

**STORMWATER MANAGEMENT PLAN (SWMP)
for
208 CUNNINGHAM DRIVE, COLORADO SPRINGS**

Prepared for:

Fountain Valley Salvation
Army Corps
208 Cunningham Drive
Colorado Springs, CO 80911

Prepared by:



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R&R Project No.: FV21181
EPC Project No.:

Qualified Stormwater Manager: TBD

Contractor: TBD

**208 CUNNINGHAM DRIVE, COLORADO SPRINGS
STORMWATER MANAGEMENT PLAN (SWMP)
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General SWMP Notes:

1. There are no existing streams, wetlands, or other surface waters within 50 feet of the construction limits.
2. There are no dedicated asphalt / concrete batch plants proposed.
3. There are no anticipated allowable non-stormwater discharges from this site (no groundwater, springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.).

208 CUNNINGHAM DRIVE, COLORADO SPRINGS STORMWATER MANAGEMENT PLAN (SWMP)

I. QUALIFIED STORMWATER MANAGER

A. Qualified Stormwater Manager

Contractor: TBD

B. Applicant / Contact Information

Owner/Developer: Fountain Valley Salvation Army Corps
208 Cunningham Drive
Colorado Springs, CO 80911
Attn: Quiana Vargas (719)-382-1182
Quiana.vargas@usw.salvationarmy.org

Engineer: R&R Engineers – Surveyors, Inc.
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Denver, CO 80204
Attn: Darvin Wilson, P.E. (720)-381-2439
dwilson@rrengineers.com

II. SPILL PREVENTION AND RESPONSE PLAN

A. Spill Prevention and Response Procedures:

- The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize their migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on site and prevent their release into receiving waters.
- Spill Response Procedures:
 - Notify site superintendent immediately when a spill, or the threat of a spill, is observed. The superintendent shall assess the situation and determine the appropriate response.
 - If spills represent an imminent threat of escaping on-site facilities and entering the receiving waters, site personnel shall respond immediately to contain the release and notify the superintendent after the situation has stabilized.
 - The site superintendent, or his designee, shall be responsible for completing a spill reporting form and for reporting the spill to the appropriate agency.
 - Spill response equipment shall be inspected and maintained as necessary to replace any materials used in spill response activities.
- Spill kits shall be on-hand at all fueling sites. Spill kit location(s) shall be reported to the SWMP Administrator.
- Absorbent materials shall be on-hand at all fueling areas for use in containing inadvertent spills. Containers shall be on-hand at all fueling sites for disposal of used absorbents.
- Recommended components of spill kits include the following:

- Oil absorbent pads (one bale)
- Oil absorbent booms (40 feet)
- 55-gallon drums (2)
- 9-mil plastic bags (10)
- Personal protective equipment including gloves and goggles.

B. Notification Procedures:

- In the event of an accident or spill, the SWMP Administrator shall be notified as a minimum.
- Depending on the nature of the spill material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line: 877-518-5608), downstream water users, or other agencies may also need to be notified.
- Any spill of oil which 1) violates water quality standards, 2) produces a “sheen” on a surface water, or 3) causes a sludge or emulsion, or any hazardous substance release, or hazardous waste release which exceeds the reportable quantity, must be reported immediately by telephone to the National Response Center Hotline at (800)-424-8802.

III. MATERIALS HANDLING

A. General Materials Handling Practices:

- Potential pollutants shall be stored and used in a manner consistent with the manufacturer’s instructions in a secure location. To the extent practical, material storage areas should not be located near storm drain inlets and should be equipped with covers, roofs, or secondary containment as required to prevent storm water from contacting stored materials.
- Chemicals that are not compatible shall be stored and segregated areas so that spilled materials cannot combine and react.
- Disposal of materials shall be in accordance with the manufacturer’s instructions and applicable local, state, and federal regulations.
- Materials no longer required for construction shall be removed from the site as soon as possible.

B. Adequate garbage, construction waste, and sanitary waste handling and disposal facilities shall be provided as necessary to keep the site clear of obstruction and Stormwater Control Measures (SCMs) clear and functional.

C. Specific Materials Handling Practices:

- All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled in a way that does not contaminate storm water.
- All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored on site shall be covered and contained and protected from vandalism.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants, shall be conducted under cover during wet weather and on an impervious surface to prevent release of contaminants onto the ground. Materials spilled during maintenance operations shall be cleaned up immediately and properly disposed of.
- Wheel wash water shall be settled and discharged on site by infiltration. Wheel wash water shall not be discharged to the storm water system.

- Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and ad application rates that will not result in loss of chemical to storm water runoff. Follow manufacturer’s recommendations for application rates and procedures.
- pH-modifying sources shall be managed to prevent contamination of runoff and storm water collected on site. The most common sources of pH-modifying materials are bulk cement, cement kiln dust (CKD), fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters.

D. Equipment maintenance and fueling: Contractor shall implement appropriate spill prevention and response procedures

E. Concrete Wash Water: Unless confined in a pre-defined, bermed containment area, the cleaning of concrete truck delivery chutes is prohibited at the job site. The discharge of water containing waste cement to the storm drainage system is prohibited.

IV. POTENTIAL SOURCES OF POLLUTION

Potential pollutant sources will be addressed as follows:

POTENTIAL POLLUTION SOURCES

Potential Pollution Sources	Possible Site Contributions of Pollutants to Stormwater Discharges	Location
All disturbed and stored soils	Stockpiles of fill from site excavations, topsoil stockpiles.	Stockpiles
Vehicle tracking of sediments	See GEC Plans for vehicle entrance and exits. Vehicle tracking control pads will be installed and maintained at all construction access points.	VTC (per GEC Plans)
Management of contaminated soils	No contaminated soils are expected to be encountered.	N/A
Loading and unloading operations	Loading and unloading of construction materials	TBD*
Outdoor storage activities (building material, fertilizers, chemicals, etc.)	Stockpiles and equipment storage areas (no fertilizers, petroleum or chemical products will be stored on-site).	TBD*
Vehicle and equipment maintenance and fueling	Fueling will occur on-site using mobile equipment (will not be stored on-site). Equipment maintenance will occur off-site	TBD*
Significant dust or particulate-generating processes	Vehicle tracking, soil removed from excavation, stockpiles.	TBD*
Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.	All equipment maintenance will occur off-site. No fertilizers, pesticides, detergents, and/or solvents will be used or stored on-site.	TBD*
On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)	All waste will be removed from site as soon as possible, and disposed of at a permitted off-site disposal site	TBD*
Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment	Properly contained concrete washout areas may be designated and maintained within the site, based on construction phasing.	CWA
Dedicated asphalt and concrete batch plants	No dedicated asphalt or concrete batch plants are planned on-site.	N/A

Non-industrial waste sources such as worker trash and portable toilets	Worker trash will be removed from the site as soon as possible. Portable toilets will be utilized and maintained as required based on construction phasing.	TBD*
Other areas or procedures where potential spills can occur	Petroleum releases from equipment are possible.	TBD*

* Contractor to add locations of any items not specified at this time*

V. IMPLEMENTATION OF CONTROL MEASURES

Narrative Description of Appropriate Stormwater Controls and Measures

Construction Phasing

Phase 1 – Mobilization, Clearing & Grubbing Operations

Clearing and grubbing will be completed prior to initial overlot grading activities for this site. Perimeter control measures will be installed prior to the start of construction operations. These perimeter controls will include construction and silt fencing and a vehicle tracking control pad.

Phase 2 – Earthwork, Grading, and Storm Installation

Major earthwork activities will include overlot grading, backfill, and compaction, utility construction, and rough and final grading for site improvements.

Phase 3 – Paving and Final Grading Activities

This phase will include final grading of porous landscape detention and landscape areas. Appropriate temporary SCM's will be maintained until vegetation is re-established throughout the site.

Phase 4 – Stabilization

All disturbed areas within the project will be revegetated. The specific revegetation requirements will include the following:

- Landscape plantings – per porous landscape detention
- Native seeding – all other disturbed areas

Phase 5 – Removal of Temporary Control Measures

Temporary sediment control measures shall remain in place until vegetation has been adequately established to prevent erosion from storm runoff. Once adequate vegetation has been established, the temporary erosion control measures will be removed and disposed of off-site.

SCM's for Stormwater Pollution Prevention (See GEC Plans):

Phase	SCM
Clearing and Grubbing necessary for perimeter controls	VTC's
Initiation of perimeter controls	SF/CF
Remaining clearing and grubbing	
Site Grading	CWA / SSA
Porous Landscape Detention	PLD
Stabilization	SM
Removal of erosion control measures	

SCM's Descriptions:

Stabilized Staging Area (SSA): A stabilized staging area will be located on the southwest corner of the site. Construction trailers, portable toilets, and material storage will occur within this staging area.

Concrete Washout Area (CWA): A concrete washout area will be located near the exit of the site by the VTC. Concrete washout areas must be designated on all sites that will generate concrete wash water or liquid concrete waste from onsite concrete mixing or concrete delivery. The CWA will receive wash water from the washing of tools and concrete mixer chutes, liquid concrete waste from dump trucks, mobile batch mixers, or pump trucks. Surface discharges of concrete washout water from construction sites are prohibited.

Construction Exit (CE) or Vehicle Tracking Control (VTC): A temporary stone construction exit with wheel wash (vehicle tracking control) will be installed at the two proposed access points to the private drives to the west and north as shown on the attached CSWMP. This will prevent mud from being carried into the surrounding roadways by construction vehicles. The area of the entrance shall be cleared of all vegetation, roots, and other material. Stone shall be placed to the specified dimensions and added as warranted during construction. As required, a water tanker shall be transported to the site to wash off tires and undercarriages of the vehicles with water, without detergent, in order to remove loose dirt and mud. The wash water will be collected and routed to a sediment trapping device for treatment prior to discharging into any surface water. If the gravel in the construction entrance is clogged with sediment, it will be removed, washed, and placed back in the wash rack. Wash-out from concrete trucks will occur at a designated location within the perimeter controls of the site.

Construction Fence (CF): A construction fence can be 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. If natural resource protection is an objective, then the construction fencing should be used in combination with other perimeter control BMPs such as silt fence, sediment control logs or similar measures.

Surface Roughening (SR): Surface roughening can be used to provide temporary stabilization of disturbed areas, such as when revegetation cannot be immediately established due to seasonal planting limitations. Surface roughening is not a stand-alone BMP, and should be used in conjunction with other erosion and sediment controls. Surface roughening is often implemented in conjunction with grading and is typically performed using heavy construction equipment to track the surface. Be aware that tracking with heavy equipment will also compact soils, which is not desirable in areas that will be revegetated. Scarifying, tilling, or ripping are better surface roughening techniques in locations where revegetation is planned. Roughening is not effective in very sandy soils and cannot be effectively performed in rocky soil.

Silt Fence (SF): Silt Fence will be installed around the site as shown on the attached CSWMP. Silt fence will be installed along the limits of construction in order to protect adjacent areas until re-vegetation is established and the soil stabilized. The silt fence and/or super silt fence shall be checked on a routine basis for deterioration and other problems. Any fence damage or fabric deterioration shall be repaired by the end of the day. When accumulated sediment begins to bulge the fence, or reaches a depth of one half the fence height, the sediment will be removed and spread on designated upland areas of the site.

Stockpiling (SP): Silt Fence, sediment control log, or approved substitute, is to be located along the extents of the stockpile area in order to protect surrounding areas from sedimentation. Soils that will be stockpiled for more than thirty (30) days shall be protected from wind and water erosion within fourteen (14) days of stockpile construction. Stabilization and protection of the stockpile may be accomplished by any of the following: Mulching, Temporary/Permanent Revegetation Operations, Chemical Soil Stabilizer Application (requires

WMD approval), or erosion control matting/Geotextiles. If stockpiles are located within 100 feet of a drainageway, additional sediment controls such as temporary dikes or silt fence shall be required.

Seeding and Mulching (SM): To provide vegetative cover on disturbed areas that have reached final grade, a perennial grass mix should be established. Permanent seeding should be performed promptly (typically within 14 days) after reaching final grade. Each site will have different characteristics and a landscape professional or the local jurisdiction should be contacted to determine the most suitable seed mix for a specific site.

Street Sweeping: Where sediment is transported onto a paved or public road surface, the road surface will be cleaned thoroughly at the end of each day. Sediment shall be removed by shoveling or sweeping, and transported to a sediment control disposal area. If necessary, street washing is allowed following removal of sediment in the above manner.

Proposed Sequence of Major Activities / Timing Schedule

The anticipated start and completion time period of the construction activities is from April, 2024 through June, 2024. The estimated schedule for erosion control activities is as follows:

- Install Initial SCM's: April, 2024
- Site Grading: April-May, 2024
- Seeding & Mulching: May-June, 2024
- Final Stabilization: June, 2024

Erosion and Sediment Controls:

- 1) Structural Practices / Control Measures (all structural Control Measures shall conform to ECM / DCM and MHFD standards and details):
 - a. Silt fence at toe of slope along downstream limits of disturbed areas
- 2) Non-Structural Practices:
 - Preserve existing vegetation beyond limits of work
 - Temporary seeding of areas to remain disturbed for significant periods of time
 - Permanent seeding/mulching (SM) upon completion of rough grading

Other Controls:

- Contractor shall dispose of all waste materials at a permitted off-site disposal site.
- Vehicle tracking pads will be installed at all access points to limit off-site soil tracking.
- Street Sweeping: Contractor shall perform street sweeping following storm events and as required to keep adjoining public streets clean.

Control Measure / SCM Details:

- Refer to Standard SCM Details in GEC Plans.
- Refer to additional Standard Details in MHFD Volume 3 where applicable.

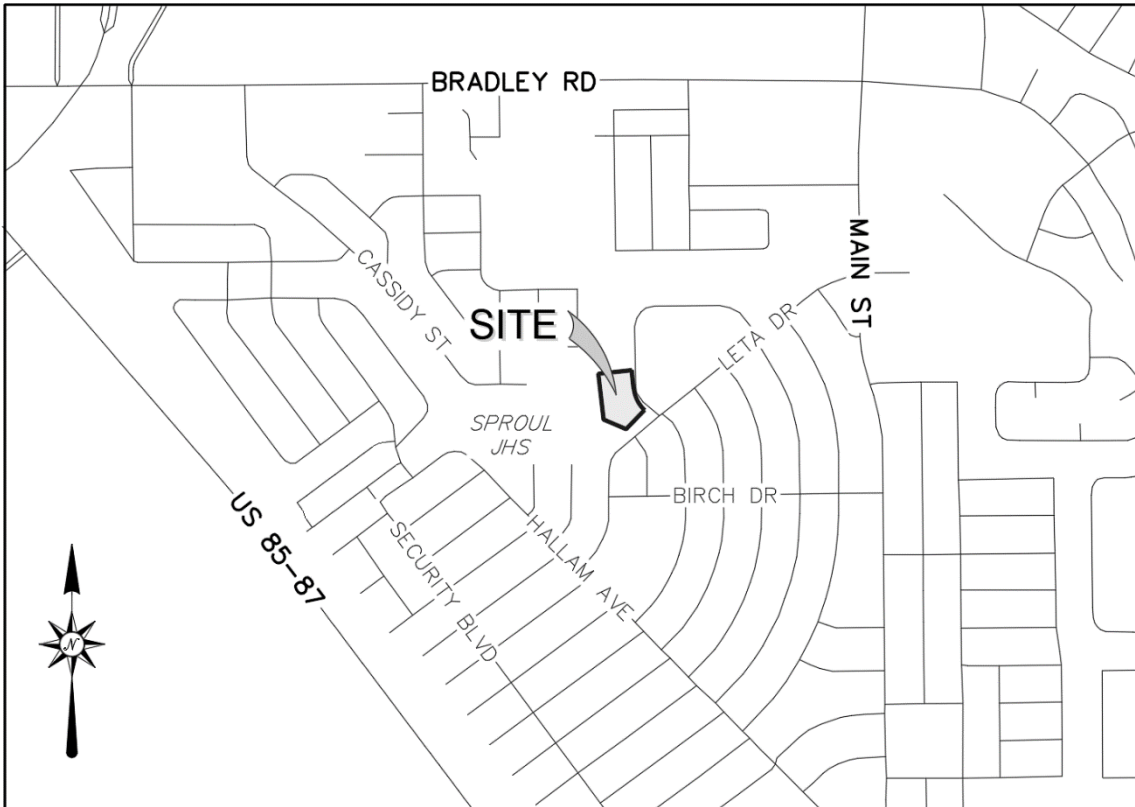
VI. SITE DESCRIPTION

A. Nature of Construction Activity

- The 208 Cunningham Drive Site is proposing a paved parking lot and a porous landscape detention in El Paso County, Colorado. The site is 2.04 acres large and currently consists of one existing building for the Salvation Army. The site is located on Lot 4, Block 5, 1 Refill Security, Colorado

Addition 4 within a portion of the Northeast Quarter of Section 11, Township 15 South, Range 66 West of the Sixth P.M., with Cunningham Drive ROW to the east, Sprout Junior High School to the west, a single-family home to both the north and south of the site. Site development activities will include site grading, storm pipe construction, concrete and asphalt paving, and associated improvements.

- B. Proposed sequence of major activities:
- Mobilization / implementation of SCM's
 - Clearing and grubbing
 - Rough grading
 - Utility installation
 - Final grading
 - Parking lot paving
- C. Total site area = 2.04-acres; Projected disturbed area = 0.83-acres (approx.)
- D. Soil erosion potential and potential impacts upon discharge:
- On-site soils are comprised primarily of "Blakeland series" soils, which are characterized as well-drained loamy sand with rapid permeability, slow surface runoff rates, and moderate hazard of erosion (Hydrologic Soils Group A).
 - Potential impacts upon discharge would include sedimentation adversely affecting downstream waterways and habitat.
- E. Existing vegetation on site:
- Sparse grasses and trees (approx. 55% coverage, based on site inspection)
- F. Allowable non-stormwater components of discharge: none anticipated
- G. Receiving water: Surface drainage from this site flows south into Leta Dr. ROW where curb and gutter carry the flow downstream to an existing regional. Ultimately, flow will discharge to Pine Creek (ultimate receiving water).
- H. Stream Crossings: There are no stream crossings located within the construction site boundary.



VICINITY MAP
SCALE: 1" = 1,000'

VII. SITE MAP

- SWMP Maps are provided on the attached GEC Plans
- Qualified Stormwater Manager shall update SWMP Maps as required based on field conditions throughout the project.
- Contractor shall update and annotate the SWMP Maps to show the location of the construction trailer, stabilized staging area, CWA, and other items as these locations are determined on site.

VIII. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

- A. Permanent seeding will be provided to achieve long-term stabilization of the site.
- B. Seed Mix: "Foothills Mix" or approved equal
- C. Seeding Application Rate: Drill seed 0.25" to 0.5" into the soil. In small areas not accessible to a

drill, hand broadcast at double the rate and rake 0.25” to 0.5” into the soil. Apply seed at the following rates:

- Dryland: 20-25 lbs/acre
- Irrigated: 40 lbs/acre

D. Soil Stabilization Practices:

- Mulching Application: Apply 1-1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier. On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of mulch and mulch tackifier.

E. Soil Conditioning and Fertilizer Requirements:

- Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY / 1000 SF.
- Fertilizer shall consist of 90% fungal biomass (mycelium) and 10% potassium-magnesia with a grade of 6-1-3 or approved equal. Fertilizer shall be applied as recommended by seed supplier.

F. Final stabilization is reached when all soil-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 porous landscape detention is not to be installed until the site has been fully stabilized.

G. Structural Control Measures:

- Re-Seeding and Landscaping for site stabilization
- Porous Landscape Detention

H. Non-Structural Control Measures:

- Proper Housekeeping Procedures
- Proper Spill Containment Procedures

IX. INSPECTION REPORTS

A. Qualified Stormwater Manager: Designated Inspector shall be a Qualified Stormwater Manager per CDPHE criteria.

B. Inspection Frequency:

- Contractor shall inspect SCMs bi-weekly as a minimum, and immediately (within 24 hours) after any precipitation or snowmelt event that causes surface erosion (i.e. that results in stormwater running across the ground), to ensure that SCMs are maintained in effective operating condition.

C. Inspection Procedures:

Site Inspection / Observation Items:

- Construction site perimeter and discharge points (including discharges into a storm sewer system)
- All disturbed areas
- Areas used for material / waste storage that are exposed to precipitation.
- Other areas having a significant potential for stormwater pollution, such as demolition areas or concrete washout locations, or locations where vehicles enter or leave the site.
- Erosion and sediment control measures identified in the SWMP.

- Any other structural SCMs that may require maintenance, such as secondary containment around fuel tanks, or the condition of spill response kits.

D. Inspection Requirements:

- Determine if there is any evidence of, or potential for, pollutants entering the drainage system.
- Review SCMs to determine if they still meet design and operational criteria in the SWMP, and if they continue to adequately control pollutants at the site.
- Upgrade and/or revise any SCMs not operating in accordance with the SWMP and update the SWMP to reflect any revisions.

SCM Maintenance / Replacement and Failed SCMs:

- Contractor shall remove sediment that has been collected by perimeter controls, such as silt fence and inlet protection, on a regular basis to prevent failure of SCMs, and remove potential of sediment from being discharged from the site in the event of SCM failure.
- Removed sediment must be moved to an appropriate location where it will not become an additional pollutant source and should never be placed in ditches or streams.
- Contractor shall update Erosion Control Plans / SWMP Maps and SWMP Plan as required with any new SCMs added during the construction period.
- Contractor shall address SCMs that have failed or have the potential to fail without maintenance or modifications, as soon as possible, immediately in most cases, to prevent discharge of pollutants.

E. Inspection Reports:

- Contractor shall maintain records of all inspection reports, including signed inspection logs, at the project site. SWMP records shall be located in the project trailer.
- Inspection logs shall be signed by the Qualified Stormwater Manager.
- Permittee shall document inspection results and maintain a record of the results for a period of 3 years following expiration or inactivation of permit coverage.
- Site inspection records shall include the following:
 - Inspection date
 - Name and title of personnel making the inspection, along with Inspector's signature.
 - Location of discharges of sediment or other pollutants from the site.
 - Location(s) of SCMs that need to be maintained.
 - Location(s) of SCMs that failed to operate as designed or proved inadequate for a particular location.
 - Location(s) where additional SCMs are needed that were not in place at the time of inspection.
 - Deviations from the minimum inspection schedule
 - Notations regarding updates and revisions to SWMP Maps based on field conditions.

Note: This project does not rely on control measures owned or operated by another entity.

Appendix A:

208 Cunningham Drive Grading and Erosion Control Plans

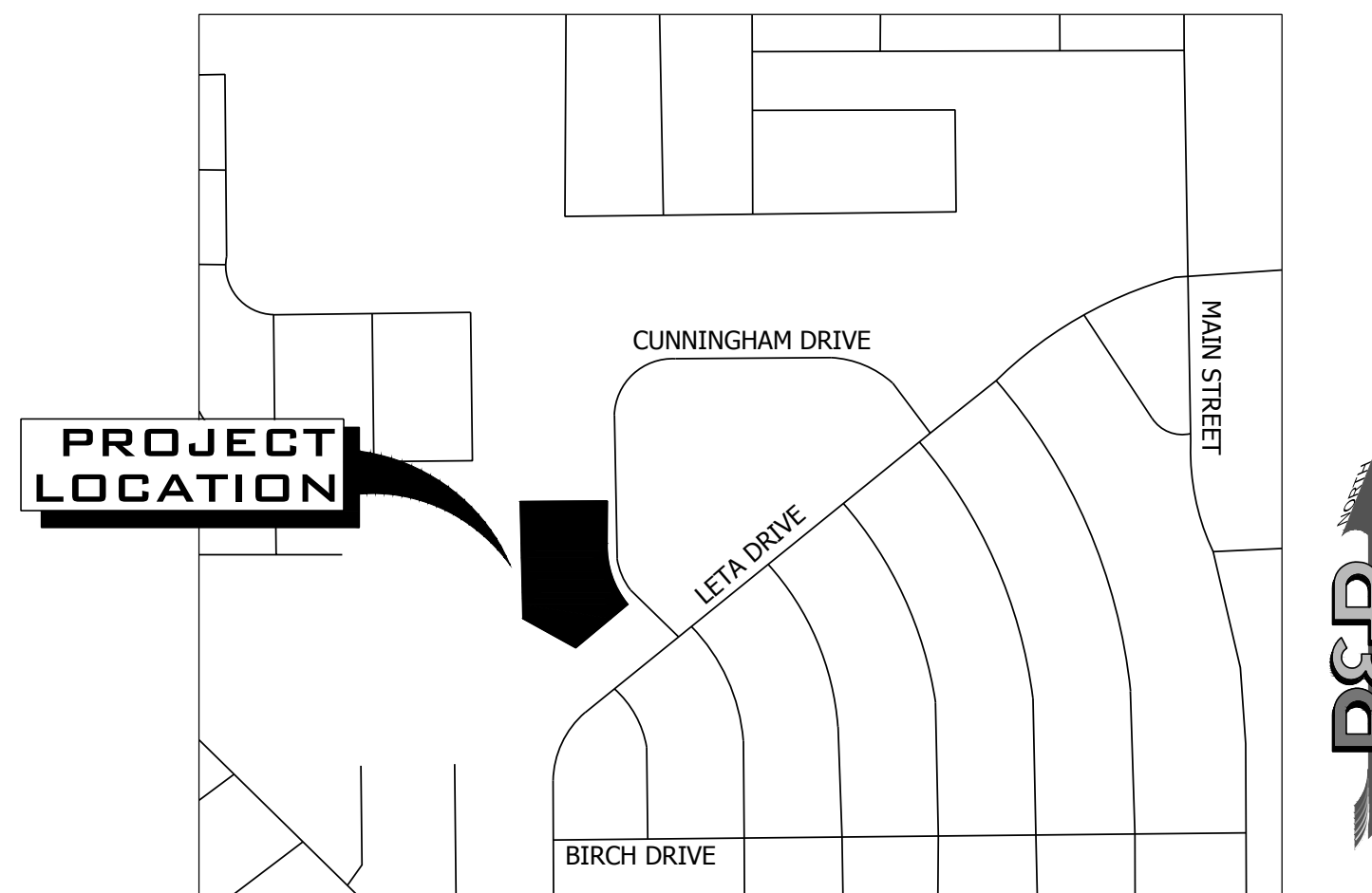
GRADING AND EROSION CONTROL PLAN

208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
 LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



Know what's below.
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VICINITY MAP
SCALE 1" = 500'

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	GRADING & EROSION CONTROL PLAN
C3.0	FINAL GRADING & EROSION CONTROL PLAN
C4.0	DETAILS
C4.1	DETAILS
C4.2	DETAILS

CONTACT LIST		
OWNER	CIVIL ENGINEER	SURVEYOR
FOUNTAIN VALLEY SALVATION ARMY CORPS	R&R ENGINEERS-SURVEYORS, LLC	R&R ENGINEERS-SURVEYORS, LLC
208 CUNNINGHAM DRIVE COLORADO SPRINGS, CO 80911 (719) 382-1182 QUIJANA.VARGAS@USW.SALVATIONARMY.ORG	1635 WEST 13TH AVENUE, SUITE 310 DENVER, CO 80204 (720) 381-2439 DWILSON@RRENGINEERS.COM	1635 WEST 13TH AVENUE, SUITE 310 DENVER, CO 80204 (720) 381-2439 KKUCHARCZYK@RRENGINEERS.COM
CONTACT: QUIJANA VARGAS	CONTACT: DARVIN WILSON, P.E.	CONTACT: KEVIN KUCHARCZYK

BASIS OF BEARING
 BEARINGS ARE BASED ON THE NORTH LINE OF LOT 6, BLOCK 1 OF REFLING OF SECURITY, COLORADO ADDITION NO. 4 AS MONUMENTED AT THE WEST END BY A FOUND 3/4" BAR AND AT THE EAST END BY A NO. 4 REBAR. SAID LINE IS ASSUMED TO BEAR N89°10'20"E.

BENCHMARK
 THE BENCHMARK FOR THIS SURVEY IS A NO. 4 REBAR LOCATED ALONG THE EASTERN BOUNDARY OF THE SUBJECT PARCEL (SEE SHEET 2). THE ELEVATION WAS DERIVED FROM GPS OBSERVATIONS USING AN OPUS DERIVED SOLUTION. ELEVATION: 5801.58 FEET (NAVD 1988 DATUM)

LEGAL DESCRIPTION PER TITLE COMMITMENT
 PARCEL 1:
 LOTS 4 AND 5, BLOCK 1, REFLING OF SECURITY, COLORADO ADDITION NO. 4, COUNTY OF EL PASO, STATE OF COLORADO.
 PARCEL 2:
 LOT 6, BLOCK 1, REFLING OF SECURITY, COLORADO ADDITION NO. 4, COUNTY OF EL PASO, STATE OF COLORADO

Engineer's Statement (for standalone GEC Plan):
 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 any negligent acts, errors or omissions on my part in preparing this plan.

Engineer of Record Signature _____ Date _____

Owner's Statement (for standalone GEC Plan):
 I, the owner/developer have read and will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature _____ Date _____

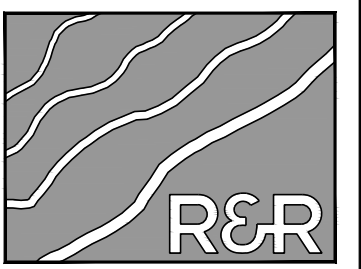
El Paso County:
 County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/or elevations which shall be confirmed at the job site. The County through the approval of this document 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 and Community Development Director's discretion.

County Engineer/ECM Administrator _____ Date _____

NO.	REVISION	BY	DATE



R&R ENGINEERS-SURVEYORS, INC.

1635 WEST 13TH AVENUE, SUITE 310
 DENVER, COLORADO 80204
 PHONE: 303-753-6730

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FOUNTAIN VALLEY SALVATION ARMY
 SITE ADDRESS: 208 CUNNINGHAM DRIVE
 COLORADO SPRINGS, CO 80911
 PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY
 208 CUNNINGHAM DR
 COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN			
JOB NO.	FV21181	ORG. SUBM. DATE	12/22/2023
DWN:	JMP	CHKD:	DW
NAME:			

COVER SHEET

NO. **C1.0**

PATH: P:\V\21181 - 208 CUNNINGHAM DR\ENGINEERING\DRAWINGS\PLAN\GEC\FV21181 - CVD.DWG, PLOT DATE: 12/22/2023 12:19:58 PM, BY: JENNA PERDUE



Know what's below. Call before you dig.

EL PASO COUNTY GRADING & EROSION CONTROL STANDARD NOTES:

- 1. 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.
2. 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.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. 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 WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY 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.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS 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.
14. DURING DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER MAY BE DISCHARGED ON-SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES 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.
17. WASTE 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. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER 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.
20. 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.
21. 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.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT 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.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. OWNER/DEVELOPER 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, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). 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.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON-SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ? AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL 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

GRADING AND EROSION CONTROL PLAN
208 CUNNINGHAM DRIVE
LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911

MASTER LEGEND

Table with columns: EXISTING, DESCRIPTION, PROPOSED. Lists various features like PROPERTY LINE, LOT LINE, RIGHT OF WAY, CENTERLINE, FLOOD PLAIN, LIMITS OF DISTURBANCE, SWALE / STREAM FLOWLINE, OVERFLOW RELIEF PATH, FENCE LINE, EASEMENT, EDGE OF PAVEMENT, VERTICAL CURB AND GUTTER, MOUNTABLE CURB AND GUTTER, SPILL GUTTER, TRANSITION GUTTER, CONCRETE SIDEWALK, HANDICAP PARKING, SIGHT TRIANGLE, SIGN(S), PARKING COUNT INDICATOR, MAJOR CONTOUR, MINOR CONTOUR, GRADE BREAK, SPOT ELEVATION, RIP RAP, WATER LINE, WATER METER, WATER VALVE, WATER REDUCER, WATER FITTINGS, FIRE HYDRANT, SANITARY LINE, SANITARY MANHOLE, SANITARY CLEANOUT, STORM SEWER PIPE, STORM SEWER MANHOLE, STORM SEWER INLET, STORM SEWER FLARED END SECTION, STORM SEWER HEADWALL, UNDERGROUND ELECTRIC, OVERHEAD ELECTRIC, UTILITY POLE, STREET LIGHT, CABLE TV SERVICE, TELECOM SERVICE, FIBER OPTIC SERVICE, NATURAL GAS SERVICE, TREE, TREE LINE, HARD SIDED HAIL CANOPY, HAIL NETTING.

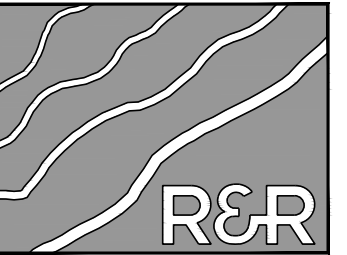
BMP LEGEND table listing various Best Management Practices (BMPs) and their symbols. Includes: ROCK CHECK DAM (CD), COMPOST BLANKET (CB), COMPOST FILTER BERM (CFB), CONCRETE WASHOUT AREA (CWA), CONSTRUCTION FENCE (CF), CONSTRUCTION MARKERS (CM), DEWATERING (DW), DIVERSION DITCH (DD), ROCK AND RIPRAP GRADATIONS, EROSION CONTROL BLANKET (ECB), INLET PROTECTION (P), REINFORCED CHECK DAM (RCD), REINFORCED ROCK BERM (RRB), RRB FOR CULVERT PROTECTION (RRC), SEDIMENT BASIN (SB), SEDIMENT CONTROL LOG (SCL), SEDIMENT TRAP (ST), SEEDING AND MULCHING (SM), SILT FENCE (SF), STABILIZED STAGING AREA (SSA), SURFACE ROUGHENING (SR), TEMPORARY ROAD CROSSING (TRC), TEMPORARY SLOPE DRAIN (TSD), TEMPORARY STREAM CROSSING (TSC), TERRACING (TER), VEHICLE TRACKING CONTROL (VTC), VTC WITH WHEEL WASH (VW), A LOT EROSION CONTROL (A), B LOT EROSION CONTROL (B), LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE (LOC), PROP. STORMWATER FLOW ARROWS, EX. STORMWATER FLOW ARROWS, PROP. CUT/FILL BOUNDARY.

EXISTING VEGETATION NOTES:

- 1. EXISTING VEGETATION CONSISTS OF SPARSE GRASS
2. MINIMAL TREES AND SHRUBS EXIST ONSITE AND ARE NOT TO BE DISTURBED
3. OFFSITE TREES TO BE REMOVED AS NEEDED FOR CONSTRUCTION OF 12" HP STORM PIPE

PLAN: FV21181 - 208 CUNNINGHAM DR ENGINEERING & DRAINAGES BY: ANS, GEC: V21181 - CVD.DWG. PLOT DATE: 12/22/2023 12:19:58 PM. BY: JENNA PERDUE

Revision table with columns: NO., REVISION, BY, DATE.



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Table with columns: FOUNTAIN VALLEY SALVATION ARMY, SITE ADDRESS, PREPARED FOR.

Table with columns: FOUNTAIN VALLEY SALVATION ARMY, SITE ADDRESS, PREPARED FOR.

Table with columns: JOB NO., ORG. SUBM. DATE, DWN., NAME.

GENERAL NOTES

NO. C1.1

GRADING AND EROSION CONTROL PLAN

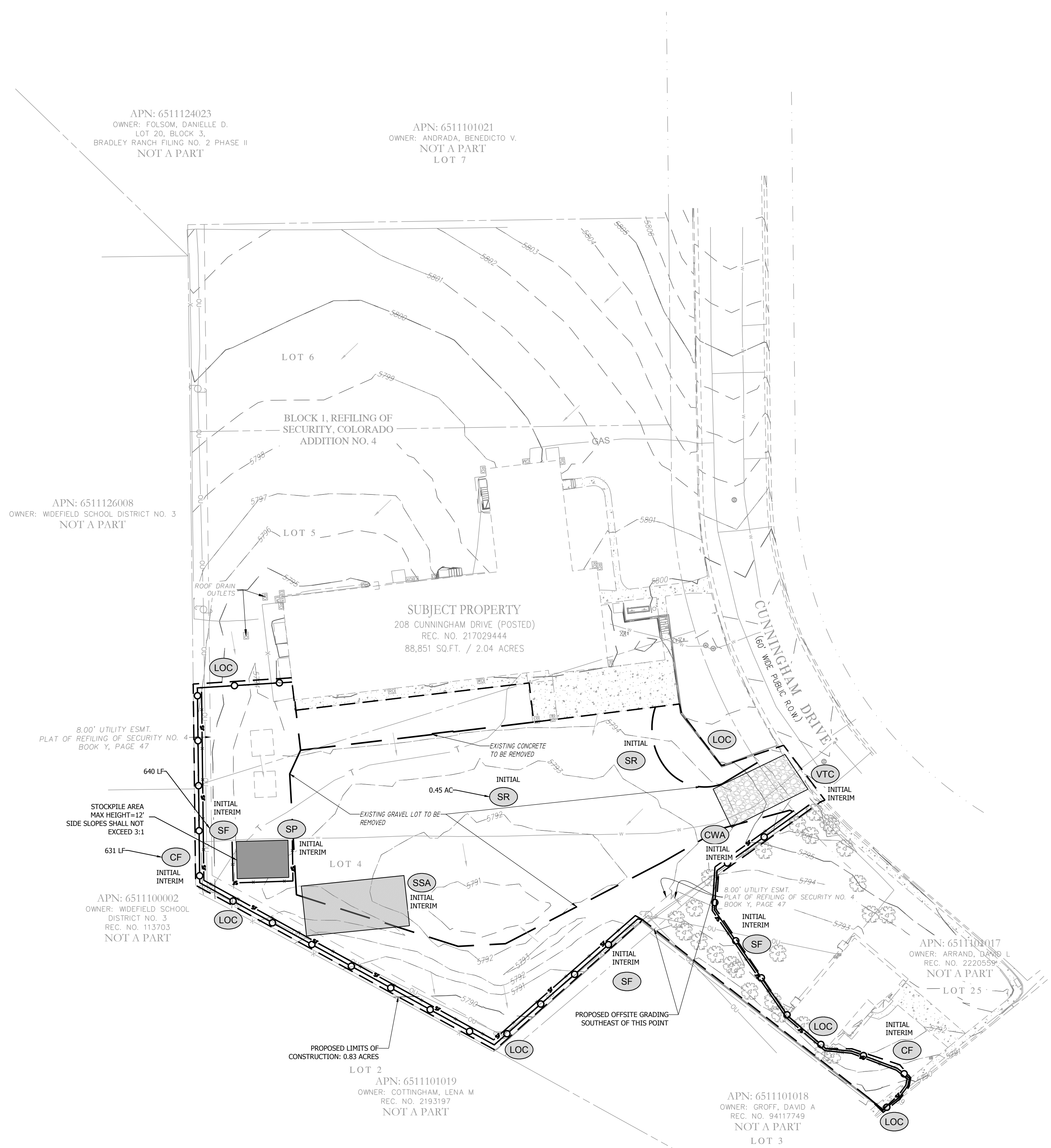
208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
 LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



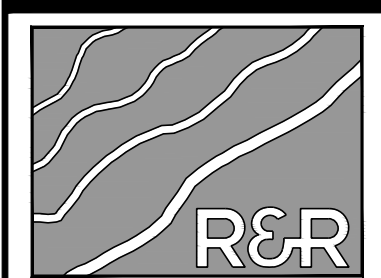
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BMP LEGEND	
	CHECK DAM
	COMPOST BLANKET
	COMPOST FILTER BERM
	CONCRETE WASHOUT AREA
	CONSTRUCTION FENCE
	CONSTRUCTION MARKERS
	DEWATERING
	DIVERSION DITCH
	EROSION CONTROL BLANKET
	INLET PROTECTION
	REINFORCED CHECK DAM
	REINFORCED ROCK BERM
	RRB FOR CULVERT PROTECTION
	SEDIMENT BASIN
	SEDIMENT CONTROL LOG
	SEDIMENT TRAP
	SEEDING AND MULCHING
	SILT FENCE
	STABILIZED STAGING AREA
	SURFACE ROUGHENING
	TEMPORARY ROAD CROSSING
	TEMPORARY SLOPE DRAIN
	TEMPORARY STREAM CROSSING
	TERRACING
	VEHICLE TRACKING CONTROL
	VTC WITH WHEEL WASH
	A LOT EROSION CONTROL
	B LOT EROSION CONTROL
	LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE
	PROP. STORMWATER FLOW ARROWS
	EX. STORMWATER FLOW ARROWS
	PROP. CUT/FILL BOUNDARY



PLAN: FV21181 - 208 CUNNINGHAM DR GRADING AND EROSION CONTROL PLAN - GEC.DWG, PLOT DATE: 12/22/2023, 12:20:47 PM, BY: JENNA PERDUE

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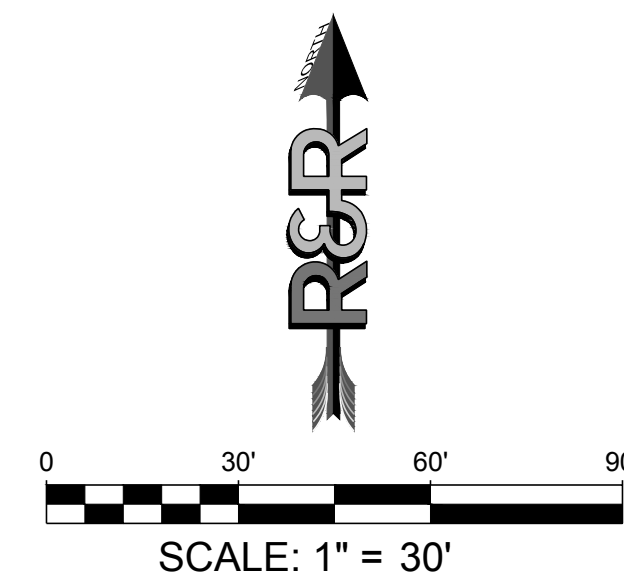
FOUNTAIN VALLEY SALVATION ARMY
 208 CUNNINGHAM DRIVE
 COLORADO SPRINGS, CO 80911

PREPARED FOR:
 FOUNTAIN VALLEY SALVATION ARMY
 208 CUNNINGHAM DR
 COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN
 JOB NO. FV21181
 ORG. SUBM. DATE 12/22/2023
 DWN: JMP CHKD: DW

GRADING & EROSION CONTROL PLAN

NO. **C2.0**



GRADING AND EROSION CONTROL PLAN

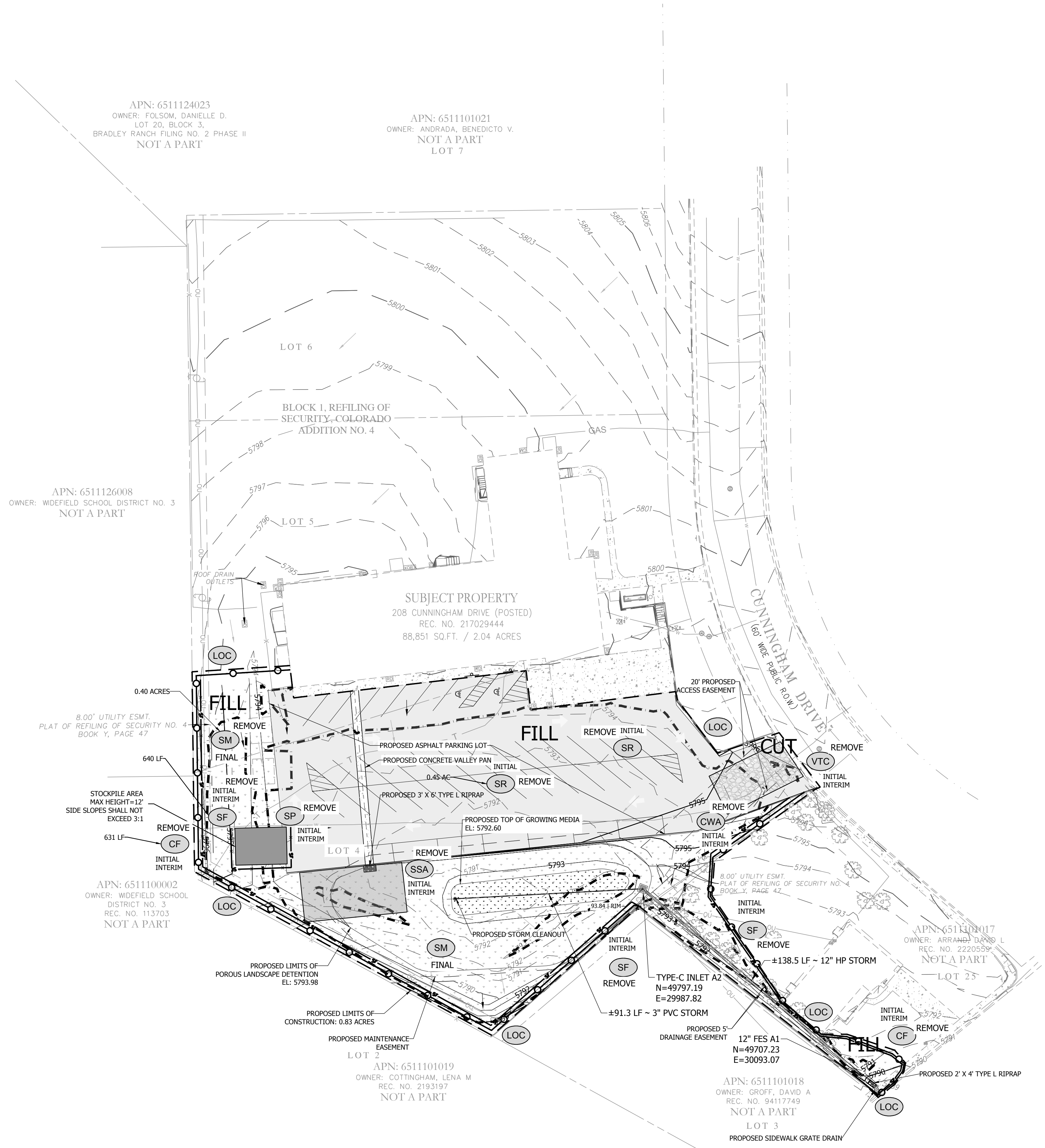
208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
 LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



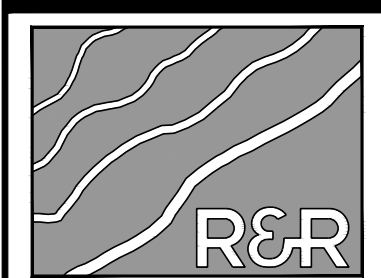
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BMP LEGEND	
	CHECK DAM
	COMPOST BLANKET
	COMPOST FILTER BERM
	CONCRETE WASHOUT AREA
	CONSTRUCTION FENCE
	CONSTRUCTION MARKERS
	DEWATERING
	DIVERSION DITCH
	EROSION CONTROL BLANKET
	INLET PROTECTION
	REINFORCED CHECK DAM
	REINFORCED ROCK BERM
	RRB FOR CULVERT PROTECTION
	SEDIMENT BASIN
	SEDIMENT CONTROL LOG
	SEDIMENT TRAP
	SEEDING AND MULCHING
	SILT FENCE
	STABILIZED STAGING AREA
	SURFACE ROUGHENING
	TEMPORARY ROAD CROSSING
	TEMPORARY SLOPE DRAIN
	TEMPORARY STREAM CROSSING
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	VEHICLE TRACKING CONTROL
	VTC WITH WHEEL WASH
	A LOT EROSION CONTROL
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	LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE
	PROP. STORMWATER FLOW ARROWS
	EX. STORMWATER FLOW ARROWS
	PROP. CUT/FILL BOUNDARY



PLAN: FV21181 - 208 CUNNINGHAM DRIVE GRADING AND EROSION CONTROL PLAN - GEC - FINAL DWG. PLOT DATE: 12/22/2023 12:21:51 PM BY: DENA FERDIE

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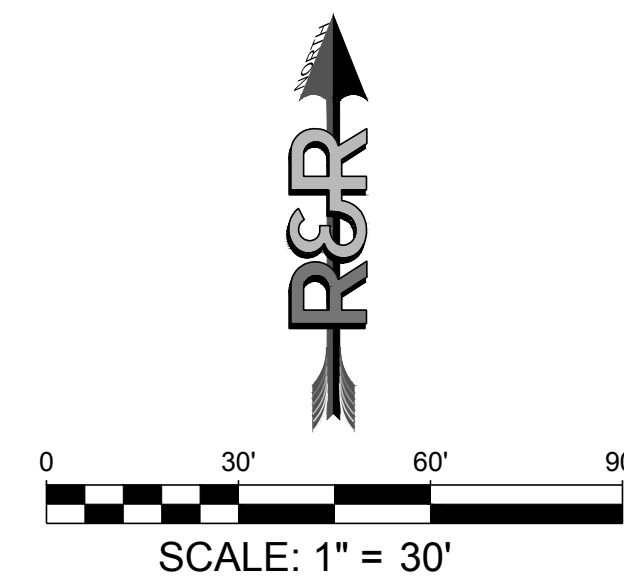
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FOUNTAIN VALLEY SALVATION ARMY
 208 CUNNINGHAM DRIVE
 COLORADO SPRINGS, CO 80911
 PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY
 208 CUNNINGHAM DR
 COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN	
JOB NO.	FV21181
ORG. SUBM. DATE	12/22/2023
DWN:	JMP
CHKD:	DW
NAME	

FINAL GRADING & EROSION CONTROL PLAN

NO. **C3.0**



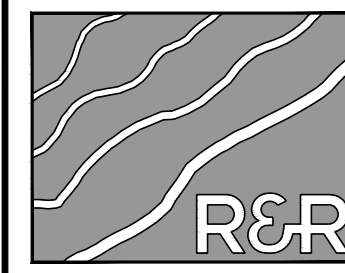
GRADING AND EROSION CONTROL PLAN 208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF
THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH
P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



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J-HOOK INSTALLATION
1. Silt fence must be placed on a flat surface 2'-5" away from toe of the slope to allow for ponding and deposition.
2. Compact the trench using a jumping jack or wheel rolling to the front that the fence resists being pulled out of the ground by hand.
3. Silt fence shall be fast with no sags after it has been anchored.
4. Fabric shall be attached to posts with 1" heavy duty staples or 1" nails. These should be placed vertically down the post, 3" apart.
5. The preferred installation method uses a trencher or silt fence installation device.
6. Install silt fence along the contour of the slopes or in a manner to avoid creating concentrated flow (such as a "J-hook" installation).

SECTION A-A
1. Frequent observations and maintenance are necessary to maintain control measures in effective operating condition. Inspections and corrective measures should be documented thoroughly.
2. Accumulated sediment must be removed when the height reaches 3/4 of the design height of the silt fence.
3. Silt fence must remain until the upstream disturbance area is stabilized.
4. Permanently stabilize area after silt fence is removed.

 STORMWATER ENTERPRISE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01	SILT FENCE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01
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CONCRETE WASHOUT AREA PLAN
1. SEE PLAN VIEW FOR:
- LOCATION OF CONCRETE WASHOUT AREA
- LOCATE AT LEAST 50' AWAY FROM STATE WATERS MEASURED HORIZONTALLY.
2. AN IMPERMEABLE LINER (16 MIL MINIMUM THICKNESS) IS REQUIRED IF CONCRETE WASH AREA IS LOCATED WITHIN 400' OF STATE WATERS OR 1000' OF WELLS OR DRINKING WATER SOURCES.
3. DO NOT LOCATE IN AREAS WHERE SHALLOW GROUNDWATER MAY BE PRESENT.
4. THE CONCRETE WASH AREA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
5. CONCRETE WASH AREA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 6'.
6. BERM SURROUNDING SIDES AND BACK OF CONCRETE WASH AREA SHALL HAVE A MINIMUM HEIGHT OF 2 FEET.
7. CONCRETE WASH AREA ENTRANCE SHALL BE SLOPED 2% TOWARDS THE CONCRETE WASH AREA.
8. SIGNS SHALL BE PLACED AT THE CONCRETE WASH AREA.
9. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

SECTION A-A
1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE HEIGHT REACHES 3/4 OF THE DESIGN HEIGHT OF THE SILT FENCE.
3. SILT FENCE MUST REMAIN UNTIL THE UPSTREAM DISTURBANCE AREA IS STABILIZED.
4. PERMANENTLY STABILIZE AREA AFTER SILT FENCE IS REMOVED.

 STORMWATER ENTERPRISE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01	CONCRETE WASHOUT AREA APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01
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AGGREGATE VEHICLE TRACKING CONTROL
1. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHOULD BE LOCATED AT ALL POINTS WHERE VEHICLES EXIT THE CONSTRUCTION SITE TO ADJACENT ROADWAY.
2. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. RADIUS MUST BE ADEQUATE FOR INTENDED CONSTRUCTION VEHICLE TURNING.
4. ROCK SHOULD CONSIST OF 6" MINUS ROCK.
5. INSTALL CONSTRUCTION FENCE ON BOTH SIDES OF VEHICLE TRACKING CONTROL PAD WHEN NEEDED OR REQUIRED BY INSPECTOR.

SECTION A-A
1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE HEIGHT REACHES 3/4 OF THE DESIGN HEIGHT OF THE SILT FENCE.
3. SILT FENCE MUST REMAIN UNTIL THE UPSTREAM DISTURBANCE AREA IS STABILIZED.
4. PERMANENTLY STABILIZE AREA AFTER SILT FENCE IS REMOVED.

 STORMWATER ENTERPRISE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01	VEHICLE TRACKING CONTROL APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01
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SEEDING & MULCHING
ALL SOIL TESTING, SOILS AMENDMENT AND FERTILIZER DOCUMENTATION, AND SEED LOAD AND BAG TICKETS MUST BE ADDED TO THE CSMP.

SOIL PREPARATION
1. IN AREAS TO BE SEEDED, THE UPPER 6 INCHES OF THE SOIL MUST NOT BE HEAVILY COMPACTED, AND SHOULD BE IN FRABLE CONDITION. LESS THAN 85% STANDARD PROCTOR DENSITY IS ACCEPTABLE. AREAS OF COMPACTION OR GENERAL CONSTRUCTION ACTIVITY MUST BE SCARIFIED TO A DEPTH OF 6 TO 12 INCHES PRIOR TO SPREADING TOPSOIL TO BREAK UP COMPACTED LAYERS AND PROVIDE A BLENDING ZONE BETWEEN DIFFERENT SOIL LAYERS.
2. AREAS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.
3. THE CITY RECOMMENDS THAT EXISTING AND/OR IMPORTED TOPSOIL BE TESTED TO IDENTIFY SOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDED TO CORRECT TOPSOIL DEFICIENCIES BASED ON SOIL TESTING RESULTS.
4. TOPSOIL SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD TO RETAIN ITS STRUCTURE AVOID COMPACTION, AND TO PREVENT EROSION AND CONTAMINATION. STRIPPED TOPSOIL MUST BE STORED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TAKEN TO PROTECT THE TOPSOIL AS A VALUABLE COMMODITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESIRABLE WORKING CONDITIONS (E.G. DURING WET WEATHER OR WHEN SOILS ARE SATURATED). TOPSOIL SHALL NOT BE STORED IN SWALES OR IN AREAS WITH POOR DRAINAGE.

SEEDING
1. ALLOWABLE SEED MIXES ARE INCLUDED IN THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. ALTERNATIVE SEED MIXES ARE ACCEPTABLE IF INCLUDED IN AN APPROVED LANDSCAPING PLAN.
2. SEED SHOULD BE DRILL-SEEDED WHENEVER POSSIBLE.
3. BROADCAST SEEDING OR HYDRO-SEEDING WHEN DRILL-SEEDING IS USED.
4. SEEDING RATES MUST BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO-SEEDING.
5. BROADCAST SEEDING MUST BE LIGHTLY HAND-RAKED INTO THE SOIL.

MULCHING
1. MULCHING SHOULD BE COMPLETED AS SOON AS PRACTICABLE AFTER SEEDING. HOWEVER PLANTED AREAS MUST BE MULCHED NO LATER THAN 14 DAYS AFTER PLANTING.
2. MULCHING REQUIREMENTS INCLUDE:
- MAY OR STRAW MULCH
- ONLY CERTIFIED WEED-FREE AND CERTIFIED SEED-FREE MULCH MAY BE USED. MULCH MUST BE APPLIED AT 2 TONS/ACRE AND ADEQUATELY SECURED BY CRIMPING AND/OR TACKLER.
- CRIMPING MUST NOT BE USED ON SLOPES GREATER THAN 3:1 AND MULCH FIBERS MUST BE TUCKED INTO THE SOIL TO A DEPTH OF 2 TO 4 INCHES.
- TACKLER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1.
- HYDRAULIC MULCHING IS AN OPTION ON STEEP SLOPES OR WHERE ACCESS IS LIMITED.
- IF HYDRO-SEEDING IS USED, MULCHING MUST BE APPLIED AS A SEPARATE SECOND OPERATION.
- WOOD CELLULOSE FIBERS MIXED WITH WATER MUST BE APPLIED AT A RATE OF 2,000 TO 2,500 POUNDS/ACRE, AND TACKLER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE.
- EROSION CONTROL BLANKET
- EROSION CONTROL BLANKET MAY BE USED IN PLACE OF TRADITIONAL MULCHING METHODS.

 STORMWATER ENTERPRISE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01	SEEDING & MULCHING APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01
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SURFACE ROUGHENING
1. SURFACE ROUGHENING MAY BE USED IN AREAS FLATTER THAN 3:1. INSTALL FURROWS ALONG CONTOUR TO INTERCEPT SHEET FLOW.
2. SURFACE ROUGHENING MAY BE ACCOMPLISHED BY FURROWING, SCARIFYING, RIPPING OR DISKING THE SOIL.
3. FURROWS MUST BE A MINIMUM OF 4" IN DEPTH.
4. SURFACE ROUGHENING SHALL NOT BE USED ON EXTREMELY SANDY OR ROCKY SOILS.

SECTION A-A
1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE HEIGHT REACHES 3/4 OF THE DESIGN HEIGHT OF THE SILT FENCE.
3. SILT FENCE MUST REMAIN UNTIL THE UPSTREAM DISTURBANCE AREA IS STABILIZED.
4. PERMANENTLY STABILIZE AREA AFTER SILT FENCE IS REMOVED.

 STORMWATER ENTERPRISE APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01	SURFACE ROUGHENING APPROVED: [Signature] SHEET NUMBER: 001 ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO: 900-01
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AGGREGATE VEHICLE TRACKING CONTROL
1. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHOULD BE LOCATED AT ALL POINTS WHERE VEHICLES EXIT THE CONSTRUCTION SITE TO ADJACENT ROADWAY.
2. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. RADIUS MUST BE ADEQUATE FOR INTENDED CONSTRUCTION VEHICLE TURNING.
4. ROCK SHOULD CONSIST OF 6" MINUS ROCK.
5. INSTALL CONSTRUCTION FENCE ON BOTH SIDES OF VEHICLE TRACKING CONTROL PAD WHEN NEEDED OR REQUIRED BY INSPECTOR.

SECTION A-A
1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
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FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911

 PREPARED FOR:
FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DR
COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN
JOB NO. FV21181
ORG. SUBM. DATE 12/22/2023
DWN: JMP CHK: DW
NAME

DETAILS

NO. **C4.0**

GRADING AND EROSION CONTROL PLAN 208 CUNNINGHAM DRIVE

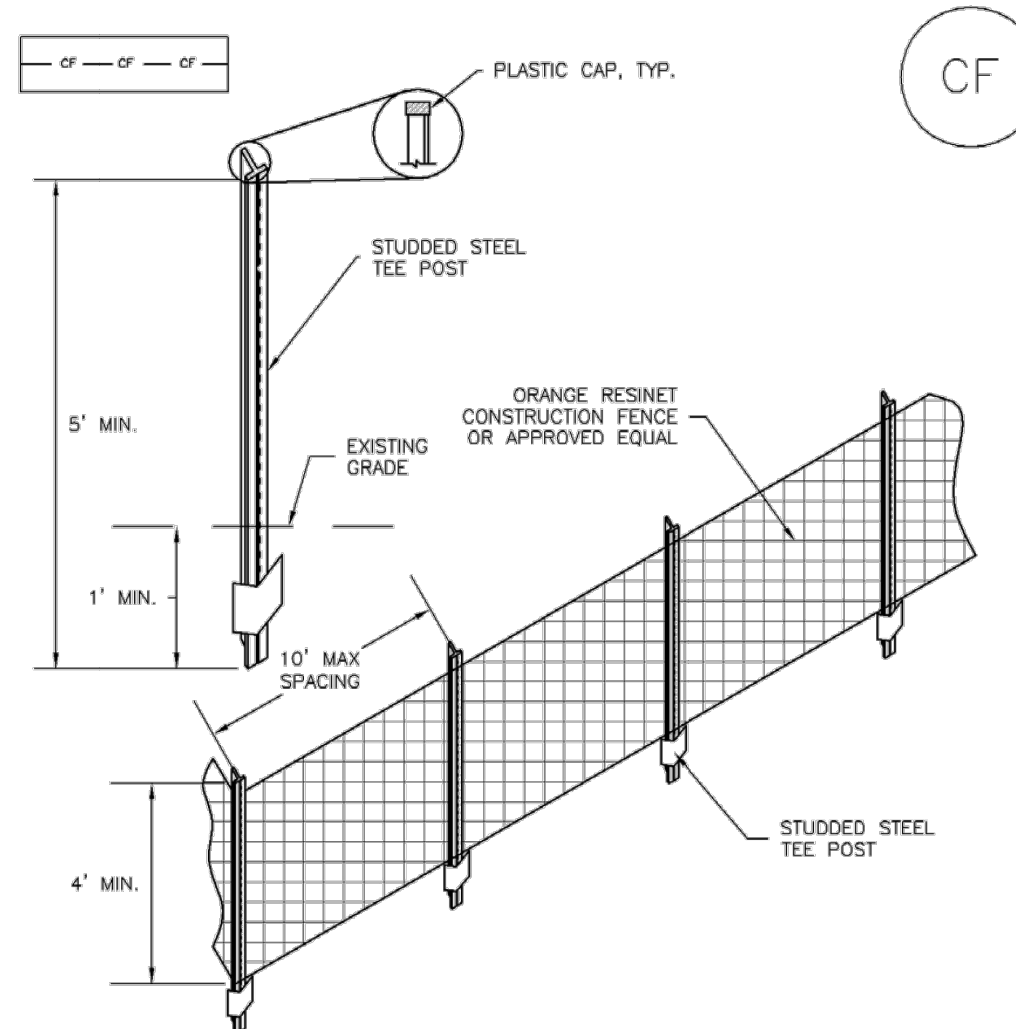
LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



Know what's below.
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NO.	REVISION	BY	DATE

SM-3 Construction Fence (CF)



CF-1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

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

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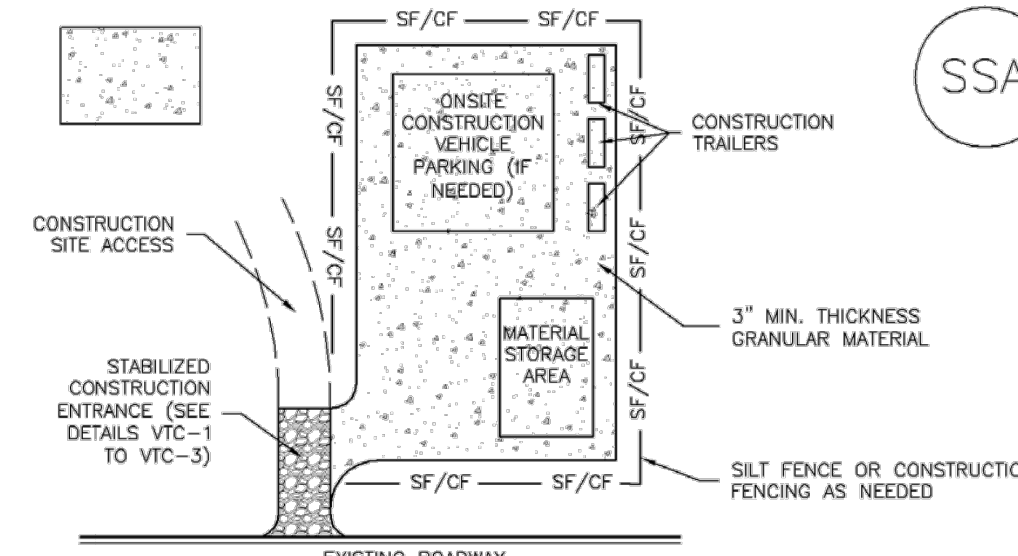
Construction Fence (CF) SM-3

CONSTRUCTION FENCE MAINTENANCE NOTES

- 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.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
- (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-LOCATION OF STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

- 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.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

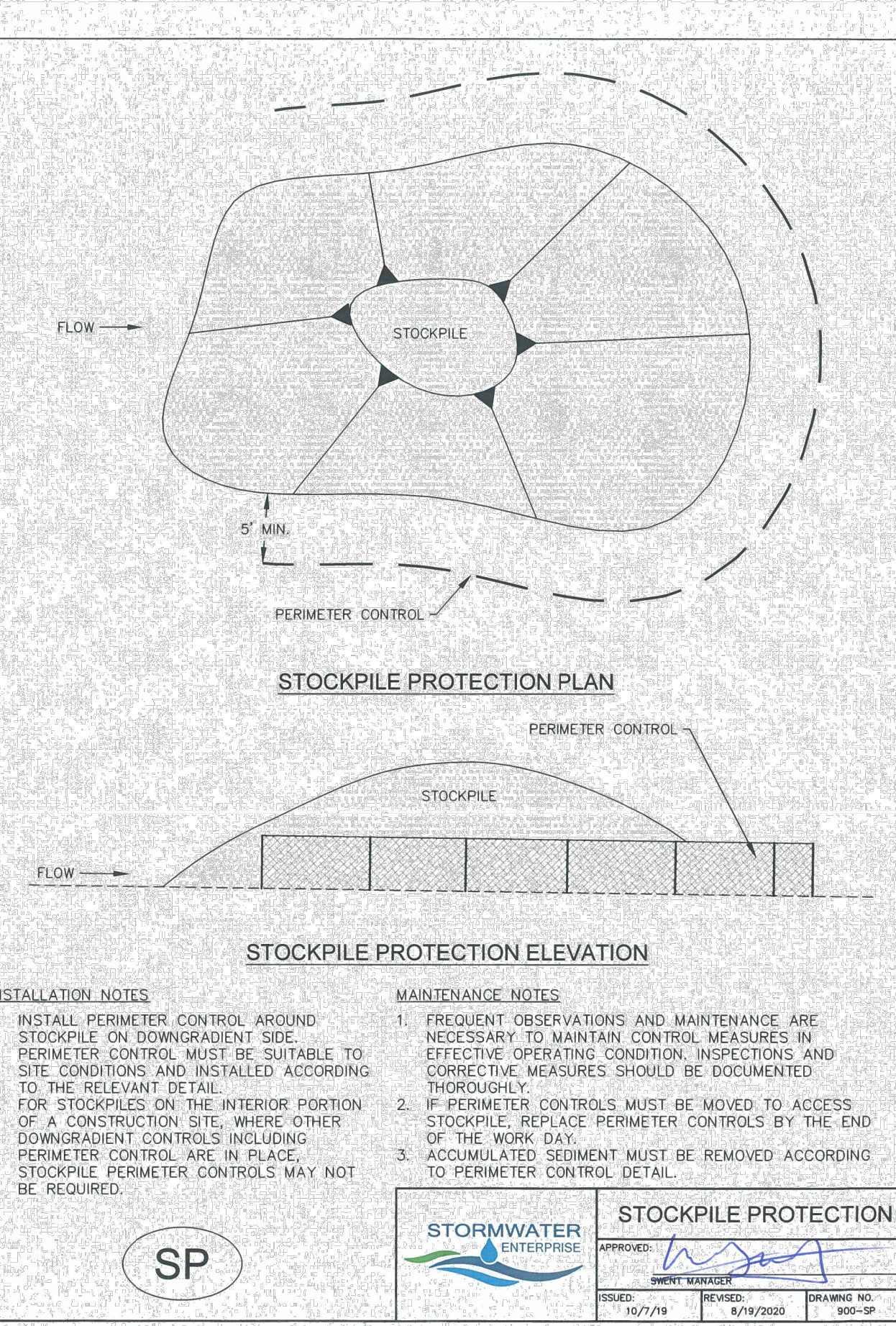
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SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

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

SSA-4 Urban Drainage and Flood Control District November 2010
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STOCKPILE PROTECTION ELEVATION

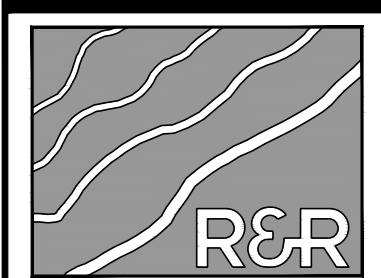
- | | |
|--|--|
| <h4>INSTALLATION NOTES</h4> <ol style="list-style-type: none"> INSTALL PERIMETER CONTROL AROUND STOCKPILE ON DOWNGRADIENT SIDE. PERIMETER CONTROL MUST BE SUITABLE TO SITE CONDITIONS AND INSTALLED ACCORDING TO THE RELEVANT DETAIL. FOR STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS INCLUDING PERIMETER CONTROL ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED. | <h4>MAINTENANCE NOTES</h4> <ol style="list-style-type: none"> FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. IF PERIMETER CONTROLS MUST BE MOVED TO ACCESS STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORK DAY. ACCUMULATED SEDIMENT MUST BE REMOVED ACCORDING TO PERIMETER CONTROL DETAIL. |
|--|--|

STORMWATER ENTERPRISE

STOCKPILE PROTECTION

APPROVED:

ISSUED: 10/27/19 REVISED: 6/16/2020 DRAWING NO: 900-SP



ENGINEERS SURVEYORS

R&R ENGINEERS-SURVEYORS, INC.
1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

FOUNTAIN VALLEY SALVATION ARMY
SITE ADDRESS: 208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911
PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DR
COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN			
JOB NO.	FV21181		
ORG. SUBM. DATE	12/22/2023		
DWN:	JMP	CHKD:	DW
NAME			

DETAILS

NO. **C4.1**

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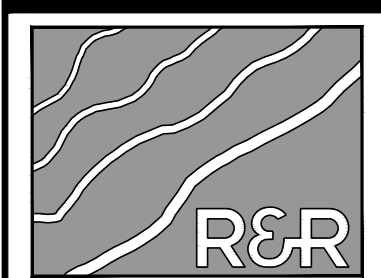
GRADING AND EROSION CONTROL PLAN 208 CUNNINGHAM DRIVE

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LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



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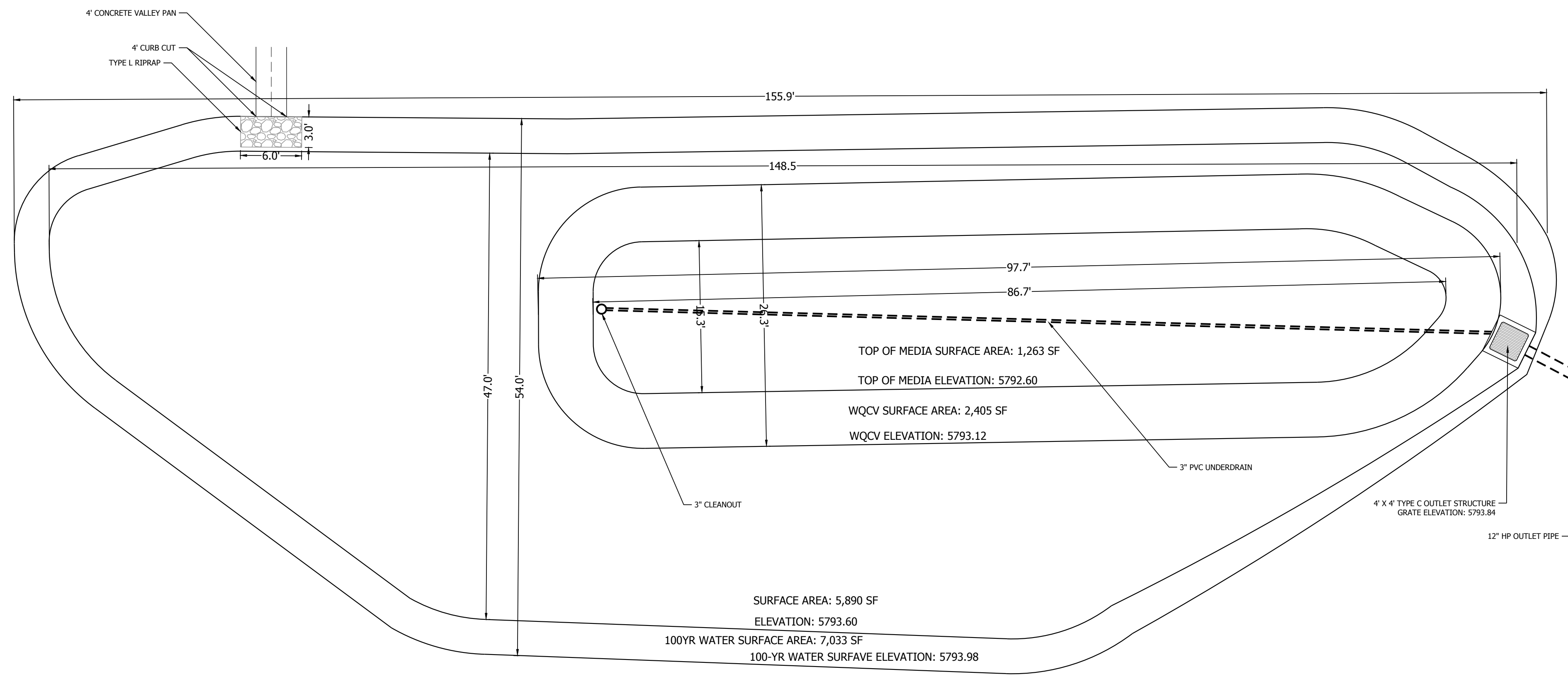
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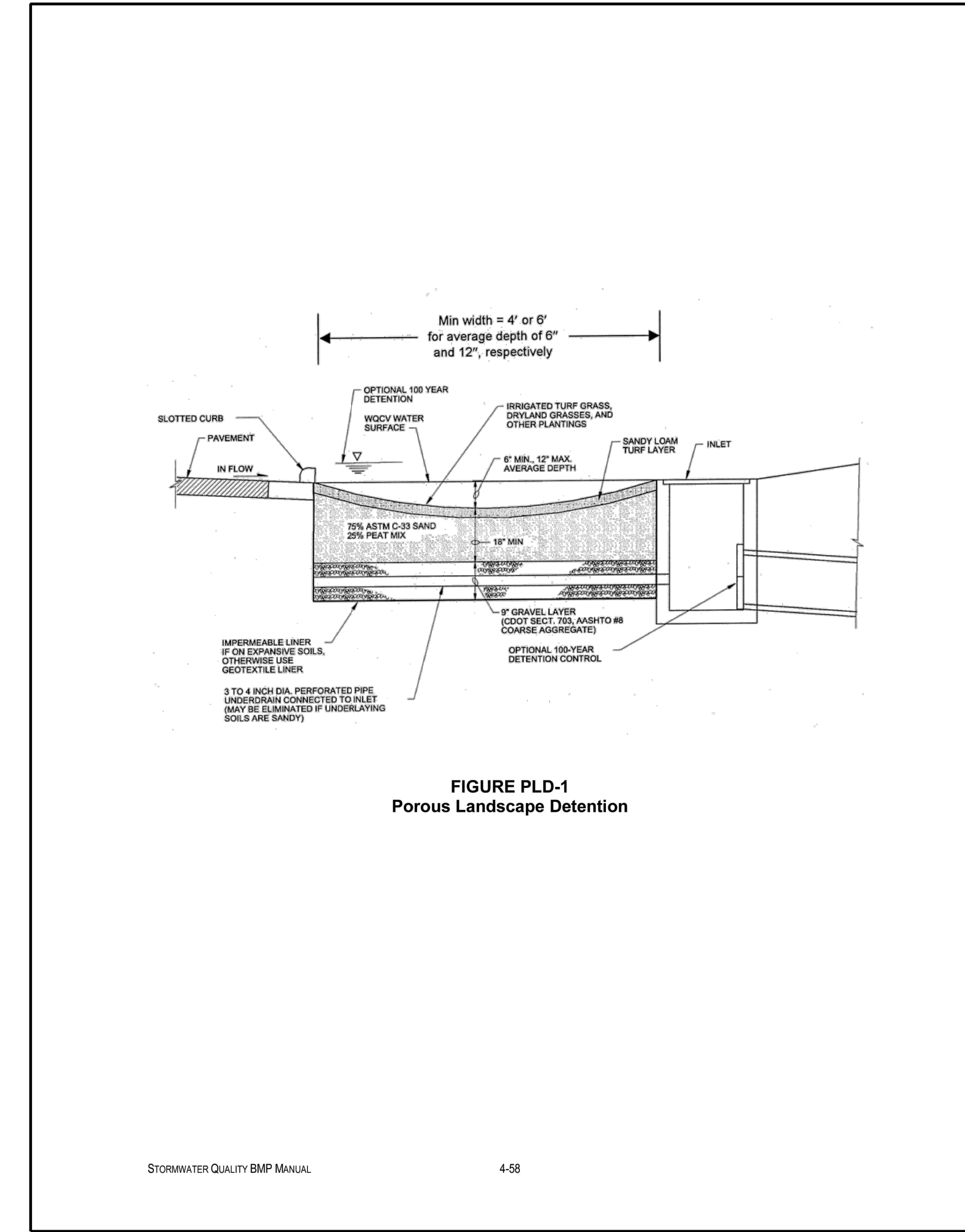
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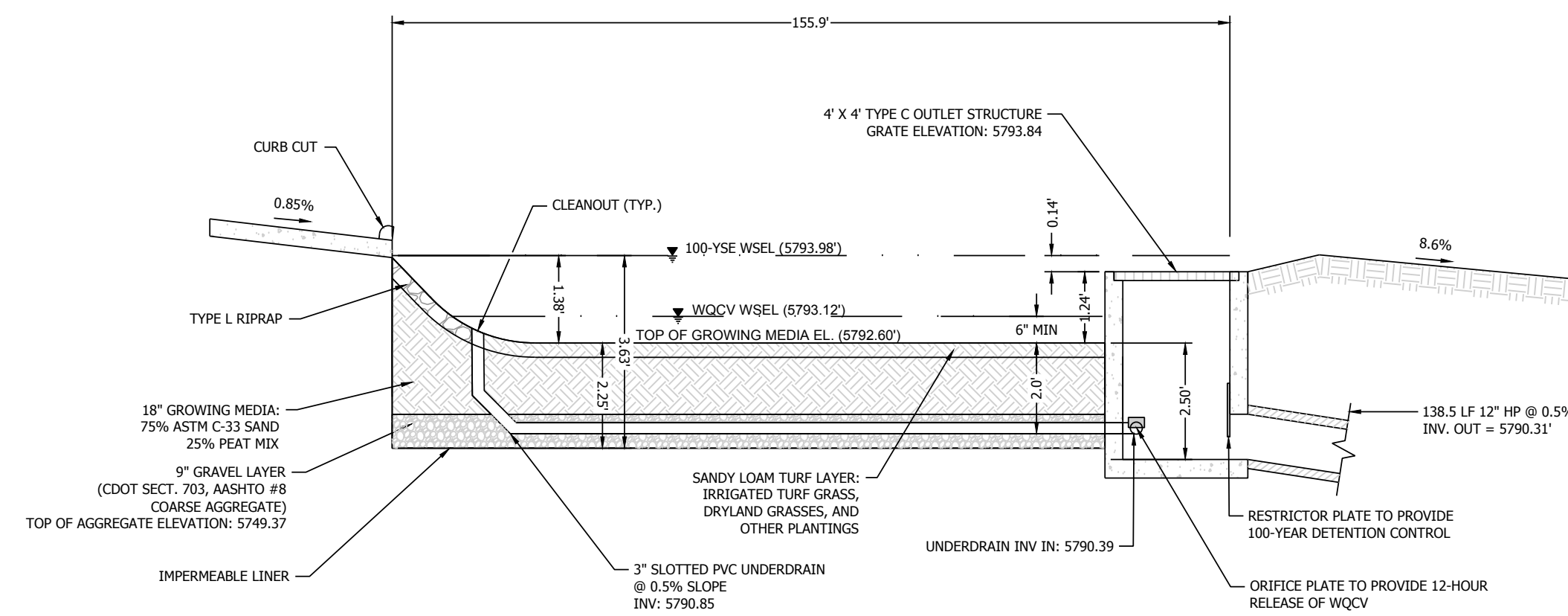
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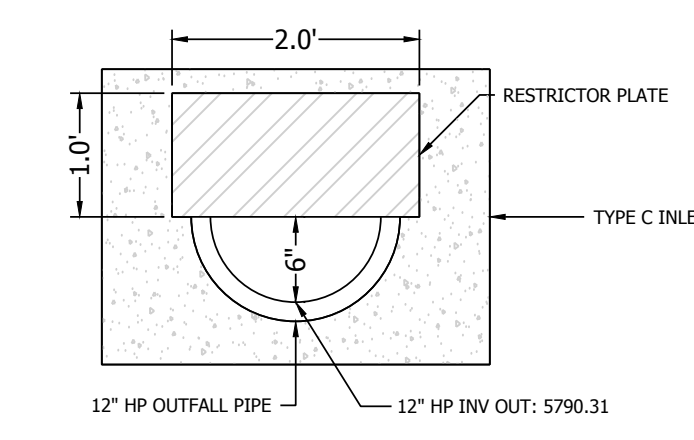
POROUS LANDSCAPE DETENTION PLAN
SCALE: N.T.S.



POROUS LANDSCAPE DETENTION DETAIL



POROUS LANDSCAPE DETENTION PROFILE
SCALE: N.T.S.



RESTRICTOR PLATE DETAIL

PATH: P:\V21181_208_CUNNINGHAM_DR\ENGINEERING\DRAWINGS\PLAN\SEC\CV21181 - DET.DWG, PLOT DATE: 12/22/2023 12:23:04 PM, BY: JENNA PERDUE

FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911
SITE ADDRESS:
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COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN
JOB NO. FV21181
ORG. SUBM. DATE 12/22/2023
DWN: JMP CHKD: DW
NAME: JPM
POROUS LANDSCAPE DETENTION DETAILS
NO. C4.2

Appendix B:

Erosion and Stormwater Quality Control Permit