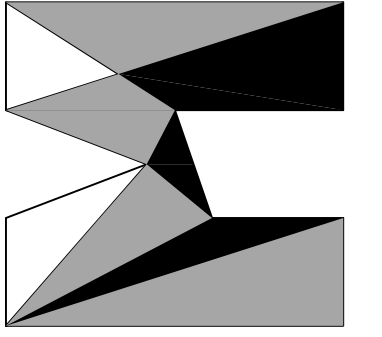


NORTH

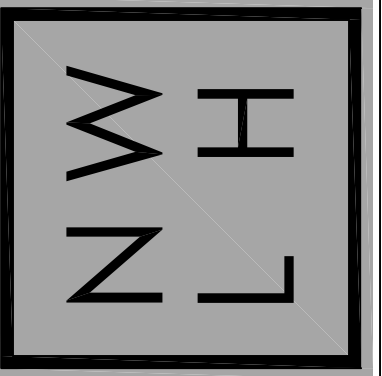
OVERALL PROPOSED SITE PLAN

NTA
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040



matthew mawer
 residential design
 matt@mawer.net
 425.417.7817

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 www.nwlifestylehomes.com



HOUTCHENS RESIDENCE
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040

JOB NO: 20-020
 DATE: 9/01/22
 DRAWN BY: MM, MG
 REVISED:

SHEET NO.

SP

LEGAL DESCRIPTION

THE EAST HALF OF TRACT 18 AND ALL OF TRACT 19, FABEN'S POINT WATERFRONT TRACTS, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 33 OF PLATS, PAGES 17 AND 18, IN KING COUNTY, WASHINGTON;

TOGETHER WITH THAT PORTION OF VACATED ELIZABETH WAY WHICH LIES BETWEEN THE CENTERLINE OF TRACT 18 PRODUCED SOUTHERLY AND THE EAST LINE OF TRACT 19 PRODUCED SOUTHERLY, AND THE WESTERLY HALF OF VACATED MERCER STREET EXTENDING NORTHWARD FROM THE SOUTH LINE OF TRACT 20 TO THE OUTER BOUNDARY OF THE ADJOINING SHORELANDS OF LAKE WASHINGTON, AND LAKE WASHINGTON SHORELANDS ADJOINING.

TOGETHER WITH THAT PORTION OF TRACT 20 IN SAID PLAT OF FABEN'S POINT WATERFRONT TRACTS LYING EAST OF THE FOLLOWING DESCRIBED LINE BEGINNING AT A POINT ON THE SOUTH LINE OF SAID TRACT 20 WHICH BEARS NORTH 89°55'45" WEST 92.06 FEET FROM THE SOUTHEAST CORNER THEREOF; THENCE NORTH 0°01'54" EAST PARALLEL TO THE EAST LINE OF SAID TRACT 20, A DISTANCE OF 268.52 FEET; THENCE SOUTH 89°55'45" EAST 2.06 FEET; THENCE NORTH 0°01'54" EAST 44.50 FEET TO AN INTERSECTION WITH THE NORTHERLY LINE OF SAID TRACT 20;

EXCEPT THAT PORTION OF TRACT 20 AND THE WESTERLY HALF OF VACATED MERCER STREET (62ND AVENUE SOUTHEAST) CONVEYED TO JOHN W. HARVEY, III, BY DEED RECORDED UNDER KING COUNTY RECORDING NUMBER 6492897; ALSO EXCEPT THE SOUTH 100.00 FEET OF THE WEST 13.06 FEET OF THE EAST 92.06 FEET OF SAID TRACT 20, (PURSUANT TO CITY OF MERCER ISLAND BOUNDARY LINE REVISION NO. MI-83-04-112, RECORDED UNDER RECORDING NUMBER 8306299004.)

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

HELD N 89°55'45" W BETWEEN FOUND MONUMENTS ON THE CENTERLINE OF SE 22ND ST PER R1.

REFERENCES

R1. BOUNDARY LINE REVISION NO. MI-83-04-12, VOL. 36, PG. 159, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS.

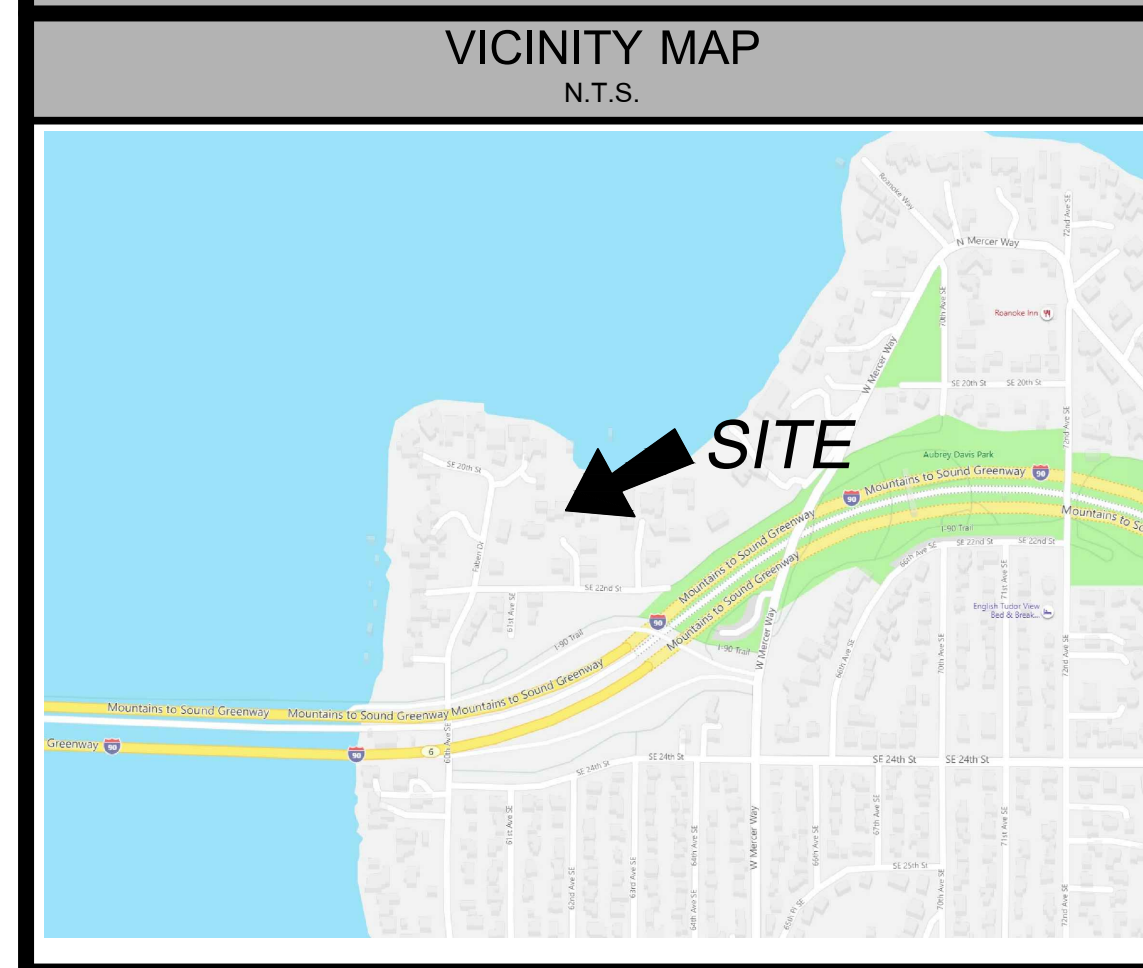
SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN OCTOBER OF 2020. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 2439700110
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 55,969 S.F. (1.29 ACRES)
6. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN CHICAGO NATIONAL TITLE COMPANY OF WASHINGTON, COMMITMENT NO. 0182986-ETU, WITH AN EFFECTIVE DATE OF JULY 1, 2020 AND THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE PROPERTY OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE PROPERTY.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 352-130-090.

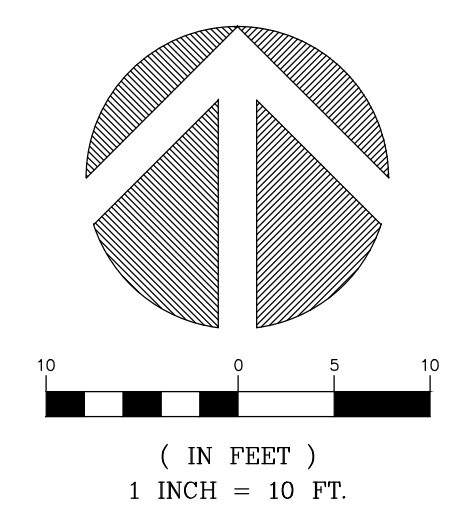
LEGEND

	AREA DRAIN		OIL FILL CAP
	ASPHALT SURFACE		POST
	BRICK SURFACE		POWER HAND HOLE
	BUILDING		POWER METER
	CENTERLINE ROW		POWER (OVERHEAD)
	CLEANOUT		POWER (UNDERGROUND)
	CULVERT PIPE		POWER POLE
	CONCRETE SURFACE		POWER POLE (FOUND)
	RETAINING WALL		REBAR & CAP (SET)
	DECK		ROCKERY
	FENCE LINE (CHAIN LINK)		SEWER LINE
	FENCE LINE (WOOD)		SEWER MANHOLE
	GAS LINE		STORM DRAIN LINE
	GAS METER		TREE (AS NOTED)
	HEDGE FOLIAGE LINE		WATER LINE
	INLET (TYPE 1)		WATER METER
	IRON PIPE (FOUND)		YARD LIGHT
	NAIL AS NOTED		ITEM NO. 5 SEWER EASEMENT, REC. NO. 4691133
	MAILBOX (RESIDENTIAL)		
	MONUMENT IN CASE (FOUND)		

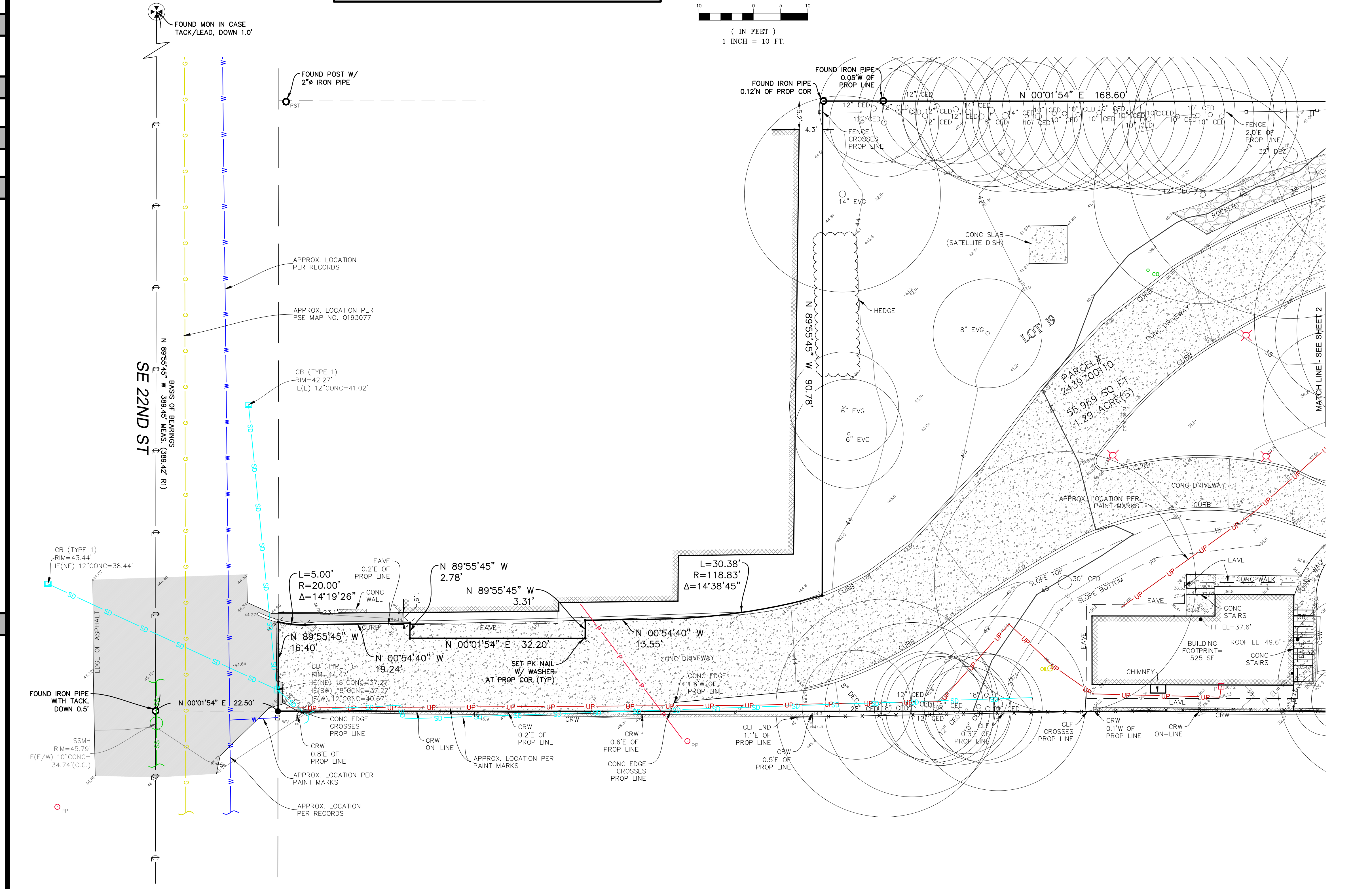
TOPOGRAPHIC & BOUNDARY SURVEY



- SCHEDULE B ITEMS**
3. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
 GRANTED TO: KING COUNTY
 PURPOSE: PUBLIC UTILITIES
 RECORDING DATE: DECEMBER 7, 1946
 RECORDING NO.: 3635877
 AFFECTS: PORTION OF SAID PREMISES LYING WITHIN VACATED ELIZABETH WAY (DOESN'T AFFECT SUBJECT PROPERTY)
 4. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
 GRANTED TO: MERCER ISLAND SEWER DISTRICT
 PURPOSE: SEWER
 RECORDING DATE: JANUARY 18, 1956
 RECORDING NO.: 4655680
 AFFECTS: PORTION OF SAID PREMISES (NOTHING TO PLOT)
 5. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
 GRANTED TO: MERCER ISLAND SEWER DISTRICT
 PURPOSE: SEWER
 RECORDING DATE: MAY 9, 1956
 RECORDING NO.: 4691133
 AFFECTS: PORTION OF SAID PREMISES (PLOTTED)



STEEP SLOPE/BUFFER DISCLAIMER:
 THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.



TOPOGRAPHIC & BOUNDARY SURVEY
 SE 1/4 OF SE 1/4 SEC 02, TWP. 24N., RGE 04E., W.M.
 PARCEL NO. 2439700110
HOUTCHENS RESIDENCE
 6024 SE 22ND ST
 MERCER ISLAND, WA 98040



Terrane
 10801 Main Street, Suite 102, Bellevue, WA 98004
 phone 425.458.4488 support@terrane.net
 www.terrane.net

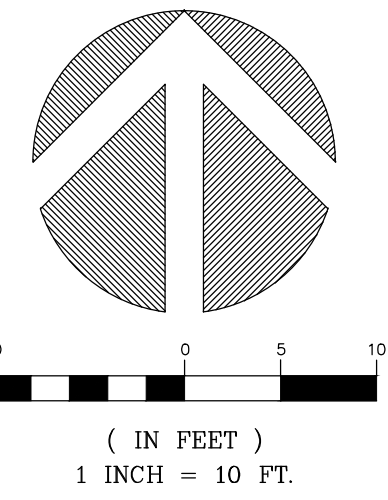
JOB NUMBER:	201729
DATE:	10/09/20
DRAFTED BY:	JPH
CHECKED BY:	JPS
SCALE:	1" = 10'
REVISION HISTORY	
SHEET NUMBER	
1 OF 3	

measure success

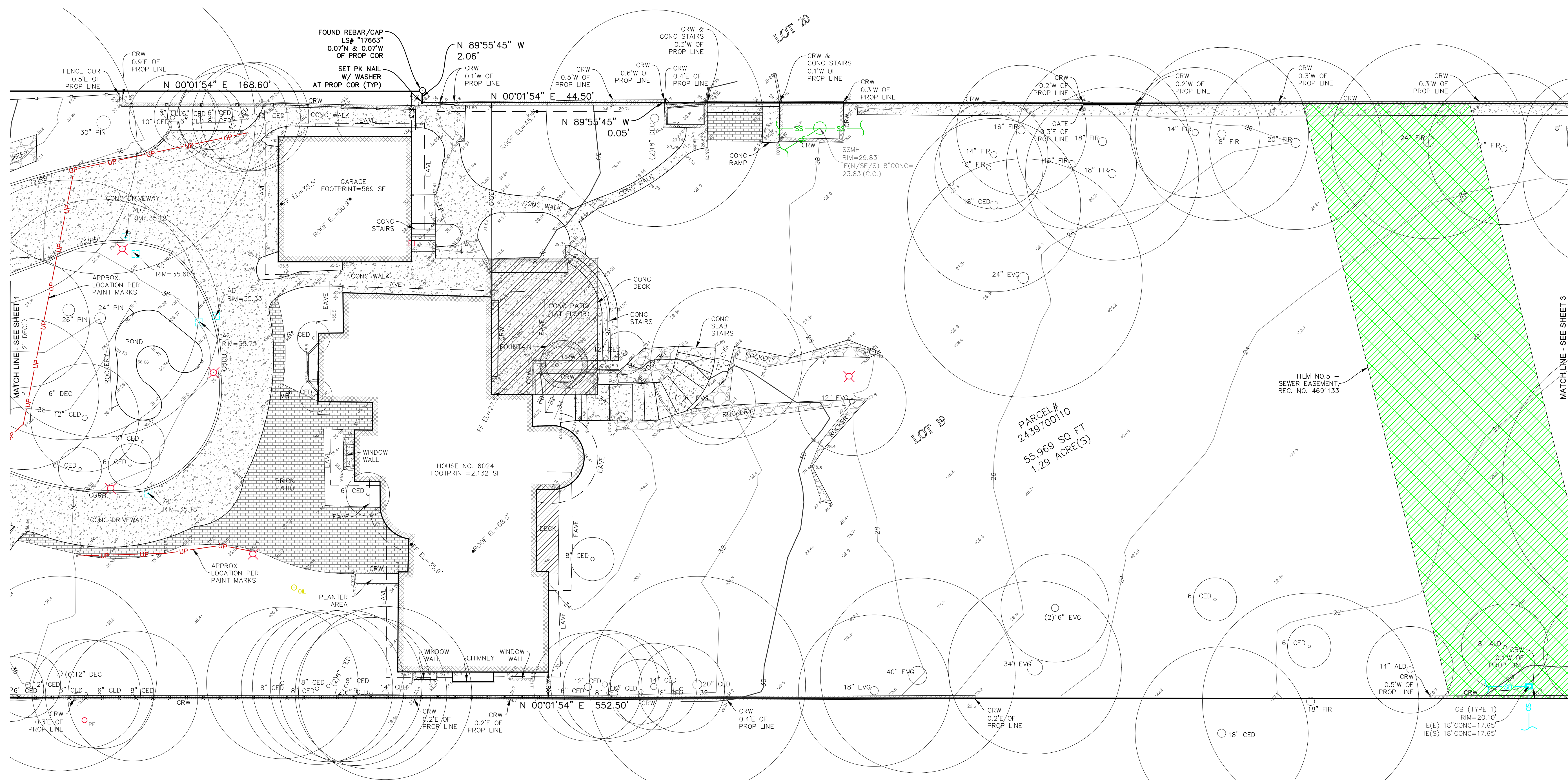
TOPOGRAPHIC & BOUNDARY SURVEY

LEGEND

- | | | | |
|--|--------------------------|--|---|
| | AREA DRAIN | | OIL O OIL FILL CAP |
| | ASPHALT SURFACE | | PST □ POST |
| | BRICK SURFACE | | PH □ POWER HAND HOLE |
| | BUILDING | | P □ POWER METER |
| | CENTERLINE ROW | | P — POWER (OVERHEAD) |
| | CLEANOUT | | UP — POWER (UNDERGROUND) |
| | CULVERT PIPE | | PP ○ POWER POLE |
| | CONCRETE SURFACE | | ○ REBAR AS NOTED (FOUND) |
| | RETAINING WALL | | ● REBAR & CAP (SET) |
| | DECK | | Rockery |
| | FENCE LINE (CHAIN LINK) | | SS — SEWER LINE |
| | FENCE LINE (WOOD) | | ○ SEWER MANHOLE |
| | GAS LINE | | SD — STORM DRAIN LINE |
| | GAS METER | | ○ TREE (AS NOTED) |
| | HEDGE FOLIAGE LINE | | W — WATER LINE |
| | INLET (TYPE 1) | | WM □ WATER METER |
| | IRON PIPE (FOUND) | | Y □ YARD LIGHT |
| | NAIL AS NOTED | | ITEM NO. 5 - SEWER EASEMENT, REC. NO. 4691133 |
| | MAILBOX (RESIDENTIAL) | | |
| | MONUMENT IN CASE (FOUND) | | |

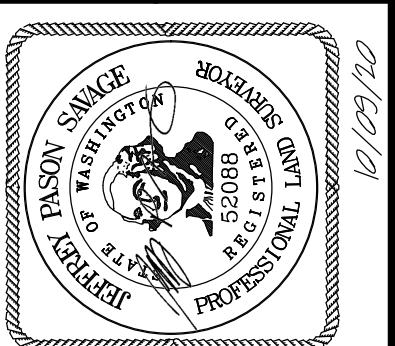


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TOPOGRAPHIC & BOUNDARY SURVEY
 SE 1/4 OF SE 1/4 SEC 02, TWP. 24N., RGE 04E., W.M.
 PARCEL NO. 2439700110

HOUTCHENS RESIDENCE
 6024 SE 22ND ST
 MERCER ISLAND, WA 98040



Terrane
 10801 Main Street, Suite 102, Bellevue, WA 98004
 phone 425.458.4488 support@terrane.net
www.terrane.net

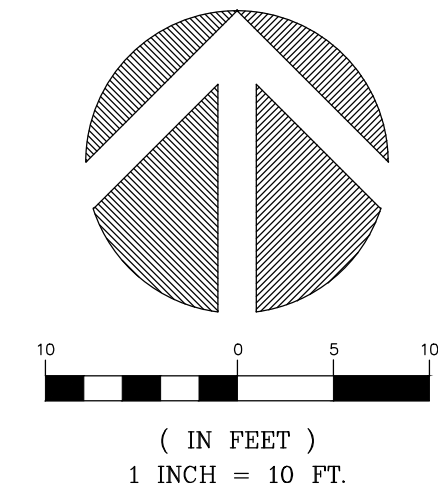
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DATE:	10/09/20
DRAFTED BY:	JPH
CHECKED BY:	JPS
SCALE:	1"= 10'
REVISION HISTORY	
SHEET NUMBER	
2 OF 3	

measure success

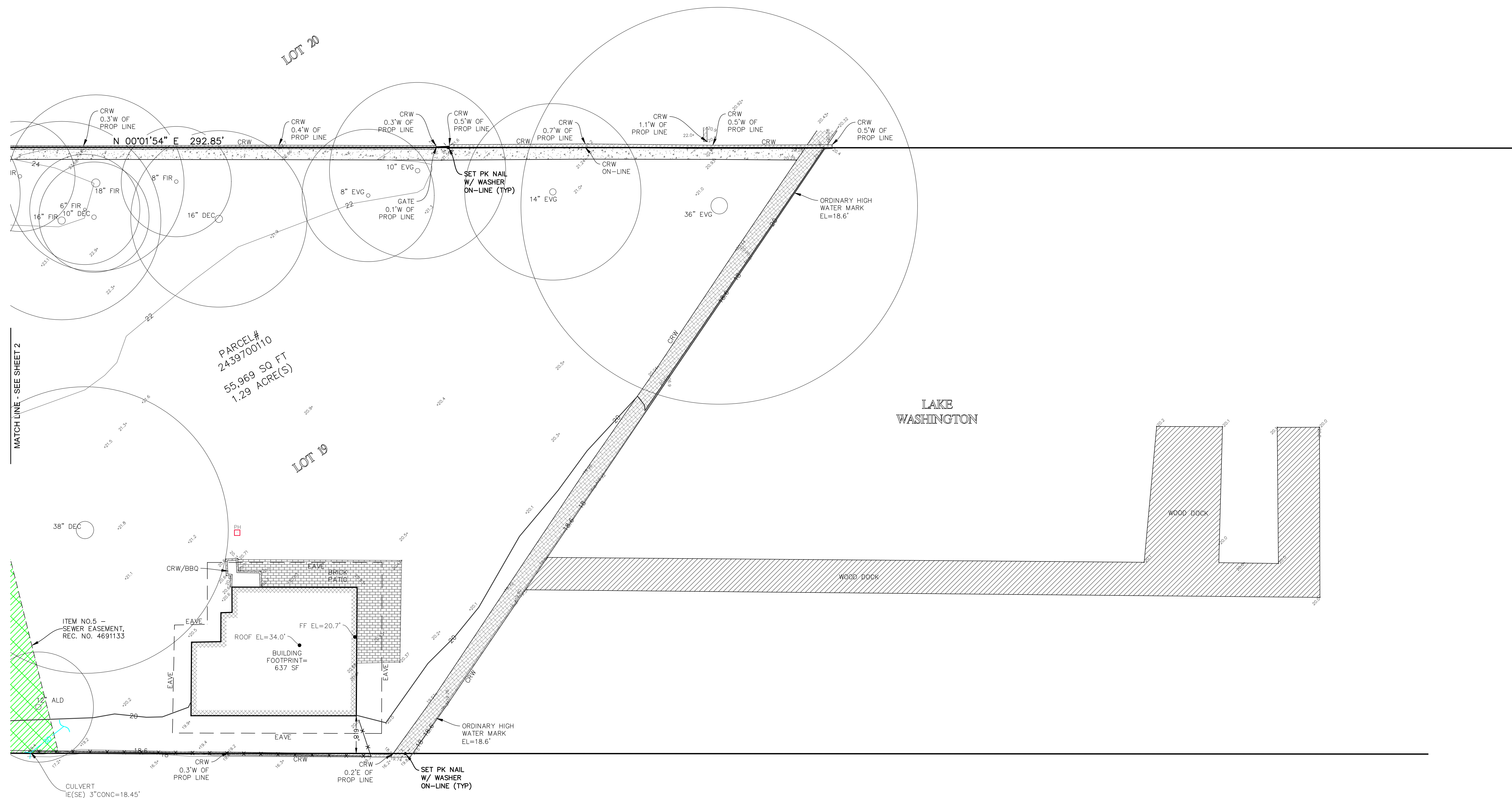
TOPOGRAPHIC & BOUNDARY SURVEY

LEGEND

	AREA DRAIN		OIL FILL CAP
	ASPHALT SURFACE		POST
	BRICK SURFACE		POWER HAND HOLE
	BUILDING		POWER METER
	CENTERLINE ROW		POWER (OVERHEAD)
	CLEANOUT		POWER (UNDERGROUND)
	CULVERT PIPE		POWER POLE
	CONCRETE SURFACE		REBAR AS NOTED (FOUND)
	RETAINING WALL		REBAR & CAP (SET)
	DECK		ROCKERY
	FENCE LINE (CHAIN LINK)		SEWER LINE
	FENCE LINE (WOOD)		SEWER MANHOLE
	GAS LINE		STORM DRAIN LINE
	GAS METER		TREE (AS NOTED)
	HEDGE FOLIAGE LINE		WATER LINE
	INLET (TYPE 1)		WATER METER
	IRON PIPE (FOUND)		YARD LIGHT
	NAIL AS NOTED		ITEM NO. 5 - SEWER EASEMENT, REC. NO. 4691133
	MAILBOX (RESIDENTIAL)		
	MONUMENT IN CASE (FOUND)		



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TOPOGRAPHIC & BOUNDARY SURVEY
 SE 1/4 OF SE 1/4 SEC 02, TWP. 24N., RGE 04E., W.M.
 PARCEL NO. 2439700110

HOUTCHENS RESIDENCE
 6024 SE 22ND ST
 MERCER ISLAND, WA 98040



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 SCALE: 1"= 10'

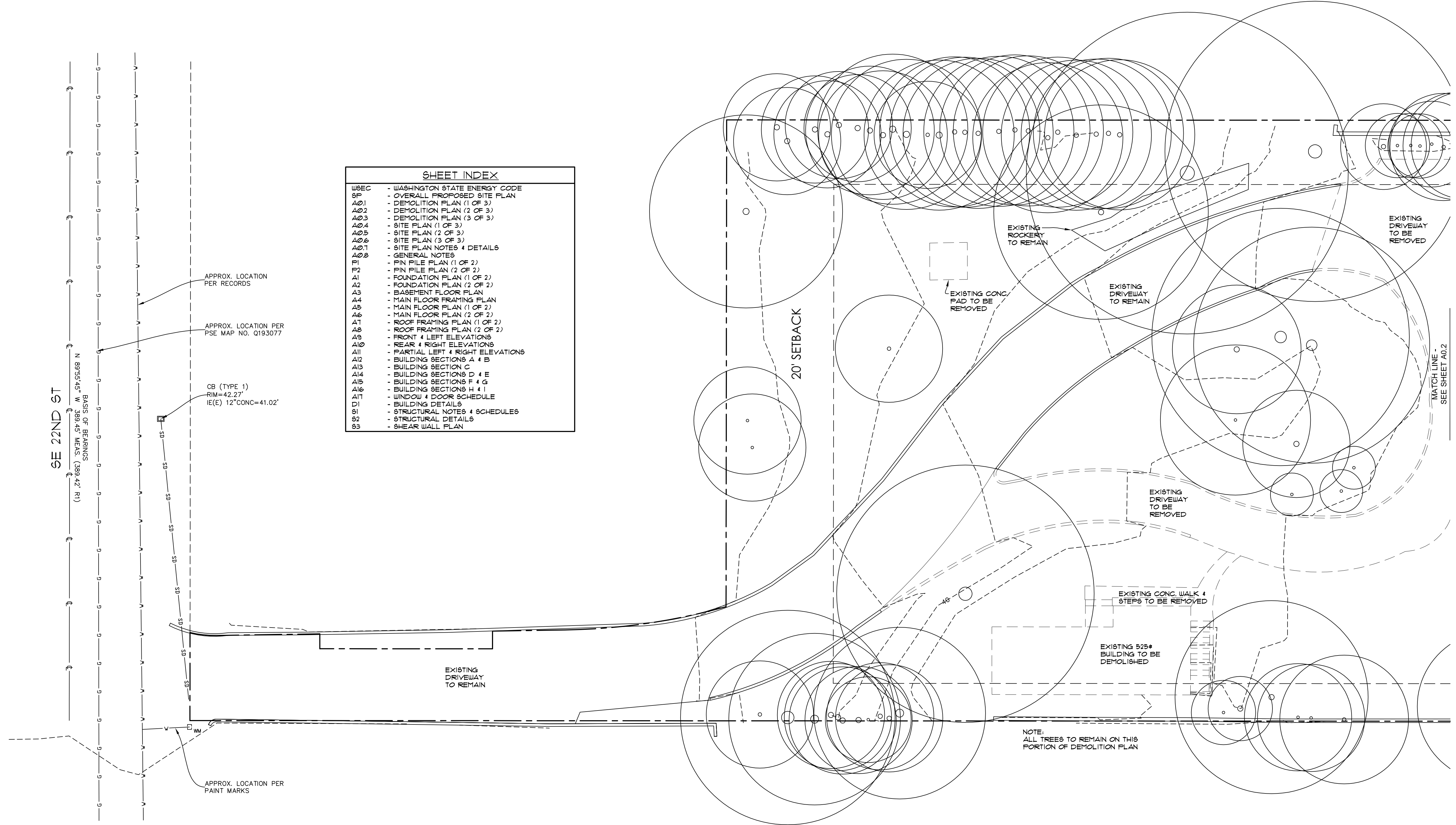
REVISION HISTORY

NO.	DATE	DESCRIPTION

SHEET NUMBER

3 OF 3

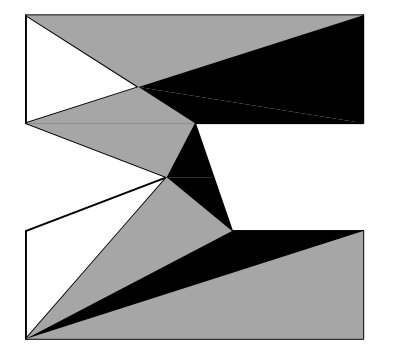
measure success



SHEET INDEX	
WSEC	- WASHINGTON STATE ENERGY CODE
SP	- OVERALL PROPOSED SITE PLAN
A0.1	- DEMOLITION PLAN (1 OF 3)
A0.2	- DEMOLITION PLAN (2 OF 3)
A0.3	- DEMOLITION PLAN (3 OF 3)
A0.4	- SITE PLAN (1 OF 3)
A0.5	- SITE PLAN (2 OF 3)
A0.6	- SITE PLAN (3 OF 3)
A0.7	- SITE PLAN NOTES & DETAILS
A0.8	- GENERAL NOTES
F1	- PIN PILE PLAN (1 OF 2)
F2	- PIN PILE PLAN (2 OF 2)
A1	- FOUNDATION PLAN (1 OF 2)
A2	- FOUNDATION PLAN (2 OF 2)
A3	- BASEMENT FLOOR PLAN
A4	- MAIN FLOOR FRAMING PLAN
A5	- MAIN FLOOR PLAN (1 OF 2)
A6	- MAIN FLOOR PLAN (2 OF 2)
A7	- ROOF FRAMING PLAN (1 OF 2)
A8	- ROOF FRAMING PLAN (2 OF 2)
A9	- FRONT & LEFT ELEVATIONS
A10	- REAR & RIGHT ELEVATIONS
A11	- PARTIAL LEFT & RIGHT ELEVATIONS
A12	- BUILDING SECTIONS A & B
A13	- BUILDING SECTION C
A14	- BUILDING SECTIONS D & E
A15	- BUILDING SECTIONS F & G
A16	- BUILDING SECTIONS H & I
A17	- WINDOW & DOOR SCHEDULE
D1	- BUILDING DETAILS
S1	- STRUCTURAL NOTES & SCHEDULES
S2	- STRUCTURAL DETAILS
S3	- SHEAR WALL PLAN



DEMOLITION PLAN (1 OF 3)
 SCALE: 1" = 10'
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040



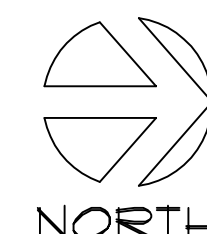
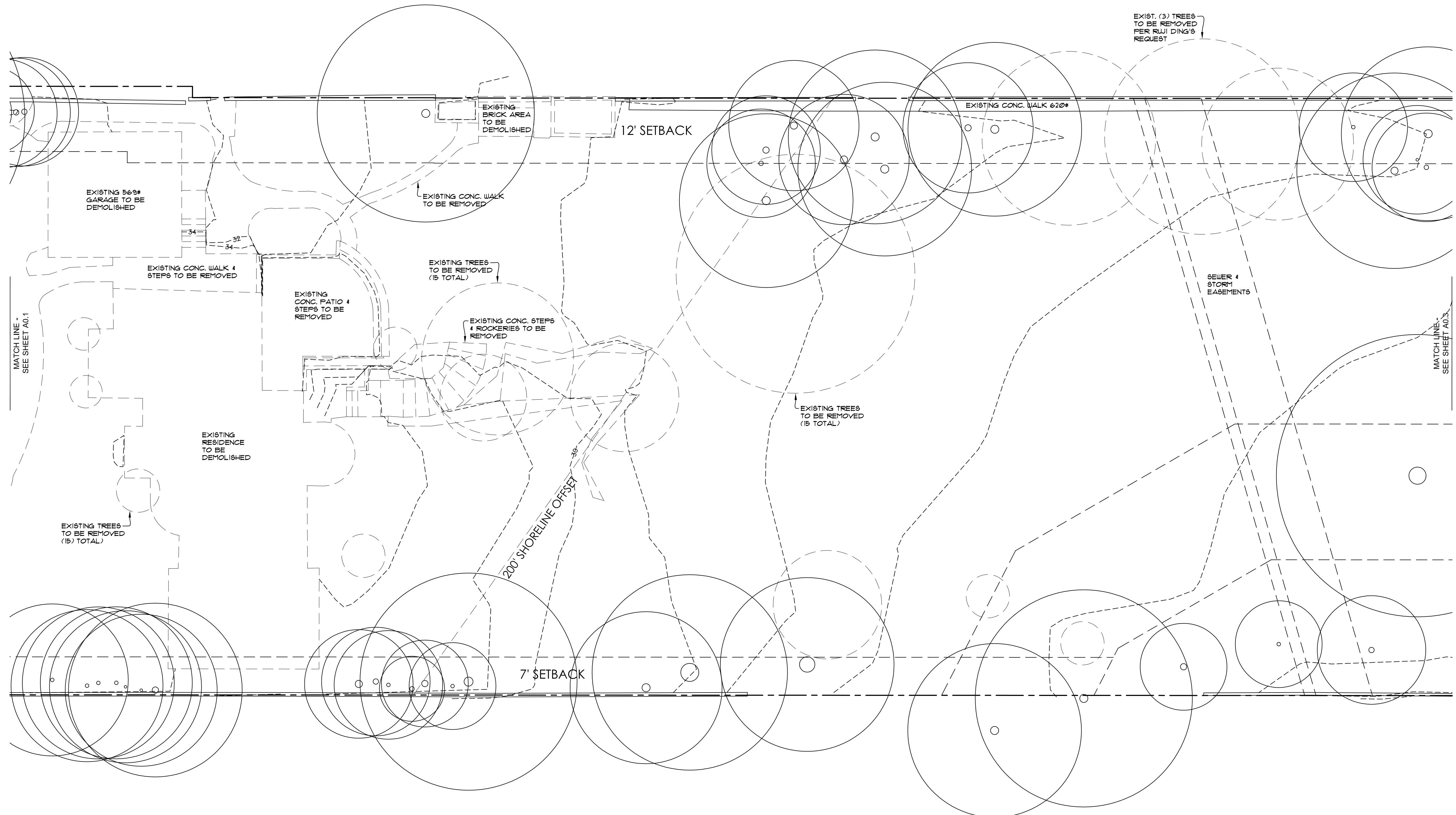
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N W L H

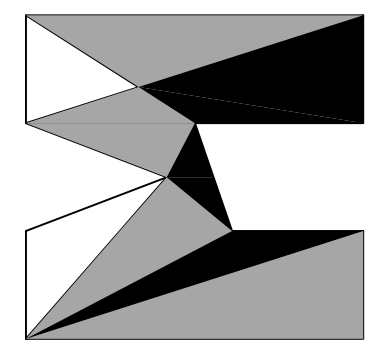
HOUTCHENS RESIDENCE
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040

JOB NO: 20-020
 DATE: 9/01/22
 DRAWN BY: MM, MG
 REVISED:

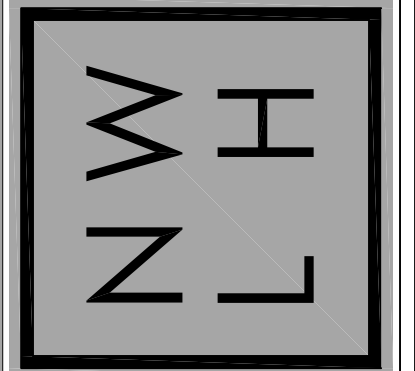
SHEET NO.
A0.1



DEMOLITION PLAN (2 OF 3)
 SCALE: 1" = 10'
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040



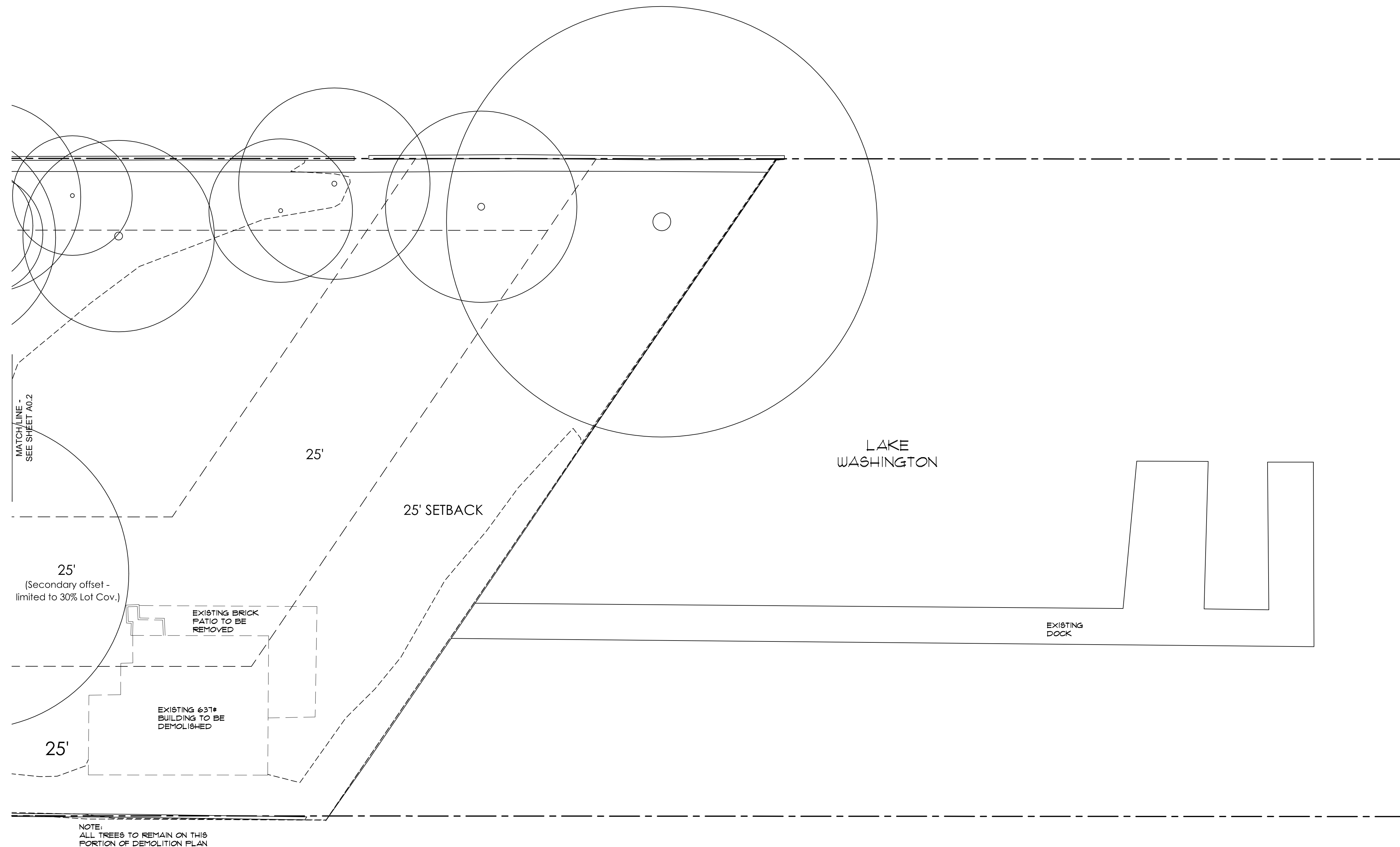
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HOUTCHENS RESIDENCE
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040

JOB NO: 20-020
 DATE: 9/01/22
 DRW. BY: MM, MG
 REVISED:

SHEET NO.
A0.2



MATCHLINE -
SEE SHEET A0.2

25'
(Secondary offset -
limited to 30% Lot Cov.)

25'

25' SETBACK

LAKE
WASHINGTON

EXISTING
DOCK

25'

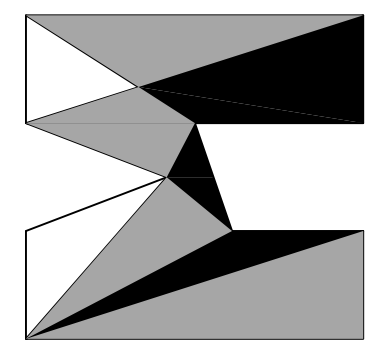
EXISTING BRICK
PATIO TO BE
REMOVED

EXISTING 631*
BUILDING TO BE
DEMOLISHED

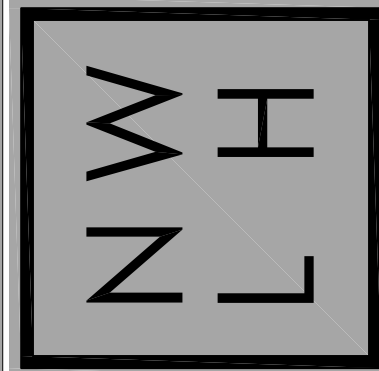
NOTE:
ALL TREES TO REMAIN ON THIS
PORTION OF DEMOLITION PLAN



DEMOLITION PLAN (3 OF 3)
SCALE: 1" = 10'
6024 SE 22nd ST
MERCER ISLAND, WA 98040



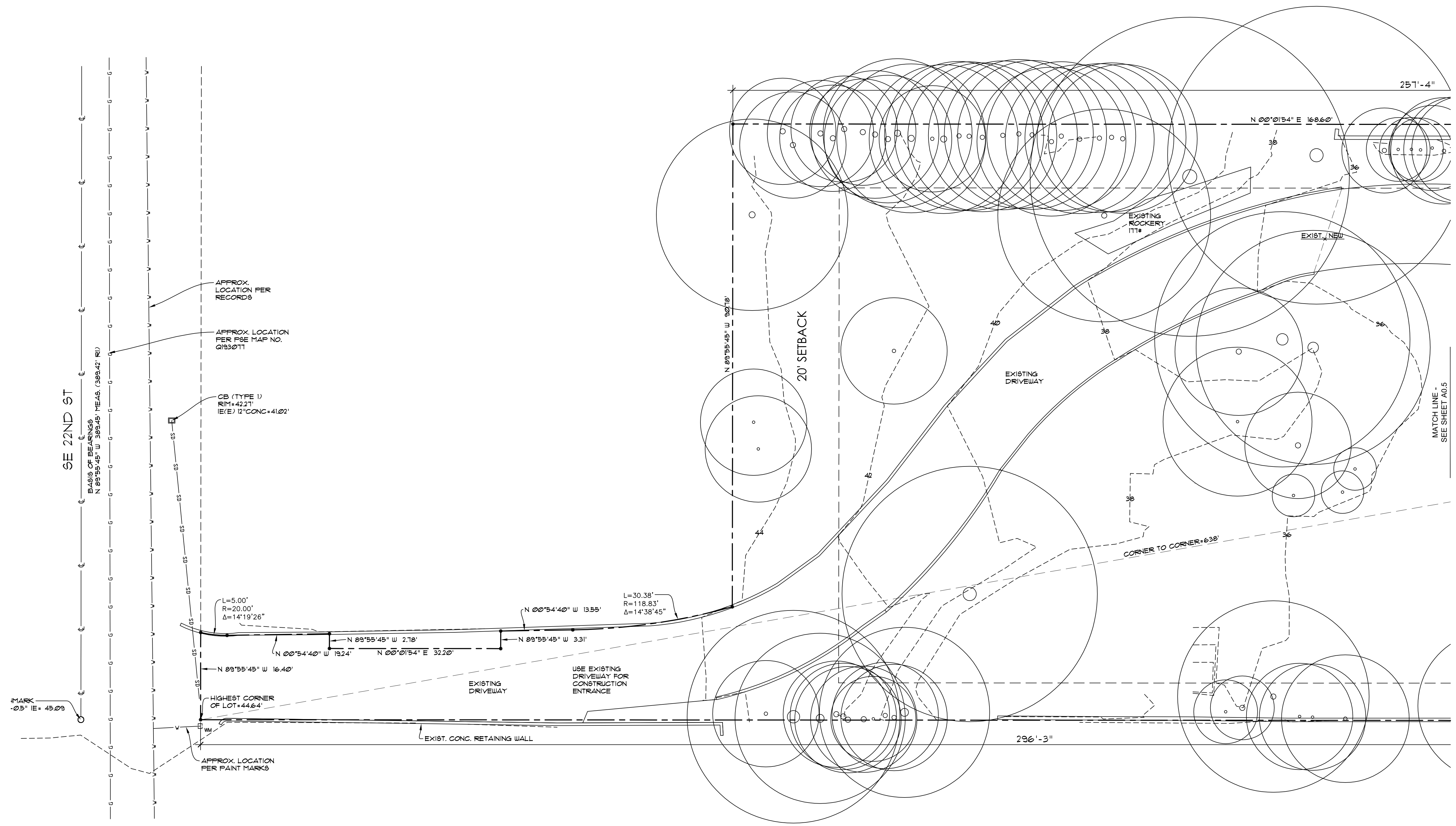
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HOUTCHENS RESIDENCE
6024 SE 22nd ST
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JOB NO: 20-020
DATE: 9/01/22
DRW. BY: MM, MG
REVISED:

SHEET NO.
A0.3



MARK
-05" IE+ 45.09

SE 22ND ST

BASIS OF BEARINGS
N 09°55'45" W 389.45' MEAS. (389.42' RI)

APPROX. LOCATION PER RECORDS
APPROX. LOCATION PER PSE MAP NO. Q133011

CB (TYPE 1)
RIM+42.21'
IE(IE) 12" CONC+41.02'

L=5.00'
R=20.00'
Δ=14°19'26"

HIGHEST CORNER OF LOT+44.64'

APPROX. LOCATION PER PAINT MARKS

USE EXISTING DRIVEWAY FOR CONSTRUCTION ENTRANCE

EXIST. CONC. RETAINING WALL

20' SETBACK

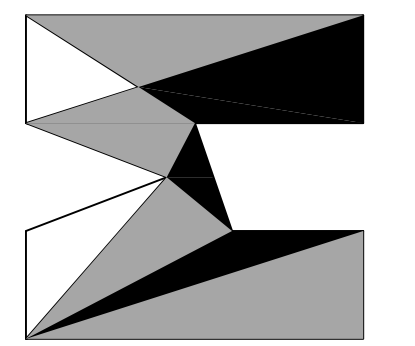
EXISTING DRIVEWAY

CORNER TO CORNER+63.8'

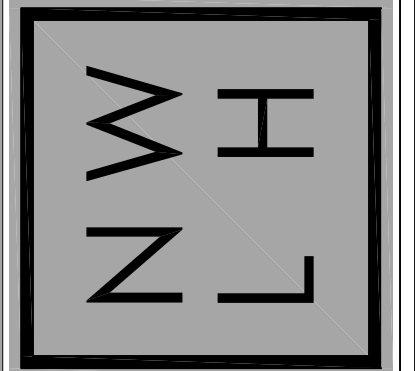
MATCH LINE - SEE SHEET A0.5



SITE PLAN (1 OF 3)
SCALE: 1" = 10'
6024 SE 22nd ST
MERCER ISLAND, WA 98040



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HOUTCHENS RESIDENCE
6024 SE 22nd ST
MERCER ISLAND, WA 98040

JOB NO: 20-020
DATE: 9/01/22
DRW. BY: MM, MG
REVISED:

SHEET NO.
A0.4

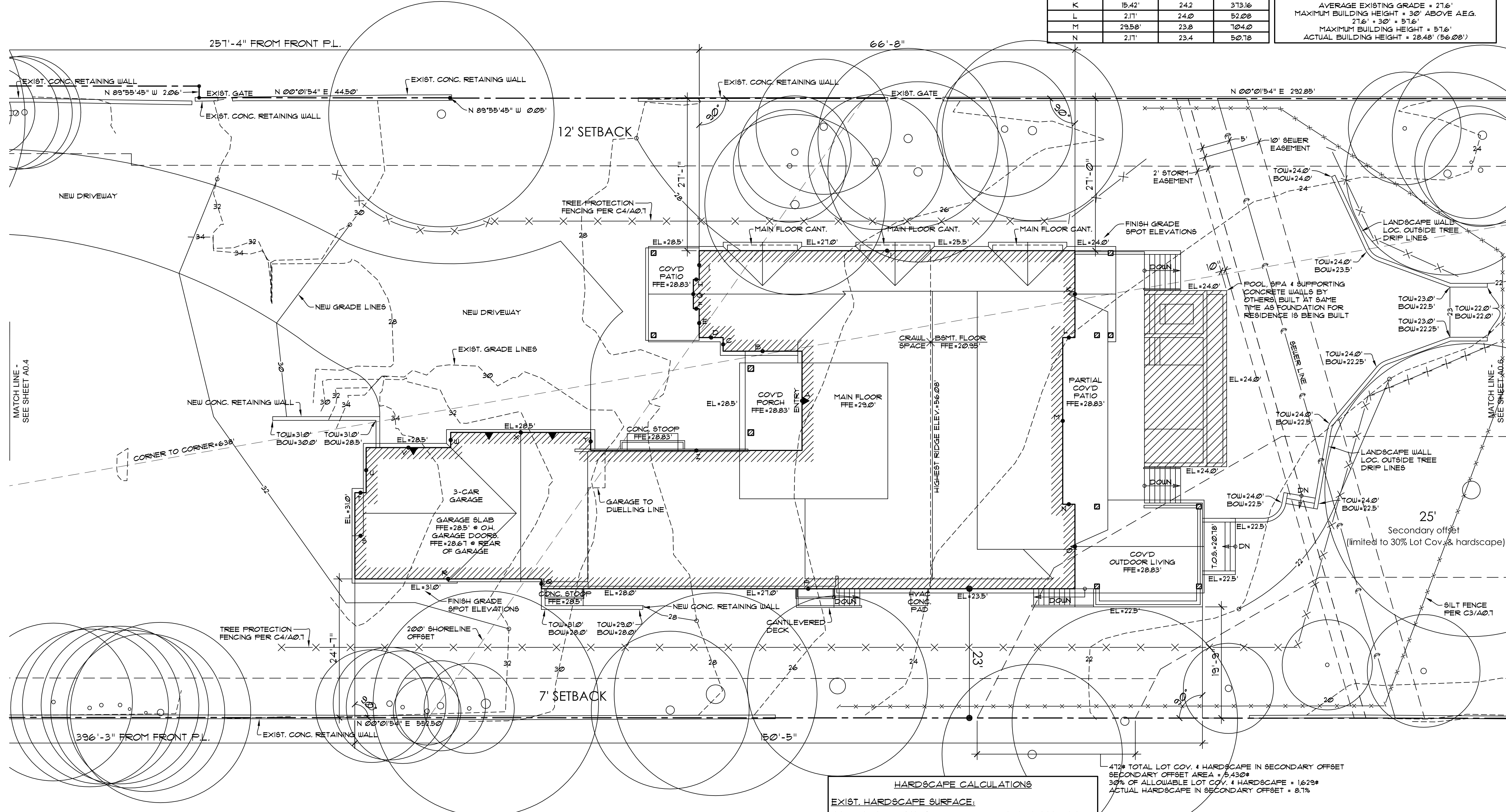
EFFECTIVE FEBRUARY 1, 2021 WASHINGTON STATUTES MANDATE ALL JURISDICTIONS IN THE STATE TO ADOPT AND ENFORCE THE FOLLOWING UPDATED CONSTRUCTION CODE EDITIONS AS THEY WERE ADOPTED AND AMENDED BY THE STATE OF WASHINGTON:

- 2018 INTERNATIONAL BUILDING CODE (IBC)
- 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2018 INTERNATIONAL MECHANICAL CODE (IMC)
- 2018 INTERNATIONAL FUEL GAS CODE (IFGC)
- 2018 UNIFORM PLUMBING CODE (UPC)
- 2018 INTERNATIONAL FIRE CODE (IFC)
- 2018 INTERNATIONAL EXISTING BUILDING CODE
- 2018 INTERNATIONAL SWIMMING POOL, AND SPA CODE
- WASHINGTON STATE ENERGY CODE (WSEC)
- ICC/ANSI A117.1-09, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, WITH STATEWIDE AND CITY AMENDMENTS

WALL SEGMENT	WALL LENGTH	MIDPOINT ELEVATION	RESULT
A	17.63'	26.1	460.14
B	14.0'	26.6	372.4
C	2.42'	27.1	655.8
D	4.25'	27.3	116.03
E	5.13'	27.4	140.56
F	1.04'	27.5	28.5
G	5.17'	27.5	142.18
H	1.04'	27.5	28.6
I	5.13'	27.5	141.08
J	66.67'	25.8	1720.09
K	15.42'	24.2	373.16
L	2.17'	24.0	52.08
M	29.58'	23.8	704.2
N	2.17'	23.4	50.78

O	P	Q	R	S	T	U	V	W	X	Y	Z	TOTALS
15.0'	23.2	348.0										
94.67'	26.0	2461.42										
1.75'	29.5	516.3										
33.08'	33.0	10916.4										
15.29'	34.0	519.86										
2.0'	34.0	68.0										
8.0'	34.0	272.0										
15.0'	34.0	510.0										
2.11'	32.8	88.89										
24.83'	32.0	794.51										
3.21'	30.4	97.58										
37.5'	27.4	1027.5										
424.86'	N/A	11726.35										

11726.35 / 424.86 = 27.6'
 AVERAGE EXISTING GRADE = 27.6'
 MAXIMUM BUILDING HEIGHT = 30' ABOVE A.E.G.
 27.6' + 30' = 57.6'
 MAXIMUM BUILDING HEIGHT = 57.6'
 ACTUAL BUILDING HEIGHT = 28.48' (56.08')



SITE INFO

OWNER: HOUTCHENS
 ENGINEER: MDT ENGINEERING
 ZONE: R15
 LOT SIZE: 55,969# (129 ACRES)
 PARCEL NO.: 2439100110
 SETBACKS: FRONT-20', REAR-25', SIDE-5' MIN. TOTAL OF 17% OF LOT WIDTH

HEIGHT LIMIT: 30' ABOVE A.B.E.
 F.A.R. (LESSER OF): 40% (22,387#) OR 120,000#
 LOT COVERAGE: 40% (BUILDING & VEHICLE DRIVING SURFACE)
 REQUIRED LANDSCAPE: 0%
 LOT SLOPE: LESS THAN 15%
 HARDSCAPE: 4% (626#)

PROVIDE STRAW OR PLASTIC COVER TO ANY EXPOSED SOILS THROUGH OUT THE CONSTRUCTION CYCLE.

24 HOUR EROSION CONTROL CONTACT INFO: MASON MAWER - 425.417.1819

LOT SLOPE:
 HIGHEST LOT ELEV.+44.64'
 LOWEST LOT ELEV.+20.00'
 44.64'-20.00'=24.64'
 24.64/638=3.9% LOT SLOPE

SIDE SETBACKS:
 LOT IS WIDER THAN 50'.
 SIDE SETBACKS TO BE 1% OF SITE WIDTH.
 LOT IS 12' WIDE (10.71x15').
 SIDE SETBACKS TO BE 7% TOTAL.

GROSS FLOOR AREA CALCULATIONS	
SITE AREA	55,969#
ALLOWABLE F.A.R.	12,000#
MAIN FLOOR W/ GARAGE	5,152#
BASEMENT FLOOR	2,240#
TOTAL FLOOR AREA	7,392#
PROPOSED G.F.A.	7,992# (14.3%)

LOT COVERAGE CALCULATIONS

EXIST. LOT COVERAGE SURFACE:
 MAIN STRUCTURE W/ OVERHANGS - 3,674# (REMOVE)
 ACC. STRUCT. W/ OVERHANGS - 1,857# (REMOVE)
 DRIVING SURFACE - 5,781# (P. REMOVE)

TOTAL EXIST. LOT COVERAGE - 11,312#
 LOT COV. TO BE REMOVED - 7,380#
 REMAINING LOT COVERAGE - 3,932

LOT COVERAGE SURFACE:
 MAIN STRUCTURE W/ OVERHANGS - 6,410#
 EXIST. DRIVING SURFACE - 3,932#
 NEW DRIVING SURFACE - 2,178#

TOTAL LOT COVERAGE - 13,120#
 LOT AREA - 55,969#
 PROPOSED LOT COVERAGE - 13,120/55,969 = 23.4%
 MAXIMUM LOT COVERAGE - 22,387 (40%)
 REMAINING LOT COVERAGE - 9,261# (16.5%)

HARDSCAPE CALCULATIONS

EXIST. HARDSCAPE SURFACE:
 UNCOVERED PATIOS - 434# (REMOVE)
 WALL/WALKWAYS - 519# (REMOVE)
 STAIRS - 247# (REMOVE)
 ROCKERIES & RETAINING WALLS - 453# (P. REMOVE)

TOTAL EXIST. HARDSCAPE - 1,653#
 HARDSCAPE TO BE REMOVED - 1,200#
 REMAINING HARDSCAPE - 453#

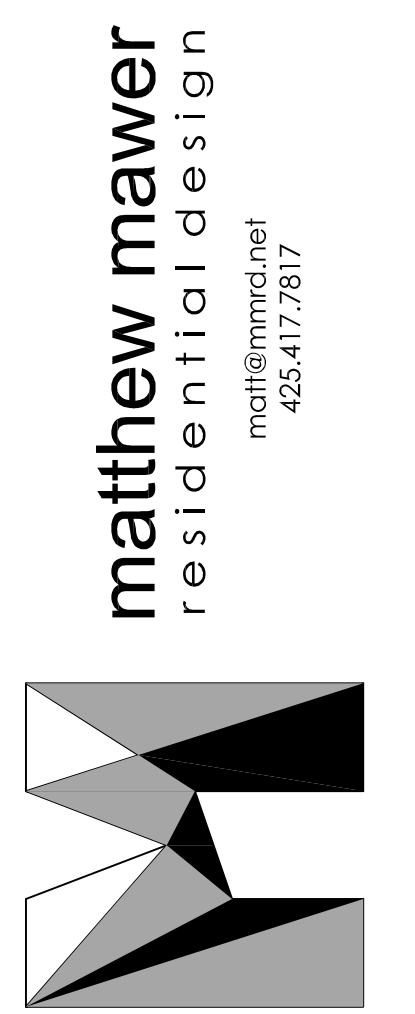
HARDSCAPE SURFACE:
 EXIST. ROCKERY - 177#
 EXIST. CONC. RETAINING WALLS - 276#
 POOL & SPA - 456#
 NEW CONC. RETAINING WALLS - 30#
 UNCOVERED PATIOS/STOOPS - 407#
 CONCRETE STEPS - 134#
 NEW CONC. LANDSCAPE WALLS - 75#
 CANTILEVERED DECK - 22#

TOTAL HARDSCAPE - 1,577#
 LOT AREA - 55,969#
 PROPOSED HARDSCAPE - 1,577/55,969 = 2.8%
 MAXIMUM HARDSCAPE - 16.5%+3%=19.5%

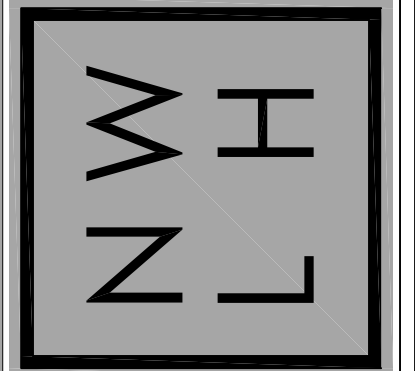
41% TOTAL LOT COV. & HARDSCAPE IN SECONDARY OFFSET
 SECONDARY OFFSET AREA = 5,430#
 39% OF ALLOWABLE LOT COV. & HARDSCAPE = 1,629#
 ACTUAL HARDSCAPE IN SECONDARY OFFSET = 8.1%



SITE PLAN (2 OF 3)
 SCALE: 1" = 10'
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040



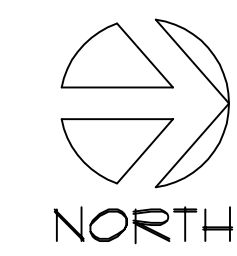
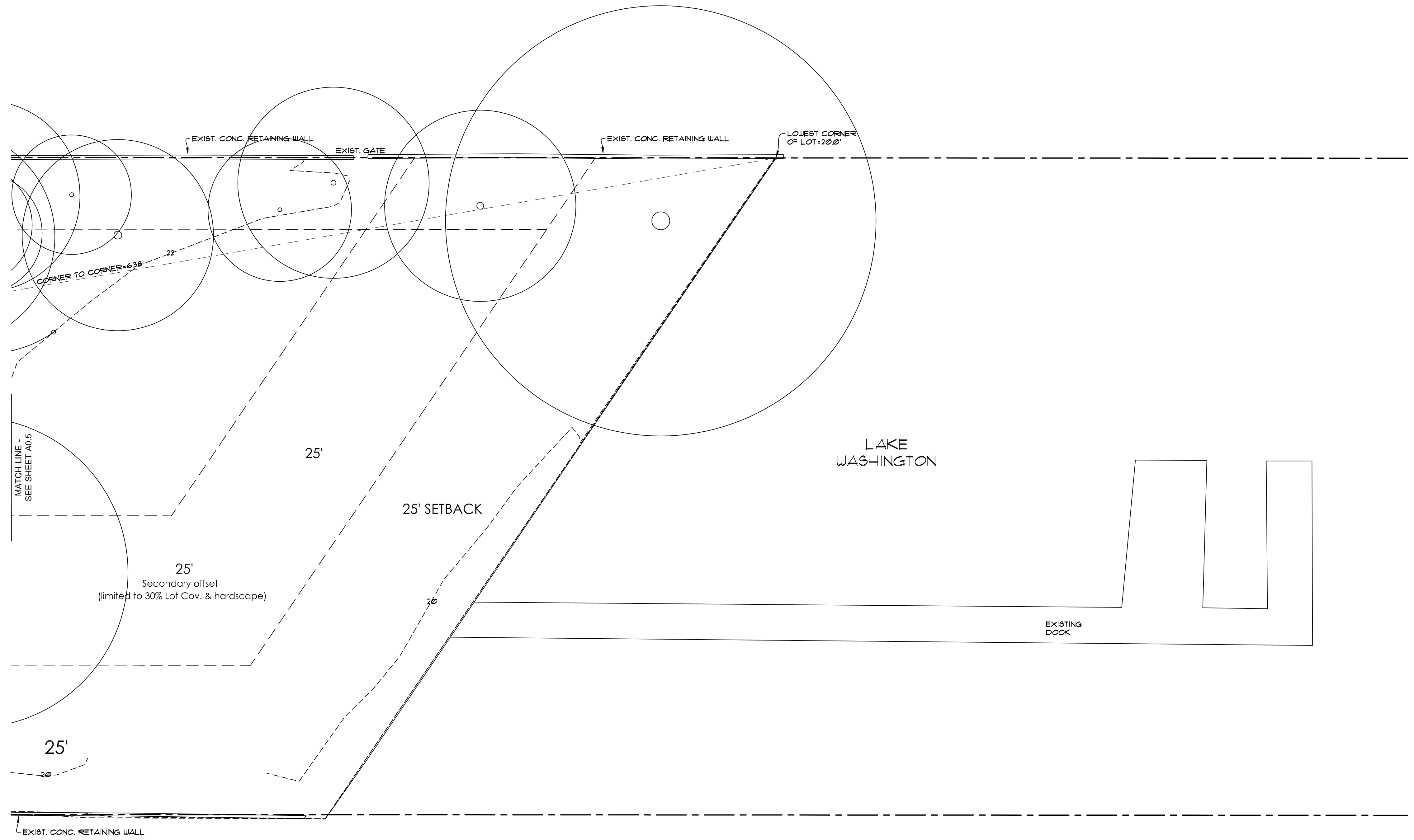
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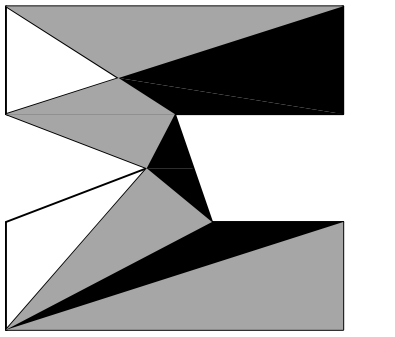
HOUTCHENS RESIDENCE
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040

JOB NO: 20-020
 DATE: 9/01/22
 DRWN. BY: MM, MG
 REVISED:

SHEET NO.
A0.5



SITE PLAN (3 OF 3)
 SCALE: 1" = 10'
 6024 SE 22nd ST
 MERCER ISLAND, WA 98040



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HOUTCHENS RESIDENCE
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 DATE: 9/01/22
 DRAWN BY: MM, MG
 REVISED:

SHEET NO.
A0.6

EROSION/SEDIMENTATION CONTROL - PLAN NOTES

1. THE APPROVED CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS:
 - A. CONDUCT PRE-CONSTRUCTION MEETING.
 - B. FLAG OR FENCE CLEARING LIMITS.
 - C. POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR.
 - D. INSTALL CATCH BASIN PROTECTION IF REQUIRED.
 - E. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
 - F. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
 - G. CONSTRUCT SEDIMENT PONDS AND TRAPS.
 - H. GRADE AND STABILIZE CONSTRUCTION ROADS.
 - I. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
 - J. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY/COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
 - K. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY/COUNTY TESC MINIMUM REQUIREMENTS.
 - L. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT.
 - M. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 7 DAYS.
 - N. SEED OR SOO ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
 - O. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.

2. CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS CLEAN AND FREE OF CONTAMINANTS AT ALL TIMES AND FOR PREVENTING AN ILLICIT DISCHARGE INTO THE MUNICIPAL STORM DRAIN SYSTEM. IF YOUR CONSTRUCTION PROJECT CAUSES AN ILLICIT DISCHARGE TO THE MUNICIPAL STORM DRAIN SYSTEM, THE CITY/COUNTY STORM MAINTENANCE DIVISION WILL BE CALLED TO CLEAN THE PUBLIC STORM SYSTEM, AND OTHER AFFECTED PUBLIC INFRASTRUCTURE. THE CONTRACTOR(S), PROPERTY OWNER AND ANY OTHER RESPONSIBLE PARTY MAY BE CHARGED ALL COSTS ASSOCIATED WITH THE CLEAN-UP AND MAY ALSO BE ASSESSED MONETARY PENALTIES. THE MINIMUM PENALTY IS \$500. A FINE FOR A REPEAT VIOLATION SHALL BE A MULTIPLE OF THE NUMBER OF VIOLATIONS. A FINE MAY BE REDUCED OR WAIVED FOR PERSONS WHO IMMEDIATELY SELF-REPORT VIOLATION TO THE CITY/COUNTY. A FINAL INSPECTION OF YOUR PROJECT WILL NOT BE GRANTED UNTIL ALL COSTS ASSOCIATED WITH THE CLEAN-UP, AND PENALTIES, ARE PAID TO THE CITY/COUNTY.

3. CONSTRUCTION DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORM/WATER DRAINAGE SYSTEM MUST BE BELOW 25 NTU, AND NOT CONSIDERED AN ILLICIT DISCHARGE. TEMPORARY DISCHARGE TO SANITARY SEWER REQUIRE A PERMIT, AUTHORIZATION AND PERMIT AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.

4. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY/COUNTY STANDARDS AND SPECIFICATIONS.

5. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE SET BY SURVEY AND CLEARLY FLAGGED IN THE FIELD BY A CLEARING CONTRACTOR PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE OR REMOVAL OF ANY GROUND COVER BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMITTEE/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

6. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (EG. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTION CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

7. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION MAINTENANCE, REPLACEMENT, AND UPGRADE OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

8. A COPY OF THE APPROVED ESC PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

9. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.

10. THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY/COUNTY INSPECTOR.

11. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (EG. ADDITIONAL SLOPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.

12. THE ESC FACILITIES SHALL BE INSPECTED BY THE PERMITTEE/CONTRACTOR DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT DOCUMENTING THE REVIEW OF THE ESC FACILITIES.

13. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.

14. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

15. ALL DENUDED SOILS MUST BE STABILIZED WITH AN APPROVED TESC METHOD (EG. SEEDING, MULCHING, PLASTIC COVERING, CRUSHED ROCK) WITHIN THE FOLLOWING TIMELINES:
 - MAY 1 TO SEPTEMBER 30 - SOILS MUST BE STABILIZED WITHIN 7 DAYS OF GRADING.
 - OCTOBER 1 TO APRIL 30 - SOILS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING.
 - STABILIZE SOILS AT THE END OF THE WORKDAY PRIOR TO A WEEKEND, HOLIDAY, OR PREDICTED RAIN EVENT.

16. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RTE APPLIED AT APPROXIMATELY 20 POUNDS PER ACRE).

17. WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2".

18. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A 6' HIGH TEMPORARY CONSTRUCTION FENCE (CHAIN LINK WITH PIER BLOCKS) SEPARATING THE LOT (OR BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL THE PLANNING DEPARTMENT AUTHORIZES REMOVAL.

19. CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A 6-FT. HIGH CHAIN LINK FENCE ADJACENT THE DRIP LINE OF TREES TO BE SAVED, WETLAND OR STREAM BUFFERS, AND SENSITIVE SLOPES. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY AN EROSION CONTROL FENCE. IF APPROVED BY THE CITY, A FOUR-FOOT HIGH ORANGE MESH CLEARING CONTROL FENCE MAY BE USED TO DELINEATE CLEARING LIMITS IN ALL OTHER AREAS.

20. OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM, THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.

21. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, FLAGGED TO A DEPTH OF 1' AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4'-8" ROCK/40%-10% PASSING; 2'-4" ROCK/30%-40% PASSING; AND 1'-2" ROCK/10%-20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON THE SITE.

22. IF ANY PART(S) OF THE CLEARING LIMIT BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED IMMEDIATELY.

23. ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.

24. AT NO TIME SHALL MORE THAN 1" OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED IMMEDIATELY FOLLOWING REMOVAL OF EROSION CONTROL BMP'S. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTEAM SYSTEM.

25. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT OR SYSTEM UNICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.

26. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6" MUST HAVE A PERIMETER FENCE WITH A MINIMUM HEIGHT OF 3'.

27. THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY. ALSO ALL INTERCEPTOR SHALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.

28. PRIOR TO THE OCTOBER 1 OF EACH YEAR (THE BEGINNING OF THE WET SEASON), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEEDED WITHIN ONE WEEK AFTER OCTOBER 1. A SITE PLAN DEPICTING THE AREAS TO BE SEEDED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

29. ANY AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT (INCLUDING A 5-FOOT BUFFER) MUST BE SURROUNDED BY SILT FENCE PRIOR TO CONSTRUCTION AND UNTIL FINAL STABILIZATION OF THE SITE TO PREVENT SOIL COMPACTION AND SILTATION BY CONSTRUCTION ACTIVITIES.

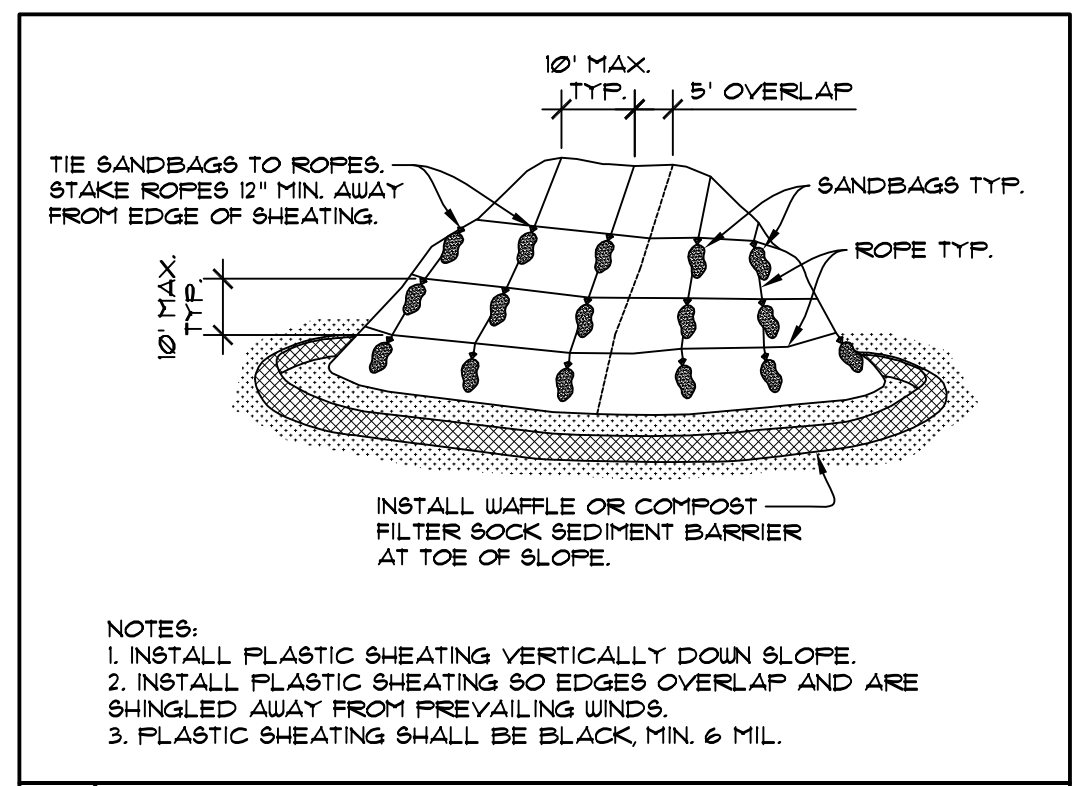
30. IF THE TEMPORARY CONSTRUCTION ENTRANCE OR ANY OTHER AREA WITH HEAVY VEHICLE LOADING IS LOCATED IN THE SAME AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT, 6" OF SEDIMENT BELOW THE GRAVEL MUST BE REMOVED PRIOR TO INSTALLATION OF THE INFILTRATION FACILITY OR PERVIOUS PAVEMENT (TO REMOVE FINES ACCUMULATED DURING CONSTRUCTION).

31. ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE ADEQUATE PROTECTION FROM SEDIMENT. CATCH BASINS DIRECTLY DOWNSTEAM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE CITY INSPECTOR SHALL BE PROTECTED WITH A 'STORM' DRAIN PROTECTION INSERT OR EQUIVALENT.

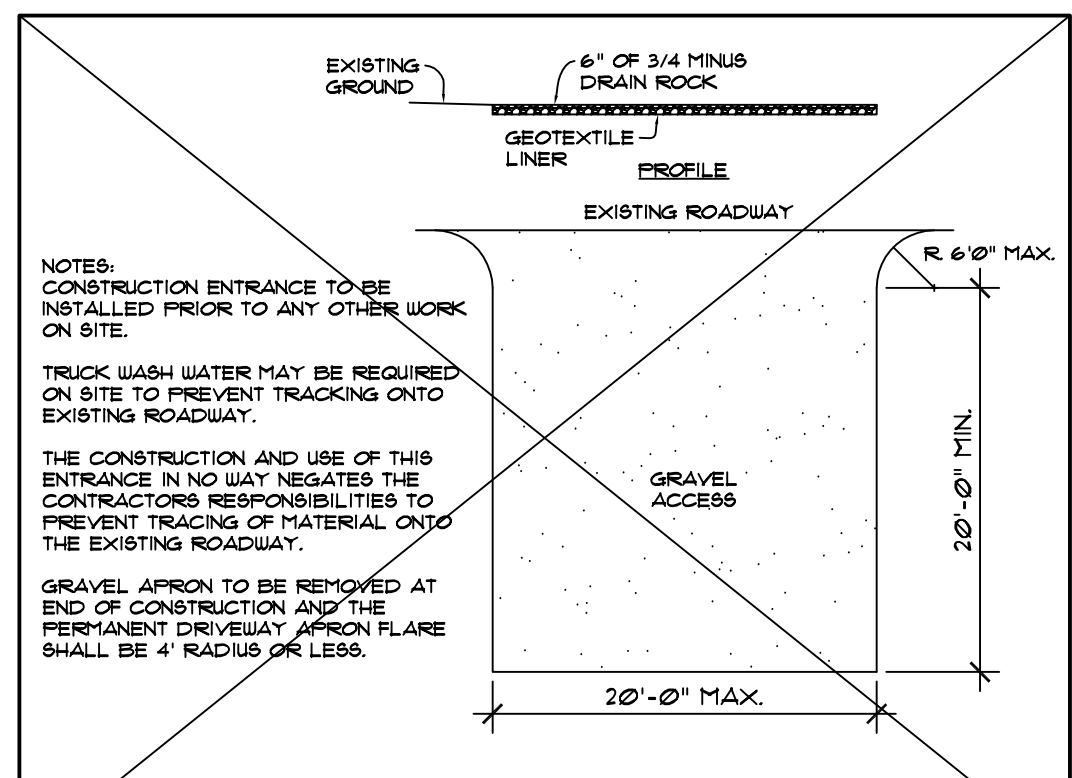
32. IF A SEDIMENT POND IS NOT PROPOSED, A BAKER TANK OR OTHER TEMPORARY GROUND AND/OR SURFACE WATER STORAGE TANK MAY BE REQUIRED DURING CONSTRUCTION, DEPENDING ON WEATHER CONDITIONS.

33. DO NOT FLUSH CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RE-CLEANING THE ENTIRE DOWNSTEAM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.

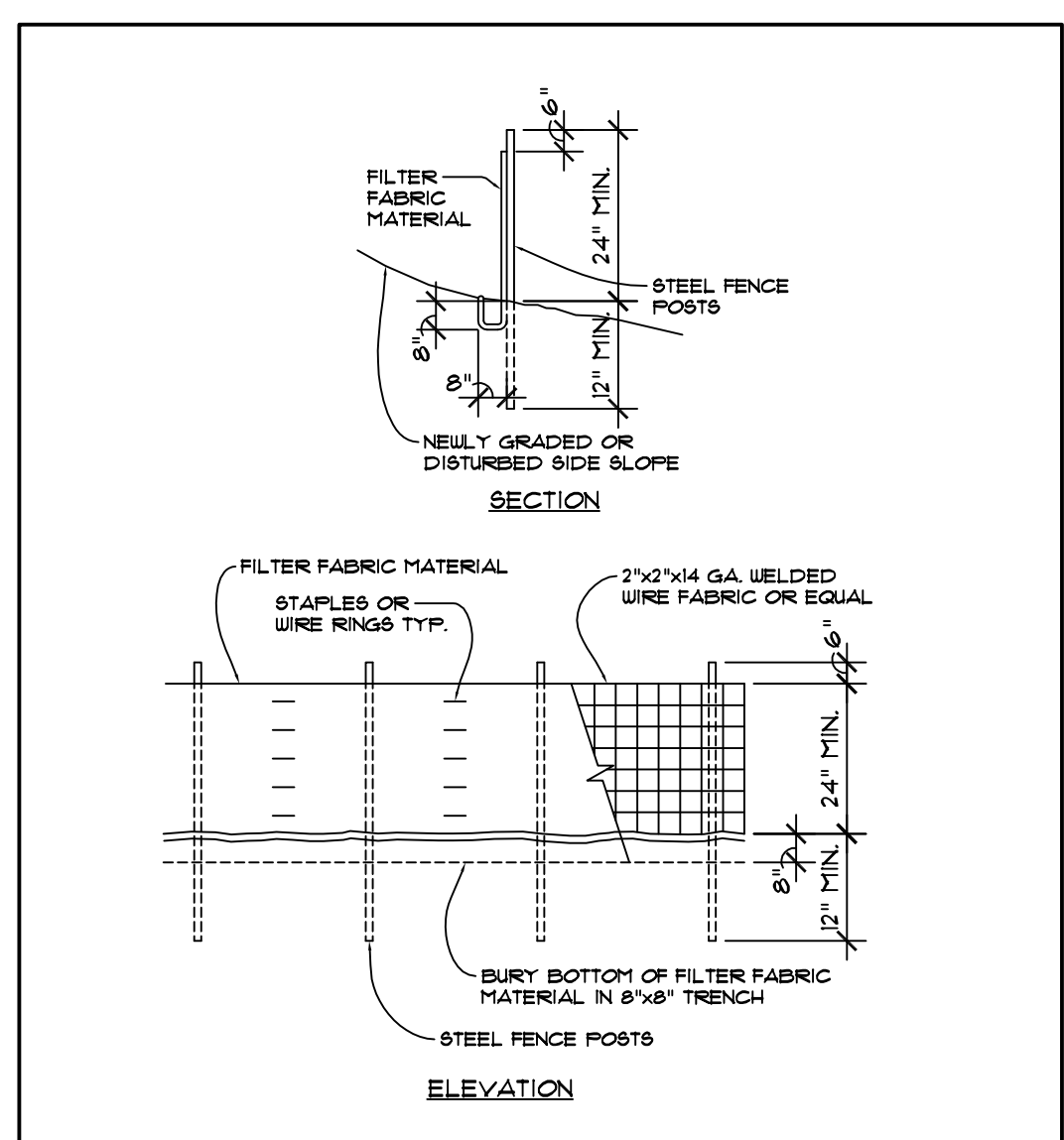
34. RECYCLED CONCRETE SHALL NOT BE STOCKPILED ON SITE, UNLESS FULLY COVERED WITH NO POTENTIAL FOR RELEASE OF RUNOFF.



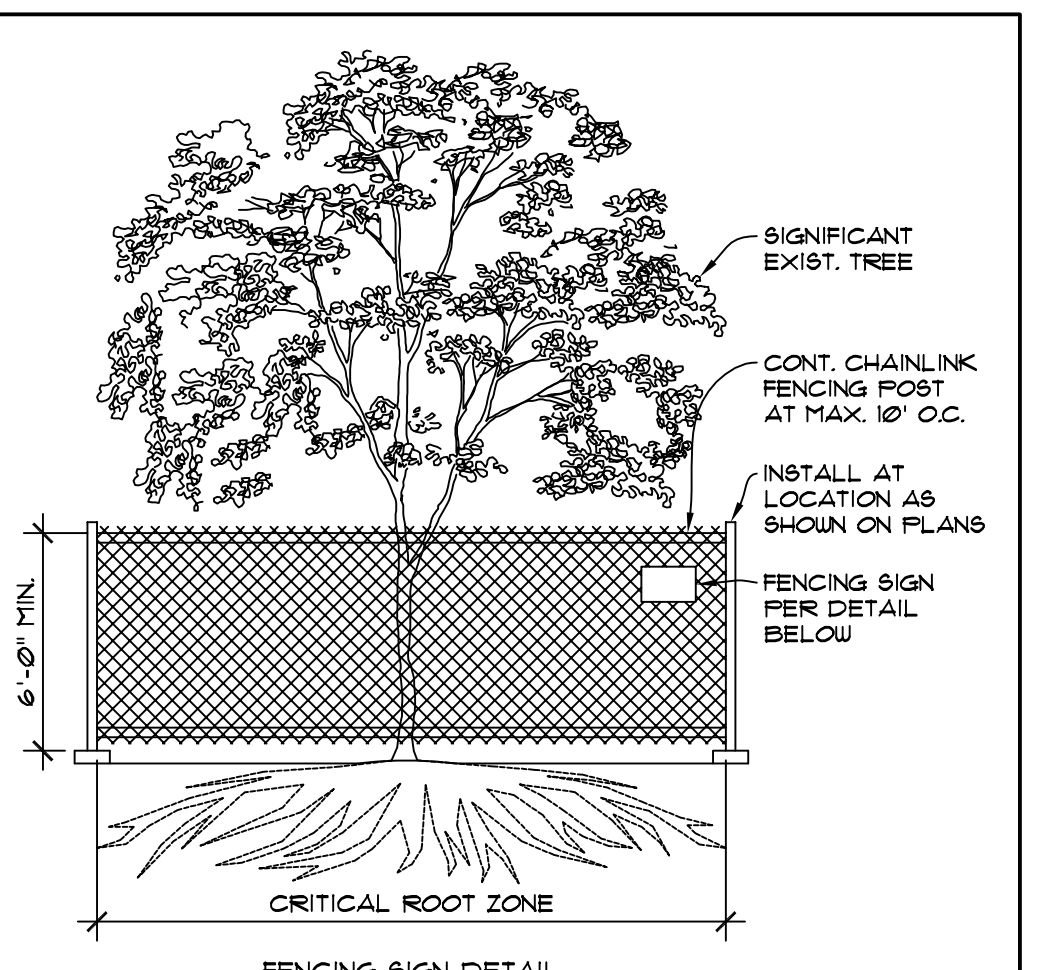
C1 TEMPORARY STOCK PILE DETAIL N.T.S.



C2 GRAVEL CONSTRUCTION ENTRANCE N.T.S.

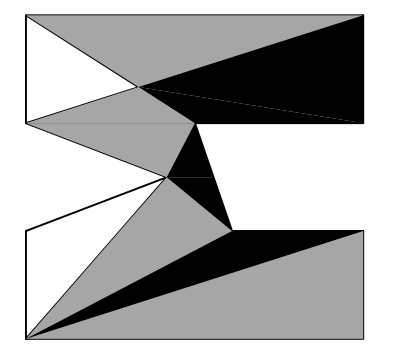


C3 SILT FENCE DETAIL N.T.S.



C4 TREE PROTECTION DETAIL N.T.S.

- NOTES:
1. MINIMUM 6'X (6) FOOT HIGH TEMPORARY CHAIN LINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCLOSE TREE(S). INSTALL FENCE POSTS USING PIER BLOCK ONLY. AVOID POST OR STAKES INTO MAJOR ROOTS. MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
 2. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION. FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND COVERED WITH SOIL AS SOON AS POSSIBLE.
 3. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
 4. FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE. SIGN TO BE MINIMUM 11"X11", AND MADE OF WEATHER-PROOF MATERIAL.



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JOB NO: 20-020
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DRW. BY: MM, MG
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A0.7

GENERAL NOTES:

- ALL FLOOR JOISTS PER PLAN, REFER TO MFG. LAYOUT FOR ALL FRAMING DETAILS AND BLOCKING, REVIEW MFG. LAYOUT PRIOR TO FRAMING, DOUBLE UNDER BEARING PARTITIONS, PROVIDE SOLID BLOCKING OVER BEARING MEMBERS.
- ALL PRE-MANUFACTURED TRUSSES TO BE IDENTIFIED BY MFG'S STAMP.
- FACTORY BUILT FIREPLACE 4 CHIMNEY TO BE UL LABELED INSTALL PER MANUFACTURERS SPEC'S O/SIDE COMBUSTION AIR REQ'D (MIN 6 SQ IN) DUCTED TO F/ROOF W/ OPERABLE O/SIDE DAMPER, TIGHTLY FITTING FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN, MINIMUM FIREPLACE EFFICIENCY OF 50% OR GREATER PER USEC R402.4.2, PILOT LIGHT SHALL NOT BE CONTINUOUSLY BURNING PER USEC R402.13.
- LIMIT SHOWER FLOW TO 2.5 GALLON/MIN.
- H.W.T. TO BE LABELED PER ASHRAE STD. NO. 90.2A-90, AND MEET THE REQUIREMENTS PER 1981 NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
- FURNACE AND HWY TANK, PILOTS, BURNERS, HEATING ELEMENTS, AND SWITCHES TO BE A MIN. OF 18" ABOVE FINISHED FLOOR.
- ALL SKYLITES TO COMPLY WITH I.R.C. SECTION 2409.1 4 2602.3
- ALL SIDELITES, SLIDING GLASS DOORS AND TUB/SHOWER ENCLOSURES TO COMPLY WITH I.B.C. SECTION 2406.
- HEAT REGISTERS TO BE PER LEGEND, LOCATE APPROXIMATELY AS SHOWN, 6" IN FROM EXTERIOR WALLS, 3" IN FROM INTERIOR WALLS.
- VENT DRYER, OVEN/RANGE 4 EXHAUST FANS 2 O/SIDE, DRYER EXHAUST DUCTS SHALL NOT EXCEED A TOTAL COMB. HORIZ. AND VERT. LENGTH OF 14'-0" INCL. 2 90° ELBOWS, DUCT 2'-0" FOR EA 90° ELBOW, EXCEEDING 2. SEE DRYER DUCT DTL. FOR ALT. SOLUTIONS. ALL EXHAUST DUCTS INSULATED (MIN. OF R-4)
- ALL NAILING PER IRC TABLE R602.3(1) AND/OR IBC TABLE 2304.9.1, COLUMN, POST 4 BEAM CONNECTIONS TO COMPLY WITH I.B.C. SECTION 2316.
-
- SOLID 5/8" REQ'D ON LOWER STORY OF 2 STORY BUILDING PER I.B.C. DRYWALL NAILED PER SHEAR NAILING SCHEDULES OR IBC 2018 EDITION.
- TUB/SHOWER SURROUND SHALL TO HAVE WATER RESISTANT GYP BOARD AND A SMOOTH HARD SURFACE TO A MINIMUM HEIGHT OF 10" ABOVE DRAIN INLET
- PROVIDE SMOKE DETECTOR IN COMPLIANCE WITH I.B.C. AND I.B.C. STD. #43.6. ALL SMOKE DETECTORS W/BAT BACKUP, SMOKE DETECTORS WILL SOUND AN AUDIBLE ALARM IN ALL SLEEPING ROOMS.
- DUELLING TO COMPLY W/ 2018 USEC-R.
- SEAL GASKET, GASKET, OR WEATHERSTRIP TO LIMIT AIR LEAKAGE: AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALL AND ROOF AND WALL PANELS, OPENINGS AT UTILITY PENETRATIONS THROUGH WALLS, FLOORS, AND ROOFS, ALL OTHER OPENINGS IN BUILDING ENVELOPE.
- ALL EXTERIOR DOORS OR ACCESS HATCHES TO ENCLOSED UNHEATED AREAS MUST BE WEATHERSTRIPPED.
- MINIMUM SOIL BEARING PRESSURE = 1500 PSF.
- FOOTINGS TO BE PLACED ON FIRM, UNDISTURBED NATIVE SOIL.
- DUELLING TO COMPLY WITH INTERNATIONAL BUILDING CODE (I.B.C.) 2018
- FIRE STOPS SHALL BE PROVIDED TO CUT OFF ALL CONCL'D DRAFT OPENINGS FROM VERT. TO HORIZ. SPACES, INCLUDING THE STAIR, TUB, SHOWER, FIREPLACE, ETC.

ALL WINDOWS TO HAVE INDIVIDUAL OUTDOOR AIR INLET PORTS PER IMC 4012.4 4021

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE, THE RESULTS OF THE TEST SHALL BE BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. (R402.4.12).

AT LEAST ONE THERMOSTAT PER DUELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. A MINIMUM OF 15% OF THE LAMP'S IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICIENCY LAMPS.

R301.3 GEOGRAPHICAL AREAS, APPROVED NATURALLY DURABLE OR PRESURE-TREATED WOOD SHALL BE USED FOR THOSE PORTIONS OF WOOD MEMBERS THAT FORM THE STRUCTURAL SUPPORTS OF BUILDINGS, BALCONIES, PORCHES OR SIMILAR PERMANENT BUILDING APPURTENANCES WHEN THOSE MEMBERS ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A ROOF, EAVE, OVERHANG OR OTHER COVERING THAT WOULD PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS. DEPENDING ON LOCAL EXPERIENCE, SUCH MEMBERS MAY INCLUDE:

- HORIZONTAL MEMBERS SUCH AS GIRDERS, JOISTS AND DECKING.
- VERTICAL MEMBERS SUCH AS POSTS, POLES AND COLUMNS.
- BOTH HORIZONTAL AND VERTICAL MEMBERS.

R303.1 STAIRWAY ILLUMINATION. ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A MEANS TO ILLUMINATE THE STAIRS INCLUDING THE STAIR TREADS, INTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF EACH LANDING OF THE STAIRWAY. FOR INTERIOR STAIRS THE ARTIFICIAL LIGHT SOURCES SHALL BE CAPABLE OF ILLUMINATING TREADS AND LANDINGS TO LEVELS NOT LESS THAN 1 FOOT-CANDLE (1 LUX) MEASURED AT THE CENTER OF TREADS AND LANDINGS. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP LANDING OF THE STAIRWAY. EXTERIOR STAIRWAYS PROVIDING ACCESS TO A BASEMENT FROM THE OUTSIDE GRADE LEVEL SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE BOTTOM LANDING OF THE STAIRWAY.

SOURCE SPECIFIC VENTILATION REQUIREMENTS:

BATHROOMS, LAUNDRY ROOMS AND POWDER ROOM FANS TO BE 50 CFM. KITCHEN EXHAUST FANS TO BE 100 CFM UNO. EXHAUST FANS SHALL BE FLOW RATED AT 25 W.G. STATIC PRESSURE EXHAUST DUCTS SHALL: BE INSULATED TO R-4 IN UNCONDITIONED SPACE BE EQUIPPED WITH A BACKDRAFT DAMPER TERMINATE OUTSIDE THE BUILDING PER IRC M1501.1 COMPLY WITH BELOW:

FAN CFM	MAX. FLEX DIA.	MAX. FT.	MAX. SMOOTH DIA.	MAX. FT.
50	4"	25'	4"	10'
50	5"	30'	5"	10'
50	6"	OVER 100'	6"	OVER 100'
80	4"	N/A	4"	20'
80	5"	15'	5"	10'
80	6"	30'	6"	OVER 100'
100	5"	N/A	5"	50'
100	6"	45'	6"	OVER 100'
125	6"	15'	6"	OVER 100'
125	7"	10'	7"	OVER 100'

WHOLE HOUSE VENTILATION REQUIREMENTS:

A 6" DIAMETER FRESH AIR INLET SHALL BE DUCTED FROM THE EXTERIOR TO THE FRESH AIR RETURN FLENUM. THE FRESH AIR DUCT SHALL BE PROTECTED FROM THE ENTRY OF INSECTS, LEAVES, OR OTHER DEBRIS AND LOCATED SO AS NOT TO TAKE AIR FROM: -HAZARDOUS OR UNSANITARY LOCATIONS. -WHERE IT WILL PICK UP OBJECTIONABLE ODORS, FUMES OR FLMMBL. VFRS. -A LOCATION OR SPACE HAVING RISK OF BURNING APPLIANCES THEREIN. -ATTIC, CRAWL SPACE, OR GARAGE. -CLOSER THAN 10" FROM AN APPLING OR PLUMBING VENT OUTLET, UNLESS THE DUCT VENT OUTLET IS AT LEAST 3' ABOVE THE FRESH AIR INLET. DUCT SHALL BE INSULATED TO R-4 WHEN PASSING THROUGH A COND' SPACE. INLET DUCT SHALL BE EQUIPPED WITH A MOTORIZED DMFR THAT WILL OPEN WHEN THE VNTLN FAN RELAY IS ACTIVATED AND REMAIN CLOSED AT ALL OTHER TIMES. IN ADDN TO THE MOTORIZED DMFR A MANUAL DMFR SET TO 35-5 AIR CHANGES PER HOUR IS ALSO REQUIRED.

A WHOLE HOUSE EXHAUST FAN SHALL BE LCTD IN THE CEILING, SIZE PER THE CALC'S BELOW. THE AIR INTAKE DUCT DMFR SHALL BE SET W/N THIS RNG

WHOLE HOUSE VENTILATION: THIS SECTION ESTABLISHES MINIMUM PRESCRIPTIVE DESIGN REQUIREMENTS FOR WHOLE HOUSE VENTILATION SYSTEMS. EACH DUELLING UNIT OR GUEST ROOM SHALL BE EQUIPPED WITH A VENTILATION SYSTEM COMPLYING WITH OPTION I, II, III OR IV. COMPLIANCE IS ALSO PERMITTED TO BE DEMONSTRATED THROUGH COMPLIANCE WITH THE INTERNATIONAL MECHANICAL CODE.

- OPTION I: WHOLE-HOUSE VENTILATION USING EXHAUST FANS. (IRC M1507.3.4)
- OPTION II: WHOLE-HOUSE VENTILATION INTEGRATED WITH A FORCED-AIR SYSTEM. (IRC M1507.3.5)
- OPTION III: WHOLE-HOUSE VENTILATION USING A SUPPLY FAN. (IRC M1507.3.6)
- OPTION IV: WHOLE-HOUSE VENTILATION USING A HEAT RECOVERY VENTILATION SYSTEM. (IRC M1507.3.7)

MECHANICAL VENTILATION RATE: THE WHOLE HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR TO EACH HABITABLE SPACE AT A CONTINUOUS RATE NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M1507.3.3(1).

EXCEPTION: THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITTED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25 PERCENT OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TABLE M1507.3.3(1) IS MULTIPLIED BY THE FACTOR DETERMINED IN TABLE M1507.3.3(2).

DUELLING UNIT FLOOR AREA (SQUARE FEET)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-1	>1
< 1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-7500	90	105	120	135	150
>7500	105	120	135	150	165

RUN TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
FACTOR	4	3	2	1.5	1.3	1

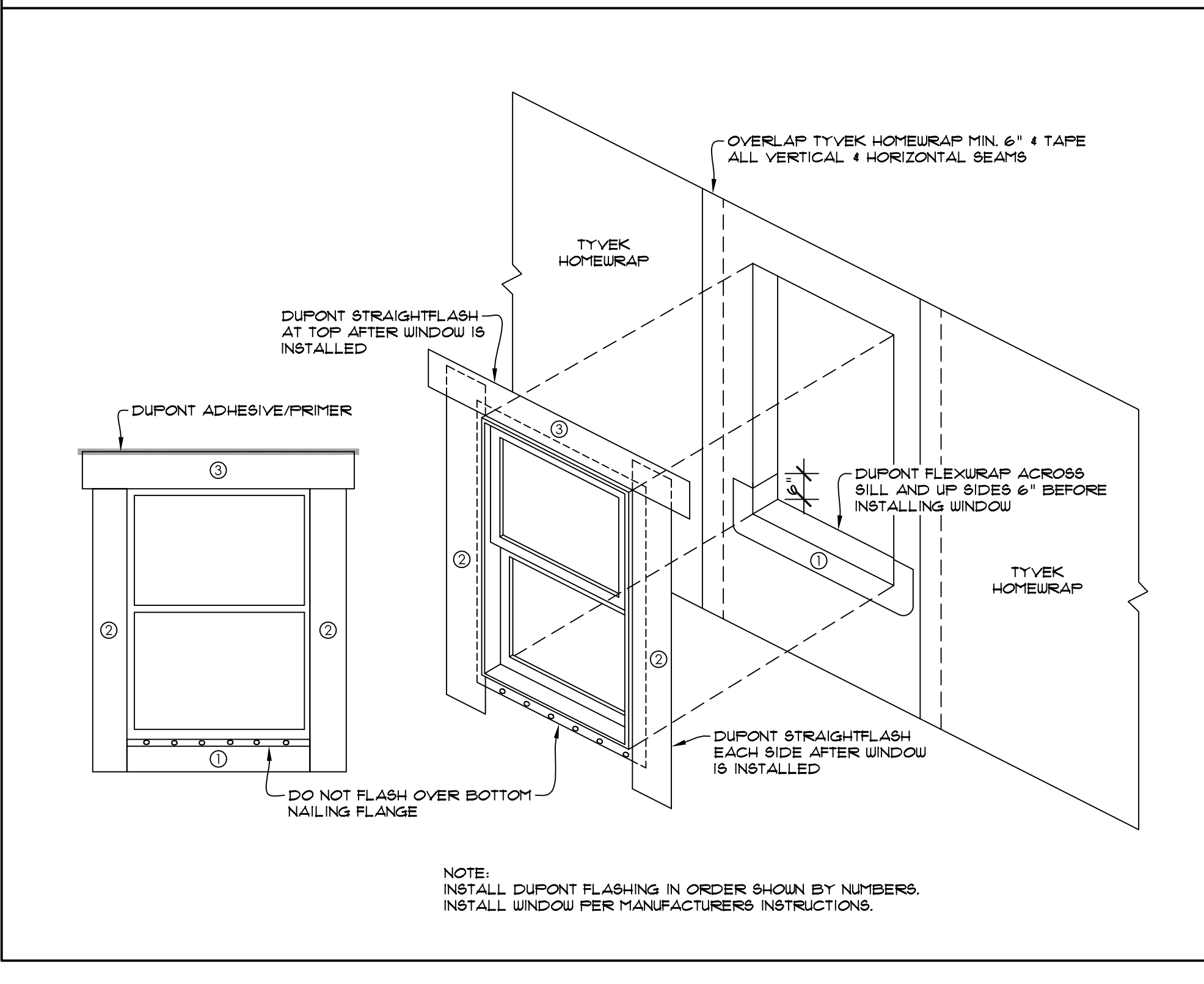
a. FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE INTERPOLATED. b. EXTRAPOLATION BEYOND THE TABLE IS PROHIBITED.

EXHAUST FANS MUST BE FLOW RATED AT 25 W.G. AND MAX. 15 SONE RATING. READILY ACCESSIBLE 24 HR. CLK. TMR OR DEMUMSTAT 4 RELAY SHALL BE INSTLL'D AND WIRED TO REGULATE THE FURN FAN, RELAY AND WHOLE HOUSE EXHAUST FAN.

INTERIOR DOORS SHALL BE INSTLL'D SO AS NOT TO IMPEDE THE MVMT OF FRESH AIR TO ALL HABITABLE ROOMS.

VNTLN SYSTEM MUST BE PERFORMANCE TESTED JUST PRIOR TO THE FINAL INSPECTION BY THE INSTALLER OR A GLD'D THIRD PARTY. THE INLET DUCT SHALL BE LABELED WITH THE ACTUAL CFM, MFR 4 A LETTER OR CHPLNG SHALL BE AVAILABLE ON SITE FOR THE INSPCTR BEFORE A CERT OF OCCUPANCY WILL BE ISSUED.

FLANGED WINDOW FLASHING INSTALLATION AFTER TYVEK HOMEWRAP (OR EQUIVALENT)



STAIRWAYS - 2018 IRC SECTION 311.7

R311.7.1 WIDTH - STAIRWAYS SHALL BE NOT LESS THAN 36" IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. THE CLEAR WIDTH OF STAIRWAYS AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL BE NOT LESS THAN 31-1/2" WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 21" WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES. EXCEPTION: THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.7.2 HEADROOM - THE HEADROOM IN STAIRWAYS SHALL BE NOT LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY. EXCEPTIONS: 1. WHERE THE NOSINGS OF TREADS AT THE SIDE OF A FLIGHT EXTEND UNDER THE EDGE OF A FLOOR OPENING THROUGH WHICH THE STAIR PASSES, THE FLOOR OPENING SHALL BE ALLOWED TO PROJECT HORIZONTALLY INTO THE REQUIRED HEADROOM NOT MORE THAN 4'-3/4". 2. THE HEADROOM FOR SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.7.3 VERTICAL RISE - A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 15" BETWEEN FLOOR LEVELS OR LANDINGS.

R311.7.4 STAIR TREADS AND RISERS - STAIR TREADS AND RISERS SHALL MEET THE REQUIREMENTS OF THIS SECTION FOR THE PURPOSES OF THIS SECTION, DIMENSIONS AND DIMENSIONED SURFACES SHALL BE EXCLUSIVE OF CARPETS, RUGS OR RANERS.

R311.7.5 RISERS - THE RISER HEIGHT SHALL BE NOT MORE THAN 7-3/4". THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8". RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE NOSING OF THE TREAD ABOVE AT AN ANGLE NOT MORE THAN 30 DEGREES FROM THE VERTICAL. OPEN RISERS ARE PERMITTED PROVIDED THAT THE OPENINGS LOCATED MORE THAN 30" AS MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW DO NOT PERMIT THE PASSAGE OF A 4" DIAMETER SPHERE. EXCEPTIONS: 1. THE OPENING BETWEEN ADJACENT TREADS IS NOT LIMITED ON SPIRAL STAIRWAYS. 2. THE RISER HEIGHT OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.7.6 TREADS - THE TREAD DEPTH SHALL BE NOT LESS THAN 10". THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".

R311.7.5 NOSINGS - NOSINGS AT TREADS, LANDINGS, AND FLOORS OF STAIRWAYS SHALL HAVE A RADIUS OF CURVATURE AT THE NOSINGS NOT GREATER 9/16" OR A BEVEL NOT GREATER THAN 1/2". A NOSING PROJECTION NOT LESS THAN 3/4" AND NOT MORE THAN 1-1/4" SHALL BE PROVIDED ON STAIRWAYS. THE GREATEST NOSING PROJECTION SHALL NOT EXCEED THE SMALLEST NOSING PROJECTION BY MORE THAN 3/8" WITHIN A STAIRWAY. EXCEPTION: A NOSING PROJECTION IS NOT REQUIRED WHERE THE TREAD DEPTH IS NOT LESS THAN 11".

R311.7.6 LANDINGS FOR STAIRWAYS - THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE WIDTH PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN THE WIDTH OF THE FLIGHT SERVED. LANDINGS OF SHAPES OTHER THAN SQUARE OR RECTANGULAR SHALL BE PERMITTED PROVIDED THAT THE DEPTH AT THE WALK LINE AND THE TOTAL AREA IS NOT LESS THAN THAT OF A QUARTER CIRCLE WITH A RADIUS EQUAL TO THE REQUIRED LANDING WIDTH. WHERE THE STAIRWAY HAS A STRAIGHT RUN, THE DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36".

NOTE: ALL UNDERGROUND PLUMBING LOCATIONS TO BE FIELD VERIFIED PRIOR TO FOUNDATION INSTALLATION.

NOTE: CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R303.

R311.7.1 STAIRWAY WALKING SURFACE - THE WALKING SURFACE OF TREADS AND LANDINGS OF STAIRWAYS SHALL BE SLOPED NOT STEEPER THAN ONE UNIT VERTICAL IN 48" HORIZONTAL.

R311.7.2 HANDRAILS - HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH FLIGHT OF STAIRS WITH FOUR OR MORE RISERS. EXCEPTION: THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.10.1.

R311.7.2.1 HEIGHT - HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34" AND NOT MORE THAN 38".

R311.7.2.2 HANDRAIL PROJECTION - HANDRAILS SHALL NOT PROJECT MORE THAN 4-1/2" ON EITHER SIDE OF THE STAIRWAY. EXCEPTION: WHERE NOSINGS OF LANDINGS, FLOORS OR PASSING FLIGHTS PROJECT INTO THE STAIRWAY REDUCING THE CLEARANCE AT PASSING HANDRAILS, HANDRAILS SHALL PROJECT NOT MORE THAN 6-1/2" INTO THE STAIRWAYS PROVIDED THAT THE STAIR WIDTH AND HANDRAIL CLEARANCE ARE NOT REDUCED TO LESS THAN REQUIRED.

R311.7.2.3 HANDRAIL CLEARANCE - HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2" BETWEEN THE WALL AND THE HANDRAILS.

R311.7.2.4 CONTINUITY - HANDRAILS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. EXCEPTIONS: 1. HANDRAIL CONTINUITY SHALL BE PERMITTED TO BE INTERRUPTED BY A NEWEL POST AT A TURN IN A FLIGHT WITH WINDERS, AT A LANDING, OR OVER THE LOWEST TREAD. 2. A VOLUTE TURNOUT OR STARTING EASING SHALL BE ALLOWED TO TERMINATE OVER THE LOWEST TREAD.

R311.7.2.5 GRIP SIZE - REQUIRED HANDRAILS SHALL BE OF ONE OF THE FOLLOWING TYPES OR PROVIDE EQUIVALENT GRASPABILITY: 1. TYPE I HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT LESS THAN 1-1/4" AND NOT GREATER THAN 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF NOT LESS THAN 4" AND NOT GREATER THAN 6-1/4" WITH A CROSS SECTION OF DIMENSION OF NOT MORE THAN 2-1/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 20". 2. TYPE II HANDRAILS WITH A PERIMETER GREATER THAN 6-1/4" SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4" FROM THE VERTICAL FROM THE INCLUDED PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF NOT LESS THAN 5/16" WITHIN 1/8" BELOW THE WIDEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR NOT LESS THAN 3/8" TO A LEVEL THAT IS NOT LESS THAN 1-3/4" BELOW THE TALLEST PORTION OF THE PROFILE. THE WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE NOT LESS THAN 1-1/4" AND NOT MORE THAN 2-3/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 20".

PER PRESCRIPTIVE REQUIREMENTS 2018 W5.E.C. *MODIFIED FOR ENERGY CREDIT 1.3)

CLIMATE ZONE 5B
MAX. GLAZING U-FACTOR: VERT. U+28, OVERHEAD U+30
MAX. GLAZING U-FACTOR: U+28
INSULATION # CONDITIONED AREAS:
TRUSSED CEILING: R-49
VAULTED 4 SINGLE RAFTER CEILING: R-38 (R40222)
ABOVE GRADE WALLS: R-21
FLOOR OVER VENTED CRAWL SPACE: R-38*
SLAB ON GRADE: R-10 # PERIMETER 4 UNDER ENTIRE SLAB*

PERCENT GLAZING 3029.4 (SF GLAZING AREA) +19.1%
CALCULATIONS: 4626 (SF FLOOR AREA)

PER PRESCRIPTIVE REQUIREMENTS 2018 W5.E.C. *MODIFIED FOR ENERGY CREDIT 1.3)

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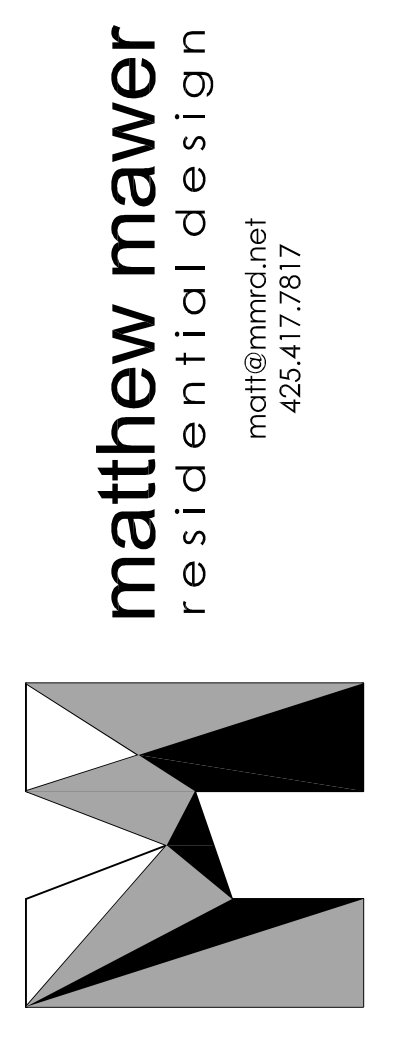
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CALCULATIONS: 4626 (SF FLOOR AREA)

XX	EXTERIOR DOOR TAG. SEE DOOR SCHEDULE ON SHEET A1T
XX	EXTERIOR WINDOW TAG. SEE WINDOW SCHEDULE ON SHEET A1T
1	5/8" TYPE "X" GUB OVER ALL WARM WALLS AND SECOND FLOOR FRAMING 4 SUPPORT MEMBERS GARAGE CEILING PROTECTION TO BE CONTINUOUS ABOVE GARAGE.
2	CONC. FIBERBOARD # TUB 4 SHOWER SURROUND TO 6" ABOVE DRAIN
3	PILOTS 4 BURNERS OR HTG. ELEMENTS 4 SWITCHES TO BE AT LEAST 18" ABOVE FLOOR. MIN. 6" DIA. FRESH AIR DUCT TO CONNECT TO RETURN AIR FLENUM
4	DIRECT VENT FIREPLACE. INSTALL PER MANUFACTURERS SPECIFICATIONS
5	WHOLE HOUSE VENTILATION SYSTEM PER M1507.3.3 OF THE IRC. SHALL BE MET WITH A HIGH EFFICIENCY FAN (MAX. 255 WATTS/CFM), NOT INTERLOCKED WITH THE FURNACE FAN VENTILATION SYSTEMS USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED. WHOLE HOUSE VENTILATION RATE PER TABLE M1507.3.3(2) AND SET TO RUN 4 (2) 4-HOUR SEGMENTS
6	22"x30" ATTIC ACCESS, WEATHERSTRIP 4 INSULATE OVER TO EQUAL CEILING INSULATION. PROVIDE WOOD SURROUND TO PREVENT LOOSE INSULATION SPILLAGE TO LIVING SPACE.
7	WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT CAUSED BY EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD AND LOWER ONE-THIRD OF THE APPLIANCE'S VERTICAL DIMENSIONS. AT THE LOWER POINT, THE STRAPPING SHALL MAINTAIN A MINIMUM DISTANCE OF 4 INCHES ABOVE THE CONTROLS
8	PER ENERGY CREDIT 3.5. AIR-SOURCED CENTRALLY DUCTED HEAT PUMP WITH A MINIMUM HRRF OF 11.0
9	PER ENERGY CREDIT 5.5. ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEAA'S ADVANCED WATER HEATING SPECIFICATION
10	ALTERNATE LOCATION OF 24"x30" CRAWL SPACE ACCESS, WEATHERSTRIP 4 INSULATE TO LEVEL EQUAL TO SURROUNDING SURFACES.
SD	INDICATES 120V HARD WIRED SMOKE DETECTOR WITH BATTERY BACKUP
CD	INDICATES 120V HARD WIRED SMOKE 4 CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP

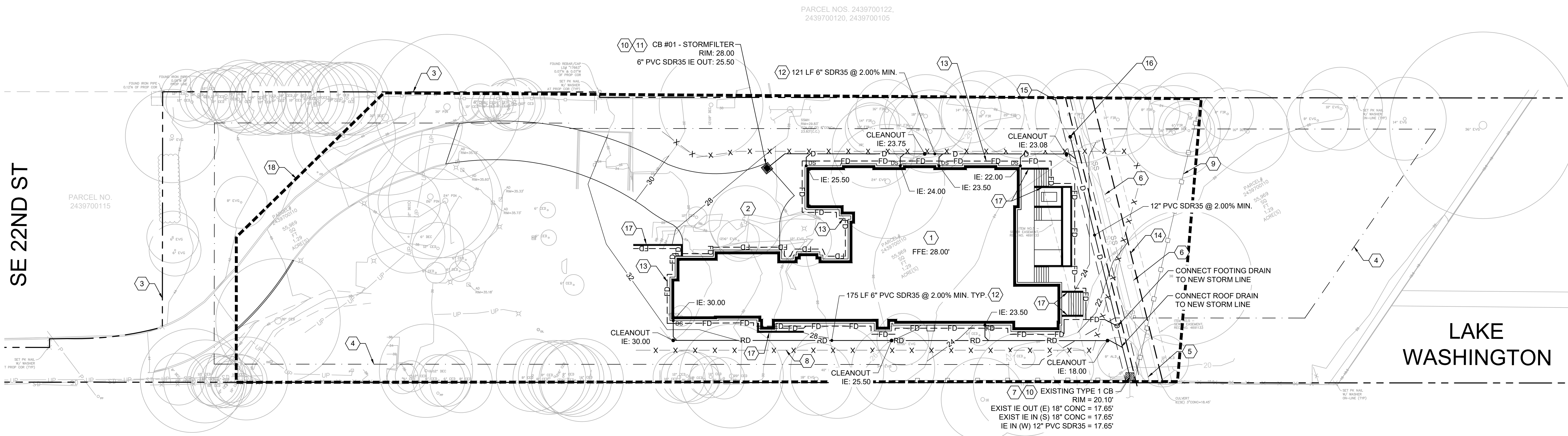


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DATE: 9/01/22
DRWN. BY: MM, MG
REVISED:

SHEET NO.
A0.8



SHEET NOTES

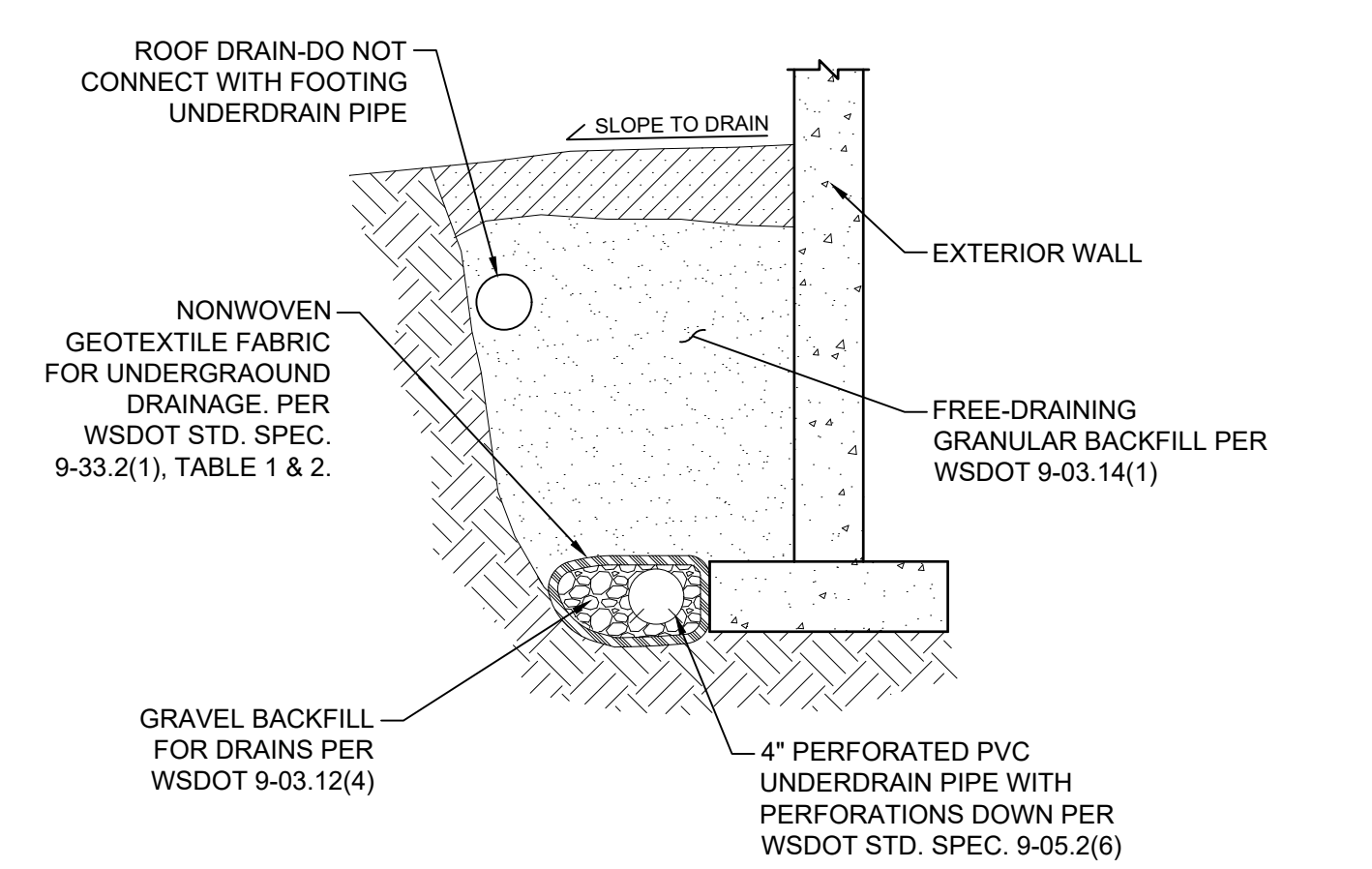
- 1 NEW SINGLE FAMILY HOUSE. SEE ARCHITECTURAL PLANS.
- 2 DRIVEWAY. SEE ARCHITECTURAL PLANS.
- 3 PROPERTY LINE.
- 4 BUILDING SETBACK.
- 5 RE-ROUTED SANITARY SEWER LINE SHOWN FOR REFERENCE ONLY. IMPROVEMENTS BY OTHERS.
- 6 EXISTING 12" STORM DRAINAGE LINE.
- 7 CONNECT STORM DRAIN LINE TO EXISTING ON-SITE CATCH BASIN.
- 8 TREE PROTECTION. SEE ARCHITECTURAL PLANS.
- 9 SILT FENCE. SEE ARCHITECTURAL PLANS.
- 10 INLET PROTECTION PER DETAIL. (C-301)
- 11 2 CARTRIDGE CATCHBASIN STORMFILTER PER DETAIL. (C-301)
- 12 ROOF DRAIN PER DETAILS. (C-201) (C-201)
- 13 FOOTING DRAIN PER DETAIL. (C-201)
- 14 10' SEWER EASEMENT, TYP.
- 15 2' STORM EASEMENT, TYP.
- 16 CONNECT NEW 12" PVC SDR35 STORM DRAIN LINE TO EXISTING 12" STORM LINE. CONTRACTOR TO VERIFY EXACT LOCATION, PIPE TYPE, AND INVERT ELEVATION PRIOR TO CONSTRUCTION.
- 17 PROPOSED RETAINING WALL SHOWN FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS FOR RETAINING WALL DESIGN.
- 18 CLEARING LIMITS.

GENERAL NOTES

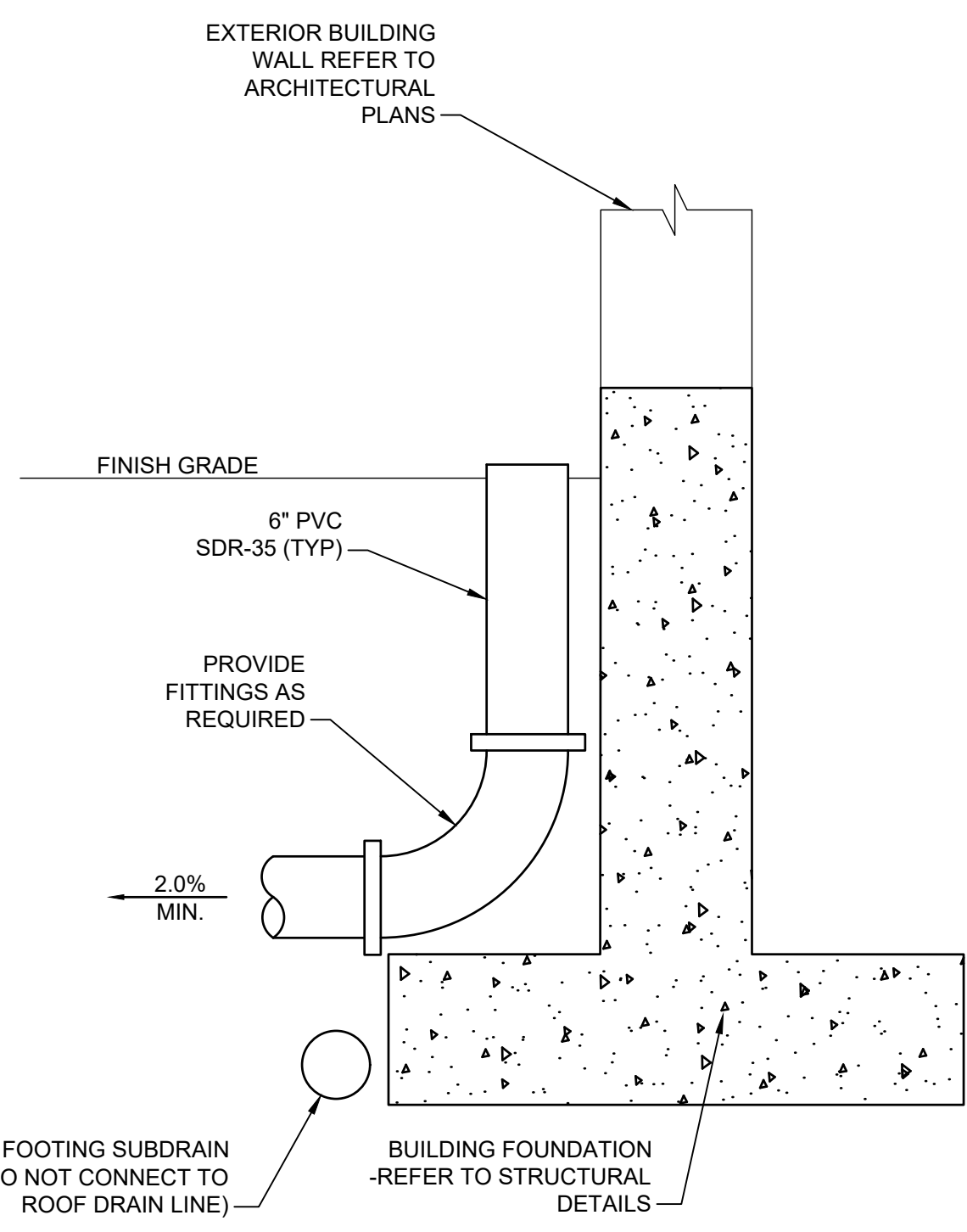
- 1. LAWN AND LANDSCAPE AREAS SHALL MEET THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT. PROPOSED LAWN AND LANDSCAPE AREAS SHALL RECEIVE TOPSOIL AMENDED WITH CEDAR GROVE FINE GRADE COMPOST OR OTHER COMPOST THAT MEETS WSDOT STANDARD SPEC 9-14.5(B) AT A RATE OF 0.01 CY PER SQUARE FOOT. SEE DETAIL FOR POST CONSTRUCTION SOIL QUALITY AND DEPTH SECTION. (C-301)
- 2. PROVIDE A MINIMUM 2 INCH LIFT OF MULCH IN ALL PLANTING AREAS FOR EROSION CONTROL.
- 3. PROPOSED LAWN AREAS SHALL RECEIVE TOPSOIL AMENDED WITH CEDAR GROVE FINE GRAVE COMPOST OR OTHER COMPOST THAT MEETS WSDOT STANDARD SPEC 9-14.5(B) AT A RATE OF 0.005 CY PER SQUARE FOOT. SEE DETAIL FOR POST CONSTRUCTION SOIL QUALITY AND DEPTH SECTION. (C-301)

TESC NOTES

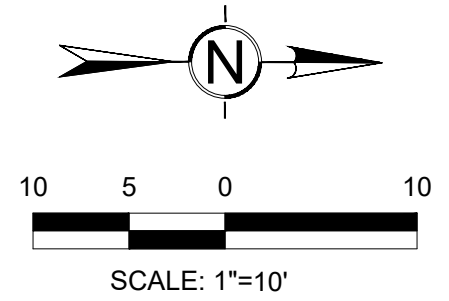
- 1. INLET PROTECTION SHALL BE PROVIDED FOR ALL CATCH BASINS WITHIN 500 FT OF THE PROJECT SITE DURING CONSTRUCTION.



FOOTING AND ROOF DRAIN SECTION SCALE: NTS 1



DOWNSPOUT CONNECTION SCALE: NTS 2



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HOUTCHENS RESIDENCE
 6024 SE 22ND ST
 MERCER ISLAND, WA 98040

REVISIONS

NO.	DESCRIPTION

DATE: 09.01.2022
 BCRA NO.: 22135
 DRAWN BY: KSS DESIGNED BY: KSS
 REVIEWED BY: JJG
 SHEET TITLE: GRADING AND DRAINAGE PLAN

STORMFILTER STEEL CATCHBASIN DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 2 CARTRIDGE CATCHBASIN HAS A MAXIMUM OF TWO CARTRIDGES. SYSTEM IS SHOWN WITH A 27" CARTRIDGE, AND IS ALSO AVAILABLE WITH AN 18" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL. PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	18" DEEP
RECOMMENDED HYDRAULIC DROP (ft)	3.05'	2.3'	3.3'
SPECIFIC FLOW RATE (gpm/ft)	2 gpm/ft 18.77 gpm/ft 1 gpm/ft	2 gpm/ft 18.77 gpm/ft 1 gpm/ft	2 gpm/ft 18.77 gpm/ft 1 gpm/ft
CARTRIDGE FLOW RATE (gpm)	22.5 18.79 11.25	15 12.53 7.5	15 12.53 7.5
PEAK HYDRAULIC CAPACITY	1.0	1.0	1.8
INLET PERMANENT POOL LEVEL (ft)	1'-0"	1'-0"	2'-0"
OVERALL STRUCTURE HEIGHT (ft)	4'-0"	3'-0"	4'-0"

* 1.67 gpm/ft SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. WWW.CONTECHES.COM
- STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
- MANUFACTURER TO APPLY A SURFACE BEAD WELD IN THE SHAPE OF THE LETTER "O" ABOVE THE OUTLET PIPE STUB ON THE EXTERIOR SURFACE OF THE STEEL SFCB.
- STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.
- STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M308 LOAD RATING. TO MEET H20 LOAD RATING ON STRUCTURE, A CONCRETE COLLAR WITH #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.
- FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
- SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

2-CARTRIDGE DEEP CATCHBASIN STORMFILTER DATA

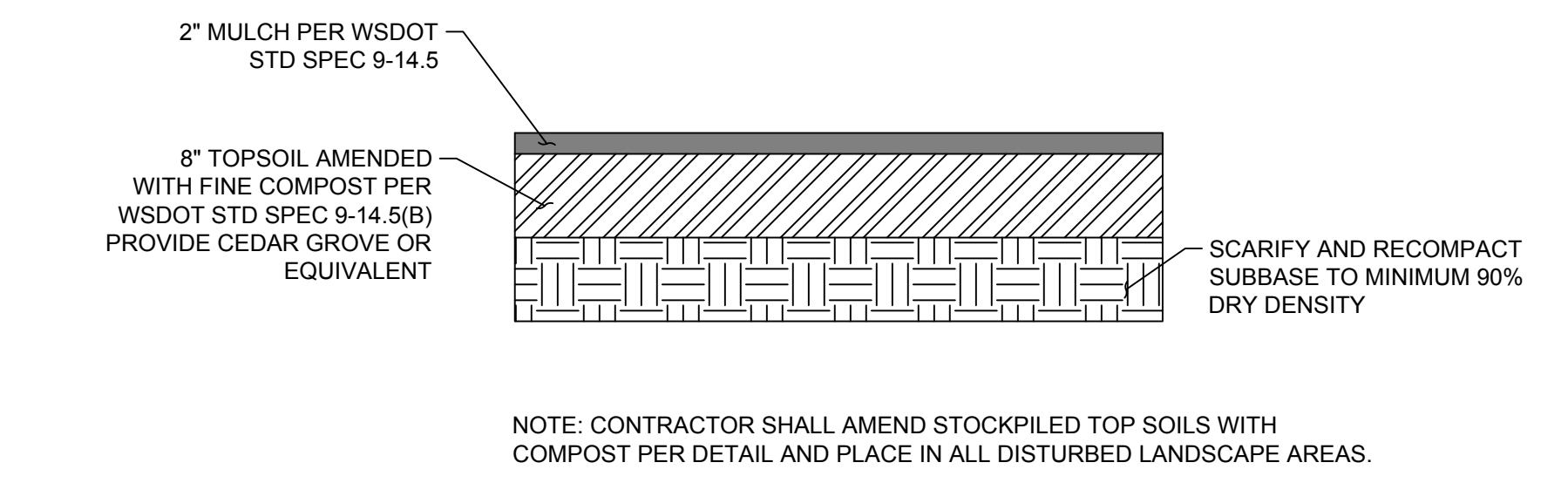
STRUCTURE ID	XXX
WATER QUALITY FLOW RATE (cfs)	XXX
PEAK FLOW RATE (<1.8 cfs)	XXX
RETURN PERIOD OF PEAK FLOW (yrs)	XXX
CARTRIDGE FLOW RATE (gpm)	XX
MEDIA TYPE (PERLITE, ZPG, PSORB)	XXXXX
RIM ELEVATION	XXX.XX'

PIPE DATA: I.E. DIAMETER
 INLET STUB: XXX.XX' XX"
 OUTLET STUB: XXX.XX' XX"

CONFIGURATIONS
 OUTLET INLET
 INLET INLET

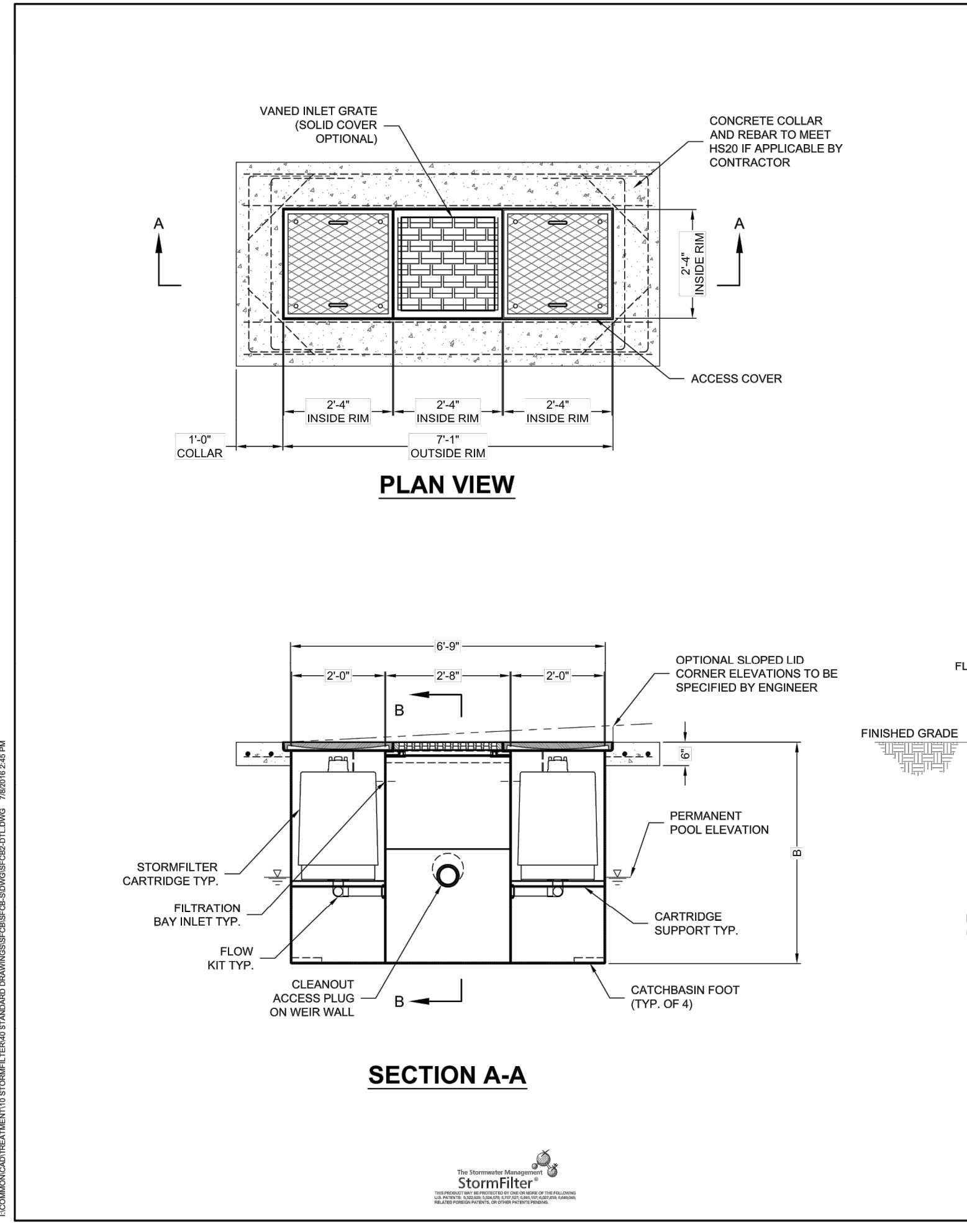
SLOPED LID: YES/NO
 SOLID COVER: YES/NO
 NOTES/SPECIAL REQUIREMENTS:

CONTECH ENGINEERED SOLUTIONS LLC
 www.contechES.com
 9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
 800-528-3999 513-645-7000 513-645-7993 FAX

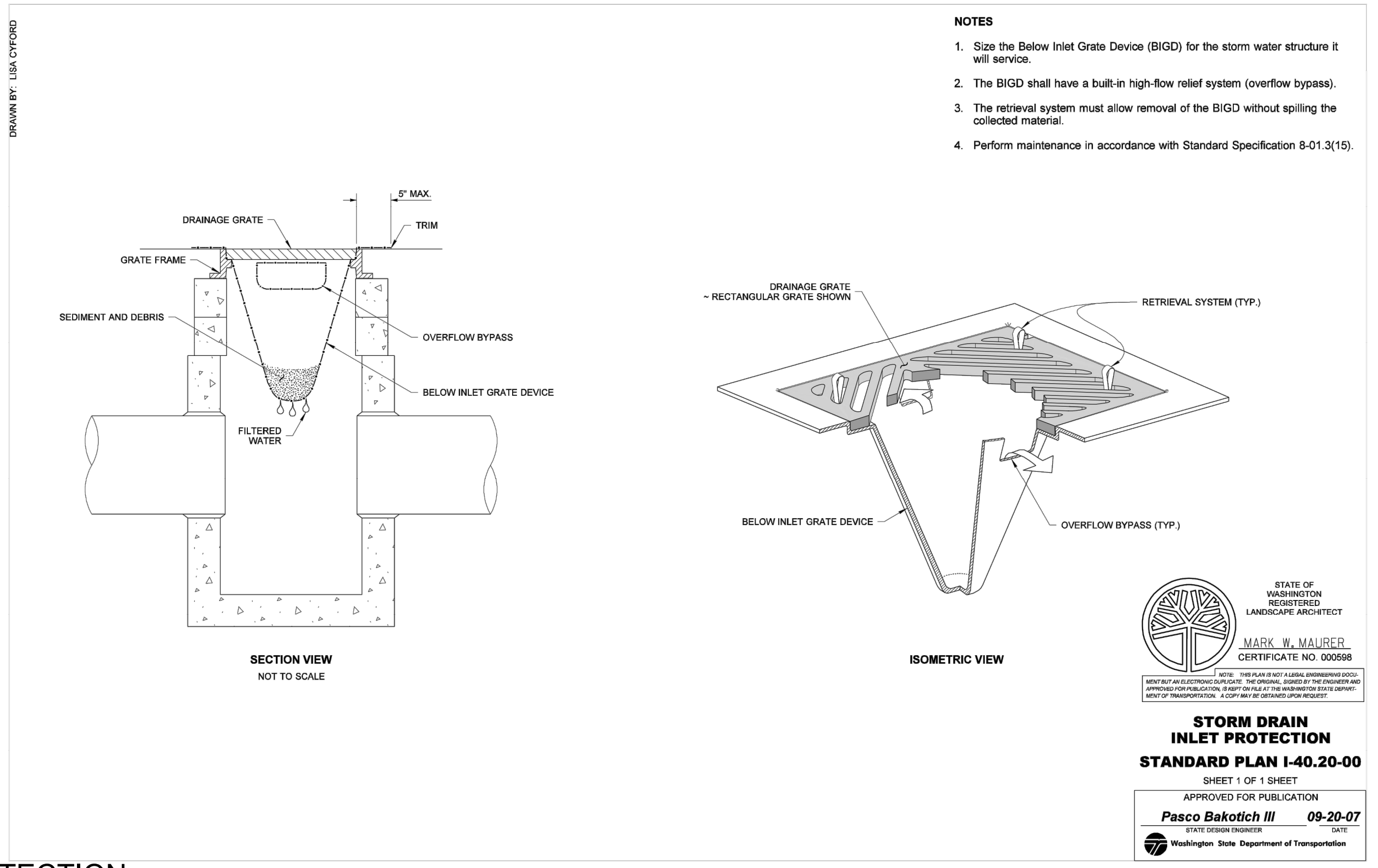


NOTE: CONTRACTOR SHALL AMEND STOCKPILED TOP SOILS WITH COMPOST PER DETAIL AND PLACE IN ALL DISTURBED LANDSCAPE AREAS.

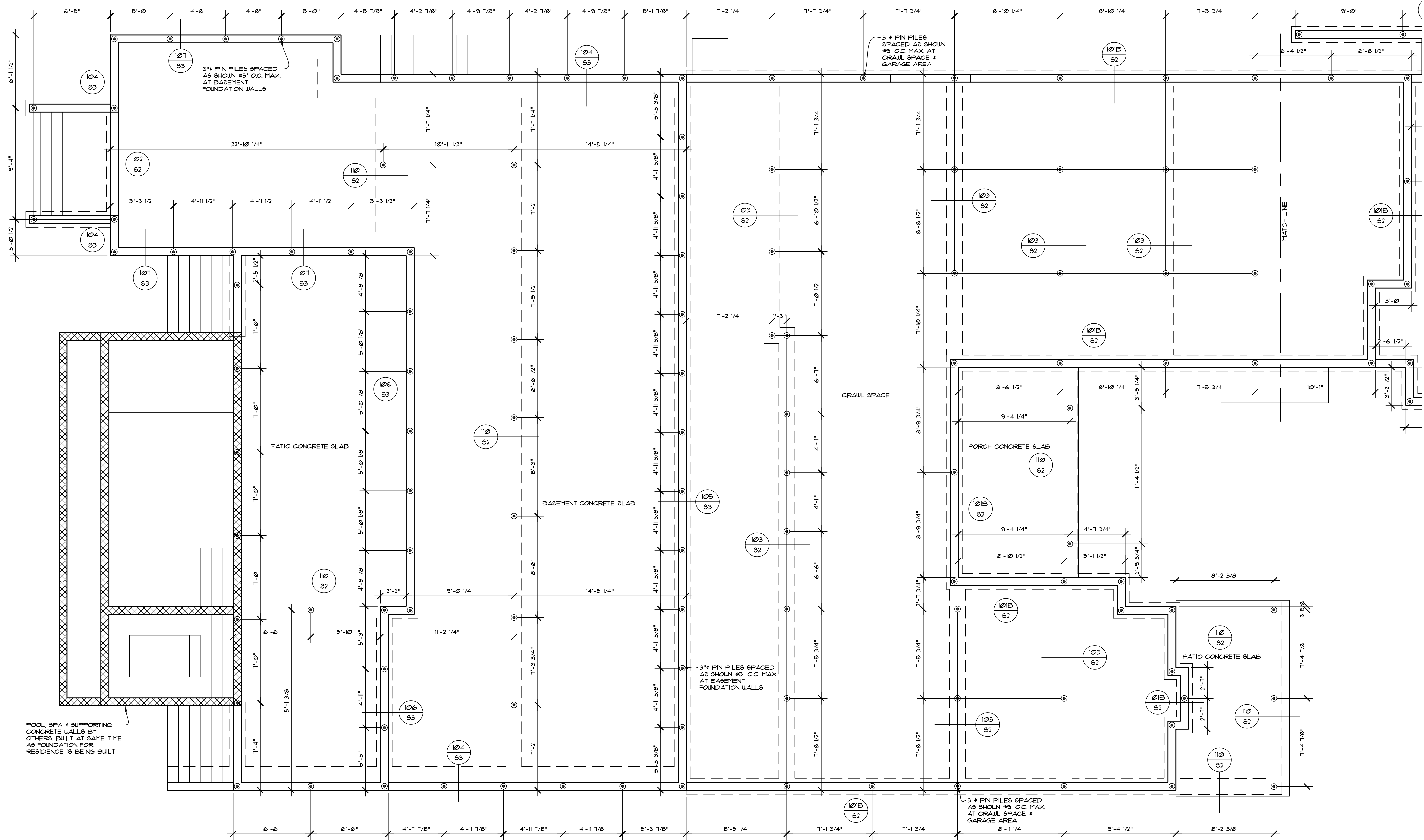
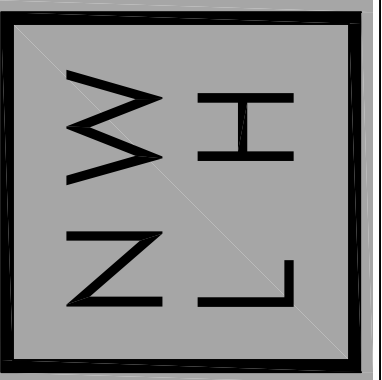
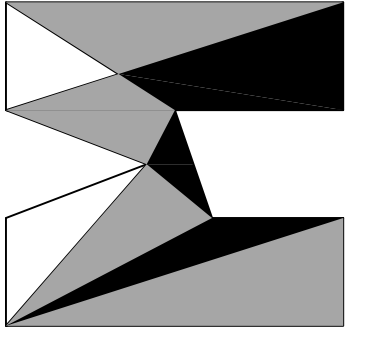
POST CONSTRUCTION SOIL QUALITY AND DEPTH SCALE: NTS 5



CATCHBASIN STORMFILTER SCALE: NTS 3

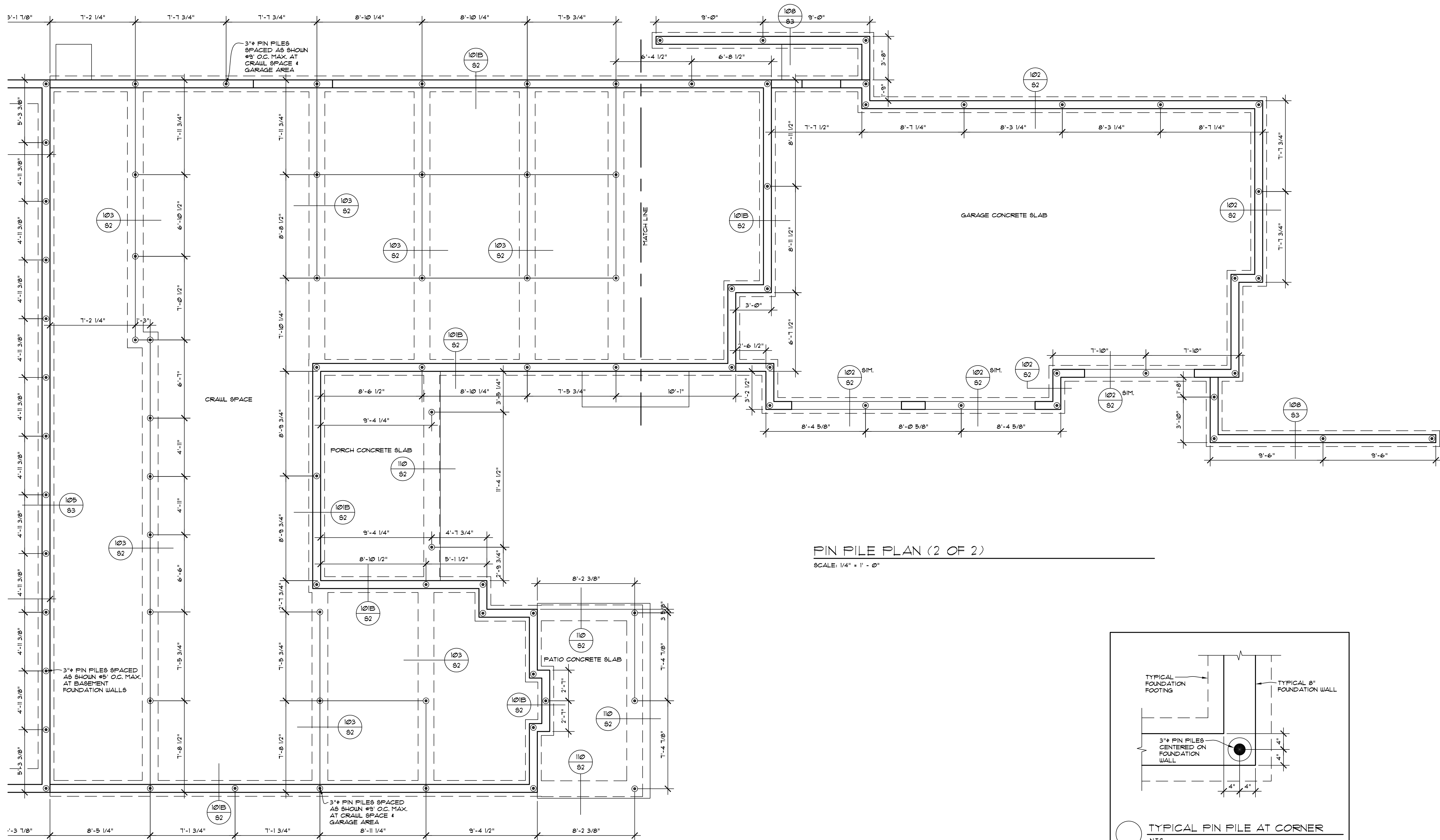


INLET PROTECTION SCALE: NTS 4

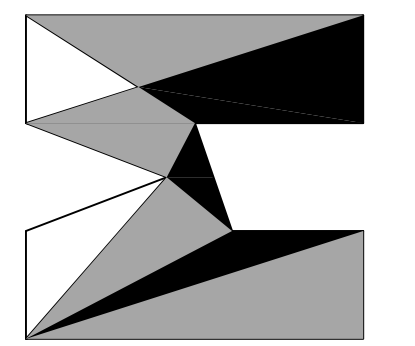
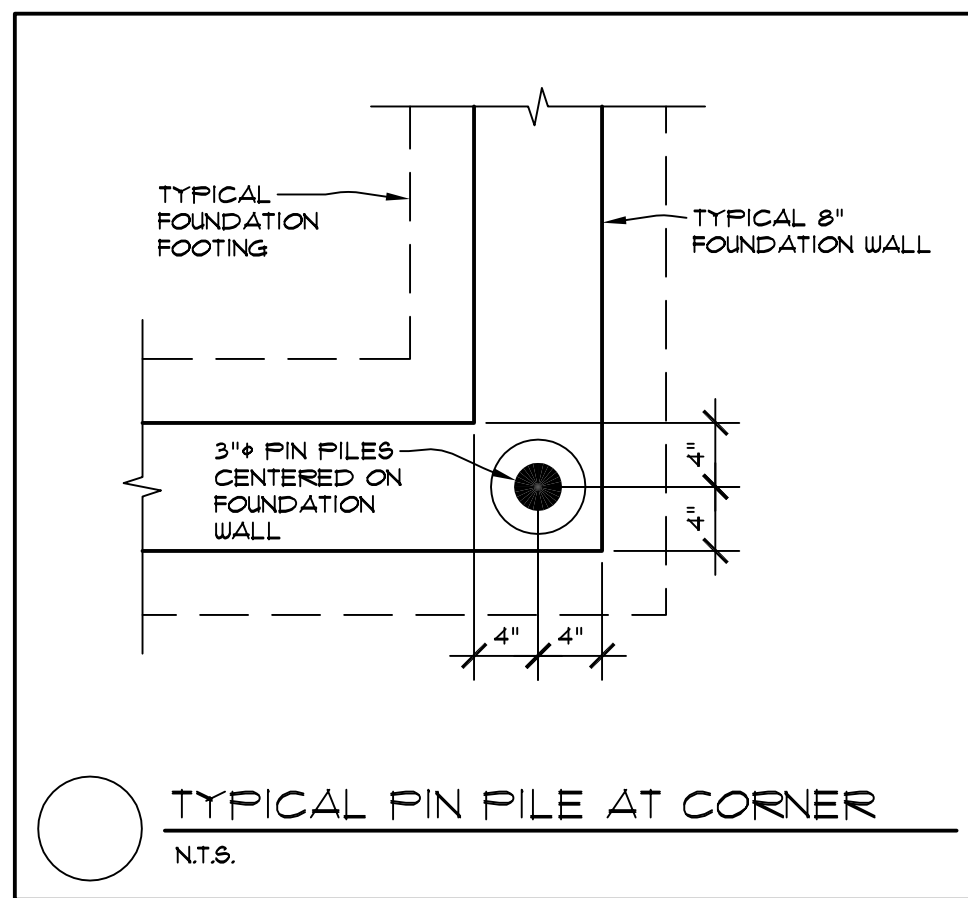


PIN PILE PLAN (1 OF 2)

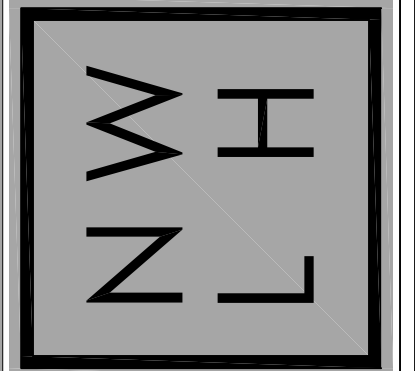
SCALE: 1/4" = 1' - 0"



PIN PILE PLAN (2 OF 2)
SCALE: 1/4" = 1' - 0"



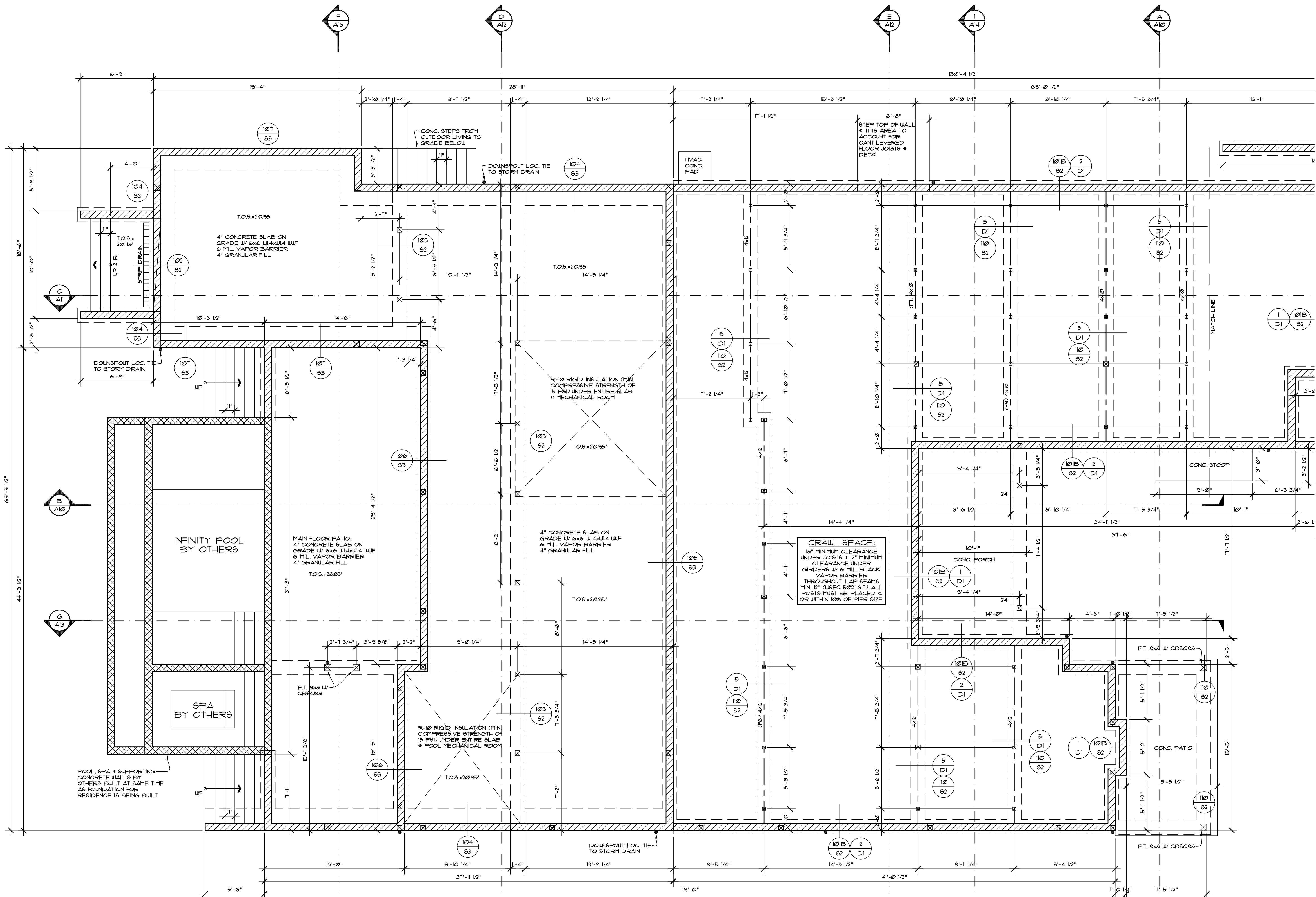
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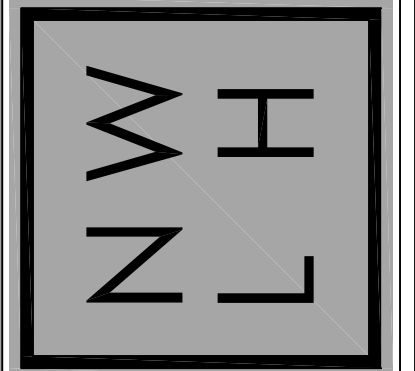
CRAWL VENTILATION CALCULATION
 CRAWL SPACE UNDER FLOOR AREA TO REQUIRE VENTING = 2454 SF.
 PROVIDE 10 CFM PER 50 SF. OF MECHANICAL VENTILATION
 2454 / 50 = 49.1
 PROVIDE MINIMUM 50 CFM CONTINUOUS MECHANICAL VENTING

PARTIAL FOUNDATION PLAN (1 OF 2)

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

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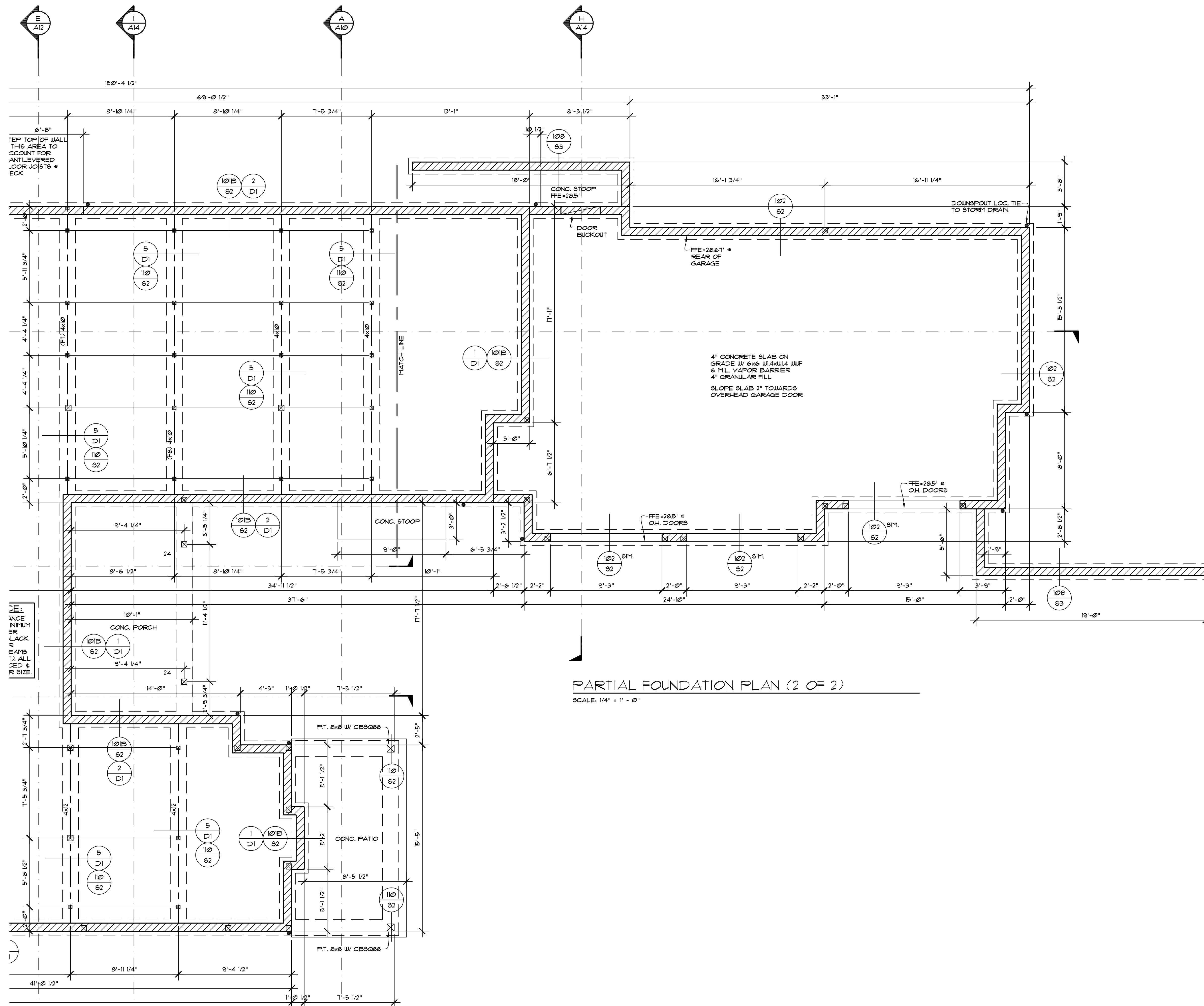
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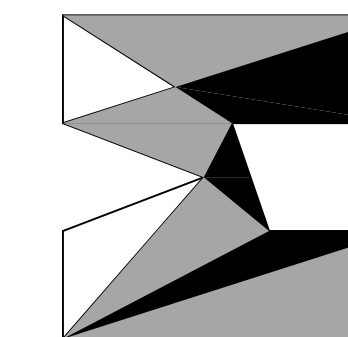
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PARTIAL FOUNDATION PLAN (2 OF 2)

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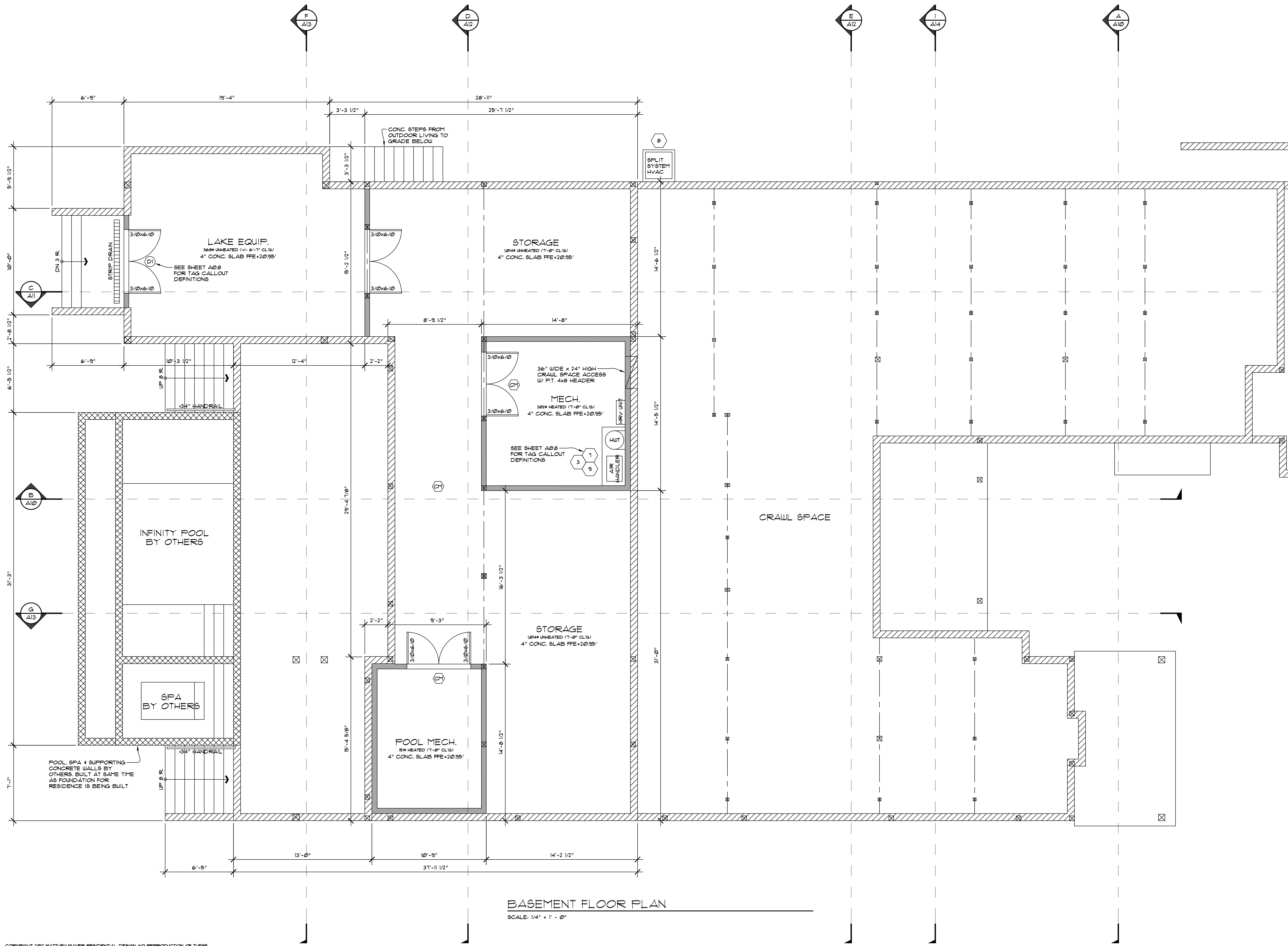
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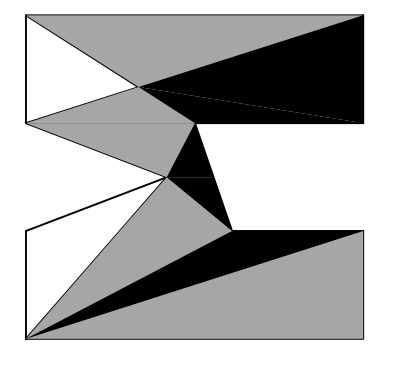
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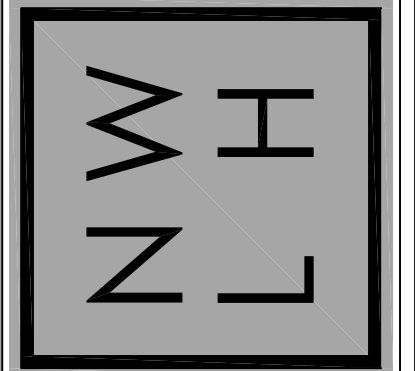


BASEMENT FLOOR PLAN
SCALE: 1/4" = 1' - 0"

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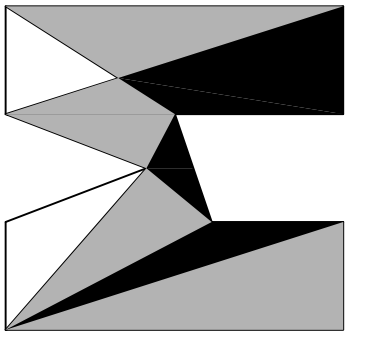
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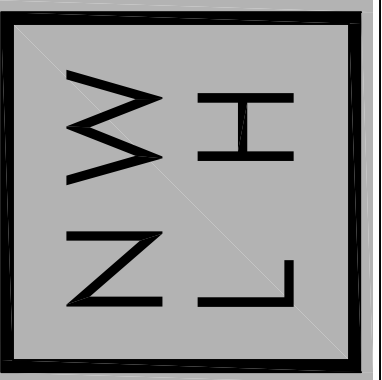
NOTE:
ALL TJ'S TO HAVE A TJ-PRO RATING OF 50

MAIN FLOOR FRAMING PLAN

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



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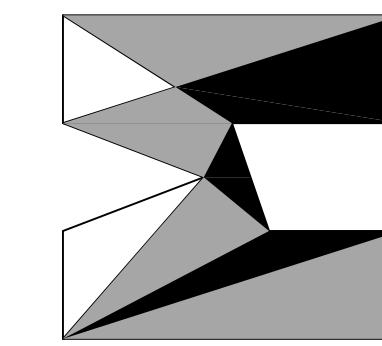


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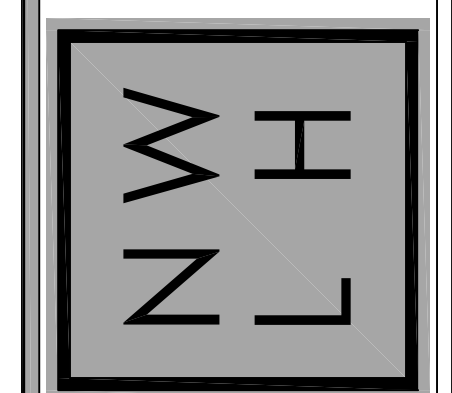
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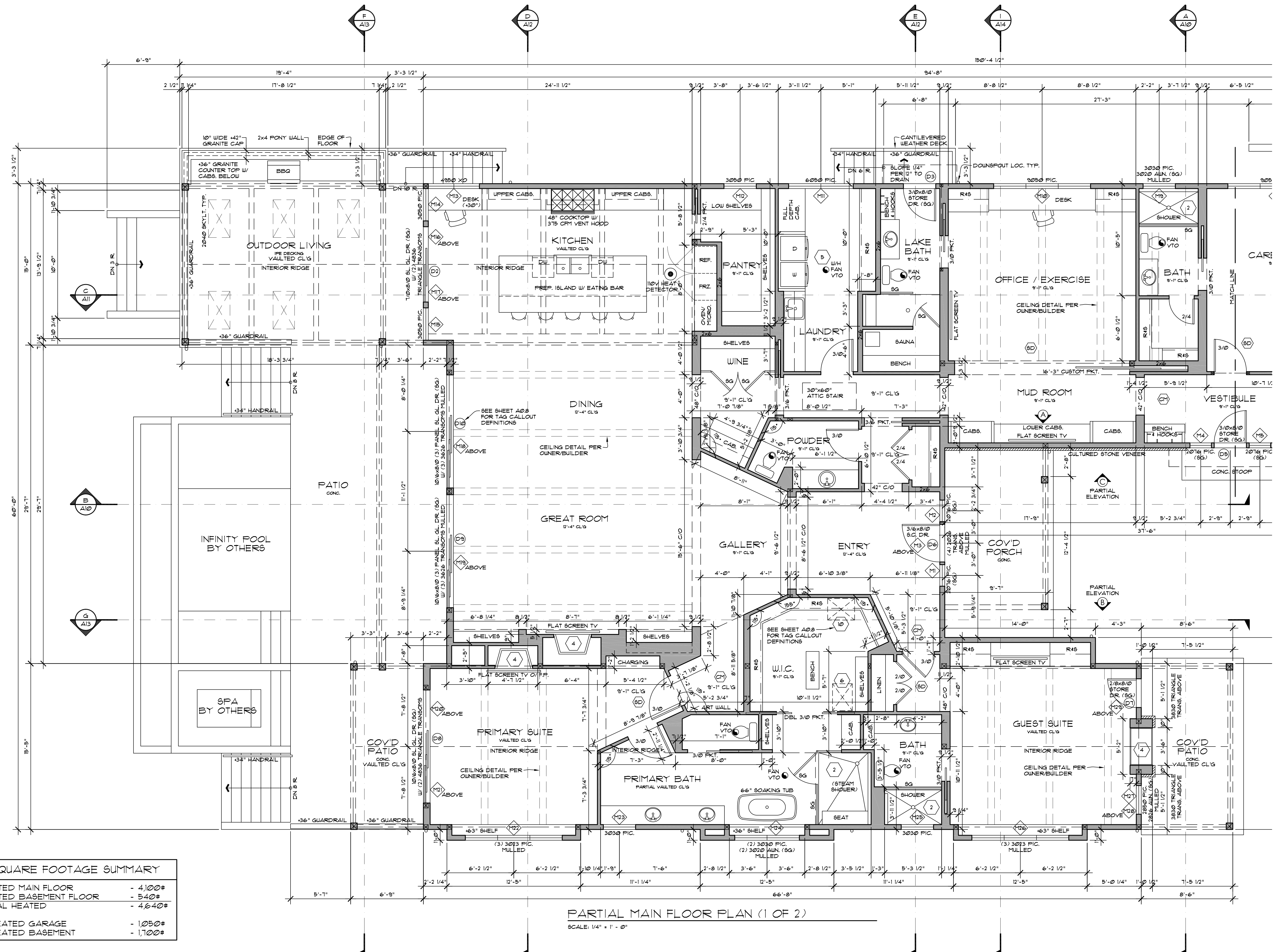
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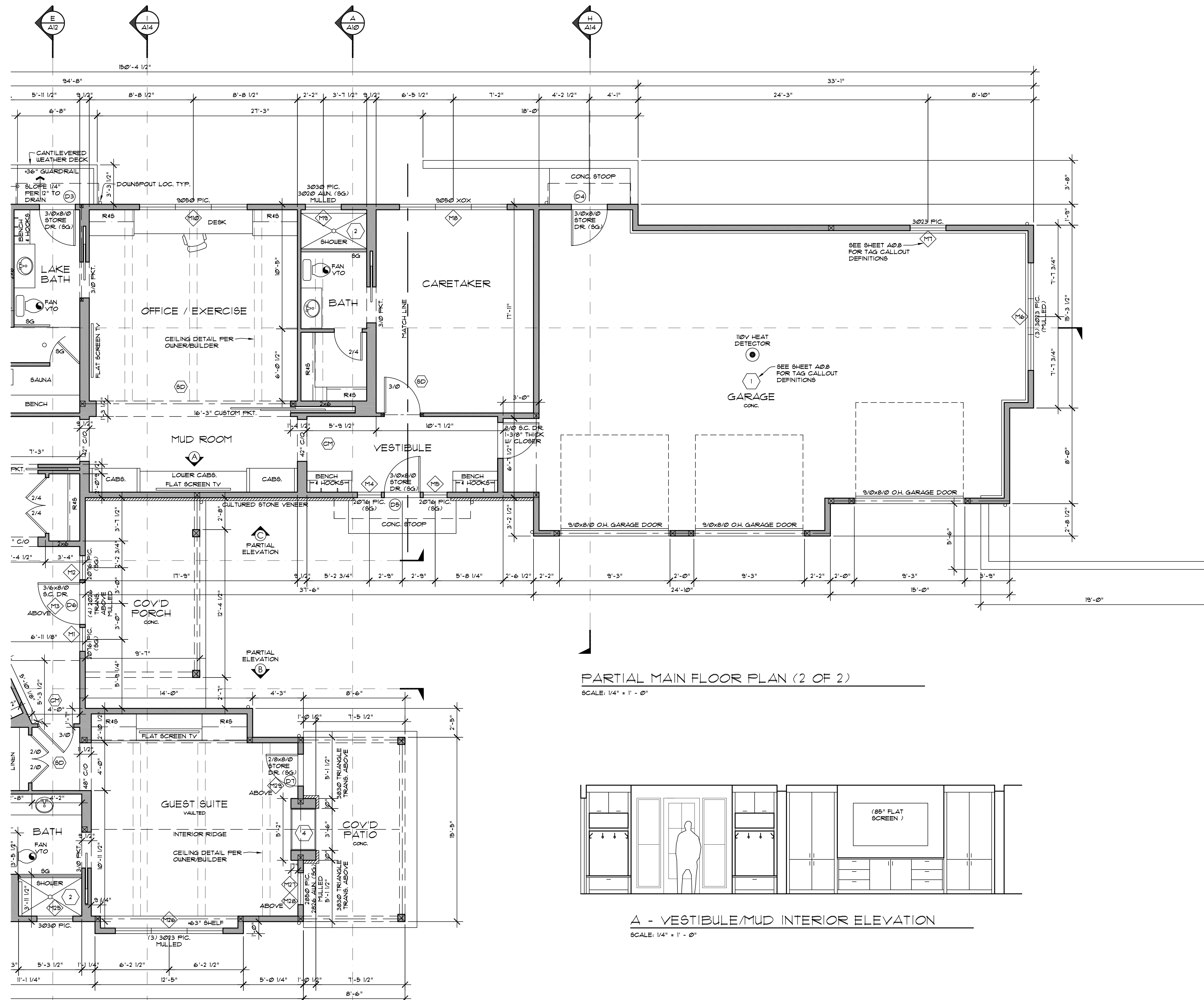
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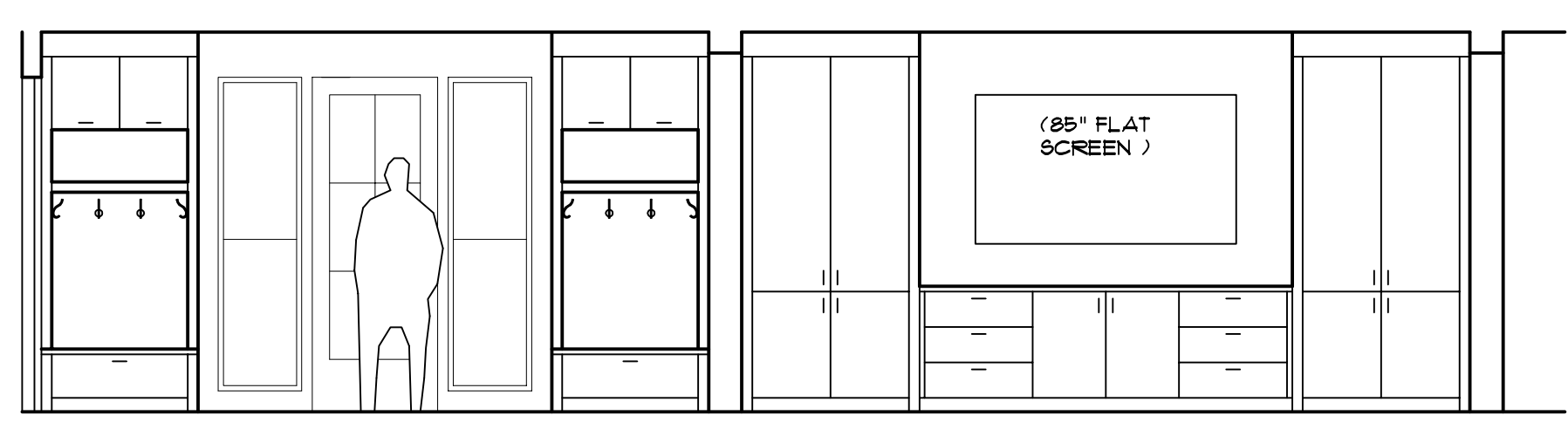


SQUARE FOOTAGE SUMMARY	
HEATED MAIN FLOOR	- 4,100#
HEATED BASEMENT FLOOR	- 540#
TOTAL HEATED	- 4,640#
UNHEATED GARAGE	- 1,050#
UNHEATED BASEMENT	- 1,100#

PARTIAL MAIN FLOOR PLAN (1 OF 2)
SCALE: 1/4" = 1' - 0"



PARTIAL MAIN FLOOR PLAN (2 OF 2)
 SCALE: 1/4" = 1' - 0"



A - VESTIBULE/MUD INTERIOR ELEVATION
 SCALE: 1/4" = 1' - 0"

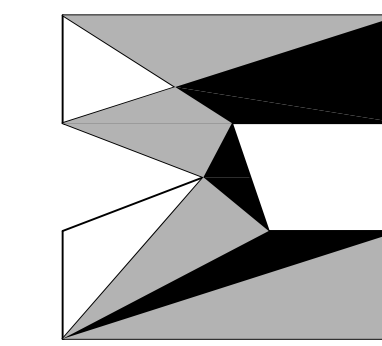
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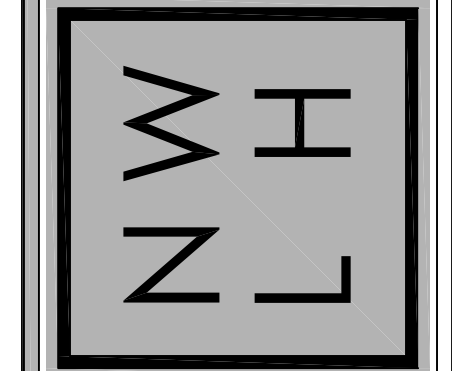
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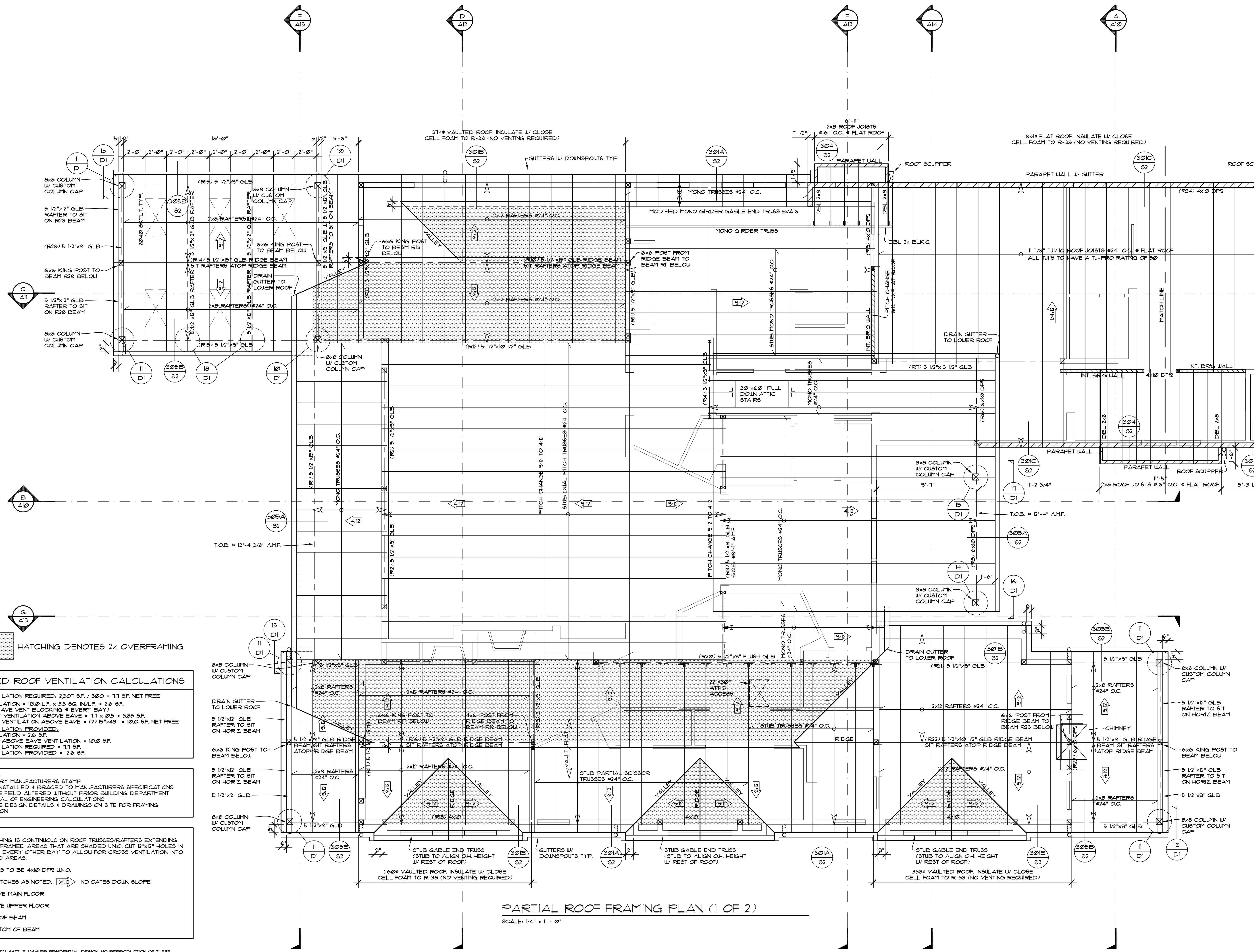
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PITCHED ROOF VENTILATION CALCULATIONS

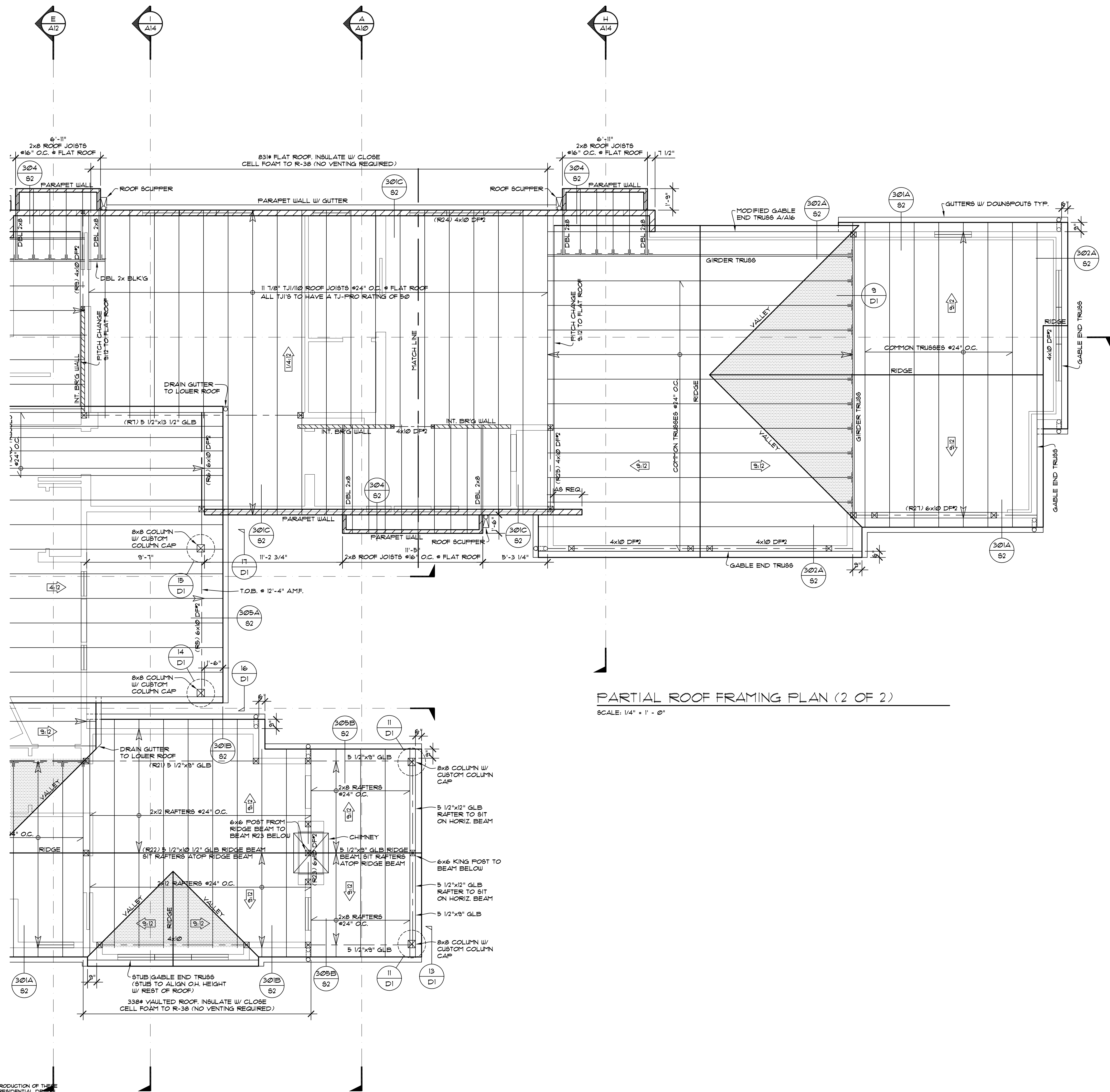
TOTAL VENTILATION REQUIRED: 2,301 SF. / 300 = 1.1 SF. NET FREE
 EAVE VENTILATION = 19.0 L.F. x 3.3 SQ. IN/L.F. = 2.6 SF.
 (PROVIDE EAVE VENT BLOCKING @ EVERY BAY)
 MIN. 50% BY VENTILATION ABOVE EAVE = 1.1 x 2.5 = 3.05 SF.
 GABLE END VENTILATION ABOVE EAVE = (2) 15'x48" = 10.0 SF. NET FREE
 TOTAL VENTILATION PROVIDED:
 EAVE VENTILATION = 2.6 SF.
 GABLE END ABOVE EAVE VENTILATION = 10.0 SF.
 TOTAL VENTILATION REQUIRED = 1.1 SF.
 TOTAL VENTILATION PROVIDED = 12.6 SF.

ALL TRUSSES:
 - SHALL CARRY MANUFACTURERS STAMP
 - SHALL BE INSTALLED & BRACED TO MANUFACTURERS SPECIFICATIONS
 - WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL OF ENGINEERING CALCULATIONS
 - SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION

NOTE:
 ROOF SHEATHING IS CONTINUOUS ON ROOF TRUSSES/RAFTERS EXTENDING UNDER OVERFRAMED AREAS THAT ARE SHADED UNO. CUT 12"x12" HOLES IN SHEATHING @ EVERY OTHER BAY TO ALLOW FOR CROSS VENTILATION INTO OVERFRAMED AREAS.
 ALL HEADERS TO BE 4x10 DFP2 UNO.
 ALL ROOF PITCHES AS NOTED. [X/12] INDICATES DOWN SLOPE
 AMF. = ABOVE MAIN FLOOR
 AUF. = ABOVE UPPER FLOOR
 T.O.B. = TOP OF BEAM
 B.O.B. = BOTTOM OF BEAM

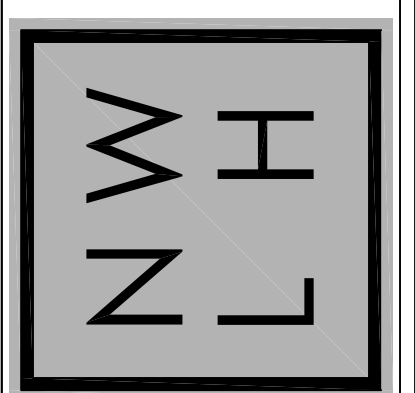
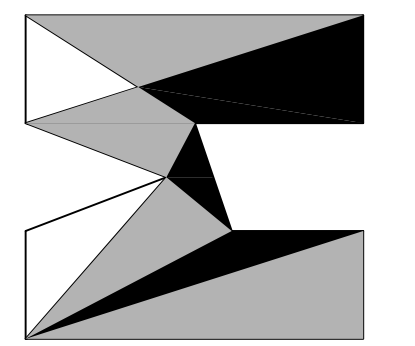
PARTIAL ROOF FRAMING PLAN (1 OF 2)
 SCALE: 1/4" = 1' - 0"

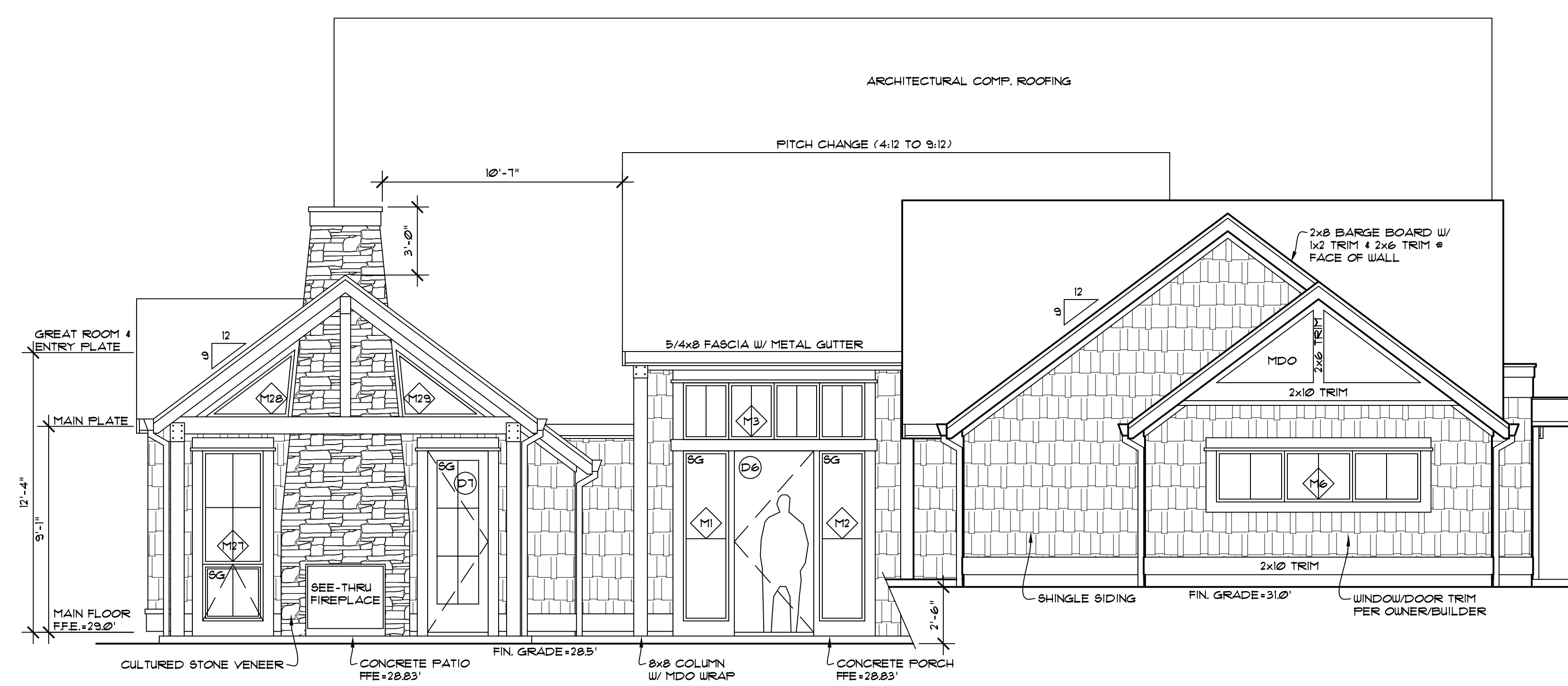
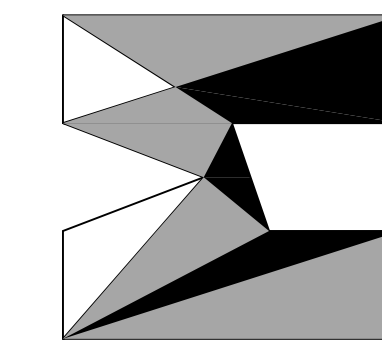
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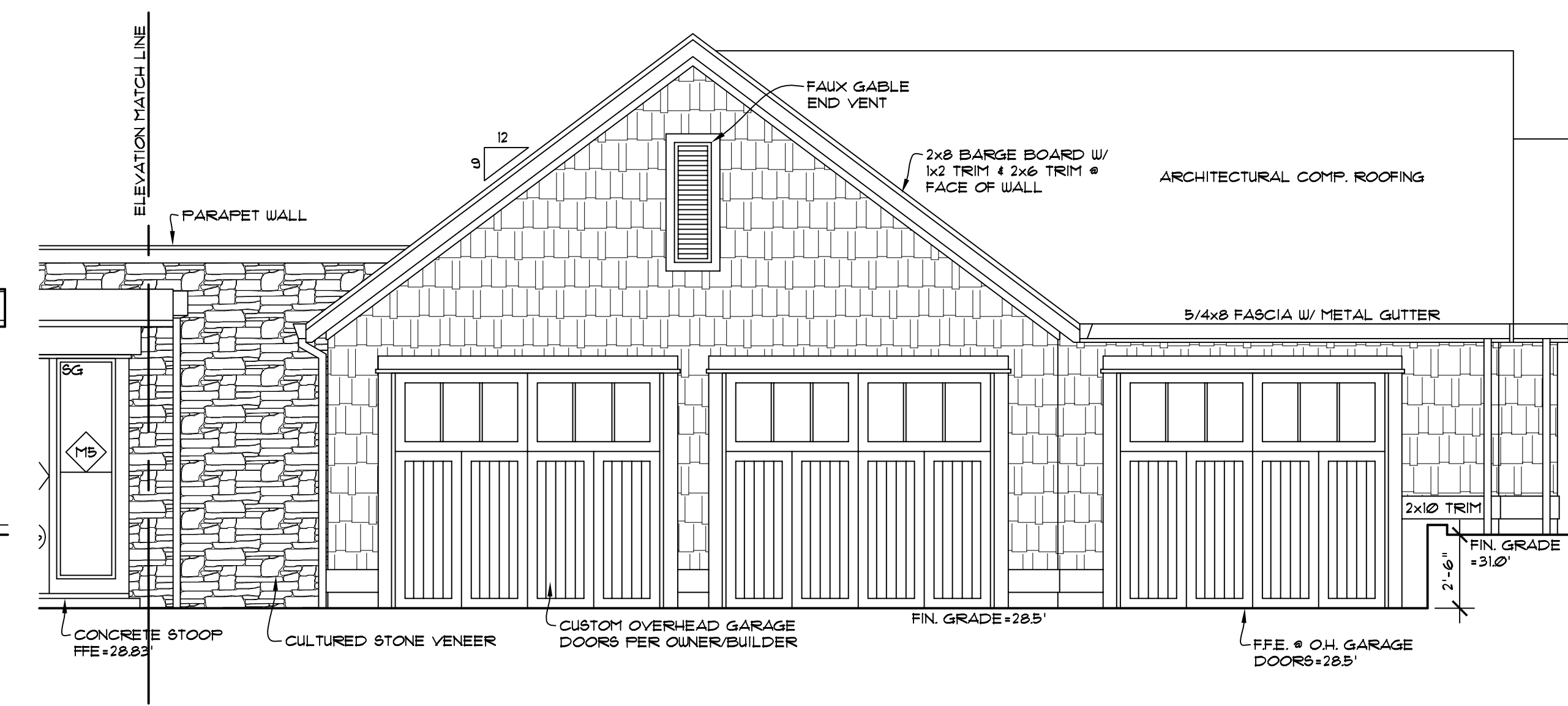
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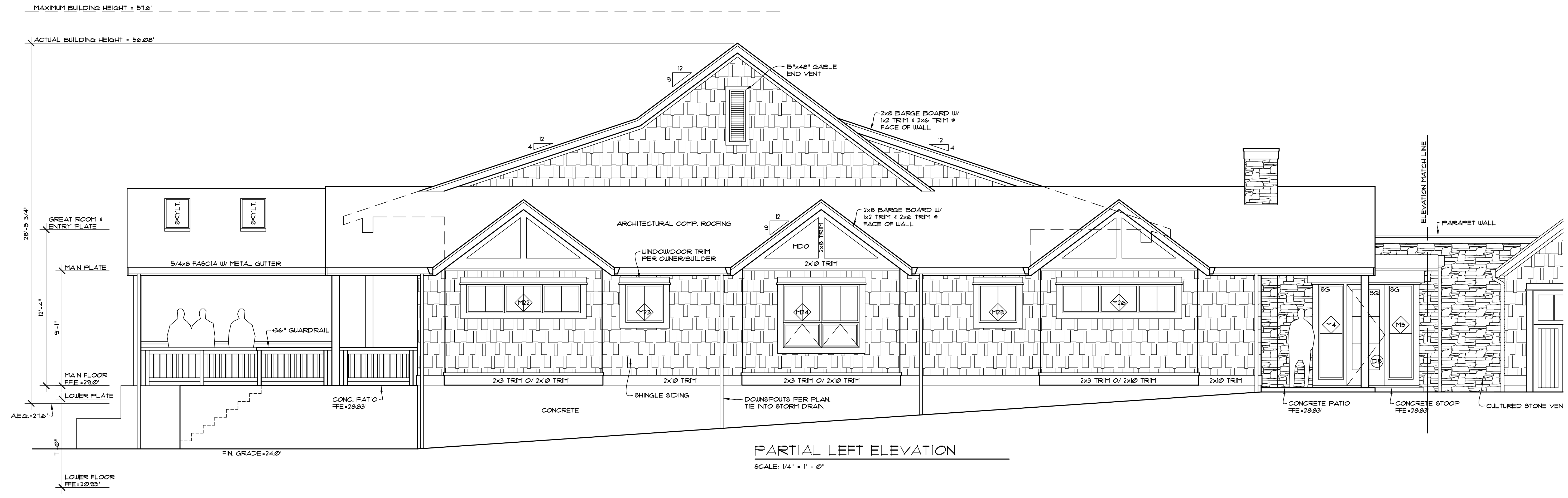




FRONT ELEVATION
SCALE: 1/4" = 1' - 0"

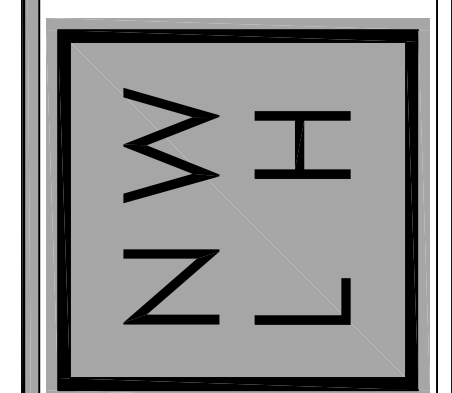


PARTIAL LEFT ELEVATION
SCALE: 1/4" = 1' - 0"



PARTIAL LEFT ELEVATION
SCALE: 1/4" = 1' - 0"

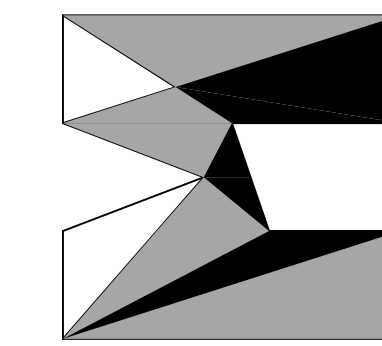
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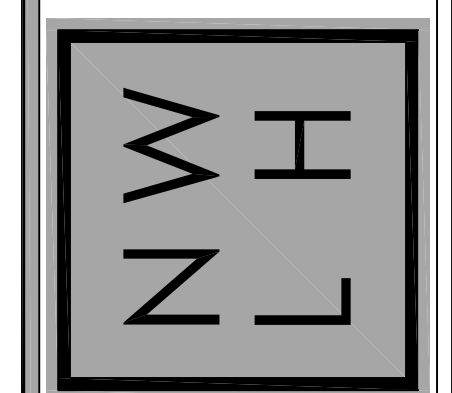
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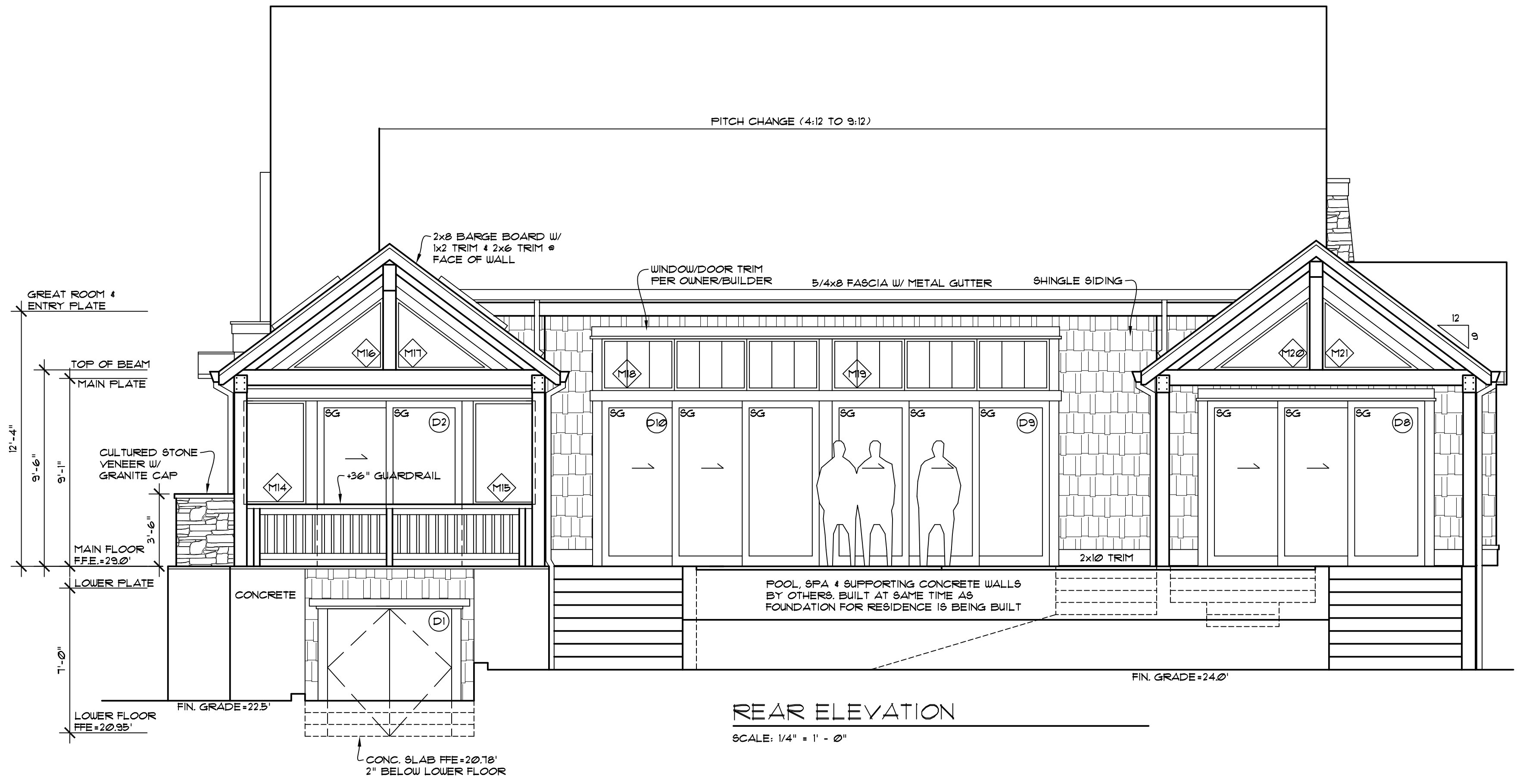
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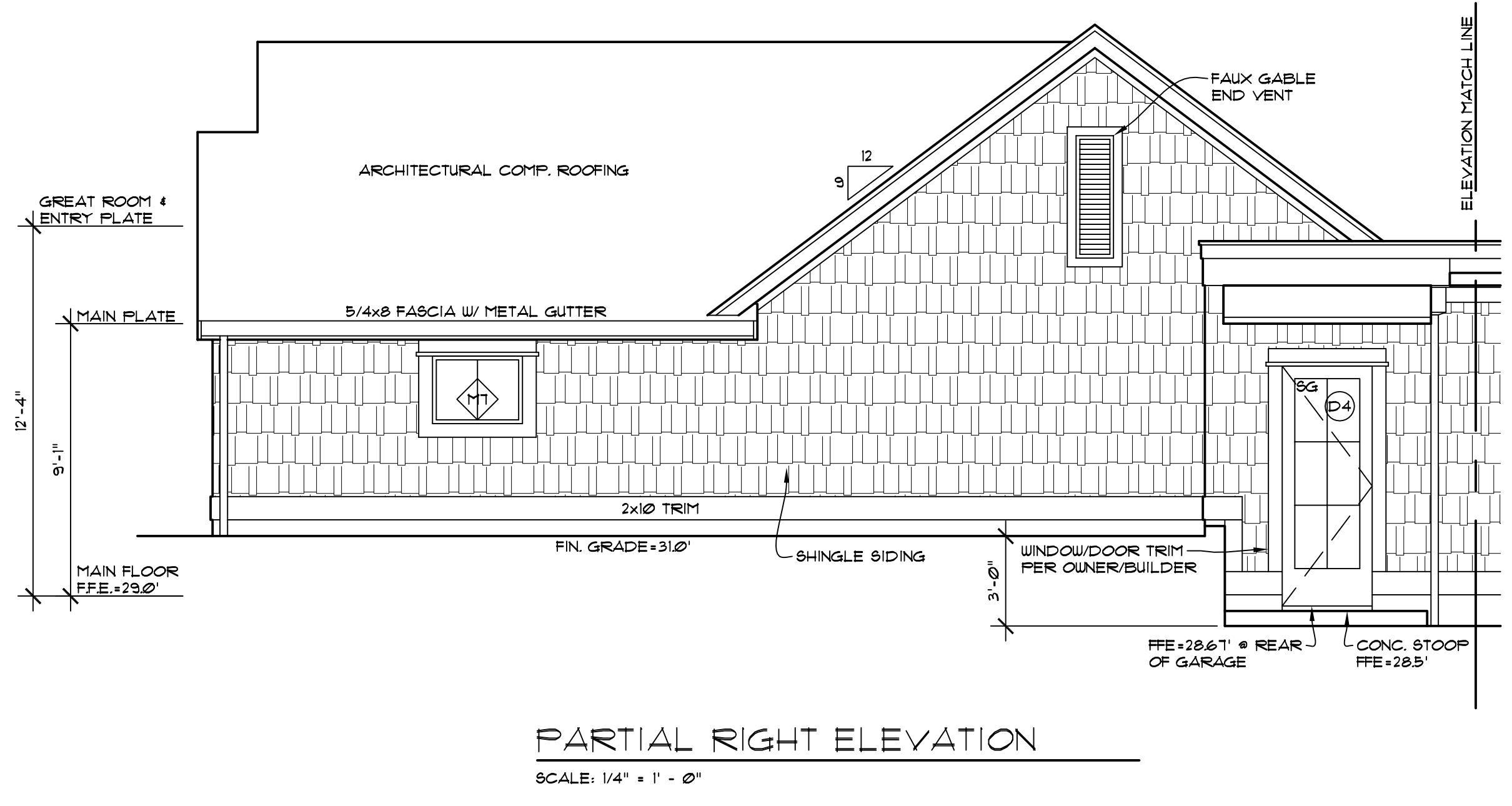
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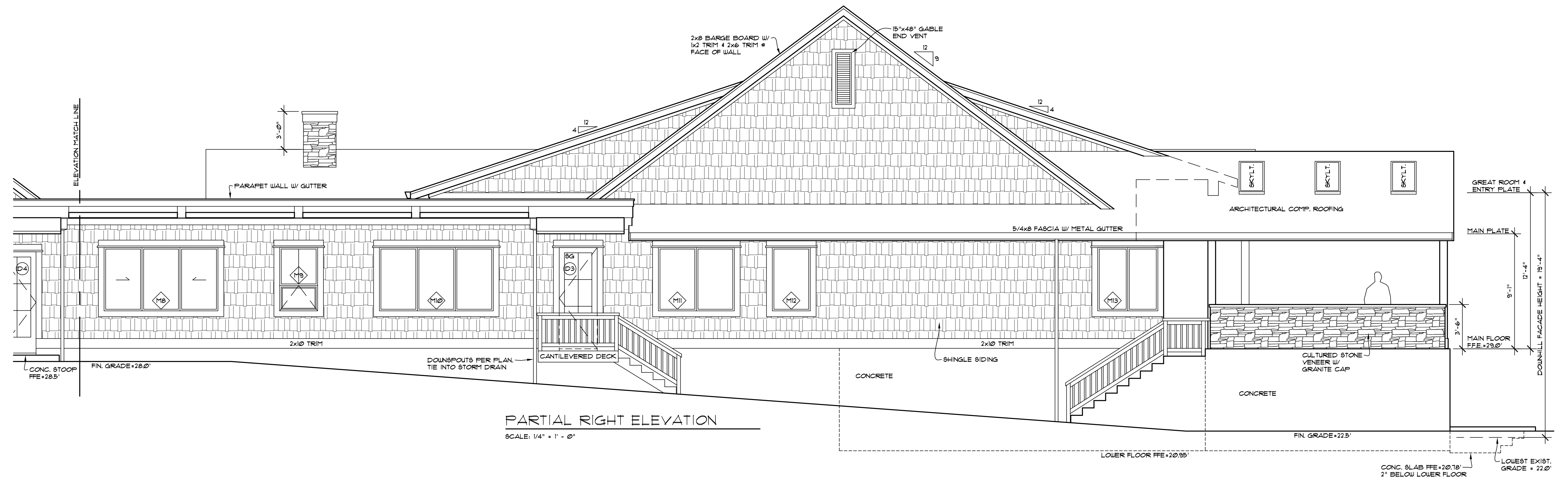
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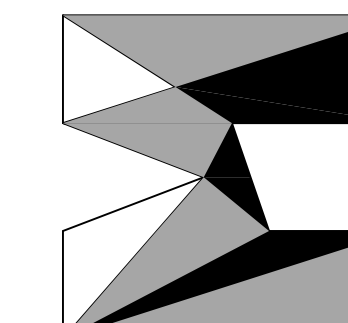
REAR ELEVATION
SCALE: 1/4" = 1' - 0"



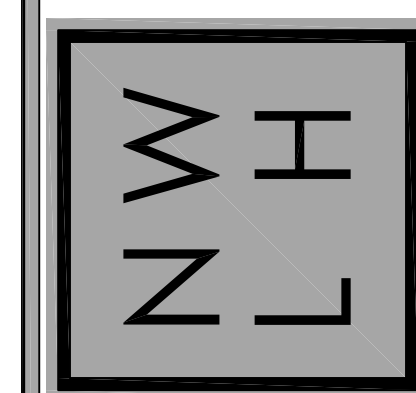
PARTIAL RIGHT ELEVATION
SCALE: 1/4" = 1' - 0"



PARTIAL RIGHT ELEVATION
SCALE: 1/4" = 1' - 0"



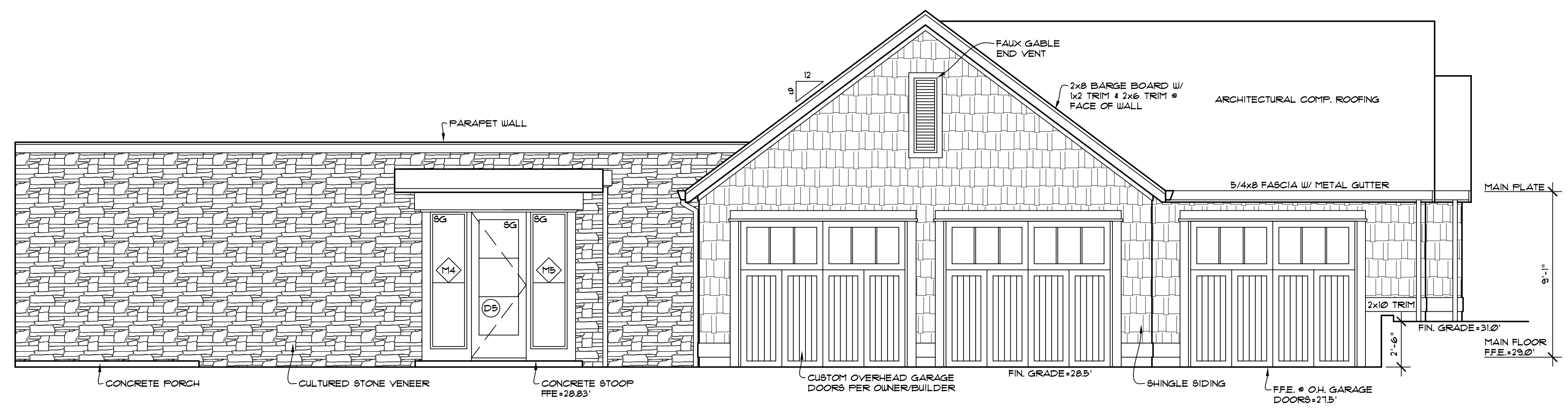
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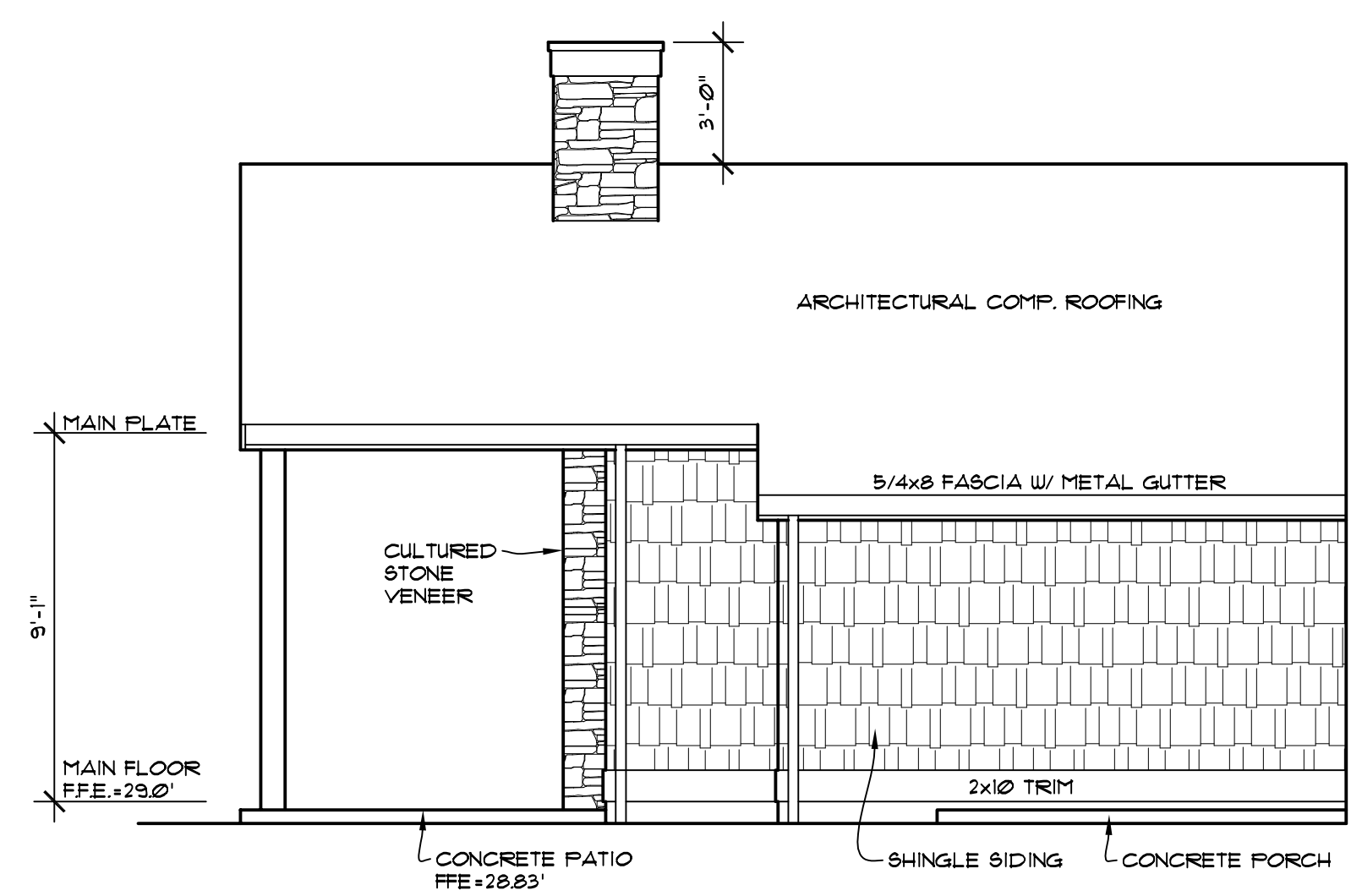
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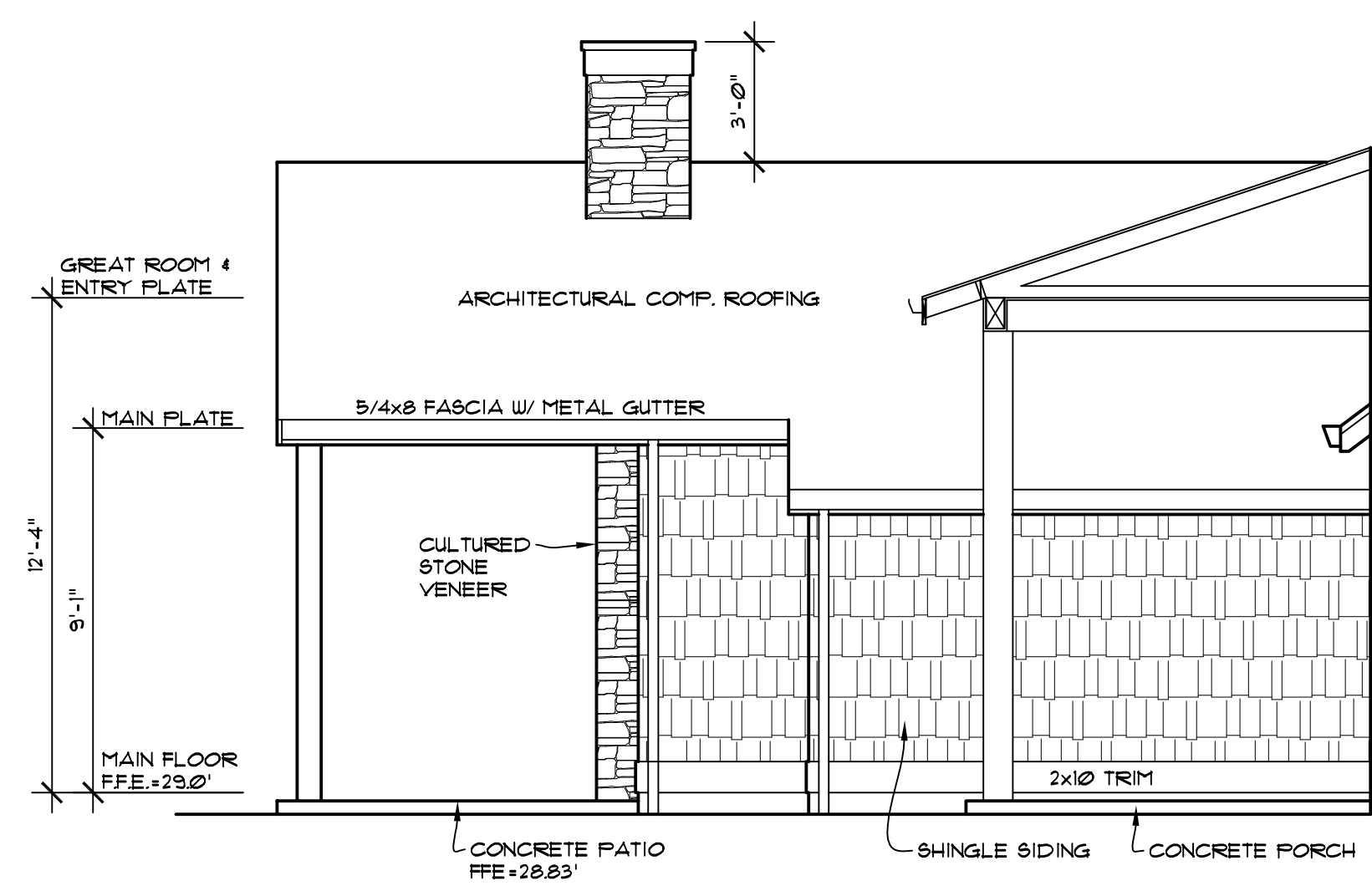
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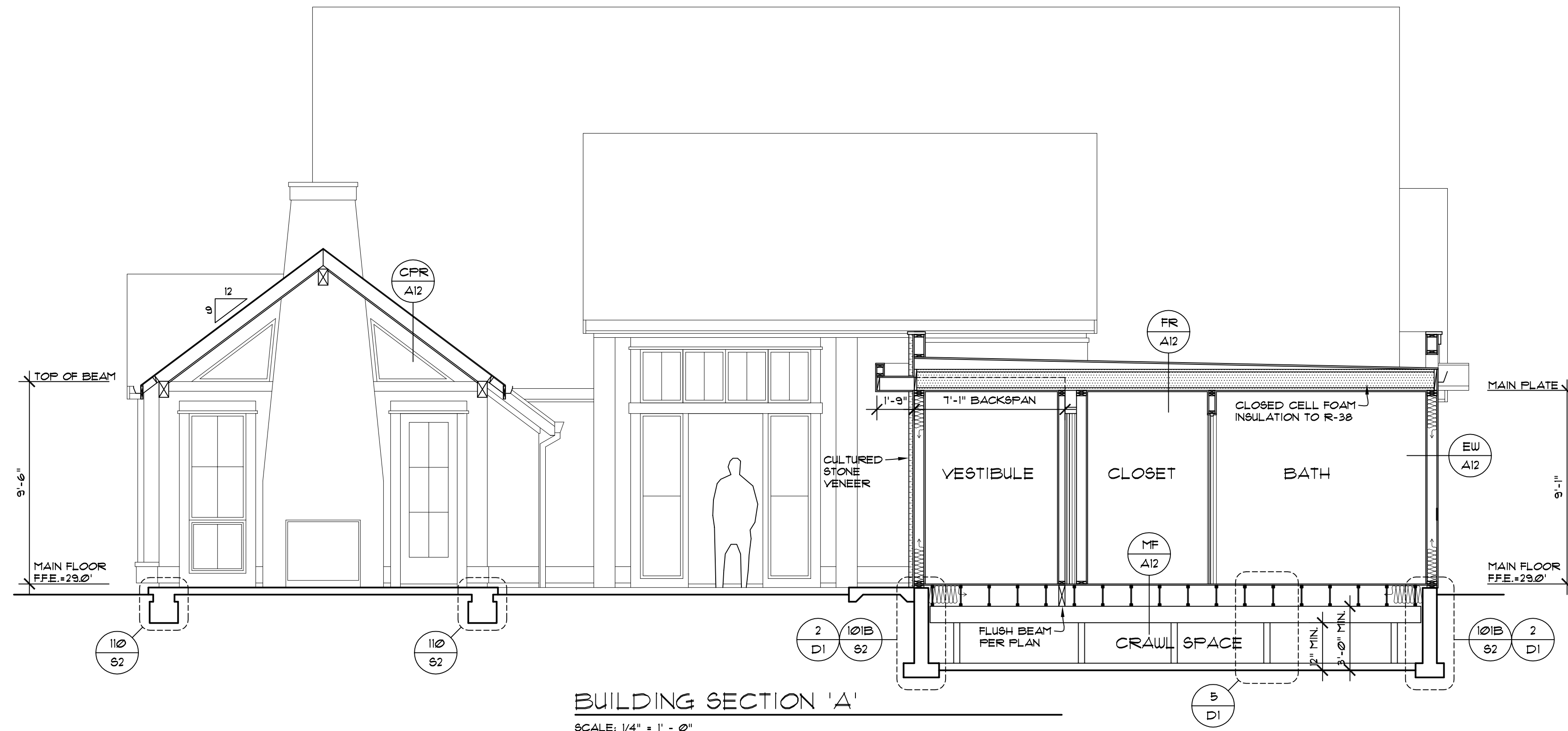
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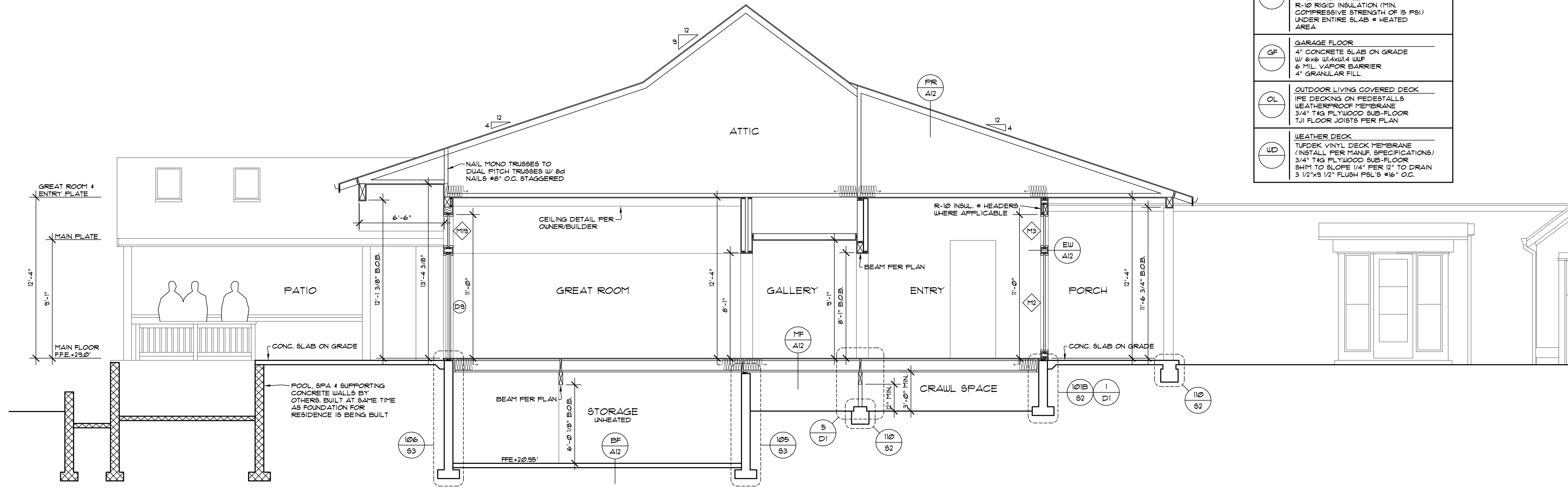
PARTIAL RIGHT ELEVATION 'B'
SCALE: 1/4" = 1' - 0"



PARTIAL RIGHT ELEVATION 'B'
W/ PORCH SECTION
SCALE: 1/4" = 1' - 0"



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

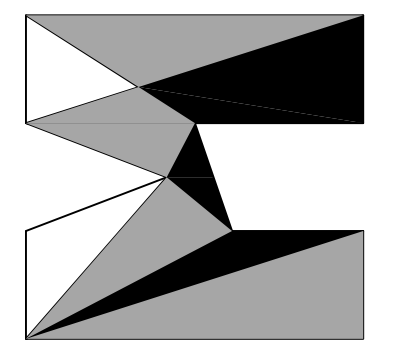


BUILDING SECTION 'B'
SCALE: 1/4" = 1' - 0"

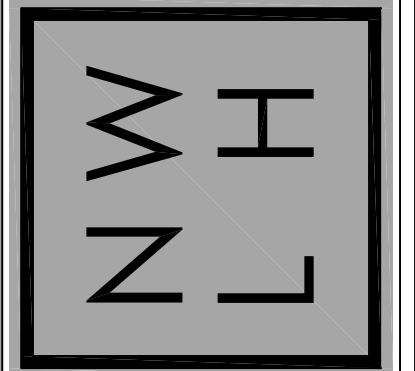
FR	FLAT ROOF GARLISLE SYNTEC SURE-TOUGH 60 MIL. POLYESTER-REINFORCED EPDM ROOF MEMBRANE SHEATHING PER STRUCTURAL ENGINEER 2x SHIM TO SLOPE 1/4" / 12" TO DRAIN TJI ROOF JOISTS PER PLAN R-38 INSUL. @ SINGLE RAFTER ROOF 4 MIL. UV. POLY. 5/8" GUB.
FR	FITCHED ROOF ROOFING PER ELEVATIONS 30# BUILDING PAPER SHEATHING PER STRUCTURAL ENGINEER TRUSSES OR 2x RAFTERS PER PLAN R-49 BATT. INSUL. @ TRUSSED ROOF R-38 BATT. INSUL. OR R-38 CLOSED CELL FOAM INSUL. @ SINGLE RAFTER ROOF 4 MIL. UV. POLY. 5/8" GUB.
CFR	COVERED PATIO ROOF ROOFING PER ELEVATION 30# BUILDING PAPER SHEATHING PER STRUCTURAL ENGINEER 2x8 RAFTERS @24" O.C. 1/8" T&G CEILING SHEATHING OR EQ.
EW	EXTERIOR CONDITIONED WALL 1/2" GUB. R-21 BATT INSULATION 4 MIL UV RES. POLY 2x6 STUDS @ 16" O.C. SHEATHING PER SHEAR WALL SCHED. BUILDING PAPER SIDING PER ELEVATIONS
GW	EXTERIOR GARAGE WALL 1/2" GUB. 4 MIL UV RES. POLY 2x6 STUDS @ 16" O.C. SHEATHING PER SHEAR WALL SCHED. BUILDING PAPER SIDING PER ELEVATIONS
DG	DUELLING TO GARAGE WALL 1/2" GUB 4 MIL UV RES. POLY 2x6 STUDS @ 16" O.C. R-21 BATT INSULATION 1/2" GUB
BW	BASEMENT WALL (* HEATED AREA) RETAINING WALL PER PLAN 1/2" AIRSPACE 2x6 STUDS @ 16" O.C. R-21 BATT INSULATION 1/2" GUB
MF	MAIN FLOOR FINISH FLOOR 1/2" UL. FLY @ VINYL 5/8" UL. FLY @ VINYL TO HARDWOOD 3/4" T&G PLYWOOD SUB-FLOOR (GLUE + NAIL) TJI FLOOR JOISTS PER PLAN R-38 BATT. INSULATION @ AREAS OVER UNHEATED SPACE PER ENERGY CREDIT 13 5/8" GUB
BF	BASEMENT FLOOR 4" CONCRETE SLAB ON GRADE W/ 6x6 WAXW4 WUF 6 MIL. VAPOR BARRIER 4" GRANULAR FILL R-10 RIGID INSULATION (MIN. COMPRESSIVE STRENGTH OF 15 PSI) UNDER ENTIRE SLAB @ HEATED AREA
GF	GARAGE FLOOR 4" CONCRETE SLAB ON GRADE W/ 6x6 WAXW4 WUF 6 MIL. VAPOR BARRIER 4" GRANULAR FILL
OL	OUTDOOR LIVING COVERED DECK IPE DECKING ON PEDESTALS WEATHERPROOF MEMBRANE 3/4" T&G PLYWOOD SUB-FLOOR TJI FLOOR JOISTS PER PLAN
WD	WEATHER DECK TUPEK VINYL DECK MEMBRANE (INSTALL PER MANUF. SPECIFICATIONS) 3/4" T&G PLYWOOD SUB-FLOOR SHIM TO SLOPE 1/4" PER 12" TO DRAIN 3 1/2"x3 1/2" FLUSH PSL'S @16" O.C.

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matthew mawer
residential design
matt@mawer.net
425.417.7817



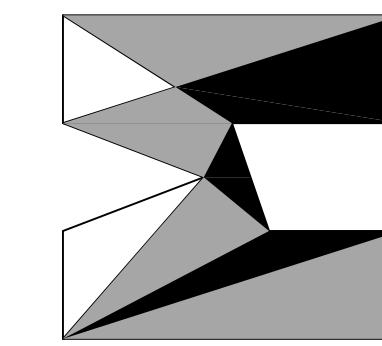
nw lifestyle homes
www.nwlifestylehomes.com



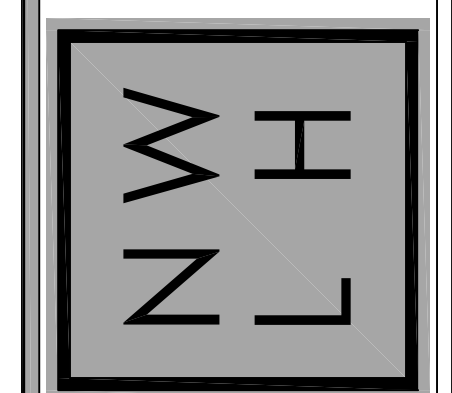
HOUTCHENS RESIDENCE
6024 SE 22nd ST
MERCER ISLAND, WA 98040

JOB NO: 20-020
DATE: 9/22/01
DRW. BY: MM, MG
REVISED:

SHEET NO.
A12



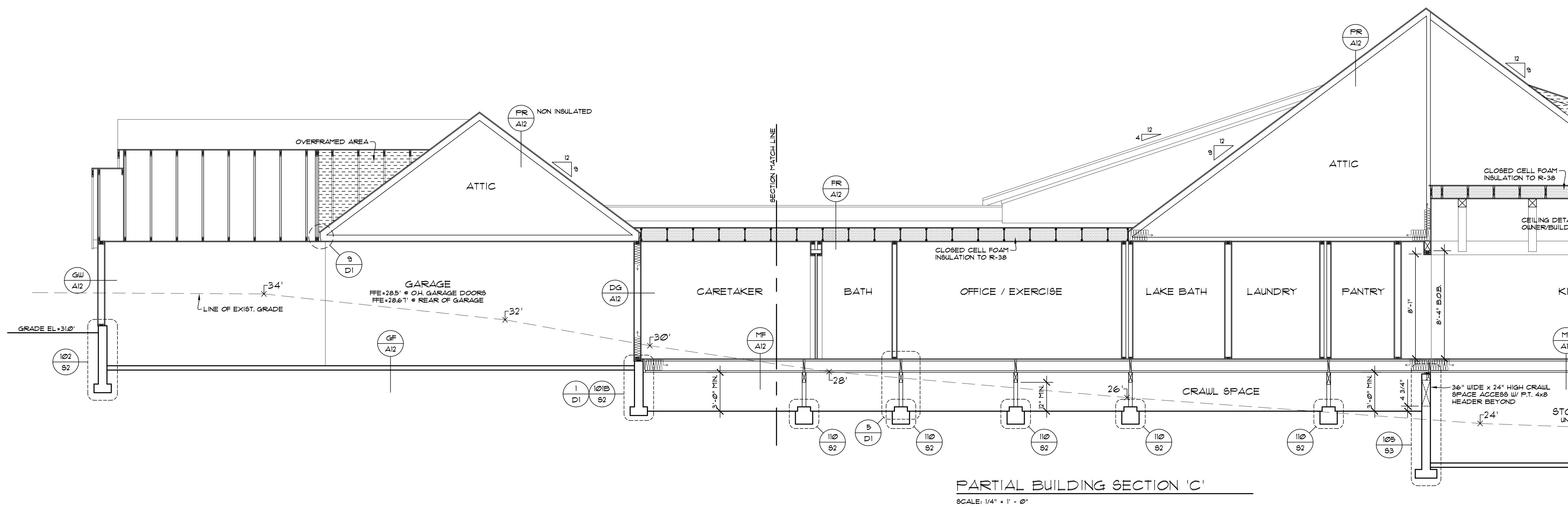
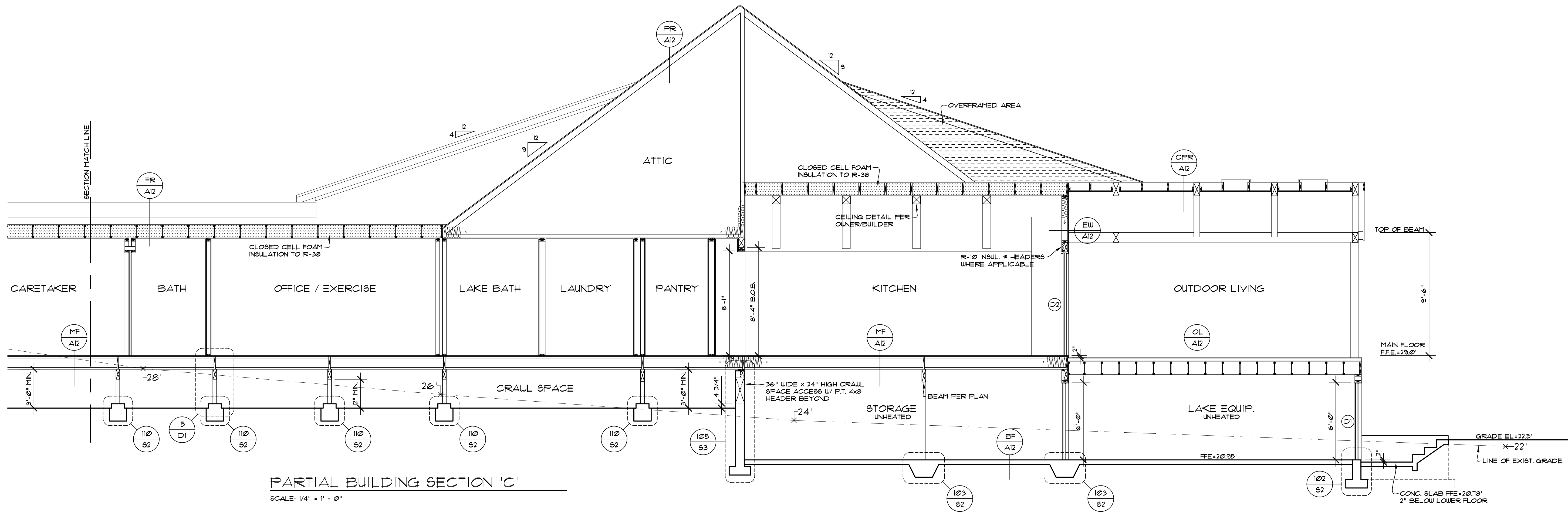
nw
lifestyle
homes
www.nwlifestylehomes.com

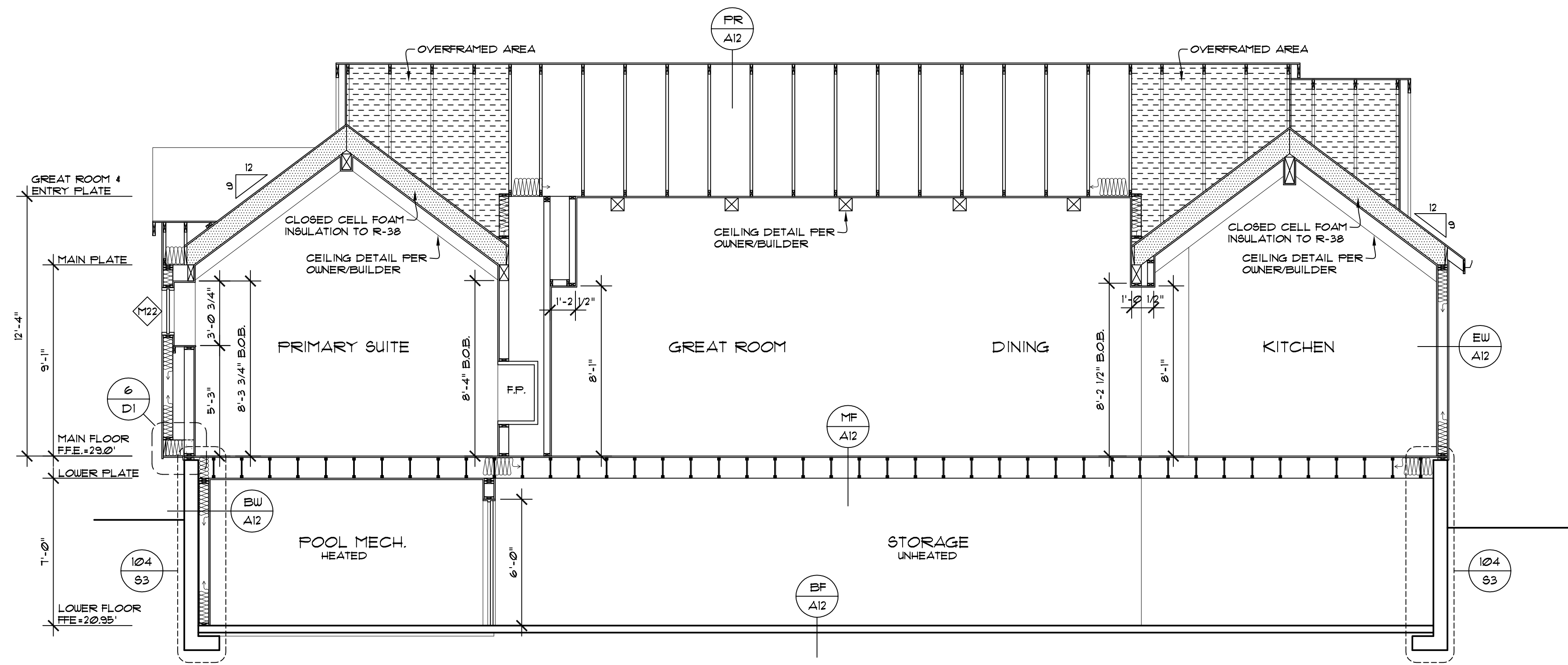


HOUTCHENS RESIDENCE
6024 SE 22nd ST
MERCER ISLAND, WA 98040

JOB NO: 20-020
DATE: 9/01/22
DRW. BY: MM, MG
REVISED:

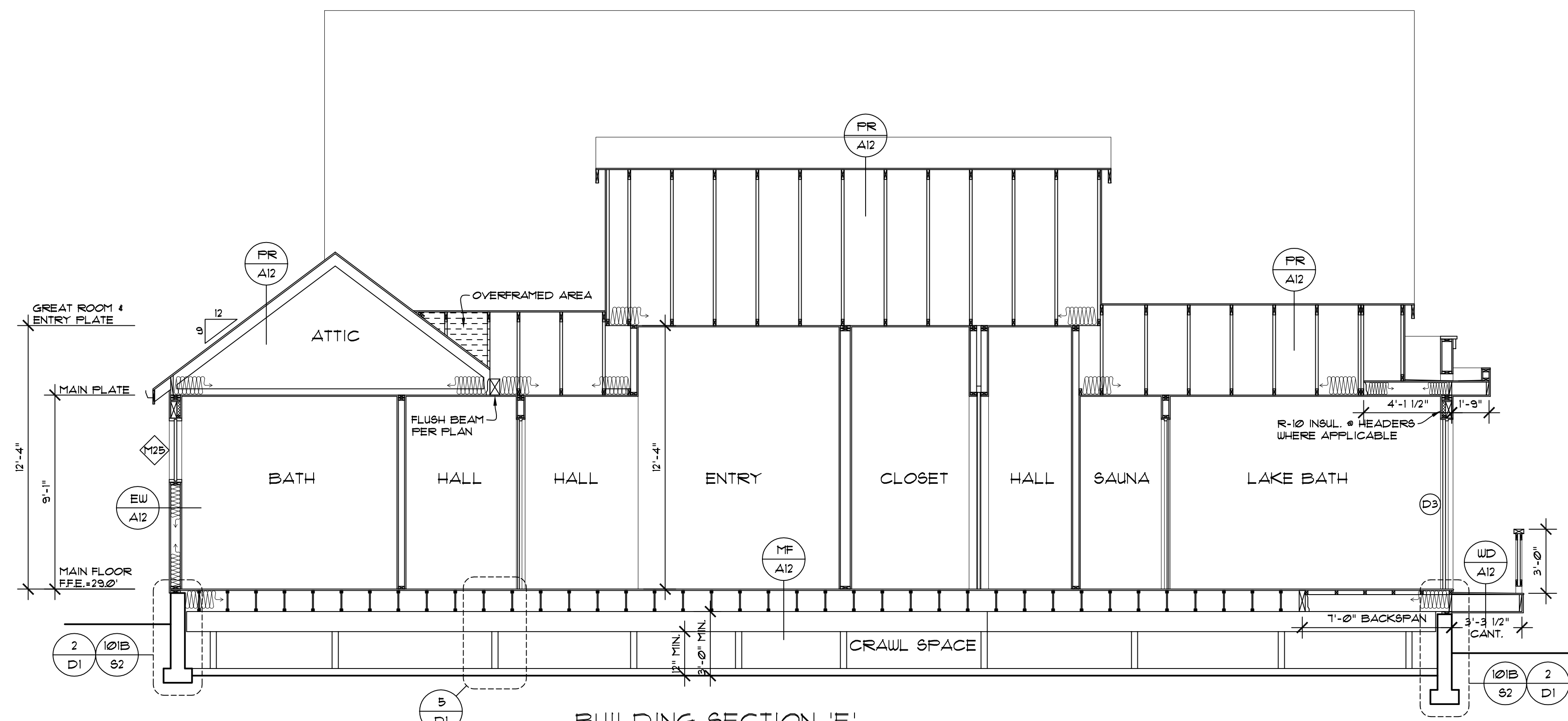
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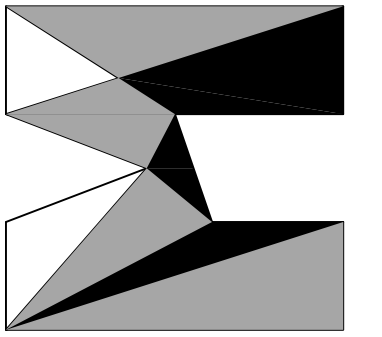
BUILDING SECTION 'D'

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

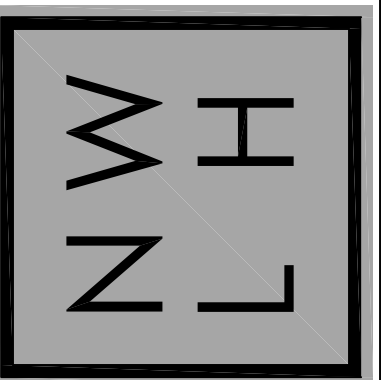


BUILDING SECTION 'E'

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



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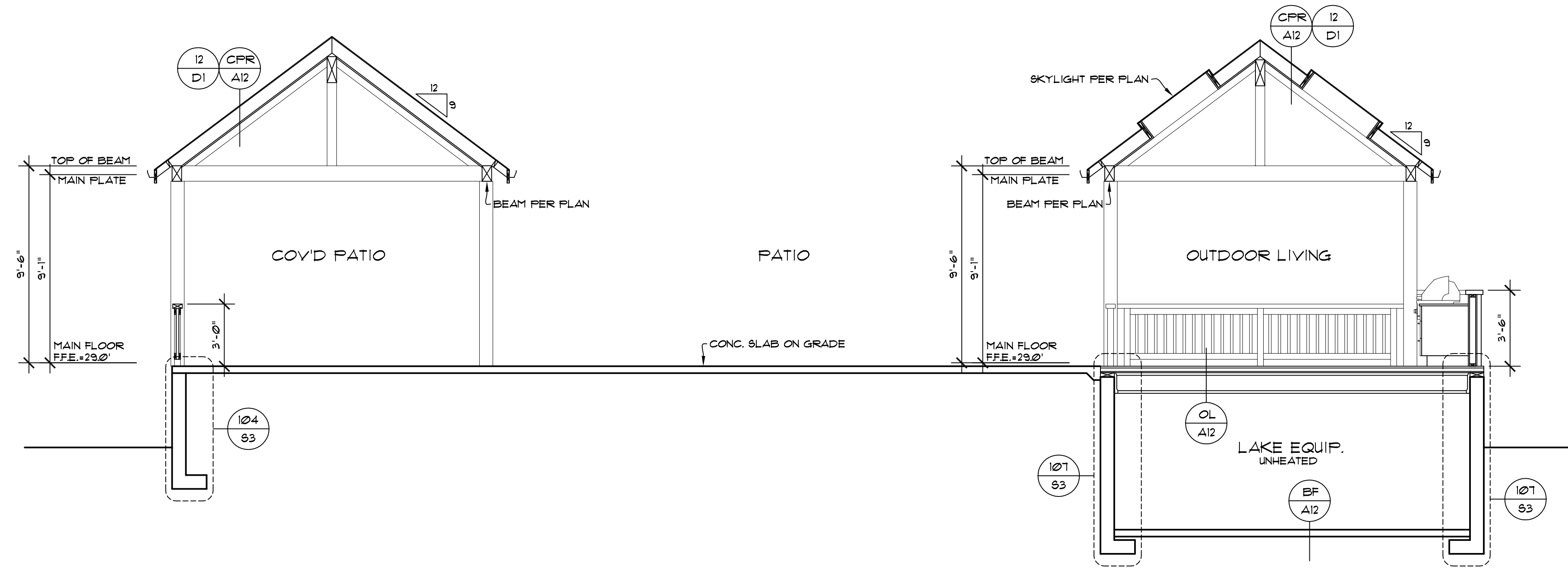


HOUTCHENS RESIDENCE
6024 SE 22nd ST
MERCER ISLAND, WA 98040

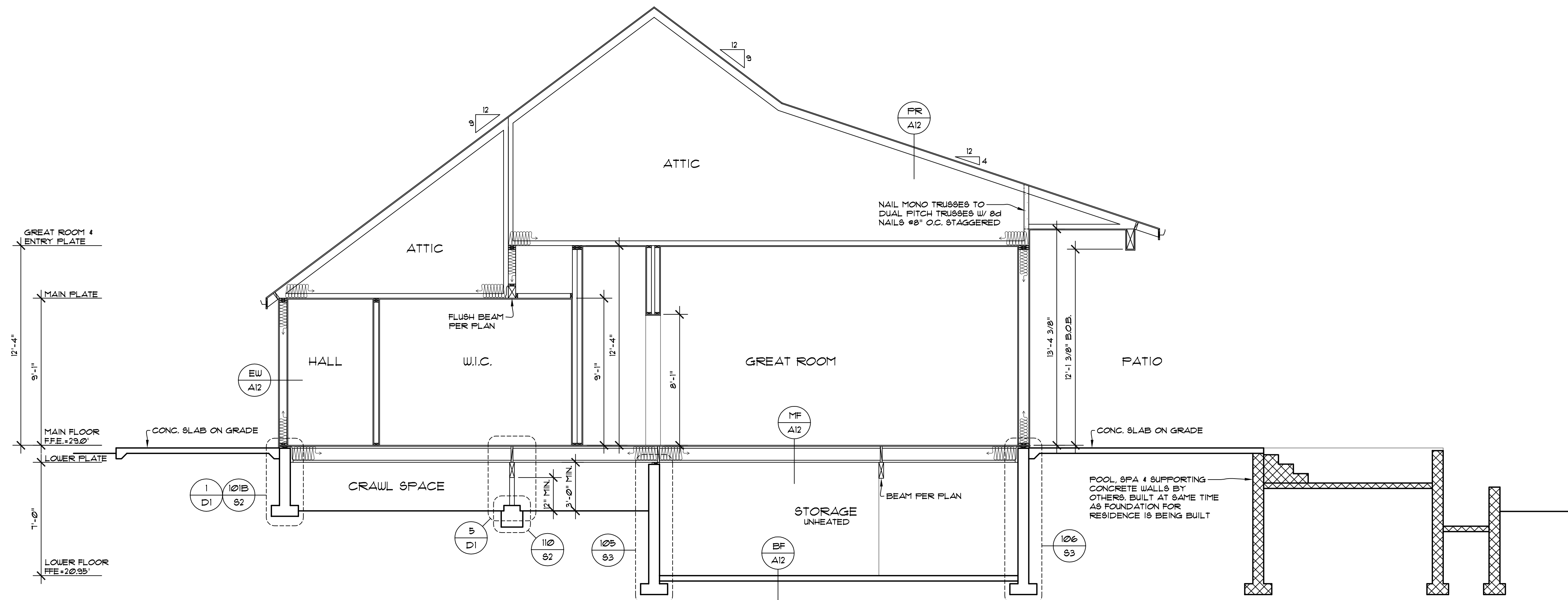
JOB NO: 20-020
DATE: 9/01/22
DRWN. BY: MM, MG
REVISED:

SHEET NO.

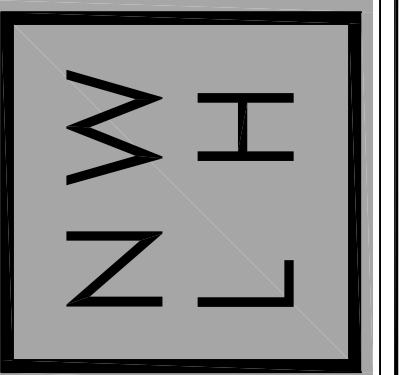
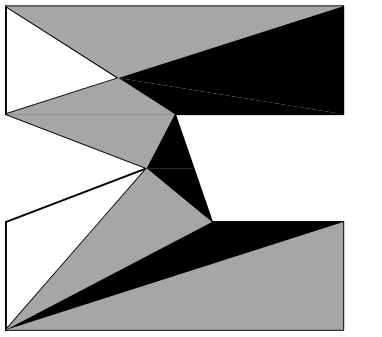
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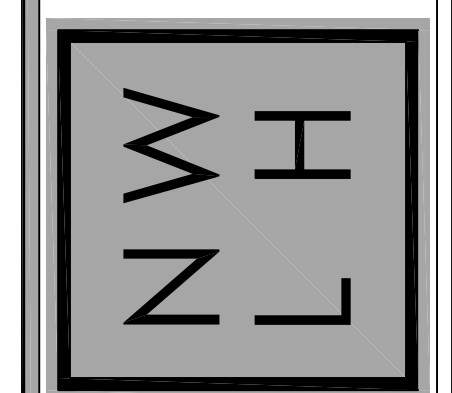
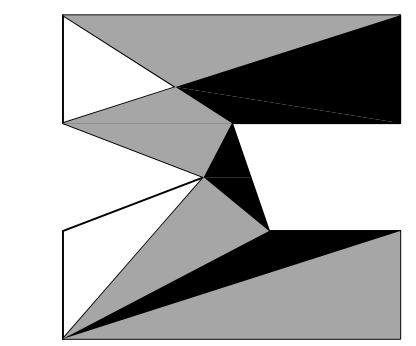
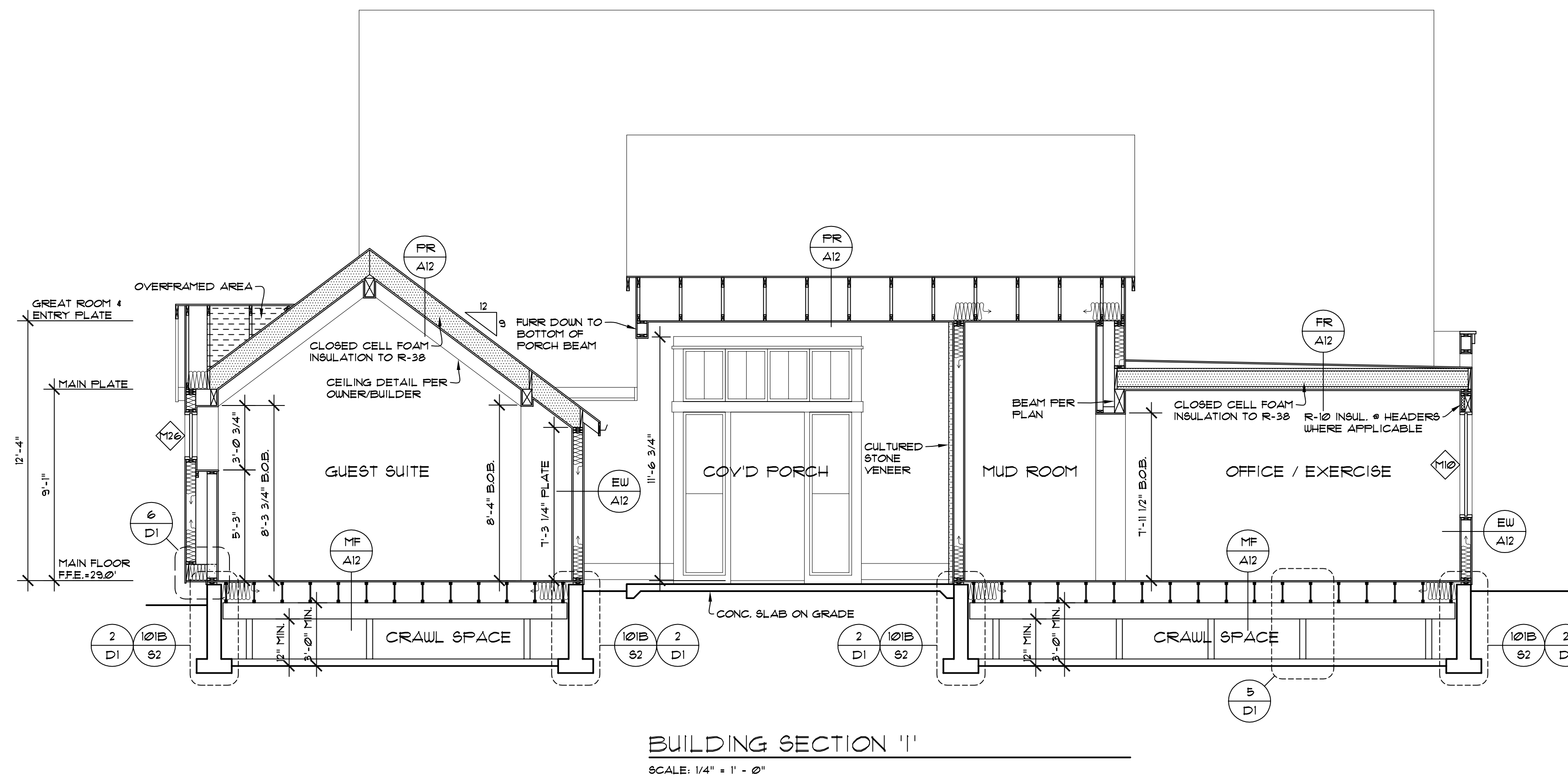
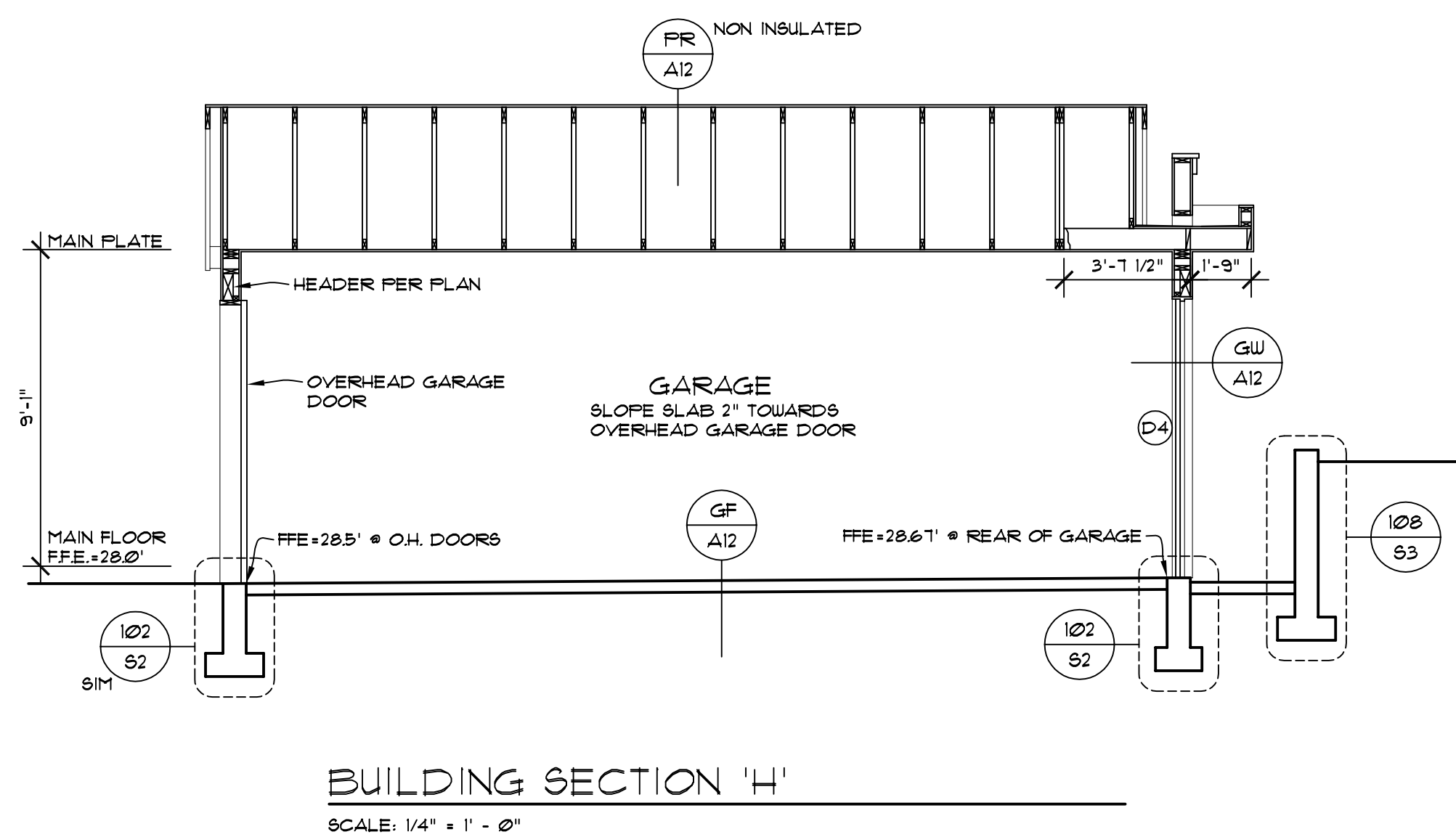
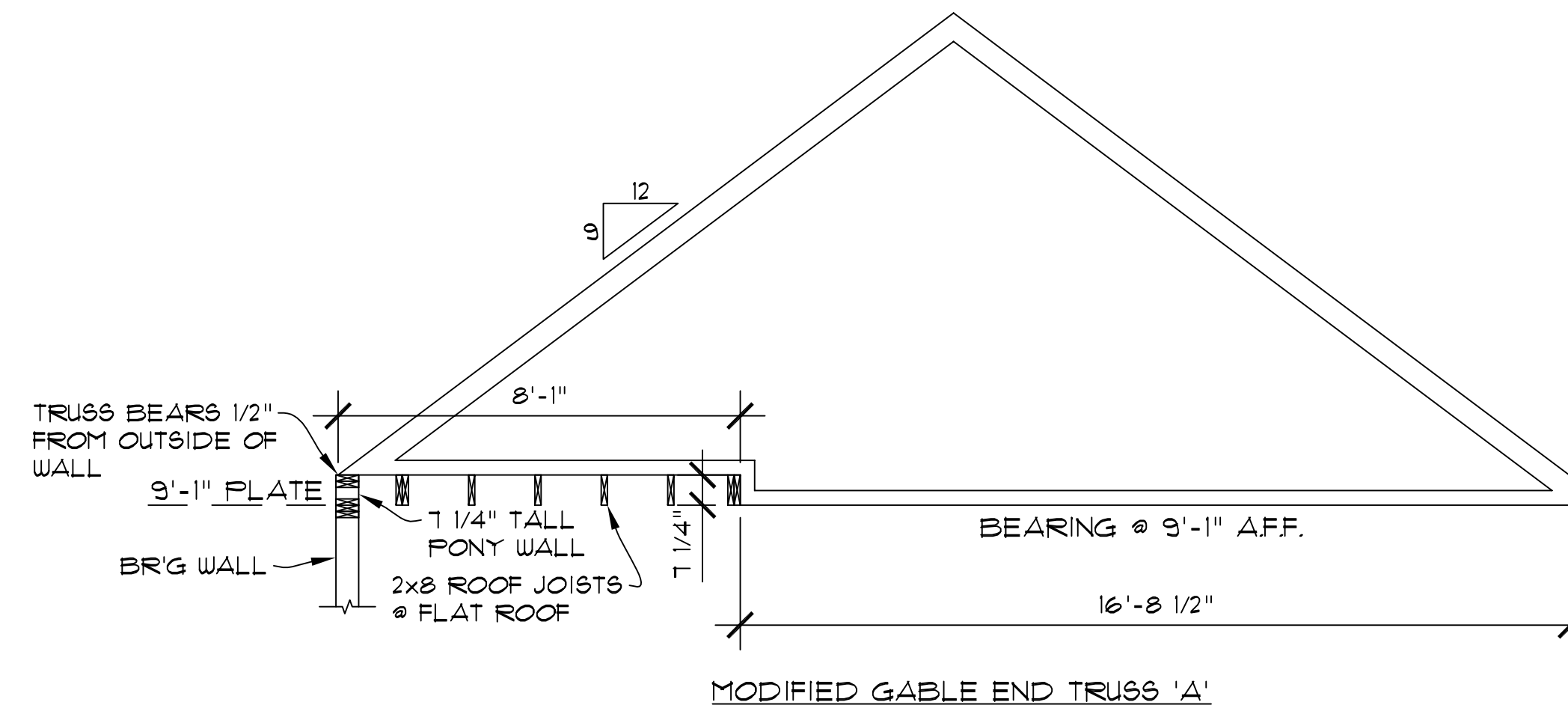
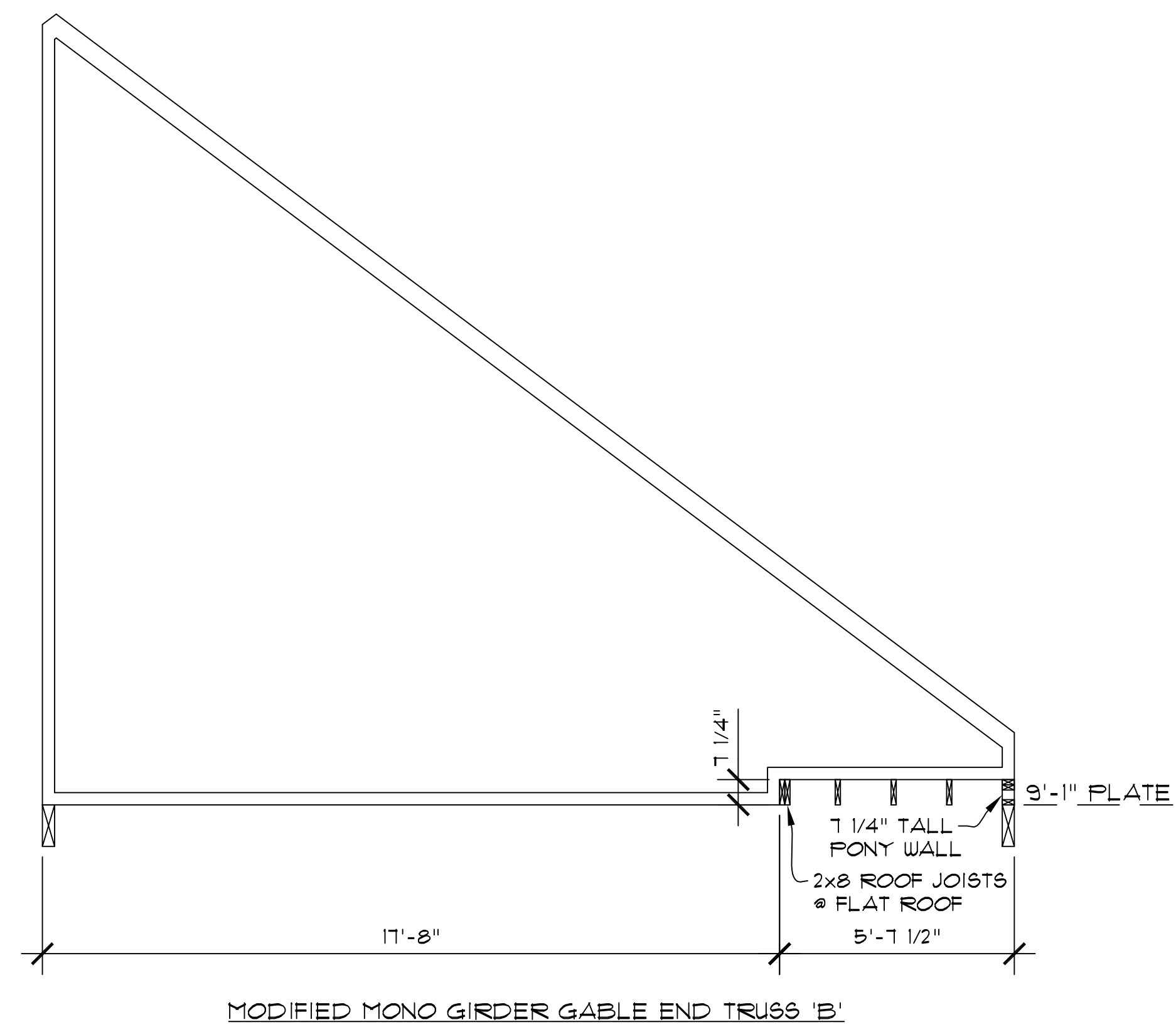


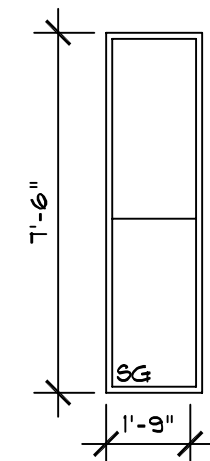
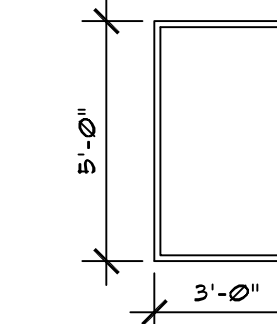
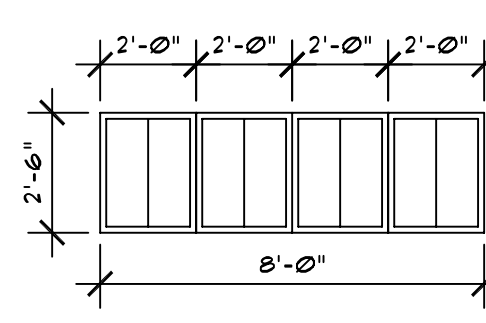
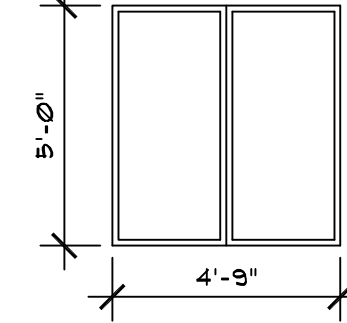
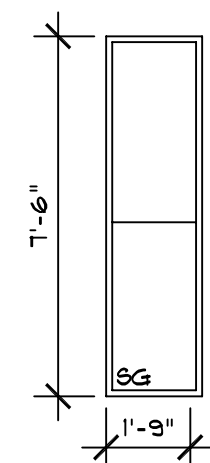
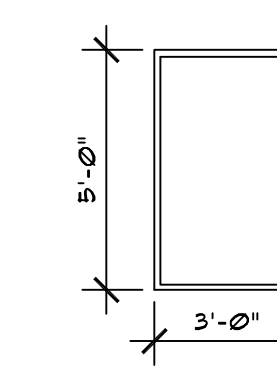
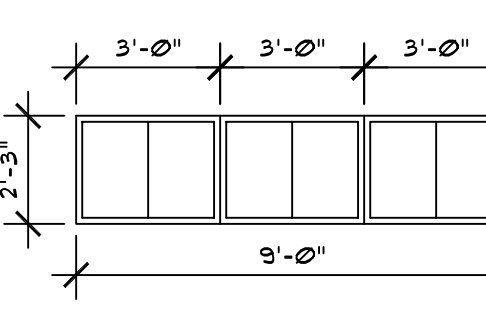
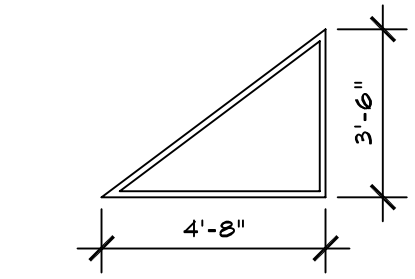
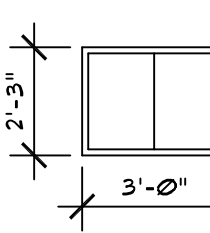
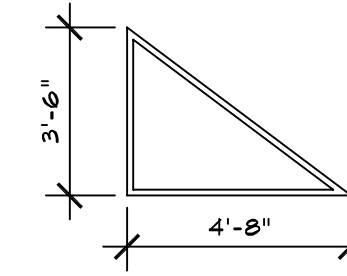
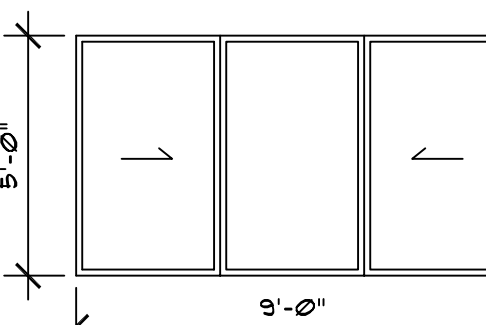
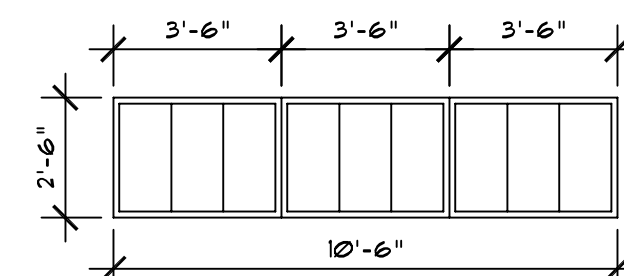
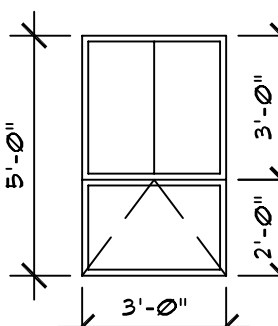
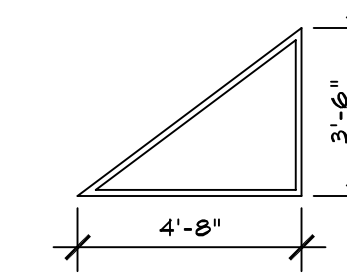
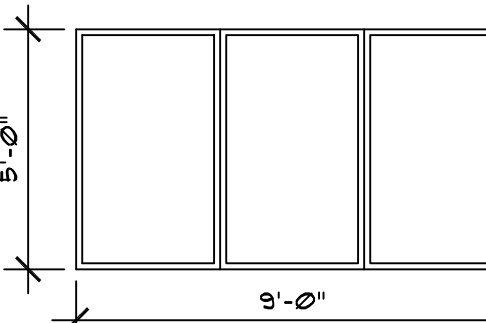
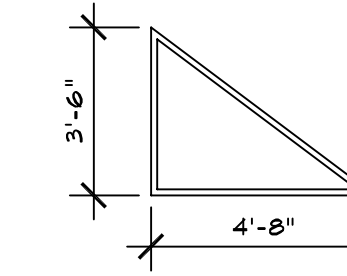
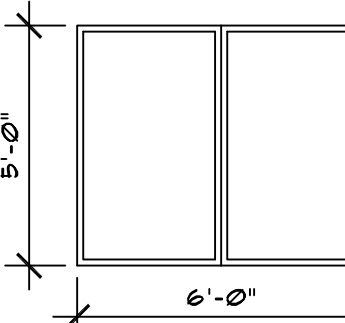
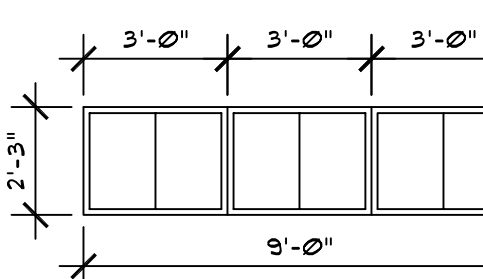
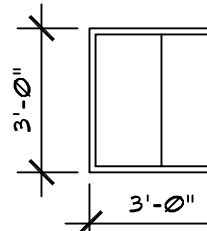
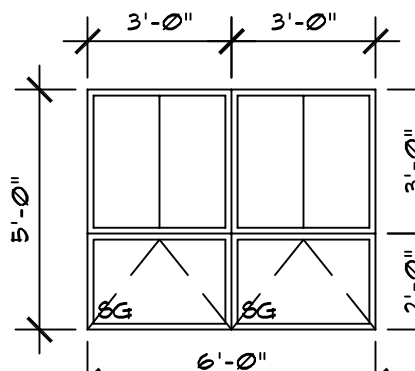
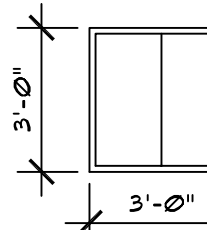
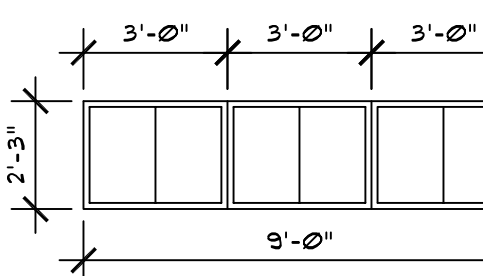
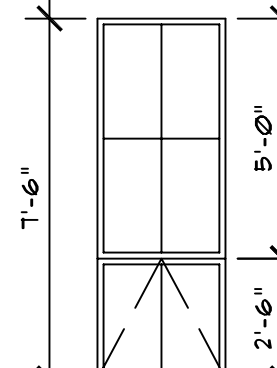
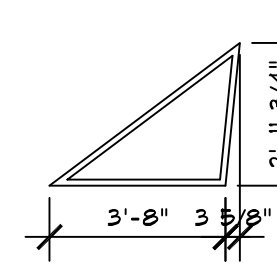
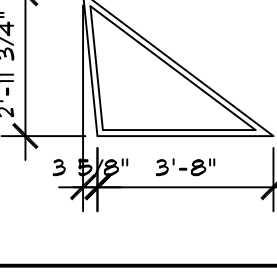
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SCALE: 1/4" = 1' - 0"

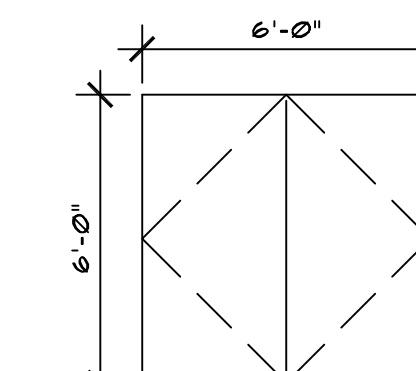
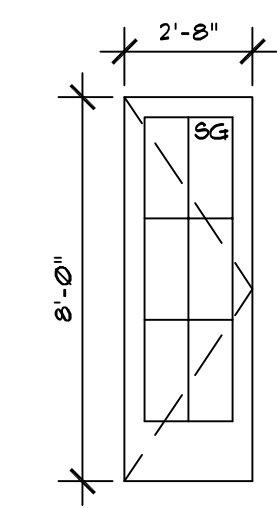
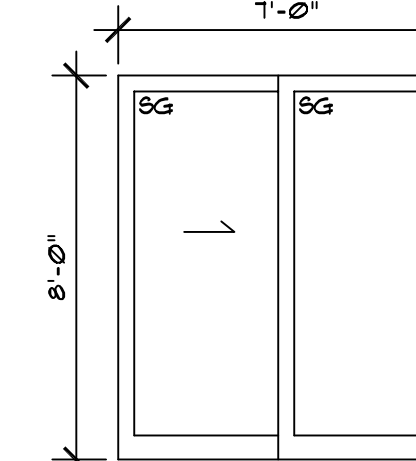
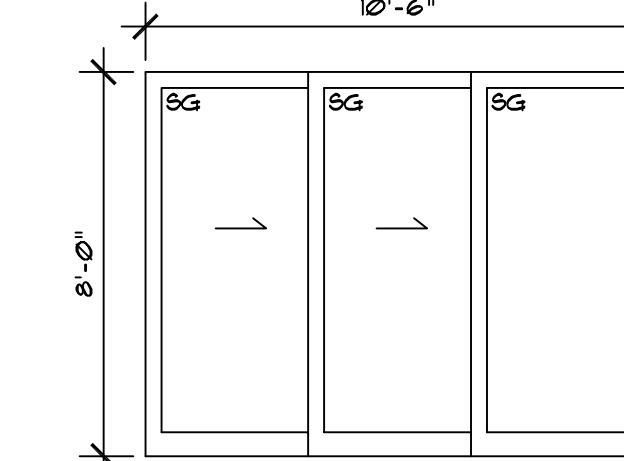
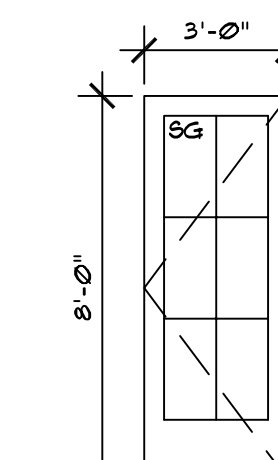
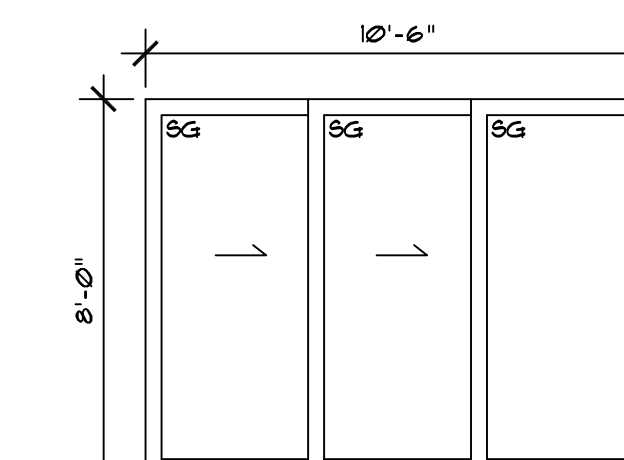
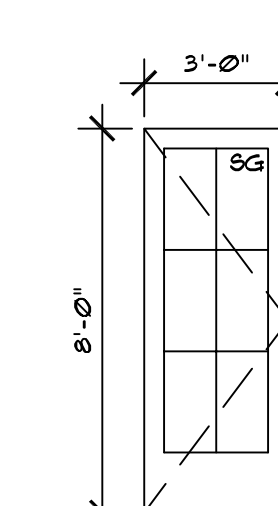
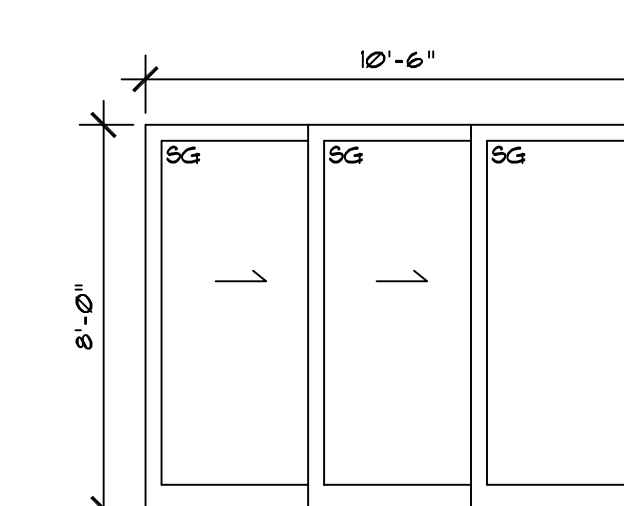
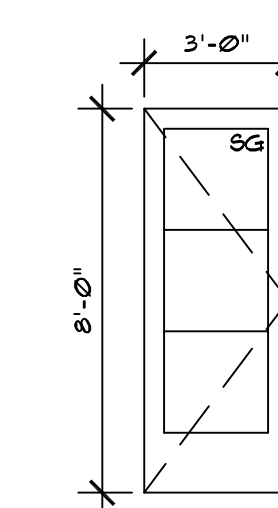
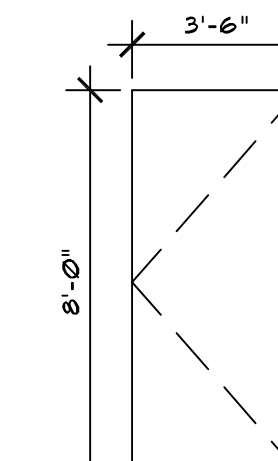


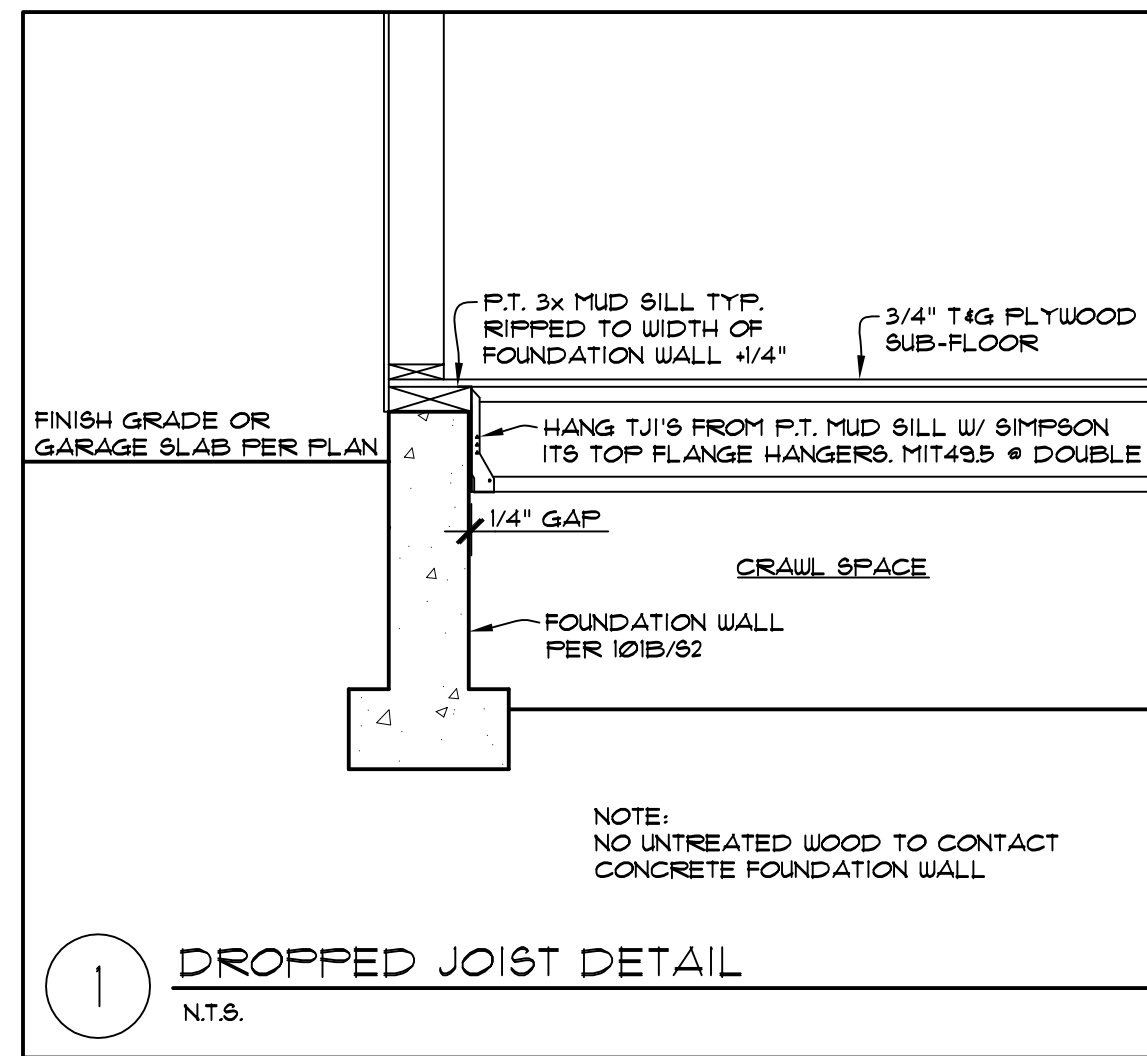
BUILDING SECTION 'G'
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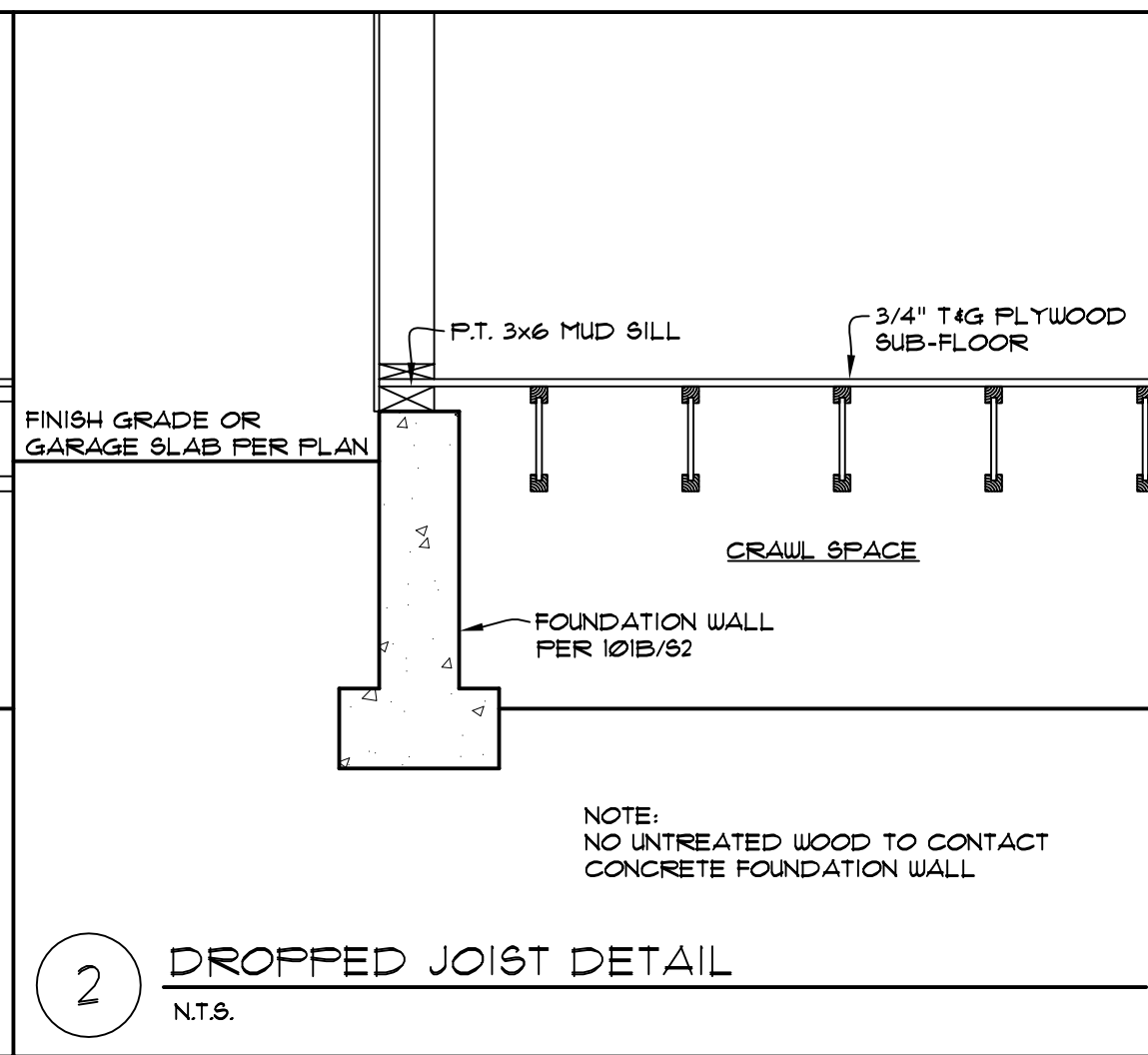


WINDOW SCHEDULE			
MAIN FLOOR WINDOWS			
M1, M2 ENTRY HDR. HT. 8'-0"		M12 PANTRY HDR. HT. 8'-0"	
M3 ENTRY HDR. HT. 11'-0"		M13 KITCHEN HDR. HT. 8'-0"	
M4, M5 VESTIBULE HDR. HT. 8'-0"		M14, M15 KITCHEN HDR. HT. 8'-0"	
M6 GARAGE HDR. HT. 8'-0"		M16 KITCHEN HDR. HT. 13'-4"	
M7 GARAGE HDR. HT. 8'-0"		M17 KITCHEN HDR. HT. 13'-4"	
M8 CARETAKER HDR. HT. 8'-0"		M18, M19 GREAT ROOM HDR. HT. 11'-0"	
M9 BATH HDR. HT. 8'-0"		M20 GREAT ROOM HDR. HT. 11'-0"	
M10 OFFICE HDR. HT. 8'-0"		M21 P. SUITE HDR. HT. 13'-4"	
M11 LAUNDRY HDR. HT. 8'-0"		M22 P. SUITE HDR. HT. 8'-0"	
		M23 P. BATH HDR. HT. 8'-0"	
		M24 P. BATH HDR. HT. 8'-0"	
		M25 BATH HDR. HT. 8'-0"	
		M26 GUEST SUITE HDR. HT. 8'-0"	
		M27 GUEST SUITE HDR. HT. 8'-0"	
		M28 GUEST SUITE HDR. HT. 13'-4"	
		M29 GUEST SUITE HDR. HT. 13'-4"	
			SG = SAFETY GLASS E = EGRESS WINDOW U-FACTOR FOR ALL WINDOWS = 0.28 U-FACTOR FOR DOORS = 0.20

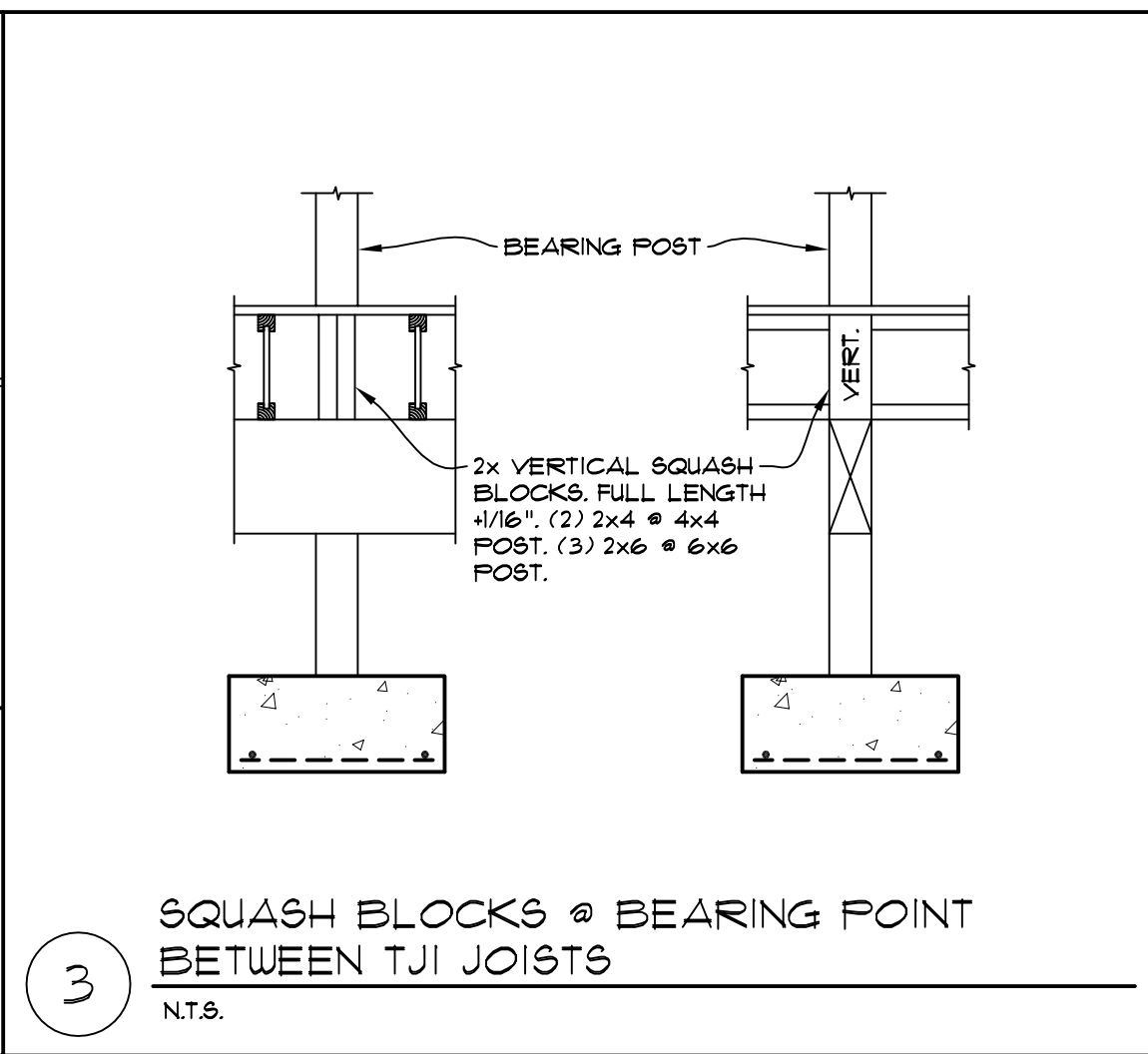
DOOR SCHEDULE			
EXTERIOR DOORS			
D1 LAKE EQUIP.		D7 GUEST SUITE	
D2 KITCHEN		D8 P. SUITE	
D3 LAKE BATH		D9 GREAT ROOM	
D4 GARAGE		D10 DINING	
D5 VESTIBULE			
D6 ENTRY			



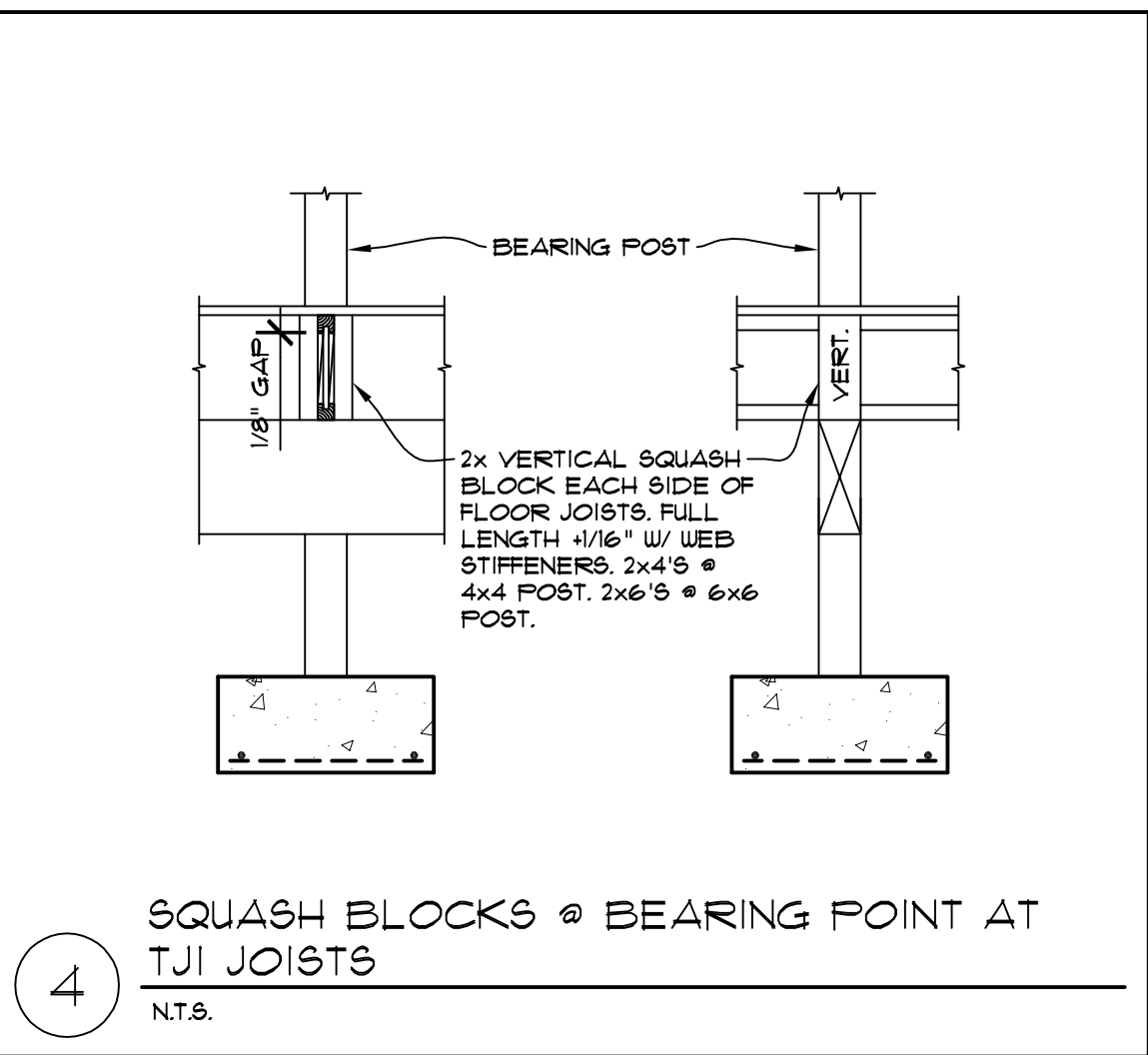
1 DROPPED JOIST DETAIL
N.T.S.



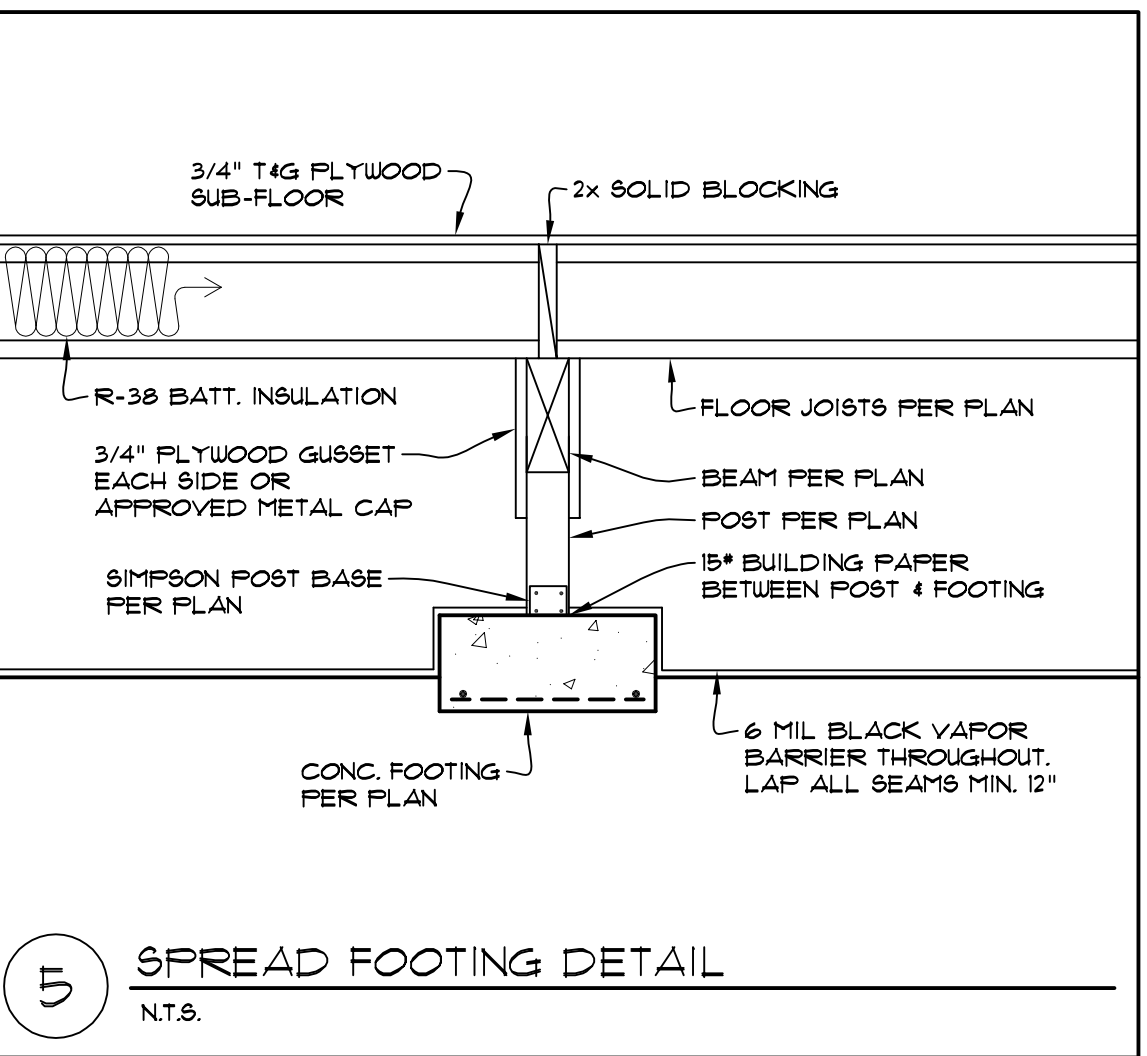
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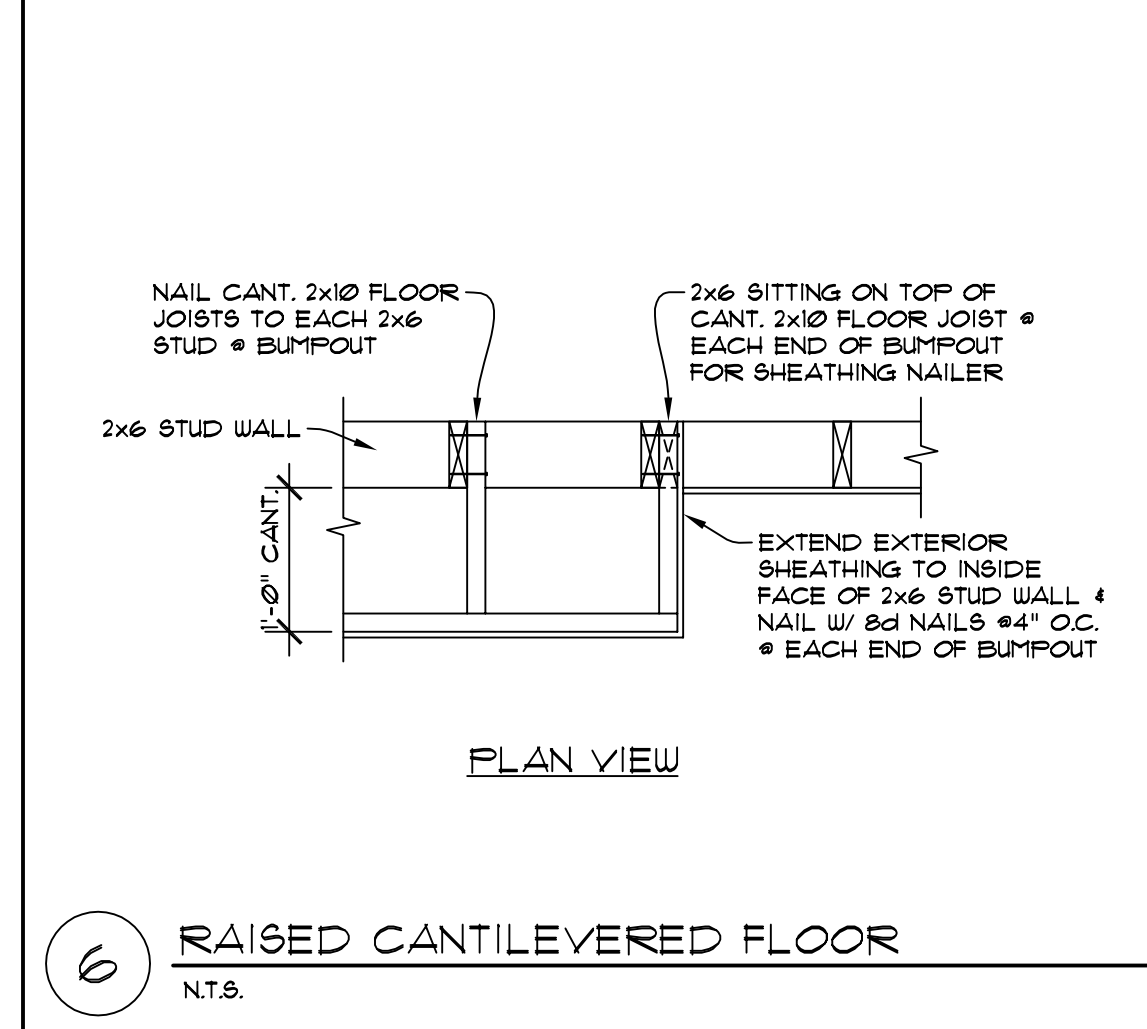
3 SQUASH BLOCKS @ BEARING POINT BETWEEN TJI JOISTS
N.T.S.



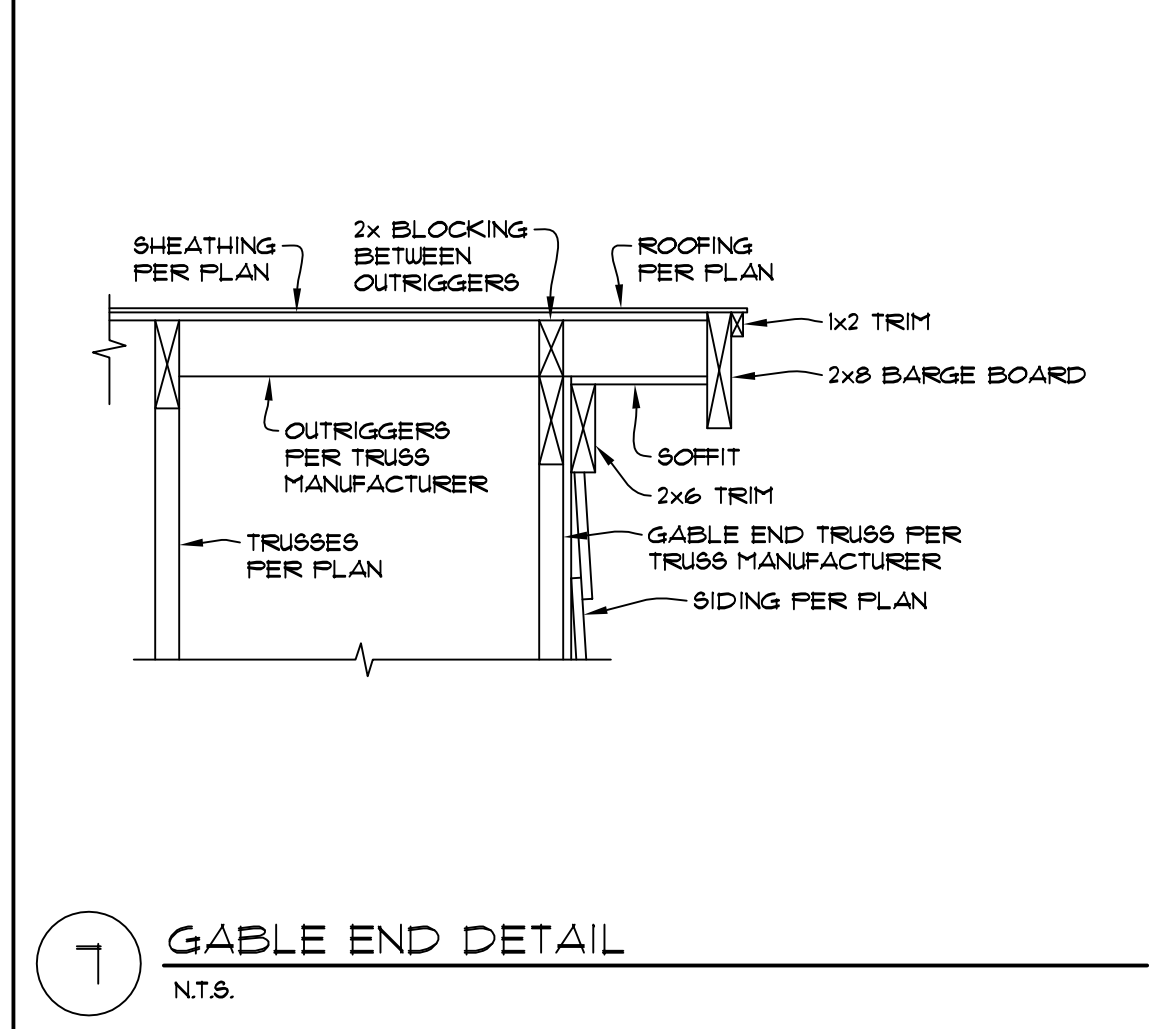
4 SQUASH BLOCKS @ BEARING POINT AT TJI JOISTS
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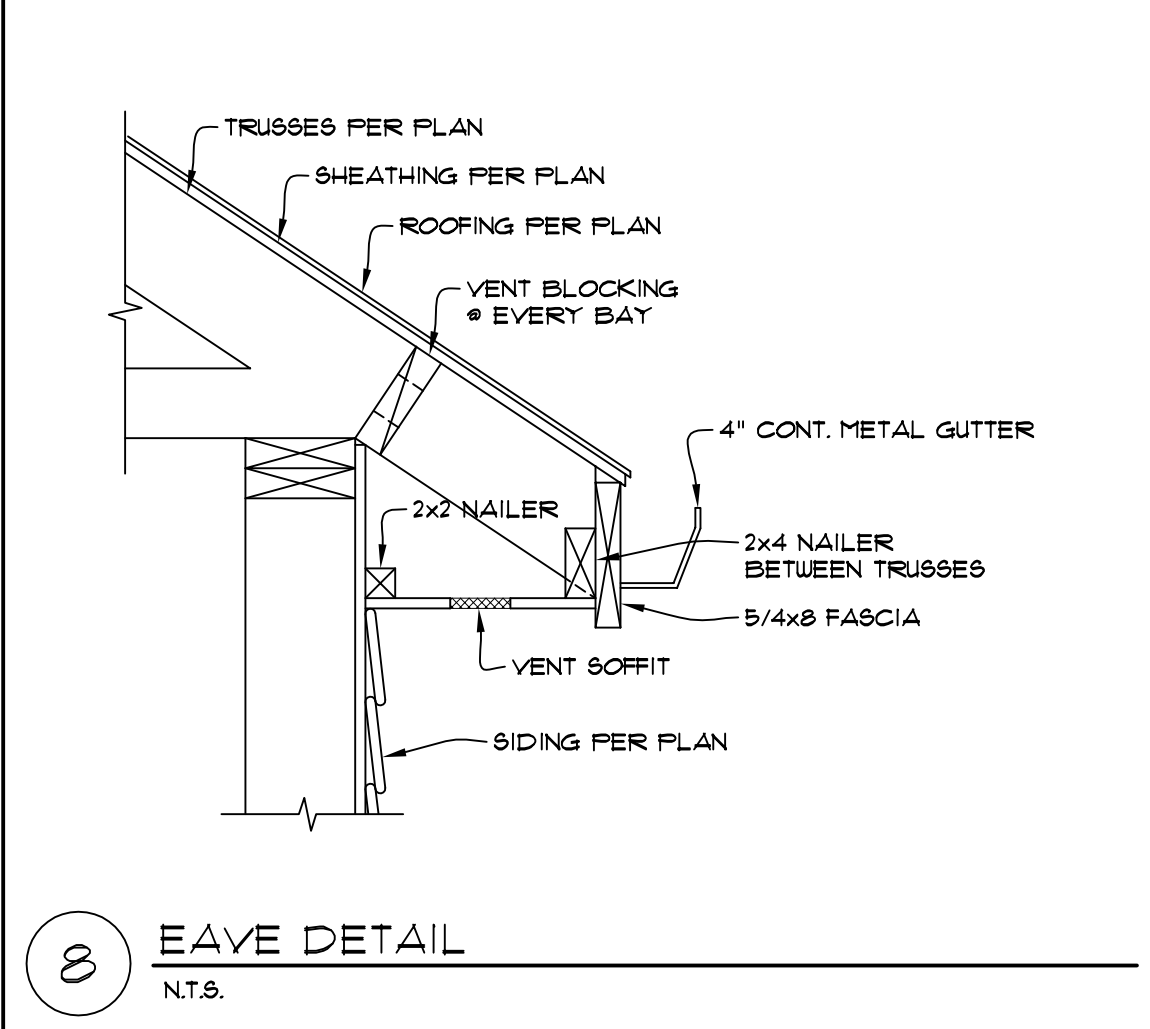
5 SPREAD FOOTING DETAIL
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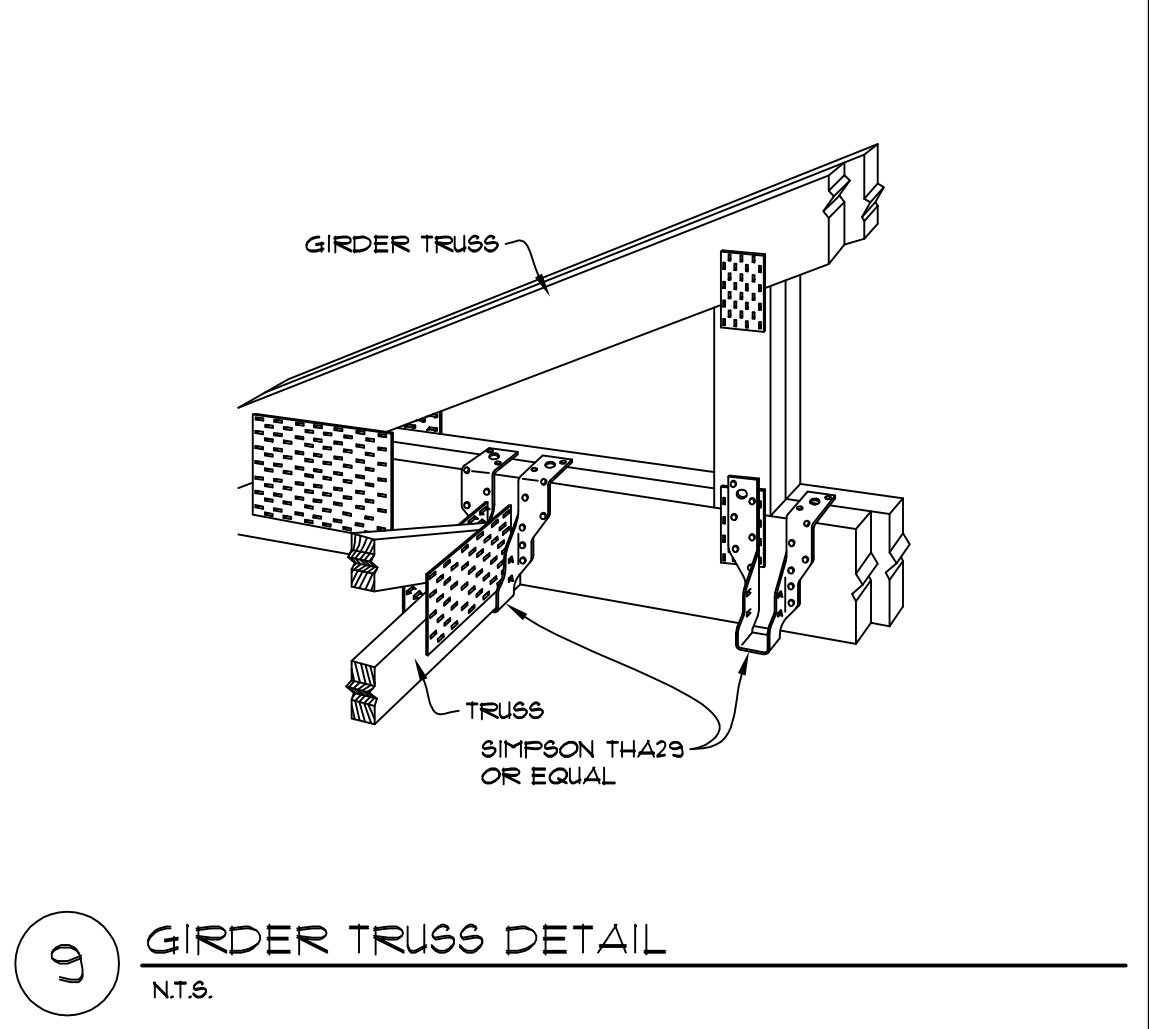
6 RAISED CANTILEVERED FLOOR
N.T.S.



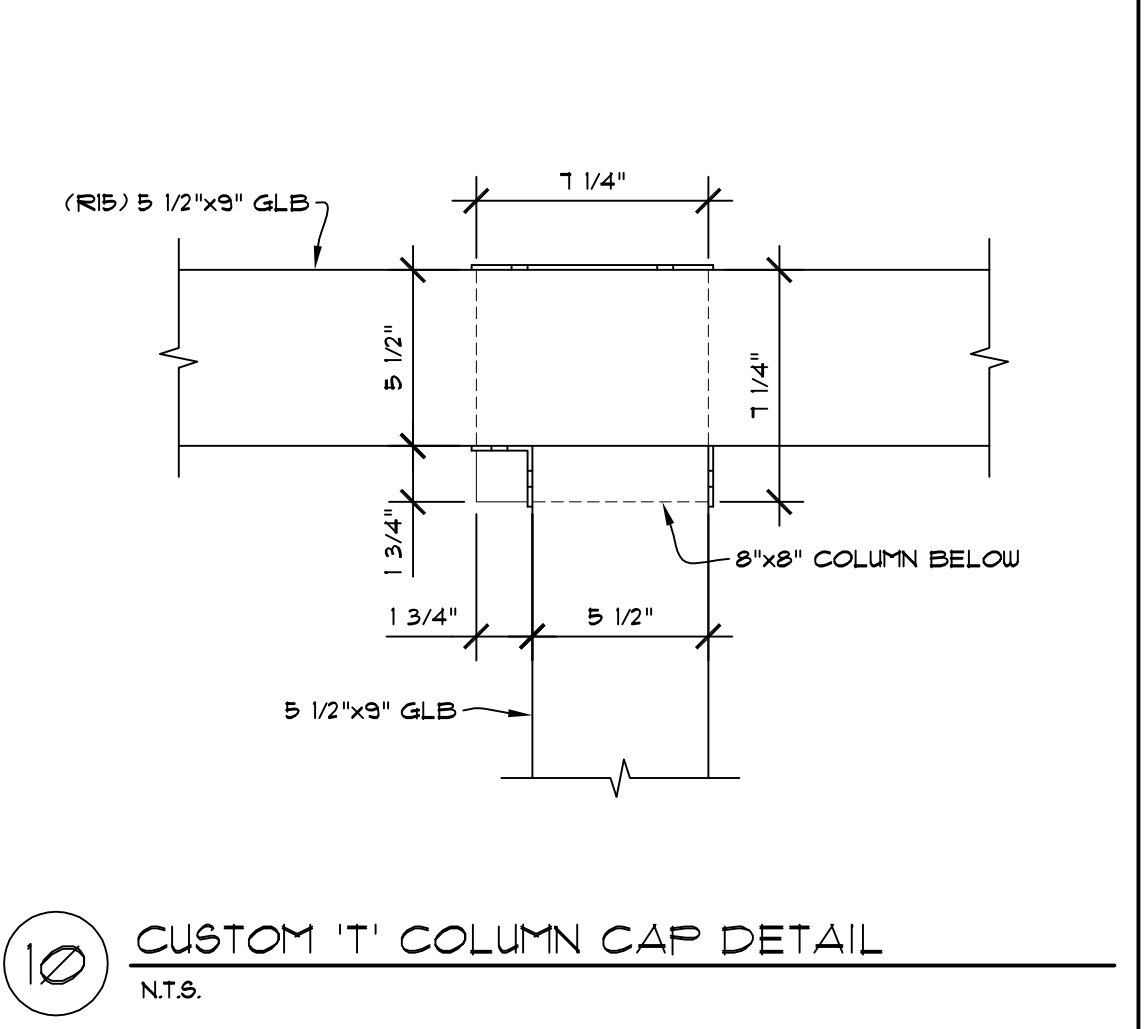
7 GABLE END DETAIL
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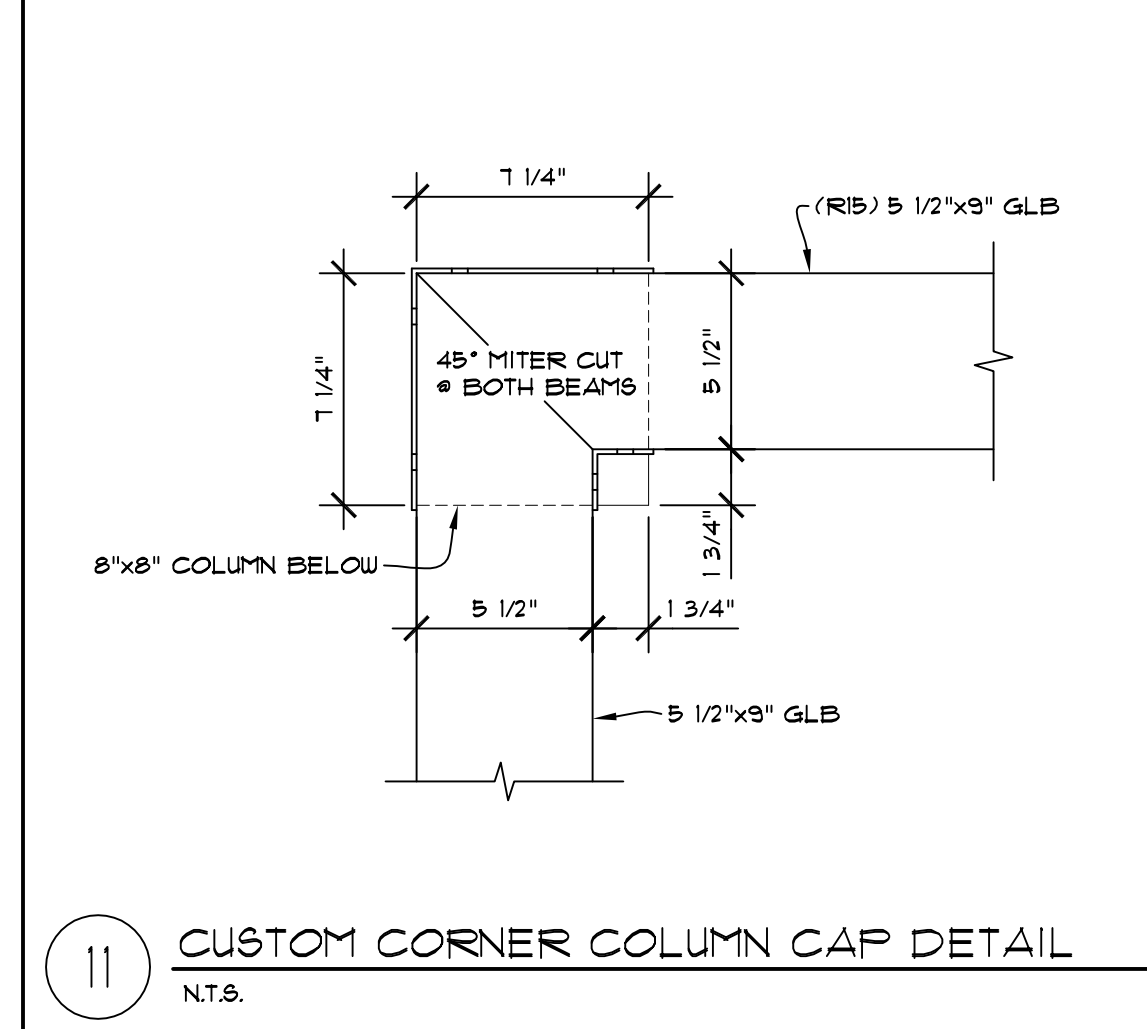
8 EAVE DETAIL
N.T.S.



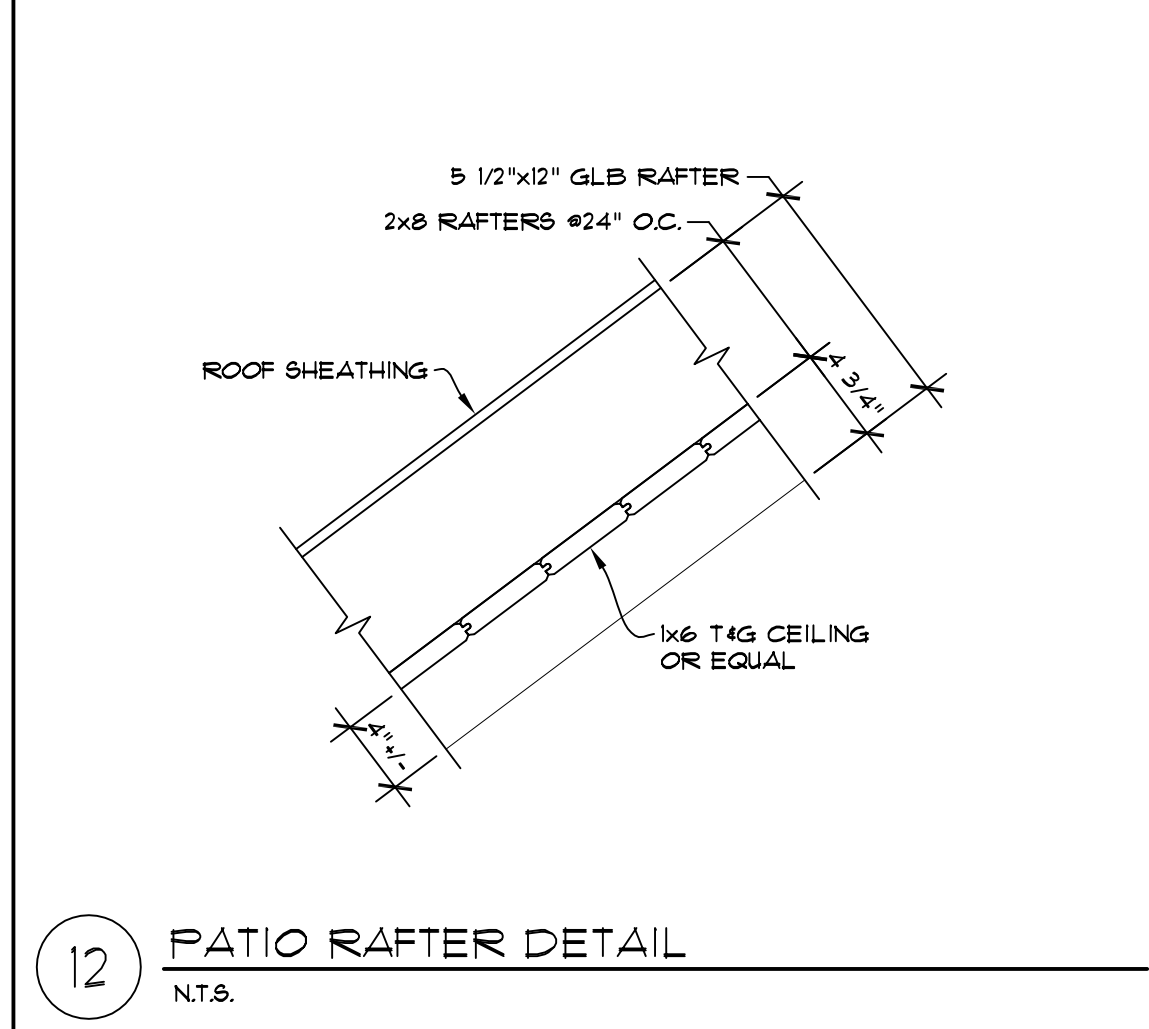
9 GIRDER TRUSS DETAIL
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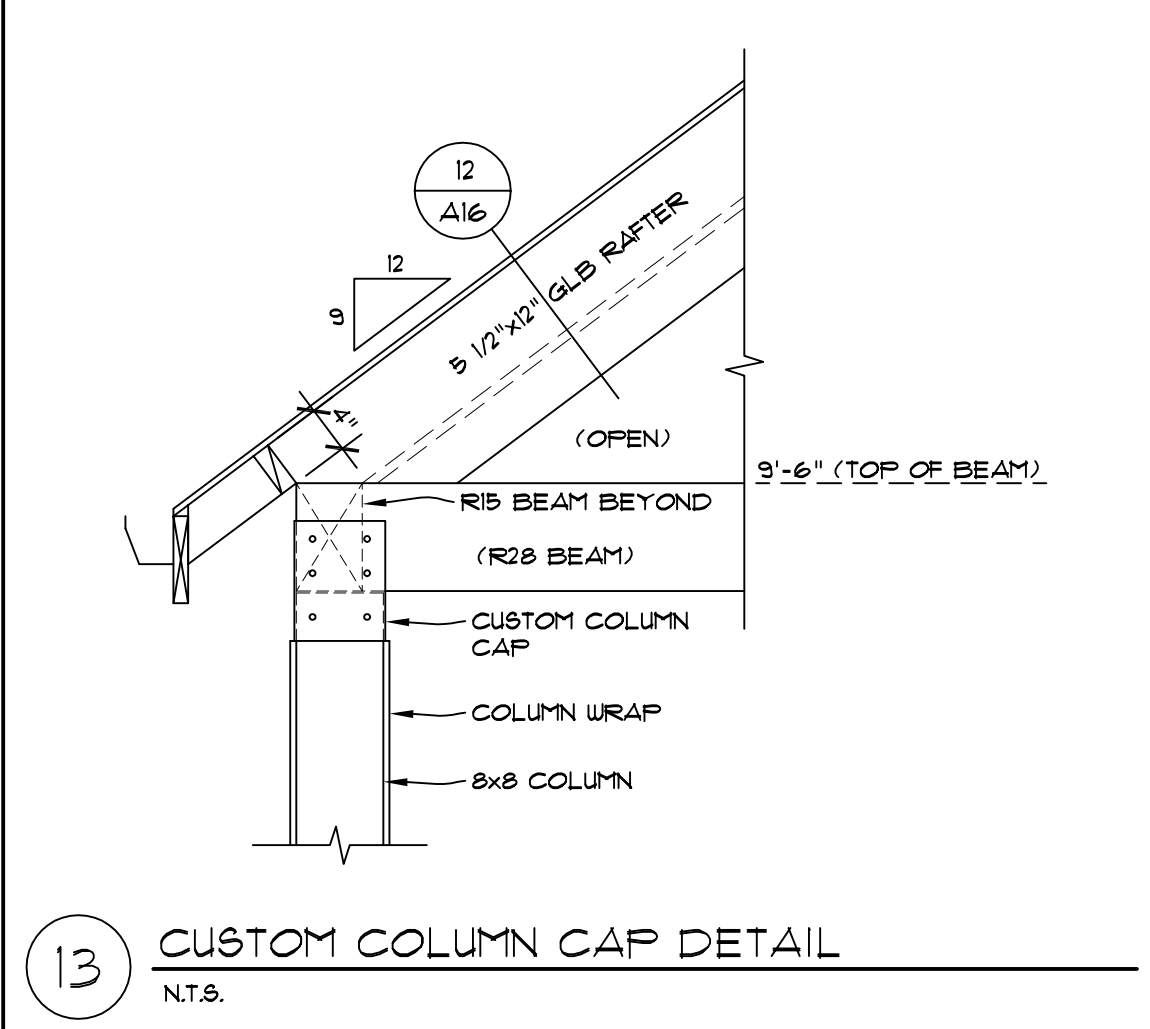
10 CUSTOM 'I' COLUMN CAP DETAIL
N.T.S.



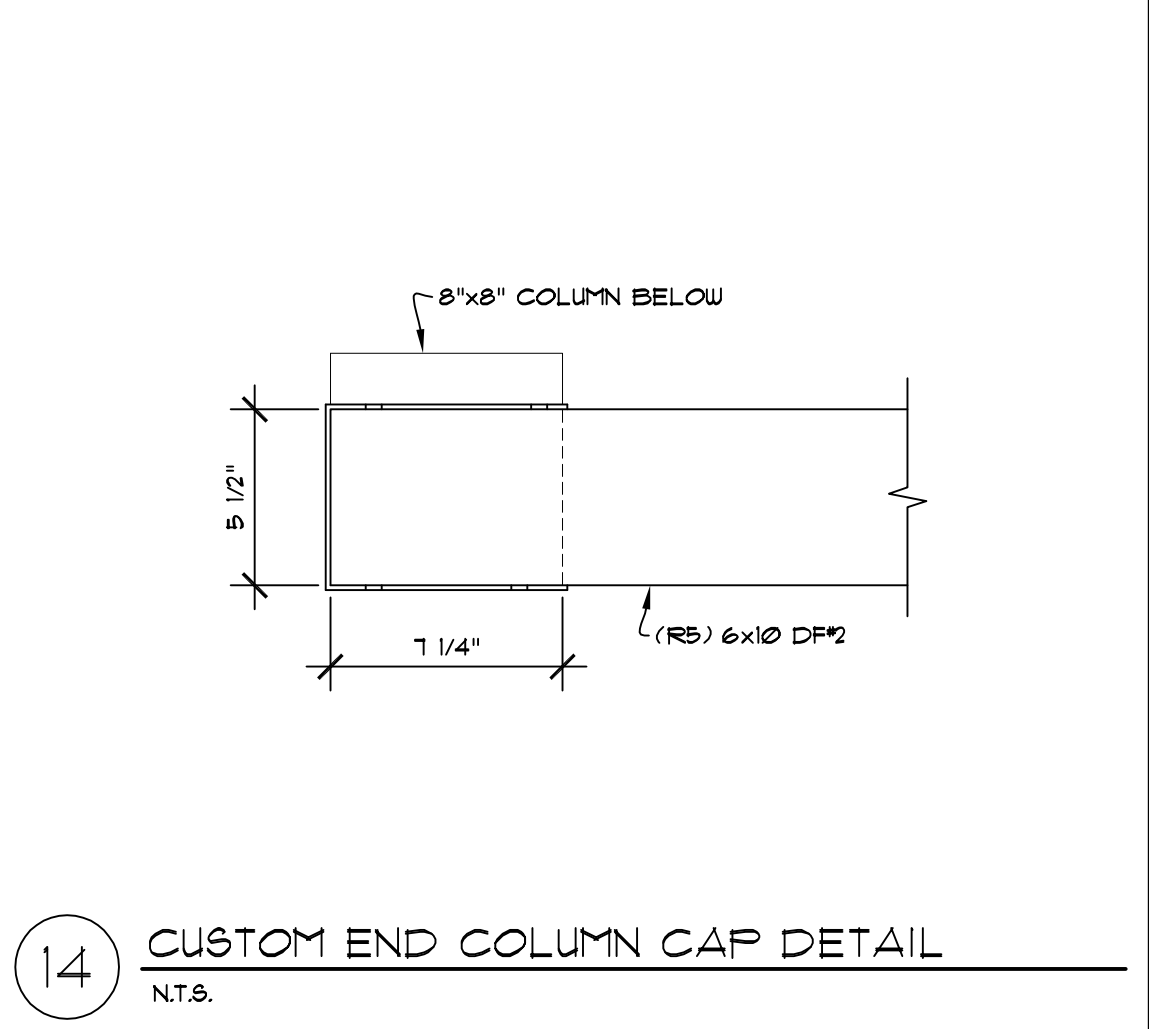
11 CUSTOM CORNER COLUMN CAP DETAIL
N.T.S.



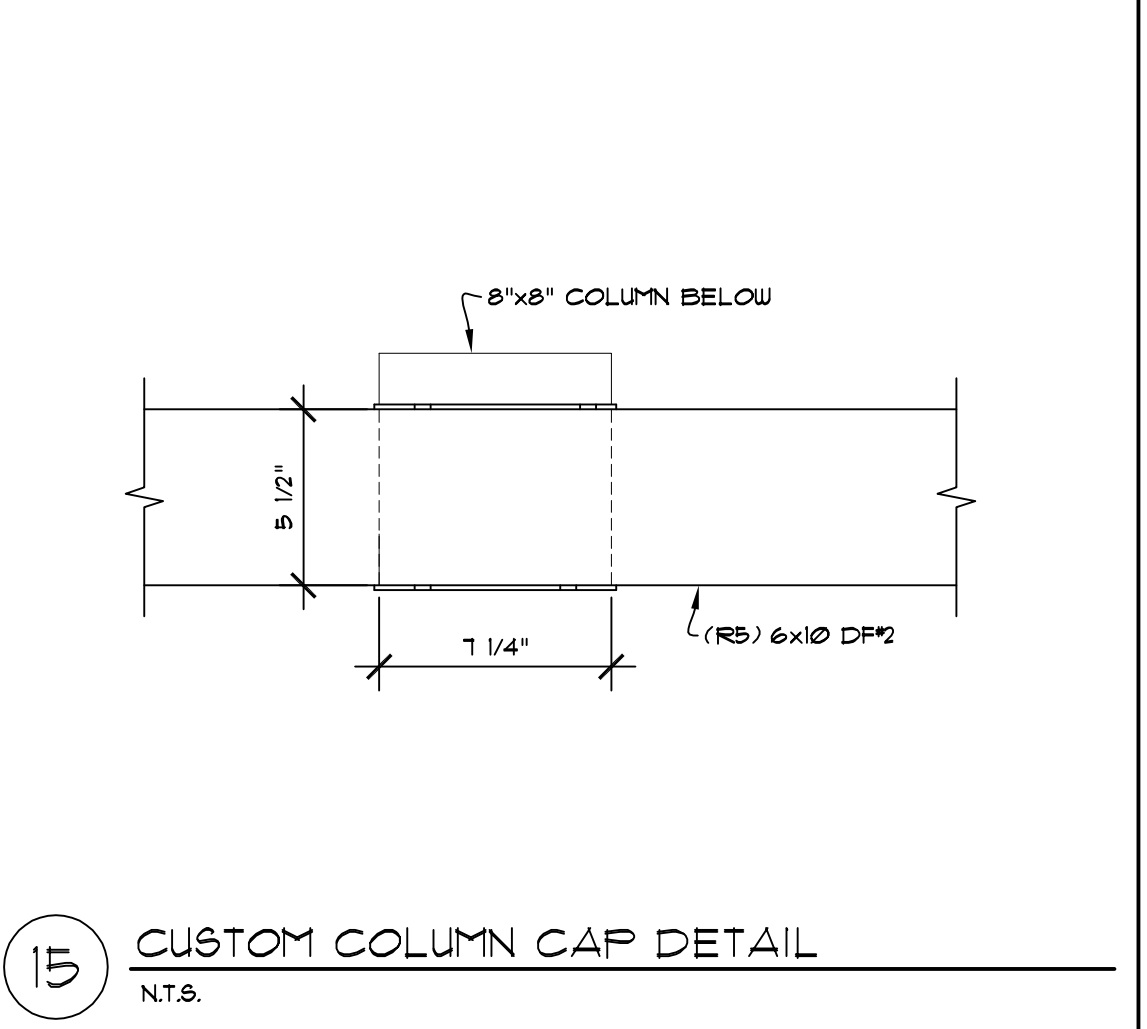
12 PATIO RAFTER DETAIL
N.T.S.



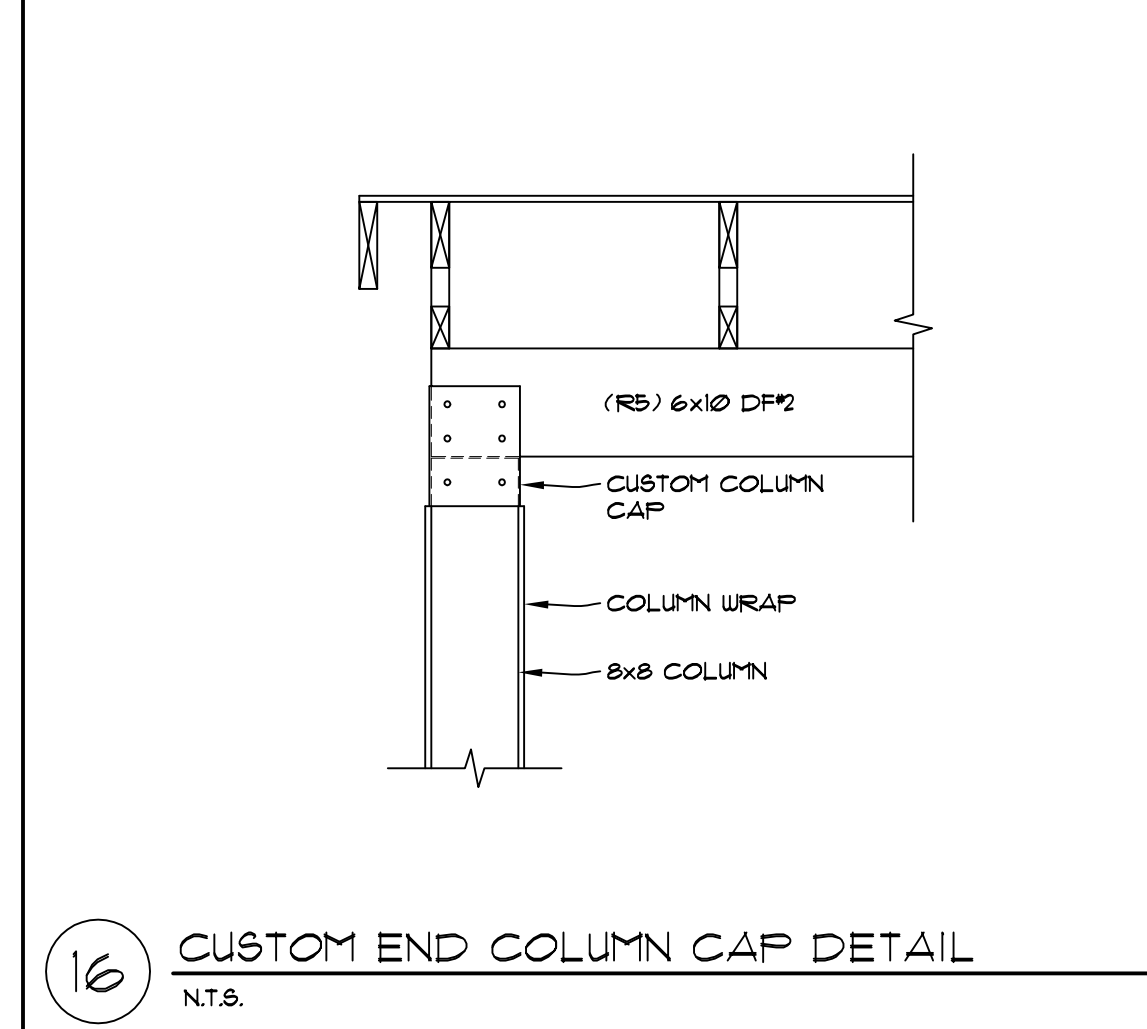
13 CUSTOM COLUMN CAP DETAIL
N.T.S.



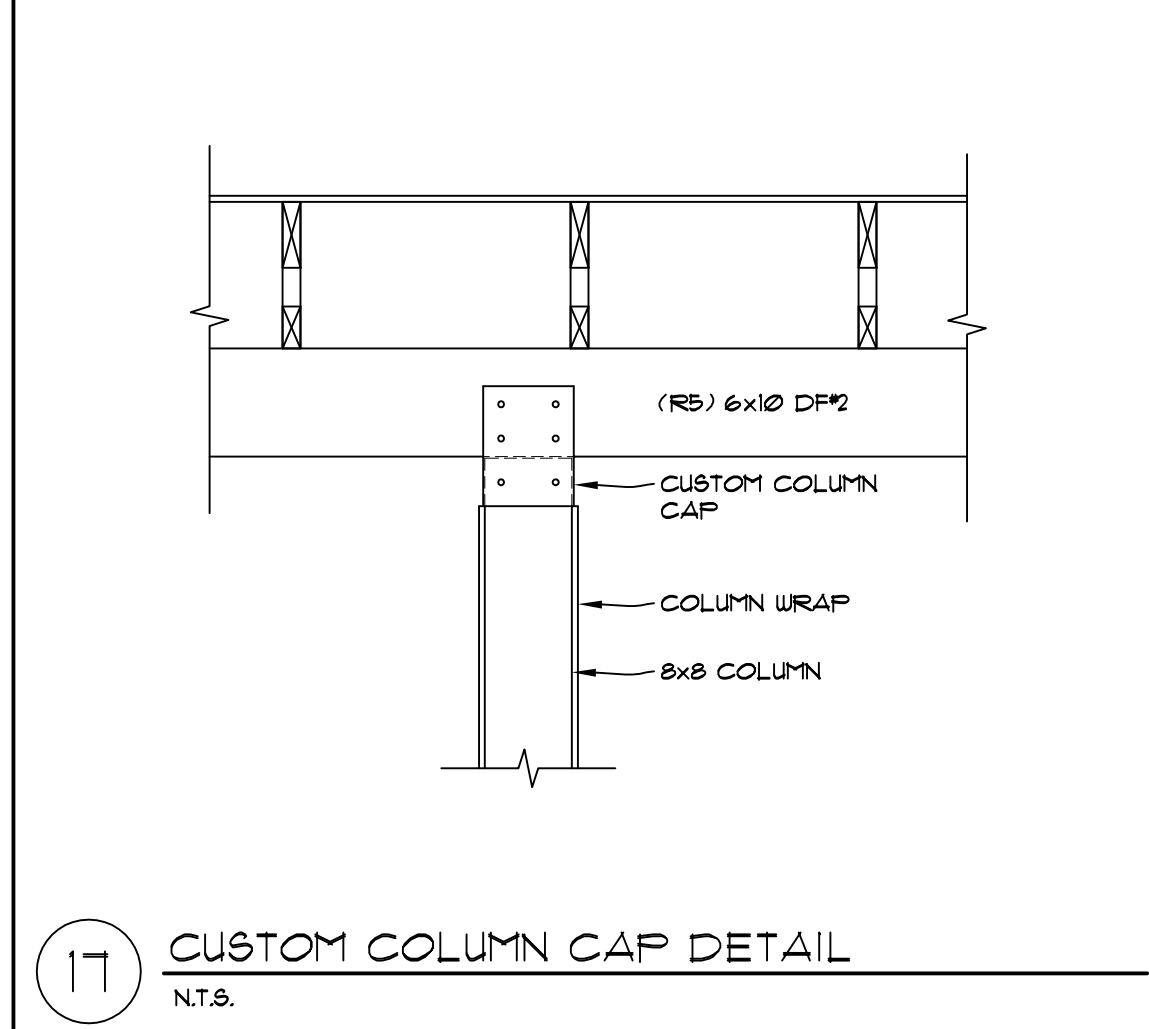
14 CUSTOM END COLUMN CAP DETAIL
N.T.S.



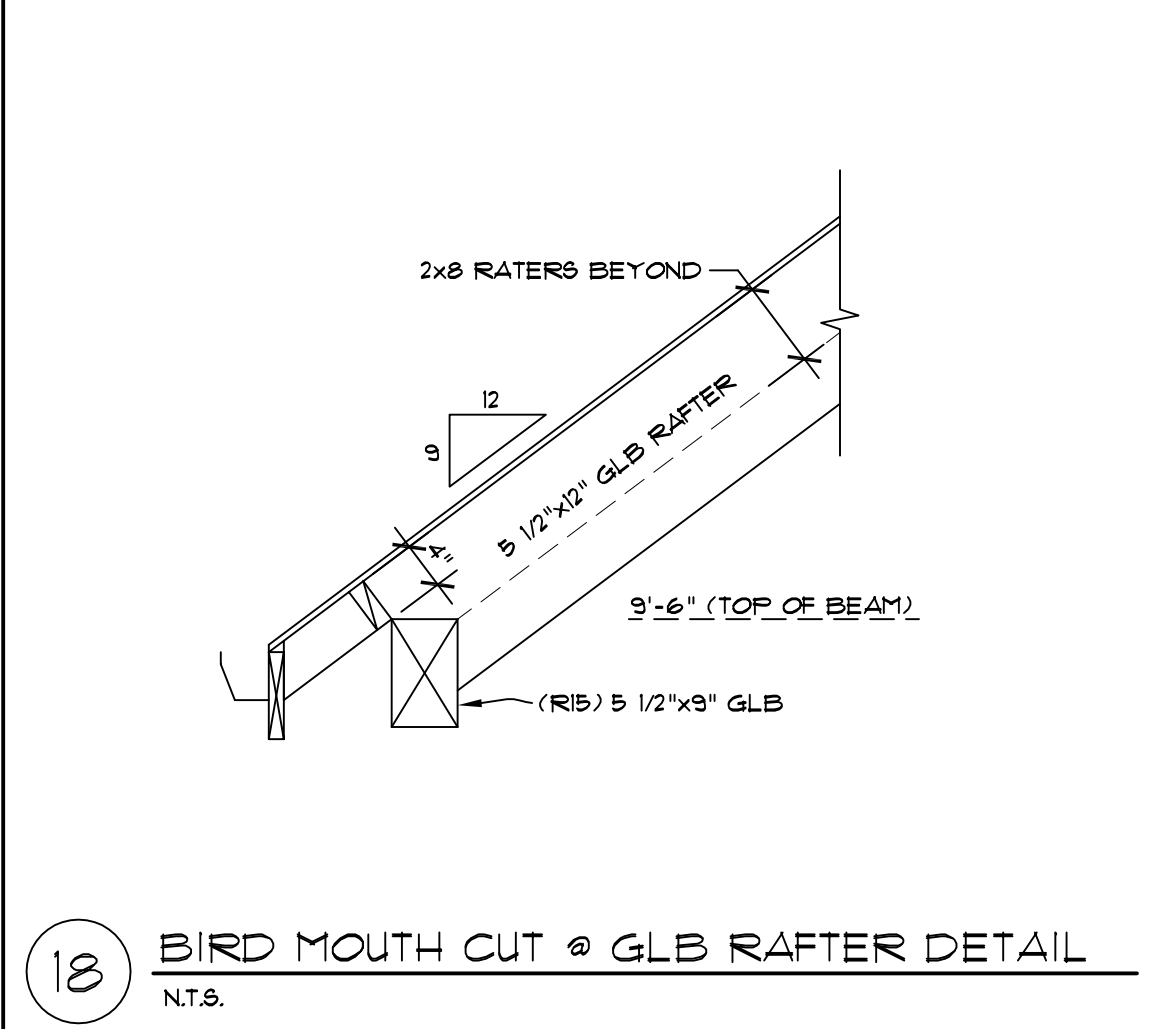
15 CUSTOM COLUMN CAP DETAIL
N.T.S.



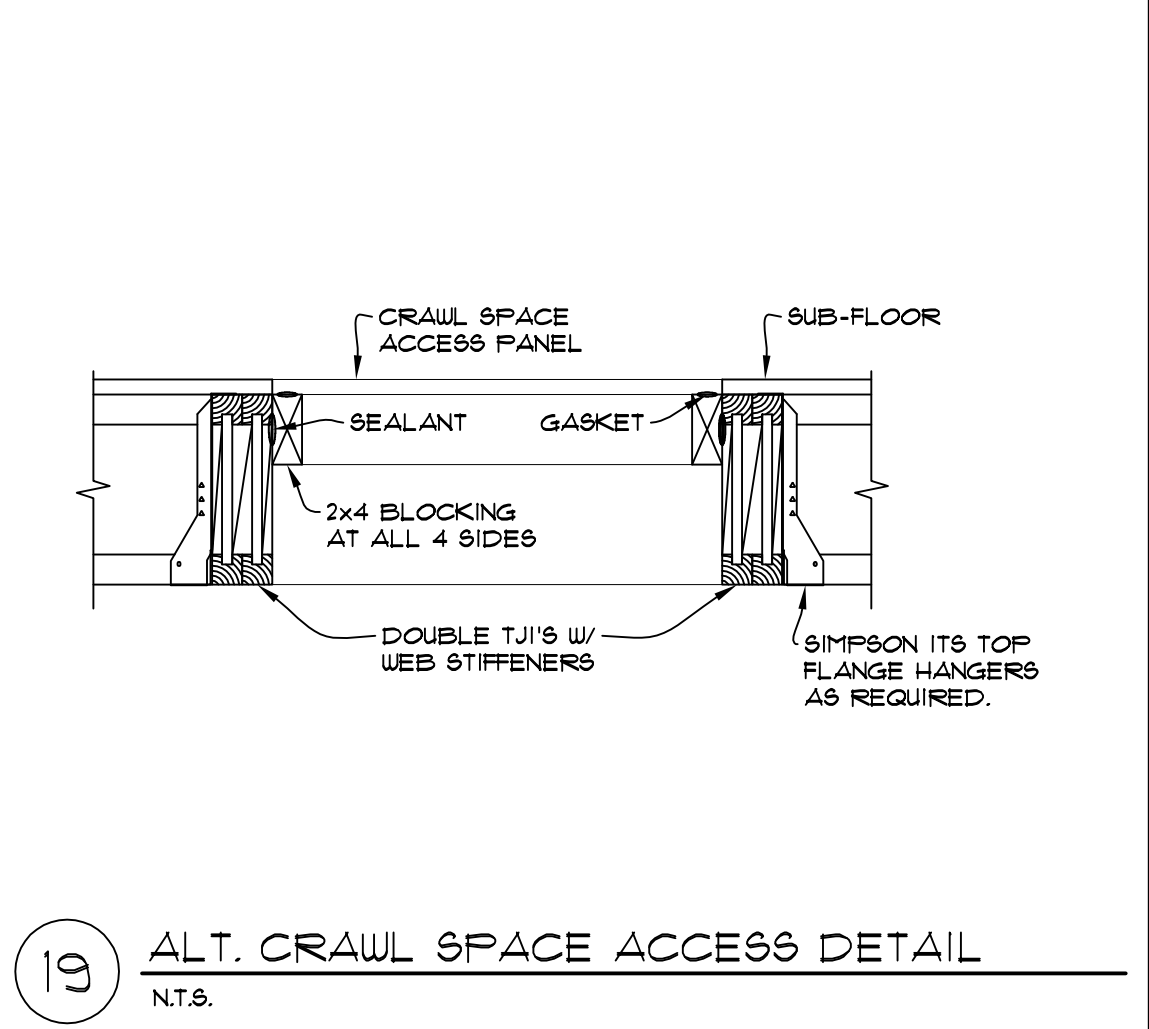
16 CUSTOM END COLUMN CAP DETAIL
N.T.S.



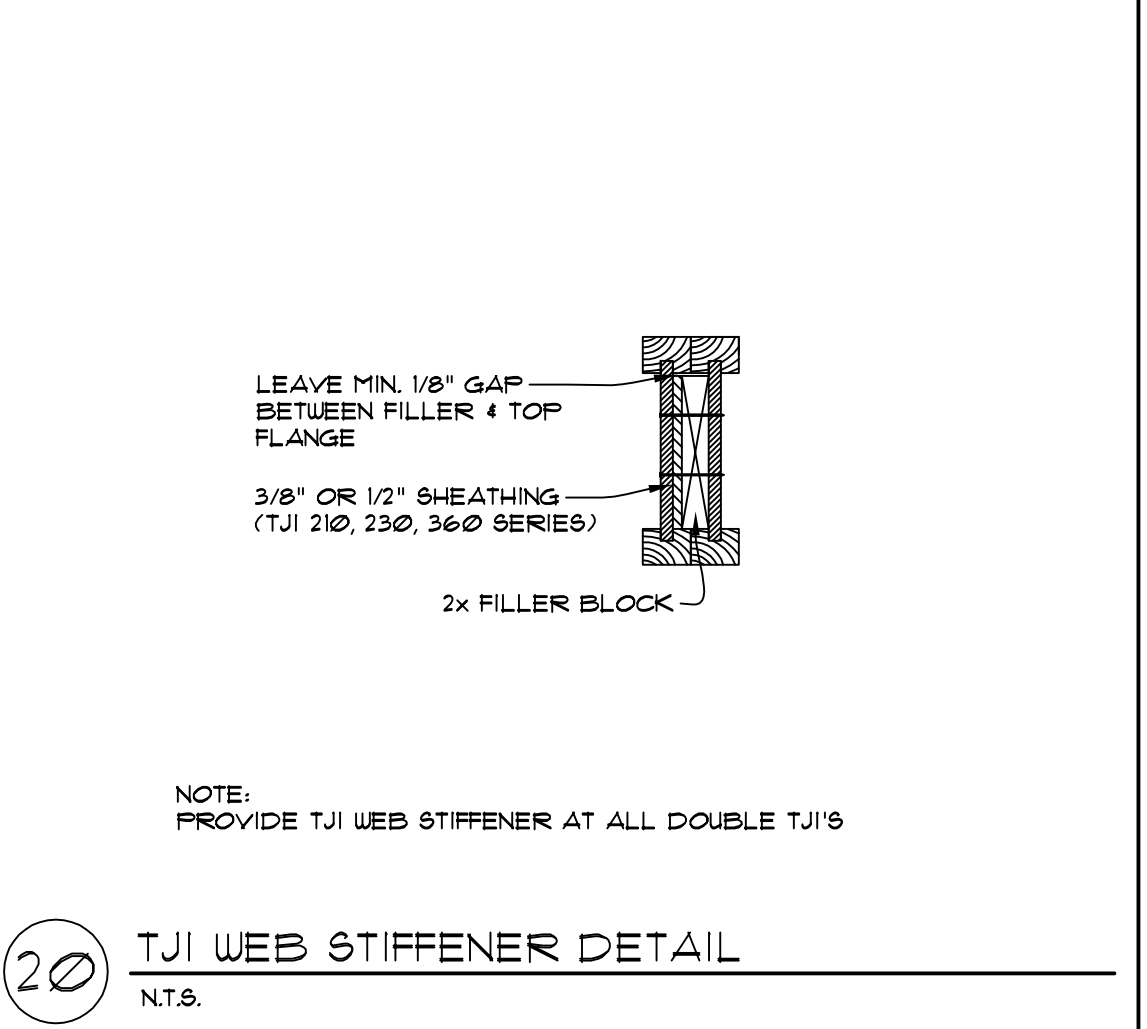
17 CUSTOM COLUMN CAP DETAIL
N.T.S.



18 BIRD MOUTH CUT @ GLB RAFTER DETAIL
N.T.S.



19 ALT. CRAWL SPACE ACCESS DETAIL
N.T.S.



20 TJI WEB STIFFENER DETAIL
N.T.S.

Window, Skylight and Door Schedule

Project Information		Contact Information	
Houtchens Residence	6024 SE 22nd Street	Matt Mawer	425.417.7817
Mercer Island, WA 98040			

Ref.	U-factor	Qt.	Width	Height	Area	UA
		Feet	Feet	Feet	Feet ²	
Exempt Swinging Door (24 sq. ft. max.)					0.0	0.00
Exempt Glazed Fenestration (15 sq. ft. max.)					0.0	0.00

Vertical Fenestration (Windows and doors)

Component Description	Ref.	U-factor	Qt.	Width	Height	Area	UA
			Feet	Feet	Feet	Feet ²	
PICTURE	M1	0.28	1	2	7	15.0	4.20
PICTURE	M2	0.28	1	2	7	15.0	4.20
TRANSOM	M3	0.28	4	2	2	20.0	5.60
PICTURE	M4	0.28	1	2	7	15.0	4.20
PICTURE	M5	0.28	1	2	7	15.0	4.20
XOX	M8	0.28	1	9	5	45.0	12.60
PICTURE	M9	0.28	1	3	3	9.0	2.52
AWNING	M9	0.28	1	3	2	6.0	1.68
PICTURE	M10	0.28	1	9	5	45.0	12.60
PICTURE	M11	0.28	1	6	5	30.0	7.80
PICTURE	M12	0.28	1	3	5	15.0	4.20
XO	M13	0.28	1	4	5	23.8	6.65
PICTURE	M14	0.28	1	3	5	15.0	4.20
PICTURE	M15	0.28	1	3	5	15.0	4.20
TRIANGLE TRANSOM	M16	0.28	1	4	3	16.3	4.57
TRIANGLE TRANSOM	M17	0.28	1	4	3	16.3	4.57
TRANSOM	M18	0.28	3	3	2	26.3	7.35
TRANSOM	M19	0.28	3	3	2	26.3	7.35
TRIANGLE TRANSOM	M20	0.28	1	4	3	16.3	4.57
TRIANGLE TRANSOM	M21	0.28	1	4	3	16.3	4.57
PICTURE	M22	0.28	3	3	2	20.3	5.67
PICTURE	M23	0.28	1	3	3	9.0	2.52
PICTURE	M24	0.28	2	3	3	18.0	5.04
AWNING	M24	0.28	2	3	2	12.0	3.36
PICTURE	M25	0.28	1	3	3	9.0	2.52
PICTURE	M26	0.28	3	3	2	20.3	5.67
PICTURE	M27	0.28	1	2	3	13.3	3.73
AWNING	M27	0.28	1	2	2	6.7	1.87
TRIANGLE TRANSOM	M28	0.28	1	3	3	11.0	3.08
TRIANGLE TRANSOM	M29	0.28	1	3	3	11.0	3.08
		0.28				0.0	0.00
SLIDING GLASS DOOR	D2	0.28	1	7	8	56.0	15.68
STORE DOOR	D3	0.28	1	3	8	24.0	6.72
STORE DOOR	D5	0.28	1	3	8	24.0	6.72
STORE DOOR	D7	0.28	1	2	8	21.3	5.97

SLIDING GLASS DOOR	D8	0.28	1	10	8	84.0	23.52
SLIDING GLASS DOOR	D9	0.28	1	10	8	84.0	23.52
SLIDING GLASS DOOR	D10	0.28	1	10	8	84.0	23.52
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00

Sum of Vertical Fenestration Area and UA
Vertical Fenestration Area Weighted U = UA/Area
909.4 254.04
0.28

Overhead Glazing (Skylights)

Component Description	Ref.	U-factor	Qt.	Width	Height	Area	UA
			Feet	Feet	Feet	Feet ²	
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00
						0.0	0.00

Sum of Overhead Glazing Area and UA
Overhead Glazing Area Weighted U = UA/Area
0.0 0.00
0.00

Total Sum of Fenestration Area and UA (for heating system sizing calculations)
909.4 254.04

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads.

Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at energycode@energy.wsu.edu or (360) 956-2042 for assistance.

Project Information		Contact Information	
Houtchens Residence	6024 SE 22nd Street	Matt Mawer	425.417.7817
Mercer Island, WA 98040			

Heating System Type: All Other Systems Heat Pump

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

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

Area of Building
Conditioned Floor Area (sq ft): 4,626
Average Ceiling Height (ft): 10.5
Conditioned Volume: 48,573

Glazing and Doors
U-Factor X Area = UA
0.280 X 909 = 254.52

Skylights
U-Factor X Area = UA
0.50 X 0 = 0

Insulation
Attic
U-Factor X Area = UA
0.026 X 2,307 = 59.98

Single Rafter or Joist Vaulted Ceilings
U-Factor X Area = UA
0.027 X 1,803 = 48.68

Above Grade Walls (see Figure 1)
U-Factor X Area = UA
0.056 X 3,261 = 182.62

Floors
U-Factor X Area = UA
0.025 X 3,516 = 87.90

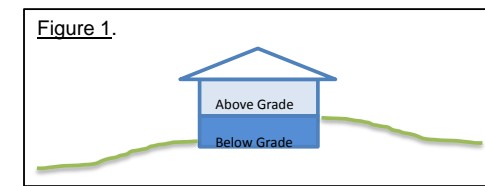
Below Grade Walls (see Figure 1)
U-Factor X Area = UA
0.042 X 742 = 31.16

Slab Below Grade (see Figure 1)
F-Factor X Length = UA
0.303 X 107 = 32.42

Slab on Grade (see Figure 1)
F-Factor X Length = UA
0.360 X 0 = 0

Location of Ducts
Unconditioned Space
Duct Leakage Coefficient: 1.10

Sum of UA: 697.28
Envelope Heat Load: 31,378 Btu / Hour
Sum of UA x ΔT
Air Leakage Heat Load: 23,606 Btu / Hour
Volume x 0.6 x ΔT x 0.018
Building Design Heat Load: 54,984 Btu / Hour
Air leakage + envelope heat loss
Building and Duct Heat Load: 60,483 Btu / Hour
Ducts in unconditioned space: sum of building heat loss x 1.10
Ducts in conditioned space: sum of building heat loss x 1
Maximum Heat Equipment Output: 75,603 Btu / Hour
Building and duct heat loss x 1.40 for forced air furnace
Building and duct heat loss x 1.25 for heat pump



2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021) Version 1.0

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

Project Information		Contact Information	
Houtchens Residence	6024 SE 22nd Street	Matt Mawer	425.417.7817
Mercer Island, WA 98040			

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

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

Authorized Representative		Date	
---------------------------	--	------	--

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

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

^b The fenestration U-factor column excludes skylights.

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

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

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

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

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

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

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

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

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

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

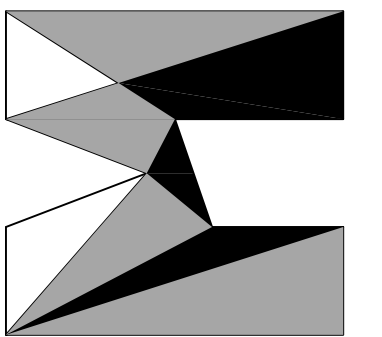
Summary of Table R406.2			
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option	User Notes
1	Combustion heating minimum NAECA ^b	0.0	<input type="checkbox"/>
2	Heat pump ^f	1.0	<input checked="" type="checkbox"/>
3	Electric resistance heat only - furnace or zonal	-1.0	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

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

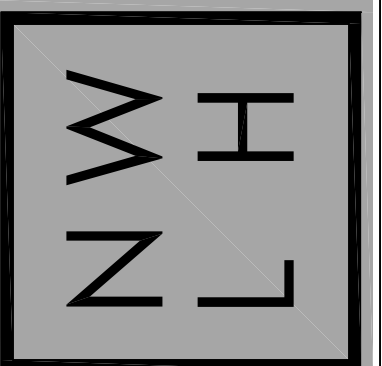
Summary of Table R406.2 (cont.)			
Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category ^d	User Notes
5.1 ^d	Efficient Water Heating	0.5	<input type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/>
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input checked="" type="checkbox"/>
5.6	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1 ^e	Renewable Electric Energy (3 credits max)	1.0	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
Total Credits		6.0	<input checked="" type="checkbox"/> Calculate Total <input type="checkbox"/> Clear Form

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

matthew mawer
residential design
matt@mawer.net
425.417.7817



nw
lifestyle
homes
www.nwlifestylehomes.com



HOUTCHENS RESIDENCE
6024 SE 22nd ST
MERCER ISLAND, WA 98040

JOB NO: 20-020
DATE: 9/01/22
DRWN. BY: MM, MG
REVISED:

SHEET NO.

WSEC



MDT ENGINEERING
 31403 44th AVE S
 AUBURN, WA 98001
 PHONE: (253) 709-9852
 EMAIL: md.thompson@earthlink.net

REVISION DATES:

REVISION DATES:

PROJECT: MAWER-HOUTCHENS
 SHEET TITLE: STRUCTURAL NOTES & SCHEDULES
 SCALE: NO SCALE
 DATE: 4-18-22
 DRAWN BY: MDT
 SHEET NO.: S1
 PROJECT NO. MAWER/HOUTCHENS

STRUCTURAL NOTES

CODES AND SPECIFICATIONS

- INTERNATIONAL BUILDING CODE, 2018 EDITION, ASCE 7-16
- INTERNATIONAL RESIDENTIAL CODE, 2015 EDITION
- SIMPSON STRONG TIE WOOD CONSTRUCTION CONNECTORS 2021-2023
- FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE STAINLESS STEEL, ZMAX(G185HDG PER ASTM A653). BATCH/POST HOT-DIP GALVANIZED (PER ASTM B695, CLASS 55 OR GREATER). UNCOATED AND PAINTED PRODUCTS SHOULD NOT BE USED WITH TREATED WOOD. WHEN USING STAINLESS STEEL HOT-DIP GALVANIZED CONNECTORS, THE CONNECTORS AND FASTENERS SHOULD BE MADE OF THE SAME MATERIAL.

DESIGN CRITERIA

- WIND LOAD: INTERNATIONAL BUILDING CODE, 2018, ASCE 7-16, ALTERNATE ALL-HEIGHTS METHOD, ULTIMATE DESIGN WIND SPEED = 110 MPH, NOMINAL DESIGN WIND SPEED = 85 MPH, EXPOSURE C
- SEISMIC: INTERNATIONAL BUILDING CODE, 2018, ASCE 7-16
 RISK CATEGORY II, SEISMIC IMPORTANCE CATEGORY, Ie=1.0
 MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS, Ss=1.5, S1=0.5
 SITE CLASS D
 DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS, Sds=1.0g, Sd=0.5g
 SEISMIC DESIGN CATEGORY, D2
 BASIC SEISMIC FORCE-RESISTING SYSTEM: LIGHT FRAME WALLS WITH WOOD SHEAR WALLS
 DESIGN BASE SHEAR, V + F(Sds)(W)/R = 0.1846W
 RESPONSE MODIFICATION COEFFICIENT, R=6.5
 ANALYSIS PROCEDURE USED: SIMPLIFIED ALTERNATIVE STRUCTURAL DESIGN FOR SIMPLE BEARING WALL SYSTEMS
- ROOF LOAD: DL = 15 PSF LL = 25 PSF (ROOF SNOW LOAD)
- FLOOR LOAD: DL = 10 PSF LL = 40 PSF
- DECK LOAD: DL = 10 PSF LL = 60 PSF
- SOILS: ASSUMED 1500 PSF ALLOWABLE SOIL BEARING
 ASSUMED 35 PCF ACTIVE SOIL PRESSURE, 350 PCF PASSIVE PRESSURE
 0.35 COEFFICIENT OF FRICTION
 ALL FOOTINGS AND SLABS SHALL BEAR ON UNDISTURBED SOIL OR FILL COMPACTED TO 95% MODIFIED PROCTOR.
- CONCRETE: 3000 PSI @ 28 DAYS (2500 PSI USED FOR DESIGN)
 GRADE 40 REINFORCEMENT
 MINIMUM 3" COVER FOR ALL REINFORCEMENT EXCEPT AS NOTED AT RETAINING WALL OR OTHER DETAILS.

TIMBER CONSTRUCTION DETAILS

- LUMBER GRADES AND ALLOWABLE STRESSES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS:
 ALL SAWN LUMBER HF#2 OR BETTER, Fb = 875 PSI, Fv = 75 PSI, E = 1,300,000
 GLULAM BEAMS 24F-V4, Fb = 2400 PSI, Fv = 165 PSI, E = 1,800,000
 MICROLAM, LVL Fb = 2600 PSI, Fv = 285 PSI, E = 1,900,000
 PARALLAM, PSL Fb = 2600 PSI, Fv = 290 PSI, E = 2,900,000
- WHEN TOP PLATE IS INTERRUPTED BY HEADER, HEADER SHALL HAVE STRAP CONNECTORS TO THE TOP PLATE EACH END. USE 2-SIMPSON MSTA24 CONNECTORS, UNLESS NOTED OTHERWISE.
- ALL SHEAR WALL SHEATHING, NAILS AND ANCHORS SHALL BE AS DETAILED ON THE DRAWINGS AND AS NOTED IN THE SHEAR WALL SCHEDULE.
- FLOOR SHEATHING SHALL BE 1/2" MINIMUM APA RATED FLOOR SHEATHING WITH 10d COMMON @ 6"OC AT ALL SUPPORTED PANEL EDGES AND 10d @ 12"OC AT INTERMEDIATE SUPPORTS.
- ROOF SHEATHING SHALL BE 1/2" MINIMUM APA RATED ROOF SHEATHING WITH 8d COMMON @ 6"OC AT ALL SUPPORTED PANEL EDGES AND 8d @ 12"OC AT INTERMEDIATE SUPPORTS.

GENERAL CONSTRUCTION NOTES

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD. ANY VARIATIONS FROM THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER OR THE ENGINEER OF RECORD.
- ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION SHALL BE PROVIDED.
- ANY PROPOSED FIELD CHANGES MUST HAVE THE APPROVAL OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

SHEAR WALL SCHEDULE

SHEAR WALL TYPE	SHEATHING (NOTE 5)	FASTENER SPACING (COMMON OR GALVANIZED BOX NAILS)	BOTTOM PLATE NAILING OR ANCHOR BOLTS	FRAMING ANCHORS (NOTES 7 & 8)	ALLOWABLE SHEAR	NOTES
1A	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" OC	16d @ 8" OC OR 1/2" A.B. @ 5'-6" OC	RBC @ 32" OC LTP4 @ 48" OC A35 @ 48" OC	130 PLF	1, 2, 3, 11
1	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" OC	16d @ 6" OC OR 1/2" A.B. @ 3'-2" OC OR 3/8" A.B. @ 5'-0" OC	RBC @ 18" OC LTP4 @ 30" OC A35 @ 30" OC	242 PLF	1, 2, 3, 11
2	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 4" OC	16d @ 4" OC OR 1/2" A.B. @ 2'-2" OC OR 3/8" A.B. @ 3'-4" OC	RBC @ 12" OC LTP4 @ 18" OC A35 @ 18" OC	353 PLF	1, 2, 3, 11
3	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 3" OC	1/2" X 5" LAG SCREW @ 8"OC OR 1/2" A.B. @ 3'-2" OC OR 3/8" A.B. @ 5'-0" OC	RBC @ 10" OC LTP4 @ 15" OC A35 @ 15" OC	456 PLF	1, 2, 3, 4, 9, 10, 11
4	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 3" OC	1/2" X 5" LAG SCREW @ 6"OC OR 1/2" A.B. @ 1'-4" OC OR 3/8" A.B. @ 2'-0" OC	RBC @ 8" OC LTP4 @ 12" OC A35 @ 12" OC	558 PLF	1, 2, 3, 4, 9, 10, 11
5	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 2" OC	1/2" X 5" LAG SCREW @ 5"OC OR 1/2" A.B. @ 1'-0" OC OR 3/8" A.B. @ 1'-8" OC	RBC @ 6" OC LTP4 @ 10" OC A35 @ 10" OC	716 PLF	1, 2, 3, 4, 9, 10, 11
6	19/32" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 BOTH SIDES	10d @ 2" OC	1/2" X 5" LAG SCREW @ 2"OC OR 1/2" A.B. @ 1'-0" OC	LTP4 @ 6" OC A35 @ 6" OC	1618 PLF	1, 2, 3, 4, 6, 9, 10, 11

1. ALL FASTENERS SHALL MEET THE FOLLOWING CRITERIA: 8d COMMON = 0.131" DIAMETER X 2 1/2", 8d GALVANIZED BOX = 0.113 DIAMETER X 2 1/2", 10d COMMON = 0.148 DIAMETER X 3", 10d GALVANIZED BOX = 0.128" X 3", 16d COMMON = 0.162" X 3 1/2".

2. PANEL EDGES SHALL BE BACKED WITH 2" NOMINAL OR WIDER FRAMING. SPACE FASTENERS @ 12" OC ON INTERMEDIATE SUPPORTS.

3. PROVIDE ALL ANCHOR BOLTS WITH 3" X 3" X 1/4" PLATE WASHERS. LOCATE WITHIN 1/2" OF SHEATHING.

4. AT GARAGE JAMBS, REFER TO LATERAL RESTRAINT PANEL DETAIL 401/S1.

5. PROVIDE 1/2" APA RATED SHEATHING (PLYWOOD OR OSB) OR APA RATED SIDING 303 OR INNER SEAL OSB RATED PANEL SIDING ON ALL EXTERIOR WALLS DESIGNATED AS SHEAR WALLS.

6. WHERE PANELS ARE APPLIED ON BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" OC ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.

7. REFER TO TYPICAL SHEAR WALL DETAILS ON STRUCTURAL DETAIL SHEET FOR LOCATION OF FRAMING ANCHORS.

8. AT UPPER FLOOR INTERIOR SHEAR WALLS, REFER TO DETAIL 303/S2 OR 304/S2.

9. AT SHEAR WALL TYPES 3, 4, 5 AND 6, ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. FOR EXAMPLE, PROVIDE A 3X STUD AT VERTICAL JOINTS IN THE SHEATHING.

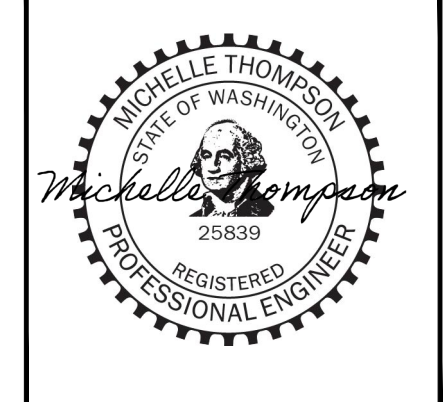
10. AT SHEAR WALL TYPES 3, 4, 5 AND 6, FOUNDATION SILL PLATES AND BOTTOM PLATES OF SHEAR WALLS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. ALSO, PROVIDE A 3X MINIMUM WIDTH MEMBER BELOW SHEAR WALL TO RECEIVE LAG SCREWS SUCH AS A 3X RIM JOIST, 3X JOIST OR BEAM OR BLOCKING BELOW SHEAR WALL.

11. FASTENERS AT PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL, G185 HDG, BATCH/POST HOT-DIP GALVANIZED OR MECHANICALLY GALVANIZED.

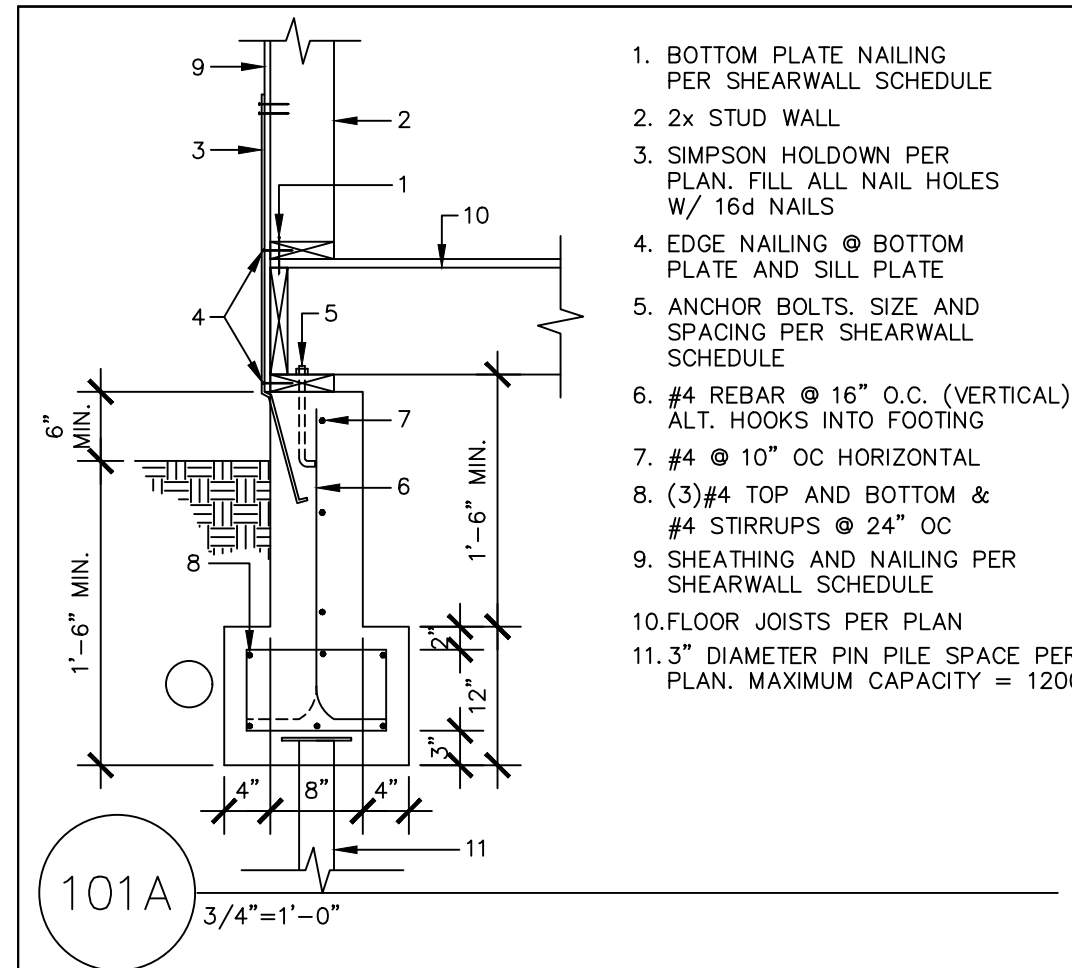
FOOTING SCHEDULE

MARK	SIZE	DEPTH	REINFORCING	ALLOWABLE LOAD
18	18"x18"	8"	(2) #4 EACH WAY	3375#
24	24"x24"	10"	(3) #4 EACH WAY	6000#
30	30"x30"	10"	(3) #5 EACH WAY	9375#
36	36"x36"	10"	(3) #5 EACH WAY	13500#
42	42"x42"	10"	(3) #5 EACH WAY	18375#
48	48"x48"	12"	(4) #5 EACH WAY	24000#
54	54"x54"	12"	(5) #5 EACH WAY	30375#
60	60"x60"	12"	(5) #5 EACH WAY	37500#
66	66"x66"	12"	(6) #5 EACH WAY	45375#
72	72"x72"	12"	(7) #5 EACH WAY	54000#

NOTE: FOOTING DESIGN IS BASED ON 2500 PSI CONCRETE AND AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF

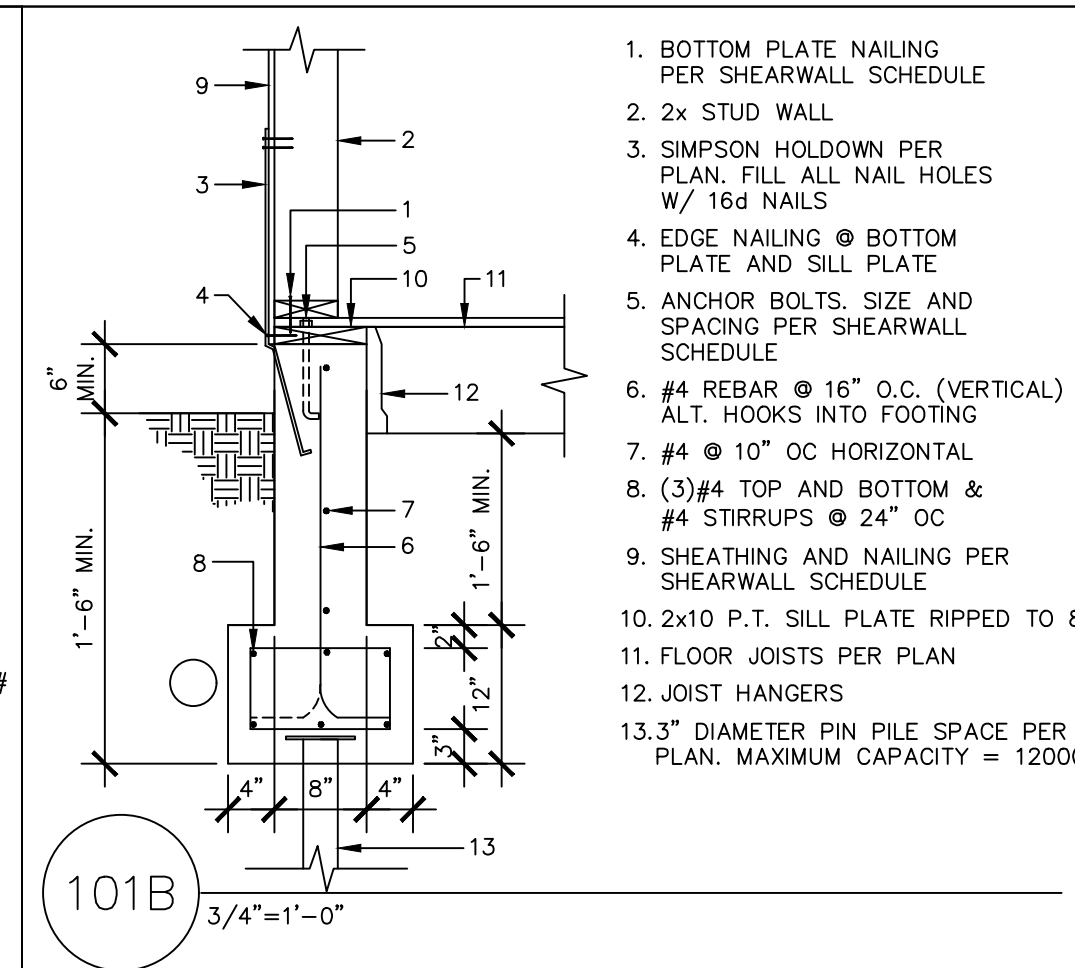


MDT ENGINEERING
 31403 44th AVE S
 AUBURN, WA, 98001
 PHONE: (253) 709-9852
 EMAIL: md.thompson@earthlink.net



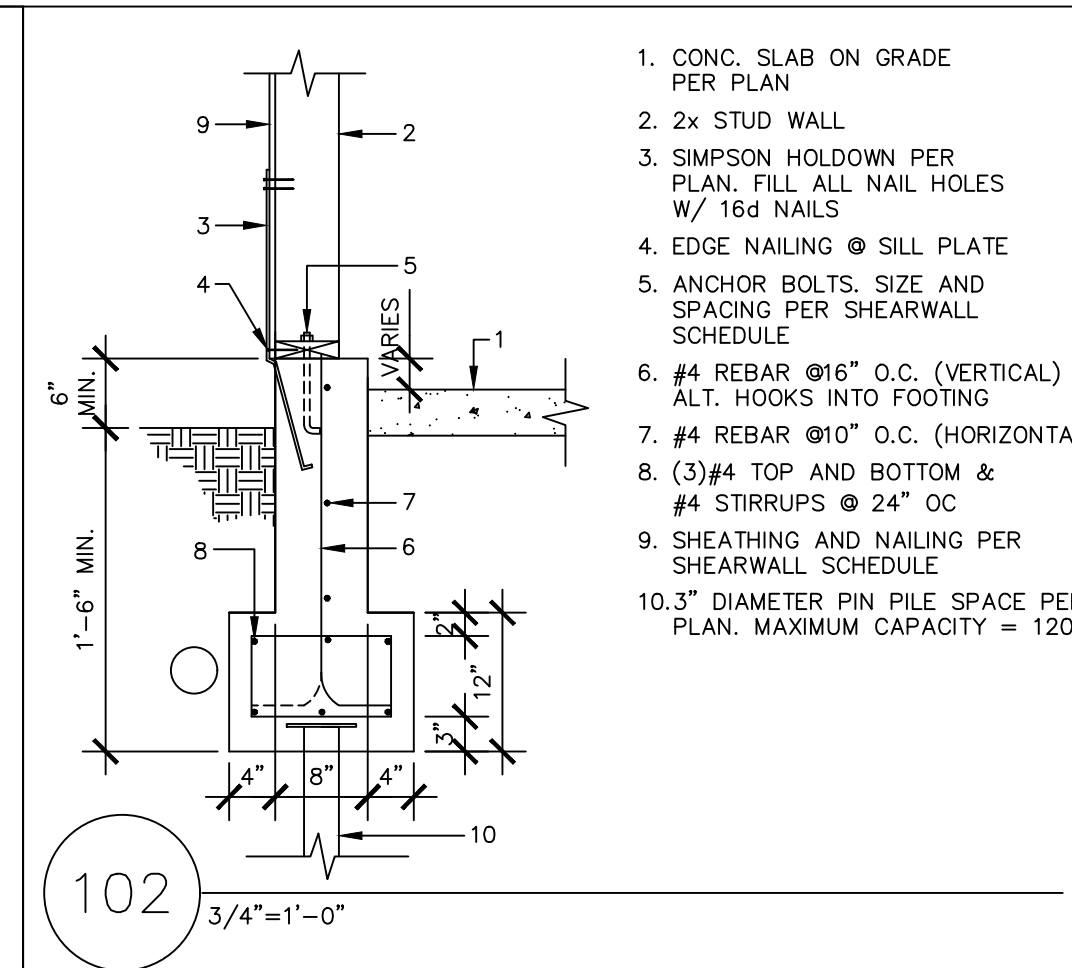
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- 2x STUD WALL
- SIMPSON HOLDOWN PER PLAN, FILL ALL NAIL HOLES W/ 16d NAILS
- EDGE NAILING @ BOTTOM PLATE AND SILL PLATE
- ANCHOR BOLTS, SIZE AND SPACING PER SHEARWALL SCHEDULE
- #4 REBAR @ 16" O.C. (VERTICAL) ALT. HOOKS INTO FOOTING
- #4 @ 10" OC HORIZONTAL
- (3)#4 TOP AND BOTTOM & #4 STIRRUPS @ 24" OC
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- FLOOR JOISTS PER PLAN
- 3" DIAMETER PIN PILE SPACE PER PLAN, MAXIMUM CAPACITY = 12000#

101A 3/4"=1'-0"



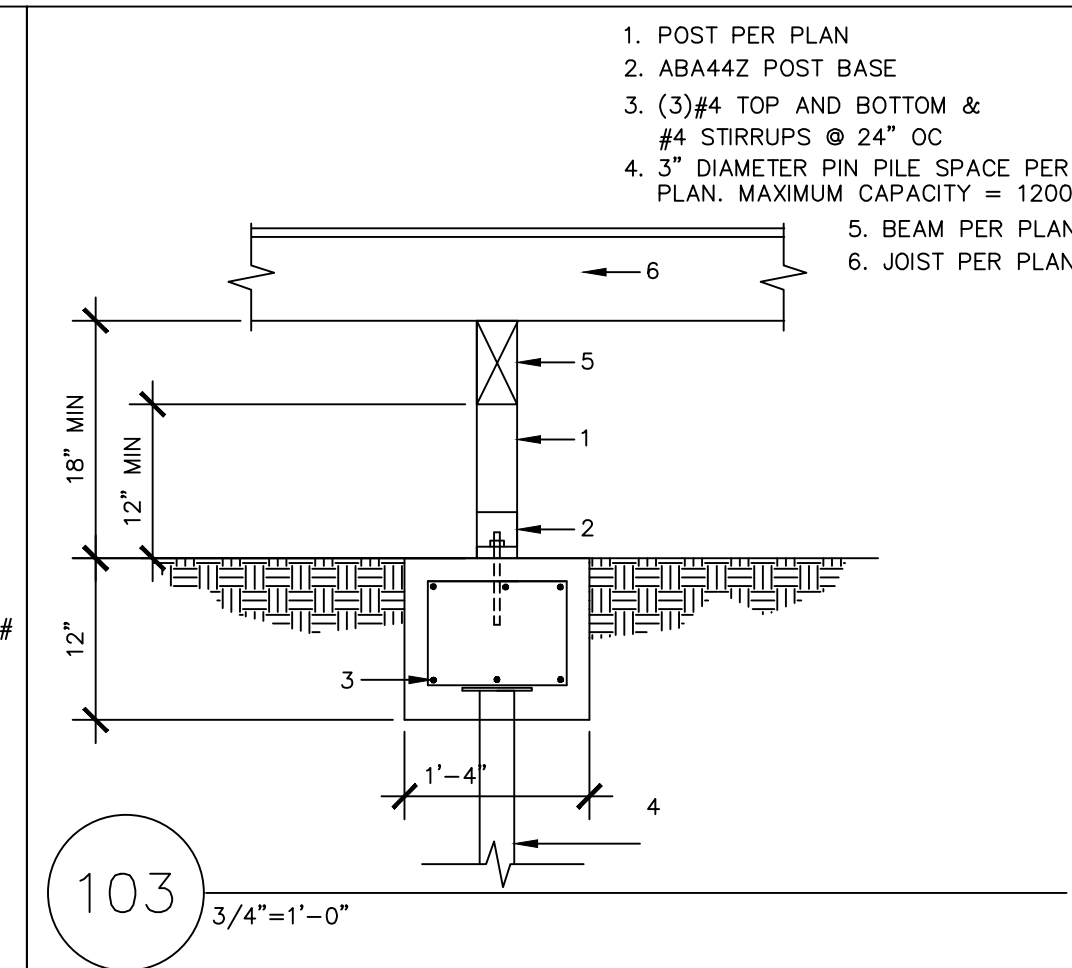
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- 2x STUD WALL
- SIMPSON HOLDOWN PER PLAN, FILL ALL NAIL HOLES W/ 16d NAILS
- EDGE NAILING @ BOTTOM PLATE AND SILL PLATE
- ANCHOR BOLTS, SIZE AND SPACING PER SHEARWALL SCHEDULE
- #4 REBAR @ 16" O.C. (VERTICAL) ALT. HOOKS INTO FOOTING
- #4 @ 10" OC HORIZONTAL
- (3)#4 TOP AND BOTTOM & #4 STIRRUPS @ 24" OC
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- 2x10 P.T. SILL PLATE RIPPED TO 8"
- FLOOR JOISTS PER PLAN
- JOIST HANGERS
- 3" DIAMETER PIN PILE SPACE PER PLAN, MAXIMUM CAPACITY = 12000#

101B 3/4"=1'-0"



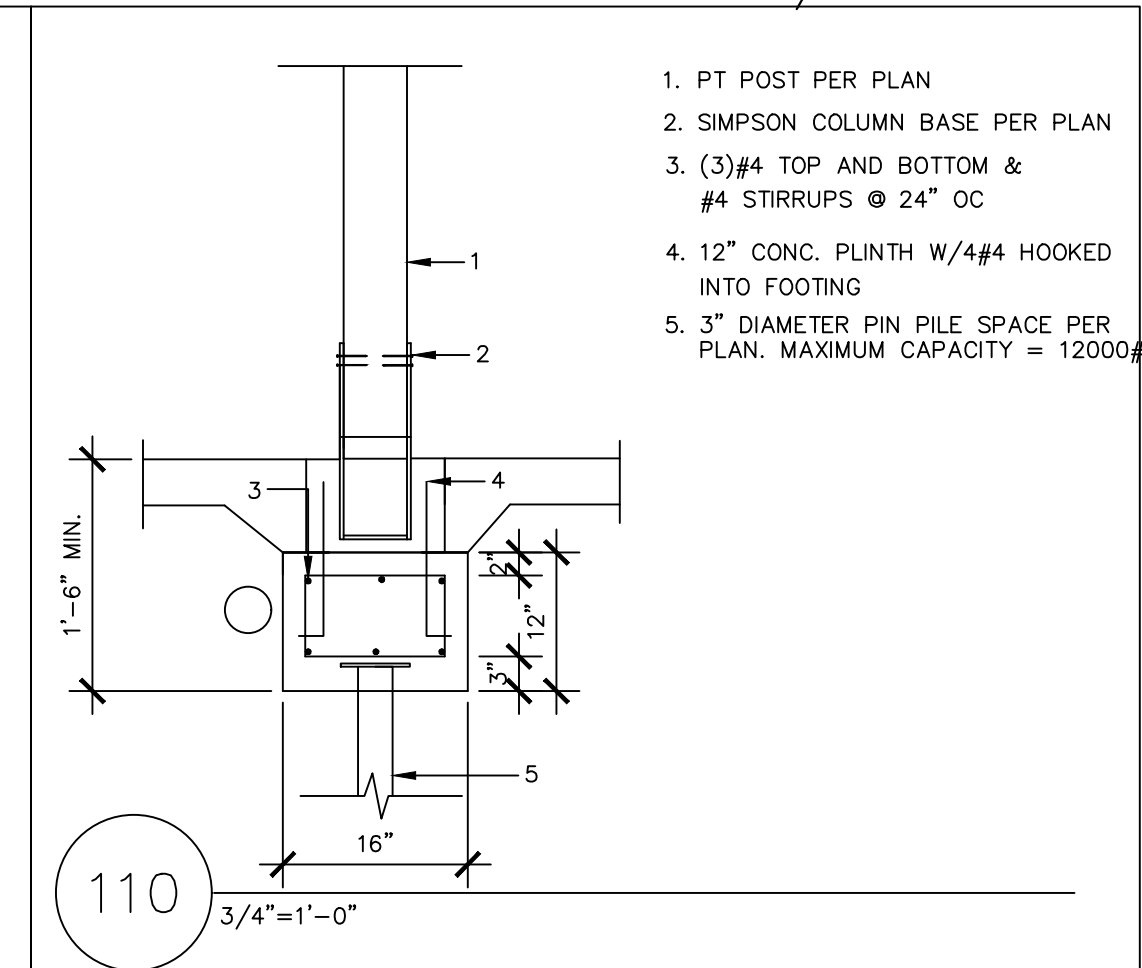
- CONC. SLAB ON GRADE PER PLAN
- 2x STUD WALL
- SIMPSON HOLDOWN PER PLAN, FILL ALL NAIL HOLES W/ 16d NAILS
- EDGE NAILING @ SILL PLATE
- ANCHOR BOLTS, SIZE AND SPACING PER SHEARWALL SCHEDULE
- #4 REBAR @ 16" O.C. (VERTICAL) ALT. HOOKS INTO FOOTING
- #4 @ 10" O.C. (HORIZONTAL)
- (3)#4 TOP AND BOTTOM & #4 STIRRUPS @ 24" OC
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- 3" DIAMETER PIN PILE SPACE PER PLAN, MAXIMUM CAPACITY = 12000#

102 3/4"=1'-0"



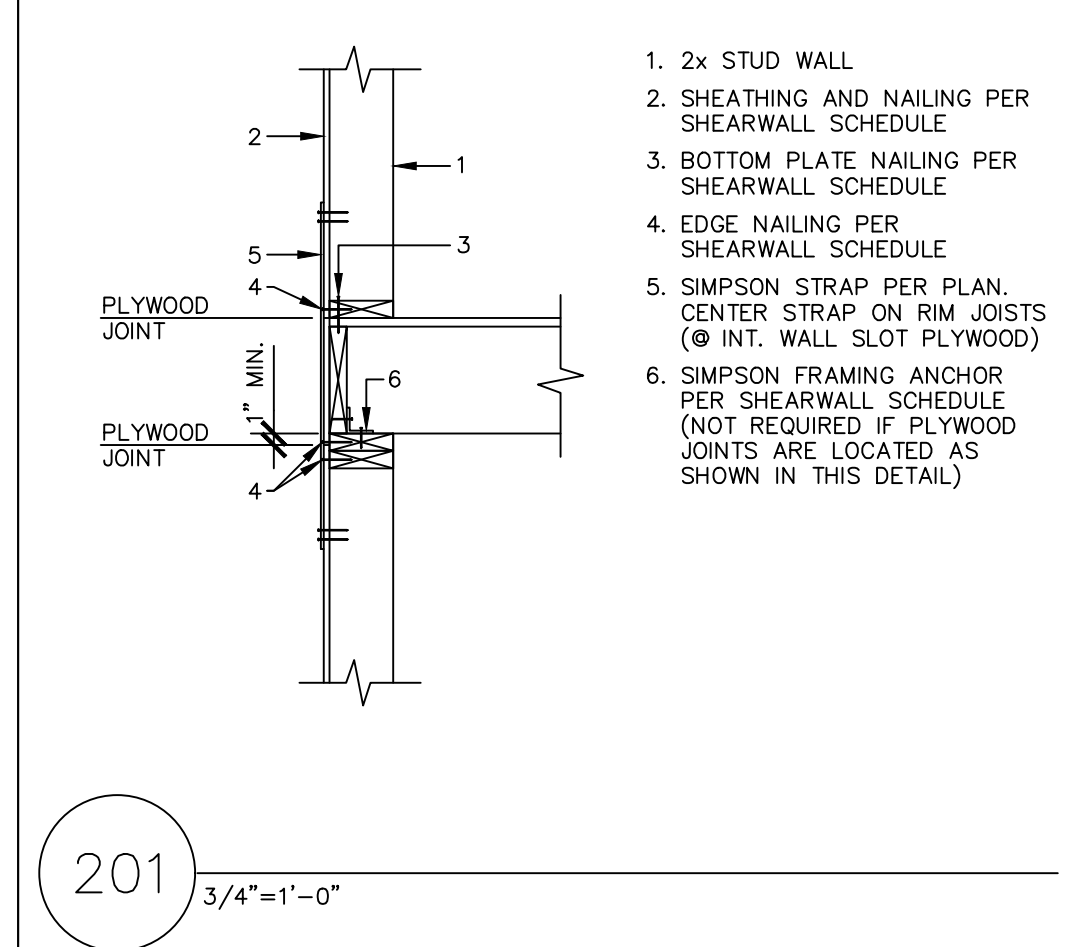
- POST PER PLAN
- ABA442 POST BASE
- (3)#4 TOP AND BOTTOM & #4 STIRRUPS @ 24" OC
- 3" DIAMETER PIN PILE SPACE PER PLAN, MAXIMUM CAPACITY = 12000#
- BEAM PER PLAN
- JOIST PER PLAN

103 3/4"=1'-0"



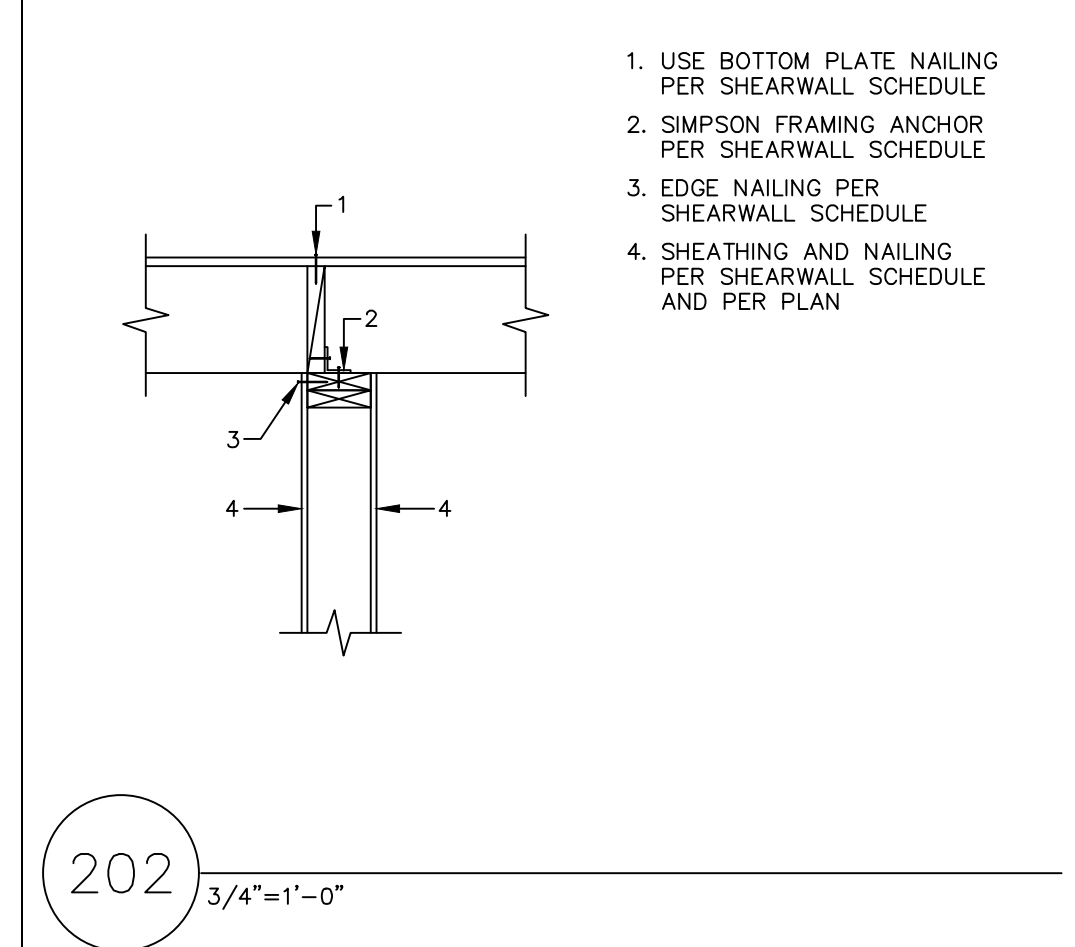
- PT POST PER PLAN
- SIMPSON COLUMN BASE PER PLAN
- (3)#4 TOP AND BOTTOM & #4 STIRRUPS @ 24" OC
- 12" CONC. PLINTH W/#4 HOOKED INTO FOOTING
- 3" DIAMETER PIN PILE SPACE PER PLAN, MAXIMUM CAPACITY = 12000#

110 3/4"=1'-0"



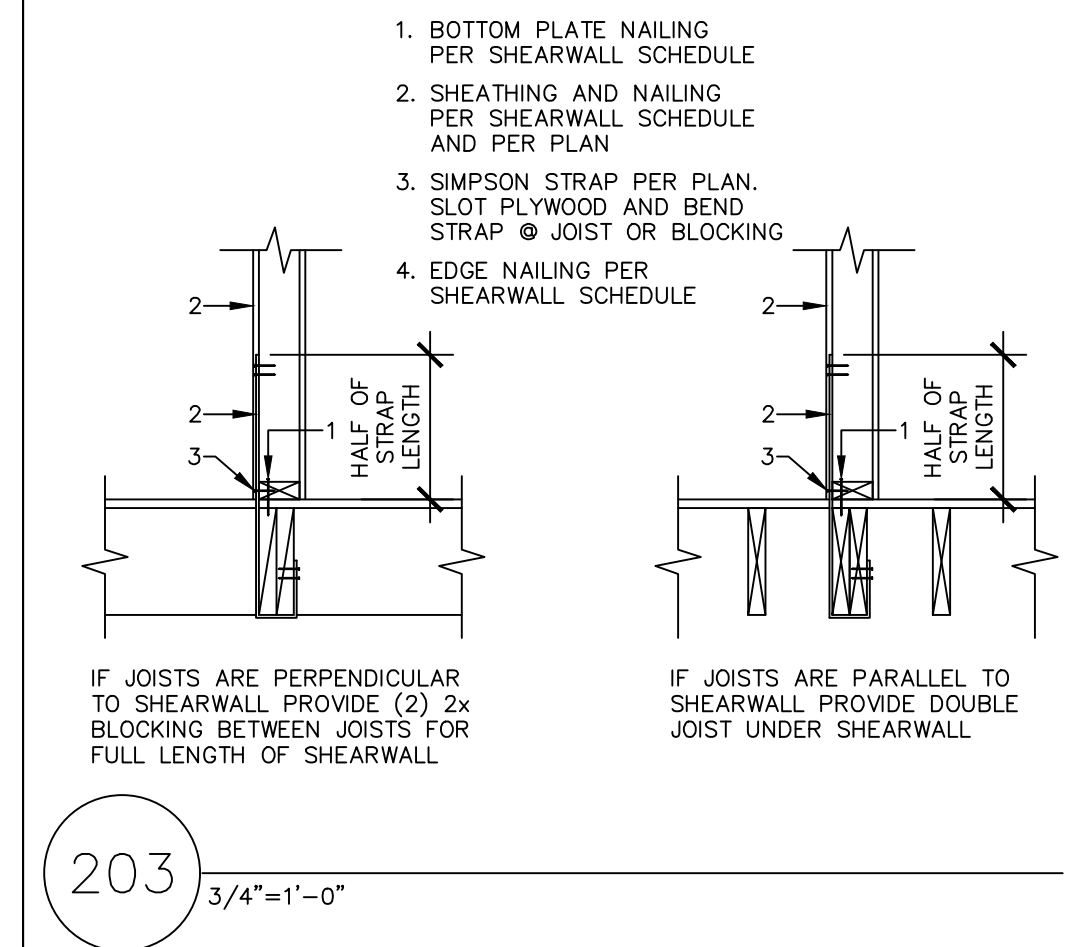
- 2x STUD WALL
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- EDGE NAILING PER SHEARWALL SCHEDULE
- SIMPSON STRAP PER PLAN, CENTER STRAP ON RIM JOISTS (@ INT. WALL SLOT PLYWOOD)
- SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE (NOT REQUIRED IF PLYWOOD JOINTS ARE LOCATED AS SHOWN IN THIS DETAIL)

201 3/4"=1'-0"



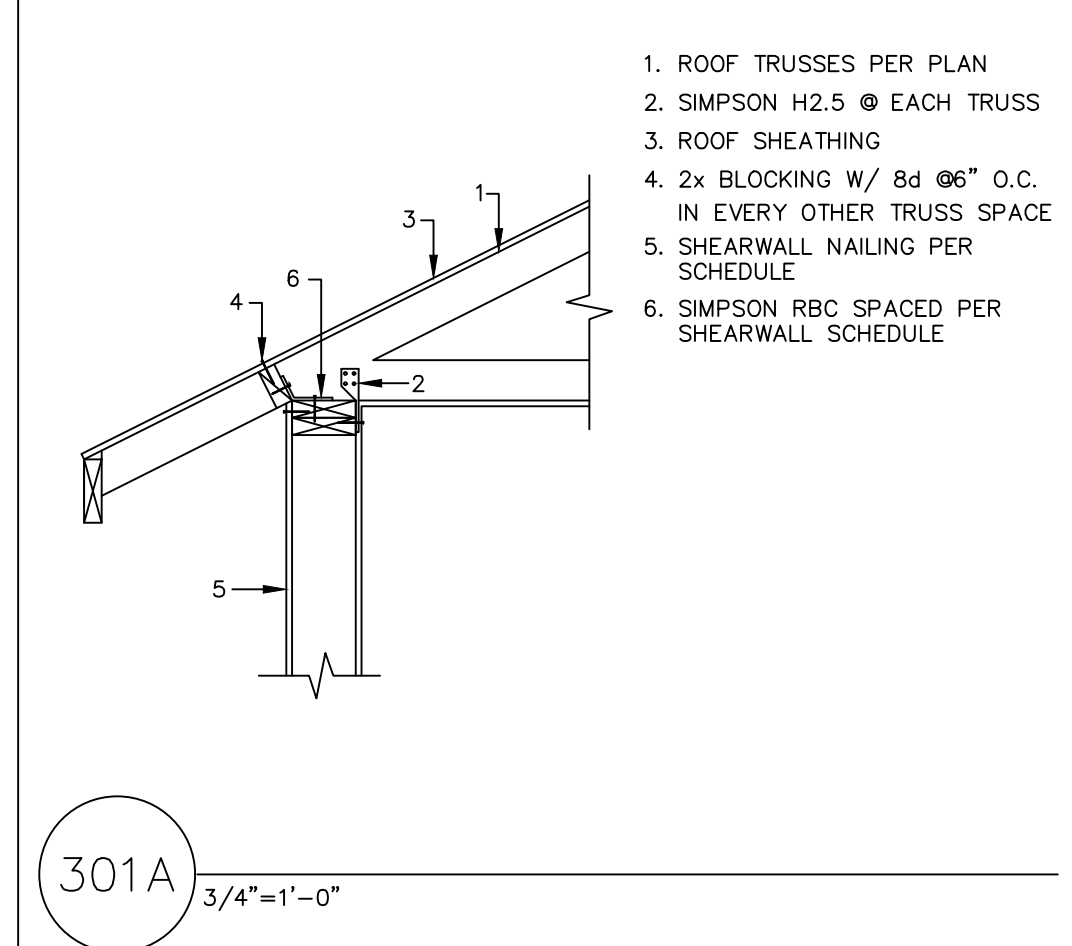
- USE BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE
- EDGE NAILING PER SHEARWALL SCHEDULE
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN

202 3/4"=1'-0"



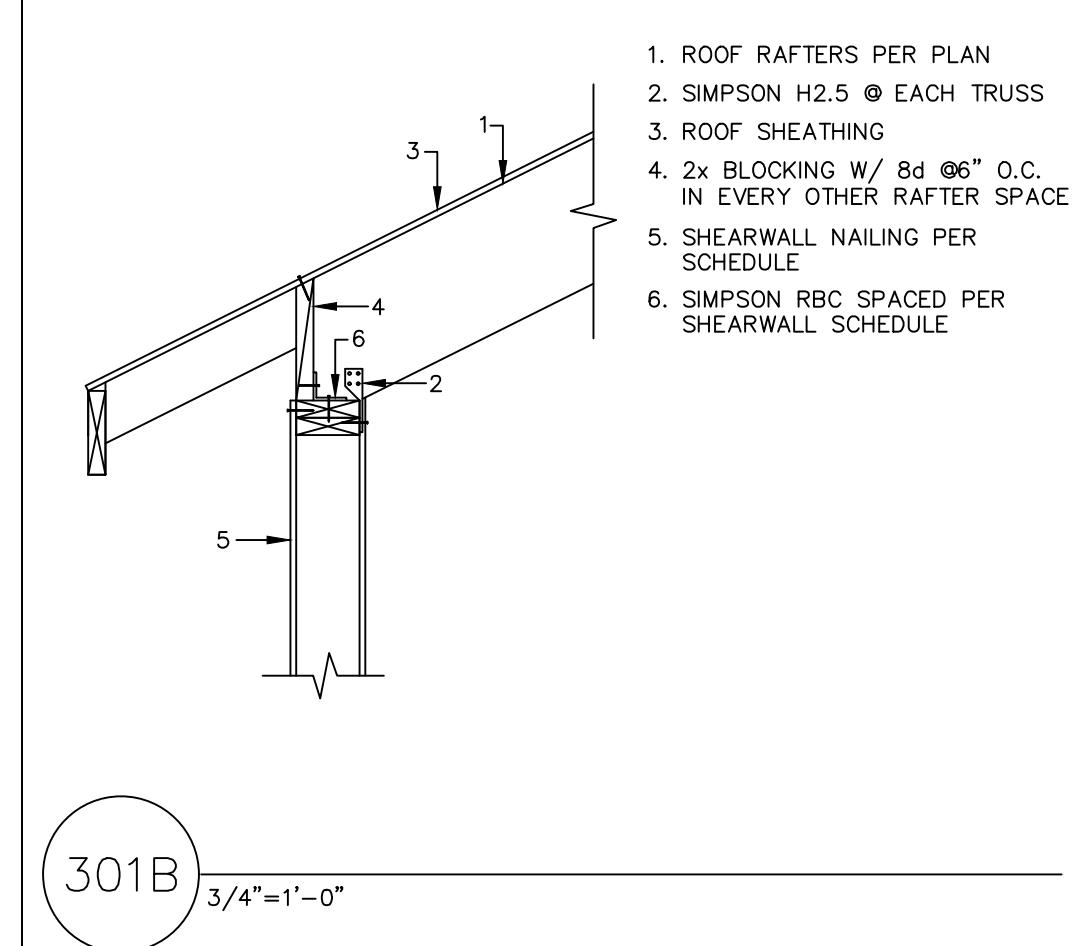
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
 - SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
 - SIMPSON STRAP PER PLAN, SLOT PLYWOOD AND BEND STRAP @ JOIST OR BLOCKING
 - EDGE NAILING PER SHEARWALL SCHEDULE
- IF JOISTS ARE PERPENDICULAR TO SHEARWALL PROVIDE (2) 2x BLOCKING BETWEEN JOISTS FOR FULL LENGTH OF SHEARWALL
- IF JOISTS ARE PARALLEL TO SHEARWALL PROVIDE DOUBLE JOIST UNDER SHEARWALL

203 3/4"=1'-0"



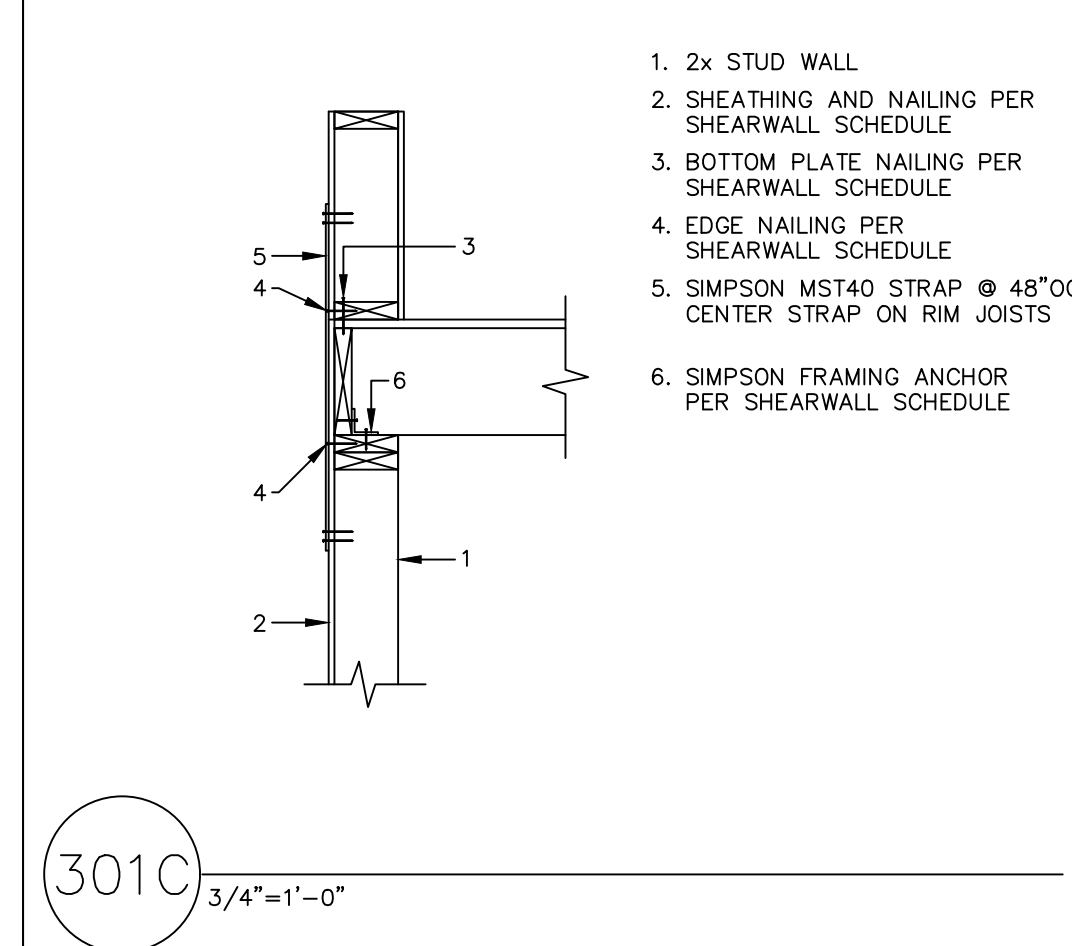
- ROOF TRUSSES PER PLAN
- SIMPSON H2.5 @ EACH TRUSS
- ROOF SHEATHING
- 2x BLOCKING W/ 8d @ 6" O.C. IN EVERY OTHER TRUSS SPACE
- SHEARWALL NAILING PER SCHEDULE
- SIMPSON RBC SPACED PER SHEARWALL SCHEDULE

301A 3/4"=1'-0"



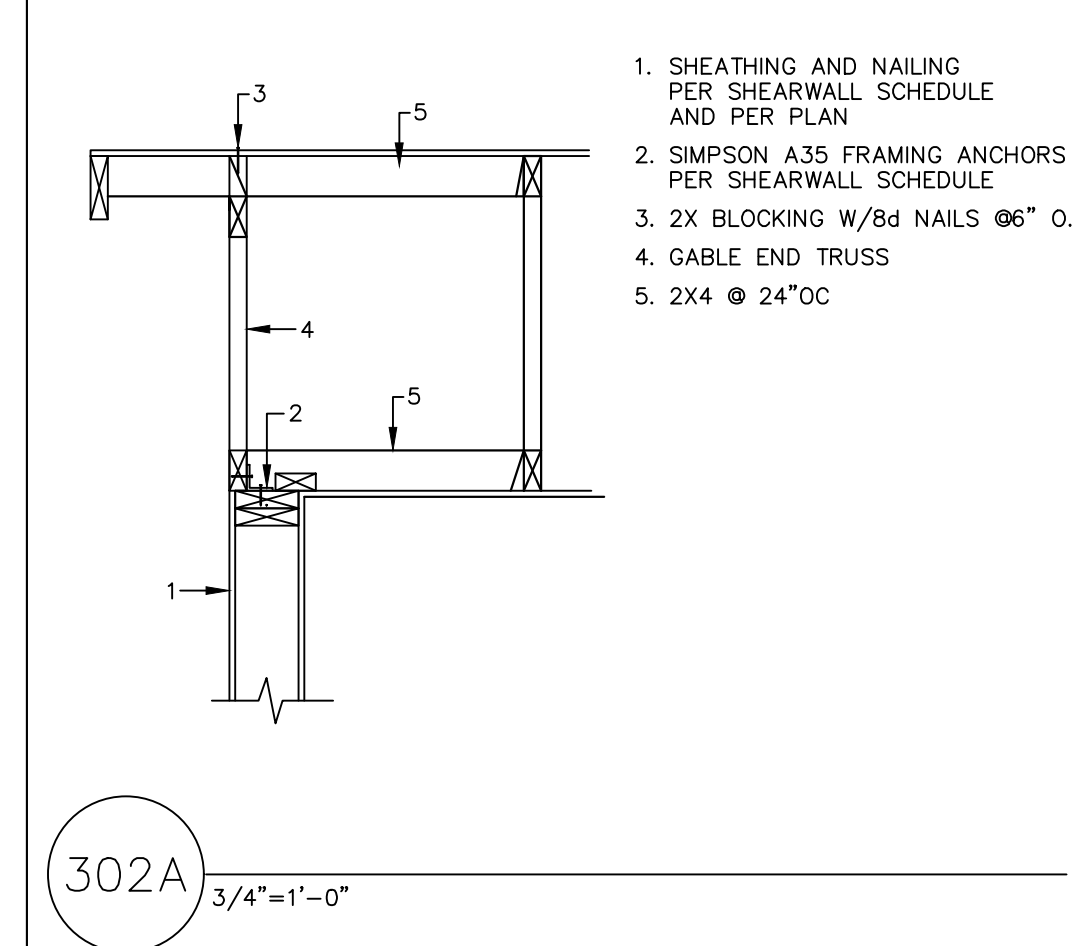
- ROOF RAFTERS PER PLAN
- SIMPSON H2.5 @ EACH TRUSS
- ROOF SHEATHING
- 2x BLOCKING W/ 8d @ 6" O.C. IN EVERY OTHER RAFTER SPACE
- SHEARWALL NAILING PER SCHEDULE
- SIMPSON RBC SPACED PER SHEARWALL SCHEDULE

301B 3/4"=1'-0"



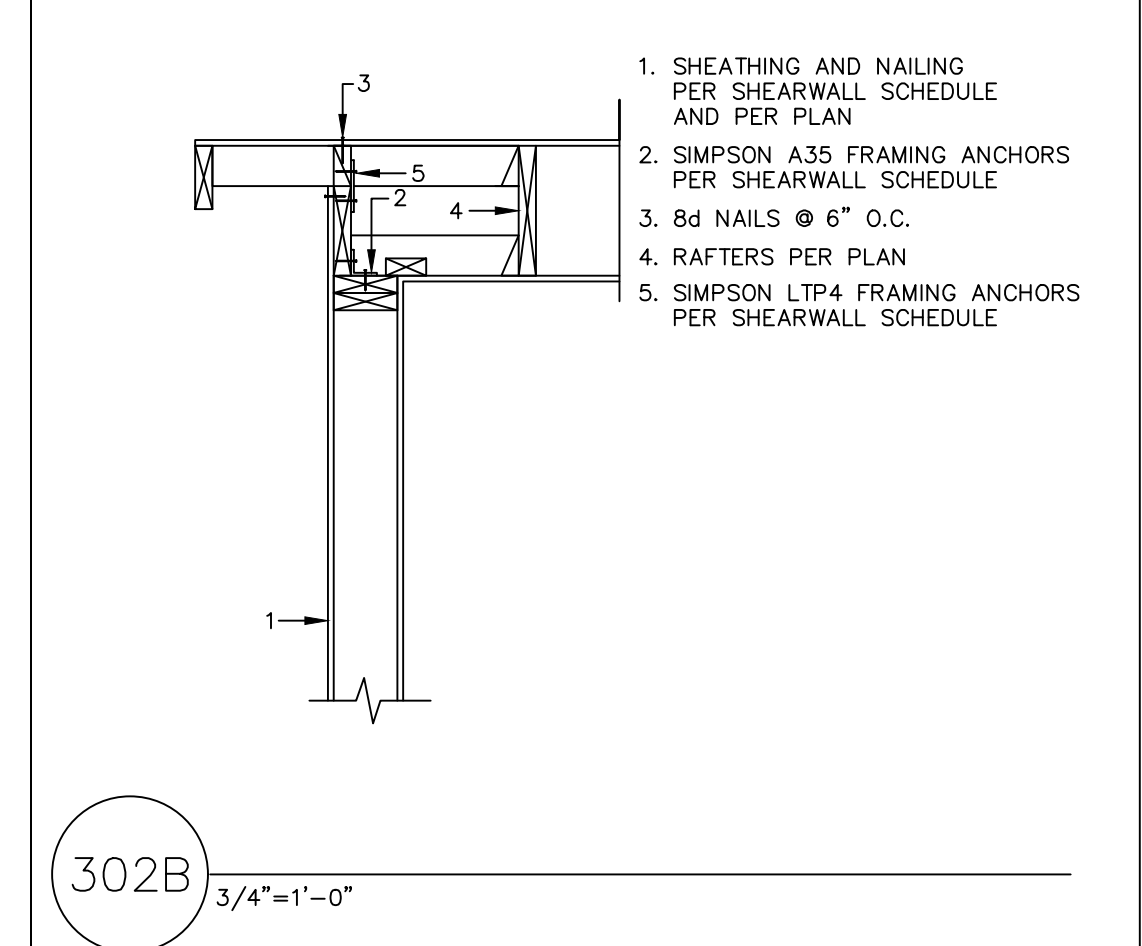
- 2x STUD WALL
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- EDGE NAILING PER SHEARWALL SCHEDULE
- SIMPSON MST40 STRAP @ 48" OC CENTER STRAP ON RIM JOISTS
- SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE

301C 3/4"=1'-0"



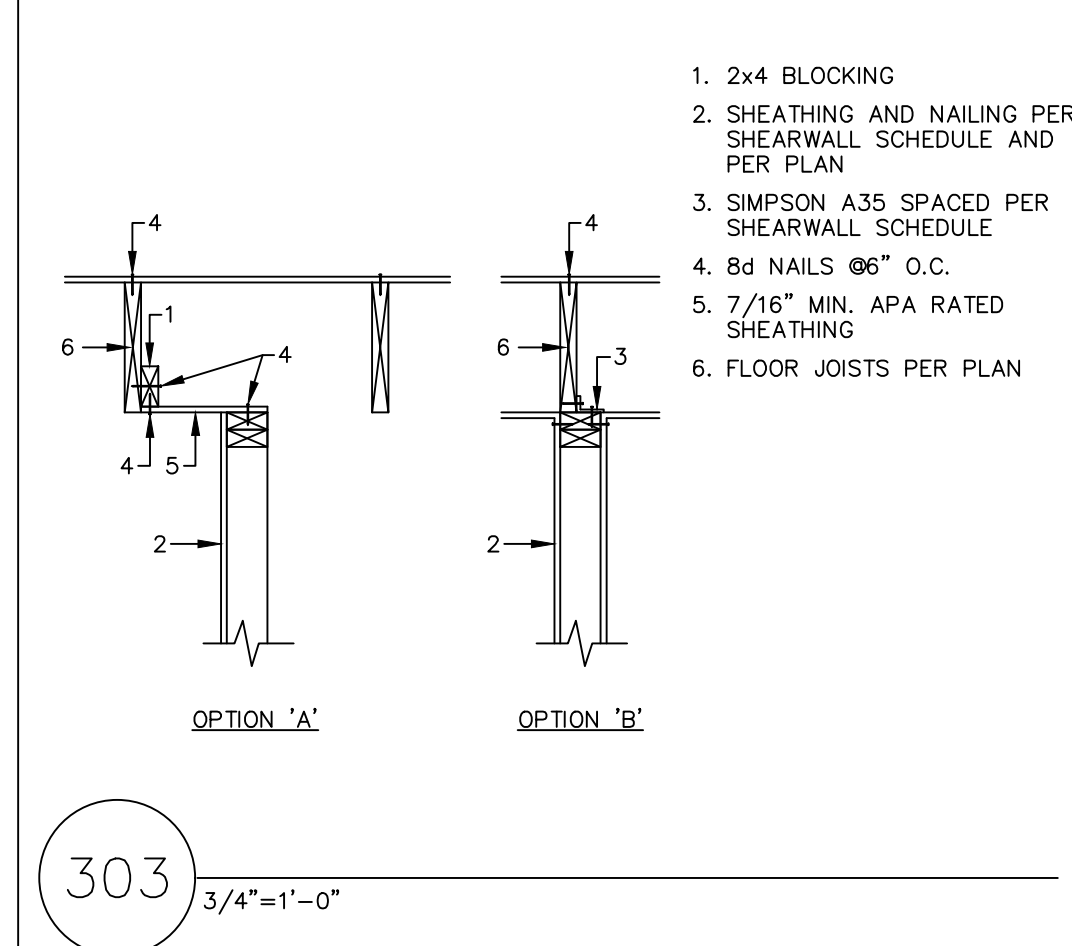
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
- SIMPSON A35 FRAMING ANCHORS PER SHEARWALL SCHEDULE
- 2x BLOCKING W/8d NAILS @ 6" O.C.
- GABLE END TRUSS
- 2x4 @ 24" OC

302A 3/4"=1'-0"



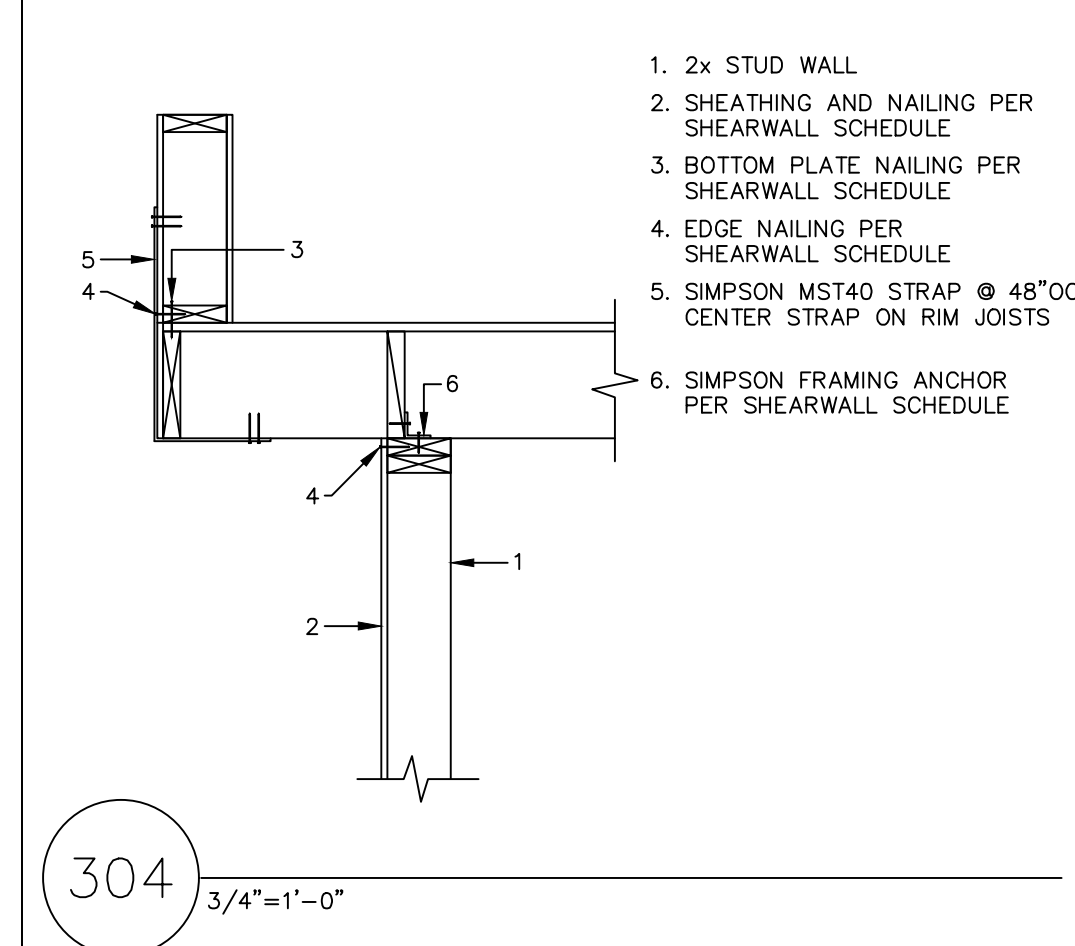
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
- SIMPSON A35 FRAMING ANCHORS PER SHEARWALL SCHEDULE
- 8d NAILS @ 6" O.C.
- RAFTERS PER PLAN
- SIMPSON LTP4 FRAMING ANCHORS PER SHEARWALL SCHEDULE

302B 3/4"=1'-0"



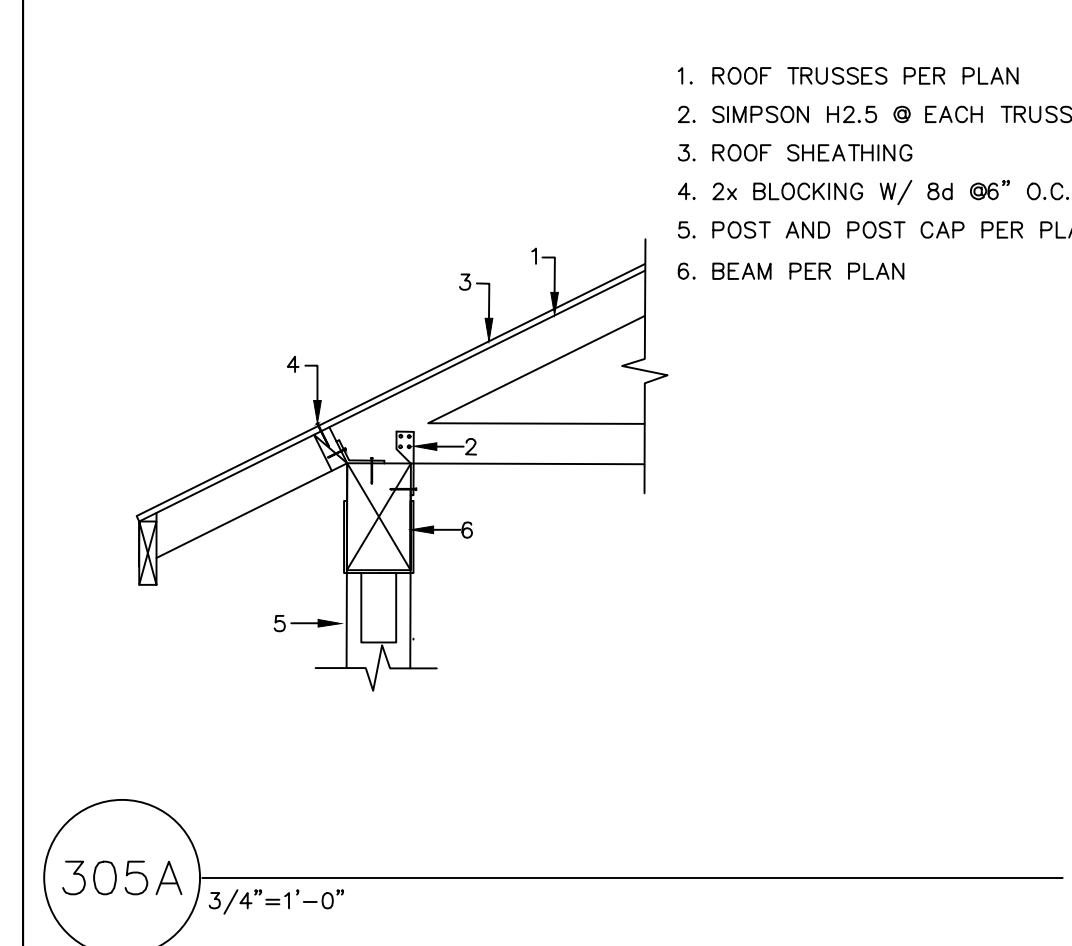
- 2x4 BLOCKING
 - SHEATHING AND NAILING PER SHEARWALL SCHEDULE AND PER PLAN
 - SIMPSON A35 SPACED PER SHEARWALL SCHEDULE
 - 8d NAILS @ 6" O.C.
 - 7/16" MIN. APA RATED SHEATHING
 - FLOOR JOISTS PER PLAN
- OPTION 'A' OPTION 'B'

303 3/4"=1'-0"



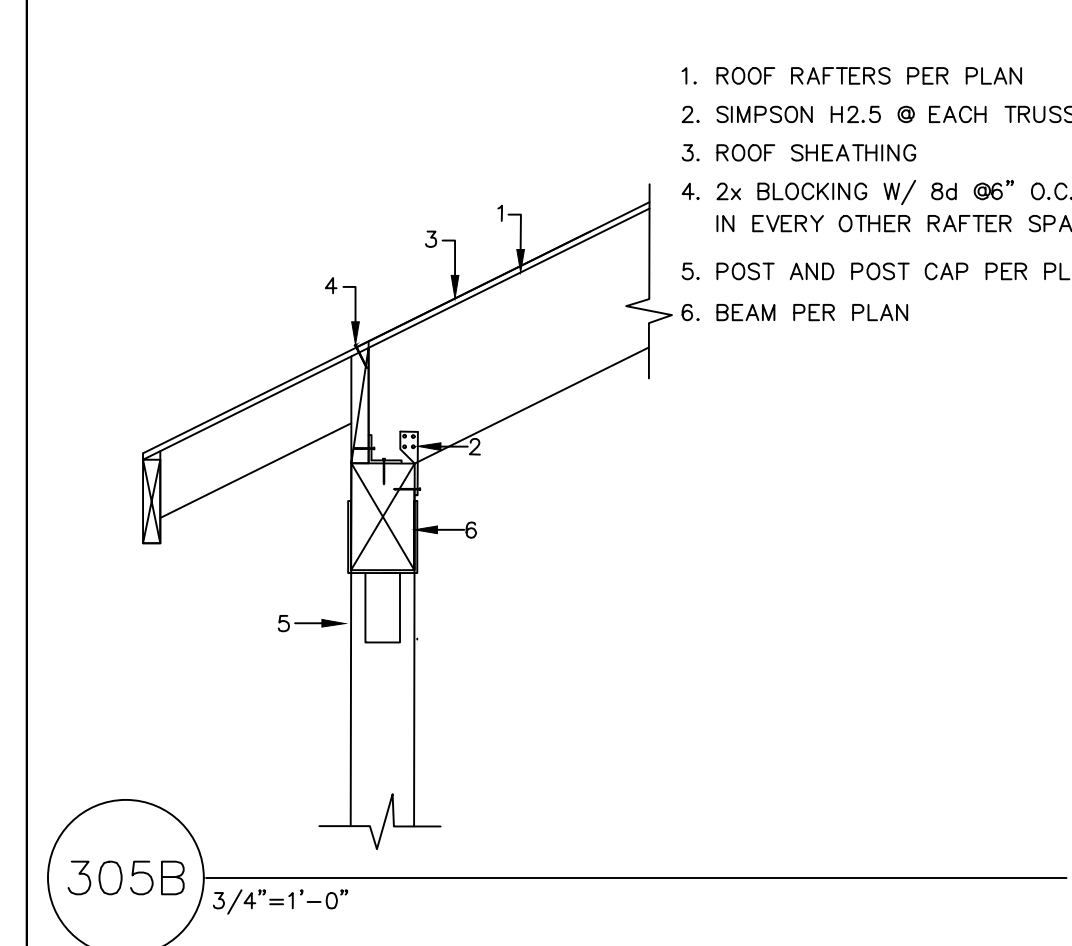
- 2x STUD WALL
- SHEATHING AND NAILING PER SHEARWALL SCHEDULE
- BOTTOM PLATE NAILING PER SHEARWALL SCHEDULE
- EDGE NAILING PER SHEARWALL SCHEDULE
- SIMPSON MST40 STRAP @ 48" OC CENTER STRAP ON RIM JOISTS
- SIMPSON FRAMING ANCHOR PER SHEARWALL SCHEDULE

304 3/4"=1'-0"



- ROOF TRUSSES PER PLAN
- SIMPSON H2.5 @ EACH TRUSS
- ROOF SHEATHING
- 2x BLOCKING W/ 8d @ 6" O.C.
- POST AND POST CAP PER PLAN
- BEAM PER PLAN

305A 3/4"=1'-0"

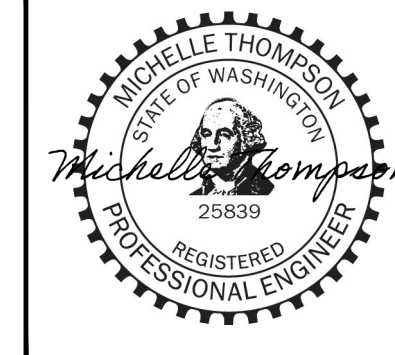


- ROOF RAFTERS PER PLAN
- SIMPSON H2.5 @ EACH TRUSS
- ROOF SHEATHING
- 2x BLOCKING W/ 8d @ 6" O.C. IN EVERY OTHER RAFTER SPACE
- POST AND POST CAP PER PLAN
- BEAM PER PLAN

305B 3/4"=1'-0"

REVISION DATES:
 REV. 7-8-22
 REV. 8-30-22

PROJECT: MAWER-HOUTCHENS	SHEET TITLE: STRUCTURAL DETAILS
SCALE: NO SCALE	DATE: 4-18-22
DRAWN BY: MDT	SHEET NO.:
PROJECT NO. MAWER/HOUTCHENS	S2



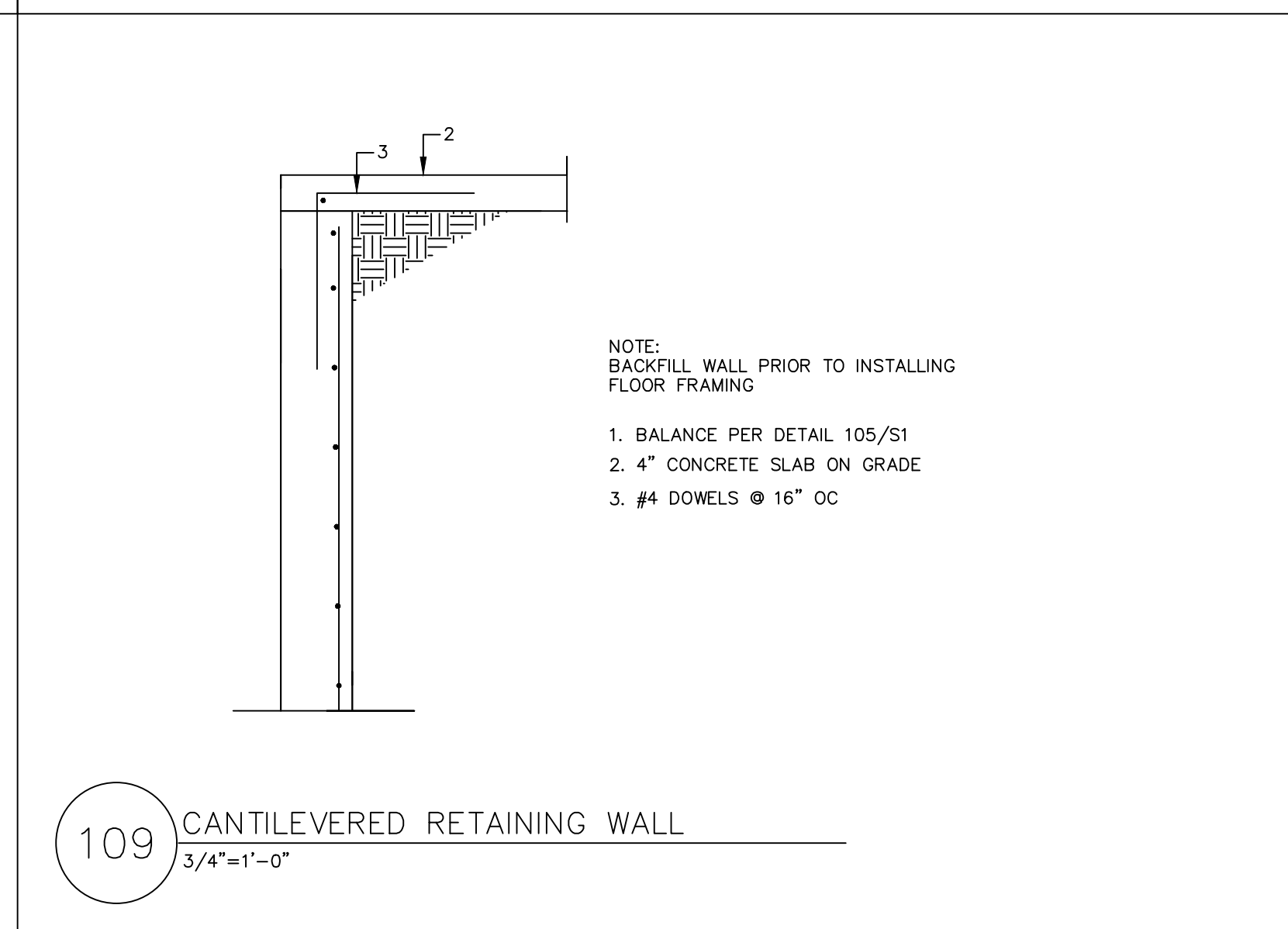
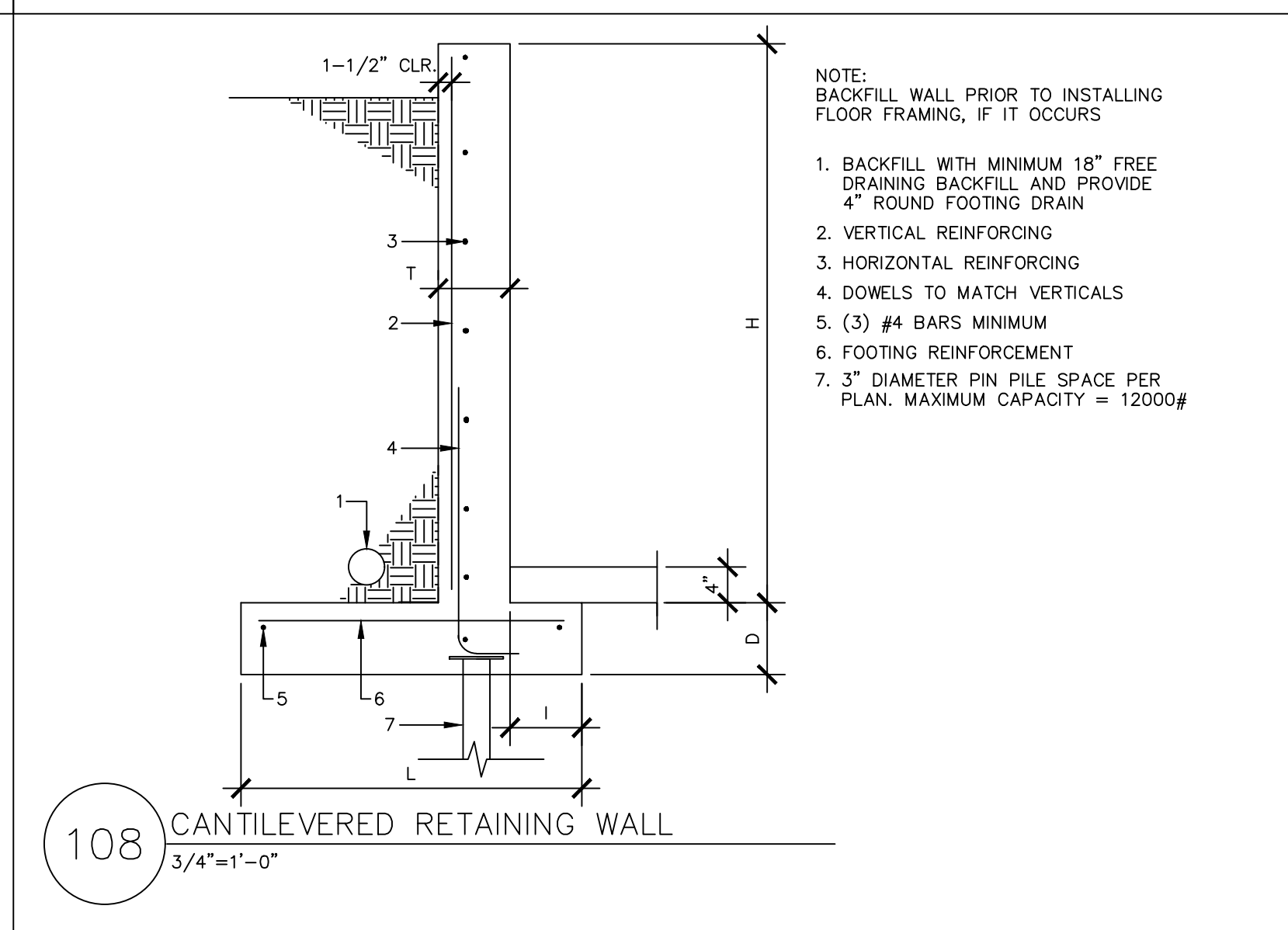
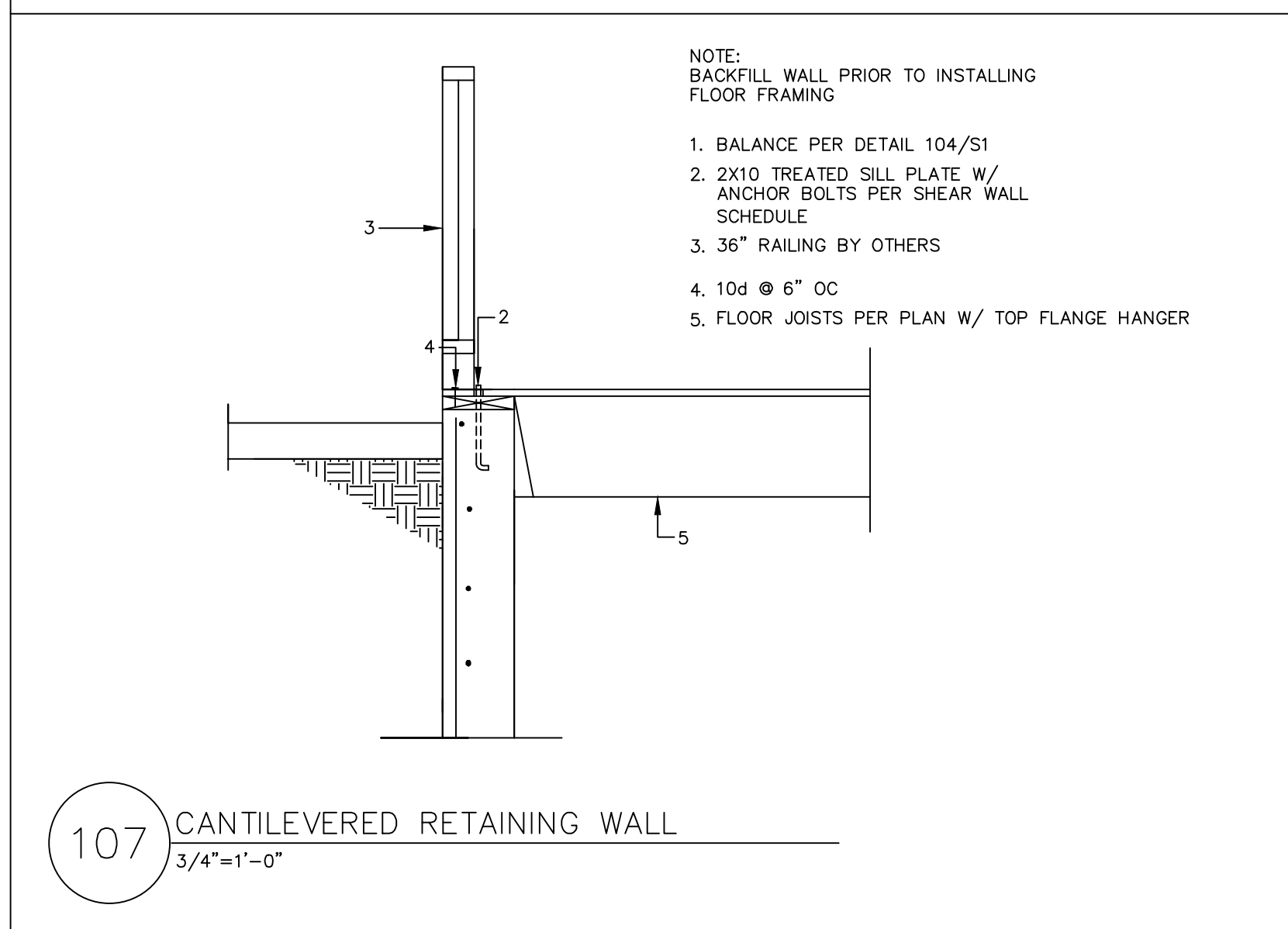
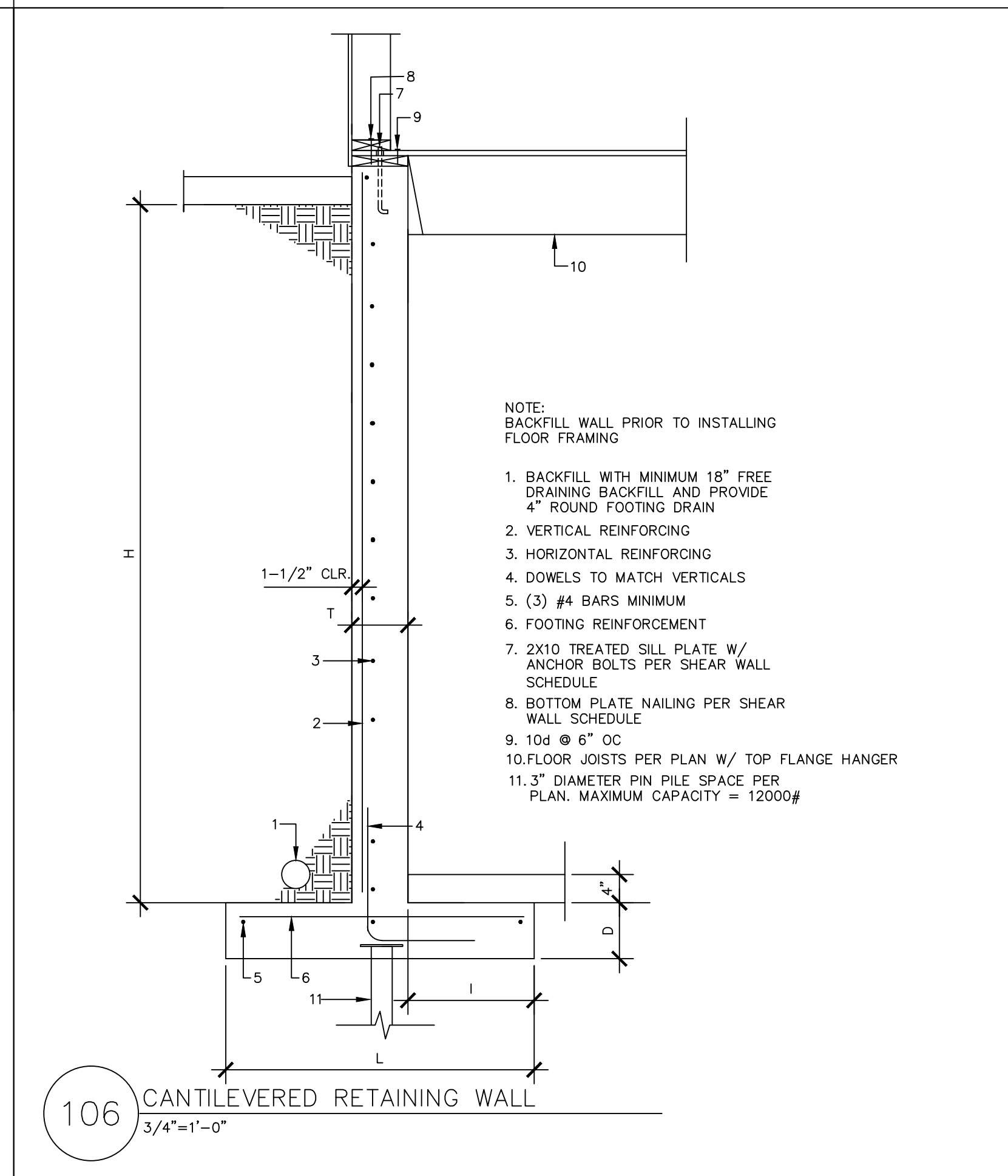
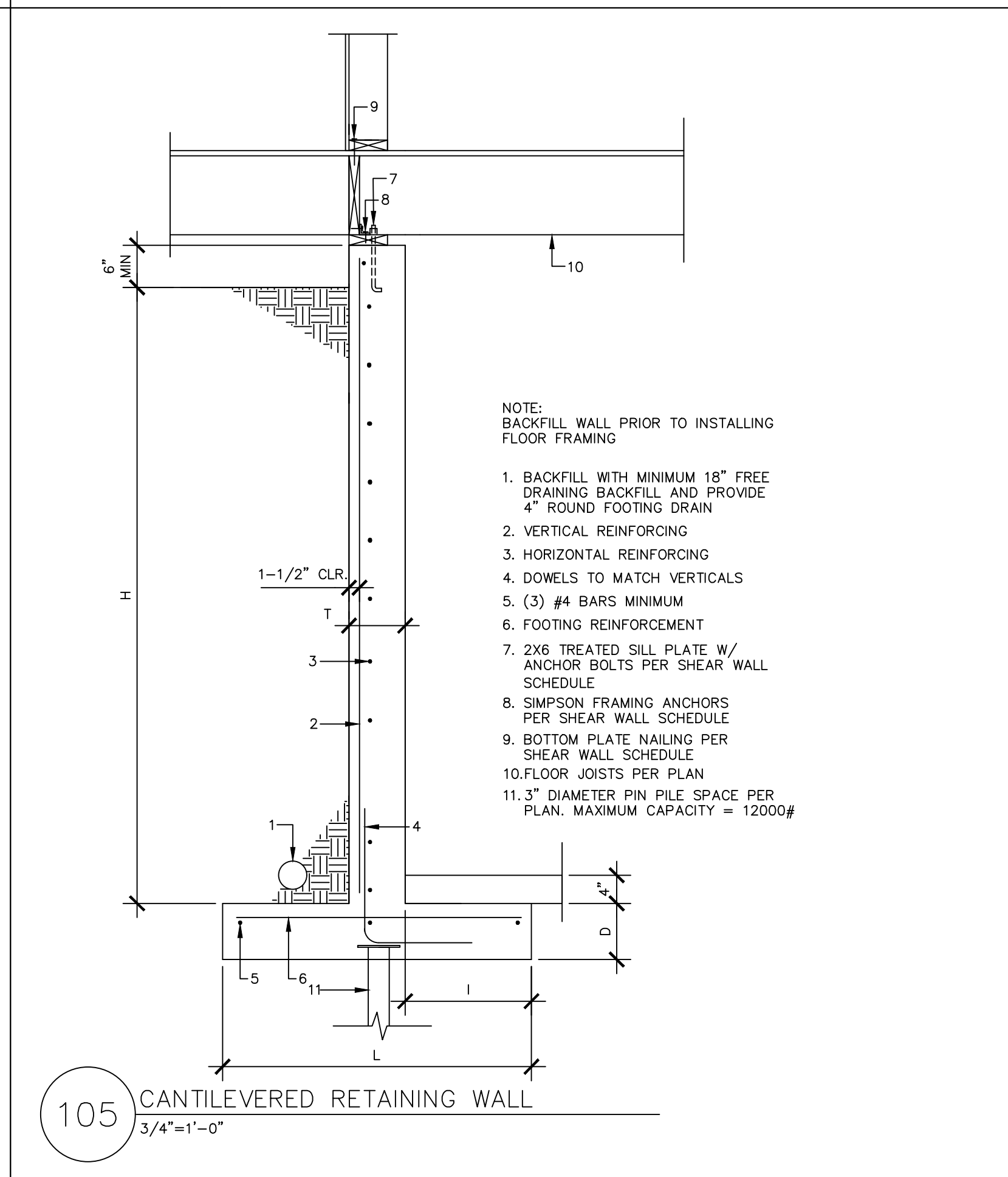
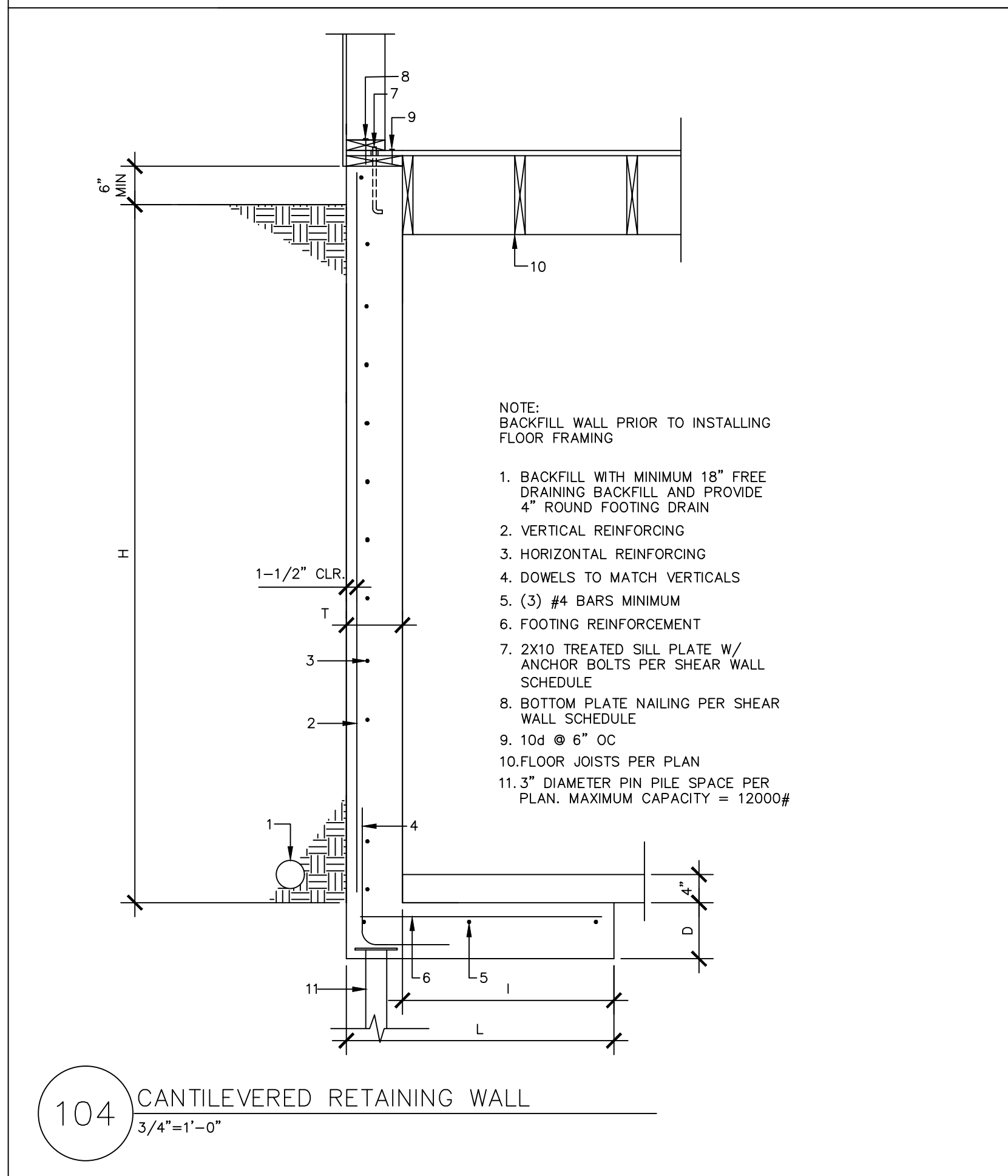
MDT ENGINEERING
31403 44th AVE S
AUBURN, WA 98001
PHONE: (253) 709-9852
EMAIL: md.thompson@earthlink.net

PROPERTY LINE CANTILEVERED RETAINING WALL SCHEDULE									CANTILEVERED RETAINING WALL SCHEDULE					CANTILEVERED RETAINING WALL SCHEDULE												
H	T	L	I	D	VERTICAL REINFORCING	HORIZONTAL REINFORCING	DOWELS	FOOTING REINFORCING	H	T	L	I	D	VERTICAL REINFORCING	HORIZONTAL REINFORCING	DOWELS	FOOTING REINFORCING	H	T	L	I	D	VERTICAL REINFORCING	HORIZONTAL REINFORCING	DOWELS	FOOTING REINFORCING
4'-0"	8"	2'-0"	1'-4"	9"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	4'-0"	8"	2'-0"	8"	8"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @18" O.C.	4'-0"	8"	2'-0"	8"	8"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @18" O.C.
6'-0"	8"	3'-4"	2'-8"	9"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	6'-0"	8"	2'-8"	1'-0"	9"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @18" O.C.	6'-0"	8"	2'-8"	1'-0"	9"	#4 @12" O.C.	#4 @12" O.C.	#4 @12" O.C.	#4 @18" O.C.
8'-0"	8"	5'-0"	4'-4"	10"	#5 @10" O.C.	#4 @12" O.C.	#5 @10" O.C.	#4 @10" O.C.	8'-0"	8"	3'-8"	1'-6"	10"	#5 @12" O.C.	#4 @12" O.C.	#5 @12" O.C.	#4 @10" O.C.	8'-0"	8"	3'-8"	1'-6"	10"	#5 @12" O.C.	#4 @12" O.C.	#5 @12" O.C.	#4 @10" O.C.
10'-0"	8"	7'-0"	6'-4"	12"	#6 @8" O.C.	#4 @12" O.C.	#6 @8" O.C.	#5 @12" O.C.	10'-0"	8"	5'-8"	2'-6"	10"	#5 @8" O.C.	#4 @12" O.C.	#5 @8" O.C.	#5 @8" O.C.	10'-0"	8"	5'-8"	2'-6"	10"	#5 @8" O.C.	#4 @12" O.C.	#5 @8" O.C.	#5 @8" O.C.
12'-0"	10"	8'-5"	7'-7"	13"	#7 @9" O.C.	#4 @10" O.C.	#7 @9" O.C.	#5 @12" O.C.	12'-0"	10"	6'-6"	2'-10"	11"	#6 @8" O.C.	#4 @8" O.C.	#6 @8" O.C.	#5 @10" O.C.	12'-0"	10"	6'-6"	2'-10"	11"	#6 @8" O.C.	#4 @8" O.C.	#6 @8" O.C.	#5 @10" O.C.

NOTES:
CONCRETE STRENGTH SHALL BE AT 2500 PSI @28 DAYS
REINFORCING BARS SHALL BE GRADE 40
LATERAL EARTH PRESSURE = 35 PCF WITH LEVEL BACKFILL
PASSIVE RESISTANCE = 350 PCF AND COEFFICIENT OF FRICTION = 0.35
PROVIDE FREE DRAINING GRANULAR BACKFILL FOR A MINIMUM OF 18" BEHIND RETAINING WALL
PROVIDE A MINIMUM 4" DIA. PERFORATED PIPE SURROUNDED IN PEA GRAVEL OR WASHED CLEAN GRAVEL (MINIMUM 9" COVER) AND SLOPED TO A STORM DRAIN SYSTEM OR OTHER APPROPRIATE OUTLET. PERIMETER DRAINS SHOULD BE PROVIDED WITH CLEANOUTS AS NECESSARY TO ALLOW PERIODIC INSPECTION AND MAINTENANCE OF DRAINS

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REVISION DATES:
REV. 7-8-22

PROJECT: MAWER-HOUTCHENS	SHEET TITLE: STRUCTURAL DETAILS
SCALE: NO SCALE	DATE: 4-18-22
DRAWN BY: MDT	SHEET NO.:
PROJECT NO. MAWER/ HOUTCHENS	S3

