GENERAL NOTES

THESE GENERAL NOTES ARE TO BE USED AS A SUPPLEMENT TO THE DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THESE GENERAL NOTES, SITE CONDITIONS, AND THE STANDARDS LISTED BELOW SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY OR OMISSION IN WRITING. ANY WORK DONE BY THE CONTRACTOR AFTER THE DISCOVERY OF A DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S OWN RISK. THE CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION.
THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES REQUIRED TO PERFORM HIS WORK.

STANDARDS:

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM WITH:
2018 Internation Residential Code
2018 Internation Mechanical Code
2018 Internation Fuel Gas Code
2018 Internation Fire Code
2018 Uniform Plumbing Code
Washington State Energy Code
Washington Cities Electrical Code
LATEST ADOPTED EDITIONS AS AMENDED AND ADOPTED BY THE APPLICABLE JURISDICTION.

CITY REVIEWS:

CAC15-001 & 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 1", "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 711. 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:
1. 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 A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
6. AT WALLS AND ROOF INTERSECTIONS
7. AT BUILT-IN GUTTERS

FIREBLOCKING:

FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL 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:
1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
1.1 VERTICALLY AT THE CEILING AND FLOOR LEVELS.
1.2 HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL 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 LEVEL 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 GREATER THAN ½-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 APPROVED 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 ½-INCH IN THE LEAST DIMENSION.

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.

FIREPLACES:

GAS ZERO-CLEARANCE FIREPLACES SHALL BE UL APPROVED. THEY SHALL BE INSTALLED IN ACCORDANCE WITH THE IRC AND THE MANUFACTURER'S SPECIFICATIONS. THEY SHALL BE FITTED WITH A TIGHT FITTING FLUE DAMPER, & OPERATED WITH A READILY ACCESSIBLE MANUAL OR APPROVED 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:

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 120 DEGREES FAHRENHEIT.

STAIR NOTES:

MINIMUM STAIR WIDTH 36" CLEAR MINIMUM HEADROOM 6'-8" CLEAR. STAIR RISE AND RUN PER THE PLANS (7-3/4" MAX RISE/10" 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. COVER 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 72 MONITORED "CHAPTER 29" FIRE ALARM SYSTEM IS REQUIRED. IT SHALL BE INSTALLED PER CHAPTER 29

1/20/2022

FIRE SPRINKLER SYSTEM:

A NFPA 13R FIRE SPRINKLER SYSTEM IS REQUIRED

1/20/2022

EGRESS:

EVERY 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" ABOVE THE FLOOR.

RECESSED LIGHTING FIXTURES:

WHEN INSTALLED, RECESSED LIGHTING FIXTURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS:
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 SEVENTY-FIVE PASCALS OR 1.57 LBS/SF PRESSURE DIFFERENCE AND HAVE A LABEL ATTACHED, SHOWING COMPLIANCE.

WATER EFFICIENCY STANDARDS:

MAXIMUM WATER USE ALLOWED MEASURED IN GALLONS PER MINUTE (GPM):

TOILETS	1.28 GPM
SHOWERHEADS	1.75 GPM
LAVATORY FAUCETS	1.0 GPM
KITCHEN FAUCETS	1.39 GPM

FANS:

BATH, POWDER ROOM AND LAUNDRY ROOM FANS 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:

RANGE HOODS SHALL HAVE A MINIMUM CAPACITY OF 100 CFM AND SHALL VENT 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:

THIS SECTION SHALL BE USED FOR SIZING EXHAUST AND SUPPLY DUCTS.

FAN CFM	FLEX DIA.	MAX LENGTH	SMOOTH DIA.	MAX LENGTH
50	4 INCH	25'	4 INCH	70'
50	5 INCH	90'	5 INCH	100'
50	6 INCH	NO LIMIT	6 INCH	NO LIMIT
80	4 INCH	NOT ALLOWED	4 INCH	20'
80	5 INCH	15'	5 INCH	100'
80	6 INCH	90'	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	90'	7 INCH	NO LIMIT

THERE SHALL BE A MAXIMUM OF THREE ELBOWS. FOR EACH ELBOW OVER THREE SUBTRACT 10 FEET FROM THE MAXIMUM LENGTH.

ENERGY CREDITS:

HEATING OPTIONS

2	HEAT PUMP	1.0 CREDIT

ENERGY OPTIONS

1.2	EFFICIENT BUILDING ENVELOPE	0.5 CREDITS
2.1	AIR LEAKAGE CONTROL & EFFICIENT VENTILATION	0.5 CREDITS
3.3	HIGH EFFICIENCY HVAC	1.5 CREDITS
5.5	EFFICIENT WATER HEATING	2.0 CREDITS
7.1	APPLIANCE PACKAGE	0.5 CREDITS

1/20/2022

WHOLE HOUSE VENTILATION (INTEGRATED):

THE INTEGRATED WHOLE HOUSE VENTILATION SYSTEMS SHALL PROVIDE OUTDOOR AIR AT THE RATE CALCULATED USING SECTION M1508.3. 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 INLET 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 M1508.5.2. THE REQUIRED FLOW RATE SHALL BE VERIFIED 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 VENTILATION 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. 1.0 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 VENT OUTLET IS 3 FEET ABOVE THE OUTDOOR AIR INLET.
B) WHERE IT WILL PICK UP OBJECTIONABLE ODORS, FUMES OR FLAMMABLE VAPORS.
C) A HAZARDOUS OR UNSANITARY 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 VENT OPENING IS AT LEAST 3 FEET ABOVE THE AIR INLET.
F) ATTIC, CRAWL SPACES OR GARAGES.
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 M1508.2 OF THE IRC.

HVAC:

THE HVAC 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 HVAC 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
CLIMATE 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	30	30
Below-Grade Wall R-Value	10/13/21 Int. + 5TB (NOTE 2)	10 with no heated slab
Slab R-Value & Depth	10, 2 Ft	no heated slab

NOTE 1 For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
NOTE 2 "10/13/21 -5TB" means R-10 continuous insulation on the exterior of the wall, or R-13 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. "10/13/21 -5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
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.

1/20/2022

OUTDOOR LIGHTING:

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 PASCALS

VAPOR 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:

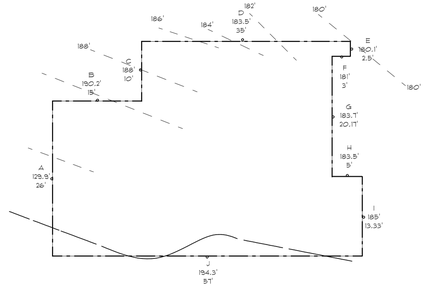
A GROUND COVER OF 6 MIL. BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES AND UNDER ALL FLOOR SLABS EXCEPT GARAGE FLOOR SLABS. THE GROUND FLOOR COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

APPLIANCE PACKAGE:

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

Average Building Elevation			
A	192.9	26	5015.4
B	190.2	15	2853
C	188.0	10	1880
D	183.5	35	6422.5
E	180.1	2.5	450.3
F	181.0	3	543
G	183.5	20.17	3701.2
H	183.5	5	917.5
I	185.0	13.33	2466
J	194.2	52	10098.3
		182.0	34347.3

$$\frac{34347.3}{182} = 188.72'$$



ARCHITECTURAL PLANS

STRUCTURAL PLANS

CIVIL ENGINEERING PLANS

WETLAND PLANS

REGISTERED ARCHITECT
RONALD S. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
ARCHITECTS
2505 N 135th DRIVE, GOODYEAR, AZ. 85395 (480) 444-6768

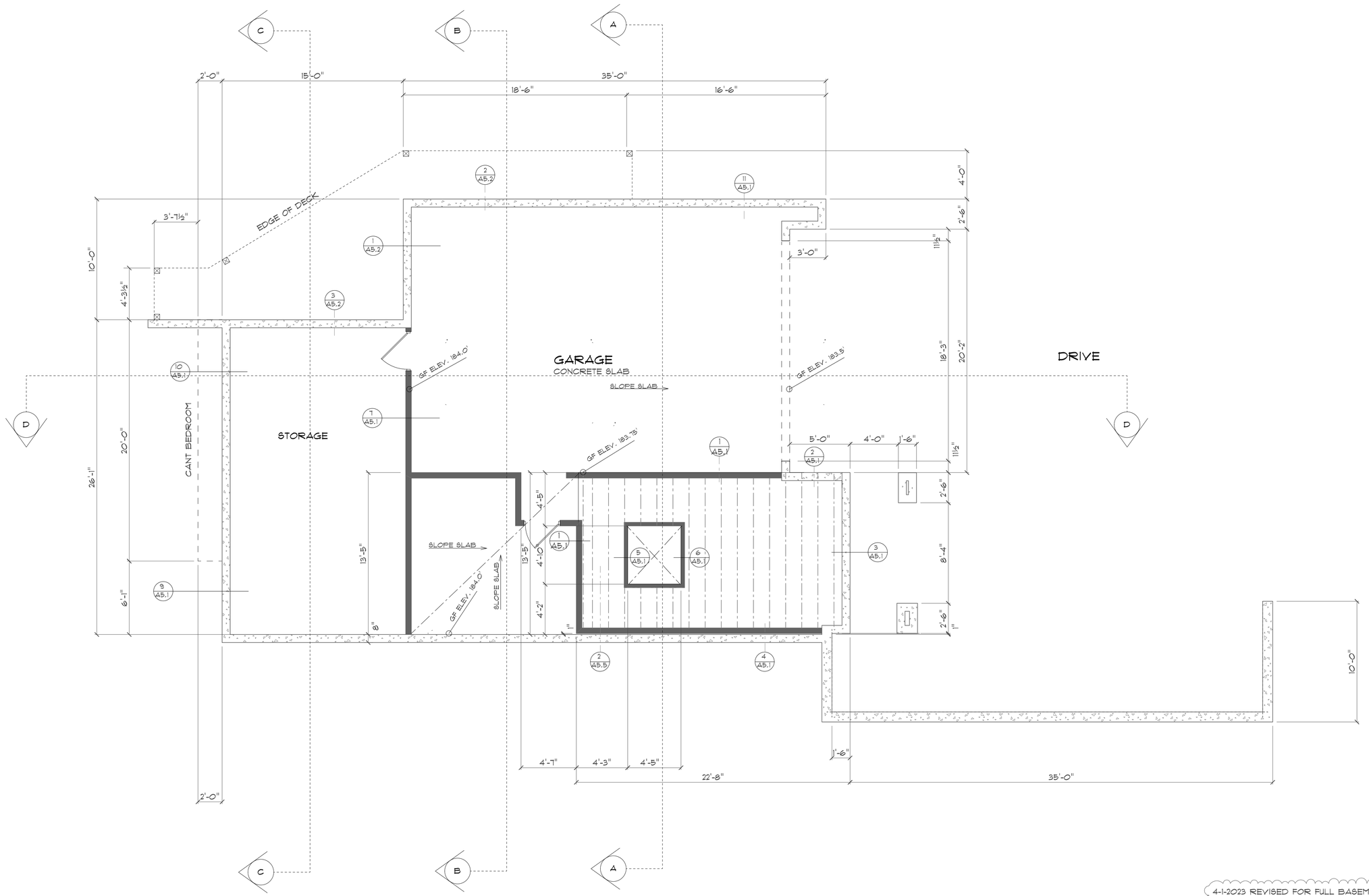
M1 Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

COVER SHEET
SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A 1.0



4-1-2023 REVISED FOR FULL BASEMENT

4210 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 135th DRIVE GOODYEAR, AZ. 85395 - (425) 444-6566
ARCHITECTS

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

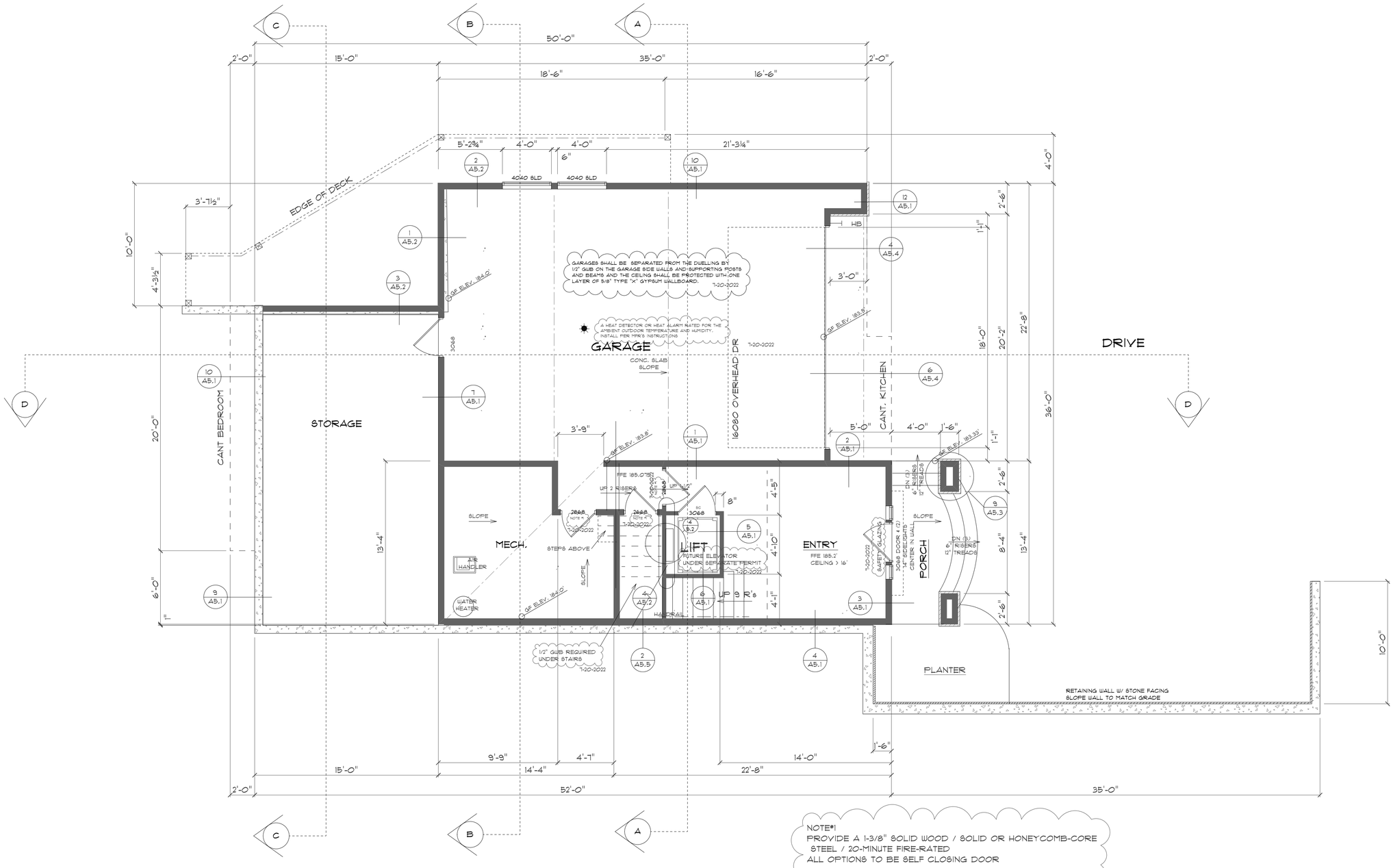
FOUNDATION PLAN

SCALE 1/4" = 1'-0"

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

PROJECT NO.
001

SHEET NO.
A2.0



BASEMENT FLOOR

LIVING	273 SF
GARAGE	958 SF
STORAGE	390 SF
TOTAL	1621 SF
PORCH	73 SF
BUILDING FOOTPRINT	1694 SF

4-1-2023 REVISED FOR FULL BASEMENT

4210 REGISTERED ARCHITECT RONALD R. HEALEY STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (480) 444-6696
ARCHITECTS

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

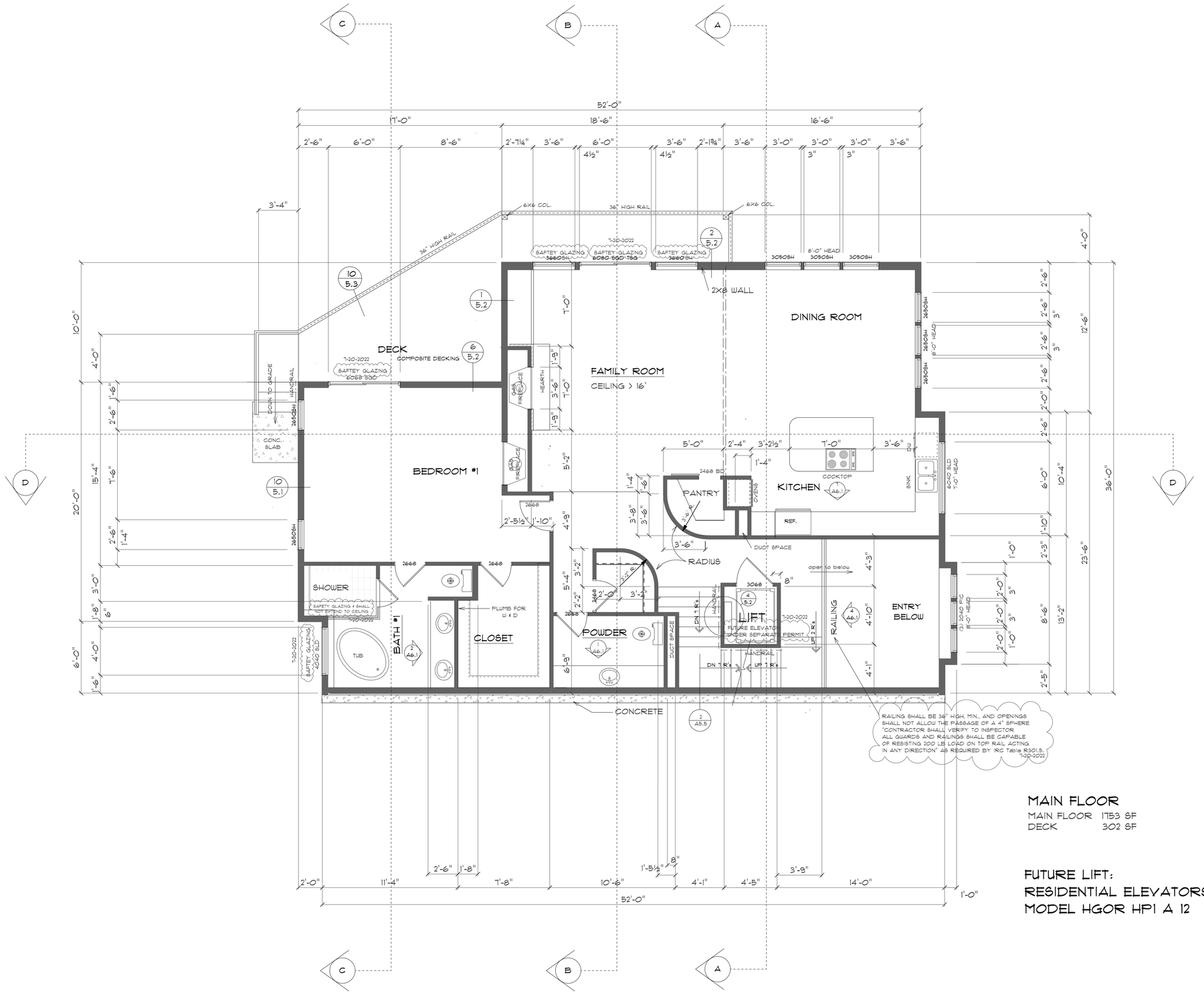
GARAGE PLAN

SCALE 1/4" = 1'-0"

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

PROJECT NO.
001

SHEET NO.
A2.1



MAIN FLOOR

MAIN FLOOR	1753 SF
DECK	302 SF

FUTURE LIFT:
RESIDENTIAL ELEVATORS
MODEL HGOR HP1 A 12

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2905 N 138th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6988
ARCHITECTS

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

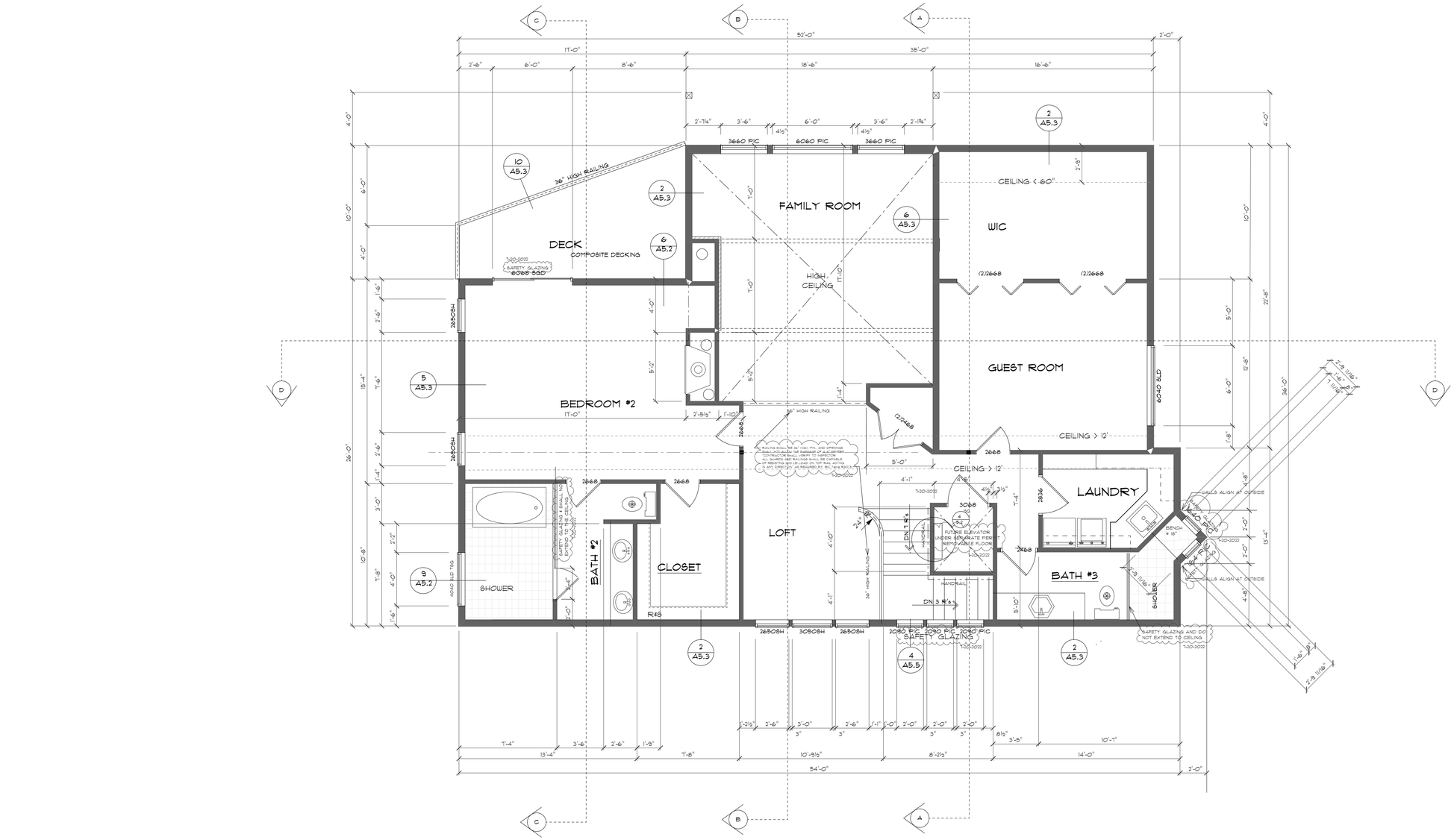
MAIN FLOOR PLAN

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A2.2



UPPER FLOOR 1345 SF
DECK 119 SF

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
2805 N 136th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6908
ARCHITECTS

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

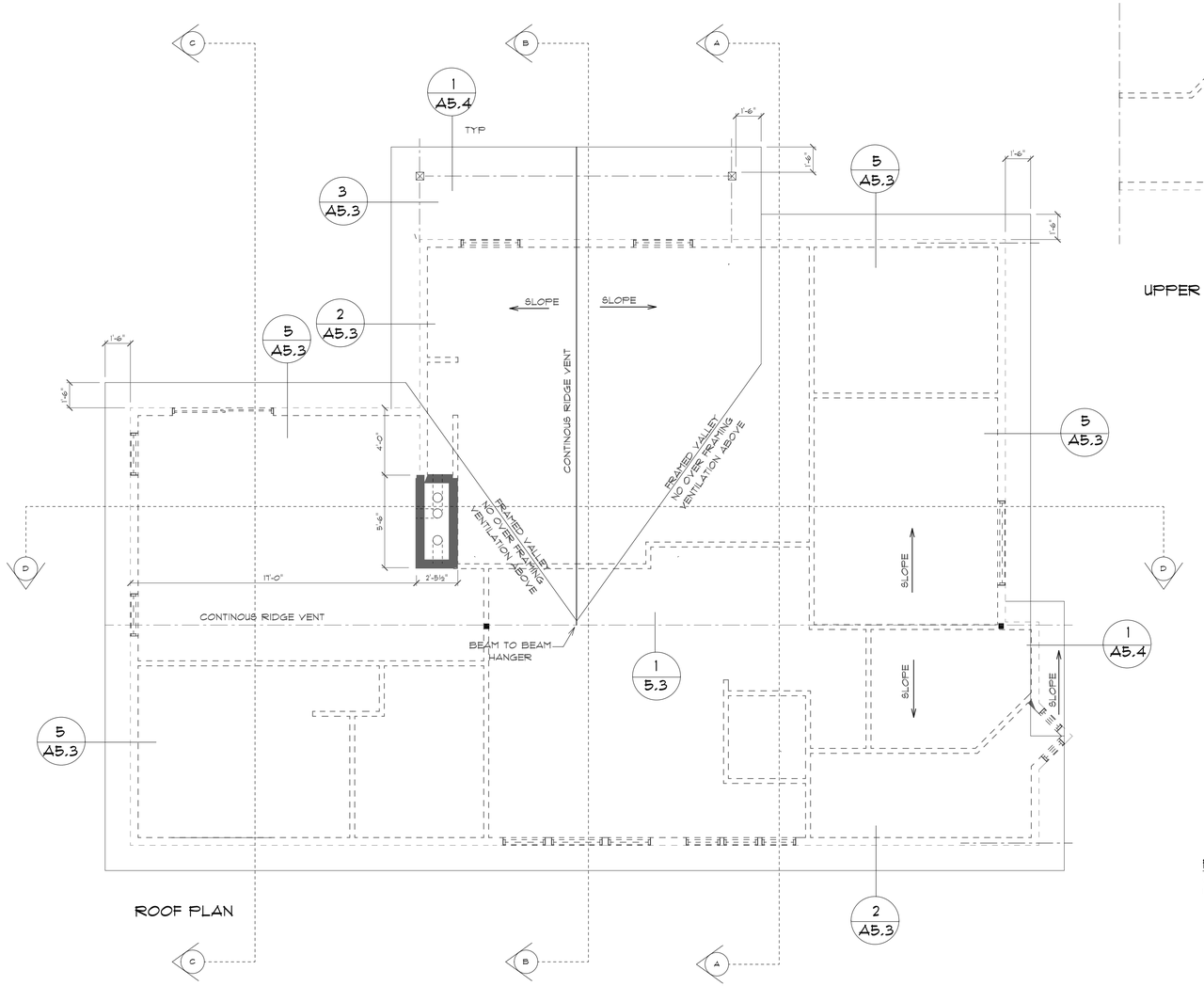
UPPER FLOOR PLAN

SCALE 1/4" = 1'-0"

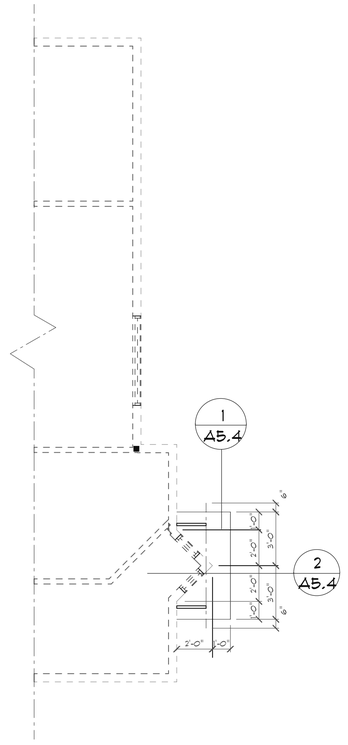
DATE
4-13-2022
10-5-2022

PROJECT NO.
001

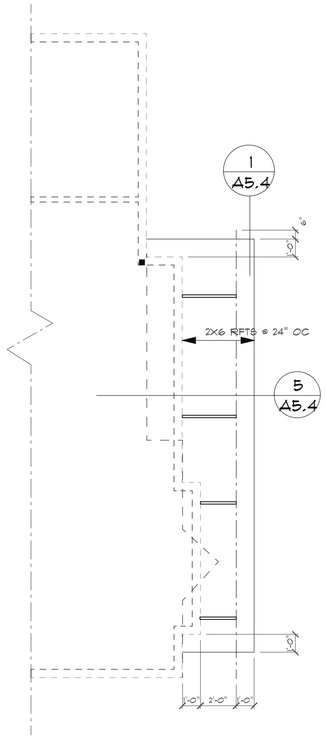
SHEET NO.
A2.3



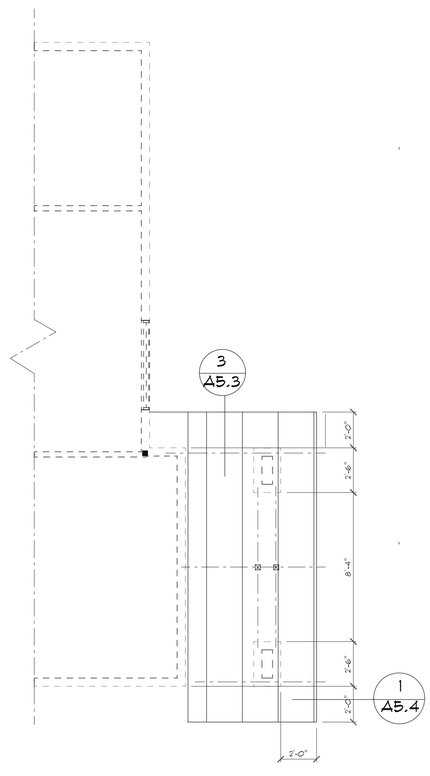
ROOF PLAN



UPPER FLOOR ROOF



MAIN FLOOR ROOF



PORCH ROOF

ROOF VENTILATION

TYPICAL EACH RAFTER BAY MAX. RAFTER BAY AREA:	44 SQ.FT. (2' X 22' = 44 SF)
VENT AREA REQ'D:	21 SQ.IN
VENT BLOCKS:	10 SQ.IN.
CONTINOUS RIDE VENT: (1lb.) 18 SQ.IN. / FT.	36 SQ.IN.
TOTAL	46 SQ.IN.

VENT BLOCKS (3) 2" dia. HOLES

ROOF JACK 49 SQ. IN. EACH

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
ARCHITECTS
2505 N 136th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6988

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

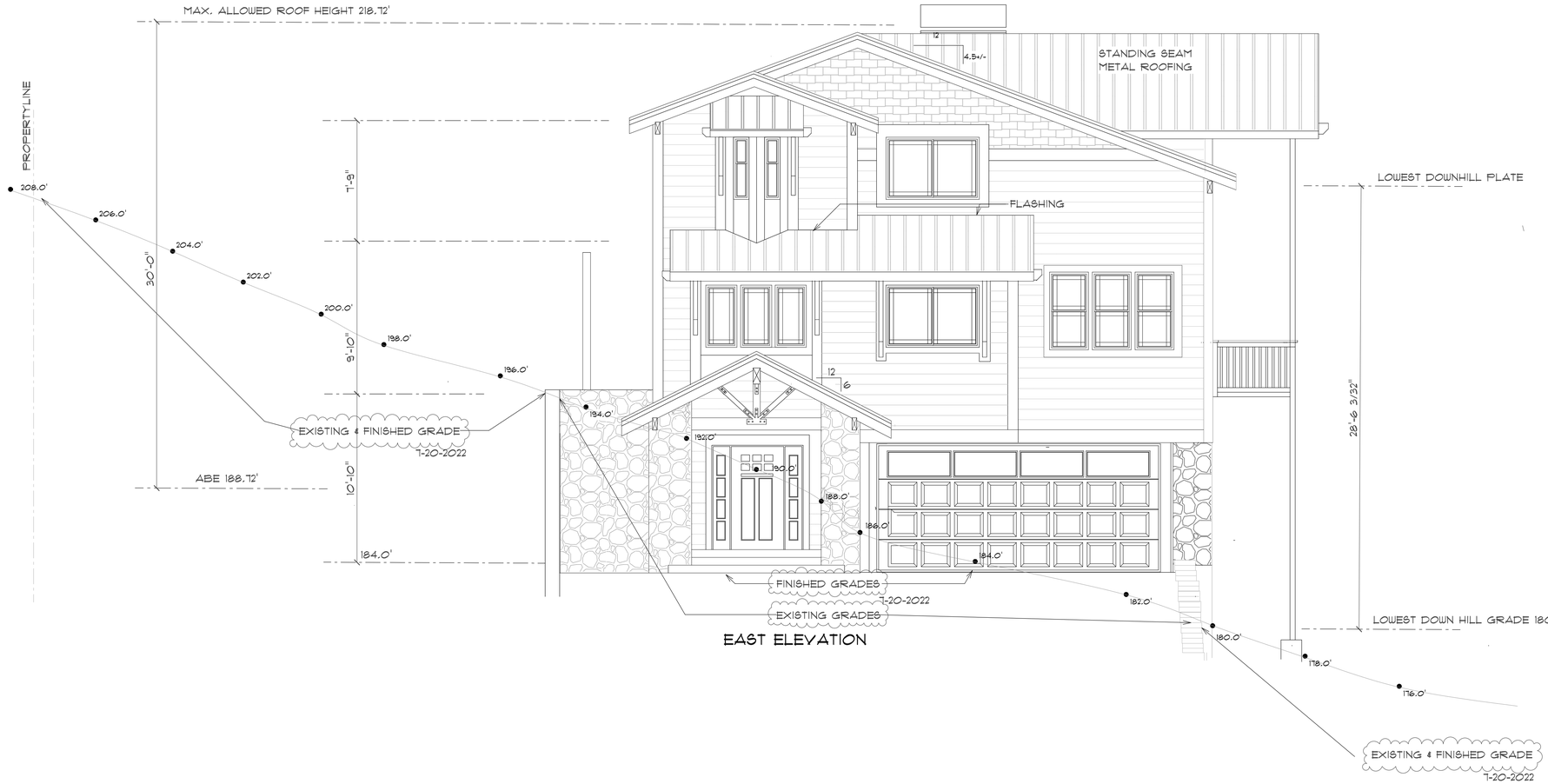
ROOF PLAN

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A2.4



EAST ELEVATION

420 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6788
ARCHITECTS

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

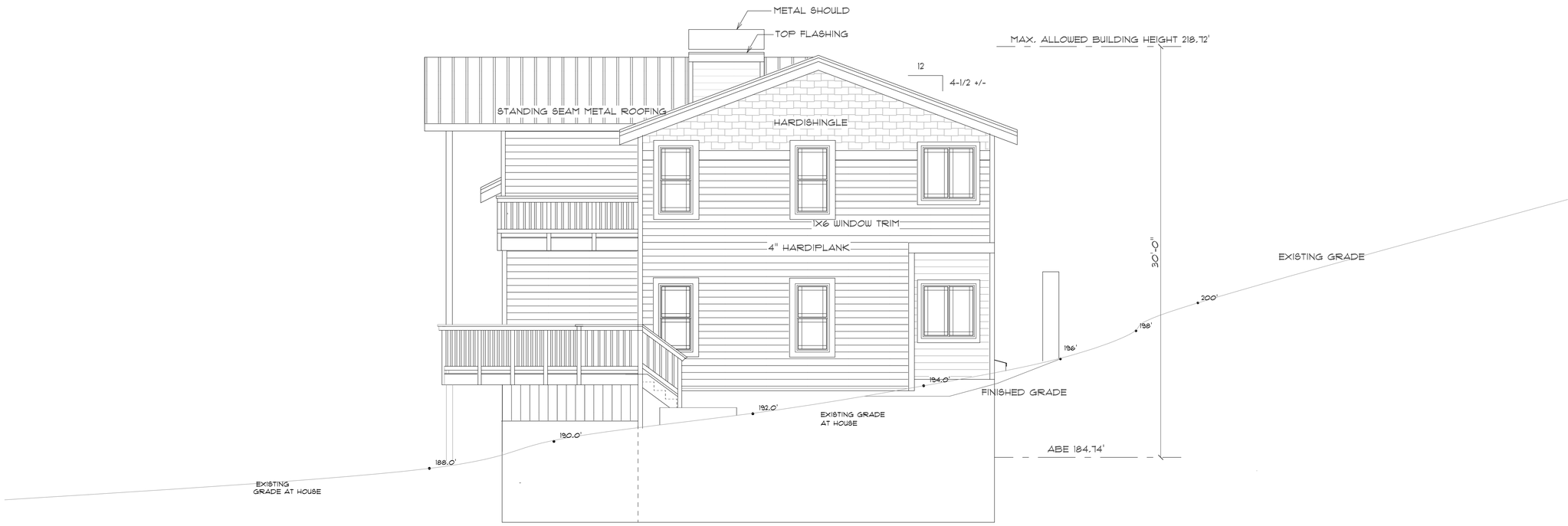
EAST ELEVATIONS

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A3.1



WEST ELEVATION

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
2505 N 135th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6968
ARCHITECTS

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

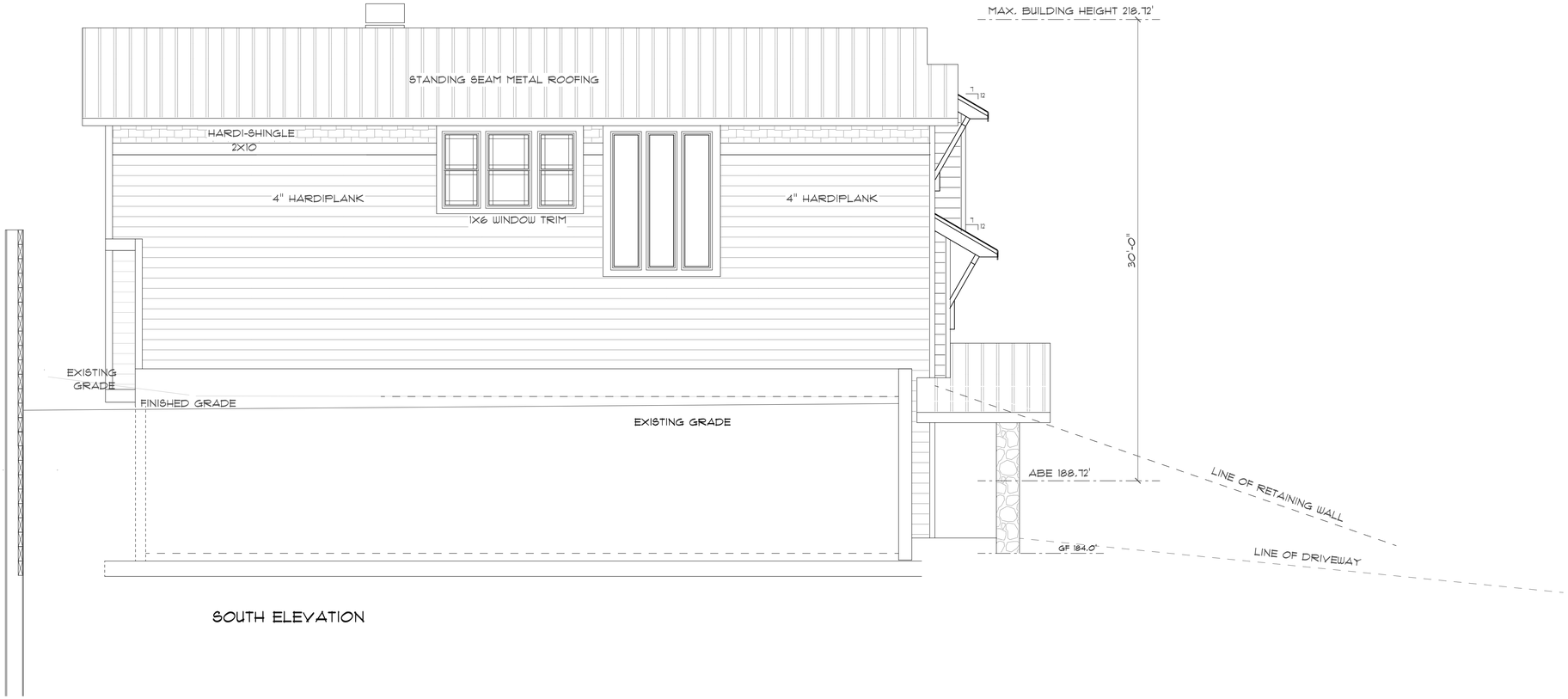
WEST ELEVATIONS

SCALE 1/4" = 1'-0"

DATE
04-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A3.2



SOUTH ELEVATION

4-1-2023 REVISED FOR FULL BASEMENT

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
2909 N 159th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6988
ARCHITECTS

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

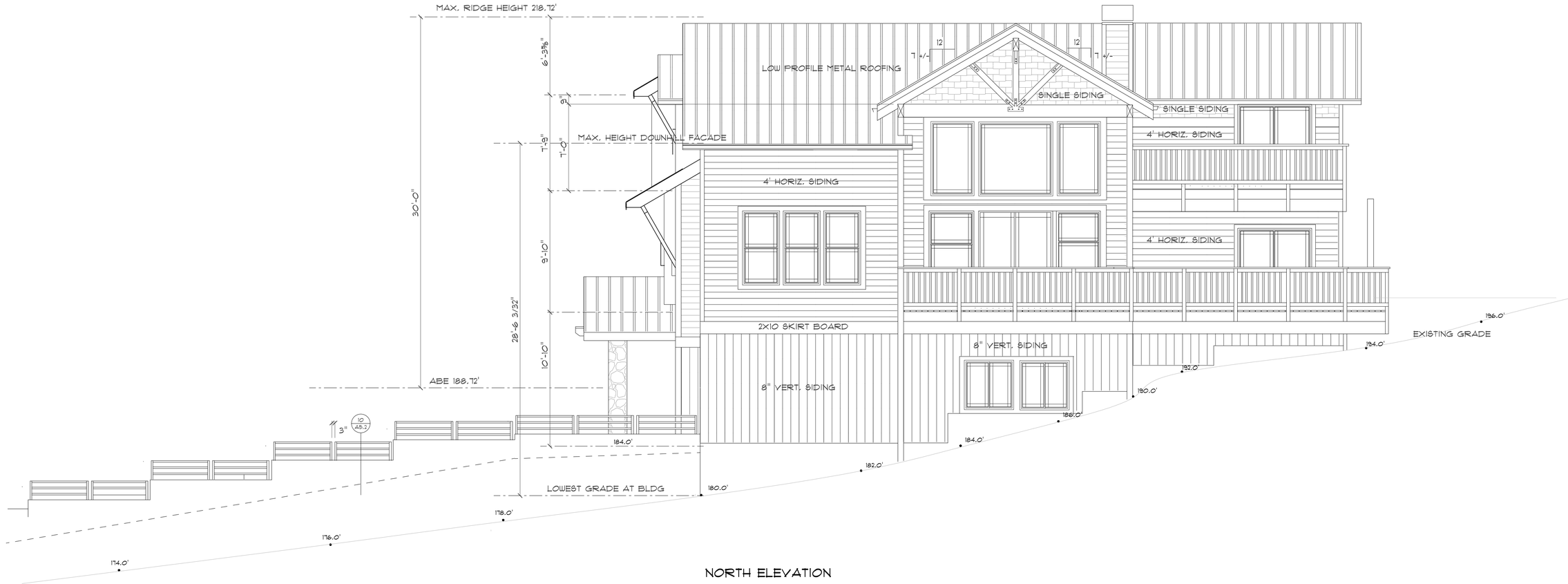
SOUTH ELEVATIONS

SCALE 1/4" = 1'-0"

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

PROJECT NO.
001

SHEET NO.
A3.3



NORTH ELEVATION

420 REGISTERED ARCHITECT RONALD C. HEALEY STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 35th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6768
ARCHITECTS

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

NORTH ELEVATION

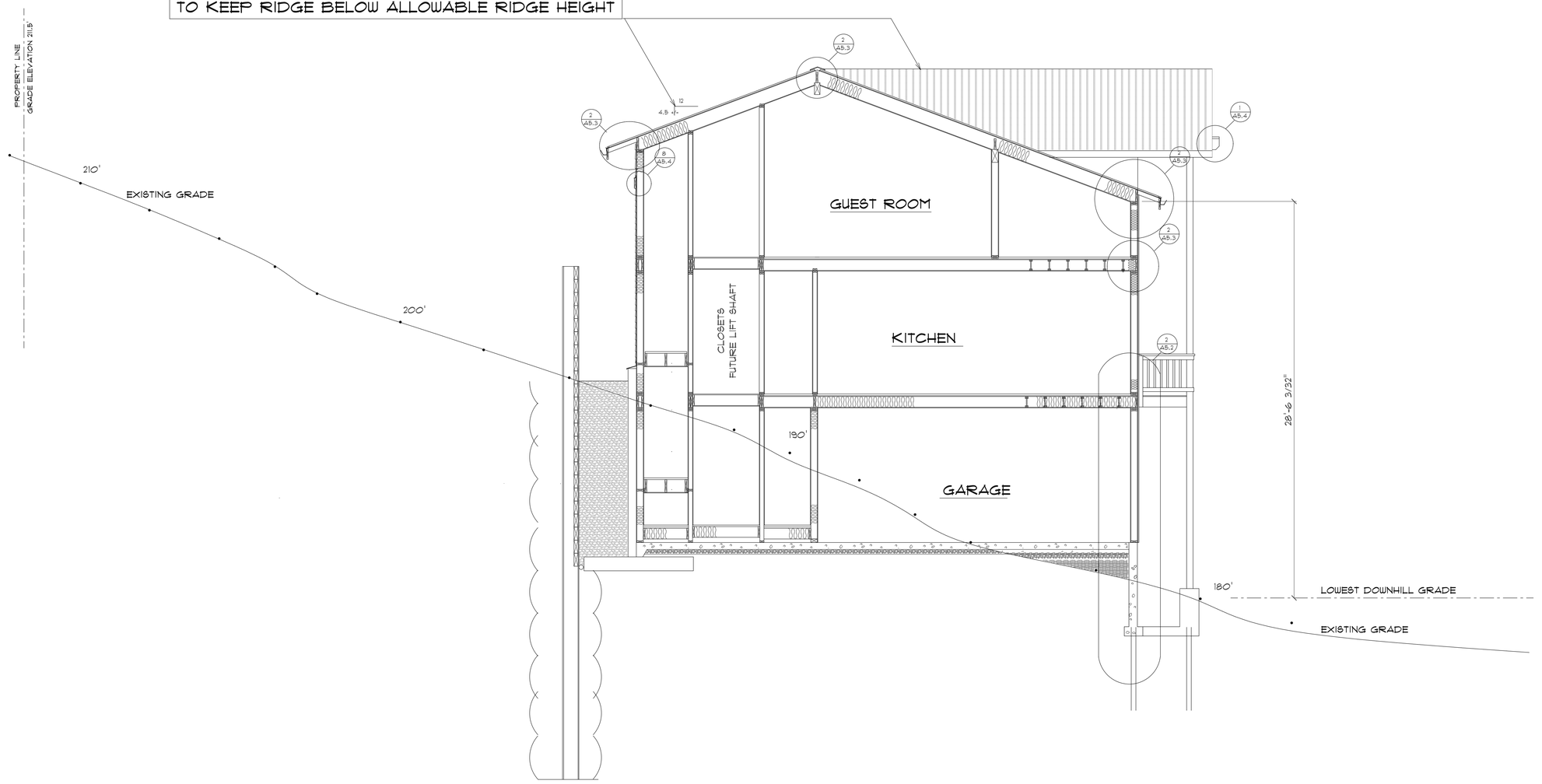
SCALE 1/4" = 1'-0"

DATE
04-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A3.4

NOTE: ADJUST ROOF PITCH AS REQUIRED
TO KEEP RIDGE BELOW ALLOWABLE RIDGE HEIGHT



430 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2909 N 135th DRIVE GOODYEAR, AZ. 85395 - (425) 444-6768
ARCHITECTS

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

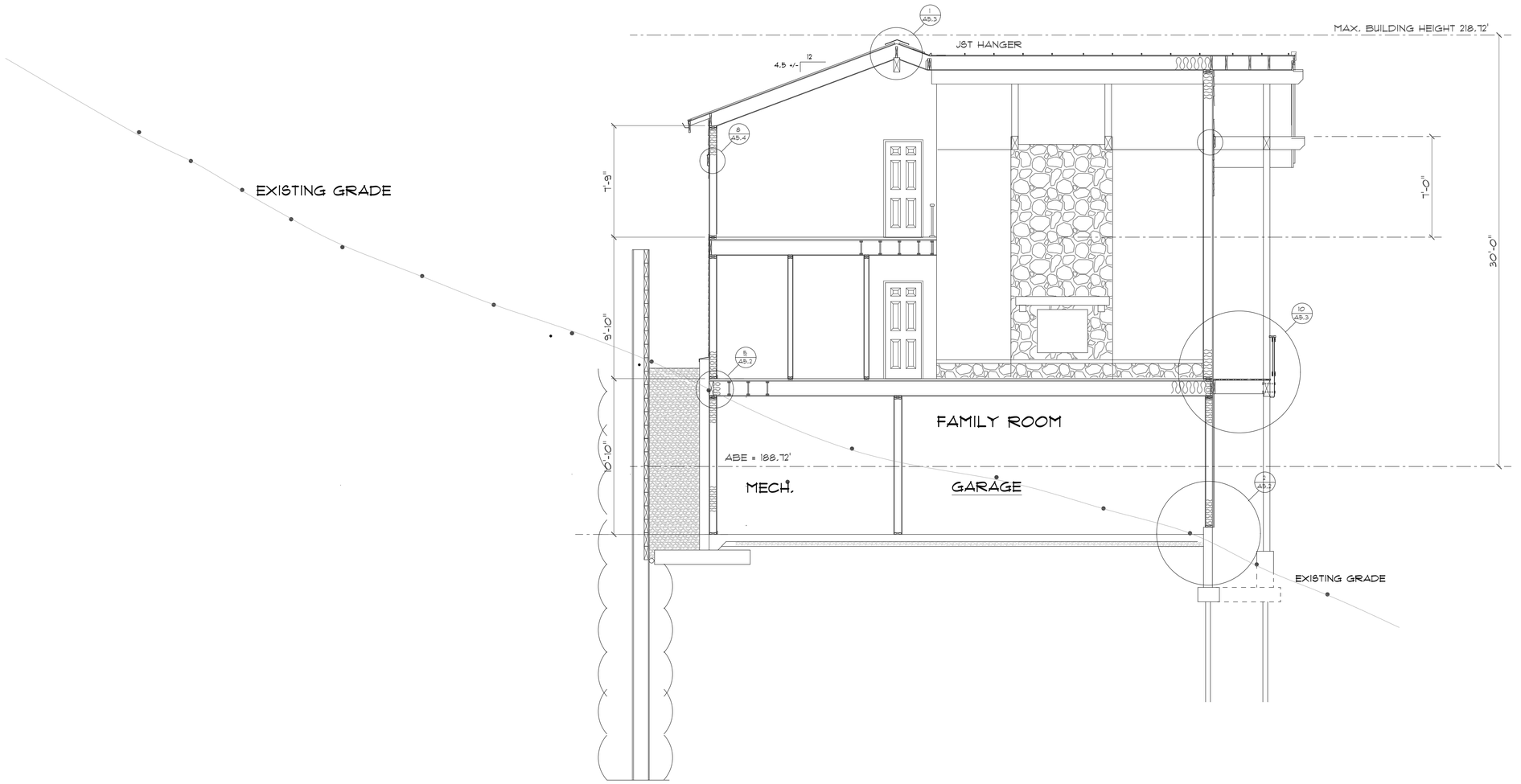
SECTION A-A

SCALE 1/4" = 1'-0"

DATE 04-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A4.1



SECTION "B-B"

SCALE 1/4" = 1'-0"

DATE
04-13-2022
10-5-2022

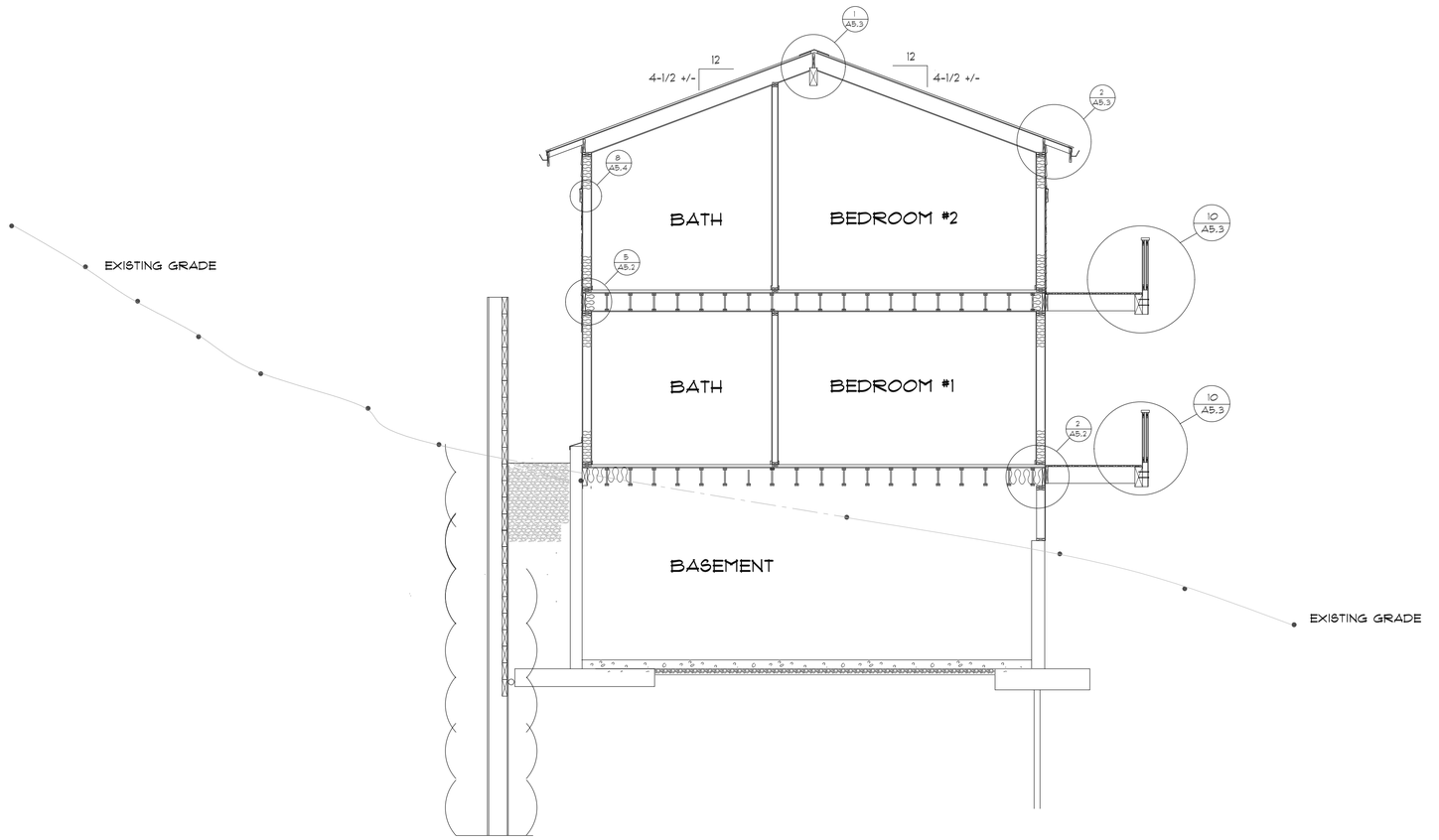
PROJECT NO.
001

SHEET NO.
A4.2

M1 Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6768
ARCHITECTS

420 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON



4-1-2023 REVISED FOR FULL BASEMENT

410 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6698
ARCHITECTS

M1 Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

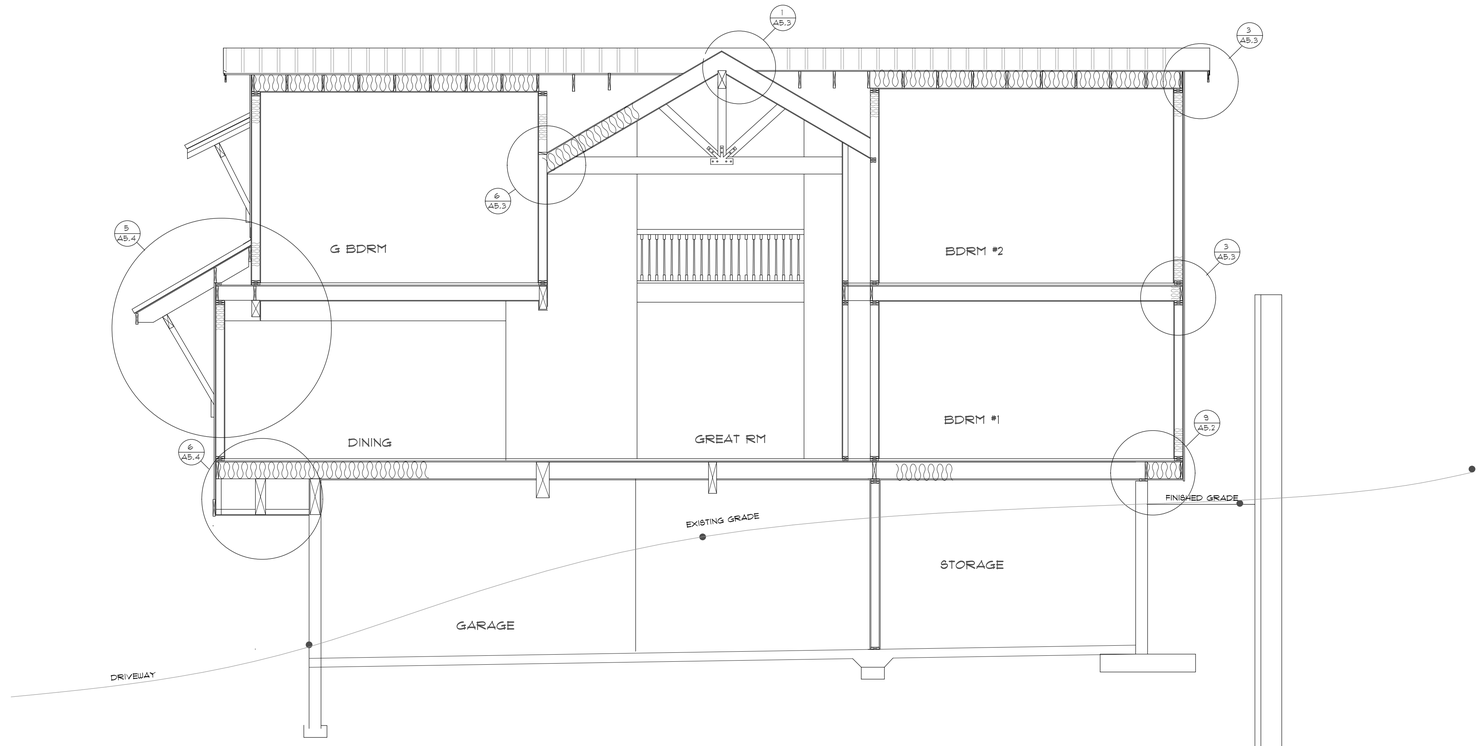
SECTION "C-C"

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A4.3



4-1-2023 REVISED FOR FULL BASEMENT

410 REGISTERED ARCHITECT RONALD R. HEALEY STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE GOODYEAR, AZ. 85395 - (480) 444-6968
ARCHITECTS

M1 Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

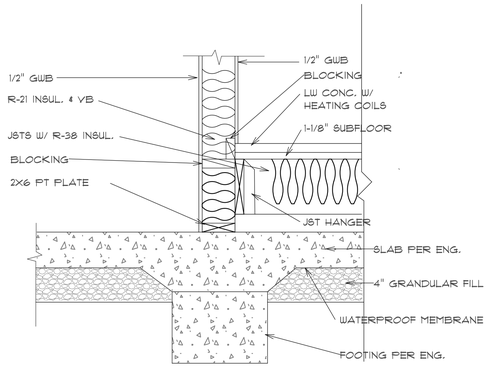
SECTION "D-D"

SCALE 1/4" = 1'-0"

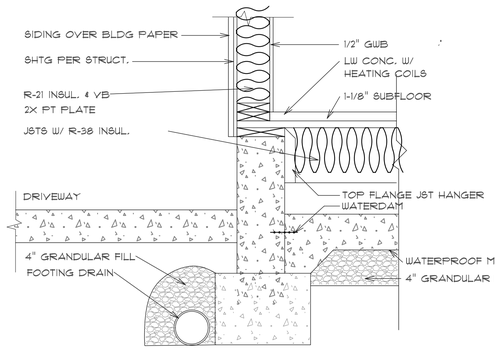
DATE
4-13-2022
10-5-2022
4-1-2023

PROJECT NO.
001

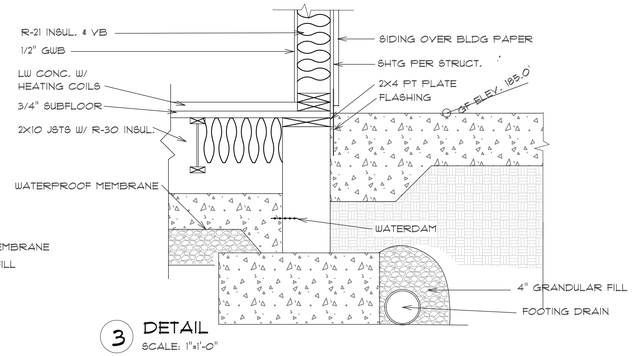
SHEET NO.
A4.4



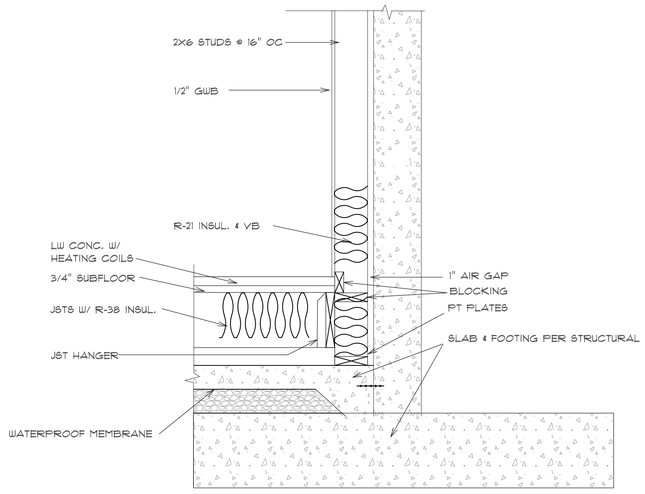
1 DETAIL
SCALE: 1"=1'-0"



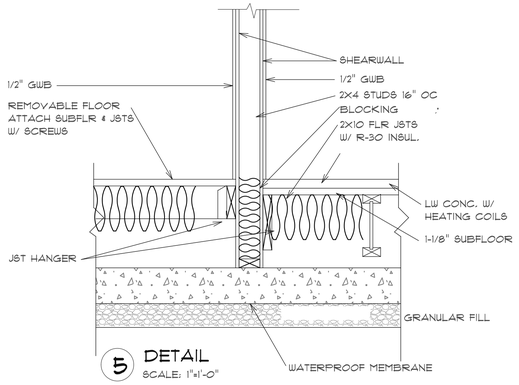
2 DETAIL
SCALE: 1"=1'-0"



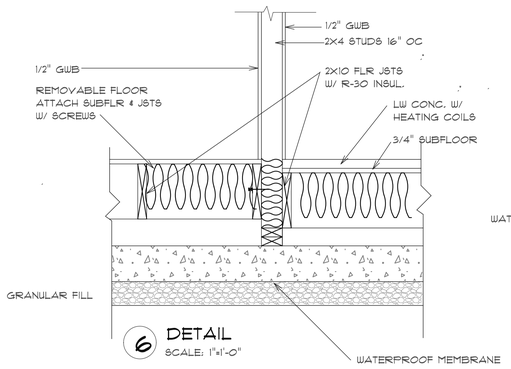
3 DETAIL
SCALE: 1"=1'-0"



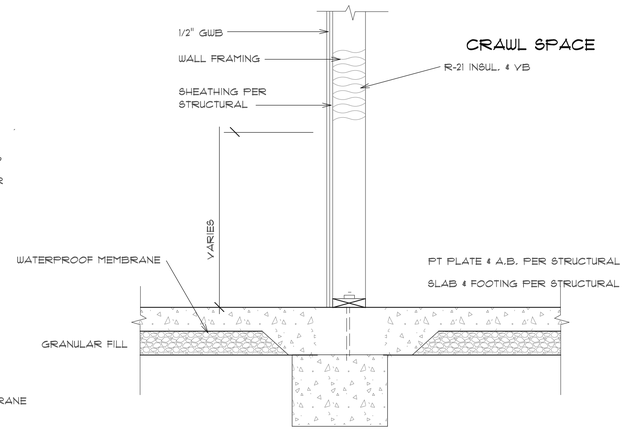
4 DETAIL
SCALE: 1"=1'-0"



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

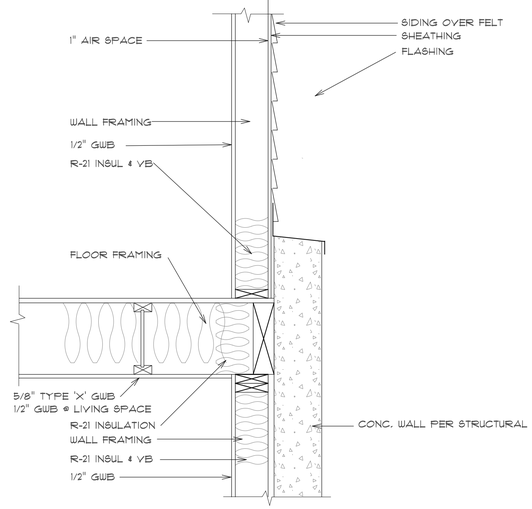


6 DETAIL
SCALE: 1"=1'-0"

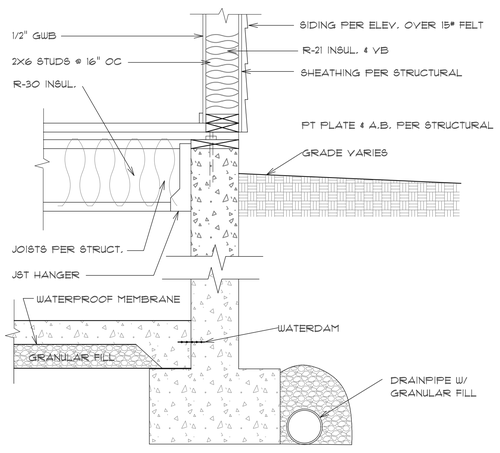


7 DETAIL
SCALE: 1"=1'-0"
4-1-2023 REVISED FOR FULL BASEMENT

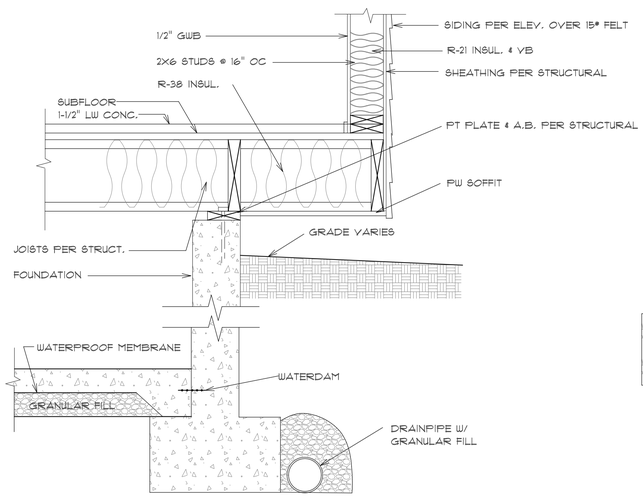
CRAWL SPACE



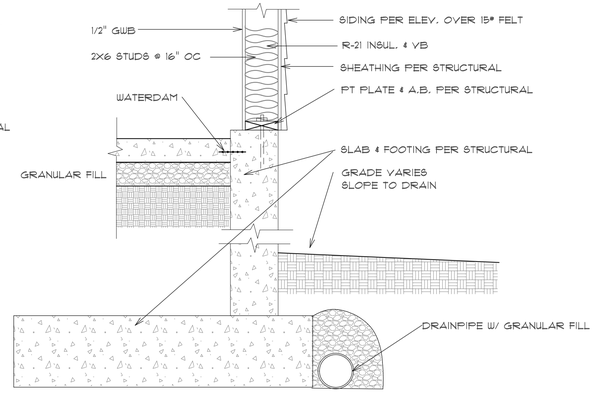
8 DETAIL
SCALE: 1"=1'-0"



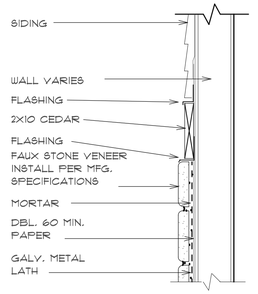
9 DETAIL
SCALE: 1"=1'-0"
4-1-2023 REVISED FOR FULL BASEMENT



10 DETAIL
SCALE: 1"=1'-0"
4-1-2023 REVISED FOR FULL BASEMENT



11 DETAILS
SCALE: 1"=1'-0"



12 WALL VENEER DETAILS
SCALE: 1"=1'-0"

420 REGISTERED ARCHITECT RONALD R. HEALEY STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
ARCHITECTS
2505 N 156th DRIVE GOODYEAR, AZ. 85395 - (425) 444-6686

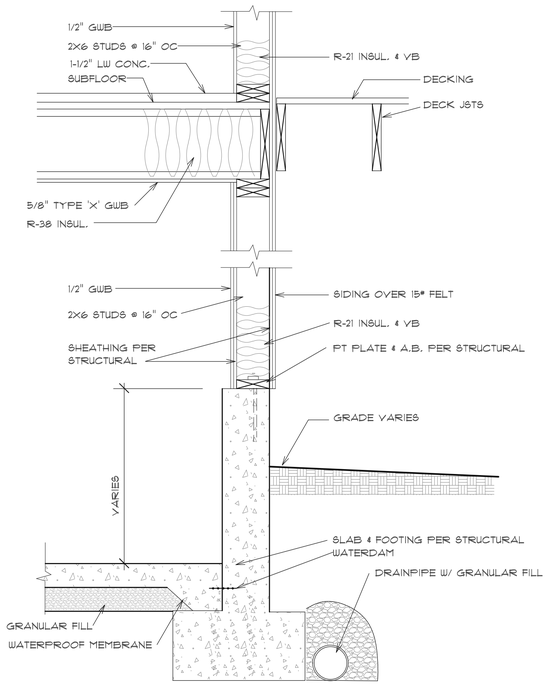
MI Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

DETAILS

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

PROJECT NO.
001

SHEET NO.
A 5.1



1 DETAIL
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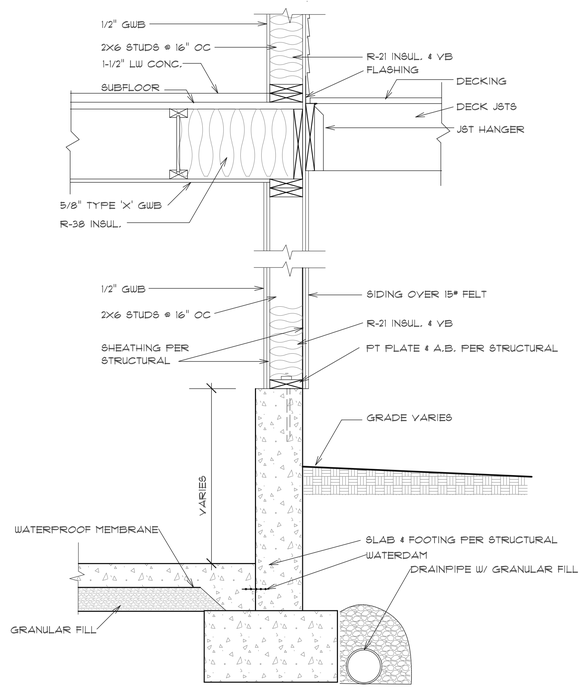
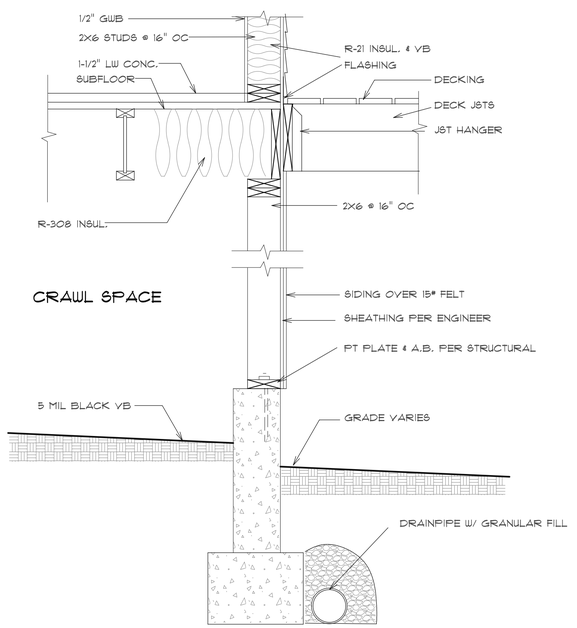
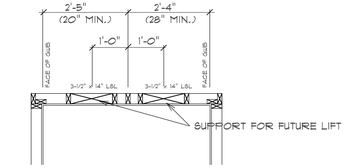


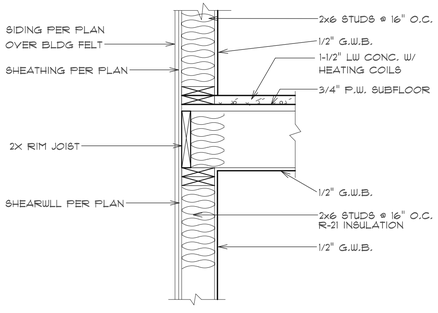
2 DETAIL
SCALE: 1"=1'-0"



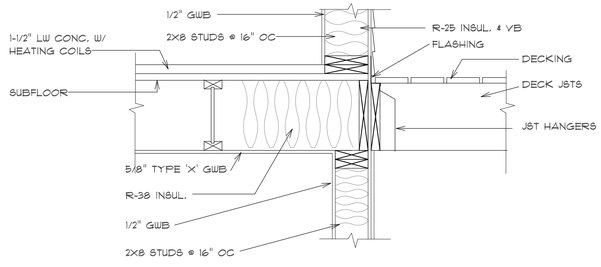
3 DETAIL
SCALE: 1"=1'-0"



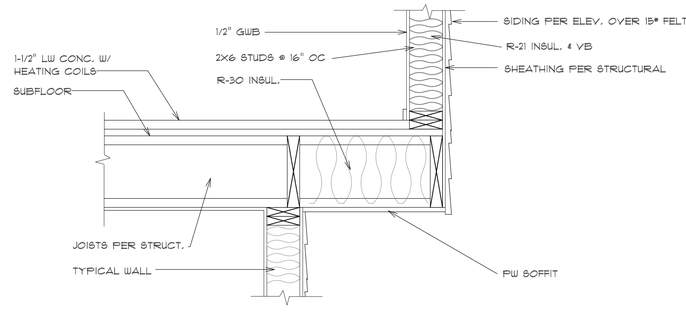
4 DETAIL
SCALE: 1/2"=1'-0"



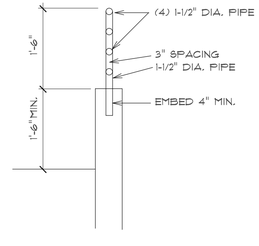
5 DETAIL
SCALE: 1"=1'-0"



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



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



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

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 135th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6368
ARCHITECTS

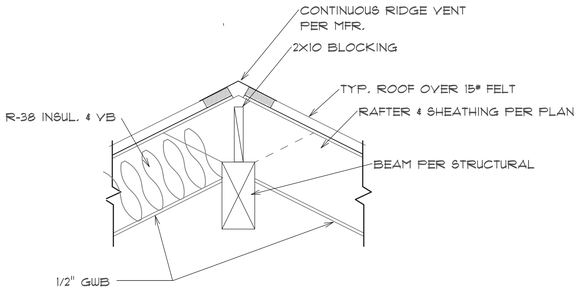
MI Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

DETAILS

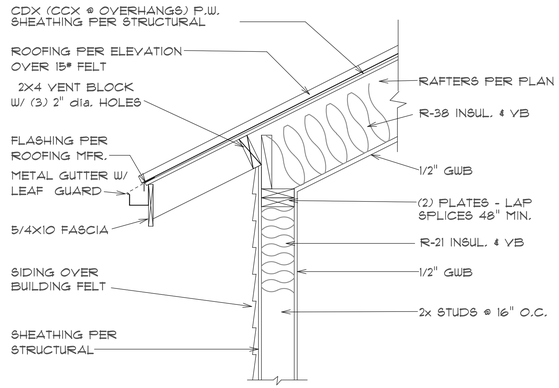
DATE
4-13-2022
10-5-2022

PROJECT NO.
001

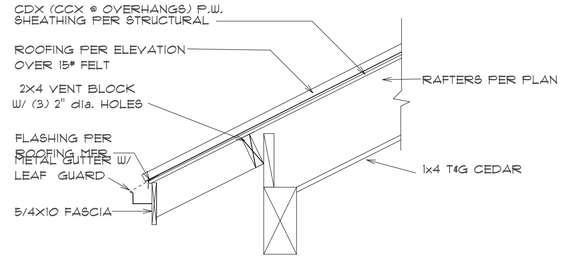
SHEET NO.
A5.2



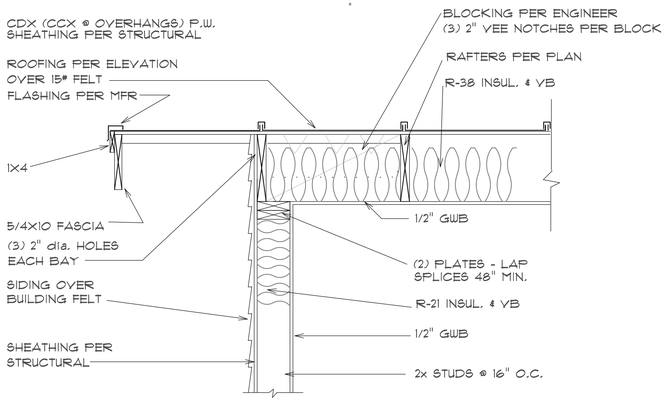
1 DETAIL
SCALE: 1"=1'-0"



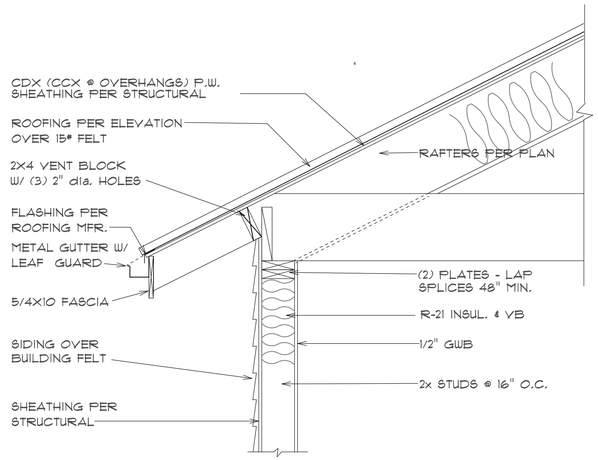
2 DETAIL
SCALE: 1"=1'-0"



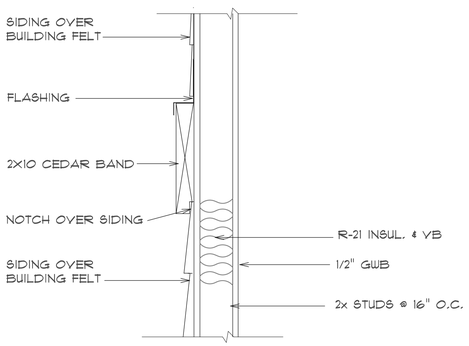
3 DETAIL
SCALE: 1"=1'-0"



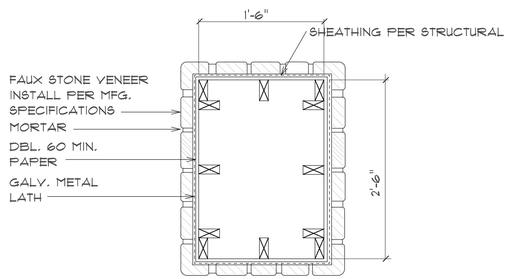
5 DETAIL
SCALE: 1"=1'-0"



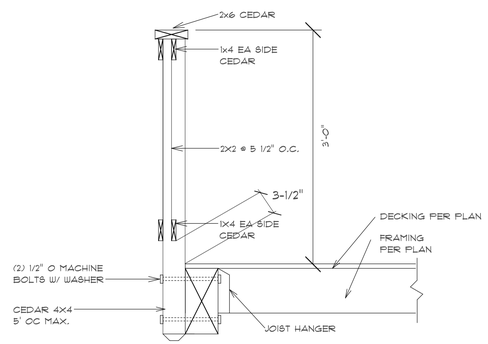
6 DETAIL
SCALE: 1"=1'-0"



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



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



10 DECK RAILING
SCALE: 1"=1'-0"

420 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N. 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6968
ARCHITECTS

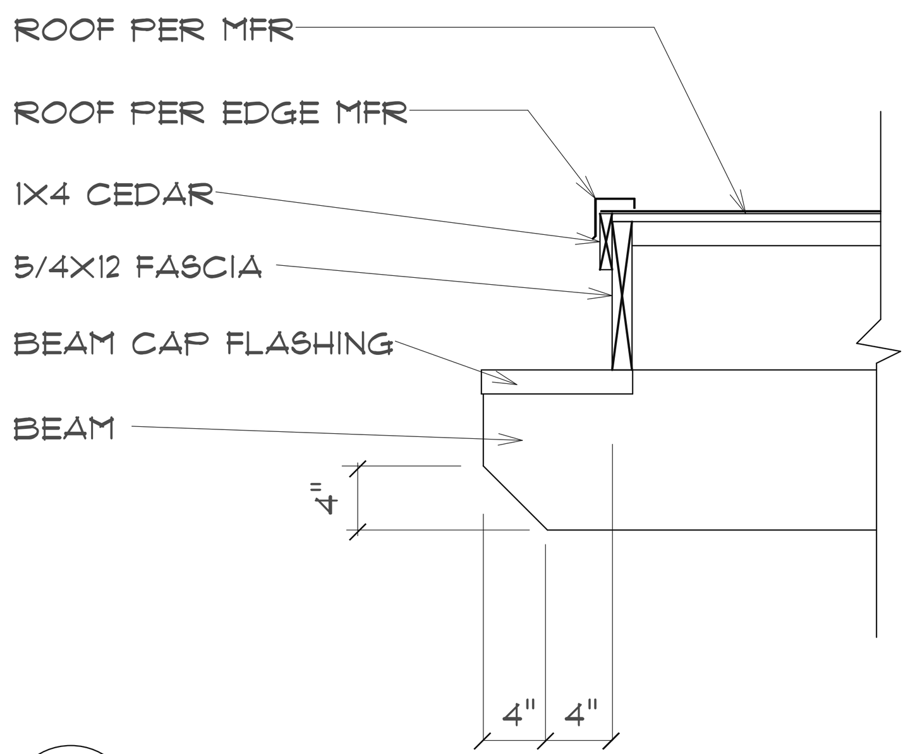
M1 Treehouse, LLC,
5631 EAST MERCER WAY
MERCER ISLAND, WA.

DETAILS

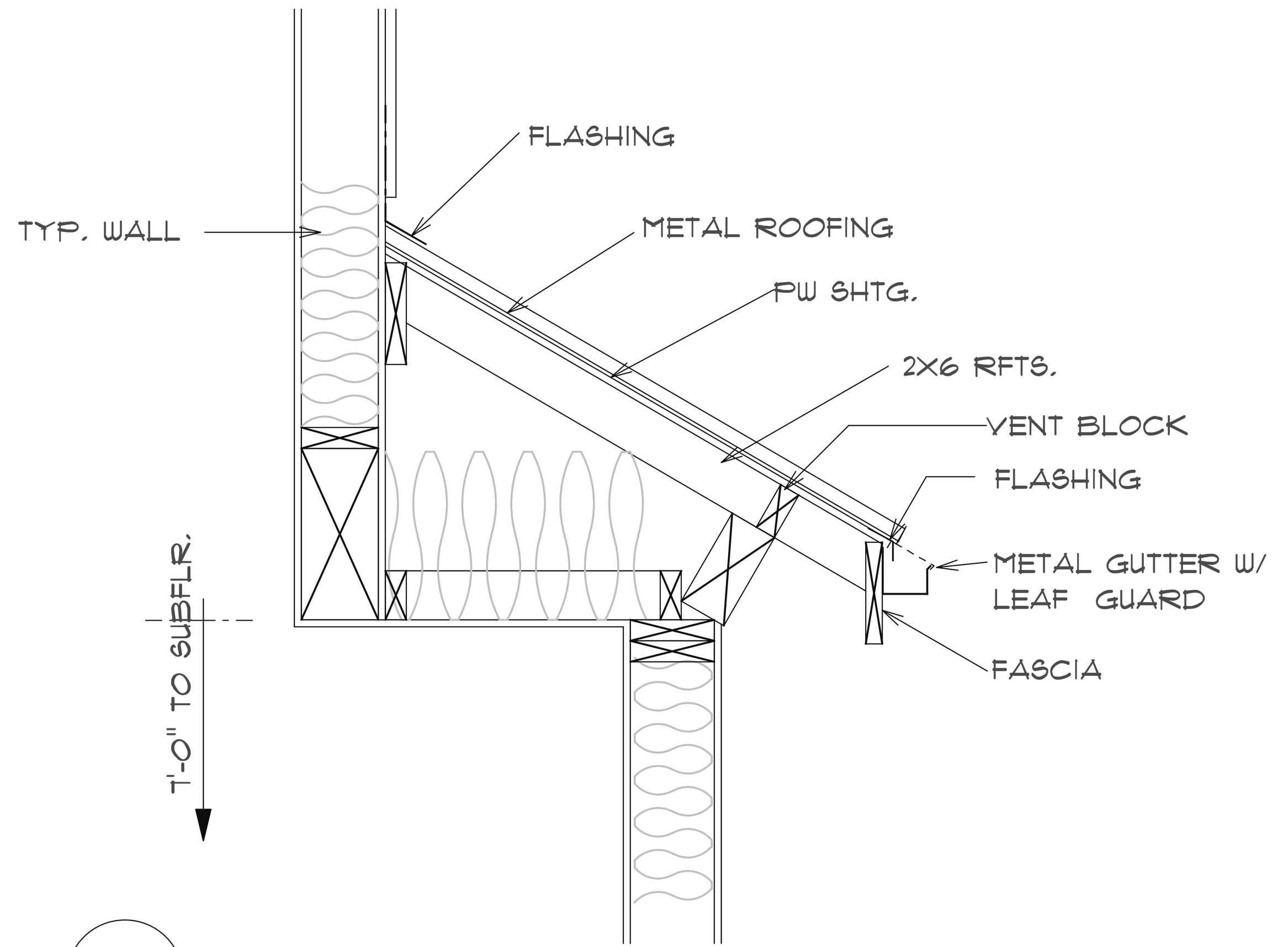
DATE
4-13-2022
10-5-2022

PROJECT NO.
001

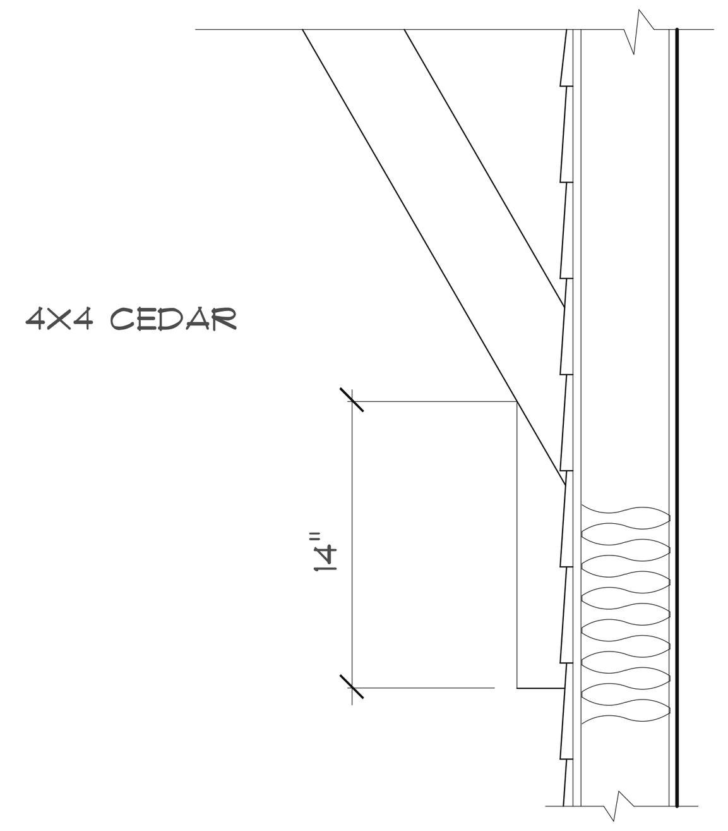
SHEET NO.
A-5.3



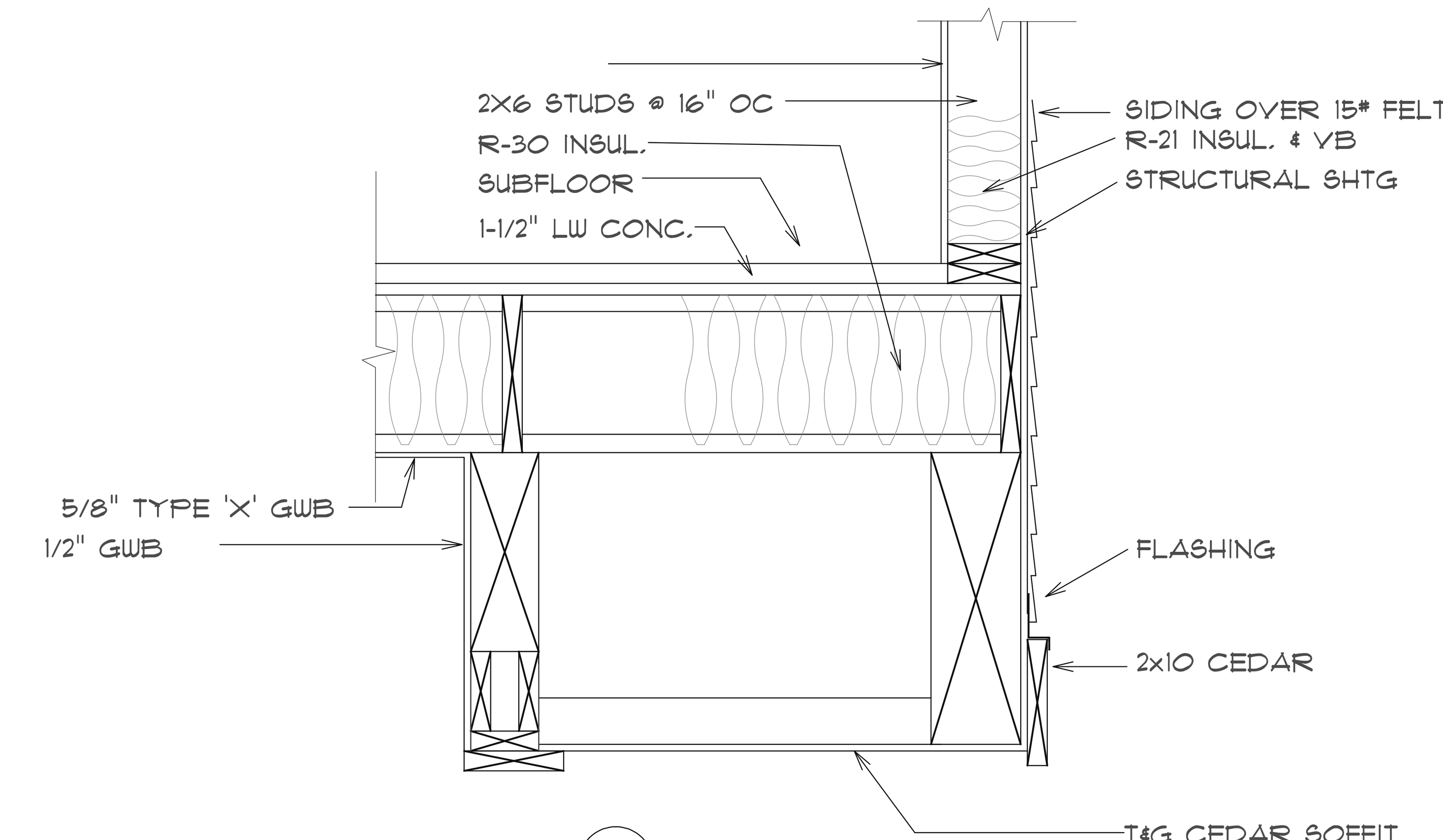
1 DETAIL
SCALE: 1"=1'-0"



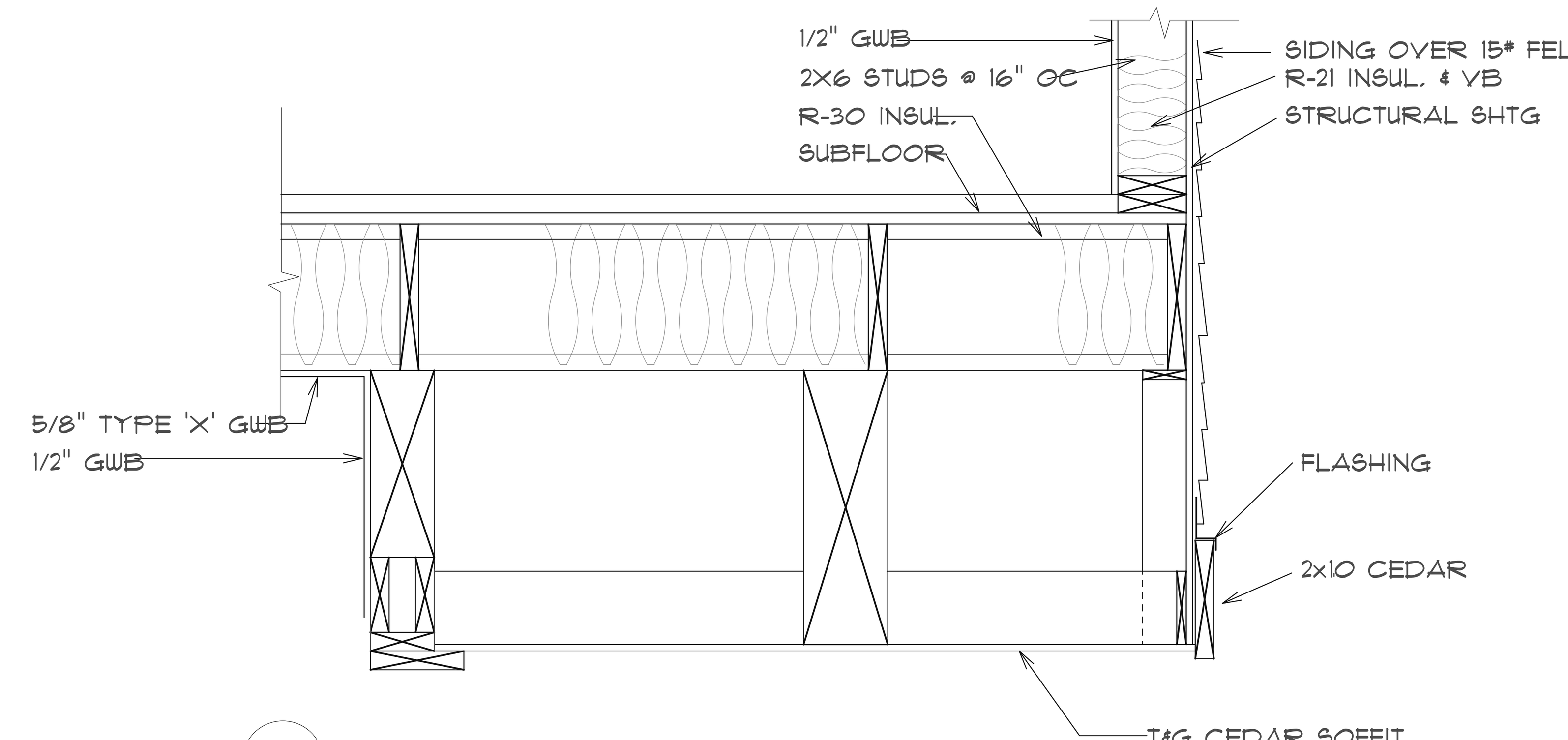
2 DETAIL
SCALE: 1"=1'-0"



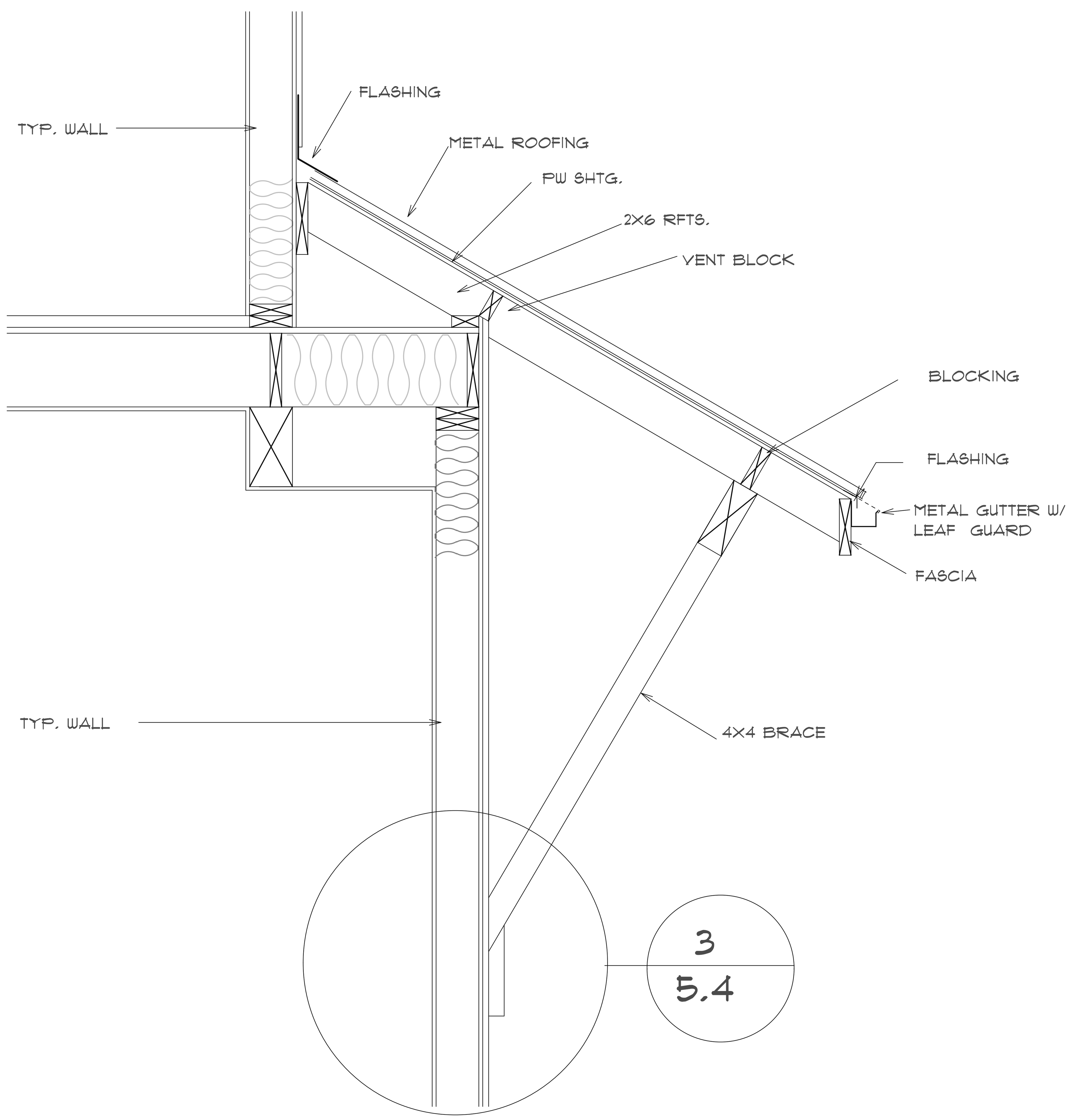
3 DETAIL
SCALE: 1"=1'-0"



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



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



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

4210 REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON

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

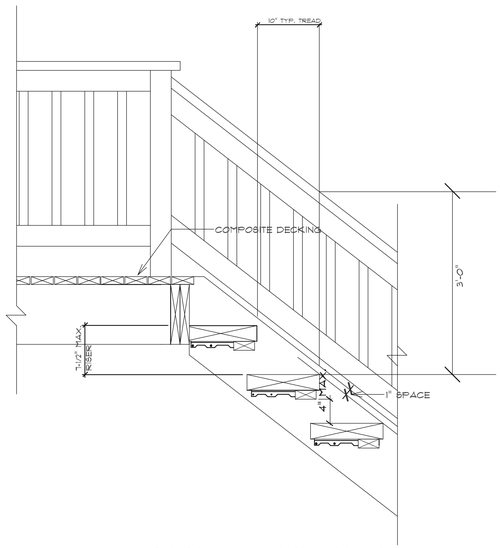
MI Treehouse, LLC,
5637 EAST MERCER WAY
MERCER ISLAND, WA.

DETAILS

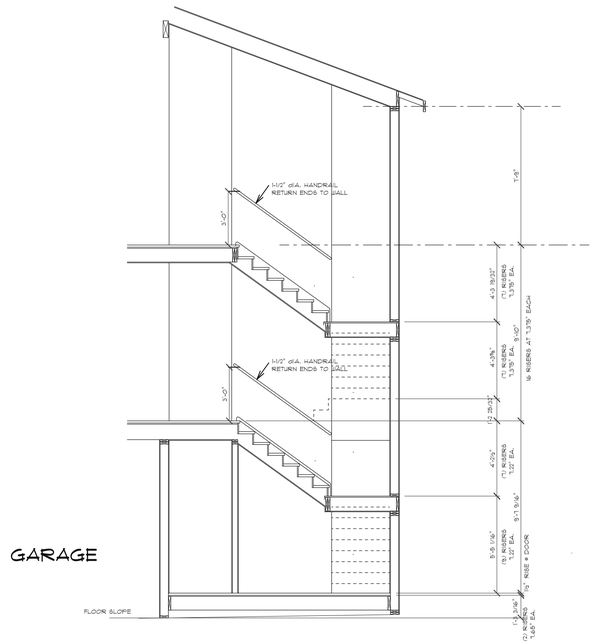
DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A-5.4



1 STAIR CONNECTION
SCALE: 1"=1'-0"



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

REGISTERED ARCHITECT
4210
RONALD R. HEALEY
STATE OF WASHINGTON

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6166
ARCHITECTS

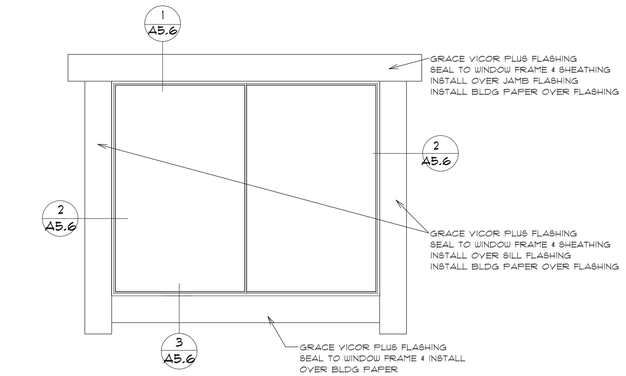
M1 Treehouse, LLC,
5631 EAST MERCER WAY
MERCER ISLAND, WA.

STAIRS SECTION & DETAILS

DATE
4-13-2022
10-5-2022

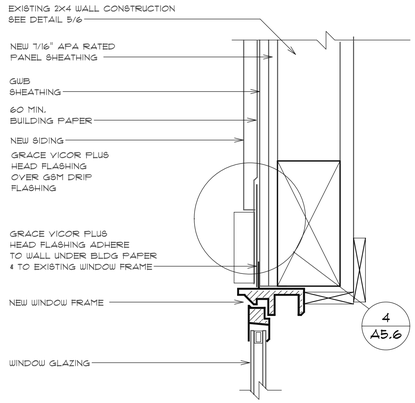
PROJECT NO.
001

SHEET NO.
A5.5



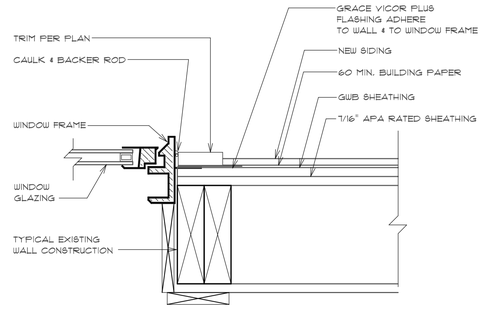
WINDOW FLASHING FOR ALL WINDOWS

7-20-2022



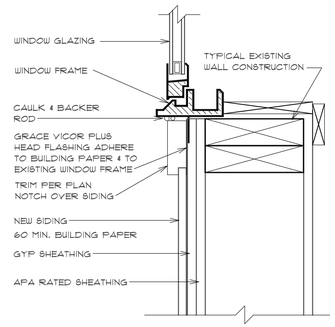
DETAIL #1

SCALE 3" = 1'-0"



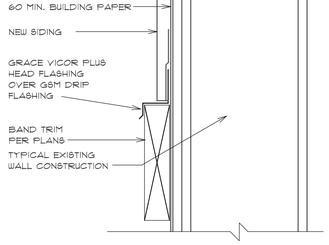
DETAIL #2

SCALE 3" = 1'-0"



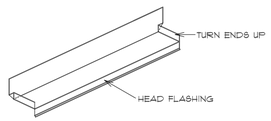
DETAIL #3

SCALE 3" = 1'-0"



DETAIL #4

SCALE 3" = 1'-0"



DETAIL #5

SCALE 1" = 1'-0"

WINDOW SCHEDULE

LOCATION	TYPE	QTY	SIZE	U-FACTOR	AREA	
ENTRY	PIC	3	2040	0.28	24	
KITCHEN	SLD	1	6040	0.28	24	
DINING	SH	3	2650	0.28	37.5	
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	SH	2	2650	0.28	25	FALL PREVENTION
BATH #2	SLD	1	4040	0.28	16	
LOFT	SH	2	2650	0.28	25	FALL PREVENTION
LOFT	SH	1	3050	0.28	15	FALL PREVENTION
STAIRS	PIC	3	2080	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	

420 | REGISTERED ARCHITECT
STATE OF WASHINGTON

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

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

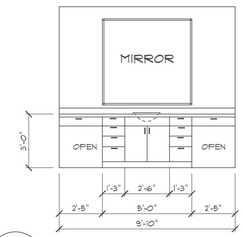
WINDOWS

SCALE 1/4" = 1'-0"

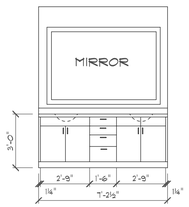
DATE
4-13-2022
10-5-2022

PROJECT NO.
001

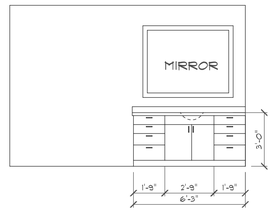
SHEET NO.
A 5.6



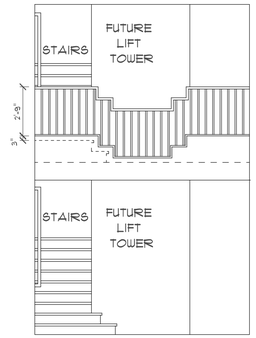
1 POWDER ROOM



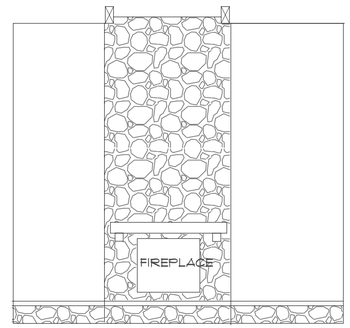
2 BATH CABINETS
BATH #1 & #2



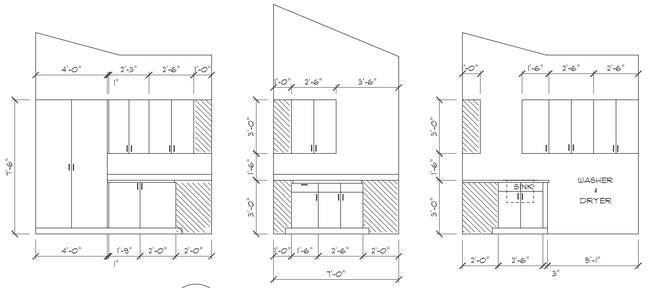
3 BATH CABINETS
BDRM #3



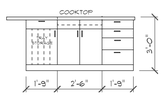
4 ENTRY

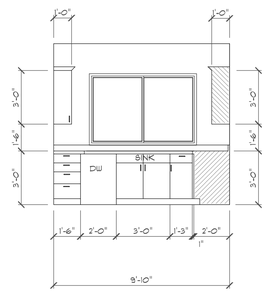


5 FAMILY ROOM

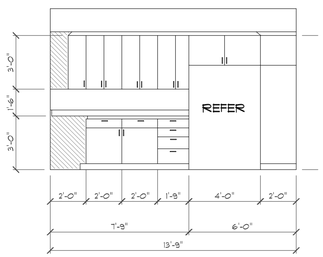


6 LAUNDRY ROOM





7 KITCHEN CABINETS



REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
2505 N 156th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6768
ARCHITECTS

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

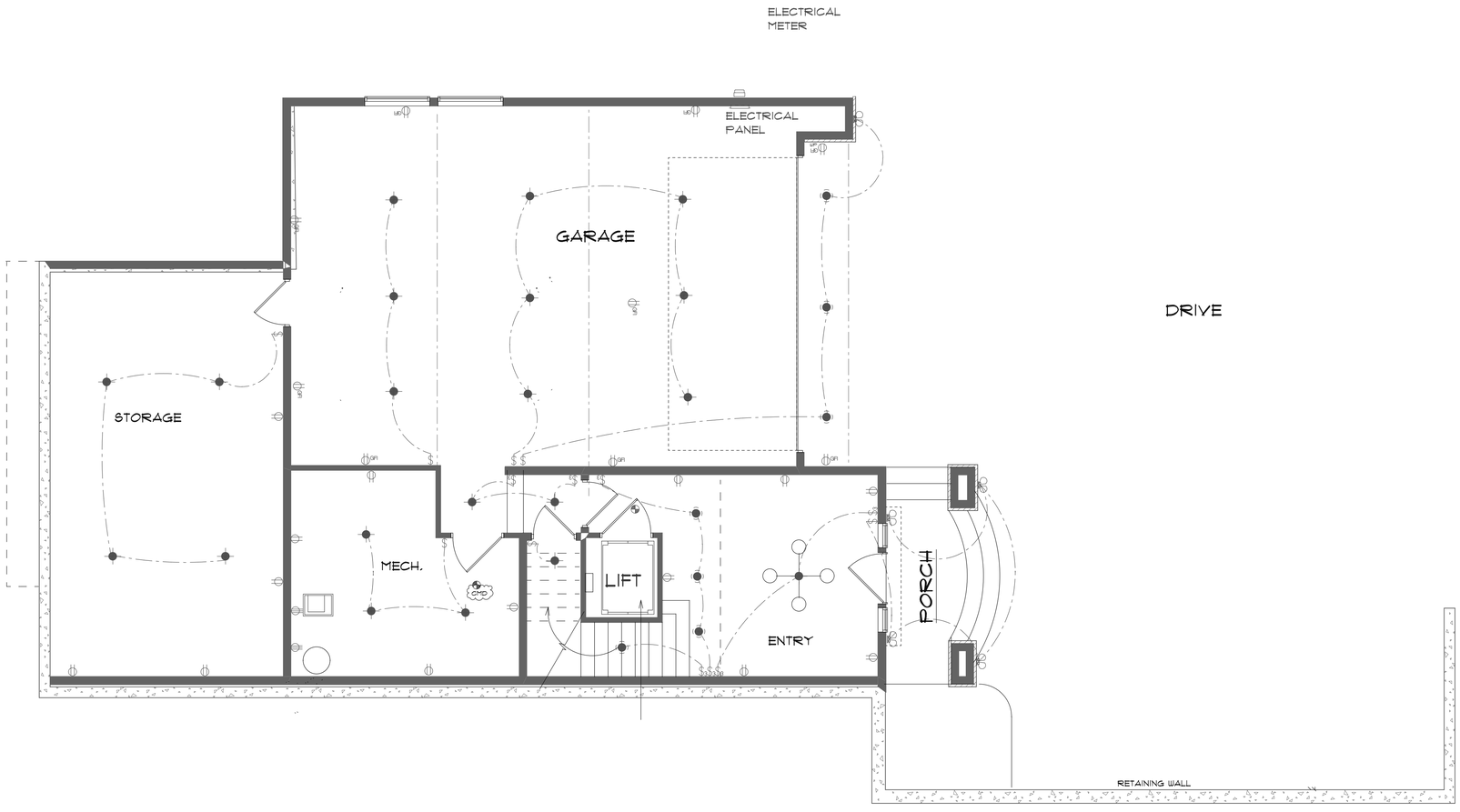
CABINETS

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A-6.1



ELECTRICAL	SYMBOL
110 v direct connection	
Outlet 110 gfi wp	
Recessed can	
Recessed directional	
Surface mount	
Wall Mount Flood	
smoke detector & carbon monoxide det	CMD
Wall mount	
fan	
outlet	
220v	
outlet gfi	GFI
smoke detector	
split receptacle	
switch	$
switch 3 way	$3

110V. SMOKE DETECTOR W/ BATTERY BACKUP & INTERCONNECTED ALARMS

WHOLE HOUSE FAN - 100 CFM MIN. VTO

110V. COMBINATION SMOKE DETECTOR & CARBON MONOXIDE DETECTOR

REGISTERED ARCHITECT
SCOTT R. HEALEY
STATE OF WASHINGTON
4120

THE HEALEY ALLIANCE AZ
2505 N 136th DRIVE GOODYEAR, AZ. 85395 - (425) 444-6968
ARCHITECTS

MI Treehouse, LLC,

5637 EAST MERCER WAY
MERCER ISLAND, WA.

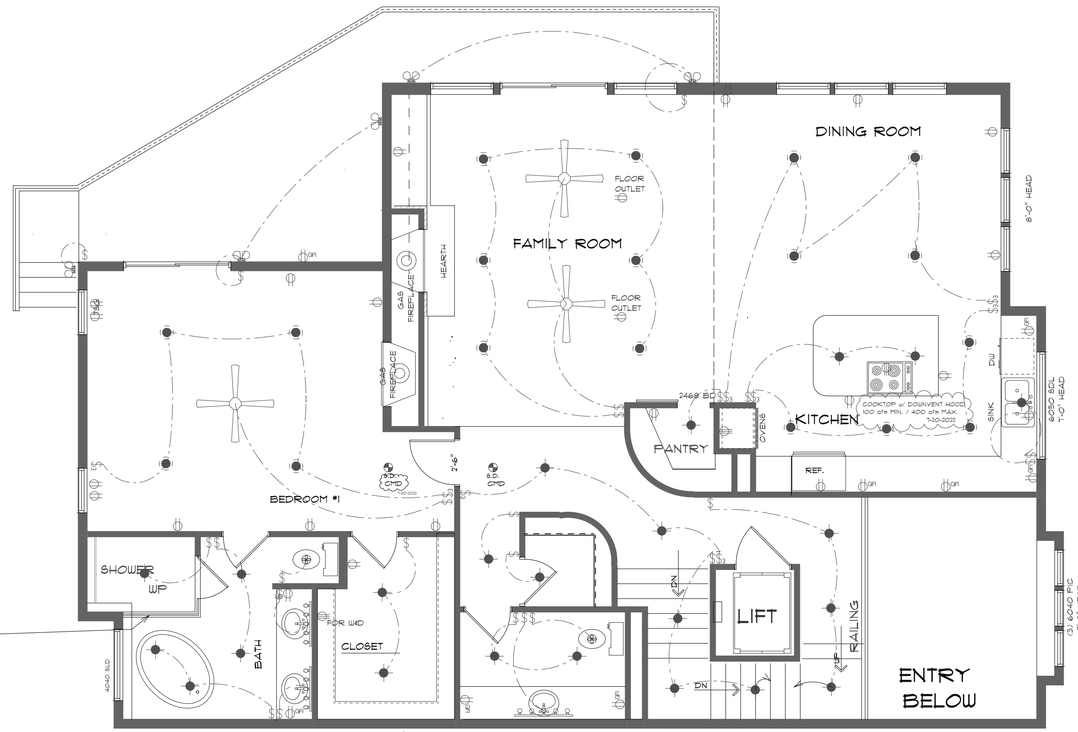
GARAGE ELECTRICAL PLAN

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A6.2



SHOWER ENCLOSURE TO BE SAFETY GLAZING AND SHALL NOT EXTEND TO THE CEILING

7-20-2022

ELECTRICAL	SYMBOL
110 v direct connection	
Outlet 110 gfi wp	
Recessed can	
Recessed directional	
Surface mount	
Wall Mount Flood	
smoke detector & carbon monoxide det	CMD
Wall mount	
Fan 50 CFM min. 7-20-2022	
outlet	
220v	
outlet gfi	GFI
smoke detector	
split receptacle	
switch	$
switch 3 way	$3

110V. SMOKE DETECTOR W/ BATTERY BACKUP & INTERCONNECTED ALARMS

WHOLE HOUSE FAN - 100 CFM MIN. VTO

110V. COMBINATION SMOKE DETECTOR & CARBON MONOXIDE DETECTOR

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

THE HEALEY ALLIANCE AZ
2505 N 136th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6988
ARCHITECTS

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

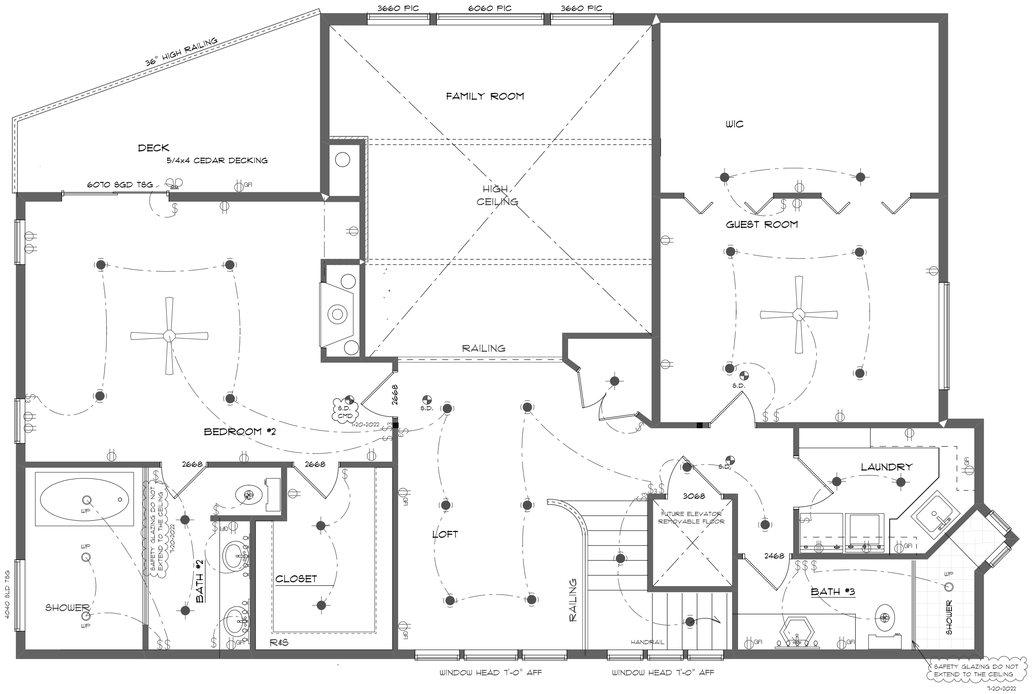
MAIN FLOOR ELECTRICAL PLAN

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A6.3



ELECTRICAL	SYMBOL
110 v direct connection	
Outlet 110 gfi wp	
Recessed can	
Recessed directional	
Surface mount	
Wall Mount Flood	
smoke detector & carbon monoxide det.	CMD
Wall mount	
fan	
outlet	
220v	
outlet gfi	GFI
smoke detector	
split receptacle	
switch	$
switch 3 way	$3

110V. SMOKE DETECTOR W/ BATTERY BACKUP & INTERCONNECTED ALARMS

WHOLE HOUSE FAN - 100 CFM MIN. VTO

110V. COMBINATION SMOKE DETECTOR & CARBON MONOXIDE DETECTOR

THE HEALEY ALLIANCE AZ
2505 N 136th DRIVE, GOODYEAR, AZ. 85395 - (425) 444-6988
ARCHITECTS

REGISTERED ARCHITECT
RONALD R. HEALEY
STATE OF WASHINGTON
420

MI Treehouse, LLC,

5631 EAST MERCER WAY
MERCER ISLAND, WA.

UPPER FLOOR ELECTRICAL PLAN

SCALE 1/4" = 1'-0"

DATE
4-13-2022
10-5-2022

PROJECT NO.
001

SHEET NO.
A6.4

STRUCTURAL NOTES

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

LIVE LOADS:
ROOF..... 25 PSF
FLOOR..... 40 PSF
DECKS..... 60 PSF

LATERAL:
WIND.....BASIC WIND SPEED,110 MPH
(ASCE 7-10 Ch. 26-27) EXPOSURE CATEGORY, D
(DIRECTIONAL PROCEDURE) K_{zt}= 1.00

SEISMIC.....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

FOUNDATIONS:
BEAR ALL FOUNDATION ON 4"ø 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 6¾ 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 ⅝"ø 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.

REINFORCING STEEL:
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..... 3"
CONCRETE EXPOSED TO EARTH OR WEATHER
#6 THRU #18 BARS..... 2"
#5 BAR AND SMALLER..... 1½
CONCRETE NOT EXPOSED TO EARTH OR WEATHER
#11 BAR AND SMALLER.....¾
SLAB ON GRADE (FROM THE SURFACE).....1½

WELDED WIRE FABRIC (WWF):
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'

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 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 A5 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.

STATEMENT OF SPECIAL INSPECTION REQUIREMENTS:
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 BOLTING, AND INSTALLATION OF STRUCTURAL STEEL OTHER THAN PREFABRICATED** STRUCTURAL STEEL MEMBERS TO VERIFY MEMBER SIZE, GRADE, WELDS, AND INSTALLATION PER PLAN.
7. 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.

STRUCTURAL SUBMITTALS:
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 WITHOUT SPECIAL INSPECTIONS.

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.

MISCELLANEOUS HARDWARE:
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 1⅛" 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 ¾" A.P.A. RATED PLYWOOD OR ¾" 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:
WALL SHEATHING SHALL BE ½" A.P.A. RATED PLYWOOD OR 7/16" 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

BEARING WALL FRAMING:
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 BETWEEN ALL WOOD AND CONCRETE.

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.

PRE-MANUFACTURED FLOOR AND ROOF TRUSSES:
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 PSI, F_v = 109 PSI) FOR SIMPLE SPANS AND 24F-V8 FOR CANTILEVER AND CONTINUOUS BEAMS. A.I.T.C. CERTIFICATE 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 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 =1350PSI
4x COLUMNS	DOUG-FIR/LARCH #1.....	F_b =1000PSI
6x COLUMNS	DOUG-FIR/LARCH #1.....	F_b =1200PSI
2x STUDS	HEM-FIR.....	F_b =675PSI
LSL	LSL 1.55E.....	F_b =2325PSI
LVL	LVL 2.0E.....	F_b =2600PSI
PSL	PSL 2.2E.....	F_b =2900PSI
GLB	GLU-LAM (24F-V4).....	F_b =2400PSI

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18-025

S1.0
STRUCTURAL NOTES

GENERAL STRUCTURAL SHORING NOTES

REFERENCE DOCUMENTS:
GEOTECHNICAL ENGINEERING STUDY
GEO GROUP NORTHWEST, INC.
REPORT #G-3837 DATED: MAR 12, 2015 (1)

DESIGN LOADS:
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 (psi)	MIN. SACKS OF CEMENT PER YARD OF CONCRETE	MAX. WATER PER 94lb SACK CEMENT	USE
------	1½ SACKS	------	PILE LEAN CONCRETE
3000	6SACKS	6 GALLONS	PILE STRUCTURAL GROUT

STRUCTURAL TIMBER:
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:
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 NOTED OTHERWISE. ALL ANCHOR BOLTS SHALL BE BE ASTM A307

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:

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.

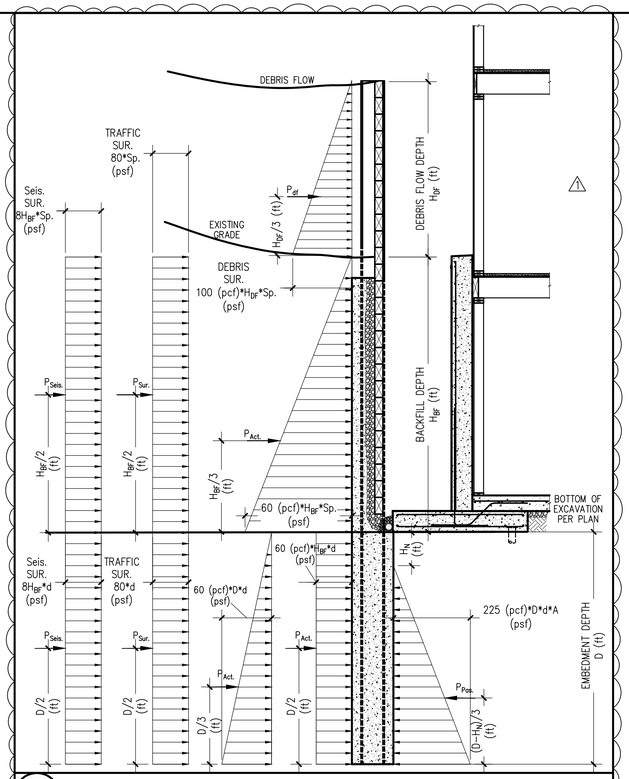
SHORING MONITORING:
CONTINUOUS OBSERVATIONS BY THE GEOTECHNICAL ENGINEER SHALL BE CONDUCTED FOR ALL PHASES OF THE SHORING PROJECT EXECUTION TO DETERMINE THE EFFECT OF CONSTRUCTION ON ADJACENT STRUCTURES IN ORDER TO PROTECT THEM FROM DAMAGE. REFER TO GEOTECHNICAL ENGINEERING STUDY FOR COMPLETE INFORMATION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

GENERAL STRUCTURAL PIN PILE NOTES

REFERENCE DOCUMENTS:
GEOTECHNICAL ENGINEERING STUDY
GEO GROUP NORTHWEST, INC.
REPORT #G-3837 DATED: MAR. 12, 2015 (1)

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.
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.



1 PILE LOADING DIAGRAM

PILE TABLE

PILE #	MAX. PILE SPACING SP (ft)	HEIGHT OF BACKFILL H (ft)	STEEL SECTION	EMBED. DEPTH (ft)	TOTAL LENGTH OF PILE (ft)	AUGER DIA. d (in)	PILE HEIGHTS {ELEV. (ft)} TOP OF STEEL	PILE HEIGHTS {ELEV. (ft)} BOTT. OF LAGGING	PILE HEIGHTS {ELEV. (ft)} BOTT. OF PILE	TIMBER LAGGING
SP1	7'-6"	4'-0"	W6x20	10'-0"	14'-0"	18"	184.00'	180.00'	170.00'	4x8 P.T. DF#1
SP2	7'-6"	3'-6"	W6x20	10'-0"	14'-0"	18"	183.50'	179.50'	169.50'	4x8 P.T. DF#1
SP3	7'-6"	3'-6"	W6x20	10'-0"	13'-6"	18"	181.50'	178.00'	168.00'	4x8 P.T. DF#1
SP4	7'-6"	3'-6"	W6x20	10'-0"	13'-6"	18"	180.50'	177.00'	167.00'	4x8 P.T. DF#1
SP5	7'-6"	3'-6"	W6x20	10'-0"	13'-6"	18"	179.50'	176.00'	166.00'	4x8 P.T. DF#1
SP6	7'-6"	3'-0"	W6x20	10'-0"	13'-0"	18"	178.00'	175.00'	165.00'	4x8 P.T. DF#1
SP7	7'-6"	3'-6"	W6x20	10'-0"	13'-6"	18"	177.50'	174.00'	164.00'	4x8 P.T. DF#1
SP8	7'-6"	4'-0"	W6x20	10'-0"	13'-0"	18"	176.50'	173.50'	163.50'	4x8 P.T. DF#1
SP9	7'-6"	2'-6"	W6x20	10'-0"	12'-6"	18"	175.50'	173.00'	163.00'	4x8 P.T. DF#1
SP10	7'-6"	2'-0"	W6x20	10'-0"	12'-0"	18"	174.50'	172.50'	162.50'	4x8 P.T. DF#1
SP11	7'-6"	1'-0"	W6x20	10'-0"	11'-0"	18"	173.50'	172.50'	162.50'	4x8 P.T. DF#1
SP12	6'-0"	6'-6"	W8x35	10'-0"	14'-6"	24"	187.00'	182.50'	172.50'	4x8 P.T. DF#1
SP13	6'-0"	8'-6"	W10x68	13'-0"	19'-0"	24"	188.50'	182.50'	169.50'	4x8 P.T. DF#1
SP14	6'-0"	10'-0"	W12x72	14'-0"	22'-0"	24"	190.50'	182.50'	168.50'	4x8 P.T. DF#1
SP15	6'-0"	10'-0"	W12x72	14'-0"	25'-6"	24"	194.00'	182.50'	168.50'	4x8 P.T. DF#1
SP16	6'-0"	10'-6"	W14x68	15'-0"	28'-6"	24"	196.00'	182.50'	167.50'	4x8 P.T. DF#1
SP17	6'-0"	11'-6"	W14x99	16'-0"	31'-6"	24"	198.00'	182.50'	166.50'	4x8 P.T. DF#1
SP18	6'-0"	12'-6"	W14x145	17'-6"	35'-0"	24"	200.00'	182.50'	165.00'	4x8 P.T. DF#1
SP19	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP20	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP21	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP22	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP23	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP24	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP25	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	202.00'	182.50'	165.00'	4x8 P.T. DF#1
SP26	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	200.00'	182.50'	165.00'	4x8 P.T. DF#1
SP27	6'-1"	12'-6"	W14x145	17'-6"	37'-0"	24"	198.00'	182.50'	165.00'	4x8 P.T. DF#1
SP28	6'-1"	12'-6"	W14x145	17'-6"	36'-0"	24"	196.00'	182.50'	165.00'	4x8 P.T. DF#1
SP29	6'-1"	10'-0"	W12x72	14'-0"	23'-6"	24"	193.50'	184.00'	170.00'	4x8 P.T. DF#1
SP30	6'-1"	9'-0"	W12x50	12'-6"	21'-0"	24"	192.00'	183.50'	171.00'	4x8 P.T. DF#1
SP31	6'-1"	8'-0"	W12x35	11'-6"	19'-6"	24"	190.50'	182.50'	171.00'	4x8 P.T. DF#1
SP32	6'-1"	7'-6"	W10x39	10'-6"	17'-6"	24"	189.00'	182.00'	171.50'	4x8 P.T. DF#1
SP33	6'-1"	7'-0"	W10x30	10'-0"	17'-0"	24"	188.00'	181.00'	171.00'	4x8 P.T. DF#1

1. BOTH GENERAL CONTRACTOR AND PILE CONTRACTOR TO VERIFY ALL PILE LENGTHS, AND ELEVATIONS PRIOR TO ORDERING MATERIAL (1)

2 PILE SCHEDULE

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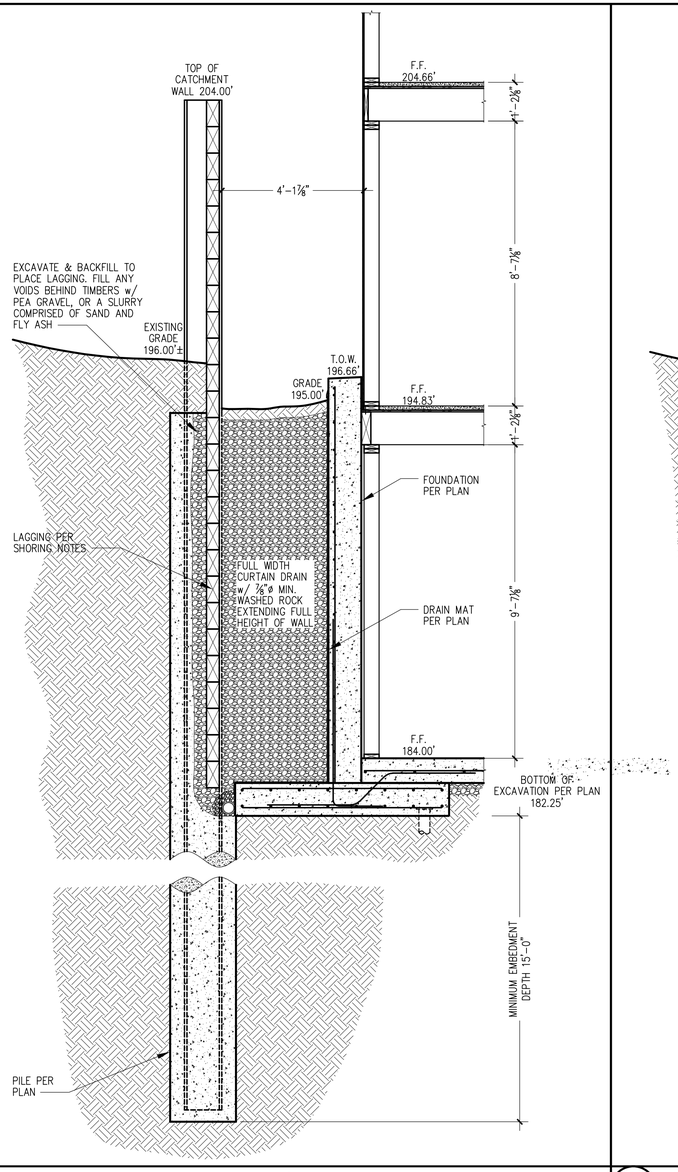
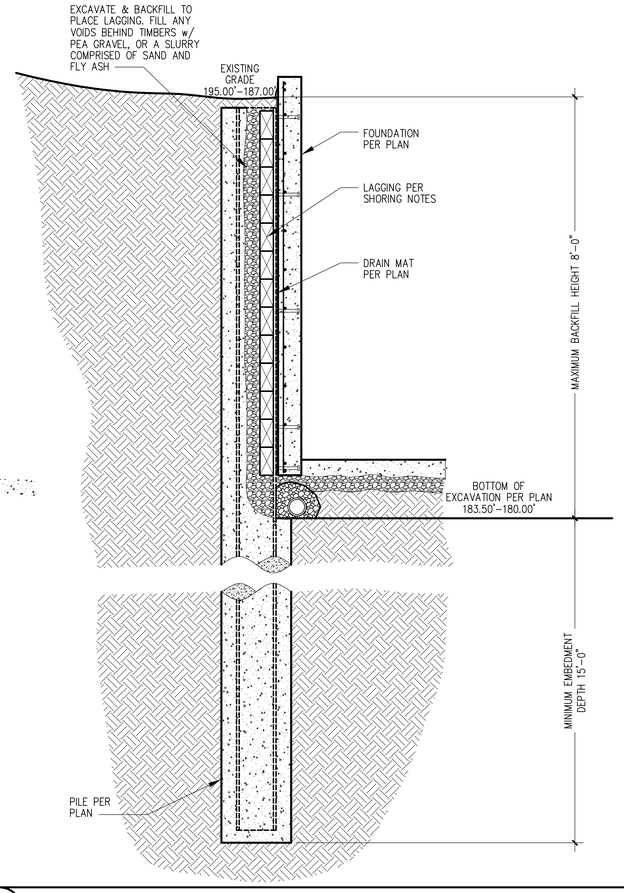
Issued	Date
Permit Plans	04/08/22
Bldg. Dept. PU (1)	08/22/22
Bldg. Dept. PU (2)	03/26/23

18-025

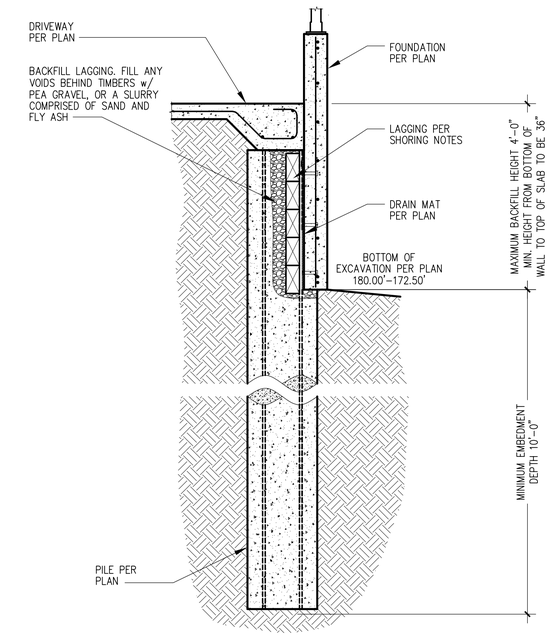
P1.0
SHORING/PIN PILE DETAILS



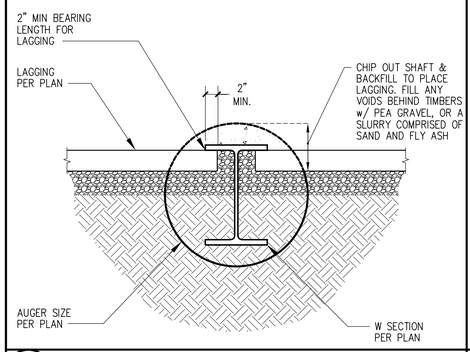
1 PILE SECTION @ HOUSE
(MAIN HOUSE)



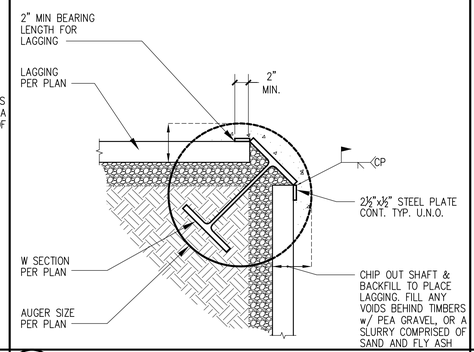
2 PILE SECTION @ SOUTH DRIVEWAY WALL
(SITE WALL)



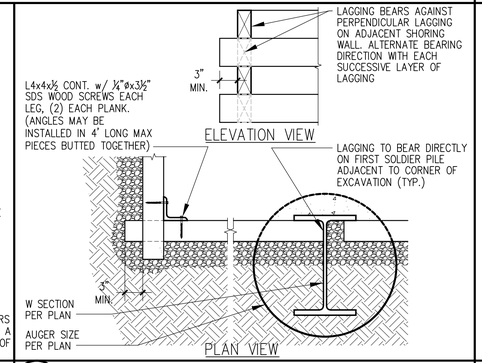
3 PILE SECTION @ NORTH DRIVEWAY WALL
(SITE WALL)



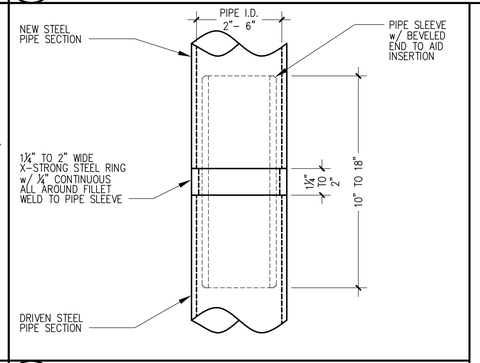
4 TYPICAL PILE PLAN



5 ROTATED PILE @ INSIDE CORNER



6 TYP. INTERIOR CORNER LAGGING SUPPORT



7 TYPICAL PIN PILE SPLICING DETAIL

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18-025

P1.1
SHORING/PIN PILE DETAILS

PILE PLAN

SCALE ¼" = 1'-0"

PILE PLAN NOTES

1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE CONTACT STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
2. WRITTEN DIMENSIONS TAKE PRECEDENT OVER SCALED DIMENSIONS.
3. VERIFY ALL DIMENSIONS AND FIELD CONDITIONS.
4. REFER TO SHEET P1.0 FOR GENERAL SHORING AND PILE NOTES AND ADDITIONAL SHORING AND PIN PILE INFORMATION.
5. PP# "X" — INDICATES LOCATION AND NUMBER OF 4" PIN PILE PER PLAN.
6. PP# "X" — INDICATES LOCATION AND NUMBER OF A BATTERED 4"ø PIN PILE PER PLAN. ARROW INDICATES DIRECTION TO DRIVE PILE. BATTERD PILES SHALL BE DRIVEN AT A RATIO OF 2 HORIZ:10 VERT.
7. SP# "X" — INDICATES LOCATION AND NUMBER OF AUGERCAST SHORING PILE PER PLAN. SEE TABLE 2/P1.0 FOR STEEL SIZE AND AUGER DEPTH AND DIAMETER.
8. REFER TO SOILS REPORT JN20408 FROM GEO TECH CONSULTANTS, INC. FOR ADDITIONAL INFORMATION.
9. GEOTECHNICAL SPECIAL INSPECTOR SHALL BE CONTINUOUSLY ONSITE DURING PILE INSTALLATION TO OBSERVE AND VERIFY CORRECT INSTALLATION OF ALL SHORING AND PIN PILES.

PP#1 TO HAVE PILE CAP SET @ ELEVATION 190.25'

4" FACE OF WALL TO ℄ OF PIN PILE (TYP.)

LOCATION OF SHORING PILES ALONG DRIVEWAY SHALL BE FIELD DETERMINED AND PLACED WITH A MAXIMUM SPACING OF 7'-6"

1" BETWEEN WALL FRAMING AND INSIDE OF FOUNDATION

1" BETWEEN WALL FRAMING AND INSIDE OF FOUNDATION

NORTH

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MI Treehouse, LLC
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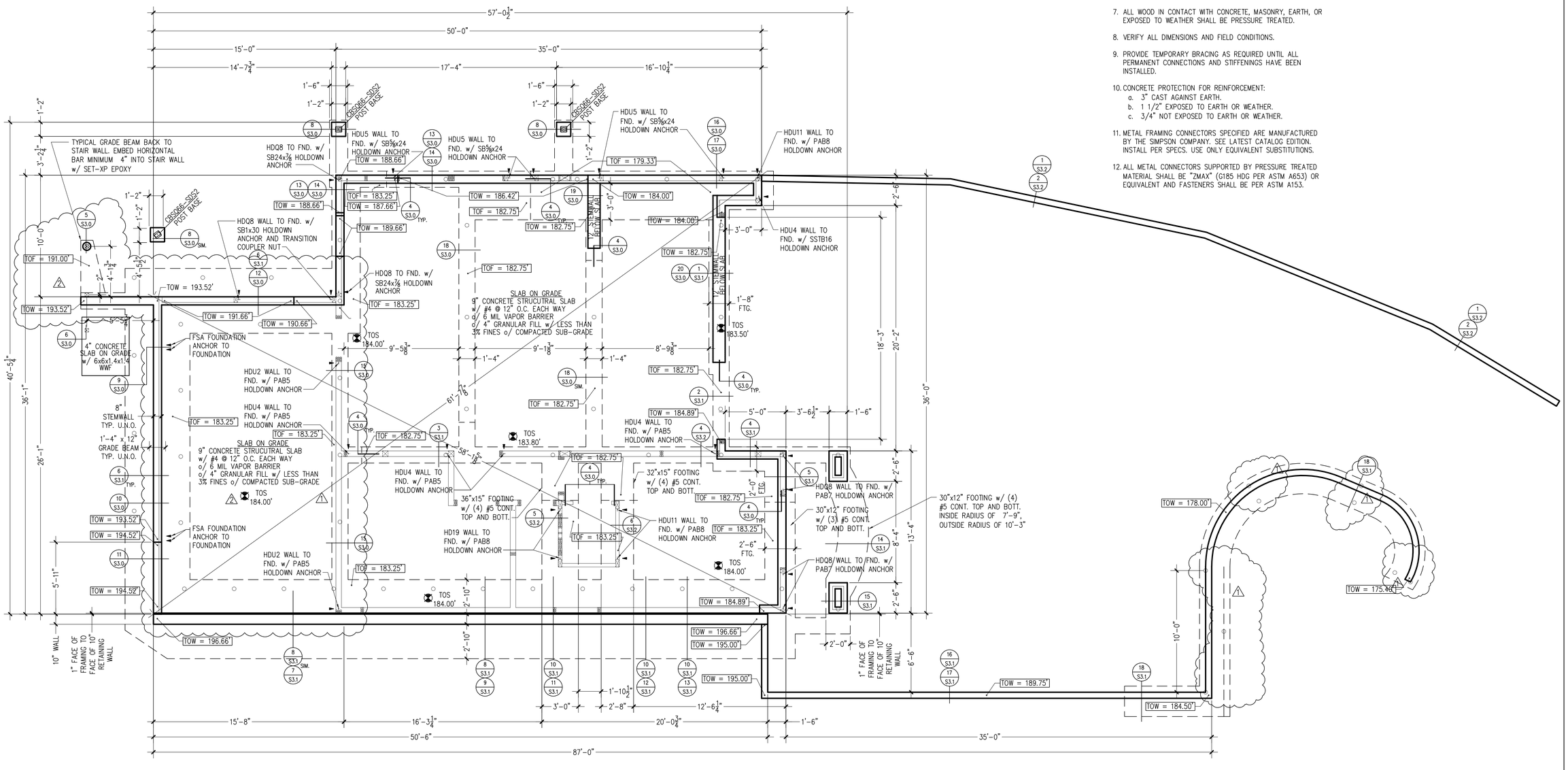
P2.0

SHORING/PIN PILE PLAN

FOUNDATION PLAN

SCALE 1/4" = 1'-0"

CONTRACTOR AND SHORING CONTRACTOR SHALL VERIFY ALL GRADE, FOOTING AND STEMWALL HEIGHTS PRIOR TO EXCAVATING

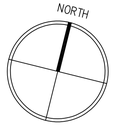


FOUNDATION PLAN NOTES

1. PLANS SHOULD BE REVIEWED BY ALL SUBCONTRACTORS PRIOR TO STARTING CONSTRUCTION. IF DISCREPANCIES EXIST PLEASE CONTACT STONEY POINT ENGINEERING OR OWNER/CONTRACTOR.
2. WRITTEN DIMENSIONS TAKE PRECEDENT OVER SCALED DIMENSIONS.
3. ALL FOOTINGS TO HAVE A MINIMUM DEPTH OF 18" BELOW FINISH GRADE.
4. ALL CONCRETE FOOTINGS TO BEAR ON 4" ø PIN PILES OR WIDE-FLANGE SHORING PILES PER PLAN.
5. STEP FOUNDATION PER SITE CONDITIONS.
6. CONCRETE COMPRESSIVE STRENGTH F'C = 3,000 PSI, GRADE 60 REINFORCEMENT.
7. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, EARTH, OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
8. VERIFY ALL DIMENSIONS AND FIELD CONDITIONS.
9. PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED.
10. CONCRETE PROTECTION FOR REINFORCEMENT:
    a. 3" CAST AGAINST EARTH.
    b. 1 1/2" EXPOSED TO EARTH OR WEATHER.
    c. 3/4" NOT EXPOSED TO EARTH OR WEATHER.
11. METAL FRAMING CONNECTORS SPECIFIED ARE MANUFACTURED BY THE SIMPSON COMPANY. SEE LATEST CATALOG EDITION. INSTALL PER SPECS. USE ONLY EQUIVALENT SUBSTITUTIONS.
12. ALL METAL CONNECTORS SUPPORTED BY PRESSURE TREATED MATERIAL SHALL BE "ZMAX" (G185 HDG PER ASTM A653) OR EQUIVALENT AND FASTENERS SHALL BE PER ASTM A153.

SHEARWALL NOTES

1. ALL EXTERIOR WALLS TO BE P1-6 U.N.O.
2. P1-X DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
3. ⇥ DENOTES LOCATION OF TIE STRAP PER PLAN
4. · ⇥ DENOTES LOCATION HOLDOWN PER PLAN.
5. SEE SHEETS S3.0, S3.1, S3.2, S4.1, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS



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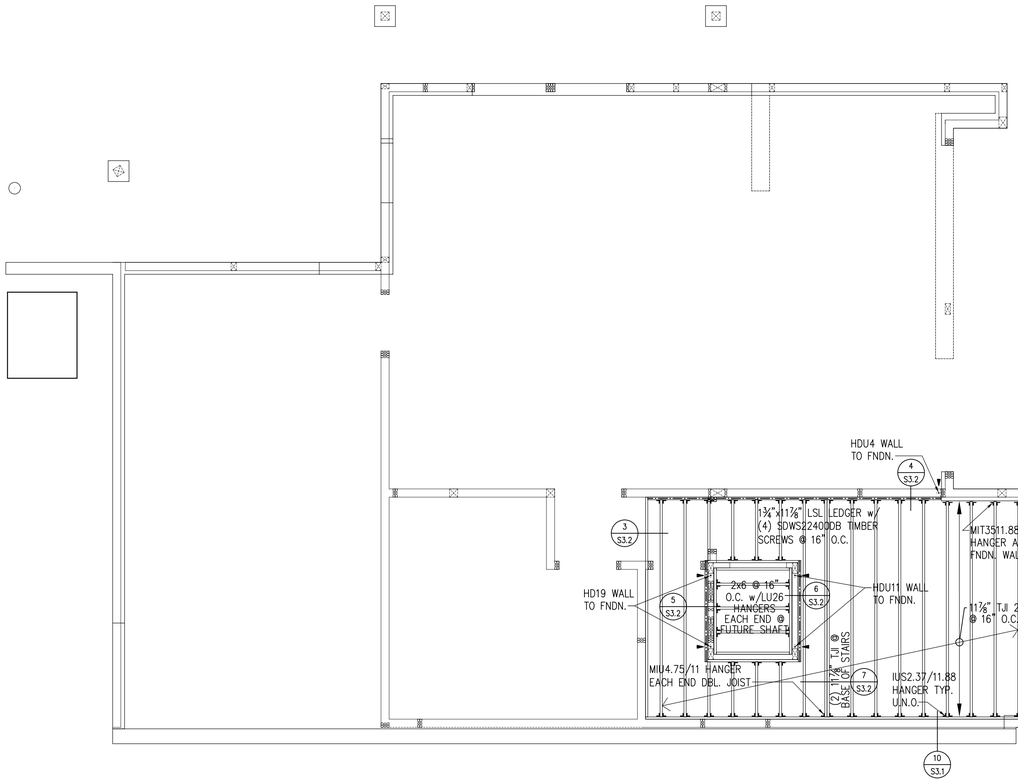
S2.0
FOUNDATION PLAN



LOWER FLOOR FLOOR FRAMING PLAN

SCALE ¼" = 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 A153.

4. ALL FLOOR BEAMS TO BE 4x8 D.F.#2 TYP. U.N.O.

5. ALL FLOOR JOIST TO BE 11⅞" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 1½"x11⅞" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.

6. 2-2x4 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. P1-X DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.

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

LEGEND

- DENOTES INTERIOR LOWER FLOOR BEARING WALLS
- DENOTES LOWER FLOOR WALLS
- DENOTES BEAMS, HEADERS

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STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER

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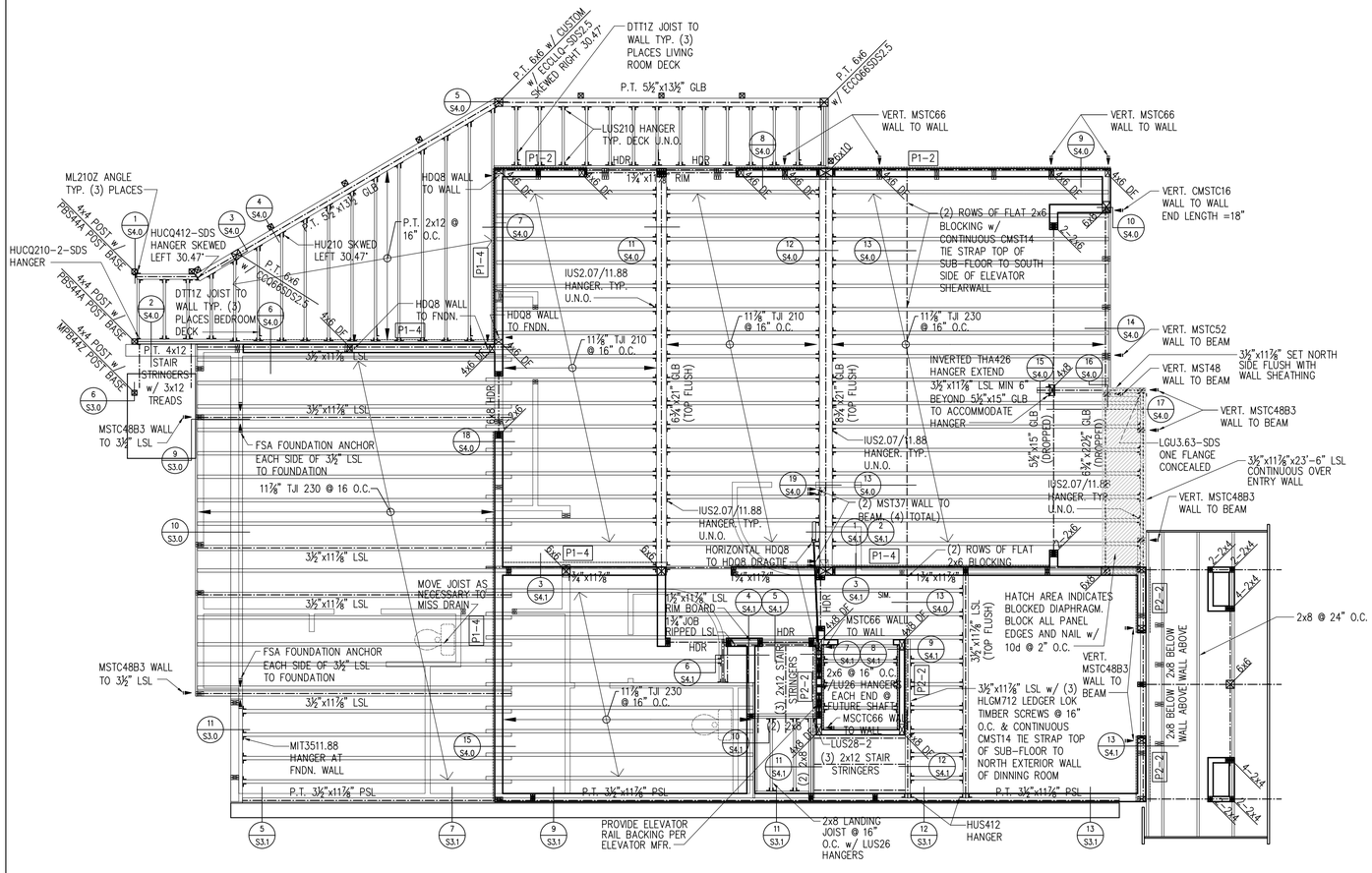
S2.1

MAIN FLOOR FRAMING PLAN



MAIN FLOOR FRAMING PLAN

SCALE ¼" = 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 11⅞" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 1½"x11⅞" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
6. ■ 2-2x4 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. P1-X ▭ DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
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

LEGEND

- DENOTES INTERIOR LOWER FLOOR BEARING WALLS
- DENOTES LOWER FLOOR WALLS
- DENOTES BEAMS, HEADERS

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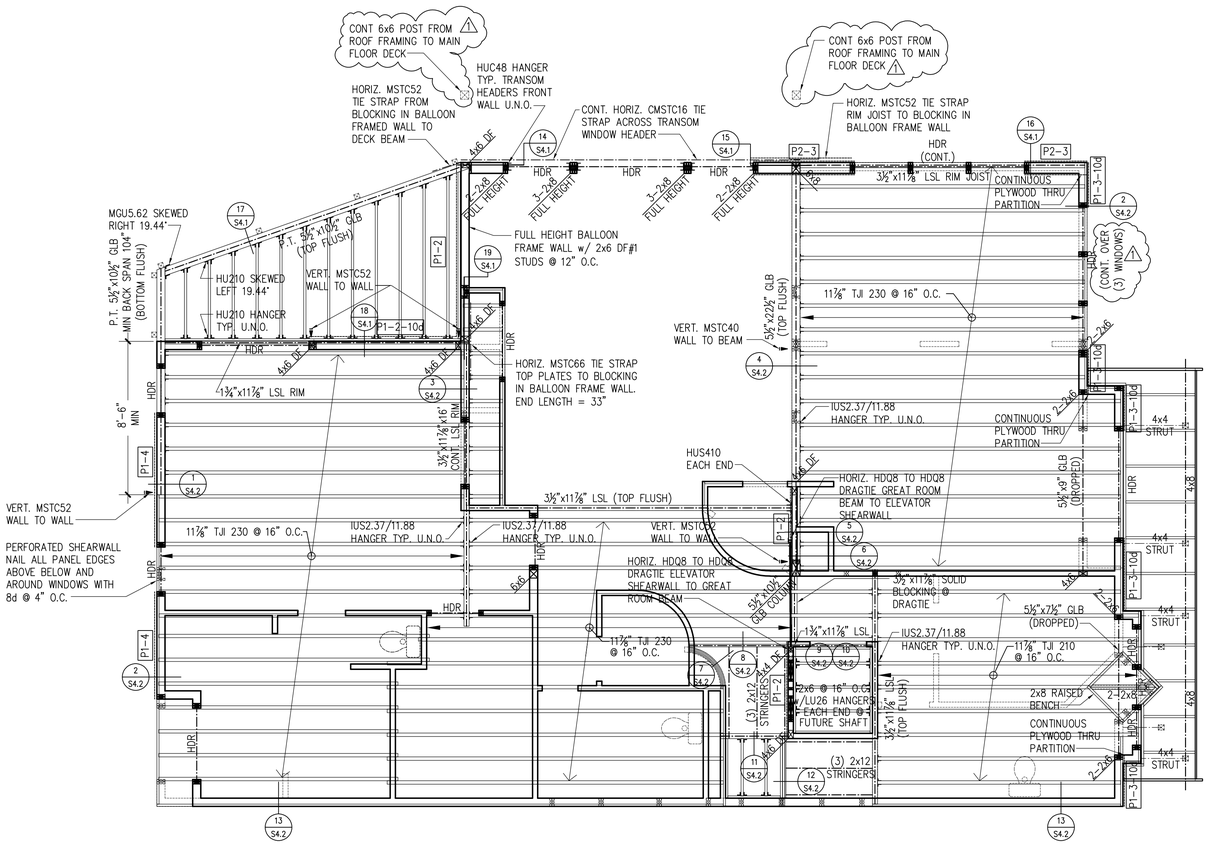
S2.2
MAIN FLOOR FRAMING PLAN



UPPER FLOOR FRAMING PLAN

SCALE ¼" = 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 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 11⅞" TJI 230 @ 16" O.C. U.N.O. ALL RIM TO BE 1½"x11⅞" TIMBERSTRAND U.N.O. PROVIDE SOLID BLOCKING BELOW ALL POINT LOADS ABOVE.
6. 2-2x4 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. P1-X DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
3. ⇥ DENOTES LOCATION OF TIE STRAP PER PLAN
4. · ⇥ DENOTES LOCATION HOLDOWN PER PLAN.
5. SEE SHEETS S1.0, S4.1, S4.2, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

LEGEND

- DENOTES INTERIOR MAIN FLOOR BEARING WALLS
- DENOTES MAIN FLOOR WALLS
- DENOTES BEAMS, HEADERS

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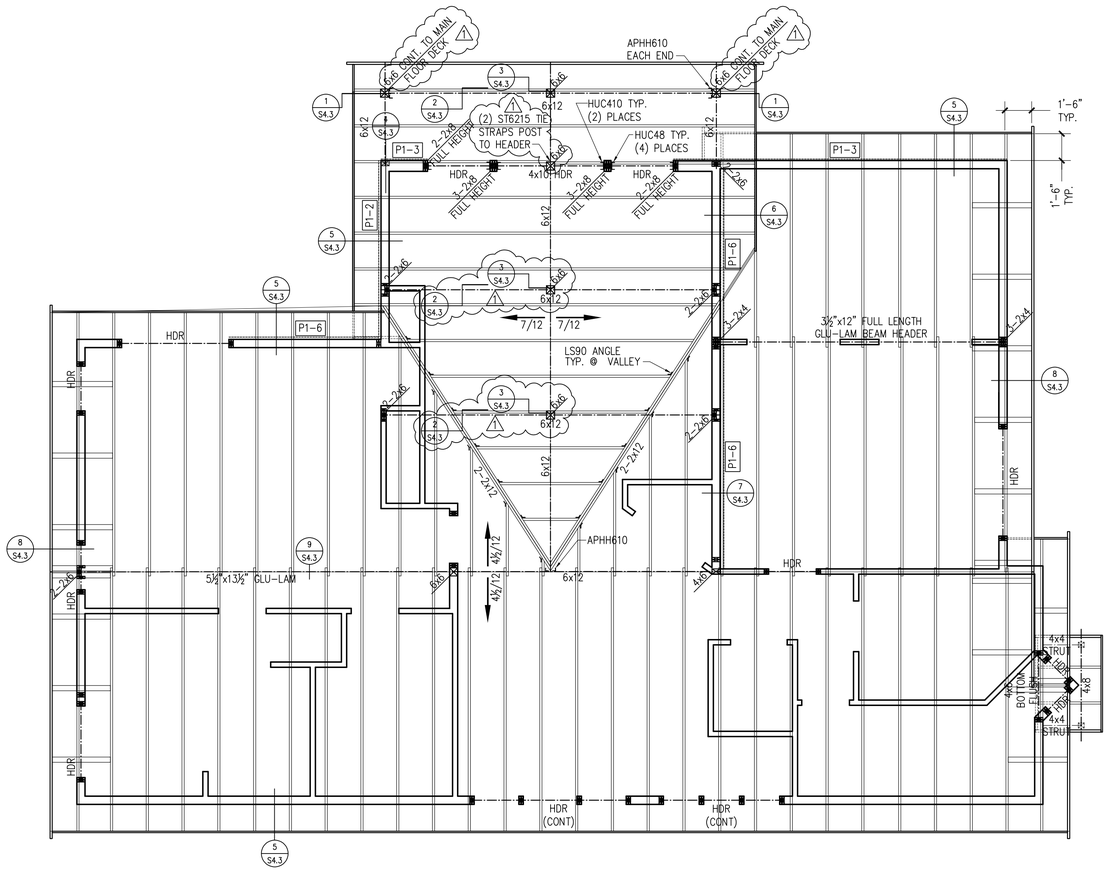
S2.3
UPPER FLOOR FRAMING PLAN



ROOF FRAMING PLAN

SCALE ¼" = 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 U.N.O.
6. 2-2x4 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.
2. P1-X DENOTES SHEARWALL MARK. MARK IS ON SIDE OF WALL TO BE SHEATHED U.N.O.
3. DENOTES LOCATION OF TIE STRAP PER PLAN
4. DENOTES LOCATION HOLDOWN PER PLAN.
5. SEE SHEETS S1.0, AND S4.3 FOR SHEARWALL SCHEDULE, NOTES AND TYP. DETAILS

LEGEND

- DENOTES INTERIOR UPPER FLOOR BEARING WALLS
- DENOTES UPPER FLOOR WALLS
- DENOTES BEAMS, HEADERS

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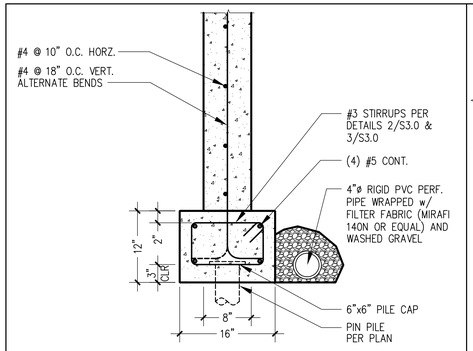
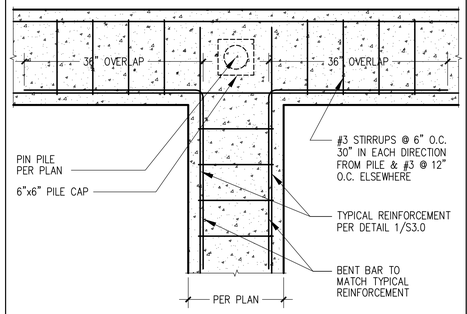
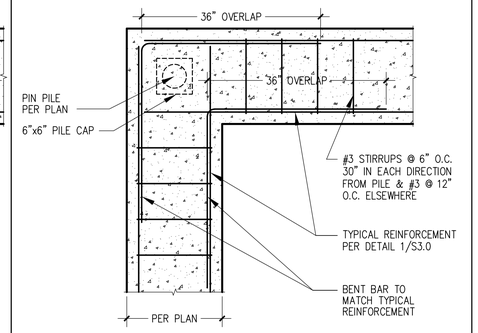
S2.4
ROOF FRAMING PLAN



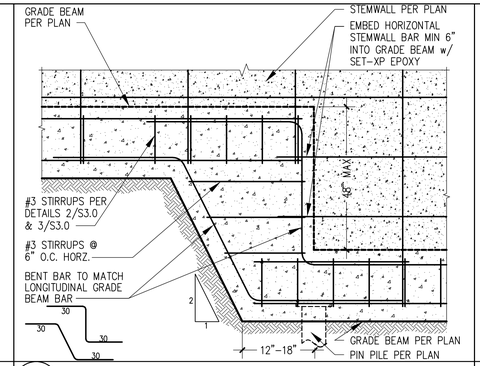
1 TYPICAL GRADE BEAM FOUNDATION



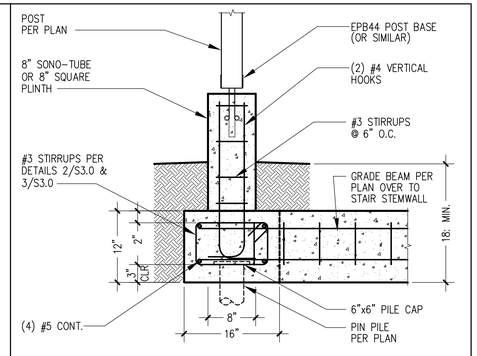
2 TYPICAL GRADE BEAM AT INTERECTIONS



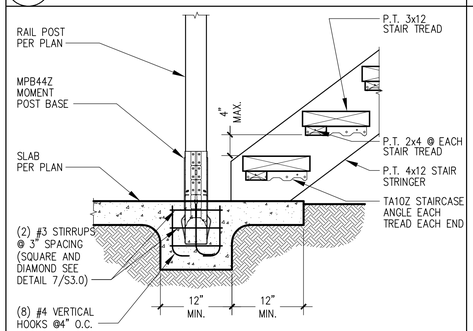
3 TYPICAL GRADE BEAM AT CORNER



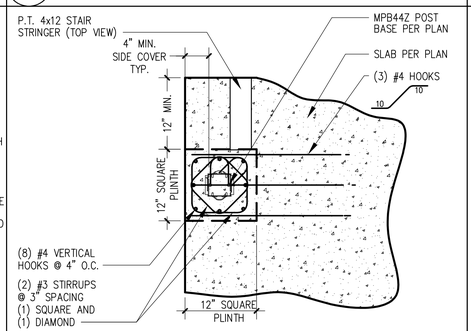
4 TYPICAL FOOTING STEP



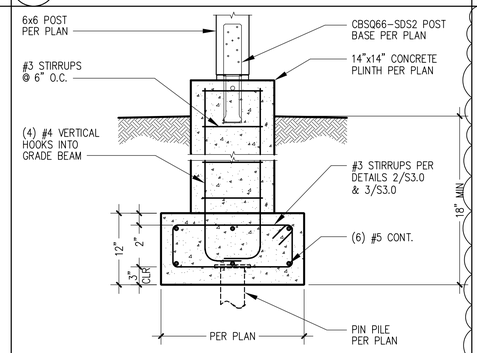
5 PLINTH @ GRADE BEAM



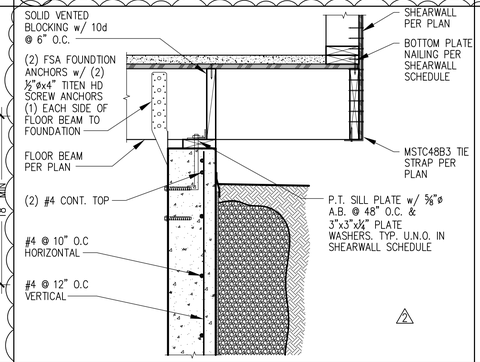
6 TYPICAL DECK STAIRS



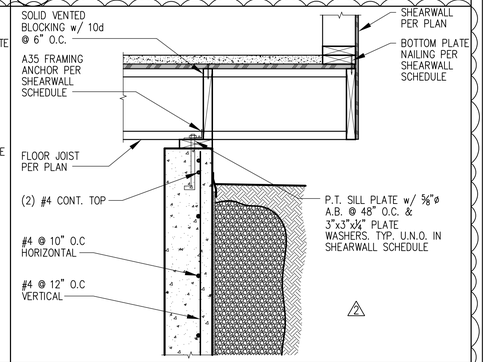
7 TYPICAL MOMENT POST BASE @ SLAB/FTG. (PLAN VIEW)



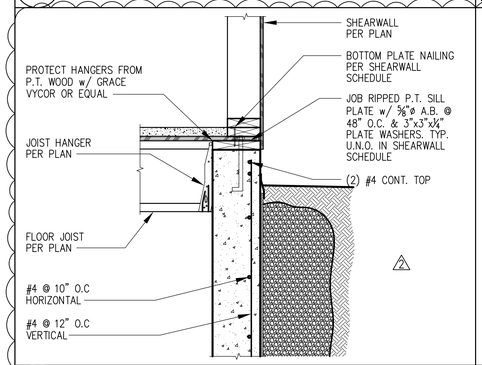
8 CONCRETE POST PLINTH @ GRADE BEAM (ISOLATED GRADE BEAM)



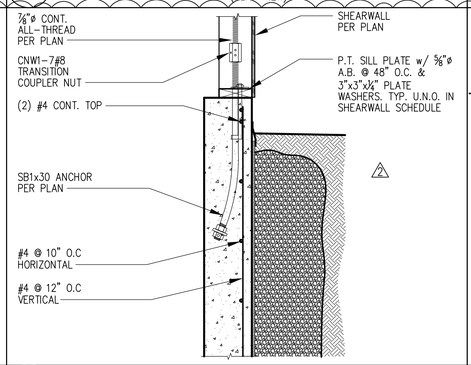
9 FSA FOUNDATION ANCHOR @ TIE STRAP (PERPENDICULAR 11⅞ TJI)



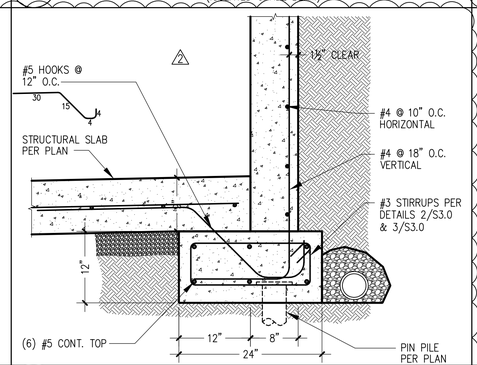
10 SHEAR TRANSFER @ CANTILEVERED JOIST (PERPENDICULAR 11⅞ TJI)



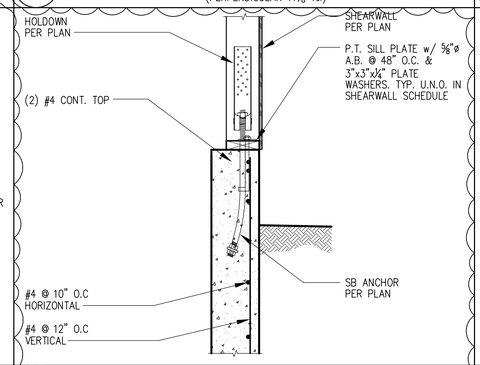
11 TYP. RAISED FOUNDATION (PERPENDICULAR 11⅞ TJI)



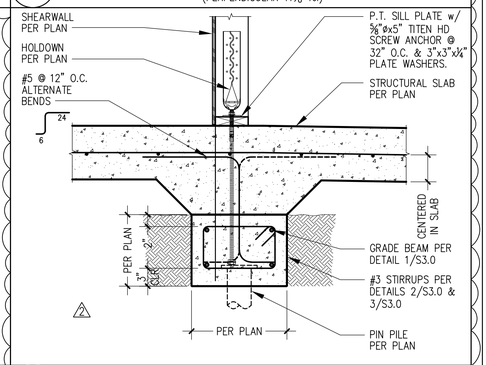
12 SB HOLDOWN ANCHOR TO FOUNDATION (ALL-THREAD @ SHORT PONYWALL)



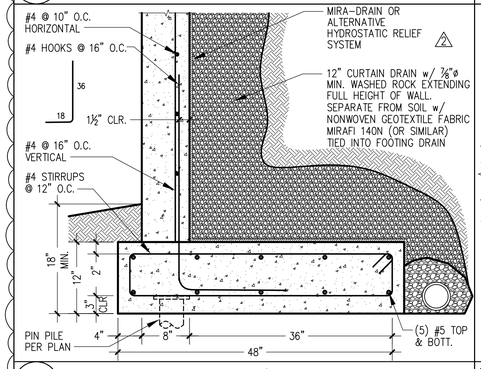
13 GARAGE SLAB @ STEMWALL



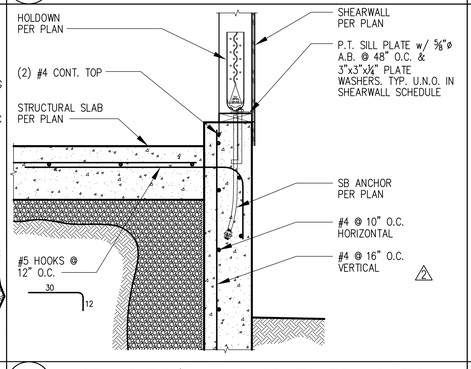
14 SB HOLDOWN ANCHOR TO FOUNDATION (HOLDOWN @ PONYWALL)



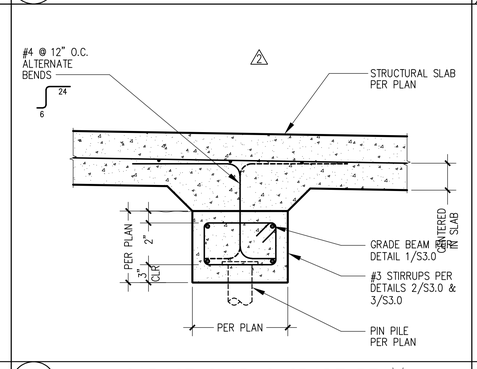
15 HOLDOWN @ BREAK IN SLOPE OF GARAGE SLAB



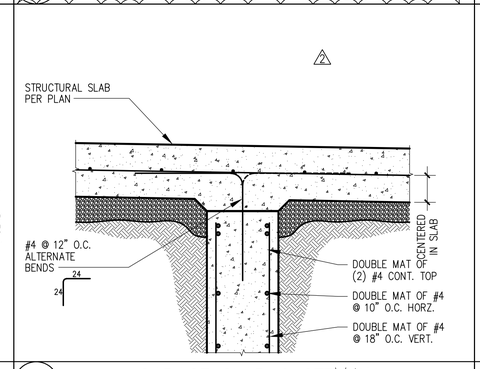
16 GARAGE WALL FOOTING



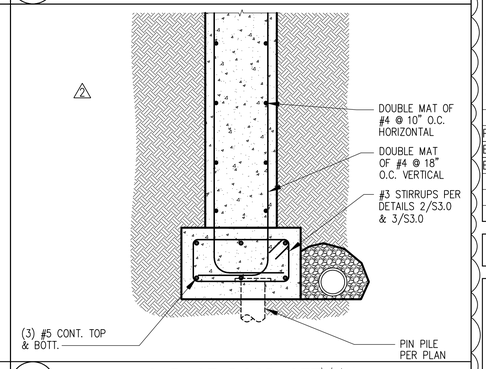
17 SB HOLDOWN ANCHOR TO FOUNDATION (HIGH GARAGE SLAB/LOW GRADE)



18 GARAGE SLAB @ GRADE BEAM



19 GARAGE SLAB @ STEMWALL



20 GARAGE DOOR STEMWALL

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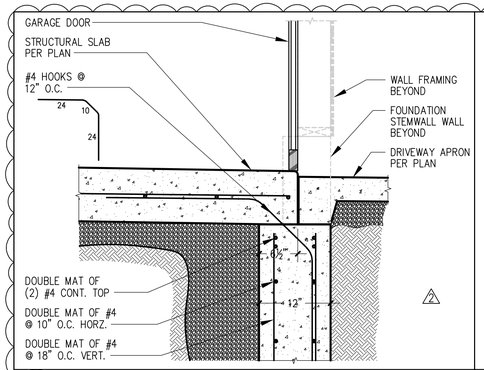
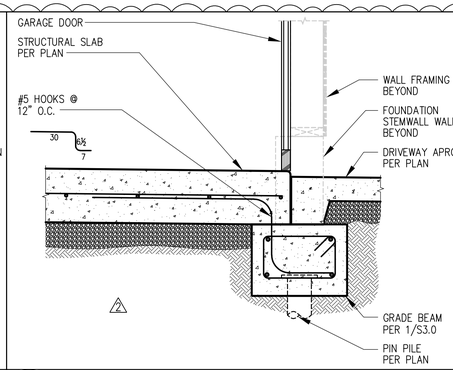
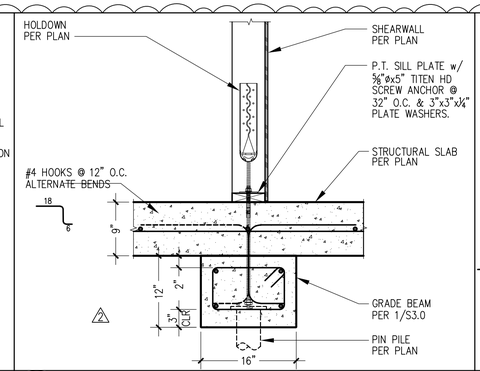
S3.0
FOUNDATION DETAILS



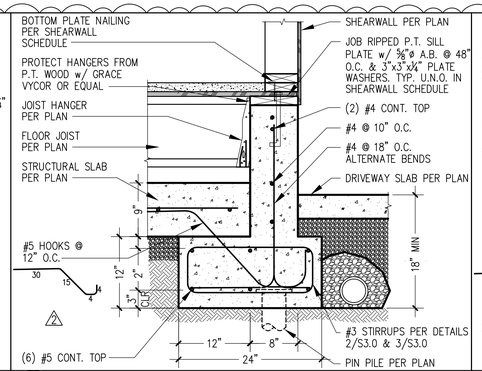
1 GARAGE SLAB @ FOUNDATION WALL
(UNHEATED SLAB)



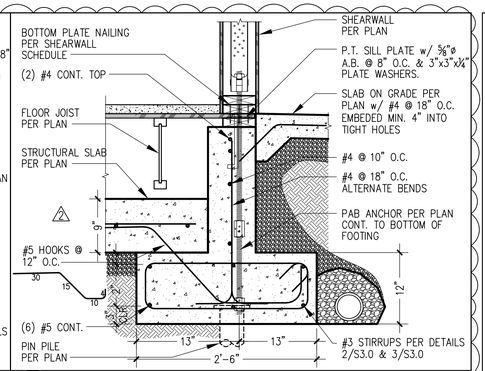
2 GARAGE SLAB @ FOUNDATION WALL
(UNHEATED SLAB)



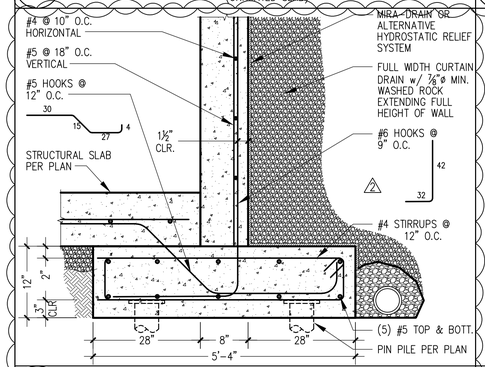
3 SHEARWALL @ TYP. SLAB



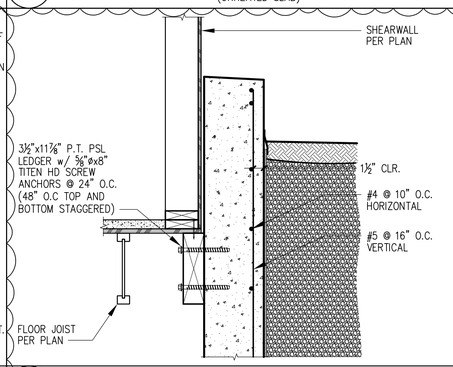
4 RAISED FOUNDATION @ ENTRY
(PERPENDICULAR 11⅞ TJI)



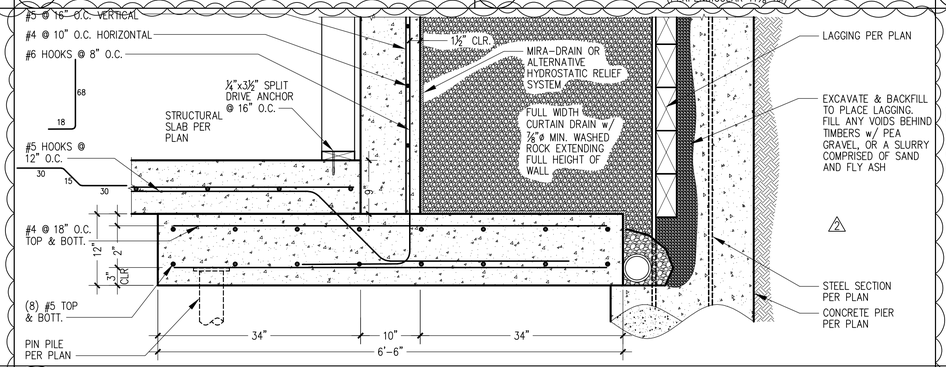
5 PAB ANCHOR @ RAISED FNDN. @ ENTRY
(PARALLEL 11⅞ TJI)



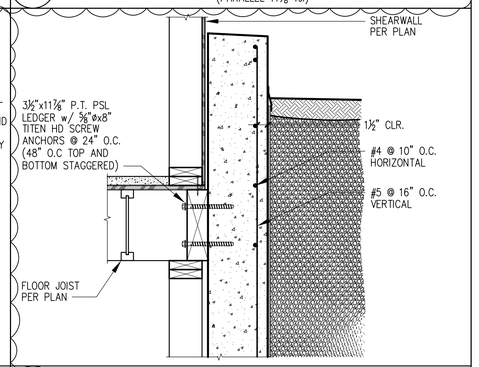
6 STORAGE WALL FOOTING



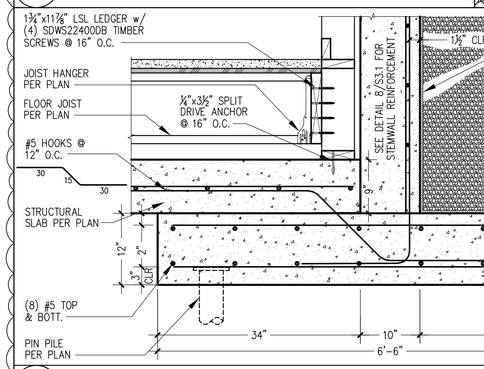
7 FLOOR FRAMING @ RAISED FOUNDATION
(PARALLEL 11⅞ TJI)



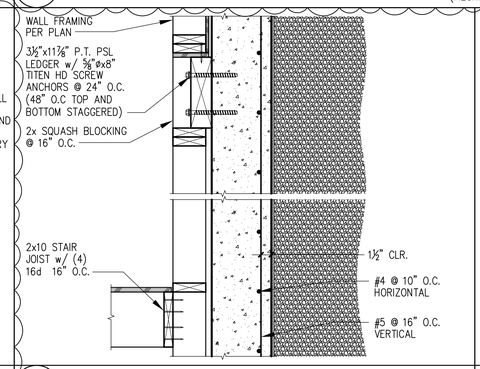
8 BASEMENT WALL FOOTING
(MECHANICAL ROOM)



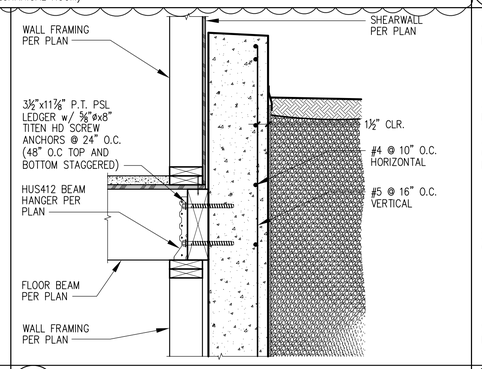
9 FLOOR FRAMING @ RAISED FOUNDATION
(PARALLEL 11⅞ TJI)



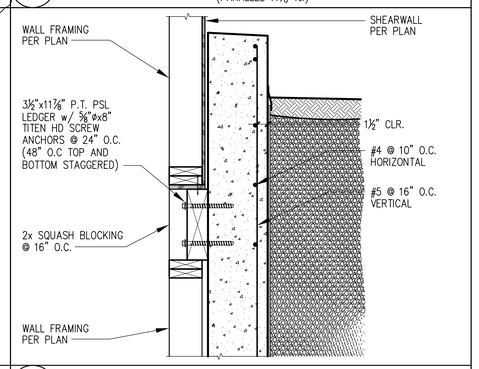
10 BASEMENT WALL FOOTING
(ENTRYWAY)



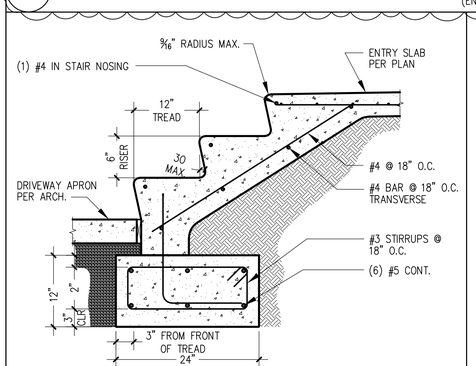
11 STAIR LANDING FRAMING @ RAISED FNDN.
(PARALLEL 11⅞ TJI)



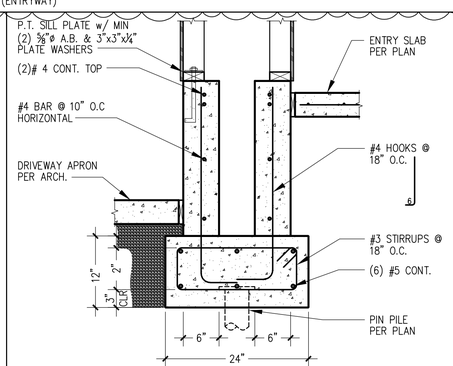
12 FLOOR FRAMING @ RAISED FOUNDATION
(PARALLEL 11⅞ TJI)



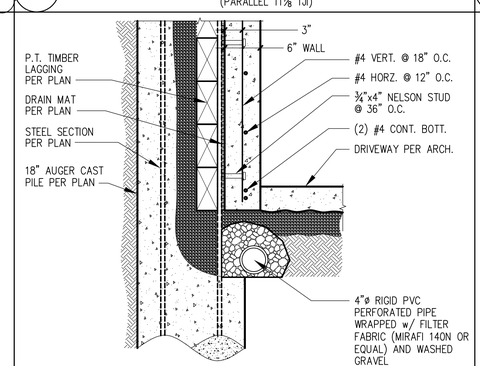
13 BALLOON WALL FRAMING @ RAISED FNDN.



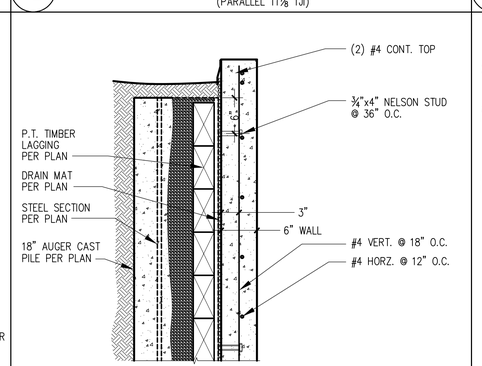
14 CONCRETE STAIRS @ GRADE BEAM



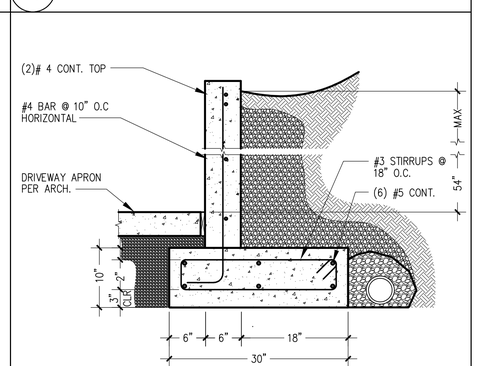
15 24" WIDE GRADE BEAM @ ENTRY



16 DRIVEWAY SITE WALL
(BASE OF SOUTH WALL)



17 DRIVEWAY SITE WALL
(TOP OF SOUTH WALL)



18 RETAINING WALL @ SOUTH DRIVEWAY

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Permit Plans	04/08/22
Bldg. Dept PU	1 08/22/22
Bldg. Dept PU	2 03/26/23

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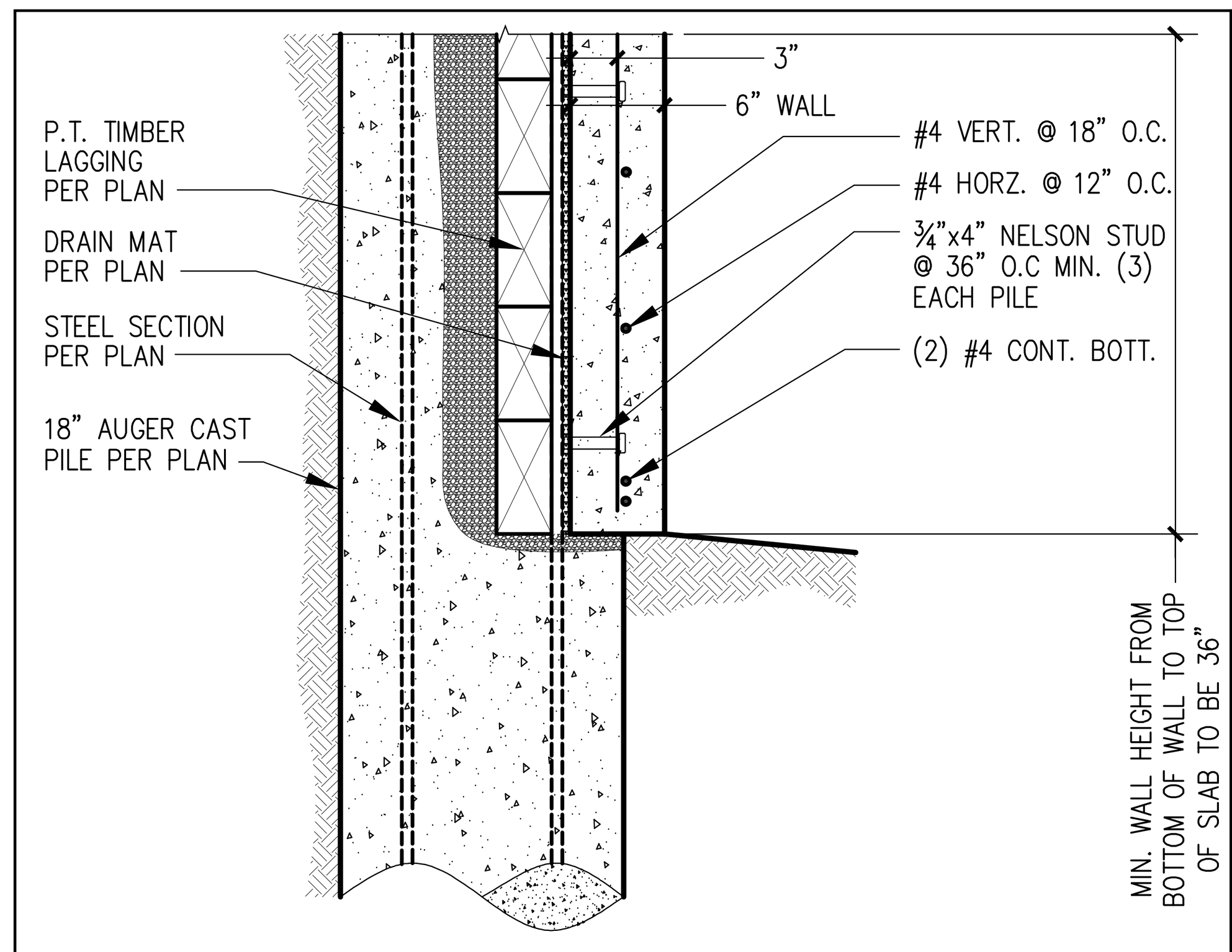
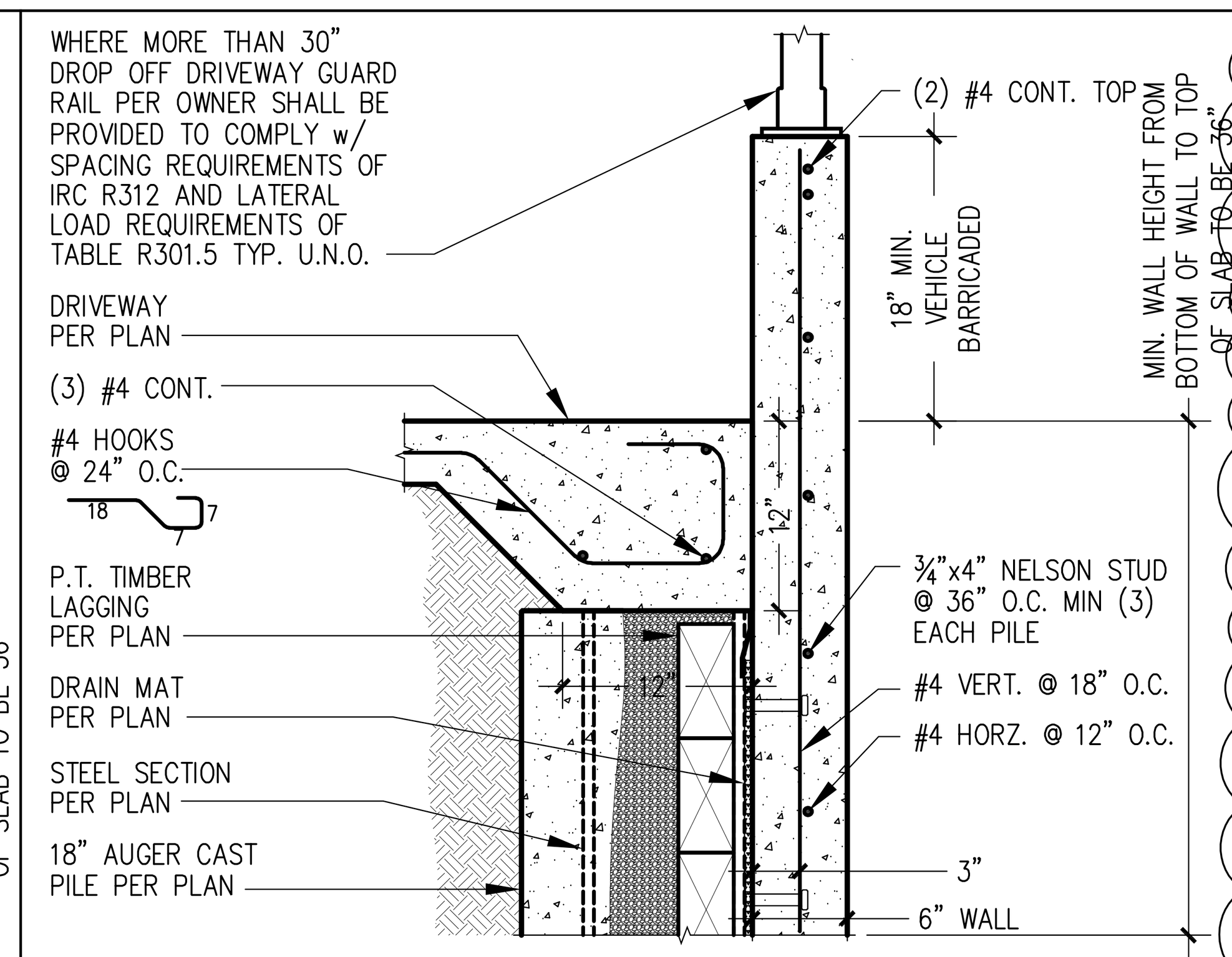
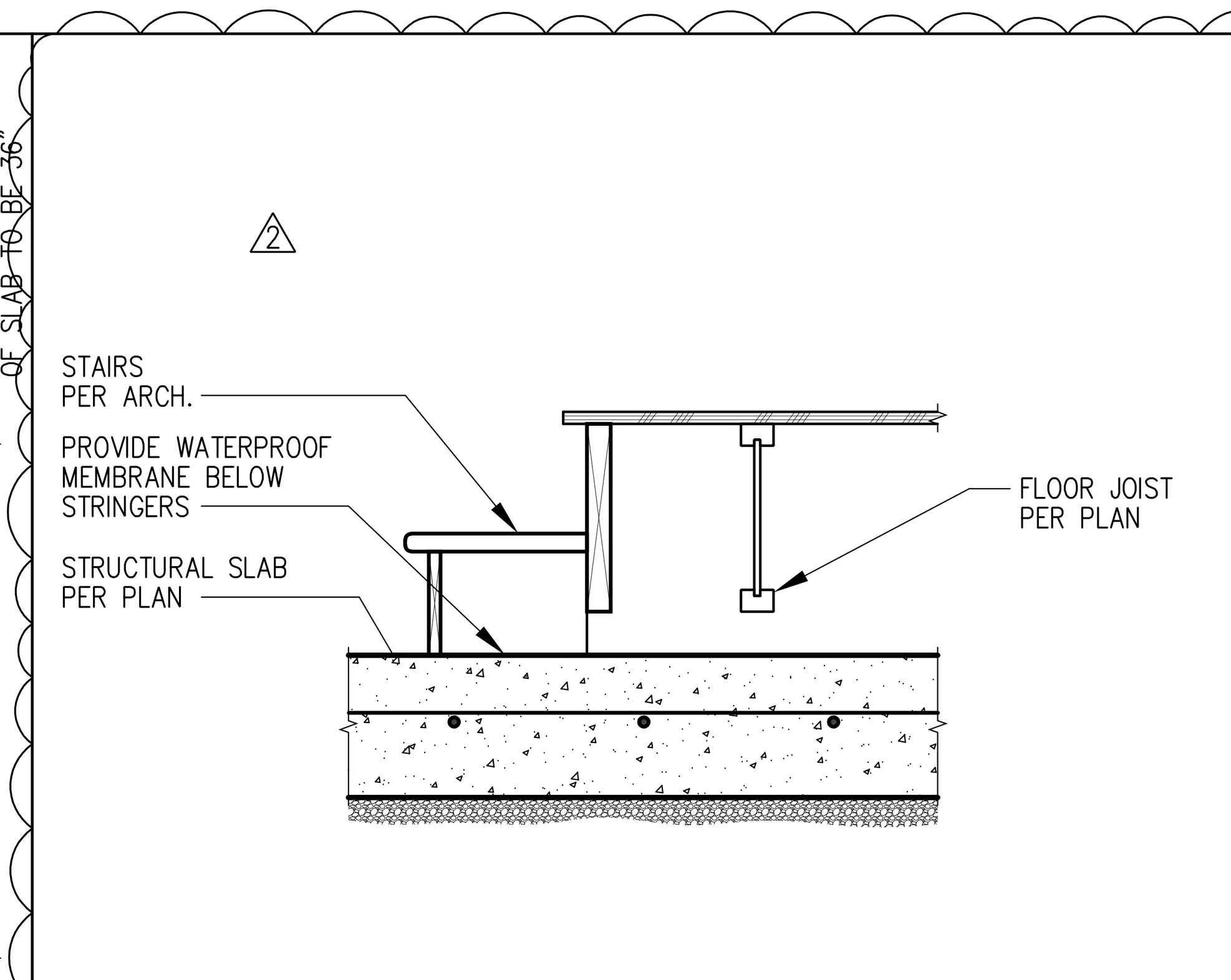
S3.1
FOUNDATION DETAILS



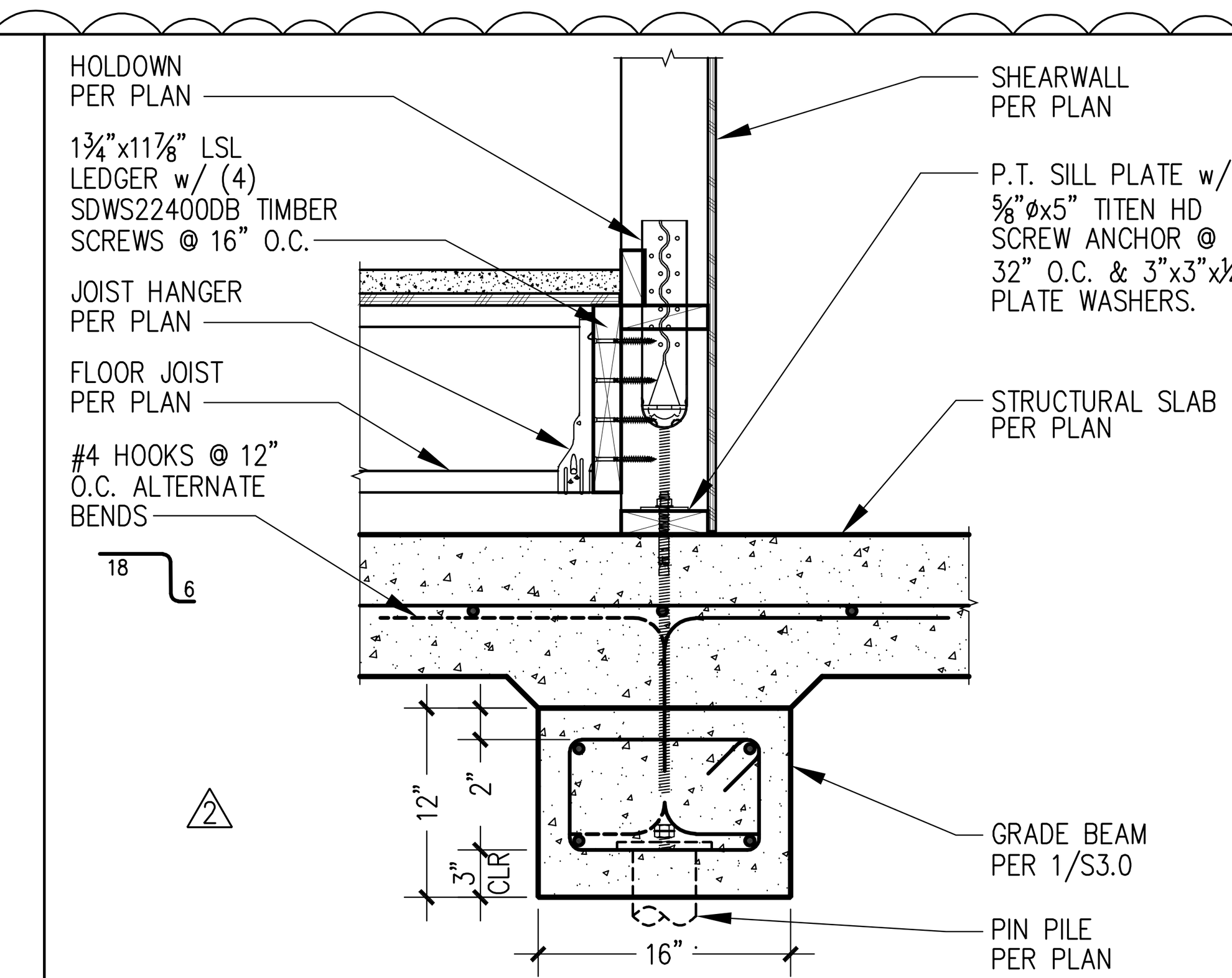
1 DRIVEWAY SITE WALL
(BASE OF WALL)



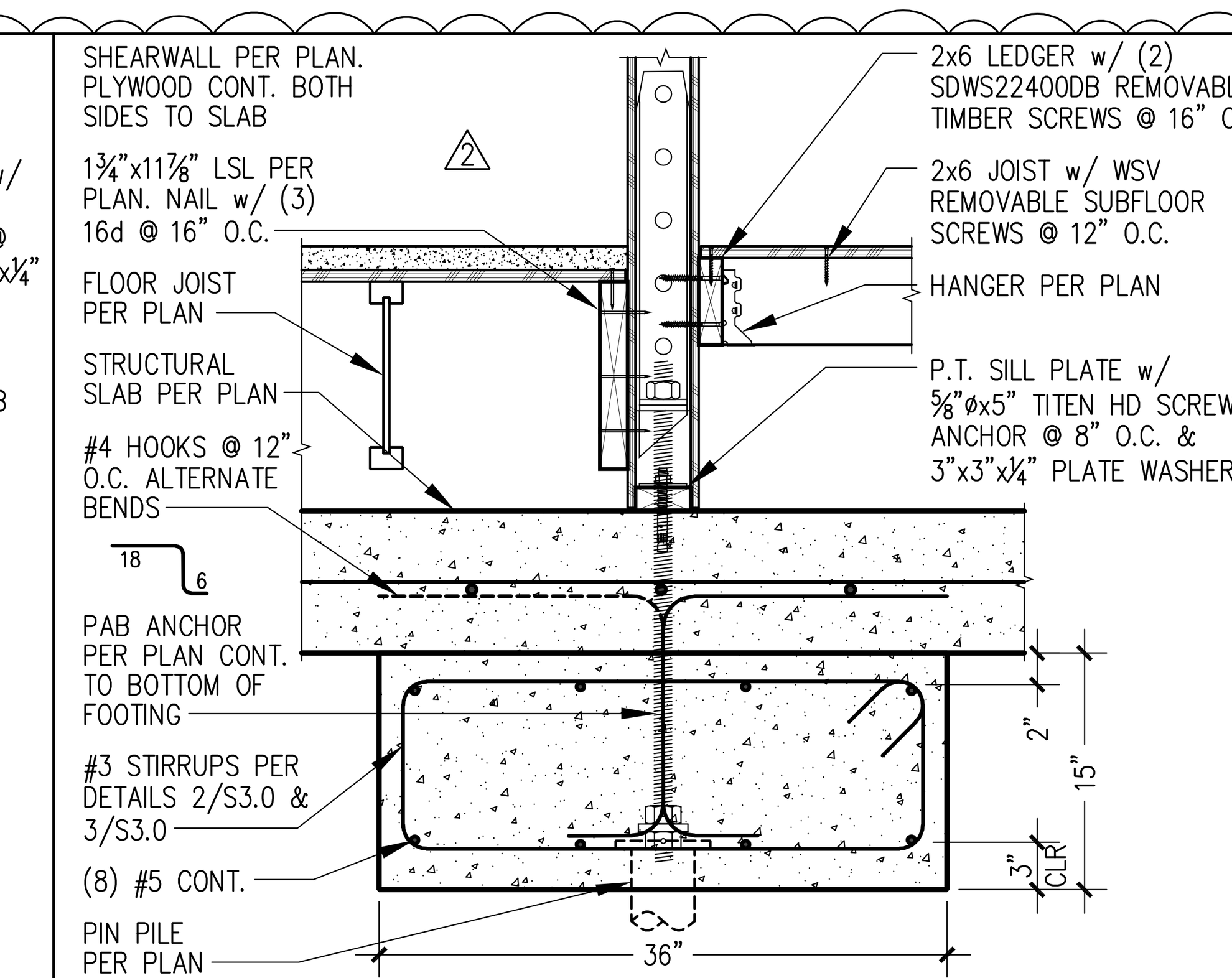
2 DRIVEWAY SITE WALL
(TOP OF GRADE)



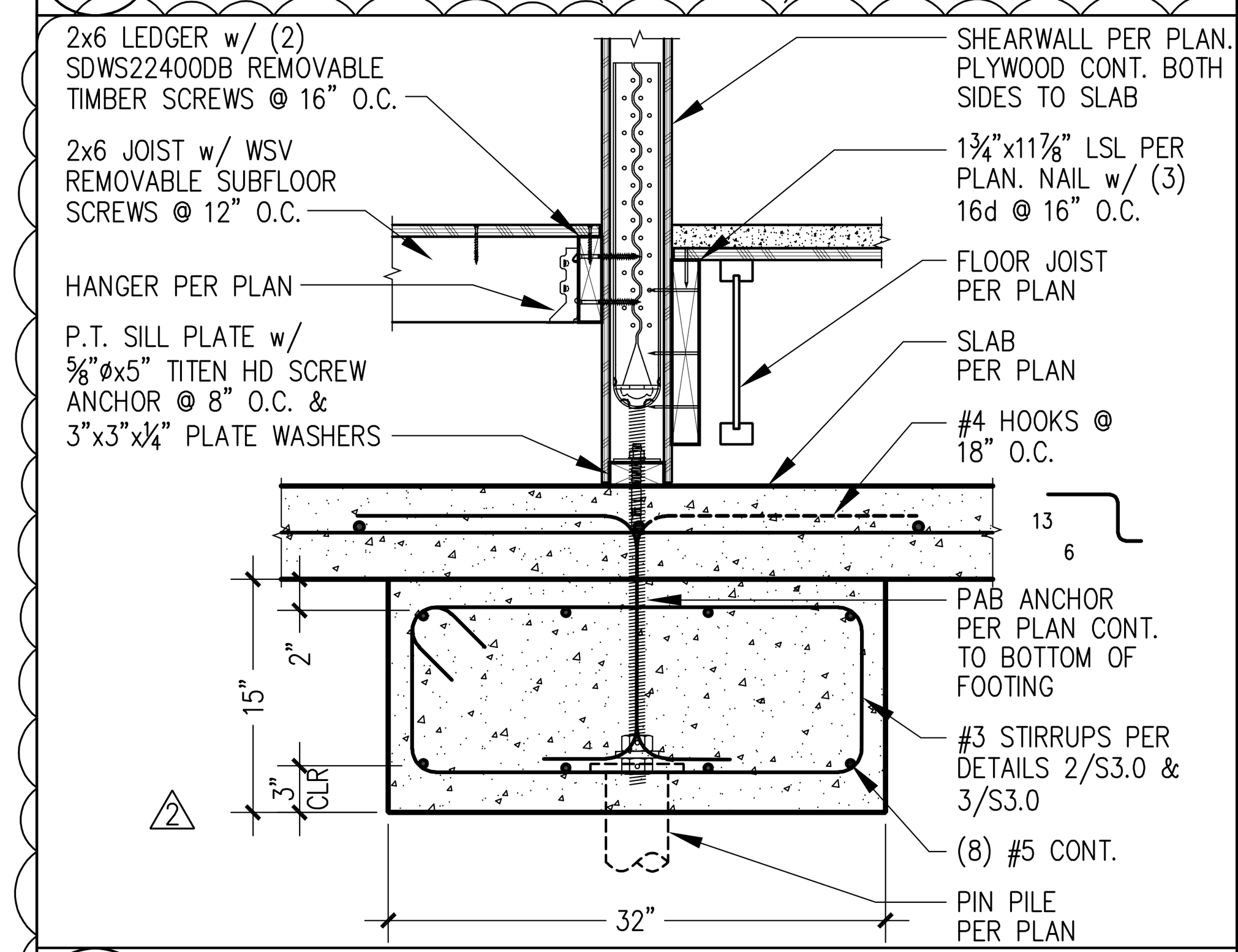
3 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ SLAB/LOWER LANDING)



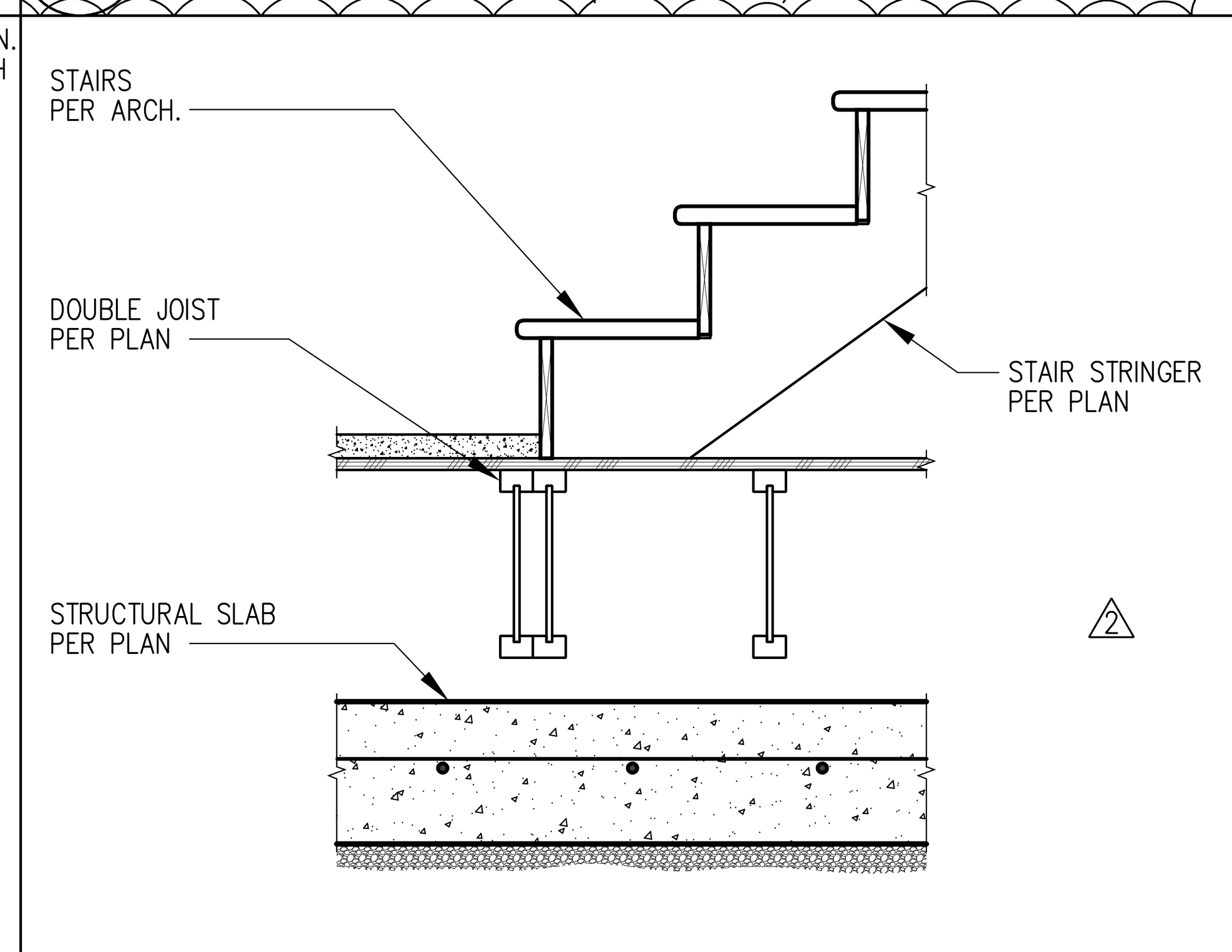
4 SHEARWALL @ SLAB w/ FLOOR FRAMING



5 PAB ANCHOR @ SLAB ON GRADE
(HD19 @ PARALLEL 11⅞ TJI)



6 PAB ANCHOR @ SLAB ON GRADE
(HDU11 @ PARALLEL 11⅞ TJI)



7 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ LOWER LANDING)

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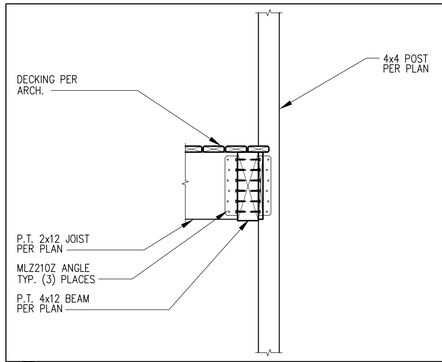
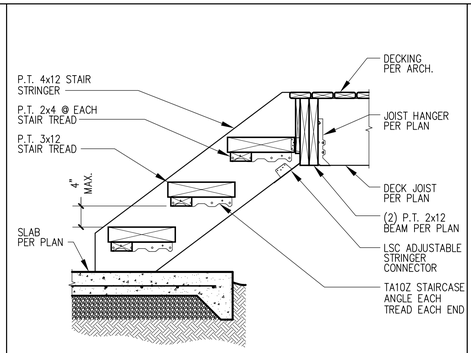
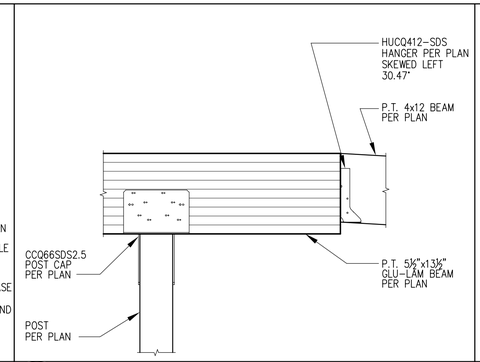
S3.2
FOUNDATION DETAILS



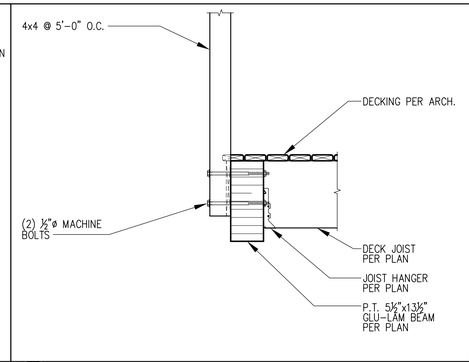
1 DECK POST @ CORNER



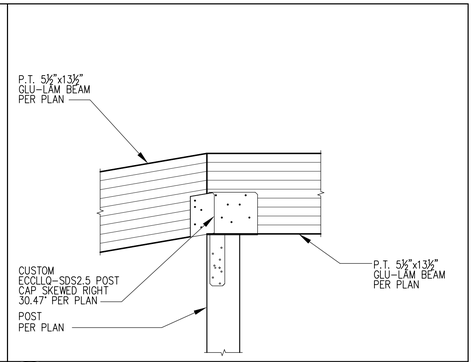
2 TYPICAL DECK STAIRS



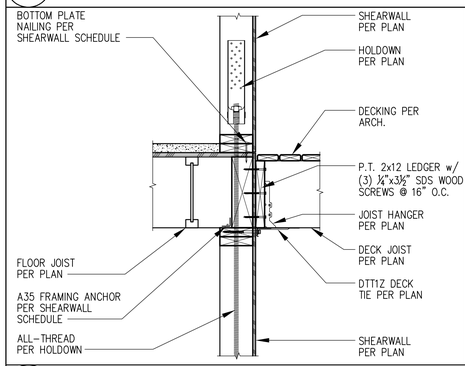
3 LOWER DECK POST @ ANGLED BEAM
(CANTILEVERED MAIN BEAM)



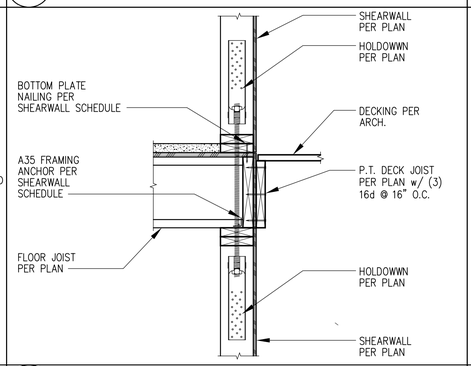
4 TYPICAL LOWER DECK RAIL



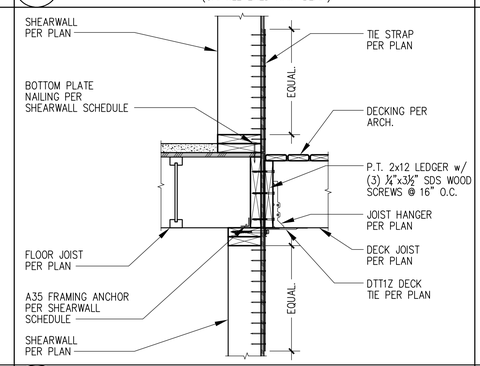
5 LOWER DECK POST @ ANGLED BEAM
(CUSTOM COLUMN CAP)



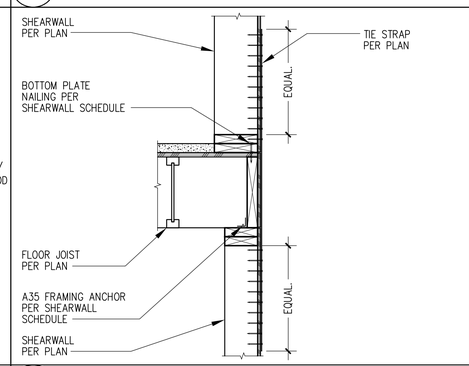
6 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST w/HOLDOWN & DECK FRAMING)



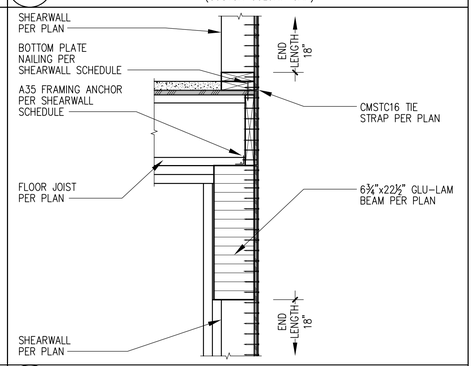
7 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST w/HOLDOWN & DECK FRAMING)



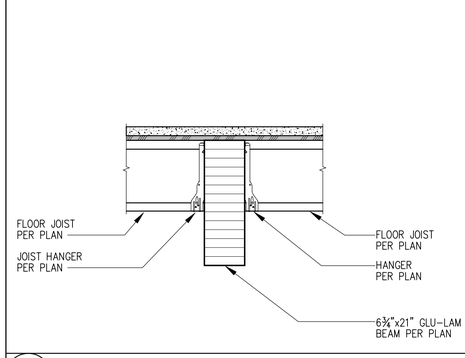
8 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST w/TIE STRAP & DECK FRAMING)



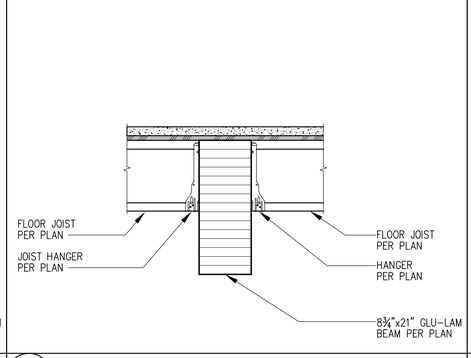
9 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST w/TIE STRAP)



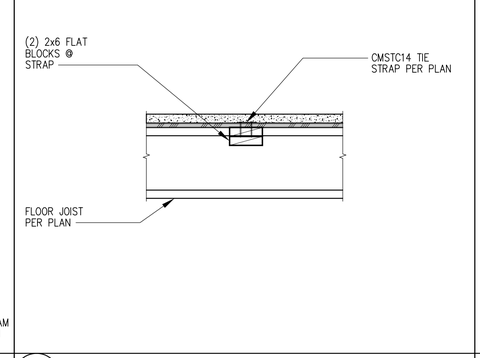
10 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST w/BEAM & TIE STRAP)



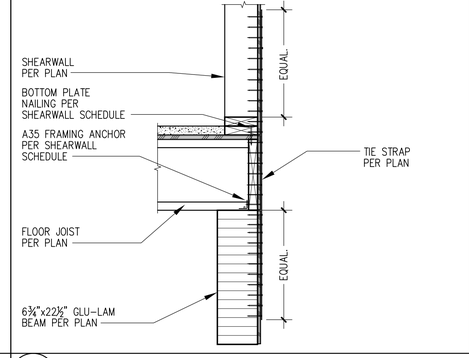
11 FLOOR FRAMING @ GARAGE BEAM
(6¾"x21" GLU-LAM)



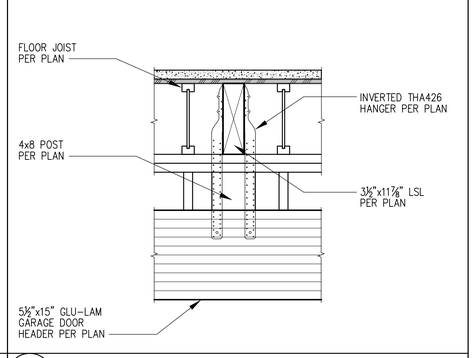
12 FLOOR FRAMING @ GARAGE BEAM
(8¾"x21" GLU-LAM)



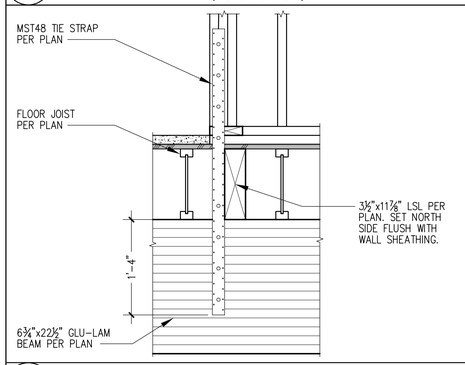
13 DRAGTIE @ PERPENDICULAR JOIST



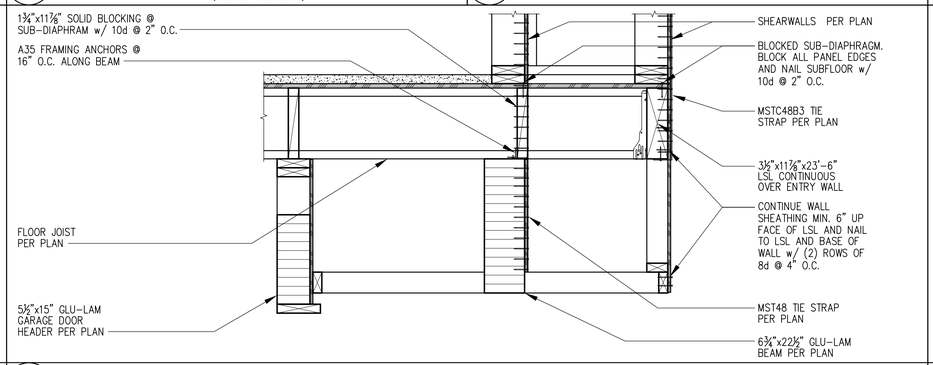
14 SHEAR TRANSFER @ FLOOR BEAM
(PARALLEL JOIST w/TIE STRAP)



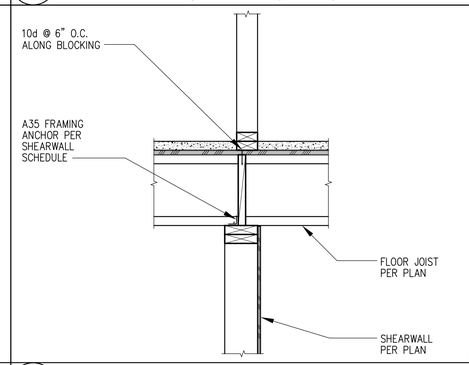
15 INVERTED BEAM HANGER @ CANTILEVER



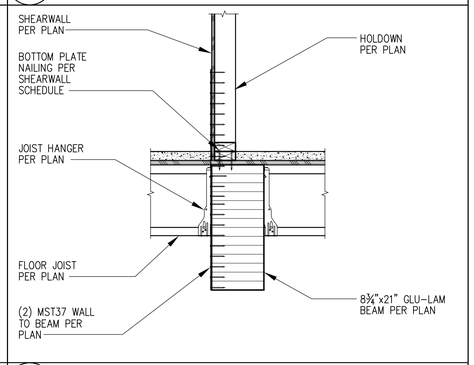
16 MST48 TIE STRAP @ BEAM



17 TIE STRAPS @ KITCHEN CANTILEVER



18 SHEAR TRANSFER @ FLOOR FRAMING
(INTERIOR PERPENDICULAR JOIST)



19 SHEAR TRANSFER @ FLOOR FRAMING
(TIE STRAP @ TOP FLUSH BEAM)

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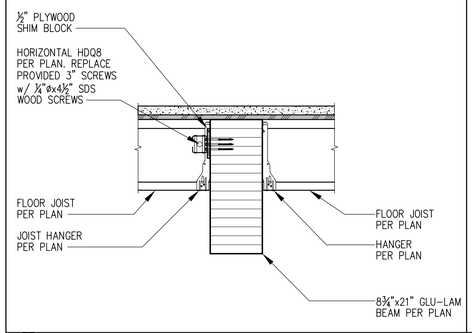
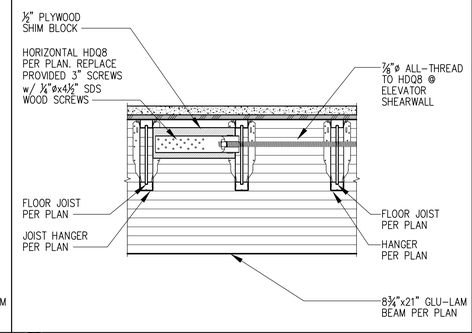
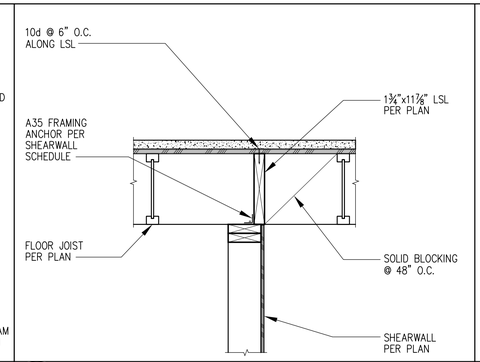
S4.0
FRAMING DETAILS



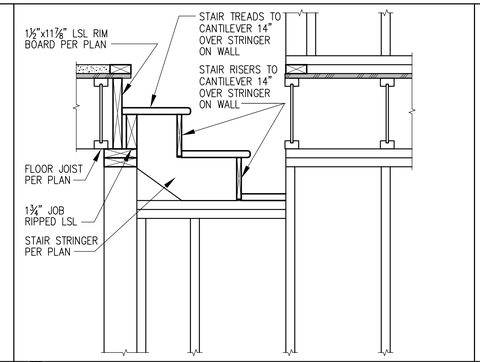
1 HORIZONTAL HDQ8 DRAGTIE @ GARAGE BEAM
(SECTION VIEW)



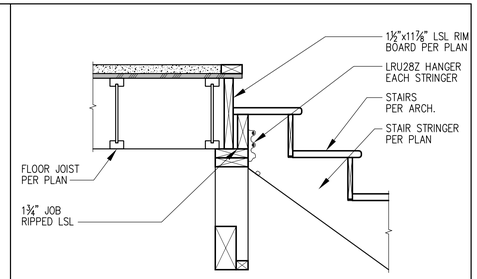
2 HORIZONTAL HDQ8 DRAGTIE @ GARAGE BEAM
(ELEVATION VIEW)



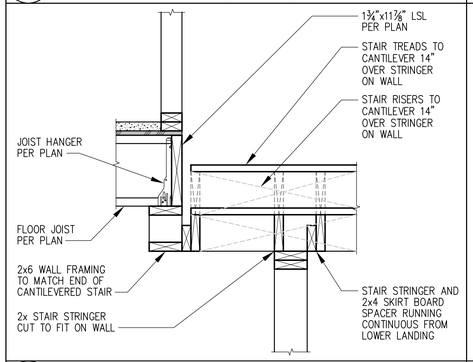
3 SHEAR TRANSFER @ FLOOR FRAMING
(INTERIOR PARALLEL JOIST)



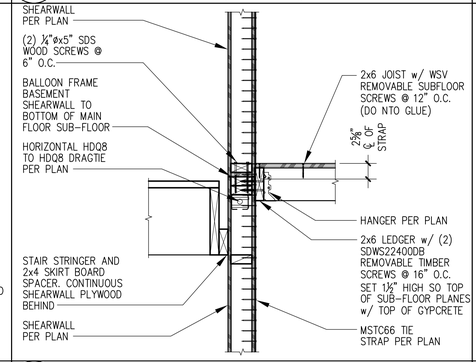
4 STAIR STRINGER FRAMING
(BASEMENT STAIRS @ CANTILEVERED STAIR FRAMING)



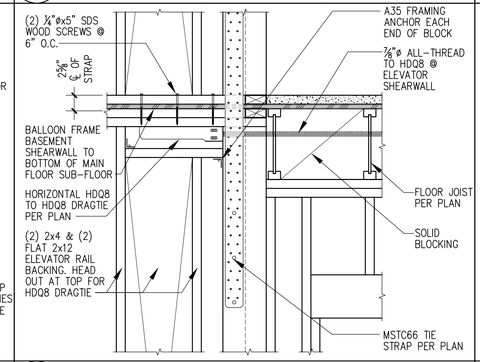
5 STAIR STRINGER FRAMING
(MAIN FLOOR TO LOWER MID LANDING)



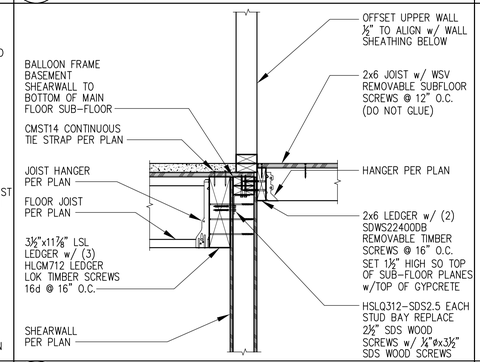
6 STAIR WALL FRAMING
(BASEMENT STAIRS @ CANTILEVERED STAIR FRAMING)



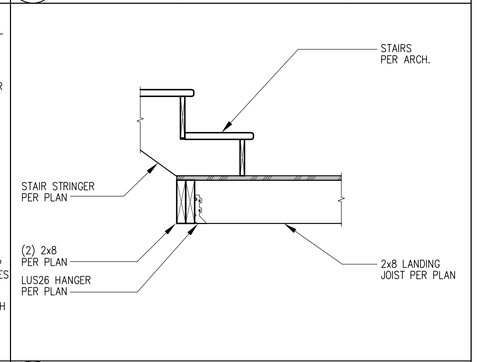
7 SHEAR TRANSFER @ FLOOR FRAMING
(SECTION VIEW OF DRAGTIE @ ELEVATOR SHAFT WEST WALL)



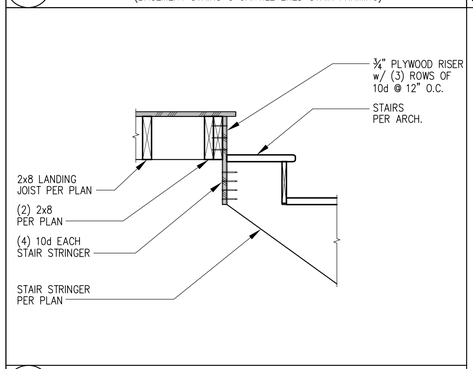
8 SHEAR TRANSFER @ FLOOR FRAMING
(ELEVATION VIEW OF DRAGTIE @ ELEVATOR SHAFT WEST WALL)



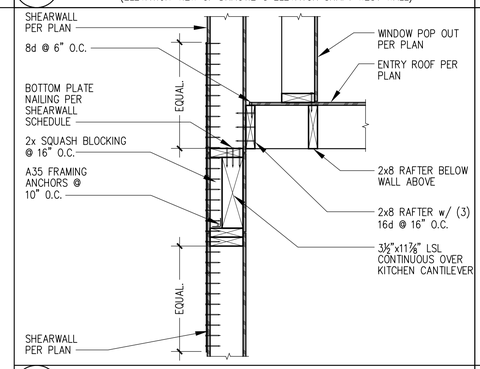
9 SHEAR TRANSFER @ FLOOR FRAMING
(SECTION VIEW @ EAST ELEVATOR SHAFT)



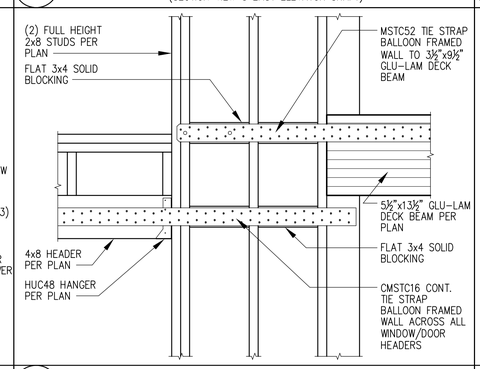
10 LOWER MID-FLOOR LANDING
(LANDING TO MAIN FLOOR)



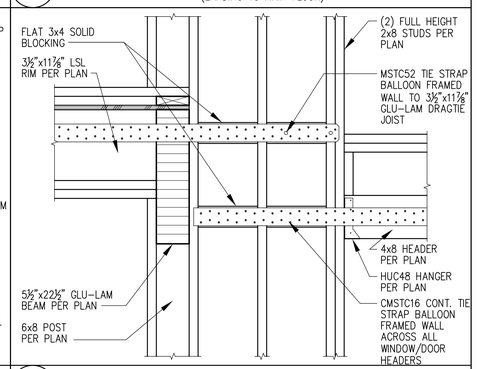
11 LOWER MID-FLOOR LANDING
(LANDING TO LOWER FLOOR)



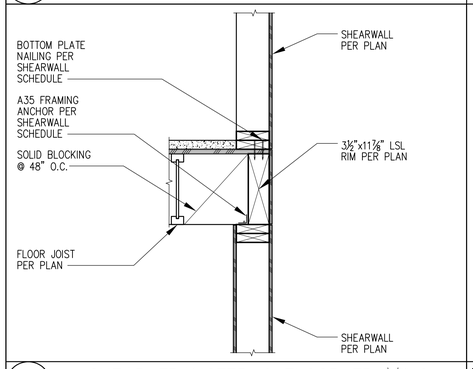
13 SHEAR TRANSFER @ ENTRY ROOF



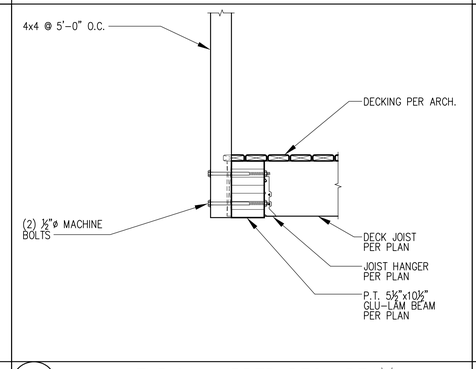
14 TIE STRAP GREAT ROOM TO DECK BEAM



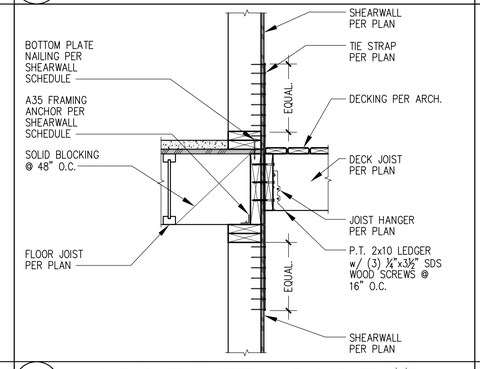
15 TIE STRAP GREAT ROOM TO FLOOR FRAMING



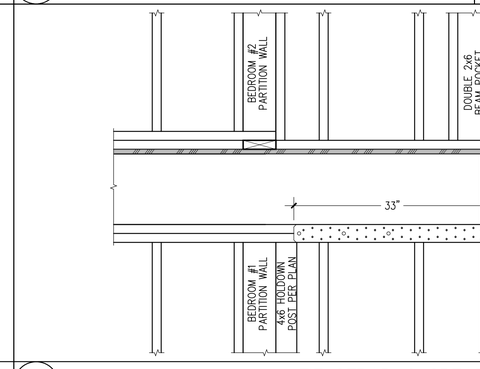
16 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST w/DOUBLE SIDED SHEARWALL)



17 TYPICAL UPPER DECK BEAM
(FLUSH)



18 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST w/TIE STRAP)



19 TIE STRAP @ GREAT ROOM BALLOON WALL

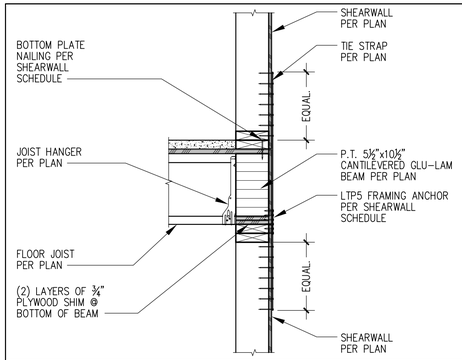
Stoney Point Engineering
Dwayne Barnes P.E.
dwayne@stoneypointengineering.com
Office: 425-644-9500

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

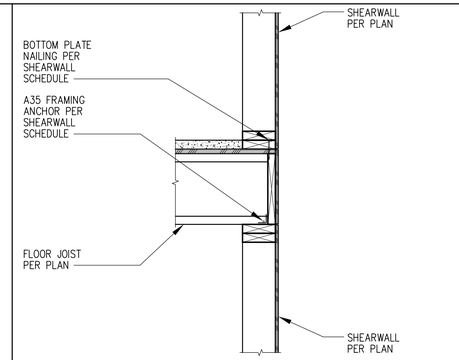
Issued	Date
Permit Plans	04/08/22
Bldg. Dept PU	1 08/22/22
Bldg. Dept PU	2 03/26/23

18-025

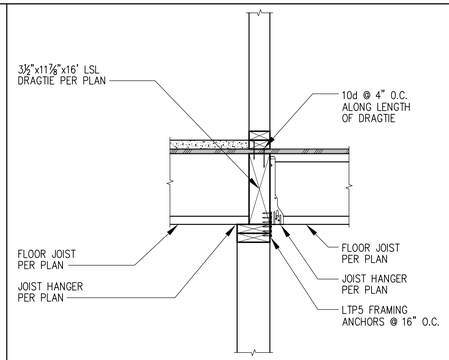
S4.1
FRAMING DETAILS



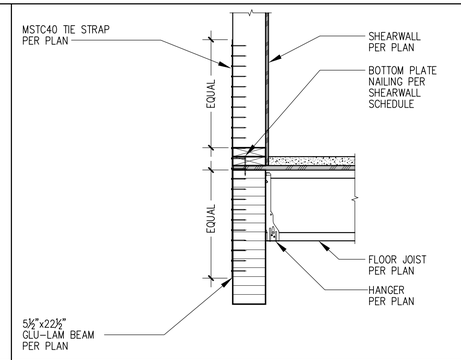
1 SHEAR TRANSFER @ CANT. DECK BEAM
(PERPENDICULAR JOIST w/ TIE STRAP)



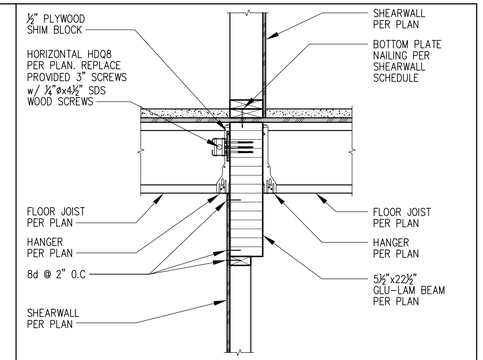
2 SHEAR TRANSFER @ FLOOR FRAMING
(PERPENDICULAR JOIST)



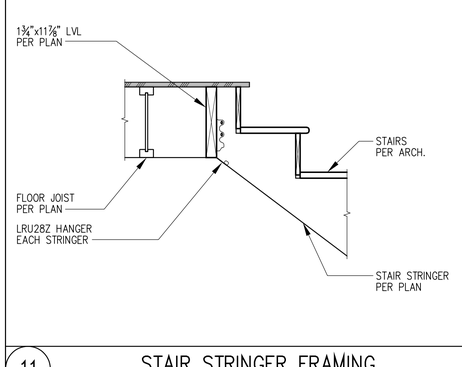
3 SHEAR TRANSFER @ LSL DRAGTIE



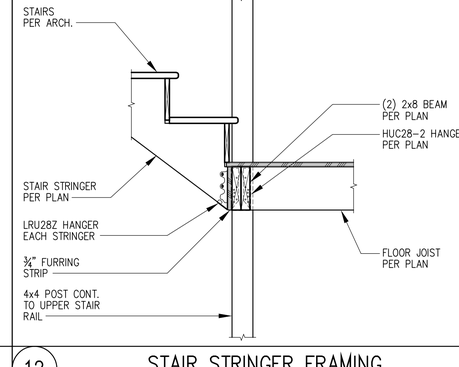
4 TIE STRAP TO BEAM
(@ PERPENDICULAR JOIST)



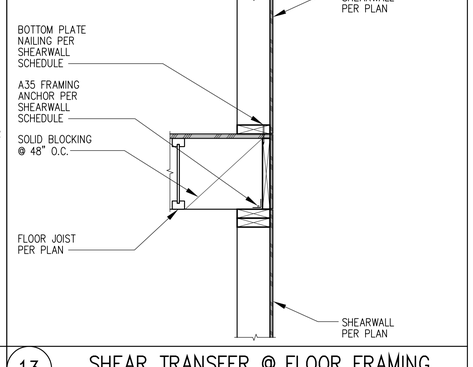
5 SHEAR TRANSFER @ PANTRY BEAM
(@ PERPENDICULAR JOIST)



6 STIE STRAP @ PANTRY BEAM
(@ PERPENDICULAR JOIST)



7 STAIR STRINGER FRAMING
(CANTILEVERED TREADS @ CURVED WALL)



8 STAIR STRINGER FRAMING
(UPPER FLOOR TO MAIN FLOOR MID LANDING)

9 SHEAR TRANSFER @ FLOOR FRAMING
(SECTION VIEW OF DRAGTIE @ ELEVATOR SHAFT WEST WALL)

10 SHEAR TRANSFER @ FLOOR FRAMING
(ELEVATION VIEW OF DRAGTIE @ ELEVATOR SHAFT WEST WALL)

11 STAIR STRINGER FRAMING
(UPPER FLOOR STAIRS @ UPPER FLOOR FRAMING)

12 STAIR STRINGER FRAMING
(UPPER FLOOR STAIRS @ UPPER MID LANDING)

13 SHEAR TRANSFER @ FLOOR FRAMING
(PARALLEL JOIST)

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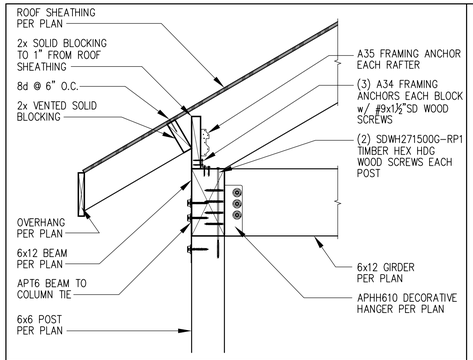
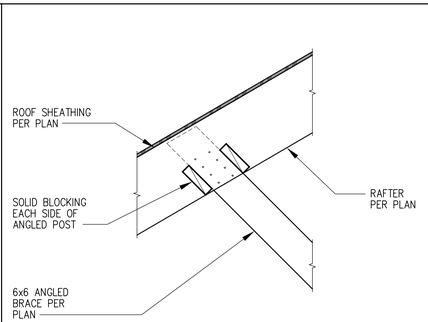
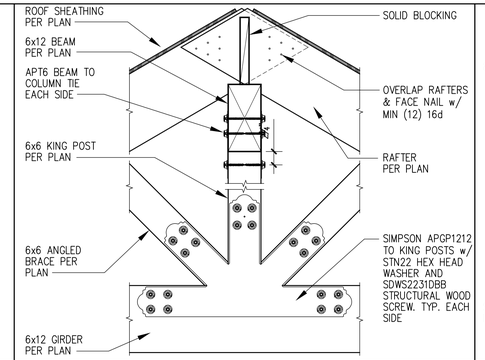
S4.2
FRAMING DETAILS



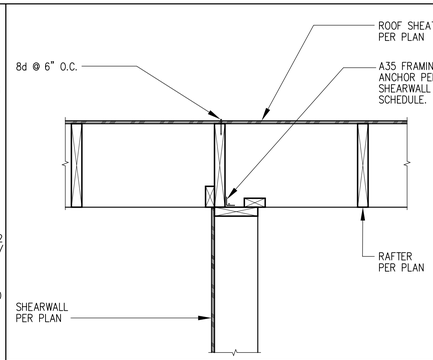
1 TYP. PORCH POST TO BEAM CONNECTION



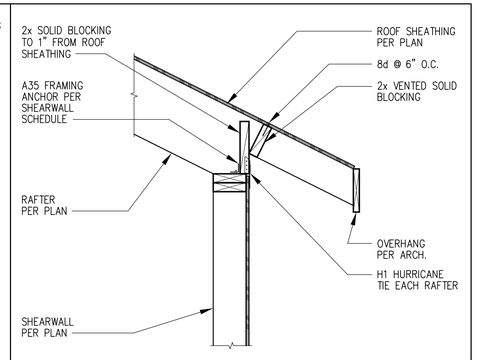
2 ANGLED POST TO RAFTER CONNECTION



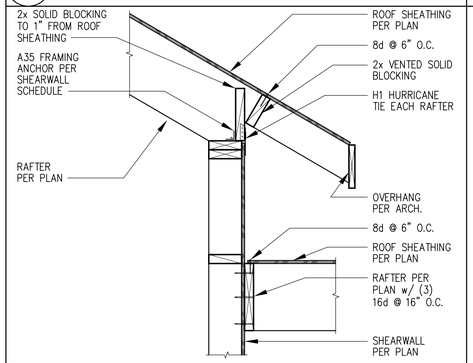
3 KING POST TO BEAM CONNECTION



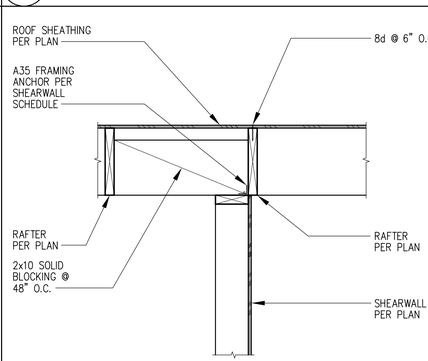
4 SHEAR TRANSFER @ GREAT ROOM GABLE



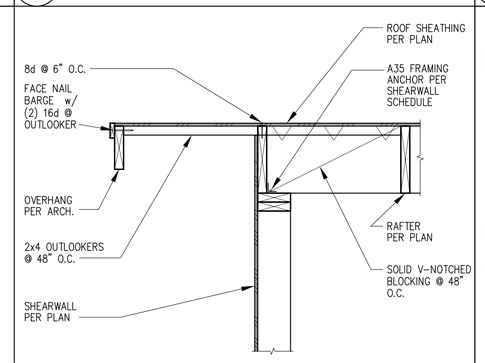
5 SHEAR TRANSFER @ EAVE
(TYPICAL RAFTER)



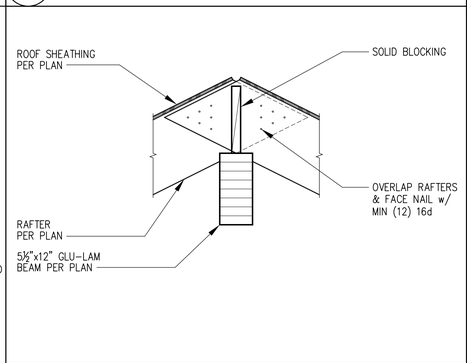
6 SHEAR TRANSFER @ EAVE
(TYPICAL RAFTER w/ LOWER ROOF)



7 SHEAR TRANSFER @ PARALLEL RAFTER
(SHEARWALL ON TYPICAL RAFTER LAYOUT)



8 SHEAR TRANSFER @ GABLE



9 ROOF FRAMING @ RIDGE

10 PLYWOOD/OSB SHEARWALL SCHEDULE
(HEM FIR FRAMING) (1, 2, 3, 4, 5)

MARK	EDGE	FIELD	SILL PLATE ANCHORS	BOTTOM PLATE NAILING	TOP PLATE CONNECTION		BASE SHEAR (PLF)	
					JOIST (8)	RAFTER OR TRUSS		
						W/ H1 / W/O H1	WIND	SEISMIC
P1-6	8d @ 6"	8d @ 12"	⅝"ø @ 48"	(1) 16d @ 4"	A35 @ 29"	RBC @ 18"	339	241
P1-4	8d @ 4"	8d @ 12"	⅝"ø @ 33"	(1) 16d @ 3"	A35 @ 20"	RBC @ 31" / RBC @ 12"	495	353
P1-3 (6)	8d @ 3"	8d @ 12"	⅝"ø @ 25"	(1) 16d @ 3"	A35 @ 15"	RBC @ 18" / RBC @ 10"	637	455
P1-2 (6)	8d @ 2"	8d @ 12"	⅝"ø @ 19"	(2) 16d @ 4"	A35 @ 12"	RBC @ 11" / RBC @ 7"	832	595
P2-4 (6, 7)	8d @ 4"	8d @ 12"	⅝"ø @ 16"	(2) 16d @ 3½"	A35 @ 10"	RBC @ 9" / RBC @ 6"	990	706
P2-3 (6, 7)	8d @ 3"	8d @ 12"	⅝"ø @ 12"	(2) 16d @ 3"	A35 @ 7"	RBC @ 6" / (2) RBC @ 10"	1274	911
P2-2 (6, 7)	8d @ 2"	8d @ 12"	⅝"ø @ 8"	(3) 16d @ 3"	A35 @ 6"	RBC @ 5" / (2) RBC @ 6"	1662	1190
P1-2-10d (6)	10d @ 2"	10d @ 12"	⅝"ø @ 16"	(2) 16d @ 3½"	A35 @ 10"	RBC @ 9" / RBC @ 6"	1002	716

NOTES.
1. ALL EXTERIOR WALLS TO BE "P1-6" SHEARWALL UNLESS NOTED OTHERWISE.
2. NAILS TO HAVE A MINIMUM DIAMETER OF 0.131" FOR 8d, 0.148" FOR 10d and 16d.
3. ALL PANEL EDGES TO BE BACKED WITH 2" NOMINAL OR WIDER FRAMING.
4. "P1" INDICATES PLYWOOD ON ONE SIDE OF SHEARWALL ONLY, "P2" INDICATES PLYWOOD ON BOTH SIDES.
5. ANCHOR BOLTS SHALL HAVE A 3"x3"x¼" STEEL PLATE WASHER THAT EXTENDS TO WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE. WHERE 2x6 SHEARWALLS ARE SHEATHED ON BOTH SIDES, LARGER PLATE WASHERS WILL BE REQUIRED IN ORDER TO MEET THE ½" EDGE DISTANCE REQUIREMENT.
6. FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3" NOMINAL MEMBER OR A BUILT-UP MEMBER STITCH NAILED TOGETHER PER THE BOTTOM PLATE NAILING PATTERN IN THE SHEARWALL SCHEDULE.
7. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER. NAILS ON EACH SIDE SHALL BE STAGGERED.
8. AT CONTRACTORS DISCRETION LTP FRAMING ANCHORS MAY BE USED IN LIEU OF THE A35.

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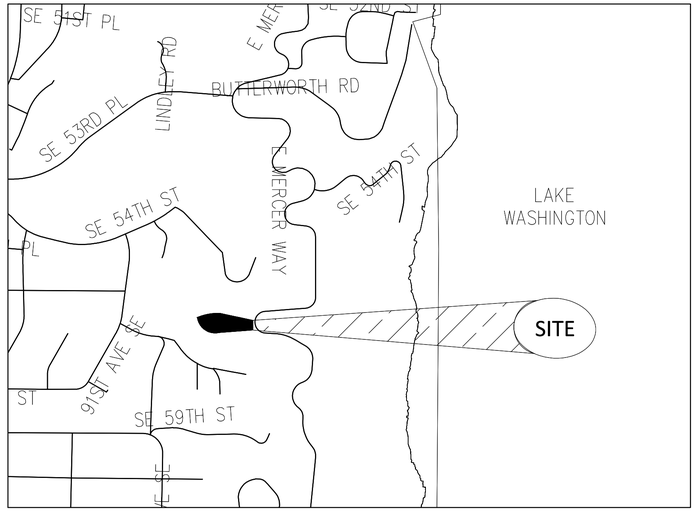
18-025

S4.3
FRAMING DETAILS

NW1/4, SE1/4, SEC. 19, TWP. 24 N., RGE. 05 E., W.M.

5637 MERCER WAY

5637 E MERCER WAY
MERCER ISLAND, WASHINGTON



VICINITY MAP
1" =500'

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. SPRAGUE, P.L.S.

BASIS OF BEARINGS
N00°01'20"W BETWEEN THE FOUND MONUMENTS ALONG THE CENTERLINE OF EAST MERCER WAY

REFERENCES
STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20140929000870

LEGAL DESCRIPTION
LOT A OF CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-010, AS RECORDED MARCH 31, 1977 UNDER RECORDING NO. 7703310851, RECORDS OF KING COUNTY AUDITOR;

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

RESTRICTIONS
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 NUMBER 7703310851
3. THIS SITE IS SUBJECT TO AN EASEMENT FOR SIDE SEWER SERVICE AND THE TERMS AND CONDITIONS THEREOF AS RECORDED UNDER RECORDING NUMBER 7804100820.
4. THIS SITE IS SUBJECT TO AN EASEMENT FOR STORMWATER/UTILITY FACILITIES & PEDESTRIAN TRAIL AND THE TERMS AND CONDITIONS THEREOF AS RECORDED UNDER RECORDING NUMBER 20070425001878.

BASIS OF BEARINGS
1. THIS SURVEY HAS BEEN PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. IN PREPARING THIS MAP, 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 STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20140929000870 AND THEREFORE CORE DESIGN, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
2. THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON JUNE 8, 2018. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN JUNE, 2018.
3. PROPERTY AREA = 37,528± SQUARE FEET (0.8615± ACRES).
4. ALL DISTANCES ARE IN FEET.
5. 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 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.
6. 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 PUBLIC RECORDS.

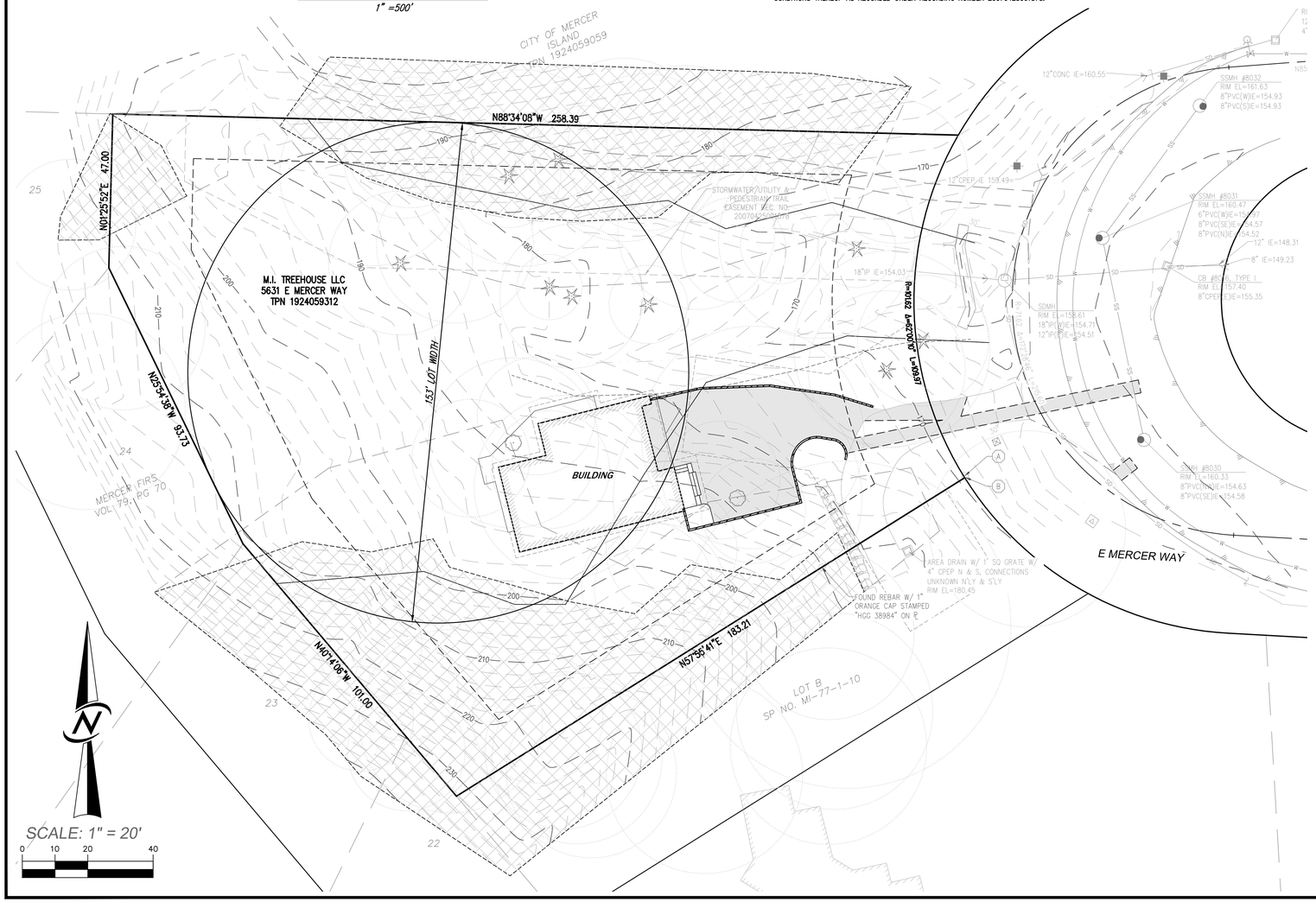
VERTICAL DATUM
NAVD 88

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

SHEET INDEX

SITE STATISTICS
ZONING:	R-15 (RESIDENTIAL-SINGLE FAMILY)
SITE AREA:	±37,554 SF (±0.862 ACRES)
NET LOT AREA:	35,823 SF (0.822 ACRES)
LOTS PROPOSED:	1
TAX PARCEL	192405-9312
DWELLING UNITS:	1
LOT WIDTH:	153'
SIDE SETBACK:	26.01' COMBINED (17% OF TOTAL LOT WIDTH)
SIDE SETBACKS PROPOSED:	13.005 (NORTHERN SETBACK) 13.005 (SOUTHERN SETBACK)
IMPERVIOUS AREA:	3,739 SF (9.9%)
LOT SLOPE STATISTICS LOT 1:	24.5%

NOTE
DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME 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 AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.



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 CONSTRUCTION.

NO.	REVISIONS	DATE
1	REVISIONS PER CITY COMMENTS	10/6/22
2	REVISIONS PER CITY COMMENTS	5/30/23

05-30-2023

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
CORE DESIGN
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

COVER SHEET
MERCER ISLAND TREEHOUSE
MI TREEHOUSE LLC
PO BOX 251
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

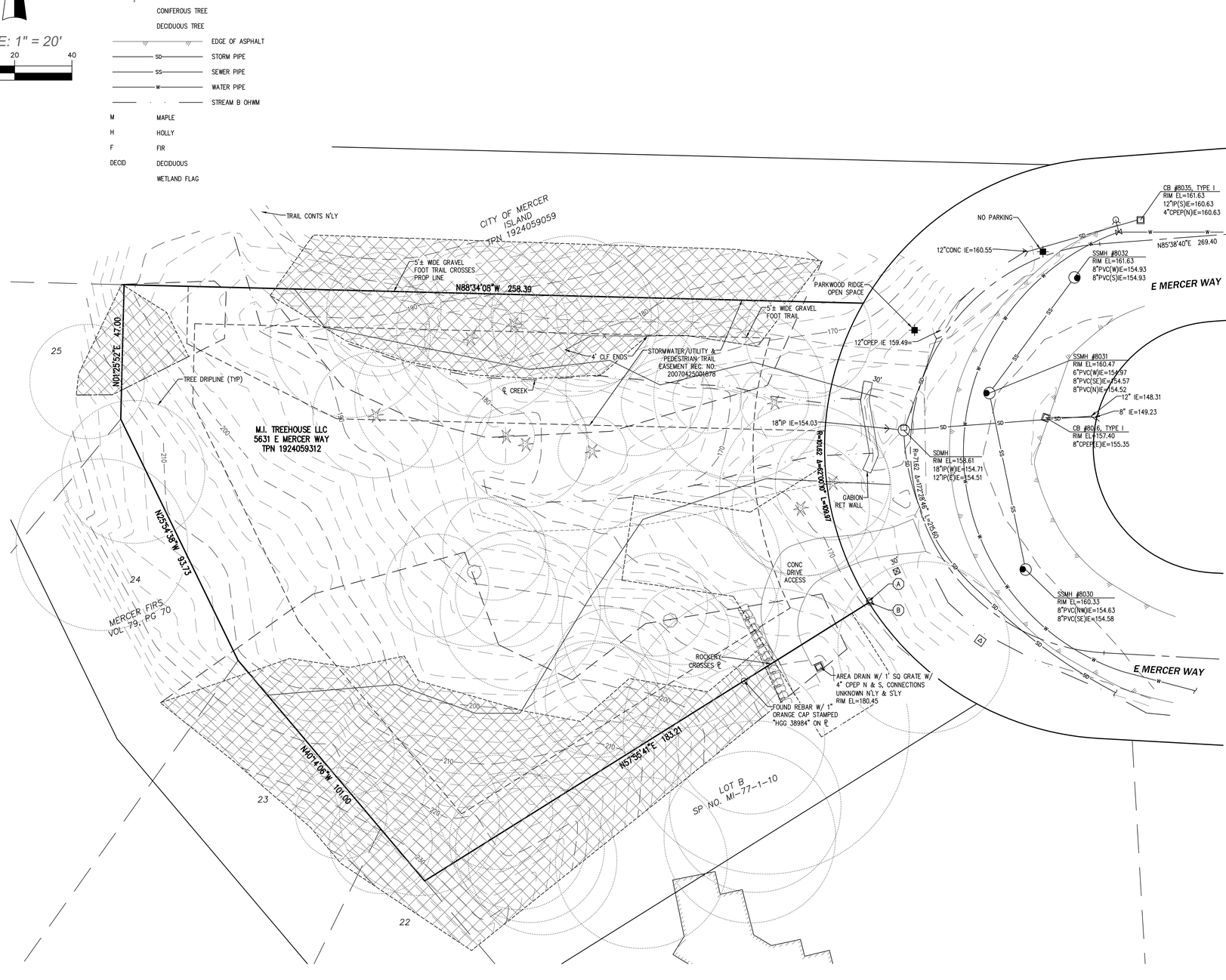
SHEET	OF
C1.01	7

PROJECT NUMBER
18039

LEGEND

- (A) FOUND REBAR W/ 1" YELLOW CAP W/ TACK STAMPED "LS ??704", 0.6' N & 0.1' E OF PROP COR
- (B) FOUND REBAR W/ 1" YELLOW CAP STAMPED "GOLDSMITH PLS 29277 38984" 0.1' N & 0.3' E OF PROP COR
- FOUND SURVEY MONUMENT AS NOTED
- WATER VALVE
- STORM DRAIN CATCH BASIN
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- COMMUNICATION RISER
- POWER TRANSFORMER
- STREET SIGN AS NOTED
- CONIFEROUS TREE
- DECIDUOUS TREE
- EDGE OF ASPHALT
- SD — STORM PIPE
- SS — SEWER PIPE
- W — WATER PIPE
- STREAM B OHWM
- M MAPLE
- H HOLLY
- F FIR
- DECID DECIDUOUS
- WETLAND FLAG

SCALE: 1" = 20'
0 10 20 40



VERTICAL DATUM

NAVD 88

BENCHMARK

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

BASIS OF BEARINGS

N00°01'20"W BETWEEN THE FOUND MONUMENTS ALONG THE CENTERLINE OF EAST MERCER WAY

REFERENCES

1. STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20140929000870.
2. PARKWOOD RIDGE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 76 OF PLATS, PAGES 81-82, RECORDS OF KING COUNTY, WASHINGTON.

LEGAL DESCRIPTION

LOT A OF CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-010, AS RECORDED MARCH 31, 1977 UNDER RECORDING NO. 7703310851, RECORDS OF KING COUNTY AUDITOR;

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

RESTRICTIONS

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 NUMBER 7703310851. (NOTED HERE, ACCESS EASEMENT SHOWN HEREON)
3. THIS SITE IS SUBJECT TO AN EASEMENT FOR SIDE SEWER SERVICE AND THE TERMS AND CONDITIONS THEREOF AS RECORDED UNDER RECORDING NUMBER 7804100820. (DOES NOT APPEAR TO AFFECT THIS PROPERTY)
4. THIS SITE IS SUBJECT TO AN EASEMENT FOR STORMWATER/UTILITY FACILITIES & PEDESTRIAN TRAIL AND THE TERMS AND CONDITIONS THEREOF AS RECORDED UNDER RECORDING NUMBER 20070425001878. SHOWN HEREON.

NOTES

1. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM FIDELITY NATIONAL TITLE INSURANCE COMPANY GUARANTEE NO WA-FBCM-IMP-27WAG14-1-16-20373439 DATED JULY 6, 2016. IN PREPARING THIS MAP, 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 THE REFERENCED FIDELITY NATIONAL TITLE INSURANCE COMPANY GUARANTEE. CORE DESIGN, INC. HAS RELIED WHOLLY ON FIDELITY NATIONAL TITLE INSURANCE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE CORE DESIGN, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
2. THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON AUGUST 31, 2020. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN JUNE, 2018.
3. PROPERTY AREA = 37,528± SQUARE FEET (0.8615± ACRES).
4. ALL DISTANCES ARE IN FEET.
5. 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 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.
6. 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 PUBLIC RECORDS.

NO.	REVISIONS	DATE
1	REVISIONS PER CITY COMMENTS	10/6/22
2	REVISIONS PER CITY COMMENTS	5/30/23

WILLIAM MICHAEL MOODY — 38488 — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON
5-30-23

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
CORE DESIGN
12100 NE 195th St, Suite 300 Bothell, Washington 98011 | 425.885.7877

TOPOGRAPHIC PLAN
MERCER ISLAND TREEHOUSE

MI TREEHOUSE LLC

PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BANOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

SHEET	OF
C1.02	7

PROJECT NUMBER 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 where feasible.
- 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 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 requirements:
     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 erosion.
- 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)

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 CONSTRUCTION.

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05-30-2023

CIVIL ENGINEERING
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12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

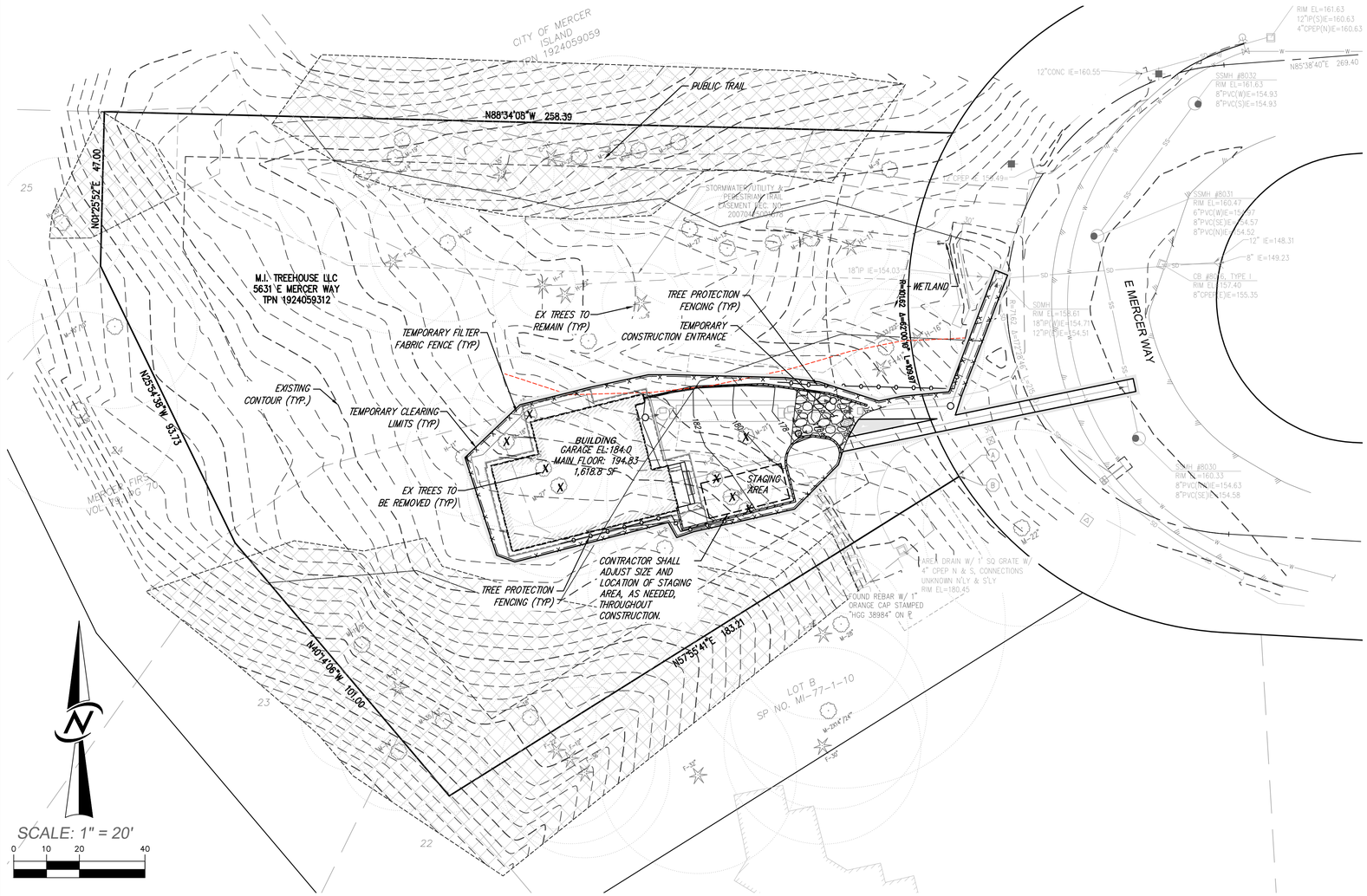
BMP NOTES
MERCER ISLAND TREEHOUSE

MI TREEHOUSE LLC
PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE
	PROJECT MANAGER

SHEET	OF
C1.03	7

PROJECT NUMBER
18039



LEGEND

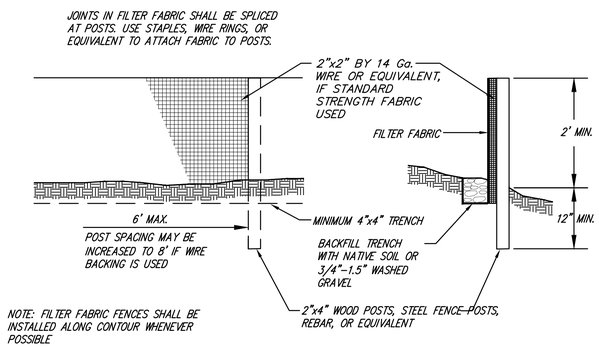
- BUILDING OVERHANG
- LOT LINES
- DRIVEWAY BOUNDARY
- PROPERTY BOUNDARY
- BUILDING EDGE
- SURVEY ALIGNMENT
- 41ST PAVEMENT EDGE
- FOUND MONUMENT AS DESCRIBED
- FOUND PIPE/REBAR AS DESCRIBED
- M — MADRONA, O — OAK
- FIG — FIG
- D — DOGWOOD
- CLF — CHAIN LINK FENCE
- VBF — VERTICAL BOARD FENCE
- ROCKERY
- INLET FILTER (W.S.D.O.T. STD DTL. 1-40.20-00)
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE DOE STD DTL. BMP 205
- CLEARING LIMITS
- TREE PROTECTION FENCE
- FILTER FABRIC FENCE
- 110 — EXISTING CONTOUR
- 110 — PROPOSED CONTOUR
- ONSITE TREE TO BE REMOVED

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.
2. 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.

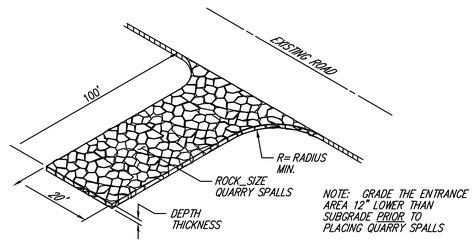
TREE PROTECTION NOTES

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



FILTER FABRIC FENCE DETAIL

NO SCALE



TEMPORARY CONSTRUCTION ACCESS

NO SCALE

UNDERGROUND LOCATOR SERVICE
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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.

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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
CORE DESIGN
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

TESC & TREE RETENTION PLAN
MERCER ISLAND TREEHOUSE

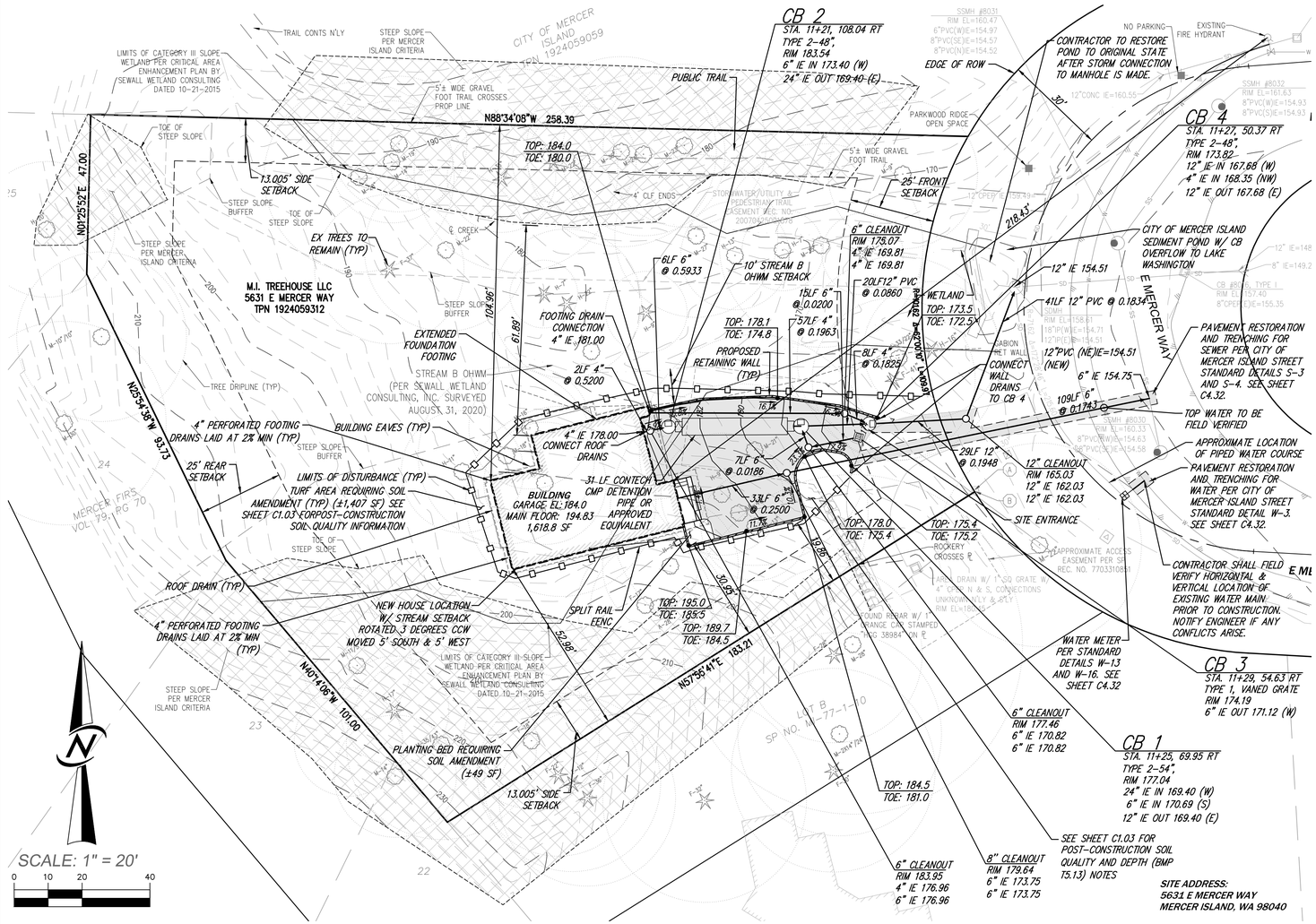
MI TREEHOUSE LLC
PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

SHEET	OF
C2.01	7

PROJECT NUMBER 18039

NW1/4, SE1/4, SEC. 19, TWP. 24 N., RGE. 05 E., W.M.



STORM DRAINAGE GENERAL NOTES

1. ALL NEW CATCH BASINS SHALL CONFORM TO THE APWA WSDOT STANDARD DETAILS.
2. THE FOOTING DRAINAGE SYSTEM AND THE ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED.
3. 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 DISCHARGED TO THE STORM DRAIN SYSTEM OR SURFACE 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.
3. 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.
4. 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

1. 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

1 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 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.

PERMITS
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.

PRE-CON
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.

SURVEYING
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 SHALL 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.

CONSTRUCTION
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 DISTRICT.
14 DISTRICT VALVES SHALL ONLY BE OPERATED BY DISTRICT PERSONNEL.

MATERIALS
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 C-151.
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.

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.
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.

SEWER GENERAL NOTES

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.

PERMITS
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.

PRE-CON
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.

SURVEYING
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 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 LOCATION OF ALL AT-GRADE APPURTENANCES INSTALLED, INCLUDING BUT NOT LIMITED TO, LOCATION OF EXISTING MANHOLES INCLUDING RIM & ALL INVERT ELEVATIONS AND NEW MANHOLE LOCATIONS 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 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 WHERE FEASIBLE.

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 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 THE INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYERE SHAOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPROATION OF THE UPPPER MATERIAL TO AVOID STRATIFIED LAYER, WHERE FEASIBLE.

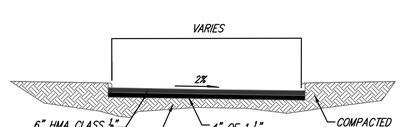
2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:

A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BMP T7.30: BIORETENTION CYELLS, SWALES, AND PLANTER BOXES (P.9-59 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.

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 DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.



DRIVEWAY SECTION
NO SCALE

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, CONTACING 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.

NO.	REVISIONS	DATE
1	REVISIONS PER CITY COMMENTS	10/6/22
2	REVISIONS PER CITY COMMENTS	5/30/23

05-30-2023

CORE DESIGN
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

SITE, UTILITY AND GRADING PLAN
MERCER ISLAND TREEHOUSE

MI TREEHOUSE LLC
PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

SHEET	OF
C4.01	7

PROJECT NUMBER
18039

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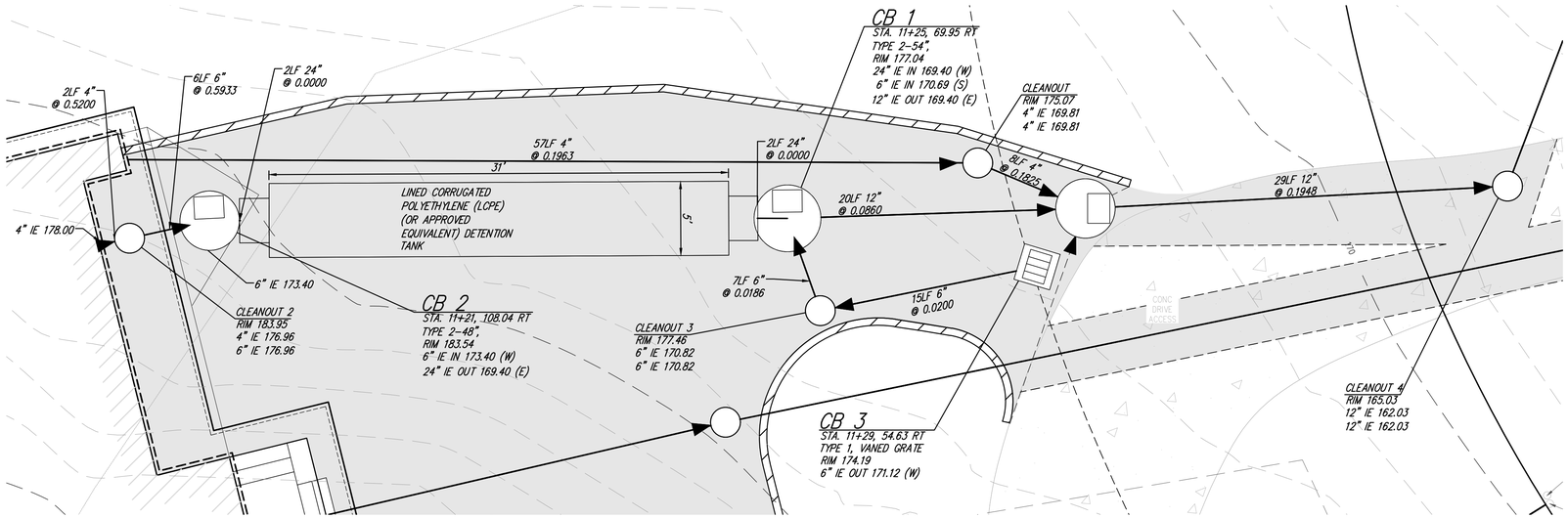
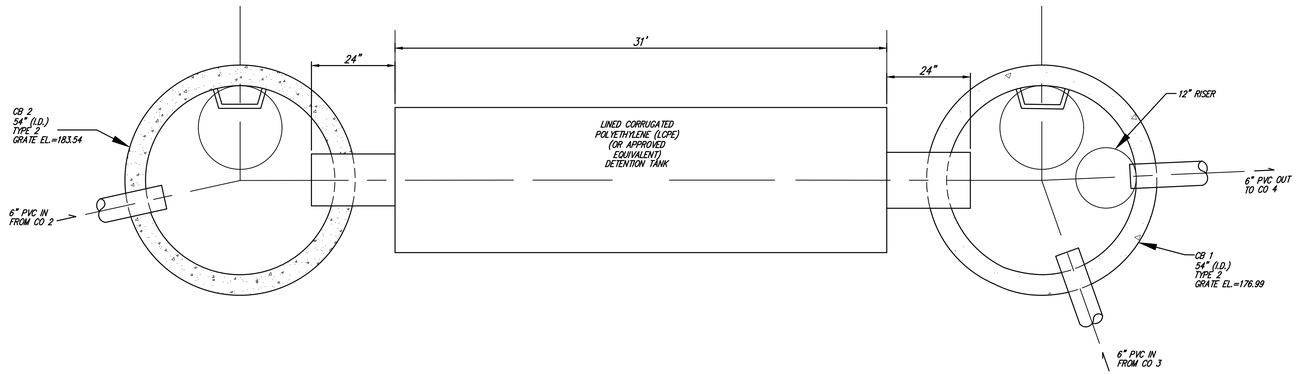
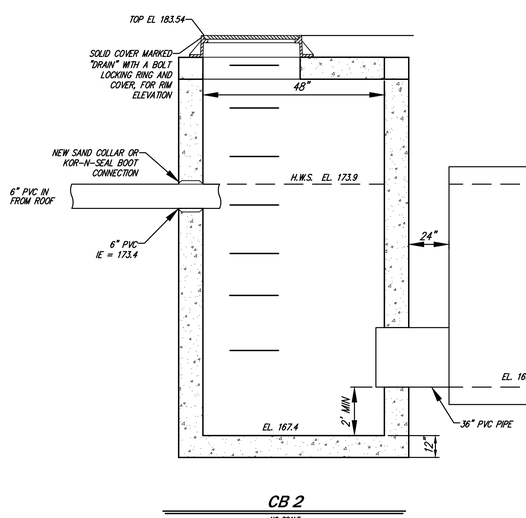


DETENTION PIPE

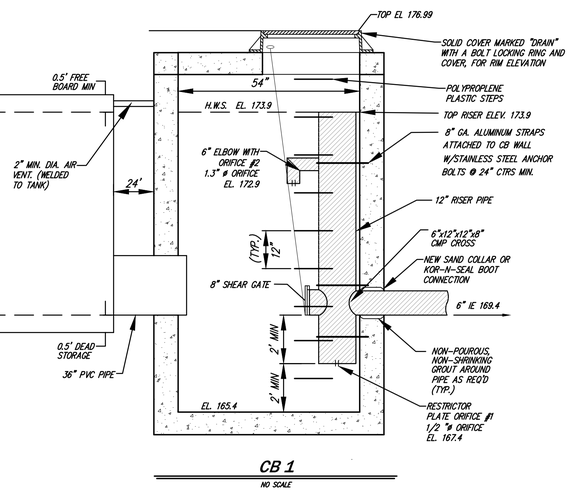
SCALE 1"=5'





CB 2

NO SCALE

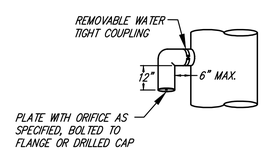


CB 1

NO SCALE

NOTES

1. ALL METAL PARTS AND SURFACES MUST BE MADE OF CORROSION RESISTANT MATERIAL OR GALVANIZED. COMPLETE CORROSION PROTECTION MUST BE ASSURED.
2. PROPOSED BUILDING SHALL BE FITTED WITH SPRINKLERS; FIRE TRUCK ACCESS IS NOT ASSUMED ON ACCESS DRIVEWAY.



ELBOW DETAIL

NOT TO SCALE

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 CONSTRUCTION.

NO.	REVISIONS	DATE
1.	REVISIONS PER CITY COMMENTS	10/6/22
2.	REVISIONS PER CITY COMMENTS	5/30/23

05-30-2023

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
CORE DESIGN
12100 NE 195th St, Suite 300 Bothell, Washington 98011 | 425.885.7877

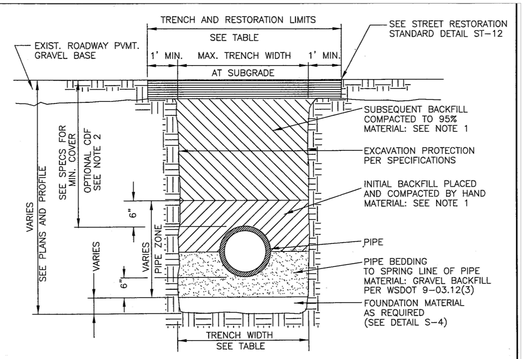
STORM DRAINAGE DETAILS
MERCER ISLAND TREEHOUSE

MI TREEHOUSE LLC
PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

SHEET	OF
C4.31	7

PROJECT NUMBER
18039



TRENCH WIDTH			
PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
SIDE SEWER	2'-0"	2'-0"	6'-0"
4" OR 6"	2'-2"	3'-0"	8'-0"
8"	2'-4"	4'-0"	8'-0"
10"	2'-6"	4'-0"	8'-0"
12"	2'-8"	4'-6"	8'-6"

NOTES

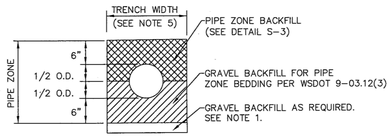
1. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.3(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS.
2. CDF FOR BACKFILL MAY BE REQUIRED BY CITY ENGINEER WHEN PROPER COMPACTION AROUND EXISTING UTILITIES MAY NOT BE POSSIBLE. CDF SHALL BE PER WSDOT 2-09.3(1)E.
3. SEE S-4 FOR PIPE BEDDING DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SEWER TRENCH DETAIL

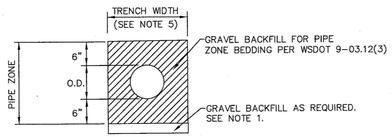
6-5-2009	NO SCALE	S-3

REV DATE | APPROVED

BEDDING FOR RIGID PIPE MATERIAL



BEDDING FOR FLEXIBLE PIPE MATERIAL



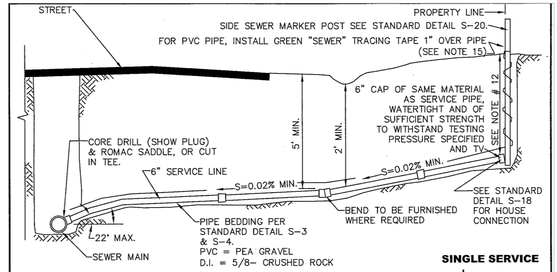
NOTES

1. EXCAVATE UNSTABLE MATERIAL DOWN TO FIRM SOIL. REPLACE WITH GRAVEL BACKFILL PER WSDOT 9-03.12(3) AS DIRECTED BY THE CITY ENGINEER.
2. PROVIDE UNIFORM SUPPORT UNDER BARREL.
3. HAND TAMP UNDER HAUNCHES.
4. COMPACT BEDDING AND BACKFILL MATERIAL TO 95% MAX. DENSITY EXCEPT DIRECTLY OVER PIPE. HAND TAMP ONLY UNTIL MINIMUM 6" ABOVE TOP OF PIPE.
5. 30" MAXIMUM TRENCH WIDTH FOR PIPE UP TO AND INCLUDING 12", FOR PIPE LARGER THAN 12", USE O.D. PLUS 16".

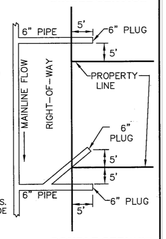
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
PIPE BEDDING

6-5-2009	NO SCALE	S-4

REV DATE | APPROVED



SINGLE SERVICE



DOUBLE SERVICE

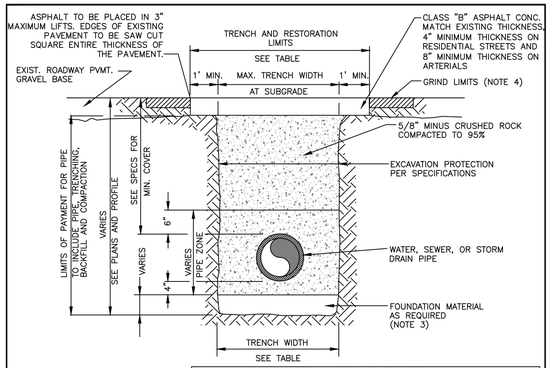
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. RIGHT-OF-WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION AND BE IN ACCORDANCE WITH CITY STANDARDS.
4. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS OR MAY BE CDF WHEN DIRECTED BY THE CITY ENGINEER (SEE DETAIL S-3).
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 6" SEWER PIPE MINIMUM SIZE IN RIGHT-OF-WAY, AND ELSEWHERE AS DIRECTED BY ENGINEER. 2% MIN. GRADE (UNLESS DIRECTED BY ENGINEER), 50% MAXIMUM.
7. ALL A.C. MAINS TO BE TAPPED IN ACCORDANCE WITH WAC 296-62-00775 STATE/FEDERAL GUIDELINES AND CERTIFICATION.
8. CONSTRUCTION IN RIGHT-OF-WAY MUST BE DONE BY A REGISTERED AND LICENSED CONTRACTOR.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY SEWER ORDINANCES.
10. WHERE CITY ENGINEER ALLOWS SIDE SEWER CONNECTIONS TO MANHOLE, INVERT OF SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN SEWER.
11. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICH EVER IS LOWER.
12. ALL PIPE MATERIALS NOT TO STANDARDS WILL BE ABANDONED AND REPLACED WITH DUCTILE IRON OR PVC PIPE OF THE SAME SIZE.
13. IF A BUILDING SEWER IS TO SERVE MORE THAN ONE PROPERTY, BY JOINT AGREEMENT OF THE OWNERS, AN APPROVED EASEMENT INSURING THAT ALL PROPERTIES INVOLVED SHALL HAVE PERPETUAL USE OF THE SIDE SEWER, HAVING PROVISIONS FOR OPERATION, MAINTENANCE, RECONSTRUCTION AND FOR ACCESS FOR REPAIR PURPOSES, SHALL BE SIGNED BY THE OWNERS. THIS EASEMENT SHALL BE RECORDED WITH THE COUNTY AUDITOR. A SIX INCH (MINIMUM) DIAMETER PIPE SHALL BE USED FOR THE COMMON LINE AND A SIX INCH CLEANOUT EXTENDING TO WITHIN 12 INCHES OF THE GROUND SURFACE SHALL BE PROVIDED AT THE WYE WHERE THE UPPER GRADE CONNECTIONS ARE MADE. BACKWATER VALVES SHALL BE INSTALLED ON SERVICE LINES UPSTREAM OF THE CONNECTION TO THE SHARED SIDE SEWER.
14. THE CITY ENGINEER MAY REQUIRE BACKWATER VALVES ON SIDE SEWERS WHEN DEEMED NECESSARY. THE EFFECTIVE OPERATION AND MAINTENANCE OF ANY BACKWATER VALVE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE SIDE SEWER.
15. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER CONNECTION AND STUB

6-5-2009	NO SCALE	S-17

REV DATE | APPROVED



WIDTH TRENCH			
PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
WATER SERVICES	2'-0"	2'-0"	4'-0"
4" OR 6"	2'-2"	3'-0"	5'-0"
8"	2'-4"	4'-0"	6'-0"
10"	2'-6"	4'-0"	6'-0"
12"	2'-8"	4'-6"	6'-6"
16"	3'-0"	5'-0"	7'-0"

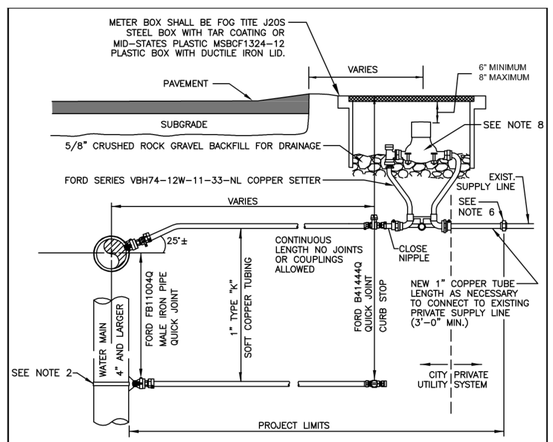
NOTES

1. CALL IN LOCATES TWO BUSINESS DAYS BEFORE YOU DIG. (1-800-424-5555)
2. IN RIGHT-OF-WAY USE 100% 5/8 MINUS CRUSHED ROCK FOR BEDDING, PIPE ZONE AND BACKFILL
3. FOUNDATION MATERIAL SHALL BE 1 ¼" MINUS CRUSHED ROCK OR OTHER AGGREGATE AS APPROVED BY CITY ENGINEER.
4. GRIND AND OVERLAY LIMITS SHALL EXTEND A MINIMUM OF 10' PAST THE END OF TRENCH AREAS.
5. SEAL ALL FINAL PATCHING AND PAVING SEAMS WITH LIQUID ASPHALT. SQUEEGEE OR MOP THE SEALER. COVER WITH DRY SAND.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
TRENCH SECTION

3-29-2021	NO SCALE	W-3

APPROVED



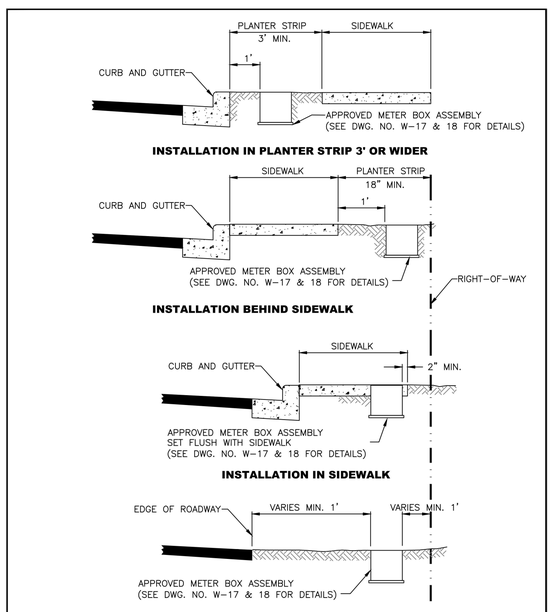
NOTES

1. WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014.
2. ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 202NS, OR APPROVED EQUAL.
3. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18" MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24", ALL HORIZONALLY STAGGERED.
4. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
5. UPON CITY ENGINEER'S APPROVAL, METER BOXES ARE ALLOWED TO BE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK.
6. 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.
7. 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.
8. WATER METER SUPPLIED BY CITY.
9. ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
10. NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
1" WATER METER INSTALLATION

02-05-2021	NO SCALE	W-13

REV DATE | APPROVED



CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
WATER METER PLACEMENT

3-20-2006	NO SCALE	W-16

REV DATE | APPROVED

UNDERGROUND LOCATOR SERVICE
CALL BEFORE YOU DIG!
811

UTILITY CONFLICT NOTE:

CAUTION:

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NO.	REVISIONS	DATE
1	REVISIONS PER CITY COMMENTS	10/6/22
2	REVISIONS PER CITY COMMENTS	5/30/23

05-30-2023

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
CORE DESIGN
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

WATER AND SEWER DETAILS
MERCER ISLAND TREEHOUSE

MI TREEHOUSE LLC
PO BOX 261
MEDINA, WA 98040

DATE	OCTOBER 2020
DESIGNED	FLAVIO BAINOTTI
DRAWN	CHUCK FEMLING
APPROVED	MICHAEL MOODY, PE
	MICHAEL MOODY, PE — PROJECT MANAGER

SHEET	OF
C4.32	7

PROJECT NUMBER
18039

SEC. 19, TWP. 24 N., RGE. 05 E., W.M.

LEGEND AND SCHEDULE

TREE TO BE REMOVED

TREE TO BE RETAINED

NATIVE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	9	ACER CIRCINATUM	VINE MAPLE	1.5" CAL. MIN.	AS SHOWN
	11	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	6` HT. MIN.	AS SHOWN
	4	TSUGA MERTENSIANA	MOUNTAIN HEMLOCK	6` - 8` MIN HT.	AS SHOWN

NOTE:
ALL TREES NOT NUMBERED ON THIS PLAN ARE TO BE RETAINED AND PROTECTED DURING CONSTRUCTION

TREE RETENTION PLAN

SCALE 1" = 20'

TREE RETENTION CALCULATIONS

AS PER MICC 19.10.060.

TOTAL SIGNIFICANT TREES	33
TOTAL RETENTION REQUIREMENT	10 TREES (33 X .30 = 9.9)
TOTAL SIGNIFICANT TREES TO BE REMOVED	10*
TOTAL SIGNIFICANT TREES TO BE RETAINED	23 (66%)

*2 NON-VIABLE TREES ARE TO BE REMOVED FOR SAFETY AND HEALTH CONCERNS. SEE TREE TABLE HEREON AND ARBORIST REPORT FOR MORE DETAILS

TREE REPLACEMENT CALCULATIONS

AS PER MICC 19.10.070.

TREES TO BE REMOVED	10
TOTAL REPLACEMENT TREES REQUIRED	24
REPLACEMENT TREES PROPOSED	24

TREE TABLE

NOTE: SEE ARBORIST REPORT BY GILES CONSULTING FOR MORE DETAIL

Tree No.	Common/ Botanical	DBH (in)	Dripline radius	No. of Repalcement Trees Requried	Condition	Viability	Future Action	Reason
974	Big Leaf Maple / *Acer macrophyllum*	26.9	28	0	Average	Dying	Remove	Conflicts with Building
975	Western Hemlock / *Tsuga heterophylla*	12.5	18	2	Average	Good	Remove	Conflicts with Building
976	Big Leaf Maple / *Acer macrophyllum*	30.2	34	3	Healthy	Fair	Remove	Conflicts with Building
977	Big Leaf Maple / *Acer macrophyllum*	15.7	26	0	Average	Dying	Remove	Conflicts with Building
978	Western Hemlock / *Tsuga heterophylla*	9.3	18	1	Average	Fair	Remove	Conflicts with Building
979	Douglas Fir / *Pseudotsuga menziezii*	15.9	20	2	Average	Fair	Remove	Conflicts with Building
980	Red Alder / Alnus rubra	28.1	20	3	Weak	Poor	Remove	Conflicts with Building
981	Western Hemlock / *Tsuga heterophylla*	21.4	20	2	Average	Good	Remove	Conflicts with Building
982	Big Leaf Maple / *Acer macrophyllum*	37.3	38	6	Healthy	Good	Remove	Conflicts with Building
983	Western Hemlock / *Tsuga heterophylla*	8.4	18	1	Healthy	Fair	Remove	Conflicts with Building
984	Western Hemlock / *Tsuga heterophylla*	11.6	16	2	Average	Fair	Remove	Conflicts with Building
985	Big Leaf Maple / *Acer macrophyllum*	19.1	34	2	Average	Fair	Remove	Conflicts with Building
986	Douglas Fir / *Pseudotsuga menziezii*	38.2	24	0	Healthy	Good	Retain	
987	Big Leaf Maple / *Acer macrophyllum*	30.8, 20.0	30		Average	Good	Retain	
988	Western Hemlock / *Tsuga heterophylla*	15.4	20		Average	Good	Retain	
		Total Replacement Trees		24				

SCALE: 1" = 20'

0 10 20 40

DATE | REVISIONS | NO.

CORE DESIGN

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING

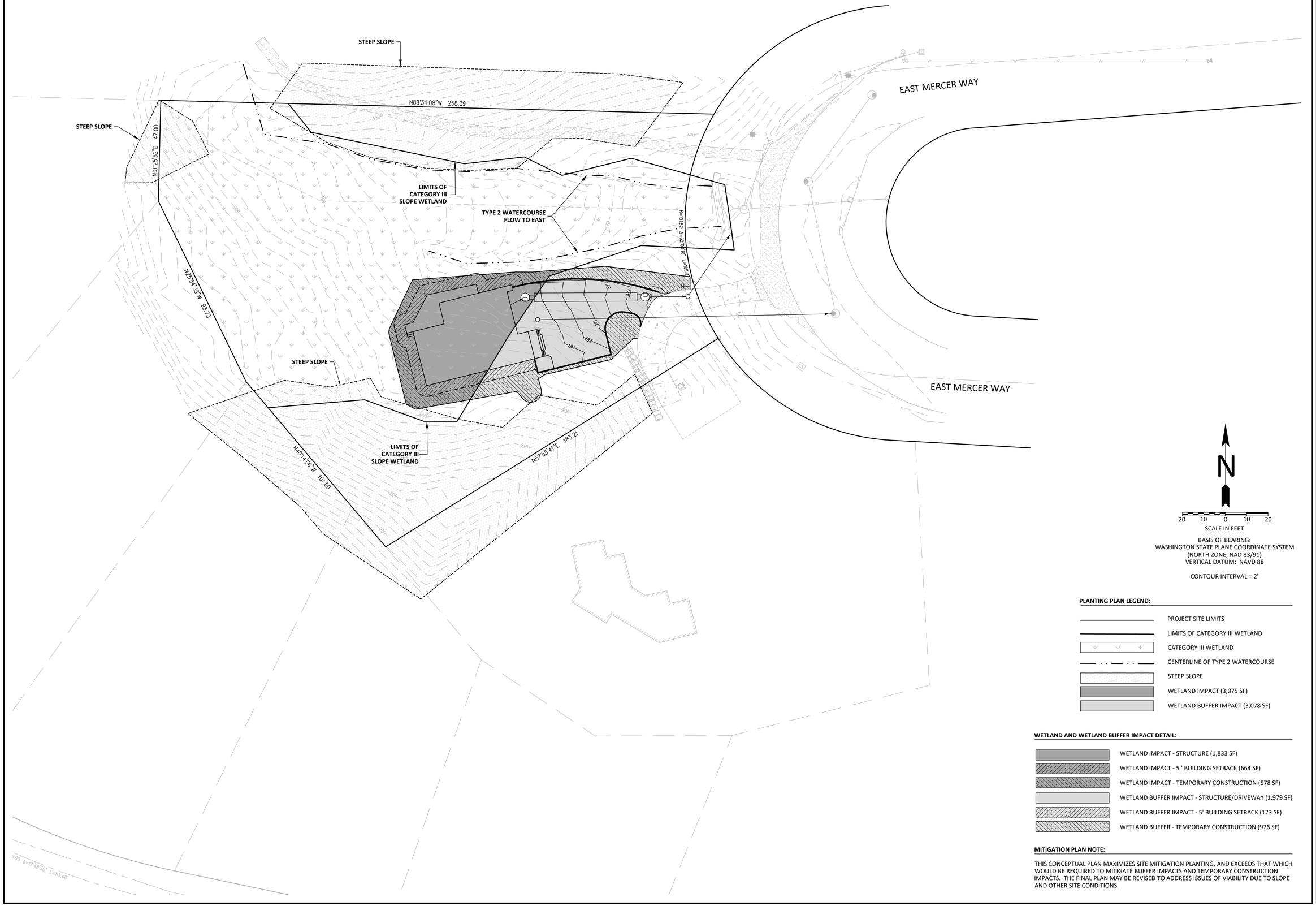
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

TREE RETENTION PLAN
MERCER ISLAND TREEHOUSE
MI TREEHOUSE LLC
P.O. BOX 261
MEDINA, WA 98039

DATE	FEBRUARY 2023
DESIGNED	MARK S LEES
DRAWN	MARK S LEES
APPROVED	LINDSEY B SOLORIO, PLA
PROJECT MANAGER	PROJECT MANAGER

SHEET L1.01 OF 1

PROJECT NUMBER 18039



BASIS OF BEARING:
WASHINGTON STATE PLANE COORDINATE SYSTEM
(NORTH ZONE, NAD 83/91)
VERTICAL DATUM: NAVD 88

CONTOUR INTERVAL = 2'

PLANTING PLAN LEGEND:

- PROJECT SITE LIMITS
- LIMITS OF CATEGORY III WETLAND
- CATEGORY III WETLAND
- CENTERLINE OF TYPE 2 WATERCOURSE
- STEEP SLOPE
- WETLAND IMPACT (3,075 SF)
- WETLAND BUFFER IMPACT (3,078 SF)

WETLAND AND WETLAND BUFFER IMPACT DETAIL:

- WETLAND IMPACT - STRUCTURE (1,833 SF)
- WETLAND IMPACT - 5 ' BUILDING SETBACK (664 SF)
- WETLAND IMPACT - TEMPORARY CONSTRUCTION (578 SF)
- WETLAND BUFFER IMPACT - STRUCTURE/DRIVEWAY (1,979 SF)
- WETLAND BUFFER IMPACT - 5' BUILDING SETBACK (123 SF)
- WETLAND BUFFER - TEMPORARY CONSTRUCTION (976 SF)

MITIGATION PLAN NOTE:

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 CONDITIONS.

Sewall Wetland Consulting, Inc.
PO Box 880 - Fall City, Washington 98024 Phone: 253-859-0515

CRITICAL AREA ENHANCEMENT PLAN
- MI TREEHOUSE LLC -

5637 EAST MERCER WAY
MERCER ISLAND, WASHINGTON

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

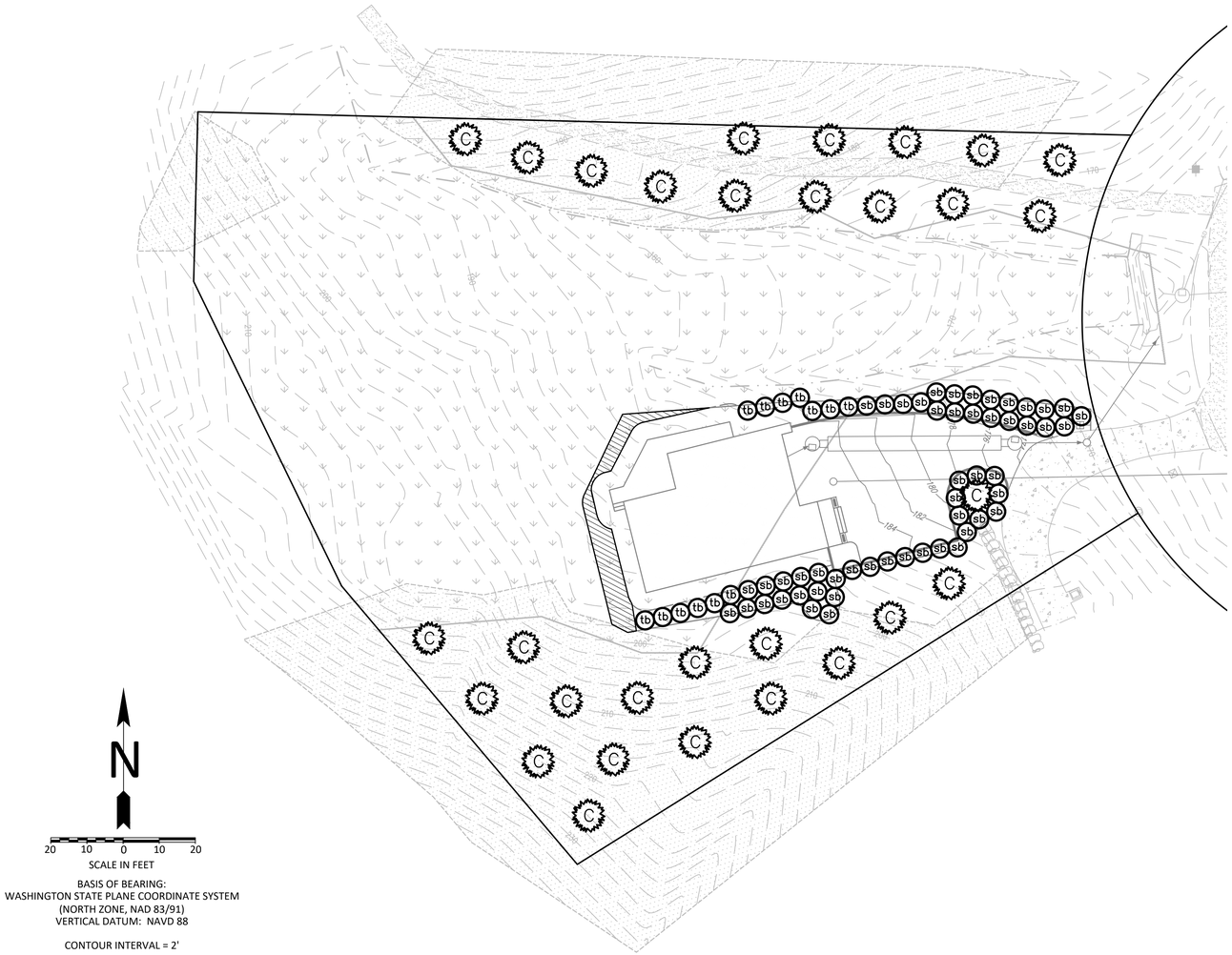
UTILITY LOCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWING, IF ANY, ARE BASED ON THE FIELD LOCATION OF THE APPARENT SURFACE EVIDENCE OF EXISTING STRUCTURES. THE UNDERGROUND ROUTING AND CONDITION OF BURIED UTILITIES HAS NOT BEEN VERIFIED OR CONFIRMED. ADDITIONAL UTILITY LOCATION AND MAPPING MAY BE REQUIRED.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

NO.	DATE	NOTES
1.	09/08/15	ADDED STREAM
2.	10/21/15	REVISED PER CITY COMMENTS
3.	12/04/18	REVISED PER NEW SITE PLAN
4.	12/17/18	ADDED IMPACT SITE PLAN
5.	01/24/19	REVISED PLANTING PLAN
6.	01/25/19	ADDED MITIGATION PLAN NOTE
7.	10/30/19	REVISED PER NEW SITE PLAN
8.	12/02/20	REVISED PER NEW SITE PLAN
9.	10/06/22	REVISED MONITORING PLAN

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

SITE PLAN

SHEET:
1 OF **2**



BASIS OF BEARING:
WASHINGTON STATE PLANE COORDINATE SYSTEM
(NORTH ZONE, NAD 83/91)
VERTICAL DATUM: NAVD 88

CONTOUR INTERVAL = 2'

MITIGATION PLAN NOTE:

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 CONDITIONS.

PLANTING PLAN NOTES:

1. BASE TOPOGRAPHIC AND SITE PLAN PROVIDED BY HEALY-JORGENSEN ARCHITECTS (2958 222ND PLACE SE - SAMMAMISH, WASHINGTON 98075; 425-454-3096). SOURCE DRAWINGS HAVE BEEN MODIFIED FOR VISUAL ENHANCEMENT.
2. PROTECT AND ACCOMMODATE EXISTING NATIVE VEGETATION WHEN INSTALLING PLANTS.
3. PLANT MATERIAL QUALITY AND LOCATIONS SHALL BE INSPECTED BY PLAN DESIGNER PRIOR TO PLANT INSTALLATION.
4. PLANT LOCATIONS SHOWN ARE APPROXIMATE. ADJUST PLANT LOCATIONS TO ACCOMMODATE SITE CONDITIONS, TO PRESERVE AND PROTECT EXISTING NATIVE VEGETATION, AND/OR PER PLAN DESIGNER AT THE TIME OF INSTALLATION.
5. SEE THIS SHEET FOR PLANT INSTALLATION DETAILS.

PLANT SCHEDULE:

	COMMON NAME	SCIENTIFIC NAME	SIZE/FORM	QUANTITY	SPACING
C	WESTERN REDCEDAR	*THUJA PLICATA*	2 GALLON CONTAINERIZED	30	AS SHOWN
tb	TWINBERRY HONEYSUCKLE	*LONICERA INVOLUCRATA*	2 GALLON CONTAINERIZED	13	AS SHOWN
sb	SALMONBERRY	*RUBUS SPECTABILIS*	2 GALLON CONTAINERIZED	52	AS-SHOWN
	RED-OSIER DOGWOOD	*CORNUS SERICEA*	4 FOOT LIVE STAKE	25	4 FT ON-CENTER
				TOTAL - 120	

1/2 **PLANTING PLAN**

MONITORING PLAN & MAINTENANCE PLAN

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

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

MONITORING PLAN

AS-BUILT

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 DEVIATIONS FROM THE APPROVED VERSION OF THIS PLAN.

BASELINE MONITORING DATA SHALL BE COLLECTED AT THE TIME OF THE 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 DOCUMENT REPRESENTATIVE CONDITIONS WITHIN BUFFER AREAS. BASELINE MONITORING AND PHOTOGRAPHS SHALL BE SUBMITTED WITH THE AS-BUILT.

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 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:

- THE CONDITION OF INSTALLED PLANT STOCK INCLUDING SURVIVORSHIP, 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.

CONTINGENCY 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:

1. ADDITIONAL PLANT INSTALLATION;
2. EROSION CONTROL;
3. HERBIVORY PROTECTION;
4. MODIFICATION TO THE IRRIGATION REGIME; AND/OR
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 COMPLIANCE MONITORING PERIOD FOR THE ENHANCEMENT WORK.

MAINTENANCE PLAN

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

GENERAL MAINTENANCE

INSTALLED PLANTS SHALL BE MAINTAINED AT REGULAR INTERVALS DURING THE MONITORING PERIOD TO PROMOTE THE SUCCESSFUL ESTABLISHMENT AND VIGOROUS GROWTH OF THE INSTALLED PLANT STOCK.

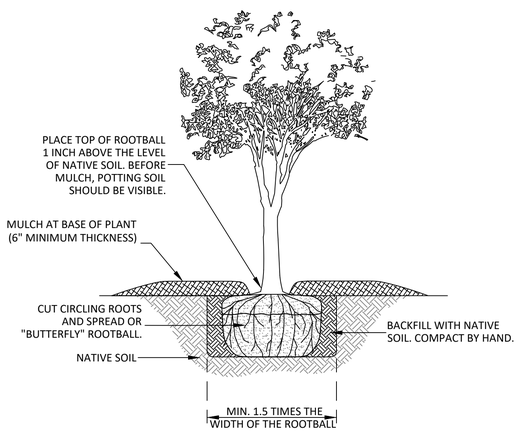
GENERAL MAINTENANCE SHALL INCLUDE:

1. RE-APPLYING BARK MULCH TO MAINTAIN A 6" MINIMUM APPLIED THICKNESS - YEAR 1 ONLY.
3. THE PRUNING OF INSTALLED PLANTS TO REMOVE DEAD WOOD AND PROMOTE VIGOROUS PLANT GROWTH AND PROPER FORM.
4. THE REPLACEMENT OF PLANTS THAT APPEAR TO BE IN DISTRESS AND/OR DISEASED.
5. THE REMOVAL OF TRASH, LITTER, AND/OR OTHER NON-DECOMPOSING DEBRIS.

GENERAL MAINTENANCE WORK SHALL OCCUR MONTHLY DURING THE GROWING SEASON AND/OR AT A FREQUENCY OTHERWISE NECESSARY TO ENSURE THE SUCCESSFUL ESTABLISHMENT AND VIGOROUS GROWTH OF THE INSTALLED PLANTS.

TABLE 2-1: GOALS, OBJECTIVES, MONITORING SCHEDULE, & PERFORMANCE STANDARDS

GOAL	OBJECTIVE	SCHEDULE	PERFORMANCE STANDARDS
TO SUCCESSFULLY ENHANCE ON-SITE WETLAND AND BUFFER AREAS USING NATIVE PLANT SPECIES.	TO INSTALL AND SUCCESSFULLY ESTABLISH NATIVE PLANTINGS AS SHOWN ON THIS DRAWING.	AUGUST OR SEPTEMBER OF YEARS 1, 2, 3, 4, & 5 FOLLOWING PLANT INITIAL INSTALLATION	• 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 GROWING SEASON (YEAR 5).



2/2 **PLANT INSTALLATION DETAIL**

NOT TO SCALE

GENERAL NOTES:

1. 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.
3. 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.
5. 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.

Sewall Wetland Consulting, Inc.
PO Box 880 - Fall City, Washington 98024 Phone: 253-859-0515

CRITICAL AREA ENHANCEMENT PLAN
- MI TREEHOUSE LLC -

5637 EAST MERCER WAY
MERCER ISLAND, WASHINGTON

Know what's below. Call before you dig.

UTILITY LOCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWING, IF ANY, ARE BASED ON FIELD LOCATION OF THE APPARENT EVIDENCE OBSERVED AT THE TIME OF SURVEY. THE EXISTENCE, 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.

NO.	DATE	NOTES
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3.	12/04/18	REVISED PER NEW SITE PLAN
4.	12/17/18	ADDED IMPACT SITE PLAN
5.	01/24/19	REVISED PLANTING PLAN
6.	01/25/19	ADDED MITIGATION PLAN NOTE
7.	10/30/19	REVISED PER NEW SITE PLAN
8.	12/02/20	REVISED PER NEW SITE PLAN
9.	10/06/22	REVISED MONITORING PLAN

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

Planting Plan, Notes, Details, & Monitoring Plan

SHEET: 2 OF 2