GENERAL NOTES - 2015 IRC

1. GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS AT THE JOB SITE SUFFICIENTLY IN ADVANCE OF WORK TO BE PERFORMED TO ASSURE THE ORDERLY PROGRESS OF THE WORK.

2. CODES HAVING JURISDICTION SHALL BE OBSERVED STRICTLY IN THE CONSTRUCTION OF THE PROJECT. ALL APPLICABLE STATE, COUNTY, AND CITY REQUIREMENTS REGARDING BUILDING, ZONING, ELECTRICAL, MECHANICAL, PLUMBING, AND FIRE CODES SHALL BE VERIFIED BY THE GENERAL CONTRACTOR AND SUBCONTRACTORS BEFORE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN CODE REQUIREMENTS AND THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THIS OFFICE.

3. ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE LOCAL BUILDING AUTHORITY.

4. MECHANICAL WORK SHALL BE EXECUTED AND INSPECTED IN ACCORDANCE WITH PUBLIC UTILITIES, REGULATIONS, AND LOCAL APPLICABLE CODES.

5. DISCREPANCIES WHICH MAY OCCUR IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION SUPERINTENDENT AND WRITTEN INSTRUCTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH THE WORK. THE SUBCONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY ERRORS, DISCREPANCIES, OR OMISSIONS OF WHICH THE SUBCONTRACTOR FAILED TO NOTIFY THE CONSTRUCTION SUPERINTENDENT BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK.

6. SUBMIT ALL MANUFACTURER'S AND PRODUCT SPECIFICATIONS AND CUT SHEETS TO THIS OFFICE AND THE OFFICE OF THE BUILDER FOR REVIEW AND APPROVAL.

7. ANY CONFLICTS WHICH MAY OCCUR DURING THE CONSTRUCTION PHASE BETWEEN THE NOTED CONSTRUCTION DOCUMENTS, APPLICABLE CODES HAVING JURISDICTION AND MANUFACTURER'S SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION SUPERINTENDENT AND THIS OFFICE FOR A FINAL CLARIFICATION.

8. IN AREAS WHERE THE CONSTRUCTION DOCUMENTS DO NOT ADDRESS DESIGN INTENT, METHODS OR MATERIALS, THE CONSTRUCTION SUPERINTENDENT SHALL BE REQUIRED TO COORDINATE WITH THIS OFFICE AND RECEIVE FINAL INSTRUCTION AND APPROVAL PRIOR TO FABRICATION.

9. PERFORM ALL FOUNDATION AND SITE WORK IN ACCORDANCE WITH RECOMMENDATIONS ESTABLISHED WITHIN THE ENGINEER'S FINAL SOILS REPORT AND CRITERIA AS COORDINATED BY THE STRUCTURAL ENGINEER.

10. THIS OFFICE AND THE OFFICE OF THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION PROCEDURES, TECHNIQUES OR THE FAILURE OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, MANUFACTURER'S SPECIFICATIONS OR REQUIRED CODES.

11. SUBCONTRACTORS SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF ALL TRASH, DEBRIS AND SHALL PROTECT ALL ADJACENT WORK FROM DAMAGE, SOILING, PAINT OVER SPRAY, ETC. ALL FIXTURES, EQUIPMENT, GLAZING, FLOORS, ETC., SHALL BE LEFT CLEAN AND READY FOR OCCUPANCY UPON COMPLETION OF THE PROJECT.

12. FIELD MODIFICATIONS OR STRUCTURAL CHANGES, SHALL BE PROHIBITED UNTIL THE CONSTRUCTION SUPERINTENDENT HAS BEEN NOTIFIED IN ADVANCE AND INSTRUCTIONS GIVEN. MODIFICATIONS INITIATED WITHOUT PROPER AUTHORITY SHALL BECOME THE RESPONSIBILITY OF THE SUBCONTRACTOR.

13. THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE BOUND IN STRICT COMPLIANCE WITH MANUFACTURER'S DETAILS, SPECIFICATIONS AND RECOMMENDATIONS, AS WELL AS THE MOST CURRENT INDUSTRY STANDARDS INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF CONCRETE, MASONRY (CMU, FULL BRICK, BRICK VENEER, THIN BRICK, FULL STONE AND STONE VENEER), MORTAR, STUCCO (ALL TYPES), SIDING (ALL TYPES), TILE, WINDOWS, DOORS, STOREFRONT, SKYLIGHTS, FLASHING (ALL TYPES), ROOFING (GUTTERS, DOWNSPOUTS), WATERPROOFING MEMBRANES, FIREPLACES (ALL TYPES), FIRE RATED ASSEMBLIES, MECHANICAL, PLUMBING, ELECTRICAL (INSTALLATION, PENETRATIONS, GRILLS AND TERMINATIONS), VAPOR AND MOISTURE BARRIERS, INSULATION (ALL TYPES), SPECIALTY EQUIPMENT, APPLIANCES AND PREMANUFACTURED BUILDING COMPONENTS. ALL TERMINATIONS, TRANSITIONS, WEEPS AND OPENINGS SHALL BE SEALED, FLASHED, COUNTERFLASHED AND GASKETED PER MFGR SPECIFICATION AND INDUSTRY STANDARDS.

14. DO NOT SCALE DRAWINGS - WRITTEN DIMENSIONS TAKE PRECEDENCE. N.T.S. SHALL BE UNDERSTOOD TO MEAN "NOT TO SCALE."

15. EXTERIOR DIMENSIONS SHALL BE FROM THE OUTSIDE FACE OF STUDS OR OUTSIDE FACE OF FOUNDATION WALLS. (SEE PLANS)

16. ALL STUD WALLS ARE DIMENSIONED 3 1/2" OR 5 1/2" WIDE. ROUGH STUD FACE TO ROUGH STUD FACE UNLESS OTHERWISE NOTED.

17. FIELD MEASUREMENTS TO BE VERIFIED FOR PROPER FIT AND ATTACHMENT FOR ALL WINDOWS, DOORS, CABINETRY, TRUSSES, APPLIANCES, HARDWARE, FIXTURES AND SPECIALIZED EQUIPMENT. ITEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

18. ALL WINDOWS AND EXTERIOR DOOR HEADER SIZES ARE TO BE PER STRUCTURAL PLANS.

19. INTERIOR PARTITIONS: 2 X 'S AT 16" O.C. FOR ALL WALLS WITH (1) LAYER OF GYPSUM BOARD EACH SIDE UNLESS OTHERWISE NOTED.

20. ALL WINDOWS AND GLASS DOORS SHALL BE DOUBLE GLAZED W/ LOW -E. ALL EXTERIOR DOORS AND DOORS LEADING TO UNHEATED AREAS SHALL BE INSTALLED PER MFGR SPECS AND BE PROVIDE WITH MFGR RECOMMENDED WEATHERSTRIPPING, SEALANT AND FLASHING TO ENSURE PROPER CONTINUATION OF REQUIRED DRAINAGE PLANE.

21. ALL GLASS WITHIN 18" OF ANY FLOOR LINE SHALL BE TEMPERED SAFETY GLASS AS PER 2018 INTERNATIONAL RESIDENTIAL CODE (I.R.C.)

22. ALL EGRESS WINDOWS FROM SLEEPING ROOMS SHALL HAVE MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. AND THE WINDOW SILL SHALL BE A MAXIMUM OF 42" ABOVE THE FINISH FLOOR

23. PROVIDE ATTIC VENTILATION AS REQUIRED PER SECTION R806 - 2018 I.R.C.

24. DOWN SPOUTS TO DISCHARGE INTO 5' DOWNSPOUT EXTENSIONS OR CONC. SPLASH BLOCK. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING PER SOILS REPORT. CONNECT PERIMETER DRAINS AND ALL AREA DRAINS TO SUMP PIT.

25. ALL INSULATION CONDITIONS SHALL MEET THESE MINIMUM PRESCRIPTIVE REQUIREMENTS AS FOLLOWS: A RESCHECK CERTIFICATE MAY BE REQUIRED BY CERTAIN JURISDICTIONS

BUILDING ENVELOPE REQUIREMENTS PER TABLE R402.1.1

0.30 MAX "U" GLAZING - DOUBLE PANE W/ LOW-E
R-19 BATTS ENCAPSULATED BATTS AT ALL BASEMENT WALLS
R-20 BATTS 2 X 6 EXTERIOR FRAME WALLS
R-49 BATT OR BLOWN AT ATTIC AREAS
R-30 BATT OR BLOWN AT HABITABLE FLOOR AREAS OVER UNHEATED SPACES, U.O.N.
EXCEPTION: PROVIDE ENOUGH INSULATION TO FILL FRAMING CAVITY. R-19 MIN.

26. ROOF TRUSS MANUFACTURER TO VERIFY DIMENSIONS AND COORDINATE TRUSS HANGERS, DETAILS, PROFILES, AND LAYOUTS. THIS OFFICE, THE GENERAL CONTRACTOR, THE SUBCONTRACTOR, AND THE STRUCTURAL ENGINEER'S OFFICE SHALL REVIEW ALL ENGINEERED TRUSS SHOP DRAWINGS PRIOR TO FINAL TRUSS FABRICATION.

27. FLOOR JOIST SUPPLIER TO VERIFY DIMENSIONS AND COORDINATE JOIST LAYOUT PLAN AND APPROPRIATE DETAILS. THIS OFFICE, THE GENERAL CONTRACTOR, THE SUBCONTRACTOR, AND THE STRUCTURAL ENGINEER'S OFFICE SHALL REVIEW ALL DRAWINGS PRIOR TO CONSTRUCTION.

28. PROVIDE INSULATION AROUND ALL PLUMBING AND HEATING LINES EXPOSED TO TEMPERATURE DIFFERENTIALS.

29. SMOKE DETECTORS. PROVIDE AS REQUIRED PER SEC. R314 2018 I.R.C.

30. REFER TO GENERAL CONTRACTOR AND MFGR SPECIFICATIONS FOR ALL OTHER INFORMATION NOT SPECIFIED ON THE CONSTRUCTION DRAWINGS. THESE DRAWINGS ARE A "BUILDERS SET OF PLANS" AND FOR CONSTRUCTION INTENT. MFGR SPECIFICATIONS SHALL SUPERSEDE CONSTRUCTION DRAWINGS. ANY DISCREPANCIES BETWEEN THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS SHALL BE BROUGHT TO THE CONSTRUCTION SUPERINTENDENT'S ATTENTION PRIOR TO CONSTRUCTION.

31. ALL SUBCONTRACTORS SHALL COMPLY W/ BUILDERS OSHA SAFETY AND HEALTH PLAN, INCLUDING BUT NOT LIMITED TO THE APPROPRIATE USE OF FALL PROTECTION, SCAFFOLD, HOUSEKEEPING, ELECTRICAL CORDS, PPE'S INCLUDING HARD-HATS AND SAFETY GLASSES.

32. THESE PLANS ARE DESIGNED TO BE BUILT BY THE BUILDER. THE BUILDER IS RESPONSIBLE TO ENSURE QUALITY CONTROL OF THE INSTALLATION OF ALL BUILDING SYSTEMS PER MFGR. RECOMMENDATIONS. THE BUILDER AGREES TO HOLD HARMLESS THE DESIGNER FOR ALL MATTERS HAVING TO DO WITH THE CONSTRUCTION OF THESE PLANS.

33. ANY GENERAL OR SPECIFIC DETAIL NOT SHOWN, OR ANY AND ALL CONNECTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL ADDITIONAL WORK REQUIRED FOLLOWING THE ISSUANCE OF A BUILDING PERMIT WILL BE BILLED AT SET HOURLY RATES

34. ALL DROPPED SOFFITS FOR MECHANICAL / PLUMBING ARE A CONCEPTUAL LAYOUT. ADDITIONAL SOFFITS MAY BE REQUIRED. FIELD VERIFY ALL DIMENSIONS AND LOCATIONS COORDINATE W/ GENERAL CONTRACTOR AND UTILITY CONTRACTOR PRIOR TO CONSTRUCTION

35. ALL TILE WORK TO CONFORM W// CURRENT TCA INSTALLATION SPECIFICATIONS & GUIDELINES. MASTIC SHALL NOT BE APPROVED FOR ANY TILE OR STONE INSTALLATIONS

36. GENERAL CONTRACTOR SHALL VERIFY REQUIREMENTS AND REFER TO THE 2018 IRC - APPENDIX F FOR NEW CONSTRUCTION IN JURISDICTIONS WHERE RADON-RESISTANT CONSTRUCTION IS REQUIRED. RADON CONTROL METHODS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING CONSTRUCTION TECHNIQUES TO PREPARE THE BUILDING FOR POST-CONSTRUCTION RADON MITIGATION. BASEMENT SLABS SHALL BE PREPARED WITH A UNIFORM LAYER OF 1/2"-2" CLEAN AGGREGATE OR SAND A MINIMUM OF 4" THICK AND OVERLAYED WITH 6-MIL POLYETHYLENE OR EQUIVALENT FLEXIBLE SHEETING MATERIAL COVERING THE ENTIRE FLOOR AREA WITH SEPARATE SECTIONS OF SHEETING LAPPED AT LEAST 12 INCHES. ALL CONSTRUCTION JOINTS IN THE CONC. SLAB OR BETWEEN CONC. SLABS AND FOUNDATION WALLS SHALL BE SEALED WITH A CAULK OR SEALANT. ALL PENETRATIONS WITHIN CONC. SLAB AND FOUNDATION WALLS BELOW GROUND SURFACE SHALL BE FILLED WITH A POLYURETHANE CAULK OR EQUIVALENT SEALANT. SUMP PITS SHALL BE COVERED WITH A GASKETED OR OTHERWISE SEALED LID AND DESIGNED TO ACCOMMODATE A 3" MIN. VENT PIPE.
CRAWL SPACE AREAS SHALL BE OVERLAYED WITH 6-MIL POLYETHYLENE OR EQUIVALENT FLEXIBLE SHEETING MATERIAL COVERING THE ENTIRE FLOOR AREA WITH SEPARATE SECTIONS OF SHEETING LAPPED AT LEAST 12 INCHES. CRAWL SPACE ACCESS, PENETRATIONS AND DUCTWORK LOCATED IN CRAWL SPACE SHALL BE GASKETED OR SEALED TO PREVENT AIR LEAKAGE. CRAWL SPACE VENTILATION SHALL COMPLY WITH SECTION R408, 2015 IRC.
A 3"-4" DIAMETER PLUMBING TEE OR OTHER APPROVED CONNECTION SHALL BE INSTALLED BENEATH THE SOIL-GAS-RETARDER AND CONNECTED TO A VERTICAL VENT PIPE THAT EXTENDS UP THROUGH THE BUILDING FLOORS, TERMINATED AT LEAST 12 INCHES ABOVE THE ROOF IN A LOCATION AT LEAST 10 FEET AWAY FROM ANY WINDOW OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND 10 FEET FROM ANY WINDOW OR OTHER OPENING IN ADJOINING OR ADJACENT BUILDINGS. THE VENT PIPE SHALL BE IDENTIFIED WITH A LABEL AT EACH FLOOR AND ACCESSIBLE ATTICS THAT READS "RADON REDUCTION SYSTEM", AND SHALL BE INSTALLED TO PROVIDE POSITIVE DRAINAGE TO THE GROUND BENEATH THE SOIL-GAS-RETARDER. A SEPARATE VENT PIPE SHALL BE PROVIDE FOR EACH DIFFERENT FOUNDATION TYPE AND SHALL BE TERMINATED SEPARATELY OR COMBINED TO TERMINATE ABOVE THE ROOF.
TO PROVIDE FOR FUTURE INSTALLATION OF AN ACTIVE SUB-MEMBRANE OR SUB-SLAB DEPRESSURIZATION SYSTEM, A ELECTRICAL CIRCUIT TERMINATED IN AN APPROVED BOX SHALL BE INSTALLED DURING CONSTRUCTION IN THE ATTIC OR OTHER ANTICIPATED LOCATION OF VENT PIPE FANS. AN ELECTRICAL SUPPLY SHALL ALSO BE ACCESSIBLE IN ANTICIPATED LOCATIONS OF SYSTEM FAILURE ALARMS.

37. THE DESIGNER HAS PROVIDED A LIMITED SCOPE OF PROFESSIONAL SERVICES FOR THIS PROJECT AT THE REQUEST OF THE OWNER. THE CONTRACT DOCUMENTS PROVIDED UNDER SUCH LIMITED SERVICES SHALL BE TERMED "BUILDER'S SET". IN RECOGNITION OF THE OWNER'S DECISION TO RELY ON THE CONTRACTOR'S SOPHISTICATION AND EXPERIENCE IN CONSTRUCTION OF THIS TYPE OF BUILDING, BY ENTERING INTO A CONTRACT WITH THE OWNER, THE CONTRACTOR WARRANTS TO THE OWNER AND THE ARCHITECT THAT HE / SHE POSSESSES THE PARTICULAR COMPETENCE AND SKILLS TO BUILD THIS PROJECT WITHOUT FULL ARCHITECTURAL DESIGN AND ENGINEERING SERVICES AND CONSTRUCTION DOCUMENTS. USE OF THE "BUILDER'S SET" BY THE CONTRACTOR FOR THIS PROJECT MAY REQUIRE MAKING ADJUSTMENTS TO THE FIELD CONDITIONS TO ASSURE THE GENERAL INTENT IS CARRIED OUT IN COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, LAND USE CODES, MANUFACTURER INSTALLATION REQUIREMENTS, AND INDUSTRY STANDARDS. CHANGES MADE IN THE FIELD WITHOUT PRIOR NOTICE AND CONSENT OF THE DESIGNER ARE UNAUTHORIZED, AND SHALL RELIEVE THE DESIGNER OF RESPONSIBILITY FROM ALL CONSEQUENCES ARISING FROM SUCH CHANGES. IN THE EVENT THAT ANY DISCREPANCY OR AMBIGUITY IS DISCOVERED DURING THE USE OF THE PLANS OR ADDITIONAL DETAILS OR GUIDANCE IS NEEDED BY THE OWNER OR CONTRACTOR, PROMPT AND TIMELY NOTICE SHALL BE GIVEN TO THE DESIGNER IN THE FORM OF WRITTEN REQUEST FOR INFORMATION (RFI). FAILURE TO DO SO SHALL RELIEVE THE DESIGNER OF RESPONSIBILITY FOR ANY AND ALL CONSEQUENCES.

SCOPE OF WORK

NEW HOME BUILD

BUILDING AND SITE

ADDRESS:
833 CAIRNS AVE
GRAND LAKE, CO 80447

OWNER:
WARD FAMILY TRUST 05-19-2016
PO BOX 608
GRAND LAKE, CO 80447-0608

LEGAL DESCRIPTION AND PARCEL:
GRAND LAKE ESTATES 1ST FLG
Lot: 3 Block: 2

PARCEL NO: 1193-064-08-016
SCHEDULE NUMBER: R142881

HEIGHT:-
1.5 STORY W/ CRAWLSPACE

FINISH AREA (MAIN):	**2,290**
FINISH AREA (LOFT):	**525**
UNFINISHED AREA (LOFT):	**152**
AREA (GARAGE):	**760**

CODE INFORMATION - IRC

GRAND COUNTY HAS ADOPTED 2015 BUILDING CODES WITH LOCAL AMENDMENTS, EFFECTIVE JUNE 30, 2018.
2015 INTERNATIONAL RESIDENTIAL CODE

THE FOLLOWING CODES ARE CURRENTLY IN EFFECT WITHIN THE COUNTY:
2015 INTERNATIONAL RESIDENTIAL CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL BUILDING CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL MECHANICAL CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL PLUMBING CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL FUEL GAS CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL ENERGY CONSERVATION CODE, ADOPTED AMENDMENTS
2015 INTERNATIONAL EXISTING BUILDING CODE
2020 NATIONAL ELECTRICAL CODE
2015 INTERNATIONAL FIRE CODE, ADOPTED AMENDMENTS

DESIGN CRITERIA

ROOF SNOW LOAD: 75psf , DEAD LOAD: 20psf, GROUND SNOW LOAD: 107psf

FLOOR LIVE LOAD: 40psf , DEAD LOAD: 10psf

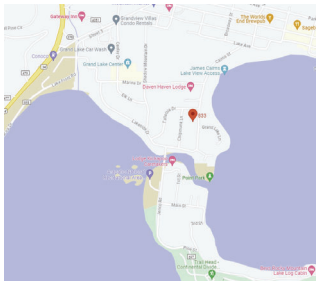
WIND SPEED – 115 MPH (VULT = 146 MPH)

EXPOSURE CATEGORY: C

SEISMIC DESIGN CATEGORY : B

FROST LINE DEPTH: 36 INCHES

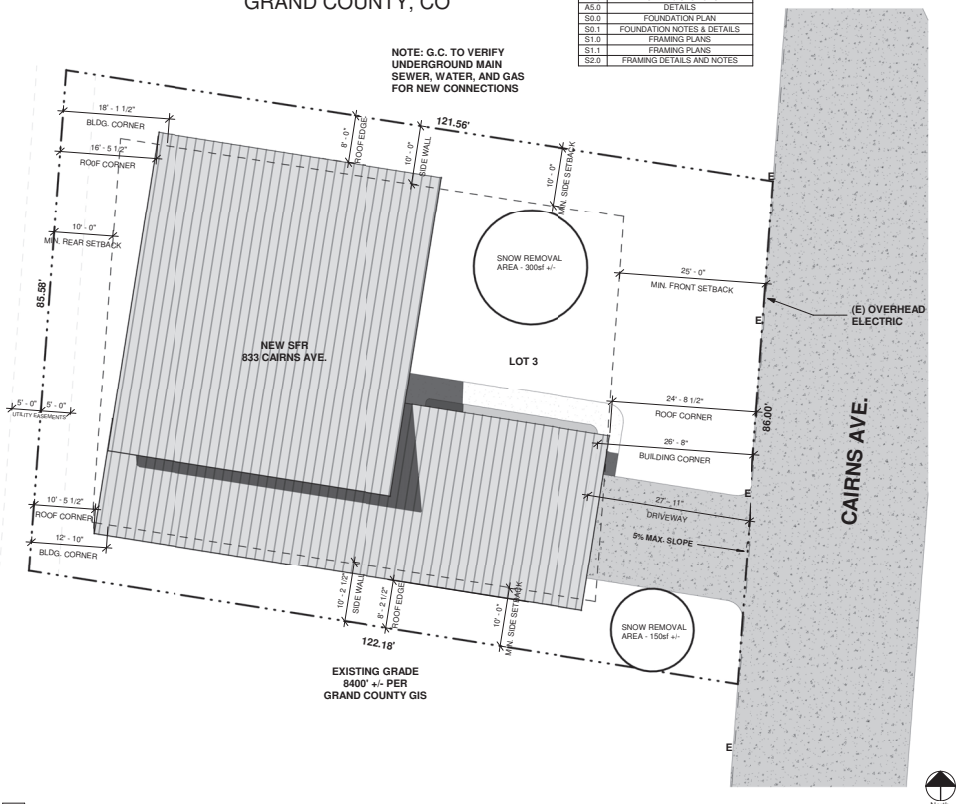
ICE BARRIER - REQUIRED



3 VICINITY MAP
12" = 1'-0"

DRAWING LIST	
NO.	NAME
A0.0	COVER
A1.0	FLOOR PLAN
A1.1	FLOOR PLANS
A2.0	ROOF PLAN
A3.0	ELEVATIONS
A3.1	ELEVATIONS
A3.2	3D VIEWS
A4.0	BUILDING SECTIONS
A5.0	DETAILS
S0.0	FOUNDATION PLAN
S0.1	FOUNDATION NOTES & DETAILS
S1.0	FRAMING PLANS
S1.1	FRAMING PLANS
S2.0	FRAMING DETAILS AND NOTES

WARD RESIDENCE
833 CAIRNES
GRAND COUNTY, CO



1 SITE PLAN
1" = 10'-0"

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phone: (720)343-5953

DEENA WARD
WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE: 3/19/2024

SHEET TITLE: COVER

A0.0

1 of 14

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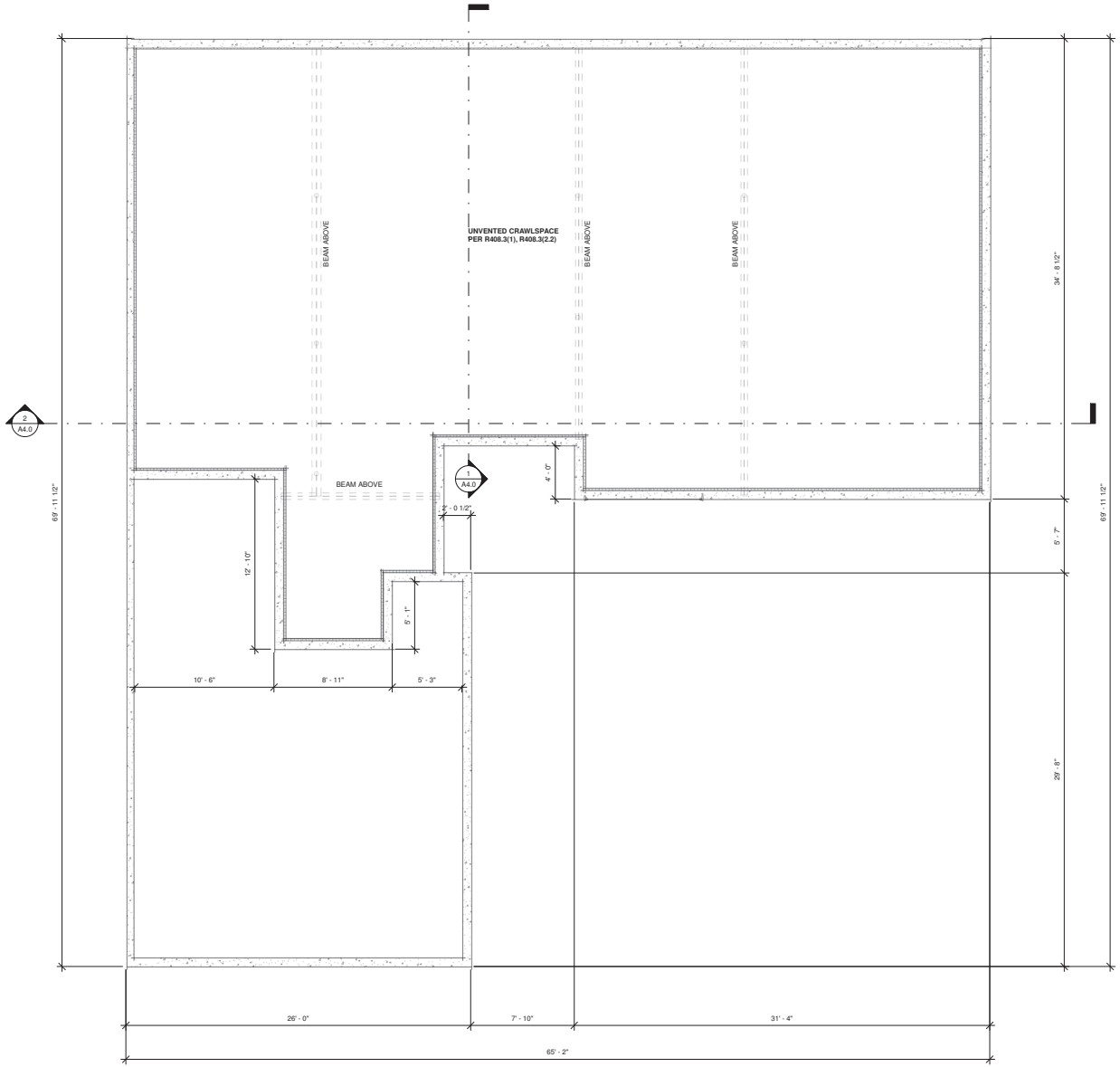
OVERALL DOOR SCHEDULE			
CONSTRUCTION TYPE	WIDTH	HEIGHT	COUNT
	2' - 0"	7' - 0"	1
2 1080 S.C. DR. W/ SELF CLOSER	2' - 10"	8' - 0"	1
18'X9' OVERHEAD DOOR	18' - 0"	9' - 0"	1
20' X 8' MULTI-PANEL GLASS SLIDER	20' - 0"	8' - 0"	1
2080 INT. BARN DR	0"	0"	1
2080 INT. DR	2' - 0"	8' - 0"	1
2480 INT. BARN DR	0"	0"	1
2480 INT. DOOR	2' - 4"	8' - 0"	2
2680 INT.	2' - 6"	8' - 0"	4
2680 INT. BARN DR	3' - 0"	8' - 0"	2
3680 ENTRY DOOR	3' - 6"	8' - 0"	1
3680 S.C. DOOR	3' - 0"	8' - 0"	1
4080 DBL BARN DOOR	0"	0"	1
6080 GLASS SLIDER	5' - 11 1/2"	8' - 0"	2
21080 MECH. DOOR	2' - 10"	8' - 0"	1

Grand total: 21

WINDOWS HEIGHTS MAY BE SUBJECT TO CHANGE
IF WIDTHS CHANGE, NEW SIZE MAY AFFECT HEADERS

OVERALL WINDOW SCHEDULE				
TYPE MARK	TYPE	WIDTH	HEIGHT	COUNT
102	Fixed 60" x 36"	5' - 0"	3' - 0"	2
105	Fixed 60" x 18"	5' - 0"	1' - 6"	1
138	Fixed 72" x 24"	6' - 0"	2' - 0"	2
C	Fixed 36" x 72"	3' - 0"	6' - 0"	1
CC	Fixed 36" x 96"	3' - 0"	8' - 0"	2
D	Slider 48" x 24"	4' - 0"	2' - 0"	1
EE	Fixed 36" x 84"	3' - 0"	7' - 0"	6
M	Casement 36" x 72"	3' - 0"	6' - 0"	2
QQ	Fixed 36" x 96" FROSTED	3' - 0"	8' - 0"	3
UU	CSMNT 36" x 96"	3' - 0"	8' - 0"	6
V	59-1/2" x 59-1/2"	5' - 0"	5' - 0"	1
VV	Casement 36" x 84"	3' - 0"	7' - 0"	6
WW	Fixed 48" x 84"	4' - 0"	7' - 0"	1
XX	Slider 60" x 36"	5' - 0"	3' - 0"	1
YY	Fixed 108" x 24"	9' - 0"	2' - 0"	1

Grand total: 36



1 LOWER FLOOR PLAN
1/4" = 1'-0"

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DEENA WARD
WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE:
3/19/2024

SHEET TITLE:
FLOOR PLAN

A1.0

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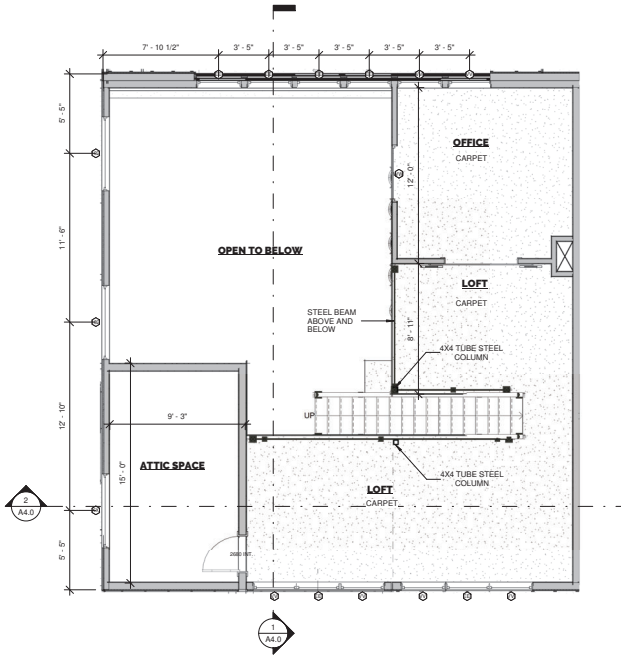
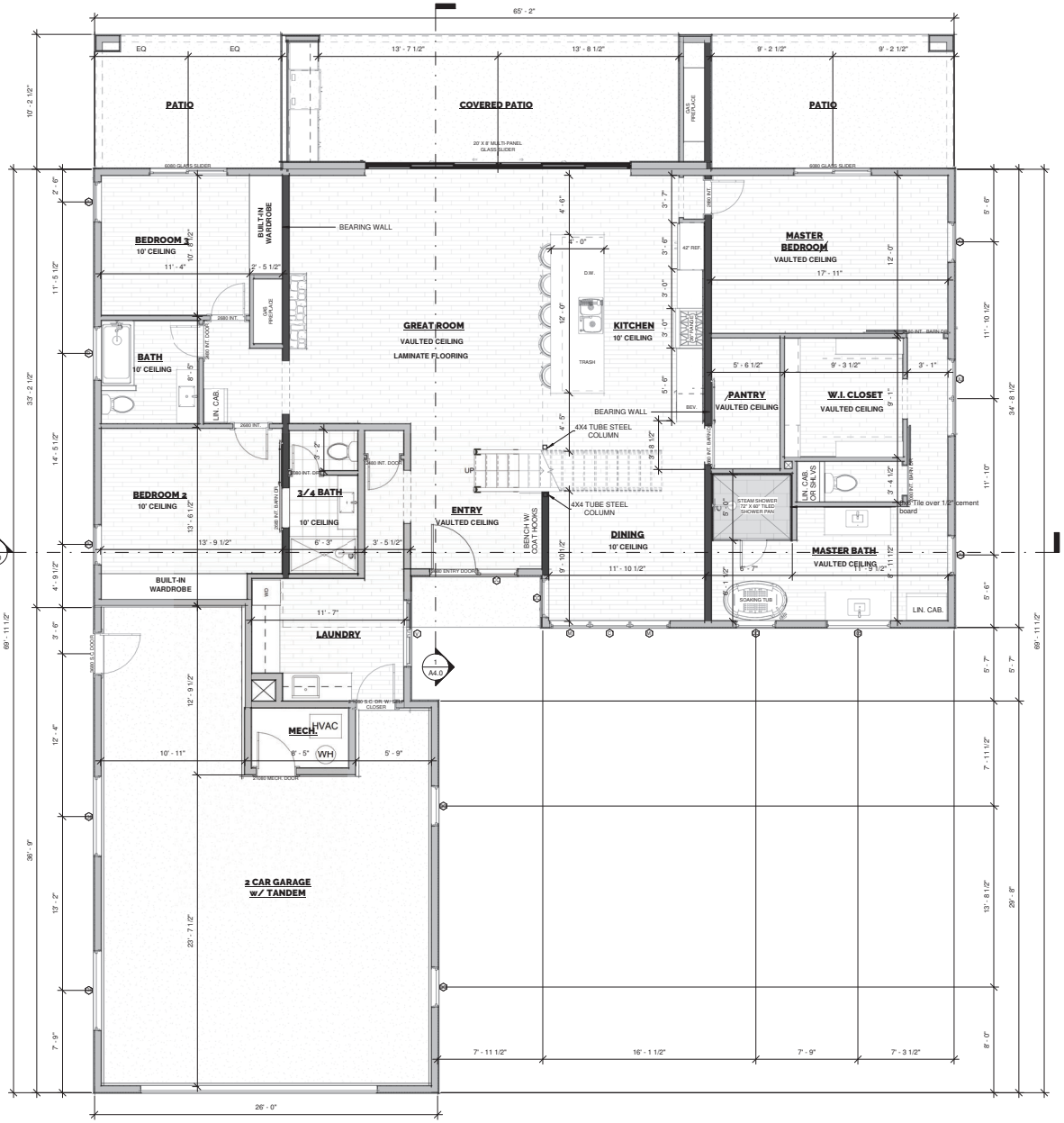


2 LOFT FLOOR PLAN
1/4" = 1'-0"



1 MAIN FLOOR PLAN
1/4" = 1'-0"

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GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE:
3/19/2024

SHEET TITLE:
FLOOR PLANS

A1.1

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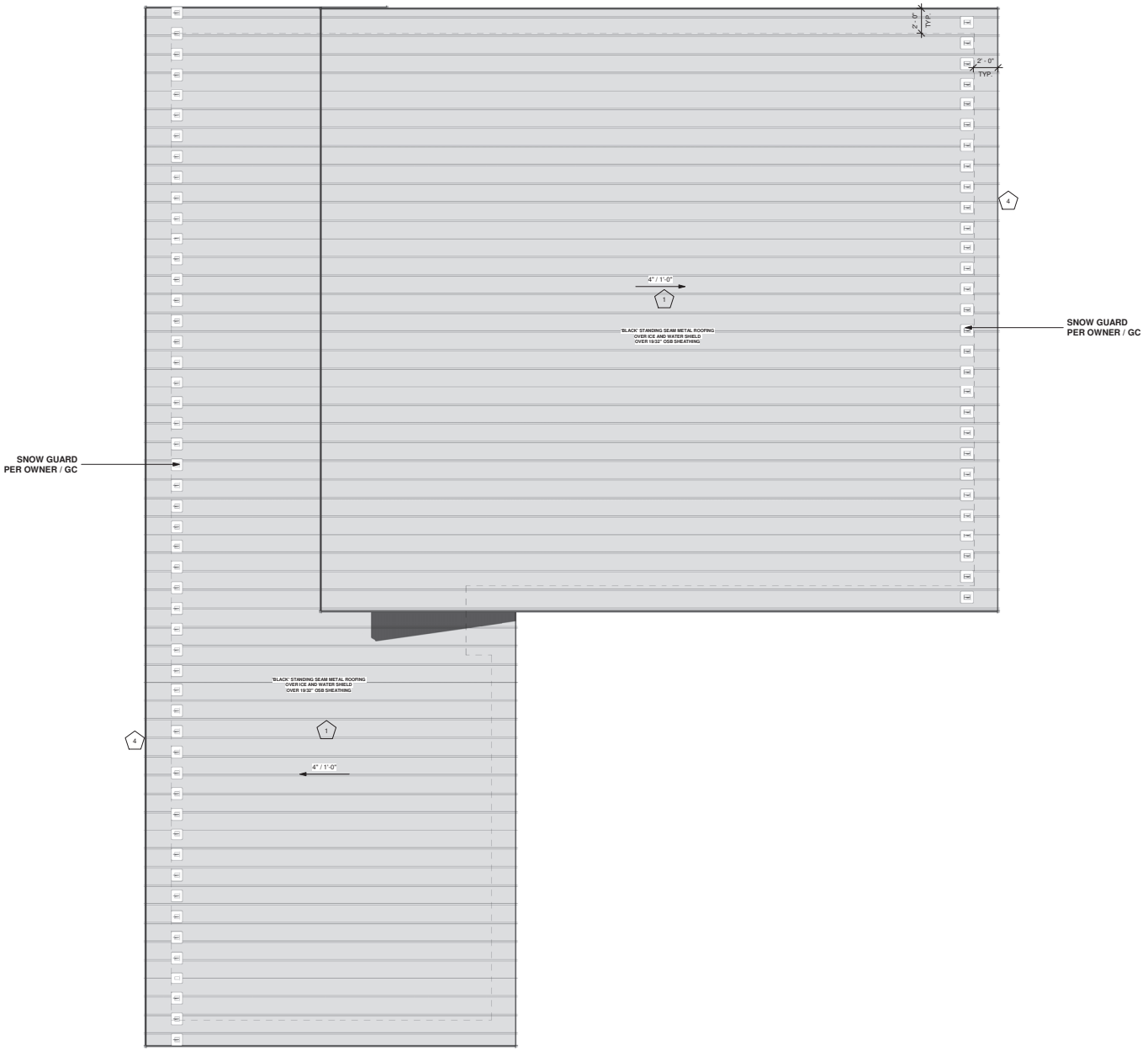
	TYPICAL EXT. FINISHES
1	STANDING SEAM METAL ROOF COLOR: 'BLACK'
2	12" METAL FASCIA PAINTED 'BLACK'
3	"HEMLOCK LAP SOFFIT COLOR: "NATURAL STAIN"
4	5" PRE-PAINTED 'BLACK' GUTTER & D.S.
5	"HEMLOCK LAP SIDING COLOR: "NATURAL STAIN"
6	VERTICAL LUNAWOOD PANEL SYSTEM SIDING COLOR: 'STAINED BLACK'
7	VERTICAL CORRUGATED METAL SIDING COLOR: 'BLACK'
8	3 LITE METAL OVERHEAD GARAGE DOOR FINISHED 'BLACK'
9	WINDOWS AND GLASS DOORS TO BE FRAMES 'BLACK' IN COLOR. DRIP EDGE TO MATCH



1 ROOF PLAN
1/4" = 1'-0"

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WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE:
3/19/2024

SHEET TITLE:
ROOF PLAN

A2.0

3/19/2024 9:21:21 AM

	TYPICAL EXT. FINISHES
1	STANDING SEAM METAL ROOF COLOR: 'BLACK'
2	12" METAL FASCIA PAINTED 'BLACK'
3	"HEMLOCK LAP SOFFIT COLOR: "NATURAL STAIN"
4	5" PRE-PAINTED 'BLACK' GUTTER & D.S.
5	"HEMLOCK LAP SIDING COLOR: "NATURAL STAIN"
6	VERTICAL LUNAWOOD PANEL SYSTEM SIDING COLOR: 'STAINED BLACK'
7	VERTICAL CORRUGATED METAL SIDING COLOR: 'BLACK'
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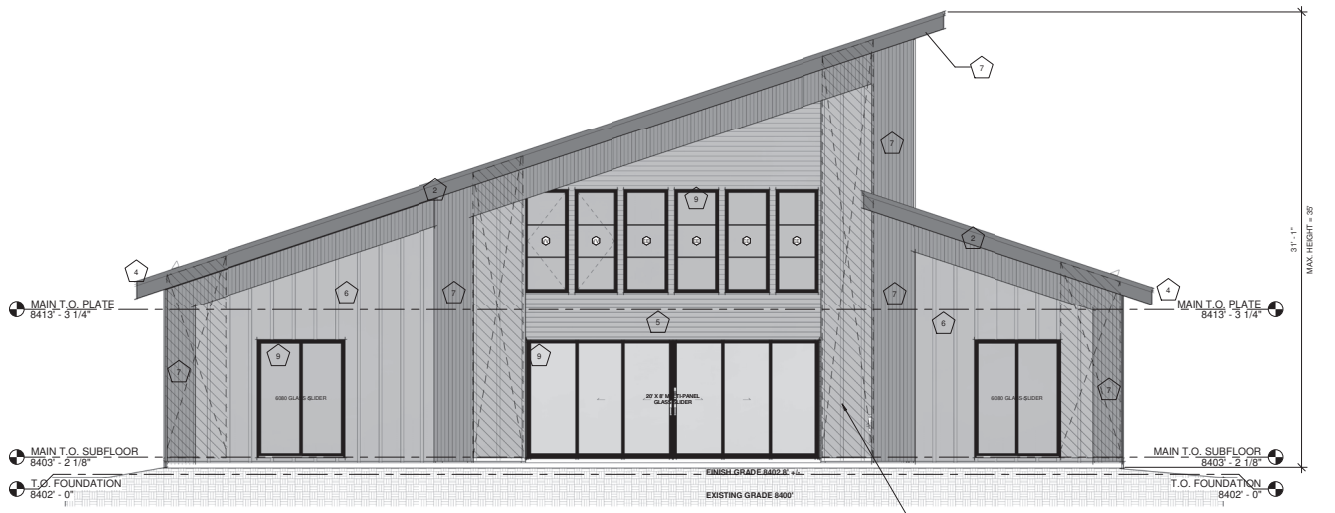
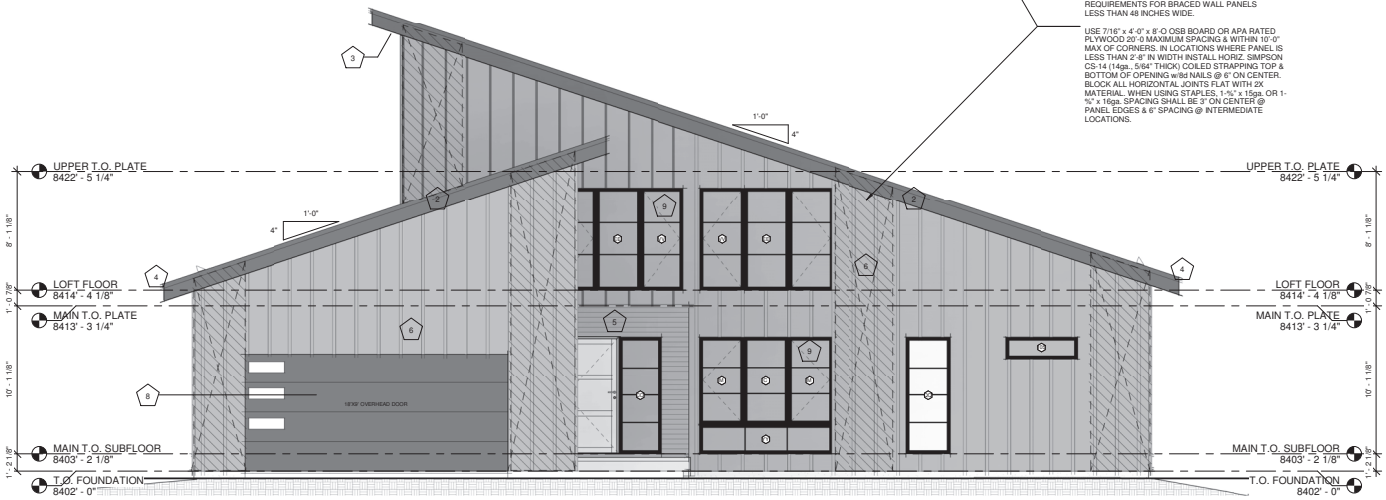


2 REAR ELEVATION
1/4" = 1'-0"

SHEAR PANEL NAILING - (BRACED WALLS R602)

ALL SHEAR PANELS TO HAVE NAILING AS FOLLOWS: 8D NAILS 6 INCHES ON CENTER AT ALL STUDS AND TOP AND BOTTOM PLATES. SHEAR PANELS TO BE LOCATED AS PER PLAN. TIE DOWN STRAPS WITH AN UPLIFT CAPACITY TO BE FASTENED TO SHEAR PANELS AS PER REQUIREMENTS FOR BRACED WALL PANELS LESS THAN 48 INCHES WIDE.

USE 7/16" x 4'-0" x 8'-O OSB BOARD OR APA RATED PLYWOOD 20'-0 MAXIMUM SPACING & WITHIN 10'-0" MAX OF CORNERS. IN LOCATIONS WHERE PANEL IS LESS THAN 2'-8" IN WIDTH INSTALL HORIZ. SIMPSON CS-14 (14ga., 5/64" THICK) COILED STRAPPING TOP & BOTTOM OF OPENING w/8d NAILS @ 6" ON CENTER. BLOCK ALL HORIZONTAL JOINTS FLAT WITH 2X MATERIAL. WHEN USING STAPLES, 1-½" x 15ga. OR 1-¾" x 16ga. SPACING SHALL BE 3" ON CENTER @ PANEL EDGES & 6" SPACING @ INTERMEDIATE LOCATIONS.



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

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Westminster, CO 80020
email: so-sdesignbuild@gmail.com
phone: (720)343-3453

DEENA WARD
WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE:
3/19/2024

SHEET TITLE:
ELEVATIONS

A3.0

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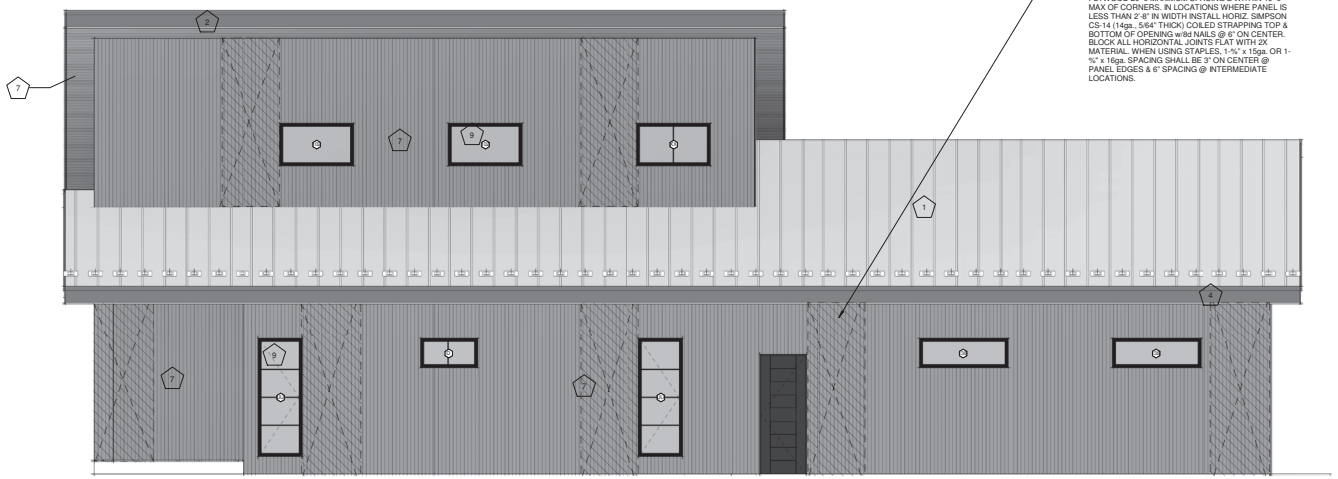
	TYPICAL EXT. FINISHES
1	STANDING SEAM METAL ROOF COLOR: 'BLACK'
2	12" METAL FASCIA PAINTED 'BLACK'
3	"HEMLOCK LAP SOFFIT COLOR: "NATURAL STAIN"
4	5" PRE-PAINTED 'BLACK' GUTTER & D.S.
5	"HEMLOCK LAP SIDING COLOR: "NATURAL STAIN"
6	VERTICAL LUNAWOOD PANEL SYSTEM SIDING COLOR: 'STAINED BLACK'
7	VERTICAL CORRUGATED METAL SIDING COLOR: 'BLACK'
8	3 LITE METAL OVERHEAD GARAGE DOOR FINISHED 'BLACK'
9	WINDOWS AND GLASS DOORS TO BE FRAMES 'BLACK' IN COLOR. DRIP EDGE TO MATCH

2 RIGHT ELEVATION
1/4" = 1'-0"

SHEAR PANEL NAILING - (BRACED WALLS R602)

ALL SHEAR PANELS TO HAVE NAILING AS FOLLOWS: 8D NAILS 6 INCHES ON CENTER AT ALL STUDS AND TOP AND BOTTOM PLATES.
SHEAR PANELS TO BE LOCATED AS PER PLAN.
TIE DOWN STRAPS WITH AN UPLIFT CAPACITY TO BE FASTENED TO SHEAR PANELS AS PER REQUIREMENTS FOR BRACED WALL PANELS LESS THAN 48 INCHES WIDE.

USE 7/16" x 4'-0" x 8'-O OSB BOARD OR APA RATED PLYWOOD 20'-0 MAXIMUM SPACING & WITHIN 10'-0" MAX OF CORNERS. IN LOCATIONS WHERE PANEL IS LESS THAN 2'-8" IN WIDTH INSTALL HORIZ. SIMPSON CS-14 (14ga., 5/64" THICK) COILED STRAPPING TOP & BOTTOM OF OPENING w/8d NAILS @ 6" ON CENTER. BLOCK ALL HORIZONTAL JOINTS FLAT WITH 2X MATERIAL. WHEN USING STAPLES, 1-¾" x 15ga. OR 1-½" x 16ga. SPACING SHALL BE 3" ON CENTER @ PANEL EDGES & 6" SPACING @ INTERMEDIATE LOCATIONS.



1 LEFT ELEVATION
1/4" = 1'-0"

3/19/2024 9:21:31 AM

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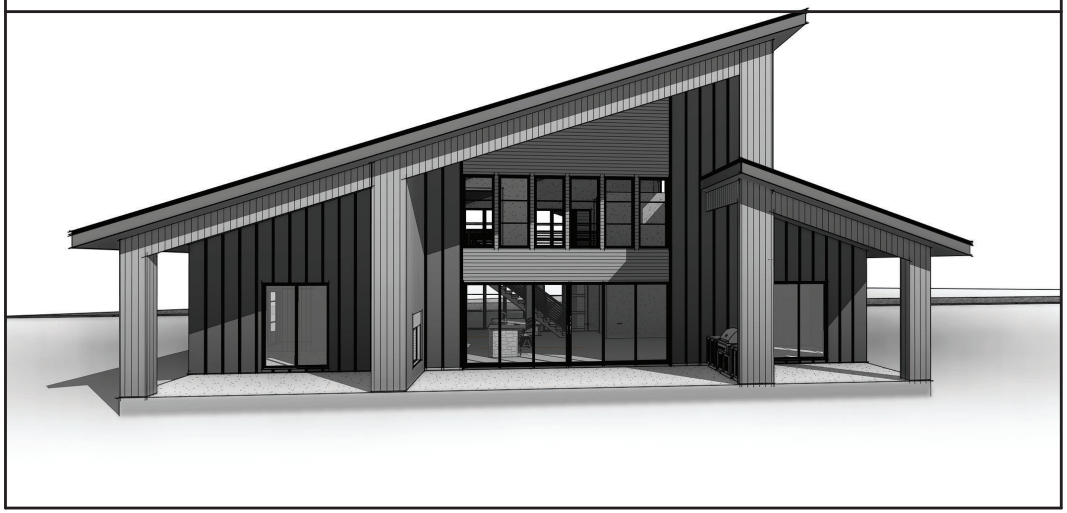
JOB NUMBER:

DATE: 3/19/2024

SHEET TITLE: ELEVATIONS

A3.1

3D EXTERIOR - REAR



3D INTERIOR - KITCHEN

3D EXTERIOR - FRONT

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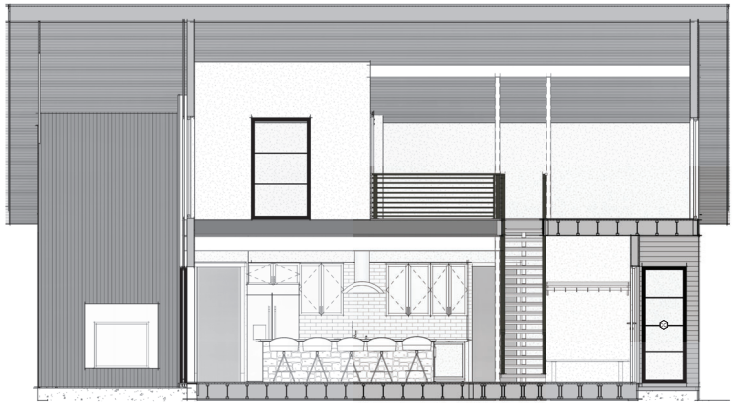
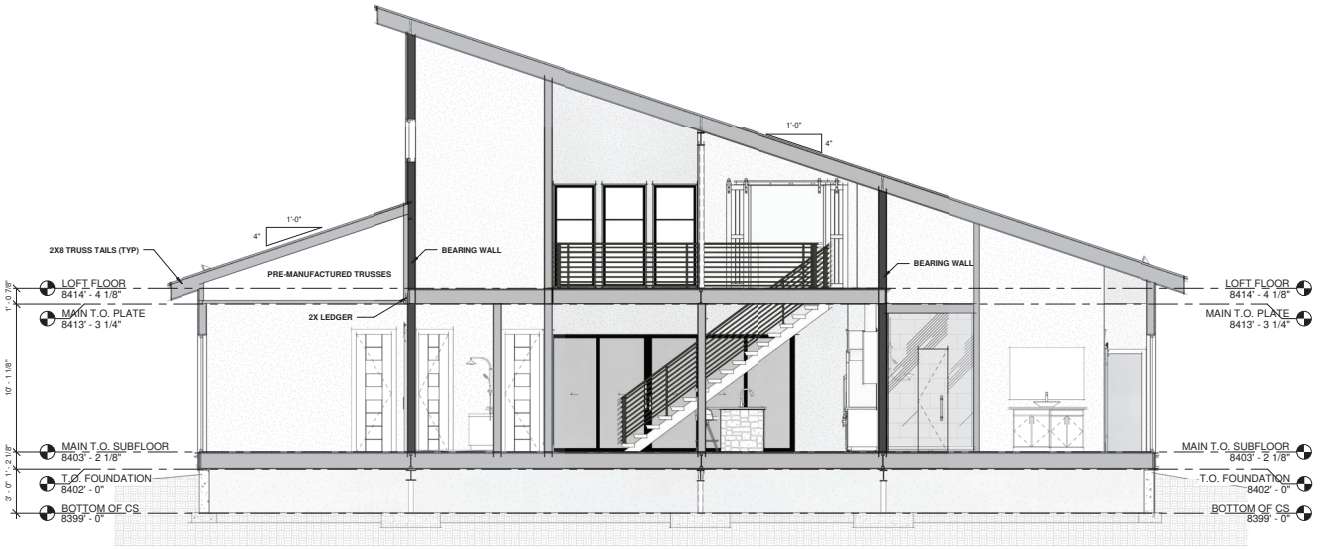
SHEET TITLE: 3D VIEWS

A3.2

3/19/2024 9:21:31 AM



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



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

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DATE:
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SHEET TITLE:
BUILDING SECTIONS

A4.0

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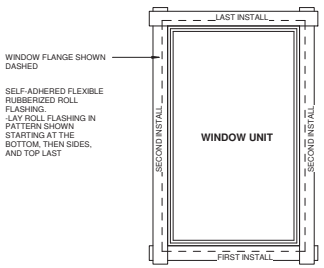
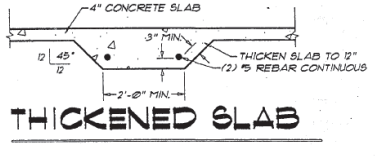
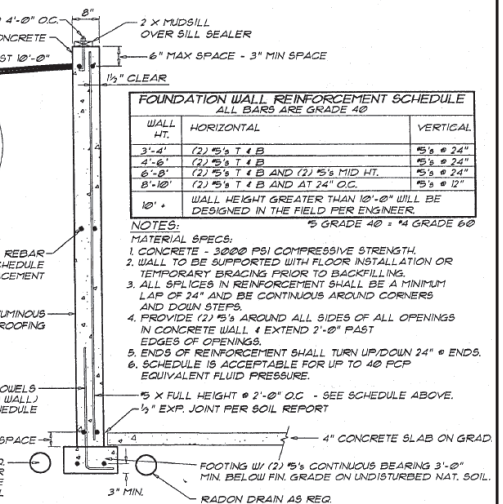


TYPICAL WINDOW FLASHING
3/4" = 1'-0"

CONCRETE WALL DETAIL



THICKENED SLAB



FOUNDATION WALL REINFORCEMENT SCHEDULE
ALL BARS ARE GRADE 40

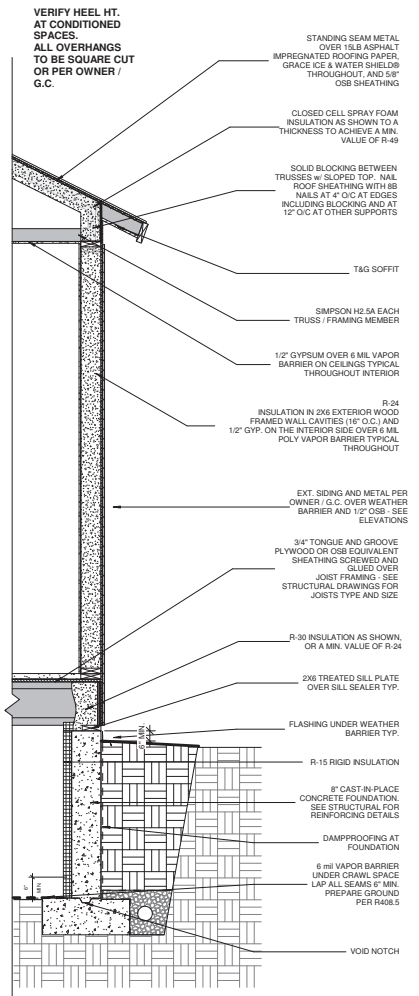
WALL HT.	HORIZONTAL	VERTICAL
3'-4'	(2) #5's T. & B.	#5's @ 24"
4'-6'	(2) #5's T. & B.	#5's @ 24"
6'-8'	(2) #5's T. & B. AND (2) #5's MID HT.	#5's @ 24"
8'-10'	(2) #5's T. & B. AND AT 24" O.C.	#5's @ 12"
10' +	WALL HEIGHT GREATER THAN 10'-0" WILL BE DESIGNED IN THE FIELD PER ENGINEER.	

#5 GRADE 40 = #4 GRADE 60

NOTES:
MATERIAL SPECS:
1. CONCRETE - 3000 PSI COMPRESSIVE STRENGTH.
2. WALL TO BE SUPPORTED WITH FLOOR INSTALLATION OR TEMPORARY BRACING PRIOR TO BACKFILLING.
3. ALL SPLICES IN REINFORCEMENT SHALL BE A MINIMUM LAP OF 24" AND BE CONTINUOUS AROUND CORNERS AND DOWN STEPS.
4. PROVIDE (2) #5's AROUND ALL SIDES OF ALL OPENINGS IN CONCRETE WALL & EXTEND 2'-0" PAST EDGES OF OPENINGS.
5. ENDS OF REINFORCEMENT SHALL TURN UP/DOWN 24" @ ENDS.
6. SCHEDULE IS ACCEPTABLE FOR UP TO 40 PCF EQUIVALENT FLUID PRESSURE.

CONCRETE DETAILS (TYP)
SCALE ½" = 1'-0"

NOTE: WALLS OVER 8' TALL AND 25' LONG AND BACK-FILLED ON ONE SIDE SHALL HAVE A BUTTRESS @ MID POINT OF WALL FOOTING AND WALL STEEL INSPECTION BY OTHER FIRMS WITHOUT WRITTEN PERMISSION SHALL VOID ALL STRUCTURAL PHASES OF THIS PROJECT.



2 WALL SECTION @ CRAWL SPACE
3/4" = 1'-0"

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JOB NUMBER:

DATE: 3/19/2024

SHEET TITLE: DETAILS

A5.0

3/19/2024 9:21:36 AM

ADDRESS: 833 Cairnes Dr., Grand Lake CO 80447 (Grand County)

ELEVATION: ~8400' **ROOF & DECK DESIGN SNOWLOAD: 75 psf** (no reduction)

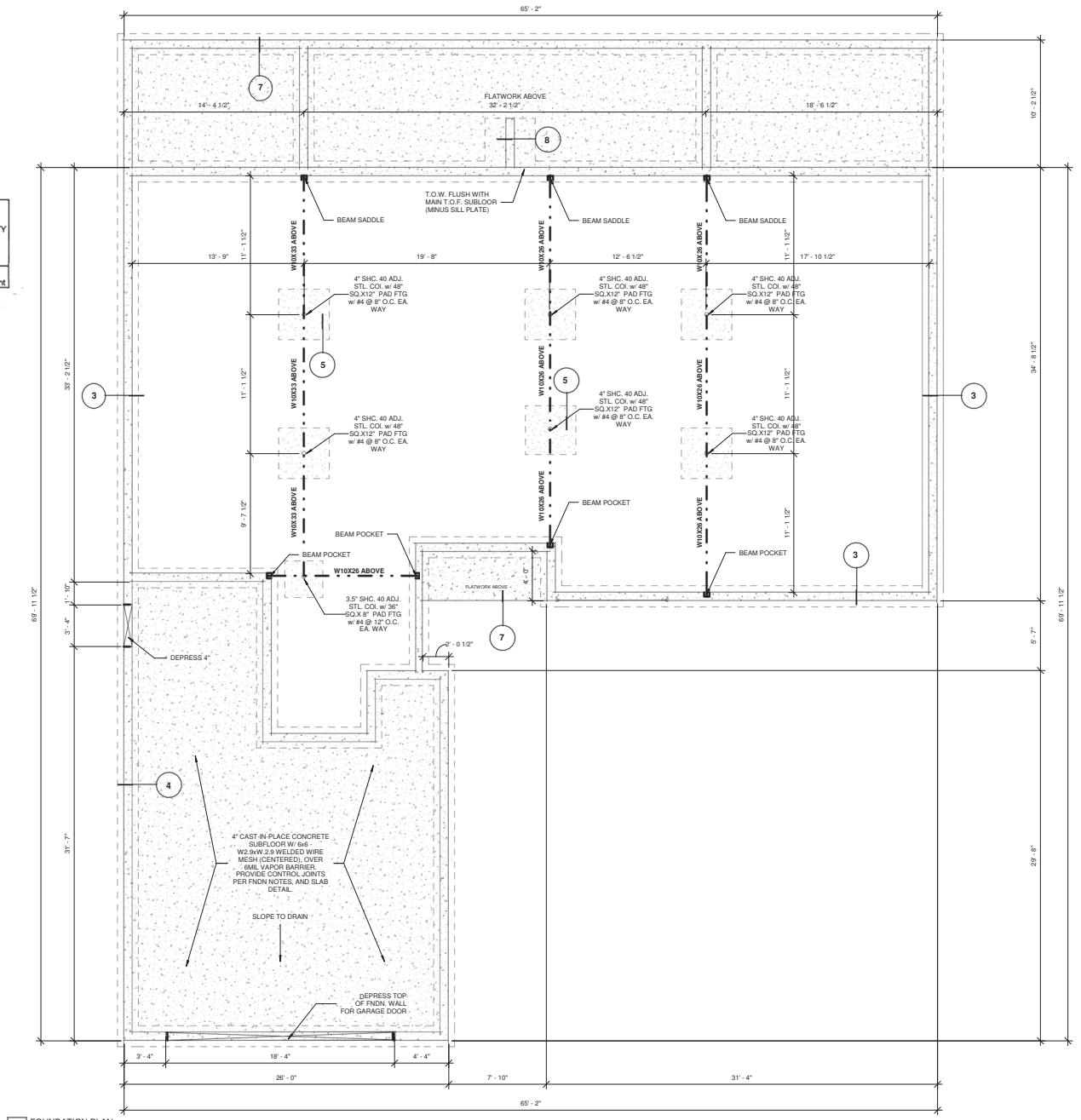
ROOF DEAD LOAD: 20 psf if standard framing (if trusses, verfy 10 psf top chord, 10 psf bottom chord)

MEETS 2015 INTERNATONAL RESIDENTIAL CODE

2015 IRC CLIMATIC & GEOGRAPHIC DESIGN CRITERIA TABLE R301.2(1)

WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	DECAY PROBABILITY
WIND SPEED 3-SECOND GUST	TOPO-GRAPHIC EFFECTS		WEATHERING	FROST LINE DEPTH	TERMITE				
115 MPH Exposure "C"	No	"B"	Severe	30"	None to Slight	-16° F	Yes	No	None to Slight

GROUND SNOW LOAD: 10' psf (Roof snow load = 0.7 ground snow load)
Ultimate Wind Speed 149MPH.



1 FOUNDATION PLAN
1/4" = 1'-0"

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DATE:	ISSUED FOR:

JOB NUMBER:

DATE: 3/19/2024

SHEET TITLE: FOUNDATION PLAN

S0.0

3/19/2024 9:21:39 AM

BUILDING JURISDICTION: **GRAND COUNTY BUILDING DEPARTMENT**
JURISDICTION'S ADOPTED CODE: IRC 2015, WITH AMMENDMENTS
BUILDING DESIGN LOADS:

ROOF SNOW LOAD: 70 PSF
ROOF DEAD LOAD: 15 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 15 PSF
WIND DESIGN: 110 MPH, EXP. B
SEISMIC DESIGN CATEGORY: 2B

COORDINATION:
A. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED
TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL,
ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL
COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.
B. ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES,
PROJECT SHOP DRAWINGS, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

ALL EXTERIOR WALLS SHALL BE SUPPORTED ON CONTINUOUS SOLID OR FULLY GROUTED MASONRY OR CONCRETE FOOTINGS, CRUSHED STONE FOOTINGS,
WOOD FOUNDATIONS, OR OTHER APPROVED STRUCTURAL SYSTEMS WHICH
SHALL BE OF SUFFICIENT DESIGN TO ACCOMMODATE ALL LOADS ACCORDING
TO SECTION R301 AND TO TRANSMIT THE RESULTING LOADS TO THE SOIL WITHIN
THE LIMITATIONS AS DETERMINED FROM THE CHARACTER OF THE SOIL. FOOTINGS SHALL BE SUPPORTED ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL. EXCEPT WHERE ERECTED ON SOLID ROCK OR OTHERWISE
PROTECTED FROM FROST, FOUNDATION WALLS, PIERS AND OTHER PERMANENT
SUPPORTS OF BUILDINGS AND STRUCTURES LARGER THAN 120 SQUARE FEET
IN AREA OR 10 FEET IN HEIGHT SHALL EXTEND TO AT LEAST 30 INCHES BELOW FINISHED GRADE, AND SPREAD FOOTINGS OF 8 INCHES THICK X 16 INCHES WIDE
MINIMUM SIZE SHALL BE PROVIDED TO PROPERLY DISTRIBUTE THE LOAD WITHIN THE
ALLOWABLE LOAD-BEARING VALUE OF THE SOIL.

ALTERNATIVELY, SUCH STRUCTURES SHALL BE SUPPORTED ON PILES WHERE SOLID
EARTH OR ROCK IS NOT AVAILABLE. FOOTINGS SHALL NOT BEAR ON FROZEN SOILS.
CONCRETE FOOTINGS SHALL INCLUDE A MINIMUM OF TWO #4 REINFORCEMENT BARS
TO BE TIED CONTINUOUSLY AND SPACED A MINIMUM OF TWO INCHES FROM THE
GROUND AND EQUALLY WITHIN THE FOOTING. FOOTINGS SHALL BE SO DESIGNED
THAT THE ALLOWABLE BEARING CAPACITY OF THE SOIL IS NOT EXCEEDED,
AND THAT DIFFERENTIAL SETTLEMENT IS MINIMIZED.
THE MINIMUM WIDTH OF FOOTINGS SHALL BE 16 INCHES.

SPREAD FOOTINGS SHALL BE AT LEAST 8 INCHES IN THICKNESS. FOOTING PROJECTIONS, *P*, SHALL BE AT LEAST 2 INCHES AND SHALL NOT EXCEED
THE THICKNESS OF THE FOOTING.

VAPOR RETARDER GROUND COVER
A VAPOR RETARDER GROUND COVER SHALL BE OF 6 MIL POLYETHYLENE, OR AN APPROVED EQUAL WITH A RATING OF 1 PERM OR LESS. THE VAPOR RETARDER SHALL COVER THE ENTIRE GROUND AREA WITHIN CRAWLSPACES IN ACCORDANCE WITH THE FOLLOWING:
1. THE VAPOR RETARDER SHALL BE OVERLAPPED SIX INCHES MINIMUM AT JOINTS AND SHALL EXTEND OVER THE TOP OF PIER FOOTINGS.
2. THE EDGES OF THE VAPOR RETARDER SHALL BE TURNED UP A MINIMUM OF
FOUR INCHES AT THE STEM WALL.
3. PENETRATIONS IN THE VAPOR RETARDER SHALL BE NO LARGER THAN NECESSARY TO FIT PIERS, BEAM SUPPORTS, PLUMBING AND OTHER PENETRATIONS.

FOUNDATIONS

1. DESIGN CRITERIA:
A. SOILS BEARING PRESSURE BASED ON AN ASSUMED ALLOWABLE BEARING PRESSURE OF 2000 PSF IN LIEU OF A QUALIFIED SOILS REPORT. PER 2015 IRC, PRESUMPTIVE LOAD- BEARING PRESSURE VALUES, (TABLE R401.4.1 PG 79)
IT IS THE RESPONSIBILITY OF THE CONTRACTOR / OWNER/OWNER'S REPRESENTATIVE AND NOT THE EOR TO ENSURE EXISTING SOILS ARE STABLE AND ADEQUATE TO SUPPORT EXISTING STRUCTURES DURING SOIL EXCAVATION/CONSTRUCTION.

2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AFTER 28 DAYS. CEMENT SHALL BE TYPE 1.

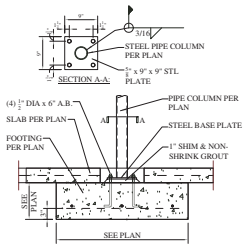
3. STRUCTURAL CONCRETE:
A. ALL WORK SHALL CONFORM WITH THE LATEST ACI SPECIFICATIONS UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.
B. DETAIL BARS IN ACCORDANCE WITH THE LATEST EDITIONS OF "ACI DETAILING MANUAL", PUBLICATION SP-66 WITH ADDED REQUIREMENTS OF THE PROJECT SPECIFICATION, AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318.

4. REINFORCEMENT:
A. REINFORCING BARS: ASTM A615, 60 KSI
B. WELDED AND FIELD BENT REINFORCING: ASTM A706, 60 KSI
C. WELDED WIRE FABRIC: ASTM 185 OR ASTM 497, 70 KSI
D. SPLICES:
· NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS.
· MAKE BARS CONTINUOUS AROUND CORNERS.
· WHERE PERMITTED, SPLICES MAY BE MADE BY CLASS B CONTACT LAPS OR
MECHANICAL CONNECTORS.
· LAP BARS A MINIMUM OF 48 BAR DIAMETERS.
· SPLICE CONTINUOUS TOP AND BOTTOM BARS IN WALLS, BEAMS, AND
GRADE BEAMS AS FOLLOWS:
+ TOP BARS - AT MID SPAN
+ BOTTOM BARS - OVER SUPPORT

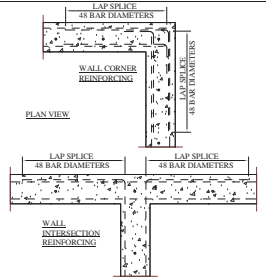
5. PLACING REINFORCEMENT:
A. REINFORCEMENT PROTECTION
· CONCRETE PLACED AGAINST EARTH. . . . . .3"
· CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH:
· BARS #5 AND SMALLER. . . . . 1-1/2"
· BARS LARGER THAN #5. . . . . 2"
· COLUMNS, GIRDERS, GRADE BEAMS, BEAMS. . . . . 1-1/2"
· SLABS OR WALLS NOT EXPOSED TO WEATHER OR EARTH. . . . . 1"
· CORE WALLS NOT EXPOSED TO WEATHER OR EARTH. . . . . 1"
B. REINFORCING PLACING TOLERANCES: PER ACI 117.
C. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND
WELDED WIRE FABRIC AT POSITIONS SHOWN ON PLANS. ALL REINFORCING, DOWELS,
BOLTS, AND EMBEDDED PLATES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE
IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.

6. CONTROL JOINTS:
A. PROVIDE SLAB CONTROL JOINTS PER ACI 6.4 AND IN ACCORDANCE WITH A
QUALIFIED SOILS REPORT. IN LIEU OF A SOILS REPORT PROVIDE CONTROL JOINTS SUCH
THAT NO MORE THAN 225 SQUARE FEET OF SLAB ARE WITHIN A GRID. SAWCUT
CONTROL JOINTS SHALL BE 1/4 OF SLAB DEPTH. JOINTS SHOULD BE SPACED AT
NO MORE THAN 15 FEET ON CENTER OR AS INDICATED ON THE DRAWINGS.

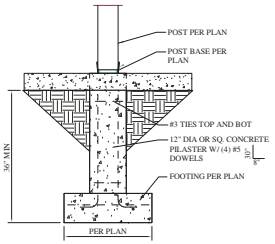
7. MEP AND OTHER OPENINGS AND EMBEDDMENTS:
A. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS BEFORE
PLACING CONCRETE. DO NOT CUT REINFORCING WHICH MAY CONFLICT. CORING
OF CONCRETE IS NOT PERMITTED.
B. REFER TO TYPICAL DETAILS FOR SPACING LIMITS ON SLEEVES AND FOR REQUIREMENTS.



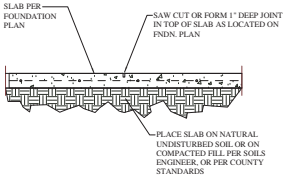
5 **INTERIOR FOOTING DETAIL**
3/4" = 1'-0"



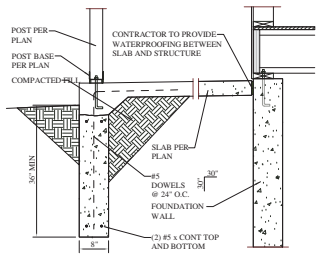
1 **TYPICAL CORNER REINF.**
3/4" = 1'-0"



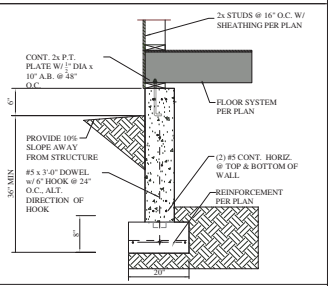
6 **EXTERIOR ISOLATED FOOTING**
3/4" = 1'-0"



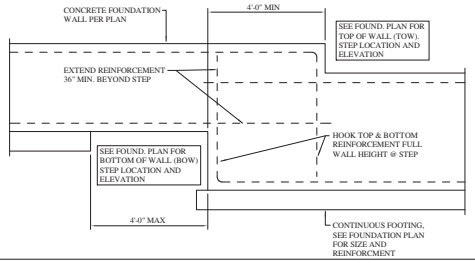
2 **TYP CONC SLAB DETAIL**
3/4" = 1'-0"



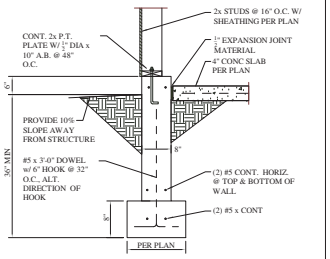
7 **TURNED DOWN SLAB DETAIL**
3/4" = 1'-0"



3 **FOOTING @ CRAWL SPACE WALL**
3/4" = 1'-0"



8 **TYP FOUNDATION WALL STEP**
1/2" = 1'-0"



4 **STEM WALL @ GARAGE DETAIL**
3/4" = 1'-0"

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DEENA WARD
WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE: 3/19/2024

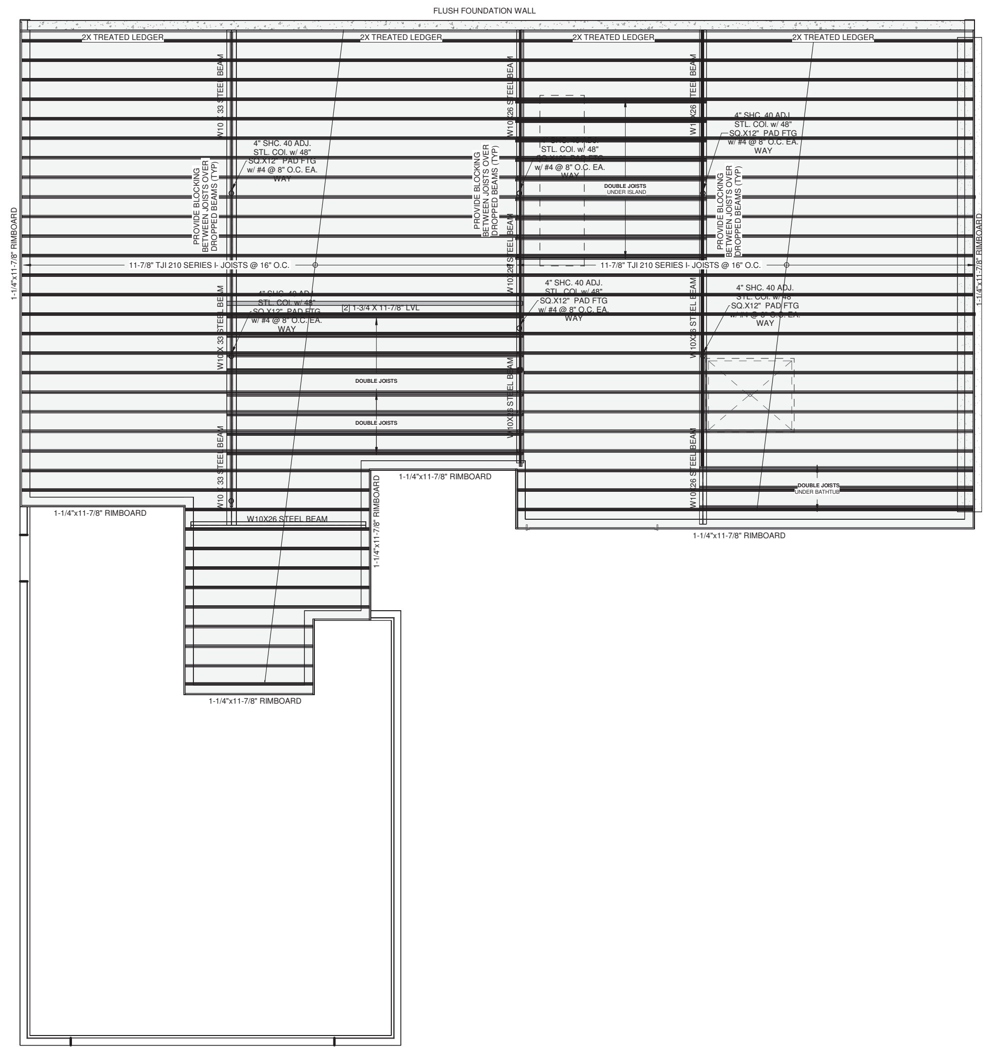
SHEET TITLE: FOUNDATION NOTES & DETAILS

S0.1

3/19/2024 9:21:34 AM

STRUCTURAL NOTES - FOUNDATION
3/8" = 1'-0"

1 FOUNDATION DETAILS
3/4" = 1'-0"



1 MAIN FLOOR FRAMING PLAN
1/4" = 1'-0"

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DATE:	ISSUED FOR:

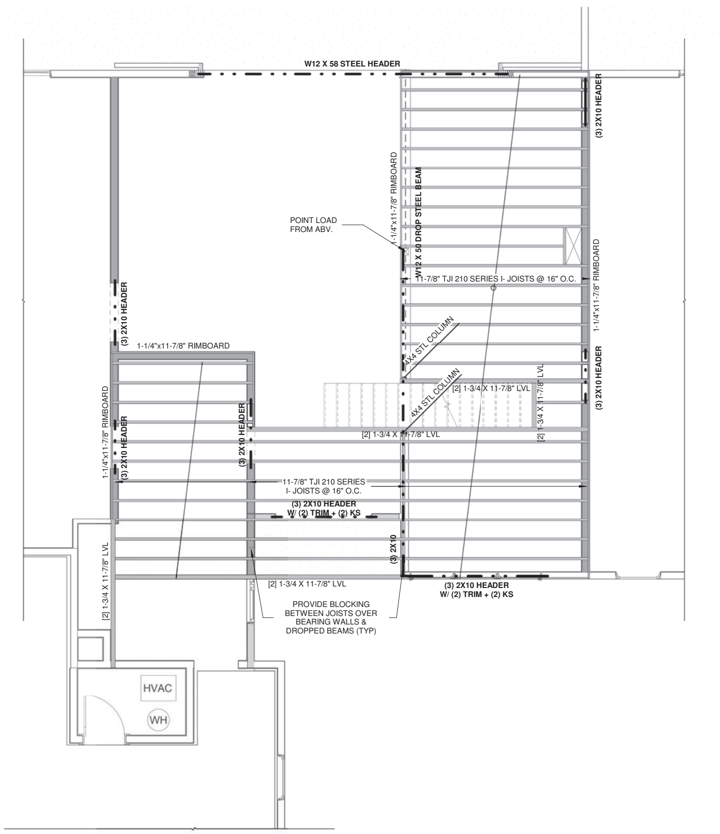
JOB NUMBER:

DATE: 3/19/2024

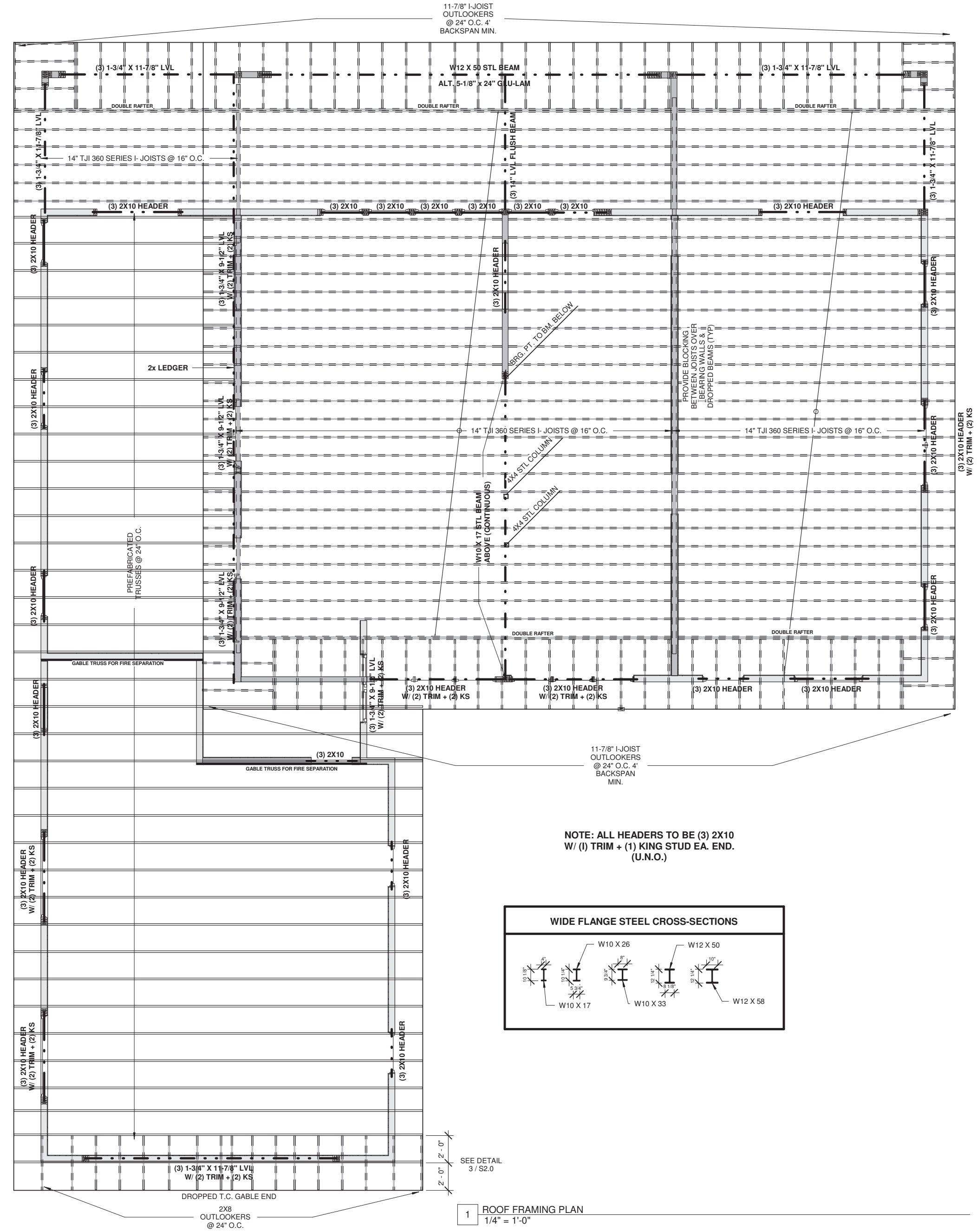
SHEET TITLE: FRAMING PLANS

S1.0

3/19/2024 9:21:39 AM



2 LOFT FRAMING PLAN
1/4" = 1'-0"



1 ROOF FRAMING PLAN
1/4" = 1'-0"

NOTE: ALL HEADERS TO BE (3) 2X10 W/ (I) TRIM + (1) KING STUD EA. END. (U.N.O.)

WIDE FLANGE STEEL CROSS-SECTIONS

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WARD RESIDENCE
833 CAIRNES DR.
GRAND LAKE, CO

DATE:	ISSUED FOR:

JOB NUMBER:

DATE: 3/19/2024

SHEET TITLE: FRAMING PLANS

S1.1

3/19/2024 9:21:41 AM

BUILDING JURISDICTION:
GRAND COUNTY BUILDING DEPARTMENT

JURISDICTION'S ADOPTED CODE: IRC 2015, WITH AMMENDMENTS
BUILDING DESIGN LOADS:

ROOF SNOW LOAD: 75 PSF
ROOF DEAD LOAD: 20 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 15 PSF
WIND DESIGN: 115 MPH, EXP. B
SEISMIC DESIGN CATEGORY: 2B

COORDINATION:
A. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.
B. ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, PROJECT SHOP DRAWINGS, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

STEEL

1. GENERAL:
A. ALL STRUCTURAL STEEL FABRICATED AND ERECTED PER THE CURRENT EDITION OF AISC STEEL CONSTRUCTION MANUAL.
B. ALL STRUCTURAL STEEL SHALL BE OF THE FOLLOWING GRADES:
· WIDE FLANGE SHAPES, CHANNELS AND TEES: ASTM A992 (FY=50 KSI)
· OTHER ROLLED SHAPES(ANGLES, PLATES, AND BARS): ASTM A36 (FY=36 KSI)
· STEEL RODS AND MISCELLANEOUS: ASTM A36 (FY=36 KSI)
· STEEL PIPE: ASTM A53, GRABE B (FY=35 KSI)
· HOLLOW STRUCTURAL SECTION (HHS): ASTM A500, GR.B (FY=46 KSI)
C. STRUCTURAL STEEL CONNECTION MATERIALS:
· CONNECTOR BOLTS: ASTM A307
· ANCHOR BOLTS: ASTM A307 OR A36.
D. EXPANSION BOLTS SHALL BE "SIMPSON STRONG-BOLT 2" OR APPROVED WEDGE TYPE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

WOOD

1. ENGINEERED LUMBER SIZES (MICROLAM, PARALAM, TIMBERSTRAND, AND FABRICATED MEMBER SIZES) SHOWN ARE NET: OTHER MEMBER SIZES ARE NOMINAL.
A. ALL COMPOSITE LAMINATED VENEER LUMBER (LVL)TO HAVE A MINIMUM ALLOWABLE BENDING. STRESS OF 2950 PSI (2950Fb)AND MODULUS OF ELASTICITY OF 2,000,000 PSI (2.0E)PER ICC-ES ESR1387.
B. ALL COMPOSITE PARALLEL STRAND LUMBER (PSL)TO HAVE A MINIMUM ALLOWABLE BENDING STRESS OF 2950 PSI (2950Fb)AND MODULUS OF ELASTICITY OF 2,000,000 PSI (2.0E)PER ICC-ES ESR1387.
C. MULTIPLE PLY MEMBERS TO BE NAILED TOGETHER USING 3 ROWS OF 16d COMMON WIRE NAILS SPACED AT 16" O/C (U.O.N.)
D. COMPOSITE LAMINATED STRAND LUMBER (LSL)IS MANUFACTURED BY TRUS JOIST AND SHOULD BEAR THE LABEL OF "STRANDGARD" OR "TIMBERSTAND" WITH A MINIMUM MODULUS OF ELASTICITY OF 1,800,000 PSI (1.8E)PER ICC-ES ESR1387.

2. FRAMING LUMBER DRY (19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION) SHALL BE SHOWN BELOW WITH MINIMUM DESIGN VALUES BASED ON THE 2012 NDS, UNLESS OTHERWISE NOTED.
A. EXTERIOR STUDS: DF NO.2 OR BETTER
B. LOAD BEARING STUDS (AND COLUMNS ASSEMBLED FROM STUDS): DF NO.2 OR BETTER
C. NON-LOAD BEARING INTERIOR STUDS: DF STUD OR BETTER
D. HEADERS AT TYPICAL OPENINGS: DF NO.2 OR BETTER
E. 2"-4" NOMINAL MEMBERS: DF NO.2 OR BETTER
F. 5" NOMINAL AND LARGER MEMBERS: DF NO.1 OR BETTER

3. FABRICATED LUMBER:
A. ALL FRAMING LUMBER TO BE GRADE MARKED PER THE LUMBER SCHEDULE SHOWN ON THESE DRAWINGS. ALL WOOD FRAMING SHALL BE SURFACE DRY TO A MAXIMUM MOISTURE CONTENT OF 19%. GLU-LAM AND COMPOSITE LUMBER MEMBERS (LVL) CANNOT EXCEED A MOISTURE CONTENT OF 16%.
B. THE MANUFACTURER SHALL PROVIDE WEB STIFFENERS (ON I-JOISTS), END BLOCKING, BRIDGING, AND ERECTION BRACING AS REQUIRED. SEE "DESIGN CRITERIA" FOR SUPERIMPOSED DEAD AND LIVE LOADS.

SHEATHING:
A. ALL PLYWOOD/OSB CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) OR THE STRUCTURAL BOARD ASSOCIATION (SBA).
B. ALL ROOF PANEL SHEATHING SHALL BE 19/32", APA RATED 40/20, EXP.1 SHEATHING UNLESS OTHERWISE NOTED. NAIL ALL ROOF SHEATHING WITH 10d NAILS AT 6" O.C. AT ALL SUPPORTED PANEL EDGES (E.N.) AND 12" O.C. FIELD NAILING (F.N.)UNLESS OTHERWISE NOTED.
C. ALL FLOOR PANEL SHEATHING SHALL BE 23/32", APA RATED 40/20, EXP.1 SHEATHING UNLESS OTHERWISE NOTED. NAIL ALL FLOOR SHEATHING WITH 10d NAILS @ 6" O.C. AT ALL SUPPORTED PANEL EDGES (E.N.) AND 12" O.C. FIELD NAILING (F.N.)UNLESS OTHERWISE NOTED.
D. ALL WALL PANEL SHEATHING SHALL BE 15/32", APA RATED 24/16, EXP.1 SHEATHING UNLESS OTHERWISE NOTED. NAIL ALL WALL SHEATHING WITH 10d NAILS AT 6" O.C. AT ALL SUPPORTED PANEL EDGES (E.N.) AND 12" O.C. FIELD NAILING (F.N.) UNLESS OTHERWISE NOTED.
E. INSTALL ALL SHEATHING WITH THE LONG DIMENSION OF THE PANEL PARALLEL TO SUPPORTING FRAMING MEMBERS, WITH EACH PANEL CONTINUOUS OVER TWO OR MORE FRAMING MEMBERS. ALLOW 1/8" SPACING AT PANEL EDGES UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER.
F. DIAPHRAGM SHEATHING NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING.
G. ALL WALLS SHEATHED WITH GYP-BOARD SHALL BE CONNECTED WITH 5d COOLER NAILS SPACED AT 7" O.C. AT SUPPORTED PANEL EDGES AND AT INTERMEDIATE SUPPORTS.
H. PROVIDE 2x BLOCKING AT UNSUPPORTED PANEL EDGES WHERE INDICATED ON APPROVED PLANS. REFER TO SHEARWALL SCHEDULE OR PLANS FOR SPECIAL BLOCKING REQUIREMENTS.

5. OPENINGS:
A. OPENINGS, POCKETS, ETC, SHALL NOT BE PLACED IN BEAMS, JOISTS, RAFTERS, STUDS, POSTS, COLUMNS, TIMBER AND OTHER STRUCTURAL MEMBERS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.

6. NAILING:
A. UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BOX NAILS WITH SIZES SHOWN ON THE DRAWINGS. MINIMUM NAILING SHALL BE IN ACCORDANCE WITH THE NAILING SCHEDULE PER IBC 2015 TABLE 2304.9.1 UNLESS NOTED OTHERWISE ON DRAWINGS. DRIVE ALL NAILS SO NAIL HEAD IS FLUSH TO WOOD SURFACE (TYP).

ENGINEERED WOOD TRUSSES:

THE USE OF LOAD DURATION FACTORS FOR SNOW LOAD OR SLOPE OF ROOF SHALL BE PROHIBITED.

A. DESIGN CRITERIA: IRC 2015 TO SUPPORT THE FOLLOWING LOADS:
B. GRAVITY LOADS [HORIZONTAL PROJECTION]
· T.C.L.L. = 75 PSF (SNOW)
· T.C.D.L. = 10 PSF (ASPHALT COMPOSITION SHINGLES OVER 1/2" SHEATHING
· B.C.L.L. = 10 PSF NON-CONCURRENT WITH ANY OTHER LIVE LOADS AND 20 PSF NON-CONCURRENT PER IBC 2015, TABLE 1607.1 (27).
· B.C.D.L.= 10 PSF (GYPSUM BOARD SHEATHING WITH INSULATION)
· EXPOSURE CATEGORY "B"
· OCCUPANCY CATEGORY 1
C. LATERAL/UPLIFT LOADS: WIND LOADING PER LATEST APPROVED ASCE-7 RECOMMENDATIONS
D. WIND VELOCITY = 115 MPH
E. OTHER LOADING CONDITIONS:
· TRUSSES TO BE CHECKED FOR UNBALANCED LOAD CONDITIONS PER LATEST TPI RECOMMENDATIONS.
F. TRUSS DEFLECTION CRITERIA:
· MAXIMUM VERTICAL ROOF LIVE LOAD DEFLECTION = LESSER OF L/240 OR 1.0"
· MAXIMUM VERTICAL ROOF TOTAL LOAD DEFLECTION = LESSER OF L/180 OR 1.5".
· MAXIMUM HORIZONTAL DEFLECTION = 1.5".
G. WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE LATEST BUILDING CODE AND SHALL CONFORM TO RECOMMENDATIONS OF THE TRUSS PLATE INSTITUTE (TPI).
H. WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED USING SAWN LUMBER WITH A MAXIMUM MOISTURE CONTENT OF 19 % AT THE TIME OF FABRICATION. ALL CHORD MEMBERS SHALL BE A MINIMUM 2X4 NOMINAL DIMENSION NO. 2 LUMBER AND WEBS SHALL BE A MINIMUM OF 2x4 NOMINAL DIMENSION STANDARD OR BETTER GRADE LUMBER.
I. TRUSS MANUFACTURER IS RESPONSIBLE FOR SPECIFYING ALL REQUIRED TRUSS-TO-TRUSS CONNECTIONS. APPROVED ENGINEERED TRUSS DRAWINGS MUST BEAR THE STAMP AND SIGNATURE OF A QUALIFIED TRUSS ENGINEER.
J. WOOD TRUSSES SHALL BE INSTALLED PER THE TRUSS MANUFACTURER'S RECOMMENDATIONS.
THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AS REQUIRED FOR THE SAFE ERECTION AND PERFORMANCE OF THE TRUSSES. THE GUIDELINES SET FORTH BY TPI AND WTCA, PUBLICATION BCSI (BUILDING COMPONENT SAFTETY INFORMATION) 1-03, "GUIDE FOR HANDLING,
INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" SHALL BE A MINIMUM REQUIREMENT.
K. TRUSS MEMBERS SHALL NOT BE CUT, DRILLED, NOTCHED OR OTHERWISE ALTERED, AND TRUSSES SHALL NOT BE USED FOR ANY OTHER PURPOSE OTHER THAN THE MANUFACTURER'S DESIGN INTENT, WITHOUT WRITTEN APPROVAL OF A QUALIFIED LICENSED ENGINEER.
L. TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.

8. MISCELLANEOUS WOOD FRAMING:
A. SILL PLATES SHALL BE BOLTED INTO CONCRETE WITH 1/2" DIA. x 10" MIN LONG BOLTS (MIN 7"EMBEDMENT U.N.O.)W/ 2"x2"x3/16" WASHERS AND NUTS AT 6'-0" O.C. MAXIMUM WITH AT LEAST TWO BOLTS PER MEMBER, UNLESS OTHERWISE NOTED.
B. STUDS SHALL BE SPACED AT 16" O.C. MAXIMUM AND OF THE SIZE SHOWN ON PLANS. 2" NOMINAL SOLID BLOCKING SHALL BE PLACED BETWEEN ALL JOISTS AND RAFTERS AT ALL SUPPORTS AND UNDER ALL PARTITIONS UNLESS OTHERWISE DETAILED.
C. HOLES FOR BOLTS SHALL BE BORED WITH A BIT OF THE SAME NOMINAL DIAMETER OF THE BOLT, BUT NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER, AND SHALL PENETRATE WOOD MEMBERS SUCH THAT BOLT THREADS DO NOT BEAR AGAINST WOOD MEMBERS. BOLTED CONNECTIONS SHALL BE SNUG TIGHT, BUT NOT TO THE EXTENT OF CRUSHING WOOD UNDER WASHER.
D. BOLTS IN WOOD MEMBERS SHALL NOT BE SPACED LESS THAN 7 DIAMETERS FROM THE END OF THE MEMBER AND SHALL NOT BE SPACED LESS THAN THE LESSER OF EITHER 4 DIAMETERS FROM THE EDGE OF THE MEMBER, OR AT THE CENTERLINE OF MEMBER, UNLESS OTHERWISE NOTED.

DESIGN AND CONSTRUCTION AMMENDMENTS

THE USE OF LOAD DURATION FACTORS FOR SNOW LOAD OR SLOPE OF ROOF SHALL BE PROHIBITED.

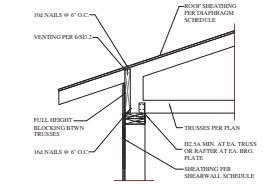
WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH APPROVED ENGINEERING PRACTICE.
THE DESIGN AND MANUFACTURE OF METAL PLATE CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1. THE DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUTES OF THE JURISDICTION IN WHICH THE PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION R106.1.

THE FRAMING DETAILS REQUIRED IN SECTION R802 APPLY TO ROOFS HAVING A MINIMUM SLOPE OF THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT) OR GREATER. ROOF-CEILINGS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R606.11(1), R606.11(2) AND R606.11(3) OR IN ACCORDANCE WITH AFPA/NDS.
COMPONENTS OF ROOF- CEILINGS SHALL BE FASTENED IN ACCORDANCE WITH TABLE R602.3(1).

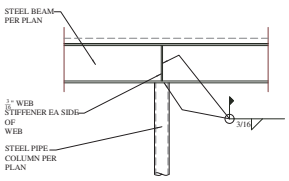
STUDS SHALL BE A MINIMUM NO. 3, STANDARD OR STUD GRADE LUMBER.
EXCEPTION:
1. BEARING STUDS NOT SUPPORTING FLOORS AND NON-BEARING STUDS MAY BE UTILITY GRADE LUMBER, PROVIDED THE STUDS ARE SPACED IN ACCORDANCE WITH TABLE R602.3(5).

EXTERIOR WALLS OF WOOD-FRAME CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R602.3(1) AND R602.3(2) OR IN ACCORDANCE WITH AF&PA'S NDS. COMPONENTS OF EXTERIOR WALLS SHALL BE FASTENED IN ACCORDANCE WITH TABLES R602.3(1) THROUGH R602.3(4).
STRUCTURAL WALL SHEATHING SHALL BE FASTENED DIRECTLY TO STRUCTURAL FRAMING MEMBERS.
EXTERIOR WALL COVERINGS SHALL BE CAPABLE OF RESISTING THE WIND PRESSURES LISTED IN TABLE R301.2(2) ADJUSTED FOR HEIGHT AND EXPOSURE USING TABLE R301.2(3). WOOD STRUCTURAL PANEL SHEATHING USED FOR EXTERIOR WALLS SHALL CONFORM TO THE REQUIREMENTS OF TABLE R602.3(3).

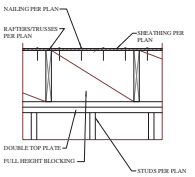
WOOD STRUCTURAL PANEL SHEATHING.
WOOD STRUCTURAL PANEL ROOF SHEATHING SHALL BE BONDED BY EXTERIOR GLUE.



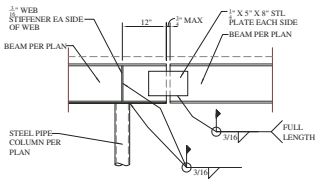
5 **TRUSS/RAFTER BLOCKING DETAIL**
1" = 1'-0"



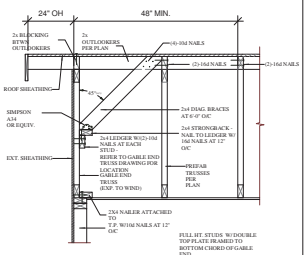
1 **COLUMN CONNECTION DETAIL**
3/4" = 1'-0"



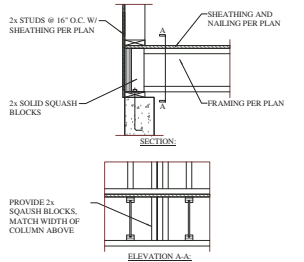
6 **BLOCKING DETAIL**
1" = 1'-0"



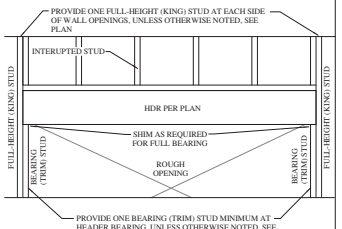
2 **STEEL BEAM SPLICE DETAIL**
1/2" = 1'-0"



3 **GABLE END TRUSS DETAIL**
1" = 1'-0"



3 **SQUASH BLOCK DETAIL**
3/4" = 1'-0"



4 **TYPICAL HEADER DETAIL**
3/4" = 1'-0"

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SHEET TITLE: FRAMING DETAILS AND NOTES

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STRUCTURAL NOTES - FRAMING
3/8" = 1'-0"

1 FRAMING DETAILS
3/4" = 1'-0"