

# CROSSROADS MIXED USE FILING NO. 2

## COUNTY OF EL PASO, STATE OF COLORADO

# WATER & SANITARY UTILITY PLANS

NOVEMBER 2022

**WATER AND SANITARY SEWER SERVICE INSTALLATIONS GENERAL NOTES:**

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE CHEROKEE METROPOLITAN DISTRICT STANDARDS AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS OTHERWISE NOTED. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE METROPOLITAN DISTRICT STANDARDS SHALL GOVERN.
- ALL WATER SYSTEM MAINS PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 200 (DR-14) PER AWWA C-900 AND ASTM D241 SPECIFICATIONS, EXCEPT WHERE NOTED. SPECIFICALLY, SECTIONS OF WATER PIPE THAT CROSS UNDER MAJOR DRAINAGE WAYS OR MAJOR THOROUGHFARES SHALL BE DUCTILE IRON PIPE.
- ALL FITTINGS SHALL BE CONSTRUCTED OF GRAY-IRON MATERIAL AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL BE WRAPPED WITH A 9-MIL THICKNESS POLYETHYLENE MATERIAL PER AWWA STANDARD C105.
- ALL WATER PIPES SHALL BE INSTALLED WITH A MINIMUM COVER OF FIVE (5) FEET BELOW FINISHED GRADE.
- ALL BENDS, TEES FIRE HYDRANTS, BLOW-OFF, AND PLUGS AT DEAD END MAINS SHALL BE INSTALLED WITH CONCRETE THRUST BLOCKS.
- VALVE BOXES SHALL BE TYLER SLIP; TYPE "C" CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE OR APPROVED EQUAL.
- ALL WATER SYSTEM COMPONENTS SHALL BE FLUSHED AND CHLORINATED PER AWWA C-601, "DISINFECTING WATER MAINS" PRIOR TO ACCEPTANCE. THE CONTRACTOR SHALL PRODUCE A 25 MG/L SOLUTION BY ADHERING CHLORINE TABLETS TO THE PIPE SECTION WITH PERMATEX CLEAR TRY INSIDE THE SYSTEM. CHLORINATION SHALL OCCUR PRIOR TO HYDROSTATIC TESTING. THE CONTRACTOR SHALL OBTAIN A BACTERIOLOGICAL SAMPLE AFTER THE SYSTEM HAS BEEN FLUSHED. A CLEAN BACTERIOLOGICAL SAMPLE MUST BE OBTAINED PRIOR TO THE SYSTEM BEING PLACED INTO SERVICE.
- HYDROSTATIC TESTING: ALL WATER SYSTEM MAINS SHALL BE FILED PRESSURE TESTED TO A MINIMUM OF 150 PSI OR 1 1/2 TIMES THE STATIC OPERATING PRESSURE, WHICHEVER IS GREATER. MAXIMUM ALLOWABLE LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING: \*10 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY.
- ALL VALVES SHALL CONFORM TO OPEN LEFT CONVENTION PER CHEROKEE METROPOLITAN DISTRICT STANDARDS.
- WHEN IT IS NECESSARY TO RAISE OR LOWER WATER MAINS AT OTHER UTILITY CROSSINGS THE CONTRACTOR SHALL INSURE A MINIMUM CLEARANCE OF 18" WHERE POSSIBLE BETWEEN THE OUTSIDE DIAMETERS OF PIPES.
- WHILE CONSTRUCTING THE WATER AND WASTE WATER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR CONSTRUCTION" SET OF UPDATED PLANS AT ALL TIMES. APPROVED FIELD MODIFICATIONS TO THE PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE WATER SYSTEM.
- PRIOR TO TAPPING ANY EXISTING WATER MAIN THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL FOR SAID TAP IN ACCORDANCE WITH THE CHEROKEE METROPOLITAN DISTRICT STANDARDS.
- ALL NONMETALLIC PIPES SHALL HAVE TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE WITH NO. 12 COPPER CONNECTIONS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4" INTERVALS. TRACER WIRE SHALL BE JOINED 3-WAY OR 4-WAY LOCKABLE MECHANICAL CONNECTORS SPECIFICALLY MANUFACTURED FOR USE IN UNDERGROUND TRACER WIRE INSTALLATIONS. NON-LOCKING FRICTION FIT, TWIST-ON, OR TAPED CONNECTIONS ARE NOT PERMITTED. THE TRACER WIRE SHALL ALSO BE CORROSION BY EPOXY OR SILICON COATING. ROUTE TRACER WIRES TO SURFACE AT ALL VALVE BOXES.
- THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. PRIOR TO EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- SANITARY SEWER PIPE SHALL CONFORM TO ASTM D3034 SDR35 PVC.
- CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF NEW SANITARY SEWER SYSTEM.
- ALL SANITARY SEWER MANHOLES, LIDS, BASES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARD MANHOLE DETAILS (6" MIN DIAMETER), EXCEPT AS NOTED ON THESE PLANS, WHERE REQUIRED ON THESE PLANS, WATER TIGHT MANHOLES, LIDS AND CONNECTIONS SHALL BE PROVIDED BY COLORADO SPRINGS STANDARDS. ALL NEW MANHOLES (IF ANY) SHALL BE COATED & LINED PER CMD STANDARDS.
- SANITARY SEWER SERVICE LINES SHALL BE LOCATED PER THE DETAIL ON THE UTILITY SERVICE PLAN, OR AT THE DIRECTION OF THE INSPECTOR.
- OVERLOT GRADING AND STREET SUB-GRADE MUST BE WITHIN +/- ONE (1) FOOT PRIOR TO ANY UTILITY INSTALLATION.
- TRACER WIRE IS TO BE INSTALLED WITH ALL SANITARY SEWER MAIN LINES AND SERVICES (FROM THE MAIN LINE TO THE BUILDING STRUCTURE), AS OUTLINED IN COMMENT #13.
- MINIMUM DEPTH OF SANITARY SEWER IS 6 FEET OF COVER. THE FOLLOWING ALLOWABLE DEPTH RULES APPLY FOR BURY DEPTHS BETWEEN 1' AND 30' IN CONSIDERATION OF THE MINIMUM DEPTH SHALL BE APPLIED: (SEE CSU WASTEWATER LESS 2.5.B FOR MORE INFORMATION)  
DEPTH GREATER THAN 4 FEET (AND LESS THAN 20'): MATERIAL TYPE DR 11 HDPE  
DEPTH BETWEEN 2 & 4 FEET (AND UP TO 20 FEET): MATERIAL TYPE SDR 26 OR SDR 35 PVC/PS 46  
DEPTH BETWEEN 1 & 2 FEET (AND BETWEEN 20 & 30 FEET): MATERIAL TYPE DIP.
- WATER SERVICE MUST BE OVER THE SEWER AT ALL TIMES (MINIMUM 18" INCHES) OTHERWISE STEEL CASING MUST BE USED, SEWER SERVICE PIPE LOCATED WITHIN ONE FOOT OF THE WATER SERVICE LINE MUST BE CONSTRUCTED WITH SCH 40 PIPE OR DIP.
- ALL EXTERIOR SEWER CLEAN OUTS (CO) MUST HAVE A CAST IRON, TRAFFIC RATED COVER, OR EQUIVALENT CONCRETE COLLAR.
- UPON COMPLETION OF CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE DISTRICT, TWO (2) COPIES OF "AS-CONSTRUCTED" PLANS AND TWO (2) SETS OF ELECTRONIC DATA FILES SHALL BE SUBMITTED TO THE DISTRICT FOR RECORD.

- THE TWO (2) COPIES SHALL BE COMPLETE WITH ALL "AS-CONSTRUCTED" INFORMATION TOGETHER WITH A CERTIFICATION BY THE PARTY RESPONSIBLE FOR CONSTRUCTION THAT ALL DATA THEREON IS ACCURATE AND REPRESENTS ACTUAL CONSTRUCTED CONDITIONS.
- THE TWO PLAN SETS SHALL BE SUBMITTED ON SHEETS THAT ARE 22" X 34" IN SIZE.
- THE PLAN SET SHALL BE ON A DURABLE MEDIA THAT CAN BE RUN THROUGH PHOTOCOPIING EQUIPMENT.
- THE TWO ELECTRONIC DATA FORMATS SHALL BE SUBMITTED. THE FIRST ELECTRONIC DATA FILE SET SHALL BE IN AUTOCAD 2006 OR NEWER FORMAT WITH NO EXTERNAL REFERENCE DRAWINGS. ALL EXTERNAL REFERENCES MUST BE BOUND INTO THE DRAWING SET. THE SECOND SET OF ELECTRONIC DATA FILES SHALL BE IN ADOBE ADOBE .PDF FORMAT.
- "AS-CONSTRUCTED" PLANS SHALL BE SUBMITTED WITHIN TWO WEEKS OF COMPLETION OF THE WATER AND/OR SANITARY SEWER UTILITIES.
- NO AUTHORIZATION TO CONNECT TO THE SYSTEM OR DISCHARGE TO THE SYSTEM WILL BE ALLOWED UNTIL THE "AS-CONSTRUCTED" DOCUMENTS HAVE BEEN RECEIVED AND ACCEPTED BY THE DISTRICT.
- ALL PLANS, SPECIFICATIONS AND SUPPORTING DOCUMENTS SHALL BE PREPARED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF COLORADO. ALL PLANS AND SPECIFICATIONS SHALL BEAR THE SEAL AND SIGNATURE OF SAID LICENSED PROFESSIONAL ENGINEER.

**BENCHMARK:**

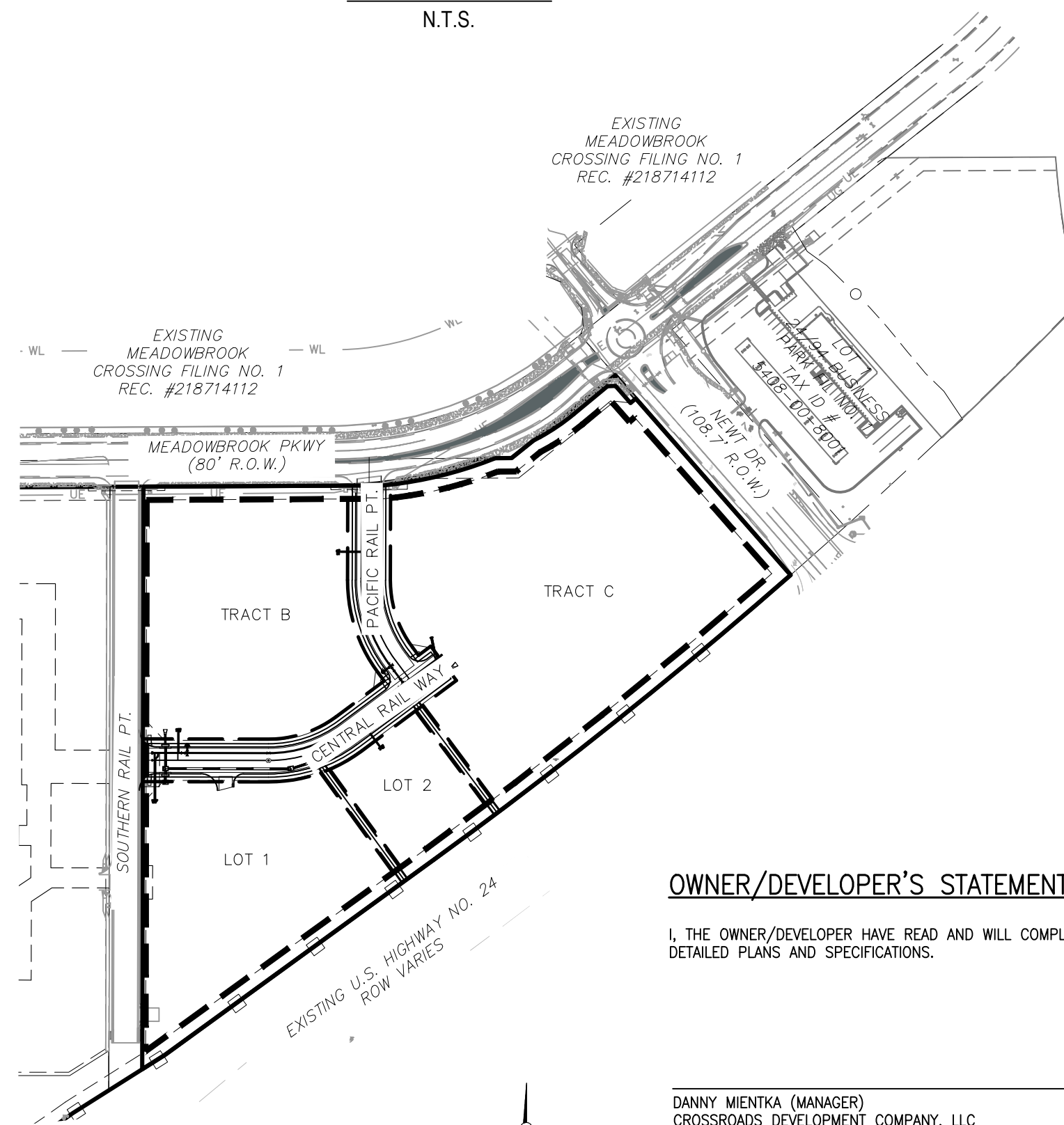
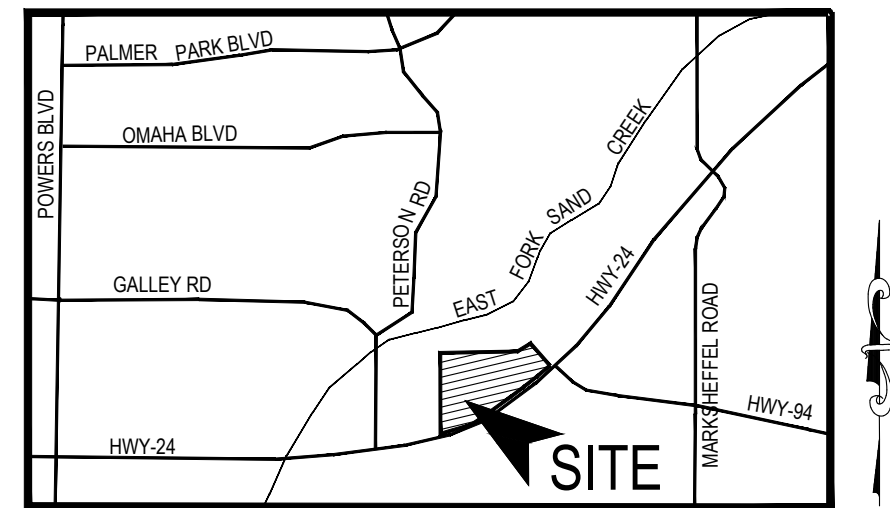
- NATIONAL GEODETIC VERTICAL DATUM OF 1929, MONUMENT R76 SET IN TOP OF CONCRETE MONUMENT ELEVATION = 6286.32'
- NATIONAL GEODETIC VERTICAL DATUM OF 1929, FOUND #5 REBAR AND ORANGE CAP PLS 32820 ELEVATION = 6325.50'

**BASIS OF BEARINGS**

THE EAST LINE OF TRACT C "CROSSROADS MIXED USE FILING NO. 2" RECORDED UNDER RECEPTION NO 22714975 IN THE RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT EACH END WITH A SET NO. 5 REBAR WITH AN ORANGE PLASTIC CAP STAMPED "M&S CIVL PLS 25966", WHICH BEARS N007°07'04"E A DISTANCE OF 871.79 FEET.

**SHEET INDEX**

SHEET 1	TITLE SHEET
SHEET 2	WATER PLAN
SHEET 3	WATER LOWERINGS AND DETAILS
SHEET 4	SANITARY PLANS
SHEET 5	UTILITY SERVICE PLANS



**SITE MAP**  
N.T.S.

**OWNER/DEVELOPER'S STATEMENT:**

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS IN THESE DETAILED PLANS AND SPECIFICATIONS.

DANNY MIENKA (MANAGER)  
CROSSROADS DEVELOPMENT COMPANY, LLC

**EL PASO COUNTY**

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

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

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E.  
COUNTY ENGINEER / ECM ADMINISTRATOR

**AGENCIES:**

- OWNER/DEVELOPER: CROSSROADS DEVELOPMENT COMPANY, LLC  
90 S. CASCADE AVE., SUITE 1500  
COLORADO SPRINGS, CO 80903  
DANNY MIENKA (719) 448-4034
- CIVIL ENGINEER: M & S CIVIL CONSULTANTS, INC.  
212 N. WAHSATCH, SUITE 305  
COLORADO SPRINGS, CO 80903  
VIRGIL A. SANCHEZ P.E. (719) 955-5485
- COUNTY ENGINEERING: EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT  
2880 INTERNATIONAL CIRCLE, SUITE 110  
COLORADO SPRINGS, CO 80910  
GILBERT LAFORCE, P.E. (719) 520-6300
- TRAFFIC ENGINEERING: EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS  
3275 AKERS DRIVE  
COLORADO SPRINGS, CO 80922  
JENNIFER IRVINE, P.E. (719) 520-6460
- WATER RESOURCES: CHEROKEE METROPOLITAN DISTRICT  
6250 PALMER PARK BOULEVARD  
COLORADO SPRINGS, CO 80915-1721  
JEFF MUNGER (719) 597-5080
- FIRE DISTRICT: CIMARRON HILLS FIRE DEPARTMENT  
1835 TUSKEGEE PLACE  
COLORADO SPRINGS, CO 80915  
(719) 591-0960
- GAS DEPARTMENT: COLORADO SPRINGS UTILITIES  
7710 DURANT DR.  
COLORADO SPRINGS, CO 80947  
TIM WENDT (719) 668-3556
- ELECTRIC DEPARTMENT: COLORADO SPRINGS UTILITIES  
7710 DURANT DR.  
COLORADO SPRINGS, CO 80947  
TIM WENDT (719) 668-3556
- COMMUNICATIONS: QWEST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987  
AT&T (LOCATORS) (719) 635-3674

**ENGINEER'S STATEMENT**

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLANS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE CHEROKEE METROPOLITAN DISTRICT. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS REPORT.

VIRGIL A. SANCHEZ, COLORADO P.E. #37160 DATE  
FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

**WATER INSTALLATION CORROSION CONTROL REQUIREMENTS**

REQUIRED, DESCRIBED AS FOLLOWS: PROVIDE CATHODIC PROTECTION & WRAP ALL METAL JOINTS, VALVES, PIPES AND HYDRANTS.

**CHEROKEE METROPOLITAN DISTRICT WATER & WASTEWATER PLAN APPROVAL**

THE CHEROKEE METROPOLITAN DISTRICT RECOGNIZES THE DESIGN PROFESSIONAL OF RECORD AS THE LICENSED ENGINEER HAVING RESPONSIBILITY FOR THE SUBMITTED DESIGN AND THE DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY. AS SUCH, THE APPROVAL GRANTED HEREIN IS FOR THE CONSTRUCTION OF THE FACILITIES AS REPRESENTED ON THESE DOCUMENTS. APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE BELOW AND RESUBMITAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**CIMARRON HILLS FIRE DEPARTMENT**

ACCORDING TO THE MODELED CALCULATIONS REVIEWED BY THE GOVERNING WATER DISTRICT AND/OR COLORADO REGISTERED CIVIL ENGINEER/DESIGNER: THE THEORETICAL AVAILABLE FIRE FLOW AT NODE "FH-1" IS 2000 GPM UNDER MAXIMUM DAILY DEMAND CONDITIONS AT 28.3PSI RESIDUAL. THE ACTUAL FIRE FLOW MAY VARY DUE TO VARIOUS PARAMETERS. UPON DETAILED REVIEW OF THE AVAILABLE WATER SUPPLY, FIRE HYDRANT LOCATIONS AND HOSE LAY DISTANCES, THESE PLANS ARE HEREBY CONSIDERED APPROVED.

FIRE DEPARTMENT SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

CROSSROADS MIXED USE FILING NO.2		TITLE SHEET	
PROJECT NO. 18-004	SCALE: HORIZONTAL: 1"=200' VERTICAL: 1"=5'	DATE: 11/23/2022	UT01
DESIGNED BY: TAU	DRAWN BY: TAU	CHECKED BY: VAS	SHEET 1 OF 5

212 N. WAHSATCH AVE., SUITE 305  
COLORADO SPRINGS, CO 80903  
PHONE: 719.955.5485



FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

REVISIONS:	NO.	DATE:	BY:	DESCRIPTION:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: C:\180044-Crossroads MU-Retail\Equity Group\img\Const Dwg\Sanitary\UT01.dwg PlotStamp: 11/23/2022 9:32 AM





CROSSROADS MIXED USE FILING NO.2	
WATER PLANS	
PROJECT NO. 18-004	DATE: 11/23/2022
DESIGNED BY: TAU	SCALE: HORIZONTAL: 1"=50'
DRAWN BY: TAU	VERTICAL: 1"=5'
CHECKED BY: VAS	SHEET 2 OF 5
WT01	

212 N. WASHCATCH AVE, STE 305  
 COLORADO SPRINGS, CO 80903  
 PHONE: 719.955.5465

CIVIL CONSULTANTS, INC.

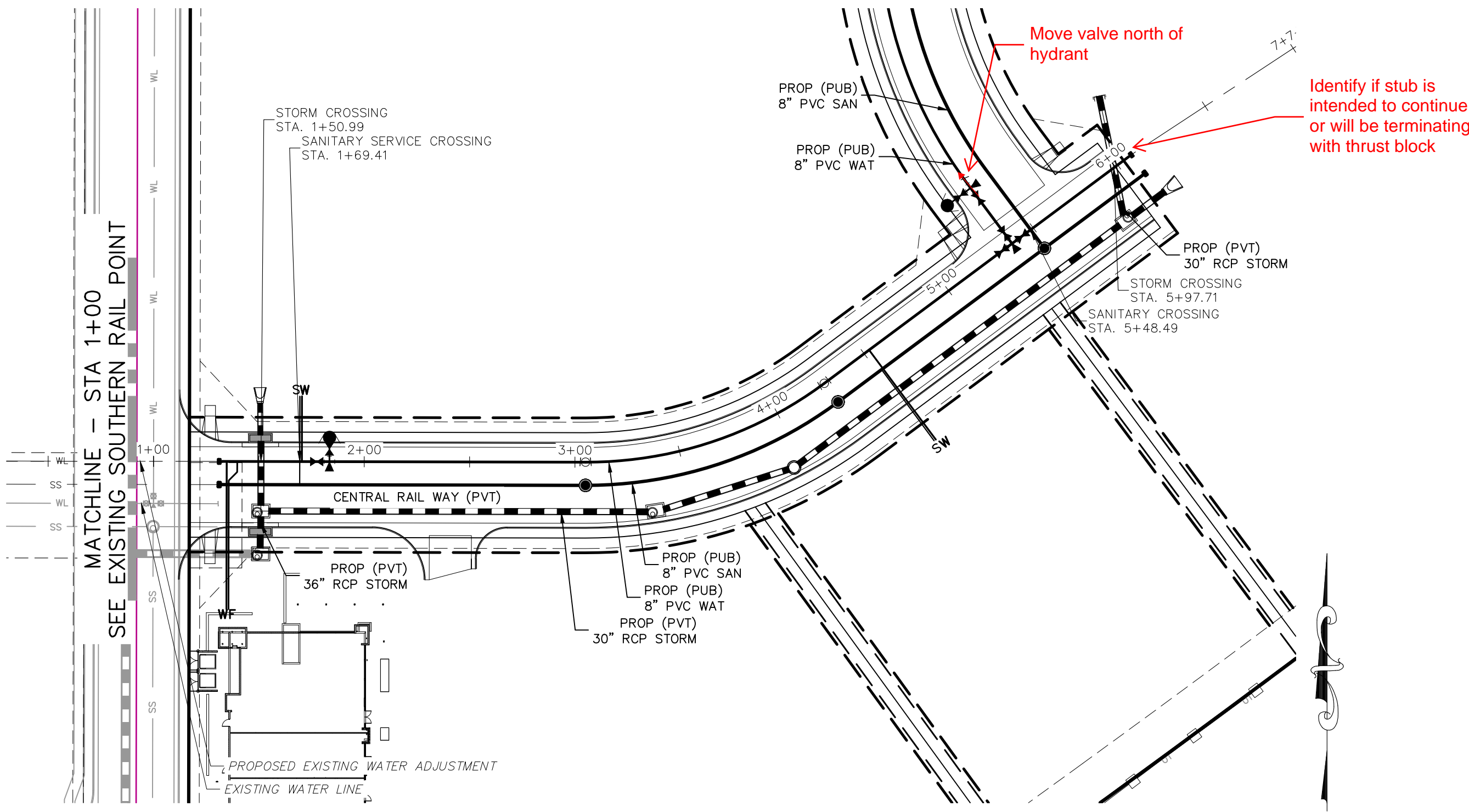
FOR AND ON BEHALF OF  
 WKS CIVIL CONSULTANTS, INC.

PROFESSIONAL ENGINEER  
 VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

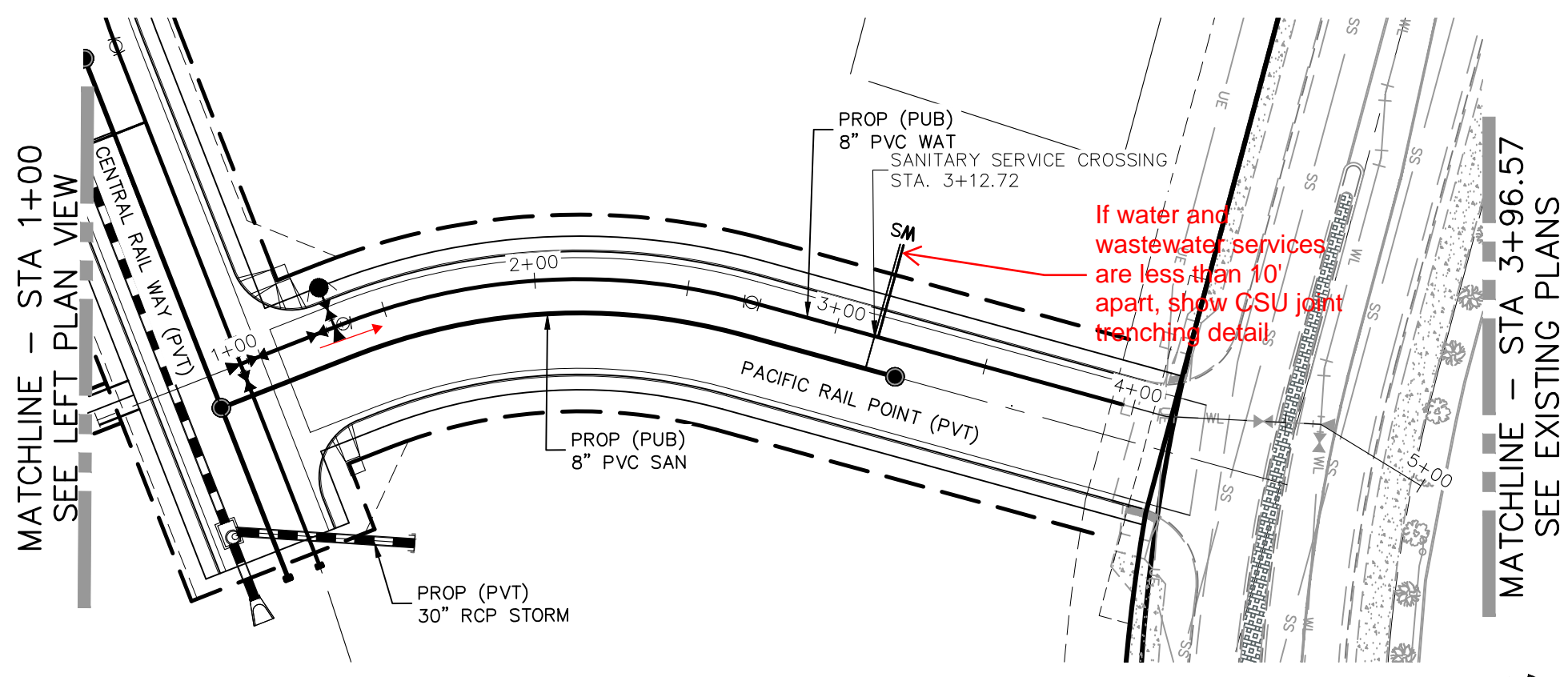
REVISIONS:	NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE:

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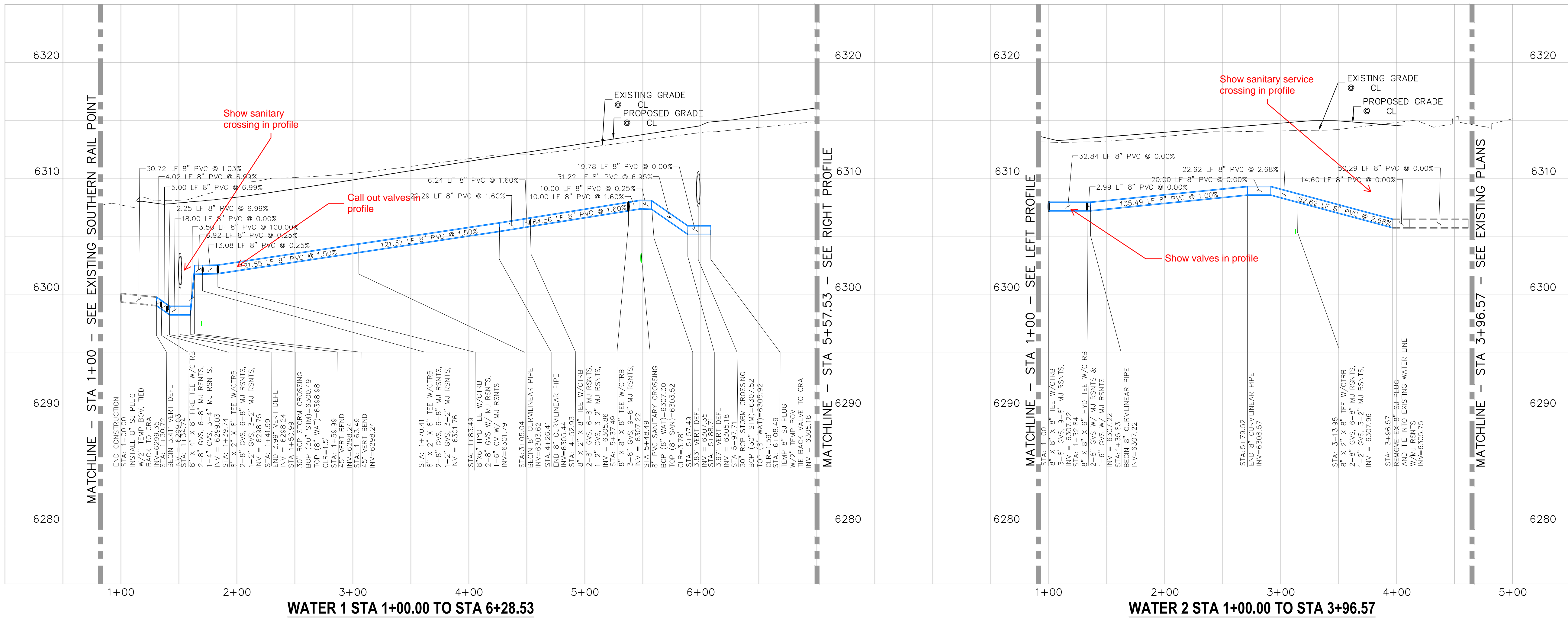
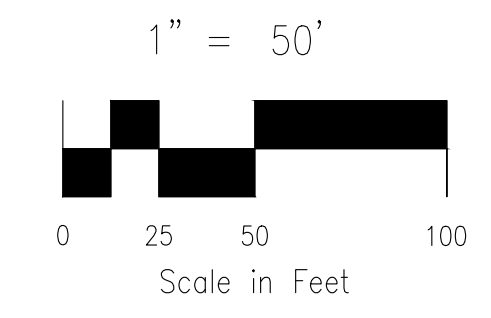
CAUTION



**CENTRAL RAIL WAY  
 WATER 1  
 STA 1+00.00 TO STA 6+28.53**



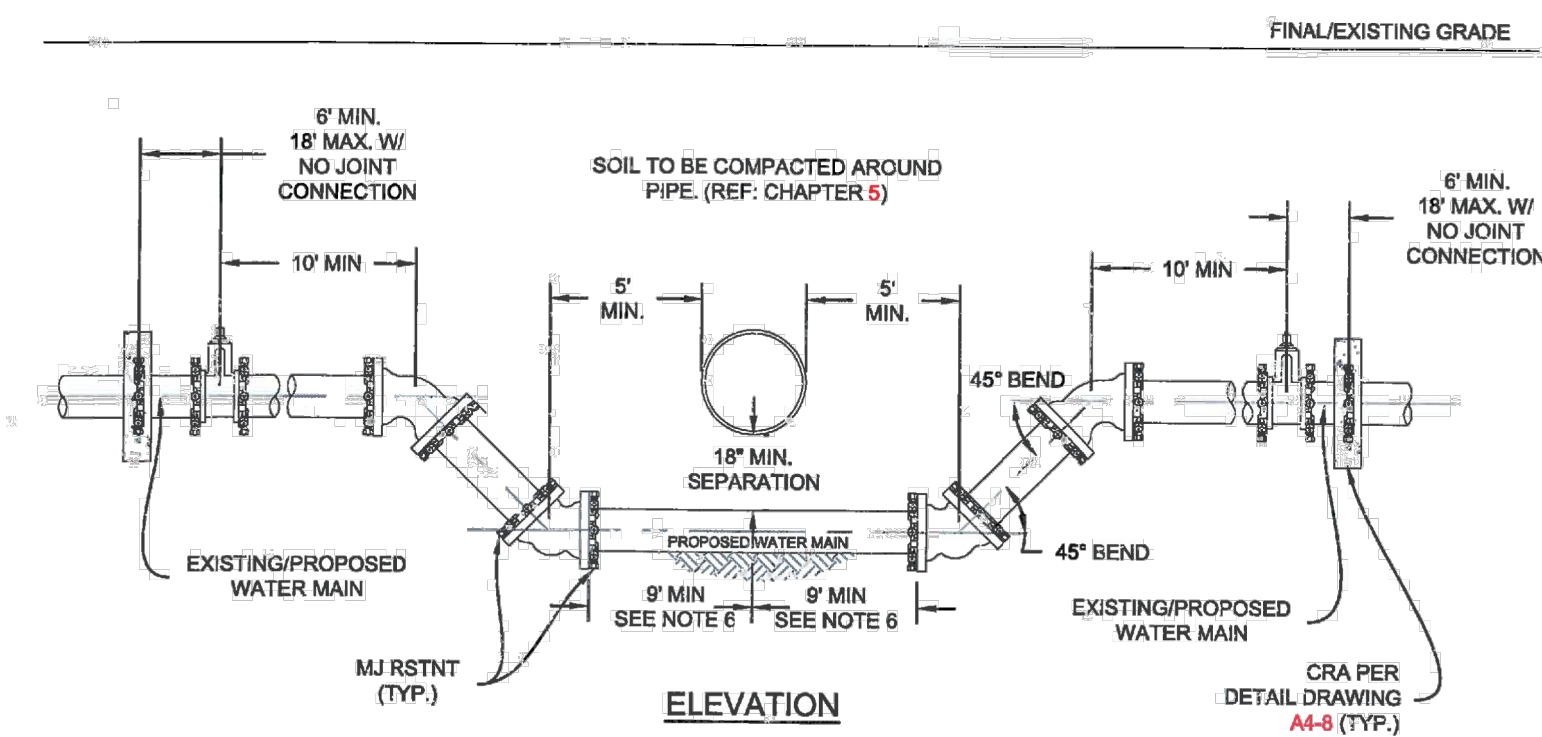
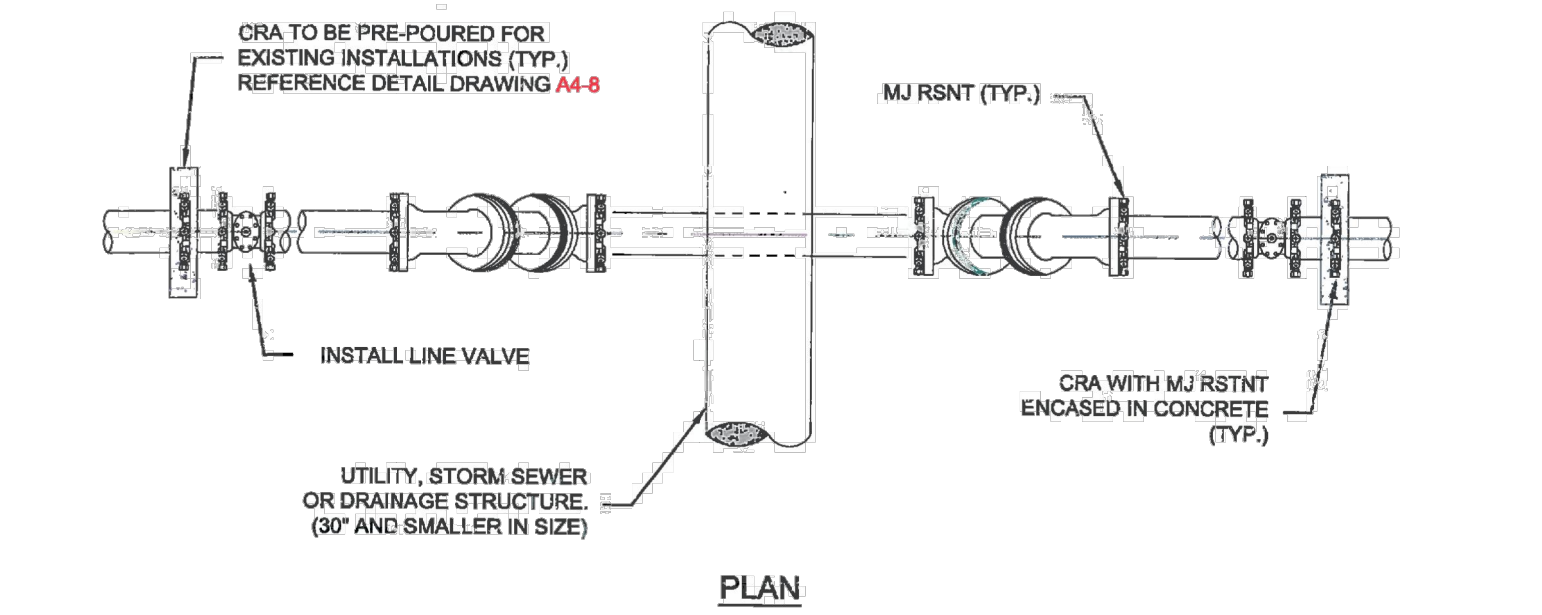
**PACIFIC RAIL POINT  
 WATER 2  
 STA 1+00.00 TO STA 3+96.57**



**WATER 1 STA 1+00.00 TO STA 6+28.53**

**WATER 2 STA 1+00.00 TO STA 3+96.57**



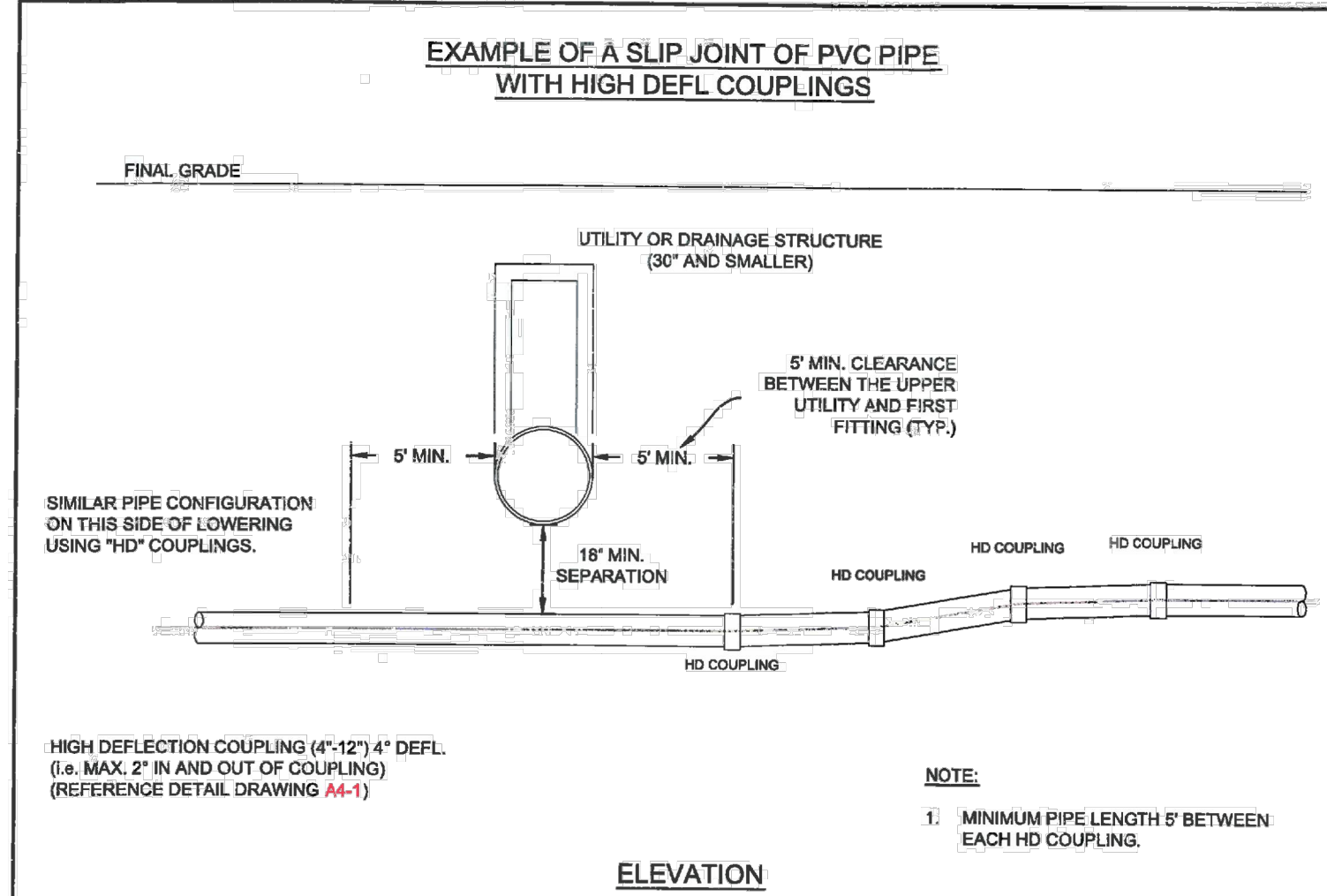


- NOTES:**
1. ALL DUCTILE IRON FITTINGS AND PIPE SHALL BE CATHODICALLY PROTECTED PER SECTION 2.6.I.
  2. ALL FITTINGS SHALL HAVE MJ RESTRAINTS IN ACCORDANCE WITH CHAPTER 5.
  3. EXAMPLE CAN VARY DUE TO SITE CONDITIONS AND COLORADO SPRINGS UTILITIES INSPECTOR'S DIRECTION.
  4. RESTRAINED JOINTS ARE REQUIRED WITHIN LOWERING.
  5. NO TAPS OR TEES ARE ALLOWED WITHIN THE LOWERING.
  6. WHERE WATER MAIN CROSSES UNDER STORM SEWER, WASTEWATER OR NON-POTABLE WATER INFRASTRUCTURE, A MINIMUM OF 9 FEET REQUIRED BETWEEN THE CENTERLINE OF THE CROSSING AND THE FIRST JOINT. THIS MEETS THE REQUIREMENTS FOR SECONDARY CONTAINMENT AS DESCRIBED IN SECTION 2.6.H.2.

Colorado Springs Utilities  
It's how we're all connected

**LOWERING DETAIL  
UTILITY CROSSING 30" & SMALLER**

A7-1  
DATED 01/2018



**PER SLIP JOINT OF PVC PIPE WITH HIGH DEFLECTION COUPLINGS**

PIPE DATA	MPPS TOTAL JOINT	DESIGN DEFLECTION (80% MAX)		MIN. RADIUS FOR DEFLECTING CURVES WITH HIGH DEFL. COUPLINGS
		HORZ. DEFL.	VERT. DEFL.	
4"	5'00"	4'00"	0.89%	288'
6"	5'00"	4'00"	0.89%	288'
8"	5'00"	4'00"	0.89%	288'
12"	5'00"	4'00"	0.89%	288'

NO DEFLECTION COUPLINGS FOR 18" OR GREATER

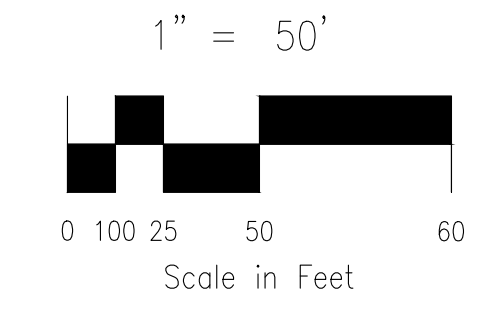
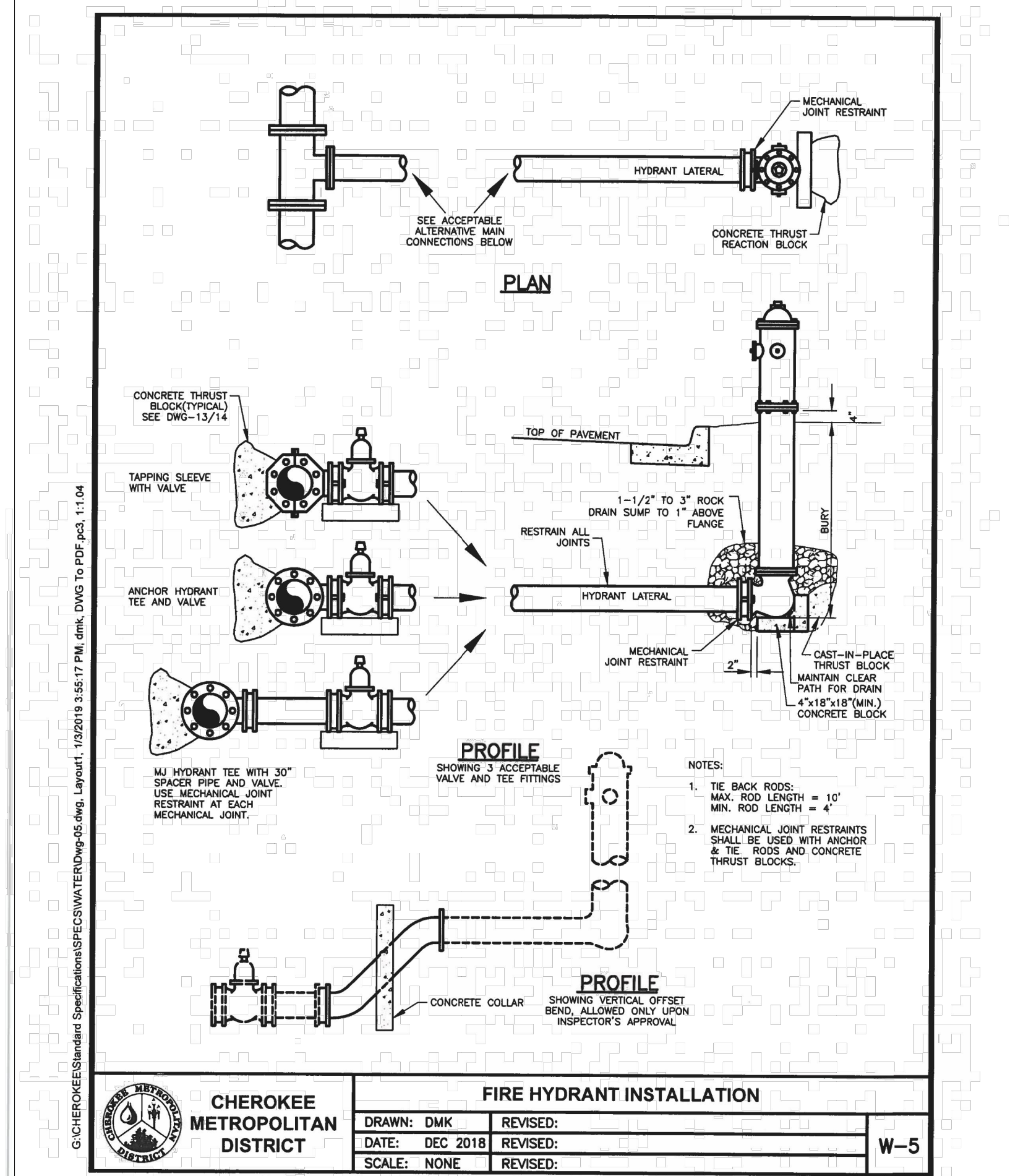
DATA FOR PVC PIPES

- NOTES:**
1. SEE DETAIL DRAWING A4-1 DETAIL FOR HORIZONTAL RADIUS.

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**LOWERING WITH HIGH DEFLECTION COUPLINGS**

A7-9  
DATED 03/2014



CROSSROADS MIXED USE FILING NO.2

UTILITY DETAILS

PROJECT NO. 18-004

SCALE: HORIZONTAL: N/A

DATE: 11/23/2022

DESIGNED BY: TAU

DRAWN BY: TAU

CHECKED BY: VAS

SHEET 3 OF 5

WT02

212 N. WASHATCH AVE., STE 305  
COLORADO SPRINGS, CO 80903  
PHONE: 719.955.5485

**CIVIL CONSULTANTS, INC.**

FOR AND ON BEHALF OF  
MKS CIVIL CONSULTANTS, INC.

REGISTERED PROFESSIONAL ENGINEER  
37160  
11/23/2022

VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

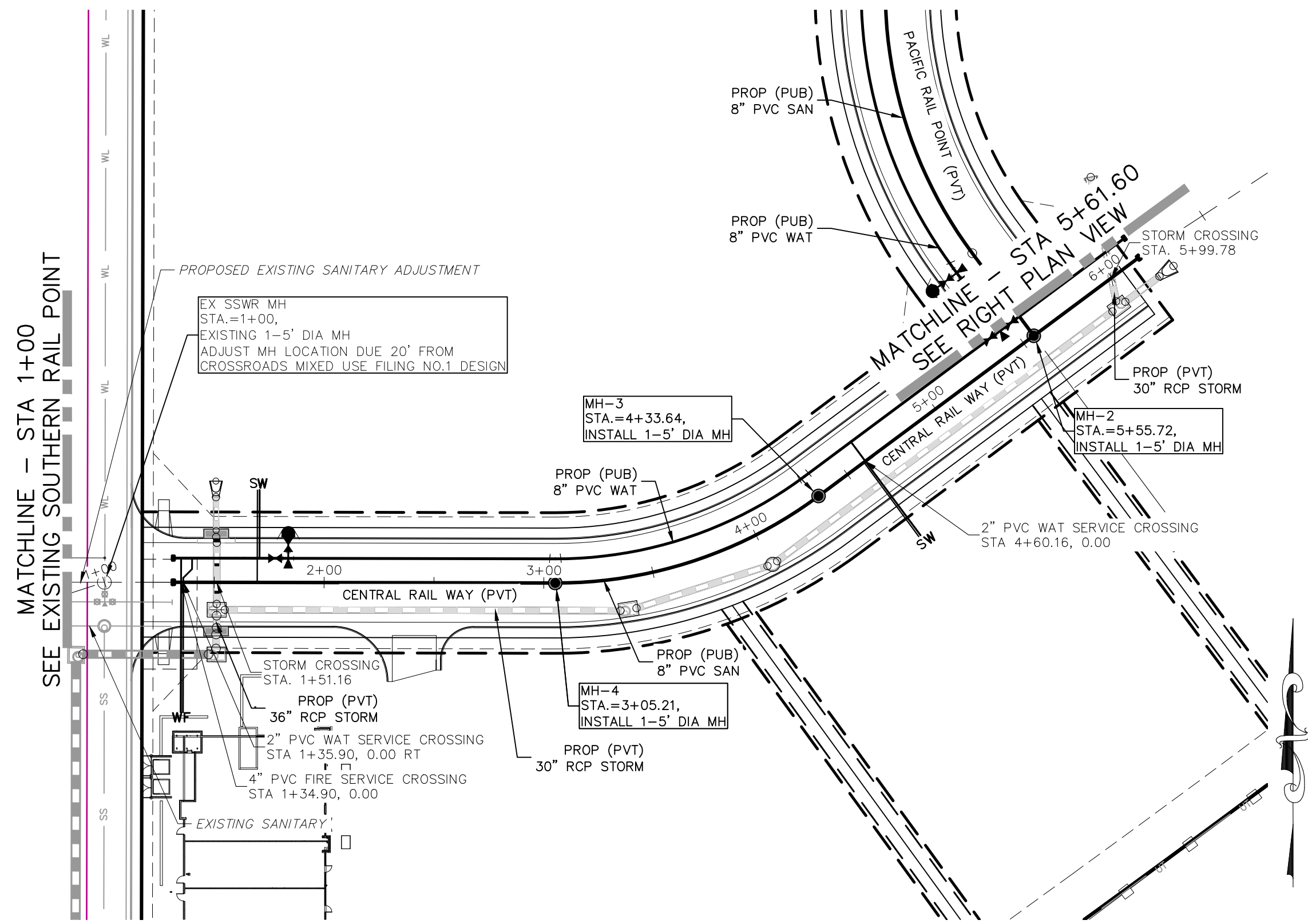
REVISIONS:

NO.	DATE	BY	DESCRIPTION	APPROVED BY	DATE

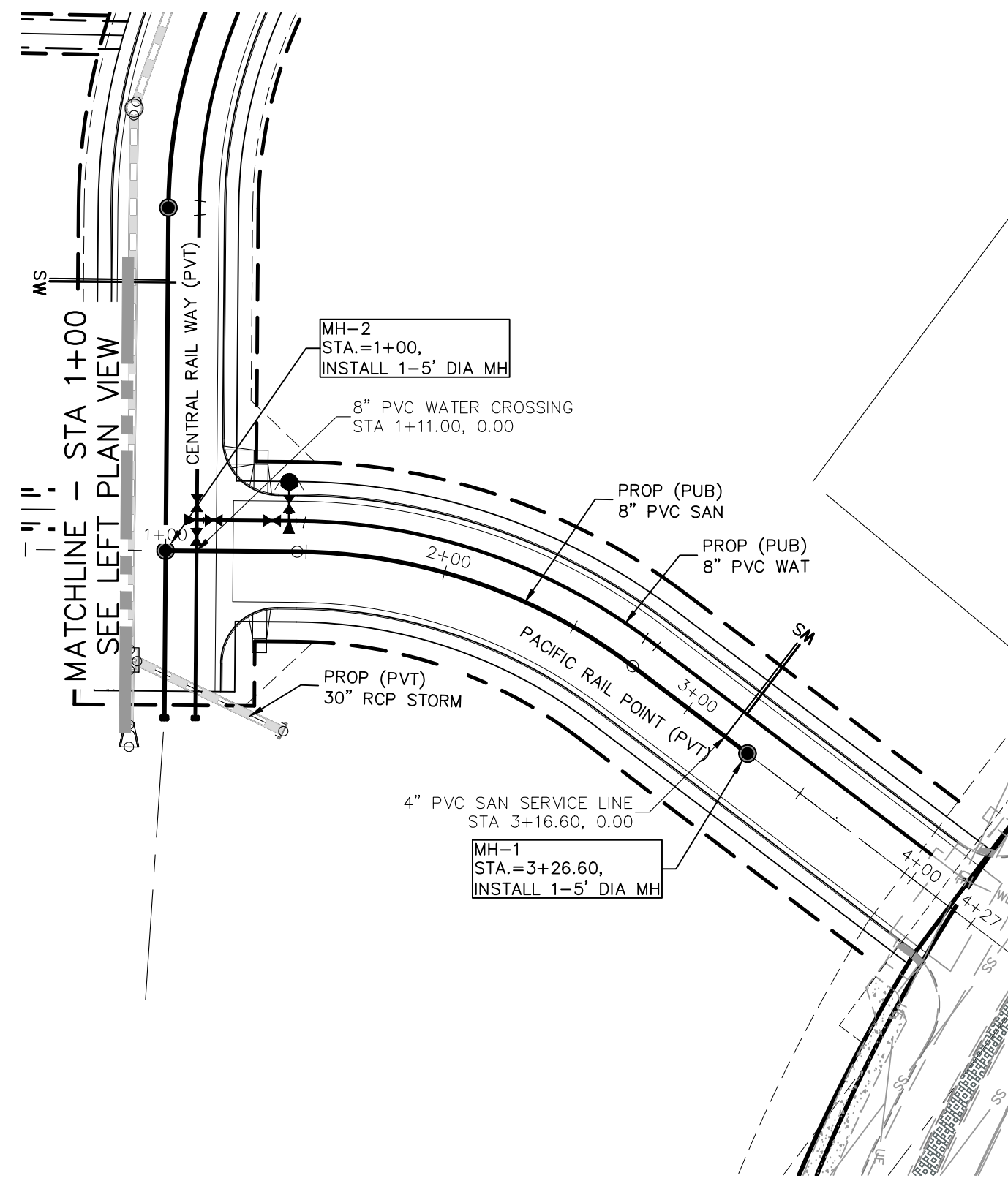
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CAUTION





**CENTRAL RAIL WAY  
SANITARY 1  
STA 1+00.00 TO STA 6+21.60**



**PACIFIC RAIL POINT  
SANITARY 2  
STA 1+00.00 TO STA 3+26.60**

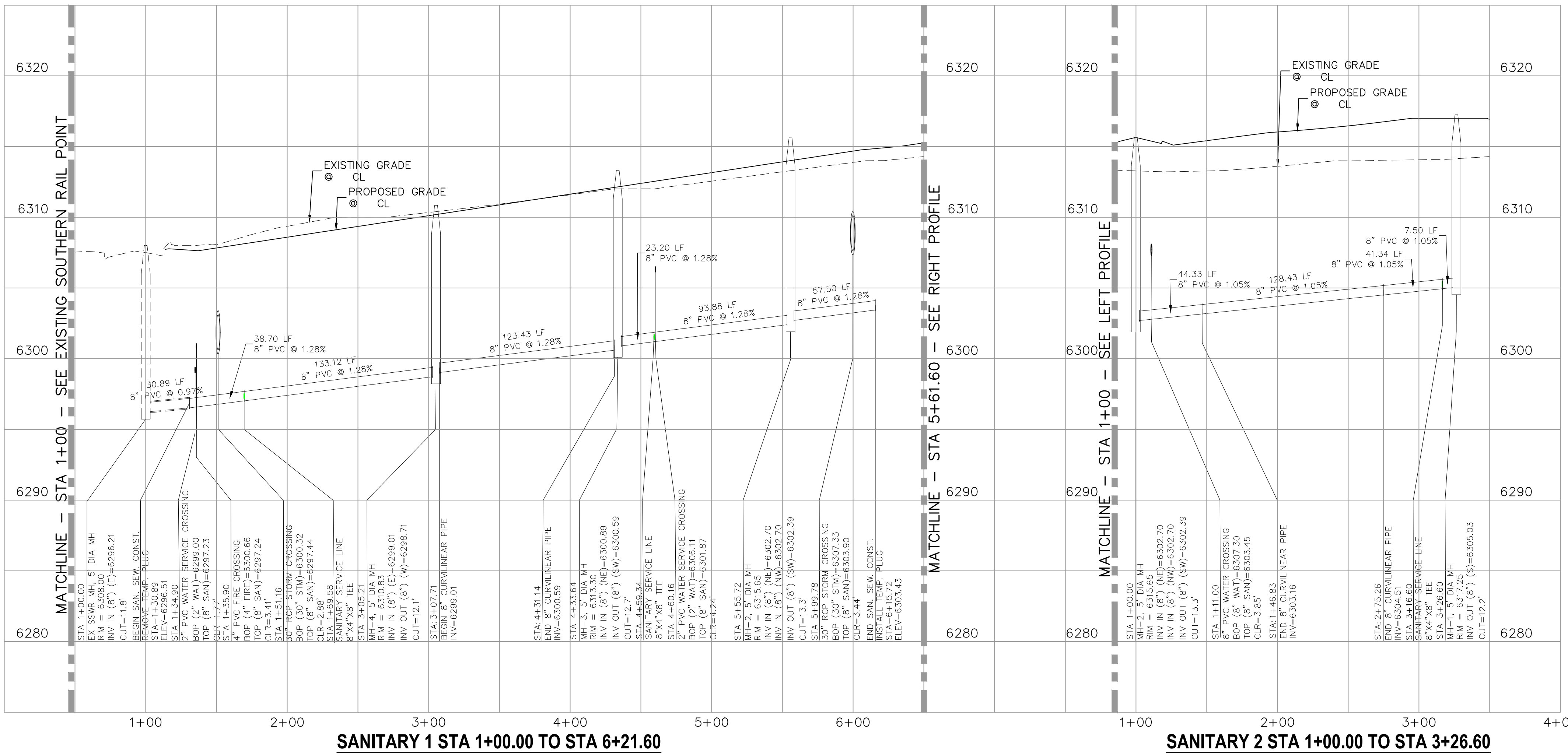
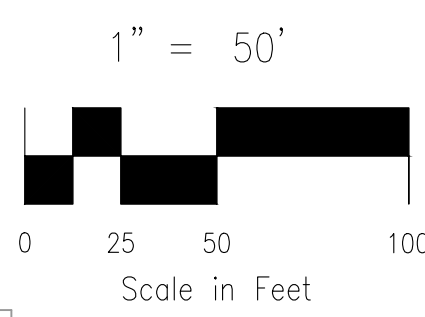
**ABBREVIATION LEGEND**

CL	CENTERLINE
LT	LEFT
RT	RIGHT
C&G	CURB AND GUTTER
EL	ELEVATION
W	WEST
CONST	CONSTRUCTION
N	NORTH
WTR	WATER
S	SOUTH
STM	STORM SEWER
PUB	PUBLIC
EX	EXISTING
STA	STATION
NTS	NOT TO SCALE
PROP	PROPOSED
SAN	SANITARY SEWER
CMD	CHEROKEE METROPOLITAN DISTRICT



**GENERAL:**

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET COLORADO SPRINGS UTILITIES' WASTEWATER LINE EXTENSION AND SERVICE STANDARDS (WASTEWATER STANDARDS) OR APPROVED EQUAL BY CHEROKEE METROPOLITAN DISTRICT.
2. THE CONTRACTOR SHALL OBTAIN LOCATES PRIOR TO ANY EXCAVATION.
3. CHEROKEE METRO DISTRICT DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE ENGINEER OF RECORD IMMEDIATELY.
4. NO TREES OR STRUCTURES ARE PERMITTED WITHIN FIFTEEN FEET (15') OF A WASTEWATER MAIN.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF COLORADO SPRINGS UTILITIES.
6. ALL FIELD STAKING SHALL COMPLY WITH THE WASTEWATER STANDARDS.
7. ALL MANHOLES LOCATED WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO FINISH GRADE. IF MANHOLES ARE IN POOR CONDITION OR IF THE DISTANCE BETWEEN THE RING/COVER AND CONE OF THE MANHOLE EXCEEDS THE WASTEWATER STANDARDS, THE CONTRACTOR MAY BE REQUIRED TO REPLACE PART OR ALL OF THE EXISTING MANHOLES.
8. REUSE OR SALVAGE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE CHEROKEE METRO DISTRICT INSPECTOR.
9. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL.



**SANITARY 1 STA 1+00.00 TO STA 6+21.60**

**SANITARY 2 STA 1+00.00 TO STA 3+26.60**

CROSSROADS MIXED USE FILING NO.2	
SANITARY SEWER PLANS	
PROJECT NO. 18-004	DATE: 11/23/2022
DESIGNED BY: TAU	SCALE: HORIZONTAL: 1"=50'
DRAWN BY: TAU	VERTICAL: 1"=5'
CHECKED BY: VAS	SHEET 4 OF 5
SS01	

212 N. WABATCH AVE, STE 305  
COLORADO SPRINGS CO 80903  
PHONE: 719.555.5485

**CIVIL CONSULTANTS, INC.**

FOR AND ON BEHALF OF  
MKS CIVIL CONSULTANTS, INC.

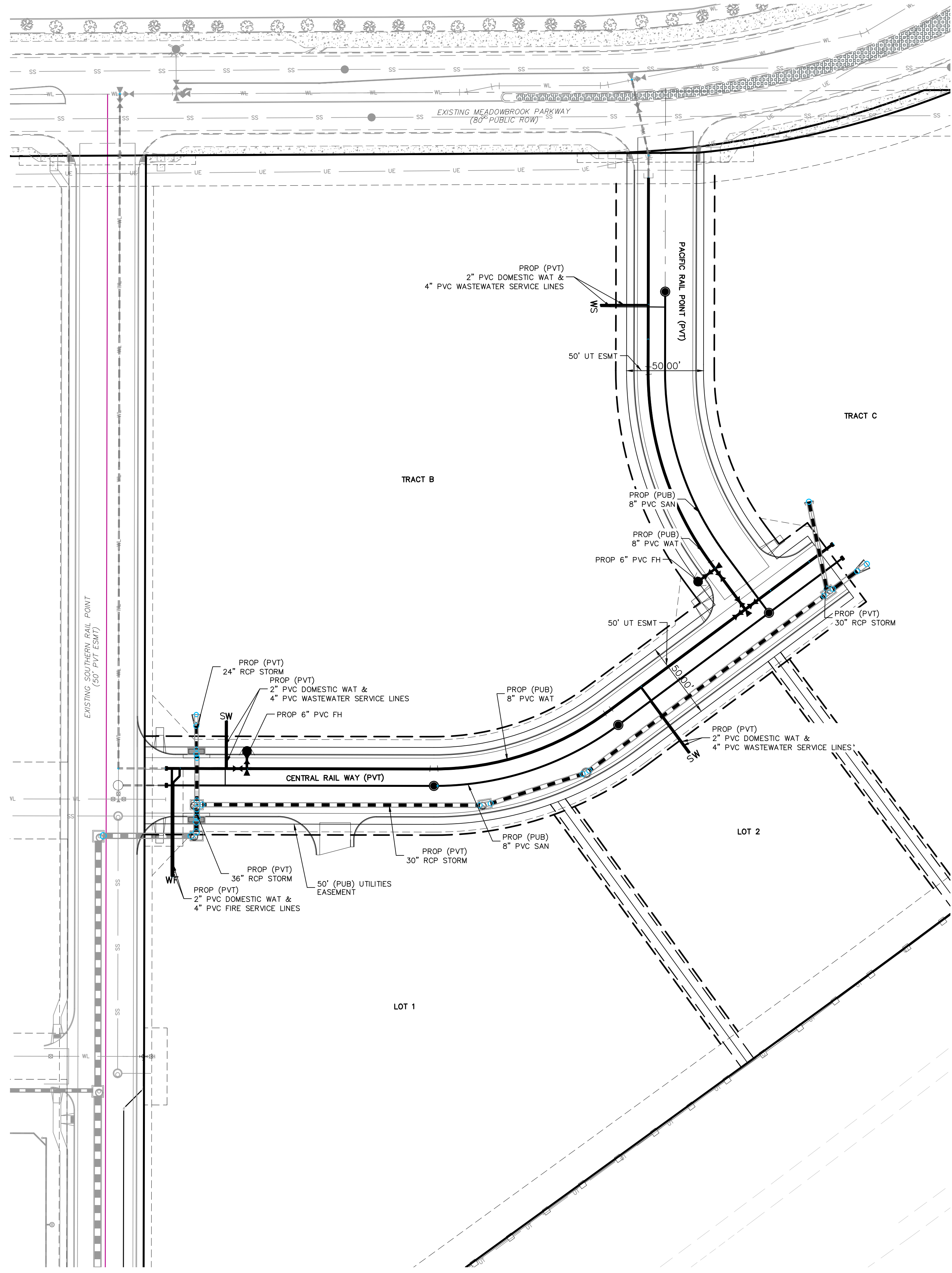
Virgil A. Sanchez, Colorado, P.E. No. 37160

REVISIONS:	NO.	DATE:	BY:	DESCRIPTION:	APPROVED BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARE OF THESE PLANS.

CAUTION





**ABBREVIATION LEGEND**

CL	CENTERLINE
CONST	CONSTRUCTION
C&G	CURB AND GUTTER
EX	EXISTING
NTS	NOT TO SCALE
PROP	PROPOSED
PUB	PUBLIC
PVT	PRIVATE
R.O.W	RIGHT OF WAY
SAN	SANITARY
STA	STATION
TYP	TYPICAL
(XXX)	HOUSE ADDRESS



CROSSROADS MIXED USE FILING NO.2	
UTILITY SERVICE PLANS	
PROJECT NO. 18-004	DATE: 11/23/2022
DESIGNED BY: TAU	HORIZONTAL SCALE: 1"=40'
DRAWN BY: TAU	VERTICAL SCALE: 1"=5'
CHECKED BY: VAS	
	SHEET 5 OF 5
	UT02

212 N. WASHATCH AVE., STE 305  
 COLORADO SPRINGS, CO 80903  
 PHONE: 719.955.5465

**CIVIL CONSULTANTS, INC.**

FOR AND ON BEHALF OF  
 WKS CIVIL CONSULTANTS, INC.

Virgil A. Sanchez, Colorado, P.E. No. 37160

NO.	DATE	BY	DESCRIPTION	APPR'D. BY	DATE

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**CAUTION**

