

# VOLLMER ROAD (NORTH)

## COUNTY OF EL PASO, STATE OF COLORADO

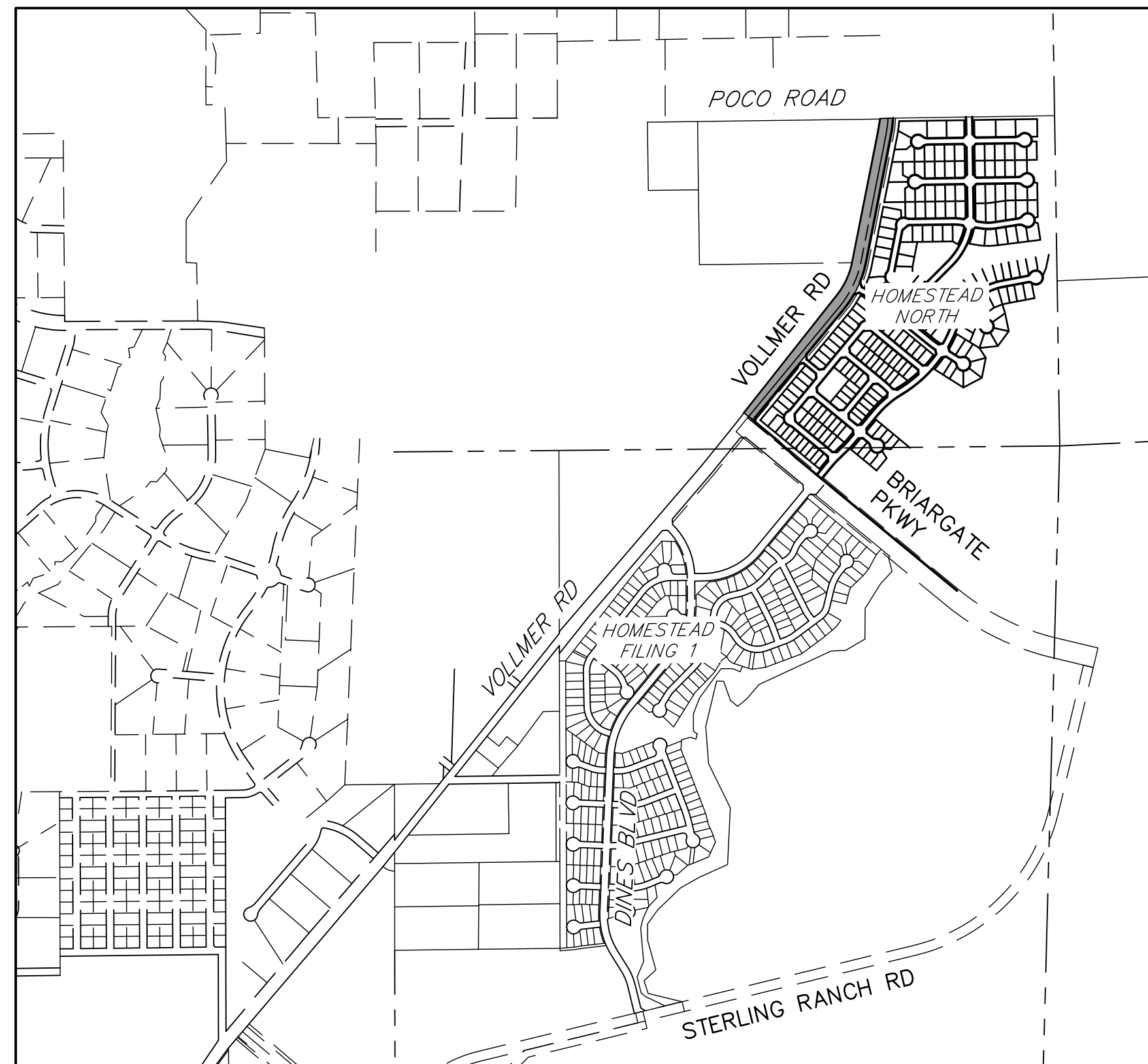
### GRADING AND EROSION CONTROL PLANS

#### FEBRUARY 2022

EPC STORMWATER REVIEW COMMENTS ARE SHOWN IN ORANGE BOXES WITH BLACK TEXT

#### 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 (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SMWP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SMWP 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 SPECIALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SMWP. 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 (JULY 2020) 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 (SMWP), 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  
 WOOD - PERMITS  
 4300 CHERRY CREEK DRIVE SOUTH  
 DENVER, CO 80246-1530  
 ATTN: PERMITS UNIT



#### VICINITY MAP

#### SHEET INDEX

- |       |  |
|-------|--|
| 1     | COVER SHEET                              |
| 2-5   | GRADING AND EROSION CONTROL INITIAL PLAN |
| 6-9   | GRADING AND EROSION CONTROL INTERIM PLAN |
| 10-13 | GRADING AND EROSION CONTROL FINAL PLAN   |
| 14-16 | GESC DETAILS                             |

#### 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 (SMWP), 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.
15. ALL STORM DRAIN PIPES SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.

Comments remain cursory.

#### BENCHMARKS

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411416.273  
 EASTING = 235167.071  
 ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
 NORTHING = 410095.404  
 EASTING = 235052.131  
 ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
 NORTHING = 411399.962  
 EASTING = 233849.817  
 ELEVATION = 7030.82

#### BASIS OF BEARING

BEARINGS ARE BASED ON THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624". SAID LINE BEARS N89°14'14"E, A DISTANCE OF 2,722.56 FEET.

#### 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>2880 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  |
| CITY STORMWATER:     | STORMWATER ENTERPRISE<br>30 S. NEVADA AVENUE, SUITE 401<br>COLORADO SPRINGS, CO 80903<br>(719)-385-5918   |

#### 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.

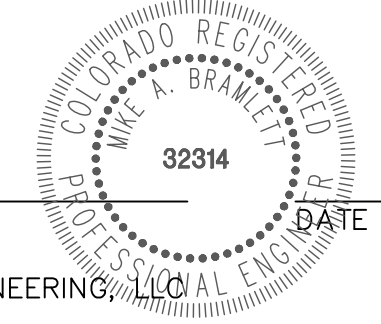
JAMES F. MORLEY \_\_\_\_\_ DATE \_\_\_\_\_

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.

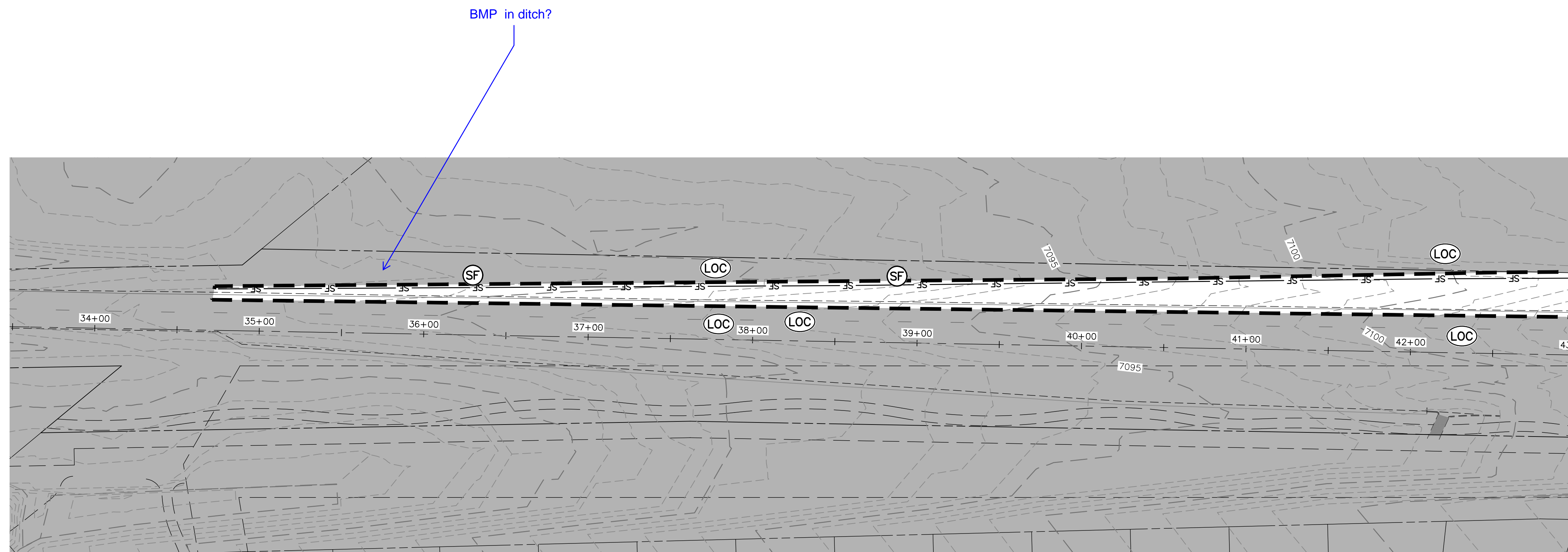
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



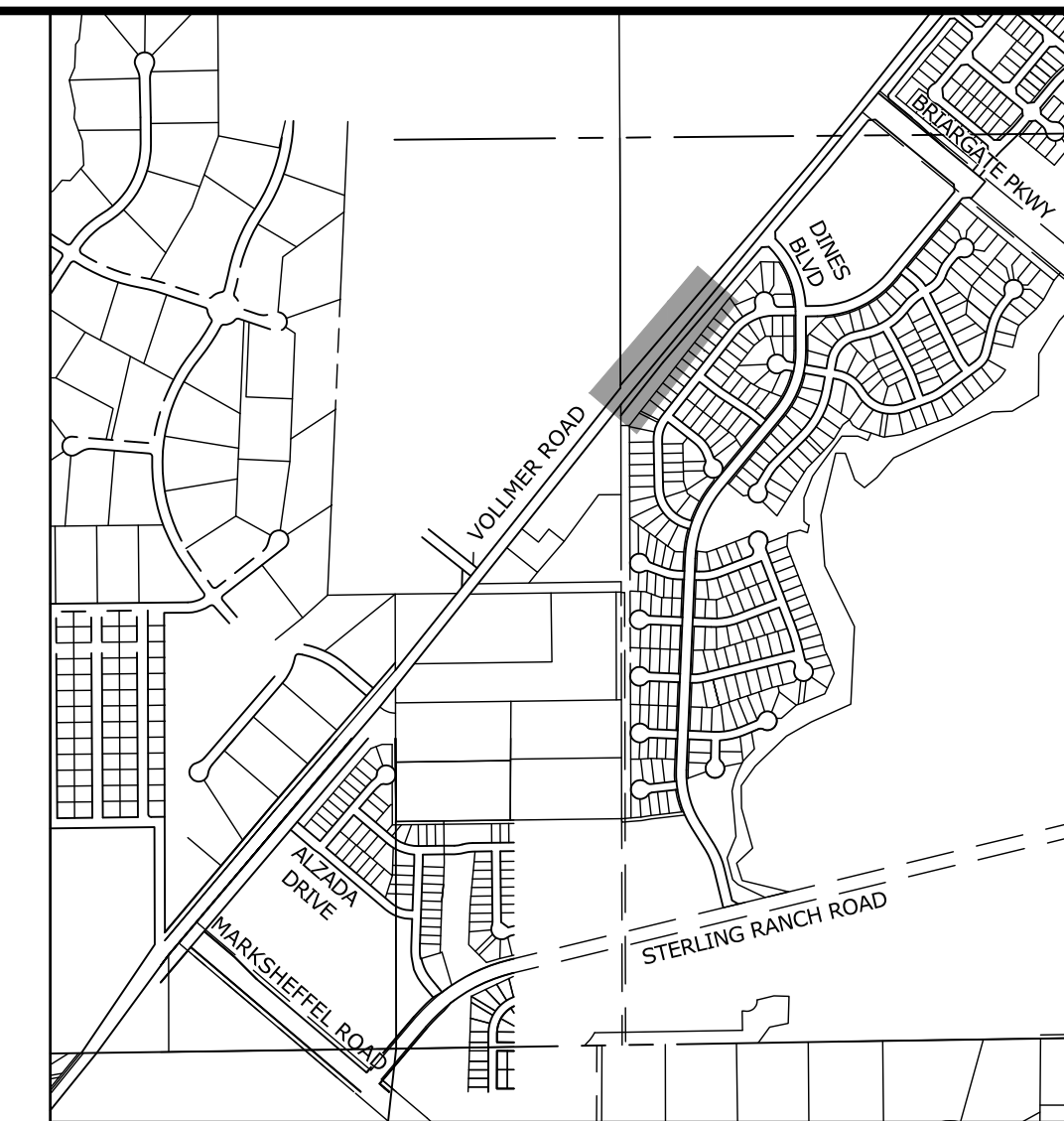
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VOLLMER ROAD (NORTH)	COVER SHEET	SHEET 1 OF 16	JOB NO. 25188.00
		PREPARED FOR SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742	UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE. DESIGNATED BY: JAMES F. MORLEY (719) 471-1742
J.R. ENGINEERING A Westcon Company Central 303-740-9383 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com		H-SCALE _____	V-SCALE _____
DATE 02-14-22		DESIGNED BY _____	DRAWN BY _____
CWC _____		CHECKED BY _____	CWC _____

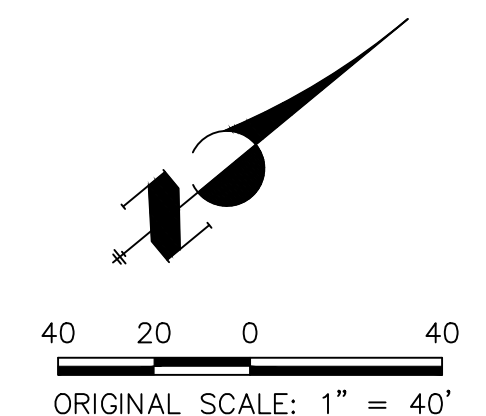




**VOLLMER ROAD**  
STA 33+50 TO STA 43+00



**KEY MAP**  
SCALE: NTS



ORIGINAL SCALE: 1" = 40'



Know what's below.  
Call before you dig.

**LEGEND**

EXISTING STORM SEWER		INLET		CURB SOCK	
STORM SEWER PROPOSED		L.P./H.P. (2.0%)		LOW POINT/HIGH POINT	
PROPOSED R.O.W.		FLOW DIRECTION & SLOPE		FLOW DIRECTION ARROW	
PROPOSED PROPERTY LINE		EXISTING FLOW DIRECTION ARROW		EMERGENCY OVERFLOW DIRECTION	
PROPOSED SIDEWALK		CWA		CONCRETE WASHOUT AREA	
EXISTING PROPERTY LINE		IP		INLET PROTECTION	
ROW EXISTING		SB		TEMPORARY SEDIMENT BASIN	
FL EXISTING		SF		SILT FENCE	
SIDEWALK EXISTING		VTC		VEHICLE TRACKING CONTROL	
DRAINAGE ACCESS & MAINTENANCE EASEMENT		SSA		STAGE STABILIZED AREA	
SILT FENCE		TS		TEMPORARY SEEDING	
LIMITS OF CONSTRUCTION/DISTURBANCE		ECB		EROSION CONTROL BLANKET	
EXISTING WETLAND BOUNDARY					
EXISTING 100 YEAR FLOODPLAIN					
CUT/ FILL					
TEMPORARY DITCH					
EXISTING					
PROPOSED					
CHECK DAM					

**NOTES:**  
EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

please add a note stating no batch plants will be utilized onsite

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE 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

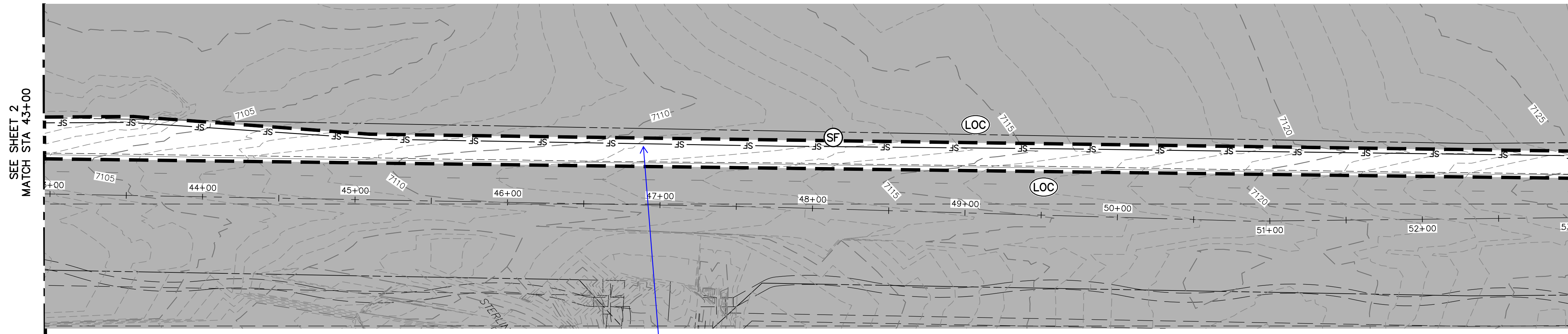
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

NO.	REVISION	BY	DATE

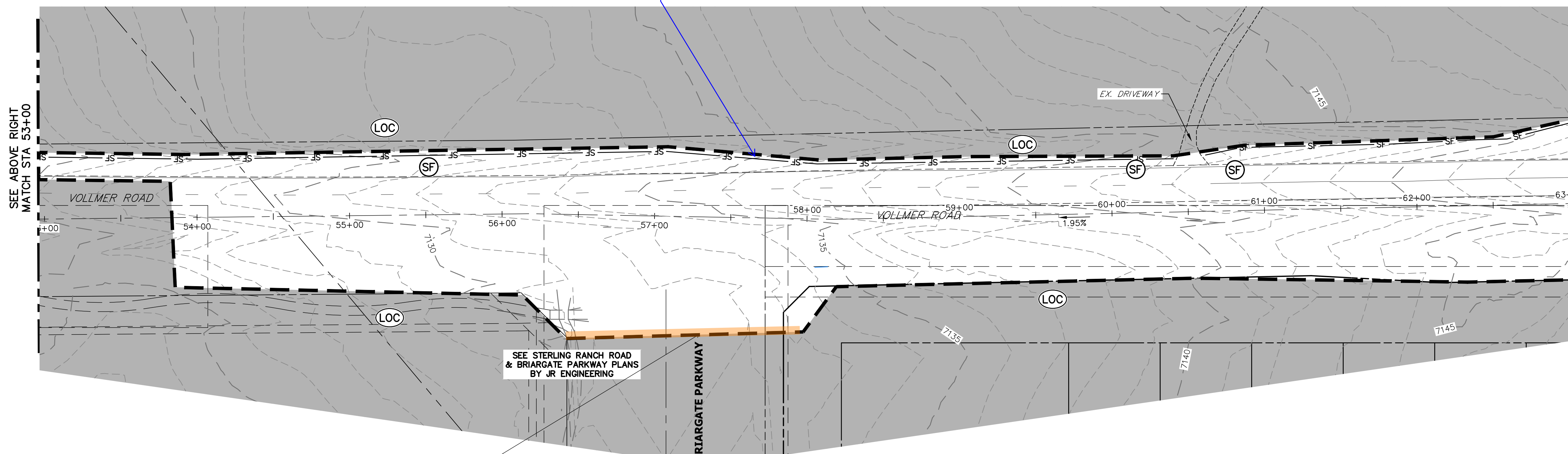
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=40'	N/A	02-14-22	CWC	SWW	

<b>VOLLMER ROAD (NORTH)</b>	<b>GRADING AND EROSION CONTROL INITIAL PLAN</b>
SHEET 2 OF 16	JOB NO. 25188.00

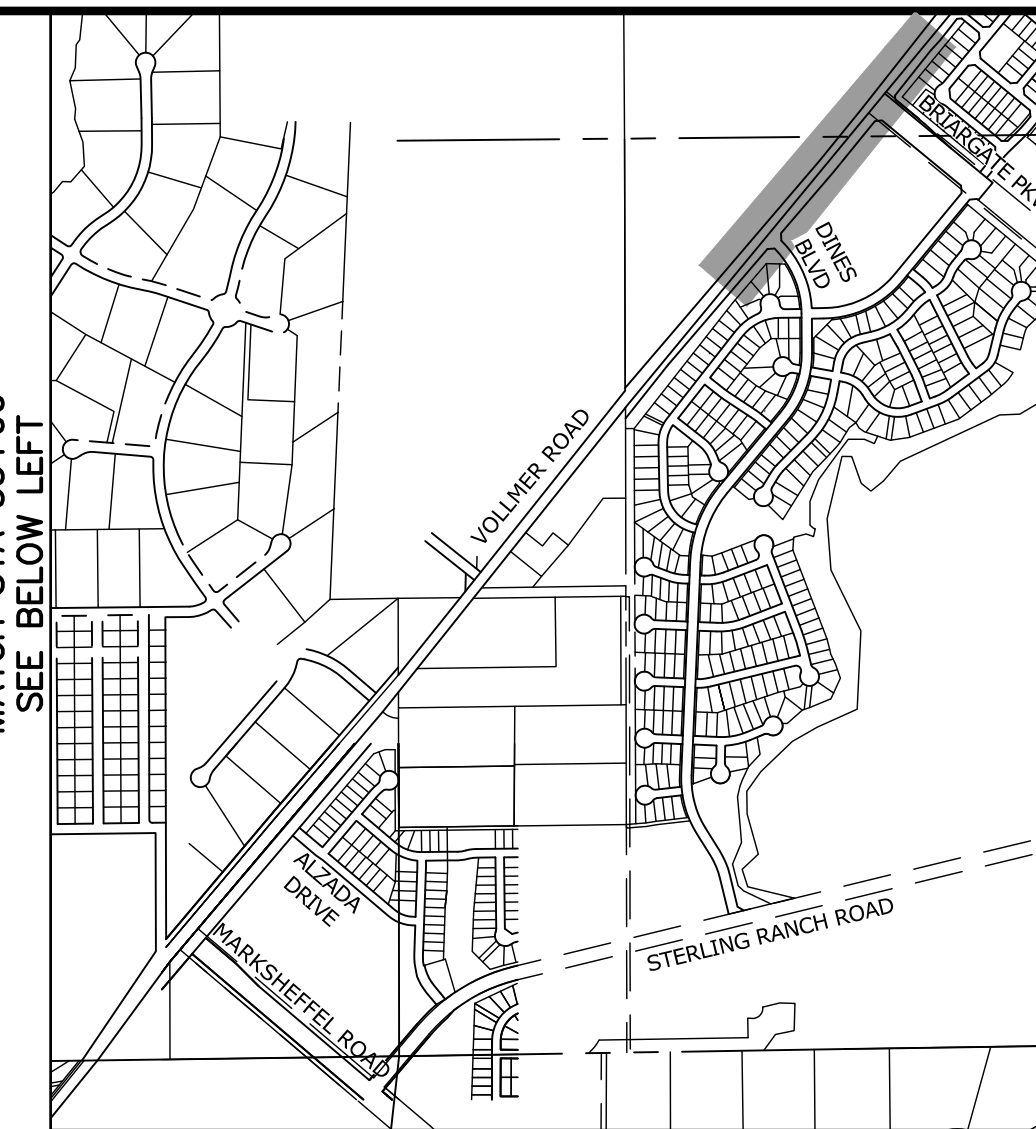
**ENGINEER'S STATEMENT**  
PREPARED UNDER THE AUTHORITY OF THE ENGINEER FOR AND ON BEHALF OF JR ENGINEERING, INC. FOR THE PROJECT OF SR LAND, LLC.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY  
COLORADO P.E. No. 37110  
FOR AND ON BEHALF OF JR ENGINEERING, INC.



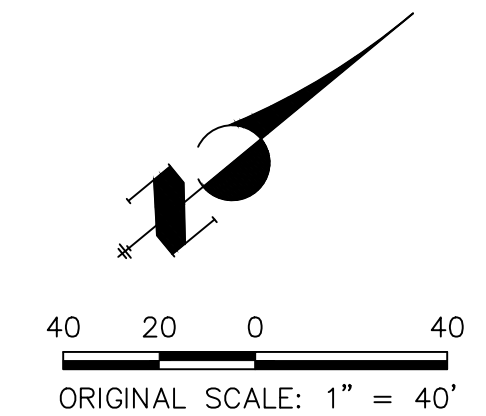
VOLLMER ROAD  
STA 43+00 TO STA 53+00



VOLLMER ROAD  
STA 53+00 TO STA 63+00



KEY MAP  
SCALE: NTS



**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 OVERTFLOW 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			

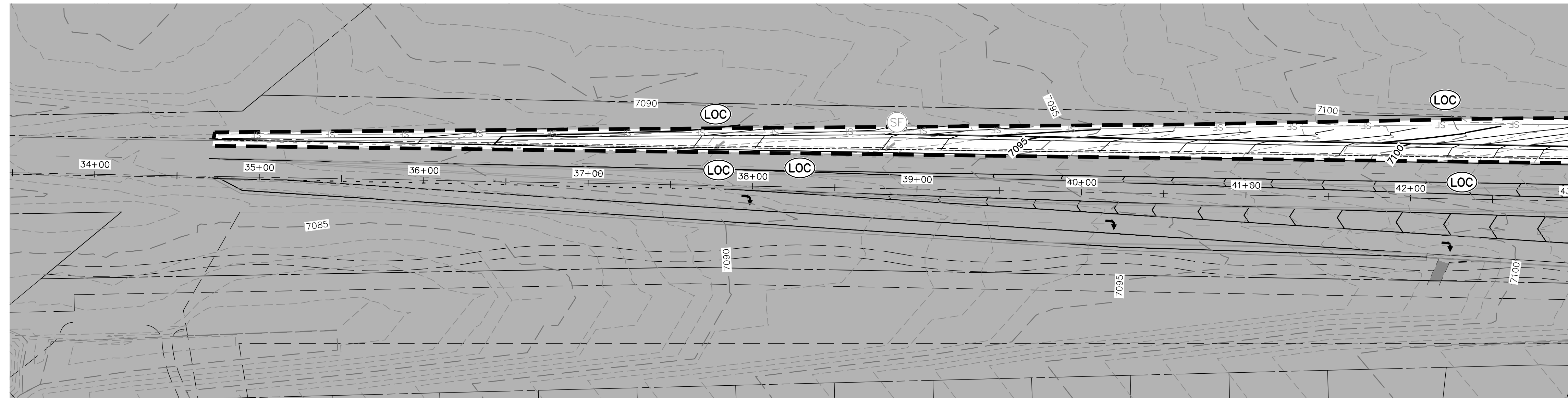
**NOTES:**  
 EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
 STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
 THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

**ENGINEER'S STATEMENT**  
 PREPARED UNDER THE AUTHORITY OF THE BOARD OF PROFESSIONAL ENGINEERS FOR AND ON BEHALF OF JR ENGINEERING, INC.  
 MIKE A. BRAMLEY, P.E.  
 COLORADO P.E. NO. 37110  
 PRELIMINARY NOT FOR CONSTRUCTION

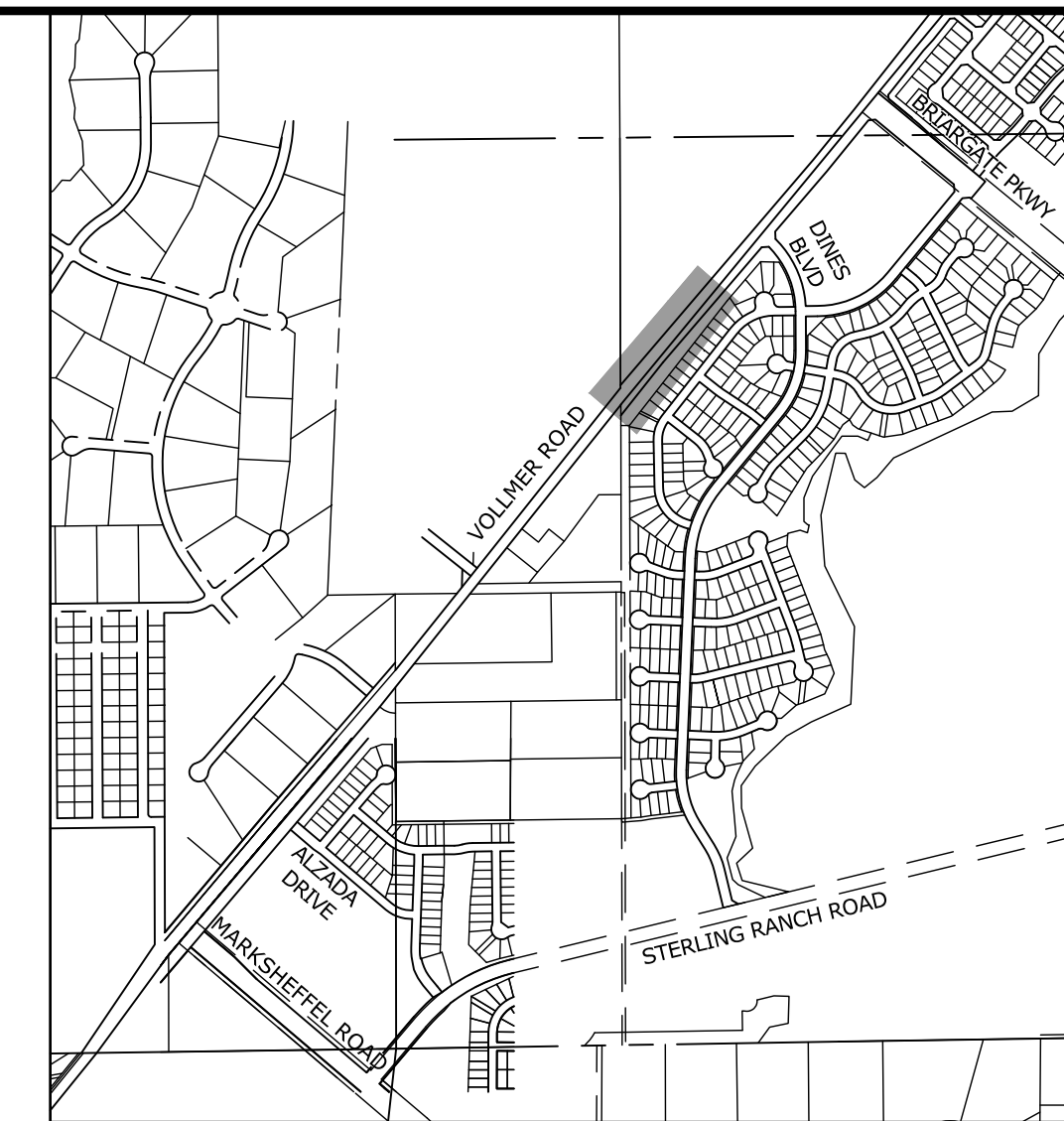
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742	<b>J.R. ENGINEERING</b> A Western Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY DATE	
		No. REVISION	
H-SCALE 1"=40'	V-SCALE N/A	DATE 02-14-22	DESIGNED BY CWC
		DRAWN BY SWW	CHECKED BY
VOLLMER ROAD (NORTH)		GRADING AND EROSION CONTROL INITIAL PLAN	
SHEET 3 OF 16		JOB NO. 25188.00	



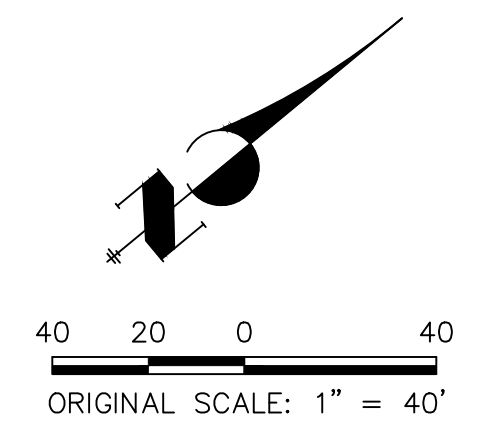




**VOLLMER ROAD**  
STA 33+50 TO STA 43+00



**KEY MAP**  
SCALE: NTS



Know what's below.  
Call before you dig.

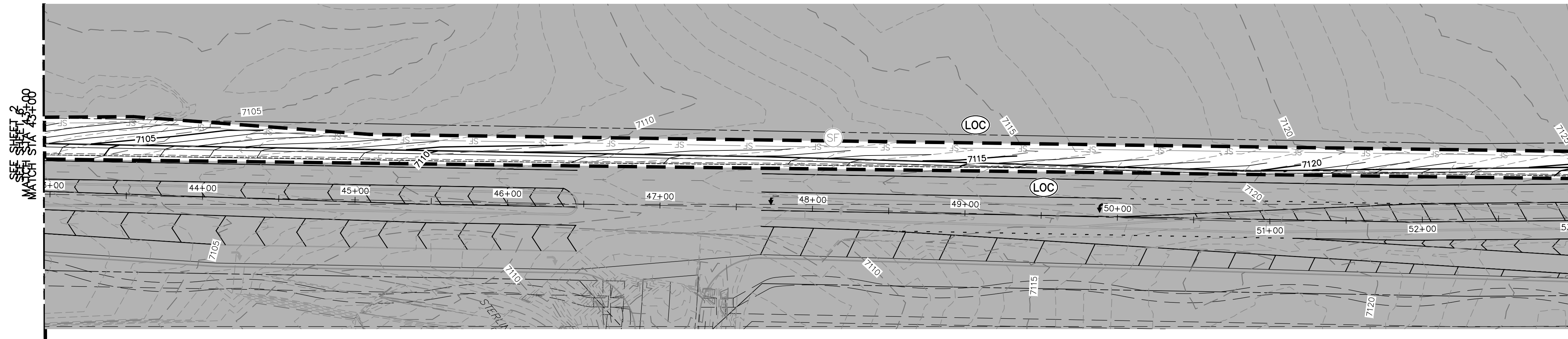
**NOTES:**  
EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

**LEGEND**

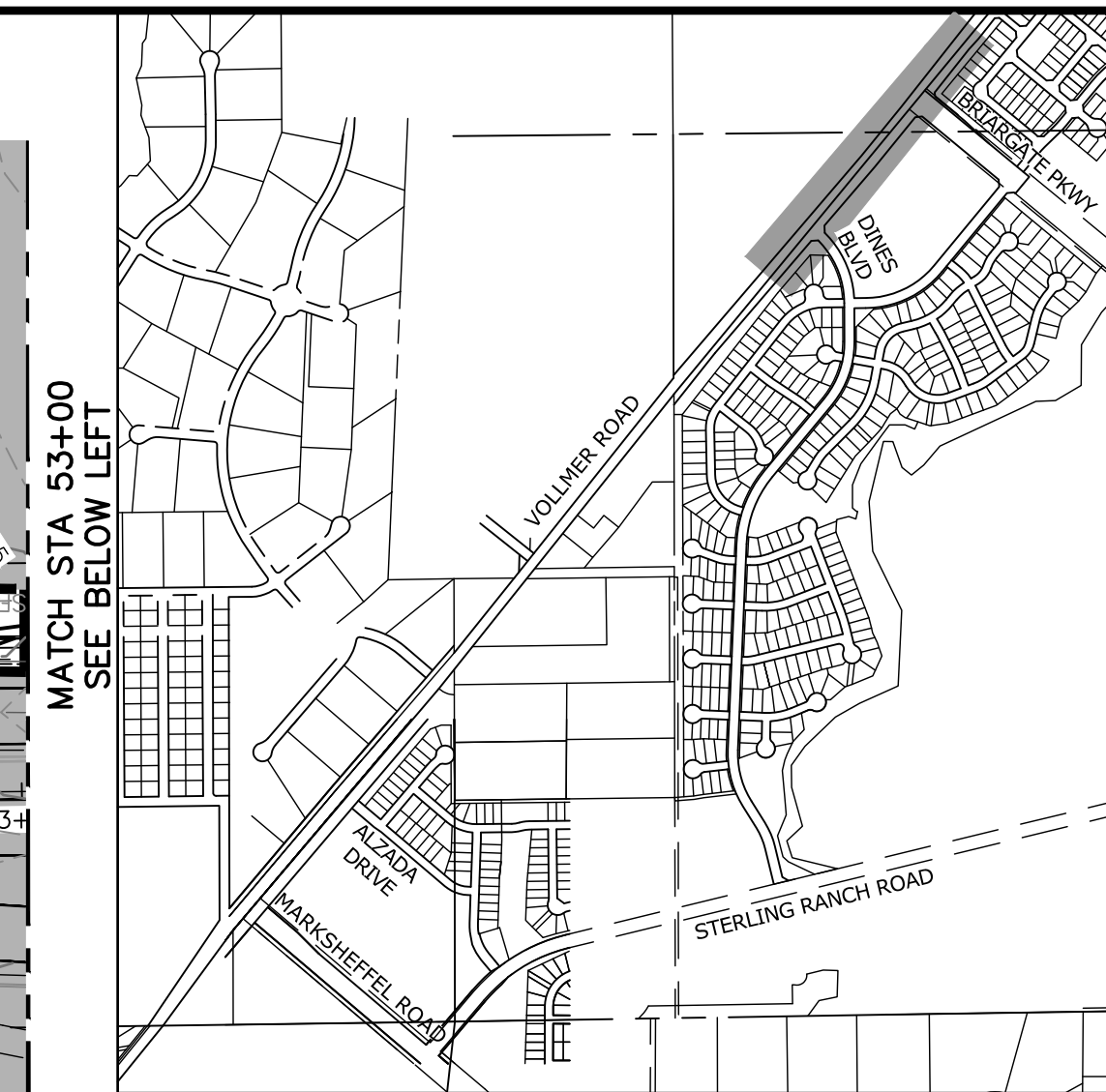
EXISTING STORM SEWER		INLET	
STORM SEWER PROPOSED		LOW POINT/HIGH POINT	
PROPOSED R.O.W.		FLOW DIRECTION & SLOPE	
PROPOSED PROPERTY LINE		FLOW DIRECTION ARROW	
PROPOSED SIDEWALK		EXISTING FLOW DIRECTION ARROW	
EXISTING PROPERTY LINE		EMERGENCY OVERTFLOW DIRECTION	
ROW EXISTING		CONCRETE WASHOUT AREA	
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 THE AUTHORITY OF THE BOARD OF PROFESSIONAL ENGINEERS, STATE OF COLORADO, FOR AND ON BEHALF OF JR ENGINEERING, INC. FOR THE PROJECT OF VOLLMER ROAD (NORTH) GRADING AND EROSION CONTROL INTERIM PLAN.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY, P.E., LICENSE NO. 11000, REGISTERED PROFESSIONAL ENGINEER, STATE OF COLORADO, FOR AND ON BEHALF OF JR ENGINEERING, INC.

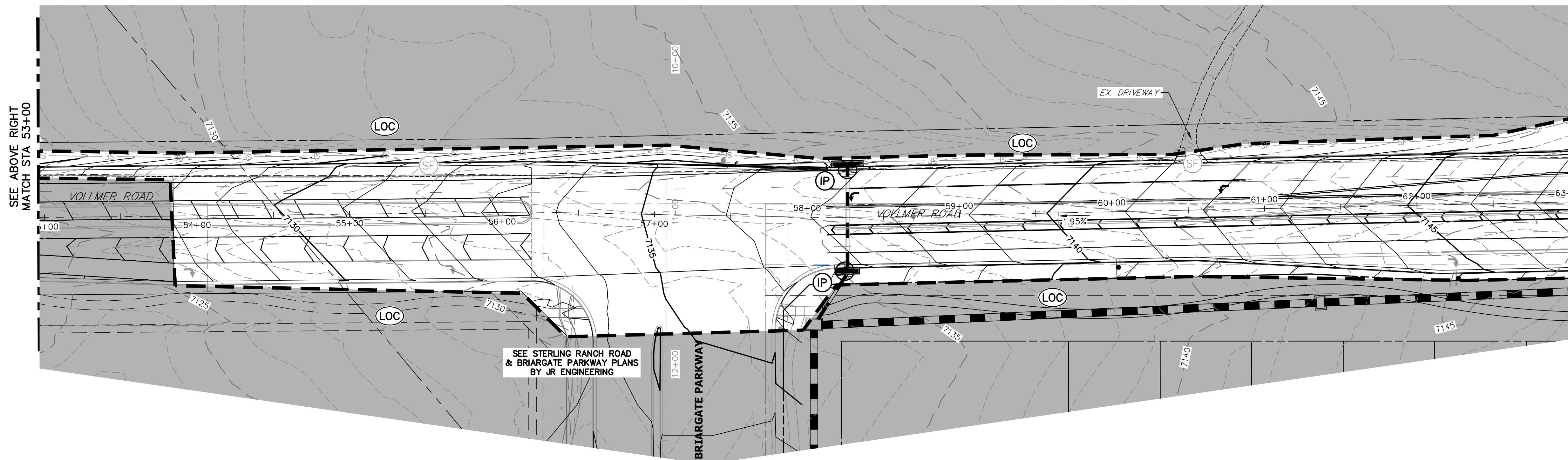
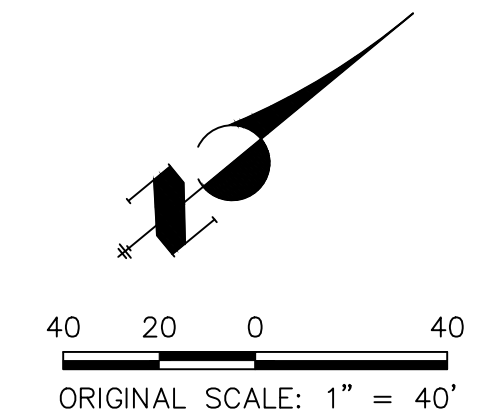
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
	<b>J.R. ENGINEERING</b> A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No. REVISION	
H-SCALE 1"=40'	N/A
V-SCALE	N/A
DATE	02-14-22
DESIGNED BY	CWC
DRAWN BY	SWW
CHECKED BY	
VOLLMER ROAD (NORTH)	
GRADING AND EROSION CONTROL INTERIM PLAN	
SHEET	6 OF 16
JOB NO.	25188.00



**VOLLMER ROAD**  
STA 43+00 TO STA 53+00



**KEY MAP**  
SCALE: N.T.S.



SEE STERLING RANCH ROAD & BRIARGATE PARKWAY PLANS BY JR ENGINEERING



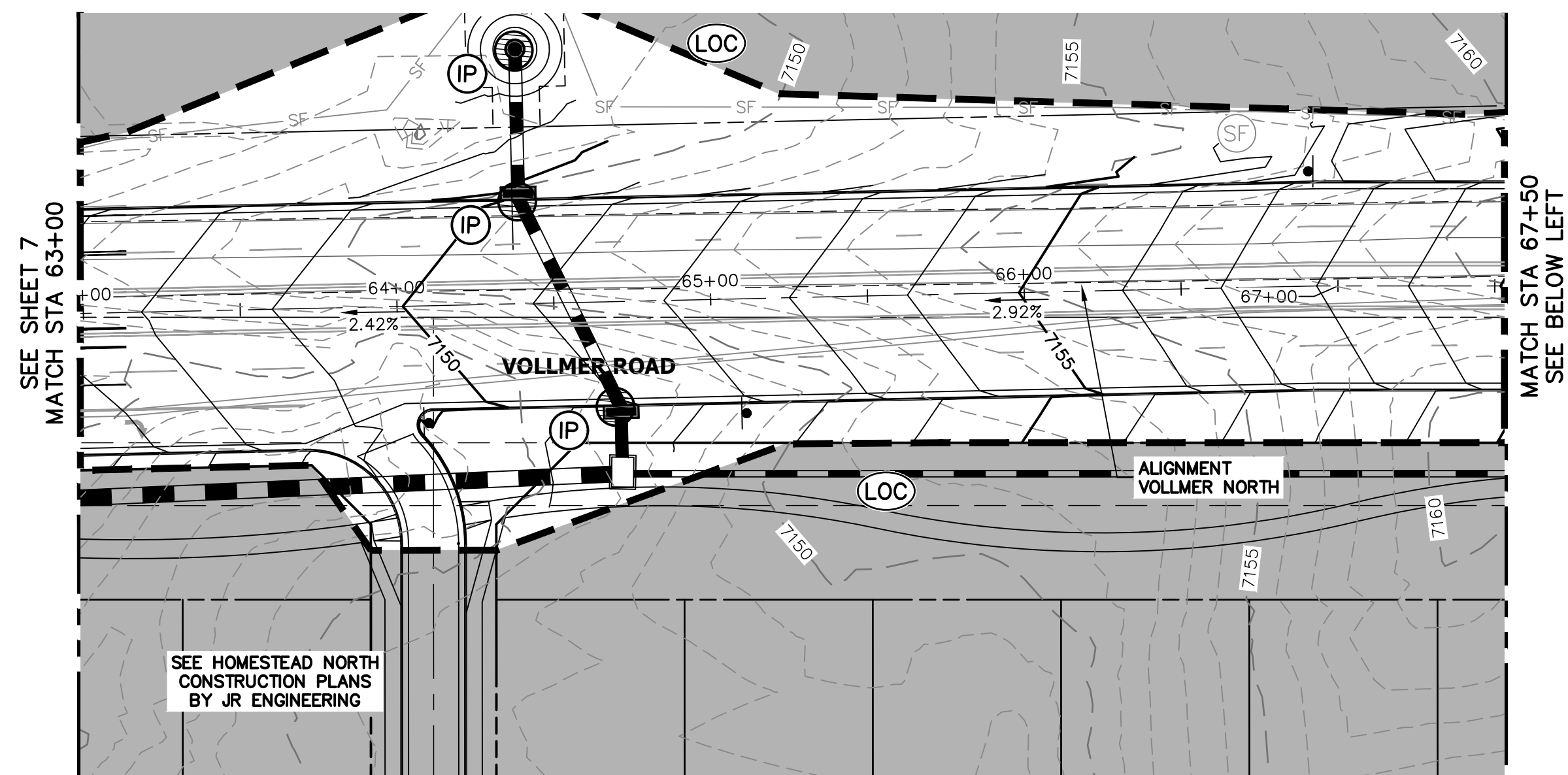
**LEGEND**

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 OVERTFLOW 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			

**NOTES:**  
EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

**ENGINEER'S STATEMENT**  
PREPARED UNDER THE AUTHORITY OF THE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND ARCHITECTS ON BEHALF OF JR ENGINEERING, INC.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY, P.E.  
FOR AND ON BEHALF OF JR ENGINEERING, INC.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR 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
BY	DATE
No. REVISION	
H-SCALE 1"=40'	V-SCALE N/A
DATE 02-14-22	DESIGNED BY CWC
DRAWN BY SWW	CHECKED BY
VOLLMER ROAD (NORTH)	
GRADING AND EROSION CONTROL INTERIM PLAN	
SHEET 7	OF 16
JOB NO. 25188.00	



VOLLMER ROAD  
STA 63+00 TO STA 67+50

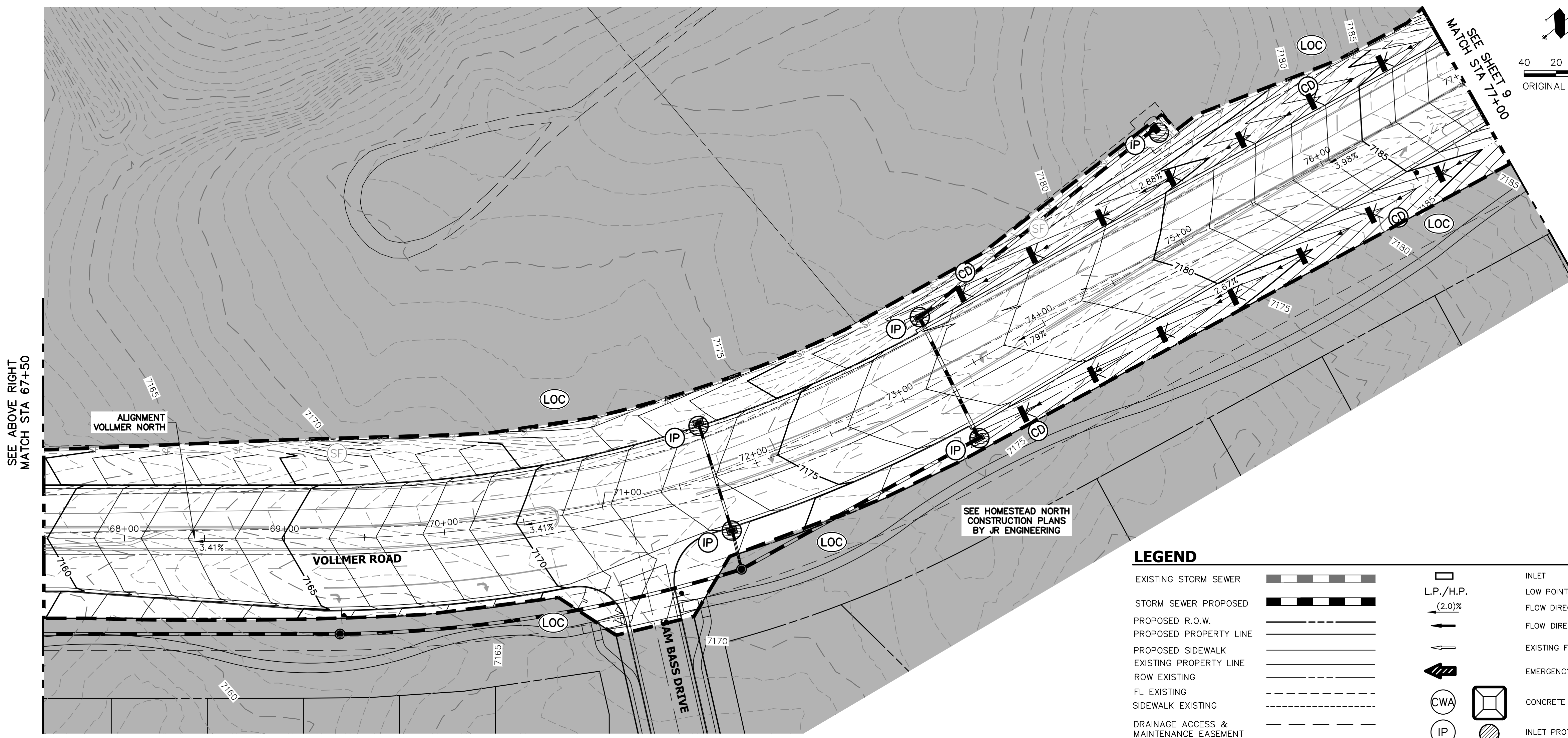


KEY MAP  
SCALE: NTS

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

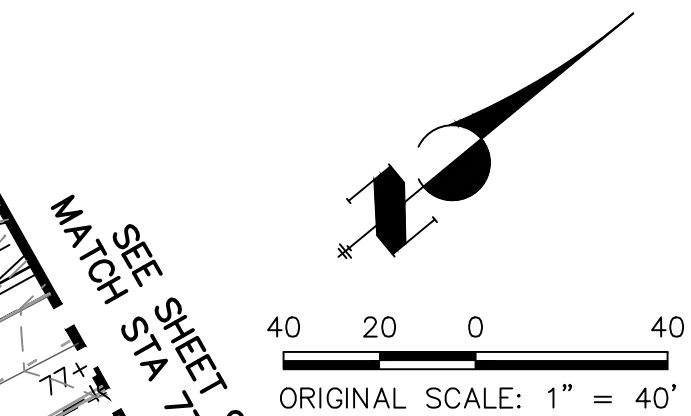
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com



VOLLMER ROAD  
STA 67+50 TO STA 77+00

SEE ABOVE RIGHT  
MATCH STA 67+50



Know what's below.  
Call before you dig.

**LEGEND**

EXISTING STORM SEWER		INLET		CURB SOCK	
STORM SEWER PROPOSED		L.P./H.P.			
PROPOSED R.O.W.		FLOW DIRECTION & SLOPE			
PROPOSED PROPERTY LINE		FLOW DIRECTION ARROW			
PROPOSED SIDEWALK		EXISTING FLOW DIRECTION ARROW			
EXISTING PROPERTY LINE		EMERGENCY OVERTFLOW 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					

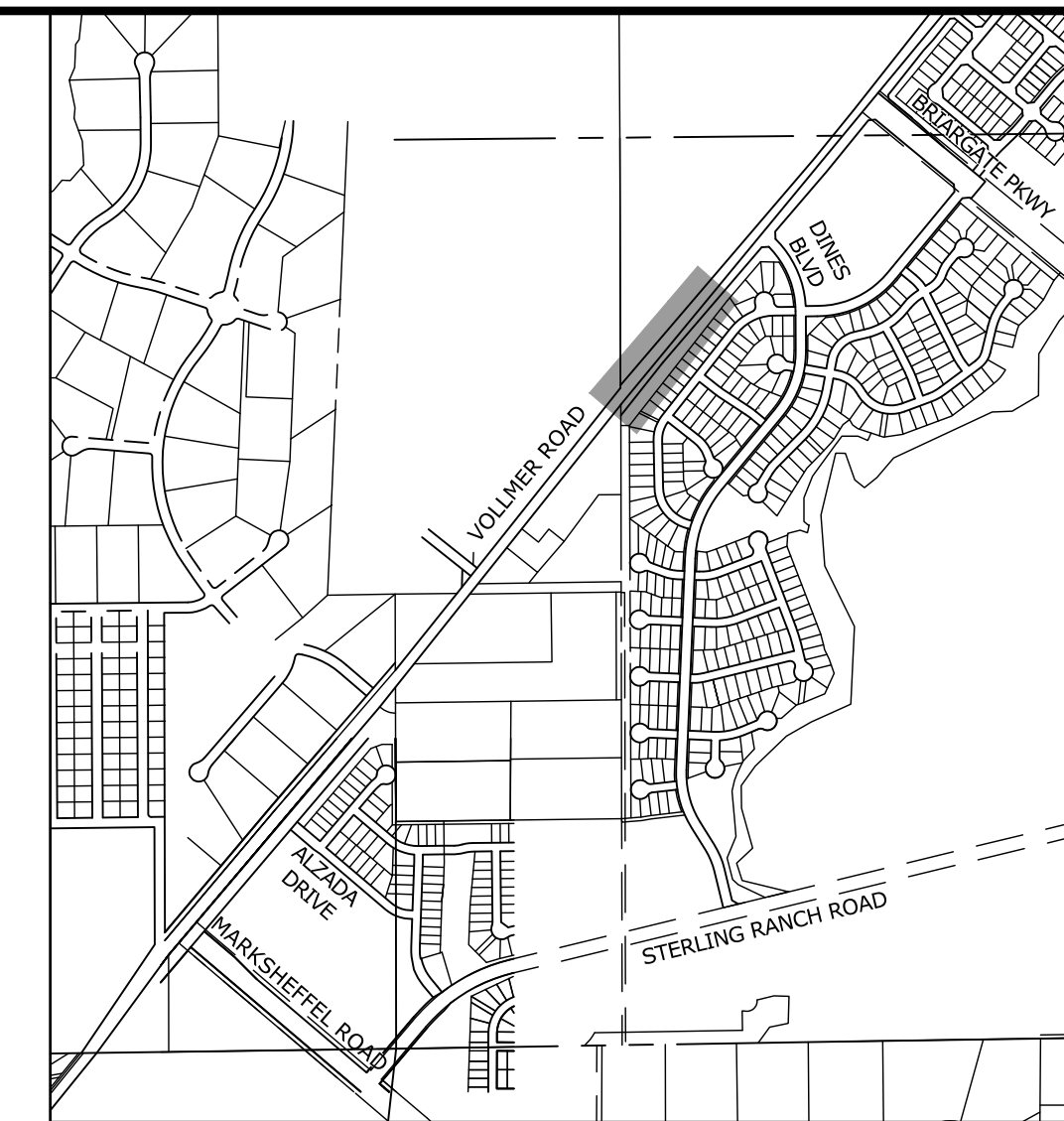
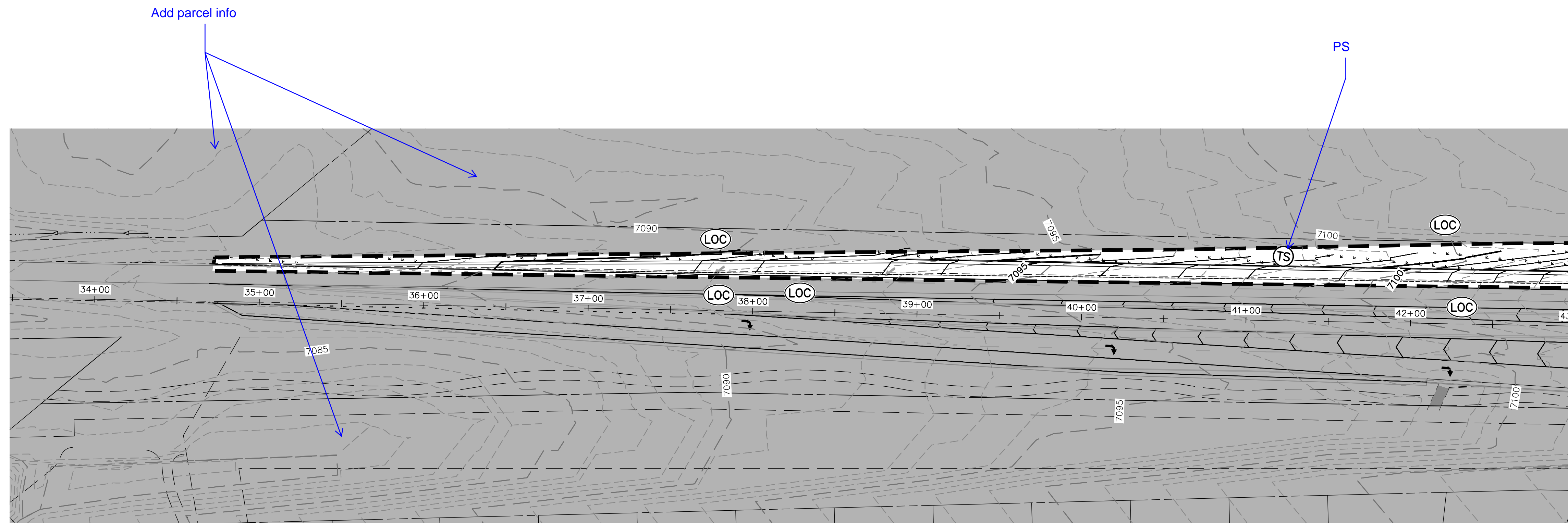
**NOTES:**  
EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

**ENGINEER'S STATEMENT**  
PREPARED UNDER THE AUTHORITY OF THE ENGINEER FOR AND ON BEHALF OF JR ENGINEERING, INC. FOR THE PROJECT OF SR LAND, LLC.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. BRAMLEY, P.E.  
COLORADO P.E. NO. 37101  
FOR AND ON BEHALF OF JR ENGINEERING, INC.

VOLLMER ROAD (NORTH)	BY	DATE										
	No.	REVISION										
GRADING AND EROSION CONTROL INTERIM PLAN	H-SCALE	1"=40'	V-SCALE	N/A	DATE	02-14-22	DESIGNED BY	CWC	DRAWN BY	SWW	CHECKED BY	
	SHEET	8	OF	16	JOB NO.	25188.00						







KEY MAP  
SCALE: NTS

VOLLMER ROAD  
STA 33+50 TO STA 43+00

**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 OVERTFLOW 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			
		CS	CURB SOCK

**NOTES:**  
 EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
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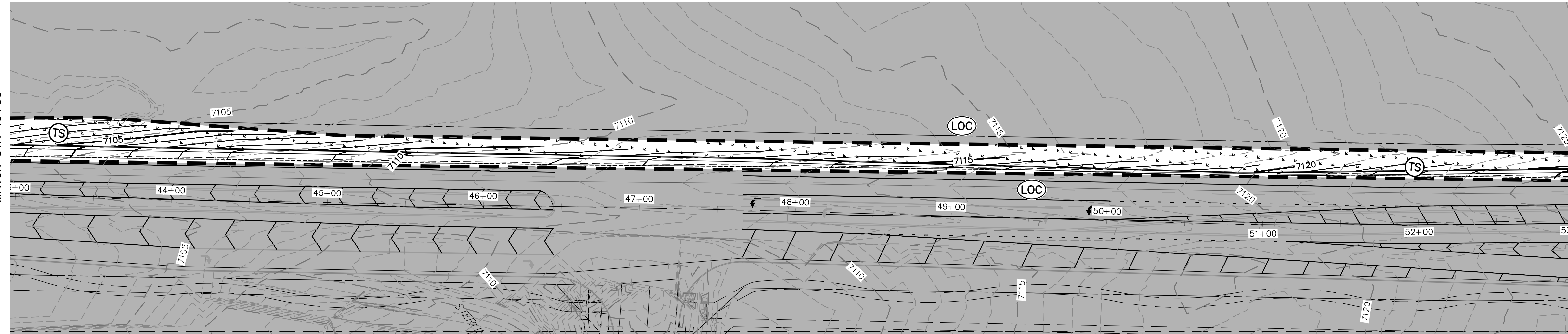
Add permanent seeding and mulching



**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
 PRELIMINARY NOT FOR CONSTRUCTION  
 MIKE A. BRAM  
 COLORADO P.E.  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC

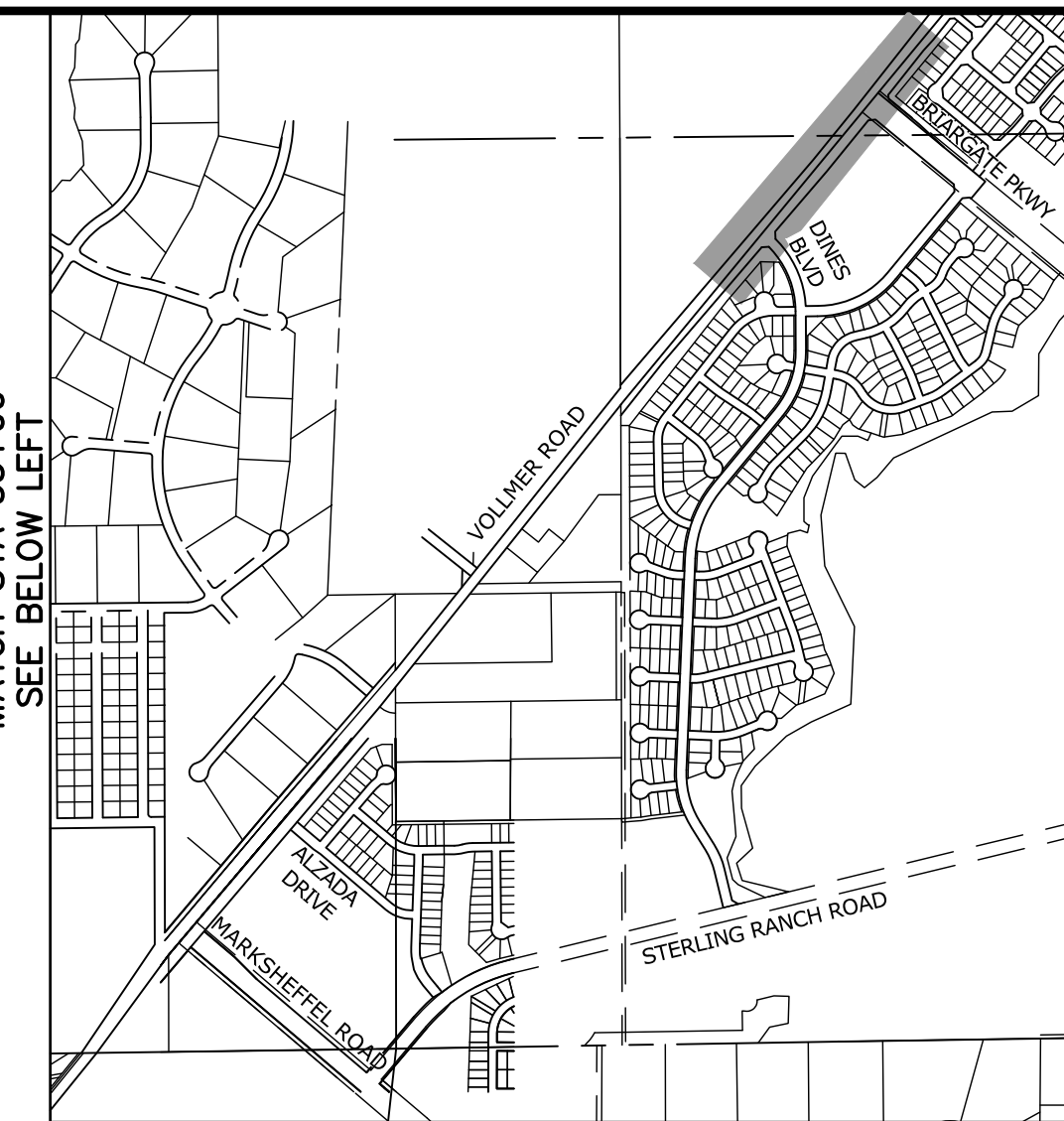
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE IN THE MANNER DESIGNATED BY WRITTEN AUTHORIZATION.  PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORELY (719) 471-1742	<b>J.R. ENGINEERING</b> A Westman Company  Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE	1"=40'	DESIGNED BY	XXX
V-SCALE	N/A	DRAWN BY	XXX
DATE	02-14-22	CHECKED BY	
<b>VOLLMER ROAD (NORT)</b> <b>GRADING AND EROSION CONTROL FINAL PLAN</b>		SHEET	10 OF 16
		JOB NO.	25188.00

SEE SHEET 6  
MATCH STA 43+00

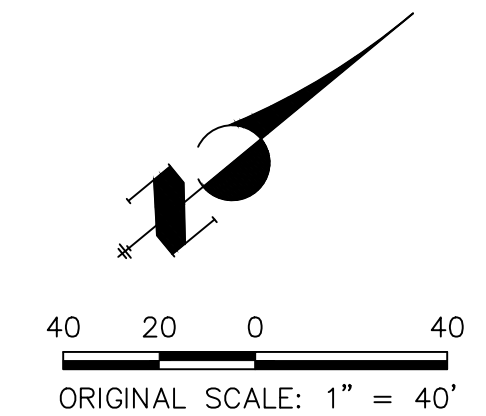


**VOLLMER ROAD**  
STA 43+00 TO STA 53+00

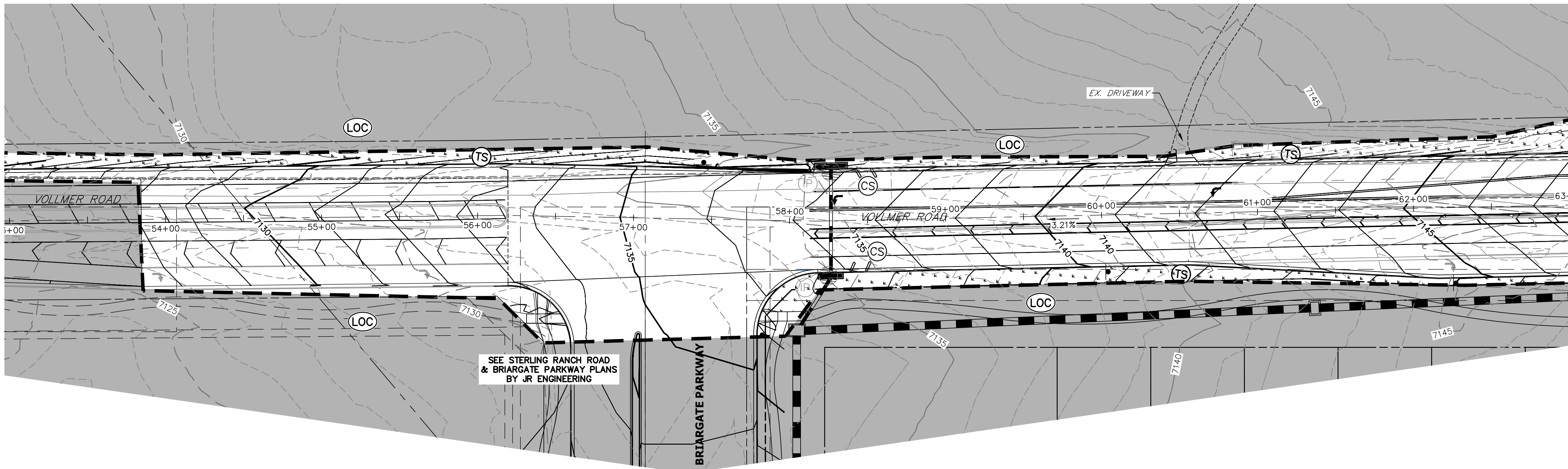
MATCH STA 53+00  
SEE BELOW LEFT



**KEY MAP**  
SCALE: NTS



SEE ABOVE RIGHT  
MATCH STA 53+00



**VOLLMER ROAD**  
STA 53+00 TO STA 63+00

MATCH STA 33+00  
SEE SHEET 8

**NOTES:**  
EXISTING VEGETATION: AN AERIAL SURVEY WAS USED TO DETERMINE A 30% COVER OF NATIVE GRASSES.  
STAGING AREA & STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.  
THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

**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 OVERTFLOW 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			



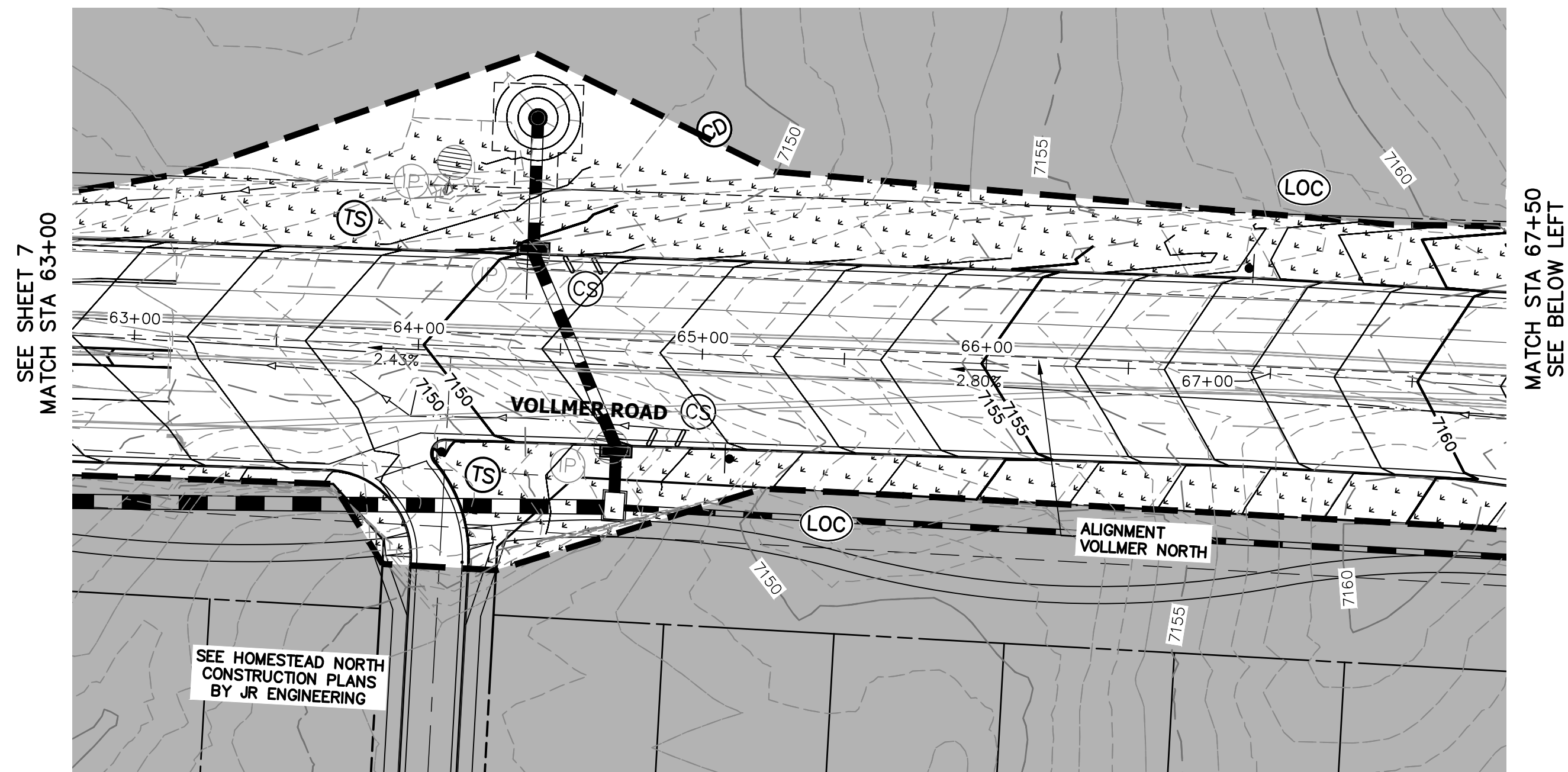
**ENGINEER'S STATEMENT**  
PREPARED FOR ENGINEERING  
**PRELIMINARY NOT FOR CONSTRUCTION**  
FOR AND ON BEHALF OF JR ENGINEERING, LOCAL ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.  
PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESENT SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

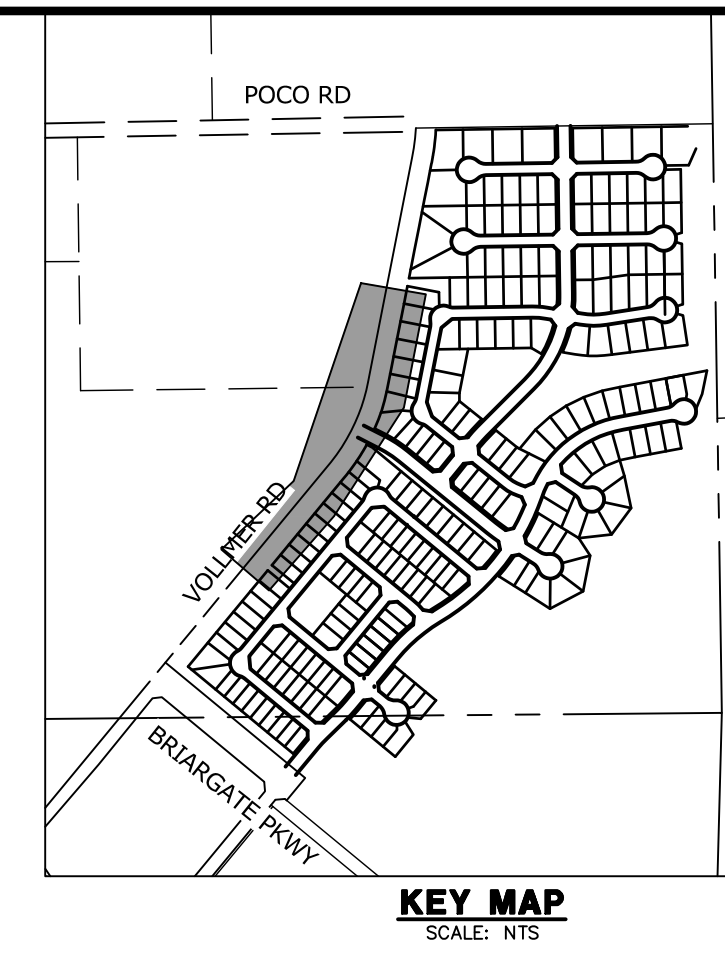
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

**VOLLMER ROAD (NORTH)**  
**GRADING AND EROSION CONTROL FINAL PLAN**  
SHEET 11 OF 16  
JOB NO. 25188.00

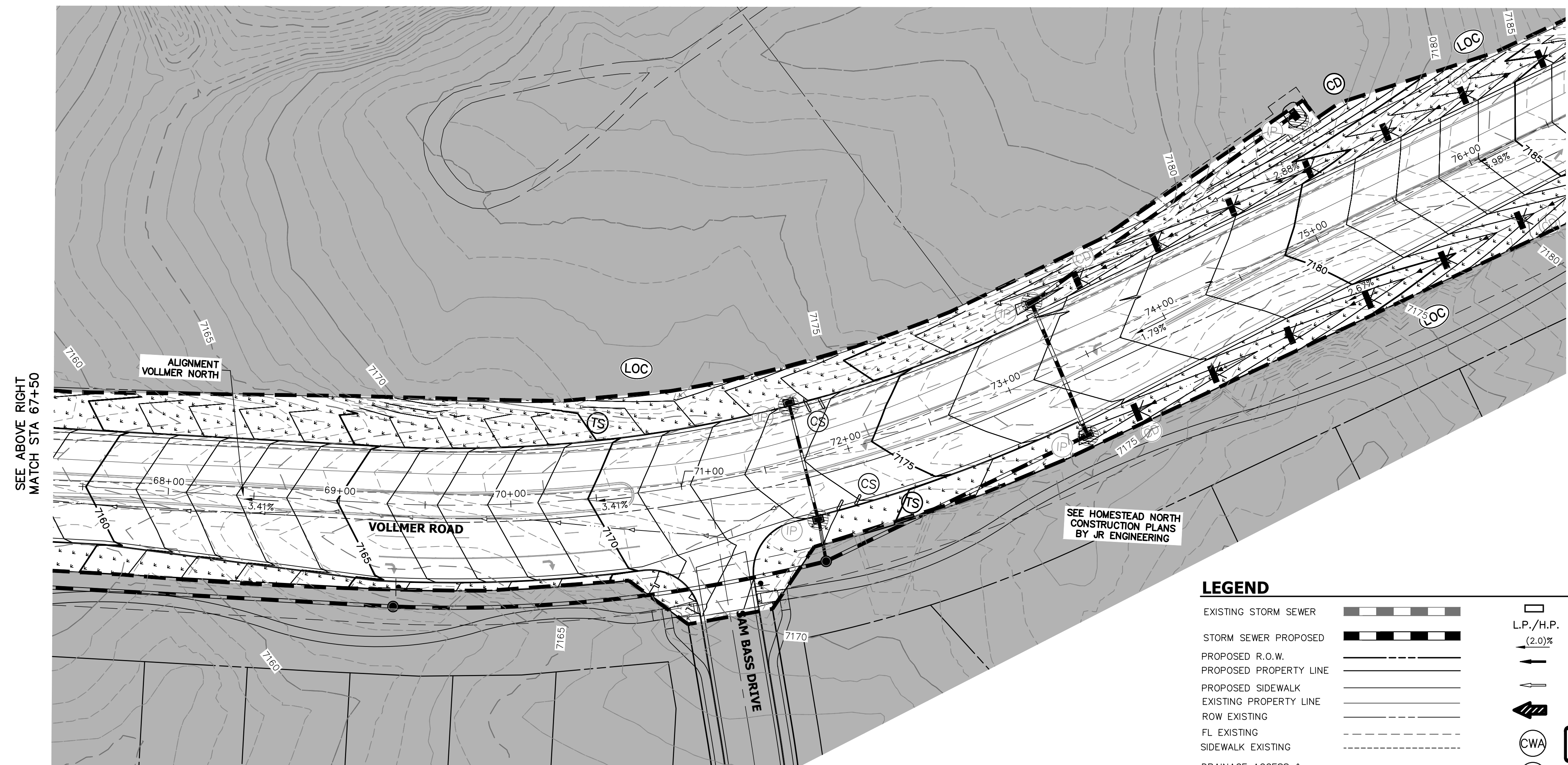


**VOLLMER ROAD**  
STA 63+00 TO STA 67+50



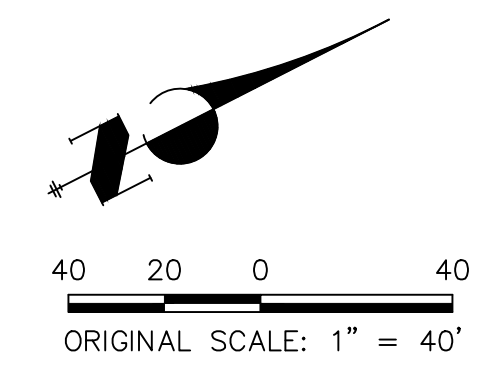
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

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



**VOLLMER ROAD**  
STA 67+50 TO STA 77+00

SEE SHEET 9  
MATCH STA 77+00



SEE ABOVE RIGHT  
MATCH STA 67+50

**LEGEND**

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

**NOTES:**  
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**ENGINEER'S STATEMENT**  
PREPARED FOR SR LAND, LLC  
ON BEHALF OF JR  
**PRELIMINARY NOT FOR CONSTRUCTION**  
MIKE A. B...  
COLORADO P.E.  
FOR AND ON BEHALF OF JR ENGINEERING, LLC  
DATE

VOLLMER ROAD (NORTH)	GRADING AND EROSION CONTROL FINAL PLAN	BY	DATE
		No.	REVISION
H-SCALE	1"=XX'	DATE	02-14-22
V-SCALE	1"=X'	DESIGNED BY	XXX
		DRAWN BY	XXX
		CHECKED BY	
SHEET 12 OF 16		JOB NO. 25188.00	



**Mulching (MU)**

**EC-4**

**Description**

Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Mulching helps reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Although often applied in conjunction with temporary or permanent seeding, it can also be used for temporary stabilization of areas that cannot be reseeded due to seasonal constraints.



Photograph MU-1. An area that was recently seeded, mulched, and crimped.

Mulch can be applied either using standard mechanical dry application methods or using hydromulching equipment that hydraulically applies a slurry of water, wood fiber mulch, and often a tackifier.

**Appropriate Uses**

Use mulch in conjunction with seeding to help protect the seedbed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed areas where growing season constraints prevent effective reseeding. Disturbed areas should be properly mulched and tacked, or seeded, mulched and tacked promptly after final grade is reached (typically within no longer than 14 days) on portions of the site not otherwise permanently stabilized.

Standard dry mulching is encouraged in most jurisdictions; however, hydromulching may not be allowed in certain jurisdictions or may not be allowed near waterways.

Do not apply mulch during windy conditions.

**Design and Installation**

Prior to mulching, surface-roughen areas by rolling with a crimping or punching type roller or by track walking. Track walking should only be used where other methods are impractical because track walking with heavy equipment typically compacts the soil.

A variety of mulches can be used effectively at construction sites. Consider the following:

Mulch	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

June 2012 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 MU-1

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

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

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

**Mulch**

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

**Maintenance and Removal**

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

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

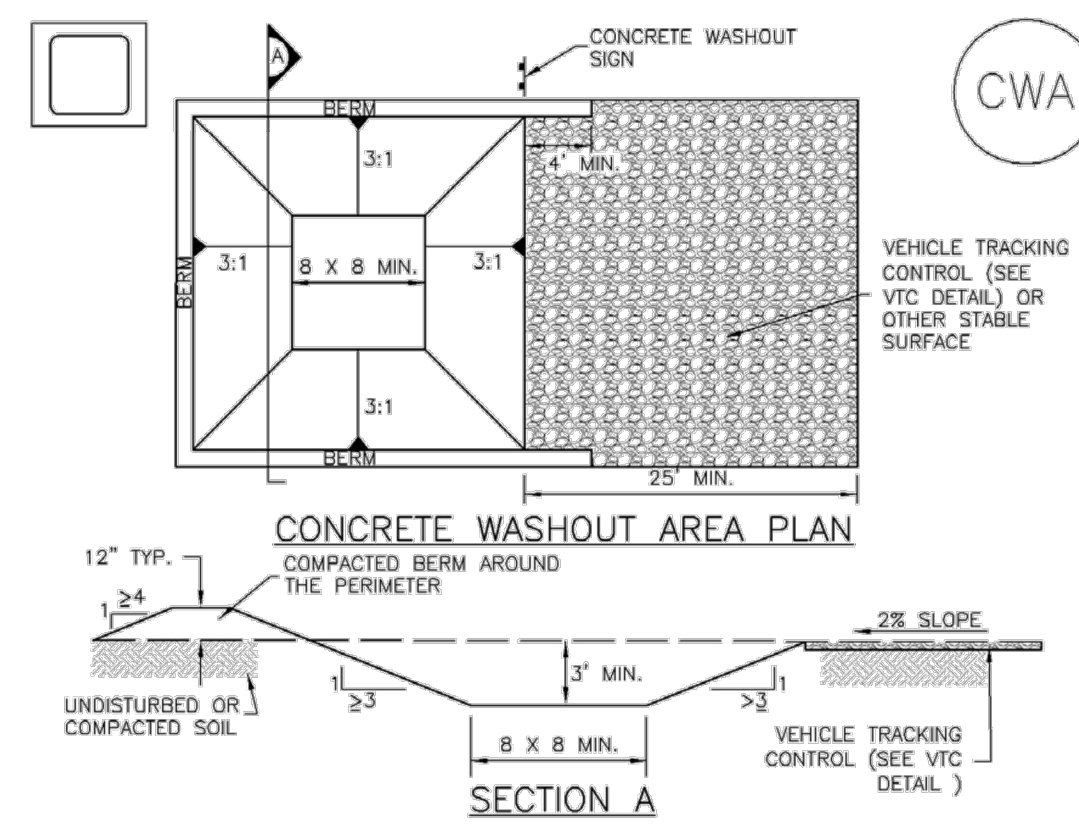
Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

TS/PS-6 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 June 2012

**Concrete Washout Area (CWA)**

**MM-3**



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 INFESIBLE, 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 RIGS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

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

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

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

TS/PS-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 June 2012

**Temporary and Permanent Seeding (TS/PS)**

**EC-2**

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

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

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

<sup>b</sup> See Table TS/PS-3 for seeding dates.

<sup>c</sup> If site is to be irrigated, the transition turf seed rates should be doubled.

<sup>d</sup> Crested wheatgrass should not be used on slopes steeper than 6H to 1V.

<sup>e</sup> Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sidecoats grama.

June 2012 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 TS/PS-5

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

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

**J.R. ENGINEERING**  
 A Westman Company  
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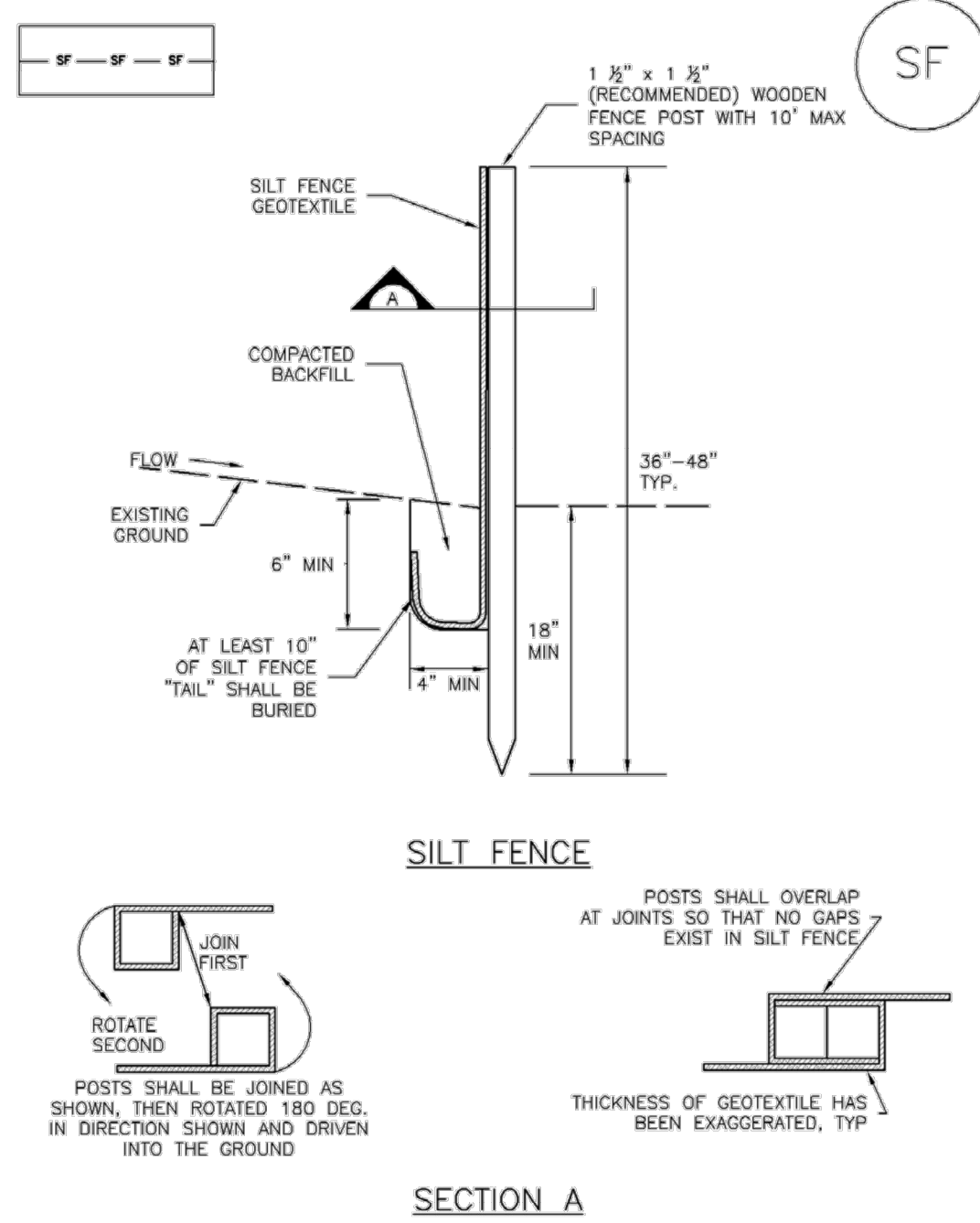
BY	DATE	No.	REVISION

H-SCALE	N/A	V-SCALE	N/A	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				02-14-22	XXX	XXX	

HOMESTEAD NORTH AT  
 STERLING RANCH FILING NO. 1  
 DETAIL

**Silt Fence (SF)**

**SC-1**



**SILT FENCE**  
SF-1. SILT FENCE

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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. COMPACTATION 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 GAPS 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 "U-HOOK." THE "U-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 SHOULD 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

**SM-4 Vehicle Tracking Control (VTC)**

**STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES**

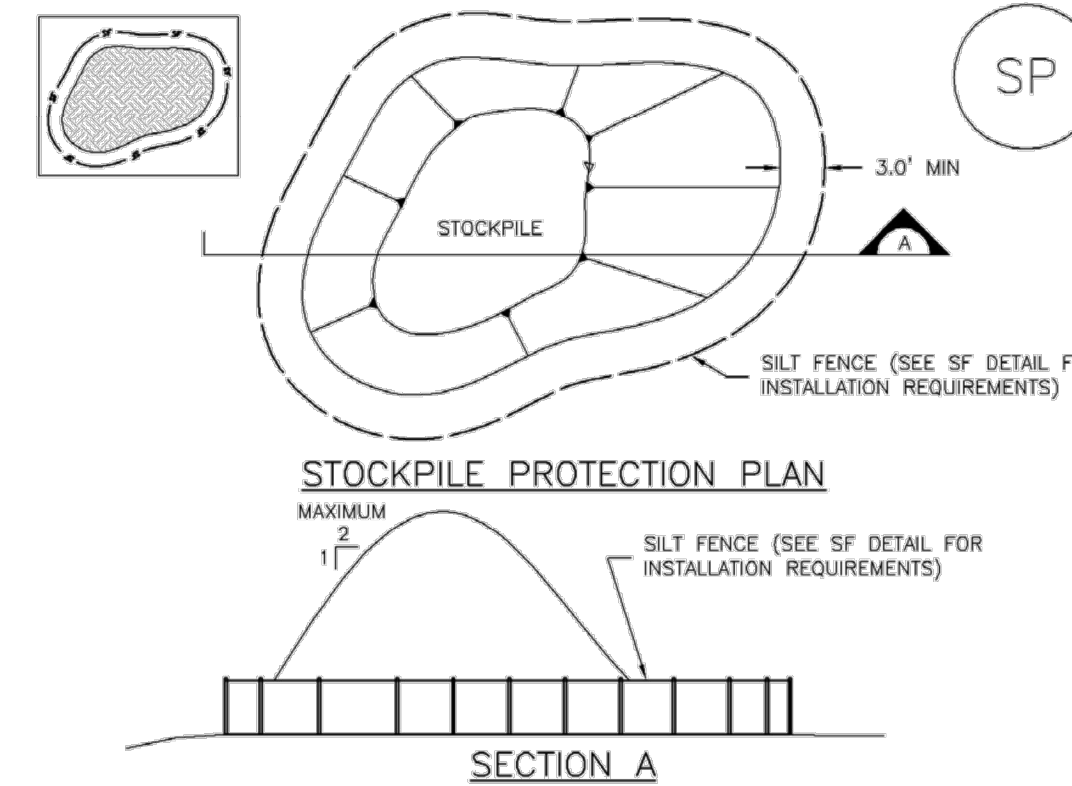
- SEE PLAN VIEW FOR:
  - LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
  - TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
- CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A 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.
- (DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

**SM-2 Stockpile Management (SP)**

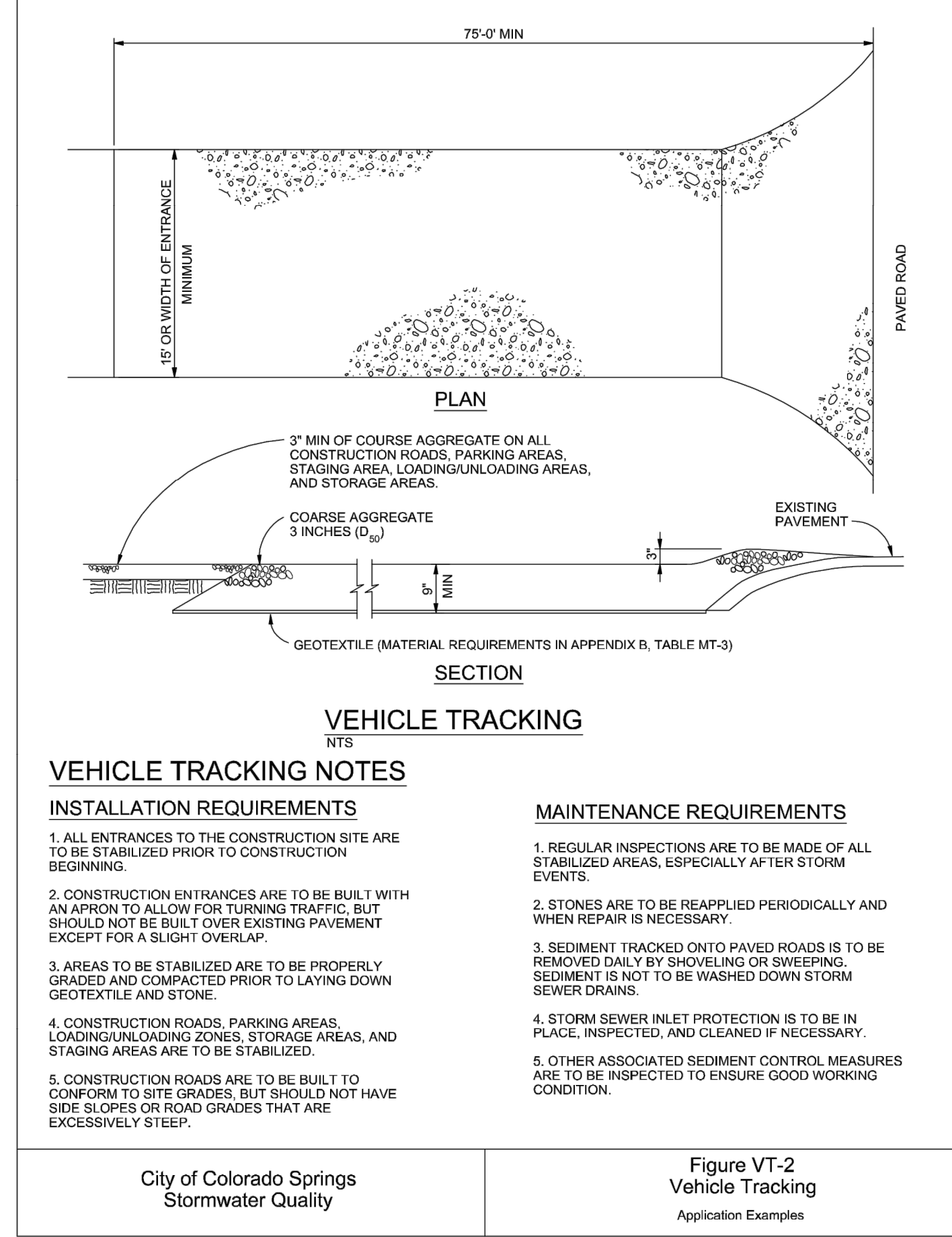


**SP-1. STOCKPILE PROTECTION**

**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.

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**VEHICLE TRACKING NOTES**

- INSTALLATION REQUIREMENTS**
- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
  - CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
  - AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
  - CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
  - CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.
- MAINTENANCE REQUIREMENTS**
- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
  - STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
  - SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
  - STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
  - OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

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

3-54

**SM-2 Stockpile Management (SM)**

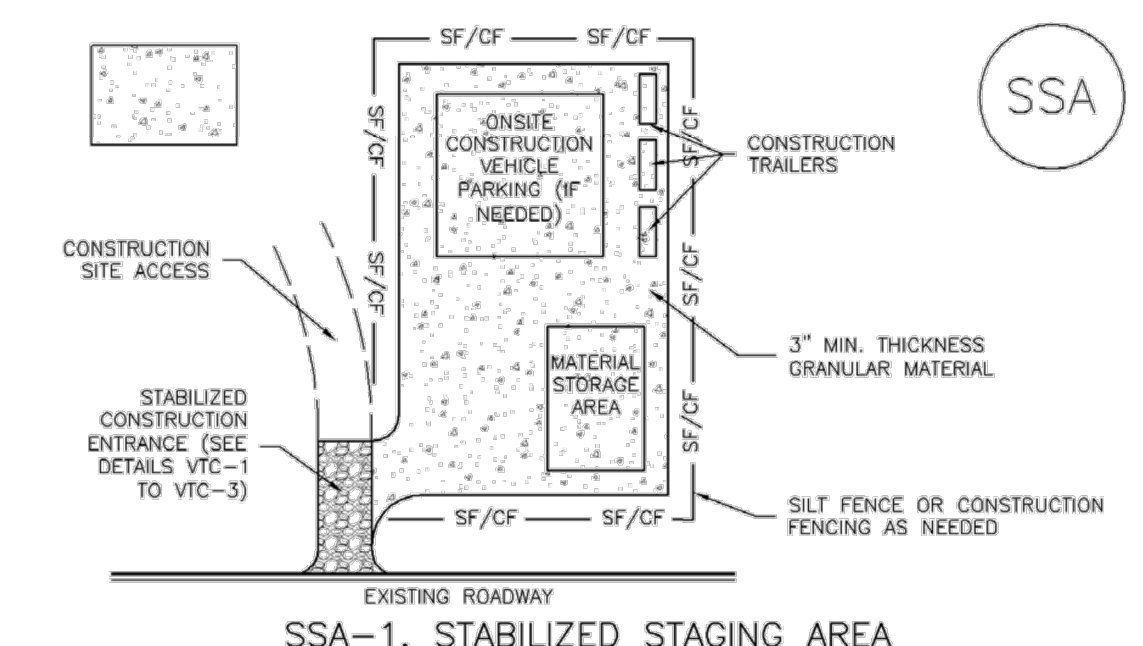
**STOCKPILE PROTECTION MAINTENANCE NOTES**

- 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 Urban Storm Drainage Criteria Manual Volume 3 November 2010

**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 Urban Storm Drainage Criteria Manual Volume 3 SSA-3

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

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UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

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				N/A	N/A	02-14-22	XXX	XXX	
HOMESTEAD NORTH AT STERLING RANCH FILING NO. 1 DETAIL									
SHEET 9 OF 10									
JOB NO. 25188.00									

