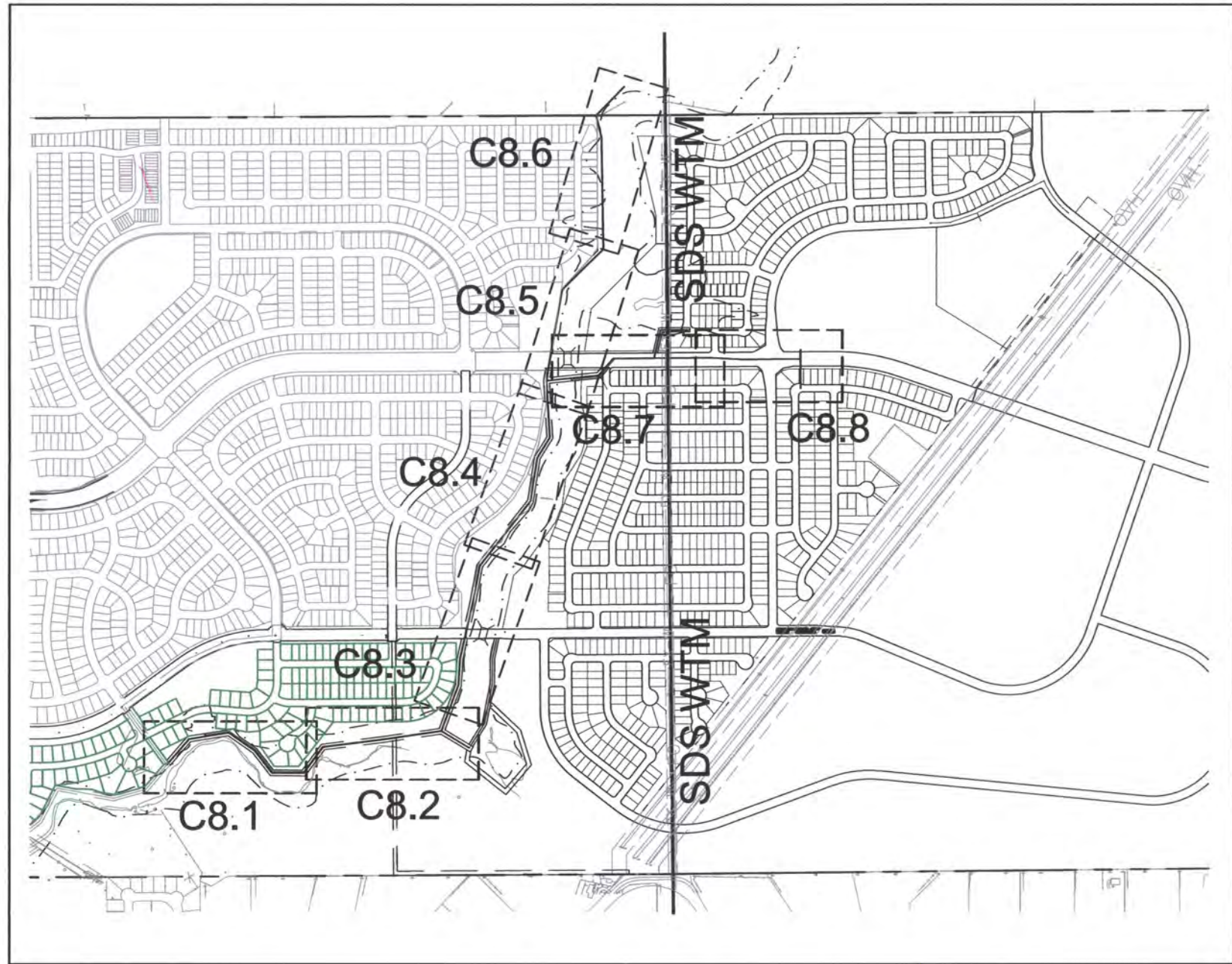
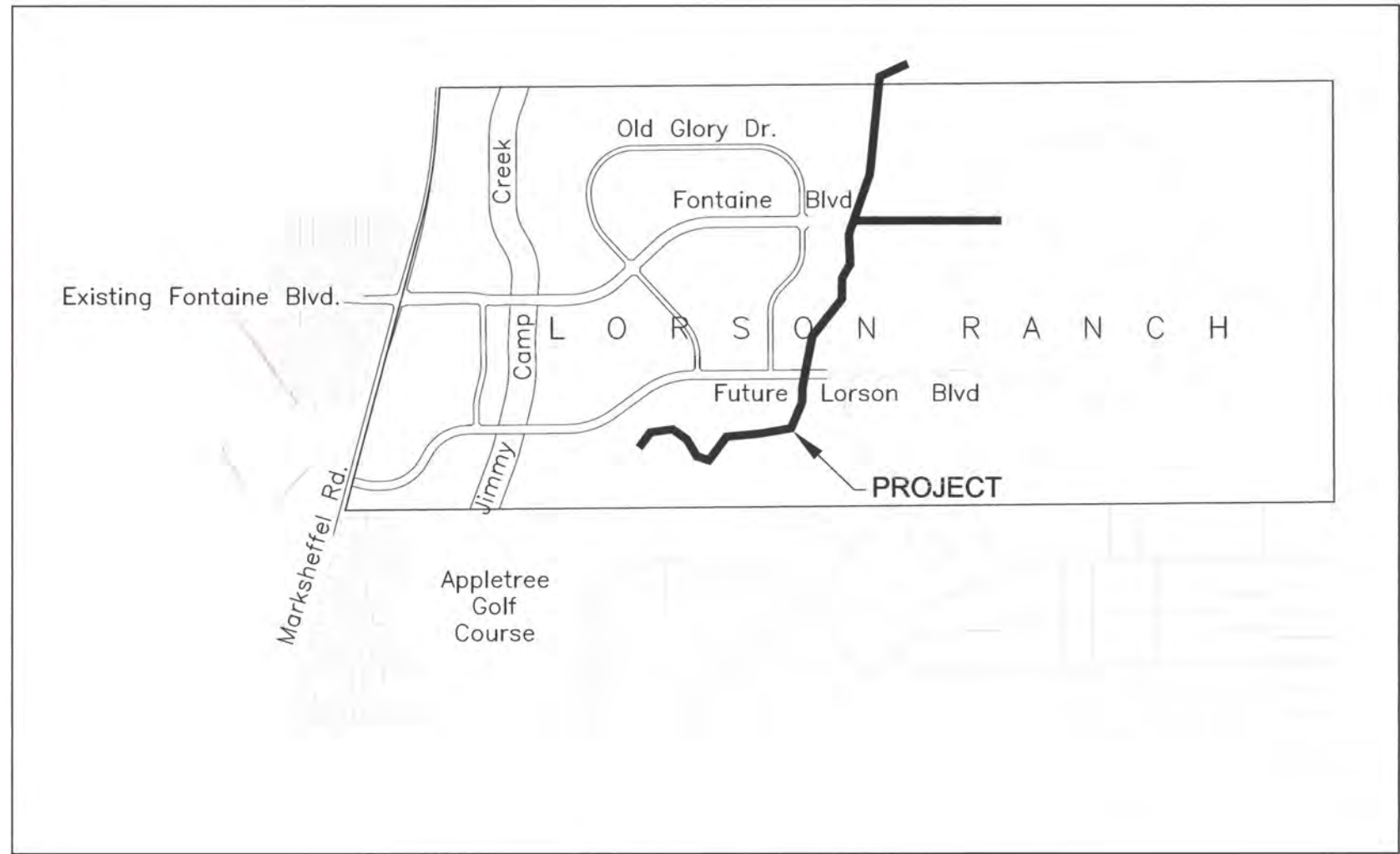


CONSTRUCTION PLANS  
FOR  
**LORSON RANCH EAST**  
**EAST JIMMY CAMP INTERCEPTOR**  
**SANITARY SEWER CONSTRUCTION PLANS**



**KEY MAP**  
SCALE: 1"=1000'



**VICINITY MAP**  
NO SCALE

**WATER / SANITARY**  
WIDEFIELD WATER AND SANITATION DISTRICT  
8495 FONTAINE BLVD.  
COLORADO SPRINGS, CO 80925  
719-390-7111

**CABLE**  
COMCAST  
P.O. BOX 173838  
DENVER, CO 80217  
970-641-4774

**ELECTRIC**  
MOUNTAIN VIEW ELECTRIC  
11140 E. WOODMEN RD.  
COLORADO SPRINGS, CO 80831  
719-495-2283

**SECURITY FIRE PROTECTION DISTRICT**  
400 SECURITY BOULEVARD  
SECURITY, CO 80911  
719-392-7121

**TELEPHONE**  
CENTURYLINK  
7925 INDUSTRY ROAD  
COLORADO SPRINGS, CO 80939  
719-278-4651

**GAS**  
BLACK HILLS ENGERGY  
7060 ALLEGRE ST.  
FOUNTAIN, CO 80817  
719-393-6639

**EL PASO COUNTY**  
PLANNING AND COMMUNITY DEVELOPMENT  
2880 INTERNATIONAL CIRCLE  
COLORADO SPRINGS, CO 80910  
719-520-6300

**BASIS OF BEARING**

BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTH HALF OF SECTION 23, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN AS BEING SOUTH 89°41'52" WEST. THE EAST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 3-1/2" ALUMINUM CAP MONUMENT AND THE WEST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 2-1/2" ALUMINUM CAP MONUMENT

**BENCHMARK**

FIMS MONUMENT F204 LOCATED AT THE NORTHWEST CORNER OF FONTAINE BLVD AND COTTONWOOD GROVE DR. ELEVATION 5724.072 (N.G.V.D. 29)

**TRAFFIC CONTROL NOTE**

THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES AND MONITORING NECESSARY TO SAFELY COMPLETE THE WORK SHOWN IN THESE CONSTRUCTION DOCUMENTS IN CONFORMANCE WITH M.U.T.C.D. GUIDELINES. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK FOR PLAN REVIEW, PERMITS AND PROCESSING. TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY BUT IS INCLUDED IN THE COST OF THE PROJECT.

PREPARED FOR:  
**LORSON, LLC**  
212 N. WAHSATCH AVE., SUITE 301  
COLORADO SPRINGS, CO 80903  
719-635-3200  
CONTACT: JEFF MARK

PREPARED BY:  
**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
BURNSVILLE, MN 55306  
719-570-1100  
CONTACT: RICHARD L. SCHINDLER P.E.

**COLORADO SPRINGS UTILITIES**  
**WATER PLAN DESIGN APPROVAL**

APPROVED BY: *Jennifer Irvine*

DATE: 12/11/17

PROJECT NUMBER: 2017-SO96

WORK ORDER NUMBER: 3232774

CSU SHEET 1 OF 3

\*See sheets C8.7 and C8.8  
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

**DISTRICT APPROVAL (WASTEWATER)**

THE WIDEFIELD WATER AND SANITATION DISTRICT RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE WIDEFIELD WATER AND SANITATION DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.

WIDEFIELD WATER AND SANITATION DISTRICT  
WASTEWATER DESIGN APPROVAL

DATE: 12/08/17 BY: *John PM/Am*

PROJECT NO. \_\_\_\_\_

IN CASE OF ERRORS OR OMISSIONS WITH THE WATER DESIGN AS SHOWN ON THIS DOCUMENT THE STANDARDS AS DEFINED IN THE "RULES AND REGULATIONS FOR INSTALLATION OF WATER MAINS AND SERVICES" SHALL RULE.

APPROVAL EXPIRES 180 DAYS FROM DESIGN APPROVAL



Know what's below.  
Call before you dig.

CALL 2-BUSINESS DAYS IN ADVANCE  
BEFORE YOU DIG, GRADE OR  
EXCAVATE FOR THE MARKING OF  
UNDERGROUND MEMBER UTILITIES

**SHEET INDEX**

SHEET NO.	SHEET DESCRIPTION
C1.1	COVER SHEET
C1.2	NOTES
C1.3	OVERALL LAYOUT
C4.1-C4.2	FUTURE DEVELOPMENT GRADING & EROSION CONTROL PLAN & DETAILS
C8.1-C8.8	SANITARY SEWER PLAN AND PROFILE
S1	CAISSON DETAILS
C12.1	UTILITY DETAILS

**DEVELOPER'S STATEMENT**

THE UNDERSIGNED OWNER/DEVELOPER HAS READ AND WILL COMPLY WITH ALL THE REQUIREMENTS SPECIFIED IN THESE CONSTRUCTION PLANS AND THE ACCOMPANYING DRAINAGE REPORT.

BUSINESS NAME: LORSON, LLC

BY: *Jeff Mark* DATE: 12/5/17

TITLE: *Authorized Signing Agent*

ADDRESS: 212 N. WAHSATCH AVE, SUITE 301  
COLORADO SPRINGS, CO 80903

**CONSTRUCTION APPROVAL**

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. 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 MANUALS VOLUME 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

Approved

JENNIFER IRVINE  
COUNTY ENGINEER/ECM ADMINISTRATOR  
By: *Jennifer Irvine*, County Engineer  
Date: 12/20/2017

ENGINEER'S APPROVAL: County Department of Public Works

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

RICHARD L. SCHINDLER, P.E. # 33997  
FOR AND ON BEHALF OF CORE ENGINEERING GROUP

**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
BURNSVILLE, MN 55306  
PH: 719.570.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. 1  
PROJECT: EAST JCC INTERCEPTOR  
212 N. WAHSATCH AVE., SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
CONTACT: JEFF MARK

DRAWN: LIA  
DESIGNED: RLS  
CHECKED: RLS

COVER SHEET  
EAST JIMMY CAMP CREEK INTERCEPTOR  
CONSTRUCTION PLANS

DATE  
DECEMBER 4, 2017

PROJECT NO.  
100.041

SHEET NUMBER  
C1.1

TOTAL SHEETS: 15



## CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM DREXEL, BARRELL & CO., JULY, 2005. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
3. DEPTH OF MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:  
BASE OF ALL CUTS AND FILLS - 12 INCHES,  
FULL DEPTH OF ALL EMBANKMENTS
4. THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
5. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
6. PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER TIRED VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
7. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
8. FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
  - HAY BALE BARRIERS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
  - SILT FENCE WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
  - TEMPORARY SEDIMENTATION BASINS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
  - MULCHING AND SEEDING OF EXCESSIVE SLOPED AREAS AS NEEDED OR AS DIRECTED BY THE ENGINEER.
  - TEMPORARY VEHICLE TRACKING CONTROL AS NEEDED AND/OR DIRECTED BY THE ENGINEER.
  - CONCRETE WASH AREAS.
  - INLET PROTECTION.
- THESE AND ALL EROSION CONTROL BEST MANAGEMENT PRACTICES AS SHOWN IN THE GRADING AND EROSION CONTROL PLANS SHALL BE STRICTLY ADHERED TO.
10. FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR LORSON RANCH.

# WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

3. ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WIDEFIELD WATER AND SANITATION DISTRICT SPECIFICATIONS. COMPACTION REQUIREMENTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE WIDEFIELD WATER AND SANITATION DISTRICT OR A HIGHER STANDARD IS IMPOSED BY ANOTHER AGENCY HAVING RIGHT-OF-WAY JURISDICTION.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE WIDEFIELD WATER AND SANITATION DISTRICT. THE WIDEFIELD WATER AND SANITATION DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
3. THE DEVELOPER OR HIS ENGINEER HAS LOCATED ALL FIRE HYDRANTS AND FUTURE SERVICE STUBS. ANY REQUIRED REALIGNMENT, EITHER HORIZONTAL OR VERTICAL, SHALL BE AT THE EXPENSE OF THE DEVELOPER.
4. ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS, VALVES AND FIRE HYDRANTS WILL BE WRAPPED WITH POLYETHYLENE TUBING, BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
5. ALL DUCTILE IRON PIPE SHALL BE DOUBLE BONDED. DIP SHALL HAVE CATHODIC PROTECTION USING NO. 6 WIRE WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET.
6. PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
7. ALL FITTINGS SHALL BE DUCTILE IRON -MECHANICAL JOINT AND HAVE 1 LB. MAGNESIUM ANODES AT EVERY FITTING.
8. THE CONTRACTOR IS REQUIRED TO NOTIFY THE WIDEFIELD WATER AND SANITATION DISTRICT (390-7111) A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES 48 HOURS PRIOR TO CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.
9. THE LOCATION OF ALL UTILITIES AS SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL FIELD EXCAVATE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL TIE-INS. CONTRACTOR SHALL NOTIFY THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER OF THE FIELD VERIFIED INFORMATION PRIOR TO CONSTRUCTION.
11. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
12. ANY WATER UTILITY MATERIAL REMOVED AND NOT REUSED SHALL BE RETURNED TO THE WIDEFIELD WATER AND SANITATION DISTRICT IF THE DISTRICT SO REQUESTS.
13. THE CONTRACTOR SHALL AT HIS EXPENSE SUPPORT AND PROTECT ALL UTILITY MAINS SO THAT THEY WILL FUNCTION CONTINUOUSLY DURING CONSTRUCTION. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT WILL BE REPLACED IMMEDIATELY BY EITHER THE CONTRACTOR OR THE WIDEFIELD WATER AND SANITATION DISTRICT AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.
14. ANY PUMPING OR BYPASS OPERATIONS MUST BE REVIEWED AND APPROVED PRIOR TO EXECUTION BY BOTH THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER.
15. DISINFECTION SHALL BE ACCOMPLISHED BY GLUING TABLETS TO THE TOP OF THE LINE. POWDER OR GRANULAR HTH SHALL NOT BE USED. SEE WIDEFIELD SPECS FOR FURTHER DEFINITION OF DISINFECTION TECHNIQUES.
16. CONTRACTOR MUST REPLACE OR REPAIR ANY DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.
17. ALL WATER LINES 6" AND LARGER, AND ALL SEWER LINES 8" AND LARGER, SHALL HAVE AS "AS-BUILT" PLANS PREPARED AND APPROVED PRIOR TO FINAL ACCEPTANCE BY THE WIDEFIELD WATER AND SANITATION DISTRICT.
18. PRIOR TO CONSTRUCTION, A PRE-CONSTRUCTION CONFERENCE IS REQUIRED A MINIMUM OF 72 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. TO SET THE PRE-CONSTRUCTION CONFERENCE, CONTACT BRANDON BERNARD-WATER SUPERINTENDENT (464-2051) AND/OR MARK MCCORMICK, WASTEWATER SUPERINTENDENT OF THE WIDEFIELD WATER AND SANITATION DISTRICT FOR A TIME. NO PRE-CONSTRUCTION CONFERENCE TIMES WILL BE SET UNTIL 4 SETS OF SIGNED DRAWINGS ARE RECEIVED BY THE WIDEFIELD W & S DISTRICT. PRE-CONSTRUCTION DATE \_\_\_\_\_/INITIALS \_\_\_\_\_



WIDEFIELD WATER AND SANITATION DISTRICT UTILITY CONSTRUCTION NOTES

1. ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE CATHODIC PROTECTION AND 1 LB MAGNESIUM ANODES AT EVERY FITTING.
2. ALL FIRE HYDRANTS SHALL BE MEULLER SUPER CENTURION 200 OR AMERICAN AVK SERIES 2700, (MODERN)

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PCD AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD INSPECTIONS.
2. 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.
3. 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.
4. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE 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 PCD INSPECTIONS STAFF.
6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
8. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
9. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE 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.
11. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
12. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
13. EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
14. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMPs MAY BE REQUIRED BY EL PASO COUNTY PCD IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
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. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
18. 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.
19. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
22. INDIVIDUALS 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 INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPODES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY RMG AND SHALL BE CONSIDERED A PART OF THESE PLANS.
27. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIAL

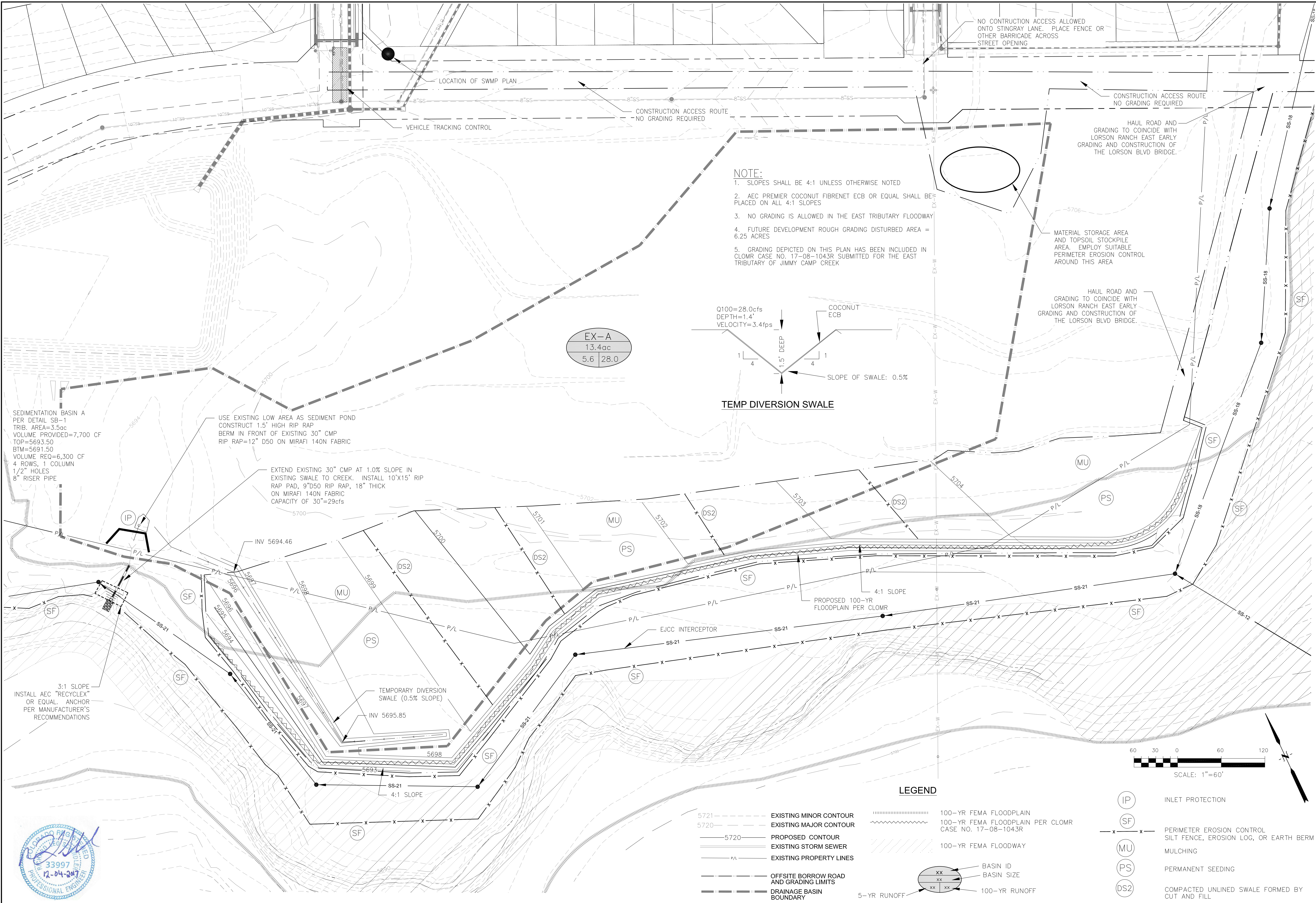
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
WATER QUALITY CONTROL DIVISION  
WQCD - PERMITS  
4300 CHERRY CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

TOTAL SHEETS: 15		SHEET NUMBER		PROJECT NO. 100.041		DATE DECEMBER 4, 2017	
		<div>NOTES</div> <div>EAST JIMMY CAMP CREEK INTERCEPTOR</div>					
DRAWN: LJA DESIGNED: RLS CHECKED: RLS		PROJECT: EAST JCC INTERCEPTOR FONTAINE BLVD. – LORSON BLVD. EL PASO COUNTY, COLORADO		PREPARED FOR: LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK		NO. DESCRIPTION DATE 1. X X X X X	
				CORE ENGINEERING GROUP 15004 1ST AVENUE S. BURNSVILLE, MN 55306 PH: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@cegi.com			

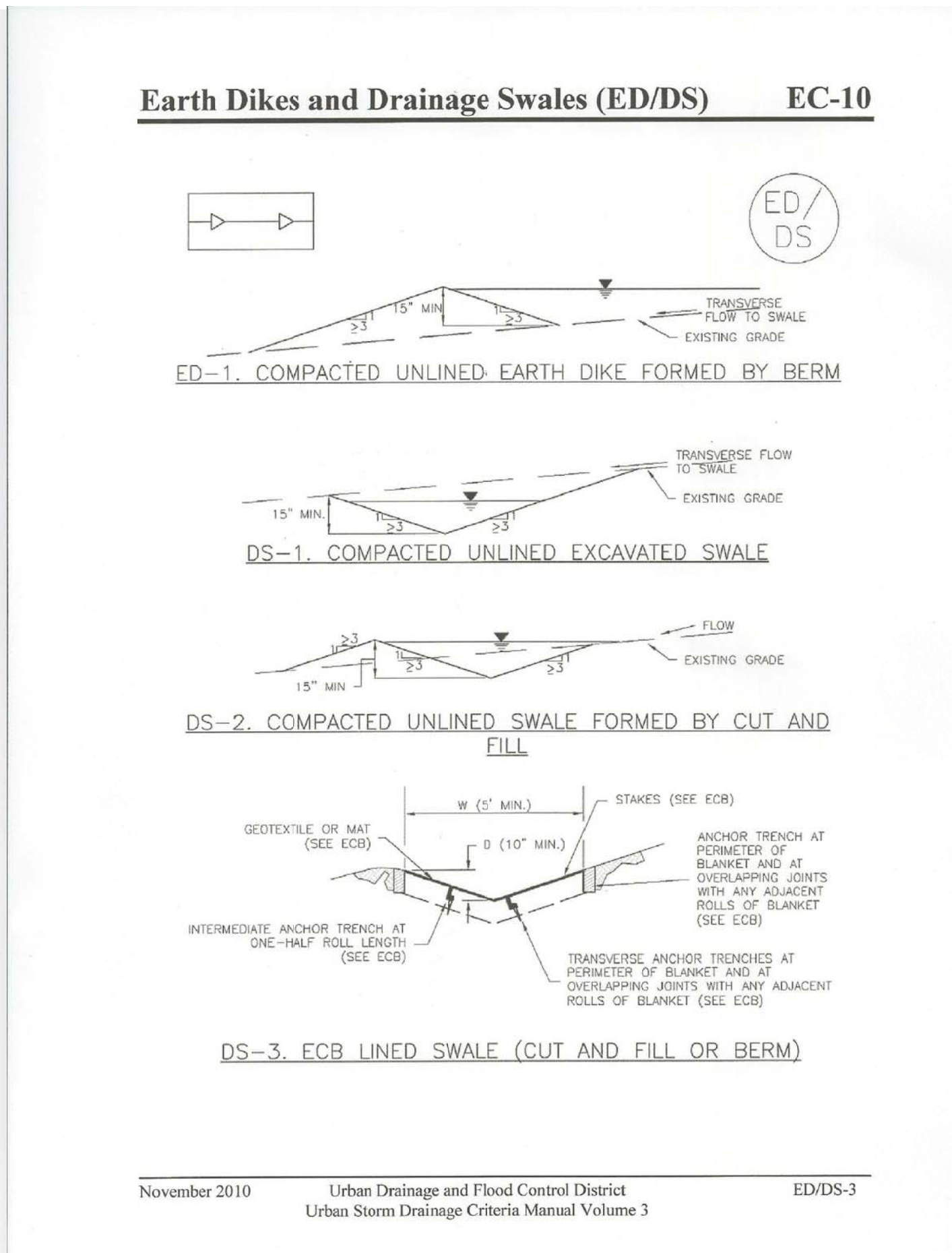
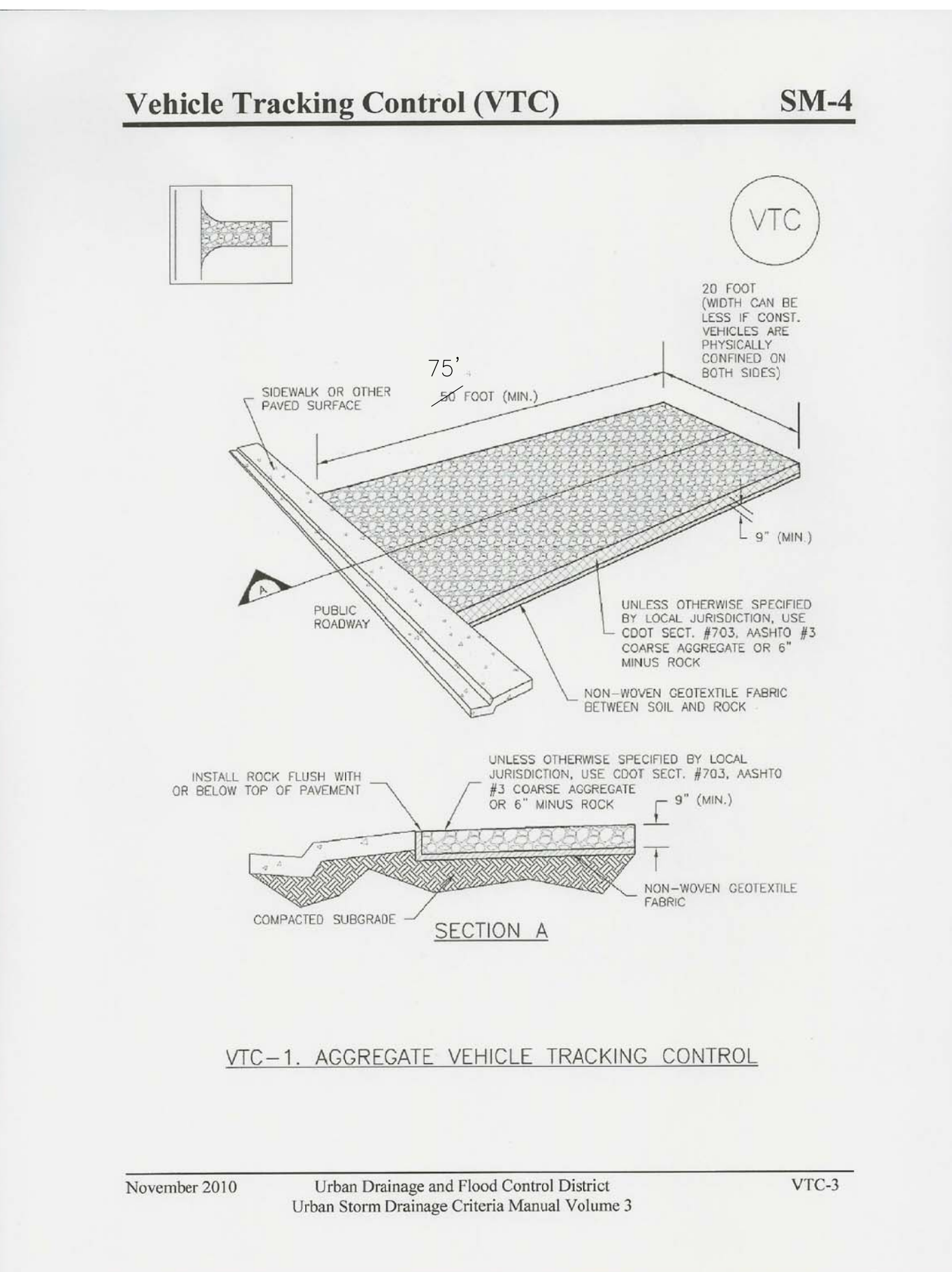
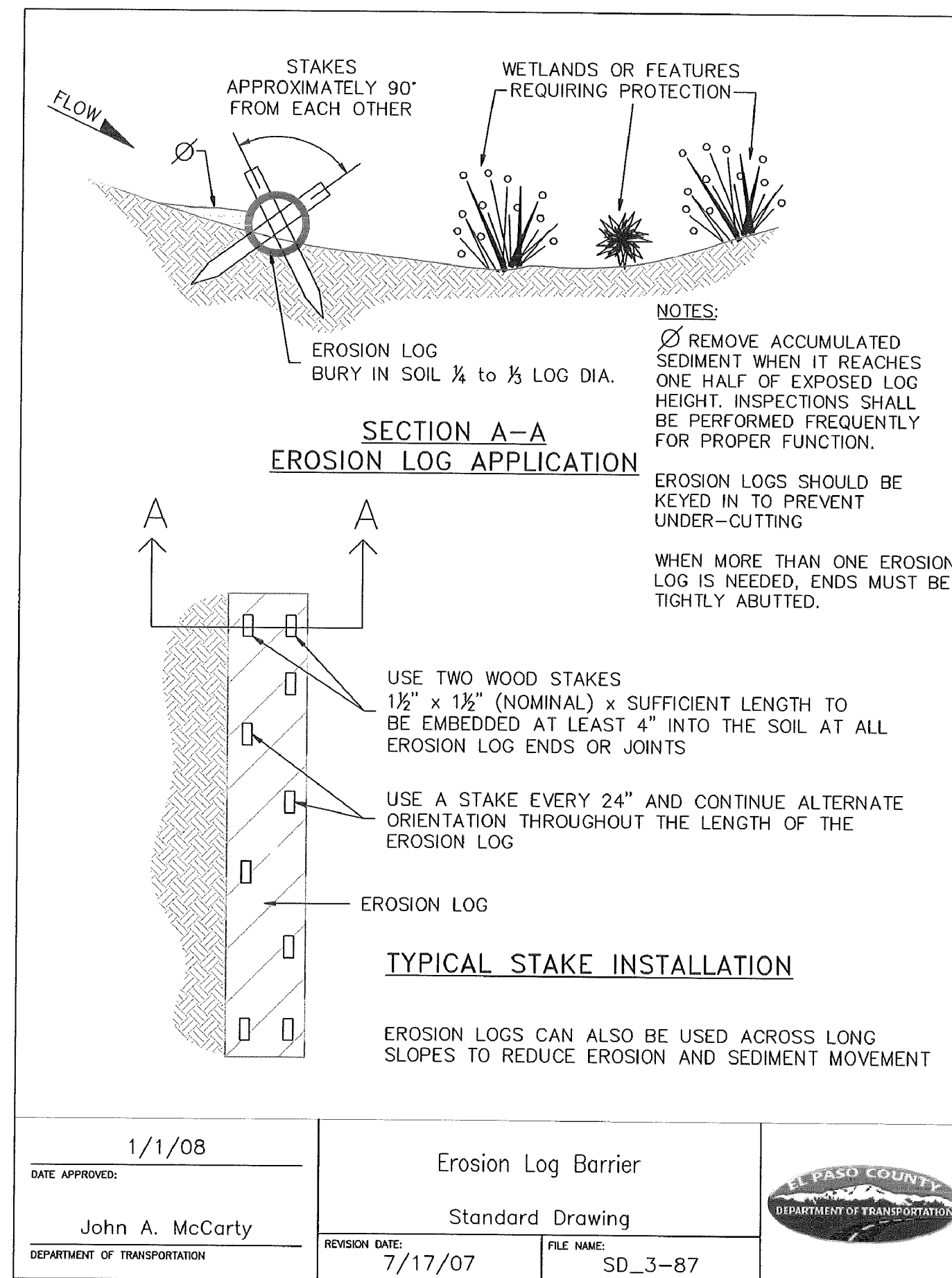
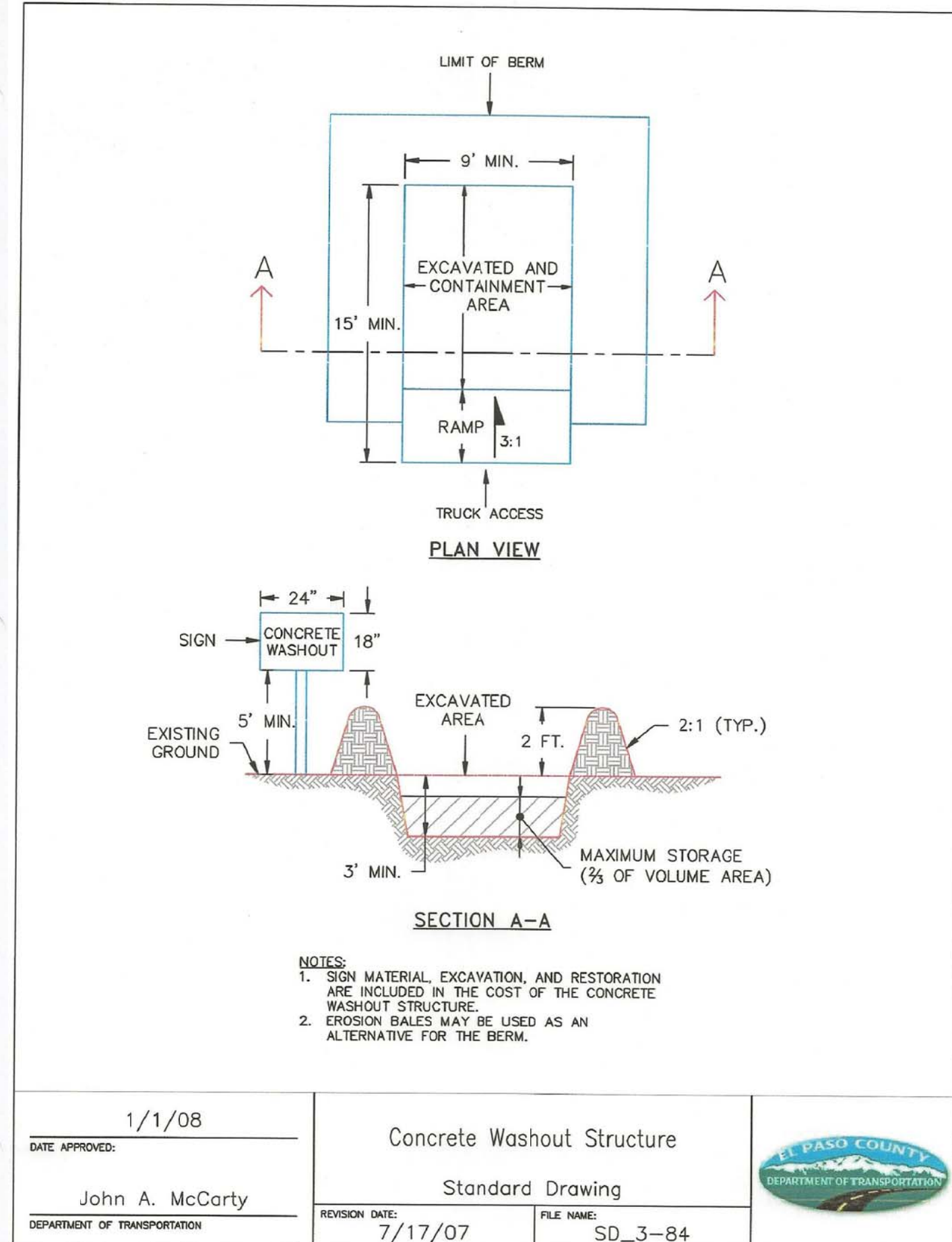
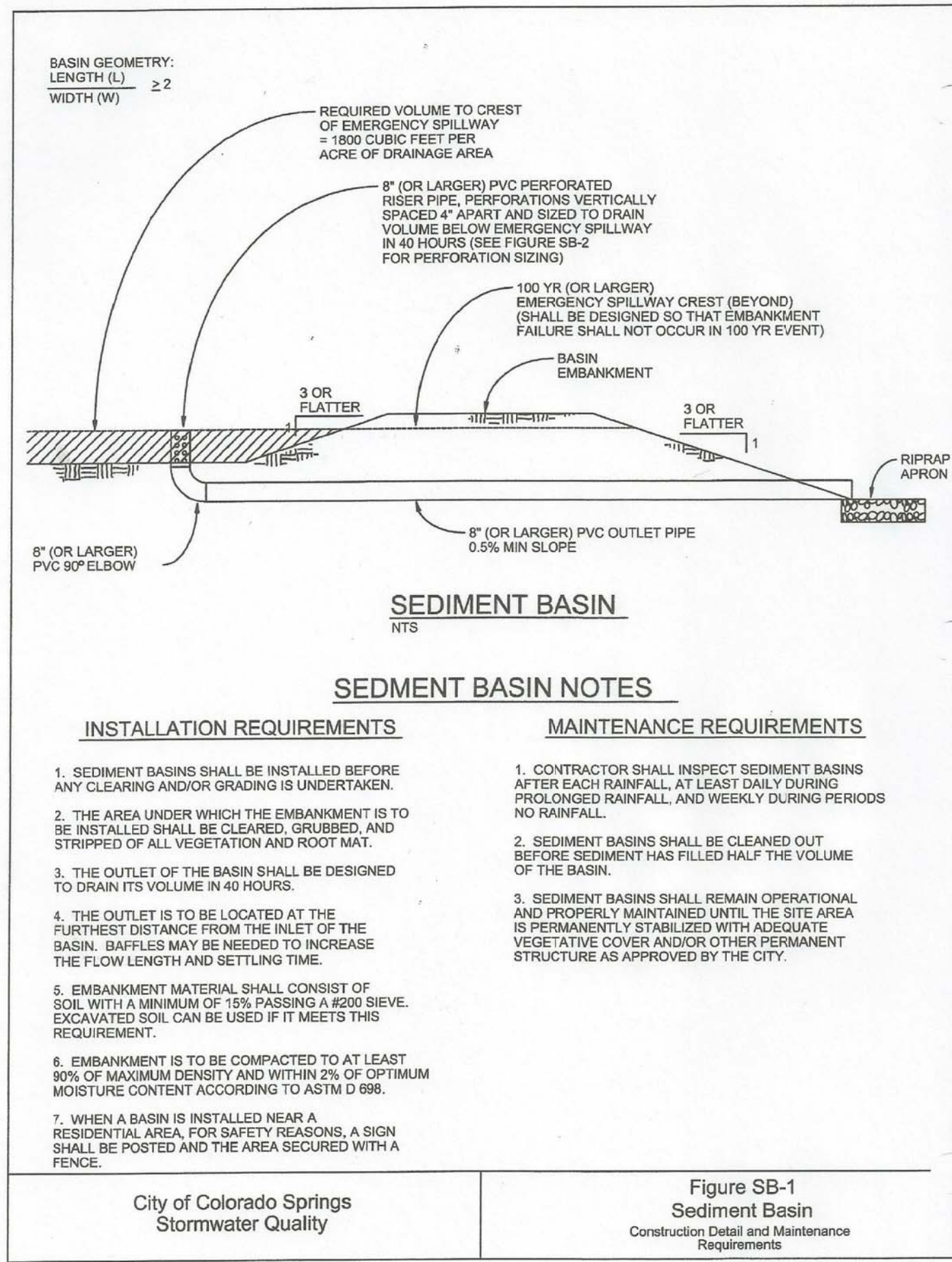












CORE  
ENGINEERING GROUP

15004 1ST AVENUE S.  
DENVER, CO 80202  
PHONE: 719.570.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: Rich@cog1.com

DATE

X

DESCRIPTION

NO.

1.

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

PREPARED FOR:  
LORSON, LLC  
212 N. WAHSATCH AVE., SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
(719) 635-3200  
CONTACT: JEFF MARK

PROJECT:  
EAST JCC INTERCEPTOR  
FONTANE BLVD. - LORSON BLVD.  
EL PASO COUNTY, COLORADO

DATE  
DECEMBER 4, 2017

PROJECT NO.  
100.041

SHEET NUMBER  
C4.2

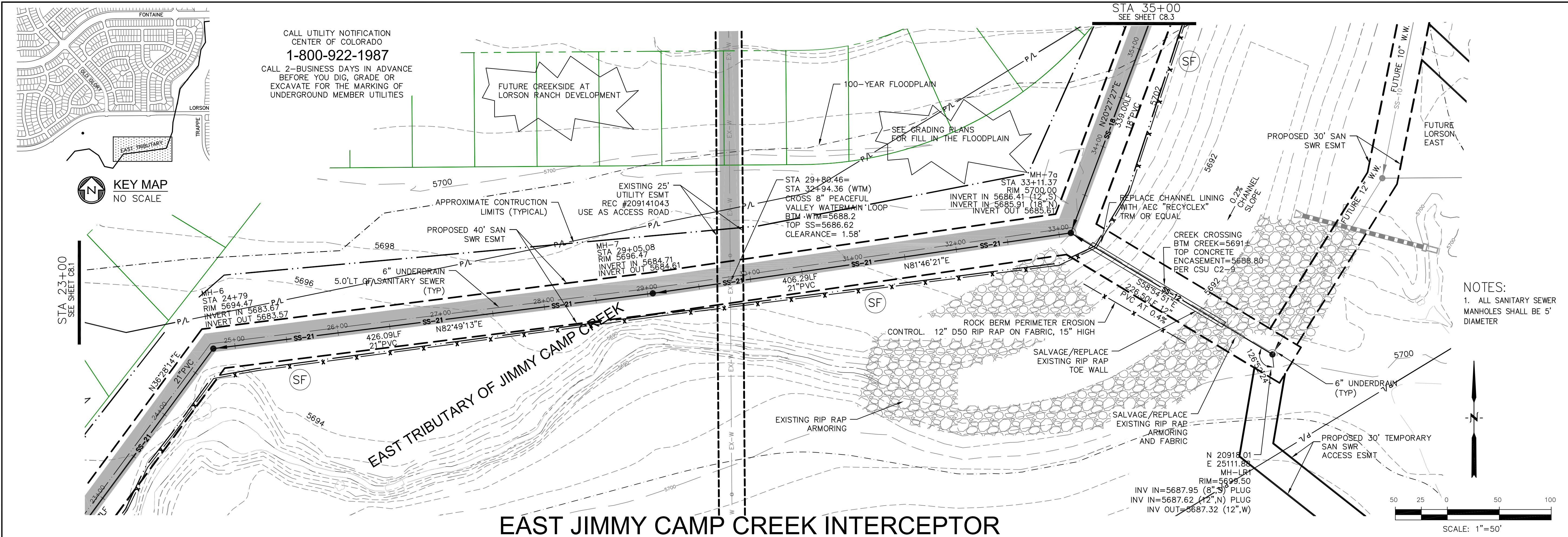
TOTAL SHEETS: 15

33997  
12-04-2017  
PROFESSIONAL ENGINEER

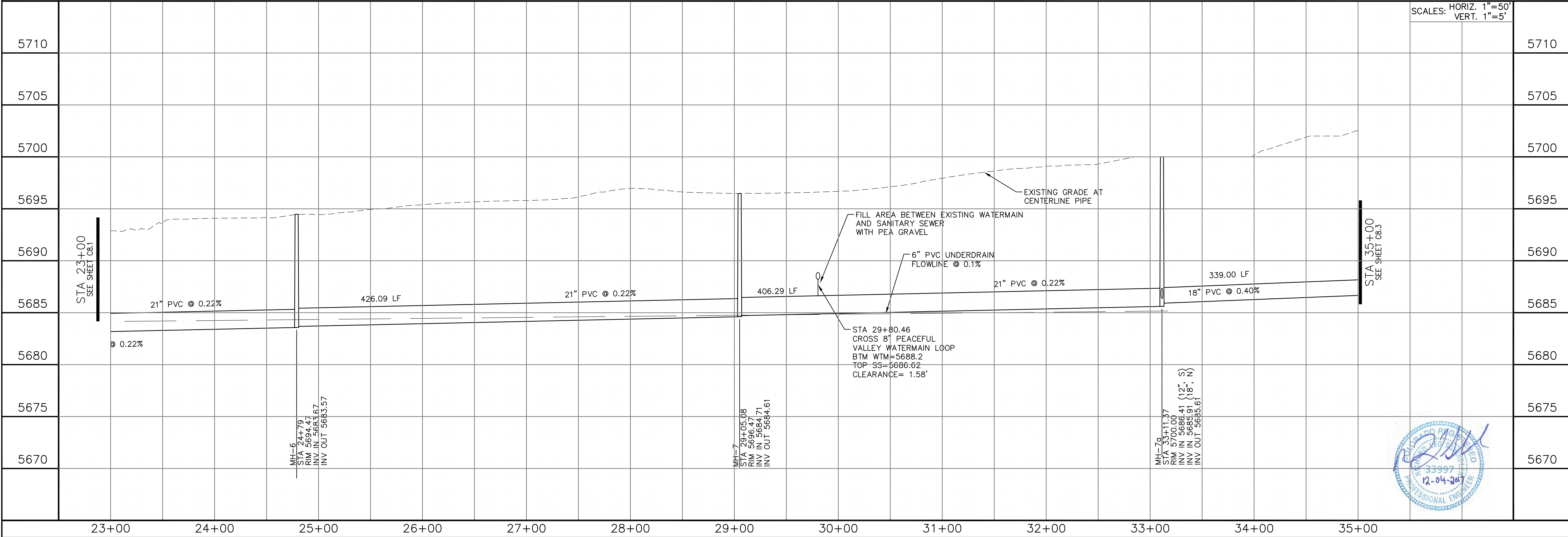








EAST JIMMY CAMP CREEK INTERCEPTOR



CORE

ENGINEERING GROUP

15004 1ST AVENUE S.  
BURNING WOOD, CO 80636  
PHONE: 719.554-7800  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: RICH@CEG1.COM

DATE:

DESCRIPTION

NO.

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

PREPARED FOR:  
LORSON, LLC  
212 N. WAHSATCH AVENUE, SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
CONTACT: JEFF MARK

PROJECT:  
EAST JCC  
INTERCEPTOR  
LORSON BLVD-EAST TRIBUTARY  
EL PASO COUNTY, COLORADO

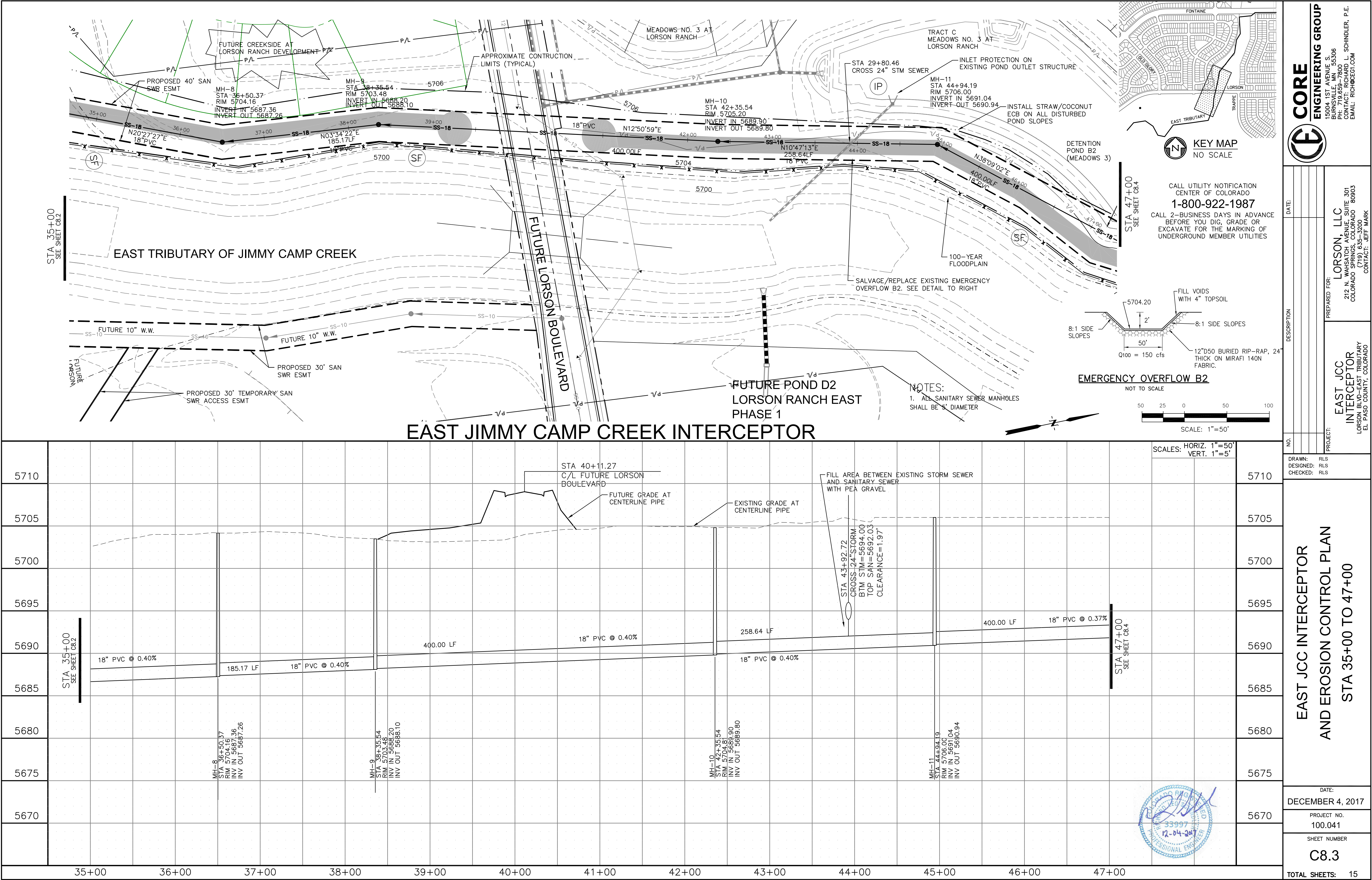
DATE:  
DECEMBER 4, 2017

PROJECT NO.  
100.041

SHEET NUMBER  
C8.2

TOTAL SHEETS: 15





CORE

ENGINEERING GROUP

15004 1ST AVENUE S.  
BURNING WOOD, CO 80016  
PHONE: 719.556.7800  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: RICH@CEG1.COM

DATE:

PROJECT NO.

SHEET NUMBER

TOTAL SHEETS: 15

PREPARED FOR:

PROJECT:

DRAWN:

DESIGNED:

CHECKED:

DATE:

DECEMBER 4, 2017

PROJECT NO.

100.041

SHEET NUMBER

C8.3

PROJECT:

EAST JCC INTERCEPTOR AND EROSION CONTROL PLAN

STA 35+00 TO 47+00

PROJECT:

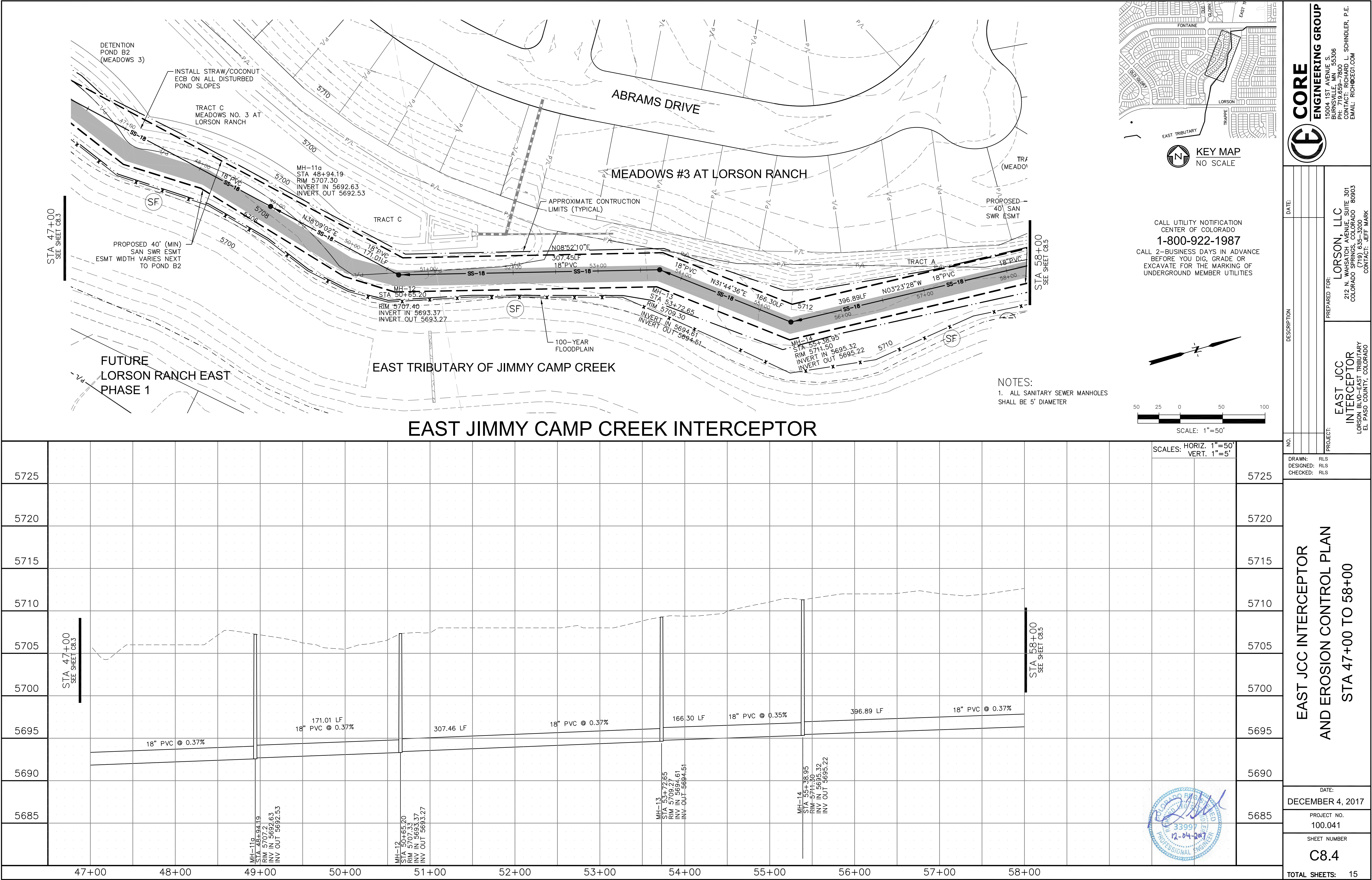
LORSON, LLC

212 N. WAHSATCH AVENUE, SUITE 301

COLORADO SPRINGS, COLORADO 80903

CONTACT: JEFF MARK

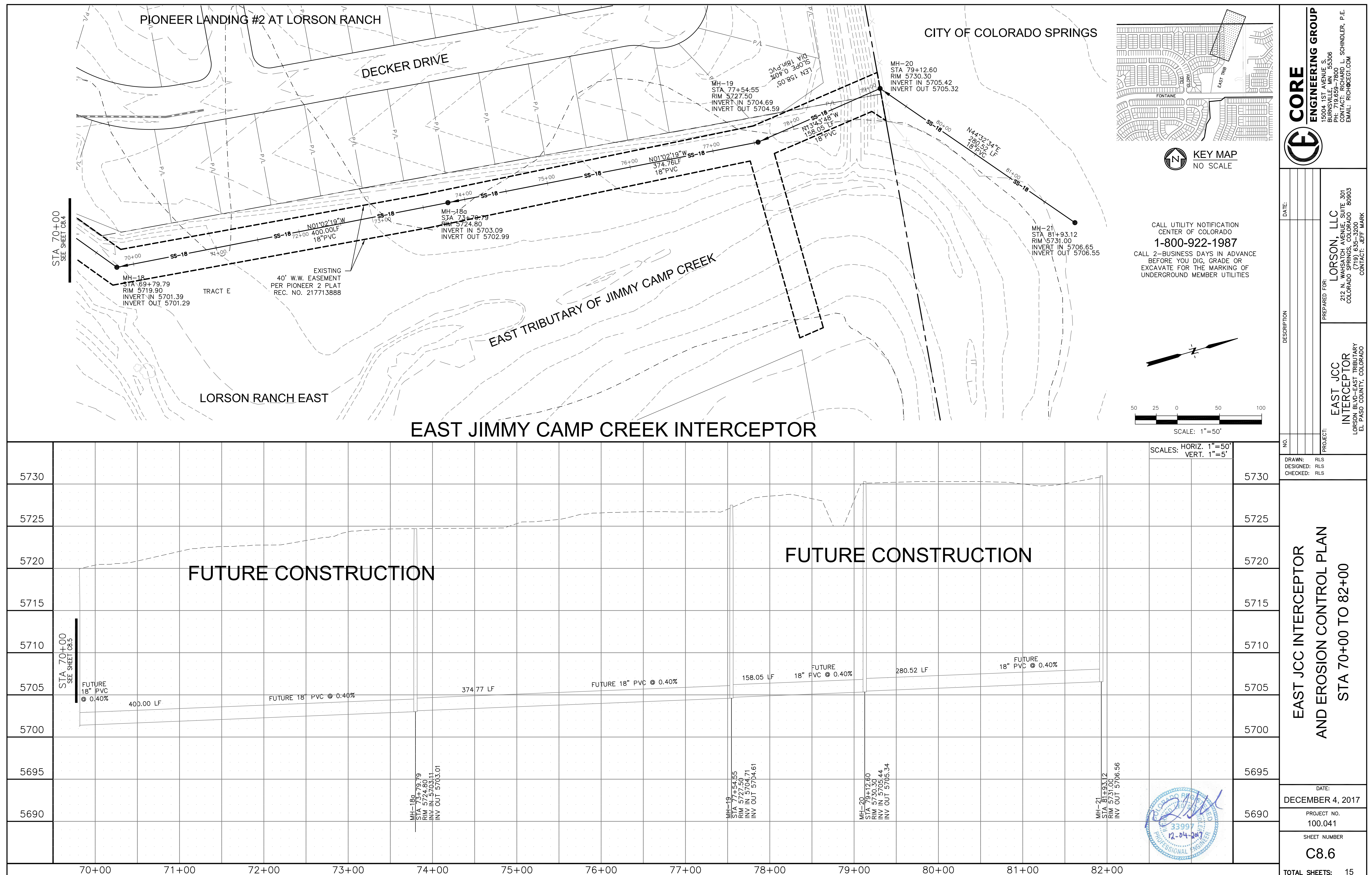




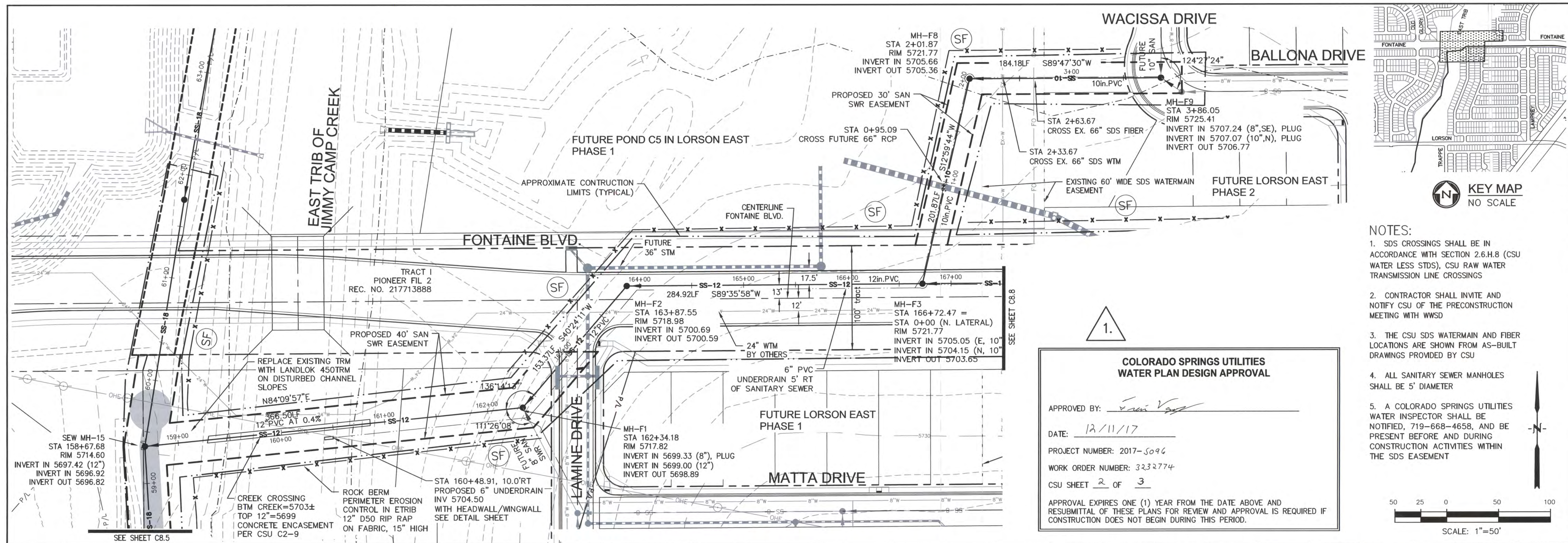












**CORE**  
ENGINEERING GROUP

15004 1ST AVENUE S.  
DENVER, CO 80202  
PHONE: 719.659.7800  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: RICH@CEGI.COM

DATE: 12/7/2017

DESCRIPTION: ADD CSU SIGNATURE BLOCK AND NOTE

NO. 1

PREPARED FOR: **LORSON, LLC**

212 N. WAHSATCH AVENUE, SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
CONTACT: JEFF MARK

PROJECT: **EAST JCC INTERCEPTOR**  
LORSON BLVD-EAST TRIBUTARY  
EL PASO COUNTY, COLORADO

DRAWN: RLS

DESIGNED: RLS

CHECKED: RLS

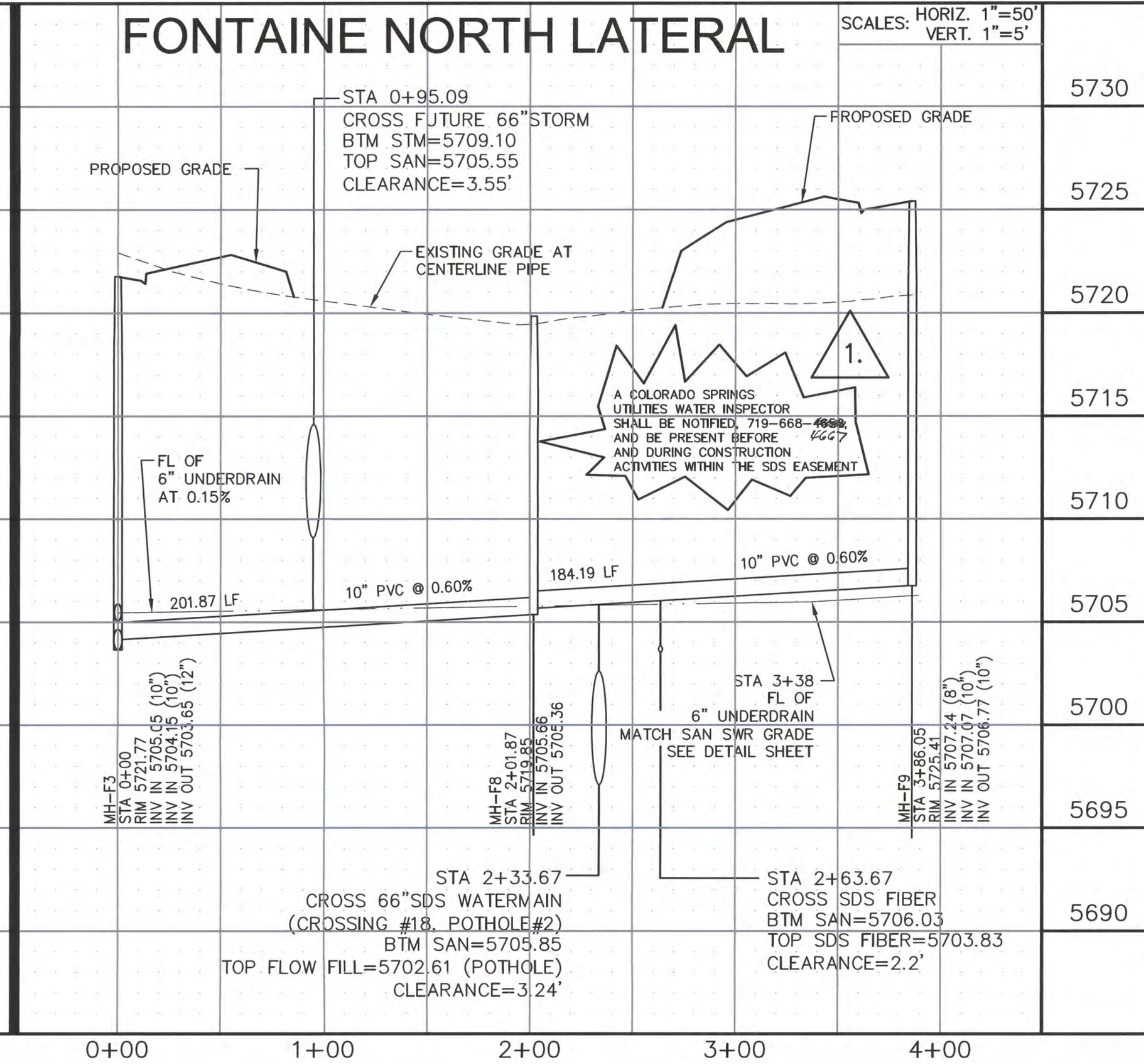
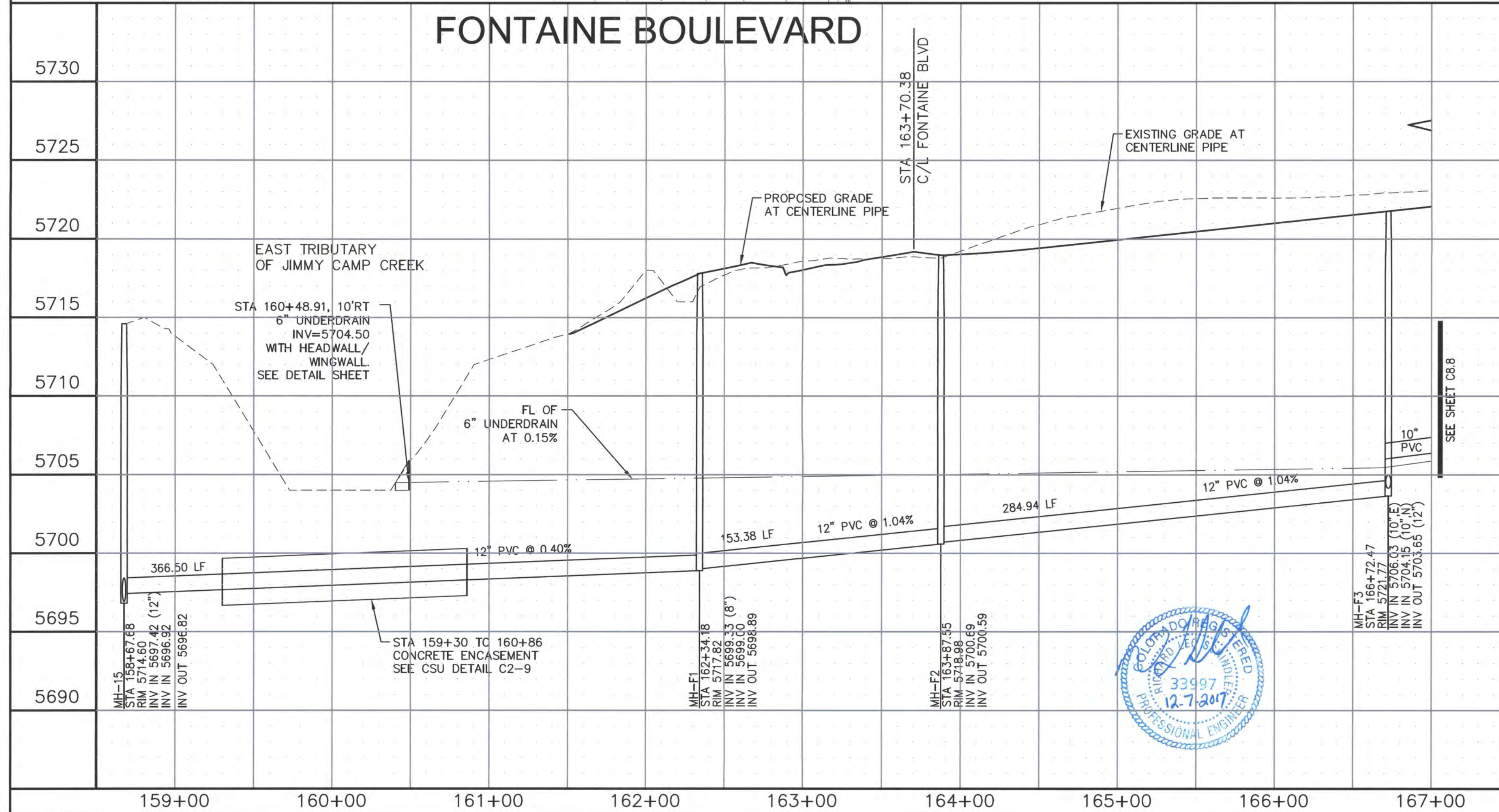
**FONTAINE BOULEVARD SANITARY SEWER AND EROSION CONTROL PLAN**  
STA 158+67 TO 166+72

DATE: DECEMBER 7, 2017

PROJECT NO. 100.041

SHEET NUMBER **C8.7**

TOTAL SHEETS: 15



**FONTAINE BOULEVARD SANITARY SEWER AND EROSION CONTROL PLAN**  
STA 158+67 TO 166+72

DATE: DECEMBER 7, 2017

PROJECT NO. 100.041

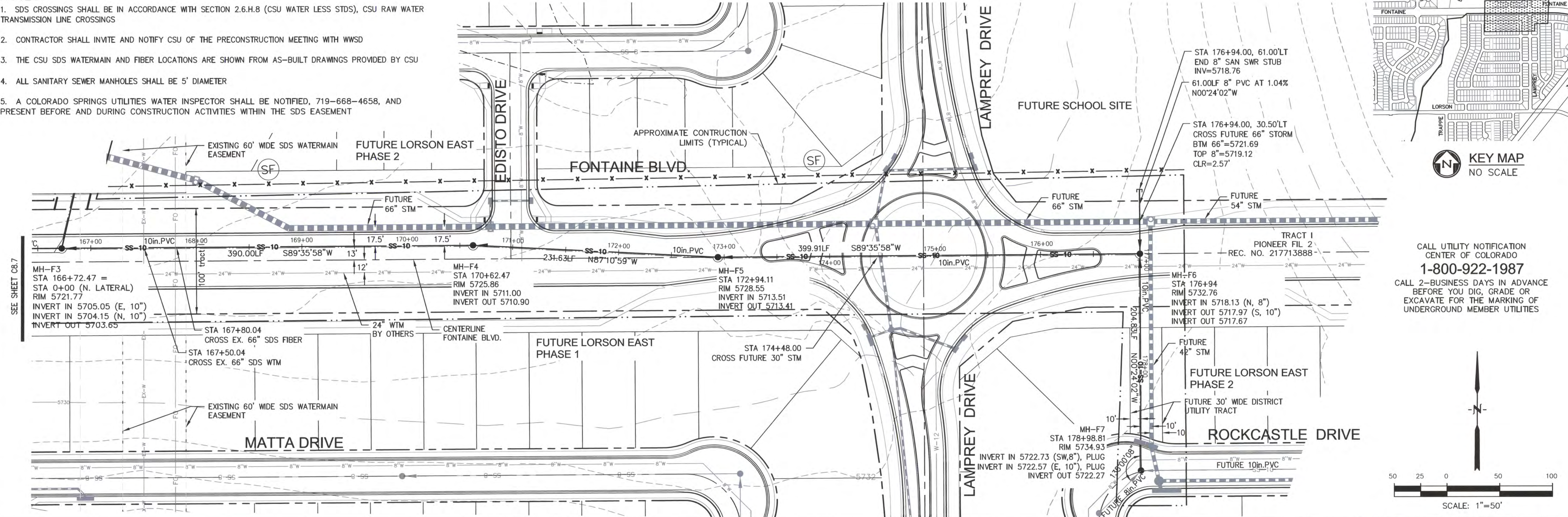
SHEET NUMBER **C8.7**

TOTAL SHEETS: 15



NOTES:

1. SDS CROSSINGS SHALL BE IN ACCORDANCE WITH SECTION 2.6.H.8 (CSU WATER LESS STDS), CSU RAW WATER TRANSMISSION LINE CROSSINGS
2. CONTRACTOR SHALL INVITE AND NOTIFY CSU OF THE PRECONSTRUCTION MEETING WITH WWS
3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
4. ALL SANITARY SEWER MANHOLES SHALL BE 5' DIAMETER
5. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4658, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT



CALL UTILITY NOTIFICATION  
CENTER OF COLORADO  
**1-800-922-1987**  
CALL 2-BUSINESS DAYS IN ADVANCE  
BEFORE YOU DIG, GRADE OR  
EXCAVATE FOR THE MARKING OF  
UNDERGROUND MEMBER UTILITIES

**CORE**  
ENGINEERING GROUP  
15004 1ST AVENUE S.  
BURNING WOODS, CO 80636  
PHONE: 719-668-7800  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: RICH@CEGI.COM



DATE: 12/7/2017  
NO. 1  
DESCRIPTION: ADD CSU SIGNATURE BLOCK AND NOTE  
PREPARED FOR: **LORSON, LLC**  
212 N. WAHATCH AVENUE, SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
CONTACT: JEFF MARK

PROJECT: **EAST JCC  
INTERCEPTOR**  
LORSON BLVD-EAST TRIBUTARY  
EL PASO COUNTY, COLORADO

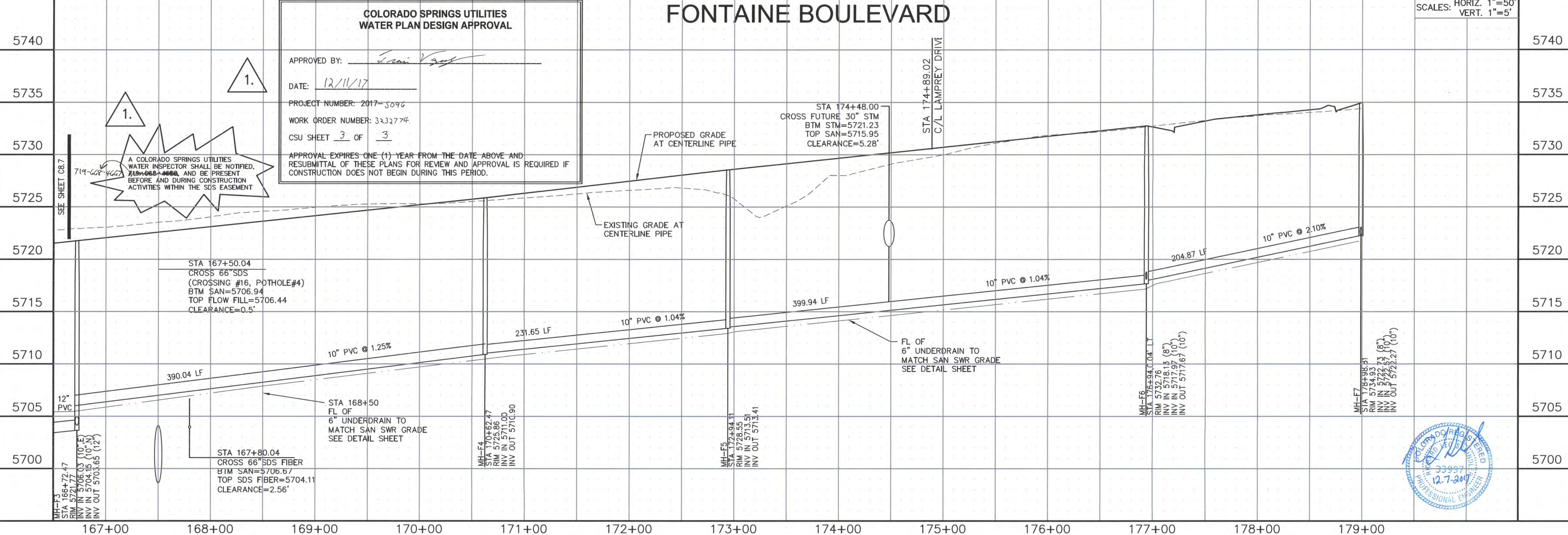
DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**FONTAINE BOULEVARD**

**COLORADO SPRINGS UTILITIES  
WATER PLAN DESIGN APPROVAL**

APPROVED BY: *[Signature]*  
DATE: 12/11/17  
PROJECT NUMBER: 2017-5096  
WORK ORDER NUMBER: 3332774  
CSU SHEET 3 OF 3  
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND  
RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF  
CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

1.  
A COLORADO SPRINGS UTILITIES  
WATER INSPECTOR SHALL BE NOTIFIED,  
719-668-4658, AND BE PRESENT  
BEFORE AND DURING CONSTRUCTION  
ACTIVITIES WITHIN THE SDS EASEMENT



**FONTAINE BOULEVARD SANITARY SEWER  
AND EROSION CONTROL PLAN  
STA 166+72 TO 179+00**

DATE: DECEMBER 7, 2017  
PROJECT NO. 100.041  
SHEET NUMBER **C8.8**  
TOTAL SHEETS: 15



## GENERAL STRUCTURAL NOTES

### 1. APPLICABLE CODES:

A. These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2009 Edition, and the Minimum Design Loads for Buildings and Other Structures (ASCE 7-05) and the Pike Peak Regional Building Code (2011 Edition).

B. All material and workmanship shall be in accordance with applicable provisions of the codes specified above.

### 2. CONCRETE:

A. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute "Building Code Requirements for Reinforced Concrete" and "Specifications for Structural Concrete for Buildings" (ACI 308 and ACI 309) latest editions. Section 13 "Inspection" of ACI 308 is deleted in its entirety, see "Field Observations" paragraph. All concrete shall be of stone aggregate, unless noted otherwise.

B. Concrete mixes:

See specifications for any additional durability requirements.

1. Mix A: For drilled piers.

3,000 psi minimum compressive strength at age of 28 days.

Type I/II Cement, minimum of 412 pounds per cubic yard.

Fly ash not allowed.

3/4" maximum aggregate size.

6" minimum - 8" maximum slump.

2. Mix B: For footings, grade beams, and miscellaneous concrete.

4,000 psi minimum compressive strength at age of 28 days.

Type I/II Cement, minimum of 564 pounds per cubic yard.

3/4" maximum aggregate size.

6 1/2" (5" Extended air).

4" (6" with superplasticizer) maximum slump.

C. Reinforcing is to be new billet steel ASTM A615, Grade 60, except ties and bars to be welded shall be Grade 40. Provide not less than (2) #5 around all sides of all openings in concrete and extend 2'-0" past edges of openings. No splice of reinforcement are permitted except as detailed or authorized by structural engineer. Where permitted, use contact lap splices, (36) bar diameters minimum. Welded Wire Fabric (WWF) shall be in accordance with ASTM A185. Lap (1) full mesh minimum at splices. No welding of reinforcement permitted unless detailed.

D. Placing of Reinforcement: Provide chairs, bolsters, additional reinforcement, and accessories necessary to support reinforcement at position shown on drawings. Support of reinforcement on form ties, wood, brick, brickbat or other unsuitable material will not be permitted.

E. Reinforcement shall be placed so that the following minimum concrete protection is provided, unless noted otherwise:

- 1) Concrete surfaces poured against ground ... 3" Clear
- 2) Formed surfaces exposed to ground or weather:
  - a) Bars #6 and larger ... 2" Clear
  - b) Bars #5 and smaller ... 1 1/2" Clear
- 3) Slabs ... at center (1 in.)
- 4) Concrete not exposed to earth or weather ... 3/4"
- 5) Beams, Columns, Ties, Stumps or spirals around primary reinforcement, or primary reinforcement with no ties, stumps or spirals ... 1 1/2"

F. The contractor is responsible for determining when it is safe to remove forms and/or shoring. Forms and shoring must not be removed until the walls are strong enough to carry their own weight and any anticipated superimposed loads. For foundation walls, this typically requires at least 12 hours of curing time at a temperature of 50°F or more. Concrete must be adequately covered during cold periods to maintain its surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type I/II cement, Rocky Mountain Group suggests forms remain in place a minimum of 3 days to ensure the performance specification has been met. When forms are stripped there must be no excessive deflection or distortion or discoloration and no evidence of damage to the concrete. Adequate thermal protection of the concrete shall be continued after stripping for a cumulative period of 48 hours at 50°F, or more, after the initial pour. See applicable notes for specifications on when to backfill foundation walls.

G. Field Quality Control:

1) Reference standards: ACI 308 Chapters 16 and 17, latest edition.

2) Slump tests: The general contractor shall provide necessary equipment and shall make test in conformity with ASTM C143. The contractor shall make slump tests on the first truck of each pour and as often as deemed necessary by the contractor to maintain the required slump tests when directed by the Architect or Engineer.

3) Control tests:

a. Control tests of concrete work shall be made on every 50 cubic yards or fraction thereof of concrete placed and, in any case, minimum of once during each day's pour.

b. Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C172.

c. Sample concrete at point of placement.

d. One cylinder shall be broken at end of seven days after placing, two cylinders shall be broken at end of 28 days after placing, and remaining cylinder shall be stored until its disposition is determined by Architect.

e. In general, remaining cylinder will be broken only when previous test reports indicated unsatisfactory results.

f. Tests on remaining cylinder shall be at expense of the contractor.

g. Architect and/or Engineer reserves right to stop future concrete work when seven or 28 day tests indicate unsatisfactory results until, in the opinion of the Architect and/or the Engineer of Record, proper corrective measures have been taken to insure quality concrete in future work and corrections deemed necessary have been made.

h. Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and temperature of concrete.

i. All tests shall be made in accordance with ASTM C318 or ASTM C331.

4) Slab tolerance: Maintain surface flatness with maximum variation of 1/8 inch in 20 feet.

### 3. DRILLED PIER FOUNDATIONS:

A. The foundation design has been completed in accordance with pertinent standards, recommended design soil parameters, accepted engineering design procedures, and is based on the best information available at the time of completion. The design is intended to minimize differential movement as described in the reference Geotechnical Report. It must be recognized that foundation components will undergo movement. It shall be the responsibility of the contractor and/or present owner to inform any subsequent owners of the soil condition and advised to maintain good practices in the future with regard to surface and subsurface drainage, framing of partitions above floor slabs, and finish work above the floor slabs, etc.

B. Foundation design is based on soil report No. B36-65 prepared by RMG Engineers dated 11/1/11. The Contractor shall thoroughly review and understand all pertinent construction aspects of this report before beginning any work.

C. The structure is to be founded on concrete grade beams bearing on drilled piers. Design of drilled piers is based on the following criteria:

- Maximum allowable end bearing pressure ... 35,000 psf
- Maximum allowable side shear ... 3,200 psf
- (For the portion of the pier in bedrock and at least 2'-0" below bottom of grade beam)
- Maximum penetration into bedrock ... 8'-0"
- Minimum total length ... 40'-0"
- Minimum spacing ... 3 pier dia.

D. The maximum variation of the center of any drilled pier at its top from the required location shall not be more than 5% of its diameter, and no pier shall be out of plumb more than 1% of its overall length.

E. A representative of the geotechnical engineer shall provide full time observation of the drilling operation and reinforcement / concrete placement to verify that the soil types and conditions are consistent with design criteria of the soil report. If the soil properties are found to be different from this criteria, the foundation engineer shall be promptly notified so that the foundation design may be reviewed.

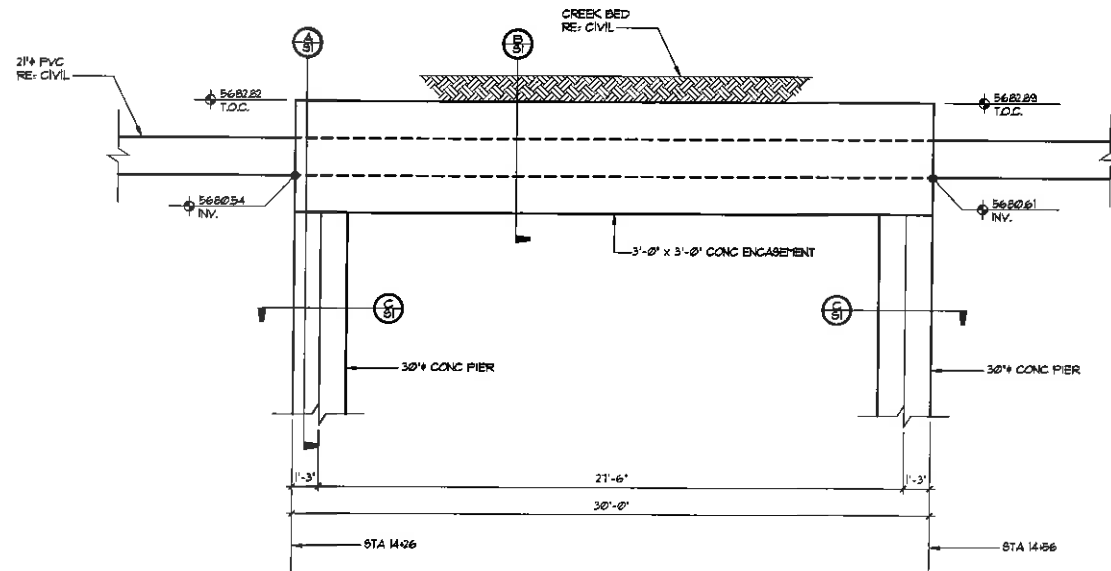
F. The bottom of all piers shall be thoroughly cleaned and dewatered prior to concrete placement.

G. Continuous horizontal bars and corner bars in grade beams supported on piers shall be spliced only where necessary for purposes of handling and bar length. Bar splices shall be placed in accordance with the following requirements:

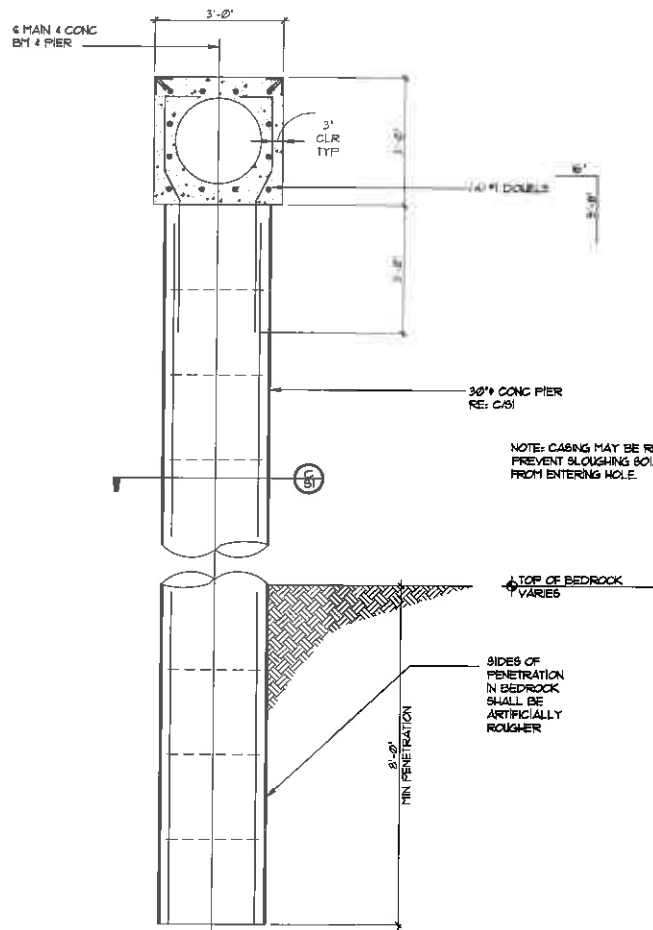
Bar Location	Splice Location	Minimum Lap
Bottom bars	at support	(36) bar diameters
Top bars	at mid-span	(42) bar diameters
Corner lap bars	at corner	(42) bar diameters
Other bars	staggered	(36) bar diameters

### 4. FIELD OBSERVATIONS:

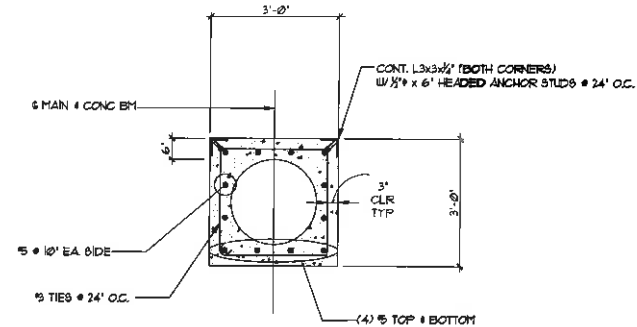
A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting any concrete so as to allow the Engineer of Record the opportunity to review the placement of reinforcing and/or embedded items. Contact Rocky Mountain Group: (719) 548-0600.



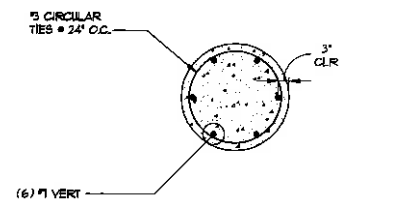
1 STREAM CROSSING ELEVATION  
SCALE 1/4" = 1'-0"



A DRILLED PIER DETAIL  
SCALE 1/2" = 1'-0"



B CONCRETE ENCASUREMENT DETAIL  
SCALE 1/2" = 1'-0"



C 30\"/>

ROCKY MOUNTAIN GROUP

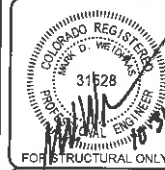
ARCHITECTS

ENGINEERS

2917 AVENUE 100, SUITE 100, BOULDER, CO 80501

719.548.0600

BOULDER, COLORADO



EAST JIMMY CAMP CREEK INTERCEPTOR

FONTAINE BLVD - LORSON BLVD

EL PASO COUNTY, COLORADO

LORSON RANCH METROPOLITAN DISTRICT NO. 1

DRILLED PIER DETAILS

AT STREAM CROSSING

FOR CONSTRUCTION

DATE

NOV

01

CHECKED

NOV

01

DATE

10-31-2017

#

REVISION

DATE

JOB NO.

159665

SHEET NO.

S1

13 of 14

DATE

10-31-2017

DATE

10-31-2017

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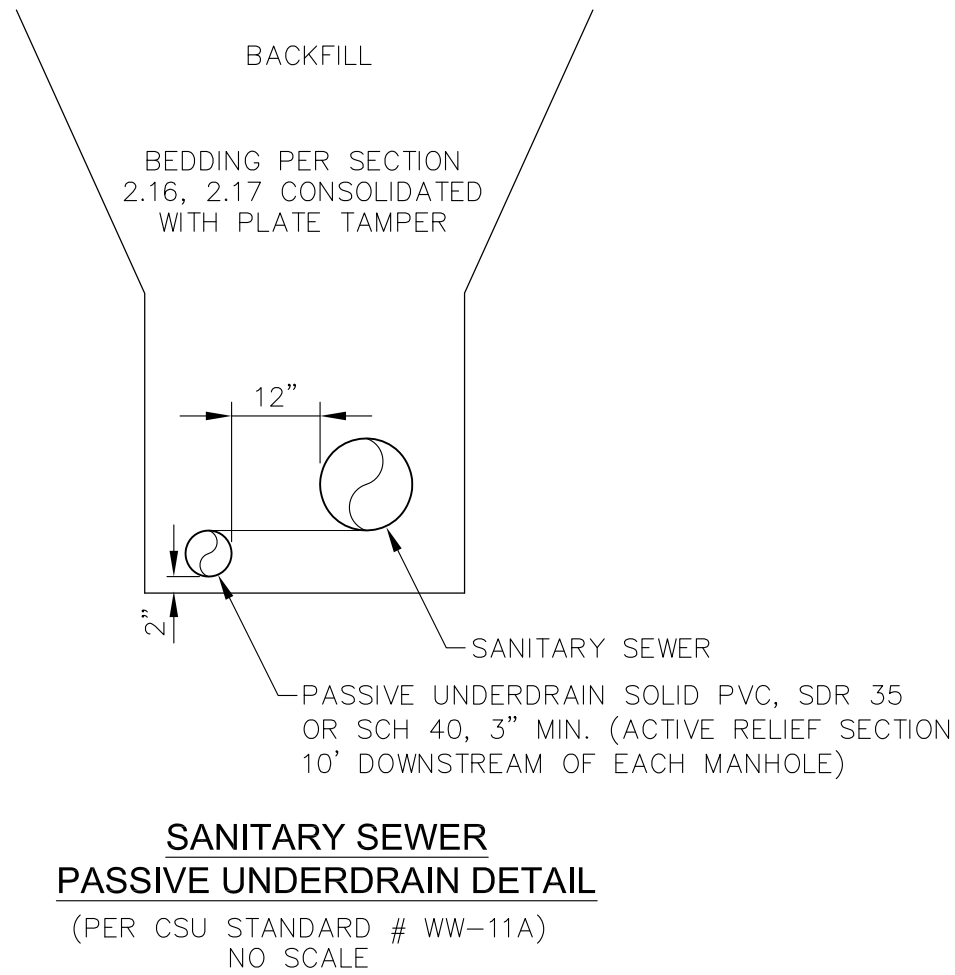
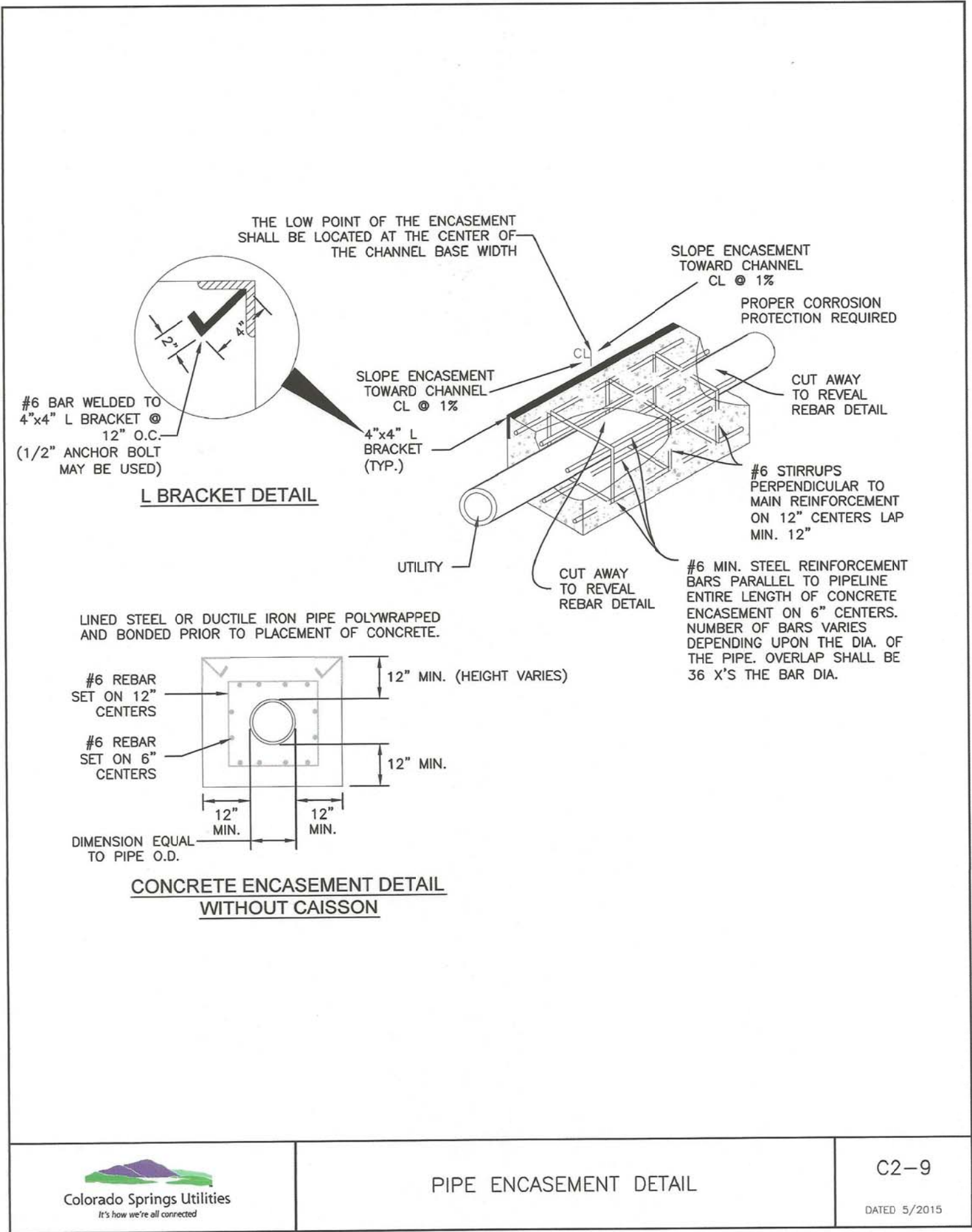
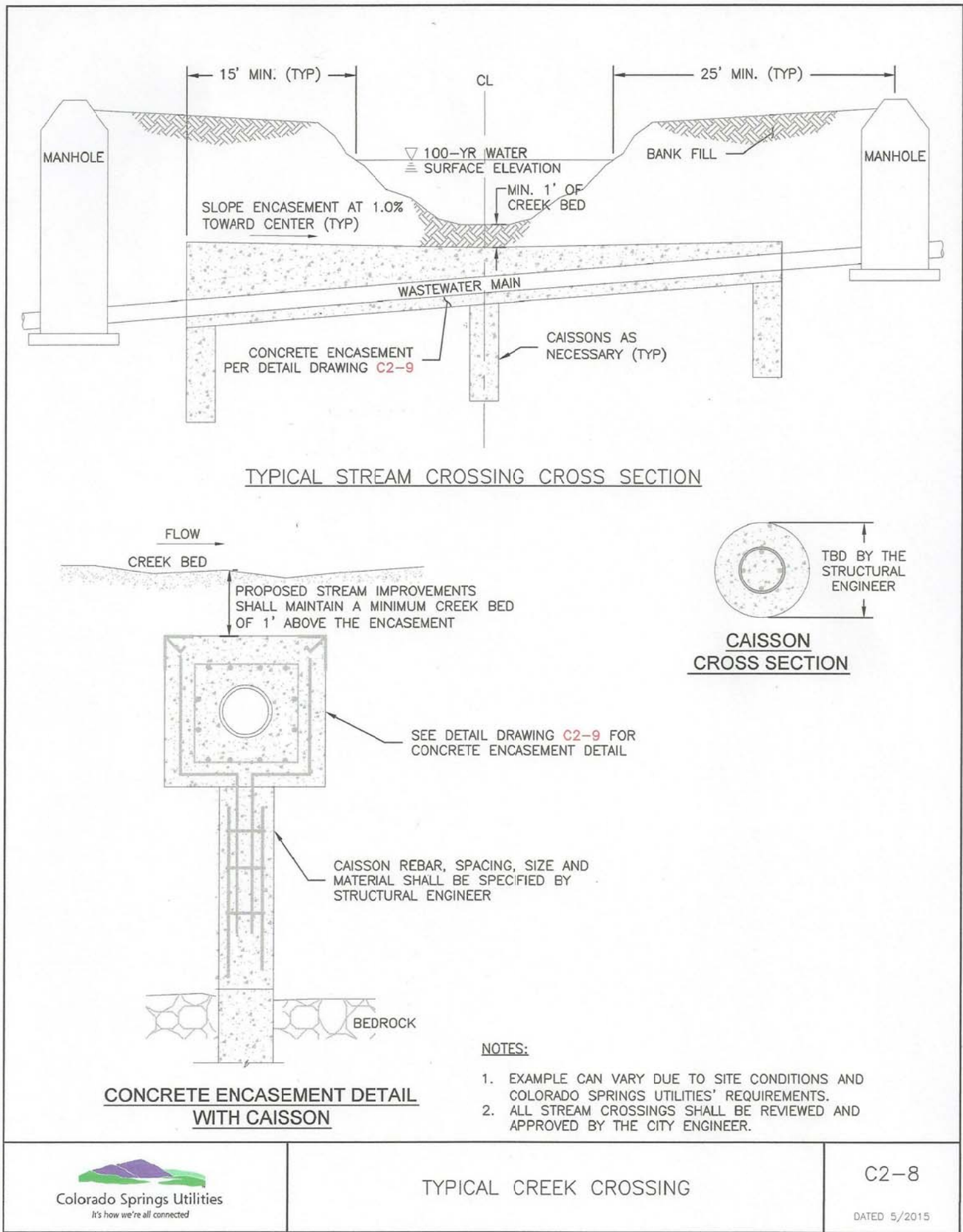
DATE

10-31-2017

DATE

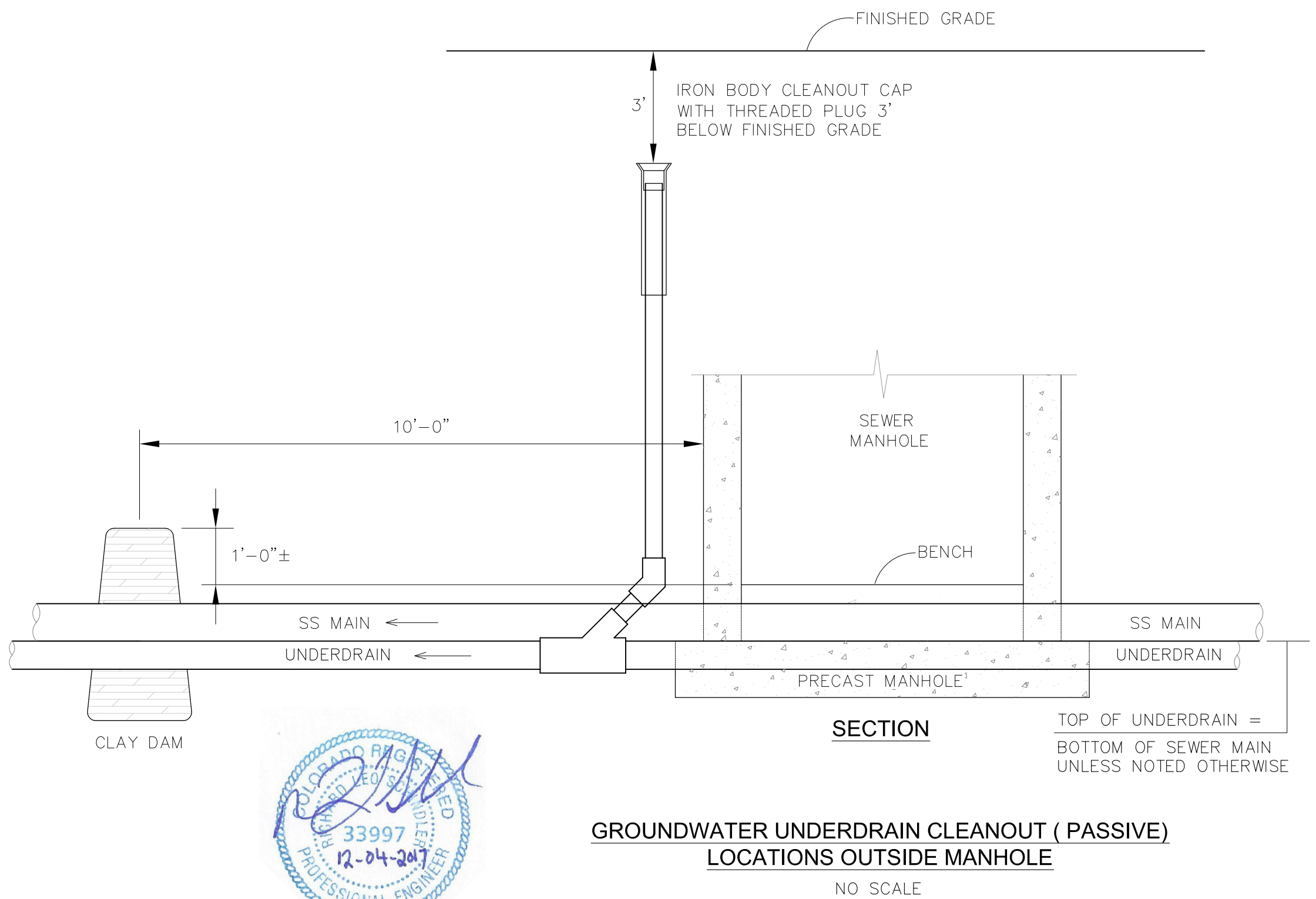
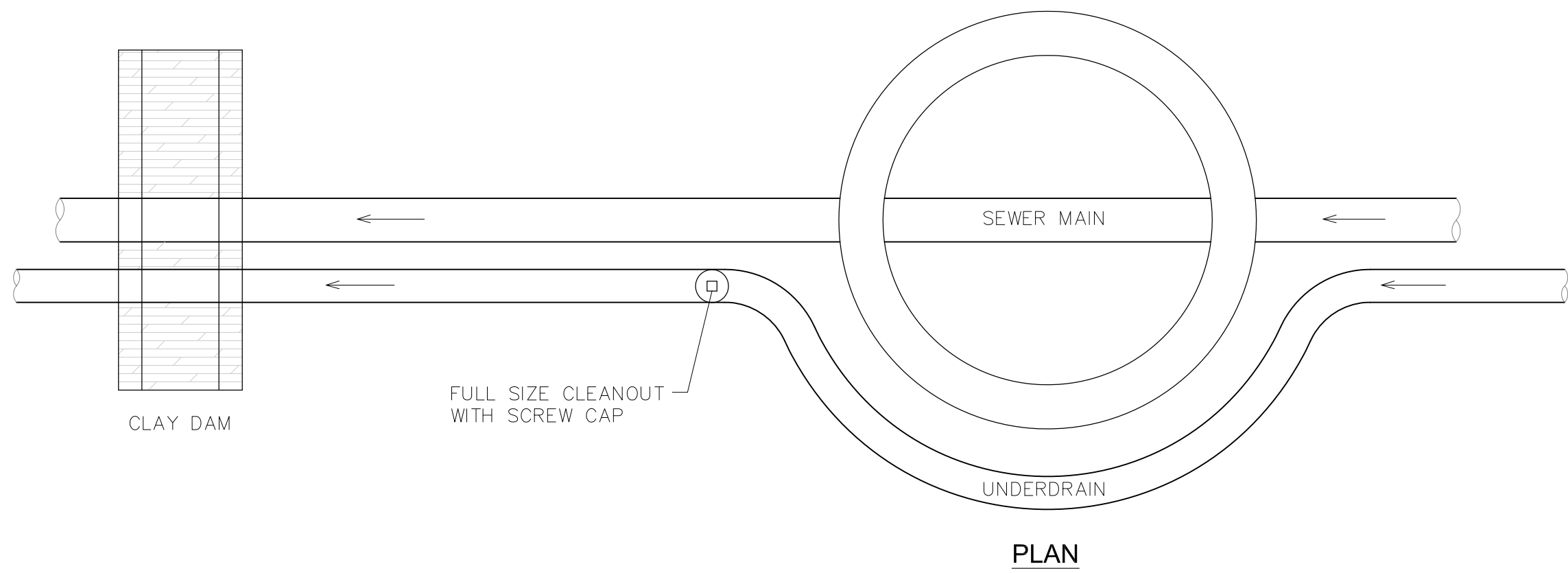
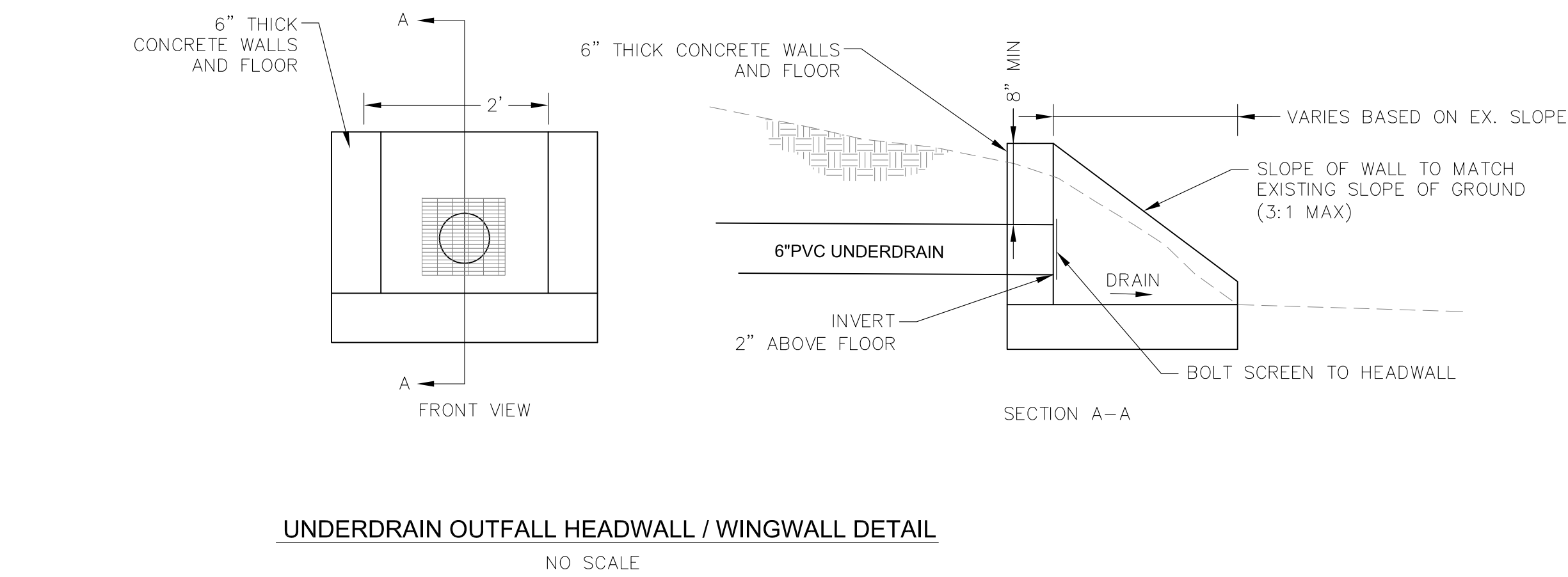
10-31-2017





NOTE:  
POINT OF DISCHARGE TO PUBLIC SYSTEM IS REQUIRED.  
UNDERDRAIN CONNECTIONS SHALL BE 3" SCH 40.

THE UNDERDRAIN WILL BE CONSTRUCTED WITH THE SANITARY SEWER LINE AND IS DIRECTED SOUTH TO LORSON BOULEVARD, THEN WEST IN LORSON BOULEVARD, THEN SOUTH WHERE THE UNDERDRAIN WILL OUTLET INTO THE EAST TRIBUTARY OF JIMMY CAMP CREEK.



UTILITY DETAILS		EAST JIMMY CAMP CREEK INTERCEPTOR		DATE DECEMBER 4, 2017		PROJECT NO. 100.041		SHEET NUMBER C12.1		TOTAL SHEETS: 15	
DRAWN: LJA		PROJECT: EAST JCC INTERCEPTOR		PREPARED FOR: LORSON, LLC		NO.		DESCRIPTION		DATE	
DESIGNED: RLS		FONTAINE BLVD. - LORSON BLVD.		212 N. WAHSATCH AVE., SUITE 301		1.		X		X	
CHECKED: RLS		EL PASO COUNTY, COLORADO		COLORADO SPRINGS, COLORADO							
				(719) 635-3200							
				CONTACT: JEFF MARK							