STORMWATER MANAGEMENT PLAN

FOR ANTELOPE RIDGE AT BULL HILL PHASE 1

PUDSP 255

Stormwater Permit # _

Certification # _____

Owner/Developer:
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SWMP Administrator/ Qualified Stormwater Manager:

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Contractor:

TBD

SWMP Location
On-site (copy) and Eagle Development (original)

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SWMP REPORT REVISION LOG

REV. #	DATE:	BY:	COMMENTS	Initials
1.				
2.				
3.				
4.				
5.				

1.0 INTRODUCTION

Antelope Ridge at Bull Hill Phase 1 consists of 472 residential lots and several tracts of land for a total site area of 164.586 acres. The site is currently ranching land within Bull Hill.

Eagle Development is the overall developer and will construct major infrastructure (grading, roads, utilities, etc.) to serve the entire site. This Stormwater Management Plan (SWMP) will only cover construction activities that are provided as the overall developer. Antelope Ridge at Bull Hill Phase 1 (PUDSP 255) consists of early overlot grading of the entire site, construction of Pond C, and a portion of the storm sewer system necessary to allow drainage to flow to Pond C. In addition, Eagle Development will construct the remaining storm sewer, watermain, and sanitary sewer at their own risk as allowed by El Paso County. Future construction of the street improvements and final grading plans can be added to this SWMP manual as the Bull Hill development progresses which will require this SWMP plan to be updated to reflect the revised scope of infrastructure.

Site Description:

The site is located east of the East Tributary of Jimmy Camp Creek and south of Bradley Road. The nearest major intersection is Bradley Road and Meridian Road. The major infrastructure for ***Antelope Ridge at Bull Hill Phase 1*** includes early overlot grading, Pond C construction, and offsite/onsite utilities. Detention/Water quality for this development is located in Pond C, constructed as part of this project. This pond will treat and detain stormwater runoff prior to discharging southwest into the East Tributary of Jimmy Camp Creek. The East Tributary of Jimmy Camp Creek, located on the west side of the project site, will be reconstructed and covered by a separate permit and construction plans (CDR234).

ANTELOPE RIDGE AT BULL HILL FILING NO. 1
BOUNDARY LEGAL DESCRIPTION (164.586 ACRES)

A PARCEL OF LAND IN SECTION 12, T15S, R65W OF THE 6TH P.M., EL PASO COUNTY, COLORADO, BEING PORTIONS OF THOSE PARCELS DESCRIBED BY SPECIAL WARRANTY DEEDS RECORDED UNDER RECEPTION NOS. 221024677 AND 221136530 IN THE RECORDS OF EL PASO COUNTY, COLORADO, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS;

COMMENCING AT THE NORTHEAST CORNER OF THAT PARCEL DESCRIBED BY SPECIAL WARRANTY DEED RECORDED UNDER RECEPTION NO. 214000553 IN THE EL PASO COUNTY, COLORADO RECORDS;
THENCE N76°10'55"E ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD AS DESCRIBED IN EL PASO COUNTY BOARD OF COUNTY COMMISSIONERS RESOLUTION NO. 98-360 RECORDED UNDER RECEPTION NO. 098124132 IN THE RECORDS OF SAID EL PASO COUNTY, 673.21 FEET TO THE POINT OF BEGINNING:

THENCE CONTINUING N76°10'55"E ALONG SAID RIGHT-OF-WAY LINE, 1,674.63 FEET TO THE WESTERLY LINE OF THAT 100 FOOT WIDE ELECTRICAL EASEMENT DESCRIBED IN GRANT OF RIGHT-OF-WAY RECORDED IN BOOK 2655 AT PAGE 58 IN THE RECORDS OF EL PASO COUNTY, COLORADO;
THENCE S46°04'43"E ALONG SAID WESTERLY LINE, 2,949.79 FEET;
THENCE S68°36'12"W A DISTANCE OF 139.82 FEET;
THENCE S38°36'12"W A DISTANCE OF 21.97 FEET;
THENCE S68°36'12"W A DISTANCE OF 75.97 FEET;
THENCE N81°23'48"W A DISTANCE OF 21.97 FEET;
THENCE S68°36'12"W A DISTANCE OF 919.40 FEET TO A POINT OF CURVE;
THENCE 296.38 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 535.00 FEET, A CENTRAL ANGLE OF 31°44'28", THE CHORD OF 292.61 FEET BEARS S52°43'58"W TO A POINT OF TANGENT;
THENCE S36°51'43"W A DISTANCE OF 43.98 FEET;

THENCE 494.38 FEET ALONG A NON TANGENT CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 120.00 FEET, A CENTRAL ANGLE OF 236°03'05", THE CHORD OF 211.86 FEET BEARS S79°21'55"W;
THENCE N53°08'17"W, NON-TANGENT TO THE PREVIOUS COURSE, 712.38 FEET;
THENCE N83°08'17"W A DISTANCE OF 25.97 FEET;
THENCE S66°51'43"W A DISTANCE OF 23.21 FEET;
THENCE S36°51'43"E A DISTANCE OF 93.44 FEET;
THENCE S53°08'17"E A DISTANCE OF 43.70 FEET TO A POINT OF CURVE;
THENCE 161.83 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 175.00 FEET, A CENTRAL ANGLE OF 52°59'01", THE CHORD OF 156.12 FEET BEARS S26°38'46"E TO A POINT OF TANGENT;
THENCE S00°09'15"E A DISTANCE OF 235.78 FEET;
THENCE S89°50'45"W A DISTANCE OF 1,259.66 FEET TO THE EAST LINE OF THE WEST HALF OF THE SOUTHWEST QUARTER (W ½ SW ¼) OF SAID SECTION 12,BEING THE EAST LINE OF BLH NO. 2 LLC PROPERTY;
THENCE N00°08'59"W ALONG SAID EAST LINE, 496.33 FEET TO THE NORTHEAST CORNER OF SAID BLH NO. 2 LLC PROPERTY;
THENCE S89°17'26"W ALONG THE NORTH LINE THEREOF, 256.96 FEET
THENCE N17°44'19"W A DISTANCE OF 965.15 FEET TO A POINT OF CURVE;
THENCE 490.03 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 743.44 FEET, A CENTRAL ANGLE OF 37°45'58", THE CHORD OF 481.21 FEET BEARS N01°08'40"E TO A POINT OF TANGENT;
THENCE N20°01'39"E A DISTANCE OF 522.11 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS AN AREA OF 7,169,351 S.F. (164.586 ACRES, MORE OR LESS).

BASIS OF BEARING: A PORTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD AS DESCRIBED IN EL PASO COUNTY BOARD OF COUNTY COMMISSIONERS RESOLUTION NO. 98-360 RECORDED UNDER RECEPTION NO. 098124132 IN THE RECORDS OF EL PASO COUNTY, COLORADO, SAID LINE BEING MONUMENTED ON THE WEST BY A NO. 5 REBAR AND 1.25 INCH ALUMINUM CAP STAMPED "CRITIGEN PLS 38166" FROM WHENCE THE EAST END MONUMENTED BY A NO. 5 REBAR AND YELLOW PLASTIC CAP STAMPED "PLS 23044" BEARS N76°10'55"E A DISTANCE OF 3,283.82 FEET. THE UNIT OF MEASUREMENTS IS THE U.S. SURVEY FOOT.

2.0 SEQUENCE OF MAJOR ACTIVITIES – Exhibit 1 Construction

The anticipated date for beginning construction activities is March, 2026 and will be complete in October, 2026. Implementation of the storm water management plan should be in place prior to initiating construction activities. Infrastructure for all residential lots will be installed in one phase. The anticipated sequence of construction is as follows:

Initial: (March, 2026):
1. Installation of perimeter erosion control measures as shown on Exhibit 1.
2. Vehicle Tracking Control Pads
3. Inlet Protection on existing inlets

Interim Stage (March, 2026 - September, 2026)
4. Site Clearing/Grubbing and topsoil stockpiling.
5. Rough Grade Site
6. Construct temporary sediment traps as construction progresses
7. Construct Pond C and outlet structure
8. Construct sedimentation basins as grading progresses
9. Construct underground water/sewer/storm.
10. Construct curb/gutter and pavement.

Final: (September, 2026 to June, 2027)
11. Final stabilize areas outside of ROW.
12. Construct gas/electric/cable/phone in the ROW areas.
13. Final stabilize ROW.
14. Final erosion control measures as areas are completed
15. Remove construction BMP's

3.0 PRE-DEVELOPMENT CONDITIONS

According to the current FEMA Flood Insurance Rate Map (FIRM) number 08041CO790 G, this site is located within the 100-year floodplain. See Appendix A.

Existing Vegetation:
The site is currently undeveloped and has been used as a pasture for many years. Ground cover is estimated at 65% density and will be visually verified in the field prior to groundbreaking activities.

Existing Slopes:
Existing slopes are around 2-10% that direct runoff southwesterly to the East Tributary of Jimmy Camp Creek.

Existing Drainage Patterns:
Pre-development drainage patterns generally flow southwest to the East Tributary of Jimmy Camp Creek.

Existing Soil Types:
The following table summarizes the characteristics of the soil type.

Table 3.1: SCS Soils Survey for Entire Study Area

Soil No.	Soil	Hydro. Group	Shrink/Swell Potential	Permeability	Surface Runoff Potential	Erosion Hazard
78	Sampson Loam (12.7%)	B	Moderate	Slow	Low	Slight
89	Tassel Fine Sandy Loam (20.9%)	D	Low	Moderately Rapid	Medium	Moderate to High

The existing soil types have a moderate potential for erosion which can be mitigated by employing appropriate downstream construction BMP's before/during/after construction to limit potential impacts to stormwater discharges. The potential impacts are sediment discharge into the existing downstream land and the proposed storm sewer system. Sediment should not be allowed to enter these existing and proposed facilities and can be mitigated by constructing small temporary sediment traps at low points and sediment basins prior to discharge into the downstream systems.

In order to utilize Sediment Pond C, sediment may be allowed to enter the storm sewer system during the overlot grading process which are not public facilities at this time. No sediment will be allowed to discharge downstream of Pond C. Based upon the location of the different soil types and type of construction, the contractor shall employ the most appropriate method of erosion control measures based on the El Paso County/City of Colorado Springs Drainage Criteria Manual, Vol. 2 or as directed by the SWMP administrator or his representative.

More detailed soils information can be found in the SCS soils survey for El Paso County.

4.0 DEVELOPED CONDITIONS

The overall drainage concept for ***Antelope Ridge at Bull Hill Phase 1*** is to direct the project area runoff southwest to a WQ pond C constructed as part of this project. Stormwater Quality and detention will be provided in Pond C prior to discharge into the East Tributary of Jimmy Camp Creek. The contractor will be responsible for any re-excavation of sediment and debris that collects in the basin depression required to ensure that the basin meets the design grades following construction. The storm lines shall also be cleaned and free of sediment once the site becomes stabilized.

There are no control measures owned/operated by another entity within this project site and disturbed area.

Proper erosion protection will be installed so no sediment enters the public storm sewer system or is discharged offsite.

Construction Site Estimates:

- Project Site: 164.586 acres
- Disturbed Area: 150.00 acres

- Percent Impervious before Construction: 0%
- Runoff Coefficient before Construction: 0.35 for undeveloped
- Ground Cover density prior to construction 65%

- Percent Impervious after Construction: 52%
- Runoff Coefficient after Construction: 0.55 for developed areas
- Final stabilization must be 70% of pre-construction density.

Receiving Waters:

- East Tributary of Jimmy Camp Creek
- This SWMP does not include any grading within the floodway of the East Tributary of Jimmy Camp Creek.
- Description: The creek channels are dry creek beds that flow water intermittently after significant rainfall events in the drainage basin.
- Description of Storm Sewer System: There will be a storm sewer system in Rolling Meadow Drive, on-site streets, and Pond C.
- Description of impaired waters or waters subject to TMDLs: The site contains no impaired waters or waters subject to TMDLs.

- Description of unique features that are to be preserved**:** There are no known protected plant species within the project limits.
- Describe measures to protect these features: there are no known features to be protected.

Site Features and Sensitive Areas to be Protected:
This site is located within (100-year floodplain) and contains no other sensitive areas including wetlands or endangered species and no grading will occur in the floodway of the creek.

Stream Crossings:
This site is located within the (100-year floodplain) and there will be no stream crossings with this development.

5.0 POTENTIAL SOURCES OF POLLUTION AND CONTROL STRATEGIES

Potential sources of sediment to stormwater runoff include earth moving and concrete activities associated with grading and landscaping.

Potential pollutants and sources, other than sediment, to stormwater runoff include Trash, debris, line transfer, Dewatering, fueling and equipment failure.

A dewatering permit may be necessary with this project for deep sanitary sewer construction. If so, this permit will need to be updated to include dewatering and discharge of water.

There are no asphalt or concrete batch plants proposed with this project.

Construction activities produce many different kinds of pollutants which may cause storm water contamination problems. Grading activities remove rocks, vegetation and other erosion controlling surfaces, resulting in the exposure of underlying soil to the elements. Because the soil surface is unprotected, soil and sand particles are easily picked up by wind and/or washed away by rain or other water sources.

The following sections highlight the potential sources of pollution at the Project Site and list the "Best Management" strategies that will be used to prevent migration of pollution offsite. Chemical materials stored indoors or that have no reasonable chance of impacting storm water quality will not be discussed in this plan.

Materials of significance stored on the project site include:

- Sediment
- Concrete Washout
- Cement
- Trash & Debris
- Sanitary Wastes
- Fuels & Oils

5.1 Wind Erosion & Dust Control

Pollutant: Sediment
Best Management Strategies:

- Daily inspections will occur for areas experiencing excessive winds, vehicle traffic, or precipitation events.

- Water trucks will spray down dust on the project Site as needed to not impact adjacent properties.
- Attention will be given to prevent the over use of water in dust control operations to minimize any muddying of the surface and possible sediment transportation.

5.2 Vehicular Transport
Pollutant: Sediment Tracking
Best Management Strategies:
- Construct a stabilized construction entrance to provide ingress and egress of the site.
- Restrict access to the stabilized construction entrance.
- Fencing will be erected if problems with access control are evident.
- Maintain track out pads by fluffing up the rock material or by adding additional rock as needed.
- Inspect, sweep and clean adjacent streets where track out is evident.

5.3 Stockpiles
Pollutant: Sediment
Best Management Strategies:
- Locate stockpiles clear of any water flow paths.
- Locate stockpiles within the property boundary.
- Stockpiles will have erosion control devices as needed installed around the base to prevent the migration of soil.
- Topsoil stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 14 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in the area.

5.4 Grading, Trenching, Export/Import
Pollutant: Sediment
Best management Strategies:
- Earth moving will be minimized by the engineering balancing of the site.
- Disturbed portions of the site where construction activity temporarily ceases for at least 14 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in the area.
- Seed bed preparation is not required if soil is in loose condition.
- Prior to seeding, fertilizer shall be applied to each acre to be stabilized in accordance with the manufacturer's specifications.
- If required seeding areas shall be mulched with straw to a uniformed cover. The straw mulch is to be tacked into place by a disk with blades set nearly straight.
- A site specific erosion control drawing has been developed showing the location of Best Management practices to be used during site construction.
- Where indicated on the erosion control plan, Best Management Practices will be installed.
- Material shall be in accordance with the plans and specifications and all construction shall be provided in accordance with the manufacturer's specifications.
- All BMP's will be inspected bi-weekly and cleaned/maintained as required.

5.5 Waste, Residual Concrete
Pollutant: Concrete, paint, and Phosphoric Acid

Best Management Strategies:

- A cleanup and washout area will be designated and posted.
- Subcontractors will be instructed on the locations and importance of the washout and cleanup areas. No on-site disposal is allowed.
- Instruct subcontractors to remove waste for which proper onsite disposal facilities are not provided back to their own facilities for ultimate transport, storage & disposal.
- Subcontractors and subcontractor employees are held responsible for improper washout.

5.6 Sanitary Facilities, Trash Containers & Littering

Pollutant: Bacteria, Ammonia, Trash

Best Management Strategies:

- Portable facilities will be regularly serviced to prevent excessive waste containment and overflow.
- All waste materials will be collected and stored in a container which will meet all local and any state solid waste management regulations.
- Trash dumpsters will be emptied prior to becoming 90% full or when debris control becomes an issue.
- Employees will be instructed on the importance of recycling and waste management, and will be held responsible for improper waste management.

5.7 Fueling, Hazardous Materials, Equipment Leakage, Fertilizer

Pollutant: Petroleum Hydrocarbons, Ethylene Glycol, Sediment

Best Management Strategies:

- MSDS sheets will be maintained in the project trailer for all onsite materials
- All dry materials such as cement will be covered and protected from rain.
- Secondary containment will be provided for stored fuel, oil, paint and any material classified as hazardous.
- Subcontractors are responsible for hazardous waste removal back to their own facilities for ultimate transportation, storage and disposal.
- Supplies will be kept onsite as necessary to control any potential spill.
- Employees will be held responsible for any illegal dumping.
- Seals will be checked by a qualified professional on all equipment and containers containing significant materials that could contribute potential pollutants and will be replaced as necessary.
- Equipment will be inspected by a qualified professional.
- Drip pans will be available for minor leaks and during fueling operations.
- Fueling nozzles, gauges, hoses, seals, and emergency shutoff valves will be inspected for leaks prior to use.
- Under no circumstances during fueling will the fueling hose/nozzle be left unattended.
- Fertilizers used will be applied only in the minimum amounts recommended by soil tests.
- Once applied, fertilizers will be worked into the soil to limit exposure to storm water.
- Stored fertilizer will be protected from exposure to precipitation and storm water runoff.

5.8 Dewatering – may be necessary. This shown for information only, additional information to be provided if used.

Pollutant: Sediment, Oil and/or Grease and Phosphoric Acid

Best Management Strategies:

- All dewatering will be filtered through rock and/or woven geo mesh fabric.

- All dewatering will be tested for Pollutants per state guidelines weekly

5.9 Concrete and Asphalt Batch Plant This shown for information only
There are no existing batch plants located on this project site and there are no proposed batch plants in the future.

6.0 BEST MANAGEMENT PRACTICES (BMP's)

Also refer to attached Erosion and Sediment Control notes and plans included in the site plans

6.1 – Erosion and Sediment Control BMP's

6.1.1 Minimize Disturbed Area and Protect Natural Features and Soil
All work will occur inside the limits of construction per the erosion Control Site Plan. See Exhibit 1.

6.1.2 Phase Construction Activity
The sequence for the installation and removal of erosion and sediment control measures is as follows:

1. Installation of perimeter erosion control measures as shown on Exhibit 1.
2. Site Clearing/Grubbing and topsoil stockpiling.
3. Construct detention/sediment ponds
4. Final grading of street ROW's and other areas
5. Construct underground water/sewer/storm.
6. Construct curb/gutter and pavement.
7. Final stabilize areas outside of ROW.
8. Construct gas/electric/cable/phone in the ROW areas.
9. Final stabilize ROW.
10. Final erosion control measures as areas are completed

6.1.3 Control Stormwater Flowing onto and through the Project
Narrative:
Temporary sediment traps, sediment basins, swales, and a proposed storm sewer system will convey stormwater throughout the site.

6.1.4 Stabilize Soils
No disturbed area which is not actively being worked shall remain denuded for more than 14 calendar days unless otherwise authorized by the director. Temporary cover by seeding or mulching should be provided on areas which will be exposed for a period greater than 14 days before permanent stabilization can be achieved. Permanent cover should be provided on all areas as soon as possible, by means of seeding and mulching, straw or hay mulch is required. All soil stock piles and borrow areas must protected with silt fence within 14 days after grading. All slopes within the project limits that are found to be eroding excessively within two years of permanent stabilization shall be provided additional slope stabilization methods such as seeding and mulching.
Water is to be used for dust control. The Contractor will prevent the escape of this water and any sediment it may carry from the construction site.

6.1.5 Protect Slopes

Temporary stabilization will include the installation of silt fences on level contours spaces at 10-20 foot intervals. Slopes will be seeded and covered with hay, straw or erosion control blankets on slopes greater than 3:1 as needed to provide for temporary stabilization until vegetation is permanently established.

All slopes within the project limits that are found to be eroding excessively within two years of permanent stabilization shall be provided additional slope stabilization methods such as seeding and mulching. Where slopes are steeper than 3:1 erosion control blankets (per specification requirements) will be utilized for final stabilization.

6.1.6 Protect Storm Drain Inlets

Inlet protection will be installed as soon as storm drain inlets are installed and before land-disturbance activities begin in areas with existing storm drain systems.

At the Contractor's discretion, additional temporary erosion control practices to include rock bags and sand bag barriers may be installed to prevent sediment movement. Inlet protection will include rock bags erosion logs curb inlet sediment filters where an overflow capacity is necessary to prevent excessive ponding in front of the curb inlet. Concrete block and wire screen inlet protection if used a detail will be included Appendix B prior to installation, will be used where heavy flows are expected and where an overflow capacity is necessary to prevent excessive ponding around the inlet.

Inlet protection devices will be inspected and accumulated sediment will be removed as needed.

6.1.7 Establish Perimeter Controls and Sediment Barriers

Temporary stabilization will include the installation of silt fences on the downslope perimeter of project area. The silt fence will be trenched in on the uphill side 6 inches deep and 6 inches wide as detailed in the silt fence exhibit. Sediment will be removed when it reaches 1/3 the height of the fence. Silt fence will be inspected and replaced or repaired as needed.

6.1.8 Retain Sediment On-Site

Temporary sediment traps and sediment basins shall be installed to detain sediment laden runoff from small watersheds for a period long enough to allow sediment to settle before discharge into receiving waters. For small drainage locations smaller sediment traps should be used. At a minimum, silt fences, vegetative buffer strips or equivalent sediment controls are required for all down-slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal will be utilized. Sediment traps/basins will be checked regularly for sediment cleanout. Sediments shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one half the design volume of the wet storage. Sediment shall be disposed in suitable areas and in such a manner that will not erode or cause sedimentation problems. The gravel outlets will be checked regularly for sediment buildup which will prevent damage. If the gravel is clogged by sediment, it shall be removed and cleaned or replaced.

6.1.9 Establish Stabilized Construction Exits

The construction entrance will be established in the entry points of roads. The construction entrance will be at least 75 feet in length and approximately 12 feet wide and graded so runoff does not leave the site. The aggregate will be established at 8 inches thick on top of 4 inch minimum thick free draining material on top of geotextile and will consist of Type G dense

graded material. A stabilized stone pad with a filter fabric under liner will be placed at points of vehicular ingress and egress.

6.1.10 Additional BMP's

BMP Schedule:

All Sediment and Erosion control BMP's (detailed below and only on BMP site map and details if utilized onsite) will be installed prior to any excavation or demolition and will be coordinated with the construction schedule.

As construction changes and new temporary BMP's are needed to control sediment and erosion temporary BMP's will be installed within 24 hours of inspection report.

Recommended BMP's:

ALL RECOMMENDED BMP'S WILL BE INSTALLED PRIOR TO EXCAVATION NEAR ANY SENSITIVE AREAS.

Culvert Inlet Protection will be used to protect existing and new culvert inlets. Inlet Protection Detail will be included in Appendix before using onsite. Removal of this BMP will occur only after vegetation is established to a minimum of 70% pre construction coverage and after removal of BMP all sediment builds up will be removed and the area exposed shall be seeded.

Silt Fence is to be installed in sensitive areas to protect stream channels, pond, and overland runoff. On this site it will be used to protect runoff from the slip pits. See Silt Fence Detail. Removal of this BMP will occur only after vegetation is established to a minimum of 70% pre construction coverage and after removal of BMP all sediment builds up will be removed and the area exposed shall be seeded.

Vehicle Tracking Control is needed at the main construction entrance location. Vehicle tracking control shall be installed at the edge of the construction staging area where construction vehicles regularly exit onto existing asphalt road. If sediment tracking occurs it will be cleaned within 24 hours.

See Vehicle Tracking Control Detail in Appendix B. Removal of this BMP will occur only after project is substantially complete and is ready for seeding operations; the area will then be seeded per specification with the rest of the project.

Check Dams (rip rap) will be used to reduce storm water velocities in drainage channels during construction as a temporary measure until permanent stabilization can be created and vegetation has been established. Check Dam Detail will be included in the the Appendix before using onsite. Removal of this BMP will occur only after vegetation is established to a minimum of 70% pre construction coverage and after removal of BMP all sediment build-up will be removed and the area exposed shall be seeded.

Portable Toilets: Portable toilets are brought in from a service contractor and will be maintained in accordance with standard waste disposal practices using vacuum trucks and place on stable ground to minimize risk of spillage. All portable toilets will be kept a minimum of 50' from any state waters and a minimum of 10' from stormwater inlets.

They shall be adequately staked and cleaned on a weekly basis. They will be inspected daily for spills.

Waste Disposal: If needed Roll offs will be utilized for standard construction waste. A qualified contractor will remove waste weekly and take to an appropriate dump site off this project.

6.1.11 Permanent BMP'S:

Re-vegetation:

During construction any disturbed area not being currently worked left dormant longer than 14 days will be re-vegetated per specification with native seed and mulched and crimped with weed free straw.

Final Stabilization will be considered complete when all disturbed areas have a minimum of 70% preconstruction coverage for the specification requirements. Then all temporary BMP's will be removed and the exposed areas left behind will be seeded.

Other permanent BMP's include Permanent Full Spectrum Detention/WQ Pond C to treat storm runoff prior to runoff that drains to the East Tributary of Jimmy Camp Creek. This pond includes concrete forebays, concrete low flow channels, and full spectrum outlet structures including water quality.

6.2 Good Housekeeping BMP'S

6.2.1 Material Handling and Waste Management

The site will use a private refuse collector that will remove litter twice weekly. No less than one litter receptacle will be present at the construction site. In the event that unusual items such as tanks, cylinders, unidentified containers, etc. which could contain potentially hazardous materials are discovered or disturbed, the Fire and Rescue services will be notified.
Litter and debris will be picked up and disposed of properly daily.
Temporary toilet facilities will be located 50 feet away from any storm drain inlets and all waters of the state.

6.2.2 Establish Proper Building Material Staging Areas

A designated staging area will be used, location to be determined based on available space in the field and plans will be redline. The staging area will be contained per SWMP guidelines. All Equipment and Materials will be brought into the site as needed.

6.2.3 Designate Washout Areas

A concrete washout will be installed to detail as shown in Exhibit 1, and will be placed more than 500 feet away from any waters of the state.

6.2.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

During construction the site will be exposed to operation and maintenance of construction equipment. The contractor shall be responsible for all activities such as fueling, oil changing, lubrication and repair which require use of petroleum products. Such products shall be transported to and from the site in special trucks equipped for that purpose. No waste petroleum products, rags, residue, or equipment parts shall be left on site. In the event of a spill or leak, causing soil to be contaminated, that soil shall be excavated placed in sealed barrels and removed from the site for transport to an approved location for disposal.

See section 7 for the Spill Plan.

6.2.5 Control Equipment/Vehicle Washing
Washing any equipment will not be allowed on-site

6.2.6 Any Additional BMPs
There are no additional BMP's anticipated

6.2.7 Allowable Non-Stormwater Discharge Management
There are no visible natural springs or irrigation or other non-stormwater discharges anticipated to be encountered.

6.2.8: SELECTING POST-CONSTRUCTION BMPs
Post Construction BMPs. Re-vegetation including seeding, mulching and erosion control blanket, and WQ ponds for long-term stormwater quality will be final BMP's. Permanent stabilization will be achieved with 70% pre construction vegetative establishment.

7.0 SPILL PREVENTION AND CONTROL PLAN

The SITE SUPERINTENDENT will act as the point of contact for any spill that occurs at this jobsite. The project manager will be responsible for implementation of prevention practices, spill containment / cleanup, worker training, reporting and complete documentation in the event of a spill. The ECO shall immediately notify the Owner, /Construction Manager, STATE and the Local Fire Department in addition to the legally required Federal, State, and Local reporting channels (including the National Response Center,
800.424.8802) if a reportable quantity is released to the environment
.

7.1 SPILL PREVENTION BEST MANAGEMENT PRACTICES
This section describes spill prevention methods Best Management Practices (BMP) that will be practiced to eliminate spills before they happen.

7.1.a Equipment Staging and Maintenance
Store and maintain equipment in a designated area Reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous materials.
Use secondary containment (drain pan) to catch spills when removing or changing fluids.
Use proper equipment (pumps, funnels) to transfer fluids Keep spill kits readily accessible Check incoming vehicles for leaking oil and fluids.
Transfer used fluids and oil filters to waste or recycling drums immediately following generation.

Inspect equipment routinely for leaks and spills Repair equipment immediately, if necessary implement a preventative maintenance schedule for equipment and vehicles.

7.1.b Fueling Area
Perform fueling in designated fueling area minimum 50' away from federal waters
Use secondary containment (drain pan) to catch spills
Use proper equipment (pumps, funnels) to transfer fluids
Keep spill kits readily accessible
Inspect fueling areas routinely for leaks and spills
Hazardous Material Storage Areas
Reduce the amount of hazardous materials by substituting non-hazardous or
Less hazardous materials.

7.1. c Hazardous Material Storage Areas
Minimize the quantity of hazardous materials brought onsite
Store hazardous materials in a designated area away from drainage points.

7.1. d Unexpected Contaminated Soil and Water
• Investigate historical site use
• Perform all excavation activities carefully and only after the Owner/Construction Manager directed any activities

7.2 **SPILL CONTAINMENT METHODS**
The following discussion identifies the types of secondary containment that will be used in the event of a spill. Table 1 summarizes the containment methods for each potential source.

• **Equipment Staging and Maintenance Area.** An equipment leak from a fuel tank, equipment seal, or hydraulic line will be contained within a spill containment cell placed beneath all stationary potential leak sources. An undetected leak from parked equipment will be cleaned up using hand shovels and containerized in a 55-gallon steel drum for offsite disposal.
• **Fueling Area.** A small spill during fueling operations will be contained using fuel absorbent pads at the nozzle. The transfer of fuel into portable equipment will be performed using a funnel and/or hand pump and a spill pad used to absorb any incidental spills/drips. Any leaking tanks or drums will have fluids removed and transferred to another tank, drum, or container for the fluids. A spill response kit will be located near the fueling area or on the fuel truck for easy access. The spill response kit will include plastic sheeting, tarps, over pack drums, absorbent litter, and shovels.
• **Hazardous Material Storage Area.** A spill from containers or cans in a hazardous material storage area will be contained within the storage cabinet these materials are kept in.
• **Unexpected Contaminated Soil.** If contaminated soil is encountered during the project, the
Owner/Construction Manager will be notified immediately. Small quantities of suspected contaminated soil will be placed on a 6-mil plastic liner and covered with 6-mil plastic. A soil berm or silt fence will be used to contain the stockpile and prevent migration of contaminated liquids in the soil.

Table 1: Spill Prevention and Containment Methods

Potential Spill Source	Potential Spill Source
Equipment Staging and Maintenance Area	Spill containment pad, spill kit, pumps, funnels
Fueling Area (site equipment only	Spill containment pad, spill kit, pumps, funnels
Hazardous Material Staging Area	Spill containment pad, spill kit, pumps, funnels
Unexpected Contaminated Soil	Plastic liner, plastic cover, soil berm, hay bales, lined super sacks

7.3 SPILL COUNTERMEASURES

Every preventative measure shall be taken to keep contaminated or hazardous materials contained. If a release occurs, the following actions shall be taken:

1. **Stop the Spill:** The severity of a spill at the site is anticipated to be minimal as large containers/quantities of Hazardous Materials (HM) are not anticipated. The type of spill would occur while dispensing material at the HM storage facility and would likely be contained in secondary containment. Thus, the use spill kits or other available absorbent materials should stop the spill.
2. **Warn Others:** Notify co-workers and supervisory personnel of the release. Notify emergency responders if appropriate. For site personnel, an alarm system will consist of three one second blasts on an air horn sounded by the person discovering a spill or fire. In the event of any spill, the Superintendent and Project Manager shall be notified if the spill is 5 gallons or more the STATE will be contacted along with the Fire Department.
3. **Isolate the Area:** Prevent public access to the area and continue to minimize the spread of the material. Minimize personal exposure throughout emergency response actions.
4. **Containment:** A spill shall only be contained by trained personnel and if it is safe to do so. DO NOT PLACE YOURSELF IN DANGER. Attempt to extinguish a fire only if it is in the incipient stage; trash can size or smaller. For larger spills, wait for the arrival of emergency response personnel and provide directions to the location of the emergency.
5. **Complete a Spill and Incident Report:** For each spill of a Hazardous Material a spill and incident report shall be completed and submitted to the Owner/Construction Manager and if applicable to the Engineer and the State of Colorado Department of Public Health and Environment

8.0 INSPECTIONS

8.1 Inspections

Inspections will occur at least every 14 days and within 24 hours of a precipitation or snow melt event producing runoff, which from past experience this occurs with precipitation of 1/4 inch of rain or more. The primary site for tracking weather data and rainfall measurements will be taken from
Weather Underground and a rain gauge will be onsite for verification only.

1. Inspection Personnel:

The contract Qualified Stormwater Manager will conduct the site inspections as mentioned above in Section 8.1. The Qualified Stormwater Manager will be sufficiently qualified for the required duties per ECM Appendix I.5.

2. Inspection Schedule and Procedures:

The inspection schedule will be routinely accomplished every 14 days and after every storm event or snow melt for the entire site with all BMP's evaluated for performance and need. Any BMP found to be ineffective will be re-accomplished or replaced with a new BMP to provide the level of protection needed. BMP's found to be no longer needed will be removed. Inspections will also be accomplished as soon as practical, but within 24 hours of the end of a precipitation or snow melt event causing surface erosion.

The general procedures for correcting problems when they are identified will be to document the problem in the log and devise a solution utilizing all resources available to formulate BMP's that will correct the problem as soon as possible.

A copy of the inspection report to be used for the site is attached. See Appendix.

8.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):

Authorized representatives for the SWMP plan will be: Jeff Mark – Primary Contact
Qualified Stormwater Manager – Trevor Terrill

8.3 Revisions to the SWMP

The Qualified Stormwater Manager and/or the site superintendent have the authority to add/subtract/revise BMP's as necessary to accommodate stormwater flow and prevent runoff. However, the engineer should be notified when any major redirection of runoff, offsite runoff, pond modifications, or other substantial changes are made to this SWMP. Changes should be documented per Section 9.0.

9.0 RECORDKEEPING AND TRAINING

9.1 Recordkeeping

- Records will be retained for a minimum period of at least 3 years after the permit is terminated.
- Major activities will start on 03/01/2026:
- Date(s) when construction activities permanently cease on a portion of the site: 6/2027
- Date(s) when an area is either temporarily or permanently stabilized: 10/2026
- All inspection logs must be signed by a qualified stormwater manager

9.2 *Changes to the SWMP*

Any changes will be referenced in APPENDIX. See Section 8.3 for authority to change the SWMP. The SWMP should be viewed as a "living document" that is continuously being reviewed and modified as a part of the overall process of evaluating and managing stormwater quality issues at the site. The Qualified Stormwater Manager shall amend the SWMP when there is a change in design, construction, operation or maintenance of the site which would require the implementation of new or revised BMPs or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in

stormwater discharges associated with construction activity or when BMPs are no longer necessary and are removed

9.3 Training

Individual(s) Responsible for Training:
All personnel on site will trained on the site specific SWMP requirements to be conducted by the Qualified Stormwater Manager and/or the site superintendent.

9.4 SWMP Location

The on-site SWMP will be located at the SE corner of Bradley Road and Rolling Meadows Parkway. All signed inspection logs will be kept on-site with the SWMP

10.0 FINAL STABILIZATION

Final stabilization will be accomplished by contractors to re-vegetate the area of disturbance per the approved plans and specifications. Final stabilization will include permanent seeding/mulching of disturbed areas, sediment forebays, erosion control blankets, turf reinforcement mats, and permanent BMP's.

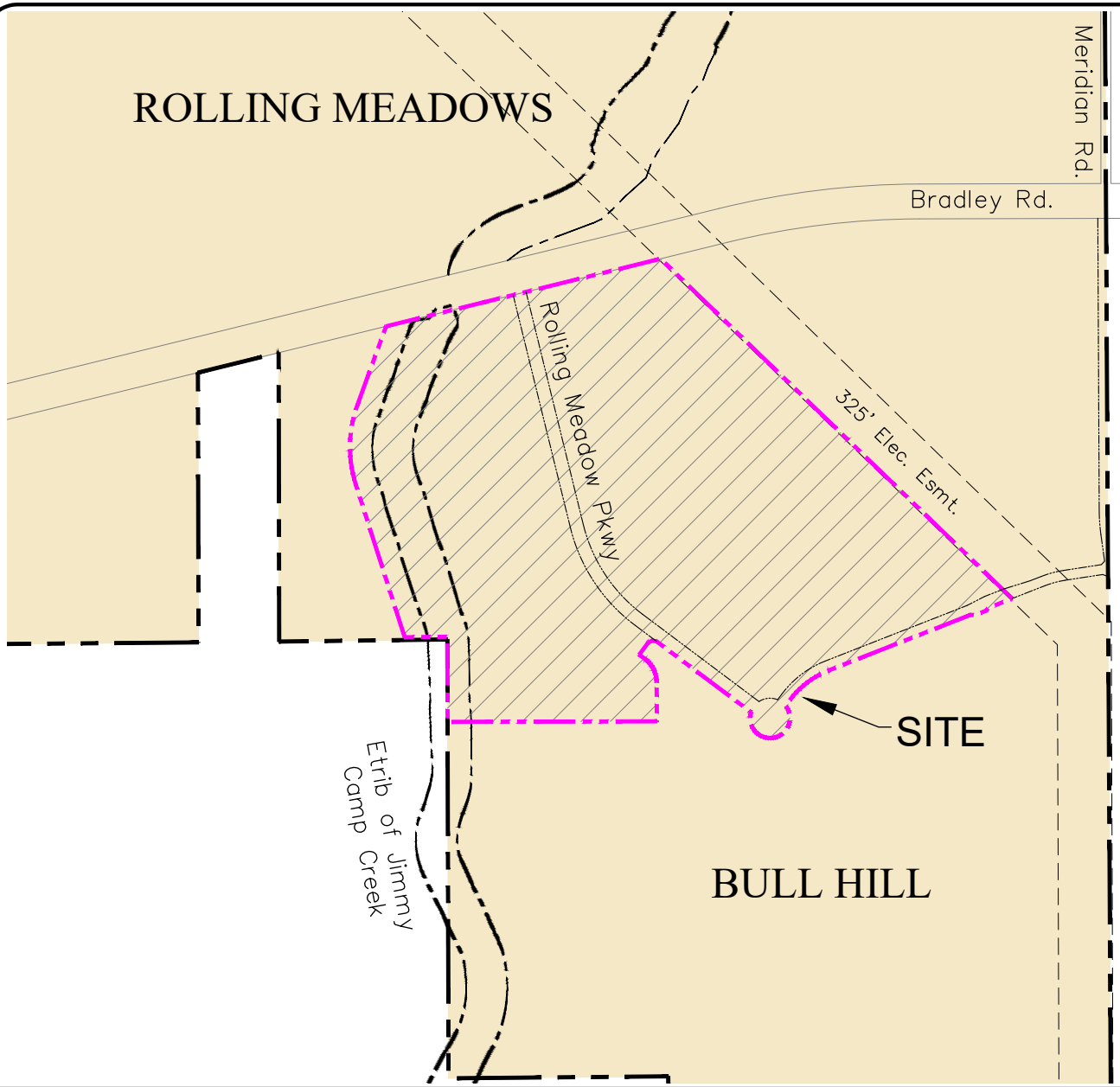
Once 70% of the pre-development vegetative cover has been established and has been accepted, temporary BMP's will be removed and the permit will be terminated and filed.

Long term stormwater quality will be achieved by on-site full spectrum detention ponds with WQ outlet structures. The contractor will be required to verify design grades are met in detention ponds prior to final stabilization. If sediment and debris has collected, it must be excavated/removed to meet design grades. In addition, storm lines shall be clean and free from sediment once the site has been stabilized.

Final stabilization is anticipated to be completed in June, 2027

This project does not rely on control measures that are owned/maintained by another entity.

APPENDIX A



N

VICINITY MAP
SCALE: 1"=1000'

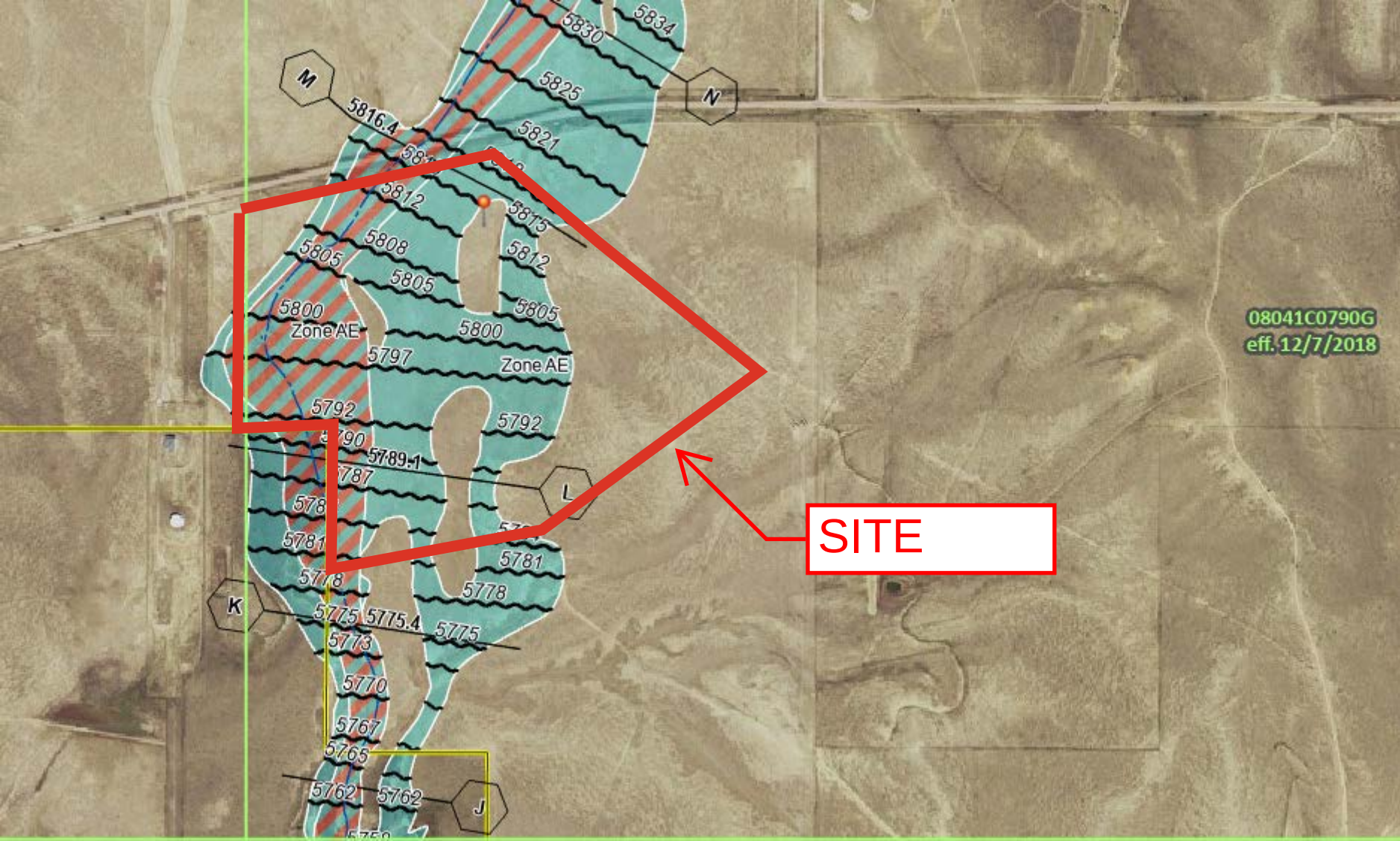
CORE
ENGINEERING GROUP

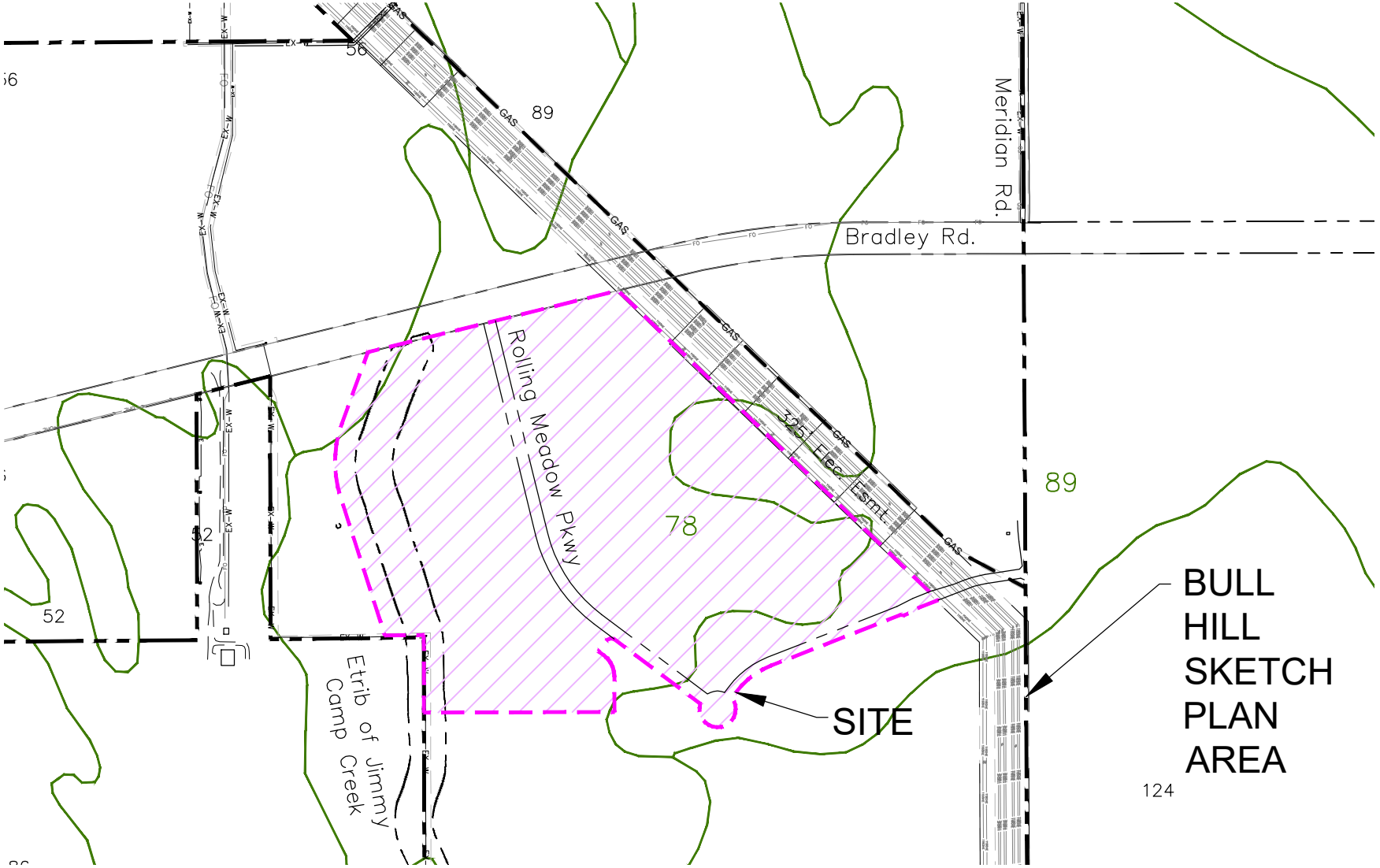
15004 1ST AVE. S.
BURNSVILLE, MN 55306
PH: 719.659-7800

CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

ANTELOPE RIDGE AT BULL HILL FIL. NO. 1
VICINITY MAP

SCALE:	DATE:	FIGURE NO.
NTS	MAY, 2025	--


SITE
08041C0790G
eff. 12/7/2018
Zone AE
Zone AE
M
N
L
K
J
5834
5830
5825
5821
5816.4
5815
5812
5812
5808
5805
5805
5805
5800
5800
5797
5792
5792
5789.1
5787
5781
5781
5778
5778
5775
5775.4
5775
5773
5770
5767
5765
5762
5762



VICINITY MAP
SCALE: 1"=1000'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

ANTELOPE RIDGE AT BULL HILL FIL. NO. 1
SOILS MAP

SCALE:	DATE:	FIGURE NO.
NTS	MAY, 2025	--

C:\Users\Rich\OneDrive - Core Engineering Group\PROJECTS\100.302\Drainage\soils map.dwg Mar 26, 2025 - 2:13pm

El Paso County Area, Colorado

78—Sampson loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 369s
Elevation: 5,500 to 6,500 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Sampson and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sampson

Setting

Landform: Terraces, alluvial fans, depressions
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 15 inches: loam
Bt - 15 to 34 inches: clay loam
Bk - 34 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: B
Ecological site: R049XB202CO - Loamy Foothill
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 4 percent
Hydric soil rating: No

Pleasant

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 20, Sep 2, 2022

El Paso County Area, Colorado

89—Tassel fine sandy loam, 3 to 18 percent slopes

Map Unit Setting

National map unit symbol: 36b5
Elevation: 5,600 to 6,400 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 47 to 51 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Tassel and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tassel

Setting

Landform: Hills
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous slope alluvium over residuum weathered from sandstone

Typical profile

A - 0 to 4 inches: fine sandy loam
C - 4 to 10 inches: sandy loam
Cr - 10 to 14 inches: weathered bedrock

Properties and qualities

Slope: 3 to 18 percent
Depth to restrictive feature: 6 to 20 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R067BY024CO - Sandy Plains
Other vegetative classification: SANDY PLAINS (069AY026CO)

Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 20, Sep 2, 2022

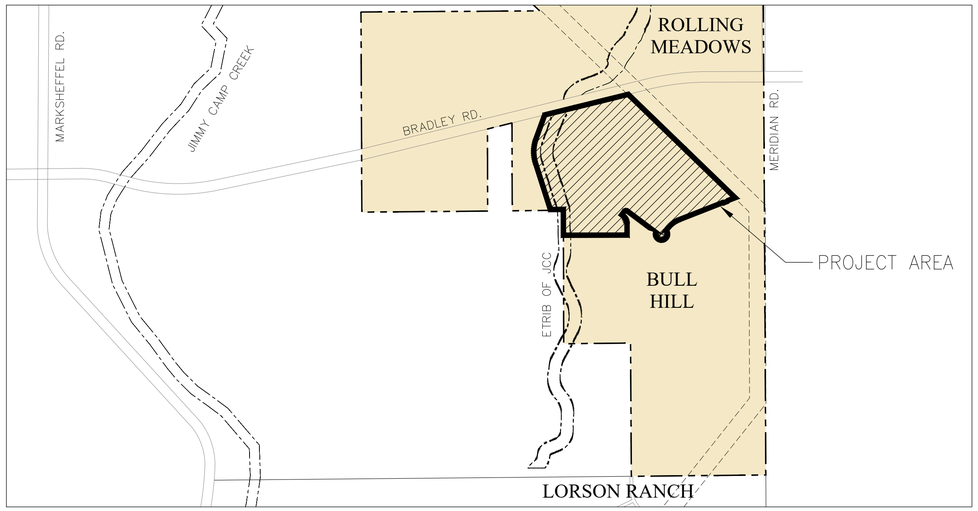
APPENDIX B

EROSION CONTROL PLANS

PRELIMINARY SITE GRADING CONSTRUCTION PLANS
FOR

ANTELOPE RIDGE AT BULL HILL FIL. NO. 1

EARLY OVERLOT GRADING / EROSION CONTROL PLANS



LOCATION MAP
1"=1500'

Know what's **below.**
Call before you dig.

CALL 2–BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
C1.1	COVER SHEET
C1.2	NOTES (GENERAL, GRADING, EROSION CONTROL)
C1.3	TYPICAL SECTIONS
C4.1 ~ C4.10	GRADING AND EROSION CONTROL PLAN
C7.1 ~ C7.3	STORM SEWER CONSTRUCTION
C9.1 ~ C9.4	POND C, OUTLET STRUCTURES, AND DETAILS
C12.1 ~ C12.4	DETAILS

LEGEND

STREET R.O.W.

STORM SEWER

DEVELOPER'S STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

NOV X, 2025
EAGLE DEVELOPMENT — DATE

WATER / SANITARY
WIDEFIELD WATER AND SANITATION DISTRICT
8495 FONTAINE BLVD.
COLORADO SPRINGS, CO 80925
719–390–7111

CABLE
COMCAST
P.O. BOX 173838
DENVER, CO 80217
970–641–4774

ELECTRIC
MOUNTAIN VIEW ELECTRIC
11140 E. WOODMEN RD.
COLORADO SPRINGS, CO 80831
719–495–2283

SECURITY FIRE PROTECTION DISTRICT
400 SECURITY BOULEVARD
SECURITY, CO 80911
719–392–7121

TELEPHONE
CENTURYLINK
7925 INDUSTRY ROAD
COLORADO SPRINGS, CO 80939
719–278–4651

GAS
COLORADO SPRINGS UTILITIES
1521 HANCOCK EXPRESSWAY
COLORADO SPRINGS, CO 80847
719–448–4800

EL PASO COUNTY
PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE
COLORADO SPRINGS, CO 80910
719–520–6300

BASIS OF BEARING

THE SOUTH RIGHT–OF–WAY LINE OF BRADLEY ROAD BEARS N76°10'55"E A DISTANCE OF 5849.08 FEET FROM ITS INTERSECTION WITH THE WEST LINE OF SECTION 11 TO THE POINT OF CURVE IN THE NORTHEAST QUARTER OF SECTION 12, BOTH POINTS BEING MONUMENTED WITH A YELLOW CAP PLS 23044.

BENCHMARK

FIMS MONUMENT NUMBER 202 IS A U.S. GEOLOGICAL SURVEY BRASS CAP STAMPED '11 HA 1947' IN A CONCRETE PAD, LOCATED ALONG DRENNAN ROAD, APPROXIMATELY 0.5 MILES EAST OF MARKSHEFFEL ROAD, APPROXIMATELY 200 FEET EAST OF A BRIDGE. THE MARK IS 32 FEET NORTH OF THE PAVEMENT, 23 FEET EAST OF A NORTH TO SOUTH FENCE LINE, AND 2 FEET NORTHEAST OF A POWER POLE." ELEVATION 5870.61 (N.G.V.D. 29)

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES AND MONITORING NECESSARY TO SAFELY COMPLETE THE WORK SHOWN IN THESE CONSTRUCTION DOCUMENTS IN CONFORMANCE WITH M.U.T.C.D. GUIDELINES. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK FOR PLAN REVIEW, PERMITS AND PROCESSING. TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY BUT IS INCLUDED IN THE COST OF THE PROJECT.

PREPARED FOR:
EAGLE DEVELOPMENT
N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, CO 80903
719–635–3200
CONTACT: JEFF MARK

PREPARED BY:
CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
719–570–1100
CONTACT: RICHARD L. SCHINDLER P.E.

CONSTRUCTION APPROVAL

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT. FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AN COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JOSHUA PALMER, P.E., COUNTY ENGINEER/ECM ADMINISTRATOR — DATE
CONDITIONS:

ENGINEER'S APPROVAL

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARING THIS PLAN

RICHARD L. SCHINDLER, P.E. # 33997
FOR AND ON BEHALF OF CORE ENGINEERING GROUP

PUD/SP 255

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@ceg1.com

NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
719.635.3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

COVER SHEET
EARLY GRADING AND
EROSION CONTROL PLAN

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C1.1
TOTAL SHEETS: 24

CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM AERIAL CONTOURS AND PREVIOUS CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
3. DEPTH OF MOISTURE–DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:
   BASE OF ALL CUTS AND FILLS – 12 INCHES,
   FULL DEPTH OF ALL EMBANKMENTS
4. THE CONTRACTOR IS RESPONSIBLE FOR THE RE–ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
5. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
6. PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF–ROLLED WITH A LOADED 988 FRONT–END LOADER OR SIMILAR HEAVY RUBBER TIRED VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER–EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTMM D–698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A–6 AND A–7–6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D–1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A–7–6 SOILS BELOW FULL–DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX–INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
7. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
8. FILL SHALL BE PLACED IN 8–INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
   - HAY BALE BARRIERS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
   - SILT FENCE WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
   - TEMPORARY SEDIMENTATION BASINS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
   - MULCHING AND SEEDING OF EXCESSIVE SLOPED AREAS AS NEEDED OR AS DIRECTED BY THE ENGINEER.
   - TEMPORARY VEHICLE TRACKING CONTROL AS NEEDED AND/OR DIRECTED BY THE ENGINEER.
   - CONCRETE WASH AREAS.
   - INLET PROTECTION.

   THESE AND ALL EROSION CONTROL BEST MANAGEMENT PRACTICES AS SHOWN IN THE GRADING AND EROSION CONTROL PLANS SHALL BE STRICTLY ADHERED TO.
10. FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR THIS PROJECT.

11. THERE MAY BE SOME TOPSOIL THAT IS NOT SUITABLE FOR RE–USE. CONTRACTOR SHALL AMEND THE TOPSOIL AS NECESSARY AND RE–SPREAD IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS. IF TOPSOIL CANNOT BE AMENDED IT SHALL BE USED AS FILL WHERE NO FUTURE STRUCTURES OR ROADS WILL BE BUILT.

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
   a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
   b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
   c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
   d. CDOT M & S STANDARDS
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER–THE–FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
6. CONTRACTOR SHALL SCHEDULE A PRE–CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS–ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, INCLUDING WORK WITHIN THE RIGHT–OF–WAY AND SPECIAL TRANSPORT PERMITS.
15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF–SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

GEOTECHNICAL REPORT NOTE

1. ALL GRADING SHALL CONFORM TO THE GEOTECHICAL RECOMMENDATIONS PREPARED BY RMG, " SOILS AND GEOLOGY STUDY, ROLLING MEADOWS/BULL HILL", DATED JANUARY 30, 2024, REV. MARCH 14, 2025, JOB NO. 187746.

ADDITIONAL SWMP PLAN CONTRACTOR NOTES.

1. CONTRACTOR MUST ADD THEIR CONTACT INFORMATION TO THE SWMP PLANS PRIOR TO CONSTRUCTION
2. IF THE GRADING IS TO BE PHASED THE CONTRACTOR MUST PROVIDE PHASING MAPS FOR INSERTION INTO THE SWMP PLANS.
3. THE CONTRACTOR MUST PROVIDE THE CLIENT THE LOCATION OF ANY POTENTIAL SOURCES OF POLUTIONS SUCH AS FUELING AREAS, ETC TO BE INSERTED INTO THE SWMP PLANS.
4. THE ON–SITE SWMP PLAN SHALL BE LOCATED AT THE SE CORNER OF ROLLING MEADOW PARKWAY AND BRADLEY ROAD UNLESS OTHERWISE DOCUMENTED.
5. EXISTING VEGETATION WITHIN THE LIMITS OF CONSTRUCTION CONSISTS OF NATIVE GRASSES AND WEEDS. GROUND COVER IS ESTIMATED AT 70% DENSITY. EXISTING VEGETATION WILL BE VERIFIED VISUALLY IN THE FIELD PRIOR TO STARTING WORK.

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

1. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE, AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY (EPC) STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE (LDC), THE ENGINEERING CRITERIA MANUAL (ECM), THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME 1 AND 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
2. A PRECONSTRUCTION MEETING BETWEEN THE PERMIT HOLDER(S) AND EL PASO COUNTY SHALL BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITIES. IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER(S) TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF. NO LAND DISTURBANCE OR CONSTRUCTION ACTIVITIES BEYOND THE INSTALLATION OF THE INITIAL CONSTRUCTION CONTROL MEASURES (CCMS), AS INDICATED ON THE APPROVED GEC PLAN OR CDS WITH GEC PLANS, MAY OCCUR PRIOR TO RECEIVING A NOTICE TO PROCEED (NTP) ISSUED BY THE ECM ADMINISTRATOR. FAILURE TO OBTAIN A NOTICE TO PROCEED PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES MAY RESULT IN AN IMMEDIATE STOP WORK ORDER (SWO).
3. CONSTRUCTION CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. STORMWATER RUNOFF FROM ALL DISTURBED AREAS AND SOIL STORAGE AREAS MUST UTILIZE OR FLOW TO ONE OR MORE CCM(S) TO MINIMIZE EROSION OR SEDIMENT IN THE DISCHARGE. THE CCM(S) MUST CONTAIN OR FILTER FLOWS IN ORDER TO PREVENT THE BYPASS OF FLOWS WITHOUT TREATMENT AND MUST BE APPROPRIATE FOR STORMWATER RUNOFF FROM DISTURBED AREAS AND FOR THE EXPECTED FLOW RATE, DURATION, AND FLOW CONDITIONS (E.G., SHEET OR CONCENTRATED FLOW).
4. ALL CCMS SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL FINAL STABILIZATION IS ACHIEVED. THE QUALIFIED STORMWATER MANAGER (QSM) SHALL ASSESS THE ADEQUACY OF CCMS AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CCMS ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CCMS.
5. PRIOR TO CONSTRUCTION THE PERMIT HOLDER(S) SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
6. MANAGEMENT OF THE STORMWATER MANAGEMENT PLAN (SWMP) DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QSM. THE SWMP SHALL BE LOCATED ON–SITE OR DIGITALLY ACCESSIBLE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES AND MUST BE IMPLEMENTED AS WRITTEN FROM THE START OF CONSTRUCTION ACTIVITY UNTIL FINAL STABILIZATION IS ACHIEVED. THE QSM SHALL AMEND THE SWMP WHEN THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE SITE WHICH WOULD REQUIRE THE IMPLEMENTATION OF NEW OR REVISED CCMS OR IF THE SWMP PROVES TO BE INEFFECTIVE IN CONTROLLING POLLUTANTS IN STORMWATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY OR WHEN CCMS ARE NO LONGER NECESSARY AND ARE REMOVED. THE QSM SHALL MAINTAIN A RECORD OF AMENDMENTS MADE TO THE SWMP THAT INCLUDES THE DATE AND IDENTIFICATION OF THE CHANGES.
7. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE–EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A RECEIVING WATER UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED. IN ADDITION TO MAINTAINING 50 HORIZONTAL FEET OF PRE–EXISTING VEGETATION UPGRADIENT OF A RECEIVING WATER (UNLESS INFEASIBLE AND APPROVED), THE PERMIT HOLDER(S) MUST INSTALL CCMS UPGRADIENT OF THE VEGETATIVE BUFFER.
8. TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
9. EROSION CONTROL BLANKET (ECB) OR OTHER APPROVED CONTROL MEASURE(S) SHALL BE USED ON SLOPES STEEPER THAN 3:1.
10. VEHICLE TRACKING CONTROLS (VTC) MUST BE IMPLEMENTED TO MINIMIZE VEHICLE TRACKING OF SEDIMENT FROM DISTURBED AREAS. VTCS MUST INCLUDE A STRUCTURE CONTROL MEASURE (E.G., TRACKING PAD) AND MAY INCLUDE A NON–STRUCTURAL CONTROL MEASURE (E.G., SWEEPING). MATERIAL TRACKED OFF–SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
11. ANY TEMPORARY OR PERMANENT CONTROL MEASURE DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF–SITE.
12. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER, PERMANENT CONTROL MEASURES (PCMS), OR DITCHES EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
13. ALL PCMS SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PCMS MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
14. SOIL COMPACTION MUST BE MINIMIZED IN AREAS WHERE INFILTRATION PCMS WILL BE INSTALLED OR IN AREAS WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION PCMS SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF SOIL COMPACTION DOES OCCUR IN AREAS WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER OR IN AREAS WHERE INFILTRATION PCMS WILL BE INSTALLED, DECOMPACTION OF THE SOIL MUST BE COMPLETED PRIOR TO PLANTING OR INSTALLATION OF THE PCM(S). AN INFILTRATION TEST MUST BE CONDUCTED FOR ALL INFILTRATION PCMS AND THE INFILTRATION TEST RESULTS SUBMITTED TO EL PASO COUNTY PRIOR TO PRELIMINARY ACCEPTANCE (PA).
15. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND PERMANENT STABILIZATION METHODS ARE COMPLETE. WHEN USING VEGETATIVE COVER AS A PERMANENT STABILIZATION METHOD, THE VEGETATION SHALL BE EVENLY DISTRIBUTED PERENNIAL VEGETATION AND OF THE VARIETY AND SPECIES FOUND IN THE COUNTY–APPROVED SEED MIXES OR IN THE APPROVED GEC PLAN. VEGETATION COVERAGE SHALL BE, AT A MINIMUM, EQUAL TO 70% OF WHAT WOULD HAVE BEEN PROVIDED BY NATIVE VEGETATION IN A LOCAL, UNDISTURBED AREA OR ADEQUATE REFERENCE SITE. ALL TEMPORARY CCMS SHALL BE REMOVED UPON FINAL STABILIZATION AND PRIOR TO STORMWATER PERMIT TERMINATION.
16. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON–SITE OR OFF–SITE WATERS, INCLUDING WETLANDS.
17. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO BE DISCHARGED OFFSITE OR TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR CONTROL MEASURES. CONCRETE WASHOUT AREAS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK, OR STREAM.
18. DURING CONSTRUCTION DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER MAY BE DISCHARGED ON–SITE IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT'S (CDPHE) LOW RISK DISCHARGE GUIDANCE POLICY FOR DISCHARGES OF UNCONTAMINATED GROUNDWATER TO LAND. IF CONSTRUCTION DEWATERING OPERATIONS ARE UNABLE TO MEET ALL CRITERIA, CONDITIONS, AND CONTROL MEASURE REQUIREMENTS OF THE LOW RISK DISCHARGE GUIDANCE POLICY, A COLORADO DISCHARGE PERMIT SYSTEM (CDPS) GENERAL PERMIT COG080000 WILL BE REQUIRED.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTE FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES, OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
20. THE PERMIT HOLDER(S) SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
21. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON–SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
22. MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. APPROPRIATE CMS SHALL BE UTILIZED BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
23. BULK STORAGE (I.E., INDIVIDUAL CONTAINERS OF 55 GALLONS OR GREATER) OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT, OR EQUIVALENT PROTECTION, TO CONTAIN ALL SPILLS ON–SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM, OR OTHER FACILITIES.
24. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON–SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
25. ON AREAS OF EXPOSED SOIL, MINIMIZE DUST THROUGH THE APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES. WATER APPLICATION MUST BE CONDUCTED IN A MANNER TO PREVENT DISCHARGE OFFSITE UNLESS AUTHORIZED BY A CDPS OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.
26. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
27. FOR SITES WHERE A SOILS REPORT IS REQUIRED, THE APPROVED SOILS REPORT FOR THIS SITE SHALL BE CONSIDERED A PART OF THESE PLANS.
28. PERMIT HOLDER(S) AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUME 2, AND ENGINEERING CRITERIA MANUAL. ALL APPLICABLE LOCAL, STATE, AND FEDERAL PERMITS MUST BE OBTAINED PRIOR TO CONSTRUCTION. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE OR LESS THAN 1 ACRE AND PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE THAT WOULD DISTURB 1 OR MORE ACRES, THE PERMIT HOLDER(S) SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE (COR400000 PERMIT) TO THE CDPHE WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A SWMP, OF WHICH THIS GEC PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD – PERMITS, 4300 CHERRY CREEK DRIVE SOUTH, DENVER, CO 80246–1530
ATTN: PERMITS UNIT

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@ceg1.com

NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-2700
CONTACT: JEFF MARK

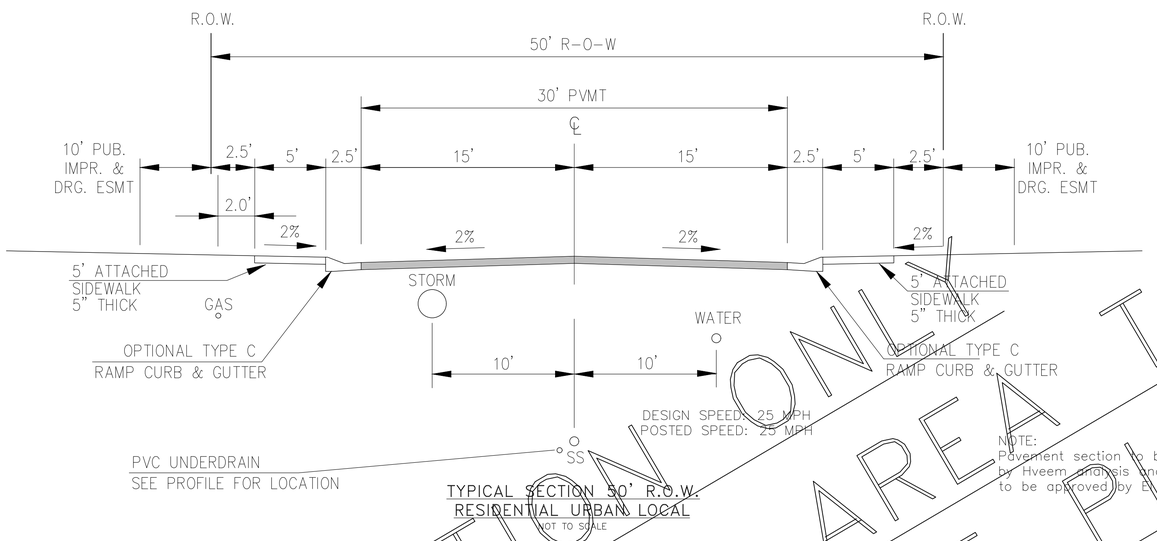
PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

NOTES

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C1.2
TOTAL SHEETS: 24



TYPICAL SECTION 50' R.O.W.
RESIDENTIAL URBAN LOCAL
NOT TO SCALE

CALF CREE DR, ECHOING GRASS WAY, EMERALD GLEN LN, HOOF HALLOW PL, SKY BLUE WY, MOX DEN WY, PRARIE PINE TR, BUFFALO HILLS WY, SUNLIT MEADOWS TR, MOSSY CREEK TR

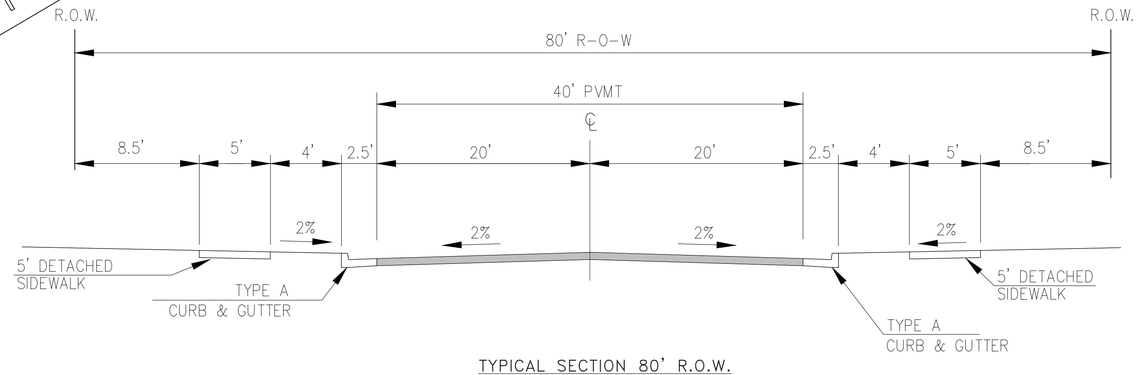


TYPICAL SECTION 60' R.O.W.
RESIDENTIAL URBAN COLLECTOR
NOT TO SCALE

PRAIRIE SONG DR, MERIDIAN ROAD

DESIGN SPEED: 40 MPH
POSTED SPEED: 35 MPH

NOTE:
Pavement section to be determined by Hveem analysis and design. Design to be approved by PCD Engineering



TYPICAL SECTION 80' R.O.W.
RESIDENTIAL URBAN COLLECTOR
NOT TO SCALE

ROLLING MEADOW PARKWAY

DESIGN SPEED: 40 MPH
POSTED SPEED: 35 MPH

FOR INFORMATION ONLY
NO STREETS/IMPERVIOUS AREA TO BE CONSTRUCTED WITH THESE PLANS

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@coeg1.com

NO. #### | DESCRIPTION #### | DATE ####

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

--- TYPICAL SECTIONS ---

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C1.3
TOTAL SHEETS: 24

LEGEND

- EXISTING/PROPOSED CURB/GUTTER
- 5721 EXISTING MINOR CONTOUR
- 5720 EXISTING MAJOR CONTOUR
- 5720 PROPOSED CONTOUR
- EXISTING STORM SEWER
- PROPOSED STORM SEWER, INLETS, MANHOLES
- SF PERIMETER EROSION CONTROL SILT FENCE, EROSION LOG, OR EARTH BERM
- SUBDIVISION BOUNDARY
- CONSTRUCTION BOUNDARY/LIMITS OF DISTURBANCE
- P/L PROPERTY LINE OR TRACT LINE
- ROW LINE
- STORMWATER RUNOFF DIRECTION
- X% SLOPE DIRECTION AND GRADE
- CUT/FILL LINE
- VTC VEHICLE TRACKING CONTROL
- COMPACTED EARTH BERM or ROUGH CUT STREET CONTROL PLAN or STRAW BALE CHECK DAM
- T G WO LOT TYPE TRANSITION, GARDEN, WALK-OUT SEE DETAIL SHEET FOR LOT GRADING TYPES
- PS PERMANENT SEEDING
- IP INLET PROTECTION
- MU MULCH
- DS2 UNLINED EARTHEN BERM BY CUT/FILL
- SR SURFACE ROUGHENING

NOTE:

1. SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
2. POND SLOPES SHALL BE 4:1
3. STRAW ECB SHALL BE PLACED ON ALL SIDE SLOPES AND PERMANENT SLOPES 3:1 OR STEEPER
4. TS TEMPORARY SEEDING REQUIRED ON DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED AND SEEDED WITHIN 21 DAYS AFTER INTERIM GRADING.
5. THERE ARE NO ASPHALT BATCH PLANTS OR CONSTRUCTION OFFICE TRAILERS PLANNED FOR THIS SITE OR CONTRACTOR SHALL OBTAIN PERMIT IF DESIRED.
6. CONTRACTOR TO DETERMINE STOCKPILE AREAS, CONCRETE WASHOUT AREAS, AND STAGING AREAS AND SHOW THEM ON THE WORKING MAPS.
7. EXISTING VEGETATION CONSISTS OF GRASSES AND WEEDS. GROUND COVER ESTIMATED AT 65% DENSITY AND WILL BE FIELD VERIFIED AT THE TIME OF CONSTRUTION
8. THE STAGING AREA WILL BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION AND WILL BE DEPICTED ON THE SWMP PLAN AT THAT TIME
9. THE SWMP MANUAL IS LOCATED AT THE SW CORNER OF BRADLEY ROAD AND ROLLING MEADOW PARKWAY
10. THERE ARE NO WETLANDS WITHIN THE LIMITS OF CONSTRUCTION. WORK WITHIN THE EAST TRIBUTARY OF JIMMY CAMP CREEK IS COVERED UNDER AN EXISTING CLOMR.

INITIAL BMP'S:

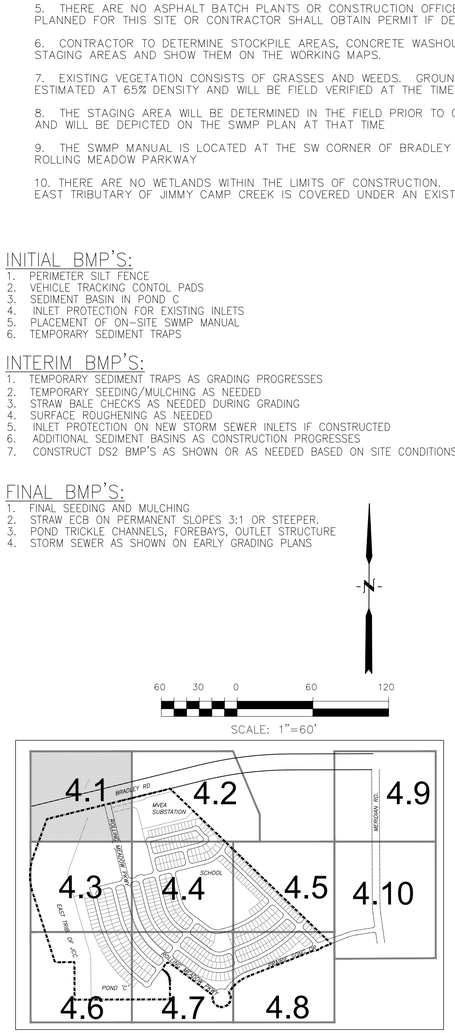
1. PERIMETER SILT FENCE
2. VEHICLE TRACKING CONTOL PADS
3. SEDIMENT BASIN IN POND C
4. INLET PROTECTION FOR EXISTING INLETS
5. PLACEMENT OF ON-SITE SWMP MANUAL
6. TEMPORARY SEDIMENT TRAPS

INTERIM BMP'S:

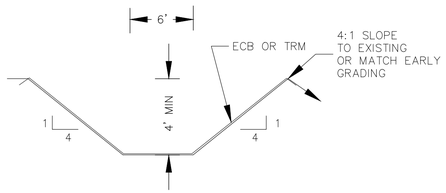
1. TEMPORARY SEDIMENT TRAPS AS GRADING PROGRESSES
2. TEMPORARY SEEDING/MULCHING AS NEEDED
3. STRAW BALE CHECKS AS NEEDED DURING GRADING
4. SURFACE ROUGHENING AS NEEDED
5. INLET PROTECTION ON NEW STORM SEWER INLETS IF CONSTRUCTED
6. ADDITIONAL SEDIMENT BASINS AS CONSTRUCTION PROGRESSES
7. CONSTRUCT DS2 BMP'S AS SHOWN OR AS NEEDED BASED ON SITE CONDITIONS

FINAL BMP'S:

1. FINAL SEEDING AND MULCHING
2. STRAW ECB ON PERMANENT SLOPES 3:1 OR STEEPER.
3. POND TRICKLE CHANNELS, FOREBAYS, OUTLET STRUCTURE
4. STORM SEWER AS SHOWN ON EARLY GRADING PLANS

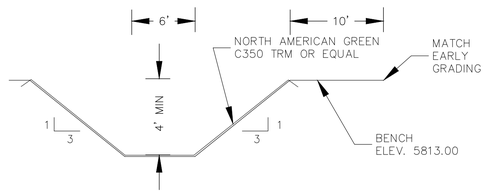


KEY MAP
NO SCALE



SWALE 'D1'

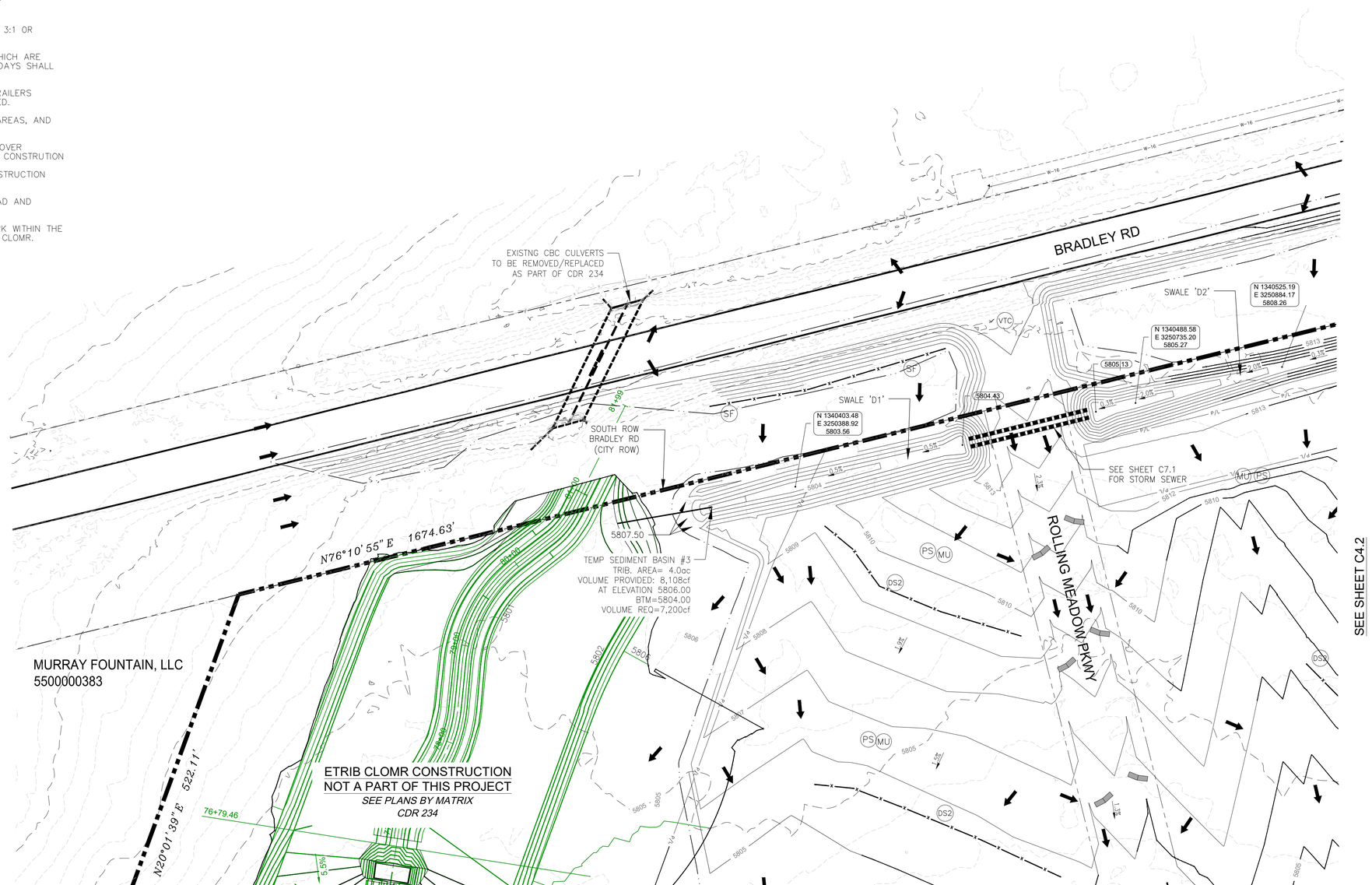
0.5% SLOPE
Q100=260.5cfs
FLOW DEPTH=2.44'
VEL=6.77fps



SWALE 'D2'

0.3% SLOPE
Q100=260.5cfs
FLOW DEPTH=2.95'
VEL=5.95fps

2% SLOPE
Q100=260.5cfs
FLOW DEPTH=1.88
VEL=11.90fps'



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE: ####
DESCRIPTION: ####
NO. ####

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

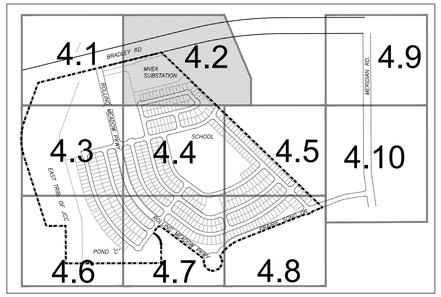
PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

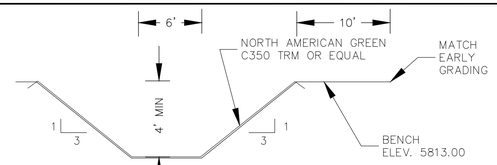
ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C4.1
TOTAL SHEETS: 24

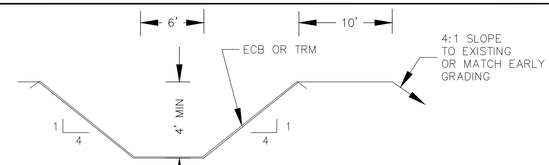


KEY MAP
NO SCALE



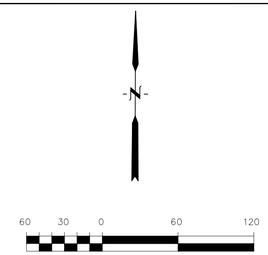
SWALE 'D2'

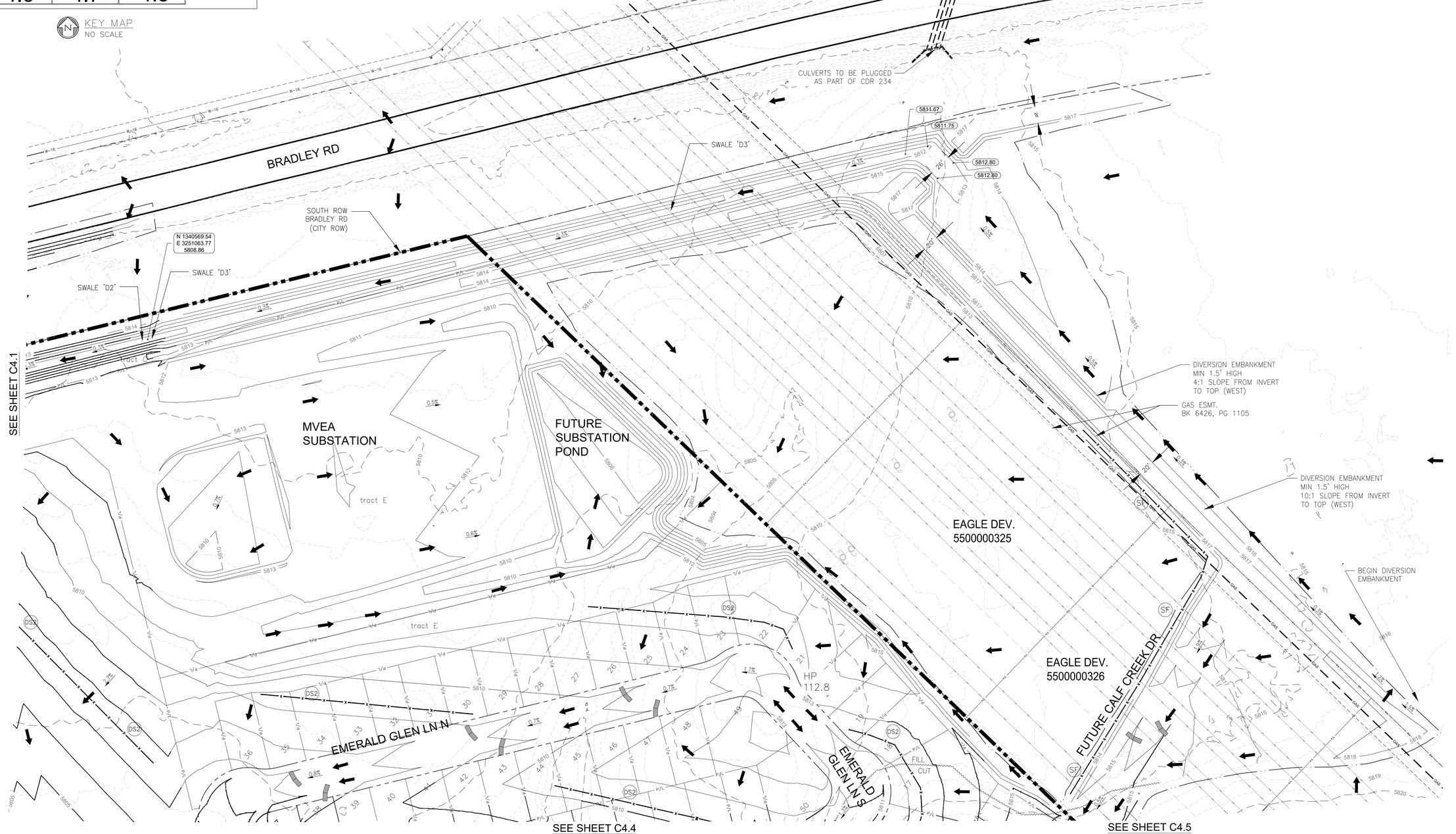
0.3% SLOPE
Q100=260.5cfs
FLOW DEPTH=2.95'
VEL=5.95fps



SWALE 'D3'

0.3% SLOPE
Q100=260.5cfs
FLOW DEPTH=2.74'
VEL=5.61fps





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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rlcs@ceg1.com

NO.	DESCRIPTION	DATE
###	####	####

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL
PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

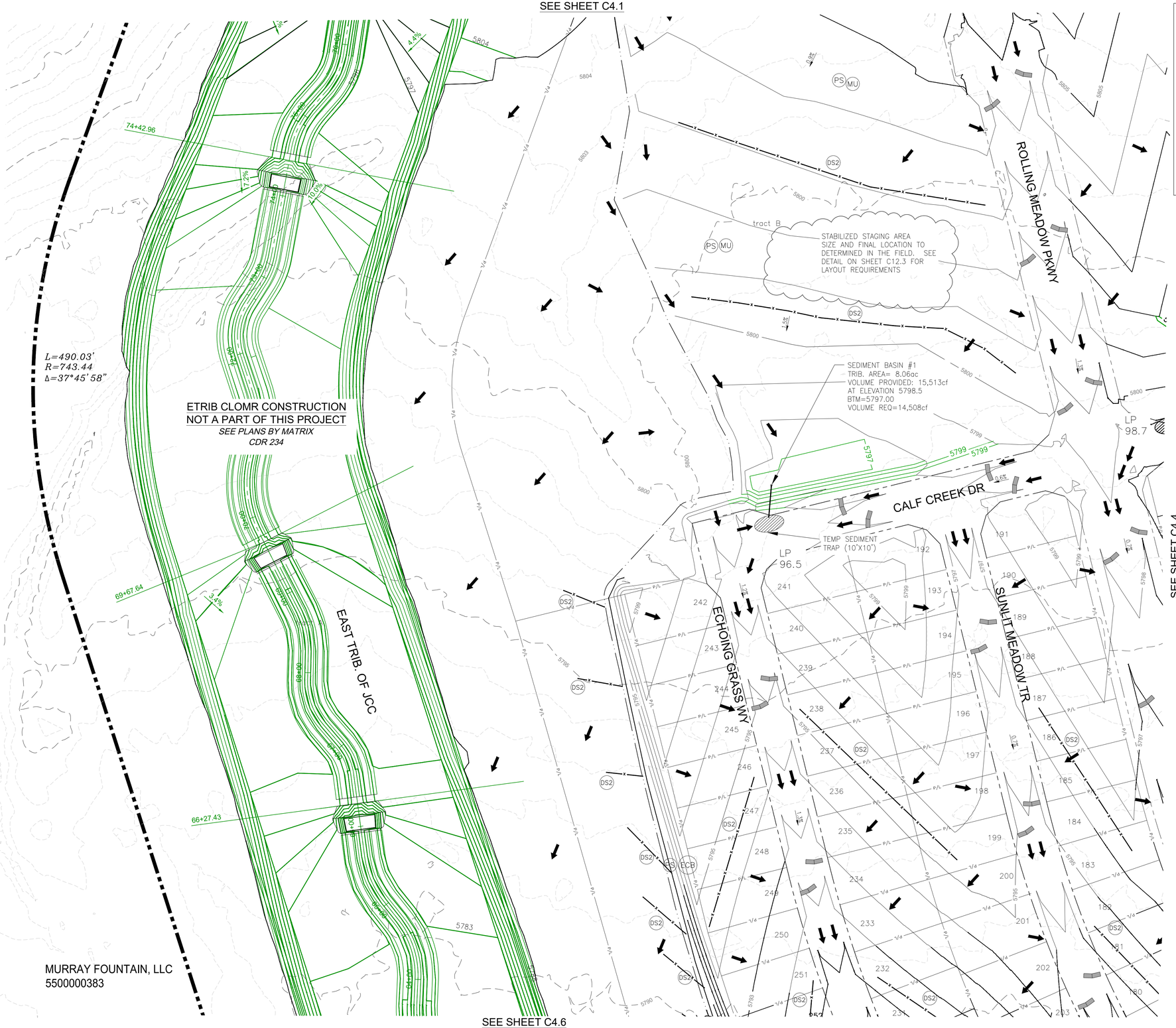
DATE:
NOV., 2025

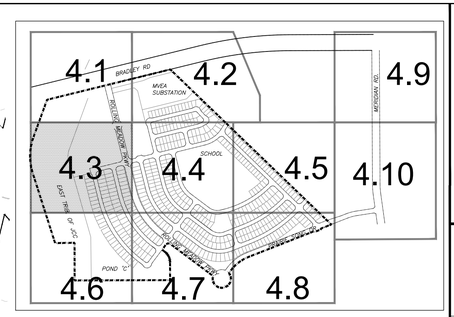
PROJECT NO.
100.302

SHEET NUMBER
C4.2

TOTAL SHEETS: 24

SEE SHEET C4.1





60 30 0 60 120
SCALE: 1"=60'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
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PH: 719.570.1100
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PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

NO.	DESCRIPTION	DATE
###	####	###

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C4.3

TOTAL SHEETS: 24



NO.	DESCRIPTION	DATE
####	####	####

DRAWN: BRN
DESIGNED: R.L.S
CHECKED: R.L.S

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C4.4
TOTAL SHEETS: 24

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

SEE SHEET C4.2

SEE SHEET C4.4

SEE SHEET C4.10

SEE SHEET C4.8

EAGLE DEV.
5500000327

EAGLE DEV.
5500000328

EAGLE DEV.
5500000329

GAS ESMT.
BK 6426, PG 1105

S46°04'43"E 2949.79'

325.00' ELEC. TRANS. ESMT

HP
126.8

LP
125.2

LP
123.5

GRADE SWALE 'A' TO DRAIN TO LOW POINT ON REAR LOT LINE

TEMP SEDIMENT TRAP (10'X10')

HOOF HALLOW PL

FOX DEN WAY

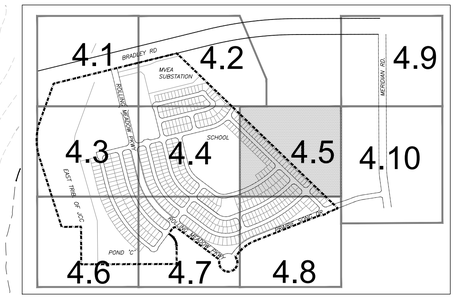
PRAIRIE PINE TR

BUFFALO HILLS WY

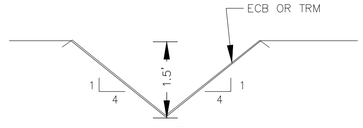
2:1 SLOPE AREA INSTALL KOIR MAT W/ NO BURLAP BACKING

FILL

CUT



KEY MAP
NO SCALE



SWALE 'A'
0.5% SLOPE
Q100=15.7cfs
FLOW DEPTH=1.08'

60 30 0 60 120
SCALE: 1"=60'

CORE ENGINEERING GROUP
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PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@cegi.com

NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL
PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C4.5

TOTAL SHEETS: 24

SEE SHEET C4.3

ETRIB CLOMR CONSTRUCTION
NOT A PART OF THIS PROJECT
SEE PLANS BY MATRIX
CDR 234

N17°44'19"W 965.15'

MURRAY FOUNTAIN, LLC
5500000383

BLH NO. 2, LLC
5500000383

S89°17'26"W 256.96'

BLH NO. 2, LLC
5500000475- 5500000479

EAST TRIB. OF JCC

TEMP SEDIMENT TRAP (10'X20')
12"D50 RIP RAP
24" THICK ON FABRIC
2:1 SLOPE, TOP=5786.9, BTM=5781.32

STM LAT 'A'
SEE SHEET C7.2

SEDIMENT BASIN C
TRIB. AREA= 120.0ac
VOLUME PROVIDED: 283,778cf
AT ELEVATION 5780.00
BTM=5774.50
VOLUME REQ=216,000cf
BY FULL SPECTRUM OUTLET
STRUCTURE. SEE SHEET C9.3

OVERFLOW 'A'
SEE DETAIL

LP
88.6

INSTALL TRM
N. AMERICAN GREEN
C350 OR EQUAL

ECHOING GRASS WY

POND 'C'
tract N

S89°50'45"W 1259.66'

EAGLE DEVELOPMENT
5500000324

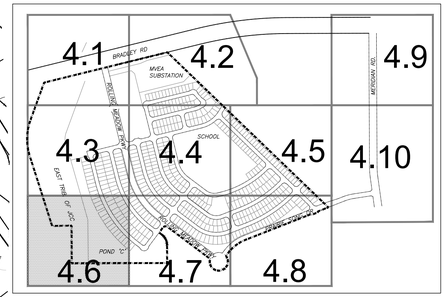
BLH NO. 2, LLC
5500000383

UTILITY ESMT.
REC:217152003

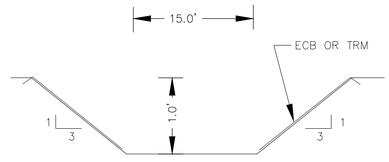
ETRIB CLOMR CONSTRUCTION
NOT A PART OF THIS PROJECT
SEE PLANS BY MATRIX
CDR 234

SEE SHEET C4.7

56+27.18
61+19.64
51+67.18



KEY MAP
NO SCALE



OVERFLOW 'A' (lots 256-257)
0.8% SLOPE
Q100=31.6cfs
FLOW DEPTH=0.5'

NOTE:
1. PRIOR TO PLATTING OF THIS PROJECT ACCESS FOR MAINTENANCE OF POND C IS GRANTED TO EL PASO COUNTY PER THE "PRE-DEVELOPMENT SITE GRADING ACKNOWLEDGEMENT AND RIGHT OF ACCESS AGREEMENT". FINAL PLATTING OF THIS PROJECT WILL INCLUDE TRACTS OF LAND DEDICATED FOR POND OWNERSHIP AND MAINTENANCE USES.

60 30 0 60 120
SCALE: 1"=60'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

DESCRIPTION: ### | DATE: ###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL
PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

NO. ###

DRAWN: BRN
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C4.6
TOTAL SHEETS: 24

SEE SHEET C4.4

SEE SHEET C4.6

SEE SHEET C4.8

ROLLING MEADOW PKWY

ECHOING GRASS WY

BUFFALO HILLS WY

PRAIRIE PINE TR

PRAIRIE SONG DR

TEMP SEDIMENT TRAP (10'X20')

TEMP SEDIMENT TRAP (10'X10')

12"D50 RIP RAP
24" THICK ON FABRIC
2:1 SLOPE, TOP=5789.00, BTM=5782.03

STM LAT 'K' & 'R'
SEE SHEET C7.3

INSTALL TRM
N. AMERICAN GREEN
C350 OR EQUAL

L=161.83'
R=175.00
Δ=52°59'01"

N53°08'17"W 212.38'

S00°09'15"E 235.78'

L=494.38'
R=120.00
Δ=236°03'05"

POND 'C'

TEMP. DIVERSION BERM
TOP=5805.00, 4' WIDE
4:1 SIDE SLOPES

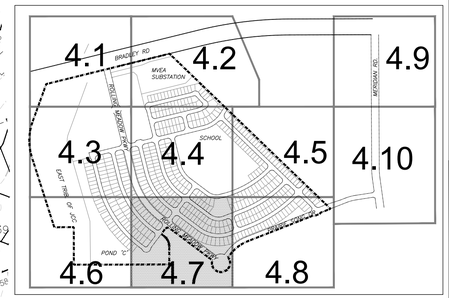
EAGLE DEVELOPMENT
5500000324

LP 88.4

HP 91.9

FILL

CUT



KEY MAP
NO SCALE

60 30 0 60 120
SCALE: 1"=60'

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@cegi.com

NO.	DESCRIPTION	DATE
###	###	###

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EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C4.7

TOTAL SHEETS: 24

SEE SHEET C4.5

SEE SHEET C4.7

SEE SHEET C4.10

PRAIRIE PINE TR

BUFFALO HILLS WY

MOSSY CREEK TR

PRAIRIE SONG DR

S68°36'12"W 919.40'

HP 136.9

4:1 SLOPE AREA
INSTALL KOIR MAT
W/ NO BURLAP BACKING

tract H

tract I

TREE

OVERHEAD

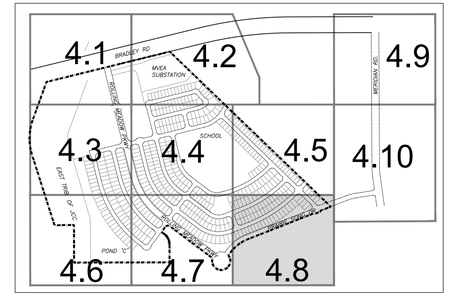
PS MU

FILL

CUT

EAGLE DEVELOPMENT
5500000324

TEMP SEDIMENT
TRAP (10'X10')



60 30 0 60 120
SCALE: 1"=60'

CORE
ENGINEERING GROUP
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NO.	DESCRIPTION	DATE
###	###	###

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CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL
PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

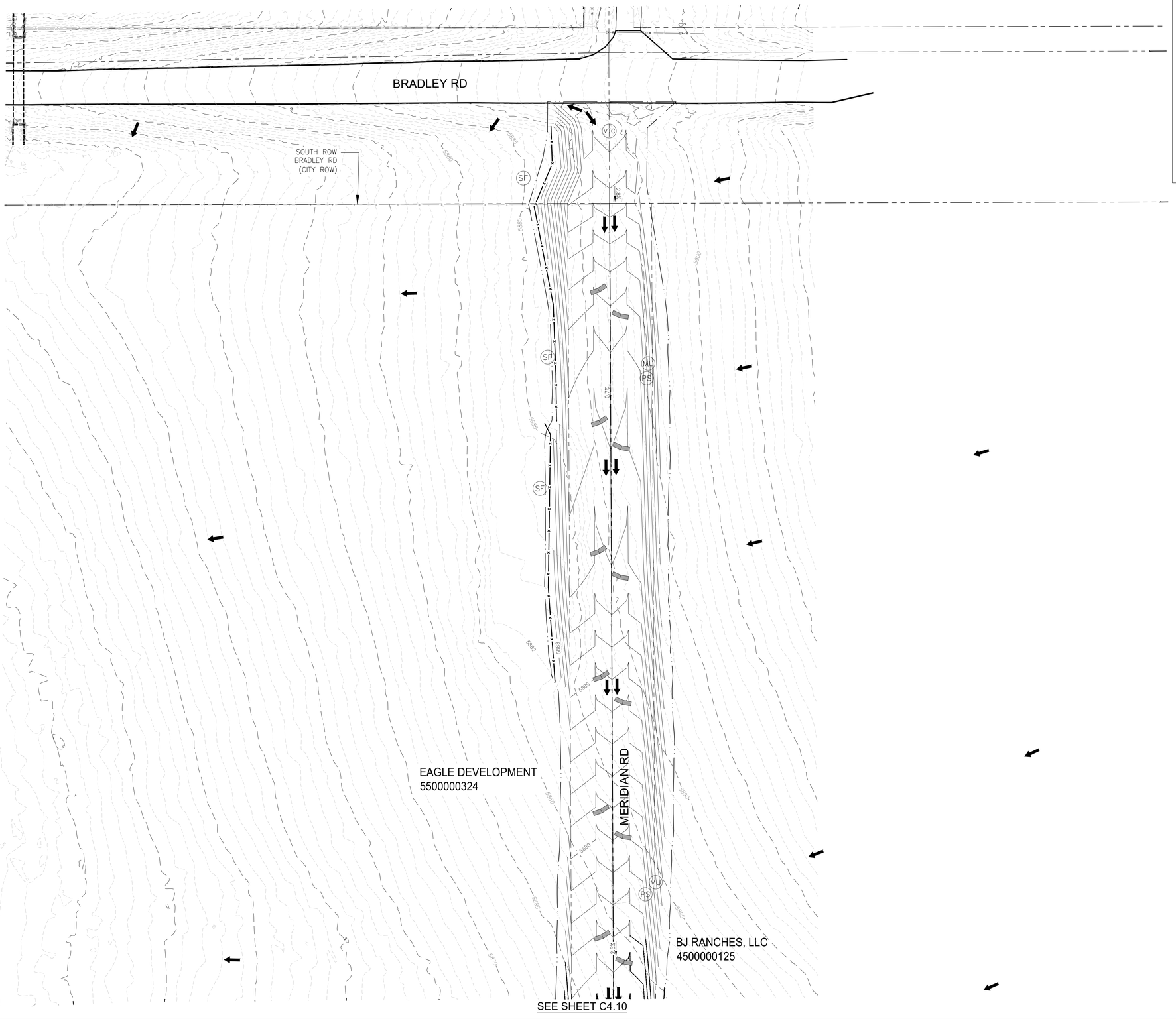
PRELIMINARY

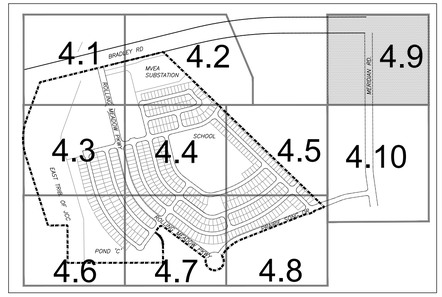
DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C4.8

TOTAL SHEETS: 24





KEY MAP
NO SCALE

N

60 30 0 60 120
SCALE: 1"=60'

CORE ENGINEERING GROUP
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BURNSVILLE, MN 55306
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CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

NO.	DESCRIPTION	DATE
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PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE. SUITE 301
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CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

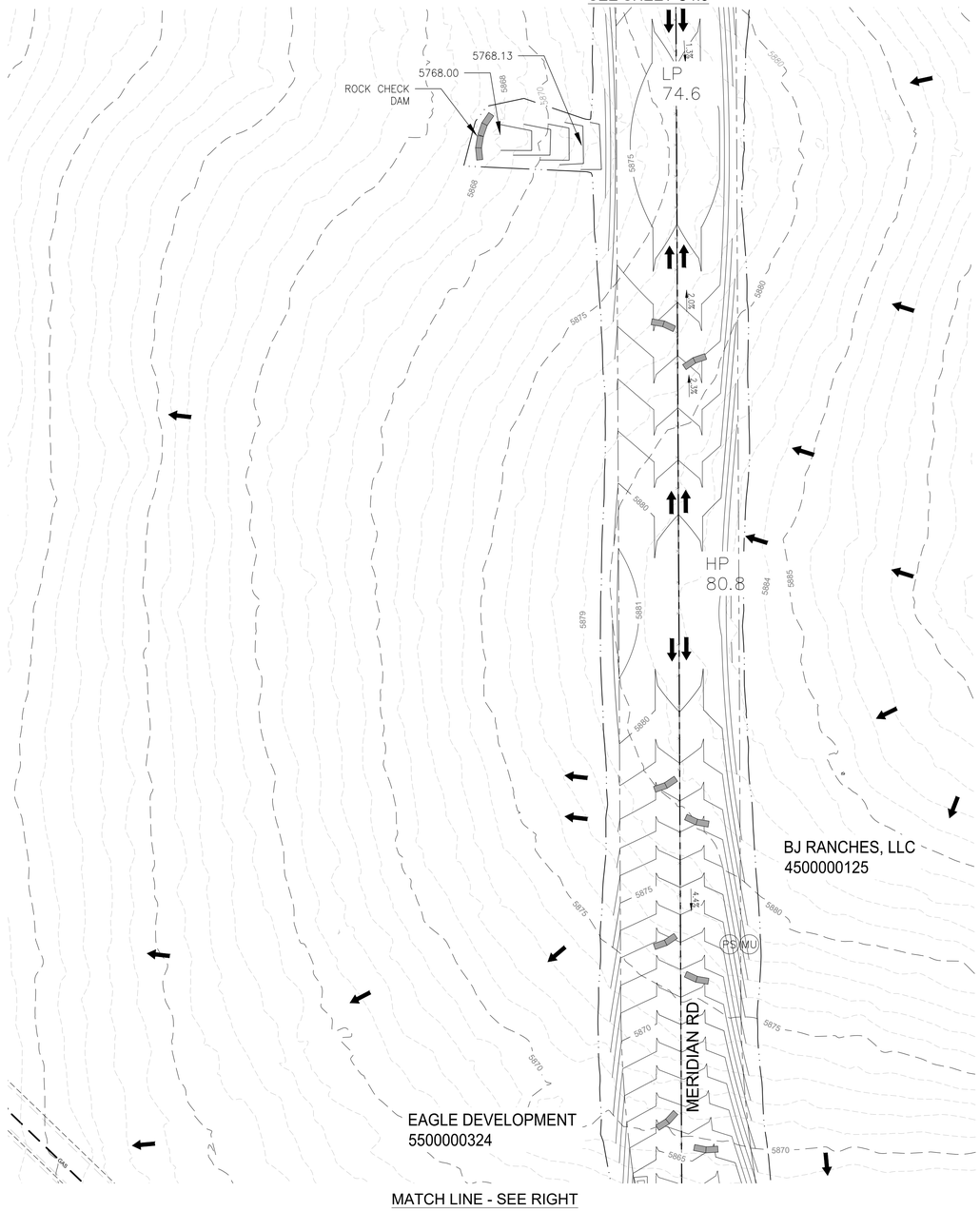
DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

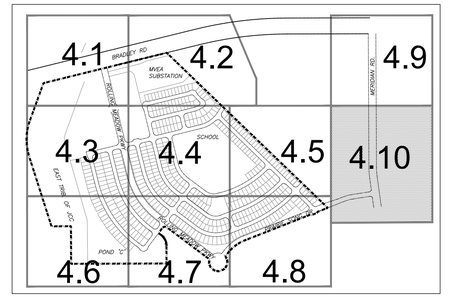
ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

PRELIMINARY

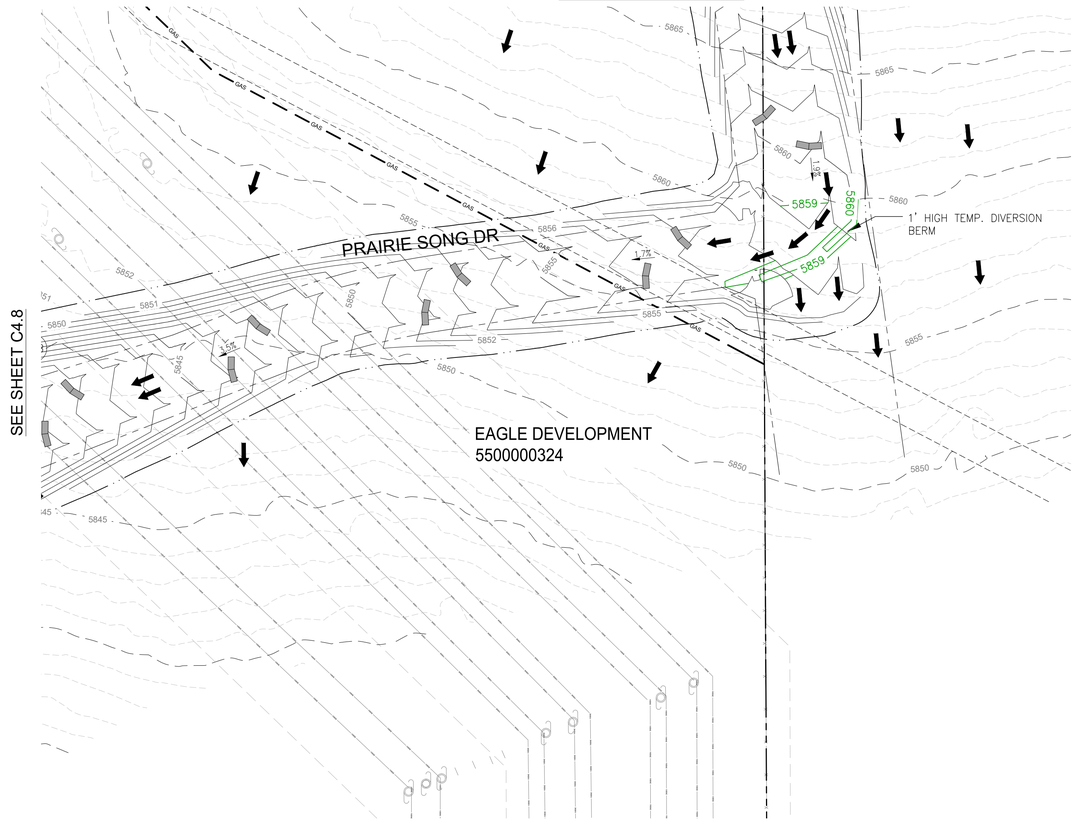
DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C4.9
TOTAL SHEETS: 24

SEE SHEET C4.3





MATCH LINE - SEE LEFT





60 30 0 60 120

SCALE: 1"=60'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
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CONTACT: RICHARD L. SCHINDLER, P.E.
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NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL
PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

ANTELOPE RIDGE AT BULL HILL
OVERLOT EARLY GRADING AND EROSION CONTROL PLAN

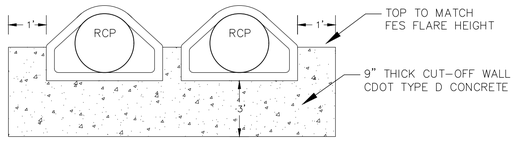
PRELIMINARY

DATE: NOV., 2025

PROJECT NO. 100.302

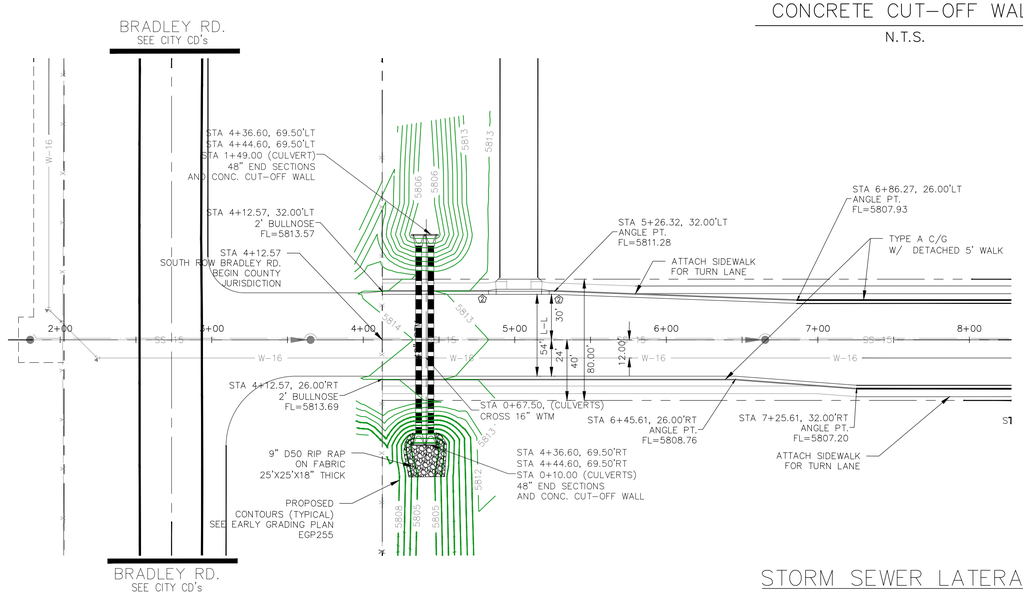
SHEET NUMBER C4.10

TOTAL SHEETS: 24



CONCRETE CUT-OFF WALL

N.T.S.



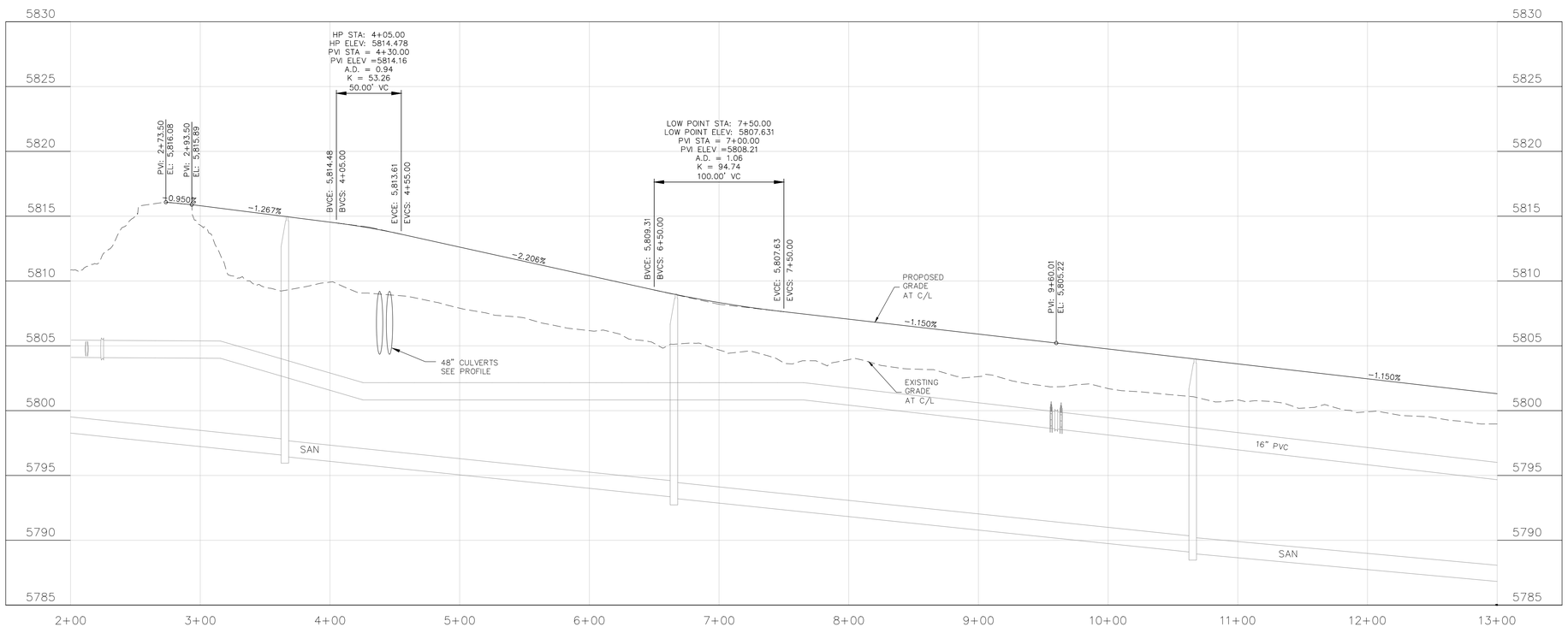
STORM SEWER LATERAL 1

NO STREETS TO BE CONSTRUCTED WITH THIS PLAN

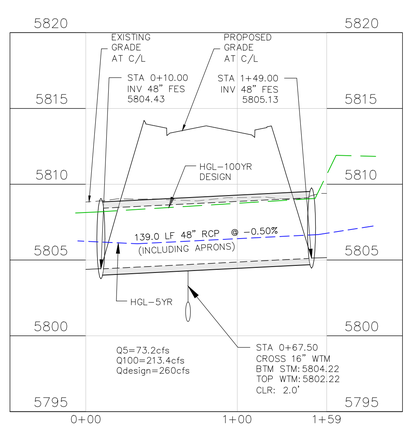




SCALE: 1"=50'



CULVERT PROFILE



CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

NO.	DESCRIPTION	DATE
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PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-7000
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN
DESIGNED: RLS
CHECKED: RLS:

--- STORM SEWER LATERAL 1 ---

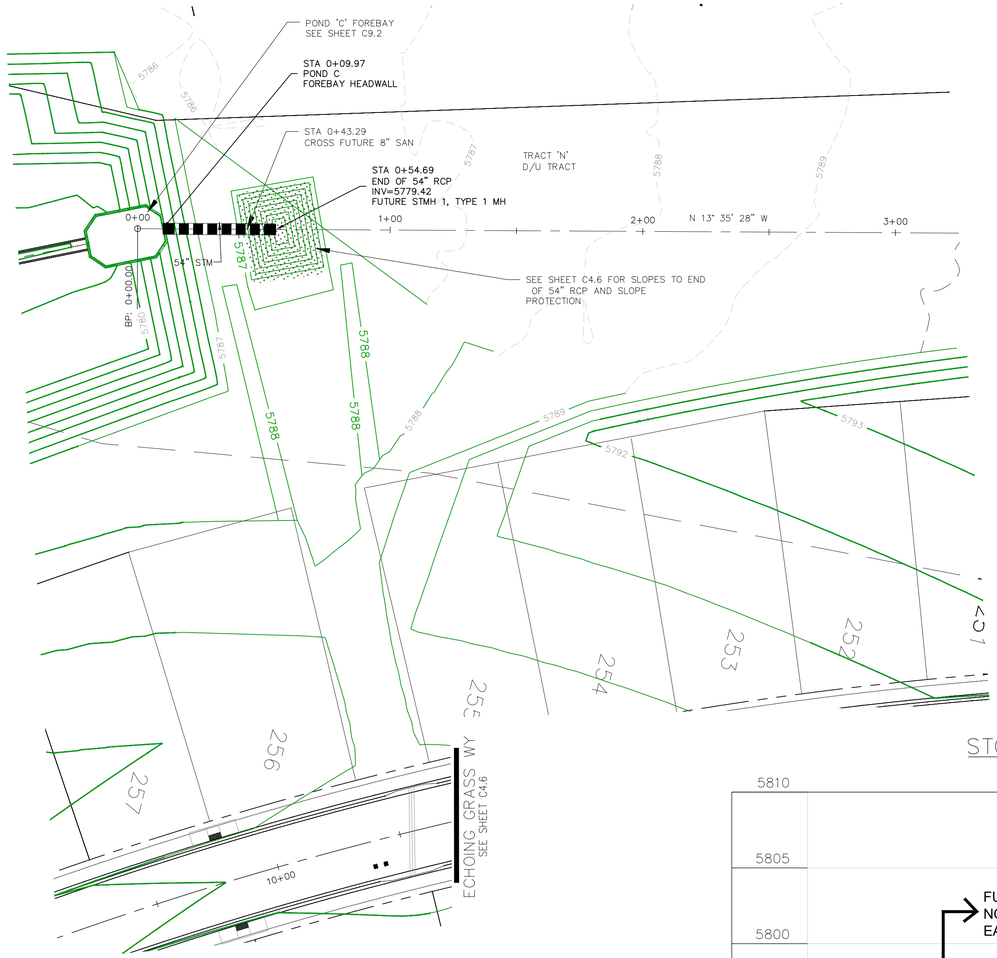
PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

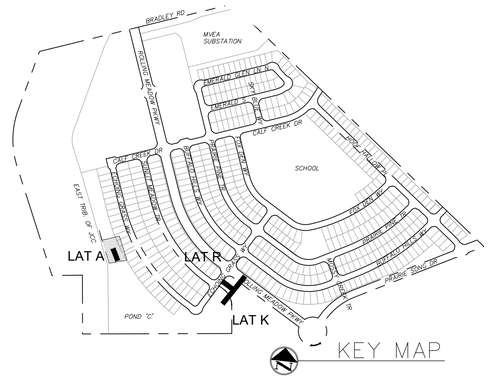
SHEET NUMBER
C7.1

TOTAL SHEETS: 24

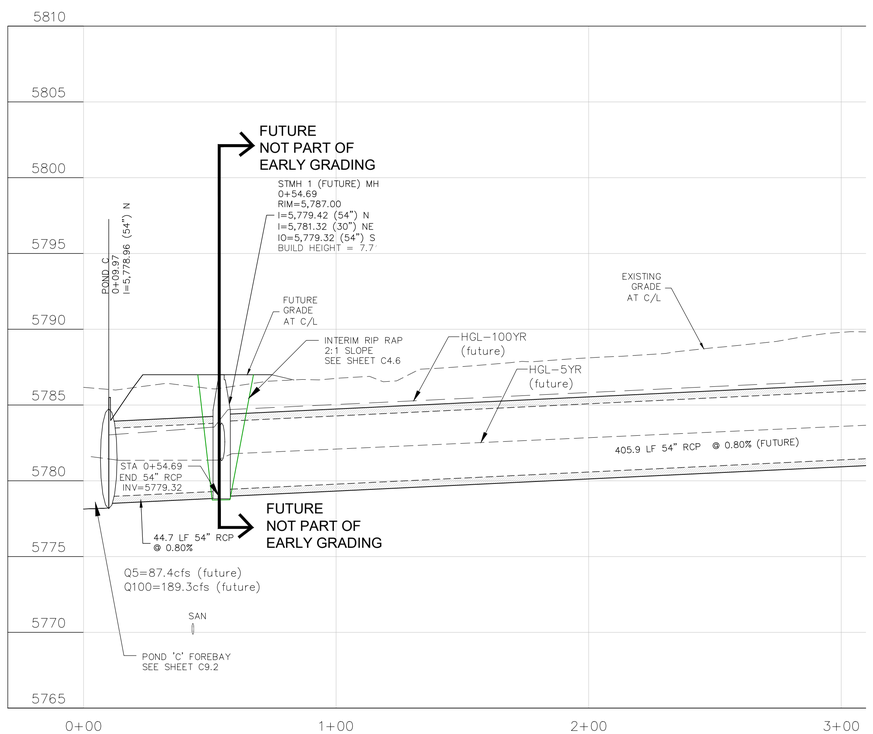








STORM LATERAL "A"



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@coegi.com

NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

GRADING AND EROSION CONTROL DETAILS

PRELIMINARY

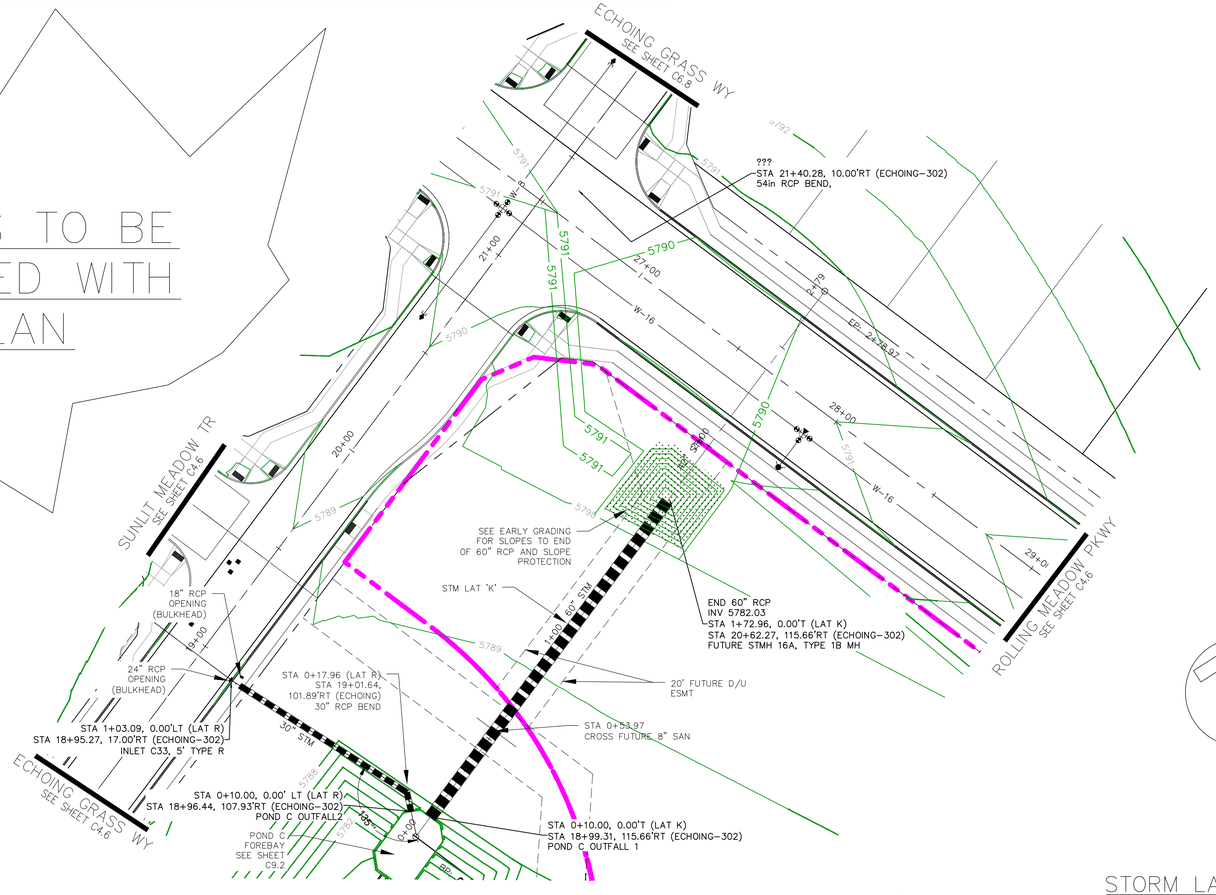
DATE:
NOV., 2025

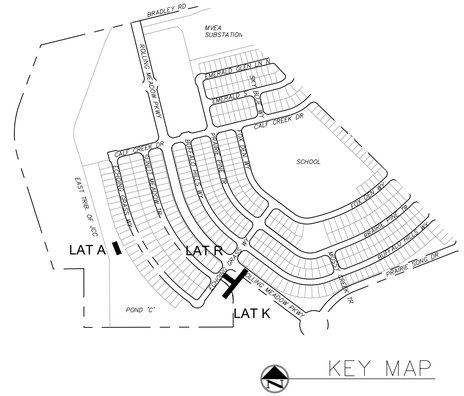
PROJECT NO.
100.302

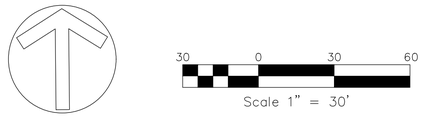
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C7.2

TOTAL SHEETS: 24

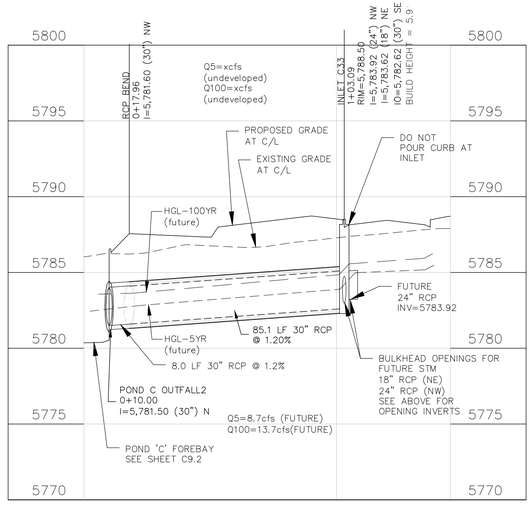
NO STREETS TO BE CONSTRUCTED WITH THIS PLAN





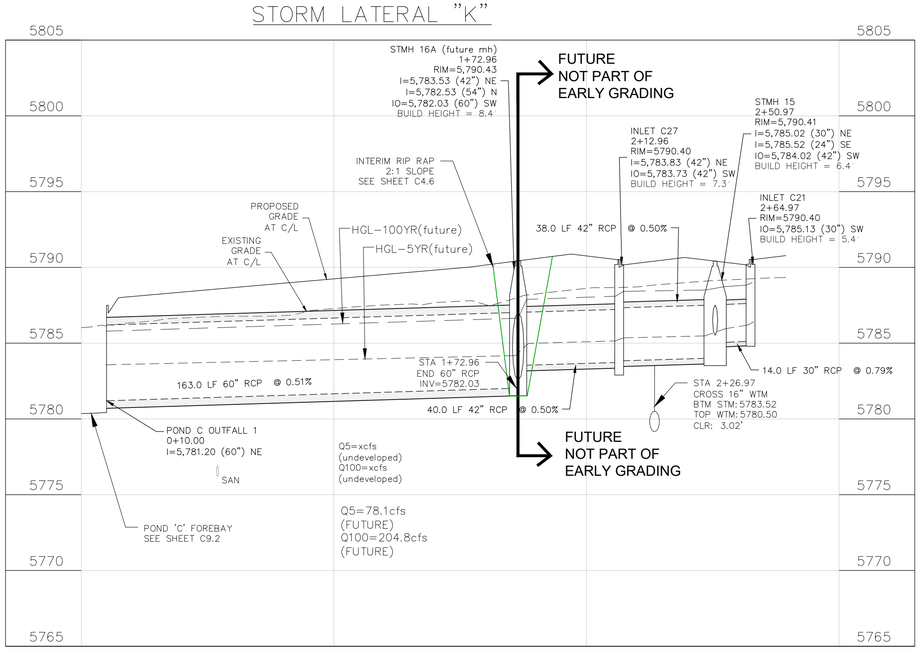


STORM LATERAL "R"



PROFILE SCALE
HORIZ. 1"=30'
VERT. 1"=5'

STORM LATERAL "K"



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DESCRIPTION
NO. ### ### ###
DATE ###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-7800
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

GRADING AND EROSION CONTROL DETAILS

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C7.3

TOTAL SHEETS: 24

NOTE:
1. POND SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
2. STRAW ECB SHALL BE PLACED ON ALL POND SIDE SLOPES UNLESS NOTED OTHERWISE

N

40 20 0 40 80

SCALE: 1"=40'

REALIGNED ETRIB
SEE CLOMR PLANS BY MATRIX
CDR 234

SEE SHEET C7.2 FOR STM SWR
54" RCP
N1338496.21, E3250440.16
INV 54"=5778.96
FG=5778.22
PROPOSED FOREBAY #1
SEE SHEET C9.2
N1338469.36, E3250422.30
5779.63
N1338438.81, E3250386.72
5785.99
N1338460.97, E3250376.99
5785.99
15' WIDE GRAVEL ACCESS ROAD (10% MAX. SLOPE) SEE SHEET C9.3
TYPE M SOIL RIP RAP LIMITS ON FOREBAY (10' WIDE, 40' LONG) 24" THICK
N1338412.57, E3250414.61
5780.00
N1338421.70, E3250432.46
5779.99
N1338385.16, E3250422.26
5779.94
4:1 SLOPE
N1338339.70, E3250421.99
5780.14
TOP=5785.50
16' WIDE
W=12
SS=15
N1338211.17, E3250421.92
5780.58
4:1 SLOPE
N1338134.79, E3250481.37
5779.00
TOP=5785.50
16' WIDE
15' WIDE GRAVEL ACCESS ROAD. SEE SHEET C9.3
N1338034.16, E3250438.63
5777.00
PROPOSED OUTLET STRUCTURE SEE SHEET C9.4 SEE SHEET C9.3 FOR POND OUTFALL
107 LF 60" RCP @ 1.18% (INCL. APRON)
6:1 SLOPE
4:1 SLOPE
EMERGENCY OVERFLOW AND CONCRETE OVERFLOW WALL TOP=5785.50 BTM=5782.50 SEE SHEET C9.3
TYPE VL SOIL RIP RAP 6"D50, 12" THICK
6:1 SLOPE
N1337947.44, E3250442.05
5776.46
N1337945.15, E3250575.84
5777.00
7' WIDE CONCRETE LOW FLOW CHANNEL SEE SHEET C9.3
N1337976.83, E3250573.80
CONC. LOW FLOW
FL 5775.44
4' WIDE CONCRETE LOW FLOW CHANNEL SEE SHEET C9.3
N1337976.83, E3250574.02
CONC. LOW FLOW
FL 5774.83
N1338212.55, E3250574.02
CONC. LOW FLOW
FL 5776.62
4:1 SLOPE
N1338162.14, E3250760.64
5780.89
4' WIDE CONCRETE LOW FLOW CHANNEL SEE SHEET C9.3
tract N
N1338468.45, E3250493.22
CONC. LOW FLOW
FL 5778.03
TYPE M SOIL RIP RAP LIMITS ON FOREBAY (10' WIDE, 40' LONG) 24" THICK
4:1 SLOPE
N1338342.27, E3250591.75
5779.57
N1338002.06, E3250891.46
5778.50
N1337976.83, E3250891.64
CONC. LOW FLOW
FL 5777.15
N1337938.23, E3250894.77
5778.72
4:1 SLOPE
TOP=5785.50
16' WIDE
TOP=5785.50
4:1 SLOPE
N1338002.19, E3251192.60
5780.00
N1337976.83, E3251207.52
CONC. LOW FLOW
FL 5778.86
ECHOING GRASS WAY
SEE SHEET C7.3 FOR STM SWR
30" RCP
SEE SHEET C7.3 FOR STM SWR
N1338212.75, E3251367.45
INV 30"=5781.50
FG 5780.50
N1338205.73, E3251343.51
5781.58
TYPE M SOIL RIP RAP LIMITS ON FOREBAY (10' WIDE, 35' LONG) 24" THICK
N1338185.62, E3251357.30
CONC. LOW FLOW
FL 5780.25
N1338210.46, E3251375.37
INV 60"=5781.20
FG 5780.42
PROPOSED FOREBAY #2
SEE SHEET C9.2
N1338181.72, E3251378.38
5781.32
TYPE M SOIL RIP RAP LIMITS ON FOREBAY (10' WIDE, 35' LONG) 24" THICK
N1338096.78, E3251346.48
5781.33
N1338071.58, E3251376.51
5788.00
N1338063.58, E3251394.95
5788.00
15' WIDE GRAVEL ACCESS ROAD (10% MAX. SLOPE) SEE SHEET C9.3
N1338008.25, E3251374.19
5782.52
N1338011.33, E3251354.04
5782.05
N1337929.15, E3251263.12
5781.00
N1337921.15, E3251369.09
5783.00
TOP=5785.50
4:1 SLOPE

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NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-7200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

POND 'C' POND GRADING AND LOW FLOW CHANNEL

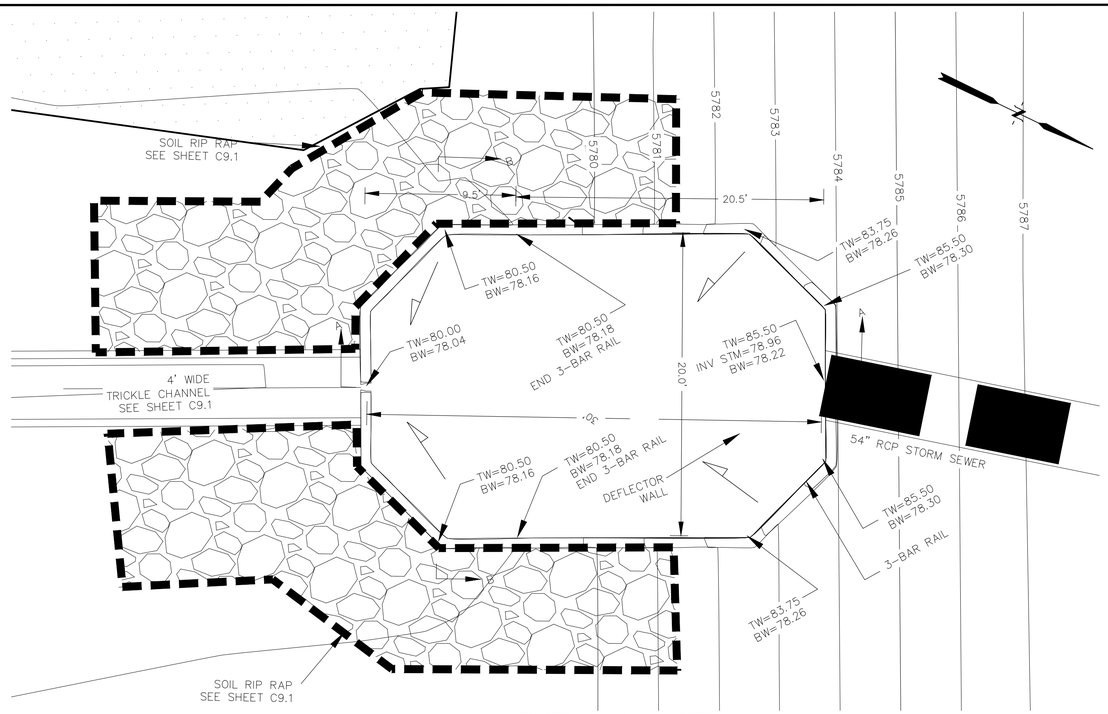
PRELIMINARY

DATE:
NOV., 2025

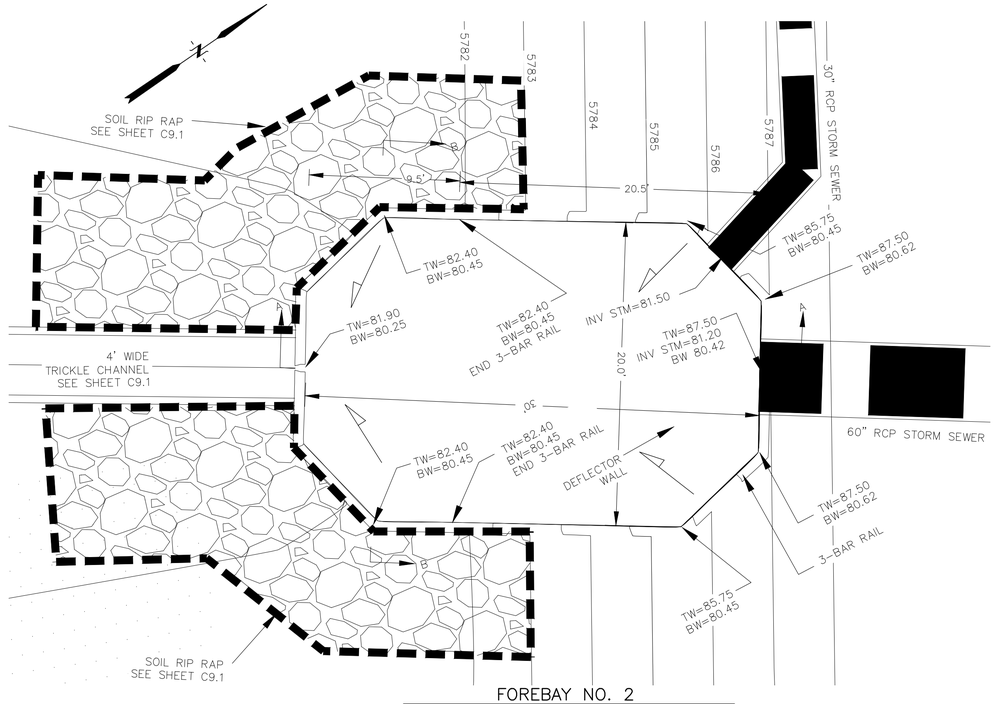
PROJECT NO.
100.302

SHEET NUMBER
C9.1

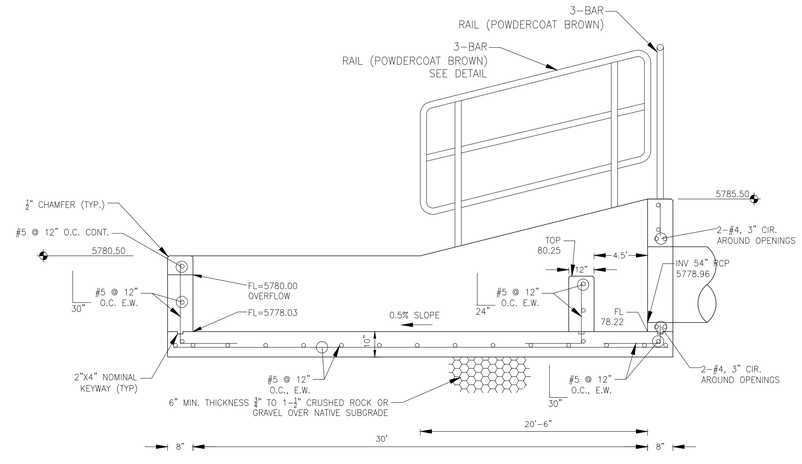
TOTAL SHEETS: 24



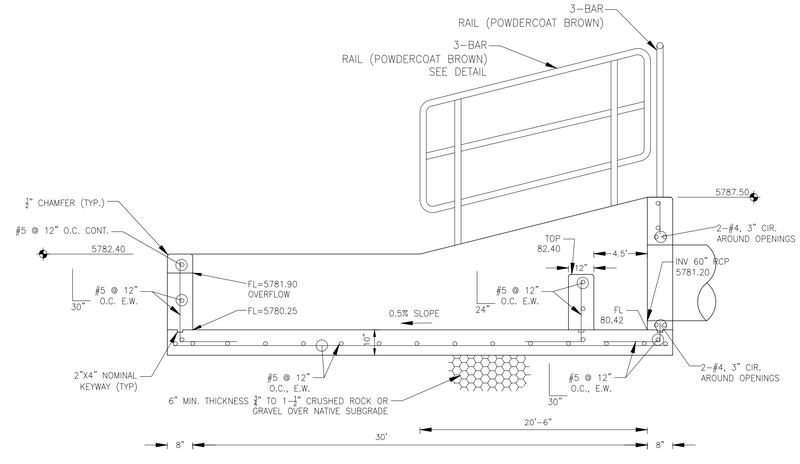
FOREBAY NO. 1 DETAIL
SCALE: 1"=5'



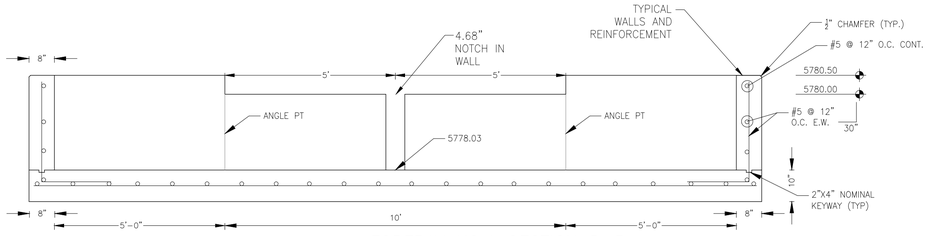
FOREBAY NO. 2
SCALE: 1"=5'



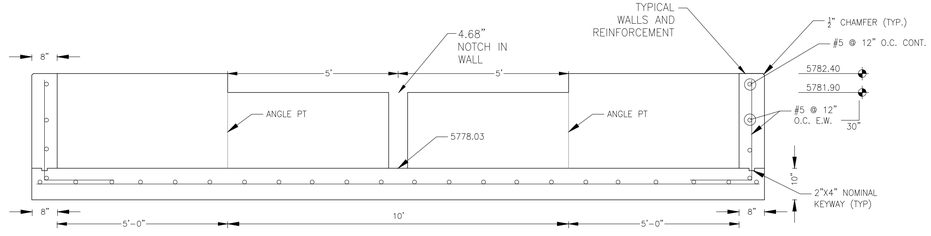
FOREBAY NO. 1 SECTION A-A
NO SCALE



FOREBAY NO. 2 SECTION A-A
NO SCALE



FOREBAY NO.1 SECTION B-B
NO SCALE



FOREBAY NO. 2 SECTION B-B
NO SCALE

CORE
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NO.	DESCRIPTION	DATE
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PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
719.635.7700
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

POND 'C'
FOREBAYS

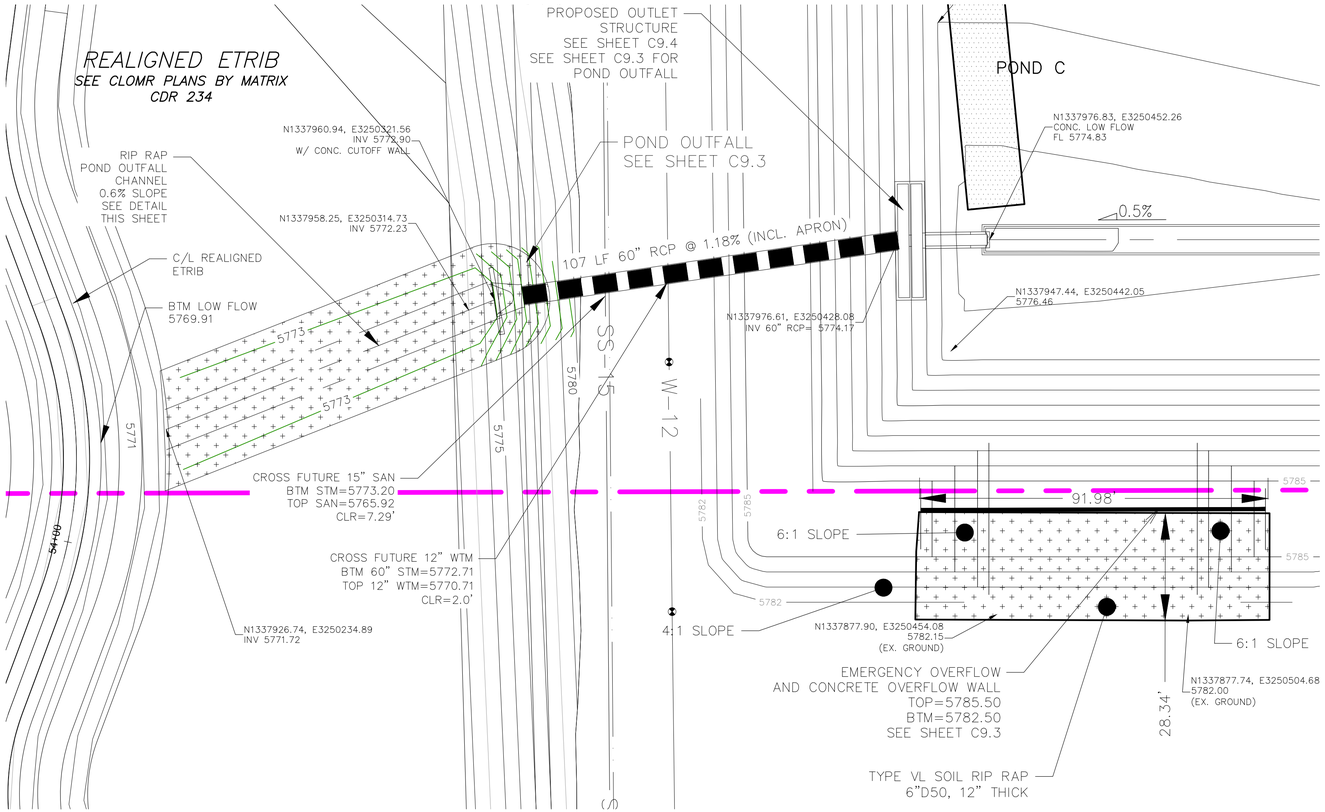
PRELIMINARY

DATE:
NOV., 2025

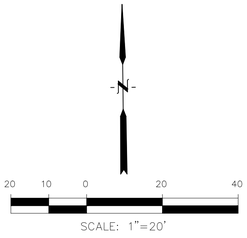
PROJECT NO.
100.302

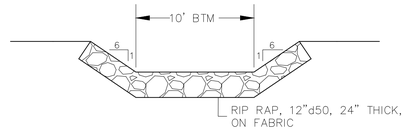
SHEET NUMBER
C9.2

TOTAL SHEETS: 24



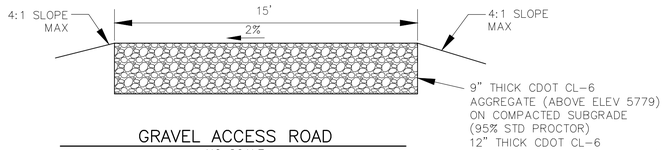
POND 'C' OUTFALL
SCALE: 1"=20'



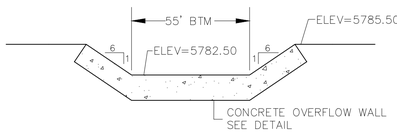


FLOW DEPTH=1.7', Q100=212.6cfs
VELOCITY: 6.2cfs

RIP RAP POND OUTFALL CHANNEL
SCALE: NTS

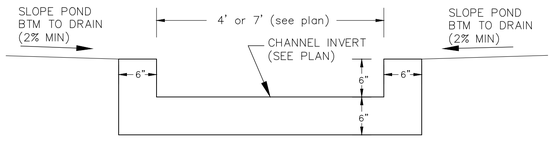


GRAVEL ACCESS ROAD
NO SCALE

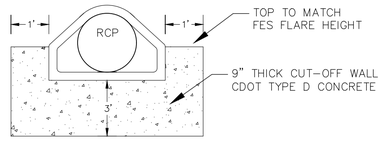


POND C
EMERGENCY OVERFLOW
BTM=5782.50, TOP=5785.00
WIDTH=55', 6:1 SIDE SLOPES
FLOW DEPTH=1.98', Q100=212.6cfs

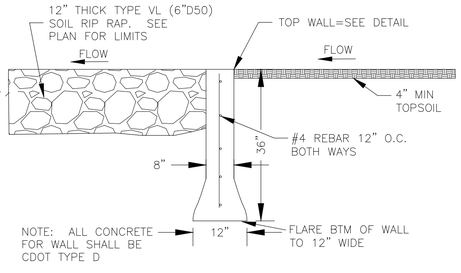
WQ POND C
EMERGENCY OVERFLOW
PROFILE
SCALE: NTS



CONCRETE LOW FLOW CHANNEL
N.T.S.



CONCRETE CUT-OFF WALL
N.T.S.



POND CONCRETE OVERFLOW WALL
NO SCALE

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NO.	DESCRIPTION	DATE
###	###	###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 352-3000
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

POND 'C' DETAILS

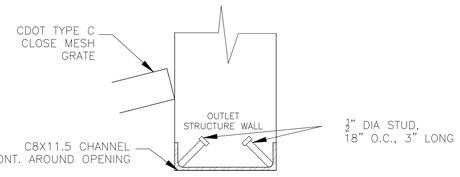
PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

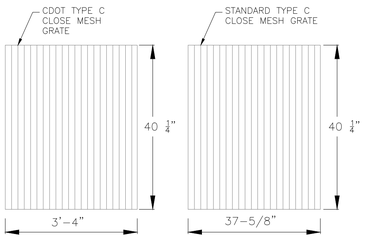
SHEET NUMBER
C9.3

TOTAL SHEETS: 24



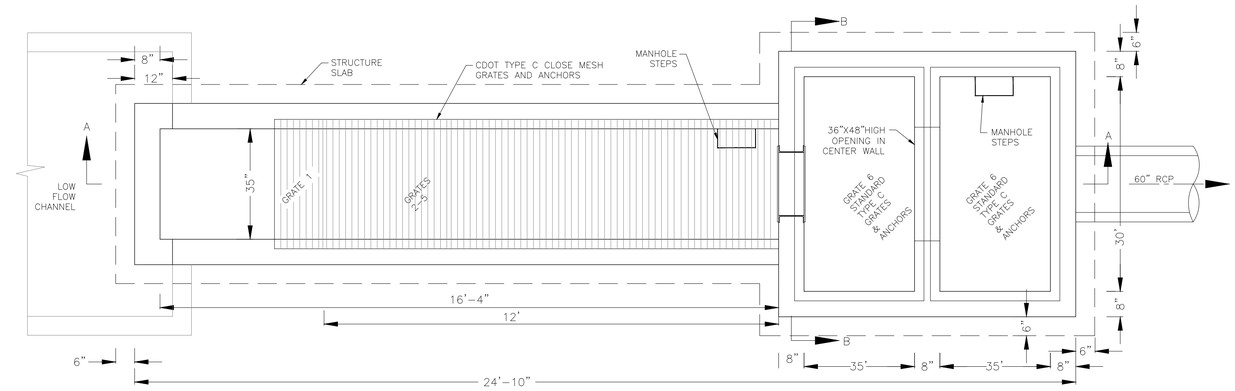
DETAIL A
NO SCALE

NOTE:
AFTER CONCRETE STRUCTURE HAS BEEN POURED ALL GRATE DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO GRATE CONSTRUCTION

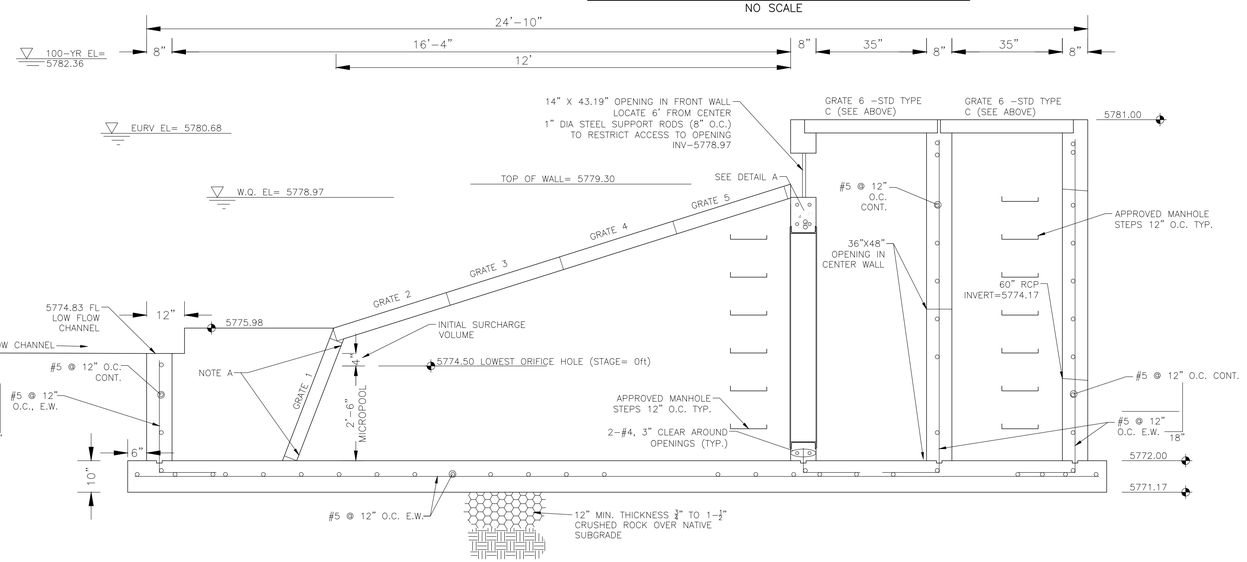


GRATE 1
NO SCALE

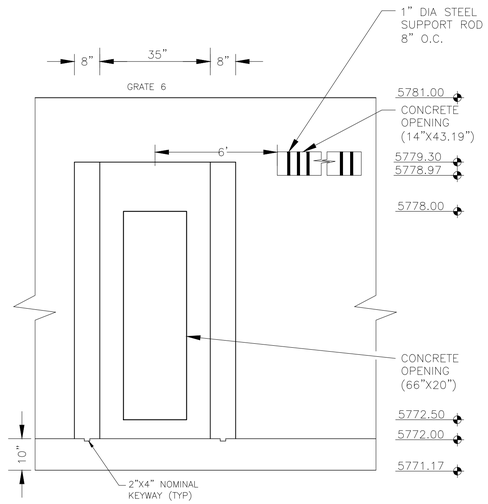
GRATES 2,3,4,5
NO SCALE



OUTLET STRUCTURE DETAIL – PLAN VIEW
NO SCALE



OUTLET STRUCTURE DETAIL – SECTION A–A
NO SCALE



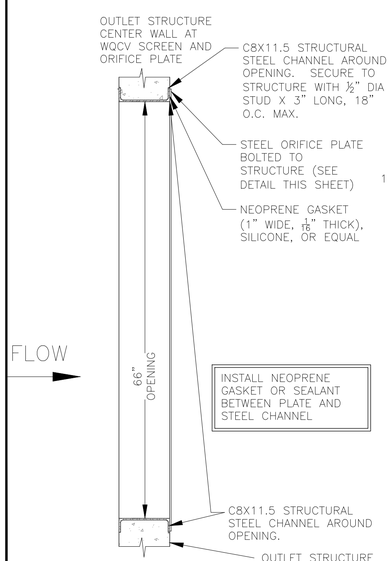
OUTLET STRUCTURE DETAIL – SECTION B–B
NO SCALE

OUTLET STRUCTURE, FOREBAY, AND DRAIN CHANNEL NOTES:

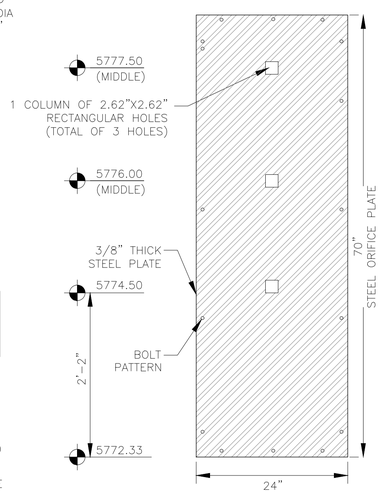
1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
2. GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE A TWO-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE, UNLESS OTHERWISE NOTED.

BAR SIZE	#4	#5	#6
MIN. SPLICE LENGTH	1'-3"	1'-7"	2'-0"

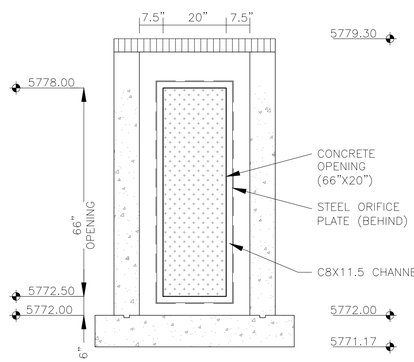
3. CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAY SHALL BE CDOT CLASS D CONCRETE.
4. CONCRETE FOR DRAIN CHANNELS SHALL BE CDOT CLASS B CONCRETE
5. EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE ½" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
6. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A ⅜" CHAMFER UNLESS OTHERWISE NOTED.
7. SUBGRADE TO BE 12" THICK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURE.
8. REFER TO POND DETAILS FOR PRESEDIMENTATION/FOREBAY DESIGN.
9. ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCITON OF OUTLET STRUCTURE TO SCHEDULE OBSERVATION VISITS FOR STRUCTURES.



TRASH RACK DETAIL
NO SCALE



ORIFICE PLATE DETAIL
NO SCALE



OUTLET STRUCTURE DETAIL – SECTION B–B
NO SCALE

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E.MAIL: rich@cegi.com

NO.	DESCRIPTION	DATE
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PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

POND 'C'
FULL SPECTRUM / WQ POND
OUTLET STRUCTURE DETAILS

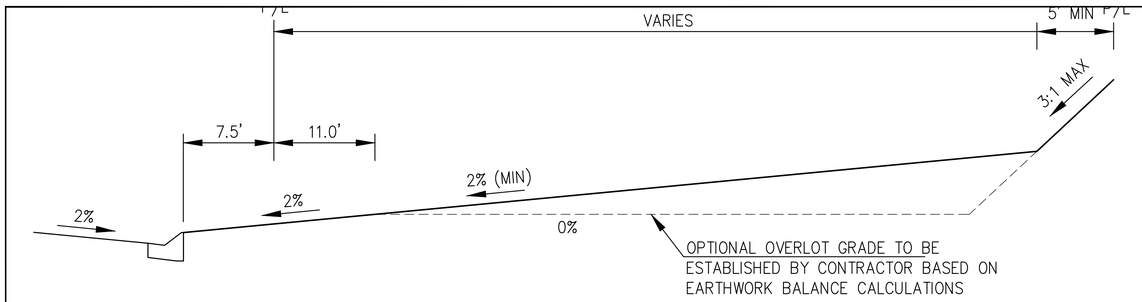
PRELIMINARY

DATE:
NOV., 2025

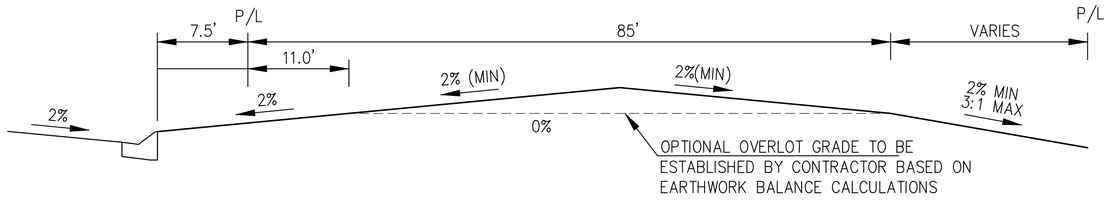
PROJECT NO.
100.302

SHEET NUMBER
C9.4

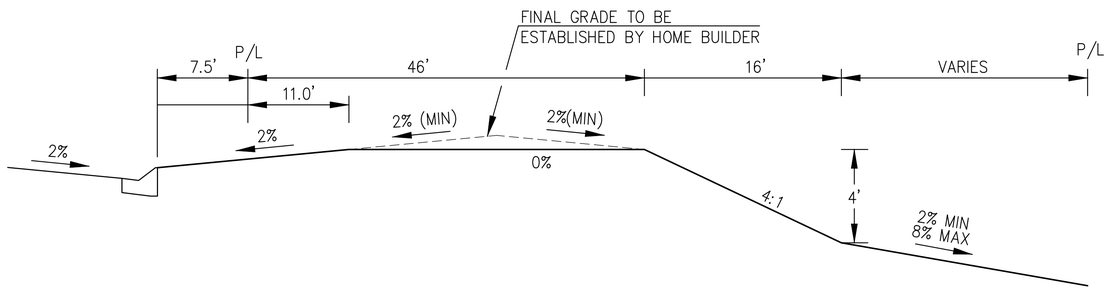
TOTAL SHEETS: 24



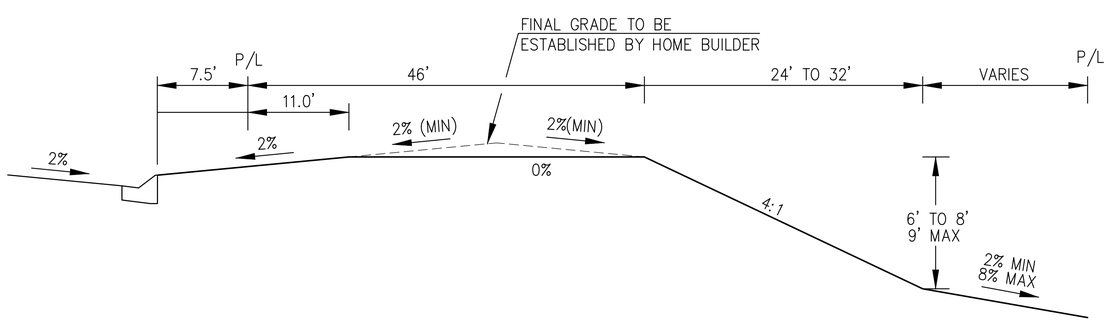
TYPICAL "A" LOT



TYPICAL "B" LOT

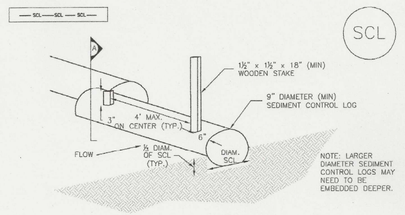


TYPICAL "GARDEN" LOT

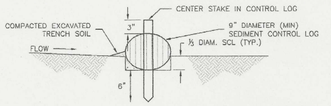


TYPICAL "WALKOUT" LOT

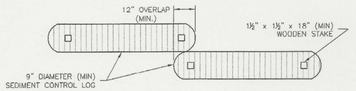
Sediment Control Log (SCL) — SC-2



SEDIMENT CONTROL LOG



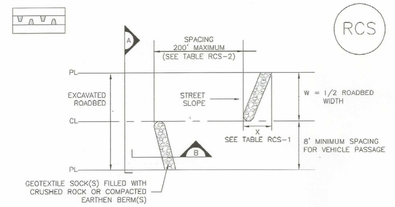
SECTION A



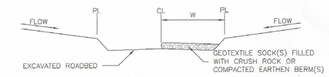
SEDIMENT CONTROL LOG JOINTS

SCL-1. SEDIMENT CONTROL LOG

EC-9 Rough Cut Street Control (RCS)



ROUGH CUT STREET CONTROL PLAN



SECTION A



SECTION B

TABLE RCS-1

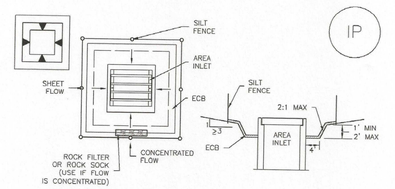
W (FT)	X (FT)
20-30	5
31-40	7
41-50	9
51-60	10.5
61-70	12

TABLE RCS-2

LONGITUDINAL STREET SLOPE (%)	SPACING (FT)
<2	NOT TYPICALLY NEEDED
2	200
3	200
4	150
5	100
6	50
7	25
8	25

RCS-1. ROUGH CUT STREET CONTROL

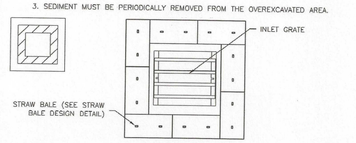
SC-6 Inlet Protection (IP)



IP-5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

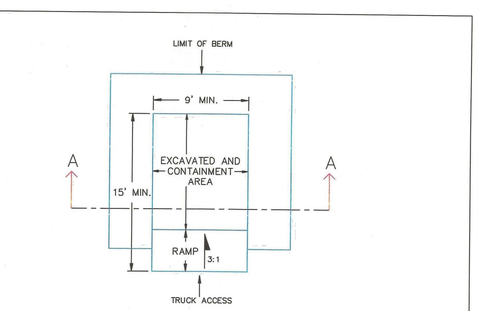
1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.
3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.



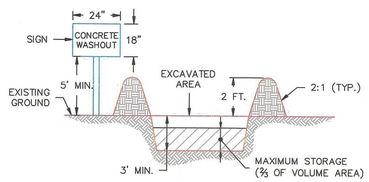
IP-6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



PLAN VIEW



SECTION A-A

NOTES:
1. SIGN MATERIAL, EXCAVATION, AND RESTORATION ARE INCLUDED IN THE COST OF THE CONCRETE WASHOUT STRUCTURE.
2. EROSION BALES MAY BE USED AS AN ALTERNATIVE FOR THE BERM.

DATE APPROVED: 1/1/08	Concrete Washout Structure	
John A. McCarty, DEPARTMENT OF TRANSPORTATION	Standard Drawing	
	REVISION DATE: 7/17/07	FILE NAME: SD_3-84

EL PASO COUNTY COLORADO DEPARTMENT OF TRANSPORTATION

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@cegi.com

NO. ### | DESCRIPTION: #### | DATE: ###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

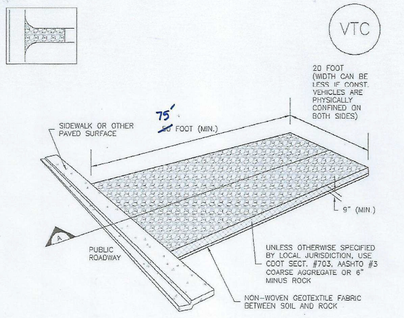
DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

--- GRADING AND EROSION CONTROL DETAILS ---

PRELIMINARY

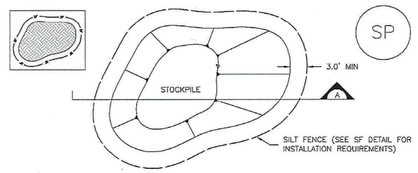
DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C12.1
TOTAL SHEETS: 24

Vehicle Tracking Control (VTC) SM-4

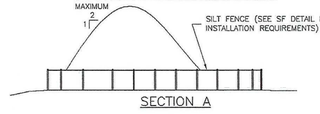


VTC–1. AGGREGATE VEHICLE TRACKING CONTROL

Stockpile Management (SP) MM-2



STOCKPILE PROTECTION PLAN



SECTION A

SP–1. STOCKPILE PROTECTION

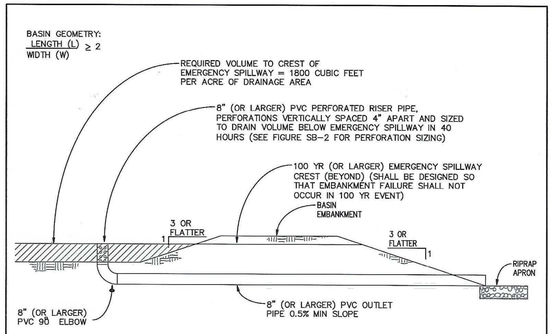
STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –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 MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

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.



SEDIMENT BASIN
NTS

SEDMENT BASIN NOTES

INSTALLATION REQUIREMENTS

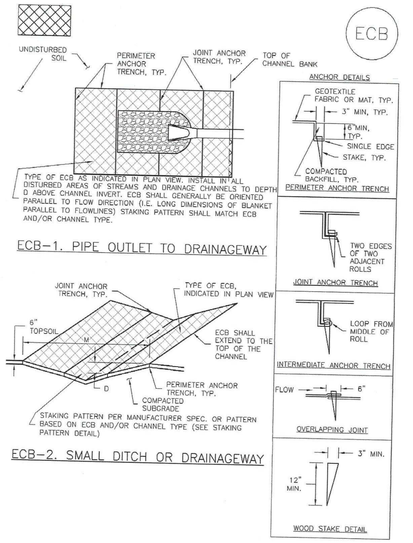
1. SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 40 HOURS.
4. THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BAFFLES MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
5. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL.
2. SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
3. SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

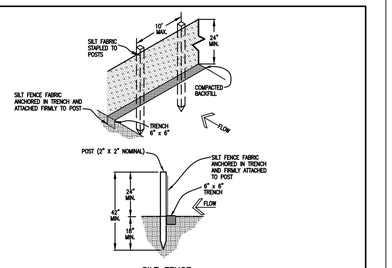
City of Colorado Springs Stormwater Quality	Figure SB–1 Sediment Basin Construction Detail and Maintenance Requirements

EC-6 Rolled Erosion Control Products (RECP)



ECB–1. PIPE OUTLET TO DRAINAGEWAY

ECB–2. SMALL DITCH OR DRAINAGEWAY



SILT FENCE

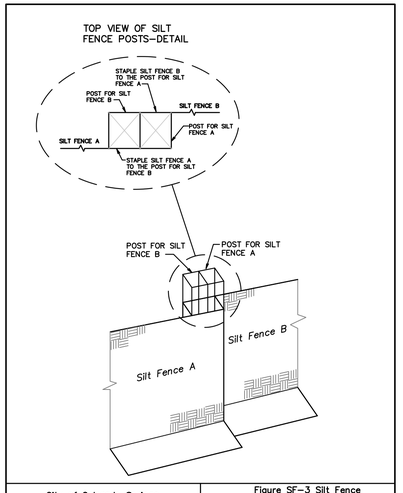
INSTALLATION REQUIREMENTS

1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDED TEE" OR "V" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #9 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
5. WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 8" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE ORIGINAL GROUND SURFACE.
6. ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES; HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

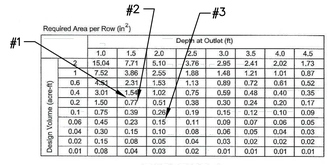
MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
3. SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality	Figure SF–2 Silt Fence Construction Detail and Maintenance Requirements

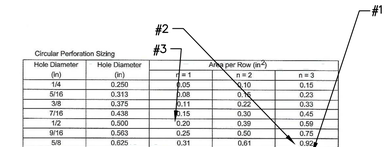


City of Colorado Springs Stormwater Quality	Figure SF–3 Silt Fence Joint Tying Construction Detail and Maintenance Requirements



Design Volume (acre-ft)	Required Area per Row (in²)	Depth at Outlet (ft) 1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
2	15.04	7.71	5.10	3.76	2.95	2.41	2.02	1.73
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
0.6	4.51	2.31	1.53	1.13	0.89	0.72	0.61	0.52
0.4	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35
0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17
0.1	0.75	0.39	0.26	0.19	0.15	0.12	0.10	0.09
0.06	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05
0.04	0.30	0.15	0.10	0.08	0.06	0.05	0.04	0.03
0.02	0.15	0.08	0.05	0.04	0.03	0.02	0.02	0.02
0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01

TABLE SB-1



Hole Diameter (in)	Hole Diameter (in)	n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.16	0.23
3/8	0.375	0.11	0.22	0.33
7/16	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
9/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
7/8	0.875	0.60	1.20	1.80
1	1.000	0.79	1.57	2.36
1 1/8	1.125	0.99	1.99	2.98
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.76	5.52	8.28
2	2.000	3.14	6.28	9.42
Minimum steel plate thickness		1/4"	5/16"	3/8"

TABLE SB-2

City of Colorado Springs Stormwater Quality	Figure SB-2 Outlet Sizing Application Techniques and Maintenance Requirements

SEDIMENT BASIN 1

- 8.06 acres, 14,508cf REQUIRED
- 8" PVC AT 0.5% SLOPE
- VOLUME = 15,513cf (0.35ac–ft), 1.5' DEEP
- 1.1sqin FROM TABLE SB–1
- 3 COLUMNS, 11/16" HOLES
- 8" OUTLET PIPE

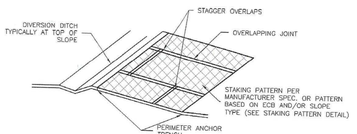
SEDIMENT BASIN 2

- 5.3 acres, 9,540cf REQUIRED
- 8" PVC AT 0.5% SLOPE
- VOLUME = 10,555cf (0.24ac–ft), 1.5' DEEP
- 0.90sqin FROM TABLE SB–1
- 3 COLUMNS, 5/8" HOLES
- 8" OUTLET PIPE

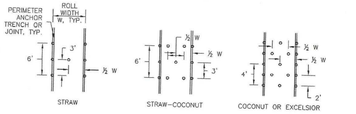
SEDIMENT BASIN 3

- 4.0 acres, 7,200cf REQUIRED
- 8" PVC AT 0.5% SLOPE
- VOLUME = 8,108cf (0.19ac–ft), 2.0' DEEP
- 0.20sqin FROM TABLE SB–1
- 1 COLUMNS, 1/2" HOLES
- 8" OUTLET PIPE

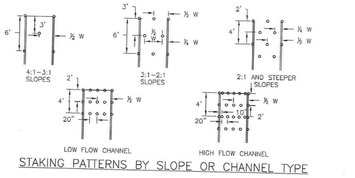
Rolled Erosion Control Products (RECP) EC-6



ECB–3. OUTSIDE OF DRAINAGEWAY



STAKING PATTERNS BY ECB TYPE



STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ecg1.com

DATE: ###
DESCRIPTION: ####
NO. ###

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635–3200
CONTACT: JEFF MARK

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ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

--- GRADING AND EROSION CONTROL DETAILS ---

PRELIMINARY

DATE: NOV., 2025
PROJECT NO. 100.302
SHEET NUMBER C12.2
TOTAL SHEETS: 24

Temporary and Permanent Seeding (TS/PS) EC-2

Seeding dates for the highest success probability of perennial species along the Front Range are generally in the spring from April through early May and in the fall after the first of September until the ground freezes. If the area is irrigated, seeding may occur in summer months, as well. See Table TS/PS-3 for appropriate seeding dates.

Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species[a] (Common name)	Growth Season[b]	Pounds of Pure Live Seed (PLS)/acre[c]	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	½
5. Millet	Warm	3 - 15	½ - ¾
6. Sudangrass	Warm	5–10	½ - ¾
7. Sorghum	Warm	5–10	½ - ¾
8. Winter wheat	Cool	20–35	1 - 2
9. Winter barley	Cool	20–35	1 - 2
10. Winter rye	Cool	20–35	1 - 2
11. Triticale	Cool	25–40	1 - 2

[a] Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in the mulch.

[b] See Table TS/PS-3 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

[c] Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses

Common Name[a]	Botanical Name	Growth Season[b]	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Alakali Soil Seed Mix					
Alkali sacaton	*Sporobolus airoides*	Cool	Bunch	1,750,000	0.25
Basin wildrye	*Elymus cinereus*	Cool	Bunch	165,000	2.5
Sodar streambank wheatgrass	*Agropyron riparium 'Sodar'*	Cool	Sod	170,000	2.5
Jose tall wheatgrass	*Agropyron elongatum 'Jose'*	Cool	Bunch	79,000	7.0
Arriba western wheatgrass	*Agropyron smithii 'Arriba'*	Cool	Sod	110,000	5.5
Total					**17.75**
Fertile Loamy Soil Seed Mix					
Ephriam crested wheatgrass	*Agropyron cristatum 'Ephriam'*	Cool	Sod	175,000	2.0
Dural hard fescue	*Festuca ovina 'duriuscula'*	Cool	Bunch	565,000	1.0
Lincoln smooth brome	*Bromus inermis leyss 'Lincoln'*	Cool	Sod	130,000	3.0
Sodar streambank wheatgrass	*Agropyron riparium 'Sodar'*	Cool	Sod	170,000	2.5
Arriba western wheatgrass	*Agropyron smithii 'Arriba'*	Cool	Sod	110,000	7.0
Total					**15.5**
High Water Table Soil Seed Mix					
Meadow foxtail	*Alopecurus pratensis*	Cool	Sod	900,000	0.5
Redtop	*Agrostis alba*	Warm	Open sod	5,000,000	0.25
Reed canarygrass	*Phalaris arundinacea*	Cool	Sod	68,000	0.5
Lincoln smooth brome	*Bromus inermis leyss 'Lincoln'*	Cool	Sod	130,000	3.0
Pathfinder switchgrass	*Panicum virgatum 'Pathfinder'*	Warm	Sod	389,000	1.0
Alkar tall wheatgrass	*Agropyron elongatum 'Alkar'*	Cool	Bunch	79,000	5.5
Total					**10.75**
Transition Turf Seed Mix[c]					
Ruebens Canadian bluegrass	*Poa compressa 'Ruebens'*	Cool	Sod	2,500,000	0.5
Dural hard fescue	*Festuca ovina 'duriuscula'*	Cool	Bunch	565,000	1.0
Citation perennial ryegrass	*Lolium perenne 'Citation'*	Cool	Sod	247,000	3.0
Lincoln smooth brome	*Bromus inermis leyss 'Lincoln'*	Cool	Sod	130,000	3.0
Total					**7.5**

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses (cont.)

Common Name	Botanical Name	Growth Season[b]	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Sandy Soil Seed Mix					
Blue grama	*Bouteloua gracilis*	Warm	Sod-forming bunchgrass	825,000	0.5
Camper little bluestem	*Schizachyrium scoparium 'Camper'*	Warm	Bunch	240,000	1.0
Prairie sandreed	*Calamovilfa longifolia*	Warm	Open sod	274,000	1.0
Sand dropseed	*Sporobolus cryptandrus*	Cool	Bunch	5,298,000	0.25
Vaughn sideoats grama	*Bouteloua curtipendula 'Vaughn'*	Warm	Sod	191,000	2.0
Arriba western wheatgrass	*Agropyron smithii 'Arriba'*	Cool	Sod	110,000	5.5
Total					**10.25**
Heavy Clay, Rocky Foothill Seed Mix					
Ephriam crested wheatgrass[d]	*Agropyron cristatum 'Ephriam'*	Cool	Sod	175,000	1.5
Oahe Intermediate wheatgrass	*Agropyron intermedium 'Oahe'*	Cool	Sod	115,000	5.5
Vaughn sideoats grama[e]	*Bouteloua curtipendula 'Vaughn'*	Warm	Sod	191,000	2.0
Lincoln smooth brome	*Bromus inermis leyss 'Lincoln'*	Cool	Sod	130,000	3.0
Arriba western wheatgrass	*Agropyron smithii 'Arriba'*	Cool	Sod	110,000	5.5
Total					**17.5**

[a] All of the above seeding mixes and rates are based on drill seeding followed by crimped straw mulch. These rates should be doubled if seed is broadcast and should be increased by 50 percent if the seeding is done using a Brillion Drill or is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching should be done as a separate operation.

[b] See Table TS/PS-3 for seeding dates.

[c] If site is to be irrigated, the transition turf seed rates should be doubled.

[d] Crested wheatgrass should not be used on slopes steeper than 6H to 1V.

[e] Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sideoats grama.

Table TS/PS-3. Seeding Dates for Annual and Perennial Grasses

	Annual Grasses (Numbers in table reference species in Table TS/PS-1)		Perennial Grasses	
Seeding Dates	**Warm**	**Cool**	**Warm**	**Cool**
January 1–March 15			✓	✓
March 16–April 30	4	1,2,3	✓	✓
May 1–May 15	4		✓	
May 16–June 30	4,5,6,7			
July 1–July 15	5,6,7			
July 16–August 31				
September 1–September 30		8,9,10,11		
October 1–December 31			✓	✓

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the Mulching BMP Fact Sheet for additional guidance.

Maintenance and Removal

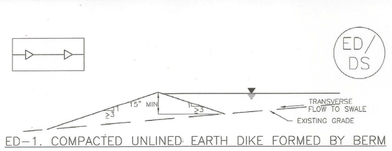
Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

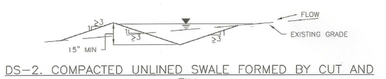
Earth Dikes and Drainage Swales (ED/DS) EC-10



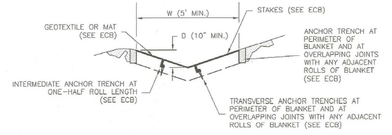
ED–1. COMPACTED UNLINED EARTH DIKE FORMED BY BERM



DS–1. COMPACTED UNLINED EXCAVATED SWALE



DS–2. COMPACTED UNLINED SWALE FORMED BY CUT AND FILL



DS–3. ECB LINED SWALE (CUT AND FILL OR BERM)

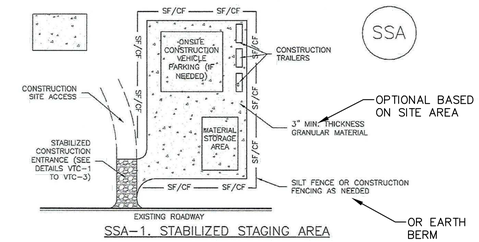
Table 5-1. El Paso County Conservation District All-Purpose Mix for Upland, Transition and Permanent Control Measure Areas

Common Name	Scientific Name	Growth Season / Form	% of Mix	Pounds PLS: • Irrigated broadcast • Irrigated hydroseeded (80 seeds/sq ft)	• Non-irrigated broadcast • Non-irrigated hydroseeded • Irrigated drilled (40 seeds/sq ft)	• Non-irrigated drilled (20 seeds/sq ft)
Bluestem, big	*Andropogon gerardii*	Warm, sod	20	4.4	2.2	1.1
Grama, blue	*Bouteloua gracilis*	Warm, bunch	10	0.5	0.25	0.13
Green needlegrass[2]	*Nassella viridula*	Cool, bunch	10	2	1	0.5
Wheatgrass, western[2]	*Pascopyrum smithii*	Cool, sod	20	6.4	3.2	1.6
Grama, sideoats	*Bouteloua curtipendula*	Warm, bunch	10	2	1	0.5
Switchgrass[2]	*Panicum virgatum*	Warm, bunch/sod	10	0.8	0.4	0.2
Prairie sandreed	*Calimovilfa longifolia*	Warm, sod	10	1.2	0.6	0.3
Yellow indiangrass[2]	*Sorghastrum nutans*	Warm, sod	10	2	1	0.5
		Seed rate (lbs PLS/acre)		19.3	9.7	4.8

Table 5-2. El Paso County All-Purpose Low Grow Mix for Upland and Transition Areas

Common Name	Scientific Name	Growth Season / Form	% of Mix	Pounds PLS: • Irrigated broadcast • Irrigated hydroseeded (80 seeds/sq ft)	• Non-irrigated broadcast • Non-irrigated hydroseeded • Irrigated drilled (40 seeds/sq ft)	• Non-irrigated drilled (20 seeds/sq ft)
Buffalograss	*Buchloe dactyloides*	Warm, sod	25	9.6	4.8	2.4
Grama, blue	*Bouteloua gracilis*	Warm, bunch	20	10.8	5.4	2.7
Grama, sideoats	*Bouteloua curtipendula*	Warm, bunch	29	5.6	2.8	1.4
Green needlegrass	*Nassella viridula*	Cool, bunch	5	3.2	1.6	0.8
Wheatgrass, western	*Pascopyrum smithii*	Cool, sod	20	12	6	3
Dropseed, sand	*Sporobolus cryptandrus*	Warm, bunch	1	0.8	0.4	0.2
		Seed rate (lbs PLS/acre)		42	21	10.3

Stabilized Staging Area (SSA) SM-6



SSA–1. STABILIZED STAGING AREA

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 MATERIAL.
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.

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CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ecg1.com

NO. ### | DESCRIPTION: #### | DATE: ####

PREPARED FOR:
EAGLE DEVELOPMENT
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635–3200
CONTACT: JEFF MARK

PROJECT:
ANTELOPE RIDGE AT BULL HILL PHASE 1
FONTAINE BLVD/MARKSHEFFEL RD
COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

GRADING AND EROSION CONTROL DETAILS

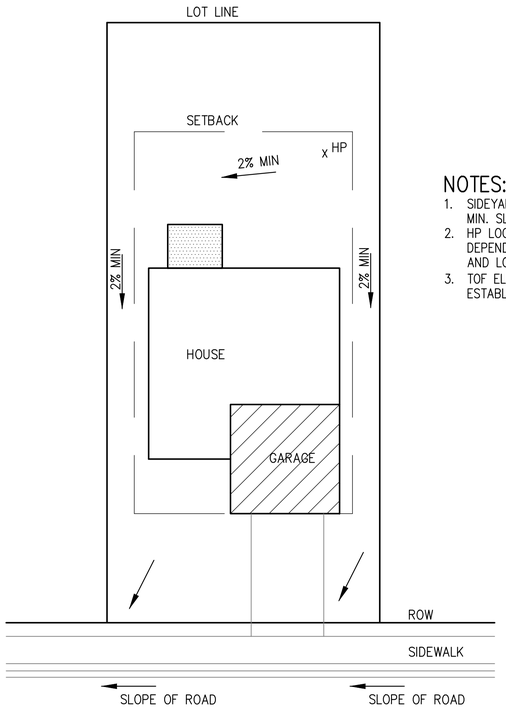
PRELIMINARY

DATE: NOV., 2025

PROJECT NO. 100.302

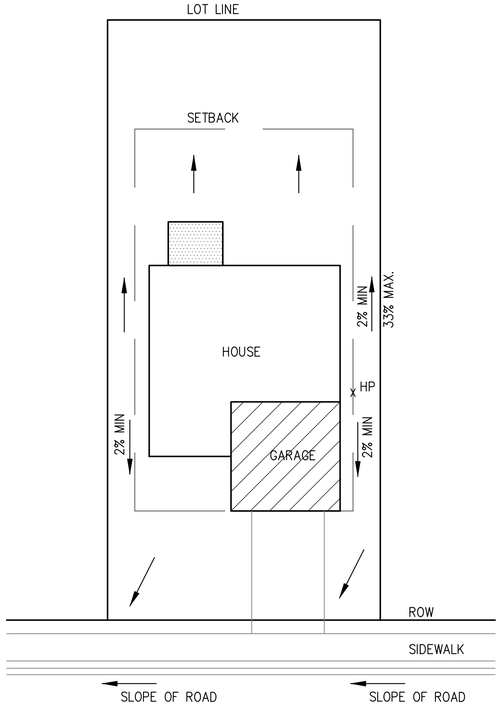
SHEET NUMBER C12.3

TOTAL SHEETS: 24



TYPICAL "A" LOT DRAINAGE PATTERN
N.T.S.

NOTES:
1. SIDEYARD SWALE TO BE CONSTRUCTED AT 2% MIN. SLOPE.
2. HP LOCATION ON EACH LOT WILL VARY DEPENDING UPON EXACT HOUSE FOOTPRINT AND LOCATION
3. TOF ELEVATION MUST BE MIN. 18" HIGHER THAN ESTABLISHED HP.



TYPICAL "B", "G", "W/O" LOT DRAINAGE PATTERN
N.T.S.

MULCHING NOTES

INSTALLATION REQUIREMENTS

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDED AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.

2. MATERIAL USED FOR MULCH CAN 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 CERTIFICATION PROGRAM.

3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.

4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.

5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL) USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.

6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

MAINTENANCE REQUIREMENTS

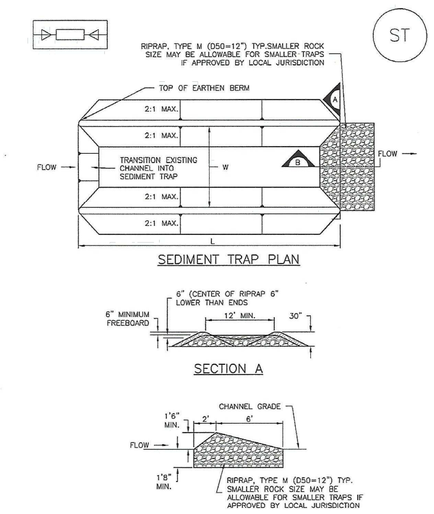
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.

2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE REBEEDED.

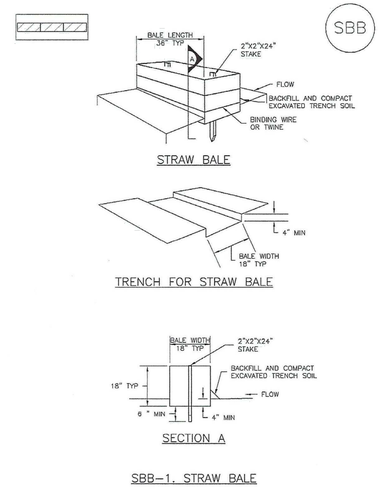
City of Colorado Springs
Stormwater Quality

Figure MU-1
Mulching
Construction Detail and Maintenance Requirements

SC-8 Sediment Trap (ST)



SC-3 Straw Bale Barrier (SBB)



City of Colorado Springs
Stormwater Quality

Figure MU-1
Mulching
Construction Detail and Maintenance Requirements

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NO.	DESCRIPTION	DATE
###	####	###

PREPARED FOR:
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COLORADO SPRINGS, CO

DRAWN: BRN:
DESIGNED: RLS
CHECKED: RLS:

GRADING AND EROSION CONTROL DETAILS

PRELIMINARY

DATE:
NOV., 2025

PROJECT NO.
100.302

SHEET NUMBER
C12.4

TOTAL SHEETS: 24

APPENDIX C

STORMWATER INSPECTION REPORT

Stormwater Inspection Report

Project Name and Location: _____

_____

Inspector Name and Title: _____ Director: _____

_____

Date/Time of Inspection: _____ Weather Conditions: _____

_____

Schedule Completion Date: _____ Construction Stage (circle all that apply):

Clearing/Grubbing Paving Rough Grading Infrastructure Building Construction Final Grading Final Stabilization Terminate Permit _____

Type of Control	**Describe status, identify problems, maintenance needs, or non-conformance with details or temporary alteration**	**Problem addressed (date and description of corrective action)**
Structural:		
Silt Fence ❒ OK ❒ N/A	❒Tears/Holes ❒Burial ❒Sed. Accum. ❒Sediment bypass	
Const. Exit ❒ OK ❒ N/A	❒Voids Filled ❒Trackout	
Check Dam ❒ OK ❒ N/A	❒Sediment Accumulation	
Inlet Protection ❒ OK ❒ N/A	❒Sed. Accum. ❒Sed. Bypass ❒Application not appropriate	
DiversionDitch/Berm ❒ OK ❒ N/A	❒Erosion ❒Stabilization	
Sediment Trap ❒ OK ❒ N/A	❒Sediment Accumulation	
Sediment Basin ❒ OK ❒ N/A	❒Sed. Accumulation ❒Bank erosion ❒Stabilization	
Discharge Point ❒ OK ❒ N/A	❒Erosion ❒Sediment Discharge	
Material Storage/ Secondary Contain. ❒ OK ❒ N/A	❒Not shown on Site Map ❒Spills ❒Out of design. area ❒Improper storage: chemicals; solvents; paint; fuels, etc.	

Other Structural Controls ❒ OK ❒ N/A		
Non-Structural:		
Good Housekeeping ❒ OK ❒ N/A	❒Solid Waste ❒Sanitary Waste ❒Dust Control	

Project Name and Location: _____Date: _____ Page 2

Equip. Wash/Maint. ❒ OK ❒ N/A	❒Spills ❒Outside designated area	
Concrete Washout ❒ OK ❒ N/A	❒Spills out of designated area ❒Not shown on Site Map	
Stabilization:		
Seed/Sod Mulching, Geotextile, Blankets ❒ OK ❒ N/A	❒Need Temp. stab. ❒Need final stab. ❒Health of veg.	
Record Keeping:		
Entrance Postings ❒ OK ❒ N/A	❒NOI ❒Permits ❒Construction Site Notice	
SWPPP Notebook ❒ OK ❒ N/A	❒Missing Sections ❒Missing Forms	
Site Map/Details ❒ OK ❒ N/A	❒Activities not up-to-date ❒Deviate from details ❒BMP Additions ❒Modifications ❒Not up-to-date	
Other ❒ OK ❒ N/A		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belied, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Inspector's Signature Date

APPENDIX D

SPILL REPORT FORM

Spill Report Form

Project Type and Location: _____

Spill Reported by: _____

Date/Time Spill: _____

Describe spill location and events leading to spill: _____

_____

_____

Material spilled: _____

Source of spill: _____

Amount spilled: _____ Amount spilled to waterway: _____

Containment or clean up action: _____

_____

_____

Approximate depth of soil excavation: _____

List Injuries or Personal Contamination: _____

Action to be taken to prevent future spills: _____

_____

Modifications to the SWPPP necessary due to this spill: _____

_____

Agencies notified of the spill: _____

_____

_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Contractor Superintendent Date

APPENDIX E

RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITY DATES

SITE STABILIZATION and CONSTRUCTION ACTIVITY DATES

A record of dates when BMPs are installed or removed, stabilization measures are initiated, major grading activities occur, and construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved.

MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity:_____

Site Contractor: _____ Begin (date): _____ End(date):_____

Location:_____

Description of Activity:_____

Site Contractor: _____ Begin (date): _____ End(date):_____

Location:_____

Description of Activity:_____

Site Contractor: _____ Begin (date): _____ End(date):_____

Location:_____

APPENDIX F

FEDERAL, STATE, OR LOCAL STORM WATER OR OTHER ENVIRONMENTAL INSPECTOR SITE VISIT LOG

Federal, State, or Local Storm Water or other Environmental Inspector Site Visit Log

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present: _____

Comments: _____

Time and Date: _____ Report Prepared:
Yes No

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present: _____

Comments: _____

Time and Date: _____ Report Prepared:
Yes No

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present: _____

Comments: _____

Time and Date: _____ Report Prepared:
Yes No

APPENDIX G

GENERAL PERMIT