



BLUE RIVER PLANNING AND ZONING COMMISSION MEETING

Tuesday, June 2, 2026

5:30 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/board-of-trustees>

Please note that seating at Town Hall is limited.

Call to Order, Roll Call

Approval of Minutes

- A. Minutes – May 5, 2026**

Project Approval

- A. 103 Blue Rock Drive – Variance Review**
- B. 0066 Conifer – New Construction**

Work Session

- A. Transitional District Ordinance Review for Recommendation**
- B. Subdivision Moratorium Repeal Ordinance Review for Recommendation**
- C. Setbacks and Wetlands Terminology LUC Discussion**
- D. Garage and Large Shed LUC Discussion**

Adjourn



BLUE RIVER PLANNING AND ZONING COMMISSION MEETING

Tuesday, May 5, 2026

5:30 PM

0110 Whispering Pines Circle, Blue River, CO

Minutes

Call to Order, Roll Call

Chairman Johnson called the meeting to order at 5:30 PM.

PRESENT:

Commissioner Carlsted
Commissioner Cleary
Commissioner Johnson
Commissioner O'Brien
Commissioner Manin

ABSENT:

Commissioner Beck

Also present:

Town Manager Chad Hull

Approval of Minutes

A. Minutes – April 7, 2026

Commissioner Carlsted moved and Commissioner Manin provided a second to approve the minutes of the April 2026 Planning & Zoning Commission Meeting. All ayes – motion passed.

Project Approval

B. 0201 Creek Side Dr – Variance Request

Commissioner Manin recused himself from this review process due to a prior professional relationship with the architect.

Town Manager Chad Hull submitted a written variance review, indicating the project's adherence to the variance application requirements stated in the LUC. The Town Manager reminded the Commissioners that all six hardship criteria must be met to grant a variance regarding Land Use Code Section 16-7-50(a):

- (1) The existence of extraordinary physical conditions or circumstances, such as the property's size, shape, location, topography, floodplain, or steep slope imposes an unreasonable hardship in the development of the property; and
- (2) The hardship deprives the owner of privileges associated with development enjoyed by most other properties within the neighborhood; and
- (3) Compliance with the standard or requirement would impose an extraordinary and wholly unreasonable cost or expense upon the owner which cost or expense essentially makes the property undevelopable and unmarketable given economic conditions; and
- (4) The need for a variance is not the result of the owner's or the owner's predecessor's decisions, actions, or inactions; and
- (5) The granting of the variance will not be materially detrimental to the public welfare or injurious to other properties in the neighborhood which are located within the Town; and
- (6) The variance granted will be the least modification possible to permit the owner's reasonable use of the owner's property.

The Town Manager also noted that the variance request may be reviewed independently of the building plan review and reminded the Commissioners of the primary architectural concerns noted at April's Planning & Zoning meeting.

The Commissioners noted the fact that a nonconforming building cannot become more nonconforming according to the LUC, particularly in reference to LUC 16-4-40(b) which prohibits a nonconforming building from being enlarged or extended. Other concerns revolved around the driveway expansion, as it is existing nonconforming, as well as parking in relation to the existing setback and that the claimed the pedestrian easement appears to be in an adjacent lot, which would not be viable as a hardship argument. The road in the front of the property was recognized as a challenge to expansion, but it was noted that this is a similar constraint encountered by other neighbors. The Commissioners additionally discussed a lack of incorporation between the existing structure and the proposed addition and the planned moving of a well on the property.

Town Manager Hull read off each hardship criteria, and the Commissioners provided their input. The Commissioners noted that it was a challenge to prove criteria one, as the property is presently developed and usable in its current state. Multiple Commissioners likewise stated a belief that criteria two is not met, as there does not appear to be substantive unique challenges with the property and there are reasonable avenues to growth beyond the requested variance. The third criteria was examined next, and the Commissioners asserted that the property has been developed and is marketable and that it would not cost the applicant additional money to create a smaller addition that would not require a variance. On criteria four, the Commissioners acknowledged that an argument could be made, but that it may be limited to an argument related to the existing building rather than the proposed addition. The Commissioners generally agreed that criteria five could be met and that the proposed addition is not injurious to the wider neighborhood. The sixth criteria was denied by the

Commissioners, as there are options to make an expansion conforming and the present request would not constitute the least modification possible.

The Commissioners expressed that the majority of criteria are not met in this application and that there are challenges with this addition as some components could be added in a conforming manner if redesigned.

Commissioner Cleary moved and Commissioner O'Brien provided a second to deny the variance request as presented. All Ayes – Motion Passed with one recusal.

Other Business

- J.** An open business session was requested by Commissioners Cleary and Manin to discuss several topics:
1. Roof slope Land Use Code language
 2. The use of legal counsel during large agendas or variances
 3. Request for additional review by the Town building official prior to Planning & Zoning meetings in order to filter incomplete projects and/or suggest work sessions
 4. Discussion of wetlands at a later date
 5. Consider the institution of a policy to allow the Commission to revisit decisions within an appropriate window
 6. Work session in June on shed language in the Land Use Code

Adjourn

Commissioner O'Brien moved to adjourn the meeting and Commissioner Cleary provided a second. All Ayes - Motion passed.

Chairman Johnson adjourned the meeting at 6:55PM.

TO: Town Manager/Clerk
FROM: Kyle Parag, Plan Reviewer - CAA
DATE: April 21, 2026 – **NOTES IN RED FROM TOWN MANAGER (May 27, 2026)**
RE: Planning/Zoning/Architectural Guidelines review – 103 Blue Rock

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

Zoning Regulation analysis –

Proposal: A new detached garage of 671 sqft with finished space above for a total of 1474 Sqft. living space is indicated on the second level. Unclear if living areas are a permitted use in a detached structure.

Zoning district: R-1

Lot Size: ~ .47 acres
80,000 sq. ft. Required– Existing Non-Conforming

Lot Width: ~ 110'
100 ft. Required - Complies

Setbacks: Proposed garage structure does not comply with front setback requirements to measure from the existing road location. Measured from easement.
Revised plans submitted on 5/27 claiming compliance with setback requirements.

Height: Complies with maximum height restrictions but might not comply with subordinate size requirement to the main house.
Revised plans submitted on 5/27 claiming compliance with subordinate size requirements.

Garage Stds:

The proposed garage is ~671 sq. ft. and complies with the standards for structures less than 5,000 sq. ft. in habitable size.

Parking is met.

Parking Stds: **Revised plans submitted on 5/27 claiming conformance with parking standards.**

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
PC	Subject to Planning Commission Specific approval
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
DEVELOPMENT STANDARD		
Article 3: Easements	Easements are indicated	Y
Article 4: Buildable Area/setbacks	Front setback is measured incorrectly, garage sits in the front setback by about 4' Revised plans display garage within buildable envelope.	N
Article 5 Building Design Standards		
Article 5-20 Building Height	Height is indicated at 23'10" Does not appear to comply with 16B-7-30 (d) Revised plans indicate subordinate height of garage relative to primary structure.	N
Article 5-60 Foundation	Foundation is indicated as exposed concrete	N
Article 5-70 Roofs	Main roof design is a gable roof with a slope of 5:12	Y

Article 5-80 Garages	Garage door has a contemporary design. Project does not comply with 16B-5-80 for the garage being set back from the front walls of the main structure.	N
Article 5-90 Window and doors	Shows general conformance	Y
Article 5-100 Balconies and railings	None indicated	Y
Article 5-110 Chimney and Roof Penetrations	None indicated.	Y
Article 6 Building Materials and Colors		
Article 6-20 Materials	No color board was provided, assumed to match existing home as required, image of home provided with shake siding look.	PC
Article 6-30 Colors	Colors are not provided.	PC
Article 7 Accessory Improvements		
Article 7-(20-40, 110) Berms, Garages, sheds and Gazebos	None indicated.	Y
Article 7-50 Driveways	Width indicated at nearly 40'. Slopes are minimal. Driveway to be relocated Revised plans redesigned the driveway to claim compliance with Land Use Code.	N
Article 7-60 Parking Areas	Parking areas not located, assumed interior new garage and a third spot could not be located outside of the setbacks Revised plans indicate presence of parking. Two parking spaces in the proposed garage – possible question on third parking spot on driveway.	N

Article 7-100 Decks	Not indicated	Y
Article 7-120 Hot Tubs	None indicated	Y
Article 7-140 Fences	None indicate	Y
Article 7-150 Retaining walls	None indicated	Y
Article 8 Signs		
Article 8 Signs	None indicated	Y
Article 9 Lighting		
Article 9 Lighting	Not indicated	N
Article 13 Environmental Regulations		
Article 13-20 Wetlands	None indicated	Y

TOWN OF BLUE RIVER

Variance Application — Narrative Responses

Applicant: Greg Giske and Tracy Schwartz Property Address: 103 Blue Rock Dr

Date: 5-5-26

Instructions: Complete all sections below. You must satisfactorily address all six criteria (Crit. 1–6) under Section 16-7-50 for the variance to be approved. Be as specific as possible — include measurements, costs, and references to your property's unique physical conditions.

Req. 1. Specific Provision or Standard Requiring a Variance

Identify the specific code provision, standard, or requirement for which you are requesting a variance.

We are requesting a variance from Section 16B-5-80(a) of the Town of Blue River Land Use Code. That section requires that garage walls be set back behind the front primary walls of the home, that garages be subordinate to the residence, and that side-loading be used where possible. We are asking for permission to build a garage in front of the primary walls of our home, as that is the only location on our property where a garage can reasonably be placed.

Req. 2. Description of the Variance Requested

Describe the extent, degree, size, or length of the variation you are requesting from the standard.

We are asking to build a garage that sits entirely in front of our home's main facade. The garage will meet all other Town setback requirements — side, rear, and road — without any additional variances. This is the only provision we are seeking relief from.

Crit. 1. Extraordinary Physical Conditions or Circumstances (Hardship)

Describe extraordinary physical conditions or circumstances that impose an unreasonable hardship on developing the property as required.

Our home was built in 1972 and sits at the rear of our lot — well before the current garage placement rules existed. Because of where the house sits, there simply isn't enough usable space behind or alongside the front walls of the home to fit a garage while still meeting all the required setbacks. This isn't something we created — it's the way the property was developed over 50 years ago. Without a variance, building any garage on this property would be essentially impossible.

Crit. 2. Deprivation of Privileges Enjoyed by Similar Properties

Explain how the hardship deprives you of privileges enjoyed by most other properties in the neighborhood.

Many homes in our neighborhood have garages — either built originally or added over time. Those properties happen to have layouts that work with the current code. Ours doesn't, through no fault of our own. The house was placed at the back of the lot by the original builder, and that decision is what puts us in this position today. It doesn't seem fair that we should be the only ones unable to build a garage simply because of how our home was originally sited.

Crit. 3. Extraordinary and Unreasonable Cost of Compliance

Describe how complying with the standard would impose an extraordinary and wholly unreasonable cost or expense.

The honest answer is that strict compliance isn't really possible on our property — it's not just expensive, it's not feasible. The rear of the lot is taken up by the house itself. The south side, which is the only other option, has four serious problems. First, our well head is tucked into a tight space on the south side between the kitchen and an existing addition — a garage there would block access to it entirely. Second, our kitchen windows face south, and a garage on that side would cut off the natural light that comes into the kitchen. Third, the existing addition on the south side already creates a complicated roofline situation, and adding a garage there would make it worse. Fourth, to even connect a garage to the house on that side, the entire roof pitch above the kitchen would need to be changed to make it structurally sound and weathertight. That's not a minor inconvenience — it's a major construction project just to avoid building in front of the house. In short, there is no realistic compliant option that doesn't cause significant damage to the home we already have.

Crit. 4. Hardship Not Self-Created

Explain why the need for a variance is NOT the result of your own decisions, actions, or inactions.

We did not create this situation. The house was built in 1972 by the original owner, long before the current land use rules were in place. The decision to place the home at the rear of the lot was made by someone else, more than 50 years ago. We purchased the property as it was and have not done anything to make the situation worse. The need for this variance comes entirely from the history of the property, not from any choices we have made.

Crit. 5. No Material Detriment to Public Welfare or Neighboring Properties

Explain why granting this variance will not be materially detrimental to the public welfare or injurious to other properties in the neighborhood.

We don't believe this garage will negatively affect our neighbors or the neighborhood. It will be built within all required setbacks, so it won't encroach on anyone else's property or the road. We plan to design it to fit with the look of our home and the surrounding area. It won't block any traffic sight lines, create drainage problems, or reduce the value of nearby properties. A garage is a pretty standard thing to have, and we think it will fit in just fine.

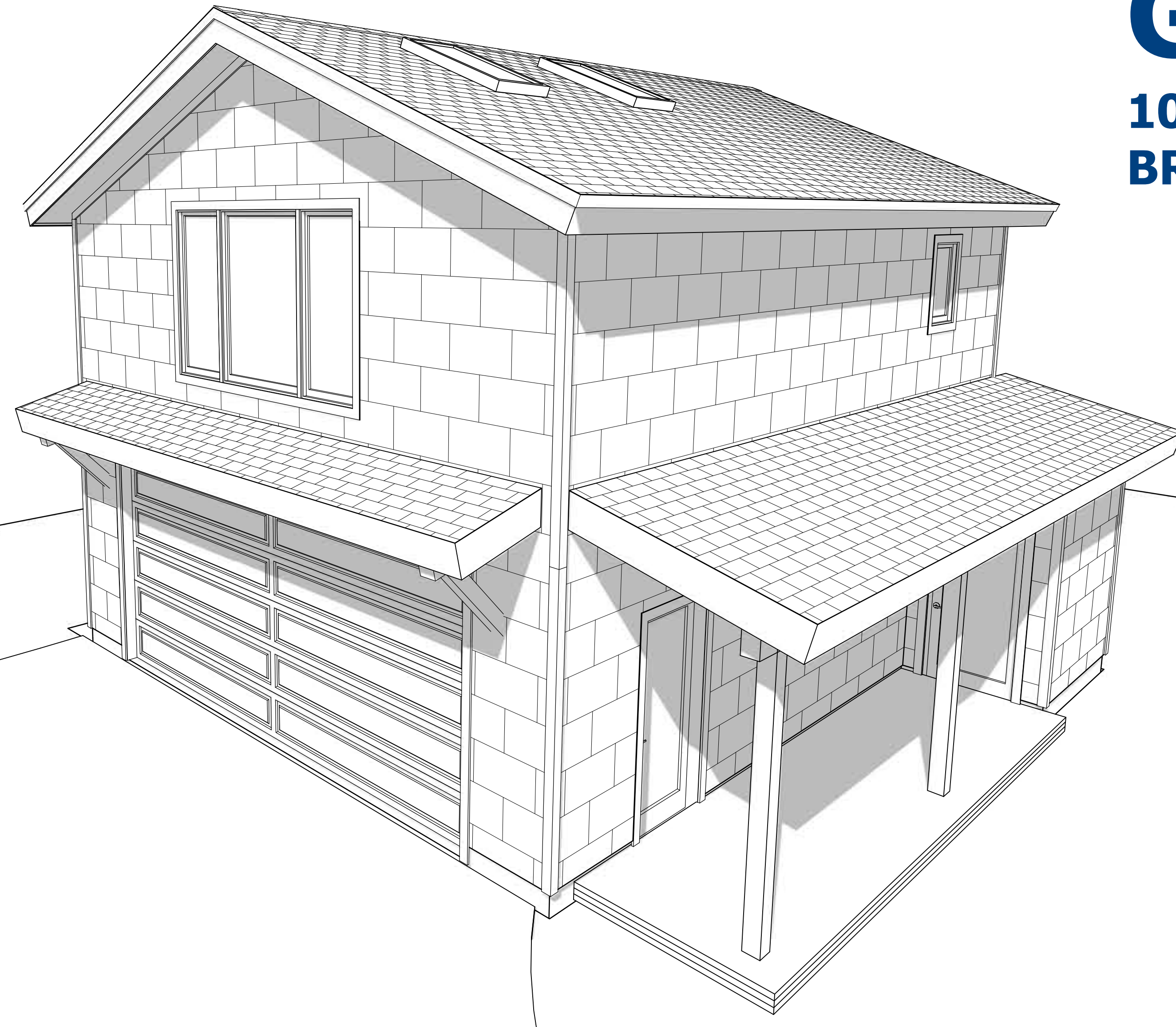
Crit. 6. Least Modification Necessary

Describe why the variance you are requesting is the least modification possible to permit your reasonable use of the property.

We looked hard at every other option before landing on this one. The south side of the house was the most obvious alternative, but we ruled it out for four real reasons: it would block access to our well head, it would cut off the natural light to our kitchen, it would create a messy and complicated roofline where the garage meets the existing addition, and it would require us to completely rebuild the kitchen roof just to tie the two structures together properly. None of those are small problems. With the south side ruled out and the rear of the lot occupied by the house, there's simply nowhere else to put a garage. We're not asking for more than we need — we're asking for the only thing that actually works on this property.

GISKE GARAGE

103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
9K ENGINEERING

SQUARE FOOTAGE

LOWER LEVEL - 109 SF
2ND LEVEL - 636 SF
GARAGE - 615 SF

TOTAL LIVABLE - 745 SF
TOTAL WITH GARAGE - 1360 SF

PROJECT TEAM

OWNER:
GREG GISKE & TRACY SCHWARTZ
103 BLUE ROCK DR, BRECKENRIDGE, CO 80424

CONTRACTOR
Thelon River Builders, Inc
PO BOX 1392
Breckenridge, CO 80424
970-333-0603

ARCHITECTURAL DESIGN AND ENGINEERING
9K ENGINEERING
JAMES MASSEY
PO BOX 4761, FRISCO, CO 80443
jpmassey@gmail.com

PROJECT SCHEDULE

EXPECTED START DATE: JULY 1, 2026
EXPECTED COMPLETION DATE: MAY 1, 2027

PROJECT OVERVIEW

TYPE OF CONSTRUCTION: WOOD FRAMING
FOUNDATION: CONCRETE STEM WALL WITH SLAB ON GRADE
SIDING: VARIOUS NATURAL AND SYNTHETIC MATERIALS
ROOF: ASPHALT ARCHITECTURAL SHINGLES

GOVERNING CODES

2012 IECC (ZONE 1)
2018 IRC, IFC
2020 NEC

RESTRICTIONS

MAXIMUM HEIGHT
35 FT, PER THE 'BULK PLANE' METHOD

SETBACKS
FRONT - 25 FT
SIDE - 15 FT
BACK - 25 FT

DESIGN CRITERIA

ROOF SNOW LOAD - 100 PSF, NO LOAD DURATION FACTORS.
DECK SNOW LOAD - 125 PSF, NO LOAD DURATIONS FACTORS.
INTERIOR SLEEPING ROOMS - 40 PSF
WIND SPEED - 115 MPH
SEISMIC CATEGORY - B
FROST DEPTH - 42 INCHES (MIN)

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DATE:
5/26/2026

SHEET:
G-1
PROJECT OVERVIEW

SCALE:

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE SPECIFIED BUILDING CODES. IN ANY CONFLICT BETWEEN THIS PLAN AND THE CODES, THE CODES SHALL TAKE PRECEDENCE. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR OF ANY DISCREPANCIES SUCH THAT THE PLAN CAN BE MODIFIED TO BRING IT INTO COMPLIANCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF ALL NEW CONSTRUCTION ON THE SITE. ALL COMPONENTS AND MATERIALS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS.
- ANY CHANGES TO THE PLAN SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.
- NEW IECC CODE COMPLIANCE ONLY APPLIES TO HOUSE ADDITIONS OR MODIFICATIONS THAT REPLACE THE INSULATION.
- ELECTRICAL, PLUMBING, AND HEATING DETAILED DESIGNS ARE NOT INCLUDED IN THIS PLAN, AND WILL BE DESIGNED AND BUILT ON SITE.
- DIMENSIONS:
 - ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER DRAWING SCALE.
 - ALL DIMENSIONS ARE TO THE FACE OF STUD AND FACE OF CONCRETE.
 - CEILING HEIGHT DIMENSIONS ARE FROM BOTTOM OF JOISTS TO TOP OF FLOOR PLYWOOD.
- DATUMS:
 - ELEVATION (1000") IS SET AT THE TOP OF THE 1ST FLOOR SLAB.
 - FOUNDATION WALLS AND FOOTER BEARING ELEVATIONS ARE DEPENDENT ON FINISHED GRADE, AND PLAN SHOWS ESTIMATED HEIGHTS.
- CONTRACTOR TO PROVIDE ALL NECESSARY BLOCKING OF JOISTS, RAFTERS, WALL STUDS PER CODE AND MANUFACTURE'S SPECIFICATIONS, AS WELL AS BACKING FOR FIXTURES, EQUIPMENT, RECESSED FEATURES, ETC.
- WHERE LARGER STUDS OR FURRING ARE REQUIRED TO COVER PIPING OR VENTILATION, THE LARGER DIMENSIONS SHALL BE CARRIED THE EXTENT OF THAT WALL.
- INSTALL TEMPERED GLASS WINDOWS AS NECESSARY PER CODE.
- FIREBLOCKS, DRAFT STOPS, AND OTHER FIRE RESISTIVE FEATURES SHALL BE INSTALLED PER CODE.
- THIS PLAN SHOWS THE COMPLETED STRUCTURE IN ITS FINAL POSITION. DURING CONSTRUCTION, CONTRACTOR SHALL PROPERLY BRACE AND SHORE AS REQUIRED TO ACHIEVE THE FINAL COMPLETED STRUCTURE.
- ALL SPECIAL INSPECTIONS SHALL COMPLY WITH THE IBC, AND NOT BE ENGAGED BY THE OWNER OR CONTRACTOR.
- JOB SITE SAFETY AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

FOUNDATION NOTES

- A SOIL REPORT WAS NOT SUPPLIED FOR THE DESIGN OF THIS STRUCTURE. MAXIMUM SOIL DESIGN PRESSURE WAS ASSUMED TO BE 2000 PSF. A SOIL REPORT WILL BE COMPLETED DURING EXCAVATION TO CONFIRM.
- ALL FOOTING ELEVATIONS ARE ESTIMATES. EXACT BEARING ELEVATIONS FOR CORRECT FROST DEPTHS TO FINISHED GRADE MUST BE VERIFIED BY THE CONTRACTOR, WHICH SHALL BE A MINIMUM OF 42".
- ALL FOOTINGS ARE TO BE PLACED ON FIRM, UNDISTURBED, NON-ORGANIC SOIL, OR PROPERLY COMPACTED (95%) BACKFILL.
- FOUNDATION WALLS SHALL BE BACKFILLED EVENLY, WITH MAXIMUM 12" VERTICAL LIFTS. BACKFILLING SHOULD BE EVEN ON EITHER SIDE OF THE WALL WITHIN 12"
- CENTER ALL FOOTINGS ON FOUNDATION WALL OR PIER.
- SLAB ON GRADE PREPARATION SHALL BE ON 95% COMPACTED 4" MINIMUM GRAVEL FILL. IF REQUIRED, SOIL COMPACTIONS SHALL BE DONE IN 8" MAXIMUM LIFTS. ISOLATION JOINTS ON THE SLAB EDGE AND AROUND PENETRATIONS SHALL BE PROVIDED WHERE APPLICABLE.
- SLAB CONTROL JOINTS SHOULD BE PLACED EVERY 12 FT, 1/3 OF SLAB DEPTH X 3/16" WIDE. SLAB REINFORCEMENT SHALL BE CARRIED THROUGH JOINTS.
- ALL CONCRETE WORK AND REINFORCEMENT DETAILS SHALL BE DONE PER APPLICABLE CODES.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.
- CONCRETE SPECIFICATIONS:
 - FOOTINGS/WALLS - 3000 PSI
 - INTERIOR SLAB ON GRADE - 3500 PSI
 - EXTERIOR CONCRETE - 4000 PSI
- ALL REINFORCING DEFORMED BARS SHALL BE PER ASTM A615, GRADE 40. LAP SPLICES SHALL BE A MINIMUM OF 40 BAR DIAMETERS. ALL BARS AROUND CORNERS SHOULD BE CONTINUOUS.
- PLACE TWO #4 BARS (PER 8" THICKNESS) AROUND ALL OPENINGS IN CONCRETE WALLS, SLABS, AND BEAMS. ALSO PROVIDE TWO #4 X 4' BARS DIAGONALLY AT EACH CORNER.
- WELDED WIRE SHALL BE PER ASTM A185 GRADE 65 AND SHALL BE LAPPED ONE FULL MESH PER SIDE AND WIRED TOGETHER.

STRUCTURAL STEEL NOTES

- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 (36,000 PSI YIELD) OR BETTER.
- ALL STRUCTURAL BOLTS SHALL BE A325N, UNLESS SPECIFIED DIFFERENTLY. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
- MINIMUM WELD SIZE PER AISC TABLE J2.4.
- WELDERS SHALL BE LICENSED PER AWS D1.1, OR WORK PERFORMED IN AWS APPROVED FABRICATOR'S SHOP.
- NON-SHRINK GROUT SHALL BE PLACED BETWEEN STEEL AND CONCRETE SUPPORTS PER MANUFACTURES SPECIFICATIONS, MINIMUM 6000 PSI.
- STAIRS, LANDINGS, AND RAILINGS ARE NOT CONSIDERED STRUCTURAL AND DO NOT REQUIRE A LICENSED WELDER.

WOOD NOTES

- ALL FRAMING AND TRUSS LUMBER SHALL BE GRADED (PER APPLICABLE CODE) HEM FIR, UNLESS NOTED DIFFERENTLY, AND SHALL CONFORM AS FOLLOWS:
 - 2" (NOMINAL) THICKNESS, FOR WALL STUDS - Fb = 675 PSI
 - 2" TO 4" (NOMINAL) THICKNESS - Fb = 850 PSI
 - >5" (NOMINAL) - Fb = 1050 PSI
- PROVIDE GROSS BRIDGING OR FULL BLOCKING AT A MINIMUM 8' O.C. FOR ALL JOISTS. PROVIDE FULL 2" BLOCKING AT CANTILEVER ENDS AND INTERMEDIATE SUPPORTS.
- FASTEN ALL WOOD MEMBERS WITH COMMON NAILS PER IRC TABLE R602.3
- PROVIDE PRESSURE TREATED WOOD FOR ALL DECK STRUCTURAL MEMBERS, UNLESS SPECIFIED OTHERWISE.
- PLYWOOD AND OSB:
 - SHALL BE GRADED BY THE AMERICAN PLYWOOD ASSOCIATION.
 - EXTERIOR TYPE PLYWOOD SHALL BE USED WHEN ANY FACE OR EDGE IS EXPOSED.
 - FLOORING SHALL BE 3/4" T&G APA RATED EXPOSURE 1 PLYWOOD SHEATHING, AND SHALL BE FASTENED WITH BOTH NAILS AND APPROPRIATE ADHESIVE. NAIL 6" O.C ON PANEL EDGES, AND 12" O.C. THROUGH PANEL CENTER. STAGGER PANELS PERPENDICULAR TO JOISTS.
 - ROOF SHALL BE 5/8" APA RATED EXPOSURE 1 SHEATHING, PER CODE. NAIL 6" O.C MIN ON PANEL EDGES, AND 12" O.C. THROUGH PANEL CENTER. STAGGER PANELS HORIZONTALLY.
 - ALL EDGES SHOULD BE SUPPORTED BY SOLID WOOD BLOCKING, OR APPROPRIATE ALTERNATIVE.
- WALL SHEATHING
 - EXTERIOR WALL SHEATHING SHALL BE 1-1/2" "ZIP" BRAND PANELING WITH INTEGRATED R-6 INSULATION.
 - INSTALL ZIP PANELING PER MANUFACTURER'S SPECIFICATIONS, INCLUDING TAPING ALL SEAMS AND PROVIDING FOR PROPER FLASHING.
 - PANELING SHOULD EXTEND, AND BE FASTENED TO THE TOP AND BOTTOM WALL PLATE.
 - LEDGERS SHALL NOT BE ATTACHED DIRECTLY TO THE ZIP PANELING. SEE DECK DETAIL FOR ATTACHMENT METHOD.
- LAMINATED VENEER LUMBER (LVL) SHALL BE VERSA-LAM 2.1E 2800, OR HAVE THE FOLLOWING MINIMUM CHARACTERISTICS:

Fb - 2750 PSI, Ft - 1450 PSI, Fv - 285 PSI, Fc - 3000 PSI, MOD of E - 2.0x10⁶ PSI
- I-JOISTS
 - SHALL BE MEYERHAEUSER "TJI" BRAND, SIZE PER PLAN. ANY SUBSTITUTIONS MUST BE STRUCTURALLY EQUIVALENT.
 - INSTALLATION, FASTENING, RIMBOARD, PENETRATIONS, AND BLOCKING SHALL BE DONE PER MANUFACTURER'S REQUIREMENTS.
 - HURRICANE STRAPS REQUIRED AT ALL EXTERIOR WALLS.

FRAMING NOTES

- ALL EXTERNAL WALLS 2X6 16" O.C.
- INTERNAL WALLS, 2X4 OR 2X6 16" O.C. AS SHOWN ON PLAN.
- ALL EXTERIOR WALL STUDS >12' 6" SHALL BE LSL ENGINEERED LUMBER.
- HEADERS SIZES SHOWN ON PLAN, BUT SHALL BE (2) HORIZONTAL 2X4 MINIMUM FOR INTERIOR OPENINGS AND (2) 2X8 MINIMUM FOR EXTERIOR OPENINGS.
- HEADERS WITH OPENINGS > 4' SHALL HAVE (2) TRIMMER STUDS.
- ROUGH OPENINGS ARE +3/4" NOMINAL SIZE, OR REFER TO WINDOW/DOOR MANUFACTURER'S SPECIFICATIONS.
- ROOF OUTLOOKERS ARE TO MATCH RAFTER TAIL SIZE, AND BE 16" O.C. WITH INVERTED LU28 HANGERS ON INSIDE RAFTER.
- EXTERIOR WALL SHALL HAVE CONTINUOUS STUDS FROM FLOOR TO ROOF.
- ROOF OVERFRAMING SHALL HAVE 2X12 RIDGE AND BASE PLATES OVER SHEATHED ROOF.
- STRAPS AND HANGERS ARE SPECIFIED AS "SIMPSON" BRAND UNLESS OTHERWISE NOTED.

TRUSS NOTES

- THE PLAN ONLY SPECIFIES GENERAL TRUSS ENVELOPE.
- DESIGN MUST BE COMPLETED BY REGISTERED ENGINEER AND STAMPED ACCORDINGLY.
- DESIGN MUST MEET WIND, SEISMIC, AND SNOW LOAD REQUIREMENTS AS SET BY COUNTY AMENDMENTS.
- INSTALLATION MUST BE COMPLETED PER DESIGN, INCLUDING BLOCKING, BRACING, AND STRAPPING.
- STRAPPING TO EXTERIOR WALL REQUIRED.

DESIGN CRITERIA

2018 IRC
 ROOF SNOW LOAD - 100 PSF
 INTERIOR SLEEPING ROOMS - 40 PSF
 WIND SPEED - 115 MPH
 SEISMIC CATEGORY - B
 EXPOSURE CATEGORY - B, PARTIALLY EXPOSED
 RISK CATEGORY - II
 FROST DEPTH - 42 INCHES (MIN)

REVISION TABLE	
LABEL	DESCRIPTION

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
 9K ENGINEERING

DATE:
5/26/2026

SHEET:
G-2
 GENERAL NOTES

SCALE:



NOTES:

LOT COVERAGE

LOT SIZE - 20823 SQFT

EXISTING HOUSE INCLUDING DECK - 2025 SQFT (9.7%)

EXISTING DRIVEWAY - 2894 SQFT (13.9%)

EXISTING IMPERVIOUS SURFACE - 4919 SQFT (23.6%)

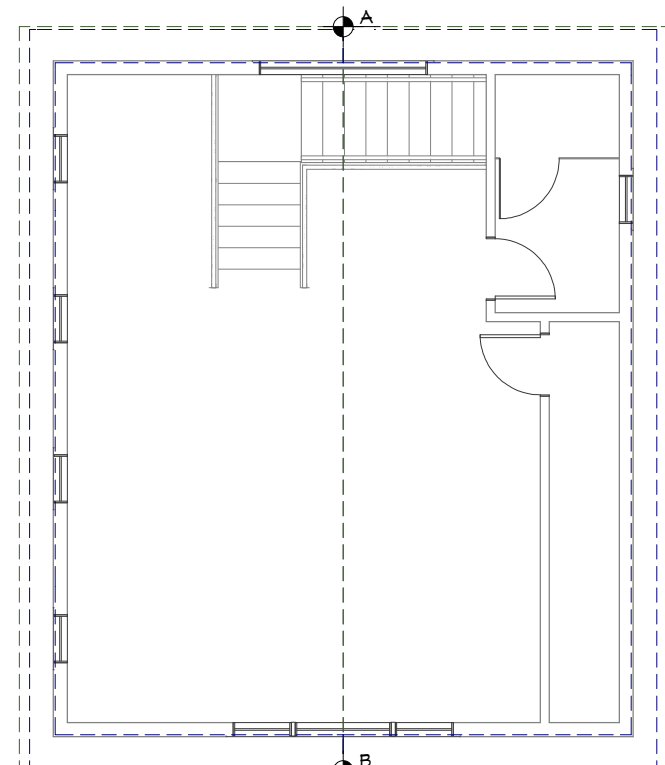
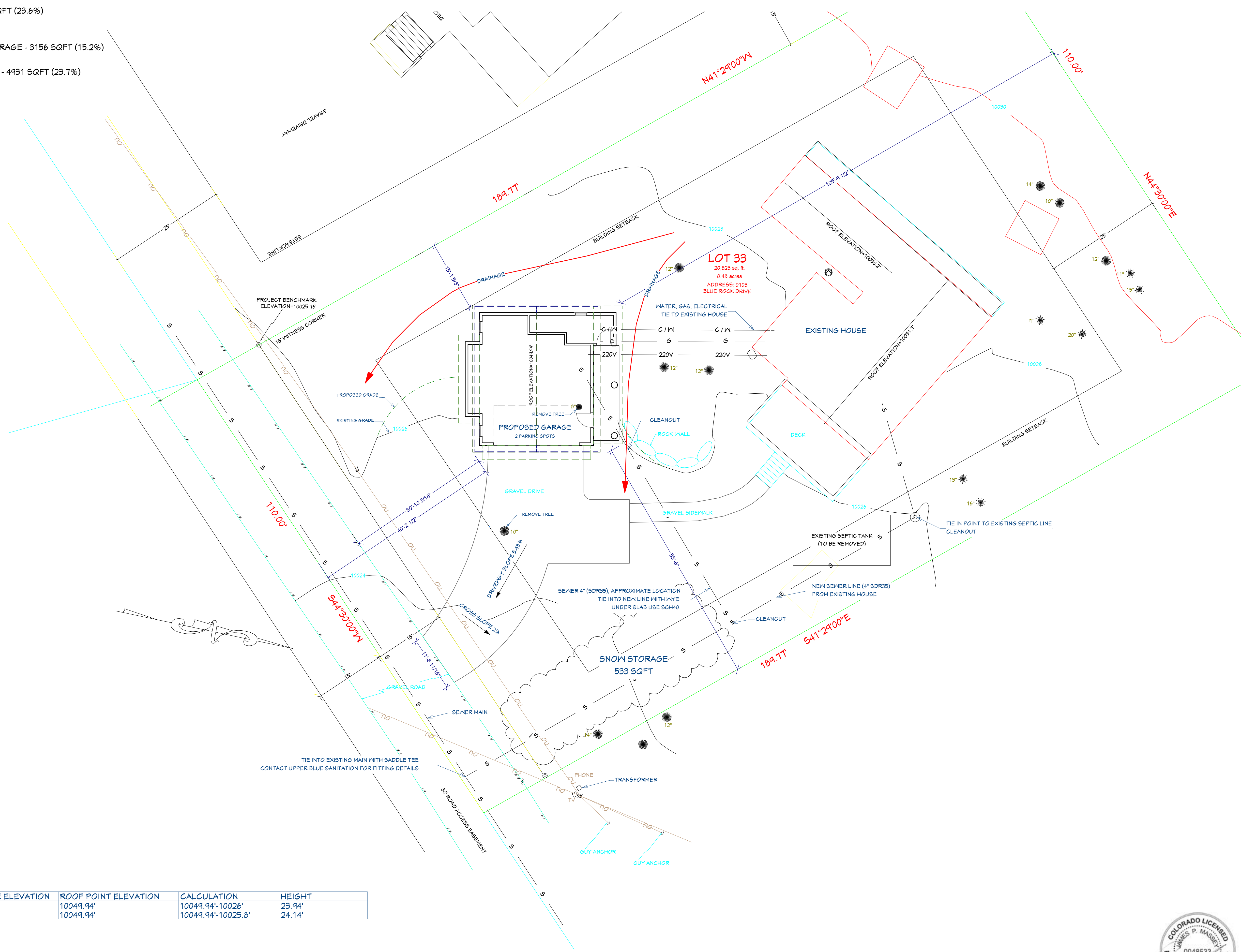
PROPOSED GARAGE - 1131 SQFT (5.4%)

EXISTING HOUSE/DECKS + PROPOSED GARAGE - 3156 SQFT (15.2%)

PROPOSED DRIVEWAY - 1775 SQFT (8.5%)

TOTAL PROPOSED IMPERVIOUS SURFACE - 4931 SQFT (23.7%)

REQUIRED SNOW STORAGE - 533 SQFT



HEIGHT CALCULATIONS
100'0" HOUSE DATUM = 10026.5' ABSOLUTE

POINT	NATURAL GRADE ELEVATION	FINISHED GRADE ELEVATION	ROOF POINT ELEVATION	CALCULATION	HEIGHT
A	10027'	10026'	10049.94'	10049.94'-10026'	23.94'
B	10025.8'	10026'	10049.94'	10049.94'-10025.8'	24.14'

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



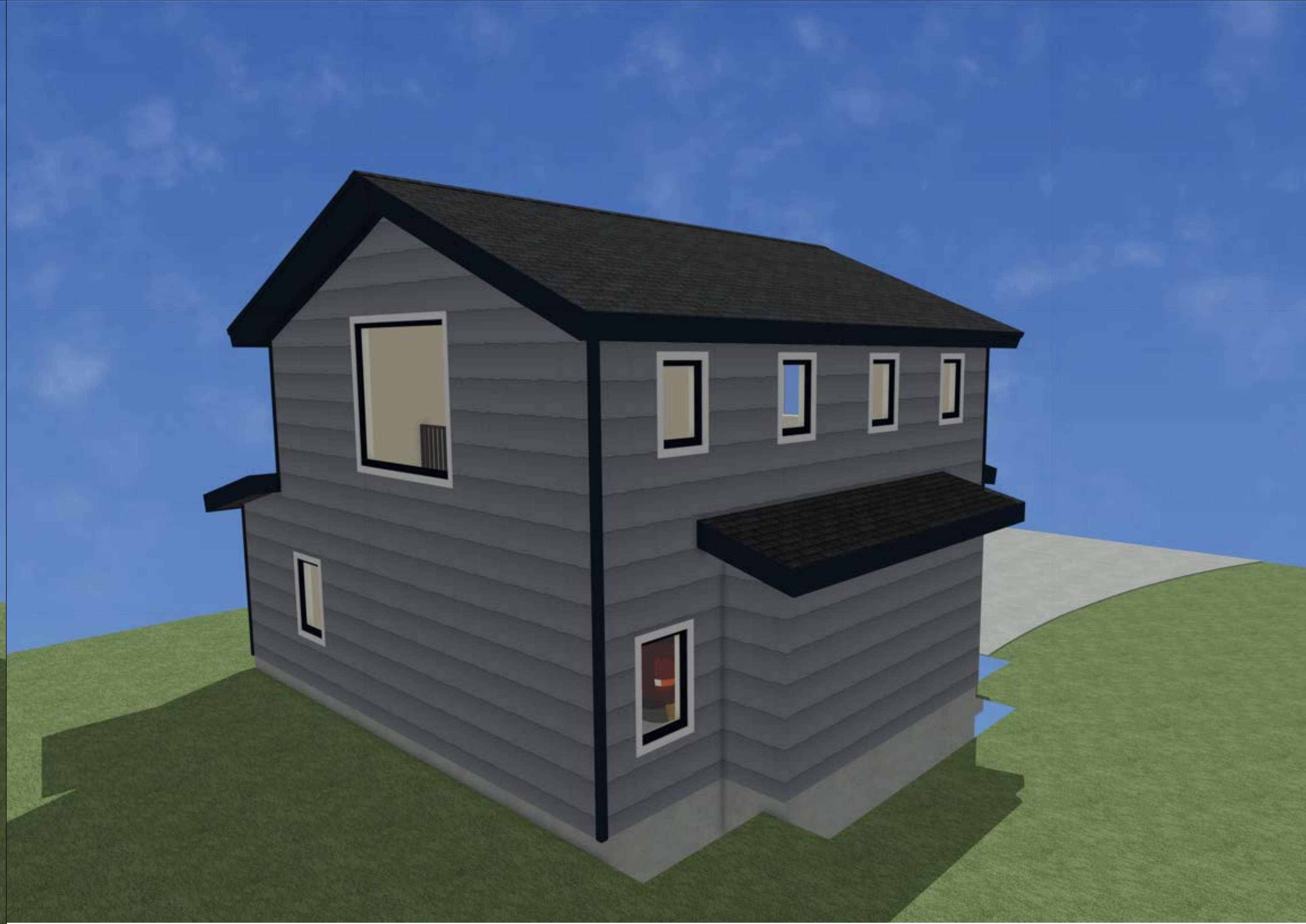
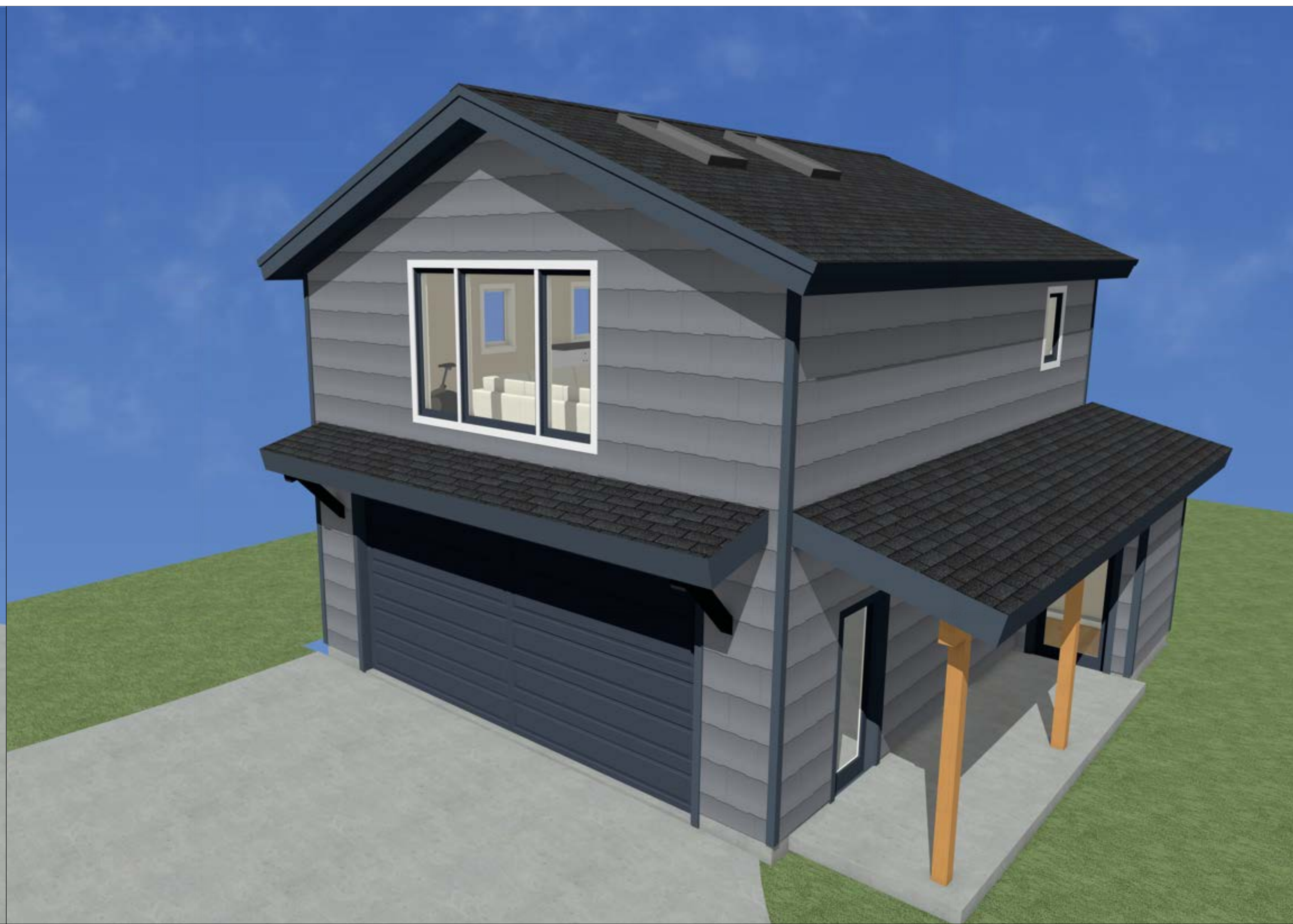
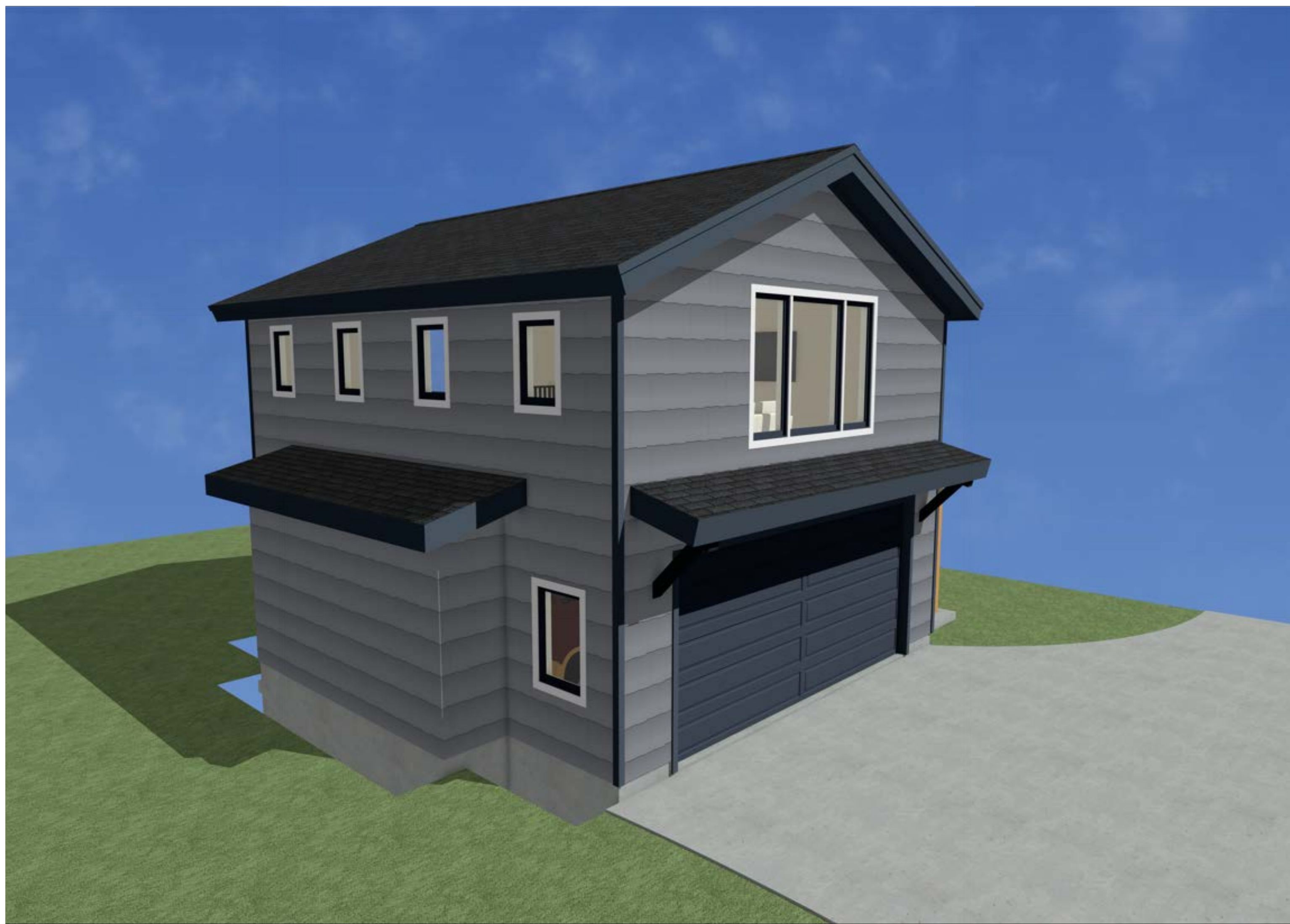
DESIGN AND ENGINEERING BY
9K ENGINEERING

DATE:
5/26/2026

SHEET:
A-1
PLOT PLAN



SCALE: 1"=10'



REVISION TABLE	REVISION TABLE
LABEL	DESCRIPTION

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
 9K ENGINEERING

DATE:
5/26/2026

SHEET:
A-2
 3D VIEWS

SCALE:



REVISION TABLE	
LABEL	DESCRIPTION

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



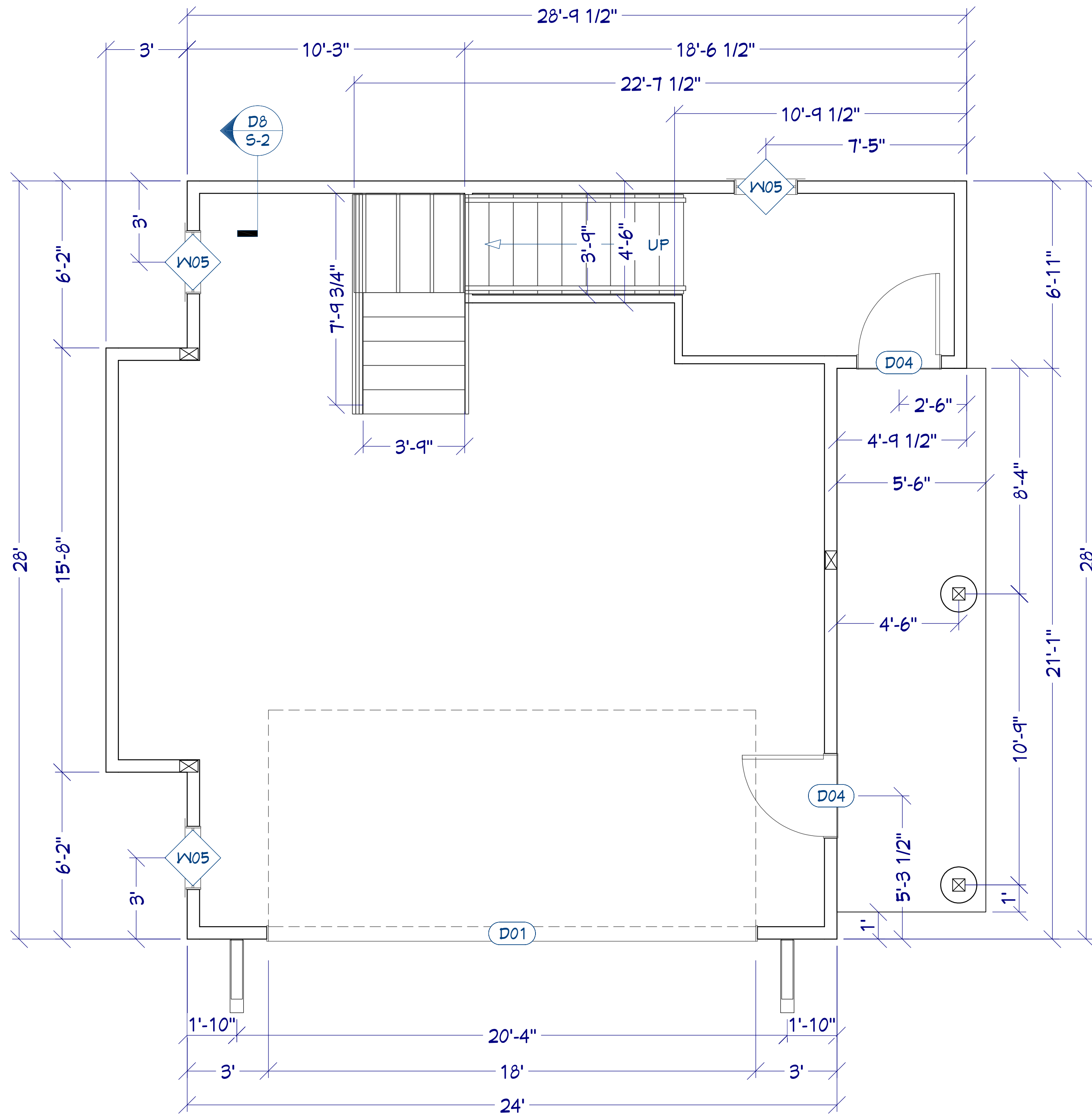
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 9K ENGINEERING

DATE:
5/26/2026

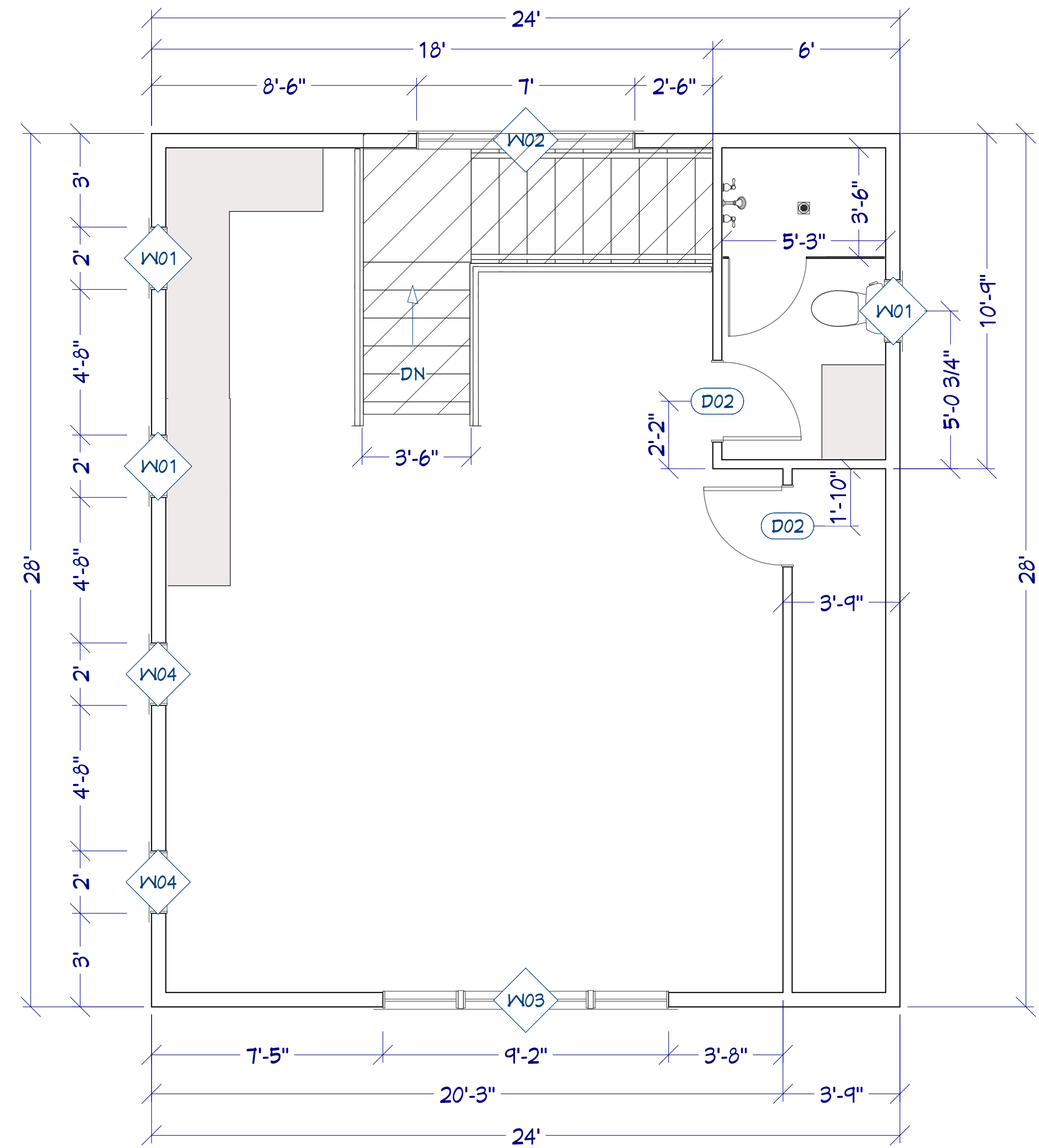
SHEET:
A-3
 INTERIOR VIEWS

SCALE:





LEVEL 1



LEVEL 2



REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424

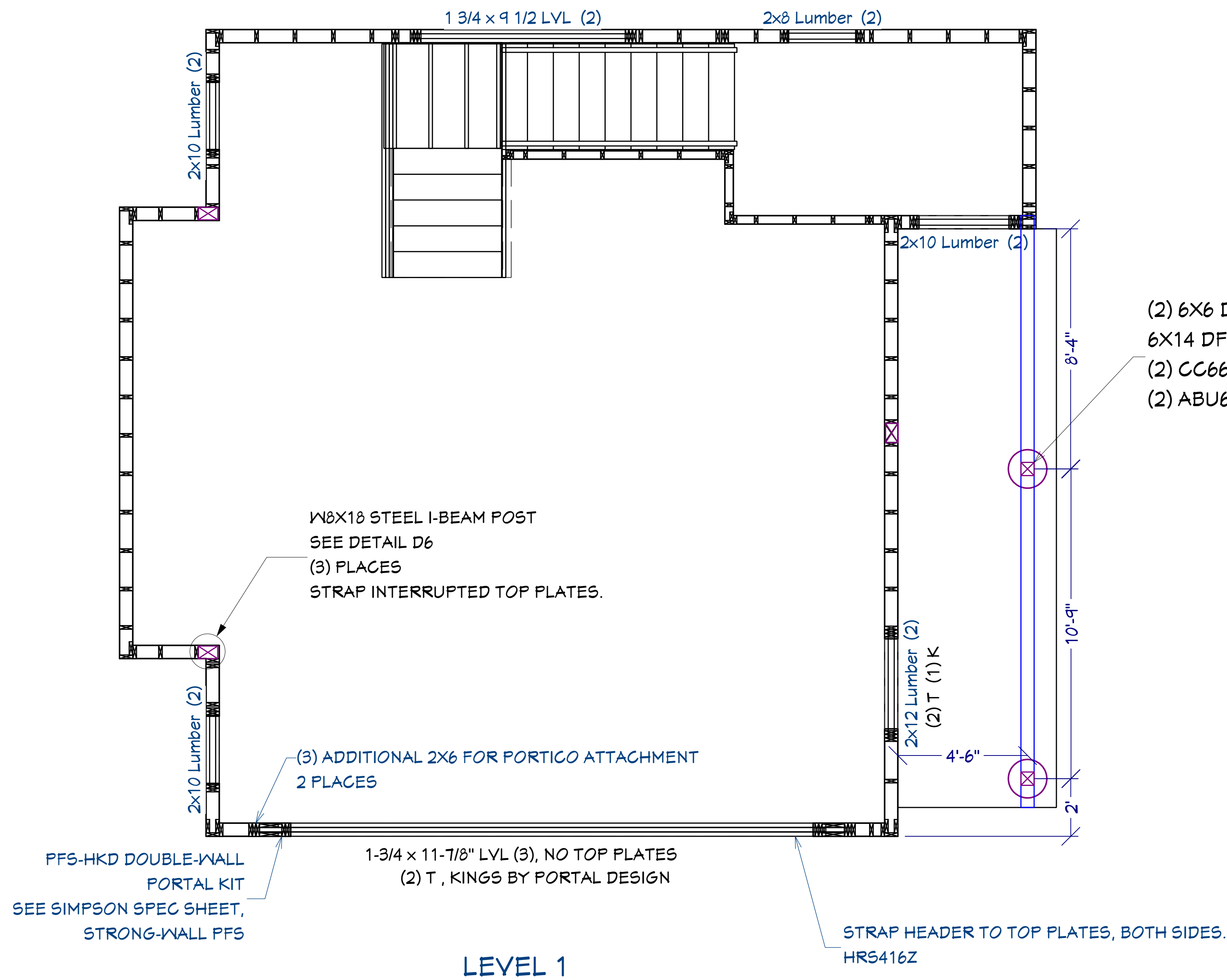


DESIGN AND ENGINEERING BY
 9K ENGINEERING

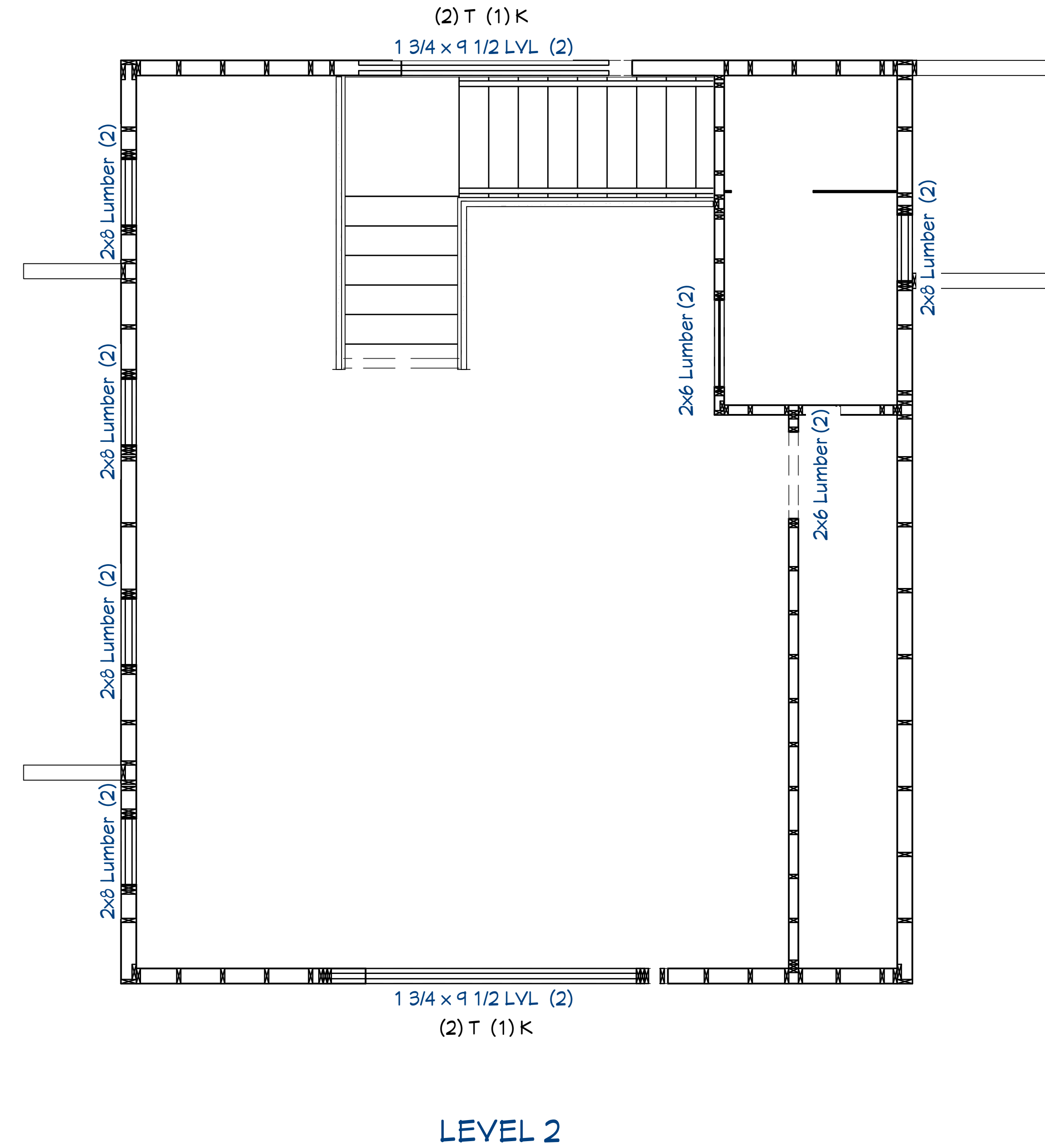
DATE:
5/26/2026

SHEET:
A-4
 LAYOUT

SCALE: 3/8"=1'



- (2) 6X6 DF COLUMNS
- 6X14 DF BEAM
- (2) CC66 COLUMN CAP
- (2) ABU66Z COLUMN BASE



LEVEL 1

LEVEL 2

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



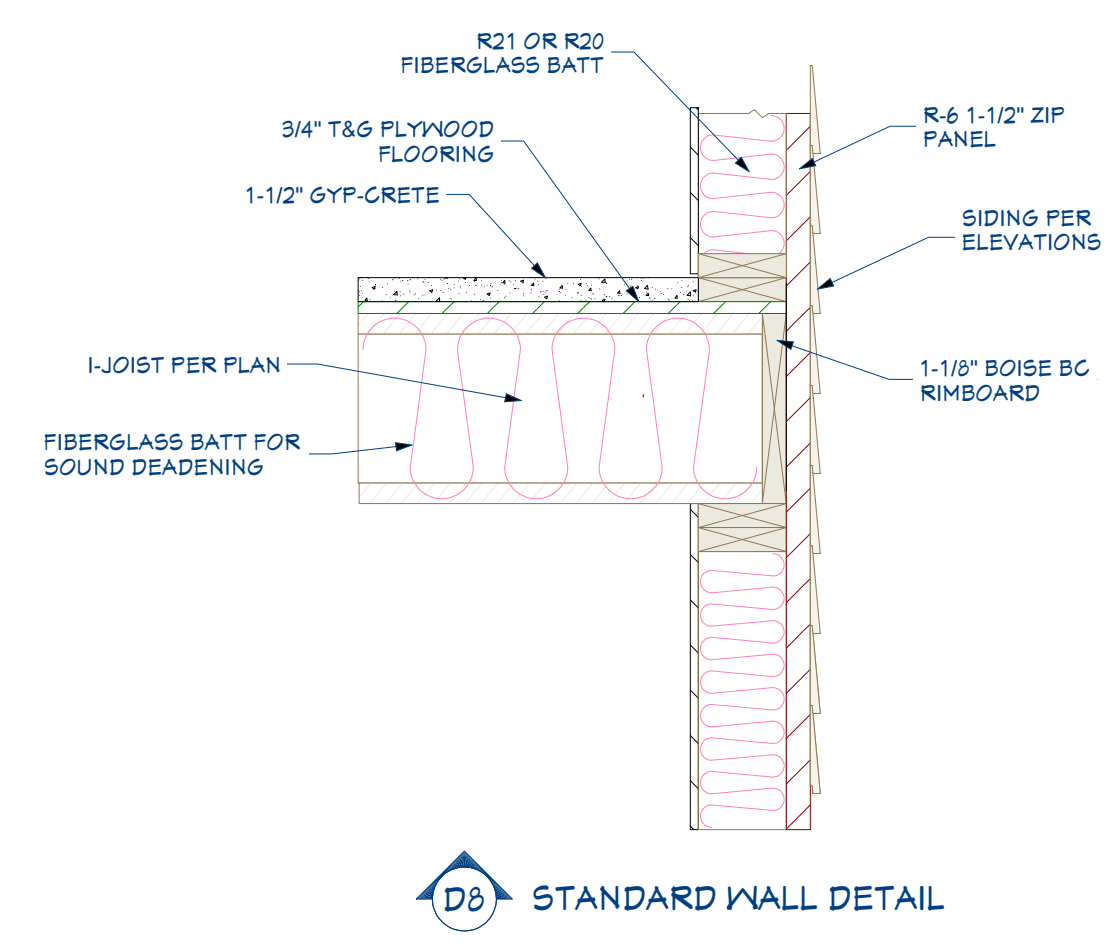
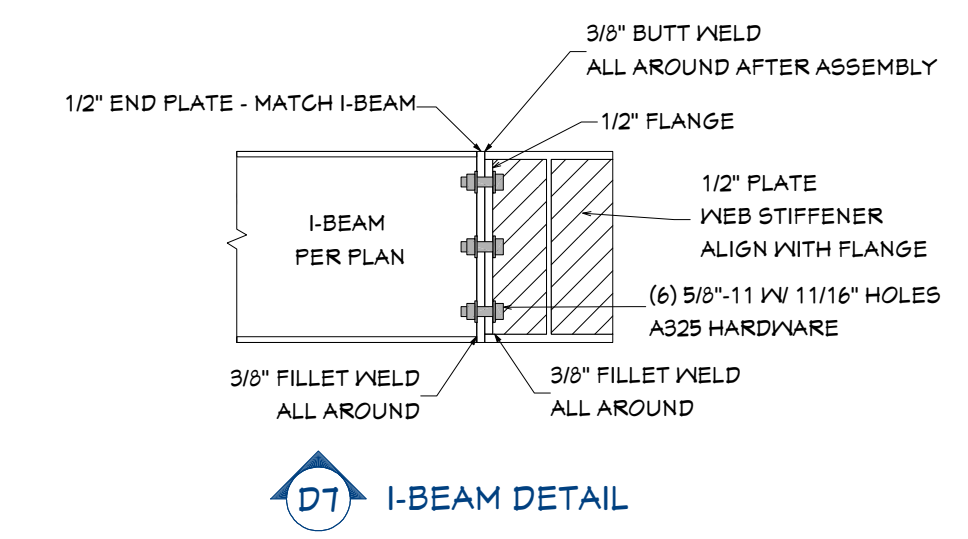
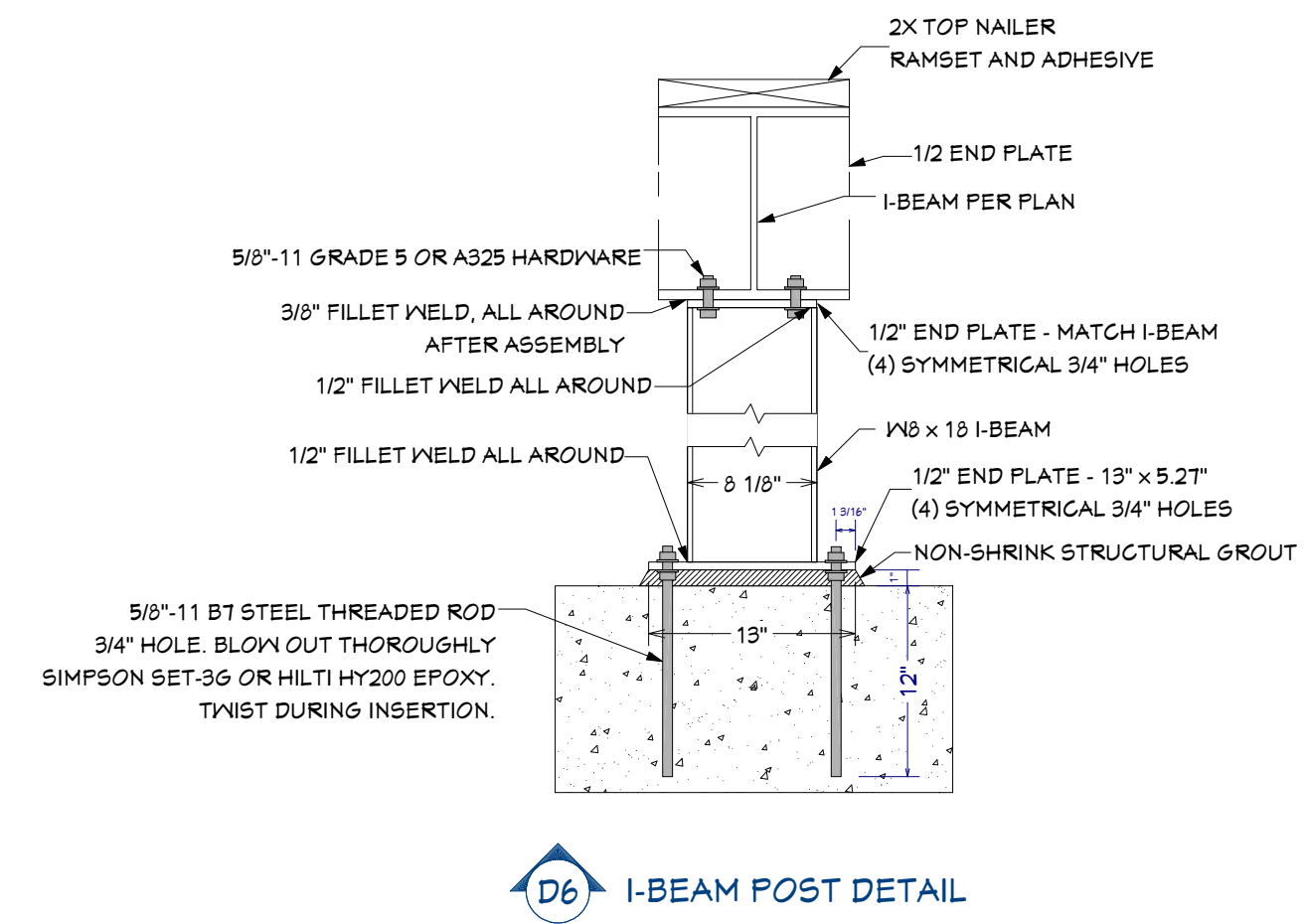
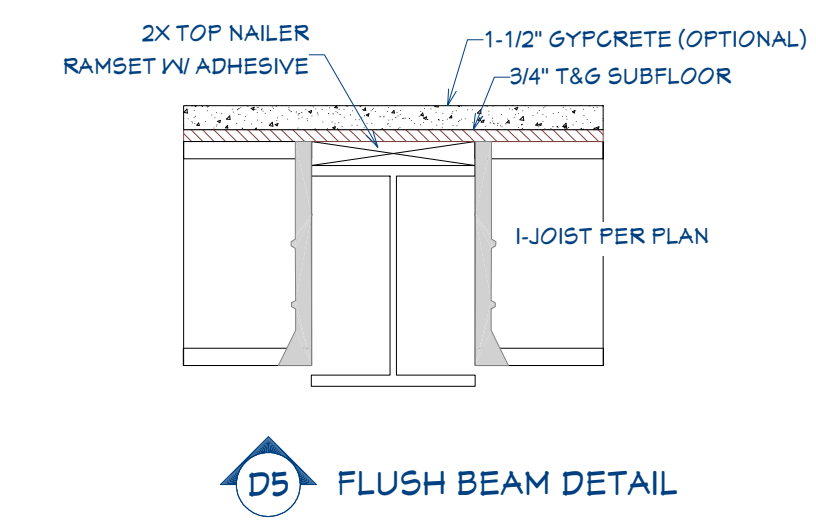
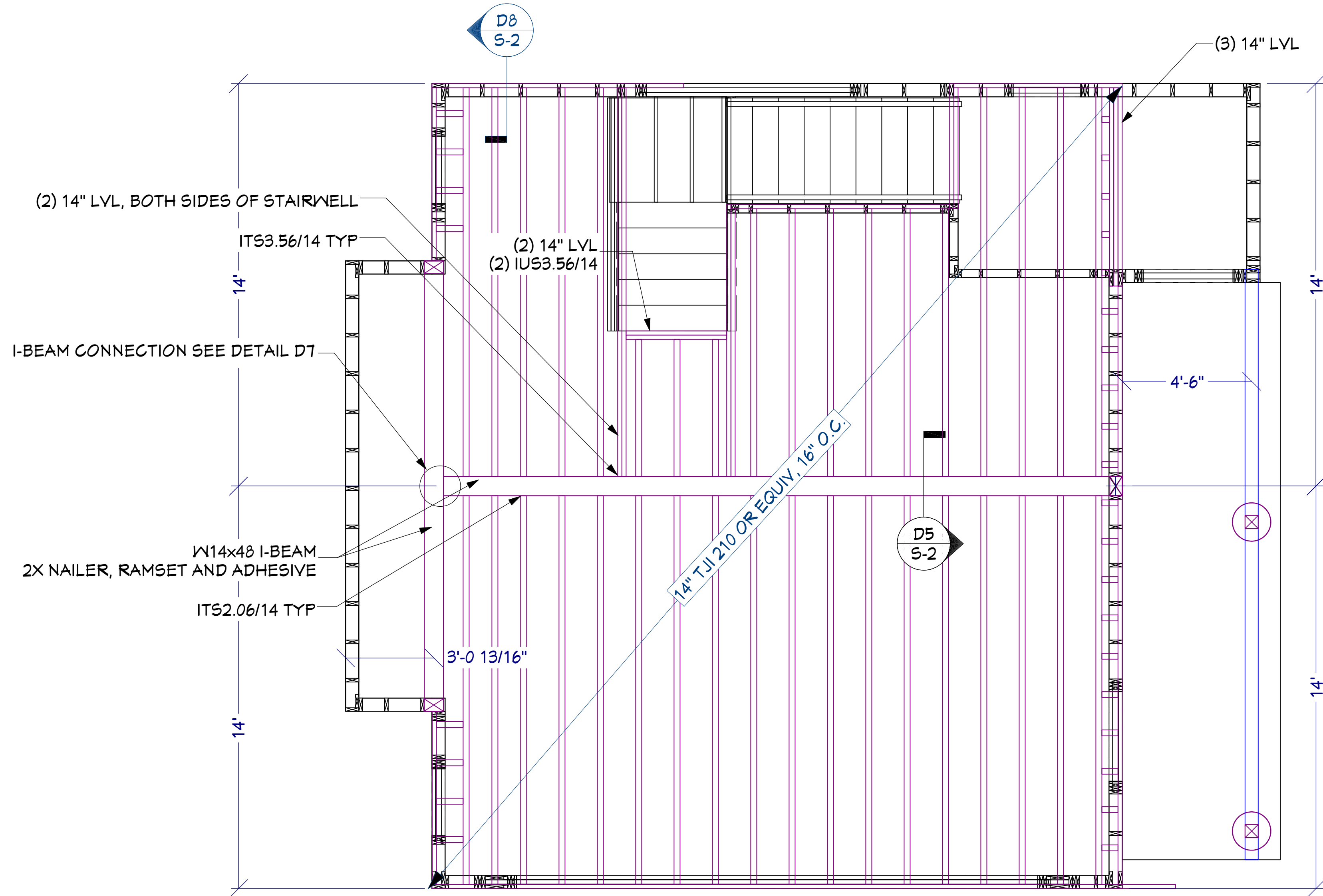
DESIGN AND ENGINEERING BY
 9K ENGINEERING

DATE:
5/26/2026

SHEET:
S-2
 WALL FRAMING

SCALE: 3/8"=1'





REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



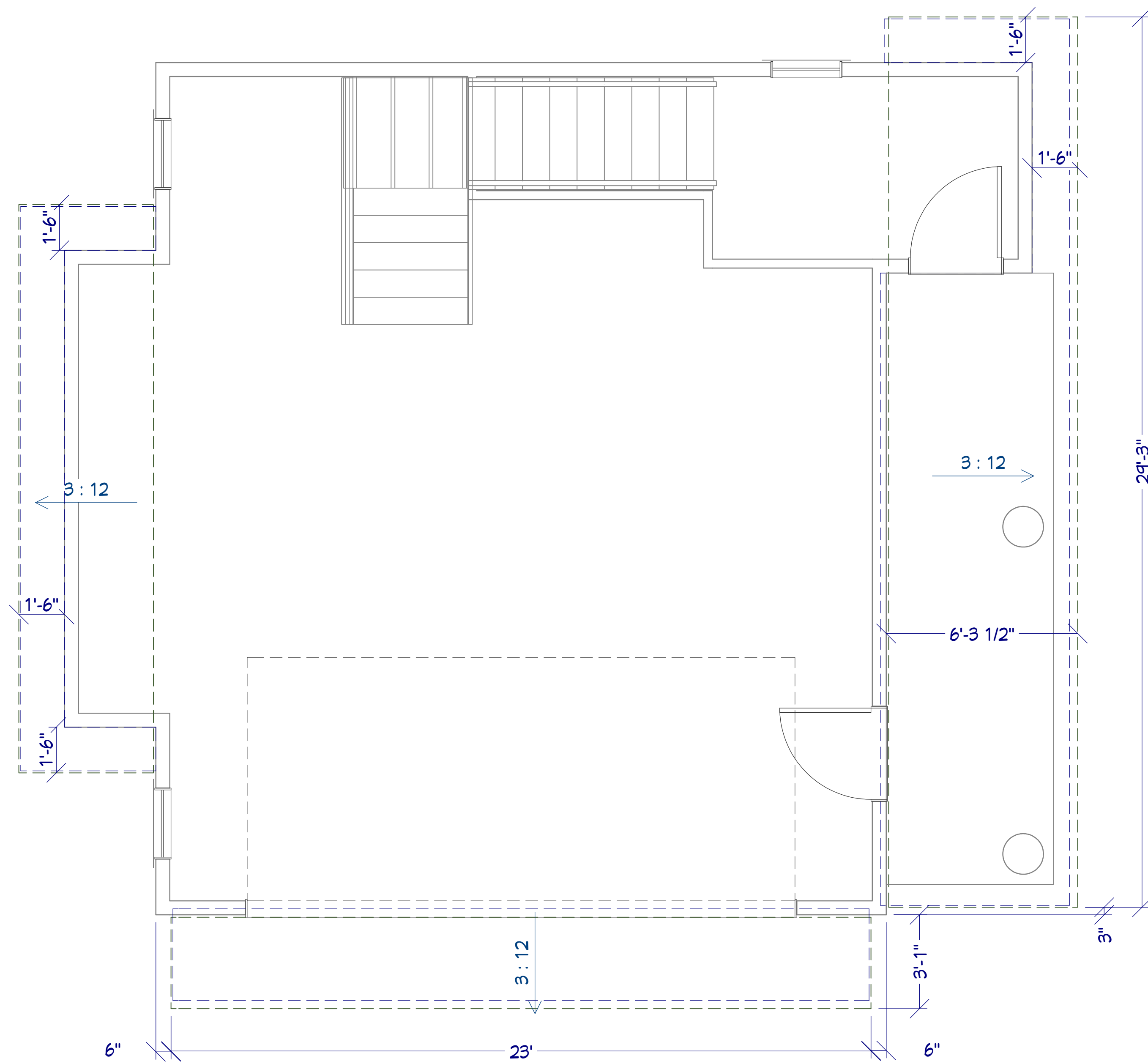
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 9K ENGINEERING

DATE:
5/26/2026

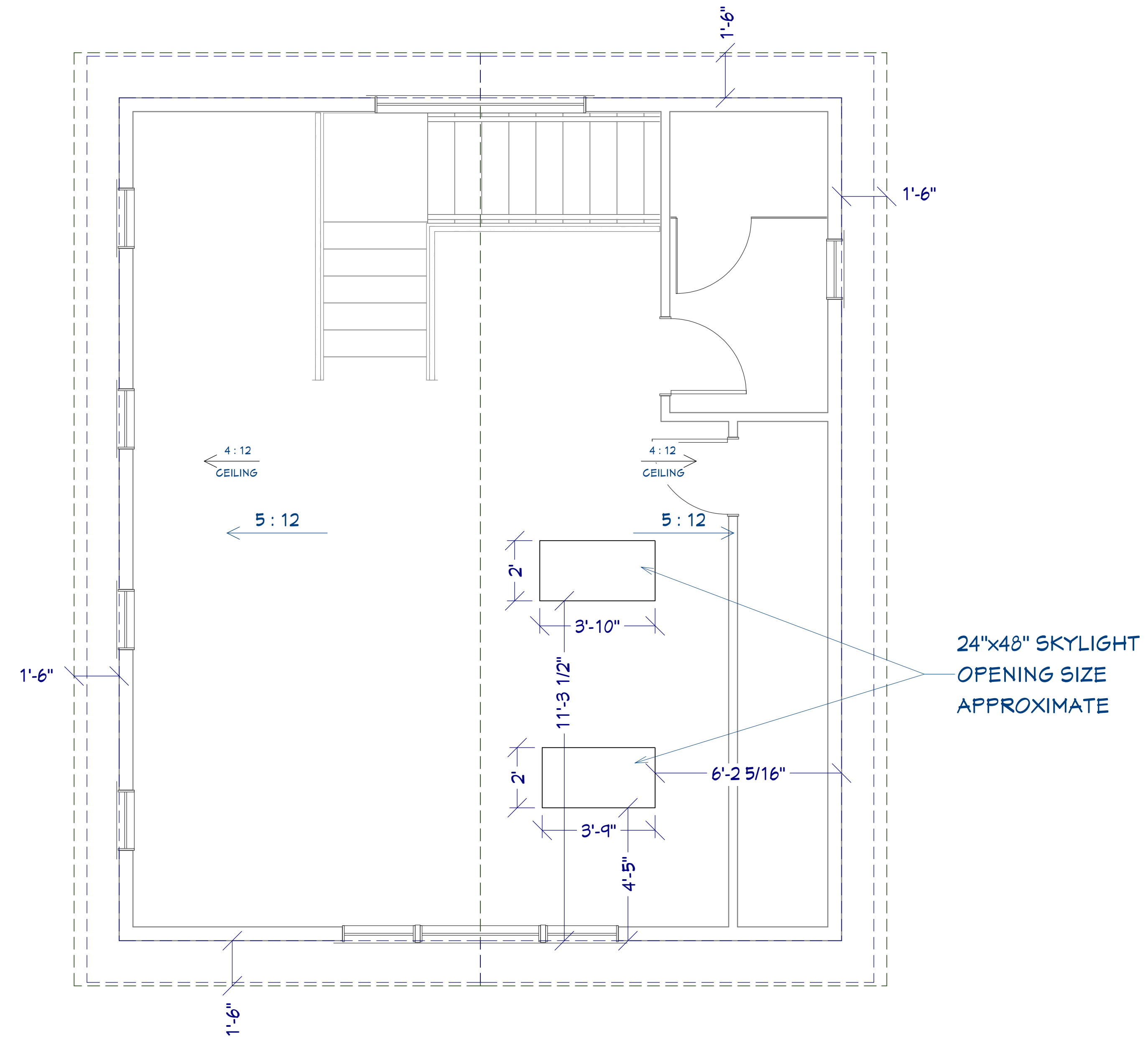
SHEET:
S-3
 2ND LEVEL
 FLOOR FRAMING

SCALE: 3/8"=1'





LEVEL 1



LEVEL 2

24"x48" SKYLIGHT
OPENING SIZE
APPROXIMATE

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
9K ENGINEERING

DATE:
5/26/2026

SHEET:
A-5

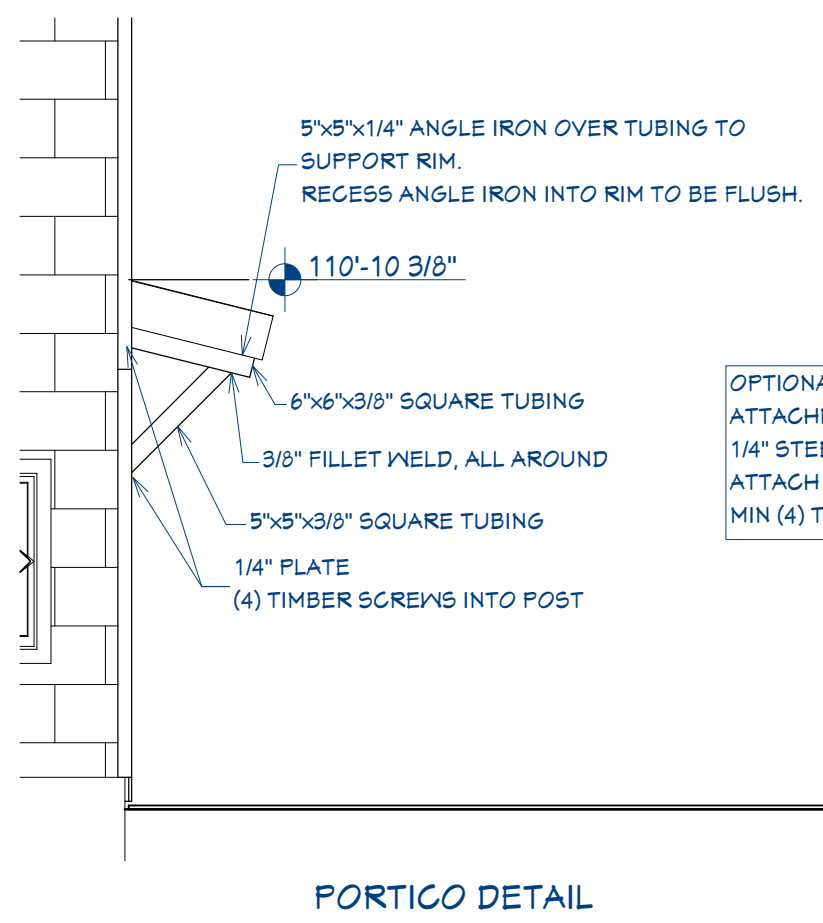
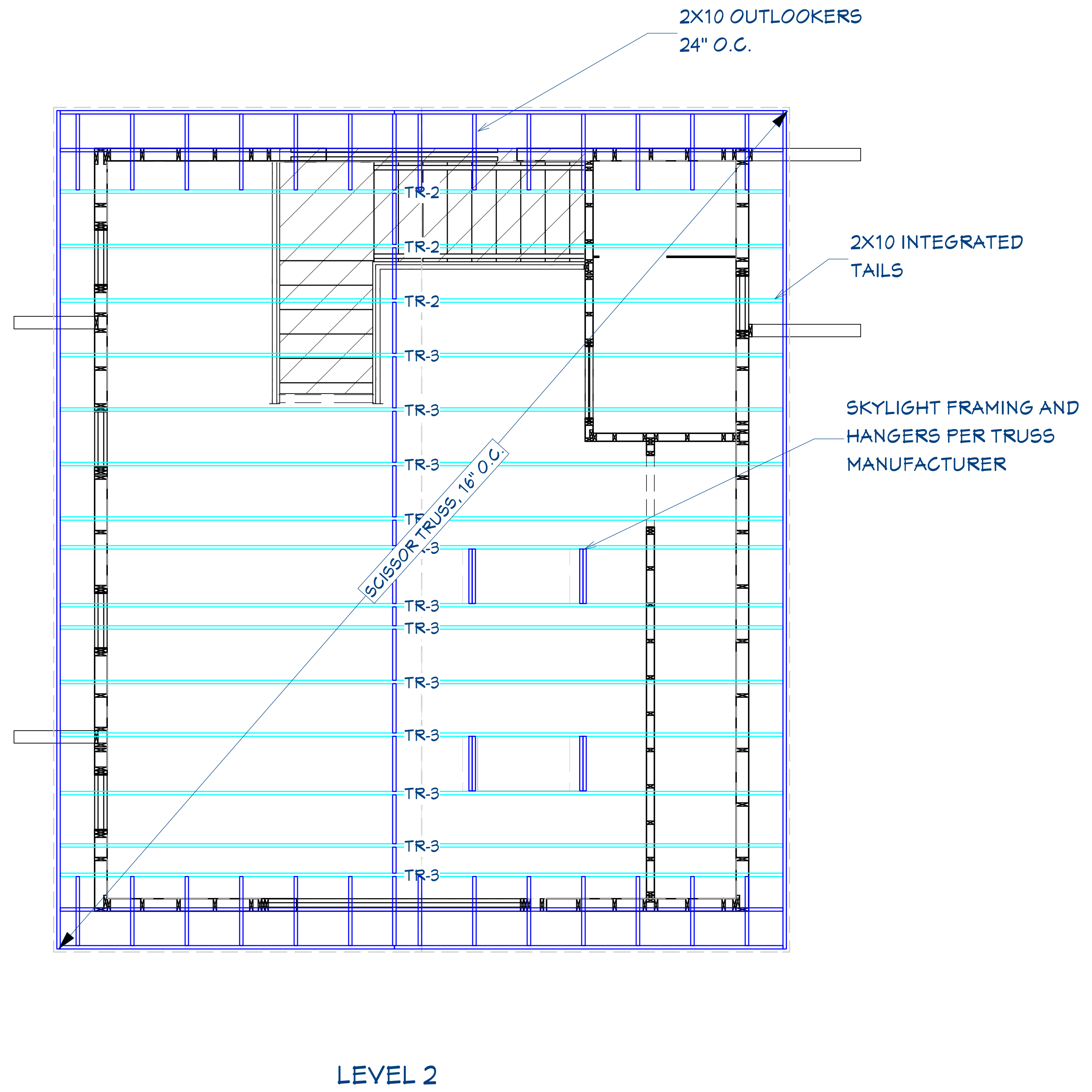
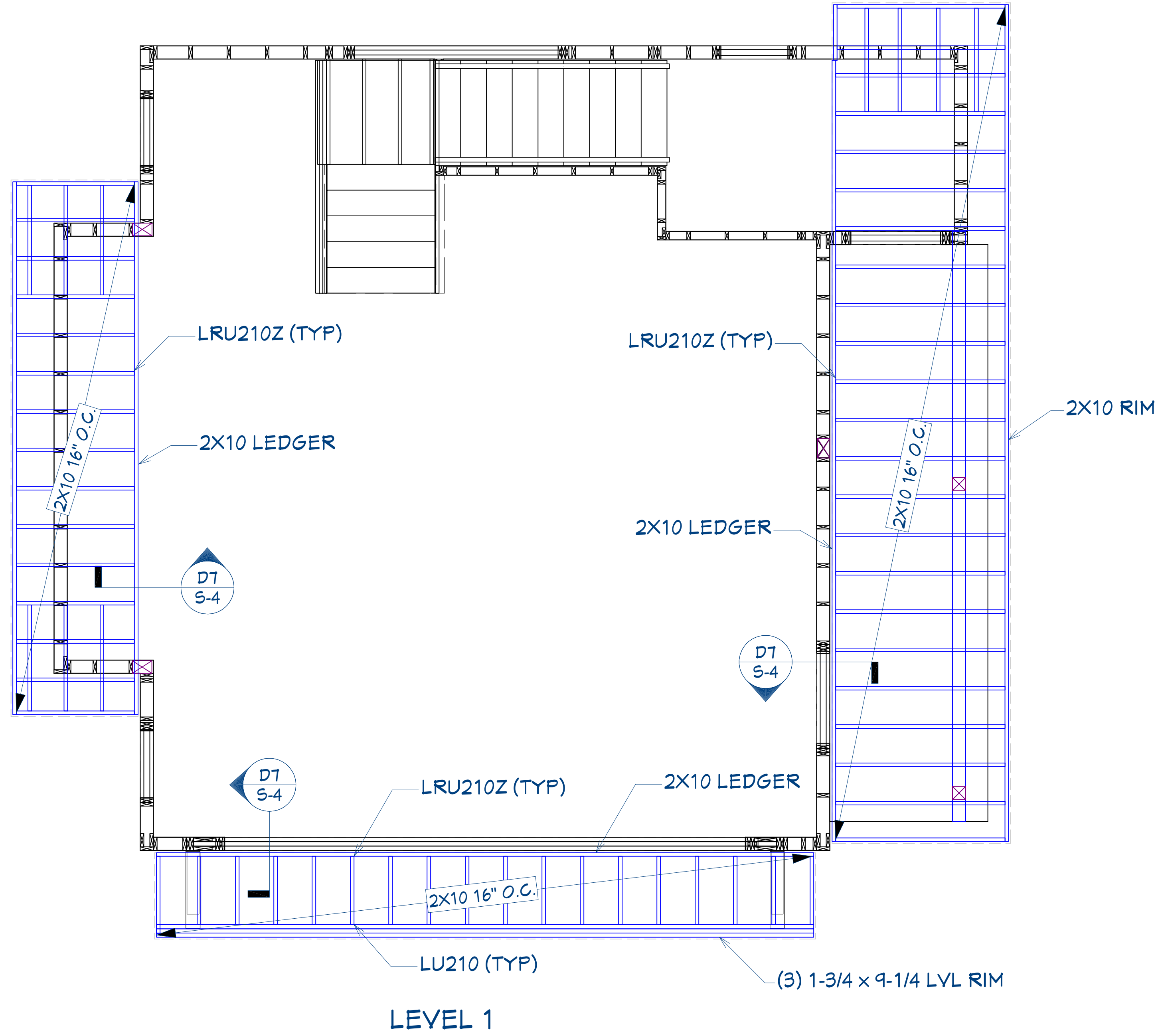
ROOF AND
CEILING PLANES

SCALE: 3/8"=1'

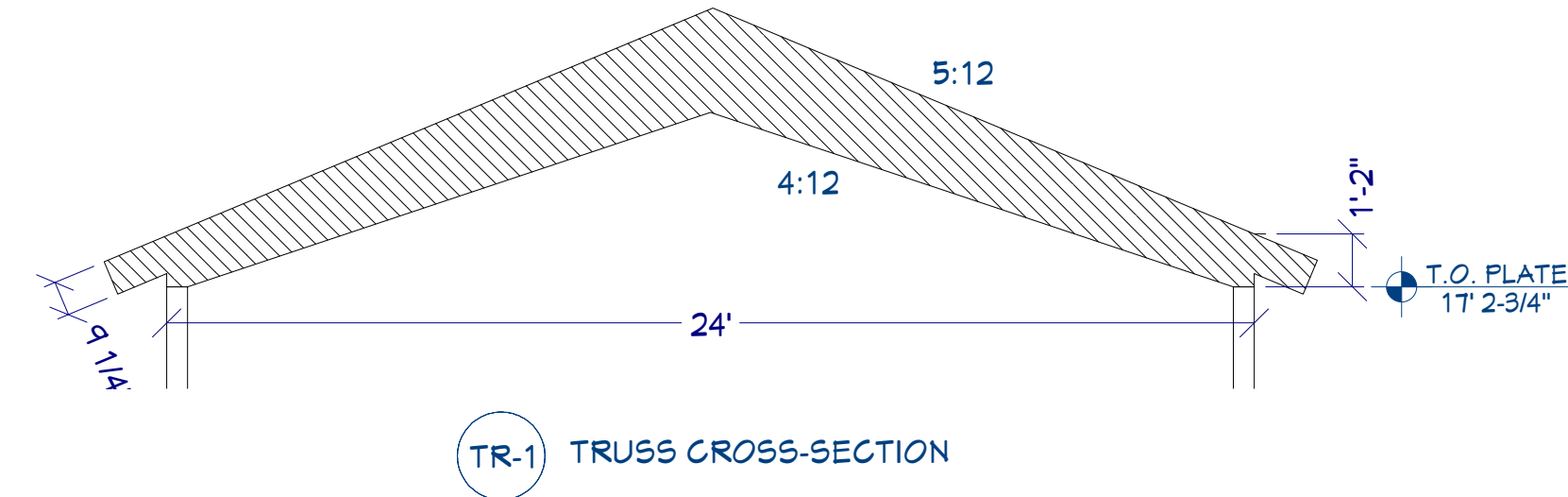
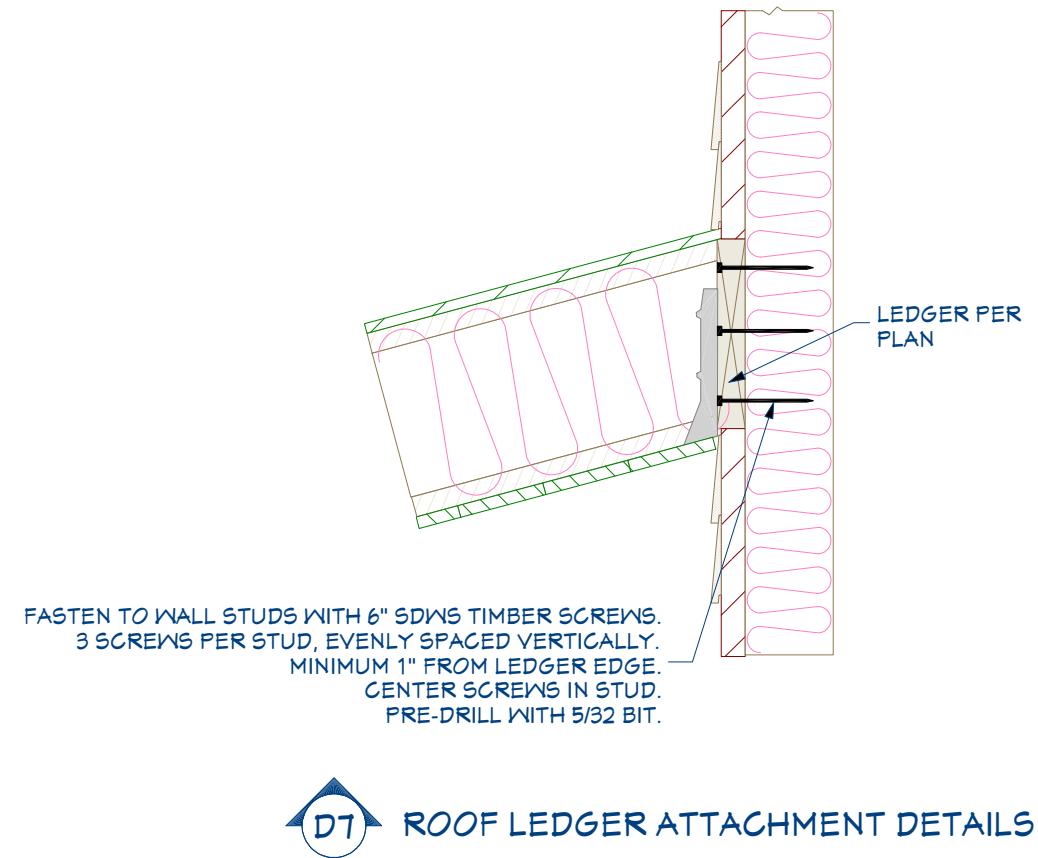


TRUSS NOTES:

1. PROFILES SHOWN ARE FOR REFERENCE ONLY. ACTUAL DESIGN IS THE RESPONSIBILITY OF TRUSS DESIGNER.
2. TRUSSES MUST MEET ALL SNOW AND WIND LOADING REQUIREMENTS. ALL TRUSSES MUST BE STRAPPED TO LOAD BEARING WALL PER MANUFACTURER'S INSTRUCTIONS
3. ALL HEALS 18" AT OUTER WALL EDGE, UNLESS SHOWN OTHERWISE.
4. TAILS 9-1/4" THICK.
5. INTERIOR WALLS UNDER TRUSSES ARE NON-LOAD BEARING. LOAD BEARING WALLS SHOWN IN TRUSS DETAILS.



OPTIONAL: SUBSTITUTE 6x6 DF BEAMS. ATTACHMENTS TO BE KNIFE PLATES, MIN 1/4\"/>



REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
9K ENGINEERING

DATE:
5/26/2026

SHEET:

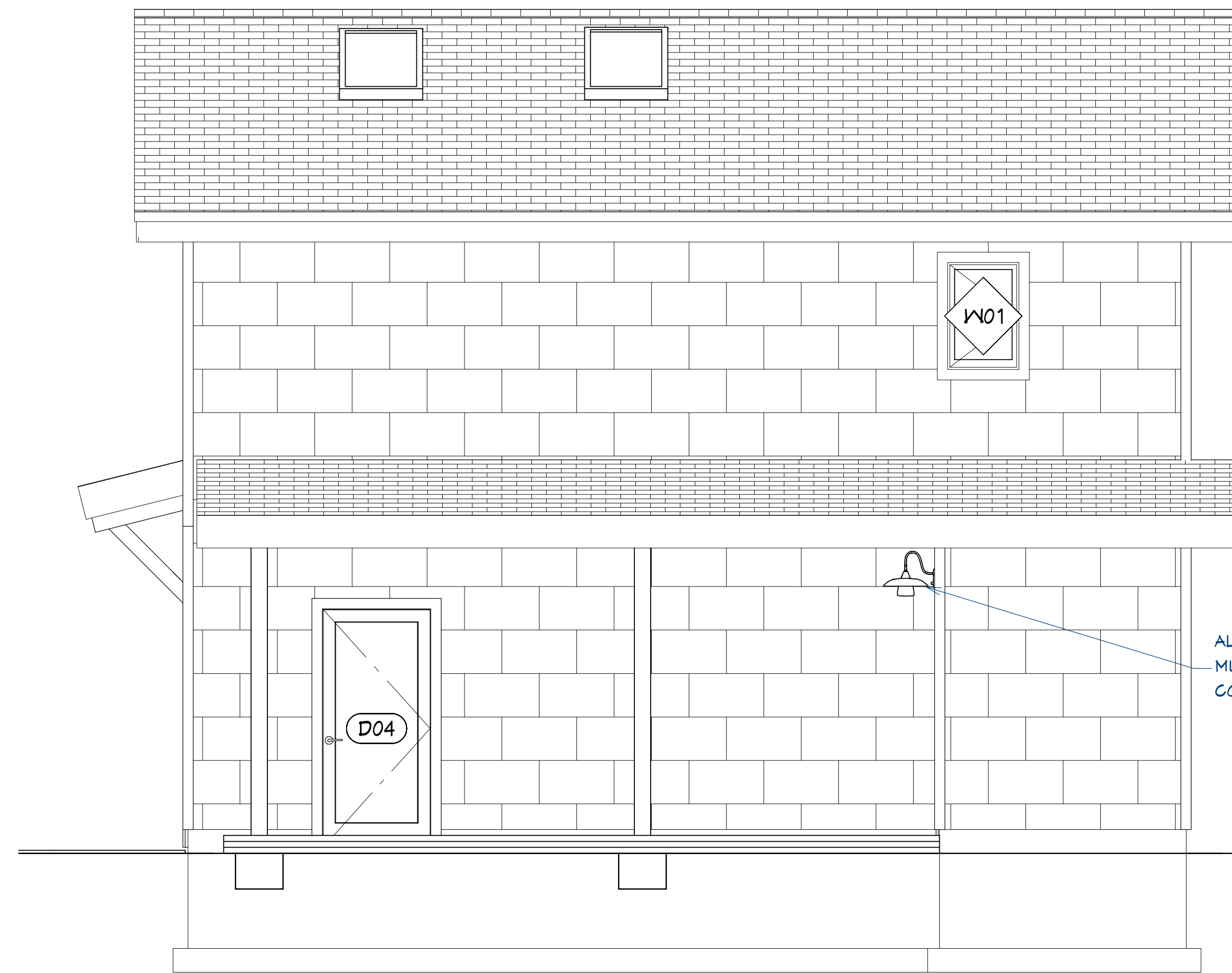
S-4
ROOF FRAMING



SCALE: 3/8"=1'

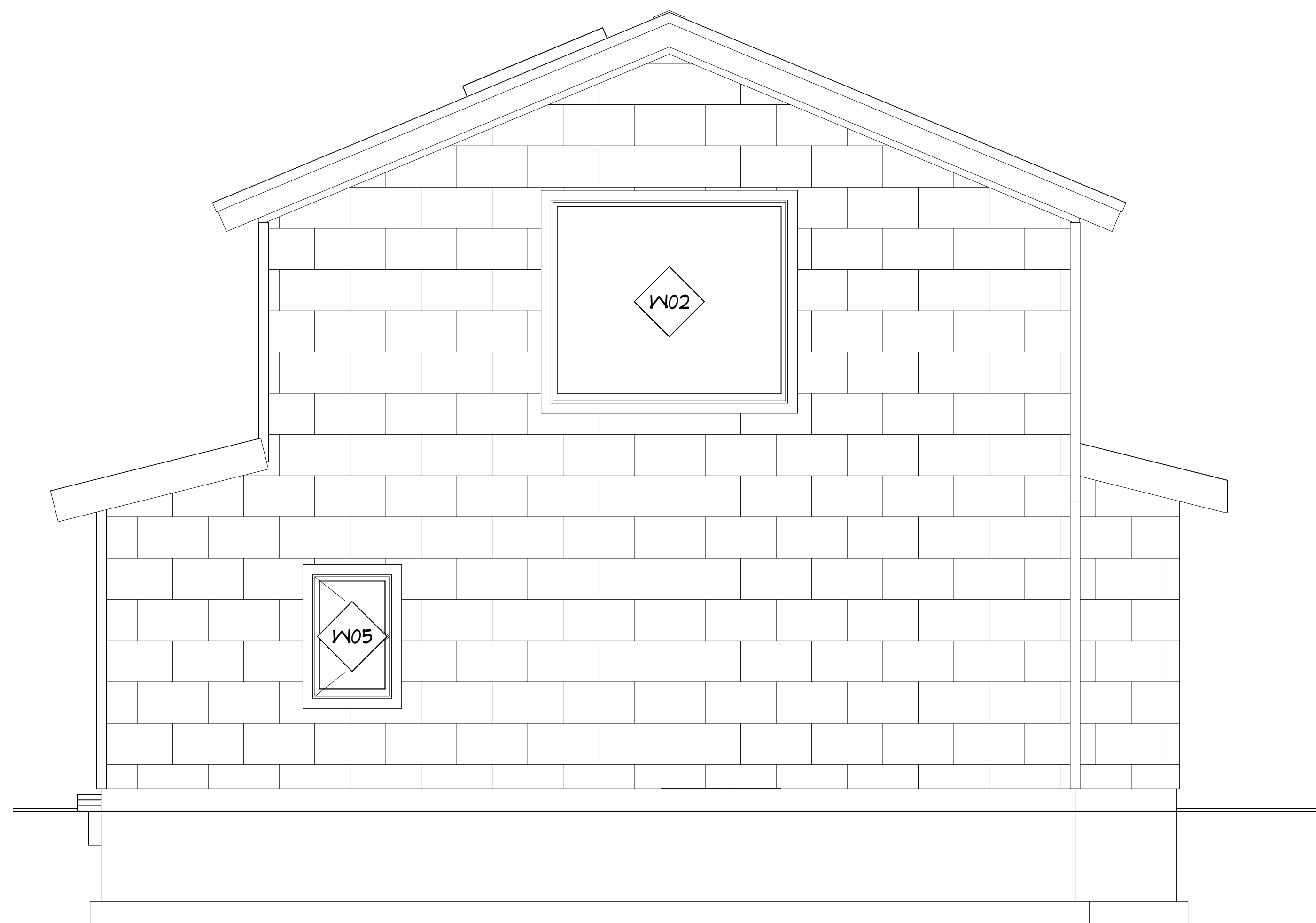


E1 FRONT ELEVATION

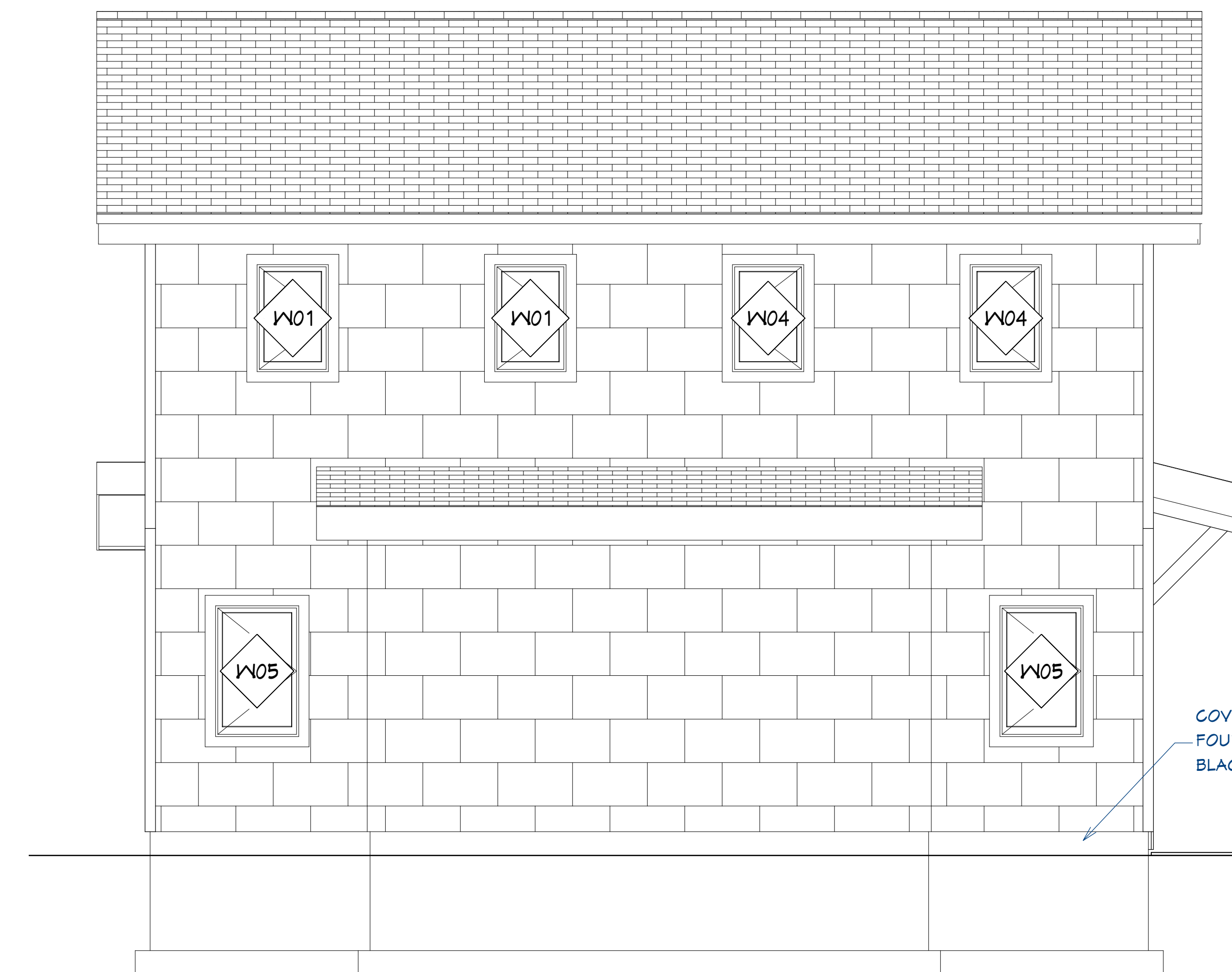


E3 RIGHT ELEVATION

ALL EXTERIOR LIGHTING
MUST BE DARK SKY
COMPLIANT.



E3 REAR ELEVATION

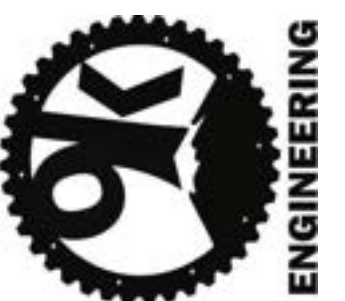


E4 LEFT ELEVATION

COVER EXPOSED
FOUNDATION WALL WITH
BLACK METAL FLASHING.

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
9K ENGINEERING

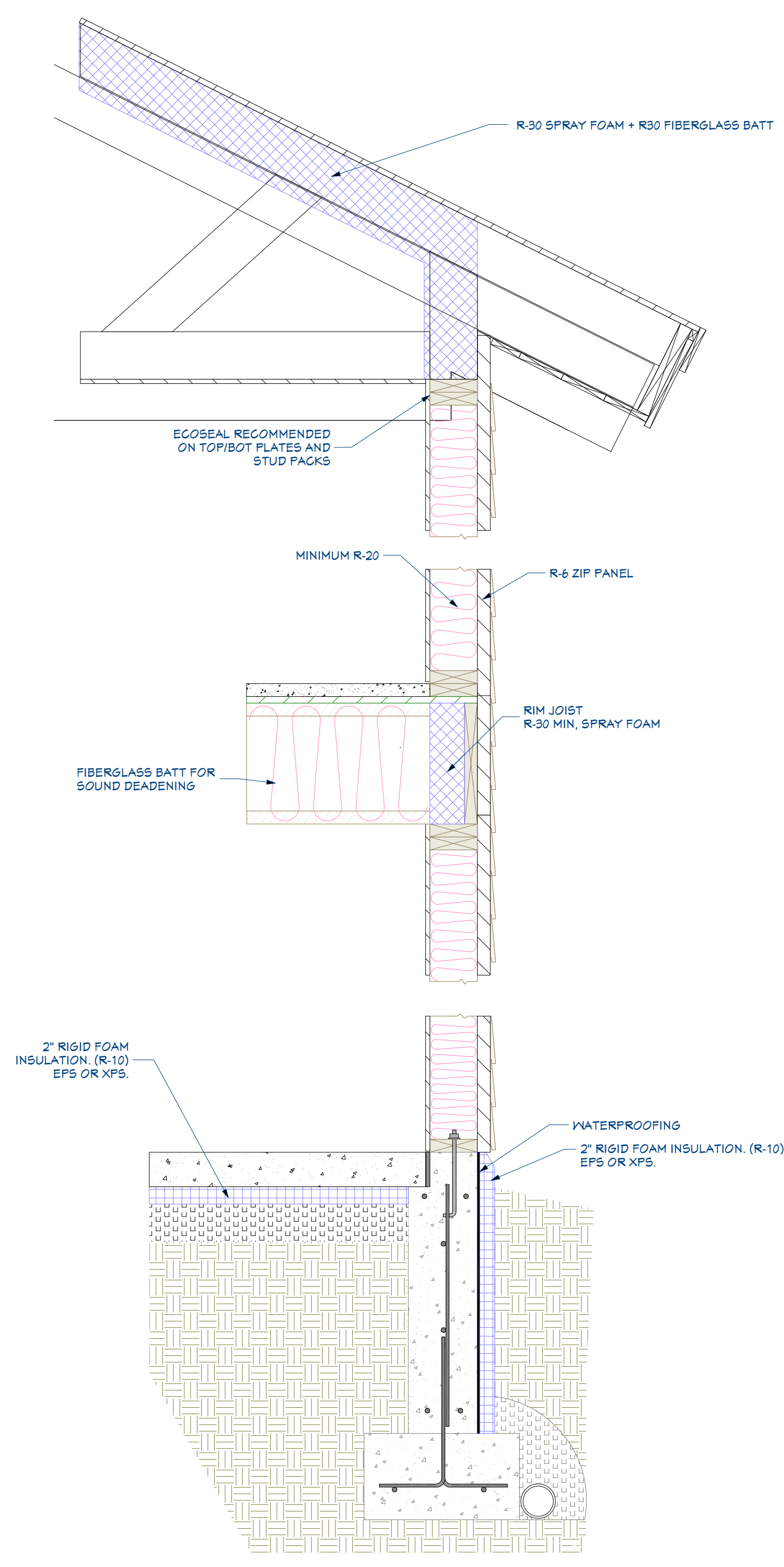
DATE:
5/26/2026

SHEET:
A-6

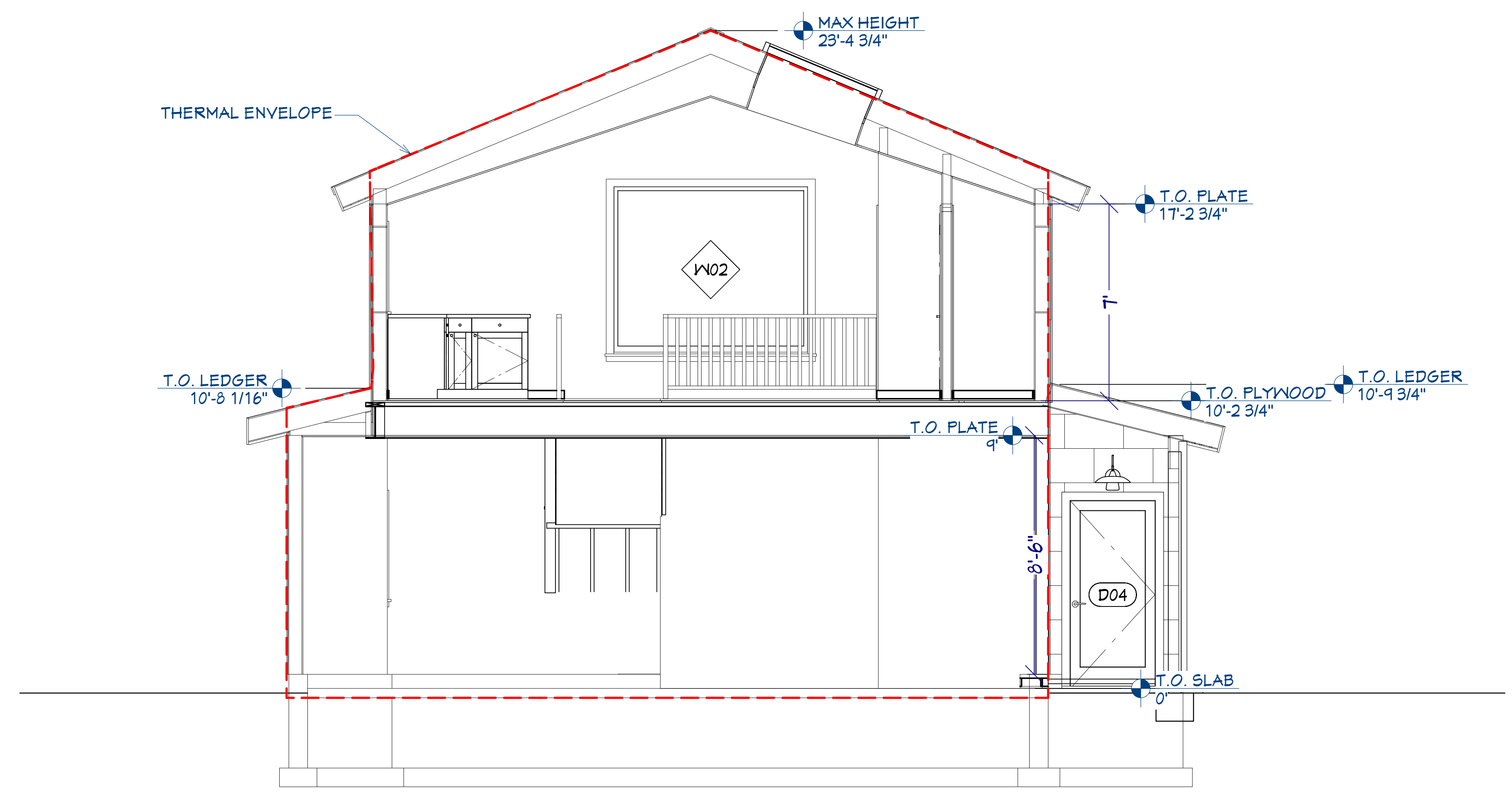
FRONT AND
REAR
ELEVATION

SCALE: 3/8"=1'

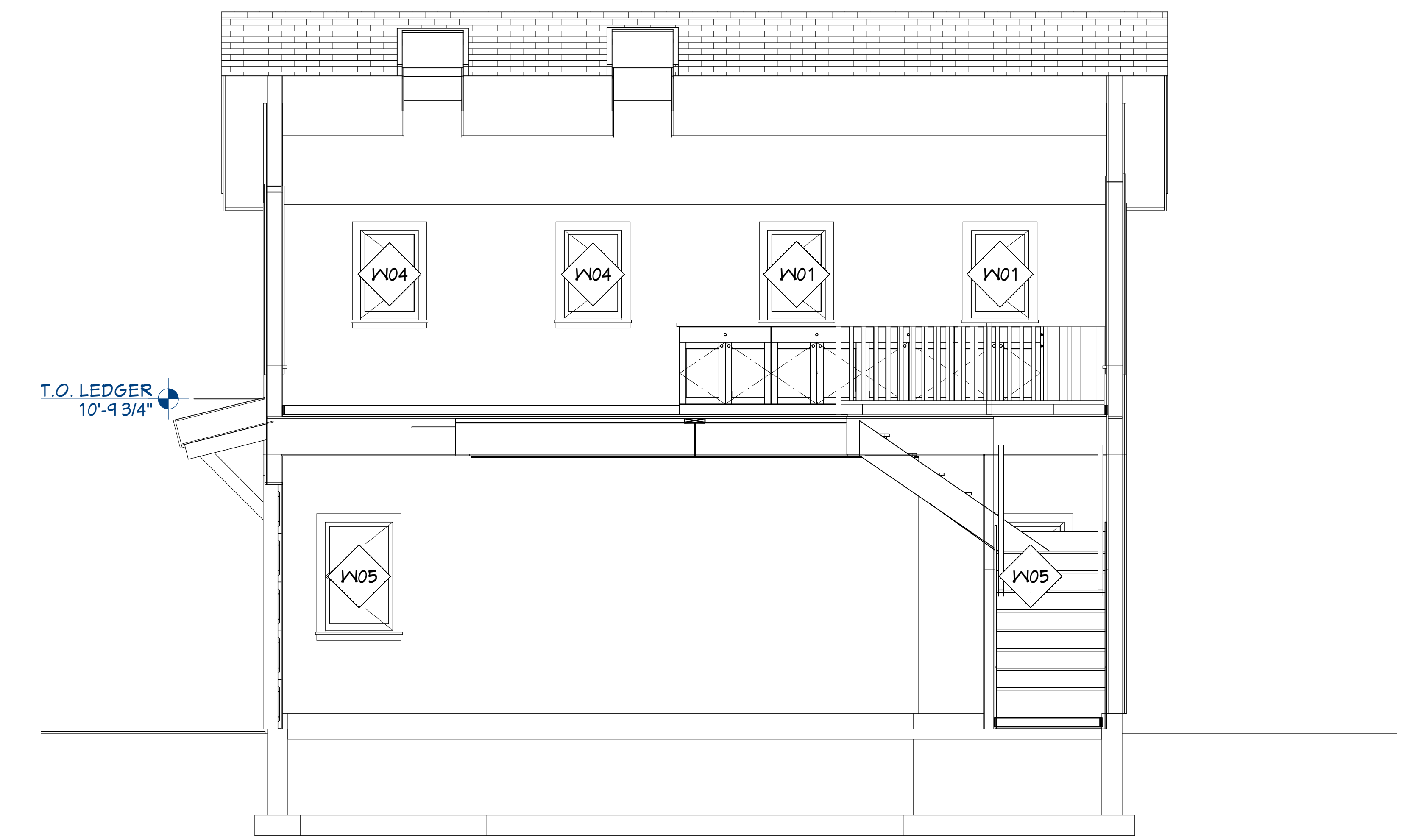




D19 INSULATION OVERVIEW



E5 CENTER SECTION



E6 CENTER SECTION

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



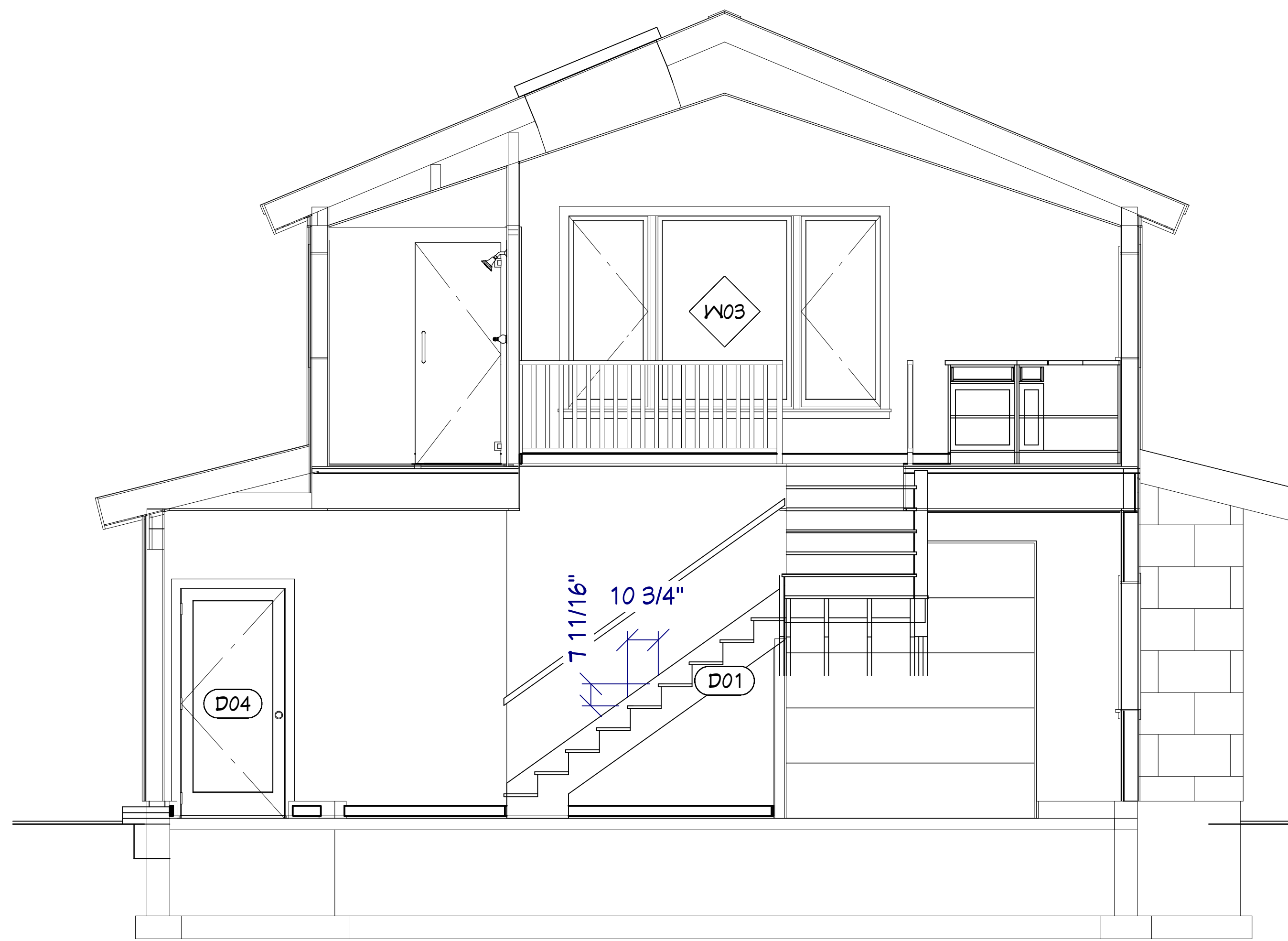
DESIGN AND ENGINEERING BY
 9K ENGINEERING

DATE:
5/26/2026

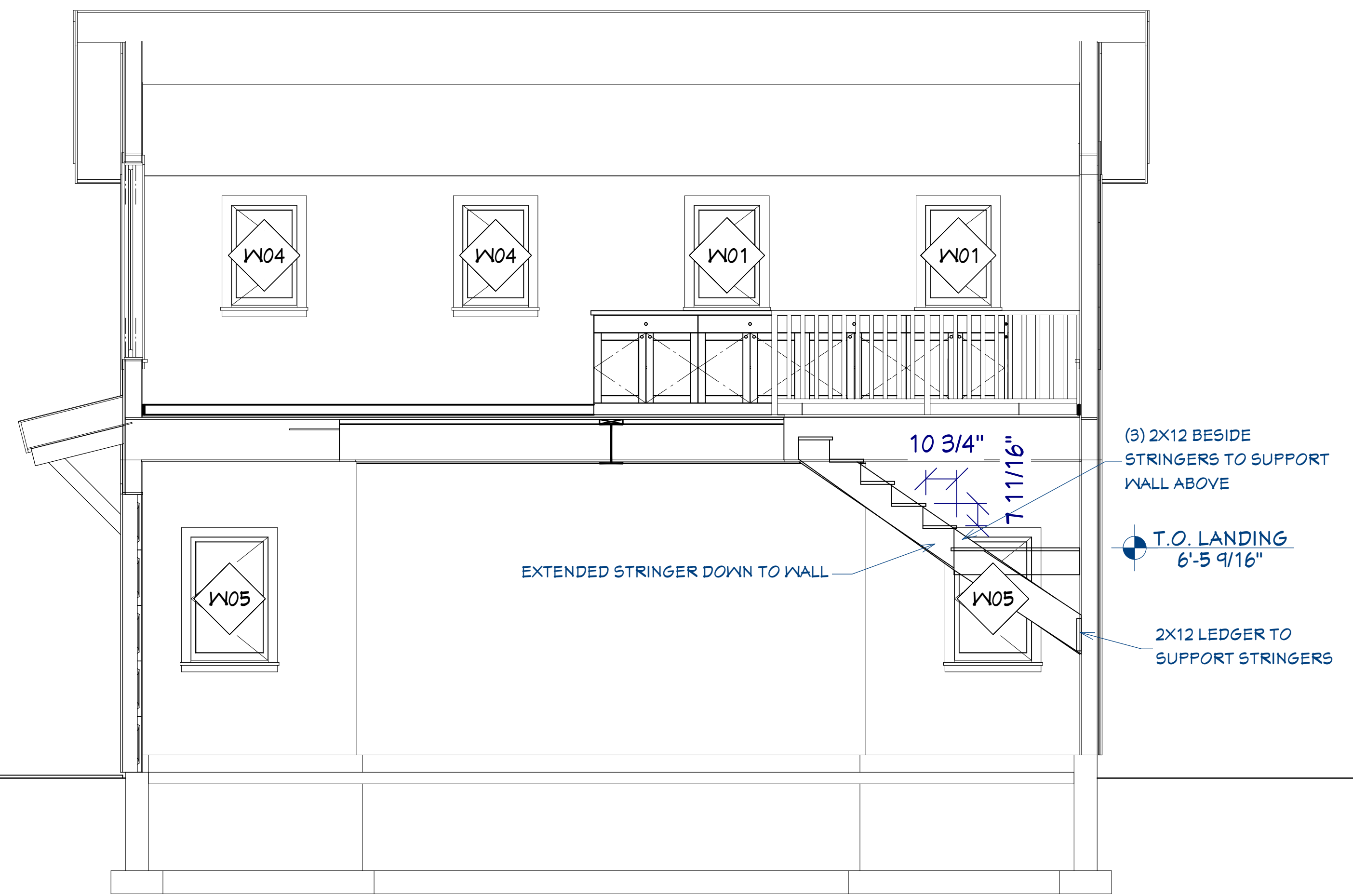
SHEET:
A-7
 CENTER SECTION

SCALE: 3/8"=1'





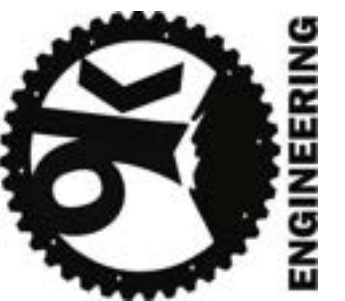
E7 STAIR SECTION 1



E8 STAIR SECTION 2

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
 103 BLUE ROCK DR
 BRECKENRIDGE, CO 80424



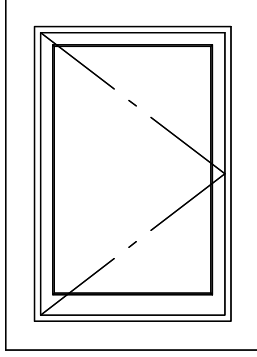
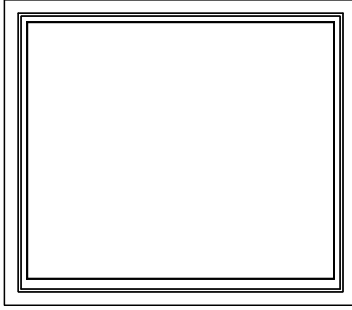
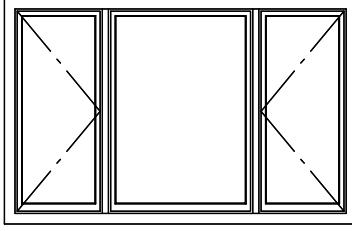
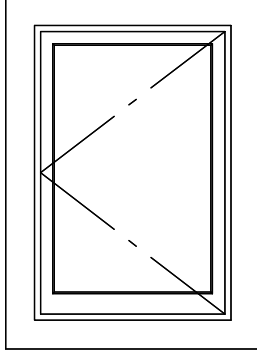
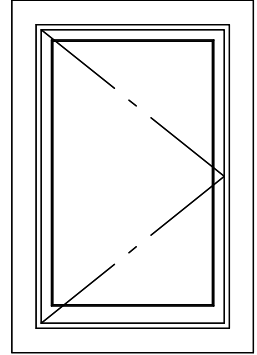
DESIGN AND ENGINEERING BY
 9K ENGINEERING

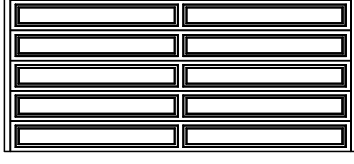
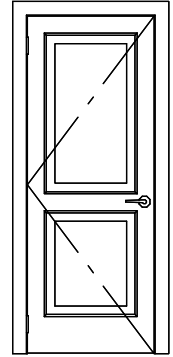
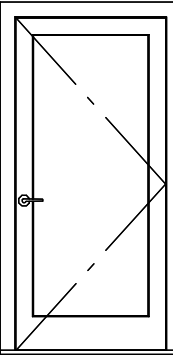
DATE:
5/26/2026

SHEET:
A-8
 STAIR SECTIONS

SCALE: 3/8"=1'



WINDOW SCHEDULE						
3D EXTERIOR ELEVATION	NUMBER	QTY	FLOOR	WIDTH	HEIGHT	DESCRIPTION
	W01	3	2	24"	36"	SINGLE CASEMENT-HR
	W02	1	2	84"	72"	FIXED GLASS
	W03	1	2	110"	68"	MULLED UNIT
	W04	2	2	24"	36"	SINGLE CASEMENT-HL
	W05	3	1	28"	44"	SINGLE CASEMENT-HR

DOOR SCHEDULE							
3D EXTERIOR ELEVATION	NUMBER	LABEL	QTY	FLOOR	WIDTH	HEIGHT	DESCRIPTION
	D01	18080	1	1	216"	96"	GARAGE-GARAGE DOOR F01
	D02	2668	2	2	30"	80"	HINGED-DOOR F04
	D04	3068	2	1	36"	80"	EXT. HINGED-DOOR F01

REVISION TABLE	DESCRIPTION
LABEL DATE	

GISKE GARAGE
103 BLUE ROCK DR
BRECKENRIDGE, CO 80424



DESIGN AND ENGINEERING BY
9K ENGINEERING

DATE:
5/26/2026

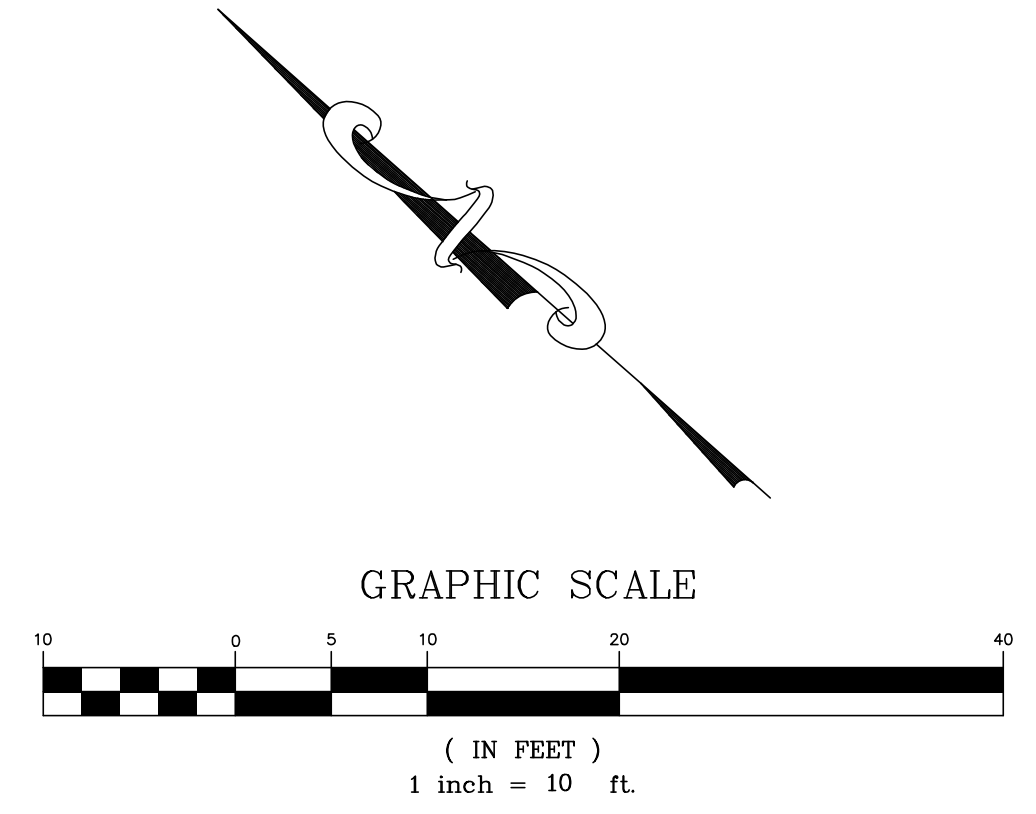
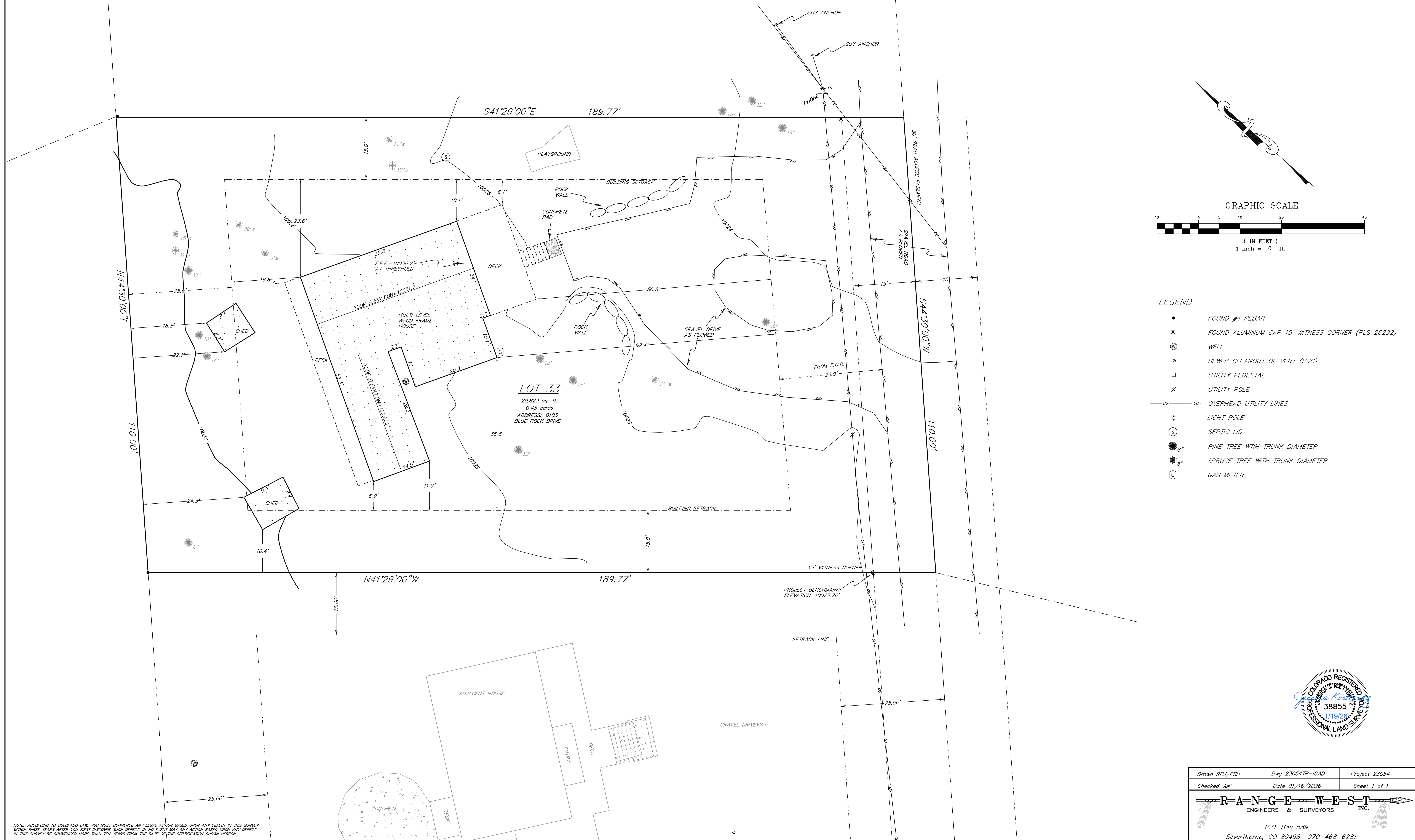
SHEET:
A-9

DOOR AND
 WINDOW
 SCHEDULE

SCALE:



A TOPOGRAPHIC MAP OF
LOT 33, BLUE ROCK SPRINGS SUBDIVISION AMENDED
BLUE RIVER ESTATES
 TOWN OF BLUE RIVER, SUMMIT COUNTY, COLORADO



- LEGEND**
- FOUND #4 REBAR
 - ⊙ FOUND ALUMINUM CAP 15' WITNESS CORNER (PLS 26292)
 - ⊕ WELL
 - SEWER CLEANOUT OF VENT (PVC)
 - UTILITY PEDESTAL
 - ∅ UTILITY POLE
 - o—o— OVERHEAD UTILITY LINES
 - ☆ LIGHT POLE
 - ⊙ SEPTIC LID
 - 8" PINE TREE WITH TRUNK DIAMETER
 - ⊙ 8" SPRUCE TREE WITH TRUNK DIAMETER
 - ⓐ GAS METER

NOTE: 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.



Drawn RRJ/ESH	Dwg 23054TP-ICAD	Project 23054
Checked JJK	Date 01/16/2026	Sheet 1 of 1

RANGEWEST

ENGINEERS & SURVEYORS INC.

P.O. Box 589
 Silverthorne, CO 80498 970-468-6281

103 Blue Rock Dr Color Board

(colors to match existing home, Photo of existing structure for reference)

- Siding – Sherwin Williams – Urbane Bronze
- Trim – Sherwin Williams – Caviar
- Stained Wood – Minwax – English Chestnut
- Metal – Black Metal to cover foundation walls (None on existing home)





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

OWTS USE PERMIT

**For the continued use of an existing onsite wastewater treatment system
As required at property transfer and major remodel**

Permit #: USE18-0047
Status: ISSUED
Issue Date: 5/15/2018
Expiration Date: 5/15/2019

SCHEDULE # 100362

LOT: 33 BLOCK: SUB: BLUE ROCK SPRINGS SUB [100]
103 Blue Rock DR (CR 579)

F THOMAS HALMOS
11 LORTON AVE
BURLINGAME, CA 94010-4401

**THE ONSITE WASTEWATER TREATMENT SYSTEM AT THIS PROPERTY WAS FOUND TO COMPLY WITH THE
MINIMUM REQUIREMENTS FOR EXISTING SYSTEMS AS SET FORTH IN THE ONSITE WASTEWATER TREATMENT
SYSTEM REGULATIONS OF SUMMIT COUNTY. KNOWN DETAILS OF THE SYSTEM ARE PROVIDED BELOW:**

System Inspected by: SNOWBRIDGE, INC
Tank Capacity: 1000 gallons
Dosing: Pump
OWTS Type: Tank & Field

System designed & permitted for: 3 Bedroom house
(Occupancy = 2 x bedrooms; example-3 bedrooms=6 person occupancy)

Service contract required? No

System Records:
Permit number: OWS81-1027 Date of Installation: 10/09/1981

Limitations & Disclaimer:

Issuance of the Use Permit is based solely on conditions observed on the date of inspection and on Department records at the time of permitting. The Department assumes no responsibility for the continued satisfactory operation of the septic system serving this property. If the septic system malfunctions, or if bedroom space is added to the house in the future, the owner is responsible for making any necessary repairs and/or upgrades under a permit issued by this department

Conditions, Recommendations, Comments:

-Use Permit expires on the date indicated on the front of this permit, at point of sale or completion of remodel, whichever occurs first.

USE04 - Snow Cover: At the time of the inspection there was significant snow accumulation over the soil treatment area. Snow cover can prevent the inspector from performing as thorough of an inspection of the soil treatment area as can be done during snow free periods.

USE06 - Vegetation: Inspection report noted improper vegetation (trees, large shrubs) in the immediate vicinity of the absorption area. Roots of such vegetation can cause field damage.

USE17 - Well Water Testing: According to the Use Permit application, the well water for this property has not been tested for potability in the past 12 months. This department recommends that a water sample be tested annually to verify a safe water source.

USE15 - Well Setback: Current regulations require well to be, at minimum, 100 feet from soil treatment areas. Inspector noted that the well on this property is less than 100 feet from the soil treatment area or did not accurately report what the distance is. Although this department does not require this to be corrected, it is important to make sure the septic system is maintained and pumped regularly to avoid contamination of the well. It is also recommended that the well water be tested annually.

THIS USE PERMIT IS HEREBY GRANTED TO THE OWNER OR HIS AGENT VERIFYING THE CONDITION OF THE OWS SYSTEM REPORTED BY AN APPROVED USE PERMIT INSPECTOR AS STIPULATED IN THE SUMMIT COUNTY OWS REGULATIONS

APPROVED BY: 
Environmental Health Official

Date: 5/15/18

TO: Chad Hull-Town Manager
FROM: Kyle Parag, Plan Reviewer - CAA
DATE: May 27, 2026
RE: Planning/Zoning/Architectural Guidelines review – 0066 Conifer

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

Zoning Regulation analysis –

Proposal: A new single-family residence with an attached garage. The proposed 2 story, 3 bedroom, 2 bath home, includes 3067 s.f. of living space and an attached 1333 s.f., 3 vehicle garage for a combined 4,400 square feet.

Zoning district: R-1

Lot Size: ~ 31,664 sq. ft.
80,000 sq. ft. Required– Existing Non-Conforming

Lot Width: ~ 218'
100 ft. Required - Complies

Setbacks: Proposed principal residence complies with required setbacks based upon submitted docs. Front cannot be definitively determined, and up to the Planning and Zoning committee interpretation. The entry point is mostly on the north side, however the house orientation is mostly facing east. The provided site plan indicates the front setback is the north, and therefore the rear is south. If the orientation to turned, the patio is located 20' from the property line and is in the setback, but the roof overhang does not appear to. The scaling is incorrect on the drawings to validate a distance.

Height: Complies with required height limitations. The height at the highest roof ridge is proposed at 26'-2"

Garage Stds: The proposed garage is ~1333 sq. ft. and complies with the standards for structures less than 5,000 sq. ft. in habitable size.

Parking Stds: Parking requirements will be met through the proposed garage.

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
PC	Subject to Planning Commission Specific approval
	Requires additional information from applicant
N/A	Not Applicable to the application

STANDARD	NOTES/REMARKS	SUBSTANTIAL COMPLIANCE
DEVELOPMENT STANDARD		
Article 3: Easements	Easements are indicated. Pedestrian easement is along southern edge.	Y
Article 4: Buildable Area/setbacks	Setbacks are indicated with the orientation issue as listed above. Site plan DOES NOT indicate the roof planes, and the north wall is indicated at 2'10" from the setback line, overhangs are indicated at 24"	PC
Article 5 Building Design Standards		
Article 5-20 Building Height	Height is indicated at 26'-2"	Y
Article 5-60 Foundation	Foundation covering is not indicated	N

Article 5-70 Roofs	Main roof design is a shed roof, with an indicated slope of 3:12	PC
Article 5-80 Garages	Garage door has a traditional design but is partially set in front of the main walls of the home.	PC
Article 5-90 Window and doors	Windows are sized to complement the home.	Y
Article 5-100 Balconies and railings	None indicated	Y
Article 5-110 Chimney and Roof Penetrations	None indicated, but a fireplace is indicated on the floor plan	Y
Article 6 Building Materials and Colors		
Article 6-20 Materials	Siding: Charcoal metal board and batt from delta metals Masonry: Dry stack farmers mix with gray undertones. Unclear on material selection, Metal siding is conditional. No clear color board provided for appearance	Y
Article 6-30 Colors	No Color Board provided	N
Article 7 Accessory Improvements		
Article 7-(20-40, 110) Berms, Garages, sheds and Gazebos	None indicated. Garage is indicated at 1333 Sqft	Y
Article 7-50 Driveways	Width indicated at 12'. Slopes are 10% for most of the driveway.	Y
Article 7-60 Parking Areas	Parking is interior	Y
Article 7-100 Decks	None proposed	Y

Article 7-120 Hot Tubs	None indicated	Y
Article 7-140 Fences	None indicated	Y
Article 7-150 Retaining walls	Several retaining walls indicated, some in the setbacks	PC
Article 8 Signs		
Article 8 Signs	None indicated	Y
Article 9 Lighting		
Article 9 Lighting	No information provided	N
Article 13 Environmental Regulations		
Article 13-20 Wetlands	Wetlands are indicated in very close proximity to the south side of the home. No wetlands delineation map acceptable to the town has been provided as part of this application. Site plan provided is difficult to determine existing slopes vs proposed slopes.	N

I'd like to be on the Agenda, AS A project for APPROVAL AS I believe ALL ITEMS NOTED by building official during their REVIEW CAN Be RESOLVED ON tuesday 6/2.

IF COMMISSION DISAGREES then perhaps they CAN table the APPLICATION RATHER THAN DENY.

ALL ISSUES ARE NON ISSUES.

- ① SET BACKS : PLAN CLEARLY SHOW EAST AS FRONT ~~OF~~ REAR IS 25.5 TO EDGE OF DRIPLINE KYLE HAS MEASURED TO EDGE OF CONCRETE FOR 20' THIS IS NOT COVERED BY ROOF, ONLY PARTIAL AS STATED ON SITEMAP. (ENTRY POINT IS NOT NORTHSIDE)
YOU ARE CORRECT W/SCALE ON ARCH / REFER TO S-1 CORRECT
- ② ROOF - RECENT P&Z DISCUSSION INDICATED 3/12 SHED WITH/MULTI PITCH IS ACCEPTABLE SHOWNEN ON A-6 BELIEVE YOUR 2'10" MEASURED TO (LIMITS OF CONSTRUCTION LINE) I HAVE 27.8ft STATED ON SITE MAP NORTHSIDE.
- ③ SHOWS ON A-1 SIDING / ROCK VENEER ON NUDURA
- ④ WILL PROVIDE, A COLOR BOARD ON 6/2 TUESDAY
- ⑤ GARAGE BEING PARTIALLY IN FRONT OF THE MAIN WALLS OF THE HOME PER 16B-5-80. SEEMS NOT APPLIABLE BECAUSE THIS IS AN ATTACHED GARAGE, SIMILAR TO MOST ~~DEVELOPMENTS~~ DEVELOPMENTS IN BLUE RIVER, 16-20-70 / 16B-7-60 16B-7-150.
- ⑥ ROOF - P&Z APPROVED 3/12 PITCHES ~~SH~~
- ⑦ RETAINING WALL 16b-7-150 DEEMED NECESSARY BY TOWN FOR A DRIVEWAY & SEPTIC FIELD (THINK THIS IS NECESSARY)
- ⑧ NO LIGHTING DETAILS / IS A STANDARD CODE SET OUTDOOR LIGHTING FULLY SHIELDED LIGHT PROJECTED BELOW FIXTURE.
- ⑨ WETLANDS - DELINEATION LIMITS SET ON SITEMAP ^{REPORT} (WERE STAKED BY A REPORT SHOWING WATERLINE (WILL BRING))



GOOD RESIDENCE

66 CONIFER DRIVE, BLUE RIVER, COLORADO



REVISION TABLE		
NUMBER	DATE	DESCRIPTION

Good Residence
66 Conifer Drive
Blue River, CO

DRAWINGS PROVIDED BY:

DATE:

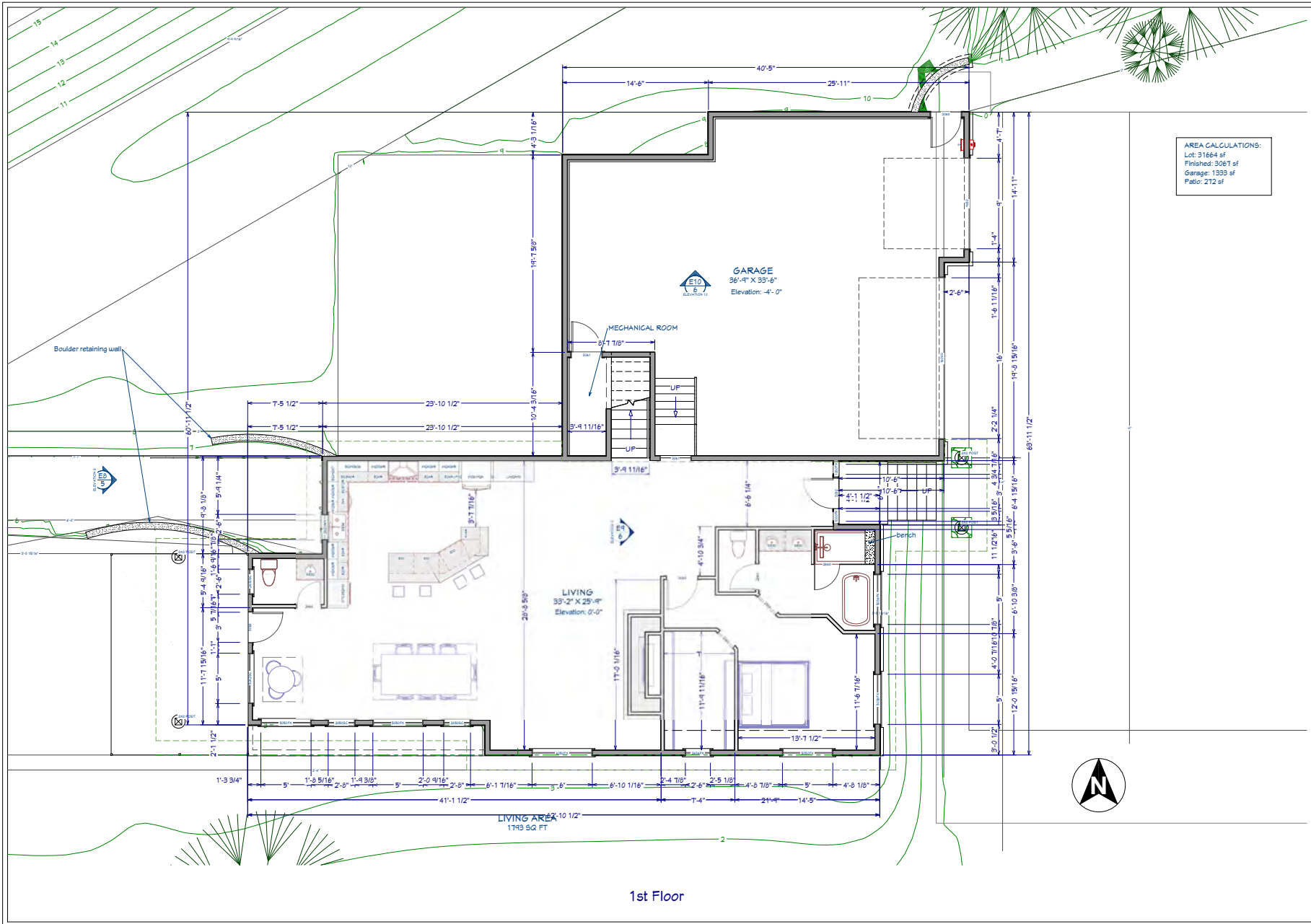
5/8/2026

SCALE:

1/4"=1'

SHEET:

A-1



AREA CALCULATIONS:
 Lot: 31664 sf
 Finished: 3081 sf
 Garage: 1339 sf
 Patio: 212 sf

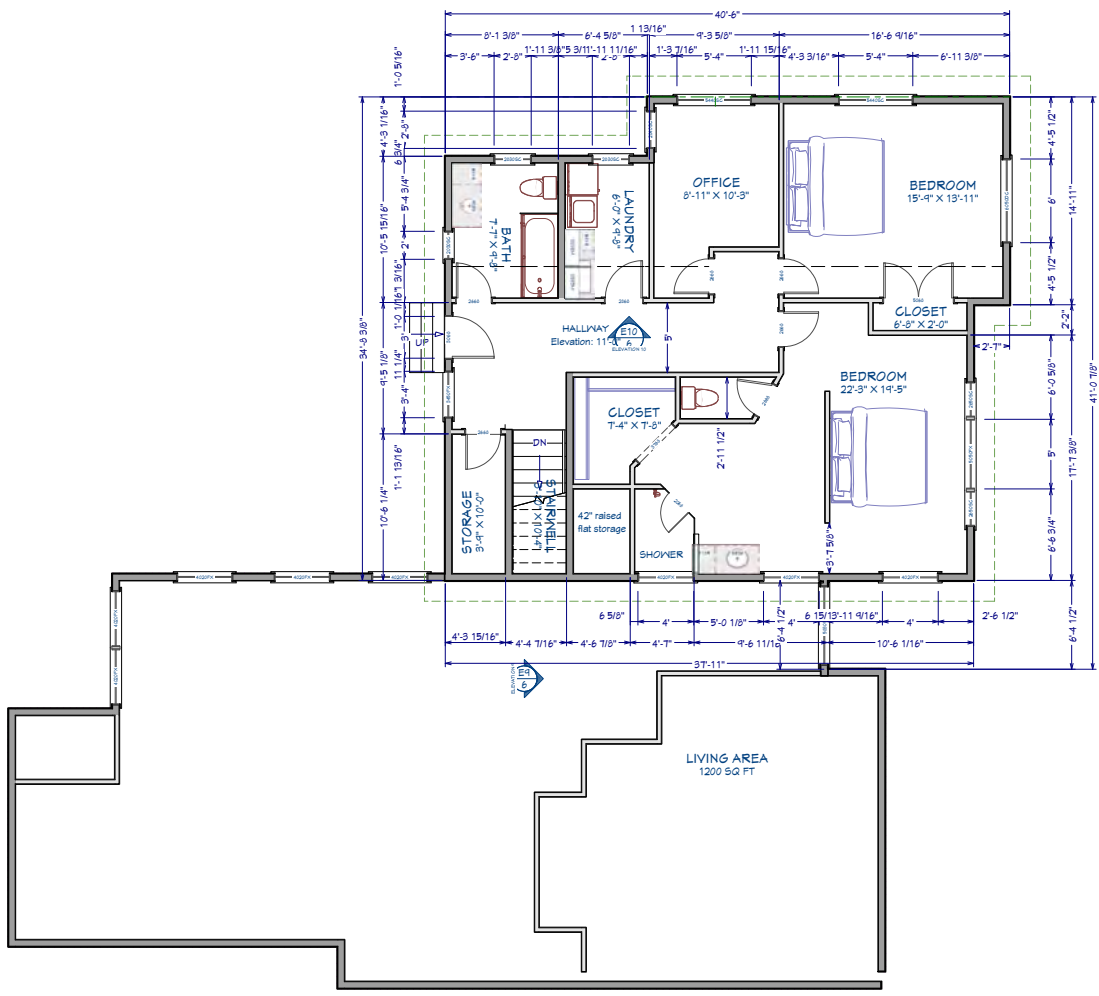
REVISION TABLE	
NUMBER	DATE

Good Residence
 66 Conifer Drive
 Blue River, CO

DRAWINGS PROVIDED BY:

DATE:
 5/8/2026
 SCALE:
 1/4"=1'
 SHEET:
 A-2

1st Floor



2nd Floor



REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

Good Residence
 66 Conifer Drive
 Blue River, CO

DRAWINGS PROVIDED BY:

DATE:

5/8/2026

SCALE:

1/4"=1'

SHEET:

A-3



REVISION TABLE	NUMBER	DATE	REVISED BY	DESCRIPTION

Good Residence
66 Conifer Drive
Blue River, CO

DRAWINGS PROVIDED BY:

DATE:

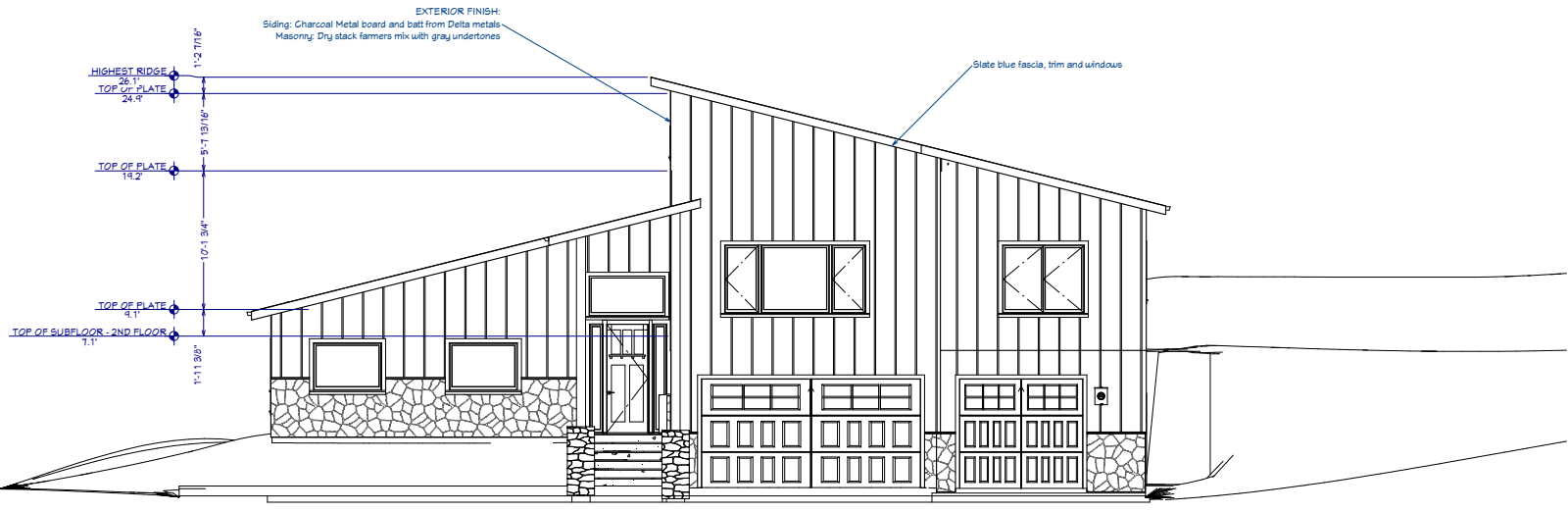
5/8/2026

SCALE:

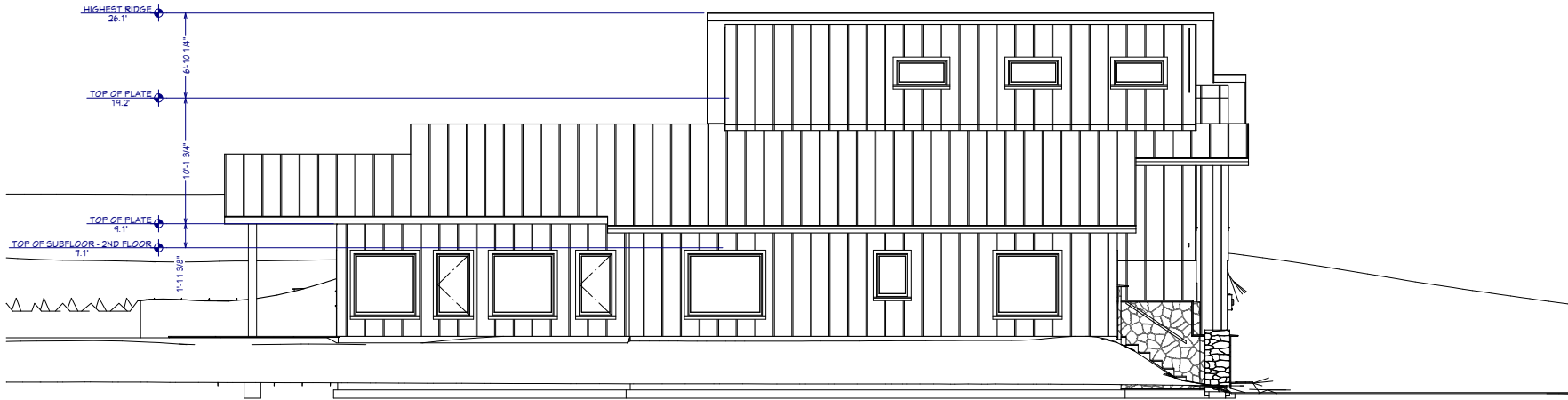
1/4"=1'

SHEET:

A-4



EAST ELEVATION



SOUTH ELEVATION



REVISION TABLE	
NUMBER	DATE

Good Residence
66 Conifer Drive
Blue River, CO

DRAWINGS PROVIDED BY:

DATE:

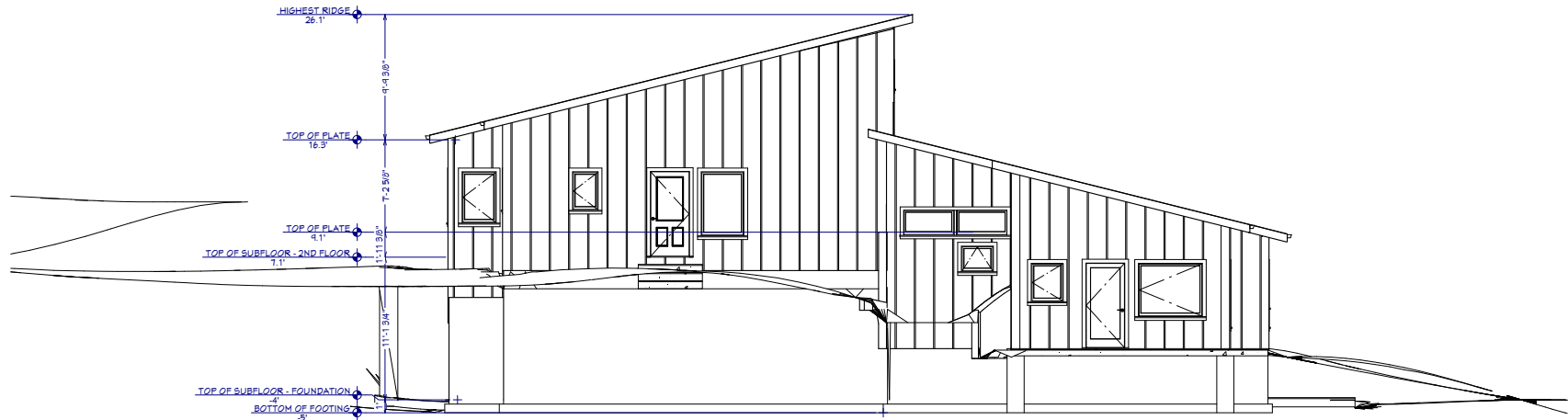
5/8/2026

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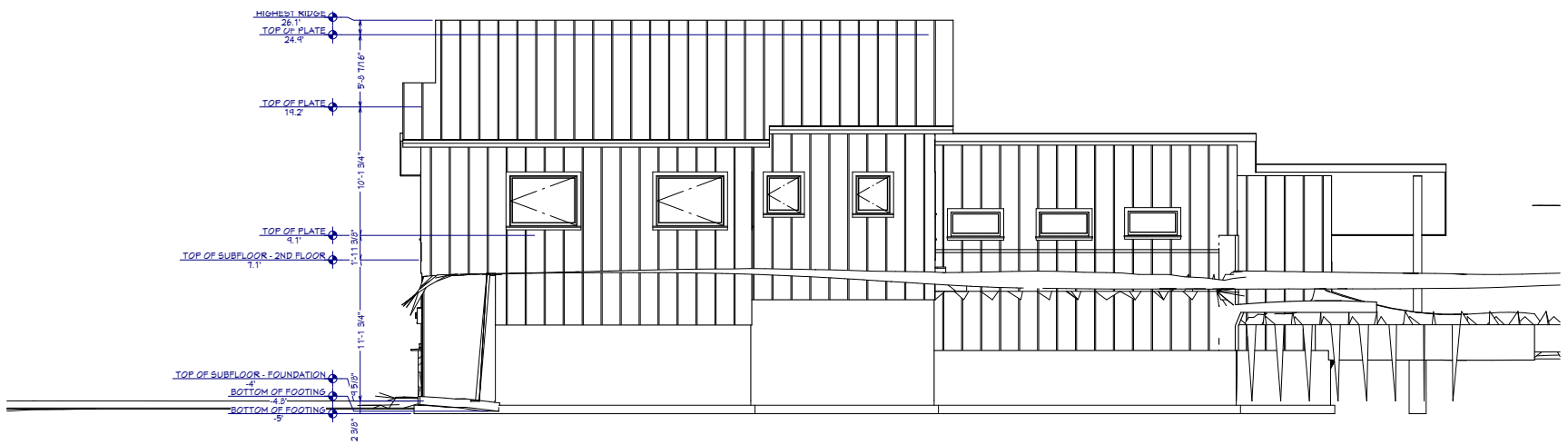
1/4"=1'

SHEET:

A-5



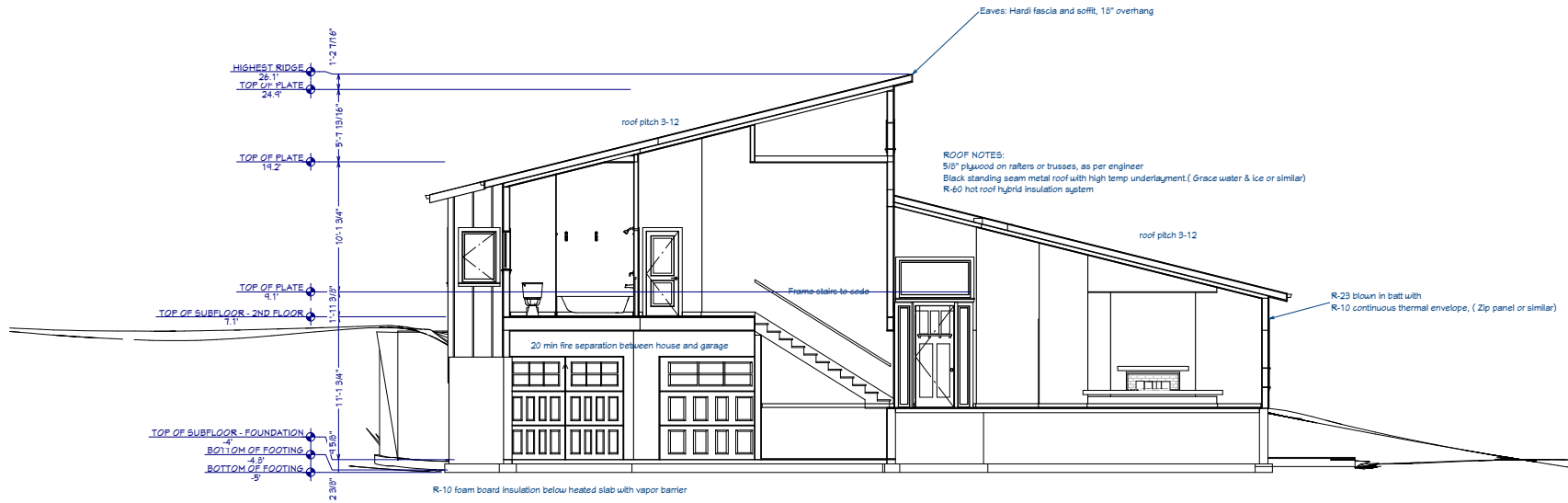
WEST ELEVATION



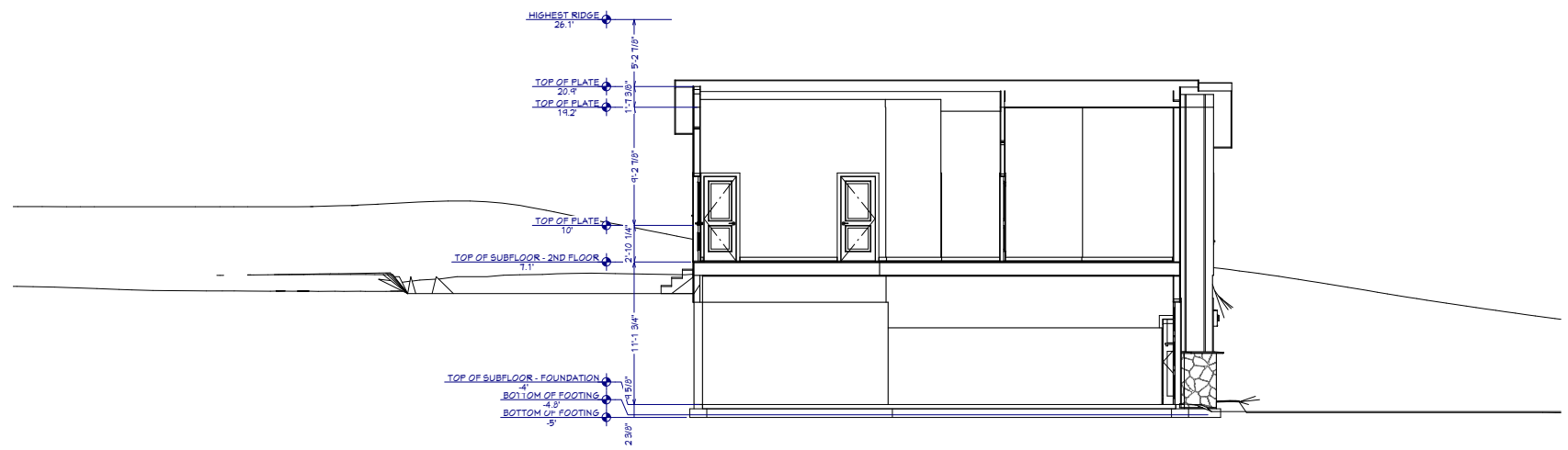
NORTH ELEVATION



REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION



Elevation Section 9



Elevation Section 10

Good Residence
66 Conifer Drive
Blue River, CO

DRAWINGS PROVIDED BY:

DATE:

5/8/2026

SCALE:

1/4" = 1'

SHEET:

A-6

66 CONIFER DRIVE

TOWN OF BLUE RIVER, COLORADO
PLOT AND EC PLAN



PREPARED FOR:
ROCKY MOUNTAIN
HOME BUILDERS

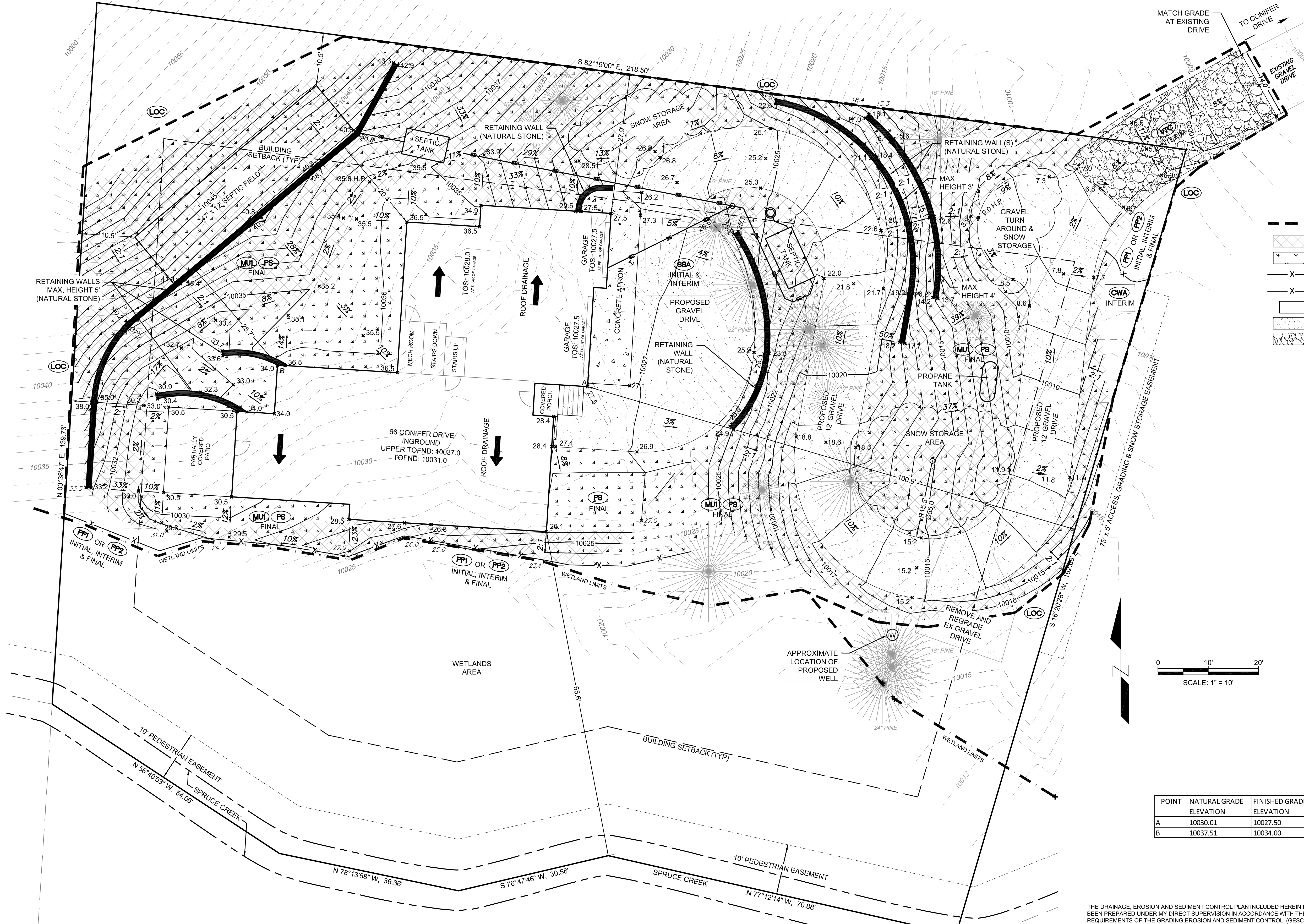
66 CONIFER DRIVE
TOWN OF BLUE RIVER, COLORADO
PLOT AND EC PLAN

DATE:
BY:

REVISIONS:
1.
2.
3.
4.

PROJECT NUMBER: 23201
ISSUED DATE: 5/4/2026
DESIGNED BY: DLC
REVIEWED BY: ROE

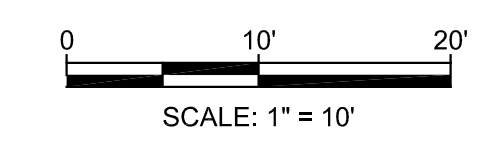
PLOT AND
EC PLAN



LEGEND

	LOC	LIMITS OF CONSTRUCTION
	MUJ	MULCH PROTECTION (FINAL)
	PS	PERMANENT SEEDING (FINAL)
	PP1	PERIMETER PROTECTION (INITIAL, INTERIM & FINAL)
	PP2	PERIMETER PROTECTION (INITIAL, INTERIM, & FINAL)
	CWA	CONCRETE WASHOUT AREA (INTERIM)
	SSA	STABILIZED STAGING AREA (INITIAL & INTERIM)
	VTC	VEHICLE TRACKING CONTROL (INTERIM)

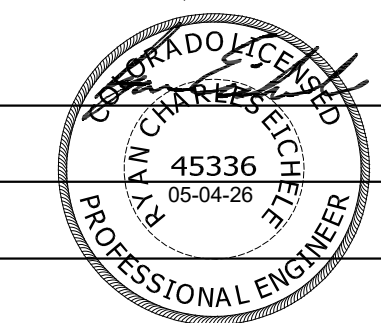
- NOTES:
- REFER TO THE TOWN OF BLUE RIVER GESC STANDARD NOTES AND DETAIL SHEETS FOR INSTALLATION AND MAINTENANCE OF GESC BMPs.
 - ANY AREA WHERE VEGETATION IS REMOVED BY VEHICLE TRAFFIC OR STAGING WILL BE SEEDED AND MULCHED.
 - ANY ADDITIONAL EROSION CONTROLS DEEMED NECESSARY BY THE TOWN OF BLUE RIVER EROSION CONTROL INSPECTOR WILL BE INSTALLED PER THE INSPECTOR'S DIRECTION.
 - ALL DISTURBED SOIL OUTSIDE OF BUILDING FOOTPRINT WILL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE TOWN OF BLUE RIVER CRITERIA UNLESS SURFACED WITH GRAVEL, CONCRETE OR OTHER IMPERVIOUS MATERIAL.
 - ANY CREATED SLOPES STEEPER THAN 4H:1V WILL BE PROTECTED BY MULCH PROTECTION AND SEEDING.
 - GRADED SLOPES SHALL NOT BE STEEPER THAN 2H:1V.
 - A MINIMUM SLOPE OF 10% AND A MAXIMUM SLOPE OF 33% IN THE FIRST 10 FEET AWAY FROM THE FOUNDATION WALLS AND WINDOW WELLS SHALL BE ESTABLISHED FOR PERVIOUS SURFACES. ALL OTHER DISTURBED AREAS SHALL HAVE A MINIMUM OF 2% SLOPE.
 - THIS PLOT PLAN IS FOR THE DESIGN OF GRADING AND DRAINAGE SURROUNDING THE HOUSE. IT IS NOT TO BE USED FOR FOUNDATION DIMENSIONS, OR CONSTRUCTION OF THE HOUSE EXCEPT FOR ESTABLISHING THE TOP OF FOUNDATION GRADE.
 - SIDING TO REMAIN 6" ABOVE FINISHED GRADE.
 - SITE BENCHMARK ESTABLISHED AT NORTHEAST CORNER OF PROPERTY, FOUND HEXBOLT PIN, ELEVATION 10005.14 NAVD 88.
 - SNOW STORAGE CALCULATION: DRIVEWAY SF = 4,755 SF, 25% OF THAT AREA = 1,189 SF, MIN. PROVIDED STORAGE AREA = 1,338 SF.



POINT	NATURAL GRADE ELEVATION	FINISHED GRADE ELEVATION	MEASURED FROM	ROOF ELEVATION	CALCULATION	HEIGHT (ft)
A	10030.01	10027.50	Natural Grade	10053.60	10053.6-10027.50	26.10
B	10037.51	10034.00	Natural Grade	10053.60	10053.6-10034.00	19.60

THE DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF THE TOWN OF BLUE RIVER, AS AMENDED

DESC PLANS PREPARED BY:
2N CIVIL, LLC
DATE
PROFESSIONAL LICENSE NO.

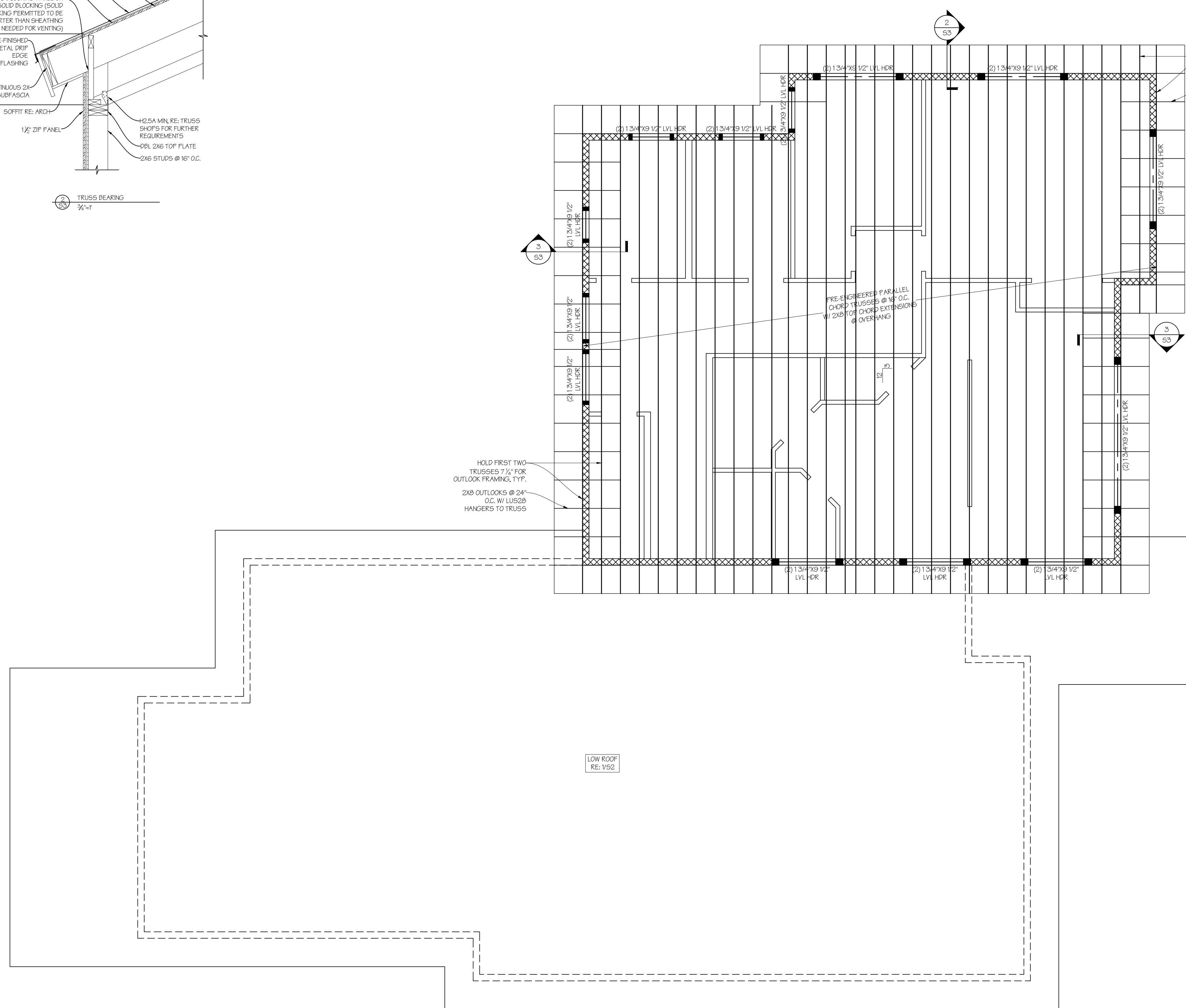
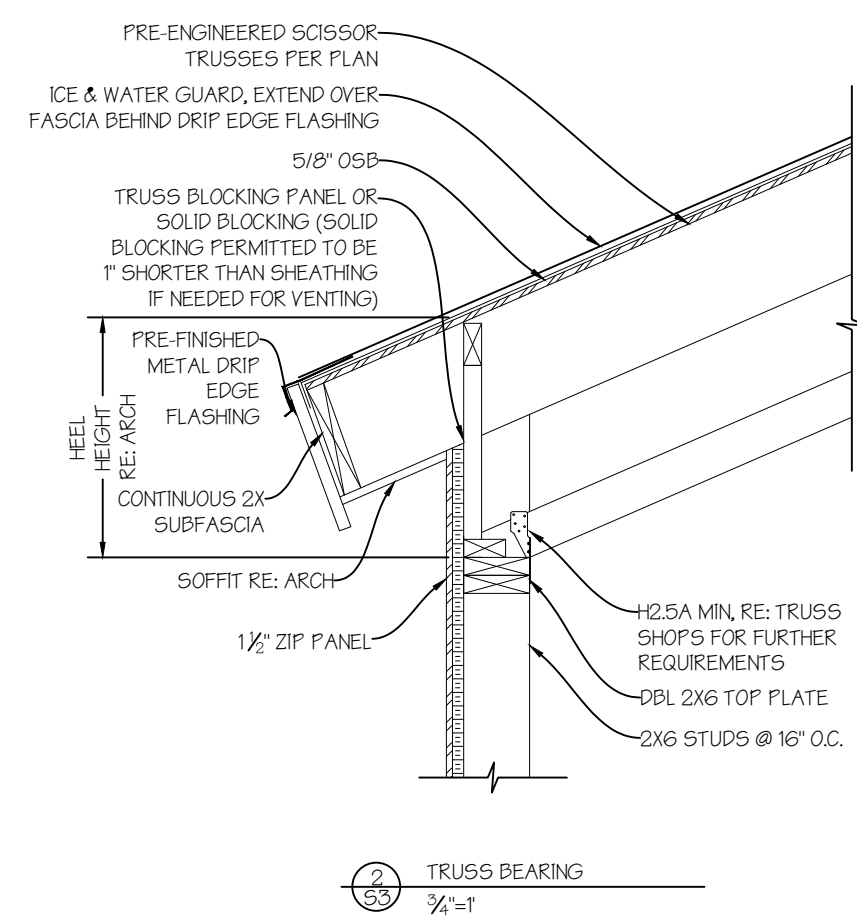
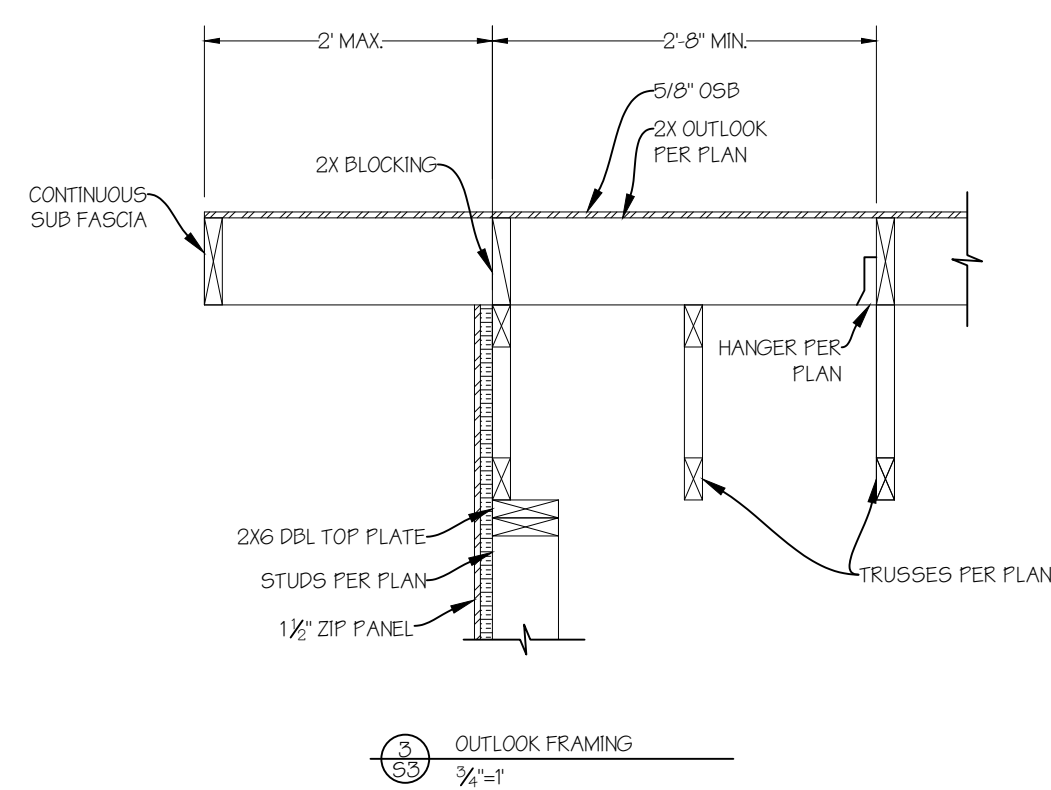


DEVELOPMENT REVIEW ENGINEER
DATE

THIS DESC PLAN HAS BEEN REVIEWED BY THE TOWN OF BLUE RIVER FOR DRAINAGE, EROSION AND SEDIMENT CONTROL IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

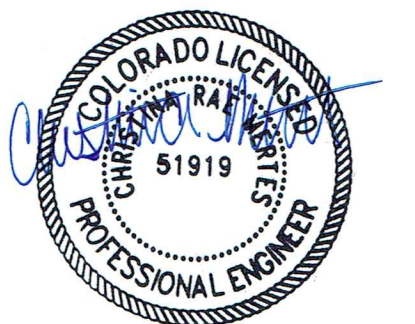
J:\Projects\23201\23201\Plot and EC Plan 66 Conifer 66 Conifer 04-27-2026.dwg 5/4/2026



1. ROOF TRUSS LAYOUT SHOWN IS PRELIMINARY. TRUSS SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW PRIOR TO FABRICATION.
 2. ALL TRUSSES SHALL BE FASTENED TO TOP PLATE W/ H2.5A CLIP MINIMUM. RE: TRUSS SHOP DRAWINGS FOR ADDITIONAL HOLDOWN AND BRACING REQUIREMENTS.

The ENGINEERING LOFT
 301 E. MAIN STREET, UNIT 265
 BUENA VISTA, CO 81211
 720.491.1611
 CHRISTINA@ENGINEERINGLOFT.COM

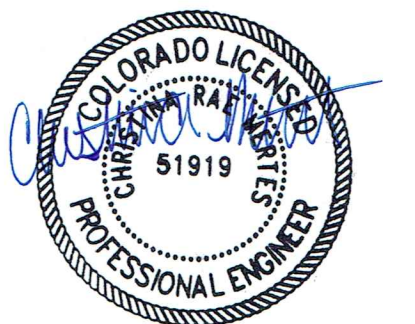
GOOD RESIDENCE
 66 CONIFER DRIVE
 BLUE RIVER, CO 80424
 ROOF FRAMING PLAN



PRELIM DATE: 5.7.26
 RELEASE DATE: 5.7.26
 REVISION DATE:

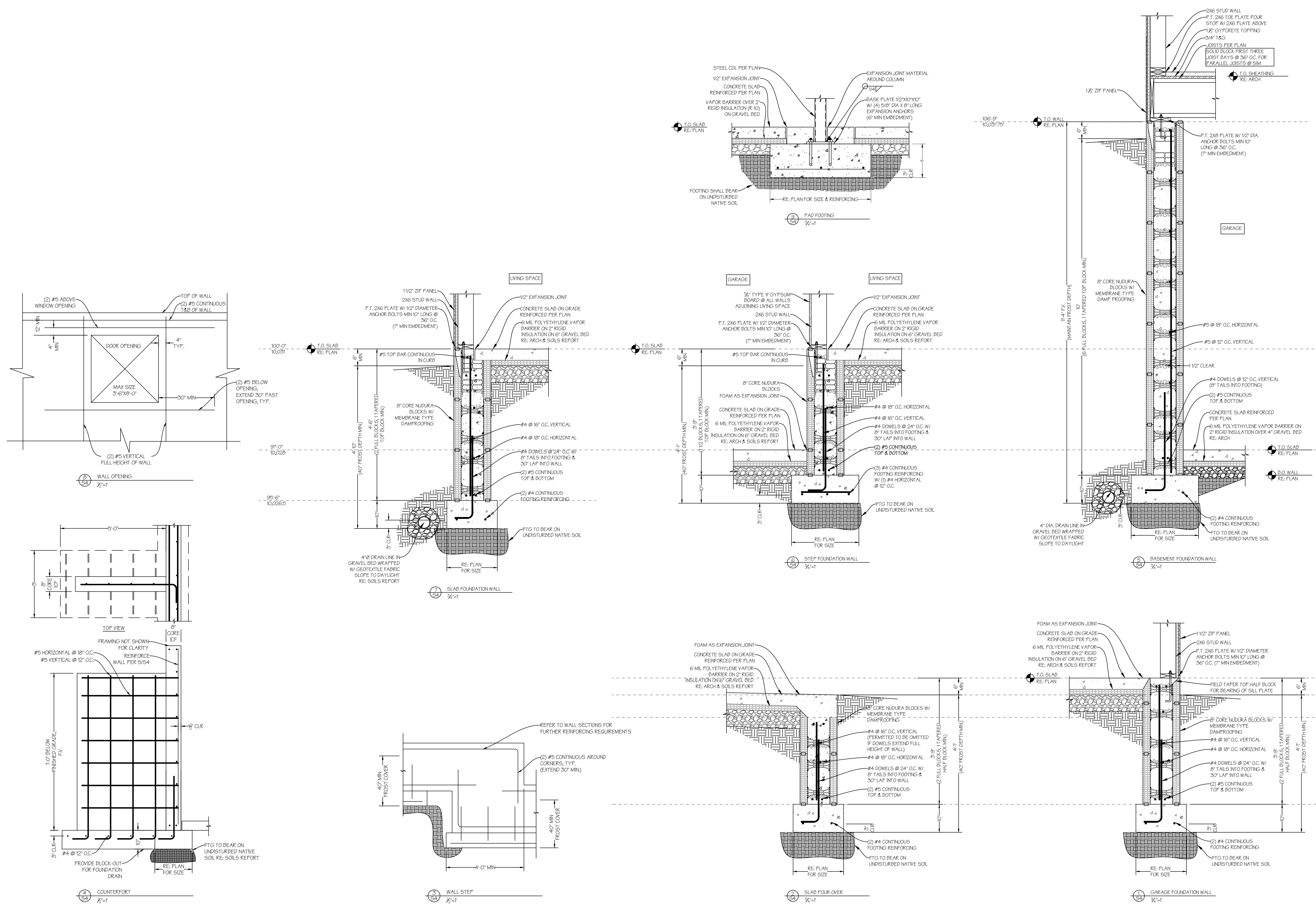
SHEET:
S3

PROJECT NUMBER: 26130



PRELIM DATE: 5.7.26
 RELEASE DATE: 5.7.26
 REVISION DATE:

SHEET:
S4
 PROJECT NUMBER: 26130



ONSITE WASTEWATER TREATMENT SYSTEM DESIGN
 TR 7-77, SEC 18, QTR 3, MINING CLAIMS CONT 0.7390 ACRES
 LEAP YEAR PLACER MS# 13358

DESIGN CRITERIA SUMMIT COUNTY, COLORADO

The system is designed to serve a proposed 3-bedroom single family residence.

Flows:

$$Q_1 = 3 \text{ bedrooms} \times 2 \text{ persons} \times 75 \text{ GPD} = 450 \text{ GPD}$$

$$Q_{\text{total}} = 450 \text{ GPD}$$

Septic Tank Requirements:

Install a Valley Precast 1,500-gallon, 3-Compartment concrete septic tank Valley Precast model number 1500T-3CP-HH, equipped with an Orenco screened vault pump system with a PF3005 pump (model BPP30DD-CW-SX-ETMCT).

Soil treatment area:

The soil treatment area has been calculated based upon the soil analysis and the design flows:

INFILTRATIVE SURFACE #1

$$A = (Q / \text{Secondary Sand Filter Application Rate}) \times \text{Application Adjustment Factor}$$

$$A = 450 / 0.80 \text{ (TL1)} \times 1.0 \text{ (Pressure Dosed bed)}$$

$$A = 563 \text{ sq. ft.}$$

INFILTRATIVE SURFACE #2

$$A = (Q / \text{Long Term Acceptance Rate, Soil Type 2A}) \times \text{Application Adjustment Factor}$$

$$A = 450 / 0.90 \text{ (TL3)} \times 1.0 \text{ (Pressure Dosed bed)}$$

$$A = 500 \text{ sq. ft.}$$

MOUND SIZING:

$$A = \text{Linear loading rate} / \text{Sand filter loading rate} = 9.6 \text{ GPD per Linear FT.} / 0.8 \text{ GPD per SQ. FT.} = 12$$

$$B = \text{Design flow rate} / \text{Linear loading rate} = 450 \text{ GPD} / 9.6 \text{ GPD per Linear FT.} = 46.9 \text{ USE 47}$$

$$I = \text{Linear Loading Rate} / \text{Soil Loading Rate} = 9.6 \text{ GPD per linear FT.} / 0.9 \text{ GPD per SQ. FT.} = 10.7 \text{ USE 12}$$

We propose one 12' x 47' soil treatment area mound (infiltrative area), with a 12' x 47' sand basal area.

INSTALLATION OBSERVATION REQUIREMENTS

This office is to observe the installation of the system at the following intervals:

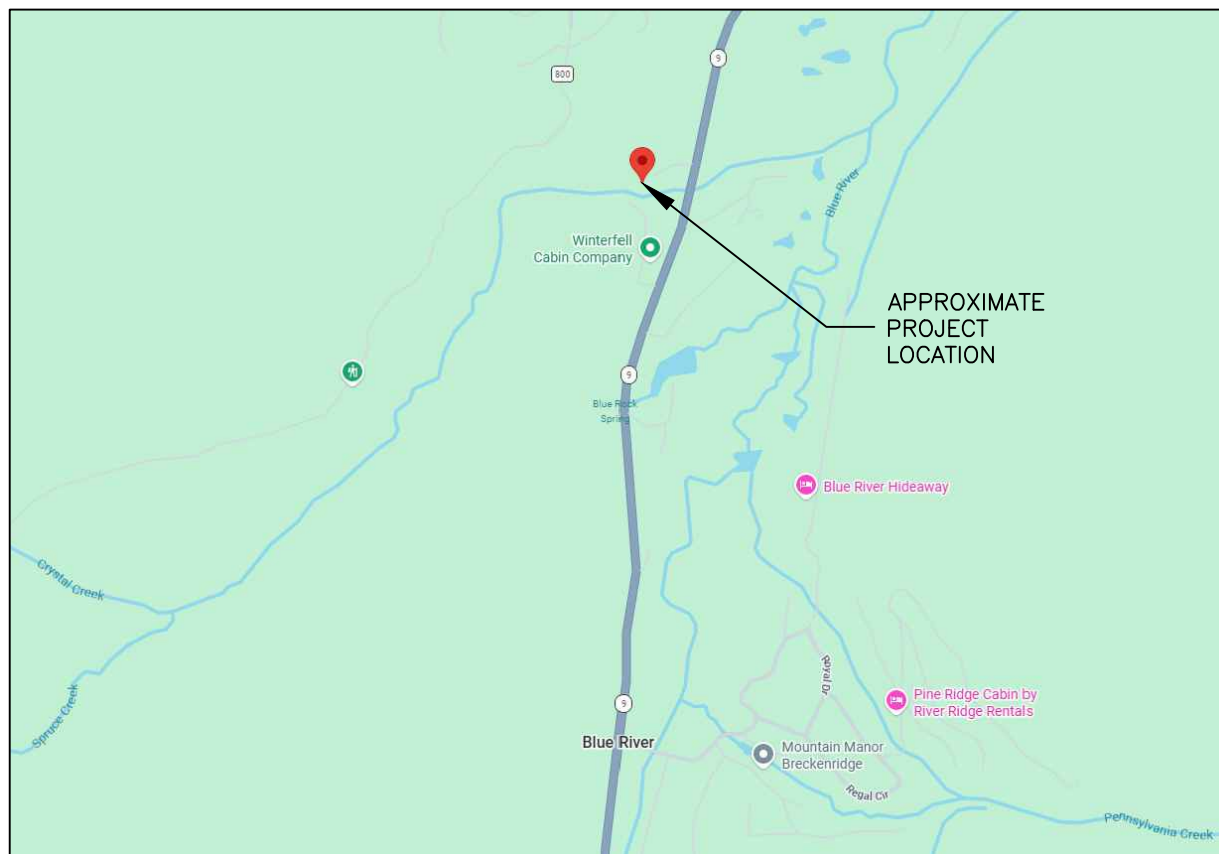
- (1) STA Open Hole Observation
- (2) Final Pre-Burial Observation
- (3) Final Grade Observation

WATER SUPPLY REQUIREMENTS

The proposed residence is to be served by a proposed well to be located greater than 100 feet from the proposed soil treatment area. The proposed well location has been depicted on Sheet 3.

INDEX OF DRAWINGS

SHEET NO.	TITLE
1.	Design Criteria
2.	Site and Soil Evaluation
3.	Site Plan(s)
4.	Soil Treatment Area/Piping Details
5.	Design Profile
6.	Septic Tank Details
7.	Pump and System Curves
8.	Mound Calculations



LOCATION MAP

GENERAL NOTES

This plan set and the information contained herein has been prepared to fulfill the "Report and Site Plan" and the "Design Document" sections of the OWTS Regulations. The locations of wells and OWTS components shown on this site plan should be staked by a licensed surveyor. It is the property owner's responsibility to ensure all construction is located within the property boundaries. All separation distances are to be verified prior to excavation.

Design criteria has been created based upon information submitted. If conditions differ from the information presented, this office should be contacted to verify and observe the conditions.

Locate all utilities prior to construction. Contractor shall have one set of county approved plans, on the jobsite, at all times during the construction and observation period. Deviation from these plans must be approved by the engineer.

All onsite wastewater treatment system construction, and any requirements not specified within this design, must meet county requirements and the requirements of local OWTS regulations. The contractor should have documented, and demonstrated, knowledge of the requirements and regulation of the county in which they are working.

All components of the OWTS (septic tank, piping, pump tanks, valves, proprietary units, etc.) are to be installed in accordance with the manufacturer recommendations.

The system is designed and intended to be used only for the wastewater load specified.

285 ENGINEERING
 P.O. BOX 1048
 CONIFER, CO
 80433
 (720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
 66 CONIFER DRIVE
 BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: DESIGN CRITERIA

DATE: 05/08/2026

SCALE: NONE

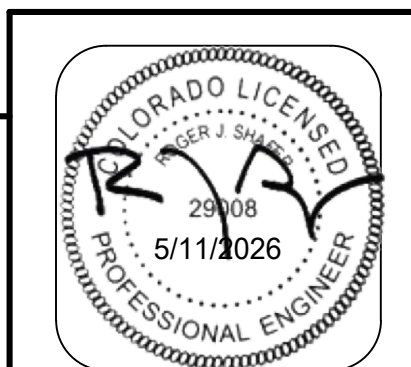
DRAWN BY: MRH

REVISIONS:

- 1
- 2
- 3

SHEET:

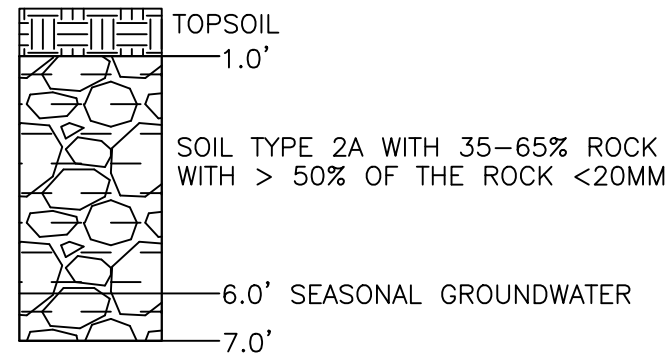
1/8



SOILS INFORMATION

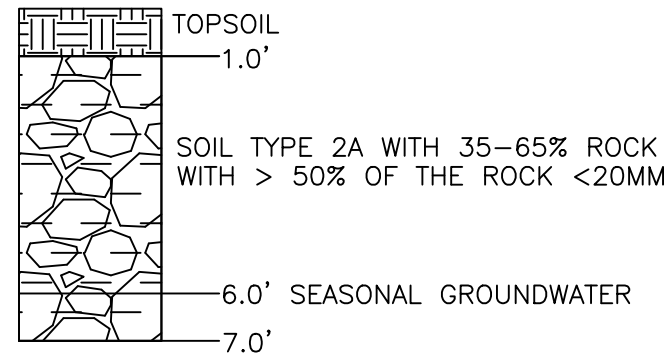
DATE TESTING COMPLETED: 03/12/2026
 EQUIPMENT USED: MINI EXCAVATOR
 DEPTH TO BEDROCK REFUSAL: NOT PRESENT
 DEPTH TO STANDING WATER: NOT PRESENT
 REDOXIMORPHIC FEATURES: 6 FEET
 LTAR: 0.80, SECONDARY SAND LOADING RATE

PROFILE #1



SOIL TYPE, TEXTURE AND STRUCTURE				
DEPTH	SOIL TYPE	TEXTURE	STRUCTURE/SHAPE	STRUCTURE/GRADE
1.0'-7.0'	R-1 WITH MATRIX 2A	SANDY LOAM WITH 35 - 65% LARGER THAN 2MM	GR	1(WEAK)

PROFILE #2



SOIL TYPE, TEXTURE AND STRUCTURE				
DEPTH	SOIL TYPE	TEXTURE	STRUCTURE/SHAPE	STRUCTURE/GRADE
1.0'-7.0'	R-1 WITH MATRIX 2A	SANDY LOAM WITH 35 - 65% LARGER THAN 2MM	GR	1(WEAK)

SCALE: 1/4" = 1'

SITE AND SOIL EVALUATION

A site and soil evaluation was conducted by 285 Engineering in accordance with the OWTS Regulations, and the results of that evaluation is presented herein.

ANTICIPATED CONSTRUCTION RELATED ISSUES

Setback tolerances are very low for the site. Required setbacks should be checked prior to construction and verified throughout the construction process.

POTENTIAL LAND USE CHANGES

There are no known or foreseeable land use changes that would affect system performance.

DIFFICULTIES ENCOUNTERED DURING SITE VISIT

Setback tolerances are very low for the site. OWTS components should be staked by a licensed surveyor.

SITE EVALUATOR

MATTHEW HOPKINS
 P.O. BOX 14
 211 N. HIGHWAY 24, UNIT D
 BUENA VISTA, CO. 81211
 303-842-6524
 matt@285engineering.com

BS Geology

Credentials: CPOW Soils Characterization Class 2017
 CPOW OWTS Design Course 2024

285 ENGINEERING
 P.O. BOX 1048
 CONIFER, CO
 80433
 (720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
 66 CONIFER DRIVE
 BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: SITE AND SOIL EVALUATION

DATE: 05/08/2026

SCALE: SHOWN

DRAWN BY: MRH

REVISIONS:



SHEET:

2/8



TEMPORARY BENCHMARK
ELEV. 10,060.5 (60.5) AT
GROUND LEVEL AT
PROPERTY CORNER (BASED
ON TOPO PROVIDED BY
OTHERS)

BASE SURVEY DATA
PROVIDED BY COLORADO
ILC LAND SURVEYING

MS# 13358
5.78 AC.
VAC.

PROPOSED SOIL
TREATMENT AREA
NO WELLS WITHIN
100 FEET

PROFILE PITS
(TYPICAL)

PROPOSED
DRIVEWAY (BY
OTHERS)

SLOPE 27%

NATIONAL
FOREST

MS# 13358
0.739 AC.

PROPOSED
3-BEDROOM
RESIDENCE

MS# 13358
0.855 AC.

PROPOSED
WELL

WETLAND
BOUNDARY
(DELINEATED
BY OTHERS)

LOT 320
DEV.

LOT 320
DEV.

N

SITE PLAN
SCALE: 1" = 50'

ALL LOCATIONS DENOTED ON
THE SITE PLANS ARE
GENERALLY PLACED AND NOT
THE RESULT OF A SURVEY.
PROPERTY OWNER/CONTRACTOR
SHALL VERIFY ALL LOCATIONS
AND SETBACKS.

ALL PIPING UNDER DRIVEWAY TO BE INSULATED WITH
2" POLYSTYRENE INSULATION AND BE MIN SCH40

OBSERVATION PORT
(TYPICAL ALL FOUR
CORNERS)

1.5" EFFLUENT LINE
24" MINIMUM COVER

4" DOUBLE SWEEP CLEANOUT
WITHIN 5' OF FOUNDATION AND
PROPOSED BUILDING SEWER
MINIMUM 24" OF COVER

STA - 12'X47' BASAL AREA
AND 12'X47' GRAVEL AREA

1,500-GALLON
THREE-COMPARTMENT
SEPTIC TANK VALLEY
PRECAST MODEL NUMBER
1500T-3CP-HH WITH
EFFLUENT PUMP SYSTEM

10' PROPERTY
LINE SETBACK
TO ALL OWTS
COMPONENTS

PROVIDE
BOLLARDS
OR
BOULDERS
TO PREVENT
TRAFFIC ON
TANK

UPHILL CORNER
OF STA (ELEV.
50.0)

FLUSHING
ASSEMBLY
(TYPICAL)

RETAINING
WALLS (BY
OTHERS)

54.06'

36.36'

30.58'

70.88'

100'
(TYPICAL)

162.63'

BOULDER RETAINING
WALL AS NECESSARY
TO LIMIT EXTENT OF
MOUND SOIL COVER
(BY OTHERS)

50' WETLAND
SETBACK FOR
ALL OWTS
COMPONENTS

20' RESIDENCE
SETBACK TO STA
GRAVEL AREA

WETLAND
BOUNDARY

50' MIN TO
BUILDING SEWER
AND SEPTIC TANK

PROPOSED
WELL

N

DETAIL SITE PLAN
SCALE: 1" = 30'

285 ENGINEERING
P.O. BOX 1048
CONIFER, CO
80433
(720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
66 CONIFER DRIVE
BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: SITE PLAN

DATE: 05/08/2026

SCALE: SHOWN

DRAWN BY: MRH

REVISIONS:



SHEET:

3/8

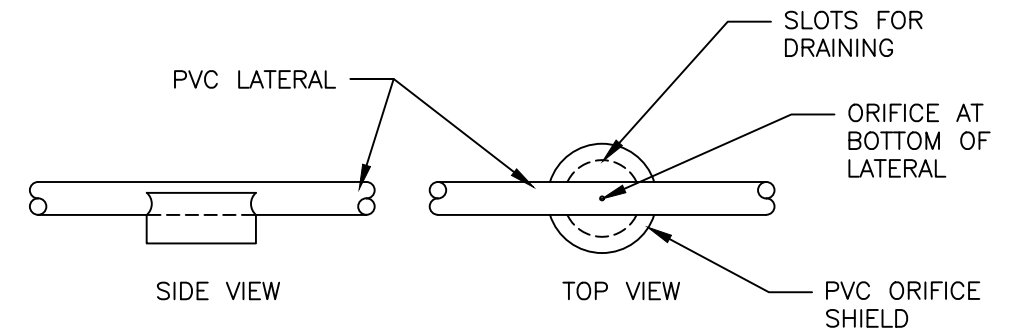


SOIL TREATMENT AREA NOTES:

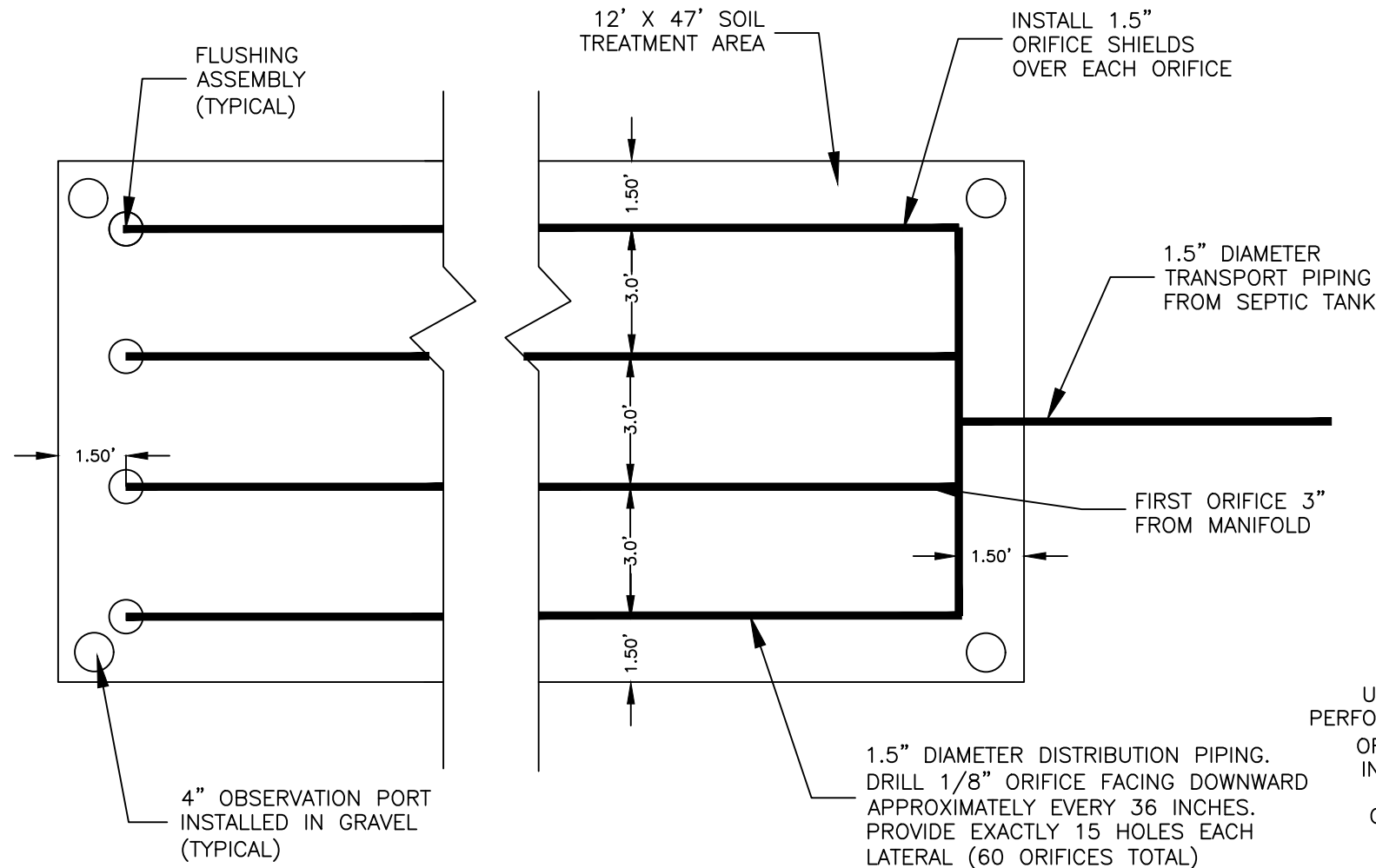
1. Construct soil treatment area in location depicted on the site plan.
2. Excavate soil treatment area level, scarify the infiltrative surface, and avoid compaction. Soil treatment area is to be installed along the contour to the degree possible.
3. All piping connections shall be securely fastened to avoid water infiltration into the system.
4. Direct surface water away from the soil treatment area by grading to divert water away from the treatment area.
5. Re-vegetate the excavated area with only native species. Contact 285 Engineering, Inc. for recommendations.
6. Snow storage is not recommended on the soil treatment area.
7. If off-site material is specified in this design; Off-site filtering material is to meet the OWTS Regulations for "Secondary" Sand.

Effective size = 0.15 - 0.60
 Uniformity Coefficient < 7.0
 Percent Passing 200 Sieve < 3.0

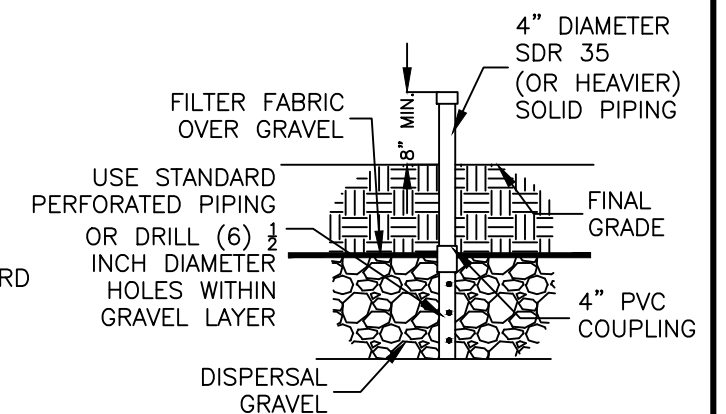
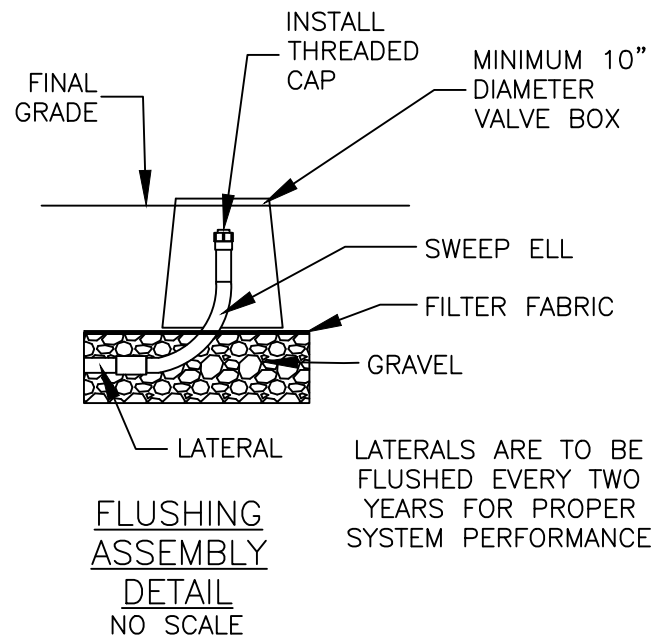
A gradation of the sand media used must be provided. The gradation must be dated no more than one month prior to the installation date. This office is to review the gradation PRIOR to construction.



ORIFICE SHIELD DETAIL
 NO SCALE



SOIL TREATMENT AREA
 PLAN VIEW
 SCALE: 1/4" = 1'



OBSERVATION PORT DETAIL
 SCALE: 1/4" = 1'

285 ENGINEERING
 P.O. BOX 1048
 CONIFER, CO
 80433
 (720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
 66 CONIFER DRIVE
 BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: STA/PIPING DETAILS

DATE: 05/08/2026

SCALE: SHOWN

DRAWN BY: MRH

REVISIONS:



SHEET:

4/8



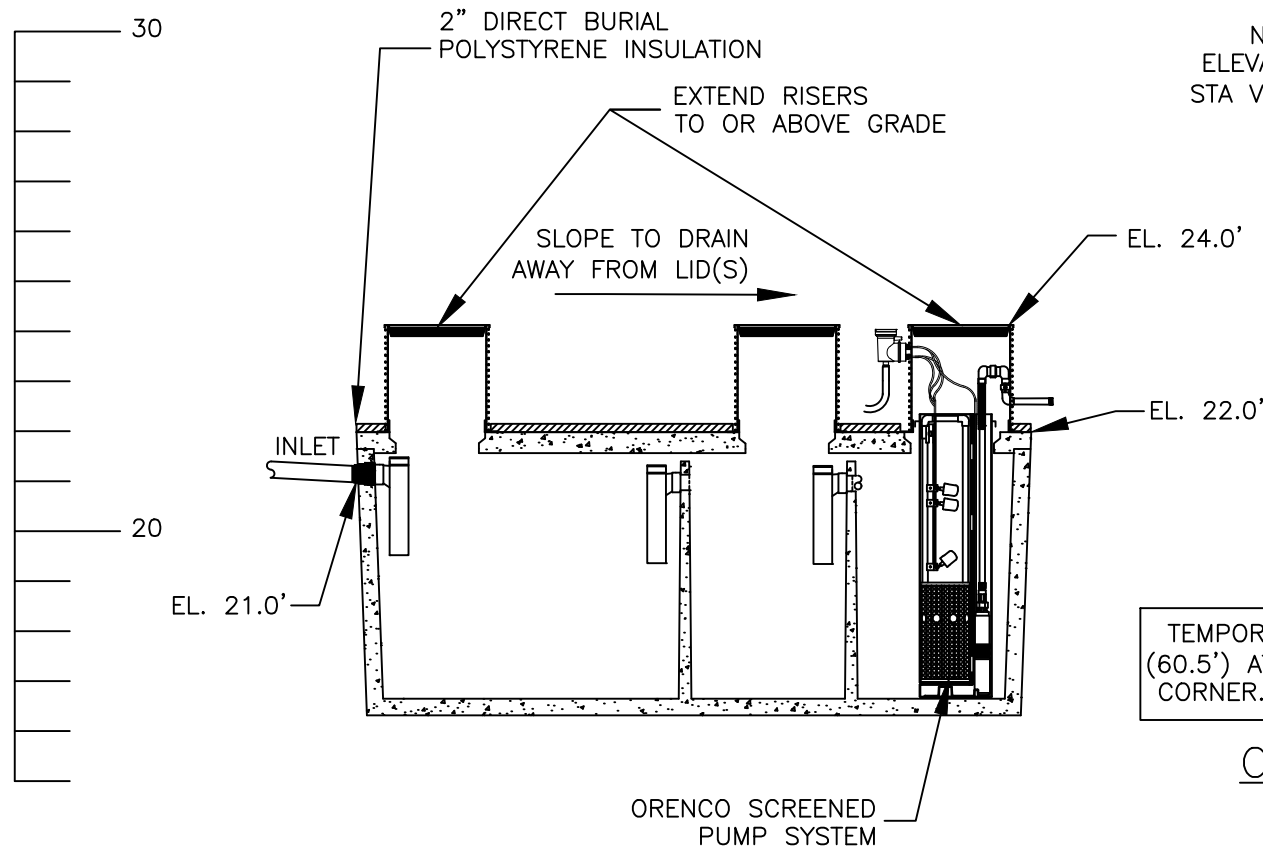
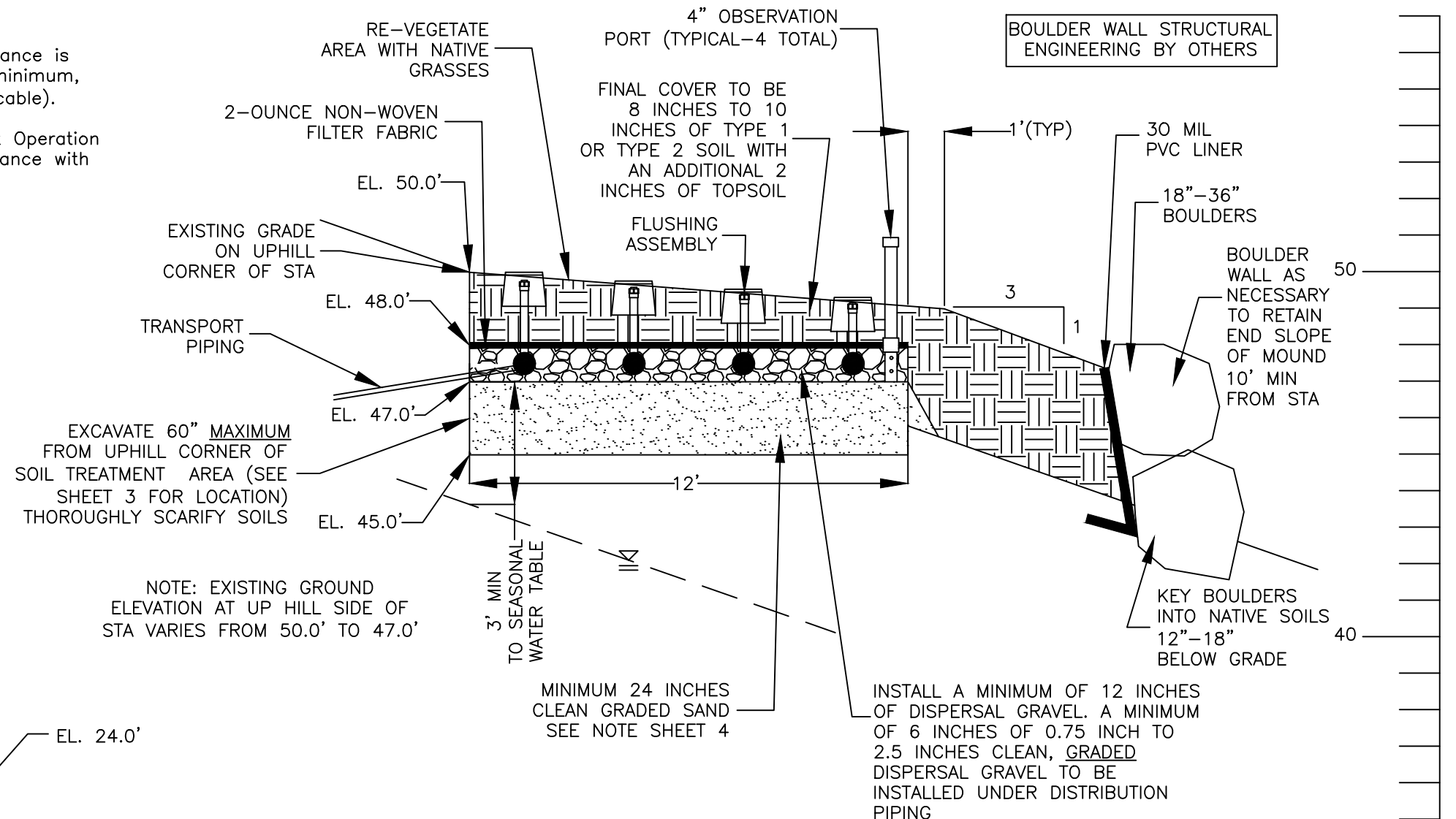
MAINTENANCE OF THE OWTS:

Maintenance of the OWTS is the responsibility of the property owner. Maintenance is to be in accordance with county recommendations and is to include, at a minimum, periodic septic tank pumping and soil treatment area valve flushing (if applicable).

The installer of the system is to provide the property owner with all product Operation & Maintenance manuals. Maintenance of each component is to be in accordance with the manufacturer recommendations.

Tank:	1500-Gallon, 3-Compartment Septic Tank
Riser Height:	2.0 Feet
Force Up:	$(146.3 \text{ ft}^3 \times 62.4 \text{ lb/ft}^3) + (0.0 \text{ ft}^3 \times 62.4 \text{ lb/ft}^3) = 9127.8 \text{ lb}$
Force Down:	$(21660.0 \text{ lb}) + (175.5 \text{ ft}^3 \times 110.0 \text{ lb/ft}^3) = 40965.0 \text{ lb}$
Factor of Safety:	4.49
Force Down > Force Up?	PASS
Factor of Safety > 1.3?	PASS

SEPTIC TANK ANCHORING NOT REQUIRED



PLACING THE OWTS INTO OPERATION:

Prior to placing the system into operation, we recommend all components be observed and tested for proper operation. This includes, but is not limited to, verifying the septic tank is watertight, the effluent screen is accessible and serviceable, and all observation ports in the soil treatment area exist.

When applicable, pump system amperage is to be checked, and the float functions verified. Automatic distributing valves are to be tested to verify proper rotation. A pressure test is to be performed on pressure distribution systems to verify the minimum 5-foot squirt height at the flushing valves, and all valves are to be flushed.

285 ENGINEERING
P.O. BOX 1048
CONIFER, CO
80433
(720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
66 CONIFER DRIVE
BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: DESIGN PROFILE

DATE: 05/08/2026

SCALE: NONE

DRAWN BY: MRH

REVISIONS:

- 1
- 2
- 3

SHEET:

5/8



SEPTIC TANK NOTES:

Access risers shall be sealed to prevent the intrusion of ground water and surface water into the system.

Install all access risers to grade.

Install a maximum of 4 feet of cover or 2 foot of cover with 2" of direct burial insulation on the septic tank.

The septic tank shall be constructed to withstand earth and hydrostatic pressures at the installed depth, when full and empty.

Install septic tank and associated equipment per manufacturer's recommendations.

Drill one 1/8" diameter hole in the pump line within the septic tank to facilitate drainback.

The discharge assembly for the pumping system is to have a disconnect union accessible from grade to allow for pump replacement.

All electrical connections must be housed in a UL approved waterproof splice box.

The pump control panel is to be mounted in a manner allowing alarms to be seen and heard, as well as for easy access.

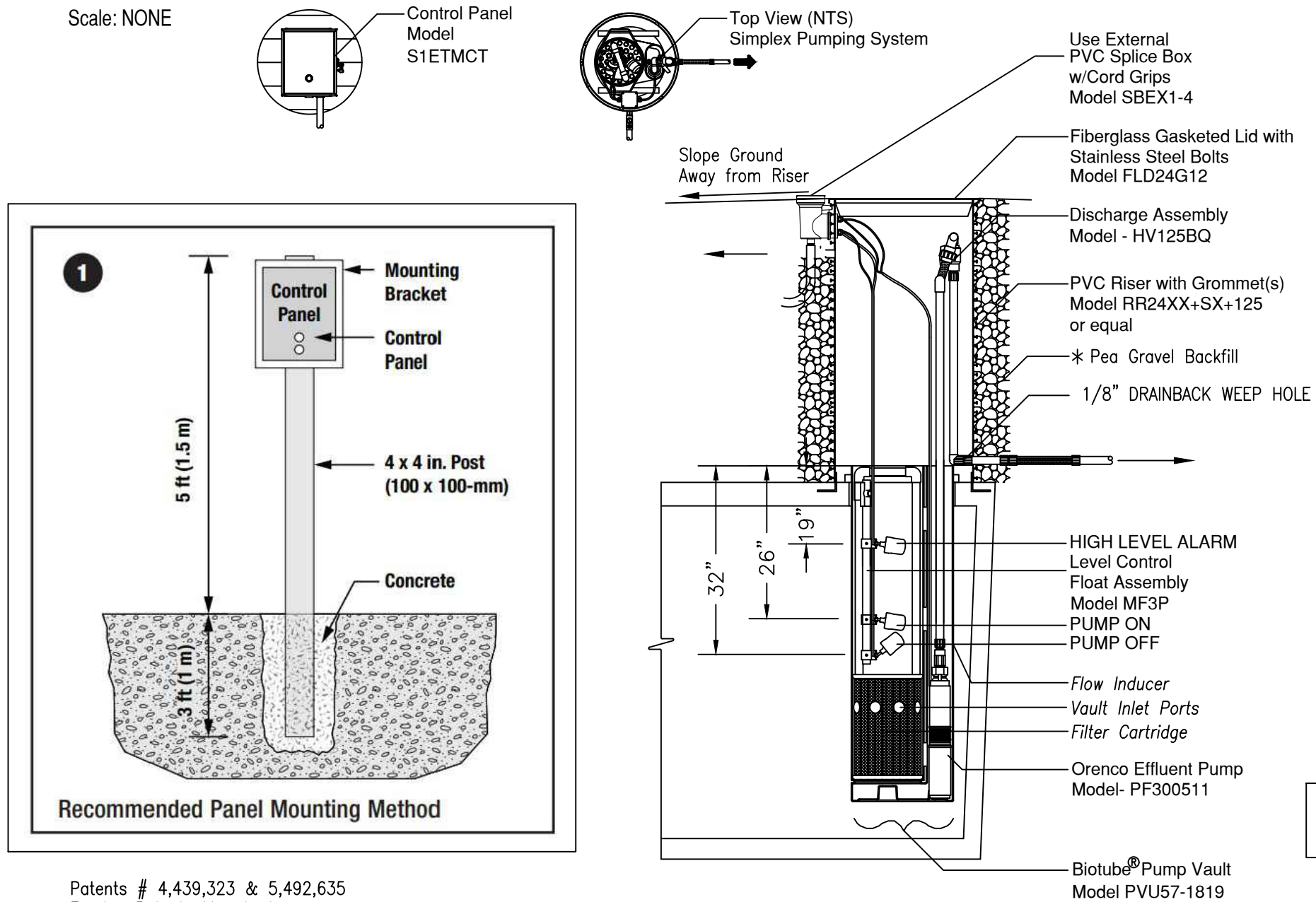
An electrical disconnect must be provided within the line of sight of the pump chamber.

APPROVED EQUALS:

If the installer seeks approval of a product other than the brand or brands specified within these documents, the installer shall furnish written evidence that such product conforms in all respects to the specified requirements, and that it has been used successfully elsewhere under similar conditions.

Effluent Pumping System for Cold Weather Applications (cw style)

Scale: NONE



Patents # 4,439,323 & 5,492,635
Foreign Patents May Apply
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FACSIMILE:
(541) 459-2884

DRAWING MODIFIED FROM
ORENCO PROVIDED
STANDARD DETAIL

NDW-TD-EPS-HV-02
Rev. 3.0 (03/06)

285 ENGINEERING P.O. BOX 1048 CONIFER, CO 80433 (720)-515-1781	PROJECT: 2026063 - OWTS DESIGN	TITLE: SEPTIC TANK DETAILS		SHEET: 6/8	
	LOCATION: 66 CONIFER DRIVE BLUE RIVER, CO 80424	DATE: 05/08/2026	REVISIONS: ① ② ③		
	CLIENT: KEVIN GOOD	SCALE: NONE			
		DRAWN BY: MRH			

PUMP AND SYSTEM CURVES:

Pump Selection for a Pressurized System - Single Family Residence Project

2026063



Parameters

Discharge Assembly Size	1.25	inches
Transport Length	103	feet
Transport Pipe Class	40	
Transport Line Size	1.50	inches
Distributing Valve Model	None	
Max Elevation Lift	28	feet
Manifold Length	9	feet
Manifold Pipe Class	40	
Manifold Pipe Size	1.50	inches
Number of Laterals per Cell	4	
Lateral Length	44	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.50	inches
Orifice Size	1/8	inches
Orifice Spacing	3	feet
Residual Head	5	feet
Flow Meter	None	inches
'Add-on' Friction Losses	0	feet

Calculations

Minimum Flow Rate per Orifice	0.43	gpm
Number of Orifices per Zone	60	
Total Flow Rate per Zone	25.9	gpm
Number of Laterals per Zone	4	
% Flow Differential 1st/Last Orifice	0.4	%
Transport Velocity	4.1	fps

Frictional Head Losses

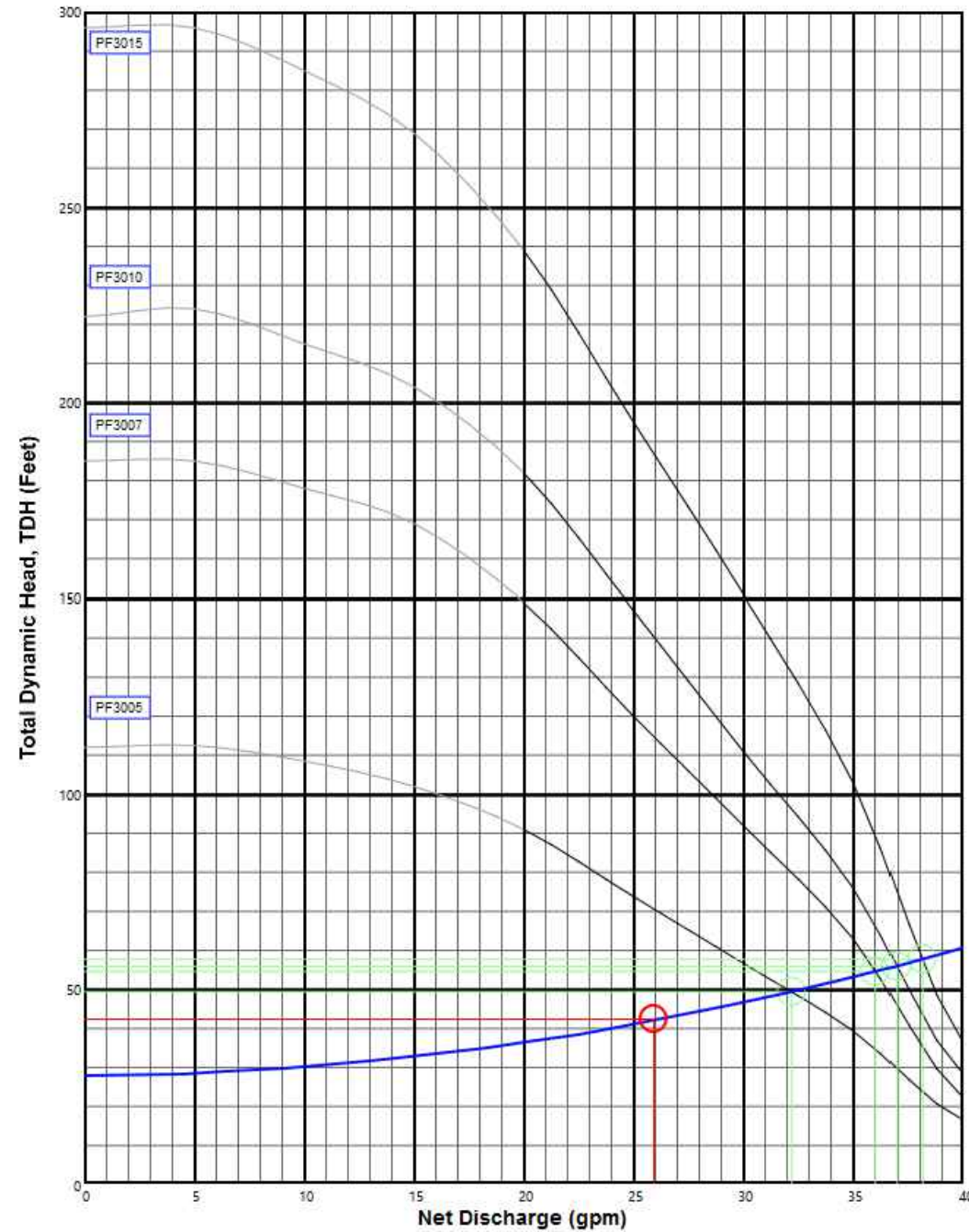
Loss through Discharge	4.7	feet
Loss in Transport	4.1	feet
Loss through Valve	0.0	feet
Loss in Manifold	0.1	feet
Loss in Laterals	0.1	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	0.0	feet

Pipe Volumes

Vol of Transport Line	10.9	gals
Vol of Manifold	0.9	gals
Vol of Laterals per Zone	18.6	gals
Total Volume	30.5	gals

Minimum Pump Requirements

Design Flow Rate	25.9	gpm
Total Dynamic Head	42.0	feet



NOTE:

SET PUMP FLOATS TO DISCHARGE
81 GALLONS PER PUMP CYCLE

285 ENGINEERING
P.O. BOX 1048
CONIFER, CO
80433
(720)-515-1781

PROJECT: 2026063 - OWTS DESIGN

LOCATION:
66 CONIFER DRIVE
BLUE RIVER, CO 80424

CLIENT: KEVIN GOOD

TITLE: PUMP AND SYSTEM CURVES

DATE: 05/08/2026

SCALE: NONE

DRAWN BY: MRH

REVISIONS:



SHEET:

7/8



MOUND CALCULATIONS (ADAPTED FROM CDPHE MOUND SPREADSHEET):

Calculation: OWTS - Mound System Design

Revised:
2/19/2026

Site Identification: **66 Conifer Drive, Blue River, CO**
 County: **Summit**
 Date: **5/8/2026**
 Engineer/Designer: **285 Engineering**
 Add'l site information: **2026063**

NOTE: If an "Error w/calc" message pops up, this means that you have selected certain values that exceed the calculated minimums or maximums

Notes: [1. The calculation is based on the Mounded Wastewater Treatment Systems Technical Guidance for Site Suitability, Design, Construction, Operation and Maintenance, dated June 2025-click HERE to view.](#)


[NOTE: For Modified Mound and Unlined Sandfilter Guidance Document Click HERE to view.](#)

- 2. Highlighted Yellow Cells / **Red Text** indicates User to Input Data
- 3. Once calculation inputs are finalized, click **ctrl + P** to print.
- 4. **Line 18** enter positive number for upslope infiltrative surface above grade and negative number for upslope infiltrative surface below grade.

1. User Input and Calculated Values

Parameters	Values	Units
Design Flow	450	GPD
% Slope	27.0	Percent
Soil LTAR (SLR)	0.9	Unitless
Linear Loading Rate (LLR)	9.6	Unitless
Sand Fill Loading Rate	0.8	Gal./sq.ft./day
Up slope fill depth under distribution cell ⁴ (C)	-3	Feet
Distribution Media Depth (E)	1	Feet
Soil Cover Depth (F)	1	Feet
Downslope correction	#N/A	Unitless
Upslope correction	#N/A	Unitless
Total depth of imported sand	2	Feet

Parameters	Auto-Calculated Values	Manually Input Values	Units
Max. Distribution Cell Width (A)	12	12.00	Feet
Min. Distribution Cell Lenth (B)	46.875	47.00	Feet
Min. Distribution Cell Area	562.5	564	Sq. Feet
Min. Basal Area (sand) Width (I)	10.67	10.67	Feet
Min. Downslope mound fill depth (D)	0.51	0.51	Feet
Actual width to toe of slope (H)	#N/A	#N/A	Feet
Upslope width (J)	#N/A	#N/A	Feet
End slope length (K)	2.27	2.27	Feet
Overall width (W)	#N/A	#N/A	Feet
Overall length (L)	53.41	54.00	Feet

285 ENGINEERING P.O. BOX 1048 CONIFER, CO 80433 (720)-515-1781	PROJECT: 2026063 - OWTS DESIGN	TITLE: MOUND CALCULATIONS	SHEET: 8/8		
	LOCATION: 66 CONIFER DRIVE BLUE RIVER, CO 80424	DATE: 05/08/2026			REVISIONS: ① ② ③
	CLIENT: KEVIN GOOD	SCALE: NONE			DRAWN BY: MRH



Aquatic Resource Delineation Report

Project No. 2021-100294

Client: Russ Blancken

**Site: 66 Conifer Drive
Breckenridge, CO 80424**

Prepared July 16, 2021 by:
Littlehorn Engineering & Surveying, LLC
P.O. Box 776390
Steamboat Springs, CO 80477
970.879.5112 | 719.836.7120



CONTENT SECTIONS

I. Project Information	3
II. Project Overview	3
III. Site Description.....	6
IV. Plant List.....	7
V. Soils	8
VI. Hydrology	8
VII. Summary.....	9

List of Abbreviations and Acronyms

FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
NRCS	National Resources Conservation Service
NWI	National Wetlands Inventory
NWPL	National Wetland Plant List
OBL	Obligate
UPL	Upland
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WSS	Web Soil Survey



I. Project Information

Landowner and Client:

Russ Blancken
5541 McNeil Drive
Austin, TX 78729

Subject Property:

MS# 13358
66 Conifer Drive
Breckenridge, CO 80424

Project Number:

2021-100294

Wetland Consultant:

Joseph Littlehorn
Littlehorn Engineering & Surveying, LLC
P.O. Box 776390
Steamboat Springs, CO 80477



II. Project Overview

At the client's request, on July 13, 2021, we visited the subject site to determine if wetlands were present on the subject site. Identification of wetlands primarily involves three factors: the predominance of wetland vegetation, hydric (wetland) soils, and signs of hydrology. Wetland delineations indicate the boundary of wetlands on a site precisely by implanting flags on the boundary or boundaries, which are then located by a Professional Land Surveyor (PLS) to illustrate the delineation on the subject site's plat. A wetland report is also generated to document the evidence, or lack thereof, of wetlands, including the data lists of the vegetation and soils, a description of the location or locations and number of flags implanted, as well as, the number of different areas delineated. This wetland report is a necessary element when developing the site to minimize or prevent disturbance of wetlands.

Wire flags labeled "Wetland Delineation" were placed along the wetland boundary, numbered 1-15. These flags delineate one wetland area illustrated on the attached site map. The client has planned to have a survey of the property done to locate the wetland flags, but it was not completed at the time of this report. This delineation was conducted in accordance with the U.S. Army Corps of Engineers' (USACE) standard protocol for determining wetlands in the Western Mountains, Valleys, and Coast Region. Wetlands adjacent to the subject property were not delineated. Wetland-type areas shall not be disturbed without permission from the USACE, Blue River, and us. Prior to the site visit, multiple data sources were analyzed to obtain a better understanding of the area. Some data sources consulted included aerial imagery, topographic maps, WSS maps published by the NRCS, and USFWS NWI maps. The wetland boundary on 66 Conifer Drive was located based on USACE standard protocol, in accordance with the *Regional Supplement to the Corps of Engineers Wetland*



Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) published by the USACE in May 2010.

The delineation involved a detailed examination of vegetation, soils, and hydrology. Dominant vegetative species were documented and compared to the NWPL to determine the wetland indicator status of each species. OBL species occur almost exclusively in wetlands. FACW species usually occur in wetlands but may on occasion exist in non-wetland areas. FAC species occur equally in wetland and non-wetland environments. FACU species usually occur in non-wetland environments. UPL species very rarely grow in wetland environments. If a species is not found to be included in the NWPL, its indicator status is assumed to be UPL. Generally, if it is found that more than 50% of the vegetative species within a single plant community possess an indicator status of FAC, FACW, or OBL, this area would satisfy the USACE criteria for wetland vegetation.



Soil exploration and examination was conducted at multiple points across the site, collected in accordance with Munsell color classification methods. If hydric soil indicators were discovered, additional areas of exploration may have been established along the gradient to accurately identify the extent of hydric soils. Throughout the investigation on-site, hydrologic indicators were taken note of, and we specifically looked for such indicators as surface water, high water tables, soil saturation, water marks, sediment deposits, drainage patterns, and other indicators. Examinations for all areas investigated and deemed non-wetland areas are not necessarily included in this report. The wetland boundary is characterized in many areas by an abrupt transition from mostly hydrophytic vegetation to upland species. A site map is attached that approximately illustrates the wetland area(s) in blue, with sampling point locations shown in yellow. Wetlands provide many valuable functions such



as flood control and wildlife habitat in addition to being areas that aid to filter out contaminants in the groundwater. Wetlands shall not be disturbed without approval from Blue River and the USACE. This delineation shall be considered valid for five (5) years' time.

III. Site Description

66 Conifer Drive is within a Montane Forest at an approximate elevation of 10,000 feet. The property slopes south and east towards Blue River. Most of the property consists of forested habitat with wildflowers, shrubs and grasses.

Per maps published by the NWI, one type of wetland area is shown to exist on the property within the immediate vicinity of Spruce Creek is classified as R3UBG. R3UBG stands for Riverine, Upper Perennial, Unconsolidated Bottom, and Intermittently Exposed.

The Riverine System (R) includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.



The Upper Perennial Subsystem (3) is characterized by a high gradient. Some water flows all year, except during years of extreme drought. The substrate consists of rock, cobbles, or gravel with occasional patches of sand. The natural dissolved oxygen concentration is normally near saturation. The fauna is characteristic of running water, and there are few or no planktonic



forms. The gradient is high compared with that of the Lower Perennial Subsystem, and there is very little floodplain development.

The Unconsolidated Bottom Class (UB) includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.

An Intermittently Exposed Water Regime (G) covers the substrate throughout the year except in years of extreme drought - for wetland classification information, see www.fwsprimary.wim.usgs.gov/decoders/wetlands.aspx.

IV. Plant List

Multiple plant species were identified across the site in both wetland and upland plant communities as listed below.

PLANT COMMUNITY A - WETLAND			
Common Name	Scientific Name	Indicator Status	Coverage
Engelmann's Spruce	<i>Picea engelmannii</i>	FAC	35%
Subalpine Fir	<i>Abies lasiocarpa</i>	FACU	25%
Heartleaf Arnica	<i>Arnica cordifolia</i>	FAC	8%
Diamondleaf Willow	<i>Salix planifolia</i>	OBL	7%
Tall Fringe Bluebells	<i>Mertensia ciliata</i>	FACW	6%
Bull Thistle	<i>Cirsium vulgare</i>	FACU	5%
Narrowleaf Fireweed	<i>Chamaenerion angustifolium</i>	FACU	2%
Field Horsetail	<i>Equisetum arvense</i>	FAC	2%
Common Cowparsnip	<i>Heracleum maximum</i>	FAC	2%
Quaking Aspen	<i>Populus tremuloides</i>	FACU	1%
Wood's Rose	<i>Rosa Woodsii</i>	FACU	1%



PLANT COMMUNITY B - UPLAND

Common Name	Scientific Name	Indicator Status	Coverage
Engelmann's Spruce	<i>Picea engelmannii</i>	FAC	29%
Subalpine Fir	<i>Abies lasiocarpa</i>	FACU	28%
Quaking Aspen	<i>Populus tremuloides</i>	FACU	17%
Heartleaf Arnica	<i>Arnica cordifolia</i>	FAC	12%
Whortleberry	<i>Vaccinium myrtillus</i>	UPL	5%
Wood's Rose	<i>Rosa woodsii</i>	FACU	4%
Narrowleaf Fireweed	<i>Chamaenerion angustifolium</i>	FACU	4%
Virginia Strawberry	<i>Fragaria virginiana</i>	FACU	3%
Common Juniper	<i>Juniperus communis</i>	UPL	3%
Jacob's-Ladder	<i>Polemonium pulcherrimum</i>	UPL	2%

V. Soils

Sampling Point A was located in an area dominated by vegetation with an indicator status classification of facultative. Soil samples taken in this area were dark in color. The 0-12 inch layer consisted of a silt loam matrix, black in color (10YR 2/2). The 12-18 inch layer consisted of a sandy matrix, dark greyish brown in color (10YR 4/2). Multiple soil samples were taken within the wetland area that yielded similar results.



VI. Hydrology

The hydrology of this wetland appears to be supplied by snow melt and groundwater. On the south side of the property, there is a stream that flows intermittently throughout the year. Deep snow packs accumulate in the mountains up valley



and melt off occurs each spring, recharging the water table in the valley below. Saturated soils act as a sponge, slowly releasing water that flows down valley below the surface of the soil. The property is located in the headwater region of the Blue River drainage basin. These low-lying areas likely serve important functions, such as flood control, nutrient and contaminant sequestration, as well as wildlife habitat. Seasonal fluctuations of the water table likely coincide with the runoff season, with the highest water table coming in late spring. A 100-year flood evaluation or stream flow study has not been performed by Littlehorn Engineering.

VII. Summary

Based on the wetland delineation performed at 66 Conifer Drive on July 13, 2021, in our professional opinion there is an area of the site that satisfies the criteria to be a wetland or waters of the US pursuant to the Army Corps of Engineers' Regional Supplement and appropriate guidance and pursuant to confirmation by appropriate regulatory staff including but not limited to the Army Corps of Engineers.

Wetland delineation flags were placed on the lot; a survey of the lot is currently pending and is being performed by others. The wetland is part of a network of wetlands that shadow the Blue River drainage basin as it continues down the valley. The network of wetlands is important to the wildlife habitat of the region. Wetlands shall not be disturbed without Town of Blue River and USACE approval. All property development shall adhere to their regulations.

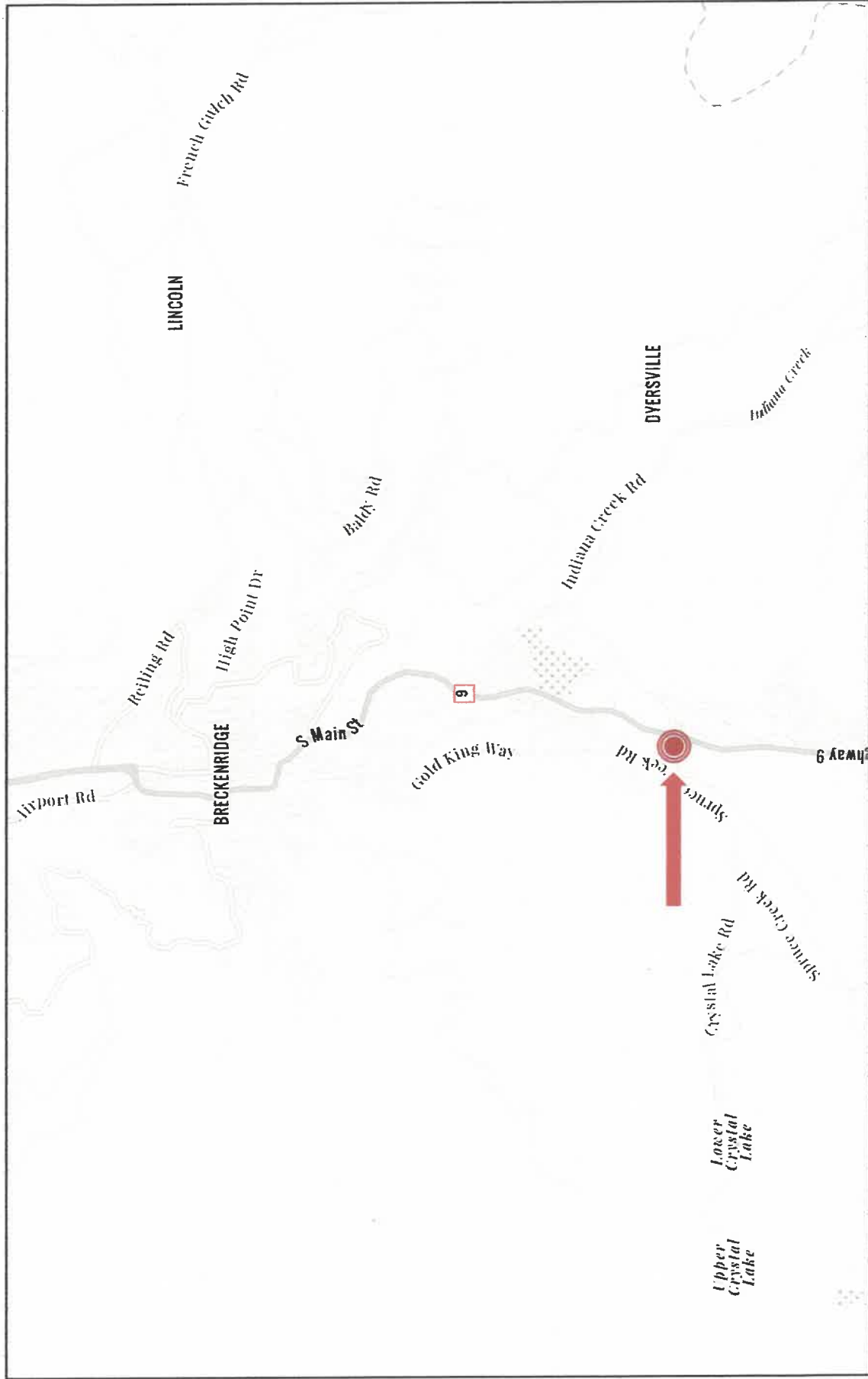
Thank you for the opportunity to serve your needs. If you have any questions about this report, please feel free to contact us at (970) 879-5112.

Attachments (4):

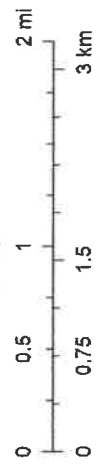
Vicinity Map
Site Map
Data Forms A & B



Vicinity Map

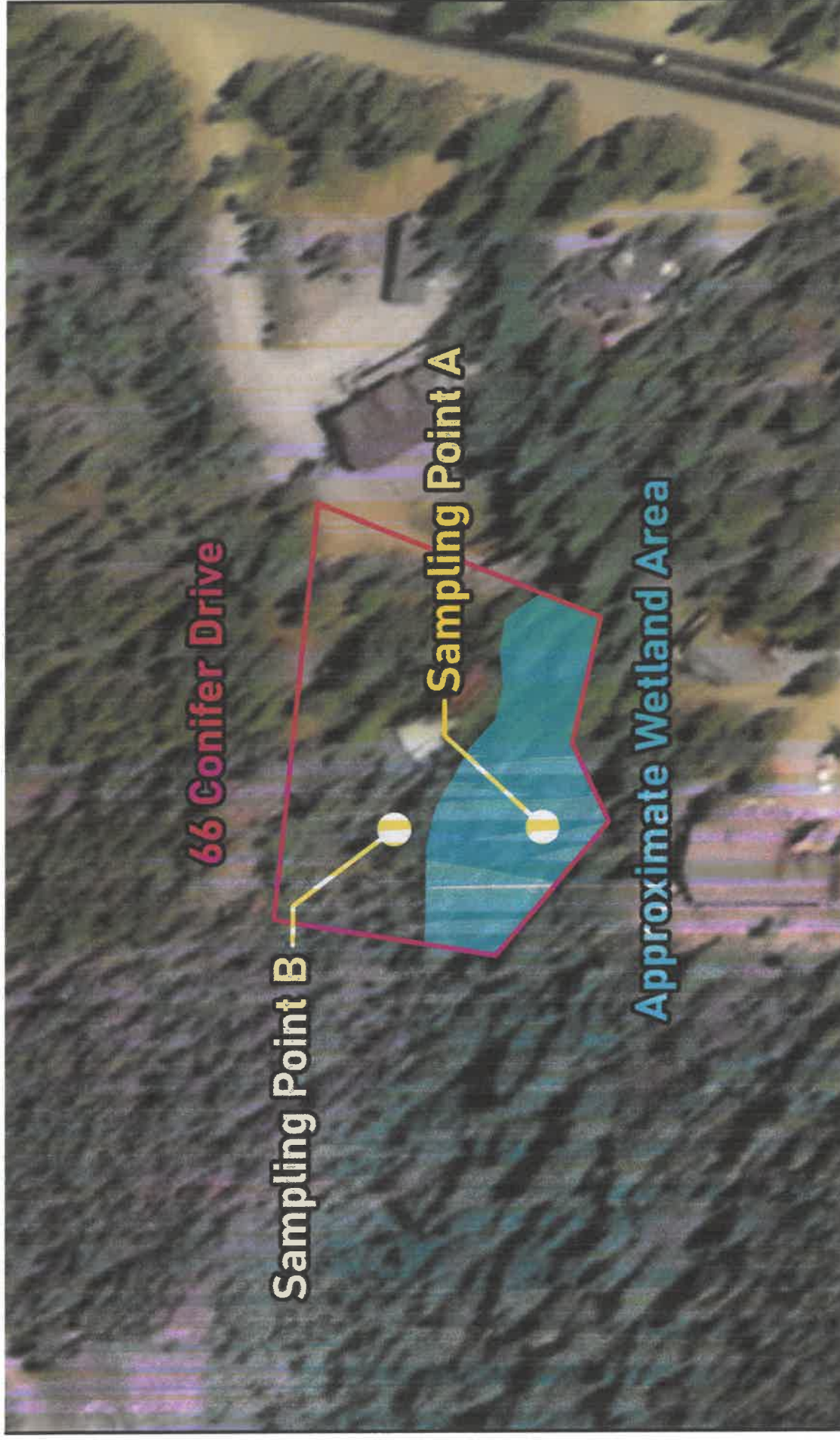


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Site Map - 66 Conifer Drive, Blue River, CO 80424



Approximate property boundaries are from Summit County GIS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 66 Conifer Drive City/County: Blue River Sampling Date: 7/13/2021
 Applicant/Owner: Russ Blancken State: CO Sampling Point: A
 Investigator(s): Joseph Littlehorn Section, Township, Range: Section 18, Township 7S, Range 77W
 Landform (hillslope, terrace, etc.): Mountainflank Local relief (concave, convex, none): Concave Slope (%): 15
 Subregion (LRR): E Lat: 39°26'26.51"N Long: 106°02'36.43"W Datum: WGS84
 Soil Map Unit Name: Web Soil Survey Grenadier gravelly loam, 6 to 15 percent slopes NWI classification: R3UB6

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Hydrology is considered problematic because the delineation was conducted outside the peak of the wet season.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____*)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <i>Picea engelmannii</i> - Engelmann's Spruce	25	<input checked="" type="checkbox"/>	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)
2. <i>Abies lasiocarpa</i> - Subalpine Fir	20	<input checked="" type="checkbox"/>	FACU	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85</u> (A/B)
4. _____				
	45		= Total Cover	
Sapling/Shrub Stratum (Plot size: _____*)				Prevalence Index worksheet:
1. <i>Picea engelmannii</i> - Engelmann's Spruce	10	<input checked="" type="checkbox"/>	FAC	Total % Cover of: _____ Multiply by: _____
2. <i>Salix planifolia</i> - Diamondleaf Willow†	7	<input checked="" type="checkbox"/>	OBL	OBL species _____ x 1 = _____
3. <i>Abies lasiocarpa</i> - Subalpine Fir	5	<input checked="" type="checkbox"/>	FACU	FACW species _____ x 2 = _____
4. <i>Populus tremuloides</i> - Quaking Aspen	1		FACU	FAC species _____ x 3 = _____
5. <i>Rosa woodsii</i> - Wood's Rose	1		FACU	FACU species _____ x 4 = _____
	23		= Total Cover	UPL species _____ x 5 = _____
Herb Stratum (Plot size: _____*)				Column Totals: _____ (A) _____ (B)
1. <i>Arnica cordifolia</i> - Heartleaf Arnica	8	<input checked="" type="checkbox"/>	FAC	Prevalence Index = B/A = _____
2. <i>Mertensia ciliata</i> - Tall Fringe Bluebells	6	<input checked="" type="checkbox"/>	FACW	
3. <i>Lonicera involucrata</i> - Twinberry Honeysuckle	5	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Indicators:
4. <i>Cirsium vulgare</i> - Bull Thistle	5		FACU	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
5. <i>Chamaenerion angustifolium</i> - Narrowleaf Fireweed	2		FACU	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
6. <i>Equisetum arvense</i> - Field Horsetail	2		FAC	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
7. <i>Heracleum maximum</i> - Common Cowparsnip	2		FAC	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8. _____				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
9. _____				Problematic Hydrophytic Vegetation ¹ (Explain)
10. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11. _____				
	30		= Total Cover	
Woody Vine Stratum (Plot size: _____*)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
			= Total Cover	
% Bare Ground in Herb Stratum <u>70</u>				

Remarks:
 *Sampled entire plant community
 †Stunted

SOIL

Sampling Point: A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 2/2	100	-	-	-	-	SiL	High O.M.
12-18	10YR 4/2	100	-	-	-	-	S	Water table starts here

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): 12
 Saturation Present? Yes No Depth (inches): 4
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Since the delineation was conducted outside of the peak of the wet season, it seems reasonable to conclude that the soil would become saturated all the way to the surface during the height of spring runoff.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: 66 Conifer Drive City/County: Blue River Sampling Date: 7/13/2021
 Applicant/Owner: Russ Blancken State: CO Sampling Point: B
 Investigator(s): Joseph Littlehorn Section, Township, Range: Section 18, Township 7S, Range 77W
 Landform (hillslope, terrace, etc.): Mountainflank Local relief (concave, convex, none): None Slope (%): 30
 Subregion (LRR): E Lat: 39°26'27.31"N Long: 106°02'36.55"W Datum: WGS84
 Soil Map Unit Name: Web Soil Survey Frisco–Peeler complex, 25 to 65 percent slopes NWI classification: Not mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: Hydrology is considered problematic because the delineation was conducted outside the peak of the wet season.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____*)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <i>Picea engelmannii</i> - Engelmann's Spruce	25	<input checked="" type="checkbox"/>	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. <i>Abies lasiocarpa</i> - Subalpine Fir	20	<input checked="" type="checkbox"/>	FACU	Total Number of Dominant Species Across All Strata: <u>5</u> (B)	
3. <i>Populus tremuloides</i> - Quaking Aspen	12	<input checked="" type="checkbox"/>	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)	
4. _____				Prevalence Index worksheet:	
	57	= Total Cover		Total % Cover of: _____ Multiply by: _____	
Sapling/Shrub Stratum (Plot size: _____*)				OBL species <u>0</u> x 1 = <u>0</u>	
1. <i>Abies lasiocarpa</i> - Subalpine Fir	8	<input checked="" type="checkbox"/>	FACU	FACW species <u>0</u> x 2 = <u>0</u>	
2. <i>Populus tremuloides</i> - Quaking Aspen	5	<input checked="" type="checkbox"/>	FACU	FAC species <u>41</u> x 3 = <u>123</u>	
3. <i>Picea engelmannii</i> - Engelmann's Spruce	4		FAC	FACU species <u>56</u> x 4 = <u>224</u>	
4. <i>Rosa woodsii</i> - Wood's Rose	4		FACU	UPL species <u>10</u> x 5 = <u>50</u>	
5. _____				Column Totals: <u>107</u> (A) <u>397</u> (B)	
	21	= Total Cover		Prevalence Index = B/A = <u>3.71</u>	
Herb Stratum (Plot size: _____*)				Hydrophytic Vegetation Indicators:	
1. <i>Arnica cordifolia</i> - Heartleaf Arnica	12	<input checked="" type="checkbox"/>	FAC	___ 1 - Rapid Test for Hydrophytic Vegetation	
2. <i>Vaccinium myrtillus</i> - Whortleberry	5	<input checked="" type="checkbox"/>	UPL	___ 2 - Dominance Test is >50%	
3. <i>Chamaenerion angustifolium</i> - Narrowleaf Fireweed	4		FACU	___ 3 - Prevalence Index is ≤3.0 ¹	
4. <i>Fragaria virginiana</i> - Virginia Strawberry	3		FACU	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. <i>Juniperus Communis</i> - Common Juniper	3		UPL	___ 5 - Wetland Non-Vascular Plants ¹	
6. <i>Polemonium pulcherrimum</i> - Jacob's-Ladder	2		UPL	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
9. _____					
10. _____					
11. _____					
	29	= Total Cover			
Woody Vine Stratum (Plot size: _____*)					
1. _____					
2. _____					
% Bare Ground in Herb Stratum <u>45</u>					
Remarks: *Sampled entire plant community					

SOIL

Sampling Point: **B**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/1	100	-	-	-	-	SL	
2-6	10YR 5/4	100	-	-	-	-	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

Alluvial material at 6" prevented deeper exploration.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: