

STANDARD CONSTRUCTION NOTES:

- 1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES...
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP)...
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS...

GRADING NOTES:

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS...
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...
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION...

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

Table with 3 columns: REV., DESCRIPTION, DATE



BASIS OF BEARINGS

THE WESTERN BOUNDARY OF LOT 168 HAVING AN ASSUMED BEARING OF N15°29'03" W.

PREPARED FOR: MAYNARD BUILDING 1364 OLD CEDAR COVE MONUMENT, CO 80132

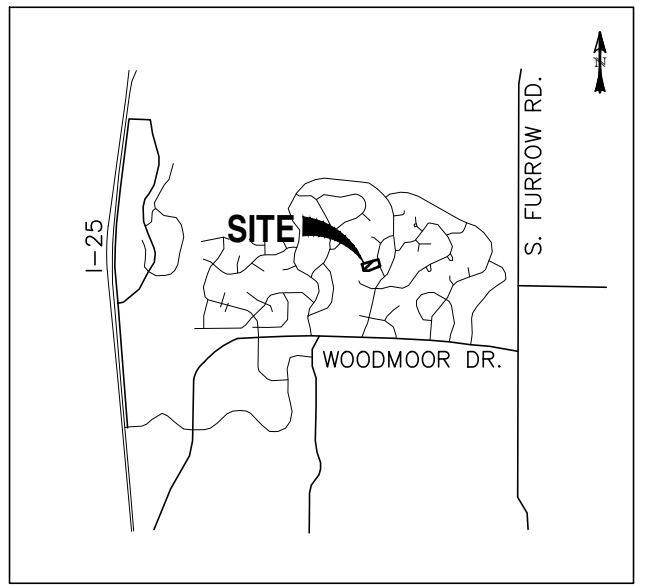


19584 FOUR WINDS WAY MONUMENT, CO 80132

GRADING & EROSION CONTROL PLAN

Table with columns: DESIGNED BY, DRAWN BY, SCALE, DATE, JOB NUMBER, SHEET

19584 FOUR WINDS WAY GRADING & EROSION CONTROL PLAN EL PASO COUNTY, COLORADO



CONSTRUCTION PLANS AND SPECIFICATIONS ENGINEERS STATEMENT:

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF...

ENGINEER: [Signature] 40510 04/29/22 DATE

OWNER STATEMENT:

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

OWNER SIGNATURE: [Signature] 4/29/22 DATE

VICINITY MAP SCALE: N.T.S.

EL PASO COUNTY APPROVAL:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE...

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...

APPROVED Engineering Department

COUNTY ENGINEER/ECM ADMINISTRATOR: [Signature] 07/18/2022 7:09 AM

El Paso Planning & Community Development Department

LEGEND

Legend table with columns: EXISTING, PROPOSED, CURB & GUTTER, EASEMENT, PUBLIC, PUBLIC IMPROVEMENT, BEGIN TRANSITION, END TRANSITION, CURB RETURN, POINT OF CURVATURE, POINT OF TANGENCY, POINT ON CURVE, POINT OF COMPOUND CURVATURE, POINT OF REVERSE CURVATURE, RADIUS POINT, TYPE 'A' CURB AND GUTTER. Includes symbols for property boundaries, easements, contours, etc.

BMP LEGEND

BMP Legend table with columns: SILT FENCE, VEHICLE TRACKING CONTROL, CONCRETE WASHOUT AREA, SEDIMENT CONTROL LOG, ROCK SOCK, STABILIZED STAGING AREA, STOCKPILE PROTECTION, PORTABLE TOILET MAINTENANCE, DRAINAGE SWALE, TEMPORARY SEDIMENT BASIN, OVERLAND FLOW DIRECTION. Includes symbols for various Best Management Practices.

SHEET INDEX:

Table with columns: TITLE SHEET, GRADING & EROSION CONTROL PLAN, DETAIL SHEET. Shows sheet 1 of 4.

PCD FILE: CDR-22-005

BMP INSTALLATION STAGING NOTES:

- STAGE 1 - PRE-DISTURBANCE: COMMENCE THE BULK OF OVERLOT GRADING OPERATIONS AND INSTALL TEMPORARY BMP'S AS SHOWN ON THE INSTALL INITIAL STORMWATER QUALITY (SWQ) BEST MANAGEMENT PRACTICES (BMP'S) AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN...
STAGE 2 - OVERLOT GRADING: COMMENCE THE BULK OF OVERLOT GRADING OPERATIONS AND INSTALL TEMPORARY BMP'S AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN...
STAGE 3 - INFRASTRUCTURE & BUILDING CONSTRUCTION: CONSTRUCT SITE IMPROVEMENTS AS SHOWN ON THE APPLICABLE CONSTRUCTION DOCUMENTS...
STAGE 4 - PERMANENT STABILIZATION: PERMANENT SWQ BMP'S SUCH AS RIP-RAP, CURB & GUTTER, PAVEMENT, LANDSCAPING, AND RESEEDING SHALL BE CONSTRUCTED AT THIS TIME AS OUTLINED ON THE GRADING AND EROSION CONTROL PLAN...

EXISTING VEGETATION NOTE: EXISTING LOT VEGETATION CONSISTS OF NATIVE GRASSES AND A FEW SHRUBS.

NOTE:

THE LOCATION OF SOIL STOCKPILE(S) AND STAGING AREA SHALL BE DETERMINED BY THE CONTRACTOR. APPROPRIATE EROSION CONTROL BMP MEASURES SHALL BE FOLLOWED FOR EACH.

SITE MAP SCALE: N.T.S.

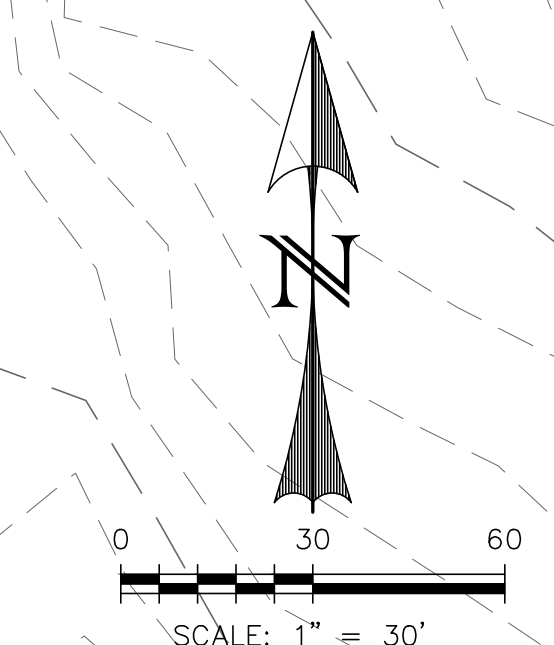
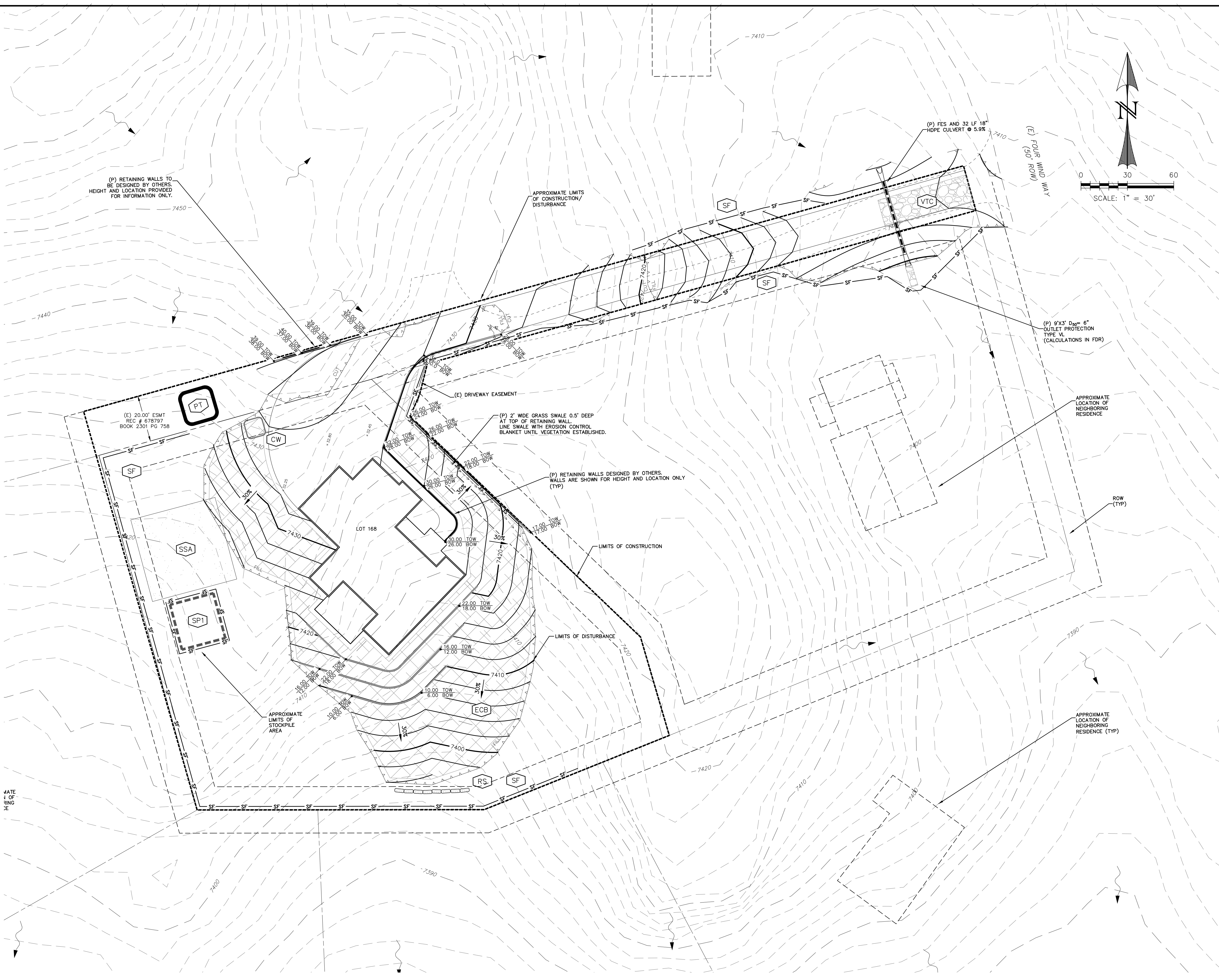
BASIC GRADING, EROSION AND STORMWATER QUALITY REQUIREMENTS AND GENERAL PROHIBITIONS:

- *INFORMATION TAKEN FROM THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUME 2, HEREIN REFERRED TO AS THE "MANUAL."
- 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.
 - CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM FACILITIES.
 - BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. BMP'S MAY BE REQUIRED BY COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES (E.G., ESTIMATED TIME OF EXPOSURE, SEASON OF THE YEAR, ETC.).
 - VEHICLE TRACKING OF SOILS OFF-SITE SHALL BE MINIMIZED.
 - ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
 - NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE COUNTY ENGINEER. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
 - BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
 - ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMP'S IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE MANUAL AND IN ACCORDANCE WITH THE EROSION AND STORMWATER QUALITY CONTROL PLAN APPROVED BY THE COUNTY OF EL PASO, IF REQUIRED.
 - ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMP'S AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS AND THE MANUAL AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION. THE INSTALLATION OF THE FIRST LEVEL OF TEMPORARY EROSION CONTROL FACILITIES AND BMP'S SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TAKING PLACE.
 - ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION.
 - ALL EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
 - ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
 - SUSPENDED SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE MINIMIZED IN RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE.
 - ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
 - TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO THE STANDARDS AND SPECIFICATIONS PRESCRIBED IN THE MANUAL, AND IN ACCORDANCE WITH THE PERMANENT EROSION CONTROL FEATURES SHOWN ON THE EROSION AND STORMWATER QUALITY CONTROL PLANS APPROVED BY THE COUNTY OF EL PASO, IF REQUIRED.
 - SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (21) CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 90 DAYS SHALL ALSO BE SEEDDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
 - NO PERSON SHALL CAUSE, PERMIT, OR CONTRIBUTE TO THE DISCHARGE INTO THE MUNICIPAL SEWER SYSTEM PERMIT POLLUTANTS THAT COULD CAUSE THE COUNTY OF EL PASO TO BE IN VIOLATION OF ITS COLORADO DISCHARGE PERMIT SYSTEM MUNICIPAL STORMWATER DISCHARGE PERMIT.
 - THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
 - NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER, INCLUDING THE TEMPORARY RAMPS WITH MATERIALS FOR VEHICLE ACCESS.
 - INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1364), REGULATIONS PROMULGATED, CERTIFICATIONS OR PERMITS ISSUED, IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE MANUAL. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND WATER QUALITY CONTROL LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL OR STATE AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
 - THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM 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. MATERIALS SHALL NOT BE STORED IN A LOCATION WHERE THEY MAY BE CARRIED BY STORMWATER RUNOFF INTO A STATE WATER AT ANY TIME.
 - SPILL PREVENTION AND CONTAINMENT MEASURES SHALL BE USED AT STORAGE, AND EQUIPMENT FUELING AND SERVICING AREAS TO PREVENT THE POLLUTION OF ANY STATE WATERS, INCLUDING WETLANDS. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE FOLLOWED, ALONG WITH PROPER DISPOSAL METHODS.

**EROSION PROTECTION & REVEGETATION REQUIREMENTS
"PER U.S.D.A. SOIL CONSERVATION SERVICE GUIDELINES"**

SEEDING GUIDELINES

<p>1. SEEDBED PREPARATION</p> <p>THE SEEDBED SHOULD BE WELL-SETTLED AND FIRM, BUT FRAGILE ENOUGH THAT THE SEED CAN BE PLACED AT THE SPECIFIED DEPTHS. COMPETITIVE STANDS OF WEEDS THAT ARE PRESENT BEFORE SEEDING MUST BE CONTROLLED BY SHALLOW TILLAGE OR BY APPLICATION OF HERBICIDES. SOILS THAT HAVE BEEN OVER-COMPACTED BY TRAFFIC OR EQUIPMENT, ESPECIALLY WHEN WET, SHOULD BE TILLED TO BREAK UP ROOTING-RESTRICTIVE LAYERS, THEN HARROWED, ROLLED, OR PACKED TO PREPARE THE REQUIRED FIRM SEEDBED.</p>		<p>2. PLANNED SEEDING PREP:</p> <p>A. METHOD: _____</p> <p>B. DATE: OCT 15-MAY 31</p> <p>C. FIRM SEEDBED: XX</p> <p>STUBBLE COVER: _____</p> <p>INTERSEED: _____</p> <p>OTHER: _____</p>		<p>SEEDING OPERATION:</p> <p>A. METHOD: XX</p> <p>BROADCAST: _____</p> <p>TYPE: GRASS/WAGTAIL</p> <p>C. DATE: OCT 15 - MAY 31</p> <p>D. PLANTING DEPTH: 4-1/2"</p>																																					
<p>2. FERTILIZER</p> <p>FERTILIZER SHOULD BE APPLIED AT A RATE OF 50 POUNDS OF AVAILABLE NITROGEN PER ACRE AND 40 POUNDS OF AVAILABLE PHOSPHATE PER ACRE. THE TIME OF APPLICATION SHOULD BE IMMEDIATELY PRIOR TO SEEDING, AT THE TIME OF SEEDING, OR IMMEDIATELY FOLLOWING SEEDING, DEPENDING ON THE KIND OF FERTILIZER AND TYPE OF EQUIPMENT USED.</p>		<p>WEED CONTROL: N/A</p> <p>MOWING: _____</p> <p>CHEMICAL: XX</p> <p>DATE: _____</p> <p>SEE S.C.S. FOR SPECIFIC RECOMMENDATIONS AT HERBICIDE APPLICATION TIME</p>																																							
<p>3. SEEDING</p> <p>SEED SHOULD BE PLANTED WITH A GRASS DRILL ON ALL SLOPES OF 1:1 OR FLATTER. SEED MAY BE BROADCAST BY HAND, BY MECHANICAL SPREADER, OR BY HYDRAULIC EQUIPMENT ON AREAS THAT ARE SMALL, TOO STEEP, OR NOT ACCESSIBLE FOR SEED DRILL OPERATIONS.</p> <p>SEED PLANTED WITH A DRILL SHOULD BE COVERED WITH SOIL TO A DEPTH OF 1/4 TO 3/4 INCH. SEED PLANTED BY THE BROADCAST METHOD SHALL BE INCORPORATED INTO THE SOIL SURFACE, NOT TO EXCEED A DEPTH OF 3/4 INCH, BY RAINING, HARROWING, OR OTHER PROVEN METHOD.</p> <p>THE TIME OF SEEDING IS FROM OCTOBER 15TH - MAY 31ST. SEED PLANTED IN THE LATE FALL WILL REMAIN DORMANT UNTIL SPRING, WHEN IT WILL GERMINATE.</p>		<p>MULCH:</p> <p>KIND: LONG - STEM NATIVE HAY</p> <p>AMOUNT: 4,000 POUNDS/ACRE</p> <p>HEW-APPLIED: N/A</p> <p>HEW-ANCHORED: CRIMPED</p> <p>ANCHORAGE DEPTH: 4"</p>		<p>WATER SAVING:</p> <p>SEED: _____</p> <p>VARIETY: _____</p> <p>SPECIES: _____</p> <p>REQUIRED PLS RATES PER ACRES (100%):</p> <p>GOSHEN PRAIRIE SANDREED 6.5</p> <p>VUAGHIN SIDEDAYS GRAMMA 9.0</p> <p>LOVINGTON BLUE GRAMMA 3.0</p> <p>BLACKWELL SWITCH GRASS 4.5</p> <p>PASTURA LITTLE BLUESTEM 7.0</p>																																					
<p>4. MULCHING</p> <p>SEDED AREAS SHOULD BE MULCHED TO CONSERVE MOISTURE; PREVENT SURFACE COMPACTION OR CRUSTING; REDUCE RUNOFF AND EROSION; CONTROL INSECTS; AND HELP ESTABLISH PLANT COVER.</p> <p>NATIVE HAY OR STRAW SHOULD BE APPLIED AT A RATE OF 4,000 POUNDS PER ACRE AND CRIMPED TO THE GROUND. ON SLOPES GREATER THAN 3:1, AN AGRONOMY BLANKET SHOULD BE USED.</p>		<p>SEED:</p> <p>VARIETY: _____</p> <p>SPECIES: _____</p> <p>REQUIRED PLS RATES PER ACRES (100%):</p> <p>GOSHEN PRAIRIE SANDREED 6.5</p> <p>VUAGHIN SIDEDAYS GRAMMA 9.0</p> <p>LOVINGTON BLUE GRAMMA 3.0</p> <p>BLACKWELL SWITCH GRASS 4.5</p> <p>PASTURA LITTLE BLUESTEM 7.0</p>																																							
<p>5. SUPPLEMENTAL WATER</p> <p>IN LOW RAINFALL AREAS WHERE WATER IS AVAILABLE AND WHERE RAPID ESTABLISHMENT IS NEEDED, IRRIGATION OF NEW SEEDING SHOULD BE PERFORMED DURING THE FIRST GROWING SEASON. WATER SHOULD BE APPLIED AT APPROXIMATELY ONE WEEK INTERVALS, AT A RATE OF 3/4 TO 1 INCH PER APPLICATION, WHEN RAINFALL IS DEFICIENT FOR PLANT DEVELOPMENT.</p>		<p>SEED:</p> <p>VARIETY: _____</p> <p>SPECIES: _____</p> <p>REQUIRED PLS RATES PER ACRES (100%):</p> <p>GOSHEN PRAIRIE SANDREED 6.5</p> <p>VUAGHIN SIDEDAYS GRAMMA 9.0</p> <p>LOVINGTON BLUE GRAMMA 3.0</p> <p>BLACKWELL SWITCH GRASS 4.5</p> <p>PASTURA LITTLE BLUESTEM 7.0</p>																																							
		<table border="1"> <tr> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> </tr> <tr> <td>PLS SEEDING RATE</td> <td>PLS SEEDING RATE</td> <td>TOTAL PLS LBS/</td> <td>TOTAL PLS LBS/</td> </tr> <tr> <td>% OF SPECIES</td> <td>PER SPECIES/ACRE</td> <td>ACRE</td> <td>SPECIES PLANNED</td> </tr> <tr> <td>IN MIXTURE</td> <td>(1) x (2)</td> <td>(3) x (4)</td> <td></td> </tr> <tr> <td>15</td> <td>0.98</td> <td>8.8</td> <td></td> </tr> <tr> <td>25</td> <td>2.25</td> <td>8.8</td> <td>19.8</td> </tr> <tr> <td>15</td> <td>0.45</td> <td>8.8</td> <td>4.0</td> </tr> <tr> <td>20</td> <td>0.90</td> <td>8.8</td> <td>7.9</td> </tr> <tr> <td>25</td> <td>1.75</td> <td>8.8</td> <td>15.4</td> </tr> </table>		(2)	(3)	(4)	(5)	PLS SEEDING RATE	PLS SEEDING RATE	TOTAL PLS LBS/	TOTAL PLS LBS/	% OF SPECIES	PER SPECIES/ACRE	ACRE	SPECIES PLANNED	IN MIXTURE	(1) x (2)	(3) x (4)		15	0.98	8.8		25	2.25	8.8	19.8	15	0.45	8.8	4.0	20	0.90	8.8	7.9	25	1.75	8.8	15.4		
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EPC 7/18/22

REV.	DESCRIPTION	DATE

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PREPARED FOR:
MAYNARD BUILDING
1364 OLD CEDAR COVE
MONUMENT, CO 80132

PREPARED UNDER MICHIGAN LICENSE FOR AND BEHALF OF CATAMOUNT ENGINEERING.
DAVID L. MUJARES, LICENSED PROFESSIONAL ENGINEER
40510
04/29/22
DATE

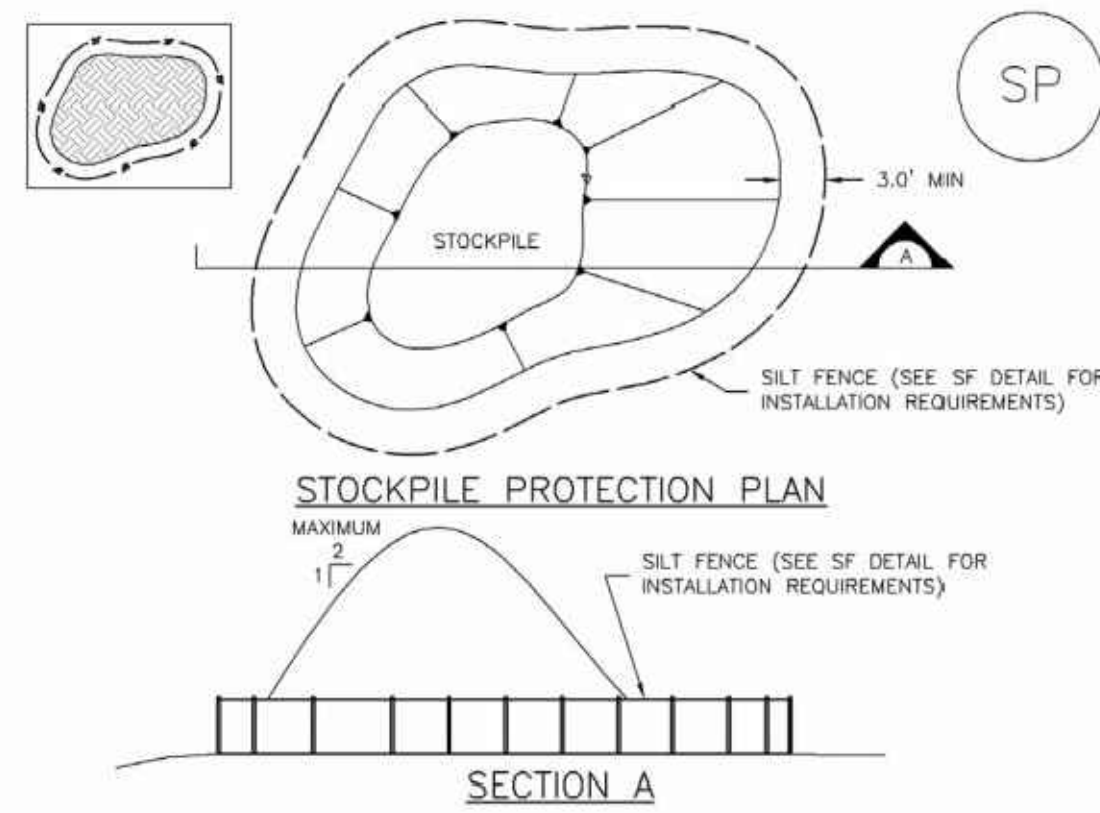
CATAMOUNT ENGINEERING
321 W. HENRIETTA AVE. WOODLAND PARK, CO 80866
PO BOX 221 (719)428-2124

19584 FOUR WINDS WAY
MONUMENT, CO 80132
GRADING & EROSION CONTROL PLAN

DESIGNED BY: DLM	DRAWN BY: SLP
SCALE: N/A	DATE: 02/17/22
JOB NUMBER: 21-337	SHEET: 2 OF 4

Stockpile Management (SP)

MM-2



SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF STOCKPILES
 - TYPE OF STOCKPILE PROTECTION
- INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
- STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING. EROSION CONTROL BLANKETS OR SOIL BINDERS, SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

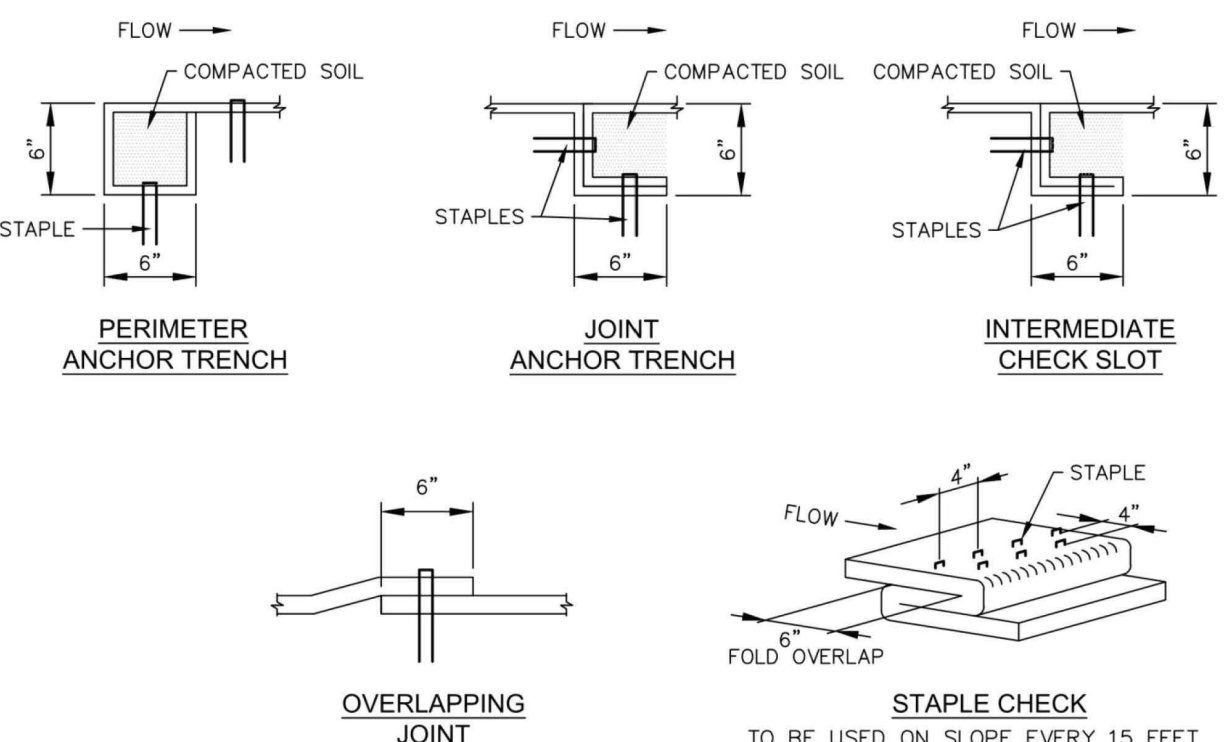
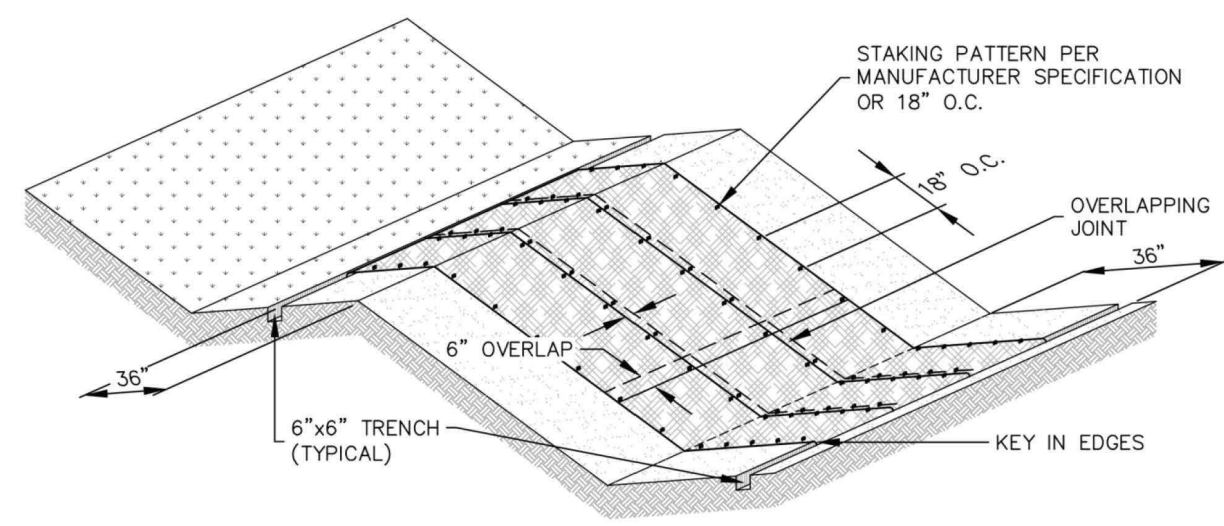
November 2010 Urban Drainage and Flood Control District SP-3
Urban Storm Drainage Criteria Manual Volume 3

MM-2 Stockpile Management (SM)

STOCKPILE PROTECTION 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.
 - IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
 - STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.
- (DETAILS ADAPTED FROM PANNER, 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.

SP-4 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3



EROSION CONTROL BLANKET

APPROVED: [Signature]

ISSUED: 10/7/19 REVISION: 8/19/2020 DRAWING NO. 900-ECB-1

INSTALLATION NOTES

- 100% NATURAL AND BIODEGRADABLE MATERIALS ARE REQUIRED FOR EROSION CONTROL BLANKETS. TRM PRODUCTS MAY BE USED WHERE APPROPRIATE AS DESIGNATED BY THE ENGINEER.
- IN AREAS WHERE EROSION CONTROL BLANKETS ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOST PRIOR TO EROSION CONTROL BLANKET INSTALLATION, AND THE EROSION CONTROL BLANKET SHALL BE IN FULL CONTACT WITH THE SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
- PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.
- JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF EROSION CONTROL BLANKETS TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL EROSION CONTROL BLANKETS.
- INTERMEDIATE CHECK SLOT OR STAPLE CHECK SHALL BE INSTALLED EVERY 15' DOWN SLOPES. IN DRAINAGEWAYS, INSTALL CHECK SLOTS EVERY 25' PERPENDICULAR TO FLOW DIRECTION.
- OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF EROSION CONTROL BLANKETS TOGETHER FOR EROSION CONTROL BLANKETS ON SLOPES.
- MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKETS SHALL CONFORM TO TABLE ECB-1.
- ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKETS SHALL BE RESEEDED AND MULCHED.
- STRAW EROSION CONTROL BLANKETS SHALL NOT BE USED WITHIN STREAMS AND DRAINAGE CHANNELS.
- COMPACT ALL TRENCHES.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- EROSION CONTROL BLANKETS SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE. TRM MUST BE REMOVED AT THE DISCRETION OF THE GEC INSPECTOR.
- ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW GEOTEXTILE THAT HAVE ERODED TO CREATE A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.

TABLE ECB-1, EROSION CONTROL BLANKET MATERIAL SPECIFICATIONS

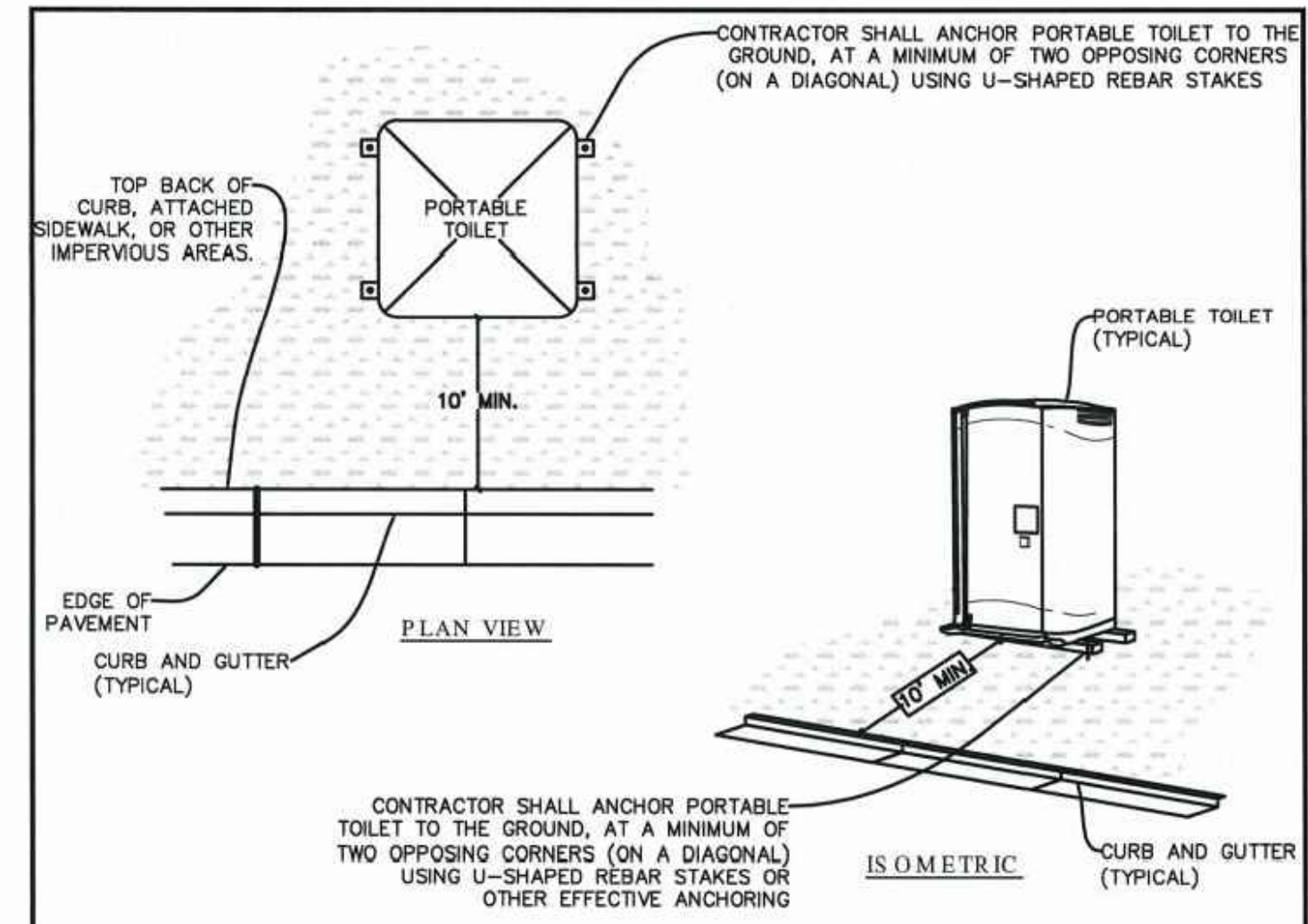
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING
STRAW	-	100%	-	DOUBLE/NATURAL
STRAW-COCONUT	30% MIN.	70% MAX.	-	DOUBLE/NATURAL
COCONUT	100%	-	-	DOUBLE/NATURAL
EXCELSIOR	-	-	100%	DOUBLE/NATURAL



EROSION CONTROL BLANKET

APPROVED: [Signature]

ISSUED: 10/7/19 REVISION: 8/19/2020 DRAWING NO. 900-ECB-1



PORTABLE TOILET PROTECTION INSTALLATION NOTES

- PORTABLE TOILETS SHALL BE PLACED A MINIMUM OF 10.0' BEHIND ALL CURBS, SIDEWALKS, AND OTHER IMPERVIOUS AREAS, 50' FROM STORM INLET, AND 100' FROM WATERWAYS.
 - ALL PORTABLE TOILETS MUST BE GROUPED TOGETHER.
 - PORTABLE TOILETS SHALL BE SECURELY ANCHORED TO THE GROUND USING U-SHAPED REBAR STAKES.
 - U-SHAPED REBAR STAKES, OR OTHER EFFECTIVE ANCHORING, SHALL BE POSITIONED ON AT LEAST 2 OPPOSING (DIGITAL) CORNERS.
- PORTABLE TOILET PROTECTION INSPECTION AND MAINTENANCE NOTES**
- THE SWMP ADMINISTRATOR SHALL REGULARLY INSPECT THE PORTABLE TOILET PROTECTION.
 - PORTABLE TOILETS SHALL BE SERVICED AT THE NECESSARY INTERVALS TO ELIMINATE THE POSSIBILITY OF OVERFLOW.
 - WHEN THE PORTABLE TOILETS ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE TOILETS MAY NEED TO BE LANDSCAPED OR STABILIZED PER THE DCM REQUIREMENTS.
 - PORTABLE TOILETS THAT ARE NOT CONSISTENTLY MAINTAINED IN ACCORDANCE WITH THESE REQUIREMENTS MAY NEED TO BE CLUSTERED TOGETHER IN ONE CENTRALIZED LOCATION IN ORDER TO INCREASE COMPLIANCE AND REDUCE THE CHANCE OF A SPILL.

PORTABLE TOILET MANAGEMENT

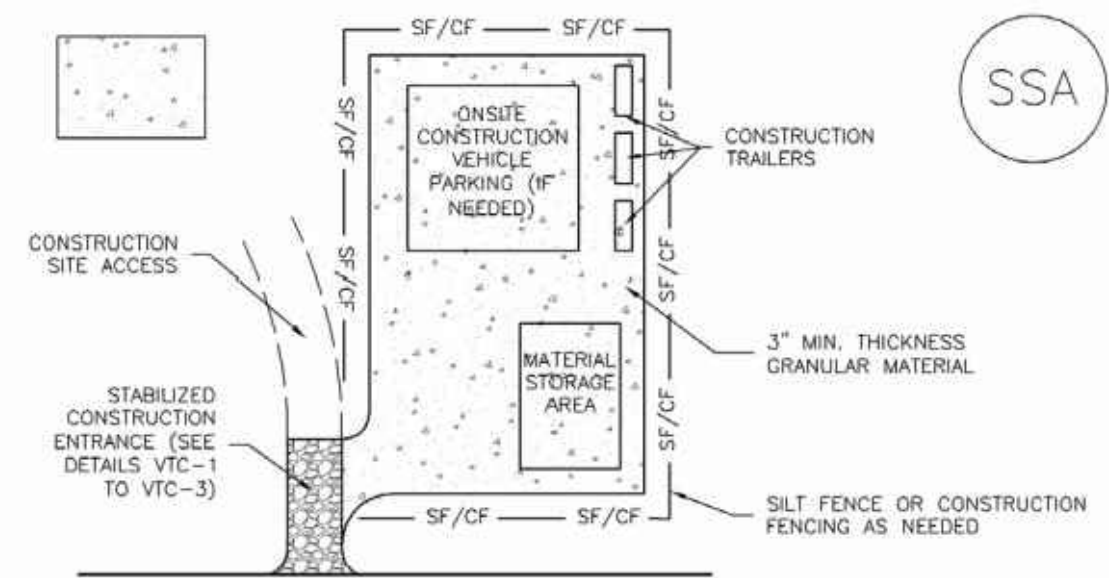
DATE: 2/23/2017 STD. DRAWING NO. D-PTM

PORTABLE TOILET DETAILS FOR CONSTRUCTION SITES

- Revised: August 23, 2017
- OVERVIEW:**
The release of pollutants, sewage, and/or contaminated wash water associated with the transport, cleaning, washing or flushing of portable toilets directly or indirectly to the storm drain system, storm water conveyances or waterways is a violation of federal, state and local laws, regulations and ordinances. The wastes and associated wash water from cleaning of portable toilets, their reservoirs or tank compartments, hoses, vacuum and pumping equipment, transfer tanks and transport tank trucks must be contained and discharged to a sanitary sewer or other appropriate sanitary wastewater treatment facility.
- The discharge of waste, wastewater or contaminated wash water from any such portable toilet transporting, cleaning or maintenance operations to the City of Colorado Springs' Municipal Separate Storm Sewer System (MS4) is prohibited. The City of Colorado Springs does not currently have a policy for placement of portable toilets on construction sites. The purpose of this document is to define the placement policy requirements.
- Portable Toilet Protection Installation for Construction Sites**
- Portable toilets shall be placed a minimum of 10 feet behind all curbs and/or sidewalks.
 - Portable toilets shall be a minimum of 50 feet from stormwater inlet structures.
 - Portable toilets shall be placed at least 100 feet from waterways.
 - Portable toilets shall be placed on a flat surface.
 - Portable toilets shall be grouped together whenever practicable.
 - Portable toilets shall be securely anchored to the ground using u-shaped rebar stakes.
 - U-shaped stakes shall be positioned on at least two diagonal corners of the structure.
 - Portable toilets that have tipped over shall be placed upright immediately upon discovery. Any spilled waste shall be cleaned up immediately and disposed of properly. Portable toilets shall be properly re-staked.
- Portable Toilet Protection Installation for Roadway Construction**
- When possible, portable toilets shall be placed out of the right-of-way at a minimum of 10 feet behind all curbs and/or sidewalks.
 - If portable toilets must be in the right-of-way, it is best to place them on mobile trailers and must be anchored or weighted down.
 - If portable toilets must be directly in the right-of-way, on pavement, they must be anchored or weighted down with BMPs completely around the base of the unit.
 - Portable toilets shall ALWAYS be a minimum of 50 feet from protected stormwater inlet structures and the downstream inlet must have inlet protection in accordance with DCM standards and specifications.
 - Portable toilets shall be placed at least 100 feet from waterways.
- Portable Toilet Protection Inspection and Maintenance Notes**
- The erosion control inspector shall inspect that the portable facility is staked down and the appropriate distance from the curb line each time they are in the area.
 - Portable toilet protection shall be repaired immediately when any stakes are loose, damaged, or removed.
 - Portable toilets shall be serviced at the necessary intervals to eliminate the possibility of overflow.
 - When the portable toilets are removed, and disturbed areas associated with the installation, maintenance, and/or removal of the toilets shall be landscaped or roughened, seeded, mulched, and crimped per the specifications.

Stabilized Staging Area (SSA)

SM-6



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.

November 2010 Urban Drainage and Flood Control District SSA-3
Urban Storm Drainage Criteria Manual Volume 3

REV.	DESCRIPTION	DATE

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DAVID L. MIJARES, P.E. #40510

04/29/22 DATE

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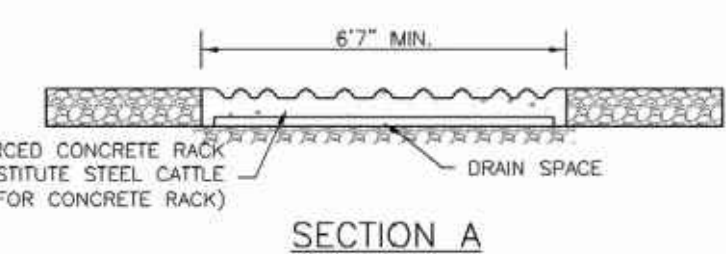
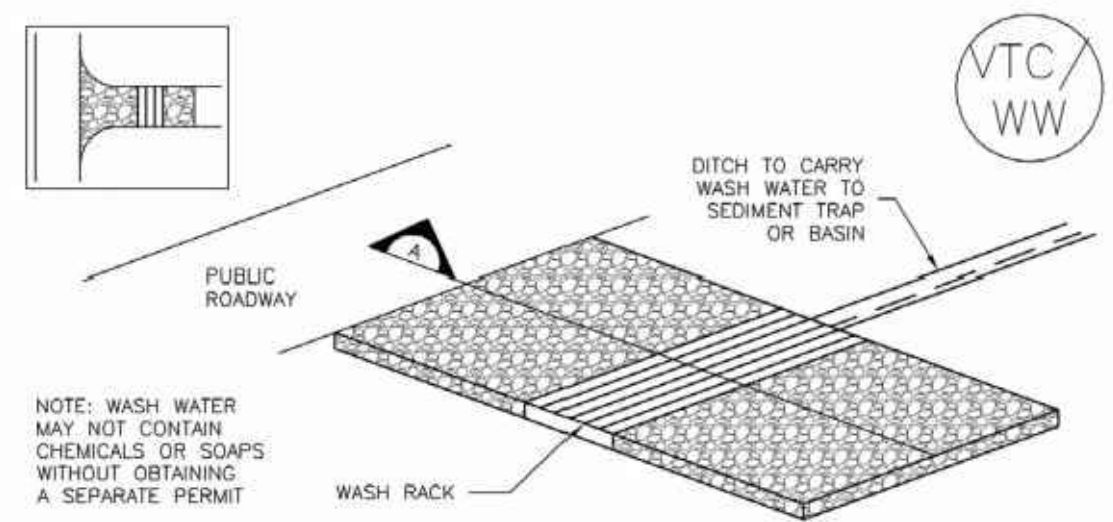
19584 FOUR WINDS WAY
MONUMENT, CO 80132

**GRADING & EROSION CONTROL
DETAIL SHEET**

DRAWN BY: SLP	SCALE: N/A	DATE: 02/17/22
JOB NUMBER: 21-337	SHEET: 3 OF 4	

EPC 7/18/22

SM-4 Vehicle Tracking Control (VTC)



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

SM-4 Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
- CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
- A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
- STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, ASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

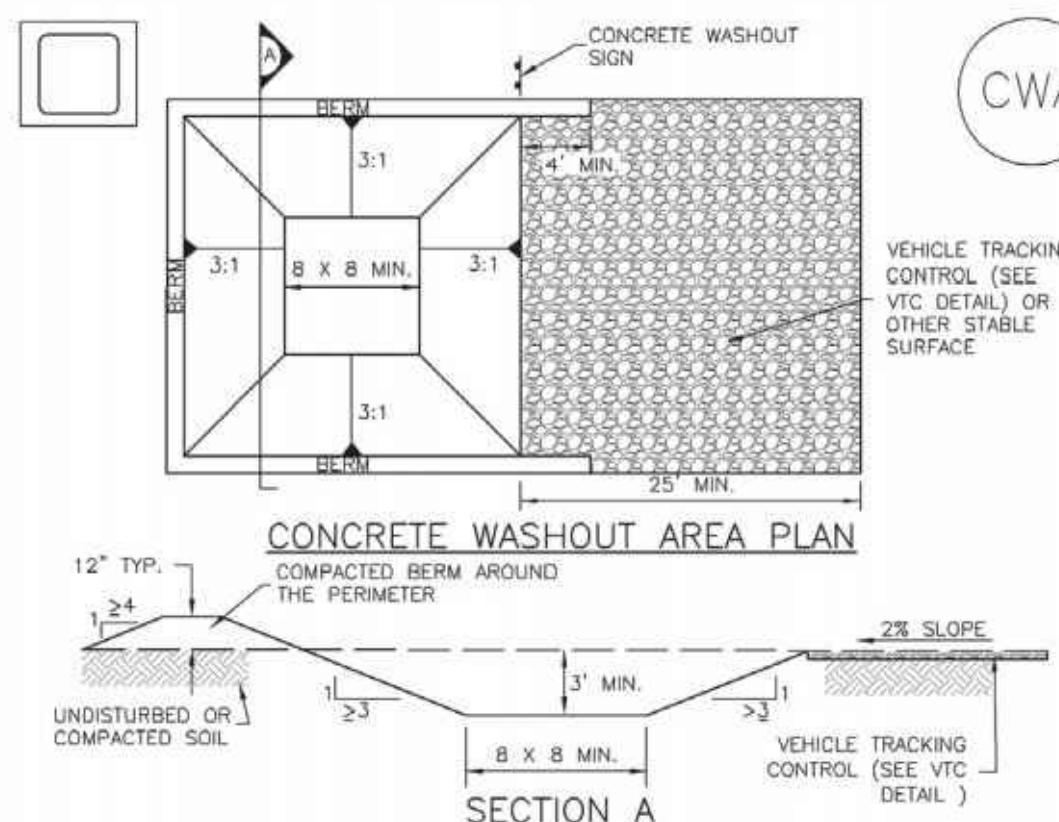
STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

- 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 TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
- SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

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

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

Concrete Washout Area (CWA) MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-CWA INSTALLATION LOCATION.
- 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.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- 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.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- 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 TRUCKS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

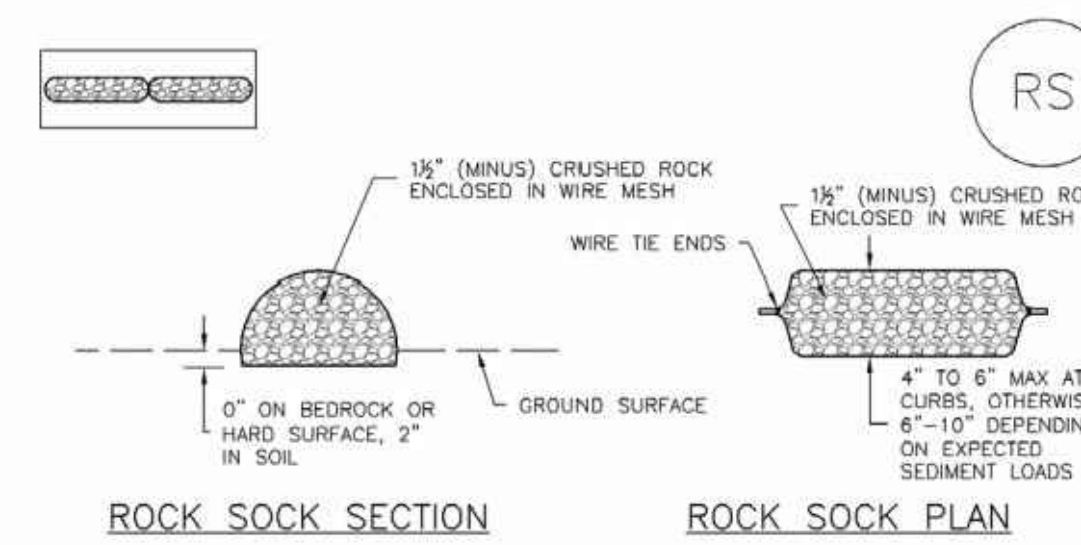
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS 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.
- 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'.
- 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.
- THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
- 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 SIOUX COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

MM-1 Concrete Washout Area (CWA)

Rock Sock (RS) SC-5



ROCK SOCK SECTION

ROCK SOCK PLAN

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1/2" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

ROCK SOCK JOINTING

GRADATION TABLE

NO. 4	NO. 10	NO. 20	NO. 40	NO. 60	NO. 100	NO. 200
2"	100	100	100	100	100	100
1 1/2"	90 - 100	90 - 100	90 - 100	90 - 100	90 - 100	90 - 100
1"	20 - 55	20 - 55	20 - 55	20 - 55	20 - 55	20 - 55
3/4"	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
3/8"	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5

MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER ASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

ROCK SOCK INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-LOCATION(S) OF ROCK SOCKS.
- CRUSHED ROCK SHALL BE 1/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1 1/2" MINUS).
- WIRE MESH SHALL BE FABRICATED OF 10 GAUGE POLYURTY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 1/2"; RECOMMENDED MINIMUM ROLL WIDTH OF 48"
- WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
- SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS-1. ROCK SOCK PERIMETER CONTROL

Rock Sock (RS) SC-5

ROCK SOCK MAINTENANCE NOTES

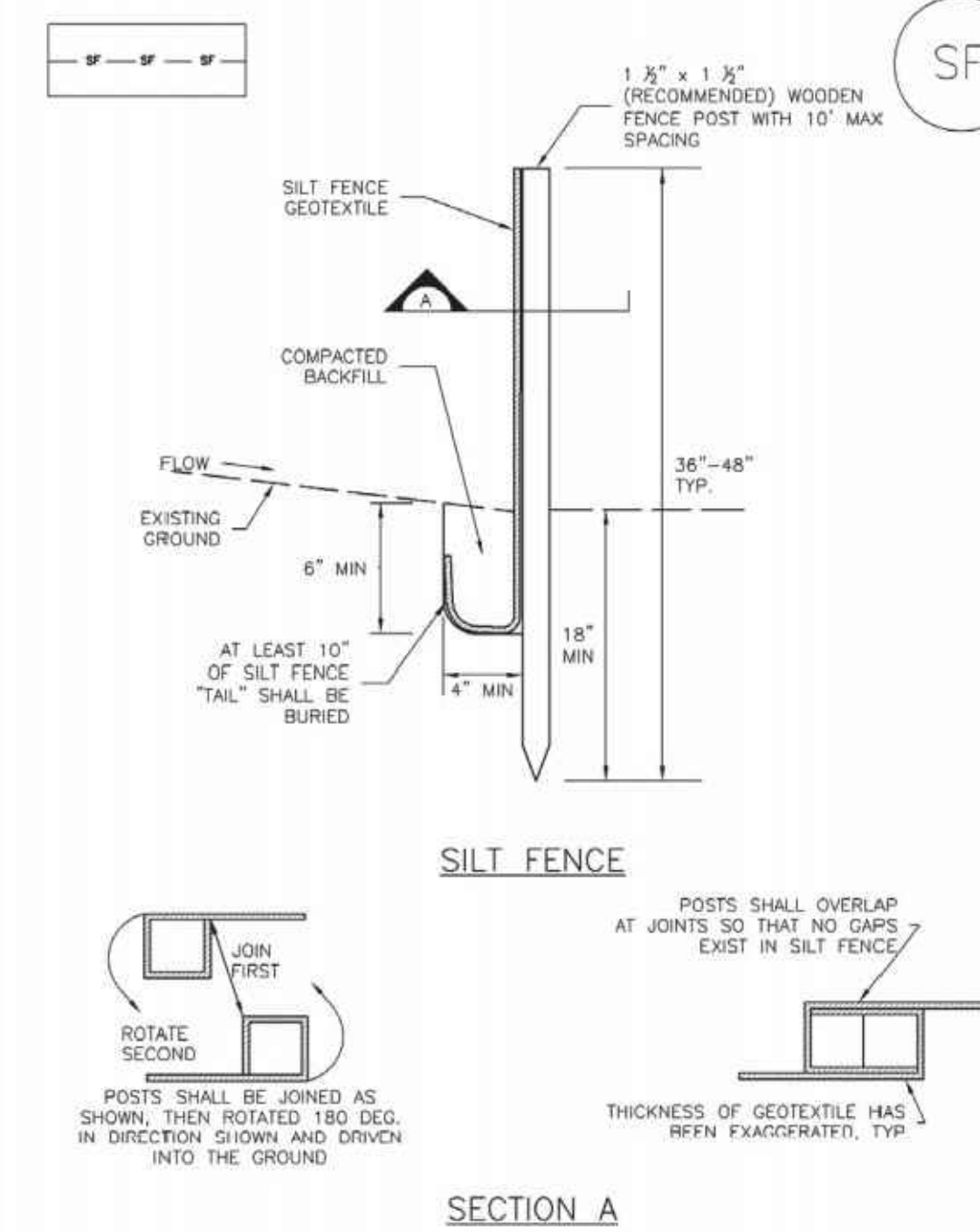
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS 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 SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE ROCK SOCK.
- ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

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

Silt Fence (SF) SC-1



SILT FENCE

SECTION A

SF-1. SILT FENCE

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

- SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
- A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
- COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
- SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
- AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
- SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

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

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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

REV.	DESCRIPTION	DATE

