECTOR W/ BATTERY BACKUP & INTERCONNECTED ALARMS WHOLE HOUSE FAN - 100 CFM MIN, YTO

110Y, COMBINATION SMOKE DETECTOR 4 CARBON MONOXIDE DETECTOR

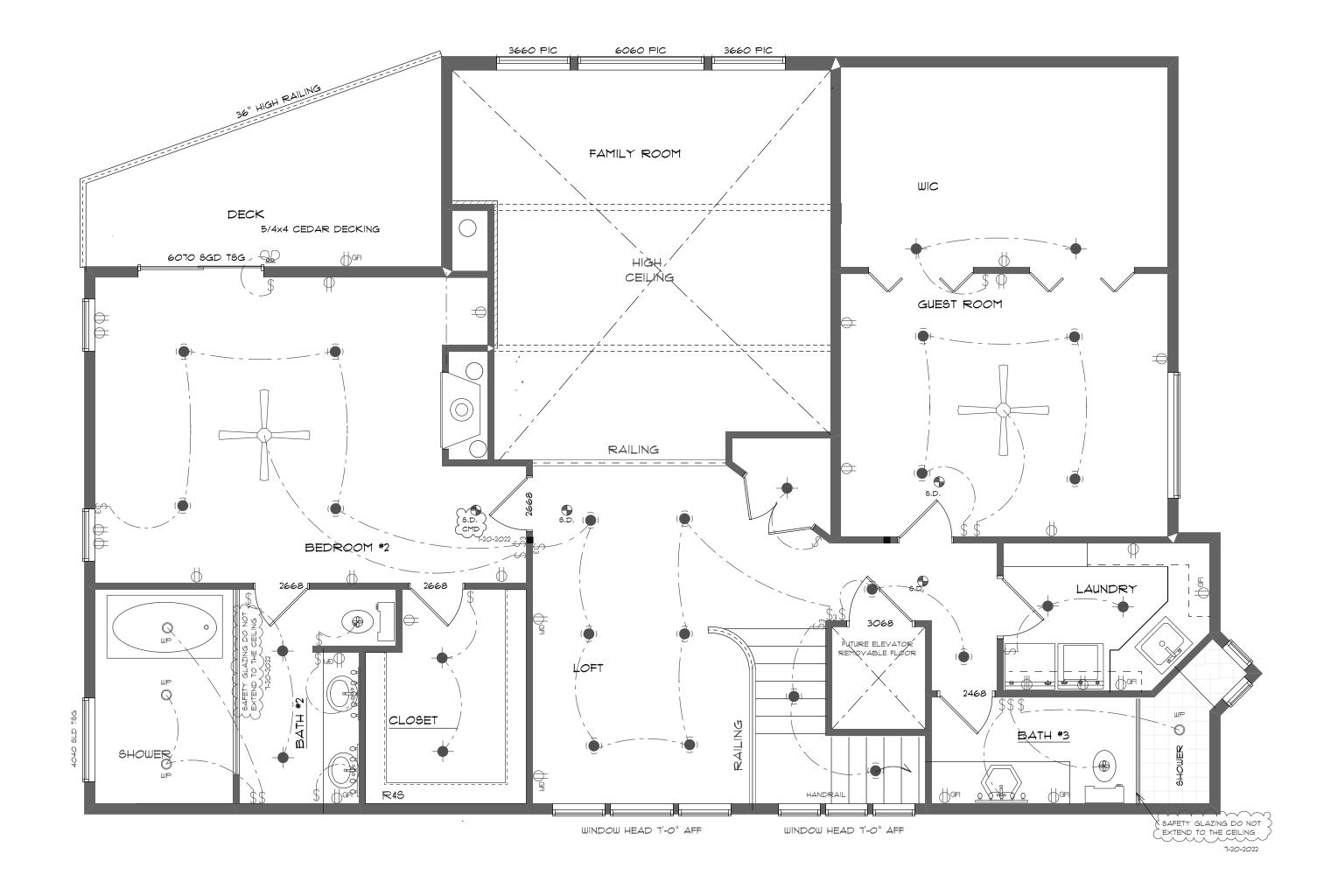
· ·

DATE 4-13-2022 10-5-2022

PROJECT NO.

OO1 SHEET NO.

A6.4



ELECTRICAL	SYMBOL
110 v direct connection	Ф
Outlet 110 gfi wp	GH GH
Recessed can	()
Recessed directional	ф
Surface mount	
Wall Mount Flood	QD
smoke detector # carbon monoxide det	CMD
Wall mount	+
fan	₩
outlet	Ф
220∨	•
outlet gfi	 GFI
smoke detector	•
split receptacle	•
ewitch	\$
ewitch 3 way	\$3

110V. SMOKE DETECTOR W/ BATTERY BACKUP & INTERCONNECTED ALARMS WHOLE HOUSE FAN - 100 CFM MIN, VTO

IIOV, COMBINATION SMOKE DETECTOR & CARBON MONOXIDE DETECTOR

STRUCTURAL NOTES

DESIGN IS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE (I.B.C.) AS AMENDED BY THE LOCAL BUILDING DEPARTMENT.

LIVE LOADS:

FLOOR.. 40 PSF

(ASCE 7-10 Ch. 26-27)

BASIC WIND SPEED.110 MPH EXPOSURE CATEGORY, D (DIRECTIONAL PROCEDURE) $K_{zt} = 1.00$

 $.S_S = 1.336$ (ASCE 7-10 Ch. 12.14) $S_{DS} = 0.891$ (SIMPLIFIED METHOD)

SEISMIC DESIGN CATEGORY, D SITE CLASS, D SITE COEFFICIENT, $F_a = 1.0$

BEAR ALL FOUNDATION ON 4" PIN PILES PER GEO GROUP NORTHWEST, INC. REPORT #G-3837 DATED: MAR. 12, 2016. ALL EXTERIOR FOOTINGS SHALL EXTEND A MINIMUM OF 1'-6" BELOW ADJACENT EXTERIOR FINISHED GRADE.

CAST-IN-PLACE-CONCRETE:

 F'_{c} = 3000 PSI @ 28 DAYS. MINIMUM 5½ SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND A MAXIMUM OF 63/4 GALLONS OF WATER PER 94# SACK OF CEMENT. IN ADDITION, TO BASEMENT WALLS, AND FOUNDATION WALLS, ALL EXTERIOR CONCRETE EXPOSED TO WEATHER AND GARAGE SLABS SHALL BE AIR ENTRAINED WITH AN AIR-ENTRAINING AGENT TO 5%-7% BY VOLUME OF CONCRETE. MAXIMUM SIZED AGGREGATE SHALL BE 1". MAXIMUM SLUMP IS 5" OR LESS. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. ALL REINFORCED STEEL DOWELS, ANCHOR BOLTS AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO POURING CONCRETE. ANCHOR BOLTS FOR SILL PLATES TO FOUNDATION WALLS SHALL BE A MINIMUM OF 58" WITH A MINIMUM OF 7" EMBEDMENT INTO CONCRETE AND A MAXIMUM SPACING OF 48" O.C. MINIMUM OF 2 BOLTS PER SILL PLATE. ONE BOLT TO BE PLACED WITHIN 12" OF EACH END OF THE SILL PLATE.

ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION BY CRSI. DEFORMED REINFORCING STEEL BARS SHALL CONFORM TO ASTM GRADE 60. ALL REINFORCING BAR BENDS SHALL BE MADE COLD, WITH A MINIMUM RADIUS OF 6 BAR DIAMETERS. CORNER BARS (2'-0" BEND) SHALL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. LAP ALL BARS A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE. UNLESS NOTED OTHERWISE ON THE DRAWINGS REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST EARTH... CONCRETE EXPOSED TO EARTH OR WEATHER #6 THRU #18 BARS... #5 BAR AND SMALLER. CONCRÉTE NOT EXPOSED TO EARTH OR WEATHER #11 BAR AND SMALLER.. SLAB ÖN GRADE (FROM THE SURFACE)..

WWF SHALL CONFORM TO ASTM A-185. WWF SHALL BE LAPPED ONE CROSSWIRE PLUS 2" (i.e. 8" FOR 6X6 MESH). WWF SHALL BE CHAIRED IN POSITION WITH A MAXIMUM CHAIR SPACING OF 4'

STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS (14th EDITION). STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM DESIGNATION A992 UNLESS NOTED OTHERWISE. SQUARE AND RECTANGULAR STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM DESIGNATION A500, GRADE B. STEEL PIPE SHALL CONFORM TO ASTM DESIGNATION A53, TYPE E OR S, GRADE B (F_{Y} = 46,000 PSI). ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS AT MEMBERS AND CONNECTIONS OF THE SEISMIC-FORCE-RESISTING SYSTEM SHALL BE MADE WITH A FILLER MATERIAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT-0 DEGREES F, AS DETERMINED BY THE APPLICABLE AWS AS CLASSIFICATION TEST METHOD. ALL COMPLETE JOINT PENETRATION GROOVE WELDS AT DEMAND CRITICAL WELDS SHALL BE MADE WITH A FILLER MATERIAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT-0 DEGREES F, AS DETERMINED BY THE APPLICABLE AWS A5 CLASSIFICATION TEST METHOD, AND 40 FT-LBS AT-70 DEGREES F, AS DETERMINED BY SECTION A3.4A. FILLER METAL PRODUCING WELDS ARE REQUIRED TO MEET THE MINIMUM REQUIREMENTS FOR CHARPY V-NOTCH TOUGHNESS AS SPECIFIED IN THE WELDING PROCEDURE SPECIFICATIONS. ATTACHMENTS ARE NOT PERMITTED WITHIN THE PROTECTED ZONE AND DISCONTINUITIES SHALL BE REPAIRED IN ACCORDANCE WITH SECTION D1.3 OF AISC 41-10. ALL STEEL MEMBERS SHALL BE GIVEN ONE SHOP COAT OF APPROVED PRIMER. SURFACES TO BE EMBEDDED IN CONCRETE, FIREPROOFED OR FIELD WELDED SHALL NOT BE PRIMED. ALL BOLTS SHALL BE A325 UNLESS NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE BE ASTM A307.

SPECIAL INSPECTIONS PER IBC CHAPTERS 1704, AND 1705 SHALL BE PREFORMED ON

THE FOLLOWING BUILDING COMPONENTS: 1. PERIODIC GEOTECNICAL INSPECTIONS FOR VERIFICATION AND COMPLIANCE TO SOILS REPORT ON SITE EXCAVATION AND GRADING. OVER EXCAVATION AND PLACEMENT OF STRUCTURAL FILL, CONSTRUCTION DEWATERING, PER PAGE 3 OF THE GEOTECHNICAL REPORT, PLACEMENT OF STRUCTURAL FILL AND SOIL COMPACTION, AND VERIFICATION OF SOIL-BEARING CAPACITY. 2. CONTINUOUS INSPECTION FOR INSTALLATION OF CONCRETE EXPANSION, ADHESIVE, AND SCREW ANCHORS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

5. PERIODIC INSPECTION ON FABRICATION, WELDING, HIGH STRENGTH BOLTNG, AND INSTALLATION OF STRUCTURAL STEEL OTHER THAN PREFABRICATED** STRUCTURAL STEEL MEMBERS TO VERIFY MEMBER SIZE, GRADE, WELDS, AND INSTALLATION PER PLAN. '. CONTINUOUS INSPECTION ON WELDING OF STRUCTURAL STEEL MEMBERS FOR OTHER THAN SINGLE-PASS FILLET WELDS (MAXIMUM 5/16-INCH).

** SPECIAL INSPECTION IS REQUIRED ON THE PREMISES FOR THE FABRICATION OF ALL PREFABRICATED STEEL ELEMENTS, INCLUDING BUT NOT LIMITED, TO STEEL STAIRS, AND STEEL MOMENT FRAMES, UNLESS THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTION.

STRUCTURAL TESTING: STRUCTURAL TESTING BY QUALIFIED TESTING FACILITIES SHALL BE CONDUCTED ON THE FOLLOWING BUILDING COMPONENTS: 1. NON DESTRUCTIVE TESTING OF THE COMPLETE JOINT PENETRATION AND PARTIAL JOINT PENETRATION GROOVE-WELDED JOINTS ON THE STEEL ENTRY STAIRS.

SHOP DRAWINGS, REPORTS, CERTIFICATES AND OTHER DOCUMENTS RELATING TO SPECIAL STRUCTURAL ELEMENTS, INSPECTIONS, AND TESTS SHOULD BE SUBMITTED TO THE CONTRACTOR, THE CITY OF BELLEVUE, AND THE ENGINEER OF RECORD. THE CERTIFICATES OF COMPLIANCE ARE REQUIRED TO STATE THAT THE WORK WAS PREFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. CERTIFICATES SHALL BE SUBMITTED ON THE FOLLOWING BUILDING COMPONENTS: 1. SHOP DRAWINGS FOR PREFABRICATED METAL-PLATE-CONNECTED WOOD TRUSSES,

AND TJI ROOF FRAMING. 2. CERTIFICATES OF COMPLIANCE FROM STEEL FABRICATORS ON ALL PREFABRICATED STEEL MEMBERS AT THE COMPLETION OF FABRICATION. INCLUDING BUT NOT LIMITED TO, BEAMS AND COLUMNS, PREFABRICATED STAIR SYSTEMS,

3. SUBMITTAL OF ALL WELDING PROCEDURE SPECIFICATIONS VERIFYING THAT ALL WELDS WERE MADE PER APPROVED CONSTRUCTION DOCUMENTS. INCLUDING BUT NOT LIMITED

TO, ALL BEAMS, AND COLUMNS, MEMBERS AND CONNECTIONS. 4. WABO CERTIFICATE INDICATING STEEL FABRICATION SHOP IS QUALIFIED TO WELD

PRESSURE TREATED WOOD:
ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, EARTH, OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED WOOD IN ACCORDANCE WITH AWPA U1 AND M4 STANDARDS.

ALL MISCELLANEOUS HANGERS AND HARDWARE TO BE SIMPSON OR APPROVED EQUAL.

ALL HANGERS SHALL BE FASTENED TO WOOD WITH PROPER NAILS AND ALL NAIL HOLES FILLED. ALL NAILS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE BE HOT DIPPED GALVANIZED PER ASTM STANDARD 153 AND I.B.C. SECTION 2304.9.5. ALL METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE ZMAX (HDG PER ASTM A653. CLASS G-185) OR EQUAL.

FLOOR SHEATHING:

FLOOR SHEATHING SHALL BE 11/2" TONGUE AND GROOVE, A.P.A. RATED SHEATHING WITH A SPAN RATING OF 48/36, WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. UNLESS NOTED OTHERWISE, NAIL WITH 10d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES, AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

ROOF SHEATHING:

ROOF SHEATHING SHALL BE 3/4" A.P.A. RATED PLYWOOD OR 3/4" OSB A.P.A. RATED SHEATHING WITH A SPAN RATING OF 32/16, WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. UNLESS NOTED OTHERWISE, NAIL WITH 8d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES, AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

WALL SHEATHING SHALL BE $\frac{1}{3}$ " A.P.A. RATED PLYWOOD OR $\frac{1}{16}$ " OSB A.P.A. RATED SHEATHING WITH A SPAN RATING OF 24/0. PANEL END JOINTS SHALL OCCUR AT SUPPORTS. NAIL ALL PANEL EDGES WITH 8d COMMON NAILS @ 6" O.C. AT SUPPORTED PANEL EDGES AND @ 12" O.C. AT INTERMEDIATE SUPPORTS.

FLOOR FRAMING:
FLOOR JOIST TO BE AS SPECIFIED ON PLANS. PROVIDE FULL DEPTH BLOCKING FOR JOIST AT THE SUPPORTS. FLUSH BEAMS (FB) AND HEADERS NOT CALLED OUT ON THE PLANS SHALL BE (2) 2x8 DOUG-FIR #2. ALL LAMINATED BEAMS SHALL BE SPIKED TOGETHER WITH 16d NAILS @ 6" O.C. STAGGERED

ALL DOOR AND WINDOW HEADERS NOT CALLED OUT ON THE PLANS SHALL BE 4x8 DOUGLAS-FIR #2 WITH (1) CRIPPLE STUD AND (1) KING STUD ON EACH END FOR OPENINGS 5' AND LESS AND (2) CRIPPLE STUDS AND (1) KING STUD ON EACH END FOR OPENINGS GREATER THAN 5'. ALL COLUMNS NOT CALLED OUT ON THE PLANS SHALL BE A MINIMUM OF TWO LAMINATED STUDS. NAIL LAMINATED COLUMNS TOGETHER WITH (2) 16d NAILS @ 12" O.C. WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATES AND BOTTOM PLATES TO EACH STUD WITH MINIMUM (2) 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d NAILS AT 16" O.C. STAGGERED. LAP AND FACE NAIL NAIL TOP PLATES WITH (3) 16d NAILS @ EACH CORNER AND INTERSECTION. STAGGER TOP PLATE SPLICES A MINIMUM OF 48" AND NAIL w/(4) 16d NAILS EACH SIDE OF SPLICE. FACE NAIL BOTTOM PLATE WITH (2) 16d NAILS AT 16" O.C. OR PER SHEARWALL SCHEDULE. PROVIDE (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER AT CONTACT SURFACES BETWÈEN ALL WOOD AND

PRE-MANUFACTURED FLOOR JOIST:
JOIST SHALL BE MANUFACTURED IN A PLANT APPROVED FOR FABRICATION BY THE BUILDING DEPARTMENT AND UNDER THE SUPERVISION OF AN APPROVED THIRD PARTY INSPECTION AGENCY. EACH JOIST SHALL BE IDENTIFIED BY A STAMP INDICATING THE JOIST TYPE, C.A.B.O. NER REPORT NUMBER, MANUFACTURERS NAME, PLANT NUMBER, AND THE INDEPENDENT INSPECTION AGENCY LOGO AND EVALUATION REPORT NUMBER. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON SITE AT TIME OF INSPECTION FOR INSPECTORS'S USE AND REFERENCE.

ALL TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH APPROVED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL PLATE CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1. ALL TRUSS DESIGN DRAWINGS SHALL BE PREPARED, STAMPED, AND SIGNED BY A WASHINGTON STATE LICENSED STRUCTURAL ENGINEER, ALL TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE MANUFACTURER'S PROVIDED CONSTRUCTION DOCUMENTS FOR THE BUILDING. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS. TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICES, SUCH THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BSCI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL CONNECTED WOOD TRUSSES. TRUSS MEMBERS SHALL NOT BE BE CUT, NOTCHED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE PRIOR APPROVAL OF THE TRUSS MANUFACTURER'S DESIGN ENGINEER. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON SITE AT TIME OF INSPECTION FOR INSPECTORS'S USE AND REFERENCE.

GLUED-LAMINATED TIMBERS

LAMINATED TIMBERS SHALL BE DOUGLAS-FIR/LARCH KILN DRIED STRESS GRADED COMBINATION 24F-V4 ($F_b = 2400 \text{ PSI}$, $F_v = 109 \text{ PSI}$) FOR SIMPLE SPANS AND 24F-V8 FOR CANTILEVER AND CONTINUOUS BEAMS. A.I.T.C. CÉRTIFICATE OF PERFORMANCE REQUIRED. COLUMNS SHALL CONFORM TO TO A.I.T.C. STANDARDS 117.

STRUCTURAL TIMBERS:
ALL GRADES SHALL CONFORM TO WWPA GRADING RULES FOR WESTERN LUMBER, LATEST AND BOLTS BEARING AGAINST WOOD. EDITION. PROVIDE CUT WASHERS UNDER ALL NUTS AND BOLTS BEARING AGAINST WOOD. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL STRUCTURAL LUMBER SHALL BE AS NOTED BELOW:

FRAMING GRADES:

	,
2x ROOF RAFTERS	DOUG-FIR/LARCH #2 $F_b = 900PSI$
2x FLOOR/DECK JOIST	DOUG-FIR/LARCH #2 $F_b = 900PSI$
4x BEAMS	DOUG-FIR/LARCH #2 $F_b = 900PSI$
6x BEAMS	DOUG-FIR/LARCH #1 $F_b = 1350PS$
4x COLUMNS	DOUG-FIR/LARCH #1 $F_b = 1000PS$
6x COLUMNS	DOUG-FIR/LARCH #1 $F_b = 1200PS$
2x STUDS	$HEM-FIRF_{b} = 675PSI$
LSL	LSL 1.55E $F_b = 2325PS$
LVL	LVL 2.0E $F_b = 2600PS$
PSL	$PSL 2.2EF_b = 2900PS$
GLB	GLU-LAM $(24F-V4)F_b = 2400PS$
	•

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STRUCTURAL NOTES

<u>DESIGN LOADS:</u>
THE SOIL PRESSURES INDICATED ON THE SOILS PRESSURE DIAGRAM DETAIL 1/P1.0 WERE USED FOR DESIGN.

SOILS:
CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE
CONDUCTED FOR ALL PHASES OF PILE INSTALLATION. ALL PREPARED SOIL
BEARING SURFACES SHALL BE INSPECTED BY THE THE GEOTECHNICAL ENGINEER
PRIOR TO PLACEMENT OF PILE. SEE GEOTECHNICAL ENGINEERING STUDY FOR
COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS FOR SHORING IN
GENERAL, SHORING MONITORING, EXCAVATION, LAGGING AND DRAINING.

CONCRETE:
CONCRETE SHALL CONFORM TO ALL REQUIREMENT OF OF CHAPTER 19 OF THE IBC. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD CYLINDER TESTS. UNLESS APPROVED OTHERWISE. REQUIRED ULTIMATE COMPRESSIVE STRENGTHS OF STRUCTURAL GROUT SHALL BE REACHED BY 28 DAYS FOR PILES:

f'c MIN. SACKS OF MAX. WATER

(psi) CEMENT PER YARD PER 94Ib USE

OF CONCRETE SACK CEMENT

----- 1½ SACKS ----- PILE LEAN CONCRETE STRUCTURAL TIMBERSCHECKS 6 GALLONS PILE STRUCTURAL GROUT ALL GRADES SHALL CONFORM TO WCLIB GRADING RULES FOR "WEST COAST LUMBER", LATEST EDITION. ALL PERMANENT TIMBER LAGGING SHALL BE PRESSURE TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPB LP-22 TO A MINIMUM RETENTION OF 0.4. ALL STRUCTURAL LUMBER SHALL BE AS NOTED BELOW:

FRAMING GRADES: I 4x TIMBER LAGGING

HEM-FIR#2.... $F_b = 680PSI$

STRUCTURAL STEEL:
STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN
ACCORDANCE WITH THE A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION
AND ERECTION OF STRUCTURAL STEEL BUILDINGS (14th EDITION). STRUCTURAL
STEEL SHAPES SHALL CONFORM TO ASTM DESIGNATION A—36 UNLESS NOTED
OTHERWISE. WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING
CODE LAWS. ALL WELDING SHALL BE BY CERTIFIED WELDERS (W.A.B.O. OR
EQUAL) USING E60 OR E70 ELECTRODES. SHOP DRAWINGS OF ALL STRUCTURAL
STEEL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO
FABRICATION. ALL STEEL MEMBERS SHALL BE GIVEN ONE SHOP COAT OF
APPROVED PRIMER. SURFACES TO BE EMBEDDED IN CONCRETE, FIREPROOFED OR
FIELD WELDED SHALL NOT BE PRIMED. ALL BOLTS SHALL BE A325 UNLESS

STATEMENT OF SPECIAL INSPECTION REQUIREMENTS:
SPECIAL INSPECTIONS PER IBC CHAPTER 1704 SHALL BE PREFORMED ON THE FOLLOWING BUILDING COMPONENTS. INSPECTIONS SHALL BE PROVIDED BY A QUALIFIED INSPECTION AGENCY APPROVED BY THE BUILDING DEPARTMENT AND RETAINED BY THE OWNER/CONTRACTOR:

NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE BE ASTM A307

1. ALL STRUCTURAL STEEL SHALL BE PERIODICALLY INSPECTED TO VERIFY MEMBER SIZE, GRADE, AND INSTALLATION PER PLAN. ANY ON SITE WELDING SHALL BE INSPECTED BY AN AWS D1.1 QUALIFED INSPECTOR. CONTINUOUS INSPECTION IS NOT REQUIRED IF THE PROCEDURES AND QUALIFICATIONS OF THE WELDERS ARE VERIFIED PRIOR TO THE START OF THE WORK. TESTING AGENCY AND CREDENTIALS TO BE PROVIDED FOR APPROVAL UPON CONTRACT AGREEMENT.

2. AUGERCAST PILE PLACEMENT

HOLE DIGGING:
PILE HOLES SHALL BE DRILLED WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED PILES. THIS MAY INVOLVE CASING HOLES OR OTHER METHODS OF OF PROTECTION FROM CAVING. REFER TO TO GEOTECHNICAL ENGINEERING STUDY FOR RECOMMENDED HOLE DIGGING PROCEDURE.

STEEL PLACEMENT TOLERANCES:

1" INSIDE PERPENDICULAR TO SHORING WALL

1" OUTSIDE PERPENDICULAR TO SHORING WALL

3" LATERALLY

LAGGING:
TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS UNLESS OTHERWISE
DIRECTED BY THE GEOTECHNICAL ENGINEER IN THE FIELD. VOIDS BETWEEN
LAGGING AND SOIL SHALL BE BACKFILLED WITH EITHER PEA GRAVEL OR SLURRY
PER GEOTECHNICAL ENGINEER. DRAINAGE BEHIND THE WALL MUST BE
MAINTAINED. IT IS THE CONTRACTOR RESPONSIBILITY TO LIMIT THE AMOUNT OF
EXPOSED SOIL WITHOUT LAGGING TO AVOID LOSS OF OF SOIL. MAXIMUM HEIGHT
OF 4 FEET IS RECOMMENDED. SPECIAL CARE SHOULD BE TAKEN TO AVOID
GROUND LOSS DURING EXCAVATION.

SHORING MONITORING:
CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE
CONDUCTED FOR ALL PHASES OF THE SHORING PROJECT EXECUTION TO
DETERMINE THE EFFECT OF CONSTRUCTION ON ADJACENT STRUCTURES IN ORDER
TO PROTECT THEM FROM DAMAGE. REFER TO GEOTECHNICAL ENGINEERING STUDY
FOR COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS.

GENERAL STRUCTURAL PIN PILE NOTES

REFERENCE DOCUMENTS:
GEOTECHNICAL ENGINEERING STUDY
GEO GROUP NORTHWEST, INC.
REPORT #G-3837 DATED: MAR. 12, 2015

PIN PILES:

1. ALL PIN PILES SHALL CONSIST OF 4"Ø GALVANIZED SCHEDULE 40 ASTM A-53 GRADE "A" PIPE, AND DRIVEN SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS AND PILE CAPS AS INDICATED IN

DETAIL 5/P1.0 & 6/P1.0

2. PILES SHALL BE DRIVEN WITH A TELEDYNE TB325 PNEUMATIC HAMMER (OR EQUIVALENT) TO A REFUSAL PENETRATION RATE OF 16SEC/INCH SUSTAINED THROUGH AT LEAST 3 MINUTES OF CONTINUOUS DRIVING. BATTERD PILES SHALL BE DRIVEN AT A RATIO OF 2 HORIZ: 10 VERT. PILE CAPACITY 8 TONS FOR VERTICAL PILES, AND 7.8 TONS FOR BATTERED PILES.

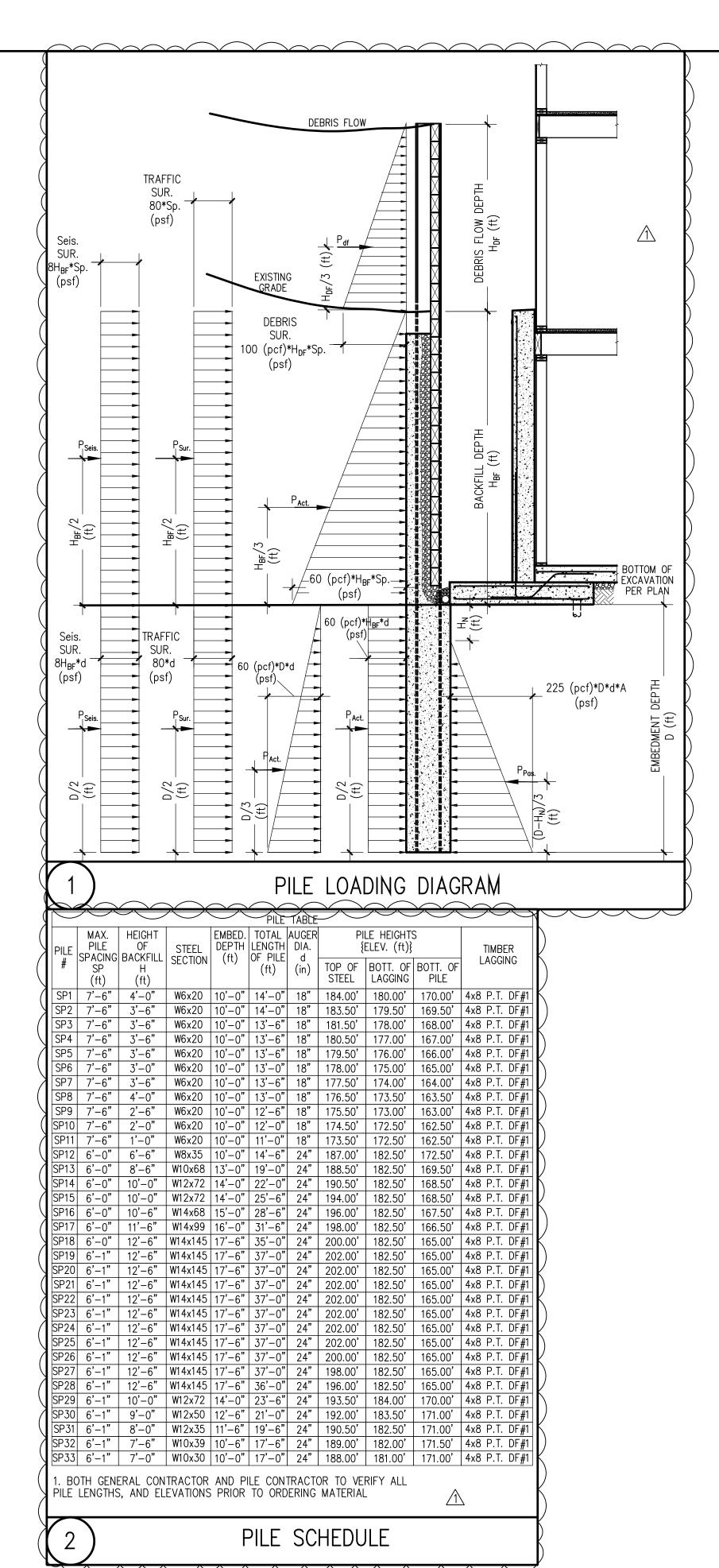
10NS FOR VERTICAL PILES, AND 7.8 TONS FOR BATTERED PILES.

3. CONTRACTOR SHALL SUPPLY THE GEOTECHNICAL ENGINEER WITH ALL EQUIPMENT AND HAMMER ENERGY INFORMATION TO BE USED ON THE

PROJECT, PRIOR TO ARRIVING ON SITE.

4. FILED LOAD TESTING PER ASTM STANDARD D 1143-81, SHALL BE CONDUCTED ON AT LEAST (1) PILE, OR A MINIMUM OF 3% OF THE PILES, UP TO A MAXIMUM OF (5).

PIN PILE MONITORING:
CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE
CONDUCTED FOR ALL PHASES OF PIN PILE INSTALLATION. ALL PREPARED SOIL
BEARING SURFACES SHALL BE INSPECTED BY THE THE GEOTECHNICAL ENGINEER
PRIOR TO PLACEMENT OF PILE. REFER TO GEOTECHNICAL ENGINEERING STUDY
FOR COMPLETE INFORMATION INCLUDING; RECOMMENDATIONS.



Stoney Point Engineering

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MI Treehouse, LLC 5637 East Mercer Way Mercer Island 98040

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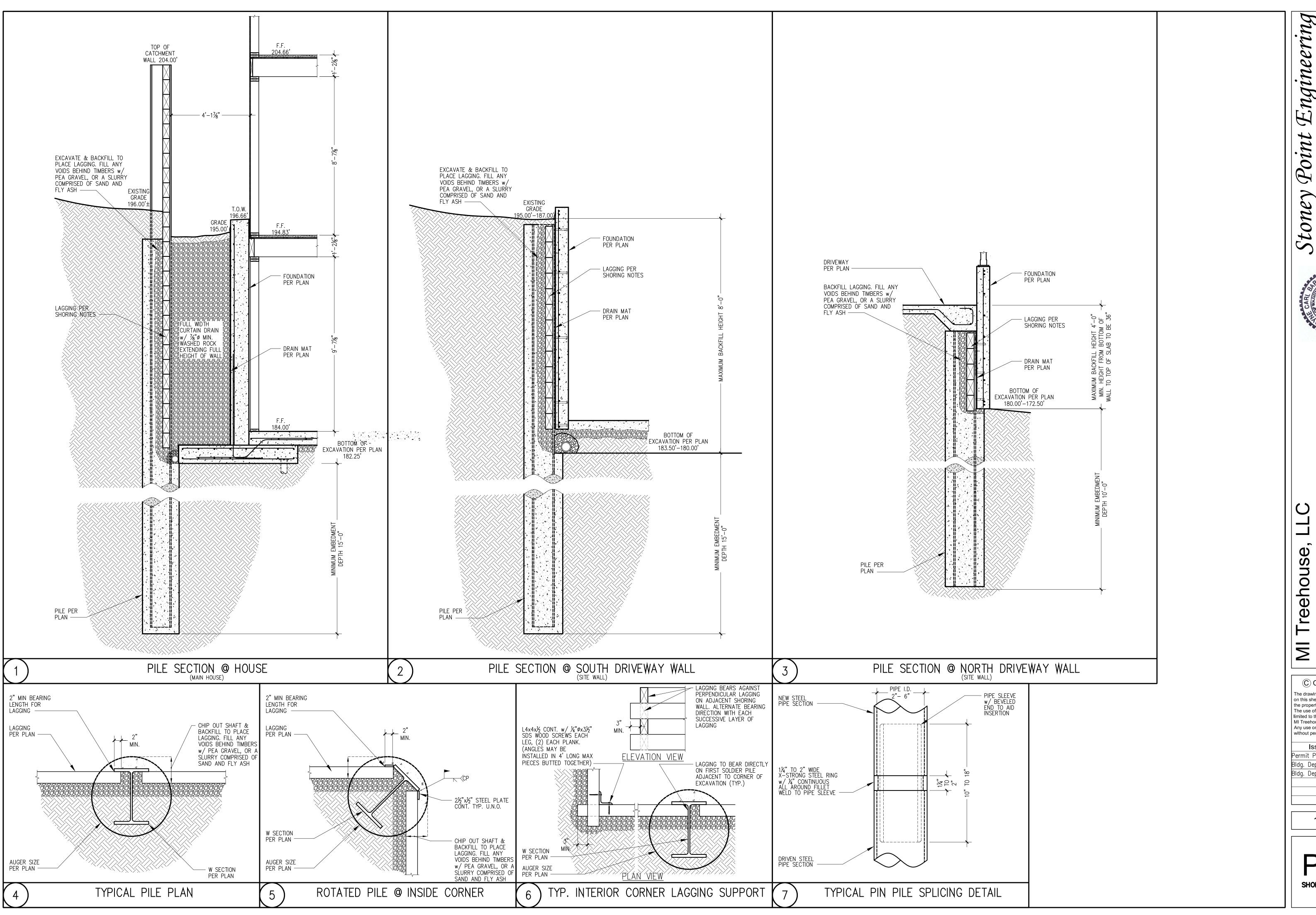
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P1.0
SHORING/PIN PILE DETAILS



Stoney Point Engineering. Owayne Barnes P.E. dwayne Estoneypointengineering.com

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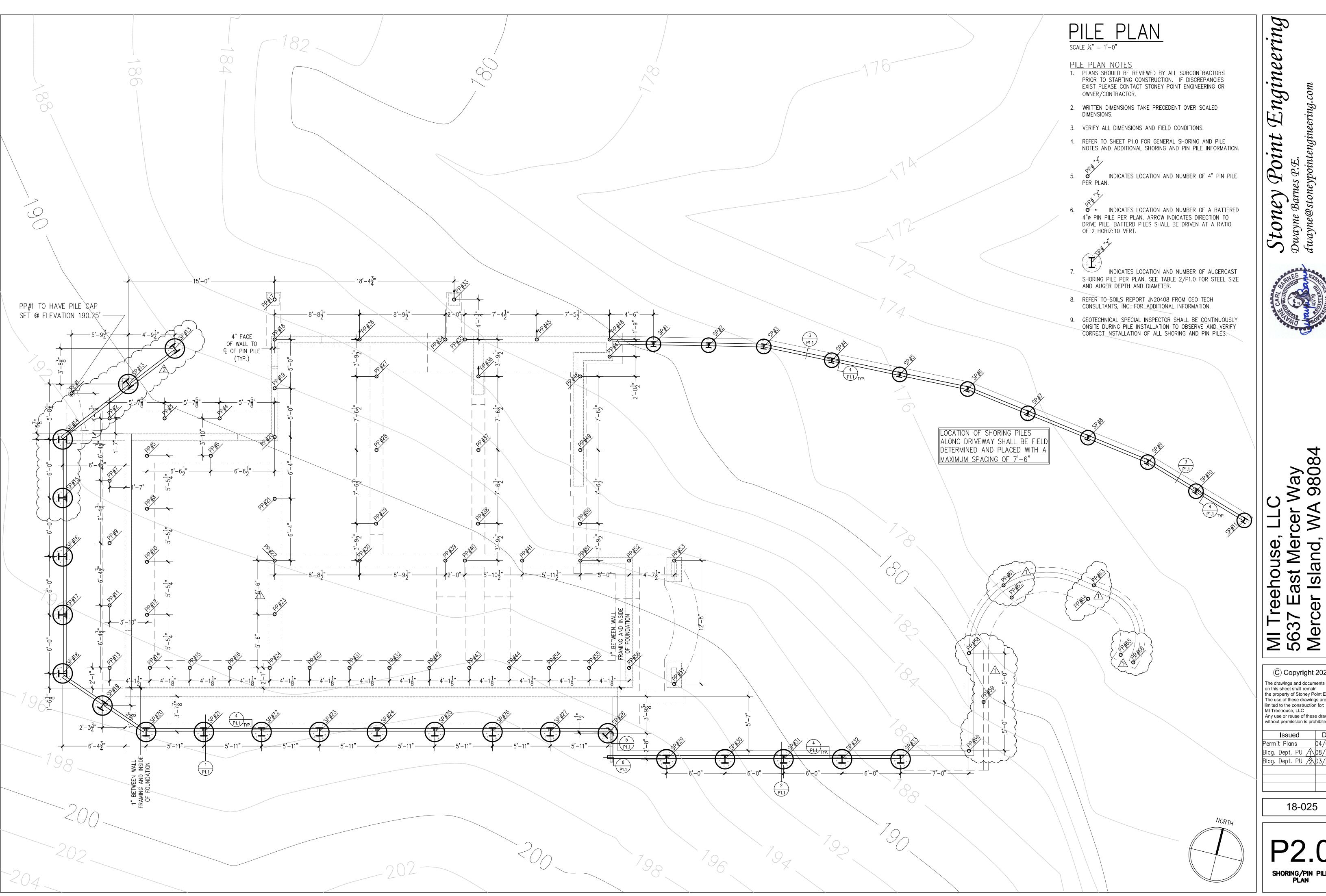
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P111
SHORING/PIN PILE DETAILS



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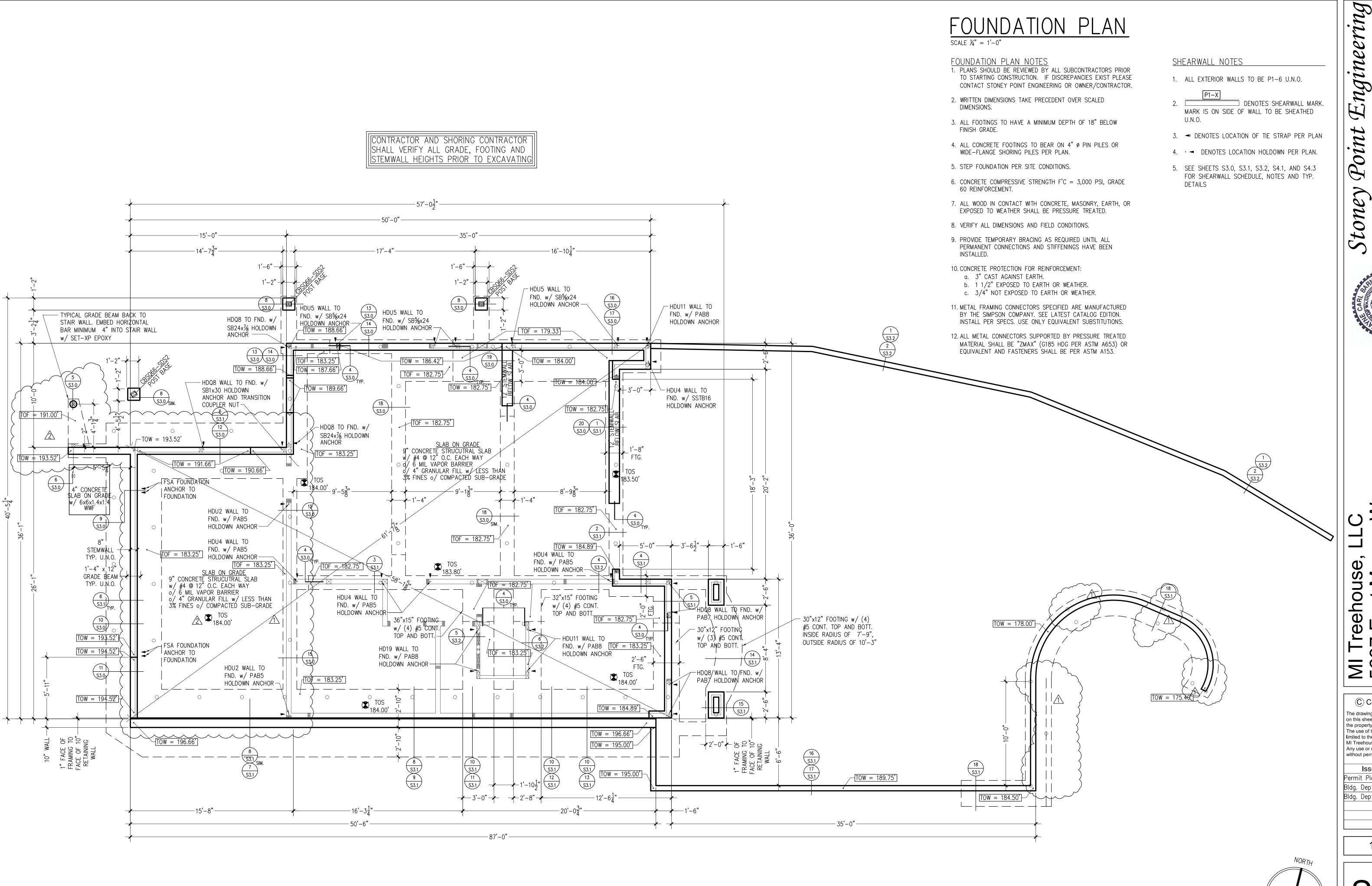
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SHORING/PIN PILE PLAN



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FOUNDATION PLAN

LOWER FLOOR FLOOR FRAMING PLAN

SCALE $\frac{1}{4}$ " = 1'-0"

LOWER FLOOR FRAMING PLAN NOTES

1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.

- 2. ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- 3. ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2018 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM
- 4. ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.
- 5. ALL FLOOR JOIST TO BE 11%" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 11/2"x111/8" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY REPLACED w/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL, U.N.O.
- 7. ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED THE DESIGN STRESS VALUES INDICATED ON SHEET S1.0. INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

1. ALL EXTERIOR WALLS TO BE P1-6 U.N.O.

2. DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED

- 3. DENOTES LOCATION OF TIE STRAP PER PLAN
- 4. DENOTES LOCATION HOLDOWN PER PLAN.
- 5. SEE SHEETS S1.0, S3.0, S3.1, S3.2, S4.0, S4.1, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

<u>LEGEND</u>

DENOTES INTERIOR LOWER FLOOR BEARING WALLS

DENOTES LOWER FLOOR WALLS

----- DENOTES BEAMS, HEADERS

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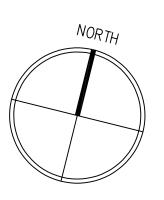
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FRAMING PLAN

SCALE $\frac{1}{4}$ " = 1'-0"

MAIN FLOOR FRAMING PLAN NOTES

1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.

- 2. ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- 3. ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2018 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- 4. ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.
- 5. ALL FLOOR JOIST TO BE 11%" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 11/2"x111/8" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY REPLACED w/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL, U.N.O.
- 7. ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED THE DESIGN STRESS VALUES INDICATED ON SHEET S1.0. INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

1. ALL EXTERIOR WALLS TO BE P1-6 U.N.O.

DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.

- 3. ■ DENOTES LOCATION OF TIE STRAP PER PLAN
- 5. SEE SHEETS S1.0, S3.0, S3.1, S3.2, S4.0, S4.1, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

LEGEND

DENOTES INTERIOR LOWER FLOOR BEARING WALLS

DENOTES LOWER FLOOR WALLS

----- DENOTES BEAMS, HEADERS

MAIN FLOOR



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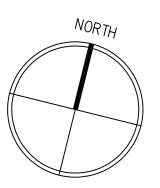
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MAIN FLOOR FRAMING PLAN



UPPER FLOOR FRAMING PLAN

SCALE $\frac{1}{4}$ " = 1'-0"

UPPER FLOOR FRAMING PLAN NOTES

- 1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR
- 2018 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- 4. ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.
- 5. ALL FLOOR JOIST TO BE 11%" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 1½"x11%" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY REPLACED w/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL, U.N.O.
- THE DESIGN STRESS VALUES INDICATED ON SHEET S1.0 INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

1. ALL EXTERIOR WALLS TO BE P1-6 U.N.O.

- DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED
- 3. ■ DENOTES LOCATION OF TIE STRAP PER PLAN

<u>LEGEND</u>

DENOTES INTERIOR MAIN FLOOR BEARING WALLS

DENOTES MAIN FLOOR WALLS

----- DENOTES BEAMS, HEADERS

- OWNER/CONTRACTOR.
- 2. ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- 3. ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1,

- 7. ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED

- 5. SEE SHEETS S1.0, S4.1, S4.2, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

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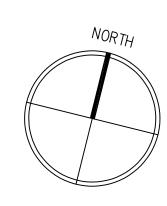
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ROOF FRAMING PLAN

SCALE $\frac{1}{4}$ " = 1'-0"

ROOF FRAMING NOTES

- 1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE NOTIFY STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
- 2. ALL EXTERIOR WALLS TO BE FRAMED WITH 2x6 H.F. (STUD GRADE OR BETTER).
- 3. ALL FRAME NAILING TO COMPLY WITH TABLE 2304.10.1, 2018 I.B.C. BLOCK ALL APA RATED SHEATHING EDGES AND NAIL WITH 8d AT 6" O.C. TYPICAL, U.N.O. ON SHEAR WALL SCHEDULE. NAILING INTO PRESSURE TREATED MATERIAL SHALL BE HOT-DIP GALVANIZED PER ASTM A153.
- 4. ALL HDRS TO BE 4x8 D.F.#2 TYPICAL U.N.O.
- 5. ROOF FRAMING TO BE 2x12 DE#1 RAFTERS @ 24" O.C. TYPICAL
- DENOTES MINIMUM REQUIRED NUMBER OF STUDS NEEDED FOR BEARING UNDER BEAMS AND BELOW WINDOW HEADERS. DOES NOT INCLUDE KING STUDS. MAY REPLACED w/ SOLID SAWN LUMBER OF SAME SECTION. TYPICAL U.N.O.
- 7. ROOF PITCH TO BE AS NOTED, U.N.O.
- 8. CONTRACTOR TO VERIFY LOCATION OF ALL ROOF SUPPORT BRACING AND POSTING AND PROVIDE ADEQUATE BEARING TO FOUNDATION.
- 9. ENGINEERED LUMBER SPECIFIED SHALL MEET OR EXCEED DESIGN STRESS VALUES INDICATED ON SHEET S1.0 INSTALL PER MFG. RECOMMENDATIONS. THESE DRAWINGS ONLY SHOW SIZE, SPAN, AND SPACING.

SHEARWALL NOTES

1. ALL EXTERIOR WALLS TO BE P1-6 U.N.O.

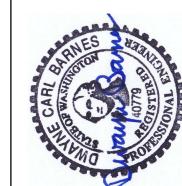
- DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
- 3. ■ DENOTES LOCATION OF TIE STRAP PER PLAN
- 5. SEE SHEETS S1.0, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

<u>LEGEND</u>

DENOTES INTERIOR UPPER FLOOR BEARING WALLS

DENOTES UPPER FLOOR WALLS

----- DENOTES BEAMS, HEADERS



ngineering

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Stoney Point

Way \ 98084 East Mercer restant is Island, WA Treehouse MI Tr 5637 Merce

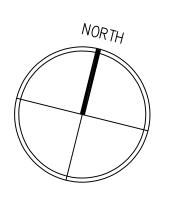
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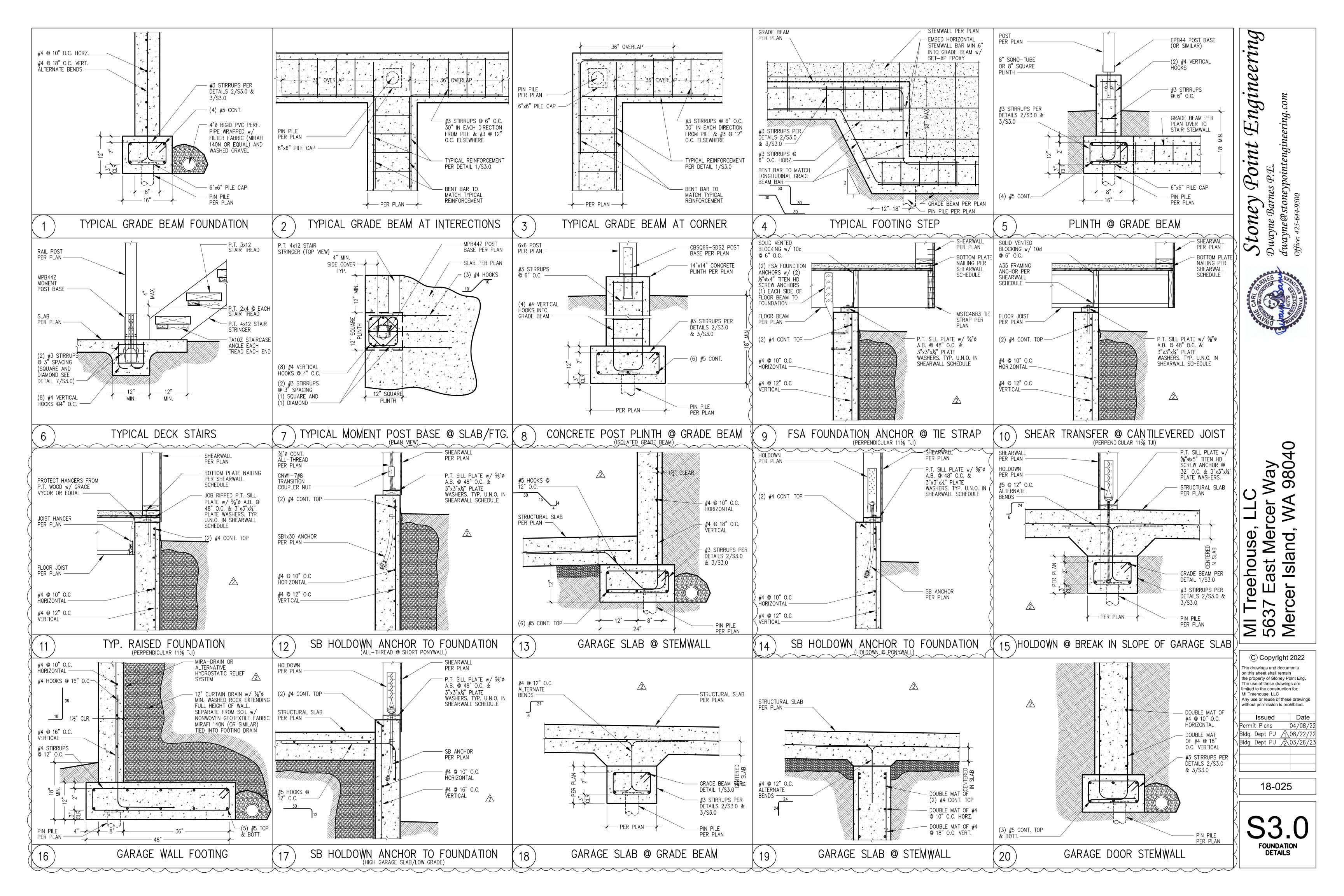
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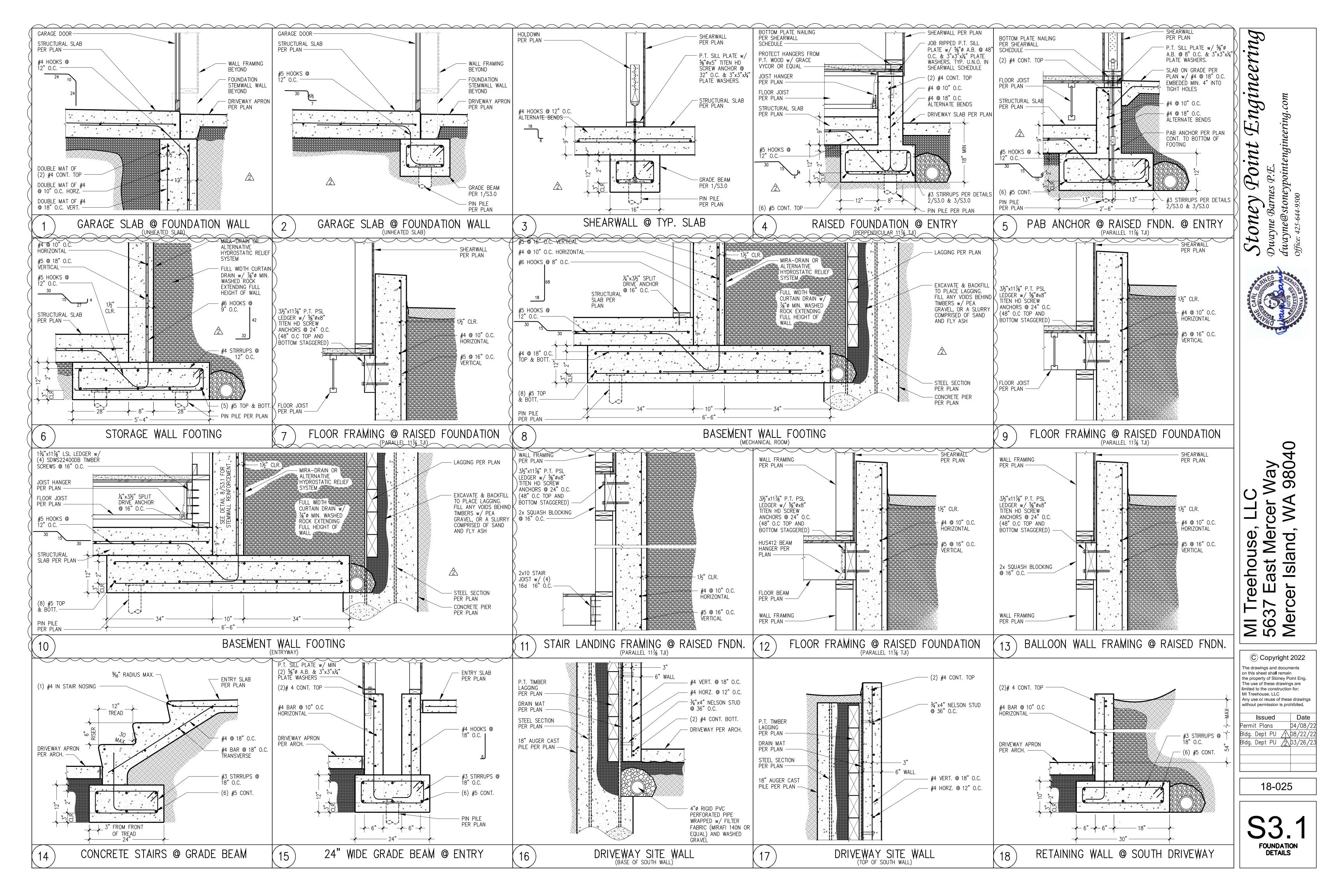
Permit Plans Bldg. Dept. PU 108/22/22 Bldg. Dept. PU 203/27/23

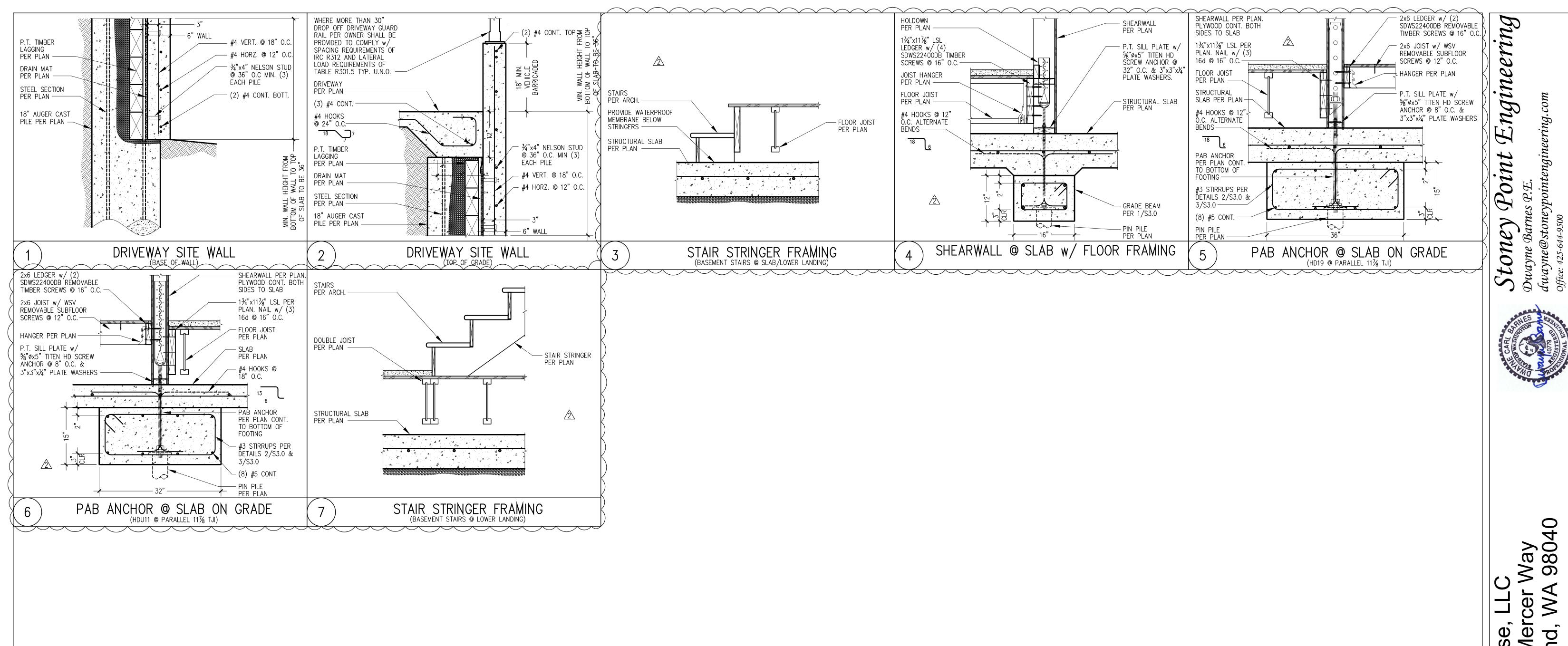
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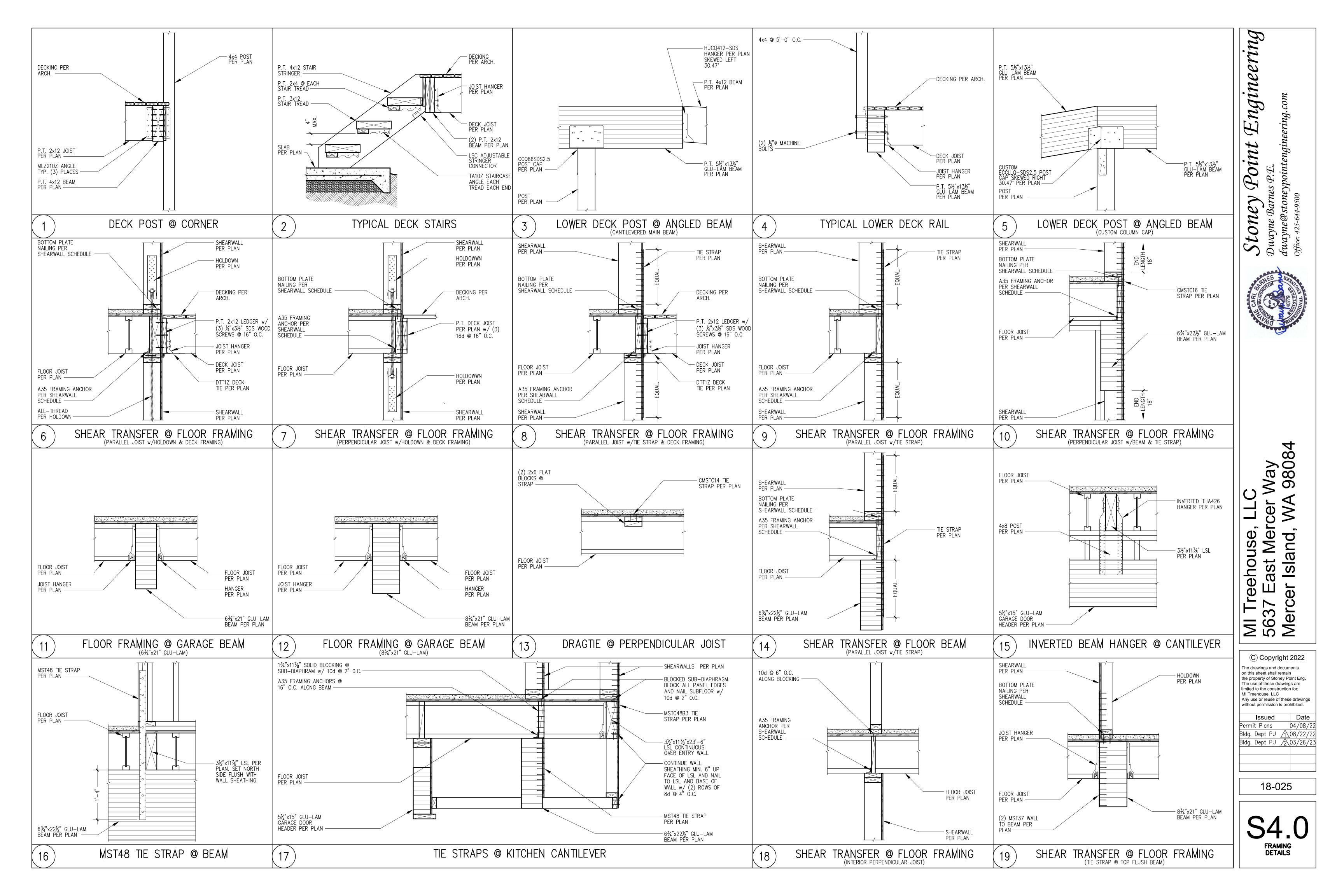
40 Way 980 ast Mercer Treehouse MI Tr 5637 Merc

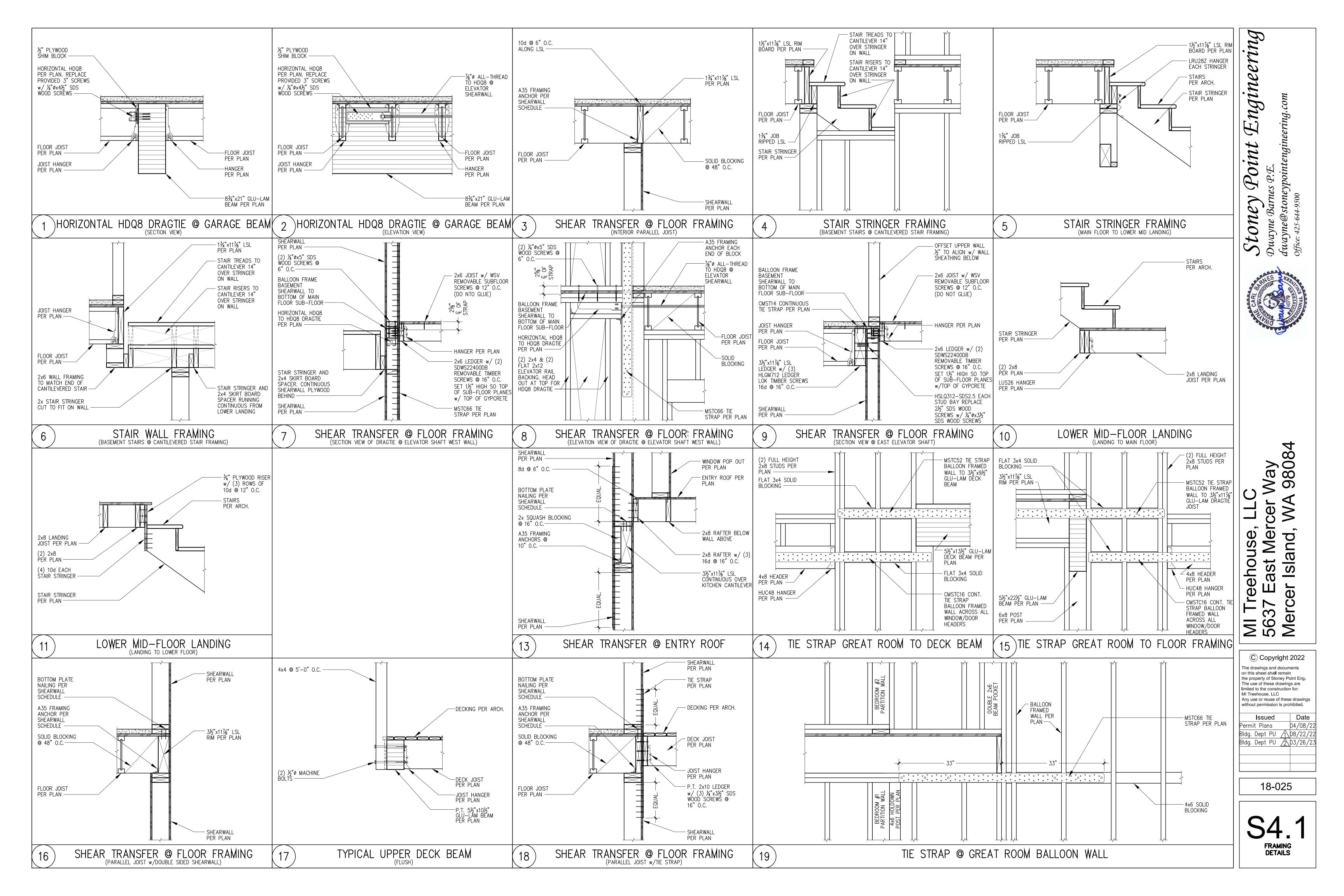
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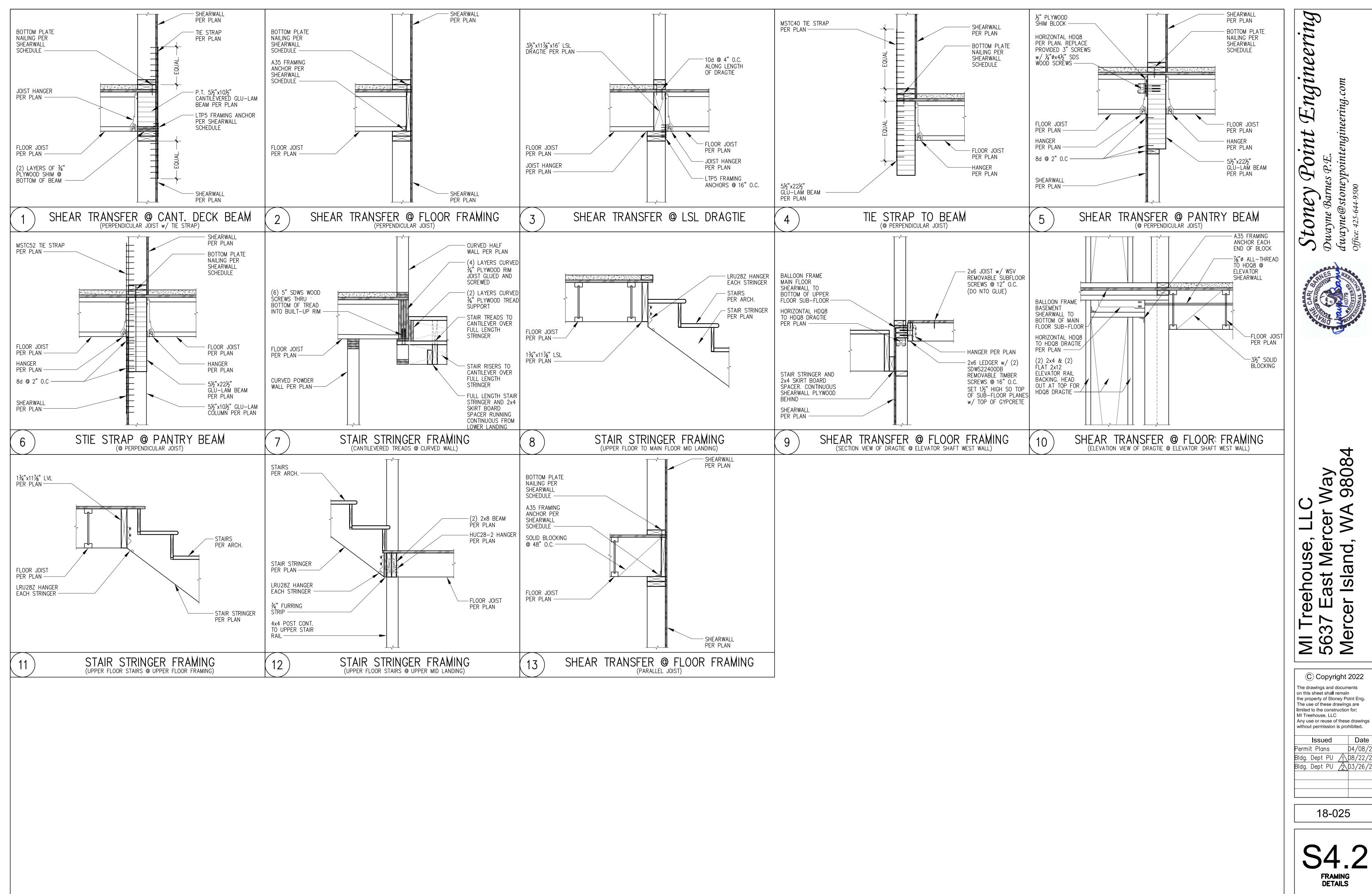
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18-025

FOUNDATION DETAILS







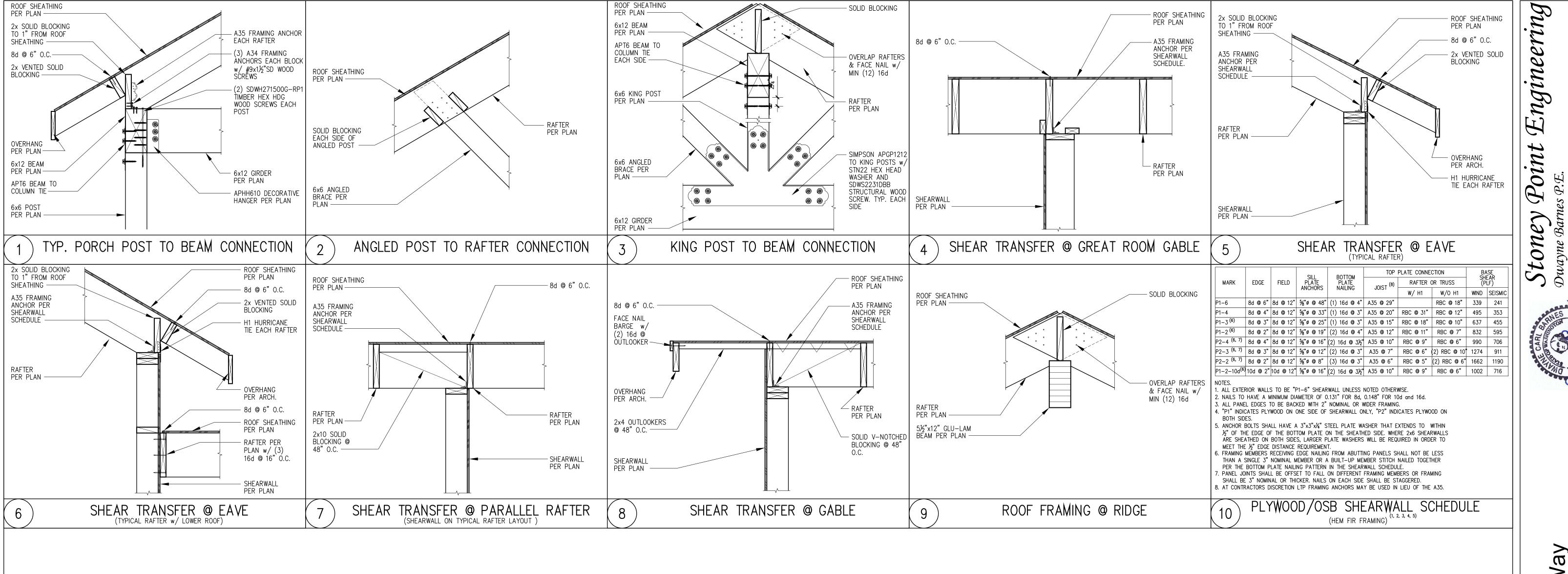
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Way 9808 Mercer and, WA

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18-025

FRAMING DETAILS



MI Treehouse, LLC 5637 East Mercer Way Mercer Island, WA 98084

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Permit Plans 04/08/22
Bldg. Dept PU 108/22/22
Bldg. Dept PU 203/26/23

18-025

S4.3
FRAMING DETAILS

BASIS OF BEARINGS

LEGAL DESCRIPTION

REFERENCES

NOO'01'20"W BETWEEN THE FOUND MONUMENTS ALONG THE CENTERLINE OF EAST MERCER WAY

LOT A OF CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-010, AS RECORDED MARCH 31, 1977 UNDER RECORDING NO.

1. THIS SITE IS SUBJECT TO THE TERMS AND CONDITIONS CONTAINED IN DEED RECORDED UNDER RECORDING NUMBER 1579699.

2. THIS SITE IS SUBJECT TO THE CONDITIONS, COVENANTS, RESTRICTIONS, EASEMENTS, NOTES, AND SETBACKS, IF ANY, AS SHOWN ON THE FACE OF CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-010 AS RECORDED UNDER RECORDING

4. THIS SITE IS SUBJECT TO AN EASEMENT FOR STORMWATER/UTILITY FACILITIES & PEDESTRIAN TRAIL AND THE TERMS AND

UNKNOWN N'LY & S'LY

ORANGE CAP STÁMPED

3. THIS SITE IS SUBJECT TO AN EASEMENT FOR SIDE SEWER SERVICE AND THE TERMS AND CONDITIONS THEREOF AS

STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20140929000870

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

CONDITIONS THEREOF AS RECORDED UNDER RECORDING NUMBER 20070425001878.

LAKE

WASHINGTON

N88'34'08"W 258.39

BUILDING

VICINITY MAP

5631 E MERCER WAY

TPN 1924059312

5637 E MERCER WAY MERCER ISLAND, WASHINGTON

BASIS OF BEARINGS

3. PROPERTY AREA = 37,528± SQUARE FEET (0.8615± ACRES).

4. ALL DISTANCES ARE IN FEET.

8"PVC(W)IE=154.93

E MERCER WAY

INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.

CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN JUNE, 2018.

THIS SURVEY HAS BEEN PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. IN PREPARING THIS MAP,

STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20140929000870 AND THEREFORE CORE DESIGN,

CORE DESIGN, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS CORE DESIGN, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY

THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON JUNE 8, 2018. ALL SURVEY

THIS IS A FIELD TRAVERSE SURVEY. A LEICA ROBOTIC TOTAL STATION WAS USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE

UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR

INSTALLATION VISIBLE AT GROUND SURFACE ARE SHOWN HEREON. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE UTILITY

LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND LOCATIONS SHOWN HEREON

MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. CORE DESIGN ASSUMES NO LIABILITY FOR THE ACCURACY OF

Traverse met or exceeded those specified in wac 332-130-090. All measuring instruments and

EQUIPMENT ARE MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

OWNER:

MI TREEHOUSE, LLC 11030 SE 30TH ST BELLEVUE, WA 98004

ENGINEER/SURVEY:

CORE DESIGN INC 14711 NE 29TH PL, SUITE 101 BELLEVUE, WASHINGTON 98007 (425) 885-7877 CONTACT: MICHAEL A. MOODY, P.E. GLENN R. SPRAGUÉ, P.L.S.

BENCHMARKS

SHEET INDEX

COVER SHEET TOPOGRAPHIC PLAN BMP NOTES STORM DRAINAGE DETAILS

SITE STATISTICS

R-15 (RESIDENTIAL-SINGLE FAMILY) SITE AREA: NET LOT AREA: 35,823 SF (0.822 ACRES) LOTS PROPOSED: TAX PARCEL 192405-9312 DWELLING UNITS:

(17% OF TOTAL LOT WIDTH) 13.005 (NORTHERN SETBACK) SIDE SETBACKS PROPOSED: 13.005 (SOUTHERN SETBACK)

LOT SLOPE STATISTICS

DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED

VERTICAL DATUM

CITY OF MERCER ISLAND POINT "CASC 38" ELEVATION=163.23

C1.01 C1.02 C1.03 C2.01 C4.01 C4.31 C4.32 EROSION CONTROL PLAN SITE, UTILITY & GRADING PLAN WATER AND SEWER DETAILS

±37,554 SF (±0.862 ACRES)

LOT WIDTH: 26.01' COMBINED SIDE SETBACK:

IMPERVIOUS AREA: 3,739 SF (9.9%)

24.5%

NOTE

SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION 19.02.020(F)(3)(a). NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

UNDERGROUND LOCATOR SERVICE

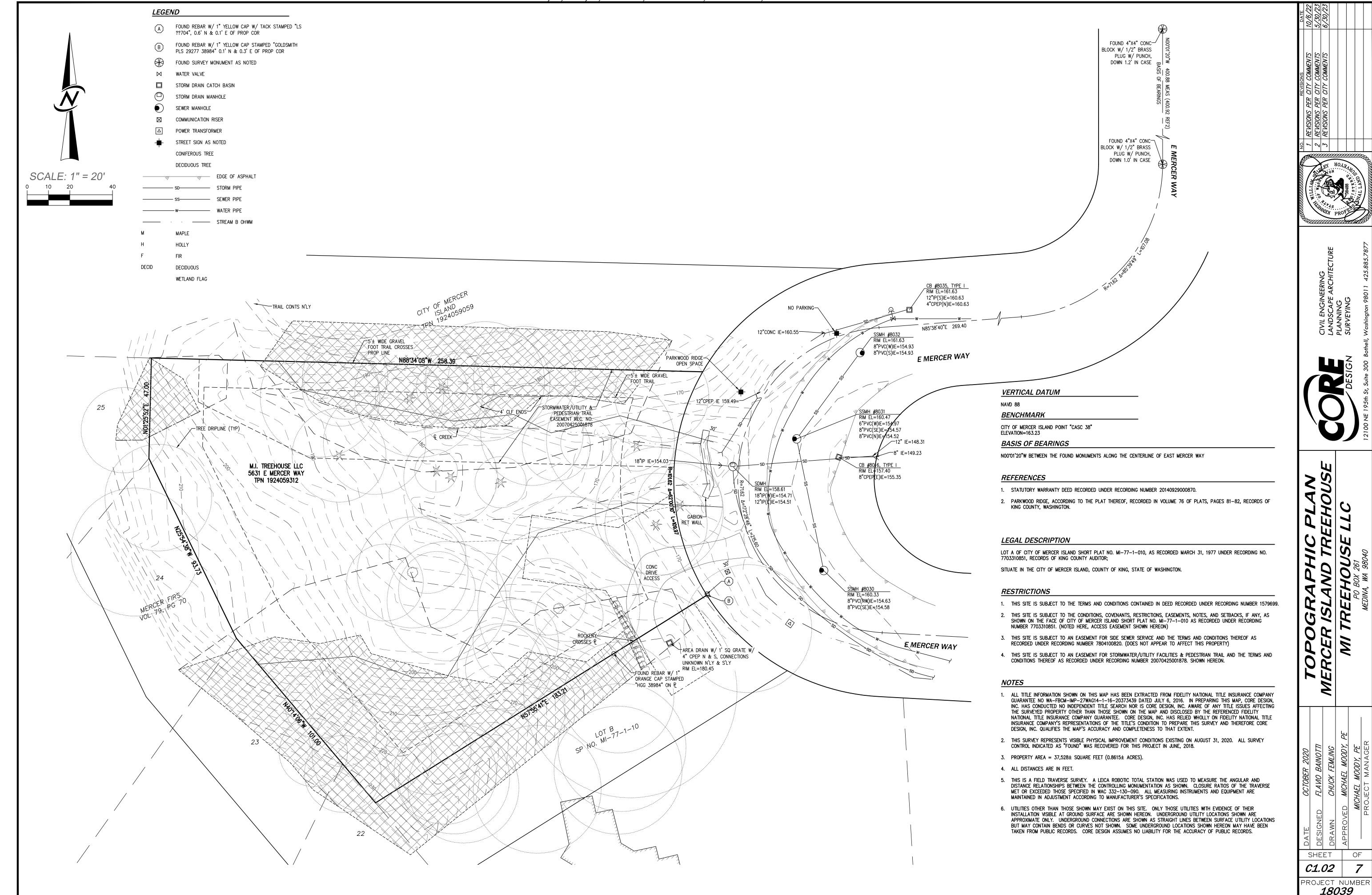
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, CONTACTING ALL UTILITY COMPANIES, POTHOLING THE UTILITIES, AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-555 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD

CALL BEFORE YOU DIG!

TLIT	Y CC	ONFL	I.ICT	NO	TE:

C1.01 PROJECT NUMBER

18039



18039

BMP T5.13: Post-Construction Soil Quality and Depth

Purpose and Definition

Naturally occurring (undisturbed) soil and vegetation provide important stormwater functions including: water infiltration; nutrient, sediment, and pollutant adsorption; sediment and pollutant biofiltration; water interflow storage and transmission; and pollutant decomposition. These functions are largely lost when development strips away native soil and vegetation and replaces it with minimal topsoil and sod. Not only are these important stormwater functions lost, but such landscapes themselves become pollution generating pervious surfaces due to increased use of pesticides, fertilizers and other landscaping and household/industrial chemicals, the concentration of pet wastes, and pollutants that accompany roadside litter.

Establishing soil quality and depth regains greater stormwater functions in the post development landscape, provides increased treatment of pollutants and sediments that result from development and habitation, and minimizes the need for some landscaping chemicals, thus reducing pollution through prevention.

Applications and Limitations

Establishing a minimum soil quality and depth is not the same as preservation of naturally occurring soil and vegetation. However, establishing a minimum soil quality and depth will provide improved on-site management of stormwater flow and water quality.

Soil organic matter can be attained through numerous materials such as compost, composted woody material, biosolids, and forest product residuals. It is important that the materials used to meet the soil quality and depth BMP be appropriate and beneficial to the plant cover to be established. Likewise, it is important that imported topsoils improve soil conditions and do not have an excessive percent of clay fines.

This BMP can be considered infeasible on till soil slopes greater than 33 percent.

Design Guidelines

- Soil retention. Retain, in an undisturbed state, the duff layer and native topsoil to the maximum extent practicable. In any areas requiring grading remove and stockpile the duff layer and topsoil on site in a designated, controlled area, not adjacent to public resources and critical areas, to be reapplied to other portions of the site
- Soil quality. All areas subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, demonstrate the following:
- 1. A topsoil layer with a minimum organic matter content of 10% dry weight in planting beds, and 5% organic matter content in turf areas, and a pH from 6.0

2014 Stormwater Management Manual for Western Washington

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to 8.0 or matching the pH of the undisturbed soil. The topsoil layer shall have a minimum depth of eight inches except where tree roots limit the depth of incorporation of amendments needed to meet the criteria. Subsoils below the topsoil layer should be scarified at least 4 inches with some incorporation of the upper material to avoid stratified layers, where feasible.

- 2. Mulch planting beds with 2 inches of organic material
- 3. Use compost and other materials that meet these organic content require
 - a. The organic content for "pre-approved" amendment rates can be met only using compost meeting the compost specification for BMP T7.30: Bioretention Cells, Swales, and Planter Boxes (p.959), with the exception that the compost may have up to 35% biosolids or manure.

The compost must also have an organic matter content of 40% to 65%, and a carbon to nitrogen ratio below 25:1.

The carbon to nitrogen ratio may be as high as 35:1 for plantings composed entirely of plants native to the Puget Sound Lowlands region.

b. Calculated amendment rates may be met through use of composted material meeting (a.) above; or other organic materials amended to meet the carbon to nitrogen ratio requirements, and not exceeding the contaminant limits identified in Table 220-B, Testing Parameters, in WAC 173-350-220.

The resulting soil should be conducive to the type of vegetation to be established.

- Implementation Options: The soil quality design guidelines listed above can be met by using one of the methods listed below:
- 1. Leave undisturbed native vegetation and soil, and protect from compaction during construction.
- 2. Amend existing site topsoil or subsoil either at default "pre-approved" rates, or at custom calculated rates based on tests of the soil and amendment.
- 3. Stockpile existing topsoil during grading, and replace it prior to planting. Stockpiled topsoil must also be amended if needed to meet the organic matter or depth requirements, either at a default "pre-approved" rate or at a custom calculated rate.
- 4. Import topsoil mix of sufficient organic content and depth to meet the requirements.

More than one method may be used on different portions of the same site. Soil that already meets the depth and organic matter quality standards, and is not compacted, does not need to be amended.

Planning/Permitting/Inspection/Verification Guidelines & Procedures

Local governments are encouraged to adopt guidelines and procedures similar to those recommended in Guidelines and Resources For Implementing Soil Quality and Depth BMP T5.13 in WDOE Stormwater Management Manual for Western Washington. This document is available at: http://www.soilsforsalmon.org/pdf/Soil_BMP_Manual.pdf

Maintenance

- Establish soil quality and depth toward the end of construction and once established, protect from compaction, such as from large machinery use, and from
- Plant vegetation and mulch the amended soil area after installation.
- Leave plant debris or its equivalent on the soil surface to replenish organic matter.
- Reduce and adjust, where possible, the use of irrigation, fertilizers, herbicides and pesticides, rather than continuing to implement formerly established practices.

Runoff Model Representation

Areas meeting the design guidelines may be entered into approved runoff models as "Pasture" rather than "Lawn."

Flow reduction credits can be taken in runoff modeling when BMP T5.13: Post-Construction Soil Quality and Depth is used as part of a dispersion design under the conditions described in:

- BMP T5.10B: Downspout Dispersion Systems (p.905)
- BMP T5.11: Concentrated Flow Dispersion (p.905)
- BMP T5.12: Sheet Flow Dispersion (p.908)
- BMP T5.18: Reverse Slope Sidewalks (p.937)
- BMP T5.30: Full Dispersion (p.939) (for public road projects)

2014 Stormwater Management Manual for Western Washington

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C1.03 ROJECT NUMBER

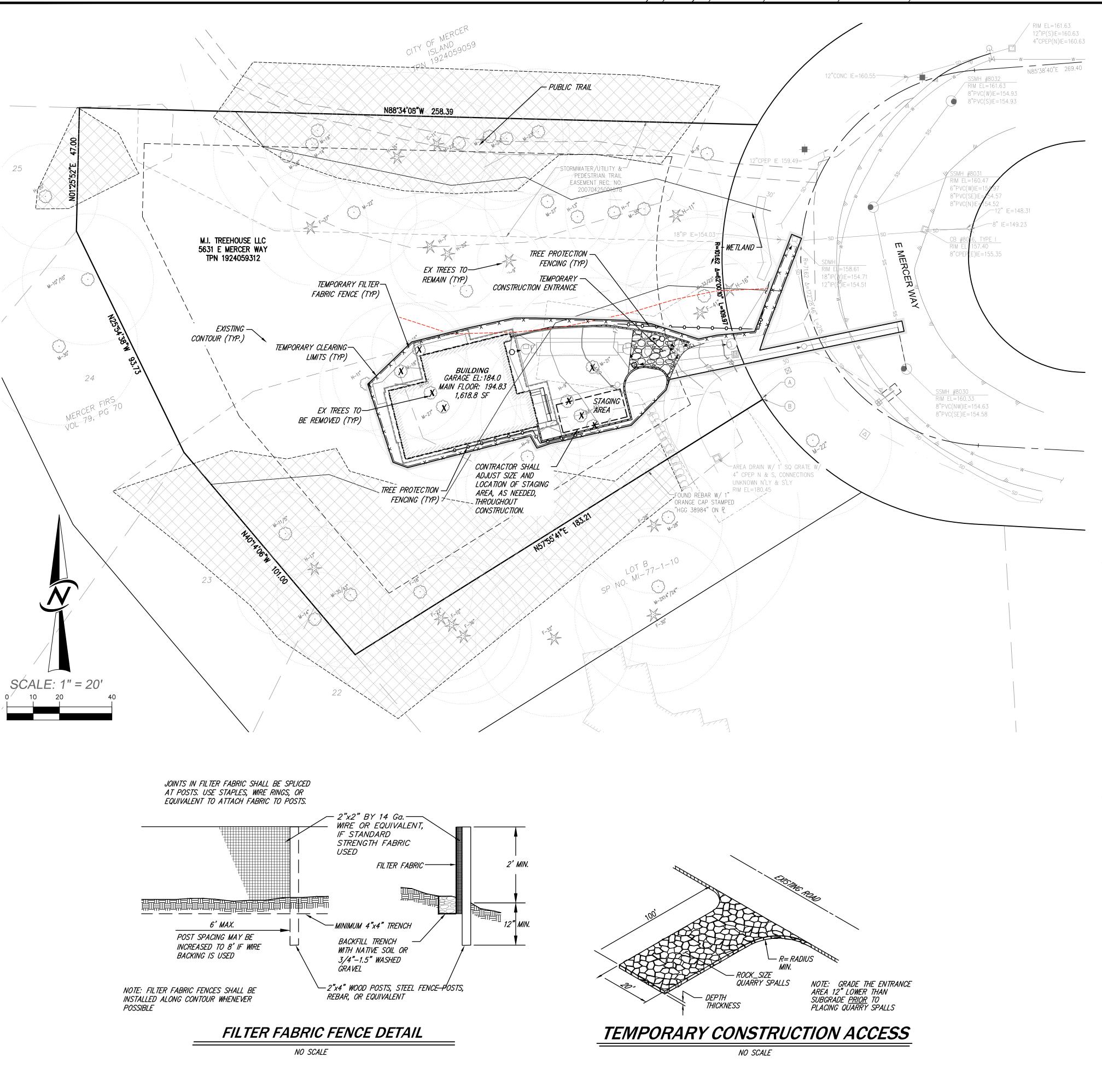
18039

UNDERGROUND LOCATOR SERVICE CALL BEFORE YOU DIG!

UTILITY CONFLICT NOTE:

CAUTION:

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LEGEND

MADRONA O OAK

DOGWOOD

F CHAIN LINK FENCE

VERTICAL BOARD FENCE

ROCKERY

INLET FILTER
(W.S.D.O.T. STD DTL. I-40.20-00)
SILT FENCE

ONSITE TREE TO BE REMOVED



80

CONSTRUCTION SEQUENCE

- (1) PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF MERCER ISLAND BY PHONING (206)—275—7726.
- $\langle \overline{2} \rangle$ FLAG LIMITS OF CLEARING IN FIELD AS INDICATED ON SHEET C2.01.
- (3) CLEAR FOR AND CONSTRUCT THE ROCKED CONSTRUCTION ACCESS
- (4) CONSTRUCT PERIMETER FILTER FABRIC FENCES.
- (5) CONSTRUCT DOWNSTREAM DISCHARGE SYSTEM, INTERCEPTOR SWALES, ROCK CHECK DAMS, STORM DRAINAGE PIPES, RIP RAP PADS.
- 6) CLEAR & GRADE SITE WHILE EXTENDING TEMPORARY INTERCEPTOR SWALE AS CONSTRUCTION PROCEEDS. ALL SILT—LADEN RUNOFF SHALL BE DIRECTED TO SEDIMENT RETENTION FACILITIES.
- (7) CLEAR FOR AND CONSTRUCT DETENTION TANK FOR USE FOR SEDIMENT RETENTION AND CONSTRUCT DISCHARGE SYSTEM.
- (8) CONSTRUCT SANITARY SEWER, WATER, & REMAINING STORM DRAINAGE FACILITIES PER THE APPROVED PLANS.
- (9) FINE GRADE AND PAVE THE DRIVEWAY.
- 10) UPON COMPLETION OF GRADING ACTIVITIES, STABILIZE ALL DISTURBED AREAS, REMOVE EXCESS SEDIMENT FROM THE TANK AND REMOVE ALL TEMPORARY EROSION/ SEDIMENTATION CONTROL FACILITIES.

TREE PROTECTION NOTES

- 1. CONTRACTOR SHALL COORDINATE WITH ARBORIST ON GRADING AROUND RETAINED TREES AND ROOTS.
- 2. ARBORIST TO BE ONSITE TO VERIFY PRESERVATION OF RETAINED TREES

UNDERGROUND LOCATOR SERVICE

CALL BEFORE YOU DIG!

UTILITY CONFLICT NOTE:

CAUTION:

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1 REVISIONS
1 REVISIONS
2 REVISIONS PER CITY COMMENTS
3 REVISIONS PER CITY COMMENTS



425.885.7877

FLANDSCAFE AKCE
PLANNING
N SURVEYING
Bothell, Washington 98011-4



SC & TREE RETENTION PLAN
ER ISLAND TREEHO
II TREEHOUSE LLC

SIGNED FLAVIO BAINOTTI
AWN CHUCK FEMLING
PROVED MICHAEL MOODY, PE
MICHAEL MOODY, PE
PROJECT MANAGER

SHEET OF **C2.01** 7

PROJECT NUMBER **18039**

1 ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE DEVELOPER EXTENSION AGREEMENT, THE STANDARD SPECIFICATIONS, STANDARD DETAILS OF THE CITY OF MERCER ISLAND.

UTILITY LOCATES

- 2 THE APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN ON PLANS AND PROFILES FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF UTILITY LOCATIONS SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN ON PLANS.
- 3 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE LOCATED, BY APPROPRIATE UTILITY DISTRICTS OR COMPANIES, ALL
- UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. 4 FOR UTILITY LOCATES IN KING COUNTY, CALL 1-800-424-5555 PRIOR TO DIGGING.

- 5 THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REGULATORY PERMITS.
- 6 ALL WORK IN RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITTING AGENCY.
- 7 A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD AT THE CITY OF MERCER ISLAND'S OFFICE PRIOR TO THE START OF CONSTRUCTION. DISTRICT STAFF WILL NOTIFY THE APPROPRIATE AGENCIES OR REPRESENTATIVES.

- 8 PRIOR TO CONSTRUCTING ANY SEWER MAINS, THE STREET CENTERLINES OF THE DEVELOPMENT, CENTER OF CUL-DE-SACS, ALL SEWER LINE EASEMENTS AND ALL LOT CORNERS SHALL BE STAKED. THE MAXIMUM STATIONING INTERVAL SHALL BE 50 FEET WITH THE STATION NUMBER
- HORIZONTAL CONTROL DATA SHALL BE NAD '83/"91. VERTICAL CONTROL SHALL BE NAVD-88 DATUM
- 10 AT THE CONCLUSION OF CONSTRUCTION, THE DEVELOPER'S REGISTERED PROFESSIONAL SURVEYOR SHALL PREPARE A DRAWING BASED ON THE SURVEYED LOCATION OF ALL AT-GRADE APPURTENANCES INSTALLED, INCLUDING BUT NOT LIMITED TO, LOCATION OF EXISTING MANHOLES INCLUDING RIM & ALL INVERT ELEVATIONS. THE DRAWING SHALL BE PROVIDED TO THE DISTRICT IN AUTOCAD FORMAT, R 2000 OR NEWER. IN ADDITION, ALL SEWER EASEMENTS SHALL BE STAKED AND FLAGGED AT THEIR INTERSECTION WITH PROPERTY LINES AND AT 25 FOOT STATIONS ALONG THE EASEMENT LINES.

POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES

SOIL RETENTION

RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIREING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING: A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHAL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF THE INCOPROATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSIL LAYERE SHAOULD BE SCAIFIED AT LEAST 4 INCHES WITH SOME INCOPROATION OF THE UPPPER MATERIAL TO AVOID STRATIFIED LAYER, WHERE FEASIBLE.

CONSTRUCTION

- 11 THE SEWER MAIN SHALL BE PLACED FIVE (5) FEET SOUTH OR WEST FROM THE CENTERLINE OF THE ROADWAY, UNLESS OTHERWISE SHOWN ON THE PLAN.
- A MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN THE SANITARY SEWER LINE AND THE WATER MAIN. AFTER TRENCH BACKFILL AND COMPACTION, PVC SANITARY SEWER MAINS SHALL BE TESTED FOR DEFLECTION AS SPECIFIED IN SECTION 7-17.3(2)G OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION TEST OBSERVATION

UTILITY DISTRICT.

AND INSPECTION BY NORTHSHORE

INCLUDE THE WORDS "SANITARY SEWER".

- WHENEVER SANITARY SEWER CROSSES BELOW A WATER MAIN, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER LINE IS
- AT LEAST EIGHTEEN (18) INCHES BELOW THE BOTTOM OF THE WATER MAIN. ALL MANHOLES SHALL HAVE A MINIMUM DROP OF ONE—TENTH (0.10) FOOT AND FIVE—TENTHS (0.50) FOOT MAXIMUM DROP BETWEEN INVERT IN AND
- INVERT OUT. MANHOLES IN THE PUBLIC RIGHT-OF-WAY SHALL BE A MINIMUM OF EIGHT (8) FEET IN DEPTH OR PER APPROVED PLANS.
- MANHOLES NOT IN PAVED PUBLIC RIGHT-OF-WAY TO HAVE LOCKING LIDS AND ALL FRAMES SHALL BE LOCKING TYPE PER THE STANDARD DETAILS. FOR PIPE SLOPES GREATER THAN 20%, RESTRAINED—JOINT DUCTILE IRON PIPE SHALL BE USED FOR EVERY JOINT.
- SIDE SEWER STUBS SHALL HAVE A MINIMUM OF TWO (2) PERCENT SLOPE AND MAXIMUM OF FORTY—FIVE (45) DEGREE SLOPE. STUBS SHALL BE 6" MINIMUM DIAMETER. FOR ALL STUBS LESS THAN EIGHT (8) FEET IN DEPTH: INSTALL A THREE (3) INCH WIDE GREEN METALLIC DETECTOR TAPE 12" ABOVE THE PIPE, THE ENTIRE LENGTH OF THE STUB CONTINUING UP THE 2X4 SIDE SEWER MARKER POST. IDENTIFICATION ON THE TAPE SHALL

- 20 SANITARY SEWER PIPE LESS THAN EIGHTEEN (18) FEET IN DEPTH AND LESS THAN 20% SLOPE SHALL BE PVC CONFORMING TO ASTM D-3034, SDR-35 AND SHALL BE BEDDED WITH CLEAN, GRANULAR MANUFACTURED PEA GRAVEL FROM 4"UNDER TO 6"OVER THE PIPE. SANITARY SEWER PIPE EIGHTEEN (18) FEET DEEP AND GREATER, OR ON A SLOPE OF 20% DUCTILE-IRON PIPE MUST MEET THE REQUIREMENTS OF AWWA C-151.
- 21 HIGH-DENSITY POLYETHYLENE (HDPE) SHALL BE SDR-11 MINIMUM.

2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.

- 3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
- A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BMP 17.30: BIORETENTION CVELLS, SWALES, AND PLANTER BOXES (P.959 OF THE 2014 SWMMWW), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65% AND A CORBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
- B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE COTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.

STORM DRAINAGE GENERAL NOTES

- ALL NEW CATCH BASINS SHALL CONFORM TO THE APWA WSDOT STANDARD DETAILS.
- THE FOOTING DRAINAGE SYSTEM AND THE ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED.
- PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION FILTER AND SILT REMOVAL FACILITIES TO ENSURE THAT SEDIMENT OR OTHER HAZARDOUS MATERIALS DO NOT ENTER THE STORM DRAINAGE SYSTEM. FOR ALL CONSTRUCTION DURING THE RAINY SEASON. DOWNHILL BASINS AND INLETS MUST BE PROTECTED WITH CATCH BASINS INSERTS. PLACEMENT OF FILTER FABRIC UNDER GRATE IS NOT ACCEPTABLE
- 4. PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF STORM DRAINAGE WORK. PIPES AND STORM DRAIN STRUCTURES SHALL BE CLEANED AND FLUSHED. ANY OBSTRUCTIONS TO FLOW WITHIN THE STORM DRAINAGE SYSTEM (SUCH AS RUBBLE, MORTAR, AND WEDGED DEBRIS) SHALL BE REMOVED AT THE NEAREST STRUCTURE. WASH WATER OF ANY SORT SHALL NOT BE DISCHÀRGED TO THE STÓRM DRAIN SYSTEM OR SURFACÉ WATER.
- 5. ON-SITE DRAINAGE SYSTEM WILL BE PRIVATELY OWNED AND MAINTAINED.
- 6. SEE FOUNDATION PLAN FOR FOOTING DRAIN LOCATIONS.
- 7. EXCAVATION OF ON—SITE CATCH BASINS WILL NOT IMPACT NEIGHBORING PROPERTY AND WILL BE CONTAINED BY WALL

GENERAL NOTES

- 1. CONTRACTOR IS TO OBTAIN PERMITS AND GUARANTEES.
- 2. ALL DAMAGE TO ADJACENT PROPERTIES OR PUBLIC RIGHTS—OF—WAY RESULTING FROM CONSTRUCTION (E.G., SILTATION, MUD, WATER, RUNOFF, ROADWAY DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT OR HAULING) SHALL BE EXPEDITIOUSLY MITIGATED AND REPAIRED BY THE CONTRACTOR. AT NO EXPENSE TO THE CITY. FAILURE TO MITIGATE AND REPAIR SAID DAMAGE OR TO COMPLY WITH THE APPROVED CONSTRUCTION PLANS, THE PERMITS ISSUED BY THE CITY OR THE CITY REQUIREMENT FOR CORRECTIVE ACTION SHALL BE CAUSE FOR THE ISSUANCE OF A "STOP WORK" ORDER. FORECLOSURE ON THE PLAT BOND/ SECURITY, AND/OR OTHER MEASURES DEEMED APPROPRIATE BY THE CITY ENGINEER OR CODE OFFICIAL TO ENSURE QUALITY CONSTRUCTION AND PROTECT THE PUBLIC SAFETY.
- CONSTRUCTION OF ALL IMPROVEMENTS FOR ACCESS, UTILITIES, STORM DRAINAGE AND SITE WORK SHALL COMPLY WITH CURRENT CITY ORDINANCES AND THE REQUIREMENTS OF THE CITY ENGINEER
- ALL SHORT PLAT IMPROVEMENTS SHALL BE COMPLETED PRIOR TO FINAL APPROVAL AND RECORDING OF THE SHORT PLAT MYLAR DOCUMENTS OR BONDED AND COMPLETED PRIOR TO ISSUANCE OF BUILDING PERMITS WHEN APPROVED BY THE CITY ENGINEER. AN ACCURATELY PREPARED AS—BUILT DRAWING THAT SHOWS ALL UTILITIES AND SHORT PLAT IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF THE WORK PROVIDED TWO PAPER COPIES, ONE MYLAR AND ONE DXF AUTOCAD FILE. SUBMIT USING MERCER ISLAND'S DATUM AN TIE THE PLAT TO AT LEAST TWO MONUMENTS.

TREE PROTECTION NOTES

- CONTRACTOR SHALL COORDINATE WITH ARBORIST ON GRADING AROUND RETAINED TREES AND ROOTS.
- 2. ARBORIST TO BE ONSITE TO VERIFY PRESERVATION OF RETAINED TREES

WATER GENERAL NOTES

ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE DEVELOPER EXTENSION AGREEMENT, THE STANDARD SPECIFICATIONS AND THE STANDARD DETAILS OF THE CITY OF MERCER

- 2 THE APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN ON PLANS AND PROFILES FOR CONVENIENCE. THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND ELEVATION OF EXISTING WATER LINE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF ANY CONFLICTS.
- 3 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE LOCATED BY APPROPRIATE UTILITY DISTRICTS OR COMPANIES, ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. 4 FOR UTILITY LOCATES IN KING COUNTY, CALL 1-800-424-5555 PRIOR TO DIGGING

5 THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REGULATORY PERMITS.

6 ALL WORK IN RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF PERMITTING AGENCY.

- 7 A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD AT THE CITY OF MERCER ISLAND'S OFFICE PRIOR TO THE START OF CONSTRUCTION. CITY STAFF WILL NOTIFY THE APPROPRIATE AGENCIES OR REPRESENTATIVES.
- 8 PRIOR TO CONSTRUCTING ANY WATER MAINS, THE STREET CENTERLINES OF THE DEVELOPMENT, CENTER OF CUL-DE-SACS, ALL WATER LINE EASEMENTS AND ALL LOT CORNERS SHALL BE STAKED. THE MAXIMUM STATIONING INTERVAL WILL BE 50 FEET WITH THE STATION NUMBER ON EACH STAKE
- 9 HORIZONTAL CONTROL DATA SHALL BE NAD '83/"91. VERTICAL CONTROL SHALL BE NAVD-88 DATUM.
- 10 AT THE CONCLUSION OF CONSTRUCTION, THE DEVELOPER'S REGISTERED PROFESSIONAL SURVEYOR SHALL PREPARE A DRAWING BASED ON THE SURVEYED LOCATIONS OF ALL APPURTENANCES INSTALLED, INCLUDING BUT NOT LIMITED TO, WATER MAIN, METER BOXES, BLOWOFFS, VALVES BOXES, HYDRANTS AND BENDS. THE DISTRICT WILL PROVIDE LOCATES TO ASSIST THE SURVEYOR IN LOCATING THE WATER MAIN BETWEEN APPURTENANCES AND LOCATING THE BENDS. THE DRAWING SHALL BE PROVIDED TO THE DISTRICT IN AUTOCAD FORMAT, R 2000 OR NEWER. IN ADDITION, ALL WATER EASEMENTS SHALL BE STAKED AND FLAGGED AT THEIR INTERSECTION WITH PROPERTY LINES AND AT 25 FOOT STATIONS ALONG THE EASEMENT LINES.

11 THE WATER MAIN SHALL BE PLACED AS SHOWN ON PLAN.

- 12 A MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN THE SANITARY SEWER LINE AND THE WATER MAIN.
- 13 A FIVE (5) FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER FACILITIES AND UNDERGROUND POWER AND TELEPHONE FACILITIES, UNLESS OTHERWISE APPROVED BY THE
- 14 DISTRICT VALVES SHALL ONLY BE OPERATED BY DISTRICT PERSONNEL.

- 15 ALL WATER MAIN PIPING SHALL BE DUCTILE-IRON MINIMUM THICKNESS CLASS 52, CEMENT-MORTAR LINED AND TYTON JOINT. ALL WATER MAIN PIPING TO MEET THE REQUIREMENTS OF AWWA
- 16 ALL WATER MAIN FITTINGS SHALL BE CEMENT-MORTAR LINED AND MEET THE REQUIREMENTS OF AWWA C-153.
- 17 POLYETHYLENE ENCASEMENT TO MEET THE AWA STANDARD C-105. ANY TEARS OR OPENINGS MADE FOR SERVICE OR TAPS SHALL BE REPAIRED WITH AN ADHESIVE TAPE.
- 18 ALL WATER MAIN PIPES AND SERVICES SHALL BE INSTALLED WITH A 14 (FOURTEEN) GAUGE, CONTINUOUS, SOLID-CORE, NEOPRENE COATED LOCATING WIRE. ANY CONNECTIONS OR SPLICES SHALL BE MADE WITH SPLIT-BOLT WIRE CONNECTORS.

20-2 AFTER INSTALLATION OF THE METER AND BOX, A 2X4 BOARD PAINTED WHITE WITH "WATER SERVICE" STENCILED ONTO IT WILL BE DRIVEN INTO THE GROUND BEHIND THE METER BOX.

PLACEMENT 19 FIRE HYDRANT LOCATIONS TO BE APPROVED BY THE FIRE MARSHAL OF JURISDICTION.

- 20 Water service line and meter locations will be coordinated with the developer's engineer after a thorough review of all utility facilities.
- 20-1 THE METER LOCATION SHALL BE WITHIN THREE (3) FEET OF THE PROPERTY LINE THAT IS PERPENDICULAR TO THE RIGHT-OF-WAY AND WITHIN ONE (1) FOOT OF THE EDGE OF PROPERTY ON THE RIGHT-OF-WAY SIDE UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT.

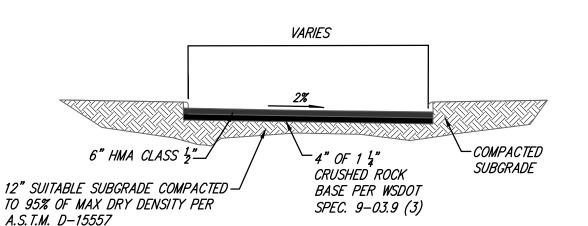
POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES (CONT.)

- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:

 1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.

 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF SOIL AND AMENDMENT.

 3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEPORT OF DEPTH AND CONTENT AND SOUTH A
- IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.



DRIVEWAY SECTION

NO SCALE

UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, CONTACTING ALL UTILITY COMPANIES, POTHOLING THE UTILITIES, AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-555 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CORE DESIGN, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

UNDERGROUND LOCATOR SERVICE CALL BEFORE YOU DIG! 811

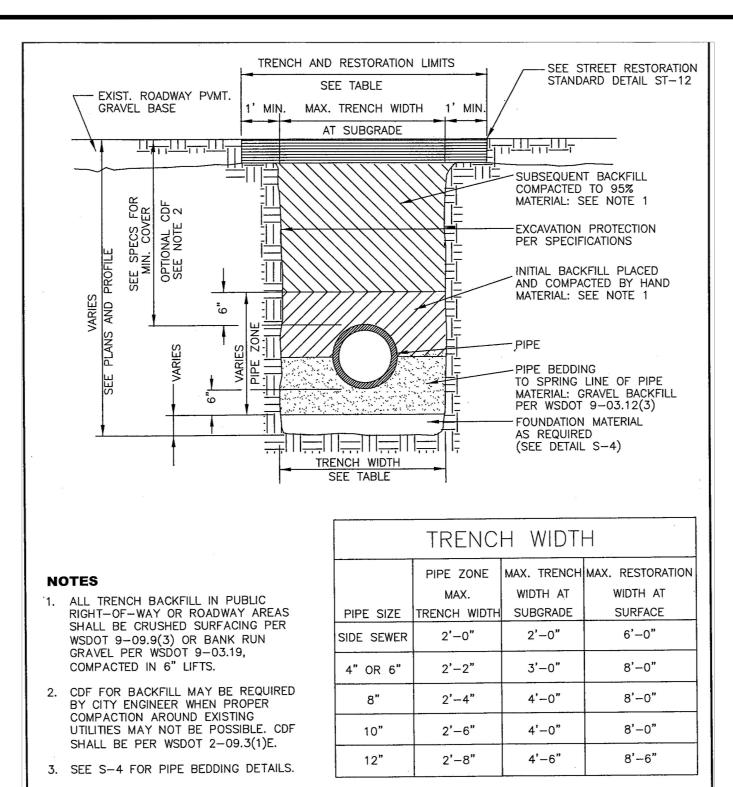
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RADING TREE 2 AND

SHEET

ROJECT NUMBEI 18039



CITY OF MERCER ISLAND

STANDARD DETAILS

SEWER

S-3

SEWER

TRENCH DETAIL

TRENCH SECTION

NO SCALE

3-29-2021

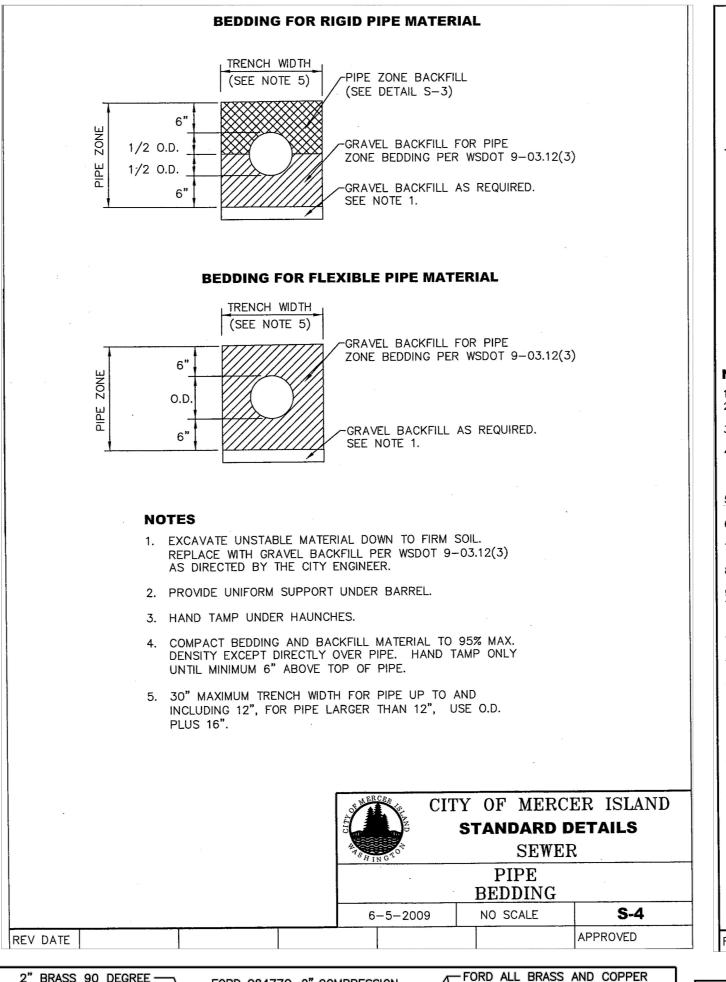
W-3

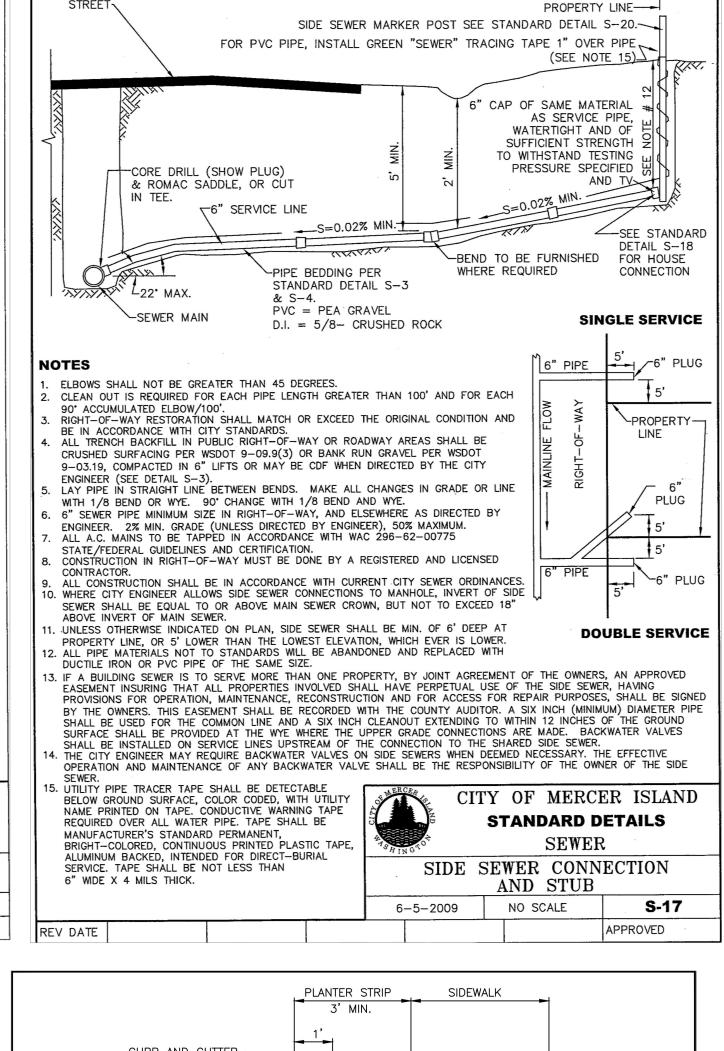
APPROVED

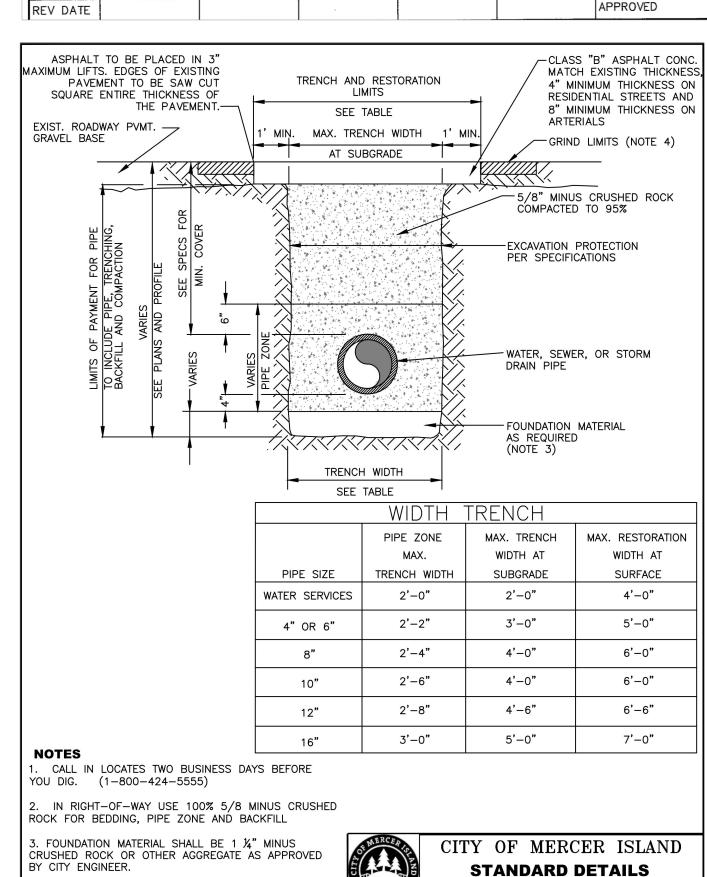
REV DATE

NO SCALE

6-5-2009







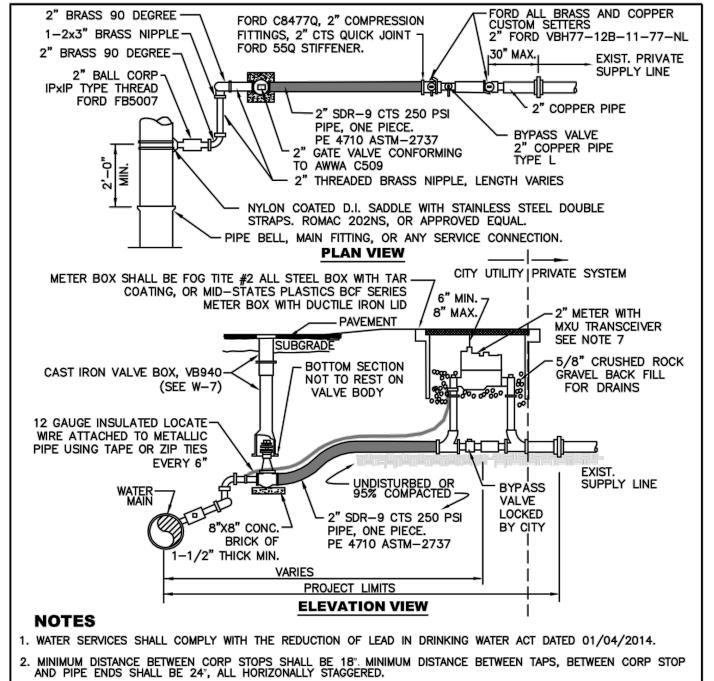
4. GRIND AND OVERLAY LIMITS SHALL EXTEND A

LIQUID ASPHALT. SQUEEGEE OR MOP THE SEALER.

COVER WITH DRY SAND.

MINIMUM OF 10' PAST THE END OF TRENCH AREAS.

. SEAL ALL FINAL PATCHING AND PAVING SEAMS WITH



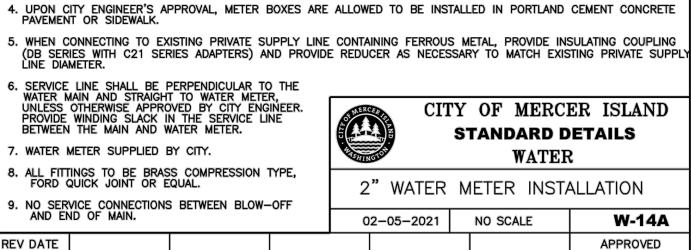
3. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.

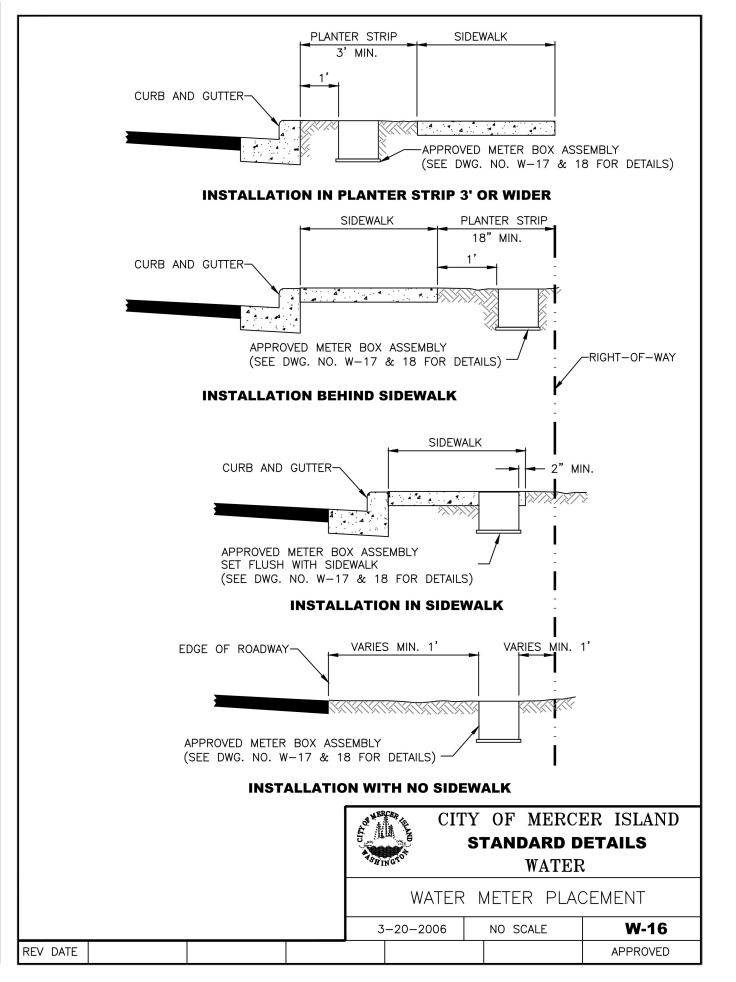
5. WHEN CONNECTING TO EXISTING PRIVATE SUPPLY LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING PRIVATE SUPPLY LINE DIAMETER.

S. SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.

WATER METER SUPPLIED BY CITY.

8. ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.





UNDERGROUND LOCATOR SERVICE CALL BEFORE YOU DIG!

811

UTILITY CONFLICT NOTE:

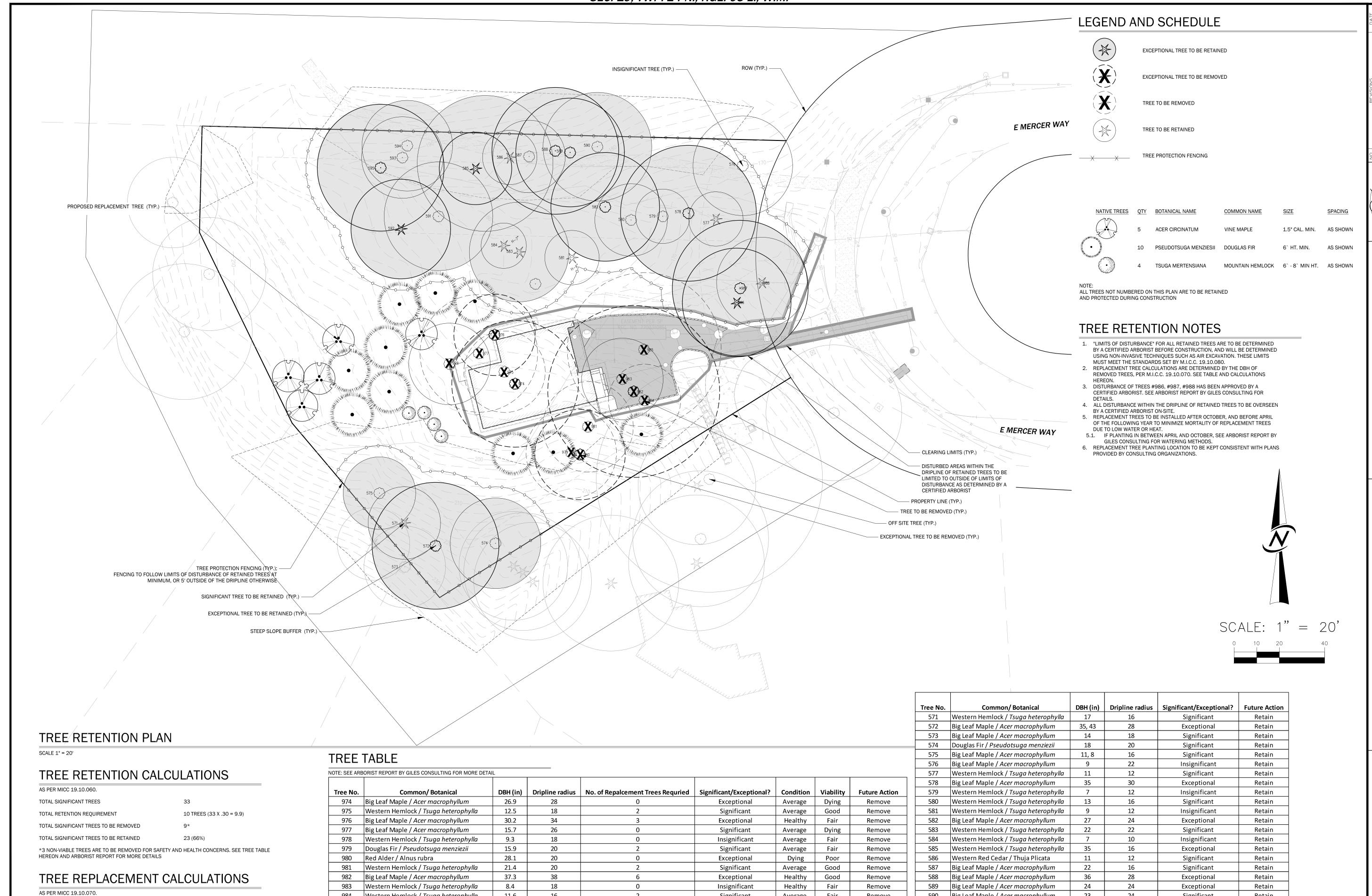
CAUTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, CONTACTING ALL UTILITY COMPANIES, POTHOLING THE UTILITIES, AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 1-800-424-555 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CORE DESIGN, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH

CITY CITY CITY CITY

~ 0 M

SHEET OF

C4.32 ROJECT NUMBER 18039



Significant

Significant

Exceptional

Exceptional

Significant

Fair

Fair

Good

Good

Good

Remove

Remove

Retain

Retain

Retain

Average

Average

Healthy

Average

Average

23

22

37

14

19

28

590 Big Leaf Maple / Acer macrophyllum

591 Big Leaf Maple / Acer macrophyllum

592 Douglas Fir / Pseudotsuga menziezii

593 Big Leaf Maple / Acer macrophyllum

594 Big Leaf Maple / Acer macrophyllum

595 Big Leaf Maple / Acer macrophyllum

24

24

22

18

20

28

Significant

Significant

Exceptional

Significant

Significant

Exceptional

Retain

Retain

Retain

Retain

Retain

Retain

SHEET

L1.01

18039

984 Western Hemlock / *Tsuga heterophylla*

985 Big Leaf Maple / Acer macrophyllum

986 Douglas Fir / Pseudotsuga menziezii

987 Big Leaf Maple / Acer macrophyllum

988 Western Hemlock / Tsuga heterophylla

TREES TO BE REMOVED

TOTAL REPLACEMENT TREES REQUIRED

REPLACEMENT TREES PROPOSED

11.6

19.1

38.2

30.8, 20.0

15.4

16

34

24

30

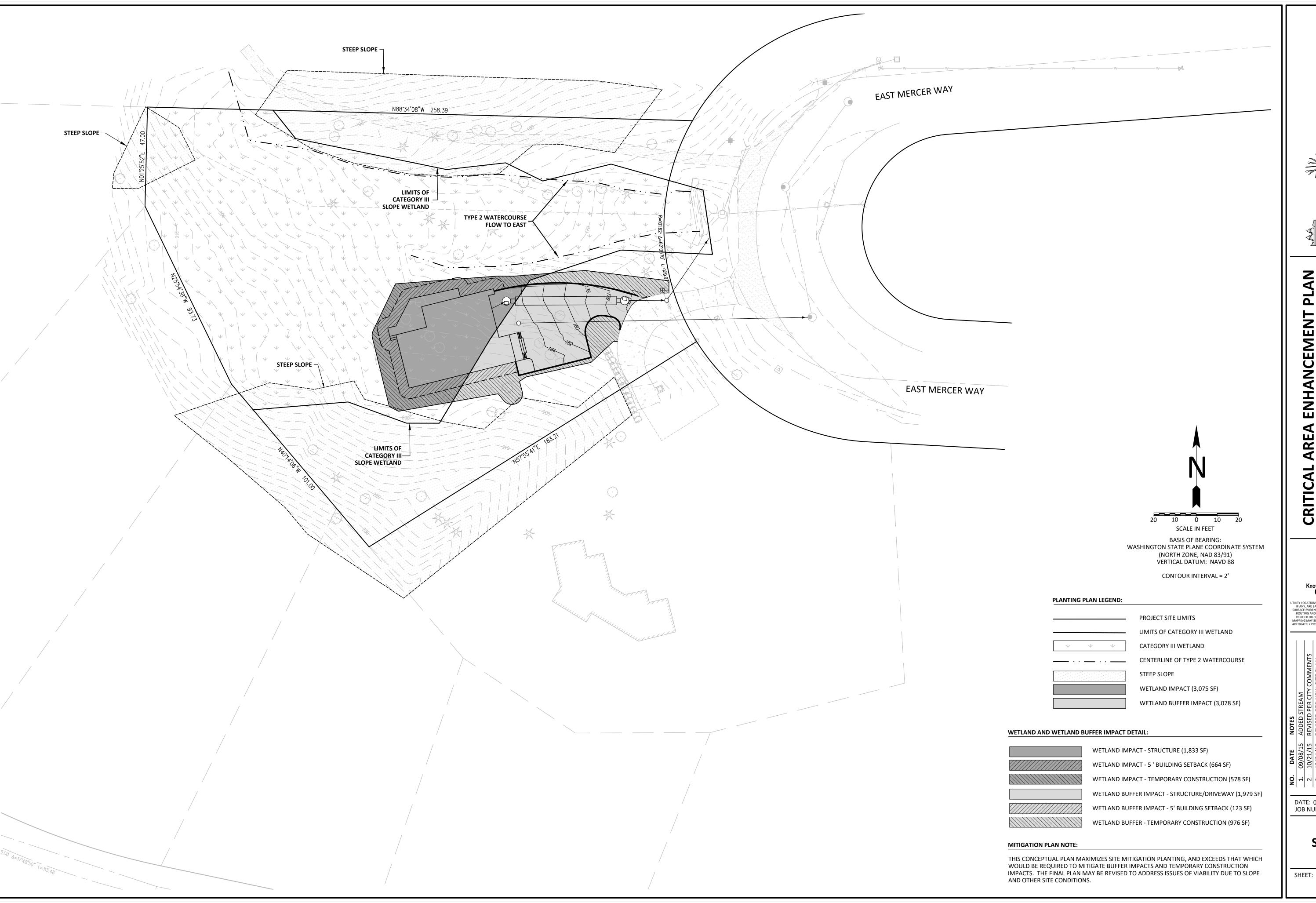
20

Total Replacement Trees

0

0

19



AREA ENHANCEMENT
- MI TREEHOUSE LLC -J

Know what's **below. Call** before you dig.

UTILITY LOCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWING, IF ANY, ARE BASED ON THE FIELD LOCATION OF THE APPARENT SURFACE EVIDENCE OF EXISTING STRUCTURES. THE UNDERGROUND ROUTING AND CONDITION OF BURIED UTILITIES HAS NOT BEEN VERIFIED OR CONFIRMED. ADDITIONAL UTILITY LOCATION AND MAPPING MAY BE REQUIRED. FIELD LOCATE, VERIFY DEPTH OF, AND ADEQUATELY PROTECT ALL UTILITIES PRIOR TO THE START OF WORK.

DATE: 03/04/2015 JOB NUMBER: 14-206

SITE PLAN

1 OF **2**

- HERBIVORY PROTECTION;
- 5. PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

SUCH CONTINGENCY PLAN SHALL BE SUBMITTED TO THE CITY OF MERCER ISLAND BY JANUARY 31 OF ANY YEAR WHEN DEFICIENCIES ARE DISCOVERED. UNLESS OTHERWISE APPROVED BY THE CITY OF MERCER ISLAND, ACTIONS SPECIFIED ON AN APPROVED CONTINGENCY PLAN MUST BE COMPLETED WITHIN 60 DAYS. IF THE FAILURE IS SUBSTANTIAL, THE CITY OF MERCER ISLAND MAY EXTEND THE

THIS SECTION PROVIDES A GENERAL OVERVIEW OF THE MAINTENANCE PROGRAM NECESSARY TO ENSURE THE PERFORMANCE STANDARDS ESTABLISHED FOR THIS

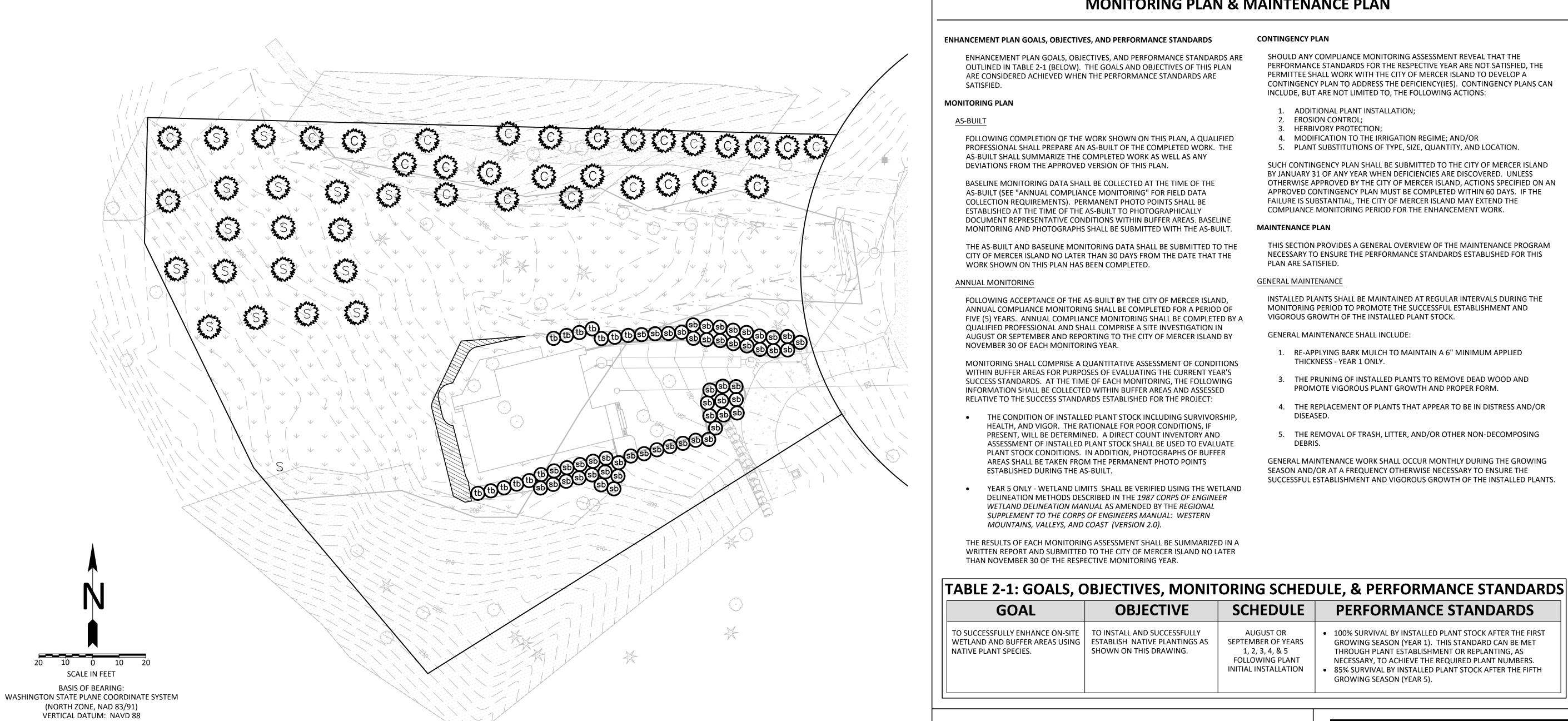
GENERAL MAINTENANCE

INSTALLED PLANTS SHALL BE MAINTAINED AT REGULAR INTERVALS DURING THE MONITORING PERIOD TO PROMOTE THE SUCCESSFUL ESTABLISHMENT AND

GENERAL MAINTENANCE SHALL INCLUDE:

- RE-APPLYING BARK MULCH TO MAINTAIN A 6" MINIMUM APPLIED
- PROMOTE VIGOROUS PLANT GROWTH AND PROPER FORM.

SEASON AND/OR AT A FREQUENCY OTHERWISE NECESSARY TO ENSURE THE SUCCESSFUL ESTABLISHMENT AND VIGOROUS GROWTH OF THE INSTALLED PLANTS.



MITIGATION PLAN NOTE:

CONTOUR INTERVAL = 2'

THIS CONCEPTUAL PLAN MAXIMIZES SITE MITIGATION PLANTING, AND EXCEEDS THAT WHICH WOULD BE REQUIRED TO MITIGATE BUFFER IMPACTS AND TEMPORARY CONSTRUCTION IMPACTS. THE FINAL PLAN MAY BE REVISED TO ADDRESS ISSUES OF VIABILITY DUE TO SLOPE AND OTHER SITE

PLANTING PLAN NOTES:

222ND PLACE SE - SAMMAMISH, WASHINGTON 98075; 425-454-3096). SOURCE DRAWINGS HAVE BEEN MODIFIED FOR VISUAL ENHANCEMENT.

1. BASE TOPOGRAPHIC AND SITE PLAN PROVIDED BY HEALY-JORGENSEN ARCHITECTS (2958

PROTECT AND ACCOMMODATE EXISTING NATIVE VEGETATION WHEN INSTALLING PLANTS.

PLANT SCHEDULE:

	COMMON NAME	SCIENTIFIC NAME	SIZE/FORM	QUANTITY	SPACING
\$ S \$	- SITKA SPRUCE	PICEA SITCHENSIS	6 FT BALL AND BURLAP	17	AS SHOWN
	- WESTERN REDCEDAR	THUJA PLICATA	2 GALLON CONTAINERIZED	27	AS SHOWN
(b)	TWINBERRY HONEYSUCKLE	LONICERA INVOLUCRATA	2 GALLON CONTAINERIZED	13	AS SHOWN
Sb —	SALMONBERRY	RUBUS SPECTABILIS	2 GALLON CONTAINERIZED	53	AS-SHOWN
	RED-OSIER DOGWOOD	CORNUS SERICEA	4 FOOT LIVE STAKE	25	4 FT ON-CENTER

TOTAL - 135

OBJECTIVE

SHOWN ON THIS DRAWING.

PLANT INSTALLATION DETAIL

GENERAL NOTES:

GROWING SEASON (YEAR 5).

- WORK SHALL CONFORM TO ANY AND ALL APPLICABLE PERMITS AND/OR APPROVED CONSTRUCTION DRAWINGS.
- 2. WORK SHALL BE COMPLETED BY PERSONS EXPERIENCED IN THE ENHANCEMENT WORK SHOWN ON THESE DRAWINGS.

PERFORMANCE STANDARDS

100% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIRST

GROWING SEASON (YEAR 1). THIS STANDARD CAN BE MET

THROUGH PLANT ESTABLISHMENT OR REPLANTING, AS

NECESSARY, TO ACHIEVE THE REQUIRED PLANT NUMBERS. 85% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIFTH

- . BEFORE THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN MERCER ISLAND, THE OWNER, AND THE PLAN DESIGNER.
- 4. A COPY OF THESE APPROVED DRAWINGS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- SITE CONDITIONS MAY VARY BASED ON SEASON AND/OR TIME OF YEAR. THE CONSTRUCTION CONTRACTOR SHALL ACCOMMODATE REALIZED AND ANTICIPATED SITE CONDITIONS WHEN COMPLETING THE WORK SHOWN ON THESE DRAWINGS.

NCEME

A ENHAR

Know what's **below**.

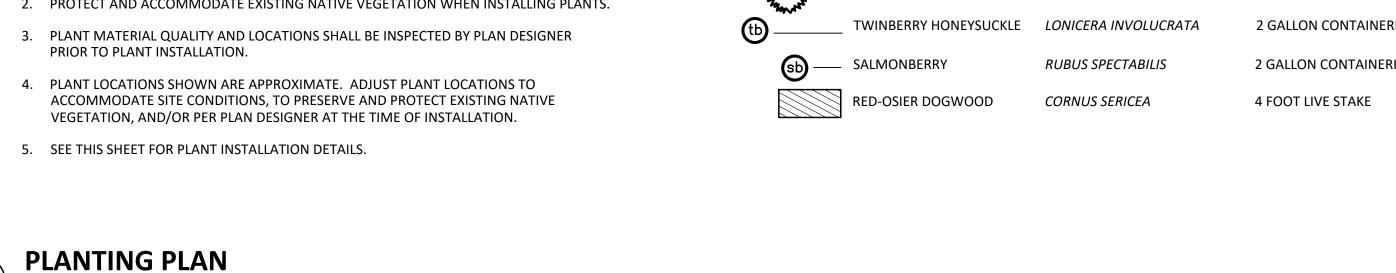
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Call before you dig. UTILITY LUCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWII IF ANY, ARE BASED ON THE FIELD LOCATION OF THE APPARENT SURFACE EVIDENCE OF EXISTING STRUCTURES. THE UNDERGROUN ROUTING AND CONDITION OF BURIED UTILITIES HAS NOT BEEN VERIFIED OR CONFIRMED. ADDITIONAL UTILITY LOCATION AND MAPPING MAY BE REQUIRED. FIELD LOCATE, VERIFY DEPTH OF, AN ADEQUATELY PROTECT ALL UTILITIES PRIOR TO THE START OF WOR

DATE: 03/04/2015 JOB NUMBER: 14-206

Planting Plan, Notes, Details, & **Monitoring Plan**

2 of 2



THE AS-BUILT AND BASELINE MONITORING DATA SHALL BE SUBMITTED TO THE CITY OF MERCER ISLAND NO LATER THAN 30 DAYS FROM THE DATE THAT THE WORK SHOWN ON THIS PLAN HAS BEEN COMPLETED.

ANNUAL MONITORING FOLLOWING ACCEPTANCE OF THE AS-BUILT BY THE CITY OF MERCER ISLAND, ANNUAL COMPLIANCE MONITORING SHALL BE COMPLETED FOR A PERIOD OF

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

SATISFIED.

MONITORING PLAN

AS-BUILT

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS ARE OUTLINED IN TABLE 2-1 (BELOW). THE GOALS AND OBJECTIVES OF THIS PLAN

FOLLOWING COMPLETION OF THE WORK SHOWN ON THIS PLAN, A QUALIFIED

PROFESSIONAL SHALL PREPARE AN AS-BUILT OF THE COMPLETED WORK. THE

AS-BUILT SHALL SUMMARIZE THE COMPLETED WORK AS WELL AS ANY

BASELINE MONITORING DATA SHALL BE COLLECTED AT THE TIME OF THE

DOCUMENT REPRESENTATIVE CONDITIONS WITHIN BUFFER AREAS. BASELINE

MONITORING AND PHOTOGRAPHS SHALL BE SUBMITTED WITH THE AS-BUILT

AS-BUILT (SEE "ANNUAL COMPLIANCE MONITORING" FOR FIELD DATA

COLLECTION REQUIREMENTS). PERMANENT PHOTO POINTS SHALL BE

ESTABLISHED AT THE TIME OF THE AS-BUILT TO PHOTOGRAPHICALLY

DEVIATIONS FROM THE APPROVED VERSION OF THIS PLAN.

ARE CONSIDERED ACHIEVED WHEN THE PERFORMANCE STANDARDS ARE

FIVE (5) YEARS. ANNUAL COMPLIANCE MONITORING SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL AND SHALL COMPRISE A SITE INVESTIGATION IN AUGUST OR SEPTEMBER AND REPORTING TO THE CITY OF MERCER ISLAND BY NOVEMBER 30 OF EACH MONITORING YEAR

MONITORING SHALL COMPRISE A QUANTITATIVE ASSESSMENT OF CONDITIONS WITHIN BUFFER AREAS FOR PURPOSES OF EVALUATING THE CURRENT YEAR'S SUCCESS STANDARDS. AT THE TIME OF EACH MONITORING, THE FOLLOWING INFORMATION SHALL BE COLLECTED WITHIN BUFFER AREAS AND ASSESSED RELATIVE TO THE SUCCESS STANDARDS ESTABLISHED FOR THE PROJECT:

- HEALTH, AND VIGOR. THE RATIONALE FOR POOR CONDITIONS, IF PRESENT, WILL BE DETERMINED. A DIRECT COUNT INVENTORY AND ASSESSMENT OF INSTALLED PLANT STOCK SHALL BE USED TO EVALUATE PLANT STOCK CONDITIONS. IN ADDITION, PHOTOGRAPHS OF BUFFER AREAS SHALL BE TAKEN FROM THE PERMANENT PHOTO POINTS ESTABLISHED DURING THE AS-BUILT.
- YEAR 5 ONLY WETLAND LIMITS SHALL BE VERIFIED USING THE WETLAND DELINEATION METHODS DESCRIBED IN THE 1987 CORPS OF ENGINEER WETLAND DELINEATION MANUAL AS AMENDED BY THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS MANUAL: WESTERN MOUNTAINS, VALLEYS, AND COAST (VERSION 2.0).

THE RESULTS OF EACH MONITORING ASSESSMENT SHALL BE SUMMARIZED IN A WRITTEN REPORT AND SUBMITTED TO THE CITY OF MERCER ISLAND NO LATER THAN NOVEMBER 30 OF THE RESPECTIVE MONITORING YEAR.

TO SUCCESSFULLY ENHANCE ON-SITE | TO INSTALL AND SUCCESSFULLY

WETLAND AND BUFFER AREAS USING | ESTABLISH NATIVE PLANTINGS AS

CONTINGENCY PLAN

MONITORING PLAN & MAINTENANCE PLAN

SHOULD ANY COMPLIANCE MONITORING ASSESSMENT REVEAL THAT THE PERFORMANCE STANDARDS FOR THE RESPECTIVE YEAR ARE NOT SATISFIED, THE PERMITTEE SHALL WORK WITH THE CITY OF MERCER ISLAND TO DEVELOP A CONTINGENCY PLAN TO ADDRESS THE DEFICIENCY(IES). CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING ACTIONS:

- ADDITIONAL PLANT INSTALLATION;
- EROSION CONTROL;
- 4. MODIFICATION TO THE IRRIGATION REGIME; AND/OR

COMPLIANCE MONITORING PERIOD FOR THE ENHANCEMENT WORK.

MAINTENANCE PLAN

PLAN ARE SATISFIED.

SCHEDULE

AUGUST OR

SEPTEMBER OF YEARS

1, 2, 3, 4, & 5

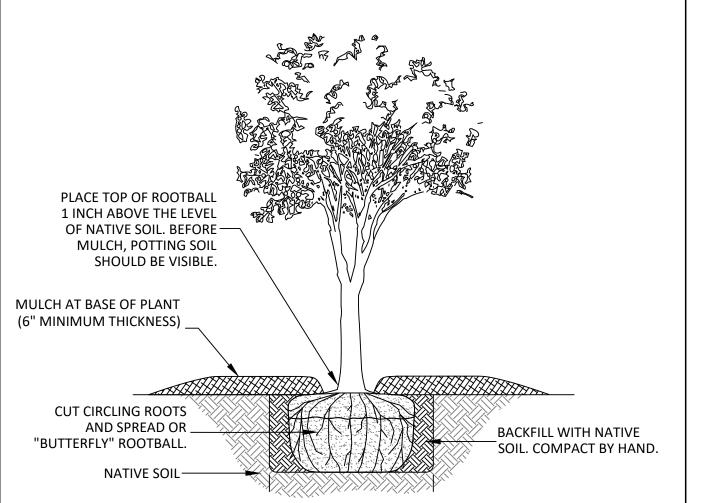
FOLLOWING PLANT

INITIAL INSTALLATION

VIGOROUS GROWTH OF THE INSTALLED PLANT STOCK.

- THICKNESS YEAR 1 ONLY.
- THE PRUNING OF INSTALLED PLANTS TO REMOVE DEAD WOOD AND
- 4. THE REPLACEMENT OF PLANTS THAT APPEAR TO BE IN DISTRESS AND/OR
- 5. THE REMOVAL OF TRASH, LITTER, AND/OR OTHER NON-DECOMPOSING

GENERAL MAINTENANCE WORK SHALL OCCUR MONTHLY DURING THE GROWING



MIN. 1.5 TIMES THE WIDTH OF THE ROOTBALL

GOAL

NATIVE PLANT SPECIES.