PLANNING COMMISSION
STAFF REPORT

June 20, 2024

AGENDA ITEM:	Planning File No. MAJ-23-0012: A final review of multifamily residential development consisting of four units located at 160 Forest Drive.
LOCATION:	160 Forest Drive / LOT 2 WEST FRISCO 70 SUB # 2
ZONING:	Residential Medium Density (RM)
APPLICANT:	Seth Francis, Blue River Builders
OWNER:	BLUE RIVER REAL ESTATE FUND III LLC C/O Seth Francis PO Box 7035 Breckenridge, CO 80424
TOWN STAFF:	Katie Kent, Community Development Director KatieK@TownofFrisco.com (970) 668-9130

PROJECT DESCRIPTION

The applicant, Seth Francis with Blue River Builders, is proposing a new multifamily residential development consisting of four units located at 160 Forest Drive.

BACKGROUND

The subject property is a 0.856-acre, undeveloped site located on the west end of town and is off Forest Drive / County Road 1050. The site is zoned Residential Medium (RM) Density with the properties to the south and east also zoned RM. The properties to the north are located within unincorporated Summit County and to the west is I-70. The surrounding properties consist of a mix of single family and multifamily development.

The site consists of steep slopes and significant rock outcroppings, and the applicant shall apply the disturbance limitations of steep slopes as outlined in the UDC.

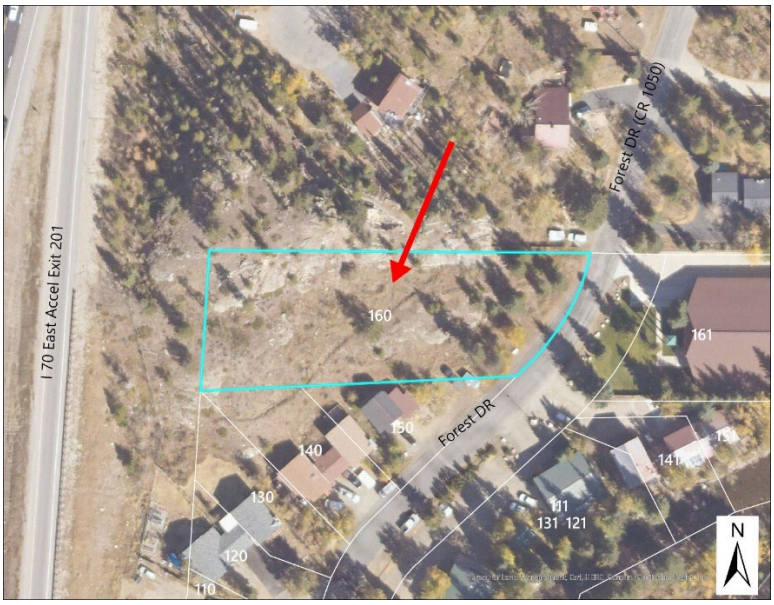
The application was previously reviewed by the Planning Commission on January 18, 2024. At that time, the application was at sketch level and received preliminary comments from the Planning Commission. Comments from the Commissioners included, but were not limited to:

- Commissioners agreed that façade repetition should be addressed.
- Commissioners encouraged the applicant to consider sight distance for the development's driveway.

- Commissioners expressed concern about the public comments focused on disturbance to neighbors' wells.
- Commissioners expressed concern about the parking arrangement, and that the reality of the parking arrangement may mean residents would park in front of their garages and block others in. One Commissioner suggested that 3 units may be more appropriate for the constraints. Commissioners noted that they would like to see turn radiuses for both outdoor and garage parking on the final plan.
- Commissioners encouraged the Town to consider taking bonds in the form of an Improvements Agreement given the excavation needed on site.
- Commissioners noted that the line of disturbance is close to the house, does not account for the drainage plan, and may be difficult to maintain in construction.
- Commissioners encouraged the applicant to consider analyzing wildlife impacts.
- Commissioners acknowledged the public's comments and the need to be considerate and use good fencing.

Public comments during the meeting included:

- Hannah Luna, 181 Forest Drive, lives on the north side of the property. Ms. Luna had thought the property might fit a single-family home but is surprised at a proposal for 4 units. Ms. Luna's property shares the rock with 160 Forest Dr, and she has 4 kids who play on the rock. Ms. Luna asked where the vertical wall would be and if there would be a barrier to secure her property. Ms. Luna also expressed concern about her well, flooding in the low point of the road, and drainage.
- Diana Brickell, 141 Forest Drive, lives across the street from the property. Ms. Brickell considered a single-family home may be built on the site, but not a 4-unit development. Ms. Brickell shared three concerns: parking on the street on the curved area would make visibility from the driveway even worse; noise and the impact of the construction on the neighbors; and the site as a wildlife corridor. Ms. Brickell mentioned that she sees moose come through the property.



Vicinity Map

MAJOR SITE PLAN REVIEW

A Major Site Plan application requires Planning Commission review and discussion. The proposal is reviewed in detail for conformance with the Frisco Community Plan and compliance with the Frisco Unified Development Code (UDC). The Planning Commission shall review the major site plan application and approve, approve with conditions, or deny the major site plan in accordance with Section 180-2.3.7 and the approval criteria in Subsection 180-2.5.2.E.

ANALYSIS – FRISCO COMMUNITY PLAN

The following elements of the Frisco Community Plan are applicable to the review of the proposed development:

Vision and Guiding Principles (excerpts)
The vision and guiding principles are a statement of community values. Together, they reflect characteristics that residents value about Frisco today, and the kind of community that residents would like to see Frisco become as it continues to grow and evolve over time. The vision and guiding principles serve as an organizing framework for subsequent chapters and policy guidance in the Community Plan, as well as for the Town Council's Strategic Plan.

Guiding Principle 1: Inclusive Community

Frisco cares about our neighbors, visitors, and the whole of our community. We are an inclusive community that welcomes people of all backgrounds and income levels. We support a balance of housing options to create opportunities for a diverse population to reside here. Our history is integral to our identity and it is also a guiding principle for our future. As the Town grows and changes, we need to be rooted in the values of our past. The Ten Mile Range mountain backdrop, historic structures, vibrant neighborhoods, and a lively Main Street characterize Frisco along with the friendly people and welcoming vibe. As Frisco grows, this character and identity should be preserved and enhanced throughout Town.

1.1: Protect the character and livability of Frisco's residential neighborhoods

- ***1.1A Ensure new housing complements adjacent properties and neighborhoods through appropriate mass, scale, and design. See page 68 for Area Specific Policies/Design Principles to help encourage compatible neighborhood development.***
- *1.1B Invest in targeted improvements (e.g., trail connections, bike paths, sidewalks, and drainage improvements) that enhance the safety and quality of life of residents.*
- ***1.1C Strive to create an appropriate balance of full-time residents, second homes, and short-term rentals to maintain a diverse and vibrant community.***

Guiding Principle 2: Thriving Economy

The Frisco economy is built upon a unique balance of tourism and its role as a commercial-service hub for the region. Tourism, driven by recreational opportunities, and the small, mountain town appeal of Main Street, creates jobs and revenue. Locals and visitors utilize the large retailers, grocery stores, and services located along Summit Boulevard, and support the small businesses on Main Street. While the Frisco economy has seen steady growth in the past decade, diversification of the economy is important. More year-round opportunities will provide stability through the seasons and economic downturns. The Town should focus on small, incremental

changes that preserve the town character and a healthy small business community that attracts residents and visitors.

2.1: Maintain a diverse and strong economy

- *2.1A Continue to attract and retain businesses that support and enhance Frisco's tourism revenues, while also seeking to build upon entrepreneurship and new or emerging niches.*
- ***2.1B Provide opportunities for a balanced mix of housing and services to support local businesses, employees, residents and visitors.***
- *2.1C As development and infill occurs, ensure that the Town's overall mix of land uses remains aligned with community goals.*
- *2.1D Participate in regional and state economic development efforts that support a diverse economy.*
- *2.1E Support the creation of home-based businesses and remote workers.*

There is an existing mixture of residential building types, building designs, and dwelling unit densities in this neighborhood. The surrounding properties consist of single family and multifamily residential uses.

The proposed development includes a building design that is unique to the project but is also reflective of the architectural elements and styling of other buildings in Frisco. The application facilitates the construction of new residential units that add variety to the sizes and types of homes in this residential neighborhood.

The proposed construction of four residential dwelling units on the subject property is permitted through the allowed density in the RM District. The application does not utilize the full density potential of the site, and therefore promotes the clustering of residential units and preserves open space on site. The application appears to be in general conformance with the purpose and recommendations of the Frisco Community Plan.

ANALYSIS – RESIDENTIAL MEDIUM DENSITY [§180-3.6]

The requirements of the Residential Medium (RM) District are applicable to the review of the proposed multifamily project as follows:

Purpose: The purpose of the RM District is as follows:

> *"To allow for the development of residential areas that are a mixture of single-household detached dwellings, duplexes, and multi-unit dwellings, to promote the clustering of medium density residential units so as to preserve open space and scenic views, and to encourage a broad mix of housing types."*

Minimum Lot Area: The minimum lot area in the RM District is 10,500 square feet or 0.24 acres. The subject lot is 37,287 square feet and meets the minimum lot size.

Minimum Lot Frontage: The minimum lot frontage in the RM District is 60 feet. Lot frontage is defined in the UDC as:

> *That portion of a lot fronting upon and providing rights of access to a dedicated street. Lot frontage is measured continuously along only one street.*

The property is approximately 125 feet north to south and approximately 344 feet from west to east. There are no proposed changes to the existing lot frontage, meeting the requirements.

Setbacks: Pursuant to §180-9, Definitions, Frisco Town Code:

> *"Lot Line, Front – The property line separating a lot from the street except, where a lot is bordered by more than one (1) street, the property owner shall determine which side of the lot having street frontage is to be considered the front for setback purposes. Each lot proposed for development shall have at least one (1) property line designated as the front lot line."*

As there is only one lot line with street frontage, the front lot line is adjacent to Forest Drive. Based upon the submitted plans, there are no proposed building encroachments into the setbacks. An Improvement Location Certificate (ILC) will be required during construction to ensure the structure, including roof eaves, does not encroach into the setback.

The minimum required setbacks and proposed setbacks for this application are as follows:

	Minimum Setback	Proposed Setback
Front Yard	20 feet	>20 feet
Side Yard	10 feet	10 feet
Rear Yard	10 feet	10 feet

Maximum Lot Coverage: Per the Unified Development Code, lot coverage shall not exceed 50% of the total lot area in the RM District. The proposed lot coverage is 8,096 square feet or 21.7% and includes the building footprint, driveways, decks, and patios. The application meets this requirement.

Per the UDC definition, lot coverage is defined as "The percentage of total lot area used for parking, roads, drives; and above or below-grade structures or improvements, including but not limited to hot tubs, decks, patios, and sheds. The following elements are excluded from the calculation of lot coverage: two feet of roof eaves as measured perpendicular from the exterior building wall; ground-mounted solar energy facilities as an accessory use; 100 percent of publicly used nonvehicular pathways and three feet of the width of privately used non-vehicular pathways; and approved dumpster enclosures that provide adequate space for recycling containers."

Maximum Building Height: The maximum building height is 35 feet in this zone district. The applicant is proposing a maximum building height of 34.31 feet, meeting the requirements. A roof ILC will be required during construction to ensure that the building does not exceed the maximum building height.

Density: The permitted density in the RM District is 12 dwelling units per developable acre. The 37,287 square foot lot (0.856 acres) allows up to ten units on site. The applicant is proposing four units of density on the property. The application meets this standard.

ANALYSIS – USE STANDARDS [§180-5]

Permitted and Conditional Uses: A variety of residential uses are permitted in the RM District including multiunit dwellings and townhomes. The application meets this standard.

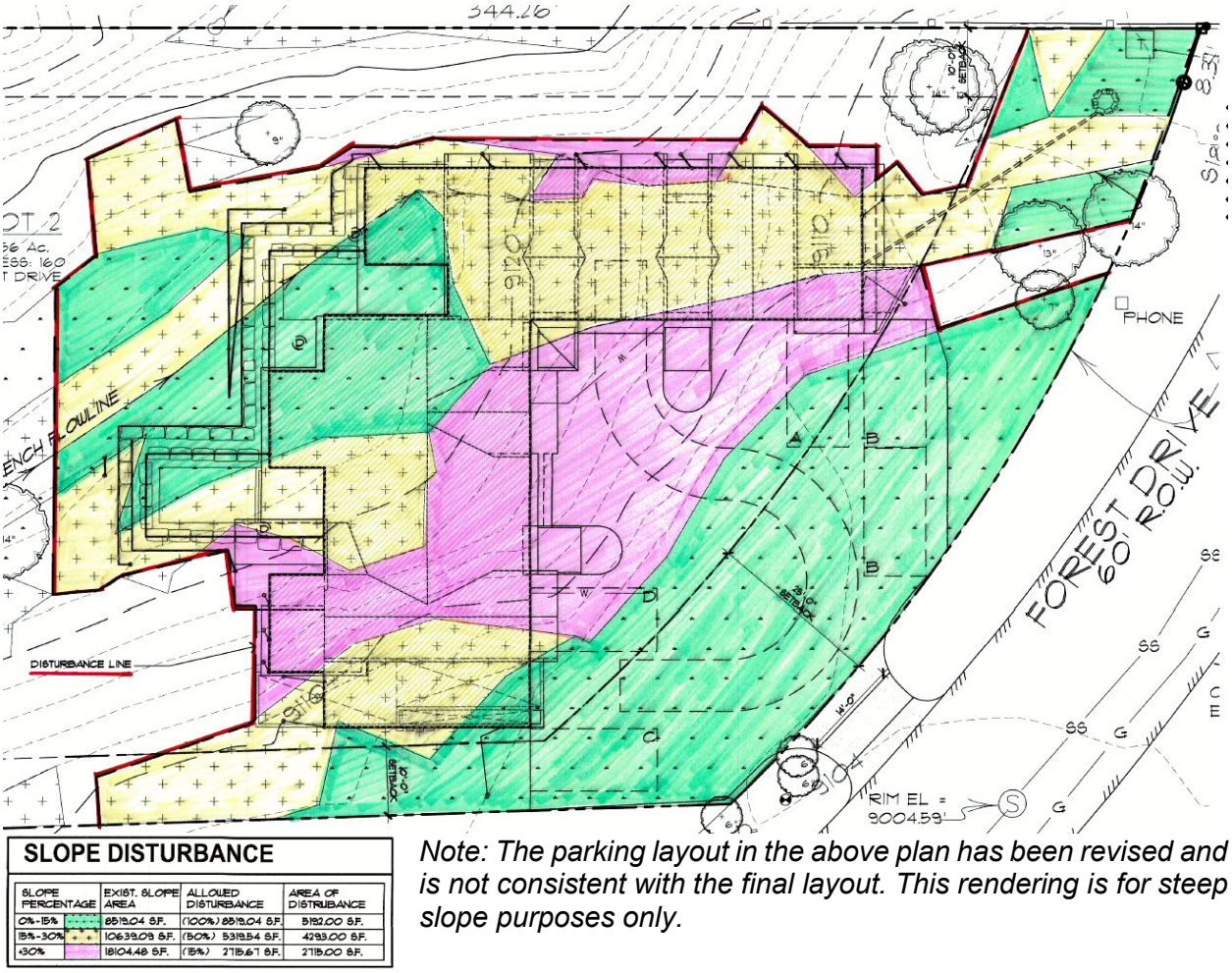
ANALYSIS - DEVELOPMENT STANDARDS [180-6]

Development on Steep Slopes (§180-6.5.1): All development in areas with steep slopes greater than 15% shall comply with the following standards:

- On slopes from 15% to less than 30%, net site disturbance shall not exceed 50% of the total area within this range of slopes.
- On slopes greater than 30%, net site disturbance shall not exceed 15% of the total area over this range of slope.

The subject property contains steep slopes and therefore must meet the requirements of this code section. The table below details the specifics of the slopes on site.

Slope Disturbance			
Slope Percentage	Existing Slope Area	Allowed Disturbance	Area of Proposed Disturbance
15%-30%	10,639.09 SF	5,319.55 SF (50%)	4,293.00 SF
>30%	18,104.48 SF	2,715.67 SF (15%)	2,715.00 SF



Note: The parking layout in the above plan has been revised and is not consistent with the final layout. This rendering is for steep slope purposes only.

The applicant has provided a disturbance boundary to include the impacts of construction. Along with the steep slope analysis, a drainage report, soils investigation, and excavation plan were

submitted and reviewed by the Town Engineer. These submittals detail the soils, excavation methods (no blasting), and drainage to ensure no adverse impacts to the Town or neighboring properties. Based on comments from the Town Engineer, multiple iterations of the plans were submitted with the latest submittal reviewed and approved by the Town Engineer, with the conditions listed below:

1. *The swales on the north and south sides of the property show slopes approaching 3:1. Drainage and erosion is a concern in these areas. Riprap or cobble shall be detailed in these areas to prevent erosion.*
2. *The swale on the south side of the home shall be realigned at the SW corner to maintain 4' of separation from home.*
3. *The response to comments states that the design engineer finds the reduce positive drainage acceptable if "provided proper waterproofing". Plans shall state that the building shall be waterproofed in accordance with IBC Section 1805.2.*
4. *The construction staging plan shall be modified to relocate silt fence. Silt fence should be constructed parallel to contours, below disturbance areas. It should not be installed perpendicular to contours. Silt fence or wattles shall be placed at NE corner of site to prevent any sediment from leaving the site.*
5. *The architectural plans show a drywell and other contour/drainage inconsistencies with the civil plans. The architectural plans shall be updated to match the civil plans.*

If the above conditions are met, Public Works finds the development to be in conformance with Town standards. Staff has suggested a recommended condition that all conditions suggested by the Town Engineer are satisfied prior to issuance of a building permit.

Drainage Plan (§180-6.6): The Town Engineer has reviewed the submitted drainage report and finds the submittal to be in conformance with Town standards, per memo dated May 29, 2024.

Access (§180-6.11)**:** All vehicle access shall comply with the standards set forth in Chapter 155, Minimum Street Design and Access Criteria. Where development abuts a Town road, the location and design of access points to the road must be approved by the Frisco Town Engineer. Multifamily projects shall have a minimum driveway width of nine feet and a maximum width of 20 feet. The width is measured within Town ROW from the ROW line to the edge of pavement.

The applicant is proposing one driveway into the site off Forest Drive. The architectural plans show 14 feet, whereas the civil plans show 20 feet. As a recommended condition of approval, prior to issuance of a building permit, all architectural plans and civil plans shall show a consistent driveway width with a maximum width of 20 feet.

Non-vehicular Access Requirements (§180-6.11.2):

> *It is the purpose of this section to promote the use of non-vehicular modes of transportation through a Town- wide network of connecting non-vehicular pathways and provide safe access year round. All site plans shall provide for and show non-vehicular access in accordance with the standards set forth in the Frisco Trails Master Plan and Chapter 155, Minimum Street Design and Access Criteria. In addition, all non-vehicular access shall meet the following standards:*
>
> A. *All multi-family, mixed-use, non-residential developments, and residential subdivisions shall provide safe and convenient non-vehicular access to a public street or road year-round. Developments shall install paved, year round access*

from and through the development to adjacent public sidewalks, bicycle and pedestrian facilities, or right of way both existing and proposed pursuant to the Frisco Trails Master Plan and in accordance with the Standards of Chapter 155, Minimum Street Design and Access Criteria.

B. *Every principal structure shall provide access to adjacent trail systems or public open space usable for recreation activities.*

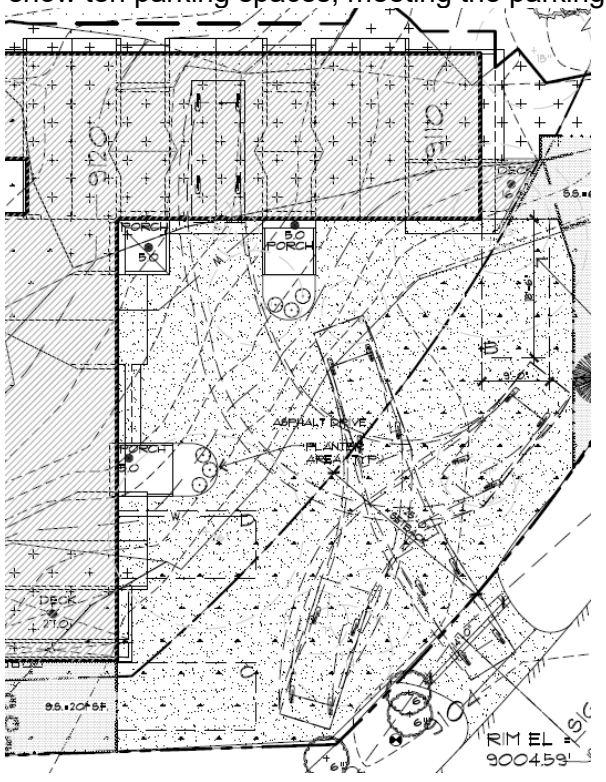
C. *Developments shall integrate pedestrian ways, trails, and/or bicycle paths with similar existing and planned facilities on adjacent properties. The Frisco Trails Master Plan should be used as a reference when planning for the integration of these facilities.*

The site plan does not show any pedestrian access to Forest Drive, however, with no connecting sidewalks, staff finds that non-vehicular access by way of the driveway is sufficient.

On-Premise Parking Requirements (§180-6.13.3. D)**:** One parking space is required per bedroom with a maximum of four parking spaces per unit. One visitor parking space is required for five units. The following is a parking analysis:

Use Type	Parking Standard	# Bedrooms	Required Spaces
Residential	1 per bedroom Maximum of 4 spaces per unit	2, 3-bedroom units 2, 2-bedroom unit	10
Visitor Parking	1 per five units		0
Total Required			**10**

The application materials show ten parking spaces, meeting the parking quantity requirements.



Staff had noted concern regarding enforcement of the proposed parking plan and ensuring that residents adhere to the dedicated parking spaces in the shared parking area. The parking spaces are labeled as B, D, and C in the image above and correspond with the respective unit. The applicant has provided draft covenant language that designates the outdoor parking spaces and dictates that each space will have signage. The draft covenant language is provided as an attachment to this staff report. The Town Engineer has reviewed the turning radius provided by the applicant and has verified the correct modeling was used. The application is meeting the parking requirements.

Tandem Parking (§180-6.13.6)**:** For multifamily residential projects, two stacked (tandem) spaces may be permitted if Planning Commission finds that the layout of the parking is functional and, at a minimum, finds two out of the following four criteria are met:

i. That some of the spaces could be used as potential visitor parking space; and/or,
ii. That, given the layout and design of the building, adequate storage space is provided for the residents so that it is not anticipated the parking space(s) will be needed predominately for storage; and/or,
iii. That the architecture of the building façade which faces or accesses the parking spaces avoids a canyon effect, such that movement is provided in the building design; and/or,
iv. That an adequate turning radius area is provided with the parking layout to allow for turning and backing into or out of the tandem parking spaces.

The proposed parking plan shows one stacked tandem space for unit D. If the Planning Commission finds adequate storage space is provided so the tandem parking does not need to be used for storage, the architecture of the building façade which accesses the parking spaces avoids a canyon effect, and an adequate turning radius area is provided with the parking layout to allow for turning and backing into or out of the tandem parking spaces, then the application meets this requirement.

Electric Vehicle Charging Stations: Chapter 65 of the Code of Ordinances of the Town of Frisco concerning Building Construction and Housing Standards, Section C405.10.1 references electric vehicle charging stations for new construction. The property will be required to comply with requirements as outlined in Section C405.10.1 at the time of building permit submittal.

Accessible Parking (§180-6.13.3.H)**:** All facilities, commercial, mixed-use, and multifamily projects with seven attached units or more must provide accessible parking. Accessible parking spaces are not required with this application.

Bicycle Parking (§180-6.13.4)**:** All multifamily residential developments must provide both enclosed, secure bicycle parking, and outdoor bicycle parking facilities. Dwelling units with a private garage are not required to provide enclosed, secure bicycle parking. Each proposed dwelling unit has a garage and so additional bicycle parking is not required for this application. The application meets this standard.

Snow Storage Areas (§180-6.13.7): The UDC requirements state that “snow storage shall be provided on premise in the amount of twenty-five percent of paved surface area and any unpaved parking and driveway areas, including uncovered decks. The applicant must demonstrate that snow removal operations for upper floor decks will not impact adjacent property.”

The applicant is showing 4,026 square feet of hardscaped area and uncovered patios/decks, requiring 1,007 square feet of snow storage. The application materials show 1,114 square feet of

snow storage, meeting the requirements. The applicant has provided snow storage within the steep slope area, which is allowable by code. Additional drainage considerations were required based on the proposed snow storage.

Outdoor Lighting (§180-6.16): Outdoor lighting installed for new structures shall be full cut-off fixtures and be positioned so that there is no direct light emission onto adjacent properties. The application meets this standard with dark sky compliant fixtures.

Landscaping and Revegetation (§180-6.14)**:** This proposal is subject to the landscaping requirements for a residential development. In residential developments, for every 875 square feet of project lot area or fraction thereof, a minimum of one tree must be planted on the site and one shrub shall be required for every 1,500 square feet of lot area. With a lot size of 37,287 square feet, 43 trees are required, and 25 shrubs are required.

There are 19 existing trees to remain on site and the applicant is proposing an additional 34 trees. Per UDC requirements, the applicant can use 50% of the existing trees on site towards landscaping requirements. With the proposed trees being planted, the applicant is showing a total of 44 trees on site, meeting the requirements. The site plan also shows 25 shrubs on site.

All species diversity and plant types are being met. The application meets the landscaping requirements.

Refuse Management (§180-6.17): All commercial, mixed-use and multifamily residential development projects containing five or more units shall utilize a trash enclosure for the collection and storage of refuse and recyclable materials. No trash enclosure is required for this development. The applicant has submitted correspondence from a trash hauler stating that they will be able to haul individual toters with no issues.

Residential Development Standards (§180-6.22)**:** The purpose of the residential development standards is to promote high-quality development while still providing for creative and unique building designs; to establish minimum standards related to scale, mass, architecture, materials, and overall design character of development and provide incentives to help achieve desired attributes; and to preserve established neighborhood scale and character, ensuring that residential areas contribute to the streetscape and are conducive to walking.

The application shall be held to the following residential development standards:

A. Facade Standards

1. *Intent. To ensure that the façade design of development is compatible with Frisco's small mountain town character and provides a human scale to enhance the walking experience in the neighborhood.*

The proposed development includes building designs that are unique to this project and have a similar styling to other buildings in Frisco.

2. *Building Elements. All building elevations shall employ varied articulation of wall surfaces, as shown in Figure 6-UU. Each façade shall be articulated through the use of at least four of the following techniques:*
   a. *Deep eaves or overhangs, at least 24 inches in depth;*
   b. Balconies, porches, or patios;

c. *Building elements that provide shelter from natural elements;*
d. ***Offsets, insets, bays, or other similar architectural features to add a variety of depths to the wall plane;***
e. ***A change in texture or material, provided all exterior wall textures and materials are consistent with the overall architectural style of the building;***
f. *Variation in roof planes or roof forms, including dormers or gables; or*
g. ***Variation in window sizes and shapes.***

A variety of building elements are utilized on all four facades of the building. Varied building articulation is achieved by utilizing the bolded techniques listed above.

3. *Duplicate Building Design Prohibited*
   a. *Building designs that duplicate, or are substantially similar in terms of roof pitch, building articulation, materials, colors, and building elements to existing or proposed structures within a 300 foot radius of the property shall not be allowed, with the exception that accessory structures on the same lot or parcel as the primary structure may be similar in design as the primary structure.*

   b. *Where a project contains two or more buildings or units, not identical units, the building design shall provide architectural relief from the duplication of buildings and units by utilizing a variety of windows, decks, balconies, or exterior facade composition.*

The building design does not duplicate other buildings within a 300-foot radius of the property and units are not identical to each other by utilizing a variety of materials and architectural elements. At sketch level Commissioners commented on the duplicative units and the applicant made changes to the location of materials as a response. The application meets this standard.

C. Roof Standards

1. *Intent. To ensure that roof elements are compatible with or complementary to existing historic or contributing buildings in the area and to encourage visibly pitched roofs or roof elements and the use of dormers and breaks in ridgelines.*

The application materials show pitched roof elements and breaks in ridgelines.

2. *Roof Pitch*
   a. *Pitched roofs, or flat roofs augmented with pitched roof elements, are required.*
   b. *A minimum roof pitch of 6/12 is encouraged.*
   c. *Mansard roofs are prohibited.*

The proposed building roofs are a combination of roof pitches of 2:12 and 4:12, meeting the requirements. The flat roofs are augmented with pitched elements.

3. *Roof Design. Roof lines shall be designed in a manner where they do not substantially deposit snow onto required parking areas, sidewalks, trash storage areas, stairways, decks, balconies or entryways.*

The proposed roof forms generally deposit snow away from parking areas. The need for snow guards, snow clips, snow fences, and other similar rooftop snow retention will be evaluated by the Town of Frisco Building Department as part of the building permit application review process.

4. *Roof Materials*
    a. *If metal roofs are used they shall be surfaced with a low gloss finish, matte finish, or other finish proven to fade and not be reflective.*
    b. *Metal roofs, asphalt and fiberglass shingles are permitted provided that they heavy material that provides substantial relief and shadow, and the design and color are compatible with the building.*
    c. *Historic buildings, as noted in the Town's Historic Resource Inventory, may use rolled asphalt roofing materials.*
    d. *Bright colored roofs that exceed a chroma of four on the Munsell Color chart are prohibited.*

The application materials show charcoal colored shingles and matte metal accents being used as roof materials, meeting this standard.

D. Building Material Standards

1. *Intent. To ensure that building materials are compatible and complementary to existing historic and contributing buildings in the area, using a combination of mainly natural materials.*
2. *Primary Materials*
    a. *Building materials shall be predominantly natural, including but not limited to, wood siding, wood shakes, logs, stone, brick, or other similar materials.*
    b. *Other materials that imitate natural materials are also acceptable provided their texture, shape, and size are substantially similar to the natural materials they are imitating, and are not obviously artificial materials.*
    c. *Stucco or steel are acceptable materials when used in combination with other acceptable materials.*

Proposed exterior building materials include matte black metal panels, wood fascia and beams, natural wood siding, and telluride stone. The application meets this standard.

3. *Specific Material Standards*
    a. *Concrete Block. Concrete block shall not be allowed as the primary or extensive exterior finish. When used as an accent, concrete block shall be a split block, or other similarly shaped, textured, and colored materials that are found to be compatible with the building and the purpose of this section.*
    b. *Metal. Metal shall have a matte finish or a finish proven to fade and not be reflective.*
    c. *Glass. The use of mirrored or reflective glass is prohibited unless required for compliance with the voluntary green building program as administered by the Town's Building Official.*

The application includes corrugated metal panels in a matte finish, meeting the requirement.

4. *Variety of Materials on All Building Elevations*
    a. *There shall be a variety of quality and type of exterior materials, and their application shall be generally in balance and proportional on all elevations of the building.*
    b. *Materials that wrap around the building, such as a durable material at the base of the structure, shall continue around projecting outside exterior corners and end at recessed inside exterior corners.*

The applicant is proposing a variety of exterior materials which appear to wrap the building corners. The application meets all building material standards.

E. Building Colors

1. *Intent. To promote building colors compatible with the site and surrounding buildings*
2. *Maximum Color Chroma. No color may be used as the primary color of the building that exceeds a chroma of four on the Munsell Color chart. Pure white or black may not be utilized as the primary building color.*

The primary building colors and materials consist of wood siding in natural wood tones, matte black corrugated metal siding, and stone in light natural tones. Pure white or black is not being utilized as the primary building color. The application meets this standard.

Bulk Standards (§180-6.23): Table 6-K of the UDC outlines bulk plane requirements. Building forms may deviate from the bulk plane standards if they do not exceed maximum building height and provide substantial architectural relief, with Planning Commission approval. Staff may approve the deviation if the projection beyond the bulk plane does not exceed 350 cubic feet. The applicant is not proposing bulk plane encroachments.

REFERRAL COMMENTS

Summit County GIS:

See letter attached dated December 19, 2023.

Summit County Planning Department:

- The neighbors to the north of the property could benefit from having the utility screened with landscaping.

Contact Jen Uhler (Jen.Uhler@summitcountyco.gov) for additional information. The applicant added additional landscaping near the transformer.

Town Engineer:

See redlined plans attached and memo dated May 29, 2024.

Summit Fire & EMS:

See attached letter dated May 16, 2024.

Frisco Sanitation:

- All tap fees are to be paid prior to issuance of building permits.

Contact Matt Smith (msmith.fsd@gmail.com) with Frisco Sanitation for additional information.

Xcel Energy:

- We require 8' clearance from the meters to an adjacent one-story drip; the third story drip above the meters meets this clearance from the deck below on the second story, but we also have a requirement that any second story drip or higher have 16' laterally from the meters, which this location does not meet.
- This will need to be reviewed by your designer once it's been assigned.

Jess Frick with Xcel Energy provided comments on this site plan, however, is no longer working with Xcel Energy. A new designer will be assigned at the time of building permit submittal and the meter location will be determined at that time. Staff is comfortable making this a condition of approval as no major changes to the proposed site plan are anticipated with determining a new meter location.

PUBLIC COMMENT

The Community Development Department has not received any public comment for the final review of this Major Site Plan as of June 13, 2024.

STAFF RECOMMENDATIONS

Recommended Findings

The Community Development Department recommends the following findings pertaining to the Major Site Plan application for the proposed new residential townhome development located at 160 Forest Drive / LOT 2 WEST FRISCO 70 SUB # 2.

Based upon the review of the Staff Report dated June 20, 2024, and the evidence and testimony presented, the Planning Commission finds:

1. *The proposed development application is in general conformance with the principles and policies of the Frisco Community Plan. Residential development of this lot is supported by the Frisco Community Plan Guiding Principles of Inclusive Community and Thriving Economy. The proposed development includes a building design that is unique to this project but that is also reflective of the architectural elements and styling of other buildings in Frisco. This application facilitates the construction of new residential units that add variety to the sizes and types of homes in this residential neighborhood.*

2. *The proposed development application is in general conformance with the Town of Frisco Zoning Regulations, specifically Section 180-3.6, the Residential Medium District (RM), including: lot area, lot frontage, lot coverage, setbacks, building height*

and density. All the applicable requirements have been met by the submittal and the recommended conditions of approval.

3. *The proposed development application is in general conformance with the Town of Frisco Zoning Regulations, specifically Section 180-6, Development Standards since all the applicable requirements have been met by the submittal and the recommended conditions of approval; including: steep slopes, grading plan, drainage plan, snow storage and snow shedding, vehicular access, non-vehicular access, and refuse management. The Planning Commission finds that the layout of the tandem parking is functional given the layout and design of the building, adequate storage space is provided so the tandem parking does not need to be used for storage, the architecture of the building façade which accesses the parking spaces avoids a canyon effect, and an adequate turning radius area is provided with the parking layout to allow for turning and backing into or out of the tandem parking spaces.*

4. *The proposed development application is in general conformance with the Town of Frisco Zoning Regulations, specifically Section 180-6.14 Landscaping since all the applicable requirements have been met by the submittal and the recommended conditions of approval; including: required vegetation, water conservation, irrigation system, and landscaping maintenance.*

5. *The proposed development application is in general conformance with the Town of Frisco Zoning Regulations, specifically 180-6.16 Outdoor Lighting since all the applicable requirements have been met by the submittal and the recommended conditions of approval; including: exterior light fixtures, light emissions, design, and energy savings.*

6. *The proposed development application is in general conformance with the Town of Frisco Zoning Regulations, specifically Section 180-6.22, Residential Development Standards, since all of the applicable requirements have been met by the submittal and the recommended conditions of approval; including: that the development is designed in a manner compatible with the neighborhood; the development includes required building elements and the other recommendations and standards of the Residential Design Standards.*

Recommended Action

Based upon the findings above, the Community Development Department recommends APPROVAL of the Major Site Plan application for the proposed new residential townhome development located 160 Forest Drive / LOT 2 WEST FRISCO 70 SUB # 2, subject to the following conditions:

Conditions:

1. *Prior to submittal of a building permit, the applicant shall satisfy all requirements of the Frisco Public Works Department outlined in the memo dated May 29, 2024:*

- *The swales on the north and south sides of the property show slopes approaching 3:1. Drainage and erosion is a concern in these areas. Riprap or cobble shall be detailed in these areas to prevent erosion.*
- *The swale on the south side of the home shall be realigned at the SW corner to maintain 4' of separation from home.*
- *The response to comments states that the design engineer finds the reduce positive drainage acceptable if "provided proper waterproofing". Plans shall state that the building shall be waterproofed in accordance with IBC Section 1805.2.*
- *The construction staging plan shall be modified to relocate silt fence. Silt fence should be constructed parallel to contours, below disturbance areas. It should not be installed perpendicular to contours. Silt fence or wattles shall be placed at NE corner of site to prevent any sediment from leaving the site.*
- *The architectural plans show a drywell and other contour/drainage inconsistencies with the civil plans. The architectural plans shall be updated to match the civil plans.*

2. *Prior to submittal of a building permit, all civil and architectural plans shall reflect the same driveway width and shall be a maximum of 20 feet in width.*
3. *Prior to issuance of a building permit, the applicant shall satisfy all requirements of Summit Fire & EMS.*
4. *Prior to issuance of a building permit, the applicant shall satisfy the requirements of the Summit County GIS Department.*
5. *Prior to issuance of a building permit, the applicant shall satisfy the requirements of Xcel Energy.*

Recommended Motion

Should the Planning Commission choose to approve this major site plan application, the Community Development Department recommends the following motion:

> ***With respect to File No. MAJ-23-0012, I move that the recommended findings set forth in the June 20, 2024 staff report be made and that the recommended conditions set forth therein be taken and that the Planning Commission hereby APPROVES the request for the Major Site Plan application for the proposed new residential townhome development located at 160 Forest Drive / LOT 2 WEST FRISCO 70 SUB # 2.***

ATTACHMENTS

Attachments:
Attachment A – Referral Comments
Attachment B – Redlined Engineering Comments
Attachment C – Application Materials (Narrative, Site Plans, Excavation Details, Soils Report)

cc: Seth Francis

Attachment A

MEMORANDUM

P.O. BOX 4100 ◆ FRISCO, COLORADO 80443

TO: EMILY WEBER, PRINCIPAL PLANNER
FROM: CHRISTOPHER MCGINNIS, PUBLIC WORKS DIRECTOR/TOWN ENGINEER
RE: MAJ-23-0012(160 FOREST DRIVE) TOWN ENGINEER REVIEW – 5/29/24 SUBMITTALS
DATE: MAY 29, 2024

The MAJ-23-0012 submittals were reviewed for general conformance with Town Code, standards, and general engineering principles. Comments were sent in December 2023 and April 2024 and revised submittals were received on 5/17/24 and 5/29/24. Many comments regarding drainage, runoff, driveway, parking, utilities, and water were addressed. The following includes additional comments from the May submittals:

1. The swales on the north and south sides of the property show slopes approaching 3:1. Drainage and erosion is a concern in these areas. Riprap or cobble shall be detailed in these areas to prevent erosion.
2. The swale on the south side of home shall be realigned at the SW corner to maintain 4' of separation from home.
3. The response to comments states that the design engineer finds the reduce positive drainage acceptable if "provided proper waterproofing". Plans shall state that the building shall be waterproofed in accordance with IBC Section 1805.2
4. The construction staging plan shall be modified to relocate silt fence. Silt fence should be constructed parallel to contours, below disturbance areas. It should not be installed perpendicular to contours. Silt fence or wattles shall be place at NE corner of site to prevent any sediment from leaving the site.
5. The architectural plans show a drywell and other contour/drainage inconsistencies with the civil plans. The architectural plans shall be updated to match the civil plans.

160 Forest Drive is an undeveloped site containing steep slopes and large granite rock. If the conditions listed above are met, Public Works finds the development to be in general conformance with Town and other standards. A drainage report, soils investigation, and excavation plan were submitted and reviewed. These submittals detail the soils, excavation methods (no blasting), and drainage to ensure no adverse impacts to the Town or neighboring properties.

SUMMIT COUNTY
COLORADO

INFORMATION SYSTEMS DEPARTMENT

970-668-4200
Post Office Box 5660
County Commons
0037 County Road 1005
Frisco, Colorado, 80443

TO: Town of Frisco Planning Department
FROM: Chandler Morehardt, GIS Technician
SUBJECT: Project Review
DATE: December 19, 2023

Property Location: 160 Forest Drive, Frisco, CO 80443
Property Description: LOT 2 WEST FRISCO 70 SUB # 2
Project Description: Multifamily development

Comments: "160 Forest Drive" should **NOT** be used as the project name as this address is subject to change. **Please provide an alternative project name for this development.**

As shown on the sketch plan, we approve the following addresses for the 4 units:

160 Forest DR, Unit A
160 Forest DR, Unit B
160 Forest DR, Unit C
160 Forest DR, Unit D

Sincerely,

Chandler Morehardt
Information Systems
Summit County Government
GIS Technician
970-668-4219
chandler.morehardt@summitcountyco.gov
PO Box 5660
Frisco, CO 80443

SUMMIT FIRE & EMS

PO Box 4910
Frisco, CO 80443
(970) 262-5100
www.summitfire.org

May 16, 2024

Ms. Emily Weber
Principal Planner
Community Development
Town of Frisco
PO Box 4100
Frisco, CO 80443

Re: 160 Forest Drive Site Plan, Frisco, CO 80443

Dear Ms. Weber,

Thank you for the opportunity to review and comment on the above proposed preliminary site plan. The 2018 edition of the International Fire Code (IFC), as amended and adopted, is the fire code of record for this site plan and future permits. Summit Fire & EMS (SFE) has the following comments and concerns:

1. A Construction permit for through Summit Fire & EMS is required for this this project. Please advise the developer/contractor to contact the fire department for details.
2. As noted on Sheet T1 of the Site Plan Submittal, the proposed fire sprinklers (NFPA 13R) will be accepted in lieu of approved access around the structure.
3. The proposed sprinkler room is acceptable.
4. A fire alarm system shall be installed as required by the IFC and local SFE policies.
5. Bollard protection for the existing fire hydrant will be required to be added.

Kim J McDonald
Division Chief/Fire Marshal
Summit Fire & EMS

Attachment B

160 FOREST DRIVE

GENERAL NOTES

1) COPYRIGHT:
All plans, designs, and concepts shown in these drawings are the exclusive property of BHH Partners, Planners and Architects, A.I.A./P.C. and shall not be used, disclosed, or reproduced for any purpose whatsoever without the Architect's written permission.

2) CODES:
This project is governed by the 2018 International Building Code as adopted by the Town of Frisco Colorado. Code compliance is mandatory. The drawings and specifications shall not permit work that does not conform to these codes. The General Contractor and Subcontractors shall be responsible for satisfying all applicable codes and obtaining all permits and required approvals. Building areas are shown for code purposes only and shall be recalculated for any other purposes.

3) FIELD VERIFICATION:
Verify all dimensions, conditions, and utility locations on the job site prior to beginning any work or ordering any materials. Notify Architect of any conflicts or discrepancies in the drawings immediately.

4) DIMENSIONS:
Written dimensions always take precedence over scaled dimensions. DO NOT SCALE DRAWINGS. Verify all dimensions shown prior to beginning any work and notify Architect of any conflicts or discrepancies for interpretation or clarification. Plan dimensions are to the face of framing members, face of wood furring or face of concrete walls unless otherwise noted. Section or elevation dimensions are to top of concrete, top of plywood, or top of wall plates or beams unless otherwise noted.

5) DISCREPANCIES:
The Owner has requested the Architect to provide limited architectural and engineering services. In the event additional details or guidance is needed by the Contractor for construction of any aspect of this project, he shall immediately notify the Architect. Failure to give simple notice shall relieve the Architect of responsibility. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved with written direction from the Architect.

6) DUTY OF COOPERATION:
Release of these plans contemplates further cooperation among the Owner, his Contractor, and the Architect. Design and construction are complex. Although the Architect and his Consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect, and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the Architect. Failure to notify the Architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the Architect shall relieve the Architect from responsibility for all consequences.

7) CHANGES TO THE WORK:
Any items described herein that impact project budget or time shall be requested from the Contractor via a written change order request prior to such work. Performance of such work without approval by change order indicates General Contractor's acknowledgment of no increase in contract sum or time. Changes from the plans or specifications made without consent of the Architect are unauthorized and shall relieve the Architect of responsibility for any and all consequences resulting from such changes.

8) WORKMANSHIP:
It is the intent and meaning of these drawings that the Contractor and each Subcontractor provide all labor, materials, transportation, supplies, equipment, etc., to obtain a complete job within the recognized standards of the industry.

9) SUBSTITUTIONS:
Substitution of "equal" products will be acceptable with Owner's written approval. See specifications.

10) CONSTRUCTION SAFETY:
These drawings do not include the necessary components for construction safety. The General Contractor shall provide for the safety, care of utilities and adjacent properties during construction, and shall comply with state and federal safety regulations.

11) EXCAVATION PROCEDURES:
Upon completion of any excavation, the Owner shall retain a soils engineer to inspect the subsurface conditions in order to determine the adequacy of foundation design. See specifications. CONTRACTOR SHALL NOT POUR ANY CONCRETE UNTIL APPROVAL IS OBTAINED FROM SOILS ENGINEER.

12) FIELD CUTTING OF STRUCTURAL MEMBERS:
The General Contractor and Subcontractors shall field coordinate and obtain approval from Engineer before any cutting, notching or drilling of any cast-in-place concrete, steel framing, or any other structural elements which may affect the structural integrity of the building. Refer to the appropriate Code Requirements, manufacturer's or supplier's instructions, and structural drawings for additional requirements.

13) WEATHER CONDITIONS:
The Owner has been advised that due to harsh winter conditions, roof and deck surfaces must be maintained reasonably free of ice and snow to ensure minimal problems with these surfaces. All roofing, roofing membranes, and waterproofing shall be approved in writing by product manufacturer (W.R. Grace for bituthene, etc.) prior to proceeding with any work. Failure to provide these written approvals removes all responsibility for the work from the Architect.

14) BUILDING AREA
Building areas are shown for code purposes only and shall be recalculated for any other use.

15) PROJECT STAKING
The general contractor shall verify all existing grades and stake all building corners and the driveway location for Owner/Architect, review board and town of Silverthorne approval prior to beginning any site clearing.

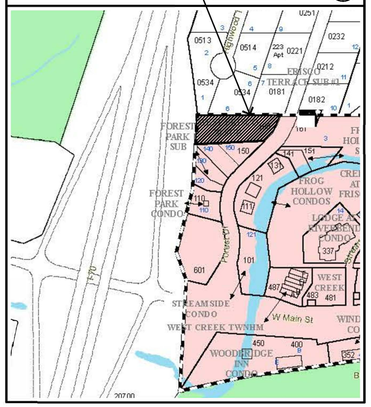
16) SITE DISTURBANCE
It is the responsibility of the contractor to protect the existing trees to remain and adjacent properties from damage during construction. Provide protective fencing throughout construction.

17) PROJECT GRADES
The general contractor shall check and verify all grades including paved area slopes prior to pouring any foundations. Survey work should be verified in detail. See numbers 5 and 6.

18) EXTERIOR MATERIAL MOCK UP
At Owner option, the General Contractor shall provide a mock up of all exterior materials for review by the Owner and Architect. This mock up shall be provided and signed off in writing prior to any exterior stain or exterior finish work. The sample shall include fascia, trim, window cladding and all other exterior finishes including a 3'-0"x3'-0" (min) sample of exterior stonework if applicable. This mock up shall be retained on site until the final punch.

19) 3D MODELING
This project has been digitally modeled in 3D software. The digital model is provided for reference purposes only. Transmission of digital model files constitutes a warranty by the party transmitting files to the party receiving files that the transmitting party is the copyright owner of the digital data. Unless otherwise agreed in writing, any use of, transmission of, or reliance on the model is at the receiving party's risk. The contractor shall notify the architect of questions or coordination issues between the contract documents and digital model.

VICINITY MAP



LEGAL DESCRIPTION

LOT 2, AMENDED FRISCO WEST 70, FILING 2
160 FOREST DRIVE
FRISCO, CO

FIRE SPRINKLER SYSTEM

PROVIDE NFPA 13R AUTOMATIC FIRE SPRINKLER SYSTEM FOR 4 UNIT CONDOMINIUM BUILDING TO INCLUDE FDC, EXTERIOR HORN, AND LIGHT. PROVIDE SIDE WALL HEADS TO GREATEST EXTENT POSSIBLE. PROVIDE SUBMITTAL FOR AUTOMATIC FIRE SPRINKLER SYSTEM.

SITE NOTES

1. ELECTRIC, CABLE T.V. AND TELEPHONE UNDERGROUND IN COMMON TRENCH.
2. VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY WORK. COORDINATE UTILITY ROUTING WITH APPLICABLE UTILITY COMPANY. ALL UTILITIES TO BE UNDERGROUND.
3. TOPOGRAPHIC INFORMATION OBTAINED FROM RANGE WEST ENGINEERS & SURVEYORS, INC. DATED 09/22/23.
4. PROVIDE POSITIVE DRAINAGE AT BUILDING PERIMETER (SLOPE AWAY FROM BUILDING AT 1:12 MIN)
5. REFER TO FOUNDATION PLAN FOR FOUNDATION DRAIN LOCATION AND SLOPE. DRAINS TO BE SLOPED TO A DRYWELL.
6. FLAG ALL TREES FOR OWNER PRIOR TO THINNING OR REMOVING.
7. PROTECT ALL REMAINING TREES WITH SNOW FENCE OR OTHER APPROVED BARRIER DURING CONSTRUCTION.
8. PROVIDE 6" DIA. STONE RIP RAP OVER WEED BARRIER FABRIC AT EAVES AND VALLEY DRIP LOCATIONS.
9. STAKE HOUSE LOCATION FOR OWNER, ARCHITECT, AND ARCHITECTURAL REVIEW BOARD PRIOR TO ANY WORK.
10. GENERAL CONTRACTOR TO REVIEW & COMPLY WITH ALL SUBDIVISION CONDITIONS. COPIES OF CONDITIONS ARE AVAILABLE FROM ARCHITECT.

FINISHED FLOOR ELEVS

	U.S.G.S.	ARCH'L.
LEVEL 1	9105.00'	100'-0"
LEVEL 2	9116.00'	111'-0"
LEVEL 3	9127.00'	122'-0

VIEW FROM FOREST DRIVE

AREA CALCULATIONS

NOTE: SQUARE FOOTAGES ARE CALCULATED FOR CODE PURPOSES ONLY AND SHOULD BE RECALCULATED FOR ANY OTHER PURPOSES.

UNIT A

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	164 SF.	484 SF.	648 SF.
LEVEL 2	867 SF.	0 SF.	867 SF.
LEVEL 3	325 SF.	0 SF.	325 SF.
TOTAL	1356 SF.	484 SF.	1840 SF.

UNIT B

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	586 SF.	264 SF.	850 SF.
LEVEL 2	589 SF.	0 SF.	589 SF.
LEVEL 3	610 SF.	0 SF.	610 SF.
TOTAL	1785 SF.	264 SF.	2049 SF.

UNIT C

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 SF.	728 SF.	996 SF.
LEVEL 2	975 SF.	0 SF.	975 SF.
LEVEL 3	713 SF.	0 SF.	713 SF.
TOTAL	1956 SF.	728 SF.	2684 SF.

UNIT D

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 SF.	728 SF.	996 SF.
LEVEL 2	975 SF.	0 SF.	975 SF.
LEVEL 3	627 SF.	0 SF.	627 SF.
TOTAL	1870 SF.	728 SF.	2598 SF.

SHEET INDEX

CODE CONSULTANT:	SOILS ENGINEER:	SURVEYOR:	ENGINEER:	CONTRACTOR:	ARCHITECT:	OWNER:
SHUMS CODA ASSOCIATES STEPHEN L. THOMAS, CBO 4610 SOUTH ULSTER, SUITE 150 DENVER CO 80237 (303) 400-6564 (303) 257-3572 (CELL) steve.thomas@shumscoda.com	CTL THOMPSON, INC. 1780 AIRPORT RD., UNIT 2 BRECKENRIDGE, CO 80424 (970) 453-2047 bniggeler@ctlthompson.com	RANGE WEST ENGINEERS & SURVEYORS, INC. P.O. BOX 588 SILVERTHORNE, CO 80498 (970) 468-6281 (970) 668-3165 FAX	ROCKY'S ENGINEERING, LLC 215 4th AVE. FRISCO, CO 80443 (970) 389-4895 rockysengineering1@gmail.com	SWEET HOMES OF COLORADO, INC. P.O. BOX 1398 PMB 288 FRISCO, CO 80443 (970) 262-3818 eric@sweethomesinc.com	BHH Partners of Colorado 560 ADAMS AVENUE SILVERTHORNE, CO 80498 (970) 453-6880 jbuxkemper@bhhpartners.com	BLUE RIVER REAL ESTATE FUND III, LLC P.O. BOX 7038 BRECKENRIDGE, CO 80424 (347) 834-1009 sjfrancis1985@gmail.com

TOF PUBLIC WORKS COMMENTS BY CHRIS MCGINNIS 4/24/24

REVISIONS:

JOB NO:
DATE: 03
DRAWN BY: J BUXKI
CHECKED BY: Z

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:
T1.1

CODE ANALYSIS

Apartment Building

Project Description

The project consists of a single structure at 160 Forest Drive, Frisco, Colorado. The building is a three-story multi-family building with four dwelling units. The first floor contains private garages for each of the units. The second and third floors include the living quarters.

Applicable Codes and Standards

The City Frisco adopts the following referenced codes with local amendments.

- 2018 International Building Code (IBC)
- 2018 International Mechanical Code (IMC)
- 2018 International Fuel Gas Code (IFGC)
- 2018 International Plumbing Code (IPC)
- 2018 International Energy Conservation Code (IECC)
- 2018 International Fire Code (IFC)
- 2020 National Electrical Code (NEC)
- 2009 ICC A117.1 Accessible and Usable Buildings and Facilities

NFPA Standards

- NFPA 10 – Portable Fire Extinguishers, 2018
- NFPA 13 – Standard for the Installation of Sprinkler Systems, 2016
- NFPA 72 – National Fire Alarm and Signaling Code, 2016

Deferred Submittals

The following deferred submittals will be provided for this project. (IBC 107.3.4.1)

- Automatic Fire Sprinkler System
- Through Penetrations Firestop Systems
- Joint Treatment Systems

Building Code Summary

Occupancy Classification	Groups R-2, S-2
Type of Construction	Type VB
Height of Building	3 Stories, 31 feet
Total Building Area	9,171 Square Feet
Fire Alarm System	Not provided per Section 907.2.9.1, Exc. 2
Automatic Fire Sprinklers	Provided in accordance with NFPA 13R

Occupancy Classification (IBC 302)

The lower level will consist of primarily Group S-2 Parking Garage and two Group R-2 dwelling units Levels 1 and 2 include Group R-2 dwelling units. The building will be classified as a nonseparated occupancy building in accordance with Section 508.3

Type of Construction

The building will be constructed as Type VB Construction in accordance with IBC Sections 601 and 602.5 as follows:

Building Element	Fire-Resistance Rating
Primary Structural Frame	0 *
Exterior Bearing Walls	0 *
Exterior Non-Bearing Wall	0 *
Interior Bearing Walls	0
Interior Bearing Walls	0
Floor Construction	0 *
Roof Construction	0

* See additional requirements below.

Allowable Building Heights

Group R-2, Type VB Construction provided with NFPA 13R fire sprinklers is permitted to be a maximum height of 60 feet and 3 stories per Tables 504.3 and 504.4. The actual height of the building is 31 feet and 3 stories.

Allowable Building Area

The building is designed as a nonseparated occupancy building in accordance with Section 508.3. The most restrictive occupancy is the Group R-2. The frontage increase in Section 506.3 is not needed for the allowable area calculation

Area Calculations - Based on Group R-2, Type VB Construction, NFPA 13 sprinklers
$A_a = A_t \times 3$
$A_a = 7{,}000 \times 3$
$A_a = 21{,}000$ SF Total allowable building area
7,000 SF maximum per story

Actual Floor Areas

Lower Level	3,490 SF
Main Level	3,406 SF
Upper Level	2,275 SF
Total	9,171 SF

Building Area complies with Section 506.2.4. Each individual story area complies with Section 508.1.

Mixed Occupancy Building

The building is designed as nonseparated occupancies in accordance with Section 508.3. The floor/ceiling assembly between the parking garage and the dwelling units on the second floor will be a one-hour fire-resistant rated horizontal assembly per Section 508.3.3, Exception 2. All dwelling units will be separated from each other by a minimum one hour fire-resistant rated fire partition or floor-ceiling assembly in accordance with Section 708.3.

The structure supporting the separation between the parking garage and the dwelling units is required to have a one-hour fire-resistance rated protection per Section 711.2.3. The supporting

structure for the dwelling unit separations are not required to be fire-resistant rated per the exception to Section 711.2.3.

Fire Separation Distances, FRR of Exterior Walls and Openings

Tables 602 & 705.8. Building provided with NFPA 13 fire sprinklers.

Exterior Wall	Fire Separation Distance	Wall Rating	Openings
North	>10 Feet	Non-rated	Unlimited, Unprotected
East	>10 feet	Non-rated	Unlimited, Unprotected
South	>10 feet	Non-rated	Unlimited, Unprotected
West	>10 feet	Non-rated	Unlimited, Unprotected

Parapets: Parapets are not required on exterior walls that are not required to be fire-resistance rated per Section 705.11, Exception 1.

Fire Partitions

Dwelling/Dwelling Separation: Fire partitions separating individual dwelling units required to have a minimum 1-hour fire-resistance rating per IBC Section 420.2 and IBC Section 708.3. The walls will extend from the floor to the underside of the floor and roof sheathing above as required in Section 708.4, item 1.

Penetrations (IBC 714)

Penetrations into and through fire partitions and floor/ceiling assemblies are required to be protected with approved through penetration firestop systems. System designs to be submitted as a deferred submittal.

Fire-Resistant Joint Systems (IBC 715)

Openings in or between adjacent assemblies that is created due to building tolerances or are designed to allow independent movement of the building in any plane caused by thermal, seismic, wind or any other loading shall be provided with an approved fire-resistant joint system. System designs will be submitted as a deferred submittal.

Roof

Minimum Class B required per IBC Section 1505.1 as amended by the Town.

Fire Sprinkler System

An automatic fire sprinkler system will be provided throughout the building in accordance with NFPA 13R. (IBC Sections 903.2.8) The system design and drawings will be submitted as a deferred submittal.

Portable Fire Extinguishers

Fire Extinguishers will be provided in accordance with IBC Section 906. Each dwelling unit will be provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C per Section 906.1, Item 1, Exception 1.

Fire Alarm System

Refer to Electrical Drawings and Specifications for additional fire alarm notes and requirements. The system design and drawings will be submitted as deferred submittals.

Manual Fire Alarm System: A manual alarm system will not be installed in the building. The building will comply with Exception 2 of Section 907.2.8.1. However, one manual fire alarm box shall be provided in a location approved by the fire department to initiate a fire alarm signal in accordance with Section 907.2.

Single- and Multiple-Station Smoke Alarms: Single- and multiple-station smoke alarms shall be provided in each dwelling unit in accordance with Section 907.2.10. Detectors shall be located within all sleeping areas and in every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.

The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms within the individual sleeping unit. The alarms shall receive their primary power from the building wiring and be provided with battery backup.

Carbon Monoxide Detection

Carbon monoxide detection shall be installed in dwelling units outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom. The alarms shall receive their primary power from the building wiring and be provided with battery backup.

Means of Egress

Occupant Load Calculations

Unit	Function	Area	Occupant Load Factor (SF/Occ.)	Occupant Load
A	Parking/Residential	1,840 SF	200	10
B	Parking/Residential	2,049 SF	200	11
C	Parking/Residential	2,684 SF	200	14
D	Parking/Residential	2,598 SF	200	13

Egress Widths
Corridor Minimum Width = 36 inches
Door Minimum Width = 32 inches clear
Stairway Minimum Width = 36 inches

Egress from Spaces (IBC Section 1006.2)

Each unit egresses to the exterior at the lower level. Each unit has an occupant load less than 20 and less than 125 feet of travel distance.

Egress from Stories (IBC Section 1006.3)

Each unit has a single exit at the lower level. A single exit is permitted by Section 1006.3.4, Item 5.

Accessible Means of Egress

Since the units are not required to accessible, an accessible means of egress is not required.

Stairways

Stairways shall comply with IBC Section 1011.

Stairway Width: Stairways will be a minimum of 36 inches in width.

Stairway Landings: The width of the stairway landings, measured perpendicularly to the direction of travel, shall be not less than the width of stairways served. Every landing shall have a minimum depth, measured parallel to the direction of travel, equal to the width of the stairway or 48 inches, whichever is less.

Accessibility

Type A Units: The building only contains 4 dwelling units. Therefore, no Type A units are required.

Type B Units: The building contains 4 dwelling units and Section 1107.6.2.2.2 would require the units to be Type B units. However, Section 1107.7.2 states that multi-story units are not required to be Type B units.

CRS 9-5 Compliance
Since there are less than 7 units in the building, CRS 9-5 is not applicable.

Interior Environment

Natural Light in Units: The minimum net glazed area shall not be less than 8% of the floor area of the room served (IBC Section 1204.2). All dwelling units comply

Mechanical Ventilation in Units: Mechanical ventilation will be provided in accordance with the IMC.

Sound Transmission: Walls, partitions and floor-ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class of not less than 50, or not less than 45 if field tested, for airborne noise where tested in accordance with ASTM E90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to entrance doors; however, such doors shall be tight fitting to the frame and sill. (IBC Section 1207.2)

Floor-ceiling assemblies between dwelling units or between a dwelling unit and parking garage shall have an impact insulation class rating of not less than 50, or not less than 45 if field tested, where tested in accordance with ASTM E492. (IBC Section 1207.3)

Safety Glazing:

Safety glazing shall be provided in hazardous locations described in IBC Section 2406.4. See Window Schedule and Details for specific requirements.

Plumbing Fixture Count

Each dwelling unit will be provided with at least 1 water closet, 1 lavatory, 1 shower, 1 kitchen sink and 1 clothes washer connection per Table 2902.1

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

T1.2

160 FOREST DRIVE TOWNHOUSES
LOT 2, AMENDED WEST FRISCO 70, FILING NO. 2
FRISCO, COLORADO
MARCH, 2024

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL CONFORM TO ALL TOWN OF FRISCO TOWN CODES, REGULATIONS, AND STIPULATIONS.
3. CONTRACTOR SHALL OBTAIN, AT ITS OWN EXPENSE, ALL PERMITS AND INSPECTIONS, WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR IS WARNED THAT CONFLICTS WITH EXISTING UTILITIES MAY EXIST. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS, AND CONTRACTOR SHALL LOCATE ALL UTILITIES (INCLUDING DEPTH). NEITHER MARCIN ENGINEERING NOR THE OWNER ASSUME ANY RESPONSIBILITY FOR UTILITY LOCATIONS. ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER SO THAT MINOR LINE OR GRADE CHANGES CAN BE MADE TO ELIMINATE ANY CONFLICTS WITH THESE EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR THAT WERE PROPERLY MARKED/LOCATED SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR ENGINEER.
5. THE CONSTRUCTION OF ALL ROADS, SIDEWALKS, CURBS, EARTHWORK AND OTHER INFRASTRUCTURE DEVELOPMENT NOT SPECIFICALLY SPECIFIED BY SEPARATE UTILITY COMPANIES, SHALL BE CONSTRUCTED TO THE TOWN OF FRISCO TOWN CODE AND/OR COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2017 EDITION) AND LATEST REVISIONS, CDOT M&S STANDARD PLANS (2012 EDITION) AND LATEST REVISIONS AND ANY SUPPLEMENTAL SPECIFICATIONS PROVIDED WITH THE CONTRACT. WHEN STANDARDS CONFLICT, THE STANDARD JUDGED MOST RESTRICTIVE BY THE ENGINEER SHALL PREVAIL. THE CONTRACTOR SHALL OBTAIN COPIES OF THESE SPECIFICATIONS AND PLANS. THE CONTRACTOR SHALL HAVE ONE COPY OF THE PLANS AND ONE COPY OF THE SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. ANY MISSING DIMENSIONS OR DISCREPANCIES IN THE PLANS, FIELD STAKING OR PHYSICAL FEATURES SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER. IF THE CONTRACTOR PROCEEDS WITH THE WORK WITHOUT NOTIFYING MARCIN ENGINEERING AND THE OWNER, HE DOES SO AT HIS OWN RISK.
7. THE CONTRACTOR SHALL KEEP ONE (1) SET OF CONTRACT DRAWINGS MARKED TO FULLY INDICATE "AS-BUILT" CONDITIONS. THE DRAWINGS SHALL BE PROVIDED TO THE OWNER AND MARCIN ENGINEERING UPON COMPLETION OF THIS WORK. THREE (3) "AS-BUILT" TIES TO ALL SERVICES, FITTINGS, VALVES AND MANHOLES TO PHYSICAL MONUMENTS ARE TO BE PROVIDED BY THE CONTRACTOR.
8. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER MARCIN ENGINEERING OR THE OWNER IS RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY WITH ANY REGULATIONS RELATING THERETO.
9. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR TO THE OWNER AND TOWN FOR APPROVAL.
10. CONTRACTOR SHALL MAINTAIN AT LEAST 1-LANE ACCESS ON ALL PUBLIC ROADS AT ALL TIMES UNLESS OTHERWISE APPROVED BY TOWN OF FRISCO.
11. ALL WATER CONSTRUCTION SHALL COMPLY WITH TOWN OF FRISCO TOWN CODE. MINIMUM COVER ON ALL WATER MAINS AND SERVICES IS 8.5'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER TOWN OF FRISCO WATER CONSTRUCTION SPECIFICATIONS.
12. ALL SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH FRISCO SANITATION DISTRICT CONSTRUCTION SPECIFICATIONS. MINIMUM COVER ON ALL SEWER MAINS AND SERVICES IS 9'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER FRISCO SANITATION DISTRICT SPECIFICATIONS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF STOCKPILING OF MATERIALS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, AND THE MATERIAL SUPPLIER.
14. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO SIGNIFICANTLY REDUCE ANY POTENTIAL POLLUTION CAUSED BY HIS ACTIVITIES, INCLUDING VEHICLE FUELING, STORAGE OF FERTILIZERS OR CHEMICALS, ETC. THE CONTRACTOR SHALL HAVE IDENTIFIED PROCEDURES FOR HANDLING POTENTIAL POLLUTANTS AND HAVE IDENTIFIED SPILL PREVENTION AND RESPONSE PROCEDURES PRIOR TO ANY ACTIVITIES AT THE PROJECT SITE.
15. OBSERVATIONS OF THE WORK IN PROGRESS AND ON-SITE VISITS ARE NOT TO BE CONSTRUED AS A GUARANTEE OR WARRANTY BY MARCIN ENGINEERING OF THE CONTRACTOR'S CONTRACTUAL RESPONSIBILITIES.
16. IF ANY GROUND WATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONTACT MARCIN ENGINEERING AND THE PROJECT GEOTECHNICAL ENGINEER IMMEDIATELY.
17. CONSTRUCTION STAKING SHALL BE PERFORMED BY OWNER.
18. BENCHMARK: CONTACT MARCIN ENGINEERING FOR SITE BENCHMARK (SEE PLANS).
19. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY RANGE WEST
20. SOILS AND MATERIAL TESTING IS BY THE OWNER, BUT THE CONTRACTOR MUST NOTIFY THE OWNER AND GEOTECHNICAL ENGINEER OF SCHEDULING.
21. ALL EARTHWORK AND PAVING SHALL CONFORM WITH GEOTECHNICAL ENGINEER REQUIREMENTS. CONTRACTOR SHALL OBTAIN COPIES OF REPORT BY KUMAR & ASSOCIATES, DATED 5/10/17.
22. ALL UTILITY TRENCHES IN ROAD PRISM TO BE COMPACTED AND TESTED PER GEOTECHNICAL ENGINEER REQUIREMENTS.
23. ROAD SUBGRADE SHALL BE PROOF ROLLED AND FREE OF DEFLECTION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. ANY FAILING AREAS SHALL BE REPAIRED AND PROOF ROLLED AGAIN UNTIL ACCEPTED BY THE GEOTECHNICAL ENGINEER WITH NO ADDITIONAL COST TO OWNER.
19. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE CHANNELS, CULVERTS AND APPURTENANCES DURING CONSTRUCTION, AS NECESSARY TO PROTECT ROADS AND PROPERTY.
20. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES. CONTRACTOR IS RESPONSIBLE TO REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETION AND ONCE VEGETATION IS APPROXIMATELY 70% RE-ESTABLISHED DEEMED BY THE OWNER.
21. CONTRACTOR IS RESPONSIBLE FOR DAILY CLEANING OF ALL ACCESS ROADS AND OTHER PUBLIC STREETS NECESSITATED BY HIS ACTIVITIES ON THE SITE.
22. DUST CONTROL IS INCIDENTAL TO EARTHWORK CONSTRUCTION AND SHALL BE PROVIDED BY CONTRACTOR, AT NO COST TO OWNER, IN ACCORDANCE WITH THE TOWN OF FRISCO TOWN CODE.
23. ALL LANDSCAPING SHALL BE PER THE ARCHITECT PLANS AND/OR OWNER.

VICINITY MAP

APPROXIMATE SCALE: 1" = 300'

SUMMIT COUNTY, COLORADO

CONSULTANT CONTACTS

A. Blue River Real Estate Fund III, LLC (Owner-Seth Francis), (347) 834-1009
B. Marcin Engineering LLC; Tom Marcin, PE, PLS (Civil Engineer, Surveyor), (970) 748-0274
C. Jarrett Buxkemper, (Architect), (970) 409-9062
D. Frisco (Municipal Governing Agency)
E. Town of Frisco (Water), Jeff Goble (970) 668-9151
F. Town of Frisco Sewer Wastewater Treatment Plant (Sewer), Ron Drake (Chairman) (970) 668-3723
G. Utility Notification Center of Colorado, (UNCC) 811

TABLE OF CONTENTS

UTILITY CONTACTS

A. Frisco Sanitation District, Matt Smith (970) 688-3723
B. Town of Frisco (Water), Jeff Goble (970) 668-0836
C. Excel Energy, Amy Lagace (970) 262-4033
D. Century Link, Ron Hickman (970) 328-8288
E. Comcast, Michael Johnson (970) 930-4713
F. Utility Notification Center of Colorado, (UNCC) 811

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

COVER SHEET & NOTES
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED THOMAS S. MARCIN 32492 PROFESSIONAL ENGINEER
MARCH 25, 2024

JOB: 24005
DATE: 3/25/2024
SCALE: N/A

SHEET
C-1

GRAPHIC SCALE
10'-0"
0 5 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 6

LOT 7

LOT 2

LOT 150

FOREST PARK

LOT 140

ROCK OUTCROP AREA

ROCK OUTCROP AREA

TRENCH FLOWLINE

MAXIMUM GRADING LIMITS

DRAINAGE IS INSUFFICIENT DUE TO TRENCH FLOWS, STEEP SLOPES, AND PROXIMITY TO FOUNDATION (LESS THAN 2'). POSITIVE DRAINAGE TO BE INCREASED OR CONCRETE/HARDSCAPE REQUIRED FOR DRAINAGE

PER CURRENT CONTOURS, DRAINAGE IS FLOWING FROM TRENCH TO BUILDING HERE. REVISE TO PROVIDE A SWALE ROUTING DRAINAGE AROUND BUILDING

SHOW EXISTING ROCK OUTCROP AREAS ON ENTIRE SITE (SITE APPEARS TO HAVE ROCK OUTCROPPINGS IN LOWER AREAS BEING DISTURBED)

INCREASED POSITIVE DRAINAGE REQUIRED ON SOUTH AND NORTH SIDE OF BUILDINGS OR CONCRETE/HARDSCAPE ALTERNATIVES NEEDED

PARKING LOT DOES NOT DRAIN TO DRYWELL. NEED TO DETAIN TO HISTORIC RUNOFF FOR 25 YEAR STORM. SHOW CALCULATIONS THAT 25 YEAR STORM IS BEING DETAINED OR ROUTE FRONT OF BUILDING/PARKING TO DETENTION OR DRYWELL

PROPOSED DRYWELL

FF=05

FF=05

FF=05

FF=05

14.7%

1'-11 1/2"

1'-3 1/2"

9122.00

9118.00

9114.00

9115.00

9117.00

9112.00

9111.00

9110.00

9107.50

9104.01

9104.50

9104.02

9104.00

9104.87

9103.46

9102.29

9103.06

9103.14

1.8%

2.0%

1.5%

1.4%

BUILDING ENVELOPE (TYP.)

PROPOSED ASPHALT

20' max

26' max

24'-5 3/4"

41'-11 3/4"

CONSTRUCT 3' WIDE VALLEY PAN

EXISTING VALVE

EXISTING FIRE HYDRANT AND VALVE

EXISTING 12" SEWER MAIN

METER BY OTHERS

METER LOCATION

PROPERTY LINE (TYP.)

EDGE OF ASPHALT

RIGHT OF WAY 60.00'

FOREST DR. 60' R.O.W.

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

GRADING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET
C-2

DRAWING: C:\Users\13703\Dropbox (Marcin Engineering)\Projects\2024\24005 - 160 Forest Dr. Townhomes Frisco\dwg\Sheets\24005-S-Grading.dwg

GRAPHIC SCALE
0 5 7.5 10 15 25
(IN FEET)
1 inch = 5 ft.

MAX. GRADING LIMITS

DRYWELL
RIM= 02.30
INV. IN=95.04

4" SDR 35 PERFORATED PVC PIPE (TYP.)
6" SOLID PVC DRAIN PIPE (TYP.)

INV. IN=06.02
INV. IN=02.74
74.43' of 6" SOLID @ 9.94%
INV. IN=98.63
35.77' of 6" SOLID @ 10.05%
INV. IN=00.54
73.46' of 4" SUBDRAIN @ 2.99%
4" SOLID PVC PIPE

RIM=19.75
INV. IN=07.08
12.18' of 6" SOLID @ 8.71%
16.40' of 4" SUBDRAIN @ 1.83%
12.00' of 4" SUBDRAIN @ 2.00%
INV. IN=03.28
15.40' of 4" SUBDRAIN @ 2.00%
INV. IN=00.85
INV. IN=01.01
17.65' of 6" SOLID @ 9.97%
6" SOLID PVC DRAIN PIPE (TYP.)
INV. IN=03.03
6.33' of 4" SUBDRAIN @ 2.00%
INV. IN=03.77
51.85' of 4" SUBDRAIN @ 2.00%
8.35' of 4" SUBDRAIN @ 2.00%
10.27' of 4" SUBDRAIN @ 2.00%
INV. IN=09.41
4" SDR 35 PERFORATED PVC PIPE (TYP.)
INV. IN=03.40
8.12' of 4" SUBDRAIN @ 2.00%
18.00' of 4" SUBDRAIN @ 2.00%
INV. IN=01.22
INV. IN=02.09
INV. IN=04.08
RIM = 15.75
INV. IN=08.84
INV. IN=03.92
27.01' of 6" ??? @ 9.94%
8.00' of 4" SUBDRAIN @ 2.00%
15.00' of 4" SUBDRAIN @ 2.00%
4" SDR 35 PERFORATED PVC PIPE (TYP.)
8.00' of 4" SUBDRAIN @ 2.00%
INV. IN=04.54
INV. IN=04.38
58.92' of 4" SUBDRAIN @ 2.00%
RIM= 15.57 INV. IN=12.09
14.46' of 4" SUBDRAIN @ 2.00%
INV. IN=04.67
INV. IN=04.83
8.00' of 4" SUBDRAIN @ 2.00%
15.07' of 4" SUBDRAIN @ 2.00%
8.07' of 4" SUBDRAIN @ 2.00%
INV. IN=04.21
4" SDR 35 PERFORATED PVC PIPE (TYP.)
8.00' of 4" SUBDRAIN @ 2.00%
INV. IN=04.37
DO THESE HAVE GRATES? IS 4" LARGE ENOUGH FOR 25 YEAR STORM?
31.00' of 4" SUBDRAIN @ 2.00%
4" SDR 35 PERFORATED PVC PIPE (TYP.)
INV. IN=04.05
INV. IN=03.43

PROPOSED ASPHALT
EXISTING EDGE OF ASHALT (TYP.)
FOREST DRIVE
60' R.O.W.

DO NOT COMBINE SUBDRAIN PIPE WITH STORM DRAIN PIPE

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

SUBDRAIN PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 5'

SHEET
C-3

NOTE:
1. DRY/SHALLOW UTILITY ROUTING SHOW FOR CONCEPTUAL PURPOSES ONLY. THE CONTRACTOR TO COORDINATE FINAL DESIGN LAYOUT AND INSTALLATION CRITERIA WITH UTILITY PROVIDERS.

GRAPHIC SCALE
0 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 7

LOT 2

LOT 3

LOT 150

SIDEWALK

CONCRETE

INSTALL TRANSFORMER COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

INSTALL
2-6" PVC CONDUITS
2-4" PVC CONDUITS
2-4" PVC CONDUITS (SPARES)
COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

12.00' MIN.

PROPOSED DRY WELL

ADJUST UTILITIES TO PRESERVE TREES

PROPOSED ELECTRIC MAIN CONNECTION

SEE SECTION 171-7 OF TOWN CODE. COMBINED SERVICE LINE REQUIRES AN HOA AND SINGLE BILLING ENTITY FOR METER.

PROPOSED GAS MAIN CONNECTION

INSTALL SDR-35 SEWER CLEANOUT INV.=99.56

INSTALL SDR-35 SEWER CLEANOUT INV.=99.52

INSTALL SDR-35 SEWER CLEANOUT INV.=99.55

INSTALL SDR-35 SEWER CLEANOUT INV.=99.15

INSTALL 4" DIP WITH THRUST BLOCK

INSTALL 6" SDR-35 SEWER SERVICE LINE

CONTINUE SERVICE TO BUILDING FOUNDATION (SHOW ENTIRE LENGTH)

INSTALL 4" DIP WITH THRUST BLOCK

SHOW GATE VALVE WHERE LINE CONNECTS TO EXISTING

INSTALL 4" DIP WATER SERVICE LINE RE: ARCHITECT/MEP FOR BUILDING CONNECTION DETAILS

SERVICE LINE TO BE LOCATED OUTSIDE OF ROW (CONNECT IN ROW AND THEN RUN PERPENDICULAR UNTIL OUTSIDE OF ROW)

METER LOCATION

METER BY OTHERS

EXISTING FIRE HYDRANT

SHOW EXISTING WATER LINE. IT CONTINUES TO SOMEWHERE IN HERE

PROPOSED GAS MAIN CONNECTION

RIM=9104.58
INV. OUT=9100.91

SEWER SERVICE CONNECTIONS
INV.=01.39

INSTALL 40 L.F. OF 6" SDR-35 WITH 2" RIGID TYPE FORM BOX TO TOP OF SERVICE LINE INSULATED

INSTALL GATE VALVE

EXISTING 12" SEWER MAIN
L=259.51
S=0.46%

NOTE:
1. METER LOCATION BY OTHERS
2. SNOW MELT BY OTHERS

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

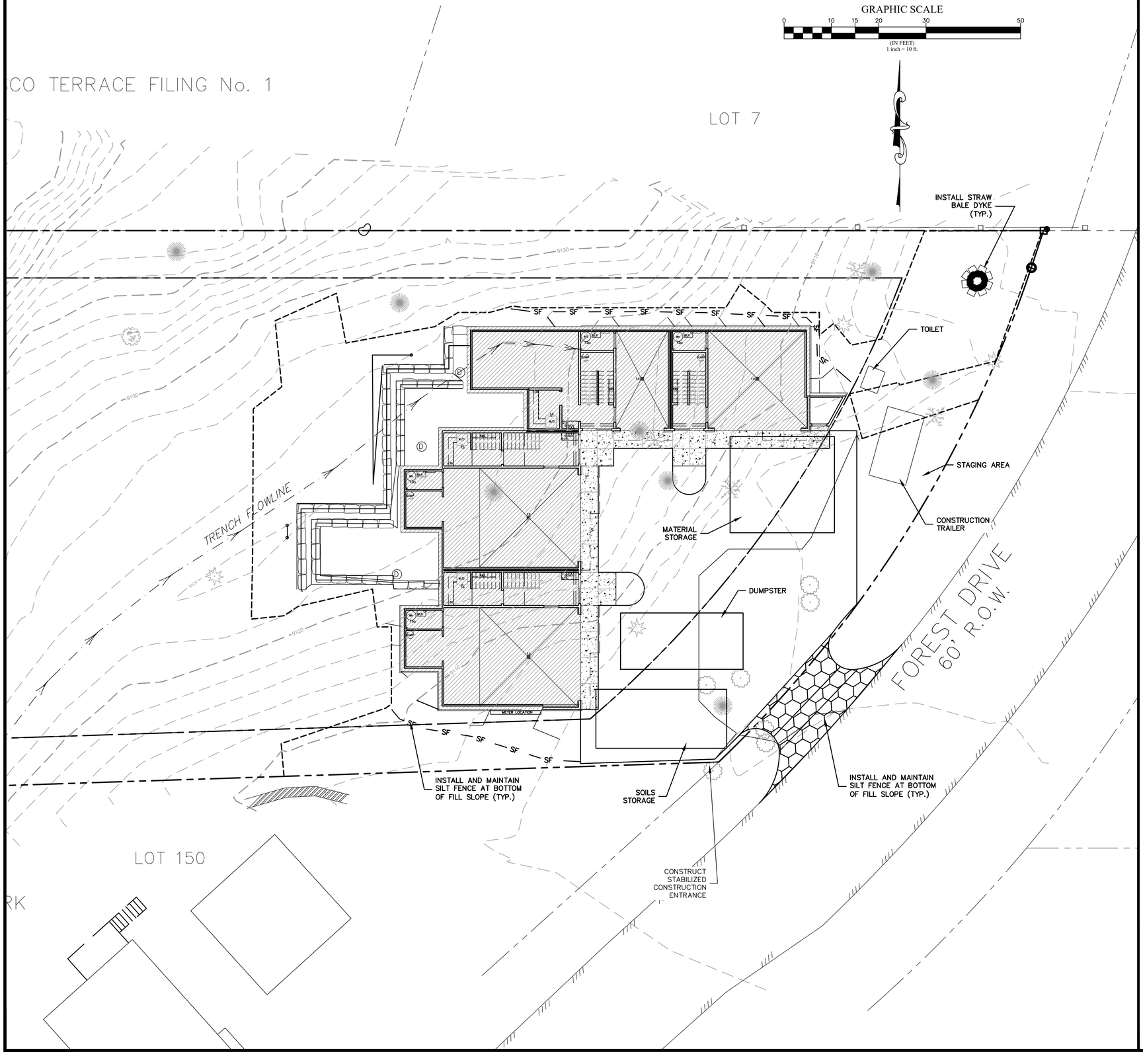
UTILITY PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET
C-4



CONSTRUCTION SEQUENCE OF EROSON/SEDIMENT CONTROL MEASURES

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL WATTLES, CONSTRUCTION FENCE, AND SEDIMENT TRAPS PRIOR TO CONSTRUCTION.
3. BEGIN EXCAVATION.
4. INSTALL EROSION CONTROL MEASURES (LANDLOK TRM FABRIC, RIP RAP AND EROSION LOGS) AFTER ROADWAY DITCHES HAVE BEEN CONSTRUCTED AND TOPSOIL PLACED.
5. REVEGETATE ALL DISTURBED AREAS PER LANDSCAPE DETAILS. AREAS TREATED WITH EROSION CONTROL MATTING WILL INCLUDE TOPSOIL, SEED MIX, FERTILIZER, MULCH AND TACKIFIER.

GENERAL NOTES FOR SEDIMENT CONTROL

1. INSTALL AND MAINTAIN SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THESE PLANS.
2. ALL PROPOSED SEDIMENT CONTROL MEASURES ARE TEMPORARY MEASURES UNLESS SPECIFIED OTHERWISE ON PLANS.
3. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT THE TIME OF CONSTRUCTION TO INSURE THAT THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENGINEER'S APPROVAL WILL BE REQUIRED FOR ANY OTHER DEVIATION FROM THE APPROVED PLANS.
4. PROVIDE CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES TO ENSURE THAT SEDIMENT CONTROL EFFICIENCY IS OBTAINED UNTIL FINAL STABILIZATION OF SITE HAS TAKEN PLACE.
5. INSTALL SEDIMENT CONTROL MEASURES AT THE ONSET OF GRADING OPERATIONS SO THAT EFFECTIVE SEDIMENT CONTROL CAN BE ACHIEVED DURING THE ENTIRE GRADING OPERATION PERIOD.
6. STABILIZE ALL POINTS OF INGRESS AND EGRESS WITH CRUSHED STONE DURING CONSTRUCTION TO PREVENT TRACKING OF MUD ONTO PUBLIC STREETS.
7. THE TERM "REVEGETATION" ON THIS PLAN MEANS TO HAVE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNT OF FERTILIZER IN ACCORDANCE WITH APPLICABLE "STANDARDS AND SPECIFICATIONS". REFER TO LANDSCAPE PLANS FOR SEED MIX.
8. APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES BEFORE REMOVAL OF SEDIMENT CONTROLS.
9. THE CONTRACTOR SHALL REMOVE SEDIMENT CONTROL FACILITIES AFTER FINAL STABILIZATION.
10. REMOVAL AND CLEANUP OF ANY SEDIMENT THAT LEAVES THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ASSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE CONSTRUCTION SITE.
12. ALL SEDIMENT CONTROL AND STORM DRAINAGE FACILITIES SHALL BE PERIODICALLY INSPECTED AND MAINTAINED TO ASSURE THEY FUNCTION PROPERLY.
13. THOSE PORTIONS OF THE ROAD SUBGRADE THAT DO NOT RECEIVE GRAVEL SHALL BE SEEDED, FERTILIZED, MULCHED AND TACKED. THE SEED SHALL BE DRILLED OR BROADCAST AND RAKED INTO THE TOP 1" OF SOIL. PRIOR TO SEEDING FERTILIZER SHALL BE WORKED INTO THE TOP 4" OF SOIL AT THE RATE SPECIFIED.

FUGITIVE DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE TO CONTROL FUGITIVE DUST AND TO INCORPORATE THE FOLLOWING:

1. ALL UNPAVED ROADS AND OTHER DISTURBED AREAS ON SITE SHALL BE WATERED TO MINIMIZE FUGITIVE DUST.
2. VEHICLE SPEED ON ALL UNPAVED ROADS AND DISTURBED AREAS SHALL NOT EXCEED A MAXIMUM OF 30 MPH SPEED LIMIT, SIGNS SHALL BE POSTED.
3. HAUL ROADS SHALL BE TREATED WITH MAGNESIUM CHLORIDE IF WATER IS NOT CONTROLLING THE DUST.
4. ALL DISTURBED SOIL SHALL BE COMPACTED ON A DAILY BASIS TO WITHIN 90% OF MAXIMUM COMPACTION.
5. ALL DISTURBED SURFACE AREAS SHALL BE REVEGETATED AS SOON AS POSSIBLE.
6. MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE PREVENTED. ANY MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE CLEANED UP DAILY.
7. NO EARTH WORK ACTIVITIES SHALL BE PERFORMED WHEN WIND SPEED EXCEEDS 30 MPH.
8. CONTRACTOR SHALL COMPLY WITH THE BEST MANAGEMENT PRACTICES (BMP'S) AND ALL NOTES AND RULES.

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

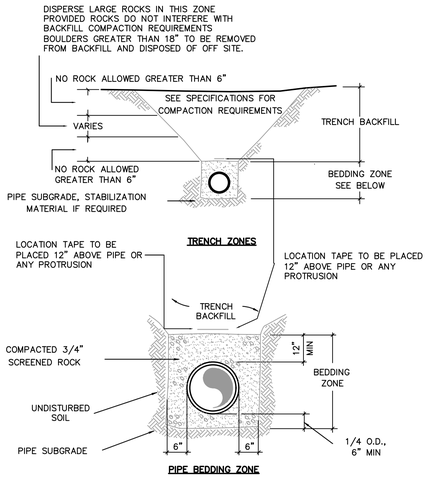
CONSTRUCTION STAGING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
CHRISTOPHER S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

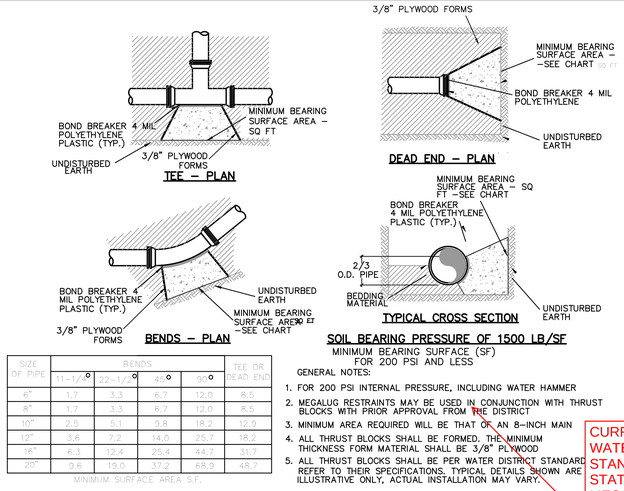
JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET
C-5



N.T.S.

A SEWER PIPE BEDDING



SIZE OF PIPE	BENDS 11-1/4°	22-1/2°	45°	90°	TEE OR DEAD END
6"	1.7	3.3	6.7	12.0	8.5
8"	1.7	3.3	6.7	12.0	8.5
10"	2.5	5.1	9.8	18.2	12.9
12"	3.6	7.2	14.0	25.7	18.2
16"	6.3	12.4	25.4	44.7	31.7
20"	9.6	19.0	37.2	68.9	48.7

MINIMUM SURFACE AREA S.F.

SOIL BEARING PRESSURE OF 1500 LB/SF
MINIMUM BEARING SURFACE (SF)
FOR 200 PSI AND LESS

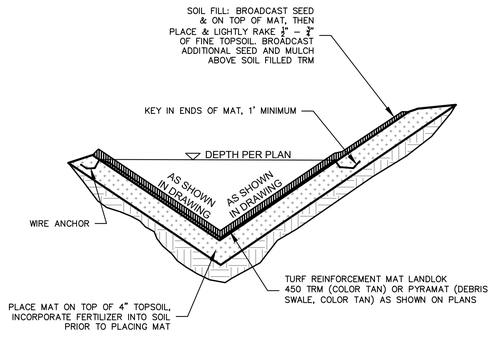
GENERAL NOTES:

1. FOR 200 PSI INTERNAL PRESSURE, INCLUDING WATER HAMMER
2. MEGALUG RESTRAINTS MAY BE USED IN CONJUNCTION WITH THRUST BLOCKS WITH PRIOR APPROVAL FROM THE DISTRICT
3. MINIMUM AREA REQUIRED WILL BE THAT OF AN 8–INCH MAIN
4. ALL THRUST BLOCKS SHALL BE FORMED. THE MINIMUM THICKNESS FORM MATERIAL SHALL BE 3/8" PLYWOOD
5. ALL THRUST BLOCKS SHALL BE PER WATER DISTRICT STANDARD REFER TO THEIR SPECIFICATIONS. TYPICAL DETAILS SHOWN ARE ILLUSTRATIVE ONLY, ACTUAL INSTALLATION MAY VARY.

CURRENT WATER STANDARDS STATE THAT MEGALUGS MUST BE USED IN PLACE OF THRUST BLOCKS

N.T.S.

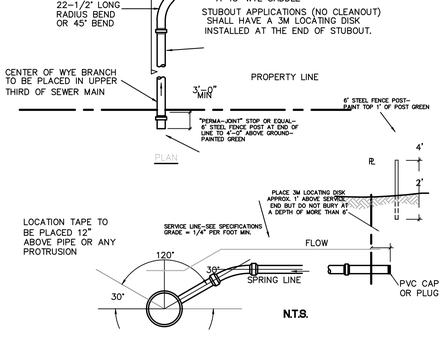
B CONCRETE THRUST BLOCK



CHANNEL
X-SECTION

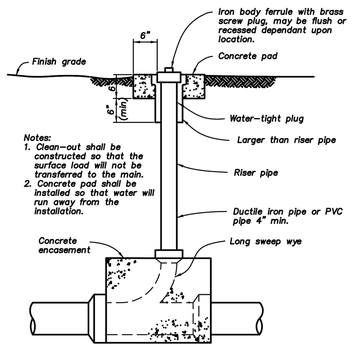
N.T.S.

C TURF REINFORCEMENT MAT DETAIL



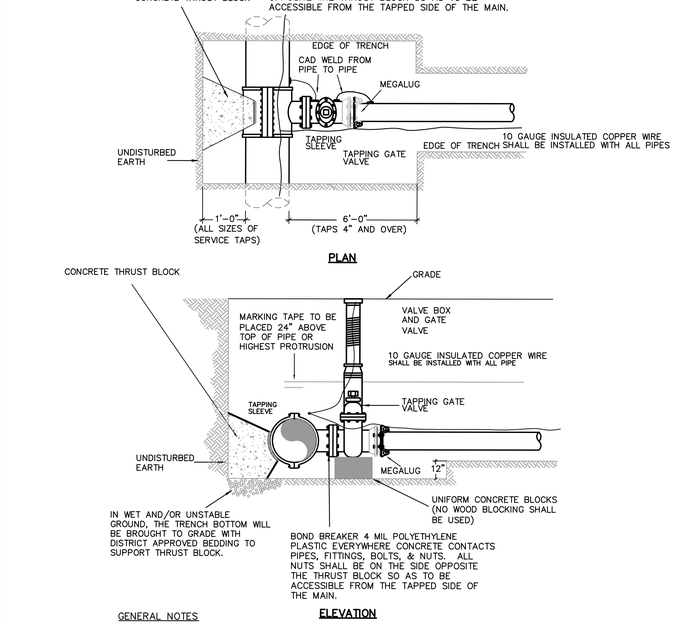
N.T.S.

D TYPICAL SEWER SERVICE



N.T.S.

E SEWER CLEANOUTS



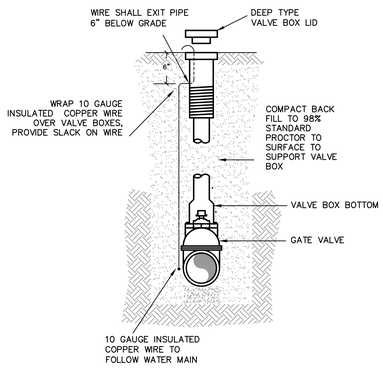
GENERAL NOTES

1. NO TAPPING SLEEVES WILL BE ALLOWED WHERE PRESSURES MAY EXCEED 150psi WORKING PRESSURE. UNLESS WRITTEN PERMISSION IS GIVEN BY THE DISTRICT.
2. PRIOR WRITTEN APPROVAL REQUIRED BY DISTRICT
3. ALL WATER TAPS SHALL BE INSTALLED PER TOWN OF FRISCO WATER CONSTRUCTION STANDARDS.

N.T.S.

F TYPICAL WATER SERVICE

IF THE DISTANCE TO THE TOP OF THE OPERATING NUT TO THE TOP OF THE VALVE COVER IS GREATER THAN 9', AN EXTENSION STEM WILL BE REQUIRED ON THE OPERATING NUT. THE EXTENSION MUST BE SECURED TO THE VALVE OPERATING NUT.



GENERAL NOTE

1. VALVE BOX IS TO BE INSTALLED PLUMB, LEVEL, AND CENTERED ON 2" NUT

N.T.S.

G TYPICAL GATE VALVE

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970–748–0274

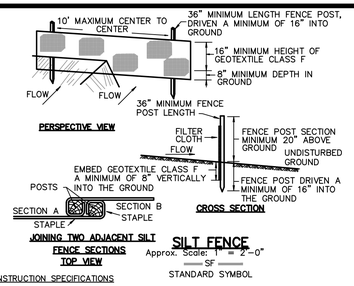
DETAIL SHEET
160 FOREST DRIVEWAY TOWNHOUSES
TOWN OF FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
JAMES S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/2024
SCALE: N/A

SHEET
C–6



CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 11/2" X 11/2" SQUARE (MINIMUM) CUT, OR 13/4" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POND PER LINEAR FOOT.

2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MIDSECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

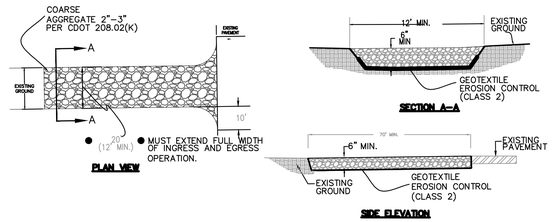
TENSILE STRENGTH	50 LBS./IN (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS./IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL FT / MINUTE (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

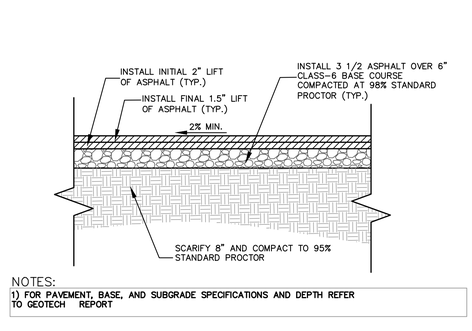
N.T.S.

A SILT FENCE



N.T.S.

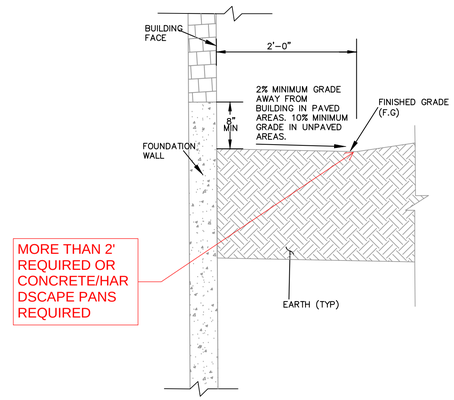
B STABILIZED CONSTRUCTION ENTRANCE



NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT

N.T.S.

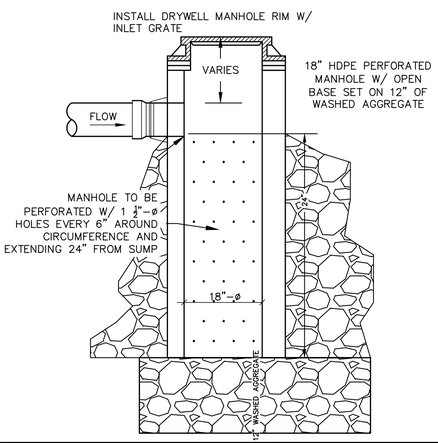
C TYPICAL ASPHALT DRIVEWAY SECTION



TYPICAL SECTION

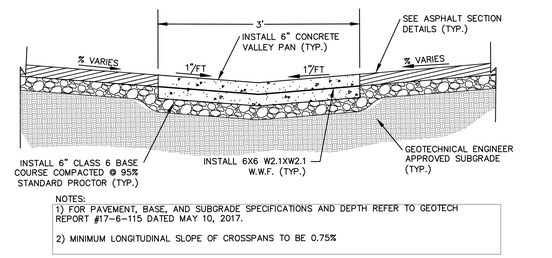
N.T.S.

D GRADING NEAR FOUNDATION WALLS



N.T.S.

E STORM SEWER DRY WELL

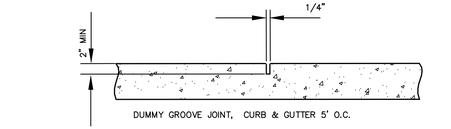


NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT #17-6-115 DATED MAY 10, 2017.

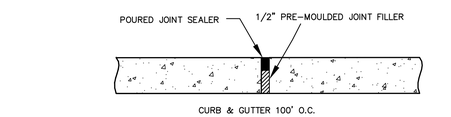
2) MINIMUM LONGITUDINAL SLOPE OF CROSSPANS TO BE 0.75%

N.T.S.

F CONCRETE VALLEY PAN DETAIL AT DRIVE



CONTRACTION JOINT

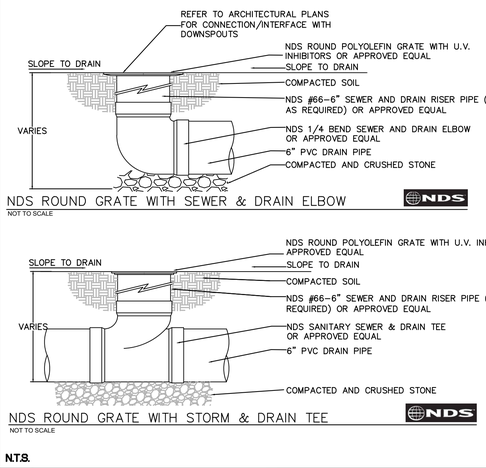


EXPANSION JOINT

GENERAL NOTES:
1) EXPANSION JOINTS SHALL BE PLACED IN THE SIDEWALK AT INTERVALS OF NOT MORE THAN 500 FT OR WHEN SIDEWALK ABUTS RIGID STRUCTURE.

N.T.S.

G CONTRACTION/EXPANSION JOINTS



NDS ROUND GRATE WITH SEWER & DRAIN ELBOW

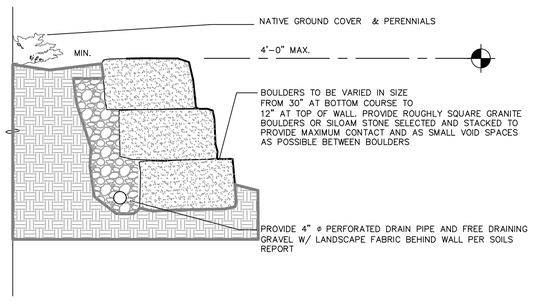
NOT TO SCALE

NDS ROUND GRATE WITH STORM & DRAIN TEE

NOT TO SCALE

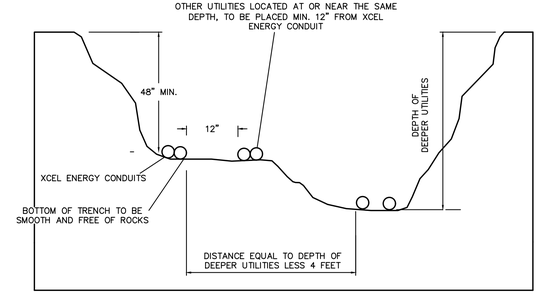
N.T.S.

H NDS ROUND STORM DRAIN INLET



N.T.S.

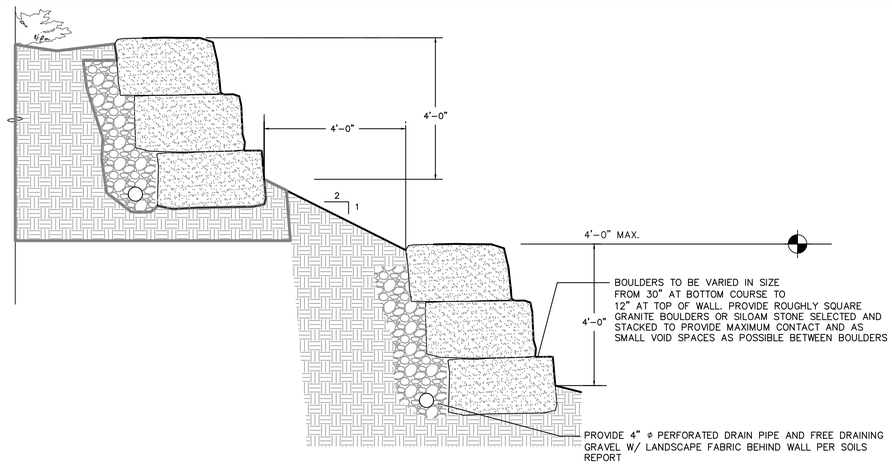
I BOULDER WALL DETAIL



NOTE: HORIZONTAL SEPARATION OF XCEL ENERGY CONDUIT FROM DEEPER UTILITIES SHALL BE THE DEPTH OF THE DEEPER UTILITIES LESS 4 FEET.

N.T.S.

J UTILITY JOINT TRENCH DRAIL



NOT FOR CONSTRUCTION

N.T.S.

K BOULDER TIER WALL DETAIL

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

DETAIL SHEET
160 FOREST DRIVE TOWNHOUSES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 16034
DATE: 3/25/2024
SCALE: N/A

SHEET
C-7

SLOPE DISTURBANCE

SLOPE PERCENTAGE	EXIST. SLOPE AREA	ALLOWED DISTURBANCE	AREA OF DISTRUBANCE
0%-15%	8519.04 S.F.	(100%) 8519.04 S.F.	5192.00 S.F.
15%-30%	10639.09 S.F.	(50%) 5319.54 S.F.	4293.00 S.F.
>30%	18104.48 S.F.	(15%) 2715.67 S.F.	2715.00 S.F.

FRISCO TERRACE FILING No. 1

LOT 1

LOT 6

LOT 7

WOODEN STEPS

FOUND ROCK "X" MARK CARVED

N90°00'00"E

344.26'

9168

ROCK OUTCROP AREA

9160

9140

9130

9120

LOT 2
0.856 Ac.
ADDRESS: 160 FOREST DRIVE

DRAINAGE CONCERNS

TRENCH FLOWLINE

DISTURBANCE LINE

DRAINAGE CONCERNS

CP-RIDGE
EL = 9146.18'

S88°07'00"W

283.69'

BRICK WALL

ROCK OUTCROP AREA

FOREST PARK

PHONE

FOREST DRIVE
60' R.O.W.

RIM EL = 9004.59

SETBACK

14'-0" SETBACK

25'-0" SETBACK

SLOPE DISTURBANCE PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.0

LOT COVERAGE

	AREA	%
LOT SIZE:	37,287 S.F. 0.856 AC	
COVERAGES: BUILDING FOOTPRINT* DRIVE	4,752 S.F. 3,344 S.F.	
LOT COVERAGE:	8,096 S.F.	21.7%

*INCLUDES ROOFS, DECKS, PATIOS AND LANDSCAPE PLANTERS

CONTOUR LEGEND

EXISTING CONTOUR 9110
PROPOSED CONTOUR 9110
SPOT GRADE +9110
ARROW INDICATES DIRECTION OF SURFACE DRAINAGE

REQUIRED SNOWSTACK

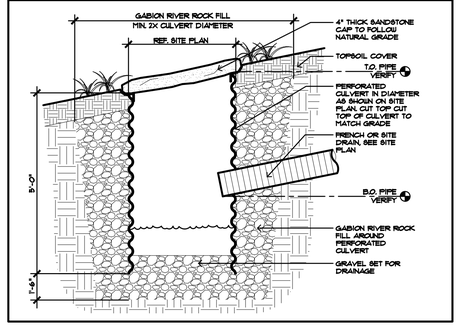
	SQ. FT.	%
HARDSCAPE (WALKS & DRIVEWAY)	3,467 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	867 S.F.	25%
TOTAL SNOW STACK	869 S.F.	25%
UNCOVERED PATIOS AND DECKS	559 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	140 S.F.	25%
TOTAL SNOW STACK	245 S.F.	44%

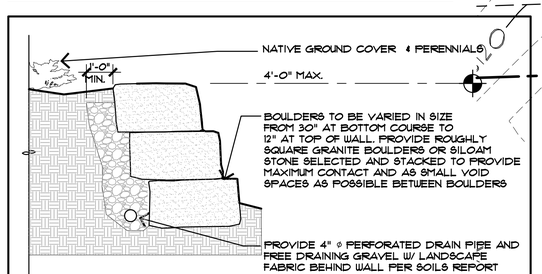
BUILDING HEIGHT

ARCHITECTURAL 100'-0" FOR PROJECT=9105.00' USGS
ALLOWED BUILDING HEIGHT = 35.00'
PROPOSED BUILDING HEIGHT = 34.31'

RIDGE POINT	RIDGE ELEV	NAT. GRADE ELEV	FIN. GRADE ELEV	MEASURED FROM	CALCULATIONS	HEIGHT
A	9139.23'	9108.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
B	9139.23'	9118.00'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
C	9139.23'	9120.50'	9105.00'	NAT. ELEV	9139.23'-9120.50'	18.73'
D	9139.31'	9116.50'	9105.00'	FIN. ELEV	9139.31'-9105.00'	34.31'
E	9139.23'	9110.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
F	9139.23'	9113.00'	9113.00'	FIN. ELEV	9139.23'-9113.00'	26.23'
G	9139.31'	9119.50'	9119.50'	FIN. ELEV	9139.31'-9119.50'	19.81'
H	9139.23'	9122.00'	9122.00'	FIN. ELEV	9139.23'-9122.00'	17.23'
J	9139.23'	9114.00'	9105.00'	NAT. ELEV	9139.23'-9114.00'	25.23'

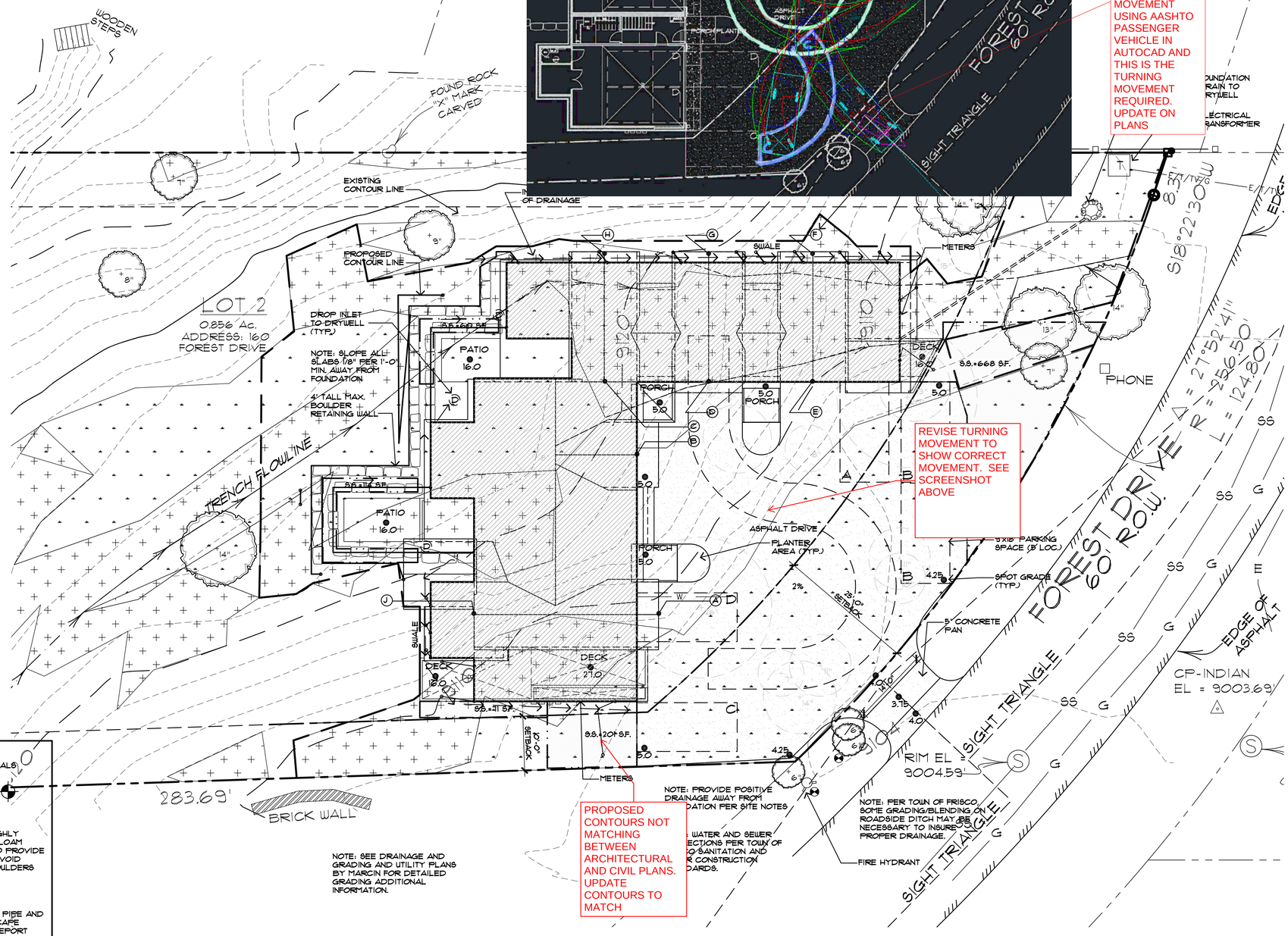
DRYWELL DETAIL





1 SP1.1 **BOULDER RETAINING WALL**
1/2" = 1'-0"

D TERRACE FILING No. 1



NOTE: SEE DRAINAGE AND GRADING AND UTILITY PLANS BY MARCIN FOR DETAILED GRADING ADDITIONAL INFORMATION.

NOTE: PROVIDE POSITIVE DRAINAGE AWAY FROM ...DATION PER SITE NOTES

NOTE: WATER AND SEWER ...ECTIONS PER TOWN OF ...O SANITATION AND ...R CONSTRUCTION ...DARDS.

NOTE: PER TOWN OF FRISCO, SOME GRADING/BLENDING OF ROADSIDE DITCH MAY BE NECESSARY TO INSURE PROPER DRAINAGE.

ANALYZED TURNING MOVEMENT USING AASHTO PASSENGER VEHICLE IN AUTOCAD AND THIS IS THE TURNING MOVEMENT REQUIRED. UPDATE ON PLANS

REVISE TURNING MOVEMENT TO SHOW CORRECT MOVEMENT. SEE SCREENSHOT ABOVE

PROPOSED CONTOURS NOT MATCHING BETWEEN ARCHITECTURAL AND CIVIL PLANS. UPDATE CONTOURS TO MATCH

SITE GRADING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40' NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O.BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.1

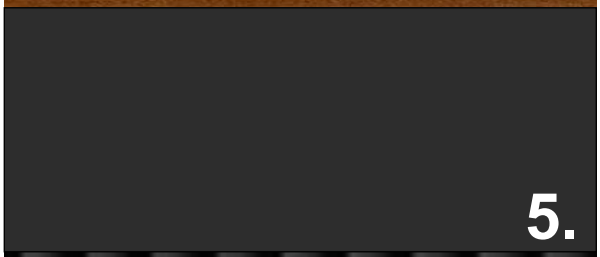
Attachment C

1. COMPOSITION SHINGLE ROOFING - GAF TIMBERLINE ULTRA HD "CHARCOAL"

2. WOOD FASCIA & BEAMS - OLYMPIC SEM-TRANSPARENT STAIN "EBONY 913"

3. HORIZONTAL SIDING - OLYMPIC SEMI-TRANSPARENT "NATURALTONE FIR 718"

4. WINDOW/DOOR TRIM - OLYMPIC SEMI-TRANSPARENT STAIN "RUSSET 705"



5. WINDOW CLADDING,
STEEL. COLUMNS, BEAMS, FLASHING - "BLACK"

6. MTL. SIDING & ACCENT ROOFING - METAL SALES CORRUGATED "MATTE BLACK"

7. STONE VENEER BASE - TELLURIDE STONE "BLANCA PEAK"

bhh Partners of COLORADO
P.O. BOX 2113, 560 ADAMS AVENUE SILVERTHORNE, CO 80498 (970) 513-1000

DATE: 12/14/23
JOB NO: 12317

160 FOREST DRIVE

160 FOREST DRIVE

GENERAL NOTES

1) COPYRIGHT:
All plans, designs, and concepts shown in these drawings are the exclusive property of BHH Partners, Planners and Architects, A.I.A./P.C. and shall not be used, disclosed, or reproduced for any purpose whatsoever without the Architect's written permission.

2) CODES:
This project is governed by the 2018 International Building Code as adopted by the Town of Frisco Colorado. Code compliance is mandatory. The drawings and specifications shall not permit work that does not conform to these codes. The General Contractor and Subcontractors shall be responsible for satisfying all applicable codes and obtaining all permits and required approvals. Building areas are shown for code purposes only and shall be recalculated for any other purposes.

3) FIELD VERIFICATION:
Verify all dimensions, conditions, and utility locations on the job site prior to beginning any work or ordering any materials. Notify Architect of any conflicts or discrepancies in the drawings immediately.

4) DIMENSIONS:
Written dimensions always take precedence over scaled dimensions. DO NOT SCALE DRAWINGS. Verify all dimensions shown prior to beginning any work and notify Architect of any conflicts or discrepancies for interpretation or clarification. Plan dimensions are to the face of framing members, face of wood furring or face of concrete walls unless otherwise noted. Section or elevation dimensions are to top of concrete, top of plywood, or top of wall plates or beams unless otherwise noted.

5) DISCREPANCIES:
The Owner has requested the Architect to provide limited architectural and engineering services. In the event additional details or guidance is needed by the Contractor for construction of any aspect of this project, he shall immediately notify the Architect. Failure to give simple notice shall relieve the Architect of responsibility. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved with written direction from the Architect.

6) DUTY OF COOPERATION:
Release of these plans contemplates further cooperation among the Owner, his Contractor, and the Architect. Design and construction are complex. Although the Architect and his Consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect, and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the Architect. Failure to notify the Architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the Architect shall relieve the Architect from responsibility for all consequences.

7) CHANGES TO THE WORK:
Any items described herein that impact project budget or time shall be requested from the Contractor via a written change order request prior to such work. Performance of such work without approval by change order indicates General Contractor's acknowledgment of no increase in contract sum or time. Changes from the plans or specifications made without consent of the Architect are unauthorized and shall relieve the Architect of responsibility for any and all consequences resulting from such changes.

8) WORKMANSHIP:
It is the intent and meaning of these drawings that the Contractor and each Subcontractor provide all labor, materials, transportation, supplies, equipment, etc., to obtain a complete job within the recognized standards of the industry.

9) SUBSTITUTIONS:
Substitution of "equal" products will be acceptable with Owner's written approval. See specifications.

10) CONSTRUCTION SAFETY:
These drawings do not include the necessary components for construction safety. The General Contractor shall provide for the safety, care of utilities and adjacent properties during construction, and shall comply with state and federal safety regulations.

11) EXCAVATION PROCEDURES:
Upon completion of any excavation, the Owner shall retain a soils engineer to inspect the subsurface conditions in order to determine the adequacy of foundation design. See specifications. CONTRACTOR SHALL NOT POUR ANY CONCRETE UNTIL APPROVAL IS OBTAINED FROM SOILS ENGINEER.

12) FIELD CUTTING OF STRUCTURAL MEMBERS:
The General Contractor and Subcontractors shall field coordinate and obtain approval from Engineer before any cutting, notching or drilling of any cast-in-place concrete, steel framing, or any other structural elements which may affect the structural integrity of the building. Refer to the appropriate Code Requirements, manufacturer's or supplier's instructions, and structural drawings for additional requirements.

13) WEATHER CONDITIONS:
The Owner has been advised that due to harsh winter conditions, roof and deck surfaces must be maintained reasonably free of ice and snow to ensure minimal problems with these surfaces. All roofing, roofing membranes, and waterproofing shall be approved in writing by product manufacturer (WR. Grace for bituthene, etc.) prior to proceeding with any work. Failure to provide these written approvals removes all responsibility for the work from the Architect.

14) BUILDING AREA
Building areas are shown for code purposes only and shall be recalculated for any other use.

15) PROJECT STAKING
The general contractor shall verify all existing grades and stake all building corners and the driveway location for Owner/Architect, review board and town of Silverthorne approval prior to beginning any site clearing.

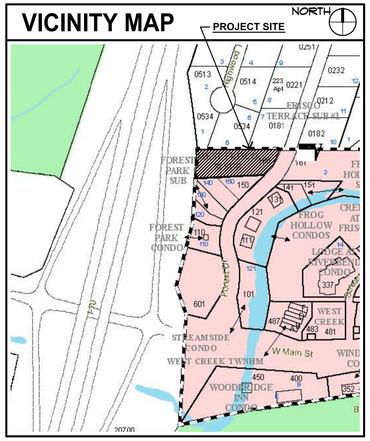
16) SITE DISTURBANCE
It is the responsibility of the contractor to protect the existing trees to remain and adjacent properties from damage during construction. Provide protective fencing throughout construction.

17) PROJECT GRADES
The general contractor shall check and verify all grades including paved area slopes prior to pouring any foundations. Survey work should be verified in detail. See numbers 5 and 6.

18) EXTERIOR MATERIAL MOCK UP
At Owner option, the General Contractor shall provide a mock up of all exterior materials for review by the Owner and Architect. This mock up shall be provided and signed off in writing prior to any exterior stain or exterior finish work. The sample shall include fascia, trim, window cladding and all other exterior finishes including a 3'-0"x3'-0" (min) sample of exterior stonework if applicable. This mock up shall be retained on site until the final punch.

19) 3D MODELING
This project has been digitally modeled in 3D software. The digital model is provided for reference purposes only. Transmission of digital model files constitutes a warranty by the party transmitting files to the party receiving files that the transmitting party is the copyright owner of the digital data. Unless otherwise agreed in writing, any use of, transmission of, or reliance on the model is at the receiving party's risk. The contractor shall notify the architect of questions or coordination issues between the contract documents and digital model.

VICINITY MAP



LEGAL DESCRIPTION

LOT 2, AMENDED FRISCO WEST 70, FILING 2
160 FOREST DRIVE
FRISCO, CO

FIRE SPRINKLER SYSTEM

PROVIDE NFPA 13R AUTOMATIC FIRE SPRINKLER SYSTEM FOR 4 UNIT CONDOMINIUM BUILDING TO INCLUDE FDC, EXTERIOR HORN, AND LIGHT. PROVIDE SIDE WALL HEADS TO GREATEST EXTENT POSSIBLE. PROVIDE SUBMITTAL FOR AUTOMATIC FIRE SPRINKLER SYSTEM.

SITE NOTES

1. ELECTRIC, CABLE T.V. AND TELEPHONE UNDERGROUND IN COMMON TRENCH.
2. VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY WORK. COORDINATE UTILITY ROUTING WITH APPLICABLE UTILITY COMPANY. ALL UTILITIES TO BE UNDERGROUND.
3. TOPOGRAPHIC INFORMATION OBTAINED FROM RANGE WEST ENGINEERS & SURVEYORS, INC. DATED 09/22/23.
4. PROVIDE POSITIVE DRAINAGE AT BUILDING PERIMETER (SLOPE AWAY FROM BUILDING AT 1:12 MIN.)
5. REFER TO FOUNDATION PLAN FOR FOUNDATION DRAIN LOCATION AND SLOPE. DRAINS TO BE SLOPED TO A DRYWELL.
6. FLAG ALL TREES FOR OWNER PRIOR TO THINNING OR REMOVING.
7. PROTECT ALL REMAINING TREES WITH SNOW FENCE OR OTHER APPROVED BARRIER DURING CONSTRUCTION.
8. PROVIDE 6" DIA. STONE RIP RAP OVER WEED BARRIER FABRIC AT EAVES AND VALLEY DRIP LOCATIONS.
9. STAKE HOUSE LOCATION FOR OWNER, ARCHITECT, AND ARCHITECTURAL REVIEW BOARD PRIOR TO ANY WORK.
10. GENERAL CONTRACTOR TO REVIEW & COMPLY WITH ALL SUBDIVISION CONDITIONS. COPIES OF CONDITIONS ARE AVAILABLE FROM ARCHITECT.

FINISHED FLOOR ELEVS

	U.S.G.S.	ARCH'L.
LEVEL 1	9105.00'	100'-0"
LEVEL 2	9116.00'	111'-0"
LEVEL 3	9127.00'	122'-0

VIEW FROM FOREST DRIVE

AREA CALCULATIONS

NOTE: SQUARE FOOTAGES ARE CALCULATED FOR CODE PURPOSES ONLY AND SHOULD BE RECALCULATED FOR ANY OTHER PURPOSES.

UNIT A

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	164 S.F.	484 S.F.	648 S.F.
LEVEL 2	867 S.F.	0 S.F.	867 S.F.
LEVEL 3	325 S.F.	0 S.F.	325 S.F.
TOTAL	1356 S.F.	484 S.F.	1840 S.F.

UNIT B

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	586 S.F.	264 S.F.	850 S.F.
LEVEL 2	589 S.F.	0 S.F.	589 S.F.
LEVEL 3	610 S.F.	0 S.F.	610 S.F.
TOTAL	1785 S.F.	264 S.F.	2049 S.F.

UNIT C

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 S.F.	728 S.F.	996 S.F.
LEVEL 2	975 S.F.	0 S.F.	975 S.F.
LEVEL 3	713 S.F.	0 S.F.	713 S.F.
TOTAL	1956 S.F.	728 S.F.	2684 S.F.

UNIT D

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 S.F.	728 S.F.	996 S.F.
LEVEL 2	975 S.F.	0 S.F.	975 S.F.
LEVEL 3	627 S.F.	0 S.F.	627 S.F.
TOTAL	1870 S.F.	728 S.F.	2598 S.F.

SHEET INDEX

CODE CONSULTANT:	SOILS ENGINEER:	SURVEYOR:	ENGINEER:	CONTRACTOR:	ARCHITECT:	OWNER:
SHUMS CODA ASSOCIATES STEPHEN L. THOMAS, CBO 4610 SOUTH ULSTER, SUITE 150 DENVER CO 80237 (303) 400-6564 (303) 257-3572 (CELL) steve.thomas@shumscoda.com	CTL THOMPSON, INC. 1190 AIRPORT RD., UNIT 2 BRECKENRIDGE, CO 80424 (970) 453-2047 bniggeler@ctlthompson.com	RANGE WEST ENGINEERS & SURVEYORS, INC. P.O. BOX 589 SILVERTHORNE, CO 80498 (970) 468-6281 (970) 668-3165 FAX	ROCKY'S ENGINEERING, LLC 215 4th AVE. FRISCO, CO 80443 (970) 389-4895 rockysengineering1@gmail.com	SWEET HOMES OF COLORADO, INC. P.O. BOX 1398 PMB 288 FRISCO, CO 80443 (970) 262-3818 eric@sweethomesinc.com	BHH Partners of Colorado 560 ADAMS AVENUE SILVERTHORNE, CO 80498 (970) 453-6880 jbuxkemper@bhhpartners.com	BLUE RIVER REAL ESTATE FUND III, LLC P.O. BOX 7035 BRECKENRIDGE, CO 80424 (347) 834-1009 s.jfrancis1985@gmail.com

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:
T1.1

CODE ANALYSIS

Apartment Building

Project Description

The project consists of a single structure at 160 Forest Drive, Frisco, Colorado. The building is a three-story multi-family building with four dwelling units. The first floor contains private garages for each of the units. The second and third floors include the living quarters.

Applicable Codes and Standards

The City Frisco adopts the following referenced codes with local amendments.

- 2018 International Building Code (IBC)
- 2018 International Mechanical Code (IMC)
- 2018 International Fuel Gas Code (IFGC)
- 2018 International Plumbing Code (IPC)
- 2018 International Energy Conservation Code (IECC)
- 2018 International Fire Code (IFC)
- 2020 National Electrical Code (NEC)
- 2009 ICC A117.1 Accessible and Usable Buildings and Facilities

NFPA Standards

- NFPA 10 – Portable Fire Extinguishers, 2018
- NFPA 13 – Standard for the Installation of Sprinkler Systems, 2016
- NFPA 72 – National Fire Alarm and Signaling Code, 2016

Deferred Submittals

The following deferred submittals will be provided for this project. (IBC 107.3.4.1)

- Automatic Fire Sprinkler System
- Through Penetrations Firestop Systems
- Joint Treatment Systems

Building Code Summary

Occupancy Classification	Groups R-2, S-2
Type of Construction	Type VB
Height of Building	3 Stories, 31 feet
Total Building Area	9,171 Square Feet
Fire Alarm System	Not provided per Section 907.2.9.1, Exc. 2
Automatic Fire Sprinklers	Provided in accordance with NFPA 13R

Occupancy Classification (IBC 302)

The lower level will consist of primarily Group S-2 Parking Garage and two Group R-2 dwelling units Levels 1 and 2 include Group R-2 dwelling units. The building will be classified as a nonseparated occupancy building in accordance with Section 508.3

Type of Construction

The building will be constructed as Type VB Construction in accordance with IBC Sections 601 and 602.5 as follows:

Building Element	Fire-Resistance Rating
Primary Structural Frame	0 *
Exterior Bearing Walls	0 *
Exterior Non-Bearing Wall	0 *
Interior Bearing Walls	0
Interior Bearing Walls	0
Floor Construction	0 *
Roof Construction	0

* See additional requirements below.

Allowable Building Heights

Group R-2, Type VB Construction provided with NFPA 13R fire sprinklers is permitted to be a maximum height of 60 feet and 3 stories per Tables 504.3 and 504.4. The actual height of the building is 31 feet and 3 stories.

Allowable Building Area

The building is designed as a nonseparated occupancy building in accordance with Section 508.3. The most restrictive occupancy is the Group R-2. The frontage increase in Section 506.3 is not needed for the allowable area calculation

Area Calculations - Based on Group R-2, Type VB Construction, NFPA 13 sprinklers
$A_a = A_t \times 3$
$A_a = 7{,}000 \times 3$
$A_a = 21{,}000$ SF Total allowable building area
7,000 SF maximum per story

Actual Floor Areas

Lower Level	3,490 SF
Main Level	3,406 SF
Upper Level	2,275 SF
Total	9,171 SF

Building Area complies with Section 506.2.4. Each individual story area complies with Section 508.1.

Mixed Occupancy Building

The building is designed as nonseparated occupancies in accordance with Section 508.3. The floor/ceiling assembly between the parking garage and the dwelling units on the second floor will be a one-hour fire-resistant rated horizontal assembly per Section 508.3.3, Exception 2. All dwelling units will be separated from each other by a minimum one hour fire-resistant rated fire partition or floor-ceiling assembly in accordance with Section 708.3.

The structure supporting the separation between the parking garage and the dwelling units is required to have a one-hour fire-resistance rated protection per Section 711.2.3. The supporting

structure for the dwelling unit separations are not required to be fire-resistant rated per the exception to Section 711.2.3.

Fire Separation Distances, FRR of Exterior Walls and Openings

Tables 602 & 705.8. Building provided with NFPA 13 fire sprinklers.

Exterior Wall	Fire Separation Distance	Wall Rating	Openings
North	>10 Feet	Non-rated	Unlimited, Unprotected
East	>10 feet	Non-rated	Unlimited, Unprotected
South	>10 feet	Non-rated	Unlimited, Unprotected
West	>10 feet	Non-rated	Unlimited, Unprotected

Parapets: Parapets are not required on exterior walls that are not required to be fire-resistance rated per Section 705.11, Exception 1.

Fire Partitions

Dwelling/Dwelling Separation: Fire partitions separating individual dwelling units required to have a minimum 1-hour fire-resistance rating per IBC Section 420.2 and IBC Section 708.3. The walls will extend from the floor to the underside of the floor and roof sheathing above as required in Section 708.4, item 1.

Penetrations (IBC 714)

Penetrations into and through fire partitions and floor/ceiling assemblies are required to be protected with approved through penetration firestop systems. System designs to be submitted as a deferred submittal.

Fire-Resistant Joint Systems (IBC 715)

Openings in or between adjacent assemblies that is created due to building tolerances or are designed to allow independent movement of the building in any plane caused by thermal, seismic, wind or any other loading shall be provided with an approved fire-resistant joint system. System designs will be submitted as a deferred submittal.

Roof

Minimum Class B required per IBC Section 1505.1 as amended by the Town.

Fire Sprinkler System

An automatic fire sprinkler system will be provided throughout the building in accordance with NFPA 13R. (IBC Sections 903.2.8) The system design and drawings will be submitted as a deferred submittal.

Portable Fire Extinguishers

Fire Extinguishers will be provided in accordance with IBC Section 906. Each dwelling unit will be provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C per Section 906.1, Item 1, Exception 1.

Fire Alarm System

Refer to Electrical Drawings and Specifications for additional fire alarm notes and requirements. The system design and drawings will be submitted as deferred submittals.

Manual Fire Alarm System: A manual alarm system will not be installed in the building. The building will comply with Exception 2 of Section 907.2.8.1. However, one manual fire alarm box shall be provided in a location approved by the fire department to initiate a fire alarm signal in accordance with Section 907.2.

Single- and Multiple-Station Smoke Alarms: Single- and multiple-station smoke alarms shall be provided in each dwelling unit in accordance with Section 907.2.10. Detectors shall be located within all sleeping areas and in every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.

The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms within the individual sleeping unit. The alarms shall receive their primary power from the building wiring and be provided with battery backup.

Carbon Monoxide Detection

Carbon monoxide detection shall be installed in dwelling units outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom. The alarms shall receive their primary power from the building wiring and be provided with battery backup.

Means of Egress

Occupant Load Calculations

Unit	Function	Area	Occupant Load Factor (SF/Occ.)	Occupant Load
A	Parking/Residential	1,840 SF	200	10
B	Parking/Residential	2,049 SF	200	11
C	Parking/Residential	2,684 SF	200	14
D	Parking/Residential	2,598 SF	200	13

Egress Widths
Corridor Minimum Width = 36 inches
Door Minimum Width = 32 inches clear
Stairway Minimum Width = 36 inches

Egress from Spaces (IBC Section 1006.2)

Each unit egresses to the exterior at the lower level. Each unit has an occupant load less than 20 and less than 125 feet of travel distance.

Egress from Stories (IBC Section 1006.3)

Each unit has a single exit at the lower level. A single exit is permitted by Section 1006.3.4, Item 5.

Accessible Means of Egress

Since the units are not required to accessible, an accessible means of egress is not required.

Stairways

Stairways shall comply with IBC Section 1011.

Stairway Width: Stairways will be a minimum of 36 inches in width.

Stairway Landings: The width of the stairway landings, measured perpendicularly to the direction of travel, shall be not less than the width of stairways served. Every landing shall have a minimum depth, measured parallel to the direction of travel, equal to the width of the stairway or 48 inches, whichever is less.

Accessibility

Type A Units: The building only contains 4 dwelling units. Therefore, no Type A units are required.

Type B Units: The building contains 4 dwelling units and Section 1107.6.2.2.2 would require the units to be Type B units. However, Section 1107.7.2 states that multi-story units are not required to be Type B units.

CRS 9-5 Compliance
Since there are less than 7 units in the building, CRS 9-5 is not applicable.

Interior Environment

Natural Light in Units: The minimum net glazed area shall not be less than 8% of the floor area of the room served (IBC Section 1204.2). All dwelling units comply

Mechanical Ventilation in Units: Mechanical ventilation will be provided in accordance with the IMC.

Sound Transmission: Walls, partitions and floor-ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class of not less than 50, or not less than 45 if field tested, for airborne noise where tested in accordance with ASTM E90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to entrance doors; however, such doors shall be tight fitting to the frame and sill. (IBC Section 1207.2)

Floor-ceiling assemblies between dwelling units or between a dwelling unit and parking garage shall have an impact insulation class rating of not less than 50, or not less than 45 if field tested, where tested in accordance with ASTM E492. (IBC Section 1207.3)

Safety Glazing:

Safety glazing shall be provided in hazardous locations described in IBC Section 2406.4. See Window Schedule and Details for specific requirements.

Plumbing Fixture Count

Each dwelling unit will be provided with at least 1 water closet, 1 lavatory, 1 shower, 1 kitchen sink and 1 clothes washer connection per Table 2902.1

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

T1.2

160 FOREST DRIVE TOWNHOUSES
LOT 2, AMENDED WEST FRISCO 70, FILING NO. 2
FRISCO, COLORADO
MARCH, 2024

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL CONFORM TO ALL TOWN OF FRISCO TOWN CODES, REGULATIONS, AND STIPULATIONS.
3. CONTRACTOR SHALL OBTAIN, AT ITS OWN EXPENSE, ALL PERMITS AND INSPECTIONS, WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR IS WARNED THAT CONFLICTS WITH EXISTING UTILITIES MAY EXIST. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS, AND CONTRACTOR SHALL LOCATE ALL UTILITIES (INCLUDING DEPTH). NEITHER MARCIN ENGINEERING NOR THE OWNER ASSUME ANY RESPONSIBILITY FOR UTILITY LOCATIONS. ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER SO THAT MINOR LINE OR GRADE CHANGES CAN BE MADE TO ELIMINATE ANY CONFLICTS WITH THESE EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR THAT WERE PROPERLY MARKED/LOCATED SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR ENGINEER.
5. THE CONSTRUCTION OF ALL ROADS, SIDEWALKS, CURBS, EARTHWORK AND OTHER INFRASTRUCTURE DEVELOPMENT NOT SPECIFICALLY SPECIFIED BY SEPARATE UTILITY COMPANIES, SHALL BE CONSTRUCTED TO THE TOWN OF FRISCO TOWN CODE AND/OR COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2017 EDITION) AND LATEST REVISIONS, CDOT M&S STANDARD PLANS (2012 EDITION) AND LATEST REVISIONS AND ANY SUPPLEMENTAL SPECIFICATIONS PROVIDED WITH THE CONTRACT. WHEN STANDARDS CONFLICT, THE STANDARD JUDGED MOST RESTRICTIVE BY THE ENGINEER SHALL PREVAIL. THE CONTRACTOR SHALL OBTAIN COPIES OF THESE SPECIFICATIONS AND PLANS. THE CONTRACTOR SHALL HAVE ONE COPY OF THE PLANS AND ONE COPY OF THE SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. ANY MISSING DIMENSIONS OR DISCREPANCIES IN THE PLANS, FIELD STAKING OR PHYSICAL FEATURES SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER. IF THE CONTRACTOR PROCEEDS WITH THE WORK WITHOUT NOTIFYING MARCIN ENGINEERING AND THE OWNER, HE DOES SO AT HIS OWN RISK.
7. THE CONTRACTOR SHALL KEEP ONE (1) SET OF CONTRACT DRAWINGS MARKED TO FULLY INDICATE "AS-BUILT" CONDITIONS. THE DRAWINGS SHALL BE PROVIDED TO THE OWNER AND MARCIN ENGINEERING UPON COMPLETION OF THIS WORK. THREE (3) "AS-BUILT" TIES TO ALL SERVICES, FITTINGS, VALVES AND MANHOLES TO PHYSICAL MONUMENTS ARE TO BE PROVIDED BY THE CONTRACTOR.
8. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER MARCIN ENGINEERING OR THE OWNER IS RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY WITH ANY REGULATIONS RELATING THERETO.
9. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR TO THE OWNER AND TOWN FOR APPROVAL.
10. CONTRACTOR SHALL MAINTAIN AT LEAST 1-LANE ACCESS ON ALL PUBLIC ROADS AT ALL TIMES UNLESS OTHERWISE APPROVED BY TOWN OF FRISCO.
11. ALL WATER CONSTRUCTION SHALL COMPLY WITH TOWN OF FRISCO TOWN CODE. MINIMUM COVER ON ALL WATER MAINS AND SERVICES IS 8.5'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER TOWN OF FRISCO WATER CONSTRUCTION SPECIFICATIONS.
12. ALL SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH FRISCO SANITATION DISTRICT CONSTRUCTION SPECIFICATIONS. MINIMUM COVER ON ALL SEWER MAINS AND SERVICES IS 9'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER FRISCO SANITATION DISTRICT SPECIFICATIONS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF STOCKPILING OF MATERIALS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, AND THE MATERIAL SUPPLIER.
14. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO SIGNIFICANTLY REDUCE ANY POTENTIAL POLLUTION CAUSED BY HIS ACTIVITIES, INCLUDING VEHICLE FUELING, STORAGE OF FERTILIZERS OR CHEMICALS, ETC. THE CONTRACTOR SHALL HAVE IDENTIFIED PROCEDURES FOR HANDLING POTENTIAL POLLUTANTS AND HAVE IDENTIFIED SPILL PREVENTION AND RESPONSE PROCEDURES PRIOR TO ANY ACTIVITIES AT THE PROJECT SITE.
15. OBSERVATIONS OF THE WORK IN PROGRESS AND ON-SITE VISITS ARE NOT TO BE CONSTRUED AS A GUARANTEE OR WARRANTY BY MARCIN ENGINEERING OF THE CONTRACTOR'S CONTRACTUAL RESPONSIBILITIES.
16. IF ANY GROUND WATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONTACT MARCIN ENGINEERING AND THE PROJECT GEOTECHNICAL ENGINEER IMMEDIATELY.
17. CONSTRUCTION STAKING SHALL BE PERFORMED BY OWNER.
18. BENCHMARK: CONTACT MARCIN ENGINEERING FOR SITE BENCHMARK (SEE PLANS).
19. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY RANGE WEST
20. SOILS AND MATERIAL TESTING IS BY THE OWNER, BUT THE CONTRACTOR MUST NOTIFY THE OWNER AND GEOTECHNICAL ENGINEER OF SCHEDULING.
21. ALL EARTHWORK AND PAVING SHALL CONFORM WITH GEOTECHNICAL ENGINEER REQUIREMENTS. CONTRACTOR SHALL OBTAIN COPIES OF REPORT BY KUMAR & ASSOCIATES, DATED 5/10/17.
22. ALL UTILITY TRENCHES IN ROAD PRISM TO BE COMPACTED AND TESTED PER GEOTECHNICAL ENGINEER REQUIREMENTS.
23. ROAD SUBGRADE SHALL BE PROOF ROLLED AND FREE OF DEFLECTION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. ANY FAILING AREAS SHALL BE REPAIRED AND PROOF ROLLED AGAIN UNTIL ACCEPTED BY THE GEOTECHNICAL ENGINEER WITH NO ADDITIONAL COST TO OWNER.
19. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE CHANNELS, CULVERTS AND APPURTENANCES DURING CONSTRUCTION, AS NECESSARY TO PROTECT ROADS AND PROPERTY.
20. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES. CONTRACTOR IS RESPONSIBLE TO REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETION AND ONCE VEGETATION IS APPROXIMATELY 70% RE-ESTABLISHED DEEMED BY THE OWNER.
21. CONTRACTOR IS RESPONSIBLE FOR DAILY CLEANING OF ALL ACCESS ROADS AND OTHER PUBLIC STREETS NECESSITATED BY HIS ACTIVITIES ON THE SITE.
22. DUST CONTROL IS INCIDENTAL TO EARTHWORK CONSTRUCTION AND SHALL BE PROVIDED BY CONTRACTOR, AT NO COST TO OWNER, IN ACCORDANCE WITH THE TOWN OF FRISCO TOWN CODE.
23. ALL LANDSCAPING SHALL BE PER THE ARCHITECT PLANS AND/OR OWNER.

VICINITY MAP

APPROXIMATE SCALE: 1" = 300'

SUMMIT COUNTY, COLORADO

CONSULTANT CONTACTS

A. Blue River Real Estate Fund III, LLC (Owner-Seth Francis), (347) 834-1009
B. Marcin Engineering LLC; Tom Marcin, PE, PLS (Civil Engineer, Surveyor), (970) 748-0274
C. Jarrett Buxkemper, (Architect), (970) 409-9062
D. Frisco (Municipal Governing Agency)
E. Town of Frisco (Water), Jeff Goble (970) 668-9151
F. Town of Frisco Sewer Wastewater Treatment Plant (Sewer), Ron Drake (Chairman) (970) 668-3723
G. Utility Notification Center of Colorado, (UNCC) 811

TABLE OF CONTENTS

UTILITY CONTACTS

A. Frisco Sanitation District, Matt Smith (970) 688-3723
B. Town of Frisco (Water), Jeff Goble (970) 668-0836
C. Excel Energy, Amy Lagace (970) 262-4033
D. Century Link, Ron Hickman (970) 328-8288
E. Comcast, Michael Johnson (970) 930-4713
F. Utility Notification Center of Colorado, (UNCC) 811

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

COVER SHEET & NOTES
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED THOMAS S. MARCIN 32492 PROFESSIONAL ENGINEER
MARCH 25, 2024

JOB: 24005
DATE: 3/25/2024
SCALE: N/A

SHEET
C-1

GRAPHIC SCALE
0 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 6

LOT 7

LOT 2

LOT 150

FOREST PARK

LOT 140

ROCK OUTCROP AREA

ROCK OUTCROP AREA

MAXIMUM GRADING LIMITS

TRENCH FLOWLINE

PROPOSED DRYWELL

FF=05

FF=05

FF=05

9122.00
9122.00
9118.00
9122.00
9115.00
9118.00
9114.00
9115.00
9115.00
9122.00
9122.00
9114.00
9114.00
9118.00
9114.00
9118.00
9117.00
9122.00
9112.00
9111.00
9110.00
METER LOCATION
METER BY OTHERS
PROPERTY LINE (TYP.)

14.7%
9107.50
9104.01
9104.50
9104.50
9104.50
1.8%
2.0%
9104.50
1.5%
9104
BUILDING ENVELOPE (TYP.)
PROPOSED ASPHALT
9104.50
2.0%
9104.50
9104.02
9104.00
14.9%
9103.46
9102.29
9103.44
9103.06
CONSTRUCT 3' WIDE VALLEY PAN
EXISTING VALVE
9104.87
EXISTING FIRE HYDRANT AND VALVE
EXISTING 12" SEWER MAIN
EXISTING GAS MAIN
FOREST DRIVE
60' R.O.W.
60.00' RIGHT OF WAY
EDGE OF ASPHALT

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

GRADING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET C-2

GRAPHIC SCALE
0 5 7.5 10 15 25
(IN FEET)
1 inch = 5 ft.

MAX. GRADING LIMITS

DRYWELL
RIM= 02.30
INV. IN=95.04

4" SDR 35 PERFORATED PVC PIPE (TYP.)
6" SOLID PVC DRAIN PIPE (TYP.)

INV. IN=06.02
INV. IN=02.74
74.43' of 6" SOLID @ 9.94%
INV. IN=98.63
INV. IN=00.54
35.77' of 6" SOLID @ 10.05%
73.46' of 4" SUBDRAIN @ 2.99%
4" SOLID PVC PIPE

RIM=19.75
INV. IN=07.08
12.18' of 6" SOLID @ 8.71%
16.40' of 4" SUBDRAIN @ 1.83%
15.40' of 4" SUBDRAIN @ 2.00%
12.00' of 4" SUBDRAIN @ 2.00%
INV. IN=03.28
INV. IN=00.85
INV. IN=01.01
17.65' of 6" SOLID @ 9.97%
6" SOLID PVC DRAIN PIPE (TYP.)
INV. IN=03.03
6.33' of 4" SUBDRAIN @ 2.00%
INV. IN=03.77
51.85' of 4" SUBDRAIN @ 2.00%
8.35' of 4" SUBDRAIN @ 2.00%
10.27' of 4" SUBDRAIN @ 2.00%
INV. IN=09.41
4" SDR 35 PERFORATED PVC PIPE (TYP.)
INV. IN=03.40
8.12' of 4" SUBDRAIN @ 2.00%
18.00' of 4" SUBDRAIN @ 2.00%
INV. IN=01.22
INV. IN=02.09
RIM = 15.75
INV. IN=08.84
INV. IN=04.08
INV. IN=03.92
27.01' of 6" ??? @ 9.94%
8.00' of 4" SUBDRAIN @ 2.00%
15.00' of 4" SUBDRAIN @ 2.00%
4" SDR 35 PERFORATED PVC PIPE (TYP.)
8.00' of 4" SUBDRAIN @ 2.00%
INV. IN=04.54
INV. IN=04.38
58.92' of 4" SUBDRAIN @ 2.00%
RIM= 15.57 INV. IN=12.09
14.46' of 4" SUBDRAIN @ 2.00%
INV. IN=04.67
INV. IN=04.83
8.00' of 4" SUBDRAIN @ 2.00%
15.07' of 4" SUBDRAIN @ 2.00%
8.07' of 4" SUBDRAIN @ 2.00%
INV. IN=04.21
4" SDR 35 PERFORATED PVC PIPE (TYP.)
8.00' of 4" SUBDRAIN @ 2.00%
INV. IN=04.37
31.00' of 4" SUBDRAIN @ 2.00%
INV. IN=04.05
4" SDR 35 PERFORATED PVC PIPE (TYP.)
INV. IN=03.43

PROPOSED ASPHALT
EXISTING EDGE OF ASHALT (TYP.)
FOREST DRIVE
60' R.O.W.

DO NOT COMBINE SUBDRAIN PIPE WITH STORM DRAIN PIPE

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

SUBDRAIN PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 5'

SHEET
C-3

NOTE:
1. DRY/SHALLOW UTILITY ROUTING SHOW FOR CONCEPTUAL PURPOSES ONLY. THE CONTRACTOR TO COORDINATE FINAL DESIGN LAYOUT AND INSTALLATION CRITERIA WITH UTILITY PROVIDERS.

GRAPHIC SCALE
0 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 7

LOT 2

LOT 150

LOT 3

CONCRETE

SIDEWALK

INSTALL TRANSFORMER COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

INSTALL
2-6" PVC CONDUITS
2-4" PVC CONDUITS
2-4" PVC CONDUITS (SPARES)
COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

12.00' MIN.

PROPOSED DRY WELL

PROPOSED ELECTRIC MAIN CONNECTION

PROPOSED GAS MAIN CONNECTION

INSTALL SDR-35 SEWER CLEANOUT INV.=99.56

INSTALL SDR-35 SEWER CLEANOUT INV.=99.52

INSTALL SDR-35 SEWER CLEANOUT INV.=99.55

INSTALL SDR-35 SEWER CLEANOUT INV.=99.15

INSTALL 6" SDR-35 SEWER SERVICE LINE

INSTALL 4" DIP WITH THRUST BLOCK

INSTALL 4" DIP WITH THRUST BLOCK

INSTALL 4" DIP WATER SERVICE LINE RE: ARCHITECT/MEP FOR BUILDING CONNECTION DETAILS

METER LOCATION

METER BY OTHERS

EXISTING FIRE HYDRANT

PROPOSED GAS MAIN CONNECTION

RIM=9104.58
INV. OUT=9100.91

SEWER SERVICE CONNECTIONS
INV.=01.39

INSTALL 40 L.F. OF 6" SDR-35 WITH 2" RIGID TYPE FORM BOX TO TOP OF SERVICE LINE INSULATED

INSTALL GATE VALVE

EXISTING 12" SEWER MAIN
L=259.51
S=0.46%

NOTE:
1. METER LOCATION BY OTHERS
2. SNOW MELT BY OTHERS

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

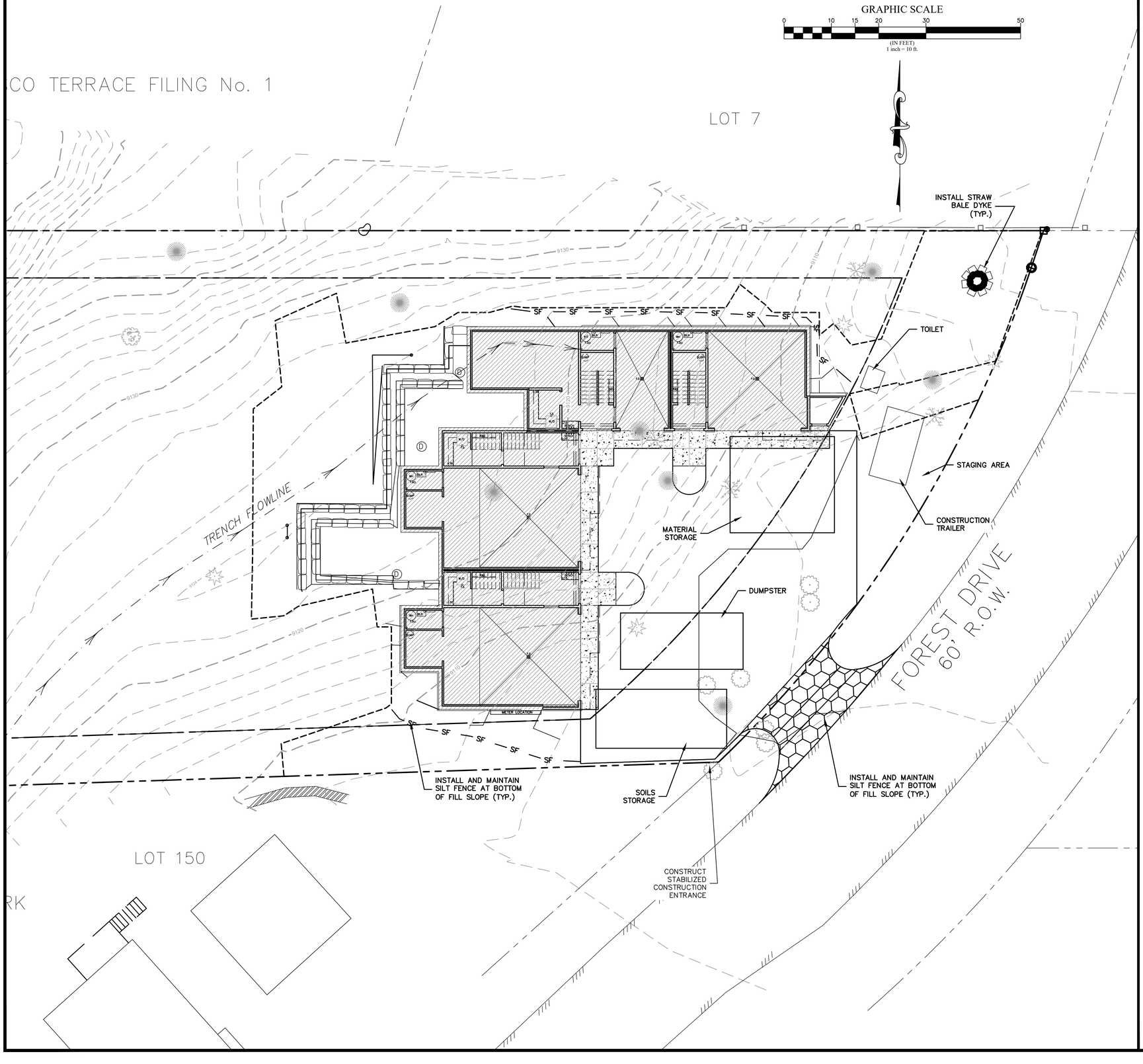
UTILITY PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET
C-4



CONSTRUCTION SEQUENCE OF EROSON/SEDIMENT CONTROL MEASURES

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL WATTLES, CONSTRUCTION FENCE, AND SEDIMENT TRAPS PRIOR TO CONSTRUCTION.
3. BEGIN EXCAVATION.
4. INSTALL EROSION CONTROL MEASURES (LANDLOK TRM FABRIC, RIP RAP AND EROSION LOGS) AFTER ROADWAY DITCHES HAVE BEEN CONSTRUCTED AND TOPSOIL PLACED.
5. REVEGETATE ALL DISTURBED AREAS PER LANDSCAPE DETAILS. AREAS TREATED WITH EROSION CONTROL MATTING WILL INCLUDE TOPSOIL, SEED MIX, FERTILIZER, MULCH AND TACKIFIER.

GENERAL NOTES FOR SEDIMENT CONTROL

1. INSTALL AND MAINTAIN SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THESE PLANS.
2. ALL PROPOSED SEDIMENT CONTROL MEASURES ARE TEMPORARY MEASURES UNLESS SPECIFIED OTHERWISE ON PLANS.
3. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT THE TIME OF CONSTRUCTION TO INSURE THAT THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENGINEER'S APPROVAL WILL BE REQUIRED FOR ANY OTHER DEVIATION FROM THE APPROVED PLANS.
4. PROVIDE CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES TO ENSURE THAT SEDIMENT CONTROL EFFICIENCY IS OBTAINED UNTIL FINAL STABILIZATION OF SITE HAS TAKEN PLACE.
5. INSTALL SEDIMENT CONTROL MEASURES AT THE ONSET OF GRADING OPERATIONS SO THAT EFFECTIVE SEDIMENT CONTROL CAN BE ACHIEVED DURING THE ENTIRE GRADING OPERATION PERIOD.
6. STABILIZE ALL POINTS OF INGRESS AND EGRESS WITH CRUSHED STONE DURING CONSTRUCTION TO PREVENT TRACKING OF MUD ONTO PUBLIC STREETS.
7. THE TERM "REVEGETATION" ON THIS PLAN MEANS TO HAVE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNT OF FERTILIZER IN ACCORDANCE WITH APPLICABLE "STANDARDS AND SPECIFICATIONS". REFER TO LANDSCAPE PLANS FOR SEED MIX.
8. APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES BEFORE REMOVAL OF SEDIMENT CONTROLS.
9. THE CONTRACTOR SHALL REMOVE SEDIMENT CONTROL FACILITIES AFTER FINAL STABILIZATION.
10. REMOVAL AND CLEANUP OF ANY SEDIMENT THAT LEAVES THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ASSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE CONSTRUCTION SITE.
12. ALL SEDIMENT CONTROL AND STORM DRAINAGE FACILITIES SHALL BE PERIODICALLY INSPECTED AND MAINTAINED TO ASSURE THEY FUNCTION PROPERLY.
13. THOSE PORTIONS OF THE ROAD SUBGRADE THAT DO NOT RECEIVE GRAVEL SHALL BE SEEDED, FERTILIZED, MULCHED AND TACKED. THE SEED SHALL BE DRILLED OR BROADCAST AND RAKED INTO THE TOP 1" OF SOIL. PRIOR TO SEEDING FERTILIZER SHALL BE WORKED INTO THE TOP 4" OF SOIL AT THE RATE SPECIFIED.

FUGITIVE DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE TO CONTROL FUGITIVE DUST AND TO INCORPORATE THE FOLLOWING:

1. ALL UNPAVED ROADS AND OTHER DISTURBED AREAS ON SITE SHALL BE WATERED TO MINIMIZE FUGITIVE DUST.
2. VEHICLE SPEED ON ALL UNPAVED ROADS AND DISTURBED AREAS SHALL NOT EXCEED A MAXIMUM OF 30 MPH SPEED LIMIT, SIGNS SHALL BE POSTED.
3. HAUL ROADS SHALL BE TREATED WITH MAGNESIUM CHLORIDE IF WATER IS NOT CONTROLLING THE DUST.
4. ALL DISTURBED SOIL SHALL BE COMPACTED ON A DAILY BASIS TO WITHIN 90% OF MAXIMUM COMPACTION.
5. ALL DISTURBED SURFACE AREAS SHALL BE REVEGETATED AS SOON AS POSSIBLE.
6. MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE PREVENTED. ANY MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE CLEANED UP DAILY.
7. NO EARTH WORK ACTIVITIES SHALL BE PERFORMED WHEN WIND SPEED EXCEEDS 30 MPH.
8. CONTRACTOR SHALL COMPLY WITH THE BEST MANAGEMENT PRACTICES (BMP'S) AND ALL NOTES AND RULES.

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

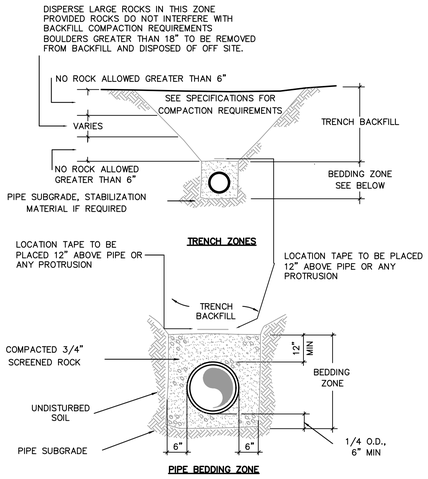
CONSTRUCTION STAGING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
CHRISTOPHER S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

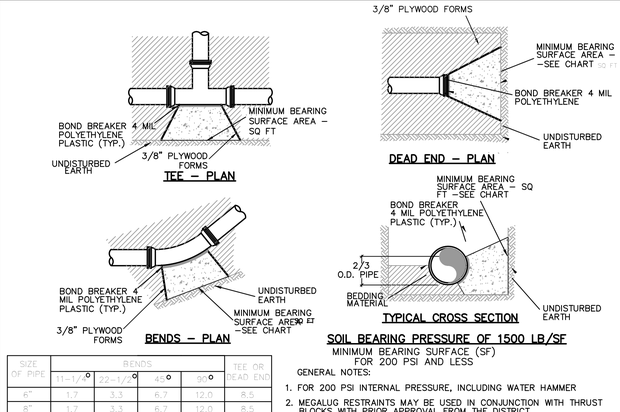
JOB: 24005
DATE: 3/25/24
SCALE: 1" = 10'

SHEET
C-5



N.T.S.

A SEWER PIPE BEDDING



SIZE OF PIPE	BENDS 11-1/4°	22-1/2°	45°	90°	TEE OR DEAD END
6"	1.7	3.3	6.7	12.0	8.5
8"	1.7	3.3	6.7	12.0	8.5
10"	2.5	5.1	9.8	18.2	12.9
12"	3.6	7.2	14.0	25.7	18.2
16"	6.3	12.4	25.4	44.7	31.7
20"	9.6	19.0	37.2	68.9	48.7

MINIMUM SURFACE AREA S.F.

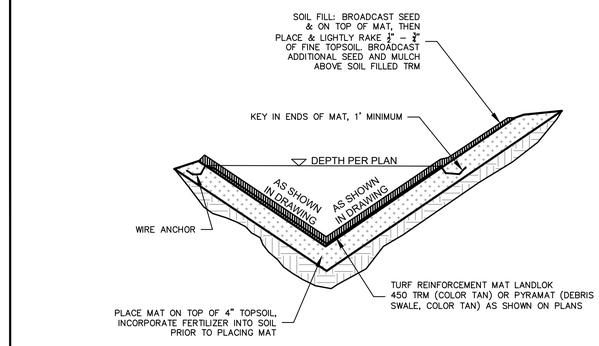
SOIL BEARING PRESSURE OF 1500 LB/SF
MINIMUM BEARING SURFACE (SF)
FOR 200 PSI AND LESS

GENERAL NOTES:

1. FOR 200 PSI INTERNAL PRESSURE, INCLUDING WATER HAMMER
2. MEGALUG RESTRAINTS MAY BE USED IN CONJUNCTION WITH THRUST BLOCKS WITH PRIOR APPROVAL FROM THE DISTRICT
3. MINIMUM AREA REQUIRED WILL BE THAT OF AN 8–INCH MAIN
4. ALL THRUST BLOCKS SHALL BE FORMED. THE MINIMUM THICKNESS FORM MATERIAL SHALL BE 3/8" PLYWOOD
5. ALL THRUST BLOCKS SHALL BE PER WATER DISTRICT STANDARDS, REFER TO THEIR SPECIFICATIONS. TYPICAL DETAILS SHOWN ARE ILLUSTRATIVE ONLY, ACTUAL INSTALLATION MAY VARY.

N.T.S.

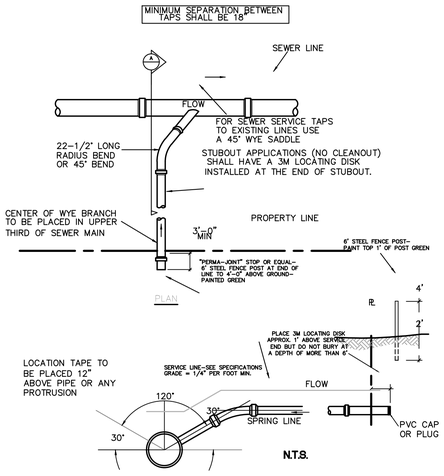
B CONCRETE THRUST BLOCK



CHANNEL
X-SECTION

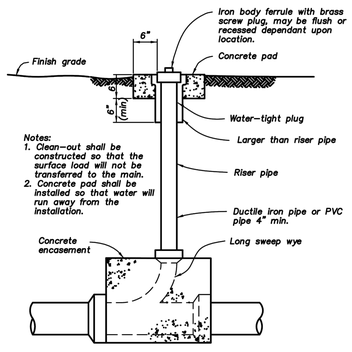
N.T.S.

C TURF REINFORCEMENT MAT DETAIL



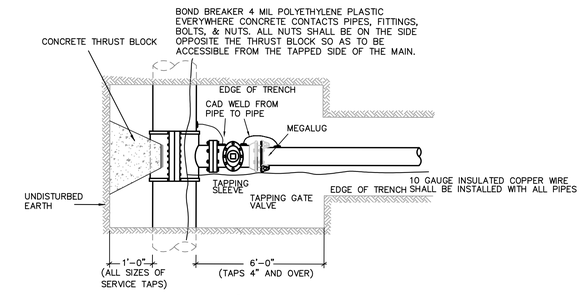
N.T.S.

D TYPICAL SEWER SERVICE



N.T.S.

E SEWER CLEANOUTS



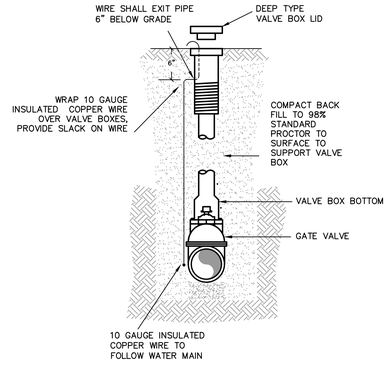
GENERAL NOTES

1. NO TAPPING SLEEVES WILL BE ALLOWED WHERE PRESSURES MAY EXCEED 150psi WORKING PRESSURE. UNLESS WRITTEN PERMISSION IS GIVEN BY THE DISTRICT.
2. PRIOR WRITTEN APPROVAL REQUIRED BY DISTRICT
3. ALL WATER TAPS SHALL BE INSTALLED PER TOWN OF FRISCO WATER CONSTRUCTION STANDARDS.

N.T.S.

F TYPICAL WATER SERVICE

IF THE DISTANCE TO THE TOP OF THE OPERATING NUT TO THE TOP OF THE VALVE COVER IS GREATER THAN 9', AN EXTENSION STEM WILL BE REQUIRED ON THE OPERATING NUT. THE EXTENSION MUST BE SECURED TO THE VALVE OPERATING NUT.



GENERAL NOTE

1. VALVE BOX IS TO BE INSTALLED PLUMB, LEVEL, AND CENTERED ON 2" NUT

NOT FOR CONSTRUCTION

N.T.S.

G TYPICAL GATE VALVE

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970–748–0274

DETAIL SHEET
160 FOREST DRIVEWAY TOWNHOUSES
TOWN OF FRISCO, COLORADO

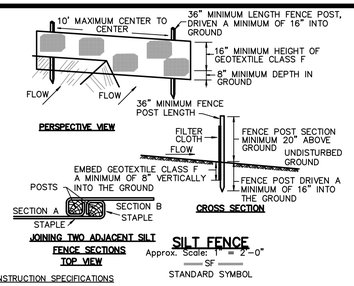
NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
CHRISTOPHER S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 3/25/2024
SCALE: N/A

SHEET
C–6

DRAWING: C:\Users\19707\Dropbox (Marcin Engineering)\Projects\2024\24005 – 160 Forest Dr. Townhouses Frisco\dwg\Sheets\24005-5-Details.dwg



CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 11/2" X 11/2" SQUARE (MINIMUM) CUT, OR 13/4" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POND PER LINEAR FOOT.

2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MIDSECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

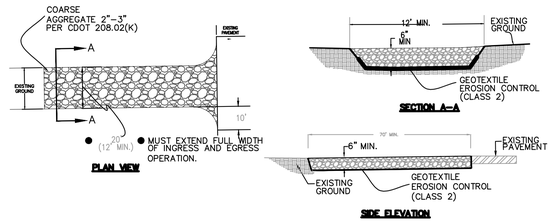
TENSILE STRENGTH	50 LBS./IN (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS./IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL FT / MINUTE (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

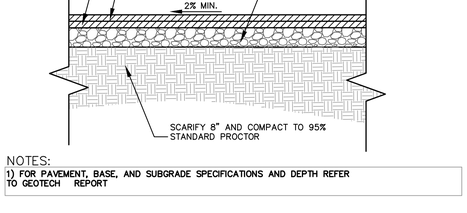
N.T.S.

A SILT FENCE



N.T.S.

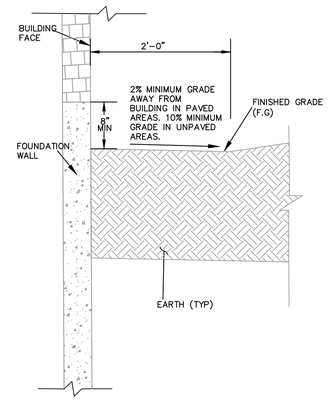
B STABILIZED CONSTRUCTION ENTRANCE



NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT

N.T.S.

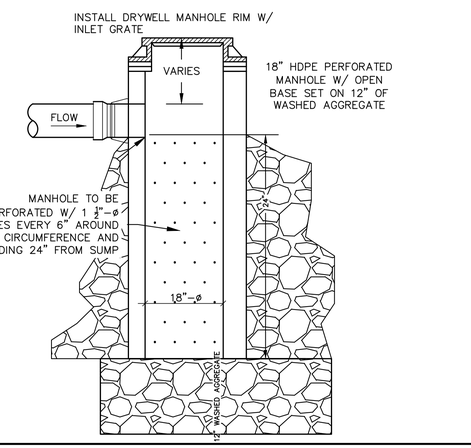
C TYPICAL ASPHALT DRIVEWAY SECTION



TYPICAL SECTION

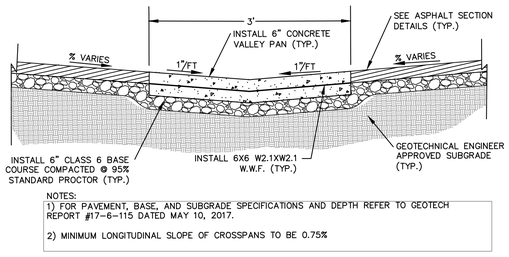
N.T.S.

D GRADING NEAR FOUNDATION WALLS



N.T.S.

E STORM SEWER DRY WELL

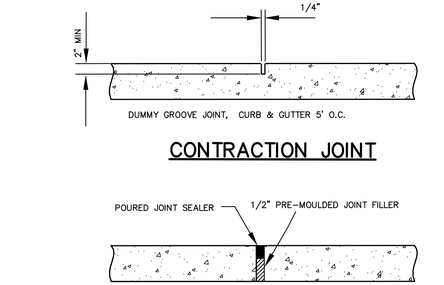


NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT #17-6-115 DATED MAY 10, 2017.

2) MINIMUM LONGITUDINAL SLOPE OF CROSSPANS TO BE 0.75%

N.T.S.

F CONCRETE VALLEY PAN DETAIL AT DRIVE



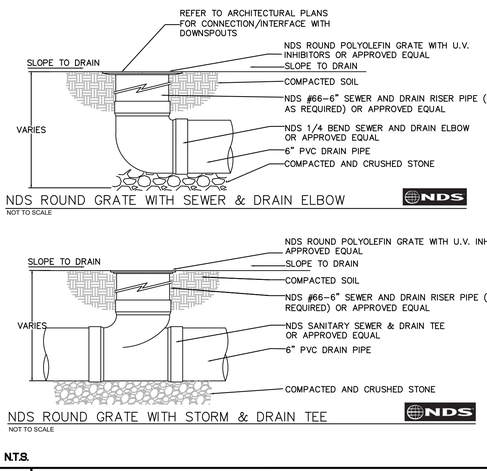
CONTRACTION JOINT

EXPANSION JOINT

GENERAL NOTES:
1) EXPANSION JOINTS SHALL BE PLACED IN THE SIDEWALK AT INTERVALS OF NOT MORE THAN 500 FT OR WHEN SIDEWALK ABUTS RIGID STRUCTURE.

N.T.S.

G CONTRACTION/EXPANSION JOINTS



NDS ROUND GRATE WITH SEWER & DRAIN ELBOW

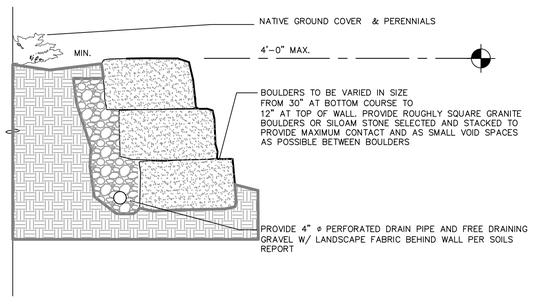
NOT TO SCALE

NDS ROUND GRATE WITH STORM & DRAIN TEE

NOT TO SCALE

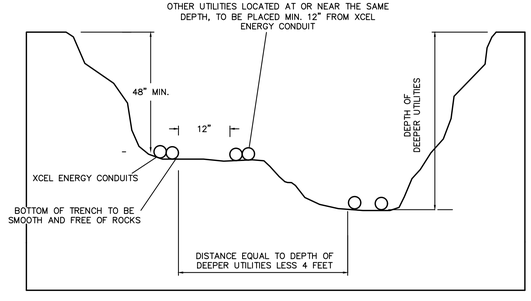
N.T.S.

H NDS ROUND STORM DRAIN INLET



N.T.S.

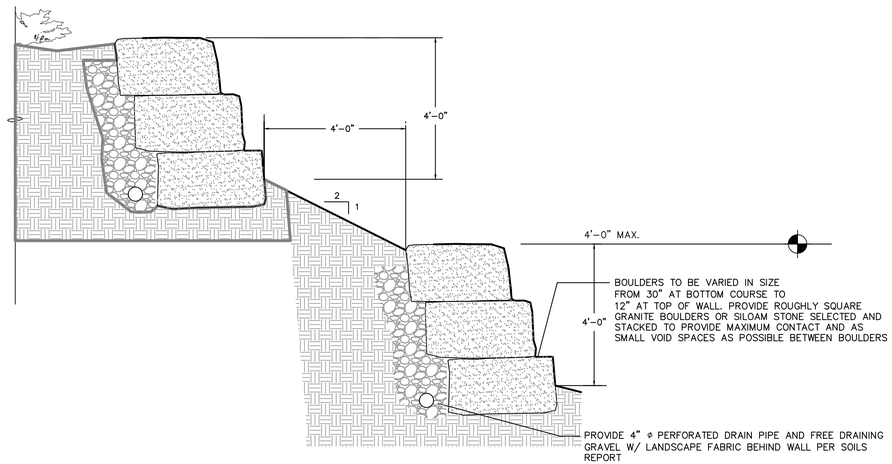
I BOULDER WALL DETAIL



NOTE: HORIZONTAL SEPARATION OF XCEL ENERGY CONDUIT FROM DEEPER UTILITIES SHALL BE THE DEPTH OF THE DEEPER UTILITIES LESS 4 FEET.

N.T.S.

J UTILITY JOINT TRENCH DRAIL



NOT FOR CONSTRUCTION

N.T.S.

K BOULDER TIER WALL DETAIL

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

DETAIL SHEET
160 FOREST DRIVE TOWNHOUSES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MARCH 25, 2024
PROFESSIONAL ENGINEER

JOB: 16034
DATE: 3/25/2024
SCALE: N/A

SHEET
C-7

SLOPE DISTURBANCE

SLOPE PERCENTAGE	EXIST. SLOPE AREA	ALLOWED DISTURBANCE	AREA OF DISTRUBANCE
0%-15%	8519.04 S.F.	(100%) 8519.04 S.F.	5192.00 S.F.
15%-30%	10639.09 S.F.	(50%) 5319.54 S.F.	4293.00 S.F.
>30%	18104.48 S.F.	(15%) 2715.67 S.F.	2715.00 S.F.

FRISCO TERRACE FILING No. 1

LOT 1

LOT 6

LOT 7

WOODEN STEPS

FOUND ROCK "X" MARK CARVED

N90°00'00"E 344.26'

9168

9160

9140

9130

9120

9110

ROCK OUTCROP AREA

ROCK OUTCROP AREA

LOT 2
0.856 Ac.
ADDRESS: 160 FOREST DRIVE

TRENCH FLOWLINE

DISTURBANCE LINE

CP-RIDGE
EL = 9146.18'

S88°07'00"W 283.69'

BRICK WALL

FOREST PARK

SETBACK

14"

13"

11"

8"

9"

7"

6"

PHONE

FOREST DRIVE
60' R.O.W.

RIM EL = 9004.59'

SS

G

S19°

E

SLOPE DISTURBANCE PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.0

LOT COVERAGE

	AREA	%
LOT SIZE:	37,287 S.F. 0.856 AC	
COVERAGES: BUILDING FOOTPRINT* DRIVE	4,752 S.F. 3,344 S.F.	
LOT COVERAGE:	8,096 S.F.	21.7%

*INCLUDES ROOFS, DECKS, PATIOS AND LANDSCAPE PLANTERS

REQUIRED SNOWSTACK

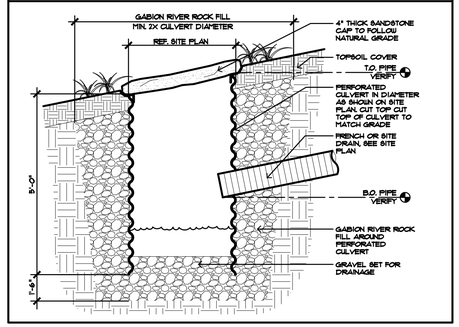
	SQ. FT.	%
HARDSCAPE (WALKS & DRIVEWAY)	3,467 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	867 S.F.	25%
TOTAL SNOW STACK	869 S.F.	25%
UNCOVERED PATIOS AND DECKS	559 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	140 S.F.	25%
TOTAL SNOW STACK	245 S.F.	44%

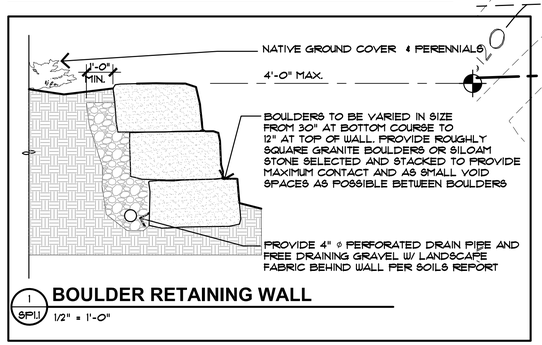
BUILDING HEIGHT

ARCHITECTURAL 100'-0" FOR PROJECT=9105.00' USGS
ALLOWED BUILDING HEIGHT = 35.00'
PROPOSED BUILDING HEIGHT = 34.31'

RIDGE POINT	RIDGE ELEV	NAT. GRADE ELEV	FIN. GRADE ELEV	MEASURED FROM	CALCULATIONS	HEIGHT
A	9139.23'	9108.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
B	9139.23'	9118.00'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
C	9139.23'	9120.50'	9105.00'	NAT. ELEV	9139.23'-9120.50'	18.73'
D	9139.31'	9116.50'	9105.00'	FIN. ELEV	9139.31'-9105.00'	34.31'
E	9139.23'	9110.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
F	9139.23'	9113.00'	9113.00'	FIN. ELEV	9139.23'-9113.00'	26.23'
G	9139.31'	9119.50'	9119.50'	FIN. ELEV	9139.31' -9119.50'	19.81'
H	9139.23'	9122.00'	9122.00'	FIN. ELEV	9139.23'-9122.00'	17.23'
J	9139.23'	9114.00'	9105.00'	NAT. ELEV	9139.23' -9114.00'	25.23'

DRYWELL DETAIL

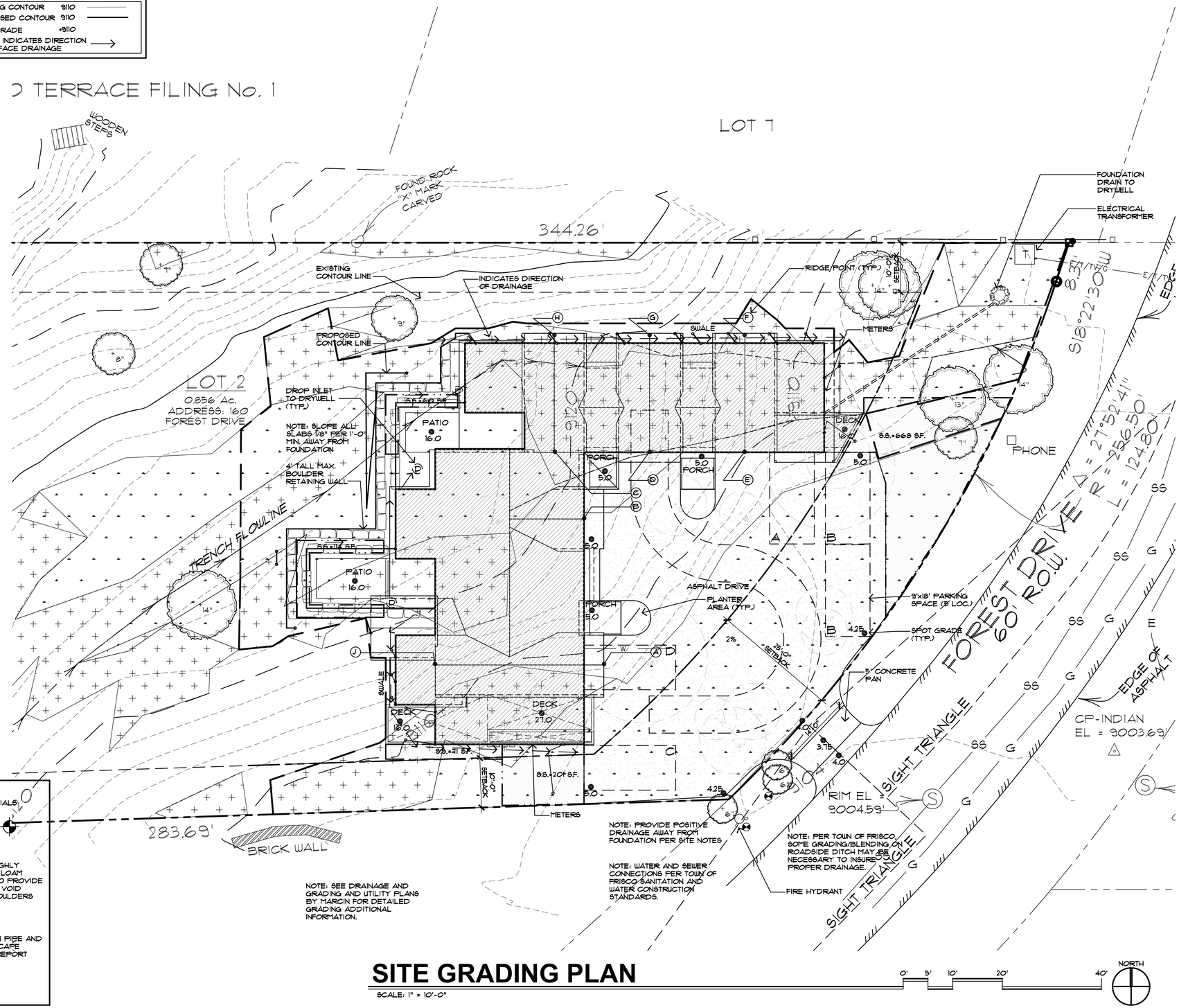




1 / SP1.1 **BOULDER RETAINING WALL**
1/2" = 1'-0"

CONTOUR LEGEND

EXISTING CONTOUR 9110
PROPOSED CONTOUR 9110
SPOT GRADE +9110
ARROW INDICATES DIRECTION OF SURFACE DRAINAGE



SITE GRADING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

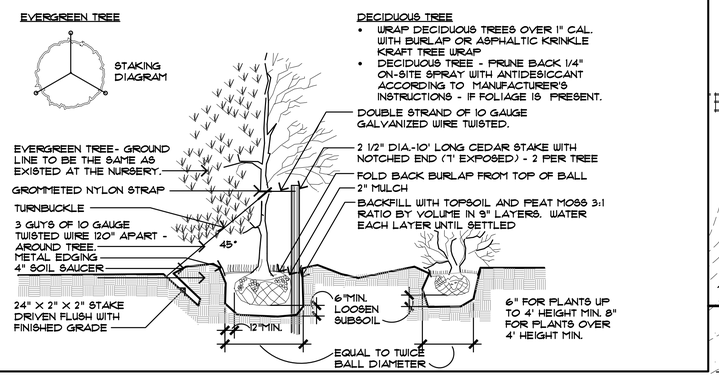
160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.1

PLANTING DETAIL



PLANTING LIST & NOTES

KEY	COMMON	BOTANICAL	NO.	SIZE
EXISTING TREES				
	EXISTING	VARIES -	33	SEE SITE PLAN
EXISTING TREES TO BE REMOVED				
	VARIES -	VARIES -	14	SEE SITE PLAN
EXISTING TREES TO REMAIN				
	VARIES -	VARIES -	19	SEE SITE PLAN
TREES				
	COLORADO SPRUCE	PICEA PUNGENS OR PICEA ENGELMANNI	4	10' TALL 8' TALL
	ASPEN	POPULUS TREMULOIDES	10	50% 2" CAL 50 % 3" CAL
	COTTON WOOD		10	2" CAL
	BALSAM POPLAR		10	2" CAL.
SHRUBS/GROUND COVERS & PERENNIALS				
	POTENTILLA	POTENTILLA FRUTICOSA	14	5 GAL.
	ALPINE CURRANT	RIBIES ALPINUM	0	5 GAL.
	PEKING COTONEASTER	COTONEASTER LUCIDUS OR APICULATUS	11	5 GAL.
	NATIVE GROUND COVER AND PERENNIALS	PROVIDE SUBMITTAL	0	1 FLAT

REVEGETATION NOTES

REVEGETATE ALL DISTURBED AREAS ON THE SITE WITH:

SHORT DRY GRASS MIX #2 LBS/1000 SF:

HARD FESCUE	30%
CREEPING RED FESCUE	30%
SHEEP FESCUE	25%
CANADA BLUEGRASS	10%
CANBY BLUEGRASS	5%

SLOPES OVER 3:1 SHALL BE HAY TACKIFIED OR NETTED.

MOUNTAIN MAGIC WILDFLOWER MIX #1 LB/10,000 SF:

BABY'S BREATH	BLANKETFLOWER
CALIFORNIA POPPY	SHIRLEY POPPY
BLUE FLAX	LUPINE MIX
WALLFLOWER	MAIDEN PINKS
PENSTEMON, ROCKY MOUNTAIN	
WILD THYME	

ROCKY MOUNTAIN BLUE COLUMBINE MIX #1LB/25,000 SF

OR

WESTERN NATIVE WILDFLOWER MIX #1 LB/6000 SF:

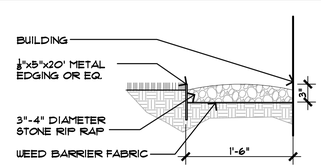
MOUNTAIN LUPINE	CONEFLOWER, WESTERN
COLUMBINE, COLORADO	SULFUR FLOWER
GERANIUM, RICHARDSON	NODDING GROUNDSEL
ASTER, ENGLEMANNS	WESTERN LARKSPUR
GAILLARDIA/BLANKETFLOWER	AMERICAN VETCH
ORANGE MOUNTAIN DAISY	GIANT LOUSEWORT
PENSTEMON, WASATCH	PENSTEMON, RYDBERGS
PENSTEMON, SMALL FLOWERED	
PENSTEMON, ROCKY MOUNTAIN	

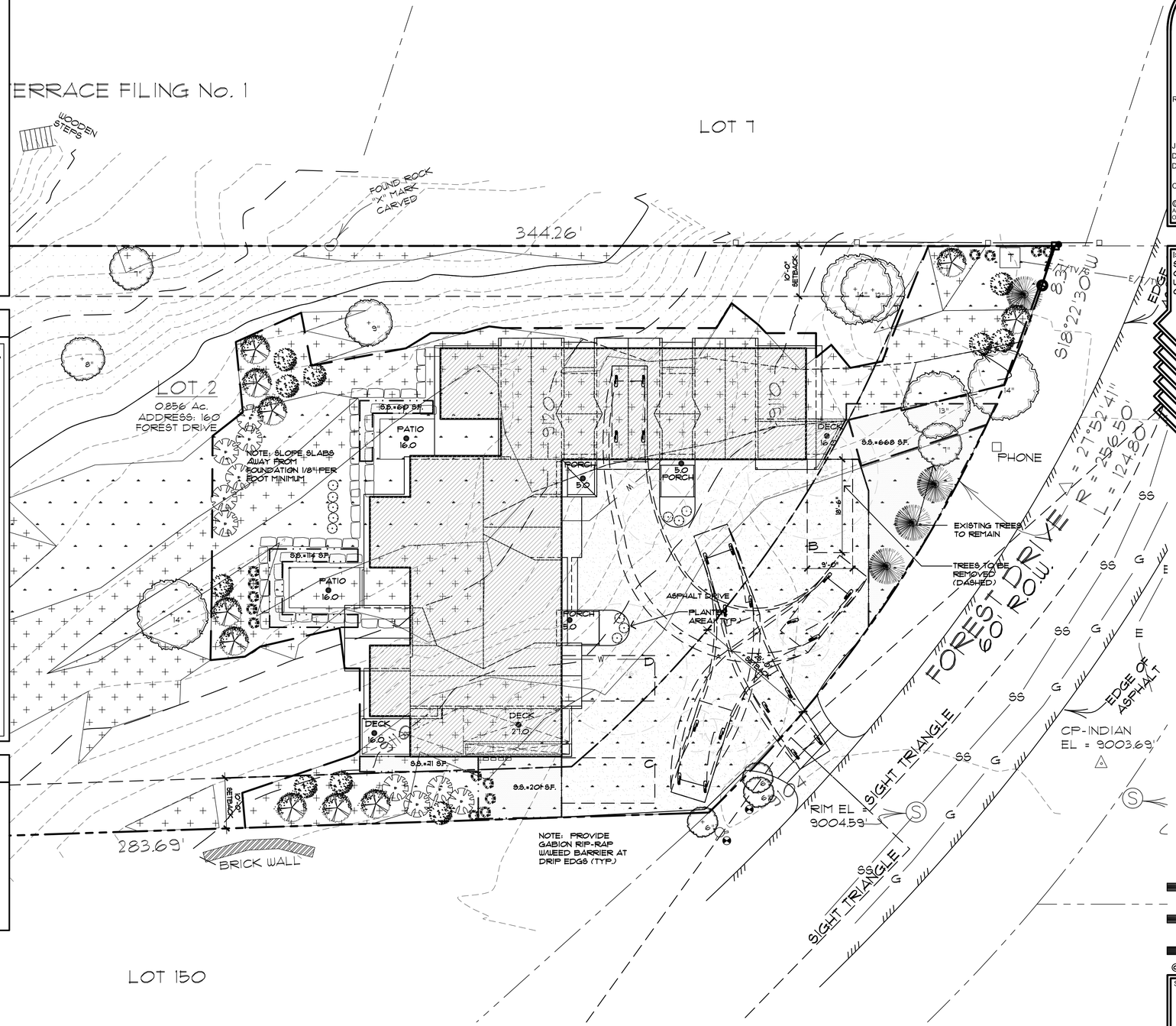
LANDSCAPE NOTES

1. PROVIDE 2"-3" (MIN.) CLAYTREE TOPSOIL AND SEED ALL DISTURBED AREAS WITH SUMMIT CO. SHORT SEED MIX (AS APPROVED BY THE TOUN OF FRISCO. STRIP AND STOCKPILE EXISTING TOPSOIL IN CONSTRUCTION AREA. SCREEN TOPSOIL PRIOR TO INSTALLATION.
2. KEEP EXISTING TREES WHERE POSSIBLE, TAKING INTO CONSIDERATION DRIP LINES AND ROOT STRUCTURE. PROTECT EXISTING TREES WITH FENCING LOCATED AT OR OUTSIDE DRIP LINE OF TREE. STOCKPILE AND REUSE EXISTING TREES WHERE POSSIBLE.
3. GENERAL CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS PER SPECIFICATIONS AND CODE REQUIREMENTS.
4. PRIOR TO ANY LANDSCAPE WORK, REMOVE ALL DEBRIS, PAINT, CONCRETE, STUMPS, SLASH, ETC. FROM LANDSCAPE AREA.
5. LOCATE ALL PLANTINGS TO AVOID SNOW STACKING & SNOW SLIDE AREAS FROM ABOVE.
6. SHRUBS ARE TO BE FIELD LOCATED AS APPROVED BY OWNER.
7. ALL NEW PLANTINGS SHOULD BE HIGH ALTITUDE GROWN AND OR COLLECTED TO ENSURE BETTER SURVIVAL.
8. NATURALIZE GROUPING OF TREES BY VARYING HEIGHT & LOCATION WHEREVER POSSIBLE.
9. SCREEN ALL UTILITY PEDESTALS WITH LANDSCAPE MATERIAL.
10. PROVIDE 3" TO 4" DIAMETER STONE RIPRAP OVER WEED BARRIER FABRIC AT BUILDING DRIP LINES. UNDULATE EDGES AND PROVIDE LANDSCAPE EDGING AT RIPRAP TO TOPSOIL JUNCTURE.
11. INSTALL & BACKFILL ALL PLANTINGS WITH SOIL MIX INCLUDING ORGANIC SOIL AMENDMENTS PER SPECIES REQUIREMENTS AND LANDSCAPE DETAILS.
12. ROOT FEED ALL NEWLY PLANTED TREES DURING INSTALLATION. PROVIDE LIQUID GROWTH TREE STIMULATOR AND SOLUABLE FERTILIZER AT RECOMMENDED RATE FOR EACH TREE SPECIES.
13. PROVIDE 3" OF SHREDDED BARK MULCH AT ALL SHRUB AND TREE WELLS.
14. ADDITIONAL CONSULTATION WITH A QUALIFIED LANDSCAPE PROFESSIONAL AT OWNER OPTION IS RECOMMENDED.

NOTE: ALL LANDSCAPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE RESERVE AND TOUN OF FRISCO.

RIP RAP BORDER





LANDSCAPE PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24
UPDATED
05-16-24

bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

STONECREST - 160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.2

SHELTER

1324KZ

MEDIUM WALL MOUNT LANTERN

Shelter's minimalist style in aluminum creates a chic, dramatic statement as the light from above grazes through its clear seedy glass. Shelter comes standard Dark Sky compliant.

DETAILS	
FINISH:	Buckeye Bronze
MATERIAL:	Aluminum
GLASS:	Clear Seecy
DIMMABLE:	YES, CL TYPE DIMMER (SSL7A)

DIMENSIONS	
WIDTH:	6.3"
HEIGHT:	20.5"
WEIGHT:	7lb
BACK PLATE:	4.5"W X 12"H
EXTENSION:	6.5"
TOP TO OUTLET:	5.75"

LIGHT SOURCE	
LIGHT SOURCE	Socketed
LED NAME:	6.5WR20-30K
WATTAGE:	1-6.50w Med. LED *Included, 50w Equiv.
VOLTAGE:	120v
COLOR TEMP:	3000
LUMENS:	575
CRI:	90
INCANDESCENT EQUIVALENCY:	1 x 50w
DIMMABLE:	YES, CL TYPE DIMMER (SSL7A)

SHIPPING	
CARTON LENGTH:	23.8
CARTON WIDTH:	12.8
CARTON HEIGHT:	9
CARTON WEIGHT:	8

PRODUCT DETAILS:

- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- Fixture is Dark Sky compliant and engineered to minimize light glare upward into the night sky
- Reflector type or Par type bulb recommended
- 2-year finish warranty
- LED Bulbs carry a 3-year limited warranty
- All-in-one fixture design comes with an LED bulb
- Bold lines and a clean, minimalist style complement contemporary architecture

EXTERIOR LIGHTING FIXTURE

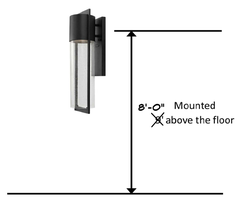
HINKLEY

HINKLEY
3300 Pin Oak Parkway
Avon Lake, OH 44012

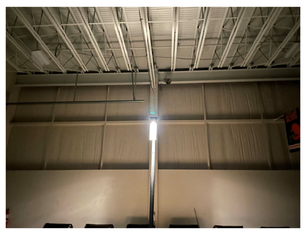
PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

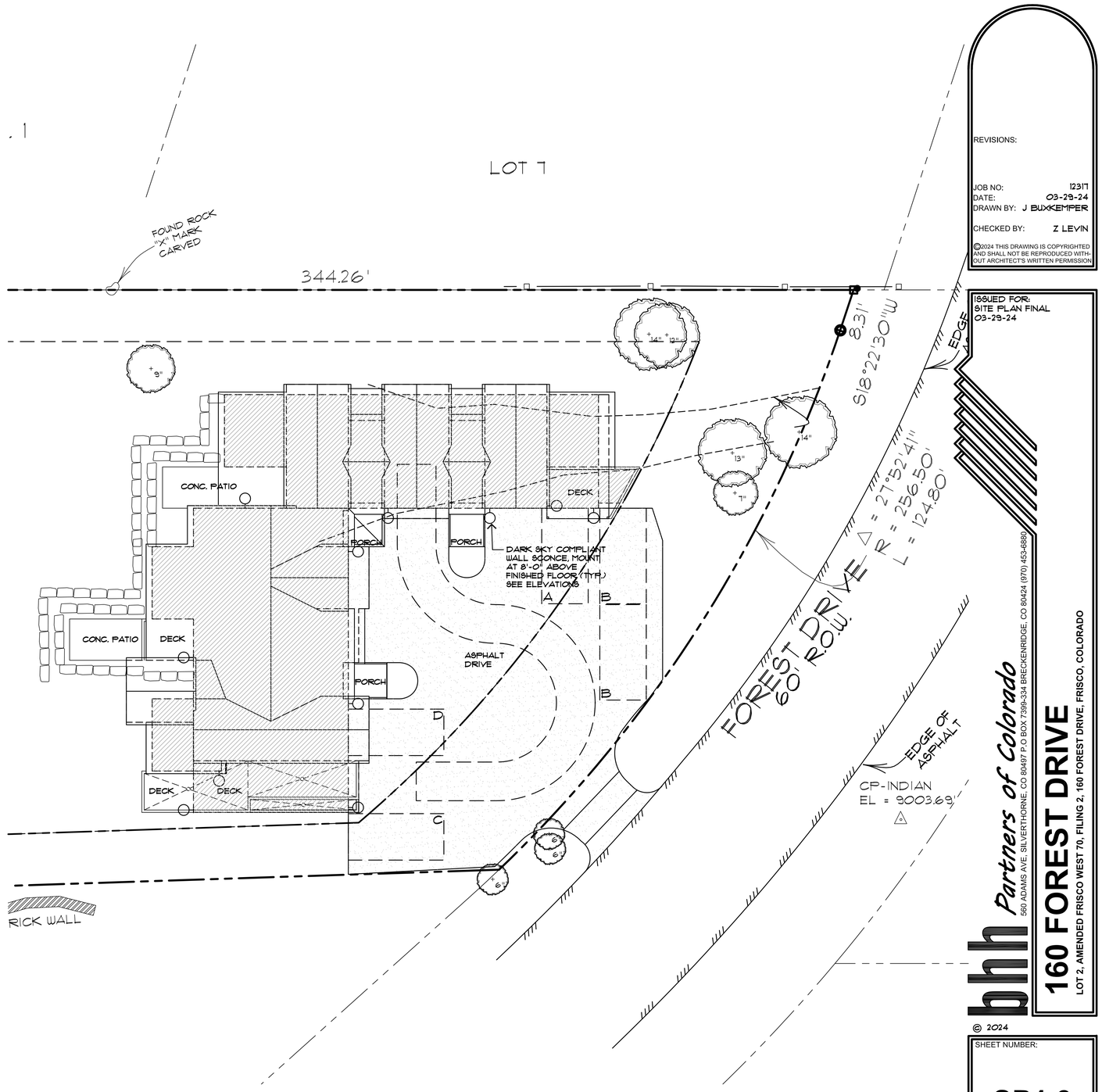
1324BK	
	Foot Candles
Distance from Light	Straight
1'	9.96
2'	4.43
3'	3.25
4'	2.72
5'	1.83
6'	1.29
7'	0.77
8'	0.55
9'	0.33
10'	0.23
11'	0.14
12'	0.11
13'	0.07
14'	0.06
15'	0.03
16'	0.02
17'	0.01



LIGHT SOURCE	
LIGHT SOURCE:	LED bulb
LED NAME:	MAX light PAR 20 bulb
WATTAGE:	9.5W
VOLTAGE:	120v
COLOR TEMP:	3000K
LUMENS:	575
INCANDESCENT EQUIVALENCY:	50W



EXTERIOR LIGHTING PHOTOMETRICS



SITE LIGHTING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40' NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUKKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

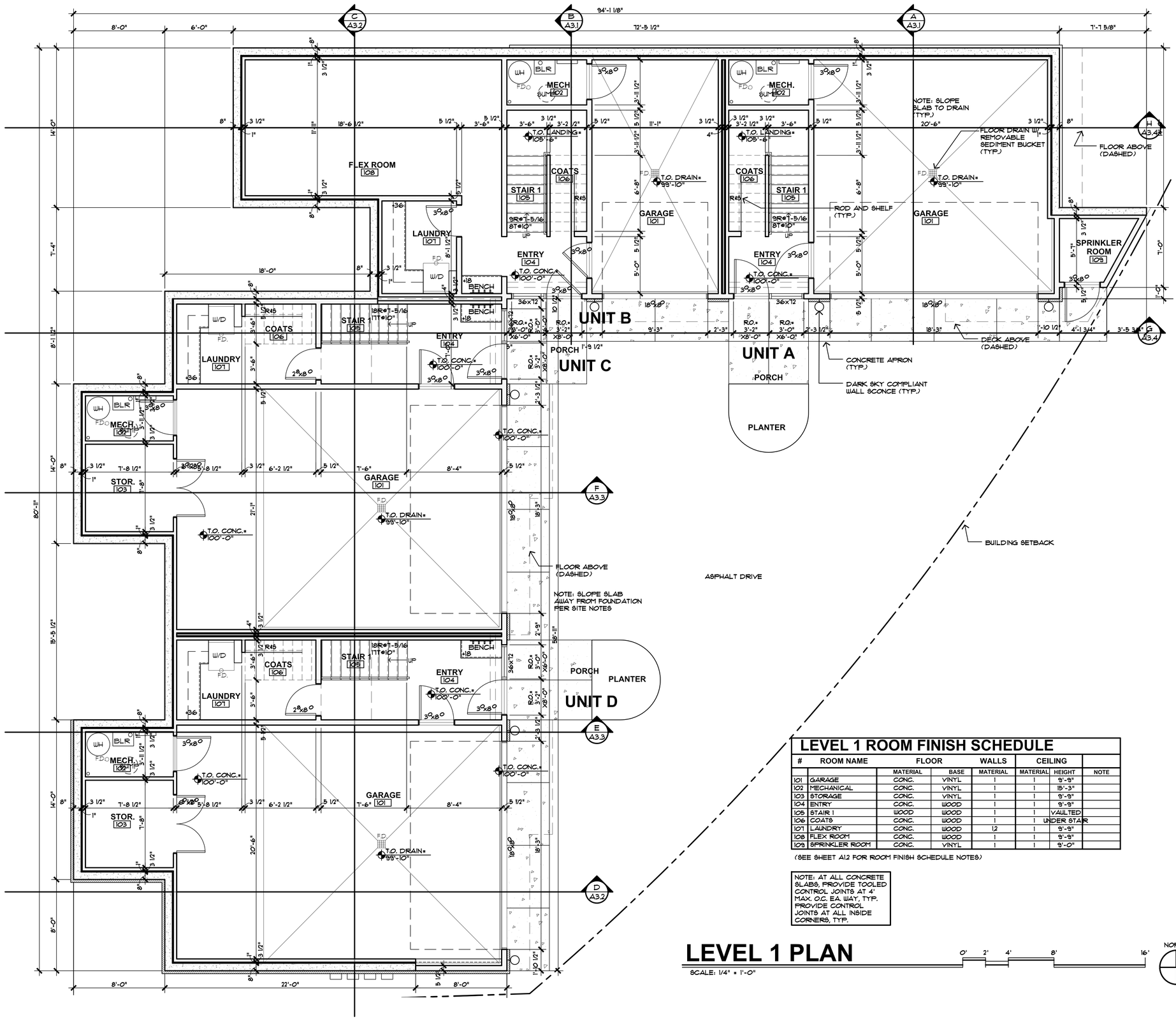
bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-4880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.3



LEVEL 1 ROOM FINISH SCHEDULE

#	ROOM NAME	FLOOR		WALLS	CEILING		
		MATERIAL	BASE	MATERIAL	MATERIAL	HEIGHT	NOTE
101	GARAGE	CONC.	VINYL	1	1	9'-9"	
102	MECHANICAL	CONC.	VINYL	1	1	15'-3"	
103	STORAGE	CONC.	VINYL	1	1	9'-9"	
104	ENTRY	CONC.	WOOD	1	1	9'-9"	
105	STAIR 1	WOOD	WOOD	1	1	VAULTED	
106	COATS	CONC.	WOOD	1	1	UNDER STAIR	
107	LAUNDRY	CONC.	WOOD	12	1	9'-9"	
108	FLEX ROOM	CONC.	WOOD	1	1	9'-9"	
109	SPRINKLER ROOM	CONC.	VINYL	1	1	9'-0"	

(SEE SHEET A12 FOR ROOM FINISH SCHEDULE NOTES)

NOTE: AT ALL CONCRETE SLABS, PROVIDE TOOLED CONTROL JOINTS AT 4' MAX. O.C. EA. WAY, TYP. PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS, TYP.

LEVEL 1 PLAN

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

0' 2' 4' 8' 16'

NORTH

REVISIONS:

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DATE: 03-29-24
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CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

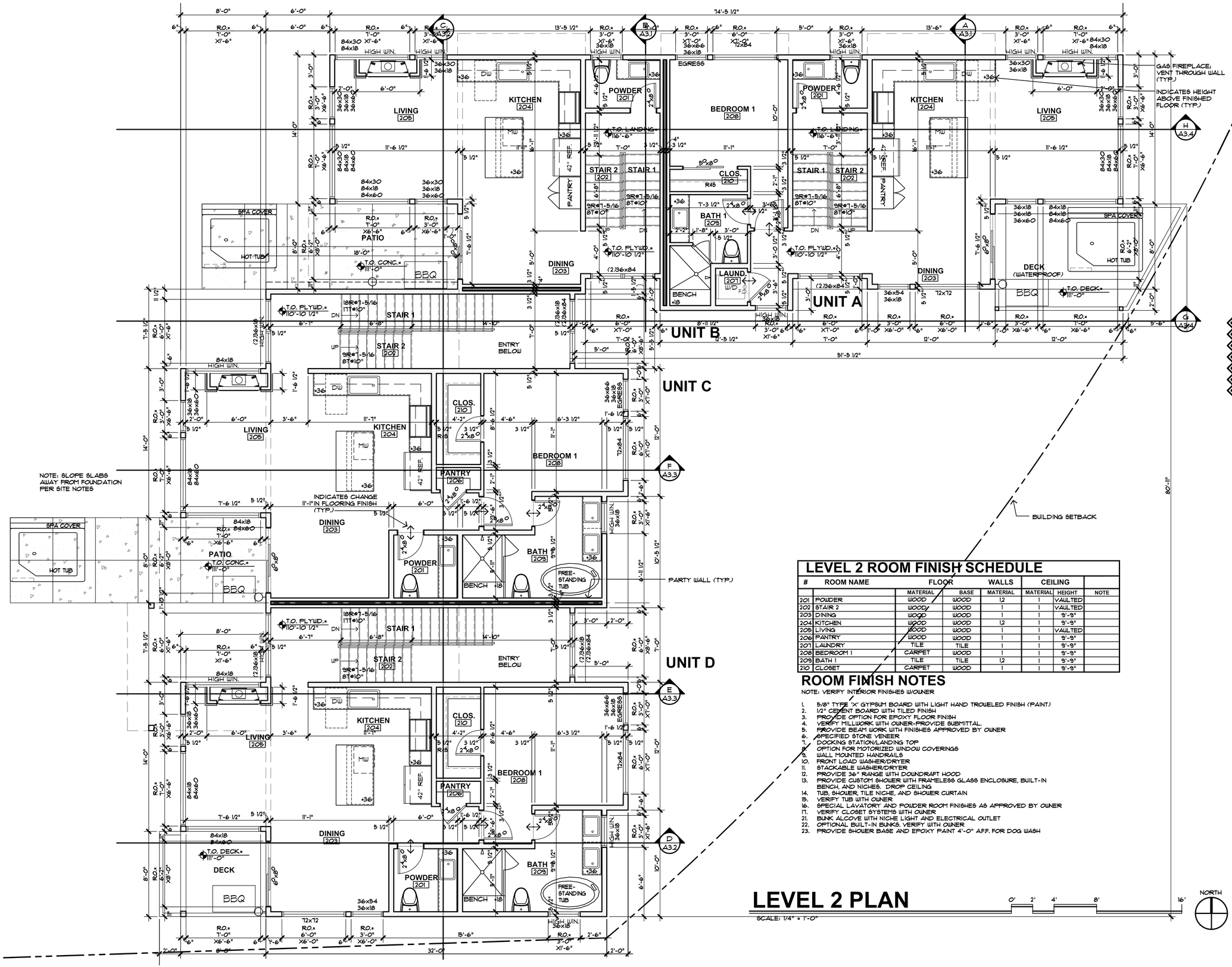
bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-4888

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

A1.1



LEVEL 2 ROOM FINISH SCHEDULE

#	ROOM NAME	FLOOR MATERIAL	FLOOR BASE	WALLS MATERIAL	CEILING MATERIAL	CEILING HEIGHT	NOTE
201	POWDER	WOOD	WOOD	12	1	VAULTED	
202	STAIR 2	WOOD	WOOD	1	1	VAULTED	
203	DINING	WOOD	WOOD	1	1	9'-9"	
204	KITCHEN	WOOD	WOOD	12	1	9'-9"	
205	LIVING	WOOD	WOOD	1	1	VAULTED	
206	PANTRY	WOOD	WOOD	1	1	9'-9"	
207	LAUNDRY	TILE	TILE	1	1	9'-9"	
208	BEDROOM 1	CARPET	WOOD	1	1	9'-9"	
209	BATH 1	TILE	TILE	12	1	9'-9"	
210	CLOSET	CARPET	WOOD	1	1	9'-9"	

ROOM FINISH NOTES

NOTE: VERIFY INTERIOR FINISHES W/OWNER

1. 5/8" TYPE 'X' GYPSUM BOARD WITH LIGHT HAND TROWELED FINISH (PAINT)
2. 1/2" CEMENT BOARD WITH TILED FINISH
3. PROVIDE OPTION FOR EPOXY FLOOR FINISH
4. VERIFY MILLWORK WITH OWNER-PROVIDE SUBMITTAL.
5. PROVIDE BEAM WORK WITH FINISHES APPROVED BY OWNER
6. SPECIFIED STONE VENEER
7. DOCKING STATION/LANDING TOP
8. OPTION FOR MOTORIZED WINDOW COVERINGS
9. WALL MOUNTED HANDRAILS
10. FRONT LOAD WASHER/DRYER
11. STACKABLE WASHER/DRYER
12. PROVIDE 36" RANGE WITH DOWNDRAFT HOOD
13. PROVIDE CUSTOM SHOWER WITH FRAMELESS GLASS ENCLOSURE, BUILT-IN BENCH, AND NICHES. DROP CEILING
14. TUB, SHOWER, TILE NICHE, AND SHOWER CURTAIN
15. VERIFY TUB WITH OWNER
16. SPECIAL LAVATORY AND POWDER ROOM FINISHES AS APPROVED BY OWNER
17. VERIFY CLOSET SYSTEMS WITH OWNER
21. BUNK ALCOVE WITH NICHE LIGHT AND ELECTRICAL OUTLET
22. OPTIONAL BUILT-IN BUNKS. VERIFY WITH OWNER
23. PROVIDE SHOWER BASE AND EPOXY PAINT 4'-0" AFF. FOR DOG WASH

LEVEL 2 PLAN

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

0' 2' 4' 8' 16'

NORTH

REVISIONS:

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bhh Partners of Colorado
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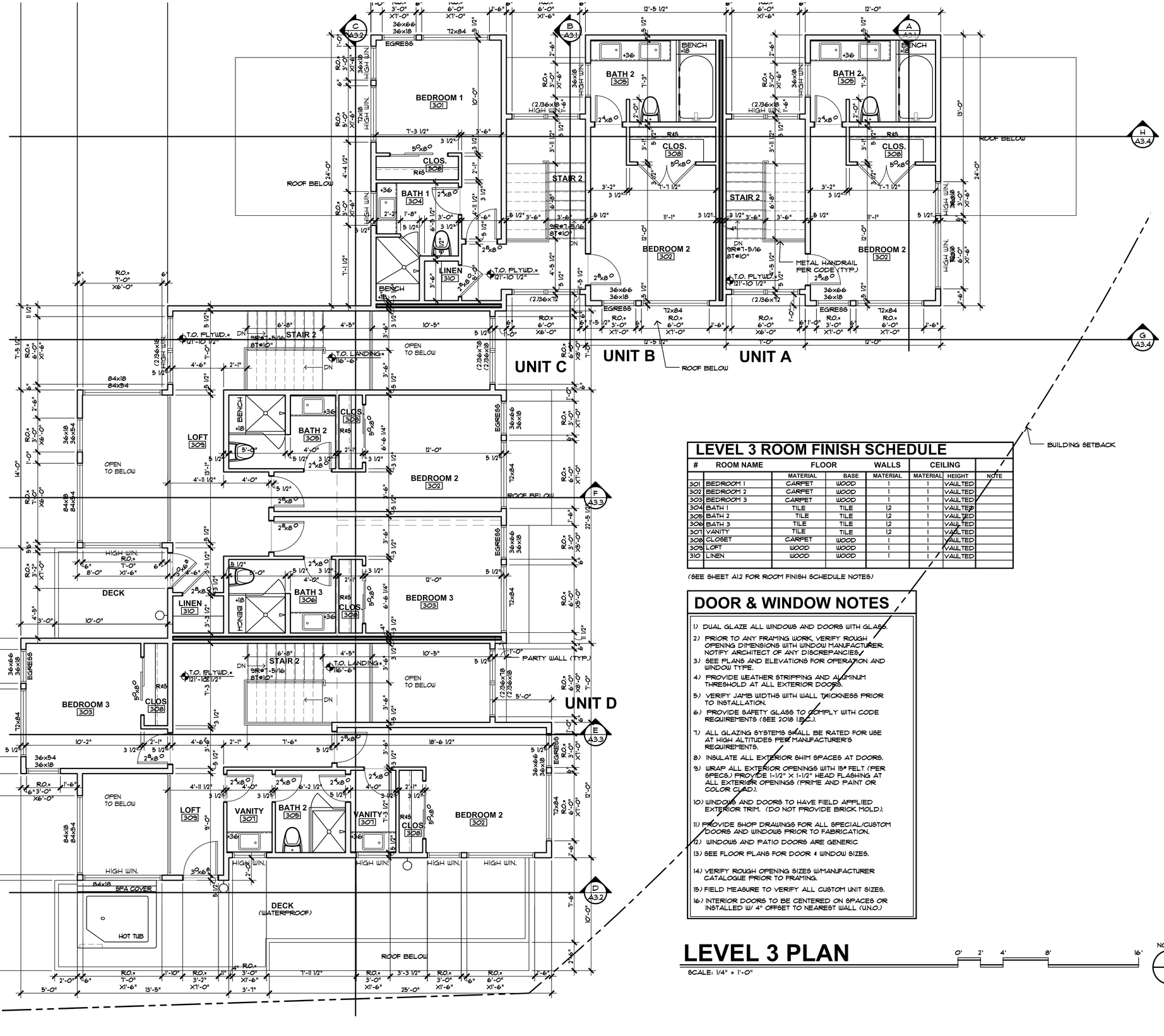
160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

A1.2



LEVEL 3 ROOM FINISH SCHEDULE

#	ROOM NAME	FLOOR		WALLS	CEILING		NOTE
		MATERIAL	BASE	MATERIAL	MATERIAL	HEIGHT	
301	BEDROOM 1	CARPET	WOOD	1	1	VAULTED	
302	BEDROOM 2	CARPET	WOOD	1	1	VAULTED	
303	BEDROOM 3	CARPET	WOOD	1	1	VAULTED	
304	BATH 1	TILE	TILE	1,2	1	VAULTED	
305	BATH 2	TILE	TILE	1,2	1	VAULTED	
306	BATH 3	TILE	TILE	1,2	1	VAULTED	
307	VANITY	TILE	TILE	1,2	1	VAULTED	
308	CLOSET	CARPET	WOOD	1	1	VAULTED	
309	LOFT	WOOD	WOOD	1	1	VAULTED	
310	LINEN	WOOD	WOOD	1	1	VAULTED	

(SEE SHEET A1.2 FOR ROOM FINISH SCHEDULE NOTES)

DOOR & WINDOW NOTES

1) DUAL GLAZE ALL WINDOWS AND DOORS WITH GLASS.
2) PRIOR TO ANY FRAMING WORK, VERIFY ROUGH OPENING DIMENSIONS WITH WINDOW MANUFACTURER. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
3) SEE PLANS AND ELEVATIONS FOR OPERATION AND WINDOW TYPE.
4) PROVIDE WEATHER STRIPPING AND ALUMINUM THRESHOLD AT ALL EXTERIOR DOORS.
5) VERIFY JAMB WIDTHS WITH WALL THICKNESS PRIOR TO INSTALLATION.
6) PROVIDE SAFETY GLASS TO COMPLY WITH CODE REQUIREMENTS (SEE 2018 I.B.C.).
7) ALL GLAZING SYSTEMS SHALL BE RATED FOR USE AT HIGH ALTITUDES PER MANUFACTURER'S REQUIREMENTS.
8) INSULATE ALL EXTERIOR SHIM SPACES AT DOORS.
9) WRAP ALL EXTERIOR OPENINGS WITH 15# FELT (PER SPECS.) PROVIDE 1-1/2" X 1-1/2" HEAD FLASHING AT ALL EXTERIOR OPENINGS (PRIME AND PAINT OR COLOR CLAD).
10) WINDOWS AND DOORS TO HAVE FIELD APPLIED EXTERIOR TRIM. (DO NOT PROVIDE BRICK MOLD).
11) PROVIDE SHOP DRAWINGS FOR ALL SPECIAL/CUSTOM DOORS AND WINDOWS PRIOR TO FABRICATION.
12) WINDOWS AND PATIO DOORS ARE GENERIC
13) SEE FLOOR PLANS FOR DOOR & WINDOW SIZES.
14) VERIFY ROUGH OPENING SIZES W/MANUFACTURER CATALOGUE PRIOR TO FRAMING.
15) FIELD MEASURE TO VERIFY ALL CUSTOM UNIT SIZES.
16) INTERIOR DOORS TO BE CENTERED ON SPACES OR INSTALLED W/ 4" OFFSET TO NEAREST WALL (U.N.O.)

LEVEL 3 PLAN

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

0' 2' 4' 8' 16'

NORTH

REVISIONS:

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DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

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bhh Partners of Colorado
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160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

A1.3

ROOF NOTES:

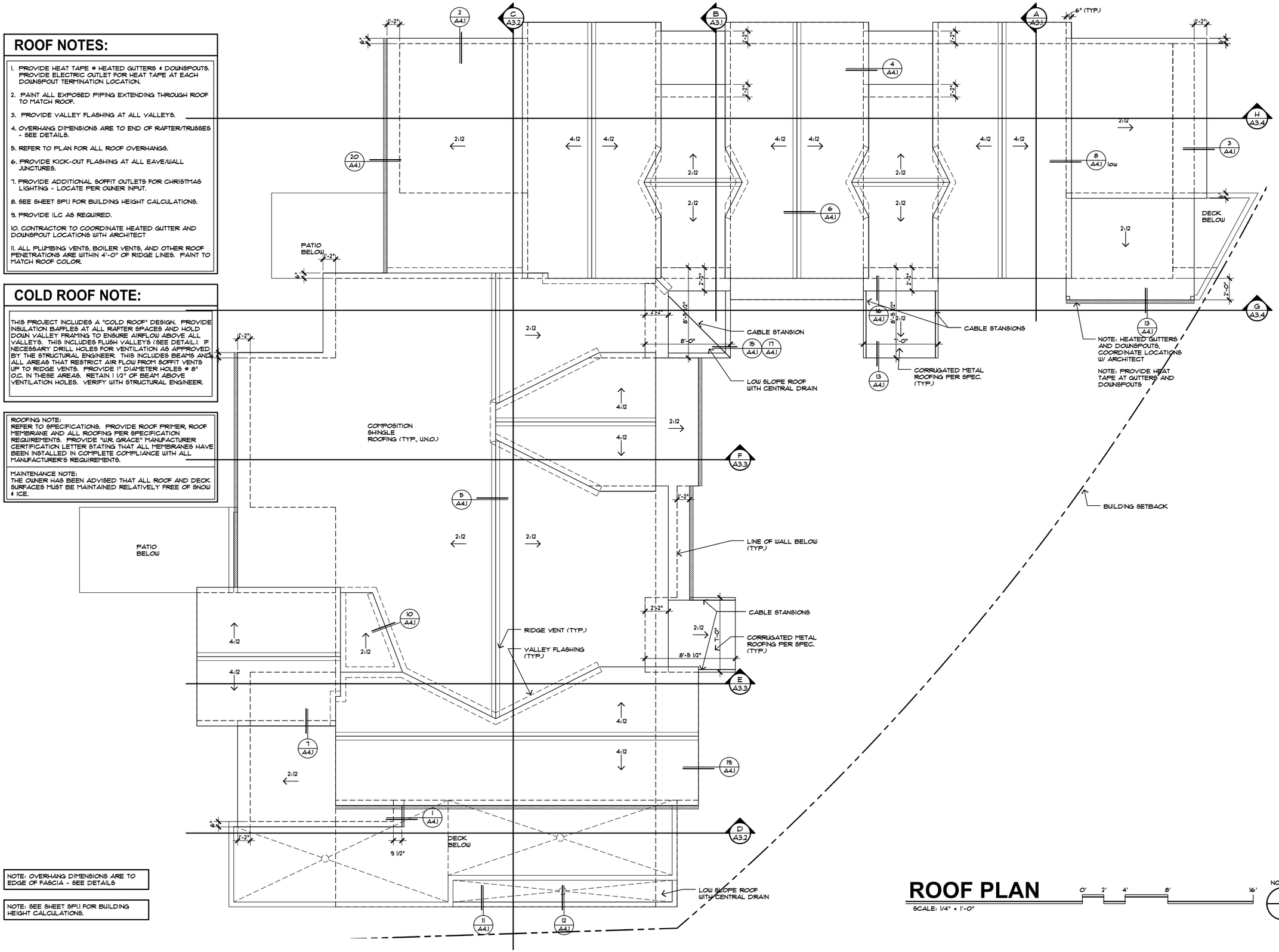
1. PROVIDE HEAT TAPE @ HEATED GUTTERS & DOWNSPOUTS. PROVIDE ELECTRIC OUTLET FOR HEAT TAPE AT EACH DOWNSPOUT TERMINATION LOCATION.
2. PAINT ALL EXPOSED PIPING EXTENDING THROUGH ROOF TO MATCH ROOF.
3. PROVIDE VALLEY FLASHING AT ALL VALLEYS.
4. OVERHANG DIMENSIONS ARE TO END OF RAFTER/TRUSSES - SEE DETAILS.
5. REFER TO PLAN FOR ALL ROOF OVERHANGS.
6. PROVIDE KICK-OUT FLASHING AT ALL EAVE/WALL JUNCTURES.
7. PROVIDE ADDITIONAL SOFFIT OUTLETS FOR CHRISTMAS LIGHTING - LOCATE PER OWNER INPUT.
8. SEE SHEET SP1.1 FOR BUILDING HEIGHT CALCULATIONS.
9. PROVIDE ILC AS REQUIRED.
10. CONTRACTOR TO COORDINATE HEATED GUTTER AND DOWNSPOUT LOCATIONS WITH ARCHITECT
11. ALL PLUMBING VENTS, BOILER VENTS, AND OTHER ROOF PENETRATIONS ARE WITHIN 4'-0" OF RIDGE LINES. PAINT TO MATCH ROOF COLOR.

COLD ROOF NOTE:

THIS PROJECT INCLUDES A "COLD ROOF" DESIGN. PROVIDE INSULATION BAFFLES AT ALL RAFTER SPACES AND HOLD DOWN VALLEY FRAMING TO ENSURE AIRFLOW ABOVE ALL VALLEYS. THIS INCLUDES FLUSH VALLEYS (SEE DETAIL). IF NECESSARY DRILL HOLES FOR VENTILATION AS APPROVED BY THE STRUCTURAL ENGINEER. THIS INCLUDES BEAMS AND ALL AREAS THAT RESTRICT AIR FLOW FROM SOFFIT VENTS UP TO RIDGE VENTS. PROVIDE 1" DIAMETER HOLES @ 8" O.C. IN THESE AREAS. RETAIN 1 1/2" OF BEAM ABOVE VENTILATION HOLES. VERIFY WITH STRUCTURAL ENGINEER.

ROOFING NOTE:
REFER TO SPECIFICATIONS. PROVIDE ROOF PRIMER, ROOF MEMBRANE AND ALL ROOFING PER SPECIFICATION REQUIREMENTS. PROVIDE "W.R. GRACE" MANUFACTURER CERTIFICATION LETTER STATING THAT ALL MEMBRANES HAVE BEEN INSTALLED IN COMPLETE COMPLIANCE WITH ALL MANUFACTURER'S REQUIREMENTS.

MAINTENANCE NOTE:
THE OWNER HAS BEEN ADVISED THAT ALL ROOF AND DECK SURFACES MUST BE MAINTAINED RELATIVELY FREE OF SNOW & ICE.



NOTE: OVERHANG DIMENSIONS ARE TO EDGE OF FASCIA - SEE DETAILS

NOTE: SEE SHEET SP1.1 FOR BUILDING HEIGHT CALCULATIONS.

ROOF PLAN

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

0' 2' 4' 8' 16'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

A1.4

SOUTH ELEVATION

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

0 2' 4' 8' 16'

EAST ELEVATION

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

0 2' 4' 8' 16'

MATERIAL LEGEND

1 COMPOSITION SHINGLE ROOFING	GAF TIMBERLINE ULTRA HD 'CHARCOAL'
2 WOOD FASICA, BEAMS	OLYMPIC SEMI-TRANSPARENT STAIN 'EBONY 913'
3 HORIZONTAL SIDING	OLYMPIC SEMI-TRANSPARENT STAIN 'NATURAL TONE FIR 718'
4 WINDOW / DOOR TRIM	OLYMPIC SEMI-TRANSPARENT STAIN 'RUSSET 705'
5 WINDOW CLADDING, STL. COLS., BEAMS, FLASHING	BLACK
6 MTL. SIDING & ACCENT ROOFING	METAL SALES CORRUGATED 'MATTE BLACK'
7 STONE VENEER BASE	TELLURIDE STONE 'BLANCA PEAK'

NOTE: MATERIALS ARE TYPICAL FOR ALL ELEVATIONS, REFER TO ASSOCIATED COLOR BOARD FOR ADDITIONAL INFORMATION

ELEVATION NOTE

THESE ELEVATIONS ARE GRAPHIC IN NATURE. THE ELEVATIONS ILLUSTRATE EXTERIOR IMAGE AND COLORS. DO NOT SCALE OFF ELEVATIONS FOR THIS PROJECT.

MATERIAL COLORS ARE TYPICAL FOR ALL ELEVATIONS REFER TO COLOR LEGEND, VERIFY ALL COLORS WITH OWNER

SEE BUILDING SECTIONS FOR ADDITIONAL INFORMATION.

NOTE: DOOR AND WINDOW HEAD HEIGHTS ARE SHOWN FROM TOP OF FINISHED FLOOR (TYP.)

REVISIONS:

JOB NO: 12317
DATE: 03/29/24
DRAWN BY: c eckel
CHECKED BY: z levin

ISSUED FOR
MAJOR SITE PLAN FINAL
03/29/24

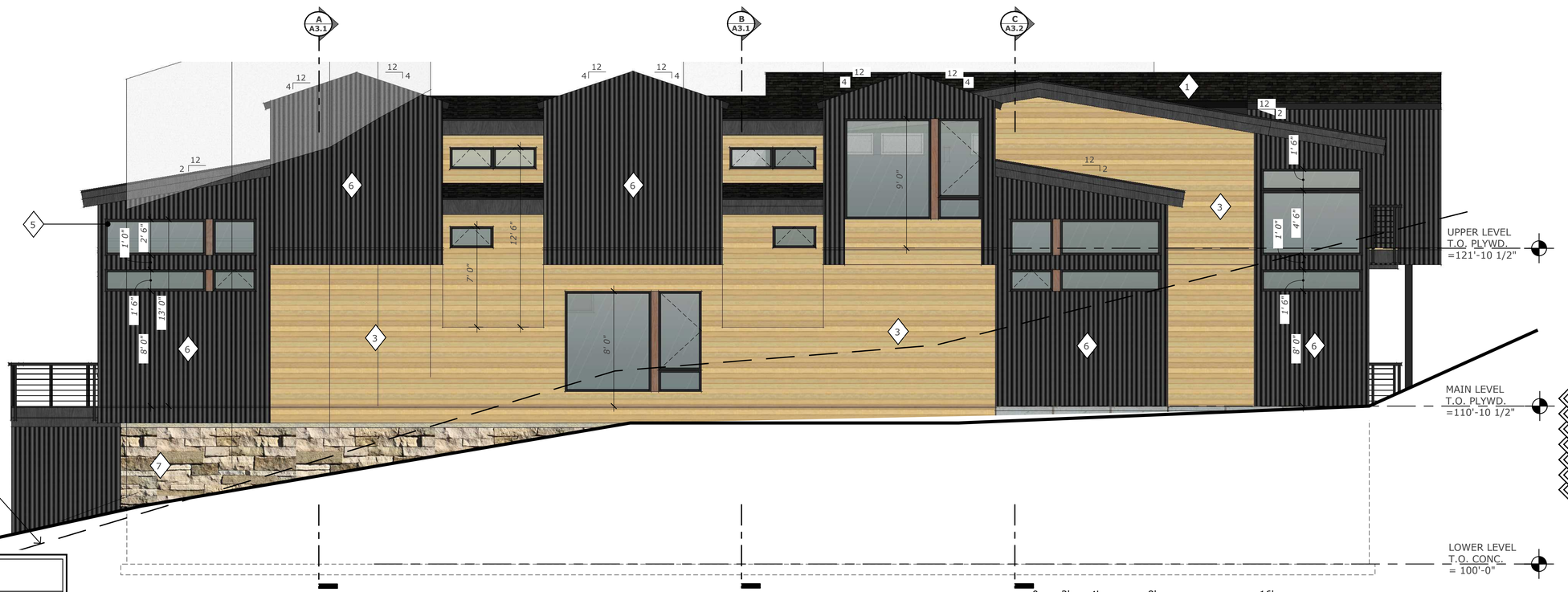
bhh Partners
P.O BOX 931 160 EAST ADAMS BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED WEST FRISCO 70, FILING NO. 2

SHEET NUMBER:

A2.1
ELEVATIONS



NORTH ELEVATION

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

0 2' 4' 8' 16'

WEST ELEVATION

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

0 2' 4' 8' 16'

MATERIAL LEGEND

1 COMPOSITION SHINGLE ROOFING	GAF TIMBERLINE ULTRA HD 'CHARCOAL'
2 WOOD FASICA, BEAMS	OLYMPIC SEMI-TRANSPARENT STAIN 'EBONY 913'
3 HORIZONTAL SIDING	OLYMPIC SEMI-TRANSPARENT STAIN 'NATURAL TONE FIR 718'
4 WINDOW / DOOR TRIM	OLYMPIC SEMI-TRANSPARENT STAIN 'RUSSET 705'
5 WINDOW CLADDING, STL. COLS., BEAMS, FLASHING	BLACK
6 MTL. SIDING & ACCENT ROOFING	METAL SALES CORRUGATED 'MATTE BLACK'
7 STONE VENEER BASE	TELLURIDE STONE 'BLANCA PEAK'

NOTE: MATERIALS ARE TYPICAL FOR ALL ELEVATIONS, REFER TO ASSOCIATED COLOR BOARD FOR ADDITIONAL INFORMATION

ELEVATION NOTE

THESE ELEVATIONS ARE GRAPHIC IN NATURE. THE ELEVATIONS ILLUSTRATE EXTERIOR IMAGE AND COLORS. DO NOT SCALE OFF ELEVATIONS FOR THIS PROJECT.

MATERIAL COLORS ARE TYPICAL FOR ALL ELEVATIONS REFER TO COLOR LEGEND,
VERIFY ALL COLORS WITH OWNER

SEE BUILDING SECTIONS FOR ADDITIONAL INFORMATION.

NOTE: DOOR AND WINDOW HEAD HEIGHTS ARE SHOWN FROM TOP OF FINISHED FLOOR (TYP.)

REVISIONS:

JOB NO: 12317
DATE: 03/29/24
DRAWN BY: c eckel
CHECKED BY: z levin

ISSUED FOR
MAJOR SITE PLAN FINAL
03/29/24

bhh Partners
P.O BOX 931 160 EAST ADAMS BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE
LOT 2, AMENDED WEST FRISCO 70, FILING NO. 2

SHEET NUMBER:
A2.2
ELEVATIONS

BUILDING ENVELOPE

ROOF/CEILING:	R60 CLOSE CELL FOAM
ABOVE GRADE WALLS:	R23 CLOSED CELL FOAM
SLABS, INCLUDING EDGE:	R10 CLOSED CELL OR RIGID INSULATION
FENESTRATIONS:	MAX U 0.23
FLOOR:	R38 BLOWN-IN BATT INSULATION
BASEMENT/CRAWL SPACE WALL:	R5 CONTINUOUS CLOSED CELL FOAM INSULATION and R13 CAVITY INSULATION
BLOWER DOOR:	ACH 1.6 AT A PRESSURE 2 INCHES W.G. (50 PASCALS)

THIS PROJECT IS GOVERNED UNDER THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AND 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AS ADOPTED BY FRISCO & THEIR ASSOCIATED AMENDMENTS.

SUSTAINABILITY NOTES:

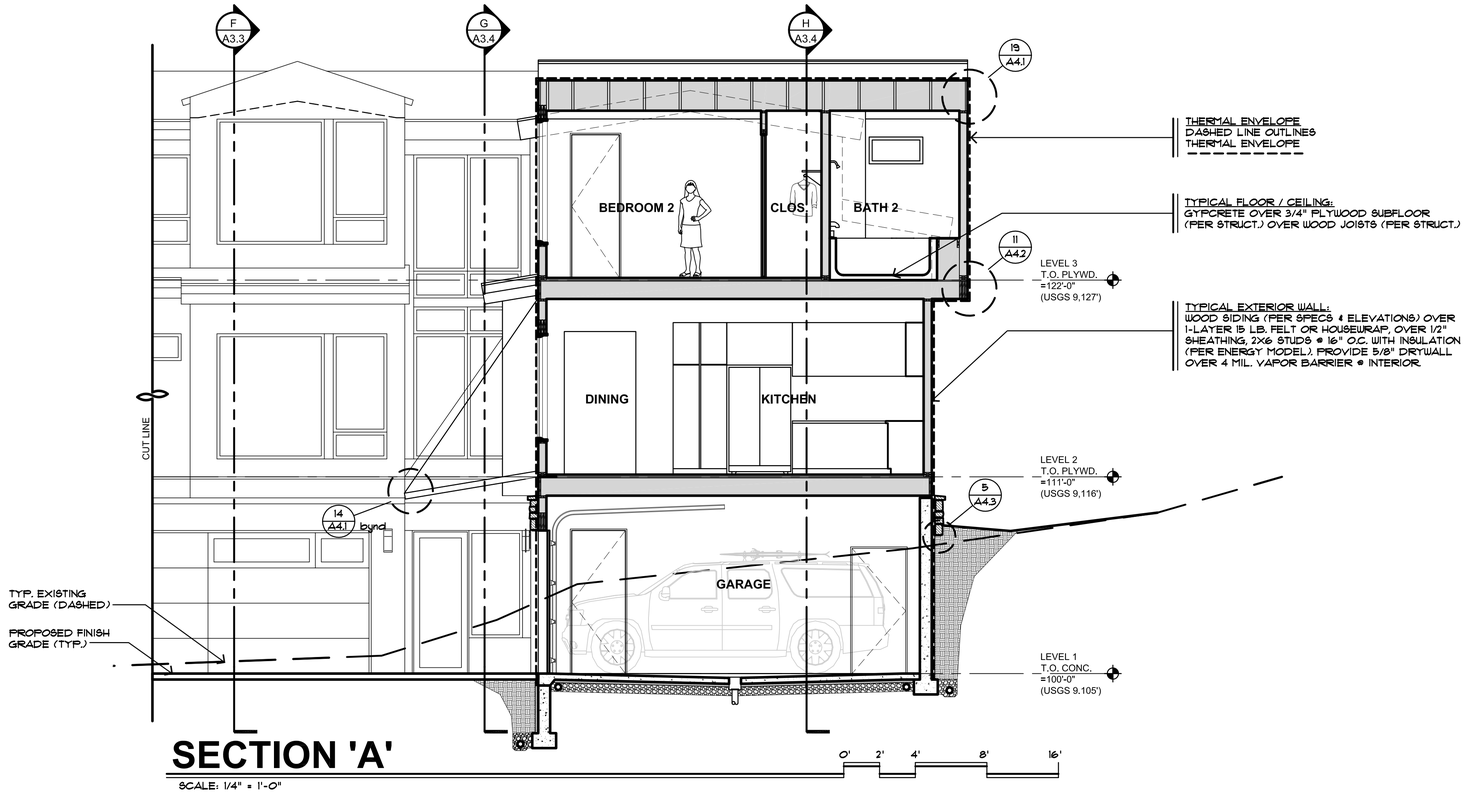
PER 2021 IECC PRESCRIPTIVE OPTION PROVIDE:

1. Radiant heating system, minimum 95% AFUE.
2. High-efficacy LED lights, minimum 100%.
3. Energy efficient water heater: Gas, minimum 0.76 energy factor.
4. Provide an electrical car charging rough in, including a blanked electrical box, and a raceway terminating in the electrical panel per Article 625 of the 2020 NEC.
5. Provide PV ready construction including a metal raceway from the electrical panel to the roof location where the panels will be installed, including a roof jack, a #8 copper ground, a 2 pull blank in the electrical panel and an electrical conduit from the electrical panel out to the electric meter.
6. WaterSense fixtures throughout.
7. HRV/ ERV, 65% sensible heat recovery efficiency, meeting minimum airflow rates per IRC installed.
8. Maximum 30% of exterior walls to be fenestrations (See sheet A2.1 for for calculation).
9. Programmable thermostats.

AIR BARRIER REQUIREMENTS

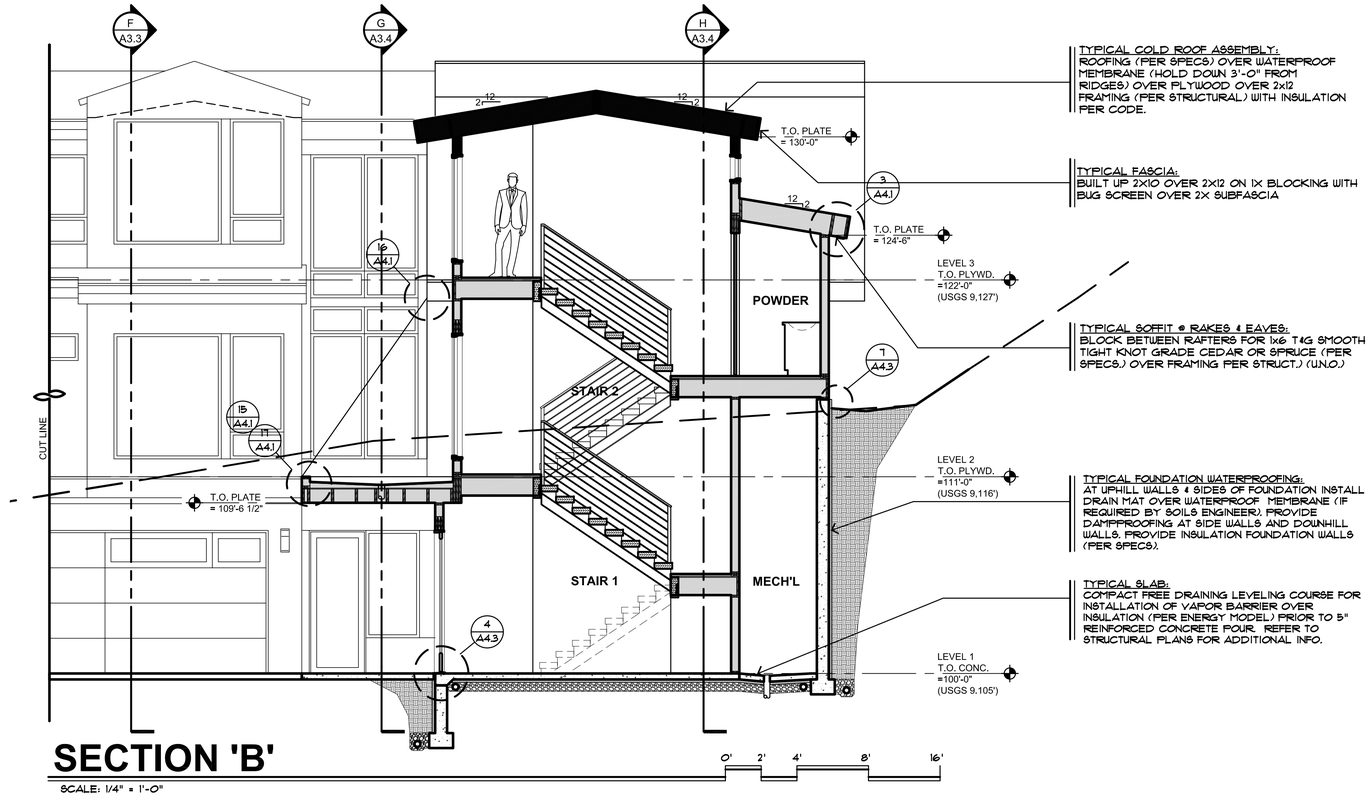
PROVIDE SEALED AIR BARRIER CONSTRUCTION PER INTERNATIONAL ENERGY CODE REQUIREMENTS AS ADOPTED BY THE LOCAL BUILDING DEPARTMENT FOR THIS PROJECT. WORK SHALL INCLUDE THE FOLLOWING AS APPLICABLE TO THE SPECIFIC PROJECT:

1. EXTERIOR BUILDING ENVELOPE
   - PROVIDE CONTINUOUS SEALANT BEAD AROUND ALL ELECTRICAL & ENVIRONMENTAL AIR PENETRATIONS AT THE EXTERIOR BUILDING ENVELOPE.
2. EXTERIOR FLOOR PLATES
   - PROVIDE CONTINUOUS SEALANT BEAD BETWEEN PLYWOOD OR SLABS AND BOTTOM PLATE OF EXTERIOR FRAMING.
3. GARAGE SEALS
   - PROVIDE CONTINUOUS SEALANT BEAD BETWEEN CONDITIONED SPACE & GARAGE SPACE TO INCLUDE FLOOR PLATES, RIM JOISTS, ATTIC TOP PLATES, & WALL PLATES.
4. INTERIOR BATH TUBS & SHOWERS ADJACENT TO EXTERIOR WALLS
   - PROVIDE CONTINUOUS SEALANT BEAD BETWEEN FLOOR PLATES AND FLOORING AT TUBS THAT ARE LOCATED ADJACENT TO ANY EXTERIOR WALL. PROVIDE CONTINUOUS SEALANT BEAD BETWEEN DRYWALL AND CEMENT BOARD AT ANY JOINTS AT EXTERIOR WALLS.
5. INTERIOR RIM FLOOR BOARDS
   - PROVIDE CONTINUOUS SEALANT BEAD AT CEILING AND FLOOR PLATES AND AT TOP AND BOTTOM OF EXTERIOR RIM BOARD CONSTRUCTION.
6. ATTIC & EAVE BAFFLE CONSTRUCTION
   - PROVIDE CONTINUOUS SEALANT BEAD AT BOTH CUT ROOFS & ATTIC TRUSSES.
7. INTERIOR SOFFITS, EXTERIOR WALLS, & EXTERIOR CEILINGS
   - PROVIDE CONTINUOUS SEALANT BEAD AT TOP PLATES AND ALL DRYWALL JOINTS PRIOR TO INTERIOR SOFFIT CONSTRUCTION. (CONTINUOUS DRYWALL TO BE PROVIDED AT ALL EXTERIOR WALLS AND CEILINGS PRIOR TO ANY SOFFIT CONSTRUCTION). PROVIDE SEALANT BEAD AT ALL SOFFIT JUNCTURES AT ALL EXTERIOR WALLS AND CEILINGS.
8. INSULATED CANTILEVERED FLOORS
   - PROVIDE CONTINUOUS SEALANT BEAD AT EXTERIOR LOWER PLATE AT CANTILEVER, AT TOP AND BOTTOM OF RIM OF RIM BOARDS AT EXTERIOR CANTILEVER, AND AT BOTTOM PLATE AT EXTERIOR WALL AT CANTILEVER.
9. RECESSED CAN LIGHTING AT EXTERIOR CEILINGS & ATTICS
   - PROVIDE CONTINUOUS SEALANT BEAD AT ALL CAN LIGHTS AT CEILING PLANE. PROVIDE SEALED UNITS OR PROVIDE CONTINUOUS SEALANT BEAD AT ALL CAN LIGHT HOUSING EDGES AND OPENINGS.
10. FIREPLACE PLATFORMS AT EXTERIOR WALLS
    - PROVIDE CONTINUOUS SEALANT BEAD AROUND ALL FRAMING PRIOR TO FIREPLACE PLATFORM CONSTRUCTION. PROVIDE DRYWALL ON ALL SURFACE PRIOR TO PLATFORM OR FIREPLACE CHASE CONSTRUCTION.
11. TOP PLATE PLUMBING & ELECTRICAL PENETRATIONS AT EXTERIOR WALLS
    - PROVIDE CONTINUOUS SEALANT OR EXPANDING FOAM SEALANT AT ALL PLUMBING PENETRATIONS AT EXTERIOR WALLS TO INCLUDE TOP PLATES.
12. ATTIC ACCESS HATCHES
    - PROVIDE MINIMUM OF 1 INCH RIGID INSULATION AT ALL ATTIC ACCESS HATCHES. INSTALL HATCHES TO PROVIDE AIR TIGHT CONSTRUCTION. PROVIDE CONTINUOUS SEALANT BEAD AROUND ALL FRAMING PRIOR TO ATTIC ACCESS HATCH INSULATION.



SECTION 'A'

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



SECTION 'B'

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

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: T SHAFFER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

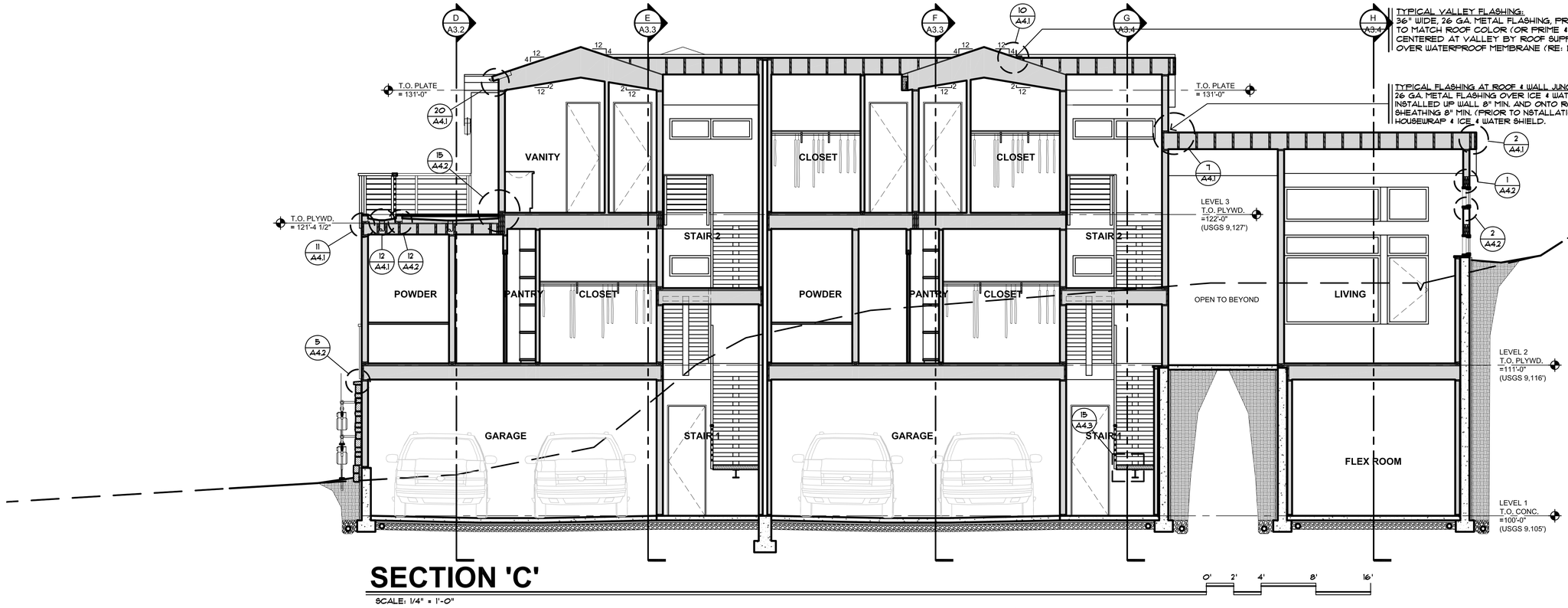
bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

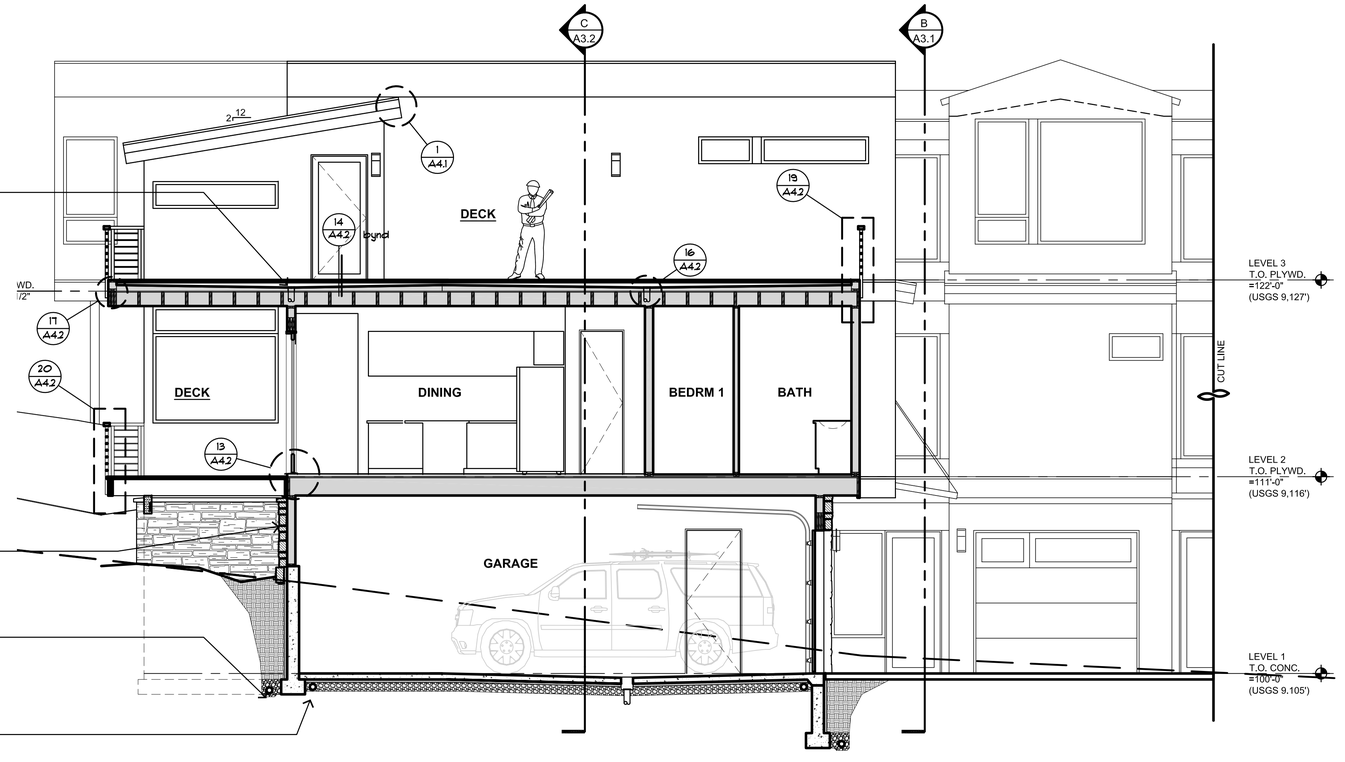
A3.1



SECTION 'C'

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

0' 2' 4' 8' 16'



SECTION 'D'

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

0' 2' 4' 8' 16'

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: T SHAFFER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

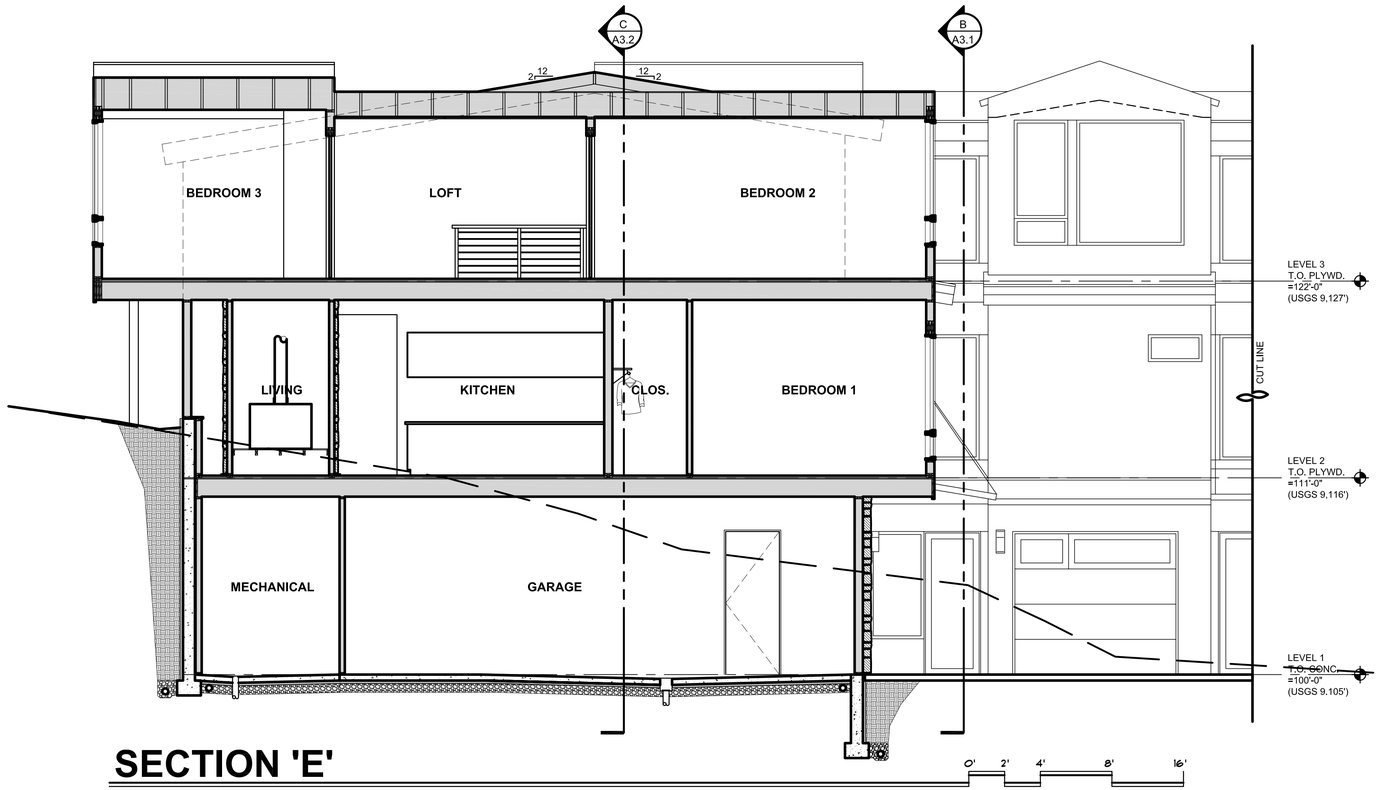
bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

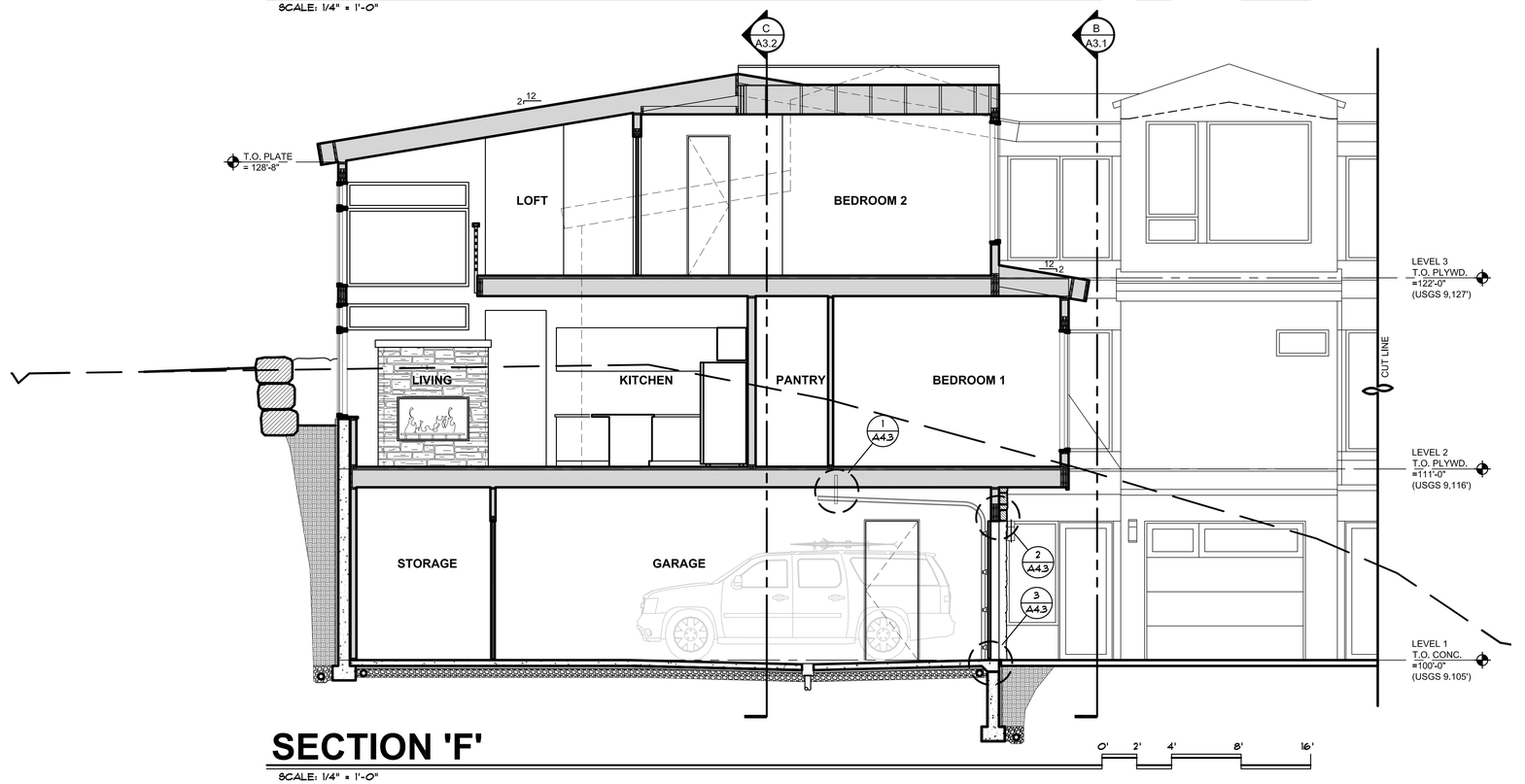
A3.2



SECTION 'E'

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

0' 2' 4' 8' 16'



SECTION 'F'

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

0' 2' 4' 8' 16'

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: T SHAFFER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

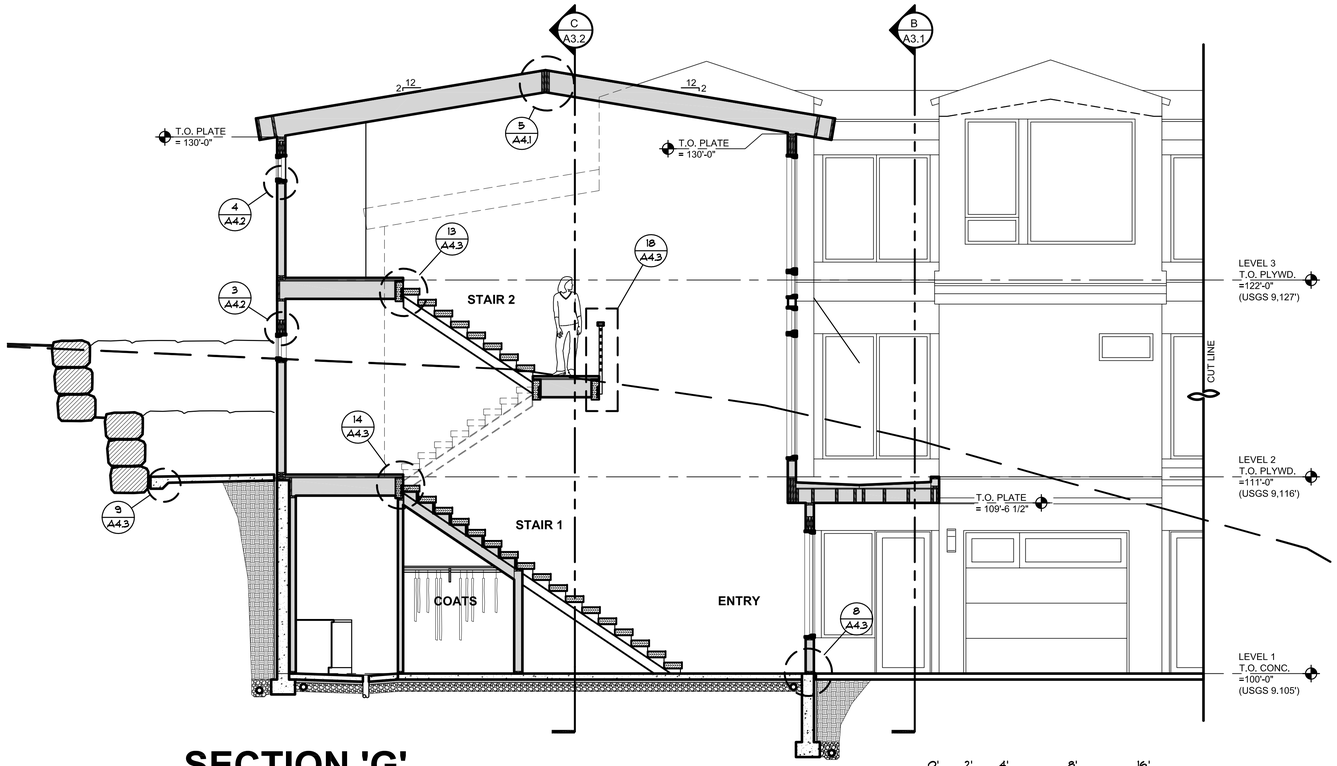
bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

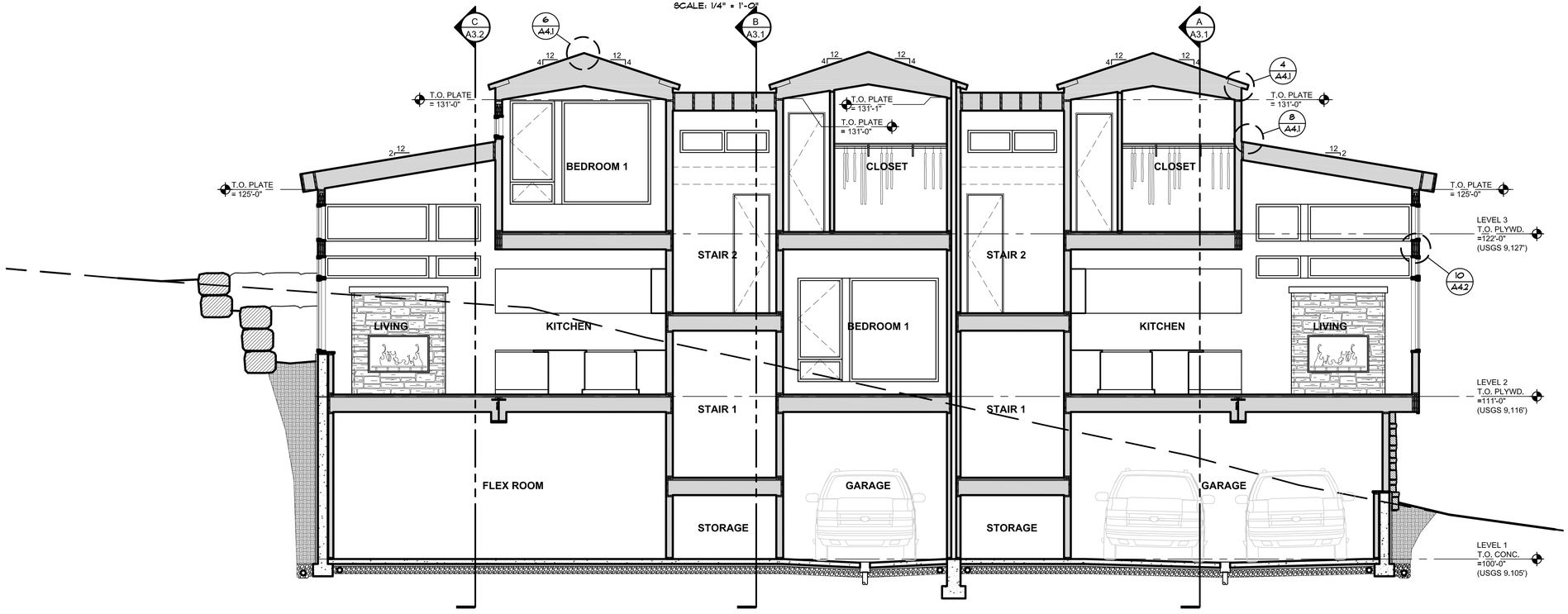
A3.3



SECTION 'G'

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

0' 2' 4' 8' 16'



SECTION 'H'

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

0' 2' 4' 8' 16'

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: T SHAFFER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24

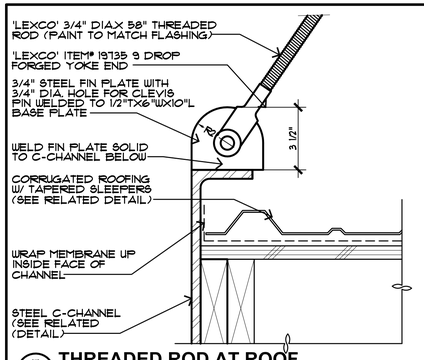
hhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

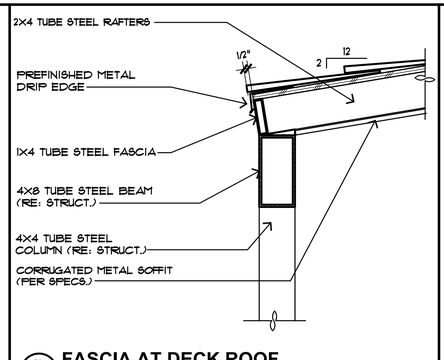
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

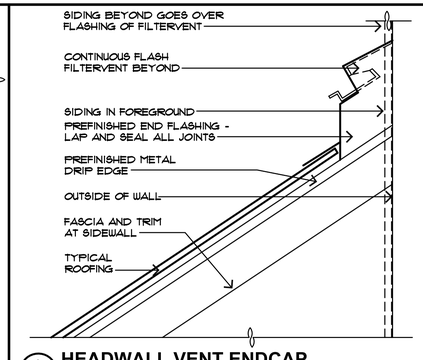
A3.4



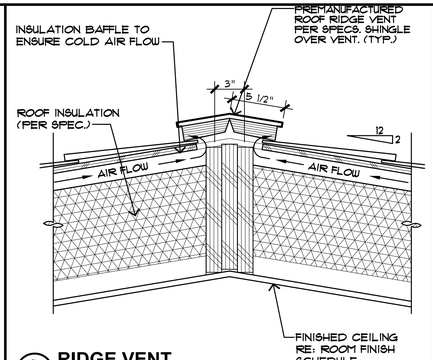
17 / A4.1 — THREADED ROD AT ROOF
3" = 1'-0"



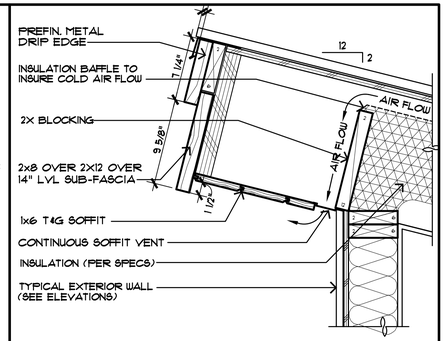
13 / A4.1 — FASCIA AT DECK ROOF
1 1/2" = 1'-0"



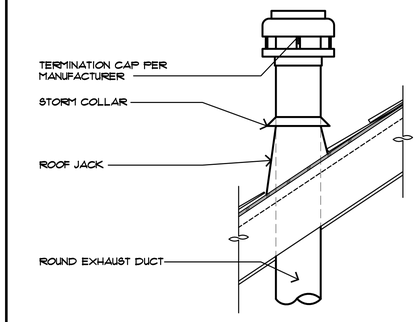
9 / A4.1 — HEADWALL VENT ENDCAP
1 1/2" = 1'-0"



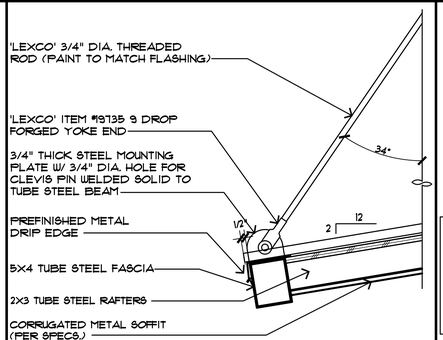
5 / A4.1 — RIDGE VENT
1 1/2" = 1'-0"



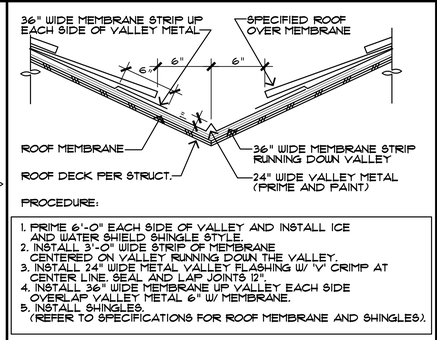
1 / A4.1 — FASCIA AT UPPER EAVE
1 1/2" = 1'-0"



18 / A4.1 — ROOF VENT TERMINATION
3/4" = 1'-0"



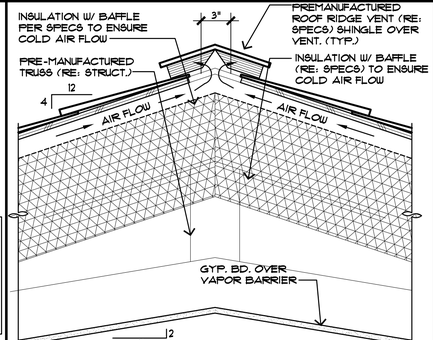
14 / A4.1 — FASCIA AT SLOPED ENTRY ROOF
1 1/2" = 1'-0"



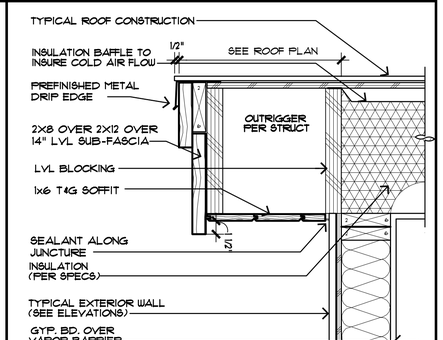
PROCEDURE:

1. PRIME 6'-0" EACH SIDE OF VALLEY AND INSTALL ICE AND WATER SHIELD SHINGLE STYLE.
2. INSTALL 3'-0" WIDE STRIP OF MEMBRANE CENTERED ON VALLEY RUNNING DOWN THE VALLEY.
3. INSTALL 24" WIDE METAL VALLEY FLASHING W/ 'V' CRIMP AT CENTER LINE. SEAL AND LAP JOINTS 12".
4. INSTALL 36" WIDE MEMBRANE UP VALLEY EACH SIDE OVERLAP VALLEY METAL 6" W/ MEMBRANE.
5. INSTALL SHINGLES. (REFER TO SPECIFICATIONS FOR ROOF MEMBRANE AND SHINGLES).

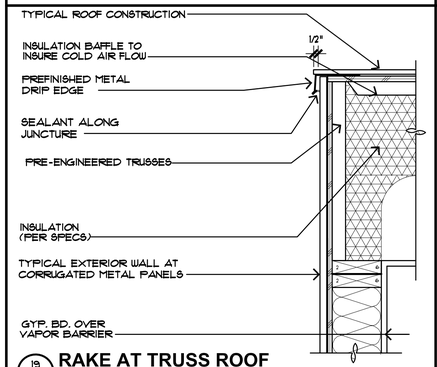
10 / A4.1 — VALLEY FLASHING
1 1/2" = 1'-0"



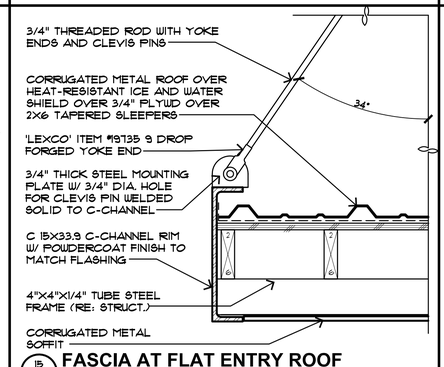
6 / A4.1 — RIDGE VENT AT TRUSS
1 1/2" = 1'-0"



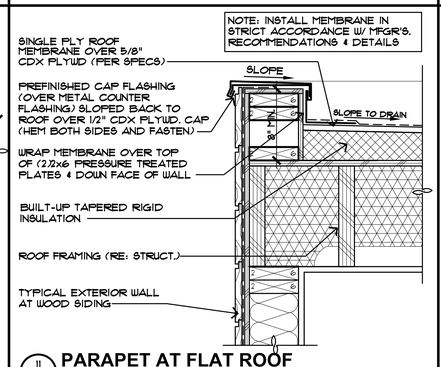
2 / A4.1 — FASCIA AT RAKE
1 1/2" = 1'-0"



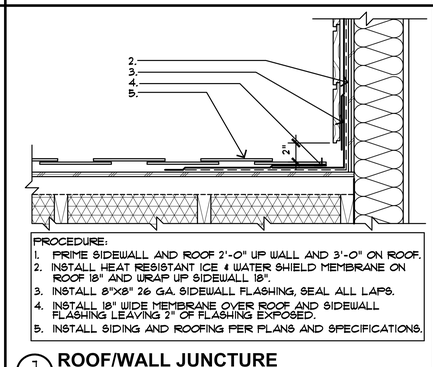
19 / A4.1 — RAKE AT TRUSS ROOF
1 1/2" = 1'-0"



15 / A4.1 — FASCIA AT FLAT ENTRY ROOF
1 1/2" = 1'-0"



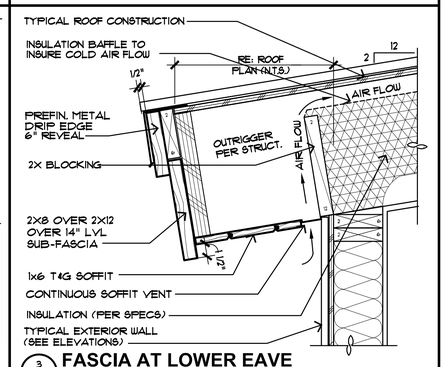
11 / A4.1 — PARAPET AT FLAT ROOF
1 1/2" = 1'-0"



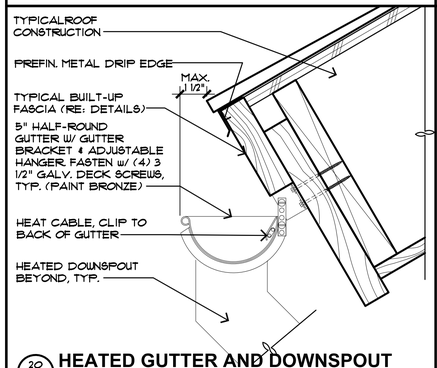
PROCEDURE:

1. PRIME SIDEWALL AND ROOF 2'-0" UP WALL AND 3'-0" ON ROOF.
2. INSTALL HEAT RESISTANT ICE & WATER SHIELD MEMBRANE ON ROOF 18" AND WRAP UP SIDEWALL 18".
3. INSTALL 8"X8" 26 GA. SIDEWALL FLASHING, SEAL ALL LAPS.
4. INSTALL 18" WIDE MEMBRANE OVER ROOF AND SIDEWALL FLASHING LEAVING 2" OF FLASHING EXPOSED.
5. INSTALL SIDING AND ROOFING PER PLANS AND SPECIFICATIONS.

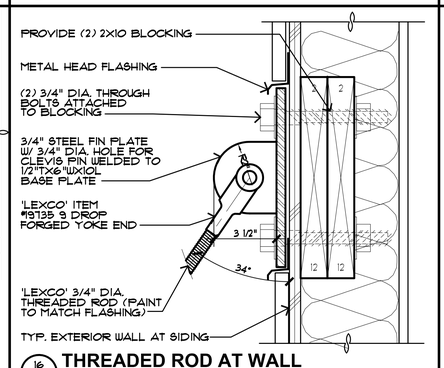
7 / A4.1 — ROOF/WALL JUNCTURE
1 1/2" = 1'-0"



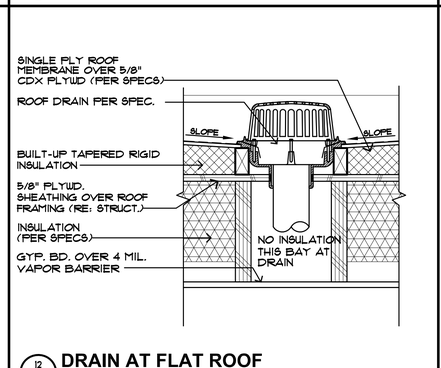
3 / A4.1 — FASCIA AT LOWER EAVE
1 1/2" = 1'-0"



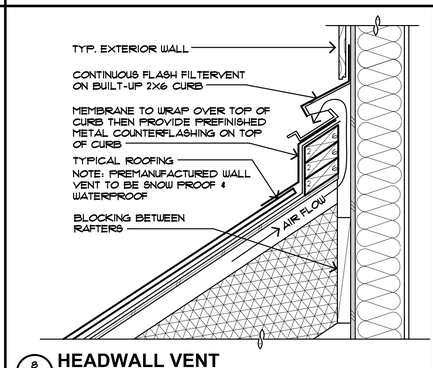
20 / A4.1 — HEATED GUTTER AND DOWNSPOUT
3" = 1'-0"



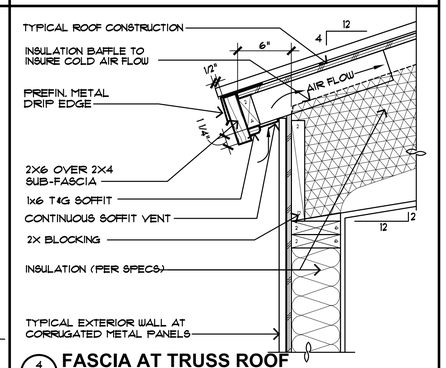
16 / A4.1 — THREADED ROD AT WALL
3" = 1'-0"



12 / A4.1 — DRAIN AT FLAT ROOF
1 1/2" = 1'-0"



8 / A4.1 — HEADWALL VENT
1 1/2" = 1'-0"



4 / A4.1 — FASCIA AT TRUSS ROOF
1 1/2" = 1'-0"

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J.BUXKEMPER
CHECKED BY: Z.LEVIN

ISSUED FOR:
SITE PLAN FINAL
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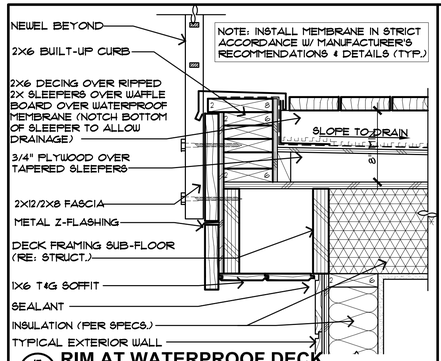
bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

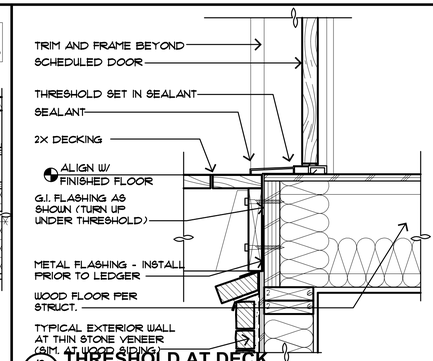
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

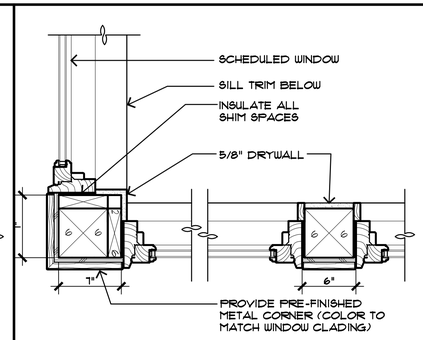
A4.1



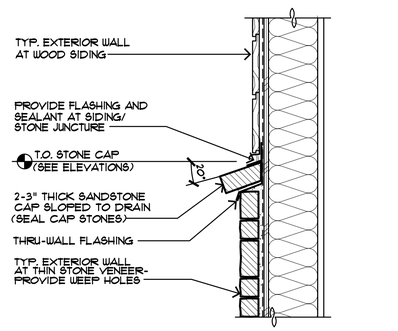
17 / A42 **RIM AT WATERPROOF DECK**
1 1/2" = 1'-0"



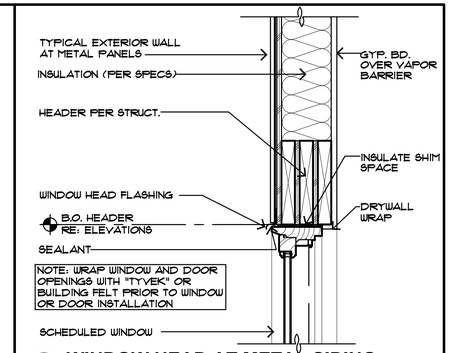
13 / A42 **THRESHOLD AT DECK**
1 1/2" = 1'-0"



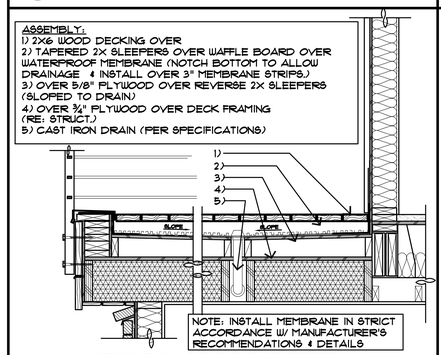
9 / A42 **TRIM AT CORNER WINDOW**
1 1/2" = 1'-0"



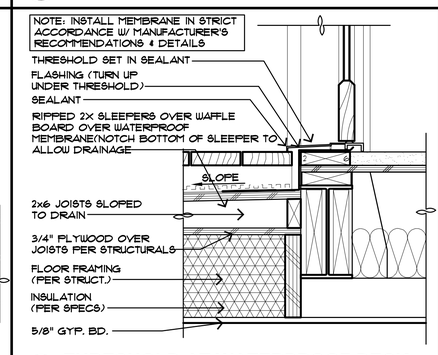
5 / A42 **STONE CAP AT STONE VENEER**
1 1/2" = 1'-0"



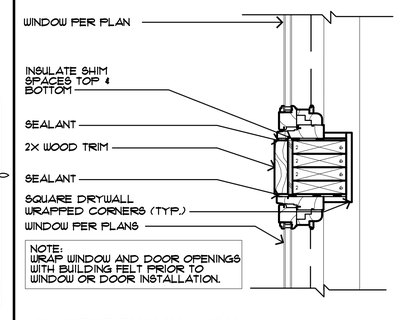
1 / A42 **WINDOW HEAD AT METAL SIDING**
1 1/2" = 1'-0"



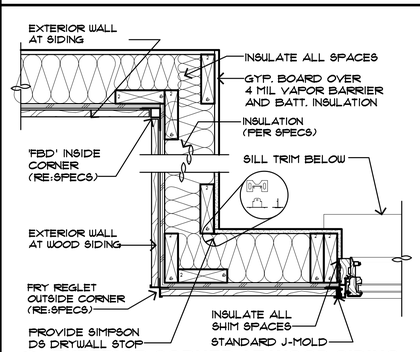
18 / A42 **WATERPROOF DECK ASSEMBLY**
3/4" = 1'-0"



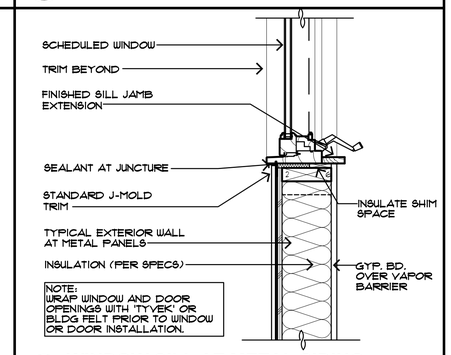
14 / A42 **THRESHOLD AT WATERPROOF DECK**
1 1/2" = 1'-0"



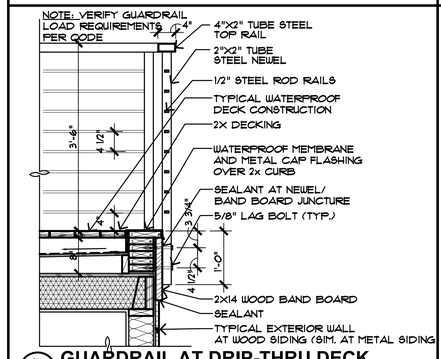
10 / A42 **WINDOW MULLION**
1 1/2" = 1'-0"



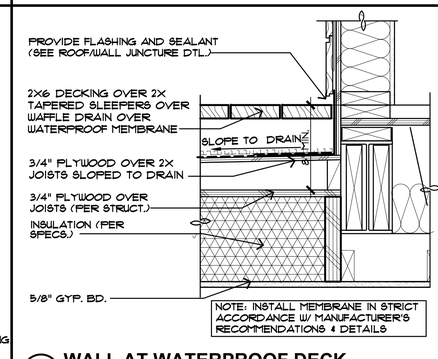
6 / A42 **EXTERIOR CORNER AT WOOD SIDING**
1 1/2" = 1'-0"



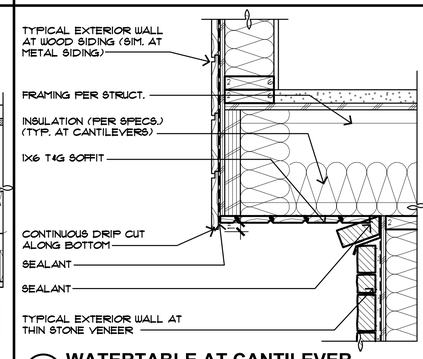
2 / A42 **WINDOW SILL AT METAL SIDING**
1 1/2" = 1'-0"



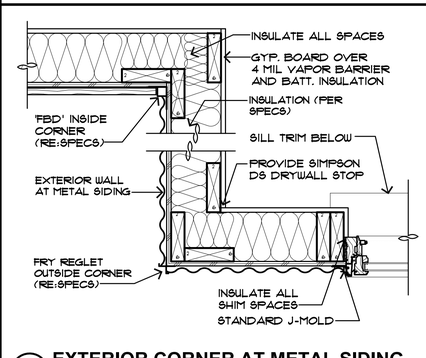
19 / A42 **GUARDRAIL AT DRIP-THRU DECK**
3/4" = 1'-0"



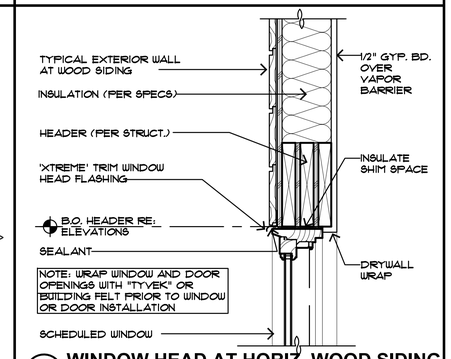
15 / A42 **WALL AT WATERPROOF DECK**
1 1/2" = 1'-0"



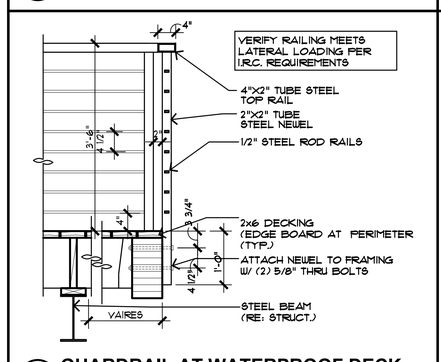
11 / A42 **WATERTABLE AT CANTILEVER**
1 1/2" = 1'-0"



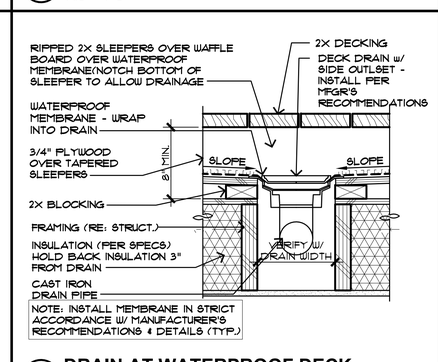
7 / A42 **EXTERIOR CORNER AT METAL SIDING**
1 1/2" = 1'-0"



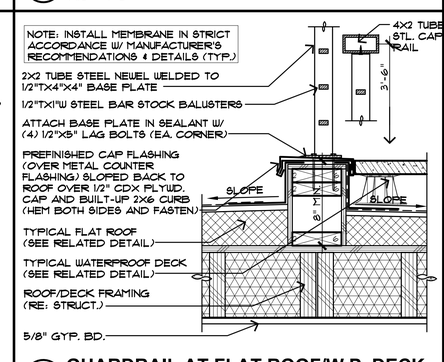
3 / A42 **WINDOW HEAD AT HORIZ. WOOD SIDING**
1 1/2" = 1'-0"



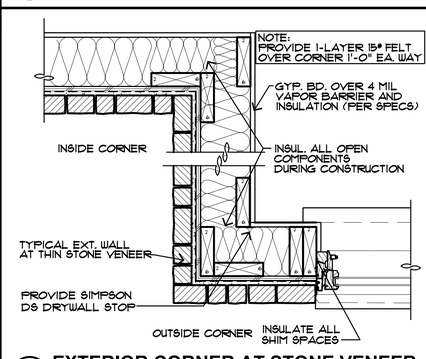
20 / A42 **GUARDRAIL AT WATERPROOF DECK**
3/4" = 1'-0"



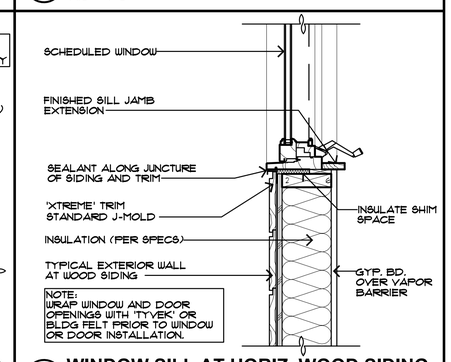
16 / A42 **DRAIN AT WATERPROOF DECK**
1 1/2" = 1'-0"



12 / A42 **GUARDRAIL AT FLAT ROOF/W.P. DECK**
1 1/2" = 1'-0"



8 / A42 **EXTERIOR CORNER AT STONE VENEER**
1 1/2" = 1'-0"



4 / A42 **WINDOW SILL AT HORIZ. WOOD SIDING**
1 1/2" = 1'-0"

REVISIONS:

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bhh Partners of Colorado
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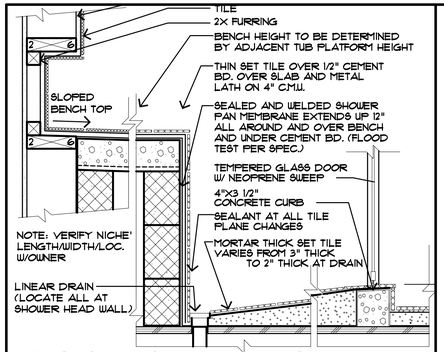
160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

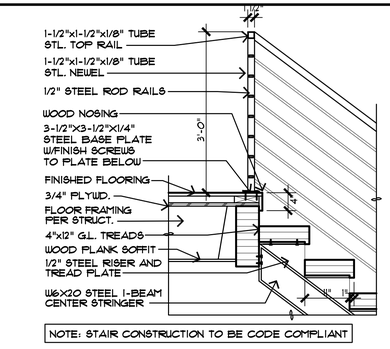
SHEET NUMBER:

A4.2



17 A4.3 **SHOWER CURB AND BENCH**

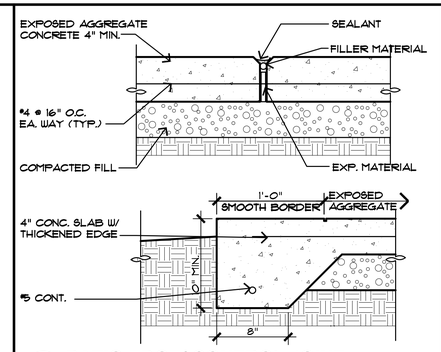
1 1/2" = 1'-0"



NOTE: STAIR CONSTRUCTION TO BE CODE COMPLIANT

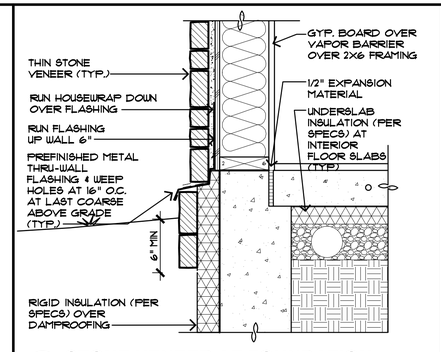
13 A4.3 **STAIR HEAD**

3/4" = 1'-0"



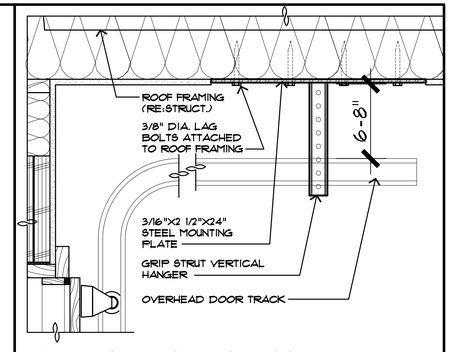
9 A4.3 **PATIO EDGE/ CONTROL JOINT**

1 1/2" = 1'-0"



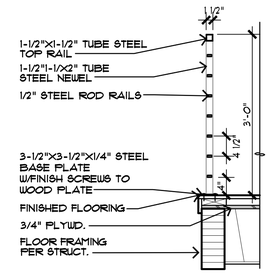
5 A4.3 **STONE VENEER AT FOUNDATION**

1 1/2" = 1'-0"



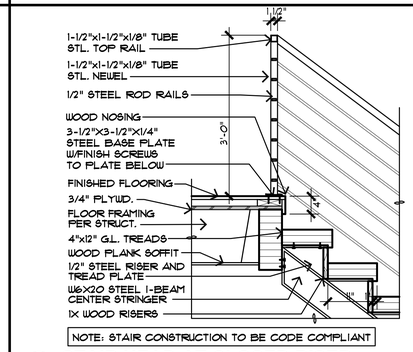
1 A4.3 **TRACK AT GARAGE DOOR**

1 1/2" = 1'-0"



18 A4.3 **INTERIOR GUARDRAIL**

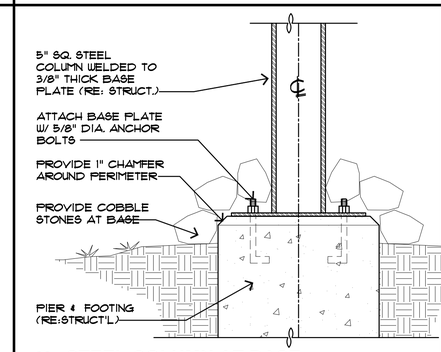
3/4" = 1'-0"



NOTE: STAIR CONSTRUCTION TO BE CODE COMPLIANT

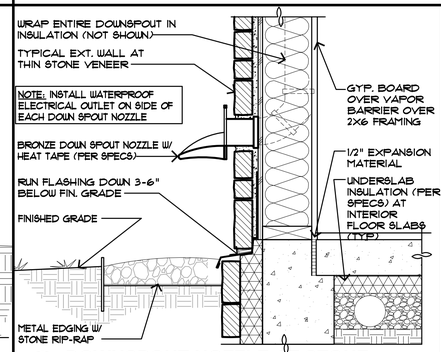
14 A4.3 **STAIR HEAD AT CLOSED RISER**

3/4" = 1'-0"



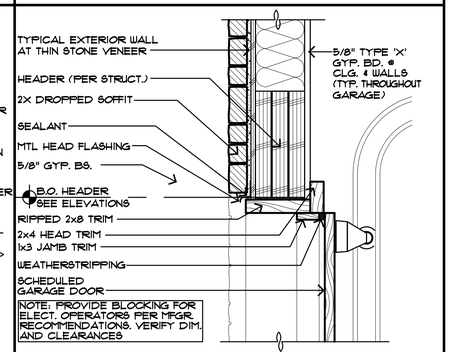
10 A4.3 **STEEL COLUMN AT BASE**

3/4" = 1'-0"



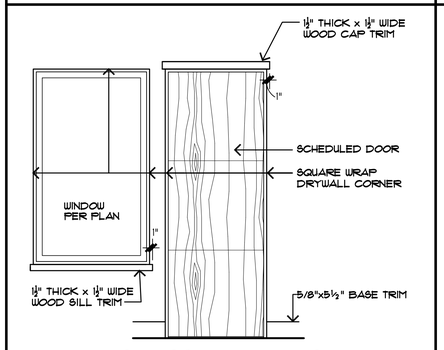
6 A4.3 **DOWNSPOUT NOZZLE AT STONE**

1 1/2" = 1'-0"



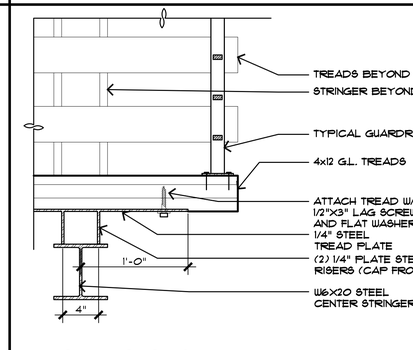
2 A4.3 **HEAD AT GARAGE DOOR**

1 1/2" = 1'-0"



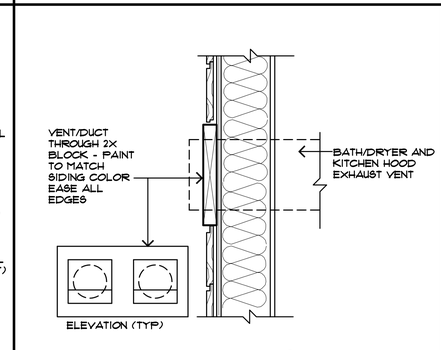
19 A4.3 **INTERIOR DOOR AND WINDOW TRIM**

1/2" = 1'-0"



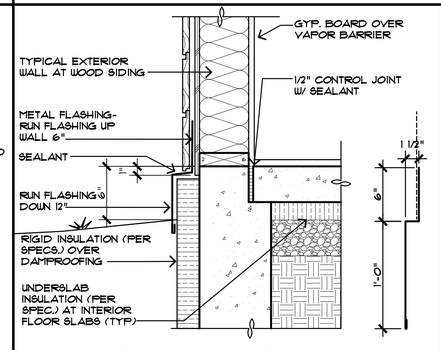
15 A4.3 **STAIR SECTION**

1 1/2" = 1'-0"



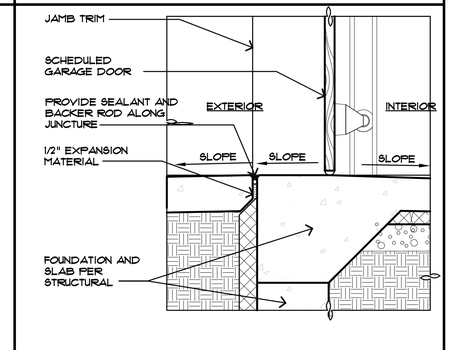
11 A4.3 **WALL VENT TERMINATION**

1 1/2" = 1'-0"



7 A4.3 **SIDING AT FOUNDATION**

1 1/2" = 1'-0"

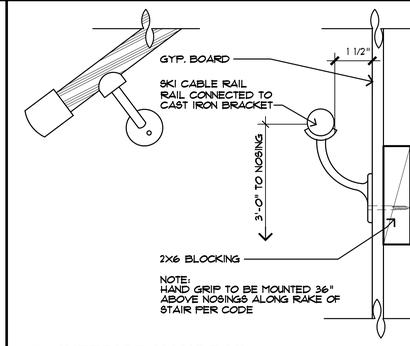


3 A4.3 **THRESHOLD AT GARAGE DOOR**

1 1/2" = 1'-0"

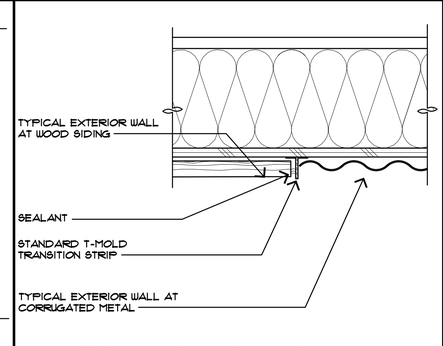
20 A4.3 **BLANK**

1 1/2" = 1'-0"



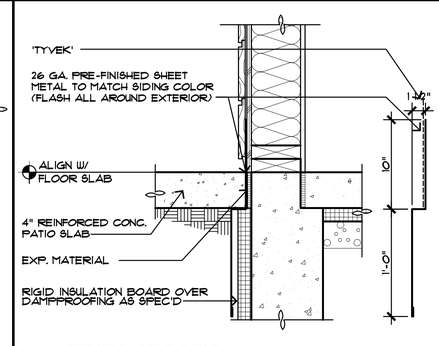
16 A4.3 **INTERIOR HANDRAIL**

3" = 1'-0"



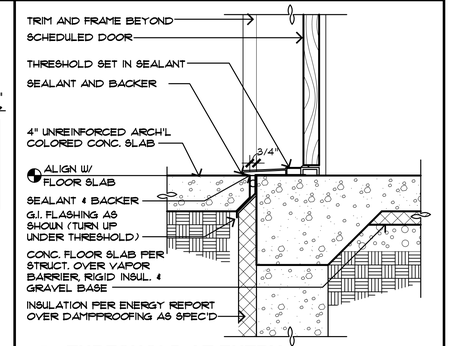
12 A4.3 **VERTICAL TRANSITION STRIP**

3" = 1'-0"



8 A4.3 **SIDING AT PATIO**

1 1/2" = 1'-0"



4 A4.3 **THRESHOLD AT ENTRY**

1 1/2" = 1'-0"

REVISIONS:

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ISSUED FOR:
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bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80498 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

A4.3

160 FOREST DRIVE

GENERAL NOTES

1) COPYRIGHT:
All plans, designs, and concepts shown in these drawings are the exclusive property of BHH Partners, Planners and Architects, A.I.A./P.C. and shall not be used, disclosed, or reproduced for any purpose whatsoever without the Architect's written permission.

2) CODES:
This project is governed by the 2018 International Building Code as adopted by the Town of Frisco Colorado. Code compliance is mandatory. The drawings and specifications shall not permit work that does not conform to these codes. The General Contractor and Subcontractors shall be responsible for satisfying all applicable codes and obtaining all permits and required approvals. Building areas are shown for code purposes only and shall be recalculated for any other purposes.

3) FIELD VERIFICATION:
Verify all dimensions, conditions, and utility locations on the job site prior to beginning any work or ordering any materials. Notify Architect of any conflicts or discrepancies in the drawings immediately.

4) DIMENSIONS:
Written dimensions always take precedence over scaled dimensions. DO NOT SCALE DRAWINGS. Verify all dimensions shown prior to beginning any work and notify Architect of any conflicts or discrepancies for interpretation or clarification. Plan dimensions are to the face of framing members, face of wood furring or face of concrete walls unless otherwise noted. Section or elevation dimensions are to top of concrete, top of plywood, or top of wall plates or beams unless otherwise noted.

5) DISCREPANCIES:
The Owner has requested the Architect to provide limited architectural and engineering services. In the event additional details or guidance is needed by the Contractor for construction of any aspect of this project, he shall immediately notify the Architect. Failure to give simple notice shall relieve the Architect of responsibility. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved with written direction from the Architect.

6) DUTY OF COOPERATION:
Release of these plans contemplates further cooperation among the Owner, his Contractor, and the Architect. Design and construction are complex. Although the Architect and his Consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect, and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the Architect. Failure to notify the Architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the Architect shall relieve the Architect from responsibility for all consequences.

7) CHANGES TO THE WORK:
Any items described herein that impact project budget or time shall be requested from the Contractor via a written change order request prior to such work. Performance of such work without approval by change order indicates General Contractor's acknowledgment of no increase in contract sum or time. Changes from the plans or specifications made without consent of the Architect are unauthorized and shall relieve the Architect of responsibility for any and all consequences resulting from such changes.

8) WORKMANSHIP:
It is the intent and meaning of these drawings that the Contractor and each Subcontractor provide all labor, materials, transportation, supplies, equipment, etc., to obtain a complete job within the recognized standards of the industry.

9) SUBSTITUTIONS:
Substitution of "equal" products will be acceptable with Owner's written approval. See specifications.

10) CONSTRUCTION SAFETY:
These drawings do not include the necessary components for construction safety. The General Contractor shall provide for the safety, care of utilities and adjacent properties during construction, and shall comply with state and federal safety regulations.

11) EXCAVATION PROCEDURES:
Upon completion of any excavation, the Owner shall retain a soils engineer to inspect the subsurface conditions in order to determine the adequacy of foundation design. See specifications. CONTRACTOR SHALL NOT POUR ANY CONCRETE UNTIL APPROVAL IS OBTAINED FROM SOILS ENGINEER.

12) FIELD CUTTING OF STRUCTURAL MEMBERS:
The General Contractor and Subcontractors shall field coordinate and obtain approval from Engineer before any cutting, notching or drilling of any cast-in-place concrete, steel framing, or any other structural elements which may affect the structural integrity of the building. Refer to the appropriate Code Requirements, manufacturer's or supplier's instructions, and structural drawings for additional requirements.

13) WEATHER CONDITIONS:
The Owner has been advised that due to harsh winter conditions, roof and deck surfaces must be maintained reasonably free of ice and snow to ensure minimal problems with these surfaces. All roofing, roofing membranes, and waterproofing shall be approved in writing by product manufacturer (W.R. Grace for bituthene, etc.) prior to proceeding with any work. Failure to provide these written approvals removes all responsibility for the work from the Architect.

14) BUILDING AREA
Building areas are shown for code purposes only and shall be recalculated for any other use.

15) PROJECT STAKING
The general contractor shall verify all existing grades and stake all building corners and the driveway location for Owner/Architect, review board and town of Silverthorne approval prior to beginning any site clearing.

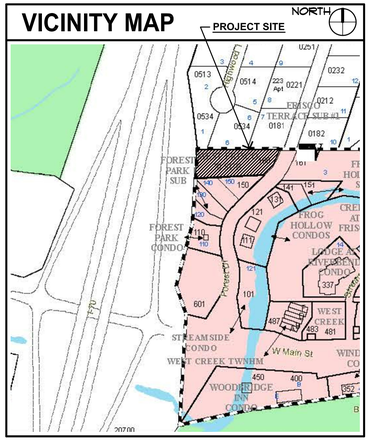
16) SITE DISTURBANCE
It is the responsibility of the contractor to protect the existing trees to remain and adjacent properties from damage during construction. Provide protective fencing throughout construction.

17) PROJECT GRADES
The general contractor shall check and verify all grades including paved area slopes prior to pouring any foundations. Survey work should be verified in detail. See numbers 5 and 6.

18) EXTERIOR MATERIAL MOCK UP
At Owner option, the General Contractor shall provide a mock up of all exterior materials for review by the Owner and Architect. This mock up shall be provided and signed off in writing prior to any exterior stain or exterior finish work. The sample shall include fascia, trim, window cladding and all other exterior finishes including a 3'-0"x3'-0" (min) sample of exterior stonework if applicable. This mock up shall be retained on site until the final punch.

19) 3D MODELING
This project has been digitally modeled in 3D software. The digital model is provided for reference purposes only. Transmission of digital model files constitutes a warranty by the party transmitting files to the party receiving files that the transmitting party is the copyright owner of the digital data. Unless otherwise agreed in writing, any use of, transmission of, or reliance on the model is at the receiving party's risk. The contractor shall notify the architect of questions or coordination issues between the contract documents and digital model.

VICINITY MAP



LEGAL DESCRIPTION

LOT 2, AMENDED FRISCO WEST 70, FILING 2
160 FOREST DRIVE
FRISCO, CO

FIRE SPRINKLER SYSTEM

PROVIDE NFPA 13R AUTOMATIC FIRE SPRINKLER SYSTEM FOR 4 UNIT CONDOMINIUM BUILDING TO INCLUDE FDC, EXTERIOR HORN, AND LIGHT. PROVIDE SIDE WALL HEADS TO GREATEST EXTENT POSSIBLE. PROVIDE SUBMITTAL FOR AUTOMATIC FIRE SPRINKLER SYSTEM.

SITE NOTES

1. ELECTRIC, CABLE T.V. AND TELEPHONE UNDERGROUND IN COMMON TRENCH.
2. VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY WORK. COORDINATE UTILITY ROUTING WITH APPLICABLE UTILITY COMPANY. ALL UTILITIES TO BE UNDERGROUND.
3. TOPOGRAPHIC INFORMATION OBTAINED FROM RANGE WEST ENGINEERS & SURVEYORS, INC. DATED 09/22/23.
4. PROVIDE POSITIVE DRAINAGE AT BUILDING PERIMETER (SLOPE AWAY FROM BUILDING AT 1:12 MIN.)
5. REFER TO FOUNDATION PLAN FOR FOUNDATION DRAIN LOCATION AND SLOPE. DRAINS TO BE SLOPED TO A DRYWELL.
6. FLAG ALL TREES FOR OWNER PRIOR TO THINNING OR REMOVING.
7. PROTECT ALL REMAINING TREES WITH SNOW FENCE OR OTHER APPROVED BARRIER DURING CONSTRUCTION.
8. PROVIDE 6" DIA. STONE RIP RAP OVER WEED BARRIER FABRIC AT EAVES AND VALLEY DRIP LOCATIONS.
9. STAKE HOUSE LOCATION FOR OWNER, ARCHITECT, AND ARCHITECTURAL REVIEW BOARD PRIOR TO ANY WORK.
10. GENERAL CONTRACTOR TO REVIEW & COMPLY WITH ALL SUBDIVISION CONDITIONS. COPIES OF CONDITIONS ARE AVAILABLE FROM ARCHITECT.

FINISHED FLOOR ELEVS

	U.S.G.S.	ARCH'L.
LEVEL 1	9105.00'	100'-0"
LEVEL 2	9116.13'	111'-1 1/2"
LEVEL 3	9127.13'	122'-1 1/2"

VIEW FROM FOREST DRIVE

AREA CALCULATIONS

NOTE: SQUARE FOOTAGES ARE CALCULATED FOR CODE PURPOSES ONLY AND SHOULD BE RECALCULATED FOR ANY OTHER PURPOSES.

UNIT A

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	164 SF.	484 SF.	648 SF.
LEVEL 2	867 SF.	0 SF.	867 SF.
LEVEL 3	325 SF.	0 SF.	325 SF.
TOTAL	1356 SF.	484 SF.	1840 SF.

UNIT B

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	586 SF.	264 SF.	850 SF.
LEVEL 2	589 SF.	0 SF.	589 SF.
LEVEL 3	610 SF.	0 SF.	610 SF.
TOTAL	1785 SF.	264 SF.	2049 SF.

UNIT C

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 SF.	728 SF.	996 SF.
LEVEL 2	975 SF.	0 SF.	975 SF.
LEVEL 3	713 SF.	0 SF.	713 SF.
TOTAL	1956 SF.	728 SF.	2684 SF.

UNIT D

	FINISHED	UNFINISHED	TOTAL
LEVEL 1	268 SF.	728 SF.	996 SF.
LEVEL 2	975 SF.	0 SF.	975 SF.
LEVEL 3	627 SF.	0 SF.	627 SF.
TOTAL	1870 SF.	728 SF.	2598 SF.

SHEET INDEX

CODE CONSULTANT:	SOILS ENGINEER:	SURVEYOR:	ENGINEER:	CONTRACTOR:	ARCHITECT:	OWNER:
SHUMS CODA ASSOCIATES STEPHEN L. THOMAS, CBO 4610 SOUTH ULSTER, SUITE 150 DENVER CO 80237 (303) 400-6564 (303) 257-3572 (CELL) steve.thomas@shumscoda.com	CTL THOMPSON, INC. 1190 AIRPORT RD., UNIT 2 BRECKENRIDGE, CO 80424 (970) 453-2047 bniggeler@ctlthompson.com	RANGE WEST ENGINEERS & SURVEYORS, INC. P.O. BOX 589 SILVERTHORNE, CO 80498 (970) 468-6281 (970) 668-3765 FAX	ROCKY'S ENGINEERING, LLC 215 4th AVE. FRISCO, CO 80443 (970) 389-4895 rockyengineering1@gmail.com	SWEET HOMES OF COLORADO, INC. P.O. BOX 1399 PMB 288 FRISCO, CO 80443 (970) 262-3818 eric@sweethomesinc.com	BHH Partners of Colorado 560 ADAMS AVENUE SILVERTHORNE, CO 80498 (970) 453-6880 jbuxkemper@bhhpartners.com	BLUE RIVER REAL ESTATE FUND III, LLC P.O. BOX 1035 BRECKENRIDGE, CO 80424 (347) 834-1009 sjfrancis1985@gmail.com

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24
UPDATED
05-16-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

STONECREST - 160 FOREST DRIVE
LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:
T1.1

LOT COVERAGE

	AREA	%
LOT SIZE:	37,287 S.F. 0.856 AC	
COVERAGES: BUILDING FOOTPRINT* DRIVE	4,752 S.F. 3,344 S.F.	
LOT COVERAGE:	8,096 S.F.	21.7%

*INCLUDES ROOFS, DECKS, PATIOS AND LANDSCAPE PLANTERS

REQUIRED SNOWSTACK

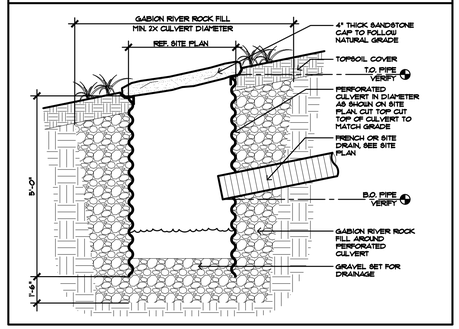
	SQ. FT.	%
HARDSCAPE (WALKS & DRIVEWAY)	3,467 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	867 S.F.	25%
TOTAL SNOW STACK	869 S.F.	25%
UNCOVERED PATIOS AND DECKS	559 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	140 S.F.	25%
TOTAL SNOW STACK	245 S.F.	44%

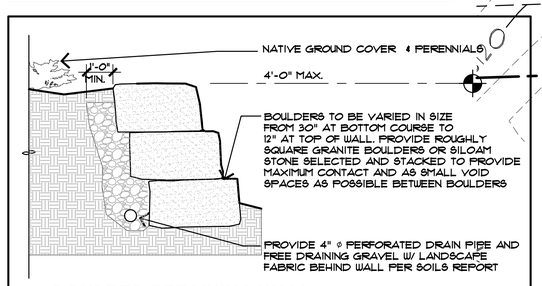
BUILDING HEIGHT

ARCHITECTURAL 100'-0" FOR PROJECT=9105.00' USGS
ALLOWED BUILDING HEIGHT = 35.00'
PROPOSED BUILDING HEIGHT = 34.31'

RIDGE POINT	RIDGE ELEV	NAT. GRADE ELEV	FIN. GRADE ELEV	MEASURED FROM	CALCULATIONS	HEIGHT
A	9139.23'	9108.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
B	9139.23'	9118.00'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
C	9139.23'	9120.50'	9105.00'	NAT. ELEV	9139.23'-9120.50'	18.73'
D	9139.31'	9116.50'	9105.00'	FIN. ELEV	9139.31'-9105.00'	34.31'
E	9139.23'	9110.50'	9105.00'	FIN. ELEV	9139.23'-9105.00'	34.23'
F	9139.23'	9113.00'	9113.00'	FIN. ELEV	9139.23'-9113.00'	26.23'
G	9139.31'	9119.50'	9119.50'	FIN. ELEV	9139.31' -9119.50'	19.81'
H	9139.23'	9122.00'	9122.00'	FIN. ELEV	9139.23'-9122.00'	17.23'
J	9139.23'	9114.00'	9105.00'	NAT. ELEV	9139.23' -9114.00'	25.23'

DRYWELL DETAIL





1 / SP1.1 **BOULDER RETAINING WALL**
1/2" = 1'-0"

D TERRACE FILING No. 1

LOT 7

WOODEN STEPS

FOUND ROCK "X" MARK CARVED

344.26'

INDICATES DIRECTION OF DRAINAGE

RIDGE POINT (TYP.)

10'-0" SETBACK

FOUNDATION DRAIN TO DRYWELL

ELECTRICAL TRANSFORMER

S18°22'30"W 83.31'

EDGE OF ASPHALT

METERS

SWALE

LOT 2
0.856 Ac.
ADDRESS: 160 FOREST DRIVE

DROP INLET TO DRYWELL (TYP.)

S.S.=69 S.F.

PATIO 16.0

NOTE: SLOPE ALL SLABS 1/8" PER 1'-0" MIN. AWAY FROM FOUNDATION

4' TALL MAX. BOULDER RETAINING WALL

TRENCH FLOWLINE

S.S.=114 S.F.

PATIO 16.0

SWALE

DECK 16.0

S.S.=41 S.F.

PORCH 5.0

DECK 21.0

S.S.=201 S.F.

METERS

PORCH 5.0

PORCH 5.0

DECK 16.0

S.S.=668 S.F.

PHONE

ASPHALT DRIVE

PLANTER AREA (TYP.)

9'x18.5' PARKING SPACE (8 LOC.)

SPOT GRADE (TYP.)

5' CONCRETE PAN

FOREST DRIVE 60' R.O.W.

EDGE OF ASPHALT

CP-INDIAN
EL = 9003.69'

Δ = 27°52'41"
R = 256.50'
L = 124.80'

SIGHT TRIANGLE

SIGHT TRIANGLE

RIM EL = 9004.59

20' SETBACK

283.69'

BRICK WALL

NOTE: SEE DRAINAGE AND GRADING AND UTILITY PLANS BY MARCIN FOR DETAILED GRADING ADDITIONAL INFORMATION.

NOTE: PROVIDE POSITIVE DRAINAGE AWAY FROM FOUNDATION PER SITE NOTES

NOTE: WATER AND SEWER CONNECTIONS PER TOWN OF FRISCO SANITATION AND WATER CONSTRUCTION STANDARDS.

NOTE: PER TOWN OF FRISCO, SOME GRADING/BLENDING ON ROADSIDE DITCH MAY BE NECESSARY TO INSURE PROPER DRAINAGE.

FIRE HYDRANT

SITE PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40'

NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

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SITE PLAN FINAL
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bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80424 (970) 453-6880
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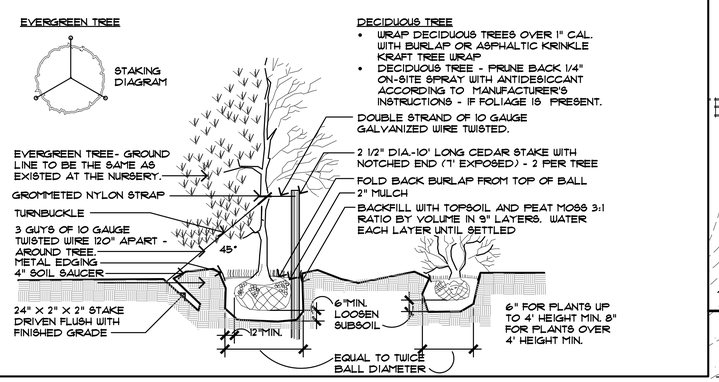
STONECREST - 160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.1

PLANTING DETAIL



PLANTING LIST & NOTES

KEY	COMMON	BOTANICAL	NO.	SIZE
EXISTING TREES				
	EXISTING	VARIES -	33	SEE SITE PLAN
EXISTING TREES TO BE REMOVED				
	VARIES -	VARIES -	14	SEE SITE PLAN
TREES				
	COLORADO SPRUCE	PICEA PUNGENS OR PICEA ENGELMANNI	10	1/ 10' TALL 10/ 8' TALL
	ASPEN	POPULUS TREMULODES	11	50% 2" CAL 50 % 3" CAL
SHRUBS/GROUND COVERS & PERENNIALS				
	POTENTILLA	POTENTILLA FRUTICOSA	14	5 GAL.
	ALPINE CURRANT	RIBIES ALPINUM	0	5 GAL.
	PEKING COTONEASTER	COTONEASTER LUCIDUS OR APICULATUS	11	5 GAL.
	NATIVE GROUND COVER AND PERENNIALS	PROVIDE SUBMITTAL	0	1 FLAT

REVEGETATION NOTES

REVEGETATE ALL DISTURBED AREAS ON THE SITE WITH:

SHORT DRY GRASS MIX #2 LBS/1000 SF:

HARD FESCUE	30%
CREEPING RED FESCUE	30%
SHEEP FESCUE	25%
CANADA BLUEGRASS	10%
CANBY BLUEGRASS	5%

SLOPES OVER 3:1 SHALL BE HAY TACKIFIED OR NETTED.

MOUNTAIN MAGIC WILDFLOWER MIX #1 LB/10,000 SF:

BABY'S BREATH	BLANKETFLOWER
CALIFORNIA POPPY	SHIRLEY POPPY
BLUE FLAX	LUPINE MIX
WALLFLOWER	MAIDEN PINKS
PENSTEMON, ROCKY MOUNTAIN	
WILD THYME	

ROCKY MOUNTAIN BLUE COLUMBINE MIX #1LB/25,000 SF

OR

WESTERN NATIVE WILDFLOWER MIX #1 LB/6000 SF:

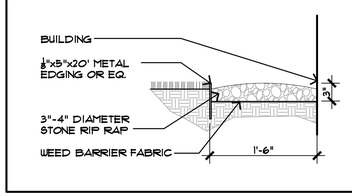
MOUNTAIN LUPINE	CONEFLOWER, WESTERN
COLUMBINE, COLORADO	SULFUR FLOWER
GERANIUM, RICHARDSON	NODDING GROUNDSEL
ASTER, ENGLEMANNS	WESTERN LARKSPUR
GAILLARDIA/BLANKETFLOWER	AMERICAN VETCH
ORANGE MOUNTAIN DAISY	GIANT LOUSEWORT
PENSTEMON, WASATCH	PENSTEMON, RYDBERGS
PENSTEMON, SMALL FLOWERED	
PENSTEMON, ROCKY MOUNTAIN	

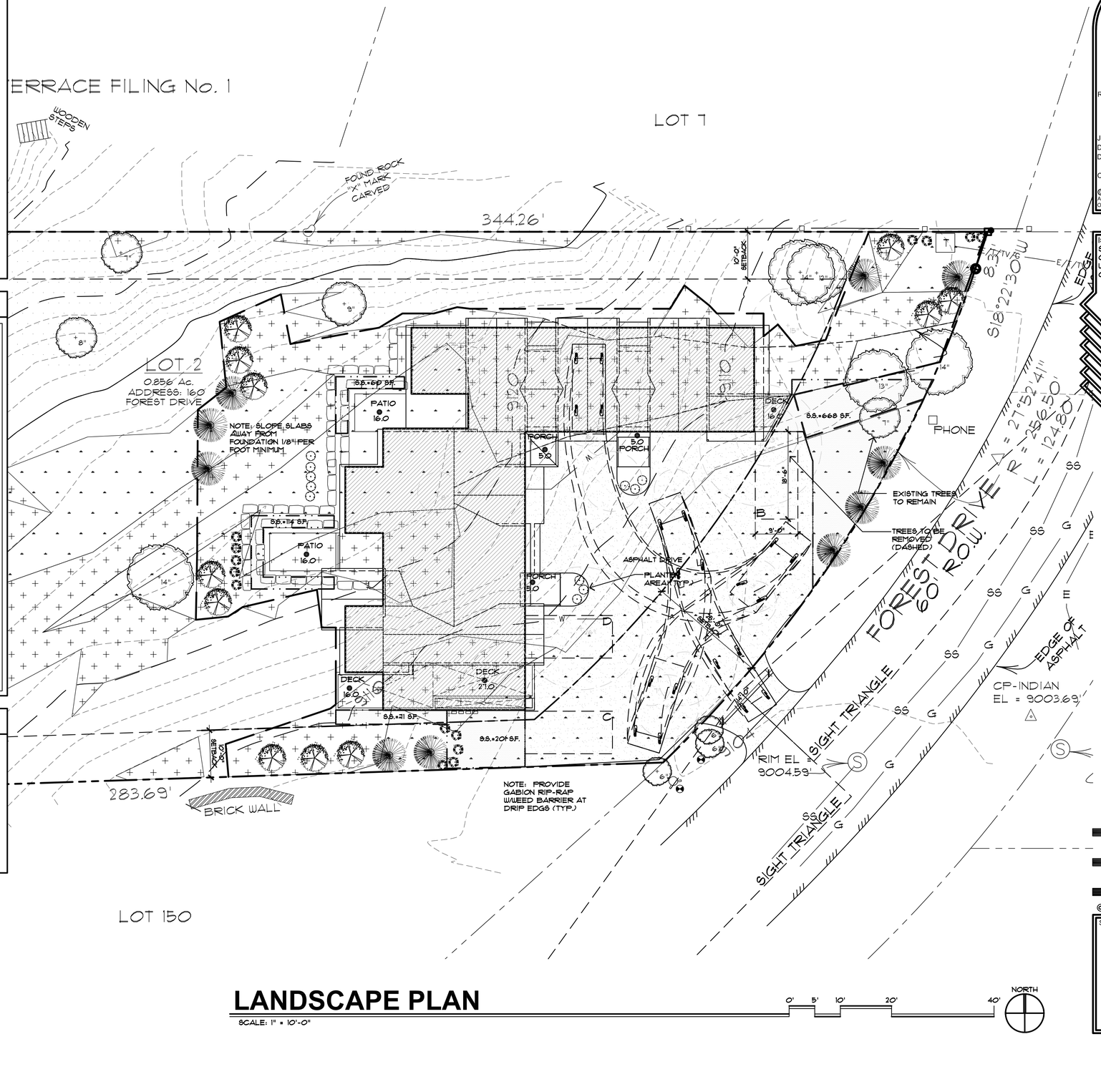
LANDSCAPE NOTES

1. PROVIDE 2"-3" (MIN.) CLAYTREE TOPSOIL AND SEED ALL DISTURBED AREAS WITH SUMMIT CO. SHORT SEED MIX (AS APPROVED BY THE TOUN OF FRISCO. STRIP AND STOCKPILE EXISTING TOPSOIL IN CONSTRUCTION AREA. SCREEN TOPSOIL PRIOR TO INSTALLATION.
2. KEEP EXISTING TREES WHERE POSSIBLE, TAKING INTO CONSIDERATION DRIP LINES AND ROOT STRUCTURE. PROTECT EXISTING TREES WITH FENCING LOCATED AT OR OUTSIDE DRIP LINE OF TREE. STOCKPILE AND REUSE EXISTING TREES WHERE POSSIBLE.
3. GENERAL CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS PER SPECIFICATIONS AND CODE REQUIREMENTS.
4. PRIOR TO ANY LANDSCAPE WORK, REMOVE ALL DEBRIS, PAINT, CONCRETE, STUMPS, SLASH, ETC. FROM LANDSCAPE AREA.
5. LOCATE ALL PLANTINGS TO AVOID SNOW STACKING & SNOW SLIDE AREAS FROM ABOVE.
6. SHRUBS ARE TO BE FIELD LOCATED AS APPROVED BY OWNER.
7. ALL NEW PLANTINGS SHOULD BE HIGH ALTITUDE GROWN AND OR COLLECTED TO ENSURE BETTER SURVIVAL.
8. NATURALIZE GROUPING OF TREES BY VARYING HEIGHT & LOCATION WHEREVER POSSIBLE.
9. SCREEN ALL UTILITY PEDESTALS WITH LANDSCAPE MATERIAL.
10. PROVIDE 3" TO 4" DIAMETER STONE RIPRAP OVER WEED BARRIER FABRIC AT BUILDING DRIP LINES. UNDULATE EDGES AND PROVIDE LANDSCAPE EDGING AT RIPRAP TO TOPSOIL JUNCTURE.
11. INSTALL & BACKFILL ALL PLANTINGS WITH SOIL MIX INCLUDING ORGANIC SOIL AMENDMENTS PER SPECIES REQUIREMENTS AND LANDSCAPE DETAILS.
12. ROOT FEED ALL NEWLY PLANTED TREES DURING INSTALLATION. PROVIDE LIQUID GROWTH TREE STIMULATOR AND SOLUABLE FERTILIZER AT RECOMMENDED RATE FOR EACH TREE SPECIES.
13. PROVIDE 3" OF SHREDDED BARK MULCH AT ALL SHRUB AND TREE WELLS.
14. ADDITIONAL CONSULTATION WITH A QUALIFIED LANDSCAPE PROFESSIONAL AT OWNER OPTION IS RECOMMENDED.

NOTE: ALL LANDSCAPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE RESERVE AND TOUN OF FRISCO.

RIP RAP BORDER





LANDSCAPE PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40' NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER
CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24
UPDATED
05-16-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

STONECREST - 160 FOREST

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.2

SHELTER

1324KZ

MEDIUM WALL MOUNT LANTERN

Shelter's minimalist style in aluminum creates a chic, dramatic statement as the light from above grazes through its clear seedy glass. Shelter comes standard Dark Sky compliant.

DETAILS	
FINISH:	Buckeye Bronze
MATERIAL:	Aluminum
GLASS:	Clear Seedy
DIMMABLE:	YES, CL TYPE DIMMER (SSL7A)

DIMENSIONS	
WIDTH:	6.3"
HEIGHT:	20.5"
WEIGHT:	7lb
BACK PLATE:	4.5"W X 12"H
EXTENSION:	6.5"
TOP TO OUTLET:	5.75"

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
LED NAVE:	6.5WR20-30K
WATTAGE:	1-6.50w Med. LED *Included, 50w Equiv.
VOLTAGE:	120v
COLOR TEMP:	3000
LUMENS	575
CRI:	90
INCANDESCENT EQUIVALENCY:	1 x 50w
DIMMABLE:	YES, CL TYPE DIMMER (SSL7A)

SHIPPING	
CARTON LENGTH:	23.8
CARTON WIDTH:	12.8
CARTON HEIGHT:	9
CARTON WEIGHT:	8

PRODUCT DETAILS:

- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- Fixture is Dark Sky compliant and engineered to minimize light glare upward into the night sky
- Reflector type or Par type bulb recommended
- 2-year finish warranty
- LED Bulbs carry a 3-year limited warranty
- All-in-one fixture design comes with an LED bulb
- Bold lines and a clean, minimalist style complement contemporary architecture

EXTERIOR LIGHTING FIXTURE

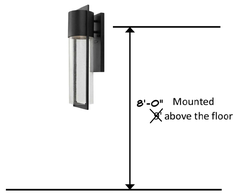
HINKLEY

HINKLEY
33000 Pin Oak Parkway
Avon Lake, OH 44012

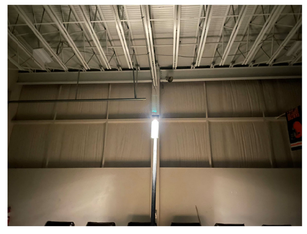
PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

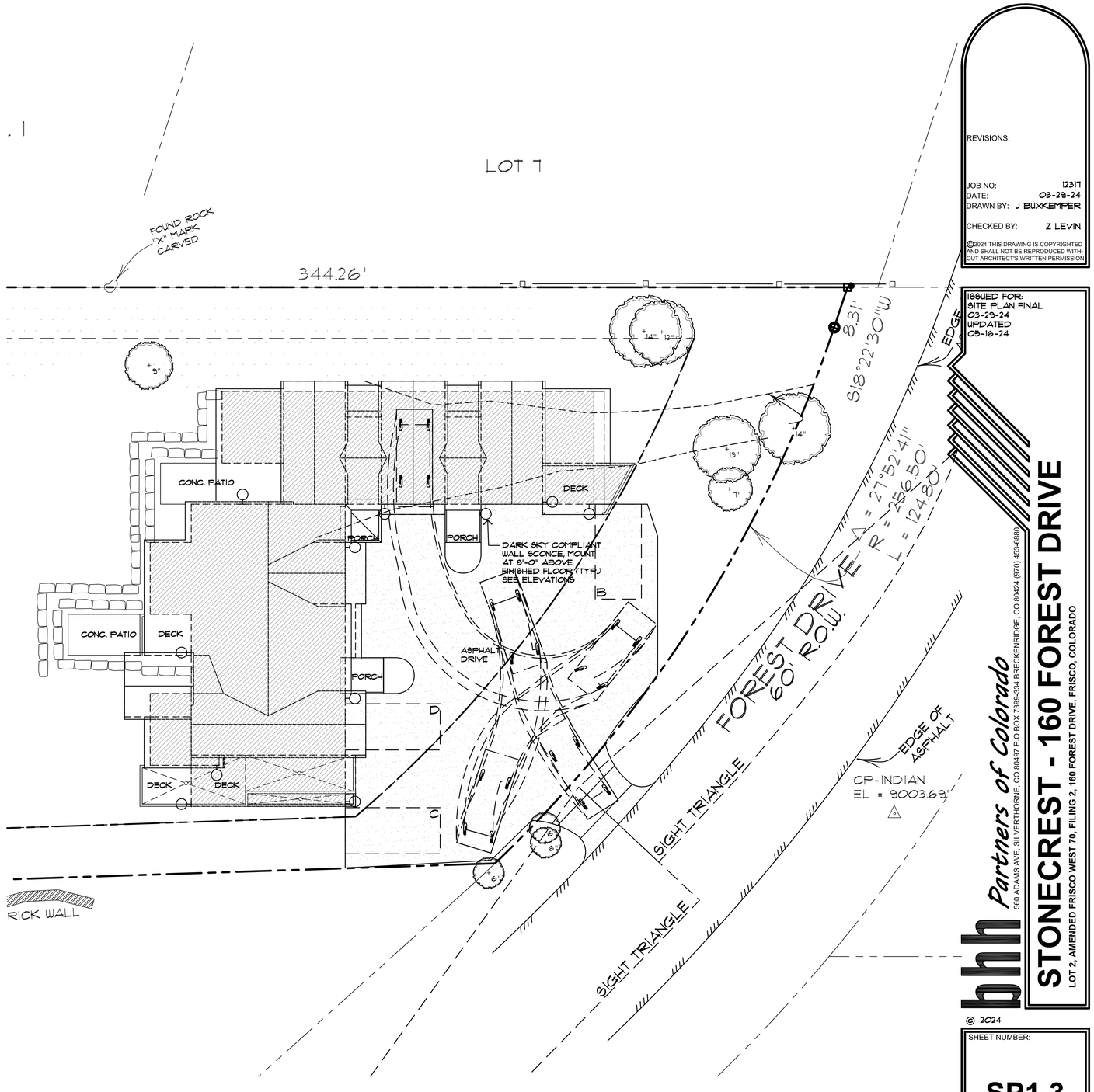
1324BK	
	Foot Cardles
Distance from Light	Straight
1'	9.96
2'	4.43
3'	3.25
4'	2.72
5'	1.83
6'	1.29
7'	0.77
8'	0.55
9'	0.33
10'	0.23
11'	0.14
12'	0.11
13'	0.07
14'	0.06
15'	0.03
16'	0.02
17'	0.01



LIGHT SOURCE	
LIGHT SOURCE:	LED bulb
LED NAME:	MAX light PAR 20 bulb
WATTAGE:	6.5W
VOLTAGE:	120v
COLOR TEMP:	3000K
LUMENS:	575
INCANDESCENT EQUIVALENCY:	50W



EXTERIOR LIGHTING PHOTOMETRICS



SITE LIGHTING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40' NORTH

REVISIONS:

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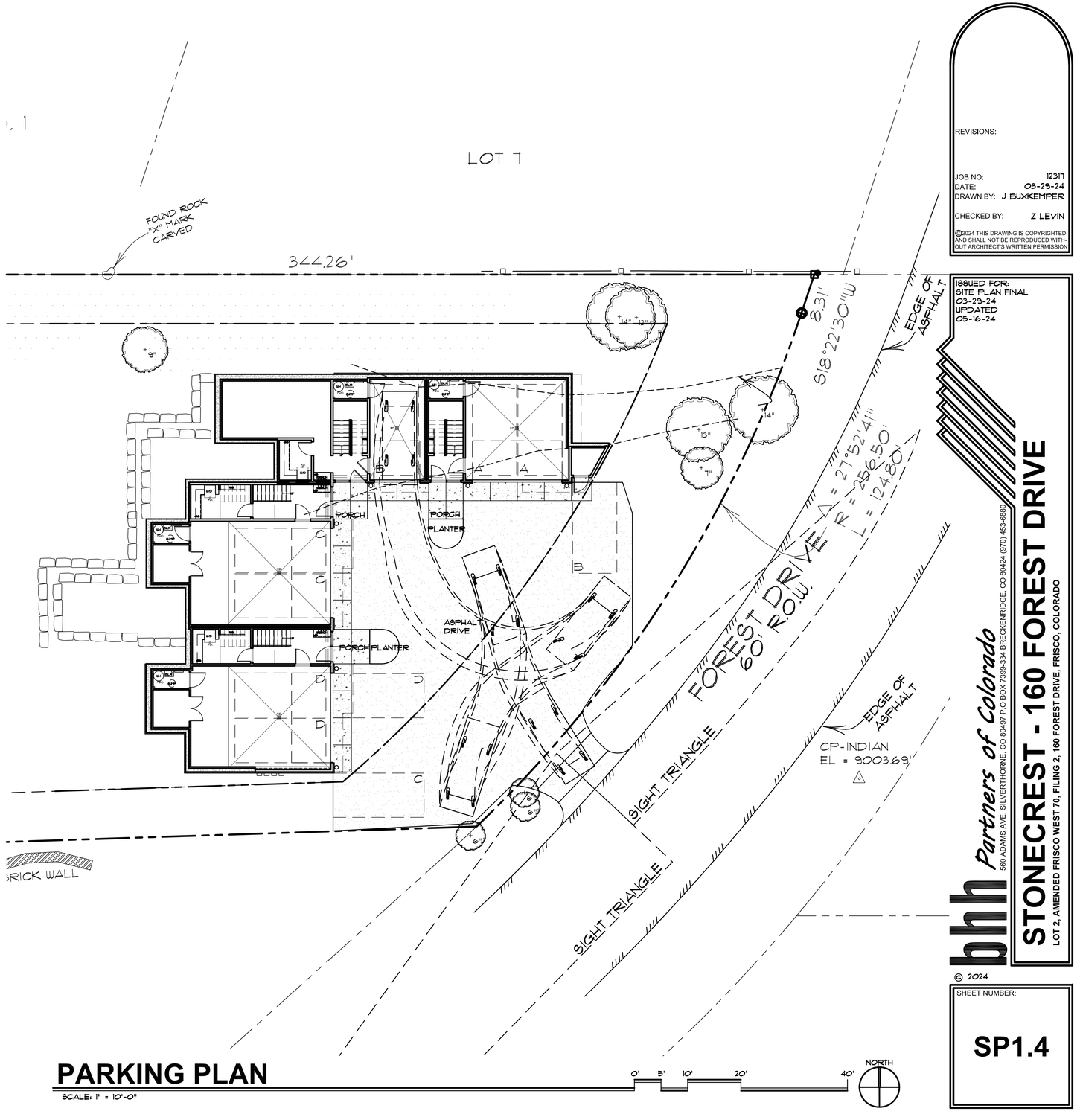
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

STONECREST - 160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.3



PARKING PLAN

SCALE: 1" = 10'-0"

0' 5' 10' 20' 40' NORTH

REVISIONS:

JOB NO: 12317
DATE: 03-29-24
DRAWN BY: J BUXKEMPER

CHECKED BY: Z LEVIN

ISSUED FOR:
SITE PLAN FINAL
03-29-24
UPDATED
05-16-24

bhh Partners of Colorado
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

STONECREST - 160 FOREST DRIVE

LOT 2, AMENDED FRISCO WEST 70, FILING 2, 160 FOREST DRIVE, FRISCO, COLORADO

SHEET NUMBER:

SP1.4

160 FOREST DRIVE
Frisco, Colorado

PARKING RULES AND REGULATIONS
For Incorporation Into Declaration of Covenants
(PROPOSED)

The following Parking Rules and Regulations (the "Rules and Regulations") of the proposed townhome development located at 160 Forest Drive, Frisco, Colorado (the "Project") are proposed to be a part of the "Initial Use Restrictions" incorporated into a Declaration of Covenants, Conditions, Easements and Restrictions for the Project. The purpose of these Rules and Regulations is to maintain the orderly and high-quality living environment in the community and in order to comply with Chapter 180 of the Town of Frisco Unified Development Code and the Colorado Common Interest Ownership Act.

Parking Rules and Regulations

1. Applicability. These Rules and Regulations shall apply to all Owners, residents, visitors, occupants, guests and invitees of each Unit in the Project. Parking and storing of vehicles within the Project shall be governed by these Rules and Regulations, unless expressly authorized (and in such cases, subject to such conditions as may be imposed) by a resolution unanimously adopted by the Executive Board.

2. Assigned Parking. Parking of vehicles at the Project shall be allowed only in Unit garages or on those uncovered exterior parking spaces designated on the Plat, and to be delineated by signage, assigned to each Unit. The uncovered exterior parking spaces assigned to each Unit shall be considered a Limited Common Element ("LCE") appurtenant to each Unit as designated on the Plat, specifically as follows:

Unit	Garage Spaces	Exterior LCE Spaces	Bedrooms
A	2	0	2
B	1	1	2
C	2	1	3
D	2	1	3

3. General Common Element Parking Prohibited. In addition to other restrictions set forth herein, Owners, residents, visitors, guests and invitees of each Unit, shall not park on the General Common Elements.

4. Parking and Back-Up Space Easements. Declarant may reserve unto itself, its successors, assigns, and designated grantees, including the Association, easements for assigned unit parking, visitor parking and vehicular back-up spaces as might be reasonably or legally necessary and incident to the orderly parking and movement of vehicles on the Property, or as shown on the recorded Plat of the Property. The rights and reservations set forth herein shall be deemed excepted and reserved in each conveyance of property by Declarant, whether or not

specifically stated therein, and in each deed or other instrument by which any Unit within the Project is conveyed by the Declarant or its successors.

5. Non-Passenger Car Parking. No portion of the Project may be used as a parking, storage, display or accommodation area for any type of camping trailer, boat, boat trailer, hauling trailer, motor home, snowmobile, snowmobile trailer or accessories thereto. No vehicle exceeding six thousand (6,000) pounds empty weight or twenty-two (22) feet in length shall be parked within the Project for a period of time exceeding two (2) hours.

6. Abandoned and Inoperable Vehicles. No abandoned or inoperable vehicles of any kind shall be stored or parked on the Project property. "Abandoned or inoperable vehicle" includes, but is not necessarily limited to, any automobile or other vehicle which has not been driven under its own propulsion for a period of thirty days or longer.

7. Unlicensed Vehicles. Unlicensed motor vehicles shall not be stored or operated on the General Common Elements. An unlicensed motor vehicle includes, but is not limited to, go-carts, mini-bikes, unlicensed motor bikes, motorized scooters, snowmobiles and all-terrain vehicles.

8. General Prohibitions. Parking of permitted vehicles upon designated parking areas shall be subject to Rules of the Executive Board that may be adopted from time to time and unless so authorized, no overnight parking is permitted on any portion of the Common Elements other than on Limited Common Element parking spaces, the use of which is limited to the Unit to which it is assigned and designated on the Plat.

9. Local, State and Federal Law. These Rules and Regulations shall not supersede local, state or federal laws and regulations.

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MARCIN ENGINEERING LLC

Memo

Date: 5/18/24

RE: Town of Frisco (Major Application MAJ-23-0012)

The following are our response to the March 29, 2024, comments for the 160 Forest Drive Major Application Submission:

Sheet C2

Show existing rock outcrop areas on entire site (site appears to have rock outcroppings in lower area being disturbed).

1 See Range West Survey.

Per current contours, drainage is flowing from trench to building here. Revise to provide a swale routing drainage around building.

2 Marcin Engineering has revised the plan.

Increased positive drainage required on south and north side of building or concrete/hardscape alternatives needed.

3 a,b Marcin Engineering feels the drainage is acceptable provided proper water proofing, and that structural and architectural considerations are met.

Parking lot does not drain to drywell. Need to detain to historic runoff for 25 year storm. Show calculations that 25 year storm is being detained or route front of building/parking to detention or drywell.

4 The drainage report describes over retention of the roof drainage and drainage from the back yard, this exceeds town requirements.

Driveway entry comment: 20' max, 26' max.

5 Revised.

Sheet C3

Do these have grates? Is 4" large enough for 25 year storm?

6 There are no inlets proposed on the south side. Some inlet locations have been revised on the north side.

Sheet C4

Continue service to building foundation (show entire length)

7 The drawing was enhanced for better visibility.

Adjust utilities to preserve trees.

8 Alignments have been adjusted.

See Section 171-7 of Town Code. Combined service line requires an HOA and single billing entity for meter.

9 By owner.

Show gate valve where line connects to existing, service line to be located outside of right of way (connect in right of way and then run perpendicular until outside of right of way). Show existing water lines. It continues to somewhere in here.

10 a,b,c Revised.

Sheet C6

Current water standards states that megalugs must be used in place of thrust blocks.

11 Revised.

Sheet C7

More than 2' required or concrete/hardscape plans required.

12 Revised, see note 3

160 FOREST DRIVE TOWNHOUSES
LOT 2, AMENDED WEST FRISCO 70, FILING NO. 2
FRISCO, COLORADO
MAY, 2024

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL CONFORM TO ALL TOWN OF FRISCO TOWN CODES, REGULATIONS, AND STIPULATIONS.
3. CONTRACTOR SHALL OBTAIN, AT ITS OWN EXPENSE, ALL PERMITS AND INSPECTIONS, WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR IS WARNED THAT CONFLICTS WITH EXISTING UTILITIES MAY EXIST. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS, AND CONTRACTOR SHALL LOCATE ALL UTILITIES (INCLUDING DEPTH). NEITHER MARCIN ENGINEERING NOR THE OWNER ASSUME ANY RESPONSIBILITY FOR UTILITY LOCATIONS. ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER SO THAT MINOR LINE OR GRADE CHANGES CAN BE MADE TO ELIMINATE ANY CONFLICTS WITH THESE EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR THAT WERE PROPERLY MARKED/LOCATED SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR ENGINEER.
5. THE CONSTRUCTION OF ALL ROADS, SIDEWALKS, CURBS, EARTHWORK AND OTHER INFRASTRUCTURE DEVELOPMENT NOT SPECIFICALLY SPECIFIED BY SEPARATE UTILITY COMPANIES, SHALL BE CONSTRUCTED TO THE TOWN OF FRISCO TOWN CODE AND/OR COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2017 EDITION) AND LATEST REVISIONS, CDOT M&S STANDARD PLANS (2012 EDITION) AND LATEST REVISIONS AND ANY SUPPLEMENTAL SPECIFICATIONS PROVIDED WITH THE CONTRACT. WHEN STANDARDS CONFLICT, THE STANDARD JUDGED MOST RESTRICTIVE BY THE ENGINEER SHALL PREVAIL. THE CONTRACTOR SHALL OBTAIN COPIES OF THESE SPECIFICATIONS AND PLANS. THE CONTRACTOR SHALL HAVE ONE COPY OF THE PLANS AND ONE COPY OF THE SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. ANY MISSING DIMENSIONS OR DISCREPANCIES IN THE PLANS, FIELD STAKING OR PHYSICAL FEATURES SHALL BE BROUGHT TO THE ATTENTION OF MARCIN ENGINEERING AND THE OWNER. IF THE CONTRACTOR PROCEEDS WITH THE WORK WITHOUT NOTIFYING MARCIN ENGINEERING AND THE OWNER, HE DOES SO AT HIS OWN RISK.
7. THE CONTRACTOR SHALL KEEP ONE (1) SET OF CONTRACT DRAWINGS MARKED TO FULLY INDICATE "AS-BUILT" CONDITIONS. THE DRAWINGS SHALL BE PROVIDED TO THE OWNER AND MARCIN ENGINEERING UPON COMPLETION OF THIS WORK. THREE (3) "AS-BUILT" TIES TO ALL SERVICES, FITTINGS, VALVES AND MANHOLES TO PHYSICAL MONUMENTS ARE TO BE PROVIDED BY THE CONTRACTOR.
8. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER MARCIN ENGINEERING OR THE OWNER IS RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY WITH ANY REGULATIONS RELATING THERETO.
9. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR TO THE OWNER AND TOWN FOR APPROVAL.
10. CONTRACTOR SHALL MAINTAIN AT LEAST 1-LANE ACCESS ON ALL PUBLIC ROADS AT ALL TIMES UNLESS OTHERWISE APPROVED BY TOWN OF FRISCO.
11. ALL WATER CONSTRUCTION SHALL COMPLY WITH TOWN OF FRISCO TOWN CODE. MINIMUM COVER ON ALL WATER MAINS AND SERVICES IS 8.5'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER TOWN OF FRISCO WATER CONSTRUCTION SPECIFICATIONS.
12. ALL SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH FRISCO SANITATION DISTRICT CONSTRUCTION SPECIFICATIONS. MINIMUM COVER ON ALL SEWER MAINS AND SERVICES IS 9'. ALL WATER MAINS SHALL BE TESTED BY THE CONTRACTOR PER FRISCO SANITATION DISTRICT SPECIFICATIONS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF STOCKPILING OF MATERIALS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, AND THE MATERIAL SUPPLIER.
14. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO SIGNIFICANTLY REDUCE ANY POTENTIAL POLLUTION CAUSED BY HIS ACTIVITIES, INCLUDING VEHICLE FUELING, STORAGE OF FERTILIZERS OR CHEMICALS, ETC. THE CONTRACTOR SHALL HAVE IDENTIFIED PROCEDURES FOR HANDLING POTENTIAL POLLUTANTS AND HAVE IDENTIFIED SPILL PREVENTION AND RESPONSE PROCEDURES PRIOR TO ANY ACTIVITIES AT THE PROJECT SITE.
15. OBSERVATIONS OF THE WORK IN PROGRESS AND ON-SITE VISITS ARE NOT TO BE CONSTRUED AS A GUARANTEE OR WARRANTY BY MARCIN ENGINEERING OF THE CONTRACTOR'S CONTRACTUAL RESPONSIBILITIES.
16. IF ANY GROUND WATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONTACT MARCIN ENGINEERING AND THE PROJECT GEOTECHNICAL ENGINEER IMMEDIATELY.
17. CONSTRUCTION STAKING SHALL BE PERFORMED BY OWNER.
18. BENCHMARK: CONTACT MARCIN ENGINEERING FOR SITE BENCHMARK (SEE PLANS).
19. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY RANGE WEST
20. SOILS AND MATERIAL TESTING IS BY THE OWNER, BUT THE CONTRACTOR MUST NOTIFY THE OWNER AND GEOTECHNICAL ENGINEER OF SCHEDULING.
21. ALL EARTHWORK AND PAVING SHALL CONFORM WITH GEOTECHNICAL ENGINEER REQUIREMENTS. CONTRACTOR SHALL OBTAIN COPIES OF REPORT BY KUMAR & ASSOCIATES, DATED 5/10/17.
22. ALL UTILITY TRENCHES IN ROAD PRISM TO BE COMPACTED AND TESTED PER GEOTECHNICAL ENGINEER REQUIREMENTS.
23. ROAD SUBGRADE SHALL BE PROOF ROLLED AND FREE OF DEFLECTION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. ANY FAILING AREAS SHALL BE REPAIRED AND PROOF ROLLED AGAIN UNTIL ACCEPTED BY THE GEOTECHNICAL ENGINEER WITH NO ADDITIONAL COST TO OWNER.
19. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE CHANNELS, CULVERTS AND APPURTENANCES DURING CONSTRUCTION, AS NECESSARY TO PROTECT ROADS AND PROPERTY.
20. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES. CONTRACTOR IS RESPONSIBLE TO REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETION AND ONCE VEGETATION IS APPROXIMATELY 70% RE-ESTABLISHED DEEMED BY THE OWNER.
21. CONTRACTOR IS RESPONSIBLE FOR DAILY CLEANING OF ALL ACCESS ROADS AND OTHER PUBLIC STREETS NECESSITATED BY HIS ACTIVITIES ON THE SITE.
22. DUST CONTROL IS INCIDENTAL TO EARTHWORK CONSTRUCTION AND SHALL BE PROVIDED BY CONTRACTOR, AT NO COST TO OWNER, IN ACCORDANCE WITH THE TOWN OF FRISCO TOWN CODE.
23. ALL LANDSCAPING SHALL BE PER THE ARCHITECT PLANS AND/OR OWNER.

VICINITY MAP

APPROXIMATE SCALE: 1" = 300'

SUMMIT COUNTY, COLORADO

CONSULTANT CONTACTS

A. Blue River Real Estate Fund III, LLC (Owner-Seth Francis), (347) 834-1009
B. Marcin Engineering LLC; Tom Marcin, PE, PLS (Civil Engineer, Surveyor), (970) 748-0274
C. Jarrett Buxkemper, (Architect), (970) 409-9062
D. Frisco (Municipal Governing Agency)
E. Town of Frisco (Water), Jeff Goble (970) 668-9151
F. Town of Frisco Sewer Wastewater Treatment Plant (Sewer), Ron Drake (Chairman) (970) 668-3723
G. Utility Notification Center of Colorado, (UNCC) 811

TABLE OF CONTENTS

UTILITY CONTACTS

A. Frisco Sanitation District, Matt Smith (970) 688-3723
B. Town of Frisco (Water), Jeff Goble (970) 668-0836
C. Excel Energy, Amy Lagace (970) 262-4033
D. Century Link, Ron Hickman (970) 328-8288
E. Comcast, Michael Johnson (970) 930-4713
F. Utility Notification Center of Colorado, (UNCC) 811

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

COVER SHEET & NOTES
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED THOMAS S. MARCIN 32492 MAY 16, 2024 PROFESSIONAL ENGINEER

JOB: 24005
DATE: 5/16/2024
SCALE: N/A

SHEET
C-1

DRAWING: C:\Users\17703\Marcin Engineering Dropbox\Projects\2024\24005 - 160 Forest Dr. Townhouses Frisco\dwg\Sheets\24005-Cover.dwg

GRAPHIC SCALE
0 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 6

LOT 7

LOT 2

LOT 150

FOREST PARK

LOT 140

20'X15' INFILTRATION GALLERY WITH 5' DEPTH FILLED WITH COBBLE, 40% VOID SPACE. THE TOP OF THE COBBLE SHALL BE OVERLAID WITH MIRAFI 140N GEOTEXTILE FOLLOWED WITH MIN. 6" OF TOPSOIL. INSTALL PERFORATED HDPE STANDPIPE IN THE CENTER OF THE GALLERY WITH 18" GRATE AT GRADE AND RUN THE DRAINAGE PIPE TO THE STANDPIPE. THE STANDPIPE SHOULD BE PERFORATED WITH AT LEAST (150) 1" HOLES.

MARCH 25, 2024

MAXIMUM GRADING LIMITS

DETAINED AREA (TYP.)

ROCK OUTCROP AREA

ROCK OUTCROP AREA

TRENCH FLOWLINE

FLOWLINE

TOP OF GRATE=21.0

TOP OF GRATE=14.5

TOP OF GRATE=14.0

FF=05

FF=05

FF=05

FF=05

9122.00
9118.00
9114.00
9114.50
9115.00
9115.00
9104.50
9104.50
9104.50
9104.50
9104.50
9104.50
9107.50
9104.02
9117.00
9112.00
9111.00
9110.00
9104.02
9104.00

9.7%
2%
2%
1.8%
2.0%
2.0%
1.5%
14%

20.00'
20.00'
26.00'

BUILDING ENVELOPE (TYP.)

PROPOSED ASPHALT

METER LOCATION

METER BY OTHERS

PROPERTY LINE (TYP.)

EXISTING GAS MAIN

FOREST DRIVE
60' R.O.W.

9103.47
9102.29
9103.11
9103.46

CONSTRUCT 3' WIDE VALLEY PAN

EXISTING VALVE

9104.87

EXISTING FIRE HYDRANT AND VALVE

EXISTING 12" SEWER MAIN

60.00' RIGHT OF WAY

EDGE OF ASPHALT

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

GRADING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MAY 16, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 5/16/24
SCALE: 1" = 10'

SHEET
C-2

GRAPHIC SCALE
0 5 7.5 10 15 25
(IN FEET)
1 inch = 5 ft.

MAX. GRADING LIMITS

20'X15' INFILTRATION GALLERY WITH 5' DEPTH FILLED WITH COBBLE, 40% VOID SPACE. THE TOP OF THE COBBLE SHALL BE OVERLAID WITH MIRAFI 140N GEOTEXTILE FOLLOWED WITH MIN. 6" OF TOPSOIL. INSTALL PERFORATED HDPE STANDPIPE IN THE CENTER OF THE GALLERY WITH 18" GRATE AT GRADE AND RUN THE DRAINAGE PIPE TO THE STANDPIPE. THE STANDPIPE SHOULD BE PERFORATED WITH AT LEAST (150) 1" HOLES.

INV. IN=95.04

4" SDR 35 PERFORATED PVC PIPE (TYP.)

6" SOLID PVC DRAIN PIPE (TYP.)

INV. IN=02.74

INV. IN=06.02

6" SOLID PVC DRAIN PIPE (TYP.)

GRATE = 21.00
INV. IN=06.96

INV. IN=98.63

INV. IN=00.54

4" SOLID PVC PIPE

6" SOLID PVC DRAIN PIPE (TYP.)

GRATE=19.75
INV. IN=07.12

GRATE = 14.00
INV. IN=07.92

INV. IN=03.28

INV. IN=00.85

INV. IN=01.01

INV. IN=03.03

6" SOLID PVC DRAIN PIPE (TYP.)

INV. IN=03.77

INV. IN=09.41

4" SDR 35 PERFORATED PVC PIPE (TYP.)

INV. IN=03.40

INV. IN=01.22

INV. IN=02.09

GRATE = 14.00
INV. IN=09.03

INV. IN=04.08

INV. IN=03.92

4" SDR 35 PERFORATED PVC PIPE (TYP.)

INV. IN=04.54

INV. IN=04.38

GRATE= 13.75 INV. IN=10.88

INV. IN=04.67

INV. IN=04.83

PROPOSED ASPHALT

SHOULDER

EXISTING EDGE OF ASHALT (TYP.)

FOREST DRIVE
60' R.O.W.

4" SDR 35 PERFORATED PVC PIPE (TYP.)

INV. IN=04.21

INV. IN=04.37

INV. IN=04.05

4" SDR 35 PERFORATED PVC PIPE (TYP.)

INV. IN=03.43

DO NOT COMBINE SUBDRAIN PIPE WITH STORM DRAIN PIPE

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

SUBDRAIN PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MAY 16, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 4/16/24
SCALE: 1" = 5'

SHEET
C-3

NOTE:
1. DRY/SHALLOW UTILITY ROUTING SHOW FOR CONCEPTUAL PURPOSES ONLY. THE CONTRACTOR TO COORDINATE FINAL DESIGN LAYOUT AND INSTALLATION CRITERIA WITH UTILITY PROVIDERS.

GRAPHIC SCALE
0 10 15 20 30 50
(IN FEET)
1 inch = 10 ft.

FRISCO TERRACE FILING No. 1

LOT 7

LOT 2

LOT 3

LOT 150

CONCRETE

SIDEWALK

INSTALL TRANSFORMER COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

PROPOSED INFILTRATION GALLERY

INSTALL
2-6" PVC CONDUITS
2-4" PVC CONDUITS
2-4" PVC CONDUITS (SPARES)
COORDINATE WITH UTILITY COMPANY FOR FINAL INSTALLATION

EXISTING TREES (TYP.)

INSTALL SDR-35 SEWER CLEANOUT INV.=99.56

INSTALL SDR-35 SEWER CLEANOUT INV.=99.52

INSTALL SDR-35 SEWER CLEANOUT INV.=99.55

INSTALL SDR-35 SEWER CLEANOUT INV.=99.15

INSTALL 6" SDR-35 SEWER SERVICE LINE

INSTALL 4" DIP WITH MEG-LUGS RESTRAINT

INSTALL GATE VALVE

EXISTING WATER LINE

PROPOSED ELECTRIC MAIN CONNECTION

PROPOSED GAS MAIN CONNECTION

INSTALL 4" DIP WITH MEGLUGS RESTRAINT, ALL NUTS AND BOLTS ASSEMBLIES SHALL BE PROTECTED WITH HIGH DENSITY PLASTIC WRAP. JOINT RESTRAINTS SHALL BE PROVIDED WITH MEGA-LUG ASSEMBLIES (TYP.)

INSTALL 4" DIP WATER SERVICE LINE RE: ARCHITECT/MEP FOR BUILDING CONNECTION DETAILS

METER BY OTHERS

EXISTING FIRE HYDRANT

PROPOSED GAS MAIN CONNECTION

RIM=9104.58
INV. OUT=9100.91

SEWER SERVICE CONNECTIONS INV.=01.39

INSTALL 40 L.F. OF 6" SDR-35 WITH 2" RIGID TYPE FORM BOX TO TOP OF SERVICE LINE INSULATED

INSTALL GATE VALVE

EXISTING 12" SEWER MAIN
L=259.51
S=0.46%

NOTE:
1. METER LOCATION BY OTHERS
2. SNOW MELT BY OTHERS

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

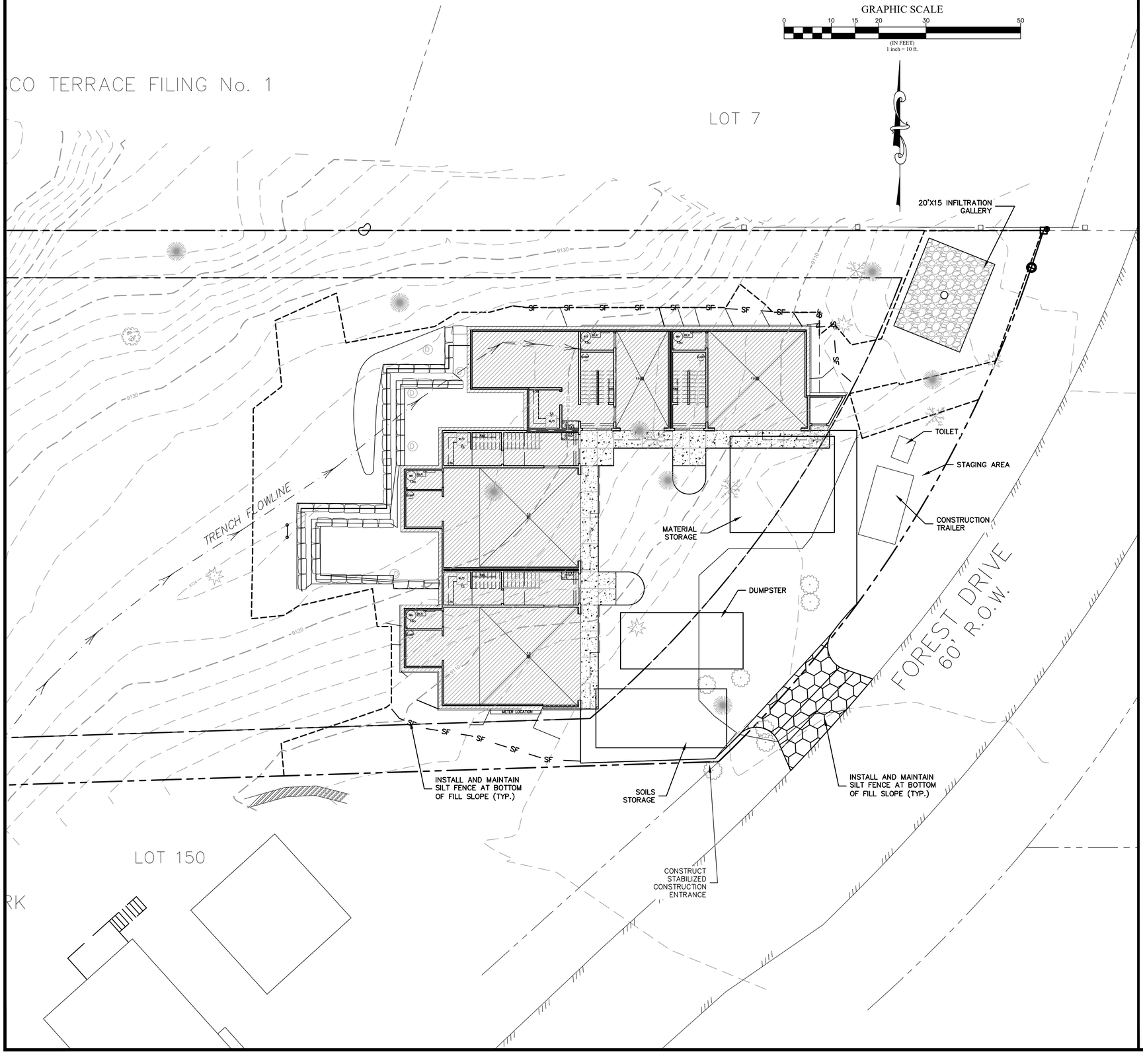
UTILITY PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED JAMES S. MARCIN 32492 MAY 16, 2024 PROFESSIONAL ENGINEER

JOB: 24005
DATE: 5/16/24
SCALE: 1" = 10'

SHEET
C-4



CONSTRUCTION SEQUENCE OF EROSON/SEDIMENT CONTROL MEASURES

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL WATTLES, CONSTRUCTION FENCE, AND SEDIMENT TRAPS PRIOR TO CONSTRUCTION.
3. BEGIN EXCAVATION.
4. INSTALL EROSION CONTROL MEASURES (LANDLOK TRM FABRIC, RIP RAP AND EROSION LOGS) AFTER ROADWAY DITCHES HAVE BEEN CONSTRUCTED AND TOPSOIL PLACED.
5. REVEGETATE ALL DISTURBED AREAS PER LANDSCAPE DETAILS. AREAS TREATED WITH EROSION CONTROL MATTING WILL INCLUDE TOPSOIL, SEED MIX, FERTILIZER, MULCH AND TACKIFIER.

GENERAL NOTES FOR SEDIMENT CONTROL

1. INSTALL AND MAINTAIN SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THESE PLANS.
2. ALL PROPOSED SEDIMENT CONTROL MEASURES ARE TEMPORARY MEASURES UNLESS SPECIFIED OTHERWISE ON PLANS.
3. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT THE TIME OF CONSTRUCTION TO INSURE THAT THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENGINEER'S APPROVAL WILL BE REQUIRED FOR ANY OTHER DEVIATION FROM THE APPROVED PLANS.
4. PROVIDE CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES TO ENSURE THAT SEDIMENT CONTROL EFFICIENCY IS OBTAINED UNTIL FINAL STABILIZATION OF SITE HAS TAKEN PLACE.
5. INSTALL SEDIMENT CONTROL MEASURES AT THE ONSET OF GRADING OPERATIONS SO THAT EFFECTIVE SEDIMENT CONTROL CAN BE ACHIEVED DURING THE ENTIRE GRADING OPERATION PERIOD.
6. STABILIZE ALL POINTS OF INGRESS AND EGRESS WITH CRUSHED STONE DURING CONSTRUCTION TO PREVENT TRACKING OF MUD ONTO PUBLIC STREETS.
7. THE TERM "REVEGETATION" ON THIS PLAN MEANS TO HAVE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNT OF FERTILIZER IN ACCORDANCE WITH APPLICABLE "STANDARDS AND SPECIFICATIONS". REFER TO LANDSCAPE PLANS FOR SEED MIX.
8. APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES BEFORE REMOVAL OF SEDIMENT CONTROLS.
9. THE CONTRACTOR SHALL REMOVE SEDIMENT CONTROL FACILITIES AFTER FINAL STABILIZATION.
10. REMOVAL AND CLEANUP OF ANY SEDIMENT THAT LEAVES THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ASSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE CONSTRUCTION SITE.
12. ALL SEDIMENT CONTROL AND STORM DRAINAGE FACILITIES SHALL BE PERIODICALLY INSPECTED AND MAINTAINED TO ASSURE THEY FUNCTION PROPERLY.
13. THOSE PORTIONS OF THE ROAD SUBGRADE THAT DO NOT RECEIVE GRAVEL SHALL BE SEEDED, FERTILIZED, MULCHED AND TACKED. THE SEED SHALL BE DRILLED OR BROADCAST AND RAKED INTO THE TOP ½" OF SOIL. PRIOR TO SEEDING FERTILIZER SHALL BE WORKED INTO THE TOP 4" OF SOIL AT THE RATE SPECIFIED.

FUGITIVE DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE TO CONTROL FUGITIVE DUST AND TO INCORPORATE THE FOLLOWING:

1. ALL UNPAVED ROADS AND OTHER DISTURBED AREAS ON SITE SHALL BE WATERED TO MINIMIZE FUGITIVE DUST.
2. VEHICLE SPEED ON ALL UNPAVED ROADS AND DISTURBED AREAS SHALL NOT EXCEED A MAXIMUM OF 30 MPH SPEED LIMIT, SIGNS SHALL BE POSTED.
3. HAUL ROADS SHALL BE TREATED WITH MAGNESIUM CHLORIDE IF WATER IS NOT CONTROLLING THE DUST.
4. ALL DISTURBED SOIL SHALL BE COMPACTED ON A DAILY BASIS TO WITHIN 90% OF MAXIMUM COMPACTION.
5. ALL DISTURBED SURFACE AREAS SHALL BE REVEGETATED AS SOON AS POSSIBLE.
6. MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE PREVENTED. ANY MUD AND DIRT CARRYOUT ONTO PAVED SURFACE SHALL BE CLEANED UP DAILY.
7. NO EARTH WORK ACTIVITIES SHALL BE PERFORMED WHEN WIND SPEED EXCEEDS 30 MPH.
8. CONTRACTOR SHALL COMPLY WITH THE BEST MANAGEMENT PRACTICES (BMP'S) AND ALL NOTES AND RULES.

NOT FOR CONSTRUCTION

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

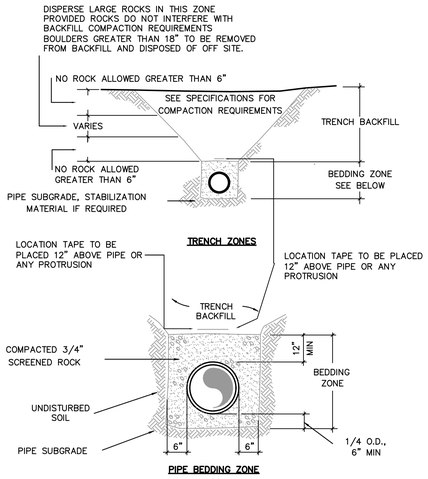
CONSTRUCTION STAGING PLAN
160 FOREST DRIVE TOWNHOMES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
CHRISTOPHER S. MARCIN
32492
MAY 29 2024
PROFESSIONAL ENGINEER

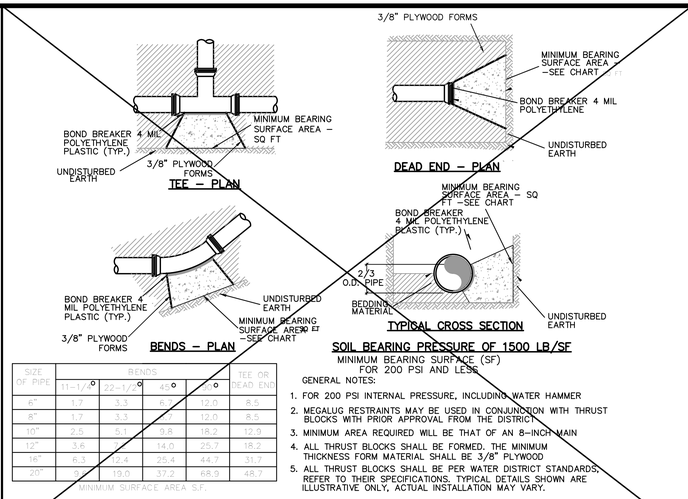
JOB: 24005
DATE: 5/29/24
SCALE: 1" = 10'

SHEET
C-5



N.T.S.

A SEWER PIPE BEDDING



SIZE OF PIPE	BENDS 11-1/4°	22-1/2°	45°	90°	TEE OR DEAD END
6"	1.7	3.3	6.5	12.0	8.5
8"	1.7	3.3	6.5	12.0	8.5
10"	2.5	5.1	9.8	18.2	12.9
12"	3.6	7.2	14.0	25.7	18.2
16"	6.3	12.4	25.4	44.7	31.7
20"	9.8	19.0	37.2	68.9	48.7

MINIMUM SURFACE AREA S.F.

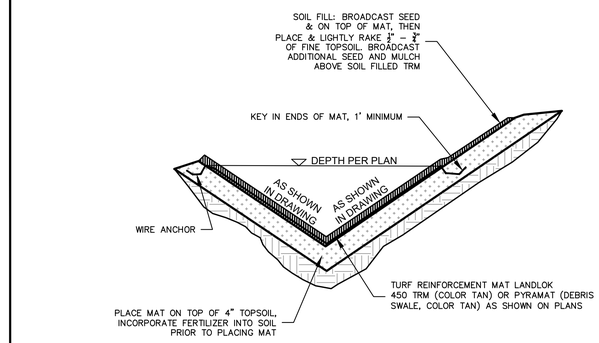
SOIL BEARING PRESSURE OF 1500 LB/SF
MINIMUM BEARING SURFACE (SF)
FOR 200 PSI AND LESS

GENERAL NOTES:

1. FOR 200 PSI INTERNAL PRESSURE, INCLUDING WATER HAMMER
2. MEGALUG RESTRAINTS MAY BE USED IN CONJUNCTION WITH THRUST BLOCKS WITH PRIOR APPROVAL FROM THE DISTRICT.
3. MINIMUM AREA REQUIRED WILL BE THAT OF AN 8–INCH MAIN
4. ALL THRUST BLOCKS SHALL BE FORMED. THE MINIMUM THICKNESS FORM MATERIAL SHALL BE 3/8" PLYWOOD
5. ALL THRUST BLOCKS SHALL BE PER WATER DISTRICT STANDARDS, REFER TO THEIR SPECIFICATIONS. TYPICAL DETAILS SHOWN ARE ILLUSTRATIVE ONLY, ACTUAL INSTALLATION MAY VARY.

N.T.S.

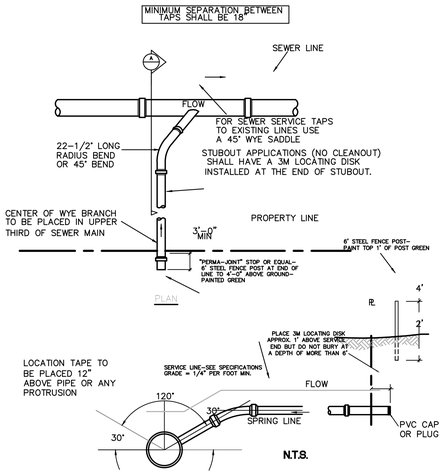
B CONCRETE THRUST BLOCK



CHANNEL
X-SECTION

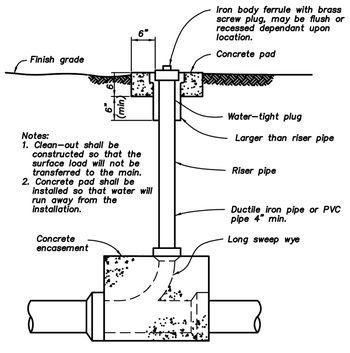
N.T.S.

C TURF REINFORCEMENT MAT DETAIL



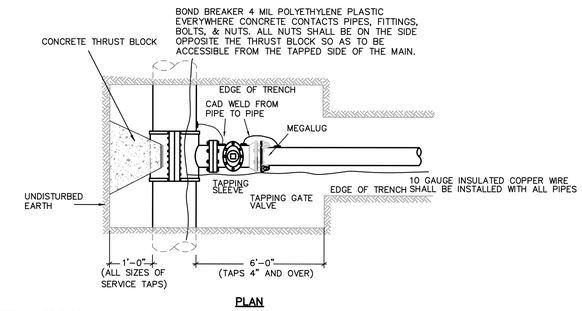
N.T.S.

D TYPICAL SEWER SERVICE



N.T.S.

E SEWER CLEANOUTS



GENERAL NOTES

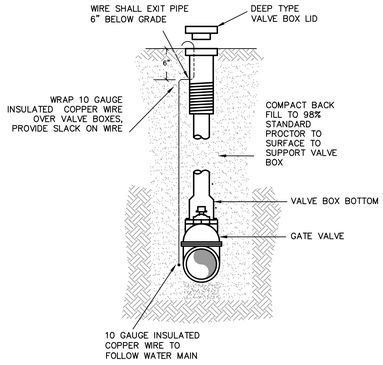
ELEVATION

1. NO TAPPING SLEEVES WILL BE ALLOWED WHERE PRESSURES MAY EXCEED 150psi WORKING PRESSURE. UNLESS WRITTEN PERMISSION IS GIVEN BY THE DISTRICT.
2. PRIOR WRITTEN APPROVAL REQUIRED BY DISTRICT
3. ALL WATER TAPS SHALL BE INSTALLED PER TOWN OF FRISCO WATER CONSTRUCTION STANDARDS.

N.T.S.

F TYPICAL WATER SERVICE

IF THE DISTANCE TO THE TOP OF THE OPERATING NUT TO THE TOP OF THE VALVE COVER IS GREATER THAN 9', AN EXTENSION STEM WILL BE REQUIRED ON THE OPERATING NUT. THE EXTENSION MUST BE SECURED TO THE VALVE OPERATING NUT.



GENERAL NOTE

1. VALVE BOX IS TO BE INSTALLED PLUMB, LEVEL, AND CENTERED ON 2" NUT

NOT FOR CONSTRUCTION

N.T.S.

G TYPICAL GATE VALVE

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970–748–0274

DETAIL SHEET
160 FOREST DRIVEWAY TOWNHOUSES
TOWN OF FRISCO, COLORADO

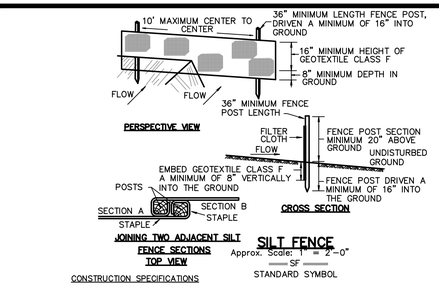
NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MAY 16, 2024
PROFESSIONAL ENGINEER

JOB: 24005
DATE: 5/16/2024
SCALE: N/A

SHEET
C–6

DRAWING: C:\Users\19707\Marcin Engineering Dropbox\Projects\2024\24005 – 160 Forest Dr. Townhouses Filed\dwg\Detail\24005-5-Details.dwg



CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 11/2" X 11/2" SQUARE (MINIMUM) CUT, OR 13/4" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POND PER LINEAR FOOT.

2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MIDSECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

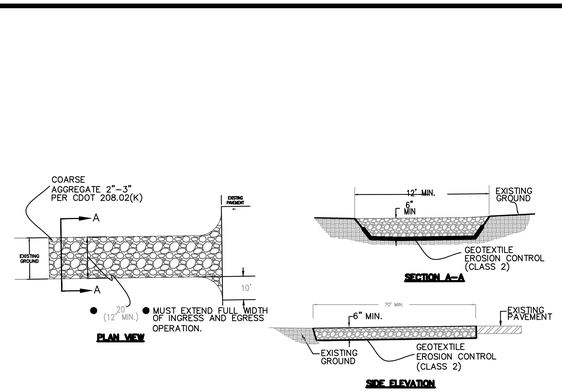
TENSILE STRENGTH	50 LBS./IN (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS./IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL FT / MINUTE (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

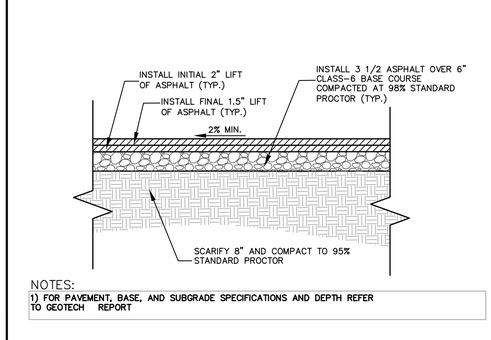
N.T.S.

A SILT FENCE



N.T.S.

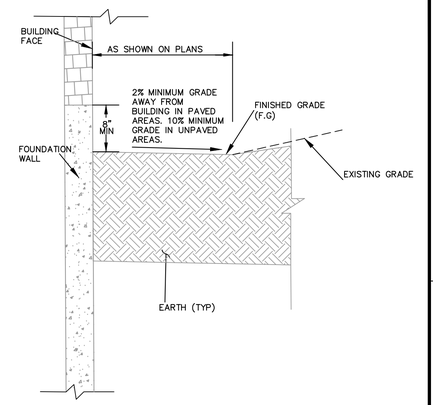
B STABILIZED CONSTRUCTION ENTRANCE



NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT

N.T.S.

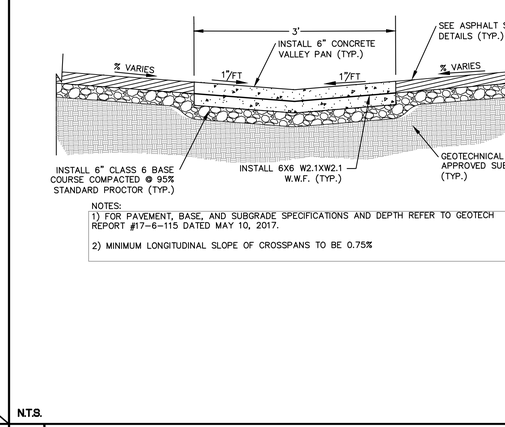
C TYPICAL ASPHALT DRIVEWAY SECTION



TYPICAL SECTION

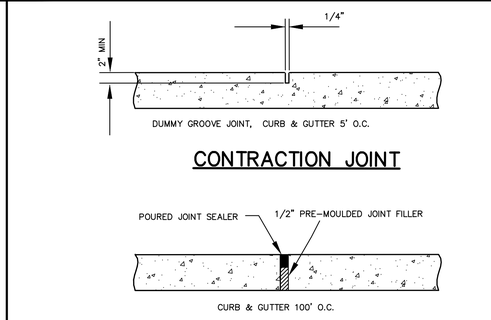
N.T.S.

D GRADING NEAR FOUNDATION WALLS



N.T.S.

E STORM SEWER DRY WELL

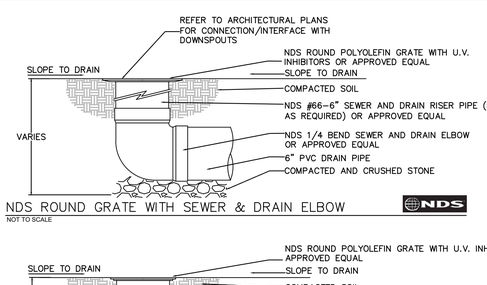


NOTES:
1) FOR PAVEMENT, BASE, AND SUBGRADE SPECIFICATIONS AND DEPTH REFER TO GEOTECH REPORT #17-6-115 DATED MAY 10, 2017.

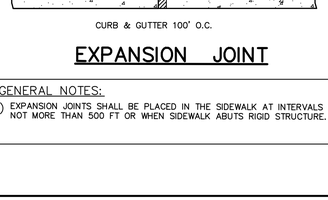
2) MINIMUM LONGITUDINAL SLOPE OF CROSSPANS TO BE 0.75%

N.T.S.

F CONCRETE VALLEY PAN DETAIL AT DRIVE



CONTRACTION JOINT



EXPANSION JOINT

GENERAL NOTES:
1) EXPANSION JOINTS SHALL BE PLACED IN THE SIDEWALK AT INTERVALS OF NOT MORE THAN 500 FT OR WHEN SIDEWALK ABUTS RIGID STRUCTURE.

N.T.S.

G CONTRACTION/EXPANSION JOINTS

NDS ROUND GRATE WITH SEWER & DRAIN ELBOW

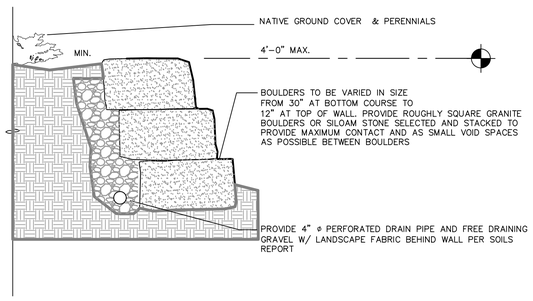
NOT TO SCALE

NDS ROUND GRATE WITH STORM & DRAIN TEE

NOT TO SCALE

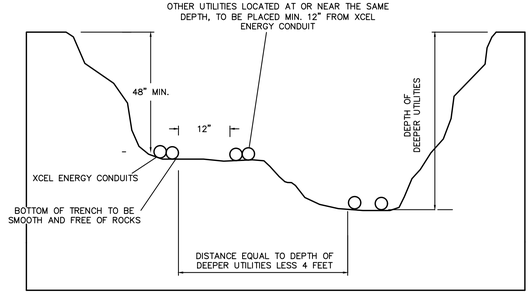
N.T.S.

H NDS ROUND STORM DRAIN INLET



N.T.S.

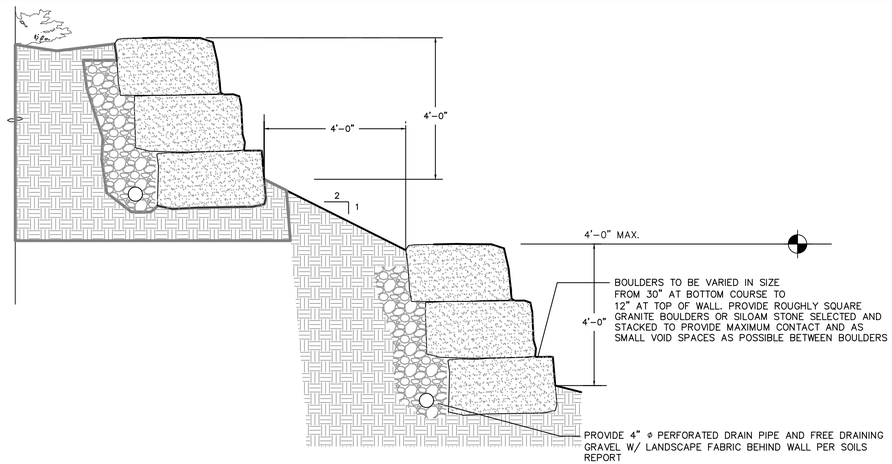
I BOULDER WALL DETAIL



NOTE: HORIZONTAL SEPARATION OF XCEL ENERGY CONDUIT FROM DEEPER UTILITIES SHALL BE THE DEPTH OF THE DEEPER UTILITIES LESS 4 FEET.

N.T.S.

J UTILITY JOINT TRENCH DRAIL



NOT FOR CONSTRUCTION

N.T.S.

K BOULDER TIER WALL DETAIL

MARCIN ENGINEERING LLC
P.O. BOX 1062
AVON, COLORADO
970-748-0274

DETAIL SHEET
160 FOREST DRIVE TOWNHOUSES
FRISCO, COLORADO

NO.	DATE	REVISIONS	BY

COLORADO REGISTERED
THOMAS S. MARCIN
32492
MAY 16, 2024
PROFESSIONAL ENGINEER

JOB: 16034
DATE: 5/16/2024
SCALE: N/A

SHEET
C-7

Study of Stormwater Drainage

Lot 2, West Frisco 70 Subdivision #2
160 Forest Drive

Town of Frisco, Colorado

May 17, 2024

Prepared for:
Frisco Town Government
P.O. Box 4100
1 East Main Street
Frisco, Colorado 80443

Prepared By:
Tony Vazquez, PE
Tom Marcin, PE, PLS
Marcin Engineering, LLC
P.O. Box 1062
101 Eagle Road, #5
Avon, Colorado 81620

Introduction

The purpose of this report is to summarize the impact of proposed construction on Lot 2, West Frisco 70 Subdivision #2 (160 Forest Drive) in Frisco, Colorado. The calculated runoff from the proposed construction will be presented and compared to that of the existing condition of the site.

Existing Conditions

This study will cover Lot 2, which contains 37289 square feet or approximately 0.86 acres. The existing condition of Lot 2 is an unimproved area covered by grass and trees with some rock outcroppings and a short, unimproved driveway.

Figure 1: Overview of the site in its existing condition via aerial imagery provided by Summit County GIS.

The USDA Web Soil Survey was used to obtain soil information for the site. The soil map produced by the Web Soil Survey showed a soil identification ***7C*** (Grenadier gravelly loam, hydrologic soil group B) over Lot 2. The nature of group B soils includes fine textured to moderately coarse textured soils with moderate infiltration rates when wet. We have identified a runoff coefficient (C value) of 0.37 for the unimproved areas of Lot 2, based on mixed vegetation with site soils being of hydrologic soil group B and slopes around 6% or greater. We have identified a C value of 0.90 for the driveway portion of Lot 2, considering it impervious.

LULC	Runoff Coefficient											
	Soil Group A			Soil Group B			Soil Group C			Soil Group D		
Slope	<2%	2%–6%	>6%	<2%	2%–6%	>6%	<2%	2%–6%	>6%	<2%	2%–6%	>6%
Cropland	0.14	0.18	0.22	0.16	0.21	0.28	0.20	0.25	0.34	0.24	0.29	0.41
Forest	0.08	0.11	0.14	0.10	0.14	0.18	0.12	0.16	0.20	0.15	0.20	0.25
Grassland	0.15	0.25	0.37	0.23	0.34	0.45	0.30	0.42	0.52	0.37	0.50	0.62
Mixed vegetation	0.14	0.22	0.30	0.20	0.28	0.37	0.26	0.35	0.44	0.30	0.40	0.50
Artificial Surfaces	0.33	0.37	0.40	0.35	0.39	0.44	0.38	0.42	0.49	0.41	0.45	0.54

Note: Source: Knox County Tennessee [73].

Figure 2: Runoff coefficients based on different soil groups and slope conditions.

Figure 3: Overview of the soil study area from USDA Web Soil Survey.

Lot 2 is generally sloped from the northwest to the southeast and contains a ditch running from the southwest to the northeast across the site. This ditch collects runoff and delivers it to the northeast corner of the site.

Proposed Conditions

Lot 2 is proposed to host a 4-unit multifamily residential structure. The structure and associated driveway, parking, and retaining walls cover approximately 7500 square feet, or 20% of Lot 2.

The existing ditch across Lot 2 will be intercepted by a storm drain inlet which will be piped north and east around the proposed structure. The drainage swale will convey runoff from the western portion of the lot and the area to the west and north of the proposed structure to a drywell located near the northeast corner of the site, in the vicinity of the discharge point of the existing ditch.

Areas to the east of the ditch, inlets, and drainage swale, including the structure, driveway, and parking, will be allowed to drain to the Forest Drive right-of-way. We anticipate that this grading configuration will reduce the amount of runoff produced from the lot during the 25-year storm when compared to the existing condition.

Re: Grading Plan prepared by Marcin Engineering for details about the proposed layout of the construction on Lot 2.

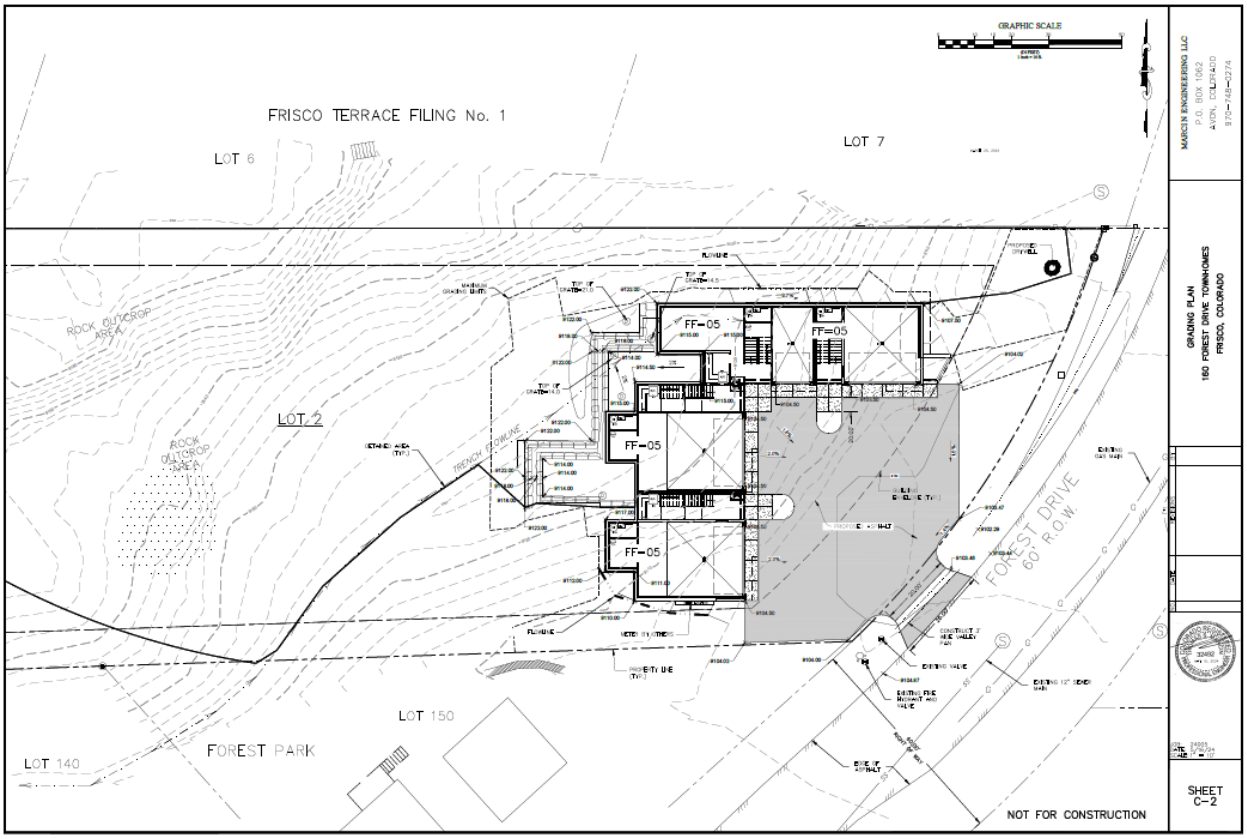


Figure 4: Overview of Grading Plan prepared by Marcin Engineering.

Runoff Calculations

The Rational Method was used to calculate runoff rates. Runoff volumes were calculated using the rainfall amount and the runoff coefficients for the existing and proposed conditions. We have used the 25-year storm rainfall amount of 2.2 inches identified in the Town of Frisco development code. For the purposes of rational method calculations, we assume the 2.2 inches will also apply as the rainfall rate for one hour (2.2 inches/hour). In the proposed condition, the site is split into two study areas: one which is detained and conveyed to the drywell, and one which is allowed to run off.

Overall, in the existing condition, the 25-year storm produces 0.74 cfs and 2674 total cubic feet of runoff. In the proposed condition, the overall site produces 0.90 cfs and 3254 total cubic feet of runoff from the 25-year storm.

Split into two, the detained area in the proposed condition produces 0.43 cfs and 1549 total cubic feet of runoff, while the undetained area in the proposed condition produces 0.47 cfs and 1698 total cubic feet of runoff. The table on the following page details the runoff calculations.

Drainage Summary - 25-yr

Parcel: 160 Forest Drive

Rainfall Depth: 2.20 inches for 25-year storm

Existing Conditions (25 yr storm)

A = Parcel/Development Area =	0.86	acres
C = Runoff Coefficient =	0.39	(4% impervious, 96% unimproved)
$I_{100\,yr}$ = Rainfall Intensity =	2.20	in/hr
Q = C * I * A =	0.74	cfs
V = RD * A * C =	2674	cf (RD = 2.20 in)

Proposed Conditions (25 yr storm)

A = Parcel/Development Area =	0.86	acres
C = Runoff Coefficient =	0.48	(20% impervious, 80% unimproved)
$I_{100\,yr}$ = Rainfall Intensity =	2.20	in/hr
Q = C * I * A =	0.90	cfs
V = RD * A * C =	3254	cf (RD = 2.20 in)

Detained Area (25 yr storm)

A = Parcel/Development Area =	0.51	acres
C = Runoff Coefficient =	0.38	(2% impervious, 98% unimproved)
$I_{100\,yr}$ = Rainfall Intensity =	2.20	in/hr
Q = C * I * A =	0.43	cfs
V = RD * A * C =	1549	cf (RD = 2.20 in)

Undetained Area (25 yr storm)

A = Parcel/Development Area =	0.35	acres	Total area check: 0.51 ac + 0.35 ac = 0.86 ac
C = Runoff Coefficient =	0.61	(46% imprevious, 54% unimproved)	
$I_{100\,yr}$ = Rainfall Intensity =	2.20	in/hr	
Q = C * I * A =	0.47	cfs	Flow check: 0.43 cfs + 0.47 cfs = 0.90 cfs
V = RD * A * C =	1698	cf (RD = 2.20 in)	Volume check: 1549 cf + 1698 cf = 3247 cf (0.1% error)

Reduction in runoff rate from proposed undetained area of site when compared to existing: 0.27 cfs

Reduction in runoff volume from proposed undetained area of site when compared to existing 976 cf

Figure 5: Runoff calculations via the rational method.

Conclusion

The proposed construction on Lot 2 exchanges about 7500 square feet of unimproved area for impervious area. By intercepting the existing ditch on the site with an inlet and conveying runoff from the rear of the site to a drywell, the amount of runoff produced by the site flowing into the Forest Drive right-of-way is reduced. When compared to the existing condition, the runoff rate drops from 0.74 cfs to 0.47 cfs (-0.27 cfs) and the runoff volume drops from 2674 cubic feet to 1698 cubic feet (-976 cubic feet). This represents a reduction of 36% for runoff rate and volume.

The proposed drywell shall be sized to handle 580 cubic feet of water before overtopping, as 580 cubic feet is the additional runoff produced by the site in the proposed condition during the 25-year storm when compared to the existing condition.

In the event of an overtopping drywell, the runoff will flow directly into the Forest Drive roadside ditch due to the drywell's location at the northeast corner – the lowest point – of Lot 2.

Prepared by:

Tony Vazquez, PE
MARCIN ENGINEERING, LLC

160 Forest Drive, Frisco, CO 80443
Major Site Plan Application
Excavation Plan

February 14, 2024

Dear Town of Frisco Planning Commission,

The following letter details the excavation plans for 160 Forest Drive.

Methodology to be utilized:

- Alpine Specialty is expecting to use a Cat 349 excavator with an H180 hammer attachment to break apart and shape the bedrock. Alpine Specialty is also expecting to use a Hitachi 210 excavator to work in conjunction with the hammer machine to remove the broken waste material as it is being created. Alpine Specialty does not anticipate any issues removing and shaping using this technique.
- The excess spoil material will be hauled out by tandem axle ten yard dump trucks.
- Prior to finishing the building excavation, Alpine Specialty is expecting to shape and install the patios and boulder retaining walls on the west side of the structure, to the extent possible. At backfill, Alpine Specialty is expecting to install the remaining walls and patio prep from within the footprint of the structure.
- The geotechnical report indicates that the excavated rock will be stable. This will be confirmed via an onsite visit from the geotechnical engineer. If the excavated rock is determined to not be stable, gunite or another similar material/process will be used to shore up the walls.

Experience:

- Alpine Specialty Earthworks ("Alpine Specialty") has been a full service excavation contractor for approximately 30 years. Alpine Specialty is a Colorado based company providing excavation services primarily in the Summit County area and along the Front Range and the surrounding areas.
  - https://www.alpinespecialty.com/about

- Alpine Specialty are experts in the following areas:
  - Excavation
  - Rock Hammering
    - https://www.alpinespecialty.com/services/rockhammer
  - Retaining Walls
  - Snow removal
  - Winter Work
  - Utilities
  - Demolition

- Alpine Specialty has used the above described technique for breaking apart and shaping bedrock many times in similar conditions over the past 30 years with great success. The below photos show this technique being used in recent years on two separate job sites (2019 and 2022) at the top of the ridge in the Summerwood neighborhood above Lake Dillon. There are also additional photos captured on Alpine Specialty's website.

Regards,

Seth

Seth Francis
Managing Partner
Blue River Real Estate
PO Box 7035, Breckenridge, CO 80424
Cell: 347-834-1009
sfrancis1985@gmail.com

Todd Alcock

Alpine Specialty Earthworks

0303 High Meadow Drive (2022):


CAT
CAT

107 Torrey Lane (2019):


CAT
CAT
316E

160 Forest Drive, Frisco, CO 80443
Major Site Plan Application
Plan to Maintain Slope Disturbance Boundary

February 14, 2024

Dear Town of Frisco Planning Commission,

The following letter details the construction plans to maintain the slope disturbance boundaries of 160 Forest Drive.

General

A metal chain linked fence will be added on the slope disturbance boundary as per the site plan to demarcate the disturbance line.

West Side of Unit D

To the west of Unit D there appears to be a slope disturbance boundary that is two feet away from the Unit. However, this is a cantilevered bedroom on the third level of the home. As such there is sufficient room to construct this structure from below and a cherry picker can be used to install the siding of the west wall of the bedroom and to not impact the disturbance boundary.

North Side of Unit A and B

To the north of Unit A and Unit B there are some areas that have four feet between the edge of the Unit and the slope disturbance boundary. In order to not impact the disturbance boundary, the following steps will be taken:

- The foundation will be formed and poured from the interior.
- 4' is sufficient to remove the forms between the foundation wall and the excavated rock.
- Waterproofing and insulation will be sprayed using long spray poles.
- Backfilling will occur with a large excavator from the interior of the house. Fill will be gravel or a self-compacting fill.
- Most of framing will be completed from the interior of the house and 4' will be sufficient to install the sheathing.
- Pump-jacks will be used to install the exterior siding as these require less footprint and can fit in the 4' disturbance line.

Regards,

Seth

Seth Francis
Managing Partner
Blue River Real Estate
PO Box 7035, Breckenridge, CO 80424
Cell: 347-834-1009
sfrancis1985@gmail.com