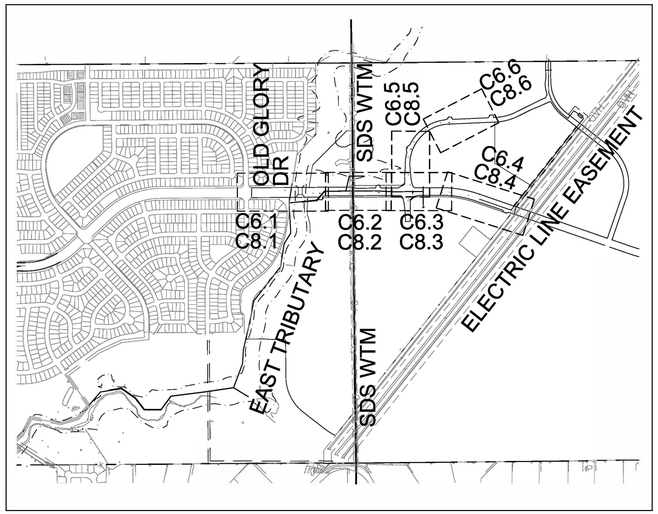
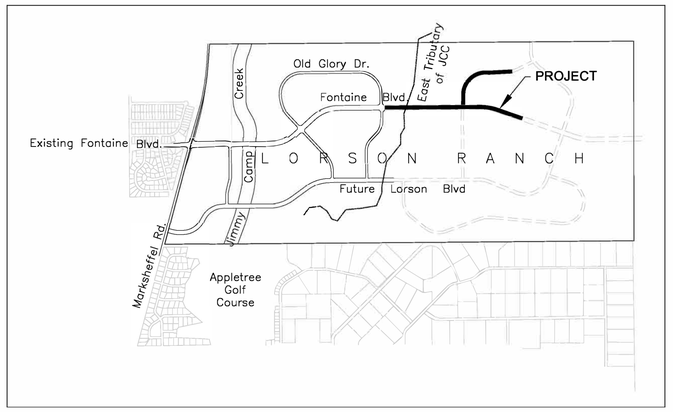
CONSTRUCTION PLANS
FOR

FONTAINE BOULEVARD & LAMPREY DRIVE

WITHIN LORSON RANCH EAST
STREET, STORM SEWER,
AND WATERMAIN CONSTRUCTION PLANS



KEY MAP
SCALE: 1"=1000'



VICINITY MAP
NO SCALE

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

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 _____ DATE _____

TITLE _____

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

COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL

APPROVED BY: _____

DATE: _____

PROJECT NUMBER: 2017–

WORK ORDER NUMBER:

CSU SHEET ___ OF ___

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.

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 ENERGY
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

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.

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.

DISTRICT APPROVAL (WATER)
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
WATER DESIGN APPROVAL

DATE _____ BY _____

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

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 _____ BY _____

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

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. CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER.

_____

JENNIFER IRVINE, COUNTY ENGINEER/ECM ADMINISTRATOR DATE
CONDITIONS:

ENGINEER'S APPROVAL
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: rlsmn@earthlink.net

DATE
DESCRIPTION
NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION LORSON RANCH EAST

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C1.1
TOTAL SHEETS: 34

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 (ASTMM 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 GRADING SHALL CONFORM TO THE GEOTECHICAL RECOMMENDATIONS FOR LORSON RANCH EAST PREPARED BY RMG, "PRELIMINARY SOILS AND GEOLOGY FOR LORSON RANCH EAST", DATED SEPTEMBER 7, 2016.

WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

1. 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 POLYETHEYLENE 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 GRANULER 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)

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

1. *ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.*

2. *CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).*

3. *CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:*
   a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
   b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
   c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
   d. 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 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. 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 (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.*

7. *IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND 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. *ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.*

10. *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.*

11. *ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.*

12. *SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.*

13. *SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.*

14. *CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, INCLUDING WORK WITHIN THE RIGHT–OF–WAY AND SPECIAL TRANSPORT PERMITS.*

15. *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.*

Full-depth asphalt is not allowed.

WORK WITHIN CSU SOUTHERN DELIVERY SYSTEM EASEMENT CONSTRUCTION NOTES

1. CONTRACTOR SHALL COMPLY WITH CSU LESS 2.6.H.8 "CROSSING RAW WATER TRANSMISSION MAINS" FOR ALL WORK WITHIN THE CSU WATERMAIN EASEMENT

2. UTILITIES CROSSING OVER THE SDS WATERMAIN MUST BE POTHOLED WITH HYDRO–VAC AT EVERY CROSSING TO OBTAIN VISUAL VERIFICATIN OF THE WATERMAIN ELEVATION.

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

4. CONTACT WAYNE RUST, 719–668–3996, COLORADO SPRINGS UTILITIES, FOR ADDITIONAL INFORMATION REGARDING THE SDS FIBER LINE.

5. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5' OF COVER OVER THE SDS WATERMAIN.

6. CONTRACTOR SHALL SALVAGE AND REPLACE ALL CARSONITE WATER MARKERS OVER THE WATERMAIN AFTER CONSTRUCTION.

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

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

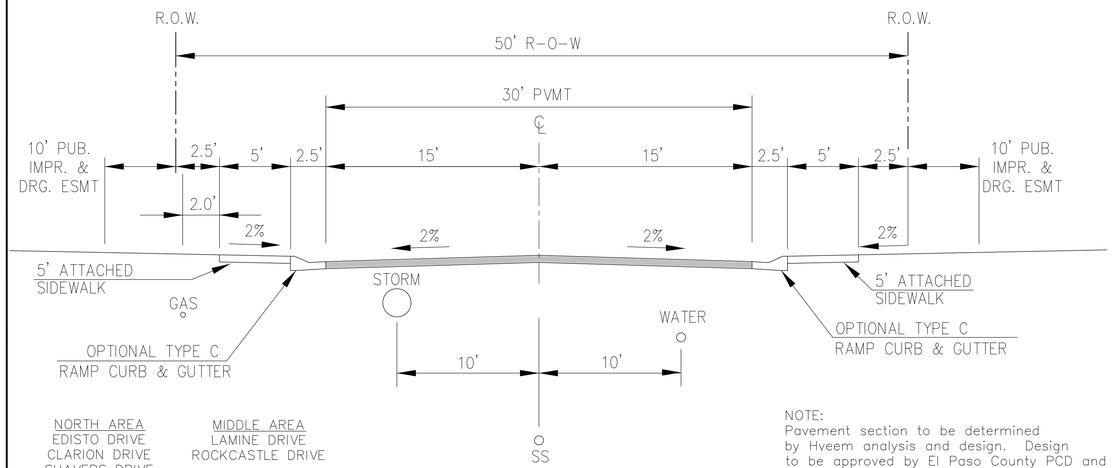
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION NOTES

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C1.2
TOTAL SHEETS: 34



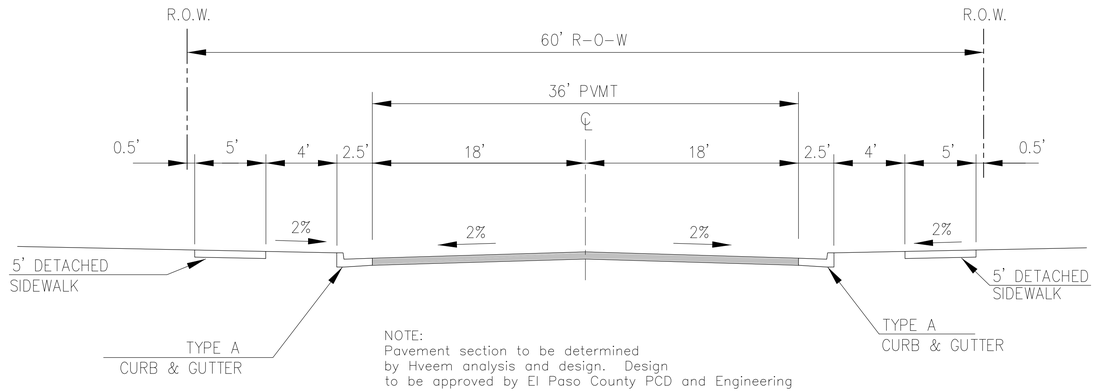
NORTH AREA
EDISTO DRIVE
CLARION DRIVE
SHAVERS DRIVE
YAMHILL DRIVE

MIDDLE AREA
LAMINE DRIVE
ROCKCASTLE DRIVE

TYPICAL SECTION 50' R.O.W.
RESIDENTIAL URBAN LOCAL
NOT TO SCALE

NOTE:
Pavement section to be determined by Hveem analysis and design. Design to be approved by El Paso County PCD and Engineering

DESIGN SPEED: 25MPH



NOTE:
Pavement section to be determined by Hveem analysis and design. Design to be approved by El Paso County PCD and Engineering

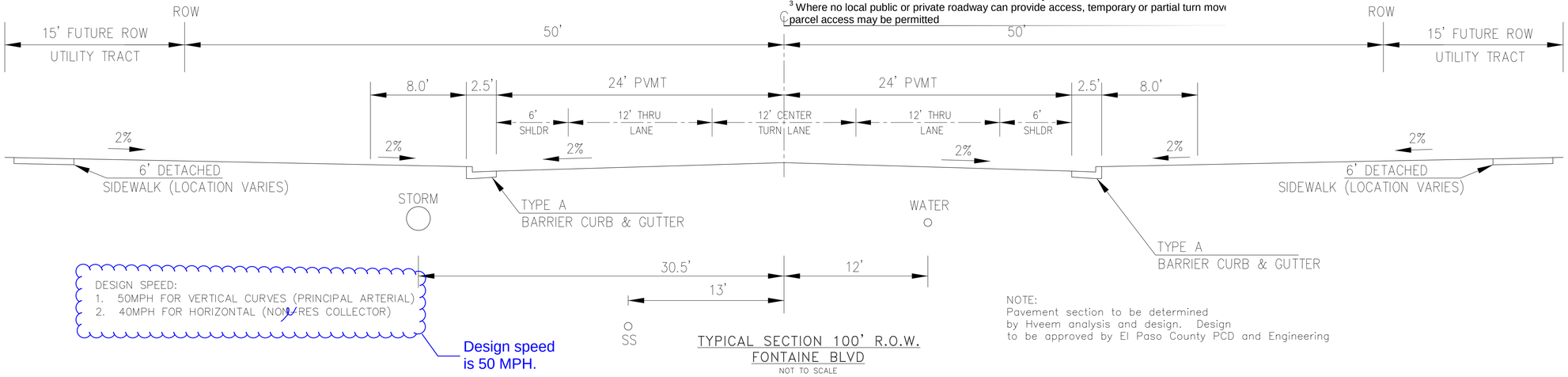
DESIGN SPEED: 40MPH

TYPICAL SECTION 60' R.O.W.
RESIDENTIAL URBAN COLLECTOR
NOT TO SCALE

LAMPREY DRIVE

Criteria	Expressways 6 Lane	Expressways 4 Lane	Arterials 6 Lane Principal	Arterials 4 Lane Principal
Design Speed / Posted Speed (MPH)	60 / 55	60 / 55	50 / 45	50 / 45
Clear Zone	30'	30'	20'	20'
Minimum Centerline Curve Radius	1,505'[1]	1,505'[1]	930'[1]	930'[1]
Number of Through Lanes	6	4	6	4
Lane Width	12'	12'	12'	12'
Right-of-Way	160'	140'	160'	130'
Paved Width (Excluding Gutter Pan)	48'[2]	36'[2]	48'[2]	36'[2]
Median Width (Including Curb & Gutter)	31'	23'	31'	19'
Shoulder Width (Ext., Excluding Gutter)	8'	8'	8'	8'
Shoulder Width (Int., Excluding Gutter)	4'	4'	4'	4'
Required Curb/ Gutter Type	6" ramp	6" ramp	6" vertical	6" vertical
Sidewalk Width (@ FL)	6' detached	6' detached	6' detached	6' detached
Design ADT		48,000		40,000
Design Vehicle	WB-67	WB-67	WB-67	WB-67
Bike Lanes Permitted	No	No	Yes	Yes
Access Permitted	No	No	No	No
Access Spacing	n/a	n/a	n/a	n/a
Intersection Spacing	1 mile	1 mile	½ mile	½ mile
Parking	No	No	No	No
Minimum Flowline Grade of Curb	.50%	.50%	.50%	.50%
Centerline Grade (Min.-Max.)	0.5-5%	0.5-5%	0.5-6%	0.5-6%
Intersection Grades (Min.-Max.)	0.5-2%	0.5-2%	0.5-3%	0.5-3%

[1] Assumes 4% superelevation, 6% for 70 MPH design speeds
[2] Pavement width in each direction for divided roadways
[3] Where no local public or private roadway can provide access, temporary or partial turn move parcel access may be permitted



DESIGN SPEED:
1. 50MPH FOR VERTICAL CURVES (PRINCIPAL ARTERIAL)
2. 40MPH FOR HORIZONTAL (NON-RES COLLECTOR)

Design speed is 50 MPH.

TYPICAL SECTION 100' R.O.W.
FONTAINE BLVD
NOT TO SCALE

NOTE:
Pavement section to be determined by Hveem analysis and design. Design to be approved by El Paso County PCD and Engineering

CORE ENGINEERING GROUP
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NO. | DESCRIPTION | DATE

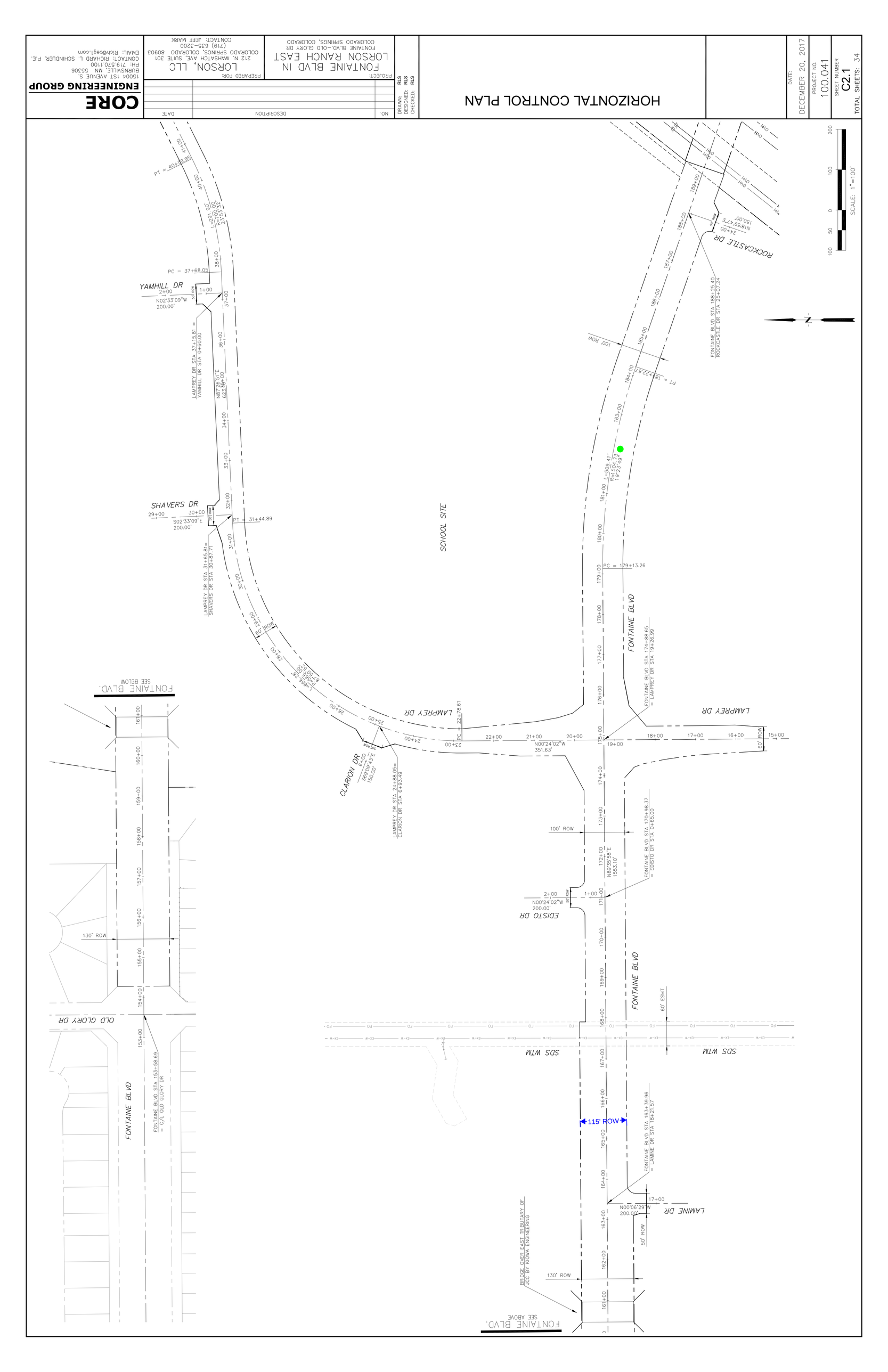
PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

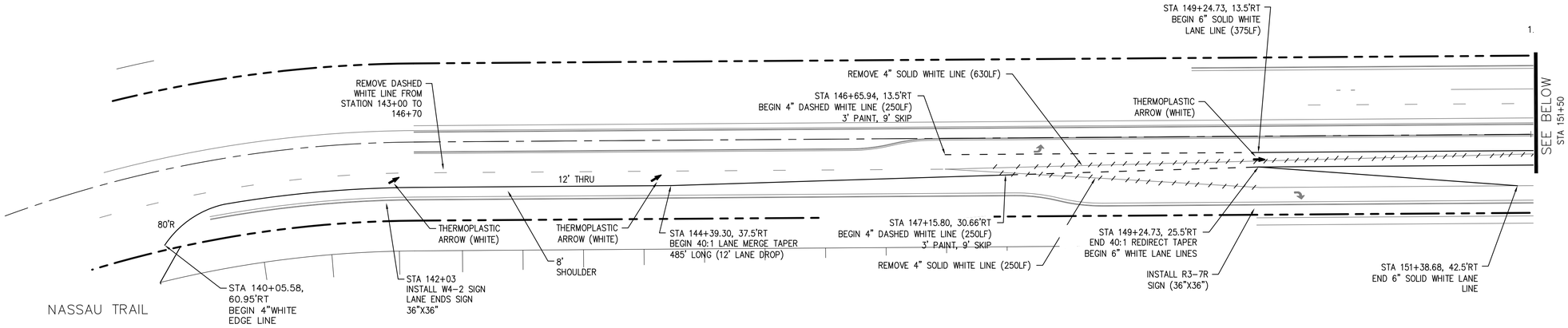
PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

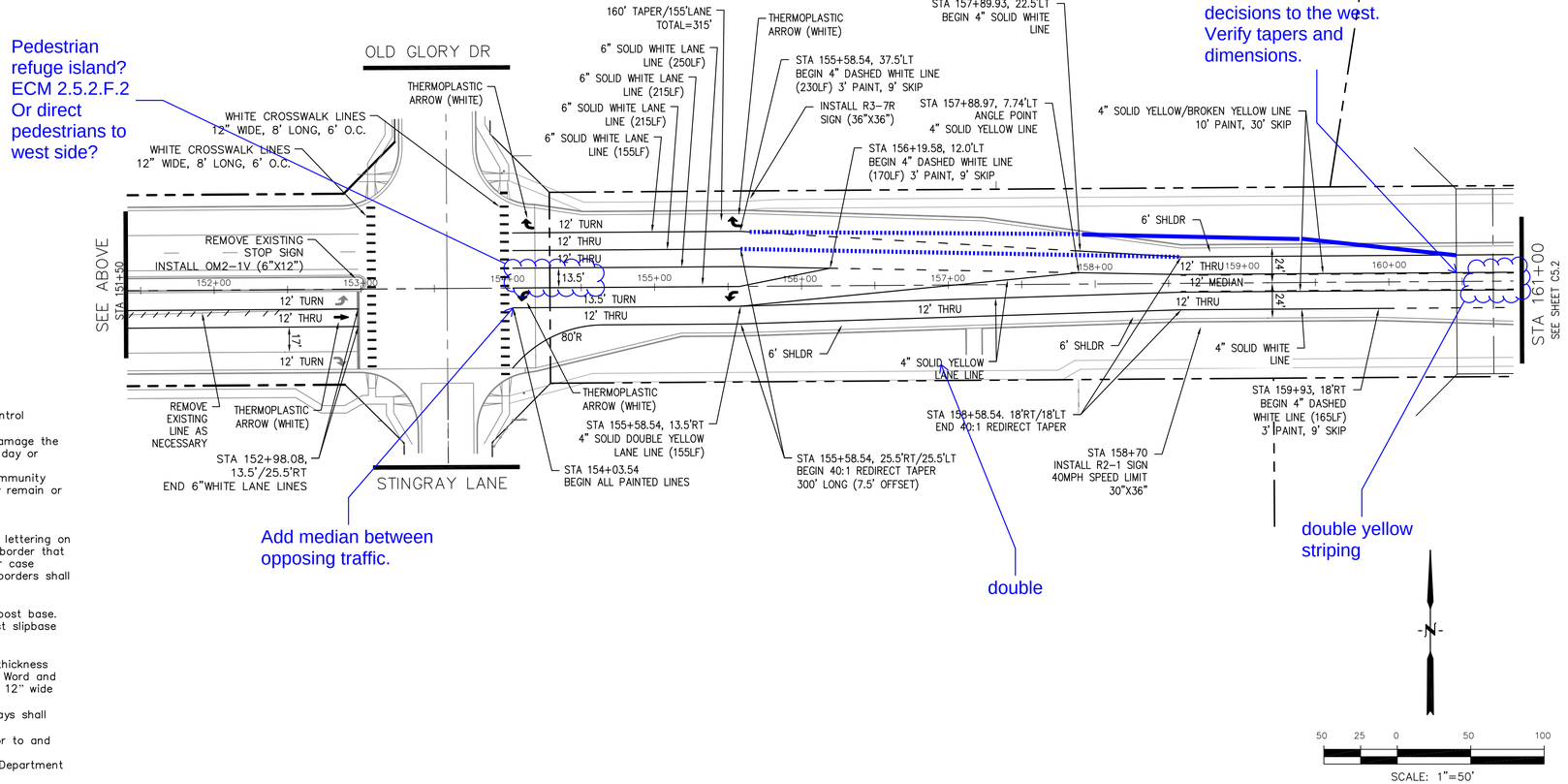
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION
TYPICAL SECTIONS

DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C1.3
TOTAL SHEETS: 34


HORIZONTAL CONTROL PLAN
DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C2.1
TOTAL SHEETS: 34
PROJECT: FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD-OLD GLORY DR
COLORADO SPRINGS, COLORADO
PREPARED FOR: LORSON, LLC
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK
DESIGNED: RLS
DRAWN: RLS
CHECKED: RLS
NO. DESCRIPTION DATE
CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BUFFALO, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com
SCALE: 1"=100'
SCHOOL SITE
FONTAINE BLVD
LAMPREY DR
CLARION DR
EDISTO DR
LAMINE DR
ROCKCASTLE DR
YAMHILL DR
SHAVERS DR
OLD GLORY DR
SDS WTM
60' ESMT
115' ROW
100' ROW
130' ROW
50' ROW
60' ROW
BRIDGE OVER EAST TRIBUTARY OF JCC BY KIOWA ENGINEERING
SEE ABOVE
SEE BELOW





Signing and Striping Notes:

1. All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).
2. Removal of existing pavement markings shall be accomplished by a method that does not materially damage the pavement. The pavement markings shall be removed to the extent that they will not be visible under day or night conditions. At no time will it be acceptable to paint over existing pavement markings.
3. Any deviation from the striping and signing plan shall be approved by El Paso County Planning and Community Development. All signs shown on the signing and striping plan shall be new signs. Existing signs may remain or be reused if they meet current El Paso County Public Works Department and MUTCD standards.
4. Street name and regulatory stop signs shall be on the same post at intersections.
5. All removed signs shall be disposed of in a proper manner by the contractor.
6. All street name signs shall have "D" series letters, with local roadway signs being 4" upper-lower case lettering on 8" blank and non-local roadway signs being 6" lettering, upper-lower case on 12" blank, with a white border that is not recessed. Multi-lane roadways with speed limits of 40 mph or higher shall have 8" upper-lower case lettering on 18" blank with a white border that is not recessed. The width of the non-recessed white borders shall match page 255 of the 2012 MUTCD "Standard Highway Signs"
7. All traffic signs shall have a minimum High Intensity Prismatic grade sheeting.
8. All local residential street signs shall be mounted on a 1.75" x 1.75" square tube sign post and stub post base. For other applications, refer to the CDOT Standard S-614-8 regarding use of the P2 tubular steel post slipbase design.
9. All signs shall be single sheet aluminum with 0.100" minimum thickness.
10. All limit lines/stop lines, crosswalk lines, pavement legends, and arrows shall be a minimum 125 mil thickness preformed thermoplastic pavement markings with tapered leading edges per CDOT Standard S-627-1. Word and symbol markings shall be the narrow type. Stop bars shall be 24" in width. Crosswalks lines shall be 12" wide and 8' long per CDOT S-627-1.
11. All longitudinal lines shall be a minimum 15mil thickness epoxy paint. All non-local residential roadways shall include both right and left edge line striping and any additional striping as required by CDOT S-627-1.
12. The contractor shall notify El Paso County Planning and Community Development (719) 520-6819 prior to and upon completion of signing and striping.
13. The contractor shall obtain a work in the right of way permit from the El Paso County Public Works Department prior to any signage or striping work within an existing El Paso County roadway.

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NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

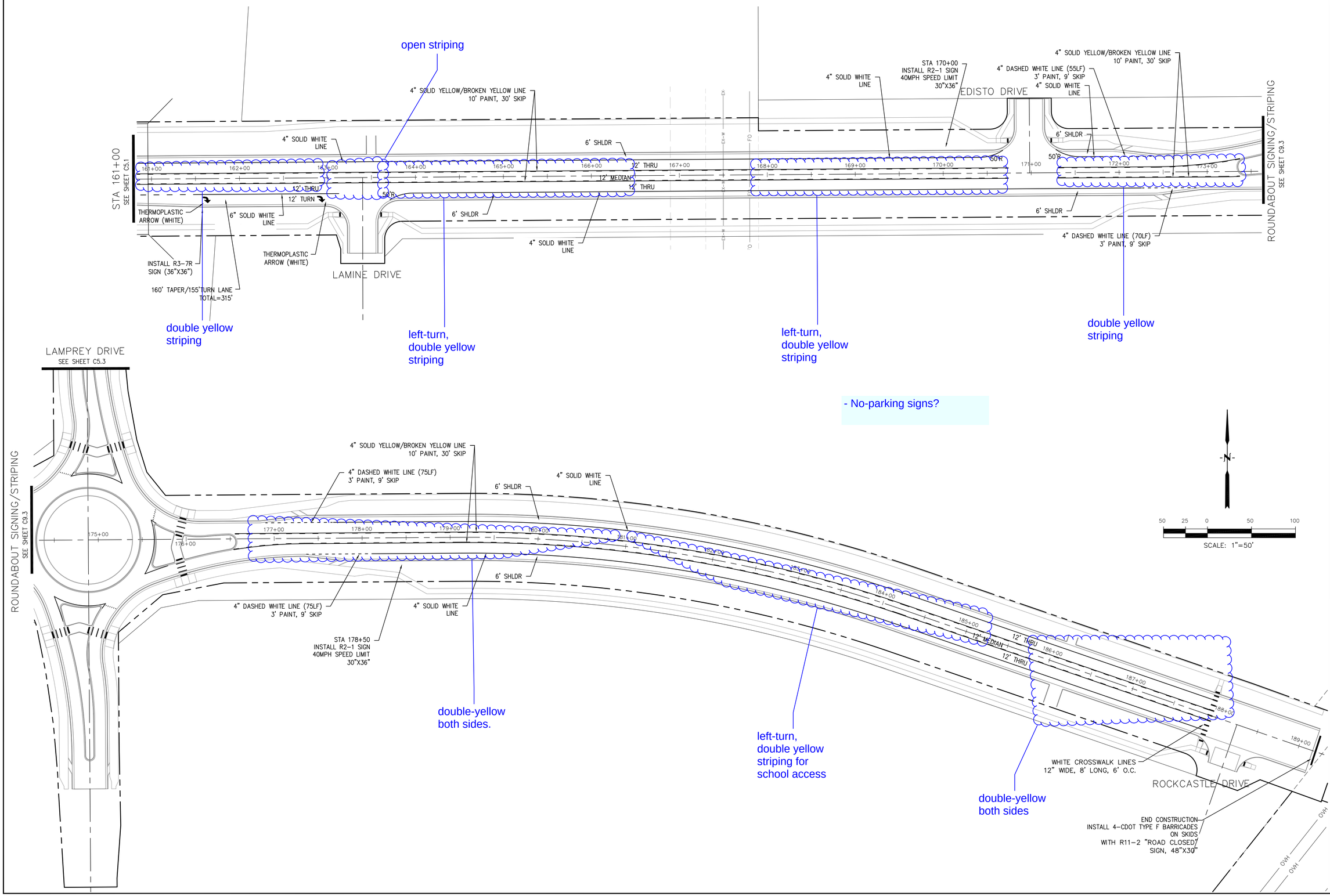
FONTAINE BLVD
SIGNING & STRIPING PLAN

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C5.1

TOTAL SHEETS: 34



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EMAIL: rlsch@cegi.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

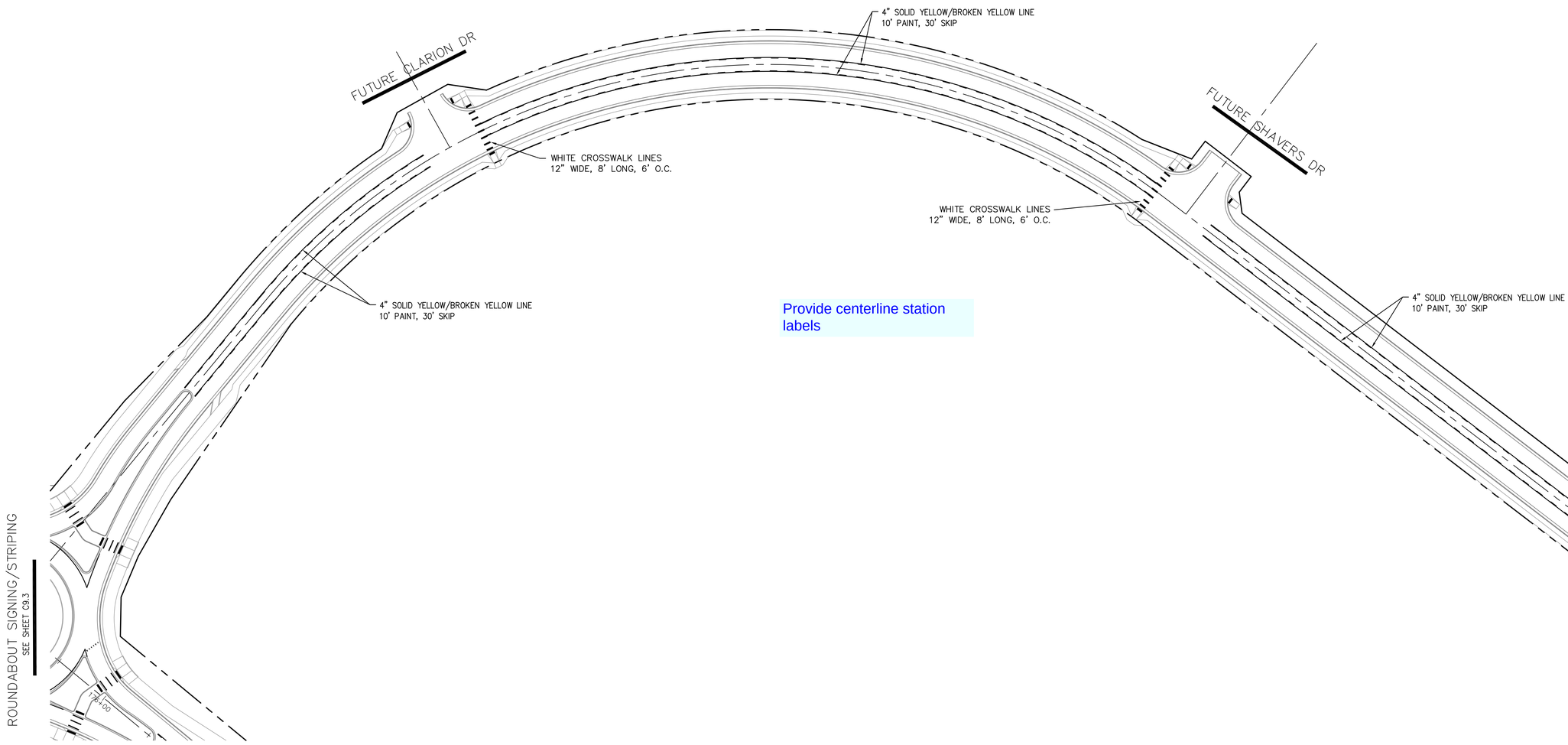
FONTAINE BLVD
SIGNING & STRIPING PLAN

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C5.2

TOTAL SHEETS: 34



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CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@coegi.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

LAMPREY DRIVE
SIGNING & STRIPING PLAN

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C5.3

TOTAL SHEETS: 34

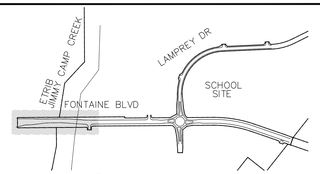
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

[1] CURVE DATA ID

[2] PEDESTRIAN RAMP, SEE SHEET C10.1

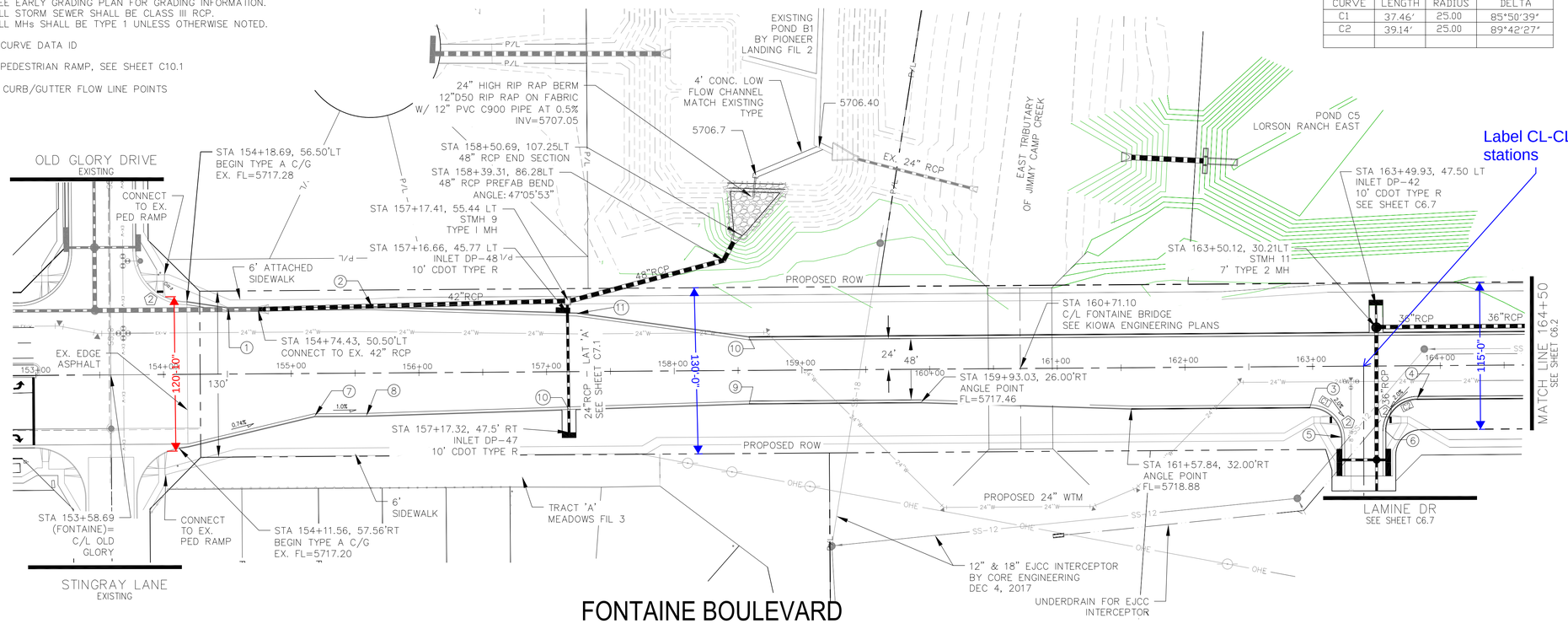
(3) CURB/GUTTER FLOW LINE POINTS

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.46'	25.00	85°50'39"
C2	39.14'	25.00	89°42'27"

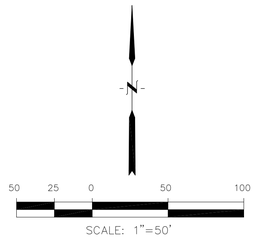


KEY MAP

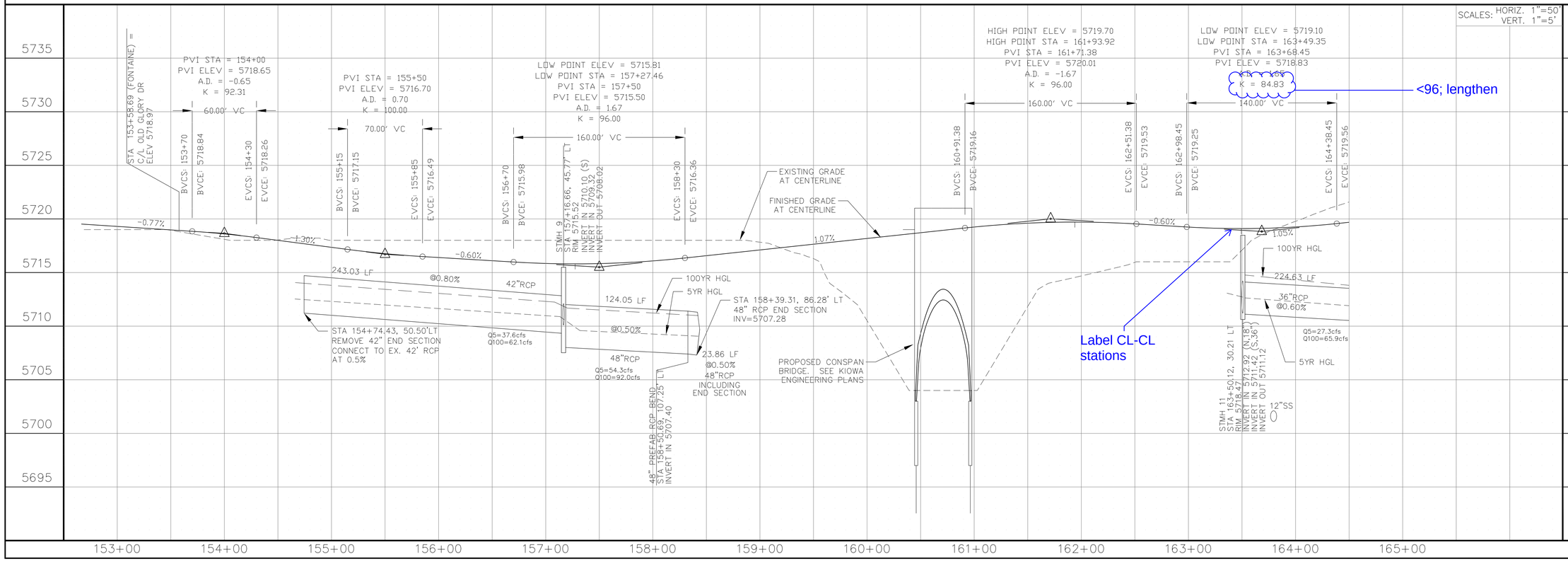
FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	154+51.20, 51.50'LT	5716.84
2	155+63.99, 51.50'LT	5715.50
3	162+97.67, 32.00'RT	5718.49
4	163+81.70, 26.0'RT	5718.57
5	163+24.70, 56.08'RT	5717.74
6	163+56.87, 50.88'RT	5717.78
7	155+18.08, 33.50'RT	5716.33
8	155+58.64, 33.50'RT	5715.89
9	158+58.64, 26.00'RT	5716.02
10	157+17.19, 29.54'RT	5714.97
11	157+24.13, 45.49'LT	5714.78
12	158+58.68, 26.00'LT	5716.02



FONTAINE BOULEVARD



SCALE: 1"=50'



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EMAIL: rlschindler@ceg1.com

DATE
DESCRIPTION
NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 153+00 TO 164+50

DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C6.1
TOTAL SHEETS: 34

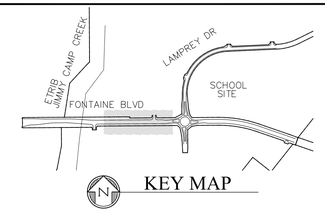
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

[1] CURVE DATA ID

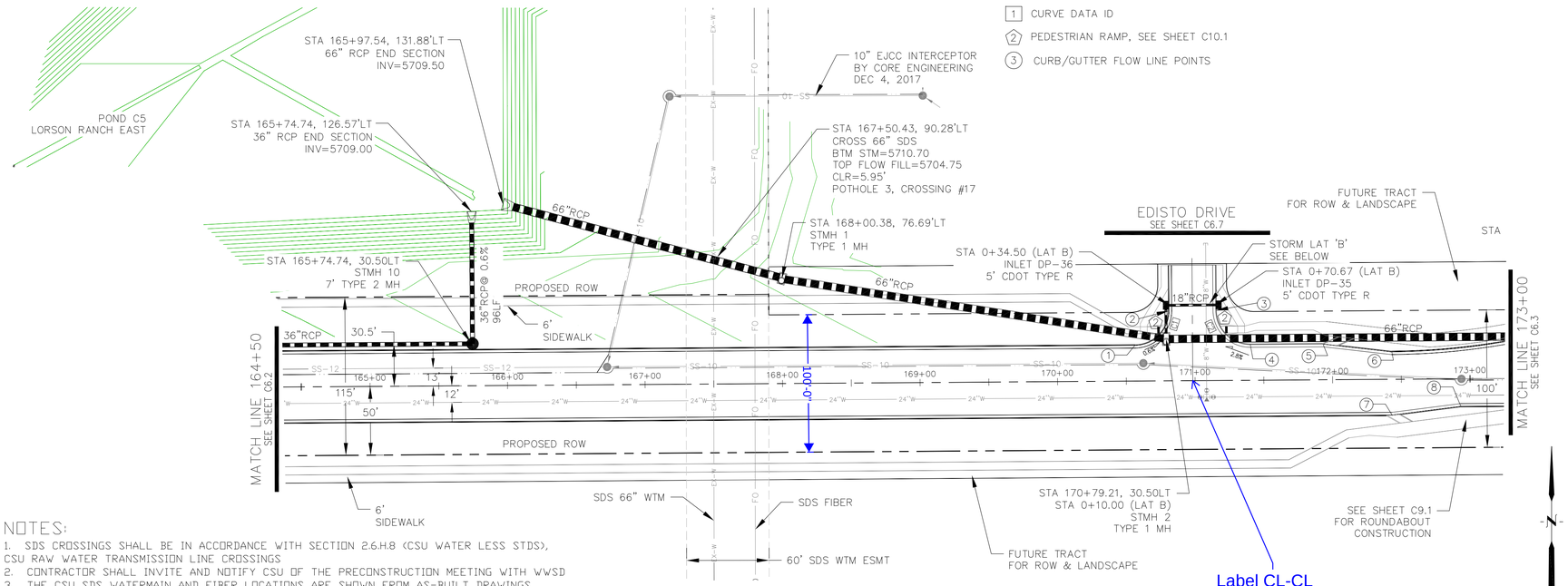
(2) PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"



FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	170+56.37, 26.00'LT	5725.42
2	170+81.37, 51.50'LT	5725.20
3	171+15.37, 51.50'LT	5725.20
4	171+40.37, 26.00'LT	5726.30
5	171+93.25, 26.00'LT	5726.85
6	172+43.25, 20.00'LT	5727.50
7	172+43.14, 26.00'RT	5727.38
8	172+93.14, 20.00'RT	5728.02



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 WWSD
3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
4. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4667, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

Label CL-CL stations

FONTAINE BOULEVARD

COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL

APPROVED BY: _____

DATE: _____

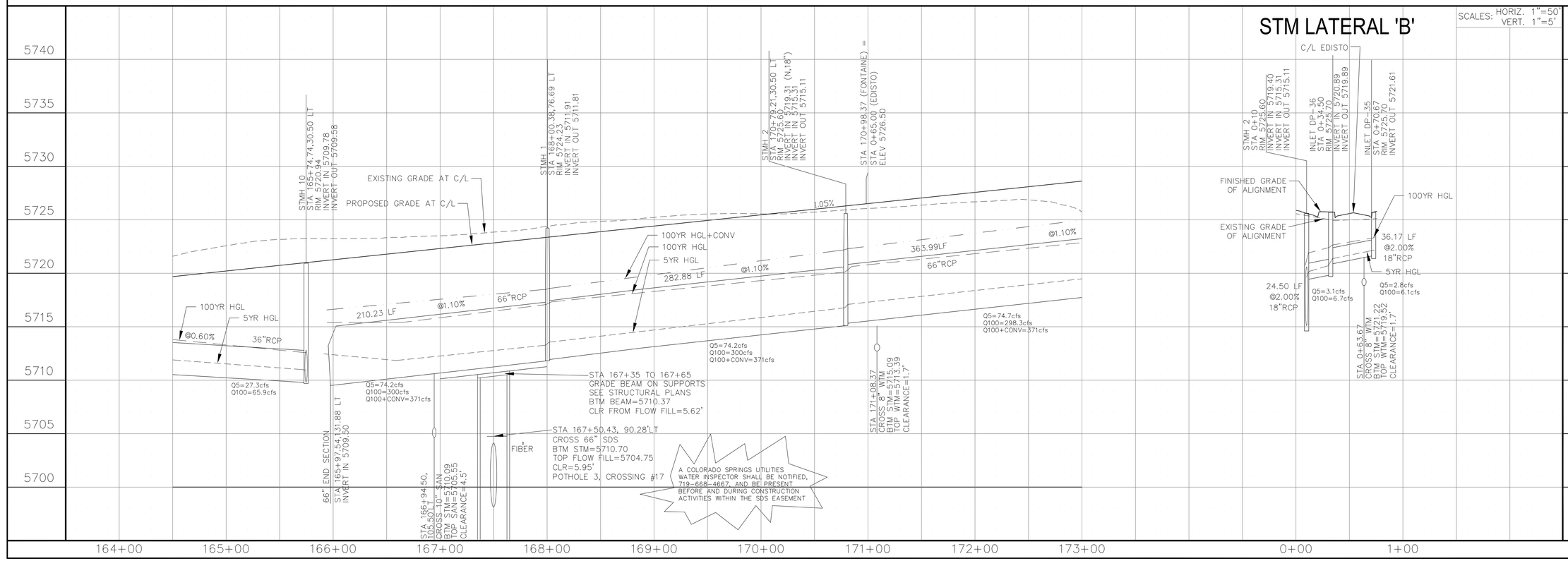
PROJECT NUMBER: 2017-

WORK ORDER NUMBER:

CSU SHEET ___ OF ___

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.

50 25 0 50 100
SCALE: 1"=50'



CORE
ENGINEERING GROUP
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CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

DATE
DESCRIPTION
NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

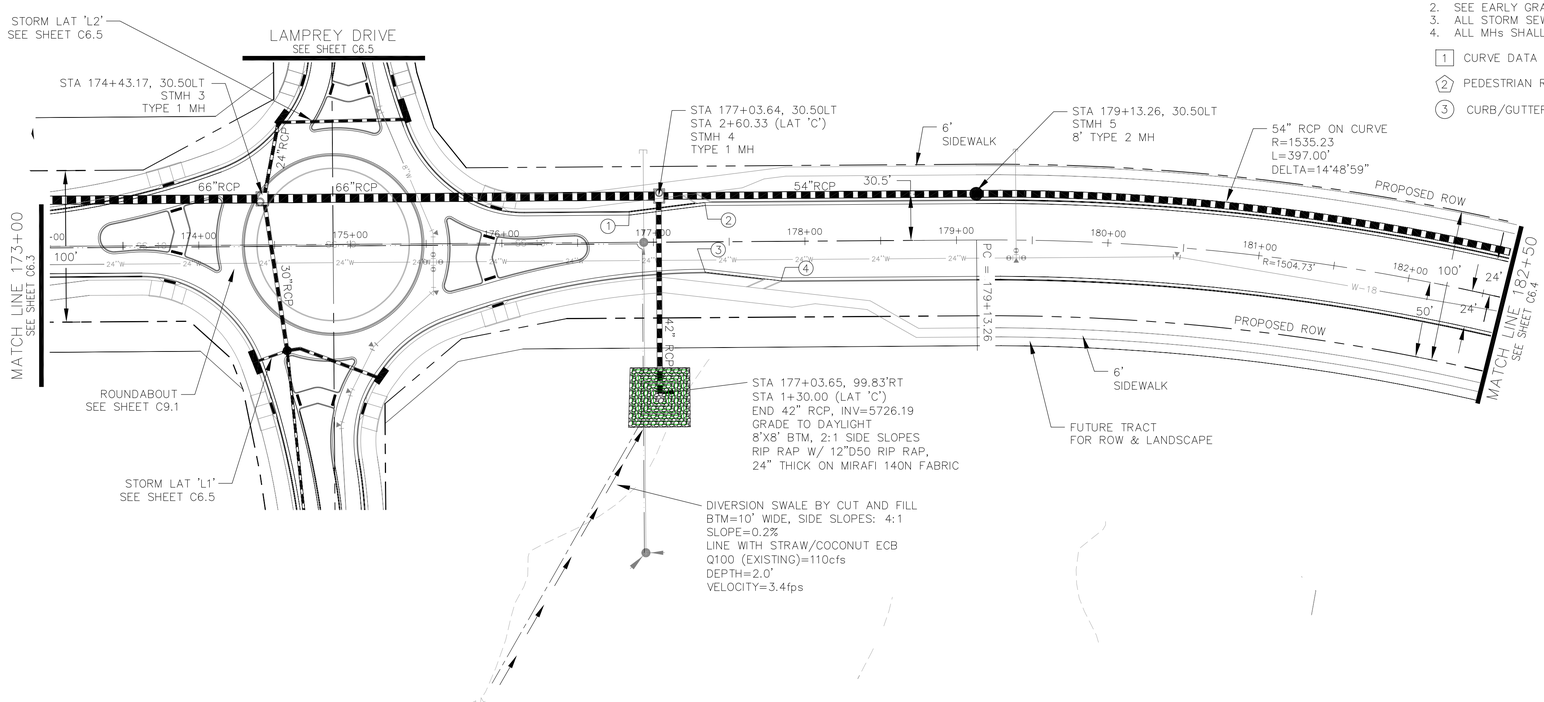
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 164+50 TO 173+00

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C6.2
TOTAL SHEETS: 34

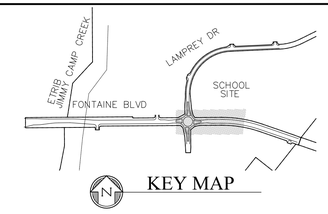


NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

(1) CURVE DATA ID

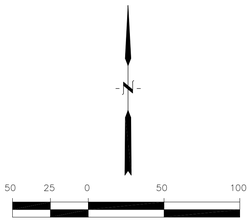
(2) PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

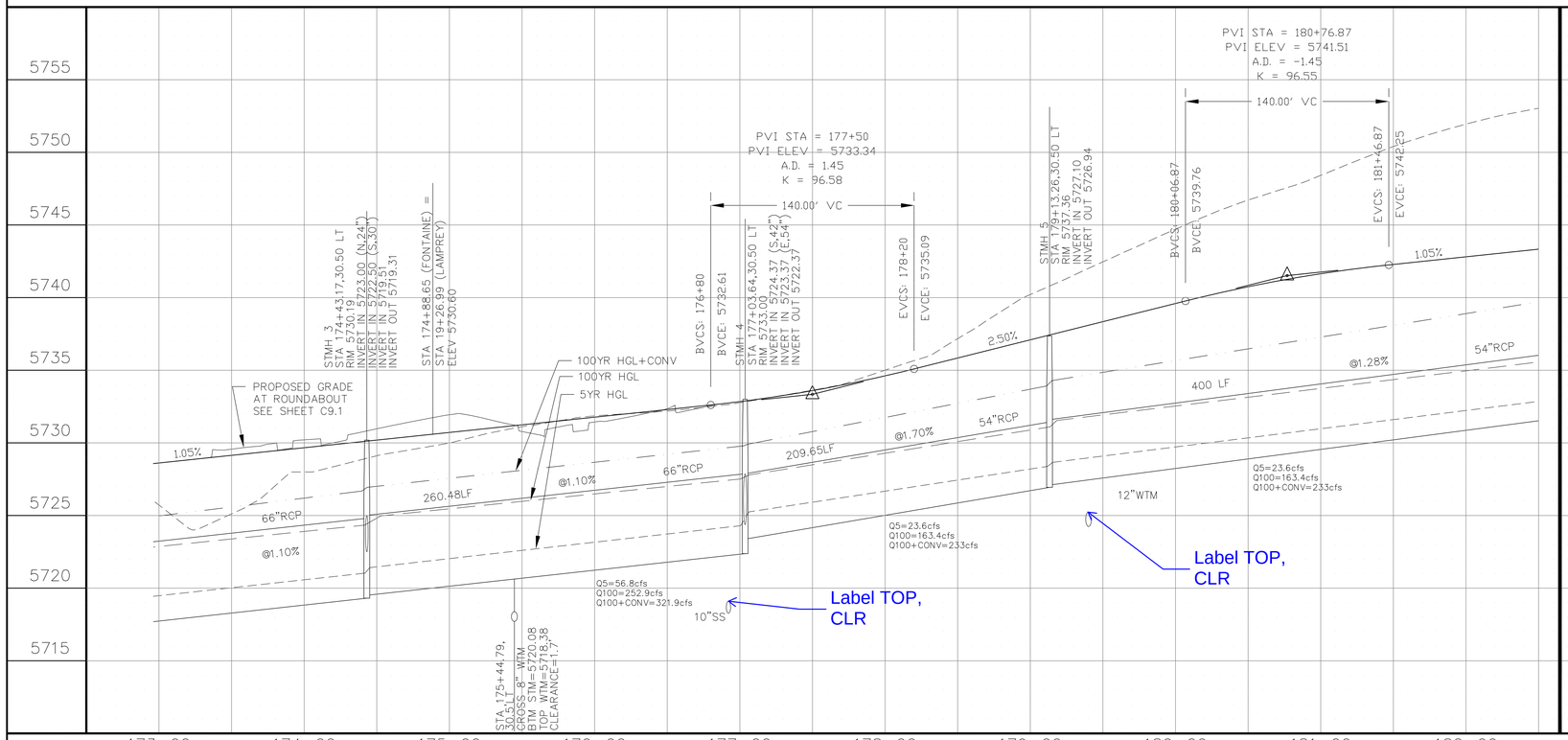


FL CURB/GUTTER TABLE

POINT	STA/OFFSET	FLOWLINE
1	176+84.17, 20.00'LT	5732.13
2	177+34.17, 26.00'LT	5732.69
3	177+34.06, 20.00'RT	5732.81
4	177+84.06, 26.00'RT	5733.62

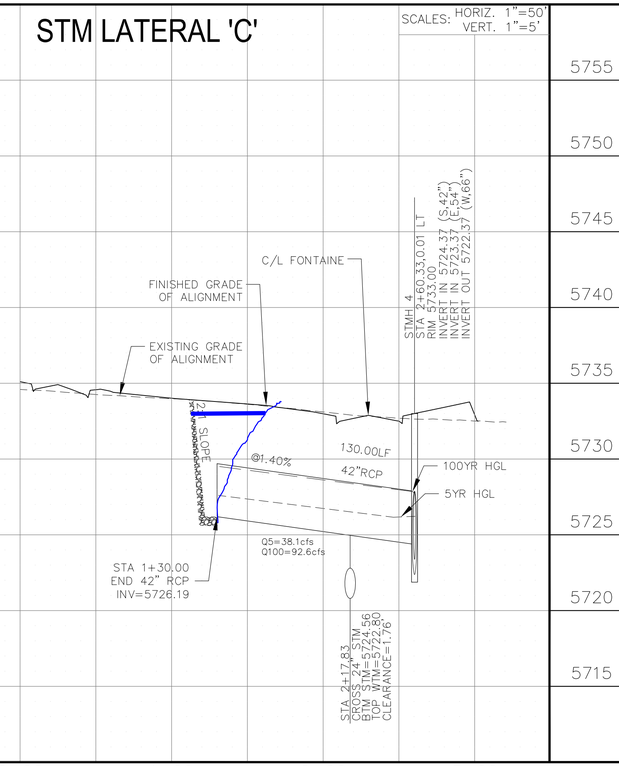


FONTAINE BOULEVARD



STM LATERAL 'C'

SCALES: HORIZ. 1"=50'
VERT. 1"=5'



CORE
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PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 173+00 TO 182+50

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

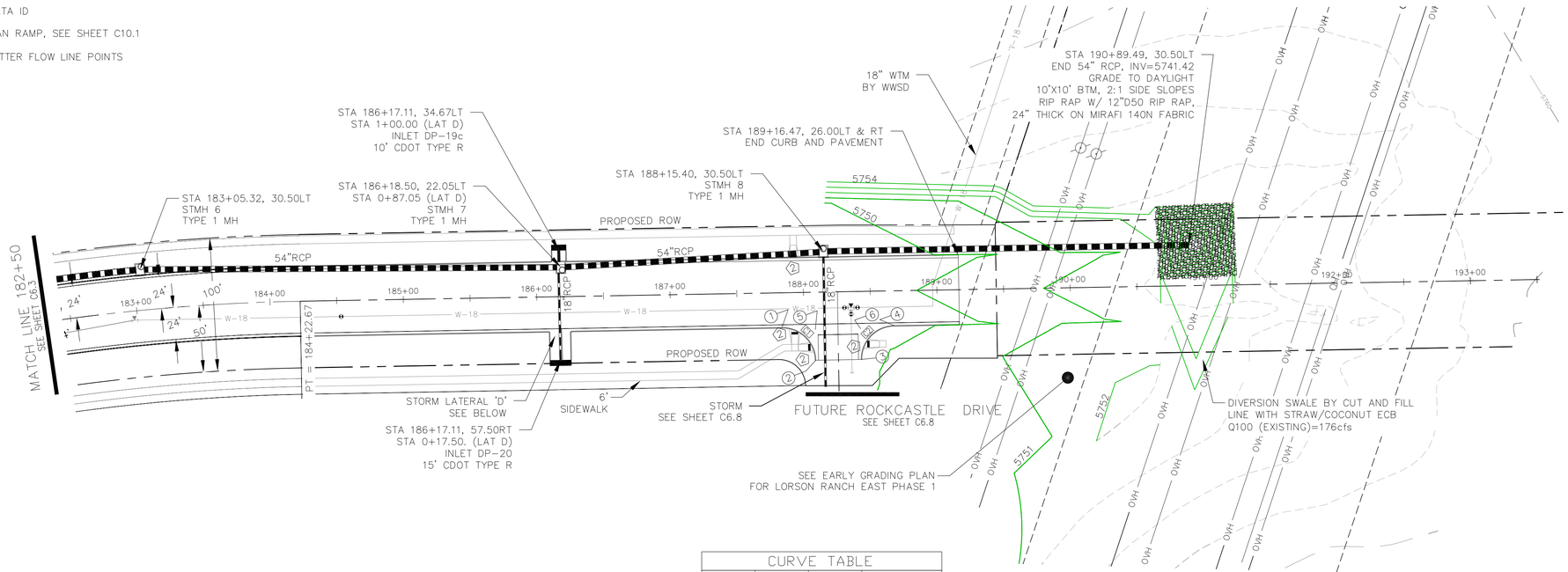
SHEET NUMBER
C6.3
TOTAL SHEETS: 34

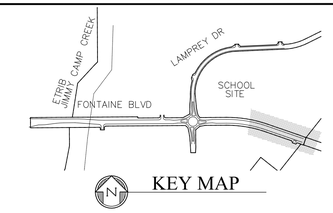
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

(1) CURVE DATA ID

(2) PEDESTRIAN RAMP, SEE SHEET C10.1

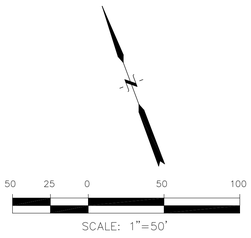
(3) CURB/GUTTER FLOW LINE POINTS



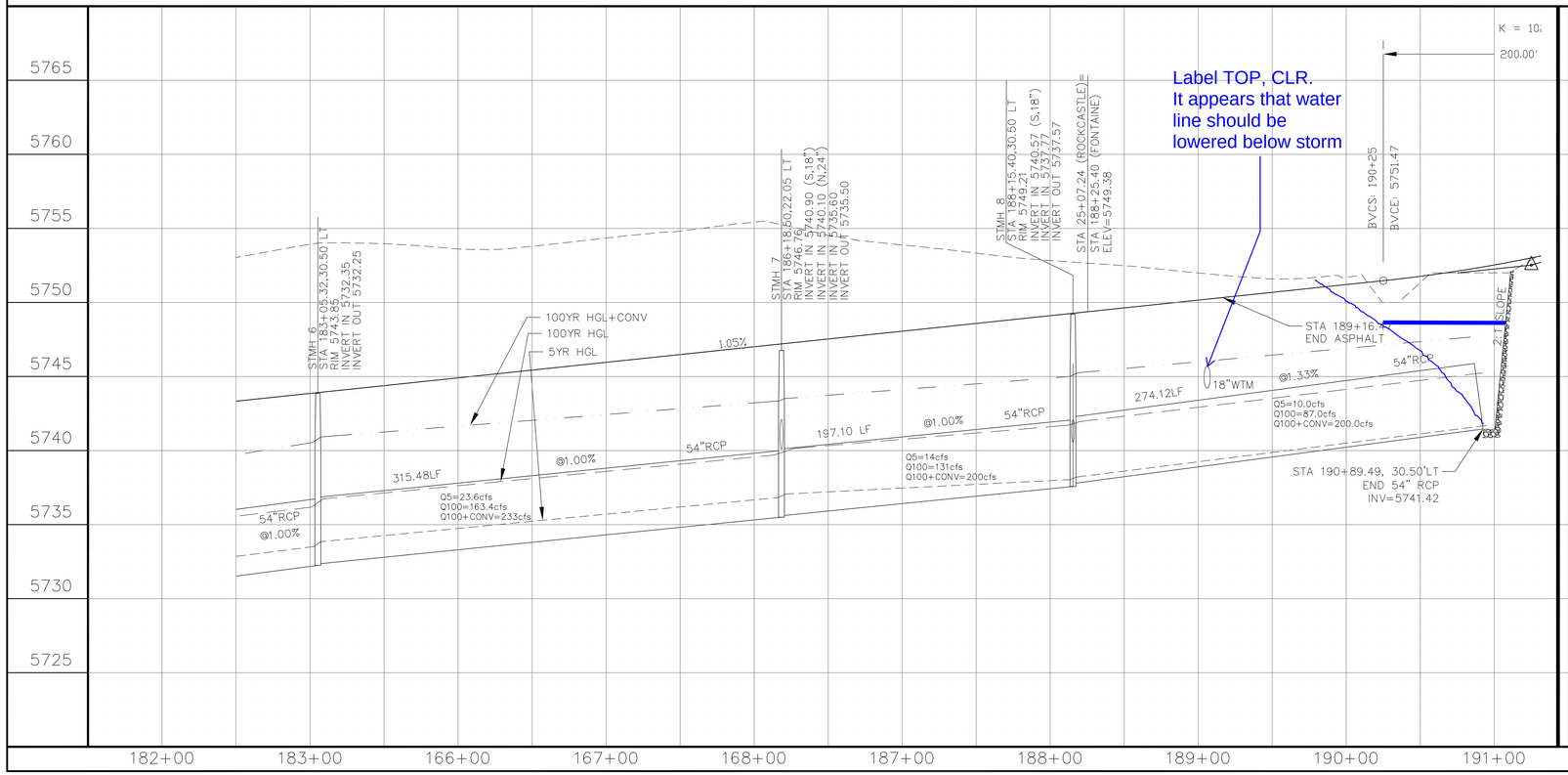


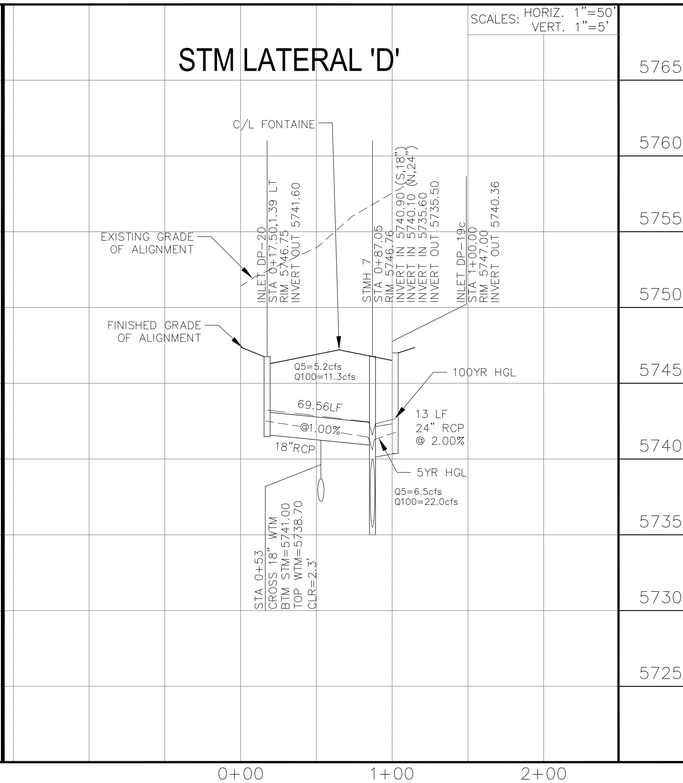
FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	187+83.40, 26.00'RT	5748.29
2	188+08.40, 51.00'RT	5748.85
3	188+42.40, 51.00'RT	5749.10
4	188+67.40, 26.00'RT	5749.17
5	188+08.40, 28.00'RT	5748.55
6	188+42.40, 28.00'RT	5748.91

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"



FONTAINE BOULEVARD





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NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 182+50 TO 191+00

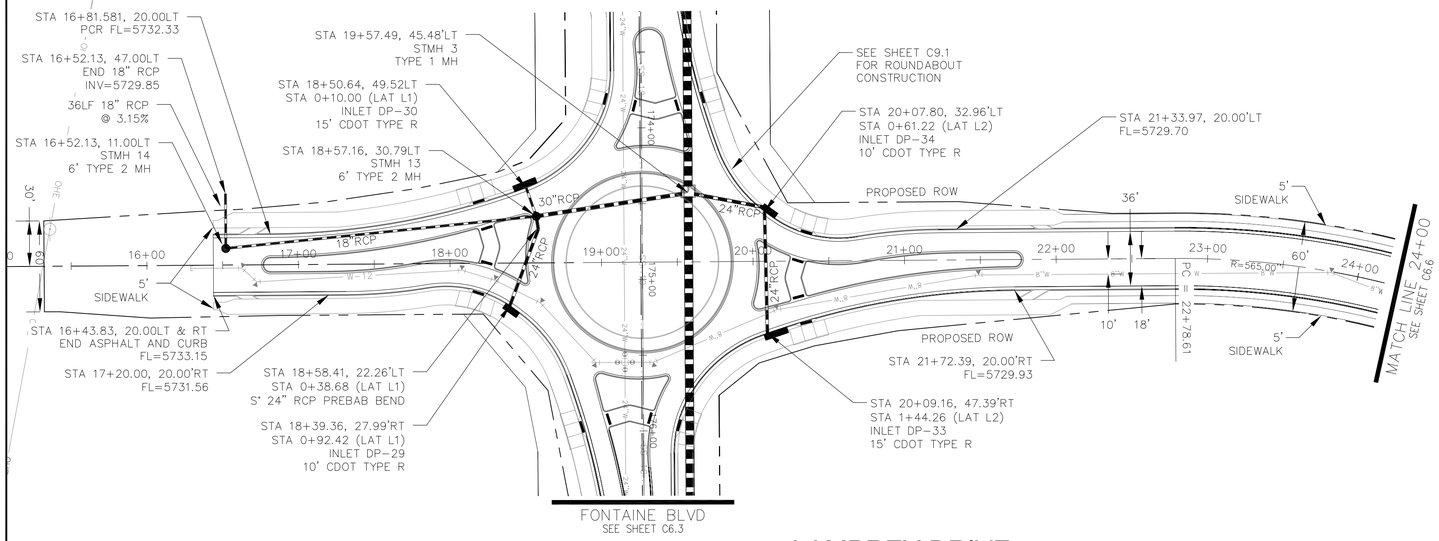
DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C6.4
TOTAL SHEETS: 34

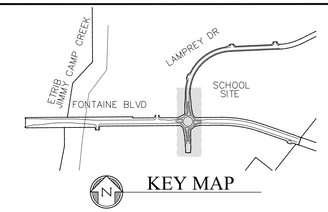
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

[1] CURVE DATA ID

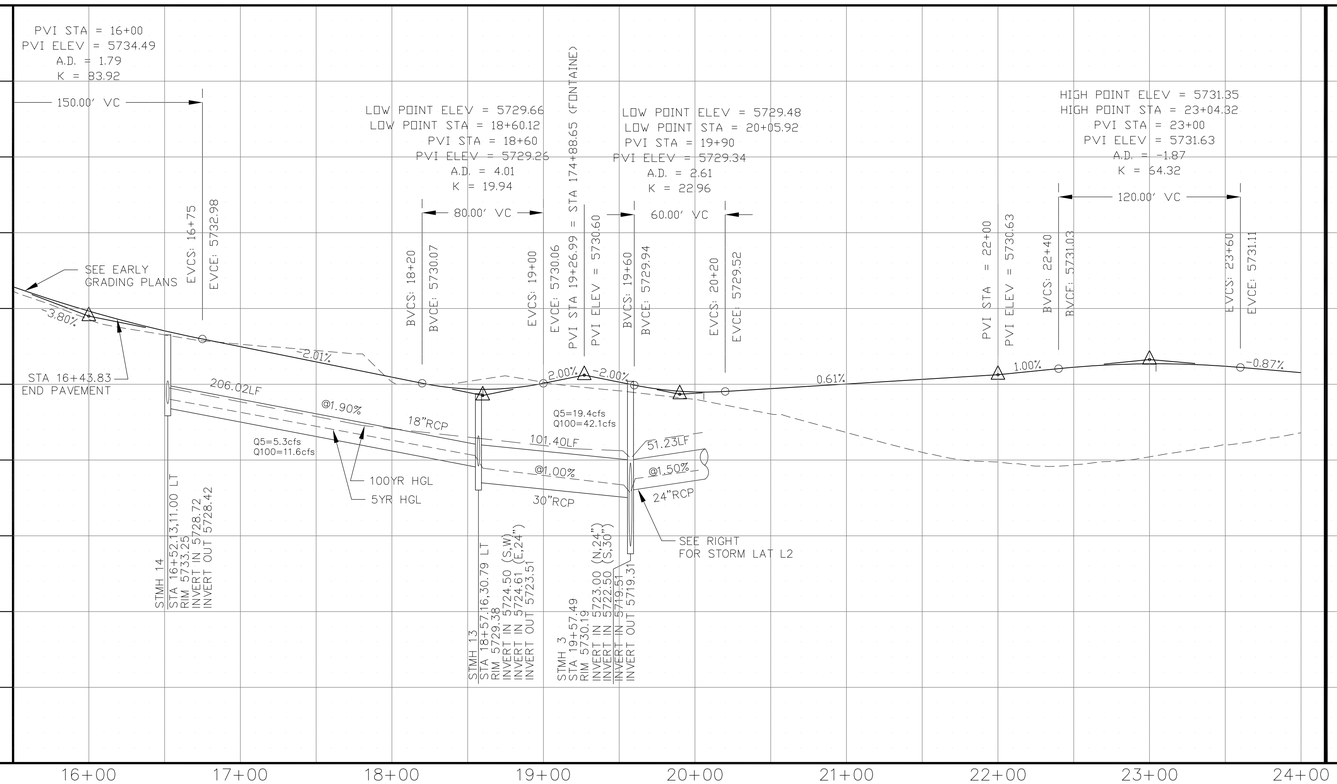
[2] PEDESTRIAN RAMP, SEE SHEET C10.1

[3] CURB/GUTTER FLOW LINE POINTS

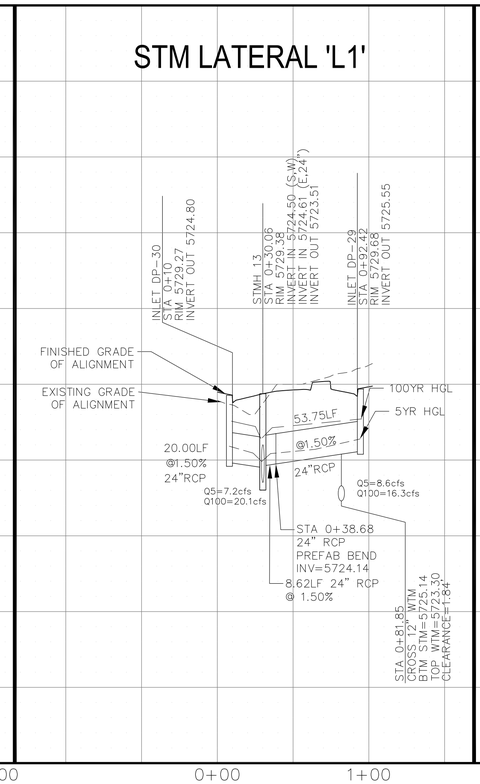




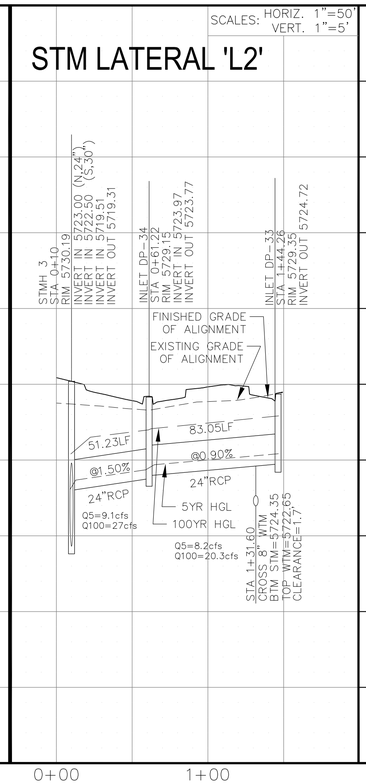
LAMPREY DRIVE



STM LATERAL 'L1'



STM LATERAL 'L2'



50 25 0 50 100
SCALE: 1"=50'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

DATE
DESCRIPTION
NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
LAMPREY DRIVE
STA 16+00 TO 24+00

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C6.5
TOTAL SHEETS: 34

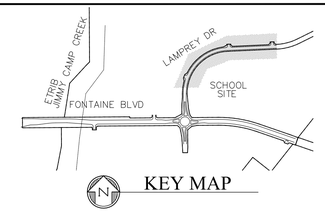
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

(1) CURVE DATA ID

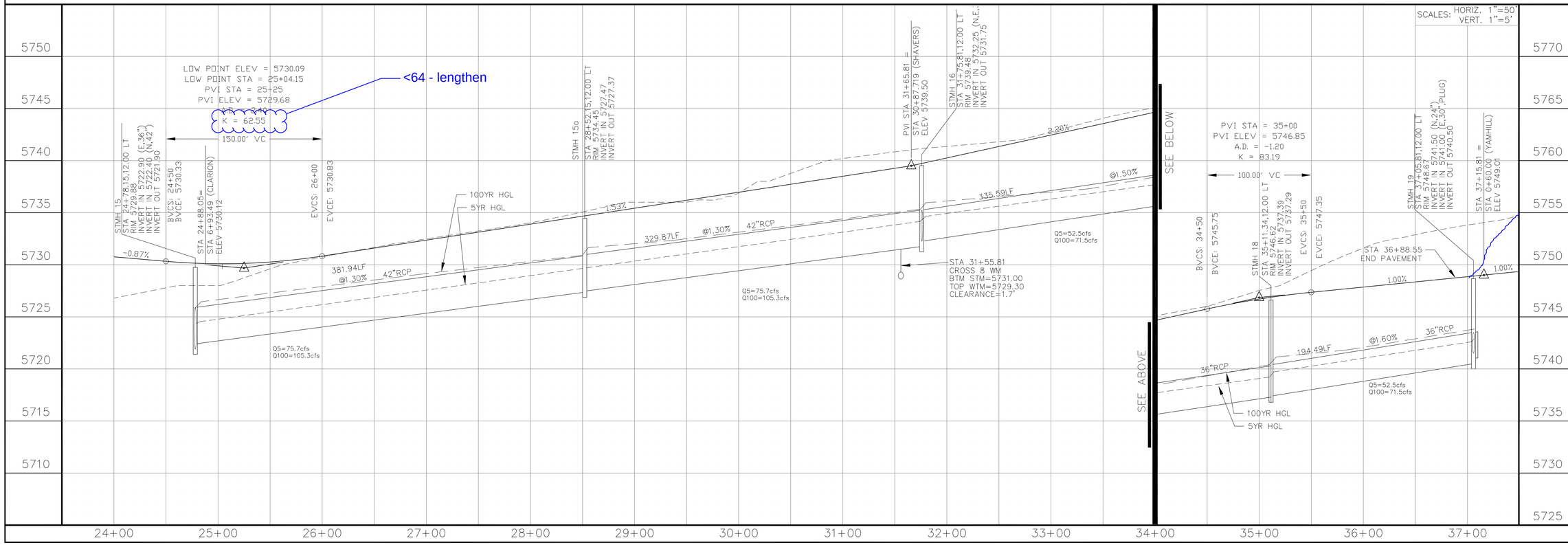
(2) PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	24+49.11, 20.00'LT	5729.82
2	24+72.27, 43.49'LT	5728.94
3	25+03.83, 43.49'LT	5728.94
4	25+26.98, 20.00'LT	5729.62



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.55'	25.00	86°03'07"
C2	37.55'	25.00	86°03'07"
C3	38.41'	25.00	88°01'11"
C4	39.27'	25.00	90°00'00"
C5	39.27'	25.00	90°00'00"



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
LAMPREY DRIVE
STA 24+00 TO 37+15.81

DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C6.6
TOTAL SHEETS: 34

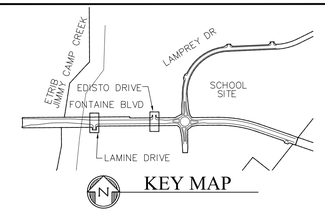
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

[1] CURVE DATA ID

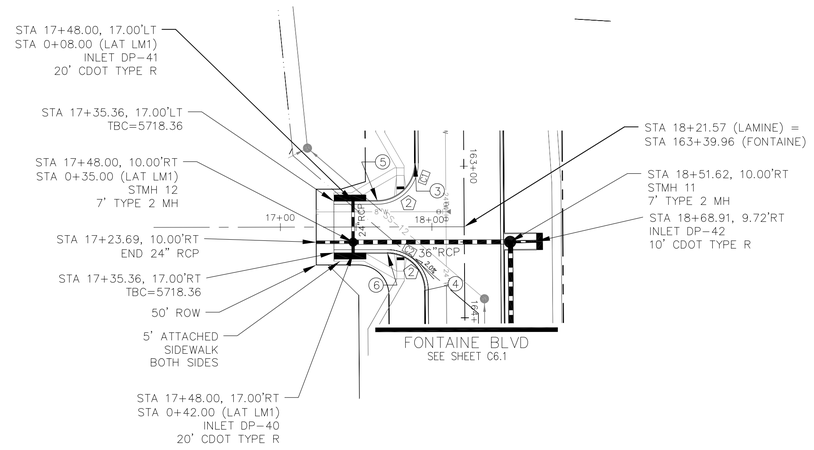
[2] PEDESTRIAN RAMP, SEE SHEET C10.1

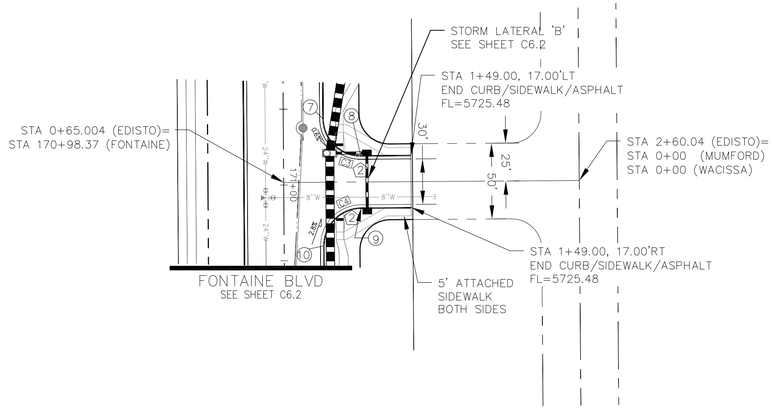
(3) CURB/GUTTER FLOW LINE POINTS

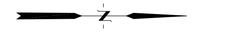
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.40'	25.00	90°17'33"
C2	39.14'	25.00	89°42'27"
C3	39.27'	25.00	90°00'00"
C4	39.27'	25.00	90°00'00"



FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
3	163+01.50, 32.16'RT	5718.51
4	163+81.70, 26.0'RT	5718.57
5	17+65.87, 17.00'LT	5717.74
6	17+70.57, 17.00'RT	5717.78
7	170+56.37, 26.00'LT	5725.42
8	1+16.00, 17.00'LT	5725.20
9	1+16.00, 17.00'RT	5725.20
10	171+40.37, 26.00'LT	5726.30





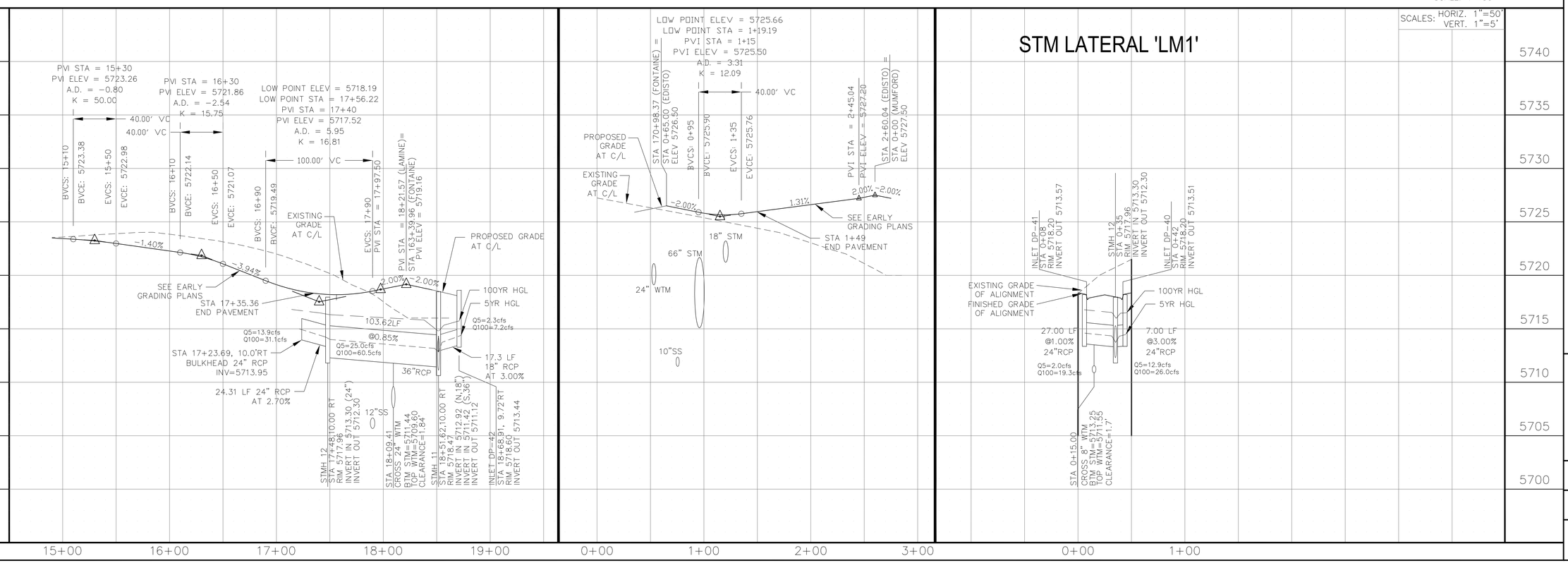


LAMINE DRIVE

EDISTO DRIVE

STM LATERAL 'LM1'

SCALES: HORIZ. 1"=50'
VERT. 1"=5'



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO.	DESCRIPTION	DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
LAMINE DRIVE
AND EDISTO DRIVE

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C6.7

TOTAL SHEETS: 34

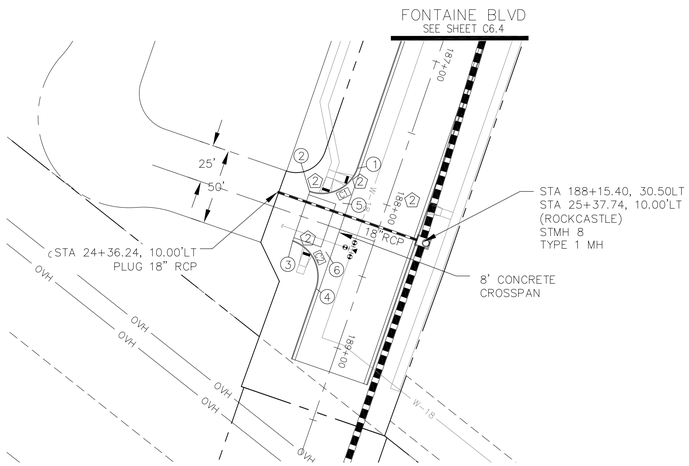
NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

[1] CURVE DATA ID

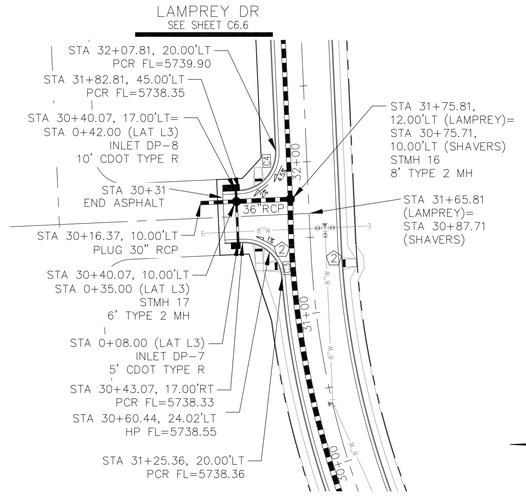
(2) PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	187+83.40, 26.00'RT	5748.29
2	24+56.24, 17.00'LT	5748.85
3	24+56.24, 17.00'RT	5749.10
4	188+67.40, 26.00'RT	5749.17
5	188+08.40, 28.00'RT	5748.55
6	188+42.40, 28.00'RT	5748.91

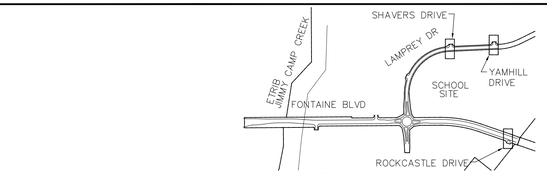


ROCKCASTLE DRIVE

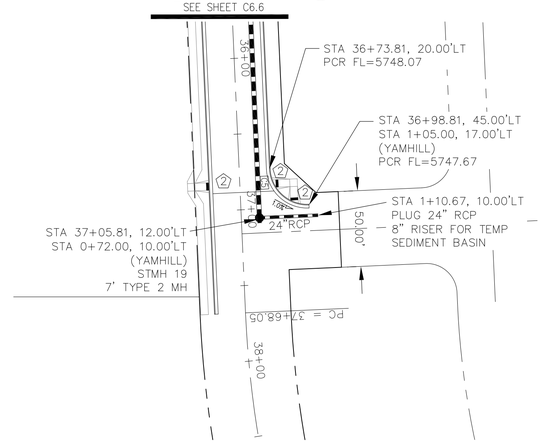


SHAVERS DRIVE

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"
C3	38.41'	25.00	88°01'11"
C4	39.27'	25.00	90°00'00"
C5	39.27'	25.00	90°00'00"



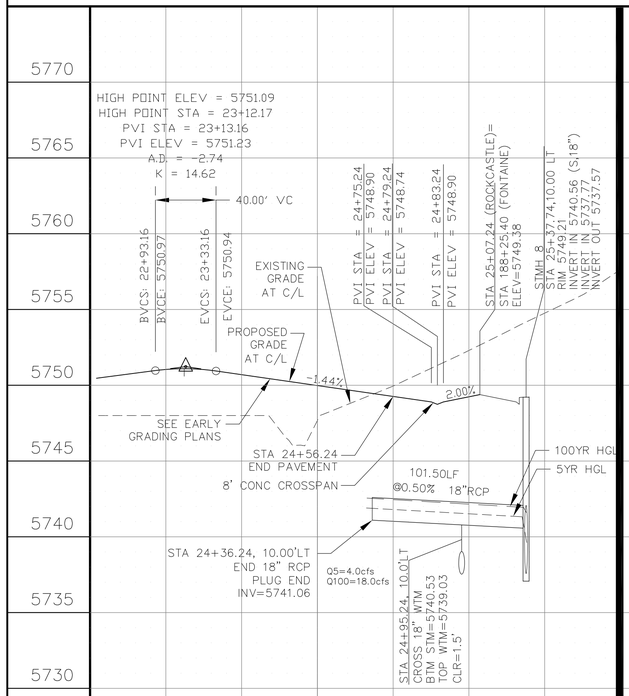
KEY MAP

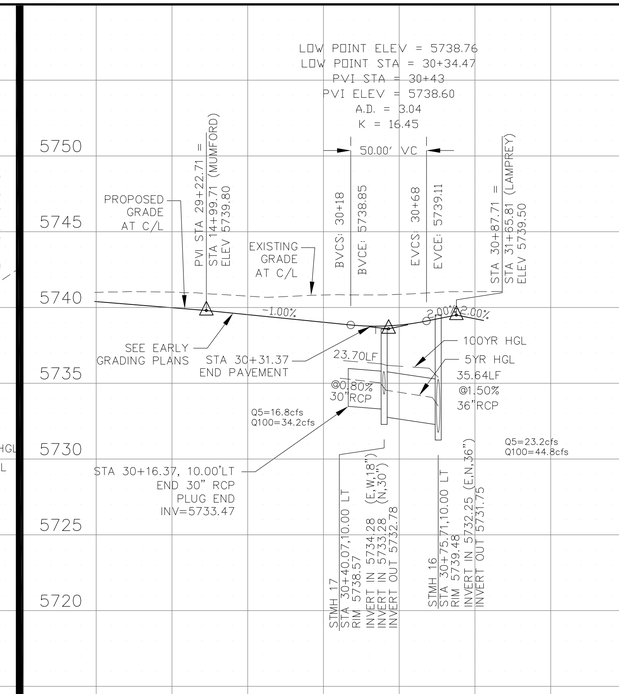


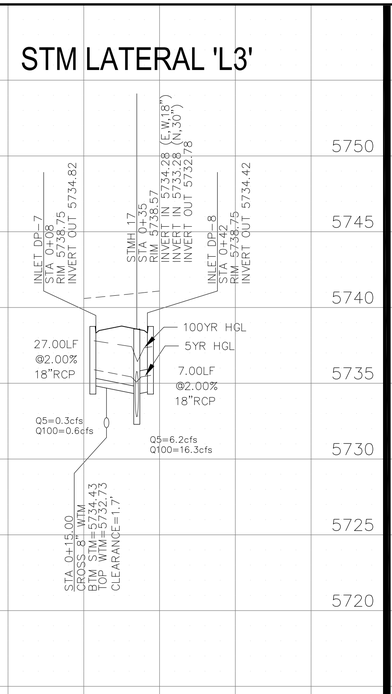
YAMHILL DRIVE

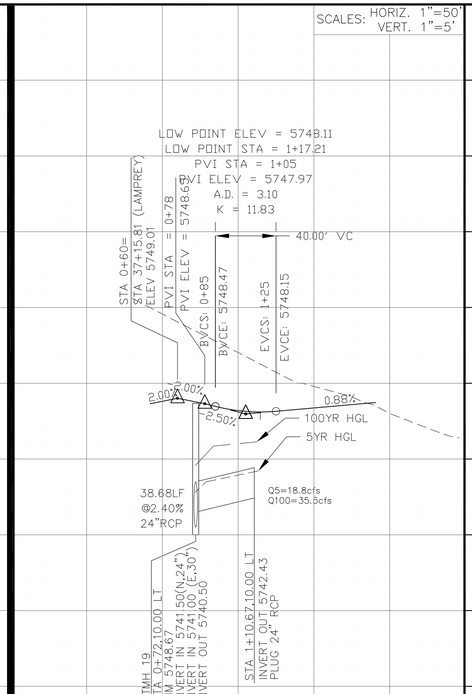
50 25 0 50 100

SCALE: 1"=50'









STREET & STORM SEWER PLAN/PROFILE
ROCKCASTLE DR, SHAVERS DR,
YAMHILL DR

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C6.8

TOTAL SHEETS: 34

NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

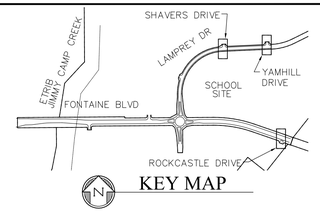
[1] CURVE DATA ID

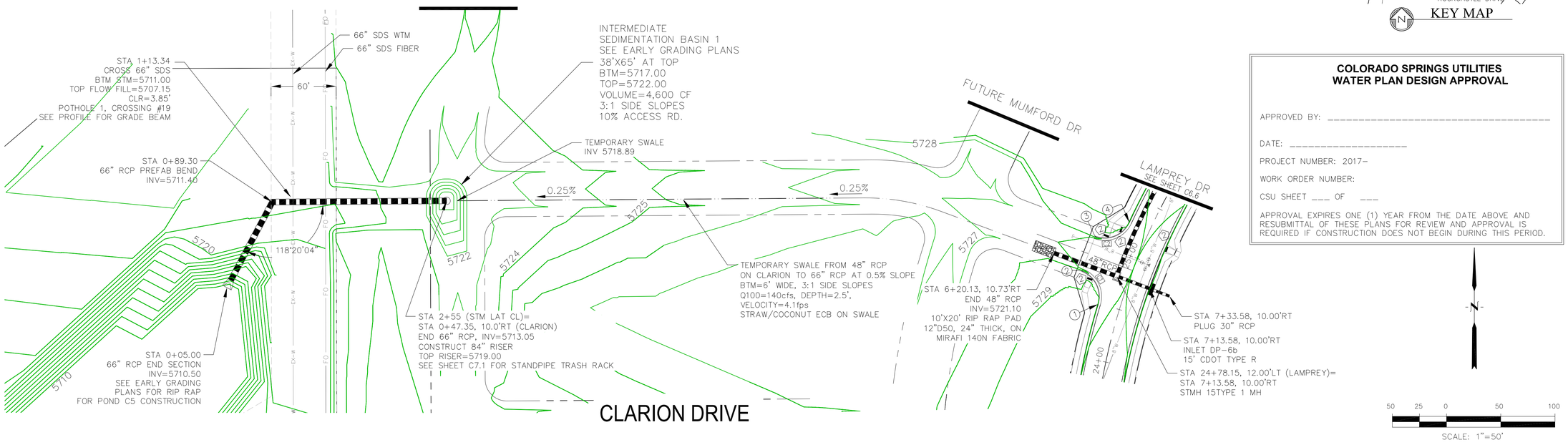
⟨2⟩ PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	24+49.11, 20.00'LT	5729.82
2	6+49.93, 17.00'RT	5728.94
3	6+49.93, 17.00'LT	5728.94
4	25+26.98, 20.00'LT	5729.62

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.55'	25.00	86°03'07"
C2	37.55'	25.00	86°03'07"





COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL

APPROVED BY: _____

DATE: _____

PROJECT NUMBER: 2017-

WORK ORDER NUMBER:

CSU SHEET ___ OF ___

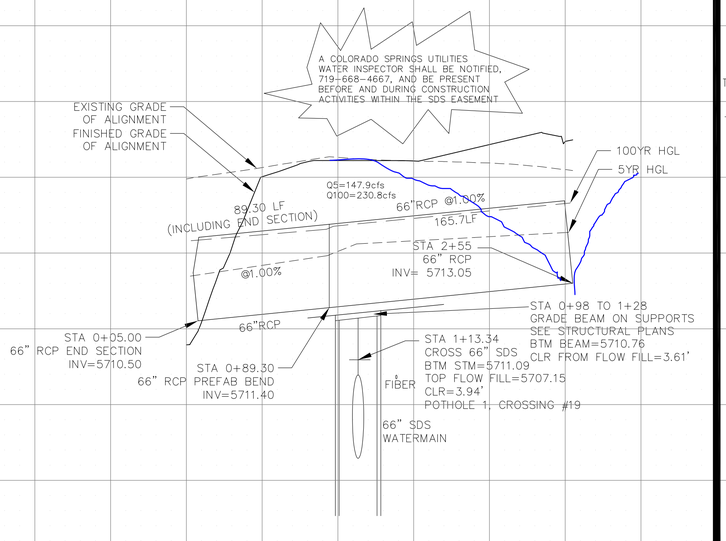
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

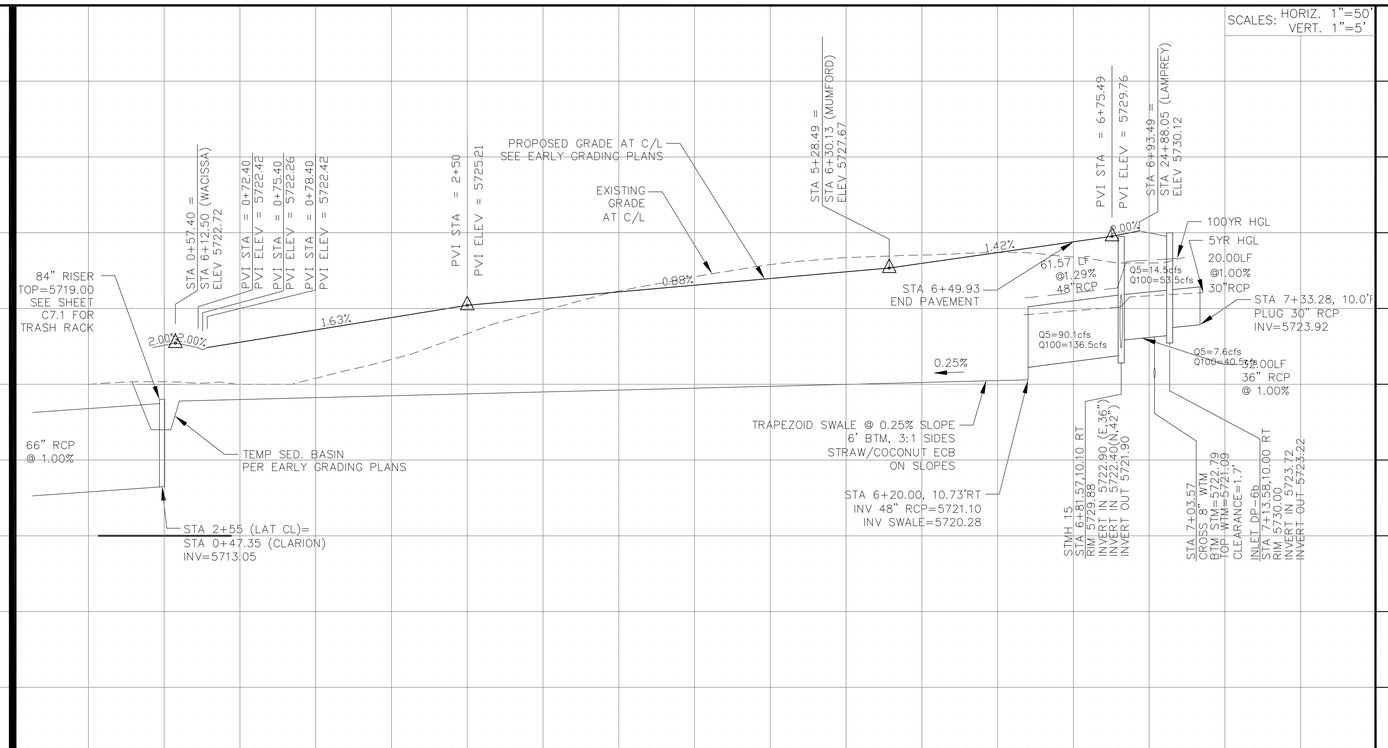
N

50 25 0 50 100

SCALE: 1"=50'

STORM LATERAL 'CL'





CORE ENGINEERING GROUP
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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO. | DESCRIPTION | DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
CLARION DRIVE AND
STORM LATERAL 'CL'

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

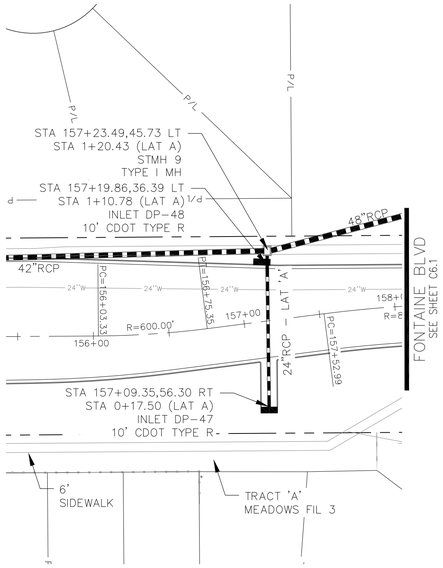
SHEET NUMBER
C6.9
TOTAL SHEETS: 34

NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHs SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

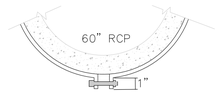
(1) CURVE DATA ID

(2) PEDESTRIAN RAMP, SEE SHEET C10.1

(3) CURB/GUTTER FLOW LINE POINTS

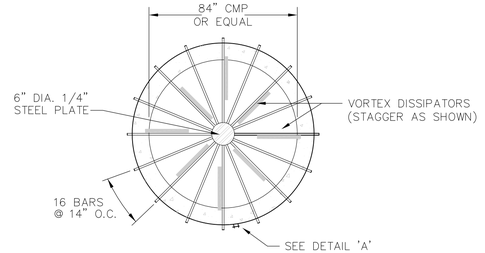


STORM LATERAL 'A'

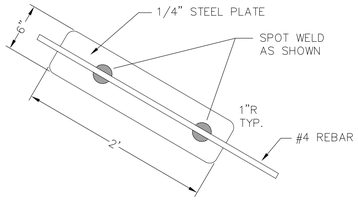


2 1/2"ø STD THREAD BOLTS WITH
LOCK WASHERS & NUTS (GALVANIZED)
(REVERSE BOLT DIRECTIONS)

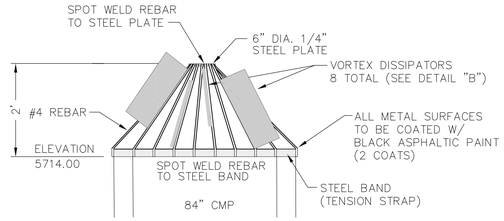
DETAIL 'A'



PLAN



DETAIL 'B' VORTEX DISSIPATOR

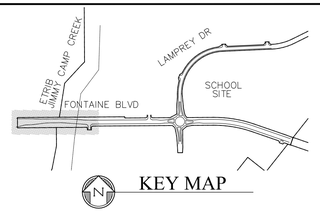


ELEVATION

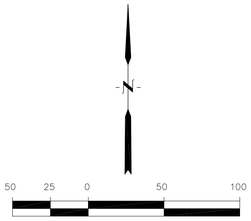
STAND PIPE TRASH RACK DETAILS

STORM LATERAL CL (SHEET C6.9)

NOT TO SCALE

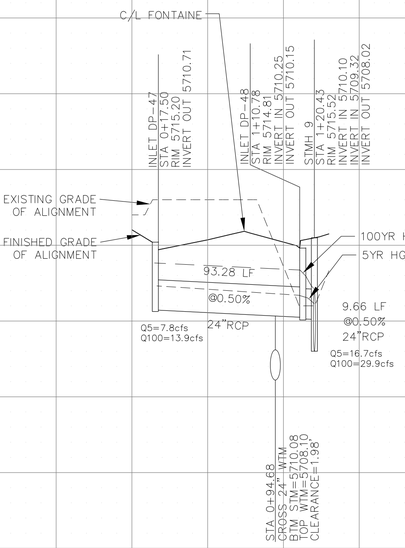


KEY MAP



SCALE: 1"=50'

SCALES: HORIZ. 1"=50'
VERT. 1"=5'



STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STORM LATERAL 'A'

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO.	DESCRIPTION	DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE:
DECEMBER 20, 2017

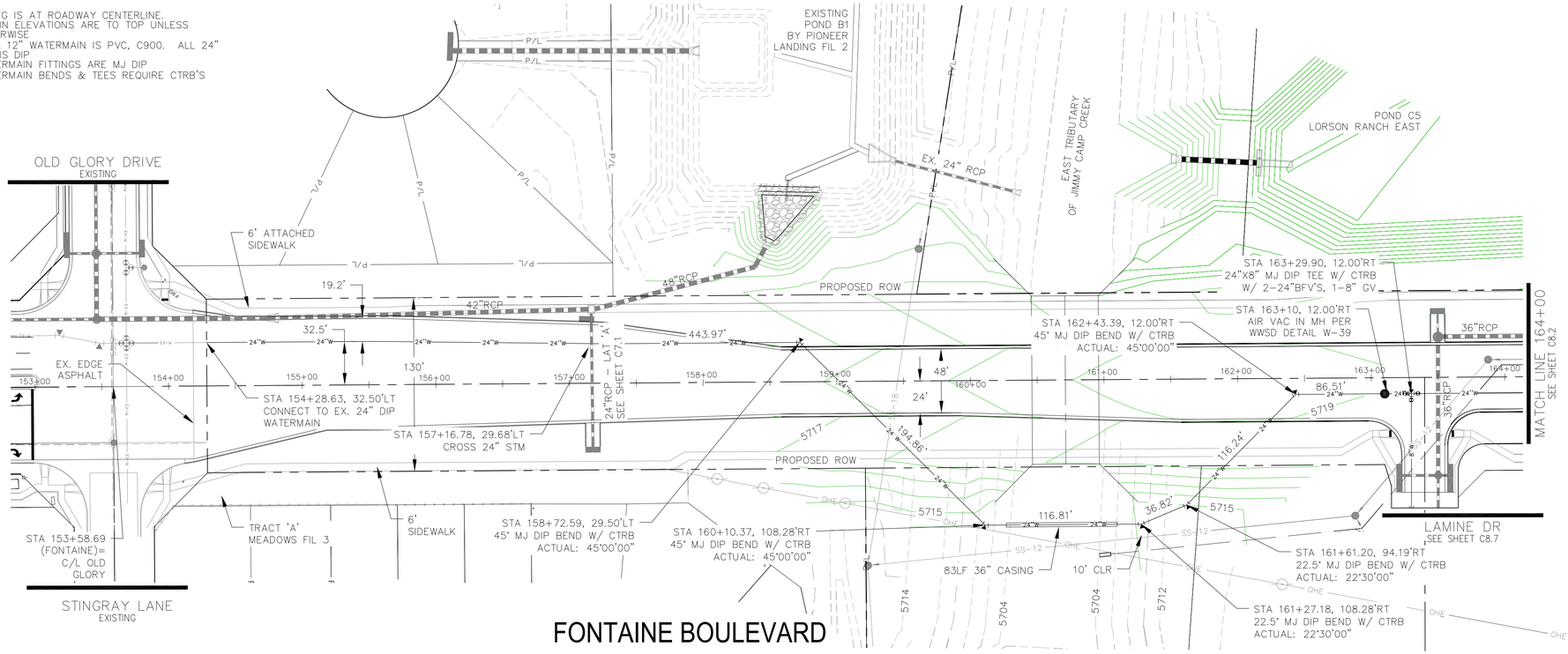
PROJECT NO.
100.041

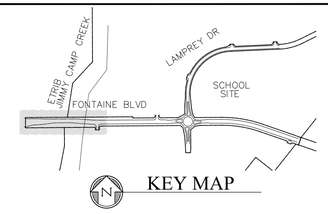
SHEET NUMBER
C7.1

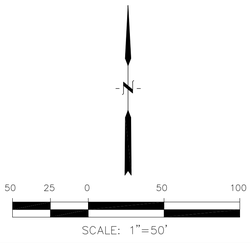
TOTAL SHEETS: 34

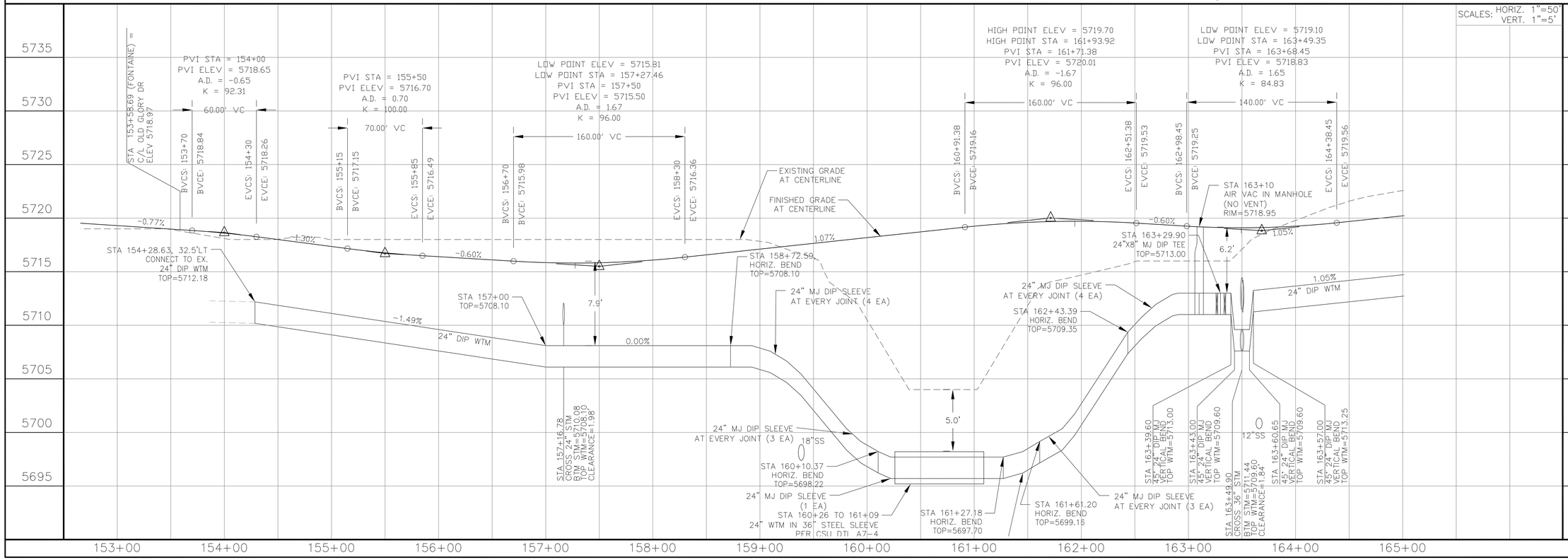
NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S









WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 153+00 TO 164+00

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

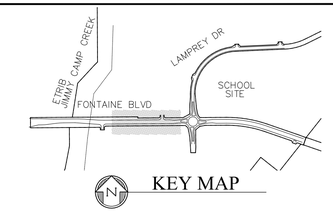
NO.	DESCRIPTION	DATE

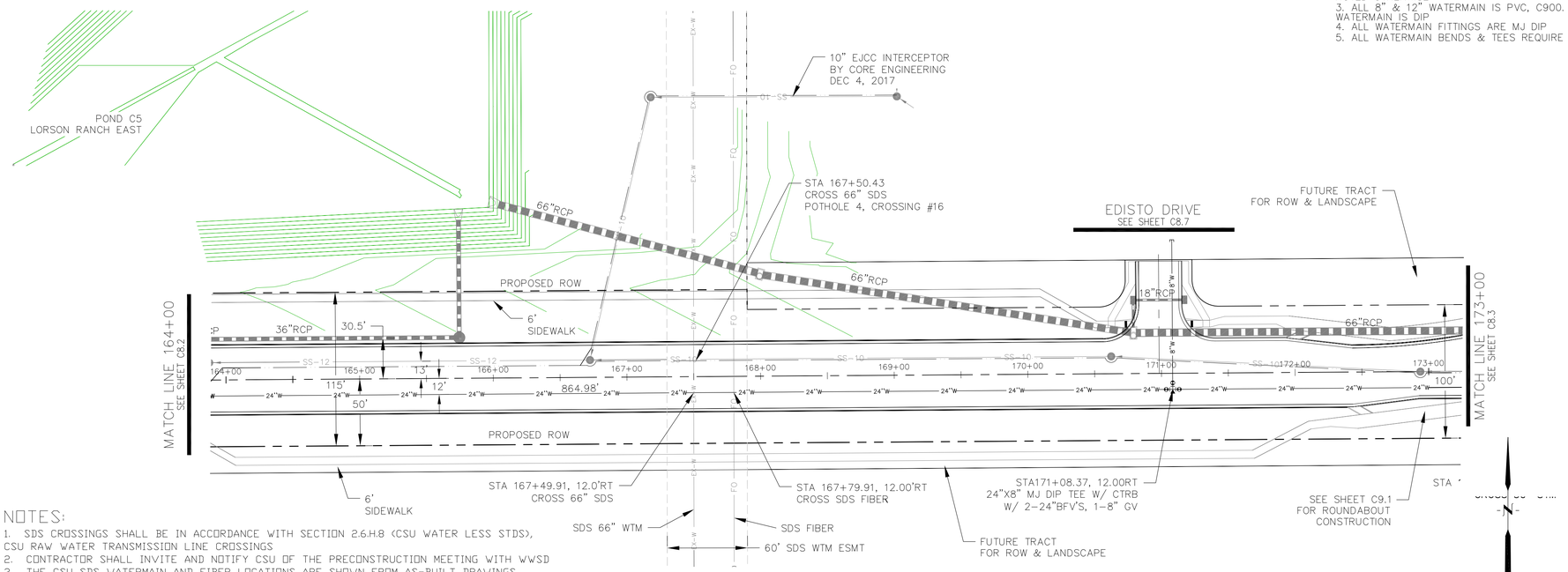
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE: DECEMBER 20, 2017
PROJECT NO. 100.041
SHEET NUMBER C8.1
TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S





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 WWSD
3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
4. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4667, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

FONTAINE BOULEVARD

COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL

APPROVED BY: _____

DATE: _____

PROJECT NUMBER: 2017-

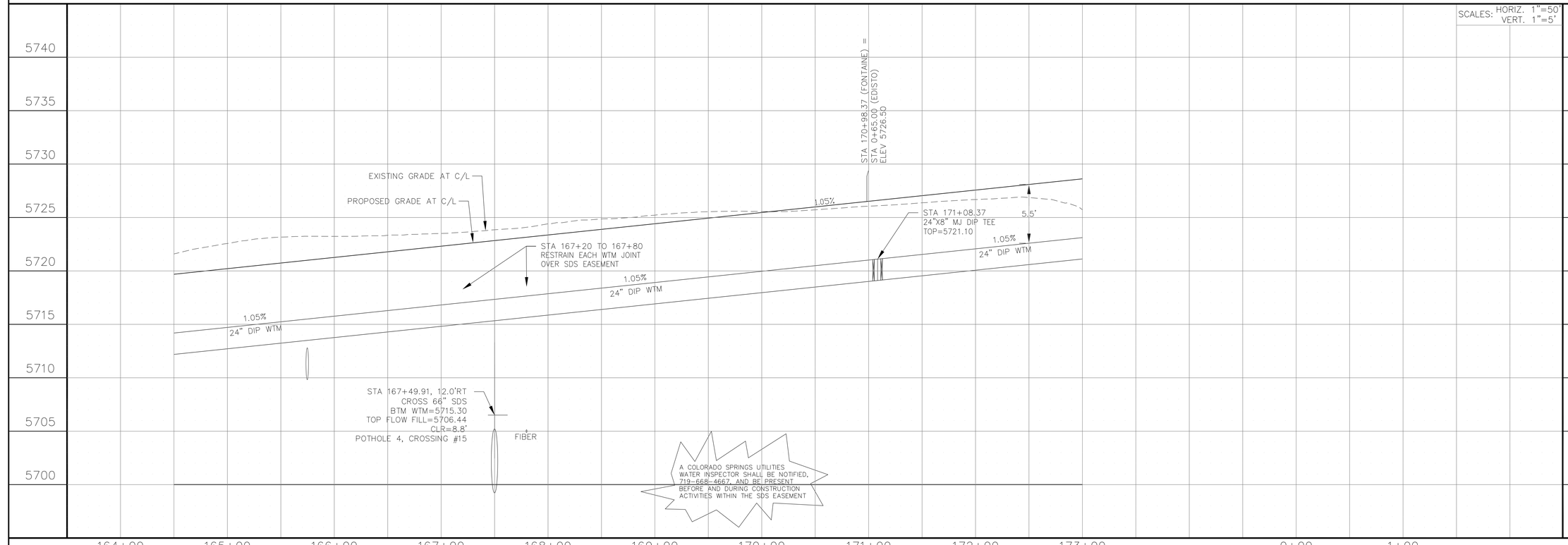
WORK ORDER NUMBER:

CSU SHEET ___ OF ___

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.

50 25 0 50 100

SCALE: 1"=50'



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

NO.	DESCRIPTION	DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

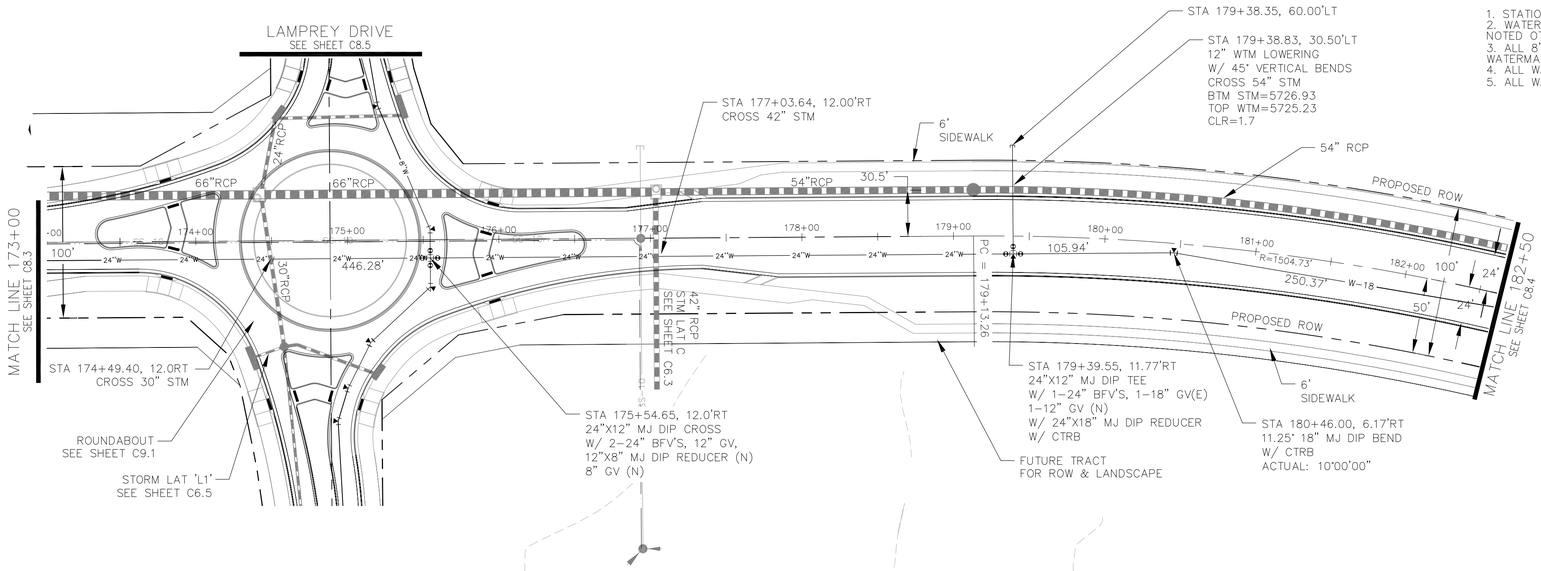
WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 164+00 TO 173+00

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.2

TOTAL SHEETS: 34



NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
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3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP.
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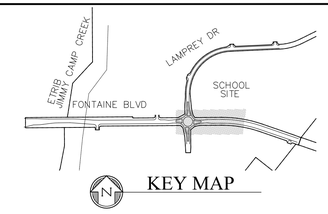
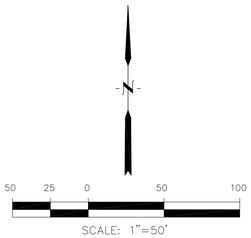
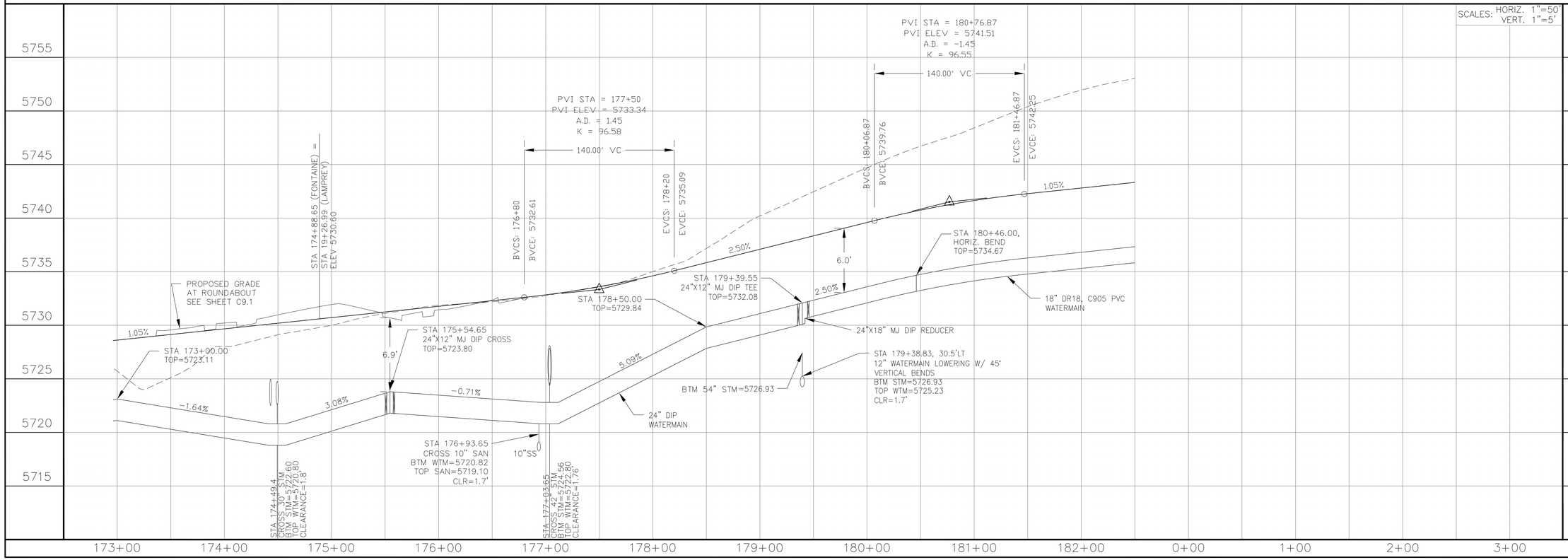
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S.



FONTAINE BOULEVARD





CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 173+00 TO 182+50

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.3
TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
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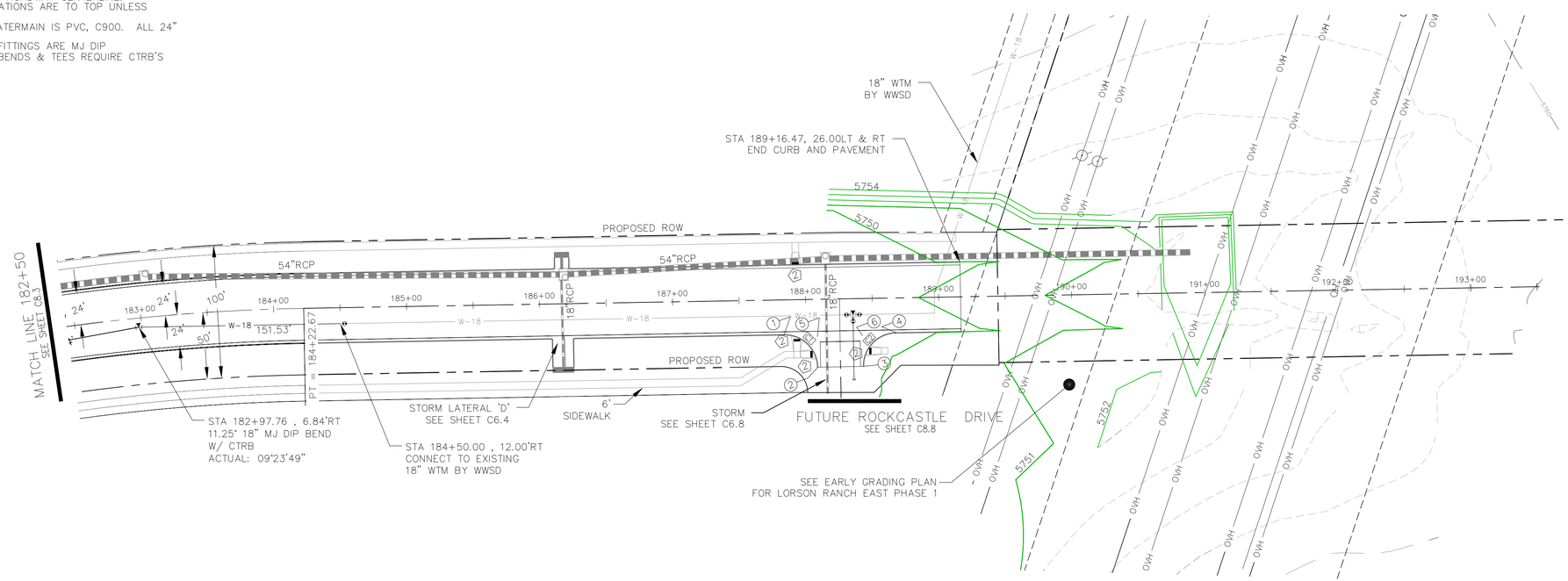
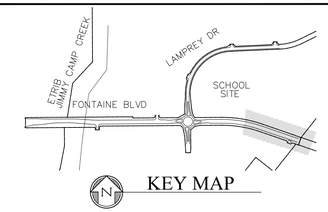
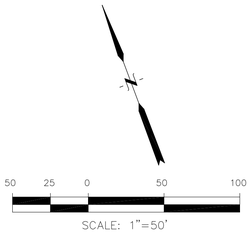
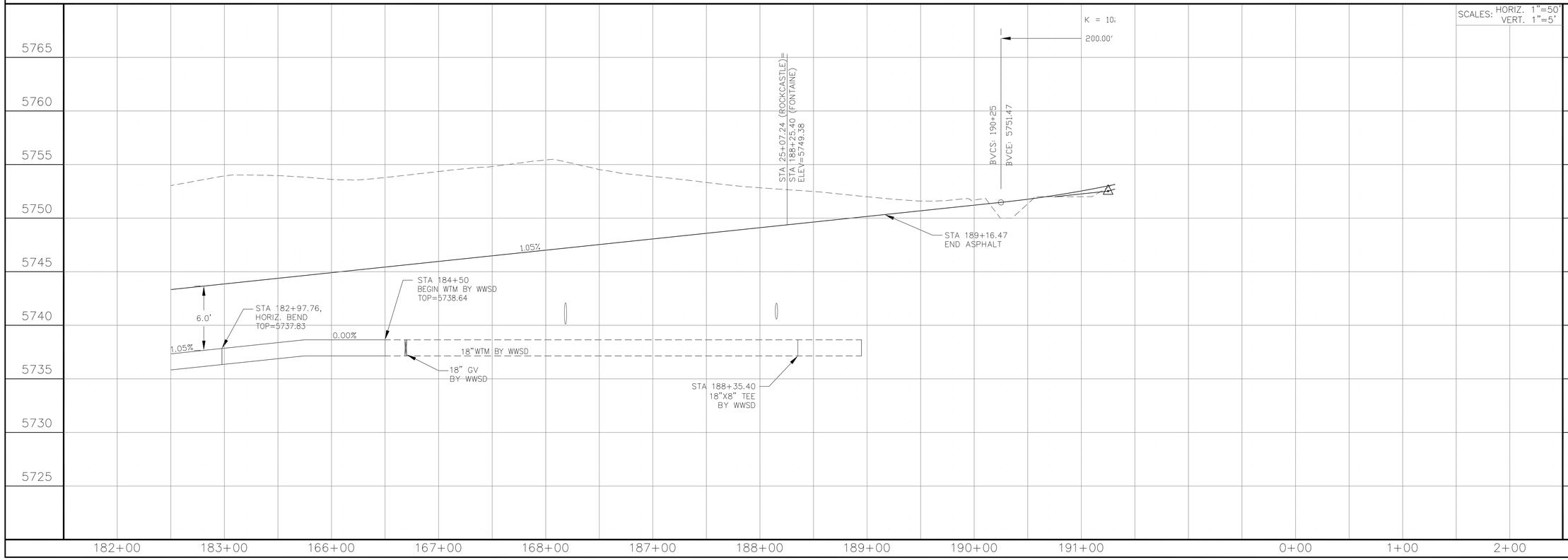






FONTAINE BOULEVARD



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO. | DESCRIPTION | DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 182+50 TO 191+00

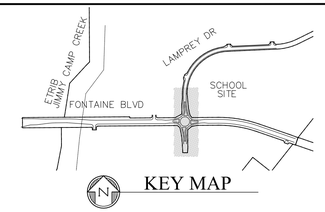
DATE:
DECEMBER 20, 2017

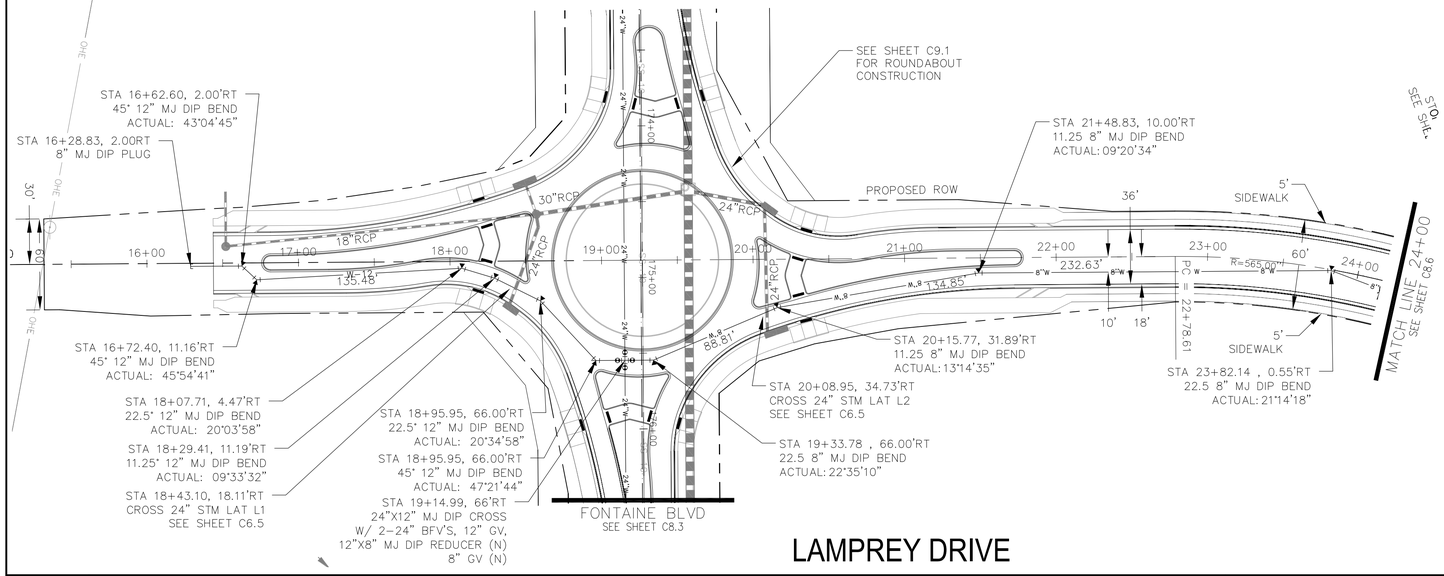
PROJECT NO.
100.041

SHEET NUMBER
C8.4
TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S

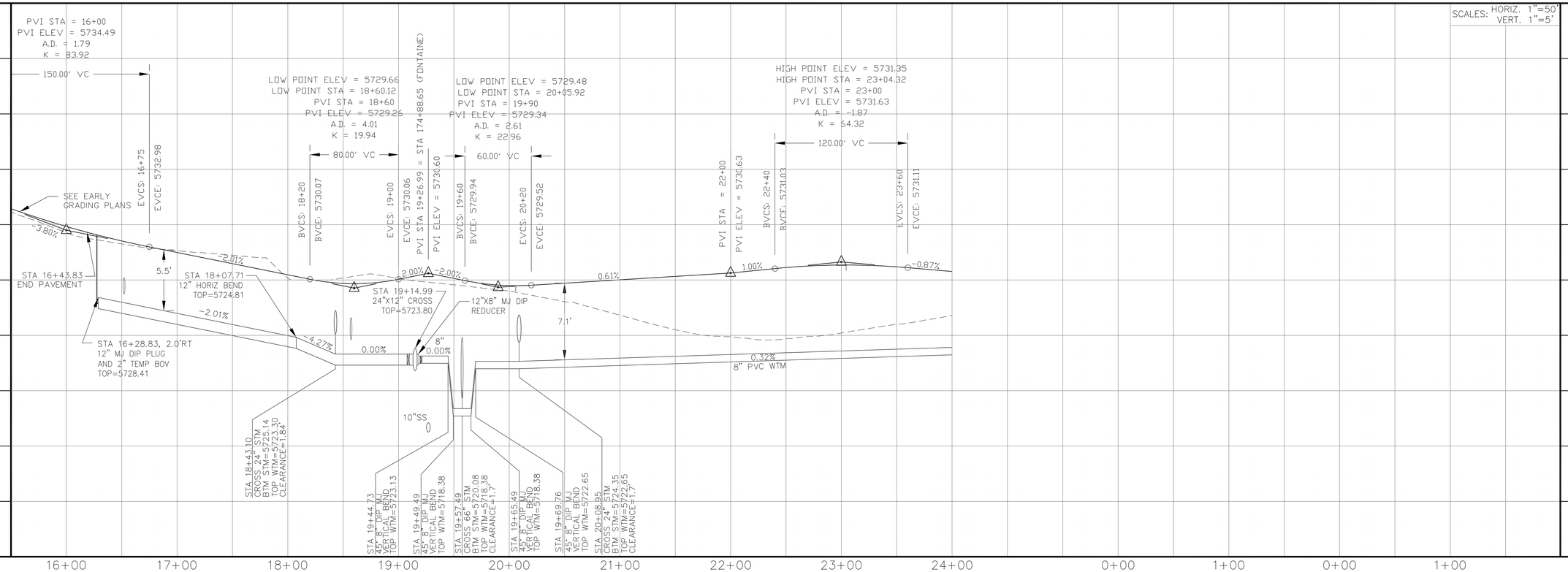




LAMPREY DRIVE

50 25 0 50 100

SCALE: 1"=50'



WATERMAIN PLAN/PROFILE
LAMPREY DRIVE
STA 16+00 TO 24+00

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlcs@ceg1.com

DATE
DESCRIPTION
NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE:
DECEMBER 20, 2017

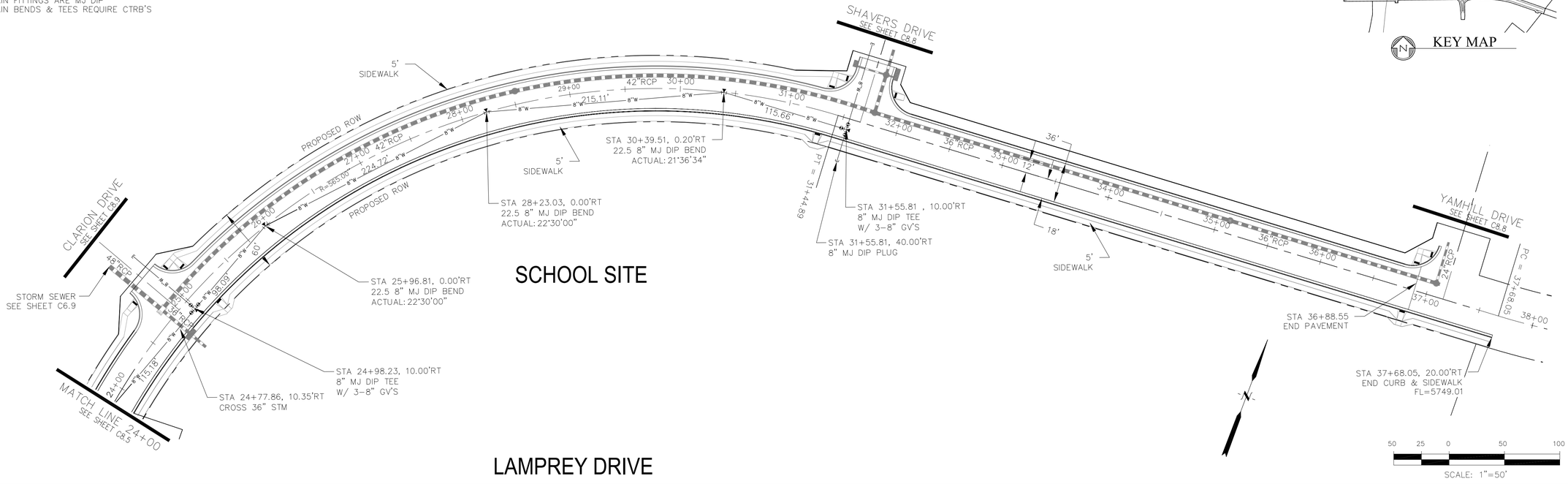
PROJECT NO.
100.041

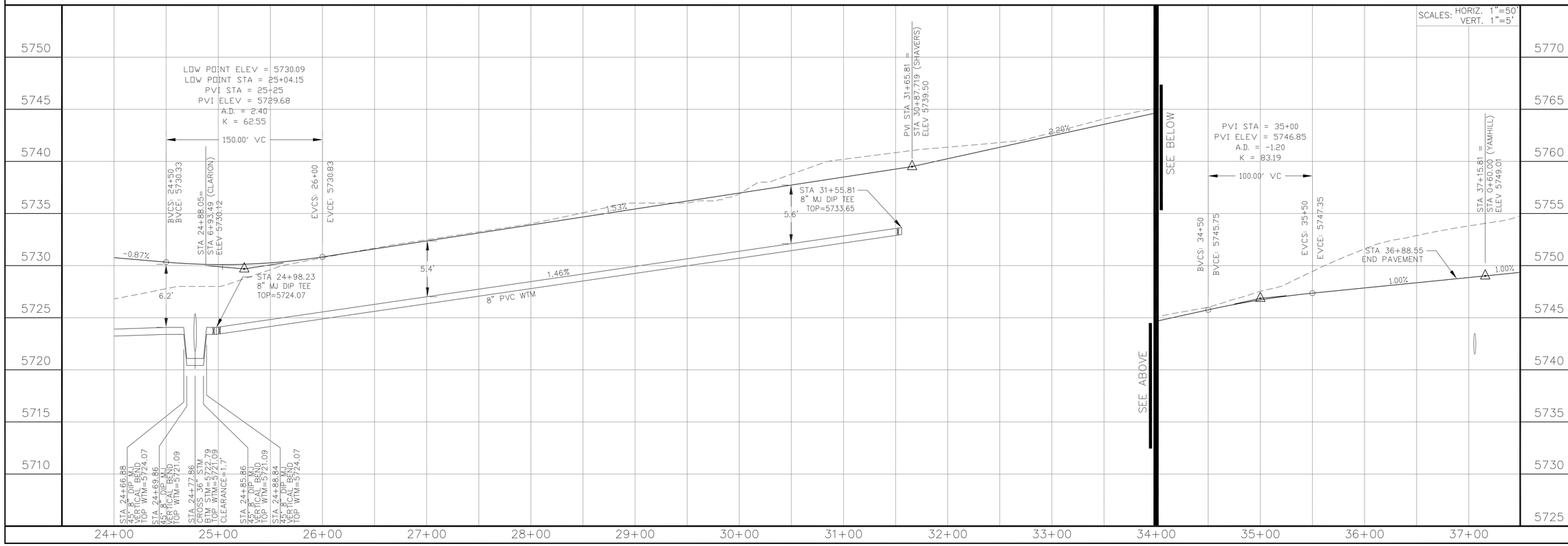
SHEET NUMBER
C8.5

TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S





LAMPREY DRIVE

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN PLAN/PROFILE
LAMPREY DRIVE
STA 24+00 TO 37+15.81

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.6

TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
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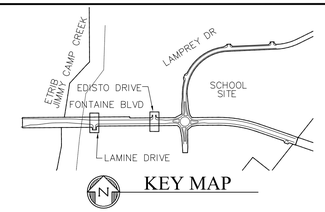
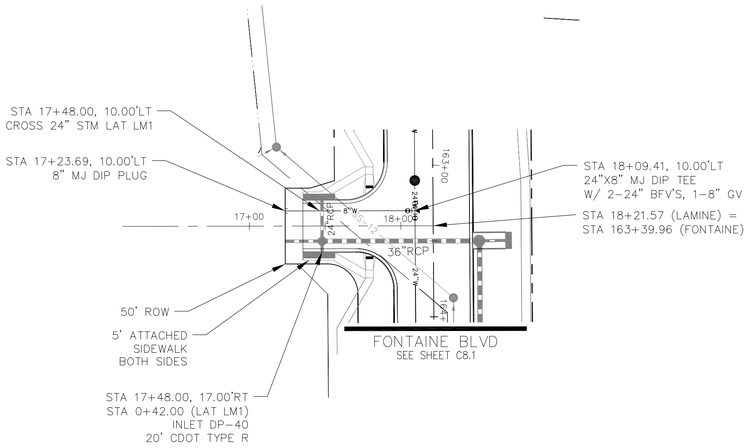
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S

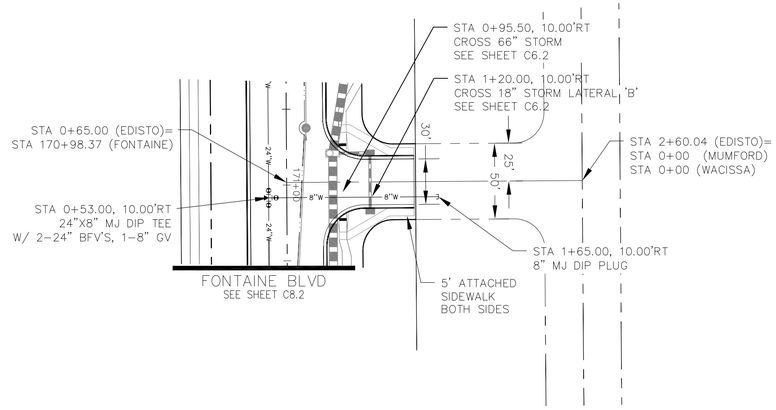
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.46'	25.00	85°50'39"
C2	39.14'	25.00	89°42'27"
C3	39.27'	25.00	90°00'00"
C4	39.27'	25.00	90°00'00"



FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
3	163+01.50, 32.16'RT	5718.51
4	163+81.70, 26.0'RT	5718.57
5	17+65.87, 17.00'LT	5717.74
6	17+70.57, 17.00'RT	5717.78
7	170+56.37, 26.00'LT	5725.42
8	1+16.00, 17.00'LT	5725.20
9	1+16.00, 17.00'RT	5725.20
10	171+40.37, 26.00'LT	5726.30



LAMINE DRIVE

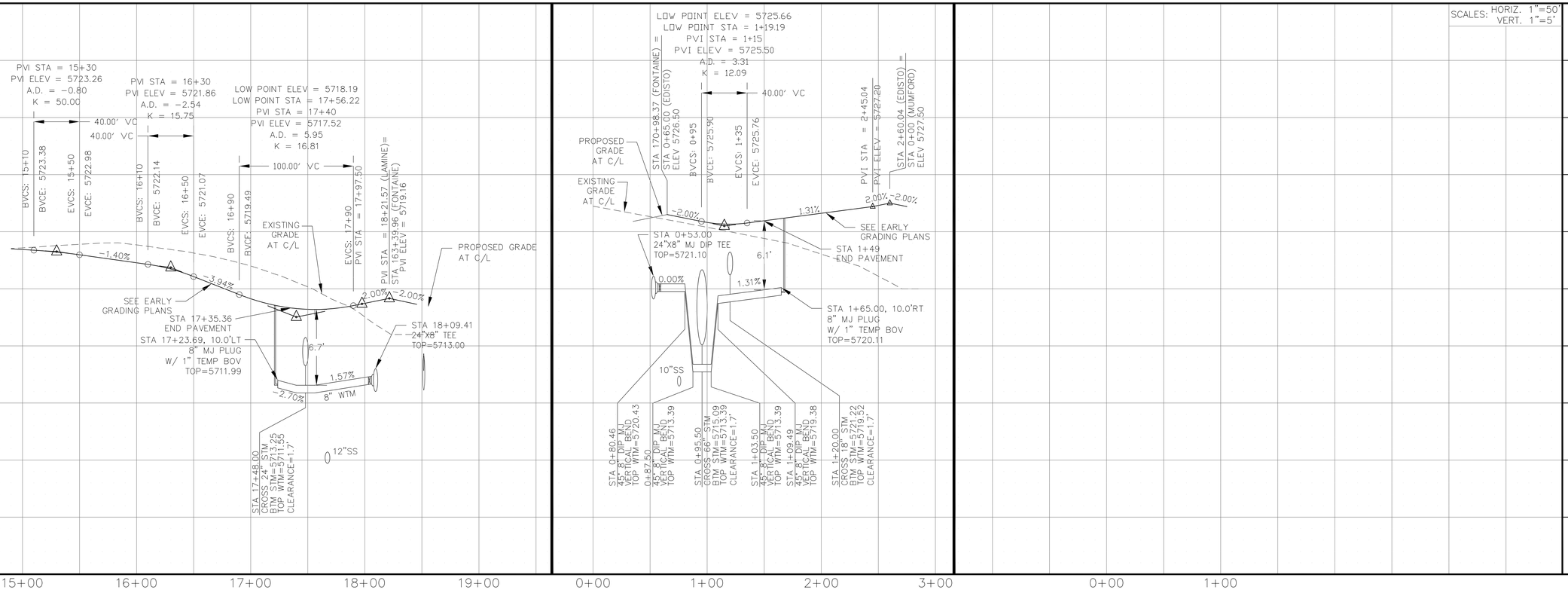


EDISTO DRIVE

50 25 0 50 100

SCALE: 1"=50'

SCALES: HORIZ. 1"=50'
VERT. 1"=5'



CORE ENGINEERING GROUP
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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

DATE

DESCRIPTION

NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN PLAN/PROFILE
LAMINE DRIVE
AND EDISTO DRIVE

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.7
TOTAL SHEETS: 34

NOTES

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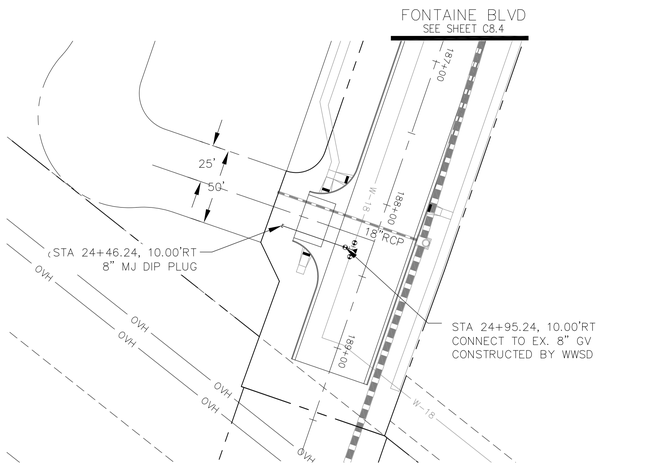
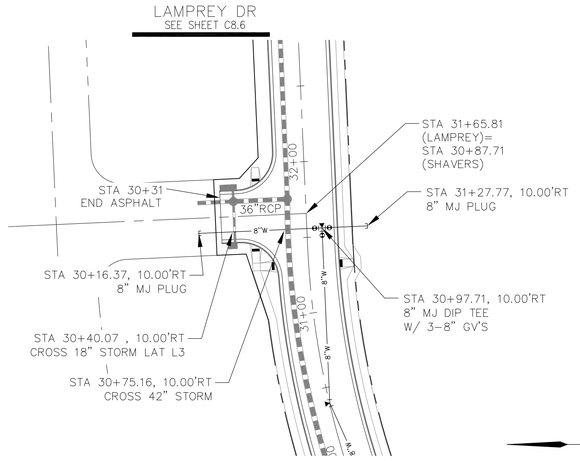
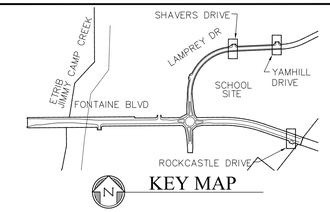


ROCKCASTLE DRIVE



SHAVERS DRIVE

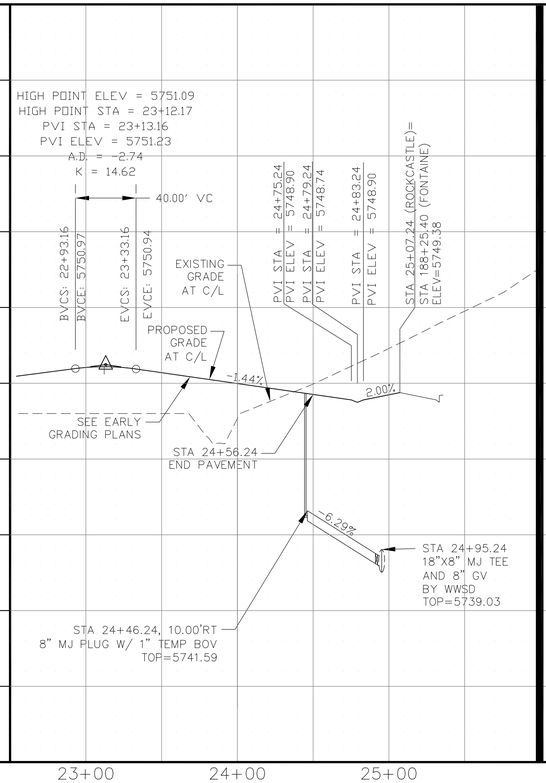


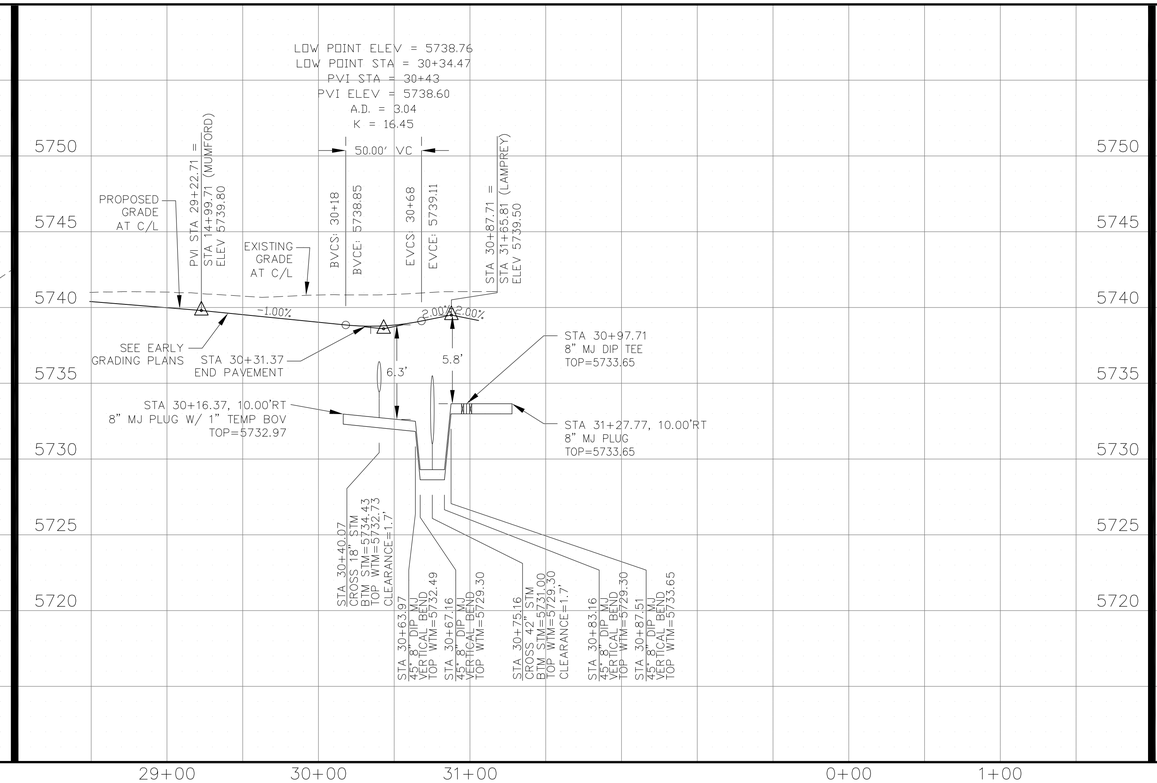
KEY MAP

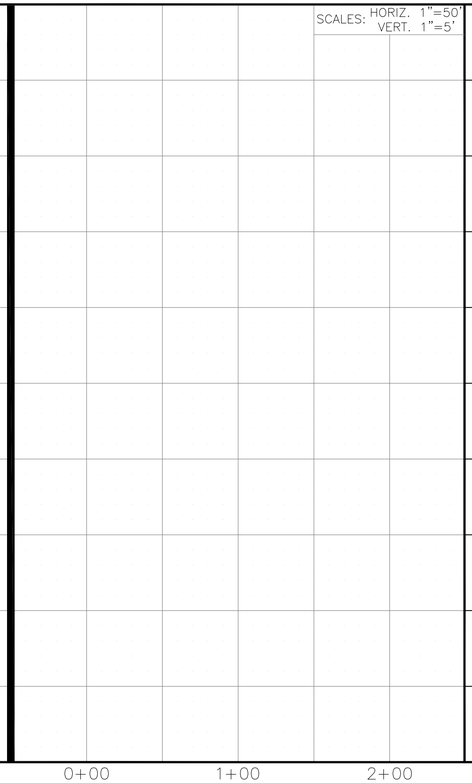
50 25 0 50 100

SCALE: 1"=50'

SCALES: HORIZ. 1"=50'
VERT. 1"=5'







CORE
ENGINEERING GROUP
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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

NO.	DESCRIPTION	DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
ROCKCASTLE DR, SHAVERS DR, YAMHILL DR

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.8
TOTAL SHEETS: 34

NOTES

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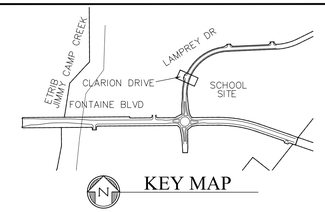
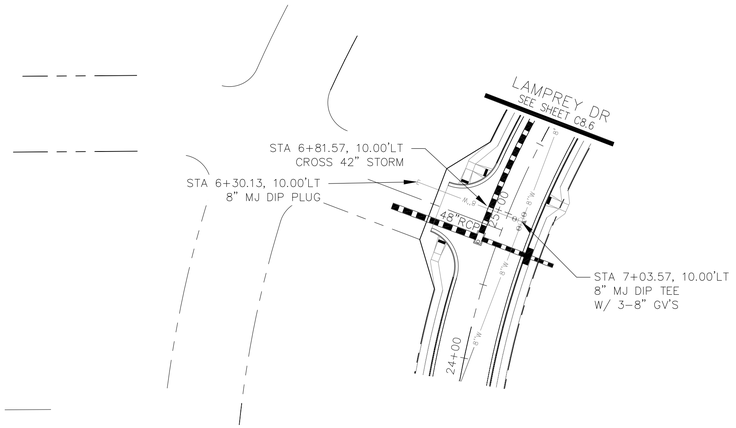
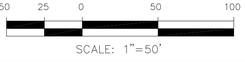
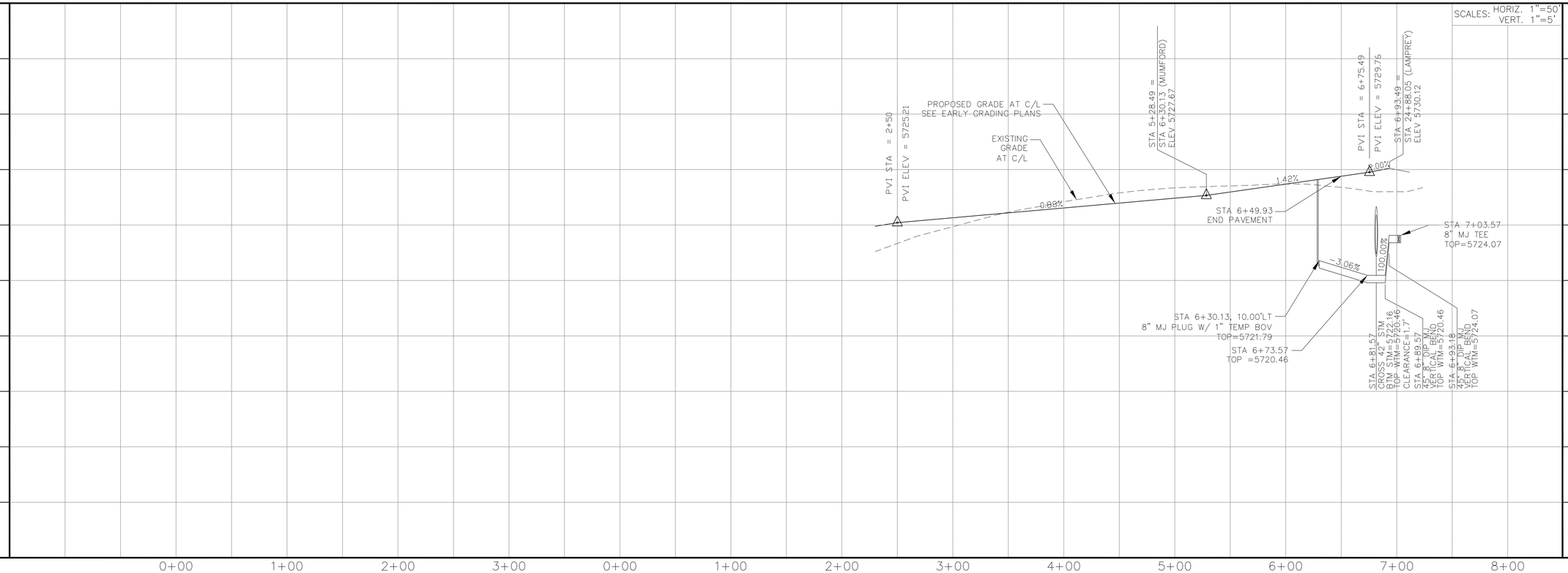
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S









CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlschindler@ceg1.com

DATE

DESCRIPTION

NO.

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

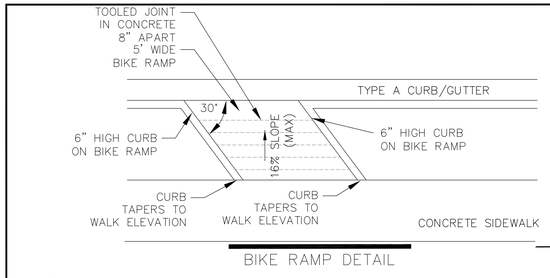
WATERMAIN PLAN/PROFILE
CLARION DRIVE

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.9

TOTAL SHEETS: 34



BIKE RAMP DETAIL

ROUNDABOUT NORTH HALF
SEE SHEET C9.2

NOTES:

1. (R) DENOTES PEDESTRIAN RAMP CONSRUCTION
2. (B) DENOTES BIKE RAMP. SEE DETAIL
3. SEE SHEET C9.2 FOR TRUCK APRON DETAIL

SCALE: 1"=20'

FONTAINE BLVD
SEE SHEET C6.3

10' CONCRETE WALK

TYPE A CURB

TYPE B CURB

TRUCK APRON
SEE DETAIL ON SHEET C9.2

STA 0+00 ROUNDABOUT SW = STA 172+43.14, 26.00'RT (FONTAINE) FL=5727.38

PC STA 0+50.36 ROUNDABOUT SW = STA 172+93.14, 20.00'RT (FONTAINE) FL=5728.02

PC STA 1+19.62 ROUNDABOUT SW = FL=5728.76

FL CURVE R=75.00', L=45.46' DELTA=34°43'42"

PT STA 1+65.08 ROUNDABOUT SW = FL=5729.15

PC STA 1+66.44 ROUNDABOUT SW = FL=5729.14

FL CURVE R=90.00', L=56.09' DELTA=35°42'22"

PC STA 1+95.00 ROUNDABOUT SW = FL=5728.88

PCC STA 2+22.53 ROUNDABOUT SW = INLET DP-30, RIM=5729.27

FL CURVE R=500.00', L=170.74' DELTA=19°33'56"

PT STA 3+93.27 ROUNDABOUT SW = STA 16+81.58, 20.0'LT LAMPREY FL=5732.33

LAMPREY DR
SEE SHEET C6.5

PCC STA 1+82.77 ROUNDABOUT SE = FL=5729.65

FL CURVE R=500.00', L=174.81' DELTA=20°01'53"

PC STA 3+57.58 ROUNDABOUT SE = STA 177+34.06, 20.00'RT (FONTAINE) FL=5732.81

STA 4+07.94, ROUNDABOUT SE = STA 177+84.06, 26.00'RT (FONTAINE) FL=5733.58

FL CURVE R=90.00', L=51.70' DELTA=32°54'49"

STA 1+54.00 ROUNDABOUT SE = FL=5729.29

PC STA 1+31.07 ROUNDABOUT SE = RIM=5729.68

PT STA 1+25.76 ROUNDABOUT SE = INLET DP-29, RIM=5729.68

FL CURVE R=75.00', L=60.39' DELTA=46°08'14"

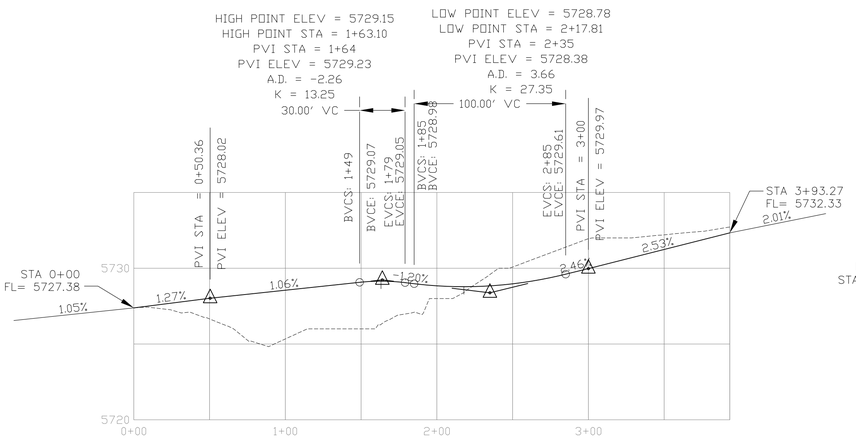
PRC STA 0+65.37 ROUNDABOUT SE = FL=5729.91

FL CURVE R=340.00', L=53.90' DELTA=09°04'57"

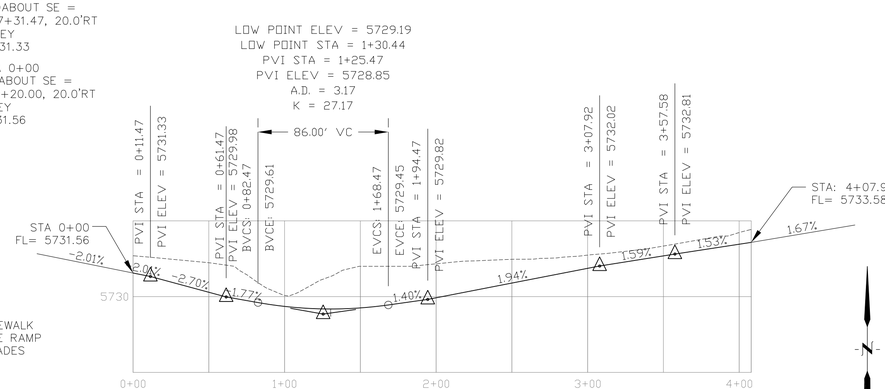
PT STA 0+11.47 ROUNDABOUT SE = STA 17+31.47, 20.0'RT LAMPREY FL=5731.33

PT STA 0+00 ROUNDABOUT SE = STA 17+20.00, 20.0'RT LAMPREY FL=5731.56

DEPRESS SIDEWALK TO MEET BIKE RAMP MAXIMUM GRADES



SW CURB FLOWLINE PROFILE
1"=50'



SE CURB FLOWLINE PROFILE
1"=50'

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NO.	DESCRIPTION	DATE

PREPARED FOR:
LORSON, LLC
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(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

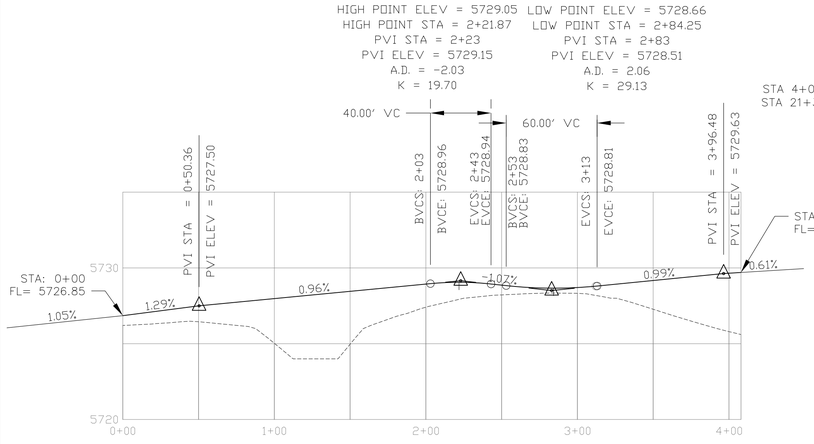
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

ROUNDABOUT DETAILED GRADING FONTAINE BOULEVARD SOUTH HALF

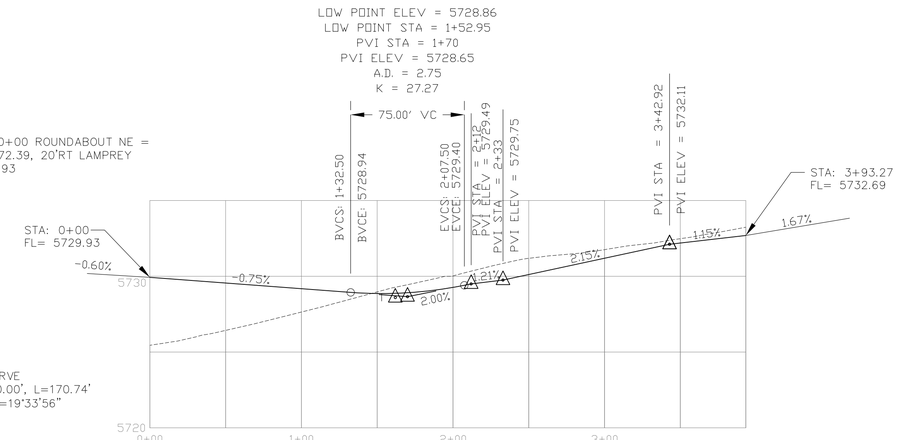
DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C9.1
TOTAL SHEETS: 34



NW CURB FLOWLINE PROFILE
1"=50'



NE CURB FLOWLINE PROFILE
1"=50'

TYPICAL TRUCK APRON DETAIL
N.T.S.

LENGTH FOR RADII
A = 1/8" TO 1/4"
B = 1-1/2"
C = 1-1/2" TO 2"

NOTES:
1. (R) DENOTES PEDESTRIAN RAMP CONSRUCTION
2. (B) DENOTES BIKE RAMP

SCALE: 1"=20'

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CONTACT: JEFF MARK

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO. | DESCRIPTION | DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

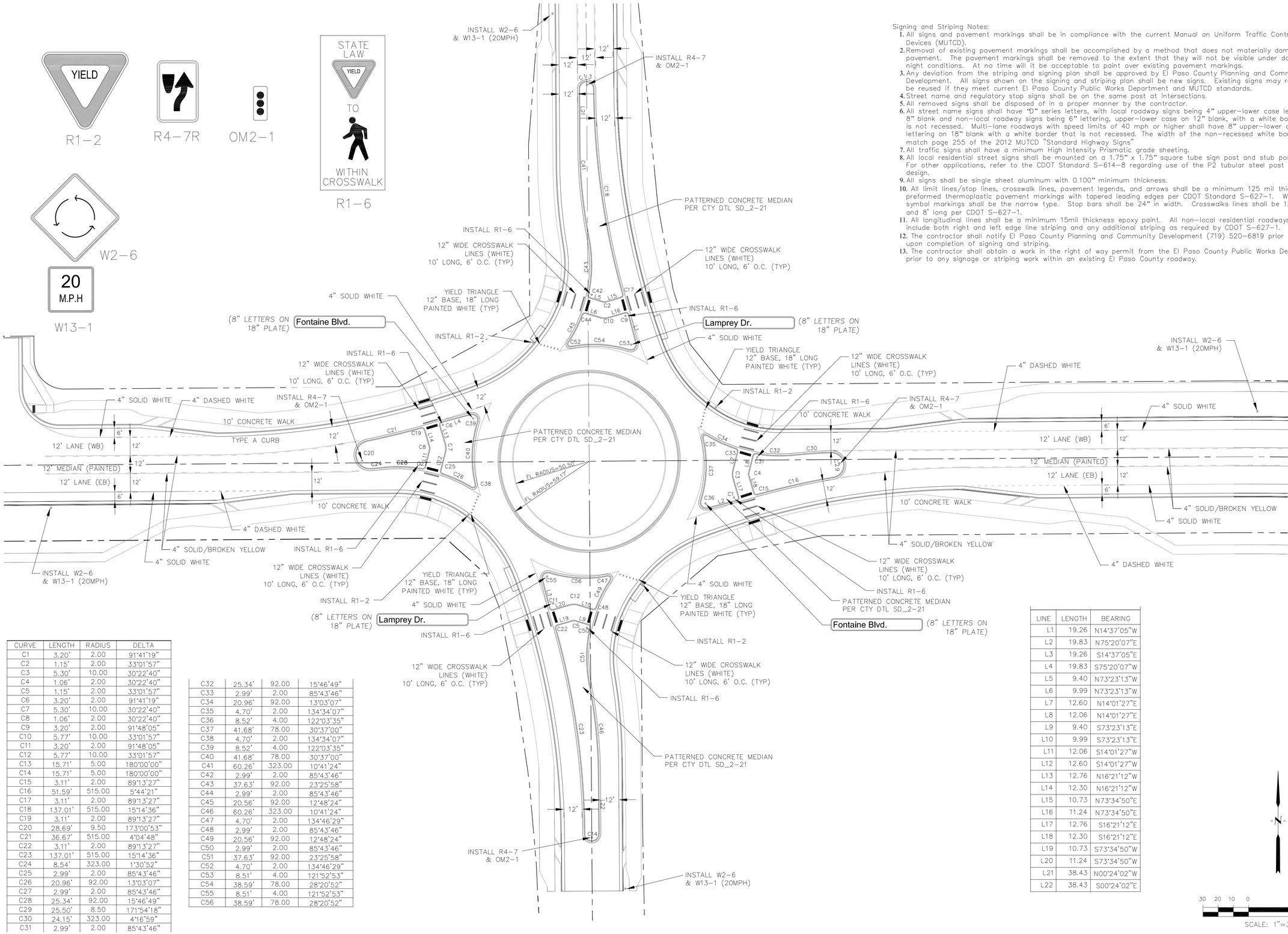
ROUNDABOUT DETAILED GRADING FONTAINE BOULEVARD NORTH HALF

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C9.2

TOTAL SHEETS: 34



Signing and Striping Notes:

1. All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).
2. Removal of existing pavement markings shall be accomplished by a method that does not materially damage the pavement. The pavement markings shall be removed to the extent that they will not be visible under day or night conditions. At no time will it be acceptable to paint over existing pavement markings.
3. Any deviation from the striping and signing plan shall be approved by El Paso County Planning and Community Development. All signs shown on the signing and striping plan shall be new signs. Existing signs may remain or be reused if they meet current El Paso County Public Works Department and MUTCD standards.
4. Street name and regulatory stop signs shall be on the same post at intersections.
5. All removed signs shall be disposed of in a proper manner by the contractor.
6. All street name signs shall have "D" series letters, with local roadway signs being 4" upper-lower case lettering on 8" blank and non-local roadway signs being 6" lettering, upper-lower case on 12" blank, with a white border that is not recessed. Multi-lane roadways with speed limits of 40 mph or higher shall have 8" upper-lower case lettering on 18" blank with a white border that is not recessed. The width of the non-recessed white borders shall match page 255 of the 2012 MUTCD "Standard Highway Signs"
7. All traffic signs shall have a minimum High Intensity Prismatic grade sheeting.
8. All local residential street signs shall be mounted on a 1.75" x 1.75" square tube sign post and stub post base. For other applications, refer to the CDOT Standard S-614-8 regarding use of the P2 tubular steel post slipbase design.
9. All signs shall be single sheet aluminum with 0.100" minimum thickness.
10. All limit lines/stop lines, crosswalk lines, pavement legends, and arrows shall be a minimum 125 mil thickness preformed thermoplastic pavement markings with tapered leading edges per CDOT Standard S-627-1. Word and symbol markings shall be the narrow type. Stop bars shall be 24" in width. Crosswalks lines shall be 12" wide and 8' long per CDOT S-627-1.
11. All longitudinal lines shall be a minimum 15mil thickness epoxy paint. All non-local residential roadways shall include both right and left edge line striping and any additional striping as required by CDOT S-627-1.
12. The contractor shall notify El Paso County Planning and Community Development (719) 520-6819 prior to and upon completion of signing and striping.
13. The contractor shall obtain a work in the right of way permit from the El Paso County Public Works Department prior to any signage or striping work within an existing El Paso County roadway.

CURVE	LENGTH	RADIUS	DELTA
C1	3.20'	2.00	91°41'19"
C2	1.15'	2.00	33°01'57"
C3	5.30'	10.00	30°22'40"
C4	1.06'	2.00	30°22'40"
C5	1.15'	2.00	33°01'57"
C6	3.20'	2.00	91°41'19"
C7	5.30'	10.00	30°22'40"
C8	1.06'	2.00	30°22'40"
C9	3.20'	2.00	91°48'05"
C10	5.77'	10.00	33°01'57"
C11	3.20'	2.00	91°48'05"
C12	5.77'	10.00	33°01'57"
C13	15.71'	5.00	180°00'00"
C14	15.71'	5.00	180°00'00"
C15	3.11'	2.00	89°13'27"
C16	51.59'	515.00	5°44'21"
C17	3.11'	2.00	89°13'27"
C18	137.01'	515.00	15°14'36"
C19	3.11'	2.00	89°13'27"
C20	28.69'	9.50	173°00'53"
C21	36.67'	515.00	4°04'48"
C22	3.11'	2.00	89°13'27"
C23	137.01'	515.00	15°14'36"
C24	8.54'	323.00	1°30'52"
C25	2.99'	2.00	85°43'46"
C26	20.96'	92.00	13°03'07"
C27	2.99'	2.00	85°43'46"
C28	25.34'	92.00	15°46'49"
C29	25.50'	8.50	171°54'18"
C30	24.15'	323.00	4°16'59"
C31	2.99'	2.00	85°43'46"
C32	25.34'	92.00	15°46'49"
C33	2.99'	2.00	85°43'46"
C34	20.96'	92.00	13°03'07"
C35	4.70'	2.00	134°34'07"
C36	8.52'	4.00	122°03'35"
C37	41.68'	78.00	30°37'00"
C38	4.70'	2.00	134°34'07"
C39	8.52'	4.00	122°03'35"
C40	41.68'	78.00	30°37'00"
C41	60.26'	323.00	10°41'24"
C42	2.99'	2.00	85°43'46"
C43	37.63'	92.00	23°25'58"
C44	2.99'	2.00	85°43'46"
C45	20.56'	92.00	12°48'24"
C46	60.26'	323.00	10°41'24"
C47	4.70'	2.00	134°46'29"
C48	2.99'	2.00	85°43'46"
C49	20.56'	92.00	12°48'24"
C50	2.99'	2.00	85°43'46"
C51	37.63'	92.00	23°25'58"
C52	4.70'	2.00	134°46'29"
C53	8.51'	4.00	121°52'53"
C54	38.59'	78.00	28°20'52"
C55	8.51'	4.00	121°52'53"
C56	38.59'	78.00	28°20'52"

LINE	LENGTH	BEARING
L1	19.26	N14°37'05"W
L2	19.83	N75°20'07"E
L3	19.26	S14°37'05"E
L4	19.83	S75°20'07"W
L5	9.40	N73°23'13"W
L6	9.99	N73°23'13"W
L7	12.60	N14°01'27"E
L8	12.06	N14°01'27"E
L9	9.40	S73°23'13"E
L10	9.99	S73°23'13"E
L11	12.06	S14°01'27"W
L12	12.60	S14°01'27"W
L13	12.76	N16°21'12"W
L14	12.30	N16°21'12"W
L15	10.73	N73°34'50"E
L16	11.24	N73°34'50"E
L17	12.76	S16°21'12"E
L18	12.30	S16°21'12"E
L19	10.73	S73°34'50"W
L20	11.24	S73°34'50"W
L21	38.43	N00°24'02"W
L22	38.43	S00°24'02"E

30 20 10 0 30 60

SCALE: 1"=30'

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NO. | DESCRIPTION | DATE

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PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

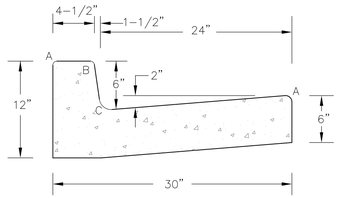
ROUNDABOUT SIGNAGE/STRIPING

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C9.3

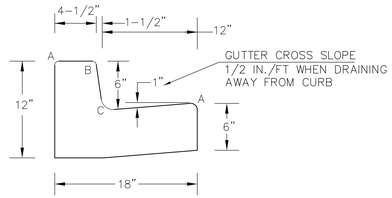
TOTAL SHEETS: 34



TYPE 'A'

VERTICAL CURB AND GUTTER

SCALE 1" = 1'-0"

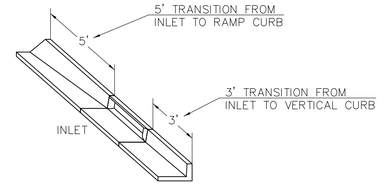


TYPE 'B'

VERTICAL CURB AND GUTTER

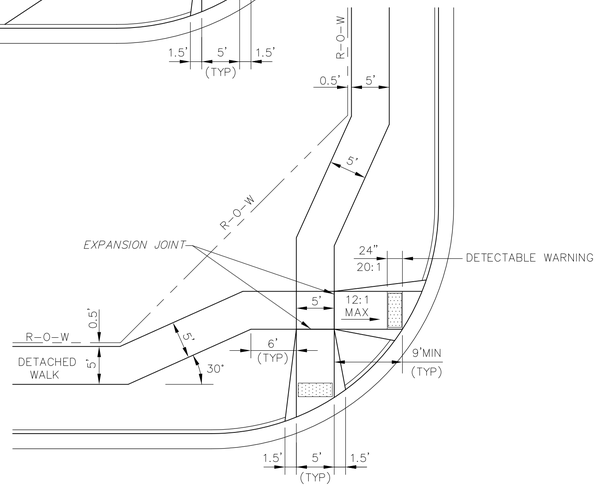
SCALE 1" = 1'-0"

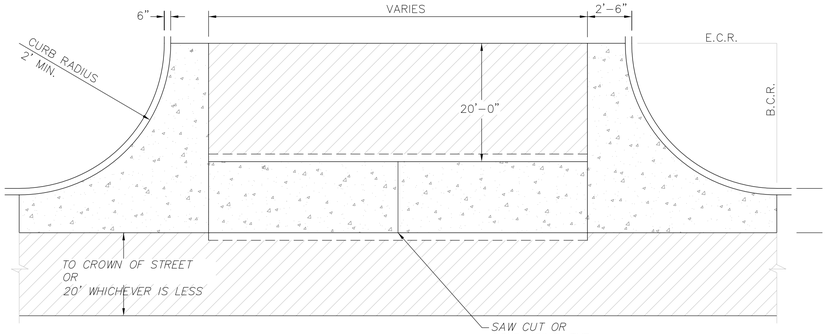
LENGTH FOR RADII
A = 1/8" TO 1/4"
B = 1-1/2"
C = 1-1/2" TO 2"



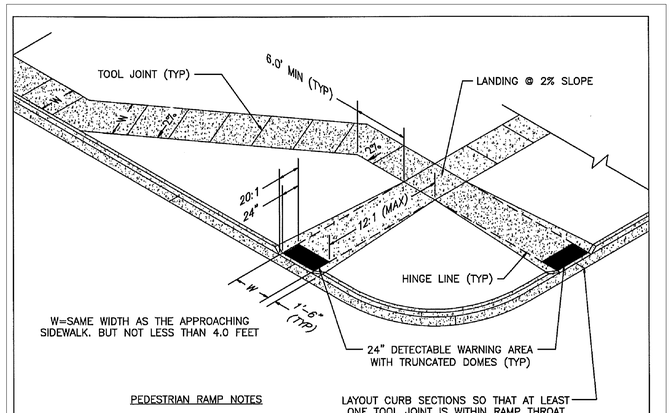
CURB INLET DETAIL

NTS





PLAN VIEW



PEDESTRIAN RAMP NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED-DOMES.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

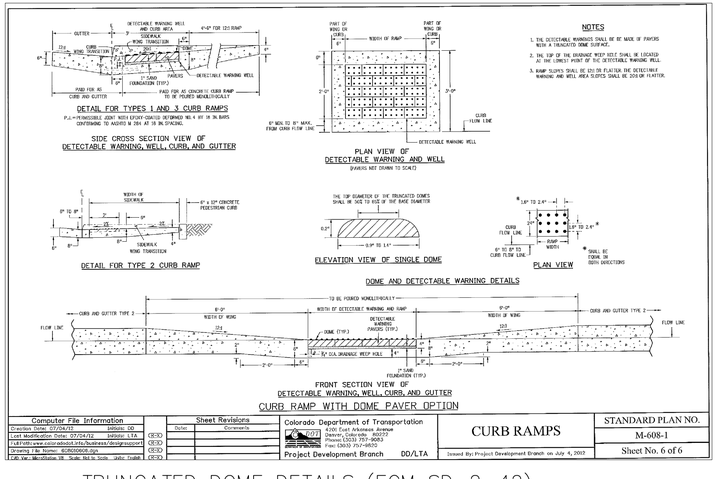
GENERAL NOTES

1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

7/9/09	Pedestrian Intersection Ramp	
DATE APPROVED:	Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
André P. Brackin	REVISION DATE: 1/18/11	FILE NAME: SD_2-41
DEPARTMENT OF TRANSPORTATION		

PEDESTRIAN RAMPS AT INTERSECTIONS (ECM SD_2-40)

NO SCALE



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Last Modification Date: 07/24/12 Initials: LTA			
PLOTTED:www.coloradodot.info/business/designsupport			
Drawing File Name: 6CM20060R.dgn			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: Feet			

Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222
(303) 757-9011 FAX (303) 757-9820
Project Development Branch DD/LTA

CURB RAMPS

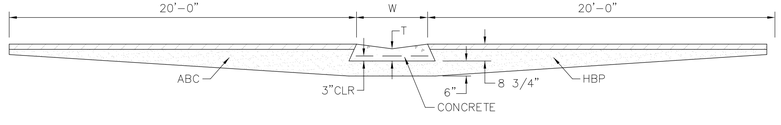
Issued By: Project Development Branch on July 4, 2012

STANDARD PLAN NO. M-608-1

Sheet No. 6 of 6

TRUNCATED DOME DETAILS (ECM SD_2-42)

NO SCALE



SECTION A – A

TYPICAL CROSSPAN LAYOUT (ECM SD_2-26)

NO SCALE

NOTES

1. *W = WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, 10' FOR ARTERIAL ROADS.*
2. *T = SQUARED-OFF RETURN TO BE POURED MONOLITHIC 8" PCC, OR 9" FOR COLLECTORS MINIMUM WITH 6x6 – 4.4 WWF OR #4 @ 18"E.W.*
3. *= 3" MINIMUM ASPHALT DEPTH (2 LIFTS).*
4. *DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.*

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COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

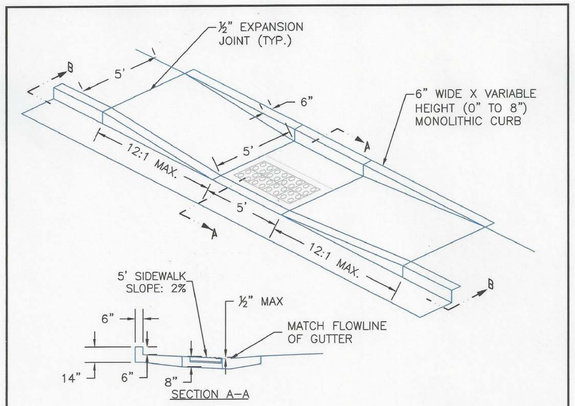
FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION STREET/STORM DETAILS

DATE:
DECEMBER 20, 2017

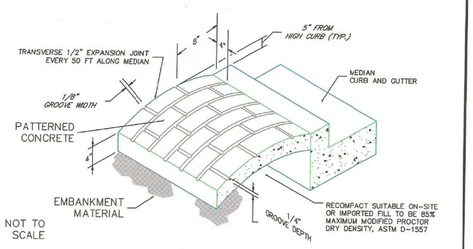
PROJECT NO.
100.041

SHEET NUMBER
C10.1

TOTAL SHEETS: 34



DATE APPROVED: 8/11/11 André P. Brackin DEPARTMENT OF TRANSPORTATION	Parallel Pedestrian Ramp Detail Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
	REVISION DATE: 12/8/15	FILE NAME: SD_2–50



NOTES:

A) The median paving shall be constructed with 4 inch thick, integrally colored concrete, embossed with a running bond 4" x 8" brick pattern as shown.

B) Install 1/2" x 4" expansion material at median noses, fixed objects, and at transverse joints at 50 ft. intervals (maximum) along the median.

C) The color additive shall be an approved commercially pure or synthetic mineral pigment, factory formulated and packaged in cubic yard dosage increments. The mixture shall be "Chromix" as manufactured by L.M. Scofield Company, "Davis Colors" as manufactured by Davis Color Company, Pigment No. 678, 5 lbs/sack, or an approved equal.

D) Patterned concrete to be colored L.M. Scofield Company "Santa Barbara Brown, C–35", Davis Color Company, Pigment No. 678, 5 lbs/sack, or an approved equal.

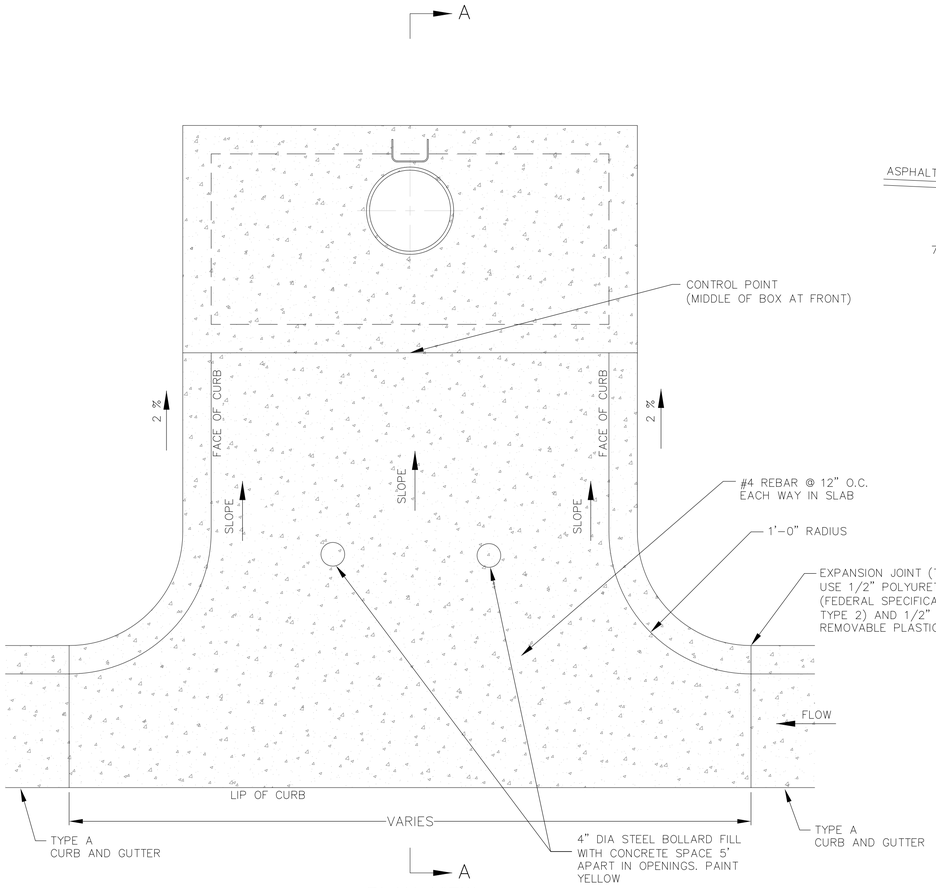
E) The Matching curing compound shall be a blend of waxes and pigments in a solvent emulsion base and conform to the requirements of ASTM C–309. The curing compound shall be "Lithocrome Colorwax" as manufactured by L.M. Scofield Company, Davis Color–Seal, as manufactured by Davis Color Company, or approved equal.

F) The concrete mix design shall conform to the requirements of the color admixture manufacturer and shall meet CDOT Class B concrete requirements, unless otherwise approved.

G) For weed control prior to median paving, apply a pre–emergent herbicide to median subgrade area per manufacturer's specifications for paving under Barrier 50 label (pbi Gordon). Trifluralin is labeled for use under asphalt under the Treflan 4EC label (Elanco).

SCALE: NOT TO SCALE

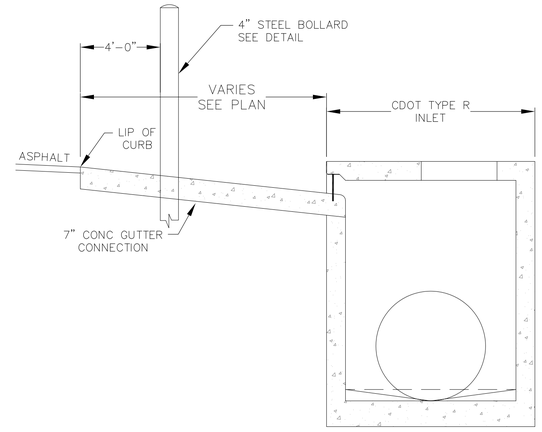
DATE APPROVED: 7/9/09 André P. Brackin DEPARTMENT OF TRANSPORTATION	Patterned Concrete Median Paving Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
	REVISION DATE: 1/18/11	FILE NAME: SD_2–21



PLAN VIEW

INLET CDOT TYPE R (RECESSED)

SCALE: NTS

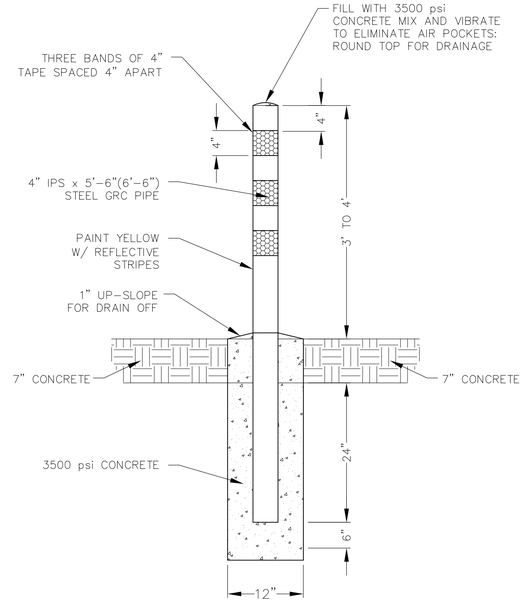


SECTION A–A

SCALE: NTS

NOTES

1. REINFORCING NOT SHOWN FOR CLARITY. REFERENCE CDOT M604–12 DETAILS.
2. SEE STORM DRAIN PROFILES FOR PIPE INVERT ELEVATIONS.
3. CONSTRUCT IN ACCORDANCE WITH EL PASO COUNTY STANDARDS EXCEPT WHERE MODIFIED HERE.



4" STEEL BOLLARD

SCALE: NTS

CORE ENGINEERING GROUP
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BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlsin@ecg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.–OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

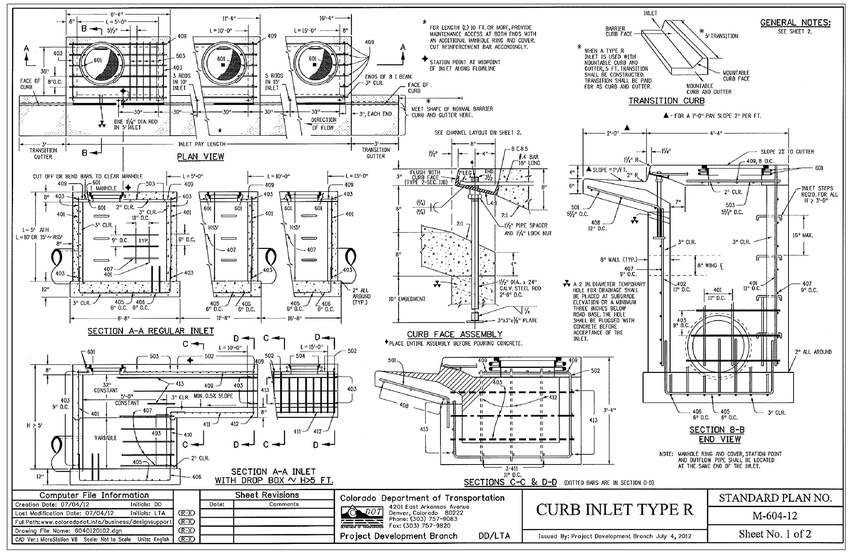
FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION STREET/STORM DETAILS

DATE: DECEMBER 20, 2017

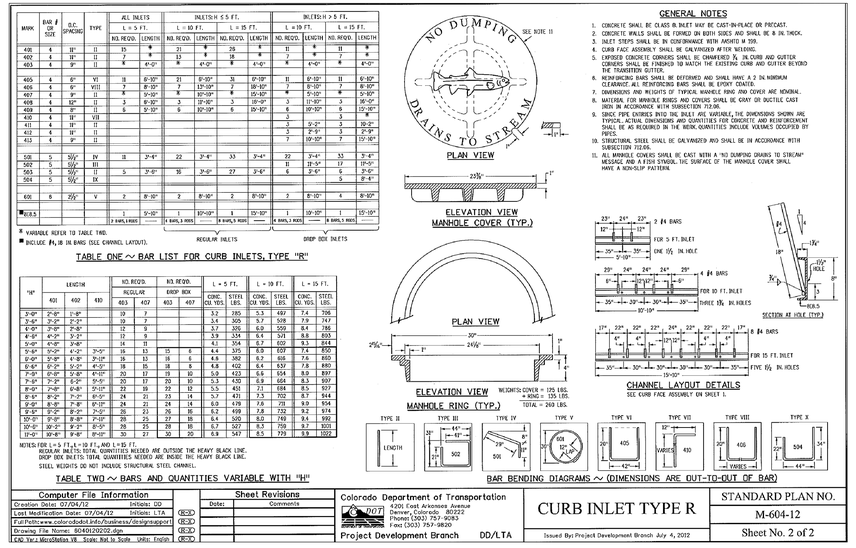
PROJECT NO. 100.041

SHEET NUMBER C10.2

TOTAL SHEETS: 34



Computer File Information		Sheet Revisions		Colorado Department of Transportation		STANDARD PLAN NO.
Creation Date: 07/04/12	Initials: SD	Date:	Comments:	4201 East Arkansas Avenue, Denver, Colorado 80222	CURB INLET TYPE R	M-604-12
Last Modification Date: 07/04/12	Initials: LTA			Phone: (303) 757-9083		
File Path: www.coloradodot.info/business/designsupport				Fax: (303) 757-9820		Sheet No. 1 of 2
Drawing File Name: 8040120102.dgn				Project Development Branch DD/LTA	Issued By: Project Development Branch July 4, 2012	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English						



MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT.		INLETS H ≤ 5 FT. L = 10 FT.		L = 15 FT.		INLETS H > 5 FT. L = 10 FT.		L = 15 FT.	
				NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
400	6	11"	II	15	*	21	*	28	*	11	*	11	*
402	6	11"	II	7	*	13	*	18	*	7	*	7	*
403	6	9"	II	8	*	8	4'-0"	8	4'-0"	4	4'-0"	4	4'-0"
405	6	6"	VII	18	8'-10"	31	8'-10"	31	8'-10"	11	8'-10"	11	8'-10"
406	6	6"	VIII	7	8'-10"	7	13'-10"	7	18'-10"	7	8'-10"	9	8'-10"
407	6	9"	II	8	9'-10"	8	10'-10"	8	15'-10"	4	5'-10"	4	5'-10"
408	6	12"	II	3	9'-10"	3	10'-10"	3	15'-10"	3	11'-10"	3	16'-10"
409	6	11"	II	6	9'-10"	9	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	6	11"	VIII							3	5'-10"	3	*
411	6	11"	II							3	5'-2"	3	10'-2"
412	6	11"	II							3	9'-5"	3	2'-9"
413	6	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	18	2'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	13'-5"	17	13'-5"
503	5	5½"	II	5	3'-9"	16	3'-9"	27	3'-6"	6	3'-6"	6	3'-5"
504	5	5½"	IX							5	8'-4"		
601	6	7½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
#10.5				1 (1 BARS, 1 RISERS)	5'-10"	1 (1 BARS, 2 RISERS)	10'-10"	1 (1 BARS, 3 RISERS)	15'-10"	1 (1 BARS, 2 RISERS)	10'-10"	1 (1 BARS, 3 RISERS)	15'-10"

* VARIABLE REFER TO TABLE TWO.
■ INCLUDE #6, IN IN BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

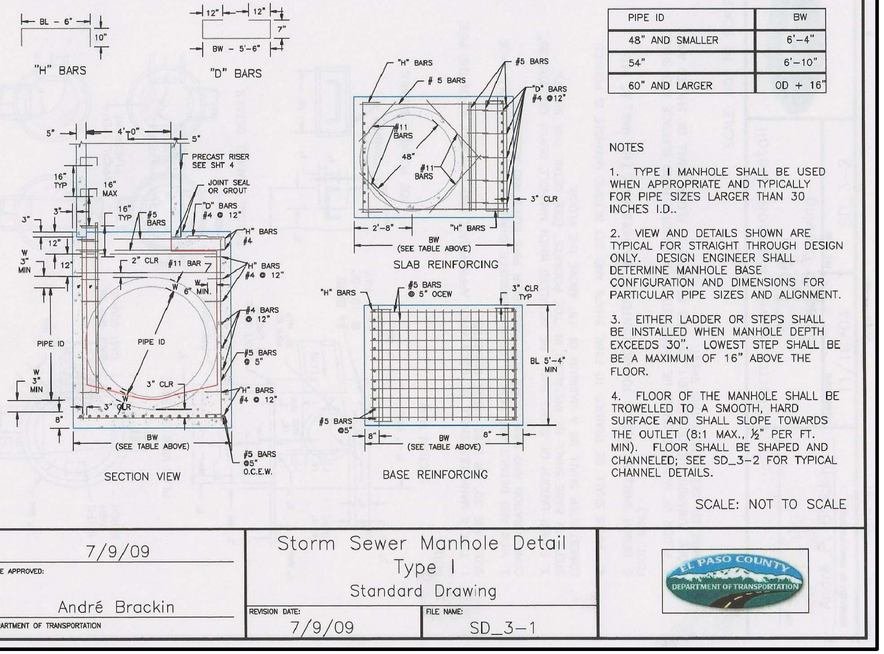
"H"	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L = 5 FT. CONC. (CU. YDS.)	STEEL LBS.	L = 10 FT. CONC. (CU. YDS.)	STEEL LBS.	L = 15 FT. CONC. (CU. YDS.)	STEEL LBS.
3'-0"	2'-0"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	2'-3"	2'-1"		10	7			3.4	305	5.7	508	7.9	747
4'-0"	2'-6"	2'-5"		12	9			3.7	335	6.0	550	8.4	786
4'-6"	2'-9"	2'-7"		12	9			3.9	334	6.4	571	8.8	805
5'-0"	3'-0"	2'-8"		14	11			4.1	354	6.7	610	9.3	844
5'-6"	3'-3"	2'-10"	3'-5"	16	13	15	6	4.4	395	6.9	609	7.4	850
6'-0"	3'-6"	2'-11"	3'-8"	16	13	16	6	4.6	382	6.7	668	7.6	850
6'-6"	3'-9"	3'-1"	4'-0"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'-0"	4'-0"	3'-2"	4'-3"	20	17	19	10	5.0	422	6.6	654	8.0	897
7'-5"	4'-3"	3'-3"	4'-5"	20	17	20	10	5.3	450	6.9	664	8.3	907
8'-0"	4'-6"	3'-4"	4'-8"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-5"	4'-9"	3'-5"	4'-10"	24	21	23	14	5.7	471	7.3	703	8.7	944
9'-0"	5'-0"	3'-6"	5'-1"	24	21	24	14	6.0	478	7.6	713	9.0	954
9'-5"	5'-3"	3'-7"	5'-3"	26	23	25	16	6.2	498	7.8	732	9.2	974
10'-0"	5'-6"	3'-8"	5'-4"	28	25	27	18	6.4	505	8.0	749	9.4	992
10'-5"	5'-9"	3'-9"	5'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1013
11'-0"	6'-0"	3'-10"	5'-6"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L = 5 FT., L = 10 FT., AND L = 15 FT.
DROP BOX INLETS. TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

BAR BENDING DIAGRAMS ~ (DIMENSIONS ARE OUT-TO-OUT OF BAR)

Computer File Information		Sheet Revisions		Colorado Department of Transportation		STANDARD PLAN NO.
Creation Date: 07/04/12	Initials: SD	Date:	Comments:	4201 East Arkansas Avenue, Denver, Colorado 80222	CURB INLET TYPE R	M-604-12
Last Modification Date: 07/04/12	Initials: LTA			Phones: (303) 757-9083		
File Path: www.coloradodot.info/business/designsupport				Fax: (303) 757-9820		Sheet No. 2 of 2
Drawing File Name: 8040120202.dgn				Project Development Branch DD/LTA	Issued By: Project Development Branch July 4, 2012	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English						



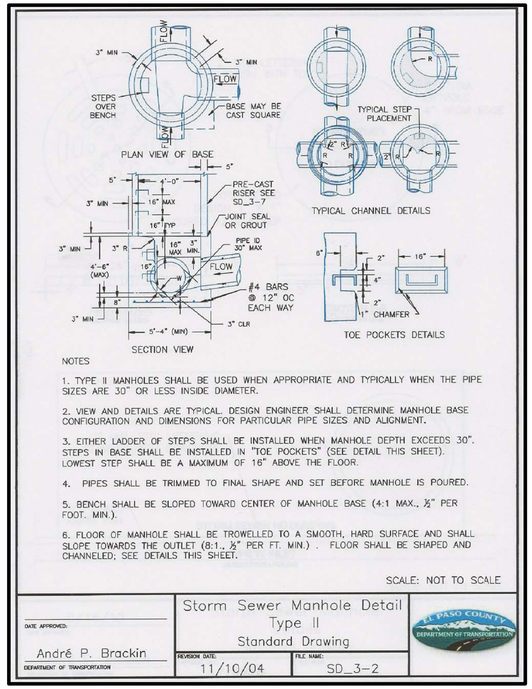
PIPE ID	BW
48" AND SMALLER	6'-4"
54"	6'-10"
60" AND LARGER	OD + 16"

NOTES

1. TYPE I MANHOLE SHALL BE USED WHEN APPROPRIATE AND TYPICALLY FOR PIPE SIZES LARGER THAN 30 INCHES I.D..
2. VIEW AND DETAILS SHOWN ARE TYPICAL FOR STRAIGHT THROUGH DESIGN ONLY. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.
3. EITHER LADDER OR STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". LOWEST STEP SHALL BE BE A MAXIMUM OF 16" ABOVE THE FLOOR.
4. FLOOR OF THE MANHOLE SHALL BE TROWELLED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (8:1 MAX., ½" PER FT. MIN). FLOOR SHALL BE SHAPED AND CHANNELED; SEE SD_3-2 FOR TYPICAL CHANNEL DETAILS.

SCALE: NOT TO SCALE

7/9/09	Storm Sewer Manhole Detail Type I Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
DATE APPROVED:	REVISION DATE: 7/9/09	FILE NAME: SD_3-1
André Brackin		
DEPARTMENT OF TRANSPORTATION		

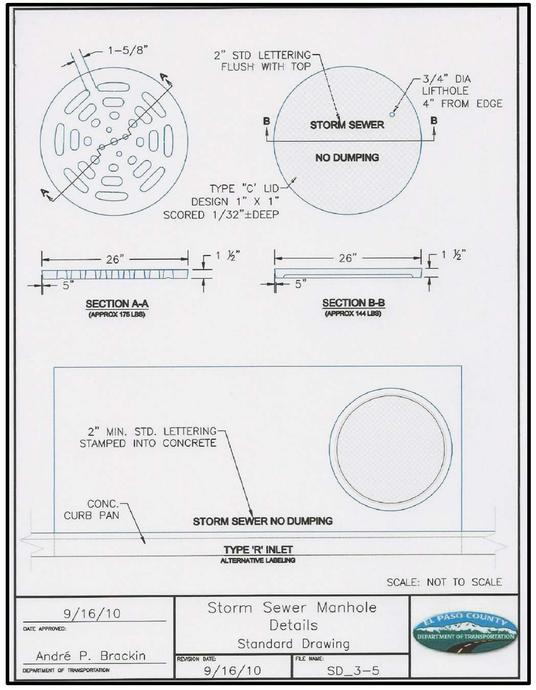


NOTES

1. TYPE II MANHOLES SHALL BE USED WHEN APPROPRIATE AND TYPICALLY WHEN THE PIPE SIZES ARE 30" OR LESS INSIDE DIAMETER.
2. VIEW AND DETAILS ARE TYPICAL. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.
3. EITHER LADDER OF STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". STEPS IN BASE SHALL BE INSTALLED IN "TOE POCKETS" (SEE DETAIL THIS SHEET). LOWEST STEP SHALL BE A MAXIMUM OF 16" ABOVE THE FLOOR.
4. PIPES SHALL BE TRIMMED TO FINAL SHAPE AND SET BEFORE MANHOLE IS POURED.
5. BENCH SHALL BE SLOPED TOWARD CENTER OF MANHOLE BASE (4:1 MAX., ½" PER FOOT. MIN.).
6. FLOOR OF MANHOLE SHALL BE TROWELLED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (8:1., ½" PER FT. MIN.) . FLOOR SHALL BE SHAPED AND CHANNELED; SEE DETAILS THIS SHEET.

SCALE: NOT TO SCALE

DATE APPROVED:	Storm Sewer Manhole Detail Type II Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
André P. Brackin	REVISION DATE: 11/10/04	FILE NAME: SD_3-2
DEPARTMENT OF TRANSPORTATION		



SCALE: NOT TO SCALE

9/16/10	Storm Sewer Manhole Details Standard Drawing	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
DATE APPROVED:	REVISION DATE: 9/16/10	FILE NAME: SD_3-5
André P. Brackin		
DEPARTMENT OF TRANSPORTATION		

STREET/STORM SEWER DETAILS

DATE: DECEMBER 20, 2017

PROJECT NO. 100.041

SHEET NUMBER C10.3

TOTAL SHEETS: 34

CORE ENGINEERING GROUP
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EMAIL: rlschindler@cegi.com

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD-OLD GLORY DR
COLORADO SPRINGS, COLORADO

NO.	DESCRIPTION	DATE

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

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 Pikes 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 Requirement Reinforced Concrete" and "Specifications for Structural Concrete for Buildings" (ACI 318 and ACI 301) latest editions. Section 1.3 "Inspection" of ACI 318 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.

Mix 'A' For drilled piers.

3,000 psi minimum compressive strength at age of 28 days.
Type I/II Cement, minimum of 470 pounds per cubic yard.
Fly ash not allowed.
3/4" maximum aggregate size.
6" minimum- 8" maximum slump.

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%± 1½% Entrained air.
4" (8" 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 splices 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 unacceptable 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 (u.n.o.)
4) Concrete not exposed to earth or weather . . 3/4"
5) Beams, Columns, Ties, Stirrups or spirals around primary reinforcement, or primary reinforcement with no ties, stirrups 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 cumulative curing time at a temperature of 50°F or more. Concrete must be adequately covered during cold periods to maintain this 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 assure this 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 standard: ACI 301 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 C138 or ASTM C231.
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. **159665** prepared by **RMG Engineers** dated **11/7/17**. 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 **11'-11'** 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 top bars	at corner	(42) bar diameters
Other bars	staggered	(36) bar diameters

4. STRUCTURAL STEEL:

A. Structural steel, including cast in angles, plates or other sections shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC) Specifications and Code of Standard Practice, latest edition.

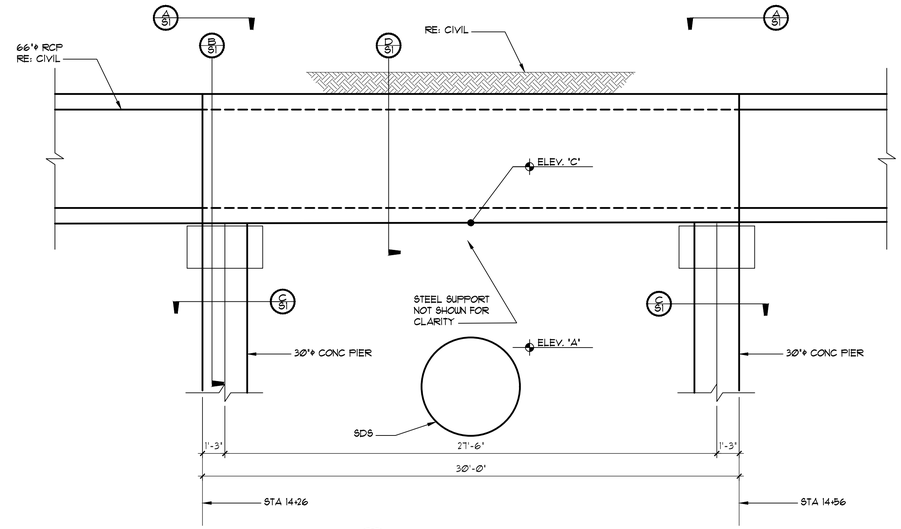
B. All wide flange and channel structural steel shall conform to ASTM A992. All other structural shapes and miscellaneous steel shall conform to ASTM A36 unless otherwise noted. Tube steel columns shall conform to ASTM A500, Grade-B. Pipe columns shall conform to ASTM A53.

C. Shop connections shall be welded with E70xx electrodes and ground smooth where exposed. Field connections shall be made with bolts conforming to ASTM A325N unless otherwise noted. Field welds shall be made with E70xx electrodes. All welding shall be in accordance with AWS "Structural Welding Code", latest edition and performed by certified, licensed welder.

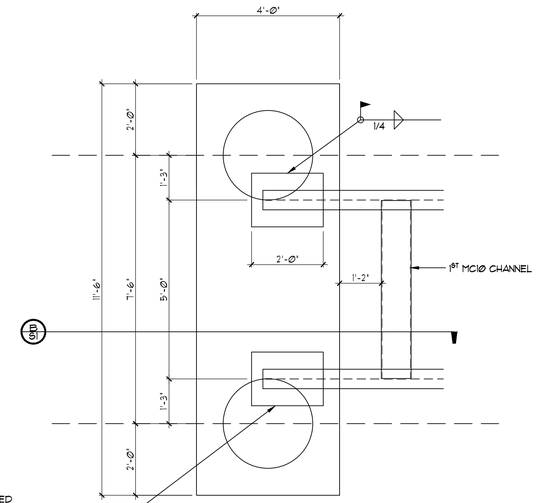
D. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded.

5. 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.

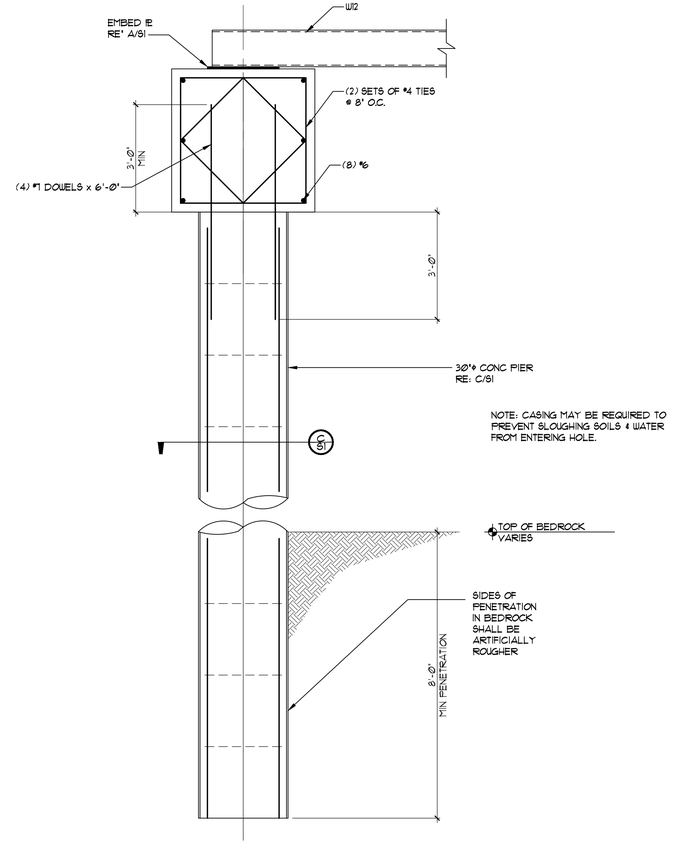


1 S1 SDS CROSSING ELEVATION
SCALE: 1/4" = 1'-0"

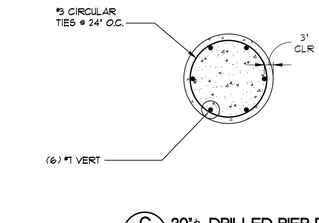


A S1 PIER CAP PLAN
SCALE: 1/2" = 1'-0"

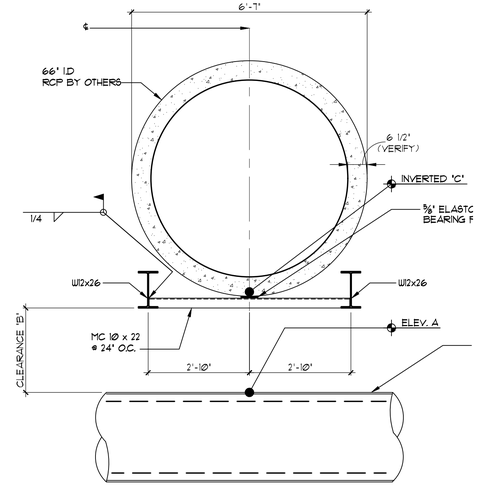
NOTE: ALL EXPOSED STEEL BE COATED IN ASPHALT COATING



B S1 DRILLED PIER DETAIL
SCALE: 1/2" = 1'-0"



C S1 30"ϕ DRILLED PIER DETAIL
SCALE: 1/2" = 1'-0"



D S1 RCP SUPPORT OVER SDS
SCALE: 1/2" = 1'-0"

DIMENSIONS		
CROSSING	NO. 19	NO.17
A	5710.6.35	5710.4.10
B	2.13	5.43
C	5710.0.05	5709.9.90

ROCKY MOUNTAIN GROUP
ARCHITECTS · RMG ENGINEERS · Geotechnical Materials, Testing Civil Planning · Architectural Structural Forensics
SOUTHERN COLORADO
2910 AUSTIN BLUFFS PKWY, SUITE 100, COLORADO SPRINGS, CO 80918
719.548.0600 · FAX 719.548.0641 · WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

COLORADO REGISTERED PROFESSIONAL ENGINEER
MARK D. WEIDENAAR
31528
FOR STRUCTURAL ONLY

FOUNTAIN BLVD STREET/STORM CONSTRUCTION
FONTAINE BLVD - LORSON BLVD
EL PASO COUNTY, COLORADO

LORSON RANCH METROPOLITAN DISTRICT NO.1

SHEET NAME: DRILLED PIER DETAILS AT SDS CROSSING

PROJECT STATUS: NOT FOR CONSTRUCTION

ARCHVENG: MDW
DRAWN: CKM
CHECKED: MDW
DATE: 12-20-2017

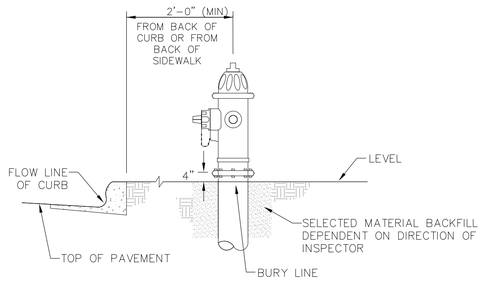
#	REVISION	DATE

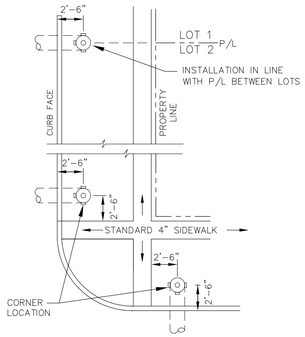
JOB NO. 159665

SHEET NO. S1
33 of 14

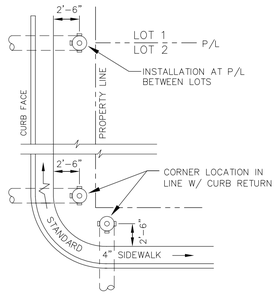
SITE SPEC / 2017 / LORSON RANCH METROPOLITAN

J:\Projects\Site Specific\2017\h-N\Lorson Ranch Metropolitan District No.1-7029\Fontaine @ SDS crossing-159665\Structural\Drawings\Final\ RMG\159665 (2).dwg Dec 20, 2017 - 4:08pm





DETACHED SIDEWALK LOCATION
NO SCALE



ATTACHED SIDEWALK LOCATION
NO SCALE

NOTE
ALL HYDRANTS SHALL BE MEULLER SUPER CENTURION 200.

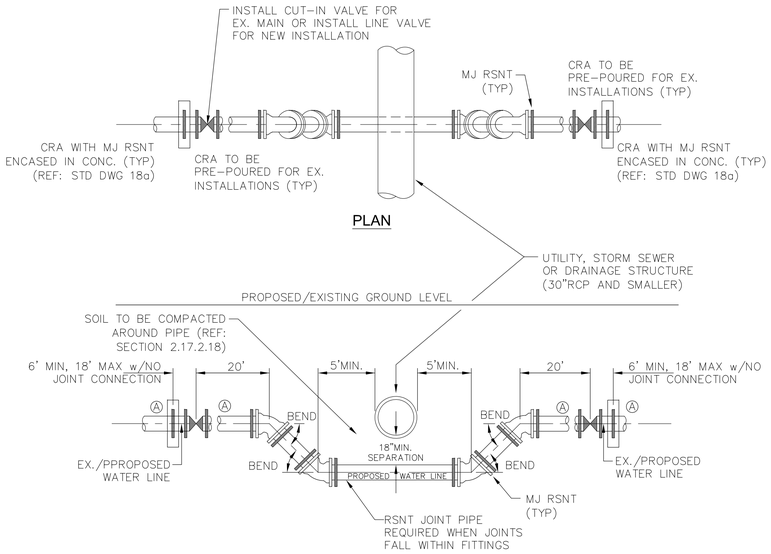
NOTES

1. HYDRANT NOZZLE SHALL BE POSITIONED AT RIGHT ANGLES TO CURB. IF NO CURB OR SIDEWALK EXIST, NOZZLE SHALL BE PLACED AT RIGHT ANGLE TO STREET OR ALLEY.

2. HYDRANTS WILL BE PLACED A MINIMUM OF 5.0 FEET FROM ANY UTILITY OR DRAINAGE STRUCTURE (TO BE CO-ORDINATED WITH JOINT TRENCH INSTALLATION)

3. ANY HYDRANT BEING INSTALLED WITH CONDITIONS OTHER THAN THOSE MENTIONED AND/OR DETAILED BELOW WILL REQUIRE SIGNED APPROVAL FROM SECURITY FIRE PROTECTION DISTRICT.

FIRE HYDRANT LOCATIONS
NO SCALE



ELEVATION
30"RCP AND SMALLER - UTILITY STRUCTURE
NO SCALE

GENERAL NOTES

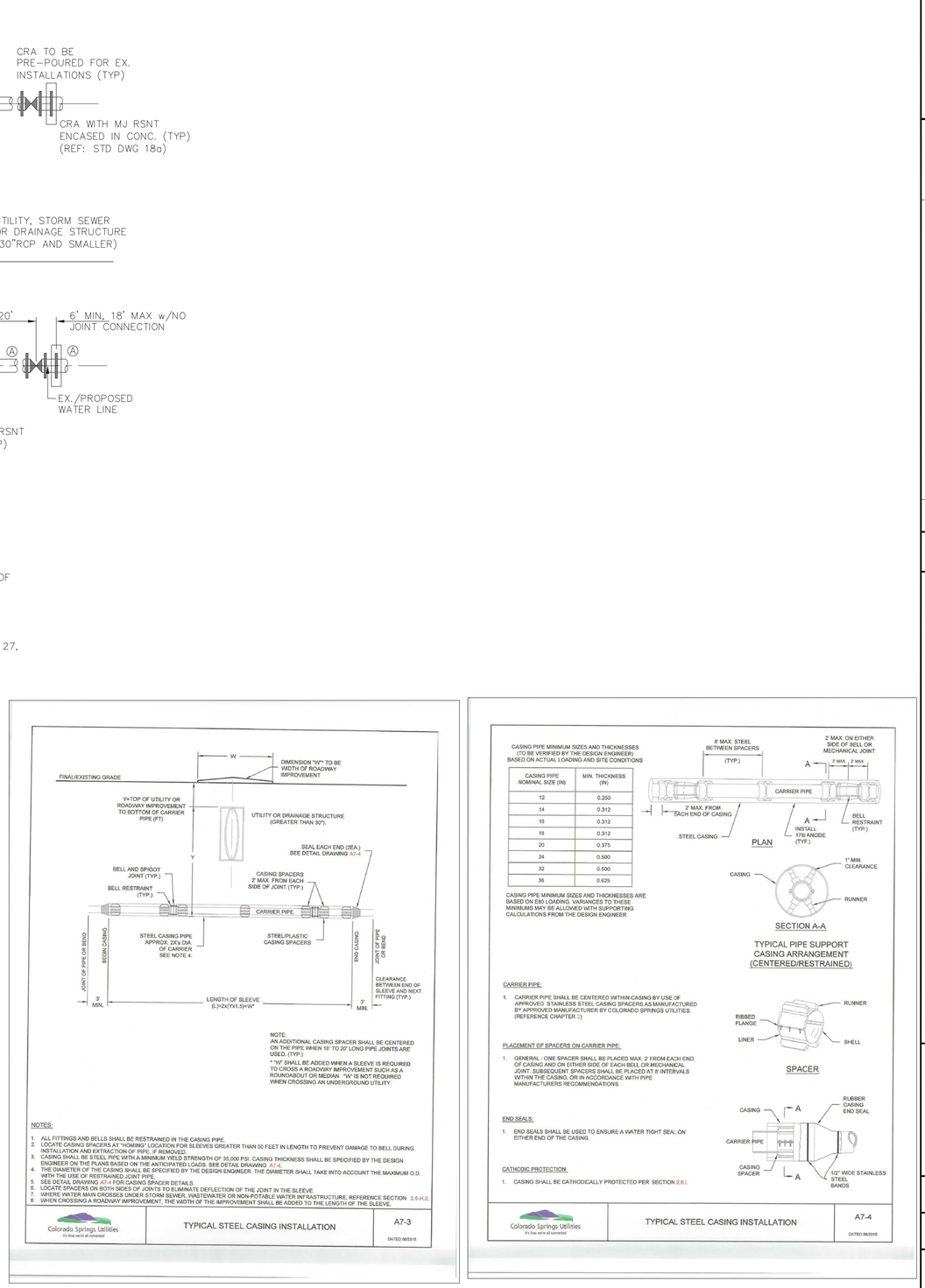
1. D.I.P. PIPE REQUIRED IN LOWERINGS (AT THE DISCRETION OF THE WRD/INSPECTOR PVC PIPE MAYBE APPROVED).

2. Ⓐ LOWERINGS TO BE CATHODIC PROTECTED UNDER THE DIRECTION OF THE WRD INSPECTOR. (17 lb).

3. ALL FITTINGS SHALL HAVE MJ RSNTS. SEE DRAWINGS NO. 27, 28 & SECTION 5.14 OF THE WRD SPECIFICATIONS.

4. EXAMPLE CAN VARY DUE TO SITE CONDITIONS AND INSPECTOR'S DIRECTION'S.

LOWERING DETAIL WITH MJ RSNT FITTINGS AND RSNT JOINT PIPE (w/APPROVAL OF W.R.D.)
(PER CSU STANDARD # 20a)
NO SCALE



CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rlsch@ceg1.com

NO. | DESCRIPTION | DATE

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

PROJECT:
FONTAINE BLVD IN
LORSON RANCH EAST
FONTAINE BLVD.-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION
WATERMAIN DETAILS

DATE:
DECEMBER 20, 2017

PROJECT NO.
100.041

SHEET NUMBER
C12.1
TOTAL SHEETS: 34

Markup Summary

2 (1)

Subject: Cloud+
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Checkmark: Unchecked
Author: dsdrice
Date: 2/2/2018 3:42:53 PM
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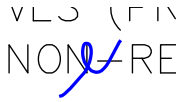
Full-depth asphalt is not allowed.

3 (5)



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Date: 2/8/2018 11:58:30 AM
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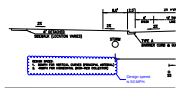

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Design speed is 50 MPH.

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Author: dsdrice
Date: 2/8/2018 12:01:05 PM
Color:

This is just for review reference.

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Author: dsdrice
Date: 2/8/2018 12:01:45 PM
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4 (2)

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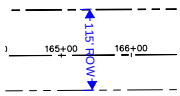
Date: 2/8/2018 12:03:17 PM
Color:



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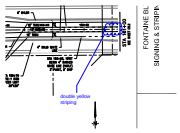
Author: dsdrice
Date: 2/8/2018 11:53:03 AM
Color:

115' ROW

5 (9)



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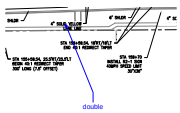
Author: dsdrice
Date: 2/14/2018 12:30:06 PM
Color:

double yellow striping

Subject: Cloud+
Page Label: 5
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 2/8/2018 1:02:13 PM
Color:

Pedestrian refuge island?
ECM 2.5.2.F.2
Or direct pedestrians to west side?



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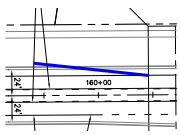

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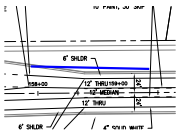

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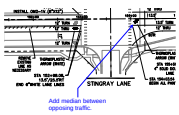

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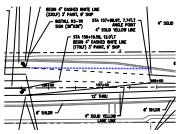
Add median between opposing traffic.



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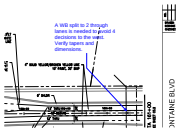

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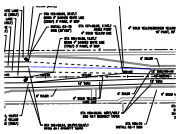
A WB split to 2 through lanes is needed to avoid 4 decisions to the west. Verify tapers and dimensions.



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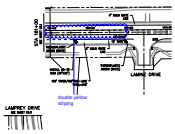
6 (9)



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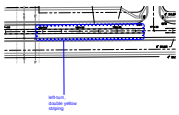

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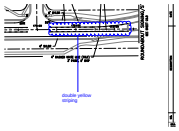

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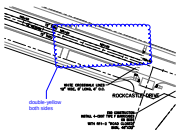

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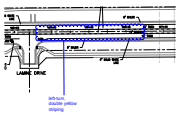
Date: 2/8/2018 9:20:26 AM
Color:

double-yellow both sides



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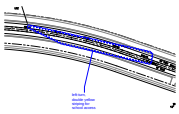

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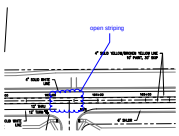
left-turn, double yellow striping for school access



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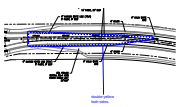

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Page Label: 6
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Author: dsdrice
Date: 2/8/2018 11:34:32 AM
Color:

double-yellow both sides.

- No-parking signs?

Subject: Text Box
Page Label: 6
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Status:
Checkmark: Unchecked
Author: dsdrice
Date: 2/8/2018 12:05:24 PM
Color:

- No-parking signs?

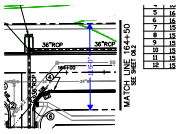
7 (1)

Provide centerline station labels

Subject: Text Box
Page Label: 7
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 2/8/2018 12:48:25 PM
Color:

Provide centerline station labels

8 (6)



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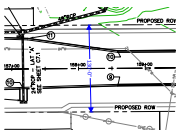
Checkmark: Unchecked
Author: dsdrice
Date: 2/8/2018 11:50:30 AM
Color:

115'-0"



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Author: dsdrice
Date: 2/8/2018 11:49:47 AM
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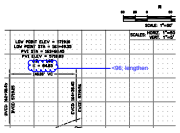

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Author: dsdrice
Date: 2/8/2018 12:44:02 PM
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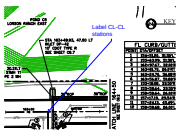
<96; lengthen



Subject: Callout
Page Label: 8
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Status:
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Author: dsdrice
Date: 2/8/2018 11:46:31 AM
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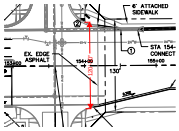
Label CL-CL stations



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Author: dsdrice
Date: 2/8/2018 12:47:06 PM
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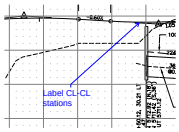
120'-10"



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Author: dsdrice
Date: 2/8/2018 1:03:46 PM
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Label CL-CL stations

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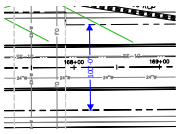
9 (2)



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Date: 2/8/2018 1:07:16 PM
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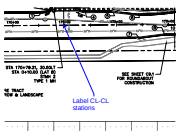

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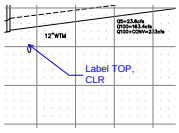
10 (4)



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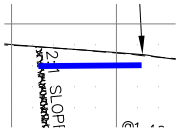

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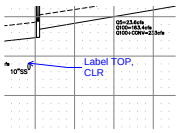
show inlet headwater



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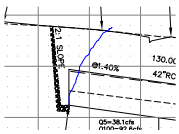

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• show interim grade

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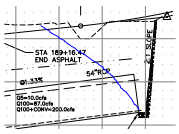
11 (3)



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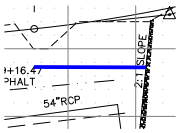

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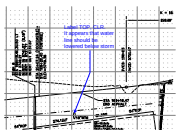

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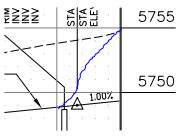
Label TOP, CLR.
It appears that water line should be lowered below storm

13 (2)



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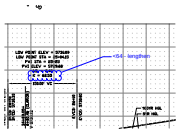

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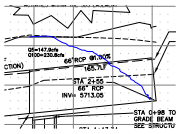
16 (2)



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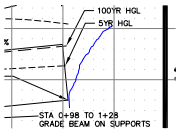

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33 (96)

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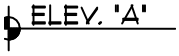

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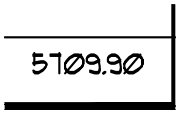

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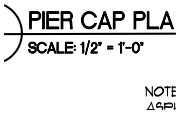

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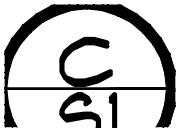

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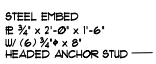
DRILLED PIER DETAIL



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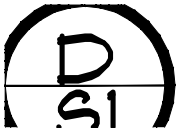

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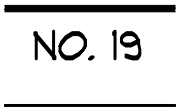
30"~ CONC PIER



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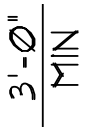

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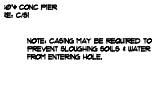

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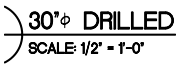
NOTE: CASING MAY BE REQUIRED TO PREVENT SLOUGHING SOILS & WATER FROM ENTERING HOLE.



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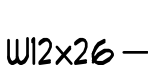

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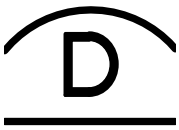

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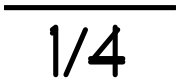

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58" ELASTOMERIC BEARING PAD

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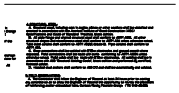

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4. STRUCTURAL STEEL: : A. Structural steel, including cast in angles, plates or other sections shall be detailed and A. Structural steel, including cast in angles, plates or other sections shall be detailed and Structural steel, including cast in angles, plates or other sections shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC) Specifications and Code of Standard Practice, latest edition. B. All wide flange and channel structural steel shall conform to ASTM A992. All other B. All wide flange and channel structural steel shall conform to ASTM A992. All other All wide flange and channel structural steel shall conform to ASTM A992. All other structural shapes and miscellaneous steel shall conform to ASTM A36 unless otherwise noted. Tube steel columns shall conform to ASTM A500, Grade-B. Pipe columns shall conform to ASTM A53. C. Shop connections shall be welded with E70xx electrodes and ground smooth where C. Shop connections shall be welded with E70xx electrodes and ground smooth where Shop connections shall be welded with E70xx electrodes and ground smooth where exposed. Field connections shall be made with bolts conforming to ASTM A325N unless otherwise noted. Field welds shall be made with E70xx electrodes. All welding shall be in accordance with AWS "Structural Welding Code", latest edition and performed by certified, licensed welder. D. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded. D. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded.

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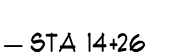

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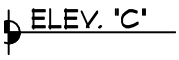

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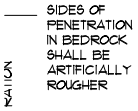

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SIDES OF PENETRATION IN BEDROCK SHALL BE ARTIFICIALLY ROUGHER

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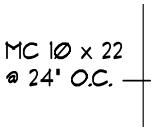

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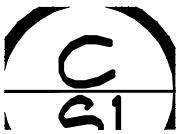
MC 10 x 22 @ 24" O.C.



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5. FIELD OBSERVATIONS: : A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting 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.Rocky Mountain Group: (719) 548-0600.: (719) 548-0600.

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(6) #7 VERT

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2. CONCRETE: : A. Concrete has been designed and shall be constructed in accordance with the American A. Concrete has been designed and shall be constructed in accordance with the American Concrete has been designed and shall be constructed in accordance with the American Concrete Institute "Building Code Requirement Reinforced Concrete" and "Specifications for Structural Concrete for Buildings" (ACI 318 and ACI 301) latest editions. Section 1.3 "Inspection" of ACI 318 is deleted in its entirety, see "Field Observations" paragraph. All concrete shall be of stone aggregate, unless noted otherwise. B. Concrete mixes: B. Concrete mixes: Concrete mixes: Concrete mixes: : See specifications for any additional durability requirements. Mix 'A' For drilled piers Mix 'A' For drilled piers For drilled piers For drilled piers 3,000 psi minimum compressive strength at age of 28 days. Type I/II Cement, minimum of 470 pounds per cubic yard. Fly ash not allowed. 3/4" maximum aggregate size. 6" minimum- 8" maximum slump. Mix 'B' For footings, grade beams, and miscellaneous concrete: Mix 'B' For footings, grade beams, and miscellaneous concrete: Mix 'B' For footings, grade beams, and miscellaneous concrete: For footings, grade beams, and miscellaneous concrete: 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 % Entrained air. 12% Entrained air. 4" (8" with superplasticizer) maximum slump. C. Reinforcing is to be new billet steel ASTM A615, Grade-60, except ties and bars to C. Reinforcing is to be new billet steel ASTM A615, Grade-60, except ties and bars to 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 splices 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 (W.W.F.) 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 D. Placing of Reinforcement: Provide chairs, bolsters, additional reinforcement, and 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 unacceptable material, will not be permitted. E. Reinforcement shall be placed so that the following minimum concrete protection is E. Reinforcement shall be placed so that the following minimum concrete protection is Reinforcement shall be placed so that the following minimum concrete protection is provided, unless noted otherwise: 1) Concrete surfaces poured against ground . . . .3" Clear 1) Concrete surfaces poured against ground . . . .3" Clear Concrete surfaces poured against ground . . . .3" Clear 2) Formed surfaces exposed to ground or weather: 2) Formed surfaces exposed to ground or weather: Formed

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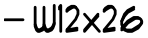
NOTE: ALL EXPOSED STEEL BE COATED IN ASPHALT COATING



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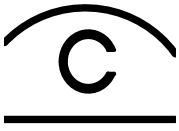

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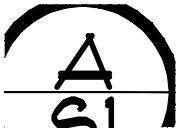

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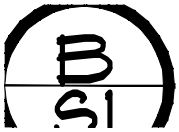

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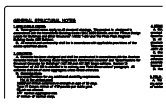

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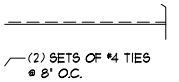
1. APPLICABLE CODES: : A. These general notes apply to all structural drawings. This project is designed in A. These general notes apply to all structural drawings. This project is designed in These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2009 Edition, and the 'Minimum Design Loads for Buildings and Other Structures" (ASCE 7-05) and The Pikes Peak Regional Building Code. (2011 Edition). B. All material and workmanship shall be in accordance with applicable provisions of the B. All material and workmanship shall be in accordance with applicable provisions of the All material and workmanship shall be in accordance with applicable provisions of the codes specified above.



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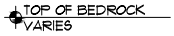

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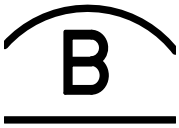

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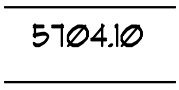

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#3 CIRCULAR TIES @ 24" O.C.

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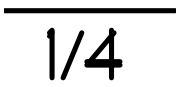

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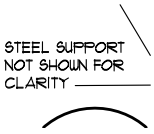

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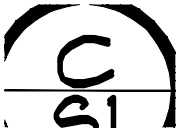

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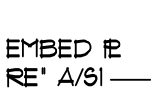

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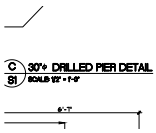

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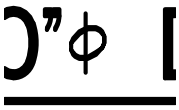

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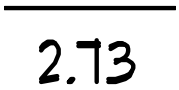

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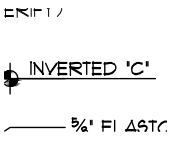

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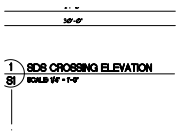

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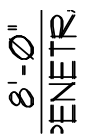

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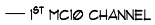

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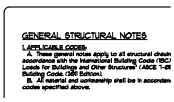
GENERAL STRUCTURAL NOTES

1. APPLICABLE CODES:
A. These general notes apply to all structural details in accordance with the International Building Code (IBC) Loads for Buildings and Other Structures" (ASCE 7-05 Building Code, (2005 Edition).
B. All material and workmanship shall be in accordance codes specified above.

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GENERAL STRUCTURAL NOTES

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3. DRILLED PIER FOUNDATIONS: : A. The foundation design has been completed in accordance with pertinent standards, A. The foundation design has been completed in accordance with pertinent standards, 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 . 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. 159665 prepared by RMG B. Foundation design is based on soil report No. 159665 prepared by RMG Foundation design is based on soil report No. 159665 prepared by RMG 159665 prepared by RMG prepared by RMG RMG Engineers dated 11/7/17. The Contractor shall thoroughly review and understand dated 11/7/17. The Contractor shall thoroughly review and understand 11/7/17. The Contractor shall thoroughly review and understand . 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 C. The structure is to be founded on concrete grade beams bearing on 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 35,000 psf psf Maximum allowable side shear . . . . . 3,200 psf 3,200 psf psf (For the portion of the pier in bedrock and at least ??'-??" below bottom of grade beam) ??'-??" below bottom of grade beam) below bottom of grade beam) Maximum penetration into bedrock. . . . . 8'-0" 8'-0" Minimum total length . . . . . 40'-0" 40'-0" Minimum spacing . . . . . 3 PIER DIA. 3 PIER DIA. D. The maximum variation of the center of any drilled pier at its top from the 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 E. A representative of the Geotechnical engineer shall provide full time A representative of the Geotechnical engineer shall provide full time observation of the drilling operation and reinforcement / concrete placement to verify that the soil type 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 F. The bottom of all piers shall be thoroughly cleaned and

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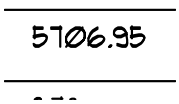

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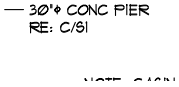

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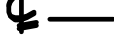

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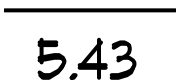

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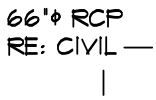

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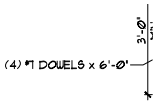

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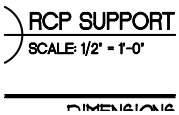

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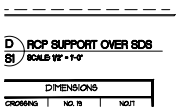

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