

# STERLING RANCH ROAD & BRIARGATE PARKWAY GESC

## COUNTY OF EL PASO, STATE OF COLORADO GRADING AND EROSION CONTROL PLANS DECEMBER 2021

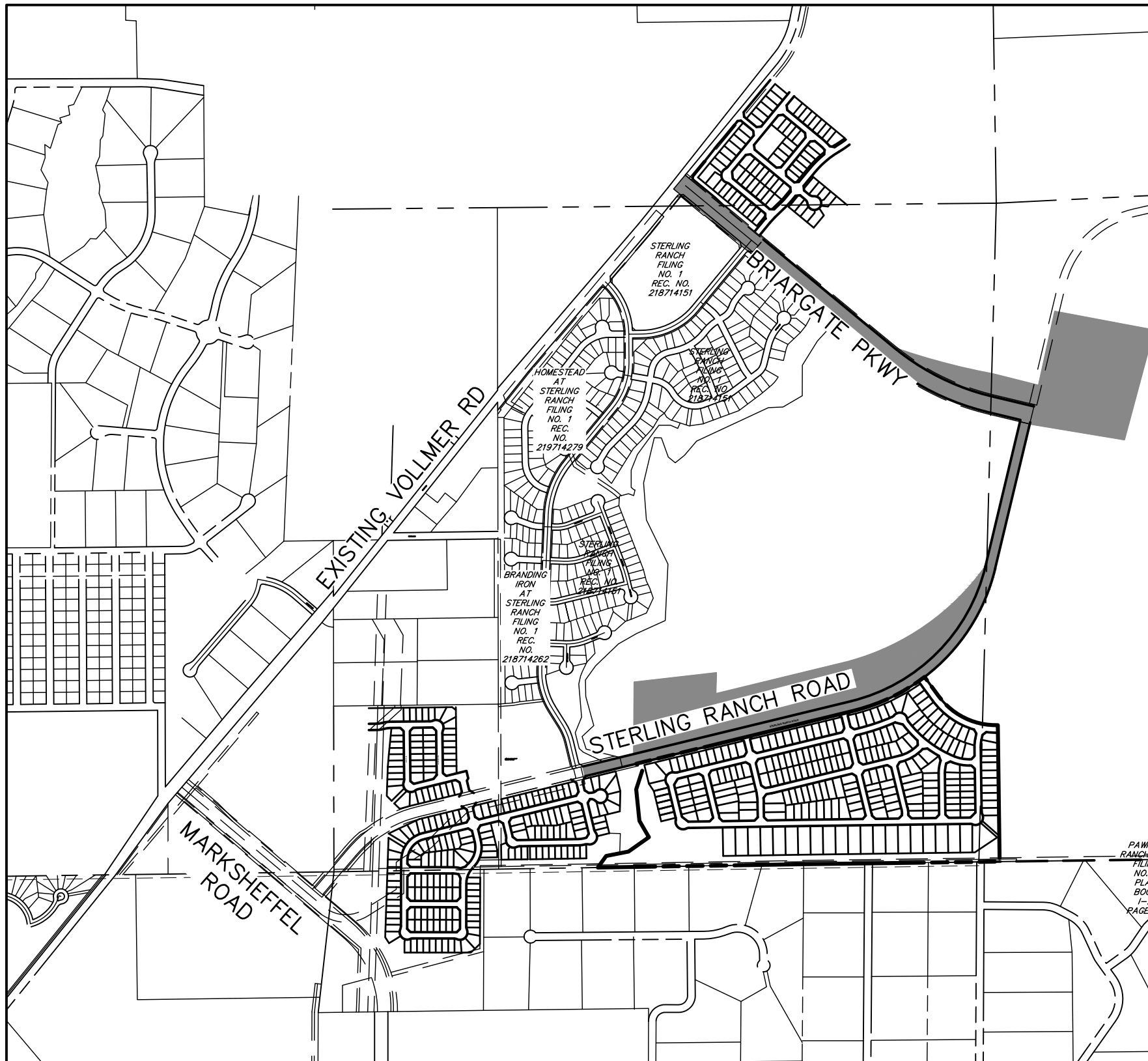
EPC STORMWATER REVIEW COMMENTS  
IN ORANGE BOXES WITH BLACK TEXT

Reviewed by:  
**Glenn Reese, P.E.**  
Stormwater Engineer II  
GlennReese@ElPasoCo.com  
719-675-2654

### GRADING AND 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 (SWMP) 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 AFFECT 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. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER 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.
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 OF UNCONTAMINATED GROUND WATER 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 ONSITE 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 ONSITE 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 ENTECH ENGINEERING INC. ON JULY 202 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



**VICINITY MAP**  
SCALE : 1"=1,000'

### SHEET INDEX

- |     |                                   |
|-----|-----------------------------------|
| 1   | COVER SHEET                       |
| 3-6 | GRADING AND EROSION CONTROL PLANS |
| 7-9 | DETAIL SHEETS                     |

### STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

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

### AGENCIES

- |                      |   |
|----------------------|---|
| OWNER/DEVELOPER:     | SR LAND, LLC<br>20 BOULDER CRESCENT, SUITE 201<br>COLORADO SPRINGS, CO 80903<br>JAMES F. MORLEY (719) 471-1742  |
| CIVIL ENGINEER:      | JR ENGINEERING, LLC<br>5475 TECH CENTER DRIVE<br>COLORADO SPRINGS, CO 80919<br>MIKE BRAMLETT P.E. (303) 267-6240  |
| COUNTY ENGINEERING:  | EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT<br>2680 INTERNATIONAL CIRCLE, SUITE 110<br>COLORADO SPRINGS, CO 80910<br>JEFF RICE, P.E. (719) 520-6300         |
| TRAFFIC ENGINEERING: | EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS<br>3275 AKERS DRIVE<br>COLORADO SPRINGS, CO 80922<br>JENNIFER IRVINE, P.E. (719) 520-6460                               |
| WATER RESOURCES:     | STERLING RANCH METRO DISTRICT ENGINEERS<br>JDS-HYDRO CONSULTANTS<br>545 E. PIKES PEAK AVE., SUITE 300<br>COLORADO SPRINGS, CO 80903<br>JOHN MCGINN (719) 668-8769 |
| FIRE DISTRICT:       | BLACK FOREST FIRE PROTECTION DISTRICT<br>11445 TEACHOUT ROAD<br>COLORADO SPRINGS, CO 80908<br>CHIEF BRYAN JACK (719) 495-4300                                     |
| GAS DEPARTMENT:      | COLORADO SPRINGS UTILITIES<br>7710 DURANT DR.<br>COLORADO SPRINGS, CO 80947<br>TIM WENDT (719) 668-3556   |
| ELECTRIC DEPARTMENT: | MOUNTAIN VIEW ELECTRIC<br>11140 E. WOODMEN ROAD<br>FALCON, CO 80831<br>(719) 495-2283   |
| COMMUNICATIONS:      | QWEST COMMUNICATIONS<br>(U.N.C.C. LOCATORS) (800) 922-1987<br>AT&T (LOCATORS) (719) 635-3674  |

### EL PASO COUNTY STATEMENT

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 DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E.

DATE

COUNTY ENGINEER/ECM ADMINISTRATOR

### OWNER/DEVELOPER STATEMENT

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

JAMES F. MORLEY

DATE

SR LAND, LLC  
20 BOULDER CRESCENT, SUITE 201  
COLORADO SPRINGS, CO 80903

### ENGINEER'S 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. 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 PLANS.

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

Add CDR-22-001



Know what's below.  
Call before you dig.

PREPARED FOR

SR LAND, LLC  
20 BOULDER CRESCENT  
SUITE 200  
COLORADO SPRINGS, CO 80903  
JIM MORLEY  
(719) 491-3024

**J.R. ENGINEERING**  
A Westman Company



Centennial 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY DATE

BY DATE

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BY DATE

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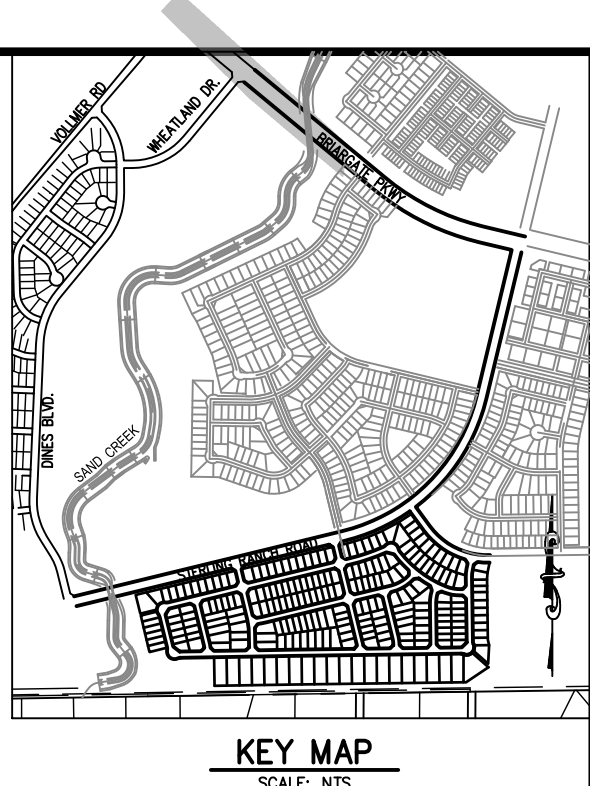
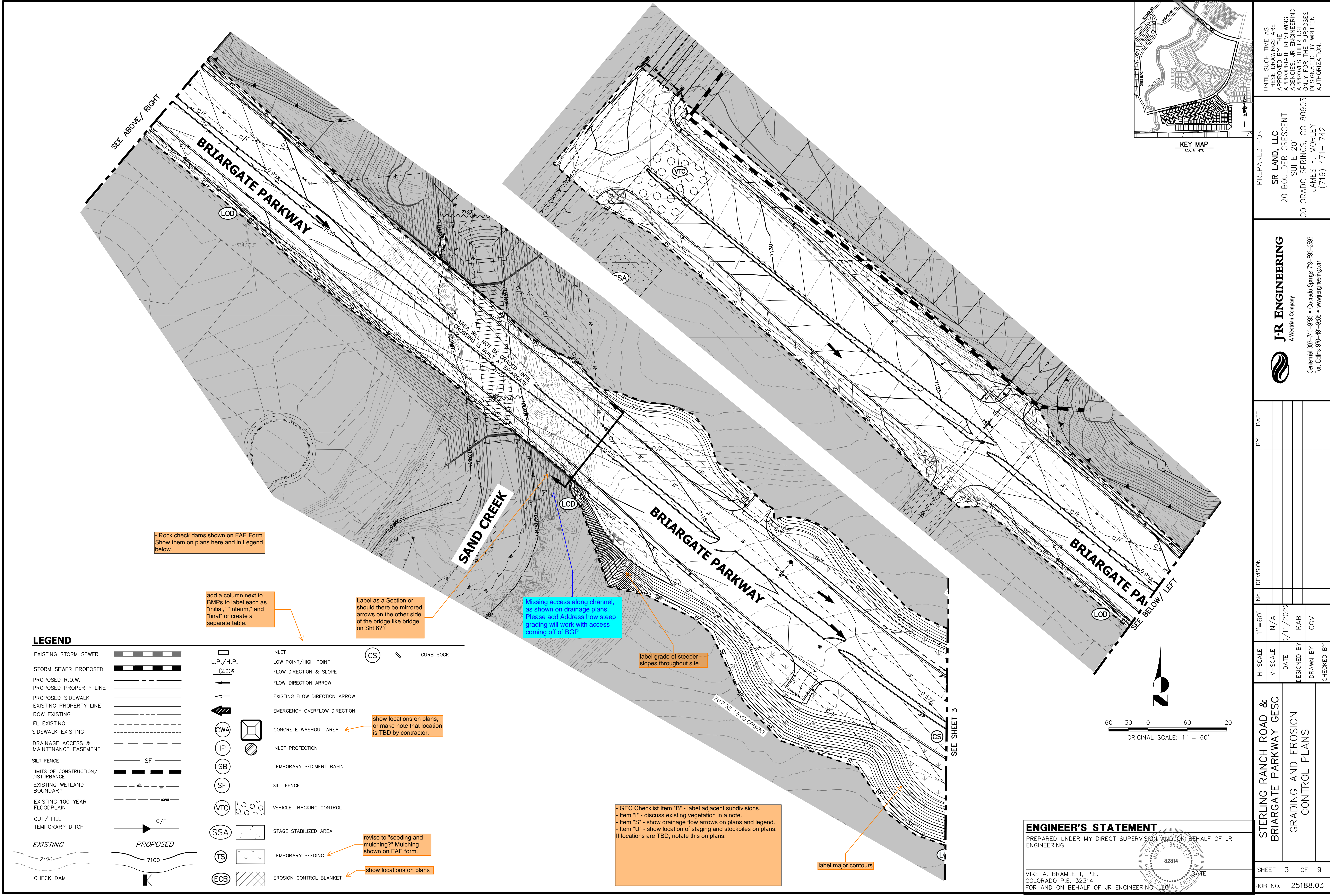
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UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING SHALL BE RESPONSIBLE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

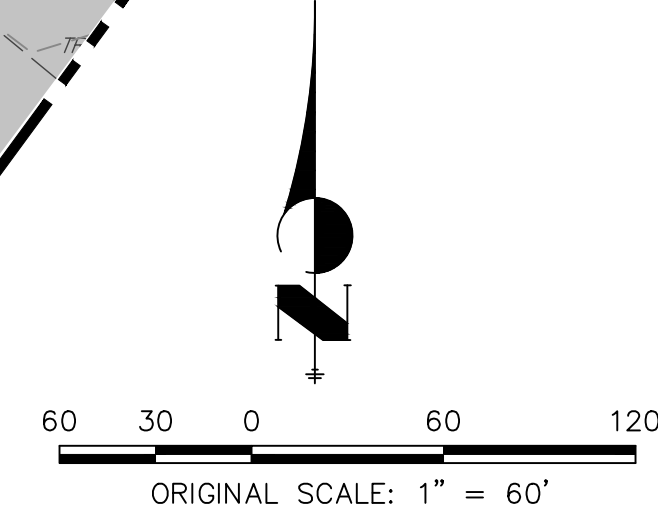
**J-R ENGINEERING**  
A Western Company  
Central 303-740-9883 • Colorado Springs 719-583-2583  
Fort Collins 970-481-9888 • www.jrengineering.com

BY	DATE	REVISION	No.	1"=60'	H-SCALE	V-SCALE	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
								5/11/2022	RAB	CGV	

STERLING RANCH ROAD &  
BRIARGATE PARKWAY GESC  
GRADING AND EROSION  
CONTROL PLANS  
SHEET 3 OF 9  
JOB NO. 25188.03

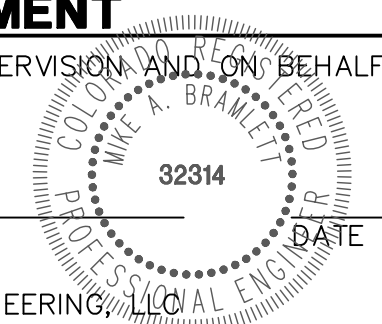
LEGEND

EXISTING STORM SEWER		INLET		CURB SOCK	
STORM SEWER PROPOSED		LOW POINT/HIGH POINT			
PROPOSED R.O.W.		FLOW DIRECTION & SLOPE			
PROPOSED PROPERTY LINE		FLOW DIRECTION ARROW			
PROPOSED SIDEWALK		EXISTING FLOW DIRECTION ARROW			
EXISTING PROPERTY LINE		EMERGENCY OVERFLOW DIRECTION			
ROW EXISTING		CONCRETE WASHOUT AREA			
FL EXISTING		INLET PROTECTION			
SIDEWALK EXISTING		TEMPORARY SEDIMENT BASIN			
DRAINAGE ACCESS & MAINTENANCE EASEMENT		SILT FENCE			
SILT FENCE		VEHICLE TRACKING CONTROL			
LIMITS OF CONSTRUCTION/DISTURBANCE		STAGE STABILIZED AREA			
EXISTING WETLAND BOUNDARY		TEMPORARY SEEDING			
EXISTING 100 YEAR FLOODPLAIN		EROSION CONTROL BLANKET			
CUT/ FILL					
TEMPORARY DITCH					
EXISTING					
PROPOSED					
CHECK DAM					



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC  
DATE



- Rock check dams shown on FAE Form. Show them on plans here and in Legend below.

add a column next to BMPs to label each as "initial," "interim," and "final" or create a separate table.

Label as a Section or should there be mirrored arrows on the other side of the bridge like bridge on Sht 6??

Missing access along channel, as shown on drainage plans. Please add Address how steep grading will work with access coming off of BGP

label grade of steeper slopes throughout site.

show locations on plans, or make note that location is TBD by contractor.

revise to "seeding and mulching?" Mulching shown on FAE form.

show locations on plans

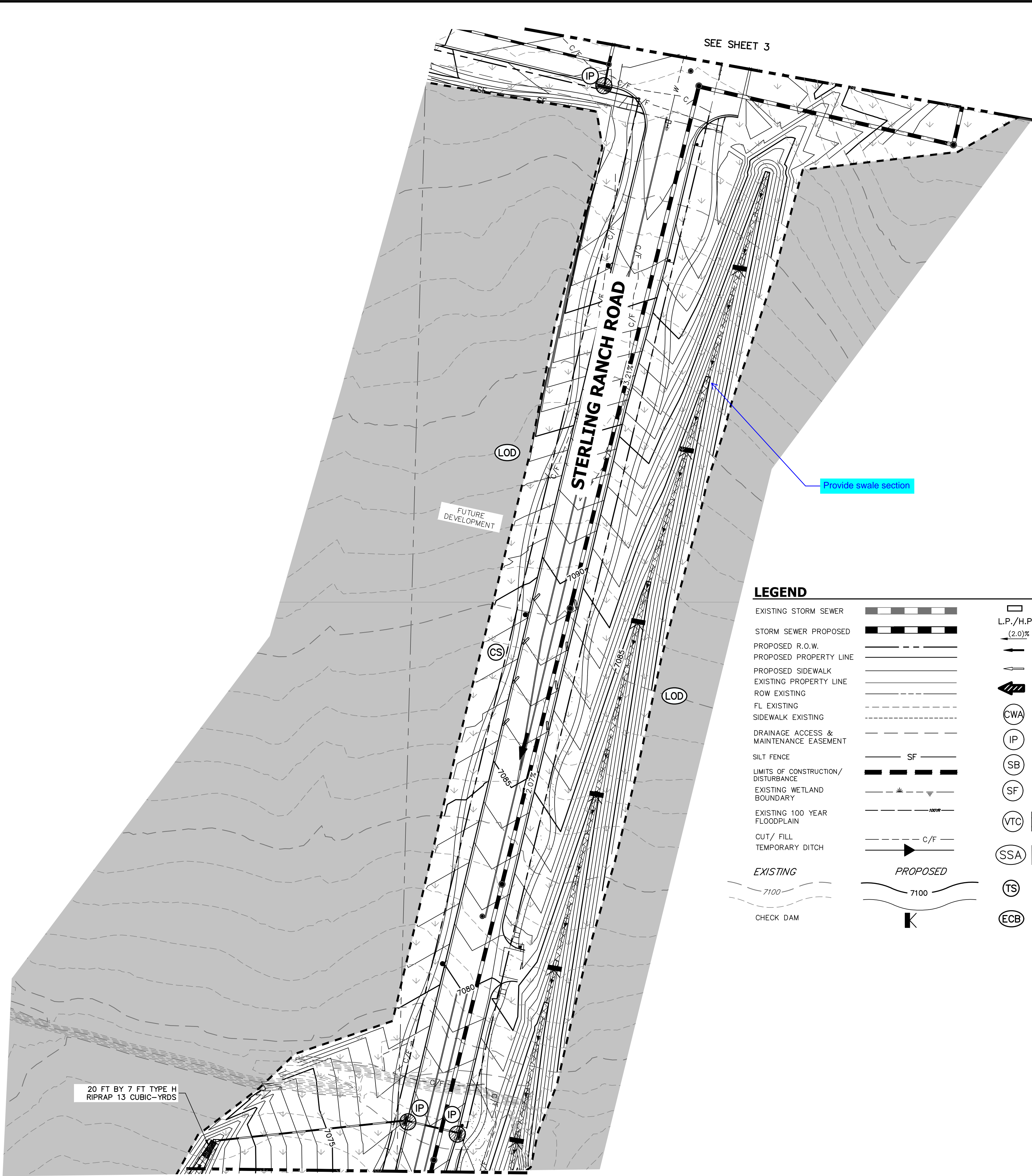
- GEC Checklist Item "B" - label adjacent subdivisions.  
- Item "I" - discuss existing vegetation in a note.  
- Item "S" - show drainage flow arrows on plans and legend.  
- Item "U" - show location of staging and stockpiles on plans.  
If locations are TBD, notate this on plans.

label major contours







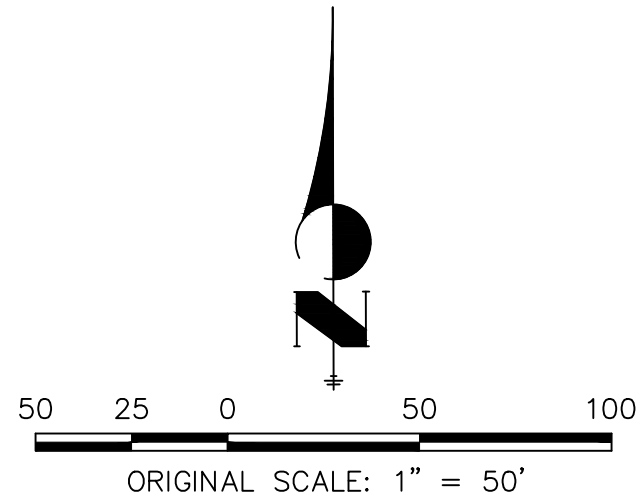


LEGEND

- |  |  |                               |  |
|--|--|-------------------------------|--|
| EXISTING STORM SEWER                   |  | INLET                         |  |
| STORM SEWER PROPOSED                   |  | LOW POINT/HIGH POINT          |  |
| PROPOSED R.O.W.                        |  | FLOW DIRECTION & SLOPE        |  |
| PROPOSED PROPERTY LINE                 |  | FLOW DIRECTION ARROW          |  |
| PROPOSED SIDEWALK                      |  | EXISTING FLOW DIRECTION ARROW |  |
| EXISTING PROPERTY LINE                 |  | EMERGENCY OVERFLOW DIRECTION  |  |
| ROW EXISTING                           |  | CONCRETE WASHOUT AREA         |  |
| FL EXISTING                            |  | INLET PROTECTION              |  |
| SIDEWALK EXISTING                      |  | TEMPORARY SEDIMENT BASIN      |  |
| DRAINAGE ACCESS & MAINTENANCE EASEMENT |  | SILT FENCE                    |  |
| SILT FENCE                             |  | VEHICLE TRACKING CONTROL      |  |
| LIMITS OF CONSTRUCTION/DISTURBANCE     |  | STAGE STABILIZED AREA         |  |
| EXISTING WETLAND BOUNDARY              |  | TEMPORARY SEEDING             |  |
| EXISTING 100 YEAR FLOODPLAIN           |  | EROSION CONTROL BLANKET       |  |
| CUT/ FILL                              |  |                               |  |
| TEMPORARY DITCH                        |  |                               |  |
| EXISTING                               |  |                               |  |
| PROPOSED                               |  |                               |  |
| CHECK DAM                              |  |                               |  |



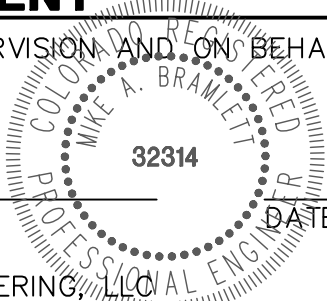
KEY MAP  
SCALE: NTS



ENGINEER'S STATEMENT

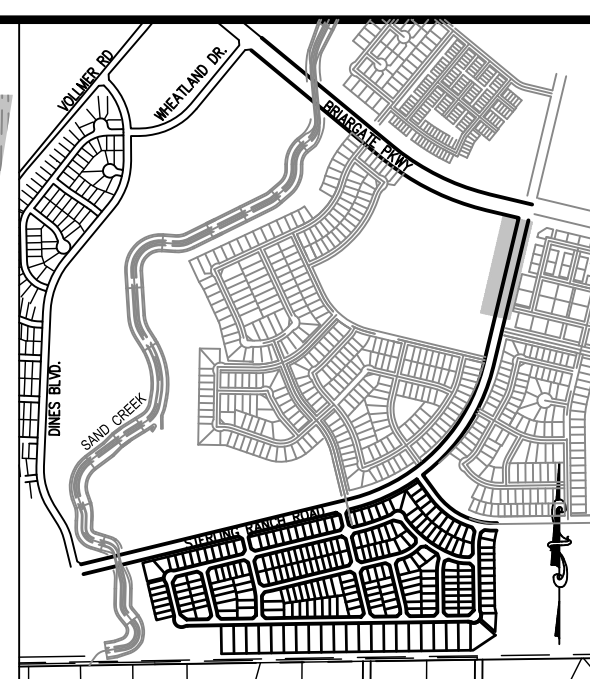
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



PREPARED FOR		SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742		J-R ENGINEERING A Western Company Central 303-740-9883 • Colorado Springs 719-593-2583 Fort Collins 970-491-9888 • www.jrengineering.com		BY		DATE	
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STERLING RANCH ROAD & BRIARGATE PARKWAY GESC		GRADING AND EROSION CONTROL PLANS		SHEET 4 OF 9		JOB NO. 25188.03			






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PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 SUITE 201  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 471-1742

**J-R ENGINEERING**  
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[illegible]

H-SCALE	1"=60'
V-SCALE	N/A
DATE	3/11/2022
DESIGNED BY	RAB
DRAWN BY	CGV
CHECKED BY	

STERLING RANCH ROAD & BRIARGATE PARKWAY GESC
GRADING AND EROSION CONTROL PLANS

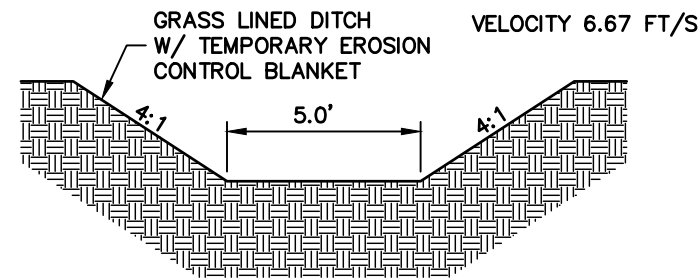
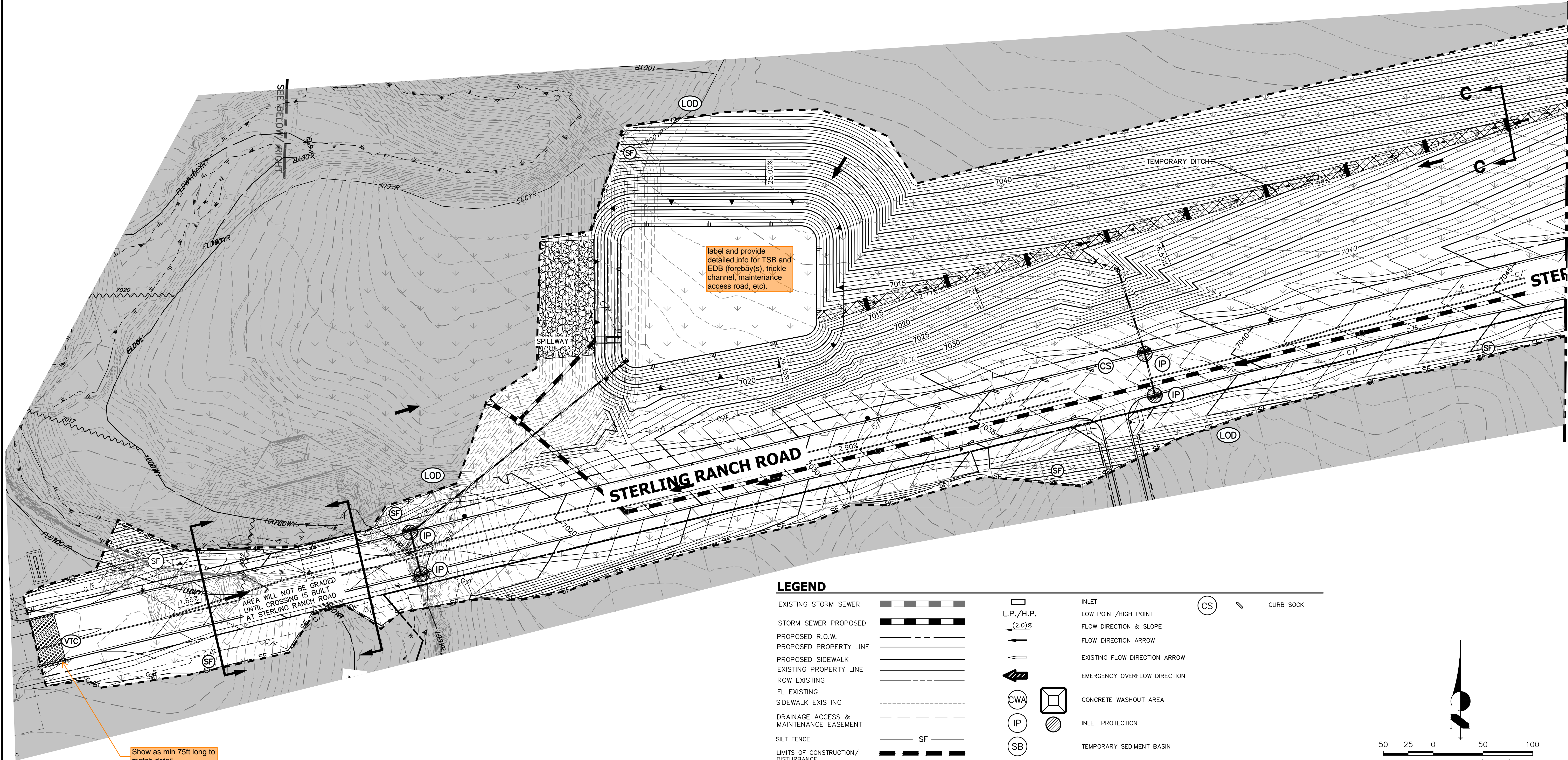
SHEET	4	OF	9
JOB NO.	25188.03		

## ENGINEER'S STATEMENT

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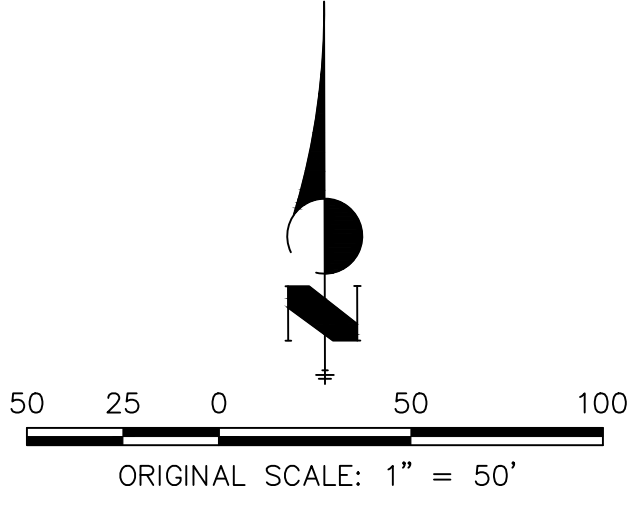
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF





LEGEND

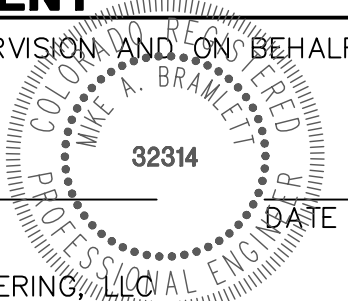
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STORM SEWER PROPOSED		LOW POINT/HIGH POINT	
PROPOSED R.O.W.		FLOW DIRECTION & SLOPE	
PROPOSED PROPERTY LINE		FLOW DIRECTION ARROW	
PROPOSED SIDEWALK		EXISTING FLOW DIRECTION ARROW	
EXISTING PROPERTY LINE		EMERGENCY OVERFLOW DIRECTION	
ROW EXISTING		CONCRETE WASHOUT AREA	
FL EXISTING		INLET PROTECTION	
SIDEWALK EXISTING		TEMPORARY SEDIMENT BASIN	
DRAINAGE ACCESS & MAINTENANCE EASEMENT		SILT FENCE	
SILT FENCE		VEHICLE TRACKING CONTROL	
LIMITS OF CONSTRUCTION/DISTURBANCE		STAGE STABILIZED AREA	
EXISTING WETLAND BOUNDARY		TEMPORARY SEEDING	
EXISTING 100 YEAR FLOODPLAIN		EROSION CONTROL BLANKET	
CUT/ FILL			
TEMPORARY DITCH			
EXISTING			
PROPOSED			
CHECK DAM			



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



STERLING RANCH ROAD & BRIARGATE PARKWAY GESC GRADING AND EROSION CONTROL PLANS	SHEET 6 OF 9	
	JOB NO. 25188.03	
PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742	BY	DATE
<b>J.R. ENGINEERING</b> A Western Company  Centennial 303-740-9883 • Colorado Springs 719-583-2583 Fort Collins 970-481-9888 • www.jrengineering.com	No.	REVISION
STERLING RANCH ROAD & BRIARGATE PARKWAY GESC GRADING AND EROSION CONTROL PLANS	H-SCALE	1"=60'
	V-SCALE	N/A
	DATE	5/11/2022
STERLING RANCH ROAD & BRIARGATE PARKWAY GESC GRADING AND EROSION CONTROL PLANS	DESIGNED BY	RAB
	DRAWN BY	CGV
	CHECKED BY	

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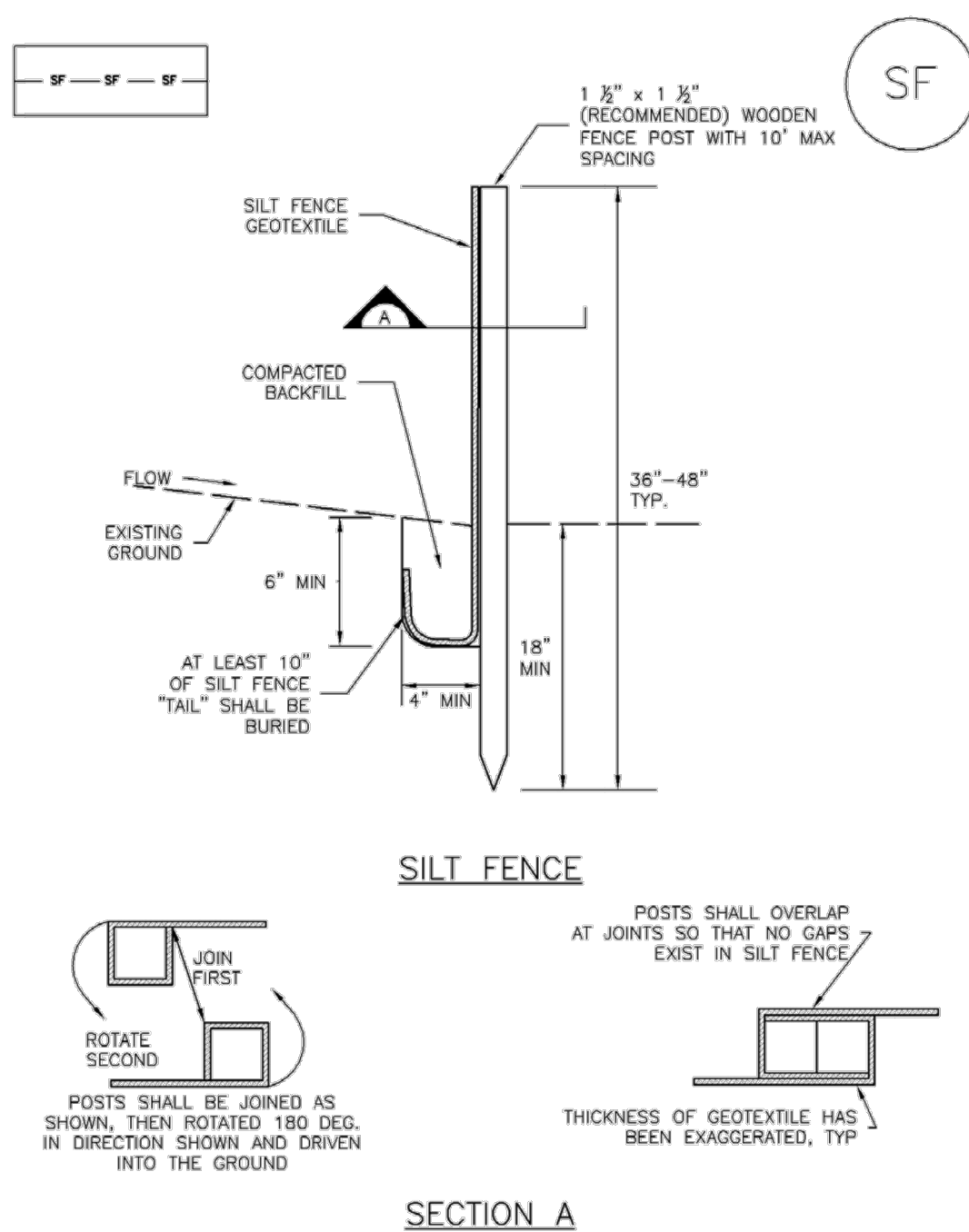






## Silt Fence (SF)

## SC-1



SF-1. SILT FENCE

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

## 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, AASHTO #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 UDFCD 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)

VTC-6 Urban Drainage and Flood Control District  
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## 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 NOTICABLE 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.

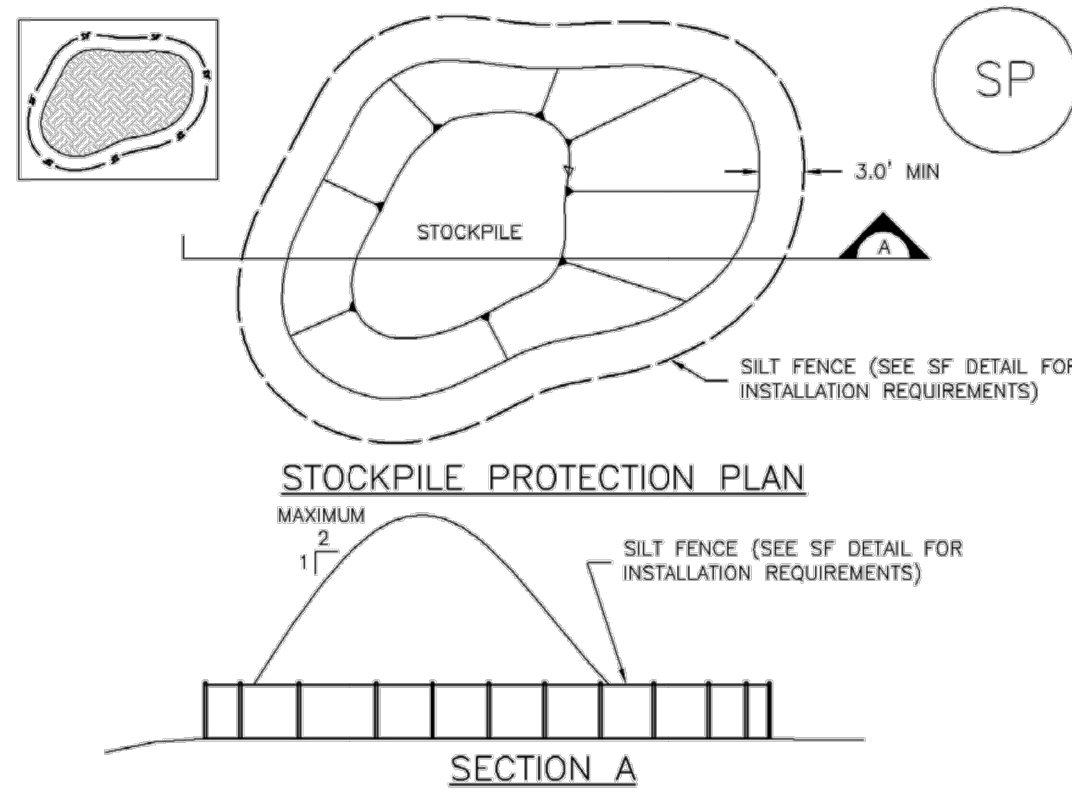
## SILT FENCE MAINTENANCE NOTES

- 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, SEEDED 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 UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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

## Stockpile Management (SP)

## MM-2

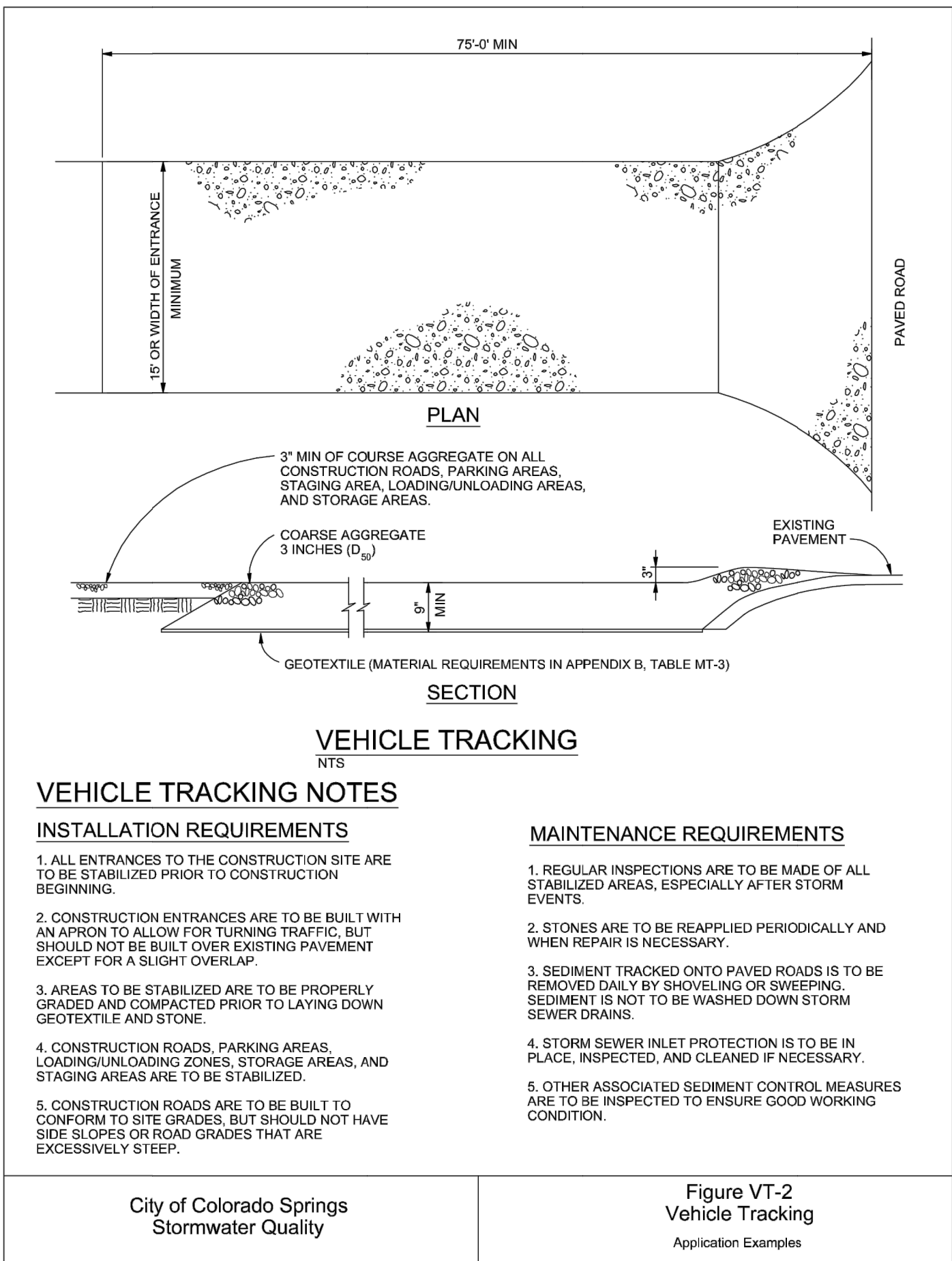


SP-1. STOCKPILE PROTECTION

## 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 DOWNGRADE CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

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Urban Storm Drainage Criteria Manual Volume 3 November 2010



City of Colorado Springs  
Stormwater Quality

Figure VT-2  
Vehicle Tracking

Application Examples

3-54

## 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.

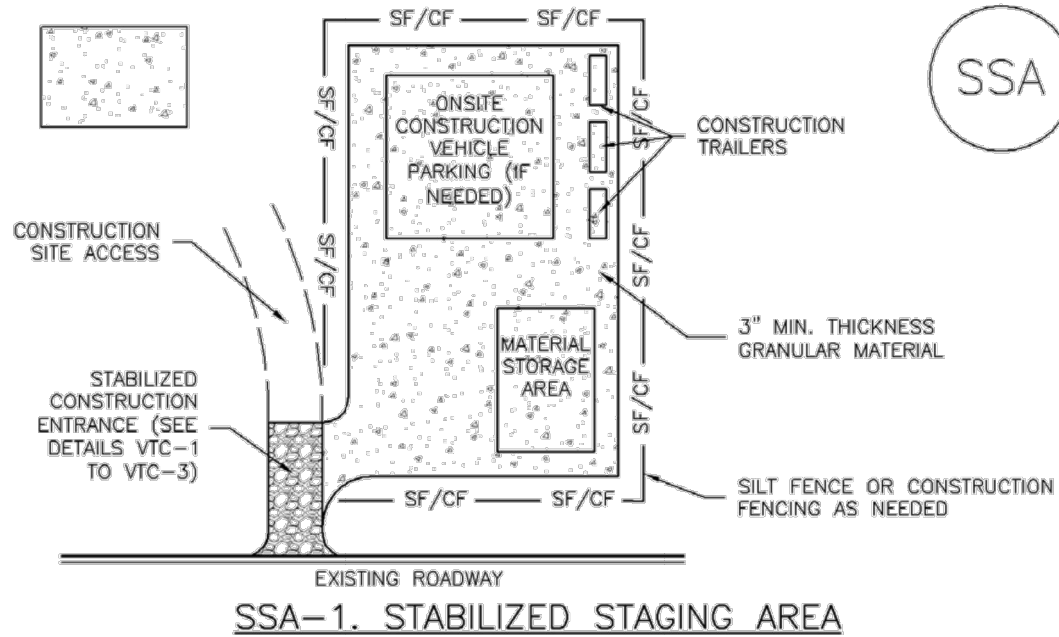
(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

SP-4 Urban Drainage and Flood Control District  
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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.

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

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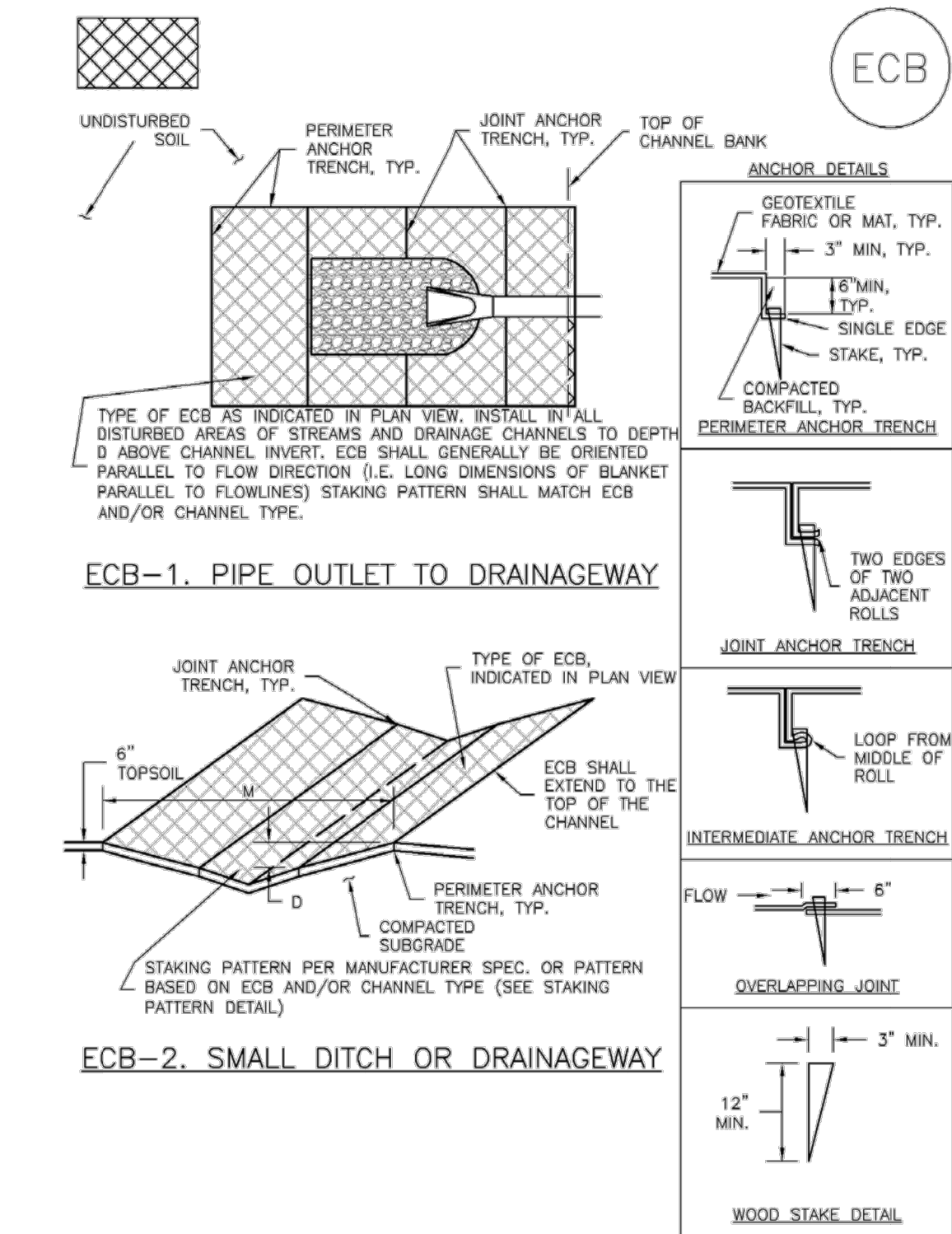
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						5/11/2022	XXX	XXX	

STERLING RANCH ROAD &  
BRIARGATE PARKWAY GESC  
DETAIL SHEETS

SHEET 8 OF 9

JOB NO. 25188.03





RECP-6      Urban Drainage and Flood Control District      November 2010  
Urban Storm Drainage Criteria Manual Volume 3

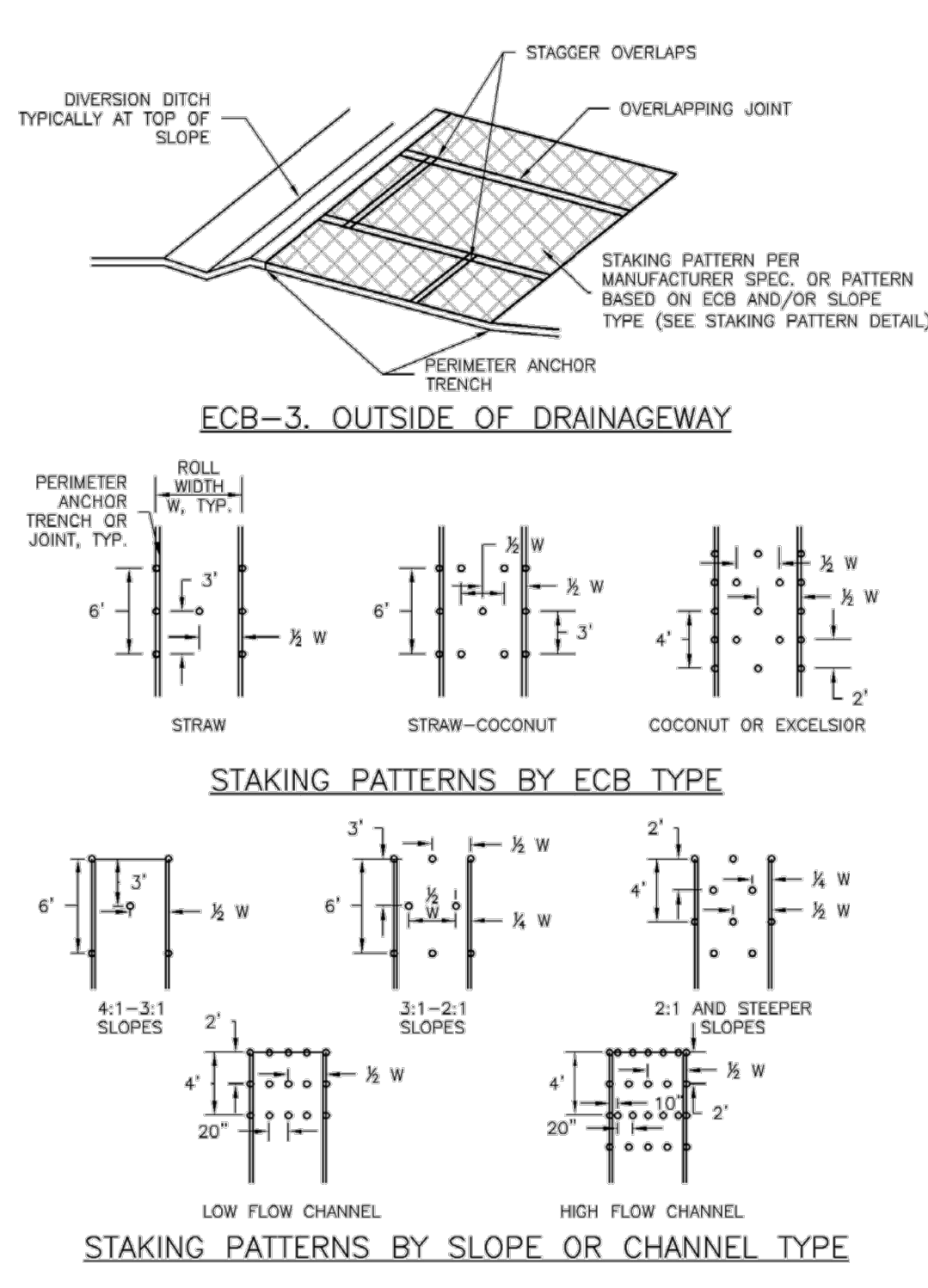
**Rock Sock (RS)** **SC-5**

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

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

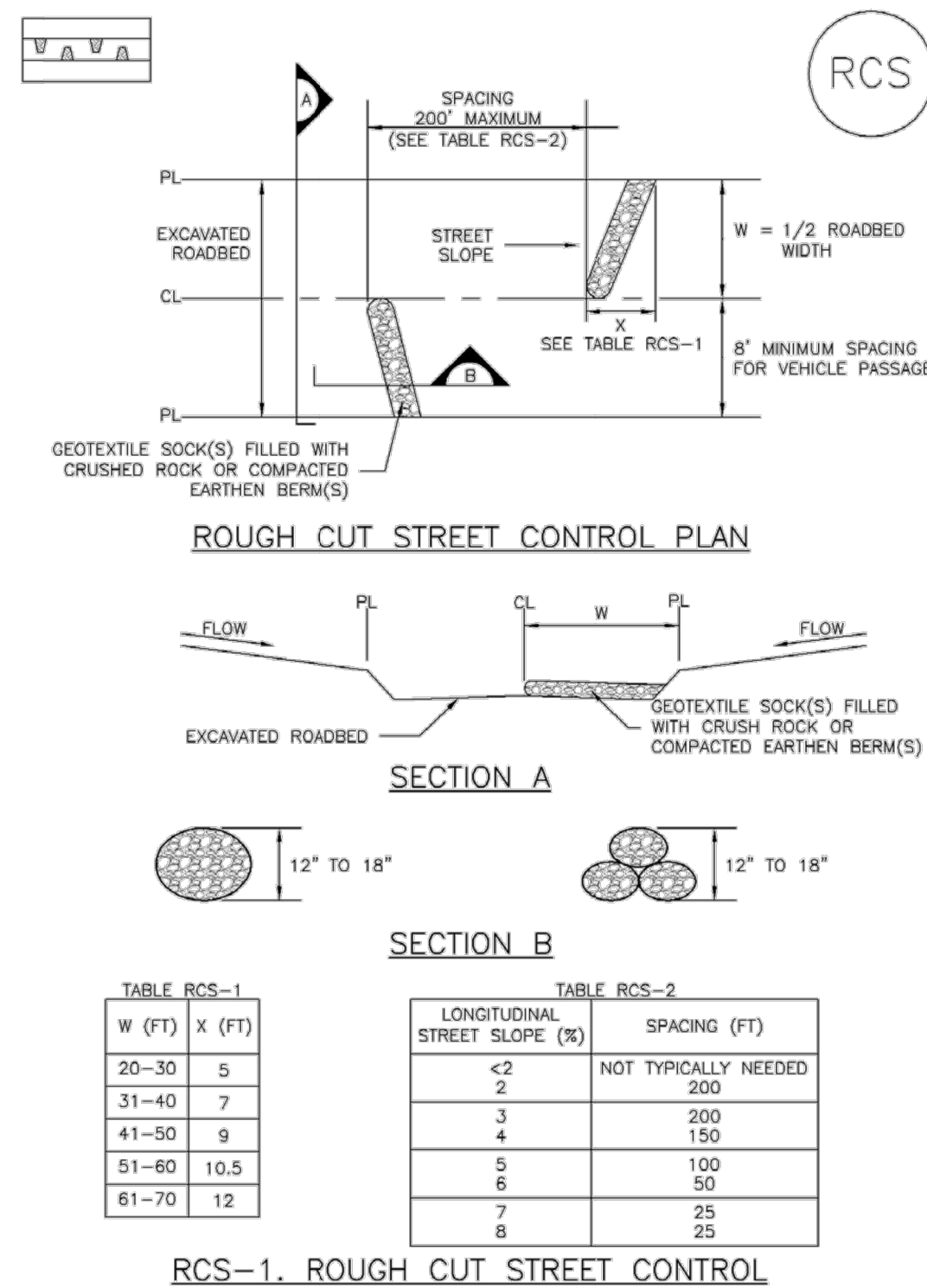
**NOTE:** THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, 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.

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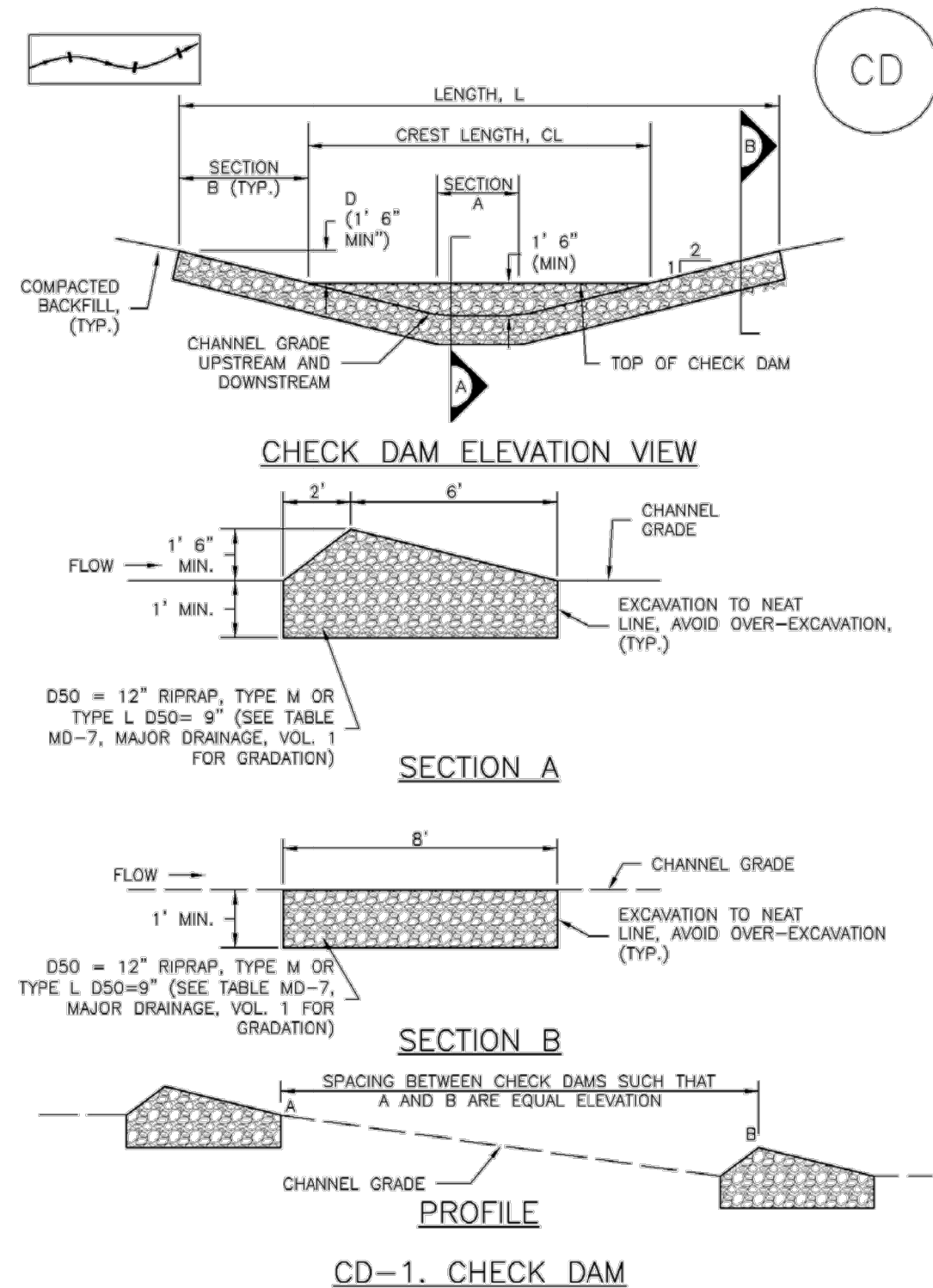


November 2010      Urban Drainage and Flood Control District      RECP-7  
Urban Storm Drainage Criteria Manual Volume 3

## EC-9 Rough Cut Street Control (RCS)



RCS-2	Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3	November 2010
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November 2010      Urban Drainage and Flood Control District      CD-3  
Urban Storm Drainage Criteria Manual Volume 3

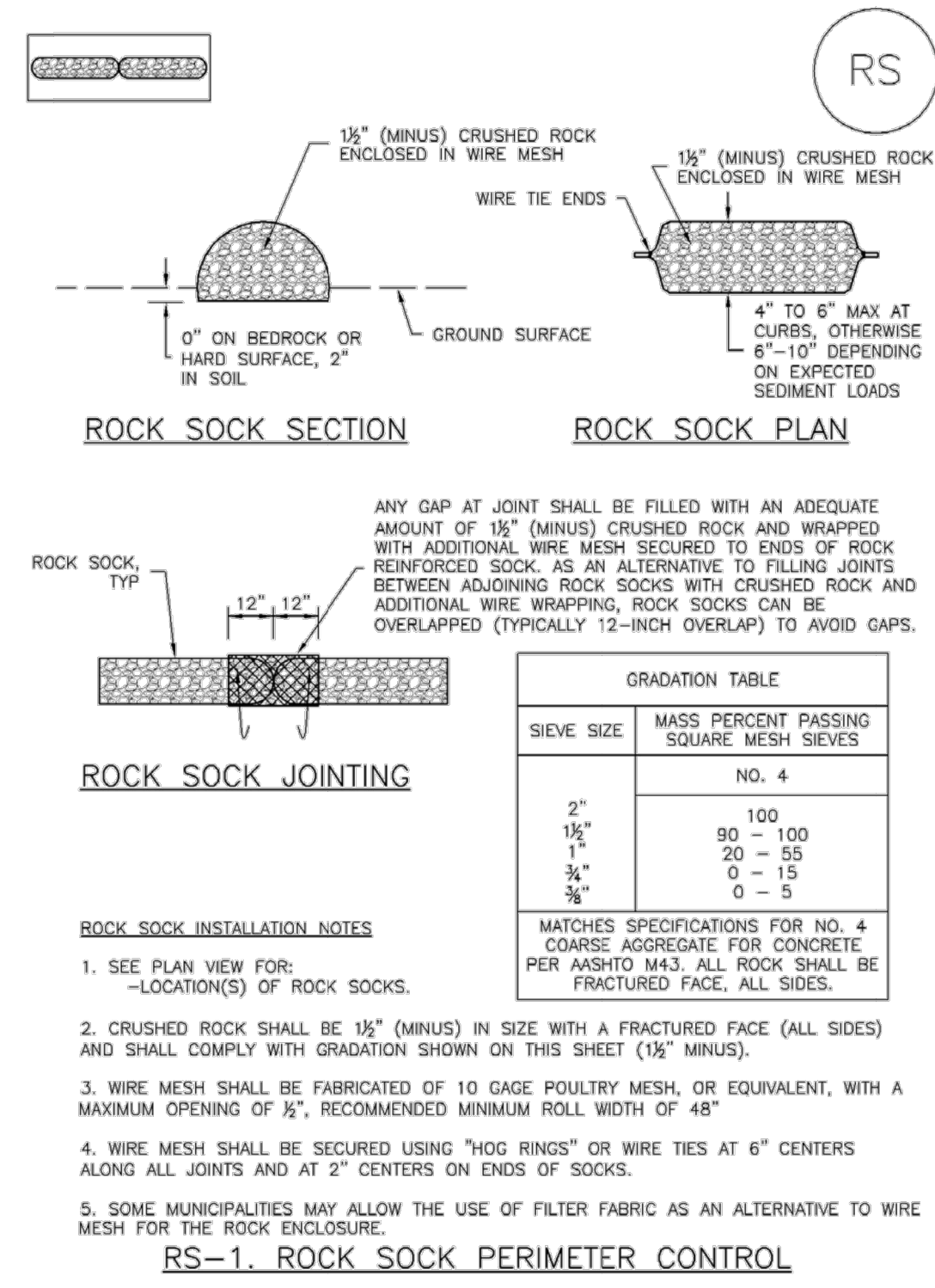
**Rough Cut Street Control (RCS)** **EC-9**

1. SEE PLAN VIEW FOR  
-LOCATION OF ROUGH CUT STREET CONTROL MEASURES

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

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.

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RS-2                      Urban Drainage and Flood Control District                      November 2010  
 Urban Storm Drainage Criteria Manual Volume 3

Item Z. Include details for the following BMP's.  
Examples of acceptable details for each are provided:

	Detail # and Source				
BMP	ECM (Appendix F)	DCM (Vol 2, Chap 3.3)	MHFD (USDCM Vol 3: Chap 7)	COS - Stormwater Construction Manual (App E)	CDOT Standard Plans on M-208 1
Inlet Protection	SD-3-60 (sandbags at drop inlet and gutter upstream of inlet) SD-3-86 (for steep slope above inlet)	IP-1 (SF at drop inlet), IP-2 (straw bale at drop inlet) IP-3 (rock socks or blocks around inlet), IP-4 (rock socks in upstream gutter)	SC-6 (RS & blocks around curb and drop inlets, rock socks at culverts, SF & straw at drop inlets)	X	X
Sediment Basin		SB-1, SB-2	SC-7	X	



# GEC\_V2.pdf Markup Summary

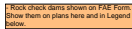
CDurham (27)



**Subject:** Stamp - Stormwater Comment Legend  
**Page Label:** [1] 1 Cover Sheet - CV01  
**Author:** CDurham  
**Date:** 4/11/2022 3:16:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

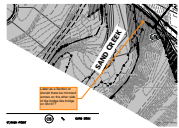


**Subject:** Stamp - Review By  
**Page Label:** [1] 1 Cover Sheet - CV01  
**Author:** CDurham  
**Date:** 4/11/2022 3:16:35 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



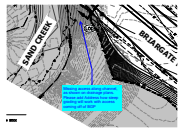
**Subject:** SW - Textbox  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:17:03 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

- Rock check dams shown on FAE Form. Show them on plans here and in Legend below.



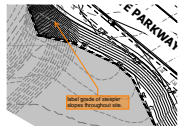
**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:17:40 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Label as a Section or should there be mirrored arrows on the other side of the bridge like bridge on Sht 6??



**Subject:** Callout  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:17:58 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

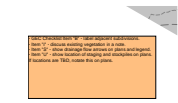
Missing access along channel, as shown on drainage plans. Please add Address how steep grading will work with access coming off of BGP



**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:18:02 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

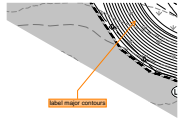
label grade of steeper slopes throughout site.





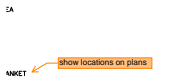
**Subject:** SW - Textbox  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:18:10 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

- GEC Checklist Item "B" - label adjacent subdivisions.
- Item "I" - discuss existing vegetation in a note.
- Item "S" - show drainage flow arrows on plans and legend.
- Item "U" - show location of staging and stockpiles on plans. If locations are TBD, notate this on plans.



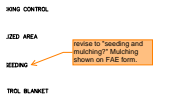
**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:18:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

label major contours



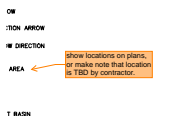
**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:18:52 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

show locations on plans



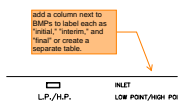
**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:19:02 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

revise to "seeding and mulching?" Mulching shown on FAE form.



**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:19:12 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

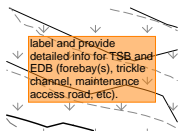
show locations on plans, or make note that location is TBD by contractor.



**Subject:** SW - Textbox with Arrow  
**Page Label:** [2] 2 GR\_01 SRR and BGP - GESC (1a)  
**Author:** CDurham  
**Date:** 4/11/2022 3:19:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

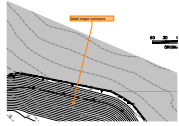
add a column next to BMPs to label each as "initial," "interim," and "final" or create a separate table.





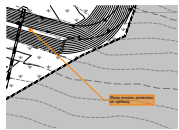
**Subject:** SW - Textbox with Arrow  
**Page Label:** [3] 3 GESC (1)  
**Author:** CDurham  
**Date:** 4/11/2022 3:19:55 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

label and provide detailed info for TSB and EDB (forebay(s), trickle channel, maintenance access road, etc).



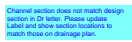
**Subject:** SW - Textbox with Arrow  
**Page Label:** [3] 3 GESC (1)  
**Author:** CDurham  
**Date:** 4/11/2022 3:20:16 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

label major contours



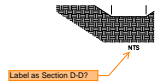
**Subject:** SW - Textbox with Arrow  
**Page Label:** [3] 3 GESC (1)  
**Author:** CDurham  
**Date:** 4/11/2022 3:20:28 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Show erosion protection on spillway.



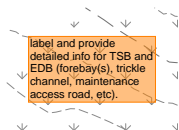
**Subject:** Text Box  
**Page Label:** [5] 5 GESC (3)  
**Author:** CDurham  
**Date:** 4/11/2022 3:21:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Channel section does not match design section in Dr letter. Please update  
Label and show section locations to match those on drainage plan.



**Subject:** SW - Textbox with Arrow  
**Page Label:** [5] 5 GESC (3)  
**Author:** CDurham  
**Date:** 4/11/2022 3:21:35 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

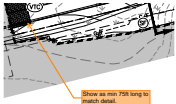
Label as Section D-D?



**Subject:** SW - Textbox with Arrow  
**Page Label:** [6] 6 GESC (4)  
**Author:** CDurham  
**Date:** 4/11/2022 3:22:12 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

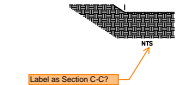
label and provide detailed info for TSB and EDB (forebay(s), trickle channel, maintenance access road, etc).





**Subject:** SW - Textbox with Arrow  
**Page Label:** [6] 6 GESC (4)  
**Author:** CDurham  
**Date:** 4/11/2022 3:22:35 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Show as min 75ft long to match detail.



**Subject:** SW - Textbox with Arrow  
**Page Label:** [6] 6 GESC (4)  
**Author:** CDurham  
**Date:** 4/11/2022 3:22:51 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Label as Section C-C?



**Subject:** Image  
**Page Label:** [9] 9 DT03  
**Author:** CDurham  
**Date:** 4/11/2022 3:23:40 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Item Z. Include details for the following BMP's.  
Examples of acceptable details for each are  
provided:

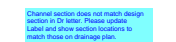


**Subject:** SW - Textbox  
**Page Label:** [9] 9 DT03  
**Author:** CDurham  
**Date:** 4/11/2022 3:23:47 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



**Subject:** Text Box  
**Page Label:** [1] 1 Cover Sheet - CV01  
**Author:** CDurham  
**Date:** 4/7/2022 2:39:13 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

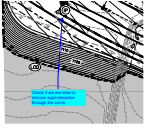
Add CDR-22-001



**Subject:** Text Box  
**Page Label:** [6] 6 GESC (4)  
**Author:** CDurham  
**Date:** 4/7/2022 2:58:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Channel section does not match design section in Dr letter. Please update  
Label and show section locations to  
match those on drainage plan.

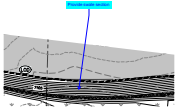




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**Subject:** Callout  
**Page Label:** [3] 3 GES (1)  
**Author:** CDurham  
**Date:** 4/7/2022 3:07:42 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

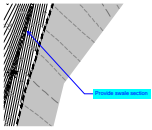
Check if we are able to remove superelevation through the curve.



---

**Subject:** Callout  
**Page Label:** [3] 3 GES (1)  
**Author:** CDurham  
**Date:** 4/7/2022 3:10:02 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide swale section



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**Subject:** Callout  
**Page Label:** [4] 4 GES (2)  
**Author:** CDurham  
**Date:** 4/7/2022 3:10:15 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide swale section