

# TOWN OF DILLON PLANNING AND ZONING COMMISSION

SPECIAL MEETING Wednesday, June 28, 2017 5:30 p.m. Dillon Town Hall 275 Lake Dillon Dr.

### **AGENDA**

- 1. Call to Order
- 2. **Approval of the minutes** of the June 7, 2017 regular meeting.
- 3. **Public Comments:** Open comment period for planning and zoning topics not on tonight's agenda.
- 4. Consideration of Resolution No. PZ 07-17, Series of 2017; A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, RECOMMENDING THE APPROVAL OF A LEVEL IV DEVELOPMENT APPLICATION FOR AN AMENDMENT TO BLOCK 6 OF THE EXISTING DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT FOR THE APPROVAL OF 3 APARTMENT BUILDINGS WITH A TOTAL OF 36 APARTMENT UNITS LOCATED ON LOT 6 OF THE DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT, DILLON, COLORADO; AND, SETTING FORTH DETAILS IN RELATION THERETO.
- 5. Announcement of new Commissioner, Kevin Stout
- 6. Election of Chairman of the Planning and Zoning Commission
- 7. **Discussion Item:** Follow-up discussion for PUD amendments regarding maximum allowable heights and off-street parking requirements.
- 8. Other Business
- 9. Adjournment

# TOWN OF DILLON PLANNING AND ZONING COMMISSION

REGULAR MEETING WEDNESDAY, June 7, 2017 5:30 p.m. Town Hall

# **CALL TO ORDER**

The regular meeting of the Planning and Zoning Commission of the Town of Dillon, Colorado, was held on Wednesday, June 7, 2017, at Dillon Town Hall. Vice Chair Amy Gaddis called the meeting to order at 5:35 p.m. Commissioners present were: Jerry Peterson and Teresa England. Chairman Nathan Nosari and Commissioner Charlotte Jacobsen were absent. Staff members present were Dan Burroughs, Town Engineer; and Corrie Woloshan, Recording Secretary.

# **APPROVAL OF THE MINUTES OF MARCH 1, 2017 REGULAR MEETING**

Commissioner Jerry Peterson moved to approve the minutes from the March 1, 2017 regular meeting. Commissioner Teresa England seconded the motion, which passed unanimously.

# **PUBLIC COMMENTS**

There were no public comments.

CONSIDERATION OF RESOLUTION NO. PZ 04-17, SERIES OF 2017; A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, RECOMMENDING THE AMENDING OF CHAPTER 16, "ZONING," ARTICLE V, "PLANNED UNIT DEVELOPMENT," SECTION 16-5-120 "PUD DEVELOPMENT STANDARDS," ARTICLE VI, "OFF-STREET PARKING AND LOADING," SECTION 16-6-40 "GENERAL PARKING REQUIREMENTS," AND SECTION 16-6-60 "DESIGN STANDARDS FOR OFF-STREET PARKING SPACES AND FACILITIES," ESTABLISHING ADDITIONAL PROVISIONS FOR ALLOWABLE BUILDING HEIGHTS WITHIN A PUD, PARKING LOT DESIGN, AND OFF-STREET PARKING REQUIREMENTS.; AND, SETTING FORTH DETAILS IN RELATION THERETO.

### **SUMMARY:**

The following changes are proposed to the Town of Dillon planning and zoning regulations:

- A. Cap the maximum height that can be requested in a Planned Unit Development to an additional 40% more than the height allowed in the underlying zone district; Require all Planned Unit Developments which request additional height, to meet additional parking criteria including placing 65% of the parking beneath the main floor to enhance the street level appeal of the building.
- B. Add additional criteria to off-street parking requirements for a PUD.
- C. Eliminate a separate set of standards for parking generation calculations in the Core Area Zone.
- D. Add a provision in the Off-Street Parking Standards to allow a vehicle to back into a public right-of-way from an off-street parking lot under certain circumstances.

These Changes are explained in greater detail below:

A. Cap the maximum height that can be requested in a Planned Unit Development to an additional 40% more than the height allowed in the underlying zone district; Require all

# <u>Planned Unit Developments which request additional height, to meet additional parking criteria including placing 65% of the parking beneath the main floor to enhance the street level appeal of the building.</u>

Town staff needs a tool to help define the absolute maximum height allowable in a planned unit development. Right now it is somewhat a free for all, and Town staff cannot give potential developers quantifiable direction on what building height is too high.

After the Dillon Crossroads project review, the community decided that a 90' building is way too tall. Town staff would propose that we cap any building height in a planned unit development to an additional 40% more than the underlying zoning district would allow.

In the Core Area Zone District, this would allow a building to be 50' + (0.40)x50' = 70'. In the Commercial Zone District, this would allow a building to be 40' + (0.40)x40' = 56'.

IN both cases, the code allows an additional 8' in height for non-habitable architectural elements such as elevator towers, roof peaks, bell towers, etc...

This code change to Section 16-5-120 PUD Development Standards, **Sub-section (f) Building Height**, simply defines the upper limit of a height increase within the context of a planned unit development and caps it at 40% more than the underlying zone district. It further requires that a 100% of the parking required by code be met. See the attached code section and resolution.

# B. Add additional criteria to off-street parking requirements for a PUD.

Subsection (i) Off-Street parking of Section 16-5-120 PUD Development Standards will be modified with the following language to prevent any funny business as to how an applicant can apply the parking code to his/her project. The following code language was added:

- (2) The number of off-street parking spaces for each use in a PUD may not be reduced if the PUD requests an increase in building height.
- (3) The number of off-street parking spaces may not be reduced through the use of valet parking.
- (4) The applicant shall submit a parking generation report prepared by a licensed Traffic Engineer in order to justify the proposed parking reductions and amount of parking provided for the development.

# C. Eliminate a separate set of standards for parking generation calculations in the Core Area Zone.

The Town of Dillon Municipal code currently has two sets of standards for calculating the required amount of parking generated by different types of uses. One set is applied to the Town Center Core Area (CA) zoning (Section 16-6-40(b)) and the other set is applied to the rest of the Town (Section 16-6-40(a)). The Core Area parking regulations arbitrarily require less parking than is required in the rest of town.

For example, retail uses require 1 space per 400 square feet of floor area outside the Core Area and retail uses require only 1 space per 650 square feet within the core area. As an example, a 4,000 square foot retail use in the Core Area would only require 7 parking spaces, whereas the same development in the rest of the Town would require 10 spaces.

Town staff believes the parking generation for the rest of the Town is more aligned with the actual parking spaces required for a development.

As the Town moves forward with redevelopment of the Town Center, analyzing the true impact to the Town's available parking pool of around 500 parking spaces is very important. So utilizing the parking regulations that have been applied to our successful Dillon Ridge Marketplace development areas and adjacent commercial and retail establishments in the Anemone Trail area of Town seems the most appropriate.

The code change simply deletes subsection (b) of Section 16-6-40 and renumbers the subsequent subsections accordingly.

# D. Add a provision in the Off-Street Parking Standards to allow a vehicle to back into a public right-of-way from an off-street parking lot under certain circumstances.

In working with a developer on redeveloping Lot 16R, it has become apparent that the simplest way to allow this project to develop and provide the required number of onsite residential parking is to allow a row of their off-street parking lot to back into the parking aisle which remains in the Reconfigured Parking Lot B. Parking Lot B has one row of head-in 90° parking along the west side that is available for public parking; the developer is proposing a row of head-in 90° parking on the east side as well. This only makes sense because the parking lot was originally designed this way.

However, the code does not allow offsite parking to back into a public Right-of-way. In this unique circumstance, Parking Lot B actually exists in a dedicated right-of-way. So the code does not at this time allow off-street parking to use this existing 24' wide parking aisle to service offsite parking spaces.

To accommodate this unique circumstance, the Town is proposing that the code be changed to allow spaces from a private off-street parking lot to back into an unnamed right-of-way used for parking.

This parking change would also bring the Town's off-street parking into compliance with the code.

### STAFF RECOMMENDATION:

Staff recommends approval of Resolution PZ 04-17, Series of 2017.

Commissioner Teresa England supports the idea. Commissioner Jerry Peterson mentioned everyone will ask for a variance. Dan Burroughs, Town Engineer explained they'd have to prove an economic hardship and Council would have to buy off on it. Buildings need to be compatible with the surrounding area. Core Area zone used to be 40 feet, and they raised that to 50 feet for the whole Core Area when La Riva was built.

Vice Chair Amy Gaddis asked, what is the highest building in Town? Dan Burroughs, Town Engineer said it is La Riva, at 50 feet plus 8. They did everything they could, put parking underground, to minimize the height of the building. Everything is based on perception and where you measure it from.

Vice Chair Amy Gaddis questioned, do we need to put something in here that if you're going above 50 foot you have to start reducing as you go up? Dan Burroughs, Town Engineer, said there are Towns that do this, have to step back with each level, like a wedding cake. Would be a good rule to implement. Again, the PUD process is there.

Vice Chair Amy Gaddis asked, do you feel we could request perspective of the street showing existing condition and what the new would look like? Dan Burroughs, Town Engineer replied, absolutely. Commissioner Teresa England mentioned, I think the massing model is a good idea. I hesitate getting into specific design criteria, if we think it's appropriate suggest but don't make step back a rule. Vice Chair Amy Gaddis added, it's not uncommon when buildings get above a certain height you don't want it to look so

large. Dan Burroughs, Town Engineer informed, Frisco's architecture requires stepping. Vice Chair Amy Gaddis expressed it's also a pedestrian feel, where you don't feel like you're standing next to a tall building. Dan Burroughs, Town Engineer said I can bring you more information on Frisco's design guidelines. Their codes are more complicated because you get points for meeting certain things and lose points for others. Vice Chair Amy Gaddis requested that we talk to Roth Sheppard regarding the 40% and if they would recommend a change above that height.

### **PUBLIC HEARING:**

A **Public Hearing** is required for this resolution.

Vice Chair Amy Gaddis opened the public hearing at 6:10 p.m.

Jim Hartmeier, Lookout Ridge – Expressed the 40% overage on zoning height he didn't originally like. Spoke with Dan about it. Concern is, it would allow for a building 78 feet high. Do we really have a need for a 78 foot building? Wording needs to be cautious. Suggest starting off with a lower percent and seeing how that goes.

Danny Eilts, 324 W Buffalo – Said he submitted plans for the Crossroads project, it appears all of this is coming out of that process. I thought one reason for a PUD was to attract developers, but it sounds like we're putting more restrictions on a PUD. You're going to chase developers away. I don't know enough about the 40% but my initial response is you're making the process more difficult to do a PUD and increases the cost of a project. Maybe you don't need a PUD process, you're chasing developers away. Vice Chair Amy Gaddis asked what the height was on his project? Dan Burroughs, Town Engineer replied it was almost 90 feet, more than twice what we allow. This is why we're here today. From a staff standpoint we need to know what to tell developers. We're trying to work with the community, PNZ, and Council so that developers have better guidelines when putting money towards something that will succeed. We are fact finding now but again Council said not to bring them PUD changes.

Vice Chair Amy Gaddis closed the public hearing at 6:17 p.m.

Commissioner Teresa England moved to approve sections 3 and 4 of Resolution NO. PZ 04-17 Series of 2017. Commissioner Jerry Peterson seconded the motion, which passed unanimously upon roll call vote.

# CONSIDERATION OF RESOLUTION NO. PZ 05-17, SERIES OF 2017

A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, RECOMMENDING THE AMENDMENT OF CHAPTER 16, "ZONING," ARTICLE VIII, "DESIGN GUIDELINES" OF THE DILLON MUNICIPAL CODE OF THE TOWN OF DILLON, COLORADO TO ADD A NEW SECTION 16-8-120, "MARCH 2017 TOWN OF DILLON DESIGN GUIDELINES;" AND, SETTING FORTH DETAILS IN RELATION THERETO.

### **SUMMARY:**

The Town and Roth Sheppard Architects have worked with community members through workshops and forums, community advisory committees, and Town Council work sessions discussing the creation a cohesive vision for the built environment in the Town of Dillon. The "March 2017 Town of Dillon Design Guidelines" (Guidelines) are the culmination of a community based and architecturally focused visioning effort to create unique design guidelines that will help to create complimentary developments with quality

architectural elements that acknowledge Dillon's mountain lake setting. They provide a design framework supporting Dillon's '*Mountain Lakestyle*' brand. These are guidelines for architects, developers, and the Town to utilize when planning, designing, proposing, reviewing, and constructing projects with architectural elements, themes, and visions found in the Guidelines.

The Guidelines are attached to Resolution PZ 05-17, Series of 2017 as Exhibit 'A'.

The Planning and Zoning Commission has reviewed the Guidelines through various drafts, and had a presence on the Economic Development Advisory Committee during the development of the Guidelines. The Town Council has contributed to the effort through numerous work sessions with the design and development team. The Commission last reviewed the Guidelines in a study session during the March 2017 regular meeting. This Resolution provides the Dillon Municipal Code adoption by reference language to support their use as a guiding document to create complimentary, high quality developments in the Town of Dillon.

The Resolution provides the Code language to adopt the Guidelines by reference. The Guidelines remain a separate document which the Code references. The Colorado state statutes and Town Charter provide that the "March 2017 Town of Dillon Design Guidelines" may be adopted by reference. This adoption by reference is how the Code provides for the Building and Fire Codes, for example. These codes are amended from time to time, and then adopted by reference to reflect the passage of time and improvements in design and life safety.

The Resolution recommends that the Town Council adopt the amendment to Chapter 16 "Zoning", Article VIII "Design Guidelines," by adding a new Section 16-8-120 "March 2017 Town of Dillon Design Guidelines". The new Code section reads as follows:

# Sec. 16-8-120 "March 2017 Town of Dillon Design Guidelines"

Pursuant to the Home Rule Charter, Section 3-12, there is adopted the "March 2017 Town of Dillon Design Guidelines", by reference thereto.

# STAFF RECOMMENDATION:

Town staff believes it is in the best interest and well-being of the Town to adopt this Chapter 16 amendment, by adding a new Section 16-8-120 "March 2017 Town of Dillon Design Guidelines," and recommends approval of Resolution PZ 05-17, Series of 2017.

Amy – we made only a few changes to this, is it otherwise the same? Dan – yes, this has also been approved by Town Council. Teresa – do you want them to take a look at the concept of stepping back? Amy – I'd be surprised if it wasn't in here in terms of facade. If we want to look at increasing the height, if we put it into the guidelines vs the code could we amend this? Teresa – they talk about the character of the building fitting into the architecture of surrounding buildings. That's why I hesitate to make it iron clad, it might not fit in all situations.

### **PUBLIC HEARING:**

A **Public Hearing** is required for this resolution.

Vice Chair Amy Gaddis opened the public hearing at 6:24 p.m.

No public comments.

Vice Chair Amy Gaddis closed the public hearing at 6:25 p.m.

Commissioner Teresa England moved to approve Resolution NO. PZ 05-17 Series of 2017. Vice Chair Amy Gaddis seconded the motion, which passed unanimously upon roll call vote.

CONSIDERATION OF RESOLUTION NO. PZ 06-17, SERIES OF 2017; A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, APPROVING A LEVEL III DEVELOPMENT APPLICATION FOR A CONDITIONAL USE PERMIT FOR AN ACCESSORY APARTMENT AT 151 TENDERFOOT STREET, DILLON, COLORADO; AND, SETTING FORTH DETAILS IN RELATION THERETO.

### **SUMMARY:**

The Town received an application for a Conditional Use Permit for an Accessory Dwelling Unit at 151 Tenderfoot Street, Lot 16, Block L, New Town of Dillon, Dillon, Colorado. The proposed project would include the construction of a three car garage addition with a small Accessory Dwelling Unit above it. The application demonstrates conformance to the Code Sections pertaining to Conditional Use Permits and Accessory Dwelling Units, Section 16-5-220 and Section 16-4-40, respectively.

**Project:** Pasterkamp Addition with Accessory Apartment

Location: Lot 16, Block L, New Town of Dillon

**Address:** 151 Tenderfoot Street

**Owners:** Jim and Susan Pasterkamp

**Architect:** Bill Marvin, Hodges/Marvin Architects, Inc.

**Development Application:** Level III Conditional Use Permit for an Accessory Apartment; Residential Remodel with attached garage footprint addition.

**Application Date:** April 24, 2017

# **Code Analysis:**

Zoning: Residential Low (RL). Accessory Apartments are permitted through a Level III Conditional Use Development Permit process. Two (2) parking spaces shall be provided for the accessory apartment, the apartment shall not exceed 900 SF nor be greater than 1/3 of the primary residence, the apartment shall be deed restricted to minimal six (6) month rental terms and the apartment may not be sold as a separate property. Additional water / sewer tap fees shall be paid.

An Accessory Dwelling Unit may be permitted in the RE, RL, RM, and RH zones in a single family residence (Sec. 16-4-40). The subject property is zoned Residential Low (RL). The provisions required in this Code section to satisfy this allowance are provided in detail, by subsection, in Resolution PZ 06-17, Series of 2017. This application does meet those provisions

*Yards (Setbacks):* The side setbacks for the RL zone are 8', and the proposed addition is set back greater than eight feet from the side lot line. The proposed addition is also well clear of the required 15' rear yard and 20' front yard. (Sec. 16-3-130)

Easements: The proposed addition will not be constructed in any known easements. (Sec. 16-9-10)

Parking: Two (2) dedicated parking spaces are required for the proposed Accessory Dwelling Unit.

# Comprehensive Plan Reference:

- Section 6, Part II "Land Use Guidelines" refers to the desire to create diversity in residential land uses in an effort to increase year-round residents in the community.
- Section 6, Part III "Residential / Mixed Use Zoning Classification" provides for up to six (6) units per acre in the Residential Low zoning district and states that accessory units are permitted in the zone.

# Square Footage Analysis:

Existing:

Main: 960 SF Upper: 960 SF Total: 1920 SF

Proposed:

Stairway: 358.5 SF Garage / 3-Car: 1008 SF

Accessory Apartment above Garage: 1-Bed – 1-Bath / Kitchen with Oven: 696 SF

Total: 2062.5

10tal. 2002.3

Total Residence with Addition: 3982.5 SF

Total Heated Living Area (Excludes Garage): 2,974.5 SF

Percentage of Total SF: 696 SF / 2974.5 SF = 23.4% (33.3% Permitted by Code)

### Lot Coverage:

Lot Size: 22,500 SF

Existing Structure: 1020 SF

Existing Shed: Assume 10' x 12' = 120 SF

Proposed: 1355 SF

Total Lot Coverage: 2,495 SF

Percent Lot Coverage: 11.1% (40% Allowed by Code)

# Snow Storage:

Area to be cleared of snow: 1,290 SF

Snow Storage Requirement: 1,290 SF x 0.25 = 322.5 SF

Snow Storage Provided: 330 SF

### Parking:

Three (3) parking spaces are provide in the garage and at least two (2) exterior parking spaces are provided on site. Of those spaces, two (2) are to be reserved for the accessory apartment.

Building Height:

Low ground elevation: 97.7' (southeast elevation) High ground elevation: 98.6' (northwest elevation)

Base Elevation: 98.2'

Highest Ridge Elevation: 124' - 7 - 1/8'' = 124.7'

Building Height: 124.7' - 98.2' = 26.5' (30' Permitted by Code)

### Architecture:

The project has timbers and beams, wood siding, stone features, and design characteristics described in the Town of Dillon Architectural Guidelines. The architectural design exhibits aspects of historic mountain architectural elements in the roof lines and building elements depicted in the Guidelines, and is complimentary with the existing structure and surrounding neighborhood. The design has articulation and varied roof pitches and elevations. Gable truss features and hardware tie the addition aesthetically with the existing residence. The proposed colors lend to a complimentary aesthetic.

### Street Trees:

Code Requirement:

# Sec. 16-7-30. - Specific requirements. Excerpt

- (e) Trees shall be provided in the following manner:
- (1) Street trees shall be provided for all projects where front yards are required, at a rate of one (1) tree for every fifteen (15) linear feet, or fraction thereof, of street frontage, including street side yards.
- (2) In addition to the street trees required above, trees shall be provided for all projects other than single-family, at a rate of one (1) tree per five (5) parking spaces or fraction thereof. These trees shall be placed within or immediately adjacent to the parking lot.
- (3) Within all other yards, trees shall be provided in a number adequate to buffer the project from adjacent uses.
- (4) All required trees shall be a minimum of six (6) feet in height, with the exception that twenty-five percent (25%) of the required trees for any project shall be a minimum of eight (8) feet in height.
- (5) All required trees shall have a minimum caliper, measured two (2) inches above ground level, of one and one-half  $(1\frac{1}{2})$  inches.
- (6) A minimum of thirty percent (30%) of all required trees shall be evergreens, and at least twenty-five percent (25%) of the evergreens shall be a minimum of eight (8) feet in height.

-Required Trees: 100 LF Frontage / (1 tree/15 LF) = 7 trees, 3 of which shall be evergreens

### Site Evaluation:

The site plan shows 11 evergreen and aspen trees in the front portion of the 100' wide property. The site is heavily vegetated with a mix of deciduous and evergreen trees. No additional trees are required to screen the residence from the roadway.

Water / Sewer Tap Fees (EQR's):

- Existing 2-Bed / 2-Bath home: 1 EQR assessed balance
- 0.65 EQR's additional assessed for 1-Bed / 1- Bath / Full Kitchen Apartment
  - $\circ$  = 0.65 EQR x \$14,966.00 = \$9,727.90 due

### Impact Fees:

Summit County Housing Authority 5A affordable housing funding.

- Additions between 1,500 and 2,499 SF are assessed \$0.50 / SF.
- Proposed addition:
  - o Total SF Proposed: 2,062.5 SF
  - o Garage Exemption: -600 SF (per 5A Measure)
  - o Assessed Area: 1,462.5 SF
- Impact Fees Due:  $$0.50/SF \times 1,462.5 SF = $732.25 due$

### **CONDITIONS OF APPROVAL:**

1. The applicant shall obtain a Grading and Excavation Permit with the Town prior to performing any site disturbing activity.

- 2. The foundations shall be surveyed by a Colorado Licensed Surveyor and an Improvement Location Certificate plat provided to the Town prior to Building Permit finalization. The following information is to be provided: location of the foundation showing adherence to the setbacks, and providing a building height certification meeting the maximum building height limit
- 3. The applicant shall re-vegetate all disturbed areas by planting a native grass seed or turf grass seed mix, ensure growth through watering or irrigation, and maintain a vegetative ground cover.
- 4. The applicant shall pay the required water and sewer tap fees.
- 5. The applicant shall pay all applicable Impact Fees.
- 6. The applicant shall file with the Town the required restrictive covenant preventing subdividing into separate ownership.
- 7. The applicant shall file with the Town a deed restriction that prevents short term rentals of the Accessory Apartment.
- **8.** The applicant shall verify the functionality of the water service curbstop valve. The curbstop water service valve shall be observed and documented as functional by the Dillon Water Department. It is the owner's responsibility to maintain the curbstop valve in an operational condition in accordance with the Dillon Municipal Code.

### STAFF RECOMMENDATION:

Staff recommends approval of Resolution PZ 06-17, Series of 2017.

### **PUBLIC HEARING:**

A **Public Hearing** is required for this resolution.

Vice Chair Amy Gaddis opened the public hearing at 6:25 p.m.

Bill Marvin with Hodges/Marvin Architects presented. Separate entry doors for the accessory unit were discussed. Commissioner Jerry Peterson asked if the accessory unit will have a separate heating system. Jim Pasterkamp, 151 Tenderfoot Dr – explained, for now it will be shared. He is a mechanical contractor and will eventually re-do the whole system.

Dan Burroughs, Town Engineer said this is compliant with our accessory apartment code. He will enter into a covenant with the Town that they can't short term rent and they can't subdivide.

Vice Chair Amy Gaddis read letter received 6/7/2017 from Dennis Boyd, 159 Tenderfoot St, supporting the conditional use permit. Looks like an excellent design and it will help mitigate the housing shortage we have in Summit County. Please use dirt excavated from property to create berm. I also think you are being optimistic with snow storage.

Vice Chair Amy Gaddis asked, is there anything in the code re: snow storage? Dan Burroughs, Town Engineer answered, yes 25%, he's met that. Commissioner Jerry Peterson commented I think berm is a great idea. Dan Burroughs, Town Engineer said typically you wouldn't allow berms but all along Tenderfoot have been berms built by owners for sound masking. Pretty much everyone has one. All utilities are overhead so not an issue with the berm. Just drainage if they're directing drainage into their neighbor.

Jim Pasterkamp – also owns 155 Tenderfoot. Knows the noise issue very well. We have a lot of vegetation in the back lot and I'm torn between removing vegetation and putting berm back there. I know TOD owns the tip corner and next door is commercial. If the city wants to build a berm back there I'd be willing to talk to them about it.

Vice Chair Amy Gaddis closed the public hearing at 6:38 p.m.

Commissioner Jerry Peterson moved to approve Resolution NO. PZ 06-17 Series of 2017. Commissioner Teresa England seconded the motion, which passed unanimously upon roll call vote.

# **OTHER BUSINESS**

Peterson -- Why doesn't Town decide what they want to do with Danny? Dan Burroughs, Town Engineer mentioned Danny presented to Council last night. Kerstin's going to give him a formal letter. Some of the Commissioners still think it's too tall and there aren't enough parking spots. The height now is 64 feet. Right now there's no guidance to staff or the applicant on height. We're trying to remove some of the guess work with this.

We have a special meeting set for Wednesday, June 28th, 2017 at 5:30.

# **ADJOURNMENT**

There being no further business, the meeting adjourned at 6:43 p.m.

Respectfully submitted,

Corrie Woloshan

Corrie Woloshan Secretary to the Commission

# TOWN COUNCIL ACTION ITEM STAFF SUMMARY JUNE 23, 2017 PLANNING AND ZONING COMMISSION MEETING

**DATE:** June 23, 2017

**AGENDA ITEM NUMBER: 4** 

### **ACTION TO BE CONSIDERED:**

Consideration of Resolution No. PZ 07-17, Series of 2017;

A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, RECOMMENDING THE APPROVAL OF A LEVEL IV DEVELOPMENT APPLICATION FOR AN AMENDMENT TO BLOCK 6 OF THE EXISTING DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT FOR THE APPROVAL OF 3 APARTMENT BUILDINGS WITH A TOTAL OF 36 APARTMENT UNITS LOCATED ON BLOCK 6 OF THE DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT, DILLON, COLORADO; AND, SETTING FORTH DETAILS IN RELATION THERETO.

### **SUMMARY:**

The Town of Dillon has received a Level IV Development Application for a an amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development consisting of 36 apartment units located on Block 6, Dillon Ridge Marketplace Planned Unit Developed, Dillon, Colorado. The proposed Dillon Vistas Apartment Complex consists of three buildings with twelve (12) 2 bedroom units each for a total of 36 units. 18 of the units (50% of the units) will be set aside for workforce housing.

Block 6 is essentially a lot that was created with the approval of the Original Dillon Ridge Marketplace Planned Unit Development (P.U.D.). Block 6 sits along the north side of Lookout Ridge between the Skyline Cinemas parking lot to the west and the Lookout Ridge Townhome development along the east side of the property. The addresses for these apartment buildings have not yet been assigned by Summit County Government.

A Level IV application requires a public hearing between both the Planning and Zoning Commission and the Dillon Town Council for approval.

### **PUBLIC NOTICE:**

The Town posted a sign of the public hearing on the site on Monday June 19, 2017. A newspaper ad was ran in the Summit Daily Journal on Friday June 16, 2017, and a mailing noticing the public hearing time and date was sent out on Friday June 16, 2017 to property owners within 300' of the proposed development. These dates are all within the required 7-14 day notice period before the Public hearing on June 28, 2017.

### **ZONING:**

The proposed project is located within the Mixed Use (MU) Zone District.

# PROPOSED PLANNED UNIT DEVELOPMENT CHANGES TO THE UNDERLYING MIXED-USE ZONING DISTRICT:

The developer is proposing the following dimensional changes which are allowed to be varied by the Town Municipal Code through a Planned Unit Development Process.

- A. The front yard setback along Lookout Ridge Road shall not be less than twelve feet (12'). The Code typically requires 25' in the Mixed Use Zone.
- B. Allow a 100% residential development without a commercial or retail component.

### **WORKFORCE HOUSING:**

The Developer is proposing that 50% of the units (18 units total) will be reserved for workforce housing and will be rented to people who can demonstrate that they work within Summit County a Minimum of 30 hours per week. The lease term shall be for a minimum of 180 days or 6 months. The maximum rental rate for each of these units shall be set by the current Summit Combined Housing Authority policies for a 2 bed (3 person) rental unit set at 100% AMI (Area Median Income) at the time the lease is executed.

The Developer will enter into a Workforce Housing Restrictive Covenant ("Restrictive Covenant") with the Town of Dillon, this agreement will be approved by the Town Council at a future date.

### COMPLIANCE WITH DILLON COMPREHENSIVE PLAN:

The Developer believes that their proposal for a 100% residential project within the Mixed-Use Zone meets the Towns objectives for development by providing 36 rental units in Summit County to provide work force housing opportunities within the Town of Dillon and Summit County.

### **OPEN SPACE:**

The developer is providing a 10'x6' Deck for each unit which is 60 square feet. The mixed use zoning district requires that each unit have a minimum of 100 square feet of open space which can be constructed as individual open spaces or combined into a common community area.

The developer is proposing to construct a 1,440 square foot community space between buildings 2 and 3 as shown on the site plan. This accounts for the additional 40 square feet of open space required for each of the two-bedroom units. The Developer shall submit final construction plans for the 1,440 public community open space prior to the Town Council public hearing for this project.

### **OFF-STREET PARKING LOT CONSIDERATIONS:**

The proposed thirty-six (36) two-bedroom units require 2 parking spaces per unit. The Town code therefore requires a minimum of 72 parking spaces. The developer is providing 73 parking spaces including three accessible parking spaces per Federal Accessibility rules.

Condition (F) of Section 2 of Resolution PZ 07-17, Series of 2017 will require the developer to redistribute the accessible parking so that at least one accessible parking space is close to each of the three buildings.

The maximum grade of the parking lot is at 4% which is in conformance with Town Code.

The applicant is proposing parking spaces that are 9'x18' with 20' drive aisles. Prior to review at the Town Council public hearing, the applicant will be required to widen the driveways to 24' to meet the requirements of Section 16-6-60 of the Town Municipal Code. This means Buildings 2 and 3 will most likely be pushed 8' closer to the east property line which will still meet code.

### **BUILDING HEIGHT:**

The proposed height of each building from the finished floor of each building to the top of the ridge line is 37'-9 3/4" (37.81'). As measured by the Town of Dillon zoning code the building height for each building is as shown in the table below:

<b>Building Identification</b>	1	2	3
High Existing Ground Elevation @ Building	9052.0'	9055.0'	9050.5'
Low Existing Ground Elevation @ Building	9039.5'	9046.5'	9040.5
Base Elevation	9045.75'	9050.75'	9045.5'
Allowable Building Height per Code (at 35')	9080.75'	9085.75'	9080.5'
USGS Finished Floor Elevation	9041.50'	9041.80'	9041.50'
USGS Top of Building Elevation (37' 9.75")	9079.31'	9079.61'	9079.31'
	Complies	Complies	Complies

The buildings therefore are actually below the maximum building height allowed of 35' as measured by Town Code.

### **SIDE YARDS (SETBACKS):**

The Town Code requires the following setbacks in the Mixed Use Zone:

Front Yard: 25' Minimum Side Yard: 10' Minimum Rear Yard: 20' Minimum The proposed buildings meet the setbacks required by code except Building 3. Building 3's front yard will be approved at 12' instead of the 25' minimum required by Town Code. The reduced setback is allowed by the Town of Dillon PUD process.

### **LOT COVERAGE:**

The proposed development will be under the 40% maximum allowable footprint allowed by Town Code.

### **UTILITIES:**

The proposed project is within the original Dillon Ridge Marketplace Planned Unit Development, so water and sewer services have already been stubbed into the property. A new fire hydrant will be installed and individual building water and sewer services will be constructed to each of the buildings.

### **DRAINAGE:**

As part of the original PUD a storm sewer pipe was stubbed into Block 6 to accept the drainage from the development and pipe the storm water to the regional detention ponds for Dillon Ridge Marketplace constructed on the south side of U.S. Highway 6 between the Dillon Dam Road and East Anemone Trail.

# SITE RETAINING WALLS:

The proposed project has a significant retaining wall complex located behind the buildings along the north and east sides of the buildings. The developer was trying to minimize the height of the development and chose to grade the site from street level at Lookout ridge up to the north.

The proposed retaining walls are proposed to be constructed with a Redi-Rock Ledgstone Textured segmental block wall system. The color will be an earthtone as shown in the attachments.

At the top of the retaining walls the Developer is proposing to build a buck and rail fence which is characteristic in this mountain environment. See the landscape plans for more details.

### **PEDESTRIAN CONNECTIVITY:**

The proposed project provides a sidewalk connection between the onsite sidewalks and the sidewalk along the north side of Lookout Ridge in conformance with the code.

# **ARCHITECTURAL GUIDELINES:**

The architect has worked with the Town of Dillon Architectural Guidelines and the Town's architectural consultant and believes his development is in conformance with the intent of the guidelines. See the attached checklists for additional information.

**ACTION REQUESTED:** Motion, Second, Roll Call Vote. Resolutions require the affirmative vote of a majority of the members present.

STAFF MEMBER RESPONSIBLE: Dan Burroughs, Town of Dillon

# RESOLUTION NO. PZ 07-17 Series of 2017

A RESOLUTION BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, RECOMMENDING THE APPROVAL OF A LEVEL IV DEVELOPMENT APPLICATION FOR AN AMENDMENT TO BLOCK 6 OF THE EXISTING DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT FOR THE APPROVAL OF 3 APARTMENT BUILDINGS WITH A TOTAL OF 36 APARTMENT UNITS LOCATED ON BLOCK 6 OF THE DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT, DILLON, COLORADO; AND, SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the Planning and Zoning Commission of the Town of Dillon has received a Level IV Development Application for a an amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development consisting of three apartment buildings with a total of 36 apartment units located on Block 6, Dillon Ridge Marketplace Planned Unit Developed, Dillon, Colorado; and

**WHEREAS**, following the required notice, a public hearing was held on June 28, 2017, before the Planning and Zoning Commission of the Town of Dillon on the amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado; and

**WHEREAS**, following the public hearing the Planning and Zoning Commission of the Town of Dillon has made certain findings of fact regarding the application on the amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon; and

**WHEREAS**, the Planning and Zoning Commission of the Town of Dillon has determined that the Level IV Development Application on the amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado is complete; and

**WHEREAS**, the Planning and Zoning Commission of the Town of Dillon wishes to recommend approval of the Level IV Development Application on the amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado; and

**WHEREAS**, the Planning and Zoning Commission of the Town of Dillon has determined that certain conditions which are reasonable and necessary to and relate to impacts created by the amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado.

# NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO, AS FOLLOWS:

Section 1. That the Planning and Zoning Commission of the Town of Dillon, following the required notice, held a public hearing on June 28, 2017 on the application for an amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado, and following said public hearing makes the following findings of fact:

- A. That the application for the Level IV Development Permit on an amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado is complete.
- B. That the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado meets the applicable Town of Dillon Municipal Code ("Code") sections.
- C. That the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado is compatible with the Commercial Zoning District and is compatible with surrounding uses.
- D. That the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado is in general compliance with the Town of Dillon Comprehensive Plan.
- E. That the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado provides a significant workforce housing component which allows this parcel to develop as a 100% residential project without a commercial or retail component.

Section 2. That the Planning and Zoning Commission of the Town of Dillon hereby recommends to the Town Council of the Town of Dillon the approval of the Level IV Development Permit for an amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado with the following conditions:

- A. The Developer shall enter into Block 6 Planned Unit Development Agreement Amendment to the Dillon Ridge Marketplace Planned Unit Development ("Agreement") with the Town of Dillon for the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado project and meeting all the obligations and requirements contained therein prior to issuance of any development permits.
- B. The Developer shall enter into a Workforce Housing Restrictive Covenant ("Restrictive Covenant") with the Town of Dillon for the proposed amendment to Block 6 of the existing Dillon Ridge Marketplace Planned Unit Development, Dillon, Colorado containing the provisions as follows:

- 1. Developer shall dedicate in perpetuity eighteen (18) deed restricted units (six [6] non-end units in each of the three buildings), equaling fifty percent (50%) of the total units in the Development to serve as local workforce housing. Local workforce housing is defined as persons living and working in Summit County at a minimum of 30 hours a week.
- 2. The maximum rental rate for each of these units shall be set by the Summit Combined Housing Authority 2017 Summit County Area Median Income (AMI) policies as the floor for a 2 bed (3 person) rental unit set at 100% AMI (Area Median Income) at the time the lease is executed.
- 3. The Workforce units shall not be rented for less than 6 months or 180 days at a time.
- C. The Developer shall adhere to the materials and colors presented at the public hearing, a copy of which is on file in the Town Engineer's office.
- D. The Parking lot drive aisles shall be expanded from a 20' width to a 24' width to meet Town Code. The developer shall revise the site and landscaping plans accordingly and resubmit prior to the Town Council review of the PUD.
- E. The front yard setback along Lookout Ridge Road shall not be less than twelve feet (12').
- F. The three accessible parking spaces shall be redistributed so that there is one accessible parking space next to each building.
- G. The Developer shall get site plan approval from the Lake Dillon Fire Rescue prior to the Town Council public hearing for review of this Level IV application.
- H. The Developer shall provide all trees and shrubs in conformance with Town Code.
- I. The Developer shall submit final construction plans for the 1,440 public community open space prior to the Town Council public hearing for this project.

APPROVED AND ADOPTED THIS 28<sup>TH</sup> DAY OF JUNE, 2017 BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF DILLON, COLORADO.

# PLANNING AND ZONING COMMISSION, TOWN OF DILLON

	By:
	Nathan Nosari, Chairperson
ATTE	EST:
Ву:	
	Corrie Woloshan, Secretary to the Commission



June 20, 2017 AAPC # 1611

# Dillon Ridge Vistas Block 6 (Dillon Ridge Marketplace)

# **Design Guidelines Narrative**

We are proposing a 36-unit residential project on Block 6, Dillon Ridge. There are (3) buildings, each is 3-story with 12 units. Every unit has expansive mountain views from the primary living spaces. The bedrooms are located on the rear facing, private side. The Town of Dillon Design Standards checklist is attached. Many of the checklist sections are oriented towards a mixed-use project with a commercial/retail ground floor. These items are not applicable to an all residential project as we propose. These are indicated on the checklist with an N/A.

The building elevations are organized in a thee part scheme, base, middle, and top. The first story is articulated with a vertical board and batten base. The second and third stories, middle, are the horizontal primary siding. The roof creates a dominant top layer, or cap. The building form is thus expressed; minor base, major middle, and minor top. The ratio is 1:2:1.

The building weight and structure is expressed as a solid connection to the ground, due to the all residential program. The stairs are clearly expressed as a recess with a gable roof cap. Each unit has a deck with timber structure and a shed roof cap.

Since our site is closer to the Town entrance and not the lake, we have adopted the "Mountain" contextual character. Dillon Ridge Vistas provides an appropriate transition from the existing commercial Movie Theater to the all residential Lookout Ridge development.



# 2 CHARACTER & ENVIRONMENT

# DESIGN STANDARDS CHECKLIST

SECTION	APPLICANT Y/N	P&Z Y/N	P&Z COMMENTS
DRAW AUTHENTICITY FROM HISTORIC ARCHITECTL	JRE		
Symbolic connection to historic architecture	Υ		
DEFINE THE PUBLIC DOMAIN			
2-story datum at buildings taller than 2 stories	Y		
Building base use(s) meets intent of acceptable uses	N/A		All Residential
Base height relates to 2-story datum, where possible	N/A		Not Commercial
15' floor-to-floor height at grade level	N/A		Not Commercial
Window sills no higher than 36"	Υ		
Storefront mullion colors to be dark (other finishes approved on a case-by-case basis)	N/A		Not Commercial
Glazing meets or exceeds 60% transparent/40% solid ratio at <u>primary façade</u> base	N/A		Not Commercial
Simply detailed storefront design	N/A		Not Commercial
Roofs/awnings designed for snowmelt mitigation	Υ		
Fabric awning slope 1:3	N/A		none
Permanent awning slope 3:12	N/A		none
Primary façade to have main building entrance	Y		
(2) primary façades for buildings with (3) façades visible from public right-of-way	Υ		= =
Façade materials should wrap corners a min. of 24"	Υ		
Blank walls visible to the public are not acceptable	Y		
CREATE COMPLEMENTARY DEVELOPMENTS			
National brands adoption of these Guidelines for exterior architectural design	N/A		Not Commercial
TAKE ADVANTAGE OF THE CLIMATE			
Conceal rooftop utilities from sight	N/A		none

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# 3 BUILDING FORM & ARTICULATION

DESIGN STANDARDS CHECKLIST

SECTION	APPLICANT Y/N	P&Z Y/N	P&Z COMMENTS
express the base, middle, & top			
Articulate building façades into Base, Middle, & Top	Y		
Description of Base, Middle, & Top in Design Narrative	Υ		
No overly complex roofs or incompatible roof styles	Υ		
Use of proportional rules for Base, Middle, & Top	Υ		
EXPRESS THE BUILDING WEIGHT & STRUCTURE			
Description of contextual influence emphasis relative to apparent weight: Mountain or Lake	Y		
BUILDING HEIGHTS & VIEW CORRIDORS			
Modulate façades above 2-story datum to differentiate from building base	Υ		
EXPRESS THE ROOF FORM			
Emphasize Top layer that caps building volumes below	Υ		
5:12 minimum, and 12:12 maximum roof slope (steeper is acceptable if <u>Jewel building</u> )	NO		4:12 & 8:12 roof slopes
3:12 min. roof slope for projections/permanent awnings	N/A		
No mansard-style roof forms	Υ		
Simple, powerful, character-defining roof(s)	Y		
Dormers set in a consistent rhythm, set 3' back from eave edge or projecting past eave edge	Y		
Shed and gable roofs: 24" min. roof overhang at primary façades, 18" min. roof overhang at secondary façades	Y		
Use of structural beams, outriggers, and/or brackets at 18"+ roof overhangs. 2"x2" minimum dimension for exposed support ends	Y		
Roof runoff mitigation plan	Υ		
CREATE RECESSES & PROJECTIONS			
Use of projections to protect building entrances	Υ		
Concealed drainage at projections	NO		



# 4 CRAFT, MATERIALS, & COLORS

design standards checklist

SECTION	APPLICANT Y/N	P&Z Y/N	P&Z COMMENTS
HIGHLIGHT THE CRAFT			
Utilize or mimic authentic fastening and joinery methods	N		
Pragmatic and highly crafted architectural features	N		
USE LOCAL MATERIALS & TEXTURES			
Minimum of (2) primary façade materials	Υ		
Stone heights min. 4"H, with preference for 8-12"H	NO		
Materials wrap building corners min. of 24"	Υ		
Ashlar pattern at stone cladding	N/A		
Rough-sawn or hand-hewn finish at timbers	Υ		
Use of acceptable wood cladding patterns	Υ		
Use of metal cladding for roof and/or wall accent only	Υ		
Use of acceptable metal wall and/or roof patterns	Y		
Clear glazing ratio of 60% min. glazing to 40% solid	N/A		Not Commercial
Clear glazing with no more than 10% light reduction. No opaque films or glass at <u>public domain</u> .	Y		
Stucco at building Middle layer, not Base layer	N/A		No stucco
COLOR PALETTES & ACCENTS			
Darker tone storefront mullion color	N/A	= =	Not Commercial
Natural color palette with combination of marine accents (if Lake style influences)	Υ		
Façade colors of medium to dark natural tones. Bright colors only used for interventions or minor focal elements.	Υ		
Roof colors of dark natural tones (unless galvanized), muted, low reflectivity, natural tones. Bright colors only used for interventions or minor focal elements.	Y		
10% maximum area usable for accent colors on façades	Υ		

March 2017

409 Main Street, Suite 207 PO Box 2320 Frisco, CO 80443 P 970.368.7068

www.norris-design.com

DILLON RIDGE MARKETPLACE

OWNER:
Compass Home Development, LLC.

P.O. Box 5265 Frisco, CO 970.418.1598

CHECKED BY: DRAWN BY:

### LEGAL DESCRIPTION A 20' PUBLIC WATER EASEMENT

A PARCEL OF LAND BEING A PORTION OF BLOCK 6, DILLON RIDGE MARKETPLACE, REPLAT B: TOWN OF DILLON, SUMMIT COUNTY, COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY BOUNDARY LINE OF SAID BLOCK 6. WHENCE THE NORTHEAST CORNER OF SAID BLOCK 6 BEARS N00°08'06"E 153.83 FEET DISTANT: THENCE ALNG THE FOLLOWING 6 COURSES:

- S89°14'27"E A DISTANCE OF 42.59 FEET: N26°35'54"W A DISTANCE OF 44.22 FEET:
- N63°24'06"E A DISTANCE OF 20.00 FEET;
- \$26°35'54"E A DISTANCE OF 64.22 FEET;
- S63°27'55"W A DISTANCE OF 24.93 FEET:

6. N89°14'27"W A DISTANCE OF 47.17 FEET TO THE SAID WESTERLY ROUNDARY LINE OF BLOCK 6:

THENCE N00°08'06"E A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING. CONTAINING 2,231 SOUARE FEET OR 0,051 ACRE, MORE OR LESS.

Keder & ROBERT R. JOHNS COLORADO PLS NO. 26292 AL LAND PROJECT NO. COMPASS HOMES

PREPARED FOR:

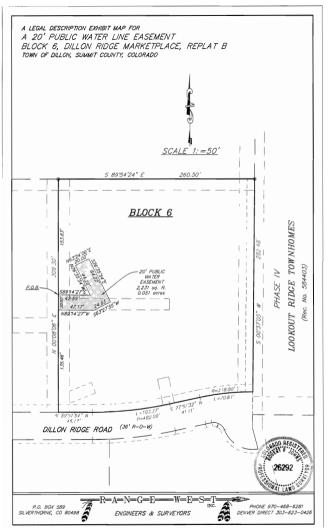
6471/17/152

P.O. BOX 589

Silverthorne, CO 80498

RANGE WEST

Phone 970-468-6281 www.rangewestinc.com



# DILLON RIDGE VISTAS

# BLOCK 6 DILLON RIDGE MARKETPLACE TOWN OF DILLON, SUMMIT COUNTY, COLORADO FINAL SITE PLAN AND PLAT DOCUMENTS

# AGENCY CONTACT LIST

OWNER/DEVELOPER
SUMMIT HOMES DEVELOPMENT
PO BOX 5265
FRISCO, CO 80443
TIM CRANE

PHONE: (970) 547-5047 FAX: (970) 513-9375

ARCHITECT
ARAPAHOE ARCHITECTS. P.C.
322C N MAIN STREET, BOX 4780
BRECKENRIDGE, CO 80424

PHONE: (970) 453-8474 FAX: (970) 453-8475

CIVIL ENGINEER
TEN MILE ENGINEERING, INC.
PO BOX 1785
FRISCO, CO 80443
JOSEPH E. MAGLICIC P.E.

PHONE: (970) 485-5773

GEOTECHNICAL CTL THOMPSON GEORGE BENEKE

PHONE: (970) 409-9670

ELECTRIC & GAS

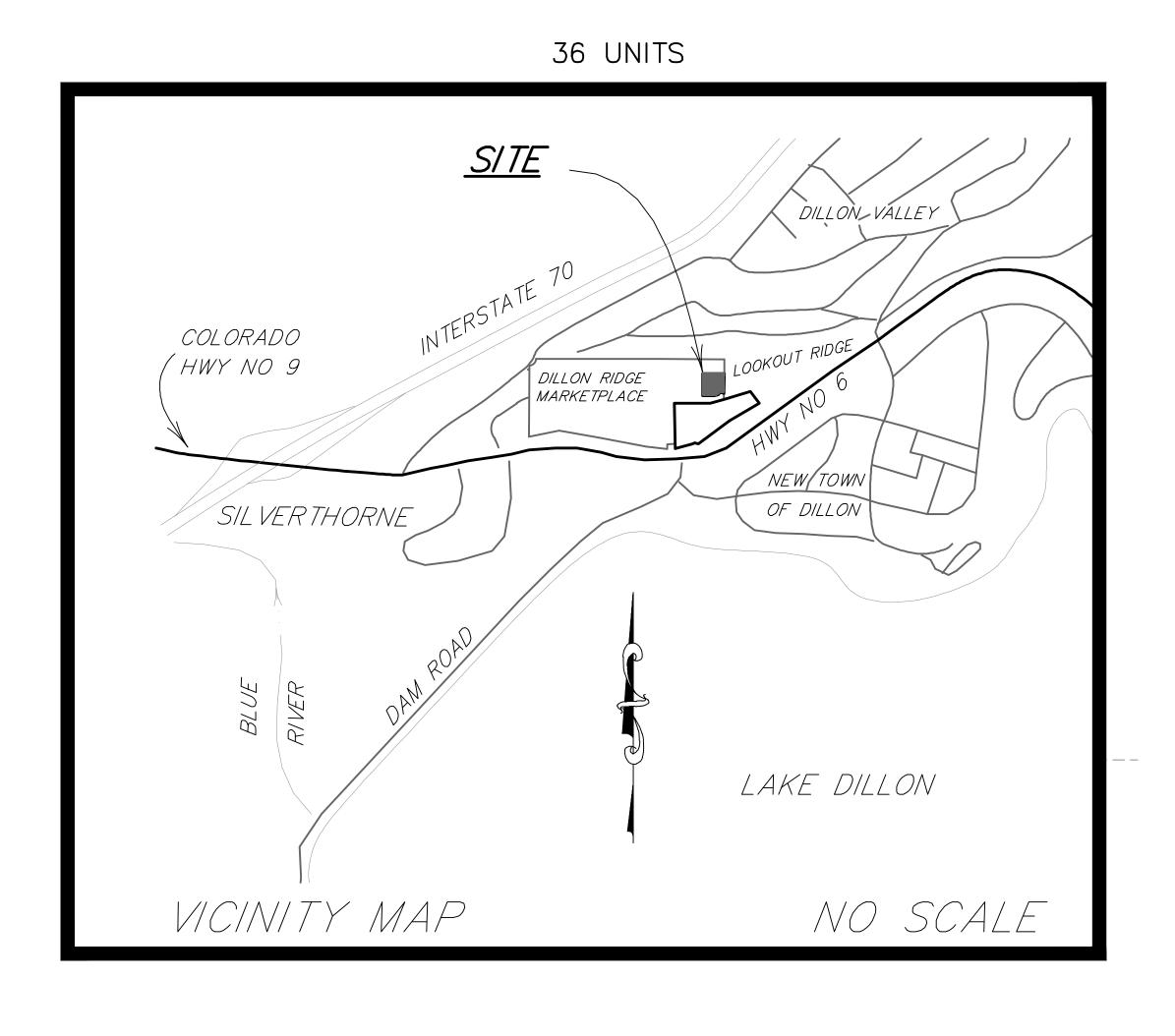
XCEL ENERGY
200 W 6TH STREET, PO BOX 1819

SILVERTHORNE, CO 80498

PHONE: (970) 262-4050 FAX: (970) 262-4038

LAKE DILLON FIRE — RESCUE P.O. BOX 4428 DILLION, CO. 80435 STEVEN SKULSKI

PHONE: (970) 513-4202 FAX: (970) 513-4250



# SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
01	COVER SHEET
02	GENERAL NOTES
03	SITE LAYOUT AND EASEMENT PLAN
04	EROSION CONTROL & CONSTRUCTION MANAGEMENT PLAN
05	EROSION CONTROL DETAILS
06	EROSION CONTROL DETAILS
07	EROSION CONTROL DETAILS
08	GRADING PLAN
09	DRAINAGE PLAN
10	OVERALL UTILITY PLAN
11	SEWER DETAILS
12	WATER DETAILS
13	WATER DETAILS

TEN MILE ENGINEERING, INC.

Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

# **ROADWAY GENERAL NOTES:**

1. EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. TITLED GEOLOGIC SITE REVIEW AND GEOTECHNICAL INVESTIGATION FOR ANGLER MOUNTAIN

2. PAVING SHALL NOT START UNTIL SUBGRADE COMPACTING TESTS ARE TAKEN AND MEET THE REQUIREMENTS OF THE PLANS AND SPECS AND FINAL PAVEMENT DESIGN BY GETOCHINICAL REPORT AND/OR TOWN OF SILVERTHORNE STANDARDS, WHICHEVER ARE MORE STRINGENT. THE PAVEMENT SECTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THS PROJECT. THE MINIMUM DEPTH OF ASPHALT SHALL BE 4 INCHES ON TOWN ROADS AND 3 INCHES

3. THE CONTRACTOR SHALL SAW-CUT ALL EXISTING PAVEMENT WHERE MATCH LINES WITH EXISTING EDGE OF PAVEMENT OCCUR.

- 4. PORTLAND CEMENT CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS: A. COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS OF CURE TIME:
  - B. AIR CONTENT OF  $6.5\% \pm 1.5\%$ C. MAXIMUM SLUMP OF 3":
  - D. "FIBER MESH" FIBERS SHALL BE ADDED TO CONCRETE FOR STRENGTH, AT A RATE OF 1.5 POUNDS OF FIBER PER CUBIC YARD OF CONCRETE.

5. ROADWAY RETAINING WALL VERTICAL AND HORIZONTAL INFORMATION HAVE BEEN ESTABLISHED AS PART OF THESE ROADWAY PLANS. STRUCTURAL, GEOTECHNICAL, AND

6. COMPACTION TESTING FOR THE BASE COURSE IN THE ROADWAY SHALL MEET 95% OF MODIFIED PROCTOR (ASTM D-1557) THE MATERIAL BEING WITHIN 2.0 PERCENT OF OPTIMUM MOISTURE. EACH LIFT OF ASPHALT SHALL MEET THE MINIMUM DENSITY OF 92-96 PERCENT MAXIMUM THEORETICAL DENSITY AS DETERMINED BY THE RICE DENSITY METHOD (ASTM D-2041). TESTS SHALL BE MADE AT A FREQUENCY OF EVERY 200 LINEAR FEET AND AT EVERY 12" COMPACTED LIFT OF FILL PLACED, AND FOR EVERY LIFT OF ASPHALT PLACED OR ROLLED. ASPHALT DENSITY TESTING SHALL BE PERFORMED ON EACH LIFT AT INTERVALS OF ONE TEST PER EVERY 250 LINEAR FEET PER LANE. TEST LOCATIONS ON EACH LIFT AND EACH LANE SHALL BE STAGGERED.

DRAINAGE ENGINEERING FOR THE WALLS IS BY OTHERS (SEE SEPARATE DESIGN DOCUMENTS)

7. 6" VERTICAL CURB SHALL BE CURB AND GUTTER TYPE 2 (SECTION IIB) CDOT M-6091.

8. TYPE I DELINEATORS PER CDOT S-612-1.

9. DURING EARTHWORK OPERATION GEOTECHNICAL ENGINEER SHALL ASSESS ACTUAL SUB-SURFACE CONDITIONS AND REQUEST ADDITIONAL REQUIREMENTS IF NECESSARY. SUBJECT TO TOWN CONSULTANT REVIEW AND CONCURRENCE.

# STORM SEWER GENERAL NOTES

1. LOCATION AND ELEVATION OF EXISTING STORM SEWER AND CULVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DIFFERENCES FROM DESIGN PLAN SHALL BE REPORTED TO DESIGN ENGINEER.

2. STORM SEWER SHALL BE SMOOTH WALLED HDPE (HIGH DENSITY POLYETHYLENE).

3. ALL CULVERTS SHALL HAVE END SECTIONS ON BOTH THE UPSTREAM AND DOWNSTREAM ENDS OF THE PIPE UNLESS OTHERWISE NOTED ON THE PLANS AND SHALL EXTEND 1 TO 3 FEET BEYOND EACH EDGE OF SHOULDERED PAVED DRIVE.

4. STORM SEWER BEDDING AND PIPE ZONE BACKFILL SHALL BE 3/4" TO 1" ROAD BASE OR TOWN OF DILLON APPROVED ALTERNATE.

5. PIPE LENGTHS FOR STORM SEWER ARE APPROXIMATE HORIZONTAL DISTANCES FROM END SECTION TO END SECTION. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND COULD VARY. END SECTIONS ARE INCLUDED IN THE PIPE LENGTH SHOWN ON THE PLANS. FINAL LENGTH OF STORM SEWER SHALL BE SUFFICIENT TO PROVIDE THE ROAD SHOULDERS AND SIDE SLOPES TO NOT BE STEEPER THAN SHOWN ON THE TYPICAL ROAD

6. REFER TO THE GEOTECHNICAL REPORT "PAVEMENT THICKNESS DESIGN RECOMMENDATIONS" AND THE STORM SEWER DETAILS ON SHEET DT01 FOR TRENCH STABILIZATION. BACKFILL PLACEMENT, COMPACTION, AND MOISTURE REQUIREMENTS. IN THE EVENT THAT SOFT FOUNDATION CONDITION IS ENCOUNTERED, THE AREA SHOULD BE OVER-EXCAVATED AND REPLACED WITH PIT-RUN AND THE APPROPRIATE NON-WOVEN GEO-TEXTILE MATERIAL.

7. INLETS SHALL BE TYPE C, CDOT M-604-10, TYPE D, CDOT M-604-11, OR TYPE R, CDOT

# **WATER GENERAL NOTES:**

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE TOWN OF DILLON WATER SYSTEMS CRITERIA DATED DECEMBER 2005. WATER SYSTEM SPECIFICATIONS AND TESTING PROCEDURES SHALL BE IN CONFORMANCE WITH TOWN OF DILLON WATER ENGINEERING STANDARDS, AS OUTLINED HEREIN.

2. ALL WATER LINE IS TO BE EITHER CLASS 52 DUCTILE IRON PIPE OR C900 PVC PRESSURE WATER PIPE. ALL FITTINGS ARE TO BE DUCTILE IRON. ALL DUCTILE IRON IS TO BE WRAPPED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH ANSI A21.5/A C105. IF C900 IS USED FOR FIRE HYDRANT LATERALS, STAINLESS STEEL OR CORTEN RODDING AND PVC APPROPRIATE MEGA-LUGS ARE REQUIRED FOR RESTRAINT

3. SERVICE LINES SHALL BE 1" HDPE PURE-CORE SDR 9 CTS PIPE. SERVICE LINE MATERIAL SHALL BE CRESLINE HD CE BLUE TM. ALL SERVICE LINES SHALL HAVE A BACKFLOW PREVENTION DEVICE INSTALLED UPSTREAM OF THE WATER METER CONSISTING OF A DOUBLE CHECK VALVE ASSEMBLY SIMILAR OR EQUAL TO A WATTS REGULATOR NO.7.

4. MINIMUM COVER WITHIN STREETS IS 9.5 FEET AND 8.5 FEET IN UNPAVED LOCATIONS. SEE INSULATION DETAILS DEPTHS BELOW 8.5'.

5. VALVES SHALL BE RESILIENT SEAT NRS GATE VALVES AND SHALL OPEN-LEFT (MUELLER, US, WATEROUS OR CLOW BRAND RESILIENT WEDGE VALVES ONLY). CHECK WITH WATER SUPT. FOR VERIFICATION OF SPECIFIC MODEL NUMBERS.

6. VALVE BOXES SHALL BE OVAL BASE BOTTOM TYPE. CHECK WITH WATER SUPT. FOR VERIFICATION OF SPECIFIC MODEL NUMBERS.

7. ALL FIRE HYDRANTS SHALL BE WATEROUS "PACER" WITH 34-INCH MOUNTAIN STANDARD FLANGE MEETING THE FOLLOWING REQUIREMENTS:

NOZZLE 5-1/4 INCH 6 INCH FOR MECHANICAL JOINT

**OPERATING NUT1** 1 INCH PENTAGON OUTLETS TWO 2-1/2 INCH, ONE 5-1/4 INCH PUMPER NOZZLE (THREADS TO MATCH EXISTING)

THREADS NATIONAL STANDARD CAP WITH PENTAGON NUT CAPS RED (ALL ABOVE GROUND PARTS)

DEPTH OF BURY

BOTTOM THRUST BLOCK AND 2-3/4" TIE RODS FROM MAIN TEE THRUST RESTRAINT TO HYDRANT BOTTOM. 42" ± 3" OPERATING NUT ABOVE FINISHED GROUND SURFACE ELEVATION OF NOZZLE AT TRAFFIC FLANGE

ALL HYDRANTS TO BE SHOP PRIMED AND PAINTED RED WITH TWO BOLLARDS.

8. WATER METER KIT WILL BE PROVIDED BY TOWN. THE CHARGE FOR THE WATER METER KIT WILL BE PAID BY THE DEVELOPER AT THE TIME OF THE BUILDING PERMIT ISSUANCE. THE METER KIT WILL HAVE REMOTE READOUT. 9. AIR RELEASE VALVES (ARV'S) SHALL BE APCO MODEL NO. 143 C COMBINATION AIR/VACUUM VALVE OR APPROVED EQUAL

FOR DUCTILE IRON PIPE: FOR C900 PVC PIPE: MEGALUG 1700 SERIES ROMAL ROM GRIP UNI-FLANGE 1400 SERIES

10. MECHANICAL JOINT RESTRAINT DEVICES SHALL BE:

SIGMA-LOCK

IBEE IRON INC. SERIES 1500 STAR GRIP 3000 SERIES

9'-6" OR 8'-6" (AS REQUIRED TO MEET THE WATERLINE COVER)

11. PIPE JOINT RESTRAINT DEVICES, TIE RODS AND THRUST BLOCKS SHALL BE INSTALLED PER DETAILS. ALL RESTRAINT RODS AND HARDWARE ARE TO BE STAINLESS STEEL OR CORTEN.

# WATER GENERAL NOTES (CONTINUED):

ALL MAIN EXTENSIONS AND PRIVATE PIPE EXTENSIONS SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA C651, AND THE LOCAL HEALTH AUTHORITY HAVING JURISDICTION, PRIOR TO ACCEPTANCE BY TOWN OF DILLON (TOD). THE CHLORINATING AGENT, AND METHOD OF APPLICATION, SHALL BE APPROVED BY THE TOD.

THE CHLORINATION OF THE FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING. BEFORE FILLING THE PIPE WITH WATER, THE PIPE SHALL BE CLEAN AND FREE OF DEBRIS TO THE SATISFACTION OF THE TOWN. TOD WILL NOT PROVIDE LABOR OR MATERIAL FOR DISINFECTION TO APPLICANT'S INSTALLING MAINS UNDER PRIVATE CONTRACT.

CHLORINE TABLETS MAY BE USED FOR DISINFECTION IN 12-INCH AND SMALLER PIPE. SIXTEEN INCH AND LARGER PIPE REQUIRES A CHLORINE SLURRY FED INTO THE WATER USED IN FILLING THE PIPE. CHLORINE TABLETS SHALL BE ATTACHED TO THE INSIDE TOP OF THE PIPE WITH AN APPROVED ADHESIVE CERTIFIED TO NSF STANDARD 61 PRIOR TO THE PIPE INSTALLATION IN THE TRENCH. AN APPROVED ADHESIVE IS DOW CORNING 732 MULTI-PURPOSE SEALANT.

NUMBER OF HYPOCHLORITE TABLETS OF 5 GRAM STRENGTH REQUIRED FOR A DOSE OF 50 MILLIGRAMS/LITER\*

\*BASED ON 3 3/4" GRAM AVAILABLE CHLORINE PER TABLET

AFTER THE PIPE IS FILLED WITH WATER AND CHLORINE, THE CHLORINATED WATER SHALL BE HELD IN CONTACT WITH THE PIPE FOR 24 HOURS. AT THE END OF THE 24 HOUR PERIOD, THE WATER IN THE PIPELINE SHALL BE TESTED BY THE LOCAL HEALTH AUTHORITY OR THEIR DESIGNATED REPRESENTATIVE TO INSURE A RESIDUAL CHLORINE CONTENT OF NOT LESS THAN 25 MILLIGRAMS PER LITER. THEN THE PIPELINE SHALL BE THOROUGHLY FLUSHED TO REMOVE THE HEAVILY CHLORINATED WATER. CARE SHALL BE TAKEN IN FLUSHING THE PIPELINE TO PREVENT PROPERTY DAMAGE AND DANGER TO THE PUBLIC.

SAMPLES OF WATER WILL BE COLLECTED FOR BACTERIOLOGICAL EXAMINATION AND RESIDUAL CHLORINE CONTENT TESTING BEFORE THE PIPE IS PUT INTO SERVICE. TESTING OF RESIDUAL CHLORINE AND SAMPLING WILL BE DONE BY THE LOCAL HEALTH AUTHORITY OR THEIR DESIGNATED

# 13. <u>HYDROSTATIC TESTING</u>

NO HYDROSTATIC TESTS SHALL BE MADE ON ANY PORTION OF THE PIPELINE UNTIL FIELD PLACED CONCRETE HAS HAD ADEQUATE CURING TIME, DEFINED AS FOLLOWS:

CONCRETE SHALL BE CURED BY A METHOD RECOMMENDED BY ACI 308. WHEN THE DAILY MEAN AMBIENT TEMPERATURE IS ABOVE 40°F, THE FINISHED CONCRETE SHALL BE CURED CONTINUOUSLY FOR A MINIMUM OF 7 DAYS OR FOR THE TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED COMPRESSIVE STRENGTH. WHICHEVER PERIOD IS LESS. WHEN THE MEAN DAILY AMBIENT TEMPERATURE IS 40°F OR LOWER, THE FINISHED CONCRETE SHALL BE CONTINUALLY CURED AT A MINIMUM TEMPERATURE OF 55° F FOR THE PERIOD RECOMMENDED BY ACI 306 TO PREVENT DAMAGE FROM EARLY-AGE FREEZING AND PROVIDE THE SERVICE CATEGORY STRENGTHS REQUIRED FOR EACH

TOS SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF TESTING. ALL TESTING SHALL BE MADE IN THE PRESENCE OF TOD.

ONLY THE FOLLOWING METHODS ARE ACCEPTABLE FOR SUPPLYING POTABLE WATER FOR

I. WATER MAY BE TAKEN FROM A NEARBY PRESSURIZED WATER SOURCE WHICH HAS BEEN PREVIOUSLY CHLORINATED, TESTED AND ACCEPTED, SUCH AS A FIRE HYDRANT.

WATER MAY BE DELIVERED TO THE SITE IN A CHLORINATED WATER TRUCK HAVING A MINIMUM CAPACITY OF 300 GALLONS. THE WATER TRUCK SHALL BE USED EXCLUSIVELY FOR THE TRANSPORTATION OF POTABLE WATER.

ANY PREVIOUSLY TESTED, CHLORINATED AND ACCEPTED WATER MAIN, WHICH IS PRESSURIZED AND IS TO SERVE THE NEW MAIN EXTENSION, MAY BE TAPPED ON THE PRESSURIZED SIDE OF THE

IN ANY EVENT, THE METHOD OF SUPPLYING WATER AS WELL AS THE SOURCE OF WATER FOR HYDROSTATIC TESTING MUST BE CERTIFIED AND APPROVED BY TOD. USE OF BARRELS, SANITARY OR OTHERWISE, TO SUPPLY WATER FOR HYDROSTATIC TESTING IS STRICTLY PROHIBITED.

TOD WILL FURNISH ONLY THE CALIBRATED METER BUT NOT THE PUMP FOR TESTING. THE PIPELINE SHALL BE PROPERLY BACKFILLED AND SHALL BE IN A STATE OF READINESS FOR TESTING. ALL BULKHEADS, PUMPS, TAPS, AND APPURTENANCES NECESSARY TO FILL THE PIPELINE AND MAINTAIN REQUIRED PRESSURE SHALL BE IN PLACE. THE PIPELINE SHALL BE FILLED WITH WATER AND THE TEST PRESSURE OF 150 POUNDS PER SQUARE INCH SHALL BE APPLIED TO THE PIPELINE BY MEANS OF A CONTINUOUSLY OPERATING PUMP, EQUIPPED WITH A BYPASS VALVE FOR REGULATING PRESSURE. WHEN FILLING THE PIPELINE, IT SHALL BE FILLED AT A RATE, WHICH WILL NOT CAUSE ANY SURGES, NOR WILL IT EXCEED THE RATE AT WHICH THE AIR CAN BE RELEASED.

ALL AIR IN THE LINE SHALL BE PROPERLY PURGED. WHERE BLOWOFFS OR HYDRANTS ARE NOT AVAILABLE OR ARE NOT EFFECTIVE IN PURGING AIR FROM THE LINE, TOD SHALL REQUIRE A TAP TO PURGE THE LINE. THE LOCATION AND SIZE OF TAP SHALL BE AT TOD'S DISCRETION.

WHILE THE TEST PRESSURE IS MAINTAINED, AN EXAMINATION SHALL BE MADE OF THE PIPELINE IN GENERAL, AND ANY LEAKS SHALL BE REPAIRED. ANY PIPE OR FITTING FOUND TO BE FAULTY SHALL BE REMOVED AND REPLACED. NO LEAKAGE IS ALLOWED THROUGH THE BONNET OF THE LINE VALVE. ANY VALVE LEAKING THROUGH THE BONNET SHALL BE REPAIRED IN PLACE OR REMOVED AND REPLACED. CUTTING AND REPLACING PAVEMENT, EXCAVATING, AND BACKFILLING MAY ALL BE NECESSARY PARTS OF LOCATING AND REPAIRING LEAKS DISCOVERED BY PRESSURE TESTING OF

AFTER ALL VISIBLE LEAKS HAVE BEEN STOPPED, THE FULL TEST-PRESSURE SHALL BE MAINTAINED FOR 2 CONTINUOUS HOURS. ALLOWABLE LEAKAGE FOR EACH SECTION BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING LEAKAGE RATES FOR 4-INCH THROUGH 20-INCH DISTRIBUTION

SHOULD TESTING SHOW A LEAKAGE RATE IN EXCESS OF THE RATES SHOWN, THE PIPELINE SHALL NOT BE ACCEPTED. THE PIPELINE SHALL BE REPAIRED, RECHLORINATED AS DESCRIBED IN NOTE 12, AND RETESTED UNTIL IT MEETS THE TEST REQUIREMENTS.

14. THE CONTRACTOR IS RESPONSIBLE FOR:

A. NOTIFYING ALL CUSTOMERS POSSIBLY AFFECTED BY OUTAGE OF WATER DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL APPLICABLE LICENSES, PERMITS, BONDS, ETC. REQUIRED FOR THE MAIN INSTALLATION/SYSTEM MODIFICATION.

C. CONTACT TOWN OF DILLON FOR PRE-CONSTRUCTION MEETING AND INSPECTION, AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

D. IN CASE OF AN EMERGENCY AFTER WORKING HOURS, CALL TOWN OF DILLON.

NOTE: BE ADVISED THAT OCCASIONALLY VALVES IN OUR SYSTEM MAY BE INOPERABLE. ON SUCH OCCASIONS IT MAY BECOME NECESSARY TO BACK UP AN ADDITIONAL BLOCK FOR THE SHUT OUT. IT WILL THEN BE NECESSARY TO MAKE THE ADDITIONAL NOTIFICATIONS TO GIVE THE AFFECTED CUSTOMERS THE MANDATORY 24 HOURS ADVANCE NOTICE. ALSO BE ADVISED THAT WHEN VALVE MAINTENANCE IS REQUIRED, A DELAY OF SEVERAL DAYS SHOULD BE EXPECTED.

15. WATER TRENCH BEDDING AND PIPE ZONE BACKFILL SHALL BE GRADED AS FOLLOWS:

TOTAL PASSING BY SIZE (% BY WEIGHT)

OR TOWN OF DILLON APPROVED CONTRACTOR ALTERNATE.

16. IRRIGATION VAULT TO BE CONSTRUCTED PER TOWN OF DILLON DETAIL. 17. ALL WATER LINE WORK SHALL BE INSPECTED BY THE DESIGN ENGINEER DURING

CONSTRUCTION PER TOWN OF DILLON REQUIREMENTS 18. AS BUILT DRAWINGS SHALL BE PROVIDED PER TOWN OF DILLON

REQUIREMENTS

19. CLAY CHECK DAMS MAY BE REQUIRED IF GROUNDWATER IS ENCOUNTERED. 20. WATERLINES ARE TO BE INSTALLED WITH A MINIMUM COVER OF 9 FT. ANY DEPTH LESS THAN 9 FT. MUST BE APPROVED THE TOWN OF DILLON PRIOR TO INSTALLATION. IF APPROVED, 4" OF INSULATION WILL BE REQUIRED. HI—100 HIGH DENSITY INSULATION WILL BE REQUIRED UNDER ALL ROADWAYS AND DRIVES.

# SANITARY SEWER GENERAL NOTES:

1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO TOWN OF DILLON SEWER SYSTEM CRITERIA DATED..

2. ALL SEWER MAINS AND SERVICES SHALL BE SDR 26 (UNLESS OTHERWISE NOTED).

4. MANHOLES SHALL BE WRAPPED WITH BITUTHENE.

3. ALL MANHOLE RIMS WITHIN THE 100-YEAR FLOOD PLAIN SHALL BE SET AT THE 100-YEAR FLOOD PLAIN ELEVATION AND SHALL HAVE GASKETTED BOLT DOWN LIDS.

5. SANITARY SEWER BEDDING AND PIPE ZONE BACKFILL SHALL BE 3/4" TO 1" SCREENED ROCK OR TOWN OF DILLON APPROVED ALTERNATE.

6. PIPELINE FLUSHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A CLEANING COMPANY THAT WILL HIGH-PRESSURE JET CLEAN THE LINES TO INSURE THAT SAND, ROCKS, OR OTHER FOREIGN MATERIAL ARE NOT LEFT IN ANY OF THE PIPELINES. WHEN FLUSHING, CARE SHOULD BE TAKEN TO PREVENT DAMAGE TO PROPERTY OR ROADWAYS OR EROSION OF SURROUNDING SOILS. FLUSHING WATER AND FLUSHED DEBRIS SHALL NOT BE ALLOWED TO ENTER THE EXISTING SEWER SYSTEM.

7. SEWER LINE ALIGNMENT, AND GRADE VERIFICATION. ONCE THE SEWER PIPELINES HAVE BEEN FLUSHED, THE SEWER PIPELINES SHALL BE INSPECTED BY MEANS OF CLOSED CIRCUIT TELEVISION (CCTV). DOCUMENTATION SHALL CONSIST OF A COLOR, DVD-FORMAT VIDEOTAPE, LOG SHEETS, AND A WRITTEN REPORT DETAILING THE CONDITION OF THE PIPELINE AND LATERAL CONNECTIONS/OPENINGS. THE REPORT SHALL NOTE THE TIME AND DATE OF VIDEO INSPECTION. STREET NAME, UPSTREAM AND DOWNSTREAM MANHOLE, DIRECTION OF VIEW, DIRECTION OF FLOW, SURFACE MATERIAL, PIPELINE LENGTH, PIPE SECTION LENGTH, PIPE SIZE, PIPE MATERIAL, LATERAL CONNECTIONS, VIDEO TAPE NUMBER, COUNTER NUMBER, AND A DETAILED LOGGING OF DEFECTS ENCOUNTERED. ANY REJECTED WORK SHALL BE REPAIRED. THEN RE-TELEVISED.

8. LEAKAGE. ALL PIPELINES SHALL BE TESTED FOR LEAKAGE BY MEANS OF AN AIR PRESSURE TEST. THE TEST SHALL BE PERFORMED AS FOLLOWS:

PREPARATION FOR TESTS: FLUSH AND CLEAN THE PIPELINE PRIOR TO TESTING IN ORDER TO WET THE PIPE SURFACES AND PRODUCE MORE CONSISTENT RESULTS. PLUG AND BRACE ALL OPENINGS IN THE PIPELINE AND THE UPPER CONNECTIONS. CHECK ALL PIPE PLUGS WITH A SOAP SOLUTION TO DETECT ANY AIR LEAKAGE. IF LEAKS ARE FOUND, RELEASE THE AIR PRESSURE, ELIMINATE THE LEAKS, AND START THE TEST PROCEDURE OVER

B. PROCEDURE OF TEST: ADD AIR UNTIL THE INTERNAL PRESSURE OF THE PIPELINE IS RAISED TO APPROXIMATELY 4.0 PSI, AT WHICH TIME THE FLOW OF AIR SHALL BE REDUCED AND THE PRESSURE MAINTAINED BETWEEN 3.5 AND 4.5 PSI FOR A SUFFICIENT TIME TO ALLOW THE AIR TEMPERATURE TO COME TO EQUILIBRIUM WITH THE TEMPERATURE OF THE PIPE.

C. AFTER THE TEMPERATURE HAS STABILIZED, PERMIT THE PRESSURE TO DROP TO 3.5 PSIG IN EXCESS OF THE GROUND WATER PRESSURE ABOVE THE TOP OF THE SEWER, AT WHICH TIME A STOP WATCH OR SWEEP SECOND HAND WATCH SHALL BE USED TO DETERMINE THE TIME LAPSE REQUIRED FOR THE AIR PRESSURE TO DROP TO 3.0 PSIG.

D. THE TIME ELAPSED SHALL NOT BE LESS THAN THE FOLLOWING:

PIPE SIZE TIME (INCHES) (MINUTES)

E. BRACE ALL PLUGS SUFFICIENTLY TO PREVENT BLOWOUTS AND VENT THE PIPELINE COMPLETELY BEFORE ATTEMPTING TO REMOVE PLUGS.

F. PROVIDE PRESSURIZING EQUIPMENT WITH A RELIEF VALVE SET AT 5 PSI TO AVOID OVER-PRESSURIZING AND DAMAGING AN OTHERWISE ACCEPTABLE LINE.

9. MANHOLE VISUAL EXAMINATION. THE ENGINEER SHALL VISUALLY CHECK EACH MANHOLE, BOTH EXTERIOR AND INTERIOR, FOR FLAWS, CRACKS, HOLES, OR OTHER INADEQUACIES, WHICH MIGHT AFFECT THE OPERATION OR WATERTIGHT INTEGRITY OF THE MANHOLE. SHOULD ANY INADEQUACIES BE FOUND, THE CONTRACTOR, AT ITS OWN EXPENSE, SHALL MAKE ANY REPAIRS DEEMED NECESSARY BY THE ENGINEER. CONTRACTOR TO NOTIFY ENGINEER 48 HOURS PRIOR TO INSTALLATION OF MAN HOLES.

10. MANHOLE LEAKAGE TEST (VACUUM). ALL MANHOLES SHALL BE TESTED FOR LEAKAGE AND ALL TESTS SHALL BE WITNESSED BY THE ENGINEER. THE LEAKAGE TEST SHALL BE CONDUCTED PRIOR TO BACK-FILLING AROUND THE MANHOLE AND SHALL BE CARRIED OUT IN THE FOLLOWING

A. MANHOLES SHALL BE VACUUM TESTED AFTER ASSEMBLY AND PRIOR TO BACKFILLING.

B. CARE SHALL BE TAKEN TO EFFECT A SEAL BETWEEN THE VACUUM BASE AND THE MANHOLE RIM. PIPE PLUGS SHALL BE SECURED TO PREVENT MOVEMENT WHILE THE VACUUM IS

C. A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN. THE TIME FOR THE VACUUM TO DROP TO 9 INCHES OF MERCURY SHALL BE RECORDED.

D. ACCEPTANCE SHALL BE DEFINED AS WHEN THE TIME TO DROP TO 9 INCHES MEETS OR

EXCEEDS THE FOLLOWING: 5 FT. 120 SECONDS 120 SECONDS

E. IF THE MANHOLE FAILS THE TEST, MAKE NECESSARY REPAIRS. REPAIRS AND REPAIR PROCEDURES MUST BE ACCEPTABLE TO TOWN.

F. IF PREFORMED PLASTIC GASKETS ARE PULLED OUT DURING THE VACUUM TEST. THE

MANHOLE SHALL BE DISASSEMBLED AND THE GASKETS SHALL BE REPLACED. 11. ALL SEWER LINE WORK SHALL BE INSPECTED BY THE DESIGN ENGINEER DURING

CONSTRUCTION PER TOWN OF DILLON REQUIREMENTS 12. AS BUILT DRAWINGS SHALL BE PROVIDED PER TOWN OF DILLON

REQUIREMENTS 13. CLAY CHECK DAMS MAY BE REQUIRED IF GROUNDWATER IS ENCOUNTERED.

14. ALL SEWER SERVICES ARE TO BE INSTALLED AT A MINIMUM 2% OR PROVIDE SERVICE SLOPE TABLE. 15. SEWER LINES ARE TO BE INSTALLED WITH A MINIMUM COVER OF 9 FT. - 6 IN. ANY DEPTH LESS THAN 9 FT., INSULATION WILL BE REQUIRED. HI-100 HIGH DENSITY INSULATION WILL BE REQUIRED UNDER ALL ROADWAYS AND DRIVES.

# **OVERALL GENERAL NOTES:**

1. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.

2. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED.

3. ALL STREET STATIONING IS ALONG THE CENTERLINE OF THE ROADWAY UNLESS OTHERWISE NOTED, FOR SEPARATE WATER & SANITARY SEWER PLANS THE STATIONING IS ALONG THE CENTERLINE OF THE PIPE

OTHERWISE NOTED. 5. THE CONTRACTOR SHALL HAVE ON HIS POSSESSION AT THE SITE A COPY OF THE

4. THE PROFILE GRADE ON THE PLANS IS ALONG THE ROADWAY CENTERLINE UNLESS

APPROVED CONSTRUCTION PLANS.

6. LIMITS OF WORK: NO AREAS SHALL BE DISTURBED OUTSIDE OF THE TEMPORARY CONSTRUCTION EASEMENTS AND THE ROADWAY DISTURBANCE LIMITS.

7. ALL CONSTRUCTION SHALL CONFORM TO THE TOWN OF SILVERTHORNE STANDARDS AND SPECIFICATIONS AS APPLICABLE. ALL WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE DEVELOPER, TOWN OF SILVERTHORNE, OR THEIR REPRESENTATIVES. ONE OR ALL OF THE PARTIES HAS THE RIGHT TO REJECT MATERIALS AND WORKMANSHIP WHICH DO NOT CONFORM TO SPECIFICATIONS.

8. THE CONTRACTOR SHALL NOTIFY THE TOWN OF SILVERTHORNE AND THE PUBLIC UTILITY COMPANIES PRIOR TO PROCEEDING WITH ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.

9. CONTRACTOR SHALL GIVE 48 HOURS NOTICE TO TOWN PERSONNEL TO PERFORM REQUIRED INSPECTIONS AND PRIOR TO ANY CONSTRUCTION ON THIS SITE. CONTACT TOWN OF DILLON PERSONNEL.

10. ALL EXCAVATION SHALL COMPLY WITH OSHA SAFETY REGULATIONS.

11. MATERIALS SHALL BE INSPECTED AND ACCEPTED BY THE TOWN'S INSPECTOR UPON DELIVERY AND WHERE POSSIBLE, PRIOR TO INSTALLATION.

# STANDARD EROSION AND SEDIMENT CONTROL NOTES:

The contractor must notify Town of Dillon at least 48 hours prior to starting construction.

2. All grading, erosion, and sediment control must conform with approved plans. Revisions to disturbance areas, slopes, and/or erosion and sediment control measures are not permitted without prior approval from the Town of Dillon.

3. The landowner is responsible for obtaining a permit for Storm water Discharges Associated with Construction Activity from the Colorado Department of Public Health and Environment, at least 10 days prior to the start of construction activities for land disturbance areas of one acre or greater. The permit must be kept current throughout the construction duration.

4. Erosion control measures must be installed prior to grading activities. 5. All temporary and permanent soil erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function. For example, erosion control blankets, straw bale dikes or silt fences may require periodic replacement. Sediment traps and basins will require periodic sediment removal.

6. All topsoil, where physically practicable, must be salvaged and not topsoil shall be removed from the site except as set forth in the approved plans. Topsoil and overburden must be segregated and stockpiled separately. Topsoil and overburden must be redistributed within the graded area after rough grading to provide a suitable base for areas, which must be seeded and planted. Runoff from the stockpiled area must be controlled to prevent erosion and resultant sedimentation of receiving water.

The landowner and/or contractor must immediately take all necessary steps to control increased sediment discharge. 8. The landowner and/or contractor is responsible for clean up and removal of all sediment and debris from all drainage

infrastructure and other public facilities. 9. The landowner and/or contractor must take reasonable precautions to ensure that vehicles don not track or spill earth

materials on to streets/roads and must immediately remove such material if this occurs. 10. The landowner and/or contractor is responsible for controlling waste such as discarded building materials, concrete truck

washout, chemicals, litter, and sanitary waste, as applicable. In addition, spill prevention and containment BMP's for construction materials, waste and fuel must be provided, as applicable. 11. If it is necessary to move material in excess of 300 cubic yards and/or 10,000 square feet of land disturbance area to or

from another unincorporated Town of Dillon site, a grading permit is necessary for the off-site property. If the material is moved to a property located within another jurisdiction, evidence is required that the local government has approved the grading operation.

13. Soil stabilization measures must be applied within 30 days to the disturbed areas that may not be at final grade, but will

12. The storm water volume capacity of detention ponds must be restored and storm sewer lines will be cleaned upon completion of the project.

be left dormant for longer than 60 days. 14. Fugitive dust emissions resulting from grading activities and/or wind shall be controlled using the best available control

technology, as defined by the Colorado Department of Public Health and Environment, at the time of grading. 15. The erosion and sediment control plan may be modified by the Town of Dillon, or its authorized representative, as field conditions warrant.

# **DISTURBED AREA SEEDING NOTES:**

All areas to be seeded will be properly prepared to provide a friable soil surface in the upper 6 inches, minimum.

2. Areas to be seeded will be drill seeded with the appropriate mix (Table 2 or 3) at the rates specified. Seed may be broadcast or hydroseeded on steep slopes. The specified seeding rate will be doubled for broadcast seeding or increased by 50 percent for hydroseeding.

3. seeded areas will be mulched at a rate of at least two tons per acre of certified, weed—free straw mulch, or one ton per acre of wood cellulose, if hydromulching is completed. Hydromulching will be completed as a separate step after seeding. 4. Straw mulch will be secured by use of m-binder tackifier at a rate of 3

pounds/1.000 square feet on slopes flatter than 2:1. Mulch will be secured with

netting on slopes steeper than 3:1. SEED MIX TYPE I SCIENTIFIC NAME % MIX POUNDS PLS/ACRE COMMON NAME FESTUCA IDAHOENSIS IDAHO FESCUE 20 ALPINE BLUEGRASS POA ALPINA WESTERN WHEATGRASS PASCOPYRUM SMITHII 20 15.8 KOELERIA CRISTATA JUNE GRASS 15

1. Mix should be drill seeded, except on steep slopes where

ACHILLEA MILLEFOLIUM

FESTUCA ARIZONICA

broadcast or hydroseeding are acceptable at 200 and 150 percent of rate shown, respectively. 2. The following wildflowers may also be seeded in certain areas. 0.8 Pounds PLS/Acre -Blanket Flower

4.4 Pounds PLS/Acre 0.2 Pounds PLS/Acre -Firecracker Penstemon -California Poppy 0.4 Pounds PLS/Acre 3. Divide Pounds PLS/Acre by 43.5 to obtain Pounds PLS/1,000 SQ.

ARIZONA FESCUE

WHITE YARROW

	SEED MIX TYPE I	I	
COMMON NAME	SCIENTIFIC NAME	% MIX	POUNDS PLS/ACRE
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	20	15.8
REDTOP	AGROSTIS ALBA	15	0.3
TUFTED HAIRGRASS	DESCHAMPSIA CAESPITOSA	15	0.5
IDAHO FESCUE	FESTUCA IDAHOENSIS	30	5.8
ALPINE BLUEGRASS	POA ALPINA	20	1.7

1. Mix should be drill seeded, except on steep slopes where broadcast or hydroseeding are acceptable at 200 and 150 percent of rate shown, respectively.

2. Divide Pounds PLS/Acre by 43.5 to obtain Pounds PLS/1,000 SQ



					1 FINAL SITE PLAN/PLAT 4/7/17 TOS FINAL SITE PLAN & PLAT SUBMITTAL	No. Revision/Issue Date Description
TEN MILE	ENGINEERING, INC.	Professional Civil Engineers	Po Box 1/85	FIISCU, CU 60443	tenmileennineer@aol.com	
CVLSIN JUC	` -	IDGE MARNEIPLACE	COLORADO	() [] []		

DILLON RIDGE VISTAS

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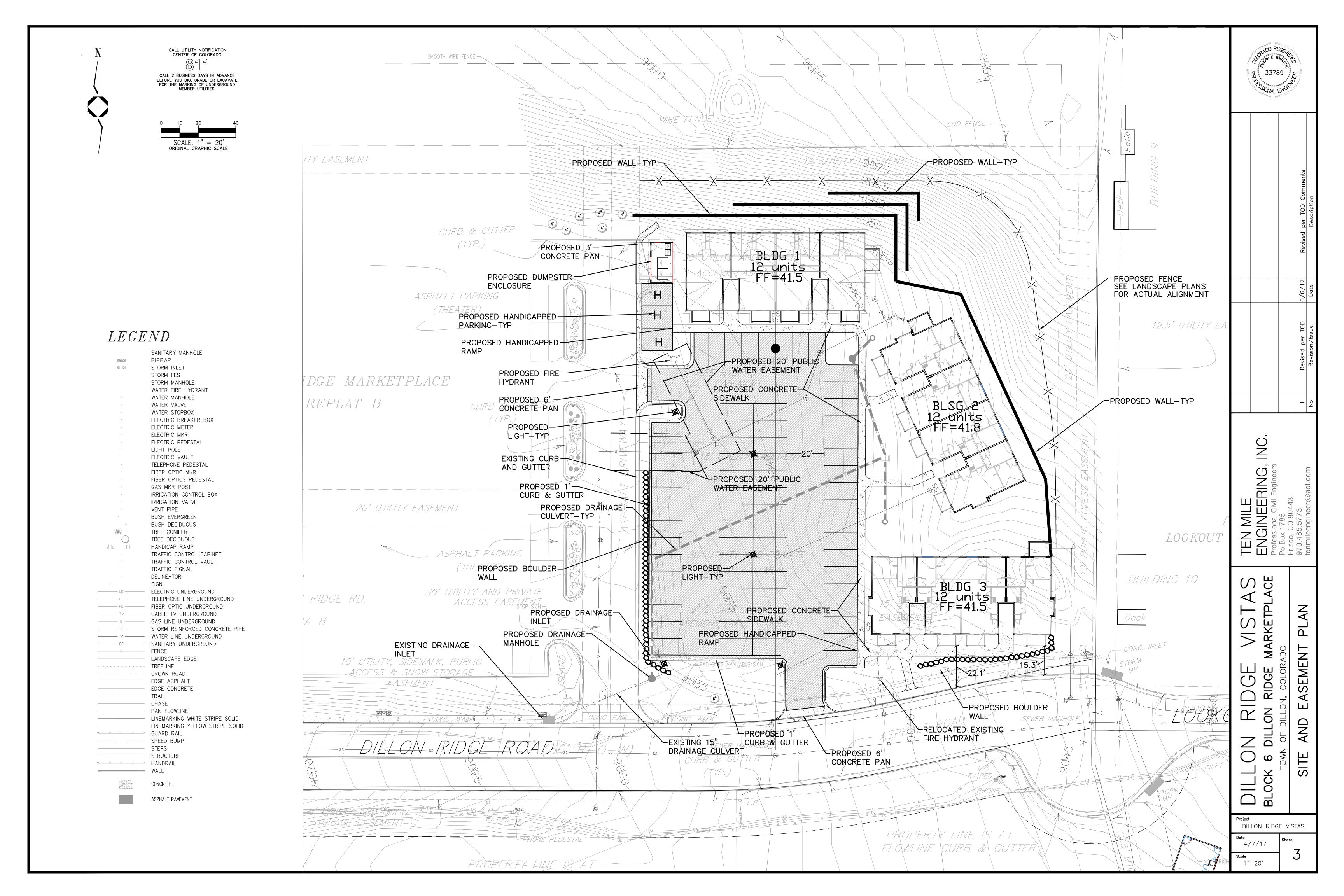
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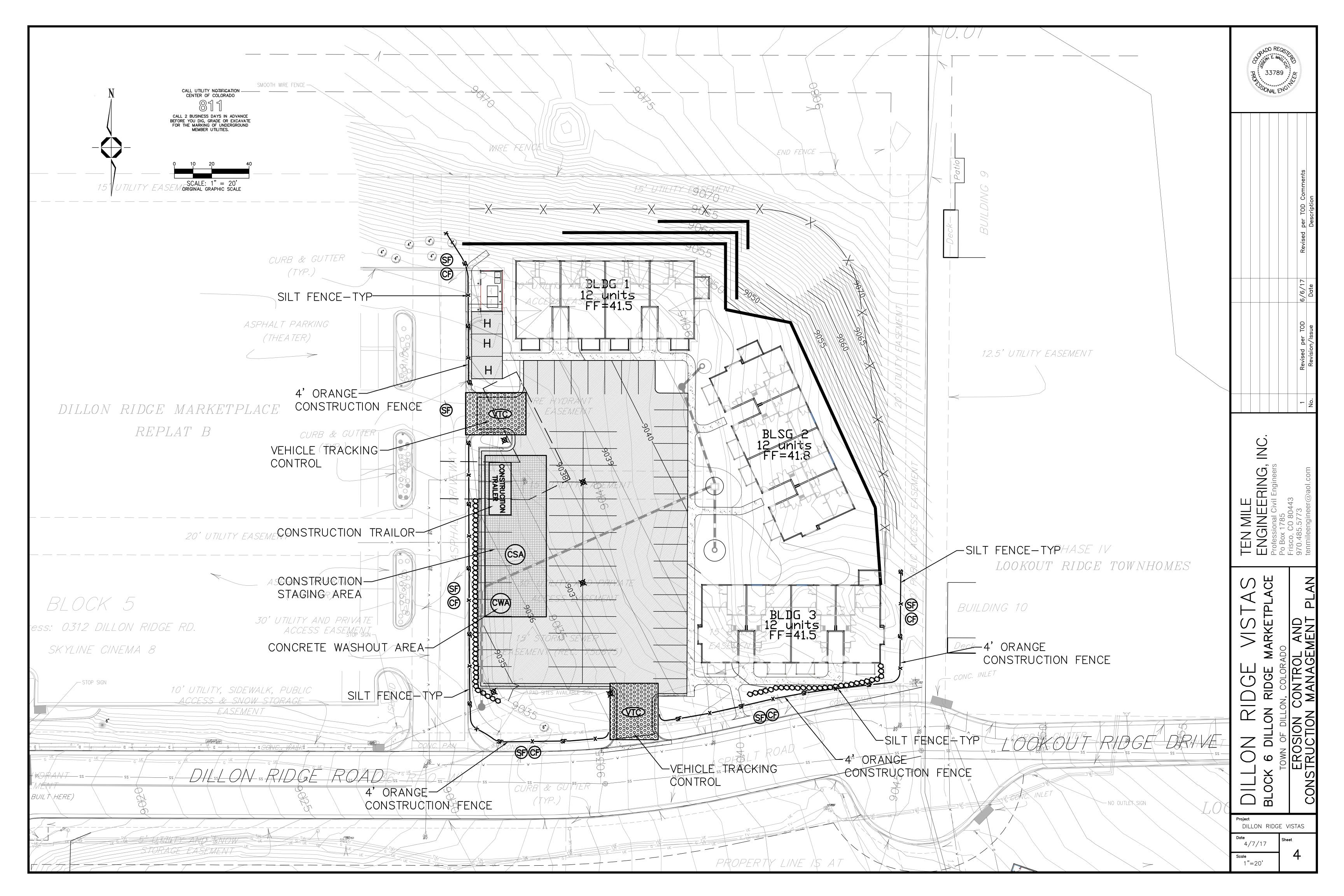
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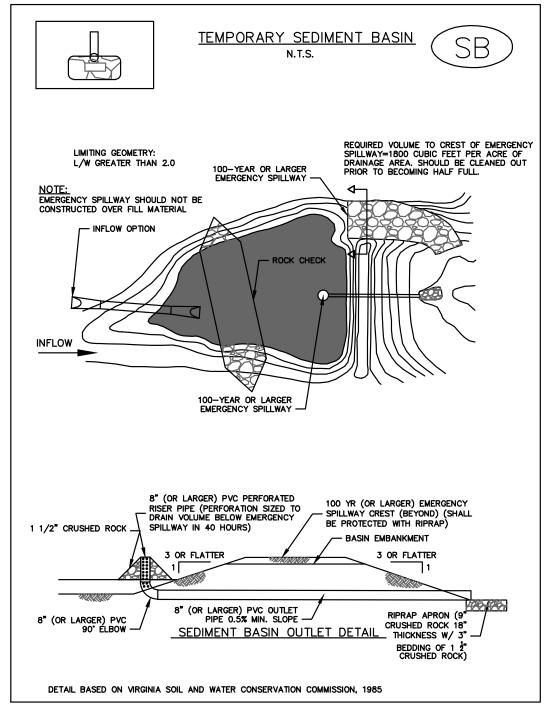
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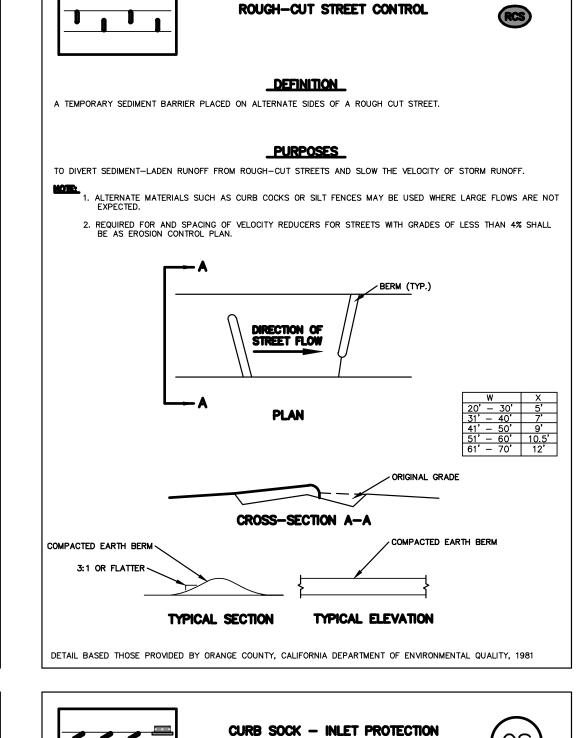
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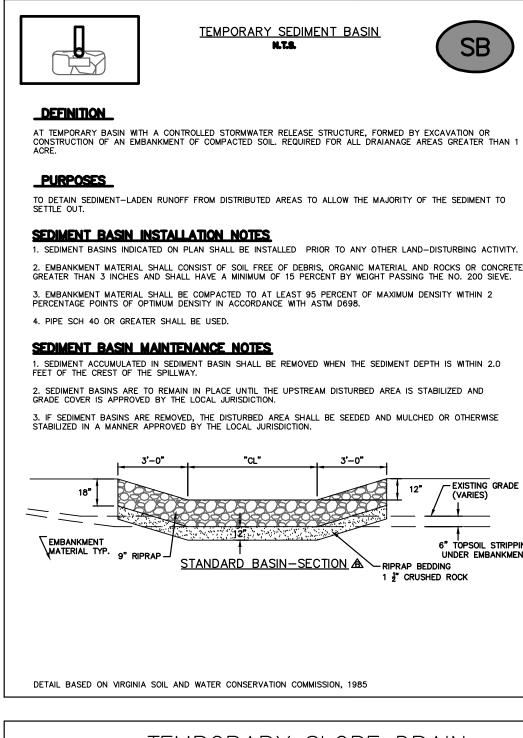
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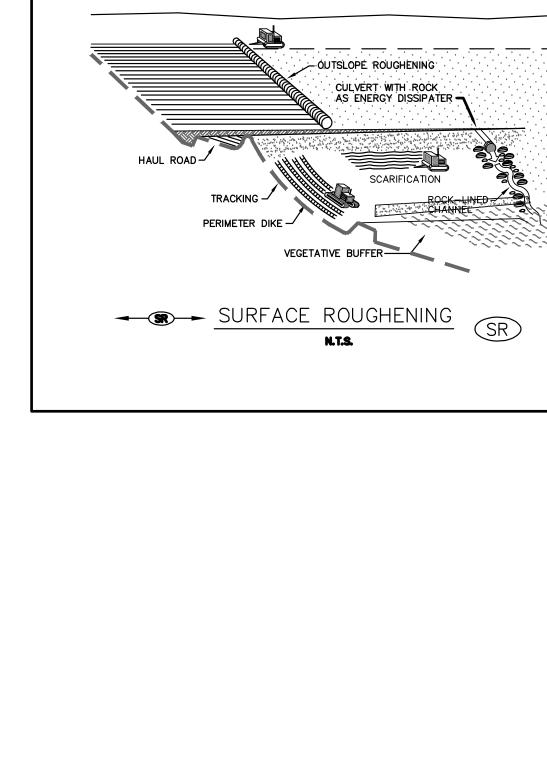












**DEFINITION** 

PROVIDE A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS CREATED BY OPERATING A TILLAGE OR

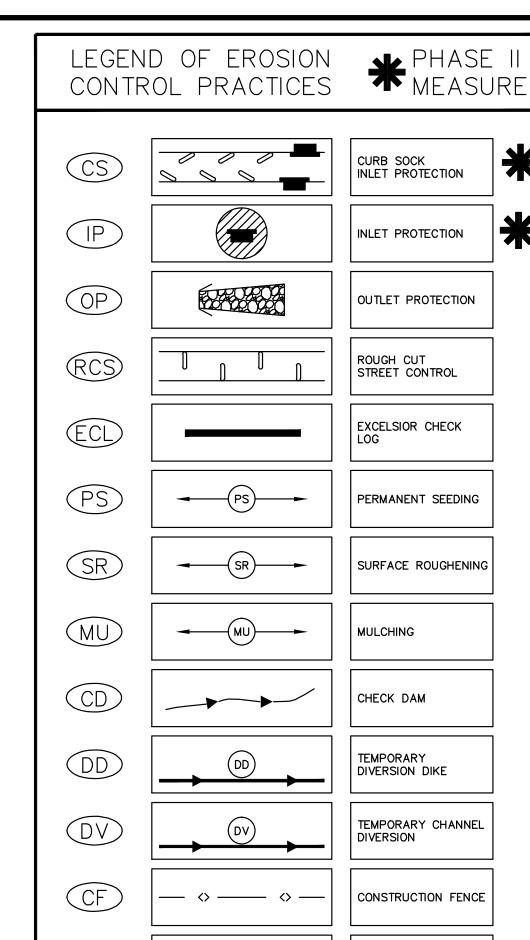
OTHER SUITABLE IMPLEMENT ON THE CONTOUR, OR BY LEAVING SLOPES IN A ROUGHENED CONDITION BY

1. TO AID IN SEED BED PREPARATION AND ESTABLISHMENT OF VEGETATIVE COVER.

3. TO REDUCE RUNOFF AND WIND EROSION AND PROVIDE FOR SEDIMENT TRAPPING.

2. TO REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION.

NOT FINE-GRADING THEM.



SILT FENCE

CONTROL

VEHICLE TRACKING

VEHICLE TRACKING

EROSION CONTROL

PAVED FLUME

TEMPORARY

SLOPE DRAIN

TEMPORARY

STREAM CROSSING

SEDIMENT BASIN

SEDIMENT TRAP

S NO NO

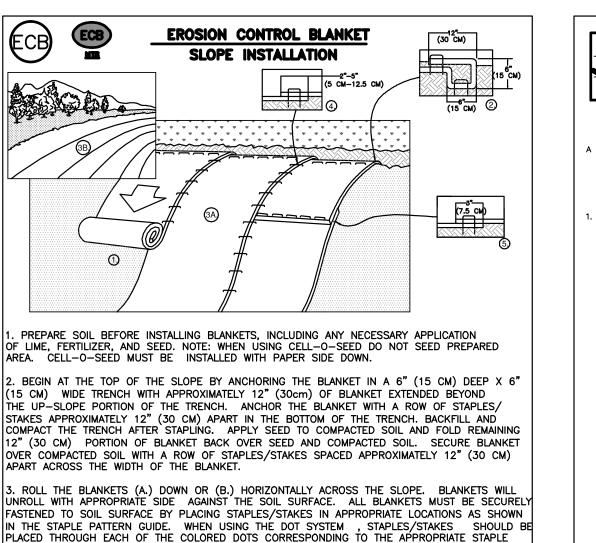
CONSTRUCTION ROAD STABILIZATION

CONTROL WITH

WASH RACK

STRAW BALE

BARRIER



4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5"

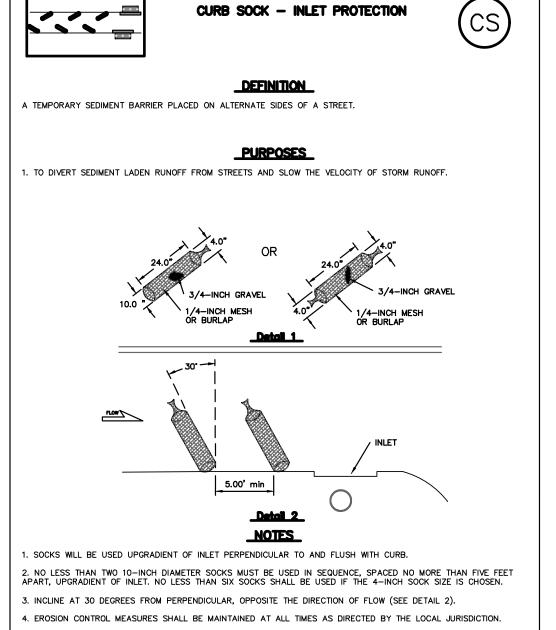
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE

STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPRÓXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH, NOTE: \*IN LOOSE SOIL

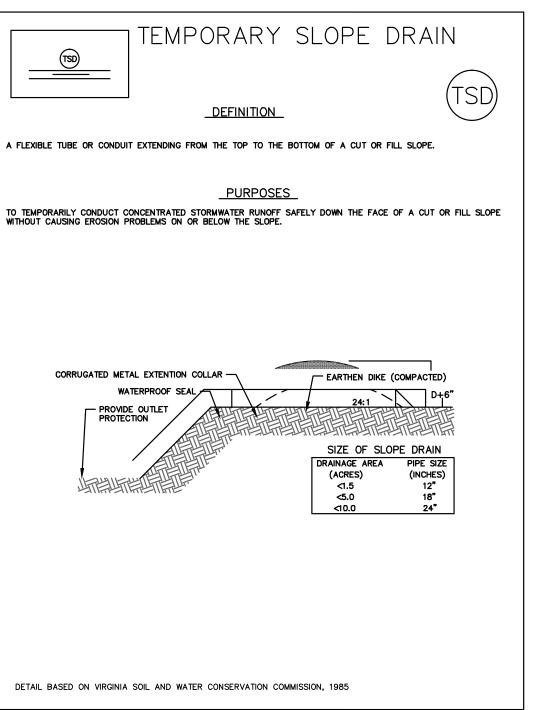
CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE

(5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.

NECESSARY TO PROPERLY SECURE THE BLANKETS.



DETAILS BASED ON THOSE PROVIDED BY THE CITY OF LAKEWOOD, COLORADO



# **VEGETATION** -SEDIMENT CONTROL LOG-(SEE SCL-1 DETAIL) ROCK WILL BE INSTALLED, -AS NECESSARY, TO PREVENT EROSION DISCHARGE PIPE FILTER BAG ON STRAW BALES OR ROCK PAD **DEWATERING INSTALLATION NOTES** 1. SEE PLAN VIEW FOR;

REV. 1/2004

-LOCATION OF DEWATERING EQUIPMENT. -TYPE OF DEWATERING OPERATION (DW-1 TO DW-4).

2. THE OWNER OR CONTRACTOR SHALL OBTAIN A CONSTRUCTION DISCHARGE (DEWATERING) PERMIT FROM THE STATE PRIOR TO ANY DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT.

3. THE OWNER OR OPERATOR SHALL PROVIDE, OPERATE, AND MAINTAIN DEWATERING SYSTEMS OF SUFFICIENT SIZE AND CAPACITY TO PERMIT EXCAVATION AND SUBSEQUENT CONSTRUCTION IN DRY CONDITIONS AND TO LOWER AND MAINTAIN THE GROUNDWATER LEVEL A MINIMUM OF 2-FEET BELOW THE LOWEST POINT OF EXCAVATION AND CONTINUOUSLY MAINTAIN EXCAVATIONS FREE OF WATER UNTIL BACK-FILLED TO FINAL GRADE.

# **DEWATERING INSTALLATION NOTES**

4. DEWATERING OPERATIONS SHALL USE ONE OR MORE OF THE DEWATERING SUMPS SHOWN ABOVE, WELL POINTS, OR OTHER MEANS APPROVED BY THE LOCAL JURISDICTION TO REDUCE THE PUMPING OF SEDIMENT, AND SHALL PROVIDE A TEMPORARY SEDIMENT BASIN OR FILTRATION BMP TO REDUCE SEDIMENT TO ALLOWABLE LEVELS PRIOR TO RELEASE OFF SITE OR TO A RECEIVING WATER. A SEDIMENT BASIN MAY BE USED IN LIEU OF SUMP DISCHARGE SETTLING BASIN SHOWN ABOVE IF A 4-FOOT-SQUARE RIPRAP PAD IS PLACED AT THE DISCHARGE POINT AND THE DISCHARGE END OF THE LINE IS STAKED IN PLACE TO PREVENT

5. DEWATERING OPERATIONS MAY REQUIRE A LOCAL PERMIT IN ADDITION TO STATE REQUIREMENTS.

# **DEWATERING MAINTENANCE NOTES**

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS. 5. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

# DW-4. DEWATERING FILTER BAG



ADDITIONAL PRACTICES TO BE EMPLOYED AS NECESSARY TO MEET WATER QUALITY OBJECTIVES AND SUIT THE CURRENT WEATHER, SITE CONDITIONS, AND UNFORESEEN NEEDS.

. CONTRACTOR RESPONSIBLE FOR ENSURING ALL PRACTICABLE SEDIMENT AND EROSION CONTROL SOLUTIONS ARE EMPLOYED TO MEET WATER QUALITY OBJECTIVES.

# EROSION CONTROL NARRATIVE - PHASE 1 AND PHASE 2

(WR)

(PF

(TSD)

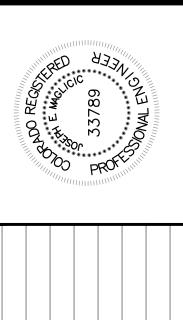
(CRS)

- . The intent of the Phase 1 erosion and sediment control plan is to fulfill water quality objectives during the roadway rough grading phase of the project. During this phase, it is anticipated that the maximum amount of disturbed area will be created. In order of occurrence, the following measures should be implemented.
- 2. A silt fence should be installed as shown on the plan.

<u>shown on the plans.</u>

- 3. Diversion dikes should be constructed as shown on the plan to redirect runoff water to stabilized outflow points. These diversion dikes shall be kept in the second phase, as the construction dictates, as part of finished grading for the lots. The dikes break up the slope length and reduce the potential for rill and gully erosion within the property boundary. At the downstream end of each of the diversion dikes, a silt trap should be installed and relocated as construction dictatates, to capture sediments erodec
- Immediately after road grading is completed, temporary seeding with mulch cover is recommended for all the exposed slopes to stabilize the disturbed areas. Permanent seeding with a temporary mulch cover should be applied to the large areas as designated.
- 5. Once the Phase 1 rough grading and earth moving is completed, Phase 2 will commence. Phase 2 includes fine grading, home construction, utility construction and street construction. Erosion and control practices outlined include inlet protection and sandbags upstream of inlets, (curb socks).
- 5. It is extremely important that each of the measures be maintained on a regular basis and inspected by a qualified erosion—control specialist to achieve the required water quality control.
- Should the utility and street construction not begin within 90 days of completion of the rough grading work, the contractor shall install Rough—Cut Street control in the street areas. It is suggested that during the 90 day period and during construction,

division dikes should be used in lieu of the Rough-Cut Street control in the same general location and shape as the RCS



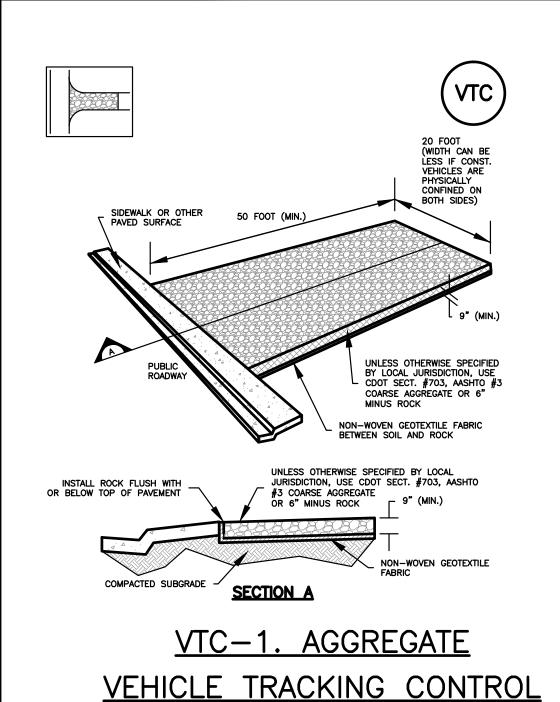
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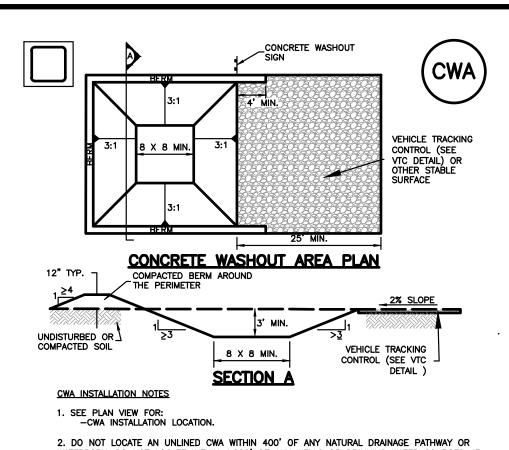
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DILLON RIDGE VISTAS 4/7/17

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NTS





WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'. 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA. 7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND DULL BICS.

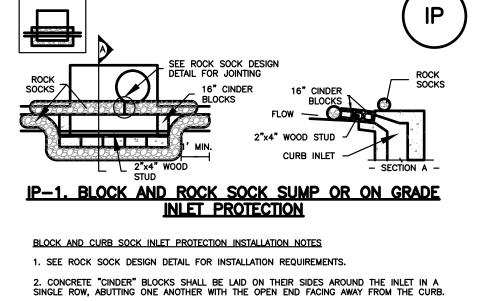
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE

REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY. 6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED. 7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

IP-2. CURB ROCK SOCKS UPSTREAM OF

**NLET PROTECTION** 

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

SOCKS APPROX 30 DEG. BLOCK AND ROCK SOCK INLET

P . P .

STAKING PATTERN PER MANUFACTURER SPEC. OR PATTERN

BASED ON ECB AND/OR SLOPE

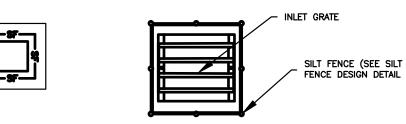
# IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

# ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

ROCK SOCK -

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

SEE ROCK SOCK DETAIL FOR JOINTING



# IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS. 2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET. 3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL. GENERAL INLET PROTECTION INSTALLATION NOTES

LOCATION OF INLET PROTECTION -TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6) 2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT. 3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED. INLET PROTECTION MAINTENANCE NOTES

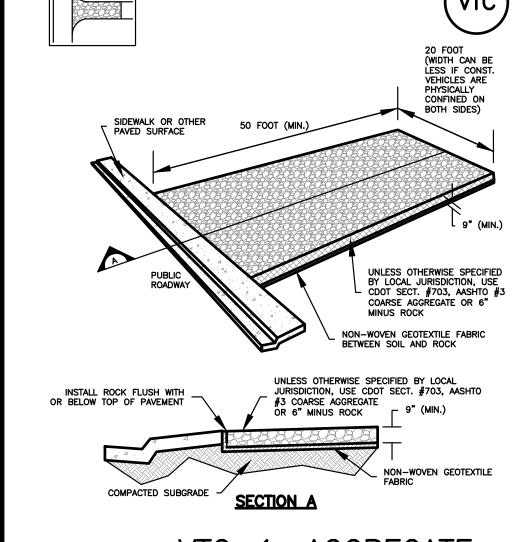
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 14 OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS. 6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.  $\underline{\text{NOTE:}}$  many jurisdictions have BMP details that vary from udfcd standard details. Consult with local jurisdictions as to which detail should be used when differences are noted.

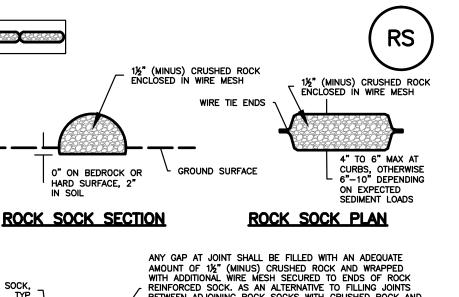
NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.



VEHICLE TRACKING CONTROL

# CWA-1. CONCRETE WASHOUT AREA



AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

MASS PERCENT PASSING SQUARE MESH SIEVES NO. 4 MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES. ROCK SOCK INSTALLATION NOTES

2. CRUSHED ROCK SHALL BE  $1\frac{1}{2}$ " (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET ( $1\frac{1}{2}$ " MINUS).

MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48" 4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

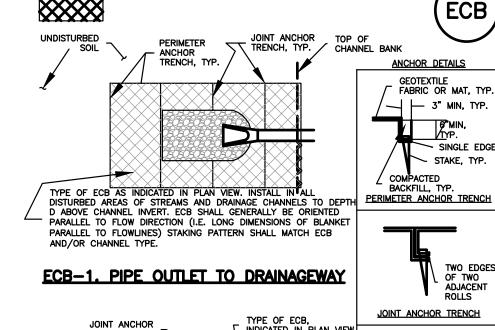
# ROCK SOCK MAINTENANCE NOTES

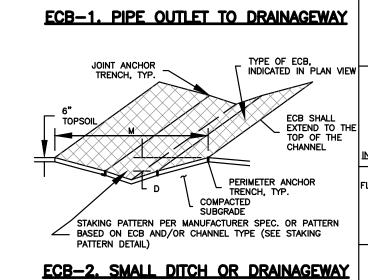
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED 5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE ROCK SOCK. 6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

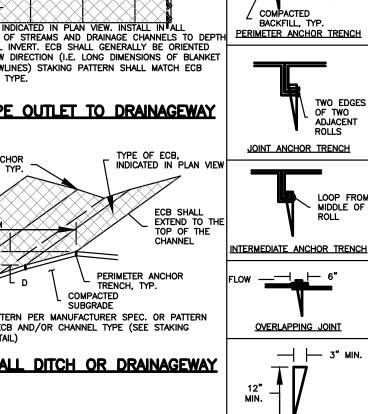
7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS.

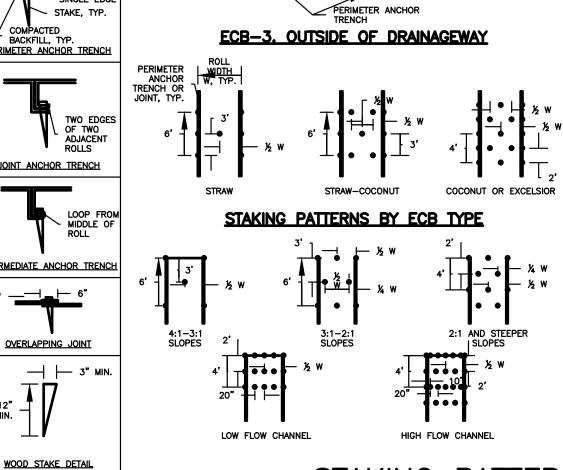
CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED,
CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN
AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET.

UDFOD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.









-TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR). -AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB. 2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPS, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS. 3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BILANKET

PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL 5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs. 7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs 8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1. 9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS 10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF

т	ABLE ECB-1.	ECB MATERIA	AL SPECIFICAT	IONS
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	_	100%	_	DOUBLE/ NATURAL
STRAW- COCONUT	30% MIN	70% MAX	-	DOUBLE/ NATURAL
COCONUT	100%	-	-	DOUBLE/ NATURAL
EXCELSIOR	_	-	100%	DOUBLE/ NATURAL

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EPOSCION. AND DEPOSCHAP MAINTENANCE. EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

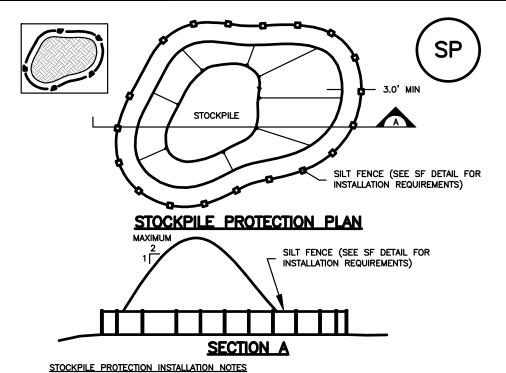
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION. 5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

# \*STRAW ECB® MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL. \*\*ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

# STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

DIFFERENT FROM THOSE SHOWN HERE



-LOCATION OF STOCKPILES.
-TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE
APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE
STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE
HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE
PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY. S. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SP-1. STOCKPILE PROTECTION

RS-1. ROCK SOCK PERIMETER CONTROL



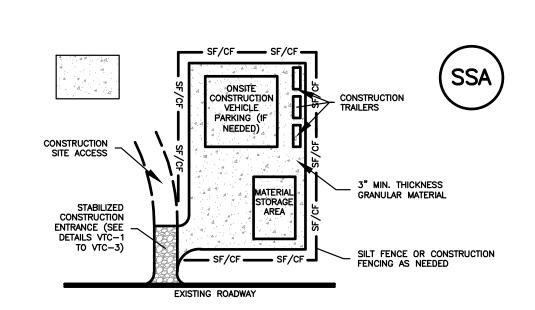
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH,

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS. 3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES. 5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK. STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE  ${\tt BMPs}$  have failed, repair or replacement should be initiated upon discovery of the failure. 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH. 5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

 ${
m \underline{NOTE}}$ : MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



# STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR -LOCATION OF STAGING AREA(S). CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION. 2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE. 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK. 6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING. STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS. 6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

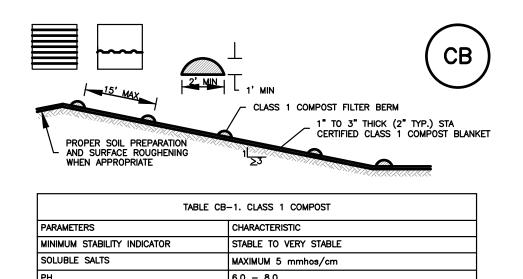
SSA-1. STABILIZED STAGING AREA

# $\mathcal{L}$ RD

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DILLON RIDGE VISTAS

4/7/17 NTS



AND SURFACE ROUGHENING WHEN APPROPRIATE	23 23 (1000) 100 (1000
TABLE CB	-1. CLASS 1 COMPOST
PARAMETERS	CHARACTERISTIC
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
SOLUBLE SALTS	MAXIMUM 5 mmhos/cm
PH	6.0 - 8.0
AG INDEX	> 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
MATURITY INDEX AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
MOISTURE CONTENT	30-60%
ORGANIC MATTER CONTENT	25-45% OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING
PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENTS	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
ORGANIC MATTER PER CUBIC YARD	MUST REPORT
CHEMICAL CONTAMINANTS	COMPLY WITH US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

6" FROM END OF LOG

SEDIMENT CONTROL LOG

DETAIL - SECTION A

ROADS, WETLANDS, INLETS OR OTHER FEATURES REQUIRING PROTECTION

STAKE AT APPROX. 90 DEG. TO EACH OTHER

SEDIMENT CONTROL LOG - SECTION B

— SCL-----SCL -----SCL---

SEDIMENTATION LOG

SEDIMENT CONTROL LOG

12" SEDIMENT CONTROL LOG

FLOW FROM CONSTRUCTION SITE,
SOIL STOCKPILE OR OTHER
DISTURBED AREA REQUIRING
SEDIMENT CONTROL

1' 6" MIN.

2" MIN. DIAMETER

USE A STAKE EVERY 24" A

HE SEDIMENTATION LOG

COMPOST FILTER BERM AND COMPOST BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR -LOCATION OF COMPOST FILTER BERM(S LENGTH OF COMPOST FILTER BERM(S).

2. COMPOST BERMS AND BLANKETS MAY BE USED IN PLACE OF STRAW MULCH OR GEOTEXTILE FABRIC IN AREAS WHERE ACCESS TO LANDSCAPING IS DIFFICULT DUE TO LANDSCAPING OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TURF GRASS FINISH IS

- 3. FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR.
- 4. FILTER BERMS SHALL BE A MINIMUM OF 1 FEET HIGH AND 2 FEET WIDE. 5. FILTER BERMS SHALL BE APPLIED BY PNEUMATIC BLOWER OR BY HAND. 6. FILTER BERMS SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL AND NOT IN AREAS OF CONCENTRATED FLOW.
- 7. COMPOST BLANKETS SHALL BE APPLIED AT A DEPTH OF 1 -3 INCHES (TYPICALLY 2 INCHES). FOR AREAS WITH EXISTING VEGETATION THAT ARE TO BE SUPPLEMENTED BY COMPOST, A THIN 0.5-INCH LAYER MAY BE USED. 8. SEEDING SHALL BE PERFORMED PRIOR TO THE APPLICATION OF COMPOST. ALTERNATIVELY, SEED MAY BE COMBINED WITH COMPOST AND BLOWN WITH THE PNEUMATIC BLOWER. 9. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO COMPOST APPLICATION.
- 10. COMPOST SHALL BE A CLASS 1 COMPOST AS DEFINED BY TABLE CB-1. COMPOST FILTER BERM MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
- 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs in effective operating condition. Inspections and corrective measures should be documented thoroughly. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. COMPOST BERMS AND BLANKETS SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RILLING IN THE COMPOST SURFACE OCCURS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN

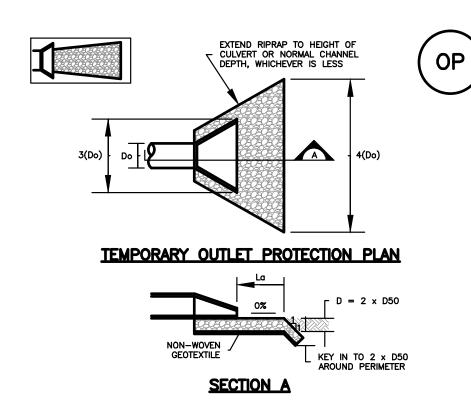


TABLE OP-1. TEMPORARY OUTLET PROTECTION SIZING TABLE					
PIPE DIAMETER, Do (INCHES)	DISCHARGE, Q (CFS)	APRON LENGTH, La (FT)	RIPRAP D50 DIAMETER MIN (INCHES)		
8	2.5	5	4		
	5	10	6		
12	5	10	4		
	10	13	6		
18	10	10	6		
	20	16	9		
	30	23	12		
	40	26	16		
24	30	16	9		
	40	26	9		
	50	26	12		
	60	30	16		

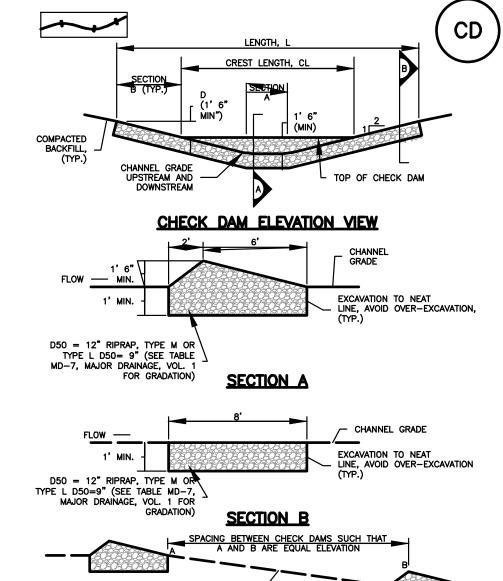
TEMPORARY OUTLET PROTECTION INSTALLATION NOTES

SEE PLAN VIEW FOR
 LOCATION OF OUTLET PROTECTION.

2. DETAIL IS INTENDED FOR PIPES WITH SLOPE  $\leq$  10%. ADDITIONAL EVALUATION OF RIPRAP SIZING AND OUTLET PROTECTION DIMENSIONS REQUIRED FOR STEEPER SLOPES. 3. TEMPORARY OUTLET PROTECTION INFORMATION IS FOR OUTLETS INTENDED TO BE UTILIZED TEMPORARY OUTLET PROTECTION INSPECTION AND MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VART FROM OUTED STATEMENT CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



CHECK DAM INSTALLATION NOTES

-CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM). -LENGTH (L), CREST LENGTH (CL), AND DEPTH (D). 2. CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES. . RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").

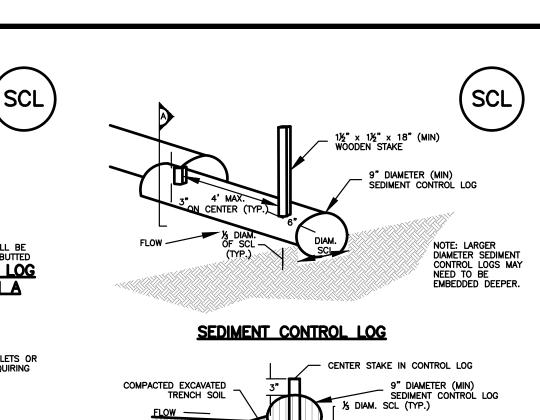
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'. 5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER CHECK DAM MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs in effective operating condition. Inspections and corrective measures should be documented thoroughly. 3. WHERE  ${\tt BMPs}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST. 5. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. 6. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

# CD-1. CHECK DAM

# CB-1. COMPOST BLANKET AND COMPOST FILTER BERM



SECTION A

SEDIMENT CONTROL LOG JOINTS

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS. 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND—DISTURBING ACTIVITIES. 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR. 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY % OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER. 7 FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING. STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE FROSCOL AND DEPENDENCE AND PROPERTY AND THE PROPERTY AND T EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL

# CIP D (12" MIN.) 7 BACKFILL UPSTREAM OF WATTLE CULVERT INLET PROTECTION SECTION A **PLAN** [ 10" MIN.

KEY IN ROCK SOCK O" ON BEDROCK, PAVEMENT OR RIPRAP KEY IN ROCK SOCK 2" ON EARTH SECTION B CULVERT INLET PROTECTION INSTALLATION NOTES

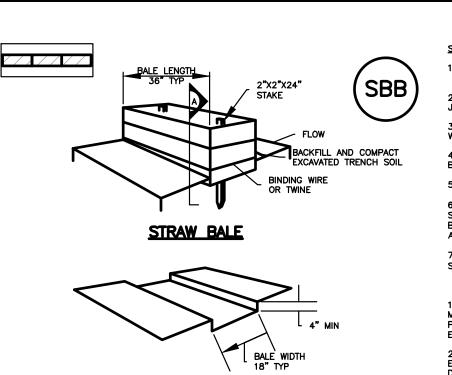
1. SEE PLAN VIEW FOR
-LOCATION OF CULVERT INLET PROTECTION. 2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS
POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.

# CIP-1. CULVERT INLET PROTECTION



<u>Trench for Straw Bale</u>

SECTION A

**PROFILE** 

STRAW BALE INSTALLATION NOTES

-LOCATION(S) OF STRAW BALES.

2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE. 3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER. 5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"X18"X18".

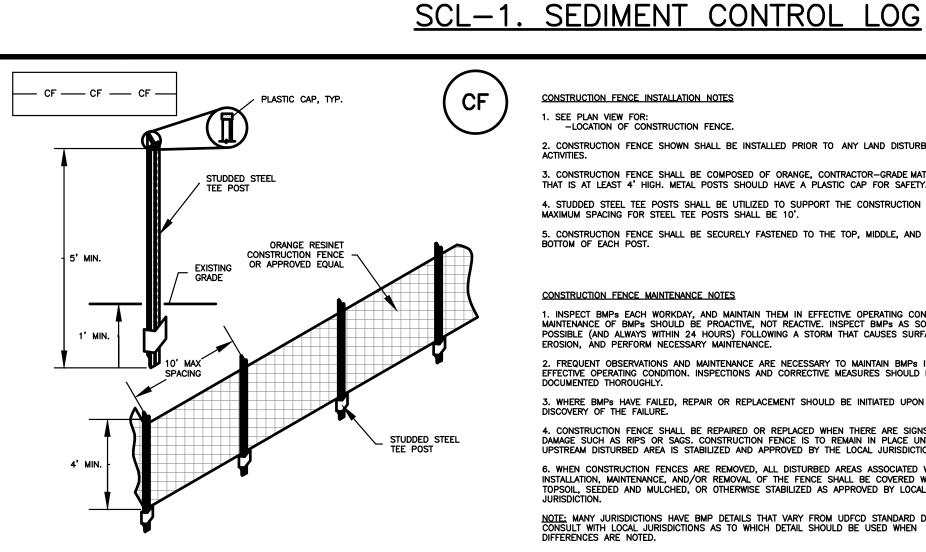
6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) 7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"X2"X24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR. 5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/4 OF THE HEIGHT OF THE STRAW BALE BARRIER. 6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.  $\underline{\text{NOTE:}}$  many jurisdictions have BMP details that vary from udfCD standard details. Consult with local jurisdictions as to which detail should be used when differences are noted.

# SBB-1. STRAW BALE



# CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
-LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING 3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR—GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY. 4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'. 5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

# CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. 6. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CF-1. PLASTIC MESH CONSTRUCTION FENCE

# TEMPORARY SEEDING MAINTENANCE NOTES

1. THE SWMP MANAGER SHALL INSPECT RECENTLY SEEDED AREAS WEEKLY TO INSURE EVEN 2. AREAS WHERE GROWTH IS NOT OCCURING SHALL BE RE-SEEDED AS SOON AS POSSIBLE AND RE-MULCHED IF NECESSARY.

3. SEEDED AREAS SHALL NOT BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR

OP-1. TEMPORARY OUTLET PROTECTION

VEHICLES. MULCHING INSTALLATION NOTES



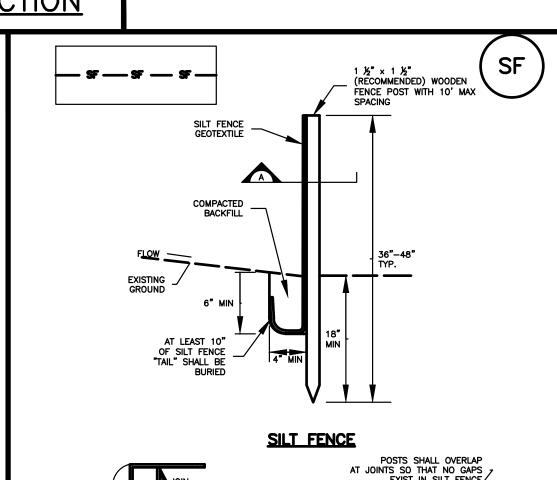
1. SEE PLAN VIEW FOR -LOCATION OF MUCLCHING

2. MULCHING SHALL BE COMPLETED WITHIN 21 DAYS OF INITIAL DISTURBANCE OR WITHIN 7 DAYS AFTER GRADING IS SUBSTANTIALLY COMPLETE. 3. MATERIAL USED FOR MULCH SHALL BE CERTIFIED CLEAN, WEED— AND SEED—FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE

4. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBE MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. 5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING, USING NETTING, OR WITH A

6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN AN AREA THAT DRAINS DIRECTLY INTO FREE SURFACE WATER SUCH AS A LAKE, STREAM OR RIVER.

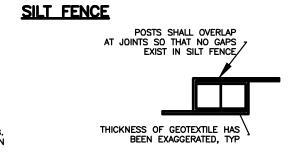
1. THE SWMP MANAGER SHALL INSPECT RECENTLY MULCHED AREAS TO INSURE MULCH HAS BEEN EVENLY DISTRIBUTED AND PROPERLY ANCHORED. 2. AREAS WHERE MULCH HAS BEEN REMOVED SHALL BE RE-MULCHED IMMEDIATLEY AND 3. MULCHED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR



SECTION A

POSTS SHALL BE JOINED

N DIRECTION SHOWN AND DRIVE



1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW PROPERTY AND REPORT TO THE SLOPE TO ALLOW 2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE LISED. 3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND. 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20'). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES. SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs in effective operating condition. Inspections and corrective measures should be documented thoroughly. 3. WHERE BMPs have failed, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS ADDROVINATELY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED TO THE BMP, TYPICALLY WHEN DEPTH OF THE BMP, TYPICALLY WHEN DEPTH OF THE BMP, TYPICALLY W SEDIMENTS IS APPROXIMATELY 6". 5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE. 6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER 7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SF-1. SILT FENCE

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4/7/17 Scale

RING ШЩ 

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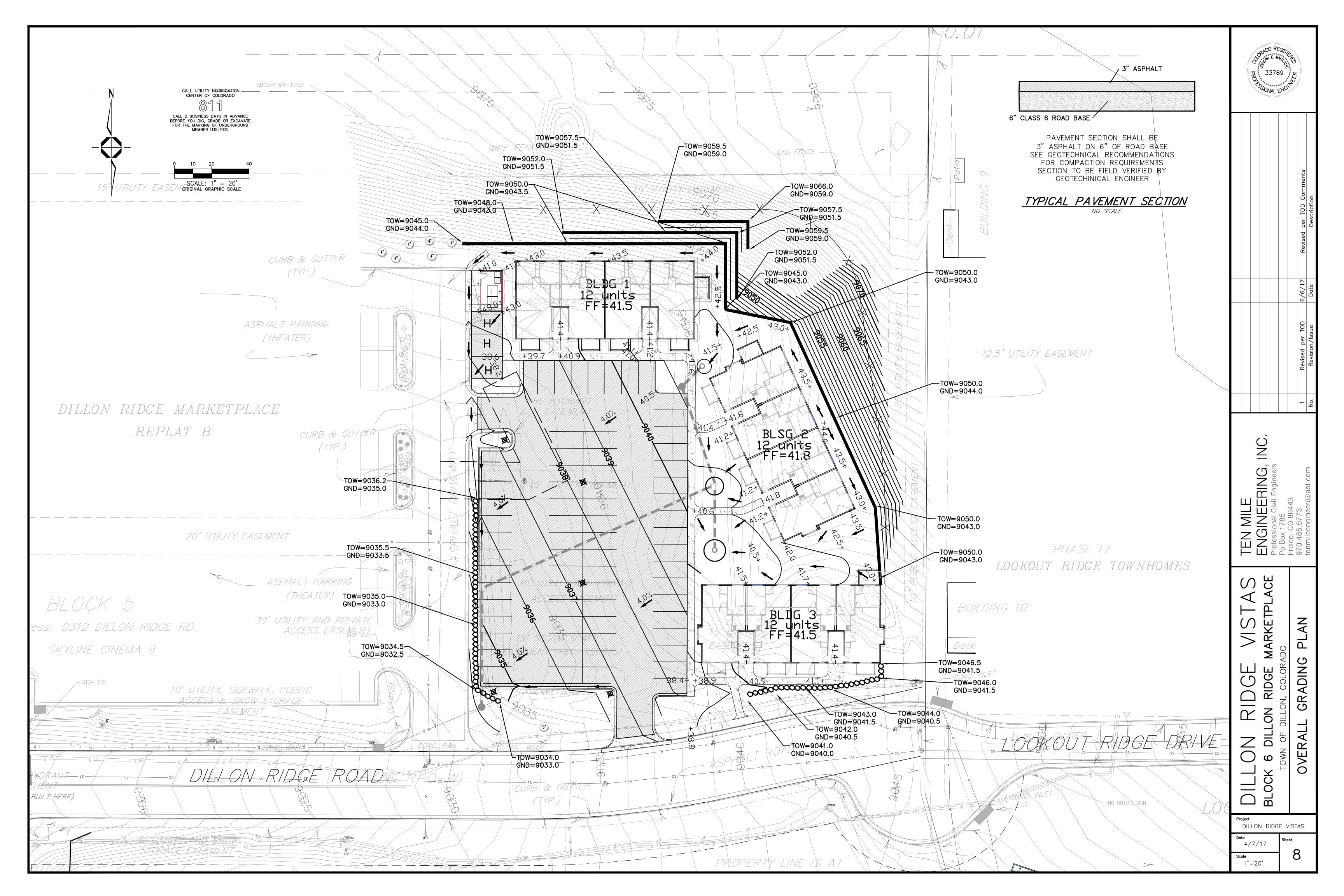
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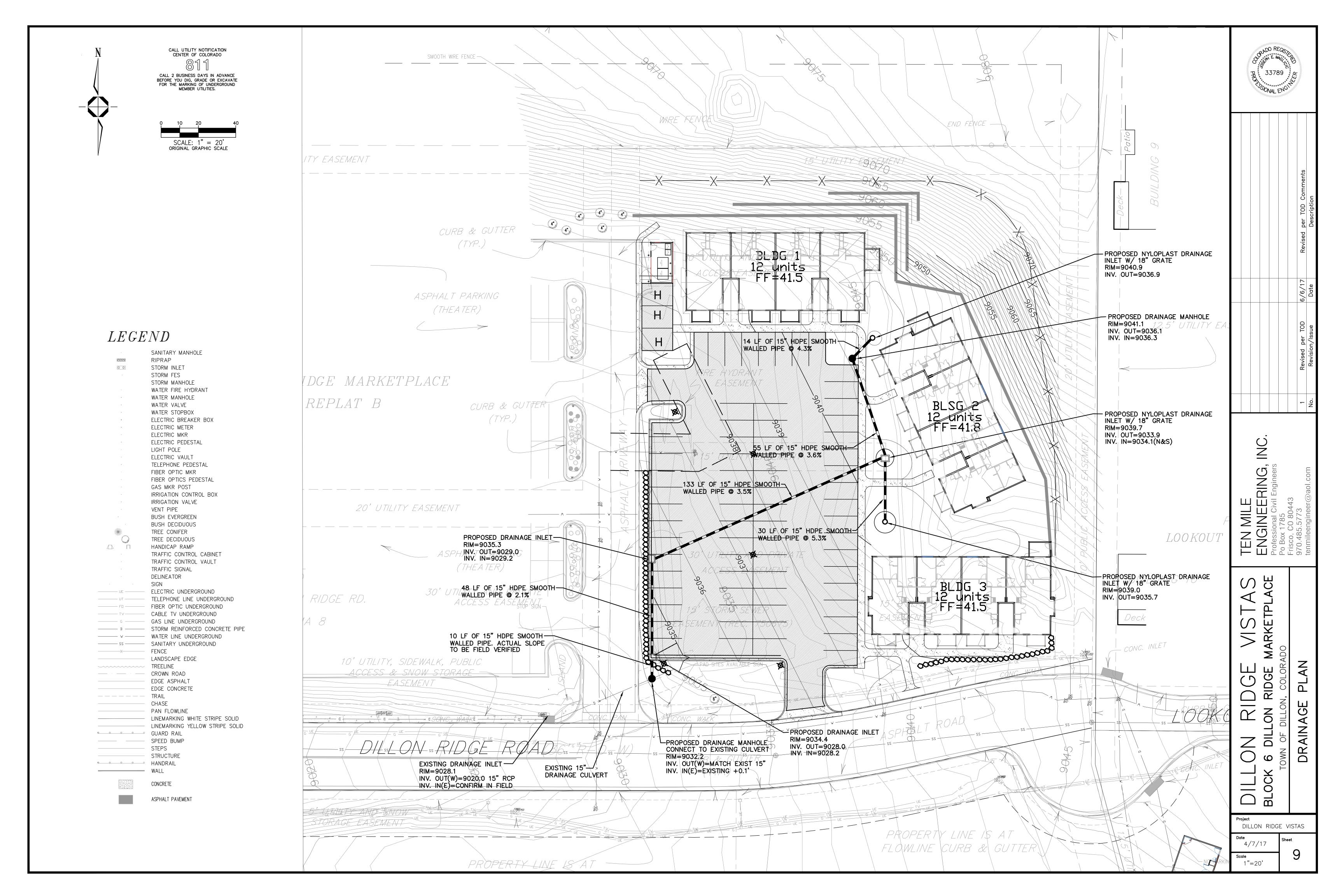
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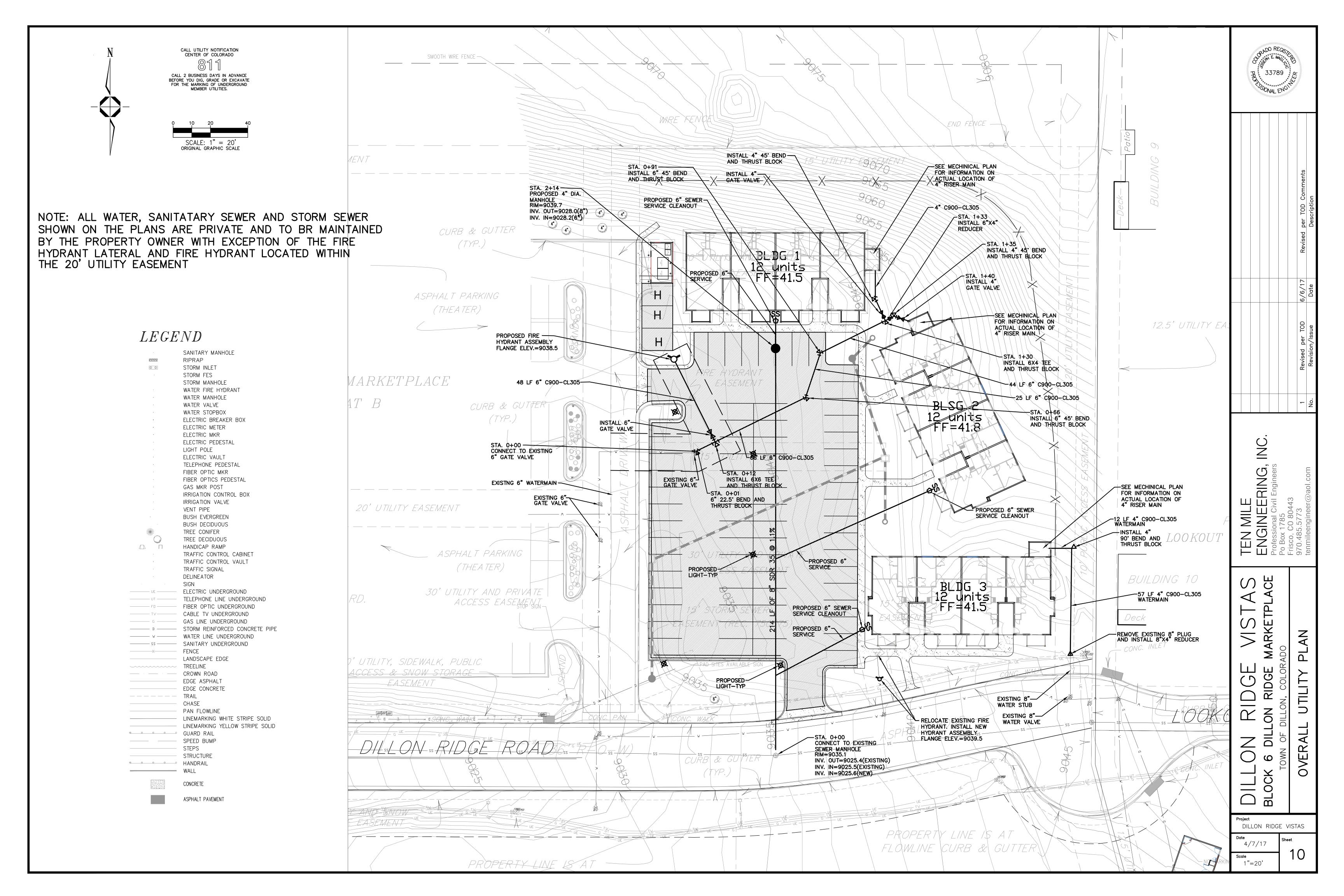
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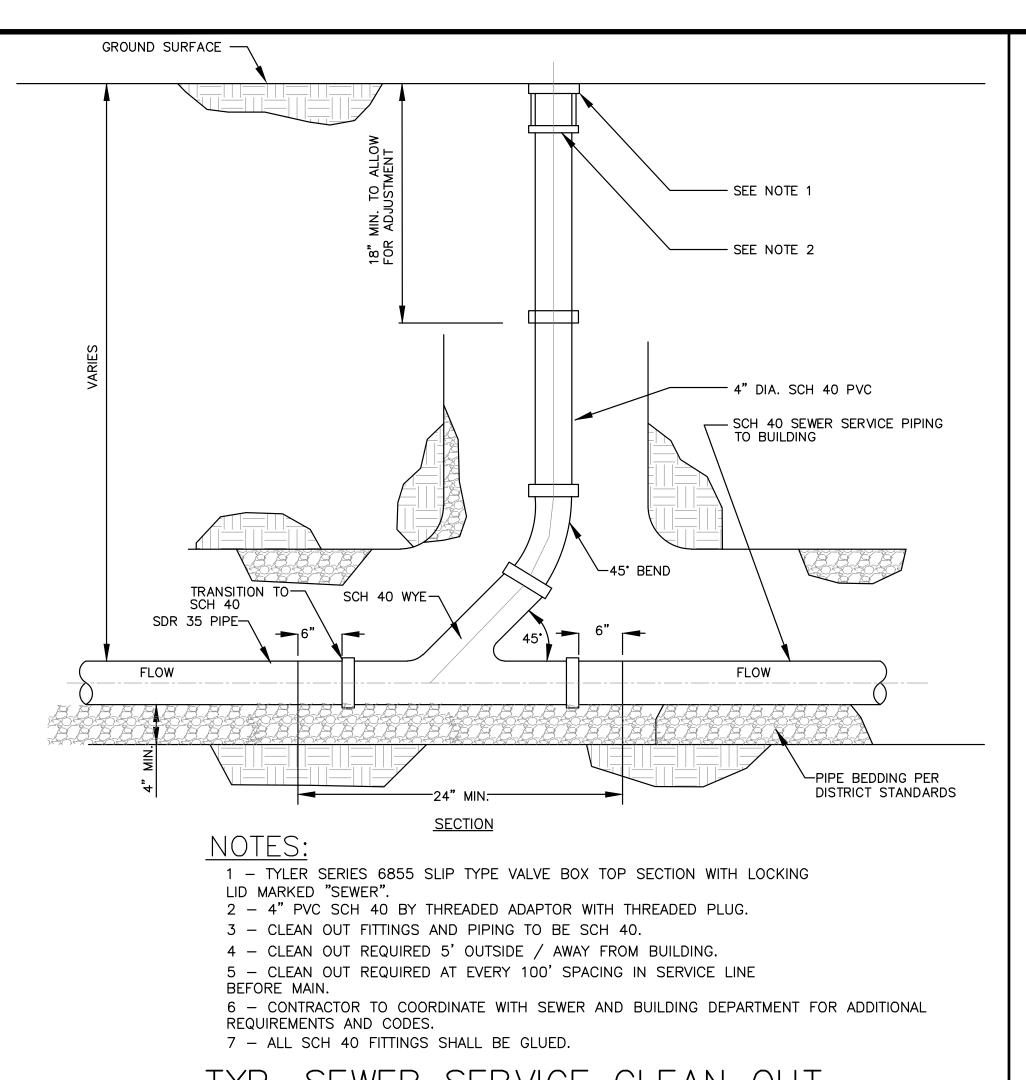
DILLON RIDGE VISTAS

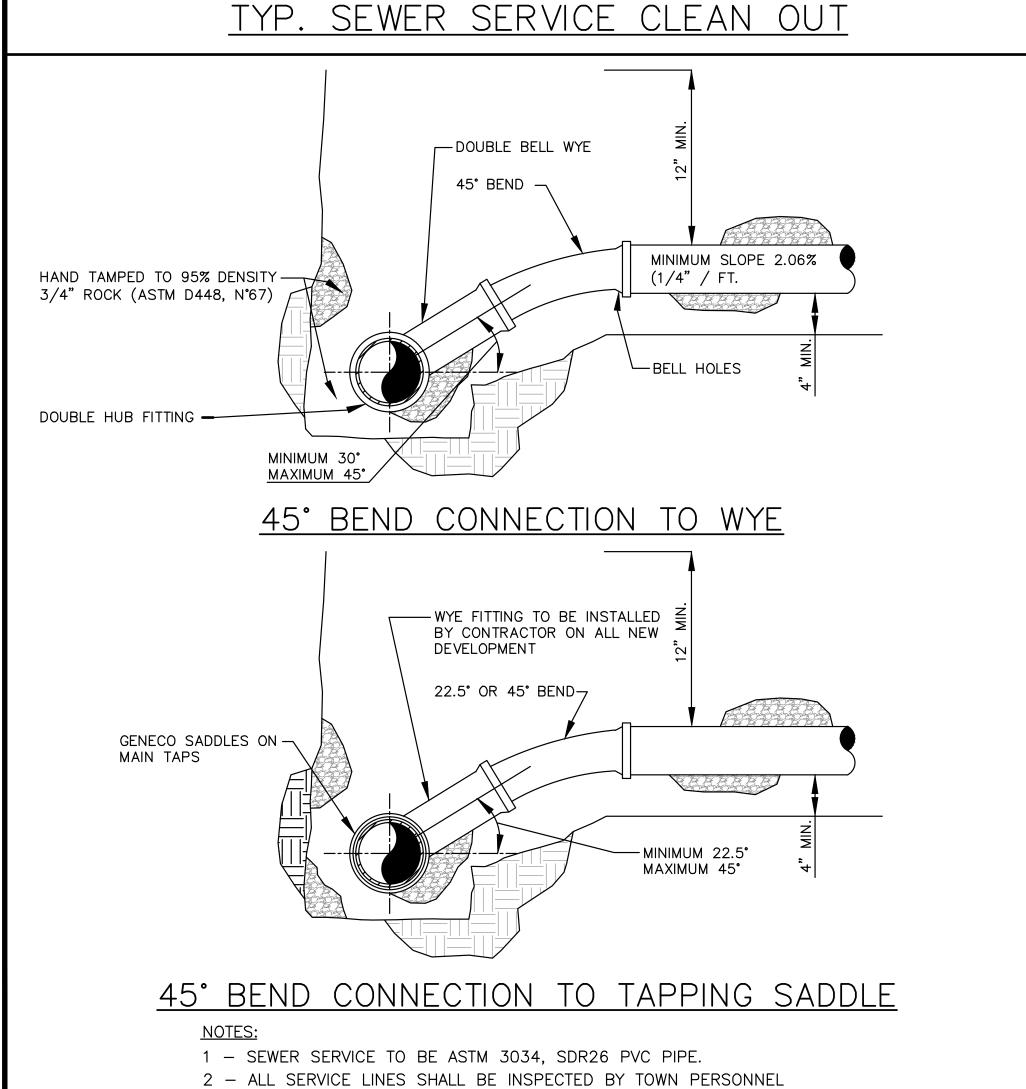
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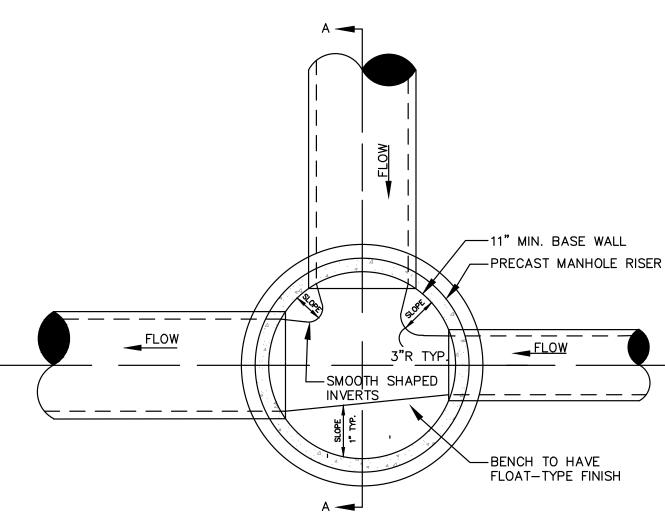




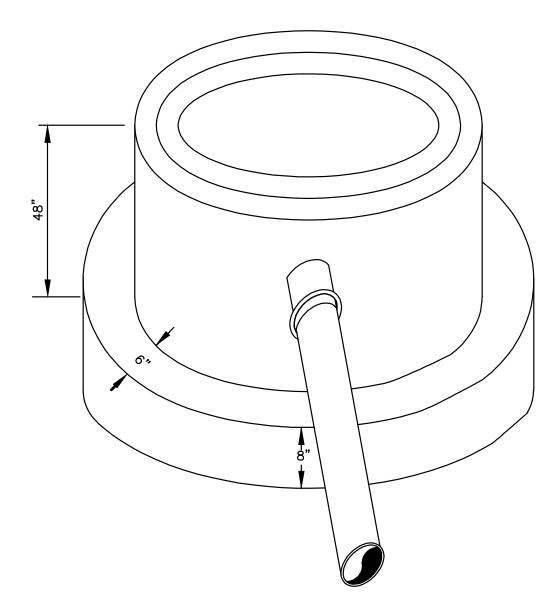




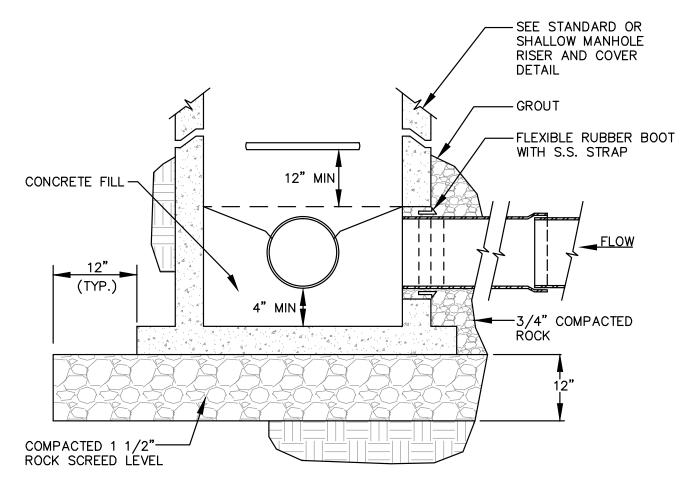
DURING INSTALLATION AND APPROVED BEFORE BACKFILLED.



- 1 CONCRETE BASE AND/OR INTERIOR CONCRETE FILL SHALL BE MINIMUM 4000 PSI CONCRETE.
- 2 SEE CAST-IN-PLACE OR PRE CAST CONCRETE MANHOLE BASE FOR SECTIONS A-A AND B-B.



# PRECAST CONCRETE MANHOLE BASE

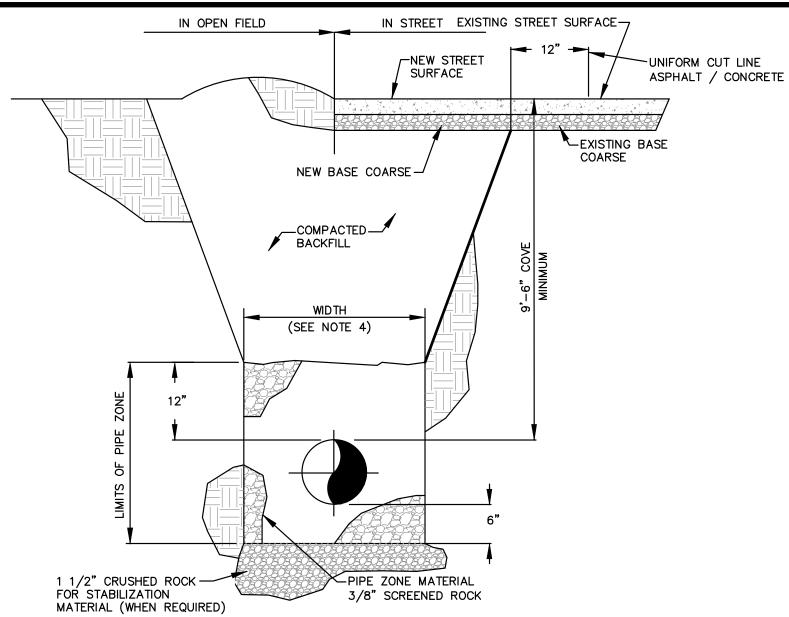


# SECTION A-A

# NOTES:

- 1 PRECAST CONCRETE SHALL MEET OR EXCEED STRENGTH OF 4000
- 2 APPLY LATEX BONDING AGENT TO PRECAST BASE SECTION BEFORE PLACING CONCRETE FILL BASE AND INVERTS.

# MANHOLE BASE INTERIOR



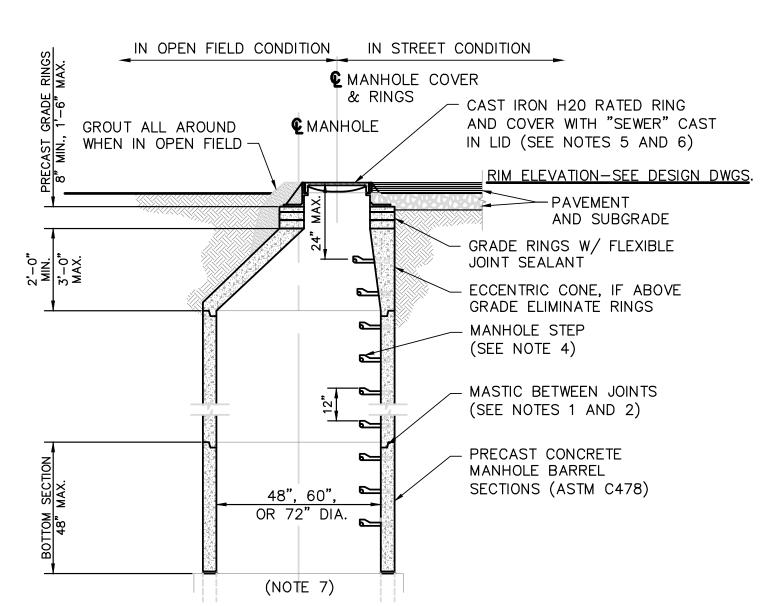
# TYPICAL SEWER/WATER TRENCH SECTION

1 - ASPHALT PATCH SHALL BE A MINIMUM OF 3" ASPHALT ON 6" ROAD BASE OR, SHALL MATCH EXISTING PAVEMENT SECTION, WHICHEVER IS

- 2 TRENCH WALLS TO BE SUPPORTED AS REQUIRED BY O.S.H.A. 3 - MINIMUM COVER TO BE BELOW STREET FINISH GRADE OR GROUND SURFACE.
- 4 MINIMUM TRENCH WIDTH = PIPE O.D. + 12" MAXIMUM TRENCH WIDTH = PIPE O.D. + 40"

REQUIRED TO KEEP TRENCH AND BACKFILL DRY AT ALL TIMES.

MAXIMUM TRENCH WIDTH IF TRENCH BOX REQUIRED = 60" 5 - UTILITY TRENCH BACKFILL BENEATH PAVED AREAS SHOULD BE PLACES IN 8" HORIZONTAL LIFTS AND COMPACTED TO AT LEAST 95% OF MAXIMUM STANDARD PROCTOR (ASTM D-698) DRY DENSITY AT A MOISTURE CONTENT WITHIN 3% OF OPTIMUM. WATER SEEPAGE SHOULD BE EXPECTED IN DEEPER EXCAVATIONS AND DEWATERING WILL BE



# NOTES: 1. ALL JOINTS TO BE DOUBLE BAND RUB-R-NEK.

- 2. ALL JOINTS SHALL BE DOUBLE SEALED WITH FLEXIBLE PLASTIC JOINT SEALING MATERIAL TO EXTRUDE
- INTO MANHOLE AND BE TRIMMED OFF AT FACE OF CONCRETE BELOW WATER TABLE. 3. ALL MANHOLES PLACED IN "OPEN SPACE" OR FIELDS SHALL BE INSTALLED WITH A RING AND COVER THAT IS 6" ABOVE FINAL GRADE WITH A COLLAR OF CONCRETE. A MARKER POST SHALL BE
- INSTALLED NEAR BY. SEE MARKER POST DETAIL. 4. STEPS INSTALLED OVER DOWNSTREAM INVERT OF MANHOLE AND SHALL BE COPOLYMER COATED
- PLASTIC 1/2" GRADE 60 STEEL REINFORCED, SIMILAR TO PS2-PF MANUFACTURED BY MA INDUSTRIES.
- 5. 60" OR LARGER MANHOLES REQUIRE A 30" OPENING
- 6. ALL RING AND COVERS TO BE CASTINGS, INC. J-1161 FOR 24" OPENINGS OR J-1361 FOR 30"
- 7. SEE EITHER CAST IN PLACE OR PRECAST MANHOLE BASE DETAIL. 8. AVOID 12" HIGH BARREL SECTIONS IF POSSIBLE.
- 9. WRAP ALL BARREL SECTIONS AND CONE WITH BITUTHANE WRAP 6" OVERLAP REQUIRED.

MANHOLE SECTION W/ ECCENTRIC CONE

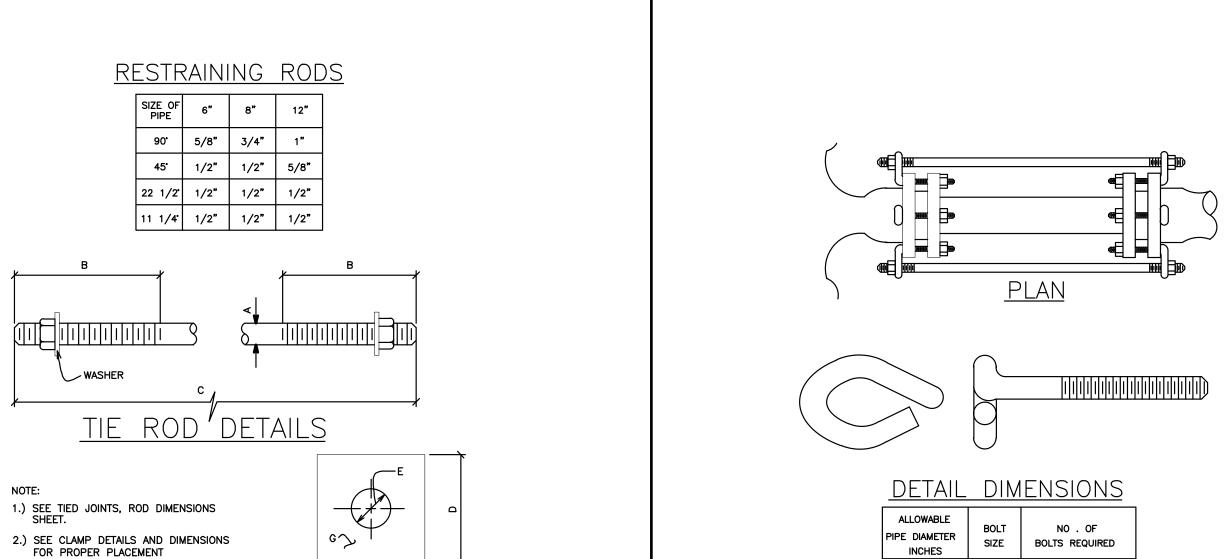
Professional Civil Engineers					AL F
Po Box 1785					uuu, MG
Frisco, CO 80443					MILITA
970.485.5773	_	FINAL SITE PLAN/PLAT	4/7/17	TOD FINAL SITE PLAN & PLAT SUBMITTAL	
tenmileengineer <i>c</i> aaoi.com	No.	Revision/Issue	Date	Description	

CE

**ARKE** RIDGE 

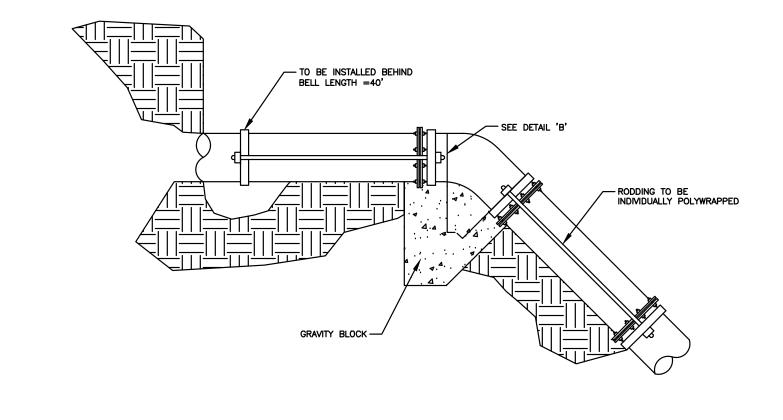
DILLON RIDGE VISTAS 4/7/17

Scale NTS



PROPE	R PLACE	MENT	)		ا م	
WASHER		.TS SHALL BE				
RTEN OF	STAINL	ESS STEEL	,	WAS	ŜHFR DÊ	TAII
			_			
	TIE	RODS			WASHERS	
A	В	С		D	E	G
OD ETER	THREAD LENGTH	ROD LENGTH	GRADE	WIDTH	HOLE DIAMETER	THICKNESS
′4 <b>"</b> ,1"	6"	1' TO 11' & 20'	MS	5"	1/8"Larger than Rod Ø	1/2 "
1-1/2"	ALL THREAD	1' TO 11' & 20'	HS	6"	1/8" Larger than Rod Ø	5/8"
					1	

TIE ROD AND WASHER DETAILS



— DOUBLE NUT W/ WASHER

DOUBLE NUT W/ WASHER

GRAVITY BLOCKS SHALL BE CONICAL IN SHAPE

TABLE 1									
SIZE OF PIPE	8"	12"							
45'	5/8"	7/8"							
22 1/2	1/2"	5/8"							
11 1/4	1/2"	1/2"							



			4/7/17 TOD FINAL SITE PLAN & PLAT SUBMITTAL	Description	
			4/7/17	Date	
			FINAL SITE PLAN/PLAT	Revision/Issue	
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RING

TEN MILE ENGINEEF

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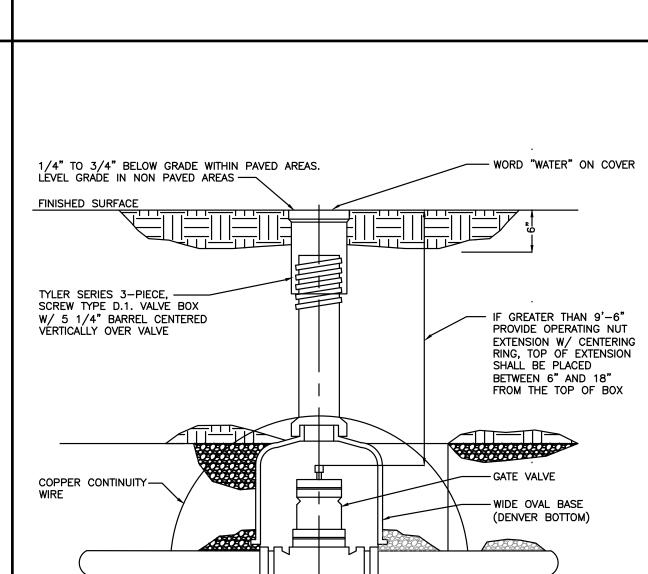
ARKE

DE

	G	RAV	ITY	BLO	CKS				
U	M V	<u>OLU</u>	ME	<u>(IN</u>	CUB				
	SIZE OF PIPE	11 ¼"	BENDS	45°	TEE OR DEAD END				
	8"	20.0	40.0	74.0	NA				
	12"	46.0	90.0	166.0	NA				
•	•								
NOTES:									
•	1 – MEGA USED			MAY BE OS AND C	LAMPS.				
:					i. Iless steel				
			n pons s	CHALL RE	WRAPPEN				
3 — ALL PIPES AND RODS SHALL BE WRAPPED IN POLYETHYLENE.									
	4 – VERT 5 – All								
	5 — ALL JOINTS SHALL BE RESTRAINED BETWEEN THE FITTINGS.								

VERTICAL THRUST BLOCK DETAIL

MINIMUM VOLU



BOLTS REQUIRED

2 - THE BOLT MAY BE HEAT TREATED.

SECONDARY JOINT RESTRAINT DETAIL

# <u>DIMENSIONS</u>

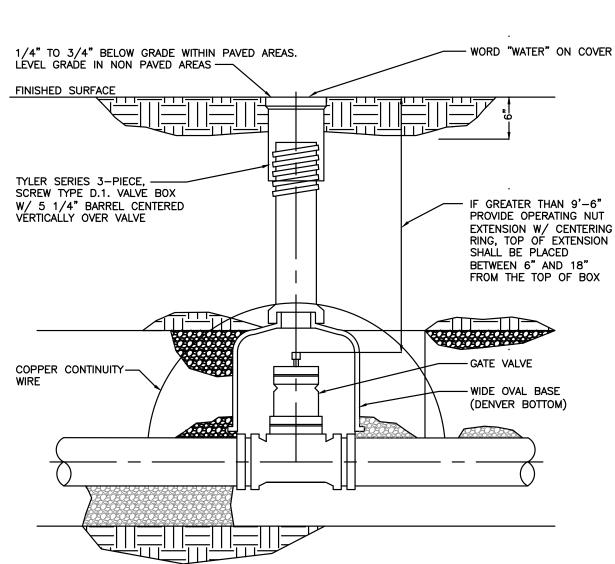
BOLT HOLE DETAIL

MECHANICAL JOINT RESTRAINT

	NOMINAL PIPE SIZE	NO OF BOLTS	NO OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES	
	6"	6	3	11.12	9.50	7.00	0.88	
	8"	6	4	13.37	11.75	9.15	1.00	
D	10"	8	6	15.62	14.00	11.20	1.00	D
•	12"	8	8	17.88	16.25	13.30	1.25	'
	16"	12	12	22.50	21.00	17.54	1.56	
	20™	14	14	27.00	25.50	21.74	1.69	

WEDGE DETAIL

JOINT RESTRAINT DETAIL



1. GATE VALVES SHALL OPEN CCW AND BE RESILIENT SEAT. 2. FITTINGS SHALL BE WRAPPED WITH 8 MIL. MINIMUM THICKNESS POLYETHYLENE SHEETING. ALL VALVES AND FITTINGS SHALL BE EPOXY

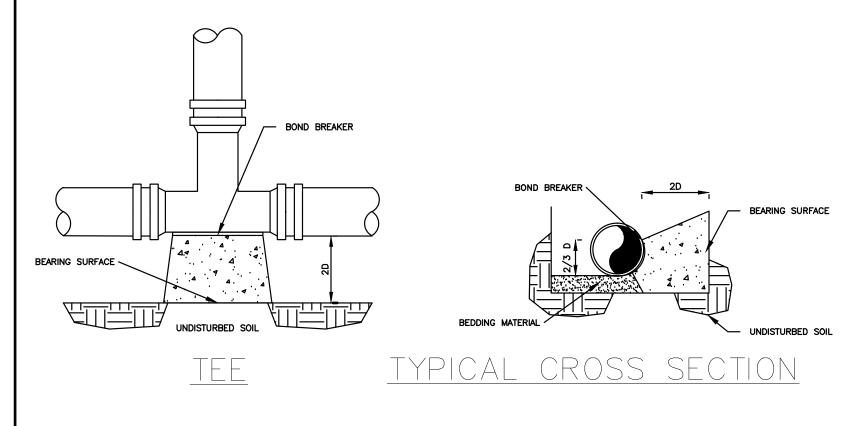
3. VALVE BOX TOP SHALL BE SET 1/4" TO 3/4" BELOW FINAL ASPHALT PAVEMENT GRADE. SHALL BE INSTALLED AT GRADE IN NON-PAVED AREAS.

4. PROVIDE MARKER POST WHERE NECESSARY. AS DETERMINED BY

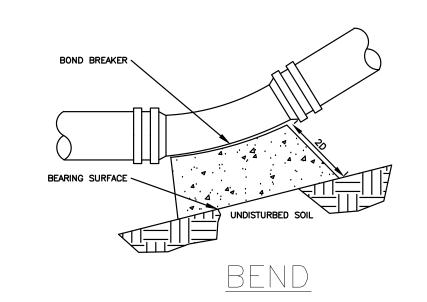
5. SEE TYPICAL WATER TRENCH DETAIL.

6. VALVE BOX AND ROD SHALL BE INSTALLED VERTICALLY AND SHALL NOT BE TILTED IN ANY DIRECTION. (WHERE REQUIRED FOR VALVES 7. VALVE BOX EXTENSION TO BE PROVIDED FOR ALL VALVES DEEPER

VALVE AND VALVE BOX DETAIL



¾" STAINLESS STEEL OR COR-TEN ALL THREAD 1½ PIPE DIA. LONG



MINIMUM BEARING SURFACE AREA

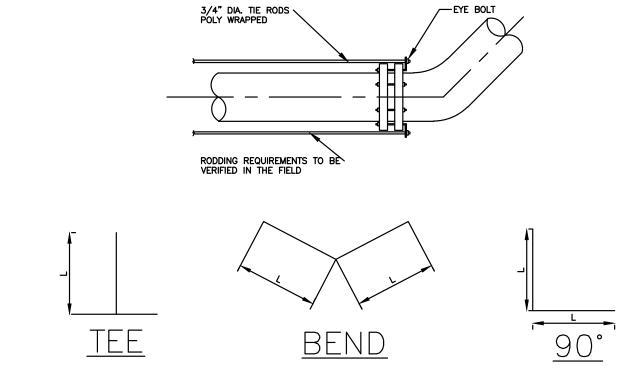
# (IN SQUARE FEET)

SIZE OF		TEE OR			
PIPE	11 ¼"	22 ½"	45°	90.	DEAD END
4"	0.5	1.0	1.5	2.5	2.0
6"	1.0	1.5	3.0	5.5	4.0
8"	1.5	2.5	5.0	9.0	6.5
12"	3.0	5.5	10.5	19.5	14.0
16"	5.0	9.5	18.5	34.0	24.0

# NOTES: 1 - D = PIPE DIAMETER

- 2 DO NOT COVER FITTING BOLTS WITH CONCRETE.
- 3 ALL FITTINGS ARE TO BE WRAPPED IN POLYETHYLENE SHEETING.
- 5 SIZES SHOWN FOR 1,500 PSF SOIL BEARING PRESSURE AND AN INTERNAL TEST PRESSURE OF 150 PSI.

THRUST BLOCK DETAIL



ROD DIAMETER, GRADE AND LENGTH OF TIED PIPE

PIPE SIZE		4"			6"			8"			12"			6" AN ARGEI	
FITTING	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G
TEE BRANCH ONLY	3/4"	30'	M.S.	3/4"	45'	M.S.	3/4"	60'	M.S.	3/4"	86'	M.S.			
PLUG OR 90° BEND	3/4"	30'	M.S.	3/4"	45'	M.S.	3/4"	60'	M.S.	3/4"	86'	M.S.	SDEC	NAI DE	SIGN
45° BEND	3/4"	9'	M.S.	3/4"	13'	M.S.	3/4"	18'	M.S.	3/4"	25'	M.S.	SPECIAL DESIGN BY PROJECT PROFESSIONAL		
22-1/2" BEND	3/4"	1'	M.S.	3/4"	4'	M.S.	3/4"	5'	M.S.	3/4"	7'	M.S.		NGINEE	
11-1/4" BEND							3/4"	1'	M.S.	3/4"	2'	M.S.			
ALL VERTICAL BENDS		TOTALLY RESTRAINED L=40'													

- 1 LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM BENDS OR FITTINGS.
- 2 LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE TIED TOGETHER, AND IS NOT NECESSARILY THE LENGTH OF THE RODS.
- 3 CLAMPS AND RODS SHALL BE EXTENDED TO NEXT PIPE.
- 4 D = DIAMETER, L = LENGTH, G = STEEL GRADE.
- 5 MINIMUM 9.5' OF GROUND COVER IS REQUIRED.
- 6 BASED ON 150 P.S.I. INTERNAL PRESSURE.
- 7 ALL RESTRAINT RODS AND HARDWARE ARE TO BE STAINLESS STEEL OR COR-TEN.
- 8 NUTS SHALL BE A.S.T.M., STANDARD DESIGNATION A-307, GRADE A OR B, HEXAGON HEAVY SERIES. 9 - LENGTH OF TIED PIPE CHART IS ALSO FOR THE LENGTH OF PIPE RESTRAINING GLANDS AND BELL RESTRAINTS.
- 10 MJ RESTRAINING GLANDS SHALL BE SIMILAR AND EQUIVALENT TO EBBA IRON SERIES 1100 OR UNI-FLANGE 1400 SERIES FOR DIP AND EBBA IRON SERIES 2000 PV OR UNI-FLANGE SERIES 1500 FOR PVC. BELL JOINT RESTRAINTS SHALL BE SIMILAR AND EQUIVALENT TO EBBA IRON SERIES 1700 OR UNI-FLANGE SERIES 1390 FOR DIP AND EBBA 1600 OR UNIFLANGE SERIES 1390 FOR PVC.

TYPICAL RESTRAINED JOINT

N RIE	BLOCK 6 DILLON RIDGE	TOWN OF DILLON, COLOR	
Project DILLON	RIDG	E VI	STA
Date 4/7/17	7	Sheet	t

NTS

		S



May 26, 2017

Summit Homes Construction, LLC, Attn: Mr. Tim Crane PO Box 6539
Dillon, Colorado 80435

Subject:

Comments Regarding Slope Stability

Dillon Ridge Vistas

Block 6, Dillon Ridge Marketplace

Summit County, Colorado Project No. SU01304-125

As requested, we conducted a slope stability analysis of the proposed grading plan at the subject site. We previously provided a Preliminary Geotechnical Investigation at the site (see report dated January 27, 2017, Project No. SU01304-125). This letter should serve as a supplement to that report. Proposed construction includes three buildings with 12 units each (36 units total). Each building will be a three-story, wood-frame structure. An asphalt parking lot with concrete curb and gutter will be provided. Overlot grading will include cut depths of around 16 feet below existing grade.

We conducted subsurface exploration at the site for our previous report. Three test pits (TP-1, TP-2 and TP-3) were excavated on Block 6. The conditions encountered in the test pits generally consisted of fill soils overlying weathered shale bedrock. In TP-1, clayey, sandy gravel was found above the weathered shale. In TP-2 and TP-3, a layer of sandy clay was encountered above the weathered shale. The thickness of the clay layer ranged from 6 to 24 inches. A full description of the conditions encountered in TP-1, TP-2 and TP-3 and laboratory test results are shown in our January 2017 report. In order to conduct our slope stability analysis, we observed an additional test pit on the site (TP-10) at the location shown on Figure 1. Conditions encountered consisted of slightly clayey to silty, sandy gravel with cobbles to a depth of 18 feet. Gradation and classification testing was conducted on a sample of the gravel soils, see Figure 3. Weathered shale was found below the gravel to the depth explored of 20 feet. No clay was encountered in TP-10. Bedding planes of the shale dip across and against the hillside. No free water was encountered; however, the iron staining of the shale indicates seasonal water seepage. A graphic log of the test pit is shown on Figure 2.

Based on our stability analysis, the factor of safety of the existing hillside is near 1.6. Industry standard suggests a safety factor of at least 1.5 for permanent slopes. Based on the proposed grading shown on Overall Grading Plan, prepared by Ten Mile Engineering, Inc., April 4, 2017, the new retaining walls will need to be engineered to retain the hillside. We understand mechanically stabilized earth (MSE) segmental block walls are being considered. It is our opinion that properly designed and constructed retaining walls will be suitable to create a permanent, stable hillside configuration. We can provide design services upon request.

We appreciate the opportunity to work with you on this project. If you have questions or we can be of further service, please call.

Manustrustrus /

Very truly yours, CTL | THOMPSON

George Benecke III, P.E.

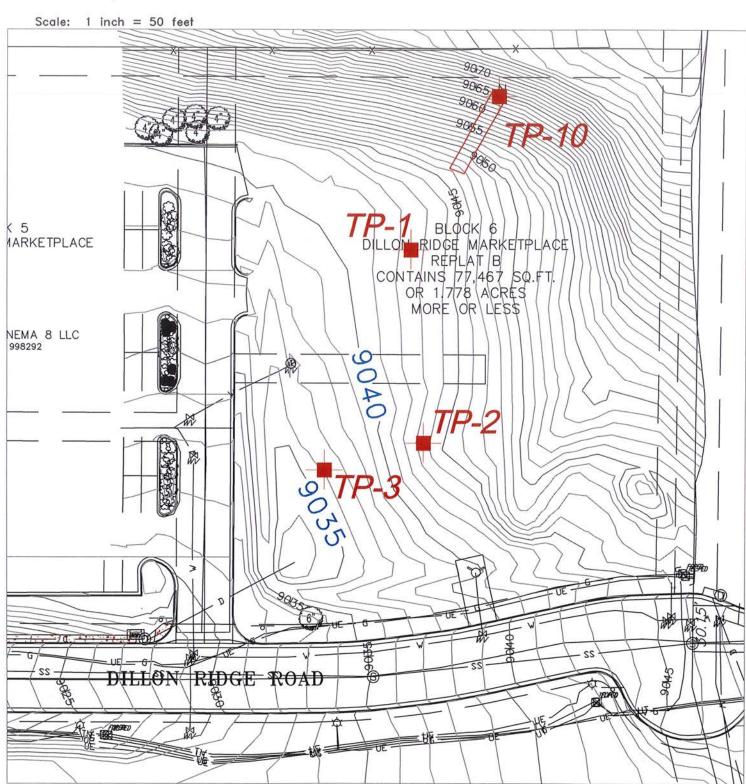
Division Manager, Summit Count

Attachments: Figures 1-3

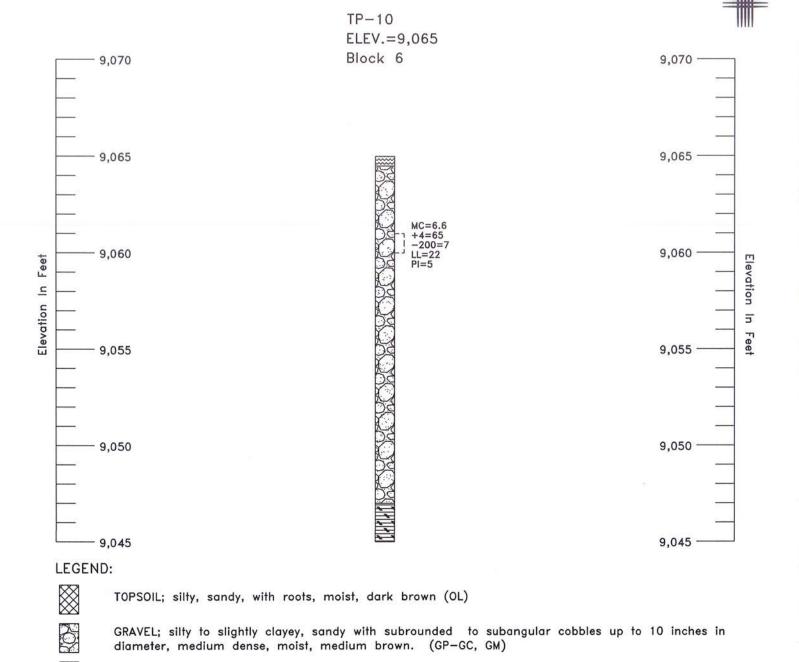
cc: Scott@columbineconcrete.com, timc@compasshomesdev.com, tenmileengineer@aol.com







LOCATION OF EXPLORATORY PITS



### NOTES:

1. This pit was excavated with a Caterpillar 336E on May 4, 2017.

82 degrees, Dip 44 degrees.

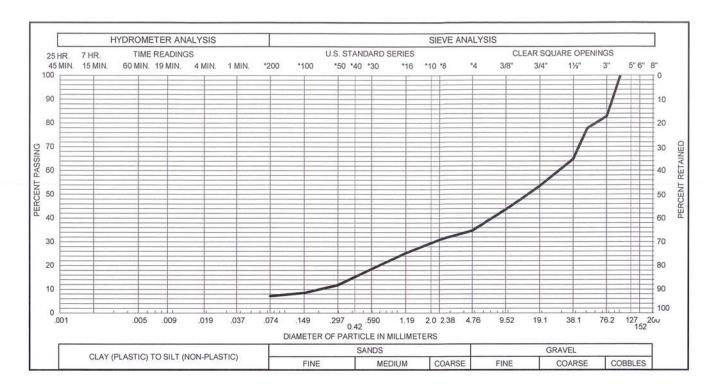
Disturbed bulk sample.

2. No free water was observed in the pit at the time of excavation. The pit was backfilled. Groundwater levels can fluctuate. Iron staining in pit indicates seasonal water seepage.

SHALE BEDROCK; very weathered, fractured fissile, mostly flat surface, very moist, orange brown. Strike

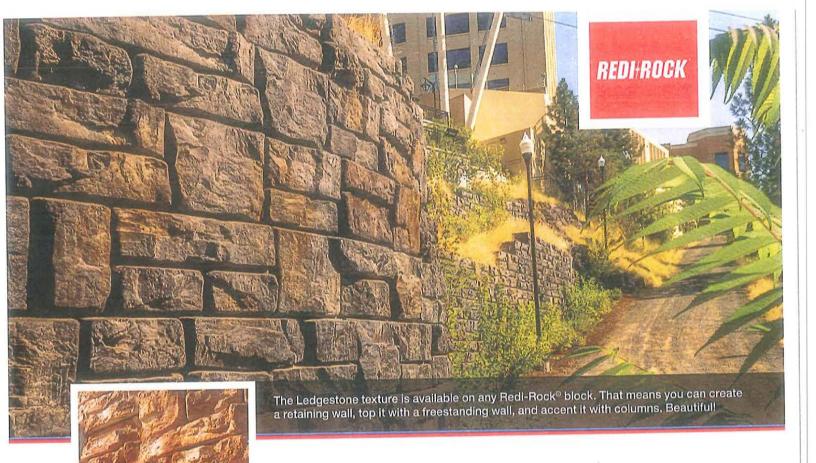
- Pit location as shown on Figure 2 was measured from site features and should be considered approximate.
- 4. Pit elevation was estimated from topography shown on Figure 1 and should be considered approximate. Elevation was checked by instrument level.
- 5. These exploratory pits are subject to the explanations, limitations and conclusions contained in our January 27, 2017 report.





Sieve Size	% Passing			
4 in.	100			
3 in.	83			
2 in.	78			
1.5 in.	65			
3/4 in.	54			
1/2 in.	48			
3/8 in.	44			
No. 4	35			
No. 8	31			
No. 16	25			
No. 30	19			
No. 50	12			
No. 100	9			
No. 200	7			
Curve No.	1			
Sample of	GRAVEL; slightly silty, sandy	GRAVEL(USCS) 65 %		28 %
		SILT & CLAY 7 %	6 LIQUID LIMIT	22 %
From TP-1	10 4-5'	PLASTICITY INDEX		5 %

# **Gradation Test Results**



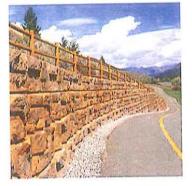


# LEDGESTONE

Strong. Rugged. Handsome. What, you don't have those thoughts about retaining walls?

Well, we do. At Redi-Rock, we like retaining walls to look great while doing the hard job of holding back the earth. We painstakingly sought out world-class stone to create molds that give these blocks their classic stone aesthetics.

Redi-Rock Ledgestone blocks give projects a random, stacked stone look. Because they the made using architectural-grade precast concrete, the level of detail in the texture is outstanding.



# Ledgestone Block Specifications

- Trapezoidal shape allows convex and concave radii
- 5.5 inch (140 millimeter) deep texture
- Colors can be formulated based upon local region
- Ten individual face molds offer up to 115 square feet (10.5 square meters) of non-repeating patterns
- Wet-cast concrete gives a greater
   level of detail and durability



Regional colors and coordinating accessories are available. Contact your local Redi-Rock retailer or visit **redi-rock.com** to learn more about the Redi-Rock Ledgestone face today!



# 19.5 Foot (6 Meter) Gravity Wall Creates Access For FBI Headquarters

# The Challenge

When the FBI was relocating its division headquarters near Cincinnati, the terrain at the new site included extreme grade changes, making for some challenging planning for an access road to the site. The road was slated for a tight space between an existing residential neighborhood and a major office building, which would require a 700 foot (213 meter) long retaining wall.

# The Solution

DSycamore Township chose Redi-Rock because we had a limited amount of space; we did not want to cut back behind the wall for tie-ins and we didnIt want to lose trees that were buffering the neighbors from the

project, explained Tracy Kellums, Superintendent for Sycamore Township.

Redi-Rock is known for building tall gravity walls using massive, one-ton blocks to get the job done, but this 19.5 foot (6 meter) tall wall gave engineers the chance to show just what Redi-Rock blocks are really capable of.

To reach the required 19.5 feet (6 meters) with a gravity wall, engineers at URS utilized several unique components of the Redi-Rock system to achieve a custom solution for the project without the need for geogrid reinforcement or anchors. The design began with six to eight courses of the 60-inch base blocks, continued with

9-inch setback blocks, and finished with 41-inch blocks and 28-inch blocks.

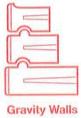
In total, the 8,000 square foot (743 square meter) wall was installed in less than three weeks, using a piece of heavy machinery and a small crew.



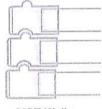
5.75 square feet of face - 2240 pounds (0.5 square meters of face - 1015 kilograms)

Project: Ronald Reagan Drive Project Customer: Sycamore Township, Ohio Design/Specifying Engineer: URS Block Manufacturer: Redi-Rock Structures of OKI Wall Installer: Nemann Construction Location: Cincinnati, Ohio Completed: 2011

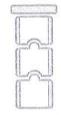
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(shown above)



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Freestanding Walls

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# Ten Mile Engineering, Inc.

May 23, 2017

Mr. Dan Burroughs PE Town of Dillon Town Engineer/Community Development Coordinator Dillon, CO

RE: Dillon Ridge Block 6 Drainage and Water Quality Memo

Dear Dan.

The following memo addresses the drainage and water quality requirements associated with the development of Block 6, Dillon Ridge Marketplace in Dillon, Colorado. Our client, Summit Homes LLC, is proposing to begin construction of three 12plex buildings (36 total units) in the summer of 2017.

Block 6 was created approximately 20 years ago as part of the overall Dillon Ridge Marketplace development. During that time the drainage and water quality for the entire area, including Block 6, was studied by Hurst and Associates, Inc. and a final drainage report was developed (Final Drainage Report, Dillon Ridge Marketplace Job No. 2000-13 Dated 3/28/1997). That report is the guiding document for the area and is the basis of this memo. A copy of the report is on file at the Town of Dillon. During the initial development of the Dillon Ridge Marketplace, Block 6 was regraded and left undeveloped. The site currently drains to the southwest and is sparsely vegetated.

# **Detention and Water Quality Requirements**

During the development of the Dillon Ridge Marketplace an overall detention and water quality pond was designed and built on the south side of Highway 6 per the recommendations in the Final Drainage Report. The majority of the overall developments drainage is directed to the pond via inlets and culverts. Once the water has been detained it is released at the allowable rate and flows through another series of culverts through the Town of Silverthorne where it eventually makes it way to the Blue River. Block 6 was included in the sizing of the pond and as such will utilize the existing pond to provide the detention and water quality functions required due to the development of the lot.

The majority of the drainage generated by the development of the Block 6 will be directed to the existing culvert previously installed to collect the drainage from

# Ten Mile Engineering, Inc.

Block 6 and ties into the overall Dillon Ridge Marketplace drainage system that directs the water to the existing detention and water quality facility. The existing drainage report for Block 6 assumed that the property would be approximately 90% impervious when developed and the existing pond was sized and built under those assumptions. The currently proposed development for Block 6 is only 58% impervious and creates less runoff than assumed during the design and construction of the existing detention pond. As a result of the reduction in impervious area, it is Ten Mile Engineering, Inc. opinion, that the development of Block 6 as currently proposed is consistent with the overall design of the detention and water quality facilities associated with the Dillon Ridge Marketplace.

Please feel free to contact me with any questions.

Sincere

Joseph E. Maglicic P.E.

Ten Mile Engineering, Inc.

PO1785

Frisco CO 80443 970 485 5773

- 2. 8F5K-B; G'5F9-BH9B898 HC 69 DF-BH98 CB &("L" \*"D5D9F" DF-BHB; Hx9G9 8F5K-B; G 5H5·8\(\displaysig): 9F9BHG\(\displaysig): K=\(\displaysig) AD57HI\(\displaysig): G75\(\displaysig): J9F\(\displaysig): MI\(\displaysig): F5D\(\displaysig): G75\(\displaysig): G75\(\di F9. 9F9B7-B; 5BMA95GI F9A9BHGCBHx9C9 C<99HG" Hx9F97-D49BHC: 1k9C9 DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT
- PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS. 3. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
- 4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 5. SUBMIT A CHANGE ORDER FOR APPROVAL FOR ANY CHANGES TO WORK SCOPE RESULTING FROM FIELD CONDITIONS OR DIRECTION BY OWNER'S REPRESENTATIVE WHICH REQUIRE ADDITIONAL COST TO THE OWNER PRIOR TO PERFORMANCE OF WORK
- 6. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED. ALL LAYOUT INFORMATION IS AVAILABLE IN DIGITAL FORMAT FOR USE BY THE CONTRACTOR.
- 7. IF A GEOTECHNICAL SOILS REPORT IS NOT AVAILABLE AT THE TIME OF CONSTRUCTION, NORRIS DESIGN RECOMMENDS A REPORT BE AUTHORIZED BY THE OWNER AND THAT ALL F97CAA9B85HCBGC: 1k9F9DCFH5F9: C@CK988IF=B; 7CBGHFI7HCB" 1k9 7CBH57HCF G<5@I C91k9C97CBH57H8C7I A9BHG5G565GG: CF1k96-8" ÷ 1k9 OWNER ELECTS TO PROVIDE A GEOTECHNICAL REPORT, THE CONTRACTOR SHALL REVIEW THE REPORT AND SUBMIT AN APPROPRIATE CHANGE ORDER TO THE OWNER'S REPRESENTATIVE IF ADDITIONAL COSTS ARE REQUESTED.
- 8. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
- 9. CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
- 12. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
- 13. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
- 16. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
- 17. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.
- 18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
- 20. THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.
- 21. MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
- 22. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.
- 24. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.
- 25. THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- 26. THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN

- DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
- 27. OPEN SPACE SWALES: IF SWALES ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE CONVEYANCE OF WATER WITHIN THE SWALES DURING THE CONTRACT PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DIVERSION OR PUMPING OF WATER IF REQUIRED TO COMPLETE WORK. ANY SWALES DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE SWALE NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
- 28. DETENTION AND WATER QUALITY PONDS: IF DETENTION PONDS AND WATER QUALITY PONDS ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE PONDS, DRAINAGE STRUCTURES AND SPILLWAYS DURING CONSTRUCTION. ALL PONDS, DRAINAGE STRUCTURES AND SPILLWAYS SHALL BE MAINTAINED IN OPERABLE CONDITIONS AT ALL TIMES. ANY POND OR SPILLWAY AREAS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE POND NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
- 29. MAINTENANCE ACCESS BENCHES: IF MAINTENANCE BENCHES OR ACCESS ROADS EXIST ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE BENCHES OR ACCESS ROADS DURING CONSTRUCTION. ANY BENCHES OR ACCESS ROADS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING BENCHES AND ACCESS ROADS DURING THE CONSTRUCTION PERIOD. IF ACCESS NEEDS TO BE BLOCKED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INTERRUPTION OF ACCESS.
- 30. LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

# LAYOUT NOTES

- 1. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 2. SHOULD SITE CONDITIONS BE DIFFERENT THAN WHAT IS INDICATED ON THE DRAWINGS CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- 3. CURVED WALKS AND CURB EDGES ARE INTENDED TO BE CONSTRUCTED WITH SMOOTH
- FLOWING CURVES. ANYTHING OTHER THAN SMOOTH FLOWING CURVES WILL BE REJECTED. 4. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO
- PERFORM THE PROPOSED WORK.
- 5. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE CONTRACTOR SHALL INSTALL SLEEVING FOR IRRIGATION IMPROVEMENTS PRIOR TO
- INSTALLING CONCRETE FLATWORK. REFER TO IRRIGATION PLANS. 7. LAYOUT WALKS, SCORE JOINTS AND PAVING PATTERNS AS CLOSELY AS POSSIBLE TO PLANS, DETAILS, AND SPECIFICATIONS. DO NOT DEVIATE FROM PLANS UNLESS SPECIFIC APPROVAL IS OBTAINED FROM THE OWNER'S REPRESENTATIVE.
- 8. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE LANDSCAPE ARCHITECT PRIOR TO ANY
- DISTURBANCE OUTSIDE OF THE LIMITS OF WORK. SEE TECHNICAL SPECIFICATIONS. 9. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY FENCING AROUND ALL PLAY STRUCTURES UNTIL PROPER FALL SURFACE IS COMPLETELY INSTALLED PER
- MANUFACTURER'S SPECIFICATIONS. 10. CONTRACTOR IS RESPONSIBLE FOR SUPERVISING ALL SAFETY SURFACING AND PAVEMENT DURING THE CURING PROCESS.

# EROSION NOTES

- 1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOW LINE AND THE PUBLIC RIGHTS-OF-WAY OF THE TOWN OF BRECKENRIDGE AS A RESULT OF THIS SITE DEVELOPMENT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.
- THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT.
- 3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- 4. THE DEVELOPER, GENERAL CONTRACTOR, GRADING CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT ON PUBLIC RIGHT-OF WAYS.
- THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO STAKE DOWN STRAW OR HAY BALES OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE IS PROHIBITED.
- 6. THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED.
- THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS.

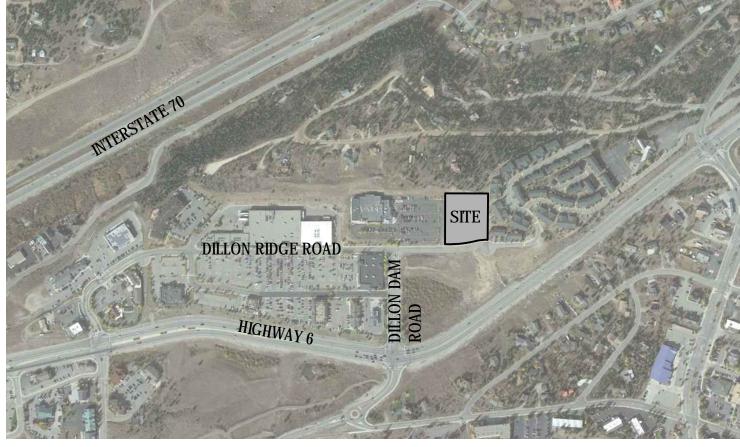
# LANDSCAPE NOTES

- THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
- 3. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
- THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
- THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
- REFER TO IRRIGATION PLANS FOR LIMITS AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL IRRIGATION BE EMITTED WITHIN THE MINIMUM DISTANCE FROM BUILDING OR WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND EMITTERS SHALL BE KEPT OUTSIDE THE MINIMUM DISTANCE AWAY FROM ALL BUILDING AND WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT.
- LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENED TO A DEPTH
- 10. ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION AT AS NOTED IN THE TECHNICAL SPECIFICATIONS.
- 11. TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
- 12. THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
- 13. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S
- 14. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 3 YEARS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 3 YEARS FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
- 16. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
- 17. SHRUB, GROUNDCOVER AND PERENNIAL BEDS ARE TO BE CONTAINED BY BENDA BOARD, 14 GAUGE GREEN, ROLL TOP, INTERLOCKING TYPE EDGER, BENDA BOARD OR EQUAL. EDGER IS BCHF9EI \( \frac{1}{2} \) 9B 58\( \frac{5}{2} \) 579BHHC 7I F6C\( \frac{7}{2} \) 5@C\( \frac{7}{2} \) GCF GC\( \frac{9}{2} \) : 9B79GK\( \frac{1}{4} \) \( \frac{1}{2} \) C: PRE-MULCHED FINAL GRADE. EDGER SHALL NOT BE REQUIRED TO SEPARATE MULCH TYPES UNLESS SPECIFIED ON THE PLANS.
- 18. ALL SHRUB BEDS ARE TO BE MULCHED WITH SHREDDED WOOD LANDSCAPE MULCH OVER SPECIFIED GEOTEXTILE WEED CONTROL FABRIC. ALL GROUND COVER AND PERENNIAL FLOWER BEDS SHALL BE MULCHED WITH SMALL NUGGET WOOD LANDSCAPE MULCH. NO WEED CONTROL FABRIC IS REQUIRED IN GROUNDCOVER OR PERENNIAL AREAS.
- AT SEED AREA BOUNDARIES ADJACENT TO EXISTING NATIVE AREAS, OVERLAP ABUTTING NATIVE AREAS BY THE FULL WIDTH OF THE SEEDER.
- 20. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
- 21. CONTRACTOR SHALL OVER SEED ALL MAINTENANCE OR SERVICE ACCESS BENCHES AND ROADS WITH SPECIFIED SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.
- 22. ALL SEEDED SLOPES EXCEEDING 25% IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BLANKETS. PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.
- 23. K<9B7CAD@H9ž5@; F589GC<5@69K+k+BŽ#%#ÎC::+B-C<98; F589G5GC<CKB ON THE PLANS.
- 24. PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.
- 25. THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE TOWN AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.
- THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION. MAINTENANCE AND REPLACEMENT OF ALL IMPROVEMENTS SHOWN OR INDICATED ON THE APPROVED LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT.

# SHEET INDEX

- L-00 COVER SHEET
- L-01 LANDSCAPE PLAN
- DETAILS L-02
- L-03 DETAILS

# VICINITY MAP





409 Main Street, Suite 207 PO Box 2320 Frisco, CO 80443

P 970.368.7068

www.norris-design.com

OWNER:

Compass Home Development, LLC

P.O. Box 5265 Frisco, CO 970.418.1598

06.07.17 SITE PL

SHEET TITLE: **LANDSCAPE NOTES** 

L-00

CHECKED BY: DRAWN BY:

1)))) NORRIS DESIGN

> 409 Main Street, Suite 207 PO Box 2320 Frisco, CO 80443

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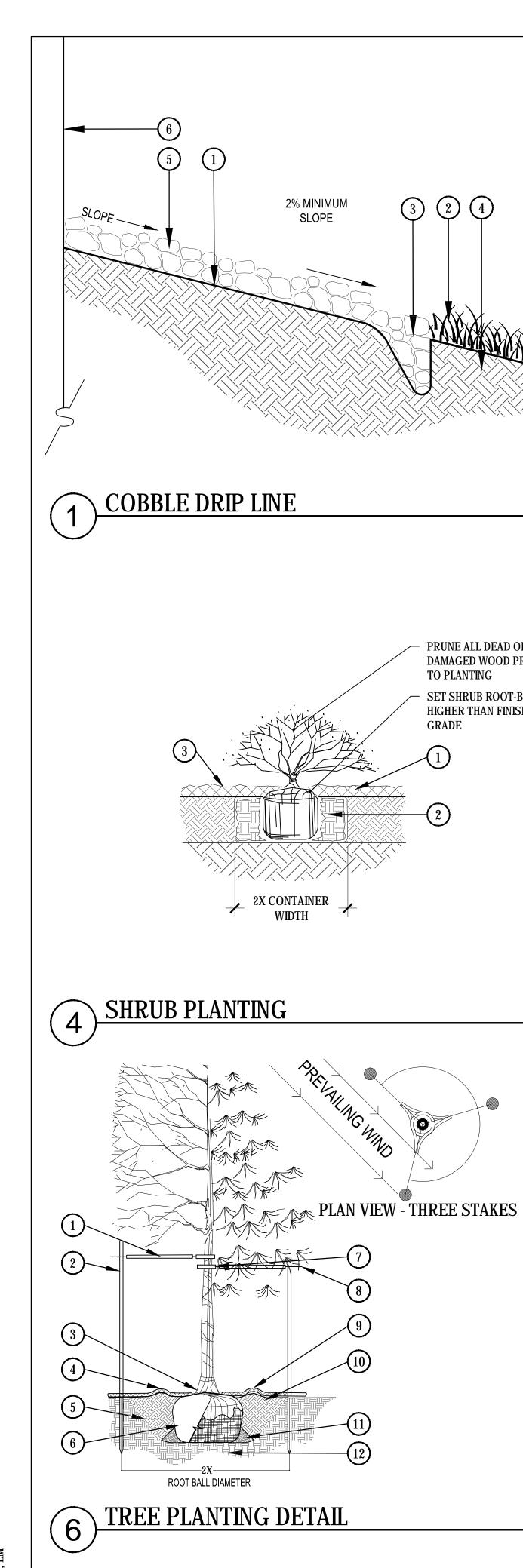
OWNER:

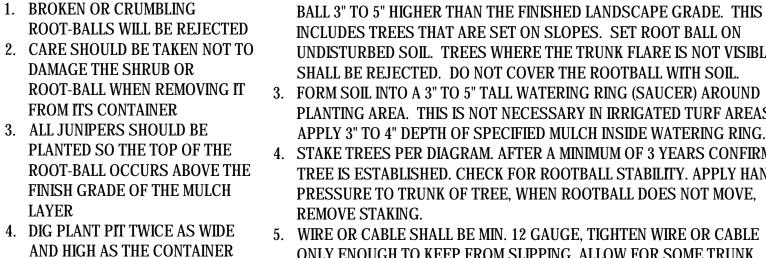
Compass Home Development, LLC.

P.O. Box 5265 Frisco, CO 970.418.1598

SHEET TITLE: LANDSCAPE PLAN

L-01





**SECTION** 

1. EXCAVATE PLANTING HOLES WITH SLOPING SIDES. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES, BUT DO SCORE THE SIDES OF THE PLANTING HOLE. MAKE EXCAVATIONS AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER AND LESS (THREE TO FIVE INCHES THAN THE DISTANCE FROM THE TOP MOST ROOT IN THE ROOT BALL AND THE BOTTOM OF THE ROOT BALL. THE PLANTING AREA SHALL BE LOOSENED AND AERATED AT LEAST THREE TO FIVE TIMES THE DIAMETER OF THE ROOT BALL. BACKFILL SHALL CONSIST OF EXISTING ON SITE SOIL - NO AMENDMENTS SHALL BE USED UNLESS OTHERWISE 2. TREES SHALL BE PLANTED WITH THE TOP MOST ROOT IN THE ROOT BALL 3" TO 5" HIGHER THAN THE FINISHED LANDSCAPE GRADE. THIS

BENDA BOARD EDGER

(16) 1/2" DIA. HOLES MIN. AT

**ALL LOW POINTS** 

LONGITUDINAL

LOW POINT

**ENSURE POSITIVE** 

DRAINAGE

SECTION OF EDGER AT

UNDISTURBED SOIL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE 3. FORM SOIL INTO A 3" TO 5" TALL WATERING RING (SAUCER) AROUND PLANTING AREA. THIS IS NOT NECESSARY IN IRRIGATED TURF AREAS.

STAKE TREES PER DIAGRAM. AFTER A MINIMUM OF 3 YEARS CONFIRM TREE IS ESTABLISHED. CHECK FOR ROOTBALL STABILITY. APPLY HAND PRESSURE TO TRUNK OF TREE, WHEN ROOTBALL DOES NOT MOVE, 5. WIRE OR CABLE SHALL BE MIN. 12 GAUGE, TIGHTEN WIRE OR CABLE

ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. NYLON STRAPS SHALL BE LONG ENOUGH TO ACCOMODATE 1-1/2" OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE. 6. ADJUST STAKING, STRAPS AND GUY WIRES ANNUALLY.

FINISHED GRADE - TOP OF SOD THATCH LAYER AND TOP OF 1) MULCH OR CRUSHER FINES SHALL BE FLUSH WITH TOP OF **EDGER** 

(2) TURF THATCH

(3) AMENDED SOIL PER SPECIFICATIONS

(4) SUBGRADE

BENDA BOARD EDGER - DRILL (16) 1/2" DIA. HOLES 1" O.C. MIN. AT (5) ALL LOW POINTS OR POORLY DRAINING AREAS IN ORDER TO ENSURE ADEQUATE DRAINAGE

SCALE: 1'' = 1'-0''

6 EDGER STAKE

1. ALL PRUNING SHALL COMPLY WITH ANSI A300

2. DO NOT HEAVILY PRUNE TREE AT PLANTING.

LEADERS AND BROKEN BRANCHES. SOME

PRUNED. HOWEVER, DO NOT REMOVE THE

THE EDGE OF THE CROWN.

PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT

INTERIOR TWIGS AND LATERAL BRANCHES MAY BE

TERMINAL BUDS OF BRANCHES THAT EXTEND TO

STANDARDS.

1. THERE SHALL BE NO EXPOSED SHARP / JAGGED EDGES.

2. CONTRACTOR SHALL INSTALL STAKES AS REQUIRED BY THE MANUFACTURER.

1 TYPICALLY IRRIGATED TURFGRASS OR DRYLAND SEED

**(2)** VERTICAL SPADE CUT EDGE FILLED WITH SPECIFIED MULCH, IS DEEPER AGAINST SPADED

TAPER EDGE OF BED SO MULCH EDGE.

3 SPECIFIED DEPTH OF MULCH (TYPICALLY WOOD MULCH 3"-4" DEEP)

4 PLANTING BED

(5) IRRIGATION HEADS SHOULD BE LOCATED ADJACENT TO MULCH BEDS, OFFSET HEAD INTO GRASS AREA TO ENSURE STABLE SUPPORT.

SPADE CUT EDGE

PLANTING AREA SHALL BE

LOOSENED AND AERATED AT

LEAST 3 TO 5 TIMES THE DIA. OF

ROOT BALL

1. IF IRRIGATION HEAD IS LOCATED ADJACENT TO MULCH BEDS, OFFSET

HEAD INTO GRASS AREA TO ENSURE STABLE SUPPORT.

(1) USE GUY ASSEMBLIES FOR EVERGREENS AND TREES OVER 3" CAL. ALL WIRE TO BE MIN. 12 GAUGE GALVANIZED (2) TOP MOST ROOT IN ROOTBALL:

1"-2" ABOVE EXISTING GRADE, UPHILL SIDE (3) 2-4" OF ORGANIC MULCH APPLIED FROM THE TRUNK. FINISHED

GRADE REFERENCES TOP OF

MULCH (4) BACKFILL WITH PLANT MIX. PLANT MIX SHALL CONSIST OF EQUAL PARTS TOPSOIL, COMPOST AND EXCAVATED SOIL. WATER THOROUGHLY WHEN BACKFILLING

(5) REMOVE ALL TWINE, ROPE, BURLAP AND WIRE FROM THE TOP 2/3 OF ROOTBALL

6 SLOPE SIDED HOLE IS 3 TIMES AS WIDE AS THE ROOTBALL DIA

7 ROOTBALL TO SIT DIRECTLY ON TOP OF UNDISTURBED SOIL TO PREVENT SETTLEMENT.

SCALE: 1/2" = 1'-0"

8 GROMMETED NYLON STRAP

(9) 24" x 3/4" P.V.C. MARKERS (TYPICAL) OVER WIRES (10) TREATED WOOD POST W/

USE 2 GUY WIRES OVER PLANTING AREA AND AWAY (1) UNAMENDED TOPSOIL ADDED TO EXISTING GRADE ON DOWN HILL

SIDE

GROMMETED NYLON STRAPS.

OWNER: Compass Home Development, LLC

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TREE PLANTING ON SLOPE

PRUNING NOTES:

SCALE: 1-1/2" = 1'-0"

ALL PRUNING SHALL COMPLY WITH ANSI A300 STANDARDS. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKING NOTES:

1 FINISH GRADE

4 SUBGRADE

**COBBLE** 

1 SPECIFIED MULCH

PRUNE ALL DEAD OR

TO PLANTING

DAMAGED WOOD PRIOR

SET SHRUB ROOT-BALL 1"

HIGHER THAN FINISH BED

AMENDED SOIL IN PLANTING BED

(2) PER SPECIFICATIONS. TILL SOIL

3 FINISH GRADE (TOP OF MULCH)

TO A DEPTH OF EIGHT INCHES.

6 BUILDING

(2) SOD / NATIVE GRASS

3 HAND SPADED EDGE

3' WIDE BAND, 5-8" RIVER ROCK

STAKE TREES PER DIAGRAM. AFTER A MINIMUM OF 3 THREE YEARS CONFIRM TREE IS ESTABLISHED. CHECK FOR ROOTBALL STABILITY. APPLY HAND PRESSURE TO TRUCK OF TREE, WHEN ROOTBALL DOES NOT MOVE, REMOVE STAKING.

WIRE OR CABLE SHALL BE MIN. 12 GAUGE, TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. NYLON STRAPS SHALL BE LONG ENOUGH TO ACCOMMODATE  $1-\frac{1}{2}$ " OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE.

3. ADJUST STAKING, STRAPS AND GUY WIRES ANNUALLY.

PLACE MIN. ½" PVC PIPE AROUND (7) GROMMETED NYLON STRAPS EACH WIRE. EXPOSED WIRE SHALL BE MAX. 2" EACH SIDE

(2) INSTALL STAKING PER **SPECIFICATIONS** 

(3) PLANT TREE SO THAT FIRST ORDER MAJOR ROOT IS 1"-2" ABOVE FINAL GRADE.

3" DEEP MULCH RING PLACED A MINIMUM OF 4 FT. IN DIAMETER ON TOP OF WEED FABRIC. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK (FINISHED GRADE REFERENCES TOP OF MULCH).

(5) 1:1 SLOPE ON SIDES OF PLANTING SETTLEMENT.

6 REMOVE ALL TWINE, ROPE, BURLAP AND WIRE FROM THE

TOP 2/3 OF ROOTBALL

8 4-6" HIGH WATER SAUCER IN

NON-TURF AREAS.

9 BACKFILL WITH PLANT MIX. PLANT MIX SHALL CONSIST OF EQUAL PARTS TOPSOIL, COMPOST, AND EXCAVATED SOIL. WATER THOROUGHLY WHEN BACKFILLING

PLACE SOIL AROUND ROOT BALL FIRMLY, DO NOT COMPACT OR TAMP. SETTLE SOIL WITH WATER TO FILL ALL AIR POCKETS.

(11) PLACE ROOT BALL ON UNDISTURBED SOIL TO PREVENT **EXISTING GRADE** 

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

(1) ECOLOTURF BY A-G SOD FARMS INC. OR APPROVED EQUAL

(2) AMENDED TOP SOIL. TILL TO A DEPTH OF 8".

3 SUBGRADE



DATE: 06.07.17 SITE PLA

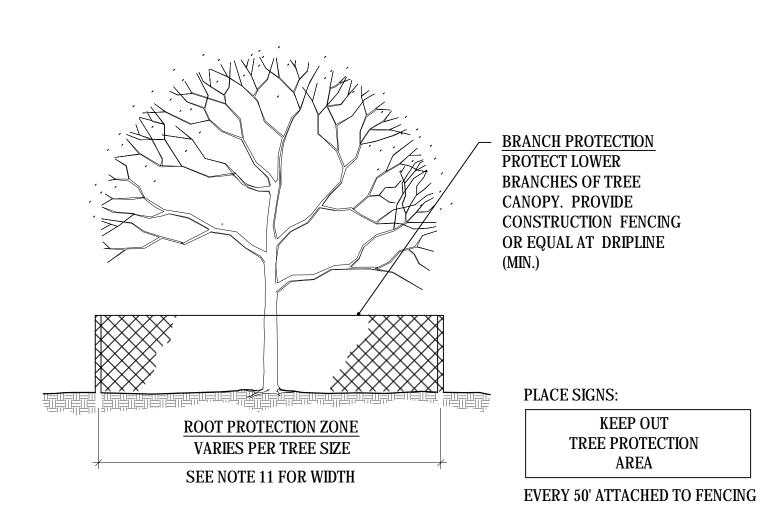
TURF CROSS SECTION SCALE: 3/16" = 1'-0"

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

SHEET TITLE: LANDSCAPE **DETAILS** 

L-02

CHECKED BY: DRAWN BY:



TREE PROTECTION NOTES

1. ALL TREES AND SHRUBS TO BE PROTECTED AND PRESERVED SHALL BE PER DETAIL. GROUPING OF MORE THAN ONE TREE MAY OCCUR.

2. TREES AND SHRUBS TO BE PROTECTED AND PRESERVED SHALL BE IDENTIFIED ON THE TRUNK WITH SURVEY TAPE.

3. TO PREVENT ROOT SMOTHERING, SOIL STOCKPILES, SUPPLIES, EQUIPMENT OR ANY OTHER MATERIAL SHALL NOT BE PLACED OR STORED WITHIN THE DRIP LINE OR WITHIN 15 FEET OF A TREE OR SHRUB TRUNK, WHICHEVER IS GREATER.

4. TREE AND SHRUB ROOTS SHALL NOT BE CUT UNLESS CUTTING IS UNAVOIDABLE.

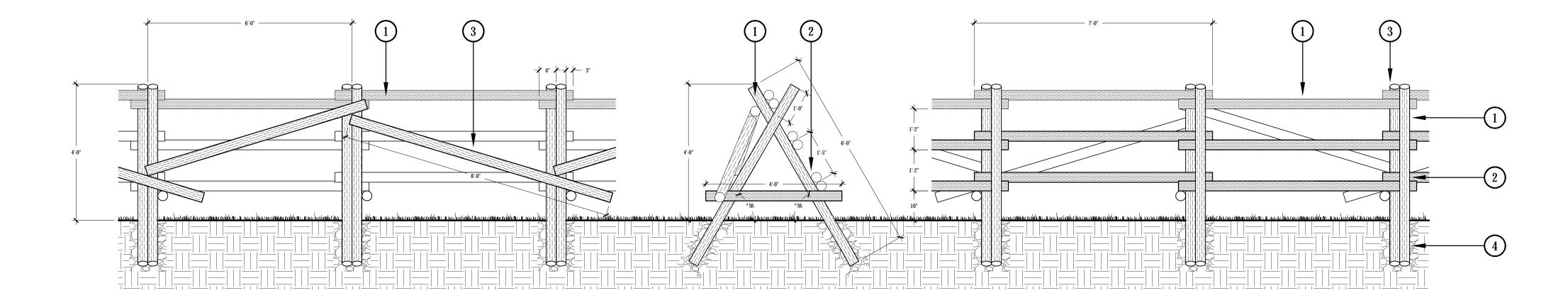
5. TRENCHES SHALL BE HAND DUG WITHIN THE DRIP LINE IN AREAS WHERE ROOTS TWO INCHES IN DIAMETER AND GREATER ARE PRESENT, OR WHEN IN CLOSE PROXIMITY TO LOW BRANCHING TREES. WHENEVER POSSIBLE, ROOTS TWO INCHES OR GREATER IN DIAMETER SHALL BE TUNNELED OR BORED UNDER AND SHALL BE COVERED TO PREVENT DEHYDRATION.

- 6. WHEN ROOT CUTTING IS UNAVOIDABLE, A CLEAN SHARP CUT SHALL BE MADE TO AVOID SHREDDING OR SMASHING. ROOT CUTS SHOULD BE MADE BACK TO A LATERAL ROOT. WHENEVER POSSIBLE, ROOTS SHOULD BE CUT BETWEEN LATE FALL AND BUD OPENING, WHEN ROOT ENERGY SUPPLIES ARE HIGH AND CONDITIONS ARE LEAST FAVORABLE FOR DISEASE CAUSING AGENTS. EXPOSED ROOTS SHALL BE COVERED IMMEDIATELY TO PREVENT DEHYDRATION. ROOTS SHALL BE COVERED WITH SOIL OR BURLAP AND KEPT MOIST.
- 7. WATERING OF PROTECTED TREES IN WHICH ROOTS WERE CUT SHALL BE PROVIDED BY THE CONTRACTOR.

- 11. FENCING MATERIAL SHALL BE SET AT THE DRIP LINE OR 15 FEET FROM TREE TRUNK, WHICHEVER IS GREATER, AND MAINTAINED IN AN UPRIGHT POSITION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- 12. ANY GRADE CHANGES (SUCH AS THE REMOVAL OF TOPSOIL OR ADDITION OF FILL MATERIAL) WITHIN THE DRIP LINE SHOULD BE AVOIDED FOR EXISTING TREES TO REMAIN. RETAINING WALLS AND TREE WELLS ARE ACCEPTABLE ONLY WHEN CONSTRUCTED PRIOR TO GRADE CHANGE.

TREE AND SHRUB PROTECTION

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



ALL WOOD SHALL BE ROUGH (1) SAWN, 3"-4" DIAMETER TREATED

SECURE ALL WOOD MEMBERS 2 WITH 60d GALVANIZED RINK

OVERLAP AND ALTERNATE RAILS AND SUPPORTS AS SHOWN

SHANK NAILS OR EQUAL

4 SET POSTS IN GRAVEL BASE

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BUCK AND RAIL FENCE

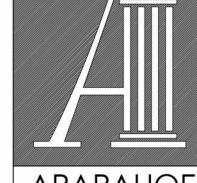
SCALE: 1/2" = 1'-0"



SHEET TITLE: LANDSCAPE **DETAILS** 

L-03





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DILLON RIDGE VISTAS
12 UNIT BUILDING - BLOCK 6
DILLON, COLORADO

PERSPECTIVE

1611 WN BY

ISSUE

05/02/17 DURA WORK SESSION

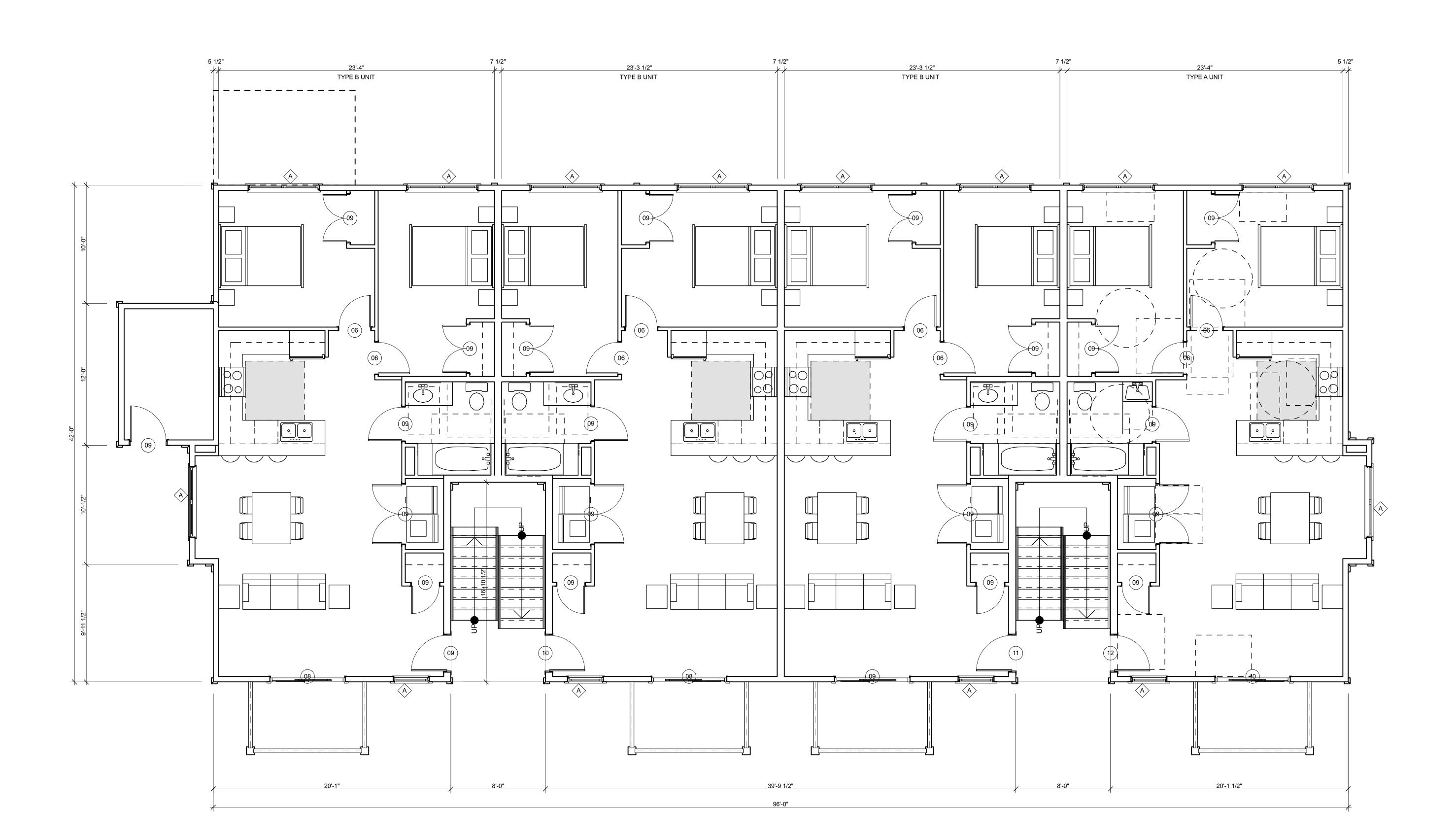
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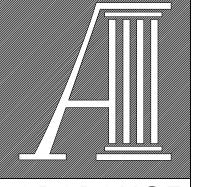
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SHEET

A-1

1 PERSPECTIVE
A-1 NOT TO SCALE





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1ST FLOOR PLAN

JOB 1611 DWN BY

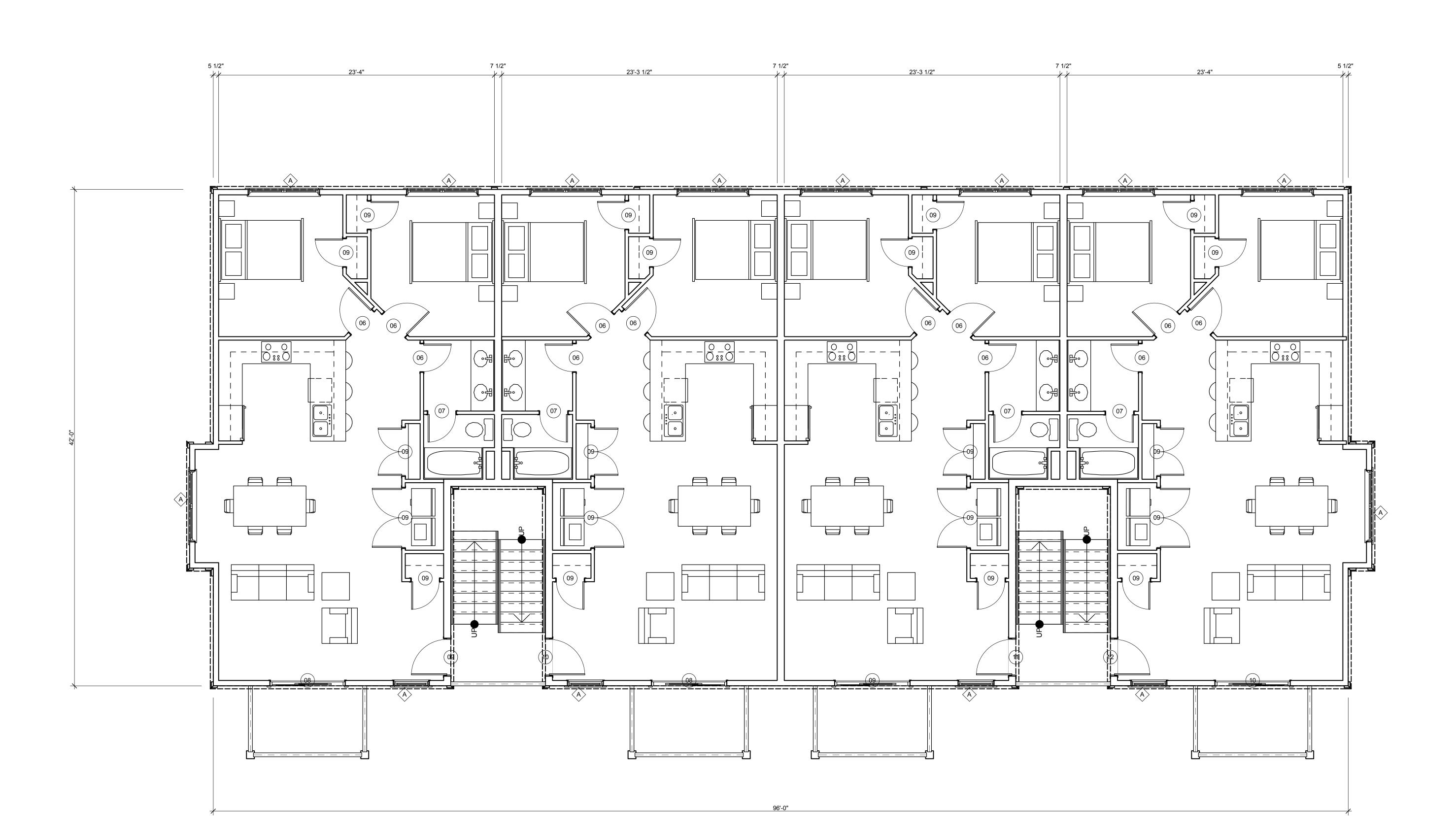
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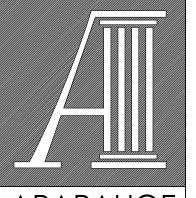
06/05/17 SITE/PUD

SHEET

1 1ST FLOOR PLAN
A-2 SCALE: 1/4" = 1'-0"

8' 16'





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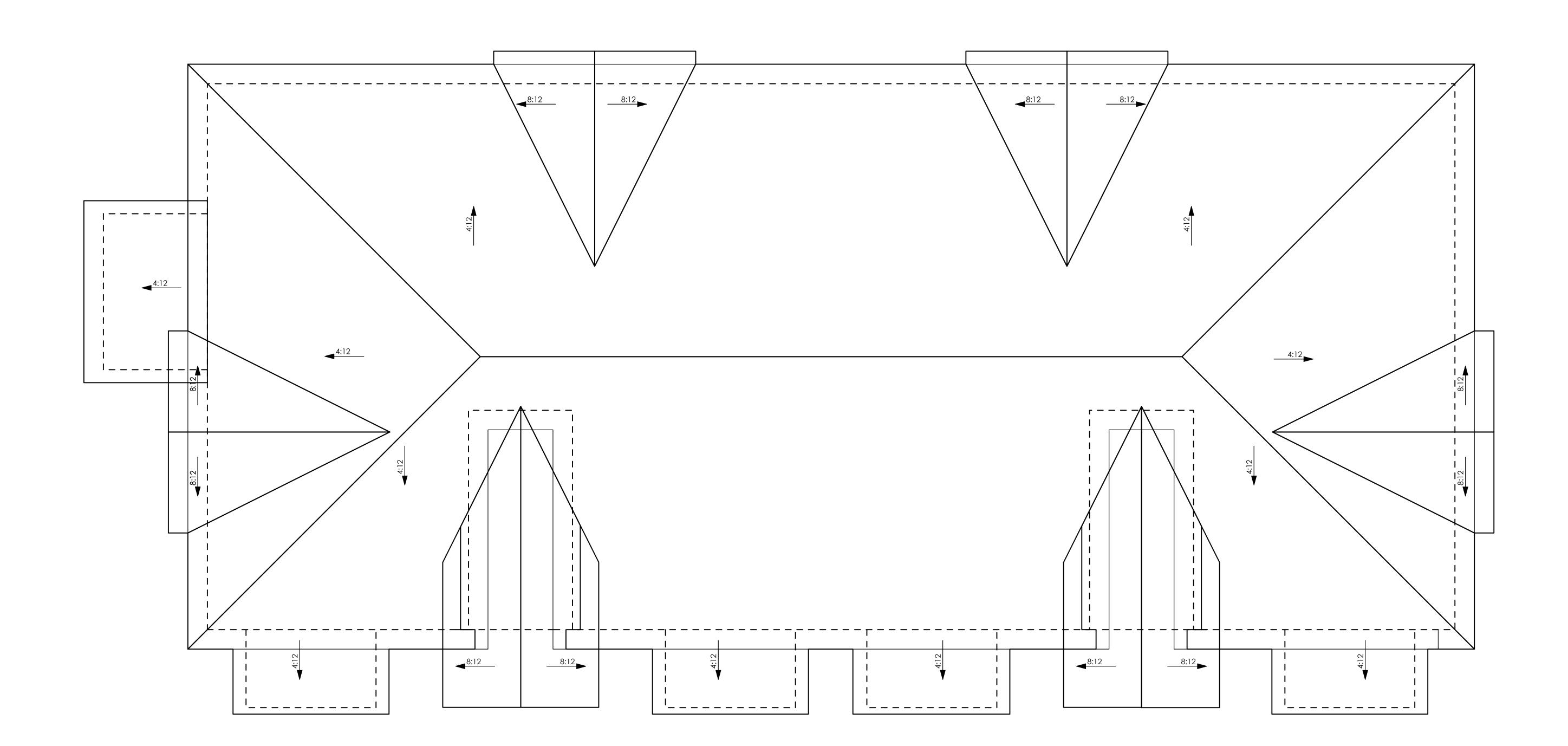
2ND & 3RD FLOOR PLAN

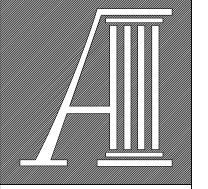
1611

05/02/17 dura work session

06/05/17 SITE/PUD

2 2ND & 3R A-3 SCALE: 1/4" = 1'-0"





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DILLON RIDGE VISTAS
12 UNIT BUILDING - BLOCK 6
DILLON, COLORADO

ROOF PLAN

JOB 1611 DWN BY

05/02/17 dura work session 06/05/17 SITE/PUD

SHEET





Arapahoe Architects 322C N Main St Breckenridge, CO 80424 **Job Number:** 1611 **Date:** 06/05/2017

# Dillon Ridge Vistas Block 6

Silverthorne, CO

Sheet:

CBD-1

# <u>MATERIALS</u> <u>COLOR</u> <u>SAMPLE</u>

ROOF

Composite Asphalt Shingle Timberline HD "Mission Brown"

FASCIA AND TRIM

1x4 on 5/4 Window and Corner Trim "Iron Gray"

PRIMARY SIDING

1x8 Cement Lap Siding

"Chestnut Brown"



ACCENT SIDING

Vertical 3/8 on 4x8 Cement Sheet "Gray Slate"



DOORS & WINDOWS

Vinyl

"Dark Bronze"



BEAMS, COLUMNS & NEWELS

Rough Sawn Timber

Pratt & Lambert Semi-Trans "Maple's Bark"



DECKING

Composite Wood

"Cedar"



Arapahoe Architects 322C N Main St Breckenridge, CO 80424 **Job Number:** 1611 **Date:** 06/05/2017

# Dillon Ridge Vistas Block 6

Silverthorne, CO

Sheet:

CBD-2

# **MATERIALS**

# <u>COLOR</u>

# **SAMPLE**

# **ROOF**

Composite Asphalt Shingle Timberline HD "Mission Brown"



# FASCIA AND TRIM

1x4 on 5/4 Window and Corner Trim "Iron Gray"



# PRIMARY SIDING

1x8 Cement Lap Siding

"Monterey Taupe"



# ACCENT SIDING

Vertical 3/8 on 4x8 Cement Sheet "Chestnut Brown"



# DOORS & WINDOWS

Vinyl

"Dark Bronze"



# BEAMS, COLUMNS & NEWELS

Rough Sawn Timber

Pratt & Lambert Semi-Trans "Maple's Bark"



# DECKING

Composite Wood

"Cedar"





Arapahoe Architects P.C. P.O. BOX 4780 322C North Main St. Breckenridge, CO 80424

# **Lighting Cut Sheet**

MANUFACTURER: Portfolio Dovray

SERIES: Outdoor Wall Light

MODEL: FS130125-29

LAMP & WATTAGE: Standard Edison Screw based 60W

MOUNTING: Wall

STYLE: Oil-Rubbed Bronze

APPLICATION: Exterior



7.75"H x 7.85"W x 8.9"D

Full Cut-Off

FOR BULLERIES

### Job Name:

Deinison Employee Housing

Catalog Number:

GLEON-AF-01-LED-E1-T4FT-BZ

Type:

McGraw-Edison

ISI16-64780

### DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

### SPECIFICATION FEATURES

#### Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, diecast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

#### Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K

### Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

### Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

### Warranty Five-year warranty.

DRILLING PATTERN

[51mm]

1-3/4"

[44mm]

3/4" [19mm] Diameter Hole

7/8" [22mm]

(2) 9/16" [14mm] Diameter Holes

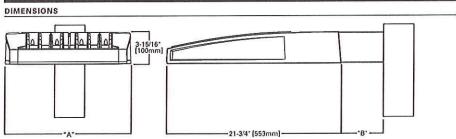
TYPE "N"



# **GLEON GALLEON LED**

1-10 Light Squares Solid State LED

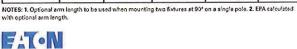
AREA/SITE LUMINAIRE



### DIMENSION DATA

Powering Business Worldwide

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length 1	Weight with Arm (lbs.)	EPA with Arm <sup>2</sup> (Sq. Ft.)
1-4	15-1/2" (394mm)	7' (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8° (549mm)	7° (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8° (702mm)	7° (178mm)	13° (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7' (178mm)	16° (406mm)	63 (28.6 kgs.)	1.12





### **ENERGY DATA**

Electronic LED Driver >0.9 Power Factor <20% Total Harmonic Distortion 120V-277V 50/60Hz 347V & 480V 60Hz -40°C Min. Temperature 40°C Max. Temperature 50°C Max. Temperature (HA Option)



TD500020EN 2016-08-23 08:01:04 Submitted by Illumination Systems, Inc.

ILLUMINATION SYST

Job Name:

Deinison Employee Housing

Catalog Number:

Notes:

GLEON-AF-01-LED-E1-T4FT-BZ

Type:

1

ISI16-64780

GLEON GALLEON LED

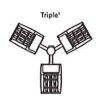
### ARM MOUNTING REQUIREMENTS

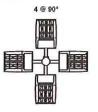
DOCTREALMENT DESCRIPTION D

Configuration	90° Apart	120° Apart
GLEON-AF-01	7° Arm (Standard)	7° Arm (Standard)
GLEON-AF-02	7* Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7' Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7° Arm (Standard)
GLEON-AF-05	10' Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10' Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13' Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13° Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16' Extended Arm (Required)
GLEON-AF-10	16' Extended Arm (Required)	16" Extended Arm (Required)



2 @ 180°



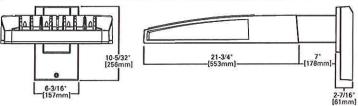




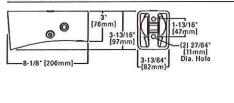


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

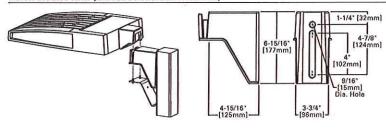
### STANDARD WALL MOUNT

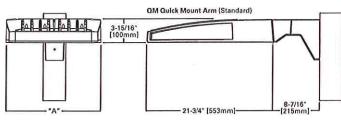


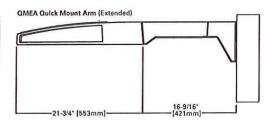




# QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)







### QUICK MOUNT ARM DATA

Number of Light Squares 1.2	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)	
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11	
5-6 3	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)		
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)		

NOTES: 1 DM option available with 1-8 light square configurations, 2 DMEA option available with 1-6 light square configurations, 3 DMEA arm to be used when mounting two fixtures at 90° on a single pole.

# BLOCK 6 PLANNED UNIT DEVELOPMENT AGREEMENT AMENDMENT TO THE DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT

THIS BLOCK 6 PLANNED UNIT DEVELOPMENT AGREEMENT AMENDMENT TO THE DILLON RIDGE MARKETPLACE PLANNED UNIT DEVELOPMENT ("Agreement") is made and entered into this 15<sup>th</sup> day of August, 2017 by and between the TOWN OF DILLON, a Colorado municipal corporation (hereinafter referred to as "Dillon" or the "Town") and DILLON RIDGE INVESTMENTS, LLC, a Colorado Limited Liability Company (hereinafter referred to as the "Developer").

**WHEREAS,** the Town previously approved the Dillon Ridge Marketplace Planned Unit Development (the "**DRM PUD**"); and

**WHEREAS,** Developer has submitted a Level IV development application for the Block 6 Amendment to the Dillon Ridge Marketplace Planned Unit Development (the "**Block 6 Amendment**") for the real property owned by Developer and legally described as follows:

Block 6, DILLON RIDGE MARKETPLACE REPLAT B, according to the Plat of Dillon Ridge Marketplace Replat B recorded July 15, 1998 as Reception No. 570108 and the Plat of Dillon Ridge Marketplace Replat D recorded March 24, 2004 as Reception No. 750675, COUNTY OF SUMMIT, STATE OF COLORADO (the "**Property**"); and

**WHEREAS,** Developer desires to construct the Dillon Vistas Apartment Complex on the Property, consisting of thirty-six (36) residential rental apartments located on Block 6, Dillon Ridge Marketplace Planned Unit Development, New Town of Dillon, Town of Dillon, Colorado, (the "**Development**"); and

**WHEREAS**, Developer has submitted a Level IV Development Permit Application and a site plan for all common site plan improvements necessary for the Development, a copy of which is attached hereto, marked as <u>Exhibit "A,"</u> and incorporated herein by reference (the "**Site Plan**"); and

**WHEREAS**, Developer has also submitted a set of site construction documents which include site layout, grading, erosion control, drainage, utility plan and detail sheets for the Development, copies of which are attached hereto, marked as <u>Exhibit "B,"</u> and incorporated herein by reference (the "**Development Plan**"); and

**WHEREAS**, Developer has also submitted a set of architectural building elevations, a color rendering and floor plans for the Development, copies of which are attached hereto, marked as <u>Exhibit "C,"</u> and incorporated herein by reference (the "**Architectural Plan**"); and

**WHEREAS**, Developer has also submitted a set of landscape plans and details for the Development, copies of which are attached hereto, marked as <u>Exhibit "D,"</u> and incorporated herein by reference (the "**Landscape Plan**"); and

**WHEREAS**, Developer has also submitted a metes and bounds legal property description for the utility easement and a sketch of the utility easement for the Development, copies of which are attached hereto, marked as <u>Exhibit "E,"</u> and incorporated herein by reference (the "**Utility Easement**"); and

WHEREAS, Developer has also submitted a detailed list of the public improvements and an estimated cost of public improvements required for the Development, copies of which are attached hereto, marked as <a href="Exhibit "G," and incorporated herein">Exhibit "G,"</a> and incorporated herein by reference (the "Improvements and Estimated Cost of Improvements"); and

**WHEREAS**, the Block 6 Amendment has been reviewed by the Town of Dillon Planning and Zoning Commission, and approved by the Planning and Zoning Commission pursuant to Resolution PZ07-17, Series of 2017, following a public hearing held on June 28, 2017; and

**WHEREAS**, the Block 6 Amendment has been reviewed by the Town of Dillon Town Council ("**Town Council**"), and approved by the Town Council pursuant to Resolution xx-17, Series of 2017 following a public hearing held on August 15, 2017; and

**WHEREAS**, the Town Council has attached certain additional Conditions of Approval to the approval of the Block 6 Amendment application, as such are stated and set forth in Town Council Resolution xx-17, Series of 2017, a copy of which Resolution is attached hereto, marked as <u>Exhibit "H,"</u> and incorporated herein by reference (the "**Resolution and Conditions of Approval**"); and

WHEREAS, the approval of the Block 6 Amendment requires that the Developer enter into this Agreement with the Town to ensure that the Block 6 Amendment requirements as set forth herein, the Conditions of Approval and the requirements of the Development are complied with, and requiring that the Developer provide certain assurances that the public improvements associated with the Development are completed.

**NOW, THEREFORE**, in consideration of the foregoing, and the mutual promises contained herein, the parties hereto promise, covenant and agree as follows:

# **SECTION I. CONDITIONS:**

# A. DEVELOPER OBLIGATIONS AND IMPROVEMENTS:

1. Developer shall design, construct, install, and pay for, according to the Town approved plans set forth in <u>Exhibits "A," "B," "C," and "D,</u>" all common Site Plan public improvements as specifically set forth in Section 1.A.3., herein below and on <u>Exhibit "A,"</u> and approved as the Block 6 Amendment, such Site Plan

public improvements hereinafter referred to as the "**Improvements**." The Improvements shall be constructed in accordance with the Site Plan, Development Plan, Architectural Plan and Landscape Plan. In addition the Developer shall install all new utilities, including drainage facilities as approved by the Town as a component of the Development, and relocate existing utilities as necessary and as directed by the Town. These utility and drainage improvements and relocations shall be in accordance with the Development Plan, Landscape Plan and the Town of Dillon Construction Specifications (as defined herein, below).

- 2. Developer shall grant a utility easement, as legally described on <u>Exhibit</u> "<u>E</u>," to the Town by separate instrument, in the form marked <u>Exhibit</u> "<u>F</u>," attached hereto and incorporated herein by this reference (the "**Utility Easement Form**"). The utility easement shall be signed by the Developer and granted to the Town at the time of approval of the Block 6 Amendment by the Town Council.
- 3. Developer shall construct the following Improvements on the Development Property in accordance with the Site Plan and the Development Plan, as such plans are set forth on Exhibits "A" and "B," at Developer's sole cost.
  - a. Remove the existing concrete curb & gutter and concrete sidewalks necessary for the installation of a new concrete curb cut along Lookout Ridge Road.
  - b. Install a new 6" Ductile Iron Fire Hydrant lateral, fire hydrant and all required fittings and appurtenances, and connect the new fire hydrant lateral to the existing main stubbed into the Development Property.
- 4. Developer shall modify the Site Plan, Development Plan, Construction Plan, Architectural Plan (<u>Exhibits "A," "B," "C," and "D"</u>) in accordance with the additional Conditions of Approval placed on the Development by the Town Council in Resolution xx-17, Series of 2017, as referenced in Exhibit "H".
- 5. Developer shall provide traffic control plans, devices, advanced warning signs, and flaggers in conformance with the most current Manual of Uniform Traffic Control Devices ("MUTCD") and per Town requirements for any work in Town rights-of way, and for hauling operations into and out of the Development Property.
- 6. Developer shall provide and install all erosion control best management practices ("**BMP**") as shown on the approved grading and drainage plans, contained in <u>Exhibit</u> "B". Developer shall maintain all erosion control devices on a daily basis. Developer shall remove all material, dirt and debris tracked onto Town streets by 4:00 p.m. each day. Developer shall pay a Five Hundred Dollar (\$500.00) per day fine for each day tracked material is left on Town streets past 6:00 p.m.
- 7. All construction as required herein shall be performed in accordance with the Town of Dillon Construction Specifications, adopted by the Town, which

construction specifications are on file at the Town of Dillon (the "**Town of Dillon** Construction Specifications").

8. Water and Sewer Equivalent Residential Units. The Developer shall pay all applicable water tap and sewer tap fees for the total number of Equivalent Residential Units ("EQRs") required for the Development prior to issuance of a building permit. The total number of EQRs required for the Development are as follows:

Twenty-eight and eight/tenths (28.8) water tap EQRs; and, Twenty-eight and eight/tenths (28.8) sewer tap EQRs.

The water tap and sewer tap fees shall be the then current water tap and sewer tap fees adopted by the Town in Section 19 of the Town of Dillon Municipal Code ("Code") at the time of payment.

- 9. Grading & Excavation Permit. The Developer shall obtain a grading and excavation permit prior to commencing construction.
- 10. Affordable Housing Development Impact Fee. The Developer shall pay all required affordable housing development impact fees prior to the issuance of a building permit. The fee shall be based on the then current fees adopted by Summit County Government at the time of payment.
- 11. Since the Property is over one (1) acre in size, the Developer shall obtain the required "Stormwater Discharge Associated with Construction Activities" Permit issued by the Colorado Department of Public Health and Environment. The Developer shall submit a copy of this permit from the state as well as the erosion control plan to the Town Engineer prior to starting construction of the Development.
- 12. Parking Space Use Restrictions. The residential and commercial parking spaces located on the Development Property may not be used for the storage of any vehicle or non-vehicle items, including, but not limited to storage sheds, trailers, boats, kayaks, ATVs or recreational equipment, construction equipment or any other vehicle or non-vehicle items. This parking space use restriction must be included in all ownership association documents created for the Development. All ownership association documents created for the Development shall be presented to the Town upon their adoption, but no later than the issuance of the first Certificate of Occupancy for the Development.
- 13. Master Sign Plan. The Developer shall submit an application for a final master sign plan for the Development to the Town for review and approval and pay all required fees associated therewith. Each individual sign will require a separate individual sign permit and an associated fee as required by the Code.
- 14. Prior to the issuance of a grading and excavation permit or a building permit for the Development, the Developer shall submit the following updated

Development Plans, Site Plans, and construction plans for the Development to the Town for review and approval:

a. Final Retaining Wall Construction Plans and Details, and a global stability analysis demonstrating that the tiered retaining wall system is stable. These plans and reports must be prepared and signed by a Colorado Licensed Civil Engineer.

# 15. Retaining Wall Design

- a. The Developer shall submit final retaining wall drawings to the Town Engineer for review and approval prior to construction. The wall drawings shall be prepared by a Colorado registered Professional Engineer. A global stability analysis, with sections cut through the series of tiered walls, must also be prepared to demonstrate the stability of the wall system and the hillside.
- b. The retaining wall system shall be constructed of Redi-Rock segmental block units utilizing the "LEDGESTONE" texture. The Developer shall submit a color sample of the proposed block material to the Town Engineer for approval prior to construction. The color shall be an earth tone in the beige/brown color spectrum.

# 16. Exterior Lighting

- a. All exterior lighting shall have full cutoff light fixtures.
- b. Exterior Building Wall Lights shall be Portfolio Dovray Model FS130125-29.
- c. Parking Lot site lighting shall be McGraw-Edison Gleon Galleon LED Catalog Number GLEON-AF-01-LED-E1-T4FT-BZ. The height of the Light fixture shall not exceed 15' as measured from the bottom surface of the light fixture lens to the ground directly below the fixture.
- d. Copies of the approved lighting fixture cut sheets are attached hereto, marked as <u>Exhibit "J"</u> and incorporated herein by reference; (the "**Site Lighting Fixtures**").

# 17. Off-Street Parking.

- a. The Code requires two (2) parking spaces on the Property for every two (2) bedroom unit. The parking requirement for thirty-six (36), two (2) bedroom apartment units is, therefore, seventy-two (72) parking spaces.
- b. The Development shall provide on the Property Seventy-Three (73) parking spaces, which shall include three (3) accessible parking spaces.

The Seventy-Three (73) parking spaces shall be dedicated for use by the residents of the Development.

# B. USES ALLOWED:

The Developer shall be allowed the following uses in the Development:

1. A 100% residential apartment complex without a commercial component.

# C. BUILDING HEIGHTS ALLOWED:

The Developer shall be allowed the following building heights in the Development:

1. Buildings shall not exceed 35' in height.

# D. YARD SETBACKS ALLOWED:

The Developer shall be allowed the following side yard setbacks in the Development:

- 1. The front yard setback shall be measured off of Lookout Ridge Road and shall be 12' as measured from the outermost edge of any deck or building corner.
- 2. The rear yard setback shall be a minimum of 20' per the Mixed Use Zone District standard.
- 3. The side yard setbacks shall be a minimum of 8' per the Mixed Use Zone District standard.

# E. PARKING LOT DESIGN STANDARDS:

The Developer shall be allowed the following parking lot grades in the Development:

- 1. Parking Lot grades shall not exceed Four percent (4%)
- 2. Off Street Parking Regulations set forth in Section 16-6 of the Code, as in effect at the time of issuance of the building permit, shall govern and control.

# F. LANDSCAPING REQUIREMENTS:

The Developer shall meet or exceed the following minimum landscaping requirements:

- 1. The street tree requirement set forth in Section 16-6-60 of the Code, as in effect at the time of issuance of the building permit, shall govern and control.
- 2. Interior parking lot islands are not required.

# G. BUILDING MATERIALS ALLOWED:

The Developer shall be allowed the following building materials in the Development:

1. Buildings materials shall consist of the materials on the architectural drawings.

# H. ARCHITECTURAL DESIGN ALLOWED:

The Developer shall be allowed the following architectural design in the Development:

- 1. The roof shall be designed with a combination of 4:12 roof planes with additional 8:12 roof planes over the proposed stairwells.
- 2. The Architectural design shall be as set forth on Exhibit "C."

# I. SIGNAGE ALLOWED:

The Developer shall be allowed the following signage in the Development:

- 1. The Development shall be allowed one (1) freestanding monument sign along Lookout Ridge Road in conformance with Section 16-11 of the Code, as in effect at the time of issuance of the individual sign permit.
- 2. Individual building signs shall conform to the requirements of Section 16-11 of the Code, as in effect at the time of issuance of the individual sign permit.

### **SECTION II. CONSTRUCTION SCHEDULE:**

- A. Developer shall construct and complete the Development in a timely manner. This shall require that the Developer begin construction within twenty-four (24) months of the date, set forth above, of this Agreement, and continue without interruption until completed. Failure to begin such construction within twenty-four (24) months of the date of this Agreement or failure to continue construction without interruption until completed shall cause the Block 6 Amendment approval to be rescinded and this Agreement to terminate and become null and void.
- B. No building permits for the Development shall be issued until the Developer has delivered to the Town a performance guarantee ("**Performance Guarantee**") in the

form of a letter of credit, in the form as set forth on <u>Exhibit "I,"</u> attached hereto and incorporated herein by this reference, guaranteeing the construction of the Improvements (the "**Letter of Credit**"). No building permits for the Development shall be issued until the Developer has complied with all applicable requirements as set forth herein, with all Code requirements, and has paid all fees and costs due and owing to the Town in relation to the Development.

C. The Improvements shall be completed prior to, or concurrent with, the construction of any buildings within the Development, and no Certificates of Occupancy shall be issued by the Town until all Improvements are completed and accepted by the Town, and all requirements of this Agreement complied with by Developer.

# SECTION III. DEVELOPER'S OBLIGATION NOT CONTINGENT:

The Developer's obligation to complete the Improvements shall become binding upon the Developer upon the date of this Agreement, shall be independent of any obligations of the Town that may be contained herein, and shall not be conditioned upon the sale or completion of any lot or any buildings within the Development.

# SECTION IV. CONSTRUCTION STANDARDS; WARRANTY PERIOD:

- A. The Improvements shall be constructed in accordance with all applicable laws, ordinances, codes, the Code, regulations and standards, including without limitation, the Town of Dillon Construction Specifications, Street Standards, Water Department Standards, Silverthorne-Dillon Joint Sewer Authority and Sanitation District Standards, Landscaping Standards of the Town of Dillon, and all applicable Town and local jurisdiction's ordinances, laws and standards.
- B. Warranty Period for Improvements. The Developer shall assure the satisfactory construction and maintenance of the Improvements for a period of one (1) year after the date of their final approval and acceptance by the Town, as set forth in Section IX, below (the "Warranty Period"). The Performance Guarantee shall serve for such Warranty Period, as set forth in Sections VII and VIII, below.

# SECTION V. COMPLIANCE WITH APPLICABLE LAWS:

The Developer shall comply with all applicable laws, ordinances, rules, the Code and regulations then in effect and as they may be amended from time to time.

### SECTION VI. COMPLIANCE WITH DEVELOPMENT PERMIT:

The Developer shall strictly comply with the terms, conditions, limitations and requirements of the Development Permit issued by the Town.

# SECTION VII. PERFORMANCE GUARANTEE:

The estimated cost of constructing the Improvements required in Section I.A., above, and are itemized and set forth on Exhibit "G." The actual cost of constructing the Improvements required in Section I.A., and itemized on Exhibit "G." shall be finally determined by the Developer and agreed to by the Town prior to the issuance of any permits for this Development. Accordingly, in conformance with Code requirements, prior to issuance of any permits for the Development, the Developer shall post an irrevocable Letter of Credit issued by a qualified lending institution acceptable to the Town, in the form as set forth on Exhibit "I," in the agreed upon amount of the cost of constructing the Improvements with the Town as a guarantee of the performance of its obligations under this Agreement. Said Letter of Credit shall be in a minimum amount of One Hundred Twenty percent (120%) of the estimated cost of constructing the Improvements and shall be for an initial term of not less than one year, renewable automatically for additional one year periods unless notice is given to the Town sixty days in advance of non-renewal. No permit of any kind shall be issued by the Town prior to the Developer delivering to the Town the irrevocable Letter of Credit as required herein.

### SECTION VIII. RELEASE OR REDUCTION OF PERFORMANCE GUARANTEE; MAINTENANCE OF IMPROVEMENTS:

- A. The Town will not accept the required Improvements, nor release a Performance Guarantee, until the Town Engineer has indicated that all required Improvements have been satisfactorily completed and until the Developer's engineer has certified to the Town Engineer, through submission of detailed as-built plans of the Development Improvements, that all Improvements have been installed in accordance with the approved construction plans for the Development and are ready for dedication to the Town or other appropriate agencies. No Performance Guarantee or Letter of Credit will be released prior to the expiration of the Warranty Period.
- B. A Performance Guarantee may be reduced by the Town upon actual completion of Improvements and then only in the ratio that the Improvements completed bear to the total Improvements of the Development. In no event shall a Performance Guarantee be reduced below twenty percent (20%) of the principal amount until all Improvements have been completed, the Warranty Period has been met and the Improvements have been accepted by the Town. Partial release of the Letter of Credit may be made only in accordance with Code requirements. The Letter of Credit shall guarantee that all Improvements shall remain free from defect for the required Warranty Period.
- C. The Performance Guarantee shall be released and returned to the Developer, without interest thereon, only at such time as the Town Manager determines, in his sole discretion, that: 1) all of the Improvements have been properly constructed or installed, 2) all Code requirements are met, 3) the Warranty Period has been met, and 4) the Improvements have been finally approved and accepted by the Town.
- D. The Developer shall maintain the Improvements in the Development and to provide for snow removal, street cleaning, drainage and general maintenance of the streets and sidewalks prior to final acceptance by the Town. In the event the Developer fails to comply, the Town is authorized, through the Town Manager, to perform the necessary

work without incurring any liability and charge such work to the Developer. If not paid, any such charges shall become a first and prior lien on the Development.

#### SECTION IX. FINAL APPROVAL OF IMPROVEMENTS AS CONSTRUCTED:

The Town's final approval of the completed Improvements shall be evidenced by a letter of final approval signed by the Town Engineer or Director of Public Works. The Town shall not be required to grant final approval of the Improvements until the Town has determined the following:

- A. The Improvements have been satisfactorily completed in accordance with the approved Development Plan, Site Plan, Construction Plans, Architect's Elevations Landscape Plan, and Town of Dillon Construction Specifications, and all requirements for the Development have been completed.
- B. The Developer has delivered to the Town all as-built drawings for all Improvements, including, but not limited to, the utility and drainage facilities.

#### **SECTION X. DEFAULT:**

The following conditions, occurrences or actions shall constitute a default by Developer under this Agreement:

- A. Developer's failure to commence construction of the Improvements within two (2) years of the date of this Agreement.
- B. Developer's failure to cure the defective construction of any Improvement within thirty (30) days of being notified by the Town in writing that such a defect exists except that if the cure of such defect will reasonably require more than thirty (30) days to cure then Developer will be in default if Developer fails to cure such defect within such longer period of time, such period not to exceed ninety (90) days from the date of said notice.
- C. Developer's failure to perform work within the Development for a period of more than sixty (60) consecutive days, without the prior written approval of the Town.
- D. Developer's insolvency, the appointment of a receiver for the Developer or the filing of a voluntary or involuntary petition in bankruptcy respecting the Developer; or
- E. Foreclosure of any lien against the Development or a portion of the Property or assignment or conveyance of the Property or the Development in lieu of foreclosure prior to the final approval and acceptance of the Improvements by the Town as provided in Section IX.
  - F. Violation of any term or condition of this Agreement.

The Town may declare a default following three (3) days written notice to the Developer.

#### **SECTION XI. MEASURE OF DAMAGES:**

The measure of damages for breach of this Agreement by the Developer shall be the actual cost of completing the Improvements, including design, engineering, construction, construction management, legal and inspection costs, as well as all costs incurred by the Town, including attorneys' costs, in pursuing such breach and remedy. For Improvements upon which construction has not begun, the estimated cost of the Improvements as supplied by Developer pursuant to the Agreement and shown on the attached Exhibit "G" shall be prima facie evidence of the minimum cost of completion; however, neither that amount nor the amount of the Performance Guarantee establishes the maximum amount of the Developer's liability, and Developer's liability shall be the Town's actual cost including those items set forth herein above. The Town shall be entitled to complete all unfinished Improvements at the time of default regardless of the extent to which development has taken place in the Development or whether development ever commenced.

#### SECTION XII. TOWN'S RIGHTS UPON DEFAULT:

- A. The Town may, but shall not be required to, have the Improvements constructed by such means and in such manner as the Town shall determine, without the necessity of a public bidding.
- B. If the Town elects to have the Improvements constructed pursuant to this Section it shall have the right to use Developer's Performance Guarantee to pay for the construction of such Improvements. If the amount of the Performance Guarantee exceeds the cost of constructing the Improvements, the Town shall deliver any excess funds to the Developer. If the Performance Guarantee is insufficient to fully pay the cost of constructing such Improvements, the Developer shall, upon demand, pay such deficiency to the Town, together with costs and interest thereon as provided in Sections XIII and XIV.
- C. The Town may exercise such rights it may have under Colorado law, including, without limitation, the right to bring suit against the Developer for specific performance of this Agreement, or to recover damages for the breach by the Developer of this Agreement.
- D. The Developer hereby grants to the Town, its successors, assigns, agents, contractors and employees, a non-exclusive right and easement to enter the Property for the purpose of constructing, maintaining and repairing any Improvements made by the Town pursuant to the provisions of this Section.
- E. In addition to any remedies provided for herein or by law, while the Developer is in default under this Agreement, the Town may refuse to issue building permits, development permits and certificates of occupancy for the Development and the Developer shall have no right to sell, transfer, or otherwise convey the lots, buildings or

units within the Development or the Development itself without the express prior written approval of the Town, which approval may be withheld at the Town's sole discretion.

F. The remedies provided for herein are cumulative in nature.

#### **SECTION XIII. INTEREST:**

Any sum which is required to be paid by the Developer to the Town under this Agreement and which is unpaid shall accrue interest at the rate of eight percent (8%) per annum commencing as of the date such sum was due.

#### **SECTION XIV. ATTORNEY'S FEES:**

It is agreed that if any action is brought in a court of law by either party to this Agreement concerning the enforcement, interpretation or construction of this Agreement, the prevailing party, either at trial or upon appeal, shall be entitled to reasonable attorney's fees, as well as cost, including expert witness fees incurred in the prosecution or defense of such action.

#### **SECTION XV. INDEMNIFICATION:**

The Developer agrees to indemnify and hold the Town, its officers, employees, consultants, insurers, and self-insurance pool harmless from and against all liability, claims, and demands on account of injury, loss or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever which arise out of or are in any manner connected with the construction of the Improvements, if such injury, loss or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by the act, omission, error, professional error, mistake, negligence or other fault of the Developer, any subcontractor of the Developer, or any officer, employee, representative, or agent of the Developer or of any subcontractor of the Developer, or which arise out of any worker's compensation claim of any employee of the Developer, or of any employee of any subcontractor of the Developer. The Developer agrees to investigate, handle, respond to, and to provide defense for and defend against any such liability, claims, or demands at the sole expense of the Developer. The Developer also agrees to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not such liability, claims or demands alleged are determined to be groundless, false or fraudulent.

#### **SECTION XVI. NO WAIVER:**

No waiver of any provision of this Agreement shall be deemed or constitute a waiver of any other provision, nor shall it be deemed to constitute a continuing waiver unless expressly provided for by a written amendment to this Agreement, signed by both Town and Developer; nor shall the waiver of any default under this Agreement be deemed a waiver of any subsequent default or defaults of the same type. The Town's failure to exercise any right under this Agreement shall not constitute the approval of any wrongful act by the Developer or the acceptance of any Improvements.

#### **SECTION XVII. VESTED RIGHTS:**

This Agreement shall not alter, extend or modify the vested right obtained by the Developer in connection with the approval of the Development.

#### SECTION XVIII. RECORDATION:

This Agreement shall be recorded in the office of the Clerk and Recorder of Summit County, Colorado. Developer shall pay all costs of recording.

#### **SECTION XIX. IMMUNITY:**

Nothing contained in this Agreement shall constitute a waiver of the Town's governmental immunity under applicable state and federal laws. The parties hereto understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Section 24-10-101, *et seq.*, C.R.S., as from time to time amended, or any other law, protection or limitation otherwise available to the Town, its officers, or its employees.

#### SECTION XX. PERSONAL JURISDICTION AND VENUE:

Personal jurisdiction and venue for any civil action commence by either party to this Agreement, whether arising out of or relating to the Agreement or the Performance Guarantee, shall be deemed to be proper only if such action is commenced in District Court of Summit County, Colorado. The Developer expressly waives its rights to bring such action in or to remove such action to any other court, whether state or federal.

#### **SECTION XXI. CODE CHANGES:**

References in this Agreement to any provision of the Code, Town of Dillon Construction Specifications or to any Town or other governmental standards are intended to refer to any subsequent amendments and/or revisions to such Code, Town of Dillon Construction Specifications or standards. Such amendments or revisions shall be binding upon Developer.

#### SECTION XXII. ASSIGNMENT, DELEGATION AND NOTICE:

Developer shall provide to the Town, for consent, written notice of: 1) any proposed transfer of title to all or any portion of the Development, 2) arrangements for delegation or transfer of the Improvement obligations hereunder to any successor, and 3) successor's written acceptance of such Improvement obligations. Notwithstanding the forgoing, Developer may sell developed units without Town's consent, provided that the purchaser deposits with the Town all guaranties, security and sureties that may be required under this Agreement. Until the Town provides written consent to the assignment, Developer and Developer's successors and assigns shall be jointly and severally liable for the assigned

Improvement obligations. The Town may withhold its consent in the event it reasonably determines that the Improvement obligations or any constituent element of this Agreement may not be fulfilled through assignment or that the benefit of Town's bargain under this Agreement may be materially and adversely impaired by such assignment.

#### **SECTION XXIII. NOTICES:**

Any notice required or permitted hereunder shall be in writing and shall be sufficient if personally delivered or mailed by certified mail, return receipt required, addressed as follows:

If to the Town:	Town Manager
	Town of Dillon
	P.O. Box 8
	Dillon, CO 80435
If to the Developer:	Dillon Ridge Investments, LLC
	Attn:

Notices mailed in accordance with the provision of this Section shall be deemed to have been given on the third business day after mailing. Notices personally delivered shall be deemed to have been given upon delivery. Nothing herein shall prohibit the giving of notice in the manner provided for in the Colorado Rules of Civil Procedure for service of civil process.

#### **SECTION XXIV. THIRD PARTIES:**

This Agreement does not, and shall not be deemed or construed to confer upon or grant to any third party (except a party to whom the Developer may assign this Agreement in accordance with the terms hereof) any right to claim damages or to bring suit, action or other proceeding against the Town because of any breach hereof or because of any of the terms, covenants, agreements, and conditions herein.

#### **SECTION XXV. ENTIRE AGREEMENT:**

This Agreement constitutes the entire Agreement and understanding between the parties relating to the subject matter of this Agreement and supersedes any prior Agreement or understanding relating to such subject matter.

#### SECTION XXVI. SEVERABILITY:

It is understood and agreed by the parties hereto that if any part, term or provision of this Agreement is held by a court of competent jurisdiction to be illegal or in conflict with any law, state or federal, the validity of the remaining portions or provisions hereof shall not be affected, and the rights and obligations of the parties shall be construed and enforces as if the Agreement did not contain the particular part, term or provision held to be invalid.

#### **SECTION XXVII. MODIFICATION:**

This Agreement may be modified or amended only by a duly authorized written instrument executed by the parties hereto.

#### **SECTION XXVIII. BINDING EFFECT:**

This Agreement shall run with the Development and the real property contained therein and shall be binding upon, and shall inure to the benefit of the parties hereto and their respective heirs, successors, assigns, and legal representative.

#### SECTION XXIX. GOVERNING LAW:

This Agreement shall be interpreted in accordance with the laws of the State of Colorado.

### SECTION XXX. WORKFORCE HOUSING RESTRICTIVE COVENANT AND AGREEMENT:

Developer shall dedicate in perpetuity eighteen (18) deed restricted units (six [6] units in each of the three buildings), equaling fifty percent (50%) of the total units in the Development to serve as local workforce housing. Local workforce housing is defined as persons living and working in Summit County at a minimum of 30 hours a week.

The Developer shall enter into the Workforce Housing Restrictive Covenant and Agreement, a copy of which is attached hereto, marked as <a href="Exhibit">Exhibit "K"</a> and incorporated herein by reference (the "Workforce Housing Restrictive Covenant and Agreement") prior to the issuance of building permits for the Development. The Development will be subject to the Workforce Housing Restrictive Covenant and Agreement that shall run with the land restricting occupancy and sale of the restricted units to qualified persons who fall within established guidelines related to workforce and employee housing.

#### SECTION XXXI. INCORPORATION OF EXHIBITS:

The attached Exhibits "A" through "K" inclusive are incorporated herein by reference.

[Signatures on Following Page]

TOWN: TOWN OF DILLON, COLORADO, A Colorado municipal corporation
By: Kevin Burns, Mayor
ATTEST:
By: Jo-Anne Tyson, Town Clerk
DEVELOPER: DILLON RIDGE INVESTMENTS, LLC, A Colorado limited liability company
, Manager and Member
STATE OF COLORADO) )ss. COUNTY OF SUMMIT )
The foregoing Agreement was acknowledged before me this day of, 2017, by, Manager and Member, Dillon Ridge Investments, LLC.
WITNESS my hand and official seal.  My commission expires:
Notary Public
6/24/17

#### LIST OF EXHIBITS

Exhibit A – Site Plan

Exhibit B – Development Plan

Exhibit C – Architectural Plan

Exhibit D - Landscape Plan

Exhibit E – Utility Easement Description

Exhibit F – Utility Easement Form

Exhibit G – Improvements and Estimated Cost of Improvements

Exhibit H – Resolution and Conditions of Approval

Exhibit I – Letter of Credit form

Exhibit J – Site Lighting Fixtures

Exhibit K – Workforce Housing Restrictive Covenant and Agreement

#### EXHIBIT "A" SITE PLAN

#### EXHIBIT "B" DEVELOPMENT PLAN

### EXHIBIT "C" ARCHITECTURAL PLAN

#### EXHIBIT "D" LANDSCAPE PLAN

# EXHIBIT "E" UTILITY EASEMENT DESCRIPTION

# EXHIBIT "F" UTILITY EASEMENT FORM

### EXHIBIT "G" IMPROVEMENTS AND ESTIMATED COST OF IMPROVEMENTS

### EXHIBIT "H" RESOLUTION AND CONDITIONS OF APPROVAL

### EXHIBIT "I" LETTER OF CREDIT FORM

#### IRREVOCABLE LETTER OF CREDIT

# INSERT PROPERTY IDENTIFICATION (IF FOR 2 YEAR WARRANTY ADD APPROPRIATE ITEM: LANDSCAPING OR HARDSCAPE OR TOTAL SUBDIVISION IMPROVEMENTS)

Town of Dillon	No.
275 Lake Dillon Drive	Issue Date:
P.O. Box 8	Expiration:
Dillon, CO 80435	
Ladies and Gentlemen:	
drafts at sight accompanied by your sign payment of public improvements pursua Agreement/Development Agreement/PU into between the Town of Dillon, Colora subdivision/development and filing num Agreement") or (b) "We have received a Bank) that Letter of Credit No	(insert amount in words) available by your ned statement that either (a) the drawing is for ant to: Town of Dillon Subdivision Improvement JD Agreement dated, entered ado and (Include name of
Credit will be returned to the Town of D Drafts must be drawn and presented for date). Each draft presented under this le	event of a partial drawing, the original Letter of Dillon by the issuing Bank after endorsement.  payment on or before (expiration letter of credit must state that it is drawn under (expiration letter of Credit) and the amount endorsed on this
letter of credit. We hereby agree with the drawers, endounder and in compliance with the terms duly honored upon the presentation to the This Letter of Credit shall be automatical periods of one year from the present or a sixty (60) days prior to any such date we service that we elect not to so extend this	orsers and bona fide holders of all drafts drawn of this Letter of Credit that such drafts will be ne drawee.  ally extended without amendment for additional any future expiration date hereof unless at least e shall notify you in writing by overnight courier is Letter of Credit.  s Letter of Credit is governed by the Uniform
By:	
Title:	
	Attest:

### EXHIBIT "J" SITE LIGHTING FIXTURES

### EXHIBIT "K" WORKFORCE HOUSING RESTRICTIVE COVENANT AND AGREEMENT