PLANNING & ZONING COMMISSION JULY 2023

July 06, 2023 at 6:00 PM
0110 Whispering Pines Circle, Blue River, CO

AGENDA

The public is welcome to attend the meeting either in person or via Zoom.

The Zoom link is available on the Town website:

https://townofblueriver.colorado.gov/planning-zoning

Please note that seating at Town Hall is limited.

I. CALL TO ORDER, ROLL CALL

II. APPROVAL OF MINUTES

A. Minutes from June 14, 2023

III. PROJECT APPROVAL

B. New Construction Project

C. 0038 Rock Springs-Addition

D. Permit has been issued. This is a design change order for the garage.

IV. ADJOURN

NEXT MEETING -

PLANNING & ZONING COMMISSION

June 14, 2023 at 6:00 PM
0110 Whispering Pines Circle, Blue River, CO

MINUTES

The public is welcome to attend the meeting either in person or via Zoom.

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Please note that seating at Town Hall is limited.

I. CALL TO ORDER, ROLL CALL

Chair Johnson called the Planning & Zoning Commission meeting to order at 6:00 p.m.

PRESENT

Also present: Town Manager Michelle Eddy; Town Attorney Bob Widner Travis Beck-Vice Chair

Bevan Hardy

Doug O'Brien

Tim Johnson-Chair

Gordon Manin-via Zoom

Ben Stuckey

Troy Watts-via Zoom

Noah Hopkins-Board Liaison

II. APPROVAL OF MINUTES

A. Minutes from May 2, 2023

Motion made by Beck, Seconded by Watts to approve the minutes of May 2, 2023.

Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

III. PUBLIC HEARING

B. Town of Blue River Land Use Code

Chair Johnson introduced the public hearing noting residents should come to the podium, provide their name, address and time is limited to 3 minutes.

Chair Johnson opened the public hearing at 6:03 p.m.

Dan Cleary-Rustic Terrace (Lot 4 Blue Rock Springs): Stated concerns in the Land Use Code including the RP1 Zone District pertaining to non-conforming lots. He noted there should not be any subdivision of the lots noting there is a moratorium on subdivisions. He also questioned the roads and whether or not the Town has a right to claim the roads and right-of-way. He noted concerns on Class B & C permits as conducted administratively and requirements for submittals. He stated a concern with the driveway language. He noted concerns of additional zoning regulations, and snow storage. Mr. Cleary thanked the staff for their work on the code.

Paul Semmer-Blue Grouse Trail-Echoed Mr. Cleary's comments and thanked the staff for the work. He inquired as to the implemenation.

Chair Johnson closed the public hearing at 6:12 p.m.

IV. PROJECT APPROVAL

C. Recommendation Vote to Board of Trustees-Land Use Code

The Commission held a discussion on the comments made.

Beck asked for answers to questions posed by Mr. Cleary.

Attorney Widner provided answers to the questions:

Implementation: Nothing about the current zoning will change. The only way for a change is if the owner asks or if the Town decides to make a complete change.

Attorney Widner reviewed the R6 Zone District-Mixed Use Development for any potential/future annexations if it fit this category. It would not apply to current properties. The floodplain allows the Town to designate areas for floodplain and no development if it wishes to protect areas. The RP1 Zone District is designed to be a subclass of the R1 District. It allows owners to apply for this district with a plan and to be compliant as many lots are non-conforming to the minimum lot size for R1. If an owner wishes they can ask to rezone to allow and recognize the non-conforming legal/conforming lot. Owners will not be required to move to RP1. Attorney Widner noted by adding the new RP1 Zone District, as it establishes a way for properties to become conforming without changing all creating a blanket size. PRD Zone District allows for higher density but is at the discretion of the Town and the Town may deny a

rezone to this district. It was noted that notice and hearings are required going first to Planning & Zoning and then to the Board of Trustees.

Right-of-way/roads-Attorney Widner noted the Town was developed in the 1960's with easements and platted to the owners within the subdivisions. He noted the government has maintained the property for 18 years or more with no objection, then the Town has a prescriptive easement on the property. The Town has maintained the roads and utilized the right-of-way for the last 60 years. The Town is allowed to continue to use and utilize the areas historically maintained. Any use beyond historical use, such as utilities is not allowed. This includes fiber and internet. It is necessary for the Town to address the issue to allow for the extension of utilities. This would require a 100% agreement from the residents. It was noted that additional research for tree fire mitigation in the right-of-way and how the mitigation will be able to be used.

Type C Process-Attorney Widner reviewed different types of permits. He noted site plans or additional information is required based on what the applicant is looking to do.

Driveways-Attorney Widner noted Mr. Cleary's concerns and stated there may be an opportunity for the Trustees to conduct further review on lengths and widths. The 300' notice issue has been in the code, the new code better defines where to measure. He noted that notice is not required by statute. Owners within 300' will receive notice but anyone may attend and speak at a public hearing.

Appeals-Attorney Widner addressed additional questions from Mr. Cleary concerning appeals of administrative decisions.

Discussion on language with roofs and the words should or shall. Discussion to leave language as should and not create a hard line with the word shall.

Paul Semmer asked for additional information on prescriptive easements as it pertains to the utilities within the road right-of-way. Specifically, were easements provided to UBSD and Colorado Natural Gas. Attorney Widner notes that the roads have been treated as public roads and therefore the utilities were allowed as such.

Attorney Widner reviewed the snow storage provision. Noting the provision to ensure the Town has the ability to store snow within the right-of-way. He noted there may be a need to regulate this provision. He also noted that as issues come up or if there are things that need to

be considered after it is adopted, it may be changed as a recommendation from the Planning and Zoning. Attorney Widner noted there are often times where requirements show on an application but don't exist within the code. If it is asked for and denied by the applicant, it defaults back to the code. It was noted to add the requirement of snow storage on site as it appears in the building application.

Manin noted language of code as it pertains to signage. He asked if the Town allowed to put any limits on the signage verbiage. Attorney Widner noted exceptions when the Town can limit content: mimic safety; obscene-very lengthy and vague as to what can and cannot be; can't put up "fighting" words (words that would incite riots); spoken word (fire in a theatre). He noted that municipalities do not touch content due to the limited areas of regulation.

Dan Cleary noted a recommendation to potentially remove the RP1 and just list the subdivisions where the lots were platted and are currently non-conforming or drafting a different solution. Discussion by the Commission to remove the RP1. Attorney Widner noted the Commission may make the recommendation to remove the zone from the proposed code if they wish. Discussion on whether or not to keep it or remove it. Attorney Widner recommended removing it and to come back and revisit the issue later.

Recommended changes: remove RP1 for further review.

Motion made by Johnson, Seconded by Hardy to recommend approval with the recommended change of removal of RP1 Zoning for further review.
Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

D. 0311 Wagon Road New Construction

Manager Eddy presented the project at 0311 Wagon Road. She noted the project has been recommended for approval by the Building Official. She noted that due to the conditions of the site, the rock retaining wall is required in the proposed location. Per the draft land use code page 147 Chapter 16B-7-150:

Location. The location and alignment of a retaining wall, screening wall, or a landscape wall should be determined based on site contours and changes in topography, natural features or man-made improvements. In no case shall a retaining wall or a landscape wall follow lot lines.

(1) Retaining wall:

(i) shall not be located within a setback except where the wall is deemed necessary by the Town to provide a reasonable buildable area for a lot.

Discussion that a materials sheet will need to be submitted and approved by the Building Official prior to permit issuance.

Discussion of the wetlands area and position of the homes are located along Wagon Road.

Discussion that the plans state the wetlands have not be delineated so no way to determine if the lower retaining wall encroaches in the wetlands. Homeowner noted the plans were stamped by the engineer with distances for the septic and wetlands flagged on site. It was advised to obtain an official designation for the wetlands.

Discussion to deny until additional information is provided on the wetlands delineation including a survey as it pertains to the septic and leach field. Discussion that this will fall under the purview of Summit County Environmental Health.

Discussion to require a septic permit prior to building permit issuance as well as materials sheet with stamped plans and fire department approval of driveway.

Motion by Beck, Seconded by Hardy contingent on the submittal of a septic permit, materials board and fire department approval of the driveway prior to permit issuance.

Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

V. ADJOURN

Motion made by O'Brien, Seconded by Stuckey to adjourn the meeting at 8:30 p.m..

Voting Yea: Beck, Hardy, O'Brien, Johnson, Manin, Stuckey, Watts

NEXT MEETING - July 2023

Discussion to move the July meeting to Thursday, July 6, 2023

Building Permit Application

Email to: info@townofblueriver.org
Questions? Call (970) 547-0545 ext. 1

Lot Number: 43 **Subdivision:** 1462
Blue River Physical Address: 135 Mount Argentine Road (CR 598), Blue River CO 80424

Homeowner Information:
Name: Owen & Ashley Nalle
Mailing Address: PO BOX 2137, Breckenridge CO 80424
Phone:
Email: owennalle@yahoo.com

Contractor Information
Company Name: Pinnacle Mountain Homes
Contact Name: Ashley Goldberg
Mailing Address: PO Box 1000, Frisco, CO 80443
Phone: 646-373-4434
Email: ashley@pinnaclemtnhomes.com
Contractor Registration #: BL23-000036
***Please note a Town of Blue River Business License is required for all businesses to conduct business in the Town of Blue River including contractors, sub-contractors and architects. ***

Description of Project:
SINGLE FAMILY NEW CONSTRUCTION.

Distance to Property Line	Type of Heat:RADIANT	Construction Type:5A
North:228'	Roof:METAL + SHINGLES	Building Height:34'
South:77'	Exterior Walls:WOOD SIDING	No. Stories:2
East:140'	Interior Walls:T&G + DRYWALL	Total # Bedrooms:6
West:90'	Basement Fin. Sq.Ft.:3,152 SF	Total # Bathrooms:8
New Addition/Res. Sq.Ft.:	Main Level Sq.Ft.:6,534 SF	Septic or Sewer:
Garage Sq.Ft.:1,821 SF	2nd Level Sq.Ft.:	SEPTIC
Total Square footage:11,613 SF	3rd Level Sq.Ft.:	

SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, PLUMBING, HEATING, VENTILIATION WORK, & FIREPLACES. THIS PERMIT BECOMES NULL AND VOID IF CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN ____ OR IF CONSTRUCTION IS SUSPENDED OR ABANDONED FOR A PERIOR OF ___ AT ANY TIME AFTER WORK IS COMMENCED.

I HEREBY CERTIFY THAT I HAVE READ AND EXAMINDED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL TOWN ORDINANCES AND STATE LAWS REGARDING BUILDING CONSTRUCTION AND TO BUILD ACCORDING TO THE APPROVED PLANS. THE GRANT OF A PERMIT DOES NOT PRESUMED TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.

Signature of Owner or Contractor: _____ Date: _____

Submittal Requirements

****ALL Submittals Must be Electronic****
Emailed to: info@townofblueriver.org

Planning & Zoning Review Submittal Requirements
****Please indicate via check box item included as well as page number in submitted packet.**

Completed √	Item	Description	Page #
	Site Plan	Scale: 1" = 10'; May appear on a single sight plan. IF on a separate page, please indicate the page.	
	SITE PLAN	Property Boundaries	SP1.01
	SITE PLAN	Building Envelope with setbacks	SP1.01
	SITE PLAN	Proposed Buildings	SP1.01
	SITE PLAN	Structures (existing & proposed)	SP1.01
	SITE PLAN	Driveway & Grades	SP1.01
	NA	A wetlands delineation & Stream crossing structures where applicable.	NA
	SURVEY PROVIDED BY RANGE WEST. SECOND PAGE OF PACKET.	Topographic survey, prepared and stamped by a licensed surveyor, indicating site contours at 2' intervals, easements, and significant natural features such as rock outcroppings, drainages and mature tree stands.	SV
		Transformer & vault location (if installed by owner or existing)	
	SEPTIC PERMIT INCLUDED	Well location; septic if applicable	SP1.01
	SITE PLAN	Snow storage areas and calculations	SP1.01
	SITE PLAN	Major site improvements	SP1.01
	SITE PLAN	Existing & proposed grading & drainage	SP1.01
	Landscaping Plan	*May be included in the site plan**	
		Landscaping must indicate tree removal for defensible space requirement; any trees 6" or more primarily noting the removal of any ponderosa pines or large trees. Clear cutting of a site is not allowed.	SP1.02
		Indicate the percentage of trees removed and revegetation to be conducted.	SP1.02
	LANDSCAPE NOTES	Upon completion of the construction project, all land must be raked and	SP1.02

		reseeded with native seed prior to issuance of CO. in cases of completion during snow coverage and/or winter, CO may be issued with conditions for completions within 60 days of the last snow and a deposit.	SP1.02
		Any major structures (retaining walls; fences; landscaping rocks) must be indicated in detail on plans in conformance with the design regulations.	SP1.02
		Indicating building walls, floors and roof relative to the site, including existing and proposed grades, retaining wall and proposed site improvements.	SP1.02
	Floor Plans	Scale 1/8" = 1'	
	FLOOR PLANS	Indicate the general layout of all rooms, approximate size, and total square footage of enclosed space for each floor level.	A1.01-A 1.11
	Exterior Elevations	Scale same as floor plans	
	BUILDING ELEVATIONS	Detail to indicate the architectural character of the residence, fenestration and existing and proposed grades. Elevations must include a description of exterior materials and colors.	A2.01-A 2.11
	Roof Plan	Scale same as floor plans	
	ROOF PLAN + SITE PLAN (BUILDING HEIGHTS)	Indicate the proposed roof pitch, overhang lengths, flue locations, roofing materials and elevations of major ridge lines and all eave lines.	SP1.01, A1.03, A1.09 & A1.10
	Materials Sheet	Display materials to be used. Color renderings are suggested as well. In cases of additions, if matching the existing structure, photos of current home.	MATERIAL LEDGEND ON SHEETS A2.01

After Approval and BEFORE Permit is Issued:

ELECTRONIC COPY Stamped set.

- **All of the above mentioned plus items below in one plan set.**

Completed √	Item	Page #
	Soils report if applicable	INCLUDED
	Electrical, plumbing and mechanical plans.	E/M SHEETS
	Construction Management Plan. Please refer to the Town Code and Architectural Guidelines for all requirements.	SP1.02
	Stamped structural plan	S SHEETS
	Current Summit County Septic System Permit (including system plot plan), or evidence of full payment of tap fees to Upper Blue Sanitary District.	APPLIED FOR
	Current Colorado Well Permit or evidence of full payment of tap fees to Timber Creek Water District	APPLIED FOR
	Colorado Department of Transportation Hwy Access Permit	
	Designation of General Contractor, except for bona fide homeowner contractor	PINNACLE MOUNTAIN HOMES
	For Manufactured Homes the following additional information is required	
	• State of Colorado Division of Housing Approved Plans	
	• State of Colorado Division of Housing Registered Installer Certificate	

Blue River Plan Submittal Requirements for Residential Plan Review

- When designing the structure, refer to the Blue River Municipal Town Code, Chapter 16 for zoning information and allowable uses/construction. The Building Code information is available under Chapter 18. https://townofblueriver.colorado.gov.

- Building Codes Adopted:
  - International Residential Code 2018
  - The Electrical Code is the current code adopted by the State of Colorado: 2020

Note: Applicable codes are required to be notated on plans.

- Snow loads:
  - Roofs shall be designed in accordance with accepted engineering practice based upon a ground snow load of 100 psf.
  - Balconies/decks-125 psf.
  - No reductions for duration.
- Frost line depth:
  - Foundation footing minimum depth below grade-40 inches.
  - Uncovered deck piers may be set at 24 inches.
- Roof underlayment 100% Ice & Water shield.
- Roof may be metal; 30-year minimum architectural grade, composition fiberglass (dark brown, dark gray, dark green, weathered wood or black only); or class-A #1 cedar shakes.
- Wind speed: 90 mph, exposure "B". Seismic design category: "B".
- Propane gas alarm/shutoff system required.
- Wood burning stoves: Required to meet Colorado Dept. of Health, Regulation No. 4.
- The building height limit in the Town is 35 feet. Refer to the Architectural Guidelines for additional information.
- Locally re-settable GFCI breakers are required in bathrooms.
- Compliance with the International Energy Conservation Code is required.
- Any application that would create an accessory apartment must meet zoning regulations and will not be processed without prior approval of the Town Board of Trustees.
- Note that Hwy 9 access permits may require 3-4 months and well permits 5-6 weeks.
- Planning & Zoning Commission approvals become void if the building permit is not issued within eighteen (18) months.
- Building permits become void if construction is discontinued for more than 180 days.

In order for your permit application to be reviewed and processed properly, the following construction information must be provided. **Note:** "Preliminary" and/or plans shown as "Not for Construction" or similar are unacceptable. ***Hardcopy submittals will not be accepted.***

Note: Items below are not all inclusive of the requirements. Please review the Building Application Packet, design guidelines, building and land use codes for complete information.

Soils Report

Must be sealed and signed by a licensed Colorado Engineer.

- Provide an engineer's soil investigation report indicating type of soil and recommended foundation design. include any required shoring.

Improvement Survey Plat

- Provide an Improvement Survey Plat (ISP) following Colorado Revised Statutes for new principal structures, substantial expansions (25% or more) to principal structures and new accessory dwelling units (ADU's).
- Provide a permanent reference to spot elevation (benchmark) that will not be disturbed during construction.
- Provide existing spot elevations at property corners and at midpoints of the side property lines.
- Must be stamped and signed by a Professional Land Surveyor (PLS) licensed by the state of Colorado.

Site Plan

- Provide site plan that shows dimensions reflecting the distances to property lines
- Indicate all public or private easements
- Show location of all proposed and existing structures with dimensions
- Prove type of construction for all structures on site
- Provide landscaping plan.
- Show permanent reference spot elevation (benchmark), existing spot elevations at property corners and at midpoints of the side property lines.
- Indicate roof drainage on site plan with arrows showing the direction of the gutter downspouts. Roof drainage shall flow towards the road and away from all structures.

Structural Plans

Plans must be sealed and signed by a Colorado Structural Engineer or Architect

- Indicate size, location and method of reinforcement for all proposed footings, column pads, piers, caissons, grad beams, foundation walls, decks, guardrails, guardrail posts. Specify location of reinforcing steel and anchor bolts.

- Provide complete and clearly dimensioned floor framing plan for each level and roof framing plan which indicates the materials, types, sizes and location of all structural elements.
- Provide complete structural design criteria including but not limited to required design loads, material specifications and structural construction requirements.
- Provide complete structural calculations for each structure.

Architectural Plans

- Provide complete and dimensioned floor layout at each level which identifies the use of each room.
- Provide Complete and dimensioned roof plan and indicate all roof slopes.
- Provide complete and dimensioned reflected ceiling plan.
- Provide exterior elevations for each side of the building which contains an overall building height and floor-to-floor heights and indicate location, size and types of all doors and glazed openings including hazardous glazing and fall protection locations.
- Provide a bulk plane diagram on front and rear exterior elevations relative to the base plane elevation. The base plan for the bulk plane is establishing by taking the average of the existing grades of the midpoints of the two side property lines.
- Provide building and wall sections which clearly identify the required type and location of all materials for construction of beams, columns, floors, walls, ceilings, roofs.
- Provide stair geometry. Include rise and run, handrail and guardrail heights.
- Provide one major section through the exterior wall from footings to the highest part of the roof (min. scale 1/4"=1')
- Provide square foot area breakdown per floor level.

Electrical Plans

Provide electrical plans showing the location and capacity of the service equipment and electrical panels, the location of all smoke detectors, carbons monoxide detectors, electrical receptacles, switches, and lighting fixtures.

Mechanical Plans

- Provide mechanical plans and indicate the location of all heating, ventilating and air conditioning equipment. Show the location of the condensing unit. Detail the equipment access and working clearances.
- Show dryer exhaust termination location and clearances, environmental exhaust termination locations and clearances.
- Provide Manual J and Manual D calculations. Must be legible. No exceptions.
- Provide all fireplace specifications, rated separation details, direct vent termination details when applicable, hearth extensions when required, chimney clearances, shutoff and control access.

Plumbing Plans

- Provide plumbing plans and indicate the location of all plumbing fixtures and appliances (Isometric may be required per the discretion of the plans examiner.)
- Provide the supply line size and main discharge size. Note the water supply inlet location.
- Indicate whether appliances are gas-operated, electric, or otherwise. List types of material to be used for all water supply, drainage and vent piping. Provide fixture max flow rates and insulation values.
- Gas load calculations and piping diagram is required.

Energy Conservation Plans

Provide verification that the project meets the requirements of the IECC, or provide a simulated energy performance analysis such as RES-check. Provide all required information per 2012 IECC R103.2.

Resubmittal Requirements

- Provide a written response addressing each correction.
- Provide revision clouds for each correction made.
- Provide updated information in the revision section of the title block.
- Provide complete plan packs per discipline requiring corrections. Example: If you are resubmitting for Civil corrections, provide a complete revised plan pack.

Subsoil Investigation Report

Rob Theobald P.E.

Prepared For:

135 Mount Argentine Road
Blue River, Colorado

This report presents the findings of sub-surface soils testing performed at 135 Mount Argentine Road, Blue River, Colorado. This testing was done in anticipation of the construction of a new single family residence. The purpose of said testing was to determine soil bearing pressure, groundwater conditions, soils classification for Onsite Wastewater Treatment System (OWTS) design, and any other special soil conditions so as to allow for design of foundations, shoring and excavation.

The findings in this report are based upon soils samples taken on June 7, 2023, observations of the soil in the test pit, and knowledge of excavations near the site and testing of the soil sample.

Project Description:

The anticipated project includes the construction of a new single family residence. The anticipated construction will be wood frame construction. It is anticipated that the foundation will be cast in place concrete foundation walls sitting on continuous strip footings. It is also anticipated that there will be point loads sitting on pads. The floor will be a cast in place slab on grade. It is anticipated that cut depths will be relatively shallow at less than 10 feet.

If cut depths exceed 10 feet Engineer should be called to inspect site conditions during excavation. Footings, foundation walls and associated reinforcement will be designed by the structural engineer for the project.

Site Conditions:

The lot is bounded by Mount Argentine Road to the north, residential parcels to the east and west and US Forest service to the south. Site vegetation is primarily spruce/fir forest. The site slopes gently to moderately to the north. A braid of Indiana Creek flows at the north east corner of the lot. The site was vacant and appeared to be largely undisturbed at the time of sampling. According to the Geologic Map of the Breckenridge Quadrangle, Summit County, Colorado (2003) near surface deposits are alluvial. This was confirmed with field testing.

Sub-surface Conditions:

Soils were taken from two pits excavated for the purpose of this report. Test pits were dug with a rubber tracked mini-excavator. Disturbed sampling methods were used.

The first test pit was dug on the north portion of the lot adjacent to the proposed soil treatment area of the OWTS and just north of the anticipated house site. Soils in test pit consisted of 3” of organic topsoil followed by reddish sandy gravel with cobbles and boulders to the limits of exploration at 7’. No groundwater or indication of groundwater was observed.

The second test pit was dug on a bench near the center of the lot within or immediately adjacent to the anticipated house site. Soils in test pit consisted of 3” of organic topsoil followed by reddish slightly silty slightly clayey sand to the limits of excavation at 8’. Groundwater was encountered at 2.5’.

Soil has slight to moderate swell potential.

Foundation:

Cast in place strip footings and pads will be ideal for this site. Foundation should be cast in place and should be placed on undisturbed native soils.

Footings should be designed for a maximum soil bearing pressure of 1,500 pounds per square foot with no minimum loading required.

Any soils disturbed during excavation, or that become inundated with water during excavation or prior to pouring of footers should be removed and replaced with dry native soil compacted to 95% Standard Proctor Density (ASTM D-698) or screened or crushed rock with a nominal size of .75-1.5". Foundations should not be placed on loose, wet or frozen soils.

Footings and foundation walls at footing steps should be poured against undisturbed soils as described above at the bottom of the forms as described above to prevent infiltration of water or backfill soil.

Foundation walls should be designed for a minimum unsupported length of 4'. Footers should be a minimum of 16" wide and minimum pad dimensions should be at least 24".

Based on these recommendations it is anticipated that settlement will be less than 1". Engineer should be called for an open hole inspection prior to placement of footings.

Reinforcing shall be installed per structural plans.

Slabs:

Concrete slabs should be poured on a 6" layer of .75"-1.5" screened rock placed on top of undisturbed native soil.

Slabs should also be isolated from foundation walls and columns by means of expansion joints to allow for unrestrained vertical movement of floor slabs.

Slab should be reinforced per the structural design.

Control joints in slab should be tooled into wet concrete, or saw cut as soon as practical to prevent or control cracking. Control joints should create areas no larger than 100 s.f., and should be laid out to with particular attention towards managing cracking from any corners, sharp turns in edges and blocked out portions of the slab.

A vapor barrier should be installed beneath the slab, and should be uninterrupted or fully sealed. Under-slab insulation should be installed that meets or exceed the 2018 International Energy Conservation Code (IECC 2018), or other applicable codes. Insulation should be continuous, or should be fully sealed, and an insulation material that can support the design loads should be used.

Under-slab utilities should be minimized to the extent possible. Backfilling of excavations for required utilities should be done with screened rock in the .75-1.5" range. Under-slab plumbing should be pressure tested prior to backfill, or pouring of the slab. All utilities should be isolated from the slab to allow for vertical movement as discussed above. Utility trenches entering the building envelope from the outside, or continuing from outside the excavation under the slab should be backfilled with well-compacted native material or dammed with clay to prevent water intrusion.

Foundation Drain:

Due to observed seasonal groundwater due to snow melting, limiting soils layers and ground frost conditions foundation drainage should be provided. A 4" perforated pipe wrapped in filter cloth located at or below footing depth, and bedded in at least 12" of screened rock in the .75-1.5" diameter range will provide foundation drainage. This drain should be located on the outside of the footing and sloped at at least 1% to daylight.

Because of observed and potential perched groundwater, foundation should be waterproofed. A drainage plane such as miri-Drain or Warm-n-Dri or 12" of screened rock shall be installed from 6" below finished grade to footer elevation to footer drain elevation. Foundation should be insulated and insulation should be installed that meets or exceed the 2018 International Energy Conservation Code (IECC 2018), or other applicable codes.

Retaining Walls:

Retaining walls, that is walls that are only backfilled on one side, should be designed with an equivalent passive fluid pressure of 45 p.s.f.. Provisions for drainage of groundwater from behind retaining walls should be made.

Radon:

No radon testing was done as part of this report and Engineer makes no claims of knowledge of radon levels on the site. It is advisable to assume radon levels could be elevated and to refer to a radon expert or Appendix F of the International Residential Code or other applicable codes.

Excavation and Shoring:

The observed soils are an OSHA Type C soil. Excavation safety shall responsibility of the contractor. If shoring is required Engineer should be contacted for a shoring design.

Backfill and Grading:

Backfill under landscape and unimproved areas should be mechanically compacted to minimize settling. Backfill under structural areas (including but not limited to slabs, sidewalks and brick pavers) should be compacted to a minimum of 95% Standard Proctor Density (ASTM D-698). Care should be taken during backfilling to make sure no rocks with a diameter of 8" or greater rest directly against foundation walls.

Additionally care should be taken to make sure foundation waterproofing is not damaged during backfill.

Site should be graded to provide positive surface drainage away from the structure. Grading should have a minimum of 6" of fall in the first 10' away from the structure, or should slope a minimum of 2% away from the structure to a swale sloped at a minimum of 2%.

OWTS:

Site appears well suited for onsite wastewater treatment (OWTS). Based on testing, anticipated infiltrative soils are a Type 1 with a high rock content resulting in an R-0 Type soil. Based on this a mounded sand filter soil treatment area with pressure dosing is anticipated.

Conclusion:

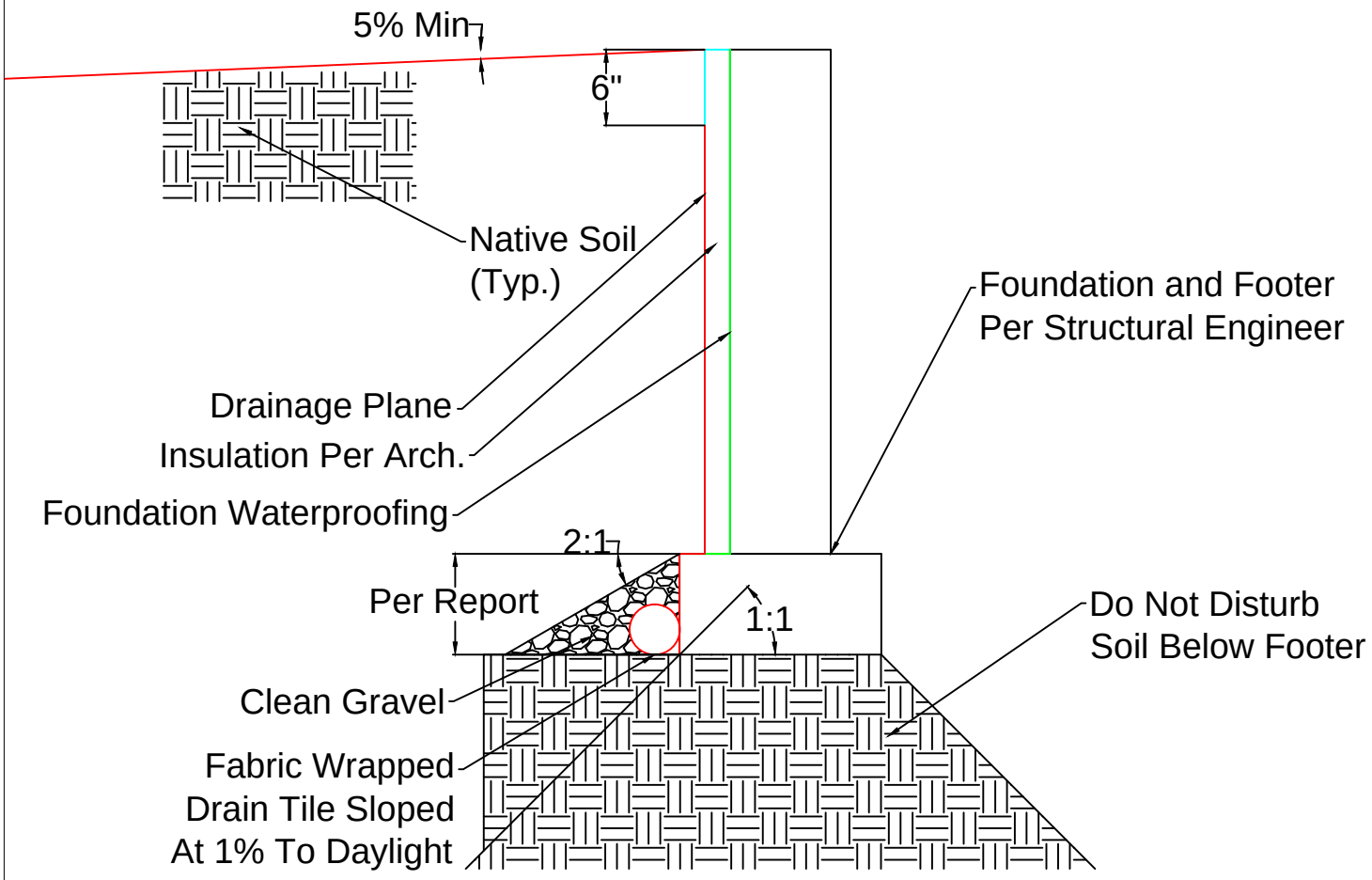
Soils on site are ideal for proposed methods of construction. If cut depths are to be excessive or if any changes in conditions are found Engineer should be contacted.

Due to nature of soils deposit it is recommended that Engineer be contacted to inspect excavation prior to placement of any foundations.

Due to practical constraints of pre-construction subsoil studies it is possible that unforeseen changes in conditions may be encountered. If any soils conditions different than those described in this report Engineer shall be contacted immediately.

Robert Theobald

Robert Theobald P.E.



Typical Foundation Drain Detail

N.T.S.

SUMMIT COUNTY
COLORADO

PUBLIC HEALTH | Environmental Health Division

970.668.4070 ph | 970.668.4255 f
www.SummitCountyCO.gov

0037 Peak One Dr. | PO Box 5660
Frisco, CO 80443

OWS_____

APPLICATION FOR AN ONSITE WASTEWATER TREATMENT SYSTEM PERMIT
(Please print or type information)

****PLEASE INCLUDE SITE PLAN WITH APPLICATION****

PROPERTY TAX SCHEDULE NO.: 6507503

LOT(S) 43 BLOCK _____ FIL _____ TRACT _____ SUBDIVISION Spruce Valley Ranch

IF METES & BOUNDS LEGAL DESCRIPTION: SECTION _____ TOWNSHIP _____ RANGE _____

STREET ADDRESS: 135 Mount Argentine RD SUMMIT COUNTY ROAD NO.: CR 598

IS THIS PROPERTY BACK COUNTRY (BC) ZONED? _____YES X_____NO

DOES THIS PROPERTY HAVE A DISTURBANCE ENVELOPE? X_____YES _____NO
(If YES, please indicate location on site plan)

PLEASE INCLUDE DIRECTIONS TO SITE ON BACK O F THIS PAGE
****

PROPERTY OWNER: Nalle, Owen and Ashley PHONE (_____)_____

MAILING ADDRESS: PO BOX 2137, Breckenridge, CO, 80424 EMAIL_____

APPLICANT (OWNER'S AGENT): Theobald Engineering and Construction PHONE (970) 409-7978

MAILING ADDRESS: PO Box 3817, Breckenridge, Colorado, 80424 EMAIL robtheobald@yahoo.com

LOT SIZE: 4.02 ACRE(S)
STRUCTURE TYPE: COMMERCIAL _____ OR RESIDENTIAL X
IN SEWER DISTRICT OR WITHIN 400 FT OF SEWER? _____Y X_____N
WATER SUPPLY: PRIVATE (WELL) X_____ OR PUBLIC _____
CLOTHES WASHER X_____ DISHWASHER X_____ GARBAGE DISPOSAL X_____ HOT TUB X_____
TOTAL NO. OF BEDROOMS PLANNED (INCLUDE ANY FUTURE BEDROOMS): 5

APPROPRIATE FEES MUST BE PAID TO THE SUMMIT COUNTY PUBLIC HEALTH DEPARTMENT, ENVIRONMENTAL HEALTH PRIOR TO ARRANGING THE INITIAL SITE INSPECTION(S). THE SITE INSPECTION DOES NOT GUARANTEE THE ISSUANCE OF A PERMIT. THE PERMIT FEE MUST BE PAID TO THE DEPARTMENT PRIOR TO PERMIT ISSUANCE. THE PERMIT ISSUANCE IS BASED ON THE ABOVE INFORMATION, THE ILLUSTRATED SITE PLAN AND ALL OTHER INFORMATION AS SUBMITTED AND APPROVED BY THE DEPARTMENT. THE ONSITE WASTEWATER TREATMENT SYSTEM PERMIT MUST BE ISSUED BEFORE A BUILDING PERMIT CAN BE OBTAINED. PLEASE CONTACT ENVIRONMENTAL HEALTH IF YOU HAVE QUESTIONS OR REQUIRE ASSISTANCE.

APPLICATION FOR AN ONSITE WASTEWATER TREATMENT SYSTEM PERMIT IS HEREBY SUBMITTED. THE UNDERSIGNED ACKNOWLEDGES THAT THE ABOVE INFORMATION IS TRUE AND THAT FALSE INFORMATION WILL INVALIDATE THE APPLICATION AND ANY SUBSEQUENT PERMIT. THIS APPLICATION IS VALID FOR ONE (1) YEAR.

SIGNATURE OF APPLICANT _____ DATE _____

****

Environmental Health Officer Approval for Permit_____ **Date**_____

Date Permit Issued_____

Environmental Health Officer Final Approval _____ **Date**_____

FILE NO.: _____

SITE PLAN

LOT(S) 43 BLOCK _____ FIL _____ TRACT _____ SUBDIVISION Spruce Valley Ranch

IF METES & BOUNDS LEGAL DESCRIPTION: SECTION _____ TOWNSHIP _____ RANGE _____

****

ANY REVISIONS TO THE SITE PLAN AS SUBMITTED AND APPROVED REQUIRES A REVISED SITE PLAN TO BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.

****

*****PLEASE INCLUDE DIRECTIONS TO SITE HERE*****

From Breck:
Go south on Hwy 9
Turn left onto Wagon Road
Turn left onto Indiana Creek Road
Turn right onto Mount Argentine Road
Property is on south side of road

Project: 135 Mount Argentine, Lot 43 Sub, Breckenridge, CO, 80424
New SFR, New Septic System

Number of Bedrooms:	5 Bedrooms
Design Flow:	750 (150 Gallons per Bedroom)
Percolation Rate:	N/A MPI
Soil Type:	3
Septic Tank Sizing:	Valley Precast 2000 gal. 3-comp (2000T-3CP-F-HH)
Dosing Rate (Calculated):	6-hour dose (Design Flow/4 = 187.5 gpd)
Float and Spacing:	Per Tank Manufacturer

Seepage Bed Sizing: (New Mounded Sand Bed, New Septic Tank, Pressure-dosed)

Gravel Bed Area = $\frac{\text{Flow}}{\text{LTAR}} = \frac{750 \text{ gpd}}{0.8 \text{ gpd/ft}^2}$ = 937.5 ft^2

Bed Length: $\frac{\text{Flow}}{\text{LLR}} = \frac{750 \text{ gpd}}{9 \text{ gpd/LF}}$ = 83.33 ft

Gravel Area Dimensions: 11.25 ft x 84 ft = 753.75 ft^2

Basal Area = $\frac{\text{Flow}}{\text{LTAR}} = \frac{750 \text{ gpd}}{0.55 \text{ gpd/ft}^2}$ = 1,363.63 ft^2

Basal Area Dimensions (Actual): 15.5 ft x 88 ft = 1,364 ft^2

System elevations:

Tank Outlet Elevation:	10228’
Field Inlet Elevation:	10225’

Profile Test Hole:

Date:

Hole Depth:

Bedrock @: NA

Groundwater @: NA

Impervious Strata @: NA

Depth	Note

Distribution System Design:

Spacing:	1’-6” from edge of bed 2’-9” center to center
Number:	4 End-dosed
Total Length:	256’ ft total
Diameter:	1.5 in

Holes in Laterals

1/8” holes in PVC Piping

Residual Pressure:	5 ft
Flow per Hole:	0.43 gpm @ residual
System Flow:	60 gpm
System Holes:	148 Calculated 144 Actual
Hole Spacing:	2 ft 3 in
Holes per Lateral:	36

System Flow during Pressure Distribution Dosing

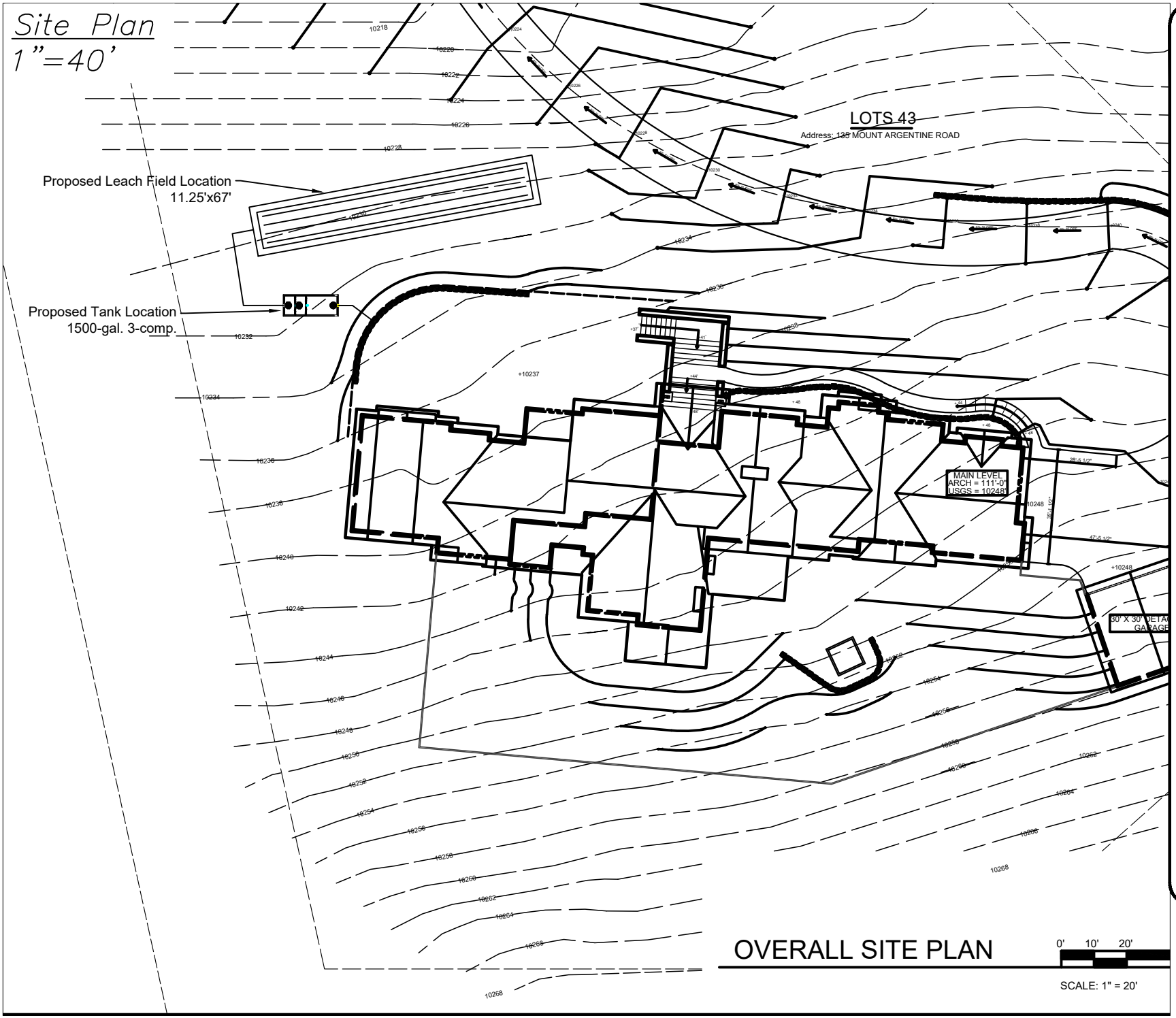
Flow/Lateral:	30 gpm
System Flow:	60 gpm
System Pump:	Orenco PF500511
Vol-gal of Laterals:	34.3 gal
Length of 2-inch manifold:	20 ft
Vol-gal of Manifold (2 in):	3.5 gal
Total Volume:	37.8 gal
Ratio:	4.96 dose/pipe volume

Note: Install clean out with 2 45’s or sweeping 90’s at end of each lateral per OWS Regulations

General Notes:

1) All work shall be done in workman like manner by licensed contractor
2) All work shall be done in accordance with permit and any changes shall be approved by Engineer and Summit County Environmental Health
(Including Onsite Wastewater Treatment System Regulations of Summit County Colorado, Amended February 27, 2018)
3) All work shall be done in accordance with all applicable codes
4) Sand Filter material shall be in accordance Summit County OWS Code with gradation report dated within one month if install. Design is based on "Secondary" sand media requirements. Engineer can be contacted for size reduction if "Preferred" sand media is to be used.
5) Bed material shall be in accordance Summit County OWS Code
6) Geotextile fabric (max 2 oz./yard per Summit County OWS Code) shall be installed covering seepage bed as a barrier to backfill material
7) All manifolds, laterals and looped ends shall be installed level
8) All holes in distribution lines shall face downwards.
9) All pressure distribution laterals shall be provided with clean out at end per Summit County OWS Code
10) All pressure distribution laterals shall be provided with an inspection port at the end of each lateral, and not more than fifty (50) feet apart.
11) All pressure distribution laterals shall be cleaned and purged after install
12) Squirt height test shall be performed to determine equal distribution and verify distal pressure is in accordance with design and Summit County OWS Code.
13) Septic tank, risers and manholes and all septic tank plumbing shall be installed per County OWS Regulations
14) An audible alarm shall be installed in residence only; no audible alarm shall be located outside
15) Mound cover shall be 8" = 10" of Type 1 or Type 2 soil with an additional 2" of topsoil
16) All disturbed areas shall be revegetated to prevent erosion
17) All disturbed areas particularly bed shall be seeded with grass seed mixture designed for revegetation by qualified landscaper, nursery or seed supplier prior to completion of project.
18) No additional vegetation shall be planted or allowed to grow over Soil Treatment area
19) Engineer shall be called for inspection at each County Inspection
20) OWS requires special operated and maintained including household water and plumbing use. Use and maintenance guide available from Summit County Government, State of Colorado, U.S. EPA shall be followed

Site Plan
1"=40'



OVERALL SITE PLAN

0' 10' 20'

SCALE: 1" = 20'

1) Call before you dig for underground locates, 811

2) All work shall be performed in a workman like manner compliant to industry standards

3) Any changes to plans shall be approved by Engineer prior to construction

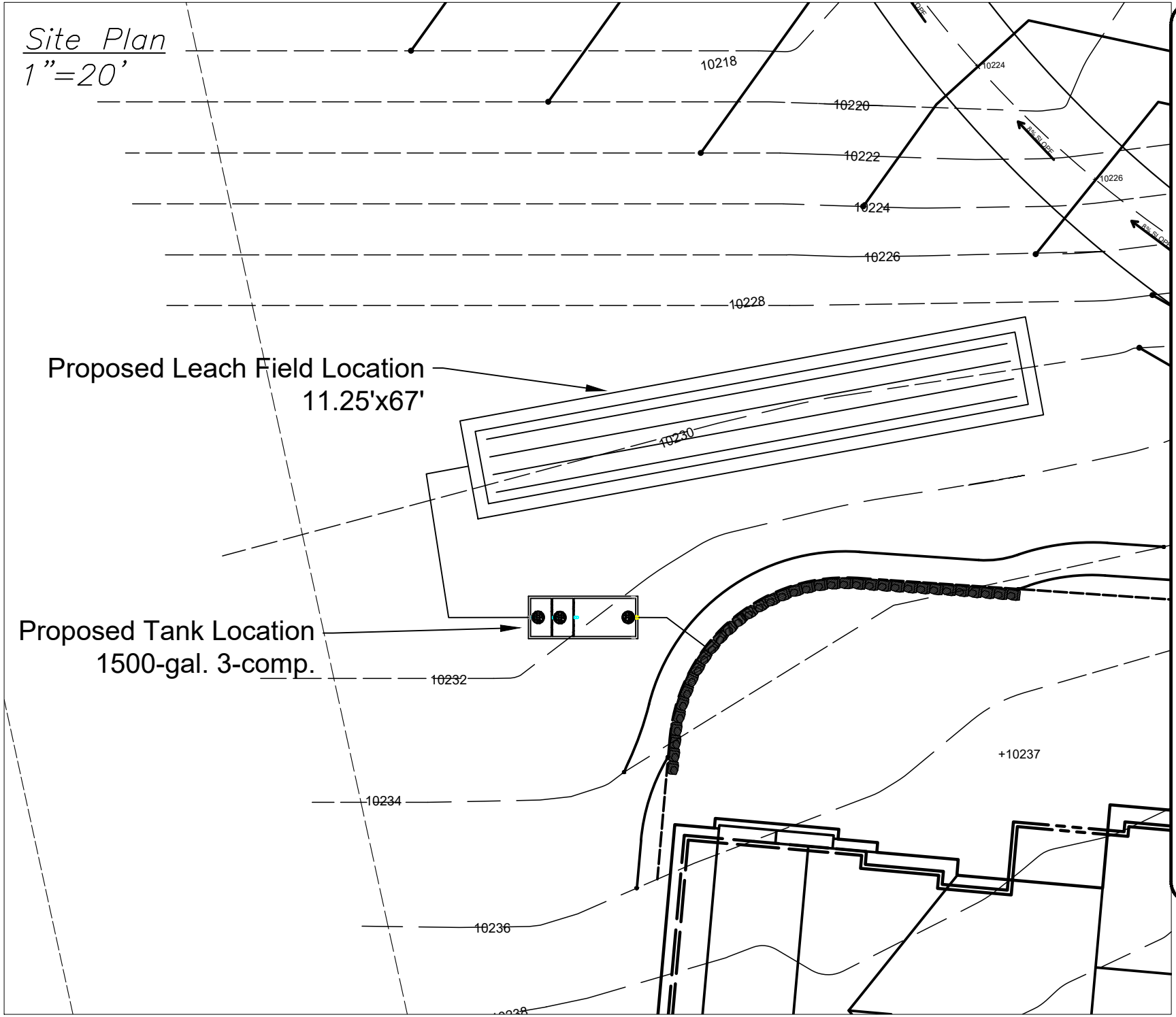
4) All work shall conform to Town of Breckenridge Standards and Code and Conditions of the Permit

No.	Revision/Issue

Theobald Engineering & Construction Services, LLP
1000 Airport Rd.
Breckenridge, CO 80424
(970) 409-7978

Job Name and Address
135 Mount Argentine Road
Lot 43 Spruce Valley Ranch Sub
Breckenridge, CO 80424

Project	Sheet
135 Mount Argentine	1 of 3
Date: 5/4/23	
Scale: 1" = 40'	



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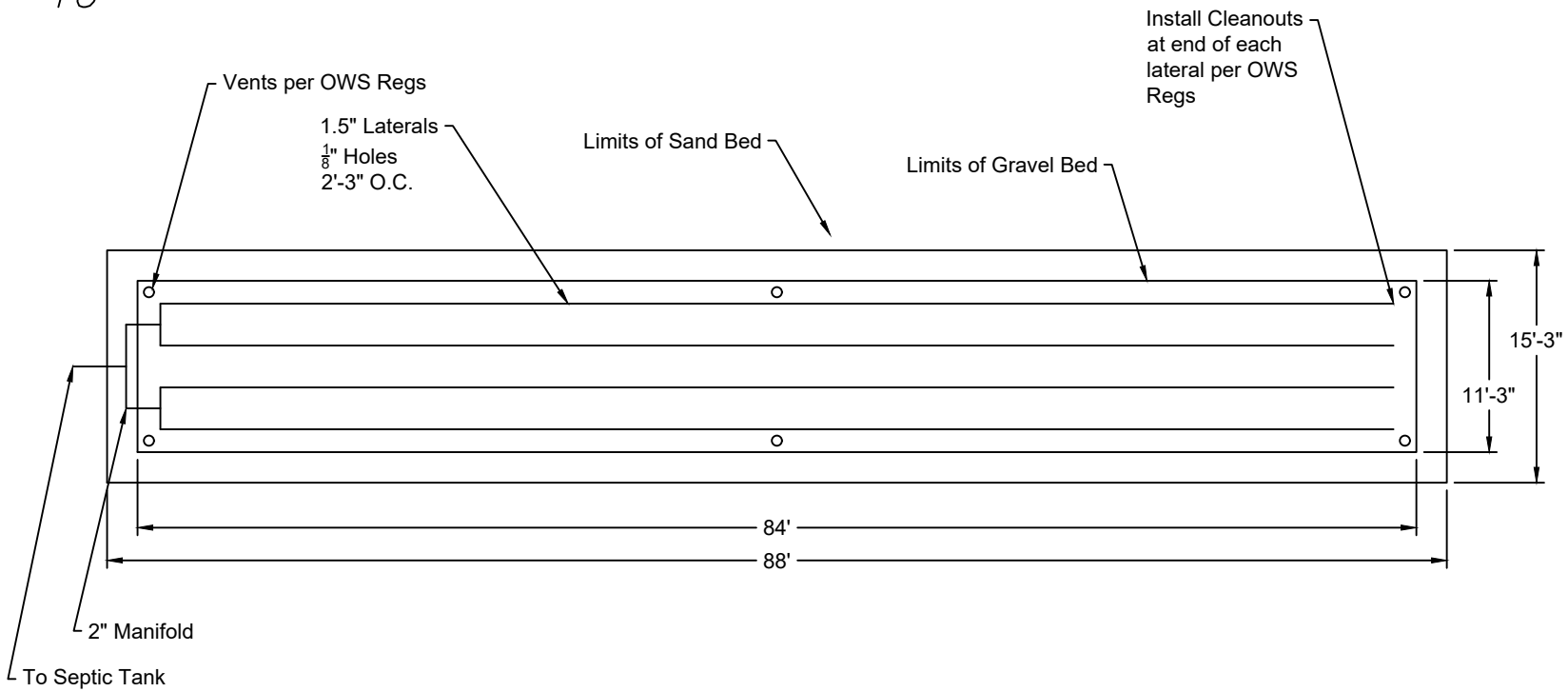
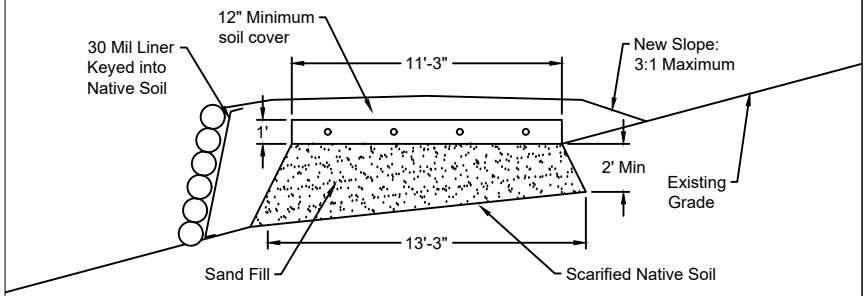
Project	Sheet
135 Mount Argentine	2 of 3
Date: 5/4/23	
Scale: 1" = 40'	

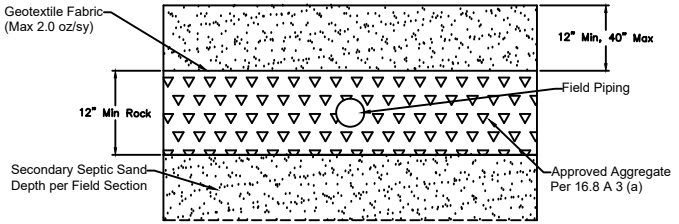
Field Layout
1"=10'



Field Section
1/8"=1'



Bed Section
NTS



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Breckenridge, CO 80424
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Project Name and Address
135 Mount Argentine Road
Lot 43 Spruce Valley Ranch Sub
Breckenridge, CO 80424

Project	Sheet
135 Mount Argentine	3 of 3
Date: 5/4/23	
Scale: Varies	

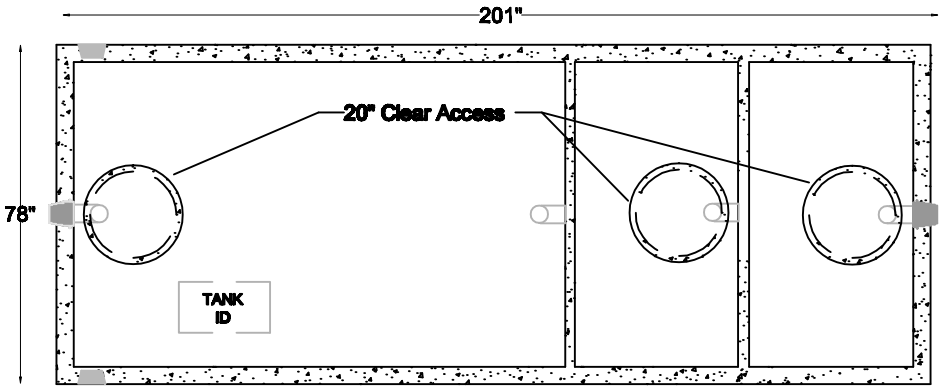
2000 Gallon Top Seam - 3CP Filter & High Head Pump

Item # 2000T-3CP-F-HH

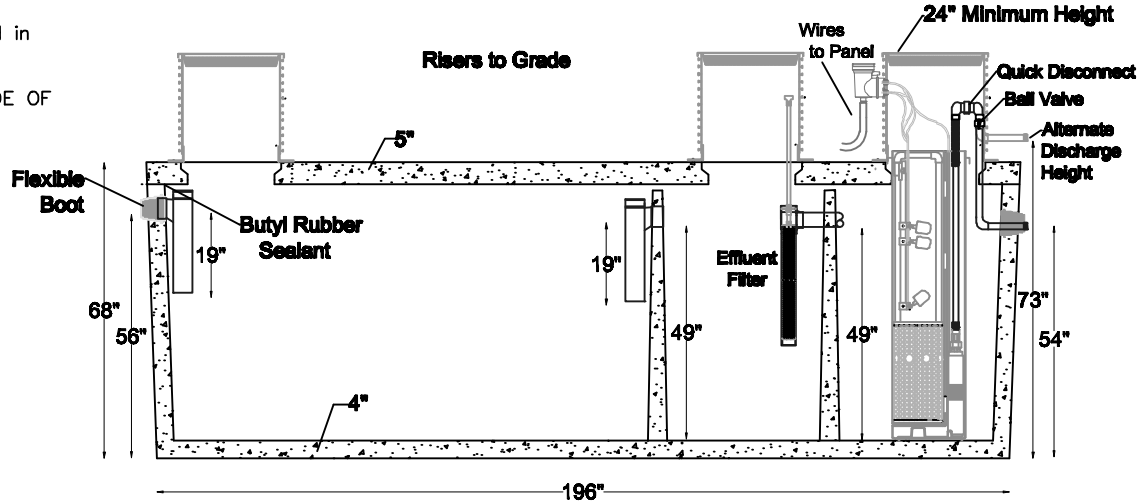
(2500 Gallon Total Volume)

DESIGN NOTES
- Design per performance test per ASTM C1227
- Top surface area 108.88 ft²
- f'c @ 28 days; concrete = 6,000 PSI Min.

Installation:
- Tank to be set on 5" min. sand bed or pea gravel
- Tank to be backfilled uniformly on all sides in lifts less than 24" and mechanically compacted
- Excavated material may be used for backfill, provided large stones are removed
- Excavation should be dewatered and tank filled with water prior to being put in service for installation with water table less than 2' below grade
- Meets C1644–06 for resilient connectors
- Inlet and Outlet identified above pipe
- Delivered complete with internal piping
- Control Panel to be mounted in sight line of tank
- TRUCK MUST BACK UP PERPENDICULAR TO LONG SIDE OF HOLE, LID IS A SECOND SET (NO EXCEPTIONS)
- 4' Maximum bury depth



Top View



Section View

ALLOWABLE BURY (Based on Water Table)	
WATER TABLE	ALLOWABLE EARTH FILL
0' – 0"	2' – 0"
1' – 0"	3' – 0"
2' – 0"	3' – 0"
3' – 0"	4' – 0"
DRY	4' – 0"

Pump:
- Lowers TSS and improves effluent quality to field
- Complete installation (wiring, panel, mounting and start-up procedures)
- Complete warranty

Service contracts available for maintenance

Digging Specs	Invert		Dimensions			Net Capacity				Net Weight		
19' Long x 8' Wide	Inlet	Outlet	Length	Width	Height	Inlet Side	Middle	Outlet	Total	Lid	Tank	Total
	56"	54"or73"	201"	78"	92"	1583 gal	517 gal	521 gal	2621 gal	6420 lbs	18590 lbs	25210 lbs

VALLEY PRECAST, Inc.
Buena Vista, Colorado

Phone: 719-395-6764
Fax: 719-395-3727
Website: www.valleyprecast.com
Email: frontdesk@valleyprecast.com

Orenco SYSTEMS® *Technical Data Sheet*

PF Series 60-Hz, 4-inch (100-mm) Submersible Effluent Pumps

Applications

Our 4-inch (100-mm) Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; 60-Hz PF Series models are CSA certified to the U.S. and Canadian safety standards for effluent pumps, meeting UL requirements.

Orenco's Effluent Pumps are used in a variety of applications, including pressurized drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more. These pumps are designed to be used with a Biotube® pump vault or after a secondary treatment system.

C US
LR80980
LR2053896

Powered by Franklin Electric

Features/Specifications

To specify this pump for your installation, require the following:

- Minimum 24-hour run-dry capability with no deterioration in pump life or performance*
- Patented 1⁄8-inch (3-mm) bypass orifice to ensure flow recirculation for motor cooling and to prevent air bind
- Liquid end repair kits available for better long-term cost of ownership
- TRI-SEAL™ floating impeller design on 10, 15, 20, and 30 gpm (0.6, 1.0, 1.3, and 1.9 L/sec) models; floating stack design on 50 and 75 gpm (3.2 and 4.7 L/sec) models
- Franklin Electric Super Stainless motor, rated for continuous use and frequent cycling
- Type SOOW 600-V motor cable

** Not applicable for 5-hp (3.73 kW) models*

Standard Models

See specifications chart, pages 2-3, for a list of standard pumps. For a complete list of available pumps, call Orenco.

Product Code Diagram

PF [50] [05] [1] [1] [ ] - [ ]

Cord length, ft (m):‡
Blank = 10 (3) 20 = 20 (6)
30 = 30 (9) 50 = 50 (15)

Check valve:
Blank = no internal check valve
CV = internal check valve†

Voltage, nameplate:
1 = 115* 200 = 200
2 = 230 4 = 460

Frequency:
1 = single-phase 60 Hz
3 = three-phase 60 Hz

Horsepower (kW):
03 = ⅓ hp (0.25) 05 = ½ hp (0.37)
07 = ¾ hp (0.56) 10 = 1 hp (0.75)
15 = 1½ hp (1.11) 20 = 2 hp (1.50)
30 = 3 hp (2.24) 50 = 5 hp (3.73)

Nominal flow, gpm (L/sec):
10 = 10 (0.6) 15 = 15 (1.0)
20 = 20 (1.3) 30 = 30 (1.9)
50 = 50 (3.2) 75 = 75 (4.7)

Pump, PF Series

* ½-hp (0.37kW) only
† Available for 10 gpm (0.6 L/sec), 1/2 hp (0.37 kW) only
‡ Note: 20-ft cords are available only for single-phase pumps through 1½ hp

Specifications

Pump Model	Design gpm (L/sec)	Horsepower (kW)	Phase	Nameplate voltage	Actual voltage	Design flow amps	Max amps	Impellers	Discharge size and material [1]	Length, in. (mm)	Min. liquid level, [2] in. (mm)	Weight, [3] lb (kg)	Rated cycles/day
PF100511	10 (0.6)	0.50 (0.37)	1	115	120	12.7	12.7	6	1 ¼ in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100511CV	10 (0.6)	0.50 (0.37)	1	115	120	12.7	12.7	6	1 ¼ in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100512	10 (0.6)	0.50 (0.37)	1	230	240	6.3	6.3	6	1 ¼ in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF10053200	10 (0.6)	0.50 (0.37)	3	200	208	3.8	3.8	6	1 ¼ in. GFP	23.0 (660)	16 (406)	26 (12)	300
PF100712 [4, 5]	10 (0.6)	0.75 (0.56)	1	230	240	8.3	8.3	8	1 ¼ in. GFP	25.9 (658)	17 (432)	30 (14)	300
PF10073200 [4, 5]	10 (0.6)	0.75 (0.56)	3	200	208	5.1	5.2	8	1 ¼ in. GFP	25.4 (645)	17 (432)	31 (14)	300
PF101012 [5, 6]	10 (0.6)	1.00 (0.75)	1	230	240	9.6	9.6	9	1 ¼ in. GFP	27.9 (709)	18 (457)	33 (15)	100
PF10103200 [5, 6]	10 (0.6)	1.00 (0.75)	3	200	208	5.5	5.5	9	1 ¼ in. GFP	27.3 (693)	18 (457)	37 (17)	300
PF102012 [5, 6, 7, 8]	10 (0.6)	2.00 (1.49)	1	230	240	12.1	12.1	18	1 ¼ in. SS	39.5 (1003)	22 (559)	48 (22)	100
PF102032 [5, 6, 8]	10 (0.6)	2.00 (1.49)	3	230	240	7.5	7.6	18	1 ¼ in. SS	37.9 (963)	20 (508)	44 (20)	300
PF10203200 [5, 6, 8]	10 (0.6)	2.00 (1.49)	3	200	208	8.7	8.7	18	1 ¼ in. SS	37.9 (963)	20 (508)	44 (20)	300
PF150311	15 (1.0)	0.33 (0.25)	1	115	120	8.7	8.8	3	1 ¼ in. GFP	19.5 (495)	15 (380)	23 (10)	300
PF150312	15 (1.0)	0.33 (0.25)	1	230	240	4.4	4.5	3	1 ¼ in. GFP	19.5 (495)	15 (380)	23 (10)	300
PF200511	20 (1.3)	0.50 (0.37)	1	115	120	12.3	12.5	4	1 ¼ in. GFP	22.3 (566)	18 (457)	25 (11)	300
PF200512	20 (1.3)	0.50 (0.37)	1	230	240	6.4	6.5	4	1 ¼ in. GFP	22.5 (572)	18 (457)	26 (12)	300
PF20053200	20 (1.3)	0.50 (0.37)	3	200	208	3.7	3.8	4	1 ¼ in. GFP	22.3 (566)	18 (457)	26 (12)	300
PF201012 [4, 5]	20 (1.3)	1.00 (0.75)	1	230	240	10.5	10.5	7	1 ¼ in. GFP	28.4 (721)	20 (508)	33 (15)	100
PF20103200 [4, 5]	20 (1.3)	1.00 (0.75)	3	200	208	5.8	5.9	7	1 ¼ in. GFP	27.8 (706)	20 (508)	33 (15)	300
PF201512 [4, 5]	20 (1.3)	1.50 (1.11)	1	230	240	12.4	12.6	9	1 ¼ in. GFP	34.0 (864)	24 (610)	41 (19)	100
PF20153200 [4, 5]	20 (1.3)	1.50 (1.11)	3	200	208	7.1	7.2	9	1 ¼ in. GFP	30.7 (780)	20 (508)	35 (16)	300
PF300511	30 (1.9)	0.50 (0.37)	1	115	120	11.8	11.8	3	1 ¼ in. GFP	21.3 (541)	20 (508)	28 (13)	300
PF300512	30 (1.9)	0.50 (0.37)	1	230	240	6.2	6.2	3	1 ¼ in. GFP	21.3 (541)	20 (508)	25 (11)	300
PF30053200	30 (1.9)	0.50 (0.37)	3	200	208	3.6	3.6	3	1 ¼ in. GFP	21.3 (541)	20 (508)	25 (11)	300
PF300712	30 (1.9)	0.75 (0.56)	1	230	240	8.5	8.5	5	1 ¼ in. GFP	24.8 (630)	21 (533)	29 (13)	300
PF30073200	30 (1.9)	0.75 (0.56)	3	200	208	4.9	4.9	5	1 ¼ in. GFP	24.6 (625)	21 (533)	30 (14)	300
PF301012 [4]	30 (1.9)	1.00 (0.75)	1	230	240	10.4	10.4	6	1 ¼ in. GFP	27.0 (686)	22 (559)	32 (15)	100
PF30103200 [4]	30 (1.9)	1.00 (0.75)	3	200	208	5.8	5.8	6	1 ¼ in. GFP	26.4 (671)	22 (559)	33 (15)	300
PF301512 [4, 5]	30 (1.9)	1.50 (1.11)	1	230	240	12.6	12.6	8	1 ¼ in. GFP	32.8 (833)	24 (610)	40 (18)	100
PF30153200 [4, 5]	30 (1.9)	1.50 (1.11)	3	200	208	6.9	6.9	8	1 ¼ in. GFP	29.8 (757)	22 (559)	34 (15)	300
PF301534 [4, 5]	30 (1.9)	1.50 (1.11)	3	460	480	2.8	2.8	8	1 ¼ in. GFP	29.5 (685)	22 (559)	34 (15)	300
PF302012 [5, 6, 7]	30 (1.9)	2.00 (1.49)	1	230	240	11.0	11.0	10	1 ¼ in. SS	35.5 (902)	26 (660)	44 (20)	100
PF30203200 [5, 6]	30 (1.9)	2.00 (1.49)	3	200	208	9.3	9.3	10	1 ¼ in. SS	34.0 (864)	24 (610)	41 (19)	300
PF303012 [5, 6, 7, 8]	30 (1.9)	3.00 (2.23)	1	230	240	16.8	16.8	14	1 ¼ in. SS	44.5 (1130)	33 (838)	54 (24)	100
PF303032 [5, 6, 8]	30 (1.9)	3.00 (2.23)	3	230	240	10.0	10.1	14	1 ¼ in. SS	44.3 (1125)	27 (686)	52 (24)	300
PF305012 [5, 6, 7, 8]	30 (1.9)	5.00 (3.73)	1	230	240	25.6	25.8	23	1 ¼ in. SS	66.5 (1689)	53 (1346)	82 (37)	100
PF305032 [5, 6, 8]	30 (1.9)	5.00 (3.73)	3	230	240	16.6	16.6	23	1 ¼ in. SS	60.8 (1544)	48 (1219)	66 (30)	300
PF30503200 [5, 6, 8]	30 (1.9)	5.00 (3.73)	3	200	208	18.7	18.7	23	1 ¼ in. SS	60.8 (1544)	48 (1219)	66 (30)	300
PF500511	50 (3.2)	0.50 (0.37)	1	115	120	12.1	12.1	2	2 in. SS	20.3 (516)	24 (610)	27 (12)	300
PF500512	50 (3.2)	0.50 (0.37)	1	230	240	6.2	6.2	2	2 in. SS	20.3 (516)	24 (610)	27 (12)	300
PF500532	50 (3.2)	0.50 (0.37)	3	230	240	3.0	3.0	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF50053200	50 (3.2)	0.50 (0.37)	3	200	208	3.7	3.7	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF500534	50 (3.2)	0.50 (0.37)	3	460	480	1.5	1.5	2	2 in. SS	20.3 (516)	24 (610)	28 (13)	300
PF500712	50 (3.2)	0.75 (0.56)	1	230	240	8.5	8.5	3	2 in. SS	23.7 (602)	25 (635)	31 (14)	300
PF500732	50 (3.2)	0.75 (0.56)	3	230	240	3.9	3.9	3	2 in. SS	23.7 (602)	25 (635)	32 (15)	300

Specifications, cont.

Pump Model	Design gpm (L/sec)	Horsepower (kW)	Phase	Nameplate voltage	Actual voltage	Design flow amps	Max amps	Impellers	Discharge size and material [1]	Length, in. (mm)	Min. liquid level, [2] in. (mm)	Weight, [3] lb (kg)	Rated cycles/day
PF50073200	50 (3.2)	0.75 (0.56)	3	200	208	4.9	4.9	3	2 in. SS	23.1 (587)	26 (660)	32 (15)	300
PF500734	50 (3.2)	0.75 (0.56)	3	460	480	1.8	1.8	3	2 in. SS	34.8 (884)	25 (635)	31 (14)	300
PF501012	50 (3.2)	1.00 (0.75)	1	230	240	10.1	10.1	4	2 in. SS	27.0 (686)	26 (660)	35 (16)	100
PF50103200	50 (3.2)	1.00 (0.75)	3	200	208	5.7	5.7	4	2 in. SS	26.4 (671)	26 (660)	39 (18)	300
PF501034	50 (3.2)	1.00 (0.75)	3	460	480	2.2	2.2	4	2 in. SS	26.4 (671)	26 (660)	39 (18)	300
PF501512[4]	50 (3.2)	1.50 (1.11)	1	230	240	12.5	12.6	5	2 in. SS	32.5 (826)	30 (762)	41 (19)	100
PF50153200[4]	50 (3.2)	1.50 (1.11)	3	200	208	7.0	7.0	5	2 in. SS	29.3 (744)	26 (660)	35 (16)	300
PF503012 [4, 5, 7, 8]	50 (3.2)	3.00 (2.23)	1	230	240	17.7	17.7	8	2 in. SS	43.0 (1092)	37 (940)	55 (25)	100
PF50303200 [4, 5, 8]	50 (3.2)	3.00 (2.23)	3	200	208	13.1	13.1	8	2 in. SS	43.4 (1102)	30 (762)	55 (25)	300
PF503034 [4, 5, 8]	50 (3.2)	3.00 (2.23)	3	460	480	5.3	5.3	8	2 in. SS	40.0 (1016)	31 (787)	55 (25)	300
PF505012 [5,6,7,8]	50 (3.2)	5.00 (3.73)	1	230	240	26.2	26.4	13	2 in. SS	65.4 (1661)	55 (1397)	64 (29)	100
PF505032 [5,6, 8]	50 (3.2)	5.00 (3.73)	3	230	240	16.5	16.5	13	2 in. SS	59.3 (1506)	49 (1245)	64 (29)	300
PF751012	75 (4.7)	1.00 (0.75)	1	230	240	9.9	10.0	3	2 in. SS	27.0 (686)	27 (686)	34 (15)	100
PF751512	75 (4.7)	1.50 (1.11)	1	230	240	12.1	12.3	4	2 in. SS	33.4 (848)	30 (762)	44 (20)	100

1 GFP = glass-filled polypropylene; SS = stainless steel. The 1 ¼-in. NPT GFP discharge is 2 7⁄8 in. octagonal across flats; the 1 ¼-in. NPT SS discharge is 2 1⁄8 in. octagonal across flats; and the 2-in. NPT SS discharge is 2 7⁄8 in. hexagonal across flats. Discharge is female NPT threaded, U.S. nominal size, to accommodate Orenco® discharge hose and valve assemblies. Consult your Orenco Distributor about fittings to connect hose and valve assemblies to metric-sized piping.

2 Minimum liquid level is for single pumps when installed in an Orenco Biotube® Pump Vault or Universal Flow Inducer. In other applications, minimum liquid level should be top of pump. Consult Orenco for more information.

3 Weight includes carton and 10-ft (3-m) cord.

4 High-pressure discharge assembly required.

5 Do not use cam-lock option (Q) on discharge assembly.

6 Custom discharge assembly required for these pumps. Contact Orenco.

7 Capacitor pack (sold separately or installed in a custom control panel) required for this pump. Contact Orenco.

8 Torque locks are available for all pumps, and are supplied with 3-hp and 5-hp pumps.

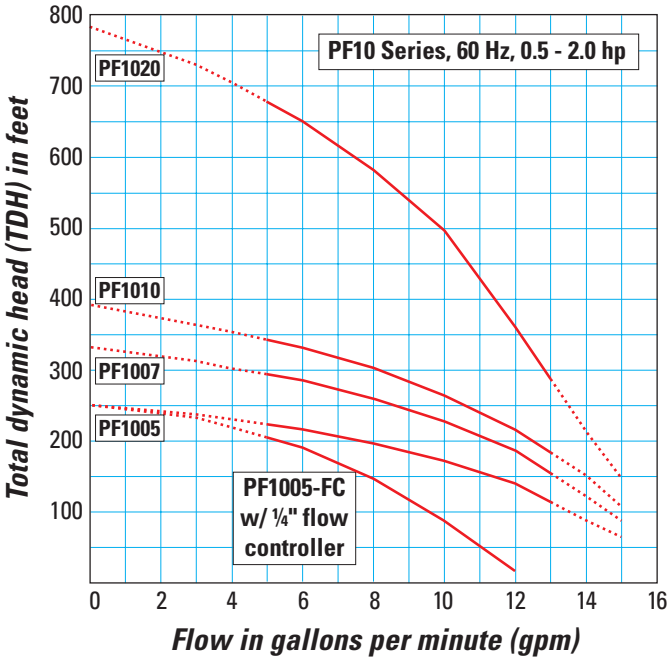
Materials of Construction

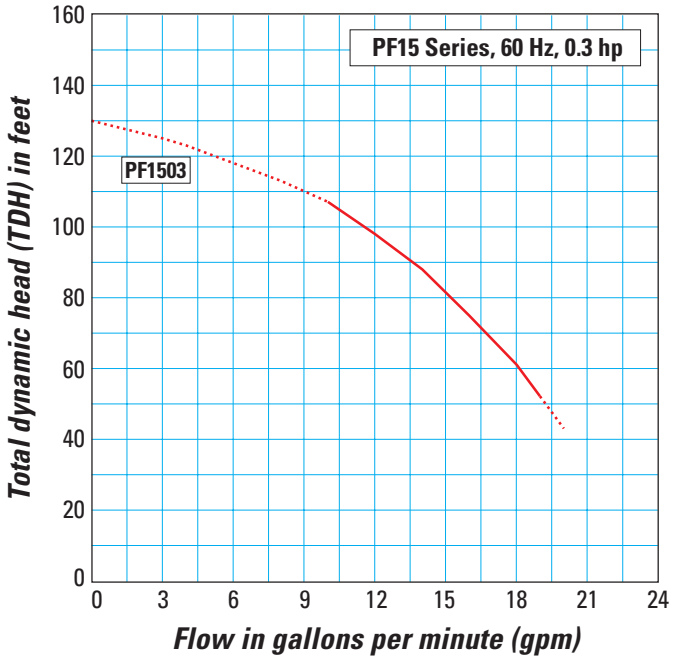
Discharge	Glass-filled polypropylene or stainless steel
Discharge bearing	Engineered thermoplastic (PEEK)
Diffusers	Glass-filled PPO (Noryl GFN3)
Impellers	Celcon® acetal copolymer on 10-, 20, and 30-gpm models; 50-gpm impellers are Noryl GFN3
Intake screen	Polypropylene
Suction connection	Stainless steel
Drive shaft	7/16 inch hexagonal stainless steel, 300 series
Coupling	Sintered stainless steel, 300 series
Shell	Stainless steel, 300 series
Motor	Franklin motor exterior constructed of stainless steel. Motor filled with deionized water and propylene glycol for constant lubrication. Hermetically sealed motor housing ensures moisture-free windings. All thrust absorbed by Kingsbury-type thrust bearing. Rated for continuous duty. Single-phase motors and 200 and 230 V 3-phase motors equipped with surge arrestors for added security. Single-phase motors through 1.5 hp (1.11 kW) have built-in thermal overload protection, which trips at 203-221˚ F (95-105˚ C).

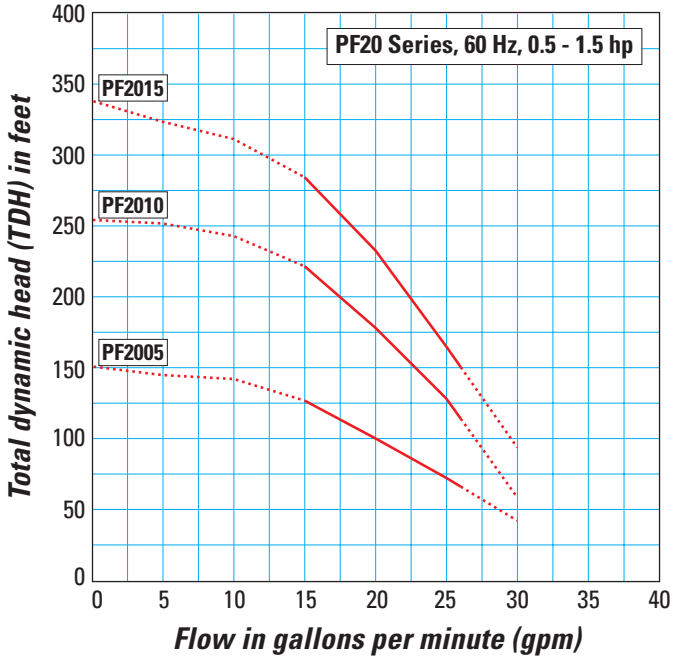
Using a Pump Curve

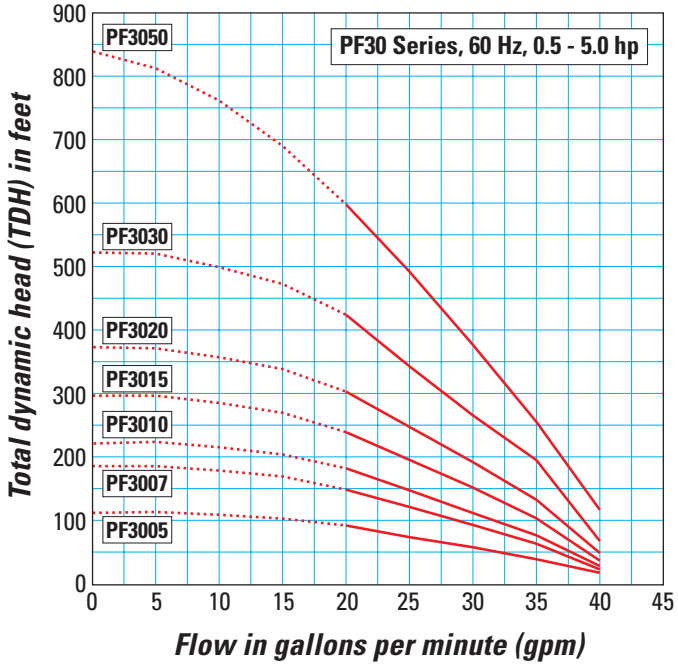
A *pump curve* helps you determine the best pump for your system. Pump curves show the relationship between flow and pressure (total dynamic head, or TDH), providing a graphical representation of a pump's optimal performance range. Pumps perform best at their nominal flow rate. These graphs show optimal pump operation ranges with a solid line and show flow rates outside of these ranges with a dashed line. For the most accurate pump specification, use Orenco's PumpSelect™ software.

Pump Curves

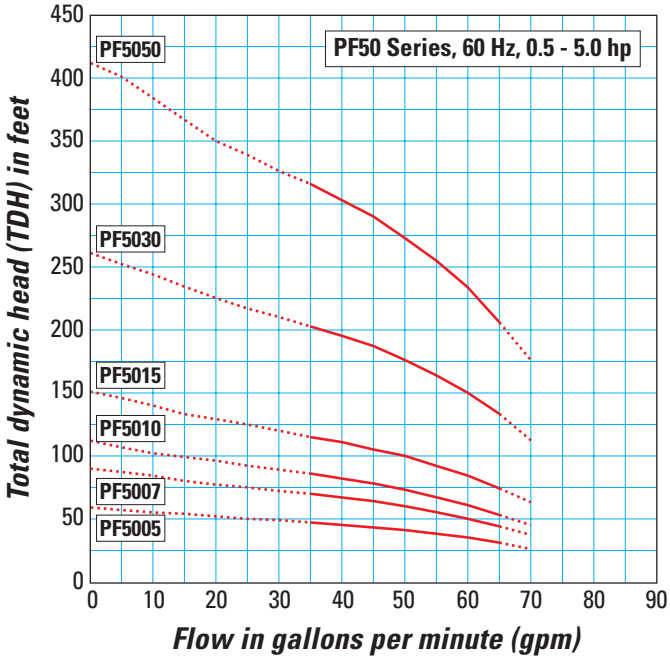


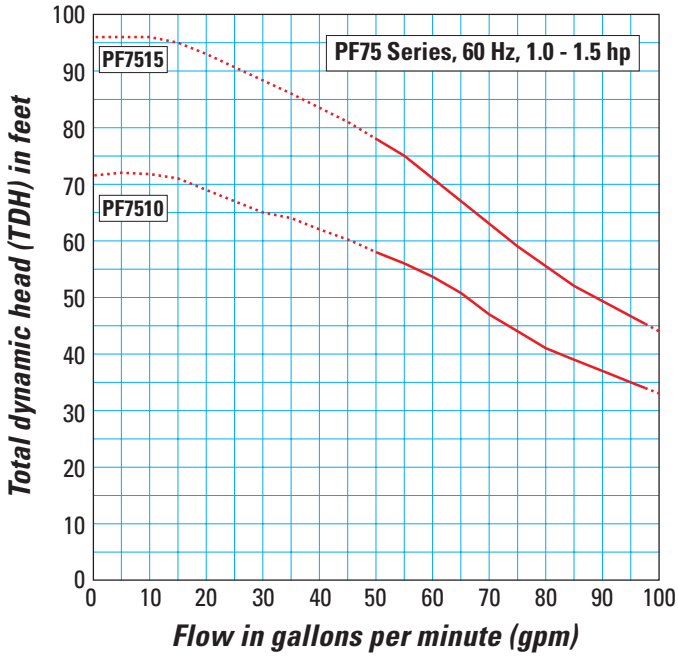






Pump Curves, cont.



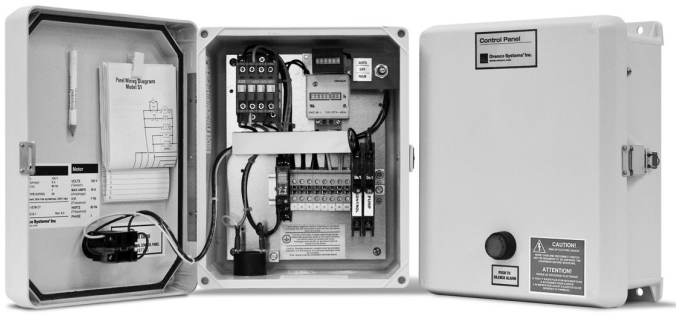


Technical Data Sheet

S-Series Simplex Control Panels

Applications

Orenco® S-Series Simplex Control Panels control single pumps in effluent sewer (STEP) systems, onsite septic systems, and for pump control into conventional gravity sewer systems.



Orenco S-Series Simplex Control Panel (S1ETMCT shown)

General

Orenco® S-Series Simplex Control Panels are electromechanical panels for controlling single pumps. Standard features include an Automatic/Off/Manual (Auto/Off/Man) toggle switch, controls circuit breaker, pump circuit breaker, automatic motor control operation, and an audible/visible high water level alarm with auto reset. Specifications for standard and optional features are listed on page 2.

All S-Series control panels have a 120 VAC controls circuit breaker. S1 panels have a 120 VAC pump circuit breaker, while S2 panels have a 240 VAC pump circuit breaker.

All S-Series panels can be used with both mechanical and mercury float switches.

Listed per UL-508 and cUL-508; CE-listed versions of S-Series panels are available.

Standard Models

S1, S2

Materials of Construction

Component	Material
Enclosure	UV-resistant fiberglass, Type 4X (IP 66)
Hinge	Stainless steel
Latch	Stainless steel

Specifications

Feature	Specifications
Height, in. (mm)	11.5 (292)
Width, in. (mm)	9.3 (236)
Depth, in. (mm)	5.4 (137)
S1 panel ratings*	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz
S2 panel ratings*	240 VAC, 3 hp (2.24 kW) 16 A, 1-phase, 60 Hz

** Pump motors used with these panels require internal overload protection.*

Product Code Diagram

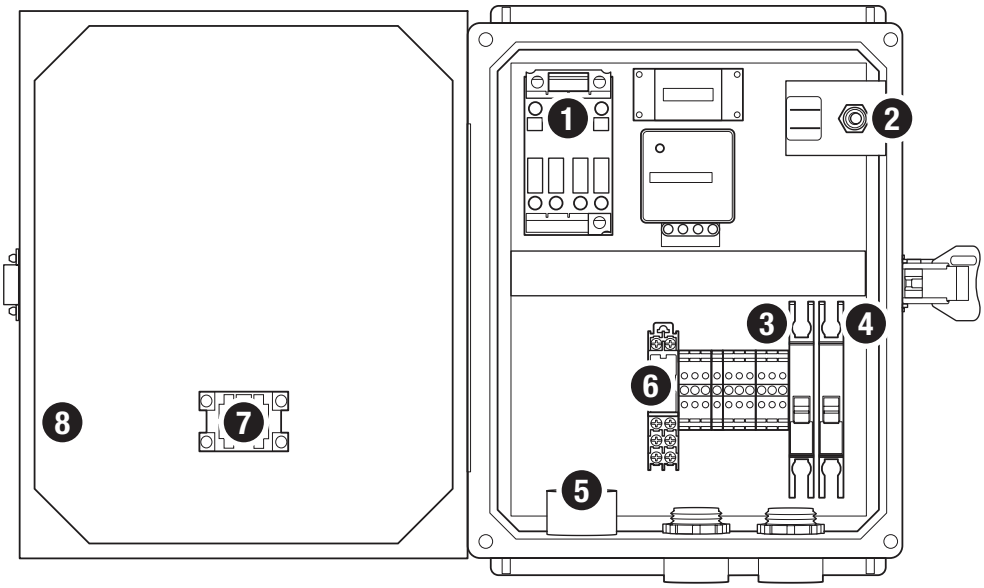
S | 1 | [ ] | ETM CT

Standard options (list in order):
- PT = programmable timer
- RO = redundant off relay
- DS = disconnect switch
- ETM = elapsed time meter
- CT = event counter
- HT = heater
- PRL = pump run light
- PL = power light
- SA = surge arrestor

Intrinsically safe relays:
- Blank = standard, no IR relays
- IR1 = up to 2 float switches
- IR2 = up to 4 float switches

Pump voltage:
- 1 = 120 VAC
- 2 = 120 VAC or 240 VAC

S Series simplex control panel



Orenco S-Series Simplex Control Panel (S1ETMCT shown)

Standard Features

Feature	Specifications*
1. Motor-start contactor	120 VAC: 17 FLA, 1 hp (0.75 kW), 2.5 million cycles at FLA 240 VAC: 17 FLA, 3 hp (2.24 kW), 2.5 million cycles at FLA
2. Auto/Off/Man toggle switch	Single-pole, double-throw HOA switch
3. Controls circuit breaker	10 A, OFF/ON switch, single pole, DIN rail mounting with thermal magnetic tripping characteristics
4. Pump circuit breaker	20 A, OFF/ON switch, single pole (120 VAC) or double pole (240 VAC), DIN rail mounting with thermal magnetic tripping characteristics
5. Audible alarm	95 dB at 24 in. (610 mm), warble-tone sound; gasketed, UL Type 4X (IP66)
6. Audible alarm silence relay	Automatic reset, DIN rail mount
7. Visible alarm	7⁄8-in. (22-mm) diameter red lens, "Push-to-silence," UL Type 4X (IP66), 1 W LED light
8. Enclosure	UV-resistant fiberglass and stainless steel, UL Type 4X (IP66)

Optional Features

Feature	Specifications*	Product code adder
Intrinsically safe control relays	Listed per UL 698A, for Class 1 Div. 1, groups A, B, C, D hazardous locations (Requires larger enclosure)	IR
Programmable timer	Repeat cycle from 0.05 seconds to 30 hours; separate variable controls for OFF & ON time periods	PT
Redundant off relay	DIN rail mount; provides a secondary off; sounds alarm upon low level condition	RO
Elapsed time meter	7-digit, non-resettable; limit of 99,999 hours; accurate to 0.01 hours	ETM
Event counter	6-digit, non-resettable	CT
Heater	anti-condensation heater; self-adjusting: radiates additional wattage as temperature drops	HT
Pump run light	7⁄8-in. (22-mm) diameter green lens; UL Type 4X (IP66), 1 W LED light	PRL
Power light	7⁄8-in. (22-mm) diameter green lens; UL Type 4X (IP66), 1 W LED light	PL
Surge arrestor	Status light on unit; protects incoming power supply from electrical surges	SA
Test Switch	Momentary switch for alarm testing	TS

** All voltages are 120 VAC unless otherwise noted.*

NALLE 2.0 RESIDENCE

GENERAL PROJECT NOTES

OWNERSHIP AND COPYRIGHT
ALL DRAWINGS, DESIGNS, AND CONCEPTS WITHIN THESE DOCUMENTS ARE THE PROPERTY OF COLLECTIVE DESIGN GROUP. THESE DOCUMENTS SHALL NOT BE REPLICATED, USED, OR DISTRIBUTED FOR ANY REASON WITHOUT CONSENT FROM COLLECTIVE DESIGN GROUP OR THE ARCHITECT.

CODE COMPLIANCE
THIS PROJECT IS GOVERNED BY THE 2018 IRC AS ADOPTED AND AMENDED BY BLUE RIVER, AND/OR THE LOCAL JURISDICTIONS FOUND WITHIN BLUE RIVER. ALL WORK DONE BY THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL COMPLY WITH THE IRC, AS WELL AS ANY AND ALL OTHER APPLICABLE CODES, REQUIREMENTS, REGULATIONS, AND RESTRICTIONS. THESE DRAWINGS, SPECS, AND DETAILS DO NOT PERMIT WORK TO BE DONE THAT DOES NOT CONFORM WITH THE AFOREMENTIONED CODES, ETC. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS FOR THIS PROJECT AND TO COMPLETE THEIR SCOPE OF WORK WITHIN THE BOUNDS OF THESE APPROVALS.

EXISTING CONDITIONS, FIELD VERIFICATION, AND DISCREPANCIES
ALL DIMENSIONS, LOCATIONS, CONDITIONS, SITE GRADES, PROPERTY LINES, SETBACKS, EXISTING STRUCTURES, AND ANY OTHER INFORMATION RELATIVE TO THIS PROJECT SHALL BE VERIFIED BY THE GENERAL CONTRACTOR BEFORE STARTING WORK OR ORDERING ANY MATERIALS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO NOTIFY THE ARCHITECT, AND ADJUST THEIR WORK ACCORDINGLY, UPON THE REALIZATION OF ANY CONFLICTS, DISCREPANCIES, OR ERRORS FOUND WITHIN THESE DOCUMENTS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REQUEST AND OBTAIN ADDITIONAL DETAILS, INFORMATION, CLARIFICATION, OR INTERPRETATION IN THE EVENT THAT ANY QUESTION OR CONCERN ARISE FROM THESE DOCUMENTS. FAILURE TO NOTIFY THE ARCHITECT IMMEDIATELY, OR OBTAIN THE INFORMATION NEEDED, SHALL RELIEVE COLLECTIVE DESIGN GROUP AND/OR ARCHITECT OF ALL RESPONSIBILITY FOR ANY CONFLICTS, DISCREPANCIES, OR ERRORS. WORK RELATED TO AN AREA IN QUESTION SHALL NOT CONTINUE UNTIL THE ARCHITECT PROVIDES DIRECTION.

DIMENSIONS
DIMENSION CALLOUTS, OR WRITTEN DIMENSIONS, TAKE PRECEDENCE OVER THE DRAWING ITSELF. THE DRAWINGS ARE NOT MEANT TO BE SCALED FOR ANY REASON, AND WRITTEN DIMENSIONS SHALL BE VERIFIED PRIOR TO BEGINNING WORK. ALL FIELD CONDITIONS OR FIELD MEASUREMENTS SHALL SUPERSEDE WRITTEN DIMENSIONS. ALL WRITTEN DIMENSIONS ARE TO THE EDGE, FACE, TOP, OR BOTTOM OF FRAMING OR TO THE EDGE, FACE, TOP, OR BOTTOM OF CONCRETE, UNLESS NOTED OTHERWISE. DOORS, WINDOWS, & COLUMNS ARE DIMENSIONED TO CENTERLINE.

CONTRACTOR'S WORK
IT IS THE INTENT THAT ALL WORK SHOWN WITHIN THESE DOCUMENTS IS TO BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR AND SUBCONTRACTORS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL PROVIDE ALL LABOR, MATERIALS, SUPPLIES, EQUIPMENT, ETC. TO THE POINT OF PROJECT COMPLETION. THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR FOLLOWING ALL MANUFACTURER RECOMMENDATIONS, SPECIFICATIONS, AND INSTRUCTIONS. ALL WORK SHALL BE COMPLETED, TO THE RECOGNIZED STANDARDS OF THE INDUSTRY, AS SHOWN WITHIN THESE DOCUMENTS UNLESS OTHERWISE NOTED OR CONSIDERED TO BE "NOT IN CONTRACT". IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE A SAFE PROJECT SITE AND TO COMPLY WITH ALL STATE, FEDERAL, AND LOCAL SAFETY REGULATIONS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE CARE TO THE UTILITIES, SURROUNDING PROPERTIES, SURROUNDING LANDSCAPE AND ENVIRONMENT, ETC. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL EXISTING GRADES, TO PROVIDE STAKING AT BUILDING CORNERS AND AT THE DRIVEWAY, AND TO PROVIDE AN ADEQUATE AND PROTECTIVE SITE FENCE THAT MEETS THE REQUIREMENTS SPECIFIC TO THE PROJECT SITE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE A MATERIAL MOCK-UP FOR REVIEW BY THE OWNER AND THE ARCHITECT (AND BY THE DESIGN REVIEW BOARD OR HOA WHEN APPLICABLE). THIS MATERIAL MOCK-UP SHALL BE APPROVED BY THE OWNER, OR BY THE ARCHITECT ON THE OWNER'S BEHALF, PRIOR TO PROCEEDING WITH THE ORDER OF, OR INSTALLATION OF, ANY MATERIALS. THIS MATERIAL MOCK-UP SHALL REMAIN ON THE PROJECT SITE UNTIL THE COMPLETION OF THE PROJECT.

WEATHER AND HIGH ALPINE ENVIRONMENT CONDITIONS
IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ROOF AND DECKING SURFACES. THIS MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO, THE REMOVAL OF ICE AND SNOW, THE OPERATION OF HEAT TAPE OR OTHER HEATING ELEMENTS, INSPECTION OF ROOF AND DECK, INSPECTION OF ALL WATERPROOF ELEMENTS, THE REPLACEMENT OF ANY ELEMENT AS NEEDED, ETC. IT IS NOT THE RESPONSIBILITY OF THE ARCHITECT NOR CONTRACTOR TO MAINTAIN ANY ROOF, DECK, OR WATERPROOF ELEMENT AFTER THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

CHANGES AND SUBSTITUTIONS
NO PORTION OF WORK SHALL DIFFER FROM THESE DRAWINGS AND DOCUMENTS. IN THE CASE THAT THE GENERAL CONTRACTOR INTENDS TO MAKE A CHANGE OR SUBSTITUTION OF "EQUAL" PRODUCTS, NOTICE MUST BE GIVEN TO THE ARCHITECT, AND APPROVAL MUST BE RECEIVED FROM THE ARCHITECT. CHANGES OR SUBSTITUTIONS MADE FROM THESE PLANS OR DOCUMENTS WITHOUT ARCHITECT APPROVAL SHALL RELIEVE THE ARCHITECT OF ANY AND ALL RESPONSIBILITY FOR ANY AND ALL DAMAGES, COST, CONSEQUENCES, ETC. RESULTING FROM THESE CHANGES OR SUBSTITUTIONS.

PROPERTY DESCRIPTION

OWNER:	OWEN AND ASHLEY NALLE OWENNALLE@YAHOO.COM P.O. BOX 2137 BRECKENRIDGE, CO 80424 512-689-7996
PROJECT ADDRESS:	0135 MOUNT ARGENTINE RD (CR 598) LOT 43 SPRUCE VALLEY RAINCH #2 BLUE RIVER, CO 80424

CONTACT INFORMATION

ARCHITECT:	COLLECTIVE DESIGN GROUP 114 BASECAMP WAY PO BOX 1000 FRISCO, CO 80443 970-453-0727 ZANE@THECOLLECTIVEDESIGN.COM
CONTRACTOR:	PINNACLE MOUNTAIN HOMES 114 BASECAMP WAY PO BOX 1000 FRISCO, CO 80443 970-453-0727 TYLER@PINNACLEMTNHOMES.COM
STRUCTURAL ENGINEER:	SUNDQUIST DESIGN GROUP P.O. BOX 249 TARPON SPRINGS, FL 34688 303-838-2222 JOE@SUNDQUISTDESIGN.COM
SOIL/SEPTIC ENGINEER:	THEOBALD ENGINEERING & CONSTRUCTION 1000 AIRPORT RD BRECKENRIDGE, CO 80424 ROBTHEOBALD@YAHOO.COM
SURVEYOR:	RANGE WEST P.O. BOX 589 SILVERTHORNE, CO 80498 JESSICA@RANGEWESTINC.COM

PROJECT VICINITY MAP

BUILDING AREA CALCS

	FINISHED	UNFINISHED	TOTAL
LOWER	3152	106	3258
MAIN	6534	1821	8355
TOTAL	9686	1925	11613

NOTES:

SQUARE FOOTAGE NUMBER ARE APPROXIMATE AND CALCULATED FOR CODE PURPOSES. NUMBERS ARE SUBJECT TO CHANGE THROUGHOUT THE COURSE OF THE PROJECT. UNFINISHED SQUARE FOOTAGE INCLUDES GARAGE, DETACHED GARAGE, MECHANICAL, AND SIMILAR UNFINISHED SPACES.

USGS BENCHMARKS

LOWER LEVEL = ARCH 100'-0" = USGS 10237'
MAIN LEVEL = ARCH 111'-0" = USGS 10248'

SHEET DIRECTORY

COLORADO LICENSED
ZANE BRANDON LEVIN
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

COVER SHEET

G1.01

A TOPOGRAPHIC MAP OF A PORTION OF LOT 43, SPRUCE VALLEY RANCH, FILING NO. 2

ACCORDING TO THE PLAT RECORDED 06/01/78 AT REC. NO. 176624

SUMMIT COUNTY, COLORADO

COMMON OPEN AREA

MOUNT ARGENTINE ROAD (50' ACCESS EASEMENT)

CO. ROAD NO. 598

EDGE OF ASPHALT ROAD (TYP.)

SHOULDER

FLOWLINE DITCH

TOP OF BANK

TOE

ELEC. PHONE PEDESTAL

TV ELEC.

PHONE PEDESTAL

TRANSFORMER

EL.= 10,210.64

POINT OF BEGINNING FOR SURVEY
EL.= 10,219.08

C1 R=475.00' L=217.14'

C2 R=165.00' L=87.00'

EL.= 10,217.83

GRADE BREAK

75'

L=141.97'

L=101.89'

BUILDING RESTRICTION LINE

S 34°38'54" E
S 31°17'53" E
378.05' (m.)
380.00' (p.)

N 01°28'10" E
N 00°58'38" E
416.86' (p.)
416.22' (m.)

50.00'

50'

LOT 43
176,009 sq.ft.
4.041 acres
Address: 0135 MOUNT ARGENTINE ROAD

LOT 44

LOT 42

EXISTING HOUSE

CP-BUDDHA
ELEV.=10,225.00

CP-DOVE
ELEV.=10,250.88

BURIED CABLE SIGN

ENVELOPE OF TREES BY OWNER

20" SPRUCE
14" SPRUCE
8" PINE
15" SPRUCE
10" SPRUCE
7" SPRUCE
9" SPRUCE
12" SPRUCE
20" SPRUCE
8" SPRUCE
DBL. 12" & 10" FIR
2-13" SPRUCE
12" SPRUCE
14" SPRUCE

S 61°37'44" W
S 61°37'44" W
256.38' (p.)
259.52' (c.)

WHITE RIVER NATIONAL FOREST

LEGEND

- FOUND REBAR & ORANGE PLASTIC CAP (PLS 27924/ANDREWS)
- FOUND REBAR & PLASTIC CAP (PLS 10847)
- FOUND No. 4 REBAR
- UTILITY PEDESTAL
- CP RANDOM SURVEY CONTROL POINT
- 69.2 SPOT ELEVATION
- 8" PINE TREE WITH TRUNK DIAMETER
- 6" SPRUCE TREE WITH TRUNK DIAMETER

LOCATED ONLY THOSE TREES MARKED

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

ELEVATIONS BASED ON APPROXIMATE U.S.G.S. SEA LEVEL
OBTAINED WITH HAND-HELD GPS UNIT
DATE OF ORIGINAL TOPO. FIELD SURVEY: 08/18/06
DATE OF TREE ENVELOPE LOCATIONS: 10/10/22
CONTOUR INTERVAL = 2 FEET

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	475.00'	217.14'	215.25'	S 82°30'35" E	26°11'31"
C2	165.00'	87.00'	85.99'	S 84°31'08" E	30°12'36"

Drawn TCB/JJK	Dwg 17700TP.DWG	Project 17700
Checked RRJ	Date 10/13/22	Sheet 1 of 1

RANGE WEST INC.
ENGINEERS & SURVEYORS
P.O. Box 589
Silverthorne, CO 80498 970-468-6281

GENERAL SITE NOTES

UTILITY LOCATIONS
ALL UTILITY LOCATIONS ARE TO BE VERIFIED IN FIELD BY CONTRACTOR BEFORE STARTING WORK. IT IS THE DUTY OF THE CONTRACTOR TO COORDINATE EXACT UTILITY ROUTING WITH THE APPROPRIATE UTILITY PROVIDER, OR UTILITY INSTALLATION COMPANY.

TOPOGRAPHIC INFORMATION
TOPOGRAPHIC INFORMATION DEPICTED ON THE SITE PLAN IS ONLY A REPRESENTATION OF THE TOPOGRAPHIC INFORMATION PROVIDED WITHIN THE STAMPED SURVEY. THE STAMPED SURVEY SHALL BE REFERENCED FOR ALL TOPOGRAPHIC VERIFICATIONS BEFORE STARTING WORK

POSITIVE DRAINAGE
POSITIVE DRAINAGE SHALL BE CREATED AROUND THE ENTIRE BUILDING PERIMETER TO SLOPE WATER AWAY FROM THE FOUNDATION. THIS POSITIVE DRAINAGE SHALL NOT HEIGHTEN GRADE ABOVE WHAT IS APPROPRIATE GIVEN THE FOUNDATION HEIGHTS AT THE BUILDING PERIMETER. THE GENERAL CONTRACTOR SHALL COORDINATE WITH AND INFORM THE STRUCTURAL ENGINEER, AND NOTIFY THE ARCHITECT, OF ANY GRADE / FOUNDATION CONFLICTS.

STAKING AND SURVEYING
THE LOCATION OF THE HOUSE, DRIVEWAY, AND OTHER RELEVANT ITEMS SHALL BE STAKED BY A CERTIFIED SURVEYOR PRIOR TO BEGINNING WORK. ADDITIONAL STAKING REQUIREMENTS MAY EXIST PER THE HOA, REVIEW BOARD, LOCAL JURISDICTION, ETC. AND IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MEET THESE ADDITIONAL REQUIREMENTS BEFORE STARTING WORK.

SITE LEGEND

- PROPERTY LINE
- BUILDING ENVELOPE
- FOUNDATION OUTLINE
- WALLS BELOW
- ASPHALT DRIVE
- ROOF LINES
- PROPOSED GRADE
- EXISTING GRADE (MAJOR)
- EXISTING GRADE (MINOR)
- DECKS
- E/T/TV — ELECTRICAL CONNECTION
- GAS — GAS CONNECTION
- S — SEPTIC CONNECTION
- W — WELL CONNECTION
- DRAINAGE ARROWS
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED

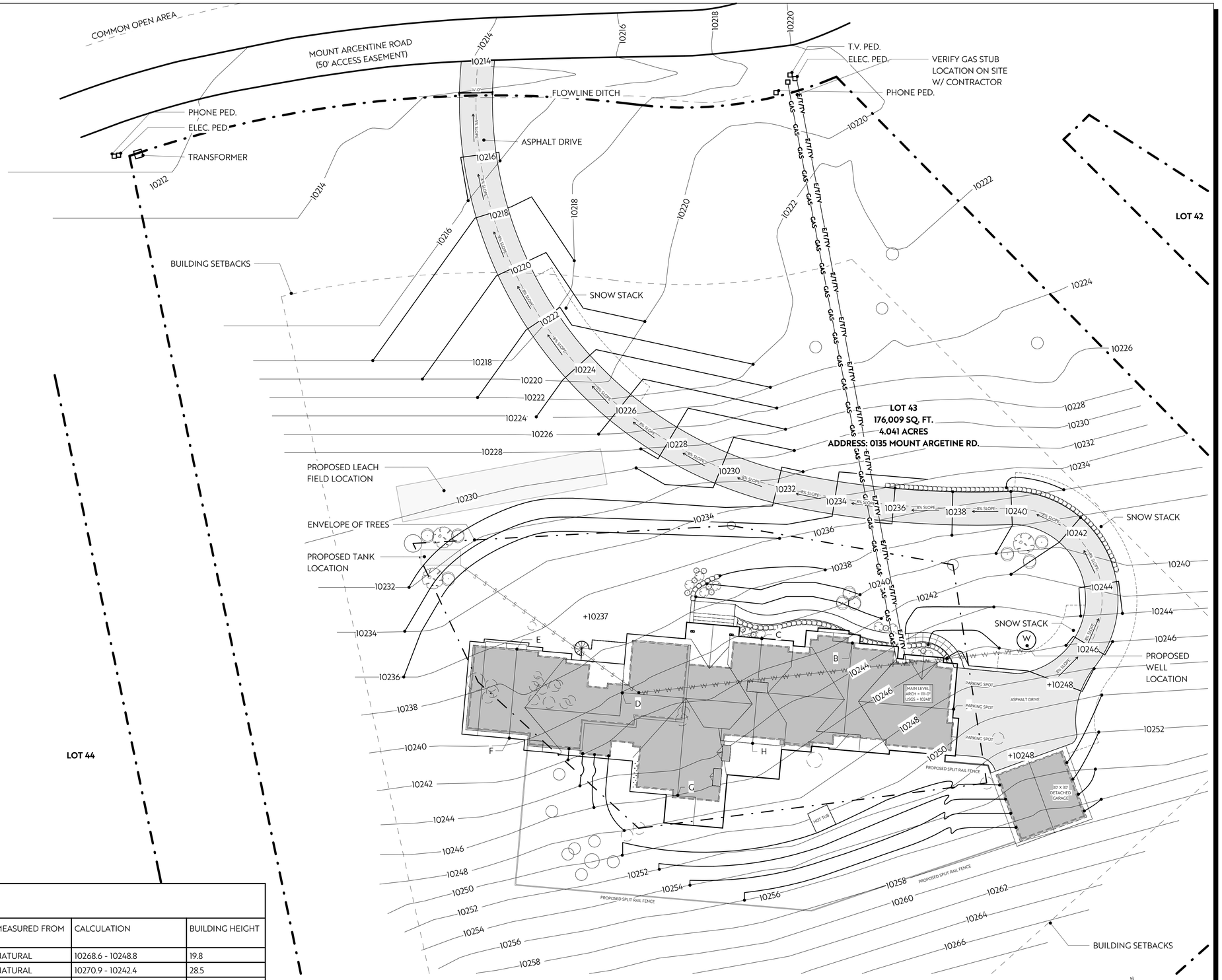
SITE COVERAGE

	SQFT	PERCENT
BUILDING, ROOF AND DECKS	10,935	6 %
FINISHED DRIVE	7,985	5 %
OTHER HARDSCAPES	1,300	1 %
LANDSCAPE SURFACE	155,789	88%
TOTAL	176,009	100 %
SNOWSTACK REQUIRED	1,997	25% OF DRIVE
SNOWSTACK PROVIDED	2,000	25% OF DRIVE

PARKING PROVIDED: 5 GARAGE, 3 SURFACE

BUILDING HEIGHT CALCS

POINT	ROOF ELEVATION	NATURAL GRADE ELEV.	PROPOSED GRADE ELEV.	MEASURED FROM	CALCULATION	BUILDING HEIGHT
A	10268.6	10248.8	10248.0	NATURAL	10268.6 - 10248.8	19.8
B	10270.9	10242.4	10246.5	NATURAL	10270.9 - 10242.4	28.5
C	10274.1	10240.4	10246.5	NATURAL	10274.1 - 10240.4	33.7
D	10272.6	10240.1	---	NATURAL	10274.1 - 10240.4	32.5
E	10270.6	10236.3	10237.0	NATURAL	10270.6 - 10236.3	34.3
F	10270.6	10239.8	10239.8	NATURAL	10270.6 - 10236.3	30.8
G	10272.6	10246.0	10248.0	NATURAL	10272.6 - 10246.0	26.6
H	10274.1	10244.8	10248.0	NATURAL	10274.1 - 10244.8	29.3



OVERALL SITE PLAN

SCALE: 1" = 20'-0"

0' 10' 20' 40' 80'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED ARCHITECT BRANDON LEVIN 6/13/23 405836

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

OVERALL SITE PLAN

SP1.01

SITE LEGEND

- PROPERTY LINE
- BUILDING ENVELOPE
- FOUNDATION OUTLINE
- WALLS BELOW
- ASPHALT DRIVE
- ROOF LINES
- PROPOSED GRADE
- EXISTING GRADE (MAJOR)
- EXISTING GRADE (MINOR)
- DECKS
- E/T/TV — ELECTRICAL CONNECTION
- GAS — GAS CONNECTION
- S — SEPTIC CONNECTION
- W — WELL CONNECTION
- DRAINAGE ARROWS
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED

LOT 43
176,009 SQ. FT.
4.041 ACRES
ADDRESS: 0135 MOUNT ARGENTINE RD.

ASPHALT DRIVE

PROPOSED TANK LOCATION

PROPOSED WELL LOCATION

MAIN LEVEL
ARCH = 111'-0"
USGS = 10248'

BUILDING SETBACK

PROPOSED SPLIT RAIL FENCE

30' X 30' DETACHED GARAGE

HOT TUB

UTILITY METER LOCATION

8% SLOPE

14' - 0"

SITE AND GRADING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

SUMMER / WINTER SUN ANGLES

COLLECTIVE
NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVIN NALLE
6/13/23
405836
ARCHITECT

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SITE AND GRADING PLAN

SP1.02

LANDSCAPE NOTES

ALL PLANT MATERIALS TO BE OF NATIVE/INDIGENOUS SPECIES AND ORIGIN WITH ALL TREES TO BE NATIVE DUG AT 8500' OR GREATER ELEVATION.

UNLESS OTHERWISE DESIGNATED ALL ROOF EDGE DRIP-LINES TO RECEIVE A 3' WIDE PATH OF COBBLE (2"-4" NATIVE OR APPROVED ROCK) OR MULCH SPLASH AREA ON WEED BARRIER FABRIC TO A DEPTH ADEQUATE TO COVER FABRIC.

ALL DISTURBED AREAS NOT OTHERWISE PLANTED AND EXISTING DISTURBED AREAS TO RECEIVE A MIN. 4" OF TOPSOIL AND BE RE-VEGETATED WITH DROUGHT RESISTANT SHORT DRY GRASS SEED MIXTURE PER THE SUMMIT COUNTY LAND USE AND DEVELOPMENT CODE. MOST AREAS TO RECIEVE OCCASIONAL HAND SCATTERINGS OF INDIVIDUAL NATIVE WILDFLOWER SPECIES (APPROPRIATE TO THE SITE) IN PLANT COMMUNITY GROUPINGS BEFORE HYDROMULCHING.

ALL SEEDING APPLICATIONS TO BE HAND SPREAD, RAKED OR DRAGGED IN AND HYDROMULCHED DOWN. NO SEEDING IS TO BE APPLIED MIXED WITH HYDROMULCH ALONE.

ALL TREES AND SHRUBS TO RECIEVE MULCH RINGS OF ASPEN MULCH TO A MINIMUM DEPTH OF 3-4" AND THE DIAMETER OF THE DRIP LINE FOR CONIFERS, 3' FOR DECIDOUS TREES AND 2' FOR SHRUBS.

SLOPES OF GREATER THAT 2:1 SHALL BE COVERED WITH AN EROSION CONTROL BLANKET.

TREES TO BE RETAINED TO BE FENCED FOR PROTECTION. NO GRADING TO OCCUR WITHIN THE AREA OF TREES TO BE RETAINED.

PROVIDE A MINUMIM 2% POSITIVE SLOPE FOR A DRAINAGE AWAY FROM THE BUILDING.

SITE LEGEND

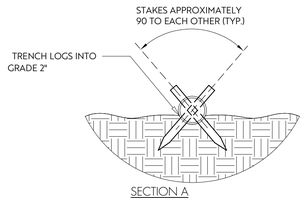
- PROPERTY LINE
- BUILDING ENVELOPE
- FOUNDATION OUTLINE
- WALLS BELOW
- ASPHALT DRIVE
- ROOF LINES
- PROPOSED GRADE
- EXISTING GRADE (MAJOR)
- EXISTING GRADE (MINOR)
- DECKS
- E/T/TV — E/T/TV — ELECTRICAL CONNECTION
- GAS — GAS — GAS CONNECTION
- S — S — SEPTIC CONNECTION
- W — W — WELL CONNECTION
- DRAINAGE ARROWS
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED

PLANT LIST AND NOTES

SYM	PLANT	NAME	QTY	SIZE
	ASPEN	POPULUS TREMULOIDES	9	
	ENGLEMANN SPRUCE	PICEA ENGELMANI	3	
	BUFFALO JUNIPER	JUNIPERUS SABINA 'BUFFALO'	10	
	JAPANESE BARBERRY	BERBERIS THUNGBERGI	10	
	APPROVED ASSORTED GROUND COVERS & PERRENIAL FLOWERS			
	REVEGETATE ALL DISTURBED AREAS W/ NATIVE GRASS (NO MOW)			

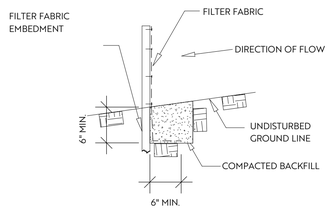
NOTES: LANDSCAPE PLAN TAKES PRECEDENT OVER PLANT LIST AND NOTES IF NUMBERS ARE INCORRECTLY LABELED.

NOTE:
THE TOPS OF ALL STAKES SHALL NOT EXTEND MORE THAN 2" ABOVE THE TOPS OF EROSION LOGS

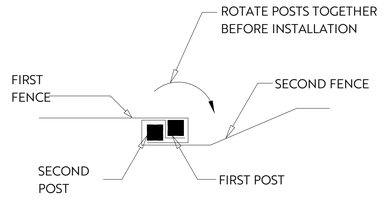


NOTE:
1. EROSION LOGS SHALL BE EMBEDDED 2 INCHES INTO THE SOIL.
2. EROSION LOGS SHALL BE TIGHTLY ABUTTED WITH NO GAPS.

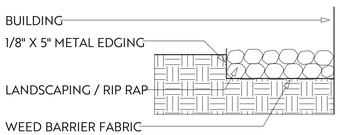
STRAW WATTLE (EROSION LOG)
SCALE: 3/4" = 1'-0"



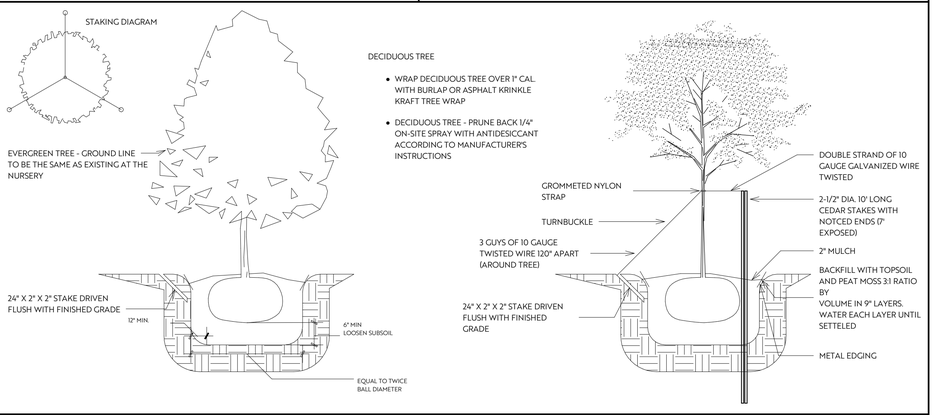
SILT FENCE
SCALE: 1" = 1'-0"



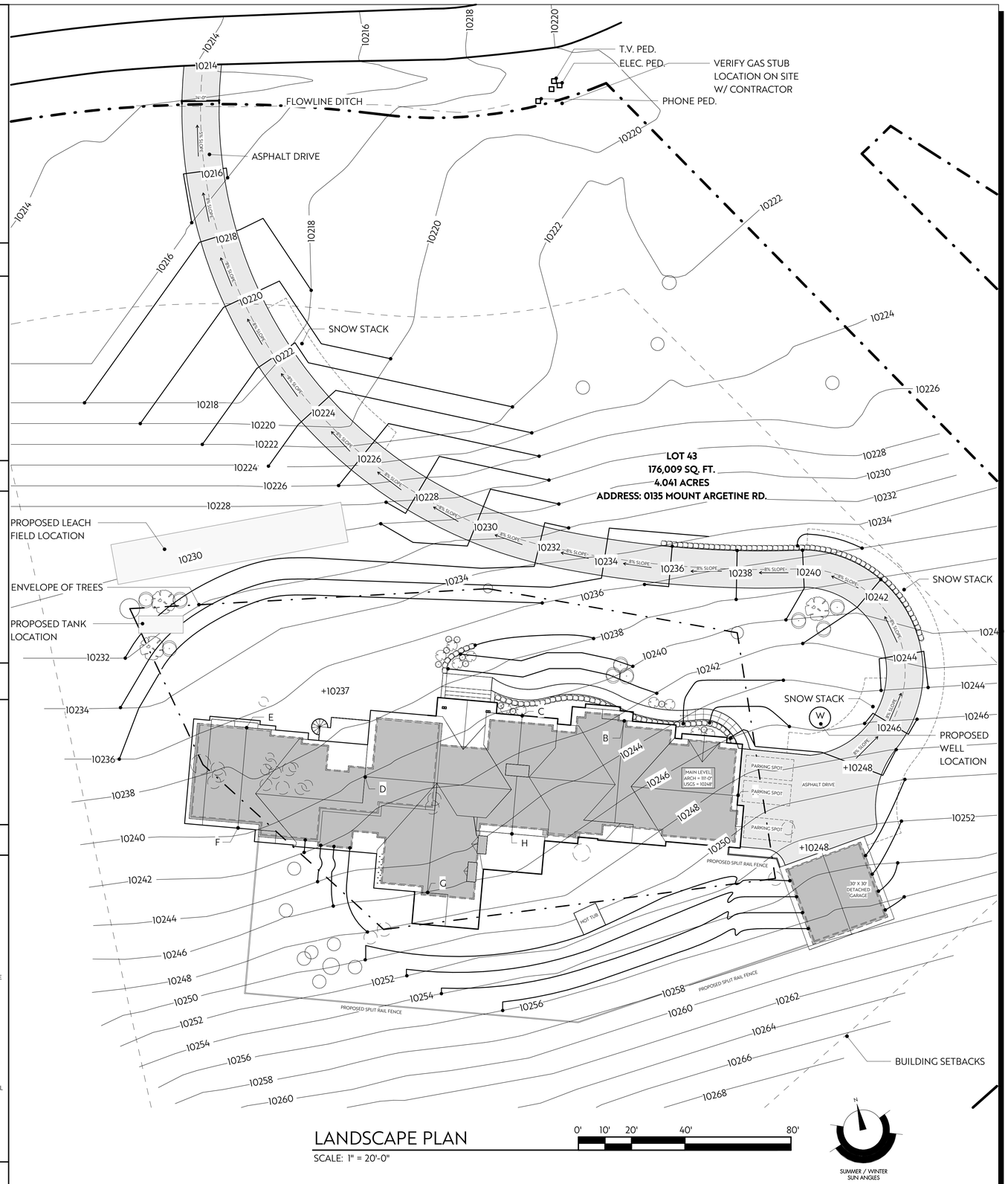
SILT FENCE - PLAN VIEW SPLICE DETAIL
SCALE: 1" = 1'-0"



RIP RAP
SCALE: 1" = 1'-0"



TREE STRAPPINGS AND PLANTINGS
SCALE: 1 1/2" = 1'-0"



LANDSCAPE PLAN
SCALE: 1" = 20'-0"

0' 10' 20' 40' 80'

COLLECTIVE
NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVIN NALLE
6/13/23
405836
ARCHITECT

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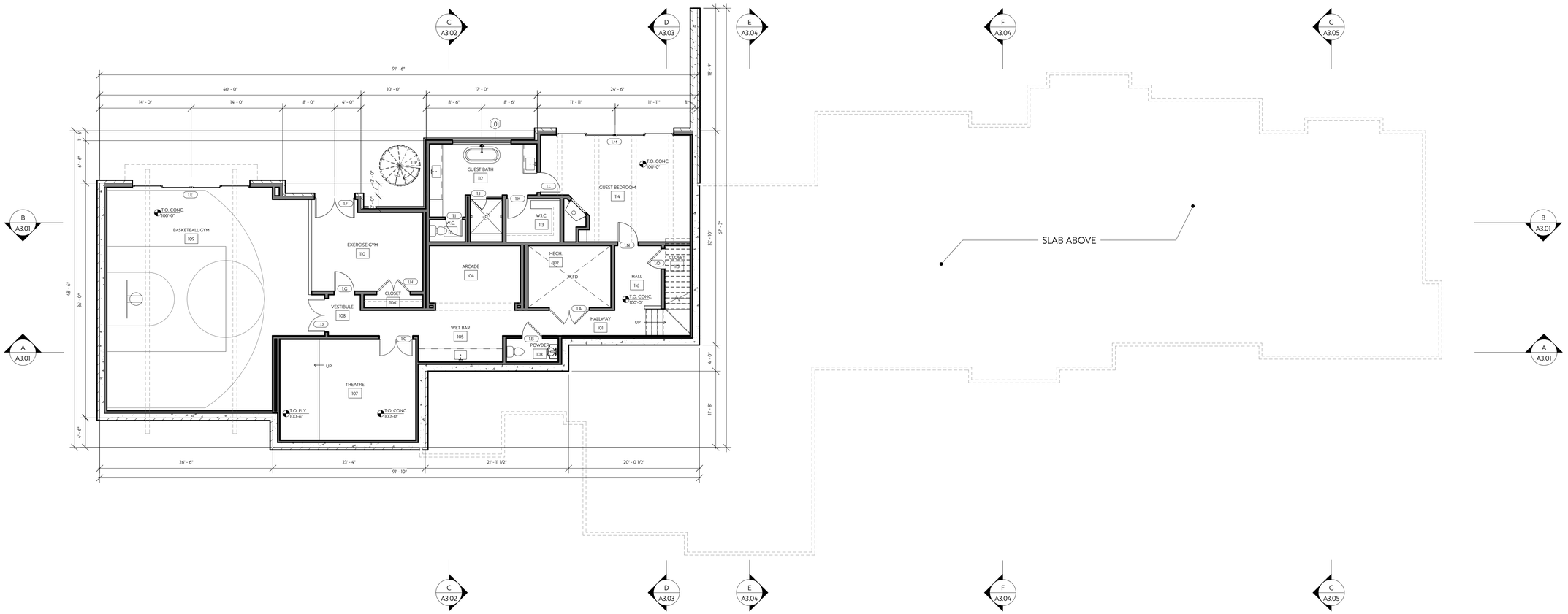
LANDSCAPE PLAN

SP1.03



LOWER LEVEL

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

0' 4' 8' 16' 32'

N

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

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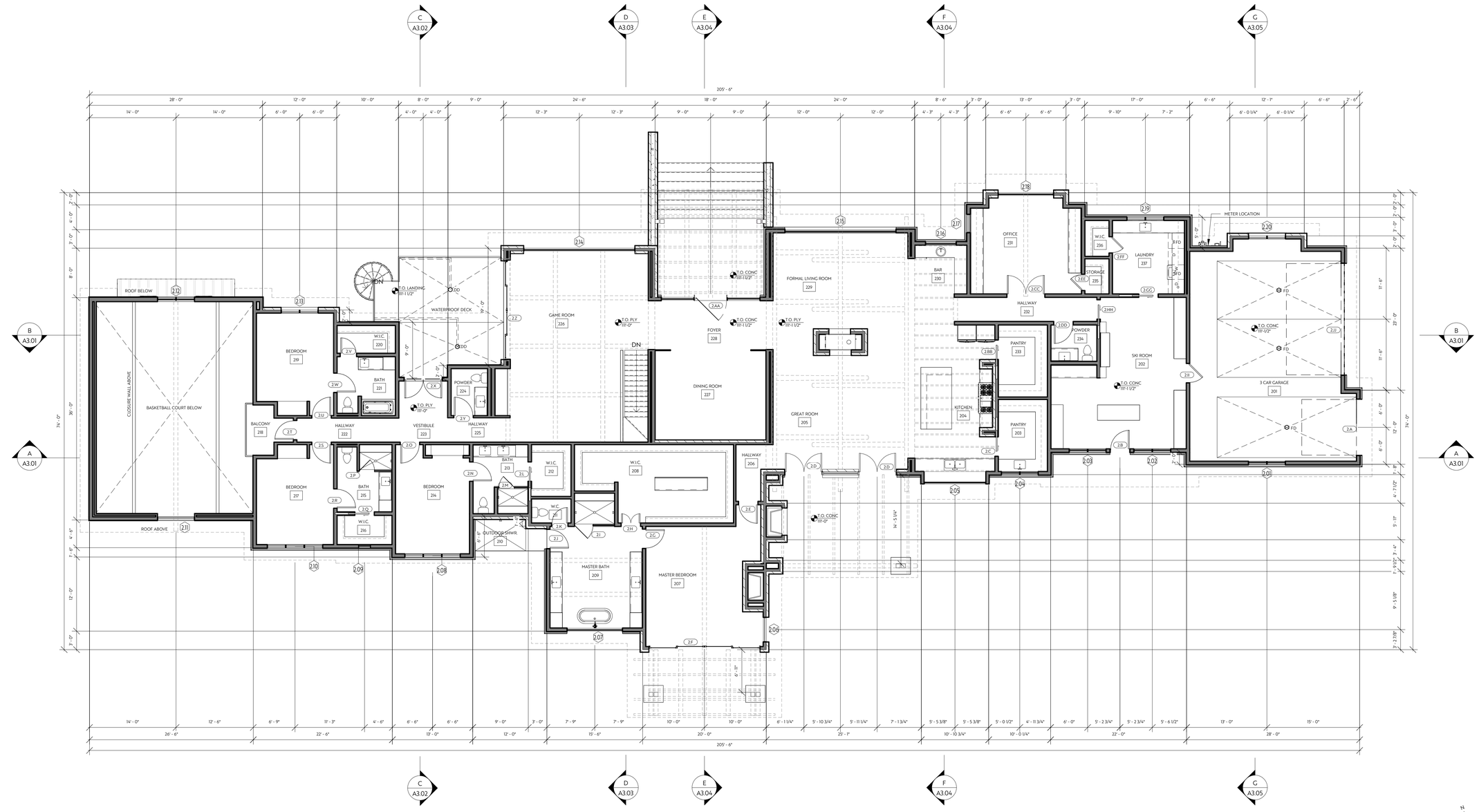
OVERALL LOWER LEVEL FLOOR PLAN

A1.01



OVERALL MAIN LEVEL

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

0' 4' 8' 16' 32'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

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0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

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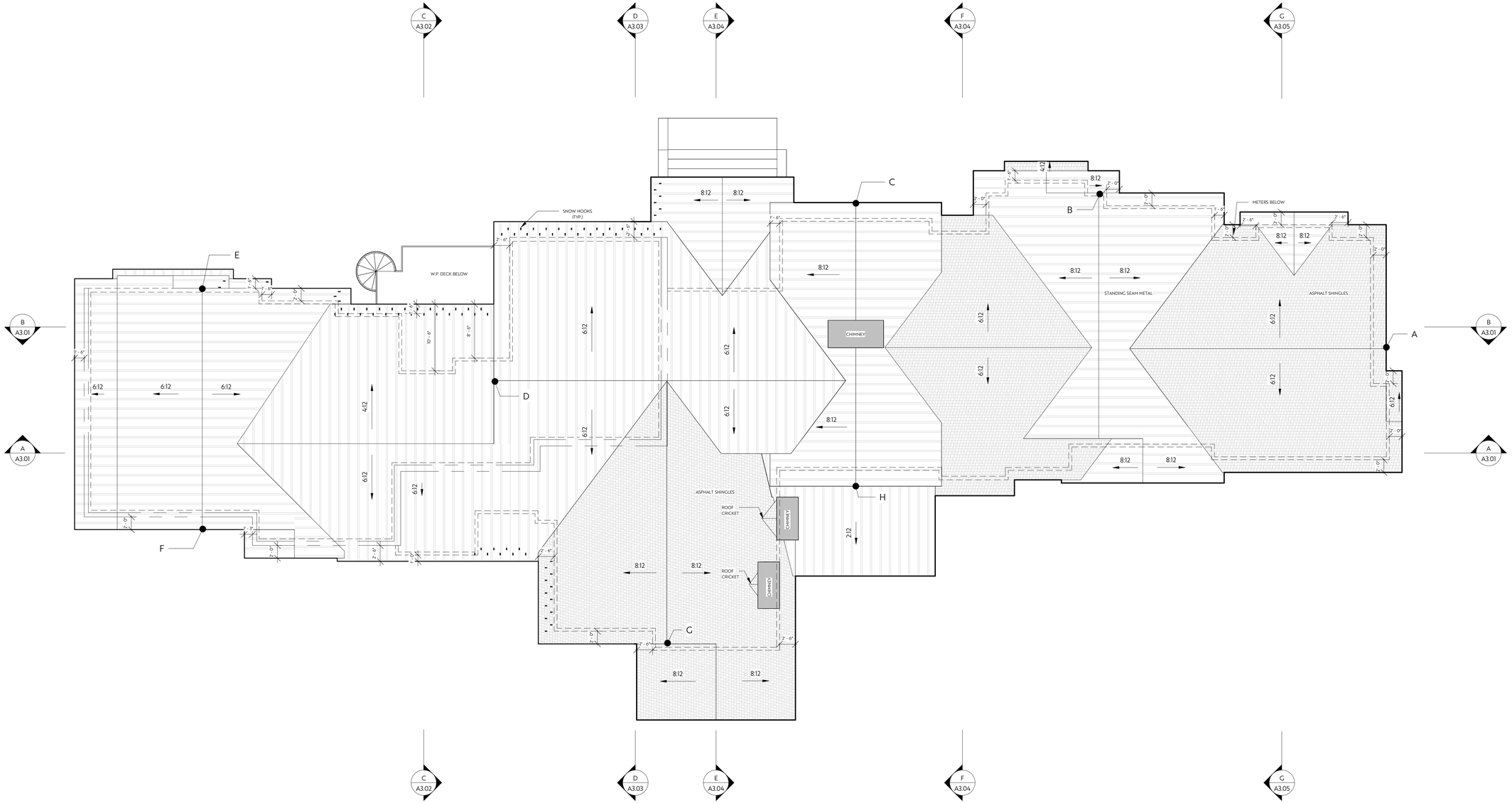
OVERALL MAIN LEVEL FLOOR PLAN

A1.02



OVERALL ROOF PLAN

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

0' 4' 8' 16' 32'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

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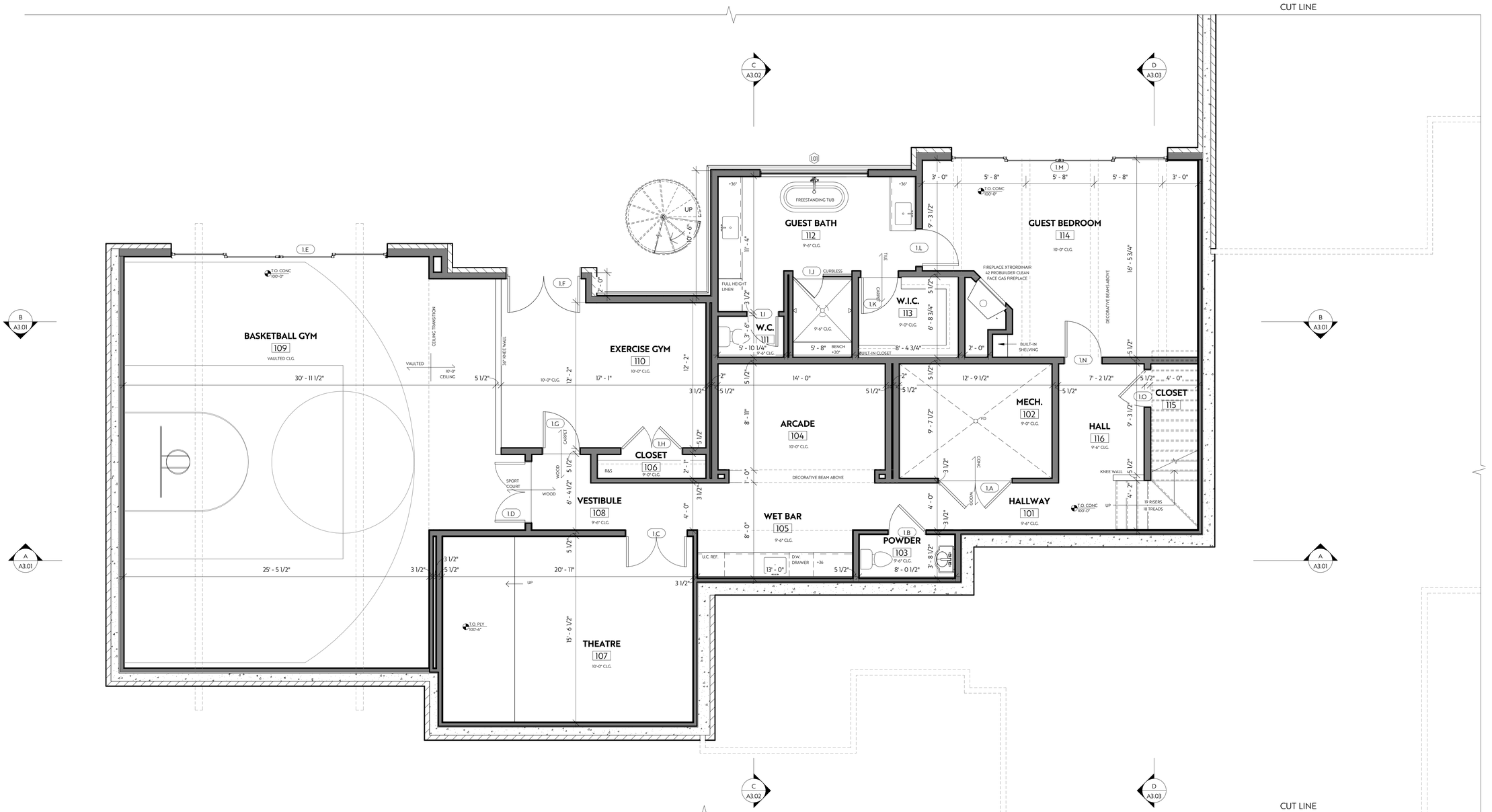
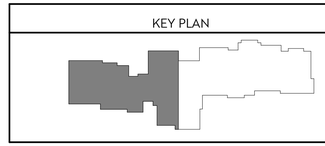
OVERALL ROOF PLAN

A1.03



KEY PLAN



LOWER LEVEL

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEE NALLE
6/13/23
405836
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LOWER LEVEL PLAN

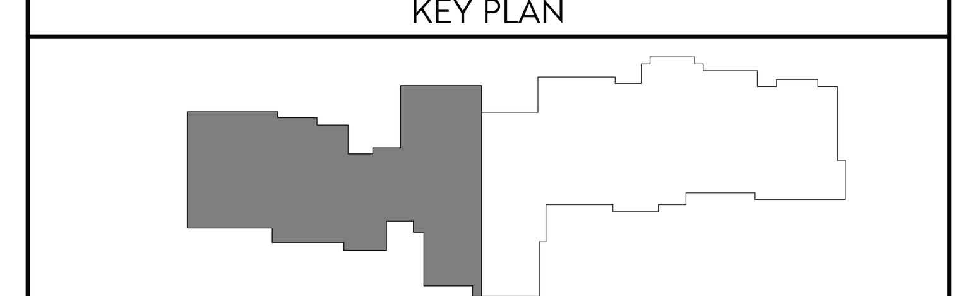
A1.04

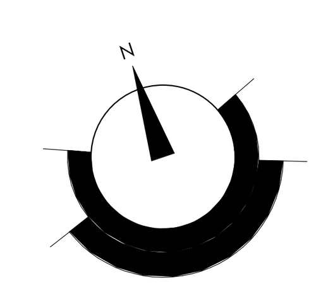
MAIN LEVEL WEST

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

0' 2' 4' 8' 16'

KEY PLAN





COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED ARCHITECT ZANE BRANDON LEVIN 6/13/23 405836

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MAIN LEVEL WEST

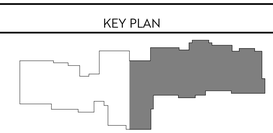
A1.05

CUT LINE

FOYER 228 12'-0" CLG. T&G
FORMAL LIVING ROOM 229 VAULT CLG. T&G
DINING ROOM 227 12'-0" CLG. T&G
GREAT ROOM 205 VAULT CLG. T&G
HALLWAY 206 12'-0" CLG. T&G
W.I.C. 208 10'-0" CLG.
MASTER BEDROOM 207 VAULT CLG. T&G
BAR 230 12'-0" CLG. T&G
OFFICE 231 VAULT CLG. T&G
HALLWAY 232 11'-0" CLG. T&G
W.I.C. 236 10'-0" CLG.
STORAGE 235 10'-0" CLG.
LAUNDRY 237 10'-0" CLG.
POWDER 234 10'-0" CLG. T&G
PANTRY 233 10'-0" CLG.
KITCHEN 204 12'-0" CLG. T&G
PANTRY 203 10'-0" CLG.
SKI ROOM 202 10'-0" CLG. T&G
3 CAR GARAGE 201 10'-0" CLG.

DECORATIVE TRUSS
SUGAR PINE ACCENT WALL
SHIP LAP ACCENT WALL
RIDGE BEAM
SHOULDER BEAM
MASON-LITE TWO-SIDED FIREPLACE
2'-8" X 12" IRON SIDELIGHT WINDOW UNIT
2'-8" X 5' IRON SIDELIGHT WINDOW UNIT
T.O. CONC 111'-0"
T.O. CONC 110'-10 1/2"
T.O. PLY 111'-1 1/2"
T.O. PLY 111'-0"
T.O. CONC 111'-1/2"
UTILITY METER LOCATION
ROOF ABOVE
FULL HEIGHT LOCKERS (CAB)
LOCKERS (CAB)
BENCH W/ STORAGE BELOW
+36" BASE CABINET
+36" UPPER AND LOWER CABINETS
+36" CABINET ISLAND
KNOTTY ALDER BUILT-IN SHELVING
MASON-LITE MFP 69 W/ HEIGHT KIT
MASON-LITE MFP 69 W/ HEIGHT KIT + GLASS FRONT
WOOD STORAGE
LINEN
REF.
FRZ.
DW
EGRESS
U.C. ICE
R&S
WOOD
STONE
TILE
CARPET

KEY PLAN



MAIN LEVEL EAST
SCALE: 1/4" = 1'-0"

0' 2' 4' 8' 16'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836
ARCHITECT

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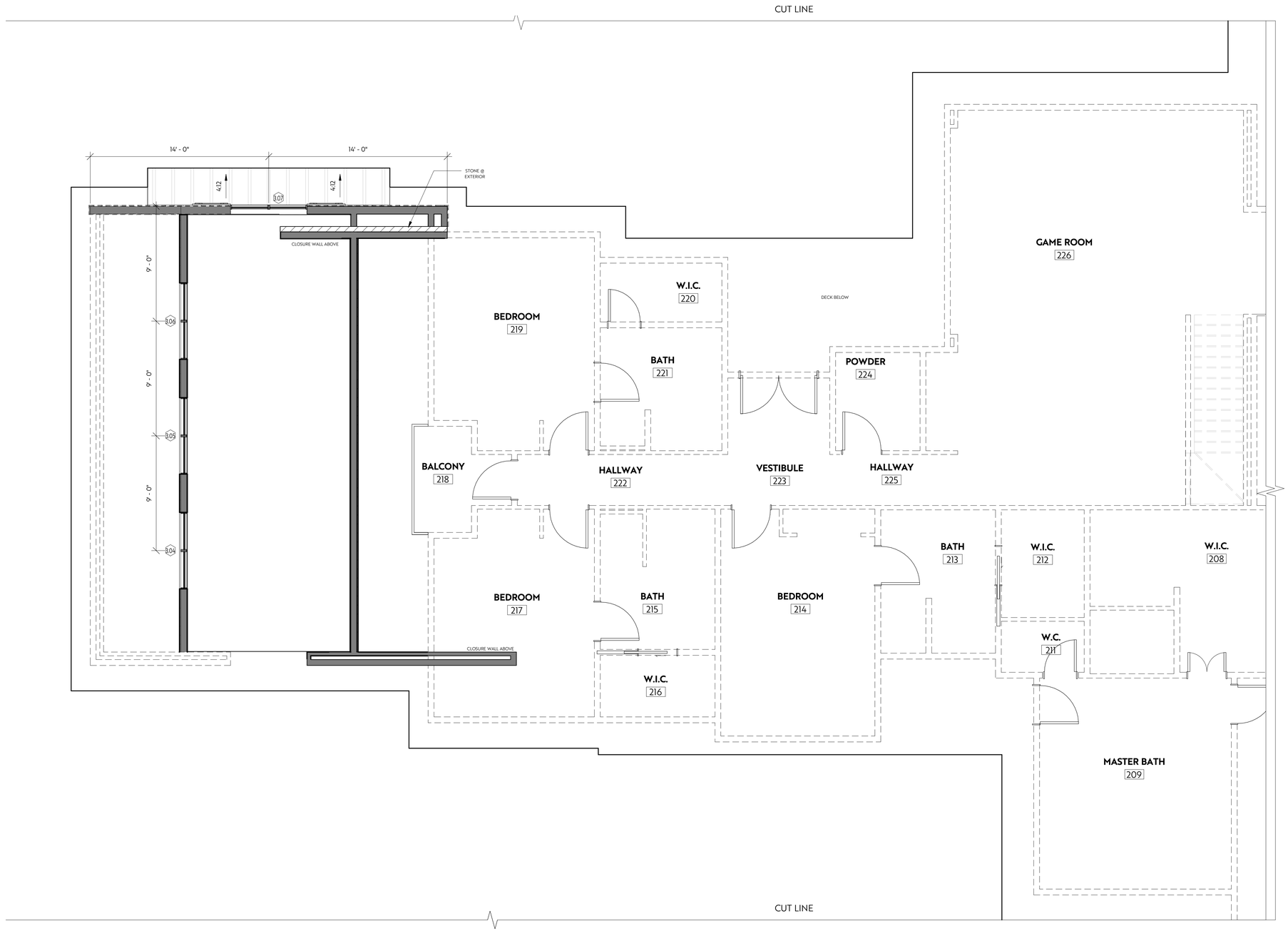
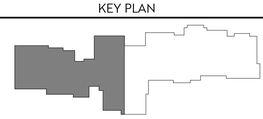
MAIN LEVEL EAST

A1.06



KEY PLAN



HIGH WINDOW WEST

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

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405836
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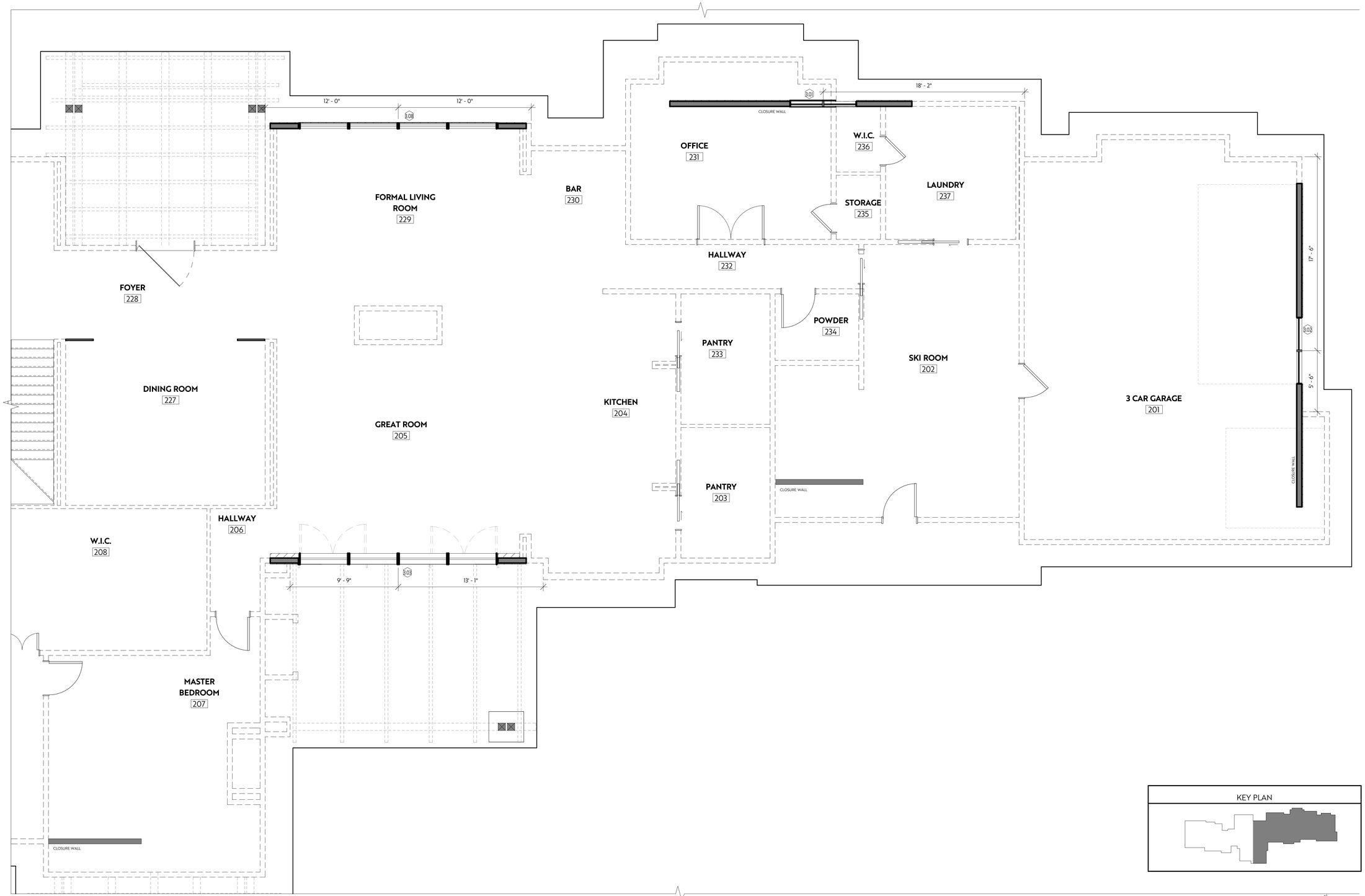
HIGH WINDOW WEST

A1.07



KEY PLAN

HIGH WINDOW EAST

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

0' 2' 4' 8' 16'

N

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVI NALLE
6/13/23
405836
ARCHITECT

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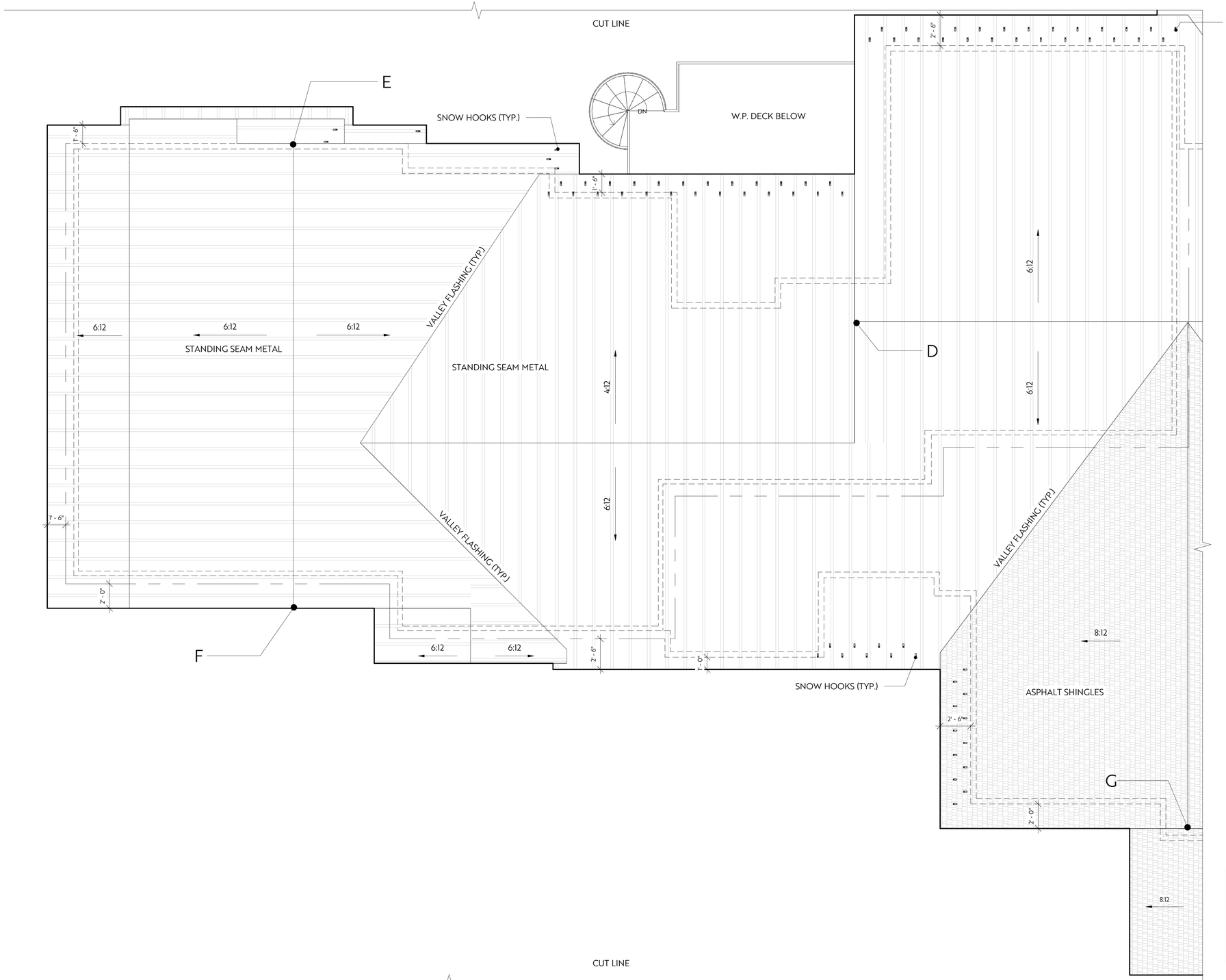
HIGH WINDOW EAST

A1.08



KEY PLAN

ROOF PLAN WEST

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVI MILLER
6/13/23
405836
ARCHITECT

ISSUE	
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JOB #:	262
DRAWN BY:	MI
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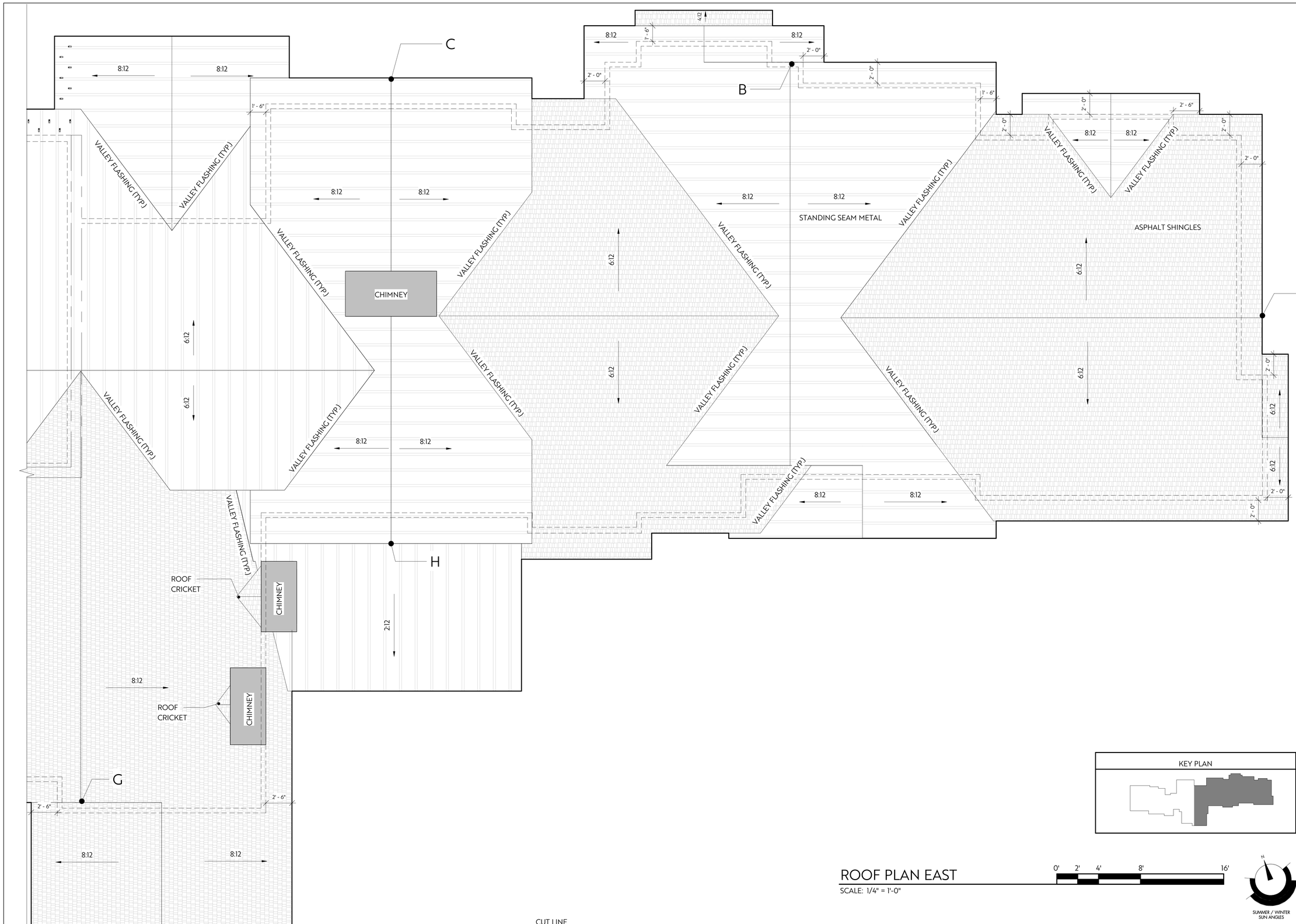
ROOF PLAN WEST

A1.09



KEY PLAN

ROOF PLAN EAST

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

0' 2' 4' 8' 16'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
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ARCHITECT

ISSUE	
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JOB #:	262
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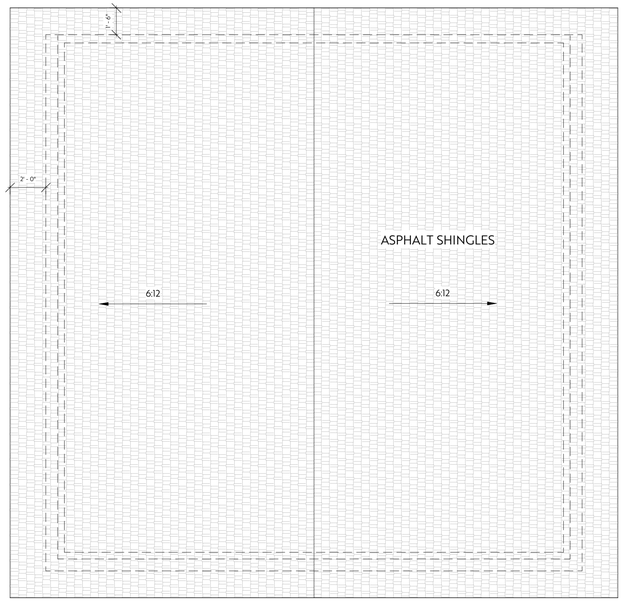
ROOF PLAN EAST

A1.10



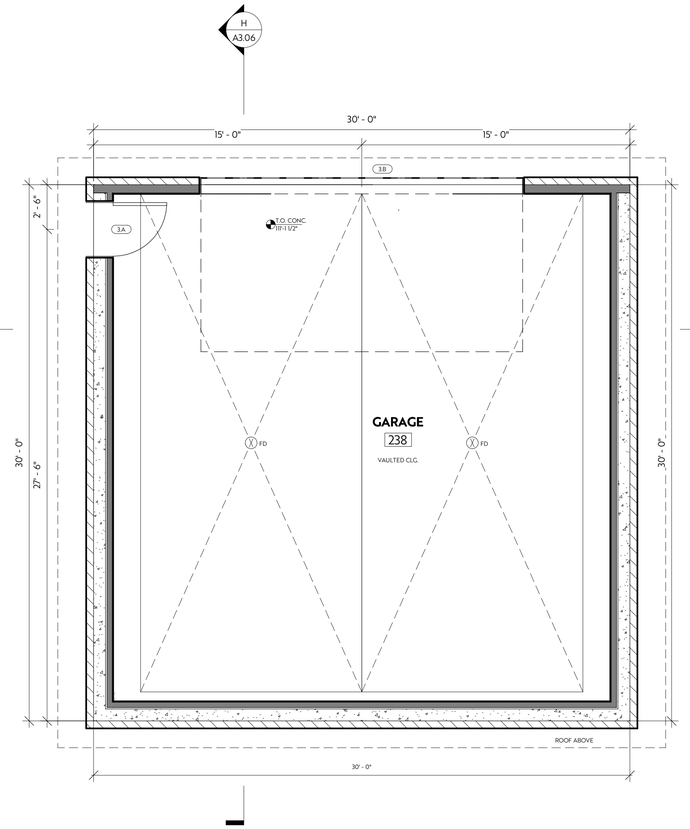
DETACHED GARAGE ROOF PLAN

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

0' 2' 4' 8' 16'

N

SUMMER / WINTER SUN ANGLES



DETACHED GARAGE PLAN

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

0' 2' 4' 8' 16'

N

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

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DETACHED GARAGE PLANS

A1.11

COLOR/ MATERIAL LEGEND

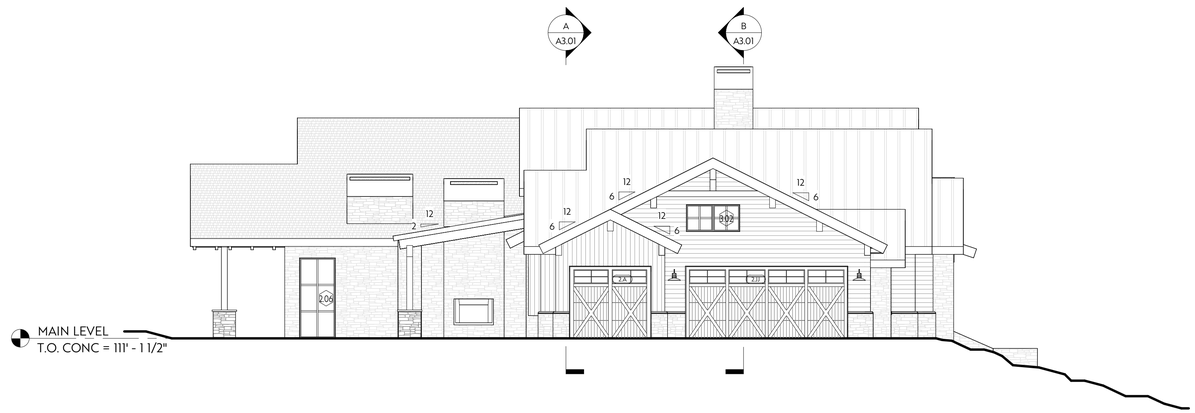
1. **METAL ROOF**
DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
WOOD SOURCE
MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS
(BLACK)
5. **WOOD TIMBERS**
PER ENGINEER
S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
1X2 IRON RAILING
(BLACK)
7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON
(BLACK)
8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST
(BLACK)
9. **VERTICAL SIDING**
WOOD SOURCE
STUART ARCH SIDING
10. **HORIZONTAL SIDING**
WOOD SOURCE
SUGAR PINE SIDING
11. **STONE VENEER**
EDWARDS STONE
MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
WOOD SOURCE
STUART ARCH SIDING
13. **DECKING**
WOOD SOURCE
DASSO XRT DECKING
(COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
CUSTOM METAL
(BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE

NORTH ELEVATION

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

0' 4' 8' 16' 32'



EAST ELEVATION

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

0' 4' 8' 16' 32'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

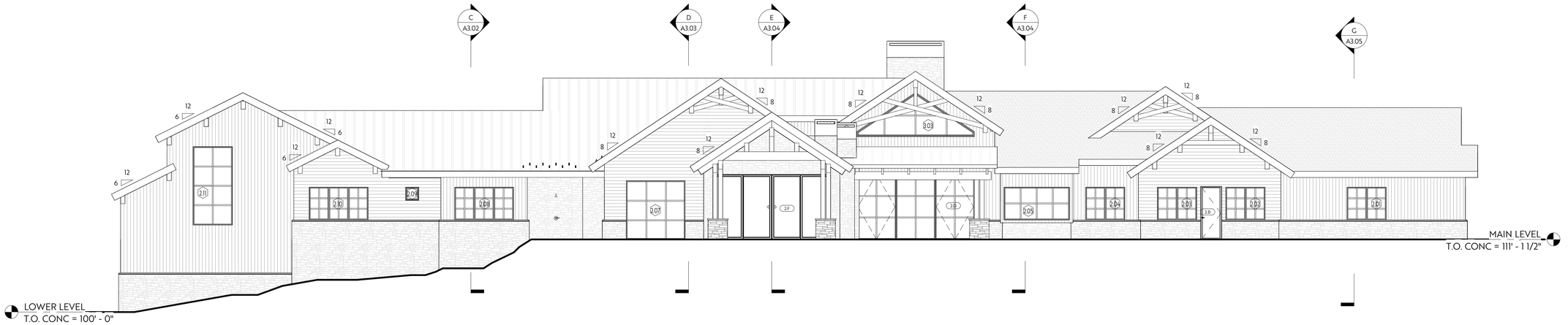
OVERALL BUILDING ELEVATIONS

A2.01

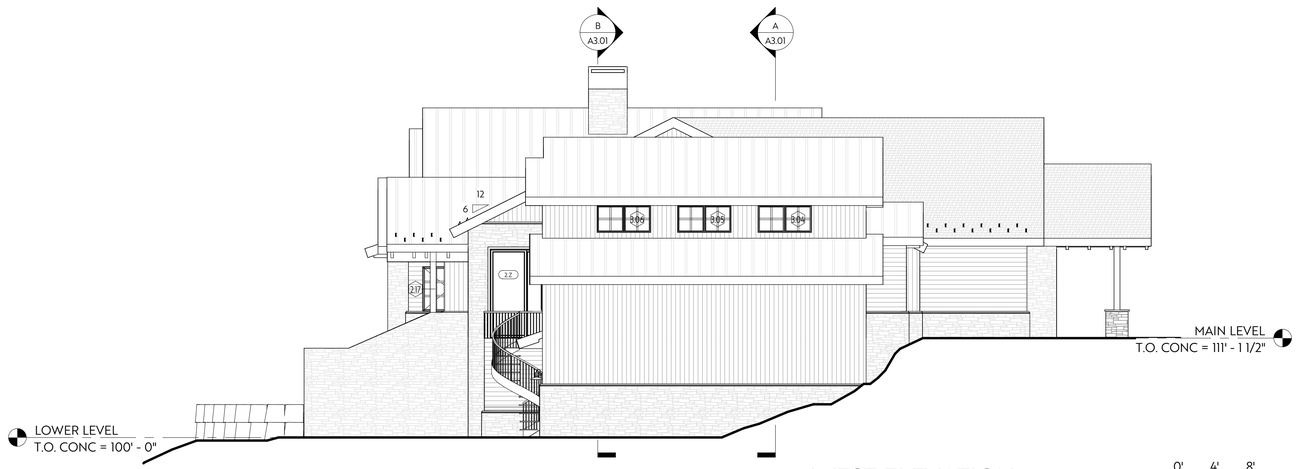
COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
   DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
   GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
   WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
   ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
   PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
   1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
   1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
   1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
   WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
    WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
    EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
    WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
    WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
    CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



SOUTH ELEVATION
SCALE: 1/8" = 1'-0"
0' 4' 8' 16' 32'



WEST ELEVATION
SCALE: 1/8" = 1'-0"
0' 4' 8' 16' 32'

COLLECTIVE

NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON KEVIN NALLE
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

OVERALL BUILDING ELEVATIONS

A2.02

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
DREXEL NATURAL METAL
COLLECTION C-CHANNEL
ROOF (ANTIQUE METAL)

2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES -
COLOR (TBD)

3. **FASCIA**
WOOD SOURCE
MONTANA CORRAL BOARD
FASCIA

4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS
(BLACK)

5. **WOOD TIMBERS**
PER ENGINEER
S.W. SEMI-TRANS (HILL
COUNTRY)

6. **TOP OF RAILING**
1X2 IRON RAILING
(BLACK)

7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON
(BLACK)

8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST
(BLACK)

9. **VERTICAL SIDING**
WOOD SOURCE
STUART ARCH SIDING

10. **HORIZONTAL SIDING**
WOOD SOURCE
SUGAR PINE SIDING

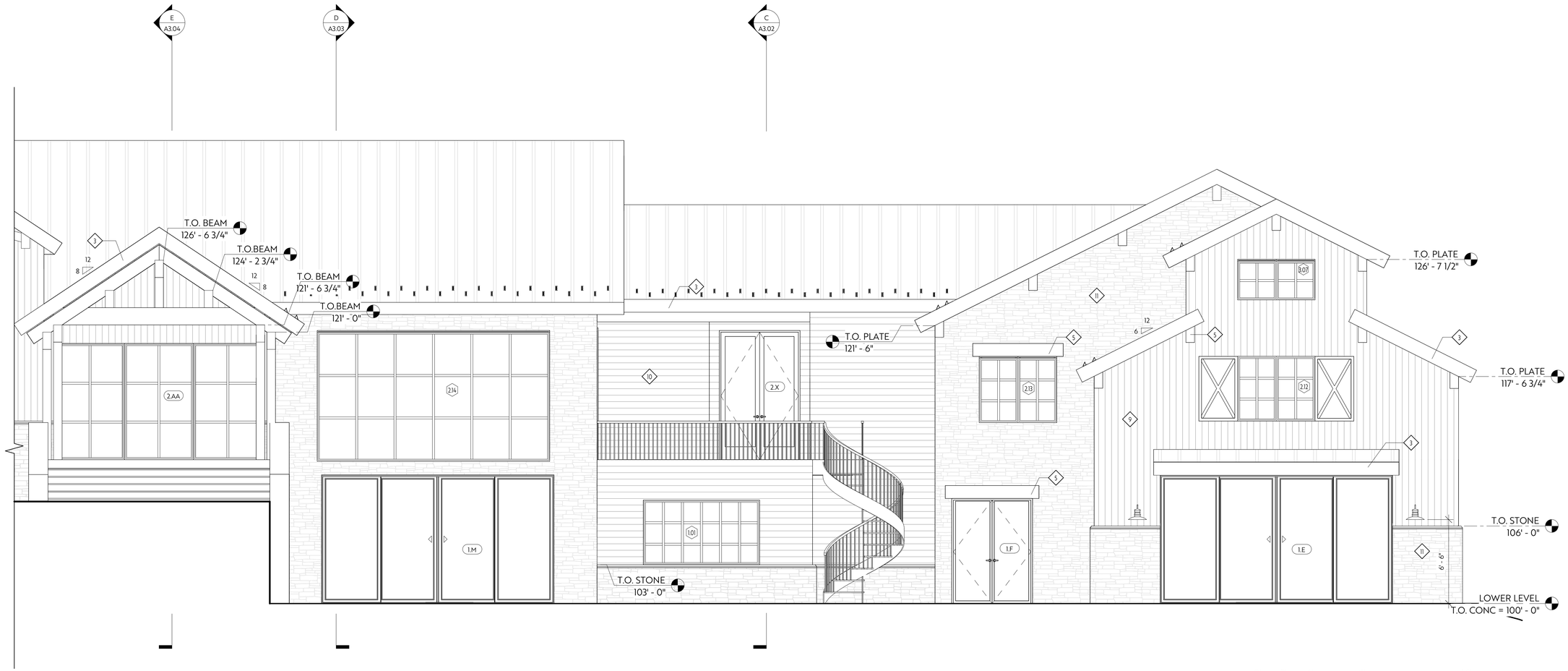
11. **STONE VENEER**
EDWARDS STONE
MOOSE'S TOOTH TUMBLED
(ASHLAR)

12. **SOFFIT**
WOOD SOURCE
STUART ARCH SIDING

13. **DECKING**
WOOD SOURCE
DASSO XRT DECKING
(COGNAC/EPIC SMOOTH)

14. **CHIMNEY SHROUD**
CUSTOM METAL
(BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



NORTH ELEVATION @ ENTRY

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON KEVIN NALLE
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

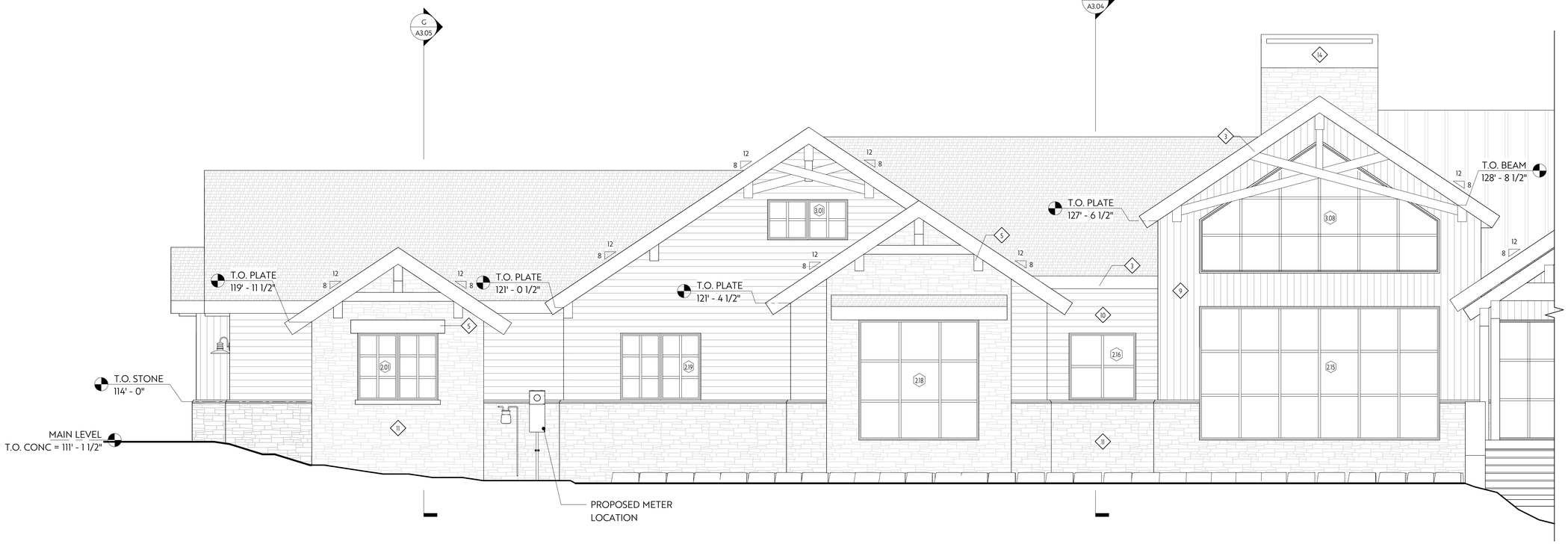
BUILDING ELEVATION

A2.03

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



NORTH ELEVATION @ OFFICE

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

0' 2' 4' 8' 16'

COLORADO LICENSED
JAMES BRANDON LEWIN
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

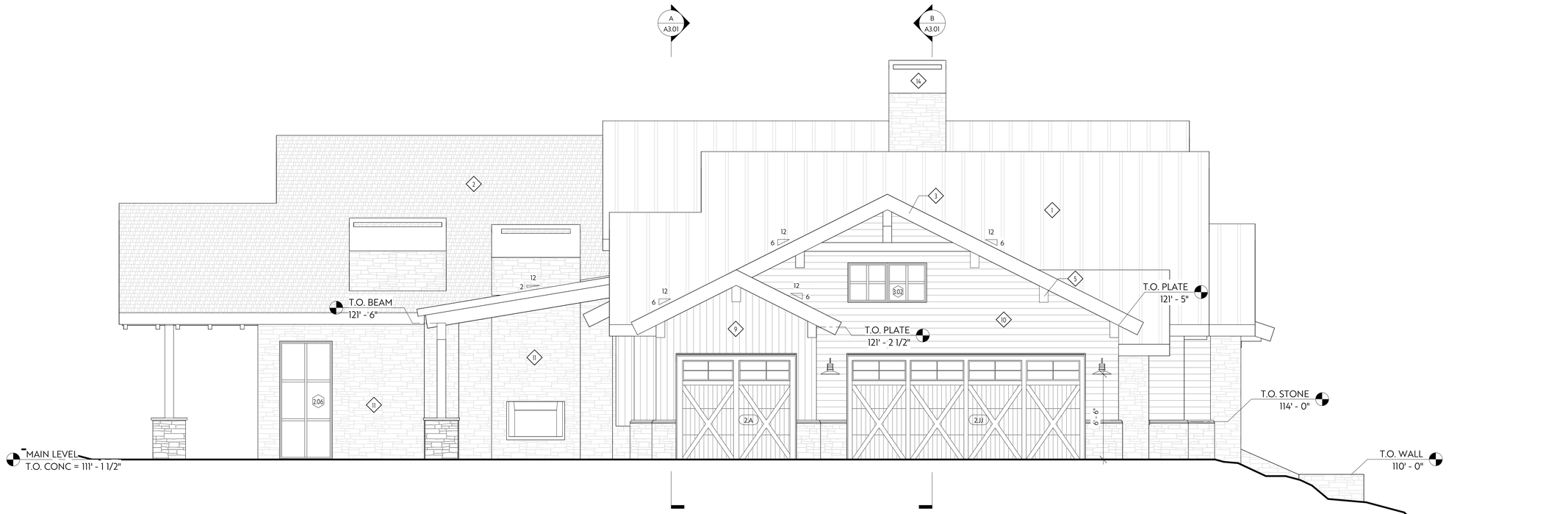
BUILDING ELEVATION

A2.04

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



EAST ELEVATION

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

0' 2' 4' 8' 16'

COLORADO LICENSED
JAMES BRANDON KERWIN
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

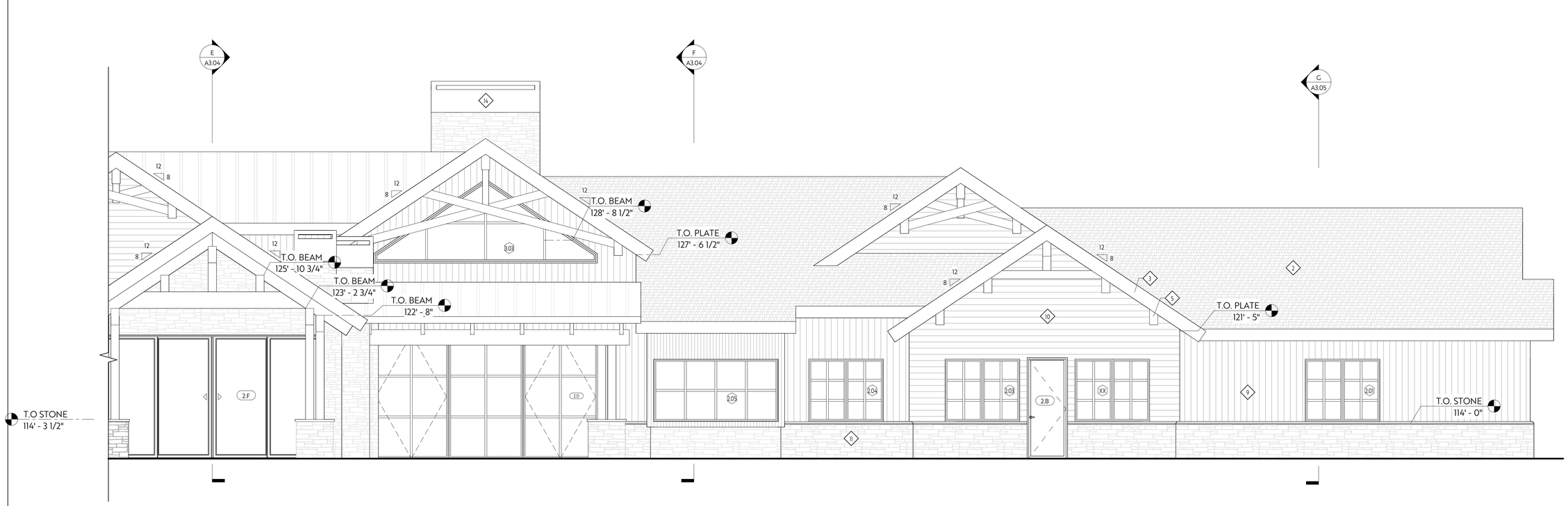
BUILDING ELEVATION

A2.05

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



SOUTH ELEVATION @ SKI ROOM

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

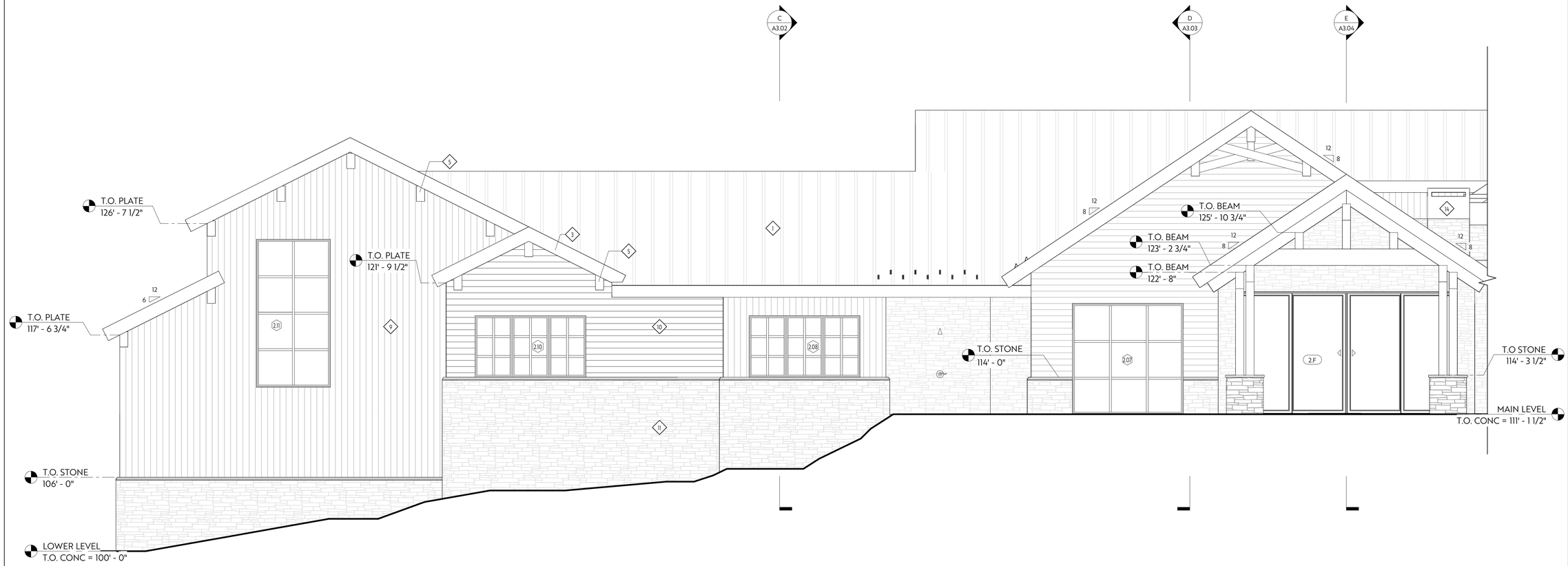
BUILDING ELEVATION

A2.06

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



SOUTH ELEVATION @ BBALL COURT

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON KEVIN MILLER
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

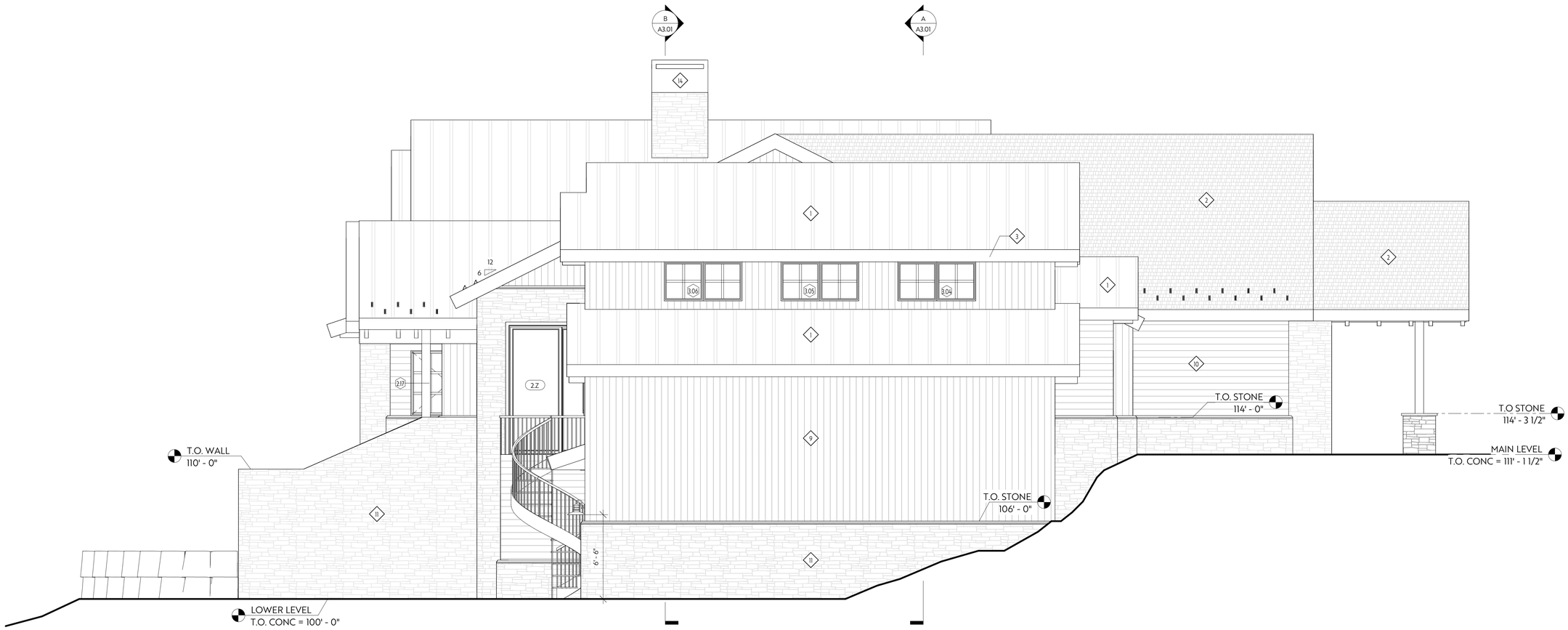
BUILDING ELEVATION

A2.07

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
   DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
   GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
   WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
   ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
   PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
   1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
   1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
   1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
   WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
    WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
    EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
    WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
    WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
    CUSTOM METAL (BLACK)

NOTE: ALL MATERIALS ARE NON-REFLECTIVE



WEST ELEVATION

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

0' 2' 4' 8' 16'

COLORADO LICENSED
BRANDON KEVIN MILLER
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

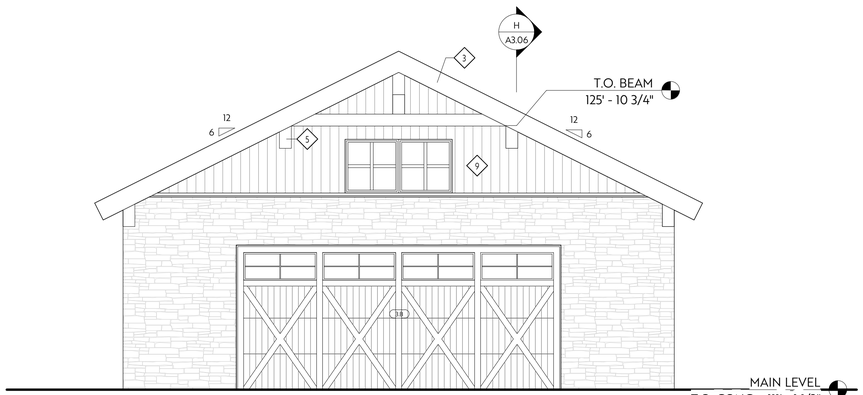
BUILDING ELEVATION

A2.08

COLOR/ MATERIAL LEGEND

1. **METAL ROOF**
   DREXEL NATURAL METAL COLLECTION C-CHANNEL ROOF (ANTIQUE METAL)
2. **ASPHALT ROOF**
   GAF TIMBERLINE SHINGLES - COLOR (TBD)
3. **FASCIA**
   WOOD SOURCE MONTANA CORRAL BOARD FASCIA
4. **WINDOW/ DOOR CLADDING**
   ANDERSON WINDOWS (BLACK)
5. **WOOD TIMBERS**
   PER ENGINEER S.W. SEMI-TRANS (HILL COUNTRY)
6. **TOP OF RAILING**
   1X2 IRON RAILING (BLACK)
7. **RAILING BALUSTERS**
   1/2" X 1/2" RECTANGULAR IRON (BLACK)
8. **RAILING NEWEL**
   1 1/2" X 1 1/2" IRON POST (BLACK)
9. **VERTICAL SIDING**
   WOOD SOURCE STUART ARCH SIDING
10. **HORIZONTAL SIDING**
    WOOD SOURCE SUGAR PINE SIDING
11. **STONE VENEER**
    EDWARDS STONE MOOSE'S TOOTH TUMBLED (ASHLAR)
12. **SOFFIT**
    WOOD SOURCE STUART ARCH SIDING
13. **DECKING**
    WOOD SOURCE DASSO XRT DECKING (COGNAC/EPIC SMOOTH)
14. **CHIMNEY SHROUD**
    CUSTOM METAL (BLACK)

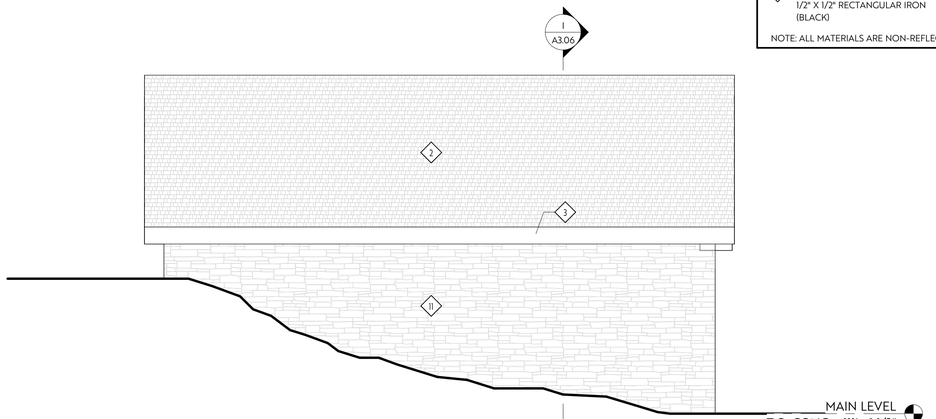
NOTE: ALL MATERIALS ARE NON-REFLECTIVE



NORTH ELEVATION - DETACHED GARAGE

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

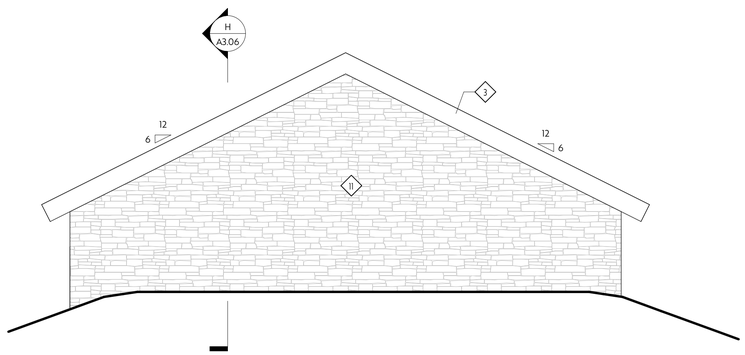
0' 2' 4' 8' 16'



EAST ELEVATION - DETACHED GARAGE

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

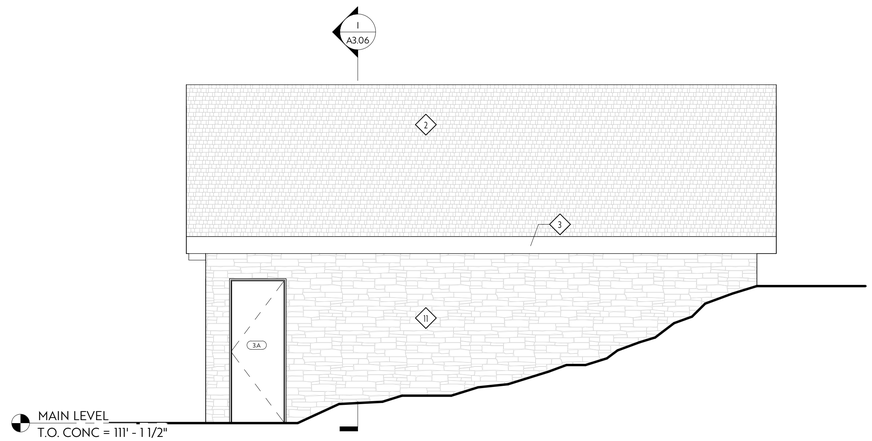
0' 2' 4' 8' 16'



SOUTH ELEVATION - DETACHED GARAGE

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

0' 2' 4' 8' 16'



WEST ELEVATION - DETACHED GARAGE

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

0' 2' 4' 8' 16'

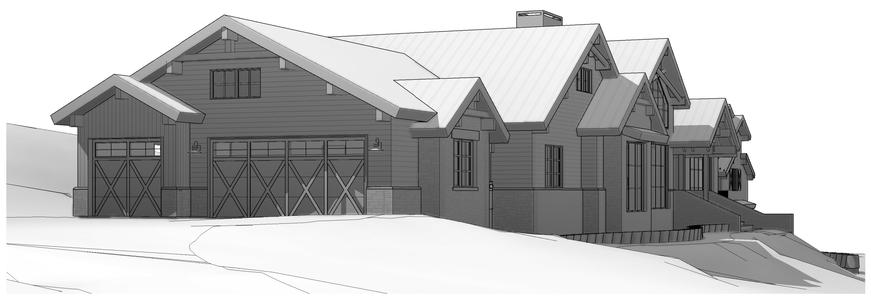
COLLECTIVE
NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON KEVIN MILLER
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

GARAGE ELEVATIONS

A2.09



BUILDING PERSPECTIVES

SCALE: NTS

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

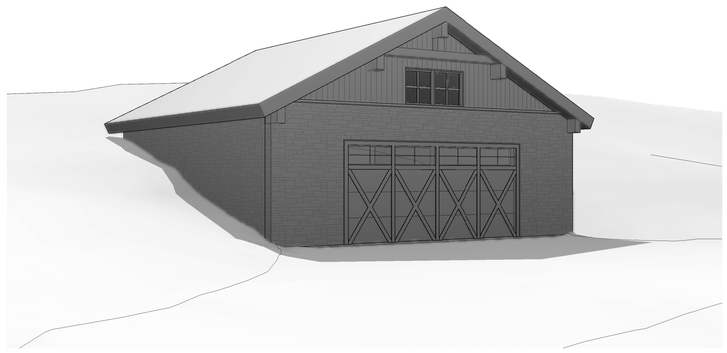
COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836
ARCHITECT

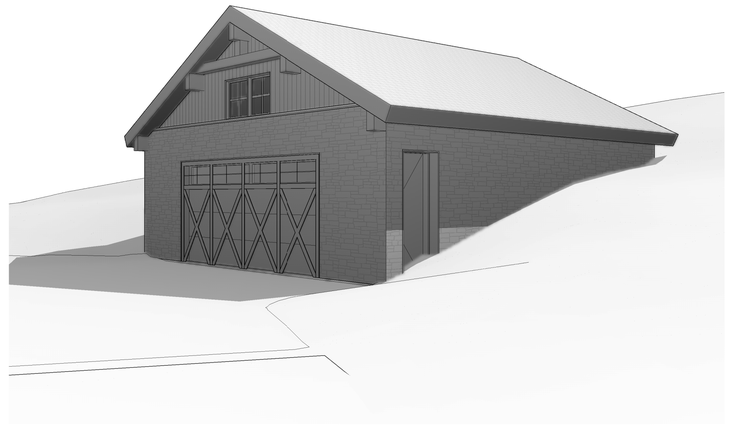
ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING PERSPECTIVES

A2.10





GARAGE PERSPECTIVES

SCALE: NTS

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

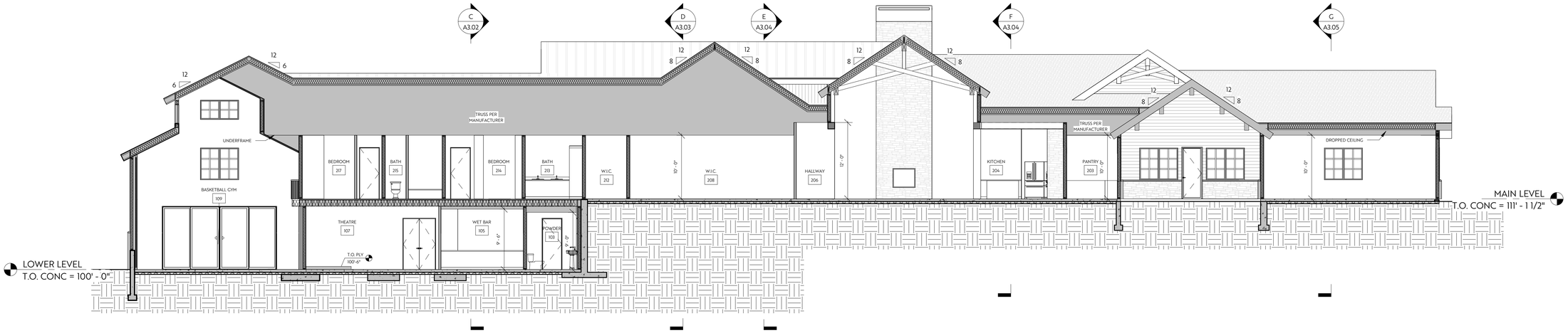
COLORADO LICENSED
TAYLOR BRANDON KENNEDY
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

GARAGE PERSPECTIVES

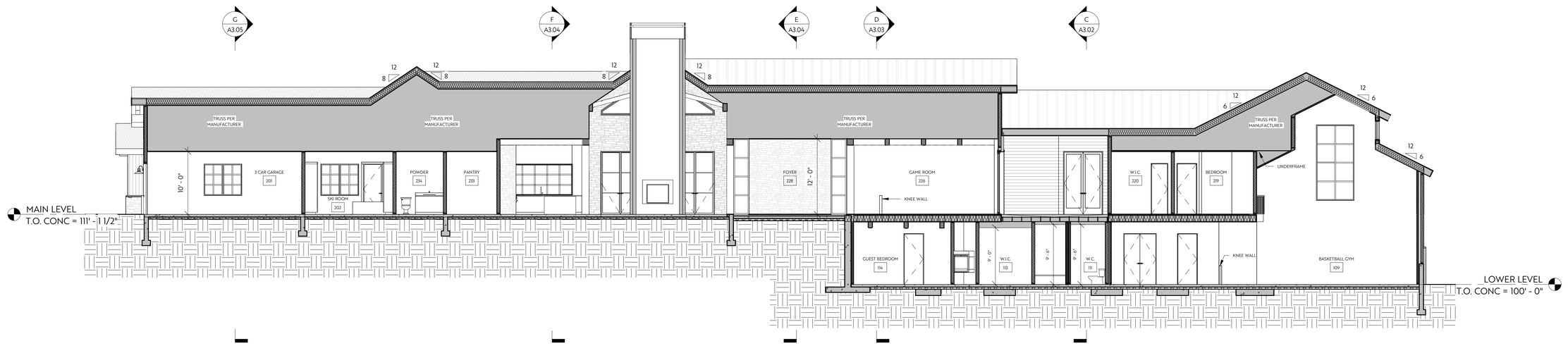
A2.11



SECTION A

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

0' 4' 8' 16' 32'



SECTION B

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

0' 4' 8' 16' 32'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

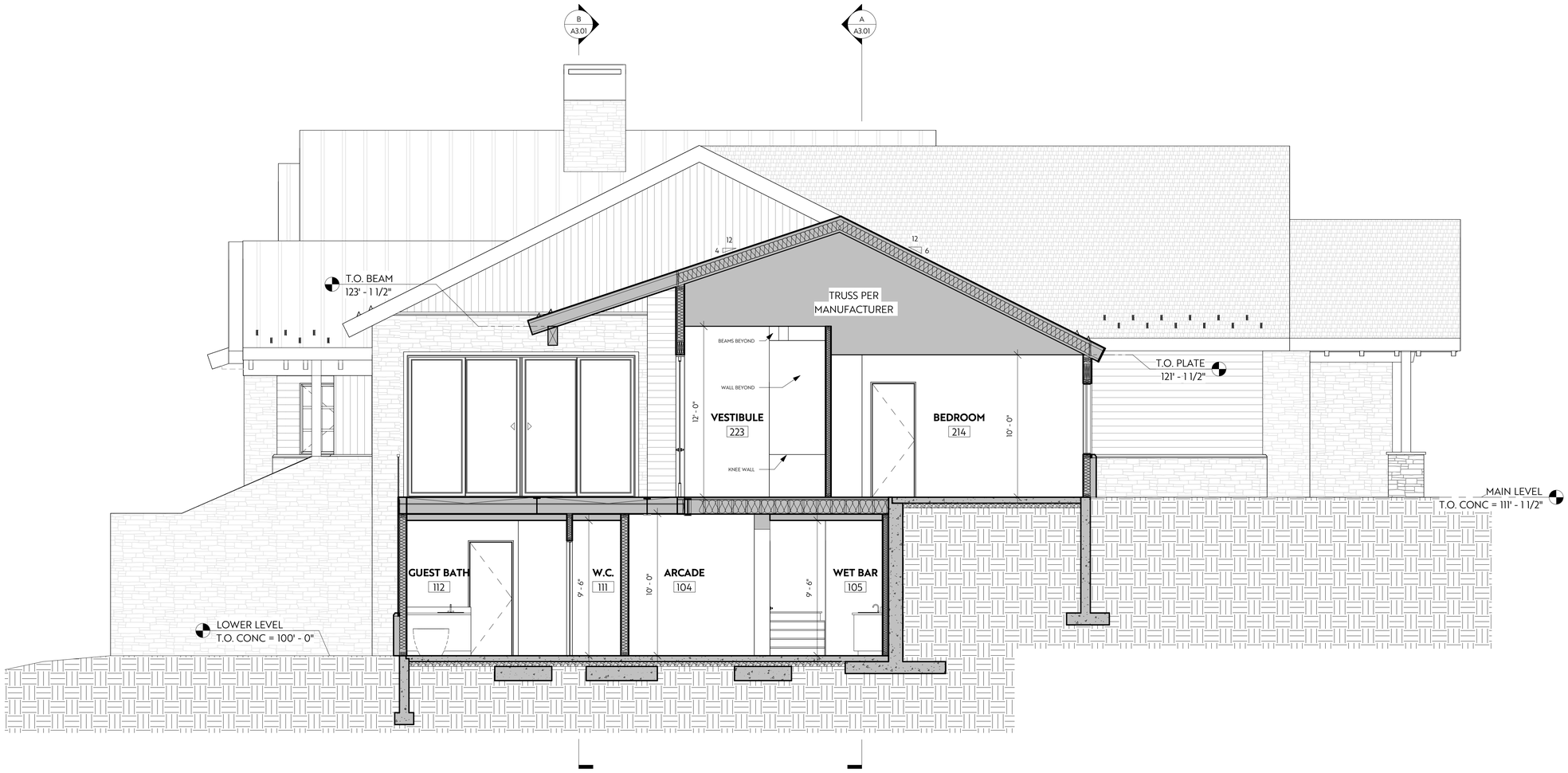
COLORADO LICENSED
BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING SECTION

A3.01



SECTION C

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVI MILLER
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING SECTION

A3.02

SECTION D

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING SECTION

A3.03

SECTION E

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

0' 2' 4' 8' 16'

SECTION F

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

0' 2' 4' 8' 16'

COLLECTIVE

NALLE 2.0 RESIDENCE

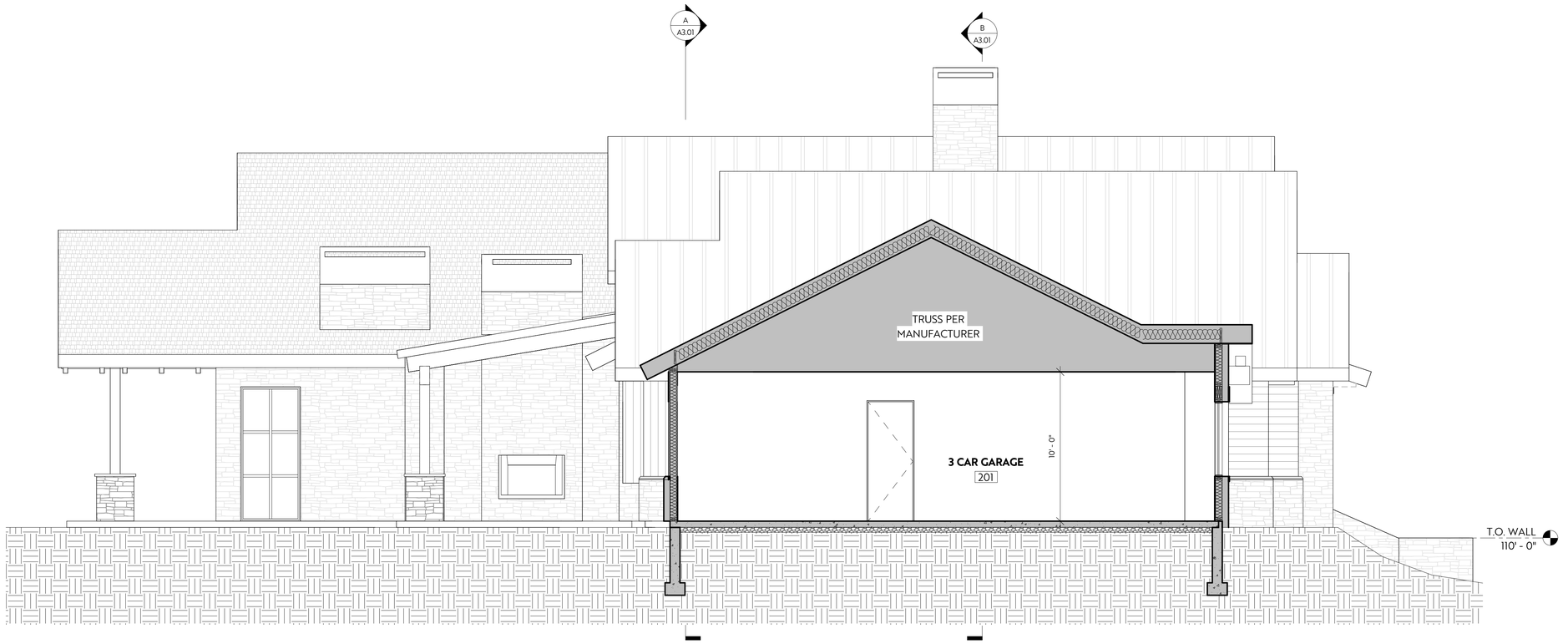
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEE MILLER
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING SECTION

A3.04



SECTION G

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

0' 2' 4' 8' 16'

COLORADO LICENSED
BRANDON LEVIN
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE

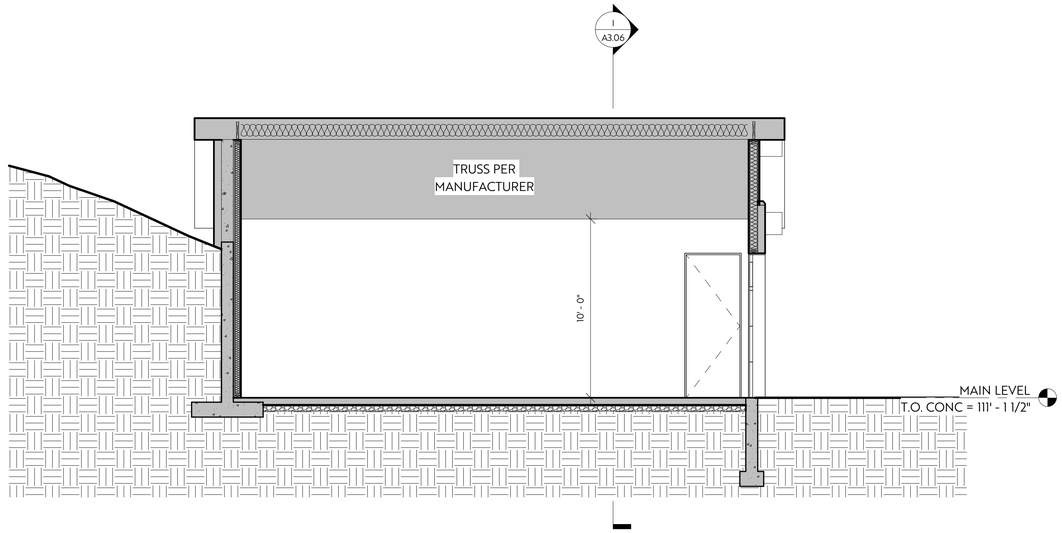
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

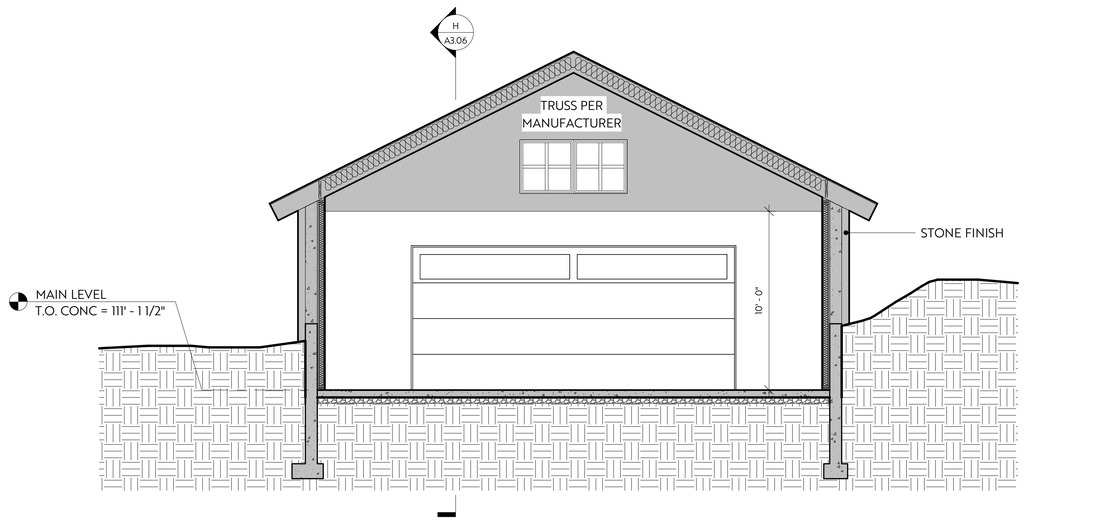
BUILDING SECTION

A3.05



SECTION H

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



SECTION I

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

ARCHITECTS
COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836

COLLECTIVE

NALLE 2.0 RESIDENCE

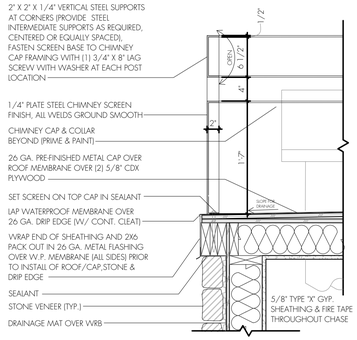
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

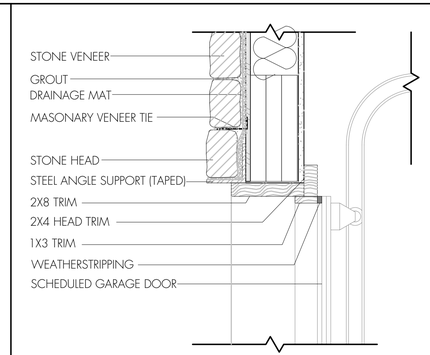
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

BUILDING SECTION

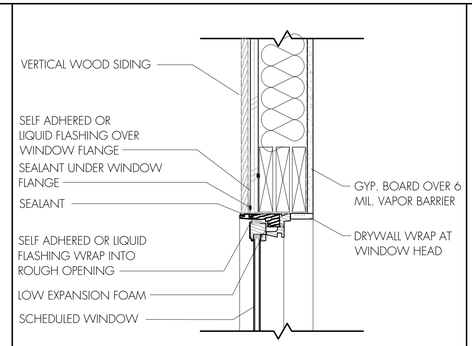
A3.06



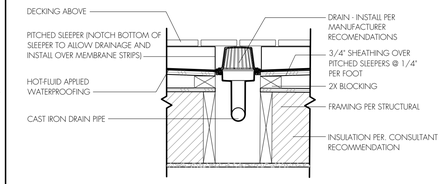
17	METAL CHIMNEY SHROUD
A4.01	SCALE: 1" = 1'-0"



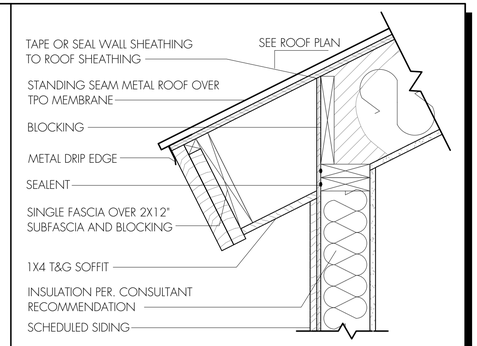
13	GARAGE HEAD AT STONE
A4.01	SCALE: 1-1/2" = 1'-0"



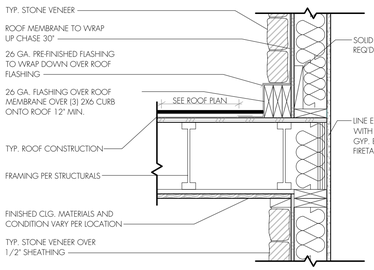
9	WINDOW HEAD AT WOOD SIDING
A4.01	SCALE: 1-1/2" = 1'-0"



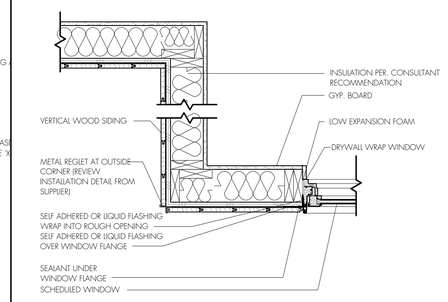
5	DRAIN AT W.P. DECK
A4.01	SCALE: 1" = 1'-0"



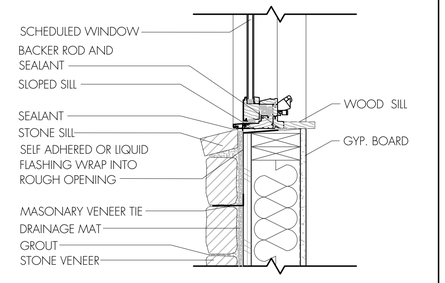
1	ROOF EVE
A4.01	SCALE: 1-1/2" = 1'-0"



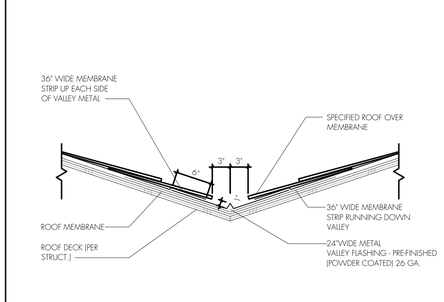
18	METAL CHIMNEY SHROUD
A4.01	SCALE: 1" = 1'-0"



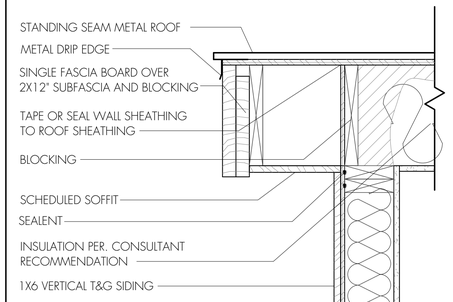
14	EXTERIOR CORNER AT WOOD SIDING
A4.01	SCALE: 1" = 1'-0"



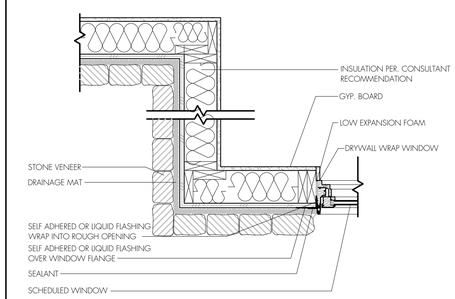
10	WINDOW SILL AT STONE
A4.01	SCALE: 1-1/2" = 1'-0"



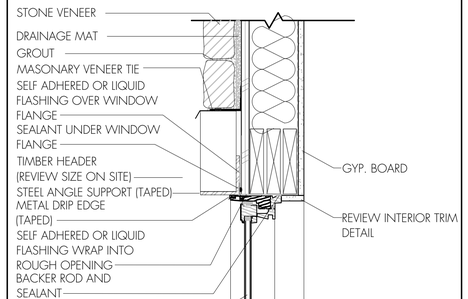
6	VALLEY FLASHING
A4.01	SCALE: 1" = 1'-0"



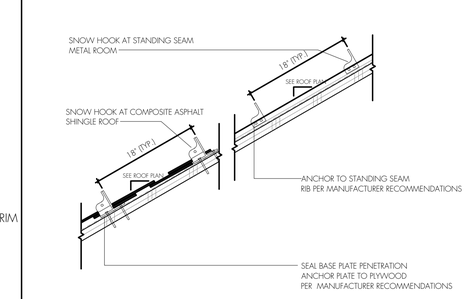
2	ROOF RAKE
A4.01	SCALE: 1-1/2" = 1'-0"



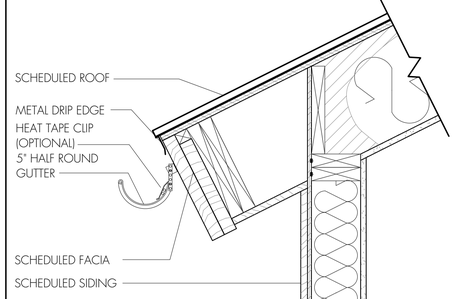
15	EXTERIOR CORNER AT STONE
A4.01	SCALE: 1" = 1'-0"



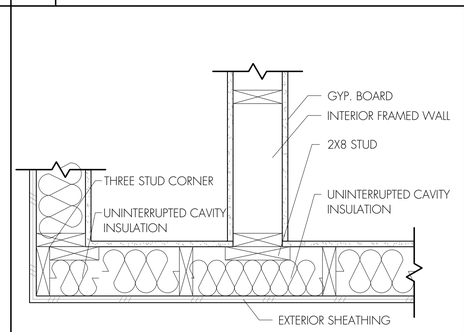
11	WINDOW HEAD AT STONE
A4.01	SCALE: 1" = 1'-0"



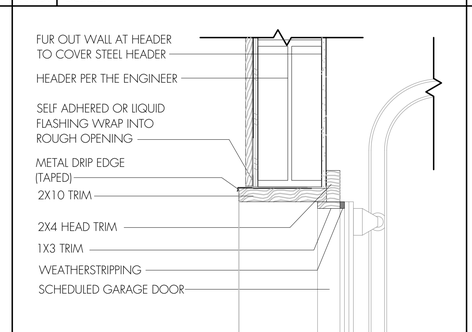
7	SNOW HOOKS
A4.01	SCALE: 1" = 1'-0"



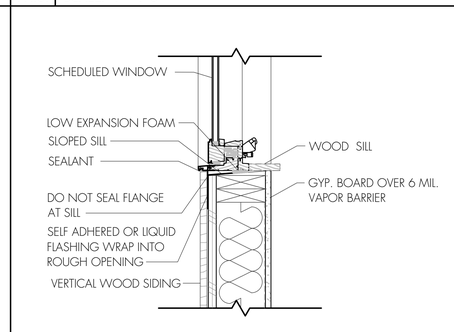
3	HALF ROUND GUTTER
A4.01	SCALE: 1-1/2" = 1'-0"



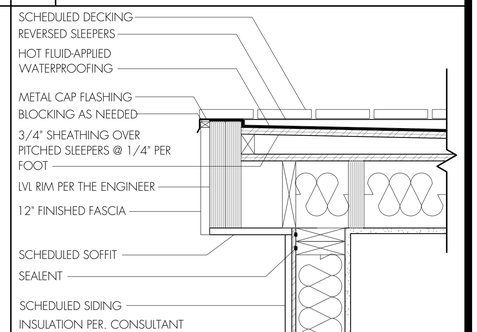
16	ADVANCED FRAMING DETAIL
A4.01	SCALE: 1-1/2" = 1'-0"



12	GARAGE HEAD AT WOOD SIDING
A4.01	SCALE: 1-1/2" = 1'-0"



8	WINDOW SILL AT WOOD SIDING
A4.01	SCALE: 1-1/2" = 1'-0"



4	WATERPROOF DECK
A4.01	SCALE: 1-1/2" = 1'-0"

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED ARCHITECT JAMES BRANDON LEVIN 6/13/23 405836

ISSUE	
Permit Set	06/13/2023
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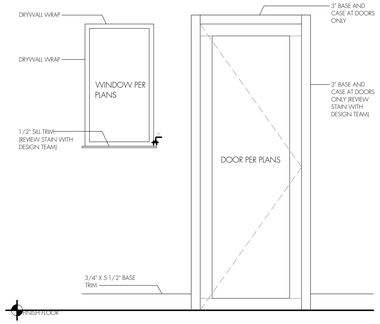
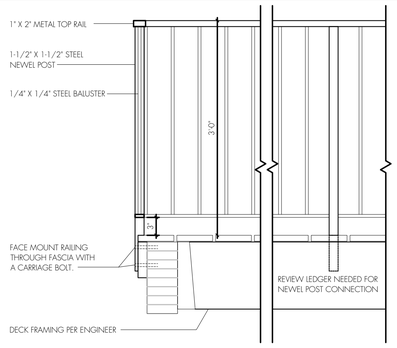
DRAWN BY:	MI
CHECKED BY:	JM

ARCHITECTURE & CONSTRUCTION DETAILS

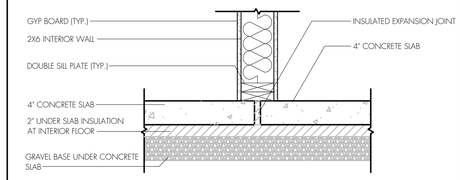
A4.01



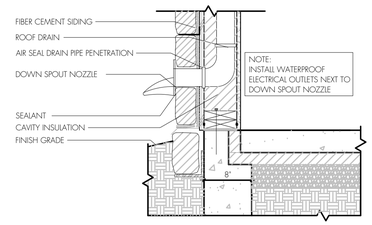
17 INTERIOR TRIM
A4.02 SCALE: 1" = 1'-0"



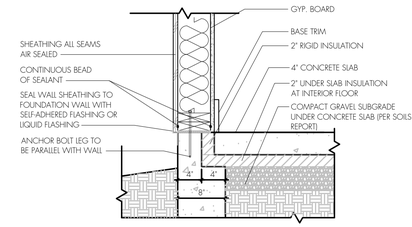
13 EXTERIOR GUARDRAIL AT DECK
A4.02 SCALE: 1" = 1'-0"



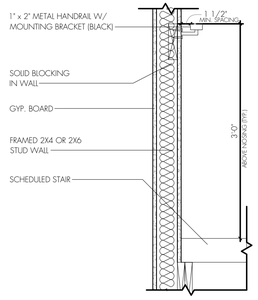
9 THERMAL BREAK AT INTERIOR WALL
A4.02 SCALE: 1" = 1'-0"



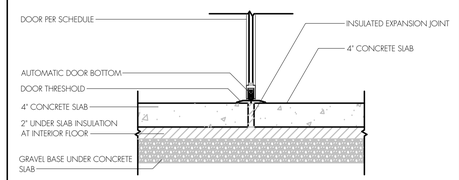
5 DRAIN OUTLET AT WALL
A4.02 SCALE: 1" = 1'-0"



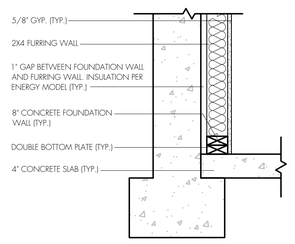
1 SLAB EDGE
A4.02 SCALE: 1" = 1'-0"



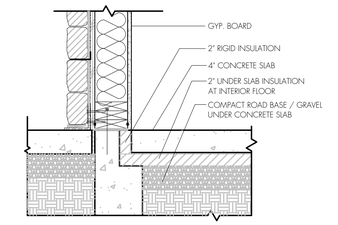
14 INTERIOR HANDRAIL
A4.02 SCALE: 1" = 1'-0"



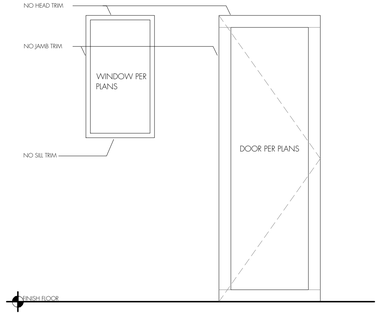
10 THERMAL BREAK AT INTERIOR DOOR
A4.02 SCALE: 1" = 1'-0"



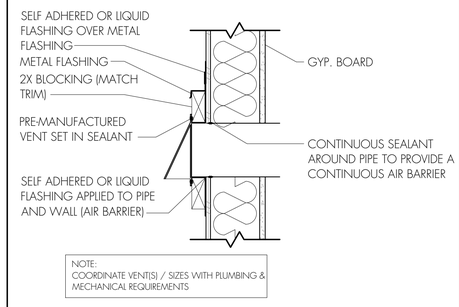
6 FURRED WALL AT FOUNDATION
A4.02 SCALE: 1" = 1'-0"



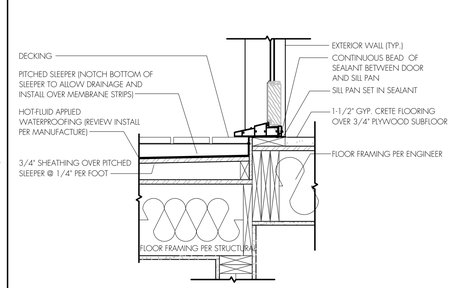
2 STONE AT PATIO
A4.02 SCALE: 1" = 1'-0"



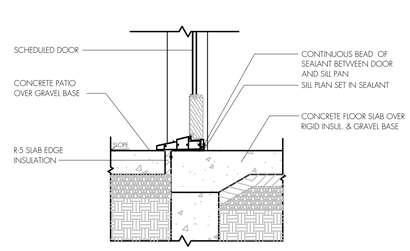
15 EXTERIOR TRIM AT WOOD SIDING
A4.02 SCALE: 1-1/2" = 1'-0"



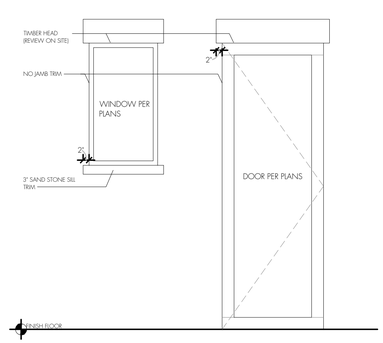
11 THROUGH WALL
A4.02 SCALE: 1-1/2" = 1'-0"



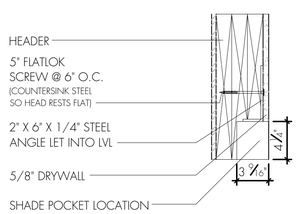
7 THRESHOLD AT W.P. DECK
A4.02 SCALE: 1" = 1'-0"



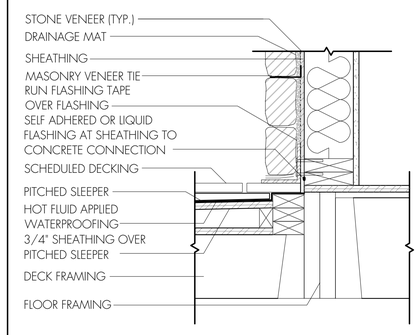
3 THRESHOLD AT PATIO
A4.02 SCALE: 1" = 1'-0"



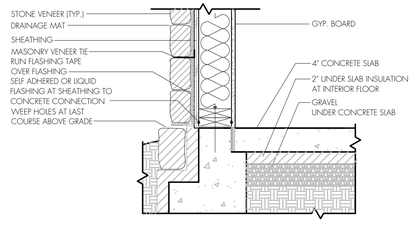
16 EXTERIOR TRIM AT STONE
A4.02 SCALE: 1-1/2" = 1'-0"



12 SHADE POCKET
A4.02 SCALE: 1-1/2" = 1'-0"



8 STONE BASE AT W.P. DECK
A4.02 SCALE: 1" = 1'-0"



4 STONE AT FOUNDATION
A4.02 SCALE: 1" = 1'-0"

COLLECTIVE
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COLORADO LICENSED
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6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
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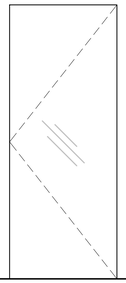
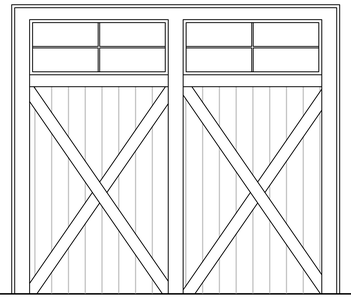
DRAWN BY:	MI
CHECKED BY:	JM

ARCHITECTURE & CONSTRUCTION DETAILS

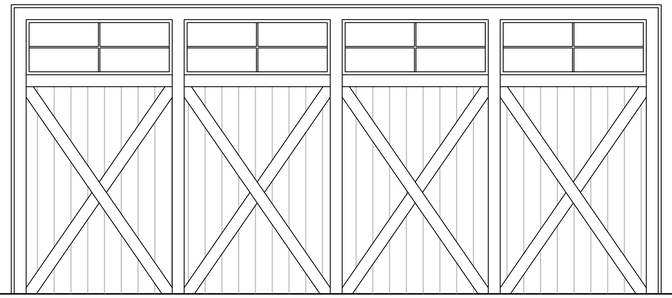
A4.02



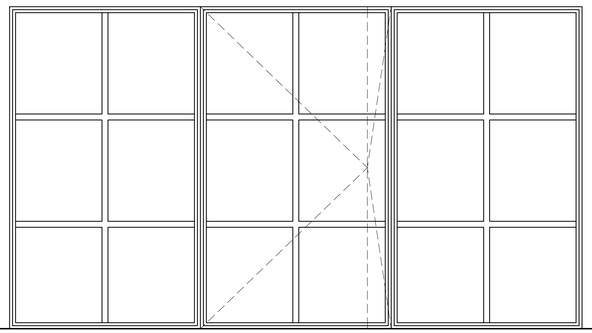
11.
GLASS SHOWER DOOR



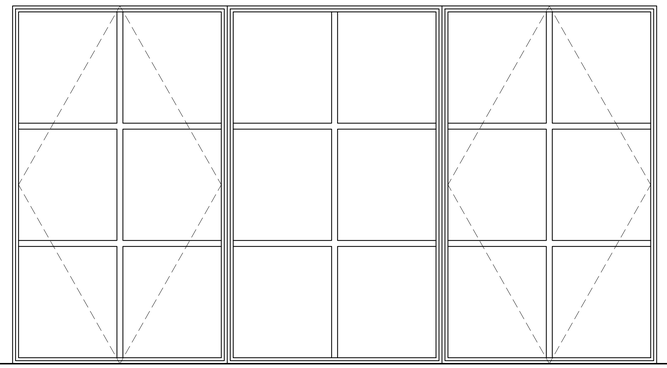
10.
CUSTOM GARAGE DOOR CLAD IN SIDING



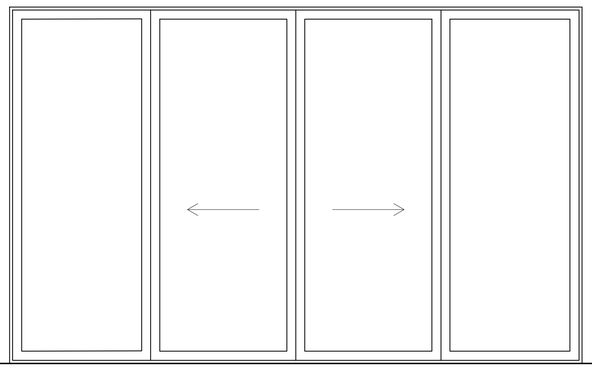
9.
CUSTOM GARAGE DOOR CLAD IN SIDING



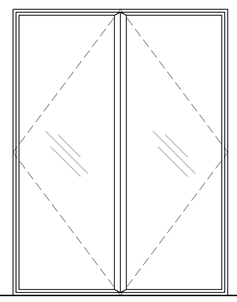
8.
THREE PANEL IRON UNIT WITH 5'-0" CUSTOM PIVOT DOOR



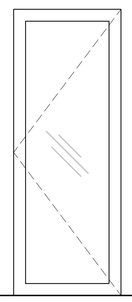
7.
SIX PANEL IRON UNIT WITH TWO FRENCH STYLE DOORS



6.
FOUR PANEL DOUBLE SLIDING DOOR WITH FULL LITE



5.
TWO PANEL DOUBLE DOOR WITH FULL LITE



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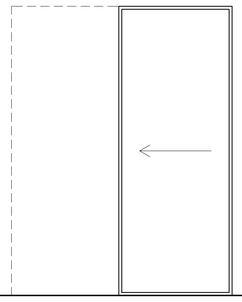
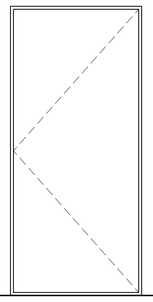
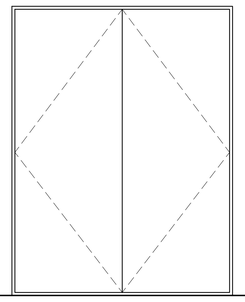
SINGLE PANEL DOOR WITH FULL LITE



3.
SOLID CORE POCKET DOOR



2.
SOLID CORE SWING DOOR



1.
SOLID CORE DOUBLE DOOR

DOOR SCHEDULE				
MARK	TYPE	WIDTH	HEIGHT	NOTES
1.A	1	6' - 0"	8' - 0"	
1.B	2	3' - 0"	8' - 0"	
1.C	1	5' - 0"	8' - 0"	
1.D	1	5' - 0"	8' - 0"	
1.E	6	18' - 0"	10'- 0"	
1.F	5	6' - 0"	8' - 0"	
1.G	2	3' - 0"	8' - 0"	
1.H	1	5' - 0"	8' - 0"	
1.I	2	2' - 8"	8' - 0"	
1.J	11	2' - 8"	8' - 0"	
1.K	2	3' - 0"	8' - 0"	
1.L	2	3' - 0"	8' - 0"	
1.M	6	18' - 0"	10' - 0"	
1.N	2	3' - 0"	8' - 0"	
1.O	2	3' - 0"	8' - 0"	
2.A	10	9' - 0"	8' - 0"	
2.B	4	3' - 0"	8' - 0"	
2.C	3	3' - 0"	8' - 0"	
2.D	7	18' - 0"	10' - 0"	
2.E	2	3' - 0"	8' - 0"	
2.F	6	18' - 0"	10' - 0"	
2.G	2	3' - 0"	8' - 0"	
2.H	1	3' - 0"	8' - 0"	
2.I	11	3' - 0"	8' - 0"	
2.J	4	3' - 0"	8' - 0"	
2.K	2	2' - 8"	8' - 0"	
2.L	3	3' - 0"	8' - 0"	
2.M	11	2' - 8"	8' - 0"	
2.N	2	3' - 0"	8' - 0"	
2.O	2	3' - 0"	8' - 0"	
2.P	11	2' - 8"	8' - 0"	
2.Q	3	3' - 0"	8' - 0"	
2.R	2	3' - 0"	8' - 0"	
2.S	2	3' - 0"	8' - 0"	
2.T	2	3' - 0"	8' - 0"	
2.U	2	3' - 0"	8' - 0"	
2.V	2	2' - 8"	8' - 0"	
2.W	2	3' - 0"	8' - 0"	
2.X	5	6' - 0"	10' - 0"	
2.Y	2	3' - 0"	8' - 0"	
2.Z	6	16' - 0"	10' - 0"	
2.AA	8	16' - 0"	9' - 0"	
2.BB	3	3' - 0"	8' - 0"	
2.CC	1	6' - 0"	8' - 0"	
2.DD	2	3' - 0"	8' - 0"	
2.EE	2	2' - 8"	8' - 0"	
2.FF	2	2' - 8"	8' - 0"	
2.GG	3	3' - 0"	8' - 0"	
2.HH	3	3' - 0"	8' - 0"	
2.II	2	3' - 0"	8' - 0"	20 MIN. FIRE RATED
2.JJ	9	18' - 0"	8' - 0"	
3.A	4	18' - 0"	8' - 0"	
3.B	9	3' - 0"	8' - 0"	

GENERAL DOOR NOTES

1. CONTRACTOR TO COORDINATE ROUGH OPENINGS WITH MANUFACTURER.
2. INTERIOR DOORS SHALL BE LOCATED WITH THE HINGE JAMB LOCATED 4" FROM ADJACENT WALL, CENTERED, OR LOCATED PER PLAN.
3. CONTRACTOR TO COORDINATE DOOR HARDWARE.
4. DOOR MANUFACTURE TO PROVIDED TEMPERED GLASS AS REQUIRED BY CODE.
5. SEE PLANS FOR DOOR HANDING.
6. VERIFY INTERIOR AND EXTERIOR DOOR HARDWARE WITH OWNER.
7. VERIFY INTERIOR DOOR WOOD SPECIES, PANEL STYLE, FINISH WITH OWNER.
8. VERIFY EXTERIOR CLADDING COLOR WITH OWNER.

COLORADO LICENSED
BRANDON LEVI MILLER
6/13/23
405836
ARCHITECT

COLLECTIVE

NALLE 2.0 RESIDENCE

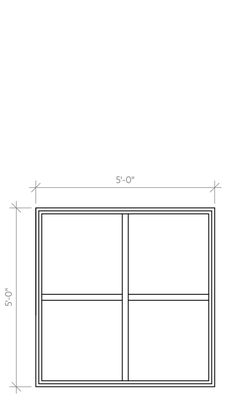
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

DOOR SCHEDULE

A5.01



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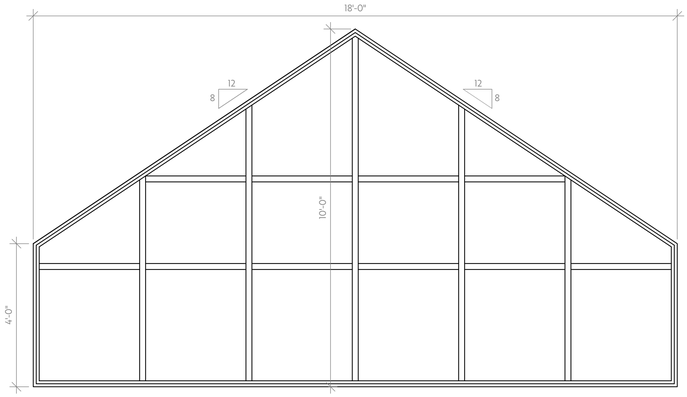

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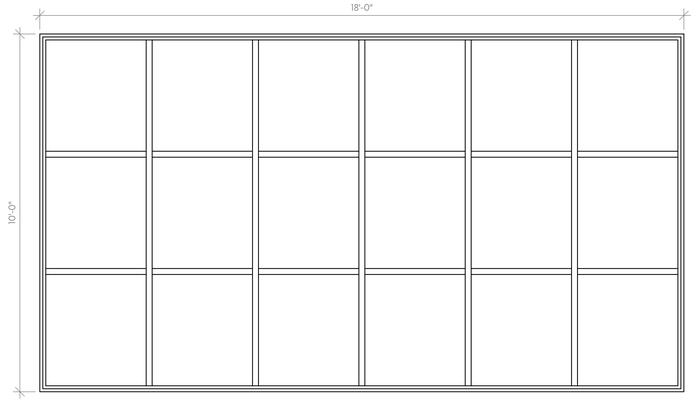

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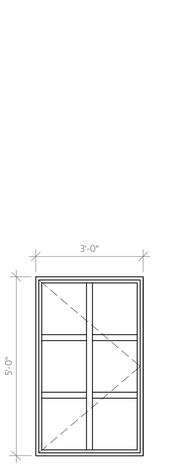

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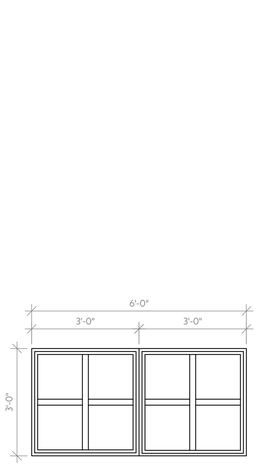

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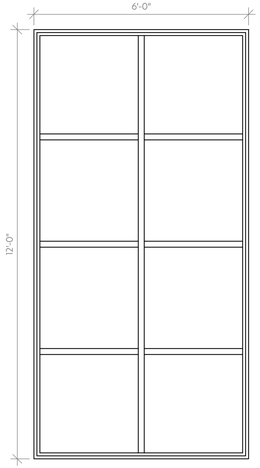
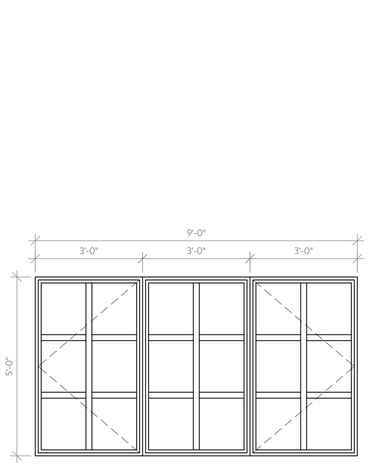


I.

H.



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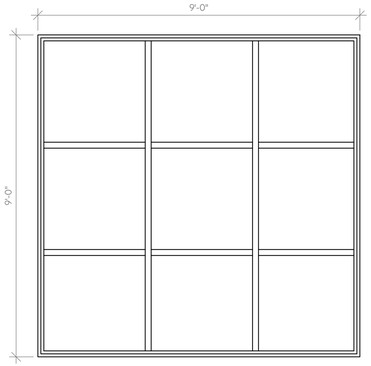

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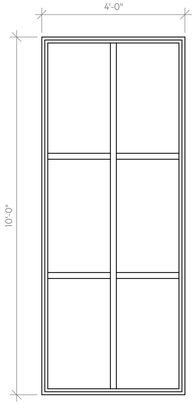

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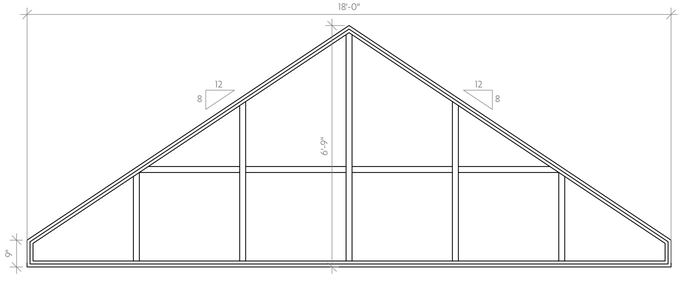

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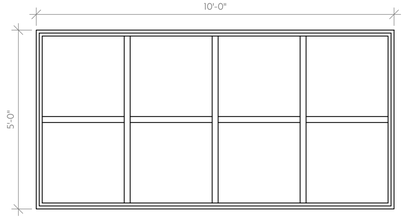

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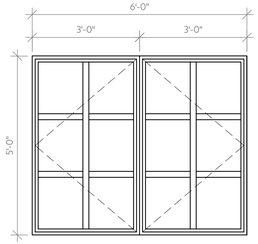

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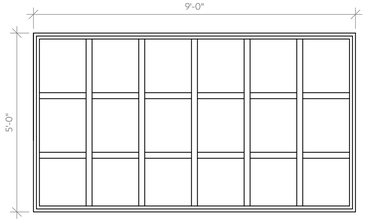


A.

WINDOW SCHEDULE				
MARK	TYPE	WIDTH	HEIGHT	NOTES
1.01	A	9' - 0"	5' - 0"	
2.01	B	6' - 0"	5' - 0"	
2.02	B	6' - 0"	5' - 0"	
2.03	B	6' - 0"	5' - 0"	
2.04	B	6' - 0"	5' - 0"	
2.05	C	10' - 0"	5' - 0"	
2.06	E	4' - 0"	10' - 0"	
2.07	F	9' - 0"	9' - 0"	
2.08	G	9' - 0"	5' - 0"	EGRESS
2.09	H	2' - 0"	2' - 0"	
2.10	G	9' - 0"	5' - 0"	EGRESS
2.11	I	6' - 0"	12' - 0"	ALIGN WINDOW HEADER
2.12	B	3' - 0"	5' - 0"	
2.13	B	3' - 0"	5' - 0"	EGRESS
2.14	L	18' - 0"	10' - 0"	
2.15	L	18' - 0"	10' - 0"	
2.16	N	5' - 0"	5' - 0"	
2.17	K	3' - 0"	5' - 0"	EGRESS
2.18	F	9' - 0"	9' - 0"	
2.19	B	3' - 0"	5' - 0"	
2.20	B	3' - 0"	5' - 0"	
3.01	J	3' - 0"	6' - 0"	
3.02	J	3' - 0"	6' - 0"	
3.03	D	18' - 0"	6' - 9"	
3.04	J	3' - 0"	6' - 0"	ALIGN WINDOW HEADER
3.05	J	3' - 0"	6' - 0"	ALIGN WINDOW HEADER
3.06	J	3' - 0"	6' - 0"	ALIGN WINDOW HEADER
3.07	J	3' - 0"	6' - 0"	ALIGN WINDOW HEADER
3.08	M	18' - 0"	10' - 0"	

GENERAL WINDOW NOTES

1. CONTRACTOR TO COORDINATE ROUGH OPENINGS WITH MANUFACTURER.
2. CONTRACTOR TO COORDINATE WINDOW HARDWARE.
3. WINDOW MANUFACTURER TO PROVIDE TEMPERED GLASS AS REQUIRED BY CODE.
4. CONTRACTOR TO VERIFY ALL OPERABLE WINDOW LOCATIONS WITH THE OWNER.
5. CONTRACTOR TO VERIFY WINDOW CLADDING COLOR AND HARDWARE WITH THE OWNER.
6. TOP OF WINDOWS TO ALIGN WITH TOP OF ADJACENT DOORS, UNLESS NOTED OTHERWISE.

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
JAMES BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

WINDOW SCHEDULE

A5.02

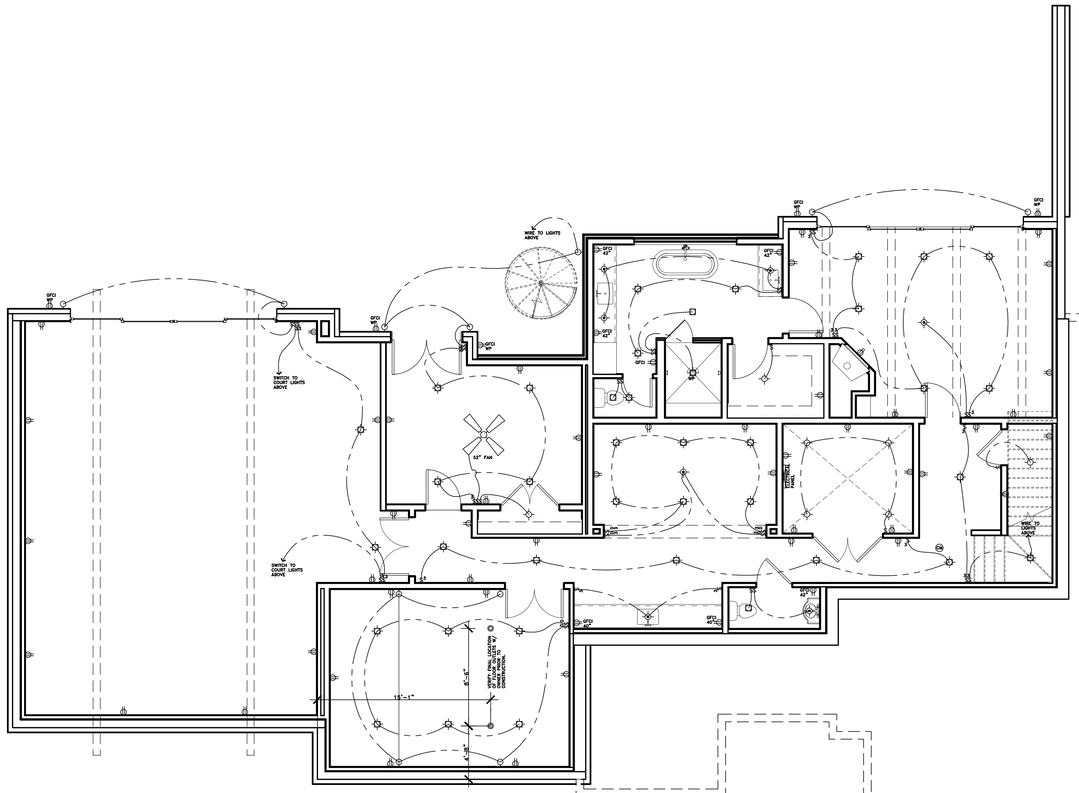
ELECTRICAL NOTES:

1. OUTLETS WITHIN 3'-0" FROM WATER SHALL BE GFCI.
2. OUTLETS HEIGHTS ARE NOTED TO CENTER OF OUTLET.
3. OUTLET BOXES IN PARTY WALLS SHALL BE SEPARATED 24" (HORIZONTAL).
4. ALL T.V., PHONE, CABLE, AND SECURITY OUTLETS SHALL BE VERIFIED WITH OWNER PRIOR TO CONSTRUCTION.
5. FINAL LOCATION OF FLOOR OUTLETS SHALL BE VERIFIED WITH OWNER PRIOR TO CONSTRUCTION.
6. ALL FAN/LIGHT COMBO UNITS SHALL HAVE SEPARATE SWITCHES.
7. OUTLETS ON SWITCH SHALL BE SWITCHED AT TOP ONLY.
8. GANG ALL OUTLETS AND SWITCHES WHERE POSSIBLE.
9. APPLIANCE POWER SHALL BE VERIFIED WITH OWNER PRIOR TO CONST.
10. PROVIDE POWER/GAS FOR WATER HEATERS LOCATED IN ATTIC.
11. ALL WATER HEATERS LOCATED IN ATTIC SHALL HAVE AT MIN. ONE LIGHT.
12. PROVIDE MINIMUM 22" X 30" X 3/4" PLYWOOD DECKING FROM HVAC UNIT TO ATTIC ACCESS/ATTIC DOOR.
13. PROVIDE ALL REQUIRED POWER/GAS, MECH., AND PLUMBING FOR HVAC UNITS. VERIFY TYPE WITH GENERAL CONTRACTOR PRIOR TO CONST.
14. ALL PHONE AND CABLE T.V. OUTLETS TO BE LOCATED BY GENERAL CONTRACTOR.
15. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED FOR TV MANUFACTURES WALL MOUNTED TV OUTLET HEIGHT.

ELECTRICAL LEGEND:

- 1X4' ACRYLIC FLUORESCENT — 2-BULB FLUORESCENT LIGHT
- 2X4 ACRYLIC FLUORESCENT — 4-BULB FLUORESCENT LIGHT
- ROPE LIGHTING
- UNDER CABINET FLUORESCENT LIGHT
- TRACK LIGHTING
- EMERGENCY LIGHTING
- SHIELDED FLOOD LIGHT
- EXHAUST VENT (VERIFY TYPE W/ OWNER)
- CEILING HEATER (VERIFY TYPE W/ OWNER)
- VENT/HEATER COMBO
- VENT/LIGHT COMBO (VERIFY TYPE W/ OWNER)
- VENT/HEAT/LIGHT COMBO (VERIFY TYPE W/ OWNER)
- SURFACE MOUNT LIGHT
- WALL SCONCE
- PENDANT MOUNT FIXTURE
- LOW VOLTAGE MINI PENDANT MOUNT FIXTURE
- EYEBEAM OR SPOTLIGHT
- LOW VOLTAGE HALOGEN MINI SPOTLIGHT
- RECESSED CAN LIGHT
- LOW VOLTAGE HALOGEN MINI CAN LIGHT
- 52" FAN — LIGHT AND FAN (TYP.)
- 52" FAN — FAN (TYP.)

- $ SWITCH
- $3 3-WAY SWITCH
- $4 4-WAY SWITCH
- $D DIMMER SWITCH
- $GFCI GFCI SWITCH – ALL WET SWITCHES TO BE GFCI.
- $WP WATERPROOF SWITCH
- 110 VOLT DUPLEX OUTLET
- 110 VOLT QUADPLEX OUTLET
- WP 110 VOLT WATERPROOF DUPLEX OUTLET
- 220V 220 VOLT DUPLEX OUTLET
- SPLIT WIRE FOR SWITCH PLUG
- FLOOR OUTLET
- TEL PHONE OUTLET
- TEL TELEVISION CABLE OUTLET
- JUNCTION BOX
- EXTERIOR DOOR BELL
- THERMOSTAT
- CHIMES
- SD SMOKE DETECTOR
- CM CARBON MONOXIDE DETECTOR
- SPK CEILING MOUNTED SPEAKER
- R RECEIVER
- VOL VOLUME CONTROL
- ELECTRICAL PANEL
- PUSHBUTTON FOR GARAGE DOOR OPENER
- A/C DISC.
- ELECTRICAL METER



POINT DESIGN INCORPORATED
RESIDENTIAL & COMMERCIAL CUSTOM PLANS
OFFICE: 512-759-7646
FAX: 512-846-1102
103 EAST STREET
P.O. BOX 149
HUTTO, TEXAS 78634

ISSUE FOR PERMIT:

ISSUE FOR PRICING:

ISSUE FOR CONSTRUCTION:

Nalle CUSTOM HOMES
1000 MOPAC CIRCLE • AUSTIN, TEXAS 78746
PHONE: 512-985-6825 FAX: 512-985-6907

CUSTOM RESIDENCE
135 MOUNT ARGENTINA ROAD
BLUE RIVER, CO 80424

NO.	DATE AND REVISIONS

RED INK?
FINAL CONSTRUCTION DRAWINGS WILL HAVE THIS STAMP IN RED INK. ALL OTHER DRAWINGS ARE INCOMPLETE AND NOT FOR CONSTRUCTION.

LOWER LEVEL ELECTRICAL PLAN (1)
SCALE: 3/16" = 1'-0"

DATE: 06-01-23
FILE NAME:
SHEET NO.: 1027A6

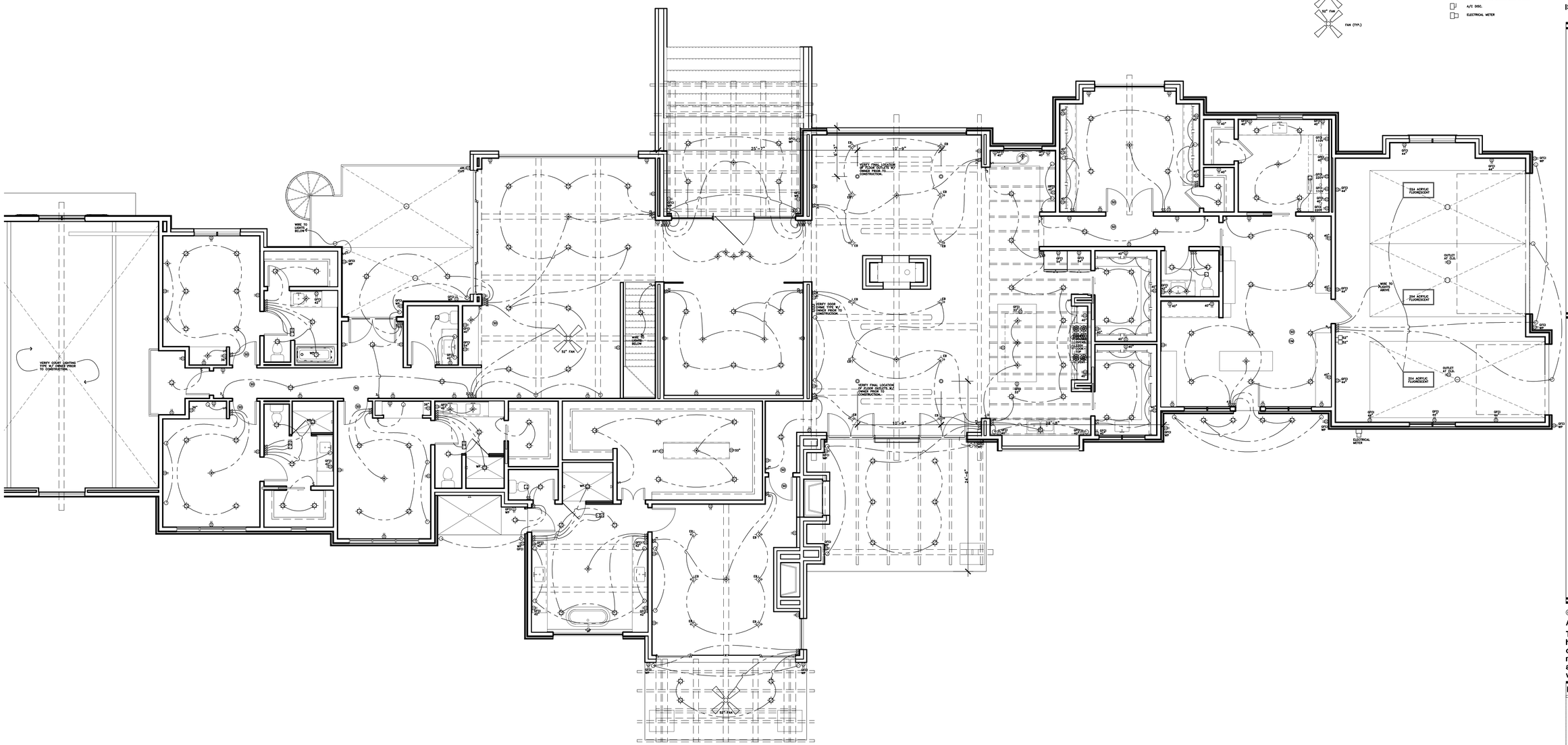
A-6.0
LOWER LEVEL ELECTRICAL PLAN

ELECTRICAL NOTES:

1. OUTLETS WITHIN 3'-0" FROM WATER SHALL BE GFCI.
2. OUTLETS HEIGHTS ARE NOTED TO CENTER OF OUTLET.
3. OUTLET BOXES IN PARTY WALLS SHALL BE SEPARATED 24" (HORIZONTAL).
4. ALL EXTERIOR, GARAGE, AND LAUNDRY OUTLETS SHALL BE VERIFIED WITH OWNER PRIOR TO CONSTRUCTION.
5. FINAL LOCATION OF FLOOR OUTLETS SHALL BE VERIFIED WITH OWNER PRIOR TO CONSTRUCTION.
6. ALL FAN/LIGHT COMBO UNITS SHALL HAVE SEPARATE SWITCHES.
7. OUTLETS ON SWITCH SHALL BE SWITCHED AT TOP ONLY.
8. GANG ALL OUTLETS AND SWITCHES WHERE POSSIBLE.
9. APPLIANCE POWER SHALL BE VERIFIED WITH OWNER PRIOR TO CONST.
10. PROVIDE POWER/GAS FOR WATER HEATERS LOCATED IN ATTIC.
11. ALL WATER HEATERS LOCATED IN ATTIC SHALL HAVE AT MIN. ONE LIGHT.
12. HVAC UNIT SHALL REST ON MIN. 3/4" PLYWOOD DECKING FROM HVAC UNIT TO ATTIC ACCESS OPENING.
13. PROVIDE ALL REQUIRED POWER/GAS, MECH., AND PLUMBING FOR HVAC UNITS. VERIFY TYPE WITH GENERAL CONTRACTOR PRIOR TO CONST.
14. ALL PHONE AND CABLE T.V. OUTLETS TO BE LOCATED BY GENERAL CONTRACTOR PRIOR TO CONST.
15. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED FOR TV MANUFACTURES WALL MOUNTED TV OUTLET HEIGHT.

ELECTRICAL LEGEND:

1X4 ACRYLIC FLUORESCENT	1-BULB FLUORESCENT LIGHT
2X4 ACRYLIC FLUORESCENT	2-BULB FLUORESCENT LIGHT
	ROPE LIGHTING
	UNDER CABINET FLUORESCENT LIGHT
	TRACK LIGHTING
	EMERGENCY LIGHTING
	SHIELDED FLOOD LIGHT
	EXHAUST VENT (VERIFY TYPE W/ OWNER)
	CEILING HEATER (VERIFY TYPE W/ OWNER)
	VENT/HEATER COMBO
	VENT/LIGHT COMBO (VERIFY TYPE W/ OWNER)
	VENT/HEAT/LIGHT COMBO (VERIFY TYPE W/ OWNER)
	SURFACE MOUNT LIGHT
	WALL SCONCE
	PENDANT MOUNT FIXTURE
LV	LOW VOLTAGE MINI PENDANT MOUNT FIXTURE
LV	LOW VOLTAGE HALOGEN MINI SPOTLIGHT
	RECESSED CAN LIGHT
LV	LOW VOLTAGE HALOGEN MINI CAN LIGHT
52" FAN	LIGHT AND FAN (TYP.)
52" FAN	FAN (TYP.)
$	SWITCH
$3	3-WAY SWITCH
$4	4-WAY SWITCH
$D	DIMMER SWITCH
$GFCI	GFCI SWITCH - ALL WET SWITCHES TO BE GFCI.
$WP	WATERPROOF SWITCH
	110 VOLT DUPLEX OUTLET
	110 VOLT QUADPLEX OUTLET
WP	110 VOLT WATERPROOF DUPLEX OUTLET
220V	220 VOLT DUPLEX OUTLET
	SPLIT WIRE FOR SWITCH PLUG
	FLOOR OUTLET
TEL	PHONE OUTLET
TV	TELEVISION CABLE OUTLET
J	JUNCTION BOX
B	EXTERIOR DOOR BELL
T	THERMOSTAT
CHIMES	CHIMES
SD	SMOKE DETECTOR
CM	CARBON MONOXIDE DETECTOR
SPKR	CEILING MOUNTED SPEAKER
R	RECEIVER
VOL	VOLUME CONTROL
	ELECTRICAL PANEL
	PUSHBUTTON FOR GARAGE DOOR OPENER
	A/C DISC.
	ELECTRICAL METER



RED INK?

FINAL CONSTRUCTION DRAWINGS WILL HAVE THIS STAMP IN RED INK. ALL OTHER DRAWINGS ARE INCOMPLETE AND NOT FOR CONSTRUCTION.

THESE PLANS ARE PROVIDED TO NALLE CUSTOM HOMES FOR A ONE-TIME USE TO CONSTRUCT THIS RESIDENCE AT 135 MOUNT ARGENTINA RD, BLUE RIVER, CO 80424. THE HOMEOWNER / CLIENT SHALL NOT REUSE OR PERMIT THE REUSE OF THESE DOCUMENTS EXCEPT BY MUTUAL AGREEMENT IN WRITING BETWEEN NALLE CUSTOM HOMES AND POINT DESIGN, INC.

UPPER LEVEL ELECTRICAL PLAN 1

SCALE: 3/16" = 1'-0"

POINT DESIGN INCORPORATED
RESIDENTIAL & COMMERCIAL CUSTOM PLANS
OFFICE: 512-759-7646
FAX: 512-846-1102
103 EAST STREET
P.O. BOX 149
HUTTO, TEXAS 78634

ISSUE FOR PERMIT:

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ISSUE FOR CONSTRUCTION:

Nalle CUSTOM HOMES
1000 MOPAC CIRCLE • AUSTIN, TEXAS 78746
PHONE: 512-985-6825 FAX: 512-985-6907

CUSTOM RESIDENCE
135 MOUNT ARGENTINA ROAD
BLUE RIVER, CO 80424

NO.	DATE AND REVISIONS

DATE: 06-01-23
FILE NAME:
SHEET NO.: 1027A7

A-7.0
UPPER LEVEL ELECTRICAL PLAN

DRAWING SYMBOLS AND ABBREVIATIONS

DETAIL NUMBER / DETAIL LOCATION (SHEET NUMBER) — DETAIL, SECTION, OR ELEVATION REFERENCE

DETAIL NUMBER / DETAIL LOCATION (SHEET NUMBER) — DETAIL, SECTION, OR ELEVATION REFERENCE

DETAIL NUMBER / DETAIL LOCATION (SHEET NUMBER) — PLAN DETAIL REFERENCE

T.O.W. XX'-XX" — TOP OF WALL ELEVATION

T.O.F. XX'-XX" — TOP OF FOOTING ELEVATION

T.O.C. XX'-XX" — TOP OF CONCRETE ELEVATION

T.O.L. XX'-XX" — TOP OF BRICK / STONE LEDGE ELEVATION

(XX'-XX") — TOP OF STEEL ELEVATION

(XX'-XX") — TOP OF PAD FOOTING ELEVATION

XX'-XX" T.O. SLAB — TOP OF SLAB ELEVATION

XX'-XX" T.O. SHEATHING — TOP OF PLYWOOD SHEATHING ELEVATION

XX'-XX" T.O. DECKING — TOP OF DECKING ELEVATION

A — PAD FOOTING MARK

A — BASE PLATE MARK

1 — REVISION NUMBER MARK

STEP T.O.W. — LOCATION OF STEP IN TOP OF WALL

STEP T.O.F. — LOCATION OF STEP IN TOP OF FOOTING

A. BOLT	ANCHOR BOLT	L	ANGLE (AISC)
ARCH.	ARCHITECTURAL	LBS.	POUNDS
B.O.	BOTTOM OF	LL	DOUBLE ANGLE (AISC)
BCI	I-JOIST (BOISE CASCADE)	LVL	LAMINATED VENEER LUMBER
BRG.	BEARING	MAX.	MAXIMUM
C	CHANNEL (AISC)	MC	MISC. CHANNEL (AISC)
C.J.	CONTROL JOINT	MIN.	MINIMUM
CMU	CONCRETE MASONRY UNIT	N.S.	NEAR SIDE
CONC.	CONCRETE	o.c.	ON-CENTER SPACING
CONT.	CONTINUOUS	plf	POUNDS PER LINEAL FOOT
CTR.	CENTER	psf	POUNDS PER SQUARE FOOT
DIA.	DIAMETER	psi	POUNDS PER SQUARE INCH
DL	DEAD LOAD	PRE-ENG.	PRE-ENGINEERED MEMBER
EXP.	EXPANSION	PROJ.	PROJECTED
EXT.	EXTERIOR	RE:	REFERENCE; REFER TO
F.O.	FACE OF	REINF.	REINFORCE (MENT)
F.S.	FAR SIDE	REV.	REVISION
FDN.	FOUNDATION	SL	SNOW LOAD
FT.	FEET	STD.	STANDARD
GL	GLU-LAMINATED MEMBER	T&G	TONGUE AND GROOVE
H.A.S.	HEADED ANCHOR STUD	TJI	I-JOIST (TRUS JOIST)
HORIZ.; H.	HORIZONTAL	T.O.	TOP OF
HSS	HOLLOW STEEL SECTION	TS	TUBE STEEL (AISC)
IN.	INCHES	TYP.	TYPICAL
INT.	INTERIOR	VERT.; V.	VERTICAL
JT.	JOINT	W	WIDE FLANGE (AISC)
KIP	1,000 POUNDS	W.W.F.	WELDED WIRE FABRIC
klf	KIPS PER LINEAL FOOT	WL	WIND LOAD
ksf	KIPS PER SQUARE FOOT	WT	TEE SECTION (AISC)
ksi	KIPS PER SQUARE INCH		

GENERAL STRUCTURAL NOTES

STRUCTURAL DESIGN CRITERIA:

1. These General Structural Notes apply to these Structural Drawings and supplement the project Specifications. Refer to the Project Manual for additional requirements.

2. This project is located in Blue River, Colorado and has been designed in accordance with the 2018 Edition of the International Residential Code (including applicable amendments and supplements).

3. Design Loads:

A.	Roof Live Load:	Uniform Snow	100 psf
B.	Floor Live Loads:	Residential	40 psf
		Light Storage	125 psf
		Stairs & Corridors	100 psf
		Balconies & Decks	125 psf
C.	Wind Analysis:	Basic Wind Speed	115 mph (3-second gust)
		Exposure	'C'
D.	Seismic Analysis:	Seismic Design Category 'B'	
E.	Frost / Fdn. Depth:	40" minimum below exterior ground surface to bottom of footing elevation	

4. Structural Design References:

American Concrete Institute (ACI); ACI 301, ACI 318, ACI 530
American Institute of Steel Construction (AISC)
American Institute of Timber Construction (AITC)
American Iron and Steel Institute (AISI)
American Plywood Association (APA)
American Society of Civil Engineers (ASCE); ASCE 7
American Society for Testing and Materials (ASTM)
American Welding Society (AWS)
National Design Specification for Wood Construction (NDS)
International Residential Code (IRC)

COORDINATION:

1. Dimensions:
Written dimensions take precedence over scaled dimensions. All dimensions noted within the Structural Drawings shall be verified with the Architectural Drawings. Refer to Mechanical, Electrical, Plumbing, and Architectural Drawings for openings not noted within the Structural Drawings. Any dimensional discrepancies shall be noted in writing for review by the Architect and Structural Engineer.

2. Shop Drawings:
Shop drawings shall be prepared by the fabricator. Copying of these Construction Documents for use as shop drawings will not be permitted.

3. Field Verification:
The Contractor shall verify existing conditions prior to commencement of work, and shall notify the Architect and Structural Engineer for any interpretation or clarification.

4. Field Modifications to Structural Members:
The Contractor is responsible for securing the Architect's and Structural Engineer's approval prior to any cutting, notching, drilling or other modifications which may affect the integrity of the structure. When such modifications have been approved, they are to be completed in accordance with applicable building codes and manufacturer's instructions.

5. Duty of Cooperation:
Issuance of these documents presupposes further cooperation among the Owner, Contractor, Architect and Structural Engineer. Building design and construction are complex, and every contingency cannot be anticipated. Although the Structural Engineer(s) have performed their services with due care and diligence, they cannot guarantee perfection. Any ambiguity or discrepancy discovered through the use of these documents shall be promptly reported to the Architect and Structural Engineer for further clarification. Failure to do so may compound misinterpretation and increase construction costs, and such failure shall relieve the Structural Engineer of responsibility from consequences which may arise.

6. Changes to the Work:
Substitution of noted structural products or "approved equivalent" products will be acceptable only with the written approval of the Structural Engineer. Changes to the Contract Documents made without approval are unauthorized and shall relieve the Structural Engineer of responsibility from consequences which may arise.

7. Jobsite Safety:
These drawings do not include the necessary components for construction safety. The General Contractor shall provide for the jobsite safety of all personnel, work, materials, utilities, equipment and adjacent properties in accordance with accepted codes, regulations and industry practices.

STRUCTURAL CONCRETE:

1. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute (ACI). Refer to the "Field Observations" paragraph of these General Structural Notes for observation requirements. All concrete shall be of stone aggregate, unless noted otherwise. Refer to the Project Manual and Specifications for additional requirements (durability, color, finish, etc.). **The use of any concrete additive containing chlorides is prohibited.**

2. Minimum 28-day compressive strength shall be as follows:

A.	Foundation Walls	3,000 psi
B.	Footings	3,000 psi
C.	Slabs on Grade	4,000 psi
D.	Topping Slabs	4,000 psi
E.	All other concrete	3,000 psi

3. Reinforcing is to be new billet steel ASTM A615 Grade 60 (field bent or welded bars shall be ASTM A706, Grade 60). No welding of reinforcement is permitted unless detailed. No splices of reinforcement are permitted except as detailed or authorized by Structural Engineer. Provide corner and bars to match all horizontal reinforcing. **Provide minimum (2)#5 bars around all sides of all openings in concrete and extend 2'-0" minimum past edges of openings.** Where permitted, use contact lap splices (40 bar diameters minimum lap). Welded wire fabric (W.W.F.) shall be in accordance with ASTM A185. Provide a minimum (1) full mesh lap at splice locations.

4. Placing of Reinforcement: Form ties are to be used for bar supports only when the clear dimensions shown on the details can be maintained. Provide wire chairs, bolsters, additional reinforcement, and accessories necessary to support reinforcement at position shown in the Structural Drawings. Support of reinforcement on wood, brick, or other unacceptable material will not be permitted.

5. The following minimum concrete cover over reinforcing shall be provided unless noted otherwise:

A.	Concrete cast against and permanently exposed to earth	3 inches
B.	Concrete exposed to earth or weather (#6 bars and larger)	2 inches
C.	Concrete exposed to earth or weather (#5 bars and smaller)	1-½ inches
D.	Concrete not exposed to earth or weather	¾ inch
E.	Piers, Beams and Columns	1-½ inches

STRUCTURAL STEEL:

1. Structural steel, including embedded angles, plates or other sections has been designed and shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC), ASD Specifications and Code of Standard Practice. Steel detailing and erection shall accommodate provisions of AISC and OSHA standards (including OSHA Steel Erection Standard Part 1926, Subpart "R").

2. Minimum yield strengths (Fy) are 35 ksi for pipes (ASTM A53, Grade B), 46 ksi for tubes (ASTM A500, Grade B), 50 ksi for wide flange members (ASTM A572, Grade 50), and 36 ksi for all others (ASTM A36).

3. Connections:
Use standard framed beam connections meeting requirements of the AISC Manual of Steel Construction (ASD). Use 3/4" diameter minimum A325N bolts or welded equivalent. Minimum welds are per AISC, and not less than 3/16" continuous fillet using E70XX electrodes (unless noted otherwise). Welding of rebar anchors to angles or plates shall be completed to develop a minimum 150% of the yield strength of the reinforcing bar. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded in the shop (unless noted otherwise). See specifications for testing requirements.

STRUCTURAL TIMBER:

1. Structural Timber has been designed and shall be constructed in conformance with provisions of the NDS Specification for Stress Grade Lumber and its Fastenings. The Contractor shall not cut, notch, or otherwise modify timber members without the written consent of the Structural engineer. Provide cross-bridging at 8'-0"o.c. maximum, and provide solid blocking between joists at all bearing supports.

2. Framing Lumber (minimum requirements) shall be as follows:

A.	Wall Studs	Hem-Fir (HF) Construction Grade
B.	Floor Joists (2x members)	Hem-Fir (HF) #2 Grade or Better
C.	Floor Beams	Douglas-Fir (DF) #1 Grade Beam & Stringer
D.	Roof Rafters (2x members)	Hem-Fir (HF) #2 Grade or Better
E.	Roof Beams	Douglas-Fir (DF) #1 Grade Beam & Stringer
F.	Posts / Columns	Douglas-Fir (DF) #1 Grade Post & Timber
G.	T&G Wood Decking	Douglas-Fir (DF) Commercial Grade

3. Wall, roof, and floor sheathing shall meet the minimum requirements of the APA and AITC. Provide thicknesses and fasten to framing members as noted in the Structural Drawings. Panels are to be oriented to span along their strong axis, and all panel joints are to be staggered.

4. Pre-fabricated structural connectors shall be as manufactured by Simpson Strong-Tie Company or approved equivalent.

STRUCTURAL TIMBER (CONT.):

5. I-joists (TJI) shall be as manufactured by Weyerhaeuser Company or approved equivalent. Provide member size and series as noted in the Structural Drawings. The Supplier shall furnish shop drawings showing all joist members, bridging, blocking, and miscellaneous accessories for review by the Structural Engineer prior to installation. Refer to the Manufacturer Installation Guide for further construction requirements.

6. Laminated Veneer Lumber (LVL) shall be as manufactured by Weyerhaeuser Company or approved equivalent. Provide member size as noted in the Structural Drawings (Fb = 2,800 psi minimum). Refer to the Manufacturer Installation Guide for further construction requirements.

Refer to Manufacturer Installation Guide for multiple-ply LVL connection requirements. Four-ply members may be attached using TrussLok, SDS, or equivalent connectors (refer to Manufacturer's recommendations for locations and spacing).

7. Glue-Laminated (GL) members shall Visually Graded Western Species, conforming to combination 24F-V4 (multiple span beams shall be 24F-V8) strength and stiffness requirements, unless otherwise noted. Ship members to the jobsite stored in manufacturer's protective wrapping. Refer to Architectural drawings for appearance grade requirements.

8. Pre-Engineered wood roof trusses shall be designed by a registered Professional Engineer licensed in the State of Colorado. Calculated live load deflections of all trusses shall not exceed 1/240 of the span length. Shop drawings and calculations bearing the seal and signature of the design engineer shall be submitted for the review of the Structural Engineer. These submittals shall indicate the design loads, locations of all trusses, connection plate sizes and capacities, and the size and grade of lumber to be used. Shop drawing review by the Structural Engineer must be completed prior to truss fabrication. The truss manufacturer shall indicate and provide blocking at bearing locations and lateral bridging as required for truss stability.

9. Tongue and Groove (T&G) Wood Decking shall be installed with tongues oriented upslope on sloped roofs. It shall be laid with patterned faces down and exposed on the underside. Controlled random lay-up shall be provided with a minimum distance of two feet between end joints in adjacent rows. Each row shall be toe-nailed through the tongue and face nailed with one nail to each support. Provide 16d nails for 2" nominal decking and 40d toe-nails and 60d face-nails for 3" and 4" nominal decking. Spike rows together with 8" spikes at 30" o.c. through pre-drilled holes in 3" and 4" nominal decking.

FOUNDATIONS:

1. The structure shall be founded upon spread footings placed upon APPROVED undisturbed natural soils or compacted structural fill with an **ASSUMED** maximum allowable bearing pressure of 2,000 psf.

2. Retaining walls have been designed in accordance with the following **ASSUMED** design values:

A.	Coefficient of Friction	0.40
B.	Lateral Earth Pressure	50 pcf
C.	Passive Pressure	300 pcf

3. Foundation walls are designed to be supported top and bottom by floor construction. Walls are not to be backfilled until such floors are in place or adequate shoring is provided.

4. Provide 1 ½" void below all non-bearing partitions constructed upon slabs on grade.

5. The soil design pressures and coefficients noted above are assumed values and must be verified by a qualified soils engineer prior to foundation construction. Once these values have been verified, the Structural Engineer must be informed and allowed sufficient time to re-evaluate the foundation system if these values differ from the assumptions listed above.

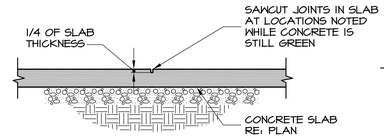
The Soils Engineer shall review all foundation excavations prior to the placement of formwork or reinforcement. All structural fill shall be observed and tested by the Soils Engineer during the grading and fill placement process.

The Soils Engineer shall provide a letter of acceptance to the Building Official for all foundation preparation, excavation, backfill, compaction, etc. prior to the placement of any foundation concrete.

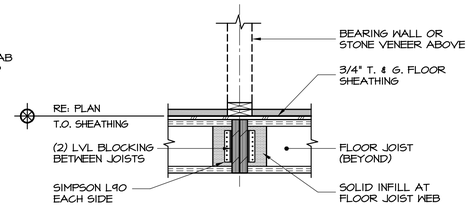
SPECIAL INSPECTIONS:

1. It is the responsibility of the Contractor to coordinate all structural inspections as required by governing building codes and the Construction Documents. A qualified independent testing company is to provide Special Inspections for portions of the Work, as indicated in the Construction Documents and as required by local jurisdictions.

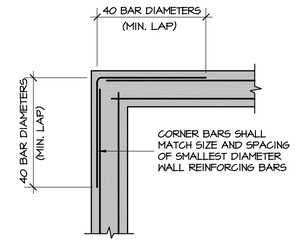
2. The Special Inspector shall be responsible for completing, maintaining, and resubmitting all special inspection logs and forms required by Local Building Officials.



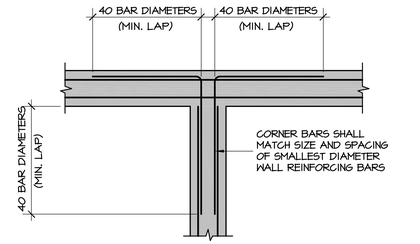
1 Typical Control Joint (C.J.)
S1.1 3/4"=1'-0"



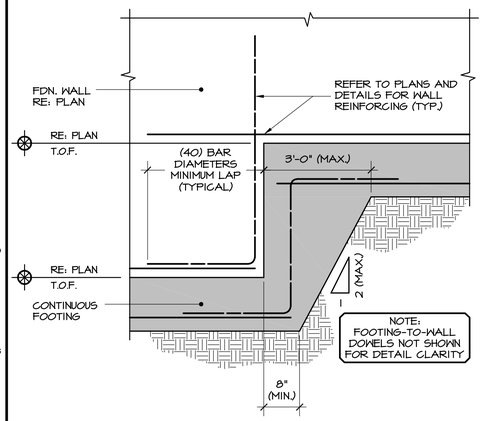
2 Typical Floor Blocking Detail
S1.1 3/4"=1'-0"



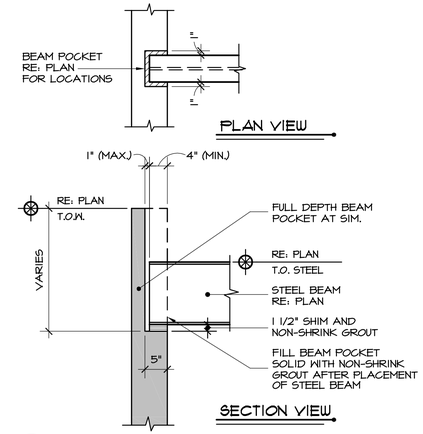
3 Typical Corner Reinforcing
S1.1 3/4"=1'-0"



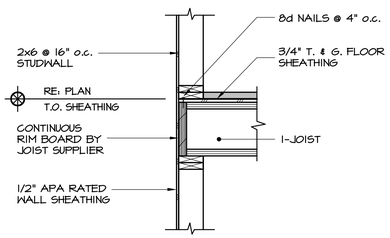
4 Typical Intersection Reinforcing
S1.1 3/4"=1'-0"



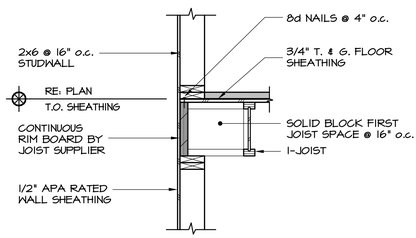
5 Typical Footing Step Detail
S1.1 3/4"=1'-0"



6 Typical Beam Pocket Detail
S1.1 3/4"=1'-0"



7 Typical Floor Framing Detail
S1.1 3/4"=1'-0"



8 Typical Floor Framing Detail
S1.1 3/4"=1'-0"

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COLORADO LICENSED DAVID SUNDQUIST 33715 PROFESSIONAL ENGINEER

NALLE 2.0 RESIDENCE

Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	• 06/07/2023
SDG Project No.	• 23-017
Drawn By	• SDG
Checked By	• JDS

Date	• Issue
05/05/23	• Review Set
05/15/23	• Review Set
05/31/23	• Review Set
06/07/23	• Construction
	•
	•

Title • General Notes and Standard Details

S1.1

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RESIDENCE

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	•
	•

Title • Foundation Plan

S2.1-A

PAD FOOTING SCHEDULE

MARK	FOOTING DIMENSIONS Plan Size	Depth	REINFORCING
(A)	4'-0" x 4'-0"	0'-10"	(5) # 5 Bars Each Way
(B)	4'-0" x 4'-0"	1'-0"	(5) # 5 Bars Each Way
(C)	5'-0" x 5'-0"	0'-10"	(6) # 5 Bars Each Way
(D)	5'-0" x 5'-0"	1'-0"	(6) # 5 Bars Each Way
(E)	6'-0" x 6'-0"	1'-0"	(8) # 5 Bars Each Way

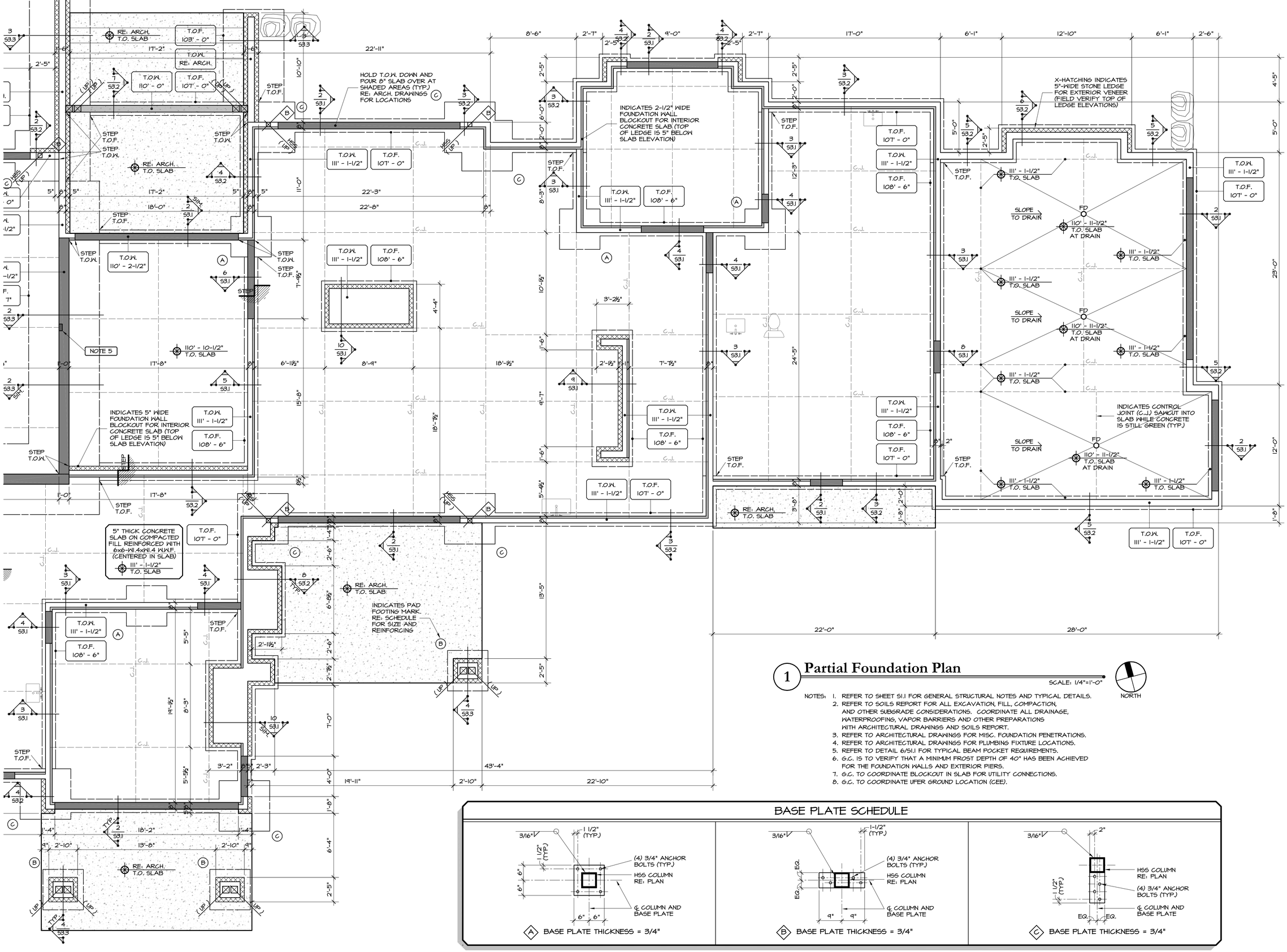
NOTES:
1. PAD FOOTINGS ARE TO BE CENTERED BELOW COLUMN CENTERLINES (U.N.O.).
2. PROVIDE 3" CLEAR DISTANCE FROM BOTTOM OF FOOTING TO REINFORCING.
3. REFER TO PLAN FOR TOP OF FOOTING ELEVATIONS.

1 Partial Foundation Plan

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

NORTH

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. REFER TO SOILS REPORT FOR ALL EXCAVATION, FILL, COMPACTION, AND OTHER SUBGRADE CONSIDERATIONS. COORDINATE ALL DRAINAGE, WATERPROOFING, VAPOR BARRIERS AND OTHER PREPARATIONS WITH ARCHITECTURAL DRAWINGS AND SOILS REPORT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. FOUNDATION PENETRATIONS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE LOCATIONS.
5. REFER TO DETAIL 6/S1.1 FOR TYPICAL BEAM POCKET REQUIREMENTS.
6. G.C. IS TO VERIFY THAT A MINIMUM FROST DEPTH OF 40" HAS BEEN ACHIEVED FOR THE FOUNDATION WALLS AND EXTERIOR PIERS.
7. G.C. TO COORDINATE BLOCKOUT IN SLAB FOR UTILITY CONNECTIONS.
8. G.C. TO COORDINATE UFER GROUND LOCATION (CEE).



1 Partial Foundation Plan

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

NORTH

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
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BASE PLATE SCHEDULE

A BASE PLATE THICKNESS = 3/4"

B BASE PLATE THICKNESS = 3/4"

C BASE PLATE THICKNESS = 3/4"

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COLORADO LICENSED DAVID SUNDQUIST PROFESSIONAL ENGINEER 35715 06/07/23

NALLE 2.0 RESIDENCE

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135 Mount Argentine Road | Blue River, Colorado

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05/31/23	• Review Set
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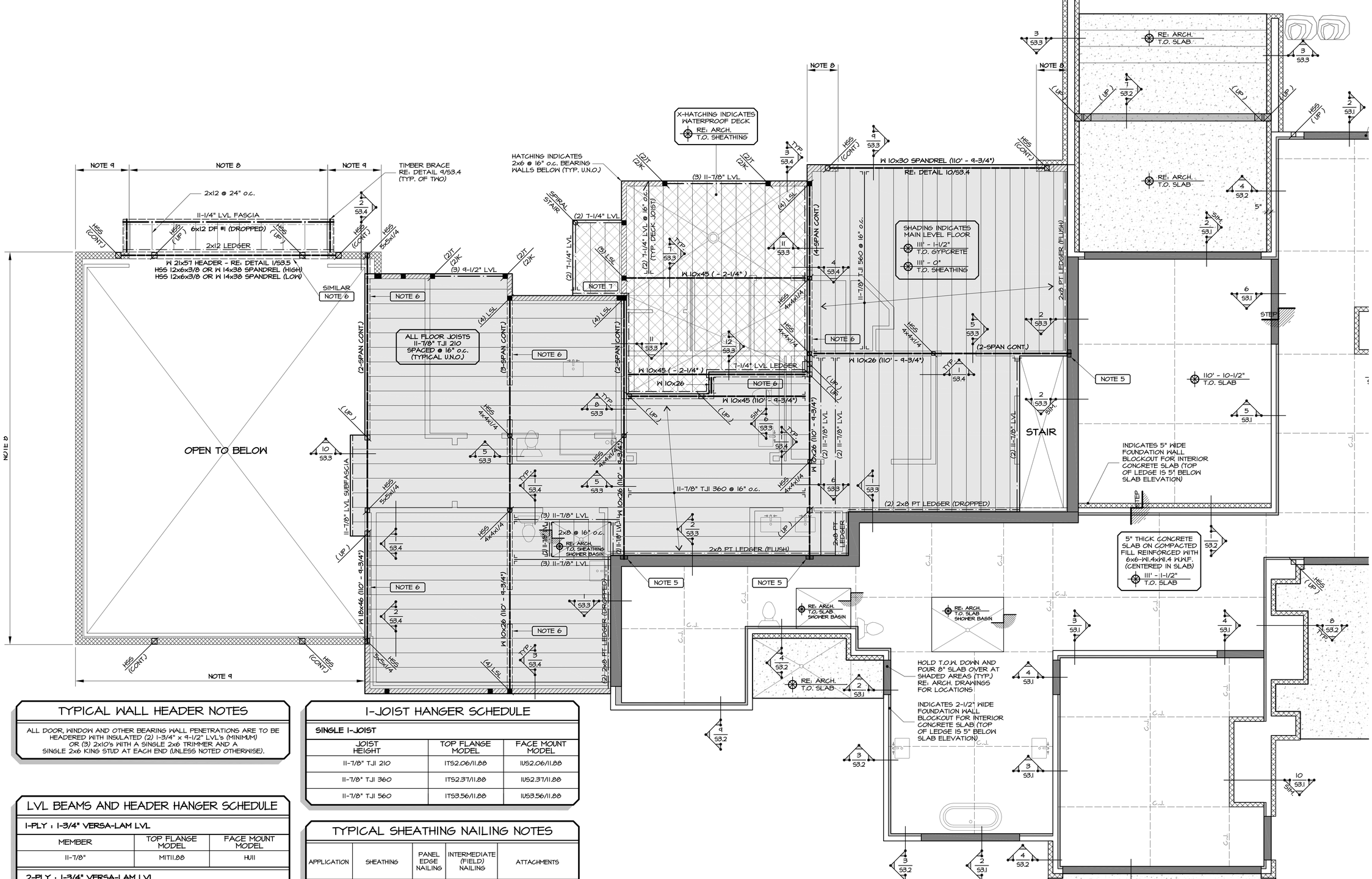
	•
	•

Title • Foundation Plan

S2.1-B



TYPICAL WALL HEADER NOTES

ALL DOOR, WINDOW AND OTHER BEARING WALL PENETRATIONS ARE TO BE HEADERED WITH INSULATED (2) 1-3/4" x 9-1/2" LVL's (MINIMUM) OR (3) 2x10's WITH A SINGLE 2x6 TRIMMER AND A SINGLE 2x6 KING STUD AT EACH END (UNLESS NOTED OTHERWISE).

LVL BEAMS AND HEADER HANGER SCHEDULE

1-PLY : 1-3/4" VERSA-LAM LVL

MEMBER	TOP FLANGE MODEL	FACE MOUNT MODEL
11-7/8"	MIT11.88	HU11

2-PLY : 1-3/4" VERSA-LAM LVL

MEMBER	TOP FLANGE MODEL	FACE MOUNT MODEL
11-7/8"	HB3.56/11.88	HHUS410

3-PLY : 1-3/4" VERSA-LAM LVL

MEMBER	TOP FLANGE MODEL	FACE MOUNT MODEL
11-7/8"	H6LTV5.37	H6U55.50/12

4-PLY : 1-3/4" VERSA-LAM LVL

MEMBER	TOP FLANGE MODEL	FACE MOUNT MODEL
11-7/8"	H6LTV7	H6U57.25/12

I-JOIST HANGER SCHEDULE

SINGLE I-JOIST

JOIST HEIGHT	TOP FLANGE MODEL	FACE MOUNT MODEL
11-7/8" TJI 210	ITS2.06/11.88	IU52.06/11.88
11-7/8" TJI 360	ITS2.37/11.88	IU52.37/11.88
11-7/8" TJI 560	ITS3.56/11.88	IU53.56/11.88

TYPICAL SHEATHING NAILING NOTES

APPLICATION	SHEATHING	PANEL EDGE NAILING	INTERMEDIATE (FIELD) NAILING	ATTACHMENTS
FLOORS	3/4" T. & G. APA RATED STURD-I-FLOOR	6"o.c.	10"o.c.	8d RING SHANK NAILS (ALT. 10d COMMON) GLUED WITH CONST. ADHESIVE
WALLS	1/2" APA RATED C-C, C-D	6"o.c.	12"o.c.	8d COMMON NAILS
ROOFS	5/8" APA RATED EXPOSURE 1 RATED 40/20	6"o.c.	12"o.c.	10d COMMON NAILS

NOTES:
1. USE REQUIREMENTS SHOWN ABOVE UNLESS NOTED OTHERWISE.
2. REFER TO THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ADDITIONAL SHEATHING REQUIREMENTS.
3. EDGE NAILING PERPENDICULAR TO FRAMING MEMBERS REQUIRED AT WALL PANELS ONLY.

1 Main Level Floor Framing Plan

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

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. FLOOR PENETRATIONS.
3. ALL FLOOR BEAMS ARE FLUSH-FRAMED (UNLESS NOTED OTHERWISE).
4. REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE LOCATIONS.
5. REFER TO DETAIL 6/S1.1 FOR BEAM POCKET REQUIREMENTS.
6. INDICATES 2x6 @ 16" o.c. BEARING WALLS ABOVE.
7. ATTACH LEDGER TO WALL/RIM WITH (3) ROWS OF 5"-LONG LEDGER-LOCK SCREWS SPACED @ 16" o.c. (MAX.).
8. THIS WALL IS TO BE FRAMED WITH 1-1/2" x 7-1/4" LSL STUDS @ 16" o.c.
9. THIS WALL IS TO BE FRAMED WITH (2) 1-1/2" x 7-1/4" LSL STUDS @ 16" o.c.
10. PROVIDE BLOCKING BETWEEN JOISTS AT STONE VENEER AND / OR BEARING WALLS FROM ABOVE (RE: DETAIL 2/S1.1).

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JOSEPH DAVID SUNDQUIST
39715
PROFESSIONAL ENGINEER
06/07/23

NALLE 2.0 RESIDENCE

Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	• 06/07/2023
SDG Project No.	• 23-017
Drawn By	• SDG
Checked By	• JDS

Date	• Issue
05/05/23	• Review Set
05/15/23	• Review Set
05/31/23	• Review Set
06/07/23	• Construction
	•
	•

Title • Main Level Floor Framing Plan

S2.2

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DAVID SUNDQUIST
PROFESSIONAL ENGINEER
55715
07/07/23

NALLE 2.0 RESIDENCE

Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	• 06/07/2023
SDG Project No.	• 23-017
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Checked By	• JDS

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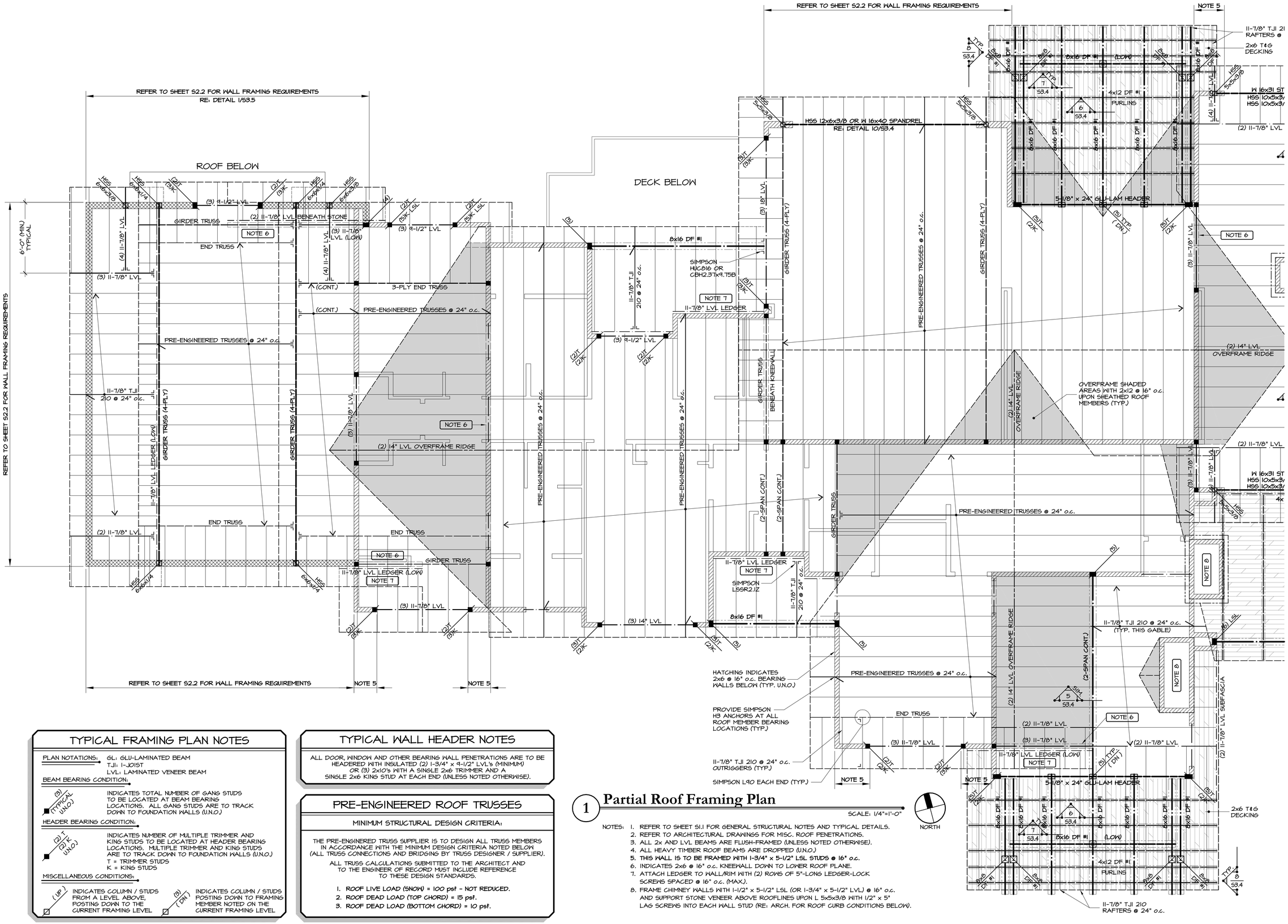
05/15/23	• Review Set
05/31/23	• Review Set
06/07/23	• Construction
	•
	•

Title • Roof Framing Plan

S2.3-A



1 Partial Roof Framing Plan

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

NORTH

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. ROOF PENETRATIONS.
3. ALL 2x AND LVL BEAMS ARE FLUSH-FRAMED (UNLESS NOTED OTHERWISE).
4. ALL HEAVY TIMBER ROOF BEAMS ARE DROPPED (U.N.O.)
5. **THIS WALL IS TO BE FRAMED WITH 1-3/4" x 5-1/2" LSL STUDS @ 16" o.c.**
6. INDICATES 2x6 @ 16" o.c. KNEEWALL DOWN TO LOWER ROOF PLANE.
7. ATTACH LEDGER TO WALL/RIM WITH (2) ROWS OF 5"-LONG LEDGER-LOCK SCREWS SPACED @ 16" o.c. (MAX.).
8. FRAME CHIMNEY WALLS WITH 1-1/2" x 5-1/2" LSL (OR 1-3/4" x 5-1/2" LVL) @ 16" o.c. AND SUPPORT STONE VENEER ABOVE ROOFLINES UPON L 5x5x3/8 WITH 1/2" x 5" LAG SCREWS INTO EACH WALL STUD (RE: ARCH. FOR ROOF CURB CONDITIONS BELOW).

TYPICAL FRAMING PLAN NOTES

PLAN NOTATIONS:
GL: GLU-LAMINATED BEAM
TJI: I-JOIST
LVL: LAMINATED VENEER BEAM

BEAM BEARING CONDITION:

(3) (TYPICAL U.N.O.) — INDICATES TOTAL NUMBER OF GANG STUDS TO BE LOCATED AT BEAM BEARING LOCATIONS. ALL GANG STUDS ARE TO TRACK DOWN TO FOUNDATION WALLS (U.N.O.)

HEADER BEARING CONDITION:

(2) T (2) K U.N.O. — INDICATES NUMBER OF MULTIPLE TRIMMER AND KING STUDS TO BE LOCATED AT HEADER BEARING LOCATIONS. MULTIPLE TRIMMER AND KING STUDS ARE TO TRACK DOWN TO FOUNDATION WALLS (U.N.O.)
T = TRIMMER STUDS
K = KING STUDS

MISCELLANEOUS CONDITIONS:

(UP) — INDICATES COLUMN / STUDS FROM A LEVEL ABOVE, POSTING DOWN TO THE CURRENT FRAMING LEVEL

(3) (DN) — INDICATES COLUMN / STUDS POSTING DOWN TO FRAMING MEMBER NOTED ON THE CURRENT FRAMING LEVEL

TYPICAL WALL HEADER NOTES

ALL DOOR, WINDOW AND OTHER BEARING WALL PENETRATIONS ARE TO BE HEADERED WITH INSULATED (2) 1-3/4" x 9-1/2" LVL's (MINIMUM) OR (3) 2x10's WITH A SINGLE 2x6 TRIMMER AND A SINGLE 2x6 KING STUD AT EACH END (UNLESS NOTED OTHERWISE).

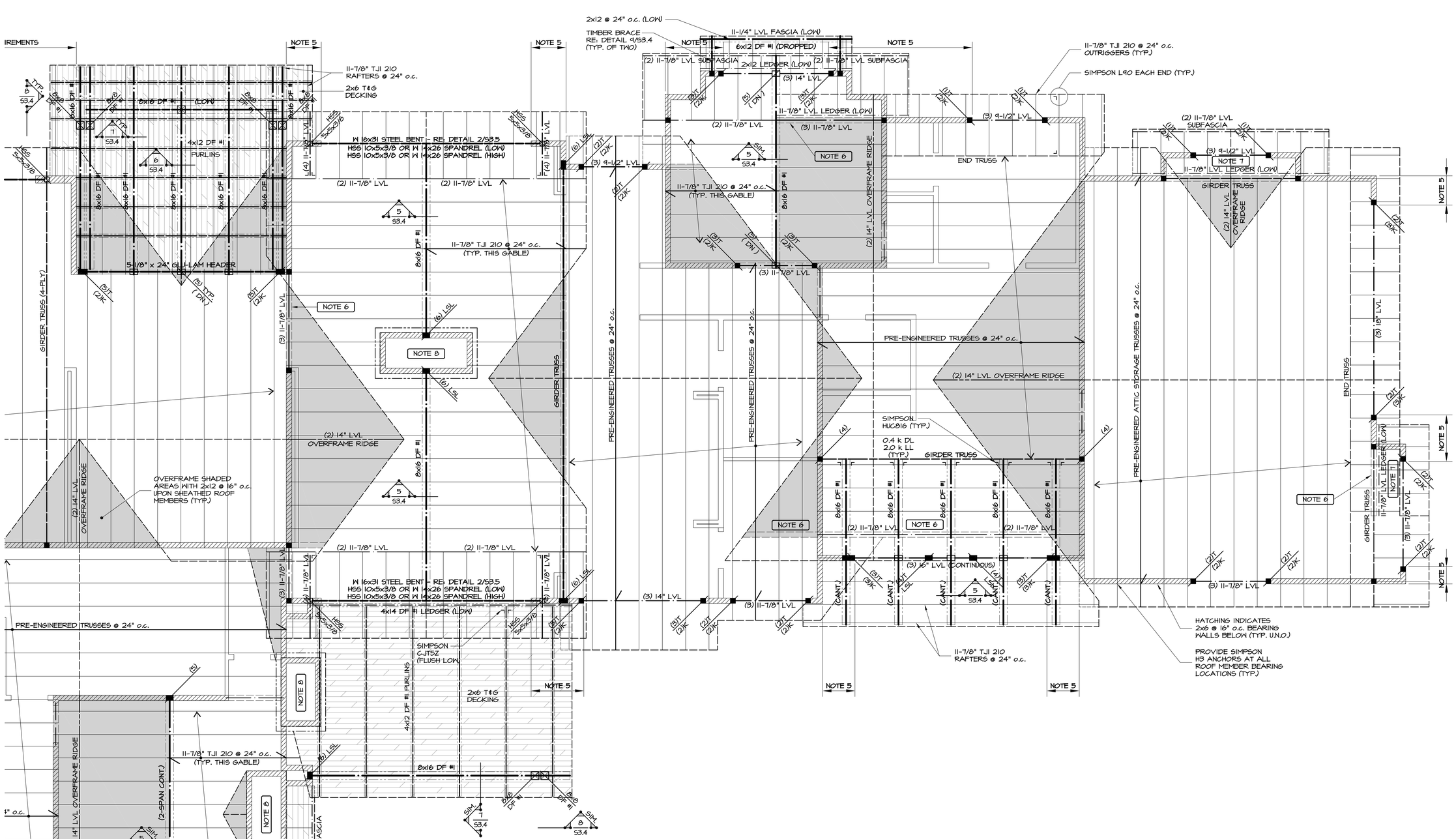
PRE-ENGINEERED ROOF TRUSSES

MINIMUM STRUCTURAL DESIGN CRITERIA:

THE PRE-ENGINEERED TRUSS SUPPLIER IS TO DESIGN ALL TRUSS MEMBERS IN ACCORDANCE WITH THE MINIMUM DESIGN CRITERIA NOTED BELOW (ALL TRUSS CONNECTIONS AND BRIDGING BY TRUSS DESIGNER / SUPPLIER).

ALL TRUSS CALCULATIONS SUBMITTED TO THE ARCHITECT AND TO THE ENGINEER OF RECORD MUST INCLUDE REFERENCE TO THESE DESIGN STANDARDS.

1. ROOF LIVE LOAD (SNOW) = 100 psf - NOT REDUCED.
2. ROOF DEAD LOAD (TOP CHORD) = 15 psf.
3. ROOF DEAD LOAD (BOTTOM CHORD) = 10 psf.



TYPICAL SHEATHING NAILING NOTES

APPLICATION	SHEATHING	PANEL EDGE NAILING	INTERMEDIATE (FIELD) NAILING	ATTACHMENTS
FLOORS	3/4" T. & G. APA RATED STURD-I-FLOOR	6"o.c.	10"o.c.	8d RING SHANK NAILS (ALT. 10d COMMON) GLUED WITH CONST. ADHESIVE
WALLS	1/2" APA RATED C-C, C-D	6"o.c.	12"o.c.	8d COMMON NAILS
ROOFS	5/8" APA RATED EXPOSURE 1 RATED 40/20	6"o.c.	12"o.c.	10d COMMON NAILS

NOTES:
1. USE REQUIREMENTS SHOWN ABOVE UNLESS NOTED OTHERWISE.
2. REFER TO THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ADDITIONAL SHEATHING REQUIREMENTS.
3. EDGE NAILING PERPENDICULAR TO FRAMING MEMBERS REQUIRED AT WALL PANELS ONLY.

TYPICAL WALL HEADER NOTES

ALL DOOR, WINDOW AND OTHER BEARING WALL PENETRATIONS ARE TO BE HEADERED WITH INSULATED (2) 1-3/4" x 9-1/2" LVL's (MINIMUM) OR (3) 2x10's WITH A SINGLE 2x6 TRIMMER AND A SINGLE 2x6 KING STUD AT EACH END (UNLESS NOTED OTHERWISE).

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1 Partial Roof Framing Plan

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

NOTES:
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2. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. ROOF PENETRATIONS.
3. ALL 2x AND LVL BEAMS ARE FLUSH-FRAMED (UNLESS NOTED OTHERWISE).
4. ALL HEAVY TIMBER ROOF BEAMS ARE DROPPED (U.N.O.)
5. **THIS WALL IS TO BE FRAMED WITH 1-3/4" x 5-1/2" LSL STUDS @ 16" o.c.**
6. INDICATES 2x6 @ 16" o.c. KNEEWALL DOWN TO LOWER ROOF PLANE.
7. ATTACH LEDGER TO WALL/RIM WITH (2) ROWS OF 5"-LONG LEDGER-LOCK SCREWS SPACED @ 16" o.c. (MAX.).
8. FRAME CHIMNEY WALLS WITH 1-1/2" x 5-1/2" LSL (OR 1-3/4" x 5-1/2" LVL) @ 16" o.c. AND SUPPORT STONE VENEER ABOVE ROOFLINES UPON L 5x5x3/8 WITH 1/2" x 5" LAG SCREWS INTO EACH WALL STUD (RE: ARCH. FOR ROOF CURB CONDITIONS BELOW).

NORTH

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05/31/23	• Review Set
06/07/23	• Construction
	•
	•

Title • Roof Framing Plan

S2.3-B

TYPICAL SHEATHING NAILING NOTES

APPLICATION	SHEATHING	PANEL EDGE NAILING	INTERMEDIATE (FIELD) NAILING	ATTACHMENTS
FLOORS	3/4" T. & G. APA RATED STURD-I-FLOOR	6"o.c.	10"o.c.	8d RING SHANK NAILS (ALT. 10d COMMON) GLUED WITH CONST. ADHESIVE
WALLS	1/2" APA RATED C-C, C-D	6"o.c.	12"o.c.	8d COMMON NAILS
ROOFS	5/8" APA RATED EXPOSURE 1 RATED 40/20	6"o.c.	12"o.c.	10d COMMON NAILS

NOTES:
1. USE REQUIREMENTS SHOWN ABOVE UNLESS NOTED OTHERWISE.
2. REFER TO THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ADDITIONAL SHEATHING REQUIREMENTS.
3. EDGE NAILING PERPENDICULAR TO FRAMING MEMBERS REQUIRED AT WALL PANELS ONLY.

TYPICAL WALL HEADER NOTES

ALL DOOR, WINDOW AND OTHER BEARING WALL PENETRATIONS ARE TO BE HEADERED WITH INSULATED (2) 1-3/4" x 9-1/2" LVL's (MINIMUM) OR (3) 2x10's WITH A SINGLE 2x6 TRIMMER AND A SINGLE 2x6 KING STUD AT EACH END (UNLESS NOTED OTHERWISE).

PRE-ENGINEERED ROOF TRUSSES

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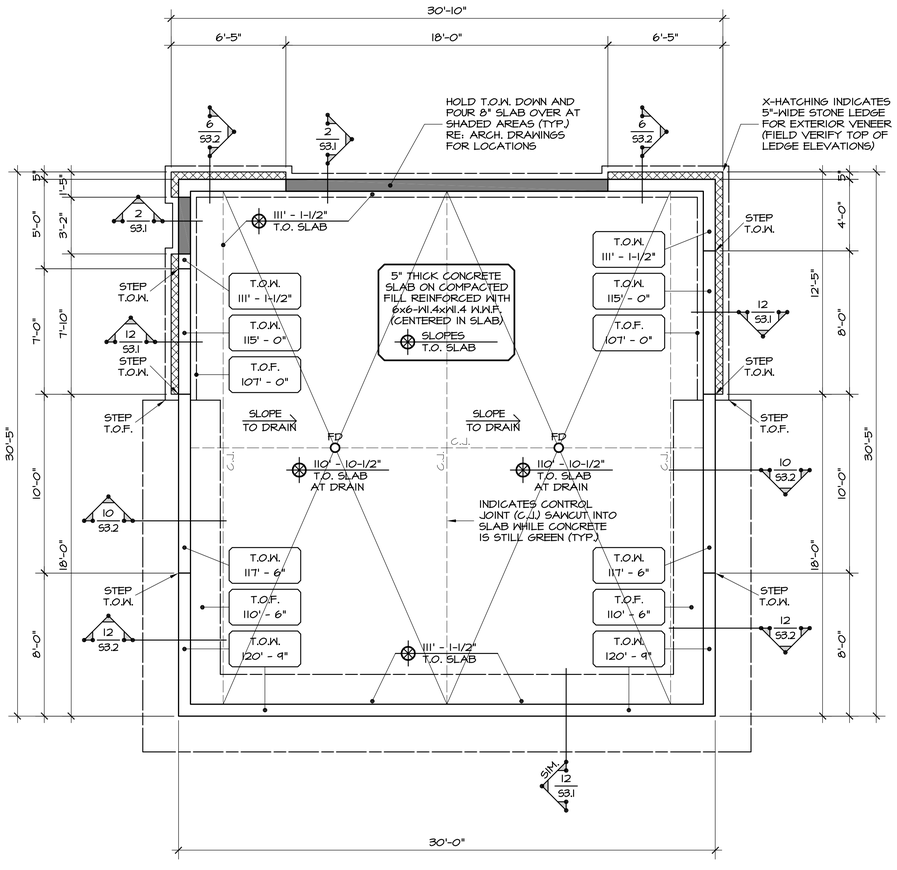
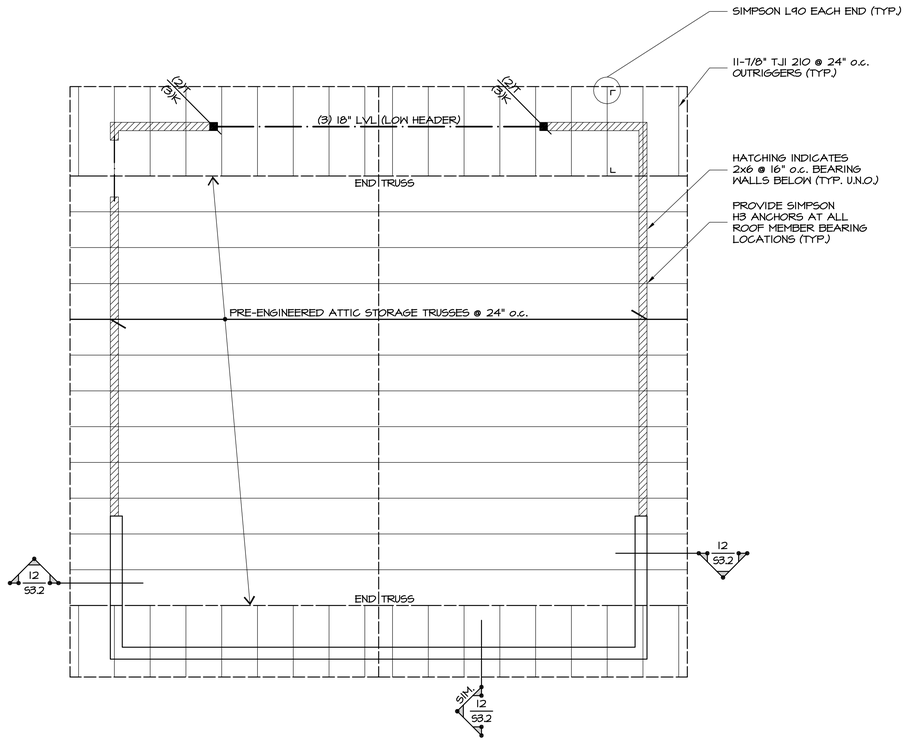


1 Detached Garage Foundation Plan

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

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. REFER TO SOILS REPORT FOR ALL EXCAVATION, FILL, COMPACTION, AND OTHER SUBGRADE CONSIDERATIONS. COORDINATE ALL DRAINAGE, WATERPROOFING, VAPOR BARRIERS AND OTHER PREPARATIONS WITH ARCHITECTURAL DRAWINGS AND SOILS REPORT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. FOUNDATION PENETRATIONS.
4. G.C. IS TO VERIFY THAT A MINIMUM FROST DEPTH OF 40" HAS BEEN ACHIEVED FOR THE FOUNDATION WALLS AND EXTERIOR PIERS.



2 Detached Garage Roof Framing Plan

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

NOTES:
1. REFER TO SHEET S1.1 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR MISC. ROOF PENETRATIONS.
3. ALL 2x AND LVL BEAMS ARE FLUSH-FRAMED (UNLESS NOTED OTHERWISE).

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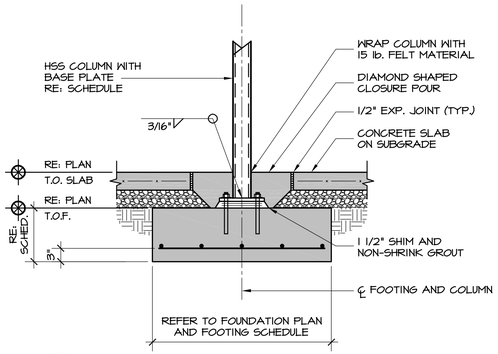
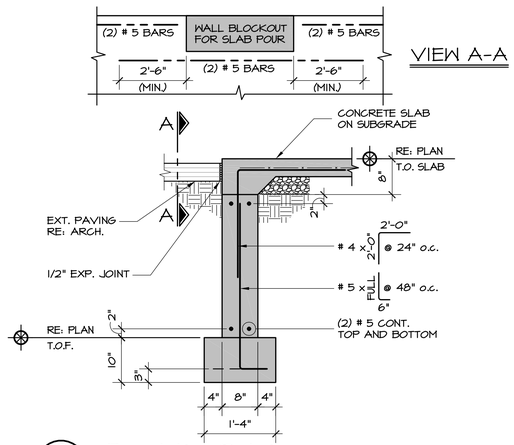
Title • Garage Foundation and Roof Framing Plans

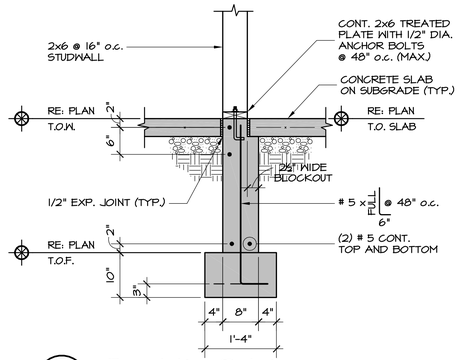
S2.4



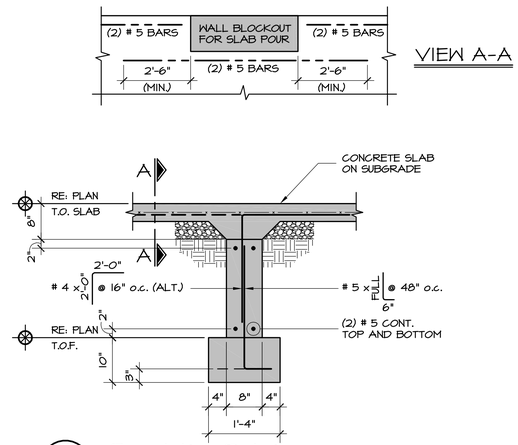
1 Foundation Detail
S3.1 3/4"=1'-0"



2 Foundation Detail
S3.1 3/4"=1'-0"



3 Foundation Detail
S3.1 3/4"=1'-0"



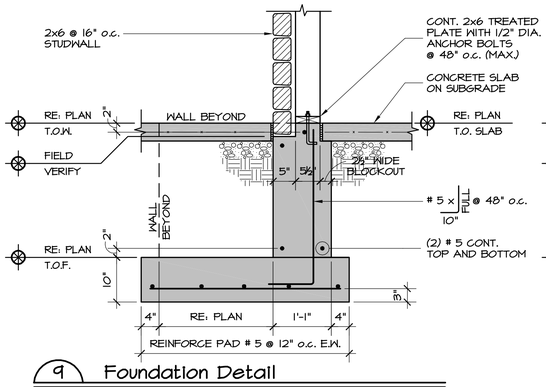
4 Foundation Detail
S3.1 3/4"=1'-0"

5 Foundation Detail
S3.1 3/4"=1'-0"

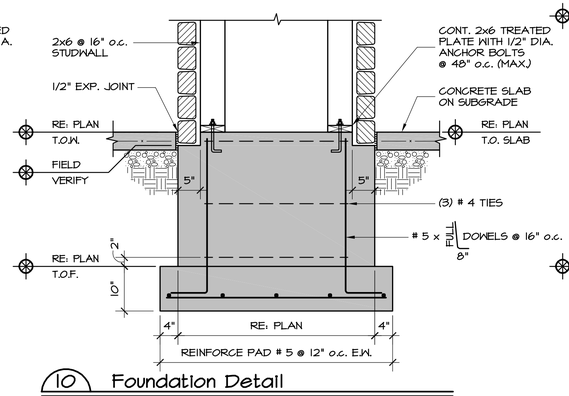
6 Foundation Detail
S3.1 3/4"=1'-0"

7 Foundation Detail
S3.1 3/4"=1'-0"

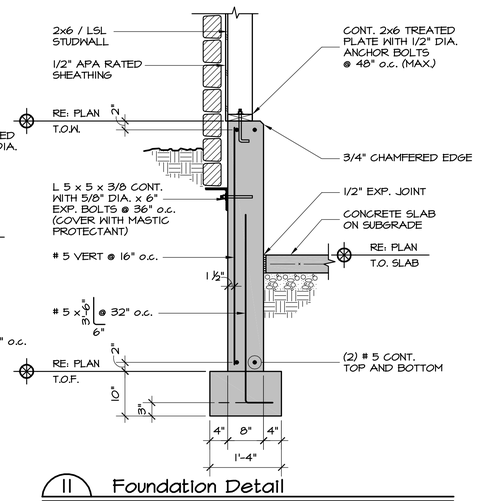
8 Foundation Detail
S3.1 3/4"=1'-0"



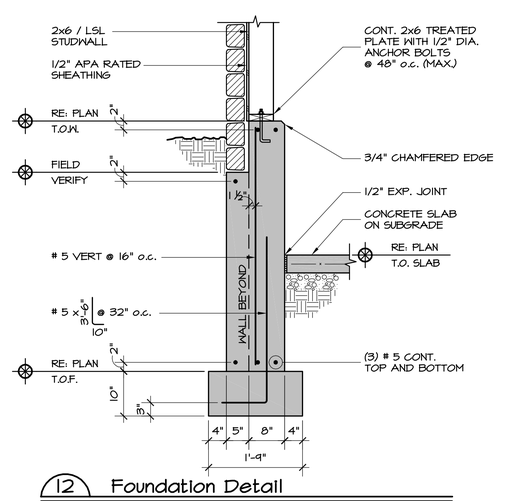
9 Foundation Detail
S3.1 3/4"=1'-0"



10 Foundation Detail
S3.1 3/4"=1'-0"



11 Foundation Detail
S3.1 3/4"=1'-0"



12 Foundation Detail
S3.1 3/4"=1'-0"

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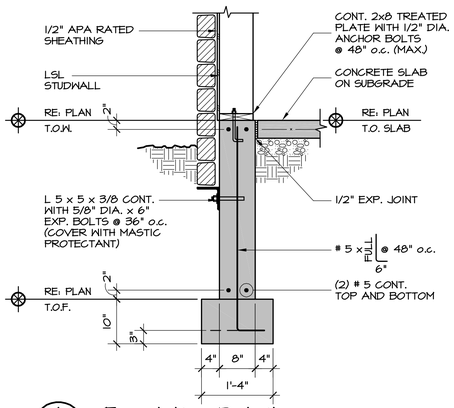
Title • Foundation Details

S3.1



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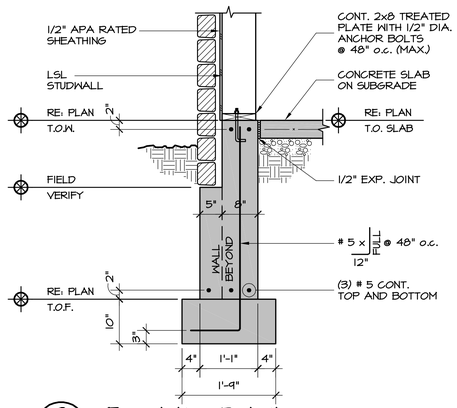
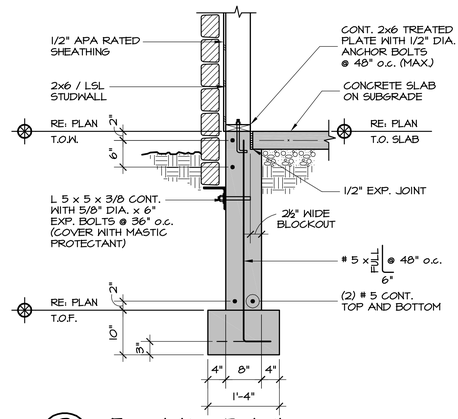


2 Foundation Detail
S3.2 3/4"=1'-0"



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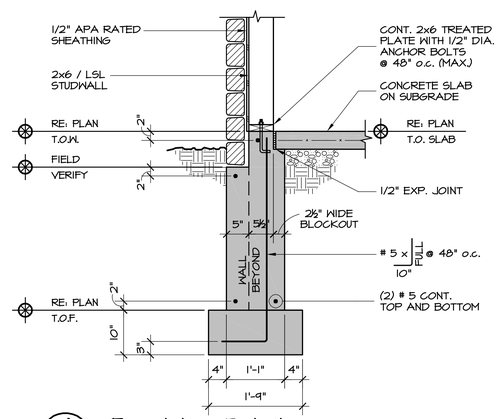
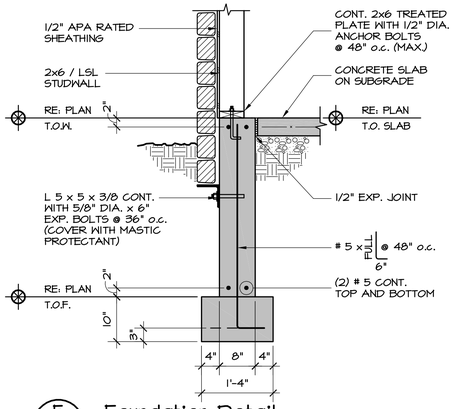
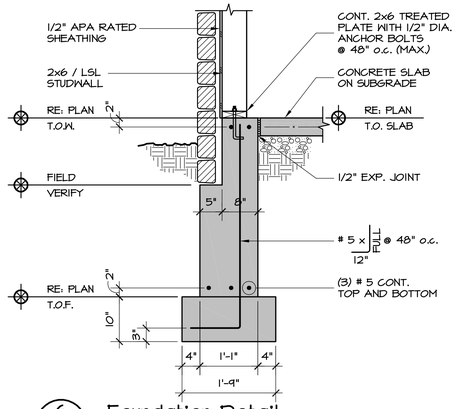
S3.2 3/4"=1'-0"



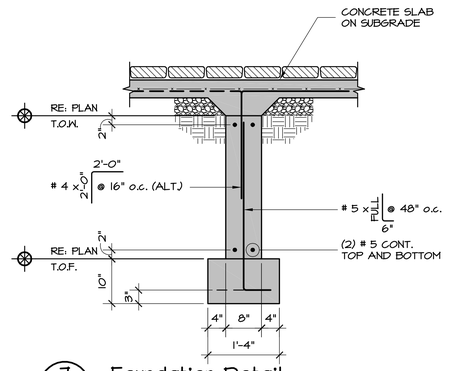
4 Foundation Detail
S3.2 3/4"=1'-0"



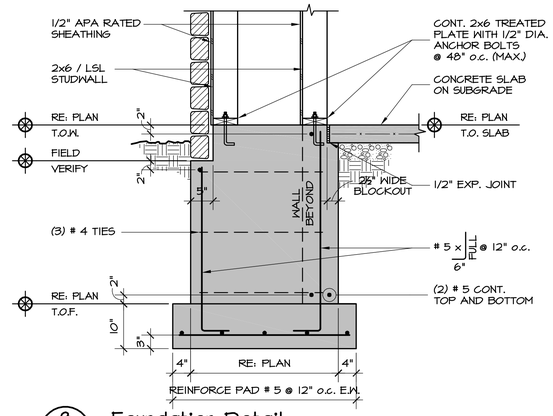
5 Foundation Detail
S3.2 3/4"=1'-0"



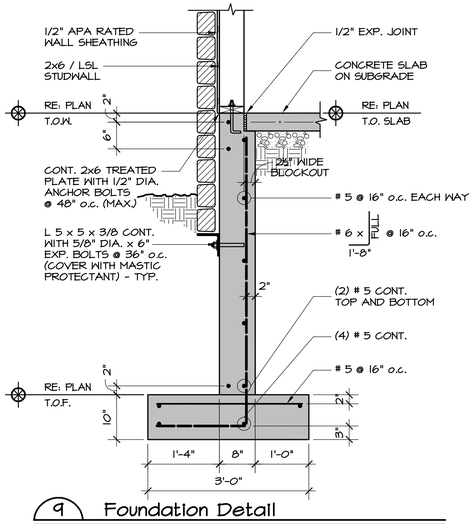
6 Foundation Detail
S3.2 3/4"=1'-0"



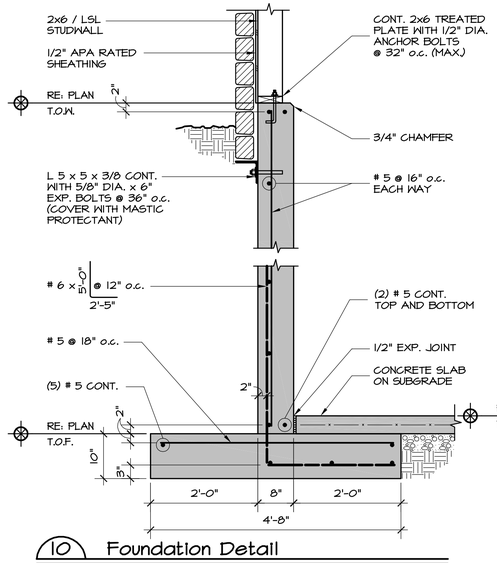
7 Foundation Detail
S3.2 3/4"=1'-0"



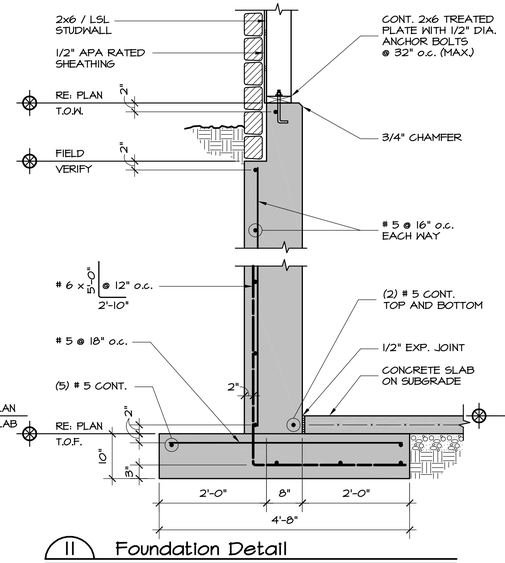
8 Foundation Detail
S3.2 3/4"=1'-0"



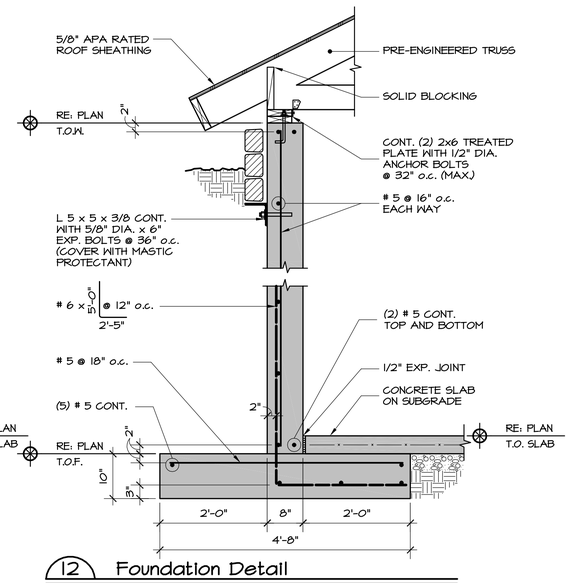
9 Foundation Detail
S3.2 3/4"=1'-0"



10 Foundation Detail
S3.2 3/4"=1'-0"



11 Foundation Detail
S3.2 3/4"=1'-0"



12 Foundation Detail
S3.2 3/4"=1'-0"

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DAVID SUNDQUIST
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06/07/23

RESIDENCE
NALLE 2.0

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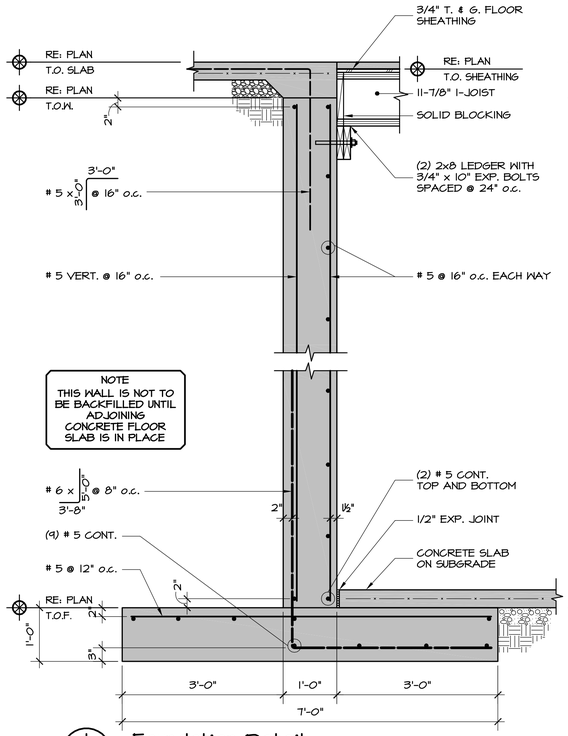
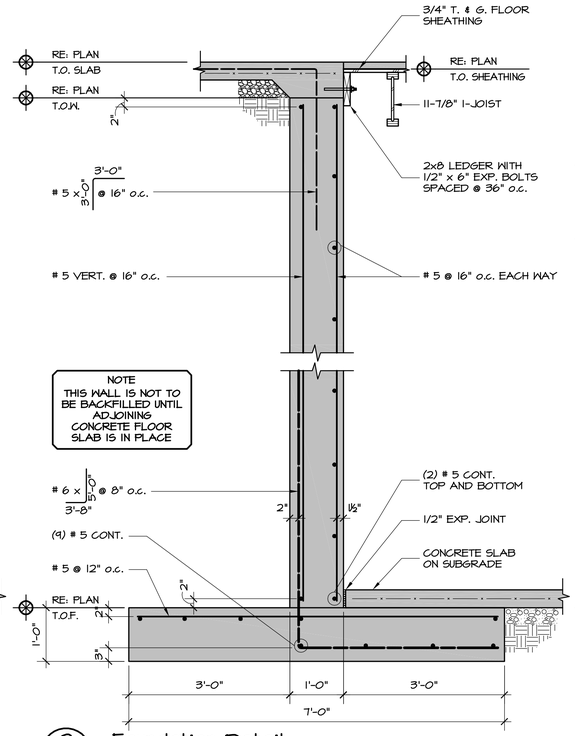
Title • Foundation Details

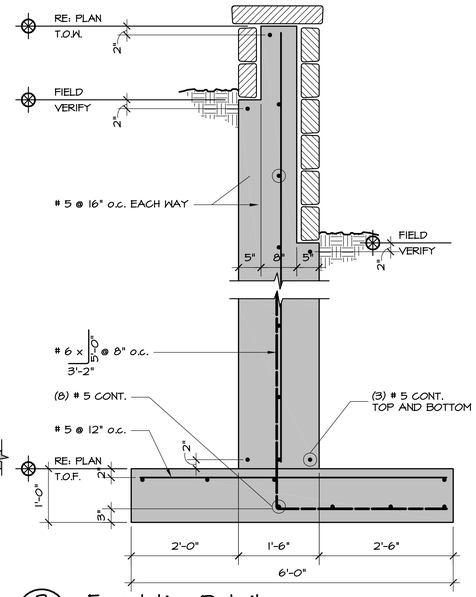
S3.2



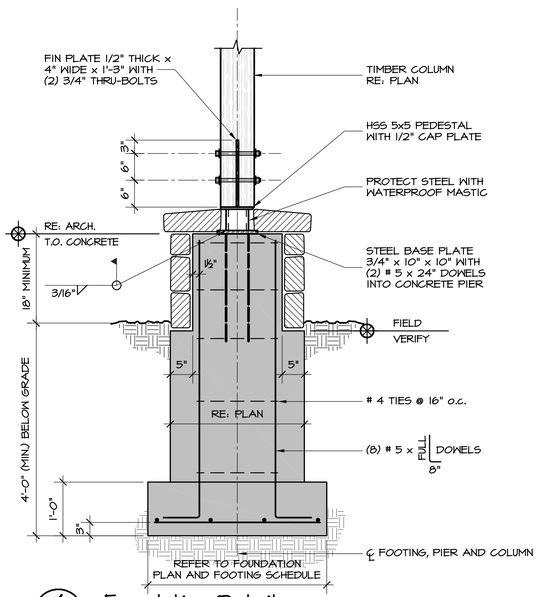
1 Foundation Detail
S3.3 3/4"=1'-0"



2 Foundation Detail
S3.3 3/4"=1'-0"



3 Foundation Detail
S3.3 3/4"=1'-0"



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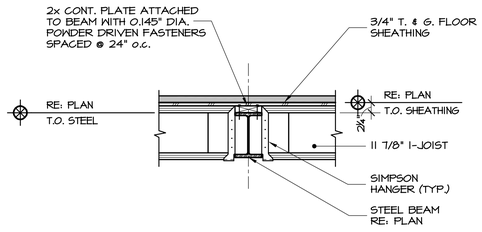
S3.3 3/4"=1'-0"



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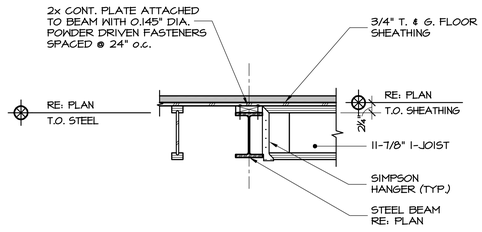
S3.3 3/4"=1'-0"



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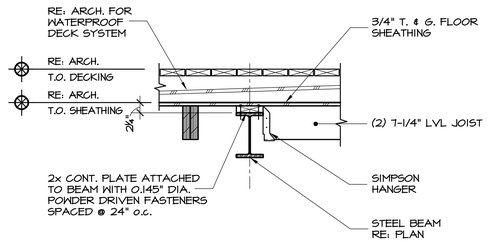
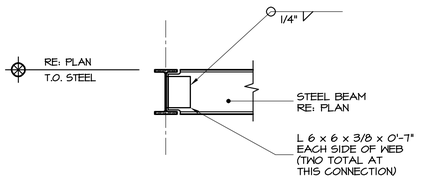
S3.3 3/4"=1'-0"



7 Framing Detail
S3.3 3/4"=1'-0"



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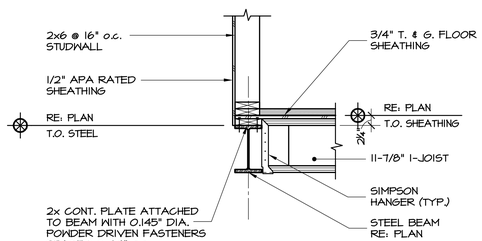
S3.3 3/4"=1'-0"



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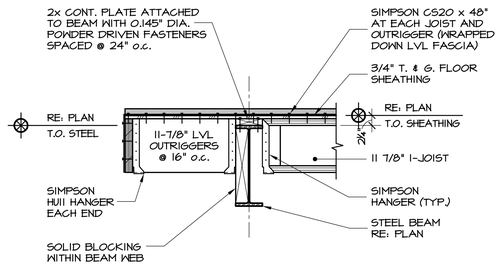

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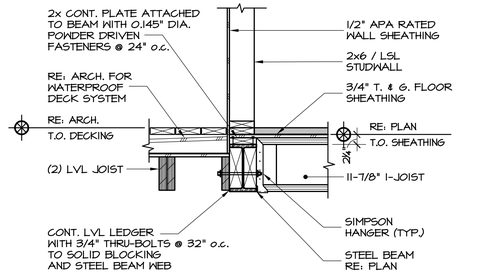

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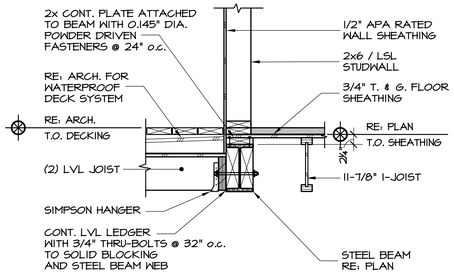

12 Framing Detail
S3.3 3/4"=1'-0"

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COLORADO LICENSED
DAVID J. SUNDQUIST
55715
PROFESSIONAL ENGINEER
06/07/23

NALLE 2.0 RESIDENCE

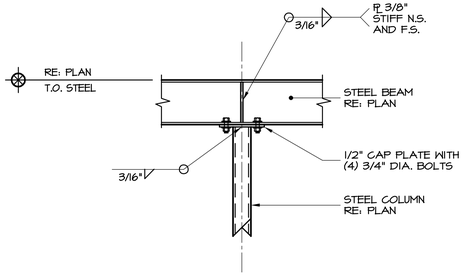
Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	• 06/07/2023
SDG Project No.	• 23-017
Drawn By	• SDG
Checked By	• JDS

Date	• Issue
05/31/23	• Review Set
06/07/23	• Construction
	•
	•
	•
	•

Title • Foundation Details and Framing Details

S3.3



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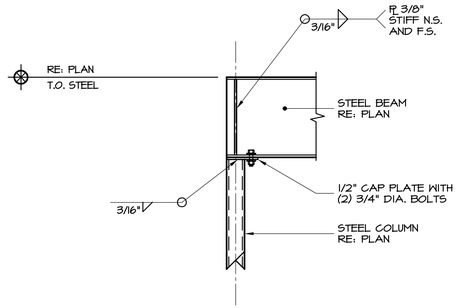
S3.4 3/4"=1'-0"



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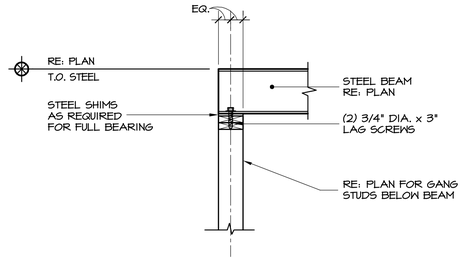
S3.4 3/4"=1'-0"



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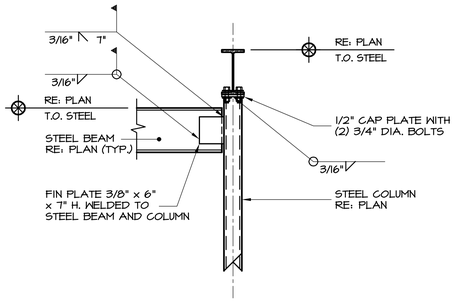
S3.4 3/4"=1'-0"



4 Framing Detail
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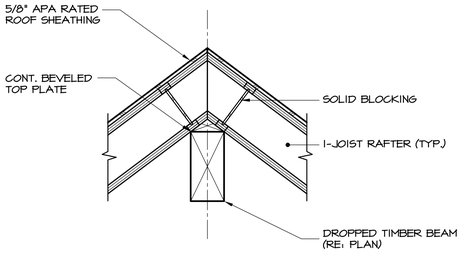
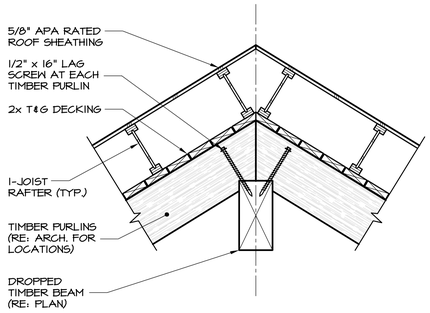
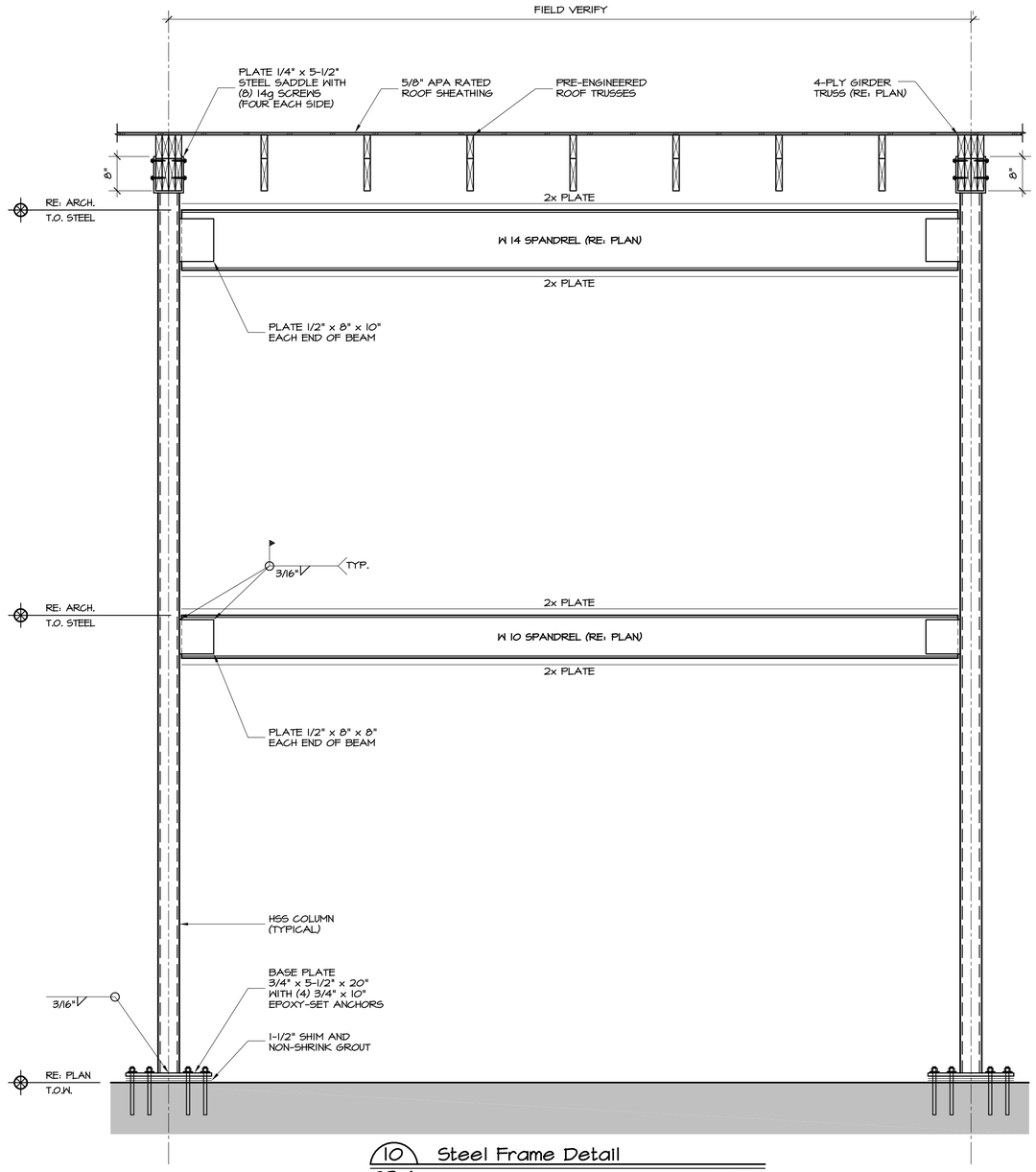


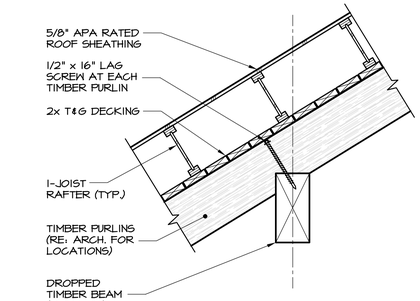
5 Framing Detail
S3.4 3/4"=1'-0"



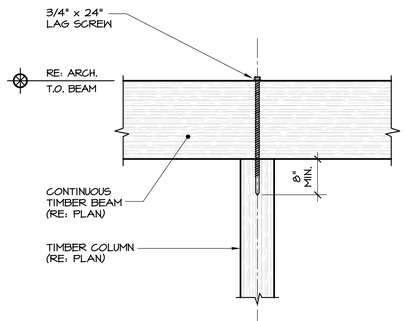
6 Framing Detail
S3.4 3/4"=1'-0"



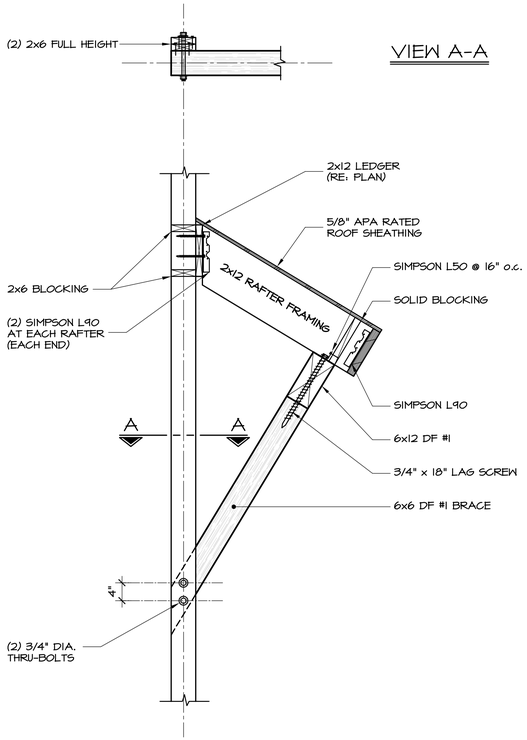
10 Steel Frame Detail
S3.4 3/4"=1'-0"



7 Framing Detail
S3.4 3/4"=1'-0"



8 Framing Detail
S3.4 3/4"=1'-0"



9 Timber Brace Detail
S3.4 3/4"=1'-0"

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NALLE 2.0 RESIDENCE

Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	06/07/2023
SDG Project No.	23-017
Drawn By	SDG
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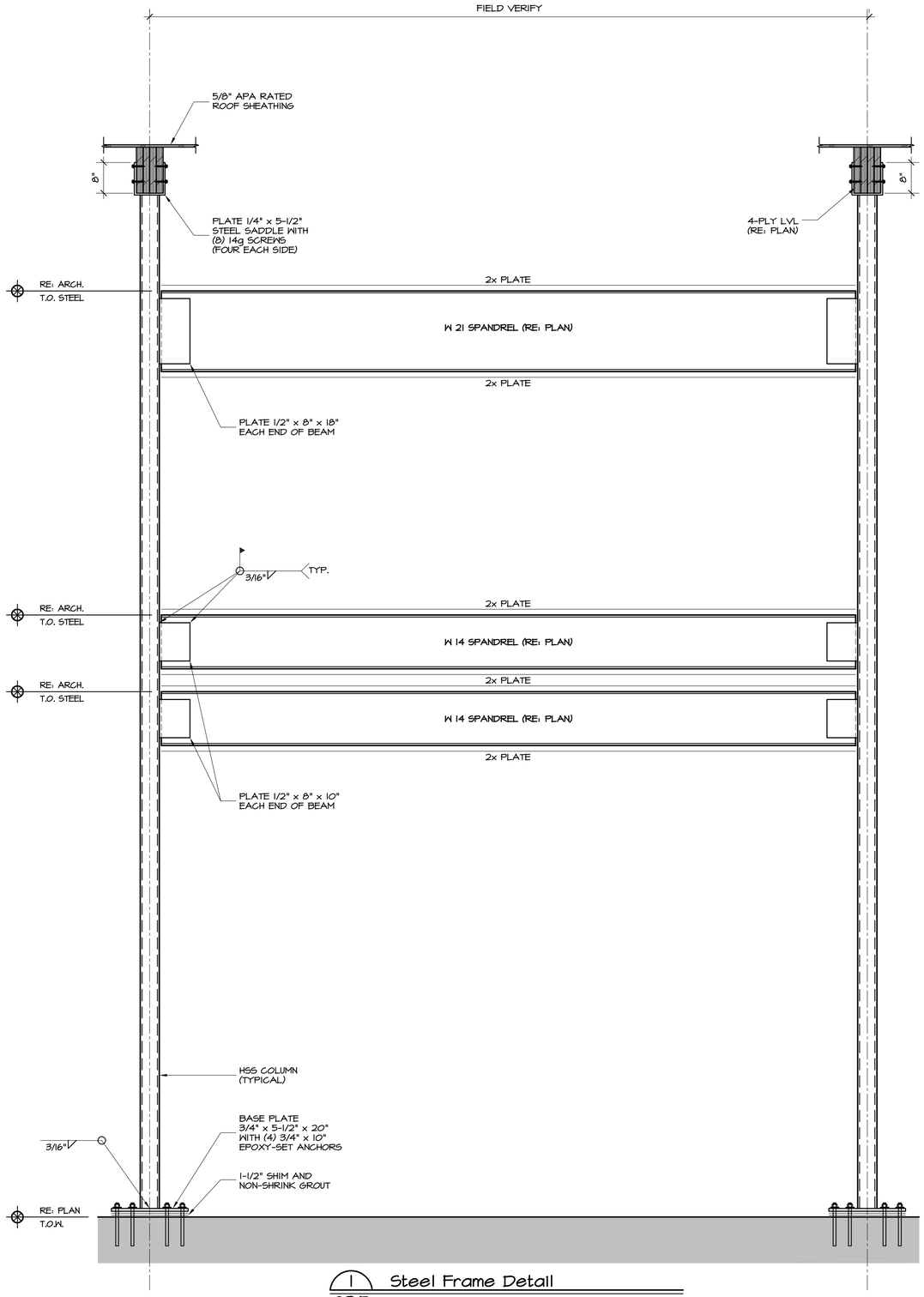
Date	Issue
05/31/23	Review Set
06/07/23	Construction

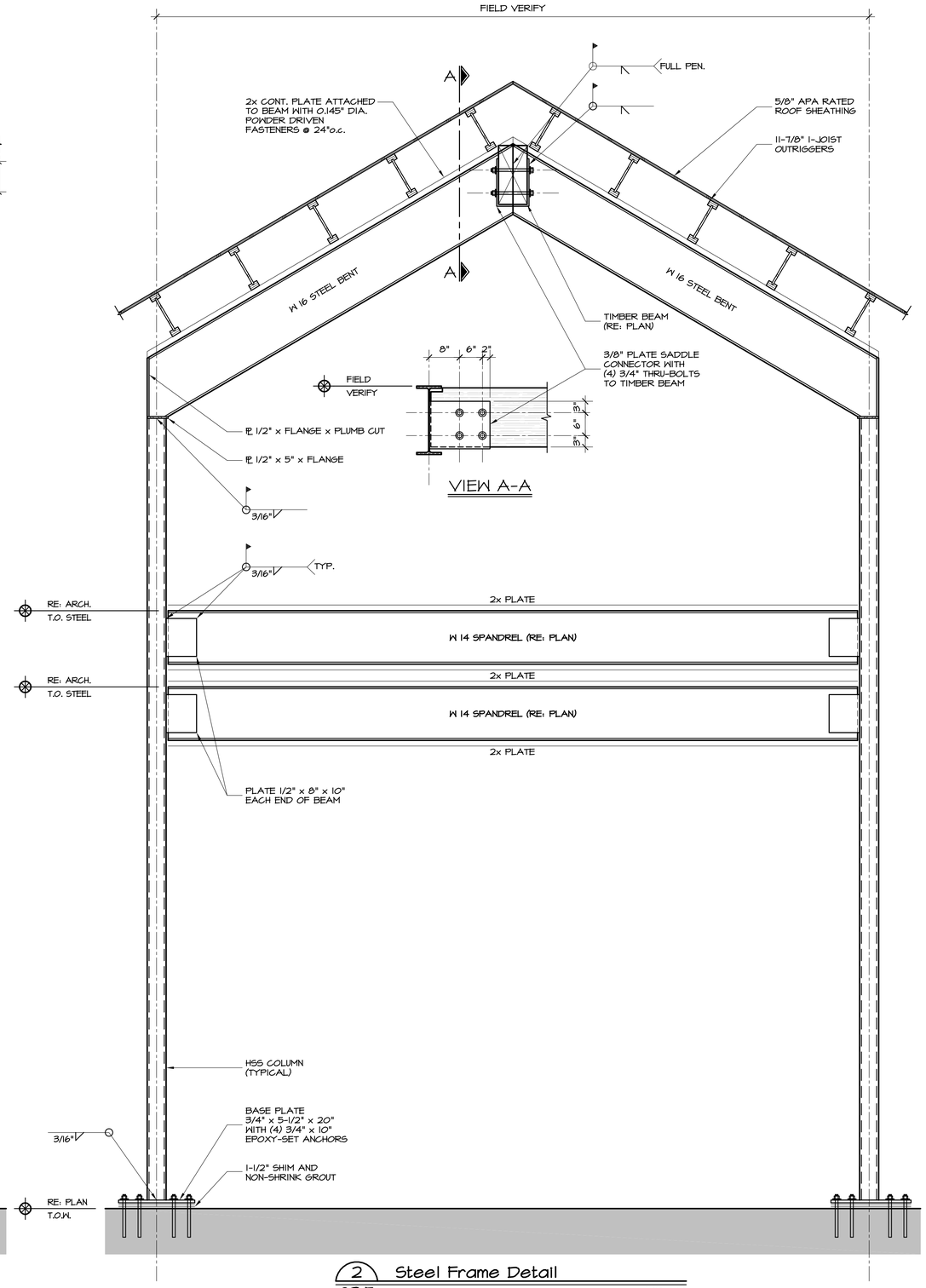
Title • Framing Details

S3.4



1 S3.5 Steel Frame Detail

3/4"=1'-0"



2 S3.5 Steel Frame Detail

3/4"=1'-0"

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COLORADO LICENSED DAVID SUNDQUIST 39715 PROFESSIONAL ENGINEER 06/07/23

NALLE 2.0 RESIDENCE

Lot 43 | Spruce Valley Ranch #2
135 Mount Argentine Road | Blue River, Colorado

Date	• 06/07/2023
SDG Project No.	• 23-017
Drawn By	• SDG
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Date	• Issue
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	•
	•
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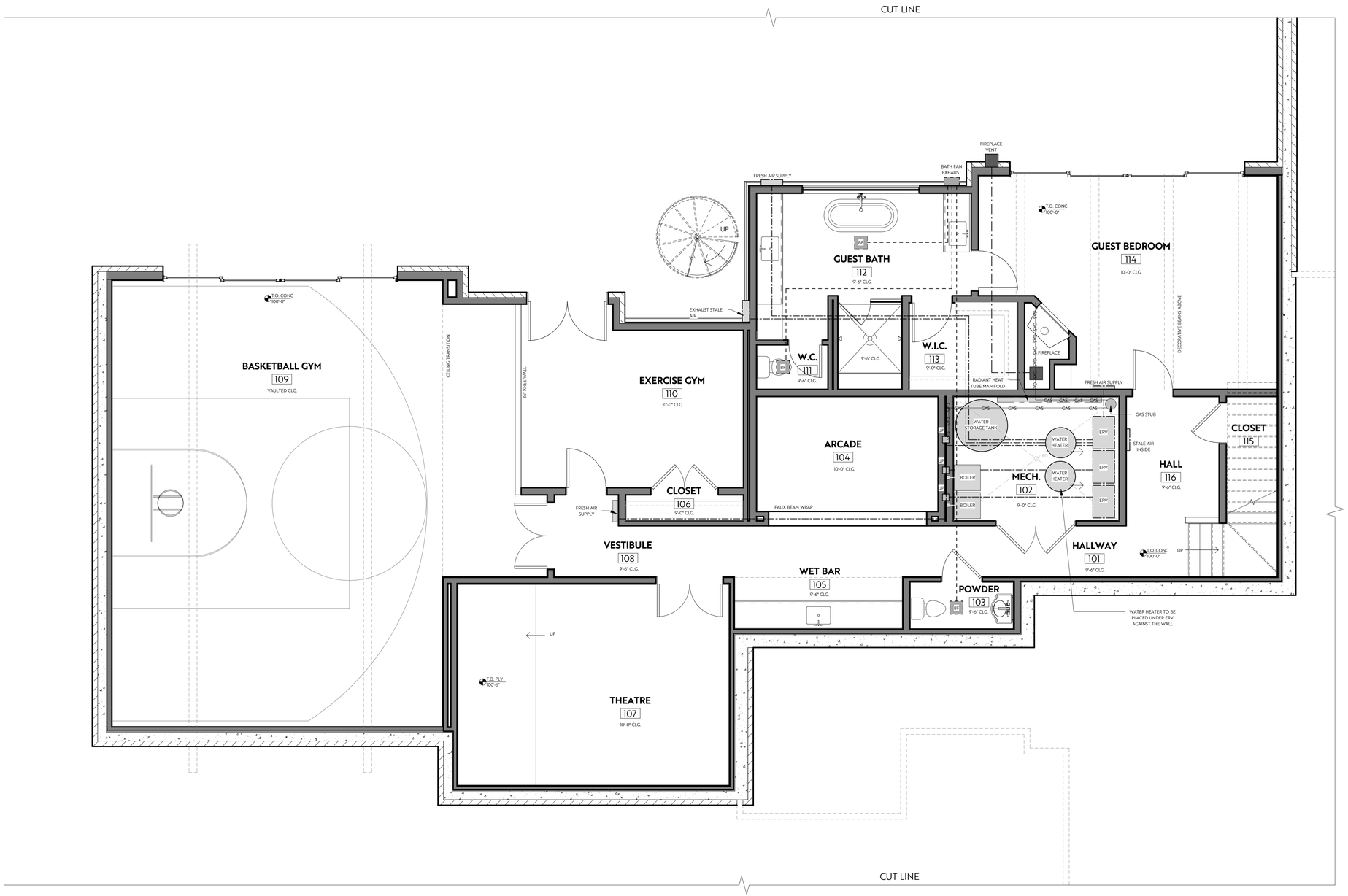
Title • Framing Details

S3.5



LEGEND:

- PROPOSED ERV ROUTING
- BATH FANS
- FIREPLACE VENT
- GAS
- DRYER VENT
- RANGE VENT
- RANGE HOOD MAKE UP AIR

PLUMBING NOTES

SUPPLY LINE SIZE:
1.5" IS RECOMMENDED TO BE INSTALLED FOR THE FIRE SUPRESSION SYSTEM. REVIEW WATER CONNECTION WITH THE WELL LOCATION AND WATER STORAGE RECOMMENDATION.

MAXIMUM FIXTURE FLOW RATES:
SHOWER - 2.5 GPM
KITCHEN FAUCETS - 2.2 GPM
BATHROOM FAUCETS - 2.0 GPM
TOILET - 3.0 GPM
WASHING MACHINE - 4.0 GPM

GAS LOAD CALCS

BOILER: 10,058K
FIREPLACES: 4 UNITS X 40K = 120K
COOKTOP: 1 UNIT = 100K
BBQ: 1 UNIT = 50K

TOTAL ASSUMED GAS LOAD = 10,328K

MANUAL J:

TOTAL SF X AVERAGE CEILING HEIGHT:
11,613 X 13.33 = 154,801 BTU

TOTAL NUMBER OF OCCUPANTS X 100 BTU/OCCUPANT: 5 X 100 = 500 BTU

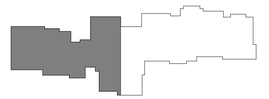
TOTAL NUMBER OF EXTERIOR DOORS X 1000 BTU/DOOR: 10 X 1000 BTU/DOOR = 10,000 BTU

TOTAL NUMBER OF EXTERIOR WINDOWS X 1000 BTU/WINDOW: 51 X 1000 BTU/WINDOW = 51,000 BTU

TOTAL BTU PER MANUAL J ABOVE: 216,301 BTU
BOILER

FOR A HOME THIS SIZE WE ARE PROPOSING A BOILER SIZE OF 255,000 BTU

KEY PLAN



LOWER LEVEL MECHANICAL PLAN

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

0' 2' 4' 8' 16'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVIN NALLE
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

LOWER LEVEL MECHANICAL PLAN

M1.01

LEGEND:

- PROPOSED ERV ROUTING
- BATH FANS
- FIREPLACE VENT
- GAS
- DRYER VENT
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- RANGE HOOD MAKE UP AIR

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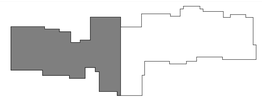


MAIN LEVEL MECHANICAL PLAN WEST

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

0' 2' 4' 8' 16'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

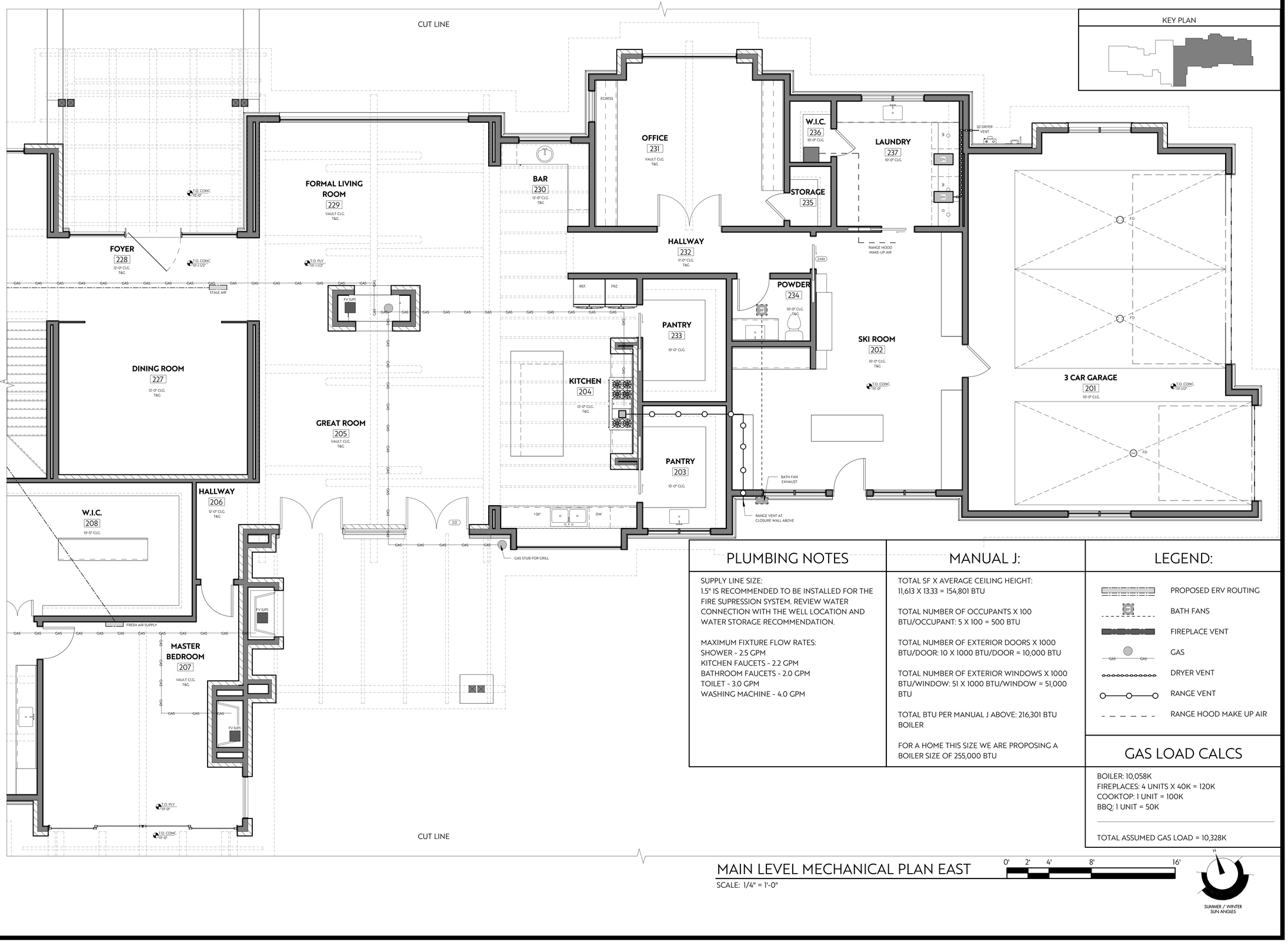
NALLE 2.0 RESIDENCE
0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
TANNER BRANDON LEVIN
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023
JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

MAIN LEVEL MECHANICAL PLAN WEST

M1.02



PLUMBING NOTES

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LEGEND:

- PROPOSED ERV ROUTING
- BF — BATH FANS
- FIREPLACE VENT
- GAS — GAS
- DRYER VENT
- RANGE VENT
- RANGE HOOD MAKE UP AIR

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FIREPLACES: 4 UNITS X 40K = 120K
COOKTOP: 1 UNIT = 100K
BBQ: 1 UNIT = 50K

TOTAL ASSUMED GAS LOAD = 10,328K

MAIN LEVEL MECHANICAL PLAN EAST

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

0' 2' 4' 8' 16'

SUMMER / WINTER SUN ANGLES

COLLECTIVE

NALLE 2.0 RESIDENCE

0135 MOUNT ARGENTINE RD (CR 598) BRECKENRIDGE, CO 80424

COLORADO LICENSED
BRANDON LEVIN NALLE
6/13/23
405836
ARCHITECT

ISSUE	
Permit Set	06/13/2023

JOB #:	262
DRAWN BY:	MI
CHECKED BY:	JM

MAIN LEVEL MECHANICAL PLAN EAST

M1.03

TO: Michelle Eddy, CMC/CPM - Town Manager/Clerk

FROM: Kyle Parag, Plan Reviewer - CAA

DATE: June 25, 2023

RE: Planning/Zoning/Architectural Guidelines review –
135 Mount Argentine Rd

Below please find staff's analysis that outlines the review with the Town's Zoning regulations and adopted Architectural Design Guidelines for the structure proposed.

Staff Recommendation:

Staff recommendation is to approve the planning review. The color board was not provided, expected to be natural stone and wood colors.

Zoning Regulation analysis –

Proposal:	A new single-family residence in the design of a wood structure. Total living area is indicated at 9686 Sqft and 1925 Sqft of unfinished space. Site includes an attached garage and a detached garage.
Zoning district:	R1
Lot Size:	~ 176,009 sq. ft. 80,000 sq. ft. Required
Lot Width:	~ 261' 100 ft. Required - Complies
Setbacks:	Proposed principal residence and secondary structure are within the setback requirements.
Height:	The structure is measured at about 31' of height. The highest point according to Town definition is above the basketball gym.
Garage Stds:	The proposed attached garage is 881, and an additional detached garage is proposed at 800 sqft for a total of 1681 sqft of garage space. Detached

garage will have a steel structure support. 2421 sqft is the maximum garage size permitted.

Parking Stds:

Parking requirements will be met through the proposed garage parking.

Architectural Design Guideline analysis -

Please note the following key to the interpretation of the analysis table:

Y	Element is in substantial compliance with the design guidelines
N	Does not comply with the design guidelines
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
DEVELOPMENT STANDARD		
VI. B. Building Envelope	The proposed principal residence is properly sited within required setbacks. The submitted site plan depicts compliance.	Y
VI. C. Building Siting	Structure is proposed in context with natural drainage patterns, contours, and landforms.	Y
VI. D. Grading and Drainage	Final grading is proposed to avoid unnaturally broad, flat surfaces.	Y
VI. E. Driveways	continuous 8% slope is proposed with exception of at the road connection, 5% is proposed. Snow storage calculations are provided, but indicated outside of the improved driveway surface. Water flow line is indicated, but a culvert is not clearly indicated. A culvert will be required near road.	

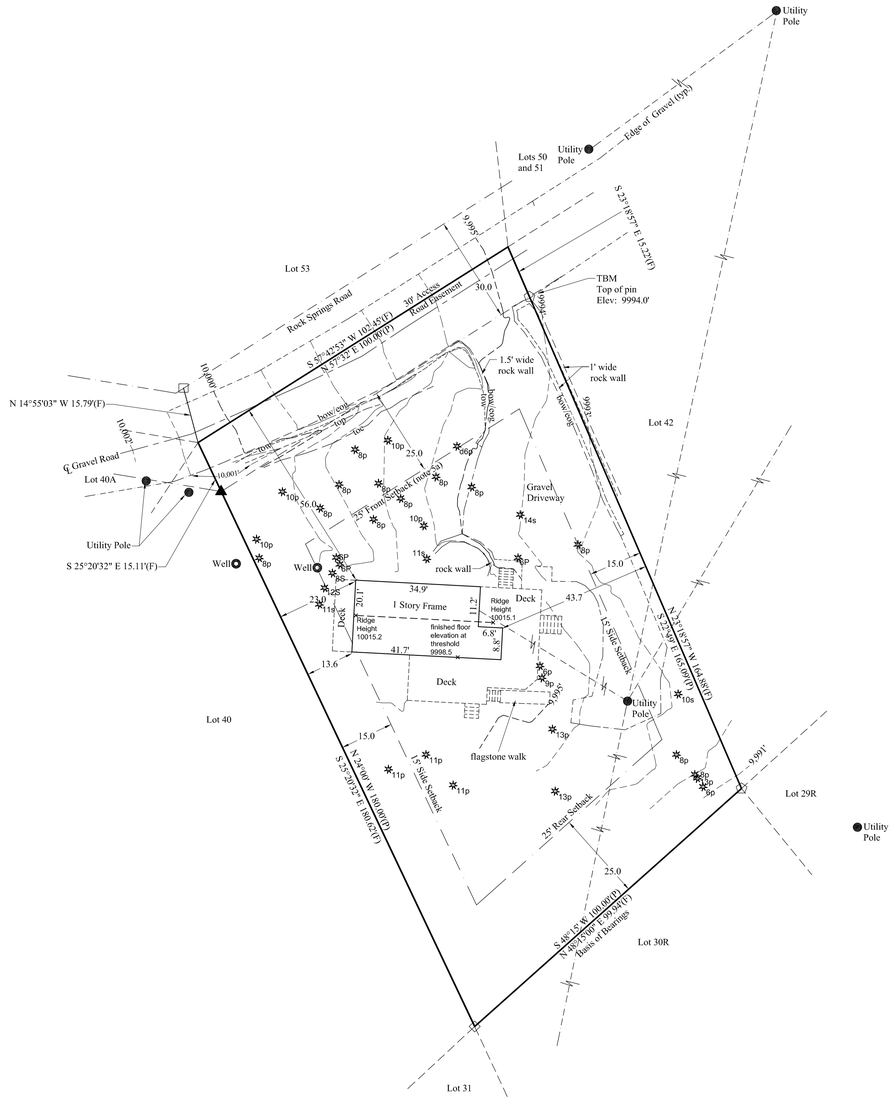
VI. F. Parking / Garages	The proposed attached two vehicle garage and the additional exterior parking space complies with minimum standards.	y
VI. G. Exterior Equipment and Satellite Dishes	No exterior equipment is indicated	Y
VI. H. Easements and Utilities	Easements are indicated	Y
VI. I. Recreation Facilities	Hot tub is indicated on south side of residence.	Y
VI. J. Signage	Address marker/signage is in compliance with visual and practical standards	Y
VI. K. Pathways /Walkways	No walking paths are proposed or indicated	Y
VI. L. Wetlands	No wetlands are identified on the plan.	N/A
VI. M. Wildfire Regulations	Many of the required regulations are operational requirements post-construction. Firewise construction details are proposed and compliant	Y
ARCHITECURAL GUIDLINES		
VI. B. Building Forms	Proposed foundation walls merge with the existing grade. Foundation walls are indicated to be covered with a stone veneer.	Y
VII. C. Setbacks	The proposed structures sit within the required setbacks per the submitted site plan.	Y
VII. D. Building Height	Building height is indicated at 34'. Scaled estimated height per Town definition is 31'.	Y
VII. E. Roofs	Roof design is gabled and relatively complex. Slopes are in general conformance. Wood structural elements are used at the gables. Roofing material vary from shingles to metal roofing.	Y

VII. F. Exterior Wall Materials	Exterior walls are a combination of stone, horizontal wood appearance product and vertical wood appearance products. **Color sheet was not provided**	Y
VII. G. Exterior Trim	**Trim colors are not clearly indicated** but expect to be natural wood colors and timbers	Y
VII. H. Windows and Doors	Windows, doors, and garage doors are proportional to the structure and appear in general compliance. Glazing a significant visual portion of the structure.	Y
VII. I. Balconies and Railings	Exterior railings are not proposed.	Y
VII. J. Chimneys and Roof Vents	Sizable chimney is proposed centrally to the structure, appears in general conformance with a modern cap.	Y
VII. K. Exterior Colors	**Color board not provided.**	
VII. L. Solid Waste Collection and Service Areas	Trash and storage areas are not indicated.	Y
SITE ELEMENTS		
VIII. A. Retaining Walls, Landscape Walls, Fences, and Screening	Retaining walls are minor in nature and used mostly for visual reasons.	Y
VIII. B. Terraces, Patios, Walkways and Decks	Walkways appear in general conformance	Y
VIII. C. Driveway Paving Surfaces	Driveway and parking area material is asphalt pavement	Y
VIII. D.	Proposed exterior lighting is in general conformance. Specific information could not be located.	Y

Exterior Landscape Lighting		

Improvement Survey Plat & Partial Topographic Survey

Lot 41
BLUE ROCK SPRINGS SUBDIVISION - AMENDED
BLUE RIVER ESTATES INC.
Town of Blue River
Summit County, Colorado
Section 18, T7S, R77W, 6th P.M.
(38 Rock Springs Road (CR 577))



Legend

(F) Field Measurement
(P) Plat (Rec. No. 94336)
(C) Calculated from Plat
(R) Record Deed

◇ Found rebar with red cap LS Illegible
⬠ Found Number 4 Rebar
□ Found rebar with yellow cap LS10847
▲ Set Number 5 rebar with aluminum cap LS38266 Witness corner

tow top of wall
bow bottom of wall
eog edge of gravel

✳11p 11" Pine Tree
✳14s 14" Spruce Tree

Notes:
1) Bearings are based on the south line of Lot 41, S48°15'W from record plat. East end of said line is a number 4 rebar; west end of said line is a rebar with red cap illegible.
2) Lineal Units: US Survey foot.
3) Lot Area: 0.390 Acres, 17002 Square feet
4) Only visible utilities located. Underground locate not done.
5) Contact the Town of Blue River for information on building setbacks, restrictions and requirements.
5a) Per Town of Blue River, front setback is measured from edge of access easement.
6) Elevation estimated from Google Earth, NAVD 1988. An elevation of 9994.0' assigned to the top of the pin at the northeast property corner as shown.
7) One foot contours intervals.

NOTE: NO TITLE RESEARCH WAS PERFORMED. THIS LAND SURVEY PLAT DOES NOT CONSTITUTE A TITLE SEARCH BY Blue River Land Surveying TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD.

I, Renee B. Parent, being a Licensed Land Surveyor in the State of Colorado, do hereby certify that this plat was prepared by me and under my supervision from a survey made by me and under my supervision and that both the plat and the survey are true and correct to the best of my knowledge and belief.

COLORADO LICENSED RENEE B. PARENT 38266 PROFESSIONAL LAND SURVEYOR 7-22-19

Notice: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

This Land Survey Plat was accepted for deposit on this _____ day of_____,20___, and is filed under Land Survey Plat Reception no. _____, in the office of the Summit County Clerk and Recorder.

Signed _____
Summit County Surveyor

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Blue River Land Surveying
(970) 668-3730
PO Box 2820 Breckenridge, CO 80424
www.blueriverlandsurveying.com

Improvement Survey Plat & Partial Topographic Survey
Lot 41
BLUE ROCK SPRINGS SUBDIVISION - AMENDED
BLUE RIVER ESTATES INC.
Town of Blue River
Summit County, Colorado
Section 18, T7S, R77W, 6th P.M.
(38 Rock Springs Road (CR 577))

Date: 07-22-2019 | 12582

Kumar & Associates, Inc.
Geotechnical and Materials Engineers
and Environmental Scientists

ACEC MEMBER

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GEOTECHNICAL ENGINEERING STUDY
PROPOSED ADDITION TO SINGLE FAMILY RESIDENCE
LOT 41 BLUE ROCK SPRINGS SUBDIVISION
38 ROCK SPRINGS ROAD
BLUE RIVER, COLORADO

Prepared by:

James A. Parker, P.E., P.G.

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47281
06/17/19
PROFESSIONAL ENGINEER

Reviewed by:

Steven L. Pawlak, P.E.

PREPARED FOR:

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leejsky@yahoo.com

Project No. 19-6-157

June 17, 2019

TABLE OF CONTENTS

SUMMARY

1. A representative of Kumar and Associates, Inc. observed two exploratory pits on the subject property. The subsoils consist of about 6 inches of topsoil overlying medium dense, well graded gravel (GW) with sand, cobbles and boulders, extending to the full depth of exploration of about 10 feet below the ground surface.

2. The medium dense, native, granular soils encountered are considered good for support of shallow foundations, floor slabs and concrete flatwork. The existing topsoil is not suitable for support of structures or improvements and will require removal from beneath, foundations, floor slabs and exterior flatwork.

3. Groundwater was not encountered to the explored depth of 10 feet below the existing ground surface. Groundwater depths may vary seasonally and frozen ground can create a perched condition, especially during spring thaw conditions.

PURPOSE AND SCOPE OF STUDY

This report presents the results of a geotechnical engineering study for a proposed addition to a single family residence to be located at 38 Rock Springs Road, Blue River, Colorado. The project site is shown on Figure 1. The purpose of the study was to develop recommendations for the foundation design. The study was conducted in accordance with our agreement for geotechnical engineering services to Lee Sky, Proposal No. P6-19-133, dated May 13, 2019.

A field exploration program consisting of exploratory pits and a site reconnaissance was conducted to obtain information on the surface and subsurface conditions. Samples of the subsoils obtained during the field exploration were tested in the laboratory to determine their classification and other engineering characteristics. The results of the field exploration and laboratory testing were analyzed to develop recommendations for foundation types, depths and allowable pressures for the proposed structure foundations. This report summarizes the data obtained during this study and presents our conclusions, design recommendations and other geotechnical engineering considerations based on the proposed construction and the subsoil conditions encountered.

PROPOSED CONSTRUCTION

The project consists of a building addition to the north side of an existing residence on the property. Review of preliminary plans indicate the proposed addition will be have a footprint of about 950 square-feet and will be a two-story, wood-framed, structure, with a slab-on-grade or structural floor over crawlspace. Grading for the addition is assumed to be relatively minor with cuts of approximately 4 to 5 feet below the adjacent ground surface. We assume relatively light foundation loadings, typical of the proposed type of construction.

If construction plans are different than those described above, we should be notified to re-evaluate the recommendations presented in this report.

SITE CONDITIONS

The project site is a residential lot located on the south side of Rock Springs Road. The lot is currently occupied with an approximate 840 square foot single-family residence with a loft. The surface of the lot is relatively flat with a slight slope down to the east. Vegetation consists of deciduous and conifer trees with grass and weeds on the site surface. The property is bordered by residential lots to the south, west and east, and Rock Springs Road to the north.

FIELD EXPLORATION

The field exploration for the project was conducted on June 6, 2019. Two exploratory pits were excavated in the area of the proposed addition at the locations shown on Figure 1, to evaluate

the subsurface conditions. The pits were excavated with a tracked excavator and logged by a representative of Kumar and Associates, Inc. Due to underground utility constraints, the exploratory pits were excavated within the proposed addition footprint. During construction, disturbed soils in exploratory pit locations should be re-excavated, moisture conditioned to near optimum moisture content and replaced as properly compacted structural fill per the recommendations in this report.

Samples of the subsoils were taken with disturbed sampling methods. Depths at which the samples were taken are shown on the Logs of Exploratory Pits, Figure 2. The samples were returned to our laboratory for review by the project manager and testing.

LABORATORY TESTING

Laboratory testing performed on samples obtained from the exploratory pits consisted of natural moisture content, percent passing the No. 200 sieve and gradation analysis. The results of a gradation analysis performed on the minus 5 inch fraction of the natural granular soils are shown on Figure 3. The laboratory test results are shown on the Logs of Exploratory Pits, Figure 2, and summarized in Table 1.

SUBSURFACE CONDITIONS

Soil Types Encountered: Graphic logs of the subsurface conditions encountered at the site are shown on Figure 2. The subsoils consist of about 6 inches of topsoil overlying medium dense, well graded gravel with sand, cobbles and boulders, extending to the full depth of exploration of about 10 feet below the ground surface.

Groundwater: No groundwater was encountered in the pits at the time of excavation. The subsoils were generally slightly moist to moist. The depth to groundwater can vary based on seasonal and climatic factors.

GEOTECHNICAL ENGINEERING CONSIDERATIONS

Subsurface data indicate that medium dense, granular, GW soil will likely be the predominant soil type encountered beneath shallow foundation, floor slab and flatwork areas. The anticipated soils at the foundation level are considered good for shallow foundation support.

Existing fill, loose and disturbed soils, building remnants; including existing foundations and utilities, should be removed from foundation areas and footing excavations extended down to the undisturbed natural granular soils.

SITE GRADING

The following recommendations should be followed for grading, site preparation, and fill compaction.

1. Where fill is to be placed, existing fill, building remnants, topsoil, loose or otherwise unsuitable material should be removed prior to placement of new fill. The exposed soils should then be scarified to a depth of 6 inches, moisture conditioned and compacted to the minimum requirements of the overlying fill. Soils should be compacted with appropriate equipment for the lift thickness placed. Lift thickness should be no more than 8 inches compacted at the recommended moisture content and to the minimum required density.
2. Permanent unretained cut and fill slopes should be graded at 2 horizontal to 1 vertical (2:1) or flatter and protected against erosion by revegetation or other means. The risk of slope instability will be increased if seepage is encountered in cuts and flatter slopes may be necessary. If seepage is encountered in permanent cuts, an investigation should be conducted to determine if the seepage will adversely affect the cut stability. This office should review site grading plans for the project prior to construction.
3. Slopes of 4:1 or steeper should be benched to provide a level surface for compaction.
4. All backfill should be processed so that it does not contain fragments larger than 6-inches in diameter and placed at the recommended moisture content.
5. The following compaction requirements should be used:

TYPE OF FILL PLACEMENT	MOISTURE CONTENT	SOIL TYPE - Compaction Percent (ASTM D698 – Standard Proctor)
Below Foundations	± 2% Optimum	Structural Fill – 98%
Foundation Wall Backfill	± 2% Optimum	Processed On-site or Structural Fill – 95%
Below Floor Slabs	± 2% Optimum	Structural Fill – 95%
Landscape Areas	± 2% Optimum	Processed On-site – 90%
Below Concrete Flatwork/Pavements	± 2% Optimum	Structural Fill – 95%
Utility Trenches	As they apply to the finished area	

Suitability of On-Site Soil

The on-site GW soils are suitable as backfill after processing to remove all plus 6-inch material and moisture treatment. The on-site topsoil is not suitable for reuse except in the upper 6 to 12 inches of backfill in landscape areas.

Considerable processing will likely be necessary to reduce the on-site soil to fragments of minus 6-inches. Processing may include screening, rock raking and crushing. All on-site soil should be processed, moisture-conditioned and placed at the minimum required compaction.

Structural Fill

Structural fill used for support of the proposed addition should consist of the on-site processed soils or a relatively well-graded imported granular material with a liquid limit of 35 or less, a plasticity index of 10 or less, 5 to 25 percent material passing the No. 200 sieve, 60 percent or more passing the No. 4 sieve and no rocks larger than 6 inches. CDOT Class 1 structural backfill is acceptable as structural fill. Structural fill should be properly placed and compacted to reduce the risk of settlement and distress. Structural fills should be placed in accordance with the recommendations presented in the SITE GRADING section of this report.

Import Fill

The Geotechnical engineer should evaluate the suitability of any proposed import fill for its intended use.

Excavations

It is the responsibility of the Contractor to provide safe working conditions and to comply with the regulations in OSHA Standards, Excavations, 29CFS Part 1926. The onsite GW soil will likely classify as “Type C” in accordance with OSHA regulations. The regulations allow slopes of 1½ horizontal to 1 vertical (1½:1) for dry temporary excavations less than 20 feet deep.

The presence of water, seepage, fissuring, vibrations or surcharge loads will require temporary excavation to have flatter slopes. A Contractor’s competent person should make decisions regarding cut slopes. A qualified Geotechnical engineer should observe any questionable slopes or conditions. Temporary shoring may be necessary.

FOUNDATIONS

Considering the subsoil conditions encountered in the exploratory pits and the nature of the proposed construction, we recommend the structure be founded with spread footings bearing on the undisturbed GW soil.

The design and construction criteria presented below should be observed for a spread footing foundation system.

1) Footings placed on the undisturbed natural granular soils should be designed for an allowable soil bearing pressure of 2,500 pounds per square foot (psf). Based on

experience, we expect movement of footings designed and constructed as discussed in this section will be about 1 inch or less.

2) The footings should have a minimum width of 16 inches for continuous walls and 2 feet for isolated pads.
3) Exterior footings and footings beneath unheated areas should be provided with adequate soil cover above their bearing elevation for frost protection. Placement of foundations at least 40 inches below exterior grade is recommended for foundations bearing on the GW soil. Concrete should not be placed on frost, frozen soil, snow or ice.
4) Continuous foundation walls should be reinforced top and bottom to span local anomalies such as by assuming an unsupported length of at least 10 feet. Foundation walls acting as retaining structures should also be designed to resist lateral earth pressures as discussed in the "Foundation and Retaining Walls" section of this report.
5) The topsoil and any loose or disturbed soils should be removed and the footing bearing level extended down to the relatively undisturbed soils or replaced with properly compacted structural fill.
6) The exposed soils in footing areas should then be adjusted to near optimum moisture content and compacted. If water seepage is encountered, the footing areas should be dewatered before concrete placement and we shall be contacted for further evaluation.
7) Voids in the footing area subgrade created by boulder removal should be backfilled with properly compacted structural fill, lean mix “flow-fill” concrete or structural concrete.
8) Structural fill used for support of the foundation should meet the requirements listed in the SITE GRADING section of this report.
9) A representative of the geotechnical engineer should observe all footing excavations prior to forming footings and concrete placement to evaluate bearing conditions.

FOUNDATION AND RETAINING WALLS

Foundation walls and retaining structures which are laterally supported and can be expected to undergo only a slight amount of deflection should be designed for a lateral earth pressure computed on the basis of an equivalent fluid unit weight of at least 50 pounds per cubic foot (pcf) for backfill consisting of the on-site processed soils or suitable granular import. Cantilevered retaining structures which are separate from the foundation and can be expected to deflect sufficiently to mobilize the full active earth pressure condition should be designed for a lateral earth pressure computed on the basis of an equivalent fluid unit weight of at least 40 pcf for backfill consisting of the processed on-site soils or suitable granular import. The backfill should not contain rock larger than about 6 inches in diameter.

The lateral resistance of foundation or retaining wall footings will be a combination of the sliding resistance of the footing on the foundation materials and passive earth pressure against the side of the footing. Resistance to sliding at the bottoms of the footings can be calculated based on a coefficient of friction of 0.45. Passive pressure of compacted backfill against the sides of the footings can be calculated using an equivalent fluid unit weight of 460 pcf. The coefficient of friction and passive pressure values recommended above assume ultimate soil strength. Suitable factors of safety should be included in the design to limit the strain which will occur at the ultimate strength, particularly in the case of passive resistance. Fill placed against the sides of the footings to resist lateral loads should be a suitable granular material compacted to at least 95% of the maximum standard Proctor dry density at a moisture content near optimum.

All foundation and retaining structures should be designed for appropriate hydrostatic and surcharge pressures such as adjacent footings, traffic, construction materials and equipment. The pressures recommended above assume drained conditions behind the walls and a horizontal backfill surface. The buildup of water behind a wall or an upward sloping backfill surface will increase the lateral pressure imposed on a foundation wall or retaining structure. An underdrain should be provided to limit hydrostatic pressure buildup behind walls.

Backfill in patio, pavement, and walkway areas should be placed in uniform lifts and compacted to at least 95% of the maximum standard Proctor (ASTM D-698) dry density. Backfill placed in landscape areas should be compacted to at least 90% of the maximum standard Proctor dry density at a moisture content near optimum. Care should be taken not to overcompact the backfill or use large equipment near the wall, since this could cause excessive lateral pressure on the wall. Some settlement of deep foundation wall backfill should be expected, even if the material is placed correctly, and could result in distress to facilities constructed on the backfill.

FLOOR SLABS

The on-site granular soils, exclusive of topsoil, are suitable to support lightly loaded slab-on-grade construction. To reduce the effects of some differential movement, floor slabs should be separated from all bearing walls and columns with expansion joints which allow unrestrained vertical movement. Floor slab control joints should be used to reduce damage due to shrinkage cracking. The requirements for joint spacing and slab reinforcement should be established by the designer based on experience and the intended slab use. A minimum 4-inch layer of free-draining gravel should be placed beneath basement level slabs to facilitate drainage. This material should consist of minus 2-inch aggregate with at least 50% retained on the No. 4 sieve and less than 2% passing the No. 200 sieve. All backfill under floor slabs should be placed in accordance with the SITE GRADING section of this report.

We recommend vapor retarders conform to at least the minimum requirements of ASTM E1745 Class C material. Certain floor types are more sensitive to water vapor transmission than others. For floor slabs bearing on angular gravel or where flooring system sensitive to water vapor transmission are utilized, we recommend a vapor barrier be utilized conforming to the minimum requirements of ASTM E1745 Class A material. The vapor retarder should be installed in accordance with the manufacturers' recommendations and ASTM 1643.

UNDERDRAIN SYSTEM AND DAMP-PROOFING

Although groundwater was not encountered during our exploration, it has been our experience in mountainous areas that groundwater levels can rise and that local perched groundwater can develop during times of heavy precipitation or seasonal runoff. Frozen ground during spring runoff can create a perched condition. We recommend below-grade construction, such as retaining walls, crawlspace and basement areas, be protected from wetting and hydrostatic pressure buildup by an underdrain and wall drain system.

The underdrain should consist of drainpipe placed in the bottom of the wall backfill surrounded above the invert level with free-draining gravel. The drain should be placed at each level of excavation and at least 12-inches below lowest adjacent finish grade and sloped at a minimum 1% to a suitable gravity outlet or sump and pump system. Free-draining gravel used in the underdrain system should contain less than 2% passing the No. 200 sieve, less than 50% passing the No. 4 sieve and have a maximum size of 1-inch. The drain gravel backfill should be at least 1½ feet deep and protected by filter fabric. A typical drain detail is shown on Figure 4.

For exterior below grade foundation walls, we recommend, as a minimum, damp-proofing consist of bituminous material, 3 lbs per square yard, extending from the top of the footing to above ground level. A wall drain system consisting of a geocomposite, MiraDrain 6000, or equivalent, should be placed adjacent to below grade construction walls, with 100 percent coverage on the foundation wall facing the uphill slope and a minimum of 50 percent coverage for the adjacent foundation walls. The wall drain system should connect into the underdrain and extend to within 1 to 2 feet of the ground surface.

SURFACE DRAINAGE

The following drainage precautions should be observed during construction and maintained at all times after the addition has been completed:

1) Inundation of the foundation excavations and underslab areas should be avoided during construction.

2) Backfill in pavement and slab areas should be compacted to at least 95% of the maximum standard Proctor dry density at a moisture content within 2% of optimum. Exterior backfill placed in landscape areas should be compacted to at least 90% of the maximum standard Proctor dry density at a moisture content near optimum.
3) The ground surface surrounding the exterior of the building should be sloped to drain away from the foundation in all directions. We recommend a minimum slope of 12 inches in the first 10 feet in unpaved areas and a minimum slope of 3 inches in the first 10 feet in paved areas.
4) Roof downspouts and drains should discharge well beyond the limits of all backfill.
5) Landscaping which requires regular heavy irrigation should be located at least 5 feet from foundation walls. The upper 2 feet of foundation wall backfill should consist of low permeability cover soil.

CONTINUING SERVICES

Three additional elements of geotechnical engineering service are important to the successful completion of this project.

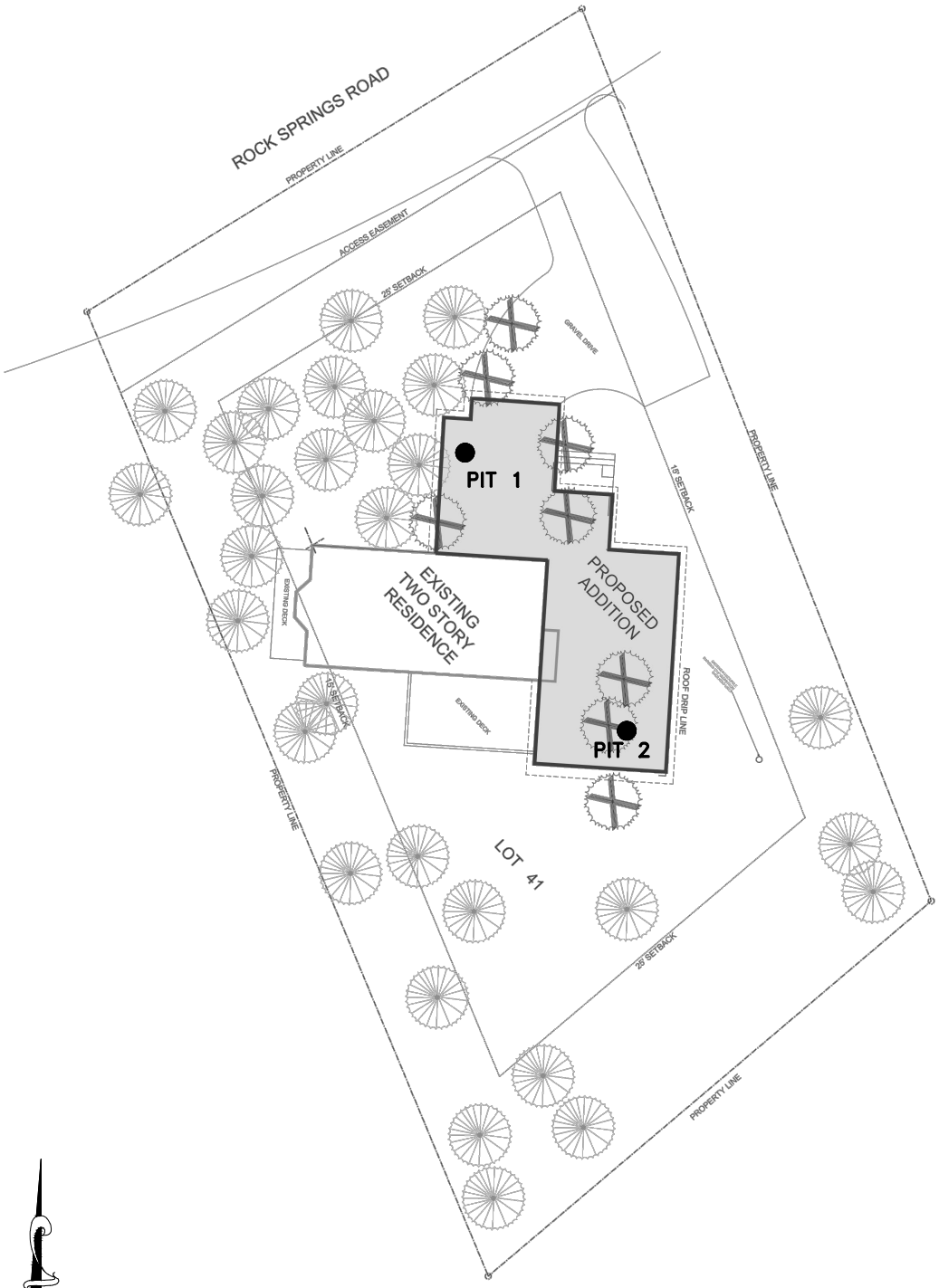
1) Consultation with design professionals during the design phases. This is important to ensure that the intentions of our recommendations are properly incorporated in the design, and that any changes in the design concept properly consider geotechnical aspects.
2) Observation and monitoring during construction. A representative of the Geotechnical engineer from our firm should observe the foundation excavation, earthwork, and foundation phases of the work to determine that subsurface conditions are compatible with those used in the analysis and design and our recommendations have been properly implemented. Placement of backfill should be observed and tested to judge whether the proper placement conditions have been achieved. We recommend a representative of the geotechnical engineer observe the drain and dampproofing phases of the work, if constructed, to judge whether our recommendations have been properly implemented.

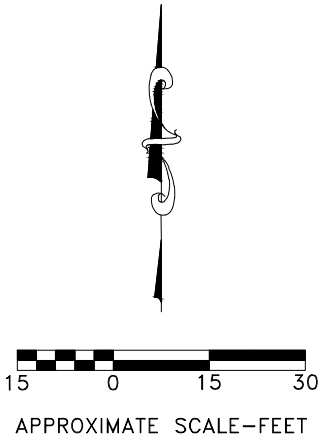
LIMITATIONS

This study has been conducted in accordance with generally accepted geotechnical engineering principles and practices in this area at this time. We make no warranty either express or implied. The conclusions and recommendations submitted in this report are based upon the data obtained from the exploratory pits at the locations indicated on Figure 1, the proposed type of construction and our experience in the area. Our services do not include determining the presence, prevention or possibility of mold or other biological contaminants (MOBC) developing

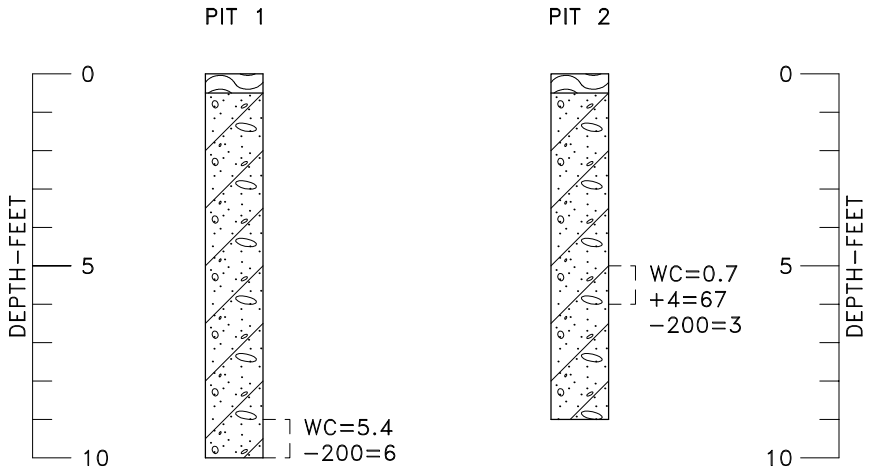
in the future. If the client is concerned about MOBC, then a professional in this special field of practice should be consulted. Our findings include interpolation and extrapolation of the subsurface conditions identified at the exploratory pits and variations in the subsurface conditions may not become evident until excavation is performed. If conditions encountered during construction appear different from those described in this report, we should be notified so that re-evaluation of the recommendations may be made.

This report has been prepared for the exclusive use by our client for design purposes. We are not responsible for technical interpretations by others of our information. As the project evolves, we should provide continued consultation and field services during construction to review and monitor the implementation of our recommendations, and to verify that the recommendations have been appropriately interpreted. The recommendations contained in this report are contingent upon review of grading and excavation plans prepared by a civil engineer licensed in the State of Colorado. Review of grading plans may alter our recommendations. Significant design changes may require additional analysis or modifications to the recommendations presented herein.





19–6–157	Kumar & Associates	LOCATION OF EXPLORATORY PITS	Fig. 1



LEGEND

TOPSOIL; SAND AND GRAVEL WITH ORGANICS, MOIST, BROWN.

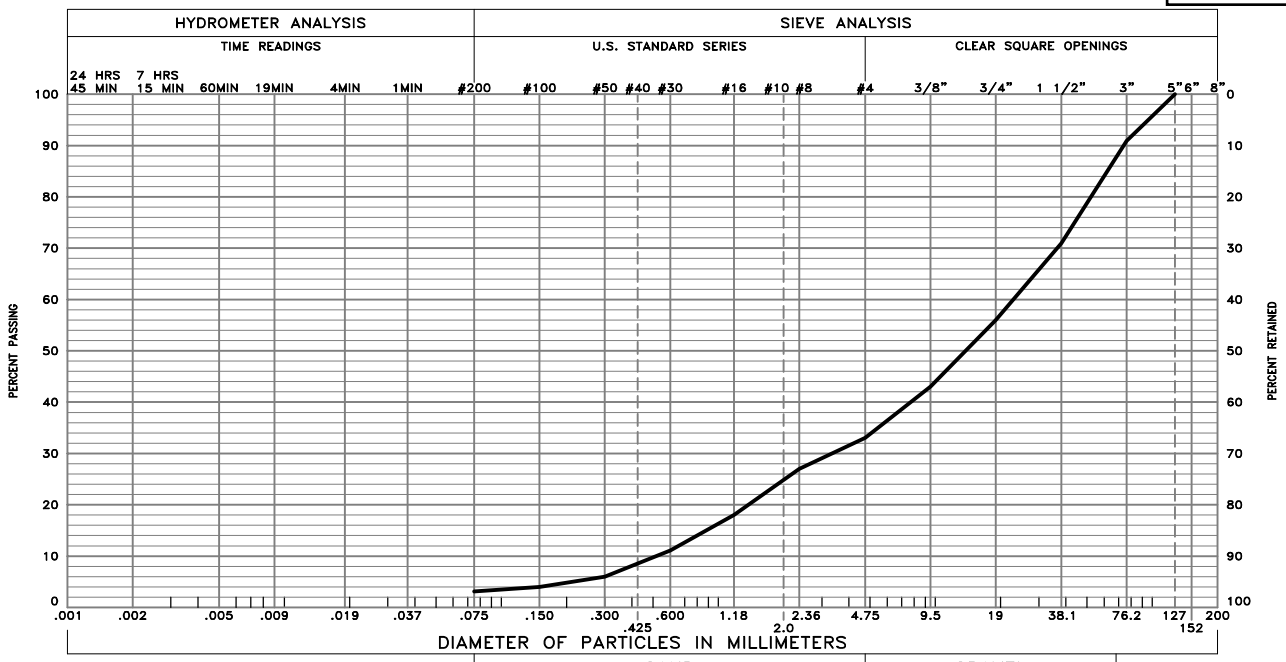
WELL GRADED GRAVEL (GW); WITH SAND, COBBLES, AND BOULDERS, MEDIUM DENSE, SLIGHTLY MOIST TO MOIST, BROWN.

DISTURBED BULK SAMPLE.

NOTES

1. THE EXPLORATORY PITS WERE EXCAVATED ON JUNE 6, 2019 WITH A TRACKED EXCAVATOR.
2. THE LOCATIONS OF THE EXPLORATORY PITS WERE MEASURED APPROXIMATELY BY PACING FROM FEATURES SHOWN ON THE SITE PLAN PROVIDED.
3. THE ELEVATIONS OF THE EXPLORATORY PITS WERE NOT MEASURED AND THE LOGS OF THE EXPLORATORY PITS ARE PLOTTED TO DEPTH.
4. THE EXPLORATORY PIT LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
5. THE LINES BETWEEN MATERIALS SHOWN ON THE EXPLORATORY PIT LOGS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES AND THE TRANSITIONS MAY BE GRADUAL.
6. GROUNDWATER WAS NOT ENCOUNTERED IN THE PITS AT THE TIME OF EXCAVATION. PITS WERE BACKFILLED SUBSEQUENT TO SAMPLING.
7. LABORATORY TEST RESULTS:
   WC = WATER CONTENT (%) (ASTM D 2216);
   +4 = PERCENTAGE RETAINED ON NO. 4 SIEVE (ASTM D 422);
   -200= PERCENTAGE PASSING NO. 200 SIEVE (ASTM D 1140).

19-6-157	Kumar & Associates	LOGS OF EXPLORATORY PITS	Fig. 2

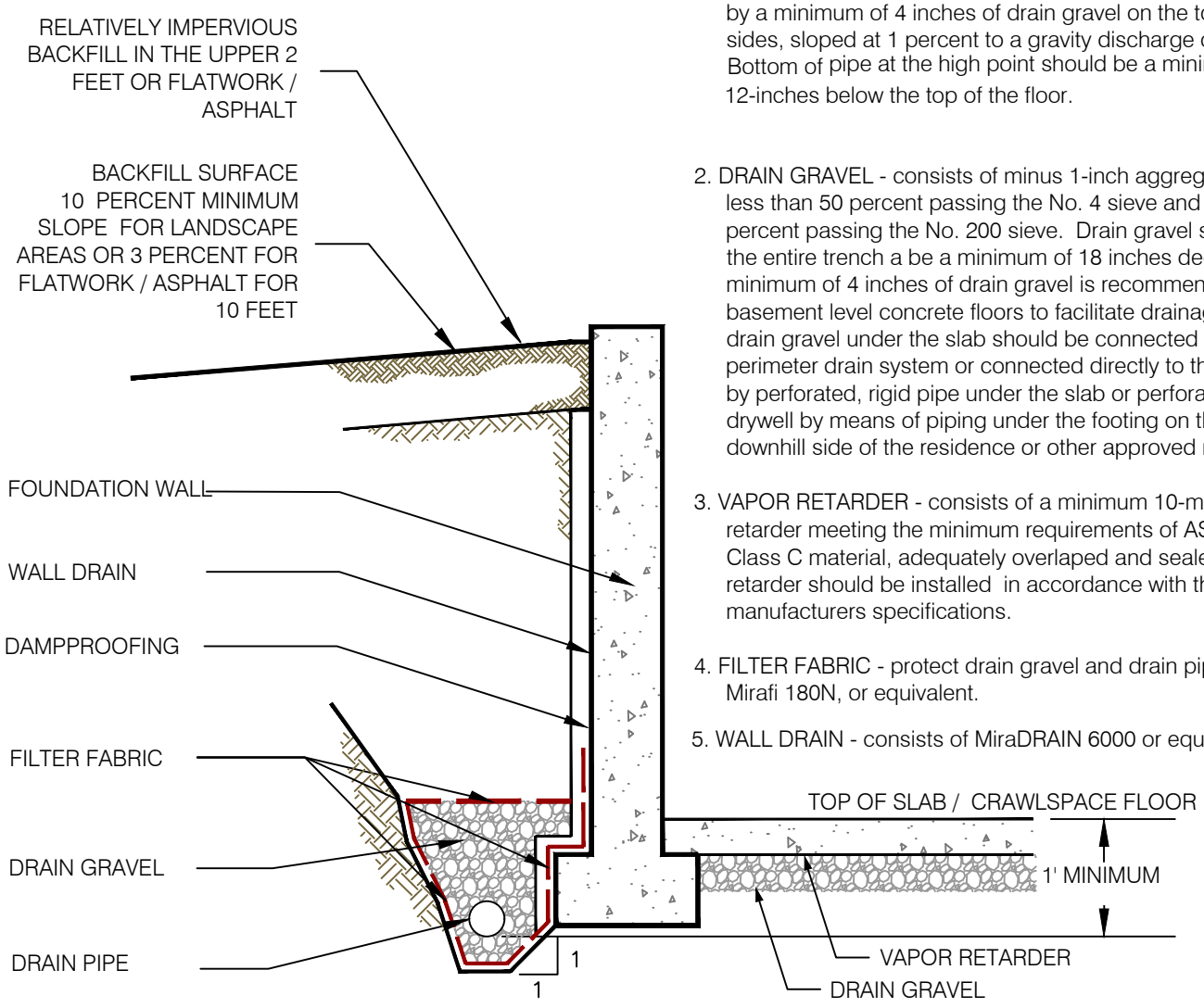


GRAVEL 67 % SAND 30 % SILT AND CLAY 3 %

SAMPLE OF: Well Graded Gravel with Sand FROM: Pit 2 @ 5'

These test results apply only to the samples which were tested. The testing report shall not be reproduced, except in full, without the written approval of Kumar & Associates, Inc. Sieve analysis testing is performed in accordance with ASTM D6913, ASTM D7928, ASTM C136 and/or ASTM D1140.

19-6-157	Kumar & Associates	GRADATION TEST RESULTS	Fig. 3



1. DRAIN PIPE - consists of 4-inch perforated PVC, surrounded by a minimum of 4 inches of drain gravel on the top and sides, sloped at 1 percent to a gravity discharge or drywell. Bottom of pipe at the high point should be a minimum of 12-inches below the top of the floor.

2. DRAIN GRAVEL - consists of minus 1-inch aggregate with less than 50 percent passing the No. 4 sieve and less than 2 percent passing the No. 200 sieve. Drain gravel should fill the entire trench a be a minimum of 18 inches deep. A minimum of 4 inches of drain gravel is recommended under basement level concrete floors to facilitate drainage. The drain gravel under the slab should be connected to the perimeter drain system or connected directly to the drywell by perforated, rigid pipe under the slab or perforation in the drywell by means of piping under the footing on the downhill side of the residence or other approved method.

3. VAPOR RETARDER - consists of a minimum 10-mil vapor retarder meeting the minimum requirements of ASTM E1745 Class C material, adequately overlaped and sealed. Vapor retarder should be installed in accordance with the manufacturers specifications.

4. FILTER FABRIC - protect drain gravel and drain pipe with Mirafi 180N, or equivalent.

5. WALL DRAIN - consists of MiraDRAIN 6000 or equivalent.

NOT TO SCALE

19-6-157	Kumar & Associates	TYPICAL DRAIN DETAIL	FIG. 4

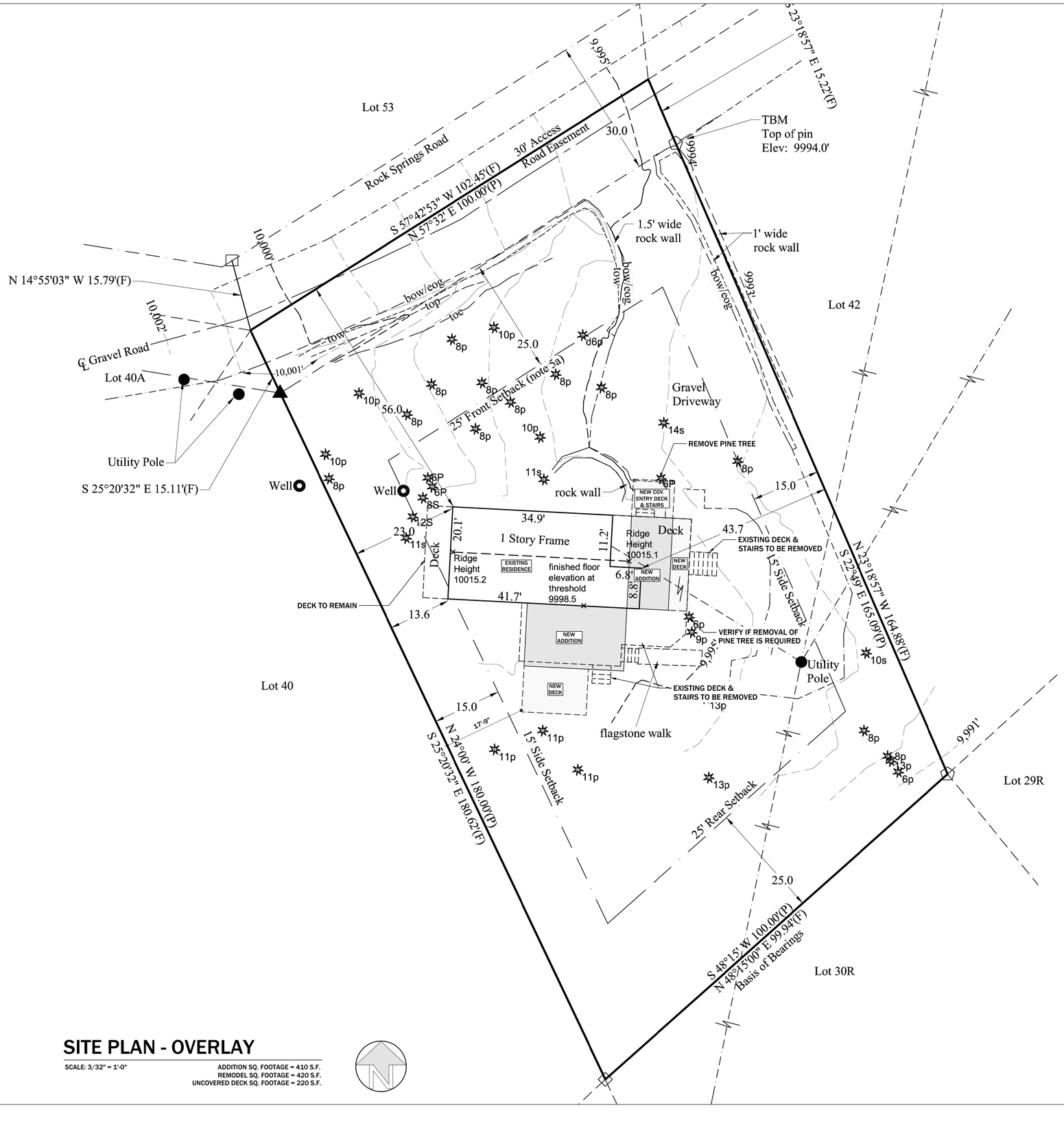
Kumar & Associates

JOB NO: 19-6-157
JOB NAME: PROPOSED ADDITION, 38 ROCK SPRINGS ROAD

TABLE 1

SUMMARY OF LABORATORY TEST RESULTS

SAMPLE LOCATION		NATURAL	NATURAL	GRADATION			ATTERBERG LIMITS		SWELL-COMPRESSION		HVEEM	WATER		SOIL OR
PIT	DEPTH	MOISTURE CONTENT	DRY UNIT WEIGHT	GRAVEL	SAND	SILT & CLAY	LIQUID LIMIT	PLASTIC INDEX	SWELL	SUR-CHARGE	STABILOMETER (R-VALUE)	SOLUBLE SULFATES	pH ()	BEDROCK DESCRIPTION
(#)	(feet)	(%)	(pcf)	(%)	(%)	(%)	(%)	(%)	(%)	(psf)		(%)		
1	9	5.4				6								WELL GRADED GRAVEL WITH SAND
2	5	0.7		67	30	3								WELL GRADED GRAVEL WITH SAND



SITE PLAN - OVERLAY

SCALE: 3/32" = 1'-0"

ADDITION SQ. FOOTAGE = 410 S.F.
REMODEL SQ. FOOTAGE = 420 S.F.
UNCOVERED DECK SQ. FOOTAGE = 220 S.F.

GENERAL SITE PLAN NOTES

INFORMATION IS BASED UPON A TOPO SURVEY RECORDED BY BLUE RIVER LAND SURVEYING FOR LOT 41, BLUE ROCK SPRINGS SUBDIVISION - AMENDED BLUE RIVER ESTATES INC. (Project Number: 12582, Dated: 7/22/2019)

CONTRACTOR TO VERIFY ALL DIMENSIONS INCLUDING BUT NOT LIMITED TO LOT LINES, SETBACKS, EASEMENTS, AND LOCAL COVENANTS.

LOCATE ALL UTILITIES AS REQUIRED BY COLORADO LAW PRIOR TO ANY EXCAVATION AT THE SITE.

DO NOT SCALE DRAWINGS. REFER TO WRITTEN DIMENSIONS ON THE PLANS.

INSPIRE ENGINEERING
PO BOX 349
WELLINGTON, CO 80549
PHONE: (319) 631-5935

CLIENT:
SKY CONSTRUCTION
PO Box 5843
Breckenridge, CO
CLIENT PHONE: (970) 485-9393

SKY ADDITION

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

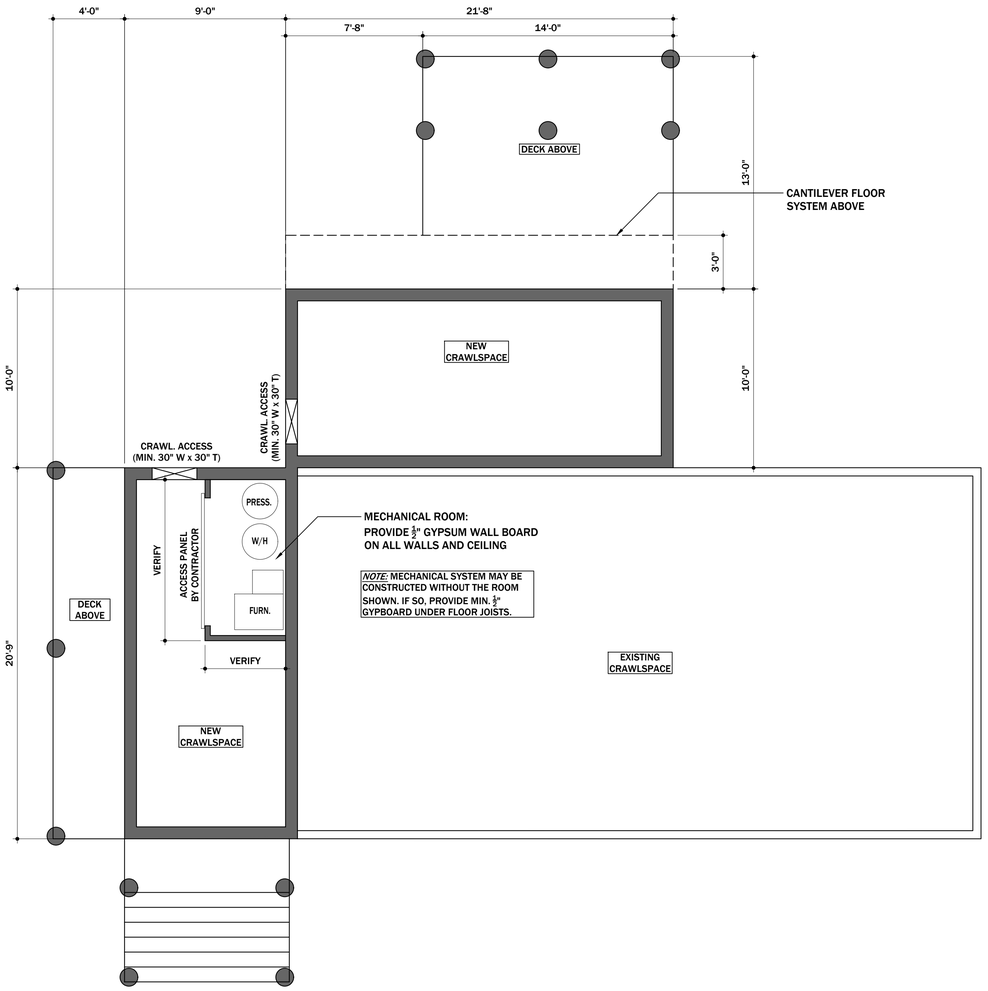
DRAWN BY:	NTR
DESIGN BY:	NTR
DATE:	5/25/2023
PROJECT #:	ARC23.0101

REVISION		DATE
1	TOWN COMMENTS	6/13/23
2		
3		
4		
5		
6		

SITE PLAN

SCALE: PER PLAN

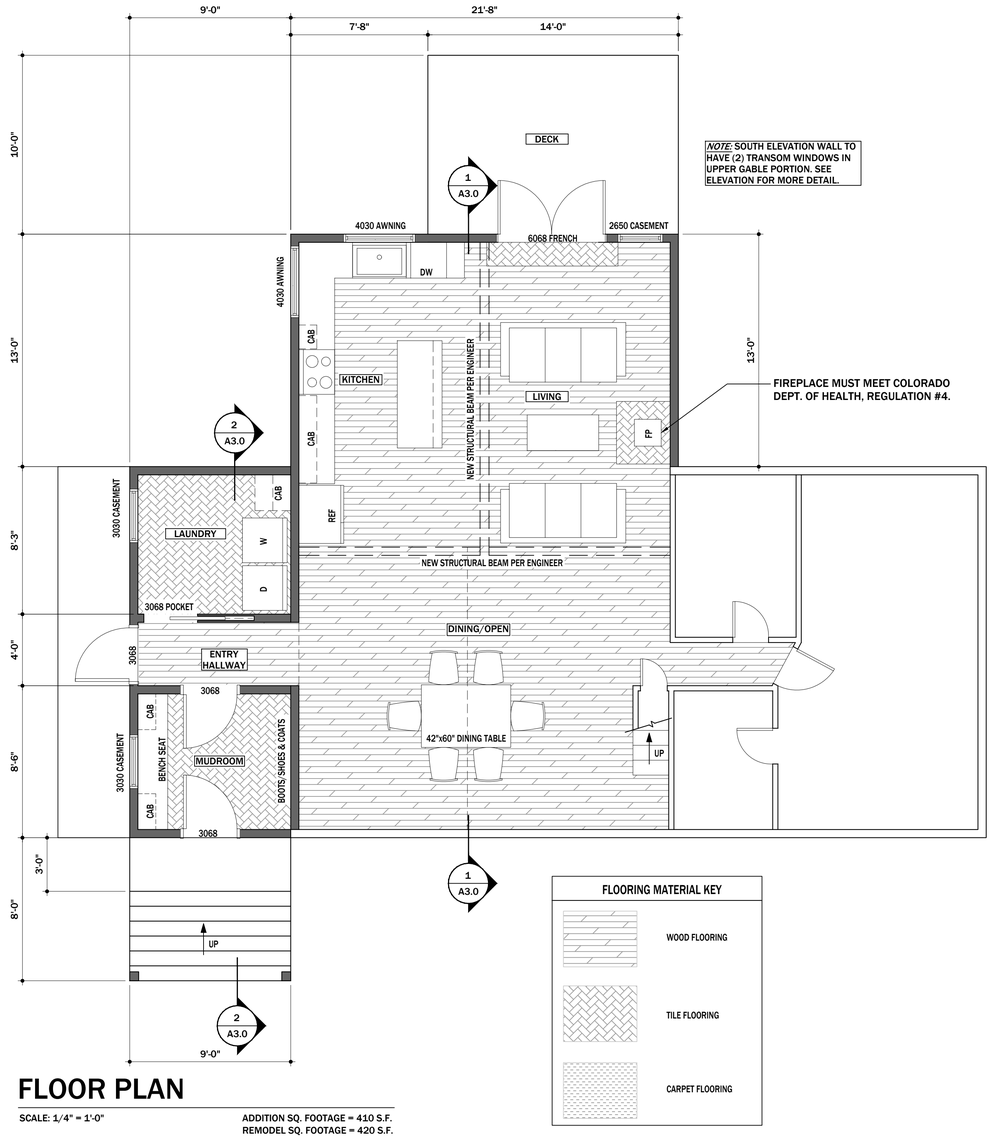
SP1.0



FOUNDATION PLAN

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

FINISHED SQ. FOOTAGE = 40 S.F. (VERIFY)



FLOOR PLAN

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

ADDITION SQ. FOOTAGE = 410 S.F.
REMODEL SQ. FOOTAGE = 420 S.F.

FLOORING MATERIAL KEY

- WOOD FLOORING
- TILE FLOORING
- CARPET FLOORING

INSPIRE ENGINEERING

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PHONE: (319) 631-5935

CLIENT:
SKY CONSTRUCTION

PO Box 5843
Breckenridge, CO

CLIENT PHONE: (970) 485-9393

SKY ADDITION

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

DRAWN BY: NTR
DESIGN BY: NTR
DATE: 5/25/2023
PROJECT #: ARC23.0101

REVISION		DATE
1	TOWN COMMENTS	6/13/23
2		
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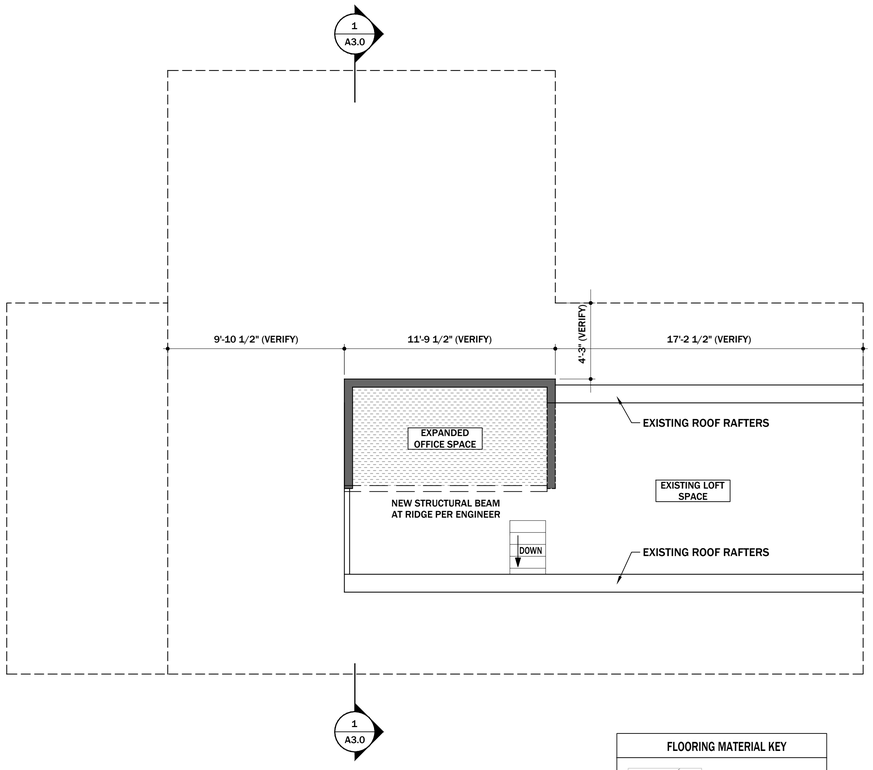
4		
5		
6		

FLOOR PLANS

SCALE: PER PLAN

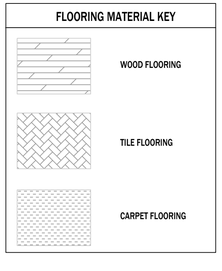
A1.0

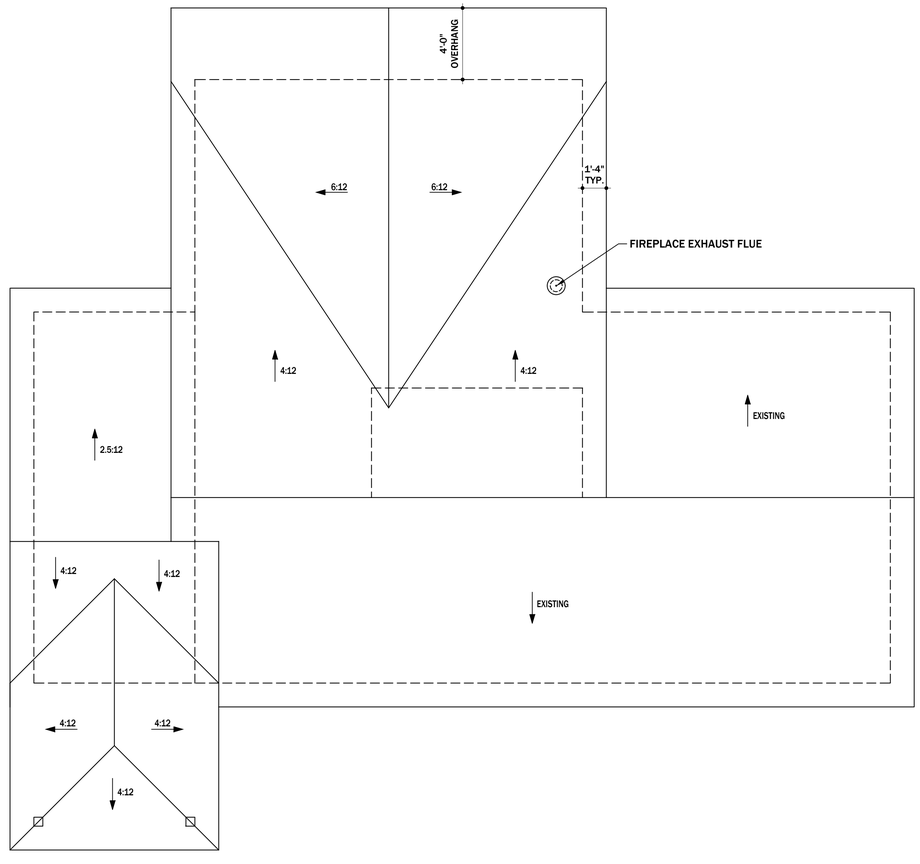


UPPER FLOOR PLAN

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

REMODEL SQ. FOOTAGE = 60 S.F.





ROOF PLAN

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

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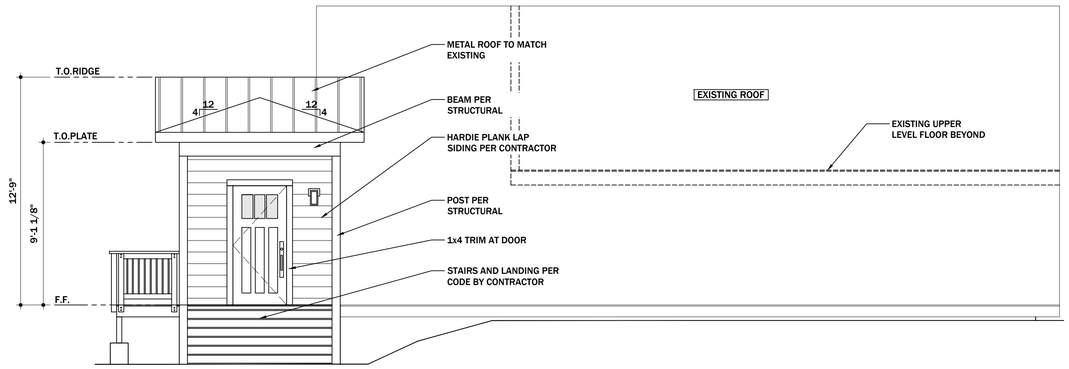
FLOOR PLANS

SCALE: PER PLAN

A1.1



N

NORTH ELEVATION

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

S

SOUTH ELEVATION

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

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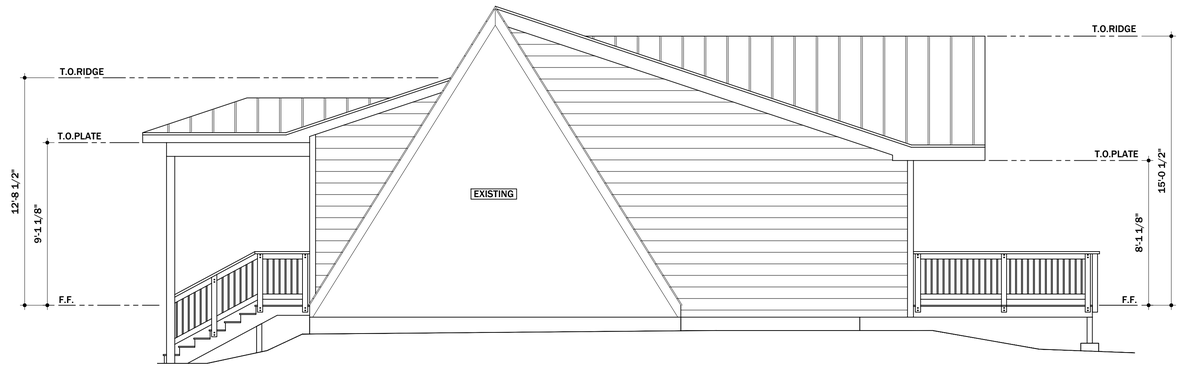
ELEVATIONS

SCALE: PER PLAN

A2.0

E EAST ELEVATION

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



W WEST ELEVATION

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

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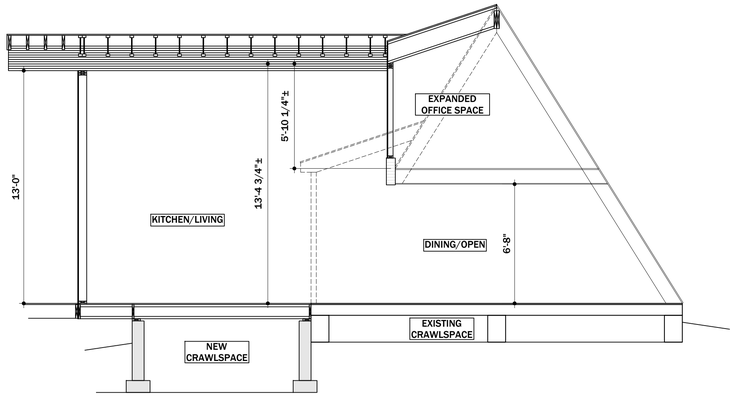
ELEVATIONS

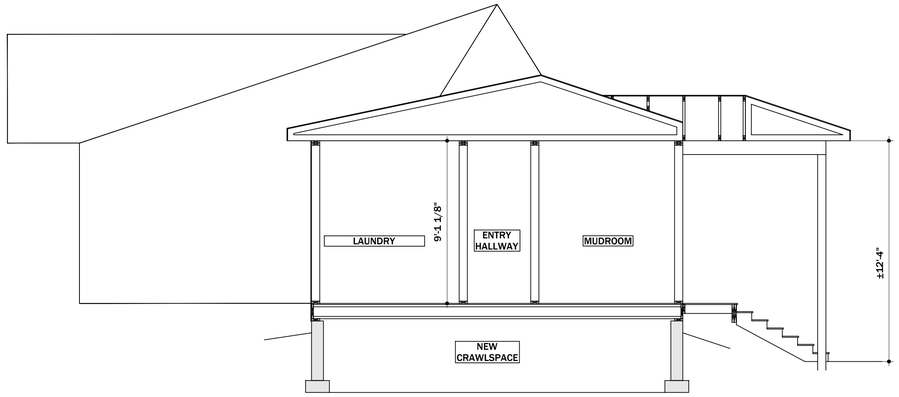
SCALE: PER PLAN

A2.1



1 SECTION 1

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



2 SECTION 2

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

GENERAL NOTES

1. MISCELLANEOUS NOTES

THESE PLANS ARE DESIGNED FOR THE FINISHED PRODUCT. SHORING, STAGING, AND ORDER OF OPERATION ARE OUTSIDE THE SCOPE OF OUR SERVICES AND SHOULD BE DESIGNED AND MONITORED BY THE CONTRACTOR DURING CONSTRUCTION.

DO NOT SCALE DRAWINGS. REFER TO WRITTEN DIMENSIONS ON THE PLANS.

FINISH MATERIAL, COLOR SELECTIONS, AND WINDOW & DOOR SPECIFICATIONS ARE OUTSIDE OF OUR SCOPE OF SERVICES AND ARE TO BE SELECTED BY THE CONTRACTOR.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. CONTACT INSPIRE ENGINEERING IF DISCREPANCIES ARE FOUND.

FOR ANY CHANGES TO THE PROJECT DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY INSPIRE ENGINEERING FOR APPROVAL PRIOR TO INSTALLATION.

ALL MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED, ERECTED, APPLIED, USED, CONDITIONED, ADJUSTED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS

2. CODE SUMMARY

THE PLANS AND ALL WORK SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE 2018 I-CODES AS AMENDED AND ADOPTED BY THE TOWN OF BLUE RIVER.

RISK CATEGORY:	II
WIND SPEED:	Vult = 115 mph
EXPOSURE CATEGORY:	B
GROUND SNOW LOAD:	125 psf
ROOF SNOW LOAD:	100 psf
SEISMIC DESIGN CATEGORY:	B

3. INSULATION

INSULATION SHALL BE PROVIDED AS REQUIRED BY THE LOCAL JURISDICTION. SEE BUILDING SECTIONS ON THE PLANS FOR MINIMUM INSULATION R-VALUES.

INSULATION REQUIREMENTS (R-VALUE):

ROOF/CEILING:	60
WALL:	30
FLOOR:	38
CRAWLSPACE WALL:	19 OR 15 CONTINUOUS

FENSTRATION REQUIREMENTS (U-FACTOR):

FENESTRATION:	0.30
SKYLIGHT:	0.55
SHGC:	N/R

4. FRAMING

ALL DIMENSIONS ARE TO THE FACE OF THE STUDS.

ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED OR SHALL BE OF DECAY RESISTANT MATERIALS AS REQUIRED BY THE IBC. AT A MINIMUM, A MOISTURE BARRIER SHALL BE INSTALLED BETWEEN THE TWO MATERIALS.

SEE BUILDING SECTIONS ON THE PLANS FOR WALL & ROOF CONSTRUCTION SPECIFICATIONS.

ALL STRUCTURAL COMPONENTS SHALL FOLLOW THE RECOMMENDATIONS PROVIDED ON THE STRUCTURAL ENGINEERED DRAWINGS.

5. ROOFING

ALL UNDERLAYMENT, ICE BARRIER, VENTING, AND DRAFT STOPS SHALL BE IN CONFORMANCE WITH THE I-CODES AS REQUIRED BY THE LOCAL JURISDICTION.

ASPHALT SHINGLE ROOF COVERING TO BE MINIMUM CLASS 4 IMPACT RESISTANT.

METAL ROOFING SHALL BE MINIMUM 26 GA. MATERIAL.

6. WINDOW & DOORS

MANUFACTURER, STYLE, AND COLOR TO BE SELECTED BY THE CONTRACTOR.

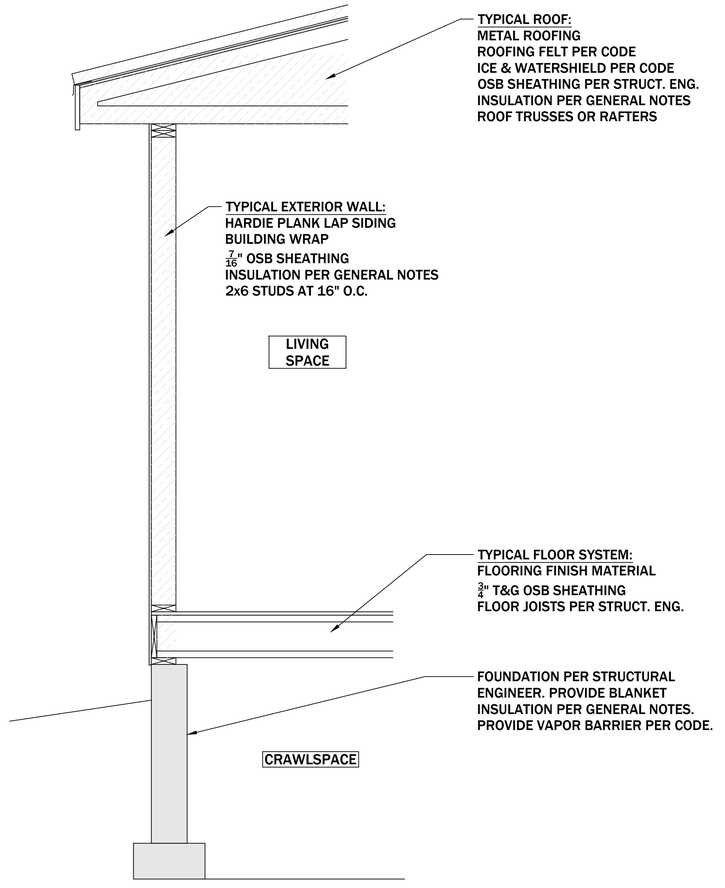
SAFETY GLAZING AND TEMPERED GLASS SHALL BE PROVIDED AS REQUIRED BY CODE.

7. MECHANICAL & PLUMBING

ALL MECHANICAL & PLUMBING WORK SHALL CONFORM TO THE INTERNATIONAL MECHANICAL CODE (IMC) & COLORADO PLUMBING CODE (CPC) AS REQUIRED BY THE LOCAL JURISDICTION.

8. ELECTRICAL

ALL ELECTRICAL SHALL CONFORM TO THE 2020 NATIONAL ELECTRICAL CODE (NEC) AS REQUIRED BY THE LOCAL JURISDICTION. SEE ELECTRICAL PLAN FOR A MORE COMPREHENSIVE NOTE LIST.



TYPICAL WALL SECTION

SCALE: 3/4" = 1'-0"

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SKY ADDITION

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

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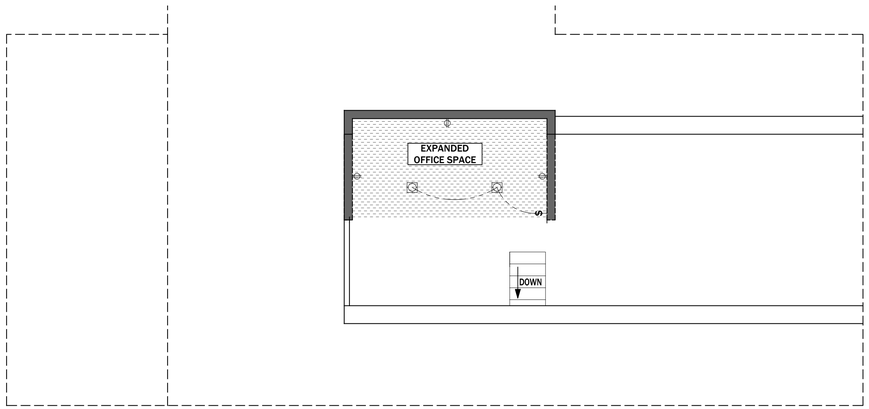
SECTIONS & NOTES

SCALE: PER PLAN

A3.0



ELECTRICAL PLAN - UPPER FLOOR

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

ELECTRICAL NOTES

1. MISCELLANEOUS NOTES

ALL ELECTRICAL SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (NEC) AS REQUIRED BY THE LOCAL JURISDICTION.

THE LAYOUT SHOWN IS FOR DESIGN INTENT. THE EXACT LOCATION OF ALL SWITCHES, OUTLETS, AND FIXTURES SHALL BE VERIFIED WITH CONTRACTOR AND OWNER PRIOR TO CONSTRUCTION. WE RECOMMEND A WALK-THROUGH WITH ELECTRICIAN BE COMPLETED PRIOR TO ROUGH ELECTRICAL INSTALLATION.

PROVIDE SMOKE AND CO2 DETECTORS AT LOCATIONS SHOWN AND/OR PER CODE. DETECTORS SHALL BE HARD WIRED WITH A BATTERY BACK-UP. PROVIDE AT EACH FLOOR LEVEL AND IN EACH SLEEPING ROOM AT HIGHEST POINT IN CEILING.

EXHAUST FANS SHALL BE INSTALLED IN EACH BATHROOM. VENT DIRECTLY TO EXTERIOR.

COORDINATE WITH THE LOCAL POWER AUTHORITY ON THE REQUIREMENTS OF THE EXISTING ELECTRICAL PANEL AS IS RELATES TO THE ADDITION, IF A NEW PANEL IS REQUIRED, AND THE LOCATION OF BOTH.

A GROUNDING ELECTRODE SHALL BE A STEEL REINFORCING BAR OR ROD WITH A MINIMUM ½"Ø AND A MINIMUM LENGTH OF 20'. GROUNDING ROD SHALL BE ENCASED IN A MIN. 2" OF CONCRETE AT OR NEAR THE BOTTOM OF THE FOUNDATION OR FOOTING THAT IS IN CONTACT WITH THE GROUND.

ALL TV & INTERNET CONNECTION LOCATIONS SHALL BE COORDINATED WITH OWNER AND CONTRACTOR PRIOR TO CONSTRUCTION.

2. OUTLETS

PROVIDE GROUND FAULT INTERRUPTED OUTLETS (GFI) AT ALL BATHROOMS, KITCHEN COUNTERTOPS, SINKS, NON-DEDICATED GARAGE AND BASEMENTS.

INSTALL ALL OUTLETS 18" ABOVE FINISHED FLOOR, U.N.O.

OUTLETS SHALL BE PLACED SO THAT THERE IS NO MORE THAN A 6'-0" MAX HORIZONTAL DISTANCE BETWEEN OUTLETS ALONG THE SAME WALL. THIS APPLIES TO OUTLET TO END OF WALL DISTANCE AS WELL.

OUTLETS AT KITCHEN COUNTERTOPS SHALL BE PLACED AT ALL AREAS WITH A COUNTERTOP WIDTH OF MORE THAN 12". PLACE OUTLETS SO THAT AT NO POINT ALONG THE COUNTERTOP AN OUTLET IS MORE THAN 24" AWAY.

3. SWITCHES

INSTALL ALL SWITCHES 48" ABOVE FINISHED FLOOR, U.N.O.

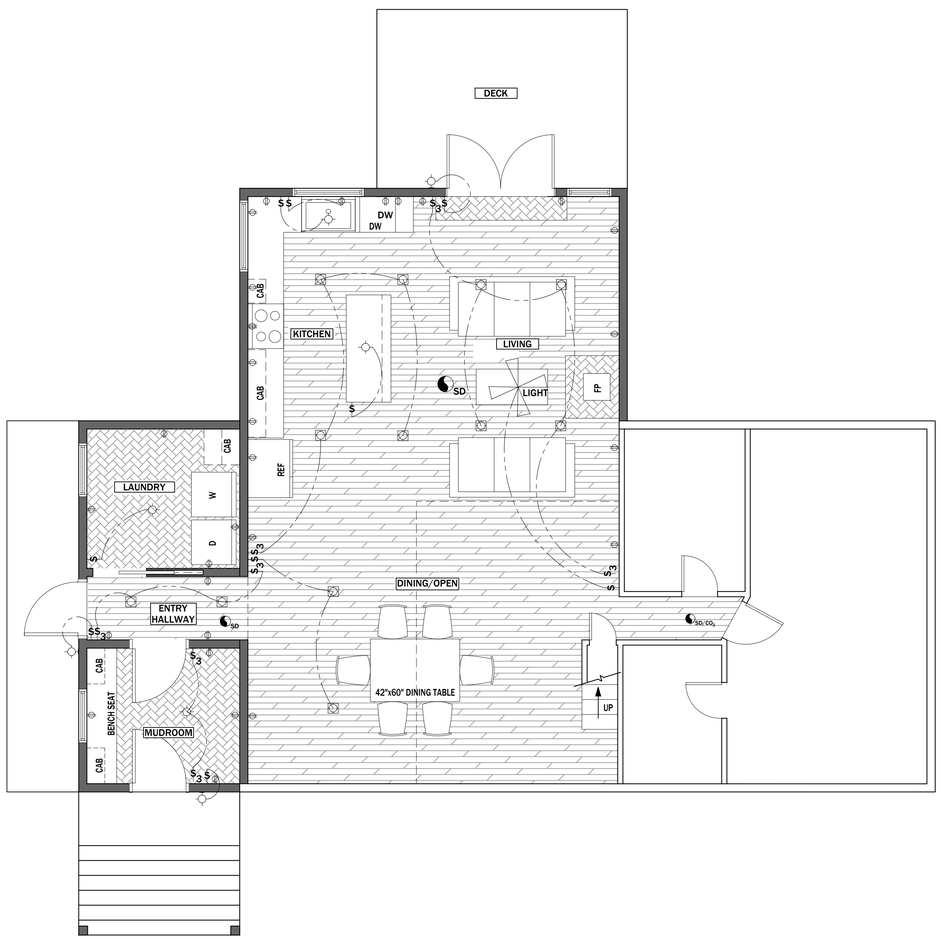
4. FIXTURES & APPLIANCES

FIXTURE AND APPLIANCE STYLE SHALL BE SELECTED BY CONTRACTOR AND OWNER.

ALL FIXTURES AND APPLIANCES SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.

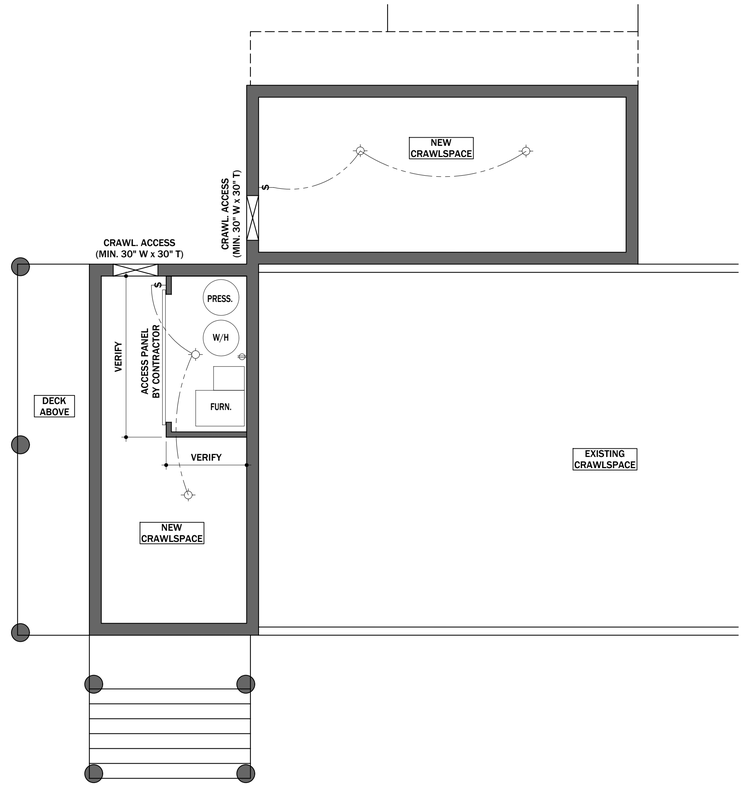
ELECTRICAL SYMBOL LEGEND

	110v OUTLET
	220v OUTLET
GFI	GROUND FAULT INTERRUPTED OUTLET
S	SINGLE POLE SWITCH
S3	3-WAY SWITCH
S4	4-WAY SWITCH
TV	CABLE JACK
SD/CO2	COMBINED SMOKE AND CARBON MONOXIDE DETECTOR
SD	SMOKE DETECTOR
	CEILING MOUNT LIGHT
	RECESSED CEILING LIGHT
	WALL MOUNTED LIGHT
	EXHAUST FAN
	CEILING FAN
LIGHT	CEILING FAN WITH LIGHT



ELECTRICAL PLAN - MAIN FLOOR

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



ELECTRICAL PLAN - CRAWLSPACE

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

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SKY ADDITION

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

DRAWN BY:	NTR
DESIGN BY:	NTR
DATE:	5/25/2023
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ELECTRICAL PLANS

SCALE: PER PLAN

A4.0

Material Data Sheet: 38 Rock springs Road, Blue River

Exterior Siding: To match existing - Cedar Shiplap, stain finished.

Roofing: Metal roofing, Black

Windows: To match existing - Pella Aluminum Clad, Color Mission Brown

Rear Exterior Door - Pella Aluminum Clad, Color Mission Brown

Entry Door - Wood Stain Finished

SKY ADDITION & REMODEL

GENERAL NOTES

1. MISCELLANEOUS NOTES

THESE PLANS ARE DESIGNED FOR THE FINISHED PRODUCT. SHORING, STAGING, AND ORDER OF OPERATION ARE OUTSIDE THE SCOPE OF OUR SERVICES AND SHOULD BE DESIGNED AND MONITORED BY THE CONTRACTOR DURING CONSTRUCTION.

FINISH MATERIAL, INSULATION REQUIREMENTS, AND WATERPROOFING ARE OUTSIDE OF OUR SCOPE OF SERVICES AND SHOULD BE DESIGN BY THE ARCHITECT.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. CONTACT INSPIRE ENGINEERING IF DISCREPANCIES ARE FOUND.

SHOP DRAWINGS AND SUBMITTALS, WHERE REQUIRED, SHALL DEMONSTRATE HOW THE CONTRACTOR IS PROPOSING TO CONFORM TO THE INFORMATION GIVEN ON THESE PLANS AND THE DESIGN CONCEPT EXPRESSED IN THE CONSTRUCTION DOCUMENTS. PRIOR TO PROVIDING INSPIRE ENGINEERING SUBMITTALS TO REVIEW, THE CONTRACTOR MUST:

a. REVIEW & APPROVE THE SUBMITTAL
b. DETERMINE AND VERIFY MATERIALS, FIELD MEASUREMENTS, AND FIELD CONSTRUCTION CRITERIA
c. CHECK & COORDINATE THE INFORMATION IN THE SUBMITTAL WITH THE CONTRACT REQUIREMENTS

2. DESIGN CRITERIA

THESE PLANS WERE PREPARED FOLLOWING THE 2018 IRC CODES AND ANY LOCAL AMENDMENTS. OUR DESIGN WAS PREPARED USING ASCE 7-16, ACI-332, AND THE 2018 NDS.

RISK CATEGORY:	II
WIND SPEED:	Vult = 115 mph
EXPOSURE CATEGORY:	B
GROUND SNOW LOAD:	125 psf
ROOF LOAD:	100 psf (SNOW) / 15 psf (DEAD)
FLOOR LOAD:	40 psf (LIVE) / 15 psf (DEAD)
DECK LOAD:	125 psf (LIVE) / 10 psf (DEAD)
SEISMIC DESIGN CATEGORY:	B

3. SOILS

SOILS REPORT BY:	ASSUMED
REPORT DATE:	N/A
REPORT NUMBER:	N/A

RECOMMENDATIONS:		
	FOUNDATION TYPE:	SPREAD FOOTINGS
	MAX. BEARING PRESSURE =	3,000 psf
	MIN. BEARING PRESSURE =	NONE
	BALANCED PRESSURE =	N/A
	MIN. FROST DEPTH =	40" (in.)
	SOIL SITE CLASS =	D
	EQ. FLUID DENSITY =	45 pcf

FOUNDATION DESIGN WAS BASED ON ASSUMED BEARING SOILS CONSISTING OF SANDY GRAVEL AND/OR GRAVEL AS DESCRIBED IN TABLE R401.4.1 OF THE IRC.

WE REQUIRE AN OPEN HOLE OBSERVATION BE PERFORMED PRIOR TO POURING THE FOUNDATION FOOTINGS. OPEN HOLE OBSERVATIONS ARE TO VERIFY THAT THE SOILS CONDITIONS ARE CONSISTENT WITH THE ASSUMED SOILS. IF SOIL CONDITIONS DIFFER FROM THE ASSUMED SOILS, CONTACT INSPIRE ENGINEERING. THIS MAY RESULT IN AN ADDITIONAL EVALUATION OR FOUNDATION RE-DESIGN.

WE RECOMMEND FOUNDATION WALLS NOT BE BACKFILLED FOR A MINIMUM OF (8) DAYS AFTER PLACEMENT OF CONCRETE. ALL FLOOR SYSTEMS SHOULD BE IN PLACE PRIOR TO BACKFILLING AGAINST ANY FOUNDATION WALL. ADEQUATELY BRACING THE FOUNDATION WALLS MAY BE USED AS AN ALTERNATIVE.

WE RECOMMEND MAINTAINING A DISTANCE OF 8" BETWEEN FINISHED GRADE AND THE TOP OF FOUNDATION. WE RECOMMEND A POSITIVE SLOPE AWAY FROM THE FOUNDATION OF 1'-0" IN THE FIRST 10'-0" (10%). AT A MINIMUM, A SLOPE OF 6" IN THE FIRST 10'-0" (5%) IS REQUIRED.

4. CONCRETE

STRUCTURAL CONCRETE FOR FOUNDATION ELEMENTS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 4,000 psi, WITH A MAX. W/C RATIO OF .45, AND AIR ENTRAINMENT OF 5-8%.

CONCRETE FOR INTERIOR SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3,500 psi. INTERIOR SLAB SHRINKAGE SHALL BE MAXIMUM OF .04% AS DETERMINED BY ASTM C157.

CONCRETE FOR EXTERIOR SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 4,500 psi, WITH A MAX. W/C RATIO OF .45, AND AIR ENTRAINMENT OF 5-8%.

ALL CONCRETE SHALL BE DESIGNED, MIXED AND PLACED IN ACCORDANCE WITH ACI-301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".

CEMENT SHALL BE TYPE I/II AND FOLLOW ASTM C150.

AGGREGATES SHALL BE PER ASTM C33.

COLD WEATHER CONCRETING REQUIREMENTS PER ACI-360R SHALL BE FOLLOWED WHEN THE AMBIENT TEMPERATURE IS 40°F OR BELOW.

HOT WEATHER CONCRETE PRODUCTION, DELIVERY, PLACEMENT, CURING, TESTING AND INSPECTIONS SHALL BE IN ACCORDANCE WITH ACI-305R.

READY MIXED CONCRETE SHALL COMPLY WITH ASTM C94.

5. FOUNDATION

FOUNDATION WALLS WERE DESIGNED BASED ON AN 8" THICK WALL. ADDITIONAL WALL THICKNESS WAS UTILIZED IN CERTAIN LOCATIONS IN ORDER TO INCREASE BEARING WIDTH AND IMPROVE CONTRACTIBILITY.

FOOTINGS SHALL BEAR A MINIMUM OF 40" BELOW FINISHED GRADE.

FOOTINGS OVER 28" WIDE REQUIRE #4 TRANSVERSE REINFORCING BARS AT 18" O.C.

REINFORCING SHALL BE DEFORMED GRADE 60 STEEL, UNLESS NOTED OTHERWISE (U.N.O.) ON THE PLAN AND SHALL CONFORM TO ASTM A615.

ALL FOUNDATION WALL REINFORCEMENT SHALL BE WIRED IN PLACE. SLAB AND FOOTING REINFORCEMENT SHALL UTILIZE CHAIRS OR OTHER ACCEPTABLE METHODS TO ACHIEVE THE REQUIRED CROSS SECTION.

MINIMUM CONCRETE COVER SHALL BE 2" U.N.O. ON THE PLAN.

REBAR OVERLAPS SHALL BE 40xBAR DIAMETERS BUT NOT LESS THAN 24". DETAIL REINFORCING BARS IN ACCORDANCE TO THE ACI DETAILING MANUAL AND ACI CODE.

FOUNDATION ANCHOR BOLTS SHALL CONFORM TO ASTM A307 AND BE $\frac{1}{2}$" DIAMETER BY 10" LONG, SPACED AT 4'-0" O.C. MAX AND 12" MAX FROM CORNERS AND PLATE SPLICES.

IT IS THE CONTRACTOR/OWNERS RESPONSIBILITY TO VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO CONSTRUCTION.

6. SLAB ON GRADE

MAX CONTROL JOINT SPACING SHALL BE 2x THE SLAB THICKNESS. CONTROL JOINTS SHALL BE $\frac{1}{4}$" WIDE WITH A DEPTH OF $\frac{1}{4}$ x SLAB THICKNESS PLUS $\frac{1}{4}$".

CONTROL JOINTS SHALL BE CUT AS SOON AS PRACTICAL.

REINFORCING SHALL BE PER THE PLANS. CENTER REINFORCING IN THE SLAB.

SLABS SHALL BE CURED PER THE METHODS DESCRIBED IN ACI-302.1, R-15 "GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION".

SECTIONS OF SLABS SHALL ONLY BE POURED IN LARGE SQUARES OR RECTANGLES.

PROVIDE A GRANULAR LEVELING COURSE CONSISTING OF $\frac{3}{4}$" MINUS CLEAN GRAVEL UNDER SLABS, EXCEPT WHERE NOTED AT EXTERIOR STRUCTURAL SLABS.

7. WOOD FRAMING

MATERIAL SPECIFICATIONS:		
	DIMENSIONAL LUMBER:	HEM-FIR #2
	TIMBER BEAMS & POSTS:	DOUG-FIR (SEE PLAN)
	GLULAM BEAMS:	SEE PLAN
	FLOOR SHEATHING:	¾" T&G
	WALL SHEATHING:	7/16" OSB (STRUCTURAL)
	ROOF SHEATHING:	5/8" OSB (STRUCTURAL)

ALL FRAMING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE GOVERNING CODE. ALL CONNECTIONS OR MEMBERS NOT SHOWN ARE PER CODE. ALL MANUFACTURED WOOD PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS. FASTEN (4) PLY LVL MEMBERS WITH (2) ROWS OF 6" SDS SCREWS AT 16" O.C. EACH FACE.

ALL EXTERIOR WALL FRAMING SHALL BE WALL SHEATHING PER ABOVE OVER 2x6 STUDS AT 16" O.C., U.N.O. SHEATHING SHALL BE ATTACHED PER THE SHEAR WALL SCHEDULE TO THE RIGHT.

BUILT UP COLUMNS SHALL BE A MINIMUM OF (3) 2x STUDS, U.N.O. ON THE PLANS

1 ¾" MINIMUM LSL RIM REQUIRED AT FLOOR SYSTEM.

FLOOR SHEATHING SHALL BE GLUED AND NAILED TO THE FLOOR FRAMING WITH 8d NAILS @ 6" O.C AT THE EDGES AND 12" O.C. IN THE FIELD. PROVIDE BLOCKING AT SUPPORTS AS REQUIRED BY CODE.

ROOF SHEATHING SHALL BE ATTACHED TO THE ROOF FRAMING WITH 8d NAILS @ 6" O.C AT THE EDGES AND 12" O.C. IN THE FIELD. PROVIDE BLOCKING AT SUPPORTS AS REQUIRED BY CODE.

RAFTERS SHALL BE ATTACHED AT BEARING WALLS WITH SIMPSON H2.5A CLIPS.

ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

PROVIDE SOLID BLOCKING TO TRANSMIT ALL POINT LOADS CONTINUOUS TO THE FOUNDATION.

IF THERE ARE 20% OF OVERDRIVEN NAILS IN SHEATHING, THEN SHEATHING MUST BE RE-NAILED WITH PROPER GUN PRESSURE NOT TO BREAK SURFACE OF SHEATHING.

ALL FASTENERS AND CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBERS HALL BE G185 HOT-DIP GALVANIZED, TYPE 304 STAINLESS STEEL OR TYPE 316 STAINLESS STEEL.

8. STEEL

ADJUSTABLE STEEL COLUMNS SHALL BE SCHEDULE 40 AND RATED FOR A SAFE ALLOWABLE LOAD OF NOT LESS THAN 30 KIPS FOR COLUMNS UP TO 10'-0". THREADS SHALL HAVE 1" TO 3" EXPOSED.

STRUCTURAL STEEL BEAMS SHALL CONFORM TO ASTM A992 (Fy = 50 ksi).

STRUCTURAL STEEL COLUMNS SHALL CONFORM TO ASTM A500 (GRADE B).

STRUCTURAL STEEL PLATES AND ANGLES SHALL CONFORM TO ASTM A36 (Fy = 36 ksi).

9. TRUSSES

SUBMIT TRUSS DESIGN TO INSPIRE ENGINEERING FOR REVIEW PRIOR TO CONSTRUCTION.

TRUSSES SHOWN ON ROOF PLAN ARE SHOWN IN APPROXIMATE LOCATIONS WITH FINAL LAYOUT AND DESIGN TO BE SUPPLIED BY TRUSS MANUFACTURER.

CONTACT INSPIRE ENGINEERING IF TRUSS LAYOUT DEVIATES FROM ROOF PLAN SHOWN ON PLANS. A RE-DESIGN MAY BE REQUIRED.

MAXIMUM TRUSS SPACING TO BE 24" O.C.

TRUSS BRACING AND BLOCKING DESIGN PER TRUSS MANUFACTURER.

ALL TRUSSES ARE ASSUMED TO HAVE NO HORIZONTAL THRUST DUE TO THE TRUSS SHAPE. IF STRUCTURAL DESIGN OF THE WALLS REQUIRES RESISTANCE TO TRUSS THRUST, A RE-DESIGN MAY BE REQUIRED.

10. QUALITY ASSURANCE

OBSERVATION/SUBMITTAL	PERFORMED BY (RECOMMENDED)
ROOF TRUSS SUBMITTAL REVIEW	INSPIRE ENGINEERING LLC
OPEN HOLE/SOIL VERIFICATION	CTL THOMPSON, INC.
FOOTING	CTL THOMPSON, INC.
FOUNDATION REINFORCING	CTL THOMPSON, INC.

THE ABOVE COMPANIES ARE OUR RECOMMENDED COMPANY FOR OBSERVATIONS. OTHER COMPANIES MAY BE USED AT CLIENTS DISCRETION. CONTACT FOR PRICING PRIOR TO SCHEDULING OBSERVATIONS. OTHER OBSERVATIONS MAY BE REQUIRED BY THE LOCAL JURISDICTION OR OTHER ENGINEERS WORKING ON THIS PROJECT.

WALL SHEATHING & SHEAR WALL SCHEDULE

WALL TYPE	SHEATHING TYPE	SHEATHING THICKNESS	EDGE BLOCKING	FASTENERS	EDGE SPACING	FIELD SPACING
EXTERIOR, U.N.O.	OSB OR PLYWOOD (EXTERIOR)	7/16"	YES	8d COMMON	6"	12"
				16 ga. x 1 ¾" STAPLES	3"	6"

NOTES:
1. ALL EXTERIOR SHEATHING VERTICAL EDGES SHALL FALL UPON 2x6 STUDS SPACED AT 16" O.C. MAX.
2. HORIZONTAL JOINTS SHALL OCCUR OVER BLOCKING EQUAL IN SIZE TO THE WALL STUDS, EXCEPT WHERE INDICATED ABOVE.
3. EXTERIOR WALL SOLE PLATES AND TOP PLATES SHALL BE ATTACHED TO FRAMING ABOVE AND BELOW IN ACCORDANCE WITH THE I-CODES.
4. WHERE JOISTS ARE PERPENDICULAR TO THE INTERIOR SHEAR WALL LINES ABOVE, BLOCKING BETWEEN JOISTS SHOULD BE INSTALLED BELOW THE SHEAR WALL.
5. WHERE JOISTS ARE PARALLEL TO THE INTERIOR SHEAR WALL LINES ABOVE, DOUBLE JOISTS SHOULD BE INSTALLED BELOW THE SHEAR WALL.
6. ATTACH INTERIOR SHEAR WALLS TO FRAMING ABOVE AND BELOW IN ACCORDANCE WITH THE I-CODES.

HOLD DOWN SCHEDULE

HOLD DOWN DESIGNATION	HOLD DOWN	NOTES
▲ 1	SIMPSON STHD14/14RJ	INSTALL PER MANUFACTURER'S SPECIFICATIONS. HOLD DOWNS ARE SHOWN IN APPROXIMATE LOCATIONS ON THE PLANS. FIELD LOCATE HOLD DOWN'S AT CORNERS, EDGE OF WINDOW & DOOR OPENINGS, OR ENDS OF REQUIRED SHEAR WALLS (SEE ARCHITECTURAL PLANS FOR DIMENSIONS)

HEADER SCHEDULE

HEADER DESIGNATION	HEADER	MATERIAL	# OF TRIMMER STUDS (U.N.O.)
HF28	(2) 2x8	HEM-FIR	1

KING STUD SCHEDULE

OPENING WIDTH	# OF KING STUDS PER SIDE (U.N.O.)
1'-0" TO 5'-0"	1
5'-1" TO 10'-0"	2
10'-1" TO 15'-0"	3

FRAMING HANGER SCHEDULE

CONNECTION TYPE	HANGER
TJI RAFTER TO DROPPED BEAM	H2.5A
TJI RAFTER TO BEARING WALL	H2.5A
TJI RAFTER TO WOOD BEAM	LSSR-SERIES
SAWN JOIST TO WOOD BEAM-FLUSH	LUS-SERIES
WOOD BEAM TO POST BELOW	BC-SERIES
WOOD POST TO CONCRETE FOUNDATION	ABU-SERIES

NOTES:
1. HANGERS SHALL BE PROVIDED PER SCHEDULE U.N.O. ON THE PLANS.
2. SOME HANGERS ARE SPECIAL ORDER.
3. HANGERS SHALL HAVE ZMAX CORROSION PROTECTION FOR ALL EXTERIOR APPLICATIONS OR WHERE PRESSURE TREATED LUMBER IS USED.
4. CONTACT INSPIRE ENGINEERING IF ALTERNATIVE HANGER OPTIONS ARE PREFERRED.
5. ALL HANGERS ARE SIMPSON MFR. INSTALL HANGERS PER MFR. SPECIFICATIONS.

SHEET INDEX

INSPIRE ENGINEERING

PO BOX 349
WELLINGTON, CO 80549

PHONE: (319) 631-5935

CLIENT:
SKY CONSTRUCTION

PO BOX 5843
BRECKENRIDGE, CO

CLIENT PHONE: (970) 485-9393

SKY ADDITION & REMODEL
38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

STATE OF COLORADO LICENSED PROFESSIONAL ENGINEER TYLER J. HOLT 0056879 PE
6/15/2023

DRAWN BY:	NTR
DESIGN BY:	NTR
DATE:	5/26/2023
PROJECT #:	ENG23.0145

REVISION		DATE
1	PLAN CHANGES	6/15/23
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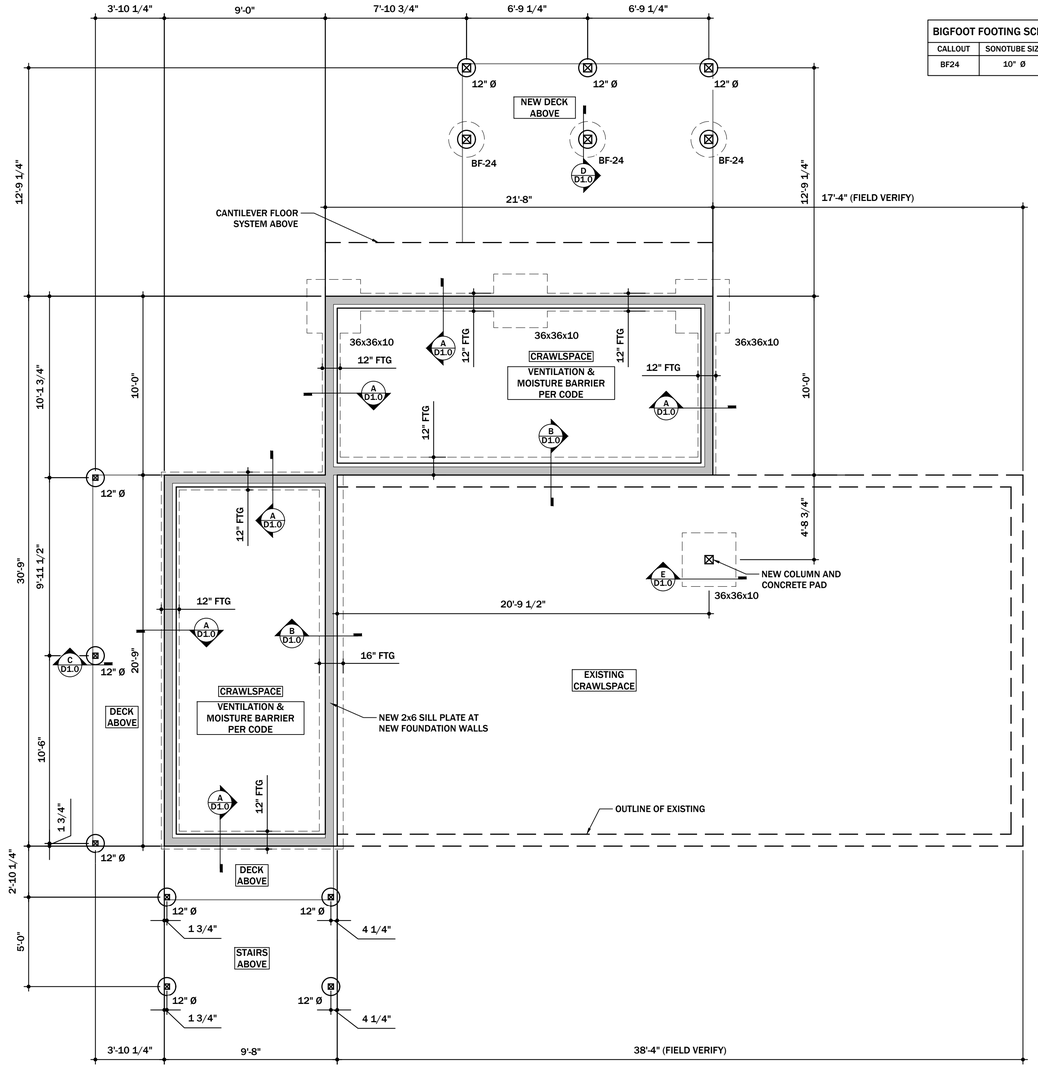
4		
5		
6		

PROJECT INFORMATION

SCALE: PER PLAN

S0.0

BIGFOOT FOOTING SCHEDULE		
CALLOUT	SONOTUBE SIZE	SONOTUBE SIZE
BF24	10" Ø	24" Ø



FOUNDATION PLAN

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

INSPIRE ENGINEERING

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SKY ADDITION & REMODEL

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

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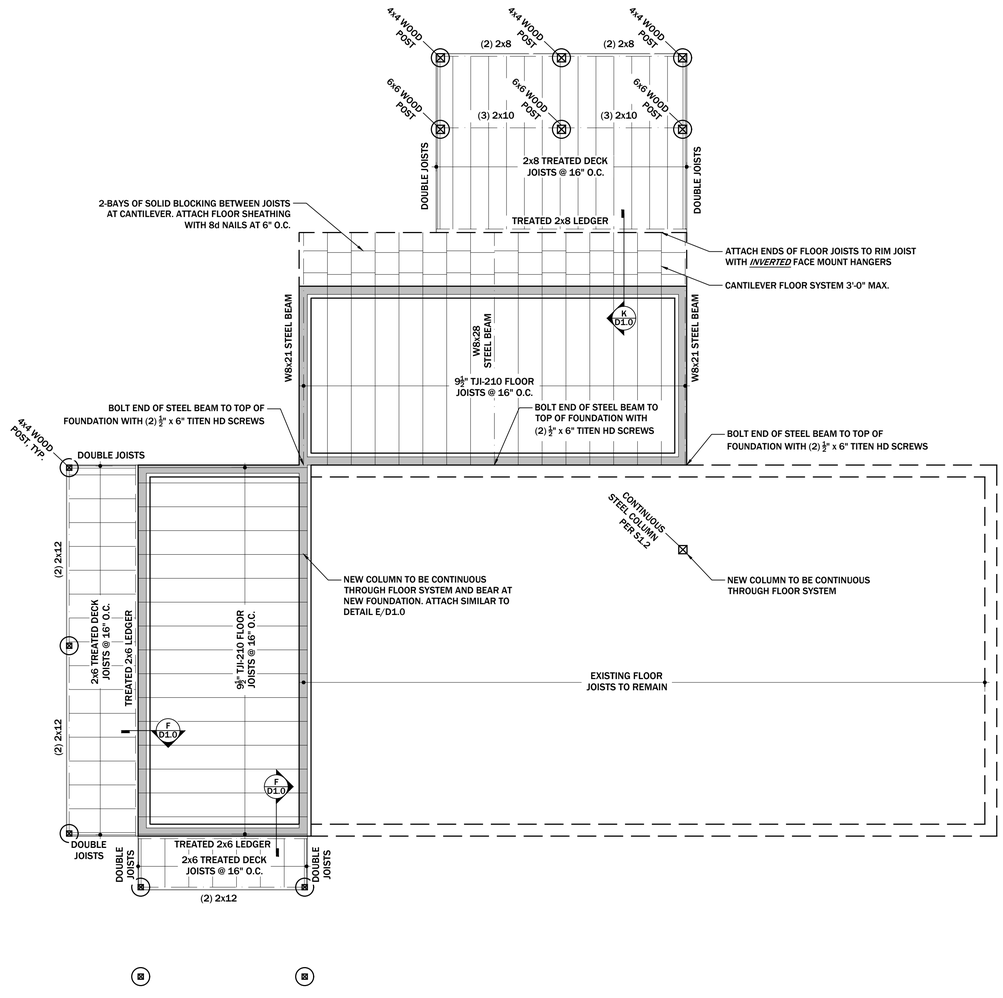
FOUNDATION PLAN

SCALE: PER PLAN

S1.0



FLOOR FRAMING PLAN

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

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SKY ADDITION & REMODEL

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

COLORADO LICENSED
NICHOLAS T. RUSSELL
0056879
PROFESSIONAL ENGINEER
6/15/2023

DRAWN BY:	NTR
DESIGN BY:	NTR
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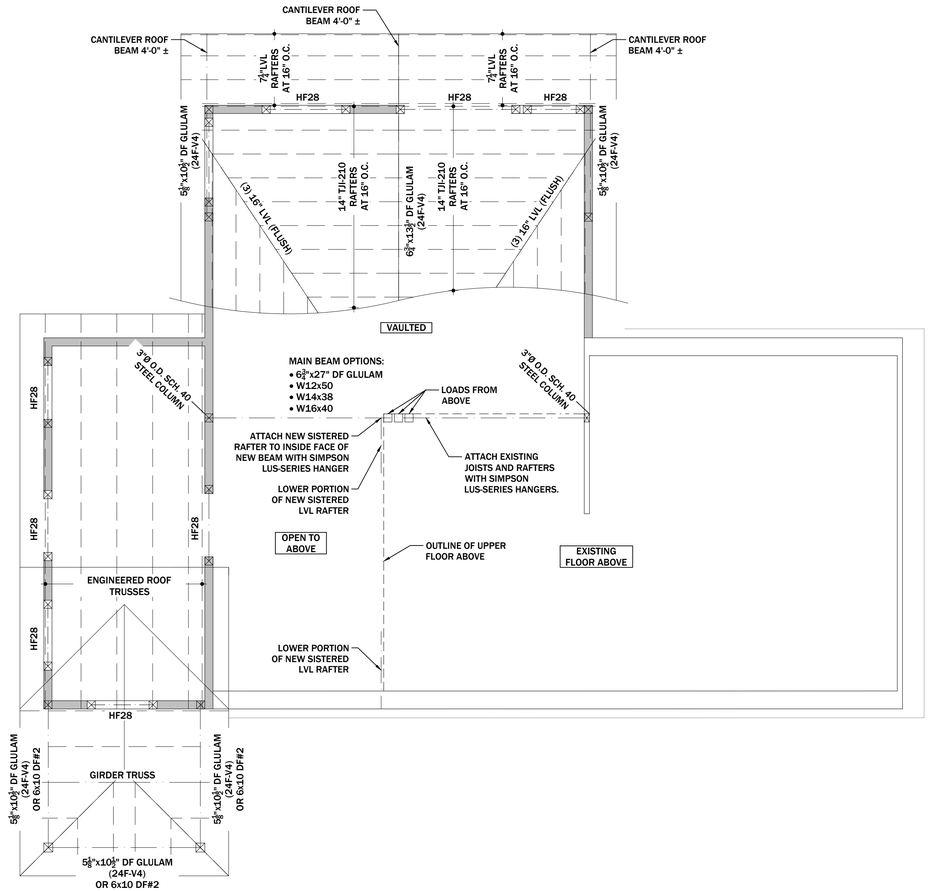
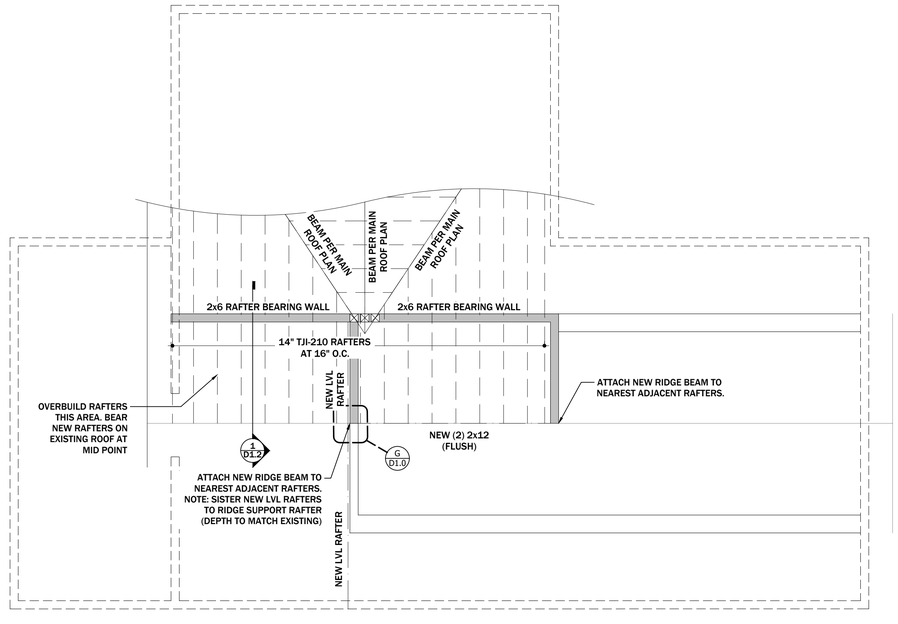
FLOOR FRAMING PLAN
SCALE: PER PLAN

S1.1



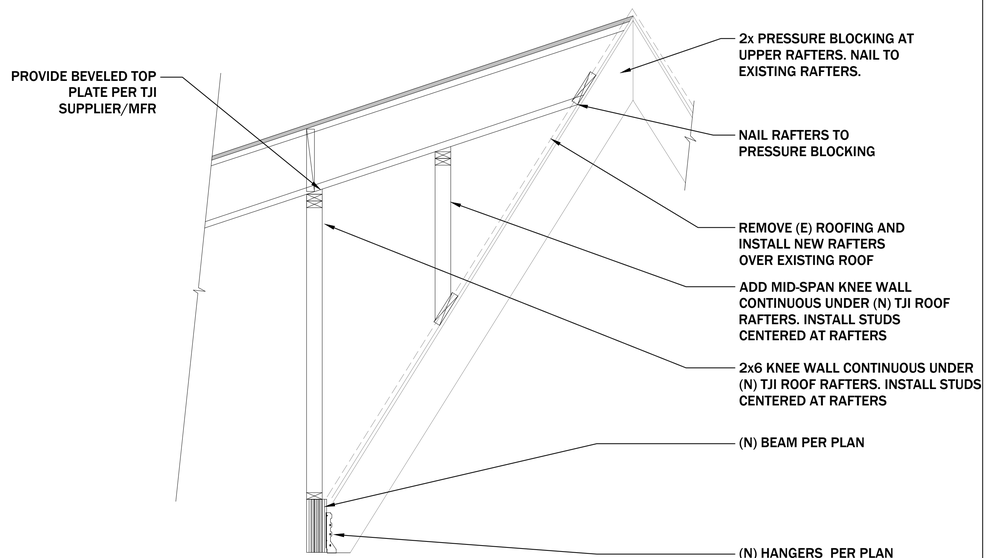
MAIN ROOF FRAMING PLAN

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



UPPER ROOF FRAMING PLAN

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



ROOF TIE-IN

(SCALE: ¾" = 1'-0")

1

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SKY ADDITION & REMODEL

38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

COLORADO LICENSED
CHRISTOPHER T. RUTTER
0056879
PROFESSIONAL ENGINEER

6/15/2023

DRAWN BY:	NTR
DESIGN BY:	NTR
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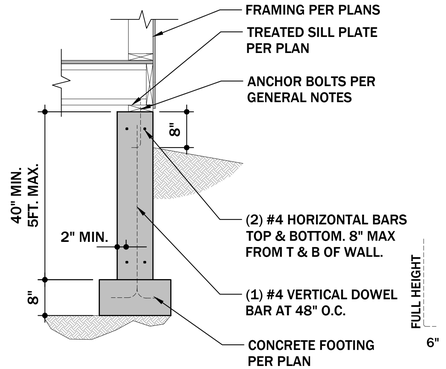
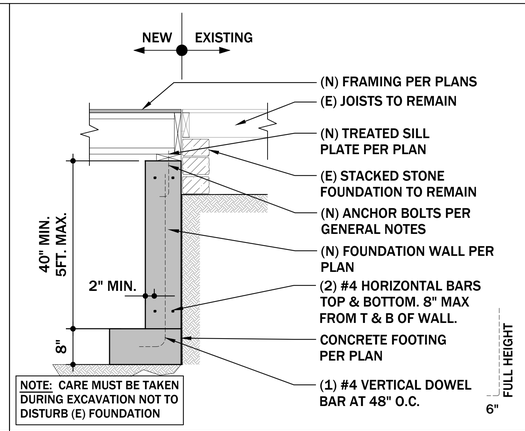
ROOF FRAMING PLAN

SCALE: PER PLAN

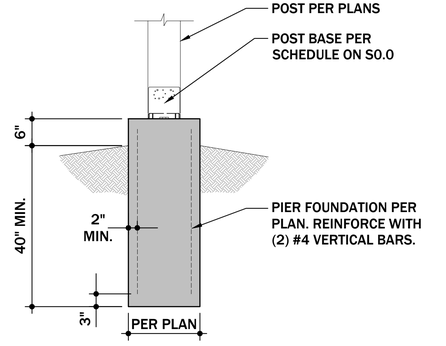
S1.2



TYPICAL CRAWL SPACE FOUNDATION (SCALE: $\frac{3}{4}$" = 1'-0") A

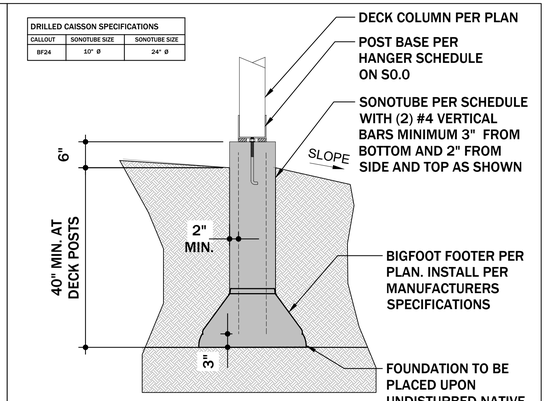


NEW SPACE FOUNDATION AT EXISTING (SCALE: $\frac{3}{4}$" = 1'-0") B

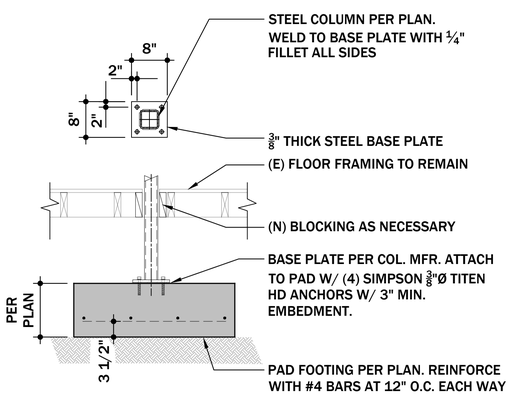


DRILLED CONC. PIER (SCALE: $\frac{3}{4}$" = 1'-0") C

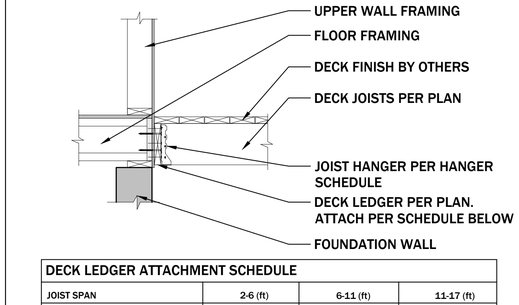
DRILLED CAISSON SPECIFICATIONS		
CALLOUT	SONOTUBE SIZE	SONOTUBE SIZE
BF24	10" Ø	24" Ø



BIG FOOT FOOTING (SCALE: $\frac{3}{4}$" = 1'-0") D



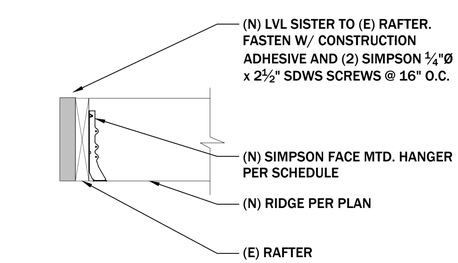
ISOLATED PAD (SCALE: $\frac{3}{4}$" = 1'-0") E



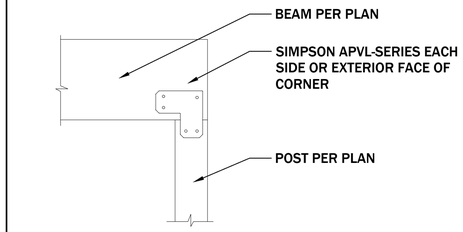
DECK LEDGER ATTACHMENT SCHEDULE			
JOIST SPAN	2-6 (ft)	6-11 (ft)	11-17 (ft)
FASTENERS			
¼" Øx5" SIMPSON SDWS SCREWS	(2) @ 16"(in.) O.C.	(3) @ 16"(in.) O.C.	(4) @ 16"(in.) O.C.
16d COMMON NAILS	(2) @ 16" O.C. EVENLY SPACED IN JOIST BAY	(3) @ 16" O.C. EVENLY SPACED IN JOIST BAY	(4) @ 16" O.C. EVENLY SPACED IN JOIST BAY
NOTE: BOTH SCREWS AND NAILS SHOWN ARE REQUIRED FOR ALL SPANS.			

NOTE: WATERPROOFING PER CONTRACTOR & ARCHITECT

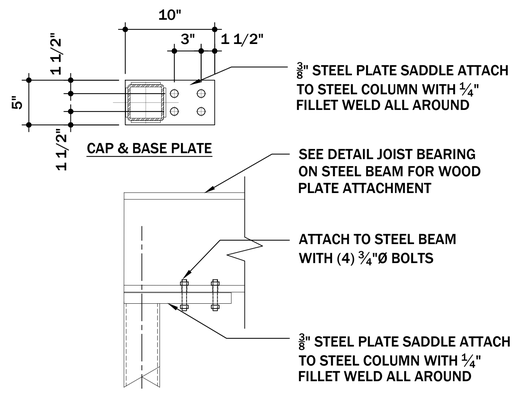
DECK LEDGER (SCALE: $\frac{3}{4}$" = 1'-0") F



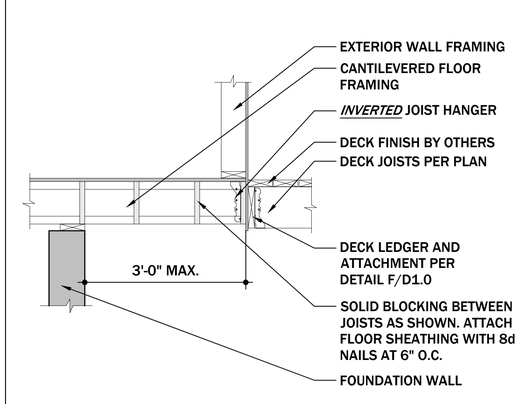
(N) RIDGE (SCALE: $\frac{3}{4}$" = 1'-0") G



POST TO BEAM CONNECTION (SCALE: $\frac{3}{4}$" = 1'-0") H



(N) HSS COL. - STEEL BEAM (SCALE: 1½" = 1'-0") J



DECK ATTACHMENT AT CANTILEVER (SCALE: $\frac{3}{4}$" = 1'-0") K

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SKY ADDITION & REMODEL
38 ROCK SPRINGS ROAD
BRECKENRIDGE, CO

COLORADO LICENSED CHRISTOPHER TYLER NUTTER 0056879 PROFESSIONAL ENGINEER
6/15/202

DRAWN BY: NTR
DESIGN BY: NTR
DATE: 5/26/2023
PROJECT #: ENG23.0145

REVISION		DATE
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FOUNDATION /FRAMING DETAILS
SCALE: PER PLAN

D1.0

TO: Michelle Eddy, CMC/CPM - Town Manager/Clerk

FROM: Kyle Parag, Plan Reviewer - CAA

DATE: April 25, 2023

RE: Planning/Zoning/Architectural Guidelines review –
0038 Rock Springs

Below please find staff's analysis that outlines the review with the Town's Zoning regulations and adopted Architectural Design Guidelines for the structure proposed.

Staff Recommendation:

Staff recommendation is to approve the planning review.

Zoning Regulation analysis –

Proposal:	Addition to an existing home to include a new mudroom, laundry room and 2 decks.
Zoning district:	R1
Lot Size:	unknown 80,000 sq. ft. Required– Existing Non-Conforming
Lot Width:	unknown 100 ft. Required - Complies
Setbacks:	Existing building encroaches on the required setbacks, existing non-compliant. Condition cannot be made worse. New work is proposed in setbacks.
Height:	Height is indicated at 15', more accurately determined to be 21'
Garage Stds:	No garage proposed
Parking Stds:	Parking requirements are existing

Architectural Design Guideline analysis -

Please note the following key to the interpretation of the analysis table:

Y	Element is in substantial compliance with the design guidelines
N	Does not comply with the design guidelines
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
DEVELOPMENT STANDARD		
VI. B. Building Envelope	The proposed principal residence is properly sited within required setbacks. The submitted site plan depicts compliance. One site plan provided does not coordinate with the rest.	Y
VI. C. Building Siting	Structure is proposed in context with natural drainage patterns, contours, and landforms.	Y
VI. D. Grading and Drainage	Final grading is proposed to avoid unnaturally broad, flat surfaces.	Y
VI. E. Driveways	Driveway is existing	Y
VI. F. Parking / Garages	Parking is existing and not reduced	y
VI. G. Exterior Equipment and Satellite Dishes	No exterior equipment is indicated	Y
VI. H. Easements and	Easements are indicated	Y

Utilities		
VI. I. Recreation Facilities	No facilities are indicated	Y
VI. J. Signage	Address marker/signage is in compliance with visual and practical standards	Y
VI. K. Pathways /Walkways	No walking paths are proposed or indicated	Y
VI. L. Wetlands	No wetlands are identified on the plan. A drainage easement is indicate on the north side of the property	N/A
VI. M. Wildfire Regulations	Many of the required regulations are operational requirements post-construction. Firewise construction details are proposed and compliant	Y
ARCHITECURAL GUIDLINES		
VI. B. Building Forms	Proposed construction compliments the existing structure.	Y
VII. C. Setbacks	The existing structure encroaches into the side setback.	Y
VII. D. Building Height	Building height is indicated at 15’ but more accurately determined to be 21’	Y
VII. E. Roofs	Roof design is gabled and relatively simple. Existing structure is A frame	Y
VII. F. Exterior Wall Materials	Exterior walls are horizontal wood siding, color to match existing	Y
VII. G. Exterior Trim	Trim colors are proposed to match existing	
VII. H. Windows and Doors	Windows, doors, and garage doors are proportional to the structure and appear in general compliance.	Y

VII. I. Balconies and Railings	Railings are substantial in appearance and consist of vertical and horizontal wood.	Y
VII. J. Chimneys and Roof Vents	Not indicated	Y
VII. K. Exterior Colors	Proposed colors indicated on the color board are in general conformance. Expected to match existing colors	Y
VII. L. Solid Waste Collection and Service Areas	Trash and storage areas are not indicated.	Y
SITE ELEMENTS		
VIII. A. Retaining Walls, Landscape Walls, Fences, and Screening	Rock wall is indicated near front of home, unclear if existing	Y
VIII. B. Terraces, Patios, Walkways and Decks	Decks are in the building envelope and complement the site and structure.	Y
VIII. C. Driveway Paving Surfaces	Driveway and parking area material are existing	Y
VIII. D. Exterior Landscape Lighting	Proposed exterior lighting is in general conformance. Specific information could not be located.	Y

STRUCTURAL GENERAL NOTES

DESIGN LOADS:

1. DESIGN LOADS: 2018 INTERNATIONAL BUILDING CODE WITH SUMMIT COUNTY AMENDMENTS, ASCE 7-10
2. RISK CATEGORY: II STANDARD
3. ROOFS:
   - A. ROOF LIVE LOAD 100 PSF, 300 LBS
   - B. FLAT-ROOF SNOW LOAD, Pf 80 PSF (BLUE RIVER, SUMMIT COUNTY)
   - C. SNOW EXPOSURE FACTOR, Ce 1.0
   - D. SNOW IMPORTANCE FACTOR, Is 1.0
   - E. THERMAL FACTOR, Ct 1.0
4. FLOOR LIVE LOADS:

OCCUPANCY OR USE	UNIFORMLY DISTRIBUTED (PSF)	CONCENTRATED LOAD (LBS)	LIVE LOAD REDUCTION
RESIDENTIAL	40	N/A	YES
BALCONIES & DECKS	1.5 x 40 = 60	N/A	NO

5. WIND:
   - A. ULTIMATE DESIGN WIND SPEED, V_{ULT}, (3-SECOND GUST) 115 MPH
   - B. NOMINAL DESIGN WIND SPEED, V_{ASD}, (3-SECOND GUST) 90 MPH
   - C. INTERNAL PRESSURE COEFFICIENT 0.18 (ENCLOSED)
   - D. WIND EXPOSURE C
   - E. AIR DENSITY COEFFICIENT 0.76
   - F. COMPONENTS AND CLADDING ULTIMATE DESIGN WIND PRESSURES
     1. WALLS:
        - a. WITHIN 4 FEET OF CORNERS +23 PSF -30 PSF
        - b. AWAY FROM CORNERS +23 PSF -24 PSF
     2. ROOFS:
        - a. WITHIN 8 FEET OF CORNERS +16 PSF -57 PSF
        - b. WITHIN 4 FEET OF EDGES +16 PSF -37 PSF
        - c. AWAY FROM EDGES +16 PSF -26 PSF
     3. OVERHANGS:
        - a. WITHIN 4 FEET OF CORNERS +23 PSF -65 PSF
        - b. AWAY FROM CORNERS +23 PSF -41 PSF
     4. PRESSURES MAY BE REDUCED FOR EFFECTIVE WIND AREAS LARGER THAN 10 SQUARE FEET, BUT NOT BELOW 16 PSF.
6. SEISMIC:
   - A. SPECTRAL RESPONSE ACCELERATION PARAMETERS
     1. SHORT PERIOD
        - a. S_S 0.234g
        - b. S_{DS} 0.250g
     2. ONE SECOND
        - a. S_1 0.069g
        - b. S_{D1} 0.111g
   - B. SOILS SITE CLASS D
   - C. SEISMIC IMPORTANCE FACTOR 1.0
   - D. SEISMIC DESIGN CATEGORY B
   - E. BASIC SEISMIC-FORCE-RESISTING SYSTEM
     - • LIGHT-FRAME WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS
   - F. DESIGN BASE SHEAR 7.2 KIPS
   - G. SEISMIC RESPONSE COEFFICIENT, C_S 0.04
   - H. RESPONSE MODIFICATION COEFFICIENT, R 6.5
   - I. ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE

FIELD VERIFICATION OF EXISTING CONDITIONS:

1. THE GENERAL CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY THE EXISTING STRUCTURE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL REPORT ANY VARIATIONS OR DISCREPANCIES TO THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING.

FOUNDATION DESIGN:

1. REFER TO SOILS REPORT BY THEOBALD ENGINEERING & CONSTRUCTION SERVICES DATED JULY 14, 2021.
2. GEOTECHNICAL ENGINEER SHALL VERIFY SOIL CONDITIONS AND TYPES DURING EXCAVATION AND PRIOR TO PLACEMENT OF FORMWORK OR CONCRETE.
3. MINIMUM FROST DEPTH SHALL BE 3'-4" BELOW EXTERIOR GRADE AND/OR BEAR ON THE SHALE STRATA , ADJUST ELEVATIONS ACCORDINGLY. GEOTECH SHALL CONFIRM.

FOOTINGS:

1. DESIGN OF FOOTINGS IS BASED ON MINIMUM PRESUMPTIVE SOIL VALUES PER IBC TABLE 1806.2.
   - A. MAXIMUM ALLOWABLE BEARING PRESSURE 2,500 PSF
   - B. MINIMUM DEAD LOAD 500 PSF
2. BEAR ON THE NATURAL UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL. EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH.

EARTH RETAINING STRUCTURES:

1. EARTH EQUIVALENT FLUID LATERAL PRESSURE:
   - A. RETAINING WALLS: 45 PCF

REINFORCED CONCRETE:

1. DESIGN IS BASED ON ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
2. CONCRETE WORK SHALL CONFORM TO ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE."
3. STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

INTENDED USE	EXPOSURE CLASS	f'c, PSI 28 DAYS	MAX W/CM RATIO	MAXIMUM AGGREGATE	SLUMP, INCHES (+/- 1")	AIR CONTENT PERCENT (+/- 1.5%)	CEMENT TYPE	ADMIXTURES / COMMENTS
FOOTINGS	F0-S0-W0-C1	3000	0.52	3/4" STONE	5	2%	I/II	
STEM WALLS	F2-S0-W0-C1	4500	0.45	3/4" STONE	4	6%	I/II	
INTERIOR SLAB ON GRADE	F0-S0-W0-C0	4000	0.45	3/4" STONE	4	3%	I/II	
EXTERIOR SLAB ON GRADE	F3-S0-W0-C2	5000	0.40	3/4" STONE	4	6%	I/II	25% MAX FLY ASH

4. DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
6. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT TIES OR BARS SHOWN TO BE FIELD-BENT, WHICH SHALL BE GRADE 40.
7. UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, LAP BARS 50 DIAMETERS (MINIMUM).
8. AT CORNERS AND INTERSECTIONS, MAKE HORIZONTAL BARS CONTINUOUS OR PROVIDE MATCHING CORNER BARS FOR EACH LAYER OF REINFORCEMENT.
9. TRIM OPENINGS IN WALLS AND SLABS WITH (2)-#5 FOR EACH LAYER OF REINFORCEMENT, FULLY DEVELOPED BY EXTENSION OR HOOK.
10. FORM INTERMITTENT SHEAR KEYS AT ALL CONSTRUCTION JOINTS AND AS SHOWN ON THE STRUCTURAL DRAWINGS.
11. EXCEPT AS NOTED ON THE DRAWINGS, CONCRETE PROTECTION FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:
    - A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
      1. EXPOSED TO EARTH OR WEATHER:
         - a. #6 THROUGH #18 BARS 2"
         - b. #5 BAR, W31 OR D31 WIRE, AND SMALLER 1-1/2"
    - B. NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
      1. SLABS, WALLS, JOISTS: #11 BARS AND SMALLER 3/4"
      2. BEAMS AND COLUMNS:
         - a. PRIMARY REINFORCEMENT 1-1/2"
         - b. STIRRUPS, TIES, SPIRALS 1-1/2"
12. ANCHOR BOLTS AND RODS FOR BEAM AND COLUMN-BEARING PLATES SHALL BE PLACED WITH SETTING TEMPLATES.

POST-INSTALLED ANCHORS

1. ALL CAST IN PLACE ANCHORS DESIGNED IN ACCORDANCE WITH ACI 318.
2. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS.
3. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. EXISTING REINFORCING BARS SHALL NOT BE CUT UNLESS APPROVED BY THE EOR.
4. ALL ANCHORS MUST BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INFORMATION (MPII) IN CONJUNCTION WITH EDGE DISTANCE, SPACING, AND EMBEDMENT DEPTH AS INDICATED ON THE DRAWINGS. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MPII.
5. SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER; REGISTRATION MUST BE IN THE STATE IN WHICH THE PROJECT IS LOCATED. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED, PRIOR TO THE ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND MADE AVAILABLE TO THE EOR/ SPECIAL INSPECTOR AS REQUESTED.
7. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION THAT SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-11 D 9.2.2, ACI 318-14 17.8.2.2). PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.
8. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS (ACI 318-11 D 2.2, ACI 318-14 17.1.2)
9. ALL POST INSTALLED ANCHORS SHALL BE INSTALLED IN DRY HOLES THAT HAVE BEEN DRILLED, CLEANED, AND PREPARED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INFORMATION AND THE RESPECTIVE ICC-ES EVALUATION REPORTS.
10. PROVIDE SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC-ES REPORT (IBC TABLE 1705.3 NOTE B).

CONCRETE POST INSTALLED ANCHORS			
ANCHOR TYPE	HILTI	DEWALT / POWERS	SIMPSON
EXPANSION	KWIK BOLT TZ (ICC ESR-1917)	POWER-STUD+ SD2 (ICC ESR-2502)	STRONG-BOLT 2 (ICC ESR-3037)
CONCRETE SCREW	KWIK HUS-EZ (ICC ESR-3027)	SCREW-BOLT+ (ICC ESR 3889)	TITEN HD (ICC ESR 2713)
ADHESIVE	HIT-HY 200 (ICC ESR-3187)	AC200+ (ICC ESR-4027)	AT-XP (UES ER-263)

STRUCTURAL WOOD FRAMING:

1. IN-GRADE BASE VALUES HAVE BEEN USED FOR DESIGN.
2. DIMENSIONAL LUMBER FRAMING SHALL BE S4S HEM FIR NO. 2 OR BETTER UNO.
3. SOLID TIMBER BEAMS AND POSTS SHALL BE DOUGLAS FIR-LARCH NO. 1 OR BETTER UNO.
4. STUDS SHALL BE HEM FIR STUD GRADE OR BETTER UNO.
5. TOP AND BOTTOM PLATES SHALL BE HEM FIR NO. 2 OR BETTER UNO.
6. ALL LUMBER SHALL BE 19% MAXIMUM MOISTURE CONTENT AT THE TIME OF INSTALLATION UNO.
7. ALL WOOD EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR-LARCH OR SOUTHERN YELLOW PINE. PRESERVATIVE-TREATED WOOD SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARDS U1 AND M4. TREATMENTS SHALL HAVE NO AMMONIA ADDED AND SHALL BE THE FOLLOWING USE CATEGORY:
   - A. UC2 AT INTERIOR
   - B. UC3B AT EXTERIOR WITH NO GROUND CONTACT
   - C. UC4B AT EXTERIOR WITH GROUND CONTACT
8. FASTENERS FOR USE WITH TREATED WOOD SHALL BE CORROSION RESISTANT IN ACCORDANCE WITH SECTION 2304.9.5 OF THE IBC.
9. ALL CONNECTORS USED WITH PRESSURE-TREATED MATERIAL SHALL BE STAINLESS STEEL ASTM 304 OR 316, OR HAVE A SIMPSON Z-MAX (G185) OR HDG COATING. STANDARD COATING (G90) IS ACCEPTABLE AT INTERIOR CONDITIONS WITH NON PRESSURE-TREATED LUMBER ONLY. CONNECTORS ARE TO BE IN ACCORDANCE WITH ASTM A653 OR ASTM 123.
10. ALL IRON AND STEEL PRODUCTS ATTACHED TO TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 OR SHALL BE TYPE 304 OR 316 STAINLESS STEEL.
11. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC. UNLESS SPECIFICALLY NOTED OR DETAILED ON THE STRUCTURAL DRAWINGS.
12. ALL BOLTS SHALL BE RETIGHTENED PRIOR TO CLOSING IN OF WALLS, FLOORS, AND ROOFS.
13. ALL BOLTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHERS UNDER HEAD AND/OR NUT, UNO.
14. METAL FRAMING ANCHORS SHOWN OR REQUIRED, SHALL BE SIMPSON STRONG-TIE OR EQUAL CODE APPROVED CONNECTORS AND INSTALLED WITH ALL HOLES FILLED (ROUND AND TRIANGULAR) WITH THE MAXIMUM SIZE NAIL RECOMMENDED BY THE MANUFACTURER TO DEVELOP THE MAXIMUM RATED CAPACITY.
15. CONNECTOR BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME B18.2.1 AND ASTM SAE J429 GRADE 1.
16. NAILS AND SPIKES SHALL CONFORM TO ASTM F1667.
17. WOOD SCREWS SHALL CONFORM TO ANSI/ASME B18.6.1.
18. LEAD HOLES FOR LAG SCREWS SHALL BE 40%-70% OF THE SHANK DIAMETER AT THE THREADED SECTION AND EQUAL TO THE SHANK DIAMETER AT THE UNTHREADED SECTION.
19. CONVENTIONAL LIGHT FRAMING SHALL COMPLY WITH IBC SECTION 2308.
20. COLUMNS / MULTIPLE STUDS IN BEARING WALLS SUPPORTING ALL BEAMS AND HEADERS SHALL OCCUR CONTINUOUSLY THROUGH EACH FLOOR LEVEL DOWN TO THE FOUNDATION OR ANOTHER SUPPORT BEAM. SOLID SQUASH BLOCKING EQUIVALENT IN AREA TO THE COLUMN/MULTIPLE STUDS ABOVE SHALL BE PROVIDED WITHIN THE JOIST SPACE BENEATH THE COLUMN/MULTIPLE STUDS.
21. ALL BEAMS AND TRUSSES SHALL BE BRACED AGAINST ROTATION AT POINTS OF BEARING.
22. 2X BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS, UNO.
23. CROSS-BRIDGING OR SOLID BLOCKING SHALL BE PROVIDED AT 8'-0" MAX. FOR ALL JOISTS AND RAFTERS MORE THAN 10" IN DEPTH, 2X3 OR APPROVED METAL TYPE BRIDGING MAY BE USED.
24. PROVIDE A MINIMUM OF (3) STUDS AT EACH CORNER, UNO.
25. ALL JOISTS AND BEAMS (EXCLUDING I-JOISTS) SHALL BE SEAT-CUT FOR FULL UNIFORM BEARING AT SUPPORTS, SEATS, CAPS, ETC.
26. VENTING IS REQUIRED IN ALL ENCLOSED ROOF AND CRAWL SPACE FRAMING CAVITIES, SEE ARCHITECTURAL DRAWINGS.
27. EXCEPT AS NOTED OTHERWISE, MINIMUM NAILING SHALL BE PROVIDED AS SPECIFIED IN TABLE 2304.9.1 "FASTENING SCHEDULE" OF THE IBC.
28. ALL MULTIPLE MEMBER BEAMS SHALL BE NAILED TOGETHER WITH MAX NUMBER OF 10D NAILS VERTICALLY @ 3" AND HORIZONTALLY @ 12" PER PLY.
29. TONGUE AND GROOVE DECKING SHALL BE INSTALLED IN ACCORDANCE WITH THE "STANDARD FOR TONGUE AND GROOVE HEAVY TIMBER ROOF DECKING", AITC 112. WHERE DECKING MUST BE NAILED FROM THE BOTTOM SIDE, USE (2) 16D GALVANIZED FINISH NAILS AT EACH SUPPORT, COUNTERSUNK AND FILLED.
30. ALL ROOF RAFTERS, JOISTS, TRUSSES, AND BEAMS SHALL BE ANCHORED TO SUPPORTS WITH H2.5A METAL FRAMING ANCHORS UNO. PROVIDE (2) WITHIN 4'-0" OF ALL CORNERS.

WOOD SHEATHING:

1. PLYWOOD AND ORIENTED STRAND BOARD (OSB) FLOOR AND ROOF SHEATHING SHALL BE APA RATED WITH STAMP INCLUDING APA TRADEMARK AND PANEL SPAN RATING.
   - A. MINIMUM FLOOR SHEATHING: 23/32" APA STURD-I-FLOOR RATED 24 INCH O.C. TONGUE & GROOVE, GLUED AND NAILED.
   - B. MINIMUM ROOF SHEATHING: 19/32" OSB OR CDX PLYWOOD, APA 40/20, NAILED.
   - C. MINIMUM WALL SHEATHING: 7/16" OSB OR CDX PLYWOOD, APA 24/16, BLOCKED AND NAILED.
2. NAIL WALL SHEATHING WITH MINIMUM 8D COMMON OR 10D BOX AT 6" AT PANEL EDGES, AND 12" AT INTERMEDIATE FRAMING EXCEPT AS NOTED. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
3. MINIMUM (3) 8D NAILS PER STUD. NAIL ALL PLATES USING EDGE NAIL SPACING INDICATED.
4. SHEATHE ALL EXTERIOR WALLS. SHEATHE INTERIOR WALLS AS DESIGNATED ON THE DRAWINGS.
5. SHEATHING SHALL BE CONTINUOUS FROM BOTTOM PLATE TO TOP PLATE. CUT IN "L" AND "T" SHAPES AROUND OPENINGS. LAP SHEATHING OVER SINGLE 2X PLATE MEMBER AT RIM JOIST. AT RIM JOIST PROVIDE A MINIMUM OF 3" BETWEEN SHEATHING EDGE AND TOP/BOTTOM EDGE OF RIM.
6. MINIMUM HEIGHT OF SHEATHING PANELS SHALL BE 16" TO ENSURE THAT PLATES ARE TIED TO STUDS.
7. ALL SHEATHING SHEETS SHALL HAVE 1/8" GAP AT ALL EDGES AND JOINTS.
8. FULLY NAIL FLOOR SHEATHING IMMEDIATELY AFTER GLUING (DO NOT SPOT NAIL).
9. PROVIDE (1) PANEL SHEATHING CLIP AT ALL UNSUPPORTED ROOF SHEATHING PANEL EDGES. WHERE SPANS ARE GREATER THAN 32" PROVIDE (2) CLIPS.

ENGINEERED LUMBER:

1. STRUCTURAL CAPACITIES OF STRUCTURAL COMPOSITE LUMBER SHALL BE IN CONFORMANCE WITH SECTION 2303.1.9 OF THE IBC.
2. MANUFACTURER OF STRUCTURAL COMPOSITE LUMBER PRODUCTS SHALL HAVE PROPER CODE EVALUATION REPORTS FOR ALL PRODUCTS AND SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
3. THE CONTRACTOR SHALL NOT CUT, NOTCH, OR OTHERWISE ALTER STRUCTURAL COMPOSITE LUMBER MEMBERS WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER AND THE MANUFACTURER; HOWEVER, HOLES MAY BE CUT IN MEMBERS IN ACCORDANCE WITH THE MANUFACTURER'S ALLOWABLE HOLE CHART.
4. MEMBERS NOTED AS LVL (LAMINATED VENEER LUMBER) ON PLAN SHALL BE 1-3/4" WIDE X DEPTH INDICATED, PLANT-FABRICATED, AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. F_b = 2600 PSI
   - B. F_v = 285 PSI
   - C. F_{cPAR} = 2460 PSI
   - D. F_{cPERP} = 750 PSI
   - E. E = 1900 KSI
5. MEMBERS NOTED AS LSL (LAMINATED STRAND LUMBER) ON PLAN SHALL BE PLANT-FABRICATED AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. F_b = 1700 PSI
   - B. F_v = 400 PSI
   - C. F_{cPAR} = 1400 PSI
   - D. F_{cPERP} = 680 PSI
   - E. E = 1300 KSI
6. BRIDGING AND BLOCKING SHALL BE INSTALLED ACCORDING TO THE FABRICATOR'S REQUIREMENTS.
7. MEMBER FORCES SHALL BE DETERMINED BY THE FABRICATOR. STRESSES SHALL NOT EXCEED THOSE ALLOWED BY THE IBC.

SHOP DRAWINGS:

1. THE STRUCTURAL DRAWINGS ARE COPYRIGHTED AND SHALL NOT BE COPIED FOR USE AS ERECTION PLANS OR SHOP DETAILS. USE OF AMODAL'S ELECTRONIC FILES AS THE BASIS FOR SHOP DRAWINGS REQUIRES PRIOR APPROVAL BY AMODAL, A SIGNED RELEASE OF LIABILITY BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS, AND DELETION OF AMODAL'S NAME AND LOGO FROM ALL SHEETS SO USED.
2. THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO MODIFY THE STRUCTURAL DRAWINGS OR PROJECT SPECIFICATIONS.
3. ALL SHOP AND ERECTION DRAWINGS SHALL BE CHECKED AND STAMPED (AFTER HAVING BEEN CHECKED) BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION FOR STRUCTURAL ENGINEER'S REVIEW; SHOP DRAWING SUBMITTALS NOT CHECKED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER WILL BE RETURNED WITHOUT REVIEW.
4. FURNISH ELECTRONIC VERSION (PDF) OF SHOP AND ERECTION DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION FOR:
   - A. CONCRETE MIX DESIGNS
   - B. CONCRETE REINFORCING STEEL
   - C. PRE-ENGINEERED WOOD TRUSSES
5. SUBMIT IN A TIMELY MANNER TO PERMIT 10 WORKING DAYS FOR REVIEW BY THE STRUCTURAL ENGINEER.
6. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "REQUEST FOR CHANGE IN WRITING" UNLESS SPECIFIC SUGGESTED CHANGES ARE CLEARLY MARKED. IN ANY EVENT, CHANGES MADE BY MEANS OF THE SHOP DRAWING SUBMITTAL PROCESS BECOME THE RESPONSIBILITY OF THE ONE INITIATING THE CHANGE.

DEFERRED SUBMITTALS:

1. PORTIONS OF THE STRUCTURE HAVE ELEMENTS OF PROPRIETARY DESIGN AND FABRICATION, WHICH SHALL BE SUBMITTED BY THE SUPPLIER FOR APPROVAL AFTER AWARD OF CONTRACT.
2. THESE ITEMS SHALL CONFORM TO THE LOAD, CAPACITY, SIZE, GEOMETRY, CONNECTION, AND SUPPORT CRITERIA NOTED ON THE STRUCTURAL DRAWINGS.
3. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. FINAL SHOP DRAWING SUBMITTALS SHALL BE STAMPED AND SIGNED.
4. FURNISH DEFERRED SUBMITTALS FOR:
   - A. OPEN-WEB WOOD TRUSSES
   - B. STAIRS
5. SUBMITTALS WILL BE REVIEWED BY THE STRUCTURAL ENGINEER OF RECORD FOR COMPLIANCE WITH THE SPECIFIED DESIGN REQUIREMENTS, STAMPED AS "REVIEWED," AND FORWARDED TO THE LOCAL BUILDING AUTHORITY FOR REVIEW AS REQUIRED.
6. FINAL ISSUE OF THE BUILDING PERMIT MAY, AT THE APPROVAL AUTHORITY'S OPTION, BE CONTINGENT ON ITS APPROVAL OF THE DEFERRED SUBMITTAL DOCUMENTS.
7. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN CALCULATIONS AND DRAWINGS HAVE BEEN REVIEWED BY THE ARCHITECT, STRUCTURAL ENGINEER, AND/OR LOCAL BUILDING AUTHORITY AS REQUIRED.

STRUCTURAL ERECTION AND BRACING REQUIREMENTS:

1. THE STRUCTURAL DRAWINGS ILLUSTRATE AND DESCRIBE THE COMPLETED STRUCTURE WITH ELEMENTS IN THEIR FINAL POSITIONS, PROPERLY SUPPORTED, CONNECTED, AND/OR BRACED.
2. THE STRUCTURAL DRAWINGS ILLUSTRATE TYPICAL AND REPRESENTATIVE DETAILS TO ASSIST THE GENERAL CONTRACTOR. DETAILS SHOWN APPLY AT ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED. ALTHOUGH DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT EVERY DETAIL IS ILLUSTRATED AND NOT EVERY EXCEPTIONAL CONDITION IS ADDRESSED.
3. ALL PROPRIETARY CONNECTIONS AND ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS.
4. ALL WORK SHALL BE ACCOMPLISHED IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE APPLICABLE CODES AND LOCAL ORDINANCES.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL WORK, INCLUDING LAYOUT AND DIMENSION VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF SUBCONTRACTORS. ANY DISCREPANCIES OR OMISSIONS DISCOVERED IN THE COURSE OF THE WORK SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR RESOLUTION.
6. CONTINUATION OF WORK WITHOUT NOTIFICATION OF DISCREPANCIES RELIEVES THE ARCHITECT AND STRUCTURAL ENGINEER FROM ALL CONSEQUENCES.
7. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE STRUCTURAL DRAWINGS DO NOT DESCRIBE METHODS OF CONSTRUCTION.
8. THE GENERAL CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO TEMPORARY BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.
9. DO NOT BACKFILL AGAINST BASEMENT OR RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE TEMPORARY BRACING IS PROVIDED.
10. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND ANY OTHER SUPPORTING ELEMENTS ARE IN PLACE.
11. THE ARCHITECT AND STRUCTURAL ENGINEER BEAR NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND OBSERVATION VISITS TO THE SITE DO NOT IN ANY WAY INCLUDE INSPECTIONS OF THESE ITEMS.

PRECAUTIONARY NOTES ON STRUCTURAL BEHAVIOR:

1. INTERIOR ARCHITECTURAL FINISH DETAILING MUST ACCOMMODATE THE RELATIVE DIFFERENTIAL MOVEMENTS OF SUPPORTING STRUCTURAL ELEMENTS.
2. WHERE THE ROOF FRAMING ELEMENT SPANS ARE LONG, APPLIED LOADING WILL NATURALLY CAUSE SUBSTANTIAL DEFLECTION. INTERIOR ELEMENTS HUNG FROM THE ROOF STRUCTURE WILL DEFLECT WITH THE ROOF.
3. THE GARAGE FLOOR IS A FLOATING CONCRETE SLAB-ON-GRADE AND MAY EXPERIENCE MOVEMENTS INDEPENDENT OF THE STRUCTURAL FOUNDATIONS. INTERIOR ELEMENTS SUPPORTED ON THE SLAB-ON-GRADE FLOOR WILL MOVE WITH THE FLOOR. INTERIOR ELEMENTS SUPPORTED ON FOUNDATIONS WILL NOT EXPERIENCE SIMILAR OR MEASURABLE MOVEMENTS.
4. EXTERIOR/PERIMETER WALL ASSEMBLIES HUNG FROM THE EDGE OF THE BUILDING STRUCTURE WILL BE DIRECTLY AFFECTED (TO SOME DEGREE) BY CHANGES IN EXTERNAL TEMPERATURE AND FLOOR DEFLECTION.
5. EXTERIOR/PERIMETER AND INTERIOR ARCHITECTURAL FINISH DETAILS SHOULD ALLOW FOR RELATIVE MOVEMENTS BETWEEN ELEMENTS WITH DIFFERENT SUPPORT CONDITIONS.

LETTERS OF CONSTRUCTION COMPLIANCE:

1. THE GENERAL CONTRACTOR SHALL DETERMINE FROM THE LOCAL BUILDING AUTHORITY, AT THE TIME THE BUILDING PERMIT IS OBTAINED, WHETHER ANY LETTERS OF CONSTRUCTION COMPLIANCE WILL BE REQUESTED FROM THE ARCHITECT AND STRUCTURAL ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ALL SUCH REQUIREMENTS IN WRITING PRIOR TO THE START OF CONSTRUCTION.
3. TWO-DAY ADVANCE NOTICE SHALL BE GIVEN WHEN REQUESTING SITE VISITS NECESSARY AS THE BASIS FOR THE COMPLIANCE LETTER.
4. THE GENERAL CONTRACTOR SHALL PROVIDE COPIES OF ALL THIRD-PARTY TESTING AND INSPECTION REPORTS TO THE ARCHITECT AND STRUCTURAL ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DATE THAT THE COMPLIANCE LETTER IS NEEDED.

SPECIAL INSPECTIONS:

1. THE FOLLOWING SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR, RETAINED BY THE OWNER, IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF IBC CHAPTER 17:
   - A. SECTION 1704 SPECIAL INSPECTIONS, CONTRACTOR RESPONSIBILITY, AND STRUCTURAL OBSERVATIONS AND THE FOLLOWING SUB-SECTIONS:
     1. 1704.2 SPECIAL INSPECTIONS
     2. 1704.3 STATEMENT OF SPECIAL INSPECTIONS
   - B. SECTION 1705 REQUIRED VERIFICATION AND INSPECTION AND THE FOLLOWING SUB-SECTIONS:
     1. 1705.1.1 SPECIAL CASES (POST-INSTALLED ANCHORS)
     2. 1705.3 CONCRETE CONSTRUCTION
     3. 1705.6 SOILS
2. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE APPROVED INSPECTOR MUST BE INDEPENDENT FROM THE CONTRACTOR RESPONSIBLE FOR THE WORK BEING INSPECTED.
3. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO INSPECT AND/OR TEST THE WORK OUTLINED ABOVE AND WITHIN THE STATEMENT OF SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
4. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
5. PER SECTION 1704.2.4 THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INDIVIDUAL REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. THE REPORTS SHALL NOTE UNCORRECTED DEFICIENCIES, CORRECTION OF PREVIOUSLY REPORTED DEFICIENCIES, AND CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE STRUCTURAL ENGINEER OF RECORD.
6. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT WITHIN 10 DAYS OF THE FINAL SPECIAL INSPECTION STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.
7. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM PER SECTION 1704.4. THE STATEMENT SHALL ACKNOWLEDGE THE AWARENESS OF THE SPECIAL LISTED REQUIREMENTS OF DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT IN THE STATEMENT OF SPECIAL INSPECTIONS PER SECTION 1705.
8. EXCEPT AS NOTED, THE SPECIAL INSPECTIONS OUTLINED ABOVE ARE IN ADDITION TO, AND BEYOND THE SCOPE OF, PERIODIC STRUCTURAL OBSERVATIONS AS DEFINED IN SECTION 1704.5. STRUCTURAL OBSERVATIONS ARE INCLUDED IN THE STRUCTURAL ENGINEERING DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES PROVIDED BY THE STRUCTURAL ENGINEER.

STRUCTURAL DRAWING LIST	
SHEET NO	SHEET TITLE
S001	GENERAL NOTES
S002	ABBREVIATION & SYMBOLS KEY, 3D VIEW
S101	FOUNDATION PLAN
S102	DECK & LOWER LEVEL FRAMING PLAN
S103	GARAGE FRAMING PLAN
S501	FOUNDATION SECTIONS & DETAILS
S502	STEEL SECTIONS & DETAILS
S511	DETAILS & SCHEDULES
S512	TYPICAL WOOD DETAILS

No.	Description	Date
1	PERMIT	5/8/2023

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PROJECT NAME

6306/6270 HWY 9

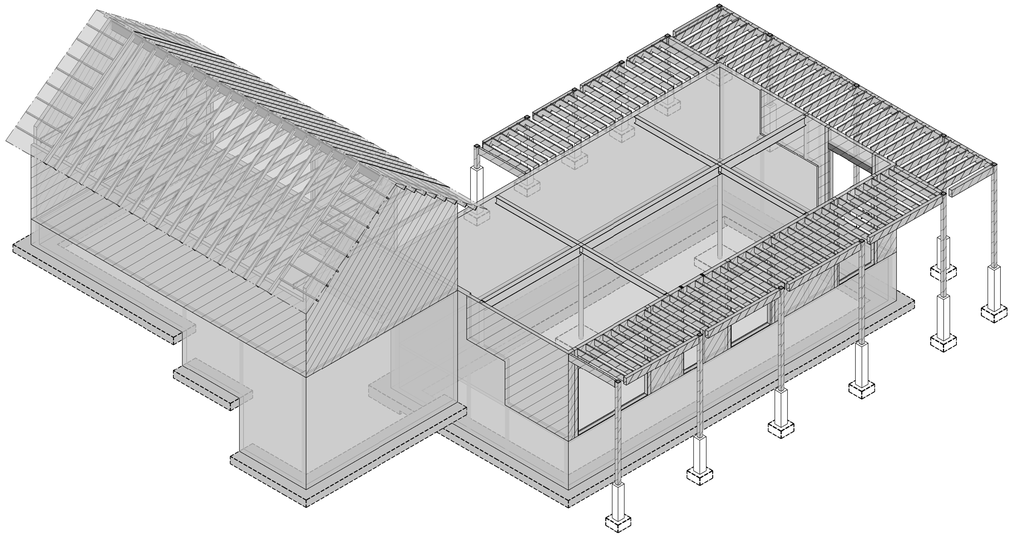
BLUE RIVER, COLORADO

DRAWING TITLE

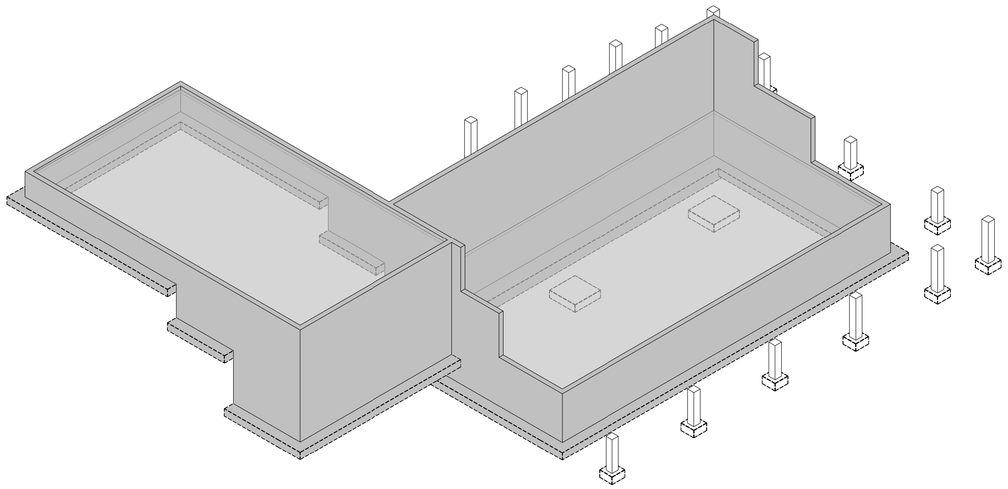
GENERAL NOTES

SEAL & SIGNATURE

DATE 3/28/2023
PROJ NO. 2304
DRAWN BY AI
CHECKED BY SS
DWG NO. S001



3D STRUCTURAL
NO SCALE



3D FOUNDATION
NO SCALE

FIELD VERIFICATION:
- ALL DIMENSIONS AND CONDITIONS SHALL BE FIELD VERIFIED BY CONTRACTOR
- IF DIMENSIONS AND CONDITIONS DIFFER THAN THOSE SHOWN ON DRAWINGS, NOTIFY ARCHITECT AND ENGINEER
- NOTIFY ARCHITECT AND ENGINEER ONCE FINISHES ARE REMOVED & FOUNDATION IS EXCAVATED TO ALLOW OBSERVATION

ABBREVIATIONS KEY

@	ON CENTER SPACING	DWG	DRAWING	LGS	LIGHT GAGE STEEL		
(E)	EXISTING	DWL	DOWEL	LL	LIVE LOAD	REINF	REINFORCE, -ED, -ING
(N)	NEW	EA	EACH	LLH	LONG LEG HORIZONTAL	REQ	REQUIRED
(R)	REMOVE	ECC	ECCENTRIC	LLV	LONG LEG VERTICAL	REQMT	REQUIREMENT
AB	ANCHOR ROD (BOLT)	E-E	END TO END	LOC	LOCATION	RET	RETAINING
ADDL	ADDITIONAL	EF	EACH FACE	LP	LOW POINT	RM	ROOM
ADJ	ADJUSTABLE	EJ	EXPANSION JOINT	LSL	LAMINATED STRAND LUMBER (GENERIC TERM)	RMO	ROUGH MASONRY OPENING
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	EL	ELEVATION	LT	LIGHT	RO	ROUGH OPENING
AFF	ABOVE FINISHED FLOOR	ELEC	ELECTRIC, ELECTRICAL	LVL	LAMINATED VENEER LUMBER (GENERIC TERM)	SC	SLIP-CRITICAL
ALT	ALTERNATE	EMBED	EMBEDMENT	MACH	MACHINE	SCH	SCHEDULE
AMT	AMOUNT	ENGR EOR	ENGINEER ENGINEER OF RECORD	MASY	MASONRY	SDST	SELF-DRILLING/ SELF-TAPPING
ANCH	ANCHOR, ANCHORAGE	EQ	EQUAL	MATL	MATERIAL	SECT	SECTION
APPROX	APPROXIMATE	EQUIP	EQUIPMENT	MAX	MAXIMUM	SF	SQUARE FEET, SUB-FLOOR
ARCH	ARCHITECT, -URAL	EQUIV	EQUIVALENT	MB	MACHINE BOLT	SHT	SHEET
ATR	ALL THREAD ROD	ES	EACH SIDE	MECH	MECHANICAL	SHTG	SHEATHING
AVG	AVERAGE	EST	ESTIMATE	MEZZ	MEZZANINE	SIM	SIMILAR
BC	BOTTOM OF CONCRETE	E-W	EAST TO WEST	MFR	MANUFACTURE, -ER, -ED	SLH	SHORT LEG HORIZONTAL
BL	BRICK LEDGE	EXC	EXCAVATE	MIN	MINIMUM	SLV	SHORT LEG VERTICAL
BLK	BLOCK	EXP	EXPANSION	ML	MICROLLAM (TRUS-JOIST BRAND LVL), MASONRY LINTEL	SOG	SLAB ON GRADE
BLKG	BLOCKING	EXT	EXTERIOR	MO	MASONRY OPENING	SP	SPACES, SPACED
BM	BEAM	FD	FLOOR DRAIN	MTL	METAL	SPEC	SPECIFICATIONS
BOT	BOTTOM	FDN	FOUNDATION	NF	NEAR FACE	SQ	SQUARE
BRG	BEARING	FF	FINISHED FLOOR, FAR FACE	NIC	NOT IN CONTRACT	SSR	SHEAR STUD RAIL
BW	BOTTOM OF WALL	F-F	FACE TO FACE	NS	NEAR SIDE	ST	SNUG-TIGHT
CB	COUNTERBORE	FIG	FIGURE	N-S	NORTH TO SOUTH	STD	STANDARD
CF	CUBIC FOOT	FL	FLUSH	NTS	NOT TO SCALE	STIFF	STIFFENER
CSF	COLD FORMED STEEL	FLG	FLANGE	OCJ	OSHA COLUMN JOIST	STL	STEEL
CG	CENTER OF GRAVITY	FLR	FLOOR	OD	OUTSIDE DIAMETER	STRUCT	STRUCTURE, -AL
CIP	CAST-IN-PLACE	FO	FACE OF	OH	OPPOSITE HAND	SUPT	SUPPORT
CJ	CONSTRUCTION JOINT, CONTROL JOINT	FP	FULL PENETRATION	OPNG	OPENING	SY	SQUARE YARD
CJP	COMPLETE JOINT PENETRATION	FS	FOOTING STEP, FAR SIDE	OPP	OPPOSITE	SYM	SYMMETRICAL
CL	CENTER LINE	FTG	FOOTING	OS	OUTSIDE FACE	T&B	TOP AND BOTTOM
CLG	CEILING	GA	GAGE, GAUGE	OSB	ORIENTED STRAND BOARD	T&G	TONGUE AND GROOVE
CLR	CLEAR	GALV	GALVANIZED	PAF	POWDER ACTUATED FASTENER	TB	TOP OF BEAM
CM	CONSTRUCTION MANAGER, -MENT	GC	GENERAL CONTRACTOR	PC	PRECAST	TC	TOP OF CONCRETE
CMU	CONCRETE MASONRY UNIT	GEN	GENERAL	PCF	POUNDS PER CUBIC FOOT	TCA	TORQUE-CONTROLLED ANCHOR
COL	COLUMN	GL	GLUED LAMINATED, GULAM	PE	PRE-ENGINEERED	TD	TOP OF DECK
COM	COMMON	GND	GROUND	PEN	PENETRATION	THD	THREAD
COMB	COMBINATION	GR	GRADE	PERP	PERPENDICULAR	THK	THICK, -NESS
CONC	CONCRETE	GT	GIRDER TRUSS	PJP	PARTIAL JOINT PENETRATION	TJ	TOP OF JOIST
CONN	CONNECTION	GYP BD	GYPSUM BOARD	PL	PLATE	TL	TOTAL LOAD
CONT	CONTINUOUS, CONTINUE	HAS	HEADED ANCHOR STUD	PLF	POUND PER LINEAR FOOT	TPG	TOPPING
COORD	COORDINATE, COORDINATION	HDG	HOT-DIP GALVANIZED	PNL	PANEL	TRANS	TRANSVERSE
CS	COUNTERSINK	HDR	HEADER	PP	PANEL POINT	TW	TOP OF WALL
CTR	CENTER	HORIZ	HORIZONTAL	PS	PRESTRESSED	TYP	TYPICAL
CY	CUBIC YARD	HP	HIGH POINT	PSF	POUNDS PER SQUARE FOOT	ULT	ULTIMATE
DAB	DEFORMED ANCHOR BAR	HT	HEIGHT	PSI	POUNDS PER SQUARE INCH	UNO	UNLESS NOTED OTHERWISE
DET	DETAIL	ID	INSIDE DIAMETER	PSL	PARALLEL STRAND LUMBER (GENERIC TERM)	VERT	VERTICAL
DEV	DEVELOP	IF	INSIDE FACE	PT	POST TENSIONED, PRESSURE TREATED	VIF	VERIFY IN FIELD
DIAG	DIAGONAL	INT	INTERIOR, INTERMEDIATE	PTN	PARTITION	WP	WORK POINT
DIM	DIMENSION	IT	INVERTED TEE	PWD	PLYWOOD	WT	WEIGHT
DL	DEAD LOAD	JB	JOIST BEARING	QTY	QUANTITY	WWF	WELDED WIRE FABRIC
DN	DOWN	JST	JOIST	R	RADIUS	XS	EXTRA STRONG
DP	DRILLED PIER	JT	JOINT	RE	REFERENCE, REFER TO	XSECT	CROSS SECTION
DT	DOUBLE TEE	K	KIP (1,000 LBS)	RECT	RECTANGLE	XXS	DOUBLE EXTRA STRONG

SYMBOLS KEY

	DIRECTION OF DECK SPAN
GRID	GRID DESIGNATION
X	REVISION
SX	INDICATES STRUCTURAL ELEVATION
SWx	SHEAR WALL
	SHORING
	STEP IN FLOOR ELEVATION
	CMU (CONCRETE MASONRY UNIT)
	BRICK
	CIP CONCRETE
	PRECAST CONCRETE
	EXISTING CONCRETE
	EARTH
FX.X	ISOLATED SPREAD FOOTING MARK
FXX	SPREAD FOOTING MARK
STEP	STEP IN BOTTOM OF WALL/GRADE BEAM
XX:12	ROOF SLOPE
SLOPE	DIRECTION OF SLOPE (DOWN)
DN UP	STAIR OR RAMP DIRECTION

BUILDING COLUMN DESIGNATIONS

XXX'-X	TOP OF CONCRETE OR MASONRY ELEVATION
	STEP TOP OF WALL
BL XXX'-X	BRICK LEDGE ELEVATION
(XXX'-X)	TOP OF FOOTING ELEVATION
XXX'-X	TOP OF FLOOR ELEVATION
	WOOD BEARING WALL
	WOOD SHEAR WALL
A	COLUMN ABOVE
XXx	COLUMN OR OTHER ELEMENT BELOW SEE SCHEDULES & NOTES Cx = COLUMN BPx = BASE PLATE EPx = EMBED PLATE ABx = ANCHOR BOLT HDx = HOLDOWN
CONT C	COLUMN CONTINUOUS FROM LEVEL BELOW
XK YT	"X" NUMBER OF KING STUDS BELOW "Y" NUMBER OF TRIMMER STUDS BELOW
(X)	"X" NUMBER OF BUILT-UP 2x6 STUDS IN COLUMN BELOW
X	"X" NUMBER OF BUILT-UP 2x4 STUDS IN COLUMN BELOW
X	HOLDOWN
	WOOD HEADER
	WOOD JOIST OR BEAM SUPPORTED BY METAL HANGER
	WOOD JOIST CONTINUOUS OVER INTERMEDIATE SUPPORT
	WOOD JOIST BEARING ON TOP OF SUPPORT

No.	Description	Date
1	PERMIT	5/8/2023

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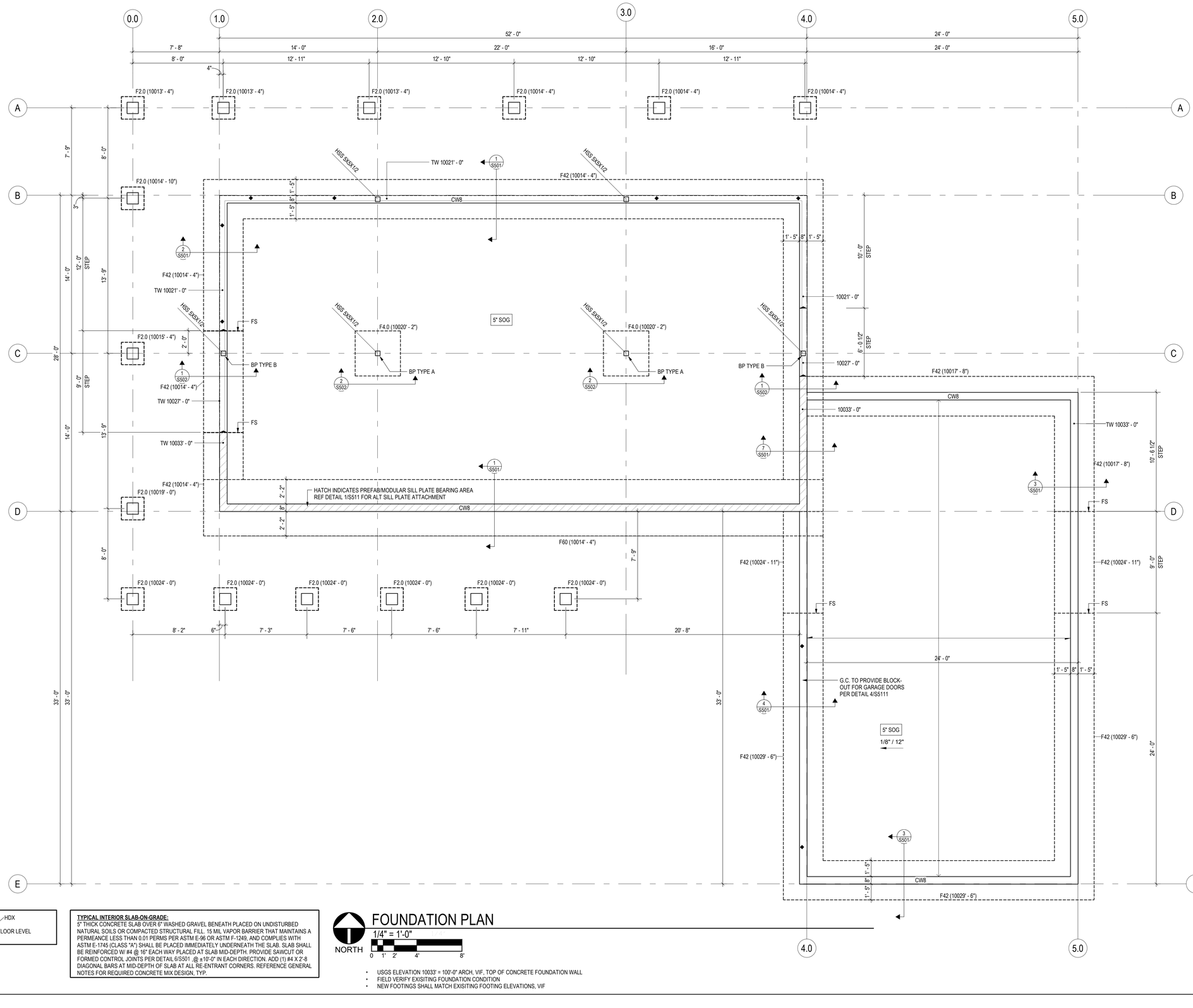
PROJECT NAME
6306/6270 HWY 9
BLUE RIVER, COLORADO

DRAWING TITLE
ABBREVIATION & SYMBOLS KEY, 3D VIEW

SEAL & SIGNATURE
STATE OF COLORADO
STEPHEN SHAUN SALISBURY
40400
LICENSED ARCHITECT
06/15/2023

DATE	3/28/2023
PROJ NO.	2304
DRAWN BY	AI
CHECKED BY	SS
DWG NO.	S002



HOLDOWNS:
- HOLDOWNS ARE INDICATED ON PLAN THUS: ◆ HDX
- HOLDOWNS INDICATED ARE LOCATED AT THE FLOOR LEVEL
- SEE HOLDOWN SCHEDULE ON SHEET S511

TYPICAL INTERIOR SLAB-ON-GRADE:
5" THICK CONCRETE SLAB OVER 6" WASHED GRAVEL BENEATH PLACED ON UNDISTURBED NATURAL SOILS OR COMPACTED STRUCTURAL FILL. 15 MIL VAPOR BARRIER THAT MAINTAINS A PERMEANCE LESS THAN 0.01 PERMS PER ASTM E-96 OR ASTM F-1249, AND COMPLIES WITH ASTM E-1745 (CLASS "A") SHALL BE PLACED IMMEDIATELY UNDERNEATH THE SLAB. SLAB SHALL BE REINFORCED W/ #4 @ 16" EACH WAY PLACED AT SLAB MID-DEPTH. PROVIDE SAWCUT OR FORMED CONTROL JOINTS PER DETAIL 6/S501 @ ±10'-0" IN EACH DIRECTION. ADD (1) #4 X 2'-8 DIAGONAL BARS AT MID-DEPTH OF SLAB AT ALL RE-ENTRANT CORNERS. REFERENCE GENERAL NOTES FOR REQUIRED CONCRETE MIX DESIGN, TYP.

FOUNDATION PLAN

1/4" = 1'-0"

NORTH

0 1' 2' 4' 8'

- USGS ELEVATION 10033' = 100'-0" ARCH, VIF, TOP OF CONCRETE FOUNDATION WALL
- FIELD VERIFY EXISITING FOUNDATION CONDITION
- NEW FOOTINGS SHALL MATCH EXISITING FOOTING ELEVATIONS, VIF

No.	Description	Date

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PROJECT NAME

6306/6270 HWY 9

BLUE RIVER, COLORADO

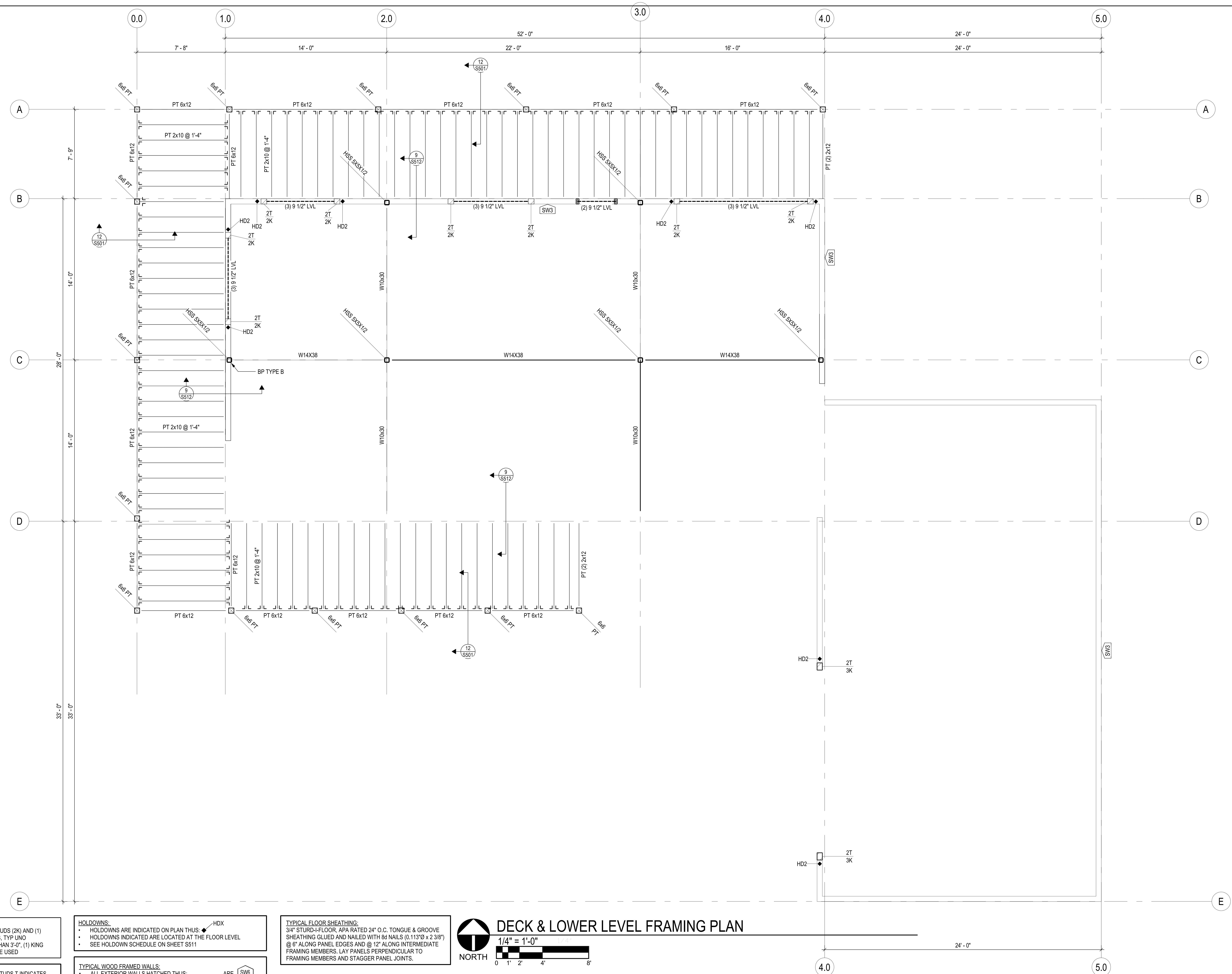
DRAWING TITLE

FOUNDATION PLAN

SEAL & SIGNATURE

STATE OF COLORADO
STEPHEN SHAUN SALISBURY
404004
LICENSED ARCHITECT
06/15/2023

DATE	3/28/2023
PROJ NO.	2304
DRAWN BY	AI
CHECKED BY	SS
DWG NO.	S101



DECK & LOWER LEVEL FRAMING PLAN

1/4" = 1'-0"

NORTH

0 1' 2' 4' 8'

TYPICAL HEADERS AND TRIM / KING STUDS:

- PROVIDE 2x8 HEADERS WITH (2) KING STUDS (2K) AND (1) TRIM STUD (1T) AT ALL WOOD OPENINGS, TYP UNO
- AT OPENINGS EQUAL TO OR SMALLER THAN 3'-0", (1) KING STUD (1K) AND (1) TRIM STUD (1T) MAY BE USED

XK / XT — K INDICATES NUMBER OF 2x KING STUDS T INDICATES NUMBER OF 2x TRIM STUDS (EQUAL TO WALL STUD WIDTH)

(XX) — INDICATES NUMBER OF 2x6 STUDS IN A STUDPACK

[XX] — INDICATES NUMBER OF 2x8 STUDS IN A STUDPACK

HOLDOWNS:

- HOLDOWNS ARE INDICATED ON PLAN THUS: ◆ HDX
- HOLDOWNS INDICATED ARE LOCATED AT THE FLOOR LEVEL
- SEE HOLDOWN SCHEDULE ON SHEET S511

TYPICAL WOOD FRAMED WALLS:

- ALL EXTERIOR WALLS HATCHED THUS: ARE SW6 SHEAR WALLS, TYP UNO.
- WALLS LESS THAN 4'-0" ARE NOT CONSIDERED PART OF THE MFWRS
- SEE SHEET S502 FOR SHEAR WALL SCHEDULES

TYPICAL FLOOR SHEATHING:

3/4" STURD-I-FLOOR, APA RATED 24" O.C. TONGUE & GROOVE SHEATHING GLUED AND NAILED WITH 8d NAILS (0.113"Ø x 2 3/8") @ 6" ALONG PANEL EDGES AND @ 12" ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.

- USGS ELEVATION 10033' = 100'-0" ARCH, VIF, TOP OF CONCRETE FOUNDATION WALL
- TOP OF (E) FLOOR SHEATHING = 98'-7 1/2" (VIF), (N) FLOOR TO MATCH UNLESS NOTED THUS: XXX'-X"
- ALL BEAMS ARE FLUSH, UNLESS NOTED OTHERWISE ON PLAN
- ALL HEADERS ARE FLUSH, UNLESS NOTED OTHERWISE ON PLAN
- ALL COLUMNS ARE BELOW
- ALL EXTERIOR HEADERS ARE (2) 2x8 INSULATED HEADERS UNLESS NOTED OTHERWISE ON PLAN
- ALL INTERIOR HEADERS ARE (3) 2x8 UNLESS NOTED OTHERWISE ON PLAN

No.	Description	Date

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PROJECT NAME

6306/6270 HWY 9

BLUE RIVER, COLORADO

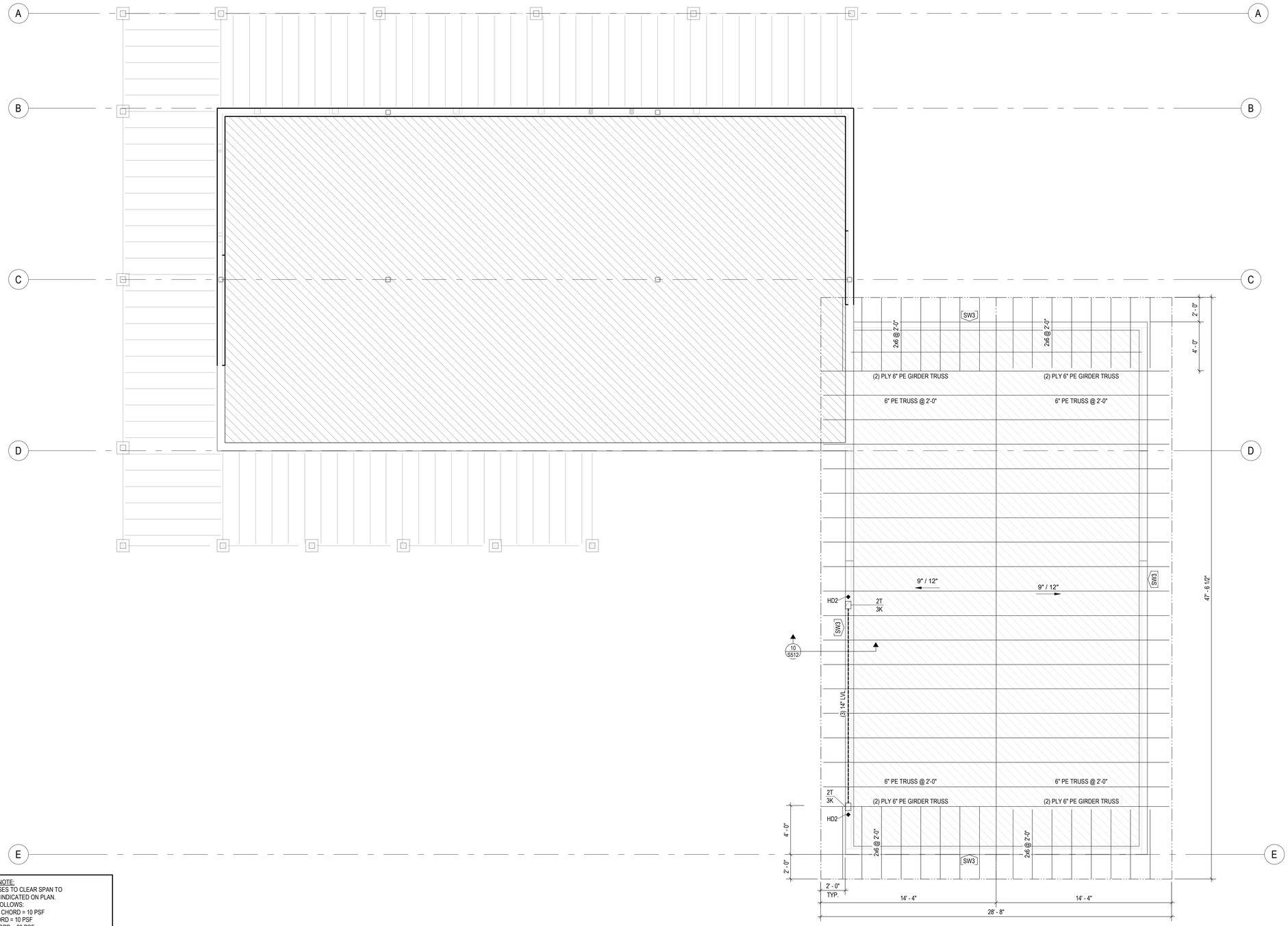
DRAWING TITLE

DECK & LOWER LEVEL FRAMING PLAN

SEAL & SIGNATURE

STATE OF COLORADO — STEPHEN SHAUN SALISBURY — 404004 — LICENSED ARCHITECT — 06/15/2023

DATE	3/28/2023
PROJ NO.	2304
DRAWN BY	AI
CHECKED BY	SS
DWG NO.	S102



ROOF TRUSS SUPPLIER NOTE:
DESIGN ALL ROOF TRUSSES TO CLEAR SPAN TO BEARING WALLS/ BEAMS INDICATED ON PLAN.
DESIGN LOADS ARE AS FOLLOWS:
- DEAD LOAD BOTTOM CHORD = 10 PSF
- DEAD LOAD TOP CHORD = 10 PSF
- SNOW LOAD TOP CHORD = 80 PSF

LIMIT DEFLECTION TO:
- SPAN/360 FOR SNOW LOAD
- SPAN/240 (LIMIT TO 1" MAXIMUM) FOR TOTAL LOAD

ALL TRUSS-TO-TRUSS CONNECTIONS TO BE DESIGNED AND SUPPLIED BY TRUSS MANUFACTURER. TRUSS FABRICATOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS STAMPED BY A COLORADO REGISTERED ENGINEER TO ARCHITECT FOR REVIEW BEFORE FABRICATION.

DO NOT ALTER TRUSS LAYOUT. BEARING DESIGN SHALL ASSUME HEM FIR WALL TOP PLATES (405 psi). USE MULTIPLE PLIES, BEARING BLOCKS, OR BEARING ENHANCERS TO ACCOMMODATE 5-1/2" BEARING LENGTHS PER PLAN. THE USE OF DOUGLAS FIR OR END GRAIN BEARING IS NOT ACCEPTABLE UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD FOR THE PROJECT.

TYPICAL HEADERS AND TRIM / KING STUDS:
- PROVIDE 2x8 HEADERS WITH (2) KING STUDS (2K) AND (1) TRIM STUD (1T) AT ALL WOOD OPENINGS, TYP UNO
- AT OPENINGS EQUAL TO OR SMALLER THAN 3'-0", (1) KING STUD (1K) AND (1) TRIM STUD (1T) MAY BE USED

XK — K INDICATES NUMBER OF 2x KING STUDS
XT — T INDICATES NUMBER OF 2x TRIM STUDS (EQUAL TO WALL STUD WIDTH)
(XX) — INDICATES NUMBER OF 2x6 STUDS IN A STUDPACK
XX — INDICATES NUMBER OF 2x8 STUDS IN A STUDPACK

HOLDOWNS:
- HOLDOWNS ARE INDICATED ON PLAN THUS: ◆ HDX
- HOLDOWNS INDICATED ARE LOCATED AT THE FLOOR LEVEL
- SEE HOLDOWN SCHEDULE ON SHEET S502

TYPICAL WOOD FRAMED WALLS:
- ALL EXTERIOR WALLS HATCHED THUS: ARE SW3 SHEAR WALLS, TYP UNO.
- WALLS LESS THAN 4'-0" ARE NOT CONSIDERED PART OF THE MFWRS
- SEE SHEET S502 FOR SHEAR WALL SCHEDULES

TYPICAL ROOF SHEATHING:
19/32" APA 40/20 RATED TONGUE & GROOVE SHEATHING FASTENED WITH 8d NAILS (0.113"Ø x 2 3/8") @ 6" ALONG PANEL EDGES AND @ 12" ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.

ROOF FRAMING PLAN

NORTH

1/4" = 1'-0"
0 1' 2' 4' 8'

- USGS ELEVATION 10033' = 100'-0" ARCH, VIF, TOP OF CONCRETE FOUNDATION WALL
- ALL BEAMS ARE FLUSH, UNLESS NOTED OTHERWISE ON PLAN
- ALL HEADERS ARE DROPPED, UNLESS NOTED OTHERWISE ON PLAN
- ALL COLUMNS ARE BELOW
- ALL EXTERIOR HEADERS ARE (2) 2x8 INSULATED HEADERS UNLESS NOTED OTHERWISE ON PLAN
- ALL INTERIOR HEADERS ARE (3) 2x8 UNLESS NOTED OTHERWISE ON PLAN

No.	Description	Date

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PROJECT NAME
6306/6270 HWY 9
BLUE RIVER, COLORADO

DRAWING TITLE
GARAGE FRAMING PLAN

SEAL & SIGNATURE
STATE OF COLORADO · STEPHEN SHAUN SALISBURY · 40404 · LICENSED ARCHITECT
06/15/2023

DATE	3/28/2023
PROJ NO.	2304
DRAWN BY	AI
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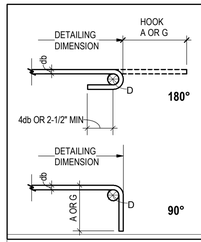
DWG NO.	S103



STANDARD HOOKS

BAR SIZE	D	180° (A OR G)	180° (J)	90° (A OR G)
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"

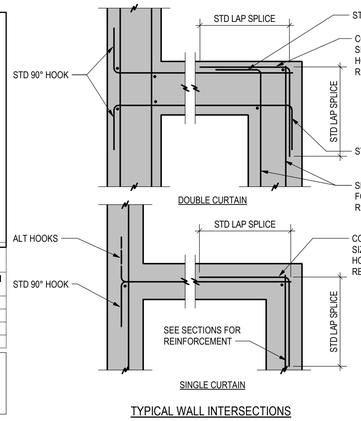
ALL GRADES OF STEEL
D = FINISHED INSIDE BEND DIAMETER
db = NOMINAL BAR DIAMETER
MIN D = 6 db FOR #3 THROUGH #8

TYPICAL CONCRETE REINFORCING LAP & EMBEDMENT LENGTHS (UNO)

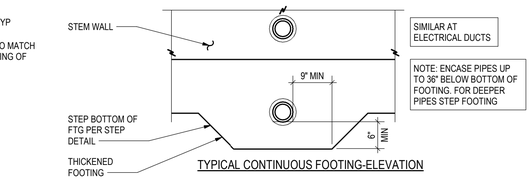
BAR SIZE	TYPE	Fc = 3000 PSI (TOP)	Fc = 3000 PSI (OTHER)	Fc = 4000 PSI (TOP)	Fc = 4000 PSI (OTHER)	Fc = 5000 PSI (TOP)	Fc = 5000 PSI (OTHER)
#4	EMBED	29	22	25	19	22	17
	LAP	37	29	32	25	29	22
#5	EMBED	36	28	31	24	28	22
	LAP	47	36	40	31	36	28

NOTES:
1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST BELOW BAR
2. TABULATED VALUES ARE BASED ON GRADE 60 NON-EPOXY-COATED REINFORCING BARS AND NORMAL WEIGHT CONCRETE
3. VALUES ARE IN INCHES

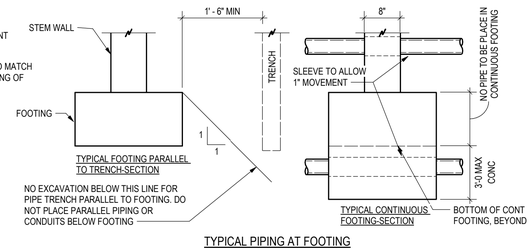
8 S501 REINF LAP & HOOK SCHEDULES
NO SCALE



TYPICAL WALL INTERSECTIONS



TYPICAL CONTINUOUS FOOTING-ELEVATION



TYPICAL PIPING AT FOOTING

9 S501 FOOTING & STEM WALL REINF DETAIL
3/4" = 1'-0"

10 S501 PENETRATION DETAIL
3/4" = 1'-0"

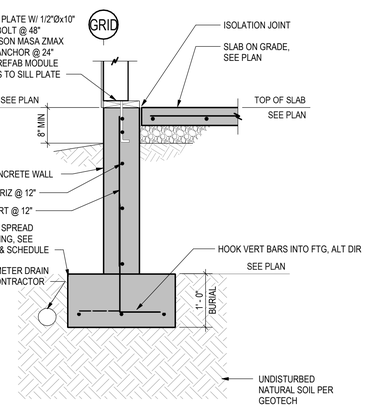
ISOLATED FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICKNESS	REINFORCING	COMMENTS
F2.0	2' - 0"	2' - 0"			
F4.0	4' - 0"	4' - 0"			

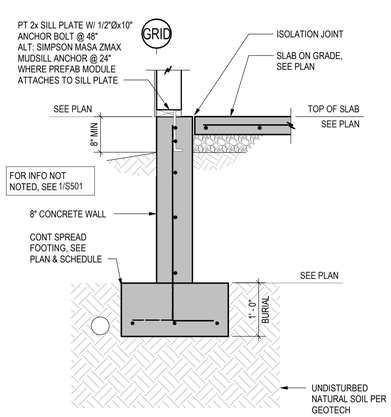
WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	REINFORCING	COMMENTS
F42	3' - 6"	1' - 0"	(2) #5 EACH WAY, BOTTOM	
F60	5' - 0"	1' - 6"	#5 EACH WAY, TOP & BOTTOM	

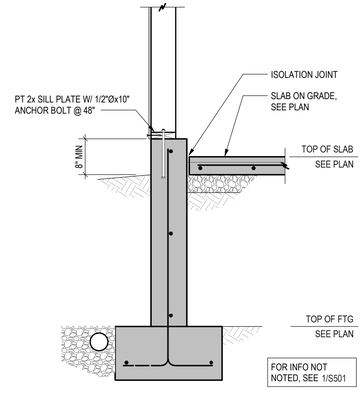
11 S501 FOOTING SCHEDULES
NO SCALE



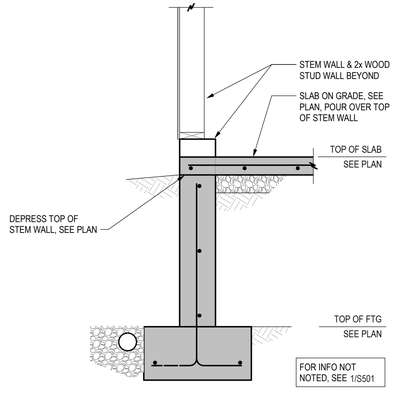
1 S501 EXT FDN, PERP JOIST
3/4" = 1'-0"



2 S501 EXT FDN, PARALLEL JOIST
3/4" = 1'-0"



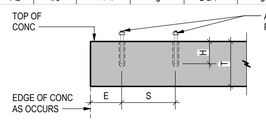
3 S501 EXT FDN AT GARAGE SLAB
3/4" = 1'-0"



4 S501 EXT FDN AT GARAGE SLAB AT DOOR
3/4" = 1'-0"

ADHESIVE ANCHOR IN 2500 PSI MIN & 21 DAY AGE MIN CONCRETE

ADHESIVE TYPE	ANCHOR THRD ROD	ANCHOR REBAR	PILOT HOLE	MIN EMBED UNO H	MIN EDGE DISTANCE E	MIN SPACING S	MIN CONC THICKNESS T
SIMPSON AT-XP (UES ER-263)	3/8"Ø	#3	1/2"Ø	3"	1 3/4"	3"	5"
	1/2"Ø	#4	5/8"Ø	4"	1 3/4"	3"	6 1/2"
	5/8"Ø	#5	3/4"Ø	5"	1 3/4"	3"	8 1/4"
	3/4"Ø	#6	7/8"Ø	6"	1 3/4"	3"	9 1/4"
	7/8"Ø	#7	1"Ø	7"	1 3/4"	3"	11 1/2"
	1"Ø	#8	1 1/8"Ø	8"	1 3/4"	3"	13"
HILTI HIT-HY 200 (ICC-ESR 3187)	3/8"Ø	#3	1/2"Ø	3"	1 3/4"	1 7/8"	4 1/4"
	1/2"Ø	#4	5/8"Ø	4"	1 3/4"	2 1/2"	5 1/4"
	5/8"Ø	#5	3/4"Ø	5"	2"	3 1/8"	6 1/4"
	3/4"Ø	#6	7/8"Ø	6"	2 1/8"	3 3/4"	7 1/2"
	7/8"Ø	#7	1"Ø	7"	2 1/4"	4 3/8"	8 3/4"
	1"Ø	#8	1 1/8"Ø	8"	2 3/4"	5"	10"



NOTES:
1. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S INFORMATION AND ICC REPORT.
2. CONTRACTOR TO VERIFY MINIMUM EDGE DISTANCES, SPACING AND THICKNESS ARE IN ACCORDANCE WITH SCHEDULE PRIOR TO INSTALLING ANCHOR.
3. HOLES TO BE DRILLED WITH ROTARY DRILL ONLY. WHEN DRILLING HOLES IN EXISTING CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. MAINTAIN A REASONABLE CLEARANCE BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR. FILL ABANDONED HOLES WITH HIGH STRENGTH GROUT.
4. SPECIAL INSPECTION IS REQUIRED PER IBC SECTION 1705 AND THE REQUIREMENTS OF THE ICC REPORTS. THE SPECIAL INSPECTOR MUST BE ON THE JOB SITE PERIODICALLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, HOLE CLEANLINESS, EMBEDMENT DEPTH, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, DRILL BIT DIAMETER, HOLE DEPTH, EDGE DISTANCE(S), ANCHOR SPACING(S), CONCRETE THICKNESS, AND ADHESIVE INJECTION.

5 S501 ADHESIVE ANCHOR DETAIL
3/4" = 1'-0"

TYPICAL CONTROL JOINT

6 S501 CONTROL JOINT DETAIL
3/4" = 1'-0"

7 S501 EXT FDN, INT & GARAGE
3/4" = 1'-0"

No.	Description	Date
1	PERMIT	5/8/2023

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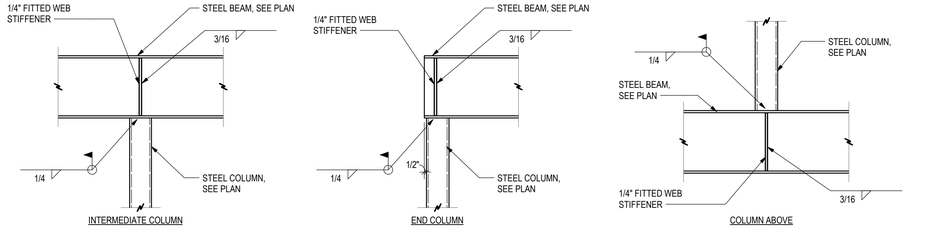
PROJECT NAME
6306/6270 HWY 9
BLUE RIVER, COLORADO

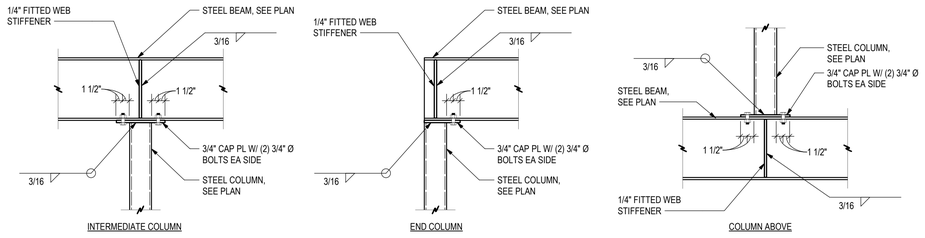
DRAWING TITLE
FOUNDATION SECTIONS & DETAILS

SEAL & SIGNATURE
STATE OF COLORADO
STEPHEN SHAUN SALISBURY
40400
LICENSED ARCHITECT
06/15/2023

DATE	3/28/2023
PROJ NO.	2304
DRAWN BY	AI
CHECKED BY	SS
DWG NO.	S501



COLUMN FIELD WELD OPTION



COLUMN BOLTED OPTION

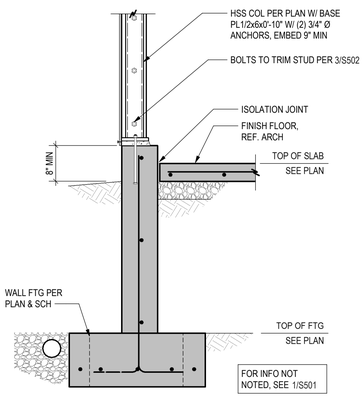
4 S502 STL BM TO STL COL CONNECTION

3/4" = 1'-0"

TYPICAL BUILT-UP STUD COLUMN TYPICAL HSS COLUMN IN STUD WALL

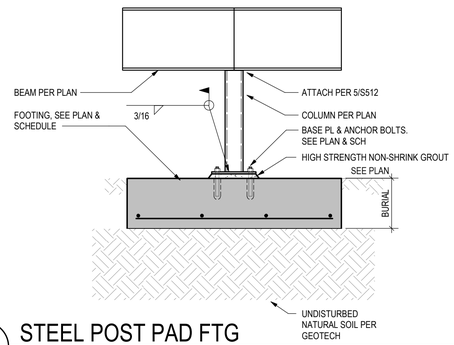
3 S502 COLUMN DETAILS

3/4" = 1'-0"



1 S502 STL COL AT EXT FND

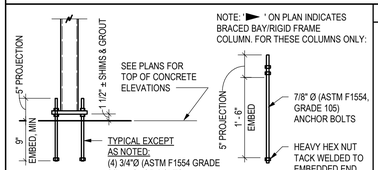
3/4" = 1'-0"



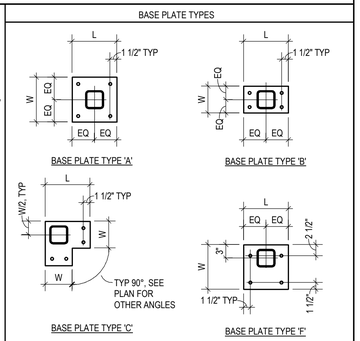
2 S502 STEEL POST PAD FTG

3/4" = 1'-0"

BASE PLATE SCHEDULE



BASE PLATE TYPES



BASE PLATE SCHEDULE					
MARK	TYPE	LENGTH	WIDTH	THICKNESS	COMMENTS
BPA	A	1' - 0"	1' - 0"	3/4"	
BPB	B	1' - 0"	8"	3/4"	
BPC	C	1' - 2"	1' - 0"	1"	

5 S502 TYPICAL COLUMN BASE DETAILS

NO SCALE

No.	Description	Date

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PROJECT NAME

6306/6270 HWY 9

BLUE RIVER, COLORADO

DRAWING TITLE

STEEL SECTIONS & DETAILS

SEAL & SIGNATURE

STATE OF COLORADO
STEPHEN SHAUN SALISBURY
40404
LICENSED ARCHITECT
06/15/2023

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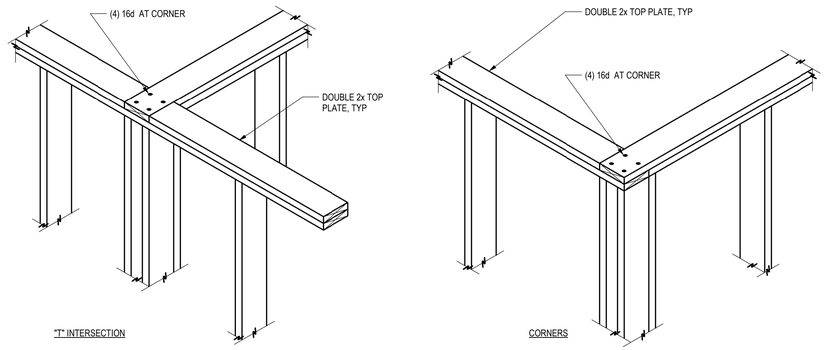
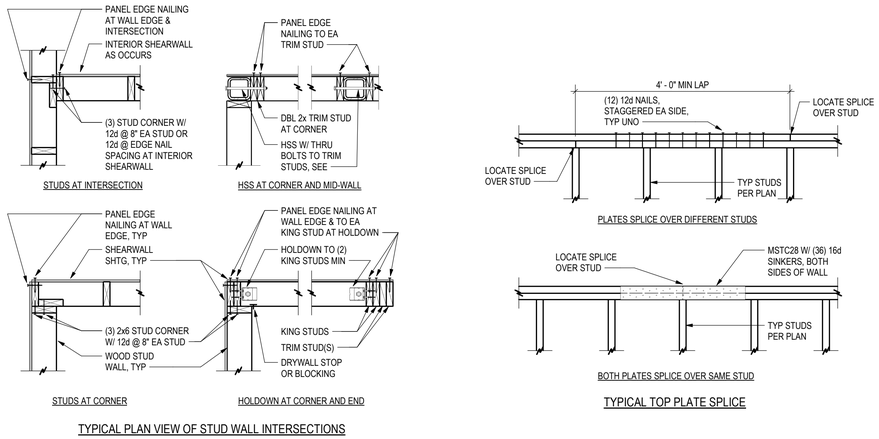
DWG NO.	S502



TYP TOP PLATE LAP

9 / S511 TOP PLATE LAP ISO

3/4" = 1'-0"



TYPICAL PLAN VIEW OF STUD WALL INTERSECTIONS

TYPICAL TOP PLATE SPLICE

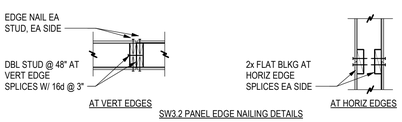
5 / S511 STUD WALL PLAN DETAILS

3/4" = 1'-0"

6 / S511 TOP PLATE SPLICE DETAIL

3/4" = 1'-0"

SHEAR WALL SCHEDULE									
MARK	SHEATHING	PANEL NAILING EDGE	PANEL NAILING FIELD	ANCHOR BOLTS	BOTTOM PL NAILING	BOTTOM PLATE CLIPS	TOP PLATE CLIPS	WIND CAPACITY (PLF)	SEISMIC CAPACITY (PLF)	COMMENTS
SW3	7/16" APA 24/0 ONE SIDE	8d @ 3"	8d @ 12"	5/8" Ø @ 24"	12d @ 3"	N/A	A35 @ 12"	583	417	
SW6	7/16" APA 24/0 ONE SIDE	8d @ 6"	8d @ 12"	1/2" Ø @ 48"	12d @ 6"	N/A	A35 @ 32"	310	221	



SW3.2 PANEL EDGE NAILING DETAILS

TYPICAL FOR ALL SHEAR WALL NAILING:
PER IBC / AWC SDPWS, SHEATHING NAILS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING. SHEATHING PANEL NAILING NOT CONFORMING TO THIS SECTION WILL NOT BE ACCEPTABLE AND WILL HAVE TO BE REINSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE NAIL GUNS USED FOR FASTENING ARE SET AT THE PROPER DEPTH AND/OR AIR PRESSURE TO ACHIEVE THE REQUIRED PENETRATION

GENERAL NOTES:
1. VALUES ARE BASED ON HEM FIR FRAMING, SEE GENERAL NOTES
2. SEE PLAN FOR HOLDOWN TYPE AND LOCATION
3. UNLESS NOTED OTHERWISE, NUMBER OF STUDS AT EACH END OF SHEAR WALLS IS CALLED OUT ON PLAN
4. NO PENETRATIONS GREATER THAN 12"x12" IN SHEAR WALLS, BLOCK AND NAIL ALL EDGES
5. NO MECHANICAL OR PLUMBING PENETRATIONS IN TOP AND BOTTOM PLATES.
6. ALL EDGES SHALL BE BLOCKED WITH 2x MEMBERS AT PLYWOOD/OSB SHEATHED WALLS
7. ALL WALLS HAVE (2) 2x TOP PLATES AND (2) 2x BOTTOM PLATE EQUAL TO WIDTH OF STUD SIZE, TYP UNO
8. MINIMUM WIDTH OF SHEATHING PANELS AT ENDS OF SHEAR WALLS SHALL BE 4'-0" TO ENSURE END STUDS ARE ENGAGED
9. SEE DETAILS FOR ATTACHMENT OF DIAPHRAGMS TO SHEARWALL PLATES, TYPICAL

0.229"x3" PLATE WASHER DETAIL

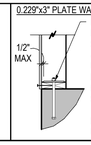


PLATE WASHER, DIAGONALLY SLOTTED HOLES ARE ACCEPTABLE UP TO 3/16 " LARGER THAN HOLE DIAMETER, SLOT LENGTH NOT TO EXCEED 1 3/4" BP OR BPS MAY BE USED

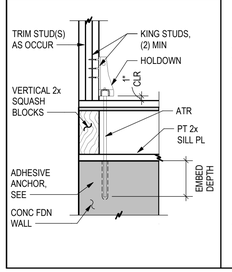
1 / S511 SHEAR WALL SCHEDULE

3/4" = 1'-0"

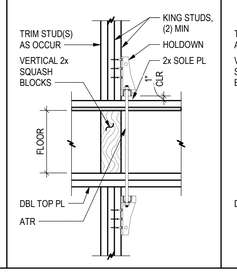
0 6" 1' 2' 3'

HOLD DOWN SCHEDULE								
MARK	TYPE	NUMBER OF STUDS	END LENGTH	FASTENING TO POST	THREADED ROD	EMBED LENGTH	CAPACITY, lbs	REMARKS
HD2	HDU4-SDS2.5	(2) 2x6, (2) 2x4	N/A	(10) 1/4"" x 2 1/2"" SDS SCREWS	5/8"" Ø	xxx	4565	

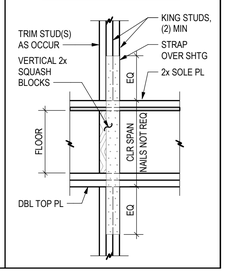
TYPE A
HARDWARE TO FRAMING MEMBERS AND FOUNDATION



TYPE B
HARDWARE TO FRAMING MEMBERS

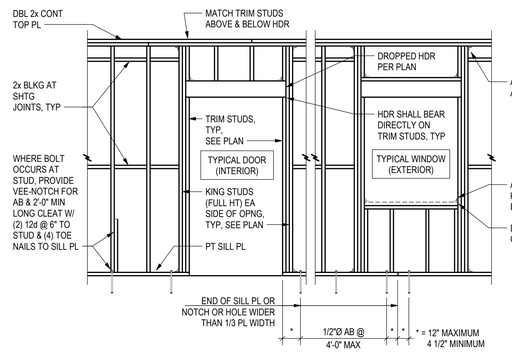


TYPE C
HARDWARE TO FRAMING MEMBERS

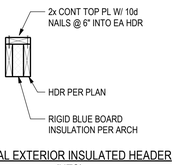


2 / S511 HOLDOWN SCHEDULE & DETAILS

3/4" = 1'-0"



TYPICAL SCHEMATIC STUD WALL ELEVATION

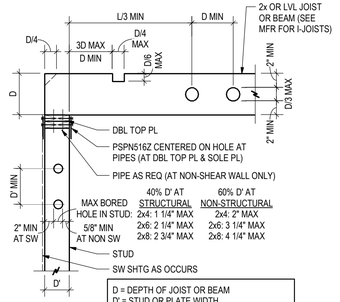


TYPICAL EXTERIOR INSULATED HEADER
(NTS)

8 / S511 STUD WALL ELEVATION

3/8" = 1'-0"

0 1' 2' 4' 6'



TYPICAL HOLES IN STUDS & JOISTS

3 / S511 STUD & JOIST HOLE DETAIL

3/4" = 1'-0"

WOOD FRAMING FASTENING SCHEDULE		
CONNECTION	FASTENING	LOCATION
1. JOIST/RAFTER/BLOCKING TO BEARING SUPPORT	(3) 8d COMMON [OR] (3) 12d SINKER	TOENAIL
2. BRIDGING/BLOCKING TO JOIST	(2) 8d COMMON [OR] (2) 12d SINKER	TOENAIL, EACH END
6. SOLE PLATE TO JOIST OR BLOCKING	16d COMMON @ 16" [OR] 12d SINKER @ 8"	FACE NAIL
7. STUD TO TOP AND SOLE PLATE	(2) 16d COMMON [OR] (3) 12d SINKER	END NAIL
8. STUD TO SOLE PLATE	(4) 8d COMMON [OR] (4) 12d SINKER	TOENAIL
9. DOUBLE STUDS AND BUILT-UP CORNER STUDS	16d COMMON @ 24" [OR] 12d SINKER @ 8"	FACE NAIL, EACH STUD
10. DOUBLE TOP PLATES	16d COMMON @ 16" [OR] 12d SINKER @ 12"	TYPICAL FACE NAIL
	(8) 16d COMMON [OR] (12) 12d SINKER	LAP SPLICE FACE NAIL
12. RIM JOIST AND JOIST BLOCKING TO TOP PLATE	8d COMMON @ 6" [OR] 12d SINKER @ 6"	TOENAIL
13. TOP PLATE INTERSECTION	(2) 16d COMMON [OR] (3) 12d SINKER	FACE NAIL
14. BUILT UP HEADER	16d COMMON @ 16" [OR] 12d SINKER @ 12"	FACE NAIL ALONG EACH EDGE, EACH 2x
16. HEADER TO KING STUD	(4) 8d COMMON* [OR] (4) 12d SINKER	TOENAIL

GENERAL NOTES:
1. REFER TO IBC TABLE 2304.9.1 FOR MORE INFORMATION.
2. ALL FASTENINGS ARE TYPICAL UNLESS NOTED OTHERWISE.

4 / S511 FASTENING SCHEDULE

NO SCALE

No.	Description	Date
1	PERMIT	5/8/2023

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PROJECT NAME
6306/6270 HWY 9
BLUE RIVER, COLORADO

DRAWING TITLE
DETAILS & SCHEDULES

SEAL & SIGNATURE
STATE OF COLORADO
STEPHEN SHAUN SALISBURY
404904
LICENSED ARCHITECT
06/15/2023

DATE	3/28/2023
PROJ NO.	2304
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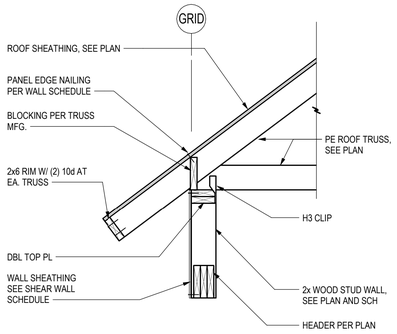
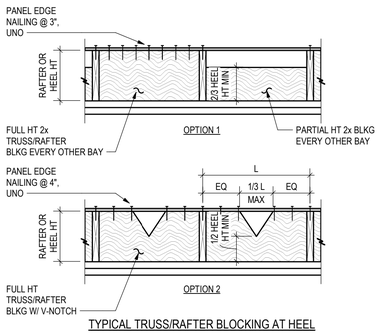
DWG NO.	S511

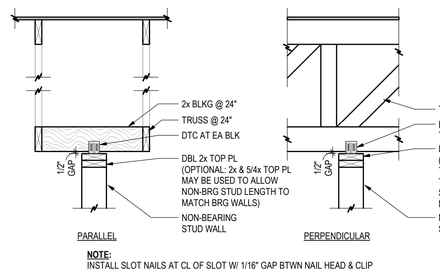


10 S512 DETAIL
3/4" = 1'-0"



TYPICAL TRUSS/RAFTER BLOCKING AT HEEL

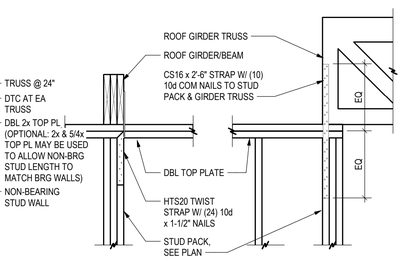
6 S512 ROOF BLOCKING DETAIL
3/4" = 1'-0"



NOTE:
INSTALL SLOT NAILS AT CL OF SLOT W/ 1/16" GAP BTWN NAIL HEAD & CLIP

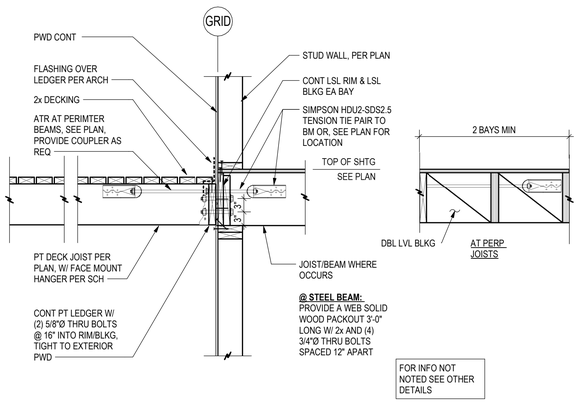
TYPICAL NON-STRUCTURAL PARTITION TO ROOF FRAMING

7 S512 PARTITION DETAIL
3/4" = 1'-0"



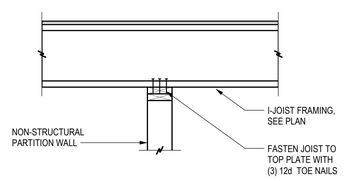
TYPICAL WOOD ROOF GIRDER/BEAM TIE-DOWN

8 S512 GIRDER TIE-DOWN DETAIL
3/4" = 1'-0"



9 S512 DECK LEDGER
3/4" = 1'-0"

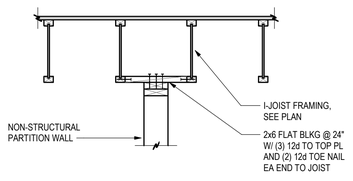
No.	Description	Date
1	PERMIT	5/8/2023



TYPICAL FLOOR OVER NON-STRUCTURAL PARTITION WALL
JOIST PERPENDICULAR TO WALL

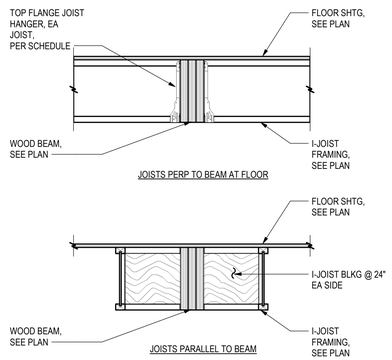
1 S512 PARTITION DETAIL
3/4" = 1'-0"

0 6" 1' 2' 3'



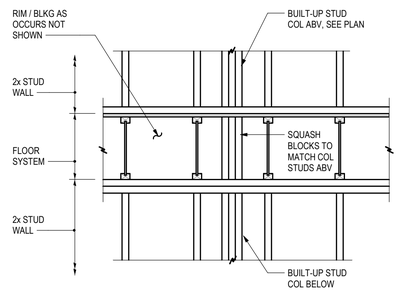
TYPICAL FLOOR OVER NON-STRUCTURAL PARTITION WALL
JOIST PARALLEL TO WALL

2 S512 PARTITION DETAIL
3/4" = 1'-0"



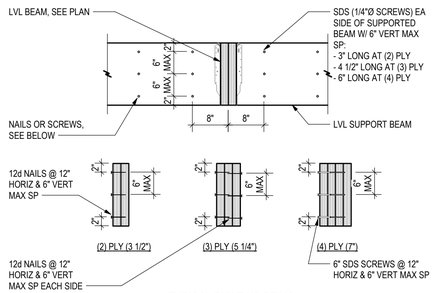
TYPICAL FLUSH WOOD BEAM

3 S512 FLUSH BEAM DETAIL
3/4" = 1'-0"



TYPICAL SQUASH BLOCKING

4 S512 SQUASH BLOCK ELEVATION
3/4" = 1'-0"



TYPICAL BUILT UP BEAM

5 S512 BUILT UP BEAM DETAIL
3/4" = 1'-0"

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PROJECT NAME
6306/6270 HWY 9
BLUE RIVER, COLORADO

DRAWING TITLE
TYPICAL WOOD DETAILS

SEAL & SIGNATURE
STATE OF COLORADO · STEPHEN SHAUN SALISBURY · 40400 · LICENSED ARCHITECT
05/15/2023

DATE	3/28/2023
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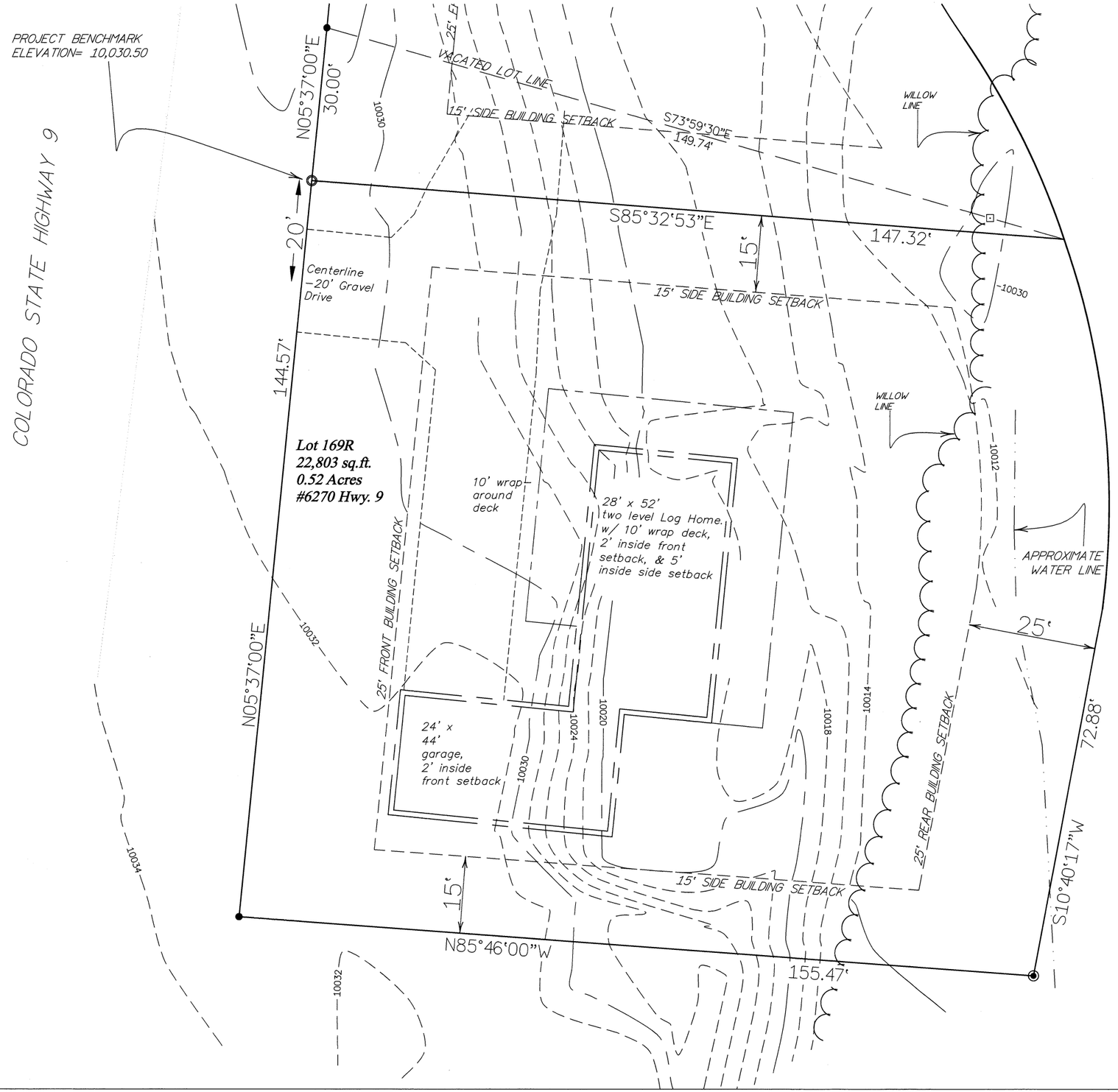
CHECKED BY	SS
DWG NO.	S512



Topographic Survey, 1' Contours
Site Plan of Lot 169R,
Mountain View Sub.
Lot line adjust Lots 169 and 170,
Rec.No. 1102615, 0.52 Acres,
Sec.19 T7S, R77W, 6th P.M.
County of Summit, State of Colorado
Conveyance at Rec.No. 1271743

LEGEND

- FOUND REBAR & PLASTIC CAP (PLS 19588)
- FOUND REBAR & PLASTIC CAP (PLS 38266)
- FOUND #4 REBAR
- WITNESS CORNER FOUND REBAR & ALUMINUM CAP (PLS 16406)
- GAS LINE MARKER
- UTILITY PEDESTAL
- UTILITY POLE
- O.H. OVER HEAD UTILITY
- SIGN
- GREEN UTILITY MARKER

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD	BEARING	DELTA
C2	44.23	155.26	44.08	N26°31'53"W	16°19'24"
C3	43.96	125.33	43.74	S24°38'37"E	20°05'55"
C4	88.91	176.12	87.96	S00°07'58"E	28°55'23"
C5	73.36	156.54	72.69	N05°56'26"W	26°51'02"
C6	44.21	278.00	44.16	N78°26'45"W	9°06'39"

Land Surveyor's Certificate:

I, Thomas Arthur Cary, a duly licensed professional land surveyor in the State of Colorado, does hereby certify that this Site Plan Lot 169R Mountain View Sub Lot Line Adjust Lots 169 and 170 truly and correctly represents the results of a survey made by me or under my direction, and that said plat complies with the requirements of Title 38, Article 51, Colorado Revised Statutes, 1973, and that the monuments required by said statute and by the Grand County Subdivision Regulations have been placed on the ground

Dated this 8 day of February, 2023 (year)

Colorado registration number: 25934
(expires Oct. 2023)

COLORADO REGISTERED THOMAS A. CARY 25934 PROFESSIONAL LAND SURVEYOR

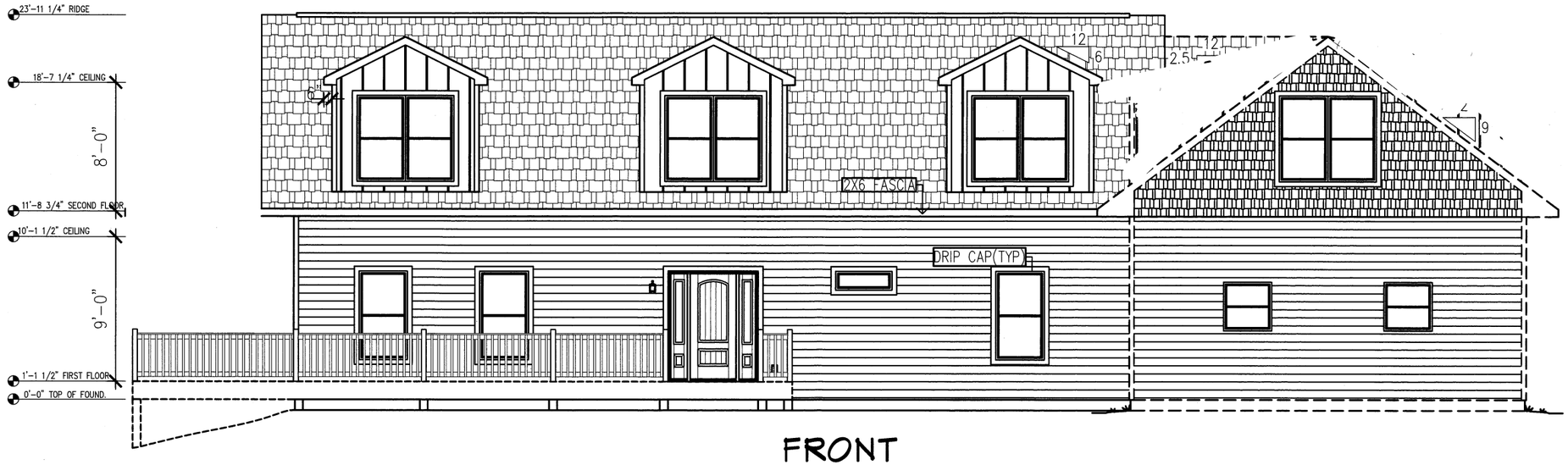
T.A. Cary PLS 25934

20' 10' 0 20'

SCALE: 1" = 10'

On PDF drawing, scale may be distorted
Scaled original drawing = 24" x 36"
any other printed size will not match

Prepared for : *Skyridge Properties* *509 Scott ave. Ste 2B* *Woodland Park, CO. 80863*	**Cary Enterprise-D** Thomas A. Cary 305 GCR 1933 PO Box 122 Kremmling, Colorado 80459 1.970.724.2912 / 970.509.0185	Field Work: 8 February 2023 Drawing: 16 February 2023 Rev: 3 May 2023 MSCAD 2022 Sheet 1 of 1 PLS 25934 Scale 1" = 10' Loosehorse56@gmail.com



FRONT

REAR

GENERAL NOTES:

SEE SHEET A1.1

NORTHSTAR SYSTEMBUILT

203 Industrial Drive
Redwood Falls, MN
Ph: (507) 644-6600
Fx: (507) 644-6601

FRONT & REAR ELEVATIONS

NS2956	DEALER: NORTHSTAR HOMES INC.			PAGE: A3.1
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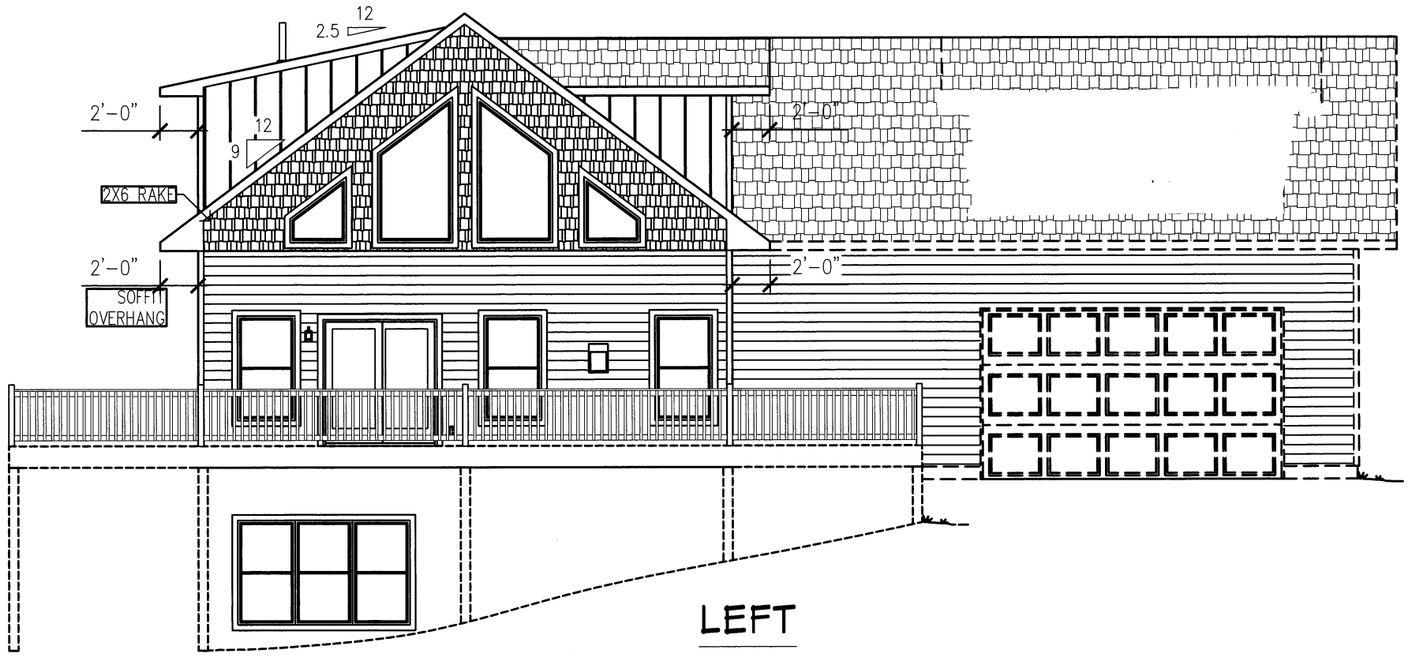
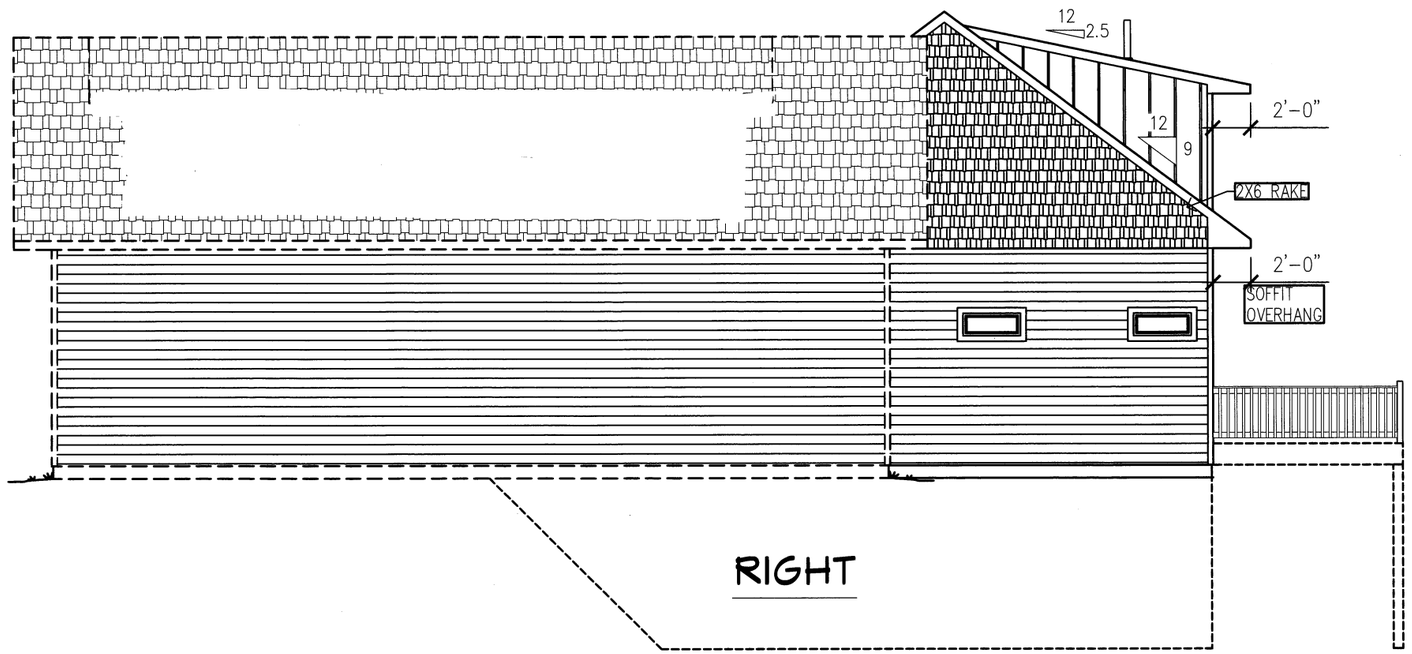
DATE: 4/20/23	REV:X BY:X	DATE: X	SCALE: 1/8"=1'-0"	



LEFT



RIGHT

GENERAL NOTES:

SEE SHEET A1.1

NORTHSTAR SYSTEMBUILT

203 Industrial Drive
Redwood Falls, MN
Ph: (507) 644-6600
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LEFT & RIGHT ELEVATIONS

NS2956	DEALER: NORTHSTAR HOMES INC.			PAGE: A3 144
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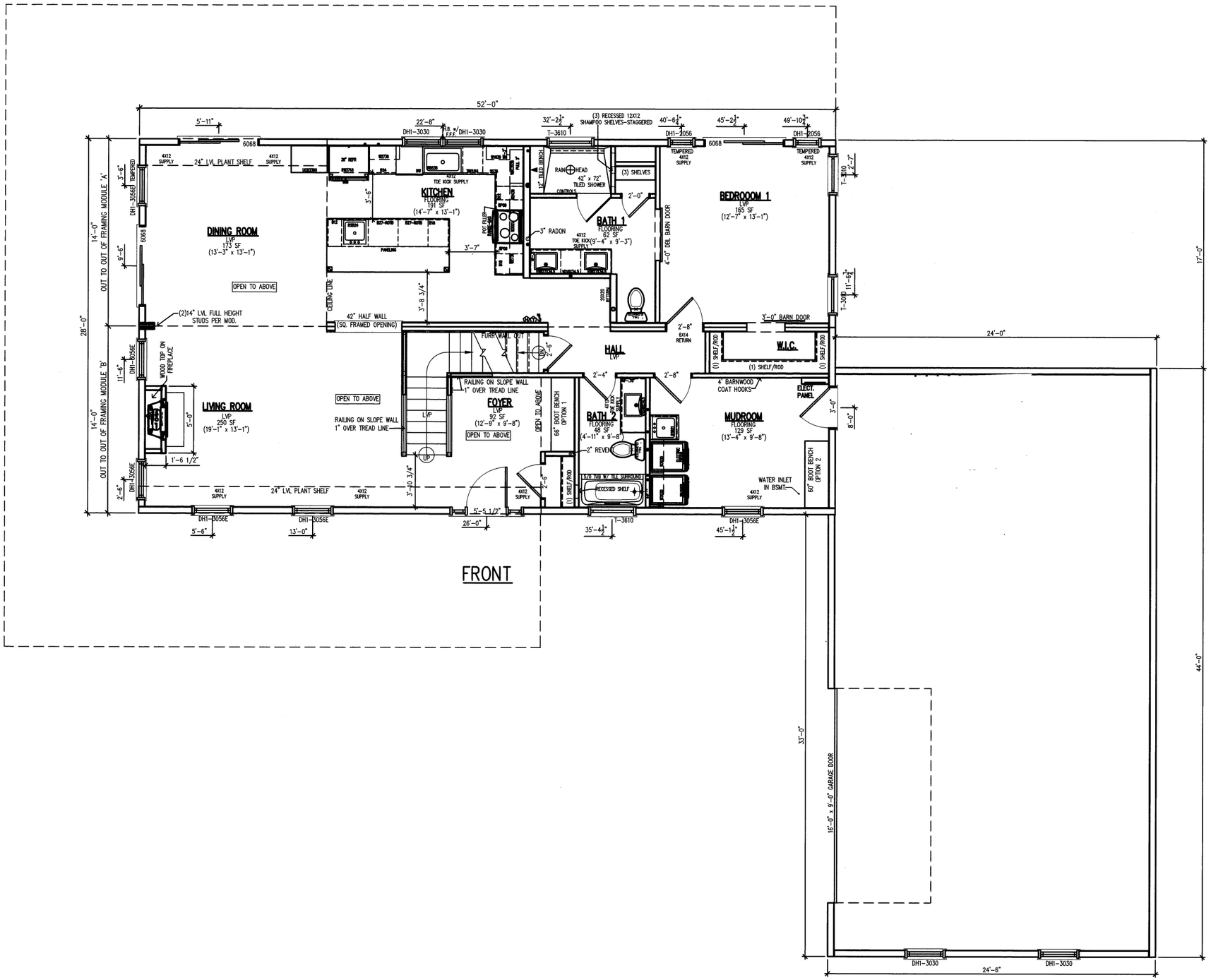


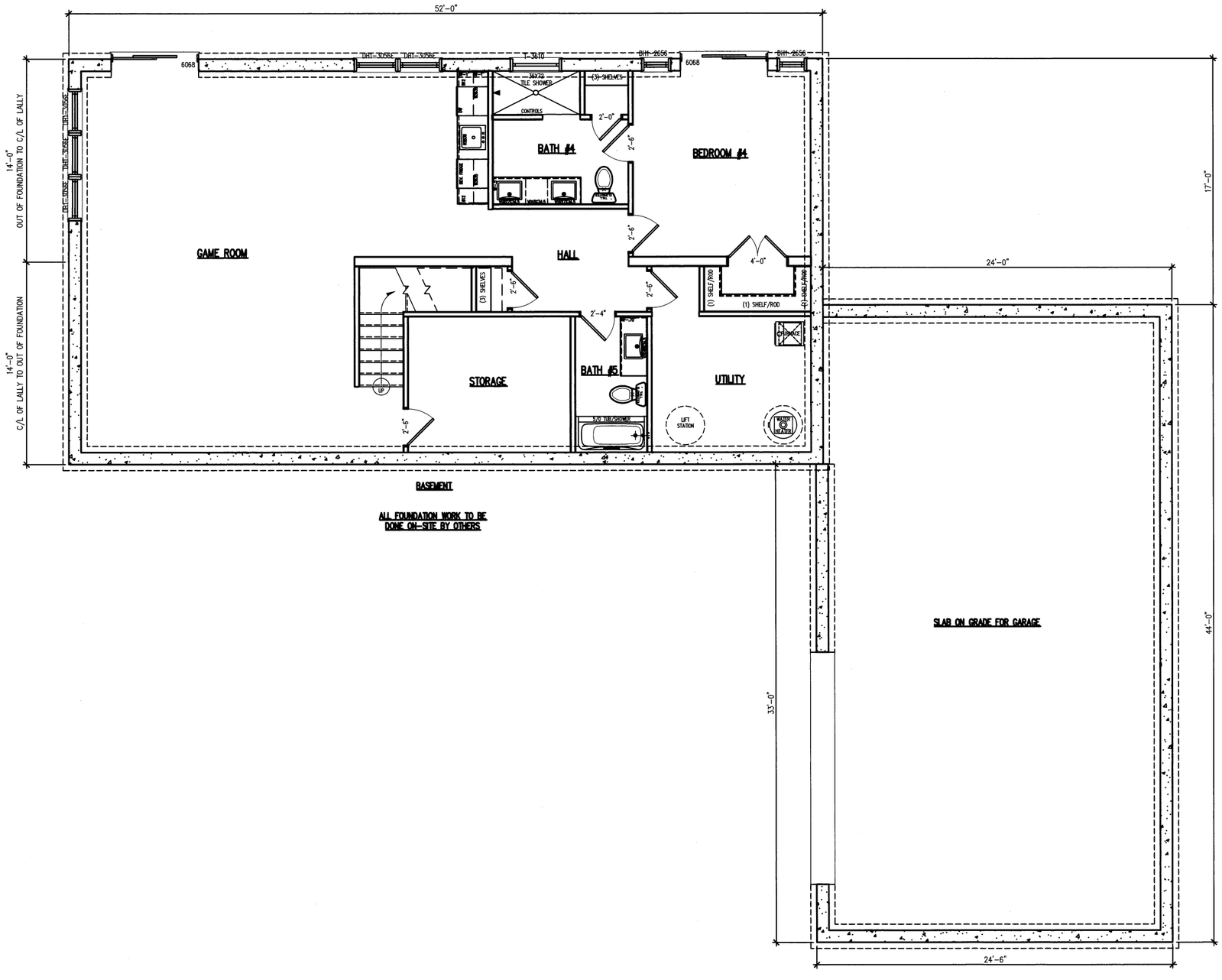
GENERAL NOTES:

SEE SHEET A2.1

NORTHSTAR SYSTEMBUILT
203 Industrial Drive
Redwood Falls, MN
Ph: (507) 644-6600
Fx: (507) 644-6601

MAIN LEVEL FLOOR PLAN

NS2956	DEALER: NORTHSTAR HOMES INC.			PAGE: A1.1
DRAWN BY: MW	CUSTOMER: LAING 2			
DATE: 4/20/23	REV: X BY: X	DATE: X	SCALE:1/4"=1'-0"	



BASEMENT

ALL FOUNDATION WORK TO BE DONE ON-SITE BY OTHERS

GENERAL NOTES:

SEE SHEET A1.1

NORTHSTAR SYSTEMBUILT
203 Industrial Drive
Redwood Falls, MN
Ph: (507) 644-6600
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BASEMENT PLAN (NOT FOR CONSTRUCTION)

NS2956	DEALER: NORTHSTAR HOMES INC.			PAGE: A4
DRAWN BY:MW	CUSTOMER: LAING 2			146
DATE:4/20/23	REV: X BY:X	DATE: X	SCALE: 1/8"=1'-0"	

TO: Michelle Eddy, CMC/CPM - Town Manager/Clerk

FROM: Kyle Parag, Plan Reviewer - CAA

DATE: June 26th 2023

RE: Planning/Zoning/Architectural Guidelines review – 6270 Hwy 9

Below please find staff's analysis that outlines the review with the Town's Zoning regulations and adopted Architectural Design Guidelines for the structure.

Staff Recommendation:

Staff recommendation is to approve the planning review. This project was previously approved with similar visual elements. The revisions include an enlarged and turned garage, and color changes.

Zoning Regulation analysis –

Proposal:	A new single-family residence constructed with off-site methods and an attached garage. Revisions include a change from a 510 sqft garage to 985 sqft.
Zoning district:	R1
Lot Size:	Unknown 80,000 sq. ft. Required– Existing Non-Conforming
Lot Width:	~ 210' 100 ft. Required - Complies
Setbacks:	Proposed principal residence is in the setbacks
Height:	Unchanged from previous submittal, about 24' 6"
Garage Stds:	The proposed garage is 985, which is under the maximum of 1200 sqft permitted for this property.

Parking Stds: Parking requirements will be met through the proposed garage parking and exterior parking space

Architectural Design Guideline analysis -

Please note the following key to the interpretation of the analysis table:

Y	Element is in substantial compliance with the design guidelines
N	Does not comply with the design guidelines
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
DEVELOPMENT STANDARD		
VI. B. Building Envelope	The proposed principal residence is properly sited within required setbacks. The submitted site plan depicts compliance.	Y
VI. C. Building Siting	Structure is proposed in context with natural drainage patterns, contours, and landforms.	Y
VI. D. Grading and Drainage	Final grading is proposed to avoid unnaturally broad, flat surfaces.	Y
VI. E. Driveways	Proposed road base driveway. **Snow storage area calculations are not provided, and snow storage is not provided.**	
VI. F. Parking / Garages	The proposed attached two vehicle garage and the additional exterior parking space complies with minimum standards.	y
VI. G. Exterior Equipment and Satellite Dishes	No exterior equipment is indicated	Y

VI. H. Easements and Utilities	Easements are indicated	Y
VI. I. Recreation Facilities	Non indicated	Y
VI. J. Signage	Address marker/signage is in compliance with visual and practical standards	Y
VI. K. Pathways /Walkways	No walking paths are proposed or indicated	Y
VI. L. Wetlands	No wetlands are identified on the plan. A drainage easement is indicate on the north side of the property	N/A
VI. M. Wildfire Regulations	Many of the required regulations are operational requirements post-construction. Firewise construction details are proposed and compliant	Y
ARCHITECURAL GUIDLINES		
VI. B. Building Forms	Proposed foundation walls tier with the property, **exposed foundation walls are proposed and are not permitted.**	
VII. C. Setbacks	The proposed structures sit within the required setbacks per the submitted site plan.	Y
VII. D. Building Height	Building height is indicated at 24’ 6”	Y
VII. E. Roofs	Roof design is gabled and relatively simple. Roof material is black asphalt shingles, **color changed**	Y
VII. F. Exterior Wall Materials	Exterior walls are wood appearance horizontal siding In a **grey color, Color Changed**	Y
VII. G. Exterior Trim	Trim colors are black, **color changed**	
VII. H. Windows and Doors	Windows, doors, and garage doors are proportional to the structure and appear in general compliance.	Y

VII. I. Balconies and Railings	Railings are substantial in appearance and consist of vertical and horizontal wood.	Y
VII. J. Chimneys and Roof Vents	Fireplace is drawn on the floor plans, but not indicated on the exterior elevations. Expectation of a side vent fireplace	
VII. K. Exterior Colors	Proposed colors indicated on the color board are in general conformance.	Y
VII. L. Solid Waste Collection and Service Areas	Trash and storage areas are not indicated.	Y
SITE ELEMENTS		
VIII. A. Retaining Walls, Landscape Walls, Fences, and Screening	Retaining walls are not indicated.	Y
VIII. B. Terraces, Patios, Walkways and Decks	Deck is in the building envelope and complements the site and structure.	Y
VIII. C. Driveway Paving Surfaces	Driveway and parking area material is roadbase gravel	Y
VIII. D. Exterior Landscape Lighting	Proposed exterior lighting is in general conformance. Specific information could not be located.	Y