STORMWATER MANAGEMENT PLAN

MONUMENT STEEL STRUCTURES

LOT 2 OF GREATER EUROPE MISSION SUBDIVISION FILING NUMBER 1

18910 BASE CAMP ROAD

EL PASO COUNTY, COLORADO

PREPARED FOR OWNER / DEVELOPER / SWMP ADMINISTRATOR:

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Prepared By:

Terra Forma Solutions

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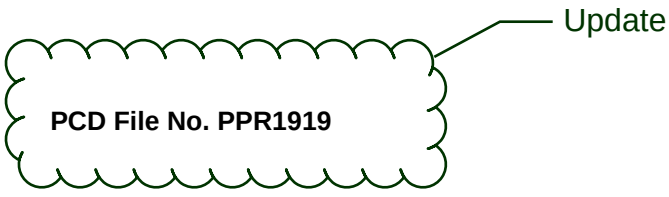
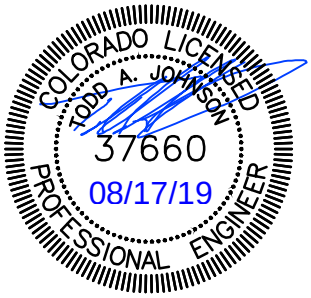
TBD



August 2019

ENGINEER'S CERTIFICATION:

This Stormwater Management Plan for Monument Steel Structures was prepared by me (or under my direct supervision) in accordance with the provisions of El Paso County and the State of Colorado.



_____ 08/17/2019

Todd Johnson, P.E. #37660 Date

TABLE OF CONTENTS

Project Location 3
Project Description 3
Existing Site Conditions 4
Receiving Waters 4
Adjacent Areas 4
Soil Idendification 5
Runoff Coefficients 5
Potential Pollutants 5
Soil Borings / Test and Groundwater 5
Area and Earthwork Volumes 5
BMP's For Stormwater Prevention 5
Erosion Control Measures Implementation 7
Schedule 9
Final Stabalization and Longterm Stormwater Management 9
Inspection and Maintenance 9
Record Keeping and Document Inspection 10
SWMP Plan Revisions 11
Conclusion 12
APPENDICES 13

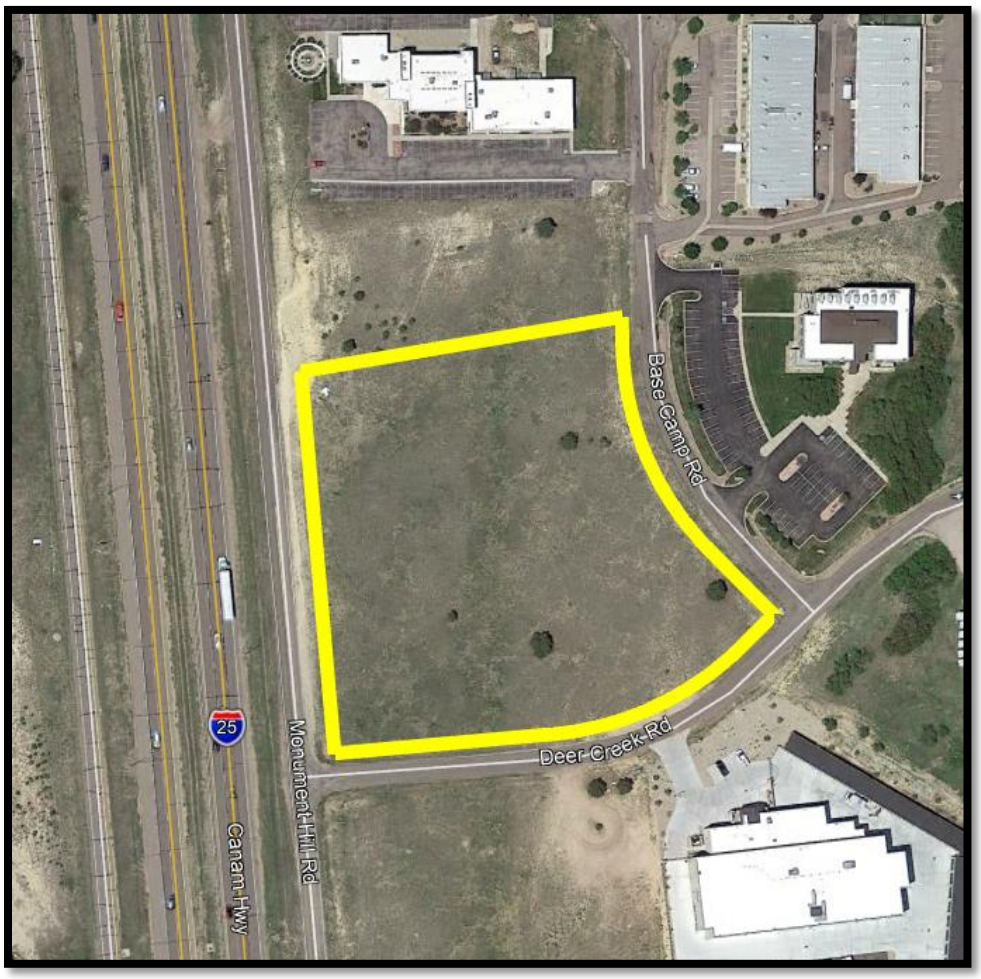
VICINITY MAP

APPENDIX A – Spill Response Plan
APPENDIX B – Referenced Information
APPENDIX C – Grading and Erosion Control Plans and Details
APPENDIX D – SWMP Forms

- SWMP Administrator / Alternate
- Construction Site Inspection Report
- Chemical Substances Kept on Site
- Spill / Release Incident Reporting Form
- Stormwater Pollution Prevention Training Log
- Subcontractor Certification Form

PROJECT LOCATION

- The Monument Steel Structures development is located at 18910 Base Camp Road in Section 11, Township 11 South, Range 67 West of the 6th Principal Meridian in El Paso County, State of Colorado.
- Approximate geodetic coordinates for the site are: 39°6'21"N, 104°51'48"W
- The site is bordered to the north by the Greater Europe Missions, to the east by Base Camp Road, to the west by Monument Hill Road and to the south by Deer Creek Road.
- See Vicinity Map in Appendices.
- See Site Location Map below for overall site location:



PROJECT DESCRIPTION

The nature and purpose of the land disturbing activities are for the development of a small sales office, display structures, and mini warehouse / RV Boat storage with access drives, parking spaces, and landscape areas.

EXISTING SITE CONDITIONS

The site is approximately 4.0 acres in size. The site is currently vacant and is approximately 90% covered by native grasses and weeds per visual inspection. Topography generally slopes from northeast to southwest towards a roadside ditch along Monument Hill Road with grades generally varying from 1% to 10%. There are no wetlands or non-stormwater discharges on the site.

RECEIVING WATERS

The receiving waters for stormwater runoff is Crystal Creek tributary to Monument Creek. The site is not located within a flooplain as shown on the FEMA FIRM Map No. 08041C0276G dated December 7, 2018. The site lies within Zone X which is described as follows: Areas of 0.2% annual chance flood; areas of 1% annual chance of a flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. The proposed on-site extended detention basin discharges to an existing storm sewer culvert transporting the runoff under Deer Creek Road and off site.

ADJACENT AREAS

The site receives runoff from the adjacent property to the north and to the east. The site slopes to the southwest into the Monument Hill roadside ditch.

SOIL IDENDIFICATION

The soil types on site as identified by the Natural Resources Conservation Service (NRCS) are as follows:

Hydrologic Soil Group				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
92	Tomah – Crowfoot Loamy sands, 3 to 8 percent slopes	B	4.7	80.6%
93	Tomah – Crowfoot complex, 8 to 15 percent slopes	B	1.1	19.4%

RUNOFF COEFFICIENTS

The existing runoff coefficient is derived to be 0.37 for the 100-year event. The developed runoff coefficient is derived to be 0.69 for the 100-year event.

POTENTIAL POLLUTANTS

During and after construction, potential pollutants that could be encountered include, but are not limited to vehicle fueling, concrete waste, hydraulic oil / fluids, antifreeze / coolant, paints and stains, sediment, trash, portable toilet waste, and cleaning solvents. There will be no dedicated batch plant on-site.

SOIL BORINGS / TEST AND GROUNDWATER

Soil borings and tests were conducted in February 2019 by CTL Thompson. There were no contaminated materials discovered that would require remediation and disposal. Groundwater was found at a depth of 13-15 feet in bore holes located at the southwest corner of the site where the proposed Extended Detention Basin is located.

AREA AND EARTHWORK VOLUMES

The site is 4.00 acres. The area of disturbance is 3.97 acres. Grading will extend past the site boundary slightly due to the need for some off-site grading at the entrance from Base Camp Road and roadside ditch grading along Monument Hill Road and Deer Creek Road. The projected earthwork has the site near balance with a projected export volume of ~ 1,500 cy.

BMP'S FOR STORMWATER PREVENTION

Structural Practices for Erosion and Sediment Control

- Construction Fence (CF) – May be chain link or plastic mesh and is used to delineate the site perimeter and locations within the site where access is restricted to protect natural resources such as wetlands, waterbodies, trees, and other natural areas of the site that should not be disturbed.

- Silt Fence (SF) - Is a temporary sediment barrier constructed of woven fabric stretched across supporting posts. The bottom edge of the fabric is placed in an anchor trench that is backfilled with compacted soil.
- Vehicle Tracking Control (VTC) Consists of a 3 to 6 inch crushed rock pad 12 inches thick at all entrance/exit points for a site that is intended to help strip mud from tires prior to vehicles leaving the construction site.
- Sediment Basin (SB) - A sediment basin is a temporary pond built on a construction site to capture eroded or disturbed soil transported in storm runoff prior to discharge from the site. Sediment basins are designed to capture site runoff and slowly release it to allow time for settling of sediment prior to discharge. Sediment basins are often constructed in locations that will later be modified to serve as post-construction stormwater basins.
- Diversion Ditch (DD) - Temporary storm conveyance channels constructed either to divert runoff around slopes or to convey runoff to additional sediment control BMPs prior to discharge of runoff from a site. Drainage swales may be lined or unlined, but if an unlined swale is used, it must be well compacted and capable of resisting erosive velocities.
- Curb Socks (CS) - Is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are typically used either as a perimeter control or as part of inlet protection. When placed at angles in the curb line, rock socks are typically referred to as curb socks. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.
- Stabilized Staging Area (SSA) consists of stripping topsoil and spreading a layer of granular material in the area to be used for a trailer, parking, storage, unloading and loading. A stabilized staging area reduces the likelihood that the vehicles most frequently entering a site are going to come in contact with mud.
- Concrete Washout Area (CWA) - Concrete waste management involves designating and properly managing a specific area of the construction site as a concrete washout area. A concrete washout area can be created using one of several approaches designed to receive wash water from washing of tools and concrete mixer chutes, liquid concrete waste from dump trucks, mobile batch mixers, or pump trucks. Three basic approaches are available: excavation of a pit in the ground, use of an above ground storage area, or use of prefabricated haulaway concrete washout containers. Surface discharges of concrete washout water from construction sites are prohibited.
- Check Dams (CD) - Check dams are temporary grade control structures placed in drainage channels to limit the erosivity of stormwater by reducing flow velocity. Check dams are typically constructed from rock, gravel bags, sand bags, or sometimes, proprietary devices. Reinforced check dams are typically constructed from rock and wire gabion. Although the primary function of check dams is to reduce the velocity of concentrated flows, a secondary benefit is sediment trapping upstream of the structure.

Non-Structural Practices for Erosion and Sediment Control

- Temporary Seeding and Mulching (SM) consists of drill seeding disturbed areas with grasses and crimping in straw mulch to provide immediate protection against raindrop and wind erosion and,

as the grass cover becomes established, to provide long-term stabilization of exposed soils. It will be required in all areas not to be paved after completion of the finished grade.

- All tributary bare areas will be seeded and stabilized prior to the removal of sediment control.
- Scraping and Sweeping (SS) of roadways will occur to remove mud tracking as needed.
- Water trucks will be used for Dust Control on disturbed areas not yet ready to be seeded, landscaped, or paved to preclude visible dust emissions.

EROSION CONTROL MEASURES IMPLEMENTATION

Prior to any earth moving or construction activities, the following BMP's will be installed:

- Construction Fence
- Silt Fence
- Vehicle Tracking Control
- Sediment Basin
- Diversion Ditches
- Curb Socks
- Stabilized Staging Area
- Concrete Washout Area
- Check Dams

All of these sediment control measures should minimize any sediment from leaving the site.

Once these measures are in place, earthwork operations will commence. Upon completion of the earthwork, utility installation will start. During all phases of construction, especially after rainfall events, the BMPs will be inspected and maintained. Maintenance of the BMPs is discussion further on in this report.

Upon completion of the utility installation, the following BMPs will be installed:

- Inlet Protection

All of the BMPs listed above will remain in place until completion of construction and final stabilization, with the exception of the sediment basin, which will be removed for site final grading and paving.

Good housekeeping management practices shall be followed by the contractor to prevent pollution associated with solid, liquid and hazardous construction related materials and wastes. These practices should include:

- Provide for waste management — Designate waste/trash collection areas on site. Locate these areas away from streets, gutters and storm inlets. Segregate and provide for proper disposal options for hazardous materials waste. Empty waste containers before they are full.
- Clean up litter and trash on a daily basis.

- Provide convenient, well-maintained and properly located toilet facilities away from gutter and inlets. Tie down or stake down portable toilets. Assure frequent pump-out of those facilities.
- Provide secondary containment for fuels, paints and stains, hazardous and toxic material wastes.
- Establish proper equipment and vehicle fueling and maintenance procedures.
- Establish proper building material handling and staging areas.
- Minimize the excess use of water on-site during construction. Any allowable non- stormwater discharge of water should be routed to the BMPs.
- Develop a spill prevention and response plan. A spill response plan is included in Appendix A of this report. This plan was adopted from a City of Aurora standard procedure.

SCHEDULE

The following is an anticipated schedule for the project:

Install Initial BMPs	August, 2019
Start Site Grading	August, 2019
Complete Site Grading	November, 2019
Start Utility Installation	November, 2019
Complete Utility Installation	January 2019
Install Inlet Protection BMP	January, 2019
Start Building Construction	January, 2019
Start Site Paving	April, 2020
Final Site Stabilization	May, 2020
Remove BMPs	May, 2020

FINAL STABALIZATION AND LONGTERM STORMWATER MANAGEMENT

Final stabilization will be achieved by seeding all areas not paved, sodded, or covered by other erosion resistant material. Final stabilization is reached when all ground surface disturbing activities at the site have been completed, and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.

The majority of the site will consist of buildings, concrete & asphalt pavement. Permanent stabilization will consist of the site paving, permanent seeding, landscaping and an Extended Detention Basin (EDB). An EDB is provided on site to provide permanent stormwater quality enhancement and has been sized and located to fit the proposed site. This BMP is a sedimentation basin designed to detain stormwater for many hours after a storm runoff ends. This BMP is similar to a detention basin used for flood control, however; the EDB uses a much smaller outlet that extends the emptying time of the more frequently occurring runoff events to facilitate pollution removal. The EDB's 40-hour drain time for the water quality capture volume (WQCV) is recommended to remove a significant portion of total suspended solids (TSS).

INSPECTION AND MAINTENANCE

The following inspection and maintenance procedures shall be used for each BMP:

Construction Fence — Inspect on a daily basis. Inspect within 24 hours of a storm. Repair or replace damage such as rips and sags. Construction fence shall remain in place until final stabilization is approved.

Silt Fence - Inspect on a daily basis. Inspect within 24 hours of a storm. Repair or replace damage such as rips and sags. Remove sediment accumulation upstream of the silt fence when the accumulation is approximately 6". Silt fence shall remain in place until final stabilization is approved.

Vehicle Tracking Control — Inspect on a daily basis. Replace rock and regrade as needed to maintain a consistent depth. Remove sediment tracked onto paved access road throughout the day and at the end of the day by sweeping and shoveling. Vehicle tracking control shall remain in place until site paving is complete.

Stabilized Staging Area — Inspect on a daily basis. Replace rock and regrade as necessary if rutting occurs or underlying subgrade is exposed. Stabilized staging area shall remain in place until final site paving is complete.

Concrete Washout Area — Inspect on a daily basis. The Concrete washout area shall be repaired, cleaned or enlarged as necessary to maintain capacity for concrete waste. Concrete materials, accumulated in pit, shall be removed once the they have reached a depth of 2". Concrete washout water, wasted pieces of concrete and all other debris in the pit shall be transported from the job site in a water-tight container and disposed of properly in accordance with local requirements. The concrete washout area shall remain in place until all concrete tor the project is placed.

Inlet Protection — Inspect daily. Sediment accumulation upstream of inlet protection shall be removed as necessary to maintain BMP effectiveness, typically when the accumulation reaches one-half of the height of the cinder block/rock sock protection. Inlet protection shall be removed upon approval of final stabilization.

Rock Sock — Inspect daily. Replace rock socks that become heavily soiled or damaged. Sediment accumulated upstream of rock socks shall be removed as needed to maintain the functionality of the BMP or when the depth of accumulation is approximately one-half of the height of the rock sock.

Sediment Basin — Inspect on a weekly basis and as soon as possible (minimum within 24 hours) of any rainfall event. Inspect daily during periods of prolonged rainfall. Accumulated sediment shall be removed before the sediment reaches one-half of the basin volume. The sediment basin shall remain in place until final site paving is complete.

RECORD KEEPING AND DOCUMENT INSPECTION

- Keeping records of spills, leaks, inspections, etc. is a requirement of the Stormwater Construction Permit. Therefore, enforcement action, including fines, could result if records are not adequate. Keeping accurate and detailed records also provides documentation of events which could prove invaluable should complications arise concerning the permit, lawsuits, etc.
- The permittee must document inspection results and maintain a record of the results for a period of 3 years following expiration or inactivation of permit coverage. These records must be made available to the Division or EPA upon request.
- A sample inspection report has been included in Appendix D. The following items must be documented as part of the site inspections:
    - The inspection date;
    - Name(s) and title(s) of personnel making the inspection;
    - Location(s) of discharges of sediment or other pollutants from the site;
    - Location(s) of BMPs that need to be maintained;

  - Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
  - Location(s) where additional BMPs are needed that were not in place at the time of inspection;
  - Deviations from the minimum inspection schedule as provided above;
  - Description of corrective action for items above, dates corrective action(s) taken, and measures taken to prevent future violations, including requisite changes to the SWMP, as necessary; and
  - After adequate corrective action(s) has been taken, or where a report does not identify any incidents requiring corrective action, the report shall contain a signed statement indicating the site is in compliance with the permit to the best of the signer‘s knowledge and belief.

- In addition to inspection records, a log book may be kept for use in tracking other items related to the SWMP such as those listed below. Additional information such as dated photographs, field notebooks, drawings and maps, and the items below, etc. can also be included where appropriate.
  - BMP operation and maintenance
  - Contacts with suppliers, regulatory agencies and personnel
  - Implementation of specific items in this SWMP
  - Training events (given or attended)
  - Events involving materials handling and storage
  - Preventive maintenance activities
- Records of spills, leaks, or overflows that result in the discharge of pollutants must be documented and maintained. Other spills that are responded to, even if they do not result in a discharge of pollutants may be recorded. Information that should be recorded for all occurrences includes the time and date, weather conditions, reasons for the spill, etc.
- A release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the State of Colorado (which include surface water, ground water and dry gullies or storm sewers leading to surface water) must be reported. More guidance is available on the web at www.cdphe.state.co.us/hm/spillsandreleases.htm. The Division‘s toll-free 24-hour number for environmental hazards and chemical spills and releases is 1-877-518-5608.

SWMP PLAN REVISIONS

Typically, the SWMP plan is considered a work in progress or a “living” document. The contractor will mark up the SWMP Plan in the field with any revisions, additions or deletions to the plan as they occur. The contractor will review the updated plan with the county inspector during their site visits.

CONCLUSION

This Stormwater Management Plan for the Monument Steel Structures site is in conformance to Engineering Criteria Manual, standards and practices established by El Paso County.

APPENDICES

VICINITY MAP

APPENDIX A – Spill Response Plan

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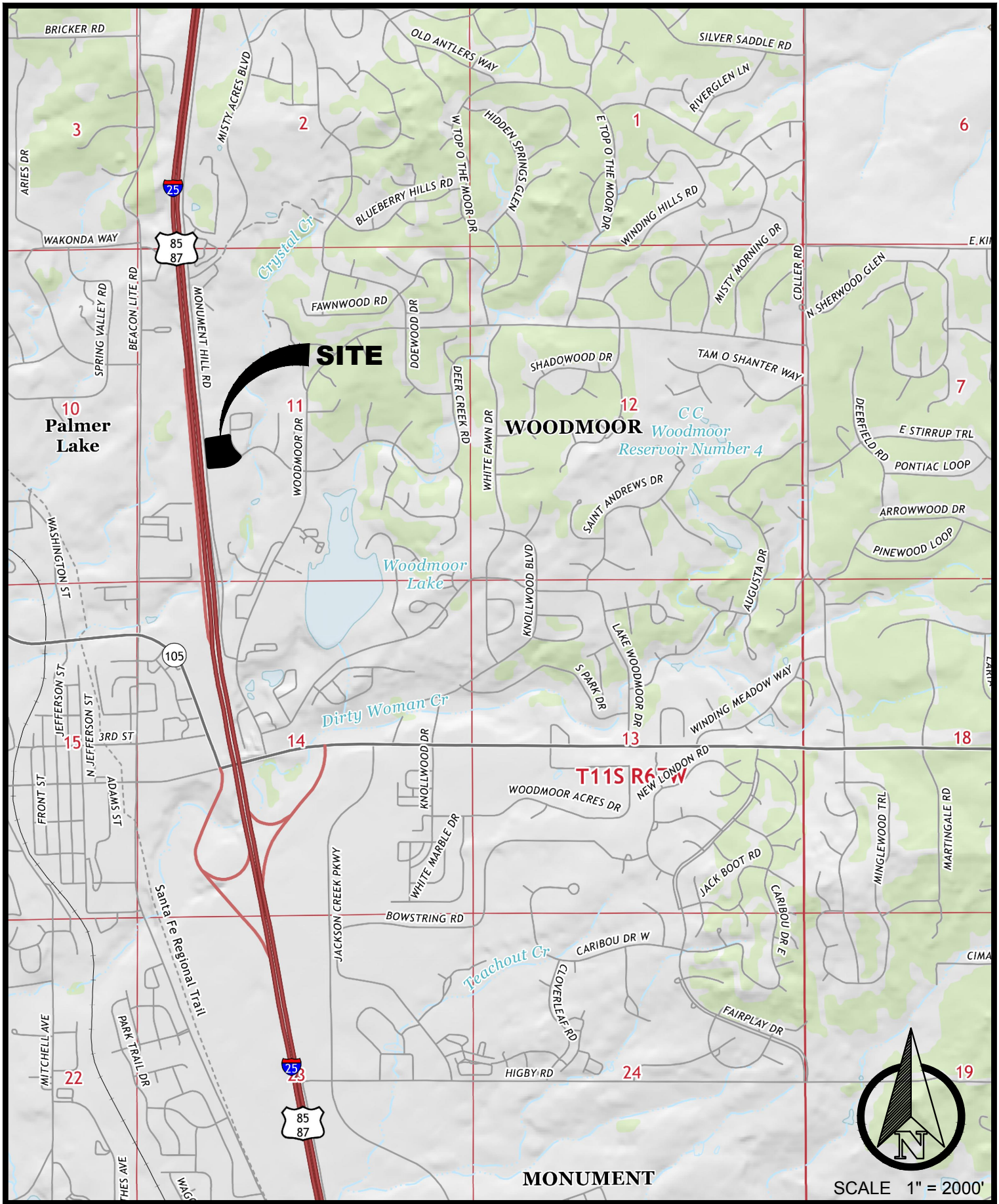


TERRA FORMA SOLUTIONS

MONUMENT STEEL STRUCTURES
VICINITY MAP
MONUMENT, COLORADO

Sheet
VM

Date
JUNE 2019

APPENDIX A - SPILL RESPONSE PLAN

SPILL RESPONSE PLAN

Upon detection of any spill, the first action to be taken is to ensure personal safety. All possible ignition sources, including running engines, electrical equipment (including cellular telephones, etc.), or other hazards will be immediately turned off or removed from the area. The extent of the spill and the nature of the spilled material will be evaluated to determine if remedial actions could result in any health hazards, escalation of the spill, or further damage that would intensify the problem. If such conditions exist, a designated employee will oversee the area of the spill and the construction Permittee will be notified immediately.

The source of the spill will be identified and if possible the flow of pollutants stopped if it can be done safely. However, no one should attend to the source or begin cleanup of the spill until ALL emergency priorities (fire, injuries, etc.) have been addressed.

Small Spills:
Small spills (usually <5 gallons) consist of minor quantities of gasoline, oil, anti-freeze, or other materials that can be cleaned up by a single employee using readily available materials.
The following procedures should be used for clean-up of small spills:

a) Ensure personal safety, evaluate the spill, and if possible, stop the flow of pollutants.
b) Contain the spread of the spill using absorbents, portable berms, sandbags, or other available measures.
c) Spread absorbent materials on the area to soak up as much of the liquid as possible and to prevent infiltration into the soil.
d) Once the liquids have been absorbed, remove all absorbents from the spill and place the materials in a suitable storage container. On paved areas, wipe any remaining liquids from the surface and place the materials in a storage container. *Do not spray or wash down the area using water*. For open soil areas, excavate any contaminated soil as soon as possible and place the soil in a suitable storage container. All materials will then be transported off-site for disposal.
e) If immediate transfer and storage of the contaminated soil is not practical, excavate and place the contaminated soil on a double thickness sheet of 3-mil or higher polyethylene film. In addition, a small berm should be formed around the outer edges of the soil stockpile, underneath the polyethylene film, to ensure that contaminants are not washed from the site during precipitation events and that materials do not seep through the berm.
f) Record all significant facts and information about the spill, including the following:
    a. Type of pollutant
    b. Location
    c. Apparent source
    d. Estimated volume
    e. Time of discovery
    f. Actions taken to clean up spill
g) Notify the Permittee of the spill and provide the information from Item #6. The Permitte will then contact the City of Colorado Springs Erosion Control Staff.

Medium to Large Spills:
Medium to large spills consist of larger quantities of materials (usually >5 — 25 gallons) that are used on site that cannot be controlled by a single employee. Generally, a number of facility personnel will be needed to control the spill and a response may require the suspension of other facility activities.

The following procedure shall be used for the cleanup of medium to large spills:

a) Ensure personal safety, evaluate the spill, and if possible, stop the flow of pollutants.

b) Immediately dispatch a front-end loader or similar equipment to the spill and construct a berm or berms down gradient of the spill to minimize the spread of potential pollutants. On paved surfaces, portable berms, sandbags, booms, or other measures will be used to control the lateral spread of the pollutants.

c) When the spread of the spill has been laterally contained, contact the Permittee or designated facility employee and provide them information on the location, type, and amount of spilled material, and a briefing on the extent of the spread and measures undertaken to contain the contaminants.

d) Depending on the nature of the spill, mobilize additional resources as needed to contain the contaminants.

e) Cleanup will commence when the lateral spread has been contained and the notification to the Permittee has been made.

f) Freestanding liquid will be bailed or pumped into 55-gallon storage drums, steel tanks, or other suitable storage containers. When all the liquid has been removed from the pavement or soil layer, absorbents will be applied to the surface and transferred to the storage containers when they have soaked up as much of the spill as possible.

g) On paved surfaces, the remaining contaminants will be removed to the extent possible, with rags, sweeping, or similar measures. *The area of the spill will not be sprayed or washed down using water*. Any contaminant soaked materials will be placed into the storage containers with the other absorbents.

h) The remaining contaminated soils will be excavated and loaded into a dump truck(s) for disposal off-site at a designated facility. If transport off-site is not immediately available, the remaining soils will be stockpiled on a double thickness sheet of 3-mil or higher polyethylene film. In addition, a small berm will be formed around the outer edges of the soil stockpile, underneath the polyethylene film, to ensure that contaminants are not washed from the site during precipitation and do not seep through the berm.

i) Record all significant facts and information about the spill, including the following:

    a. Type of pollutant
    b. Location
    c. Apparent source
    d. Estimated volume
    e. Time of discovery
    f. Actions taken to clean up spill
    g. Provide the Permittee (or designated employee) with the information from Item #9. The Permittee will then contact the City of Colorado Springs Flow Control Center.

NOTIFICATION

Notification to the Colorado Department of Public Health & Environment (CDPHE) and the City of Colorado Springs is required if there is any release or suspected release of any substance, including oil or other substances that spill into or threaten State waters. Unless otherwise noted, notifications are to be

made by the Permittee and only after emergency responses related to the release have been implemented. This will prevent misinformation and assures that notifications are properly conducted. The notification requirements are as follows:

1. **Spills into/or Threatens State Waters**: Immediate notification is required for releases that occur beneath the surface of the land or impact or threaten waters of the State of threaten the public health and welfare. Notifications that will be made are:
    a. For any substance, regardless of quantity, contact CDPHE at 1-877-518-5608. State as follows:
        i. Give your name.
        ii. Give location of spill (name of city).
        iii. Describe the nature of the spill, type of products, and estimate size of spill.
        iv. Describe type of action taken thus far, type of assistance or equipment needed.
    b. For any quantity of oil or other fluids, call the National Response Center at 1- 800-424-8802. State as follows:
        i. Give your name.
        ii. Give location of spill (name of city and state).
        iii. Describe the nature of the spill, type of product, and estimate size of spill.
        iv. Describe type of action taken thus far, type of assistance or equipment needed.
2. **Reportable Quantity Spill on Land Surface:** Immediate notification is required of a release upon the land surface of an oil in quantity that exceeds 25 gallons, or of a hazardous substance that equals or exceeds 10 pounds or its reportable quantity under Section 101(14) of the Comprehensive Environmental Response, Compensation Liability Act (CERCLA) of 1980 as amended (40 CFR Part 302) and Section 329 (3) of the Emergency Planning and Community Right to Know Act of 1986 (40 CFR Part 355) whichever is less. This requirement does apply at a minimum to the substances listed in Table A below.

TABLE A

Substances Requiring Notification

SUBSTANCE	REPORTABLE QUANTITY
Motor Oil	25 Gallons
Hydraulic Oil	25 Gallons
Gasoline/Diesel Fuel	25 Gallons

The notification procedures to be followed are:

a) Give your name.
b) Give location of spill (name of city and state).
c) Describe nature of the spill, type of product, and estimate size of spill.

d) Describe type of action taken thus far, type of assistance or equipment needed.

3. Notification is not required for release of oil upon the land surface of 25 gallons or less that will not constitute a threat to public health and welfare, the environmental or a threat of entering the waters of the State.

4. Notification, as required in paragraphs 1 and 2 above, will be made to the CDPHE using the 24-hour telephone number to report environmental spills. All information known about the release at the time of discovery is to be included, such as the time of occurrence, quantity and type of material, location and any corrective or clean-up actions presently being taken. Table B lists these phone numbers.

SPILL RESPONSE CONTACTS

TABLE B

Emergency Notification Contacts

Name/Agency	Number
City of Colorado Springs Fire Department	911
City of Colorado Springs Police Department	911
Ambulance	911
Hospital	911
National Response Center	1-800-424-8802
CDPHE — Report Environmental Spills (24 hrs/day)	1-877-518-5608
El Paso County — Stormwater Inspections	719-520-6879
Colorado Emergency Planning Committee	303-273-1622
Also contact Permittee and Owner	

It is the responsibility of the Permittee to contact the City of Colorado Springs, CDPHE, and/or the National Response Center.

- The National Response Center is to be contacted when a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 4- DFR 117, or 40 CFR 302 occurs during a 24-hour period.
- Notification to the CDPHE and El Paso county is required if there is any release or suspected release of any material, including oil or hazardous substances that spill into or threaten state waters.

REPORTS

The CDPHE and El Paso County require written notification of a spill or discharge of oil or other substance that may cause pollution of the waters of the State of Colorado. A written report must be submitted to the Water Quality Control District (WQCD) and the El Paso County Erosion Control Staff within five days after becoming aware of the spill or discharge.

The CDPHE and El Paso County require a written final report within 15 days for all releases of an oil or hazardous substance that require implementation of a contingency plan. The CDPHE and El Paso County may also require additional reports on the status of the clean up until any required remedial action has been complete.

Written notification of reports must contain at a minimum:

1. Date, time, and duration of the release.
2. Location of the release.
3. Person or persons causing and responsible for the release.
4. Type and amount of oil or substance released.
5. Cause of the release.
6. Environmental damage caused by the release.
7. Actions taken to respond, contain, and clean up the release.
8. Location and method of ultimate disposal of the oil or other fluids.
9. Actions taken to prevent a reoccurrence of the release.
10. Any known or anticipated acute or chronic health risks associated with the release.

APPENDIX B - REFERENCED INFORMATION

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the **North American Vertical Datum of 1988 (NAVD88)**. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242 or visit its website at http://www.ngs.noaa.gov/.

Base Map information shown on this FIRM was provided in digital format by El Paso County, Colorado Springs Utilities, City of Fountain, Bureau of Land Management, National Oceanic and Atmospheric Administration, United States Geological Survey, and Anderson Consulting Engineers, Inc. These data are current as of 2006.

This map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. The profile baselines depicted on this map represent the hydraulic modeling baselines that match the flood profiles and Floodway Data Tables if applicable, in the FIS report. As a result, the profile baselines may deviate significantly from the new base map channel representation and may appear outside of the floodplain.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

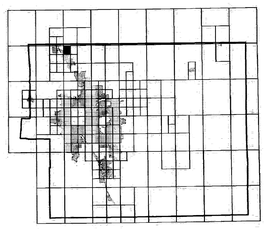
Contact **FEMA Map Service Center** (MSC) via the FEMA Map Information eXchange (FMIX) 1-877-336-2627 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. The MSC may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

El Paso County Vertical Datum Offset Table

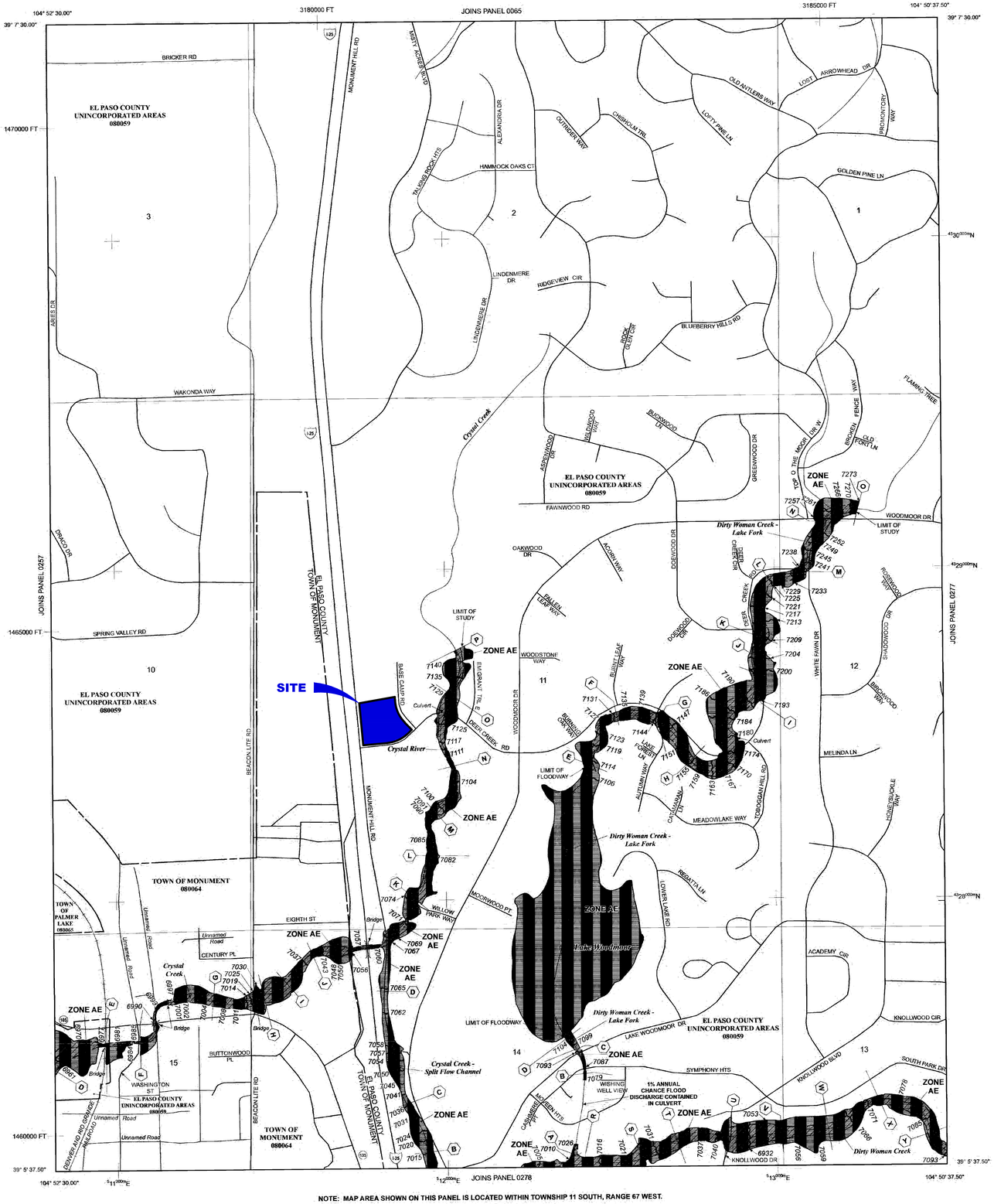
Flooding Source	Vertical Datum Offset (ft)
REFER TO SECTION 3.3 OF THE EL PASO COUNTY FLOOD INSURANCE STUDY FOR STREAM BY STREAM VERTICAL DATUM CONVERSION INFORMATION	

Panel Location Map



This Digital Flood Insurance Rate Map (DFIRM) was produced through a Cooperating Technical Partner (CTP) agreement between the State of Colorado Water Conservation Board (CWCB) and the Federal Emergency Management Agency (FEMA).

Additional Flood Hazard information and resources are available from local communities and the Colorado Water Conservation Board.



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 11 SOUTH, RANGE 67 WEST.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- **ZONE A** No Base Flood Elevations determined.
- **ZONE AE** Base Flood Elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE AR** Special Flood Hazard Area Formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- **ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- **ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- **ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- **ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- **ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D Boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 (EL 987) Base Flood Elevation line and value; elevation in feet* / Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A–A Cross section line
- 23 Transect line
- 97° 07' 30.00" / 32° 22' 30.00" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN 1000-meter Universal Transverse Mercator grid ticks, zone 13
- 6000000 FT 5000-foot grid ticks: Colorado State Plane coordinate system, central zone (FIPSZONE 0502), Lambert Conformal Conic Projection
- DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
MARCH 17, 1997

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
DECEMBER 7, 2018 - to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History Table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0276G

FIRM
FLOOD INSURANCE RATE MAP
EL PASO COUNTY, COLORADO AND INCORPORATED AREAS

PANEL 276 OF 1300
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EL PASO COUNTY	080059	0276	G
MONUMENT, TOWN OF	080064	0276	G
PALMER LAKE, TOWN OF	080065	0276	G

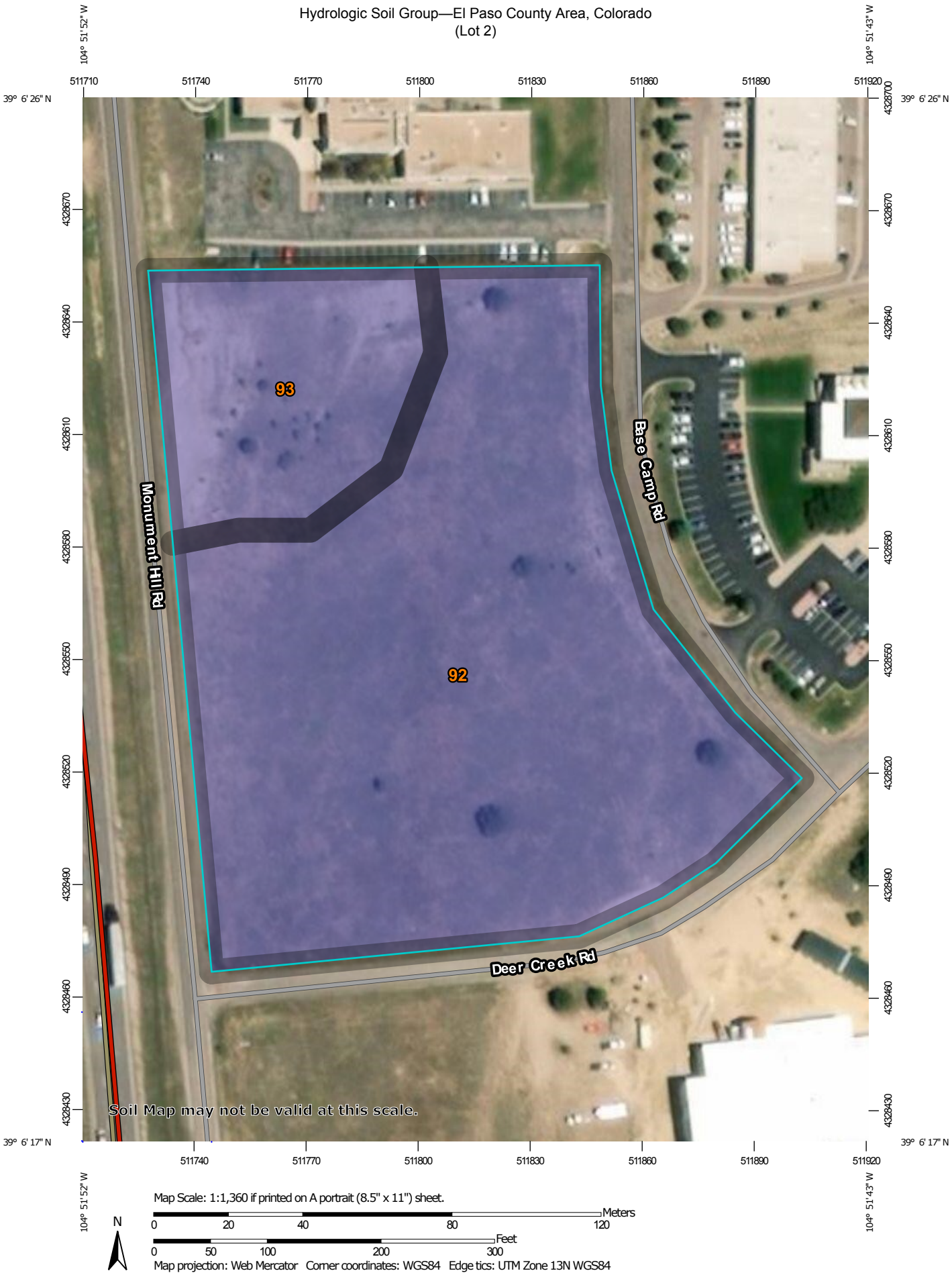
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
08041C0276G

MAP REVISED
DECEMBER 7, 2018

Federal Emergency Management Agency

Hydrologic Soil Group—El Paso County Area, Colorado
(Lot 2)



Map Scale: 1:1,360 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 16, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2010—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
92	Tomah-Crowfoot loamy sands, 3 to 8 percent slopes	B	4.7	80.6%
93	Tomah-Crowfoot complex, 8 to 15 percent slopes	B	1.1	19.4%
Totals for Area of Interest			**5.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C - GRADING AND EROSION CONTROL PLANS AND DETAILS

GREATER EUROPE MISSION
18950 BASE CAMP ROAD, MONUMENT, CO 80132
(REC. NO. 200033900 - PARCEL NO. 711303004)

BASE CAMP ROAD LLC
18925 BASE CAMP ROAD, MONUMENT, CO 80132
(REC. NO. 205173984 - PARCEL NO. 7111302003)

MONUMENT HILL SELF STORAGE
PO BOX 310, MONUMENT, CO 80132
(REC. NO. 2015713600 - PARCEL NO. 7111304021)

BASE CAMP ROAD LLC
18925 BASE CAMP ROAD, MONUMENT, CO 80132
(REC. NO. 205173984 - PARCEL NO. 7111302003)

PROPERTY BOUNDARY

N80°00'37"E 358.79'

S01°18'59"E 28.07'

R=330.00'
L=252.92'
Δ=43°54'49"

R=340.00'
L=236.12'
Δ=39°47'23"

S45°13'48"E 100.21'

S44°46'12"W 47.66'

N05°26'25"W 420.71'

S84°33'35"W 241.13'

MONUMENT HILL ROAD

BASE CAMP ROAD

DEER CREEK ROAD

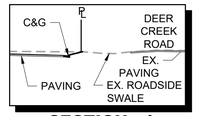
EX. 30" RCP

EX. BERM

SPILL CURB

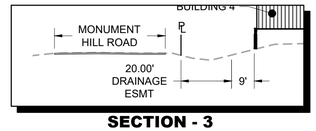
CATCH CURB

SECTION - 1

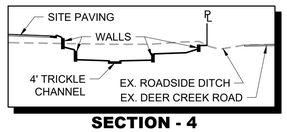


SECTION - 2 (NOT USED)

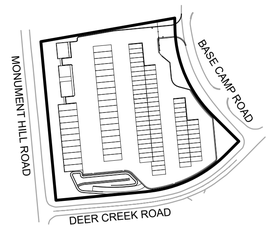
SECTION - 3



SECTION - 4



KEYMAP



KEYNOTES:

1. RETAINING WALLS
2. DETENTION POND
3. DETENTION POND MAINTENANCE ACCESS
4. OUTLET STRUCTURE
5. NOT USED
6. DRAINAGE SWALE
7. STORM INLET

LEGEND:

LP	=	LOW POINT
HP	=	HIGH POINT
FL	=	FLOW LINE
TOW	=	TOP OF WALL
BOW	=	FINISHED GRADE AT BOTTOM FACE OF WALL
FF	=	FINISHED FLOOR
FG	=	FINISHED GROUND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR

GRADING PLAN NOTES:

1. CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT TO ENSURE ALL SUBGRADE PREPARATION REQUIREMENTS, PAVEMENT RECOMMENDATIONS, MINIMUM SLOPE REQUIREMENTS , AND ALL OTHER APPLICABLE REQUIREMENTS ARE MET.
2. THE MAXIMUM SIDEWALK CROSS SLOPE SHALL BE 2.00%.
3. THE MAXIMUM LONGITUDINAL SLOPE OF ANY ADA RAMP SHALL BE 8.33%.
4. RETAINING WALL DESIGN BY OTHERS.

STEEL STRUCTURES AMERICA INC.®

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811
OR
1-800-922-1987
UTILITY NOTIFICATION CENTER OF COLORADO

PCD FILE NO. PPR1919

0 30' 60'
1" = 30' (HORIZONTAL)

TERRA FORMA SOLUTIONS

REV. NO.	DESCRIPTION	DATE
1	VALUE ENGINEERING & PIKE PEAK BUILDING REVISIONS	12/08/2019
2	HANDICAP PARKING WITH VAN ACCESSIBILITY - REVISION	10/24/2019

CONSTRUCTION DOCUMENTS
MONUMENT STEEL STRUCTURES
GRADING PLAN
18910 BASE CAMP ROAD
MONUMENT, COLORADO

COLORADO LICENSED
TODD K. MOHLENBROCK
37660
08/17/19
PROFESSIONAL ENGINEER

PROJ NO: SSA
ENG :
CHKD:
DATE : 08/17/2019

SHEET NUMBER
GR
4 OF 14

GREATER EUROPE MISSION
18950 BASE CAMP ROAD, MONUMENT, CO 80132
(REC. NO. 200033900 - PARCEL NO. 711303004)

10' UTILITY AND DRAINAGE EASEMENT
REC. NO. 200033900

10' UTILITY AND DRAINAGE EASEMENT
REC. NO. 200033900

N80°00'37"E 358.79'

S01°18'59"E 28.07'

PROPERTY BOUNDARY

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(REC. NO. 205173984 - PARCEL NO. 7111302003)

BASE CAMP ROAD

R=340.00'
L=262.92'
Δ=43°54'49"

MONUMENT HILL ROAD

N05°26'25"W 420.71'

20' UTILITY AND DRAINAGE EASEMENT
REC. NO. 200033900

10' MOUNTAIN VIEW EASEMENT
REC. NO. 848443

S45°13'48"E 100.21'

S44°46'12"W 47.66'

16.5' MOUNTAIN BELL EASEMENT
REC. NO. 848443

20' UTILITY AND DRAINAGE EASEMENT
REC. NO. 200033900

TEMP. CONSTRUCTION EASEMENT (TCE-10)
REC. NO. 217132602
REC. NO. 217132603
REC. NO. 217133688

R=340.00'
L=236.12'
Δ=39°47'23"

S84°33'35"W 241.13'

20' UTILITY AND DRAINAGE EASEMENT
REC. NO. 200033900

DEER CREEK ROAD

EX. 30" RCP

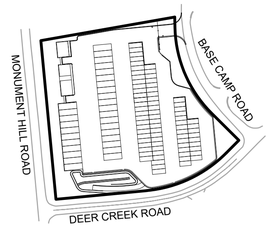
MONUMENT HILL SELF STORAGE
PO BOX 310, MONUMENT, CO 80132
(REC. NO. 2015713600 - PARCEL NO. 7111304021)

BASE CAMP ROAD LLC
18925 BASE CAMP ROAD, MONUMENT, CO 80132
(REC. NO. 205173984 - PARCEL NO. 7111302003)

CUT
FILL

BMP SUMMARY TABLE

	SILT FENCE	TEMPORARY SEDIMENT BASIN	STABILIZED STAGING AREA	CONCRETE WASHOUT AREA	VEHICLE TRACKING CONTROL WITH WHEEL WASH	INLET PROTECTION	SEEDING AND MULCHING
QUANTITY	675 LF	1 EA	260 SY	1 EA	1 EA	21	0.6 AC
INSTALLATION	AFTER DEMOLITION / PRIOR TO GRADING	PRIOR TO ANY CLEARING AND/OR GRADING	IMMEDIATLEY AFTER SITE GRADING	IMMEDIATLEY AFTER SITE GRADING	PRIOR TO SITE GRADING	IMMEDIATELY AFTER STORM SEWER CONSTRUCTION	IMMEDITATELY AFTER SITE GRADING
REMOVAL	AFTER FINAL STABILIZATION	AFTER FINAL STABILIZATION	AT THE TIME OF SITE PAVING	AFTER COMPLETION OF SITE CONCRETE CONSTRUCTION	AT THE TIME OF SITE PAVING	AFTER FINAL STABILIZATION	PERMANENT



KEYMAP

EROSION CONTROL LABELS:

- CWA — CONCRETE WASH AREA
- SF — SILT FENCE
- IP — INLET PROTECTION
- VTC — VEHICLE TRACKING PAD
- SSA — STABILIZED STAGING
- SM — SEEDING AND MULCHING
- LOC — LIMITS OF DISTURBANCE

PROPOSED CONTOURS 4925
EXISTING CONTOURS 4925
PROPOSED STORM DRAIN PIPE
PROPOSED STORM END SECTION

NOTES:

1. SEE DT1–DT2 FOR EROSION CONTROL DETAILS.
2. A VTC SHALL BE CONSTRUCTED AT ALL AREAS WHERE CONSTRUCTION TRAFFIC IS MOVING FROM PERVIOUS TO IMPERVIOUS AREAS.
3. SLOPES GREATER THAN OR EQUAL TO 4:1 SHALL BE SURFACE ROUGHENED FOR INTERIM STABILIZATION UNTIL SUFFICIENT GROWTH IS IN PLACE TO DETER EROSION.
4. THE WATER QUALITY BASIN WILL ACT AS A SEDIMENT BASIN UNTIL THE SITE HAS REACHED FINAL STABILIZATION.
5. THE CONTRACTOR SHALL PROTECT NATURAL VEGETATION TO THE MAXIMUM EXTENT PRACTICABLE.
6. ALL DISTURBED AREAS WILL BE SEEDED AND MULCHED. SLOPES 4:1 AND STEEPER WILL BE SEEDED AND CRIMPED MULCHED.

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OR
1-800-922-1987
UTILITY NOTIFICATION
CENTER OF COLORADO

PCD FILE NO. PPR1919

0 30' 60'
1" = 30' (HORIZONTAL)

TERRA FORMA SOLUTIONS

REV. NO.	DESCRIPTION	DATE
	VALUE ENGINEERING & PIKE PEAK BUILDING REVISIONS	12/08/2019
	HANDICAP PARKING WITH VAN ACCESSIBILITY - REVISION	10/24/2019

CONSTRUCTION DOCUMENTS

MONUMENT STEEL STRUCTURES

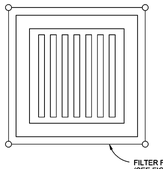
GRADING AND EROSION CONTROL PLAN

18910 BASE CAMP ROAD
MONUMENT, COLORADO

COLORADO LICENSED
JOHN M. SCHWAB
37660
08/17/19
PROFESSIONAL ENGINEER

PROJ NO: SSA
ENG :
CHKD:
DATE : 08/17/2019

SHEET NUMBER
EC
5 OF 14



FILTER FABRIC INLET PROTECTION
NTS

FILTER FABRIC INLET PROTECTION NOTES

INSTALLATION REQUIREMENTS

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.

2. SEE SILT FENCE FIGURE SF-2 FOR INSTALLATION REQUIREMENTS.

3. POSTS ARE TO BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

MAINTENANCE REQUIREMENTS

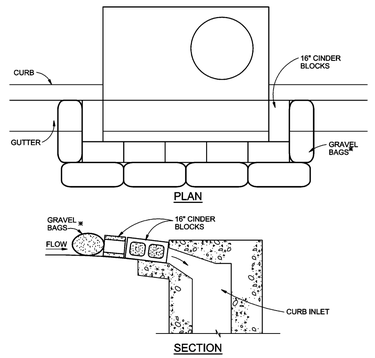
1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.

2. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE INLET PROTECTION SHALL BE PROMPTLY REPAIRED OR REPLACED.

3. SEDIMENT SHALL BE REMOVED FROM BEHIND FILTER FABRIC WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.

4. FILTER FABRIC PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED IN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality	Figure IP-1 Filter Fabric Inlet Protection Construction Detail and Maintenance Requirements



BLOCK AND GRAVEL BAG*CURB INLET PROTECTION
NTS

BLOCK AND GRAVEL BAG*CURB INLET PROTECTION NOTES

INSTALLATION REQUIREMENTS

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.

2. CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON THEIR SIDES, ABUTTING ONE ANOTHER WITH THE OPEN ENDS OF THE BLOCK FACING OUTWARD.

3. GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ABUTTING ONE ANOTHER SO THERE ARE NO GAPS.

4. GRAVEL BAGS ARE TO CONTAIN WASHED SAND OR GRAVEL APPROXIMATELY 3/4 INCH IN DIAMETER.

5. BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.

MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.

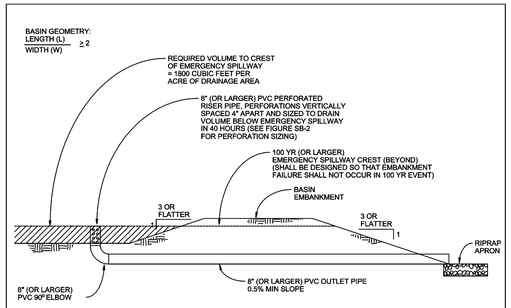
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.

3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.

4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

* AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS.

City of Colorado Springs Stormwater Quality	Figure IP-3 Block & Gravel Bag Curb Inlet Protection Construction Detail and Maintenance Requirements



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 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

REQ VOL = 1,800cf * 4.67ac
REQ VOL = 8,406cf = 0.2ac-ft
Depth of 3.5 feet

Required Area per Row (in^2)

Design Volume (acre-ft)	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

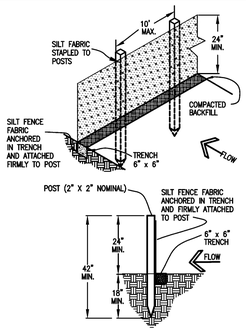
Circular Perforation Sizing

Hole Diameter (in)	Hole Diameter (in)	Area per Row (in^2) n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	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
	n = Number of columns of perforations			
Minimum steel plate thickness		1/4"	5/16"	3/8"

TABLE SB-2

6 ROWS of 9/16" Holes (1 Column of Perforations)

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



SILT FENCE

SILT FENCE NOTES

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 "U" 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 INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

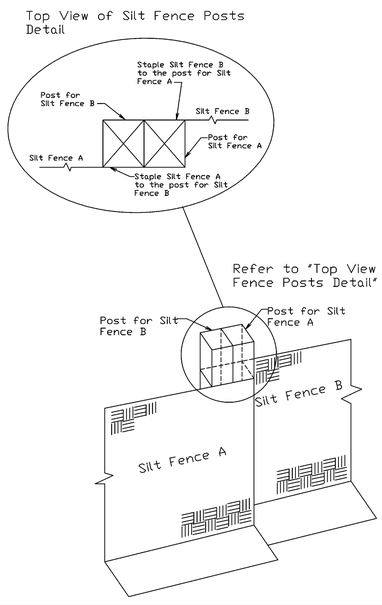
MAINTENANCE REQUIREMENTS

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.

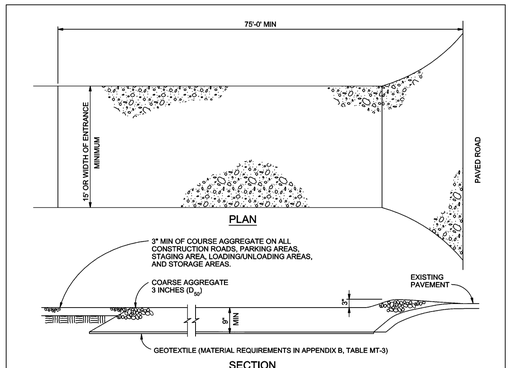
2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.

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



VEHICLE TRACKING
NTS

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.

2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.

3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.

4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.

2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.

3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.

4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs Stormwater Quality	Figure VT-2 Vehicle Tracking Application Examples

PCD FILE NO. PPR1919

TERRA FORMA SOLUTIONS

REV. NO.	DESCRIPTION	DATE

CONSTRUCTION DOCUMENTS
MONUMENT STEEL STRUCTURES
EROSION CONTROL DETAILS
18910 BASE CAMP ROAD
MONUMENT, COLORADO

COLORADO LICENSED
TODD A. HOWARD
37660
08/17/19
PROFESSIONAL ENGINEER

PROJ NO: SSA
ENG:
CHKD:
DATE: 08/17/2019

SHEET NUMBER
DT1
9 OF 13

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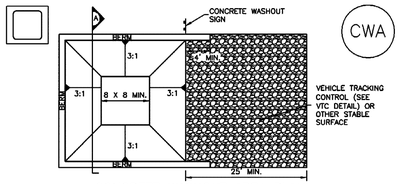
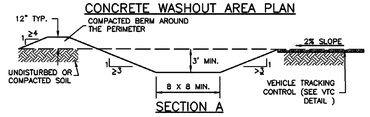


CONCRETE WASHOUT AREA PLAN



SECTION A

CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

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

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA 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. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

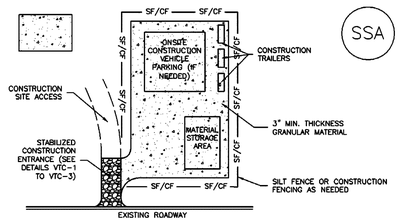
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

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



SSA-1. STABILIZED STAGING AREA

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.

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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

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

PCD FILE NO. PPR1919

TERRA FORMA SOLUTIONS

REV. NO.	DESCRIPTION	DATE

CONSTRUCTION DOCUMENTS
MONUMENT STEEL STRUCTURES
EROSION CONTROL DETAILS
18910 BASE CAMP ROAD
MONUMENT, COLORADO

COLORADO LICENSED
TODD A. HOFFMAN
37660
08/17/19
PROFESSIONAL ENGINEER

PROJ NO: SSA
ENG :
CHKD:
DATE : 08/17/2019

SHEET NUMBER
DT2
10 OF 13

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APPENDIX D **-** SWMP FORMS

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

THE SWMP ADMINISTRATOR FOR MONUMENT STEEL STRUCTURES

SITE IS:

Individual(s), Position or Title_____

Company_____

Address_____

_____

Telephone_____

E-mail_____

ALTERNATE:

Individual(s), Position or Title_____

Company_____

Address_____

_____

Telephone_____

E-mail_____

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

CONSTRUCTION SITE INSPECTION REPORT:

General Information			
Project Name:			
Date of Inspection:		**Start/End Time:**	
Inspector's Name(s) / Title(s):			
Inspector's Contact Information:			
Describe present phase of construction:			
Type of Inspection: ❑ Regular – Every 14 days ❑ Post-storm event – within 24 hours after precipitation or snowmelt event ❑ Deviation from minimum inspection schedule			
Weather Information			
Has there been a storm event since the last inspection? ❑Yes ❑No **If yes, provide:** Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? ❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other: **Temperature:**			
Have any discharges occurred since the last inspection? ❑Yes ❑No **If yes, describe:**			
Are there any discharges at the time of inspection? ❑Yes ❑No **If yes, describe:**			

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWMP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated (due to BMP failing to operate as designed or proves inadequate for a particular location); date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP / Location	**BMP Installed?**	**BMP Maintenance Required?**	**Corrective Action Needed / Completed and Notes**
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

	BMP / Location	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed / Completed and Notes
9		❑Yes ❑No	❑Yes ❑No	
10		❑Yes ❑No	❑Yes ❑No	
11		❑Yes ❑No	❑Yes ❑No	
12		❑Yes ❑No	❑Yes ❑No	
13		❑Yes ❑No	❑Yes ❑No	
14		❑Yes ❑No	❑Yes ❑No	
15		❑Yes ❑No	❑Yes ❑No	

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

Overall Site Issues

- *Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at the site.*

	BMP / Activity	Implemented?	Maintenance Required?	Corrective Action Needed / Completed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No	❑Yes ❑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No	❑Yes ❑No	
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No	❑Yes ❑No	
5	Are storm drain inlets properly protected?	❑Yes ❑No	❑Yes ❑No	
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No	❑Yes ❑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No	❑Yes ❑No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No	❑Yes ❑No	
12	Any additional BMPs needed?	❑Yes ❑No	❑Yes ❑No	

Certification Statement

"The information documented heron 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."

Print name and title_____

Signature and date_____

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

CHEMICAL SUBSTANCES KEPT ON SITE:

List chemical substances expected to be on site and the reportable quantity of each. Copy and attach multiple sheets as needed.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES

APPENDIX D

SPILL/RELEASE INCIDENT REPORTING FORM:

1. Date of spill/release: _____
2. Location: _____
3. Time of spill/release: _____ a.m. / p.m.
4. Material spilled/released: _____
5. Amount spilled/released: _____
6. Cause of spill/release: _____
7. Description of scene (e.g., type of media contaminated (e.g., soil), distance to storm sewers, if spill/release was contained): _____

   _____

   _____

   _____
8. Description of clean-up actions taken (e.g., how spill/release was contained (e.g., absorbent pillows), where recovered material was placed, how much material was not recovered, remaining actions to be taken: _____

   _____

   _____

   _____
9. List of offsite emergency responders contacted:

   _____ _____

   _____ _____

   _____ _____
10. List of offsite emergency responders at scene:

    _____ _____

    _____ _____

    _____ _____
11. Action taken to prevent recurrence: _____

    _____

    _____

    _____
12. Signature: Printed Name:

    _____ _____

Use back of form for additional space as needed. Completed forms should be kept onsite.

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES
APPENDIX D

STORMWATER POLLUTION PREVENTION TRAINING LOG

Instructor's Title (s): _____

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ☐ **Sediment and Erosion Controls**
- ☐ **Stabilization Controls**
- ☐ **Emergency Procedures**
- ☐ **Pollution Prevention Measures**
- ☐ **Inspections/Corrective Actions**

Specific Training Objective:_____

_____

_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	**Name of Attendee**	**Company**
1		
2		
3		
4		
5		
6		
7		
8		

STORMWATER MANAGEMENT PLAN (SWMP)
MONUMENT STEEL STRUCTURES

APPENDIX D

SUBCONTRACTOR CERTIFICATION:

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Management Plan (SWMP) for any work that you perform on-site. Any person or group who violates any condition of the SWMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWMP. A copy of the SWMP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify that I have read and understand the terms and conditions of the SWMP for the above designated project and agree to follow the practices described in the SWMP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____