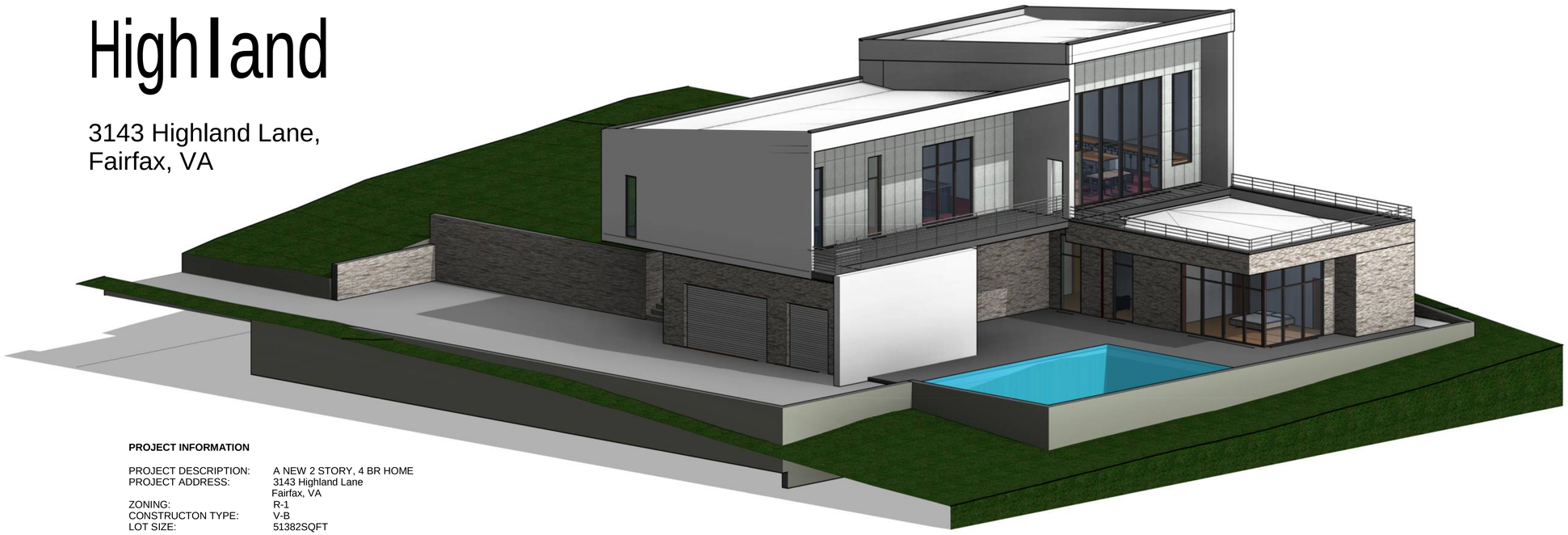
Villa Highland

3143 Highland Lane,
Fairfax, VA



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PROJECT INFORMATION

PROJECT DESCRIPTION: A NEW 2 STORY, 4 BR HOME
PROJECT ADDRESS: 3143 Highland Lane
Fairfax, VA
ZONING: R-1
CONSTRUCTON TYPE: V-B
LOT SIZE: 51382SQFT

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH THE 2012 VRC, 2012 VECC AND ALL LOCAL CODES AND ORDINANCES, AND ALL OTHER VIRGINIA STATE RULES AND REGULATIONS, AS WELL AS ALL CITY, COUNTY AND FEDERAL RULES, REGULATIONS, ORDINANCES, SAFETY LAWS AND SANITARY ORDINANCES. IF THE DRAWINGS AND/OR THE SPECIFICATIONS ARE AT VARIANCE THEREWITH, THE CONTRACTOR SHALL SO NOTIFY THE ARCHITECT IMMEDIATELY

2. SLOPE GRADE AWAY FROM STRUCTURE A MIN. OF 5% FOR 5 FEET.

3. ROOF AND DECK DOWNSPOUTS, FOUNDATION PERIMETER DRAIN LINE, DRIVEWAY AND PATIOS SHALL BE CONNECTED TO A SUBTERRANEAN SYSTEM WHERE REQUIRED BY CURRENT STORM DRAINAGE ORDINANCE.

4. PRIOR TO INSPECTION OF ROOF FRAMING, ENGINEERED CALCULATIONS FOR THE MANUFACTURED ROOF TRUSSES, AS PER PLAN, WILL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR APPROVAL.

5. THE GENERAL NOTES ARE COMPLEMENTARY TO THE GENERAL CONDITIONS AND SPECIFICATIONS. SHOULD CONFLICTS OCCUR, THEY SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION.

6. SHOULD CONFLICTS OCCUR BETWEEN THE DRAWINGS AND SPECIFICATIONS, DRAWINGS SHALL GOVERN IN MATTERS OF DIMENSION OR QUANTITY; SPECIFICATIONS SHALL GOVERN IN MATTERS OF MATERIALS, INSTALLATION OR FINISHES.

7. DURING CONSTRUCTION, REPORT ALL DISCREPANCIES AND/OR CONFLICTS IN THE DRAWINGS TO THE ARCHITECT IMMEDIATELY.

8. VERTICAL AND HORIZONTAL FIRE BLOCKING SHALL CONFORM TO VRC R608.2.

9. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND LABOR REQUIRED TO COMPLETE THE WORK. EXCLUSION OF AN ITEM OR ITEMS DOES NOT IMPLY OMISSION. THE CONTRACTOR'S RESPONSIBILITY IS TO NOTIFY THE ARCHITEC T & OWNER OF THESE OMISSIONS PRIOR TO THE SUBMISSION OF BIDS. THE CONTRACTOR SHALL COMPLYWITH THE SPIRIT AND INTENT OF THESE DOCUMENTS AND SHALL COMPLETE THEWORK SATISFACTORILY AND IN A MANNER ACCEPTABLE TO THE OWNER.THESE DOCUMENTS ILLUSTRATE THE MINIMUM STANDARDS OF CONSTRUCTION AND THE CONTRACTOR SHALLMEET OR EXCEED NORMAL CONSTRUCTION TECHNIQUES AND STANDARDS FOR A BUILDING OF THIS TYPE.

10. NEITHER THE ARCHITECT, THE ENGINEER, OR THE OWNER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF THE CONTRACTOR; SAFETY PRECAUTIONS AND PROGRAMS OF CONTRACTOR; THE ACTS OR OMISSIONS OF THE CONTRACTOR; OR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THEWORK IN ACCORDANCEWITH THE DRAWINGS OR SPECIFICATIONS.

11. VERIFY DIMENSIONS, GRADES, ELEVATIONS AND CRITICAL LOCATIONS, SUCH AS STRUCTURAL SUPPORTS, BEFORE COMMENCINGWORK AFFECTED BY THEM. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT.

12. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE DRAWINGS, SPECIFICATIONS AND EXISTING SITE CONDITIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO CONSTRUCTION.

13. A LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL ESTABLISH BUILDING CORNERS, STRUCTURAL COLUMNS, POSTS, GRADES AND OTHER IMPROVEMENTS IN THE FIELD.

14. MANUFACTURED MATERIALS, EQUIPMENT, ETC., SHALL BE INSTALLED PER MANUFACTURES RECOMMENDATIONS, INSTRUCTIONS AND APPLICABLE ICBO REPORTS UNLESS OTHERWISE NOTED OR INSTRUCTED.

15. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE BEST PRACTICES OF THE VARIOUS TRADES INVOLVED. ALL WORK SHALL BE ERECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE IN PROPER ALIGNMENT.

16. THE CONTRACTOR SHALL NOT PROCEEDWITH ANY ADDITIONAL WORK REQUIRING ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER. FAILURE TO OBTAIN AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR EXTRA COMPENSATION.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF THE DRAWINGS AND SPECIFICATIONS TO ALL TRADES UNDER HIS JURISDICTION.

18. SUBSTITUTIONS, REVISIONS OR CHANGES MUST HAVE PRIOR WRITTEN APPROVAL BY THE THE ARCHITECT.

19. NO WORK DEFECTIVE IN CONSTRUCTION OR QUALITY OR DEFICIENT IN ANY REQUIREMENT OF THE DRAWINGS OR NOTES WILL BE ACCEPTABLE AS A CONSEQUENCE OF THE ARCHITECTS FAILURE TO DISCOVER OR POINT OUT DEFECTS OR DEFICIENCIES DURING CONSTRUCTION. DEFECTIVEWORK REVEALEDWITHIN THE TIME REQUIRED BY GUARANTEES SHALL BE REPLACED BY WORK CONFORMINGWITH THE INTENT OF THE CONTRACT DOCUMENTS. NO PAYMENT, EITHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

20. IN THE EVENT CERTAIN FEATURES OF CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, THEN THE CONSTRUCTION SHALL BE SIMILAR AND OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR.

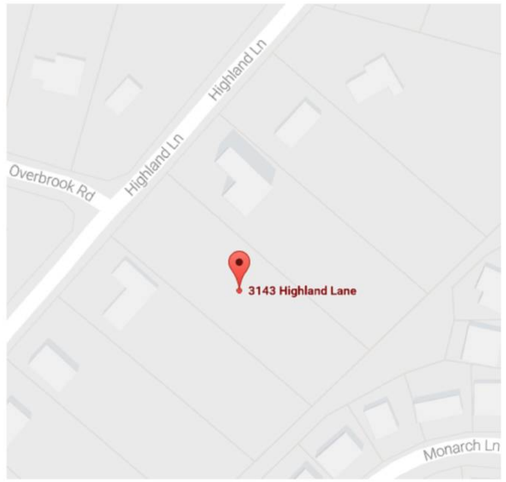
21. THE CONTRACTOR SHALL DO ALLWORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS APPROVED BY THE BUILDING OFFICIAL. THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL NOT BE CHANGED OR MODIFIED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.

22. THE CONTRACTOR SHALL NOTIFY THE OWNER UPON COMPLETION OF THEWORK. AT THAT TIME THE OWNER SHALL COMPLETE A "PUNCH LIST" OF CORRECTIONS. THE OWNERS FINAL ACCEPTANCE WILL BE CAUSE FOR FINAL PAYMENT UNDER TERMS OF THE OWNER/CONTRACTOR AGREEMENT.

23. THE PROJECT SHALL BE LEFT COMPLETELY CLEAN AND CLEAR TO THE SATISFACTION OF THE OWNER.

24. ALL WORK AND MATERIAL SHALL BE NEW AND UNUSED AND OF THE HIGHEST QUALITY IN EVERY RESPECT UNLESS OTHERWISE AUTHORIZED BY THE ARCHITECT.
VICINITY MAP

25. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FINAL CITY APPROVALS AND A CERTIFICATE OF OCCUPANCY.



VICINITY MAP

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COVER SHEET

A100

DOOR SCHEDULE														
MARK	MANUFACTURER	MATERIAL	LOCATION	TYPE	Width	Height	THICKNESS	AREA	U-VALUE	SHGC	VGA X U	COUNTS	HARDWARE	REMARKS
1			GARAGE	SINGLE GARAGE DOOR	16' - 0"	9' - 0"	0' - 1 3/8"	144.0 SF	0	0	0 SF	1		
2			TWO CAR GARAGE	DOUBLE GARAGE DOOR	8' - 0"	9' - 0"	0' - 1 3/8"	72.0 SF	0	0	0 SF	1		
3		WOOD	FOYER	DOUBLE FRONT DOOR	6' - 0"	6' - 8"	0' - 2"	40.0 SF	0.3	0.3	12 SF	1	MORTISED LOCKSET	
4		WOOD	CLOSET	5 PANEL	2' - 0"	7' - 0"	0' - 2"	14.0 SF				4	PASSAGE	
5		WOOD	CABINET	5 PANEL	2' - 8"	7' - 0"	0' - 2"					14	PASSAGE	
6		WOOD	BATHROOM	5 PANEL	2' - 6"	7' - 0"	0' - 2"					6	PASSAGE	
7		WOOD	HALLWAY / MST BEDROOM	GLASS EXTERIOR DOOR	4' - 0"	7' - 0"	0' - 2"	21.0 SF	0.3	0.3	6 SF	2	MORTISED LOCKSET	
9		WOOD	CABINET	GLASS EXTERIOR DOOR	2' - 8"	7' - 0"	0' - 2"	18.7 SF	0.3	0.3	6 SF	1	MORTISED LOCKSET	
10		WOOD	LIVING ROOM	GLASS EXTERIOR DOOR	2' - 11"	7' - 0"	0' - 2"	20.4 SF	0.3	0.3	6 SF	1	MORTISED LOCKSET	
11		WOOD	BATH	EXTERIOR DOOR	2' - 6"	7' - 0"	0' - 2"	17.5 SF	0.3	0.3	5 SF	1	MORTISED LOCKSET	
12		WOOD	LAUNDRY ROOM	DOUBLE INTERIOR DOOR	4' - 0"	7' - 0"	0' - 2"	28.0 SF				1	PASSAGE	
13		WOOD	STORAGE	SLIDING	8' - 0"	7' - 0"	0' - 1 3/8"					1		

WINDOW SCHEDULE													
MARK	MANUFACTURER	MATERIAL	LOCATION	TYPE	HEAD HEIGHT	HEIGHT	WIDTH	AREA	U-VALUE	SHGC	VGA	COUNT	REMARKS
1		WOOD / ALU	LIVING ROOM / KITCHEN	FIXED	16' - 0"	13' - 0"	4' - 0"	54 SF	0.3	0.37		1	
2		WOOD / ALU	CORRIDORS	FIXED	10' - 9"	11' - 4"	3' - 5"	39 SF	0.3	0.37		9	
3		WOOD / ALU	CABINET	CASEMENT	10' - 9"	11' - 4"	4' - 0"	45 SF	0.3	0.37		1	
4		WOOD / ALU	DECK	FIXED	8' - 8"	8' - 8"	2' - 0"	17 SF	0.3	0.37		1	
5		WOOD / ALU	LIVING ROOM	FIXED	18' - 7 3/4"	8' - 1"	4' - 0"	54 SF	0.3	0.37		1	
6		WOOD / ALU	LIVING ROOM / KITCHEN	FIXED	16' - 0"	16' - 0"	4' - 0"	64 SF	0.3	0.37		5	
7		WOOD / ALU	GUEST ROOM	CASEMENT	25' - 9"	11' - 4"	2' - 10"	31 SF	0.3	0.37		1	
8		WOOD / ALU	BEDROOMS	CASEMENT	10' - 9"	10' - 9"	4' - 0"	54 SF	0.3	0.37		3	
9		WOOD / ALU	MASTER BEDROOM	SLIDING	10' - 9"	10' - 9"	3' - 5"	37 SF	0.3	0.37		7	

TOTAL EXTERIOR DOOR AREA = 333.6SF
TOTAL VGA X U = 35.0SF
AREA-WEIGHTED AVERAGE GLAZING U-FACTOR = (TOTAL VGA X U) / (TOTAL AREA) = 0.3

TOTAL EXTERIOR DOOR AREA (TDA)= 333.6 SF
TOTAL HOUSE WINDOW AREA = 929.0 SF
TOTAL HOUSE GLAZING AREA = 1004.1 SF

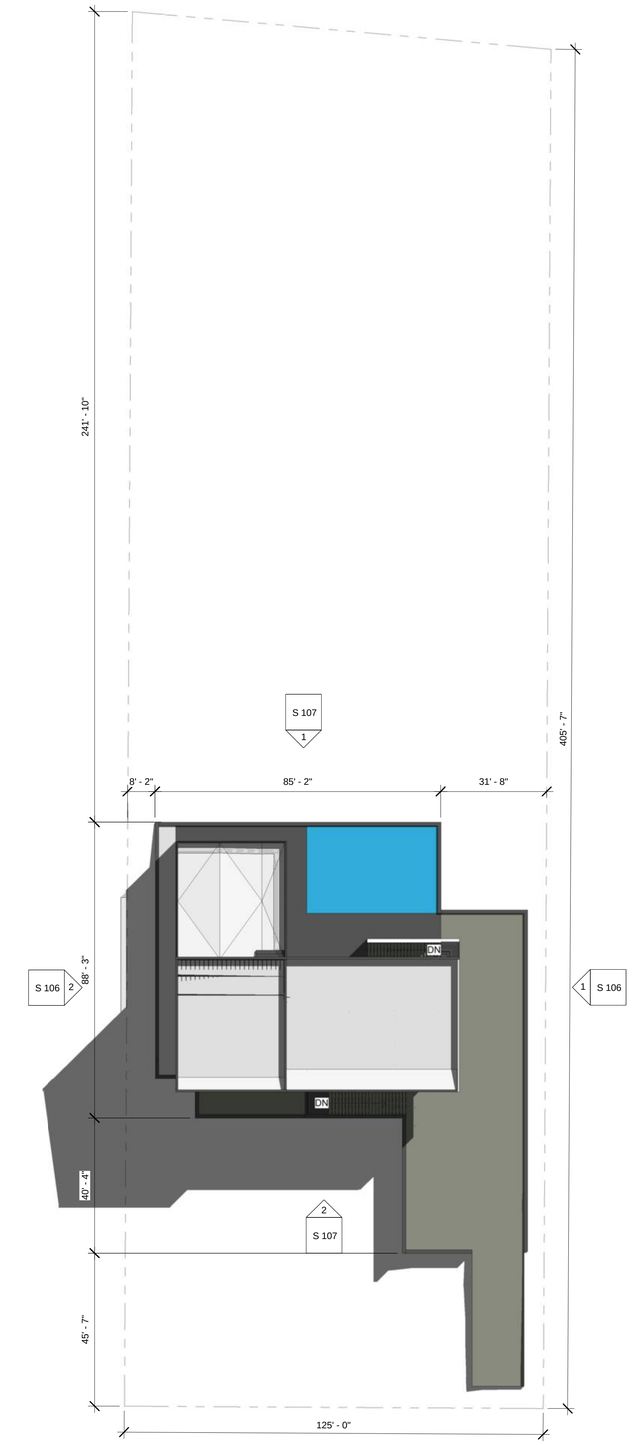
TOTAL HOUSE HEATED FLOOR AREA = 4880 SF

HOUSE GLAZING / FLOOR AREA RATIO = 20.57 %

NOTES:
1. WINDOW U-VALUES SHALL CONFORM TO VIRGINIA ENERGY CONSERVATION CODE. LISTED U-VALUES SUPPLIED BY WINDOW MANUFACTURER.
2. WINDOW SHGC VALUES SHALL CONFORM TO VIRGINIA ENERGY CONSERVATION CODE. LISTED SHGC VALUES SUPPLIED BY WINDOW MANUFACTURER.
3. ALL WINDOWS SHALL BE LOW-e4 (HARD COAT) COATED, ARGON FILLED
4. PER 402.4.4, FENESTRATION THAT IS NOT SITE BUILT SHALL BE LISTED AND LABELED AS MEETING AAMA
5. PER 402.4.2 & 402.4.2.1, BUILDING ENVELOPE TIGHTNESS SHALL BE VERIFIED BY A BLOWER DOOR TEST
6. PER 303.2 & 402.2.8, SLAB EDGE INSULATION SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS
7. PER 303.2, ALL WALL INSULATION SHALL BE INSTALLED PER MANUFACTUER'S INSTRUCTIONS

LOT COVERAGE	
LOT SIZE	51382 SF
HOUSE SIZE	2946 SF
TOTAL LOT COVERAGE	5.7%

FLOOR AREA	
FIRST FLOOR	2946 SF
SECOND FLOOR	1933 SF
TOTAL AREA	4880 SF



1 Site Plan
3/64" = 1'-0"

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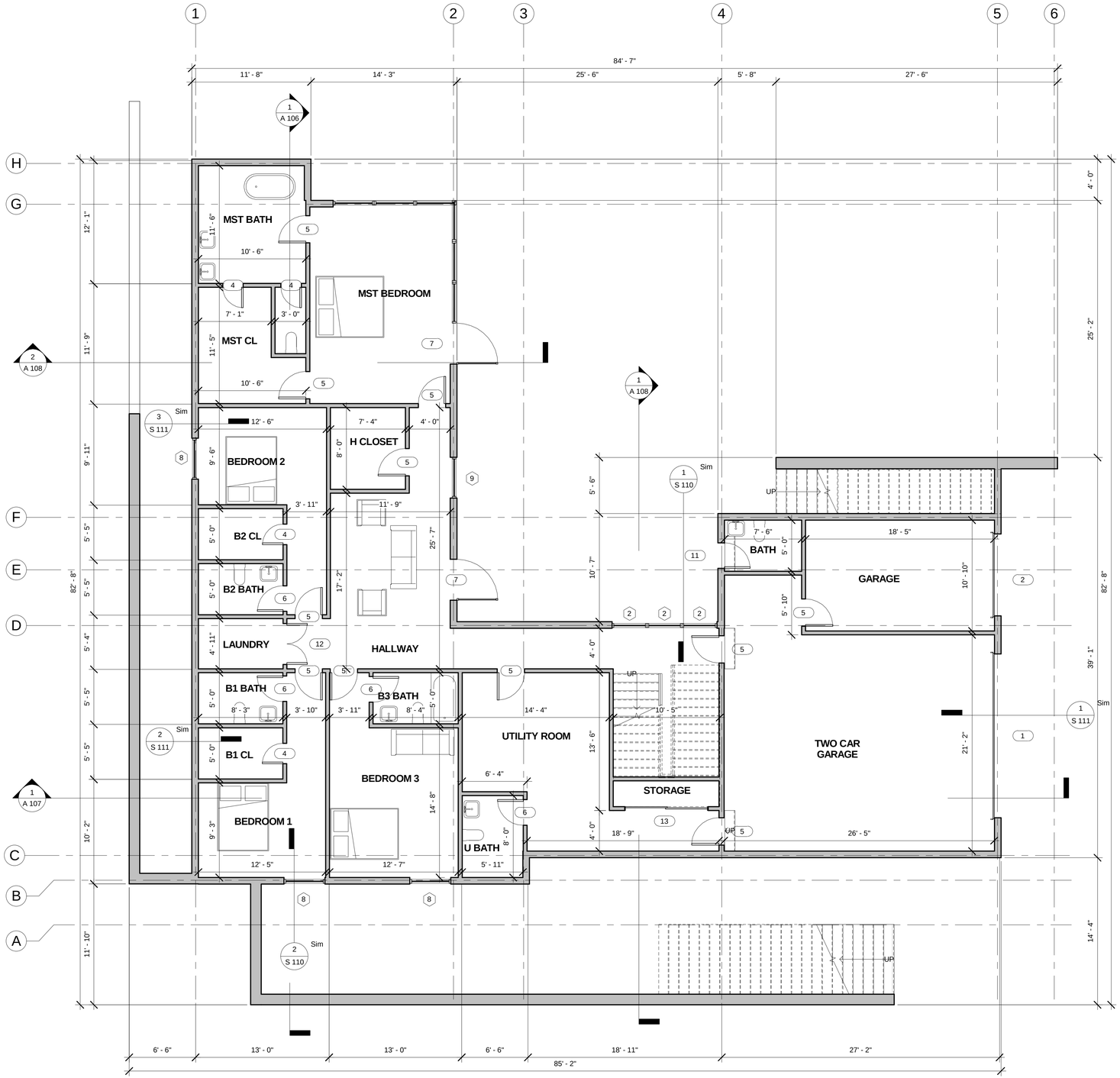
SITE PLAN

A101



1 PROPOSED FIRST FLOOR PLAN
3/16" = 1'-0"

Room Schedule		
Number	Name	Area
1	FOYER	512 SF
2	F CL	25 SF
3	F BATH	30 SF
4	LIVING ROOM	515 SF
5	KITCHEN	446 SF
6	CABINET	221 SF
7	GUEST ROOM	117 SF
8	G BATH	68 SF
9	HALLWAY	469 SF
12	H CLOSET	59 SF
13	LAUNDRY	41 SF
14	BEDROOM 1	156 SF
15	B1 CL	41 SF
16	B1 BATH	41 SF
17	BEDROOM 2	161 SF
18	B2 CL	41 SF
19	B2 BATH	41 SF
20	BEDROOM 3	205 SF
21	B3 BATH	42 SF
22	MST BEDROOM	264 SF
23	MST CL	96 SF
24	MST BATH	120 SF
25	UTILITY ROOM	256 SF
26	U BATH	48 SF
27	GARAGE	200 SF
28	TWO CAR GARAGE	602 SF
29	BATH	38 SF
30	STORAGE	26 SF

PLAN SYMBOLS

1 WINDOW TAG

1 DOOR TAG

1 WALL TAG

PLAN NOTES:
1. STAIR HANDRAILS SHALL BE LOCATED 34"-38" ABOVE STAIR NOSING. HANDRAIL SHALL BE CONTINUOUS AND SHALL TERMINATE AT NEWEL POSTS OR SAFETY TERMINAL. GRASP DIMENSION SHALL BE 1" - 1 1/4", MAX. OPENING SHALL NOT PERMIT PASSAGE OF 4" SPHERE
2. GUARDRAIL @ +36", MAX. 4" OPENING PER VBC 312.1, 312.2

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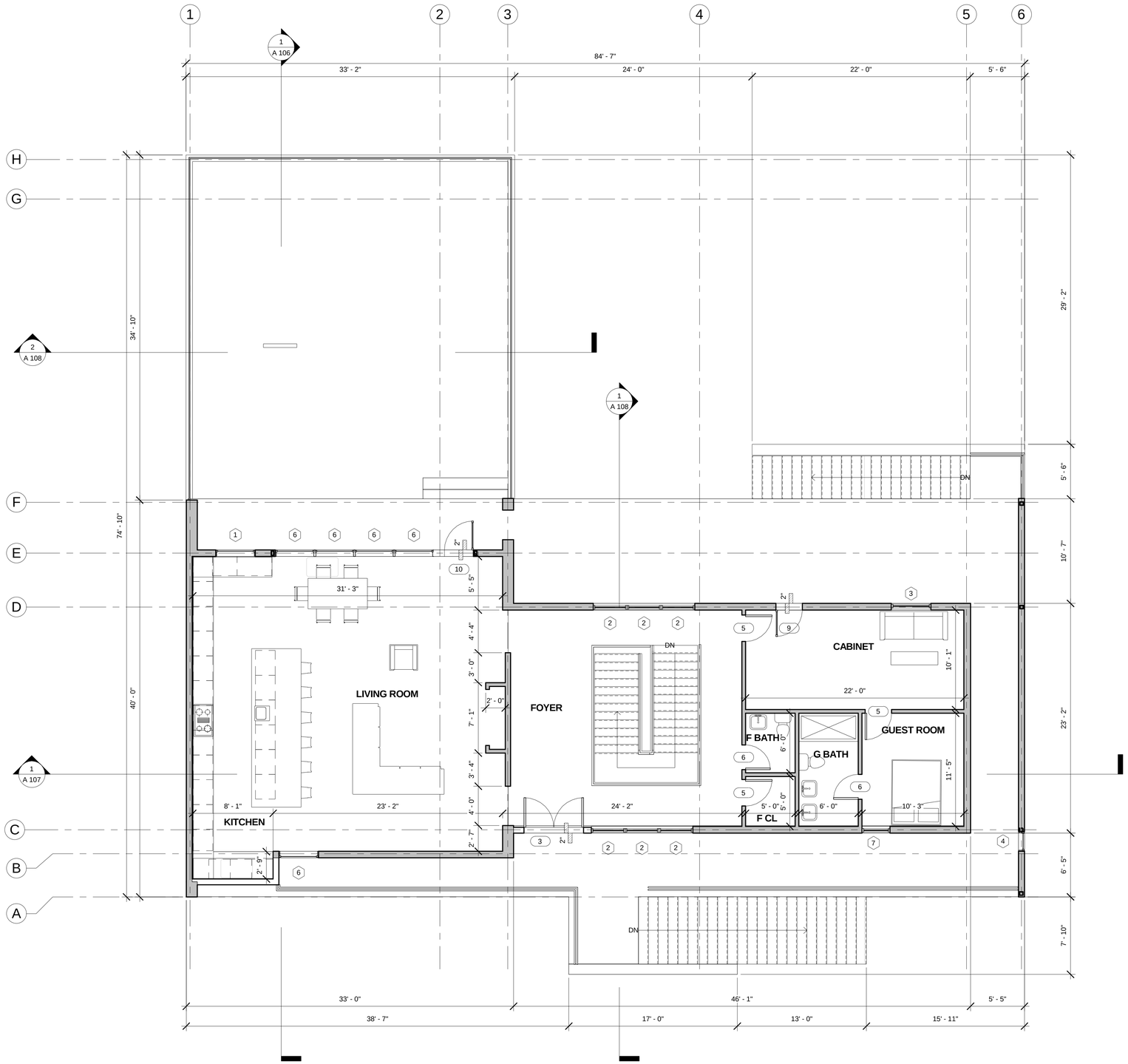
FIRST FLOOR PLAN

A102



1 PROPOSED SECOND FLOOR PLAN
3/16" = 1'-0"

PLAN NOTES:
1. STAIR HANDRAILS SHALL BE LOCATED 34"-38" ABOVE STAIR NOSING. HANDRAIL SHALL BE CONTINUOUS AND SHALL TERMINATE AT NEWEL POSTS OR SAFETY TERMINAL. GRASP DIMENSION SHALL BE 1" - 1 1/4", MAX. OPENING SHALL NOT PERMIT PASSAGE OF 4" SPHERE
2. GUARDRAIL @ +36", MAX. 4" OPENING PER VBC 312.1, 312.2

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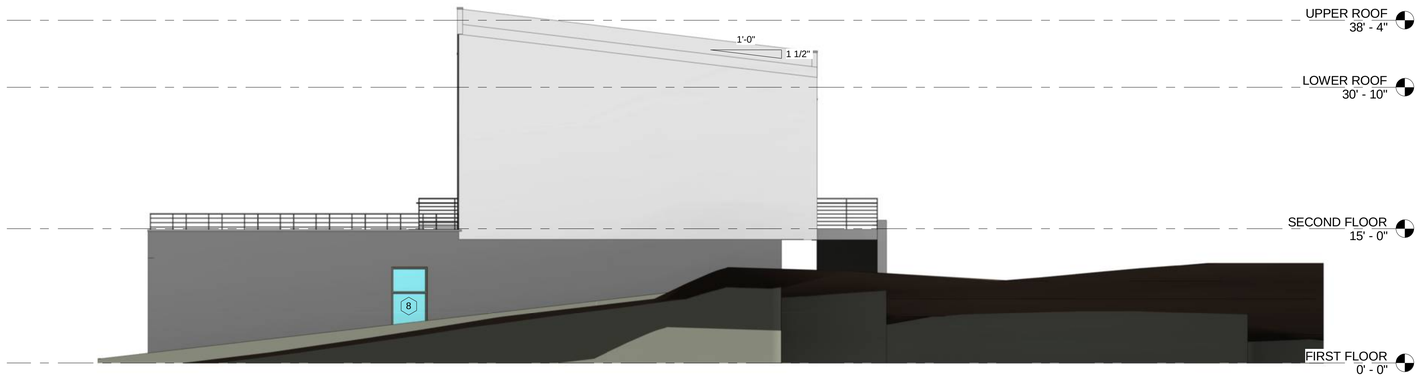
SECOND FLOOR PLAN

A103

1 EAST ELEVATION
1/8" = 1'-0"



4 WEST ELEVATION
1/8" = 1'-0"

3 SOUTH ELEVATION
1/8" = 1'-0"

2 NORTH ELEVATION
1/8" = 1'-0"

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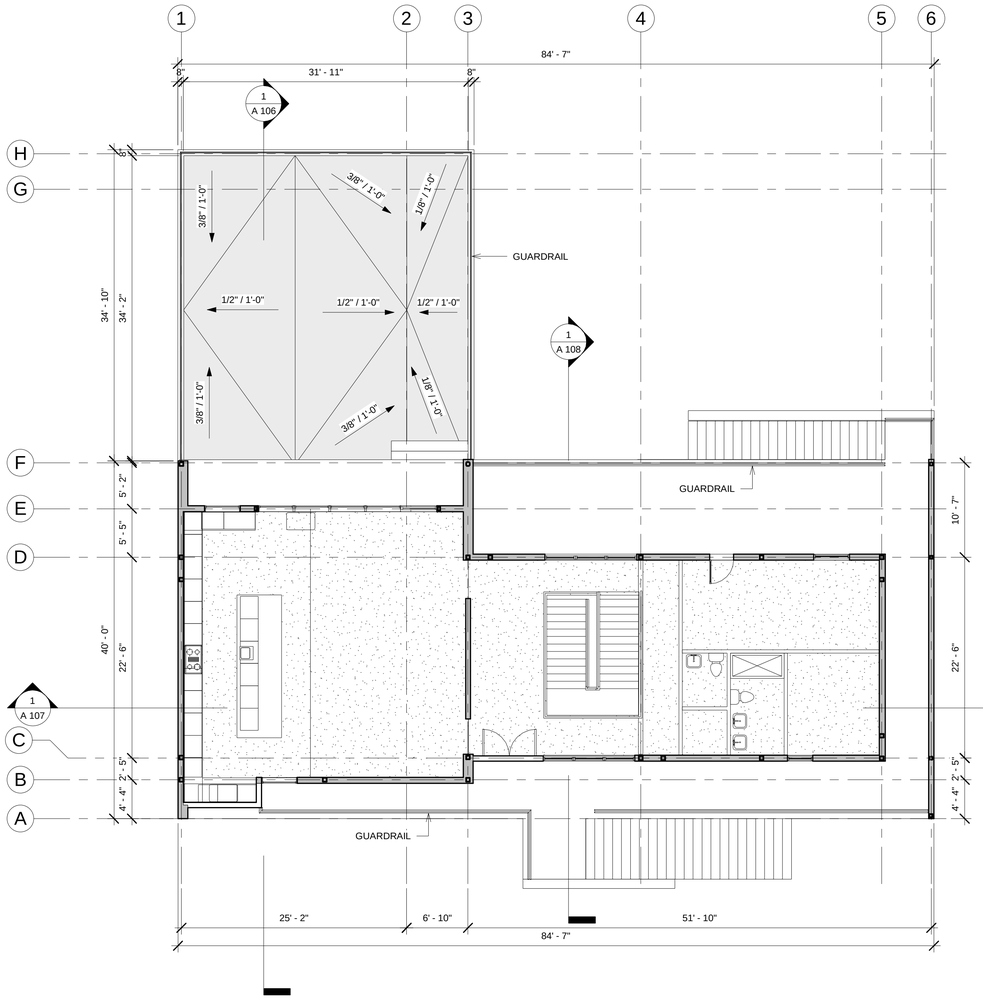
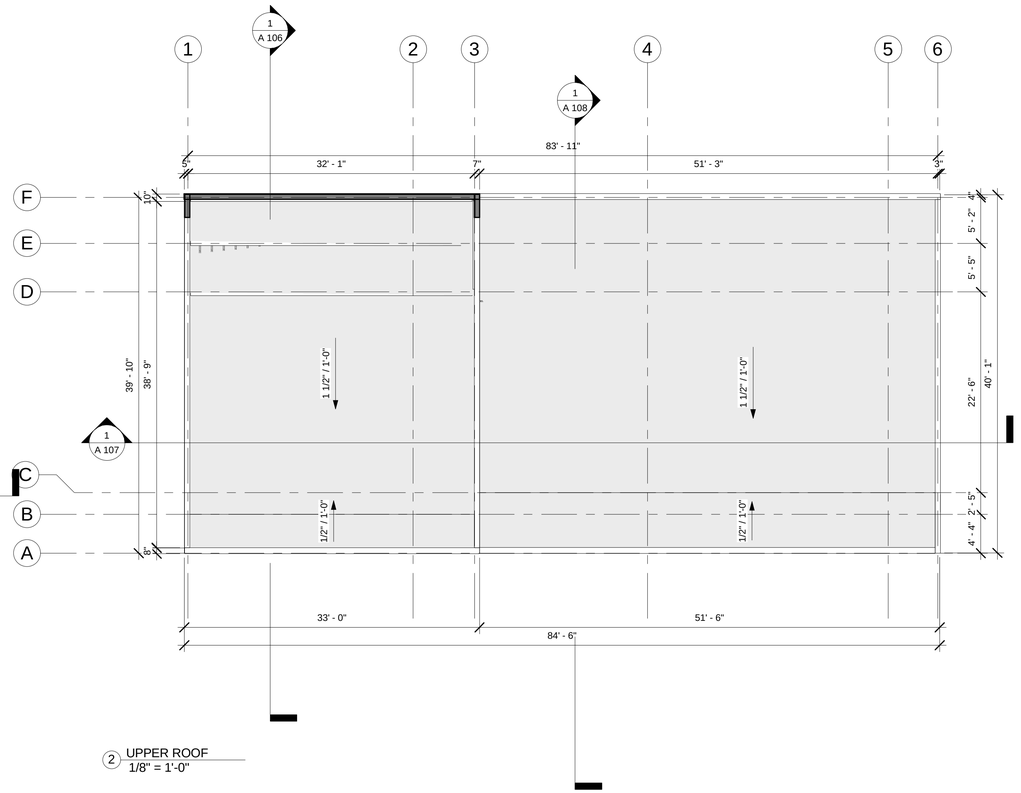
ELEVATION

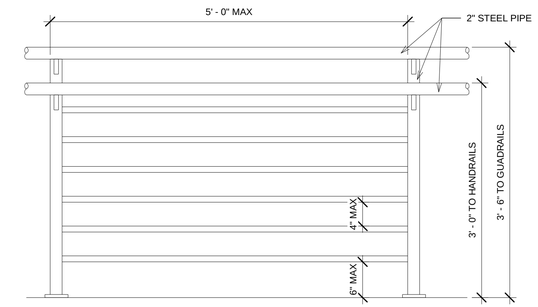
A104



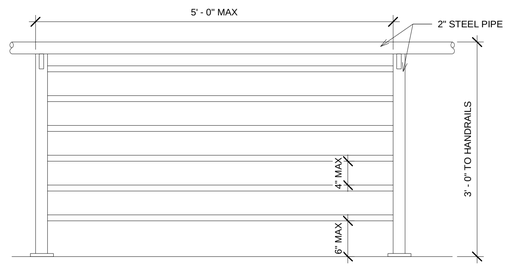
1 LOWER ROOF
1/8" = 1'-0"



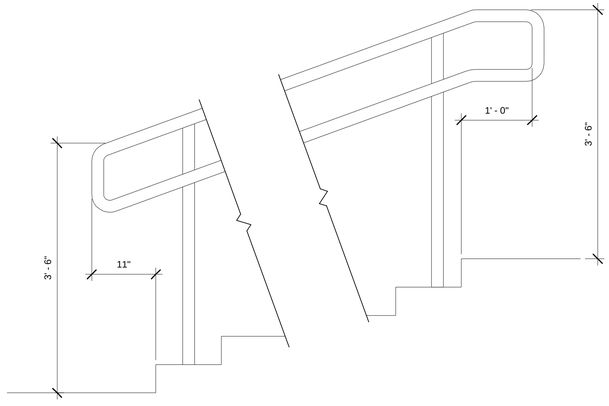
2 UPPER ROOF
1/8" = 1'-0"



42" GUARDRAIL



36" HANDRAIL



SECTION

3 RAILING DETAIL
1" = 1'-0"

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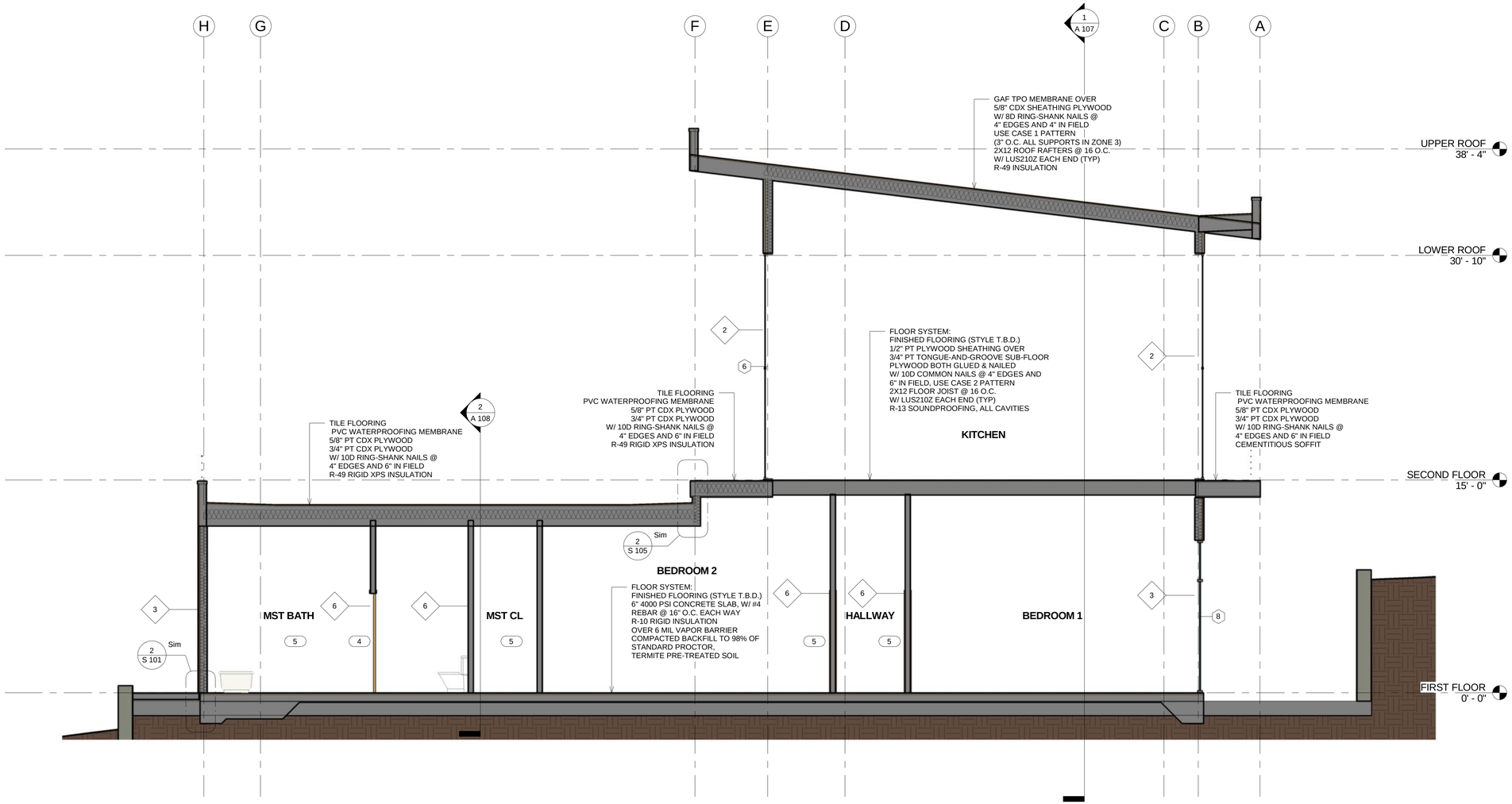
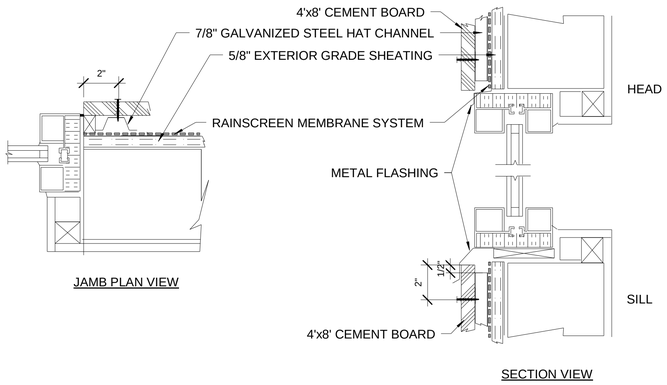
ROOF PLAN

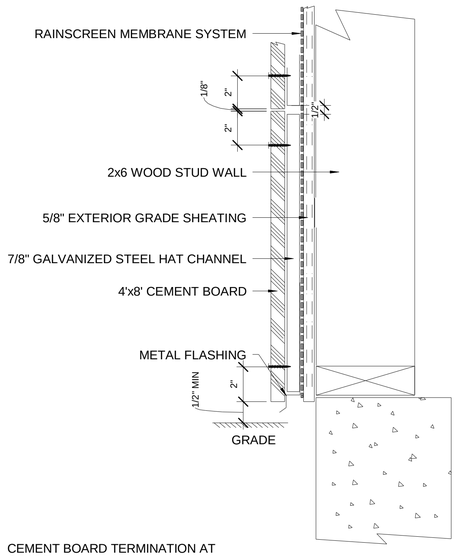
A 105



1 Section 1
1/4" = 1'-0"



2 CEMENT BOARD WINDOW DETAIL
3" = 1'-0"



3 CEMENT BOARD TERMINATION AT GRADE
3" = 1'-0"

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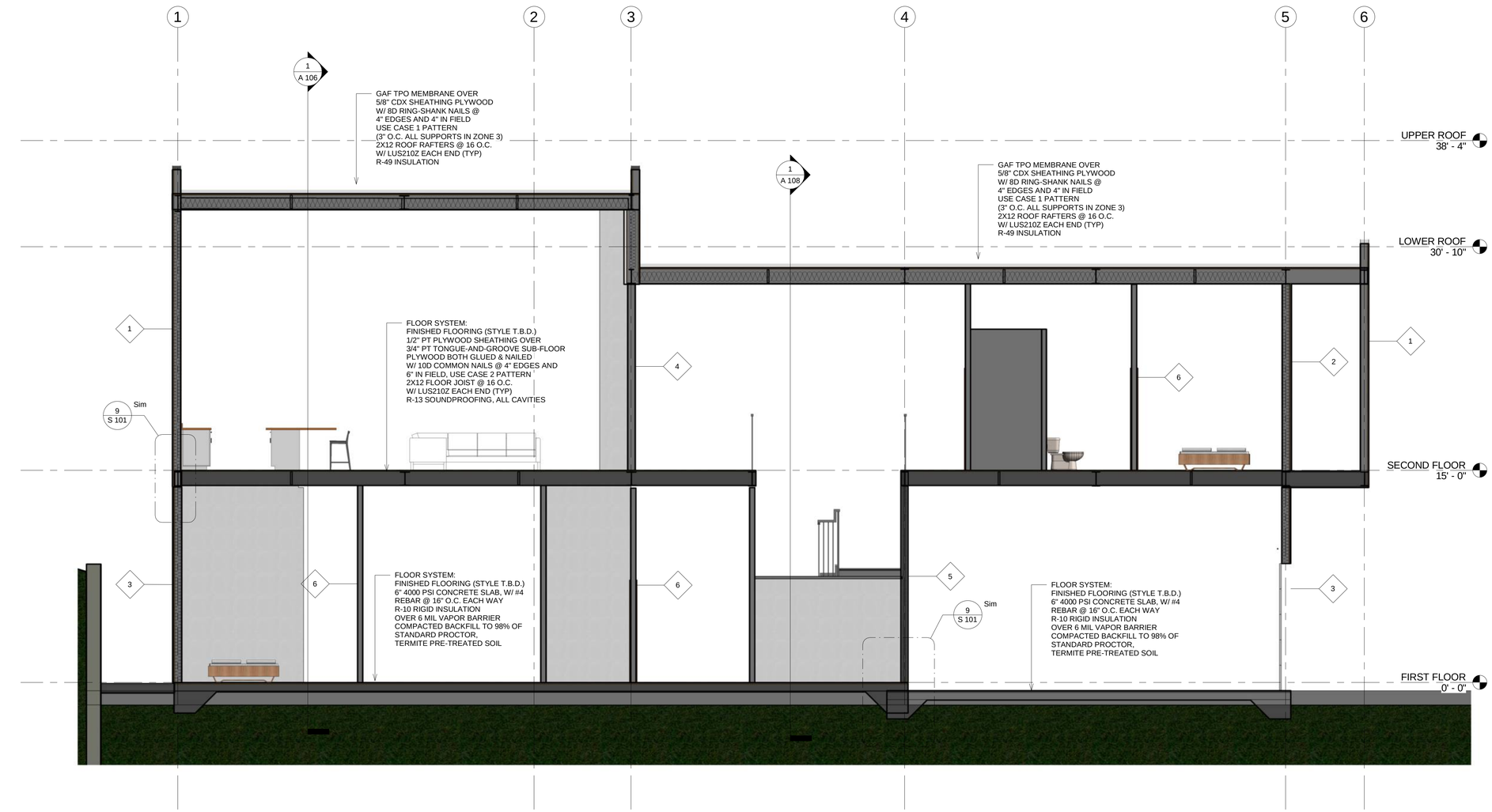
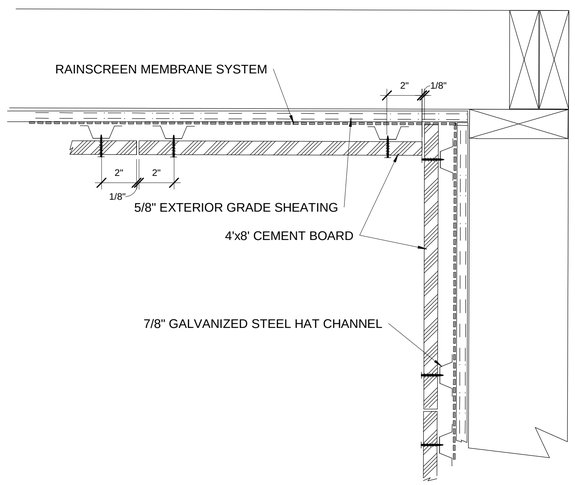
SECTIONS

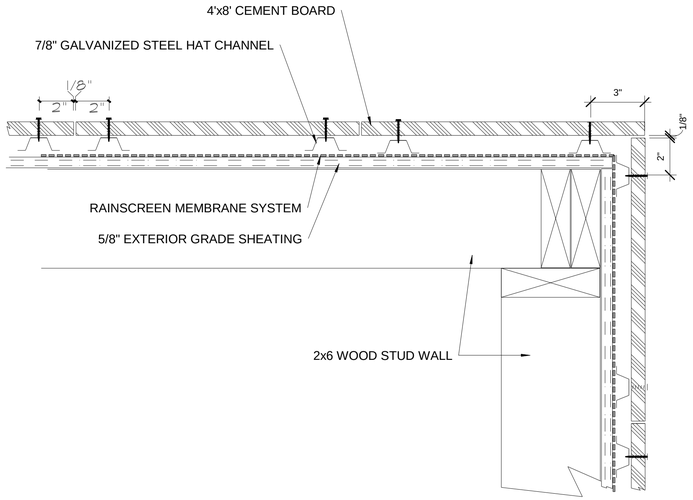
A 106



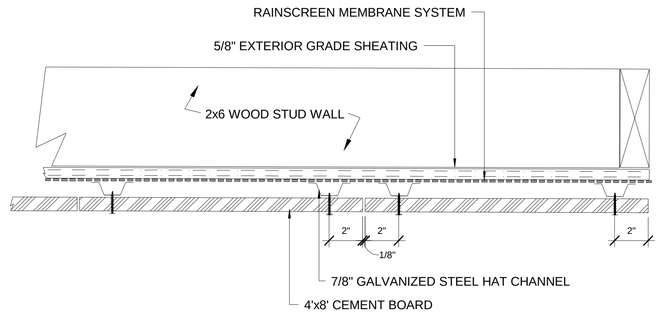
1 Section 4
1/4" = 1'-0"



2 CEMENT BOARD INSIDE CORNER
3" = 1'-0"



3 CEMENT BOARD OUTSIDE CORNER
3" = 1'-0"



4 CEMENT BOARD WALL SECTION
3" = 1'-0"

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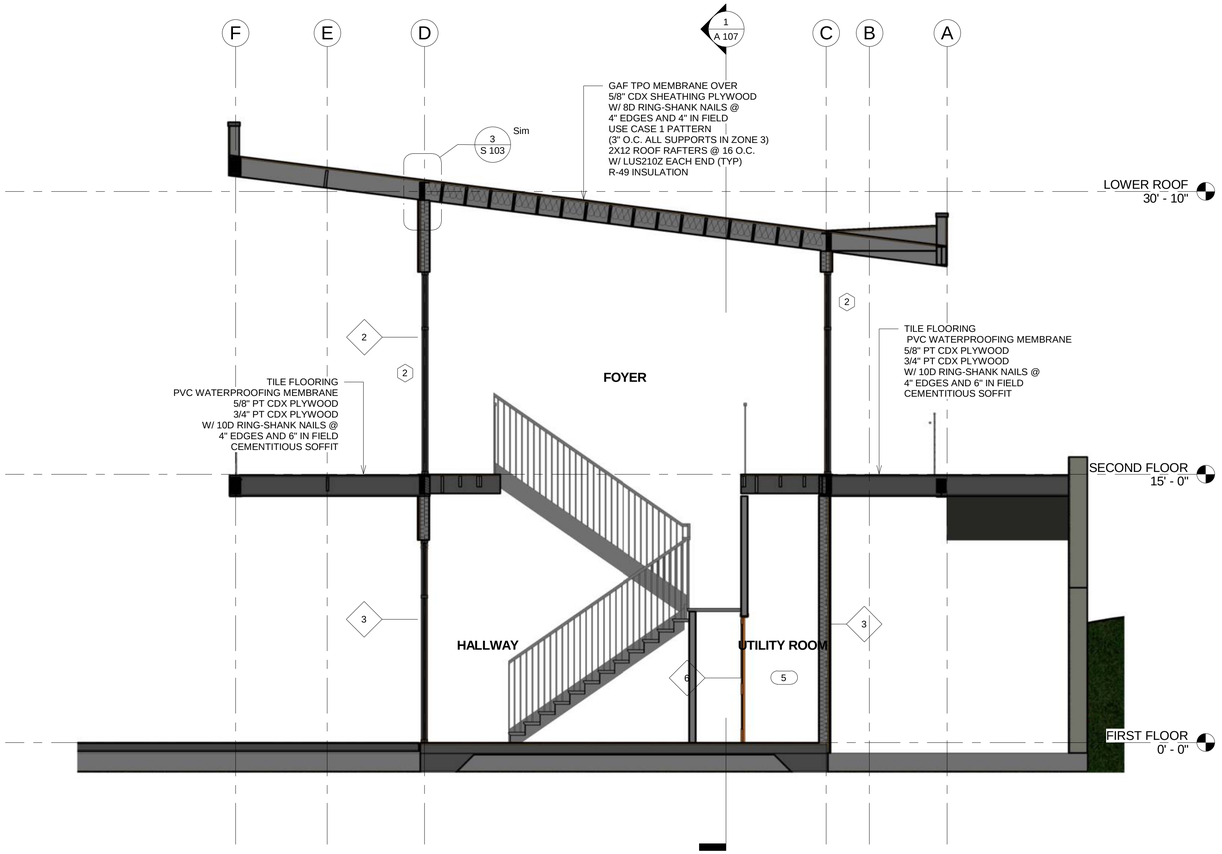
Highland

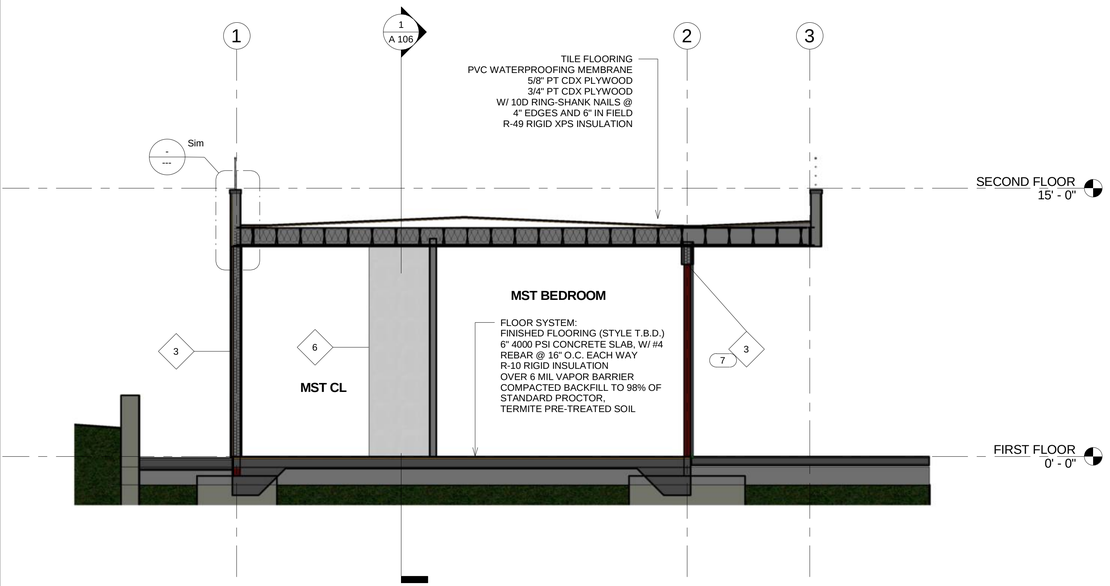
3143 Highland Lane,
Fairfax, VA 22031

SECTION

A 107



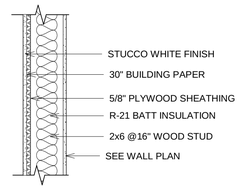
1 Section 3
1/4" = 1'-0"



2 Section 2
1/4" = 1'-0"

WALL TYPES

1



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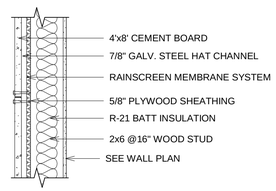

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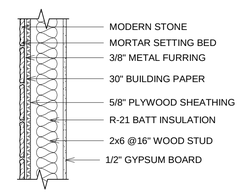

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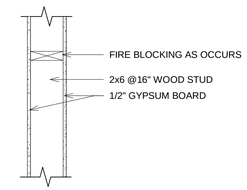

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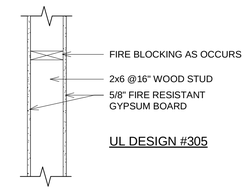

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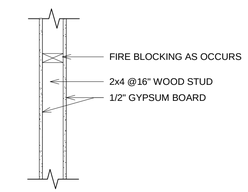

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3D VIEWS

A 109

GENERAL REQUIREMENTS:

1. PRIOR STARTING ANY WORK THE CONTRACTOR SHALL REVIEW THESE PLANS AND SITE CONDITIONS AND NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
2. THE ENGINEER IS NOT RESPONSIBLE FOR THE SUPERVISION OF THE CONTRACTOR NOR HIS EMPLOYEES DURING THE CONSTRUCTION. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE MEANS AND ESTABLISH METHODS OF THE CONSTRUCTION TO MEET REQUIREMENTS OF ALL APPLICABLE CODES, INDUSTRY STANDARDS ARE REQUIREMENTS OF THESE PLANS.
3. QUALITY OF THE WORK SHALL MEET OR EXCEED INDUSTRY STANDARD PRACTICES.
4. ANY DEVIATIONS FROM THESE PLANS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.

DESIGN DATA:

1. APPLICABLE BUILDING CODE: 2012 VRC, 2012 VBC
2. APPLICABLE DESIGN LOADS: PER ASCI/SEI 7-10
   - FLOOR LIVE LOAD: 40 PSF
   - ROOF LIVE LOAD: 20 PSF (300 LB CONC.)
   - SNOW LOAD : 25 PSF
   - BASIC WIND SPEED: 110 MPH
   - EXPOSURE: B
   - STRUCTURAL CATEGORY: II

SOILS AND FOUNDATIONS:

PRESUMPTIVE LOAD-BEARING VALUES OF FOUNDATION MATERIALS ARE USED IN LIE OF A COMPLETE GEOTECHNICAL EXPLORATION. FOUNDATIONS SHALL BE PLACED ON A "SEDIMENTARY AND FOLIATED ROCK" WITH A ALLOWABLE LOAD BEARING PRESSURE OF 1500 PSF. NOTIFY THE ENGINEER OF SOIL CONDITIONS ARE DIFFERENT.

1. ALL FOUNDATIONS, SLABS AND FOOTERS SHALL BE PLACED ON STABILIZED UNDISTURBED SUBGRADE SOIL.
2. MINIMUM FOUNDATION DEPTH SHALL BE 30" UNLESS OTHERWISE IS SPECIFIED ON THE PLANS. IF OVER-EXCAVATED - FILL SHALL NOT BE PLACED BACK INTO THE TRENCH UNLESS APPROVED BY THE ENGINEER.
3. FILL UNDER THE FOUNDATIONS SHALL BE USED ONLY IF APPROVED BY THE ENGINEER. CLEAN FILL MATERIAL SHALL BE PLACED IN 6"-8" LAYERS AND COMPACTED TO 98% DENSITY USING THE MODIFIED PROCTOR TEST.
4. FILL MATERIAL SHALL BE CLEAN GRANULAR SAND OR LIMEROCK MIX WITHOUT ANY ORGANIC MATERIALS, CLAY, MUCK AND ROCKS LARGER THAN 4". BACKFILL SHALL NOT CONTAIN ANY WOOD OR CELLULOSE DEBRIS.

CONCRETE

1. APPLICABLE CODE ACI 318 LATEST EDITION AND ACI 301.
2. ALL CONCRETE ELEMENTS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE IS SHOWN ON THE PLANS. WATER CEMENT RATION SHALL NOT EXCEED W/C=0.40.
3. ALL CAST-IN-PLACE CONCRETE SHALL BE CURED AND PROTECTED FROM OVERDRYING PER ACI 305R-10 "HOT WEATHER CONCRETING".
4. ALL EXPOSED EDGES SHALL HAVE 1/2" CHAMFERS.
5. NO COLD JOINTS ARE ALLOWED UNLESS OTHERWISE APPROVED BY THE ENGINEER.

REINFORCEMENT

1. ALL REBARS SHALL BE DEFORMED CARBON-STEEL ASTM A615/A615M-13 GRADE 60 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
* ADD ALTERNATE REINFORCEMENT OPTION: ASTM A1035 GRADE 100 (MMFX2) AS CORROSION RESISTANT ALTERNATIVE FOR ALL REINFORCEMENT.

2. ALL REQUIREMENTS FOR PLACEMENT, COVER, TOLERANCES, ETC. SHALL BE PER ACI 318-11.
3. ALL HOOKS AND BENDS SHALL BE FACTORY MADE UNLESS FIELD BENDS ARE APPROVED BY THE ENGINEER.
4. ONLY PLASTIC CHAIRS AND CENTRALIZERS SHALL BE USED FOR REINFORCEMENT SUPPORT.

HARDWARE

1. HARDWARE SHALL BE 304 STAINLESS STEEL OR BETTER OR ZMAX GALVANIZED FOR NON EXPOSED SIMPSON PRODUCTS, UNLESS OTHERWISE SPECIFIED.
2. ALL CONNECTORS SHALL HAVE STAINLESS STEEL SCREWS AND FASTENERS OR ACQ APPROVED TREATED (FOR NOT EXPOSED LOCATIONS).

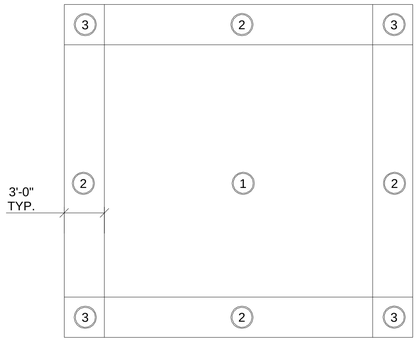
STRUCTURAL LUMBER

1. ALL WOOD MEMBERS SHALL MEET OR EXCEED REQUIREMENTS SPECIFIED IN "ANSI/AF&PA NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION" AND ALL REFERENCED STANDARDS.
2. ALL WOOD MEMBERS SHALL BE SOUTHER PINE NO2 OR GREATER KILN DRIED AS SPECIFIED IN THE STANDARDS, UNLESS OTHERWISE SPECIFIED.
3. ALL WOOD MEMBERS EXPOSED TO EXTERIOR, IN DIRECT CONTACT WITH CONCRETE OR STEEL SHALL BE PRESSURE-TREATED (PT) UC3B GRADE PER AWPA STANDARDS.
4. ALL FIELD CUTS IN PT LUMBER SHALL TREATED ON SITE.
5. NAILING SHALL BE IN ACCORDANCE WITH FBC 2014. NAILS AND OTHER FASTENERS FOR PT WOOD SHALL BE STAINLESS STEEL OR ACQ APPROVED TREATED.
6. SHEATHING SHALL BE 5/8" CDX PLYWOOD SHEATHING GRADE, UNLESS OTHERWISE IS SPECIFIED ON THE PLANS. USE 8D RING-SHANK NAILS WITH SPACING OF 4" O.C. ON ALL EDGES AND 6" O.C. IN THE FIELD.

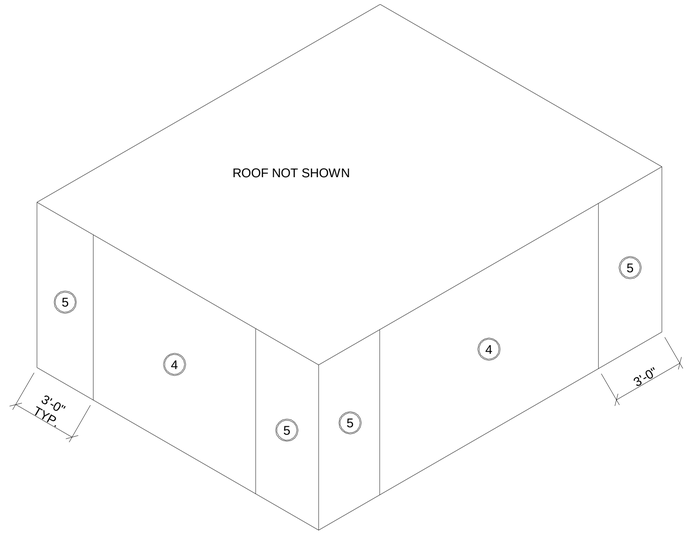
STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE CURENT ISSUE OF THE SPECIFICAITONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, AND SHALL COMPLY WITH ALL LOCAL LAWS AND ORDINANCES.
2. STRUCTURAL STEEL SHALL COMFORM TO ASTM A592 (FY=50 KSI)
3. STRUCTURAL STEEL TUBING SHALL COMFORM TO ASTM A500 GRADE B ROUND (FY=42 KSI) SQUARE OR RECTANGULAR (FY=46 KSI)
4. STEEL PIPE SHALL COMFORM TO ASTM A53 TYPE E OR S, GRADE B (FY=35 KSI)
5. BOLTS SHALL BE ¾" DIAMETER, UNLESS NOTED. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM325, ANCHOR BOLTS SHALL CONFORM TO ASTM A36, ALL OTHER BOLTS SHALL CONFERM TO ASTM A307 BOLT HOLES SHALL CONFERM TO AISC REQUIREMENTS.
6. ALL WELDING SHALL CONFORM TO THE CURRENT SPECIFICATIONS OF THE AMERICAN WELDING SOCIETY, AND SHALL COMPLY WITH ALL LOCAL LAWS AND ORDINANCES. WELDING ELECTRODES SHALL BE E-70 SERIES.
7. ALL CONNECTIONS SHALL BE FRAMED BEAM CONNECTIONS CONFORMING TO THE REQUIRMENTS OF PART 4 OF THE AISC MANUAL.
8. ALL BOLT CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS, UNLESS NOTED. CONNECTIONS SHALL BE "BEARING TYPE", WITH THRIADS INCLUDED IN THE SHEAR PLANE, UNLESS NOTED.
9. ALL HIGH SRENGTH BOLTS SHALL BE TIGHTENED TO PROVIDE AT LEAST THE MINIMUM TENSION SHOWN IN TABLE 3, FASTENER TENSION, OF THE SPECIFICATION FOR STRUCTURAL JOINTS ASTM A325 OR A490 BOLTS, UNLESS NOTED.
10. FIELD CONNECTIONS TO EXISTING STEEL SHALL BE WELDED, UNLESS NOTED.
11. ALL CONNECTIONS FOR WHICH REACTIONS ARE NOT SHOWN ON THE PLANS SHALL DEVELOP THE END REACTIONS FROM THE TABLES OF UNIFORM LOAD CONSTANTS, PART 2, OF THE AISC MANUAL. IN NO CASE, HOWEVER, SHALL CONNECTIONS HAVE LESS BOLTS THAN THE FOLLOWING:
    - W8-W10 : 2 ROWS
    - W12-W14 : 3 ROWS
    - W16-W18 : 4 ROWS
    - W21-W24 : 5 ROWS
    - W27-W30 : 6 ROWS
    - W33-W36 : 7 ROWS
12. ALL CONNECTIONS OF FLOOR MEMBERS SHALL HAVE THE MINIMUM NUMBER OF BOLTS AS FOLLOWS:
    - W18 : 5 ROWS
    - W21 : 6 ROWS
    - W24-W27 : 7 ROWS
    - W30 : 8 ROWS
    - W33 : 9 ROWS
    - W36 : 10 ROWS
13. ALL BEARING ENDS OF ALL COLUMNS SHALL BE MILLED OR FINISHED. THE CONTRACTOR SHALL SUPPLY ALL TEMPORARY BRACING REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING ERECTION. BRACING SHALL NOT BE REMOVED UNTILL ALL PERMANENT BRACING HAS BEEN INSTALLED, ALL WELDING HAS BEEN COMPLETED, ALL BOLTS HAVE BEEN PROPERLY TIGHTENED, AND FLOOR SLAB HAVE BEEN PROPERLY PLACED.
14. ALL COLUMN ANCHOR BOLTS WITH NUTS AND WASHERS, AND LEVELING PLATES SHALL BE SUPPLIED BY THE STRUCTURAL STEEL CONTRACTOR, AND SET BY THE FOUNDATION CONTRACTOR.
15. NO OPENINGS SHALL BE CUT IN STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS, OR APPROVAL IS RECEIVED FROM THE ENGINEER.
16. STELL SHALL BE PAINTED WITH COAT OF PRIMER, UNLESS NOTED.

ENCLOSED - BUILDING					
WIND PRESSURE ON COMPONENTS AND CLADDING (CH 30.5 PART 1)					
DESCRIPTION	WIDTH, FT	SPAN, FT	AREA, FT2	MAX P, PSF	MIN P, PSF
ZONE 1	1	1	1	+7.0	-19.9
ZONE 2	1	1	1	+7.0	-23.6
ZONE 3	1	1	1	+8.9	-55.0
ZONE 4	1	1	1	+16.2	-18.1
ZONE 5	1	1	1	+19.5	-24.6



ROOF WIND PRESSURES DIAGRAM
SCALE: NTS



WALLS WIND PRESSURES DIAGRAM
SCALE: NTS

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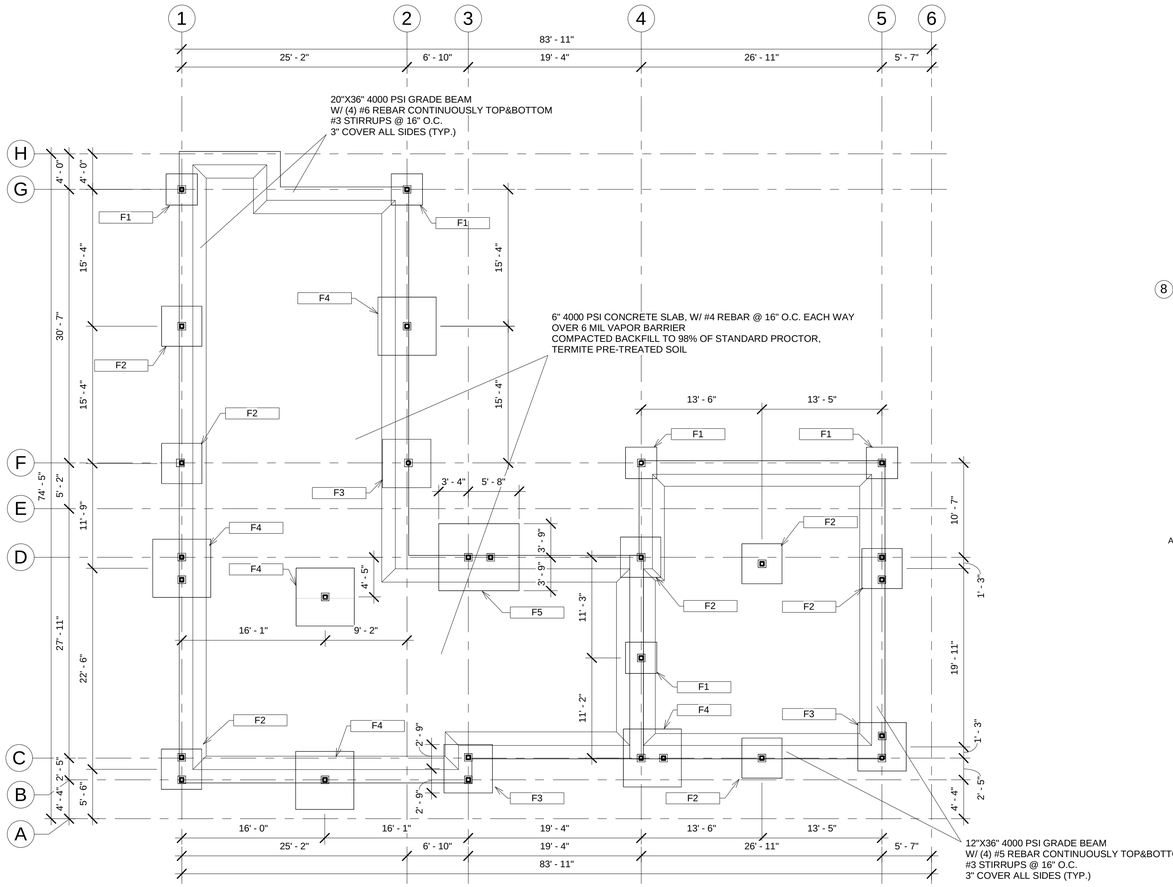
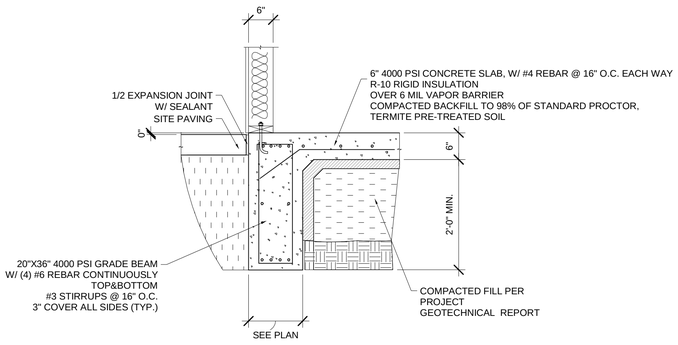
STRUCTURAL NOTES

S 100



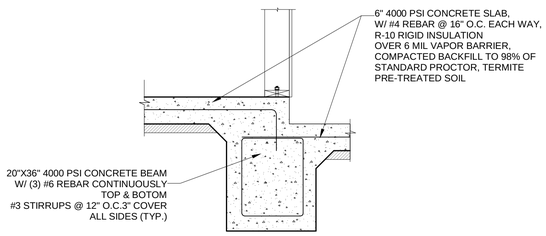
1 FOUNDATION PLAN
1/8" = 1'-0"

Structural Foundation Schedule						
Keynote	Count	Foundation Thickness	Length	Width	Structural Material	Description
F1	5	2' - 0"	3' - 6"	3' - 6"	4000 PSI Concrete, Cast-in-Place	#5 @ 10" O.C. EACH WAY TOP & BOTTOM
F2	7	2' - 6"	4' - 6"	4' - 6"	4000 PSI Concrete, Cast-in-Place	#6 @ 10" O.C. EACH WAY TOP & BOTTOM
F3	3	3' - 0"	5' - 5"	5' - 5"	4000 PSI Concrete, Cast-in-Place	#6 @ 10" O.C. EACH WAY TOP & BOTTOM
F4	5	3' - 6"	6' - 6"	6' - 6"	4000 PSI Concrete, Cast-in-Place	#6 @ 10" O.C. EACH WAY TOP & BOTTOM
F5	1	3' - 6"	7' - 6"	9' - 0"	4000 PSI Concrete, Cast-in-Place	#6 @ 10" O.C. EACH WAY TOP & BOTTOM

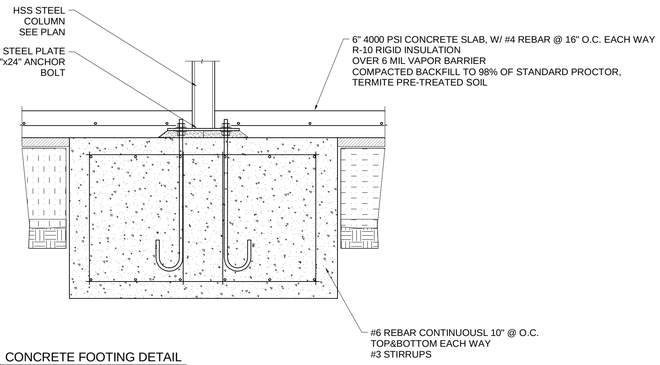


NOTE: FINISHES ARE NOT SHOWN FOR CLARITY.
SEE NOTES FOR STEEL ELEMENTS COATINGS AND FIRE PROOFING.

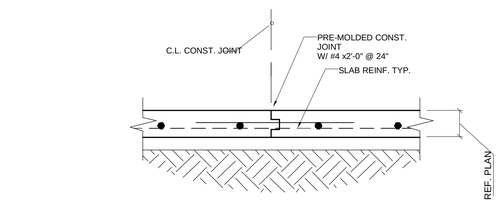
2 TYPICAL PERIMETER GRADE BEAM WITH NO LUG
3/4" = 1'-0"



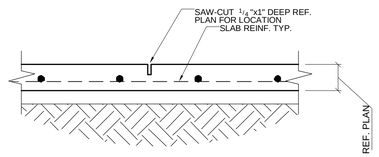
9 FOUNDATION DETAIL
3/4" = 1'-0"



3 CONCRETE FOOTING DETAIL
3/4" = 1'-0"



CONSTRUCTION JOINT

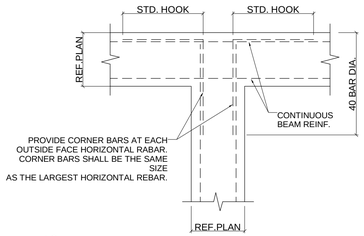


SAWCUT CONTROL JOINT

NOTE:

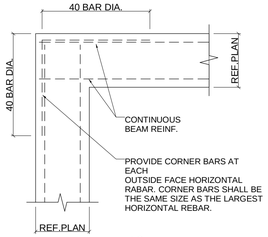
1. PROVIDE SAW-CUT WITHIN 24 HOURS OF SLAB CURING TO PREVENT ANY DAMAGING OF SLAB.
2. SEAL ALL SAW-CUT JOINTS PER ARCHITECTS REQUIREMENTS.

8 TYPICAL CONSTRUCTION JOINT
3/4" = 1'-0"

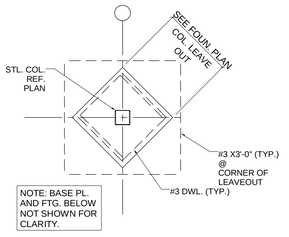


NOTE:
STIRRUPS NOT SHOWN
FOR CLARITY.

4 TYPICAL CORNER BAR DETAIL
1/2" = 1'-0"

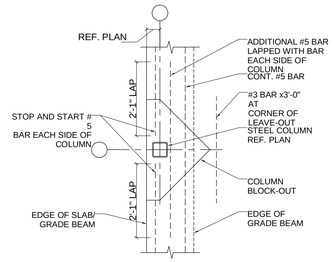


NOTE:
STIRRUPS NOT SHOWN
FOR CLARITY.

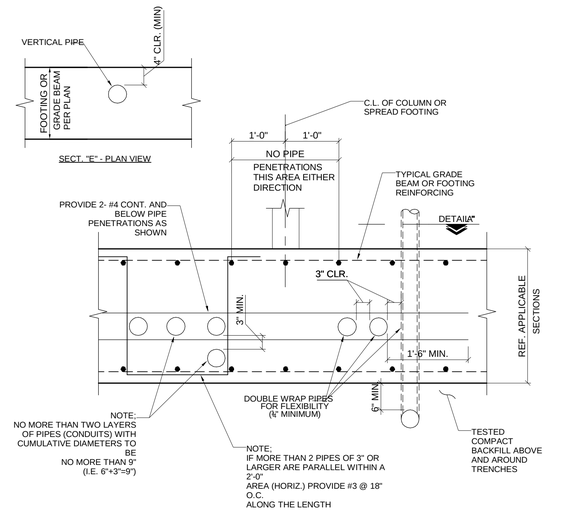


5 INTERIOR COL. LEAVE-OUT
1/2" = 1'-0"

SLAB REINF. AND STIRRUPS NOT SHOWN FOR CLARITY.



6 EXTERIOR COL. LEAVE-OUT
1/2" = 1'-0"



7 TYPICAL PENETRATION THRU FOOTINGS OR GRADE BEAMS
3/4" = 1'-0"

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FOUNDATION PLAN

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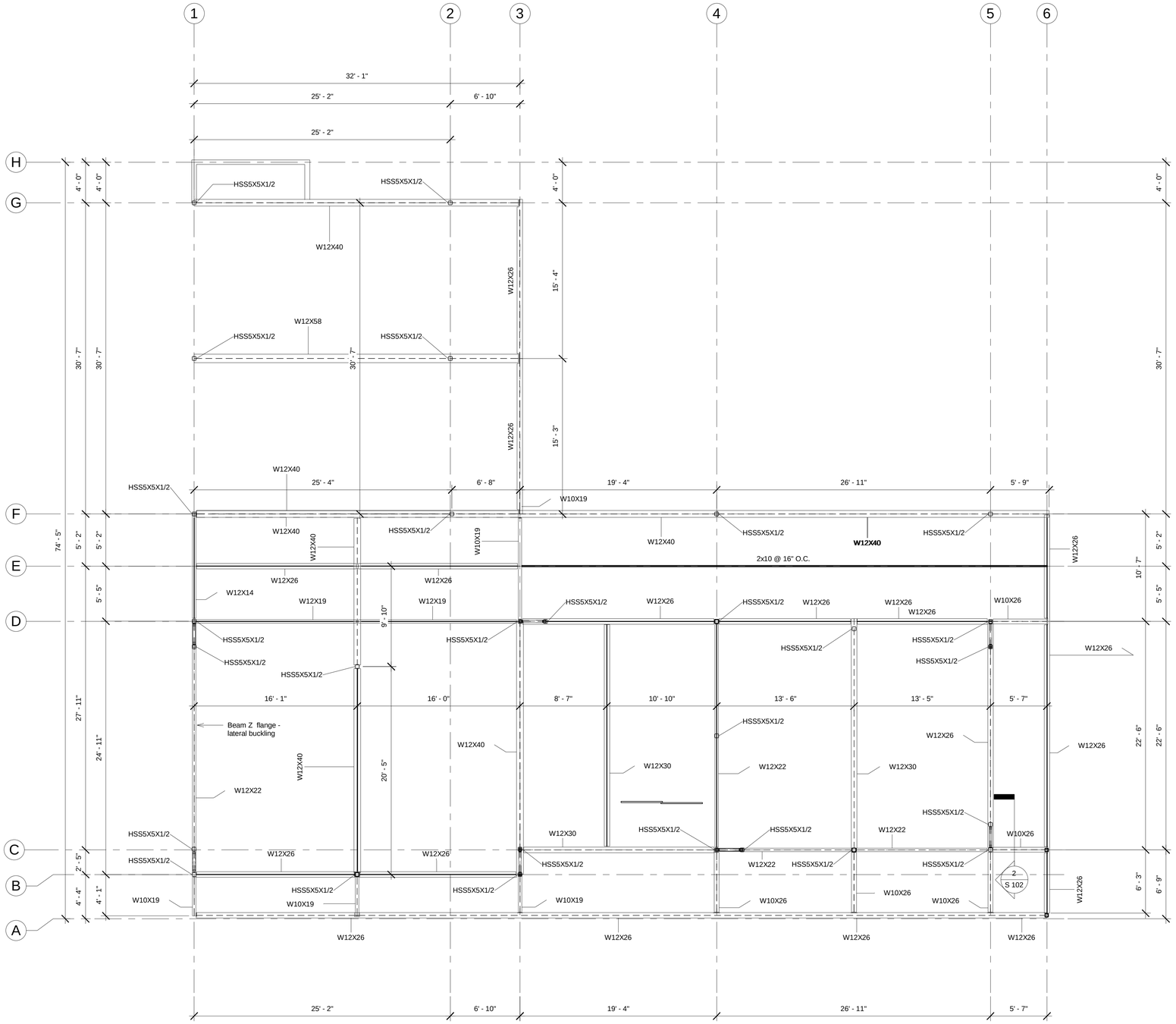
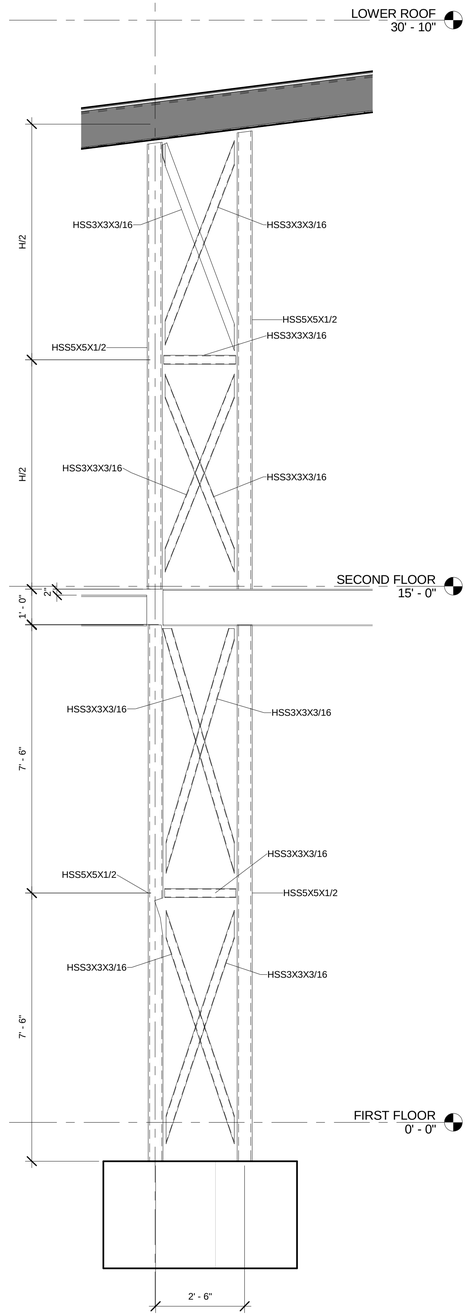


1 1ST FLOOR STEEL FRAMING PLAN
3/16" = 1'-0"



2 TYPICAL COLUMN VIEW
1/2" = 1'-0"

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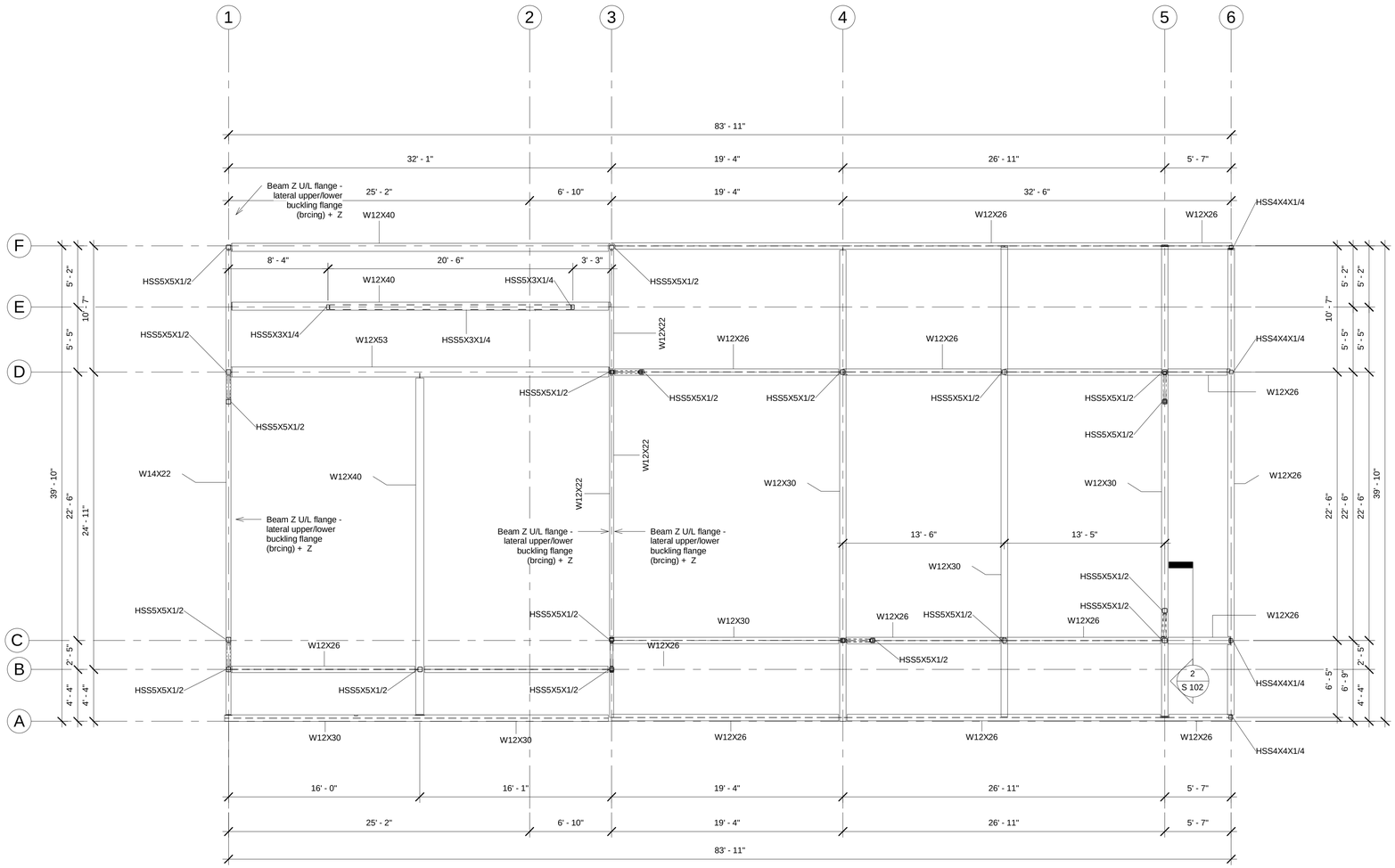
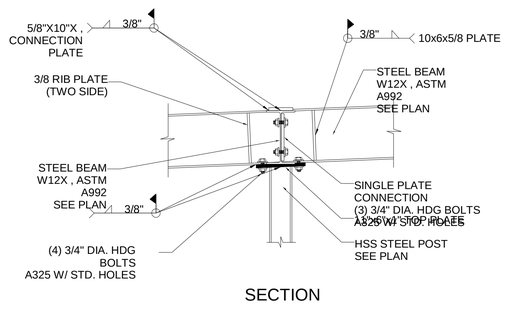
1ST FLOOR STRUCTURAL PLAN

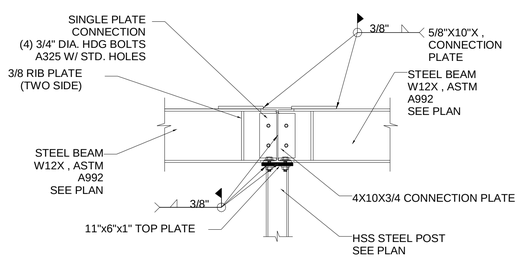
S 102



1 ROOF STEEL FRAMING PLAN
3/16" = 1'-0"

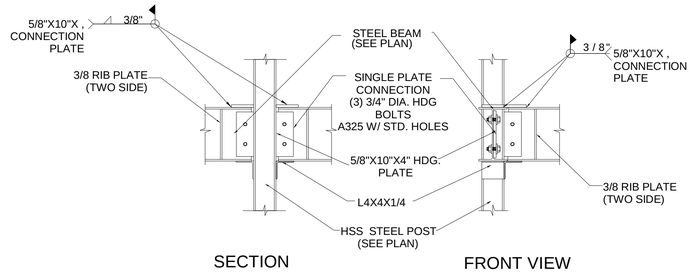


SECTION



FRONT VIEW

3 TYPICAL BEAM CONNECTION
3/4" = 1'-0"



SECTION FRONT VIEW

2 BEAM TO POST CONNECTION DETAIL
3/4" = 1'-0"

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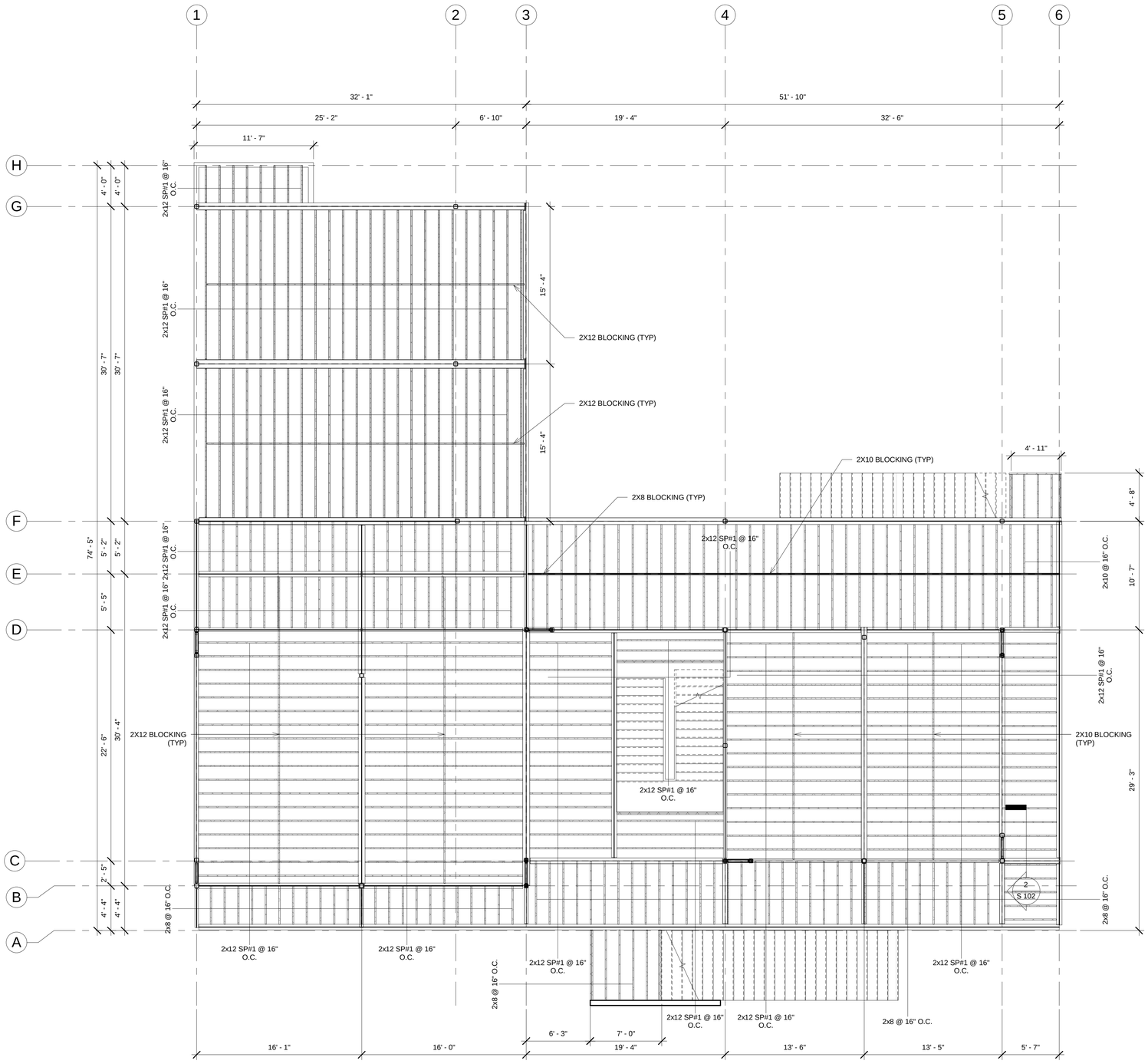
ROOF STRUCTURAL PLAN

S 103



1 1ST FLOOR WOOD FRAMING PLAN
3/16" = 1'-0"

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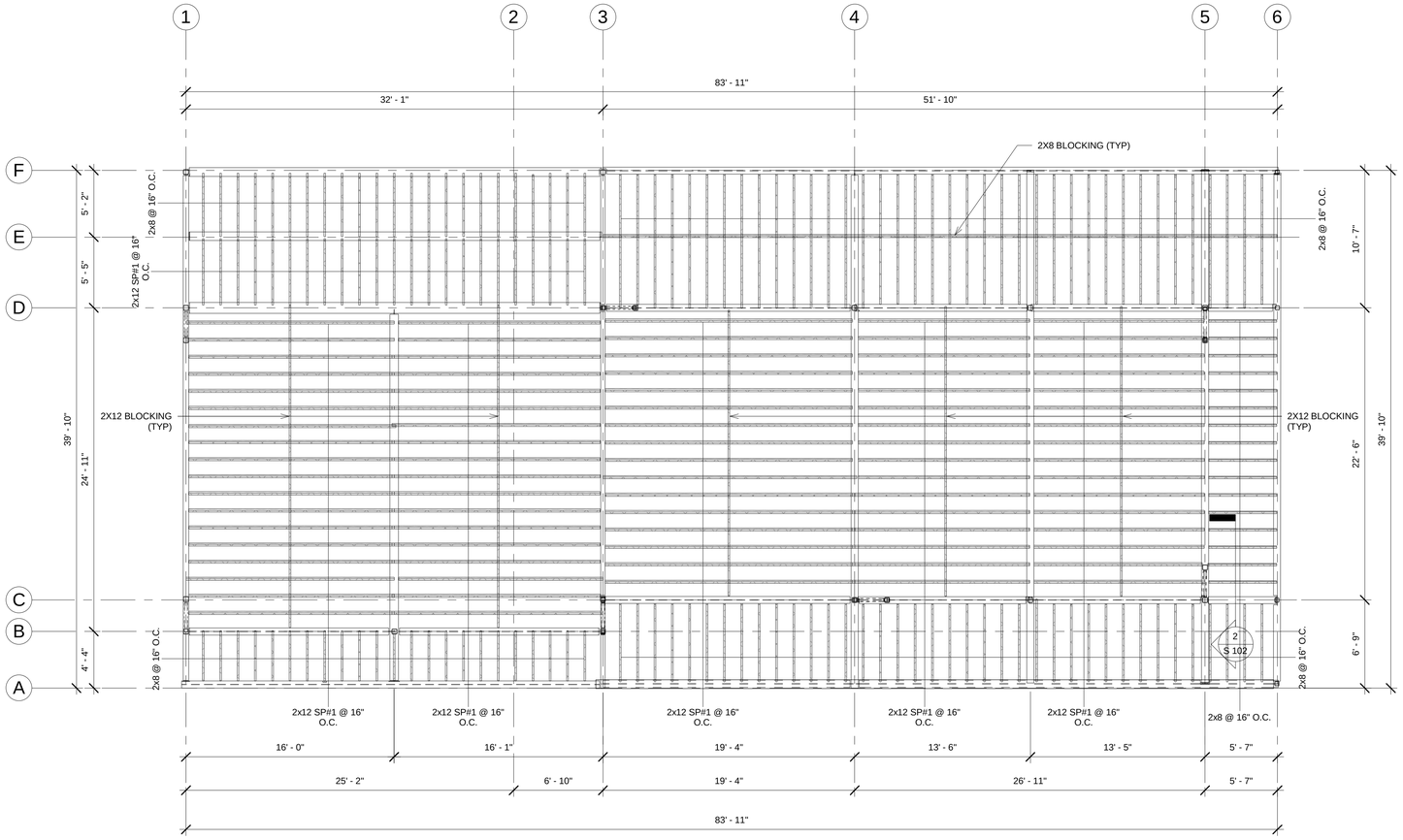
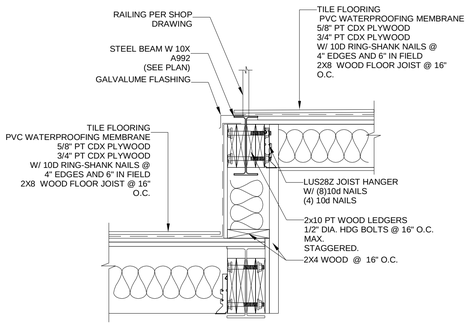
1ST FLOOR FRAMING PLAN

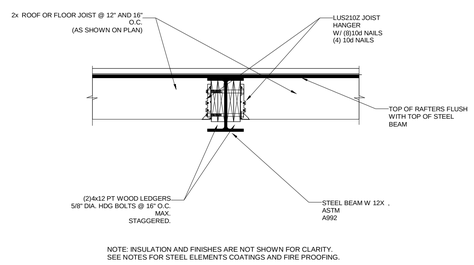
S 104



1 ROOF FRAMING PLAN
3/16" = 1'-0"

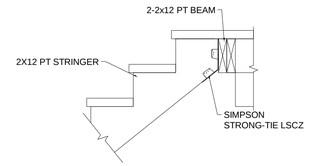


2 DECK TO WALL DETAIL
1" = 1'-0"



NOTE: INSULATION AND FINISHES ARE NOT SHOWN FOR CLARITY.
SEE NOTES FOR STEEL ELEMENTS COATINGS AND FIRE PROOFING.

3 TYPICAL WOOD JOIST TO STEEL BEAM CONNECTION
3/4" = 1'-0"



NOTES:
SIMPSON STRONG-TIE LSCZ FASTENED TO RIM JOIST BY 8-10D x 1 1/2" NAILS AND TO STRINGER
BY 8-10D x 1 1/2" NAILS

4 DECK STAIRS CONNECTION
3/4" = 1'-0"

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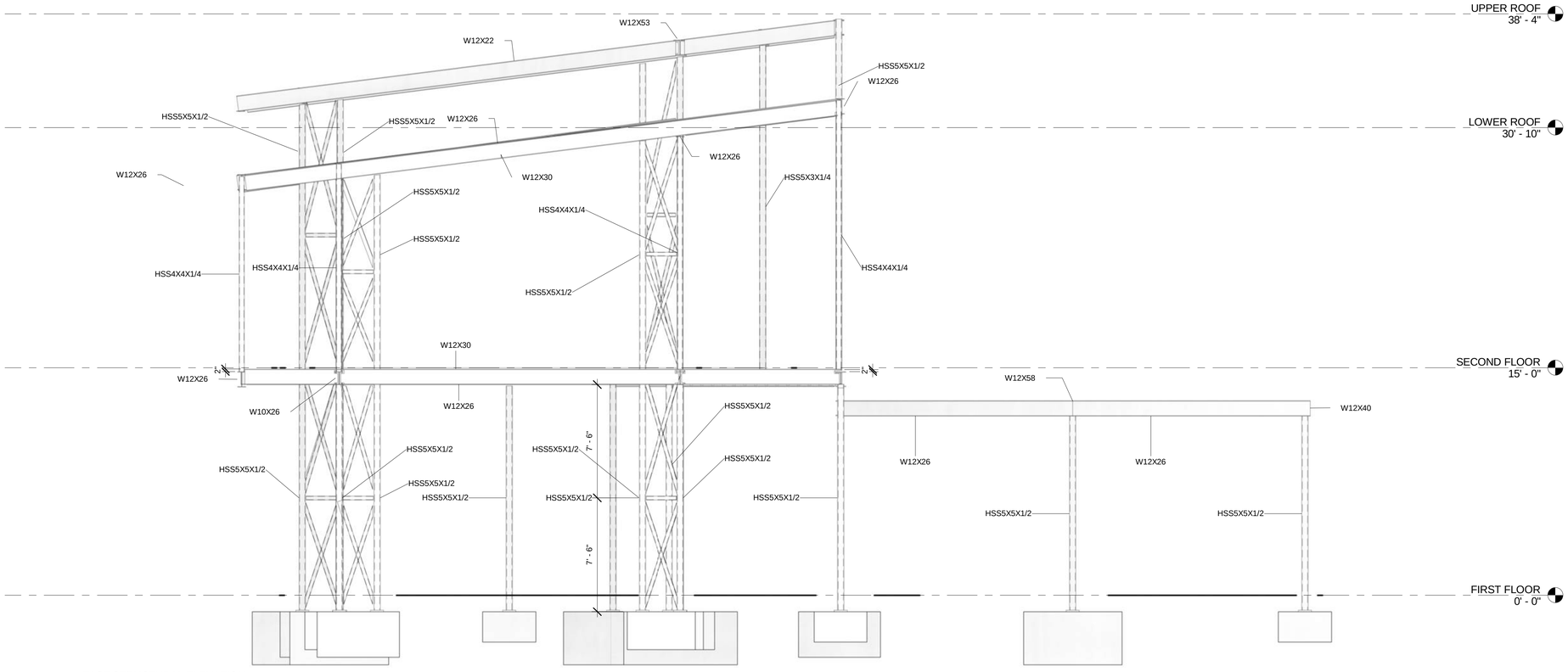
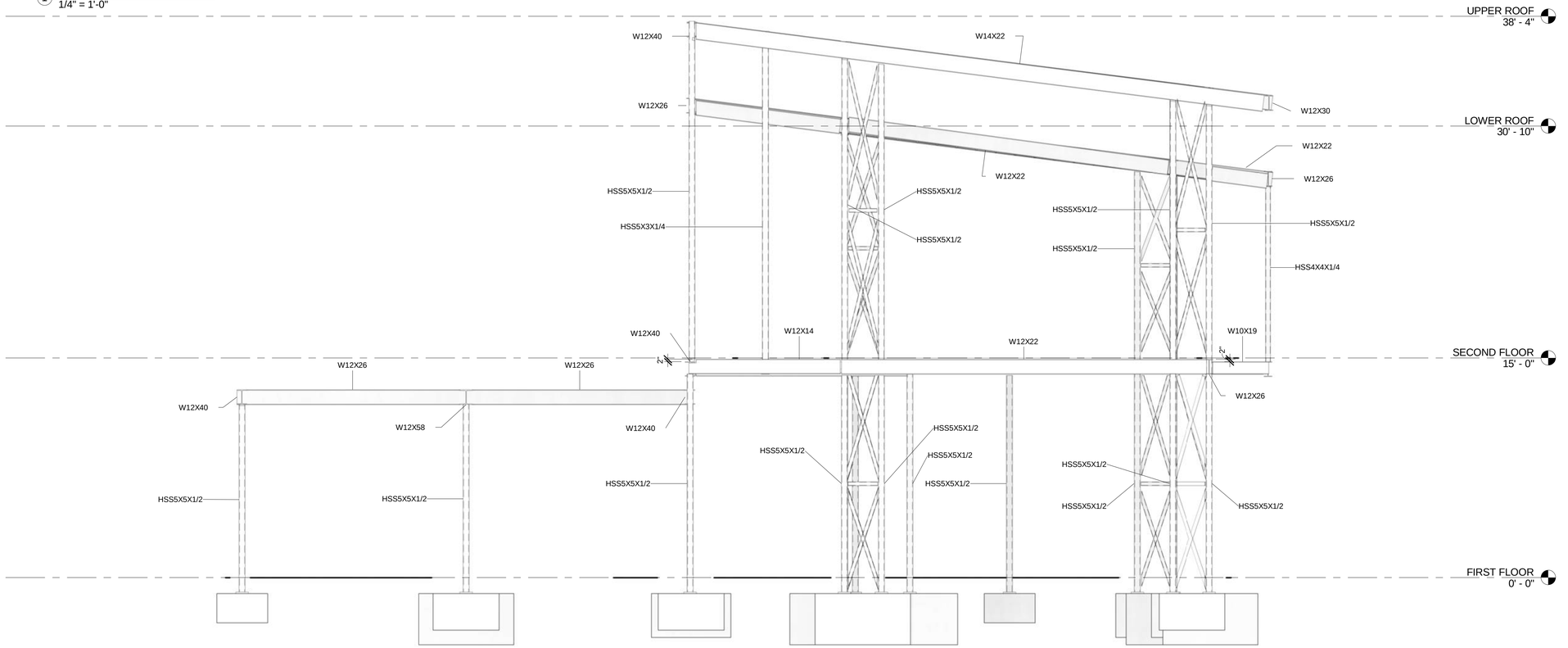
ROOF FRAMING PLANS

S 105



1 EAST STRUCTURAL ELEVATION
1/4" = 1'-0"



2 WEST STRUCTURAL ELEVATION
1/4" = 1'-0"

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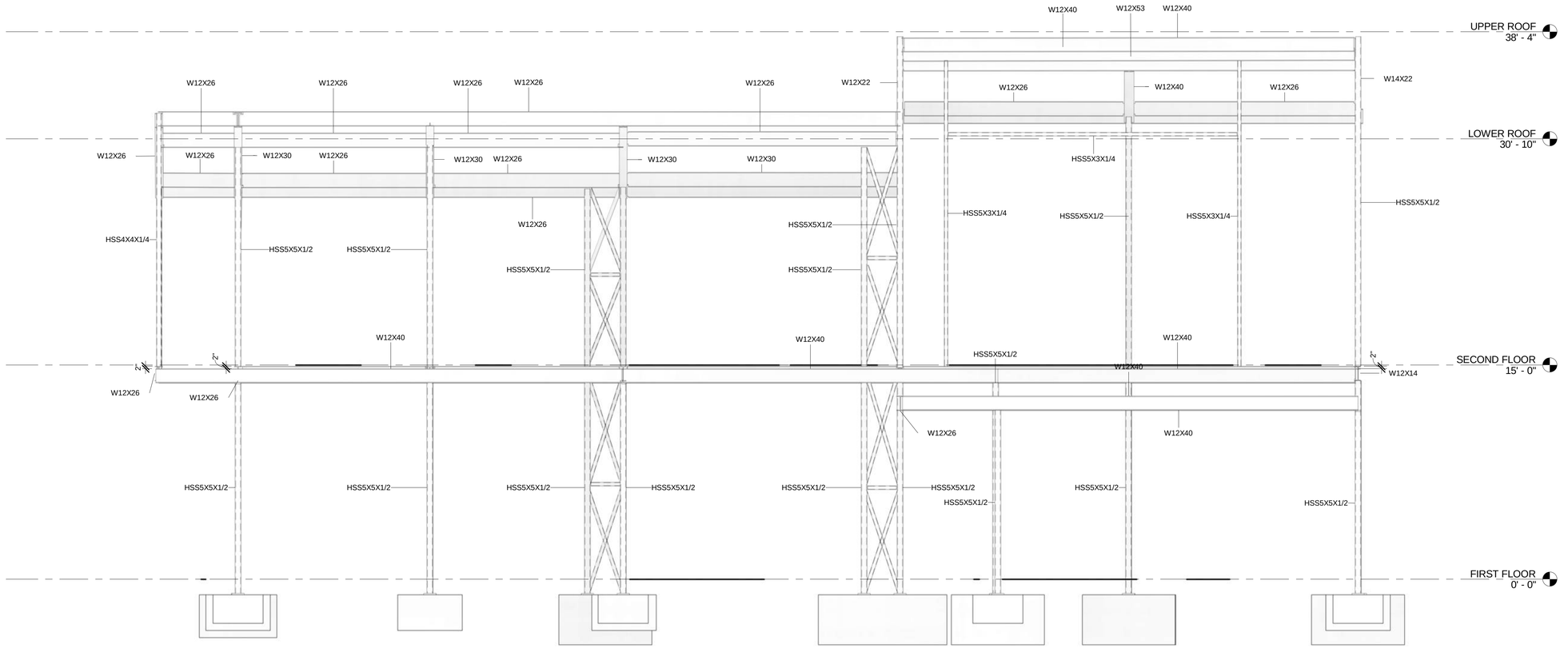
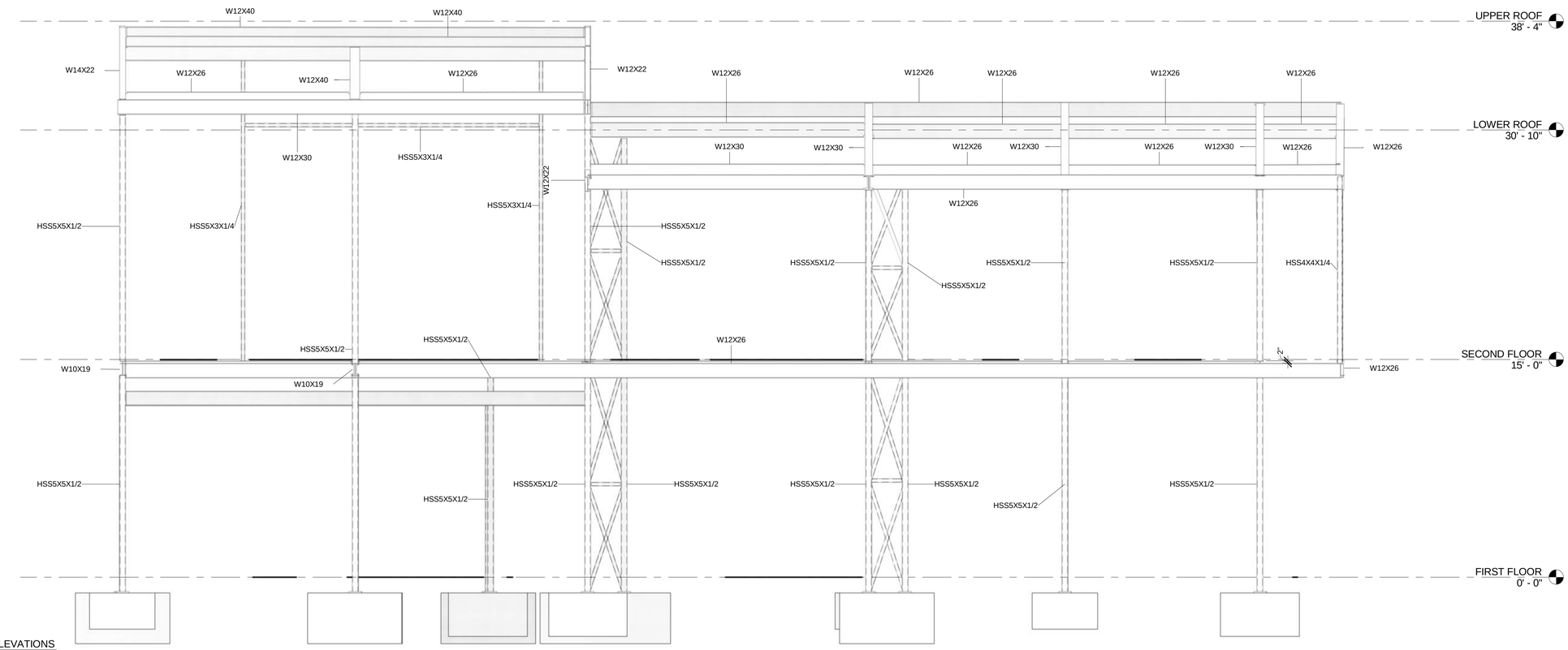
EAST & WEST STRUCTURAL ELEVATIONS

S 106



1 NORTH STRUCTURAL ELEVATIONS
1/4" = 1'-0"



2 SOUTH STRUCTURAL ELEVATIONS
1/4" = 1'-0"

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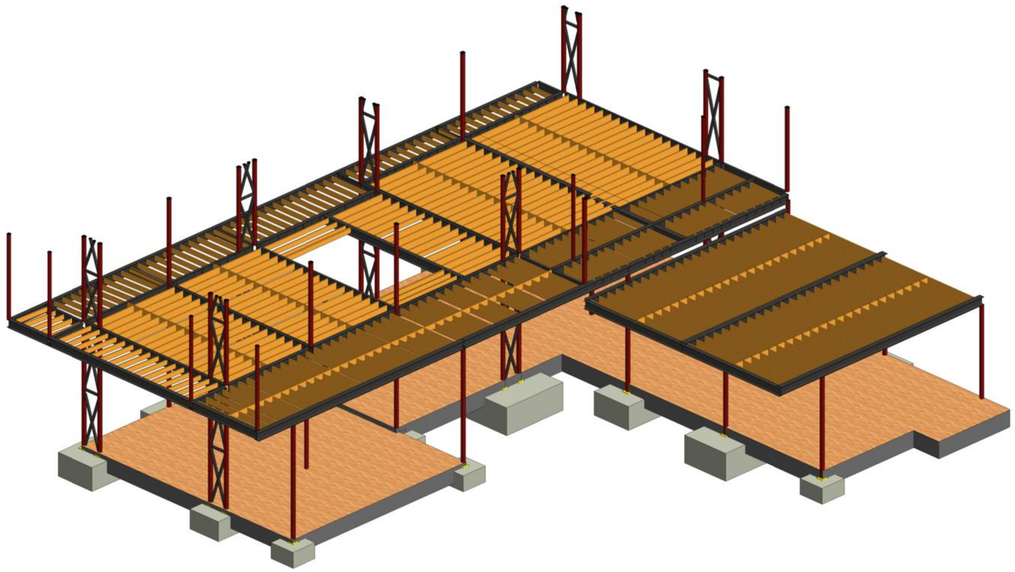
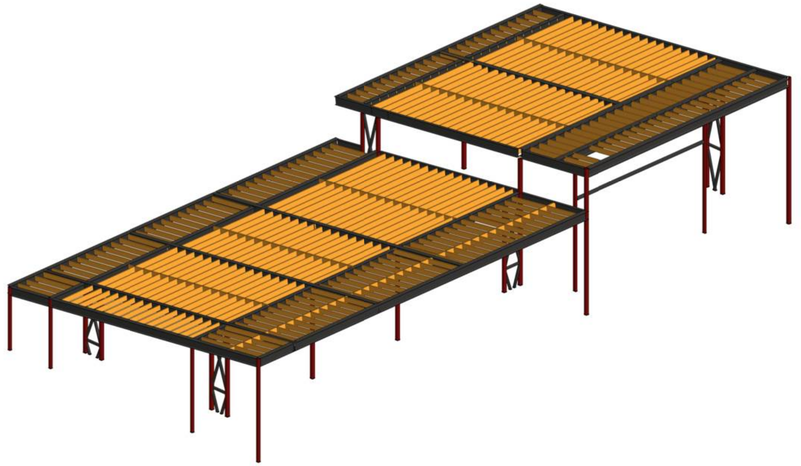
SOUTH, NORTH STRUCTURAL ELEVATIONS

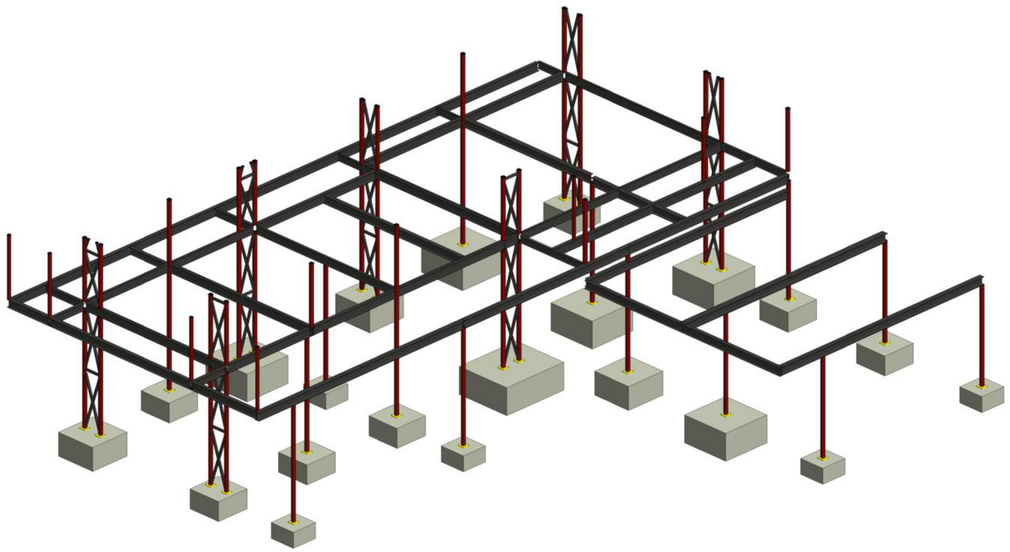
S 107



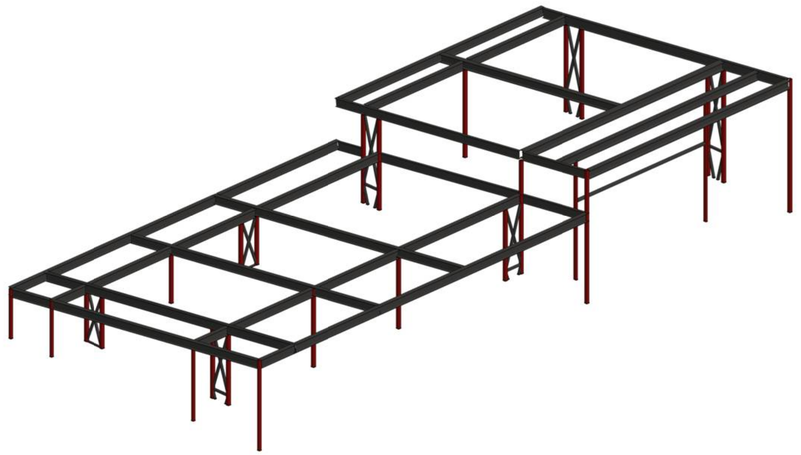
1 3D 1ST FLOOR FRAMING VIEW



2 3D ROOF FRAMING VIEW



3 3D 1ST FLOOR STRUCTURAL VIEW



4 3D ROOF STRUCTURAL VIEW

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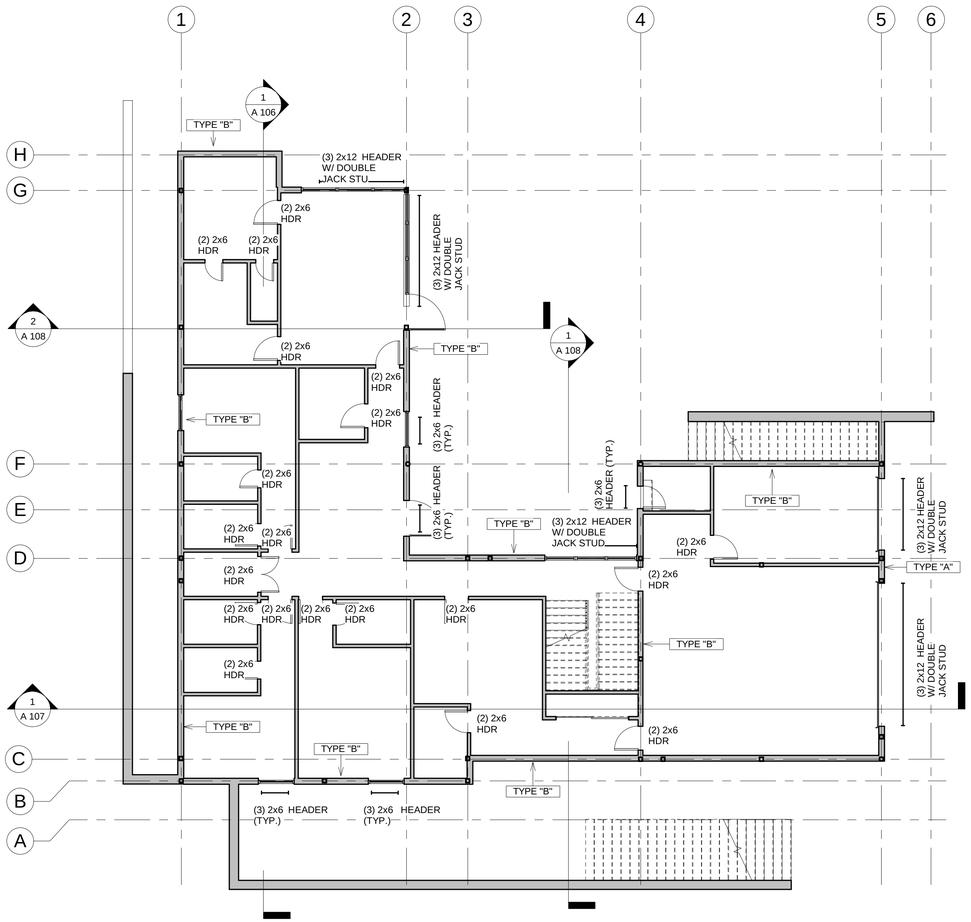
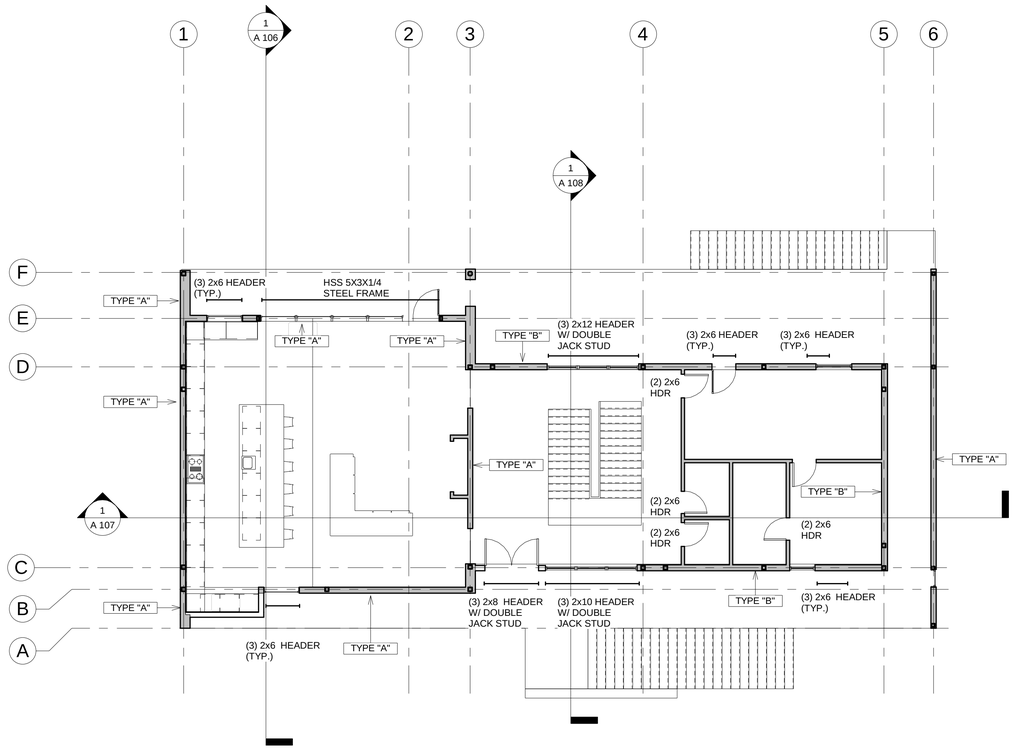
3D STRUCTURAL VIEW

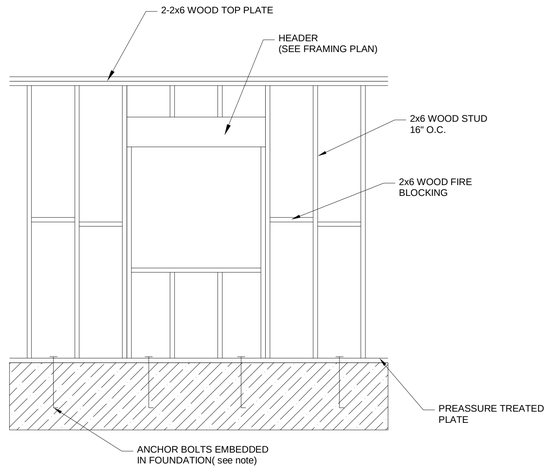
S 108



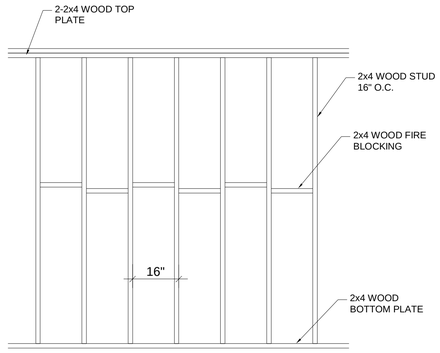
1 SHEAR WALL FIRST FLOOR PLAN
1/8" = 1'-0"



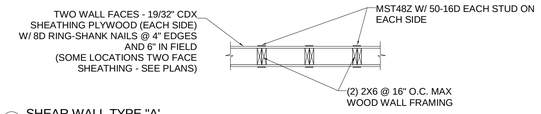
2 SHEAR WALL SECOND FLOOR PLAN
1/8" = 1'-0"



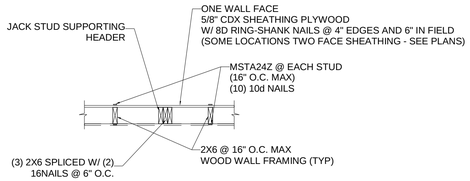
3 TYPICAL WALL FRAMING
1/2" = 1'-0"



4 TYPICAL INTERIOR WALL FRAMING
1/2" = 1'-0"



5 SHEAR WALL TYPE "A'
1/2" = 1'-0"



6 SHEAR WALL TYPE "B"
1/2" = 1'-0"

SHEAR WALLS LEGEND	
Keynote	Description

TYPE "B"	ONE WALL FACE - 19/32 CDX SHEATHING PLYWOOD W/ 10d RING-SHANK NAILS @ 4" EDGES AND 4" IN FIELD 2X6 WALL FRAMING @ 16" O.C. MAX
TYPE "A"	TWO WALL FACES - 19/32" CDX SHEATHING PLYWOOD (EACH SIDE) W/ 8d RING-SHANK NAILS @ 2.5" DIAPHRAGM EDGES 4" ALL OTHER PLYWOOD EDGES AND 4" IN FIELD 2X6 WALL FRAMING @ 16" O.C. MAX

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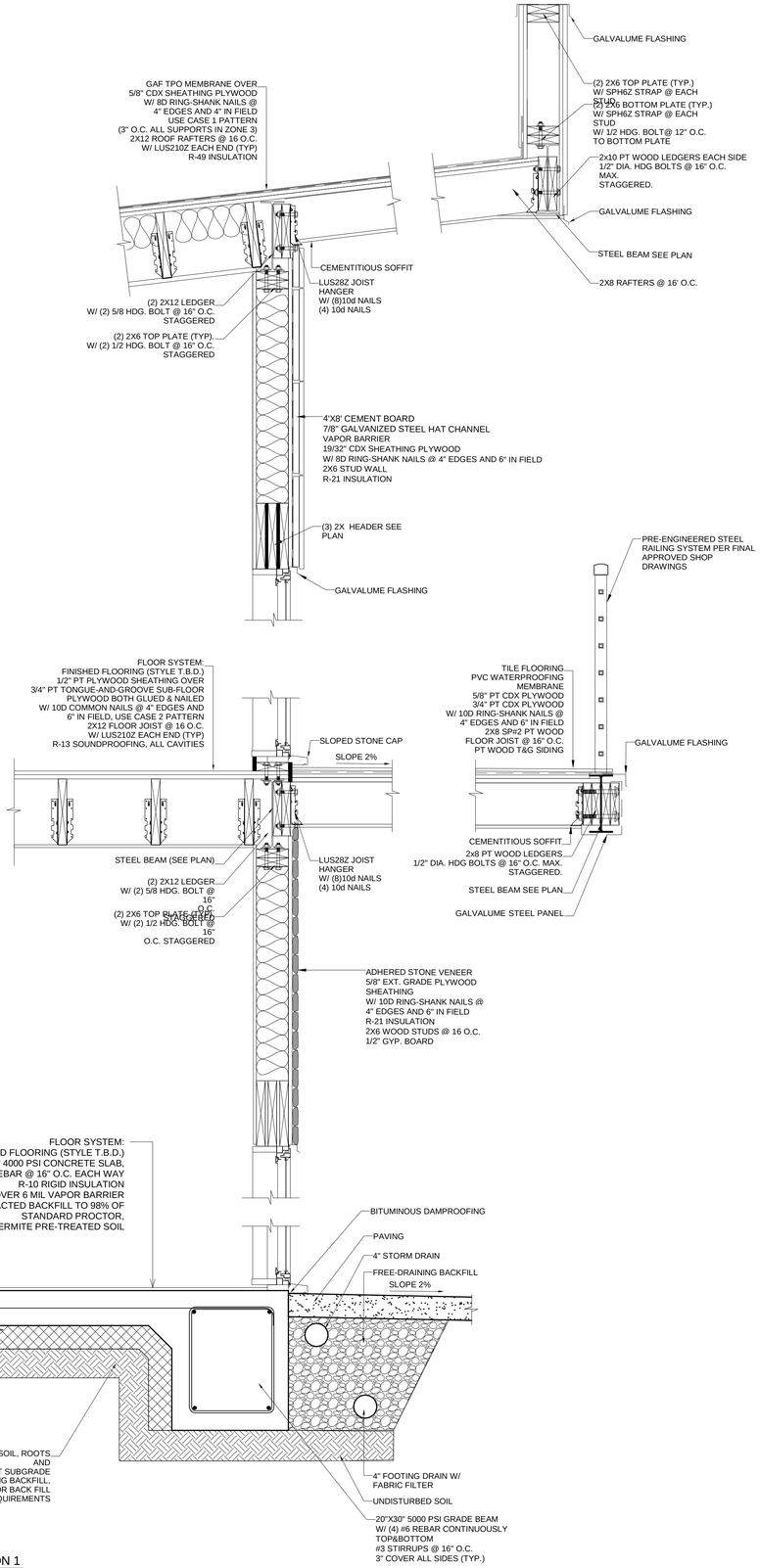
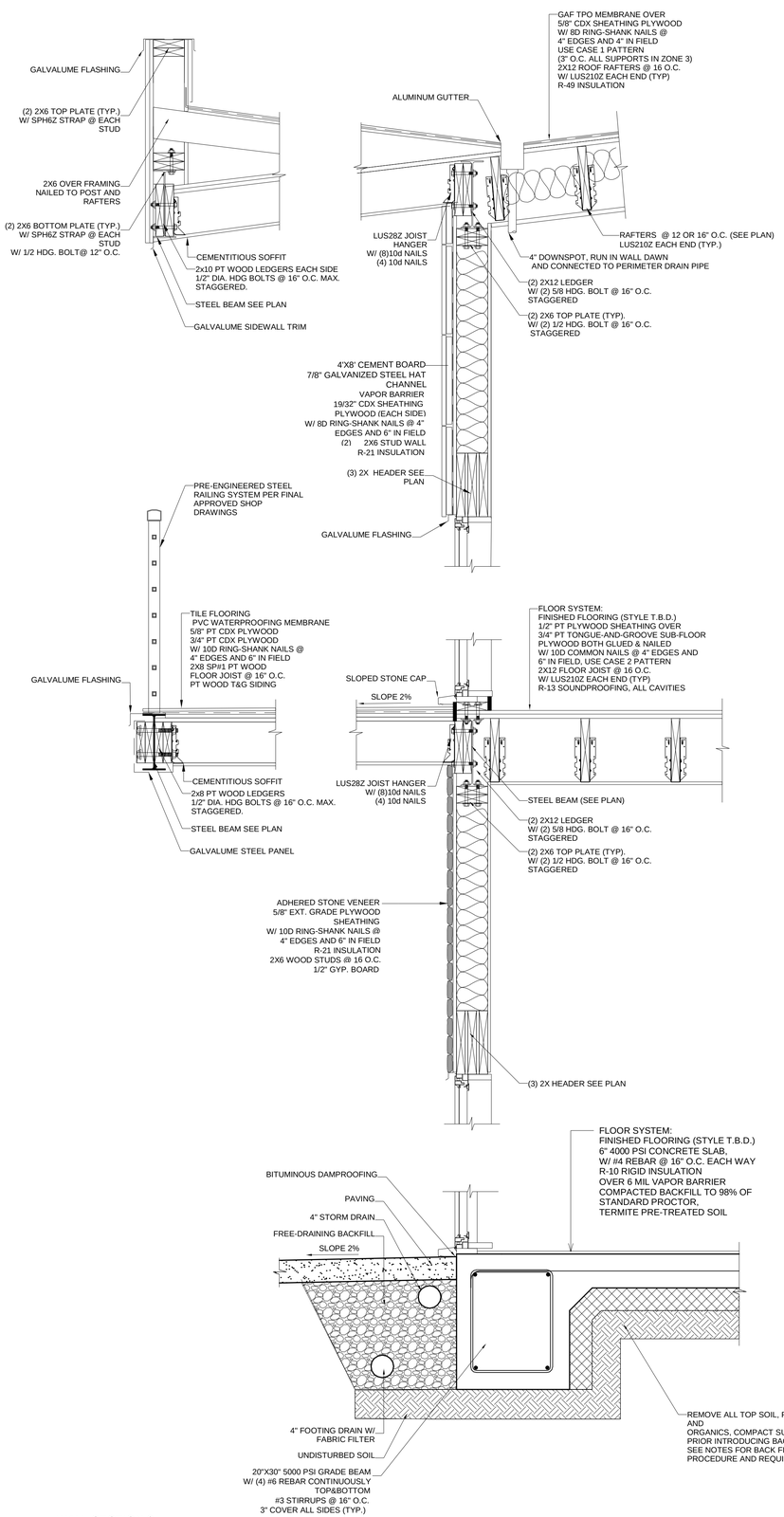
HEADER AND WALL PLAN

S 109



1 WALL SECTION 1
1" = 1'-0"



2 WALL SECTION 2
1" = 1'-0"

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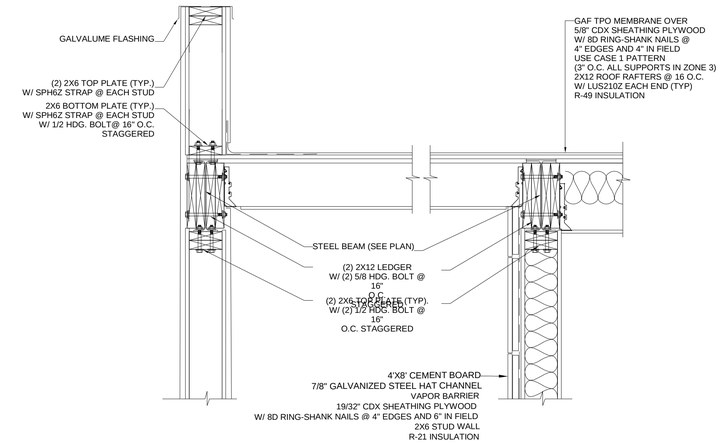
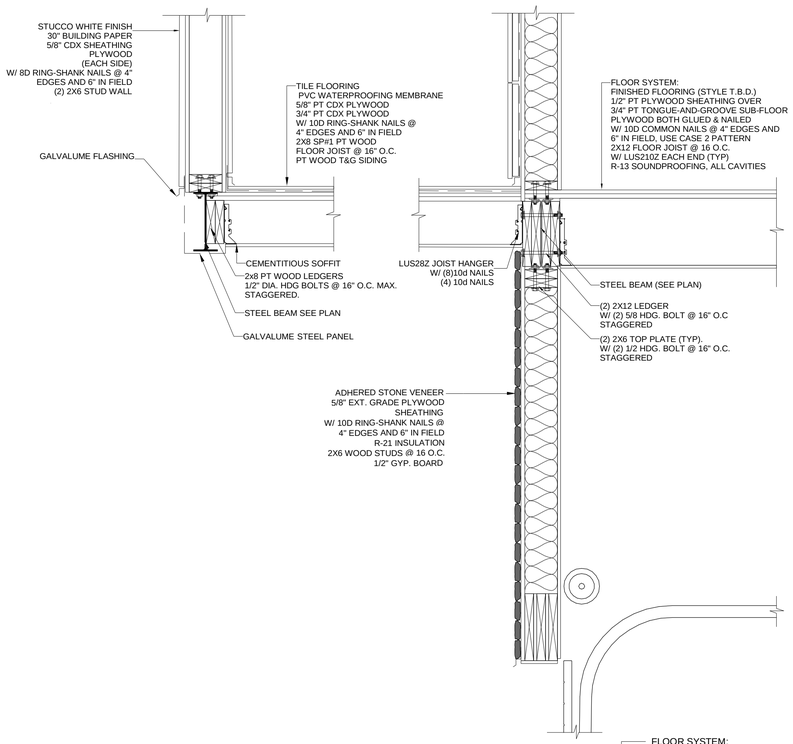
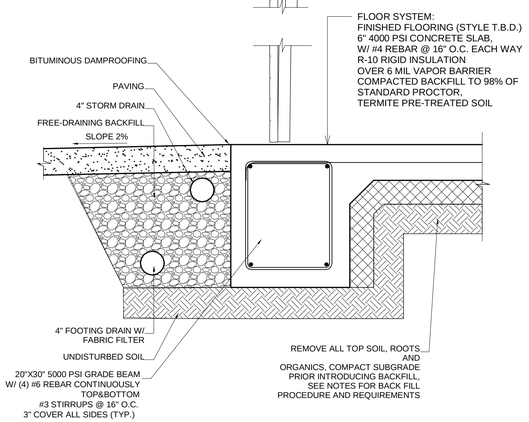
WALL SECTION 1, 2

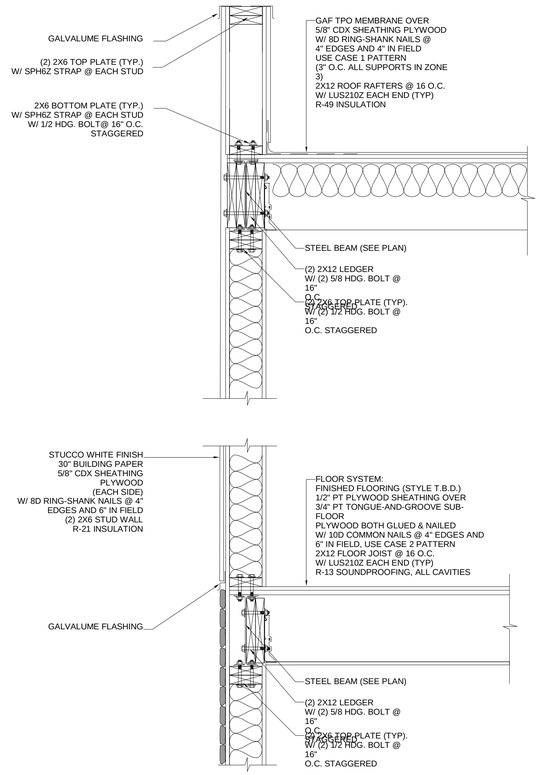
S 110

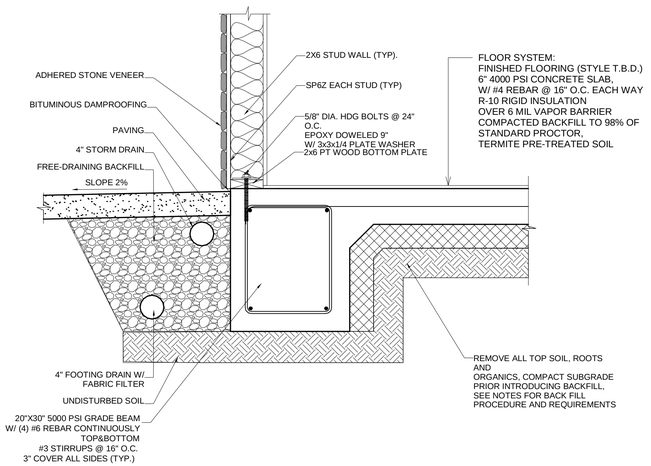




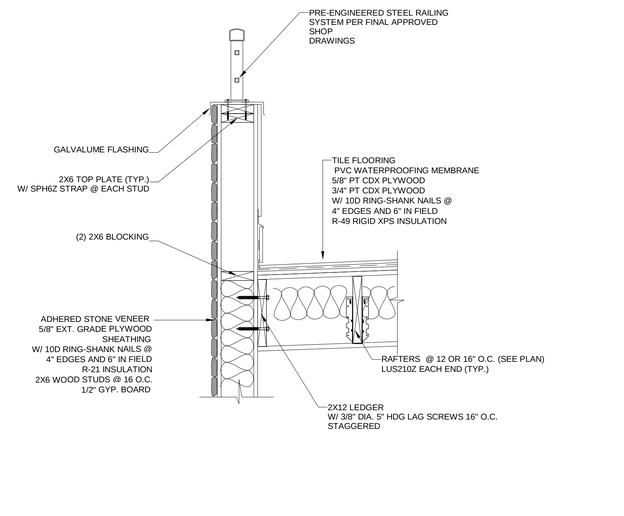


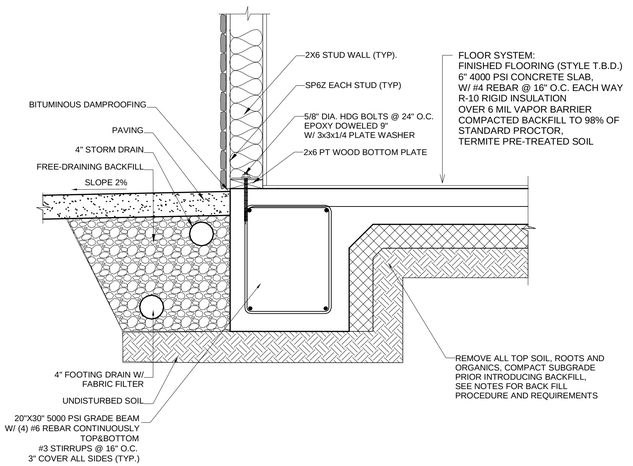
1 WALL SECTION 3
1" = 1'-0"





2 WALL SECTION 4
1" = 1'-0"





3 WALL SECTION 5
1" = 1'-0"

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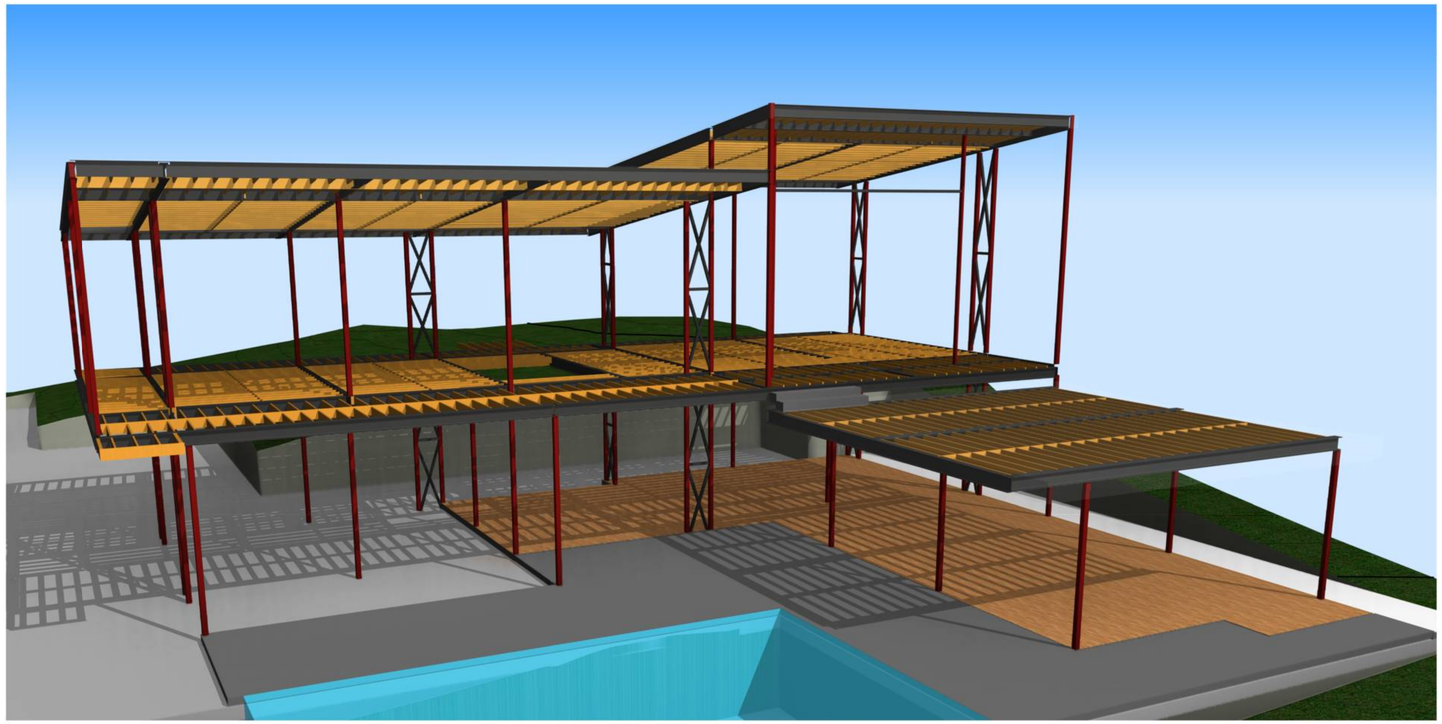
WALL SECTION 3-5

S 111



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STRUCTURAL 3D VIEW

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