



**GENERAL NOTES:**

- ALL CONSTRUCTION SHALL COMPLY WITH STONEGATE VILLAGE METROPOLITAN DISTRICT SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES, THE TOWN OF PARKER, DOUGLAS COUNTY, AND THE DISTRICT ENGINEER PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.  
  
ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, HE/SHE SHALL CONTACT THE ENGINEER IMMEDIATELY.
- THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48-HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN, AT HIS/HER EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
- ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3,000-POUND COMPRESSION STRENGTH.
- THE DESIGN ENGINEER SHALL SUBMIT ONE SET OF ROLLED "AS-BUILT" BLUELINE PRINTS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL PRIOR TO PRINTING MYLAR SEPIAS FOR THE DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE MYLAR SEPIA PRINTS SHALL BE TRANSMITTED TO THE STONEGATE VILLAGE METROPOLITAN DISTRICT OFFICE AND AN ADDITIONAL SET OF ROLLED BLUELINE PRINTS SHALL BE TRANSMITTED TO THE DISTRICT ENGINEER'S OFFICE PRIOR TO PROBATIONARY ACCEPTANCE.
- ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
- TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO 1-YEAR FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS 1-FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
- NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER.
- GRADING IS REQUIRED TO BE ADVANCED TO AT LEAST SUBGRADE LEVEL PRIOR TO UTILITY INSTALLATION. SURVEYOR CONFIRMATION IS REQUIRED.

**WATER MAIN NOTES**

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION. ALL WORK SHALL BE INSPECTED AND APPROVED BY PERSONNEL OF THE STONEGATE VILLAGE METROPOLITAN DISTRICT AND THE DISTRICT ENGINEER.
- ALL WATER MAINS SHALL BE CLASS 50 DUCTILE IRON PIPE (AWWA C-151-71) OR PVC 6-INCH THROUGH 12-INCH C-900 CLASS 200. ALL JOINTS AND FITTINGS SHALL BE IN ACCORDANCE WITH THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS. WATER MAINS 20-INCH AND LARGER SHALL BE CLASS 51. ANY VARIATION OF THIS STANDARD SHALL BE NOTED ON THE PLANS. ALL D.I. PIPE FITTINGS SHALL BE POLYETHYLENE WRAPPED.
- ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS ARE TO BE RODDED. ALL FITTINGS SHALL BE WRAPPED WITH 8-MIL MINIMUM THICKNESS POLYETHYLENE MATERIAL PER AWWA STANDARD C-105.
- ALL WATER VALVES SHALL BE OPEN RIGHT.
- THERE SHALL BE A MINIMUM COVER OF 4-1/2- FEET OVER ALL WATER MAINS.
- FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE. HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPE, FITTINGS, VALVES, MATERIALS, AND LABOR NECESSARY TO INSTALL THE HYDRANT COMPLETE IN PLACE. ACCEPTABLE MODELS ARE MUELLER CENTURION MODEL 423 OR WATEROUS COMPANY PACER WB-67 MODEL WITH BRONZE BUDED SHOW AND BRONZE SHAFT COUPLING, THE 4-1/2-INCH NOZZLE TO HAVE N.S.T. THREADS.
- ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS.
- CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS. THE LINES SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA C-603, "DISINFECTING WATER MAINS." THE PREFERRED METHOD IS TO USE SUFFICIENT CHLORINE TABLETS TO PRODUCE A 50-MG TO 1 SOLUTION. THESE TABLETS SHOULD BE ADHERED TO THE TOP OF THE PIPE SECTION WITH PERMATEX NO.1 (RED). THE CHLORINATION OF ANY FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING. STERILIZATION AND FLUSHING OF ALL MAINS SHALL BE INSPECTED COPY OF THE CERTIFIED BY HEALTH DEPARTMENT HAVING JURISDICTION. ONE COPY OF THE CERTIFICATION SHALL STATE THE LOCATION OF THE MAIN, THAT THE MAIN HAS BEEN INSPECTED BY A REPRESENTATION OF THE HEALTH DEPARTMENT HAVING JURISDICTION, AND WAS FOUND TO COMPLY WITH THE PROCEDURES SET FORTH BY THAT DEPARTMENT.
- HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS. ALL PIPE SHALL BE FIELD PRESSURE-TESTED TO A MINIMUM OF 150 PSI. ALL TESTING SHALL BE DONE IN THE PRESENCE OF A STONEGATE VILLAGE METROPOLITAN DISTRICT INSPECTOR. LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINES VALVES SHALL NOT EXCEED THE LIMITS SET FORTH IN THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
- VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES, WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER VALVE LOCATIONS, SUCH AS WHERE CROSS-PANS EXIST, ARE SHOWN ON THE PLANS.
- WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSINGS, A MINIMUM CLEARANCE OF 1-1/2- FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
- THE CONTRACTOR SHALL HAVE IN HIS/HER POSSESSION AT ALL TIMES ONE SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE STONEGATE VILLAGE METROPOLITAN DISTRICT AND THE DISTRICT ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE STONEGATE VILLAGE METROPOLITAN DISTRICT AND THE DISTRICT ENGINEER AT LEAST 48-HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48-HOURS PRIOR TO RE-START.
- PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
- COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
- VALVE BOXES: TYLER SCREW-TYPE 6-INCH CAST-IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 1560 OVAL BASE. CLAY AND BAILEY SCREW-TYPE 6 INCH CAST-IRON VALVE BOX ASSEMBLY NO. P-108 WITH NO. 106 LARGE OVAL BASE.
- ALL PIPE LENGTHS ARE APPROXIMATE.
- AT LEAST 5-DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVE OF OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER.
- 12 GAUGE COPPER TRACER WIRE REQUIRED ON ALL WATER LINES

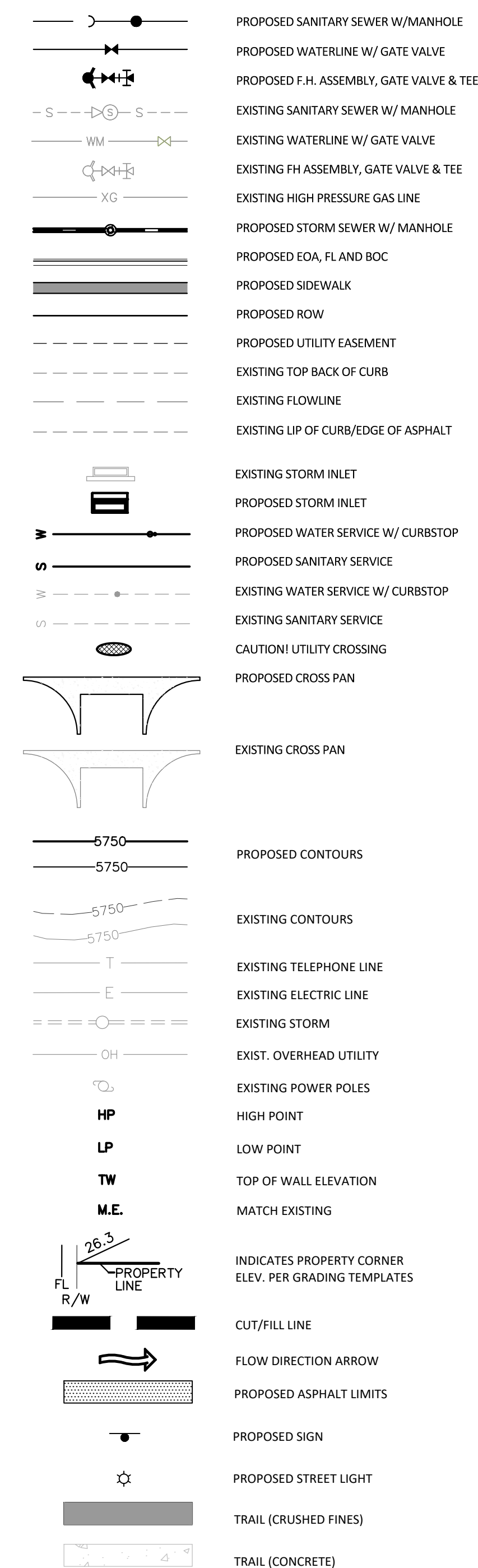
**SANITARY SEWER NOTES**

- ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8-INCH IN DIAMETER UNLESS OTHERWISE NOTED.
- SEWER LINES SHALL BE INSTALLED 5- FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10- FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1-1/2- FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
- SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.
- THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.
- SEWER WYES SHALL BE USED RATHER THAN TEES. SEWER SERVICE WYES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW, AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS BUILT" LOCATION OF WYES.
- ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE, UNLESS OTHERWISE SPECIFIED.
- PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
- AT LEAST 5-DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.
- ALL PIPE LENGTHS ARE APPROXIMATE.
- THE CONTRACTOR SHALL HAVE IN HIS/HER POSSESSION AT ALL TIMES ONE SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE STONEGATE VILLAGE METROPOLITAN DISTRICT AND THE DISTRICT ENGINEER.
- ALL MANHOLES SHALL HAVE SHAPED INVERTS.
- ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
- PRIOR TO START WORK WHERE SEWER MAIN IS TO BE INSTALLED INTO EXISTING DISTRICT SEWER SYSTEMS, THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL ACCEPTANCE BY THE DISTRICT. ITS PURPOSE SHALL BE TO PREVENT ANY MUD, WATER OR OTHER MATERIALS FROM ENTERING THE LINE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN SO INSTRUCTED BY THE DISTRICT.
- PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR/DEVELOPER SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMPOUT AT THE PLUGGED MANHOLE.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:  
"X" FOR SANITARY SEWER SERVICES  
"V" FOR WATER SERVICES
- ALL WAREHOUSE BUILDING COMPANIES WITH AN SIC CODE SHALL FILL OUT AN INDUSTRIAL WASTE AND SILVER MERCURY WASTE DISCHARGE QUESTIONNAIRE PRIOR TO DISTRICT APPROVAL.
- 12 GAUGE COPPER TRACER WIRE REQUIRED ON ALL SANITARY SEWER LINES.

**DISTRICT ACCEPTANCE NOTE:**

- UPON COMPLETION OF SANITARY SEWER AND WATER CONSTRUCTION AND TESTING, THE DEVELOPER OR CONTRACTOR SHALL CONTACT THE DISTRICT FOR PROBATIONARY ACCEPTANCE INSPECTION. A PUNCHLIST WILL BE PROVIDED THE DEVELOPER AND CONTRACTOR UPON COMPLETION OF THE INITIAL WALK-THROUGH AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO 1-YEAR FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- THE DATE OF FINAL ACCEPTANCE WILL BE INDICATED IN THE CONDITIONS OF THE PROBATIONARY ACCEPTANCE LETTER. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT FOR FINAL INSPECTION AND FINAL ACCEPTANCE.

**MASTER LEGEND**



DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 3/4/2020	UPDATED PER STORMWATER REVISIONS
E. 07/2019	REVISED STEEL CASING UNDER E-270 PER LOCATE
D. 07/2019	REVISED PER STONEGATE 9/2/18 LETTER
C. 10/2018	REVISED PER STONEGATE 9/2/18 LETTER
B. 06/2018	REVISED PER STONEGATE 5/17/16 LETTER
A. 11/2015	1ST SUBMITTAL

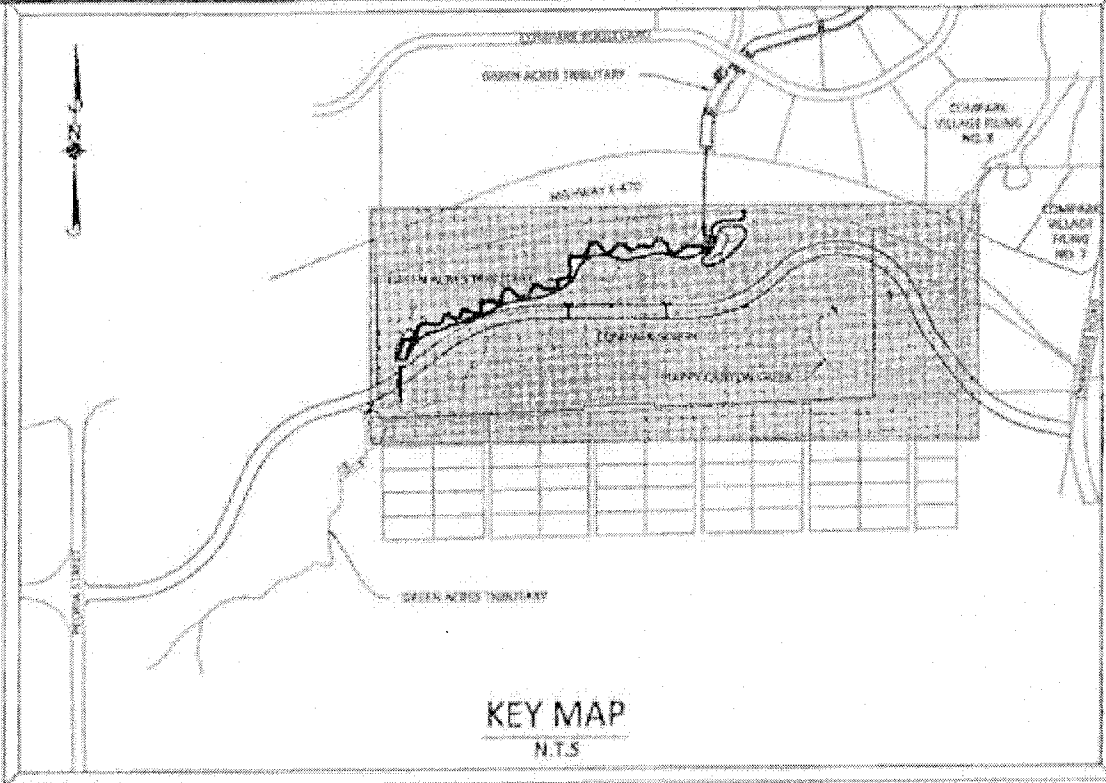
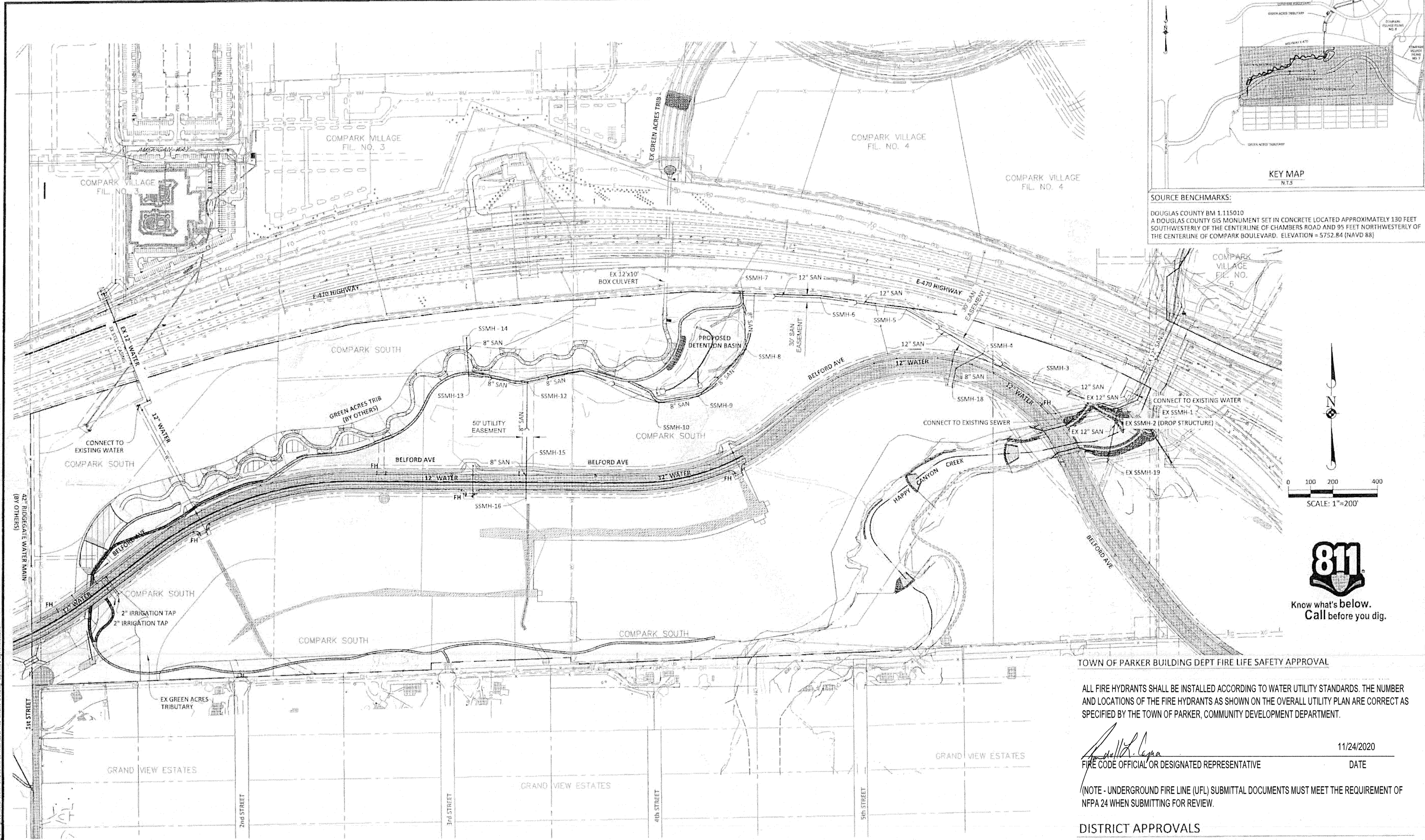
**Manhard CONSULTING**  
 7600 East Orchard Road, Suite 100-A, Greenwood Village, CO 80121, phone: 303.728.0800  
 manhard.com  
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

**COMPARK VILLAGE SOUTH, FILING NO. 1**  
**TOWN OF PARKER, COLORADO**  
**GENERAL NOTES**

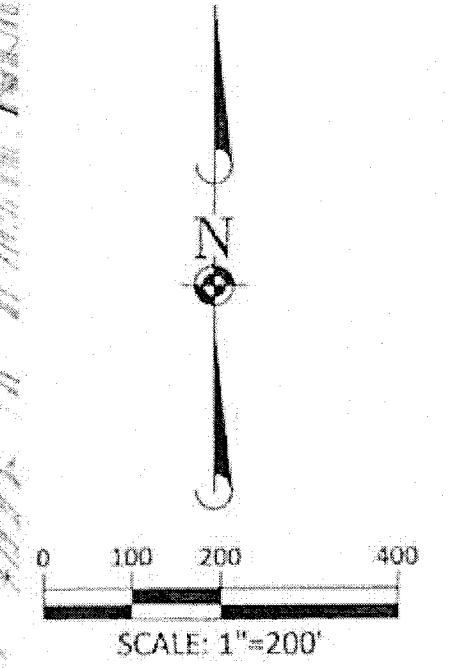
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 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**2 OF 23**  
 CLCPK63

Plotfiled: 11/20/2020 8:22 AM Dwg Name: c:\clic\c3\CompSouth04--Master\_Sm & Water.dwg\Ena\Final\_Drainage\Plan\_Sm\_Set\OfSite\GENERAL NOTES.dwg Updated By: jhoover



**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET  
 SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF  
 THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



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TOWN OF PARKER BUILDING DEPT FIRE LIFE SAFETY APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

*[Signature]* 11/24/2020  
 FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.

**DISTRICT APPROVALS**

THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE DISTRICT'S MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY EITHER THE STONEGATE VILLAGE METROPOLITAN DISTRICT OR THE DISTRICT ENGINEER FOR COMPLETENESS, ACCURACY OR CORRECTNESS OF CALCULATIONS. THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS INDICATED ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE STONEGATE VILLAGE METROPOLITAN DISTRICT FOR ADDITIONAL ITEMS AND ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

BY *[Signature]* 11/23/2020  
 STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEER DATE

BY *[Signature]* 11/23/2020  
 STONEGATE VILLAGE METROPOLITAN DISTRICT MANAGER DATE

The Town of Parker review constitutes general compliance with the Town's Standards and approved variances, subject to these plans being stamped, signed, and dated by the professional engineer of record. Review by the Town does not constitute approval of the plan design or accuracy and correctness of engineering calculations. Errors in the design or calculations remain the responsibility of the registered professional engineer whose stamp and signature are affixed to this document.

This review does not constitute approval of any private on-site improvements which may be shown. Construction cannot commence until all required drainage/traffic report(s), final development plan(s), special review(s), grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

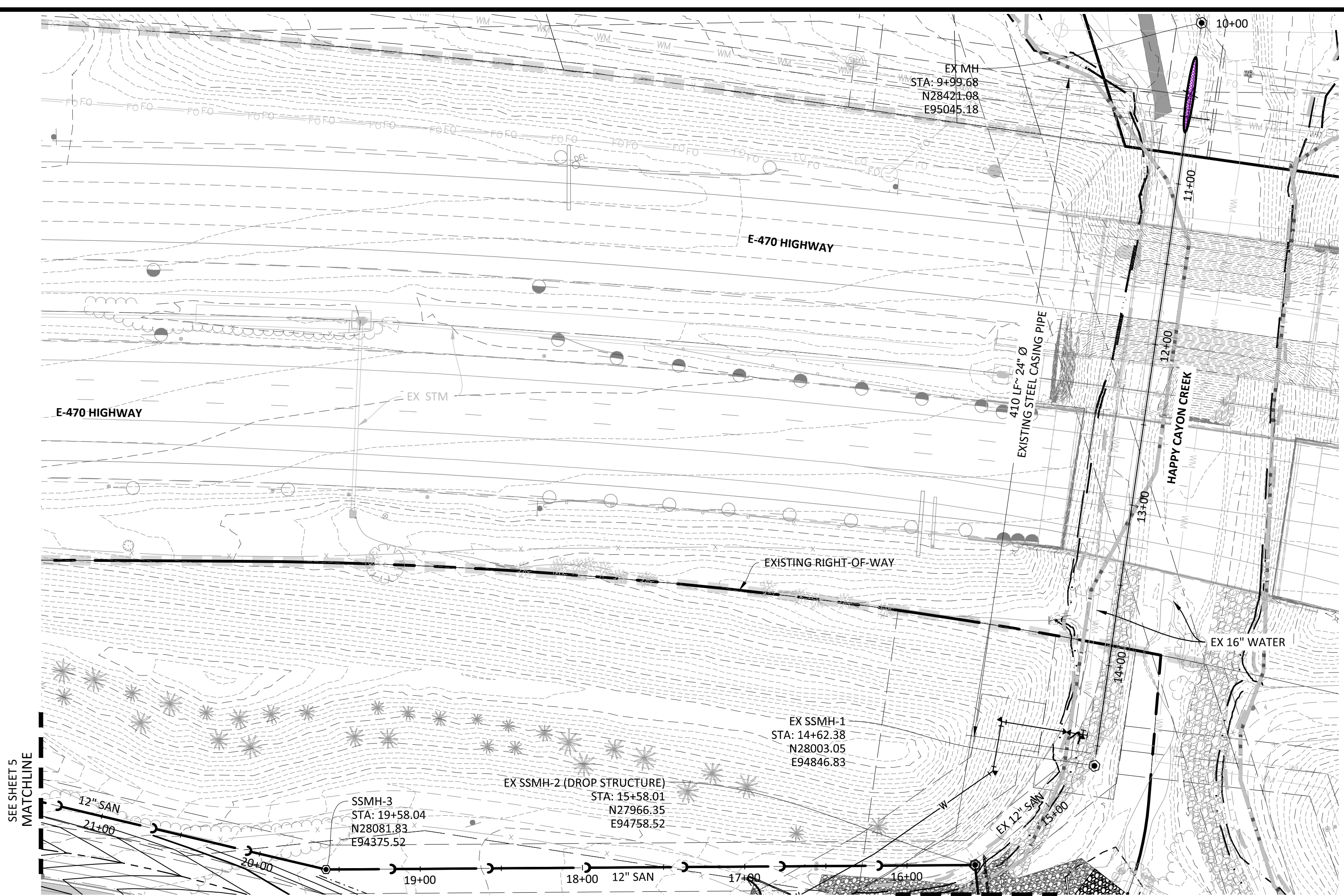
*[Signature]* 12/17/2020  
 Town of Parker, Director of Engineering Date

DATE	DESCRIPTION
11/20/2020	ISSUED FOR STORMWATER REVISIONS
11/20/2020	ISSUED FOR STORMWATER REVISIONS
11/20/2020	REVISED PER COMMENTS UNDER E-470 INTERLOCATE
11/20/2020	REVISED PER COMMENTS UNDER E-470 INTERLOCATE
11/20/2020	REVISED PER STATIONGATE 8/27/20 LETTER
11/20/2020	REVISED PER STATIONGATE 8/27/20 LETTER
11/20/2020	1ST SUBMITTAL

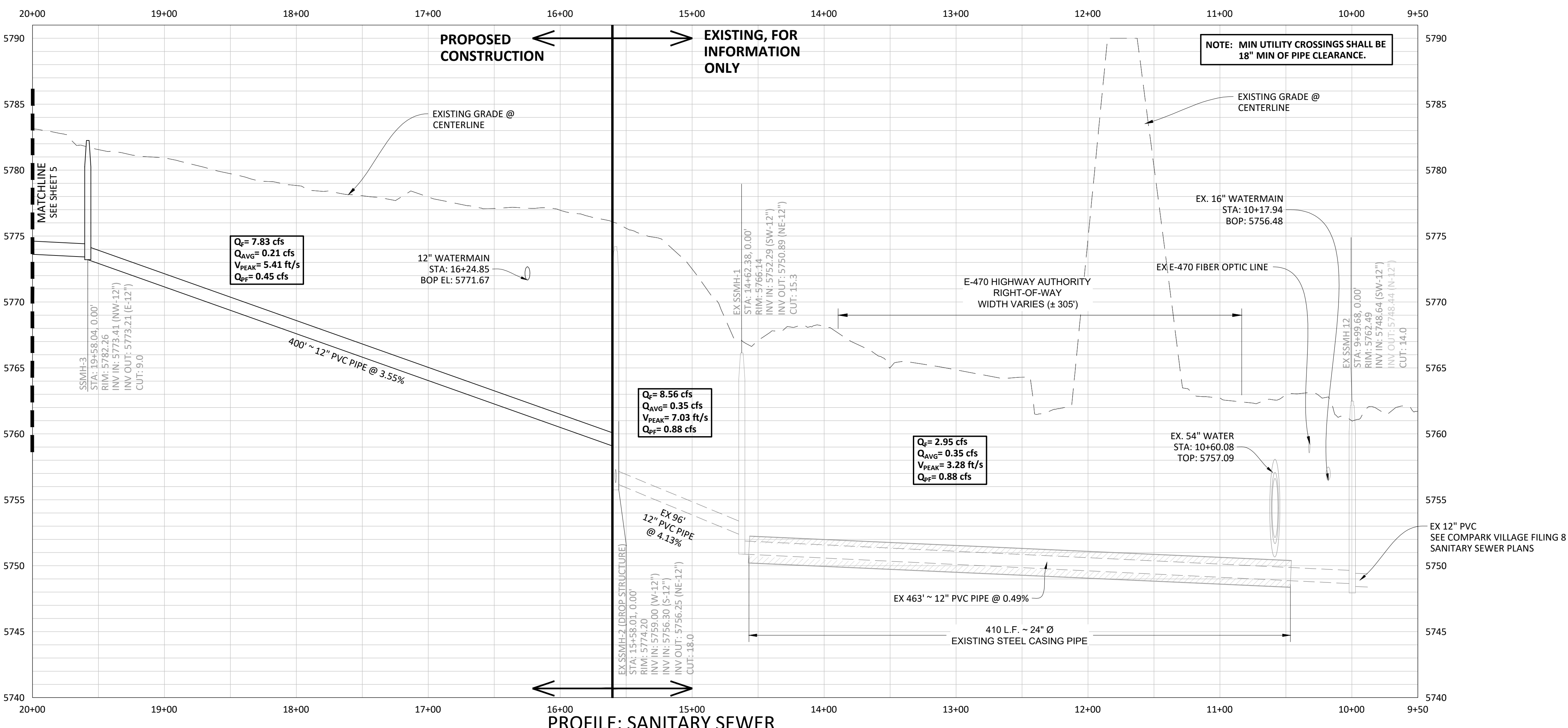
**Manhard CONSULTING**  
 7000 Bank Center Road, Suite 1000, Greenwood Village, CO 80111  
 Civil Engineering, Surveying & Geospatial Services  
 Water Resource Management | Construction Management

COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 OVERALL UTILITY PLAN

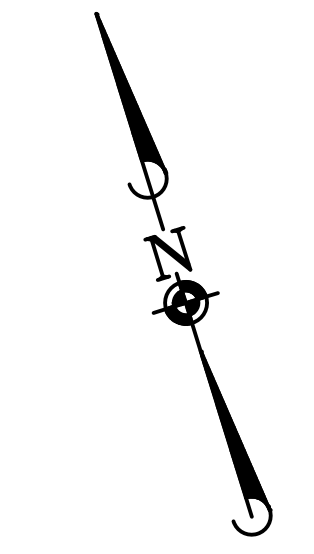
COLORADO REGISTERED PROFESSIONAL ENGINEER  
 No. 1120-2020  
 PROJECT NO. 2020-001  
 PROJECT NAME: STONEGATE VILLAGE METROPOLITAN DISTRICT  
 DRAWN BY: ETG  
 DATE: 03/2020  
 SHEET 3 OF 23  
 CLCPX3



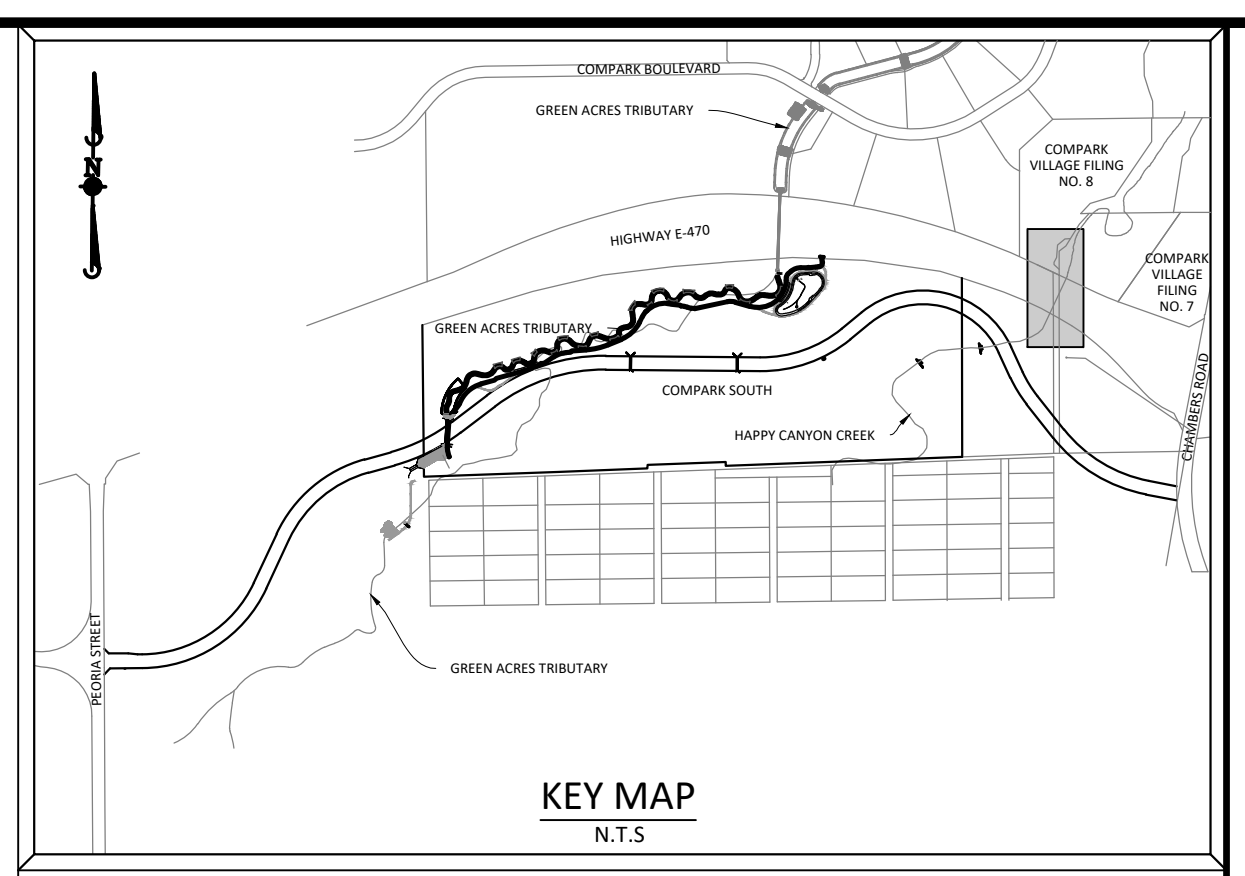
PLAN: SANITARY SEWER



PROFILE: SANITARY SEWER



0 25 50 100  
SCALE: 1"=50'  
VERTICAL SCALE: 1"=5'



**SOURCE BENCHMARKS:**  
DOUGLAS COUNTY BM 1.115010  
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

CONTRACTOR TO FIELD VERIFY LOCATIONS/ELEVATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES

- NOTES:**
- 1.) SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET.
  - 2.) CONTRACTOR SHALL OBTAIN A GROUNDWATER DISCHARGE PERMIT FOR ALL WORK ADJACENT TO HAPPY CANYON CREEK.
  - 3.) CONTRACTOR SHALL USE PROPER PIPE SKIDS IN CONJUNCTION WITH EXISTING 24" STEEL CASING PER DETAIL ON THIS SHEET.
  - 4.) CONTRACTOR TO COORDINATE WITH ADJACENT COMPARK VILLAGE FILING 8 PROJECT FOR TIMING OF THE SANITARY SEWER CONNECTION THROUGH THE EXISTING SLEEVE TO THE DOWNSTREAM STRUCTURE EXSSMH12.
  - 5.) ALL SURFACE FEATURES LOCATED IN LANDSCAPE AREAS ARE REQUIRED TO HAVE A MARKER POST WITH A CONCRETE COLLAR.

DATE	REVISIONS
G.11/20/2020	UPDATED PER STORMWATER REVISIONS
F.3/4/2020	UPDATED PER STORMWATER REVISIONS
E.1/7/2019	REVISED STEEL CASING SLEEVE UNDER E-470
D.10/2018	REVISED PER STONEGATE 9/2/18 LETTER
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B.06/2016	REVISED PER STONEGATE 5/17/16 LETTER
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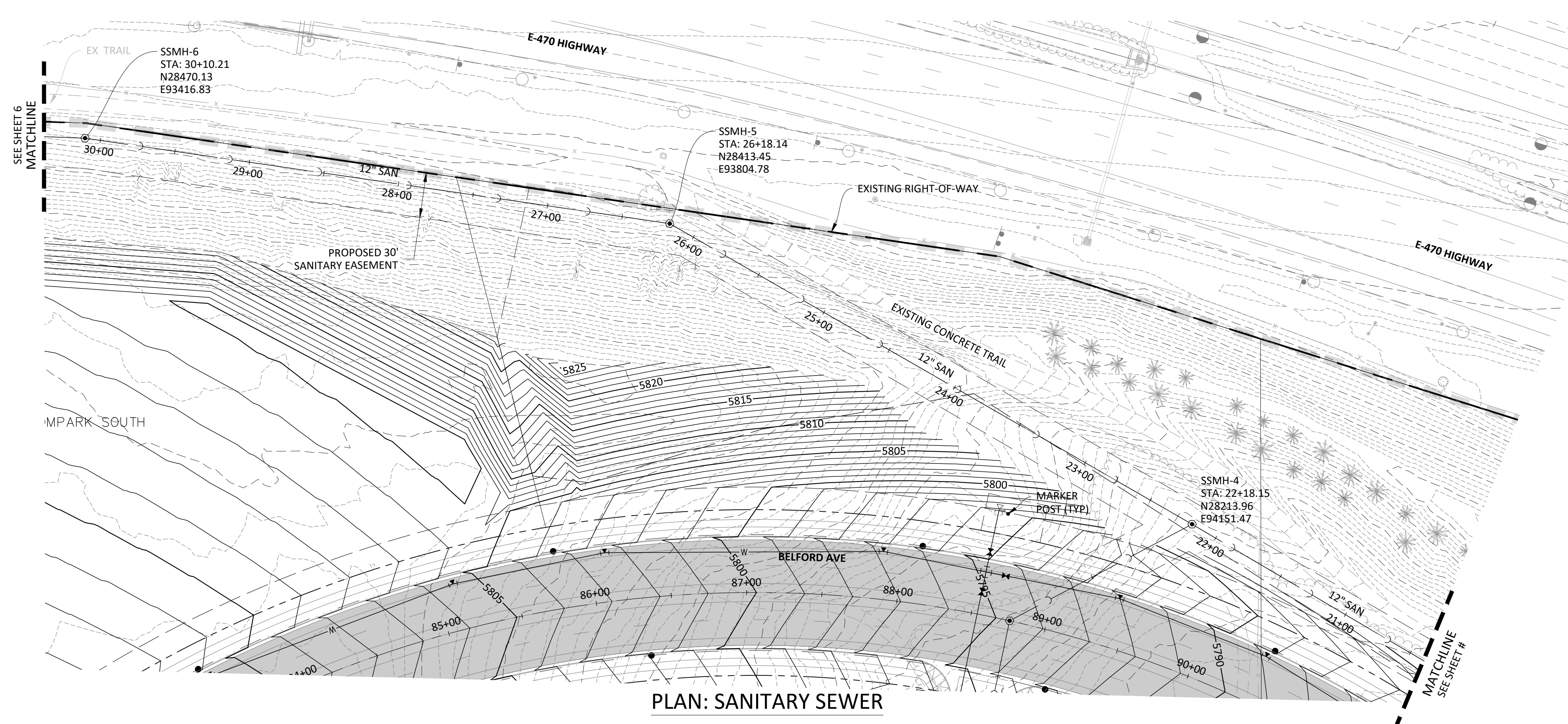
**Manhard CONSULTING**  
7600 East Orchard Road, Suite 100-003, Greenwood Village, CO 80111, phone: 303.778.0500 manhard.com  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
SANITARY SEWER PLAN & PROFILE

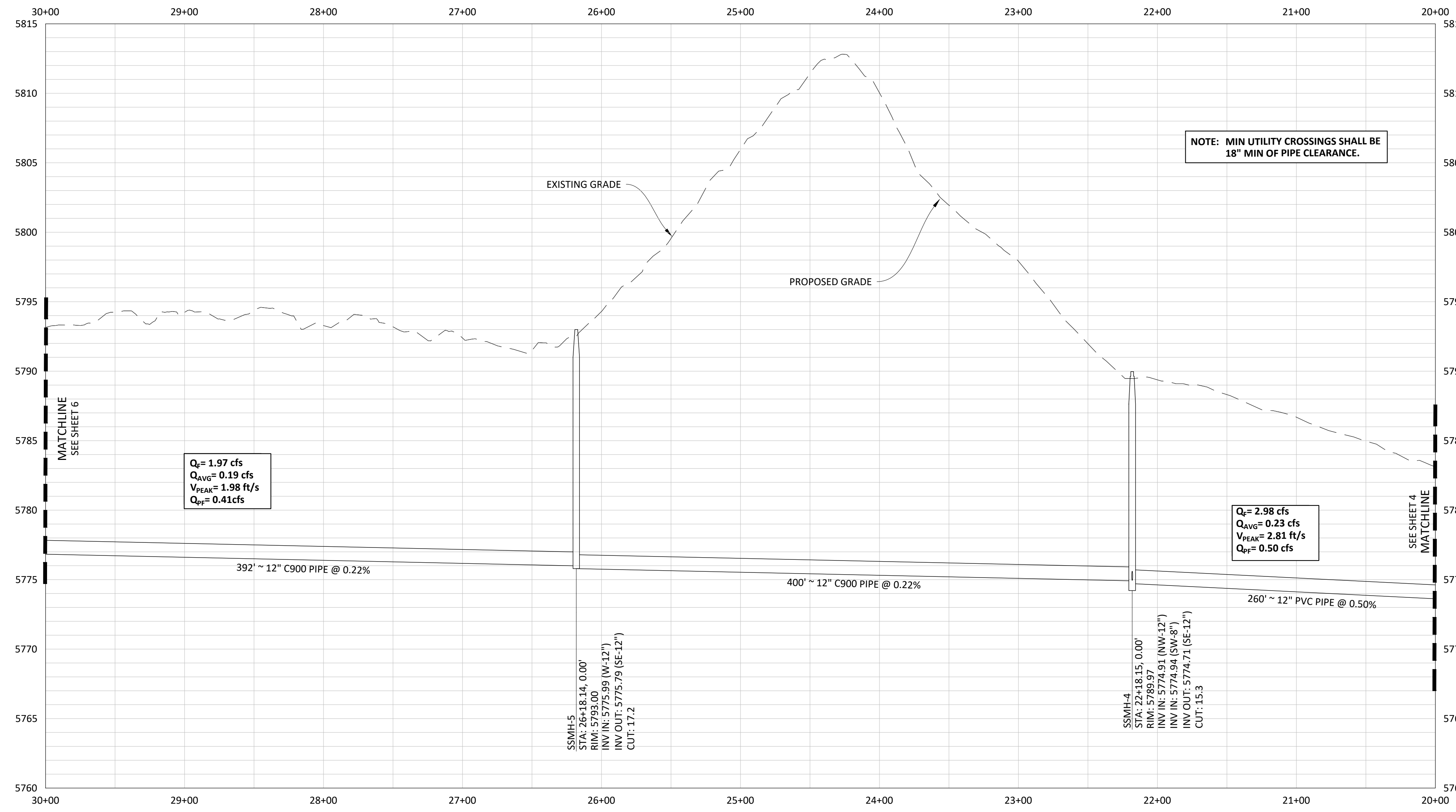
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PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

SHEET  
**4 OF 23**  
CLCPK3

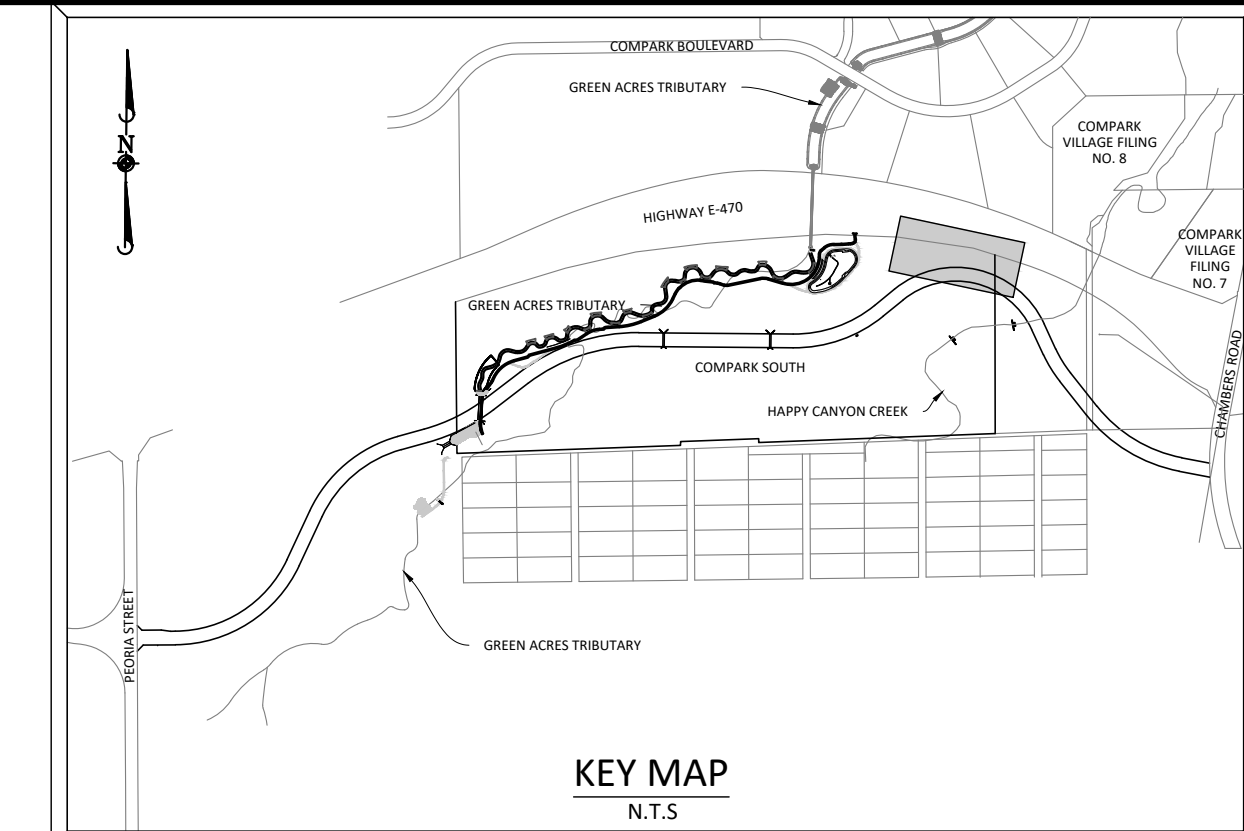
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 Updated By: Jhaothorne



PLAN: SANITARY SEWER

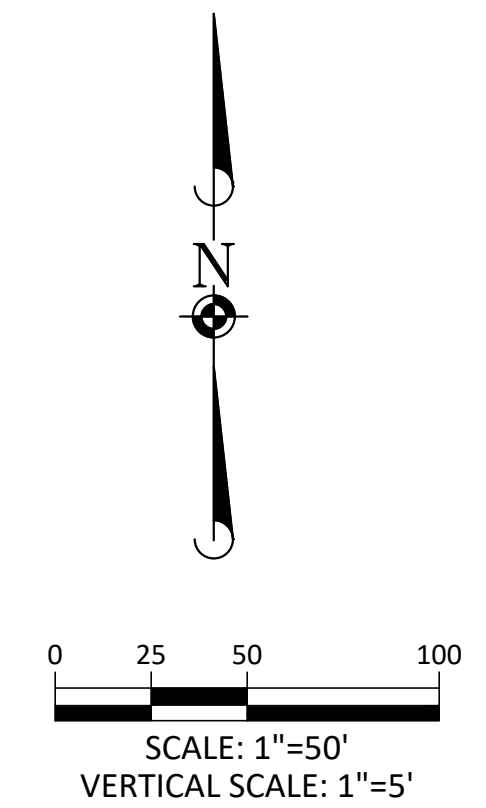


PROFILE: SANITARY SEWER



KEY MAP  
N.T.S.

SOURCE BENCHMARKS:  
DOUGLAS COUNTY BM 1.115010  
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET  
SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF  
THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



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NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

NOTE: MIN UTILITY CROSSINGS SHALL BE 18" MIN OF PIPE CLEARANCE.

Plotted: 11/20/2020 8:42 AM. Dwg Name: D:\Clpk3\comsouth12\_filing1\_no\_gal\master water and sewer\Clpk3\Office\Snr P&P-1a.dwg. Updated By: jhawthorne

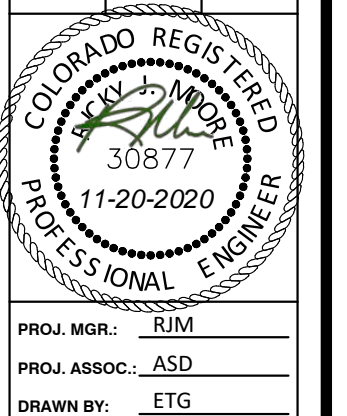
DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 3/4/2020	UPDATED PER STORMWATER REVISIONS
E. 11/20/2019	REVISED STEEL CASING UNDER E-470 PER LOCATE
D. 11/20/2019	REVISED PER STONEGATE E-470 PER LOCATE
C. 10/20/2019	REVISED PER STONEGATE E-470 PER LOCATE
B. 06/20/2019	REVISED PER STONEGATE E-470 PER LOCATE
A. 11/20/2018	1ST SUBMITTAL

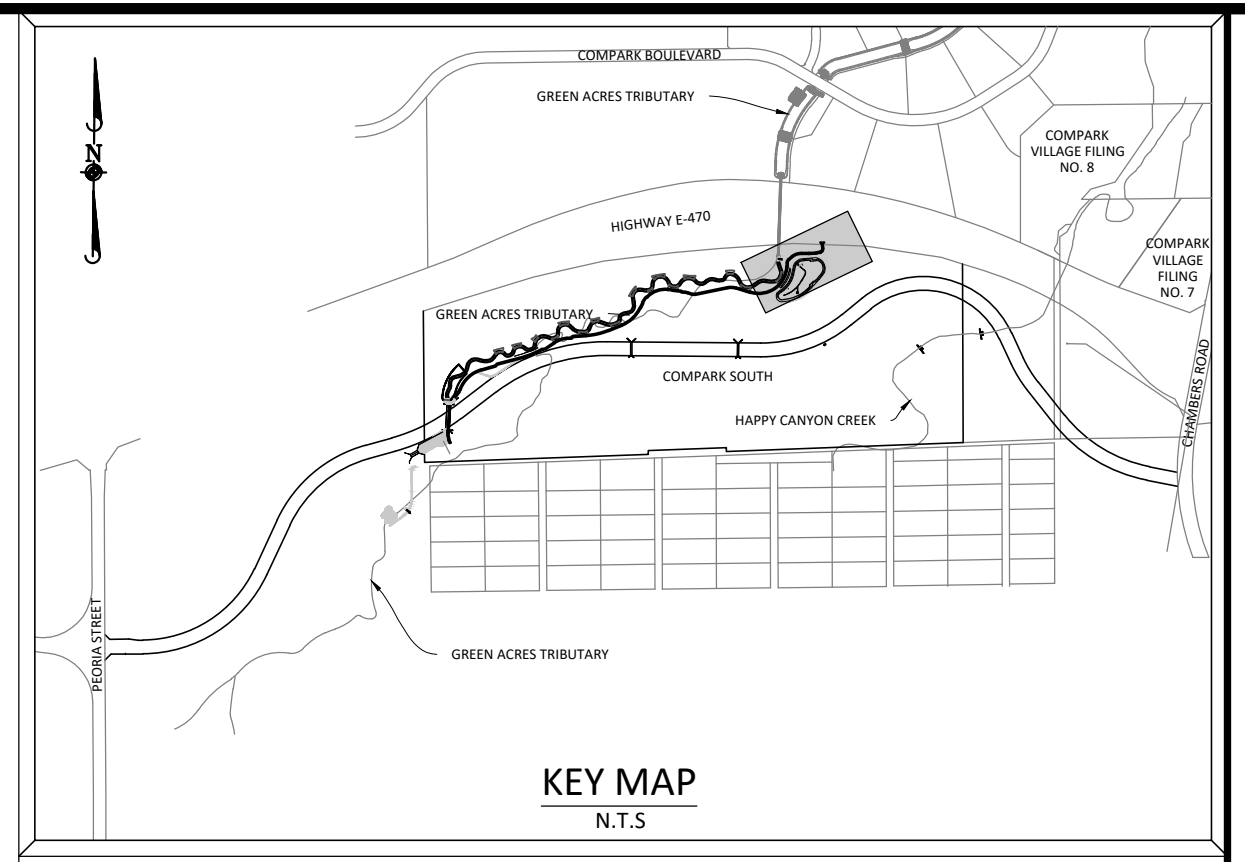
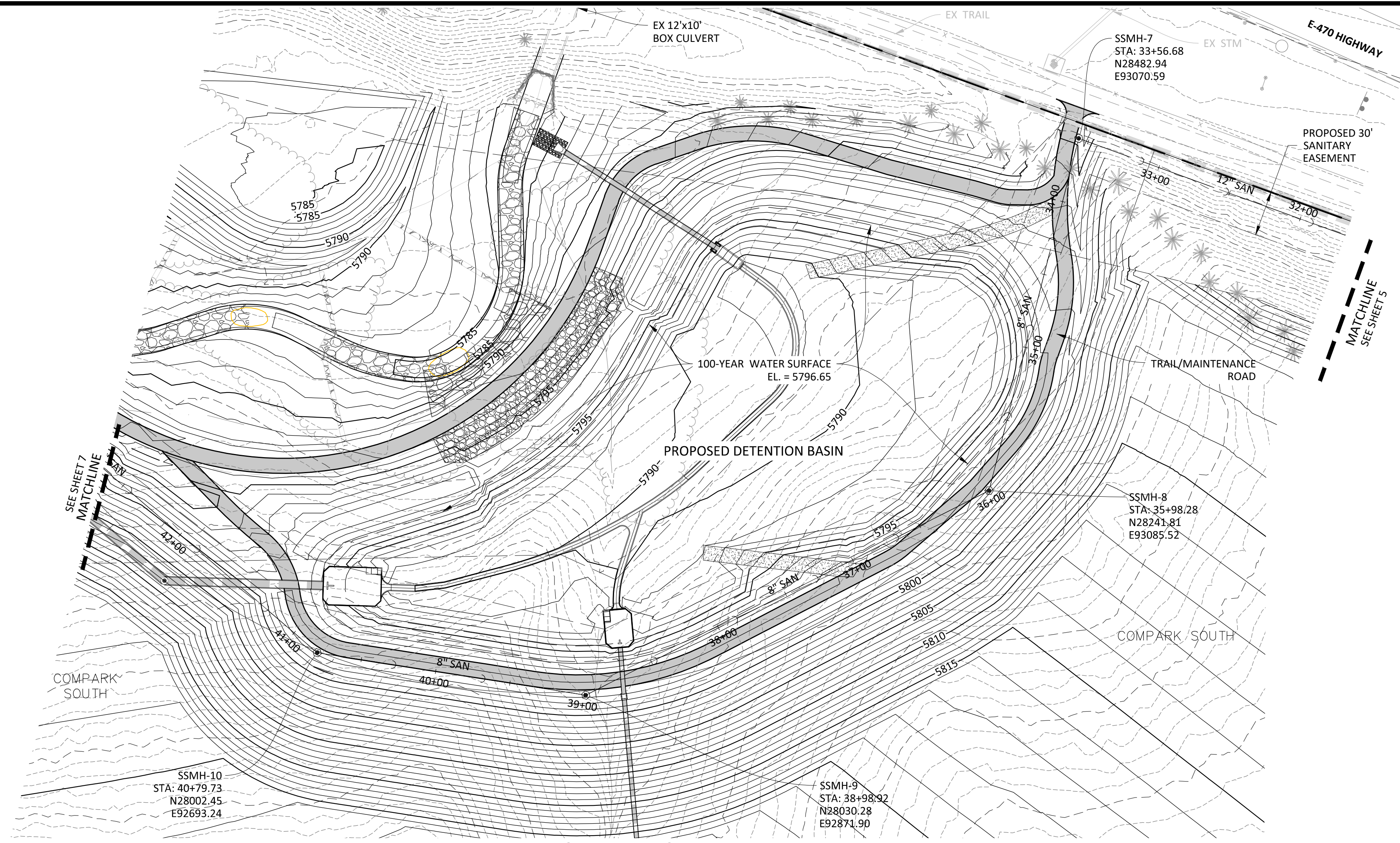
**Manhard CONSULTING**  
7600 East Orchard Road, Suite 100, Greenwood Village, CO 80111, phone: 303.778.0800 manhard.com  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
SANITARY SEWER PLAN & PROFILE

PROJ. MGR.: RIM  
PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

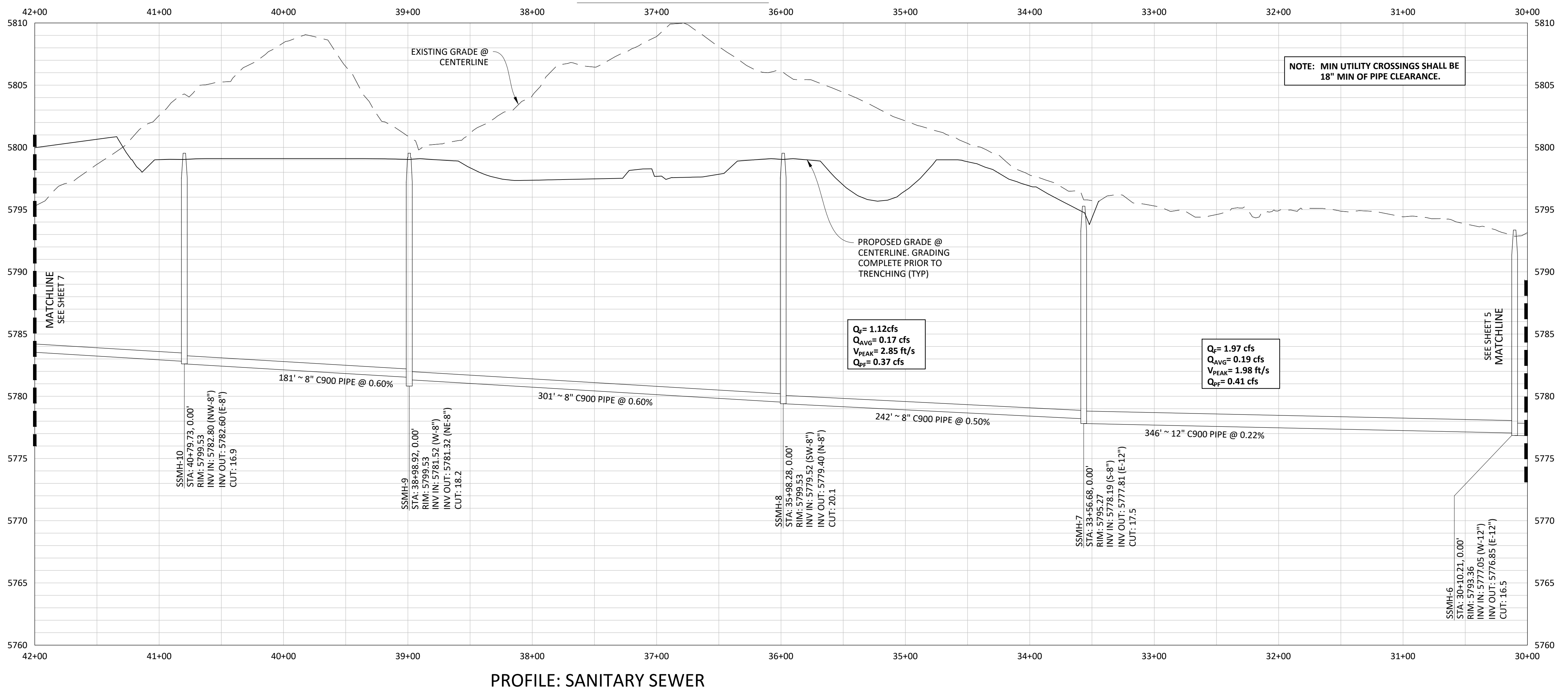
SHEET  
**5 OF 23**  
CLCPK3





**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.



DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 3/4/2020	UPDATED PER STORMWATER REVISIONS
E. 11/7/2019	REVISED STEEL CASING UNDER E-470 PER LOCATE
D. 10/20/2019	REVISED PER STONEGATE E-470 PER LOCATE
C. 10/20/2019	REVISED PER STONEGATE E-470 PER LOCATE
B. 06/20/2016	REVISED PER STONEGATE E-470 PER LOCATE
A. 11/20/2015	1ST SUBMITTAL

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 7600 East Orchard Road, Suite 100-34, Greenwood Village, CO 80120, phone: 303.780.0500  
 Civil Engineering & Geospatial Services  
 Water Resource Management | Construction Management

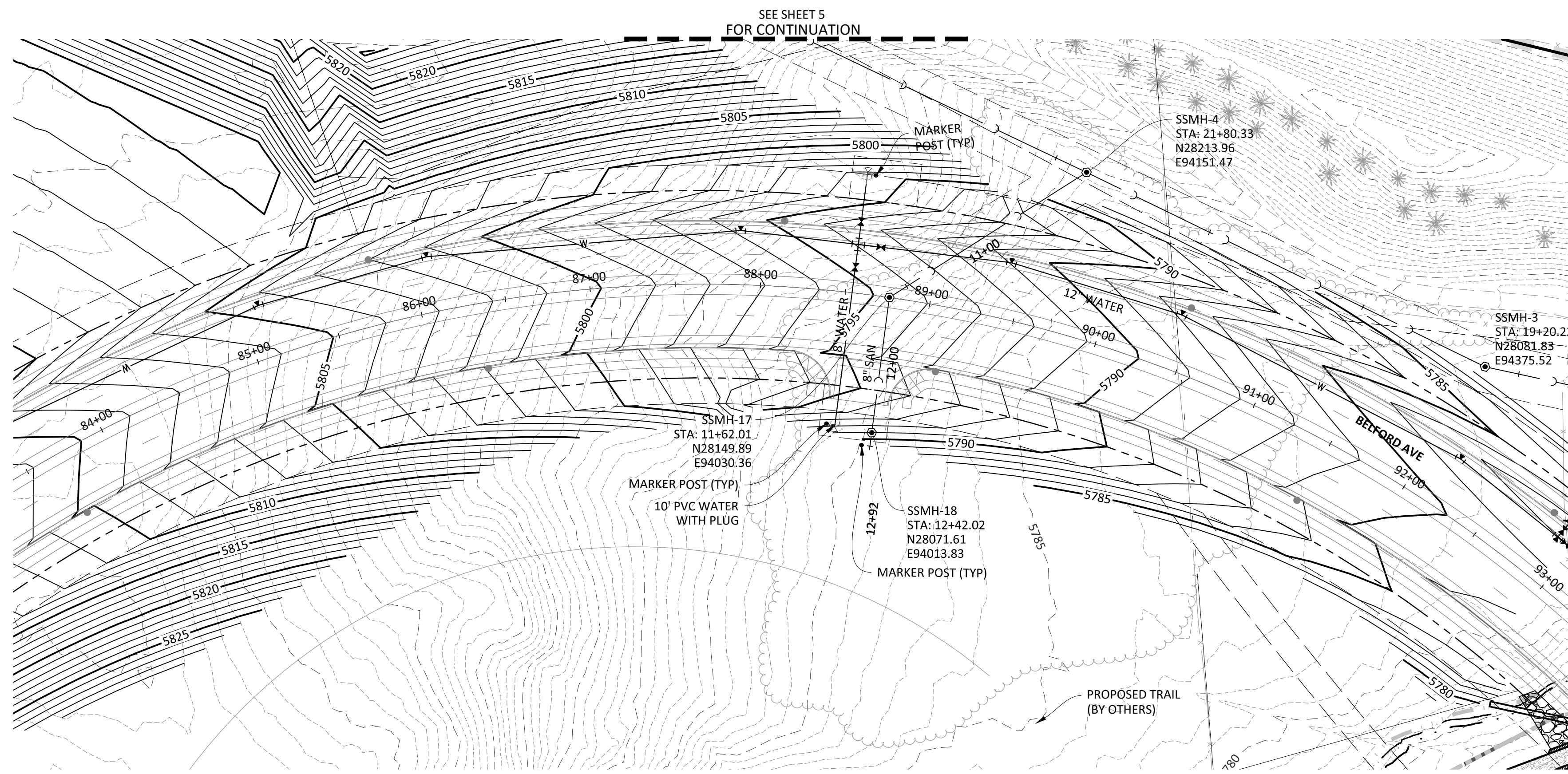
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 SANITARY SEWER PLAN & PROFILE

PROJ. MGR.: RIM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

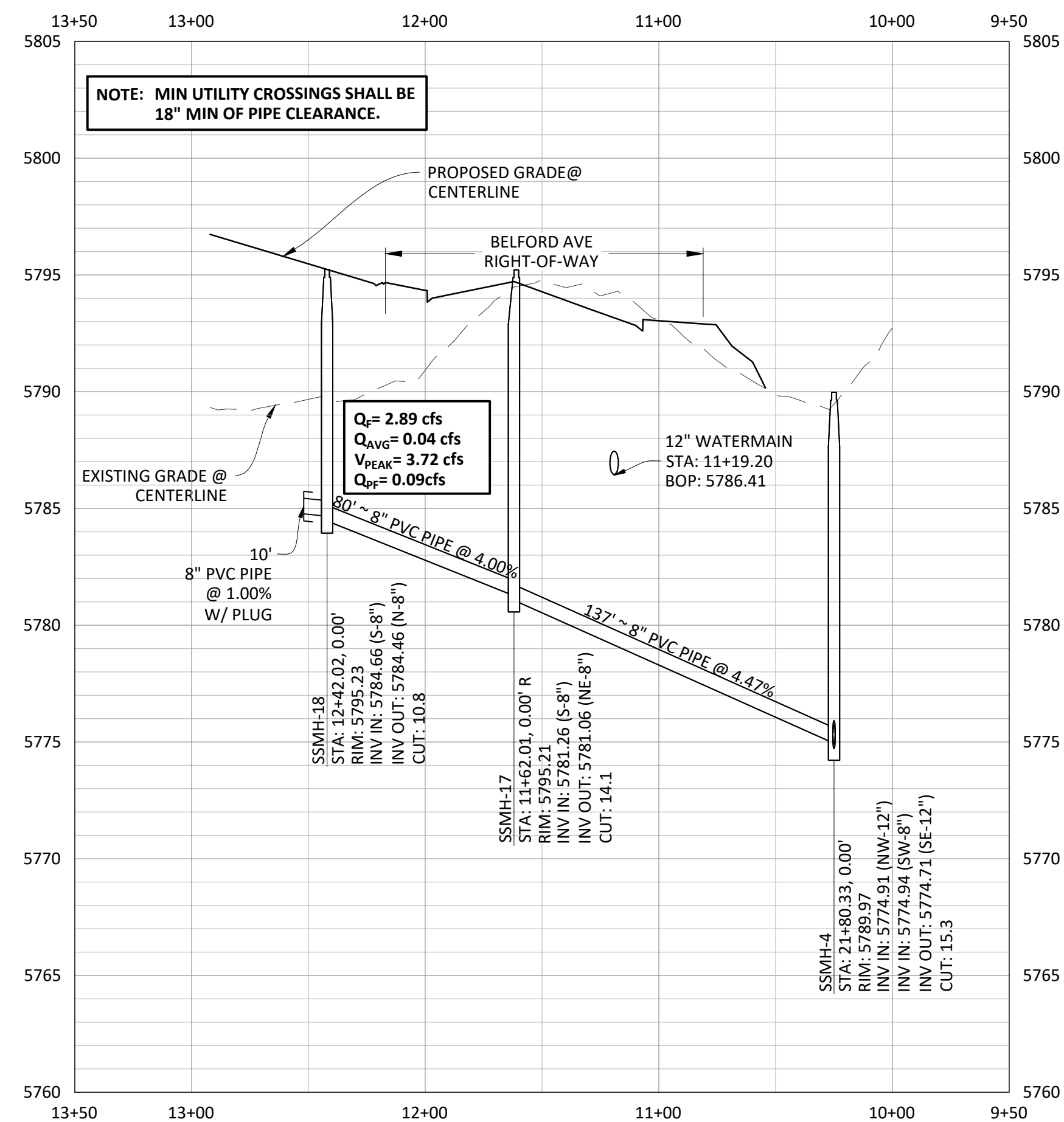
SHEET  
**6 OF 23**  
 CLCPKC3

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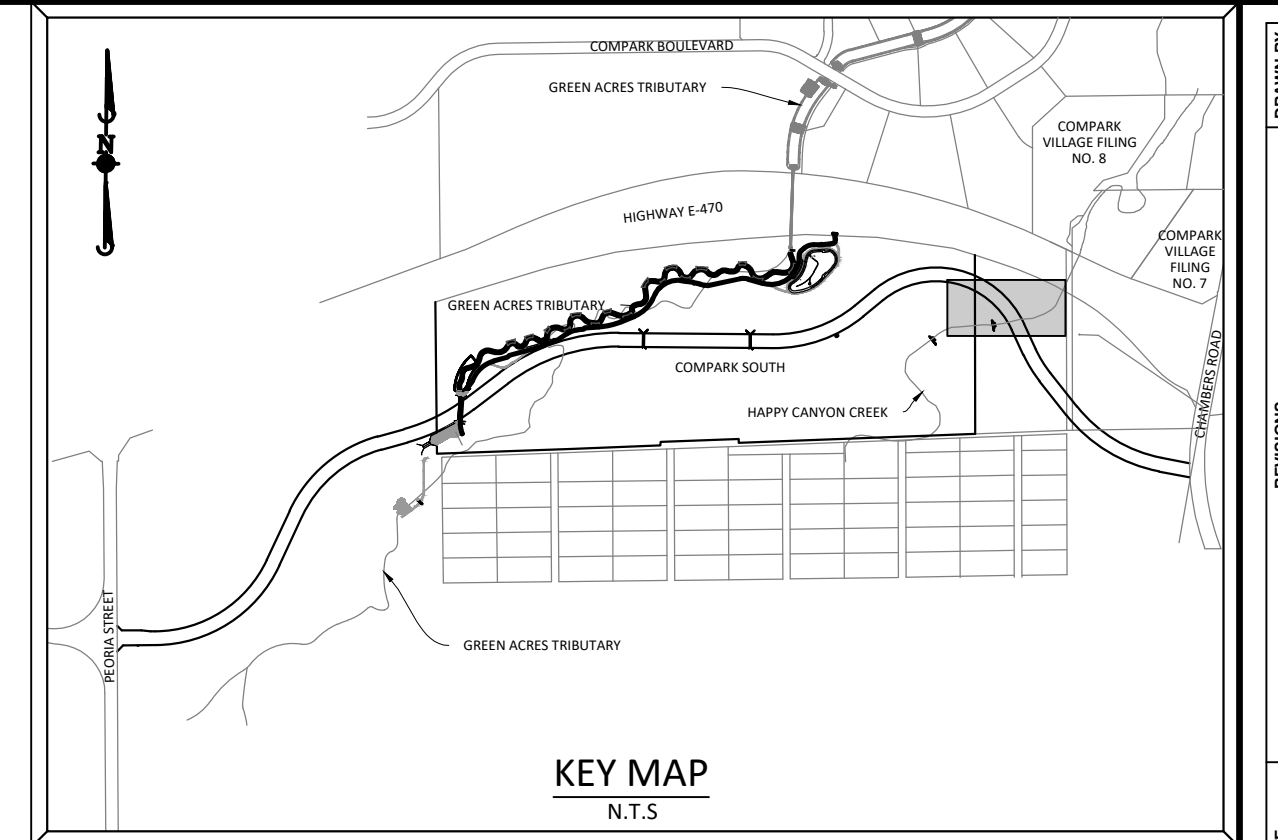




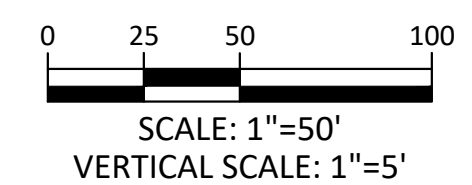
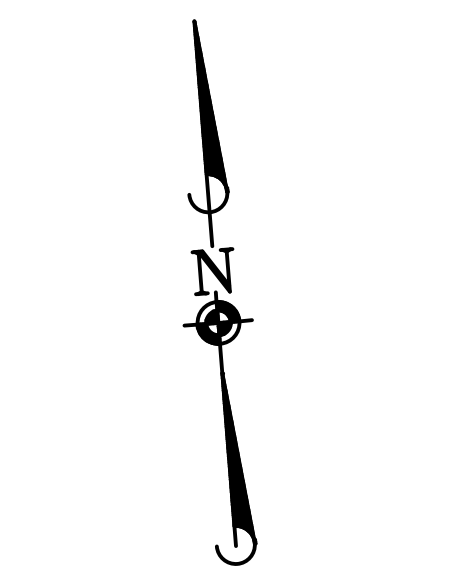
PLAN: SANITARY SEWER



PROFILE: SANITARY SEWER



**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET  
 SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF  
 THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



Know what's below.  
 Call before you dig.

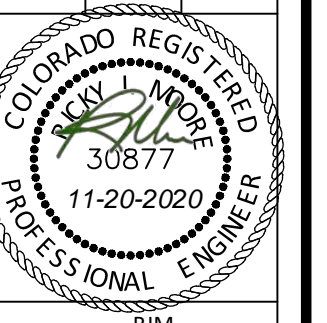
CONTRACTOR TO FIELD VERIFY LOCATION/ELEVATION OF EXISTING UTILITIES  
 PRIOR TO CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES.

NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE  
 AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

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G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
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E. 11/20/2019	REVISED STEEL CASING UNDER E-30 PER LOCATE
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B. 06/20/2016	REVISED PER STONEGATE 5/21/16 LETTER
A. 11/20/2015	1ST SUBMITTAL

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COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 SANITARY SEWER PLAN & PROFILE



PROJ. MGR.: RJM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

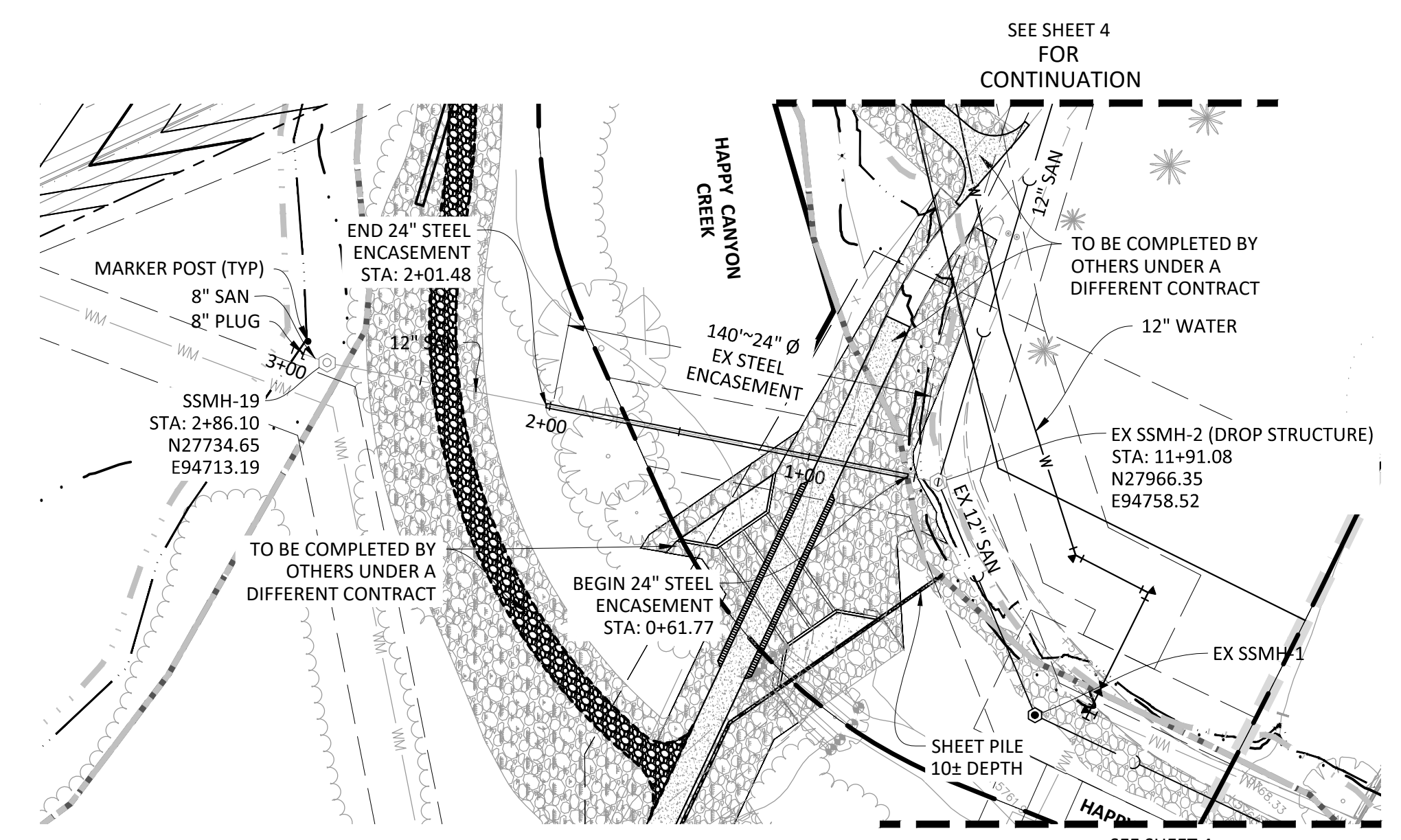
SHEET  
**8 OF 23**  
 CLCPKC3

Plotted: 11/20/2020 9:20 AM. Dwg Name: P:\Clpck3\compsouth12\_filing1\_no\_gis\master water and sewer\Office\CLCPKC3-Office-Sun P&P-4.dwg. Updated By: JHawthorne

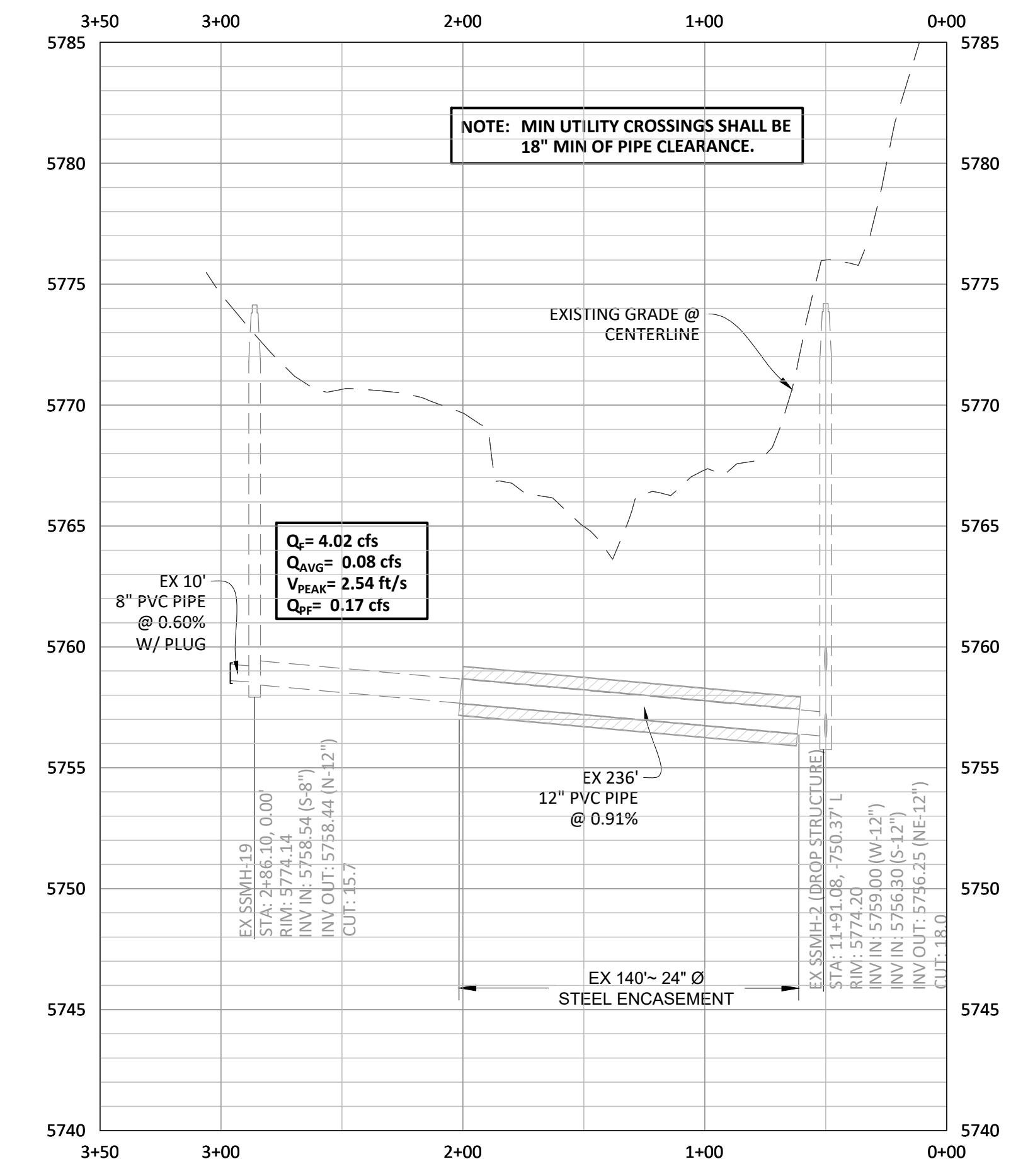
Plotted: 11/20/2020 11:09 AM Dwg Name: P:\C00k3\comsouth12\filling\_1.mxd Master water and sewer\Office\CLCPKC-Office-San P&P-3.dwg Updated By: MAMGure

NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

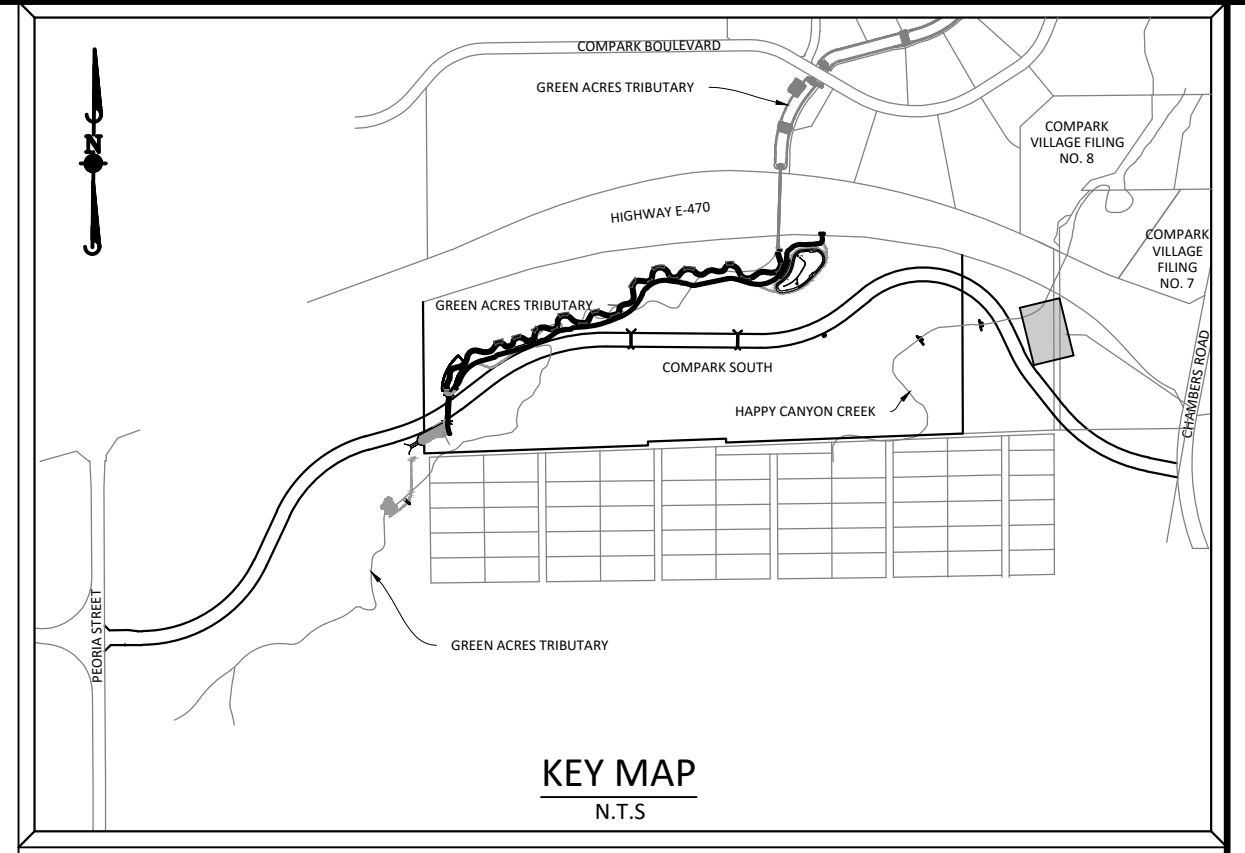
NOTE:  
THIS SEGMENT OF SANITARY SEWER MAY NEED TO BE CONSTRUCTED W/ BELFORD AVE. BRIDGE & HAPPY CANYON CREEK CONSTRUCTION



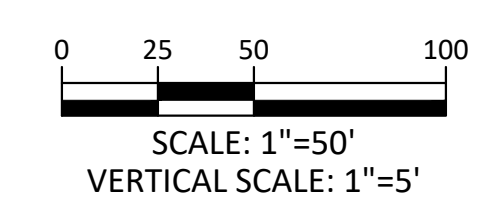
PLAN: SANITARY SEWER



PROFILE: SANITARY SEWER  
FOR INFORMATION ONLY



SOURCE BENCHMARKS:  
DOUGLAS COUNTY BM 1.115010  
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPAK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



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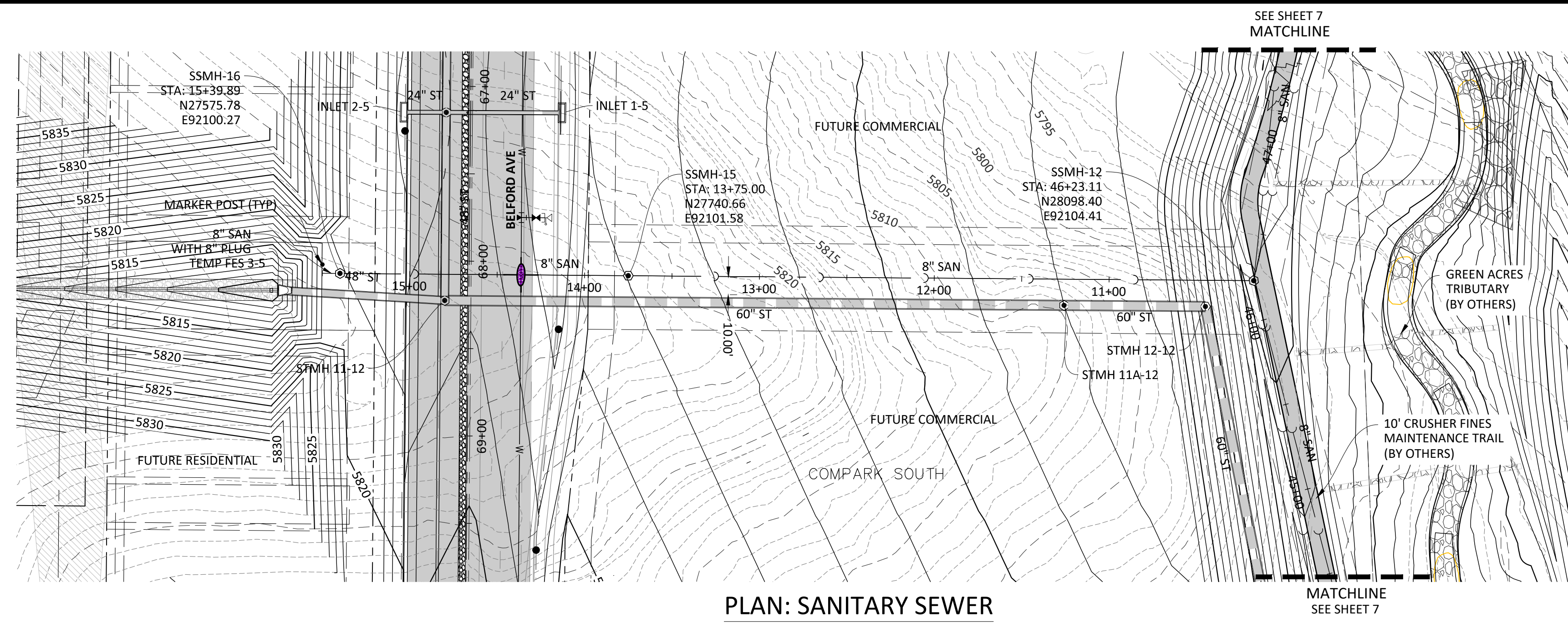
DATE	REVISIONS
G 11/20/2020	UPDATED PER STORMWATER REVISIONS
F 3/4/2020	UPDATED PER STORMWATER REVISIONS
E 3/17/2019	REVISED STEEL CASING UNDER E-470 PER LOCATE
D 3/17/2019	REVISED PER STONEGATE E-470 PER LOCATE
C 3/17/2019	REVISED PER STONEGATE E-470 PER LOCATE
B 06/2016	REVISED PER STONEGATE E-470 PER LOCATE
A 11/2015	1ST SUBMITTAL

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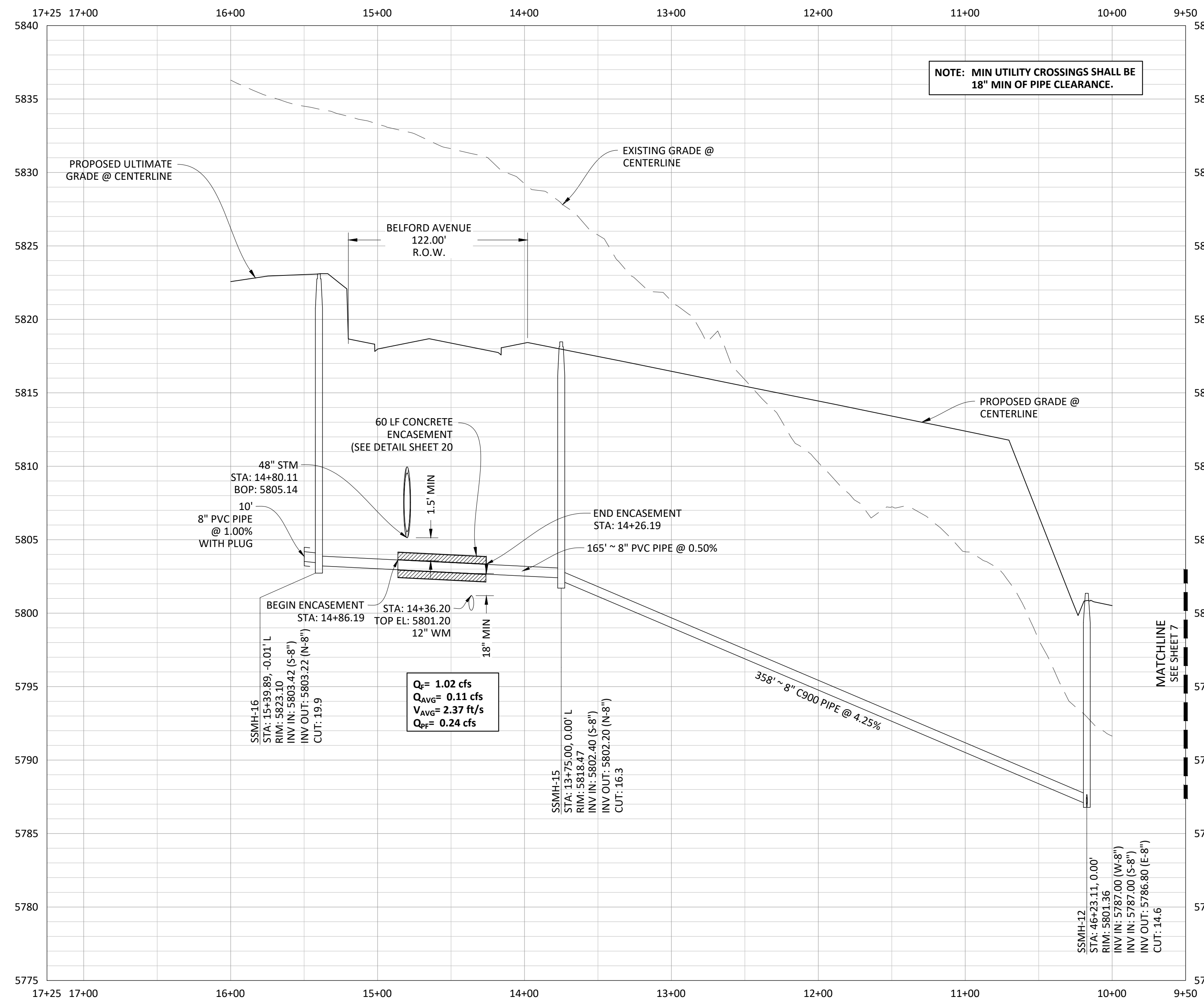
COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
SANITARY SEWER PLAN & PROFILE

PROJ. MGR.: RIM  
PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

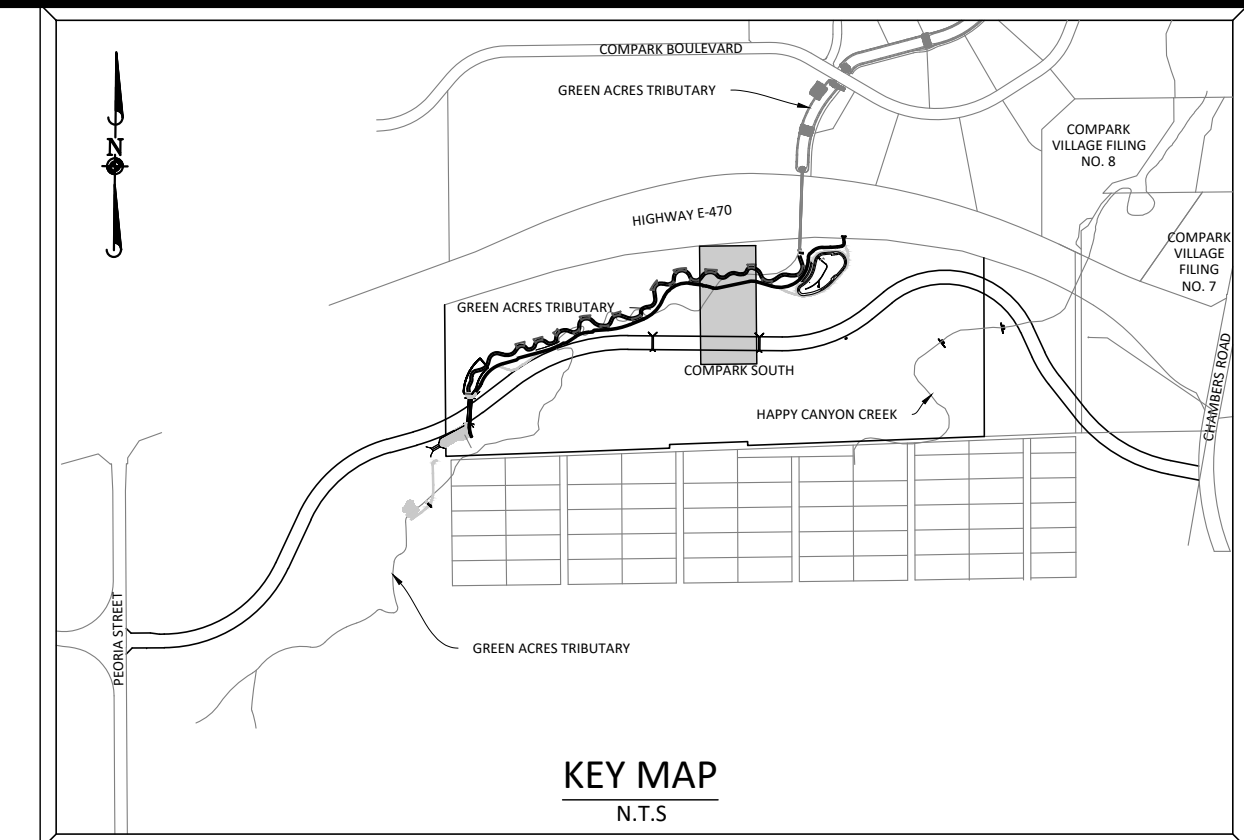
SHEET  
**9 OF 23**  
CLCPKC3



PLAN: SANITARY SEWER

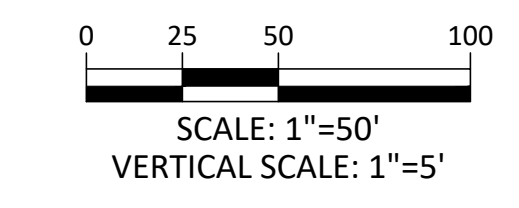
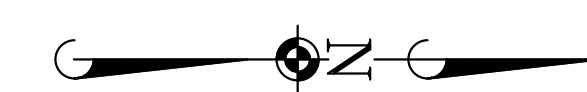


PROFILE: SANITARY SEWER



**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
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NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

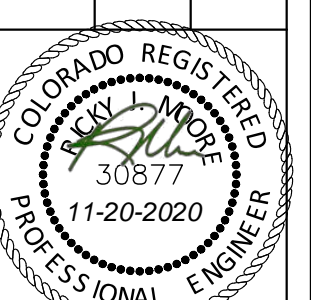


Know what's below.  
 Call before you dig.

DATE	REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
11/20/2020	REVISED PER CASING INCREASE FOR LOCATE
03/2021	REVISED FOR EXISTING SLEAVE UNDER E470
10/2021	REVISED PER STONEGATE 9/21/21 LETTER
06/2021	REVISED PER STONEGATE 5/17/21 LETTER
11/2021	151 SUBMITTAL

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 Civil Engineering | Surveying & Geospatial Services | GIS  
 Water Resource Management | Construction Management | EG

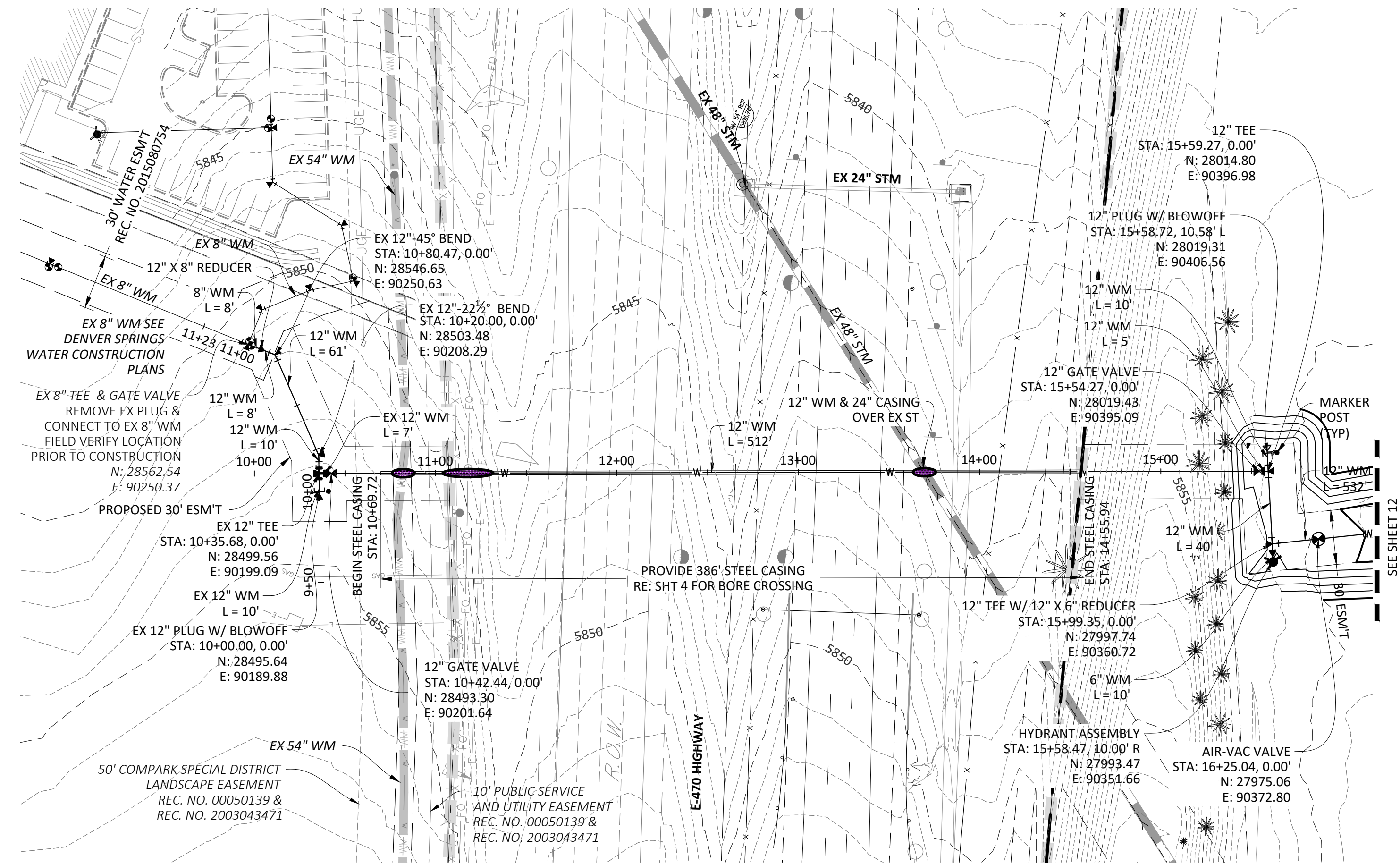
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 SANITARY SEWER PLAN & PROFILE



PROJ. MGR.: RIM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**10 OF 23**  
 CLCPKC3

Plotted: 11/20/2020 8:51 AM Dwg Name: p:\cpc\3\comsouth\12-filing\_1\_top.pit\master water and sewer\Office\CLCPKC3-Office-San P&P-5.dwg Updated By: JHawthorne

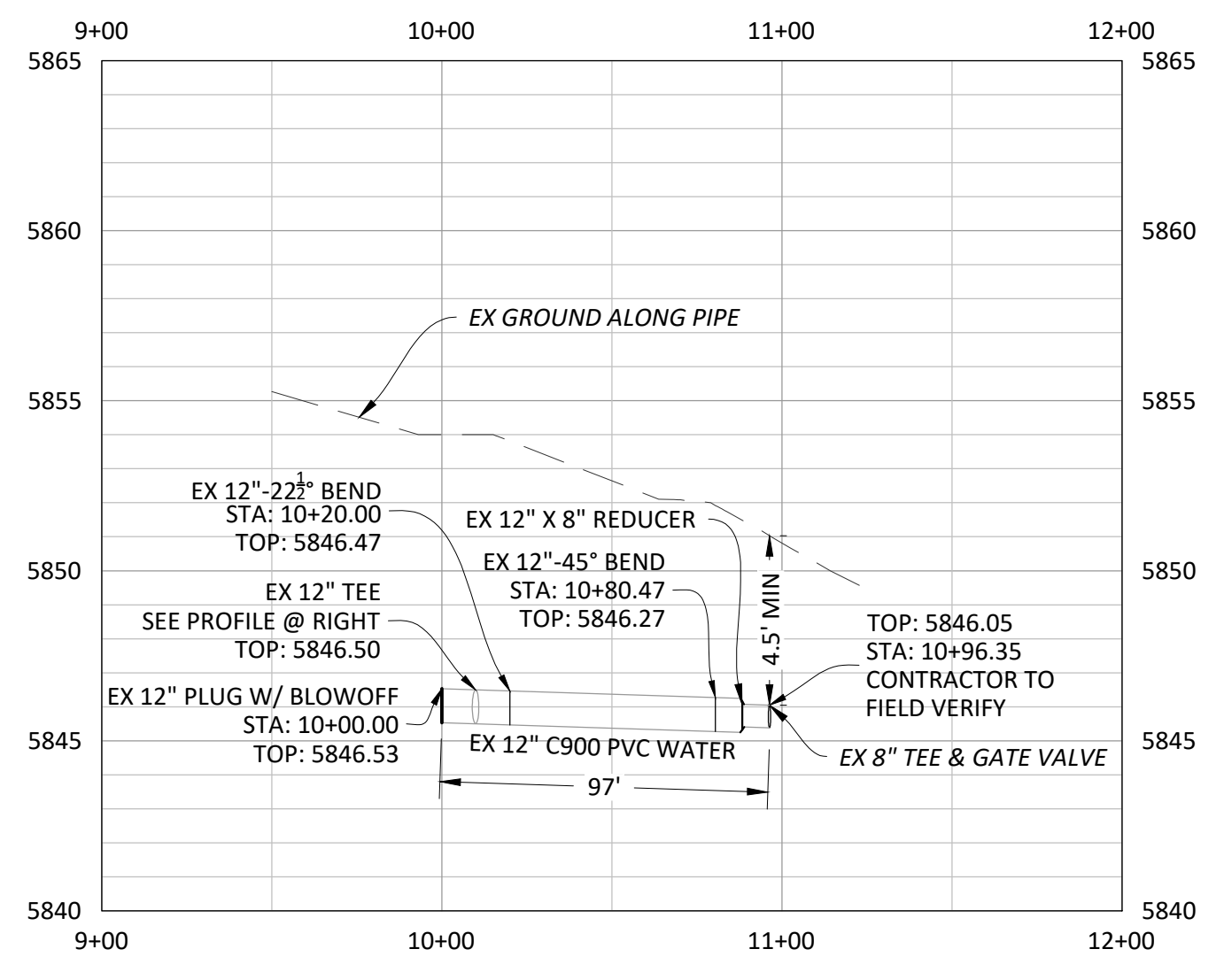


PLAN: 12" WATERLINE

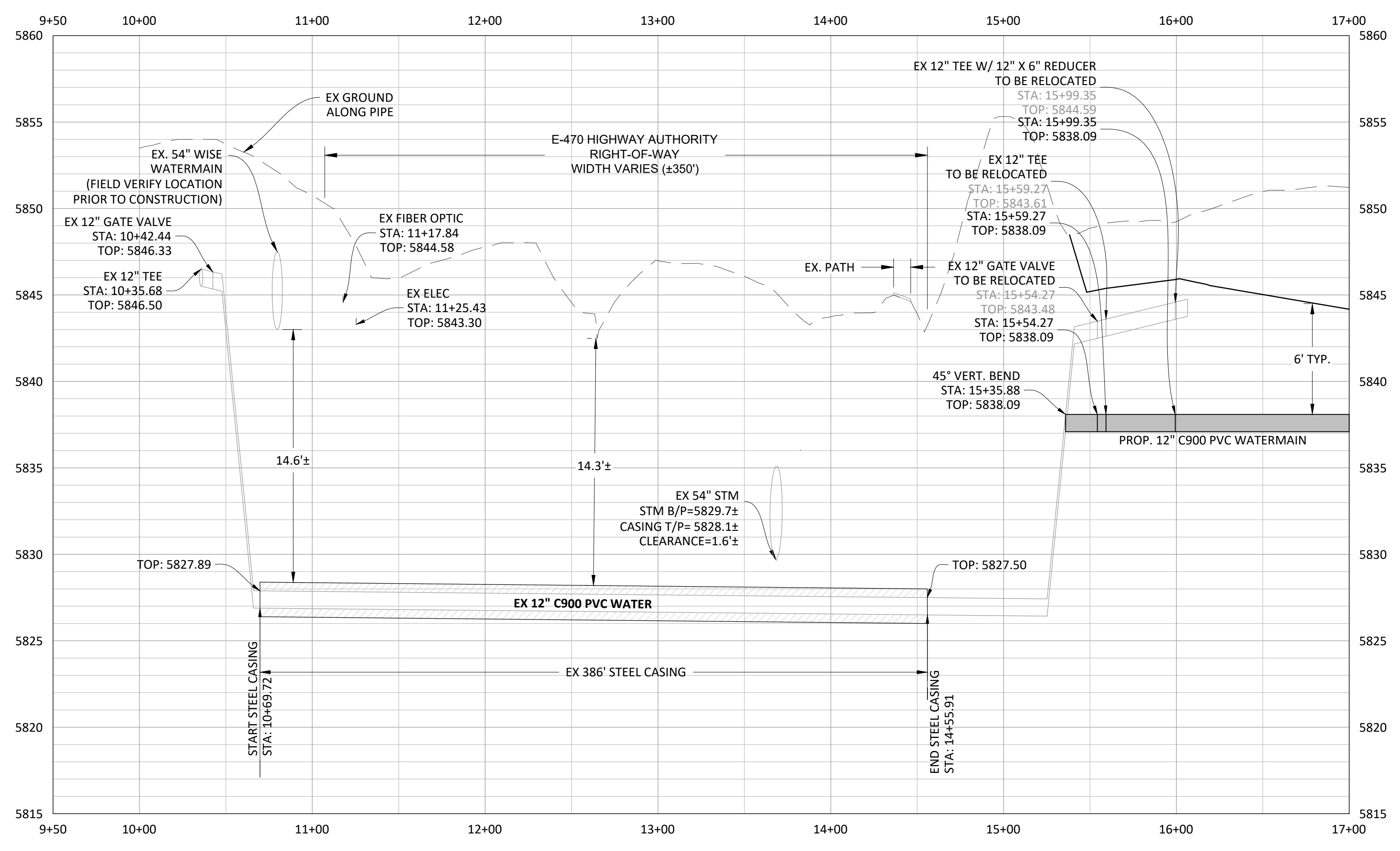
NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C900 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.

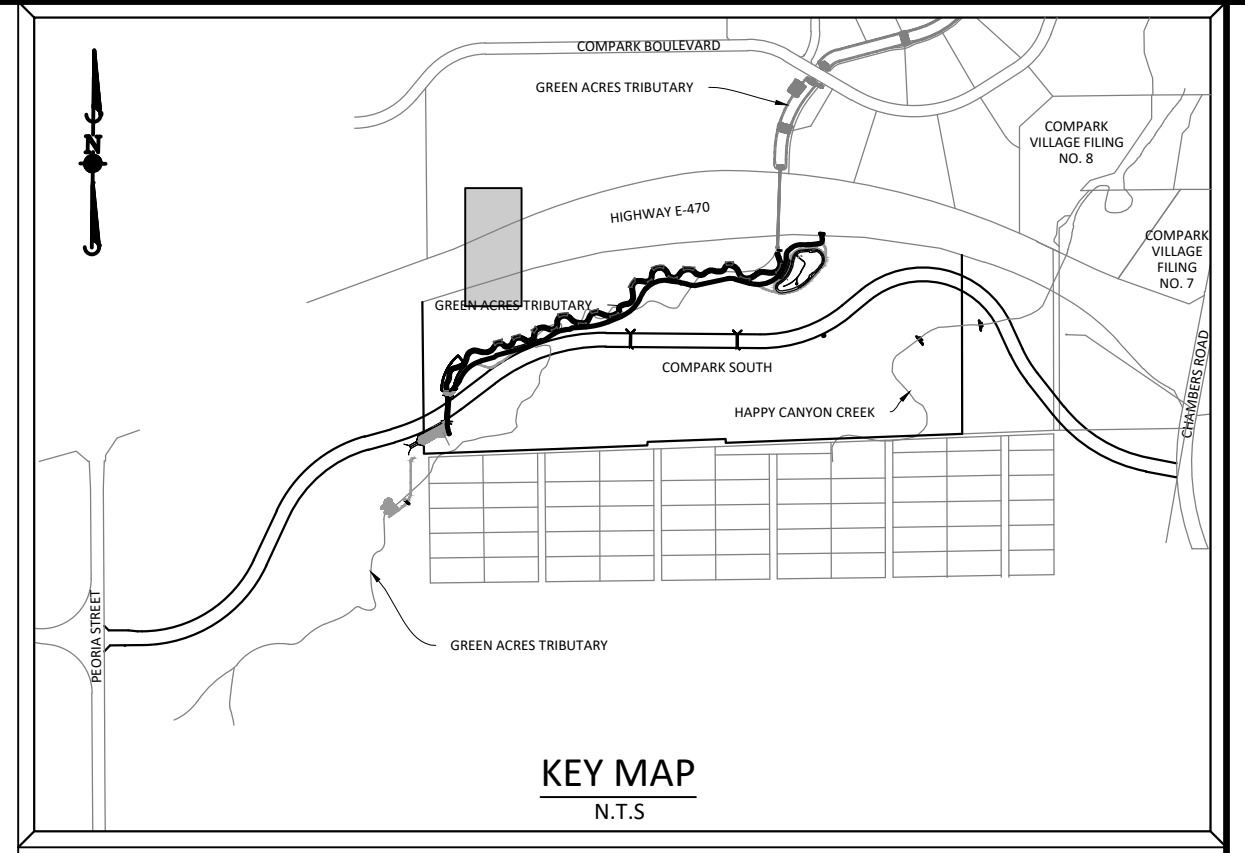
WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.



PROFILE: 8" WATERLINE FOR INFORMATION ONLY



PROFILE: 12" WATERLINE



SOURCE BENCHMARKS:  
DOUGLAS COUNTY BM 1.115010  
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DATE	REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
3/4/2020	UPDATED PER STORMWATER REVISIONS
11/20/2019	REVISED STEEL CASING UNDER E-470 PER LOCATE
10/20/2019	REVISED PER STONE GATE 5/21/16 LETTER
06/20/2016	REVISED PER STONE GATE 5/21/16 LETTER
11/20/2015	1ST SUBMITTAL

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7600 East Orchard Road, Suite 100-303, Greenwood Village, CO 80111, phone: 303.778.0500 manhard.com  
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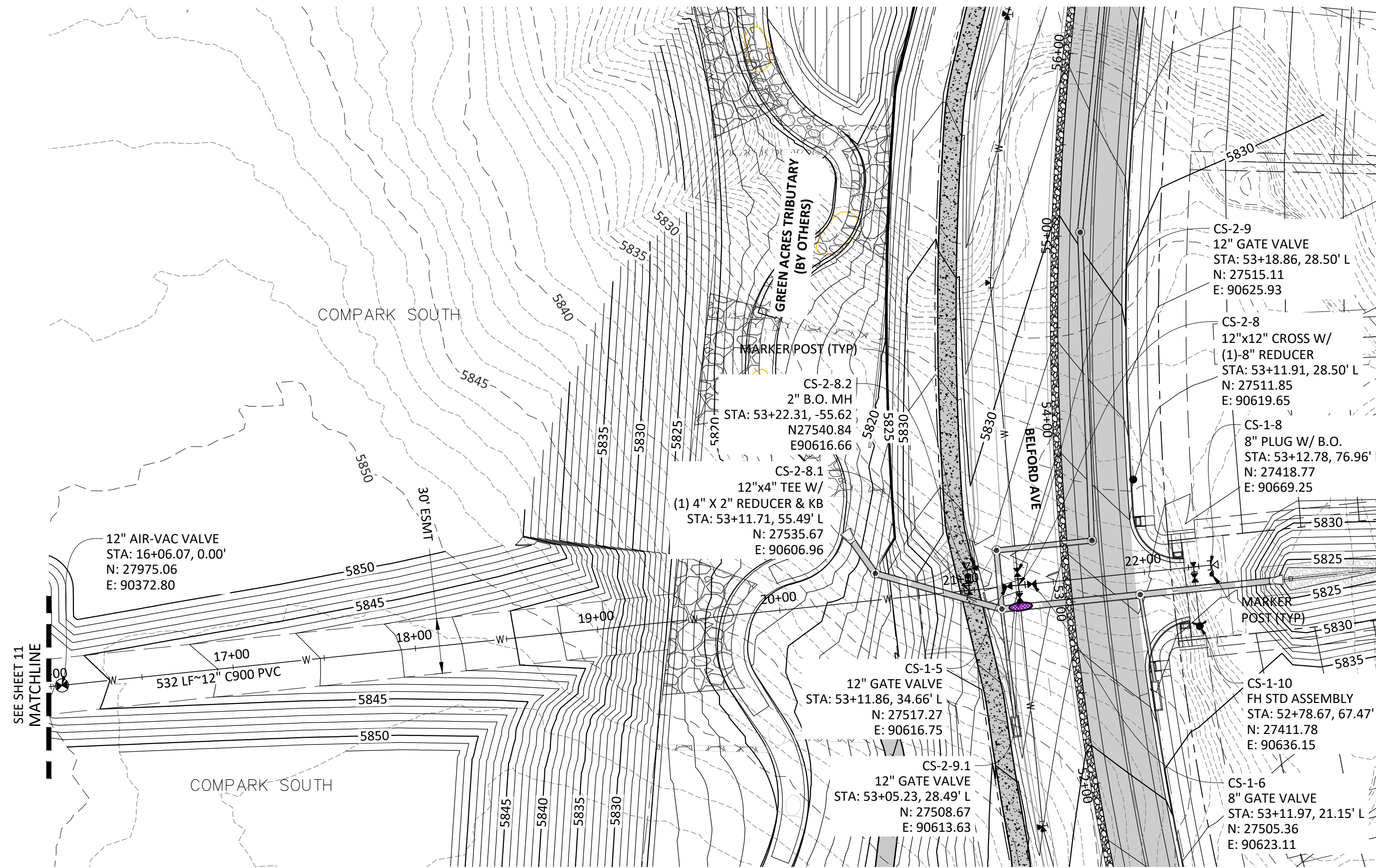
COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
E-470 WATER MAIN BORE PLAN & PROFILE

COLORADO REGISTERED PROFESSIONAL ENGINEER  
11-20-2020  
30677  
PROJ. MGR.: RIM  
PROJ. ASSOC.: ASD  
DRAWN BY: SEK  
DATE: 03/2020  
SHEET  
**11 OF 23**  
CLCPK3

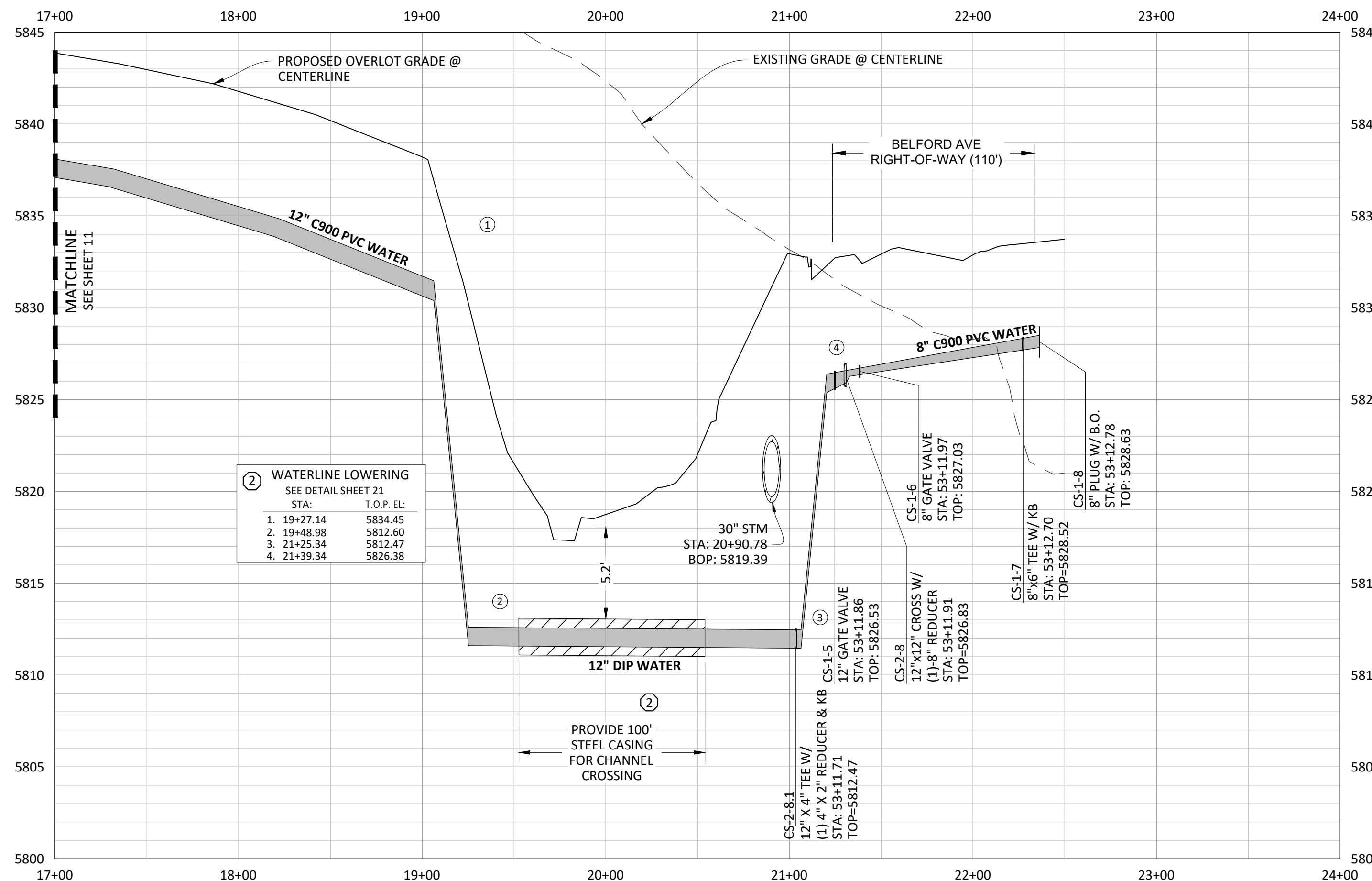
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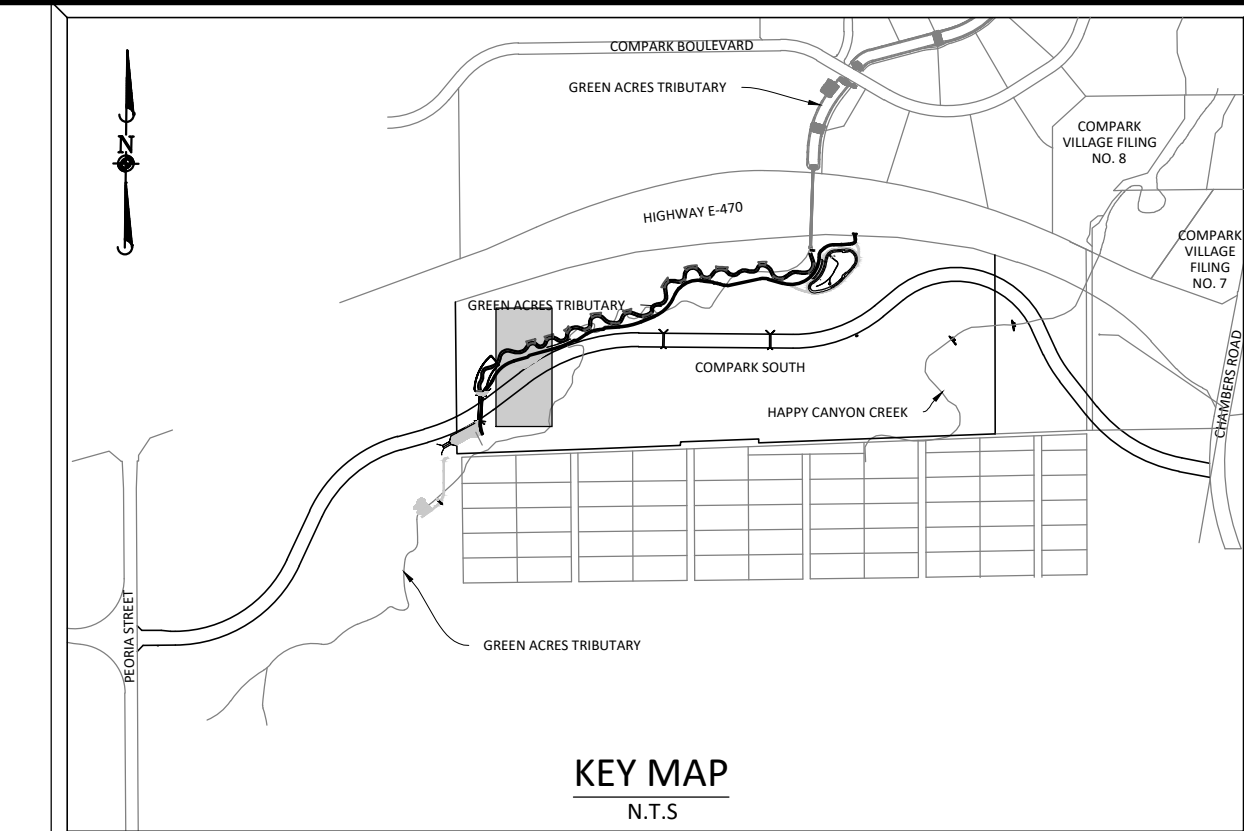
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PLAN: 12" WATERLINE

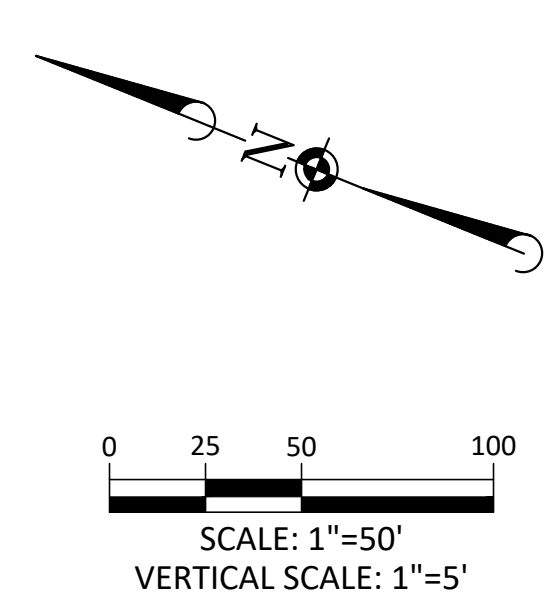


PROFILE: 12" WATERLINE



**KEY MAP**  
N.T.S.

**SOURCE BENCHMARKS:**  
DOUGLAS COUNTY BM 1.115010  
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



- NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.
- ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C900 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.
- WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.

DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
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B. 06/20/2016	REVISED PER STONEGATE 5/21/16 LETTER
A. 11/20/2015	1ST SUBMITTAL

**Manhard CONSULTING**

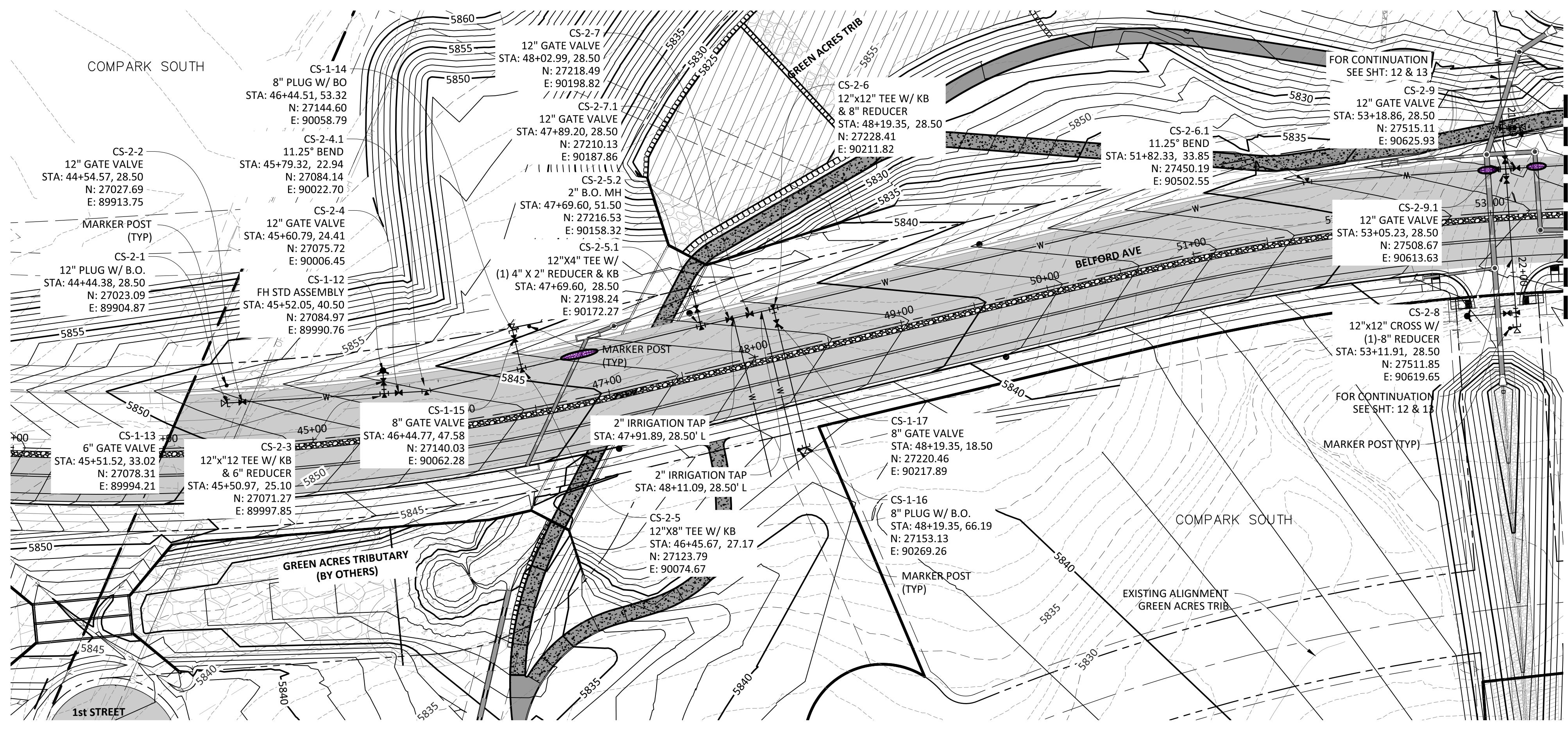
7600 East Orchard Road, Suite 100-3, Greenwood Village, CO 80111, phone: 303.778.0500 manhard.com  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
WATER PLAN & PROFILE

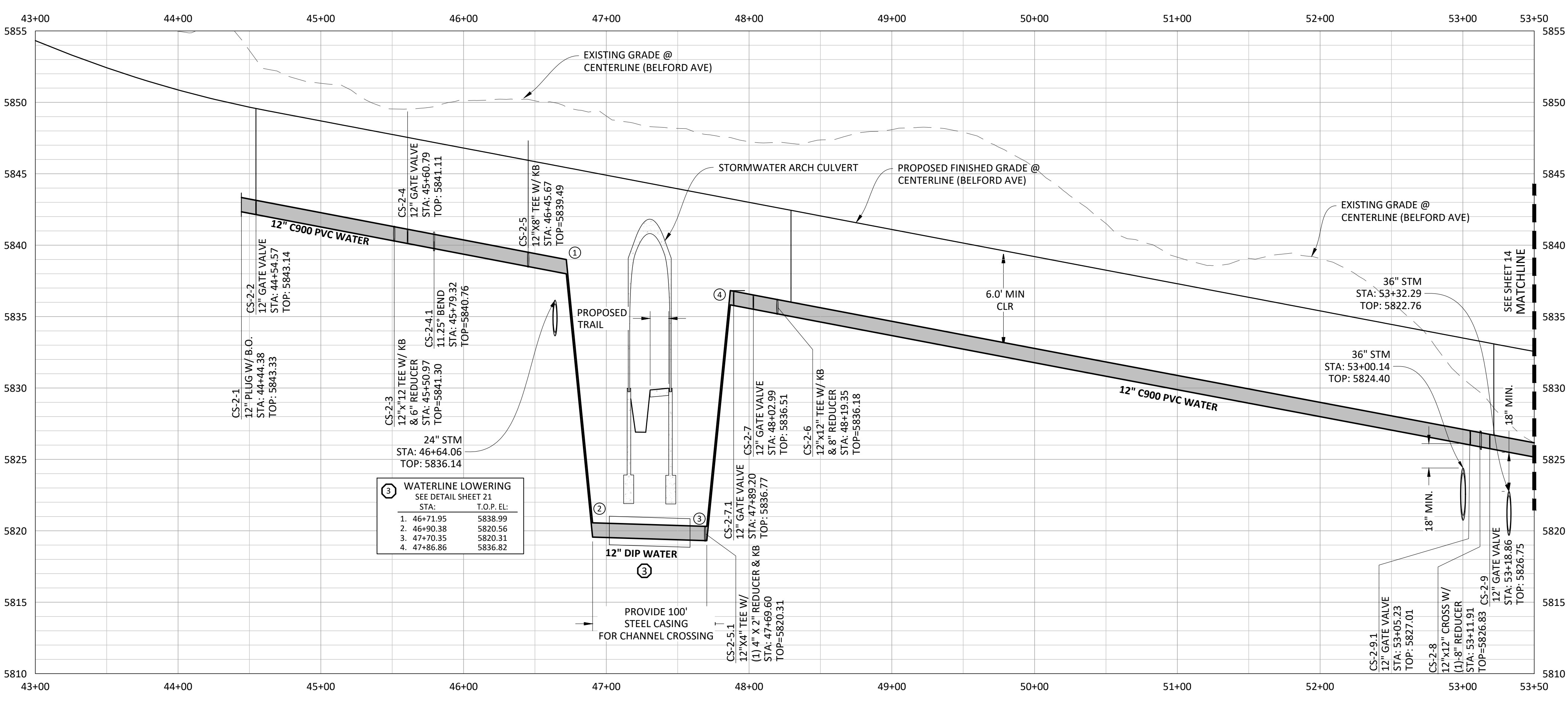
PROJ. MGR.: RIM  
PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

SHEET  
**12 OF 23**  
CLCPKC3

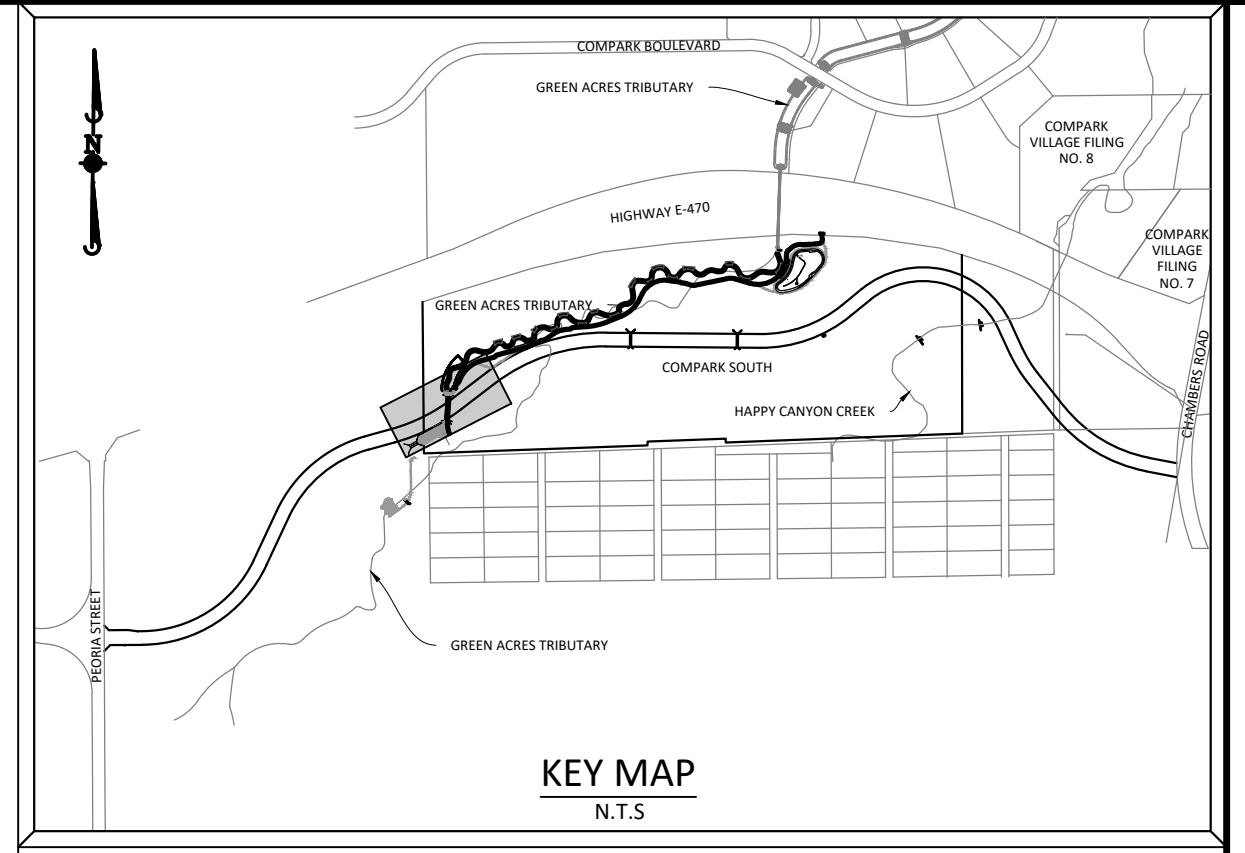
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PLAN: 12" WATERLINE



PROFILE: 12" WATERLINE



**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



SCALE: 1"=50'  
 VERTICAL SCALE: 1"=5'



Know what's below.  
 Call before you dig.

NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

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C. 10/20/2018	REVISED PER STONEGATE 5/27/16 LETTER
B. 06/20/2016	REVISED PER STONEGATE 5/27/16 LETTER
A. 11/20/2015	1ST SUBMITTAL

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 7600 East Orchard Road, Suite 100-A, Greenwood Village, CO 80111, phone: 303.778.0820 manhard.com  
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management |

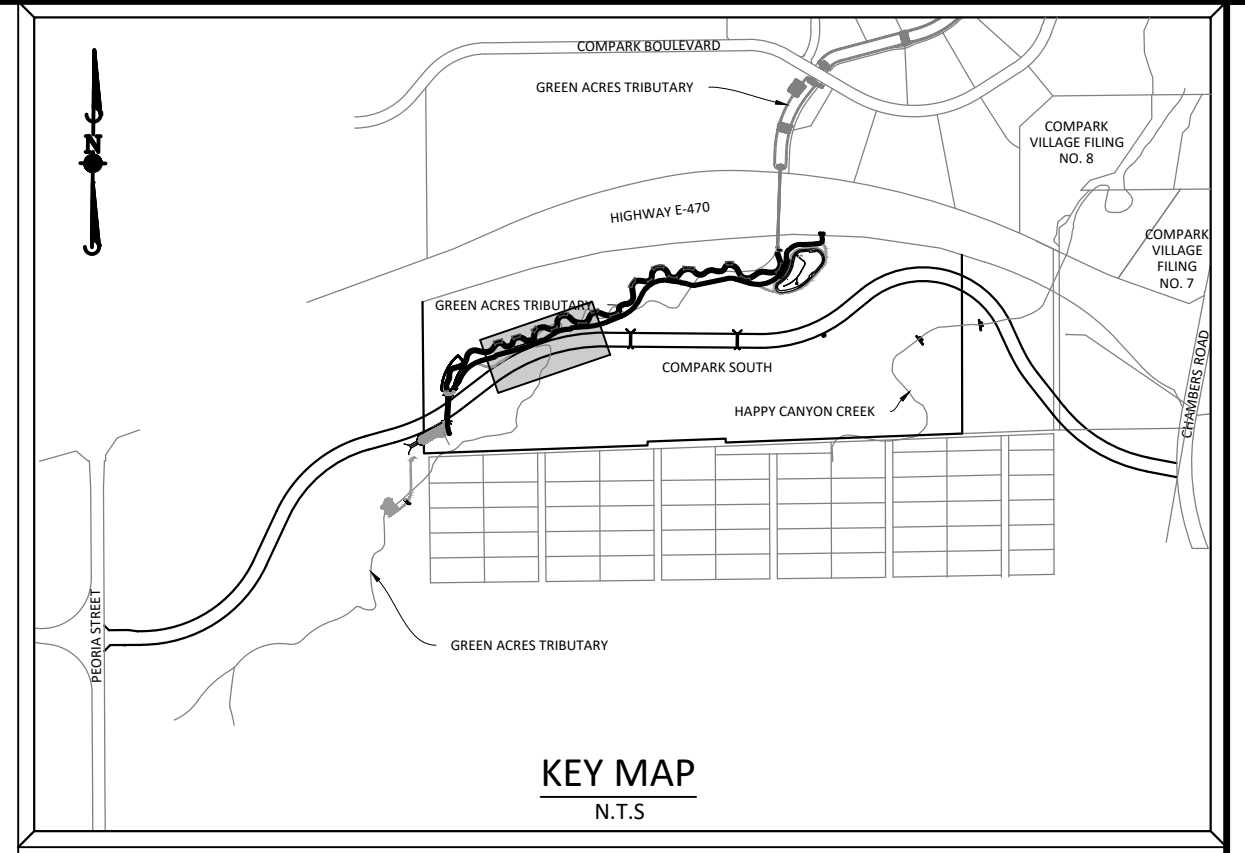
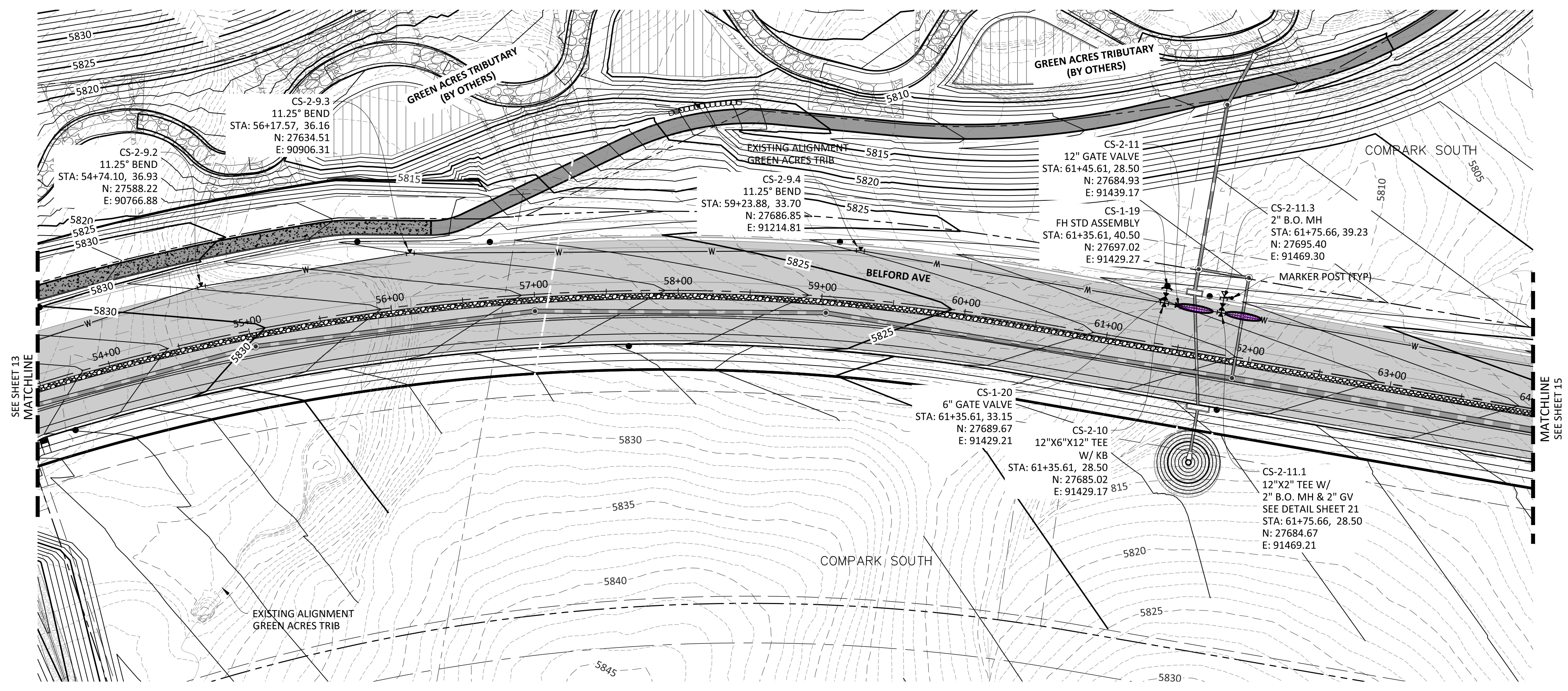
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE

COLORADO REGISTERED PROFESSIONAL ENGINEER  
 30877  
 11-20-2020

PROJ. MGR.: RJM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**13 OF 23**  
 CLCPKC3

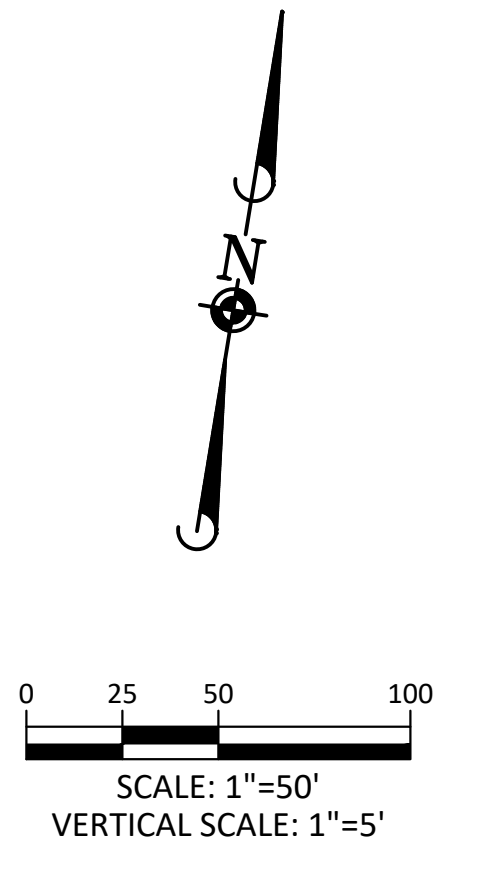
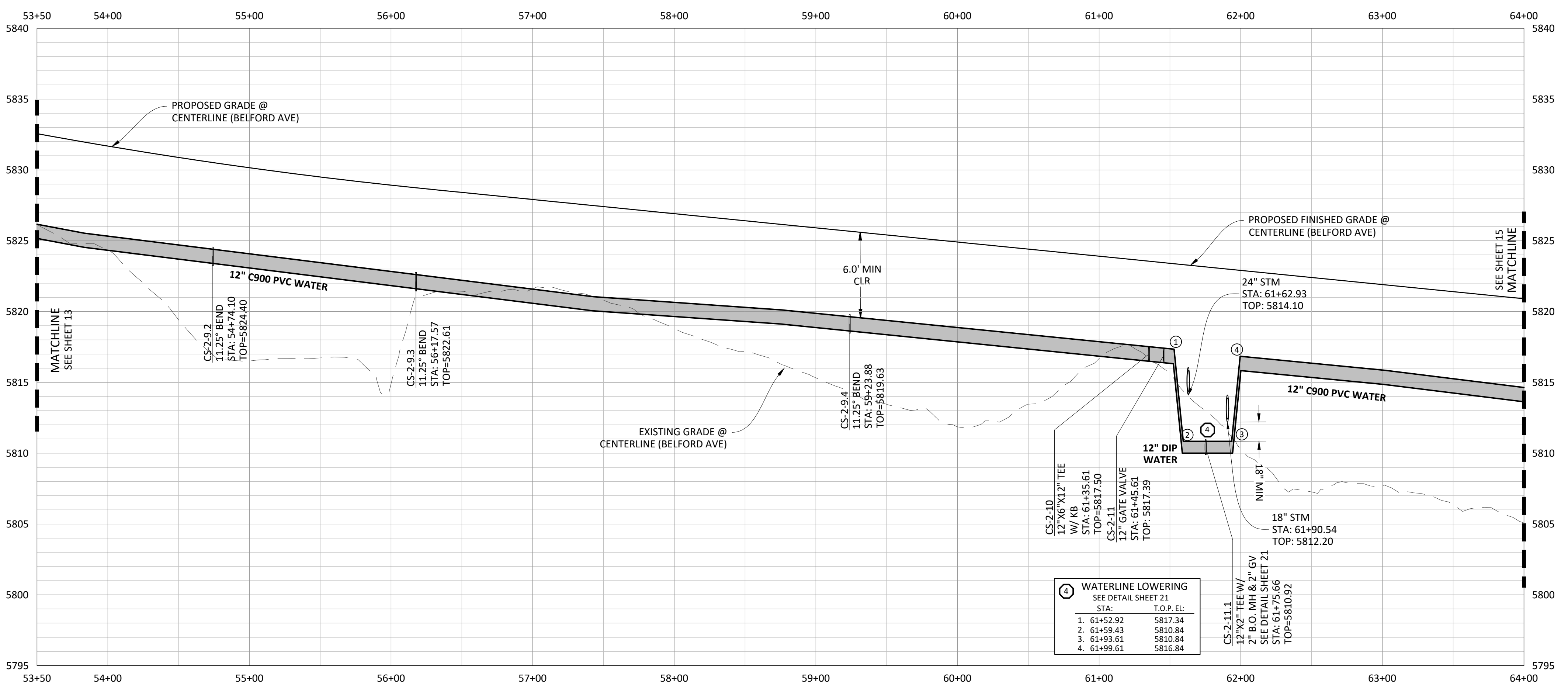
Plotted: 11/20/2020 8:59 AM. Dwg Name: D:\Cpck3\compark\_south\12\_filing\_1\_no\_gis\master\_water\_and\_sewer\Office\CLCPKC3\Office-Wat\_P&P\_2.dwg. Updated By: MMCGuire



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A. 11/20/2015	1ST SUBMITTAL

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NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

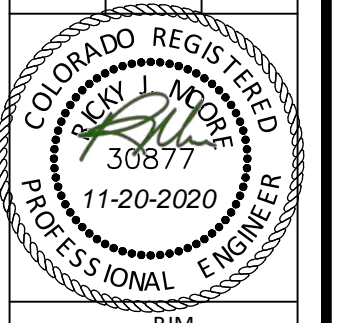
ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C900 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.

WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.

WATERLINE LOWERING	
STA.	T.O.P. EL.
1. 61+52.92	5817.34
2. 61+59.43	5810.84
3. 61+93.61	5810.84
4. 61+99.61	5816.84

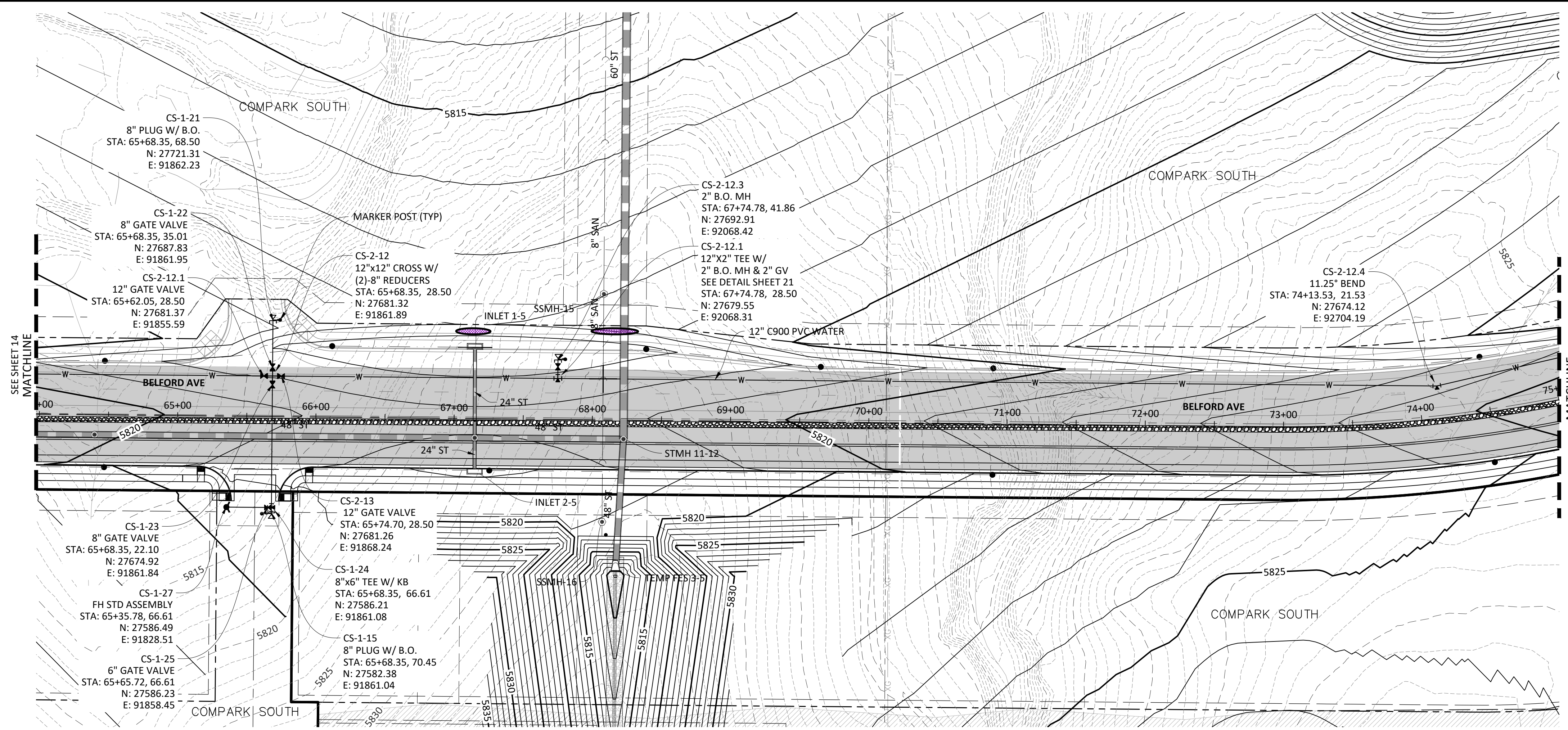
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
WATER PLAN & PROFILE

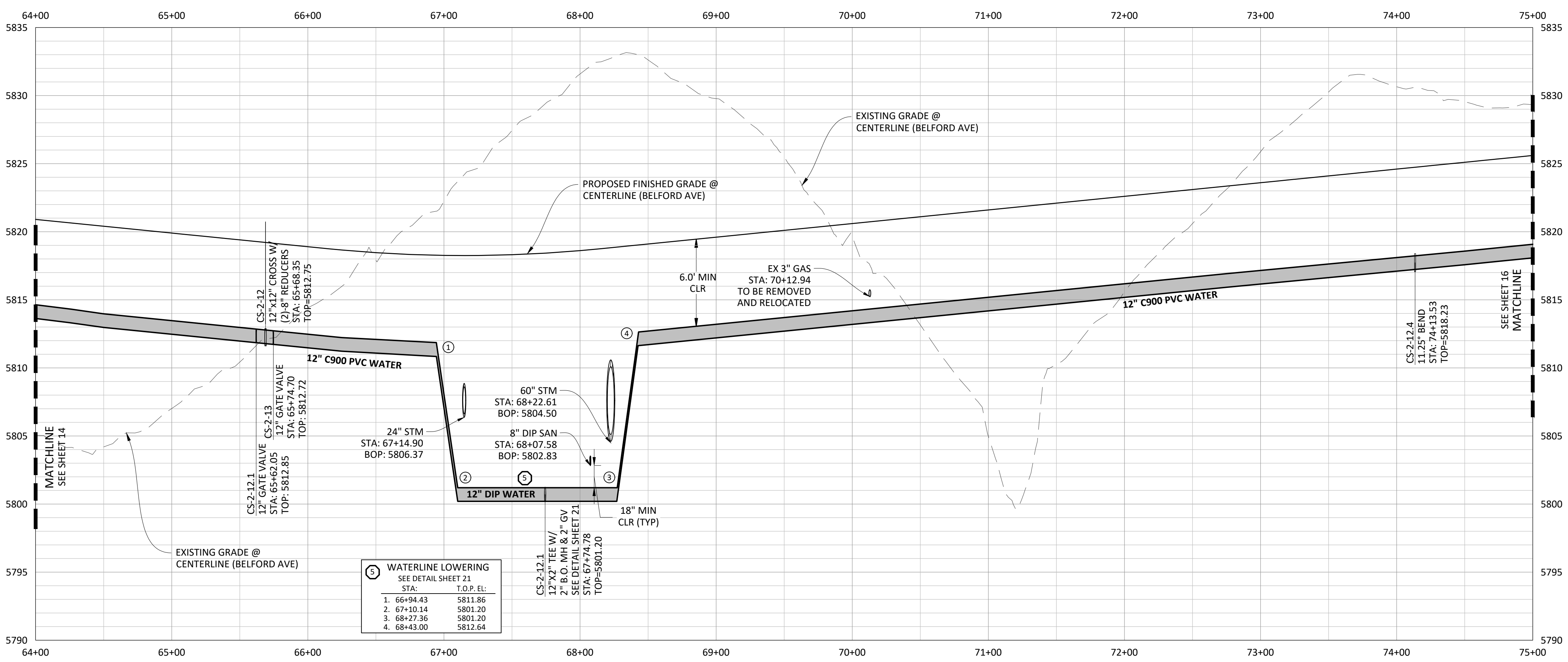


PROJ. MGR.: RJM  
PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

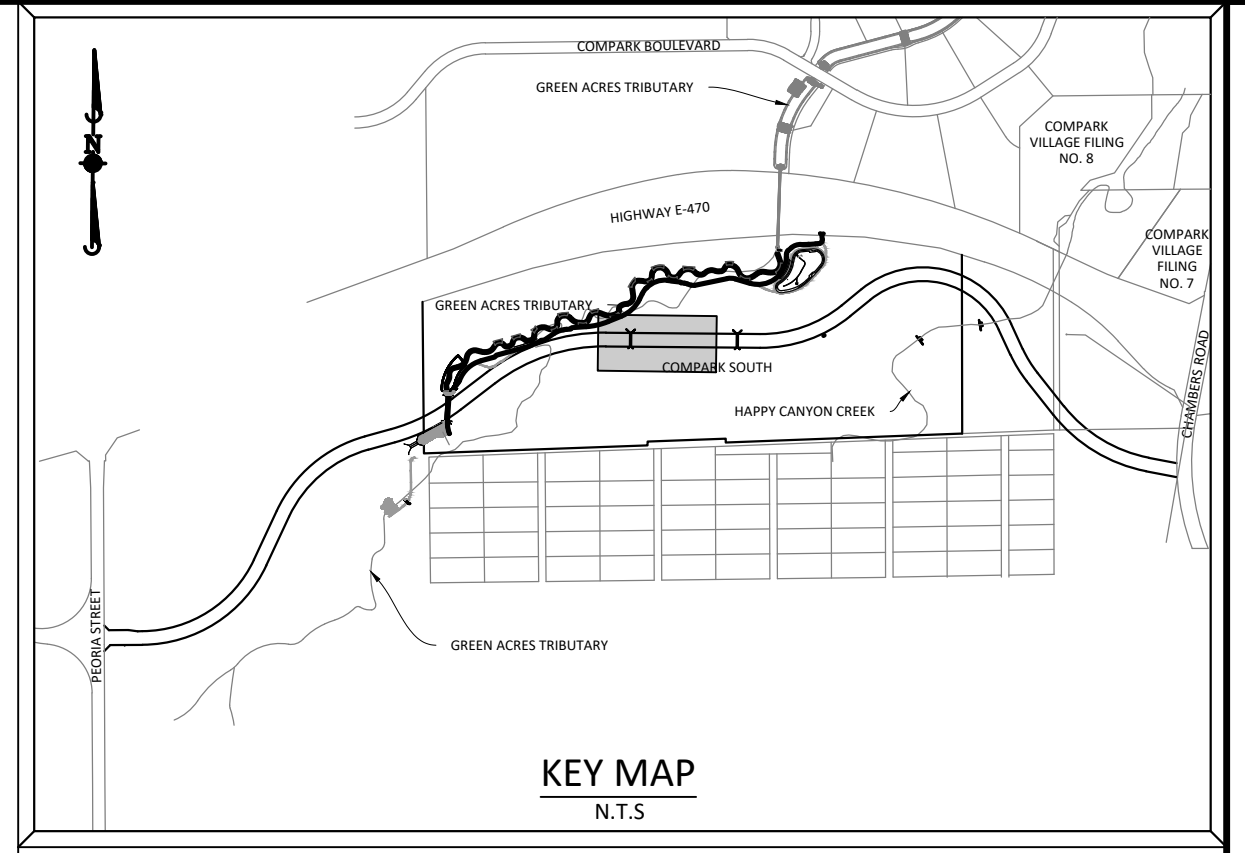
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**14 OF 23**  
CLCPK3



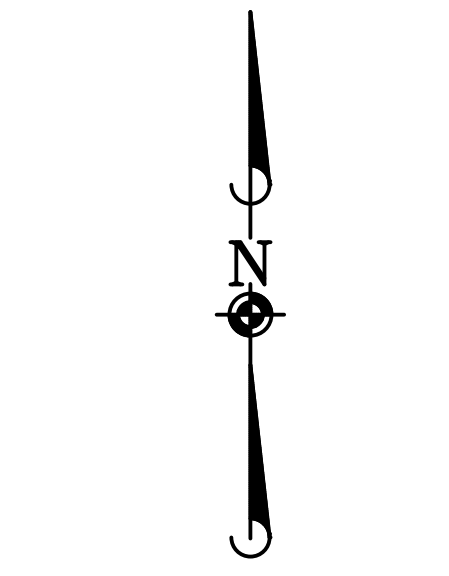
PLAN: 12" WATERLINE



PROFILE: 12" WATERLINE



**SOURCE BENCHMARKS:**  
 DOUGLAS COUNTY BM 1.115010  
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



SCALE: 1"=50'  
 VERTICAL SCALE: 1"=5'



NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

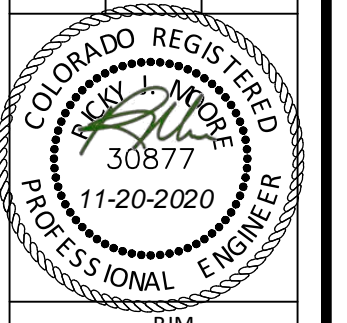
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WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.

DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 3/4/2020	UPDATED PER STORMWATER REVISIONS
E. 3/17/2019	REVISED STEEL CASING UNDER E-70 PER LOCATE
D. 3/10/2018	REVISED PER STONEGATE 5/27/16 LETTER
C. 06/20/16	REVISED PER STONEGATE 5/27/16 LETTER
B. 11/20/15	1ST SUBMITTAL
A.	EG

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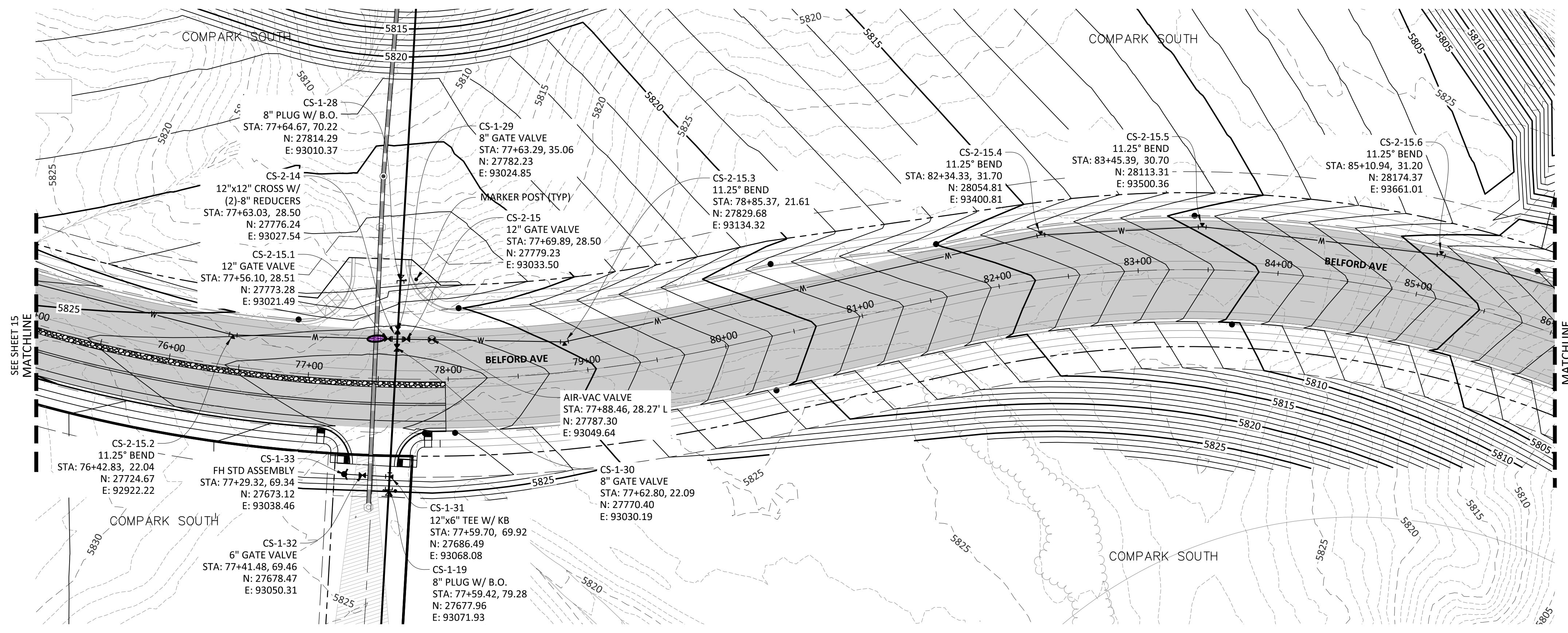
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE



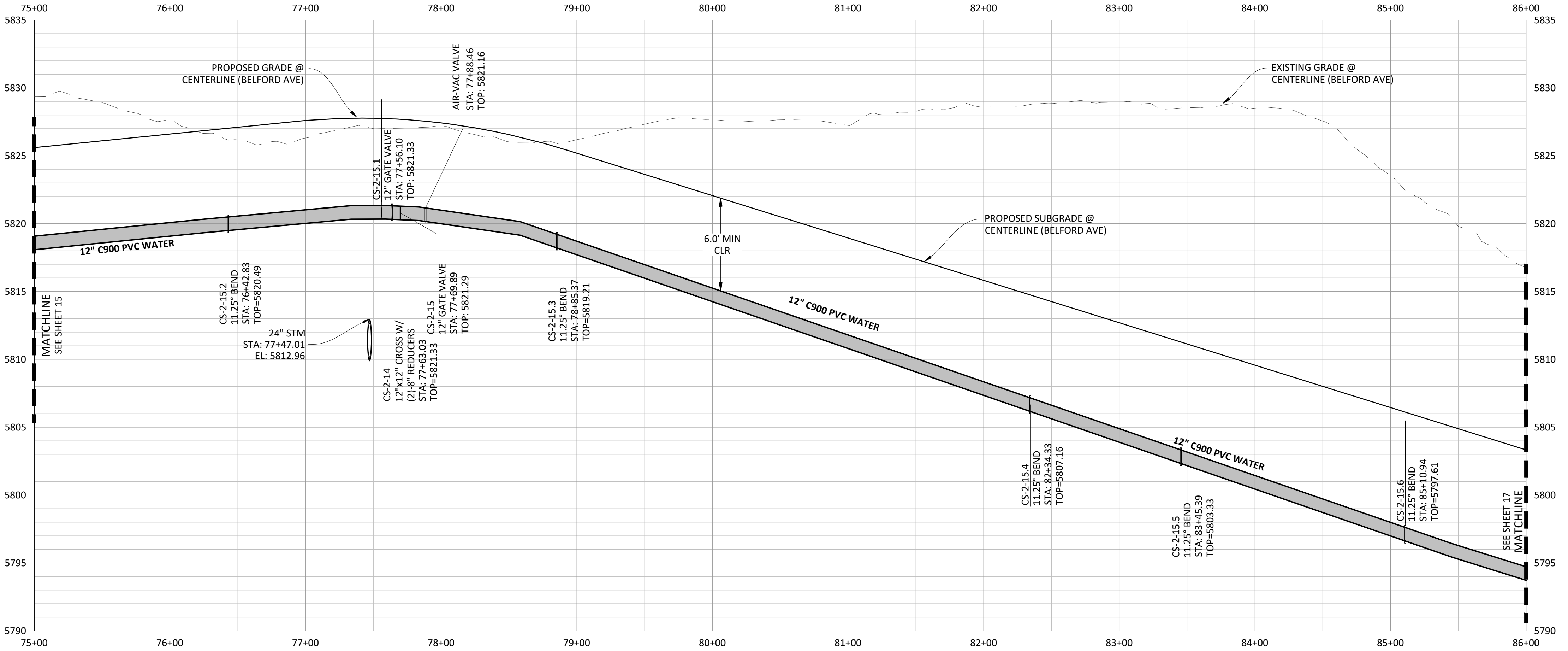
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 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/20/20

SHEET  
**15 OF 23**  
 CLCPK3

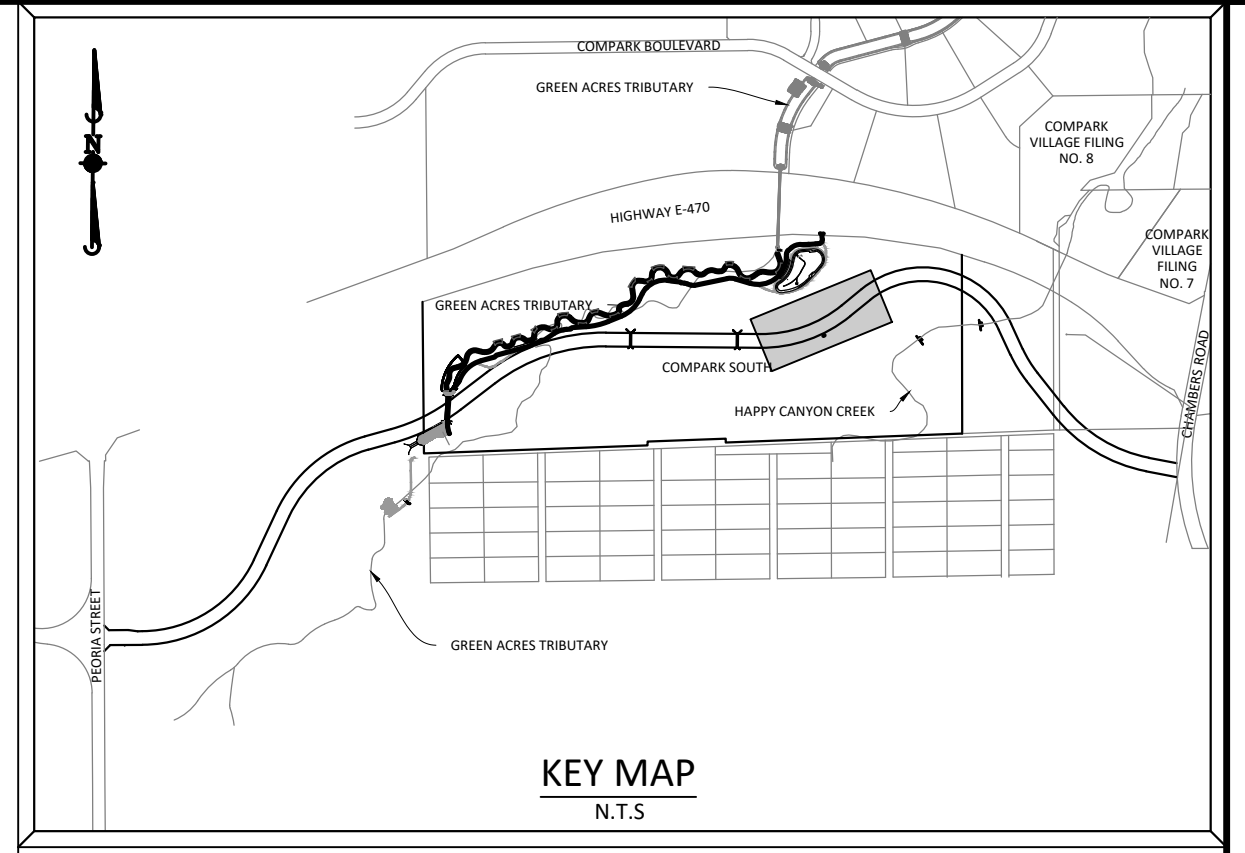
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PLAN: 12" WATERLINE



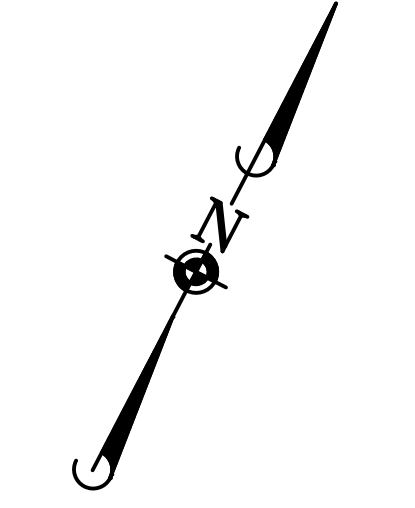
PROFILE: 12" WATERLINE



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 SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF  
 THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 3/4/2020	UPDATED PER STORMWATER REVISIONS
E. 11/20/19	REVISED STEEL COUPLING UNDER E-470 PER LOCATE
D. 10/20/19	REVISED PER STONEGATE 5/21/16 LETTER
C. 10/20/19	REVISED PER STONEGATE 5/21/16 LETTER
B. 06/20/16	REVISED PER STONEGATE 5/21/16 LETTER
A. 11/20/15	1ST SUBMITTAL

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SCALE: 1"=50'  
 VERTICAL SCALE: 1"=5'



Know what's below.  
 Call before you dig.

NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

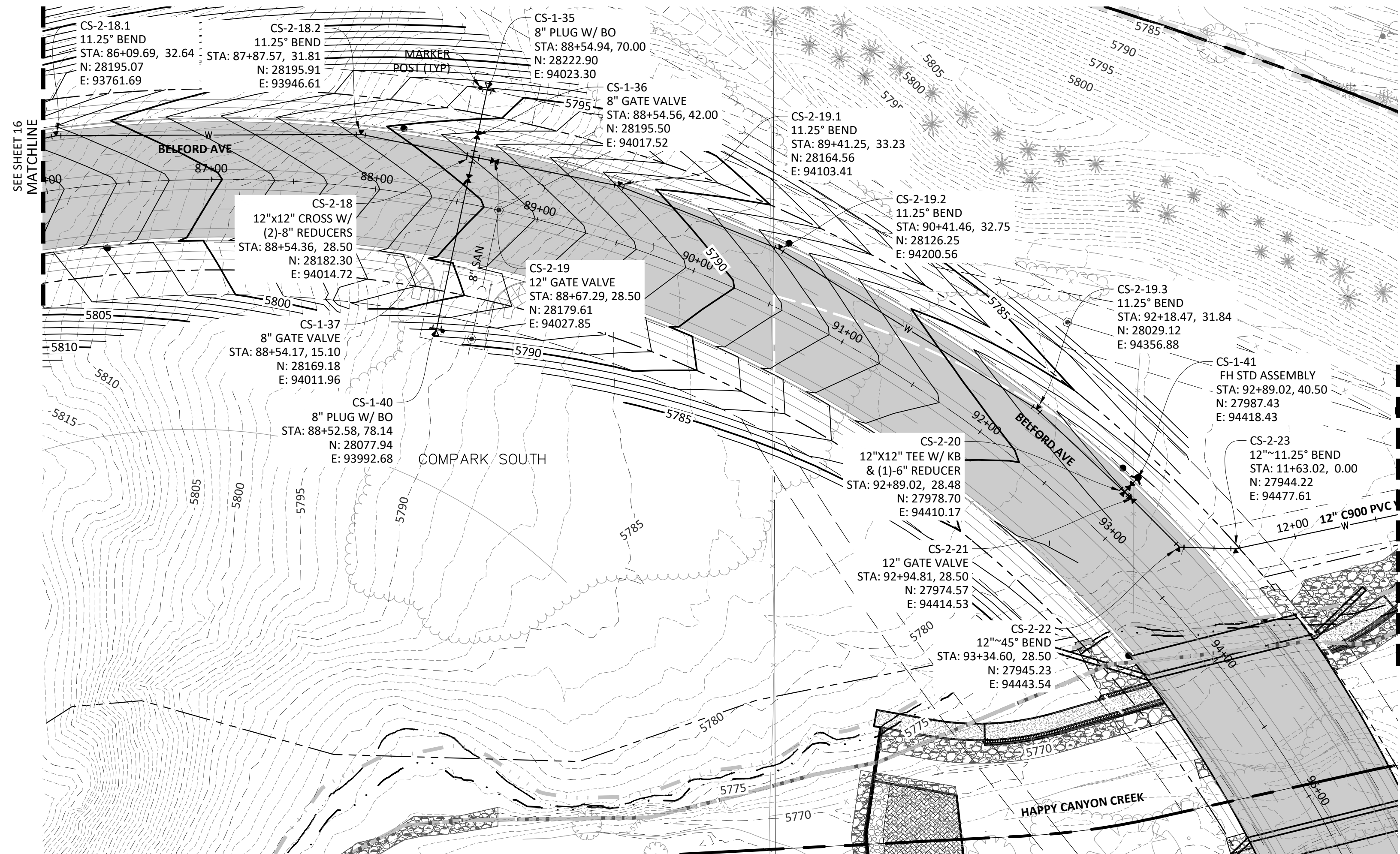
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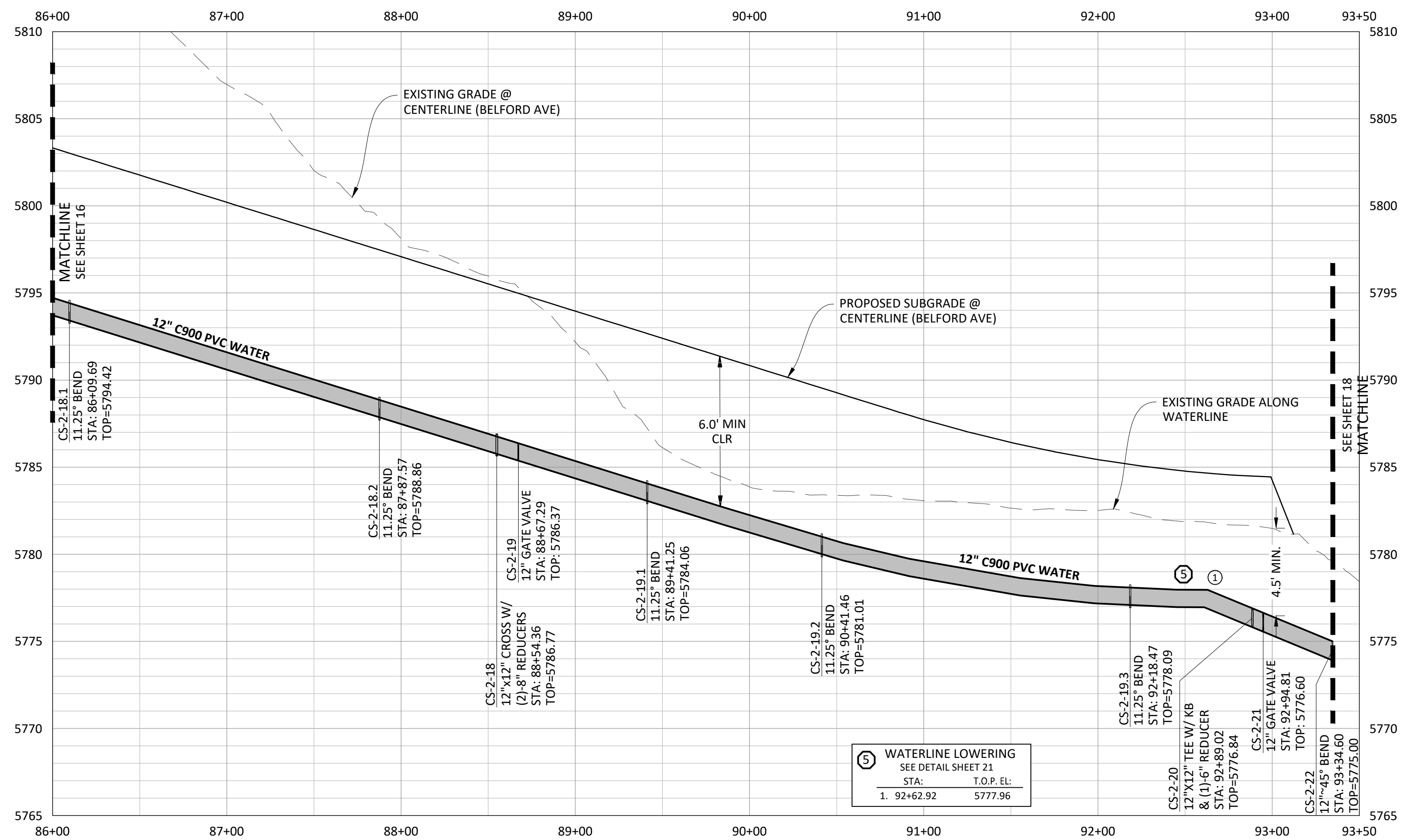
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE

COLORADO REGIS. ENR. 30877 11-20-2020 PROFESSIONAL ENGINEER  
 PROJ. MGR.: RJM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020  
 SHEET  
**16 OF 23**  
 CLCPKC3

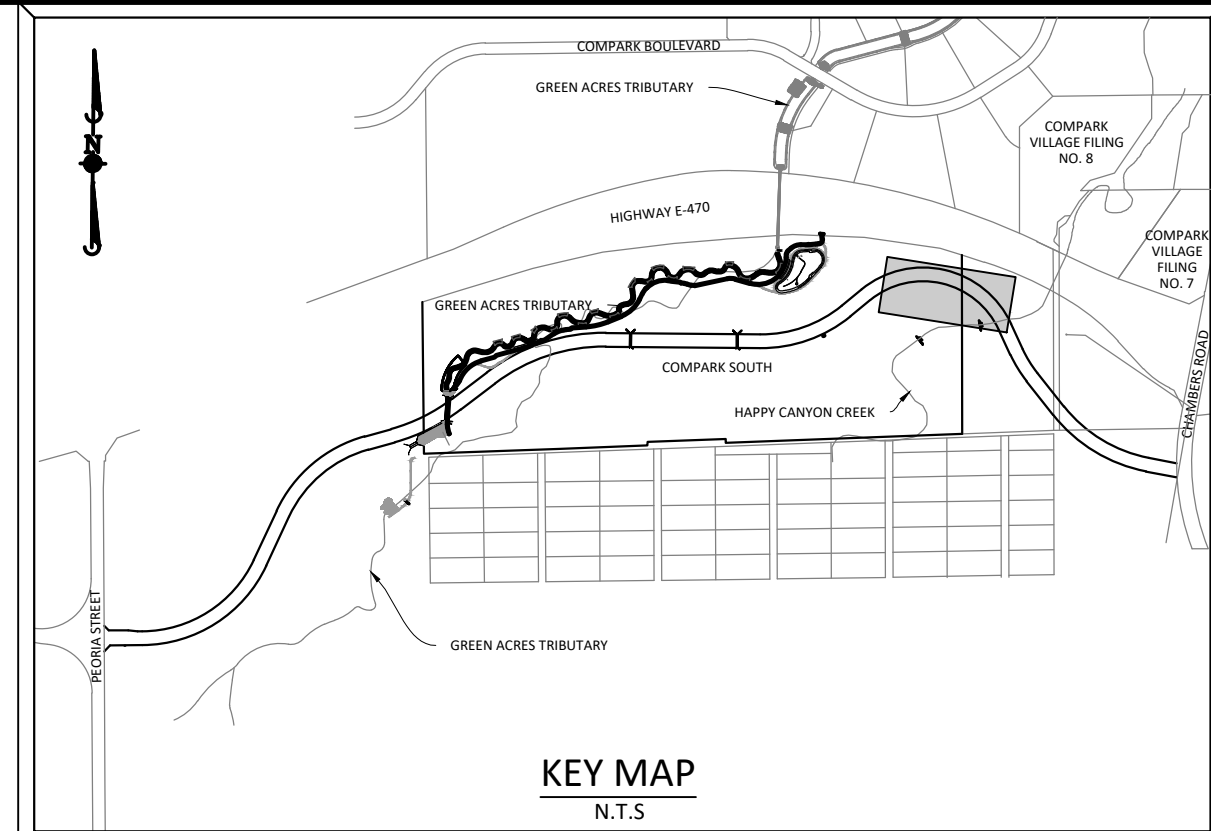
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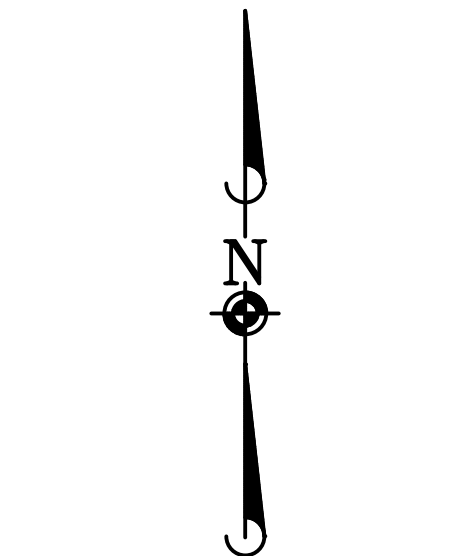
PLAN: 12" WATERLINE



PROFILE: 12" WATERLINE



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SCALE: 1"=50'



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 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.

Ⓢ WATERLINE LOWERING  
 SEE DETAIL SHEET 21  
 STA: T.O.P. EL.  
 1. 92+62.92 5777.96

DATE	REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
3/4/2019	REVISED STEEL CASING UNDER E-30 PER LOCATE
11/20/2018	REVISED PER STONEGATE 9/24/16 LETTER
10/26/2016	REVISED PER STONEGATE 5/17/16 LETTER
11/20/2015	1ST SUBMITTAL

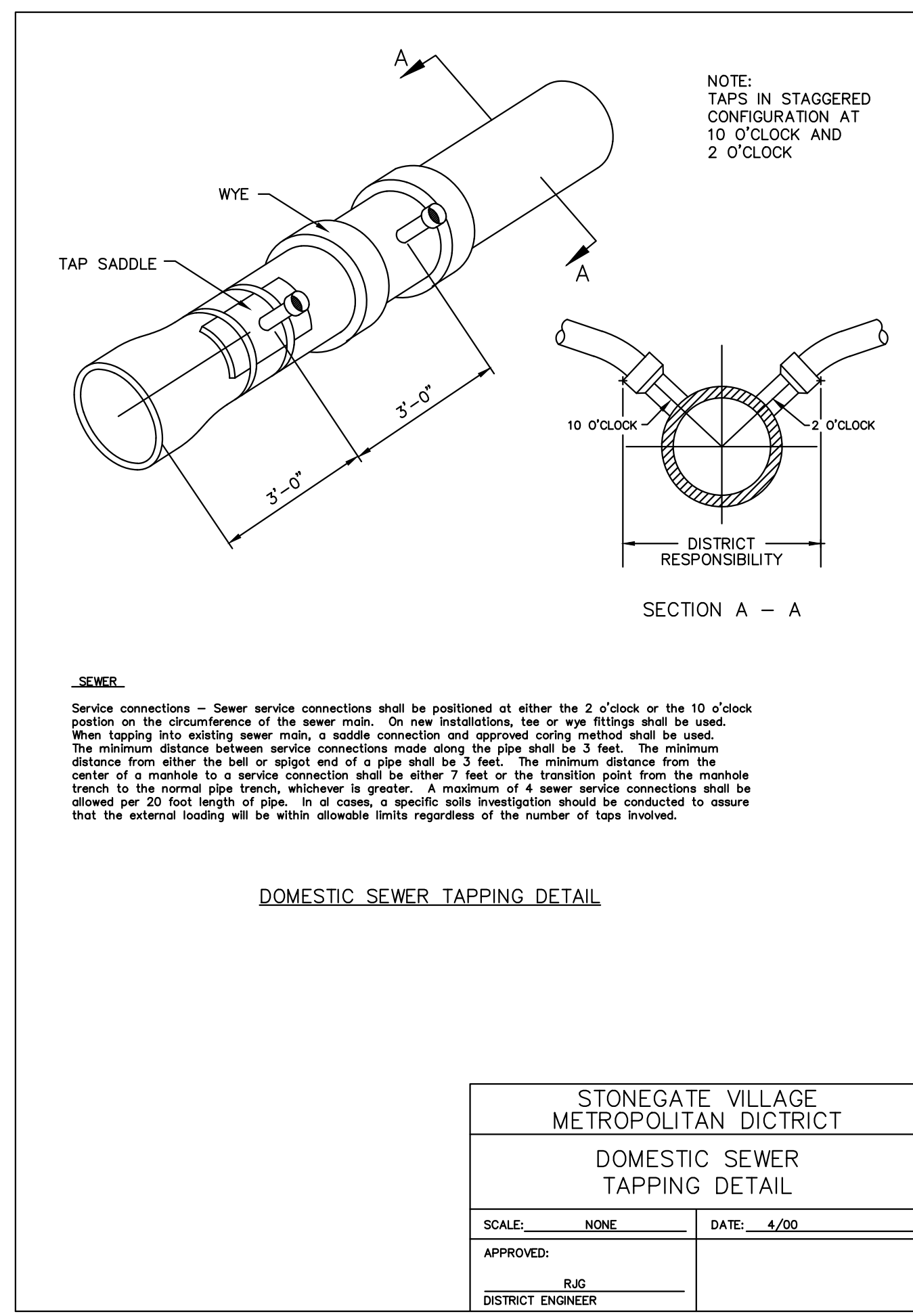
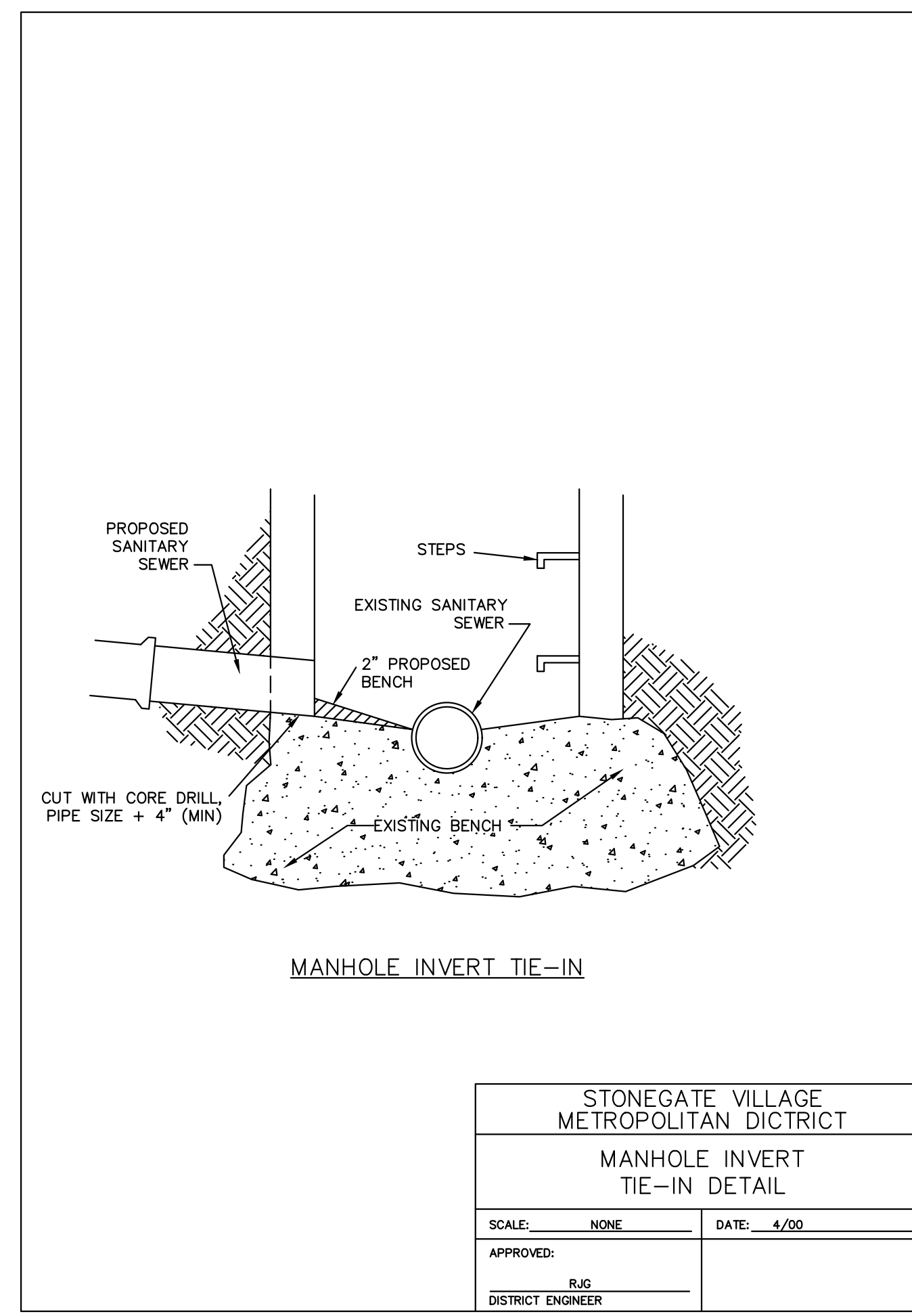
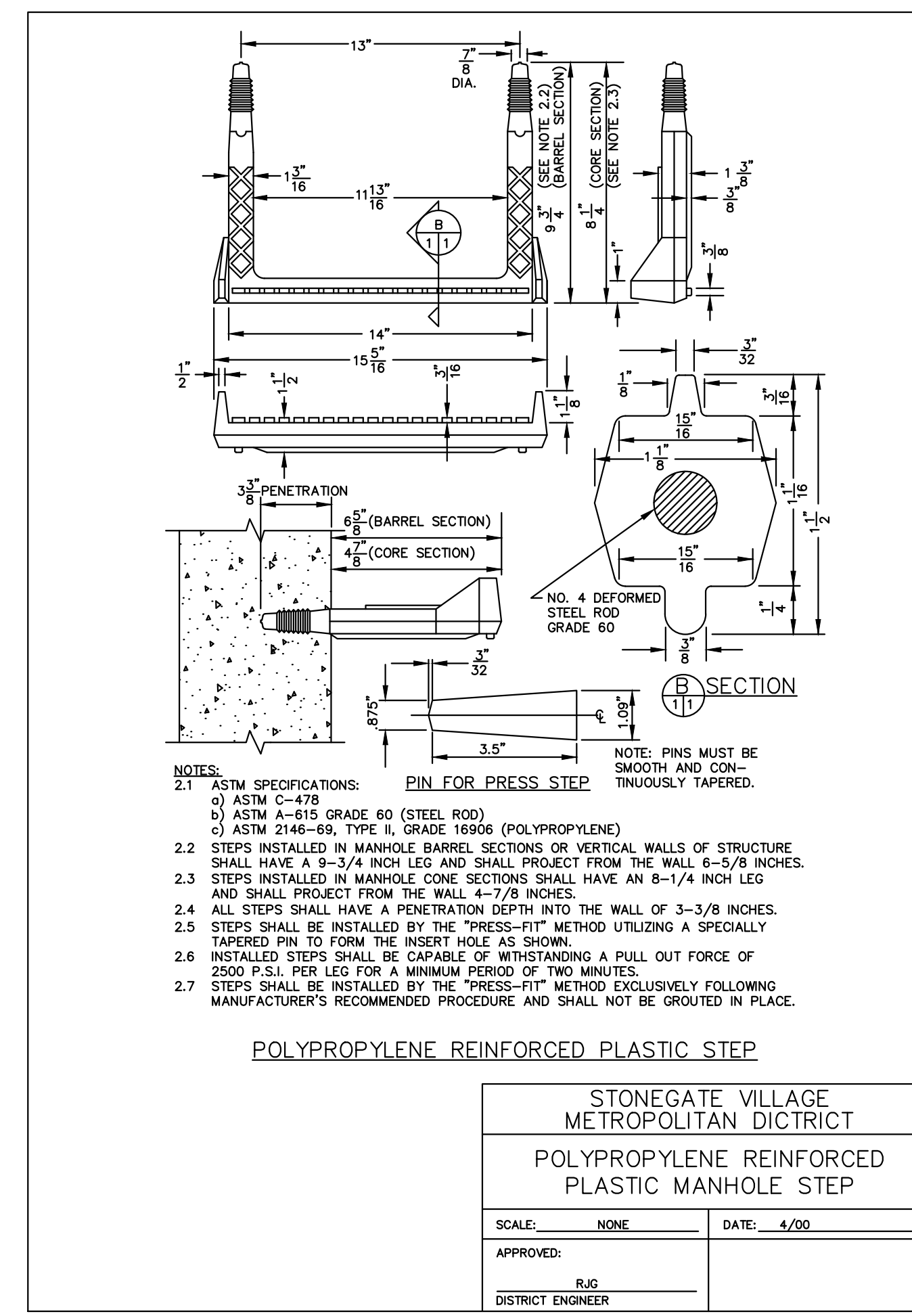
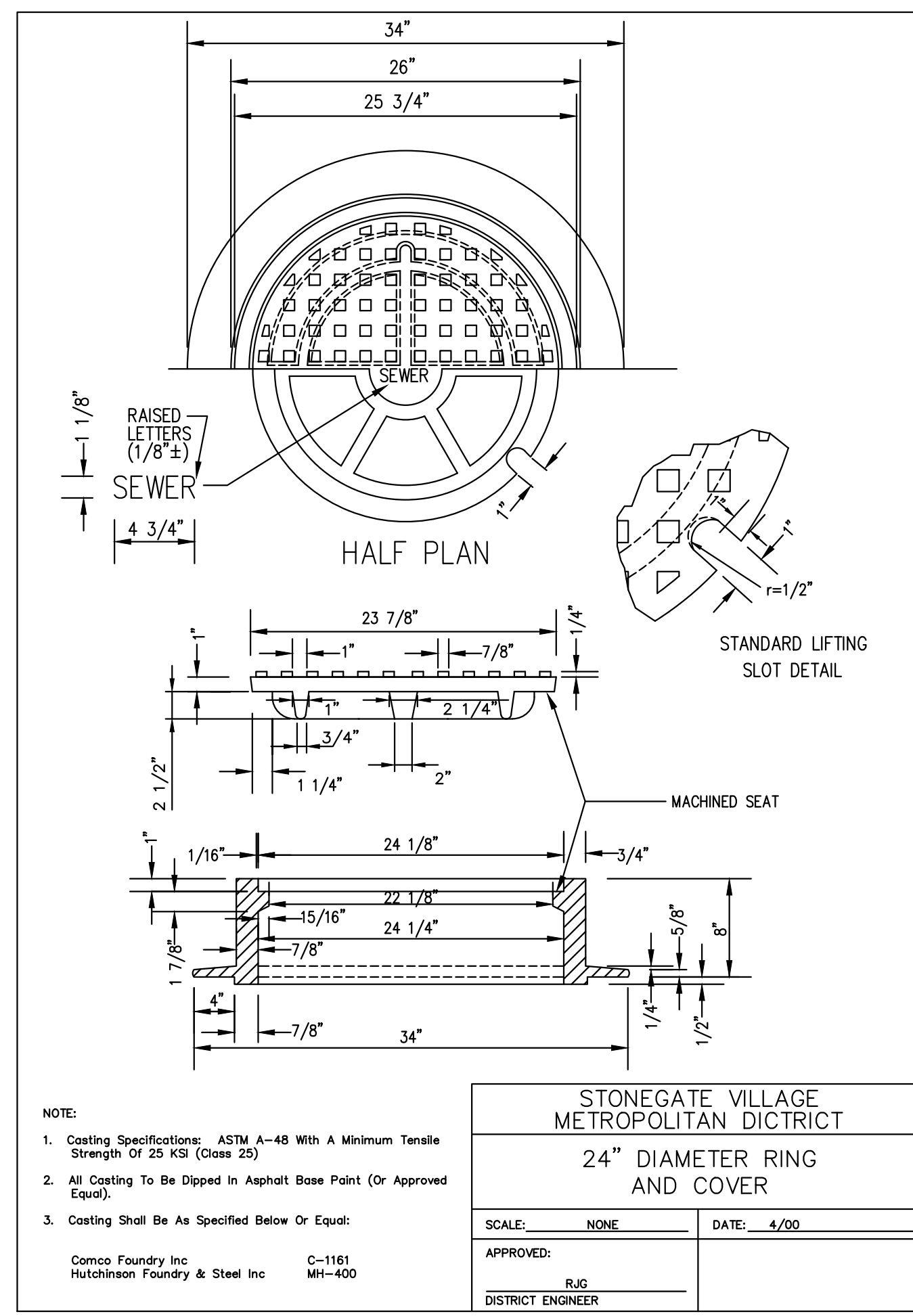
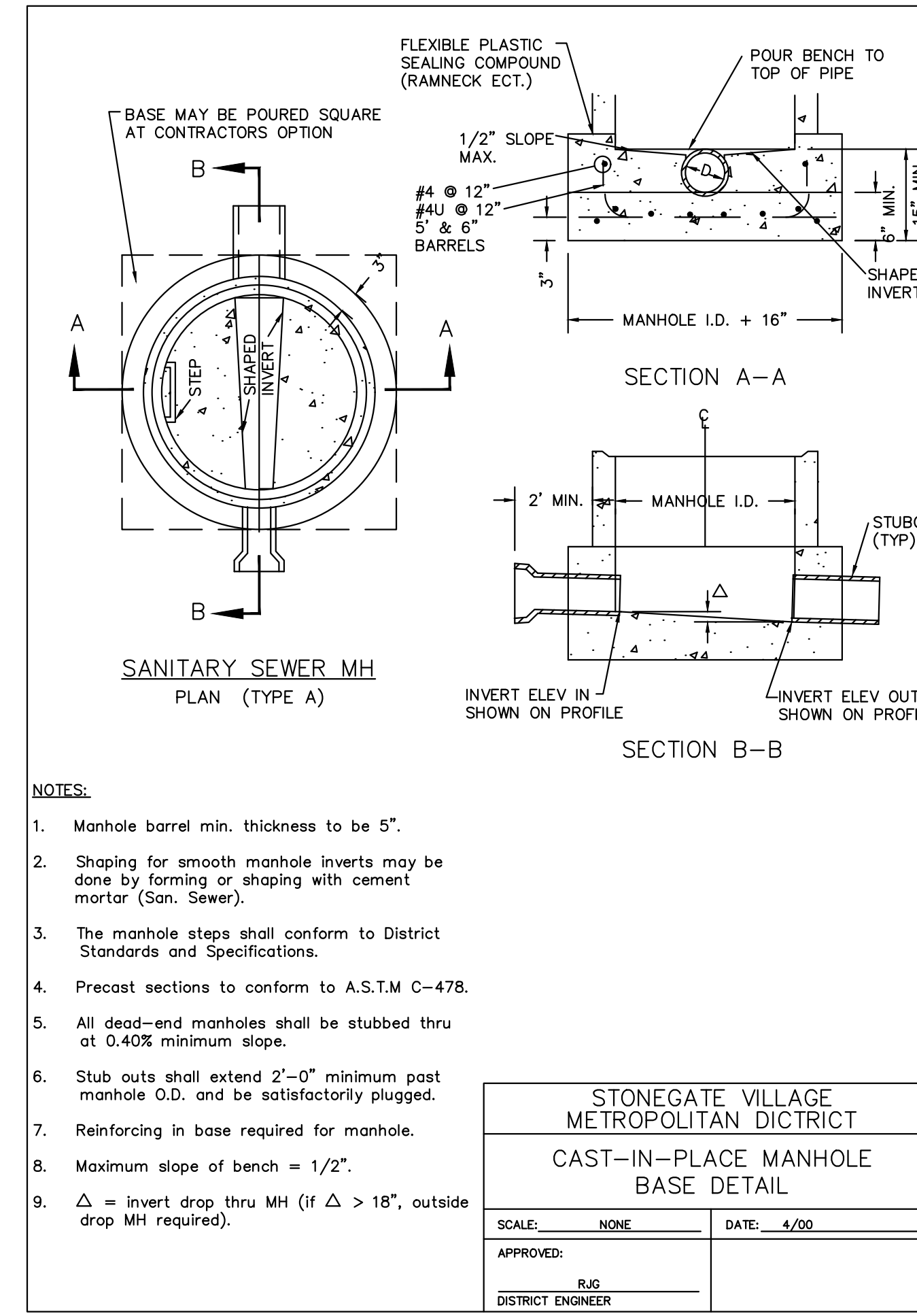
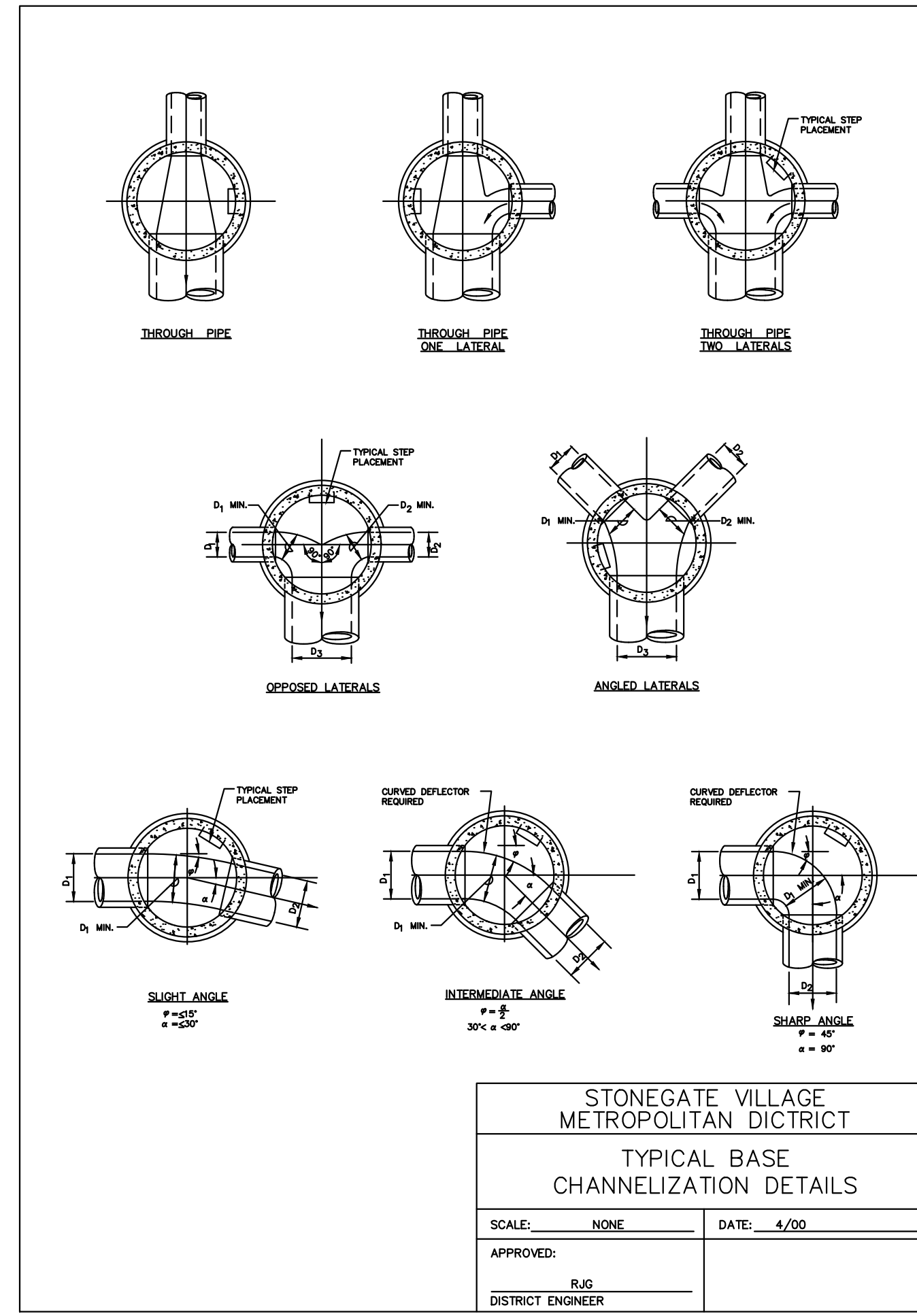
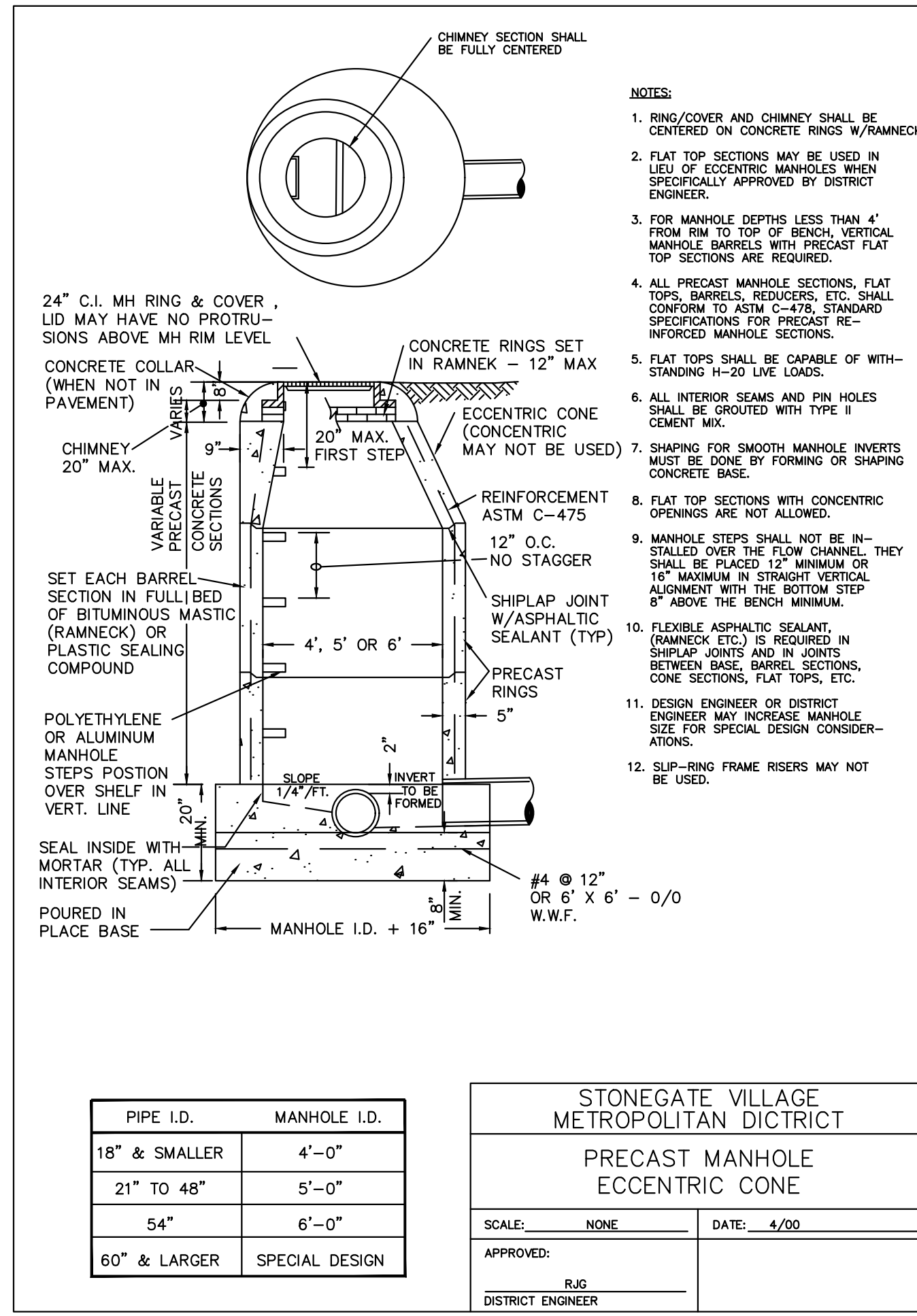
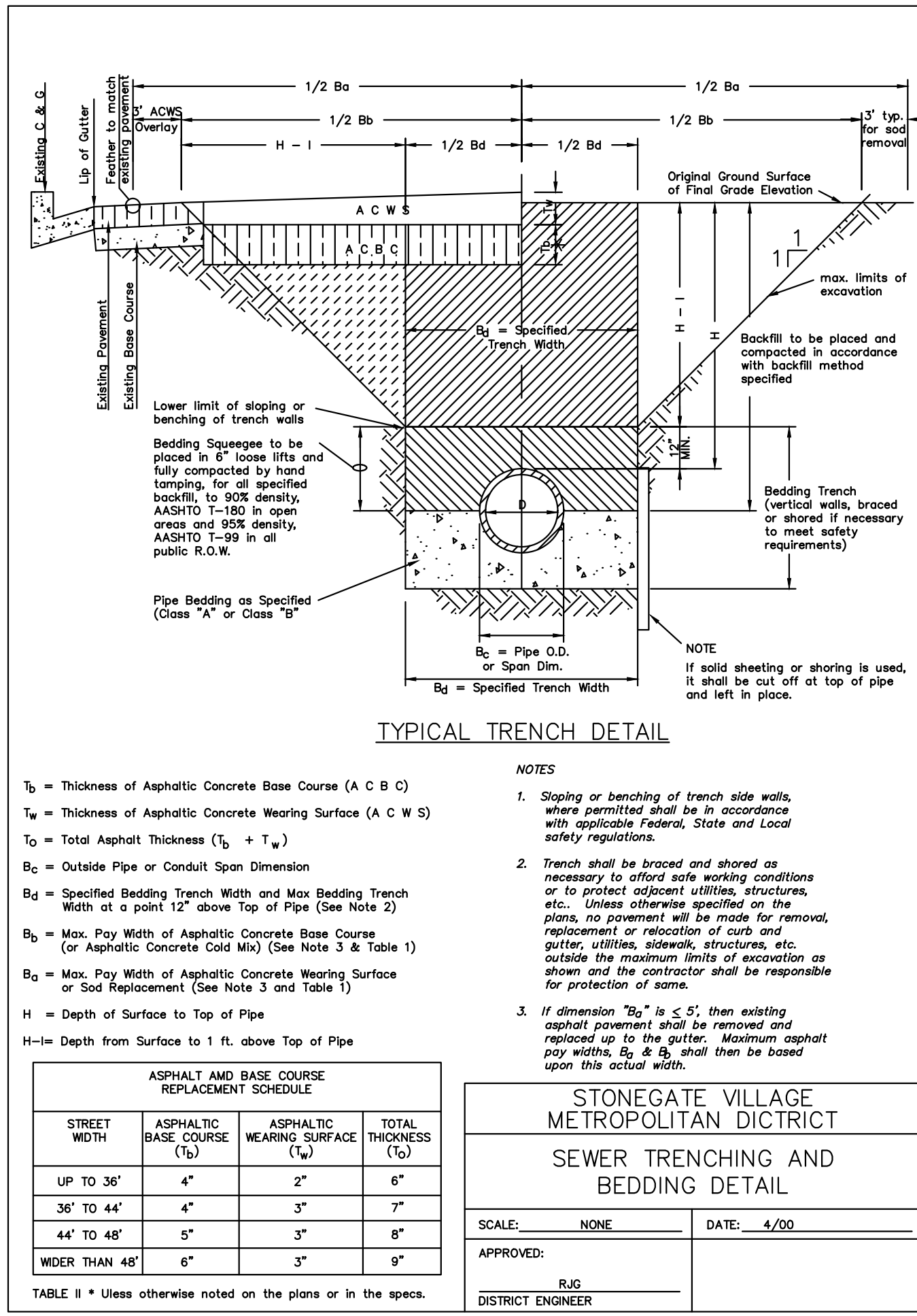
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COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE

COLORADO REGIS. ENGR. 306577  
 11-20-2020  
 PROFESSIONAL ENGINEER  
 PROJ. MGR.: RIM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/20/2020  
 SHEET  
**17 OF 23**  
 CLCPK3

Printed: 11/20/2020 10:55 AM Dwg Name: P:\C06k3\comsouth12\Filing\_1.mxd\master water and sewer\Citystate\CLCPK3-Offsite-Wat R&P.dwg Updated By: MMGGuire





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DATE	REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
11/20/2020	UPDATED PER STORMWATER REVISIONS
11/20/2020	REVISED UNDER E-270 PER LOCATE
11/20/2020	REVISED UNDER E-270 PER LOCATE
11/20/2020	REVISED PER STONEGATE 9/2/18 LETTER
11/20/2020	REVISED PER STONEGATE 9/2/18 LETTER
11/20/2020	REVISED PER STONEGATE 5/17/16 LETTER
11/20/2020	REVISED PER STONEGATE 5/17/16 LETTER
11/20/2020	11ST SUBMITTAL

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COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 SANITARY DETAILS

COLORADO REGISTERED PROFESSIONAL ENGINEER  
 30877  
 11-20-2020

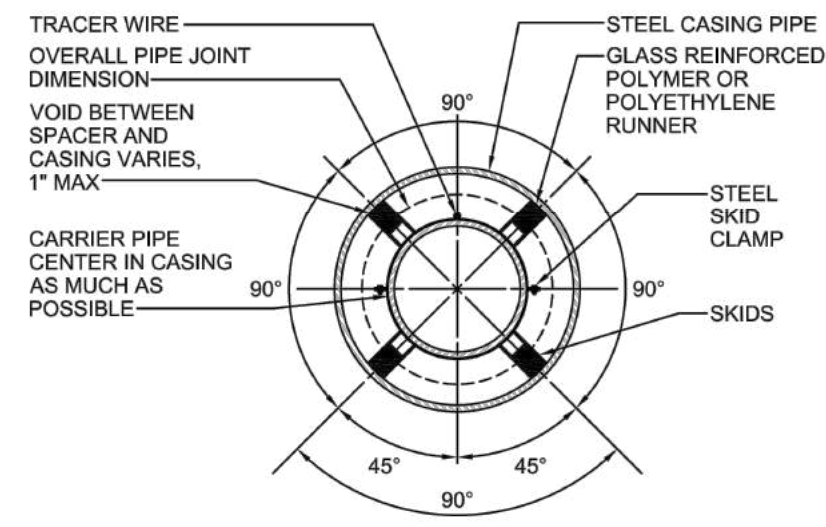
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 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**19 OF 23**  
 CLCPK3





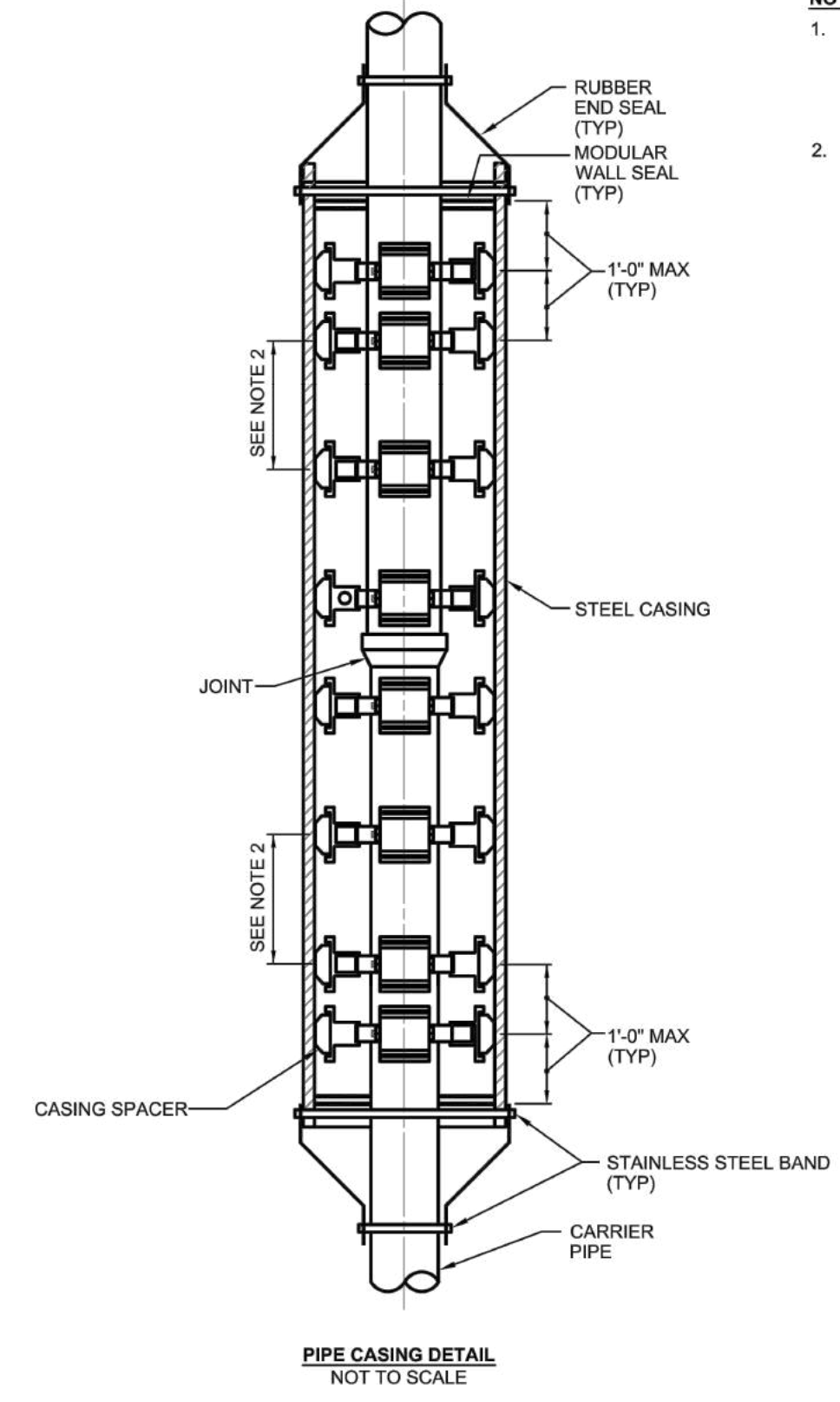




PIPE DIA.	CASING PIPE	
	MIN. O.D.	MIN. WALL THICKNESS FOR COATED PIPE
8"	18"	0.250"
10"	20"	0.281"
12"	24"	0.312"
16"	30"	0.406"
18"	30"	0.406"
20"	36"	0.469"
24"	42"	0.500"
30"	48"	0.563"

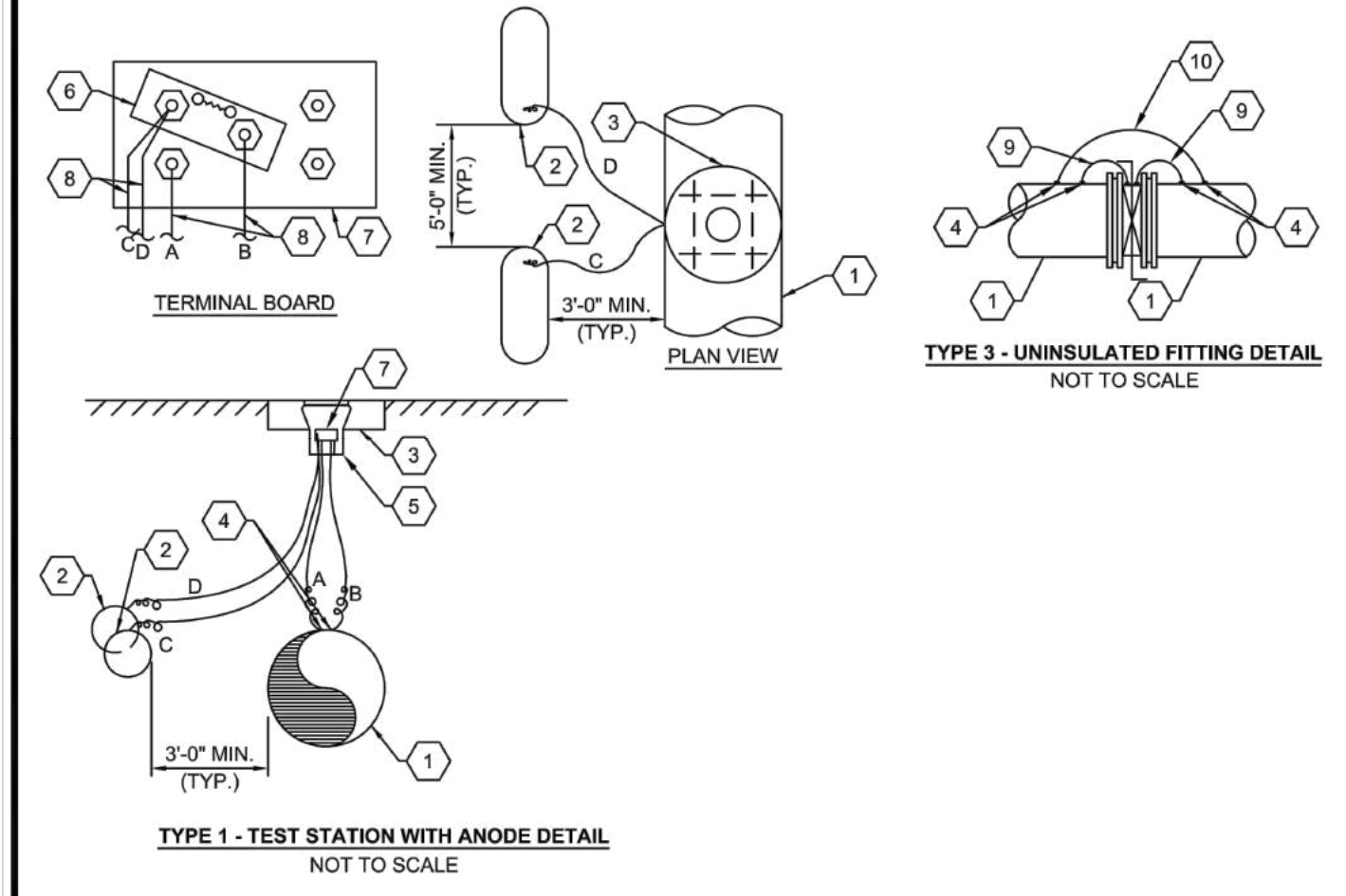
PIPE CASING DETAIL

REVISIONS	SCALE	NOT TO SCALE
BY: _____ DATE: _____	ISSUE DATE	
STEEL CASING FOR CARRIER PIPE		
SHEET	DRAWING NO.	1 OF 2 SS-18



- NOTES:**
- CASING PIPE THAT IS BORED OR INSTALLED BY OPEN CUT METHOD SHALL BE CATHODICALLY PROTECTED AS INDICATED. SEE DETAIL SS-19.
  - REFER TO STANDARDS FOR CASING SPACER SPACING REQUIREMENTS.

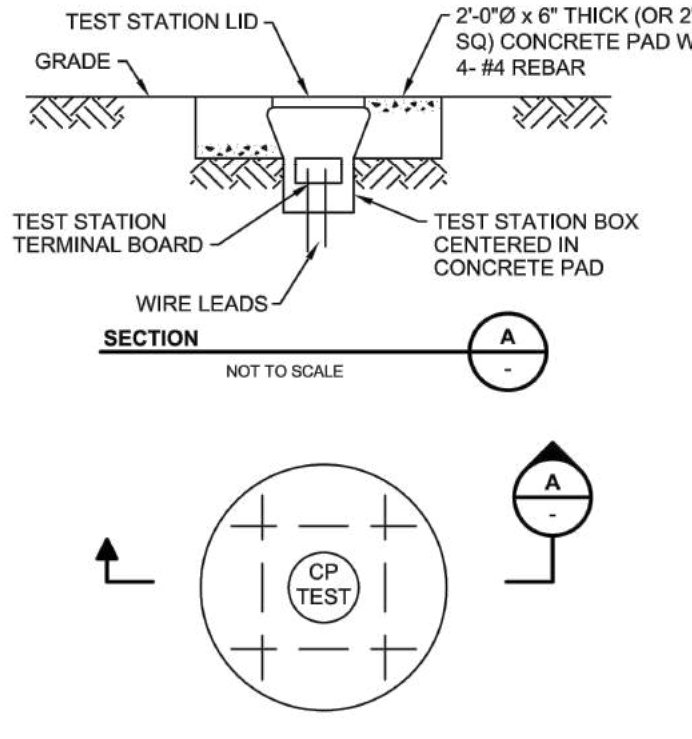
REVISIONS	SCALE	NOT TO SCALE
BY: _____ DATE: _____	ISSUE DATE	
STEEL CASING FOR CARRIER PIPE		
SHEET	DRAWING NO.	2 OF 2 SS-18



- TEST STATION WITH ANODE NOTES:**
- ANODES MAY BE INSTALLED VERTICALLY OR HORIZONTALLY IN SOIL WITH THE TOP OF THE ANODE BELOW THE SPRINGLINE OF THE PIPE. ANODES MUST BE PLACED IN NATIVE SOIL, NOT IN SELECT BACKFILL SUCH AS SAND, SQUEEGEE OR CRUSHED ROCK USED FOR PIPE BEDDING.
  - THE TEST STATION SHALL BE CENTERED IN A CONCRETE PAD THAT IS PLACED FLUSH WITH GRADE.
  - THE TEST STATION WIRES SHALL BE ATTACHED A MINIMUM OF ONE FOOT APART TO THE TOP CENTERLINE OF THE PIPE ±10".
  - A MINIMUM OF TWO FEET OF SLACK SHALL BE INSTALLED AT EACH END OF ALL WIRES.
  - CAUTION SHALL BE EXERCISED WHEN BACKFILLING THE EXCAVATION SO AS NOT TO DAMAGE OR STRESS ANY OF THE WIRES OR CONNECTIONS.
  - REFER TO TEST STATION LOCATION SCHEDULE TO IDENTIFY WHERE ANODES ARE REQ'D.
- KEYED NOTES:**
- NEW PROTECTED PIPE.
  - 48 LB. HIGH POTENTIAL MAGNESIUM ANODE
  - CONCRETE PAD-TWO FOOT DIAMETER BY SIX INCHES THICK W/ FOUR #4 REBAR
  - CADWELD WIRES TO TOP OF PIPE AND COAT
  - TEST STATION
  - TEST STATION SHUNT - 0.01 OHM - 8 AMPERE (YELLOW)
  - TEST STATION TERMINAL BOARD
  - TEST STATION WIRES:  
WIRE A - #8 AWG STRANDED (RED),  
WIRE B - #8 AWG STRANDED (RED),  
WIRE C - #12 AWG STRANDED (BLUE),  
WIRE D - #12 AWG STRANDED (BLUE).
  - BONDING CABLE - #4 AWG/HMWPE (RED)
  - BONDING CABLE - #8 AWG/HMWPE (RED)

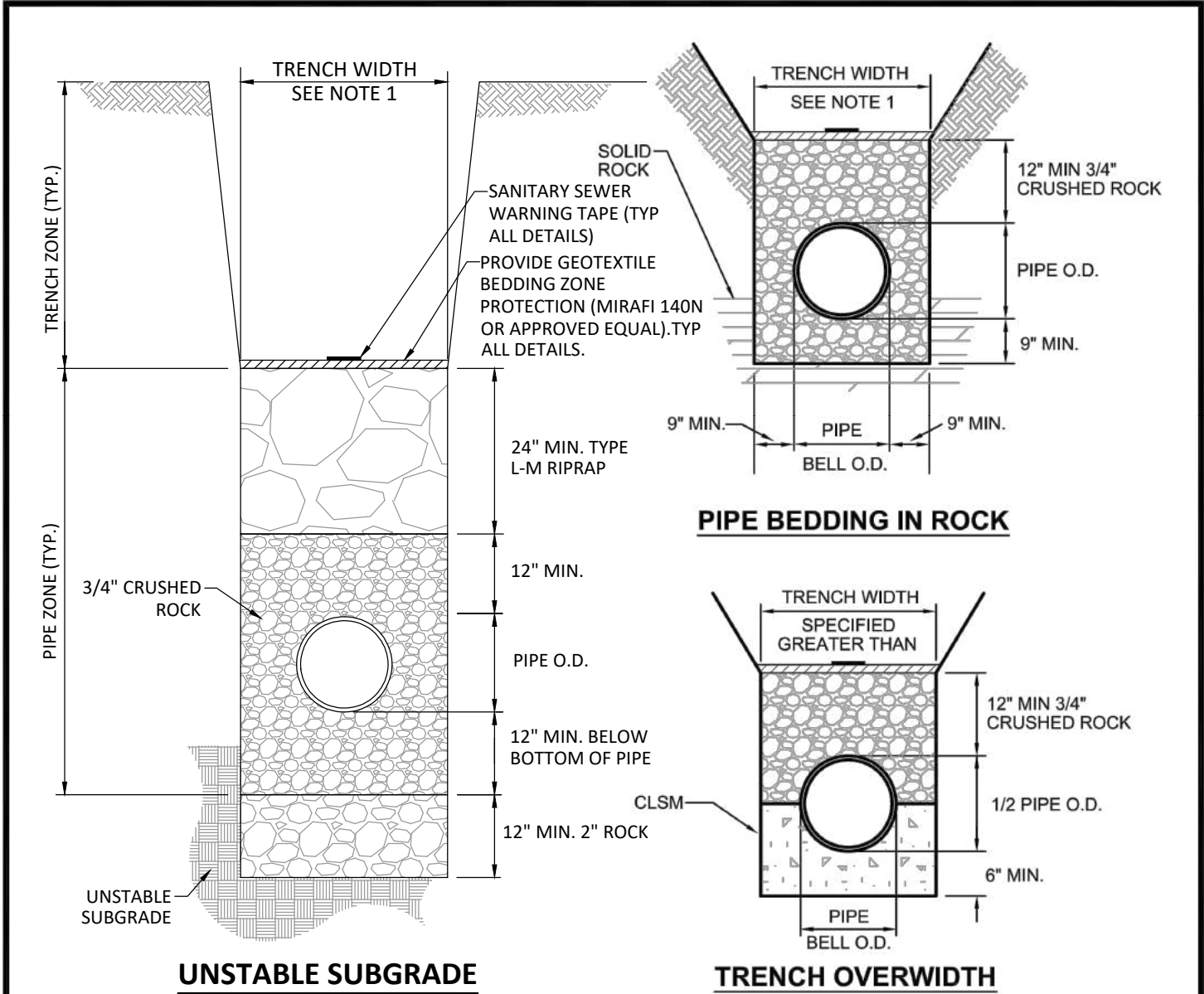
REVISIONS	SCALE	NOT TO SCALE
BY: _____ DATE: _____	ISSUE DATE	
CATHODIC PROTECTION & TEST STATION		
SHEET	DRAWING NO.	1 OF 2 SS-19

- CORROSION PROTECTION GENERAL NOTES:**
- THIS DRAWING IS A GENERAL INTERPRETATION OF THE PROJECT SPECIFICATION. EXACT LOCATION AND QUANTITY OF METALLIC COMPONENTS SUBJECT TO CHANGE DUE TO FIELD CONDITIONS, ETC.
  - AVOID ELECTRICAL CONTACT BETWEEN PROTECTED PIPELINE AND STRUCTURAL REBAR, CONDUITS, AND ALL OTHER FOREIGN METALLIC STRUCTURES.
  - ANODE AND TEST STATION LOCATION MAY BE SHIFTED TO AVOID OBSTRUCTIONS. ANODES SHALL BE LOCATED 5 FEET AWAY FROM THE PROTECTED PIPELINE AND AT THE SAME DEPTH.
  - THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR KEEPING A LOG OF ALL ANODES AND TEST STATIONS WITH THEIR DIMENSIONED LOCATIONS. LOG SHALL BE SUBMITTED TO OWNER FOR AS-BUILT DRAWINGS.
  - ALL UNDERGROUND METALS WITH CATHODIC PROTECTION SHALL BE COATED IN COMPLIANCE WITH SPECIFICATIONS.
  - REPAIR DAMAGE TO PIPE COATING AFTER INSTALLATION OF EXOTHERMIC WELDS. PROVIDE PRIMER, PLASTIC SHIELD CAP, AND SEAL. WATERTIGHT WITH WAX TAPE, AS SPECIFIED.
  - ALL LEADS ENTERING TEST STATIONS SHALL HAVE SUFFICIENT COILED SLACK TO FACILITATE COVER REMOVAL FOR TESTING.
  - ALL UNDERGROUND METALLIC FITTINGS IN ANY GIVEN AREA, INCLUDING STUBOUTS OR MECHANICALLY JOINTED PIPE SECTIONS SHALL BE BONDED TOGETHER WITH #4 AWG JOINT BONDS.
  - INSTALLATION CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH OWNER SUCH THAT TESTING AND INSPECTION CAN BE CONVENIENTLY COMPLETED.



- NOTES:**
- TEST STATION SHALL BE CENTERED IN CONCRETE PAD.
  - CONCRETE PAD SHALL BE REINFORCED WITH FOUR #5 REBAR.
- FLUSH MOUNTED TEST STATION NOT TO SCALE

REVISIONS	SCALE	NOT TO SCALE
BY: _____ DATE: _____	ISSUE DATE	
CATHODIC PROTECTION & TEST STATION		
SHEET	DRAWING NO.	2 OF 2 SS-19



- TRENCHES**
- TRENCHES SHALL BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND FOR THE PROTECTION OF EXISTING UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS. PVC PIPE TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH THE UNI-BELL HANDBOOK OF PVC PIPE, LATEST EDITION. DUCTILE IRON PIPE TRENCH WIDTHS AT THE TOP OF PIPE SHALL BE IN ACCORDANCE WITH AWWA C-600 LATEST EDITION. SHOULD TRENCHES BE EXCAVATED WIDER THAN ALLOWED, THE DISTRICT MAY REQUIRE THAT A CONCRETE CRADLE BE PLACED AROUND THE PIPE IN CONFORMANCE WITH THE TRENCH OVERWIDTH DETAIL.
- BEDDING**
- SPECIAL BEDDING LIMITS SHALL BE AS SHOWN ON THIS DETAIL. THE LIMITS OF BEDDING DEFINE THE "PIPE ZONE". CONTRACTORS SHALL SUBMIT BEDDING GRADATION TEST RESULTS TO THE DISTRICT FOR REVIEW, PRIOR TO DELIVERING ANY MATERIAL TO THE PROJECT SITE.
- COMPACTION**
- MINIMUM PIPE ZONE (BEDDING) COMPACTION SHALL BE 90% STANDARD PROCTOR DENSITY OR EQUIVALENT RELATIVE DENSITY. TRENCH ZONE COMPACTION SHALL BE: 95% STANDARD OR MODIFIED PROCTOR DENSITY OR EQUIVALENT RELATIVE DENSITY INSIDE STREET RIGHTS-OF-WAY, AND 90% STANDARD OR MODIFIED PROCTOR DENSITY OR EQUIVALENT RELATIVE DENSITY OUTSIDE. STREET RIGHTS-OF-WAY UNLESS SPECIFIED OTHERWISE.

REVISIONS	SCALE	NOT TO SCALE
BY: _____ DATE: _____	ISSUE DATE	
SPECIAL BEDDING FOR SANITARY SEWER LINE		
SHEET	DRAWING NO.	1 OF 1 SS-02

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COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 DETAILS

PROJ. MGR.: RJM  
 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**23** OF **23**  
 CLCPK3

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Plotted: 11/20/2020 4:38 PM  
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 Updated By: jhawthorne