

# GRADING & EROSION CONTROL PLANS TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION

EL PASO COUNTY **APRIL 2023** 



# **VICINITY MAP**

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**PARTICIPANTS** 

TRIVIEW METROPOLITAN DISTRICT 16055 OLD FOREST POINT, STE 302 MONUMENT, CO 80132 CONTACT: JIM MCGRADY PHONE: (719) 488-6868

CONSULTING/DESIGN ENGINEER JDS-HYDRO CONSULTANTS. A DIVISION 5540 TECH CENTER DR, STE 100 COLORADO SPRINGS, CO 80903 CONTACT: MARIO DIPASQUALE, PE (719) 227-0072

Triview Metropolitan District

PRE-EXCAVATION CHECKLIST	COLOR CODE  FOR MARKING  UNDERGROUND UTILITY LINES	
Gas and Other Utility Lines Shown on Construction Plans	WHITE PROPOSED EXCAVATION  TEMPORARY SURVEY	
Utility Notification Center of Colorado (UNCC)—Call at Least Two (2) Business Days Ahead—1—800—922—1987	RED MARKINGS  RED ELECTRIC  YELLOW GAS, OIL, STEAM	
Utilities Located & Marked on the Ground	ORANGE COMMUNICATION, CATV	
Employees Briefed on Marking and Color Codes*	BLUE POTABLE WATER	
Employees Trained on Excavation and Safety Procedures for Natural Gas Lines	PURPLE IRRIGATION, RECLAIMED WATER, SLURRY LINES  GREEN SEWER	
When Excavation Approaches Gas Lines, Employees Must Expose Lines by Careful Probing and Hand— Digging	COLORADO 811  Always Call Before You Dig 811 or (800) 922-1987	

## Rev # Date By Chk'd 121 SOUTH TEJON ST, SUITE 1110 COLORADO SPRINGS, CO. 80903 WWW.RESPEC.COM (719) 266-5212 2023-04-27 1 OF 8 224.29

## SIGNATURE BLOCKS

#### **DESIGN 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 ON MY PART IN PREPARING THIS PLAN.

224.29 MARIO L. DIPASQUALE, P.E. #41667 PROJECT NO.

#### OWNER/DEVELOPER'S STATEMENT:

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

JIM MCGRADY, CONTACT TRIVIEW METROPOLITAN DISTRICT 16055 OLD FOREST POINT, STE 302 MONUMENT, CO 80132

#### EL PASO COUNTY

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY 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.

> JOSHUA PALMER, P.E. DATE:

## SURVEY DATA

TOPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE FOLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:

HORIZONTAL DATUM: HORIZONTAL COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL BASED UPON THE FOLLOWING: COORDINATES ARE SCALED FROM CONTROL POINT 5052 BEING A 2-INCH ALUMINUM CAP STAMPED AZTEC CP 52 SET AT THE TOP OF A DIRT BANK ALONG THE EAST SIDE OF GLEN EAGLE DR. APPROXIMATELY 380+- FEET NORTHERLY OF ST. LAWRENCE WAY. VALUES ARE BASED UPON A STATIC SURVEY SESSION WITH THE FOLLOWING RESULTS:

LATITUDE: 39-04-05916N; LONGITUDE: 104-49-24.82486 W STATE PLANE NORTHING: 1,450,401.759; STATE PLANE EASTING: 3,192,049.712 SCALE FACTOR: 1.0004063250 TRUNCATE NORTHING: 1,000,000.00; TRUNCATE EASTING: 3,000,000.00 PROJECT NORTHING: 450,401.759; PROJECT EASTING: 192,049.712

VERTICAL DATUM: NAVD 88 WITH GEOID G18US; BENCHMARK: CP 5052 EL: 7213.70

BENCHMARK: NGS CS110/DM9842 EL: 6843.25; BENCHMARK: NGS S294/KK0272 EL: 7116.72

PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY ANY OTHER FEDERAL OR STATE ACCESSIBILITY LAWS OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

FLOODPLAIN STATEMENT THIS ENTIRE PROPERTY IS NOT LOCATED WITHIN THE FLOODPLAIN OR

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATION AND THE THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY THE CITY OF FOUNTAIN DOES NOT ASSURE COMPLIANCE WITH THE ADA OR

FLOODWAY PER FIRM PANEL: 08041C0295G - EFFECTIVE ON, 12-07-2018

Equation 9-19

Chapter 9

Where the maximum value of  $H_a$  shall not exceed H, and:

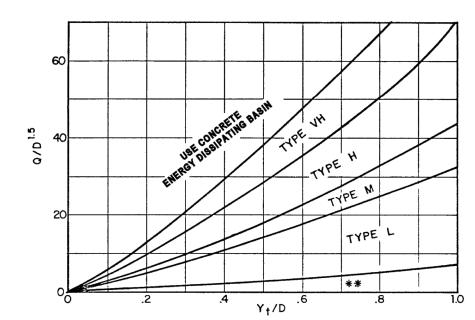
 $D_a$  = parameter to use in place of D in Figure 9-38 when flow is supercritical (ft)

 $D_c$  = diameter of circular culvert (ft)

 $H_a$  = parameter to use in place of H in Figure 9-39 when flow is supercritical (ft)

H = height of rectangular culvert (ft)

 $Y_n$  = normal depth of supercritical flow in the culvert (ft)



Use D<sub>a</sub> instead of D whenever flow is supercritical in the barrel. \*\*Use Type L for a distance of 3D downstream.

Figure 9-38. Riprap erosion protection at circular conduit outlet (valid for Q/D2.5  $\leq$  6.0)

Urban Storm Drainage Criteria Manual Volume 2

Urban Drainage and Flood Control District September 2017

## NOT TO SCALE

TIMING, CONSTRUCTION STAGING, AND SEQUENCING:

EXPECTED START DATE: JAN 2023 INSTALL TEMPORARY EROSION CONTROL - 2 DAYS PERIMETER SILT FENCING

VEHICLE TRACKING CONTROL PAD

ROUGH GRADING - 5 DAYS INSTALL FINAL SITE IMPROVEMENTS - 10 MONTHS REMOVE TEMPORARY EROSION CONTROL - 5 DAYS

MINIMUM BEST MANAGEMENT PRACTICES ELEMENTS:

STEP 1- EROSION AND SEDIMENT CONTROL

INSTALL SEDIMENT TRAPPING DEVICES (PERIMETER CONTROLS) PRIOR TO THE START OF CONSTRUCTION.

STEP 2- SPILL PREVENTION AND RESPONSE STEP 3- MATERIAL MANAGEMENT

MATERIAL AND EQUIPMENT STORAGE AREAS SHALL BE SECURE AND CONTAINED TO PREVENT DISCHARGE OF AND DISPOSED OF PROPERLY. MAINTAIN BMP'S ANY MATERIAL IN RUNOFF. WASTE SHALL BE CONTAINED

DURING BUILDING AND UTILITY CONSTRUCTION.

STEP 4- INSPECTION AND MAINTENANCE (SEE EROSION CONTROL NOTES). STEP 5- INSTALL FINAL STABILIZATION - BASE COURSE, LANDSCAPING, EROSION CONTROL BLANKETS, AND SEEDING.

STEP 6- REMOVE TEMPORARY CONTROLS - SILT FENCING AFTER PERMANENT FEATURES ARE INSTALLED.

FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT:

FINAL STABILIZATION MEASURES INCLUDE BASE COURSE, PARTIAL LANDSCAPE, AND REVEGETATION

PORTABLE TOILET - 0

**EARTHWORK SUMMARY:** 

PROPOSED SITE: CUT - 116 CY

FILL - 501 (\*1.15) = 576 CYNET - 460 CY FILL

ACCESS DRIVE & PUMP STATION SITE DISTURBED AREA - 37,554 SF, 0.86 AC SECONDARY ACCESS DRIVE DISTURBED AREA - 5,041, 0.12 AC TOTAL DISTURBANCE AREA - 42,595 SF, 0.98 AC

EROSION CONTROL FACILITIES:

PORTABLE TOILET - 0

SECONDARY ACCESS DRIVE PUMP STATION ACCESS DRIVE SILT FENCE (SF) - 372 LF SILT FENCE (SF) - 771 LF VEHICLE TRACKING PAD (VT) - 0 VEHICLE TRACKING PAD (VT) - 1 INLET PROTECTIONS - 0 INLET PROTECTIONS - 0 CHECK DAMS - 0 CHECK DAMS - 0 STABILIZED STAGING AREA - 0 STABILIZED STAGING AREA - 0 STOCKPILE PROTECTION - 0 STOCKPILE PROTECTION - 0

PUMP STATION SITE SILT FENCE (SF) - 478 LF VEHICLE TRACKING PAD (VT) - 1 INLET PROTECTIONS - 1 CHECK DAMS - 2 STABILIZED STAGING AREA - 1 STOCKPILE PROTECTION - 1 PORTABLE TOILET - 1

El Paso County Conservation District Shotgun Mix

Recommended Variety

Kaw, Bison, Champ

Lovington, Hachita, Alma

Lodorm

Arriba, Barton

Vaughn, Butte, El Reno, Niner

Glackwell, Greenville

Goshen, Pronghorn

Chevenne, Holt, Llano

Note: The above listed PLS rate per acre is for drilled application. If seeding is

completed using broadcasting methods, the PLS rate shall be doubled

**Common Name** 

(All Native)

Green Needlegrass

Grama, Sideoats

Prairie Sandreed

Yellow Indiangrass

Switchgrass

Wheatgrass, Westerr

Bluestem, Big

Grama, Blue

Percent of PLS Rate Per

Seed Mix | Acre (Drilled)

20.0%

10.0%

10.0%

20.0%

10.0%

10.0%

10.0%

10.0%

1.08

0.12

0.48

1.60

0.46

0.20

0.32

0.51

- 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 AND SENSITIVE ENVIRONMENTAL AREAS..
- 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.
- MANAGEMENT OF THE STORMWATER MANAGEMENT PLAN (SWMP) DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL MANAGER (ECM). 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.
- ONCE THE EROSION AND STORMWATER QUALITY CONTROL PERMIT (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.
- 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.
- 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.
- 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.
- 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.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- 11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- 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 DISCHARGE TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL OCCUR AS SHOWN WITHIN THE PLANS.
- 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, ORGANIC MATERIAL, 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, AND WITH ORIGINAL MANUFACTURER'S LABELS.
- 21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM, OR OTHER FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS) AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- 26. PRIOR TO CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE WAS PREPARED BY VIVID ENGINEERING GROUP (DATED 8/12/22) 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 APPLICATIONS 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

BASED ON THE DESIGN SHOWN THE DISTURBANCE IS LESS THAN ONE (1) ACRE.

- 30. EXISTING VEGETATION IS NOT NOTABLE, ONLY GRASSES/WEEDS ARE WITHIN THE LIMITS OF CONSTRUCTION.
- 31. THERE ARE NO BATCH PLANTS/ASPHALT PLANTS EXISTING OR PROPOSED FOR THIS SITE.
- 32. RECEIVING WATERS: TRIBUTARY OF BLACK SQUIRREL CREEK

**EROSION CONTROL NOTES:** 

33. THERE ARE NO SPRINGS, STREAMS, WETLANDS, OR OTHER SURFACE WATERS, INCLUDING AREAS THAT REQUIRE MAINTENANCE OF PRE-EXISTING VEGETATION WITHIN 50 FEET OF A RECEIVING WATER.

REVISION

STAMP

NOT FOR CONSTRUCTION

THIS DRAWING IS INCOMPLE AND NOT TO BE USED FO CONSTRUCTION UNLESS IT STAMPED, SIGNED AND DATE



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RN TEI

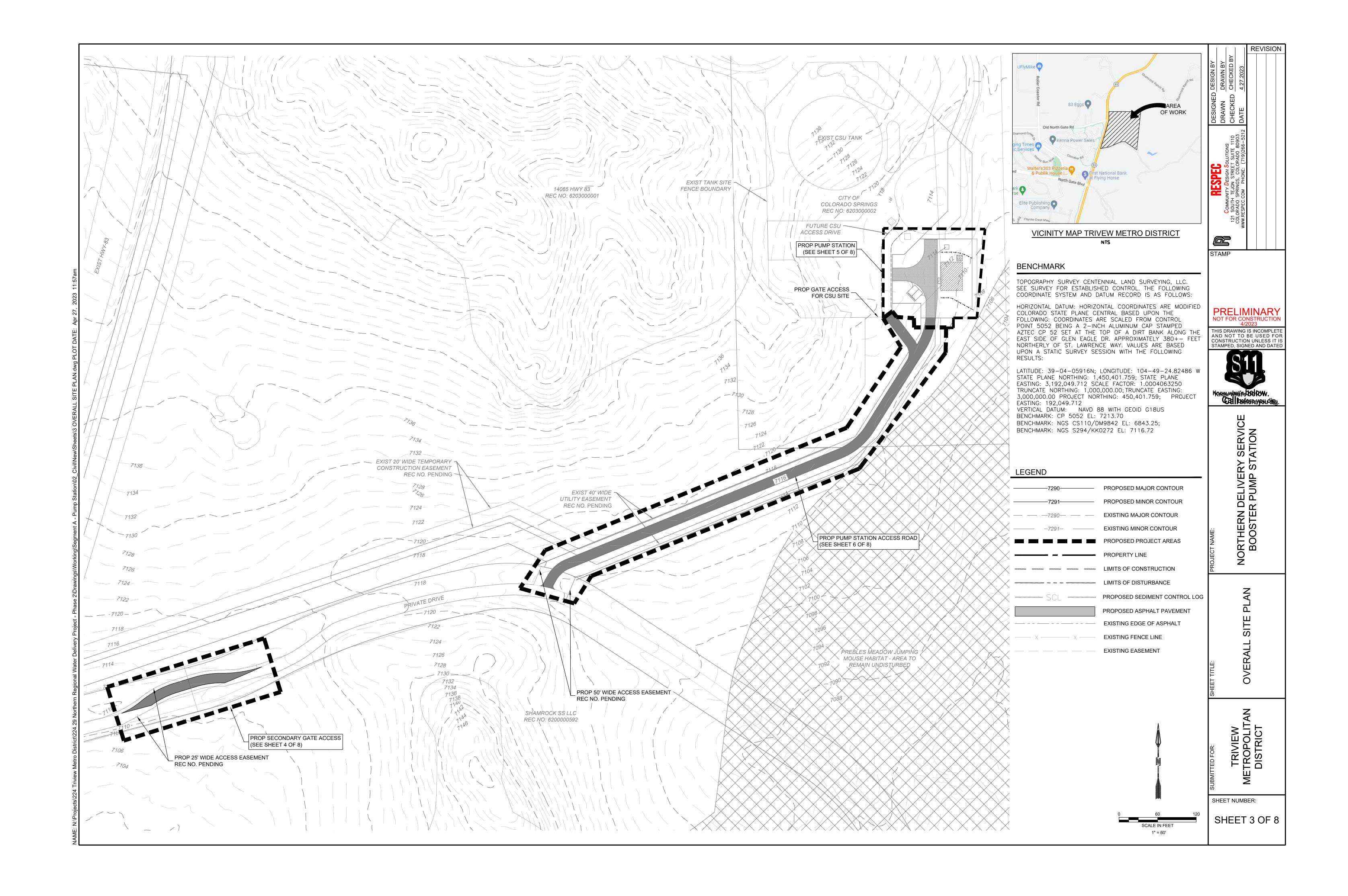
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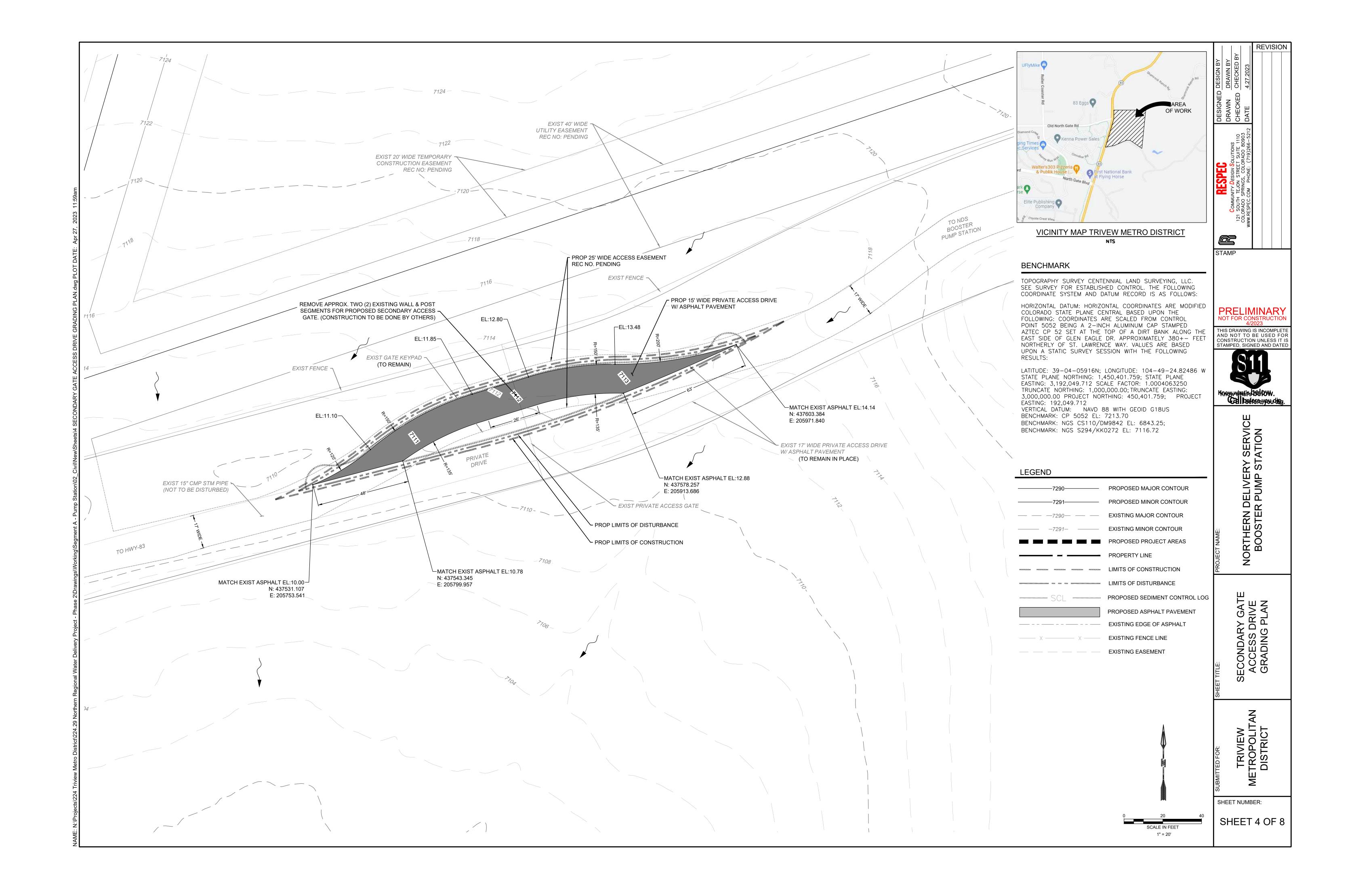
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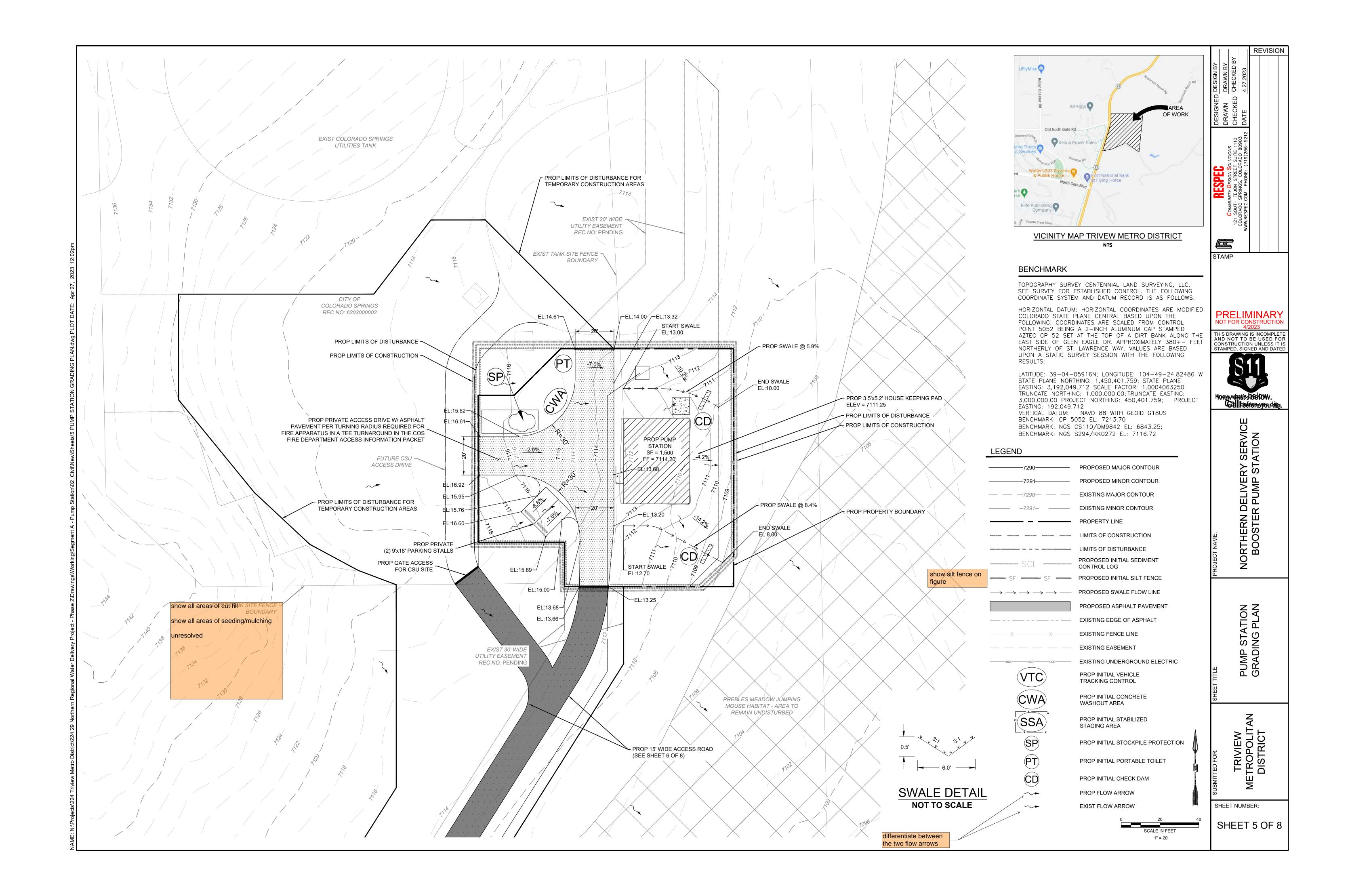
TRIVIEW TROPOLITA DISTRICT

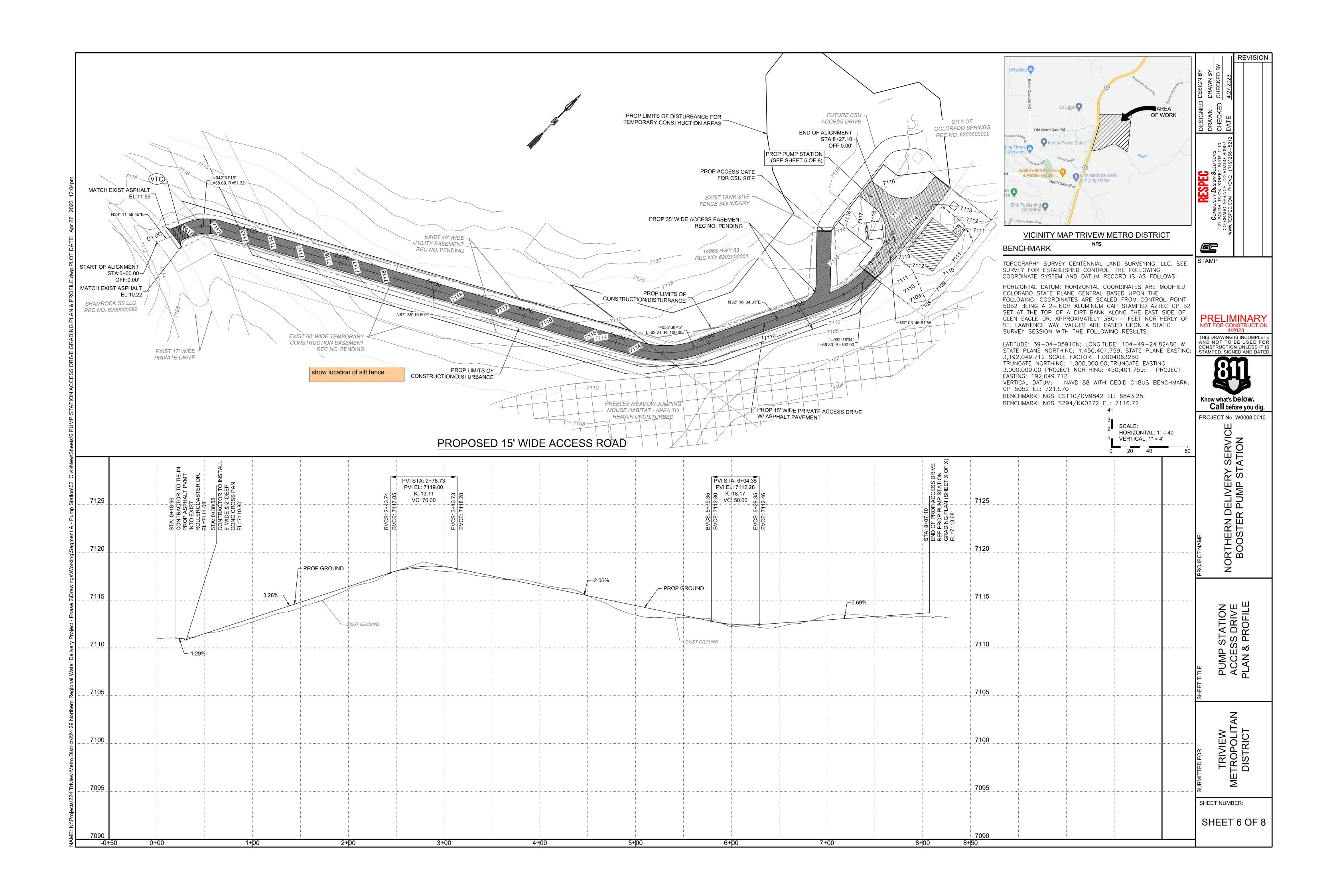
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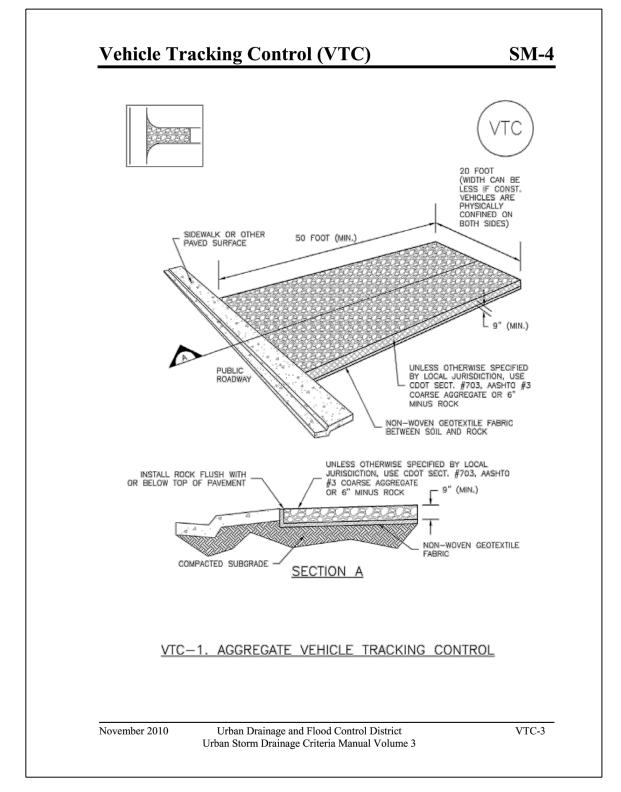
SHEET 2 OF 8

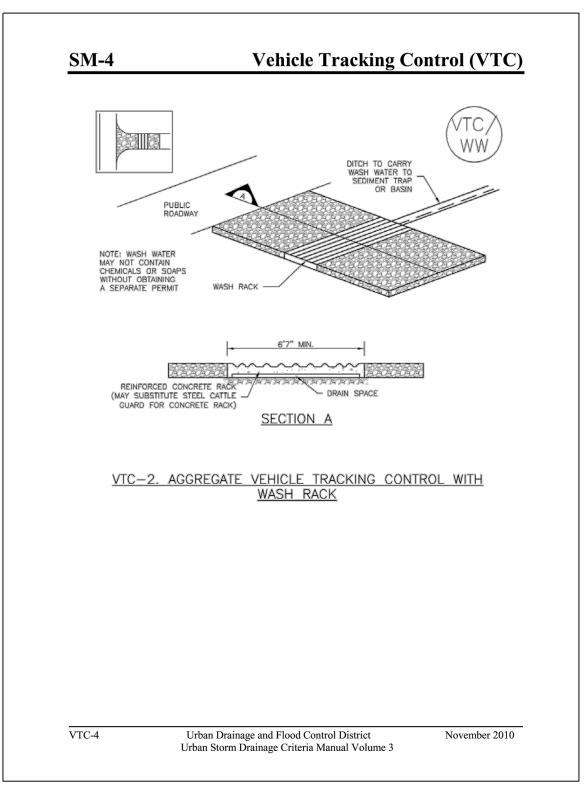


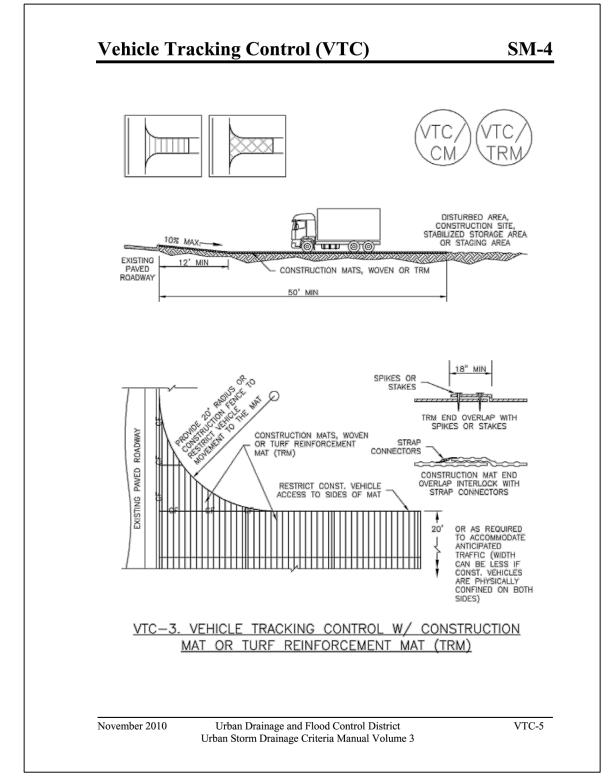






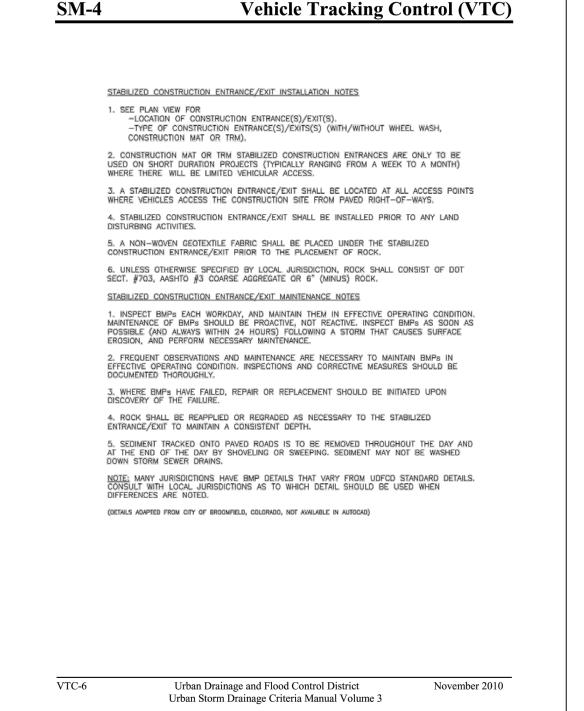






SC-2

SCL-5



NOT TO SCALE

Urban Storm Drainage Criteria Manual Volume 3

NOT TO SCALE

**Sediment Control Log (SCL)** 

SC-2

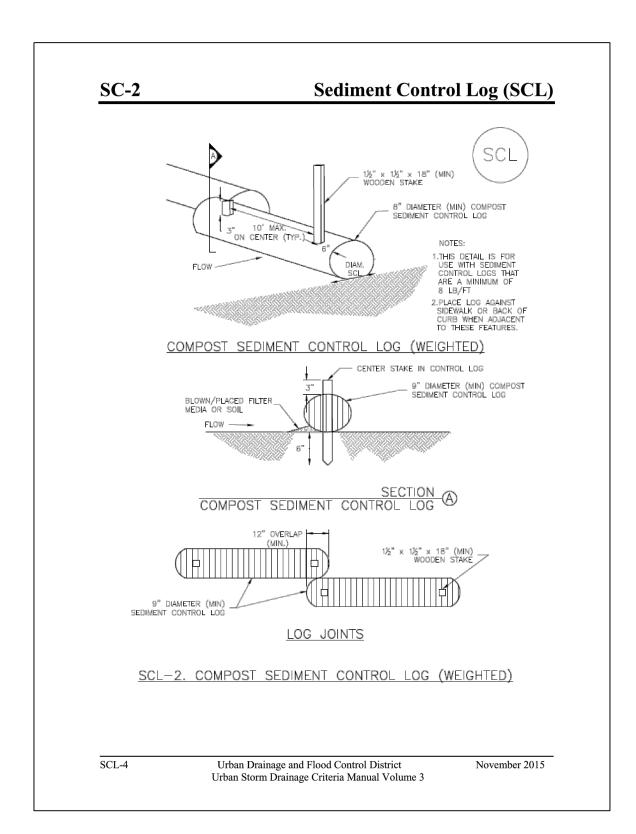
1½" x 1½" x 18" (MIN) WOODEN STAKE

9" DIAMETER (MIN) SEDIMENT CONTROL LOG

1.LARGER DIAMETER SEDIMENT CONTROL LOGS MAY NEED TO BE EMBEDDED DEEPER.

2.PLACE LOG AGAINST SIDEWALK OR BACK OF CURB WHEN ADJACENT TO THESE FEATURES.

SCL-3



**Sediment Control Log (SCL)** 4' MAX FOR TRENCHED SCLs 10' MAX FOR COMPOST SCLs SCL-3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH November 2015 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

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**Sediment Control Log (SCL)** SEDIMENT CONTROL LOG INSTALLATION NOTES 1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS. 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS. 5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY % OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED. 6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE. 7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS. GUIDAND. BE STAKED TO OF STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. LOGS SHOULD BE STAKED 10' ON CENTER. SEDIMENT CONTROL LOG 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. 4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG. 5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED, IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. (DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, 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. SCL-6 Urban Drainage and Flood Control District November 2015 Urban Storm Drainage Criteria Manual Volume 3

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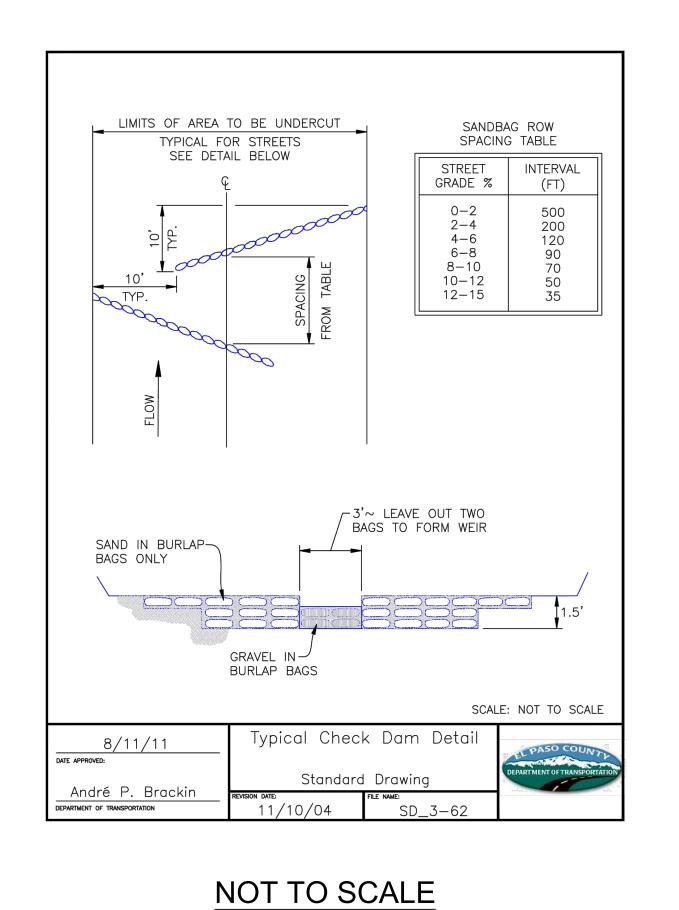
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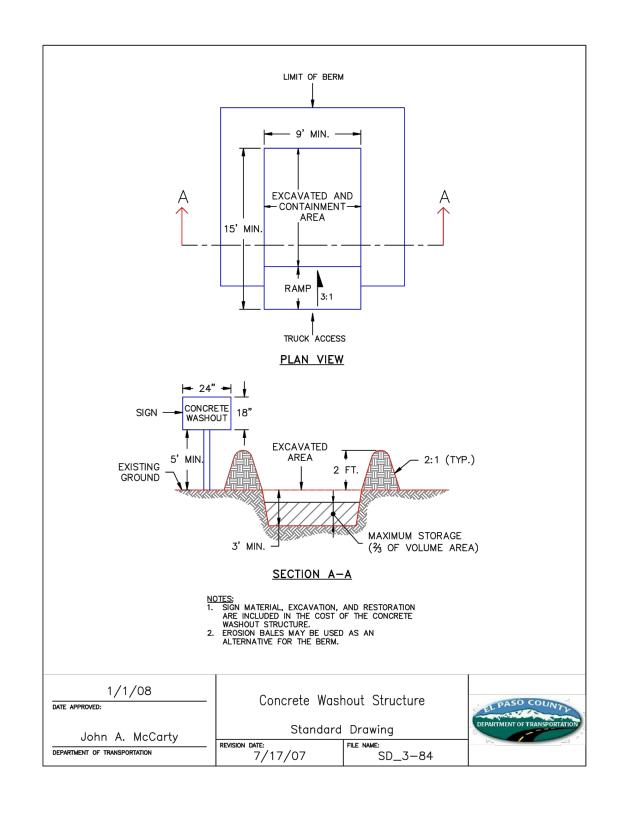
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TRENCHED SEDIMENT CONTROL LOG COMPACTED EXCAVATED TRENCH SOIL TRENCHED SEDIMENT CONTROL LOG LOG JOINTS SCL-1. TRENCHED SEDIMENT CONTROL LOG November 2015 Urban Drainage and Flood Control District

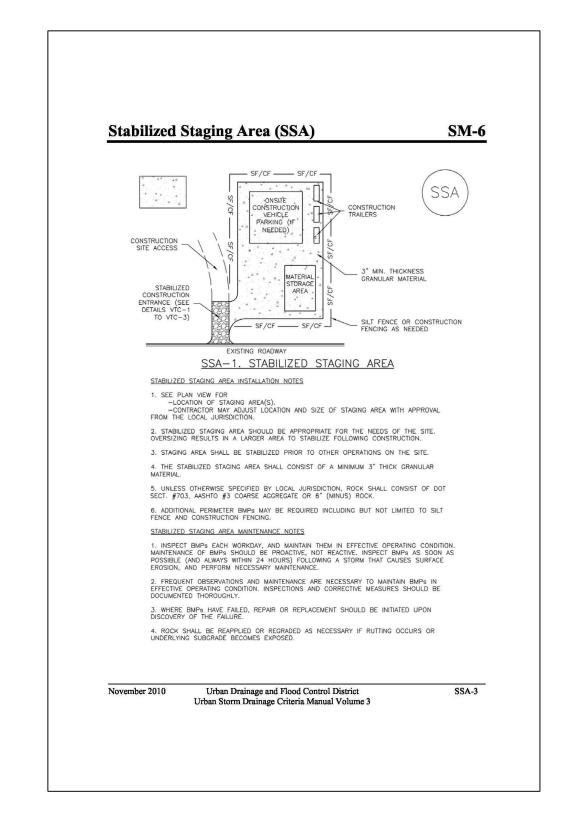
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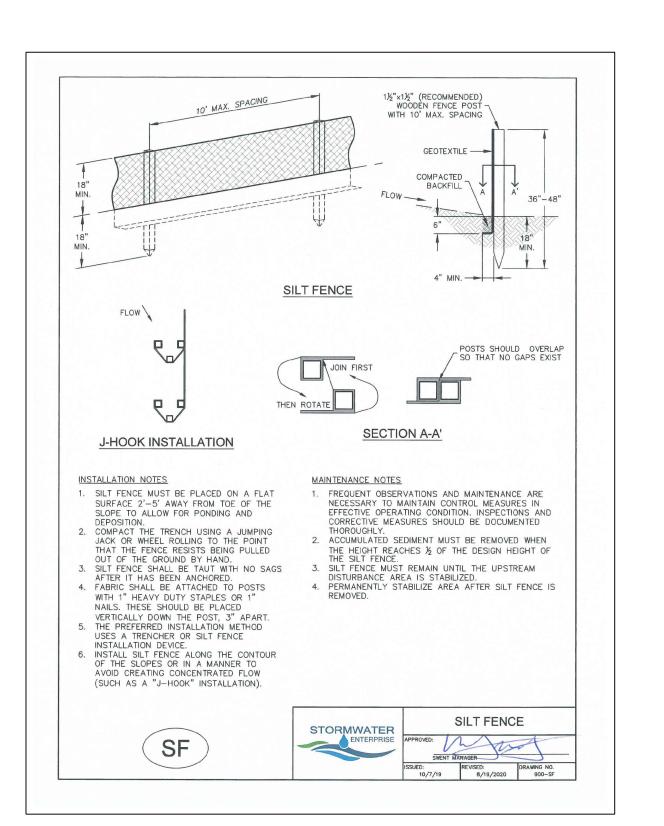


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#### GEC\_V2.pdf Markup Summary 5-22-2023

#### dotprete (5)

EPC STORMANTER REVIEW COMMENTS NO GRANZE BOXES WITH BLACK TEXT

**Subject**: Stormwater Comments Color **Page Label**: [1] 1 COVER SHEET

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Subject: Text Box

Page Label: [5] 5 PUMP STATION GRADING PLAN

Author: dotprete

Date: 5/17/2023 2:22:01 PM

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Subject: Engineer

Page Label: [5] 5 PUMP STATION GRADING PLAN

Author: dotprete

Date: 5/17/2023 2:23:31 PM

Status: Color: ■ Layer: Space: show silt fence on figure

show all areas of cut fill

show all areas of seeding/mulching

unresolved



Subject: Callout

Page Label: [5] 5 PUMP STATION GRADING PLAN

Author: dotprete

Date: 5/17/2023 2:23:59 PM

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Page Label: [6] 6 PUMP STATION ACCESS DRIVE

**GRADING PLAN & PROFILE** 

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