

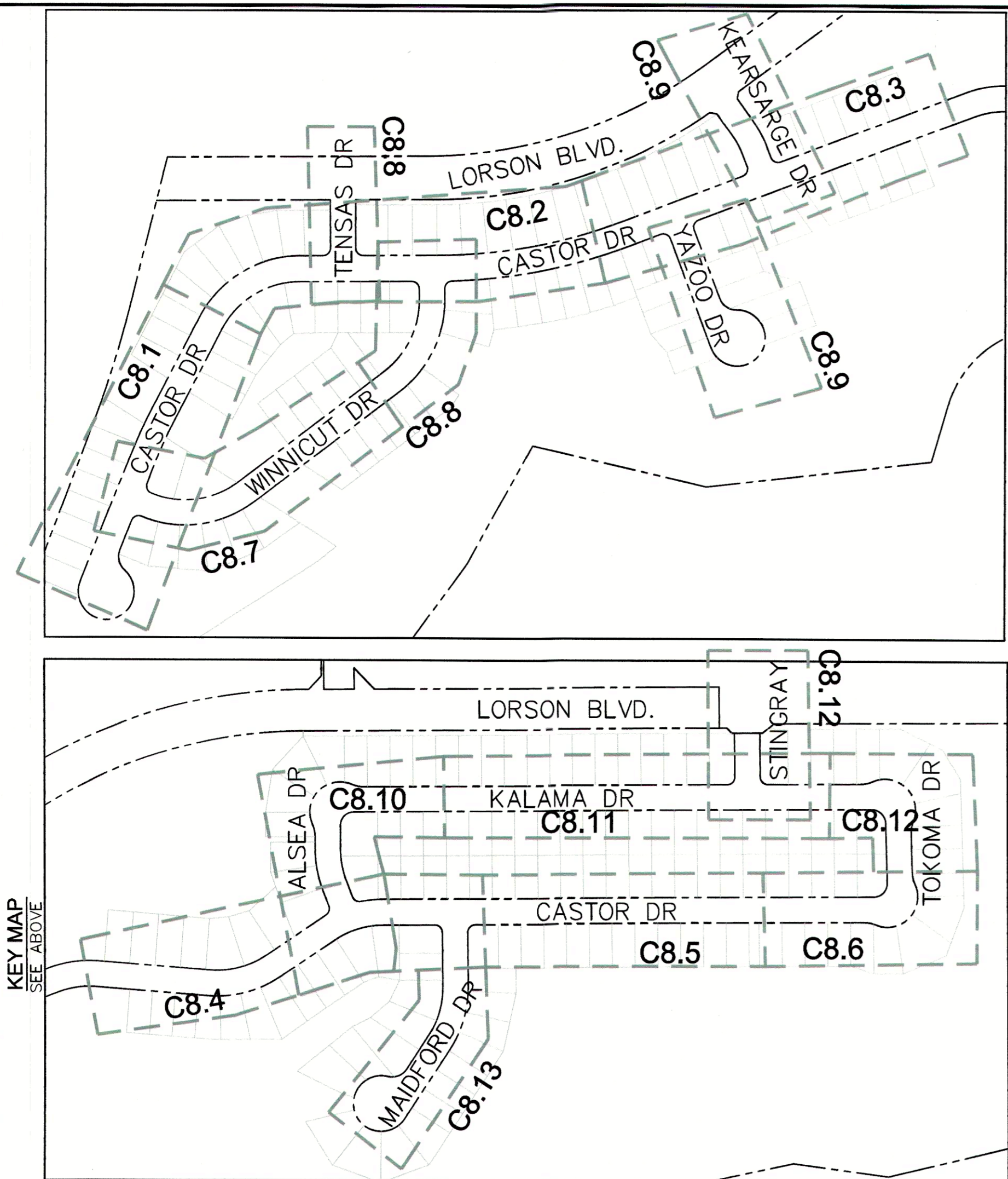
CONSTRUCTION PLANS  
FOR

# CREEKSIDE AT LORSON RANCH FILING NO. 1

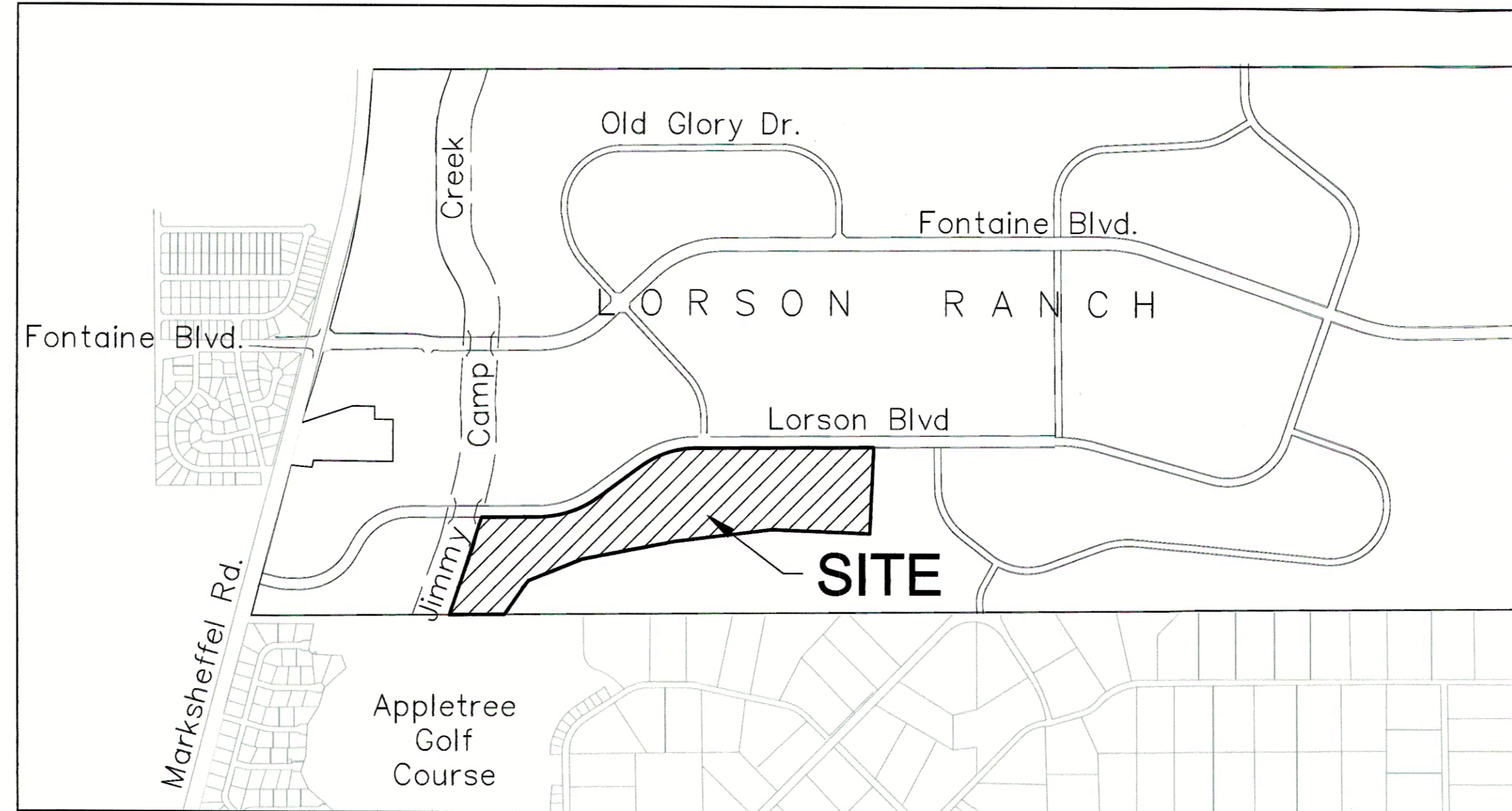
## SANITARY SEWER AND WATERMAIN CONSTRUCTION PLANS



**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



KEY MAP  
SEE BELOW



VICINITY MAP  
NO SCALE

PREPARED FOR:  
**LORSON, LLC**  
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.

SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
C1.1	COVER SHEET
C1.2	NOTES
C1.3	TYPICAL SECTIONS
C2.1-C2.2	STREET HORIZONTAL CONTROL
C3.1-C3.2	UTILITY SERVICE PLAN
C8.1-C8.15	PLAN AND PROFILES
C12.1	DETAILS

**DEVELOPER'S STATEMENT**

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

BUSINESS NAME LORSON, LLC  
BY Jm DATE 4/25/19  
TITLE Authorized Signing Agent  
ADDRESS 212 N. WAHSATCH AVE. SUITE 301  
COLORADO SPRINGS, CO 80903

**FIRE DISTRICT APPROVAL**

THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS TOGETHER WITH THE MAIN SIZES INDICATED ON THIS WATER INSTALLATION PLAN ARE ADEQUATE TO SATISFY THE REQUIREMENTS OF THE SECURITY FIRE PROTECTION DISTRICT'S FIRE AND RESCUE DEPARTMENT. THIS APPROVAL IS BASED ON THE INFORMATION IN THESE PLANS, SPECIFICATIONS AND SUPPLEMENTAL INFORMATION PROVIDED BY THE DESIGN ENGINEER WHOSE SIGNATURE APPEARS IN THESE PLANS, AND THE WIDEFIELD WATER AND SANITATION DISTRICT.

SIGNED [Signature] DATE 5-10-19  
BY FIRE PROTECTION CHIEF OR COORDINATOR

**CONSTRUCTION APPROVAL**

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

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUALS VOLUME 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE TWO YEARS THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

**Approved**  
By: Elizabeth Nijkamp  
Date: 05/29/2019 DATE  
El Paso County Planning & Community Development

JENNIFER IRVINE, COUNTY ENGINEER/ECM ADJ. 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: rich@cegi.com

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

PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
LORSON BLVD - KEARSARGE DR  
COLORADO SPRINGS, COLORADO

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**CREEKSIDE AT LORSON RANCH FIL. NO. 1**  
**SANITARY / WATERMAIN**  
**CONSTRUCTION PLANS**

DATE:  
APRIL 15, 2019

PROJECT NO.  
**100.045**  
SHEET NUMBER  
**C0.1**  
TOTAL SHEETS: 23

**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

**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°15'2" 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 4/29/2019 BY [Signature]  
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  
WATER DESIGN APPROVAL  
DATE 4/29/2019 BY [Signature]  
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 **PUDSP-18-005**



**CONSTRUCTION NOTES**

- ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
- EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM DREXEL, BARRELL & CO., JULY, 2005. SUPPLEMENTAL SURVEY DATA WAS OBTAINED FOR MARKSHEFFEL ROAD FROM M&S CIVIL GROUP IN NOVEMBER, 2016. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
- 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
- THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
- THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECT TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
- PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER Tired VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
- SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
- FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
- 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.
- FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR LORSON RANCH.

**WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES**


- 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.
- 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.
- 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.
- ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS, VALVES AND FIRE HYDRANTS WILL BE WRAPPED WITH POLYETHYLENE TUBING, BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
- 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.
- PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
- ALL FITTINGS SHALL BE DUCTILE IRON -MECHANICAL JOINT AND HAVE 9 LB. MAGNESIUM ANODES AT EVERY FITTING.
- 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.
- 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.
- 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.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
- ANY WATER UTILITY MATERIAL REMOVED AND NOT REUSED SHALL BE RETURNED TO THE WIDEFIELD WATER AND SANITATION DISTRICT IF THE DISTRICT SO REQUESTS.
- 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.
- ANY PUMPING OR BYPASS OPERATIONS MUST BE REVIEWED AND APPROVED PRIOR TO EXECUTION BY BOTH THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER.
- 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.
- 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.
- 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.
- 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 DEPARTMENT MANAGER AND/OR JASON DREESEN, WASTEWATER DEPARTMENT MANAGER OF THE WIDEFIELD WATER AND SANITATION DISTRICT AT 719-955-0548 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

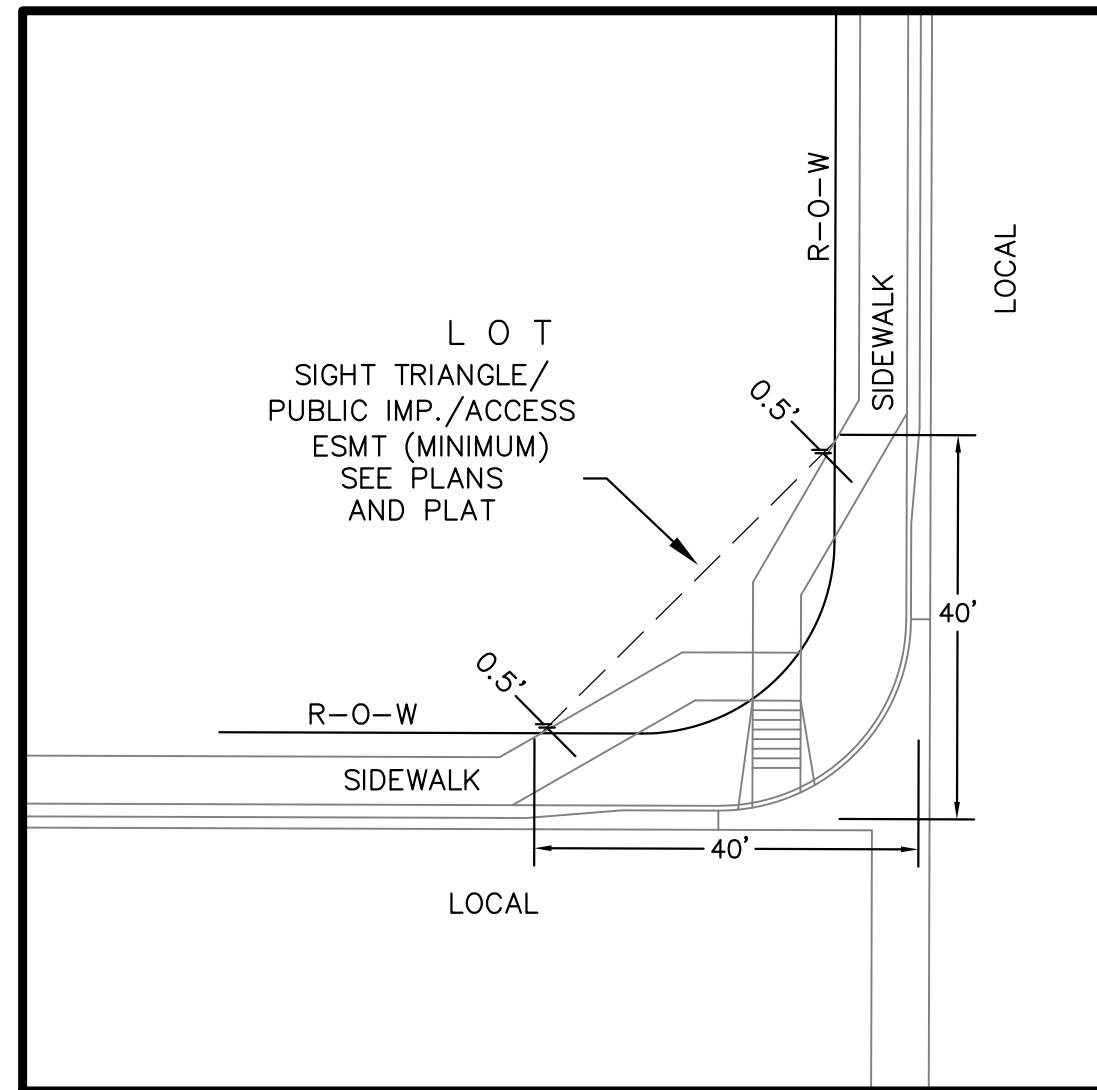
**WIDEFIELD WATER AND SANITATION DISTRICT UTILITY CONSTRUCTION NOTES**

- ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE CATHODIC PROTECTION AND 9 LB MAGNESIUM ANODES AT EVERY FITTING.
- ALL FIRE HYDRANTS SHALL BE GUARDIAN K-81D HYDRANT KENNEDY VALVE OR AMERICAN AVK SERIES 2700, (MODERN)

**UNDERDRAIN CONSTRUCTION NOTES**

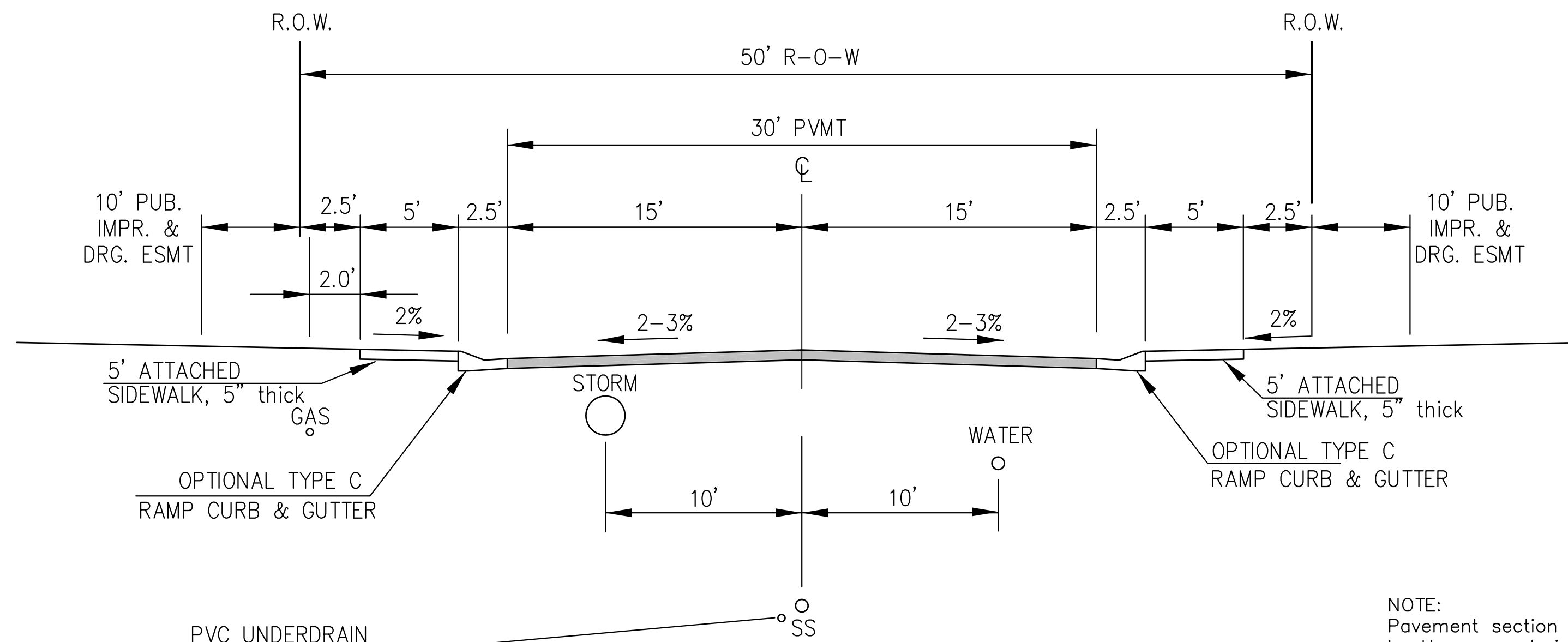
- SUMP PUMP DISCHARGES FROM HOUSES MUST DISCHARGE TO UNDERGROUND UNDERDRAIN LATERALS, OPEN SPACE, PONDS, OR SWALES AND ARE NOT ALLOWED TO FLOW OVER PUBLIC SIDEWALK OR CURB/GUTTER.
- ALL PVC UNDERDRAIN MAINS SHALL BE 4" PVC, SDR 35.
- UNDERDRAIN LATERALS SHALL BE 3" PVC, SDR 35
- UNDERDRAIN CLEANOUT BOXES ON THE MAINS SHALL BE A CAST IRON TWO PIECE HEAVY DUTY VALVE BOX MANUFACTURED BY STAR PIPE PRODUCTS OR APPROVED EQUAL. THE TOP PIECE SHALL BE 16" TALL AND THE BOTTOM PIECE SHALL BE 36" TALL.
- PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
- ALL FITTINGS SHALL BE DUCTILE IRON -MECHANICAL JOINT AND HAVE 1 LB. MAGNESIUM ANODES AT EVERY FITTING.
- 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.
- THE CONTRACTOR SHALL FIELD EXCAVATE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL TIE-INS. CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE FIELD VERIFIED INFORMATION PRIOR TO CONSTRUCTION.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
- 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 THE CONTRACTOR AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.

<p><b>CORE</b> <b>ENGINEERING GROUP</b> 15004 1ST AVENUE S. BURNSVILLE, MN 55306 PH: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rls@cegi.com</p>		DATE	
		DESCRIPTION	
NO.			
<p>PREPARED FOR: <b>LORSON, LLC</b> 212 N. WASHATCH AVE., SUITE 301 COLORADO SPRINGS, CO 80903 CONTACT: JEFF MARK</p>		<p>PROJECT: <b>CREEKSIDE AT LORSON RANCH FILING NO. 1</b> LORSON BLVD. - KEARSARGE DR COLORADO SPRINGS, COLORADO</p>	
<p>DRAWN: RLS DESIGNED: RLS CHECKED: RLS</p>			
<p><b>CREEKSIDE AT LORSON RANCH FIL NO.1</b> <b>SANITARY SEWER/WATERMAIN</b> <b>NOTES</b></p>			
			
DATE: APRIL 15, 2019			
PROJECT NO. 100.045			
SHEET NUMBER C1.2			
TOTAL SHEETS: 23			



**LOCAL ROADWAY SIGHT TRIANGLE  
PUBLIC IMPROVEMENT ESMT.**  
NOT TO SCALE

NOTE:  
ADDITIONAL PUBLIC IMPROVEMENT EASEMENTS ARE REQUIRED WHERE  
SIDEWALK ENCROACHES INTO THE PRIVATE LOTS. SEE CONSTRUCTION DRAWINGS  
AND THE FINAL PLAT. SEE CONSTRUCTION DRAWINGS AND PLAT FOR SIGHT TRIANGLES



PVC UNDERDRAIN  
SEE SAN SWR/WATERMAIN  
CONSTRUCTION PLANS  
FOR LOCATION & DETAILS

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

CASTOR DRIVE, WINNICUT DRIVE, TENSAS DRIVE, YAZOO DRIVE,  
KEARSARGE DRIVE, MAIDFORD DRIVE, ALSEA DRIVE, KALAMA DRIVE,  
STINGRAY LANE, TOMOKA DRIVE

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

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

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_  
PREPARED FOR:  
**LORSON, LLC**  
212 N. WASHACHE AVE., SUITE 301  
COLORADO SPRINGS, CO 80903  
PROJECT:  
**CREEKSIDE AT LORSON  
RANCH FILING NO. 1**  
LORSON BLVD. - KEARSARGE DR  
COLORADO SPRINGS, COLORADO  
CONTACT: JEFF MARK

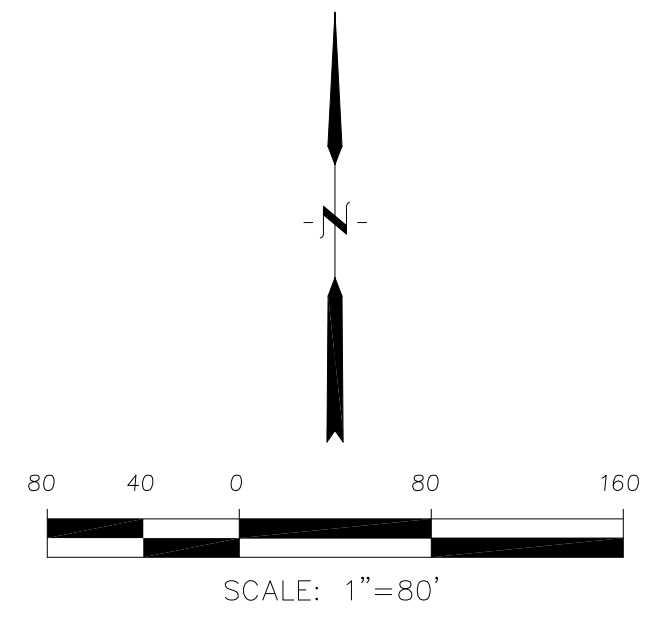
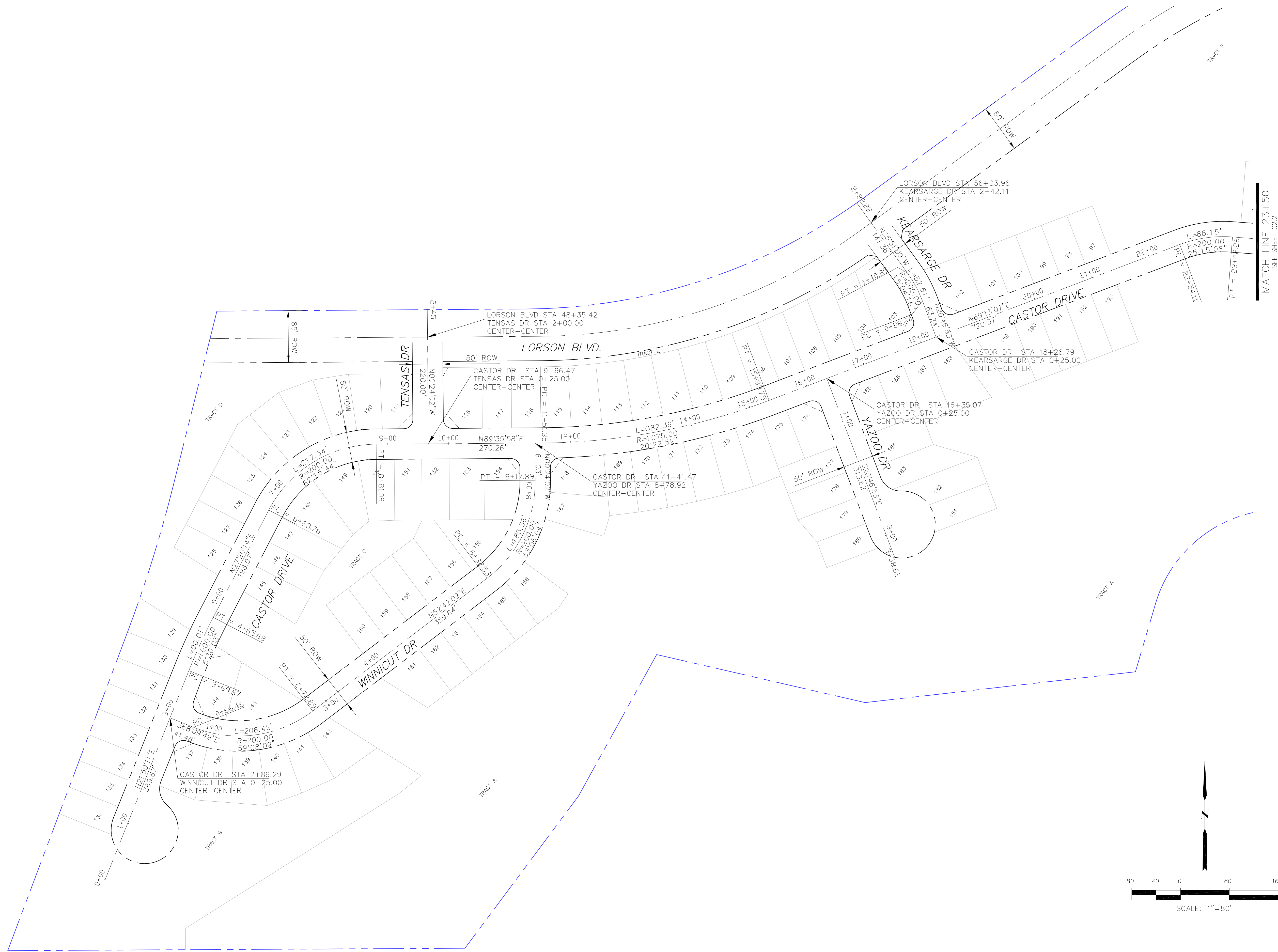
DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**TYPICAL SECTIONS**



DATE:  
APRIL 15, 2019  
PROJECT NO.  
100.045  
SHEET NUMBER  
C1.3  
TOTAL SHEETS: 23



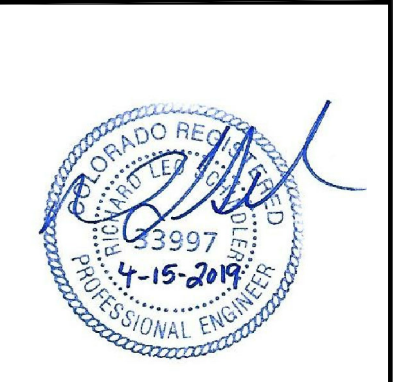


**CORE**  
**ENGINEERING GROUP**  
 15004 1ST AVENUE S,  
 SUITE 301  
 BLDG 719 S701100  
 COLORADO SPRINGS, COLORADO 80903  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@ceg1.com

NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 DESCRIPTION \_\_\_\_\_  
 PREPARED FOR:  
**LORSON, LLC**  
 212 N. WAHSATCH AVE, SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 (719) 635-3200  
 CONTACT: JEFF MARK

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**CREEKSIDE AT LORSON RANCH**  
**FILING NO. 1**  
**HORIZONTAL CONTROL PLAN**



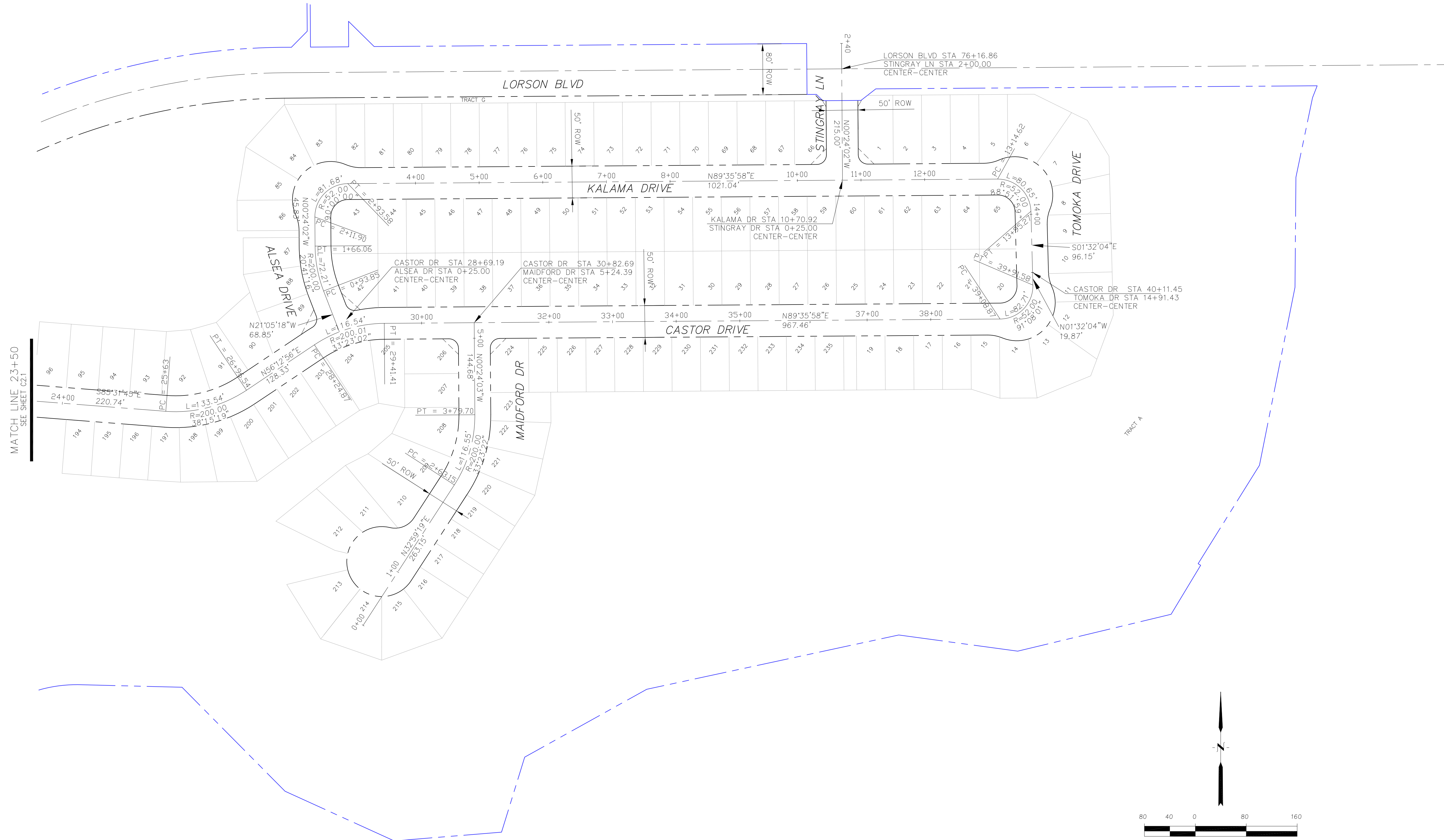
DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

SHEET NUMBER  
**C2.1**

TOTAL SHEETS: 23



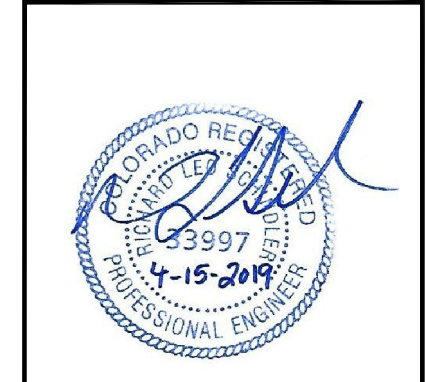


**CORE**  
**ENGINEERING GROUP**  
 15004 1ST AVENUE S,  
 BLDG 719, SUITE 1100,  
 COLORADO SPRINGS, CO 80903  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@ceg1.com

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO: \_\_\_\_\_  
 PREPARED FOR:  
**LORSON, LLC**  
 212 N. WAHSATCH AVE, SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 (719) 635-3200  
 CONTACT: JEFF MARK

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**CREEKSIDE AT LORSON RANCH**  
**FILING NO. 1**  
**HORIZONTAL CONTROL PLAN**



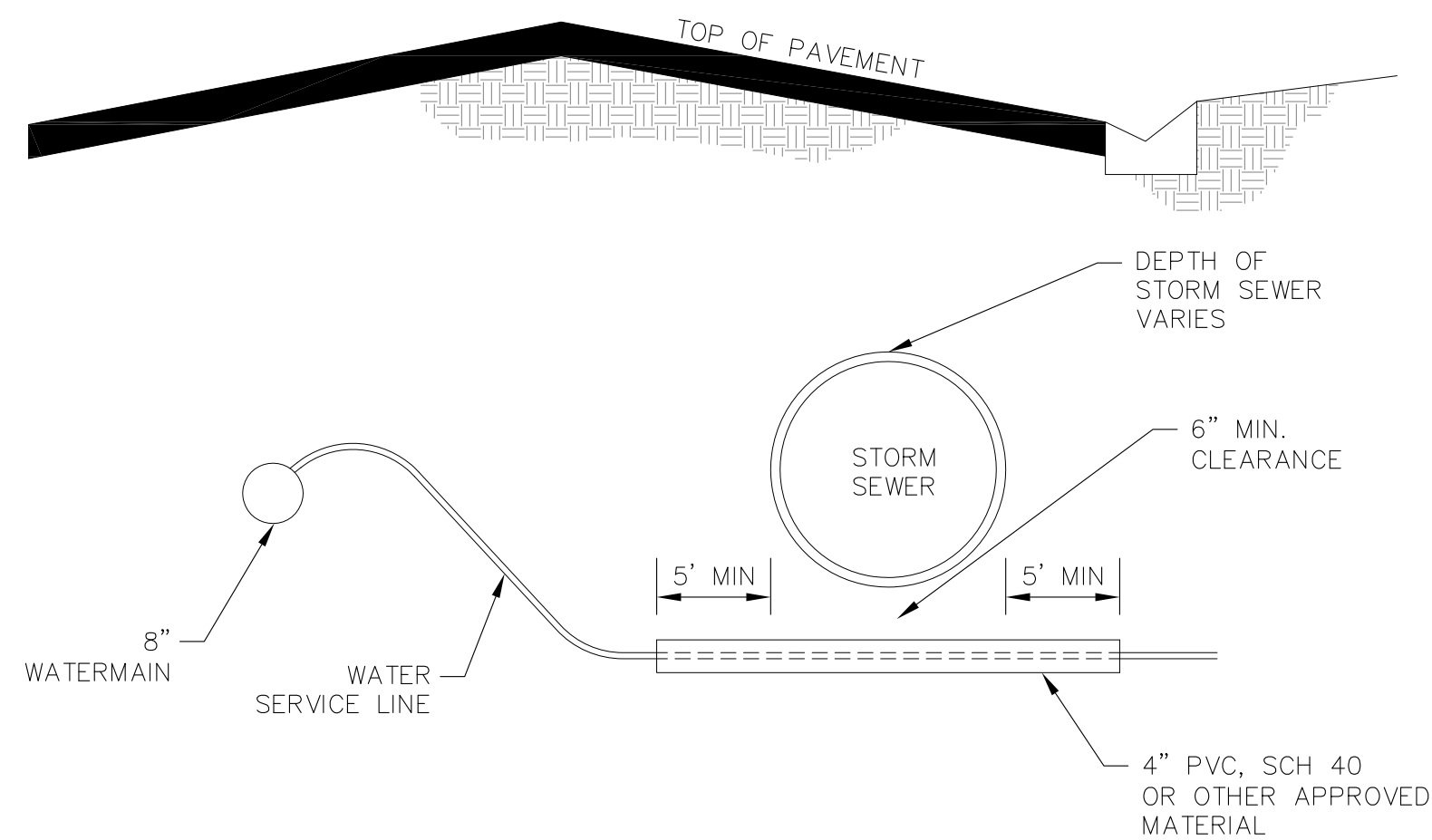
DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

SHEET NUMBER  
**C2.2**

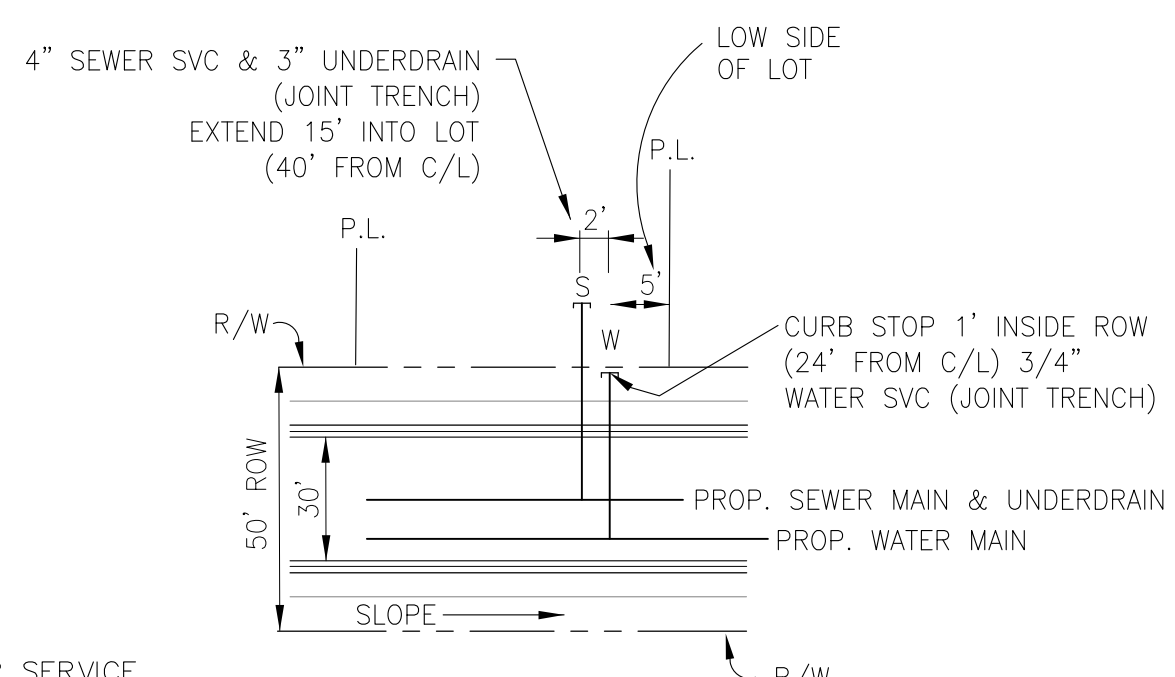
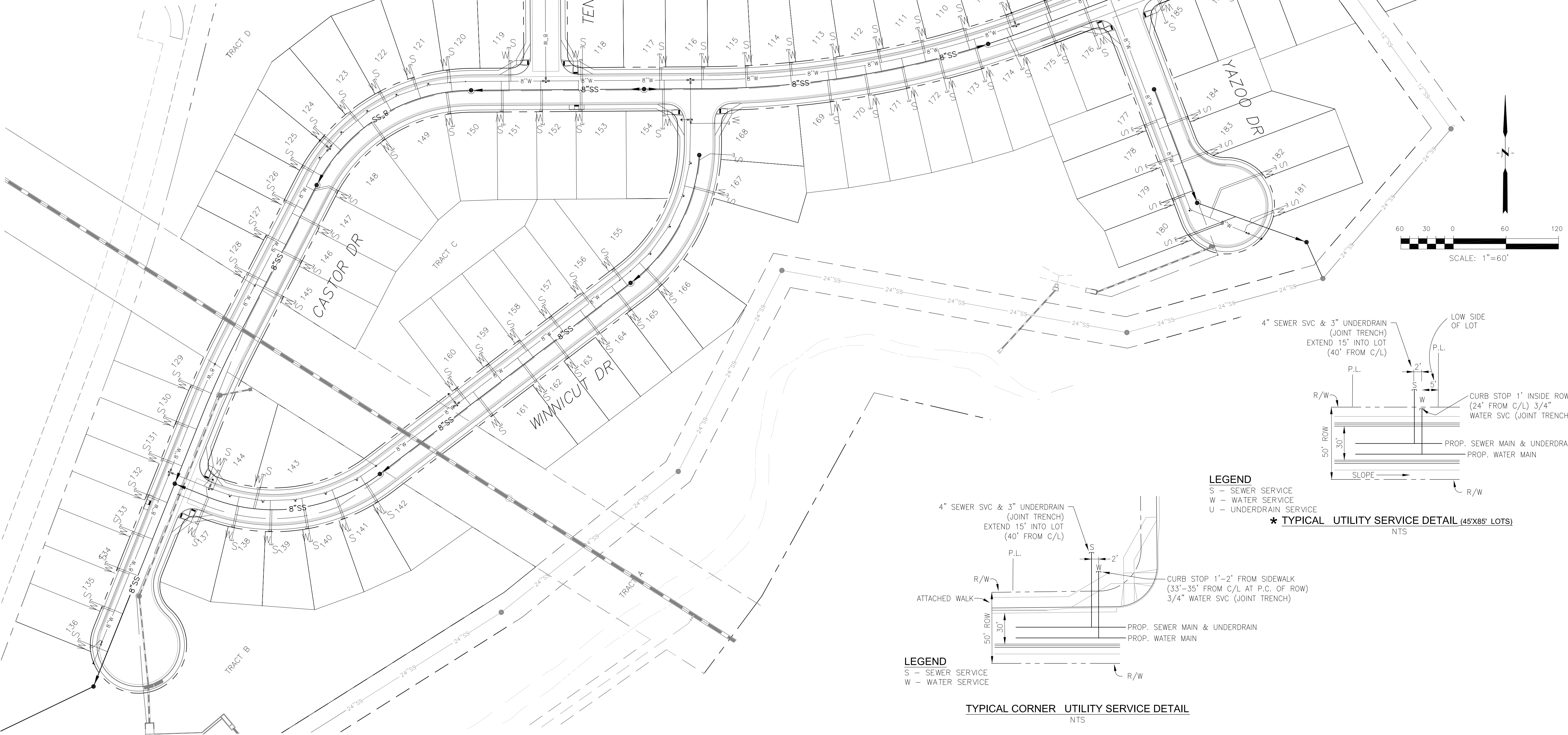
TOTAL SHEETS: 23



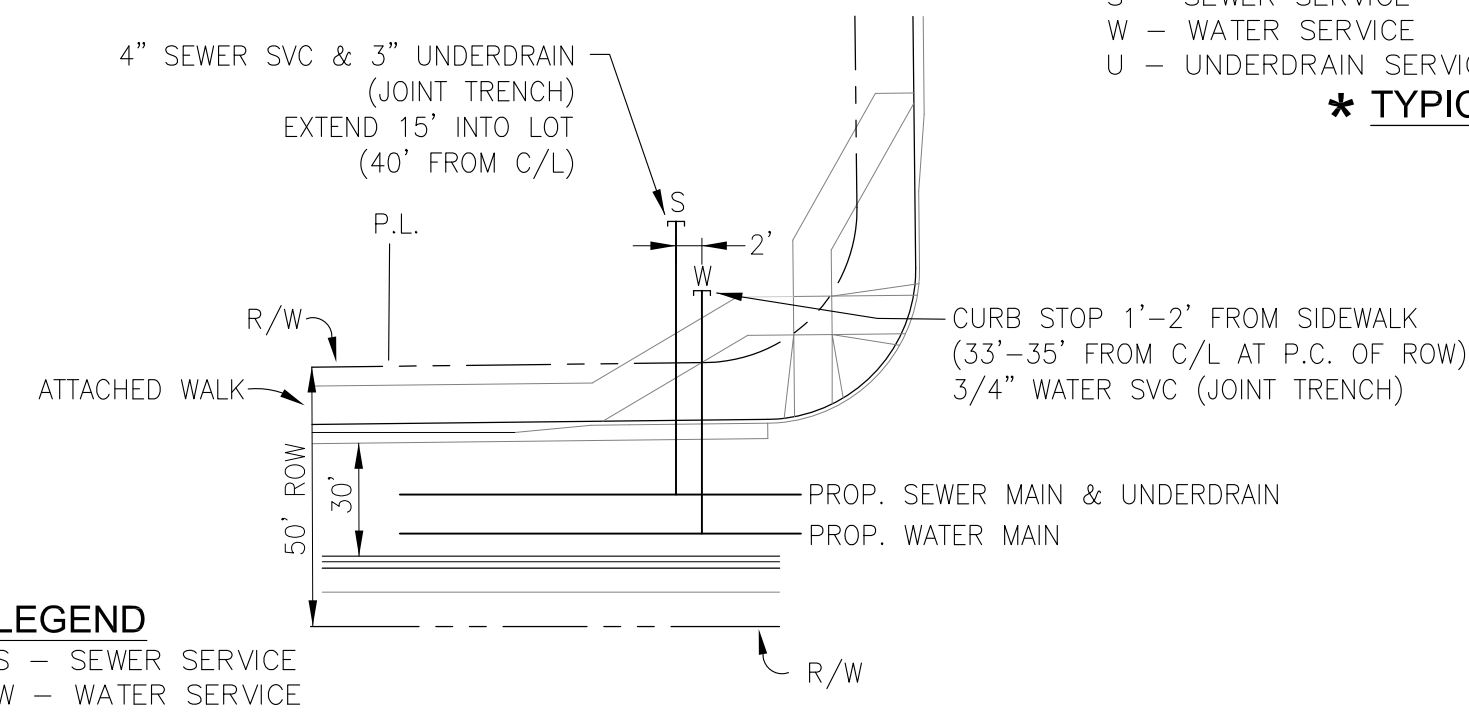


**WATER SERVICE UNDER STORM SEWER DETAIL**  
NTS

NOTE:  
1. WATER SERVICES ON ALL LOTS CROSSING STORM SEWER SHALL BE INSTALLED IN SLEEVES



**LEGEND**  
S - SEWER SERVICE  
W - WATER SERVICE  
U - UNDERDRAIN SERVICE  
**\* TYPICAL UTILITY SERVICE DETAIL (45'x85' LOTS)**  
NTS



**LEGEND**  
S - SEWER SERVICE  
W - WATER SERVICE  
**TYPICAL CORNER UTILITY SERVICE DETAIL**  
NTS

**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
BURNSVILLE, MN 55306  
PH: 719.579.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: rich@cegi.com

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_

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

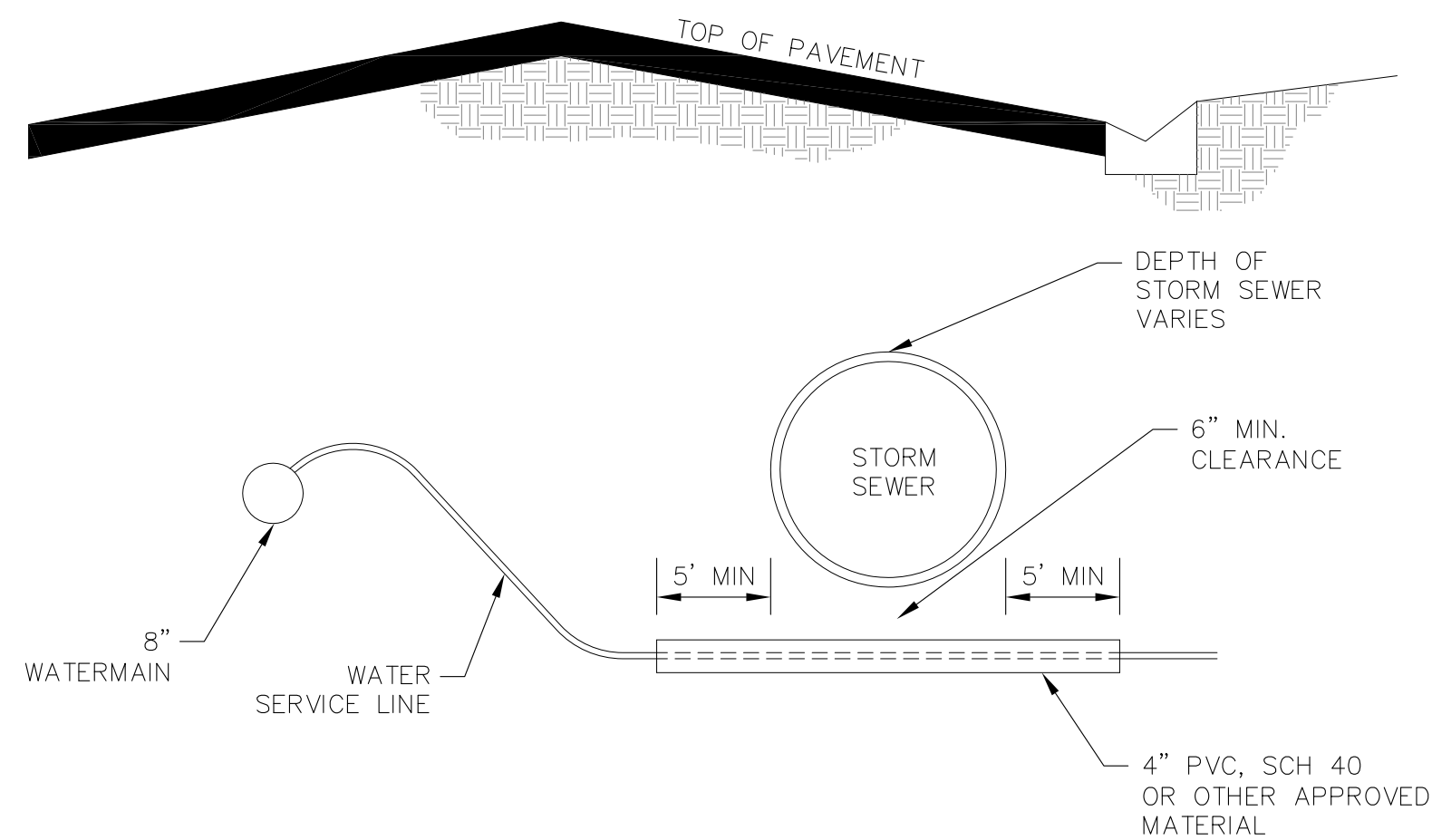
PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
LORSON BLVD. - KEARSARGE DR  
COLORADO SPRINGS, COLORADO

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
**UTILITY SERVICES PLAN**

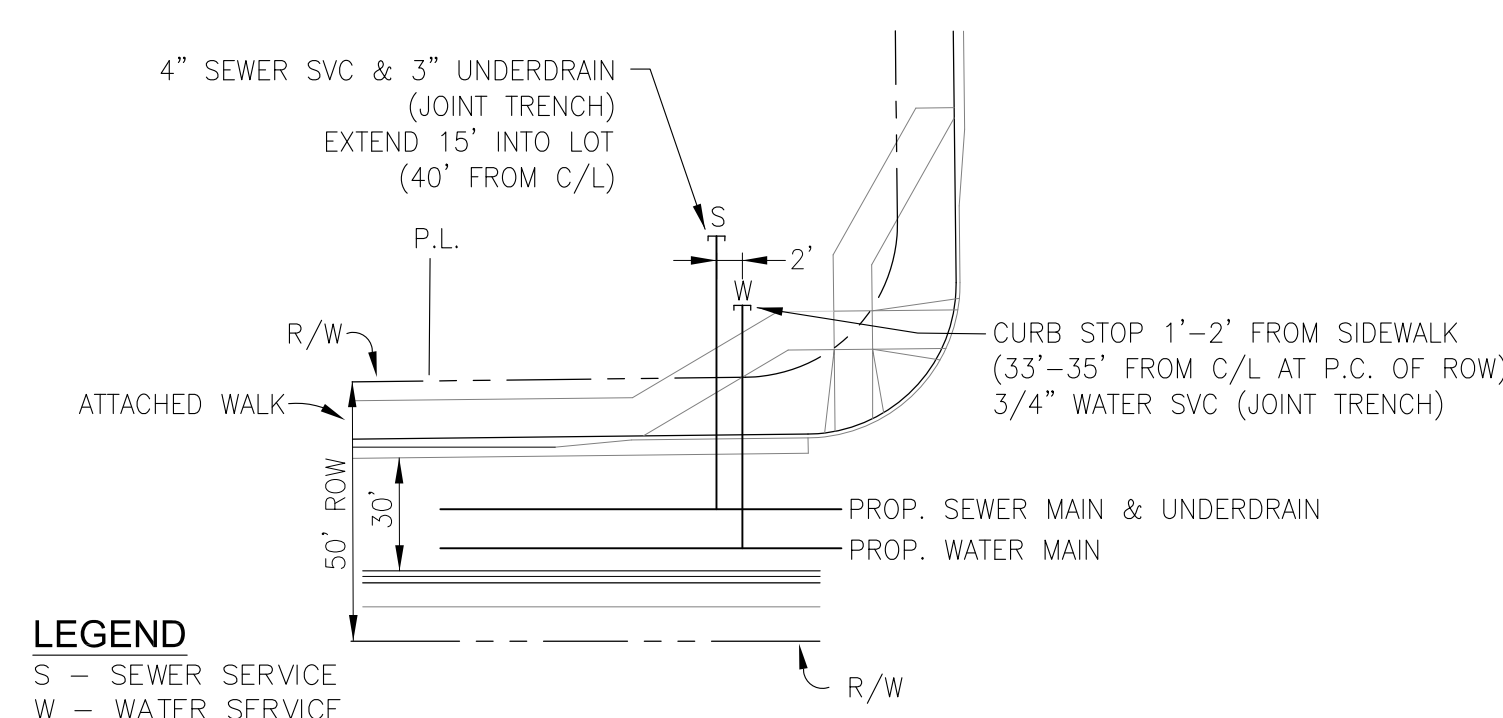
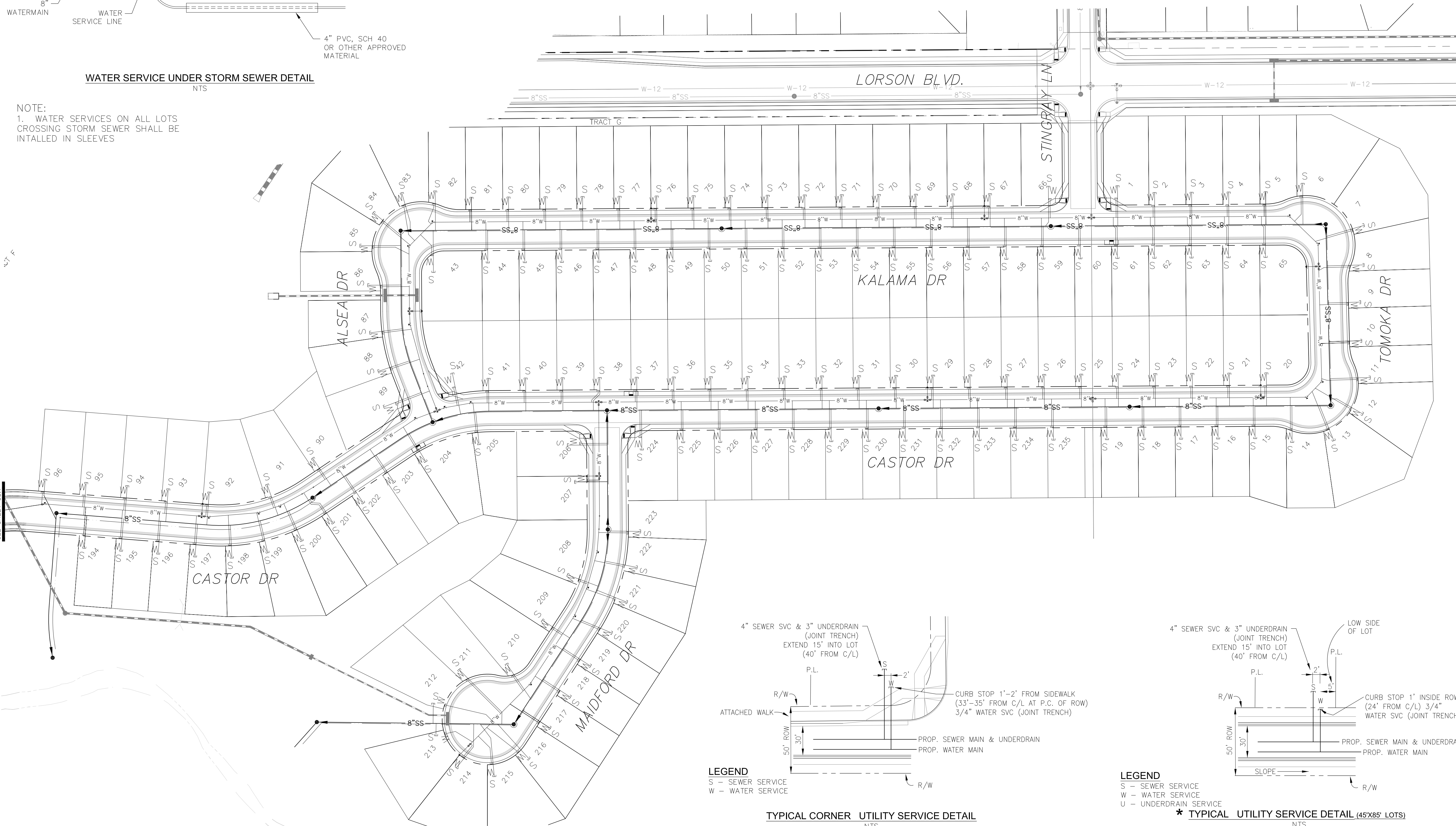
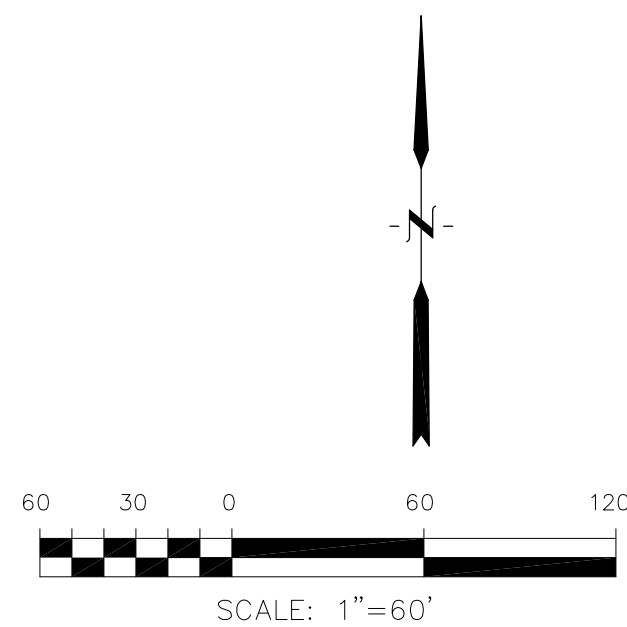
DATE: APRIL 15, 2019  
PROJECT NO. 100.045  
SHEET NUMBER C3.1  
TOTAL SHEETS: 23





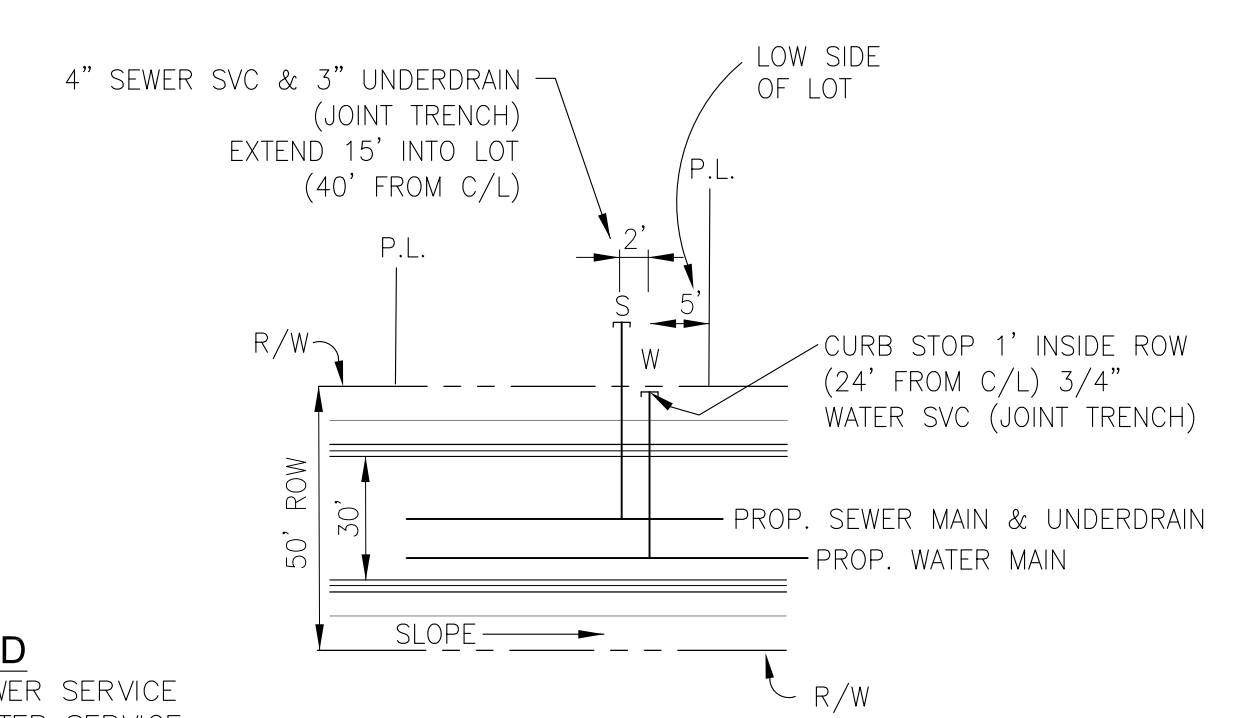
**WATER SERVICE UNDER STORM SEWER DETAIL**  
NTS

NOTE:  
1. WATER SERVICES ON ALL LOTS CROSSING STORM SEWER SHALL BE INSTALLED IN SLEEVES



**LEGEND**  
S - SEWER SERVICE  
W - WATER SERVICE

**TYPICAL CORNER UTILITY SERVICE DETAIL**  
NTS



**LEGEND**  
S - SEWER SERVICE  
W - WATER SERVICE  
U - UNDERDRAIN SERVICE

**\* TYPICAL UTILITY SERVICE DETAIL (45'x85' LOTS)**  
NTS

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

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_  
PREPARED FOR: **LORSON, LLC**  
212 N. WAHSATCH AVE., SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
CONTACT: JEFF MARK

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
LORSON BLVD. - KEARSARGE DR  
COLORADO SPRINGS, COLORADO

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
**UTILITY SERVICES PLAN**



DATE: **APRIL 15, 2019**

PROJECT NO. **100.045**

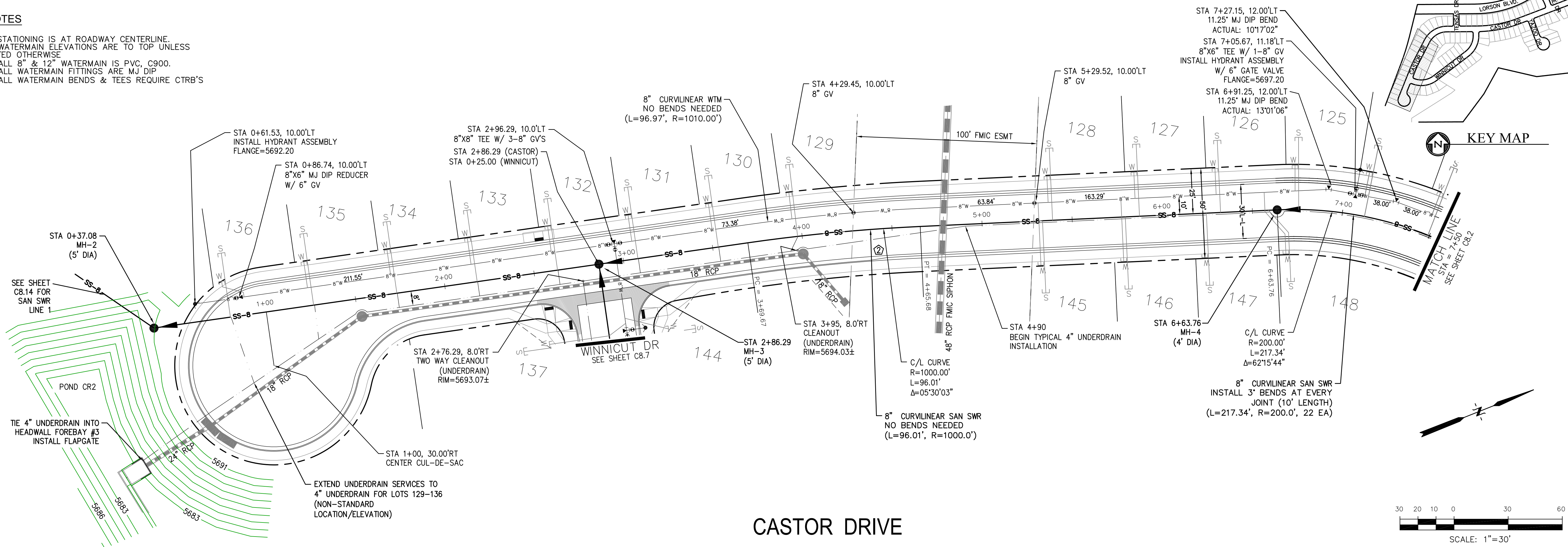
SHEET NUMBER **C3.2**

TOTAL SHEETS: 23

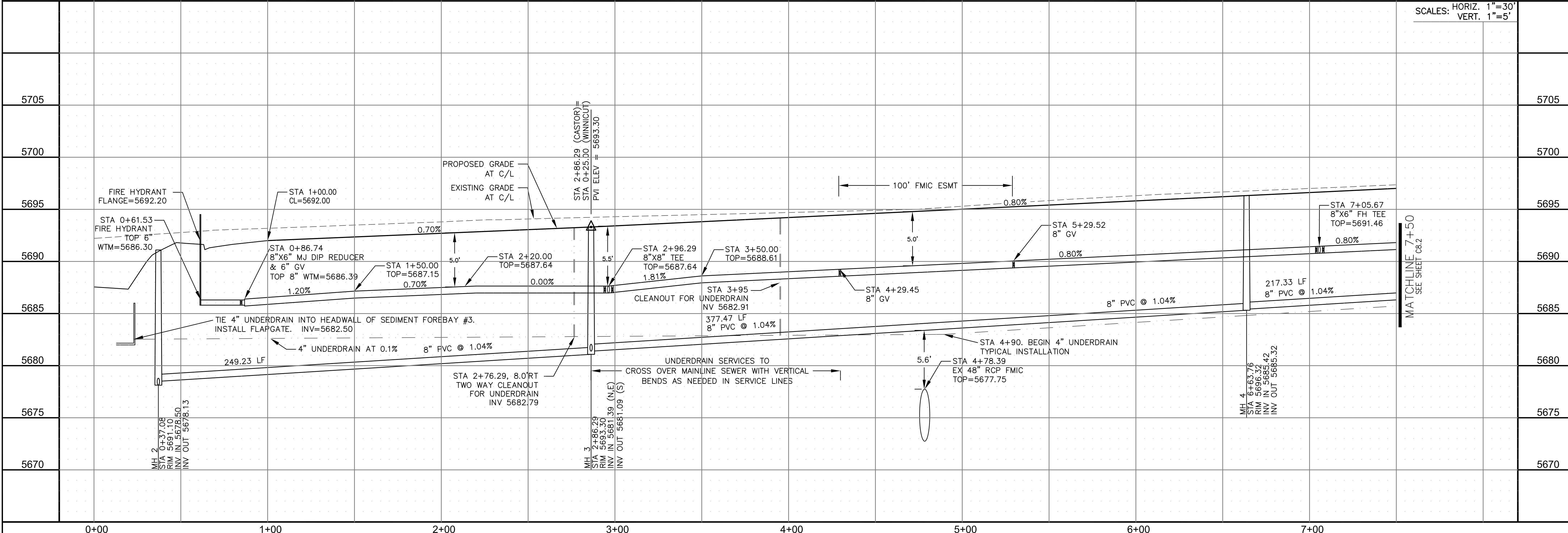


**NOTES**

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



**CASTOR DRIVE**



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 795701100  
 RICHMOND, CO 80903  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

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

PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**SANITARY / WATERMAIN**  
**CASTOR DRIVE**  
**STA 0+00 TO 7+50**



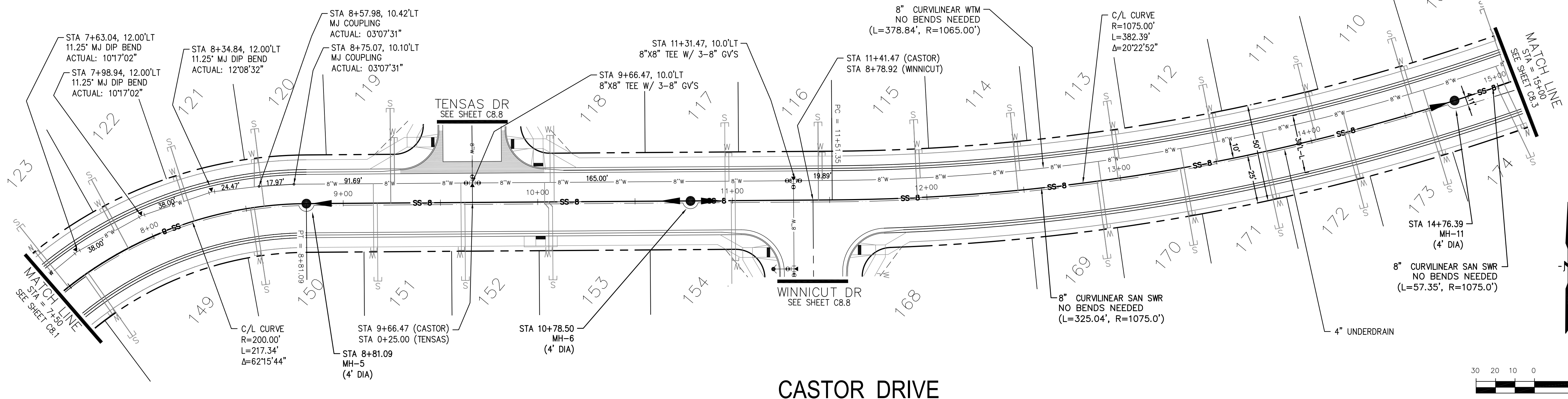
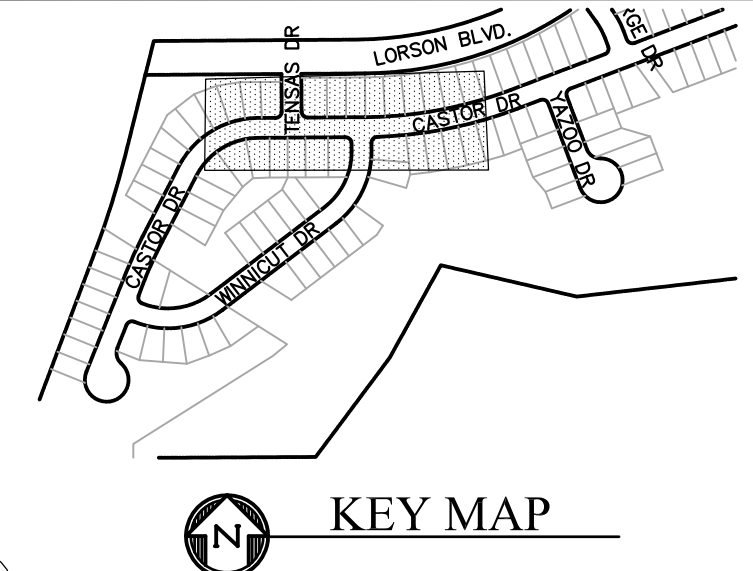
DATE:  
 APRIL 15, 2019

PROJECT NO.  
**100.045**  
 SHEET NUMBER  
**C8.1**  
 TOTAL SHEETS: 23

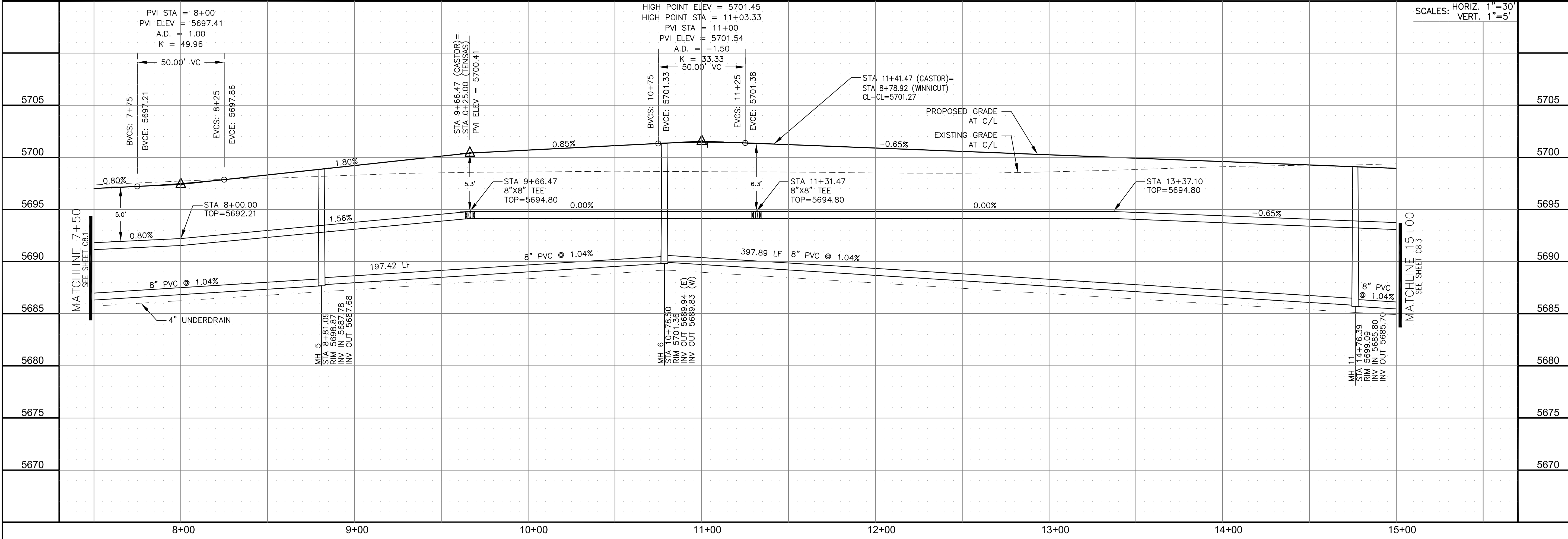
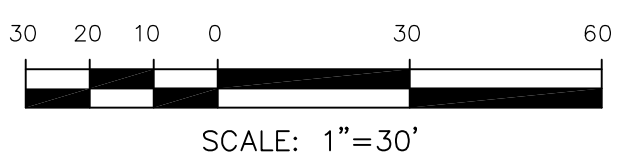


**NOTES**

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



**CASTOR DRIVE**



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 100, SUITE 300  
 BIRMGHAM, AL 35206  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

---

DATE: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

---

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

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 212 N. WAHSATCH AVE., SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO  
 CONTACT: JEFF MARK

---

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

---

**SANITARY / WATERMAIN**  
**CASTOR DRIVE**  
**STA 7+50 TO 15+00**

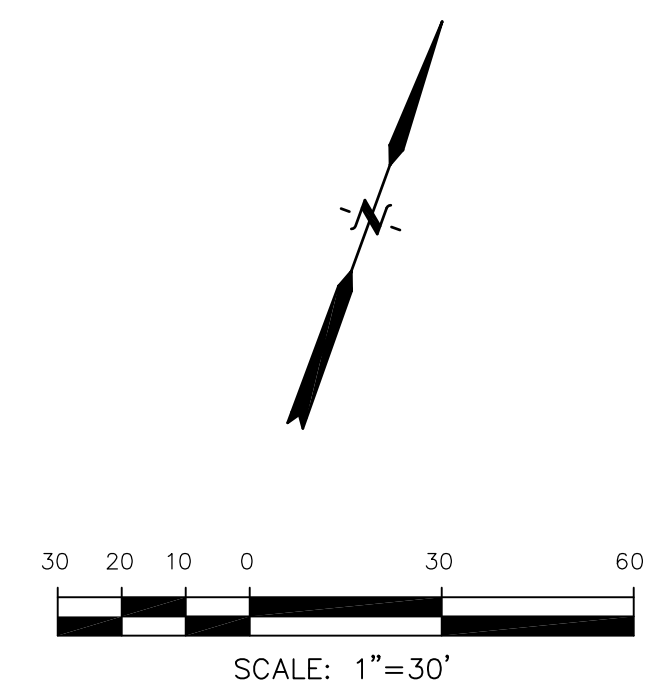
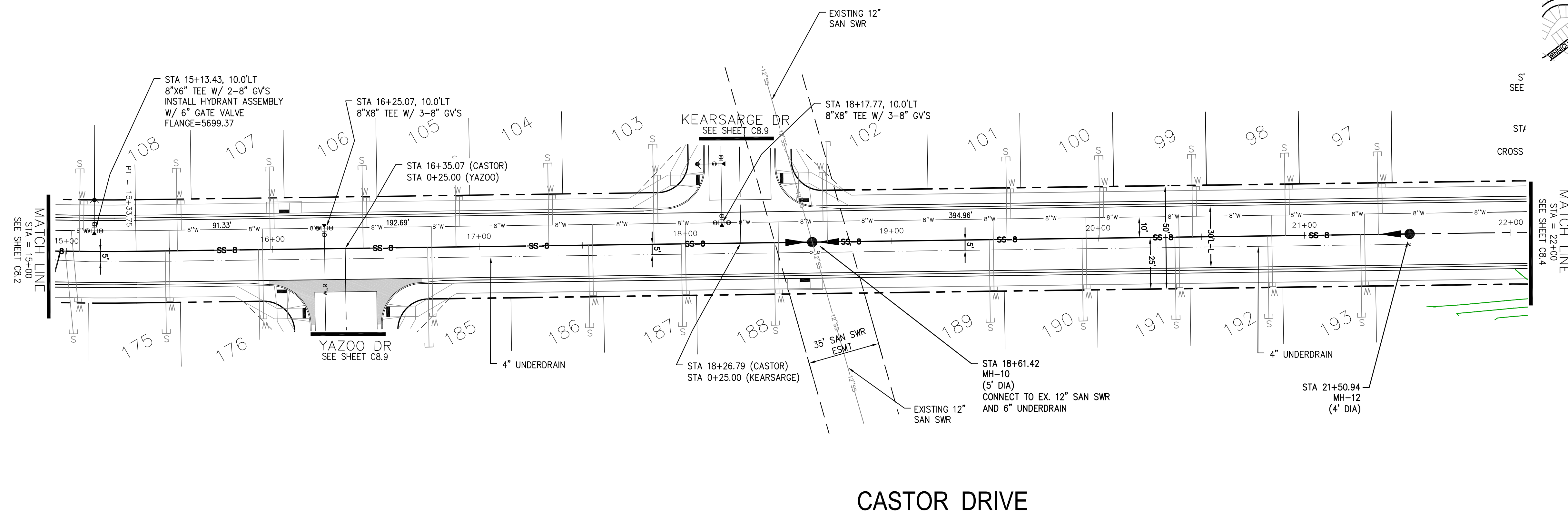
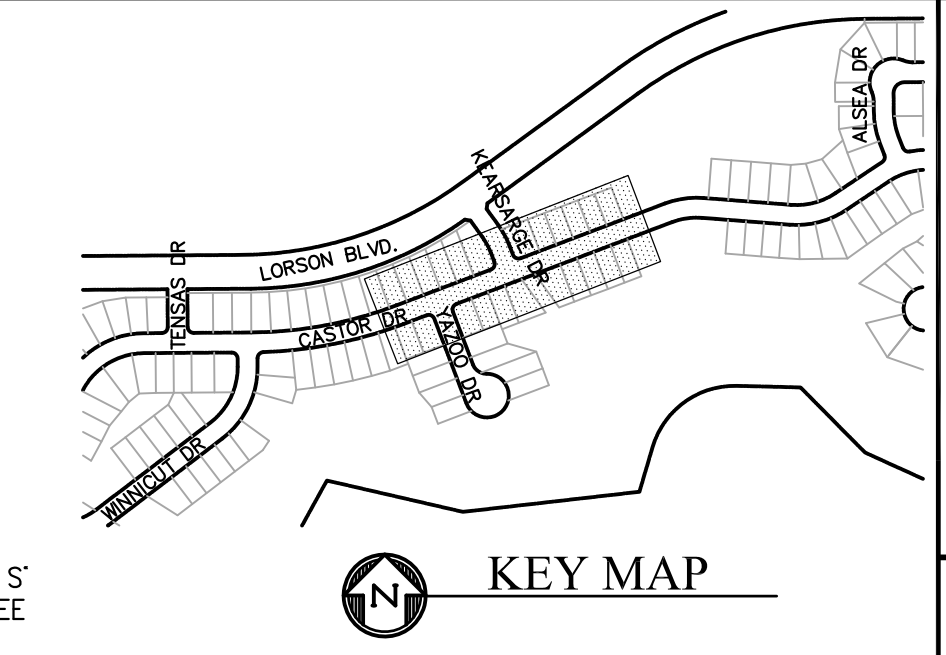
---

DATE: APRIL 15, 2019

PROJECT NO. 100.045  
 SHEET NUMBER C8.2  
 TOTAL SHEETS: 23



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



**CORE ENGINEERING GROUP**

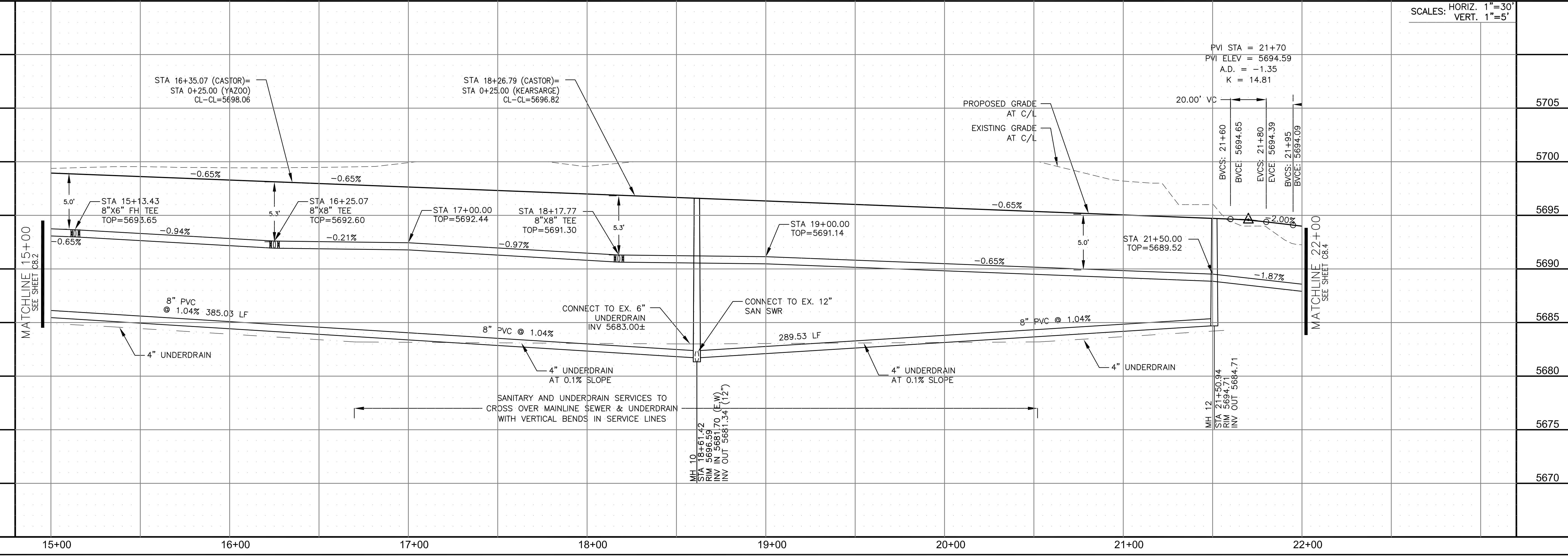
15004 1ST AVENUE S.  
 BLDG 200  
 BIRMEINGHAM, AL 35206  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@ceg1.com

**PROJECT:**  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

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

**DRAWN:** RLS  
**DESIGNED:** RLS  
**CHECKED:** RLS

**PROFESSIONAL ENGINEER**



SANITARY / WATERMAIN  
**CASTOR DRIVE**  
 STA 15+00 TO 22+00

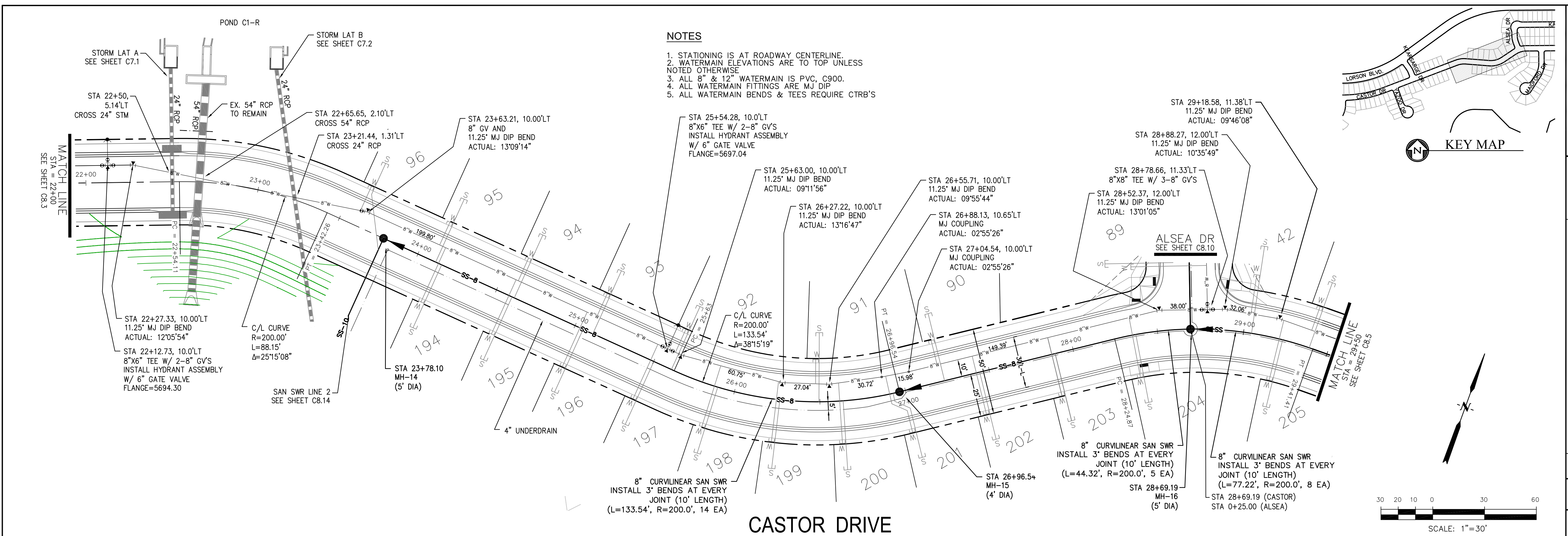
**DATE:**  
 APRIL 15, 2019

**PROJECT NO.**  
 100.045

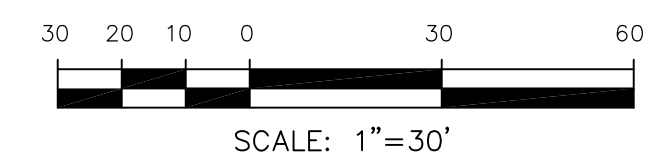
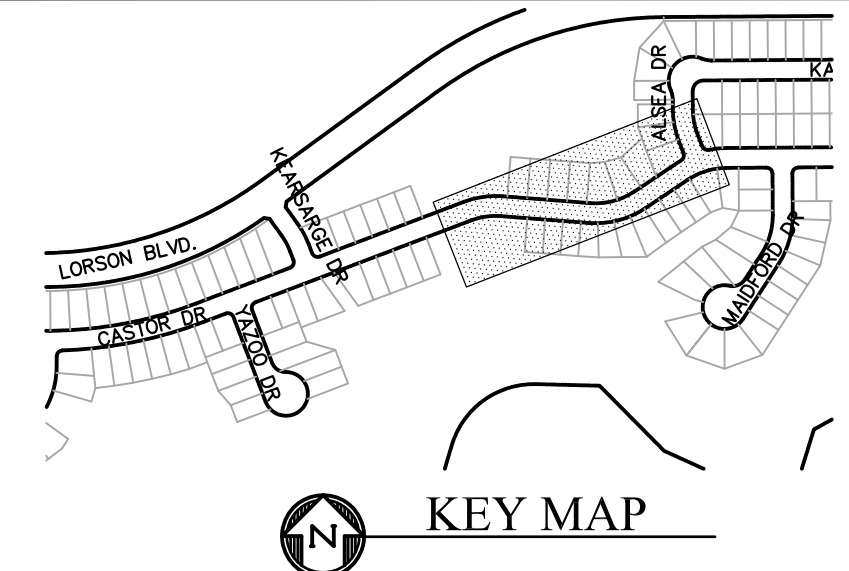
**SHEET NUMBER**  
 C8.3

**TOTAL SHEETS:** 23





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



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 200, SUITE 5506  
 BIRMGHAM, AL 35206  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

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

PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

STATION	DESCRIPTION	ELEVATION
5705	LOW POINT STA = 22+49.93 PVI STA = 22+50 PVI ELEV = 5692.99 A.D. = 4.00 K = 27.47	5693.54
5700	PVI STA = 23+30 PVI ELEV = 5694.59 A.D. = -1.31 K = 15.32	5694.59
5695	STA 22+12.73 8"x6" FH TEE TOP=5688.34	5688.34
5690	STA 23+63.21 8" GV TOP=5689.62	5689.62
5685	STA 22+39.86 8" 45" VERTICAL BEND TOP=5688.34	5688.34
5680	STA 22+47.00 8" 45" VERTICAL BEND TOP=5681.20	5681.20
5675	STA 23+21.44 8" 45" VERTICAL BEND TOP=5684.00	5684.00
5670	STA 23+78.10 MH-14 RIM IN 5694.93 INV IN 5682.67 INV OUT 5682.53	5694.93
5665	STA 25+00.00 8"x6" FH TEE TOP=5690.58	5690.58
5660	STA 25+54.28 8"x6" FH TEE TOP=5691.32	5691.32
5655	STA 26+50.00 TOP=5692.63	5692.63
5650	STA 26+96.54 MH-15 RIM IN 5694.84 INV IN 5684.84 INV OUT 5684.74	5694.84
5645	STA 27+04.54 TOP=5693.01	5693.01
5640	STA 28+52.37 TOP=5694.05	5694.05
5635	STA 28+78.66 8"x8" TEE TOP=5694.10	5694.10
5630	STA 29+18.58 TOP=5694.51	5694.51
5625	STA 28+88.27 TOP=5694.30	5694.30
5620	STA 28+69.19 MH-16 RIM IN 5699.36 INV IN 5686.18 (N) INV IN 5685.98 (E) INV OUT 5685.88 (W)	5699.36
5615	STA 28+69.19 MH-16 RIM IN 5699.36 INV IN 5686.18 (N) INV IN 5685.98 (E) INV OUT 5685.88 (W)	5699.36
5610	STA 28+69.19 (CASTOR) STA 0+25 (ALSEA) CL-CL=5699.36	5699.36

**SANITARY / WATERMAIN**  
**CASTOR DRIVE**  
**STA 22+00 TO 29+50**

DATE: APRIL 15, 2019

PROJECT NO. 100.045

SHEET NUMBER C8.4

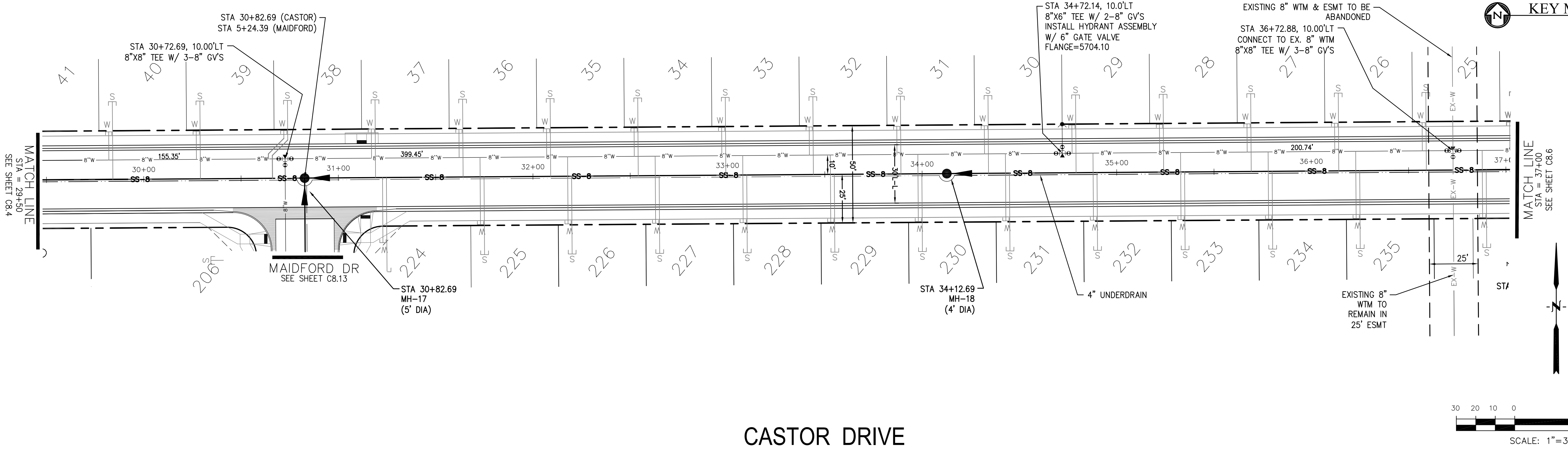
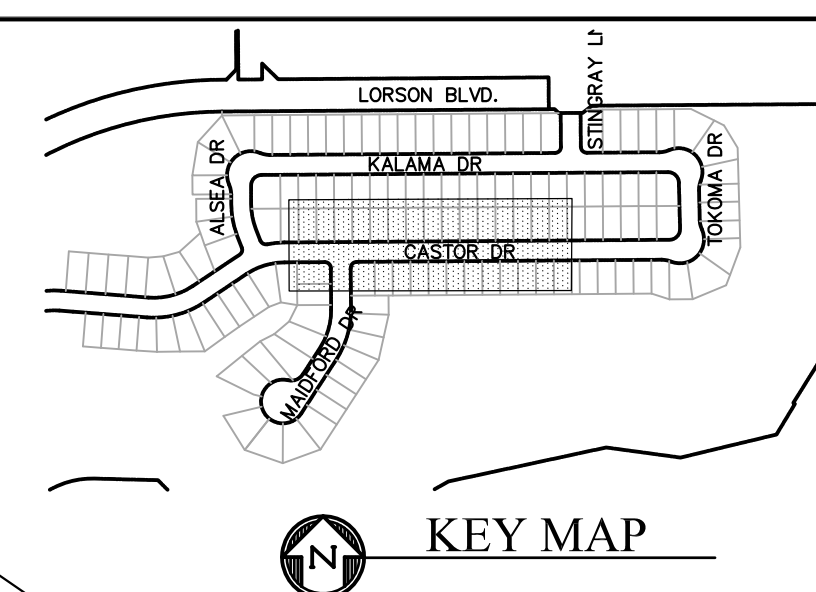
TOTAL SHEETS: 23

SCALE: HORIZ. 1"=30'  
 VERT. 1"=5'

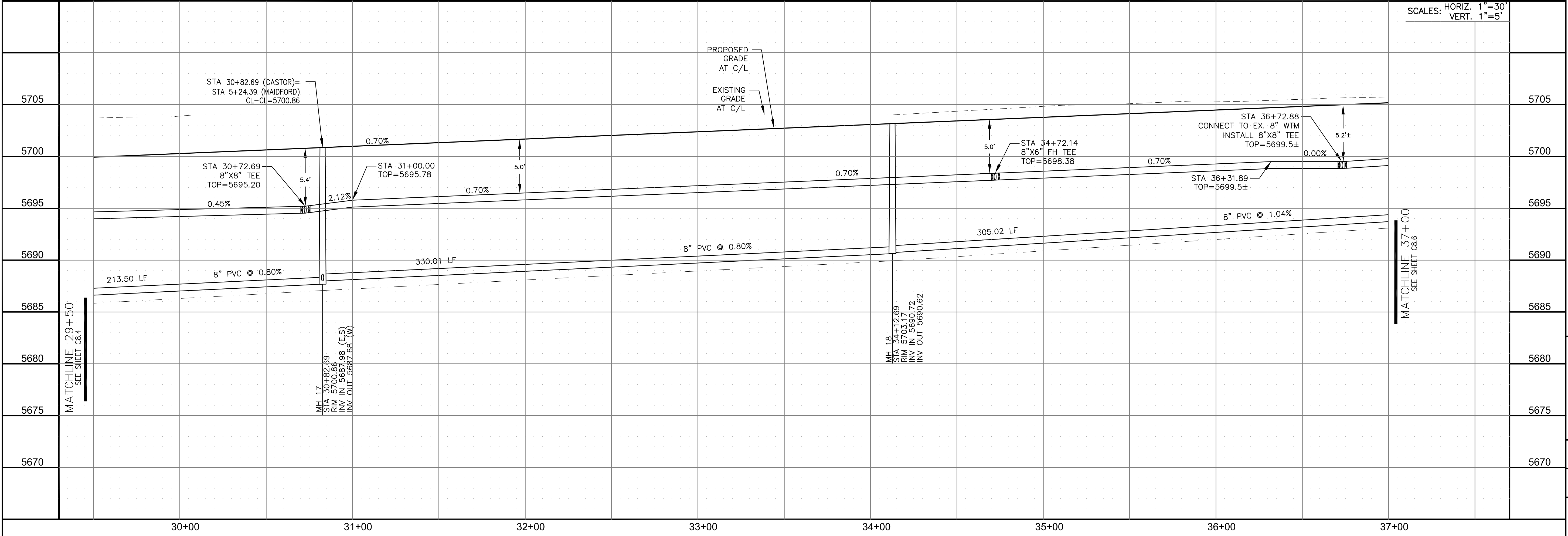
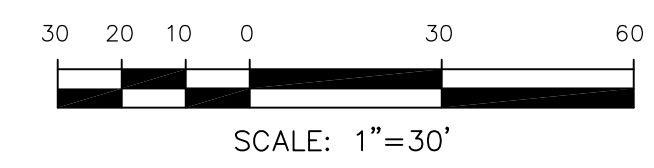


**NOTES**

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



**CASTOR DRIVE**



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 200  
 P.O. BOX 970  
 COLORADO SPRINGS, CO 80903  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO. \_\_\_\_\_

PREPARED FOR:  
**LORSON, LLC**  
 212 N. WAHSATCH AVE., SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO  
 CONTACT: JEFF MARK

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**SANITARY / WATERMAIN**  
**CASTOR DRIVE**  
**STA 29+50 TO 37+00**



DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

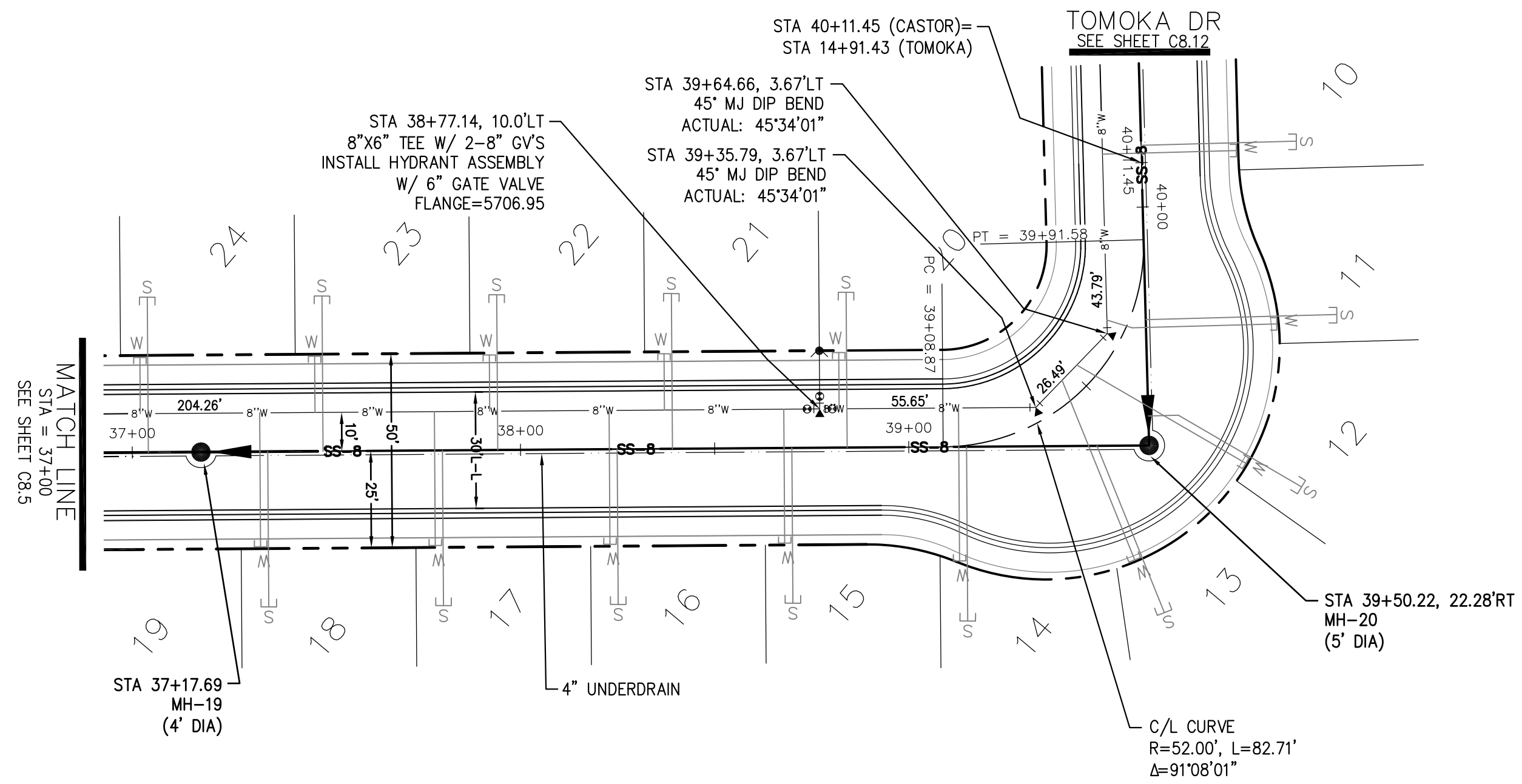
SHEET NUMBER  
 C8.5

TOTAL SHEETS: 23

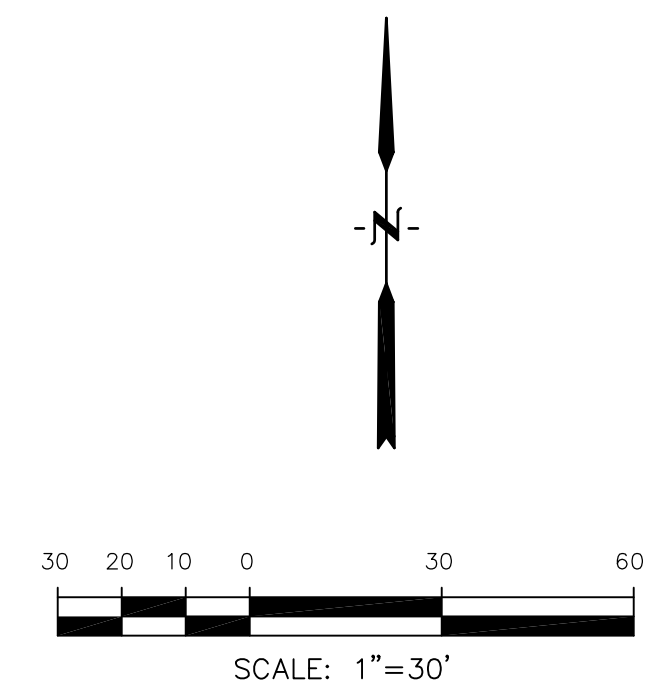
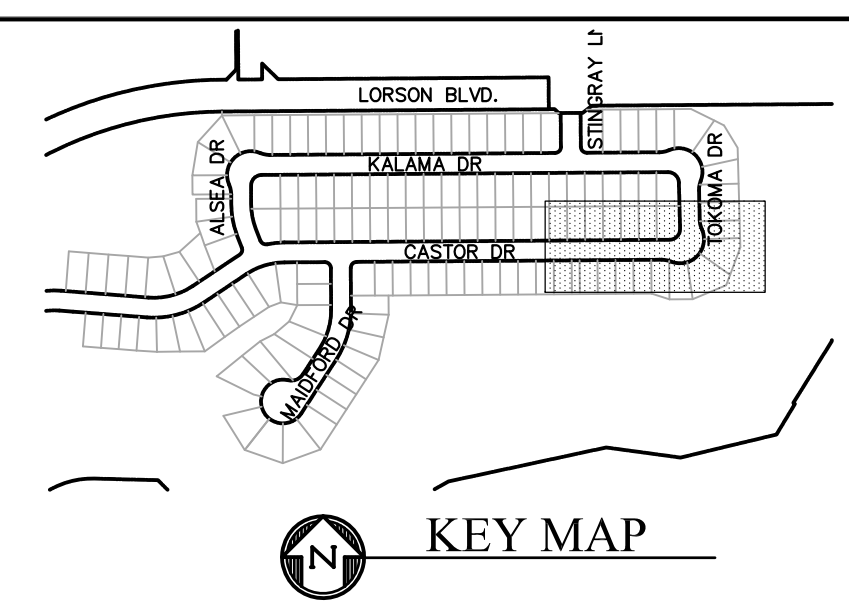


**NOTES**

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



**CASTOR DRIVE**



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 SUITE 5506  
 BLDG 79 870 1100  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

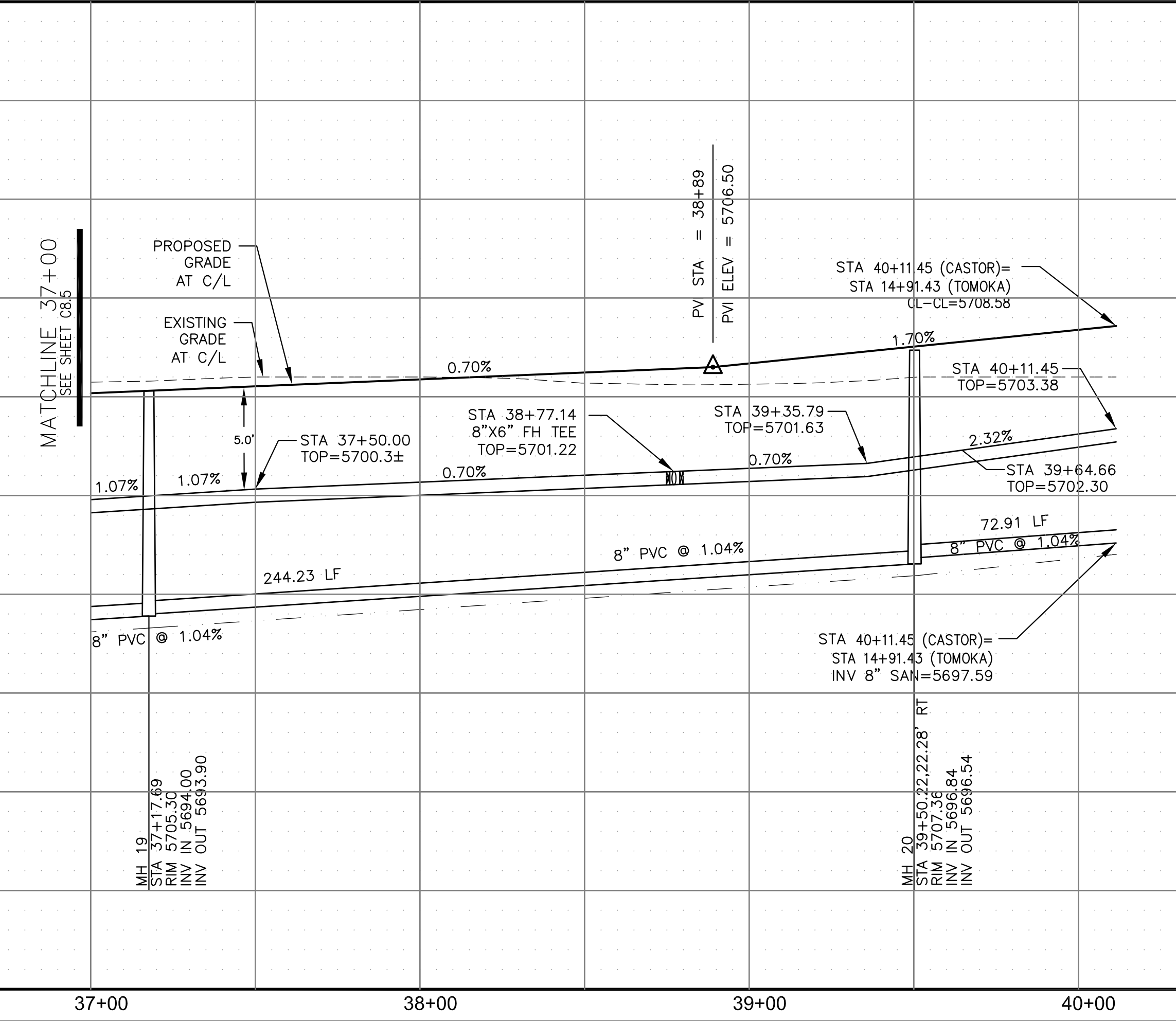
DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO.: \_\_\_\_\_

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

PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

Station	Sanitary / Watermain	Castor Drive	Sta 37+00 to 40+11
5715			5715
5710			5710
5705			5705
5700			5700
5695			5695
5690			5690
5685			5685
5680			5680



SCALES: HORIZ. 1"=30'  
 VERT. 1"=5'

**SANITARY / WATERMAIN**  
**CASTOR DRIVE**  
**STA 37+00 TO 40+11**



DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

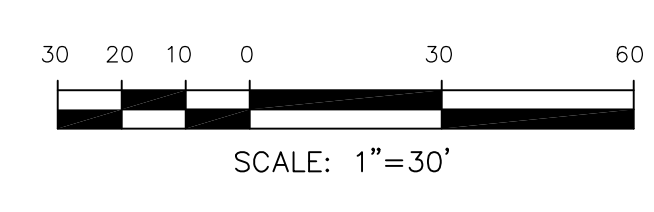
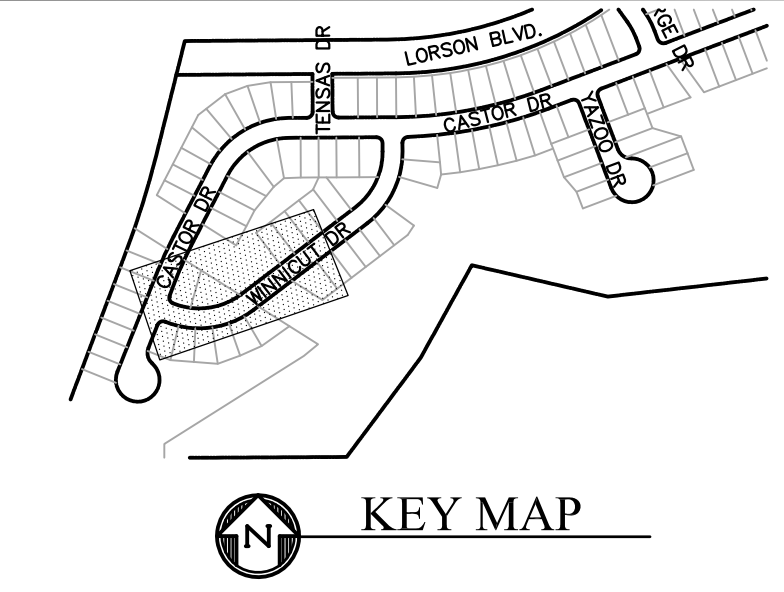
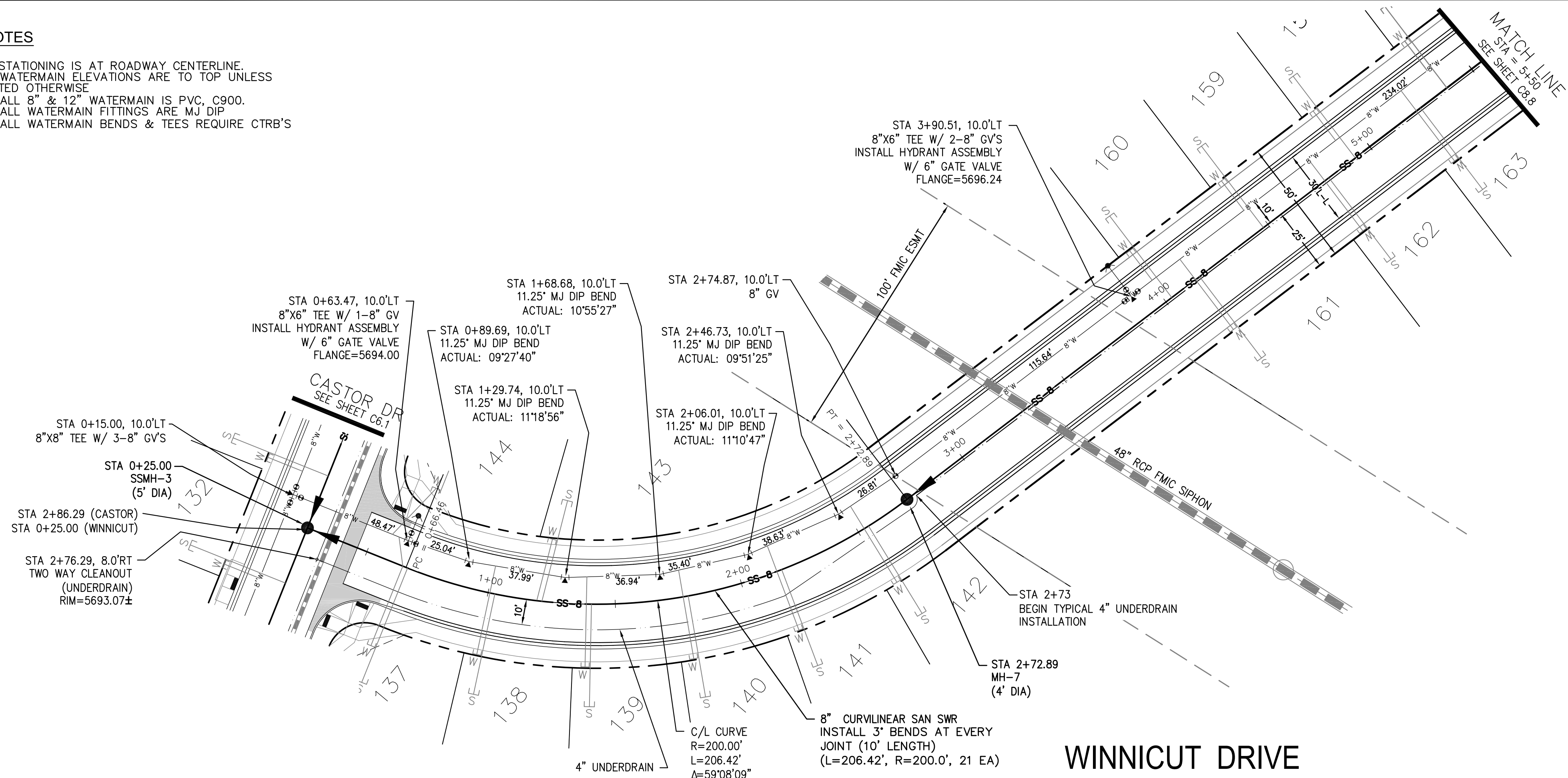
SHEET NUMBER  
 C8.6

TOTAL SHEETS: 23



**NOTES**

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

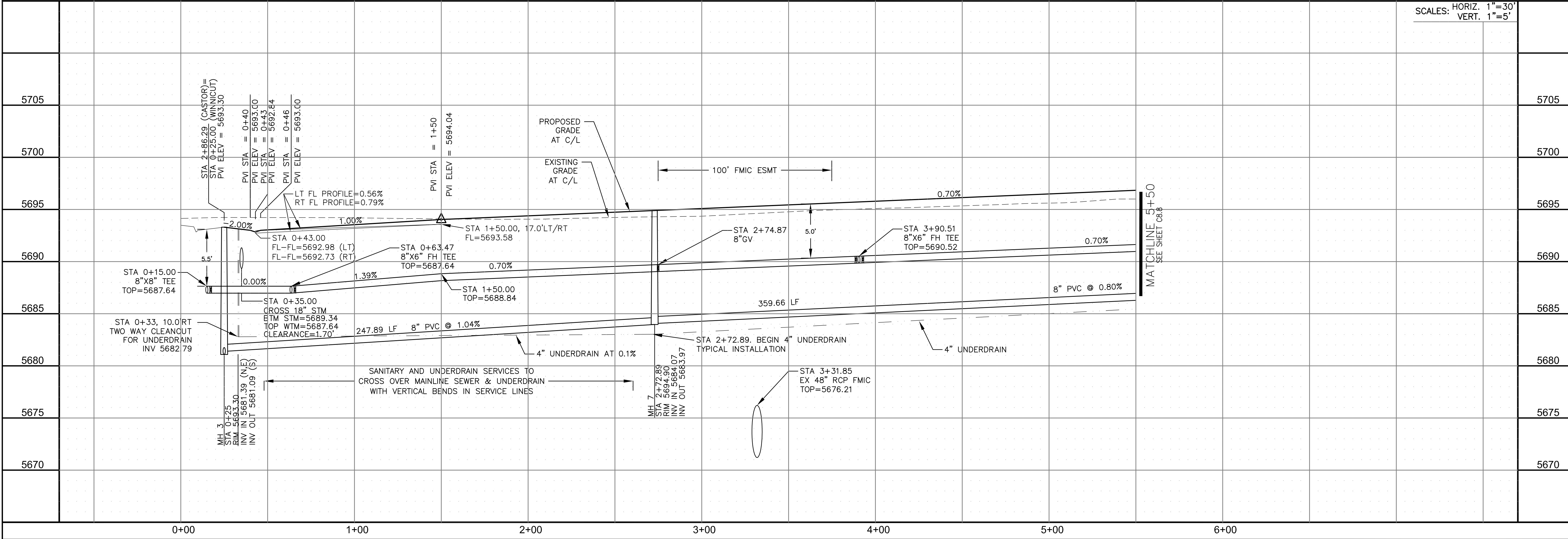


**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BIRCH CREEK, CO 80150  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO: \_\_\_\_\_

PREPARED FOR:  
**LORSON, LLC**  
 212 N. WAHSATCH AVE., SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO  
 CONTACT: JEFF MARK

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS



**SANITARY / WATERMAIN**  
**WINNICUT DRIVE**  
**STA 0+00 TO 5+50**



DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

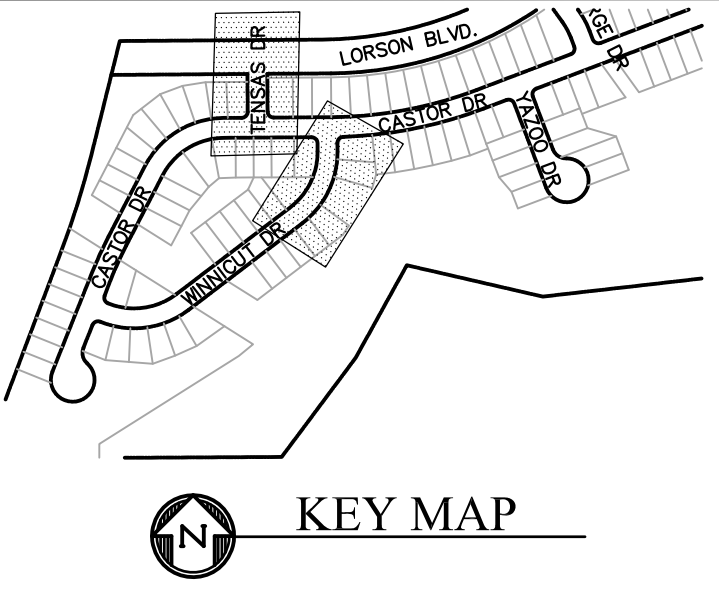
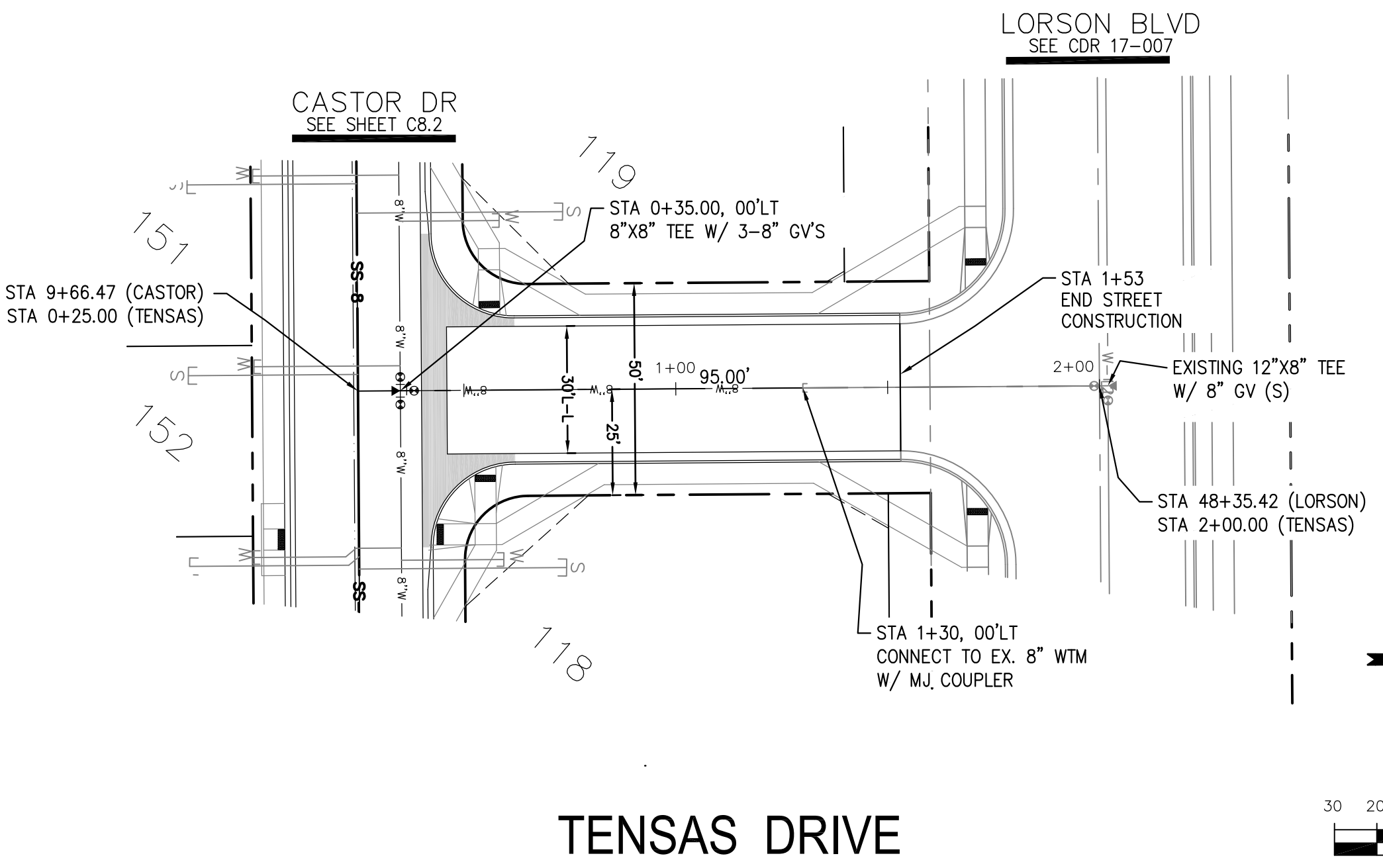
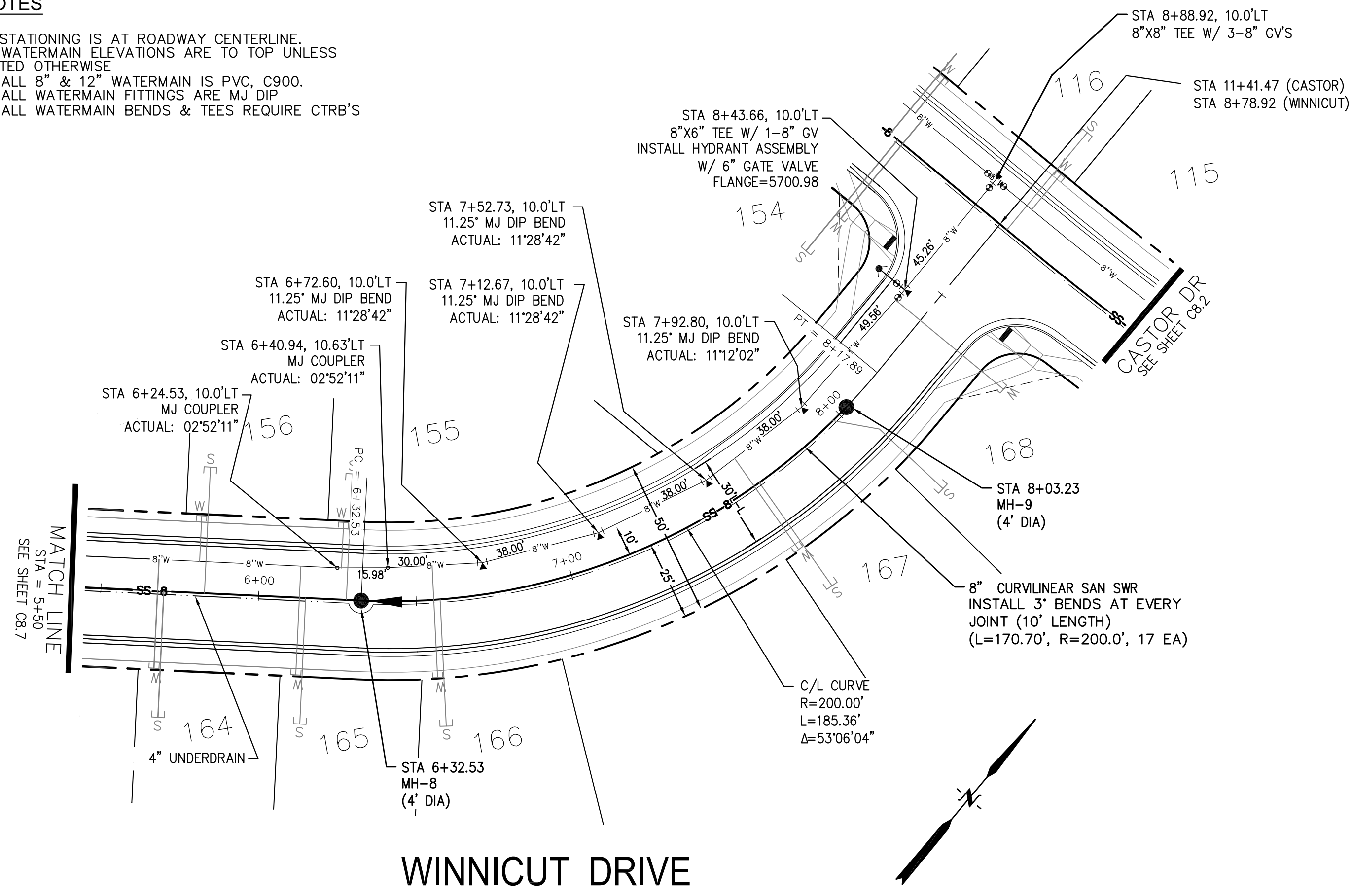
SHEET NUMBER  
 C8.7

TOTAL SHEETS: 23



**NOTES**

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



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BIRMGHAM, AL 35206  
 PH: 205.870.1100  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO.: \_\_\_\_\_

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

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

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**SANITARY / WATERMAIN**  
**WINNICUT DRIVE (5+50 TO 8+78)**  
**TENSAS DR (0+00 TO 2+00)**

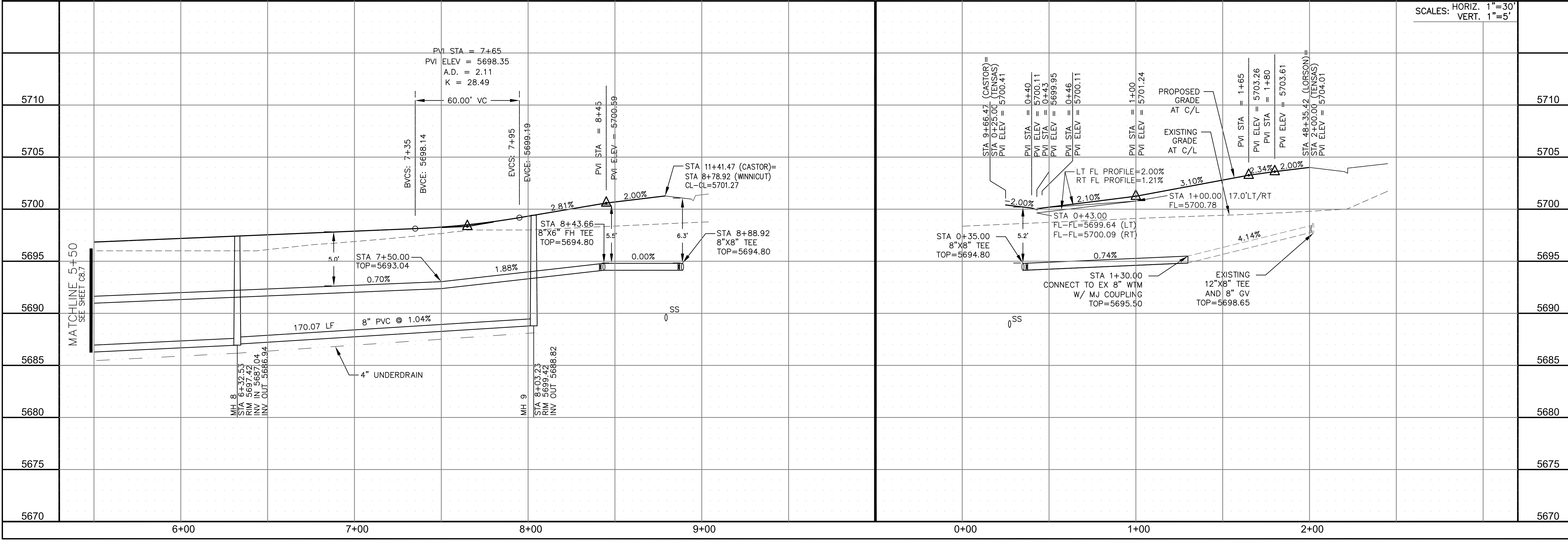


DATE: **APRIL 15, 2019**

PROJECT NO. **100.045**

SHEET NUMBER **C8.8**

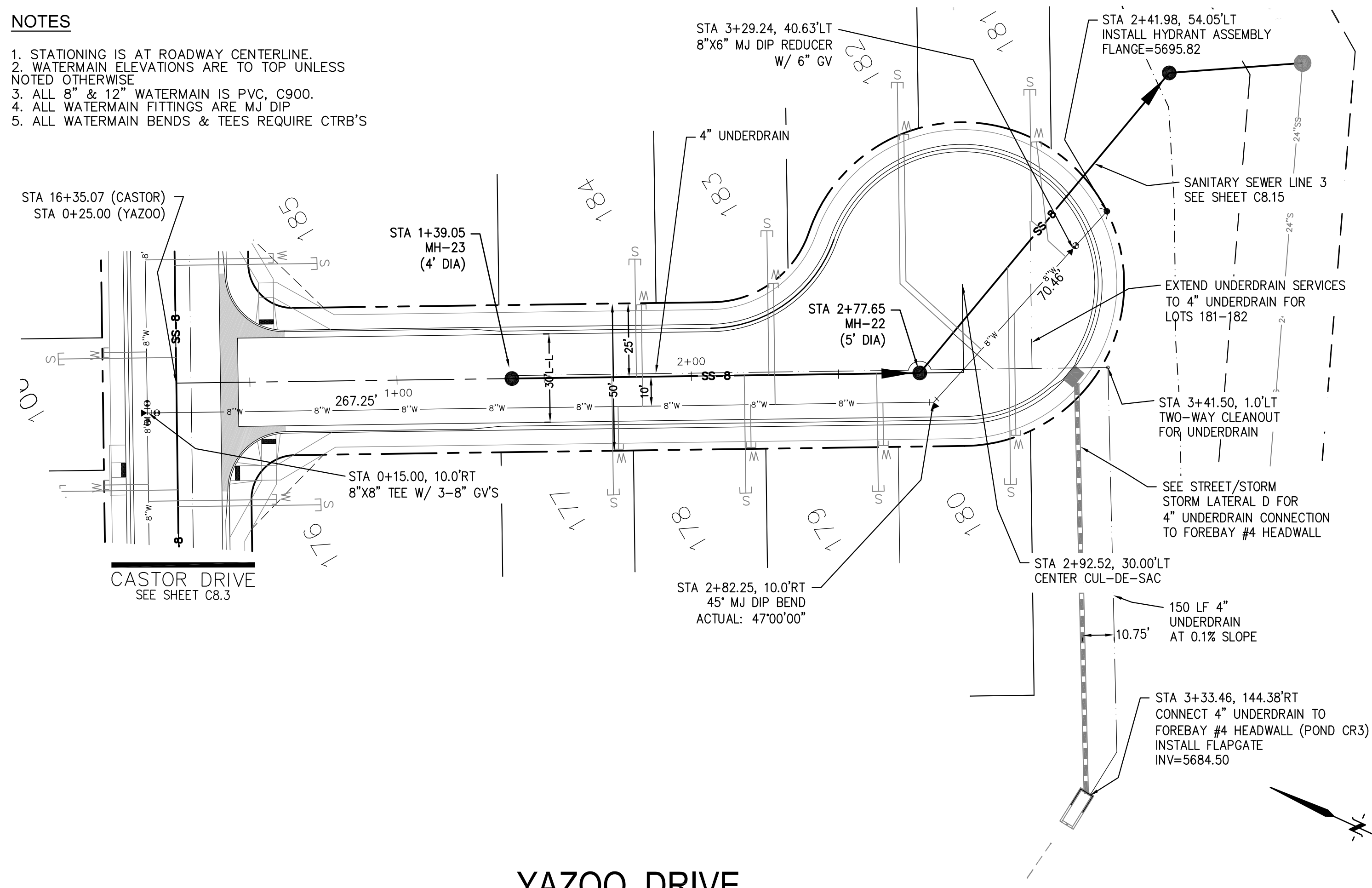
TOTAL SHEETS: 23



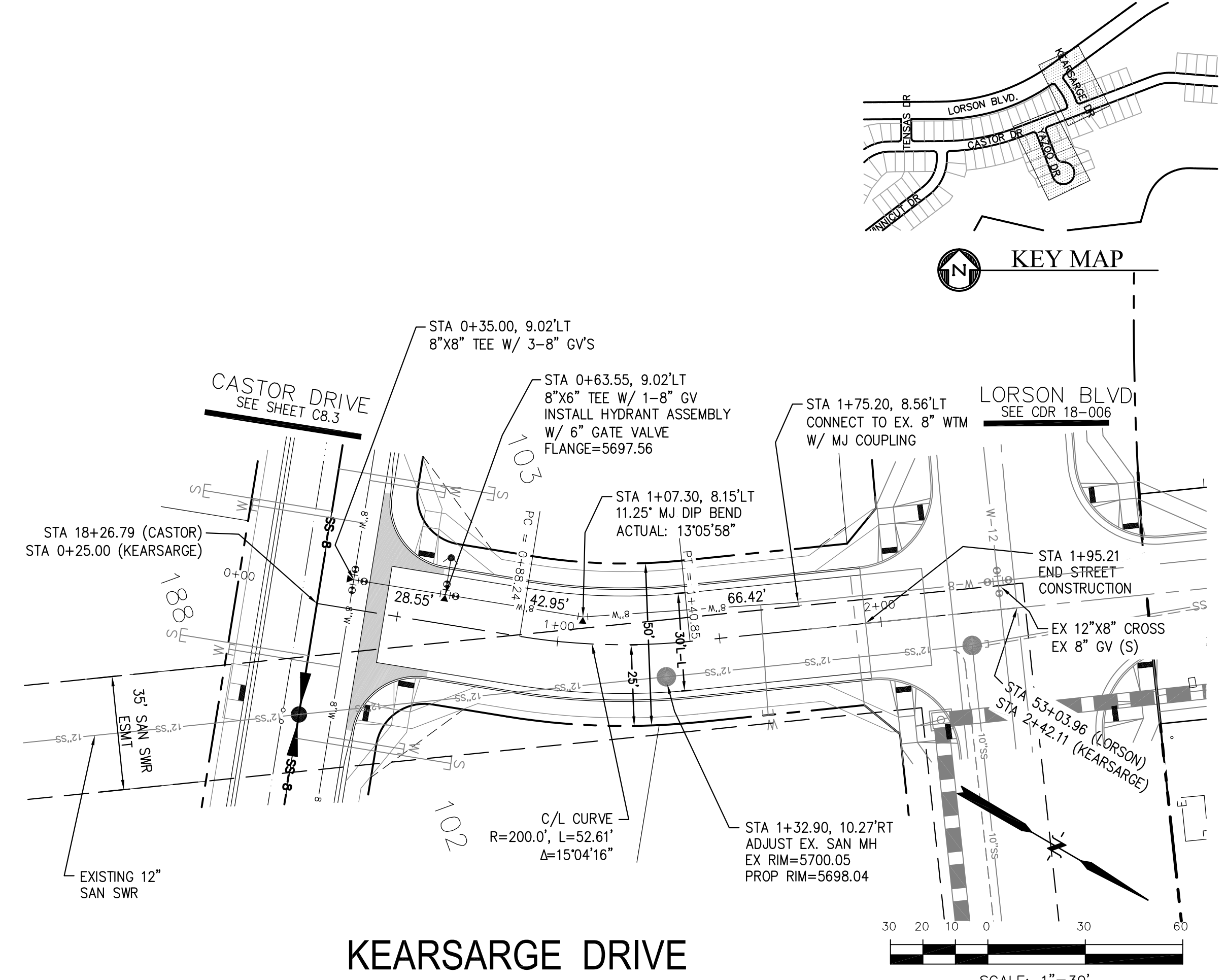


**NOTES**

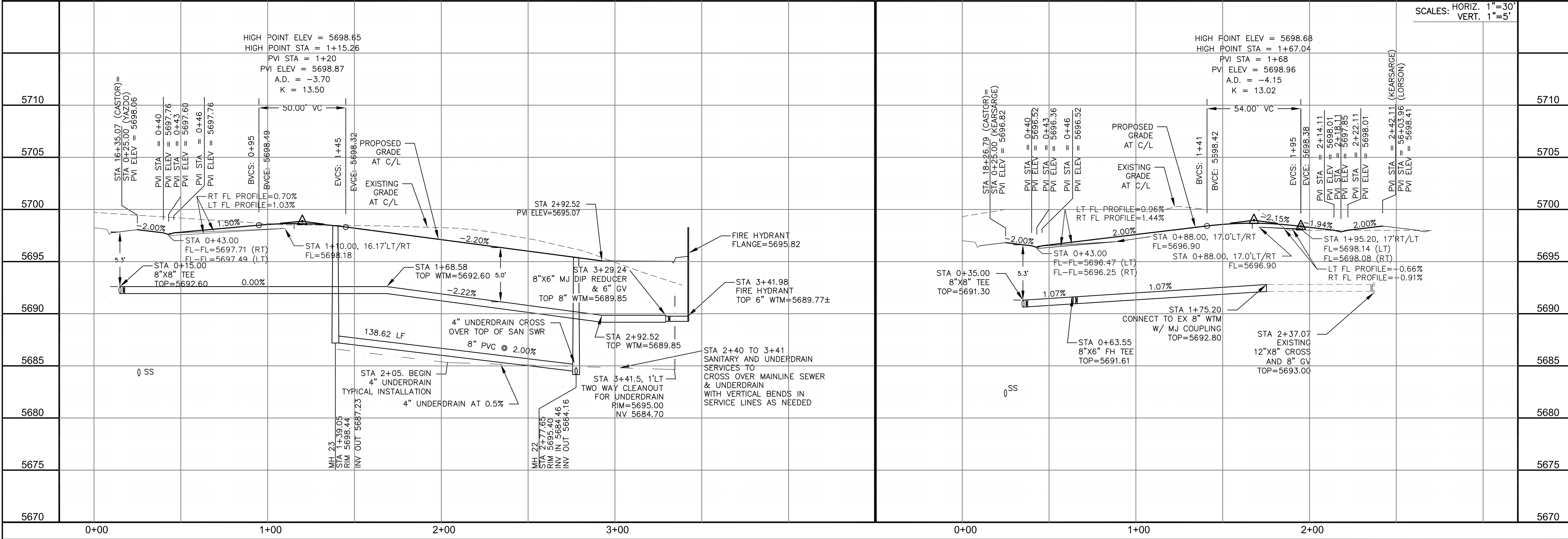
1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
3. ALL 8" & 12" WATERMAIN IS PVC, C900.
4. ALL WATERMAIN FITTINGS ARE MJ DIP.
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



**YAZOO DRIVE**



**KEARSARGE DRIVE**



SCALES: HORIZ. 1"=30'  
VERT. 1"=5'

**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 200, SUITE 5506  
 DENVER, CO 80202  
 PHONE: 303.750.1100  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@ceg1.com

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO.: \_\_\_\_\_

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

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

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

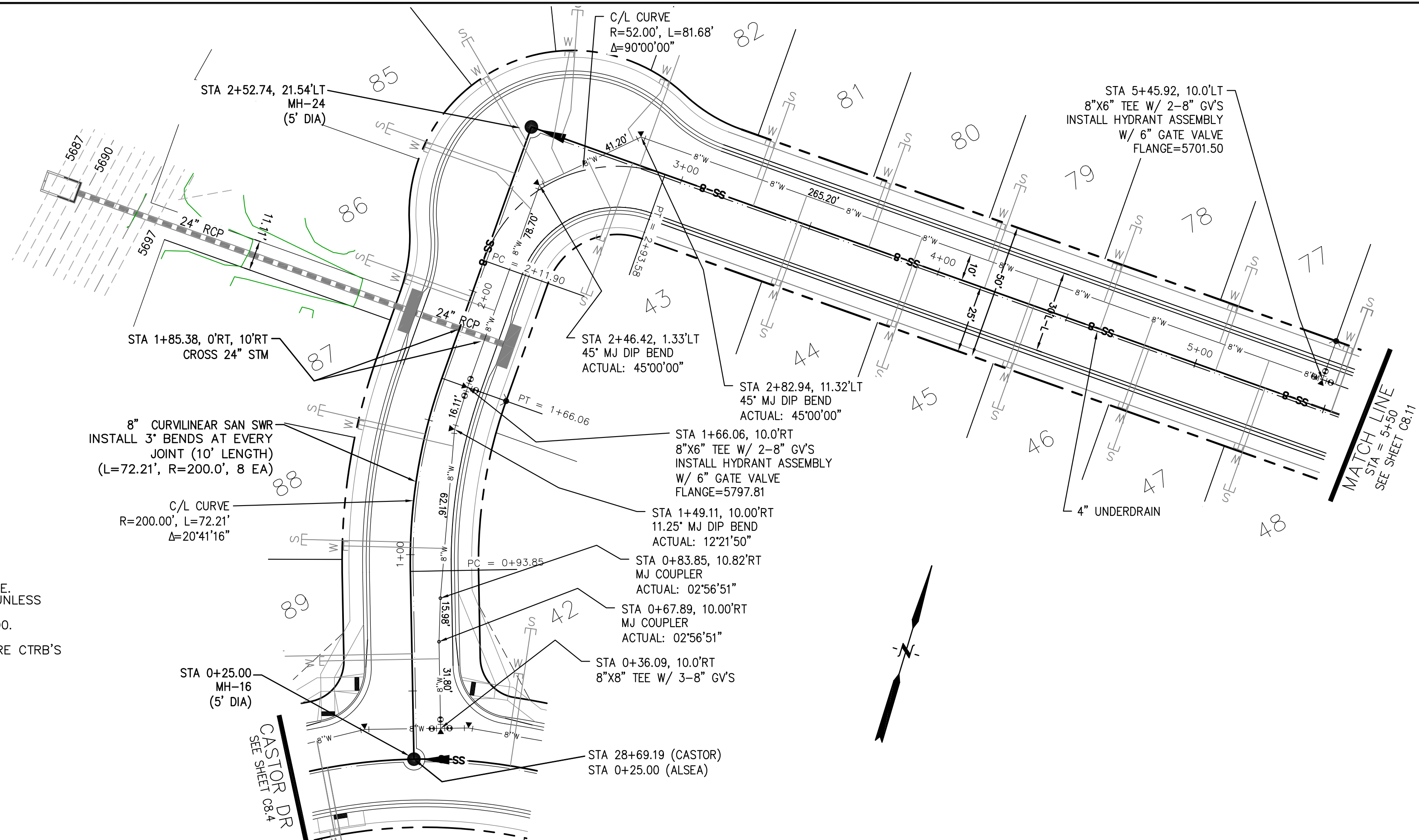
**SANITARY / WATERMAIN**  
**YAZOO DR (0+00 TO 3+41)**  
**KEARSARGE DR (0+00 TO 2+42)**

DATE: APRIL 15, 2019

PROJECT NO. 100.045  
 SHEET NUMBER C8.9  
 TOTAL SHEETS: 23

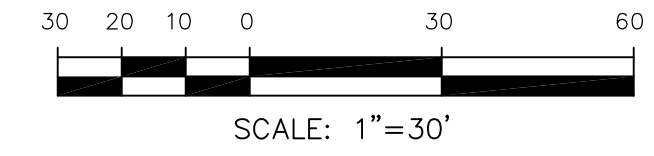
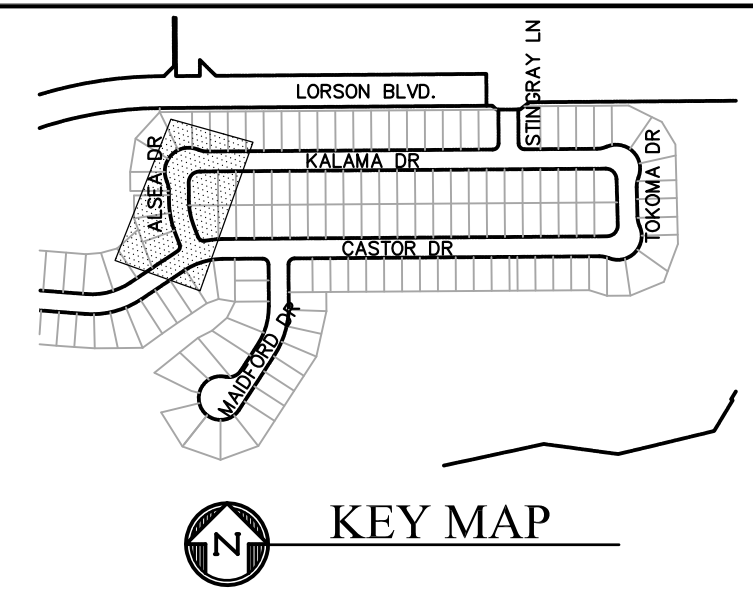


POND C1-R



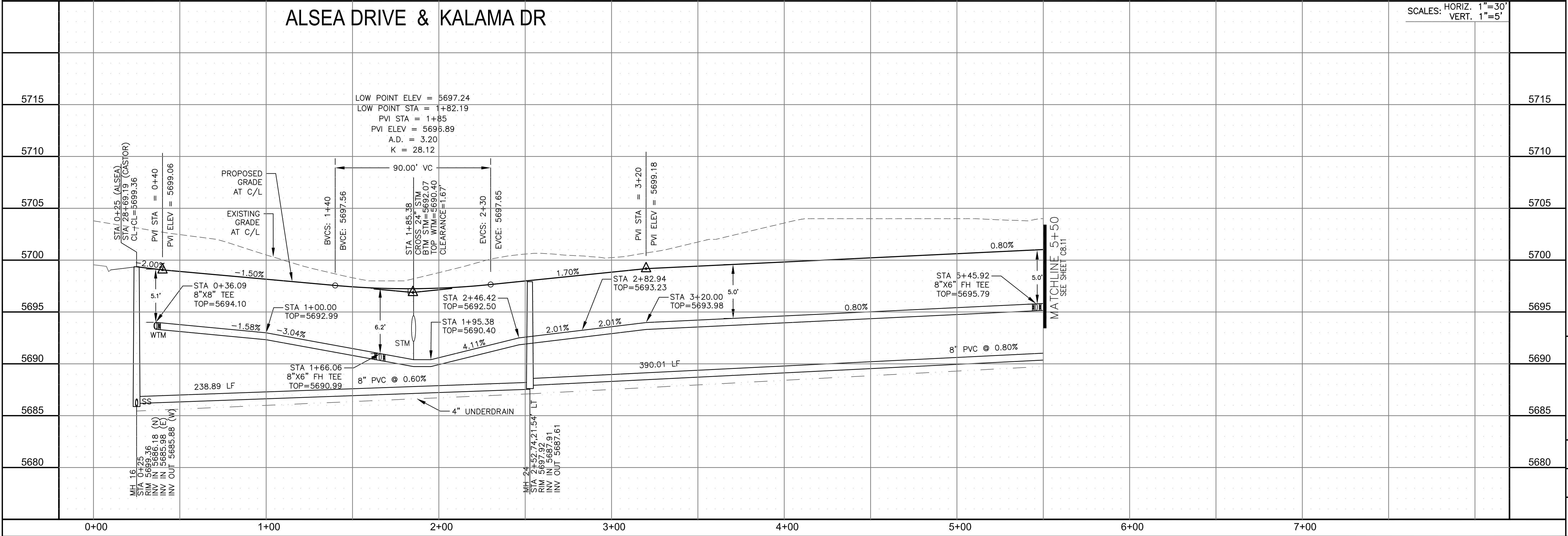
**NOTES**

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



**ALSEA DRIVE & KALAMA DR**

SCALES: HORIZ. 1"=30'  
VERT. 1"=5'



**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
DENVER, CO 80202  
PHONE: 303.750.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_

PREPARED FOR:  
**LORSON, LLC**  
212 N. WAHSATCH AVE, SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
PROJECT:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
LORSON BLVD - KEARSARGE DR  
COLORADO SPRINGS, COLORADO

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**SANITARY / WATERMAIN**  
**ALSEA DR & KALAMA DR**  
**STA 0+00 TO 5+50**



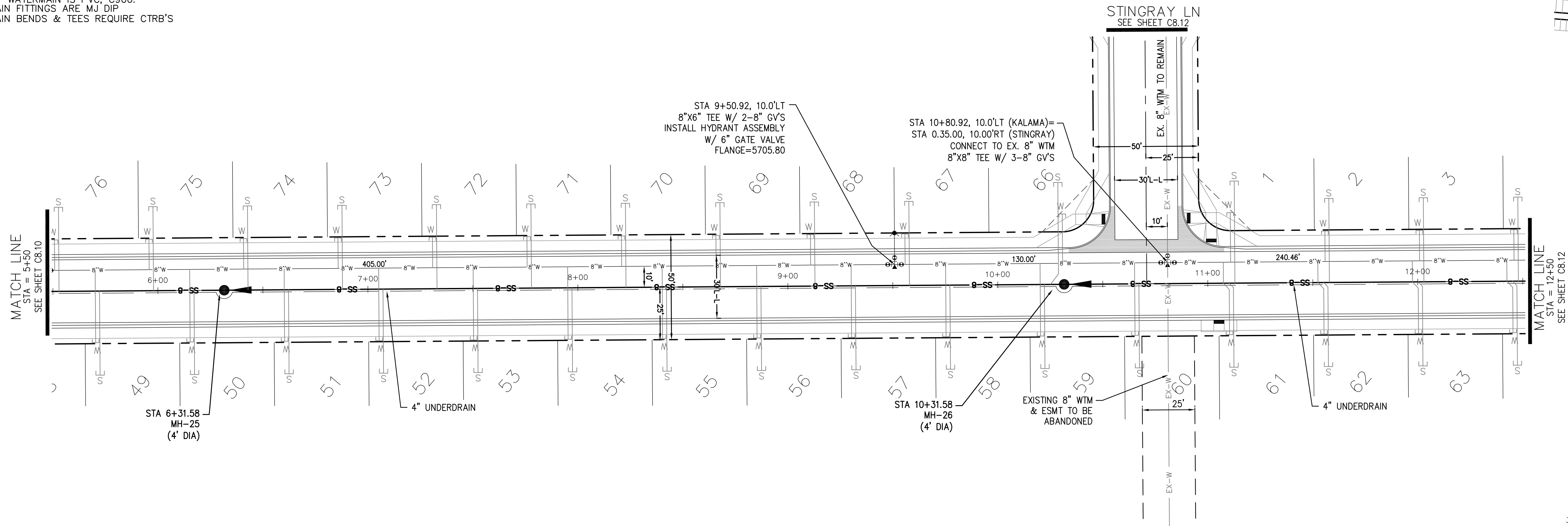
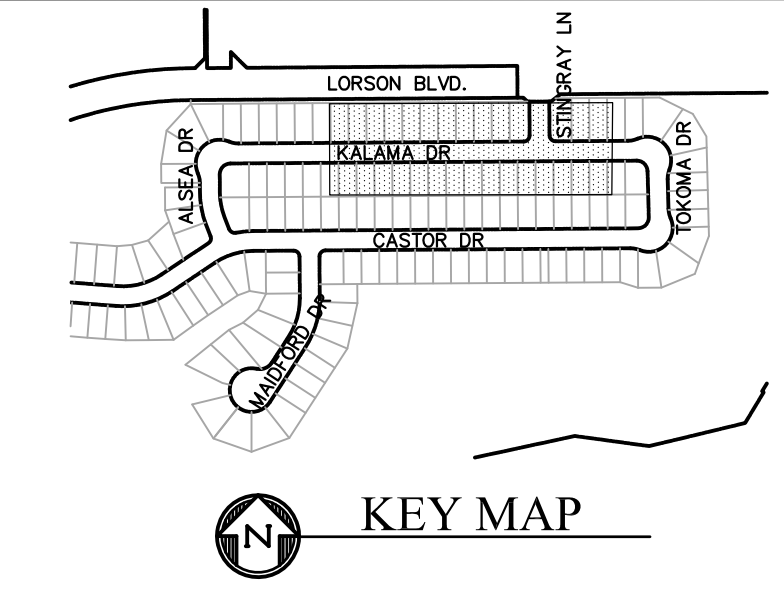
DATE:  
APRIL 15, 2019

PROJECT NO.  
**100.045**  
SHEET NUMBER  
**C8.10**  
TOTAL SHEETS: 23

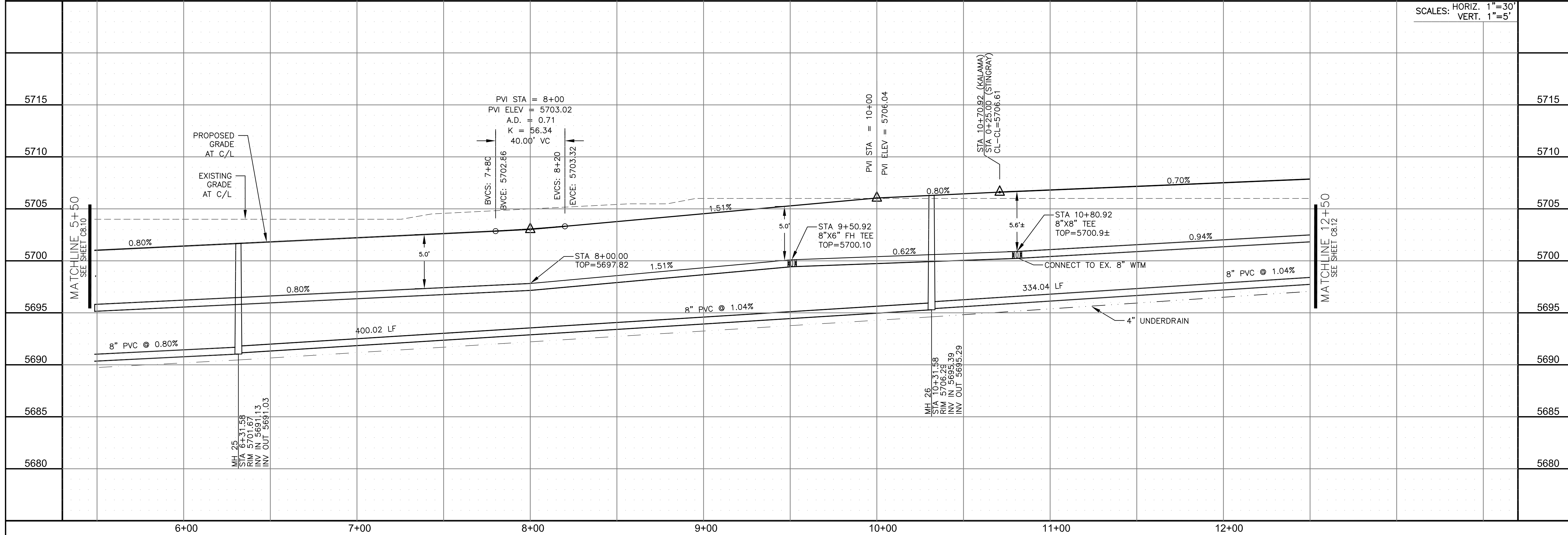
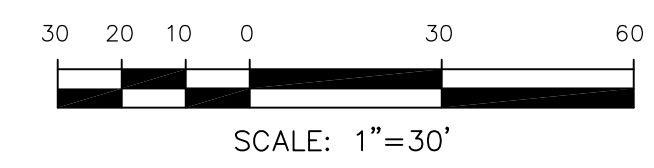


**NOTES**

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



**KALAMA DR**



SCALES: HORIZ. 1"=30'  
VERT. 1"=5'

**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
BURNING WOODS, CO 80506  
PH: 719.570.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: Rich@cegi.com

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_  
PROJECT: CREEKSIDE AT LORSON RANCH FILING NO. 1  
LORSON, LLC  
212 N. WAHSATCH AVE. SUITE 301  
COLORADO SPRINGS, COLORADO 80903  
LORSON BLVD - KEARSARGE DR  
COLORADO SPRINGS, COLORADO  
CONTACT: JEFF MARK

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**SANITARY / WATERMAIN**  
**ALSEA DR & KALAMA DR**  
**STA 5+50 TO 12+50**



DATE: APRIL 15, 2019

PROJECT NO. 100.045

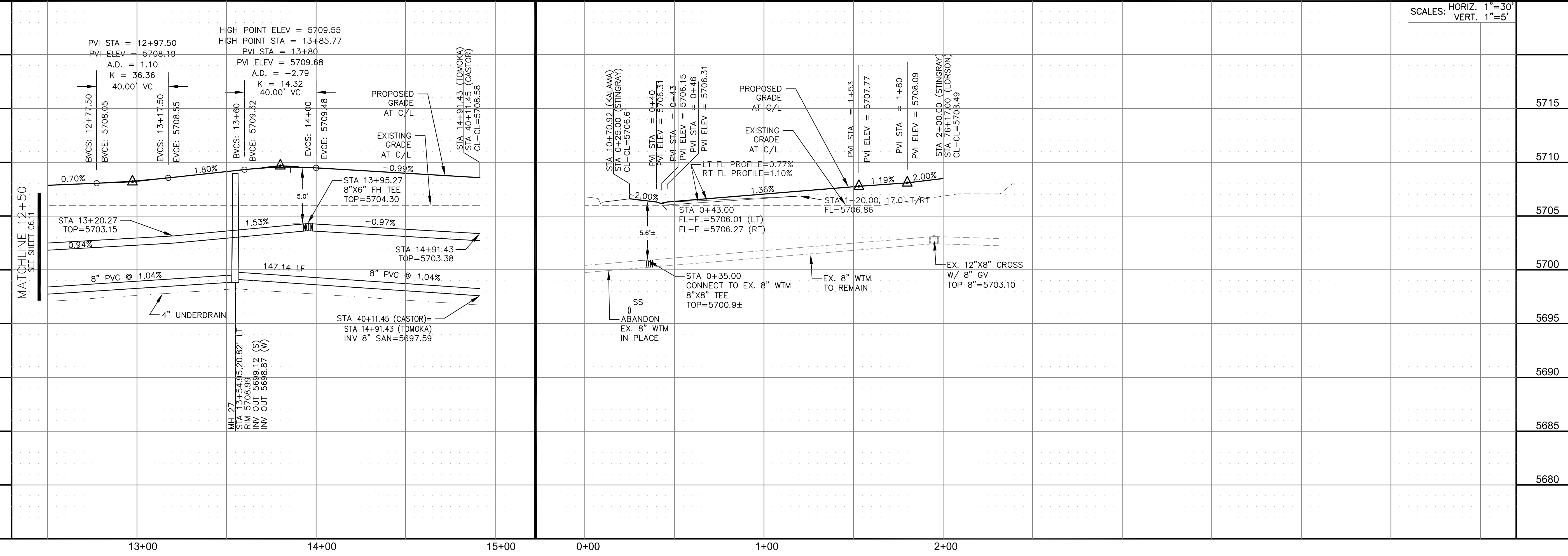
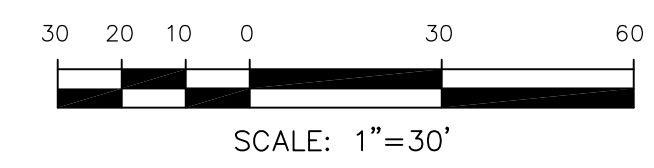
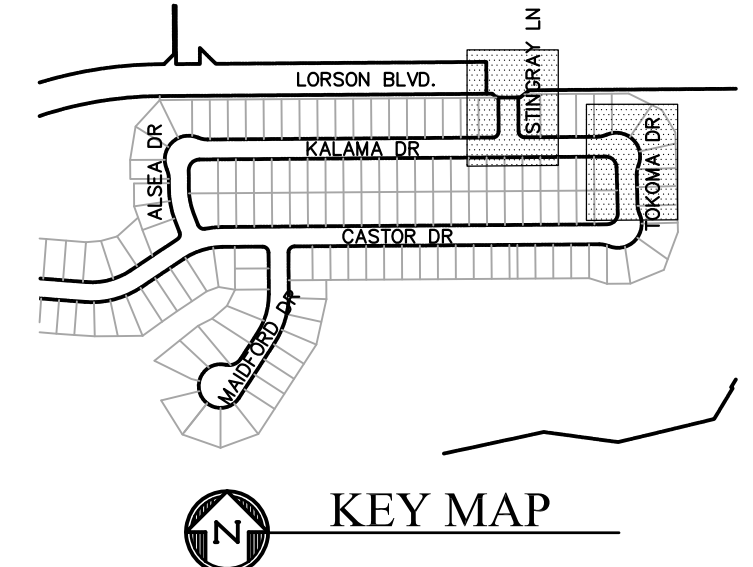
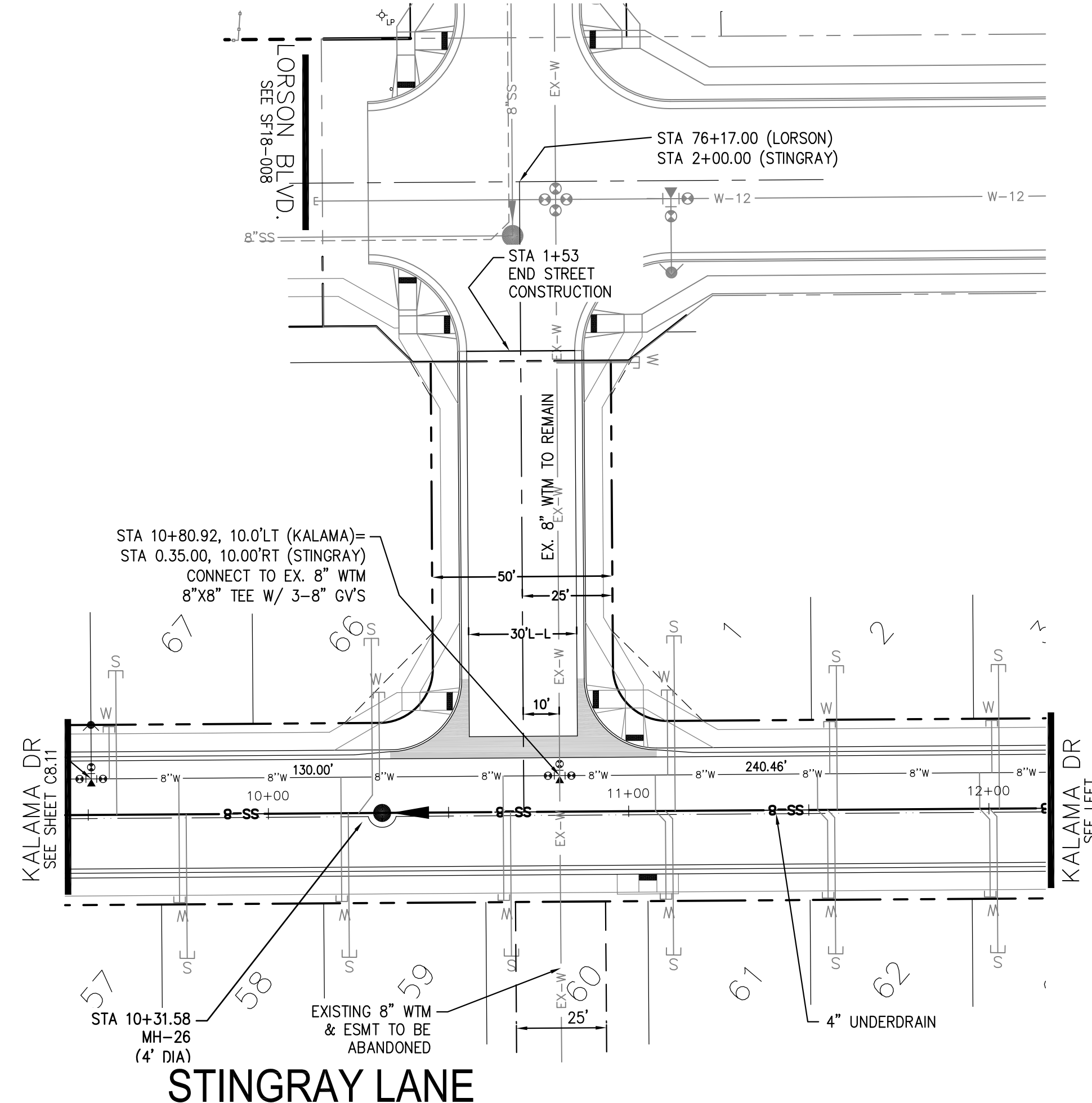
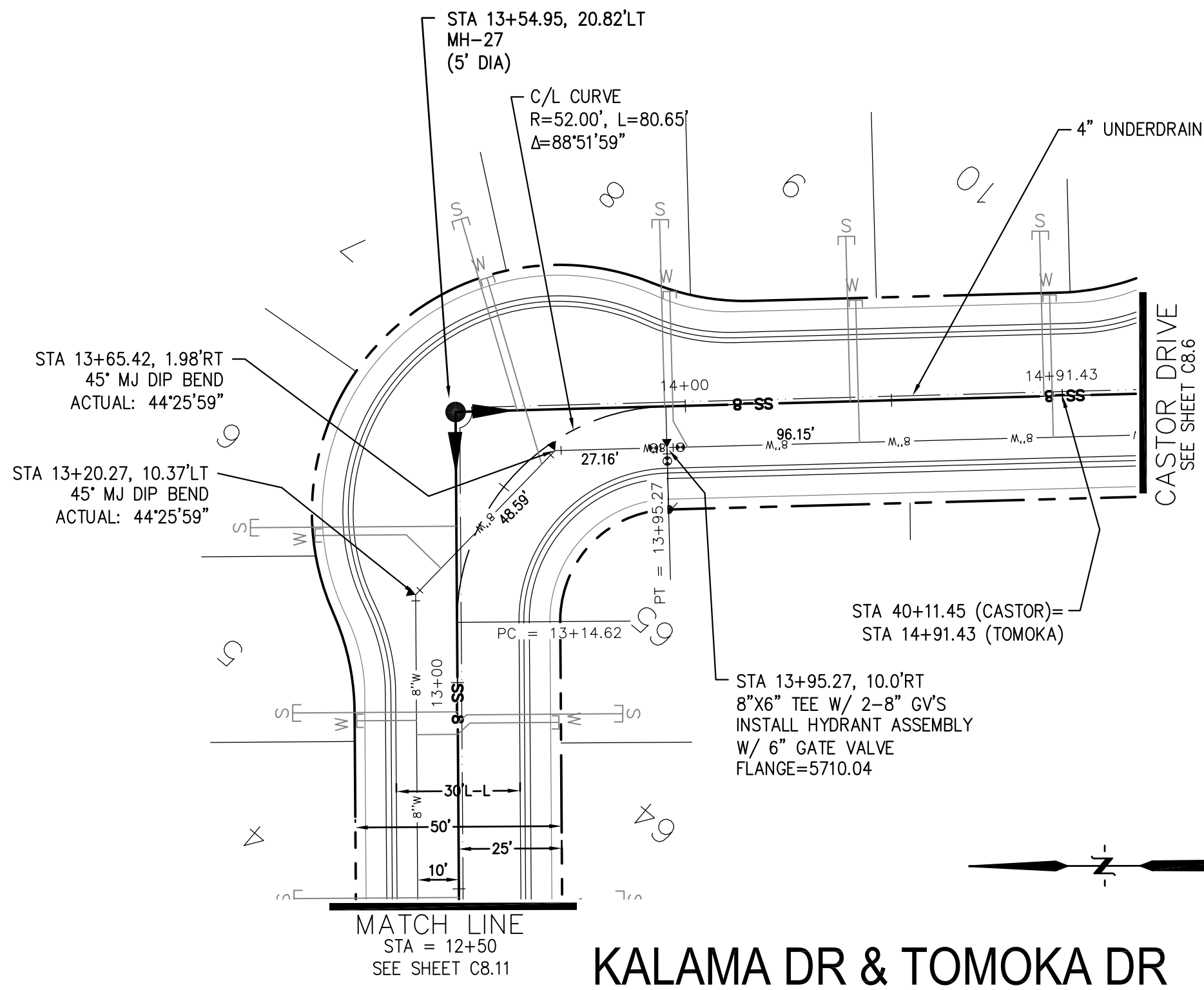
SHEET NUMBER C8.11

TOTAL SHEETS: 23



**NOTES**

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



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S., SUITE 301  
 BIRMGHAM, AL 35206  
 PHONE: 205-970-1100  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

---

PROJECT: **CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON, LLC  
 212 N. WAHSATCH AVE., SUITE 301  
 COLORADO SPRINGS, COLORADO 80903  
 (719) 635-3200  
 CONTACT: JEFF MARK

---

DATE: \_\_\_\_\_  
 DESCRIPTION: \_\_\_\_\_  
 NO. \_\_\_\_\_

---

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

---

**SANITARY / WATERMAIN**  
**TOMOKA DR (12+50 TO 14+91)**  
**STINGRAY LN (STA 0+0 TO 2+00)**

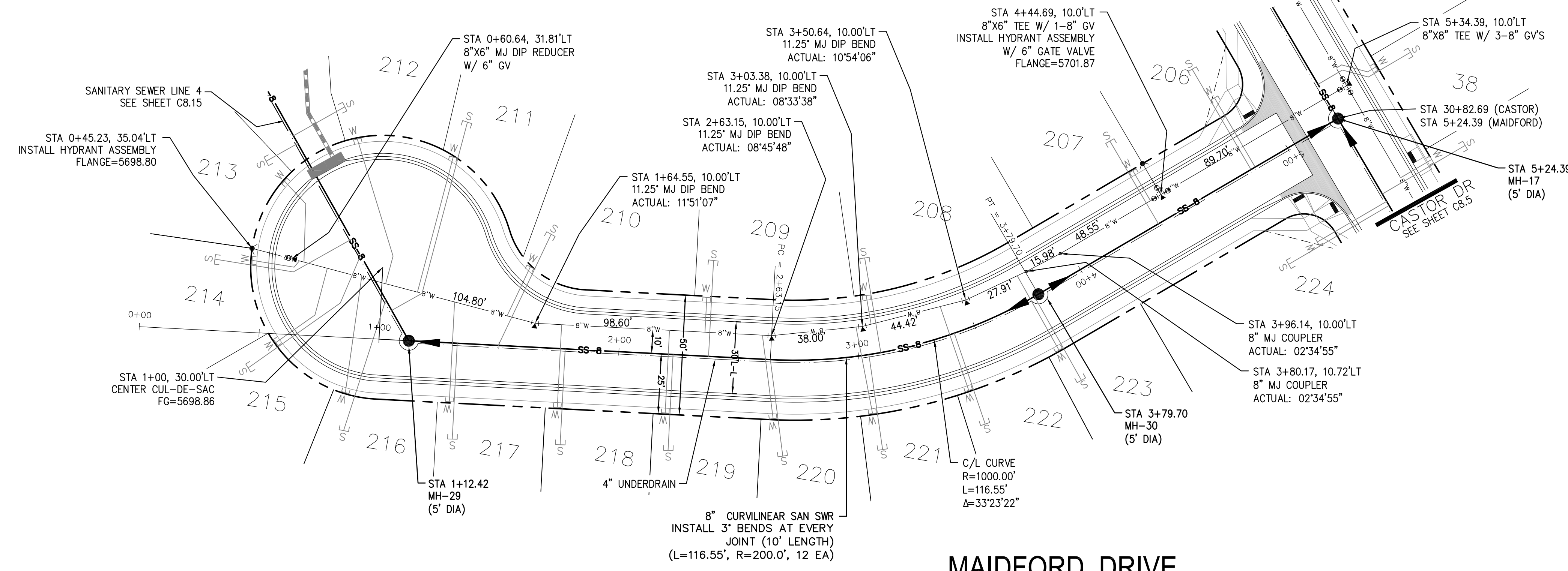
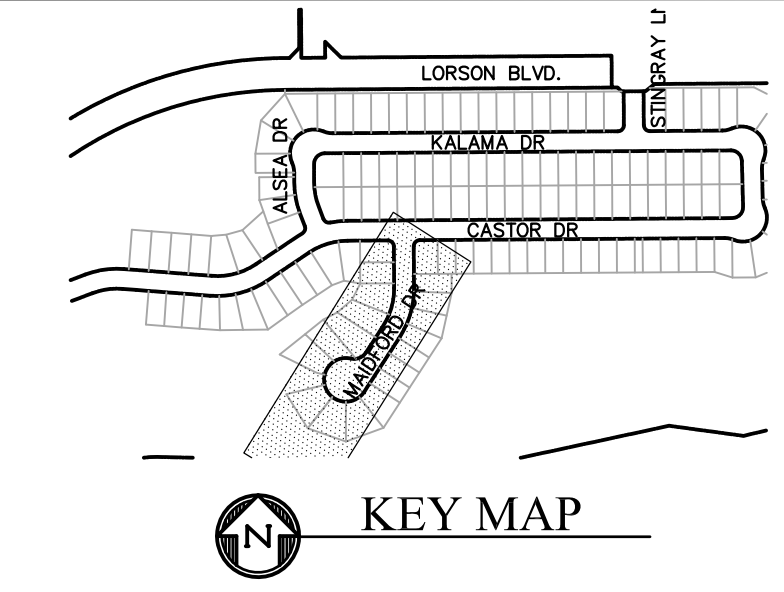
---

DATE: APRIL 15, 2019  
 PROJECT NO. 100.045  
 SHEET NUMBER C8.12  
 TOTAL SHEETS: 23

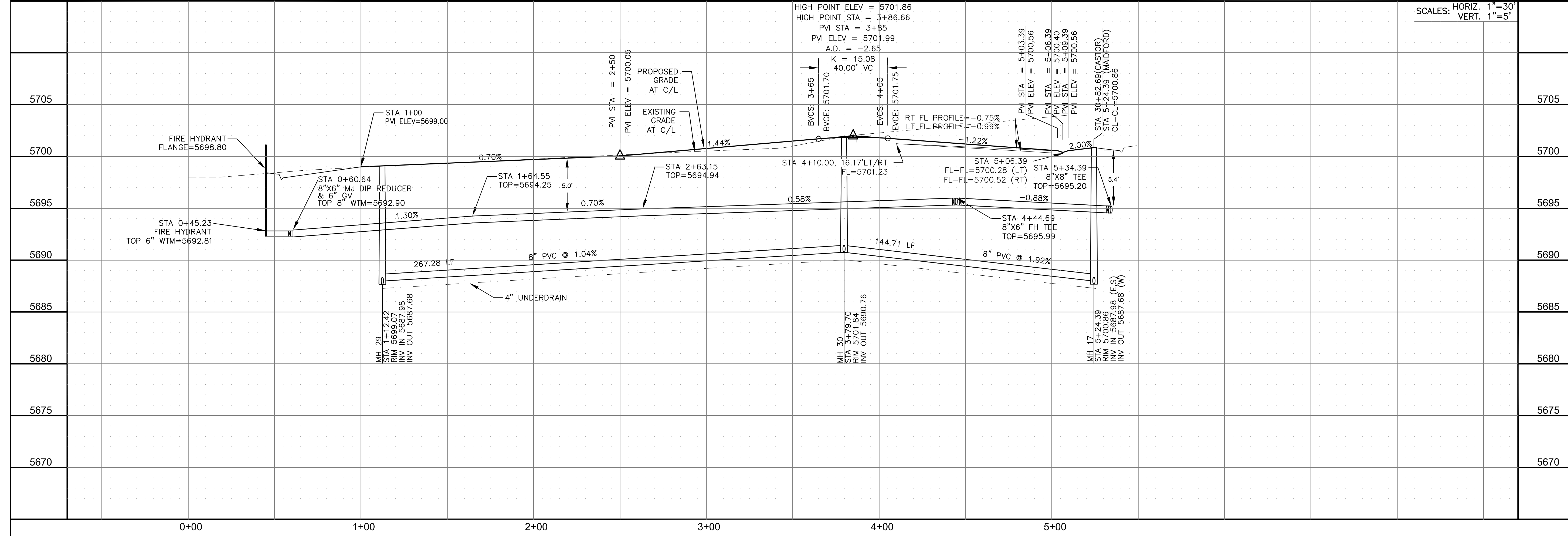
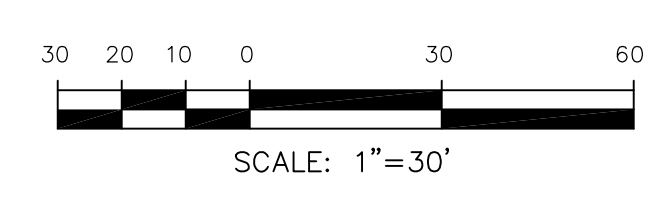


**NOTES**

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



**MAIDFORD DRIVE**



**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 SUITE 301  
 BIRCH CREEK, CO 80150  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.com

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

**PROJECT:**  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

**DRAWN:** RLS  
**DESIGNED:** RLS  
**CHECKED:** RLS

**SANITARY / WATERMAIN**  
**MAIDFORD DRIVE**  
**STA 0+00 TO 5+24**

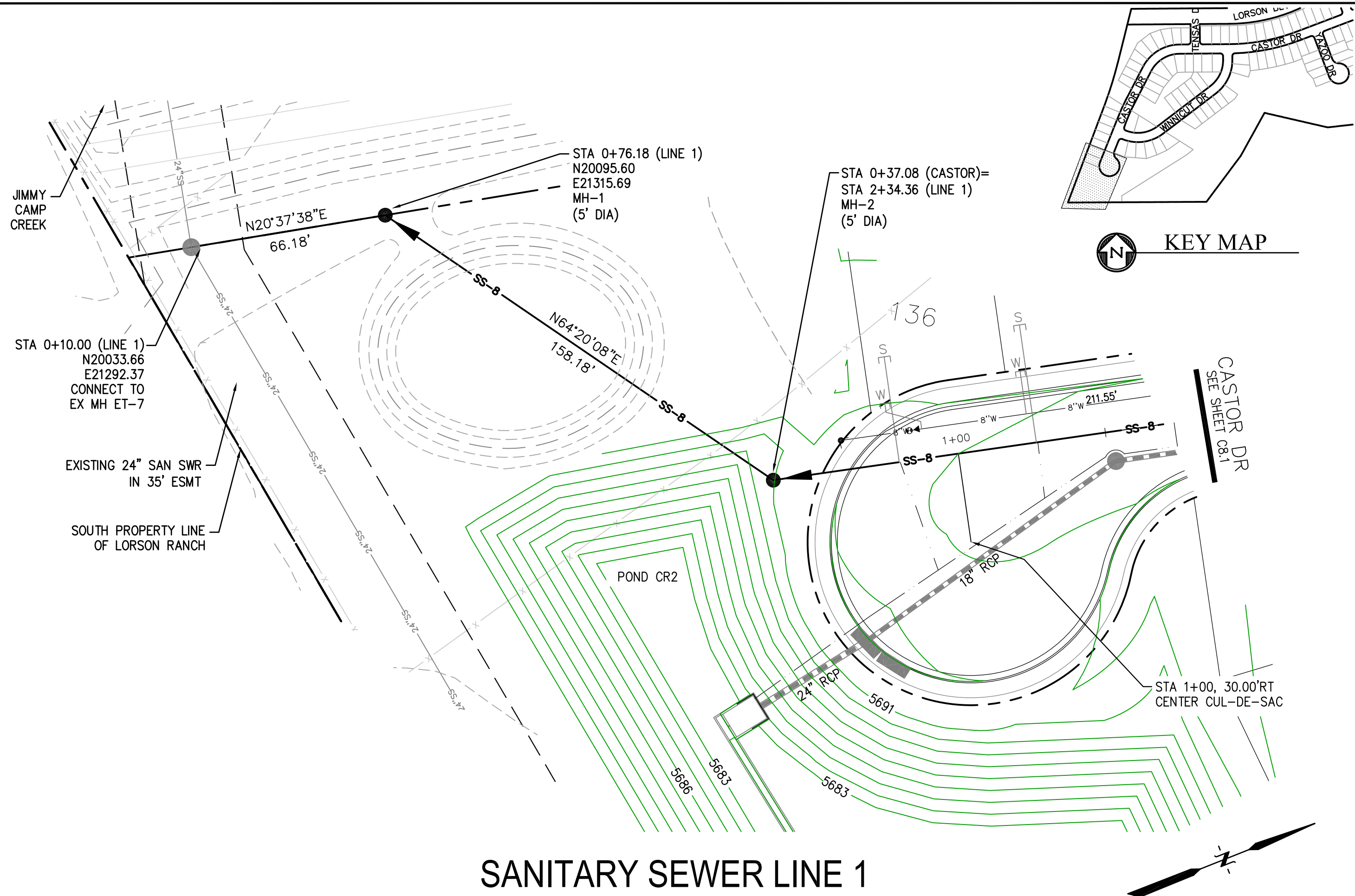
**DATE:**  
 APRIL 15, 2019

**PROJECT NO.**  
 100.045

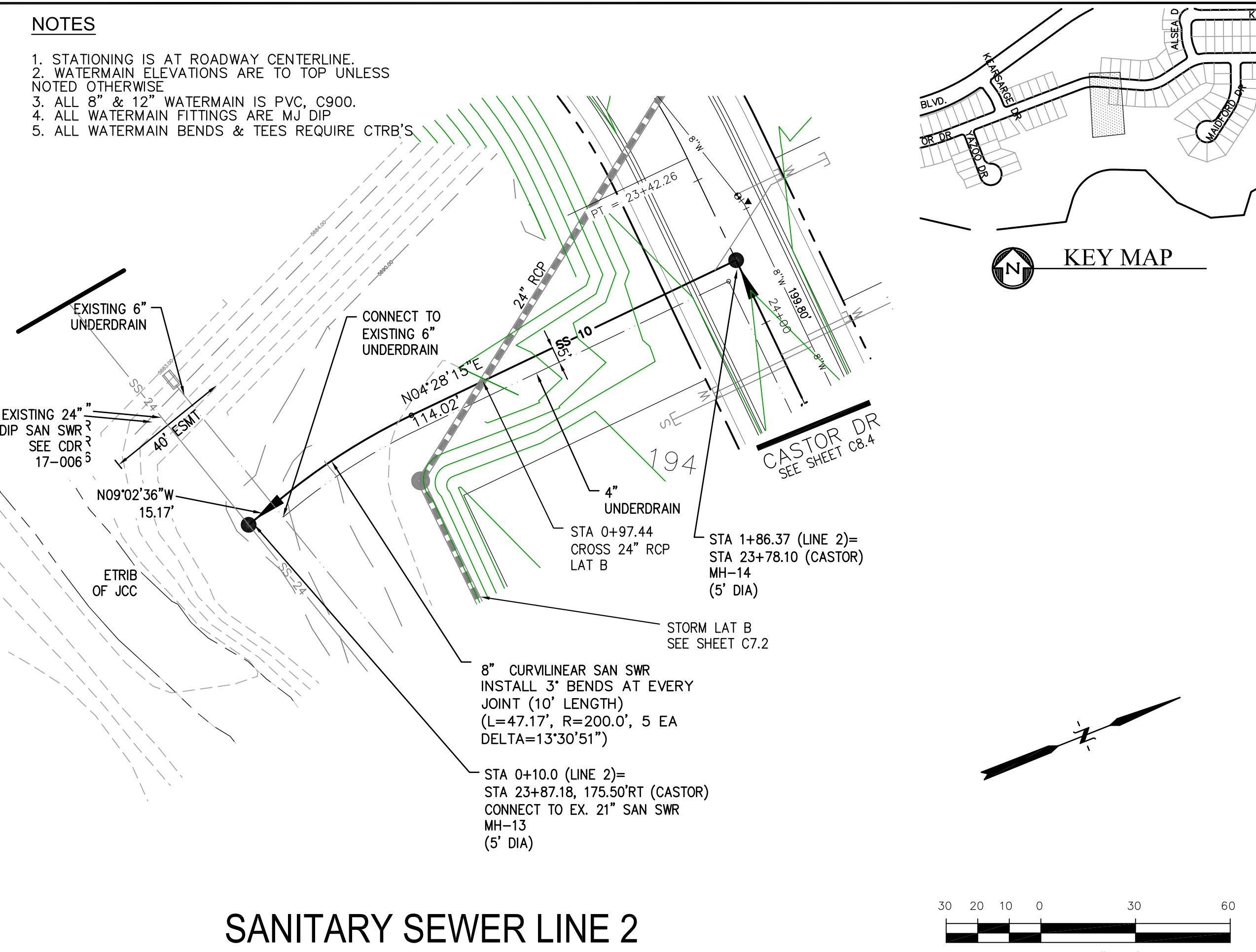
**SHEET NUMBER**  
 C8.13

**TOTAL SHEETS:** 23





**SANITARY SEWER LINE 1**

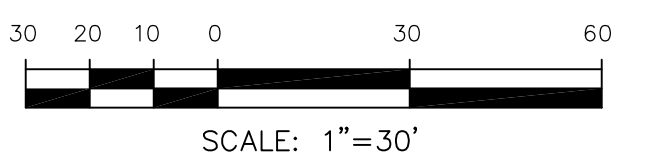


**SANITARY SEWER LINE 2**



**NOTES**

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



SANITARY SEWER LINE 1		SANITARY SEWER LINE 2	
5705		5705	
5700		5700	
5695		5695	
5690		5690	
5685		5685	
5680	<p>PROPOSED GRADE AT C/L</p> <p>EXISTING GRADE AT C/L</p> <p>8" PVC @ 1.80%</p> <p>158.21 LF</p> <p>66.21 LF</p> <p>8" PVC @ 2.50%</p> <p>EX. MH ET-7 STA 0+10.00 RIM IN 5673.54 (8") INV IN 5671.78 (24") INV OUT 5671.68 (24")</p> <p>MH 1 STA 0+76.18 RIM IN 5691.62 INV IN 5675.29 INV OUT 5675.19</p> <p>MH 2 STA 2+34.36 RIM IN 5691.10 INV IN 5678.50 INV OUT 5678.13</p>	<p>PROPOSED GRADE AT C/L</p> <p>EXISTING GRADE AT C/L</p> <p>4" UNDERDRAIN AT 0.1% SLOPE</p> <p>24" STM</p> <p>1.0' CLR</p> <p>176.37 LF</p> <p>10" PVC @ 0.50%</p> <p>STA 0+20 CONNECT TO EX. 6" UNDERDRAIN INV 5683.73±</p> <p>STA 0+97.44 CROSS 24" STM BTM STM=5687.26 TOP SAN=5682.98 CLR=4.28'</p> <p>MH 13 STA 0+10 RIM 5690.00 INV IN 5681.65 (10") INV OUT 5680.45 (24")</p> <p>MH 14 STA 1+86.37 RIM IN 5694.04 INV IN 5682.83 (8") INV OUT 5682.53 (10")</p>	
5675		5675	
5670		5670	

SCALES: HORIZ. 1"=30'  
VERT. 1"=5'

**CORE ENGINEERING GROUP**  
 15004 1ST AVENUE S.  
 BLDG 100  
 PUEBLO, CO 81001  
 CONTACT: RICHARD L. SCHINDLER, P.E.  
 EMAIL: Rich@cegi.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:  
**CREEKSIDE AT LORSON RANCH FILING NO. 1**  
 LORSON BLVD - KEARSARGE DR  
 COLORADO SPRINGS, COLORADO

DRAWN: RLS  
 DESIGNED: RLS  
 CHECKED: RLS

**SANITARY / WATERMAIN**  
**SANITARY SEWER LINE 1 & LINE 2**



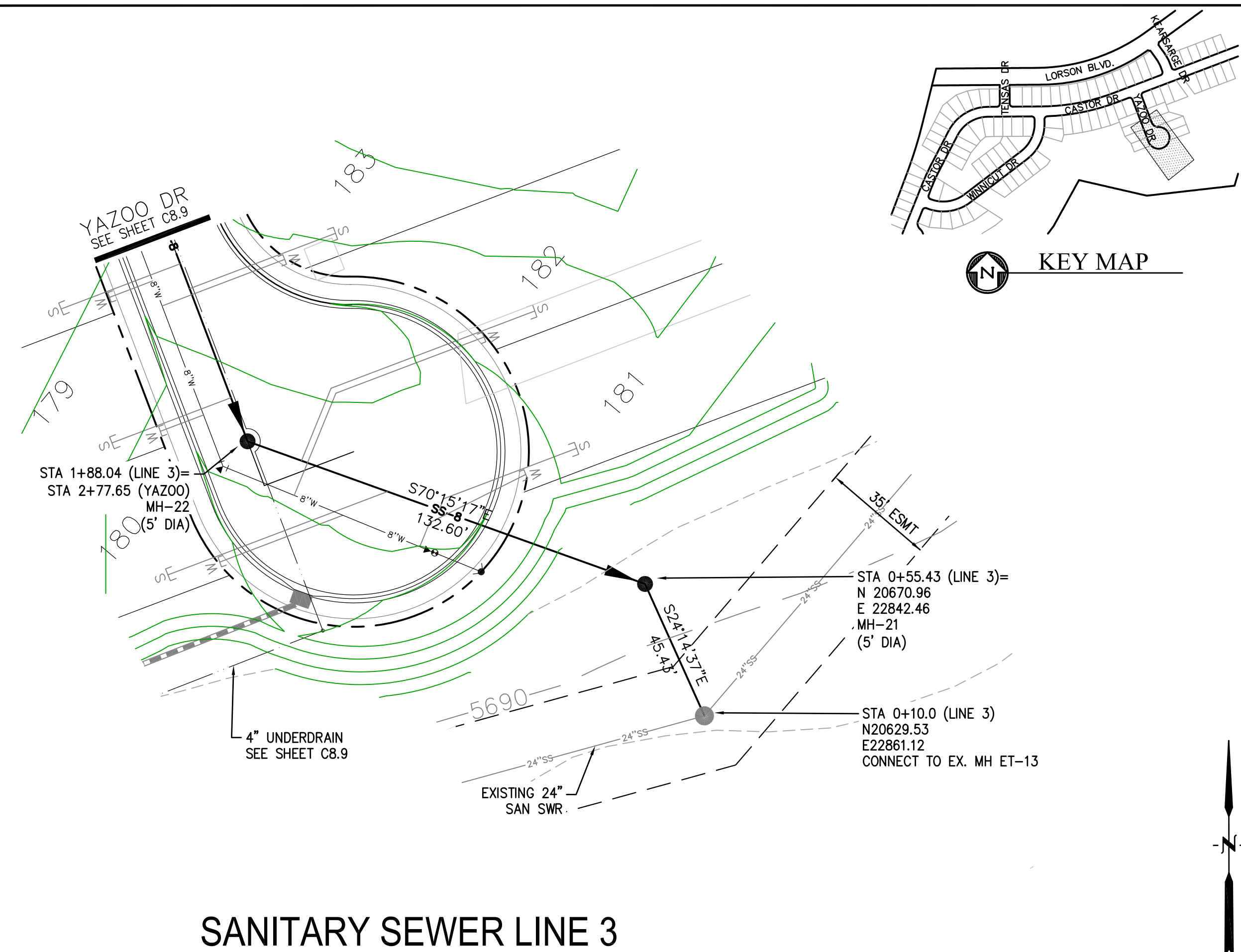
DATE:  
 APRIL 15, 2019

PROJECT NO.  
 100.045

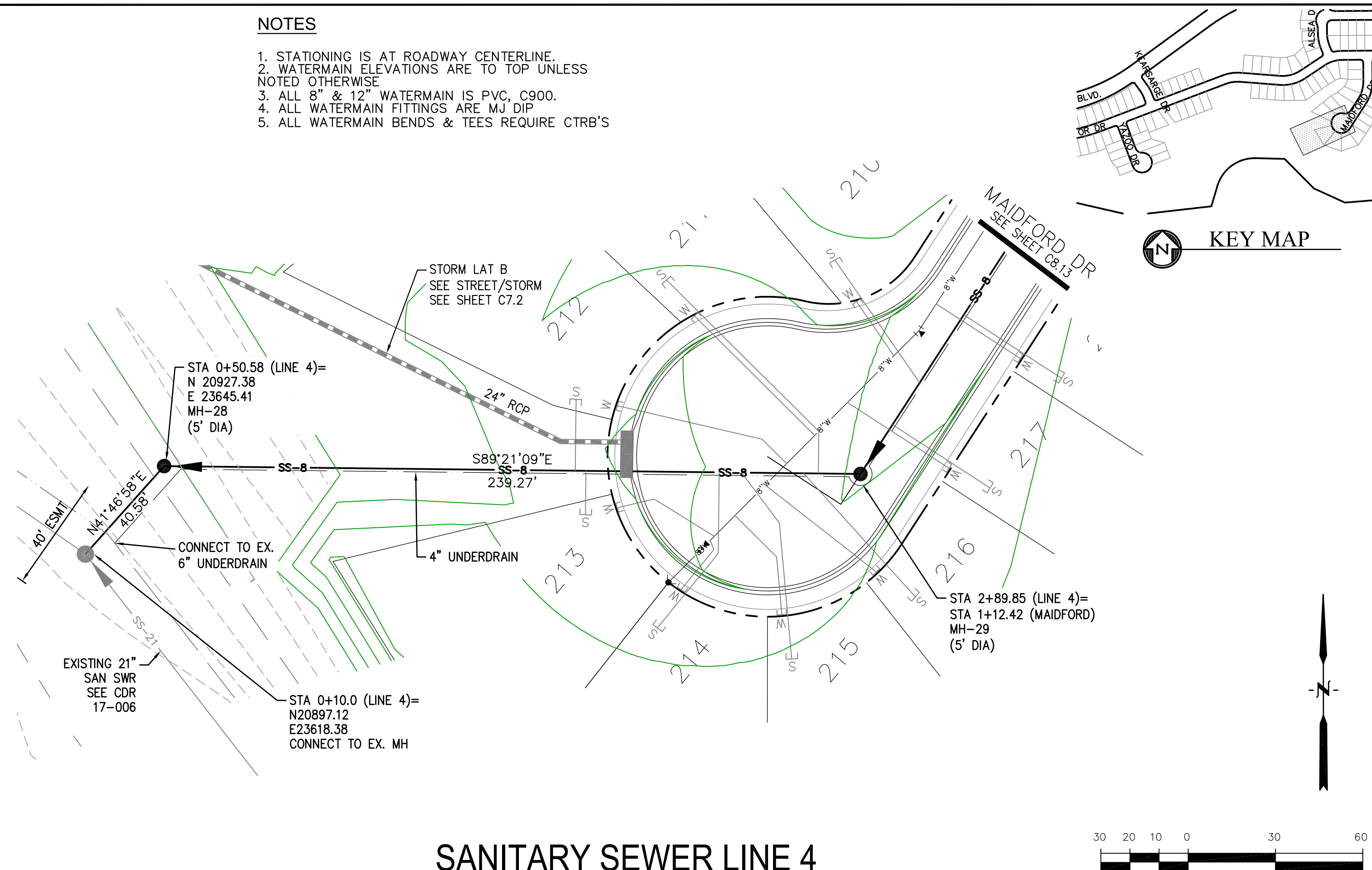
SHEET NUMBER  
 C8.14

TOTAL SHEETS: 23





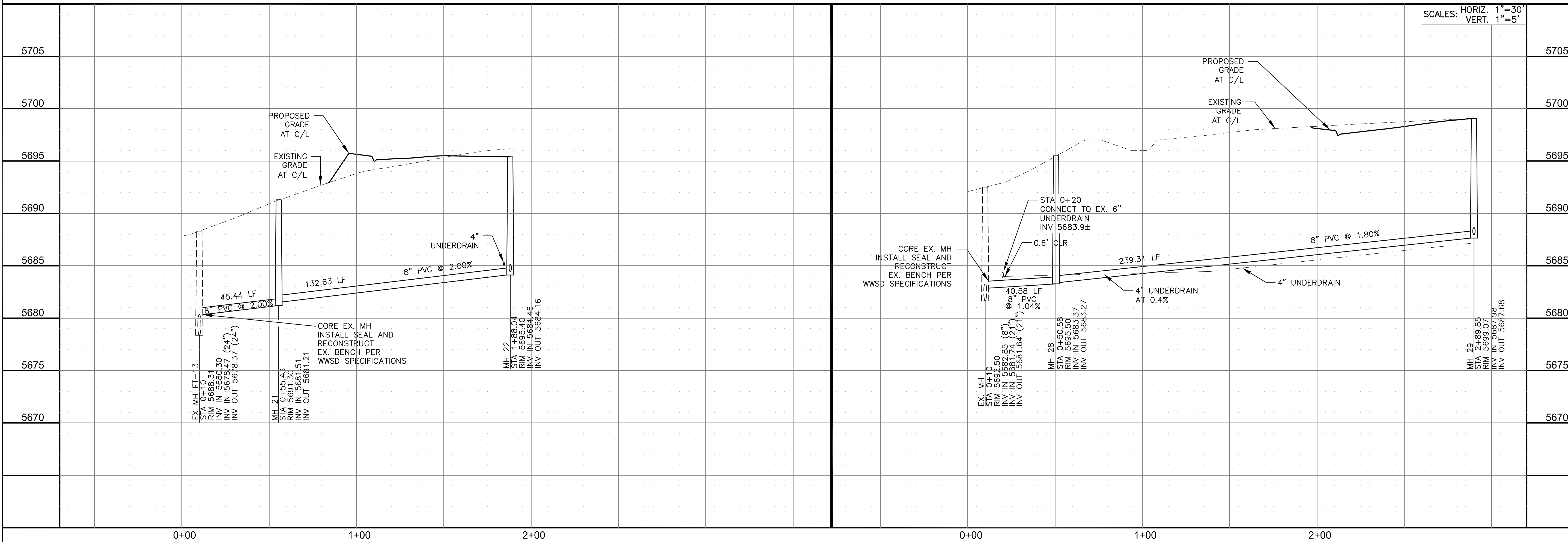
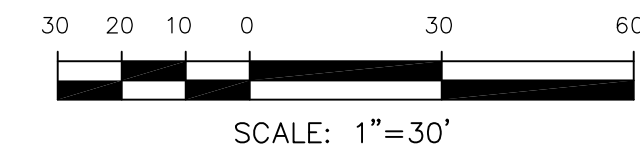
SANITARY SEWER LINE 3



SANITARY SEWER LINE 4

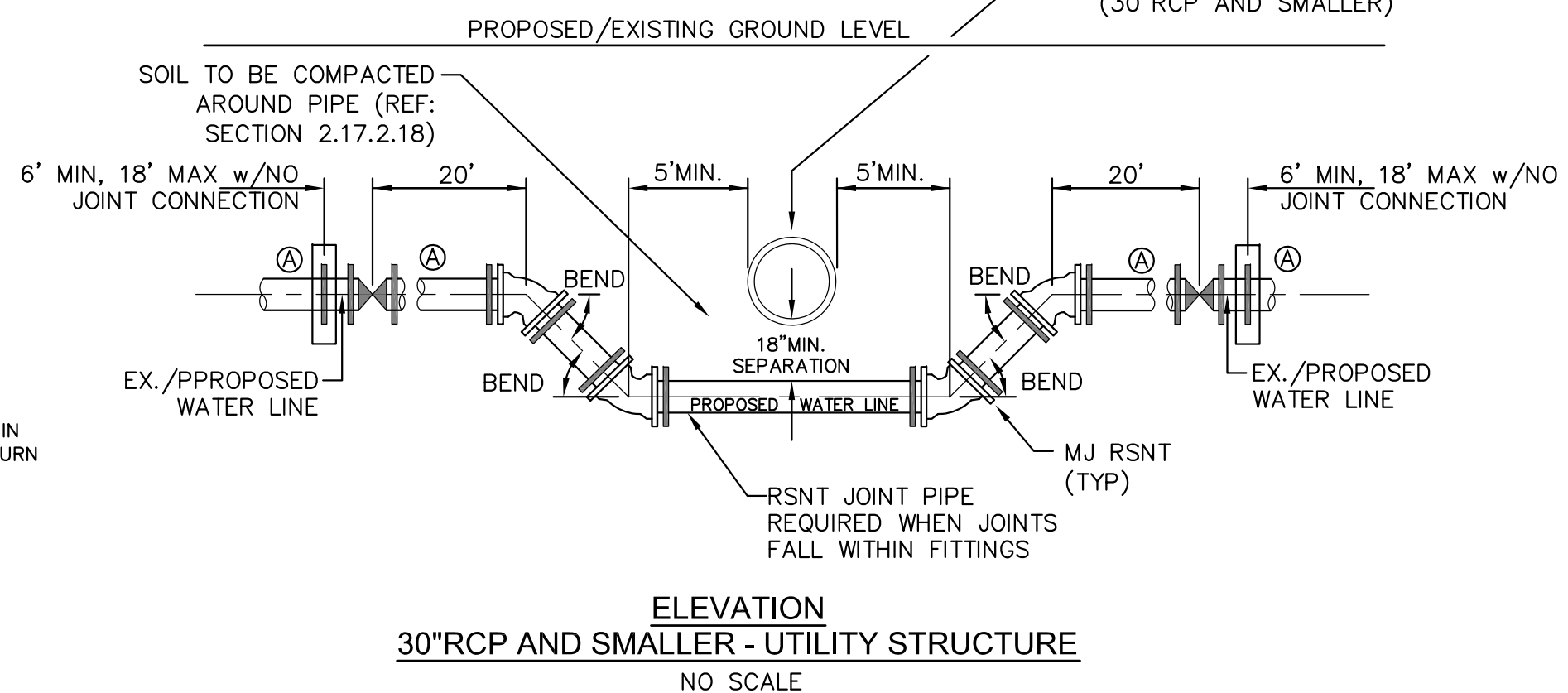
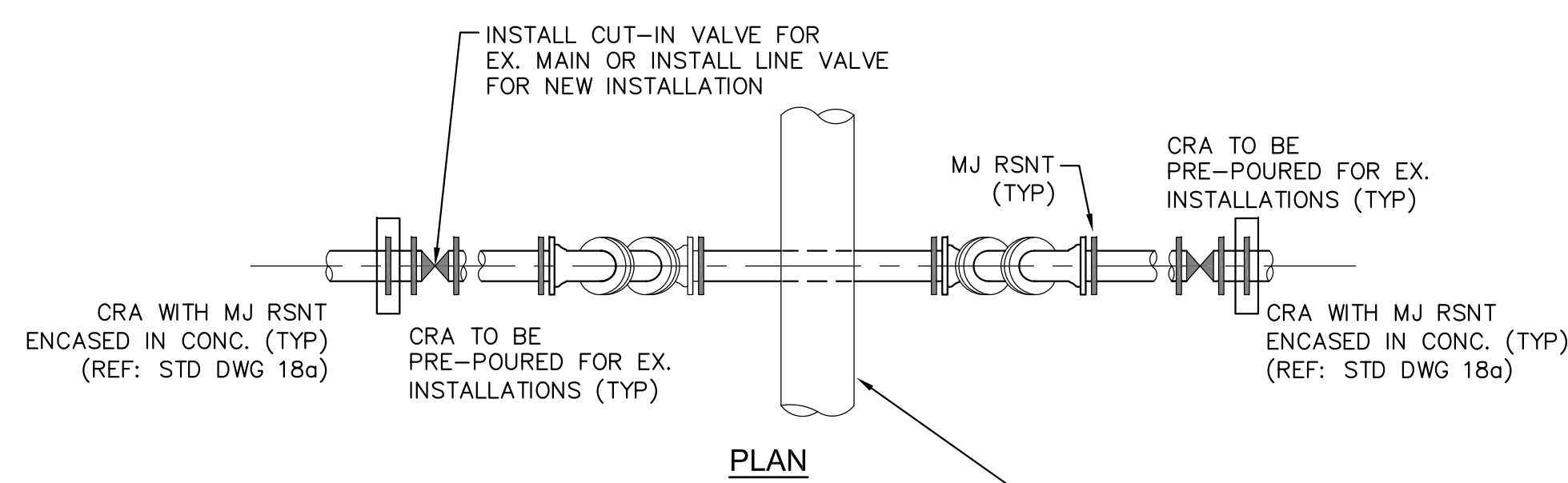
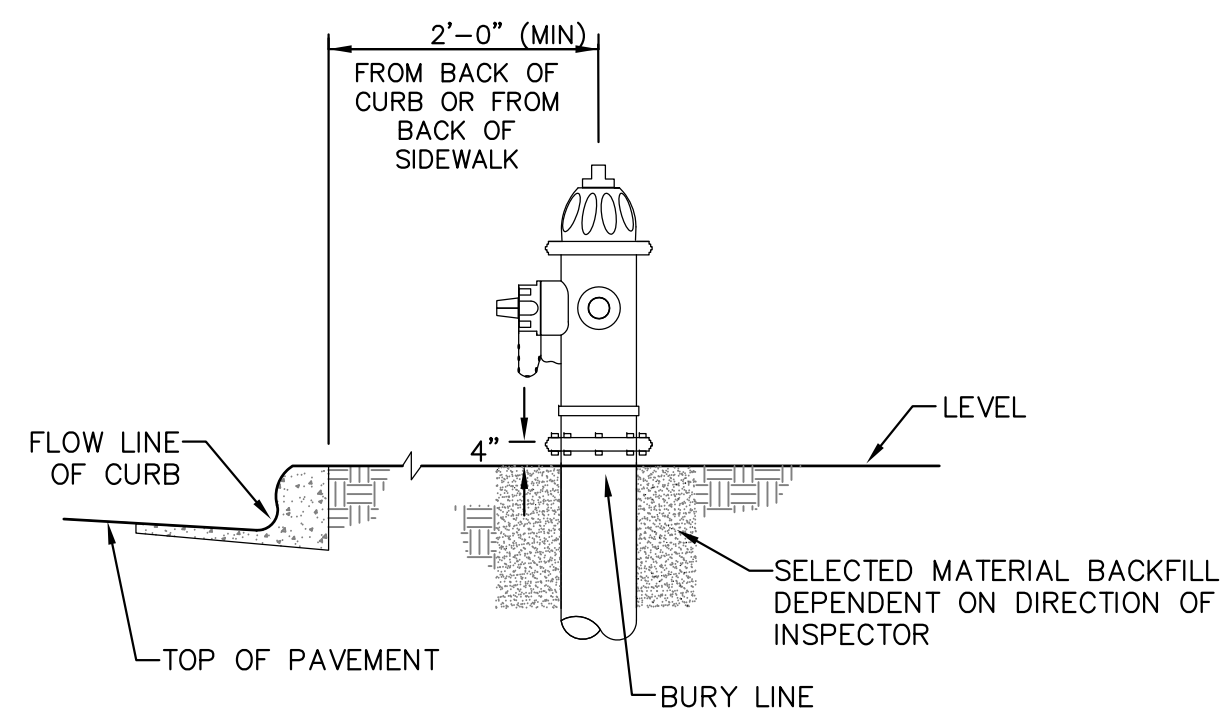
NOTES

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



<p><b>CORE ENGINEERING GROUP</b>          15004 1ST AVENUE S.          BLDG 100, SUITE 200          BOULDER, CO 80501          CONTACT: RICHARD L. SCHINDLER, P.E.          EMAIL: Rich@cegi.com</p>		DATE
<p>PREPARED FOR:  <b>LORSON, LLC</b>          212 N. WAHSATCH AVE., SUITE 301          COLORADO SPRINGS, COLORADO 80903          (719) 635-3200          CONTACT: JEFF MARK</p>		DESCRIPTION
<p>PROJECT:  <b>CREEKSIDE AT LORSON RANCH FILING NO. 1</b>          LORSON BLVD - KEARSARGE DR          COLORADO SPRINGS, COLORADO</p>		NO.
<p>DRAWN: RLS          DESIGNED: RLS          CHECKED: RLS</p>		
<p><b>SANITARY / WATERMAIN</b>  <b>SANITARY SEWER LINE 3 &amp; LINE 4</b></p>		
<p>DATE:          APRIL 15, 2019</p>		
<p>PROJECT NO.          100.045</p>		
<p>SHEET NUMBER          C8.15</p>		
<p>TOTAL SHEETS: 23</p>		

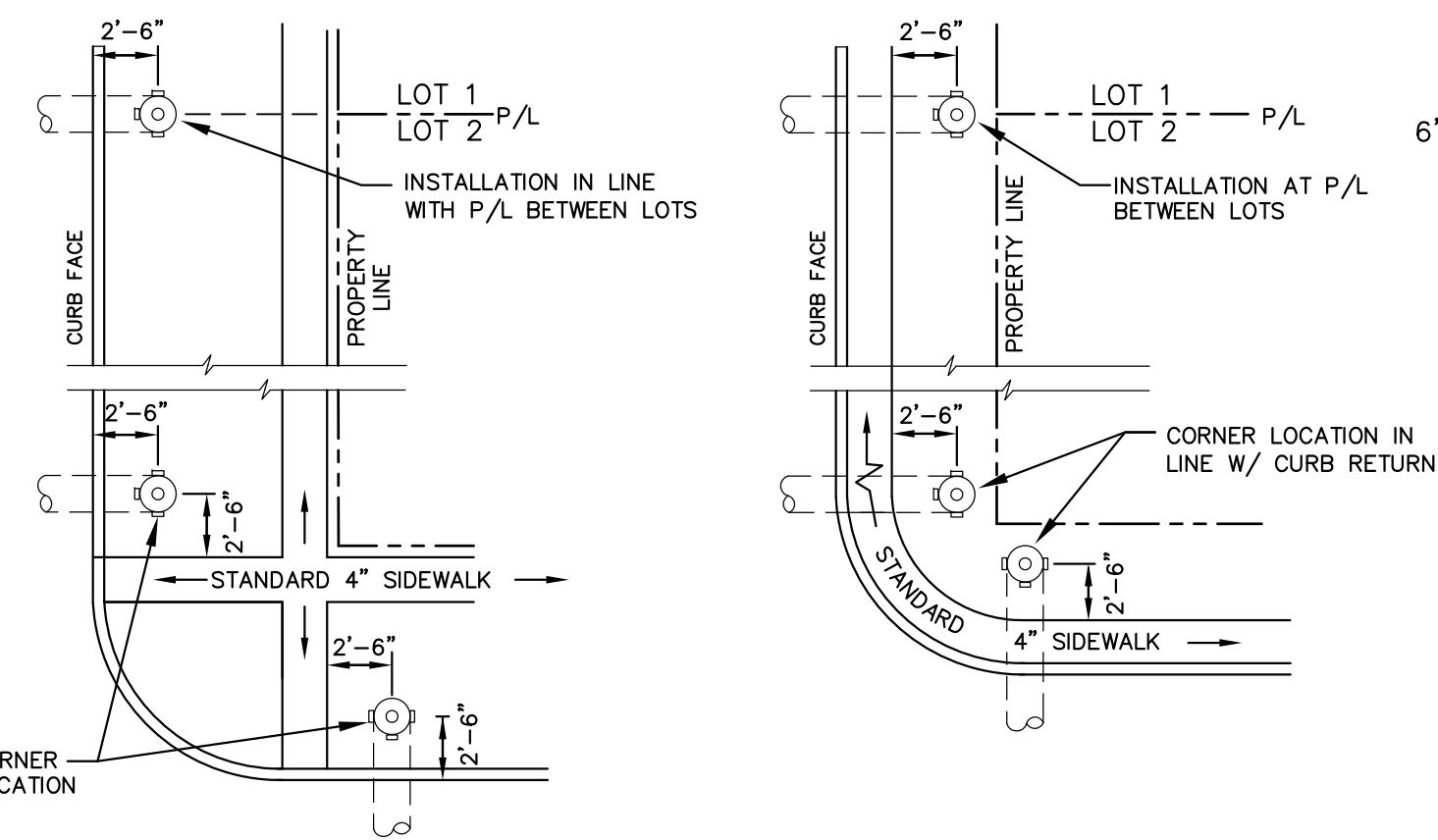




**GENERAL NOTES**

- D.I.P. PIPE REQUIRED IN LOWERINGS (AT THE DISCRETION OF THE WRD/INSPECTOR PVC PIPE MAYBE APPROVED).
- Ⓐ LOWERINGS TO BE CATHODIC PROTECTED UNDER THE DIRECTION OF THE WRD INSPECTOR. (17 lb).
- ALL FITTINGS SHALL HAVE MJ RSNTS. SEE DRAWINGS NO. 27, 28 & SECTION 5.14 OF THE WRD SPECIFICATIONS.
- 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**



**DETACHED SIDEWALK LOCATION NO SCALE**

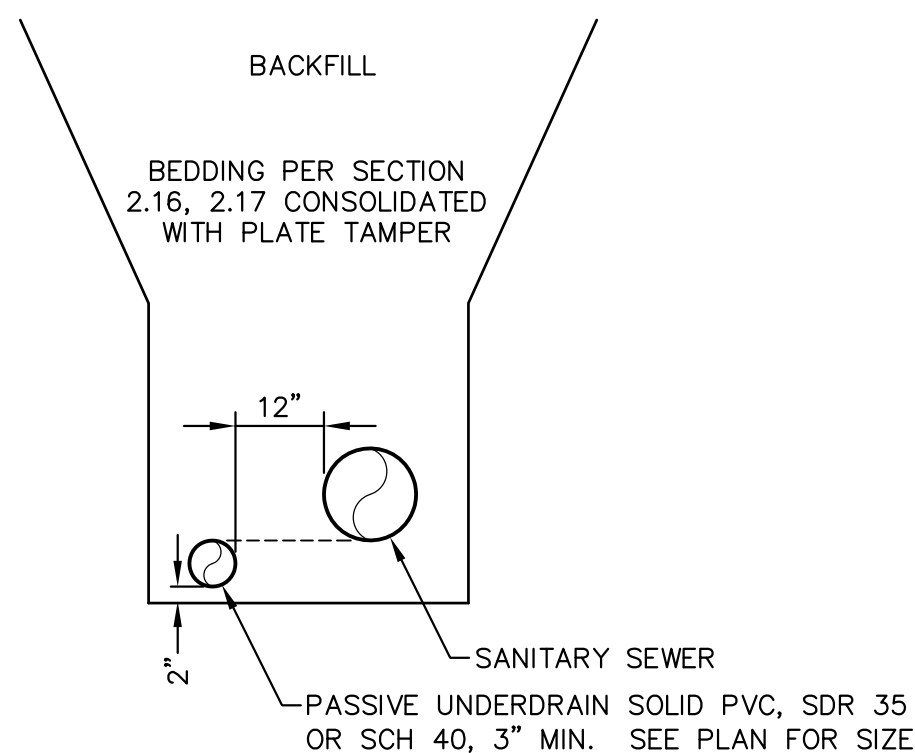
**ATTACHED SIDEWALK LOCATION NO SCALE**

**NOTE**  
ALL HYDRANTS SHALL BE GUARDIAN K-81D OR AVK SERIES 2700.

**NOTES**

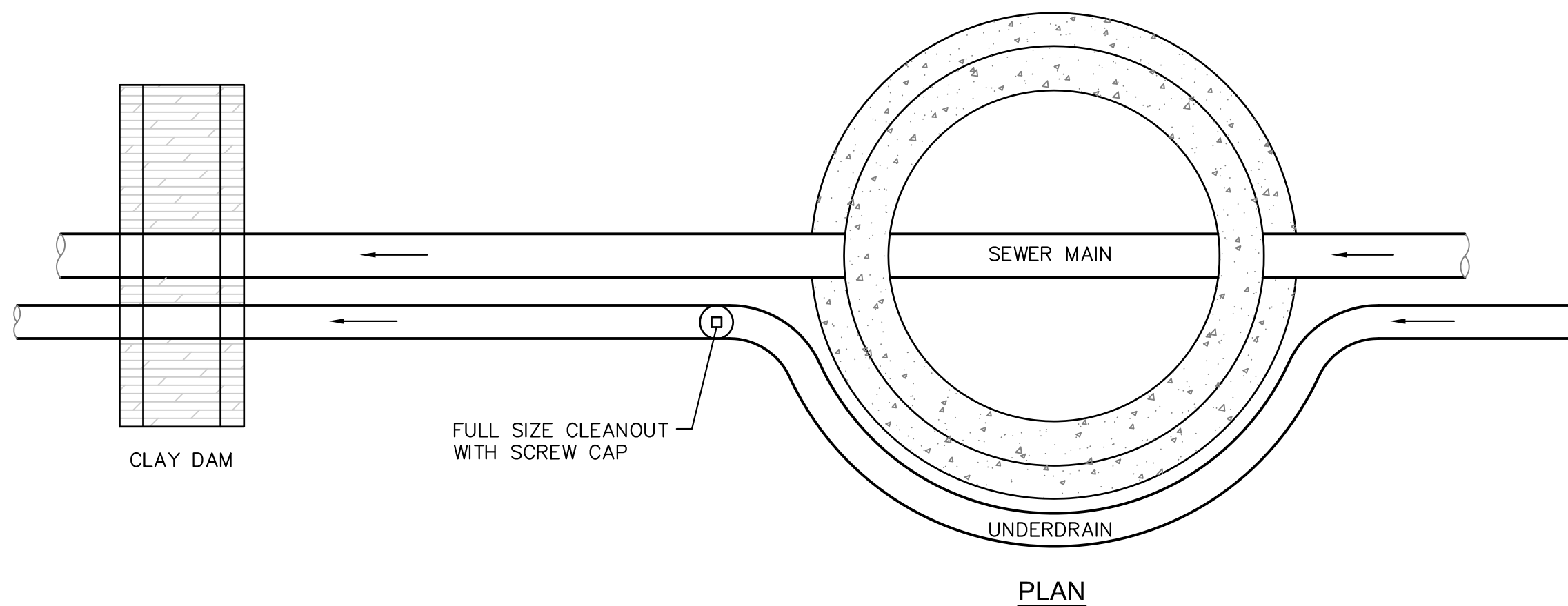
- HYDRANT NOZZLE SHALL BE POSITIONED AT RIGHT ANGLES TO CURB. IF NO CURB OR SIDEWALK EXIST, NOZZLE SHALL BE PLACED AT RIGHT ANGLE TO STREET OR ALLEY.
- HYDRANTS WILL BE PLACED A MINIMUM OF 5.0 FEET FROM ANY UTILITY OR DRAINAGE STRUCTURE (TO BE CO-ORDINATED WITH JOINT TRENCH INSTALLATION)
- ANY HYDRANT 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**

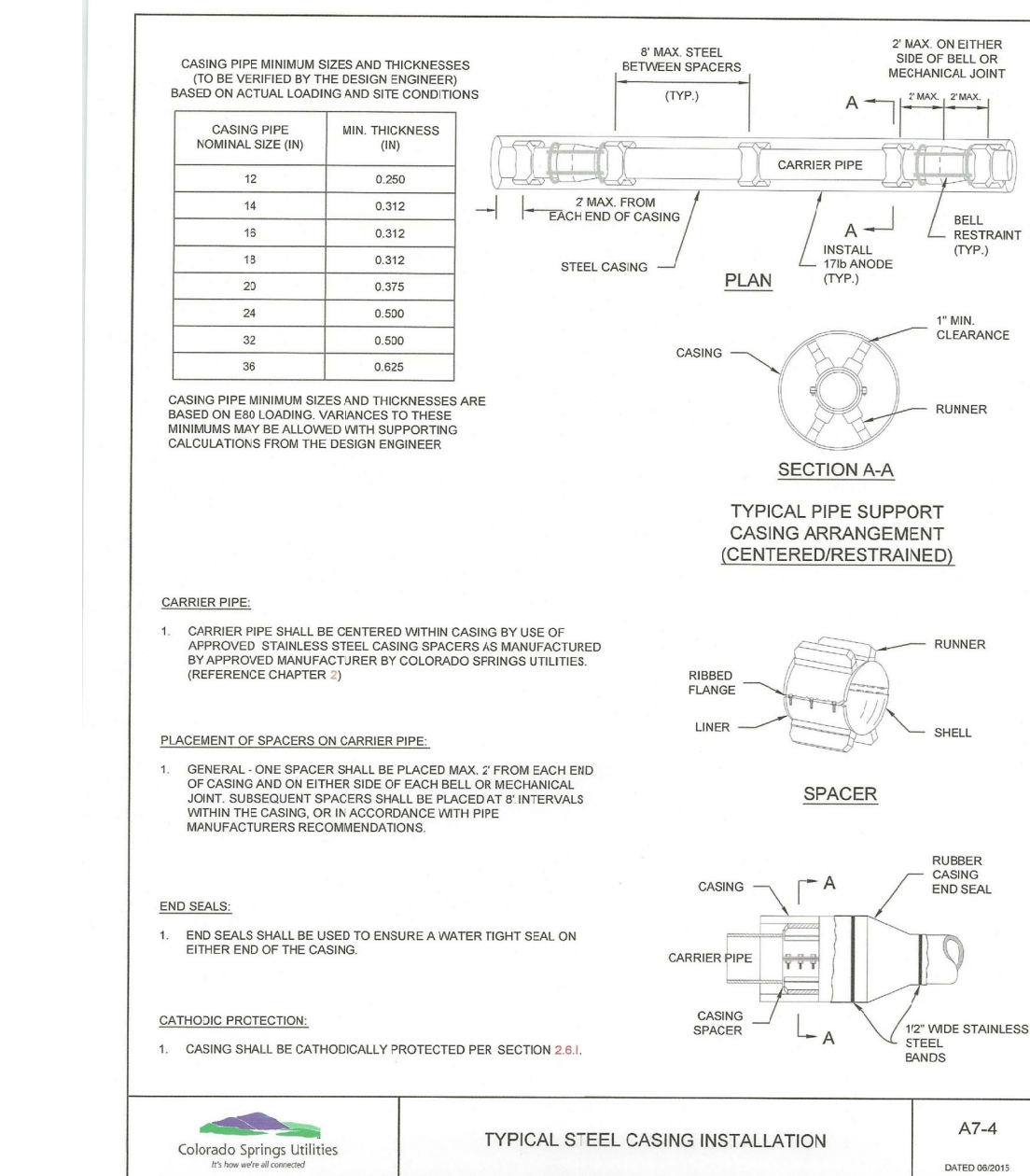


**SANITARY SEWER PASSIVE UNDERDRAIN DETAIL (PER CSU STANDARD # WW-11A) NO SCALE**

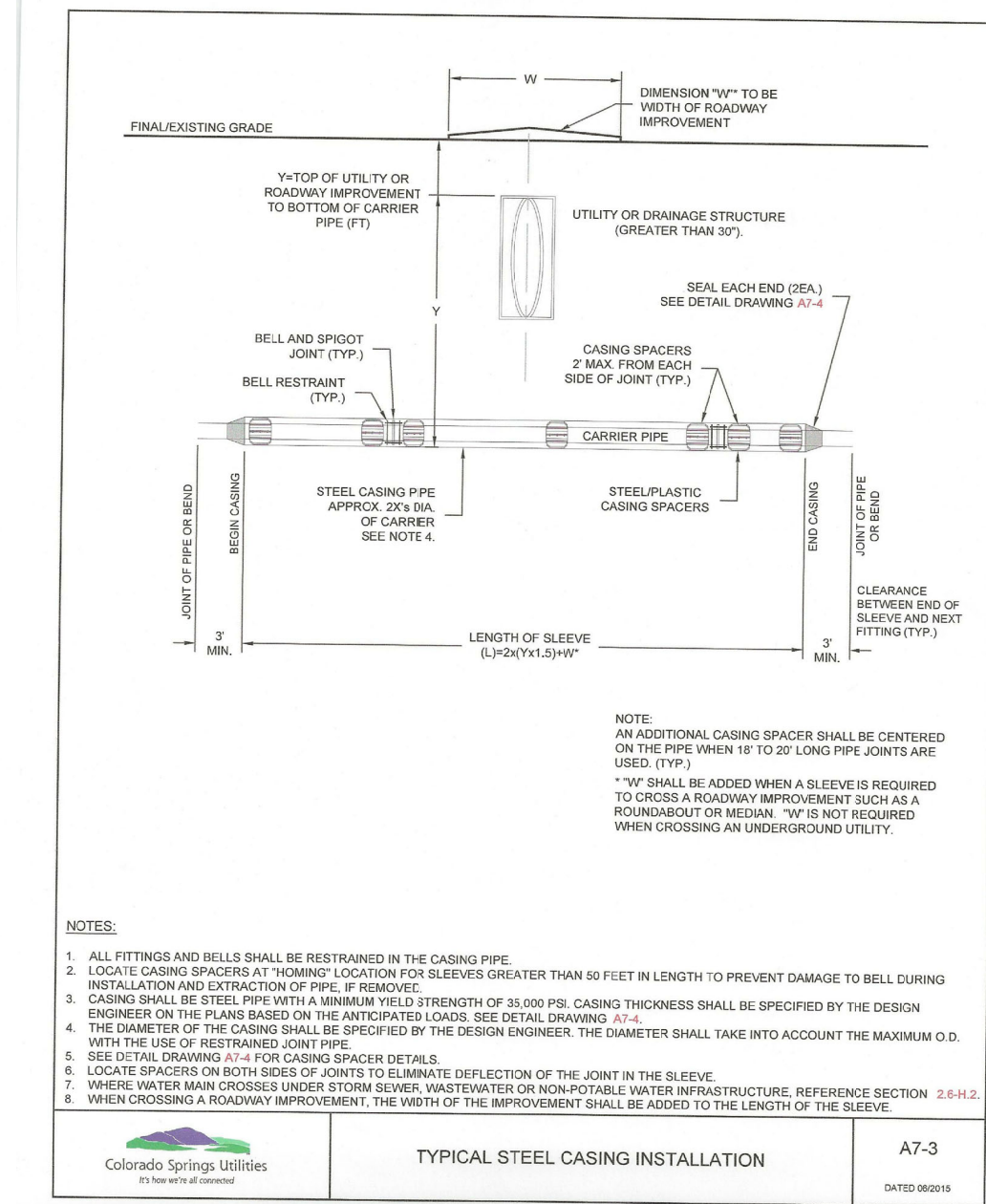
**NOTE:**  
POINT OF DISCHARGE TO PUBLIC SYSTEM IS REQUIRED. UNDERDRAIN CONNECTIONS SHALL BE 3\"/>



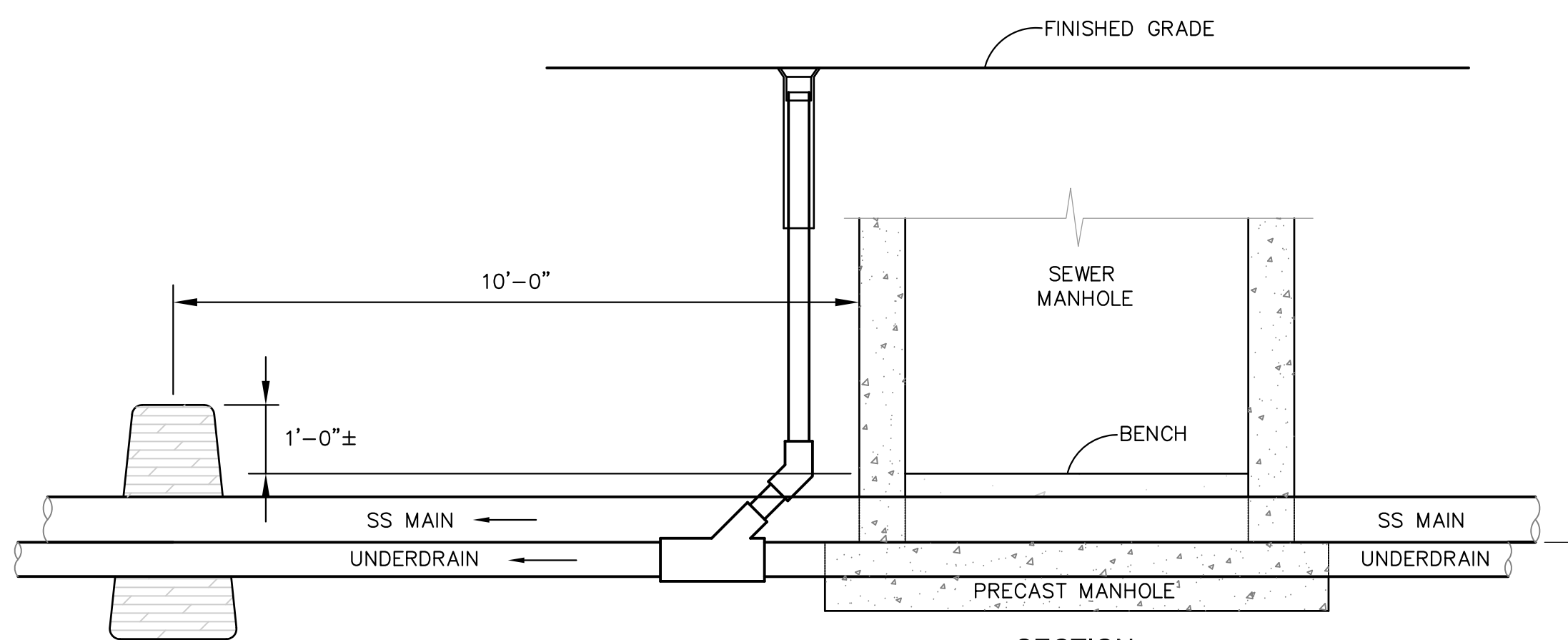
**PLAN**



**TYPICAL STEEL CASING INSTALLATION A7-4**



**TYPICAL STEEL CASING INSTALLATION A7-3**



**GROUNDWATER UNDERDRAIN CLEANOUT (PASSIVE) LOCATIONS OUTSIDE MANHOLE**

(PER CSU STANDARD # WW-12) NO SCALE

TOP OF UNDERDRAIN EQUALS BOTTOM OF SEWER MAIN UNLESS NOTED OTHERWISE

**CORE ENGINEERING GROUP**  
15004 1ST AVENUE S.  
BURNSVILLE, MN 55306  
PH: 718.970.1100  
CONTACT: RICHARD L. SCHINDLER, P.E.  
EMAIL: rich@cegi.com

DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
NO. \_\_\_\_\_

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

DRAWN: RLS  
DESIGNED: RLS  
CHECKED: RLS

**WATER/SEWER DETAILS**



DATE: APRIL 15, 2019

PROJECT NO. 100.045

SHEET NUMBER C12.1

TOTAL SHEETS: 23