



**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**

	PROPOSED SANITARY SEWER W/MANHOLE
	PROPOSED WATERLINE W/ GATE VALVE
	PROPOSED F.H. ASSEMBLY, GATE VALVE & TEE
	EXISTING SANITARY SEWER W/ MANHOLE
	EXISTING WATERLINE W/ GATE VALVE
	EXISTING FH ASSEMBLY, GATE VALVE & TEE
	EXISTING HIGH PRESSURE GAS LINE
	PROPOSED STORM SEWER W/ MANHOLE
	PROPOSED EOA, FL AND BOC
	PROPOSED SIDEWALK
	PROPOSED ROW
	PROPOSED UTILITY EASEMENT
	EXISTING TOP BACK OF CURB
	EXISTING FLOWLINE
	EXISTING LIP OF CURB/EDGE OF ASPHALT
	EXISTING STORM INLET
	PROPOSED STORM INLET
	PROPOSED WATER SERVICE W/ CURBSTOP
	PROPOSED SANITARY SERVICE
	EXISTING WATER SERVICE W/ CURBSTOP
	EXISTING SANITARY SERVICE
	CAUTION! UTILITY CROSSING
	PROPOSED CROSS PAN
	EXISTING CROSS PAN
	PROPOSED CONTOURS
	EXISTING CONTOURS
	EXISTING TELEPHONE LINE
	EXISTING ELECTRIC LINE
	EXISTING STORM
	EXIST. OVERHEAD UTILITY
	EXISTING POWER POLES
	HIGH POINT
	LOW POINT
	TOP OF WALL ELEVATION
	MATCH EXISTING
	INDICATES PROPERTY CORNER
	CUT/FILL LINE
	FLOW DIRECTION ARROW
	PROPOSED ASPHALT LIMITS
	PROPOSED SIGN
	PROPOSED STREET LIGHT
	TRAIL (CRUSHED FINES)
	TRAIL (CONCRETE)

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 SUBMITAL

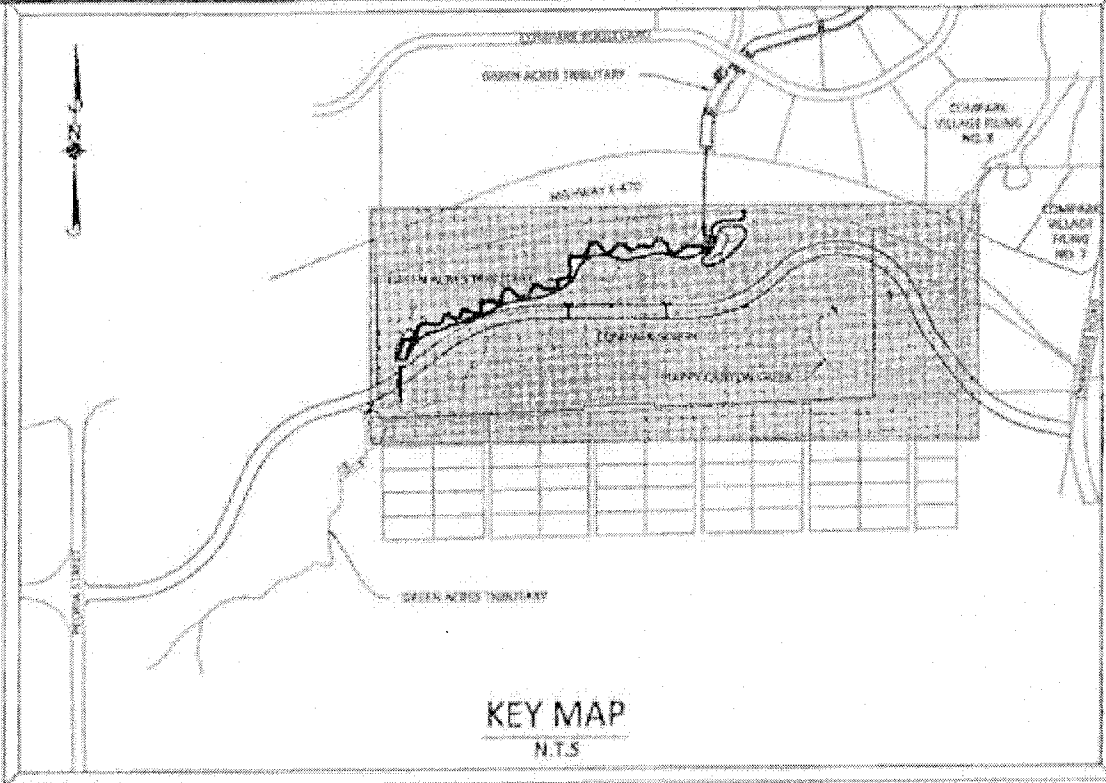
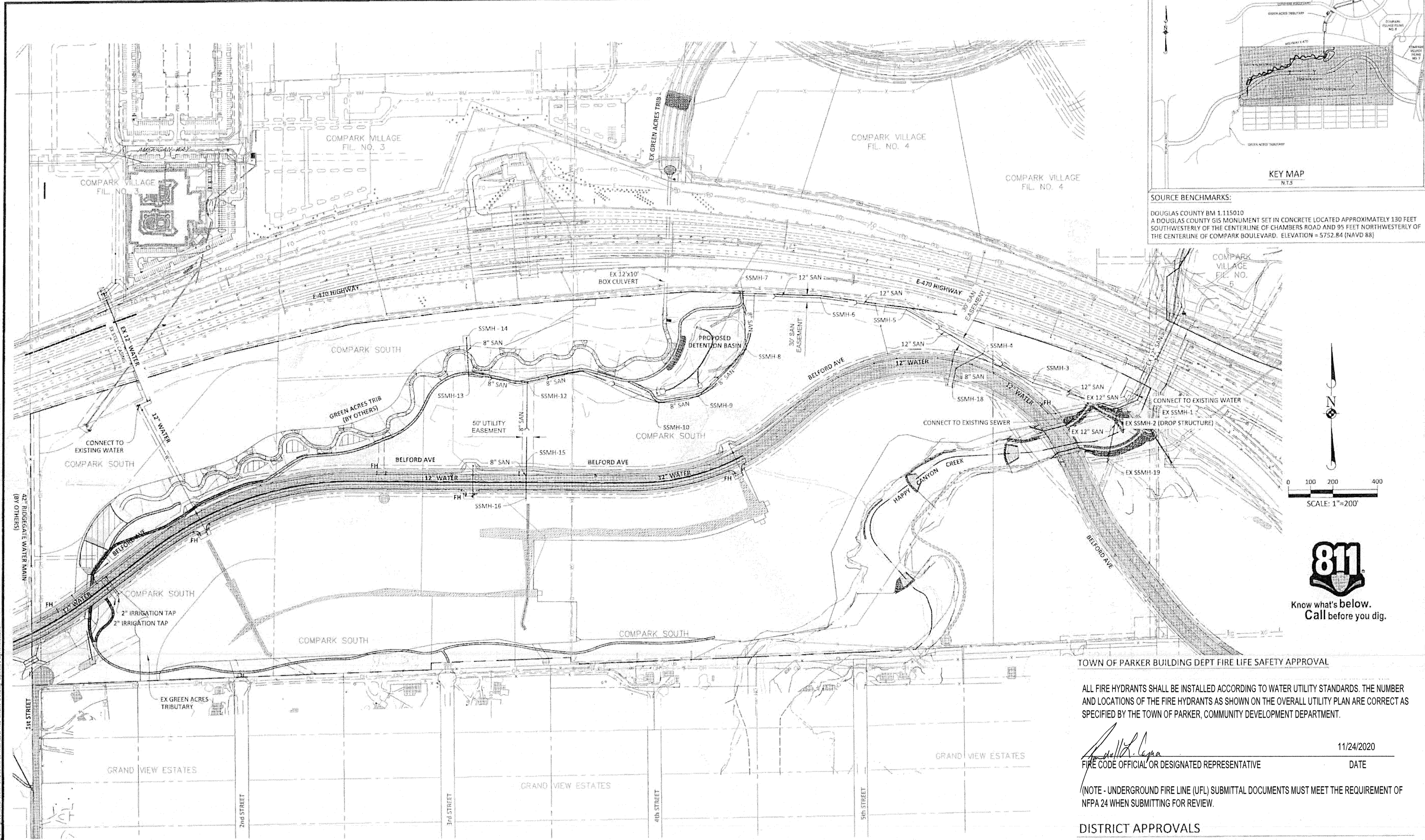
**Manhard CONSULTING**  
 7600 East Orchard Road, Suite 100-A, Greenwood Village, CO 80121, phone: 303.728.0800  
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

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

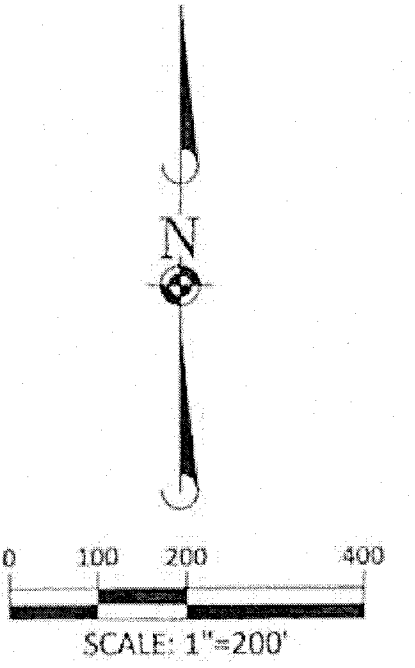
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SHEET  
**2 OF 23**  
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Plotfile: 11/20/2020 8:22 AM Dwg Name: c:\clic\c3\CompSouth04--Master\_Sm & Water.dwg\Ena\Final\_Drainage\Plan\_Sm.dwg Set\Of\clic\GENERAL NOTES.dwg Updated By: jhoover



**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

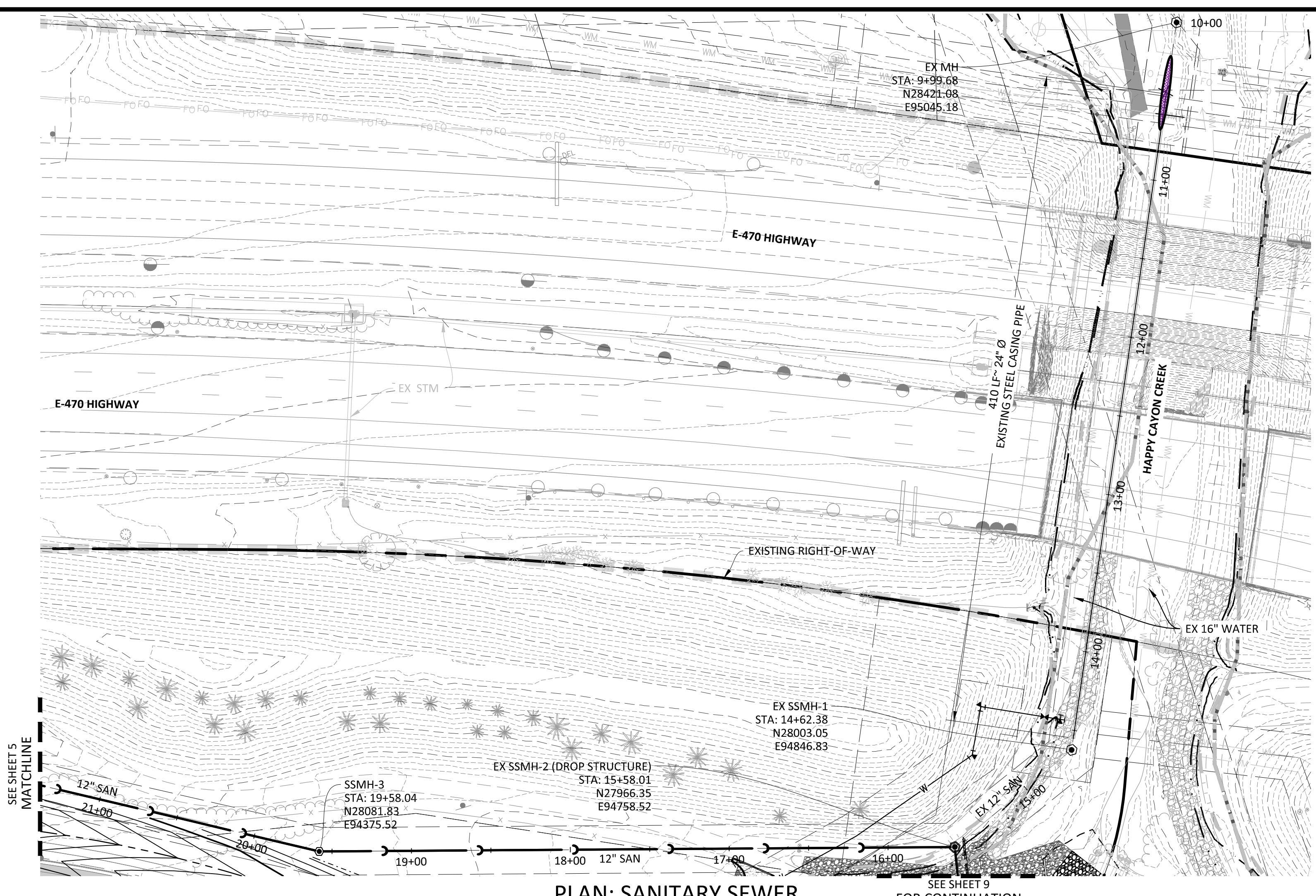
BY *[Signature]* 11/23/2020  
 STONEGATE VILLAGE METROPOLITAN DISTRICT MANAGER DATE

DATE	DESCRIPTION
11/23/2020	ISSUED FOR CONSTRUCTION
11/23/2020	ISSUED FOR CONSTRUCTION
11/23/2020	ISSUED FOR CONSTRUCTION
11/23/2020	ISSUED FOR CONSTRUCTION
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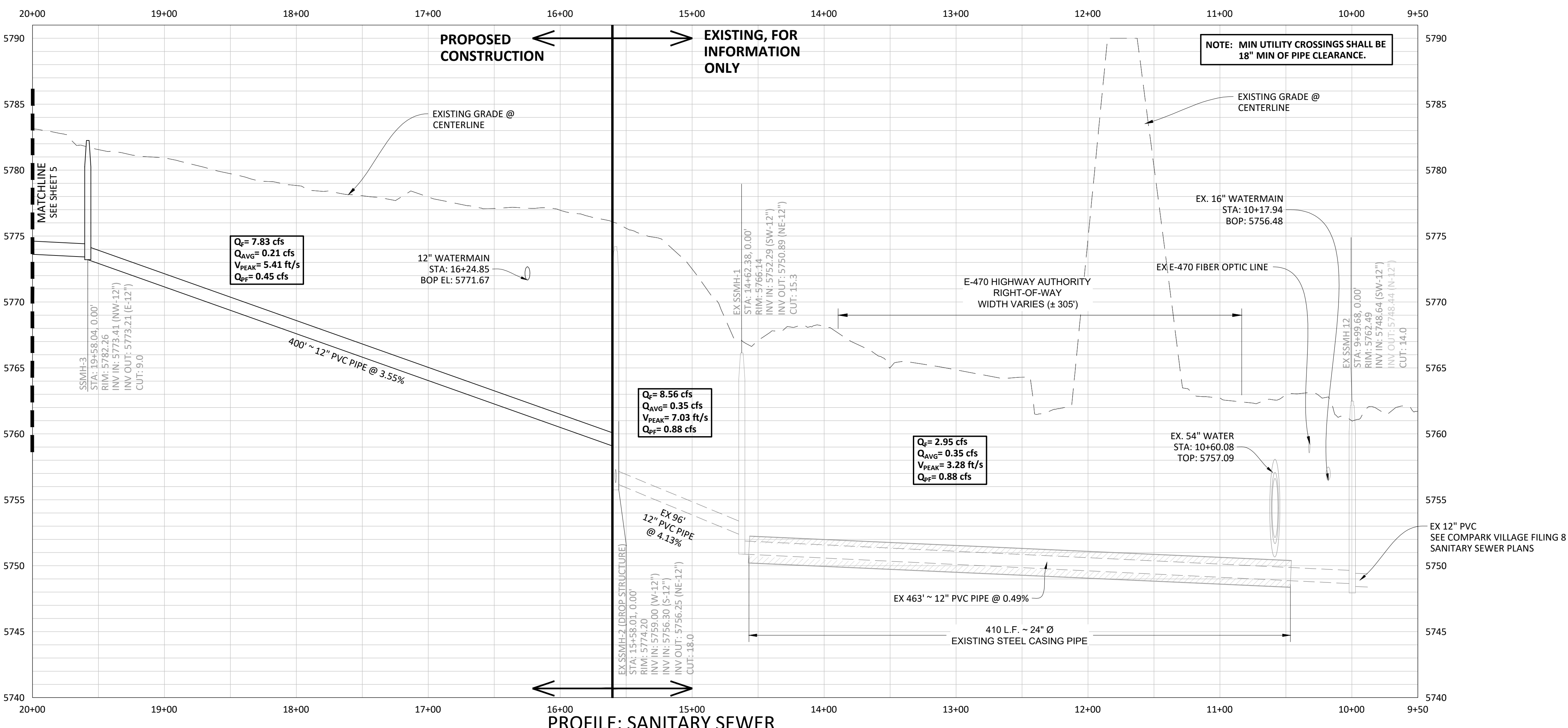
**Manhard CONSULTING**  
 7000 Bank Center Road, Suite 1000, Greenwood Village, CO 80111  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 OVERALL UTILITY PLAN

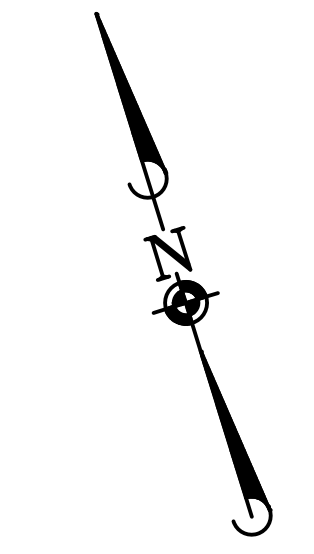
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 DATE: 03/2020  
 SHEET 3 OF 23  
 CLCPX3



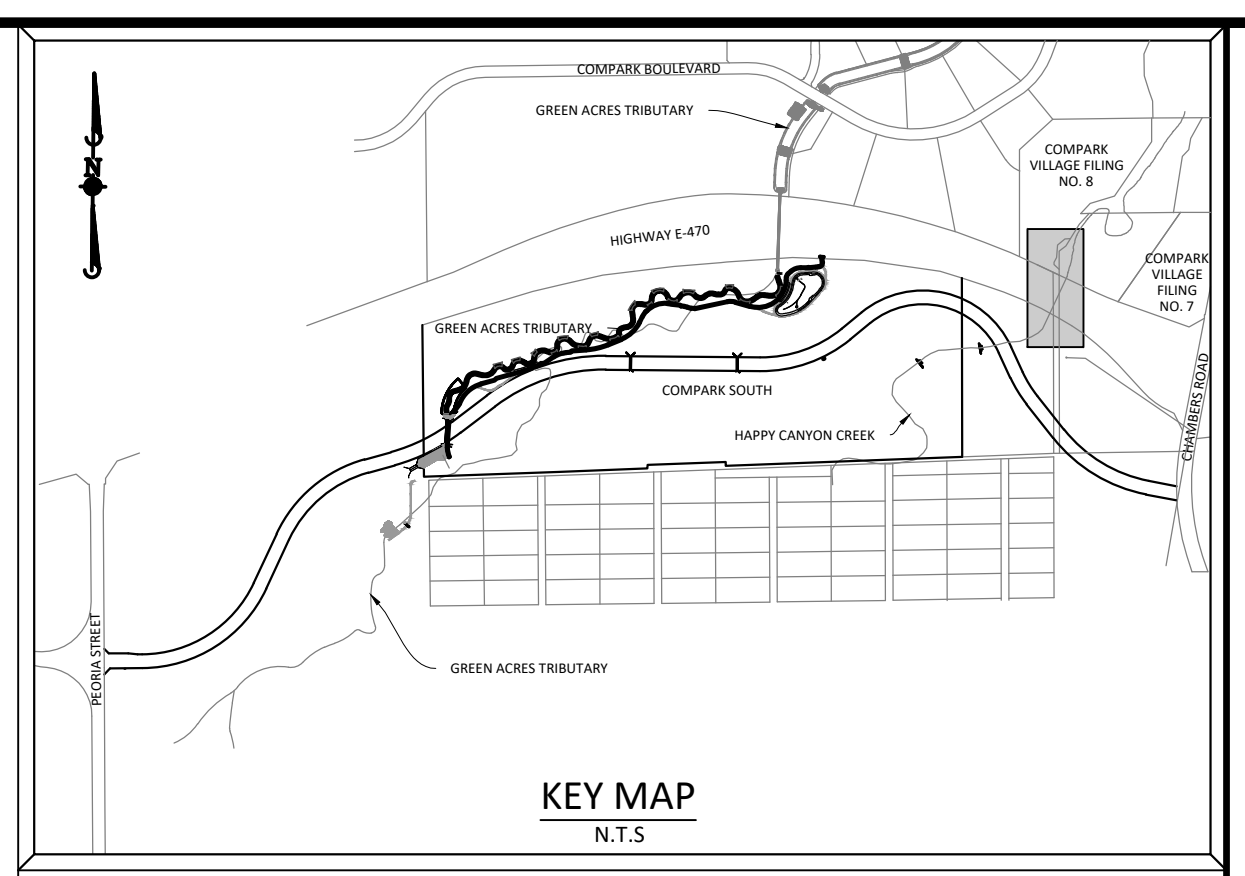
PLAN: SANITARY SEWER



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
C.10/2018	REVISED PER STONEGATE 9/2/18 LETTER
B.06/2016	REVISED PER STONEGATE 5/17/16 LETTER
A.11/2015	1ST SUBMITTAL

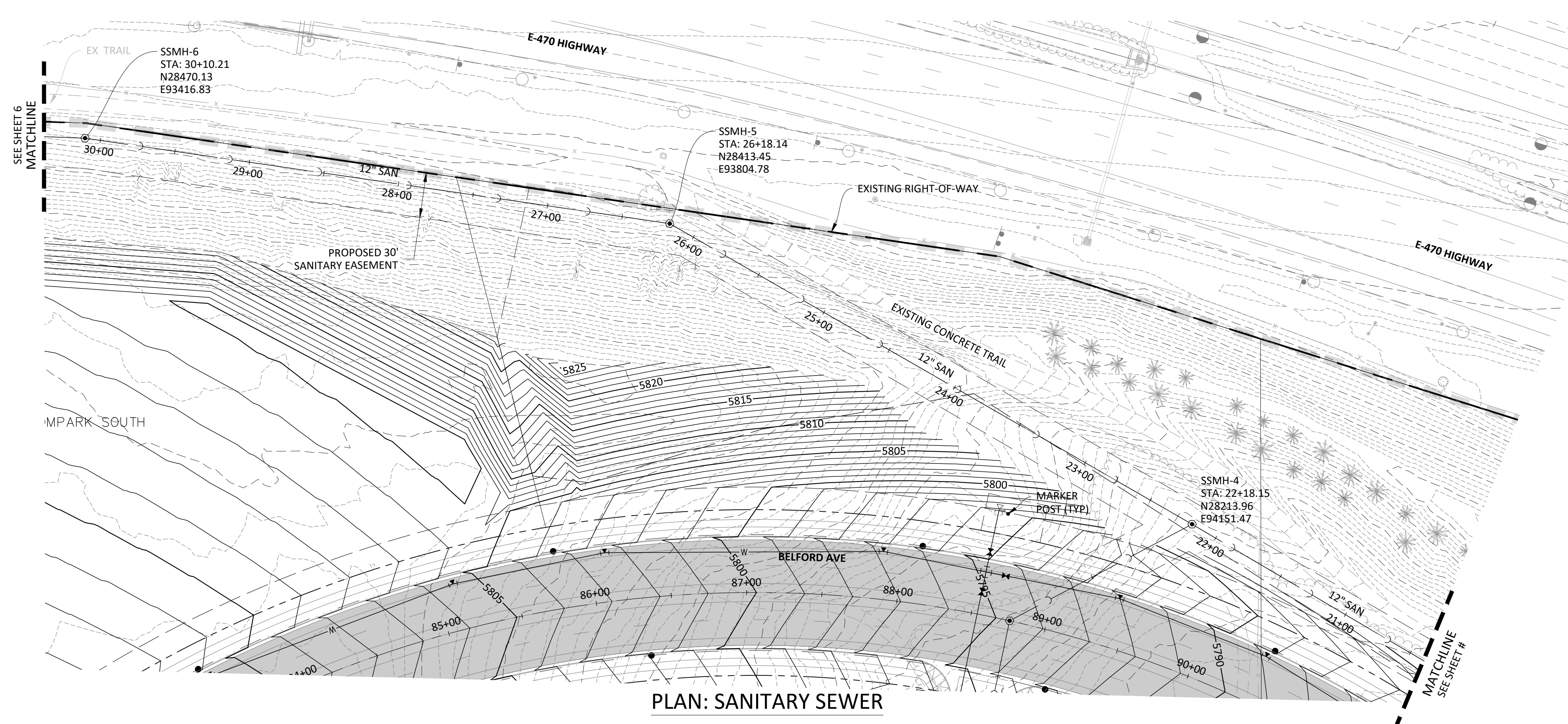
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
SANITARY SEWER PLAN & PROFILE

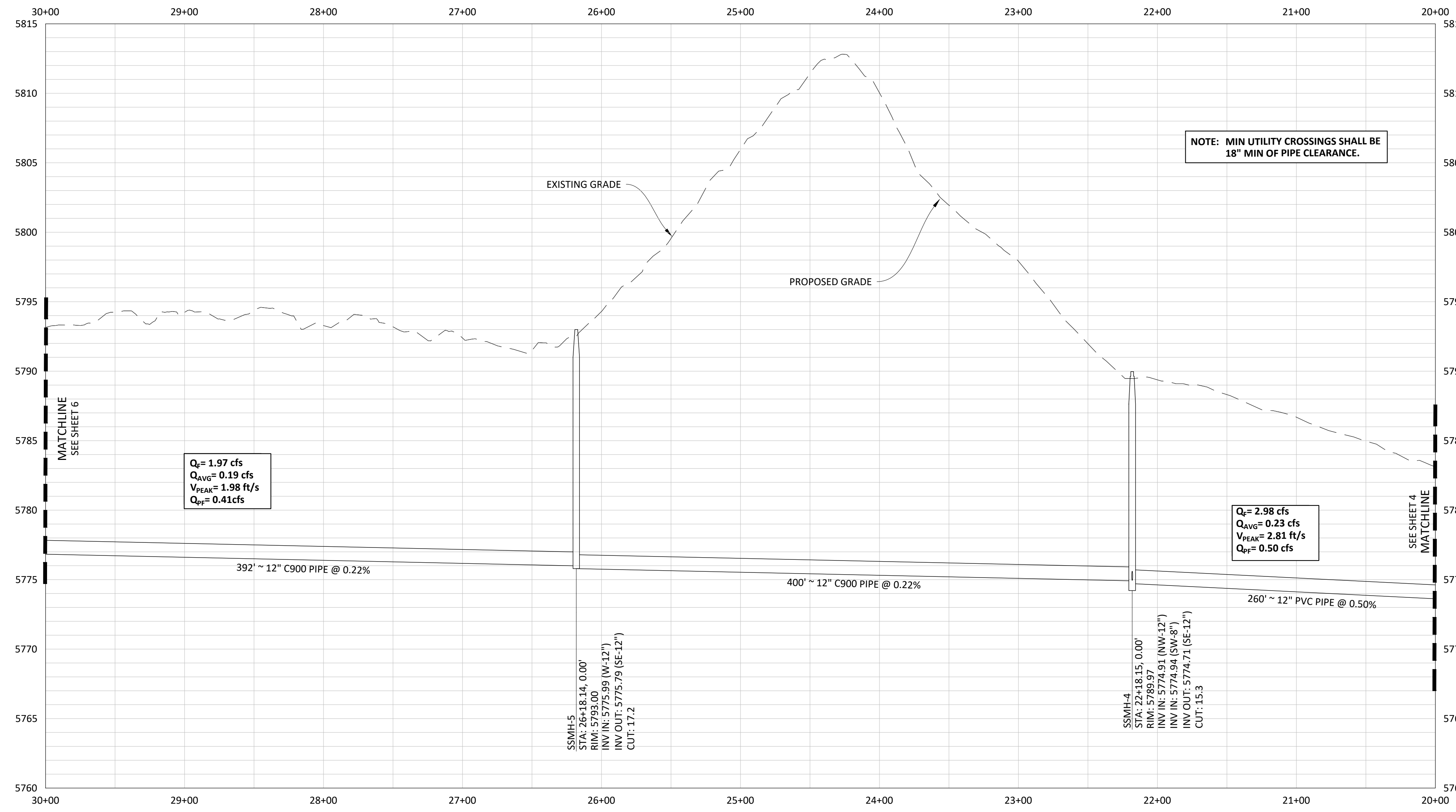
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DATE: 03/2020

SHEET  
**4 OF 23**  
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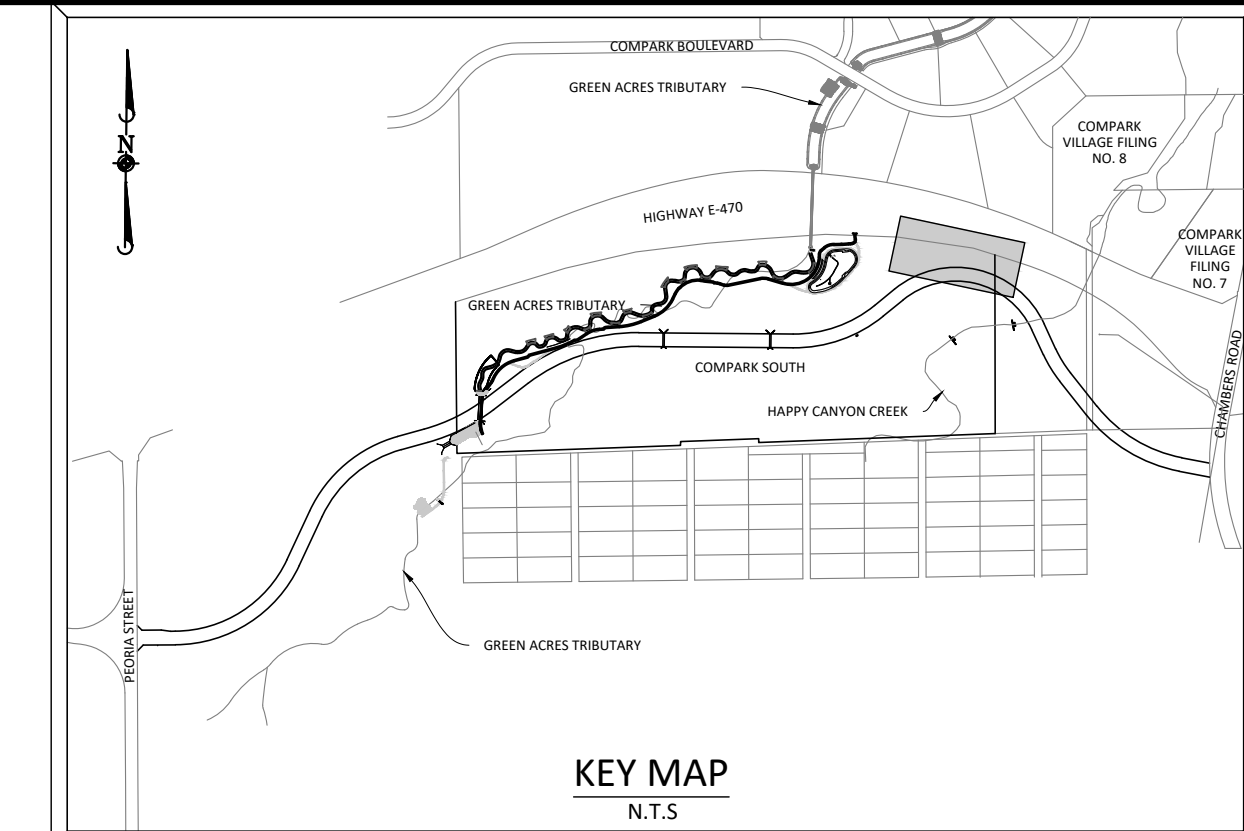
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PLAN: SANITARY SEWER

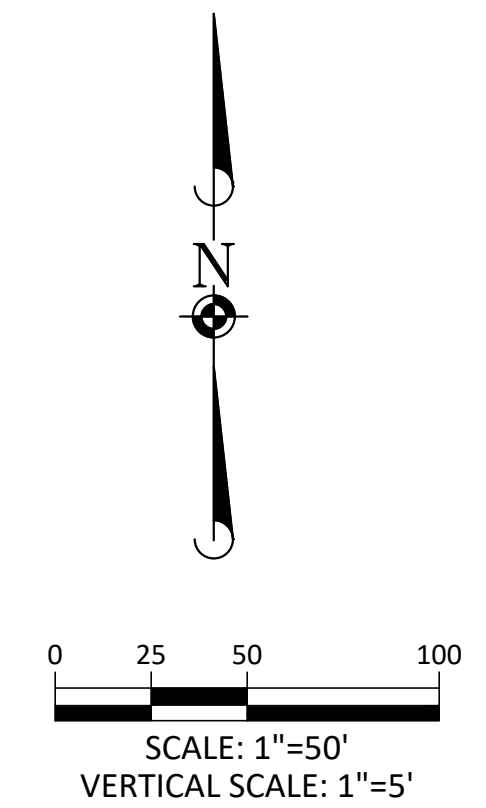


PROFILE: SANITARY SEWER



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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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.

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

Plotted: 11/20/2020 8:42 AM. Dwg Name: D:\Clpk3\ycomsouth12\_filing1\_no\_gal\master water and sewer\Clpk3\Office\Snr P&P-1a.dwg. Updated By: jhawthorne

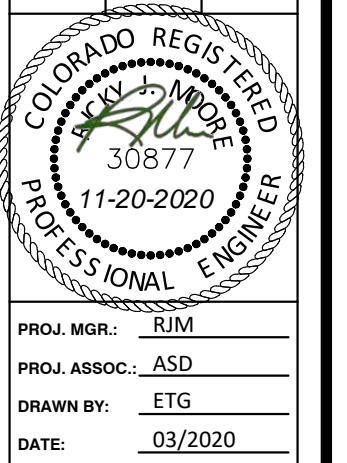
DATE	REVISIONS
G. 11/20/2020	UPDATED PER STORMWATER REVISIONS
F. 11/20/2020	UPDATED PER STORMWATER REVISIONS
E. 11/20/2020	REVISED STEEL CASING UNDER E-470 PER LOCATE
D. 11/20/2020	REVISED PER STONEGATE E-470 PER LOCATE
C. 11/20/2020	REVISED PER STONEGATE E-470 PER LOCATE
B. 11/20/2020	REVISED PER STONEGATE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

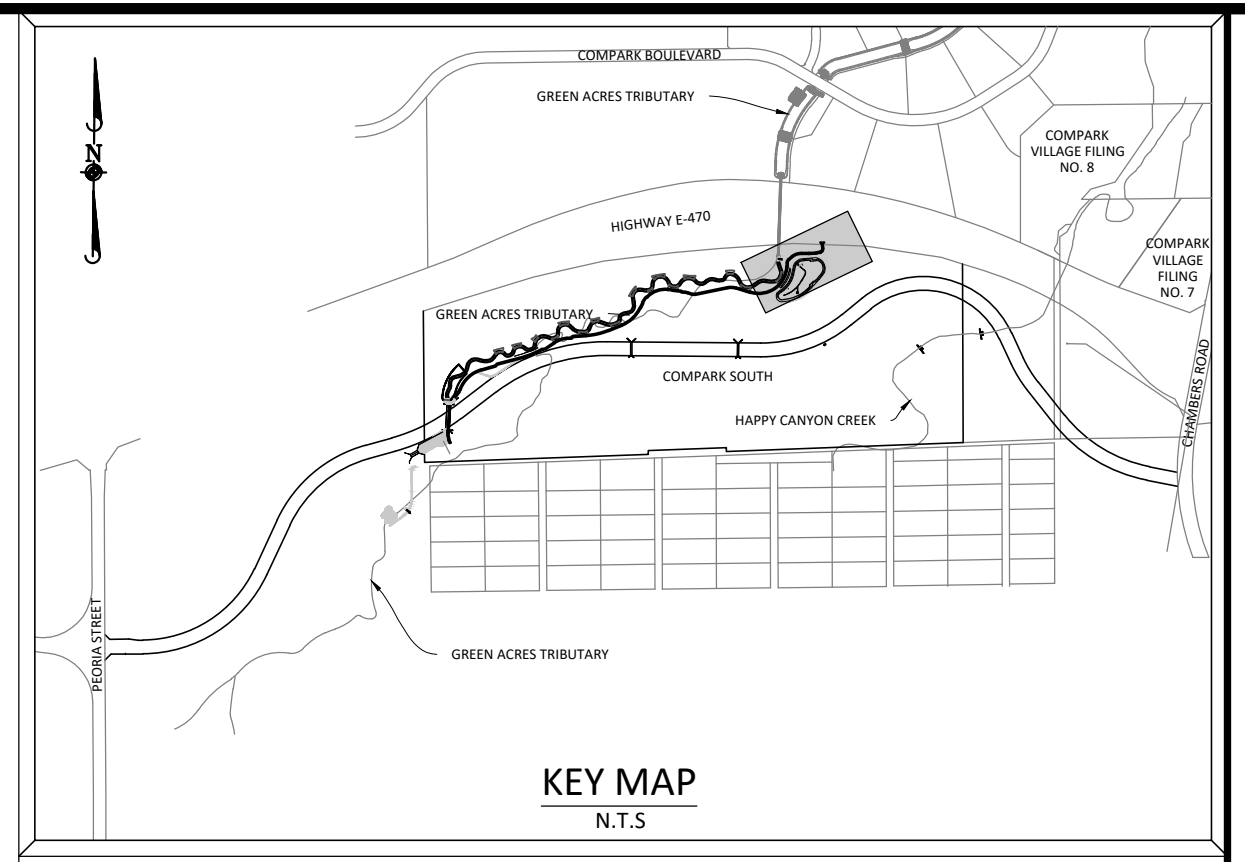
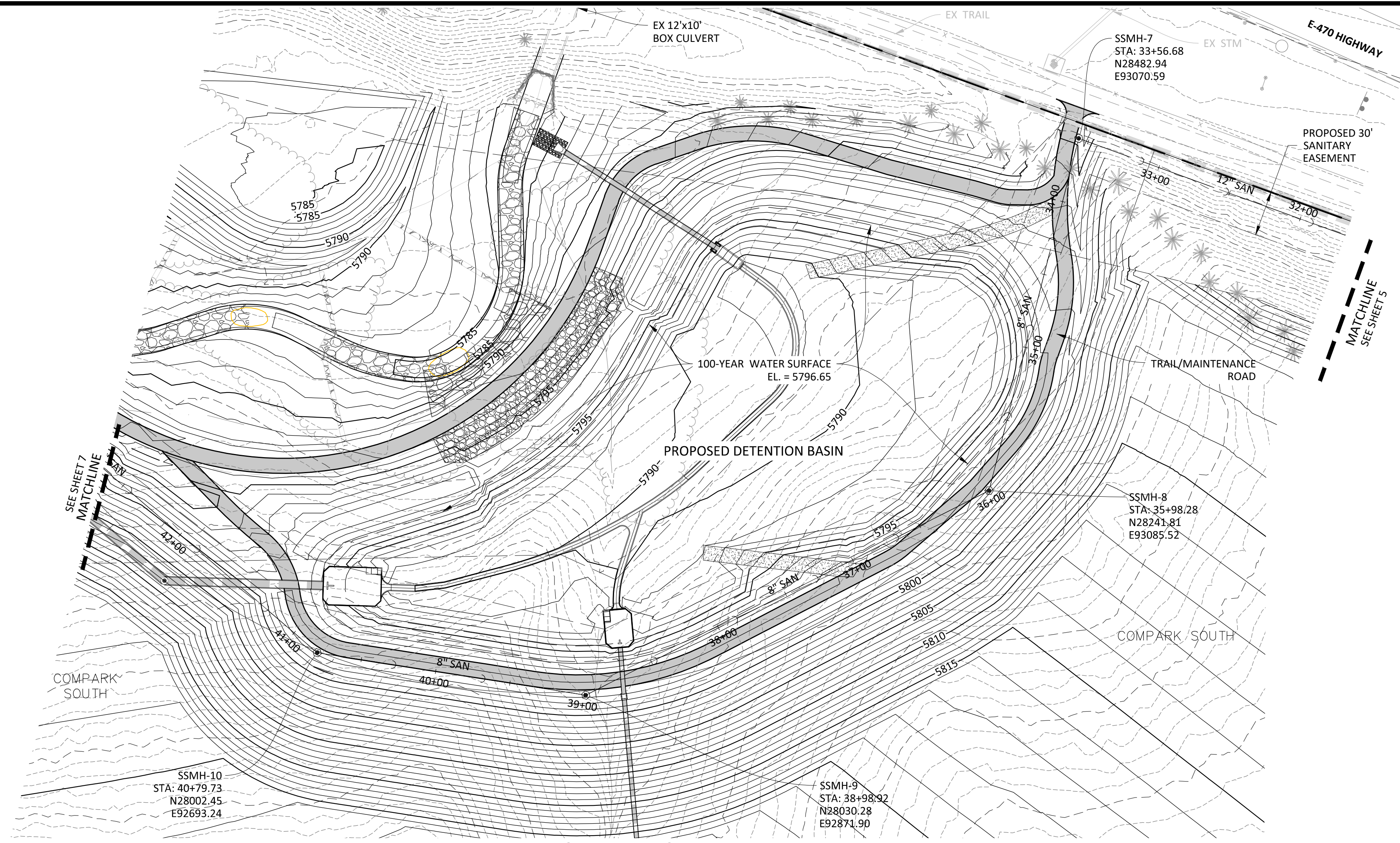
**Manhard CONSULTING**  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
SANITARY SEWER PLAN & PROFILE

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

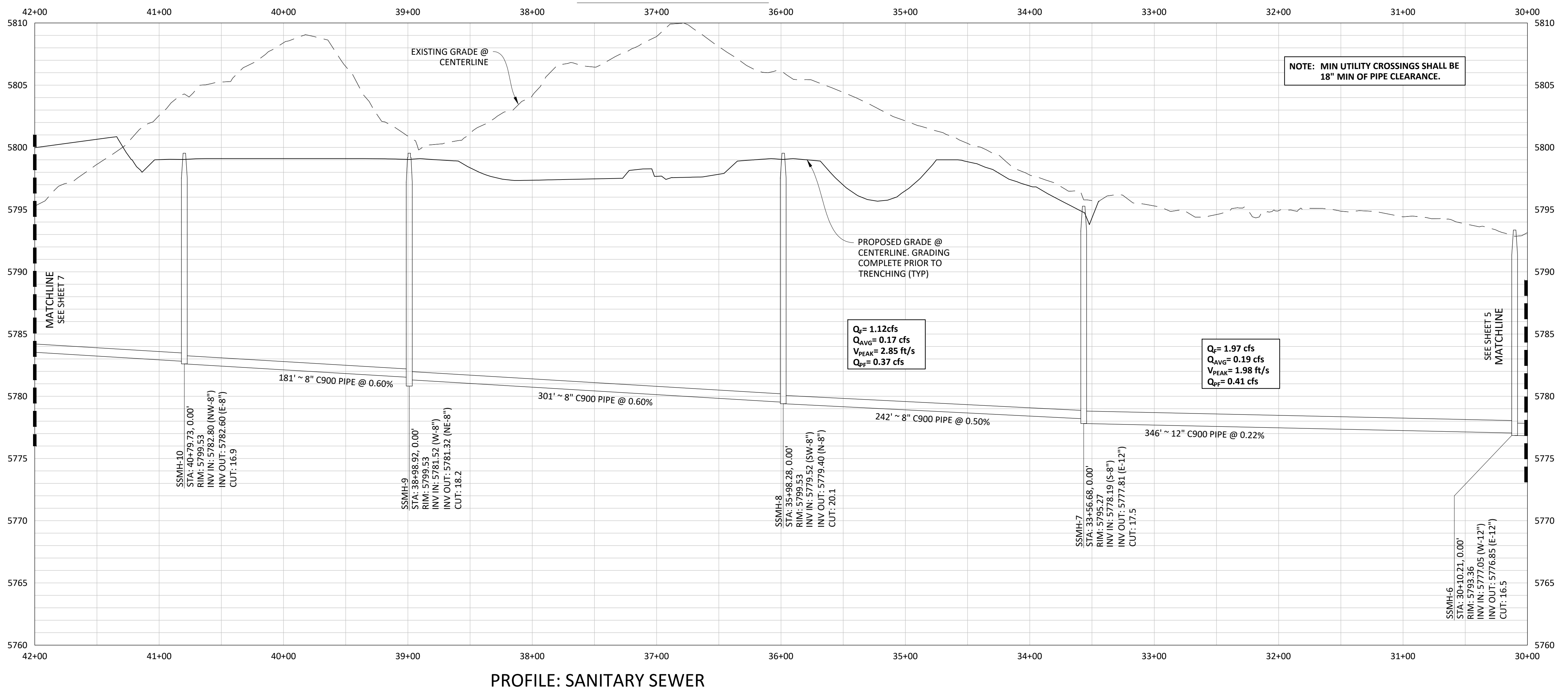
SHEET  
**5 OF 23**  
CLCPK3





**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
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D. 10/20/2019	REVISED PER STORMWATER REVISIONS
C. 10/20/2019	REVISED PER STORMWATER REVISIONS
B. 06/20/2019	REVISED PER STORMWATER REVISIONS
A. 11/20/2018	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

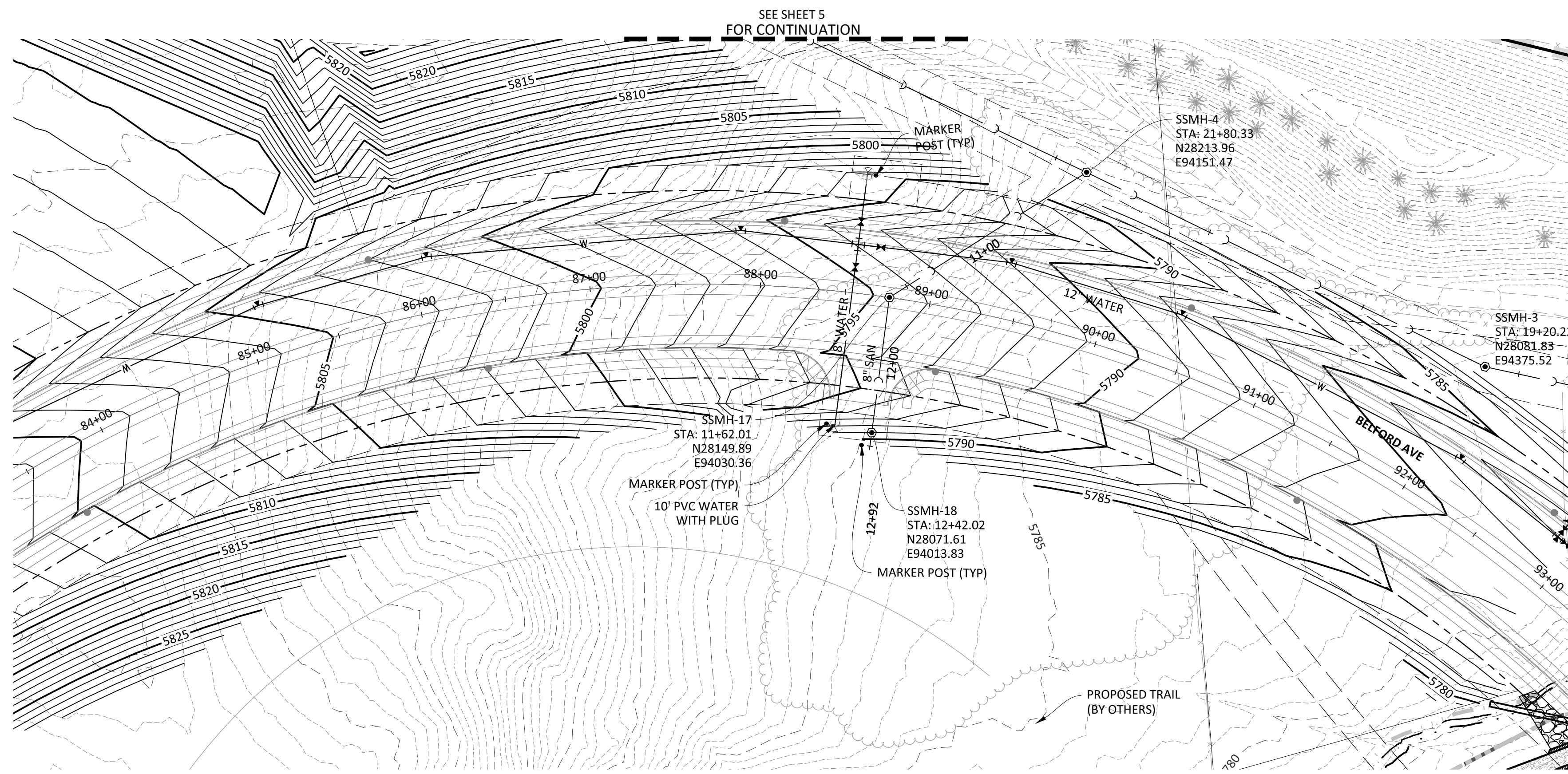
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 SANITARY SEWER PLAN & PROFILE

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

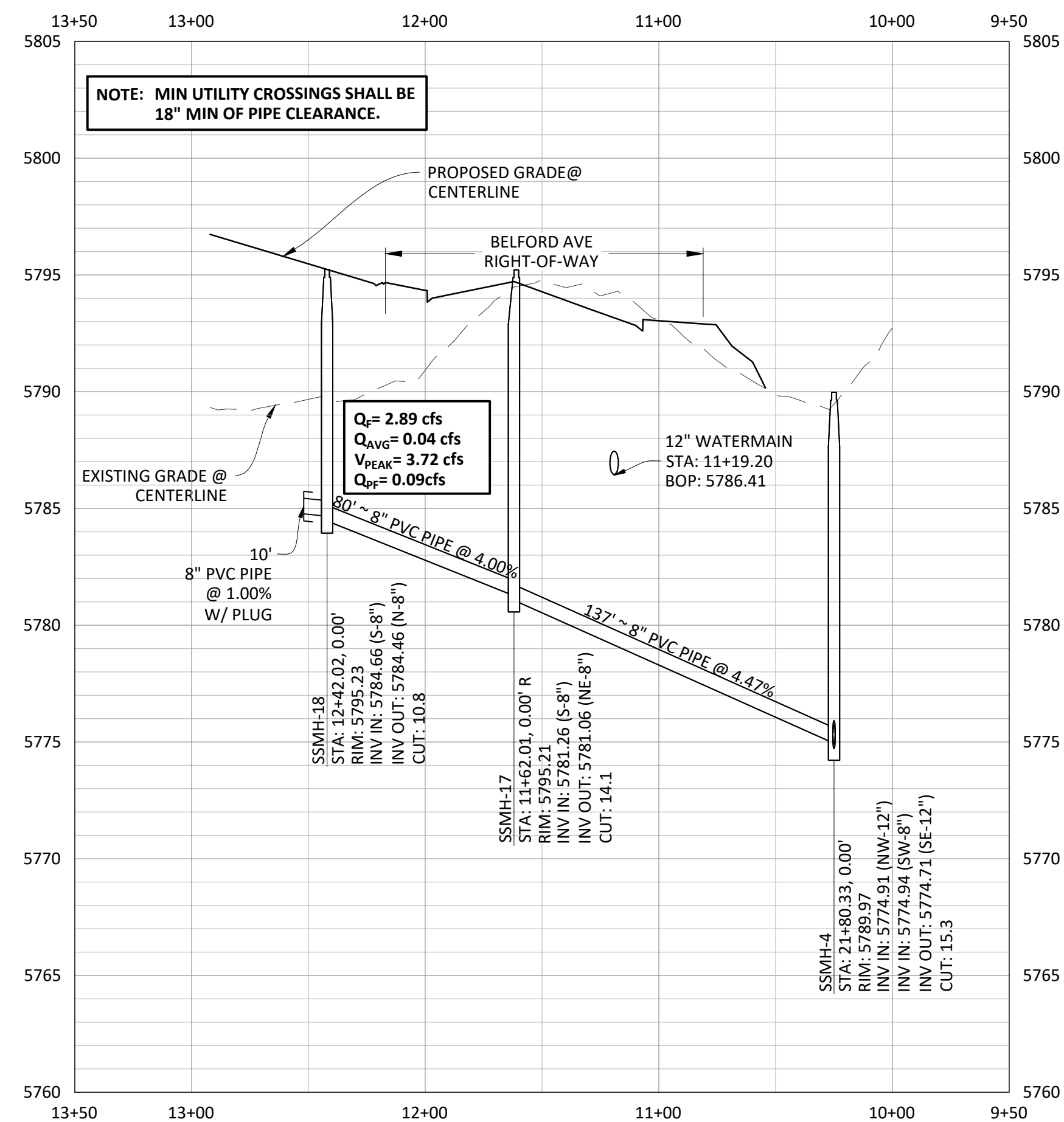
SHEET  
**6 OF 23**  
 CLCPKC3

Plotfile: 11/20/2020 11:30 AM Draw Name: P:\C\proj3\compark\12-filing\_1\to master water and sewer\CLCPKC3-Office-San P&P-1a.dwg Updated By: adruicker

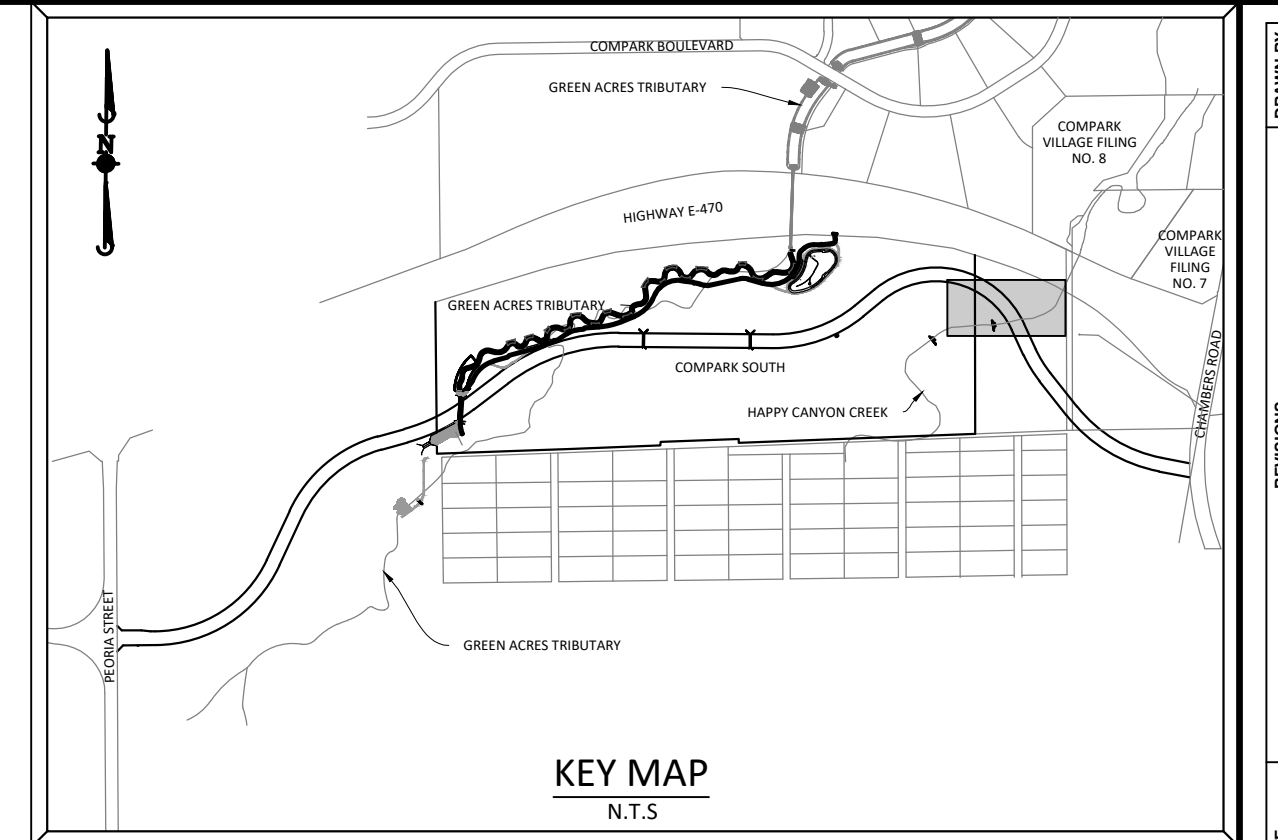




PLAN: SANITARY SEWER

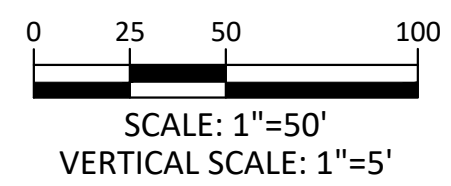
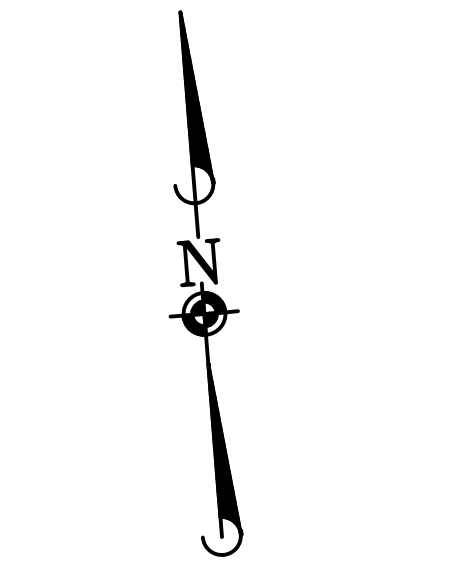


PROFILE: SANITARY SEWER



**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  
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E. 11/7/2019	REVISED STEEL CASING UNDER E-30 PER LOCATE
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C. 10/20/2016	REVISED PER STONEGATE 5/27/16 LETTER
B. 06/20/2016	REVISED PER STONEGATE 5/27/16 LETTER
A. 11/20/2015	1ST SUBMITTAL



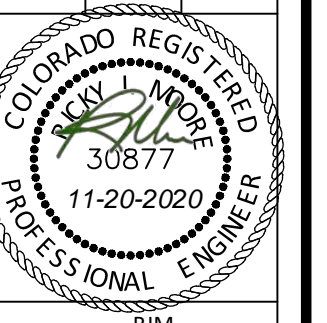
Know what's below.  
 Call before you dig.

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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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

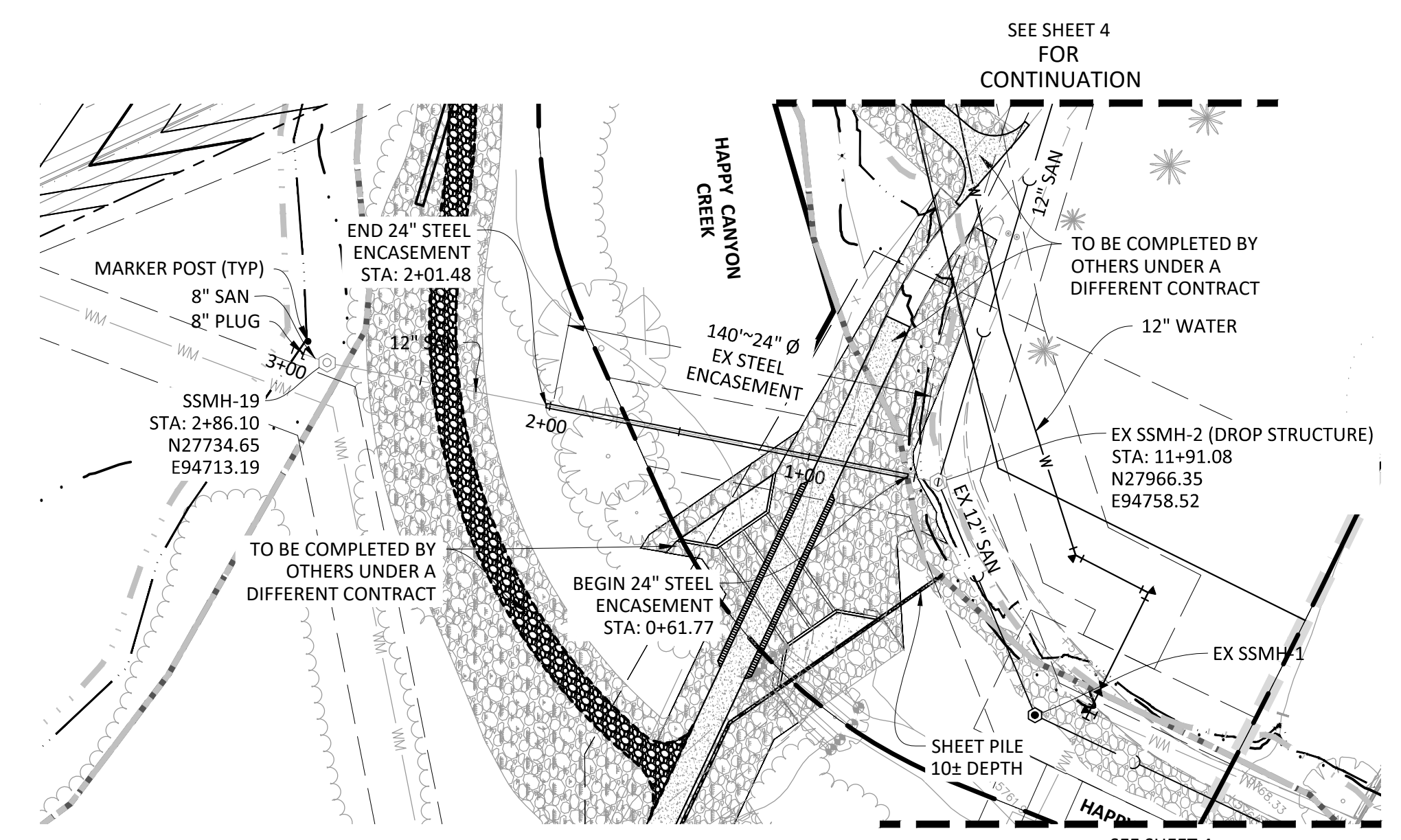
SHEET  
**8 OF 23**  
 CLCPKC3

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

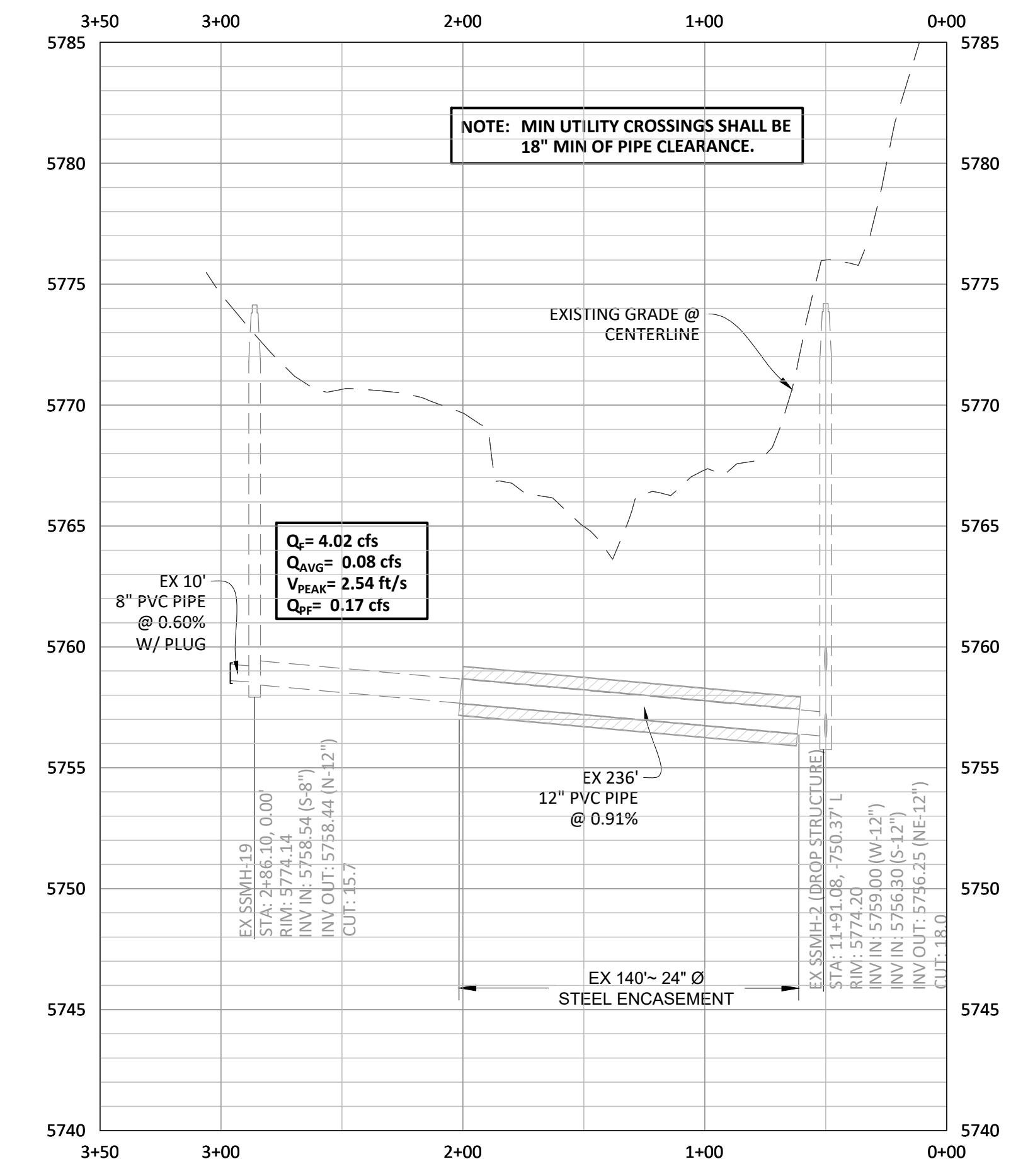
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NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

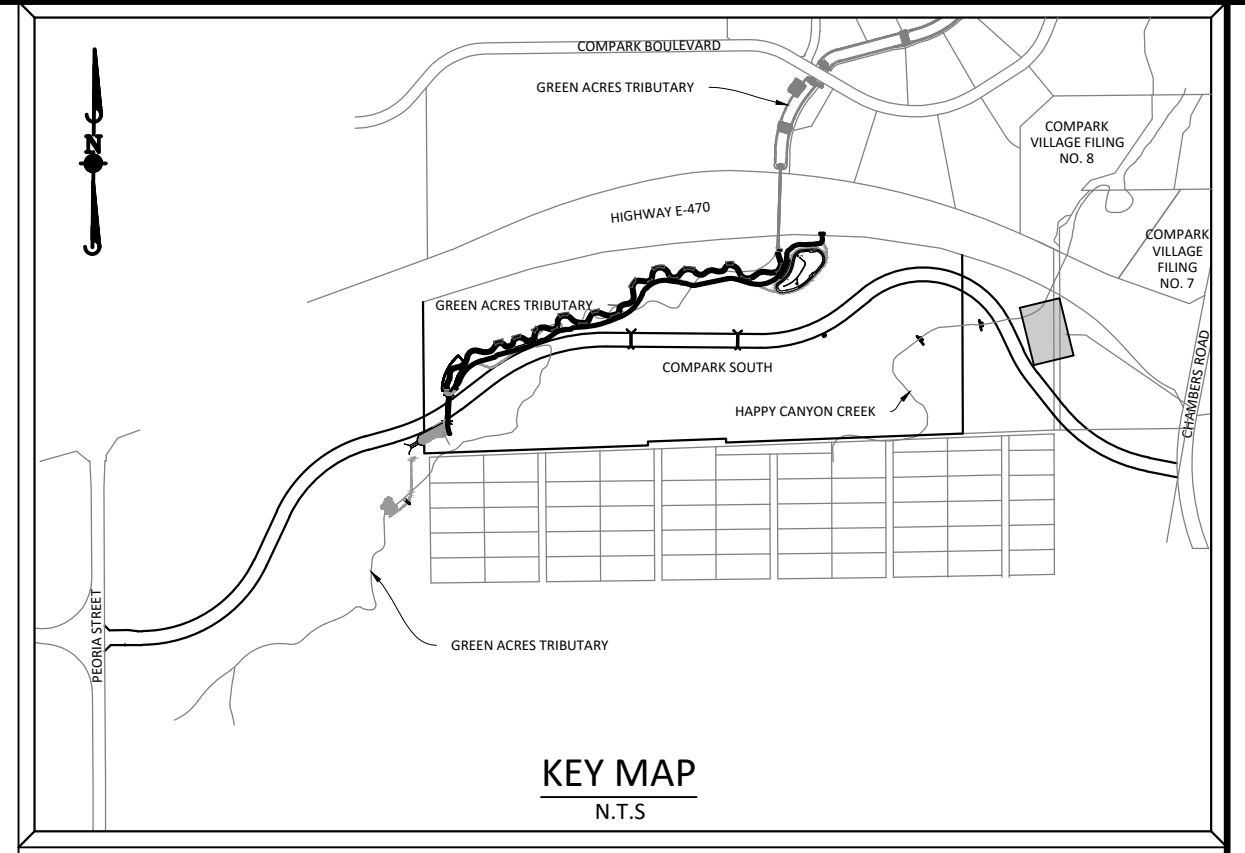
NOTE:  
THIS SEGMENT OF SANITARY SEWER MAY NEED TO BE CONSTRUCTED W/ BELFORD AVE. BRIDGE & HAPPY CANYON CREEK CONSTRUCTION



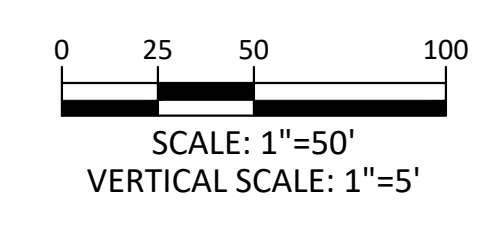
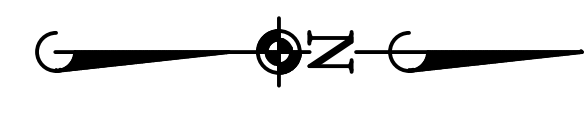
PLAN: SANITARY SEWER



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 COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



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F 3/4/2020	UPDATED PER STORMWATER REVISIONS
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C 3/17/2019	REVISED PER STONEGATE E-2716 LETTER
B 06/2016	REVISED PER STONEGATE E-2716 LETTER
A 11/2015	1ST SUBMITTAL

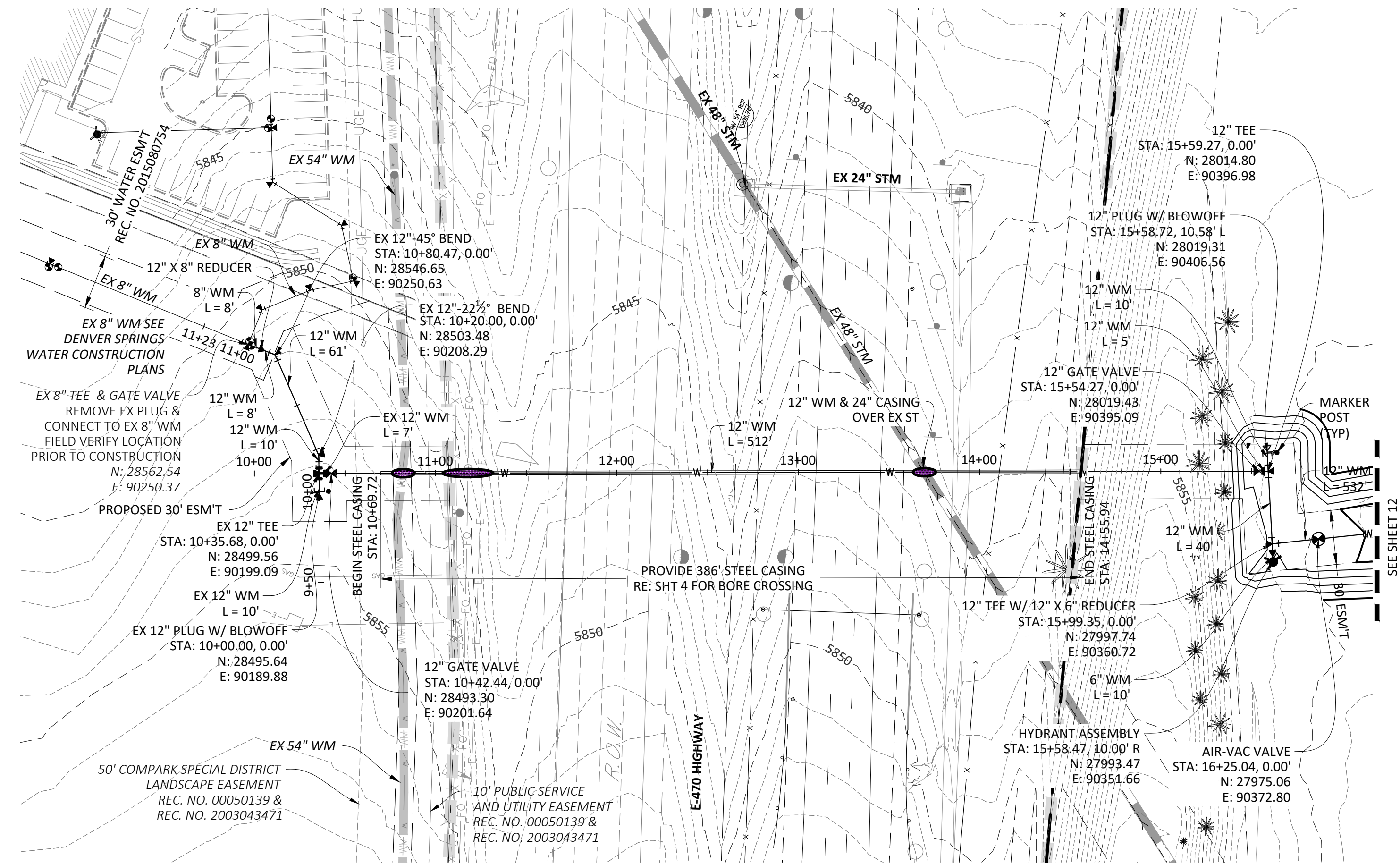
**Manhard CONSULTING**  
7600 East Orchard Road, Suite 100-303, Greenwood Village, CO 80121, phone: 303.788.0800 manhard.com  
Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

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  
**9 OF 23**  
CLCPKC3



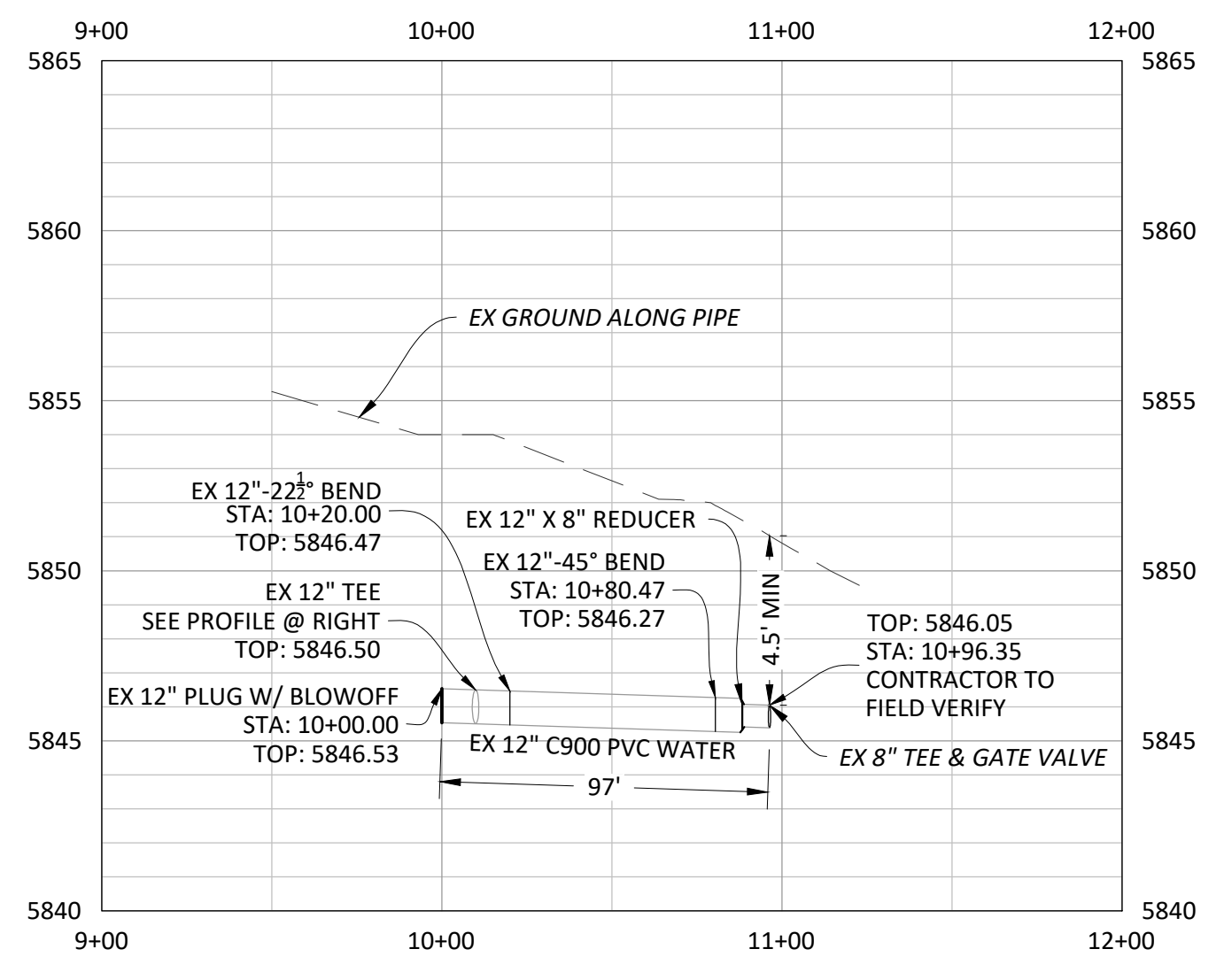


PLAN: 12" WATERLINE

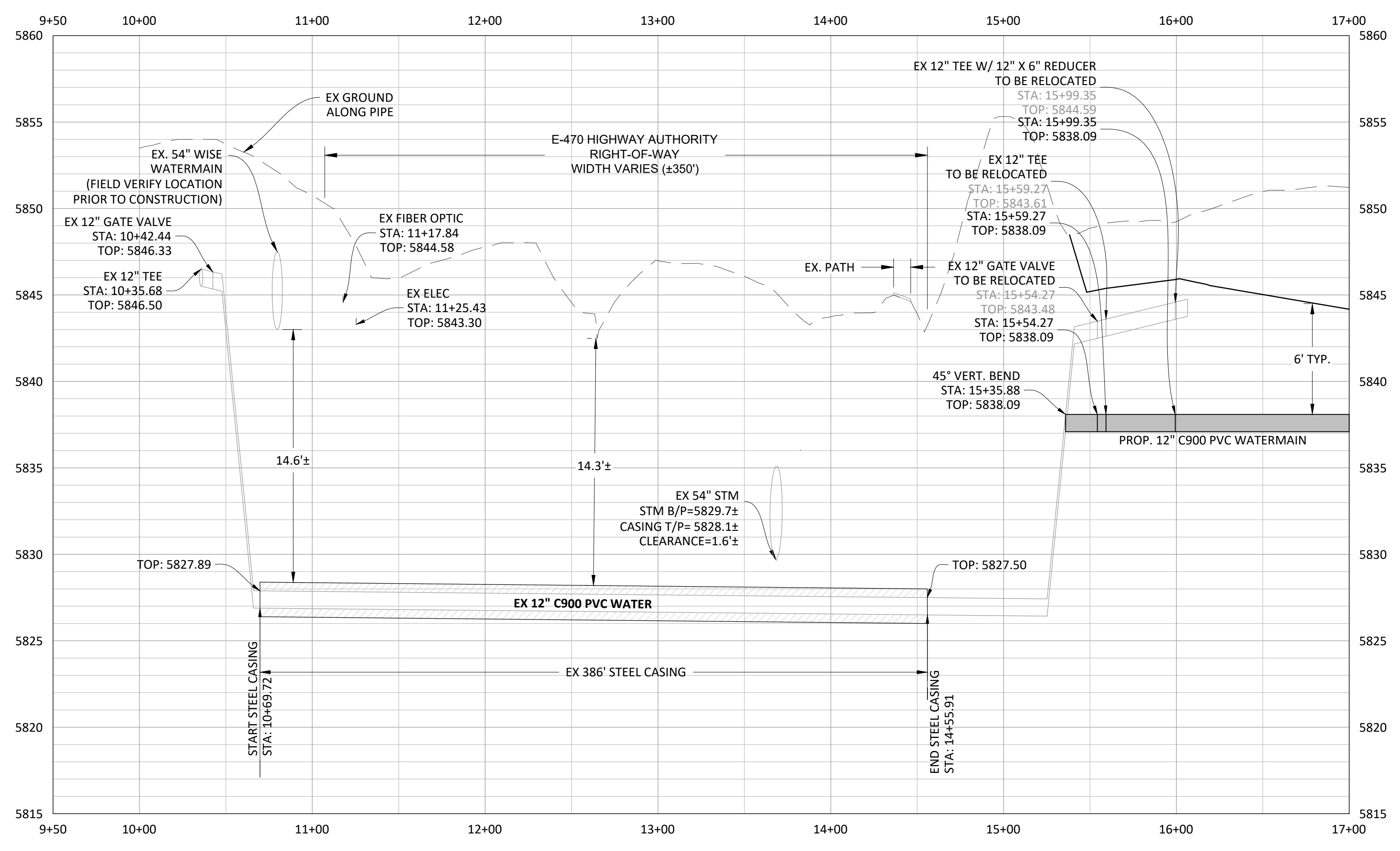
NOTE: SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.

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

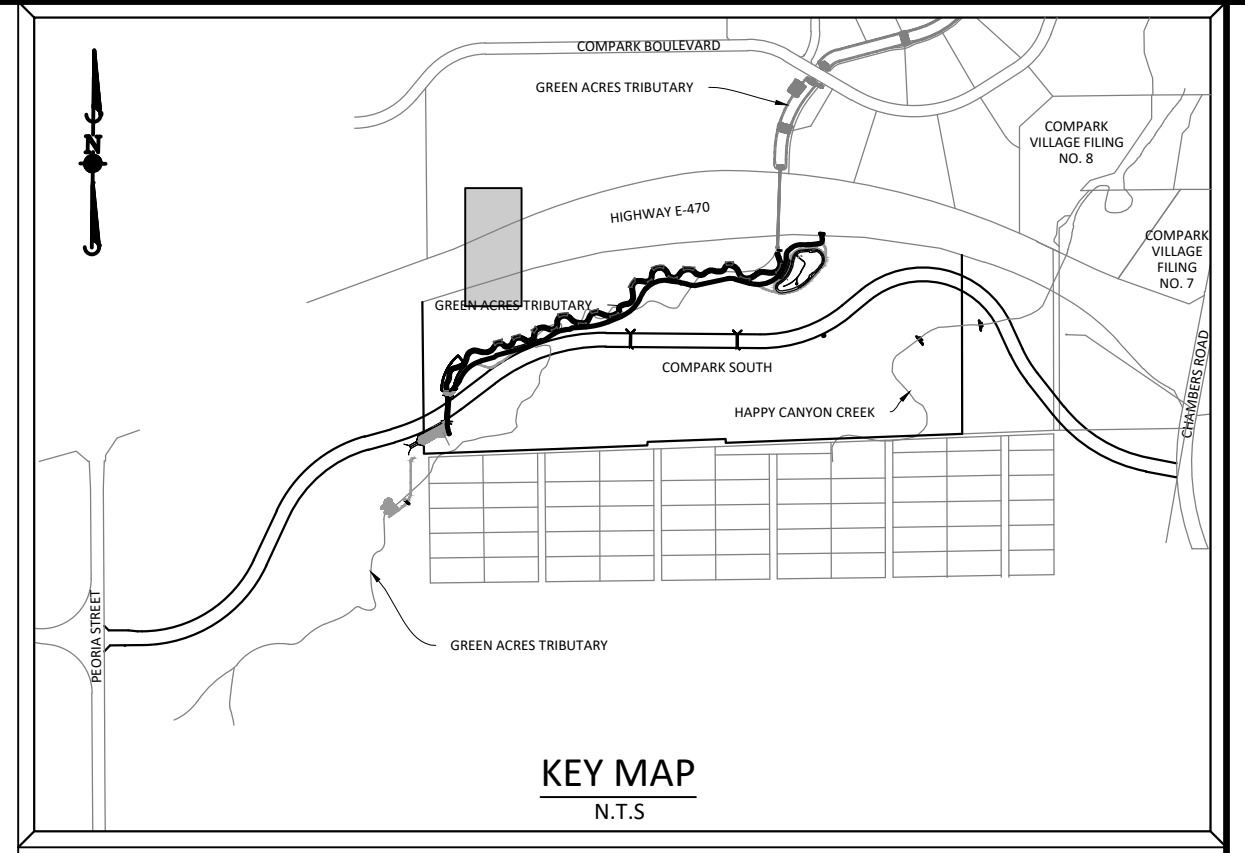
WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.



PROFILE: 8" WATERLINE FOR INFORMATION ONLY



PROFILE: 12" WATERLINE



SOURCE BENCHMARKS:  
DOUGLAS COUNTY BM 1.115010  
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3/17/2019	REVISED STEEL CASING UNDER E-470 PER LOCATE
10/20/18	REVISED PER STONE GATE 5/27/16 LETTER
06/20/16	REVISED PER STONE GATE 5/27/16 LETTER
11/20/15	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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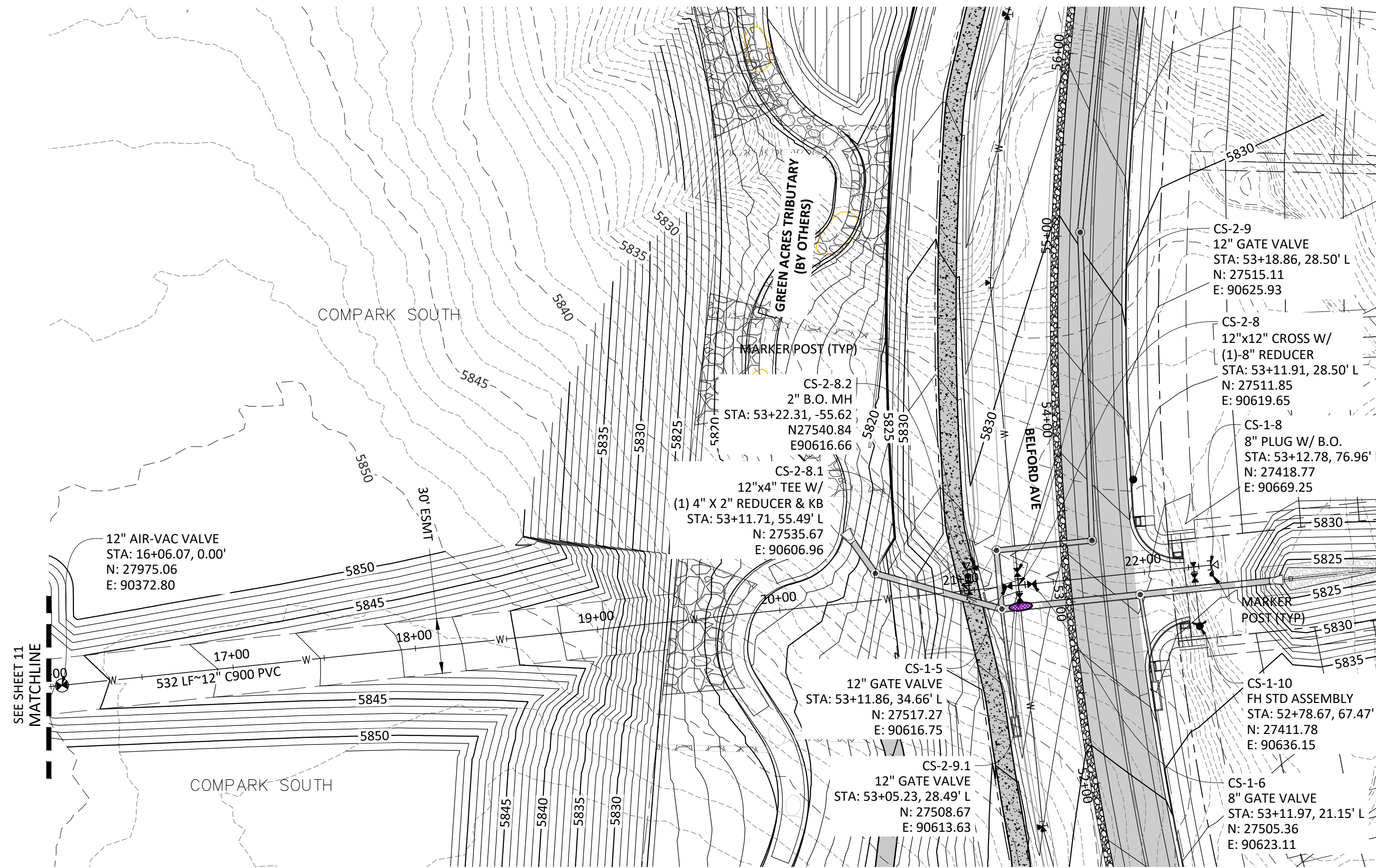
COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
E-470 WATER MAIN BORE PLAN & PROFILE

COLORADO REGISTERED PROFESSIONAL ENGINEER  
11-20-2020  
30877  
PROJ. MGR.: RIM  
PROJ. ASSOC.: ASD  
DRAWN BY: SEK  
DATE: 03/2020  
SHEET 11 OF 23  
CLCPK3

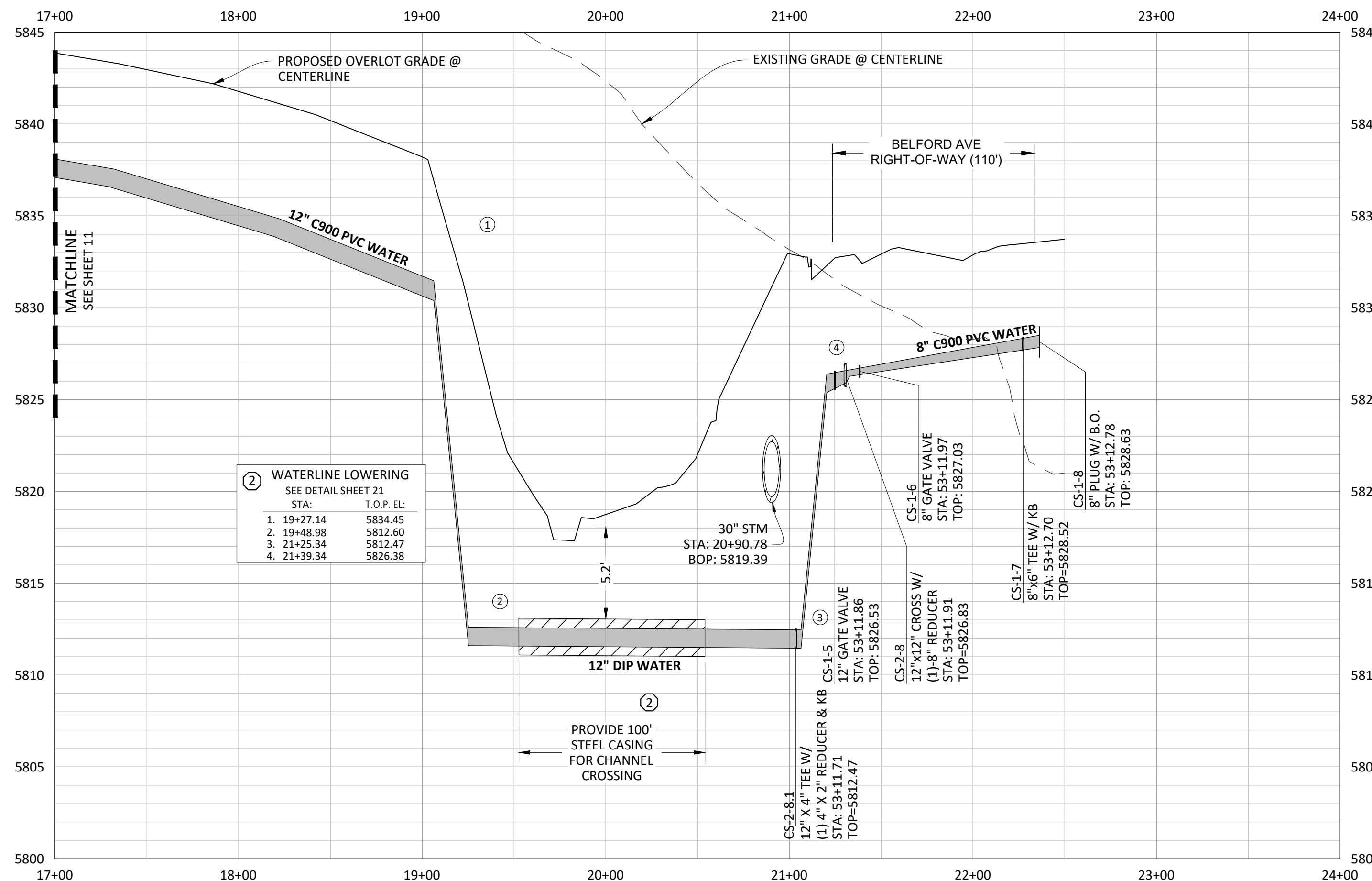
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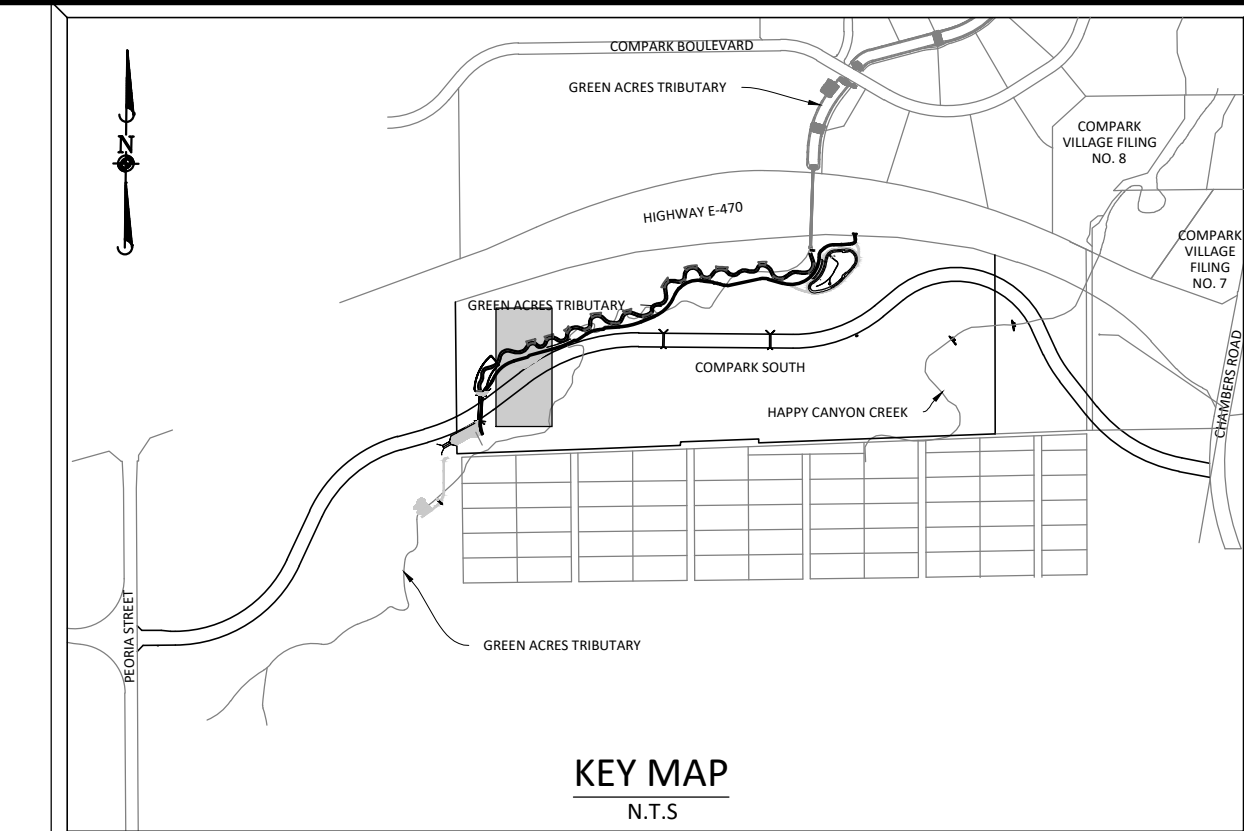
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PLAN: 12" WATERLINE

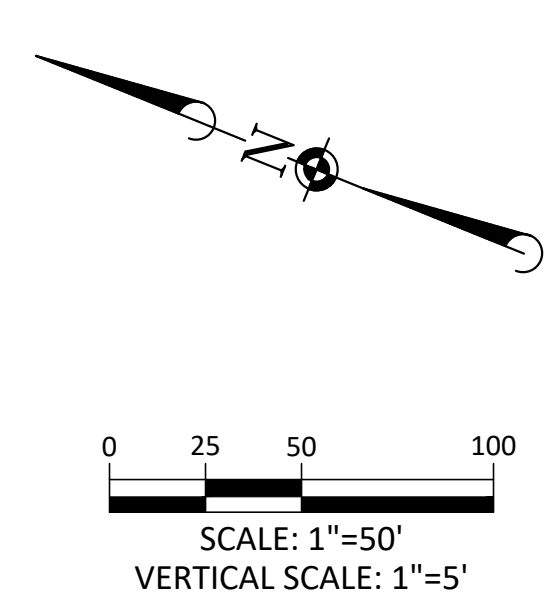


PROFILE: 12" WATERLINE



**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)



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C. 10/20/2019	REVISED PER STONEGATE 5/21/16 LETTER
B. 06/20/2016	REVISED PER STONEGATE 5/21/16 LETTER
A. 11/20/2015	1 <sup>ST</sup> SUBMITTAL

**Manhard CONSULTING**

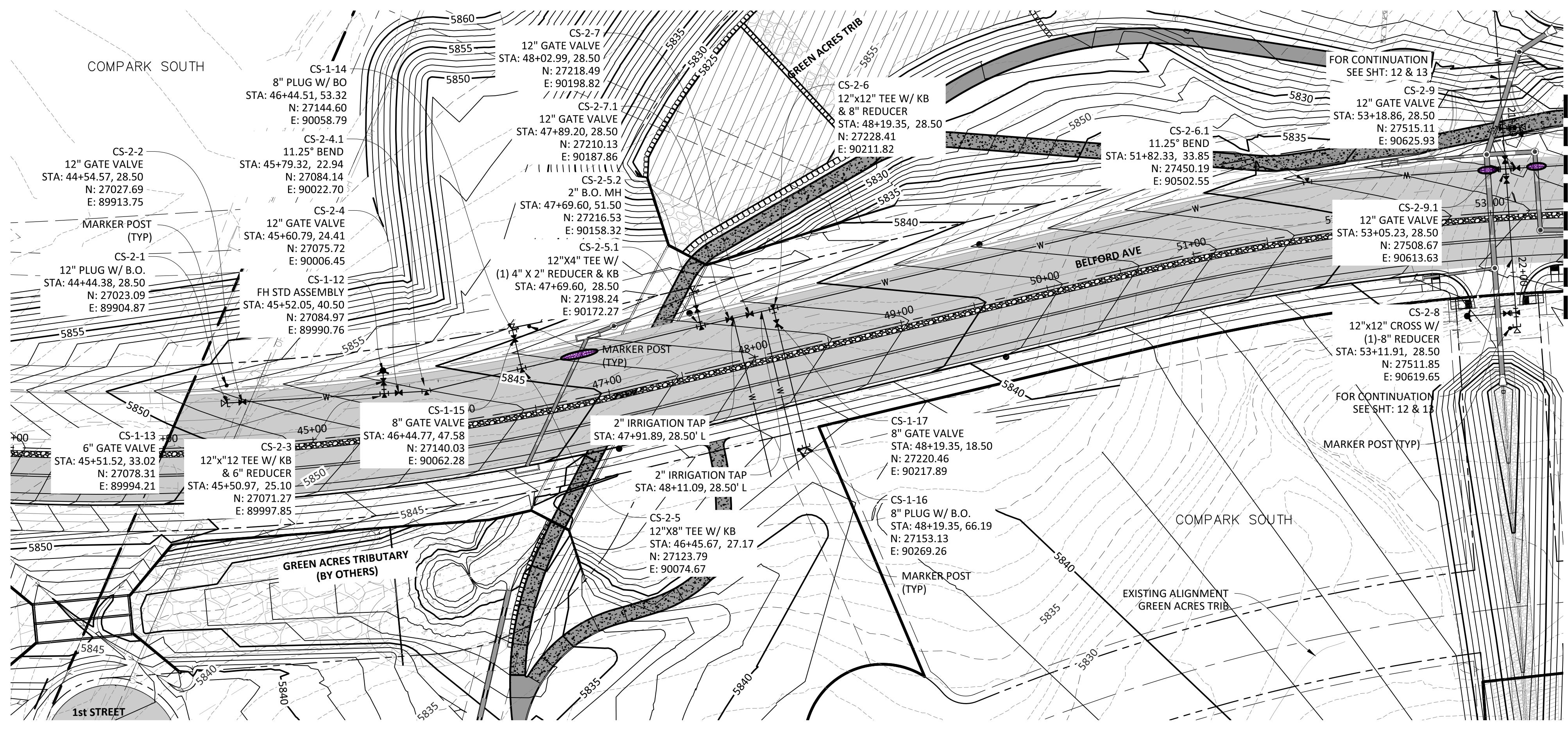
7600 East Orchard Road, Suite 100-3, Greenwood Village, CO 80111, phone: 303.778.0500 manhard.com  
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
WATER PLAN & PROFILE

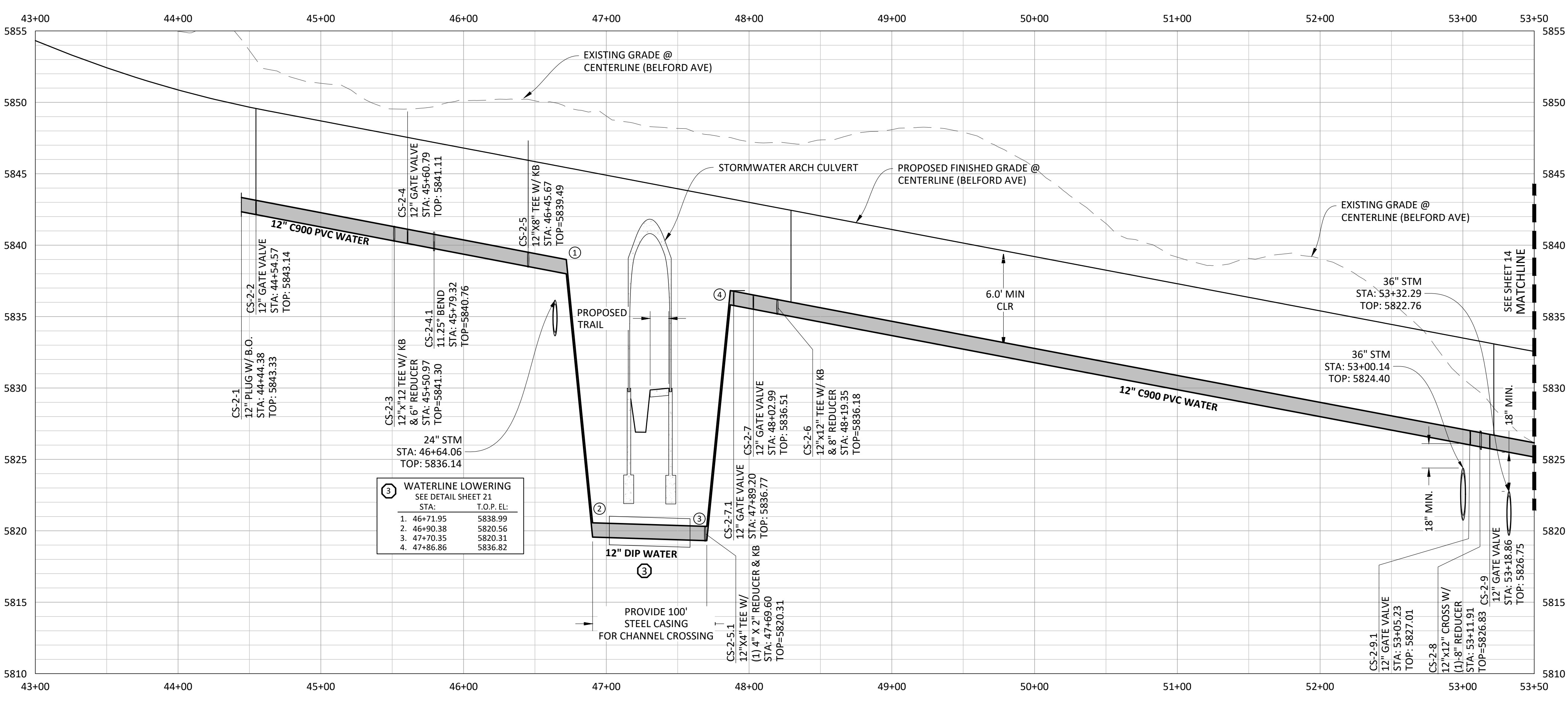
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PROJ. ASSOC.: ASD  
DRAWN BY: ETG  
DATE: 03/2020

SHEET  
**12 OF 23**  
CLCPK3

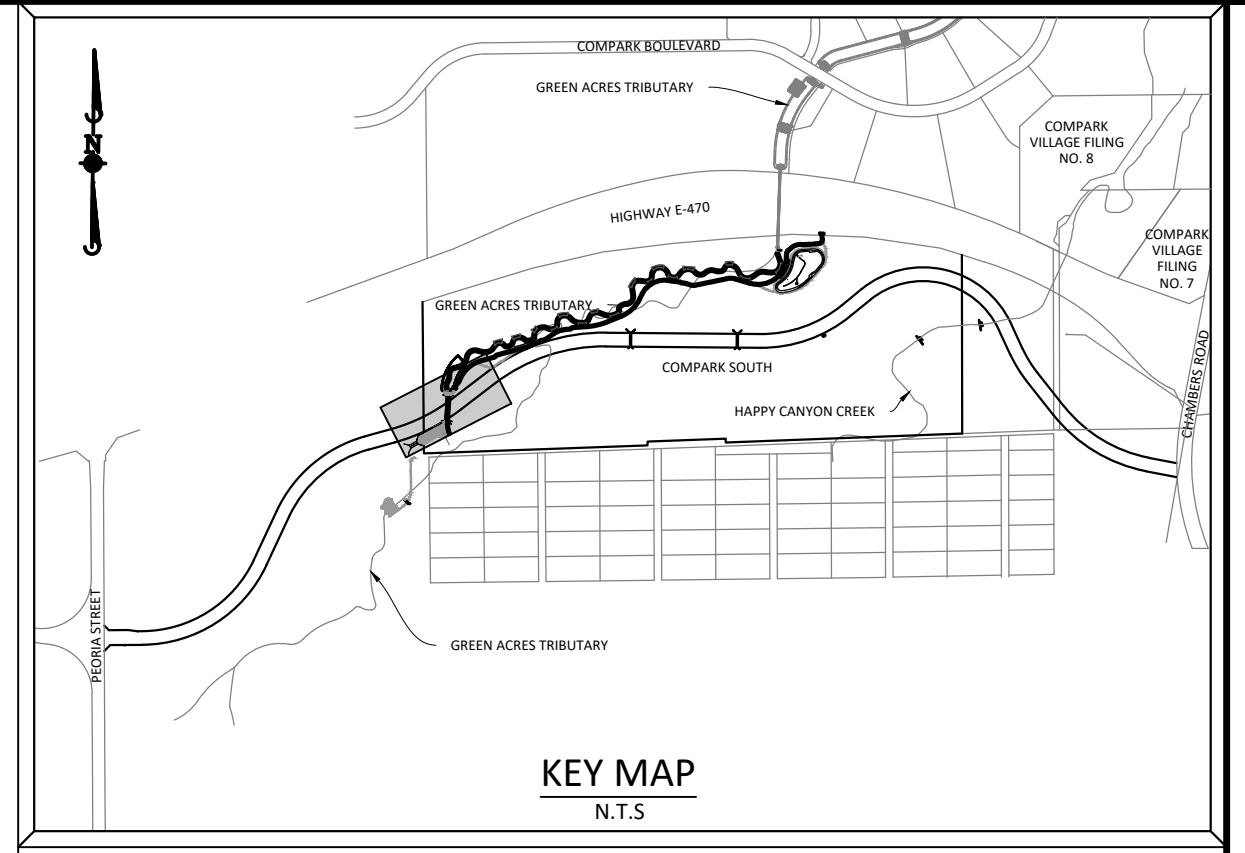
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PLAN: 12" WATERLINE



PROFILE: 12" WATERLINE



**SOURCE BENCHMARKS:**  
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0 25 50 100  
 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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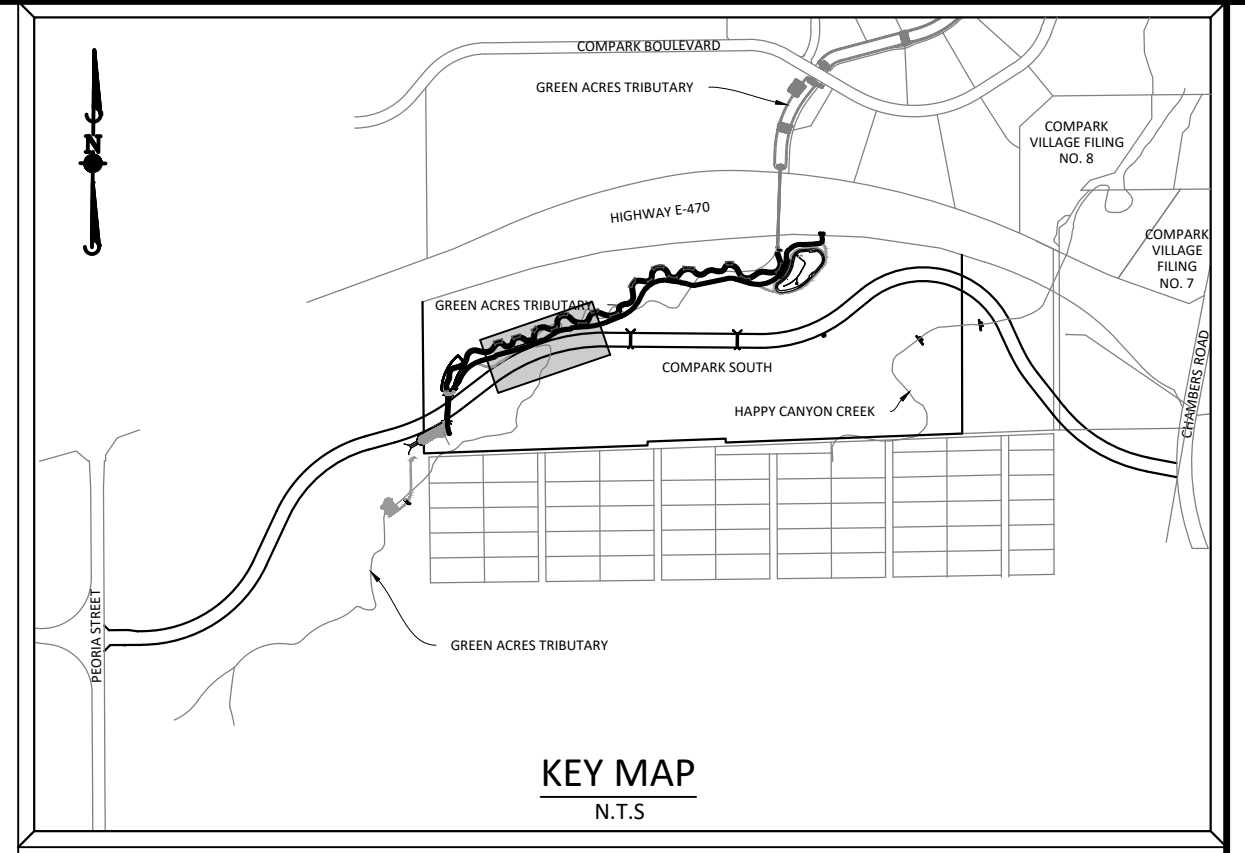
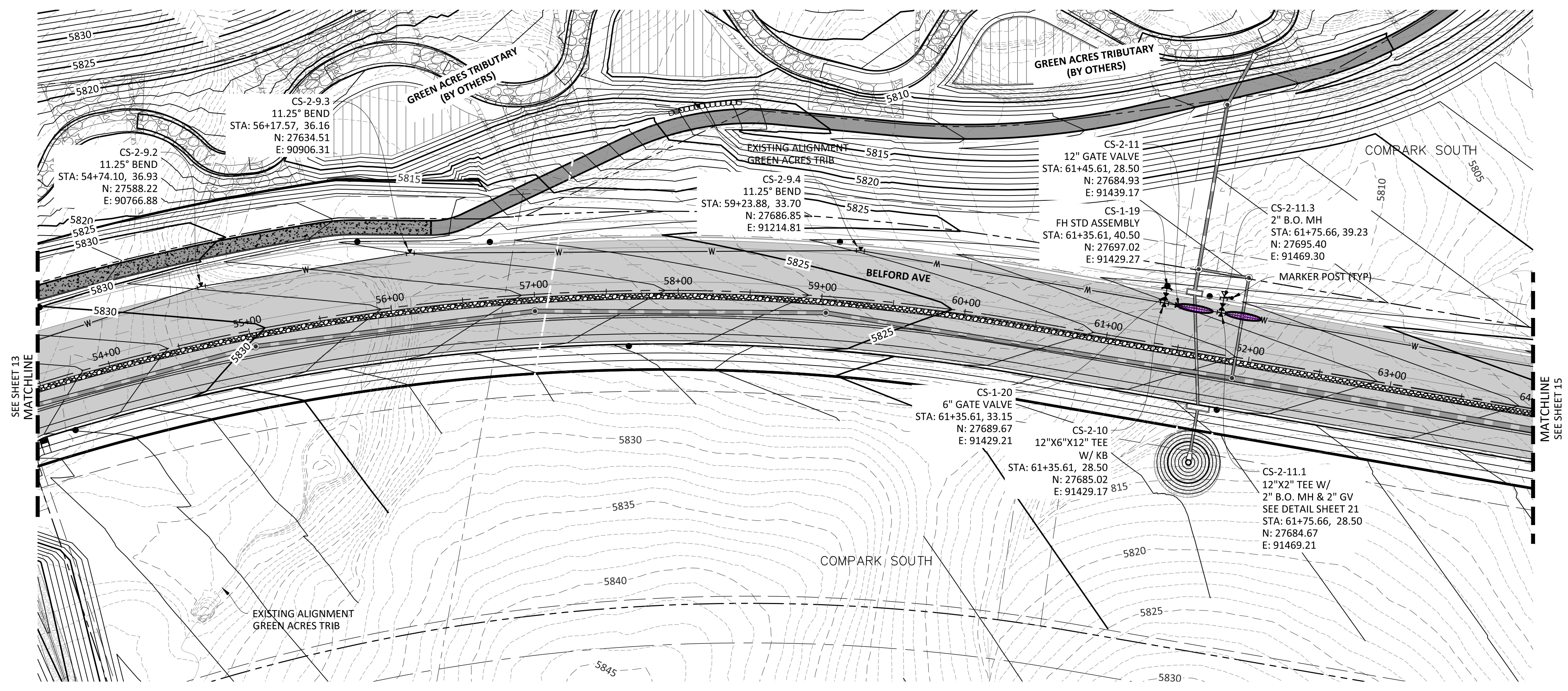
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE

COLORADO 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

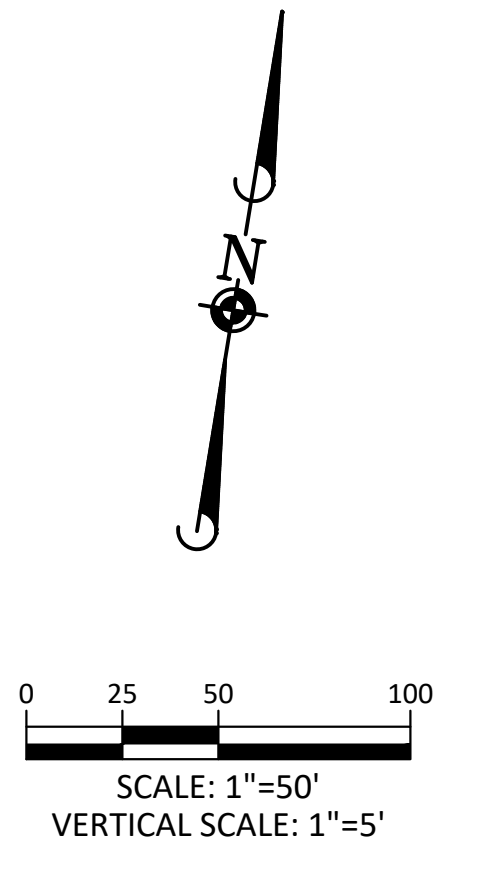
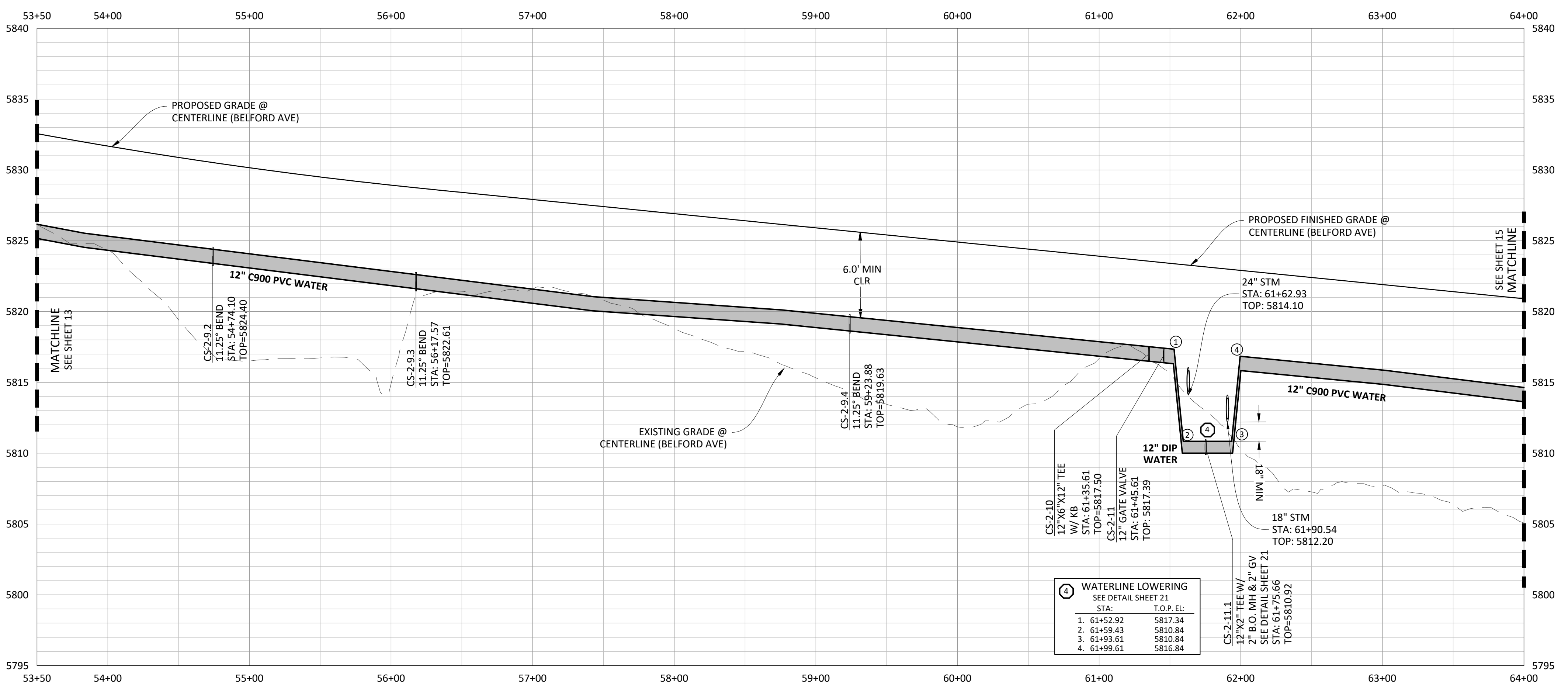


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A. 11/20/2015	1ST SUBMITTAL

**Manhard CONSULTING**

7600 East Orchard Road, Suite 100-303, Greenwood Village, CO 80111, ph:303.778.0500, manhard.com  
Civil Engineering | Surveying & Geospatial Services | Construction Management | Water Resource Management



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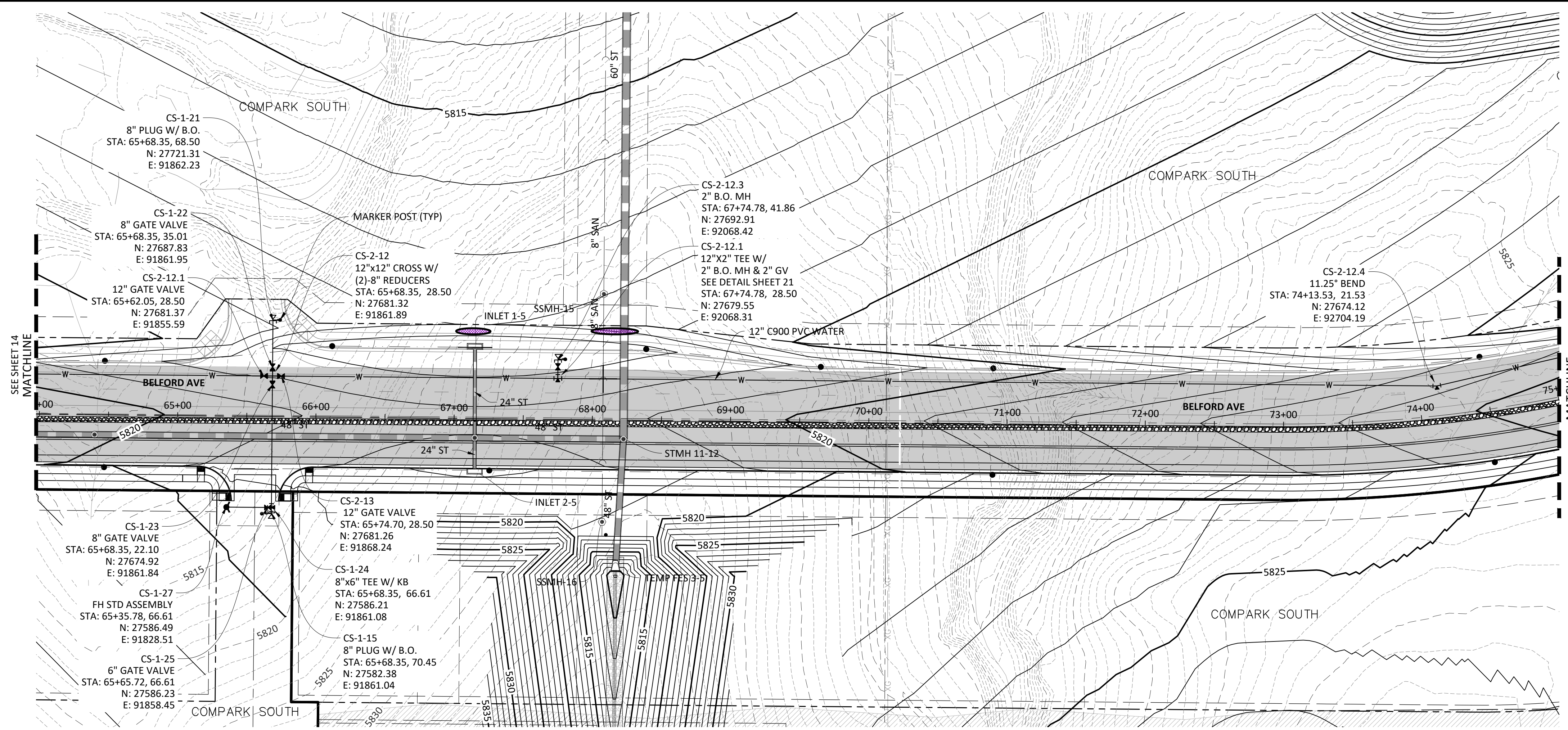
WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION. EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.

Plotted: 11/20/2020 9:00 AM. Dwg Name: S:\Cpck3\compark\_south\12\_filing\_1\_no\_ga\master water and sewer\016\016\_CLPK3\_Office-Wat\_P&P\_2.dwg. Updated By: MMacGuire

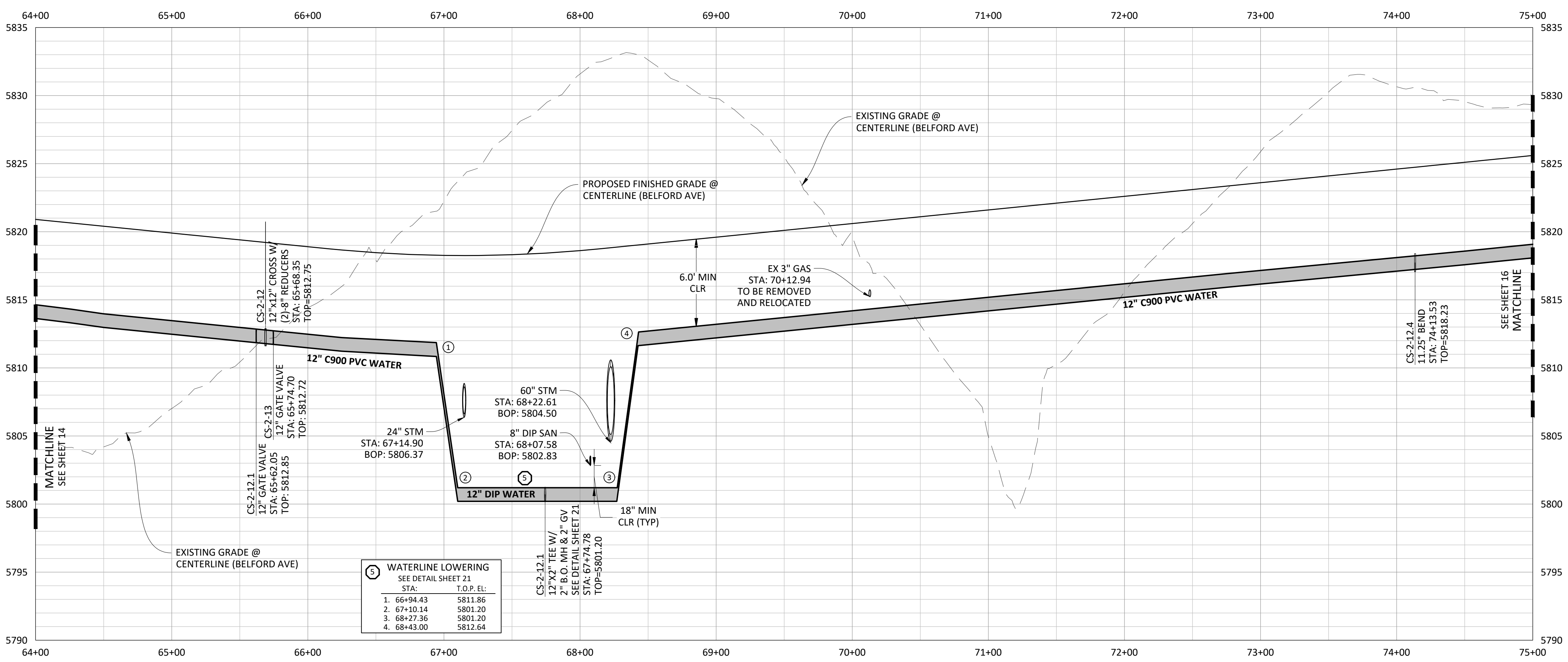
COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
WATER PLAN & PROFILE

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

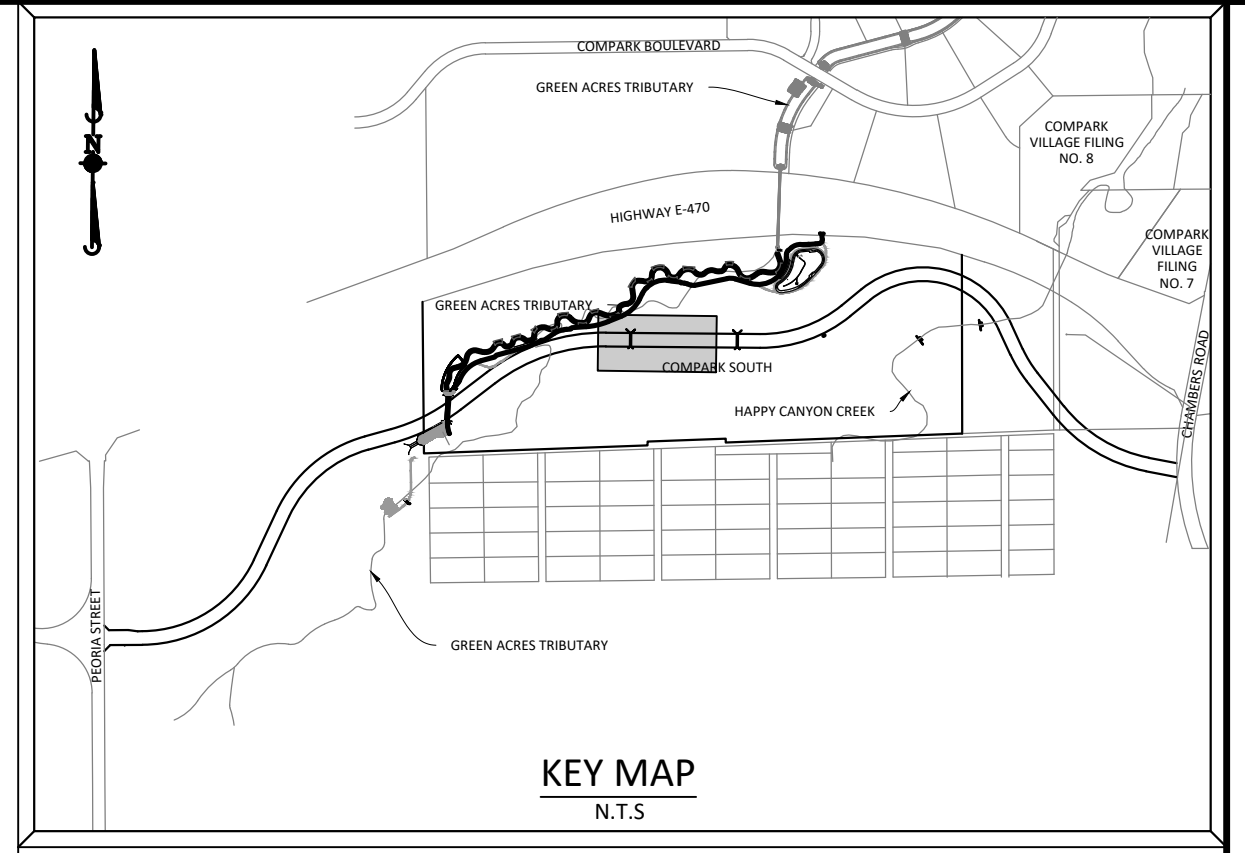
**SHEET 14 OF 23**  
CLCPK3



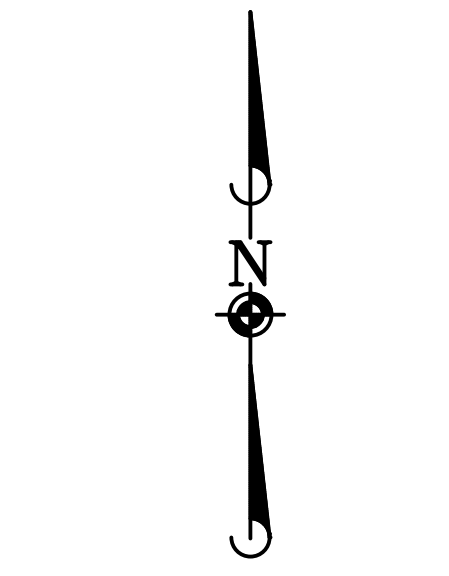
PLAN: 12" WATERLINE



PROFILE: 12" WATERLINE



**SOURCE BENCHMARKS:**  
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 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.

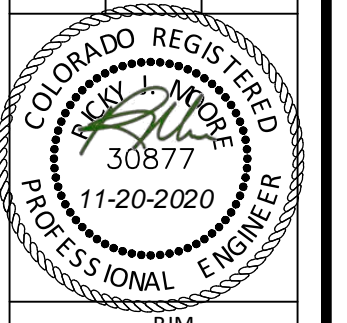
ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C900 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.

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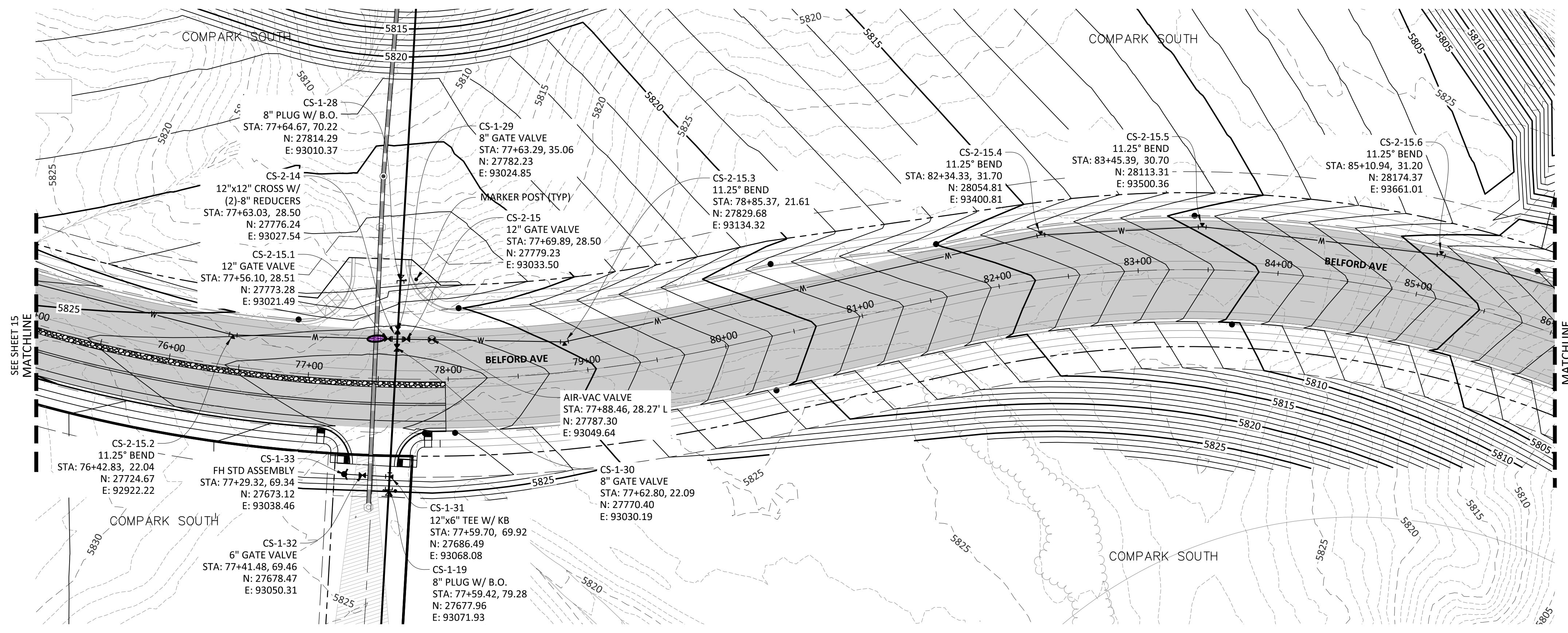
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE



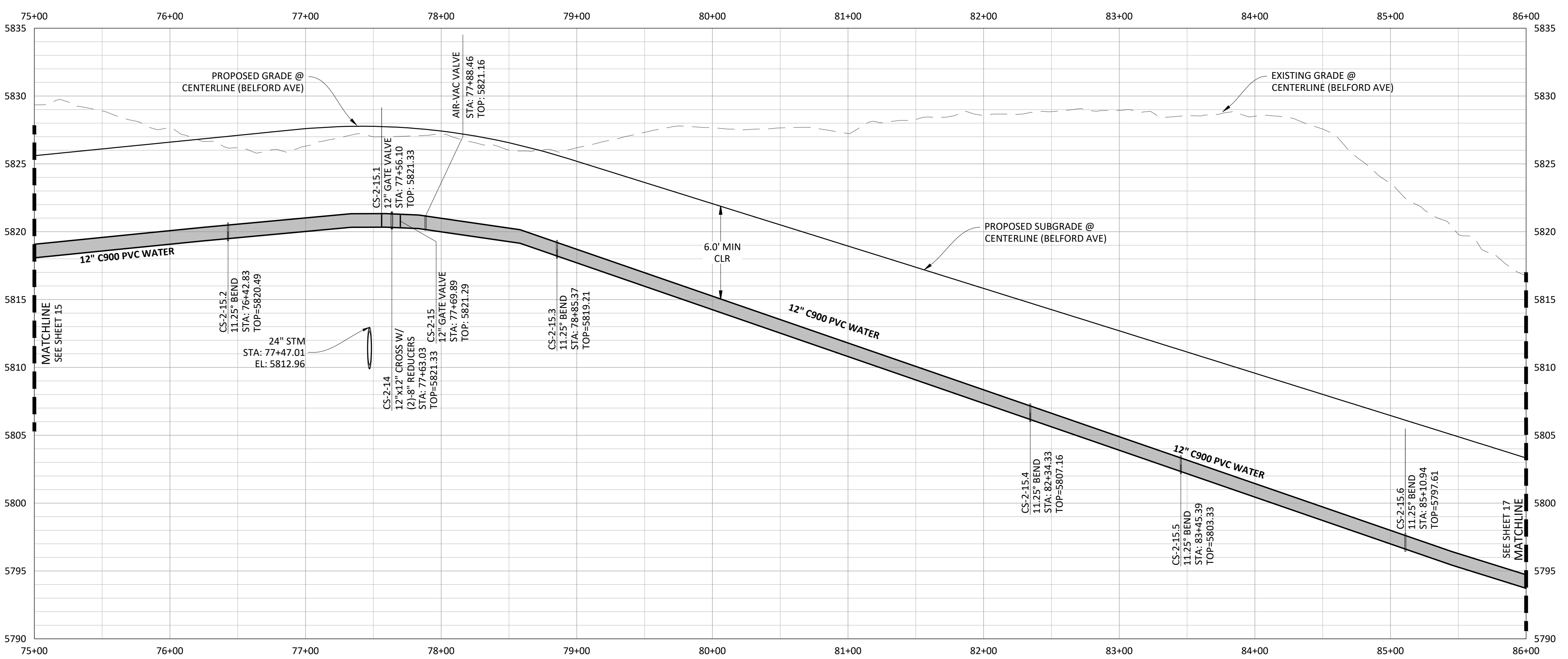
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 PROJ. ASSOC.: ASD  
 DRAWN BY: ETG  
 DATE: 03/2020

SHEET  
**15 OF 23**  
 CLCPK3

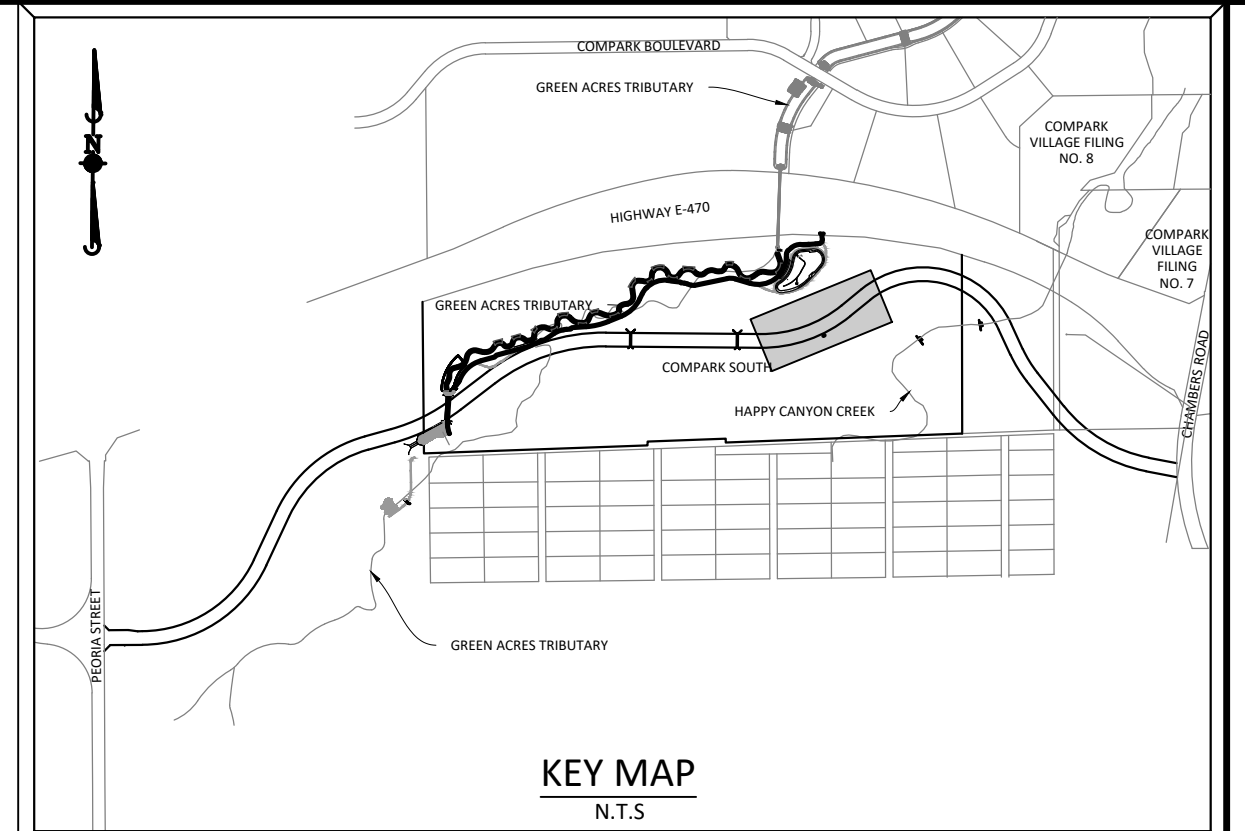
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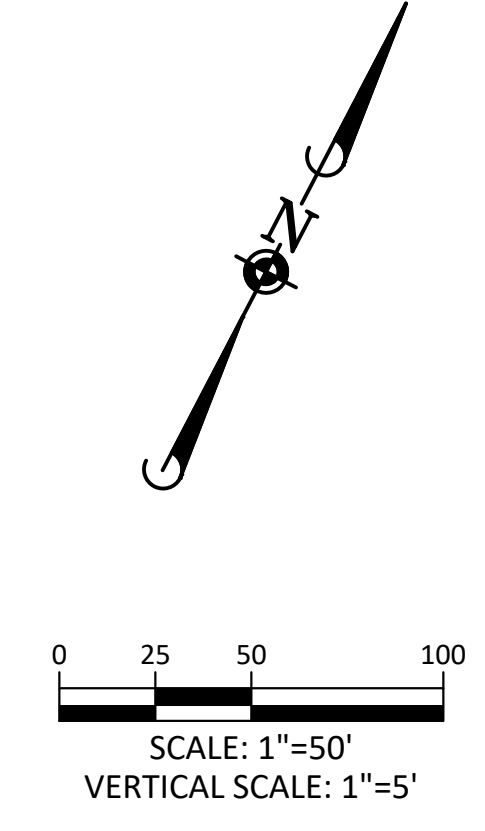
PLAN: 12" WATERLINE



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)



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.
- 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. 06/20/16	REVISED PER STONEGATE 5/21/16 LETTER
A. 11/20/15	1ST SUBMITTAL

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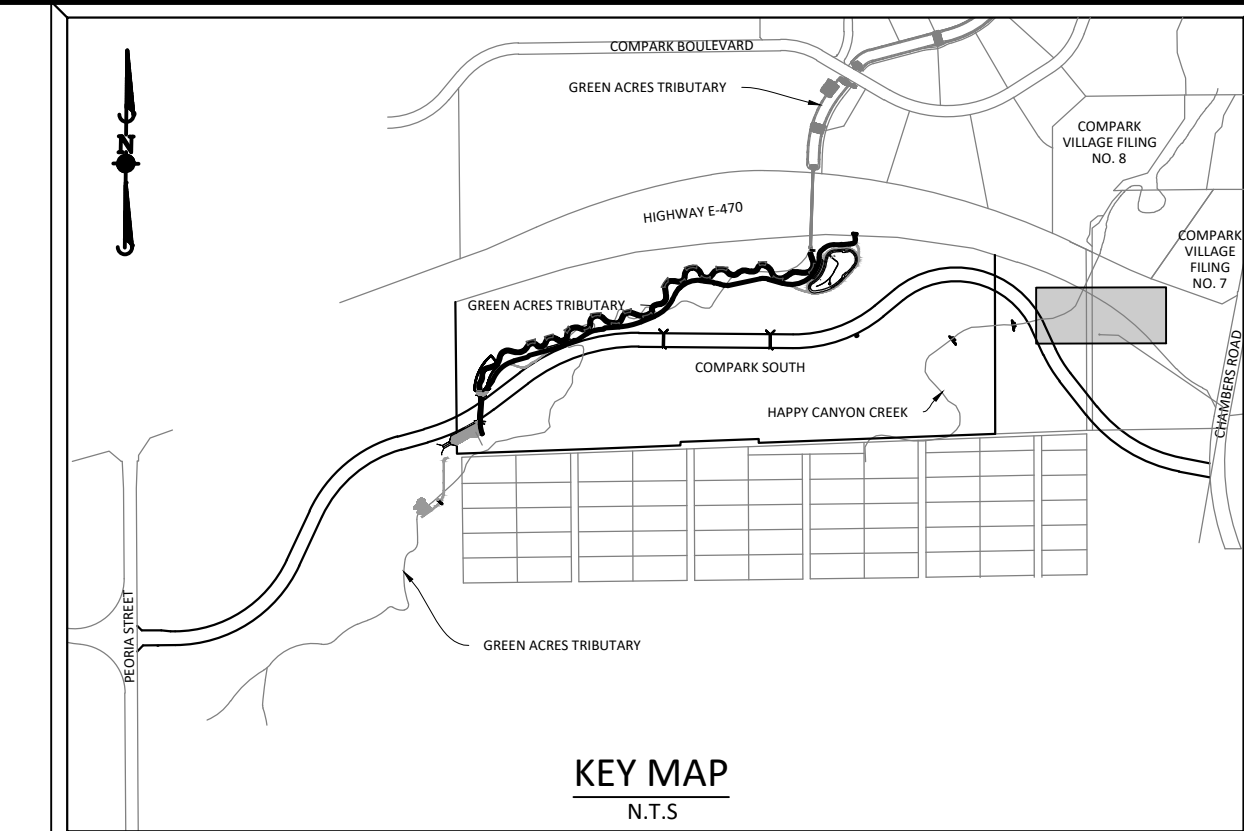
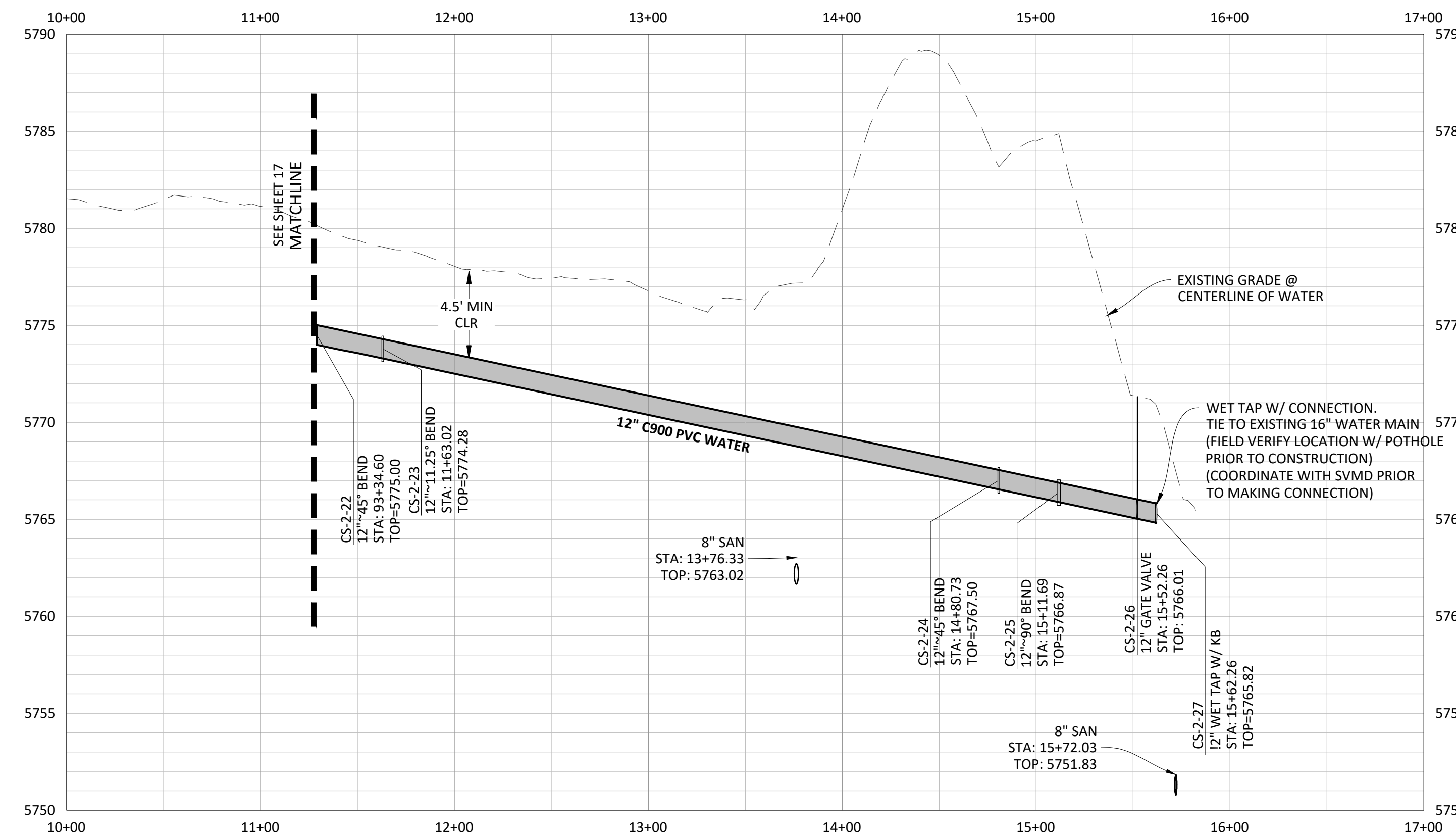
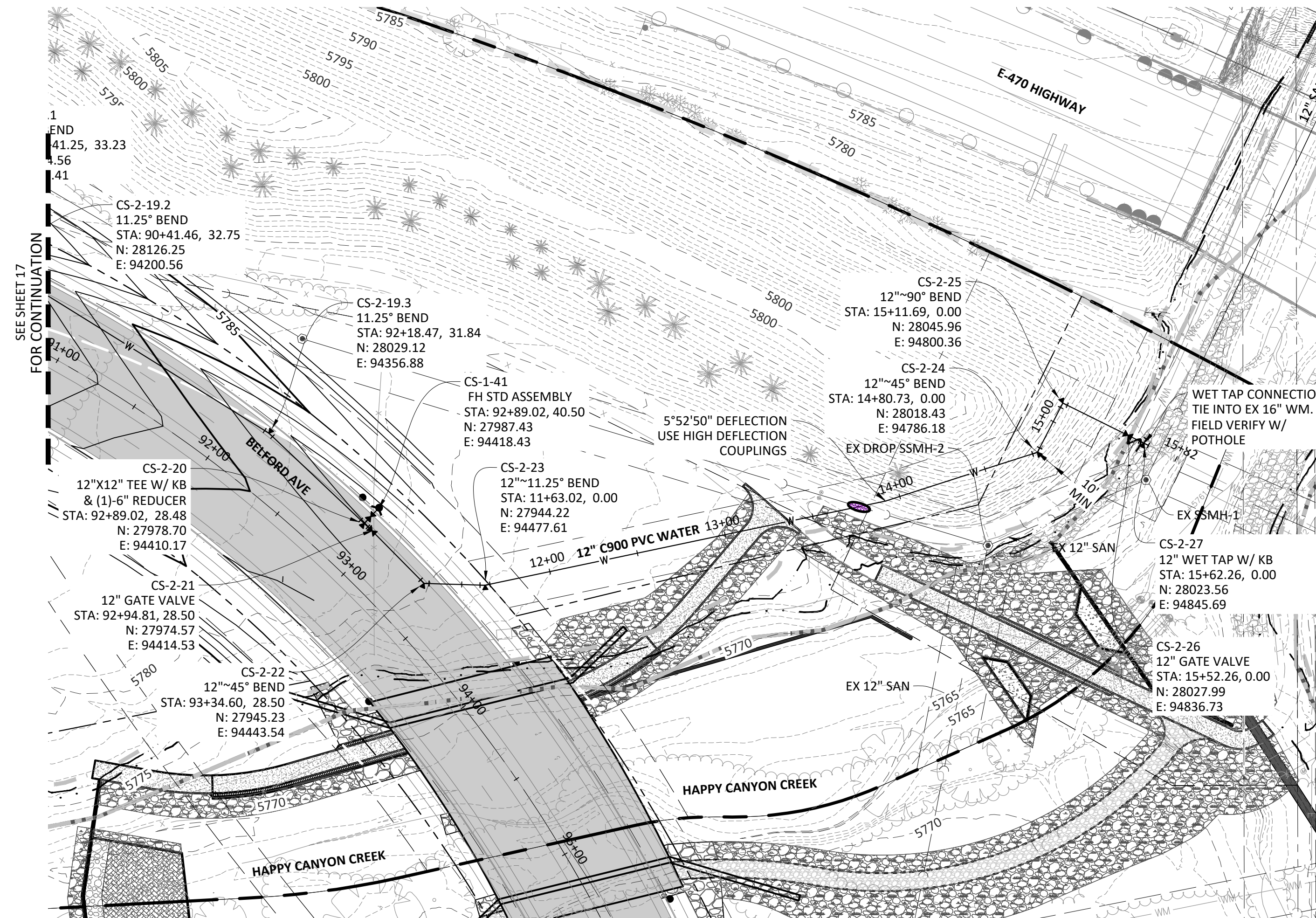
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER PLAN & PROFILE

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

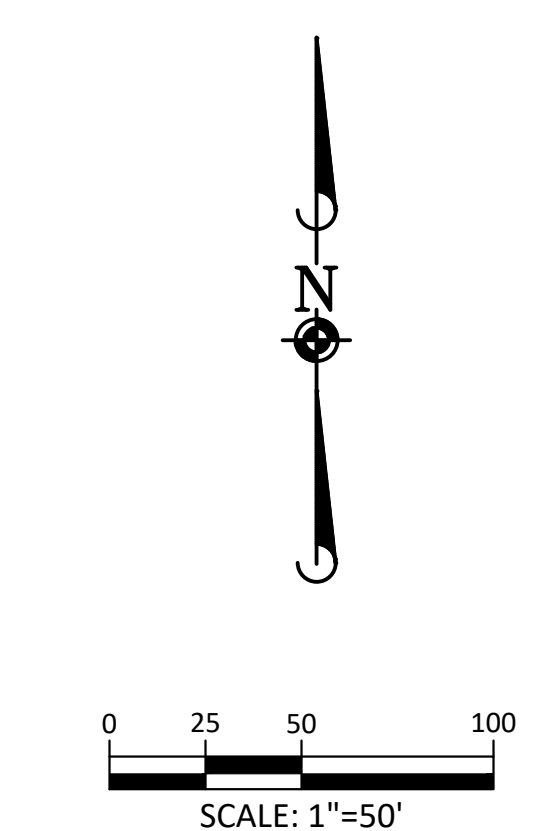
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SOURCE BENCHMARKS:  
DOUGLAS COUNTY BM 1.115010  
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET  
SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF  
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DATE	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 STONEGATE 5/27/16 LETTER
06/20/2016	REVISED PER STONEGATE 5/27/16 LETTER
11/20/2015	1ST SUBMITTAL

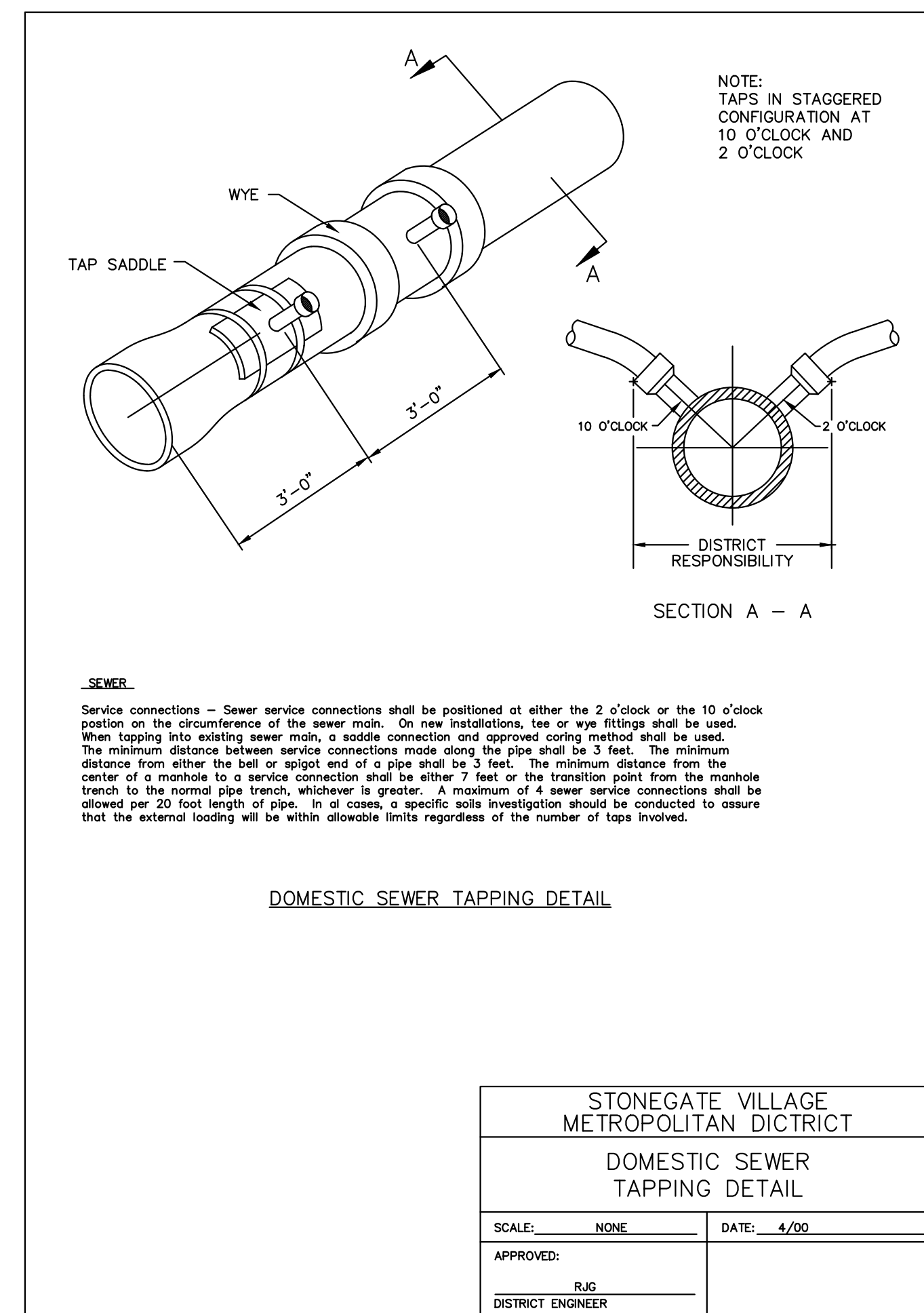
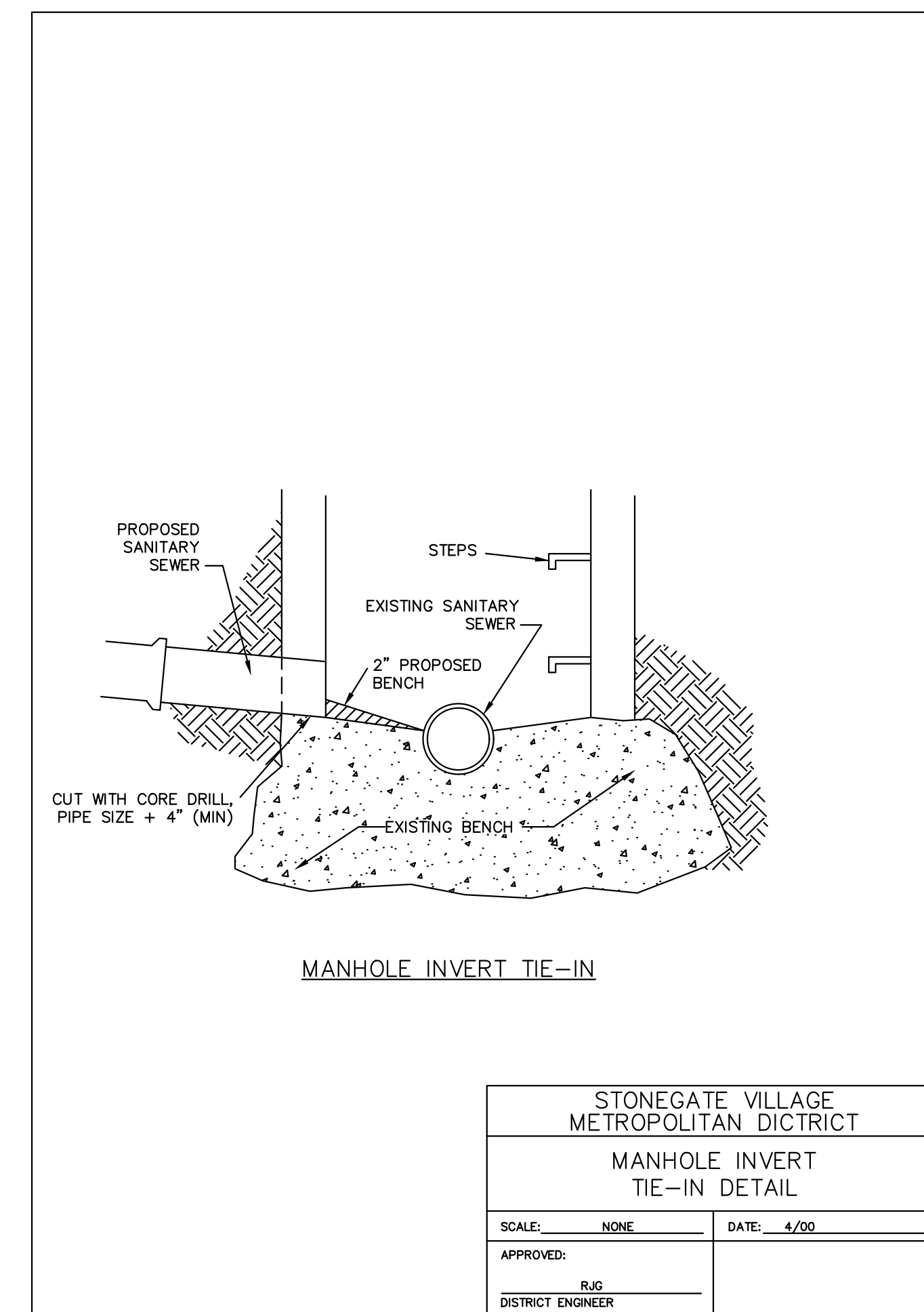
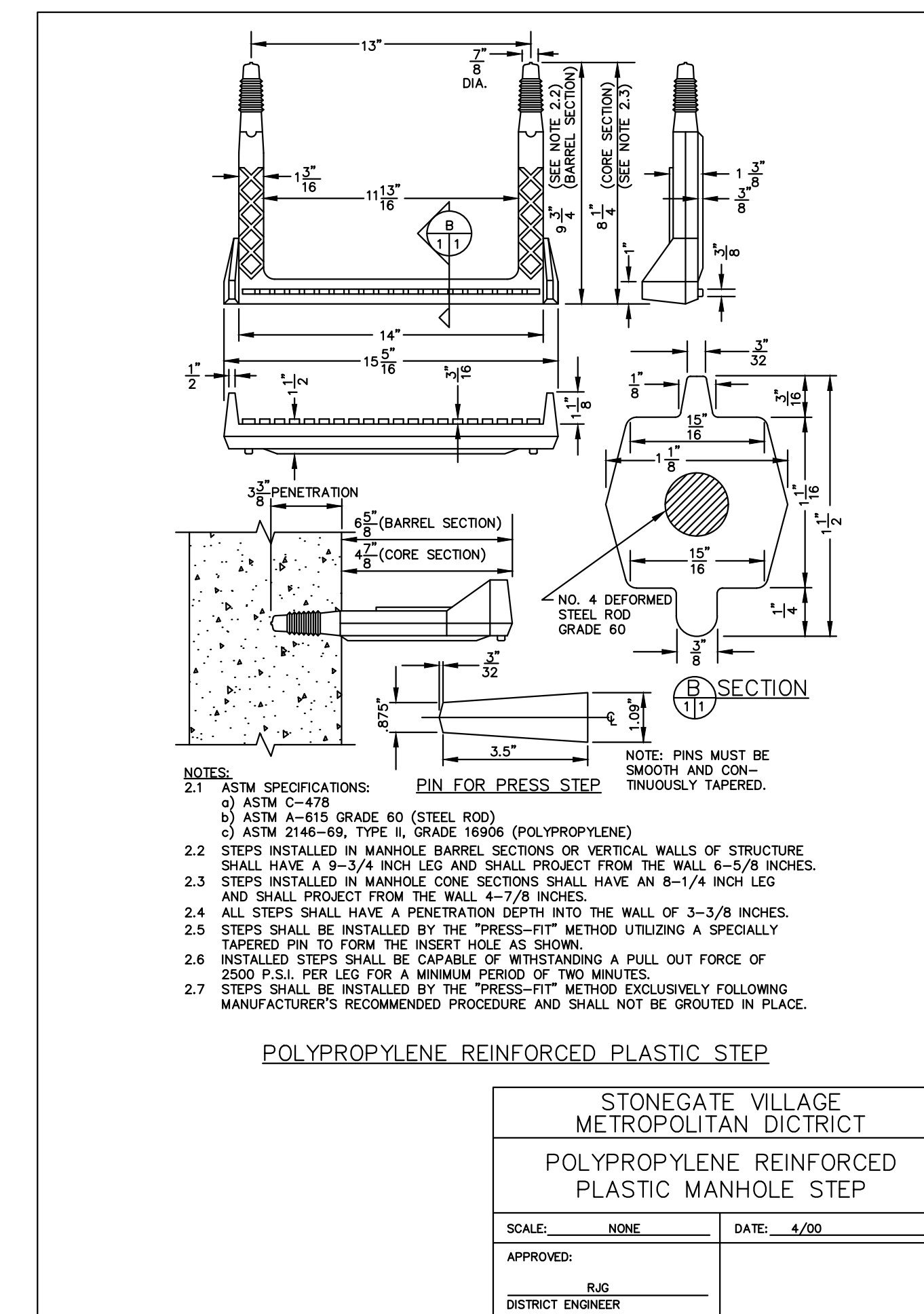
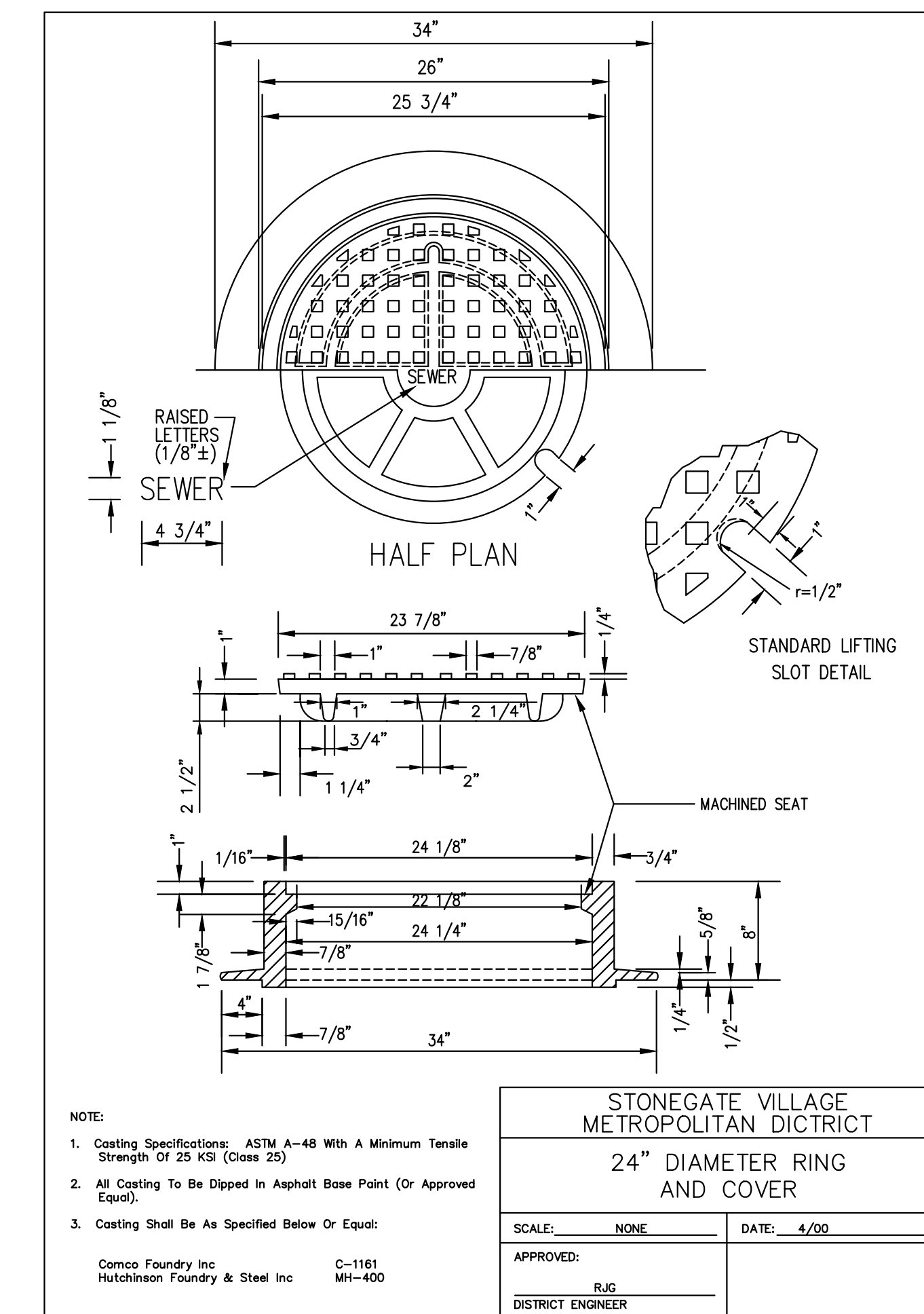
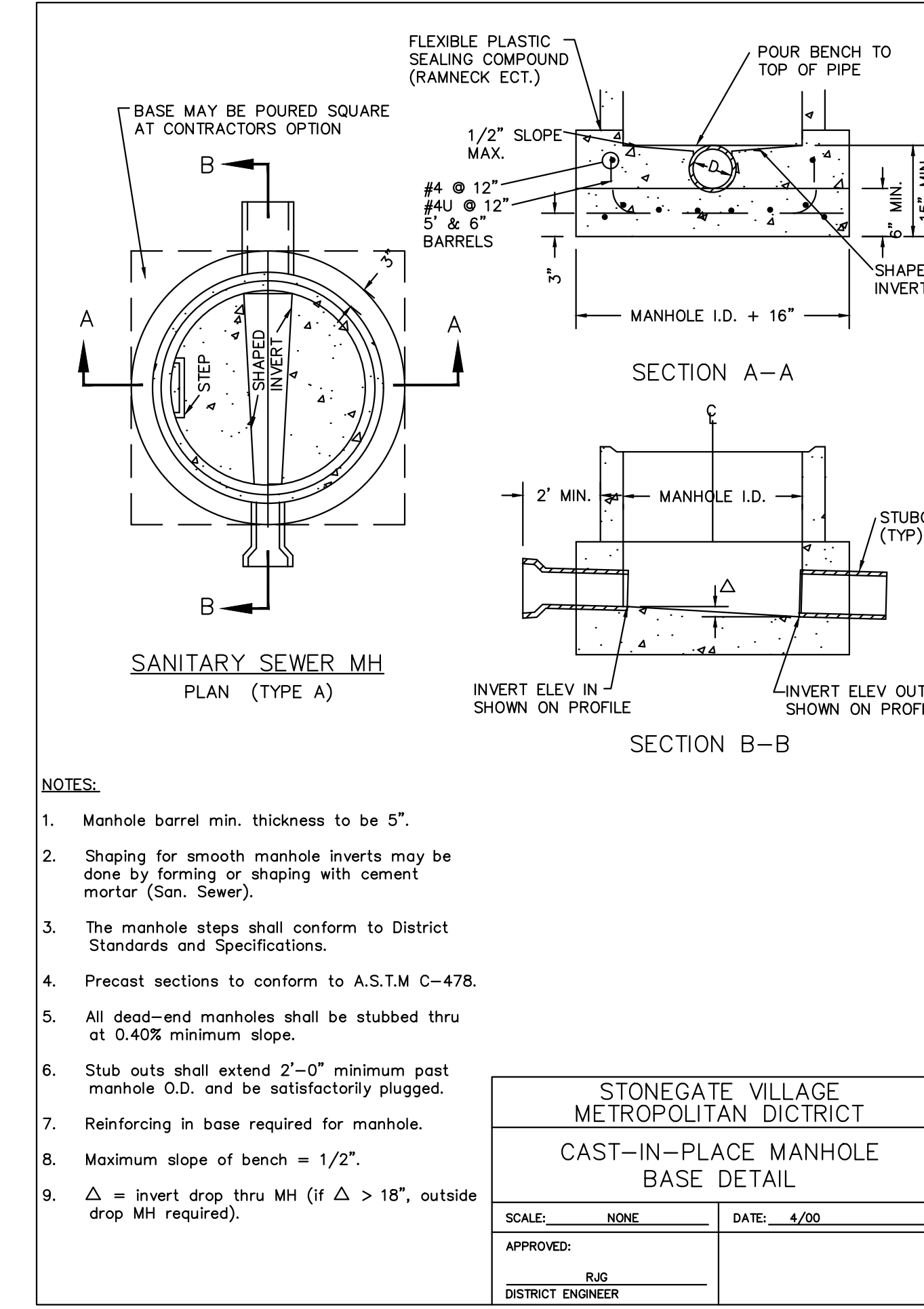
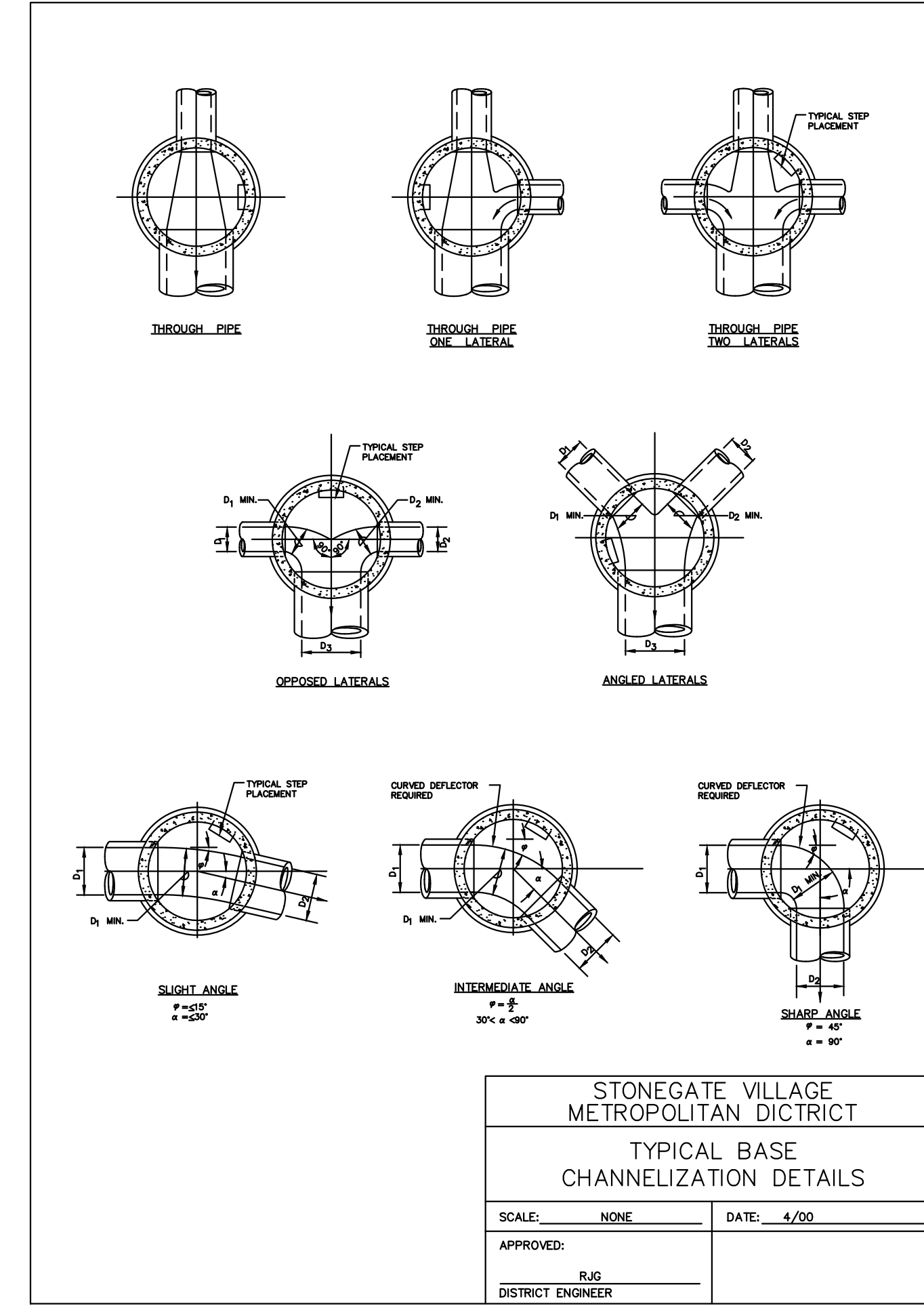
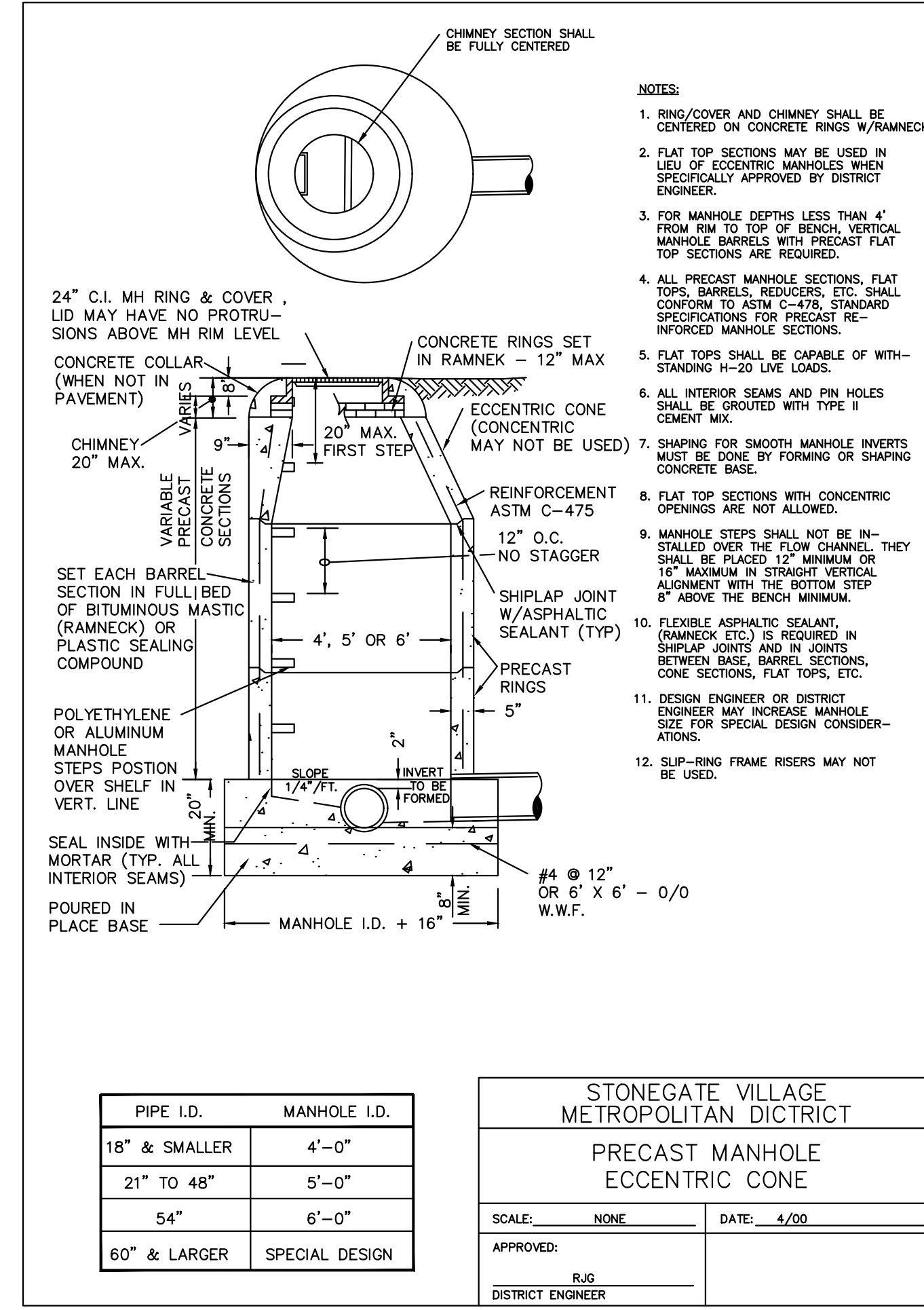
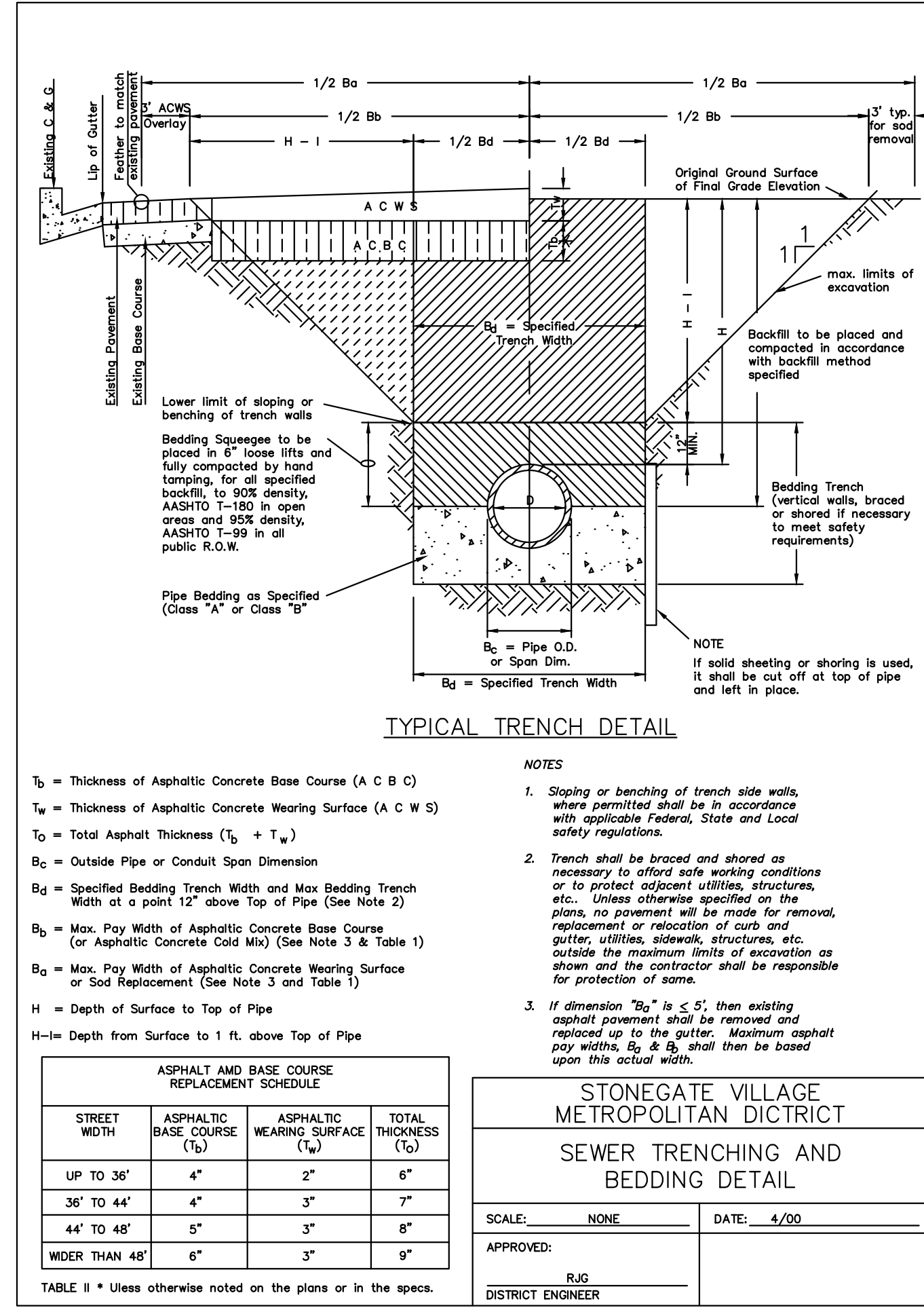
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COMPARK VILLAGE SOUTH, FILING NO. 1  
TOWN OF PARKER, COLORADO  
WATER PLAN & PROFILE

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

SHEET  
**18 OF 23**  
CLCPK3

Printed: 11/20/2020 10:50 AM Dwg Name: P:\CLCPK3\comsouth12\_filing\_1.rvt\master water and sewer\CLCPK3-Office-Water R&P.dwg Updated By: MMCGuire

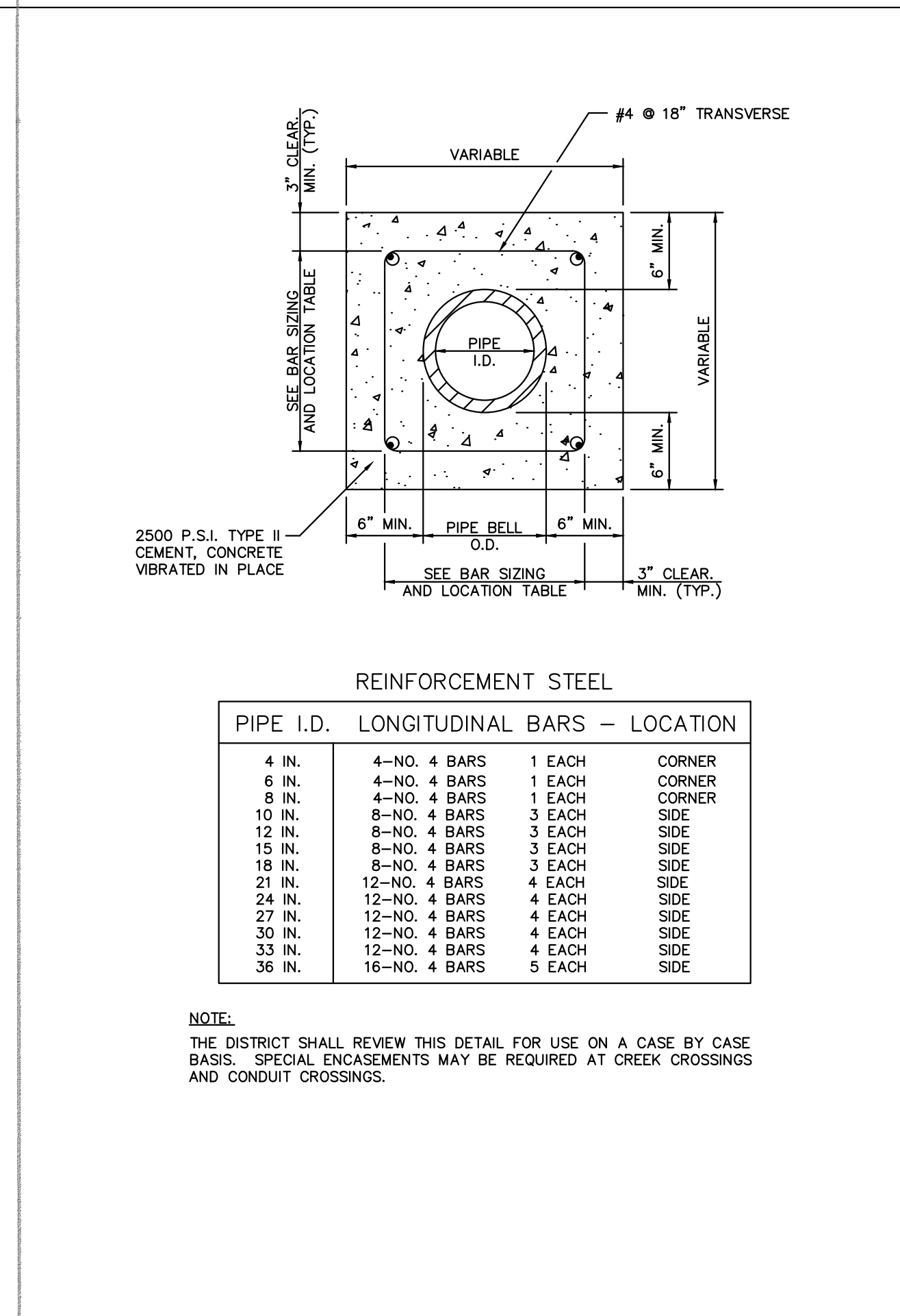
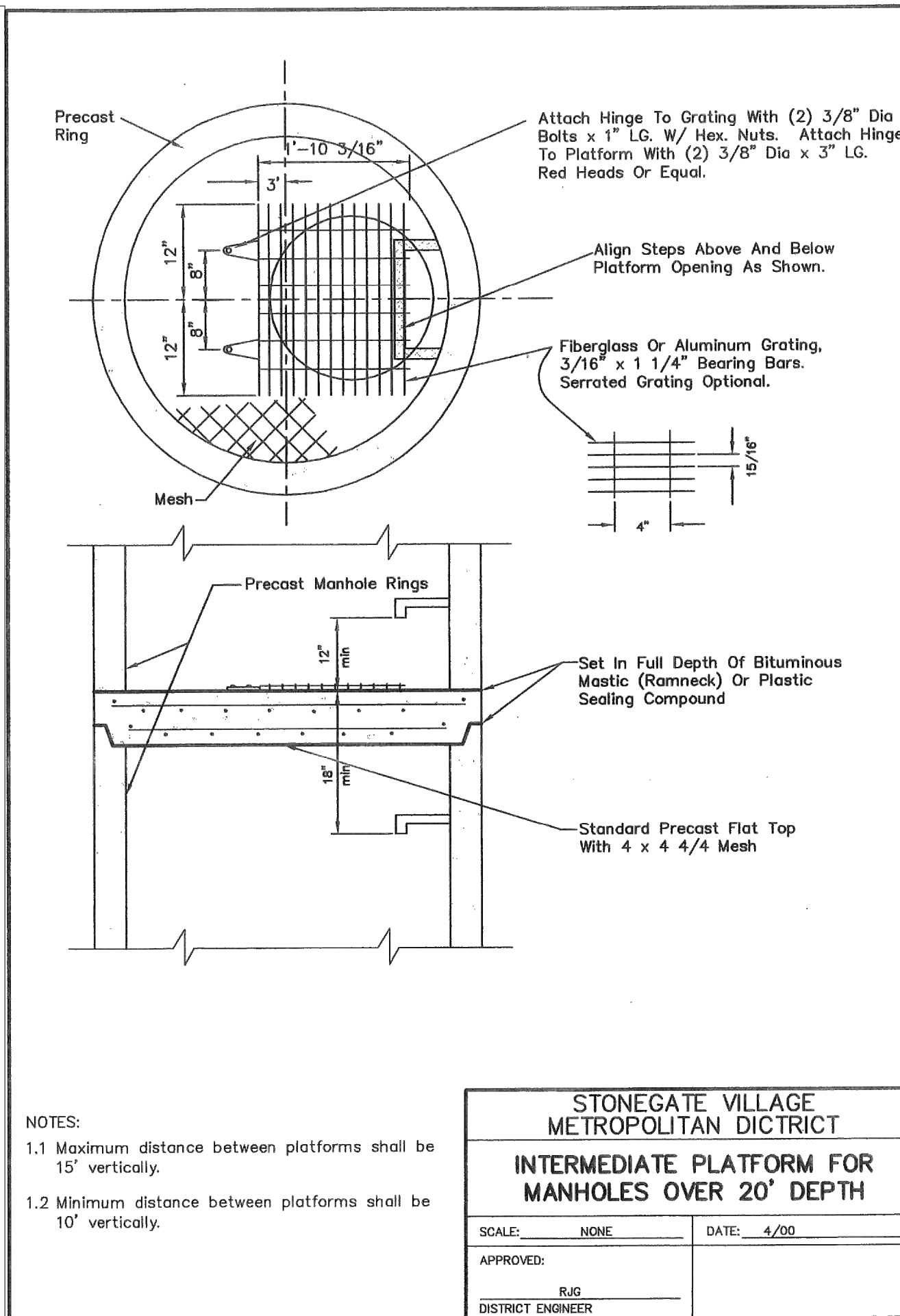
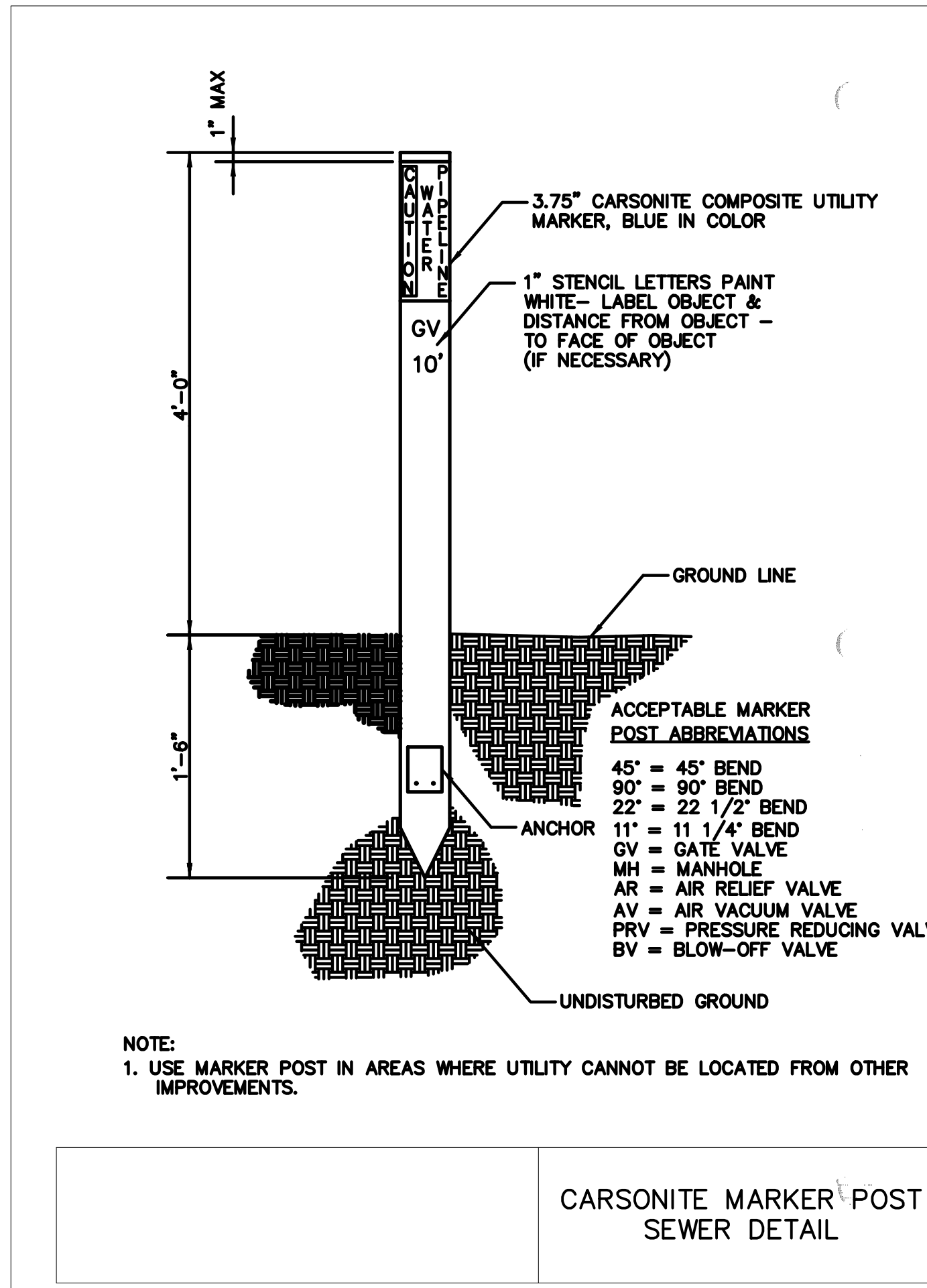


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DATE	REVISIONS
G.17/20/2020	UPDATED PER STORMWATER REVISIONS
E.3/4/2020	UPDATED PER STORMWATER REVISIONS
L.17/17/2019	REVISED UNDER E-270 PER LOCATE
C.10/10/2018	REVISED PER STONEGATE 9/2/18 LETTER
B.06/06/2016	REVISED PER STONEGATE 5/17/16 LETTER
A.11/20/2015	1ST SUBMITAL

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**INSPECTION POLICY:**

- ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT ENGINEER'S OFFICE (303)-649-9857 AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
- SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 4:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
- IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
- SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
- THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
- ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

**INSTALLATION NOTES:**

**SEWER**

- ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND CAST IRON CLASS 22 SOIL PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
- NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3'.
- MINIMUM GRADE SHALL BE 2%.
- INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
- CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100'.
- STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.

**STONEGATE VILLAGE METROPOLITAN DISTRICT**  
**DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES**

SCALE: NONE DATE: 4/00  
 APPROVED: RAG DISTRICT ENGINEER

Plotted: 11/20/2020 9:05 AM Dwg Name: c:\clic\c3\comasouh12-fig1a\_1\_no\_gat\master water and sewer\office\SANITARY DETAILS.dwg Updated By: jhawthorne

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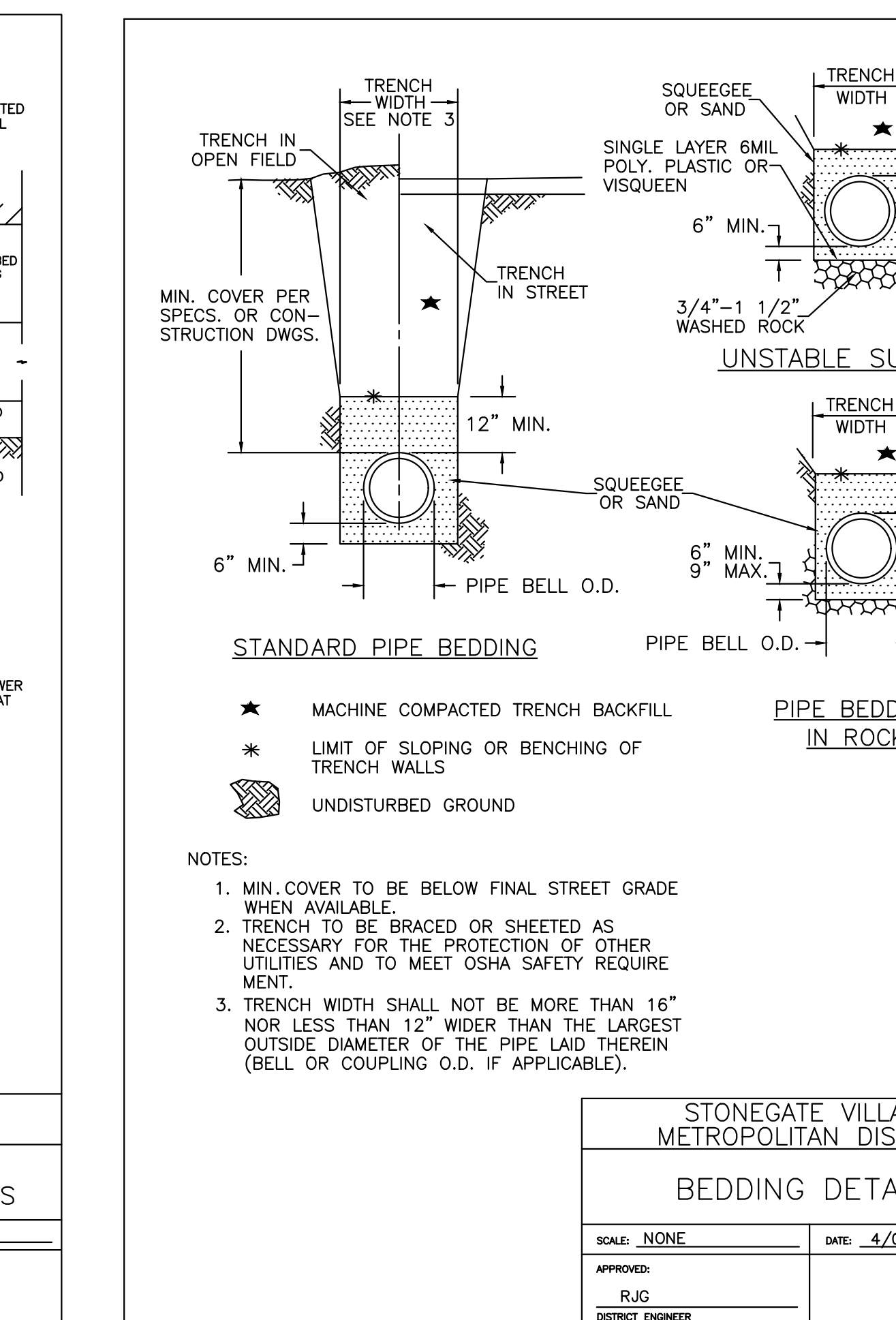
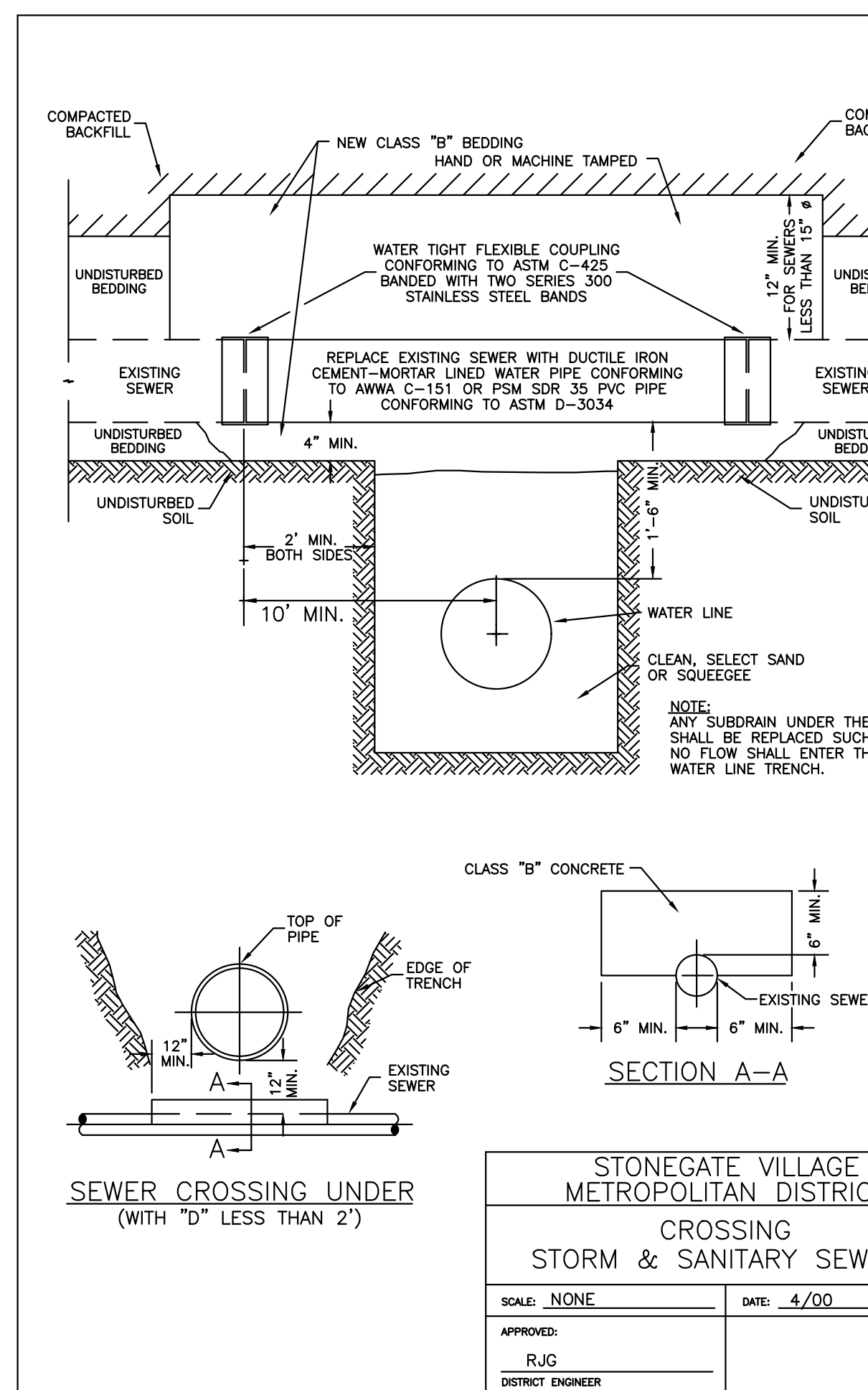
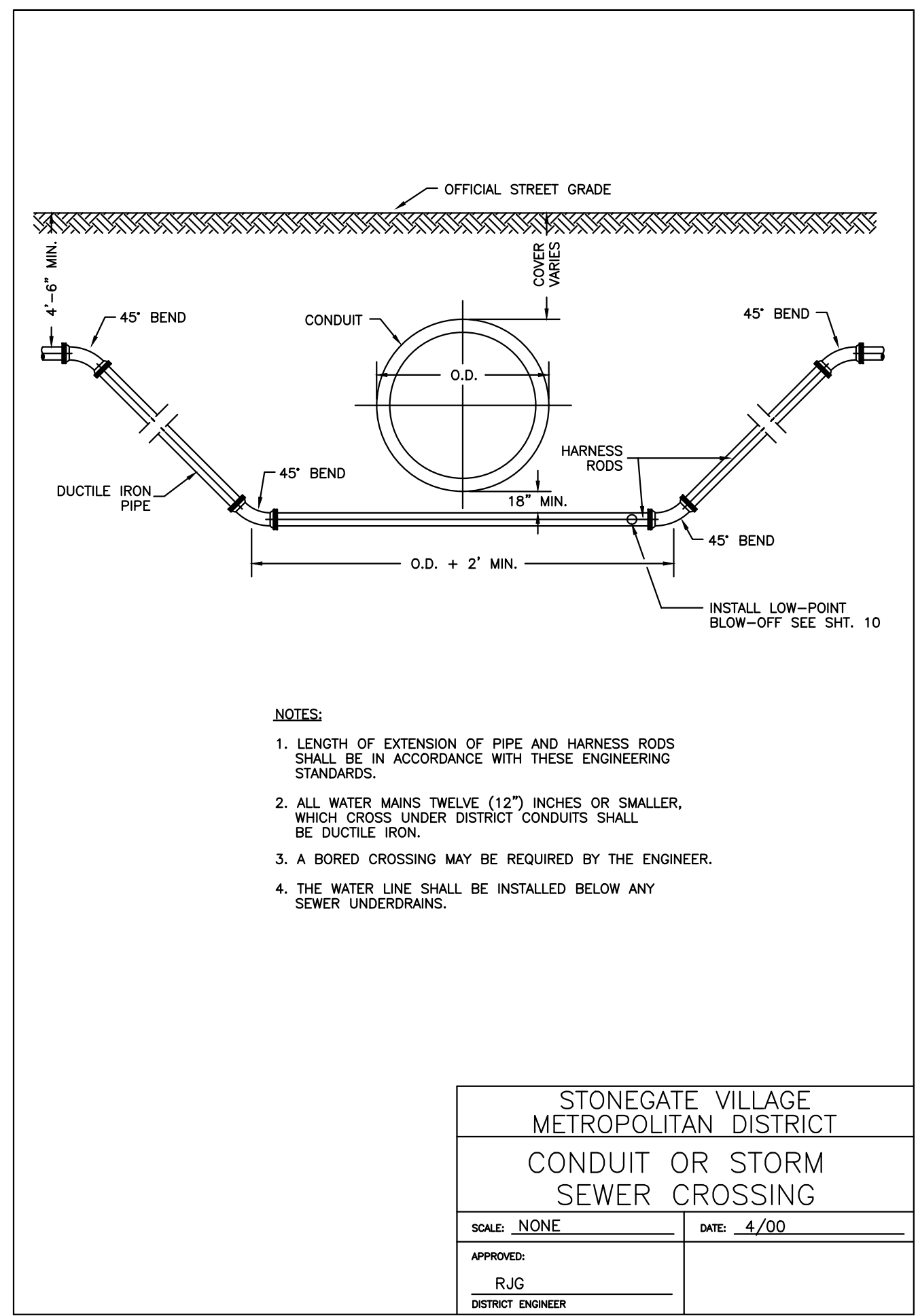
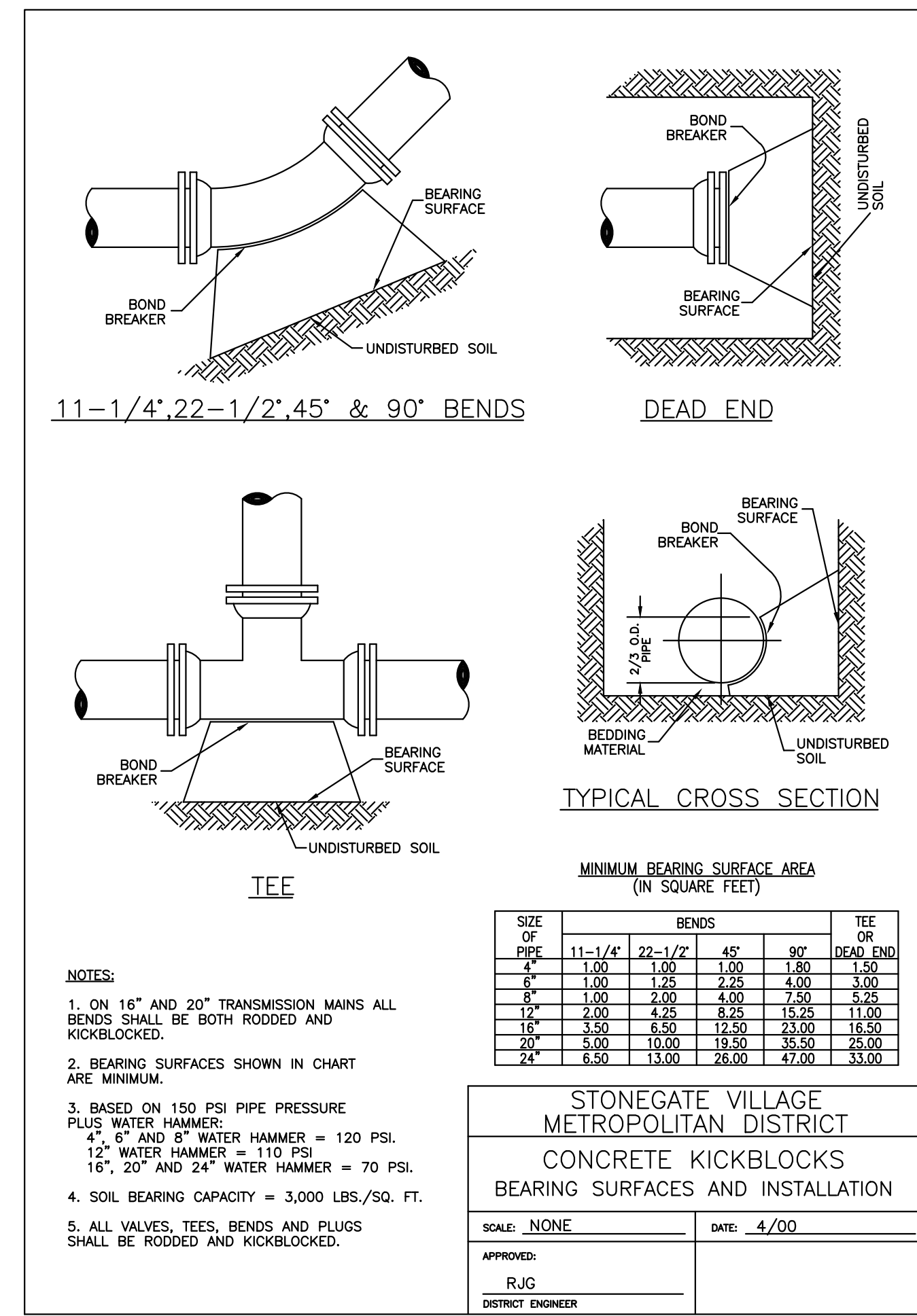
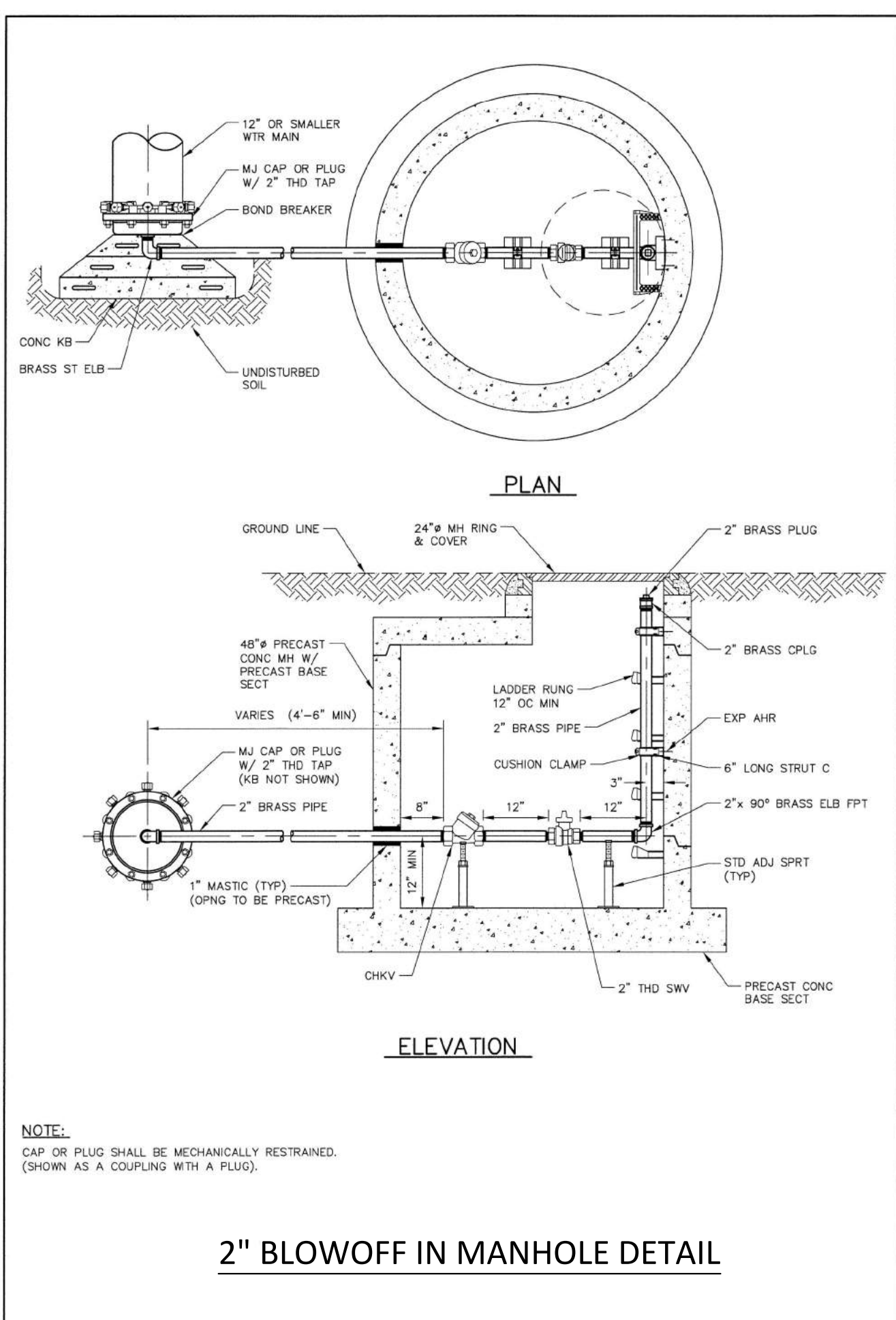
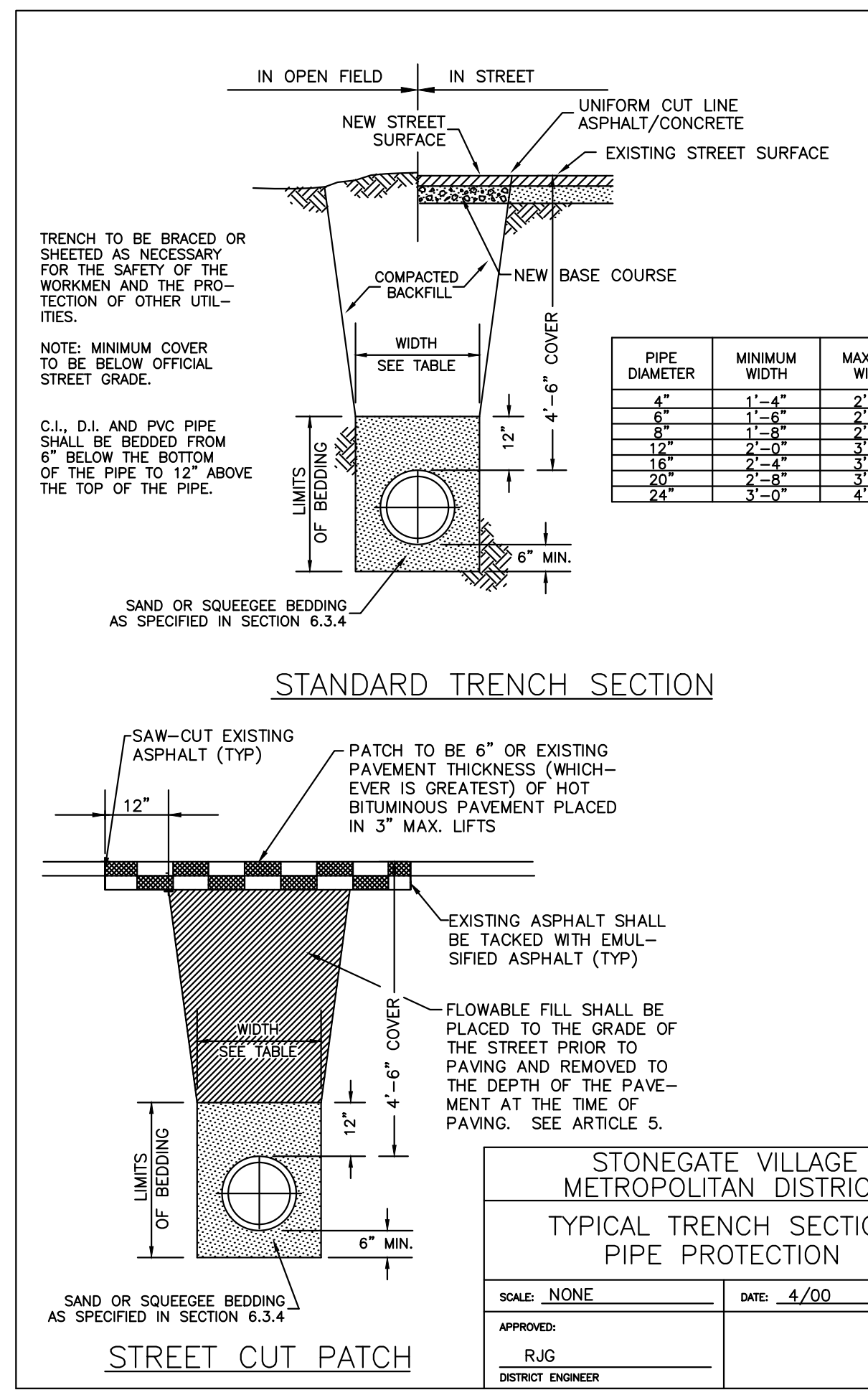
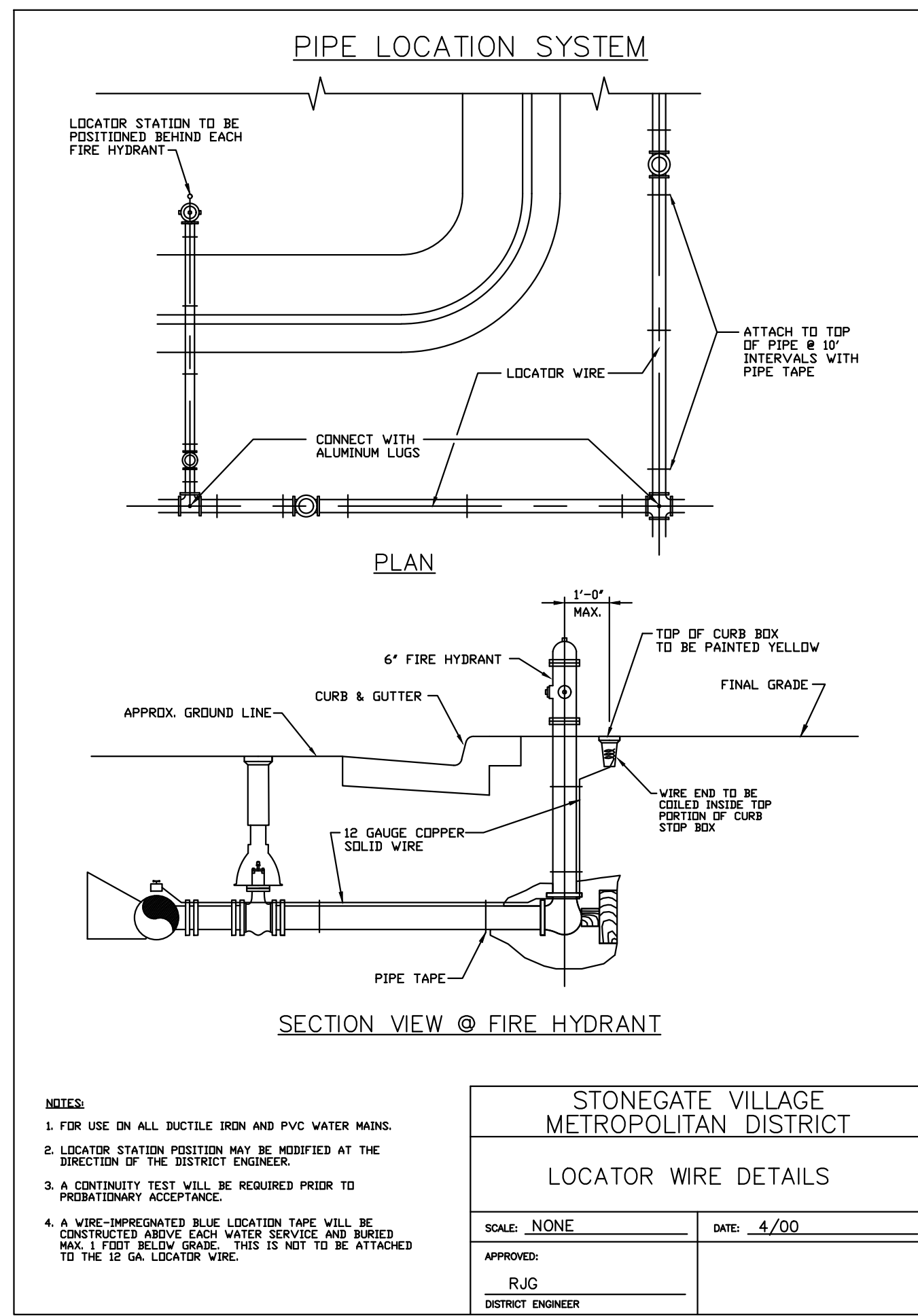
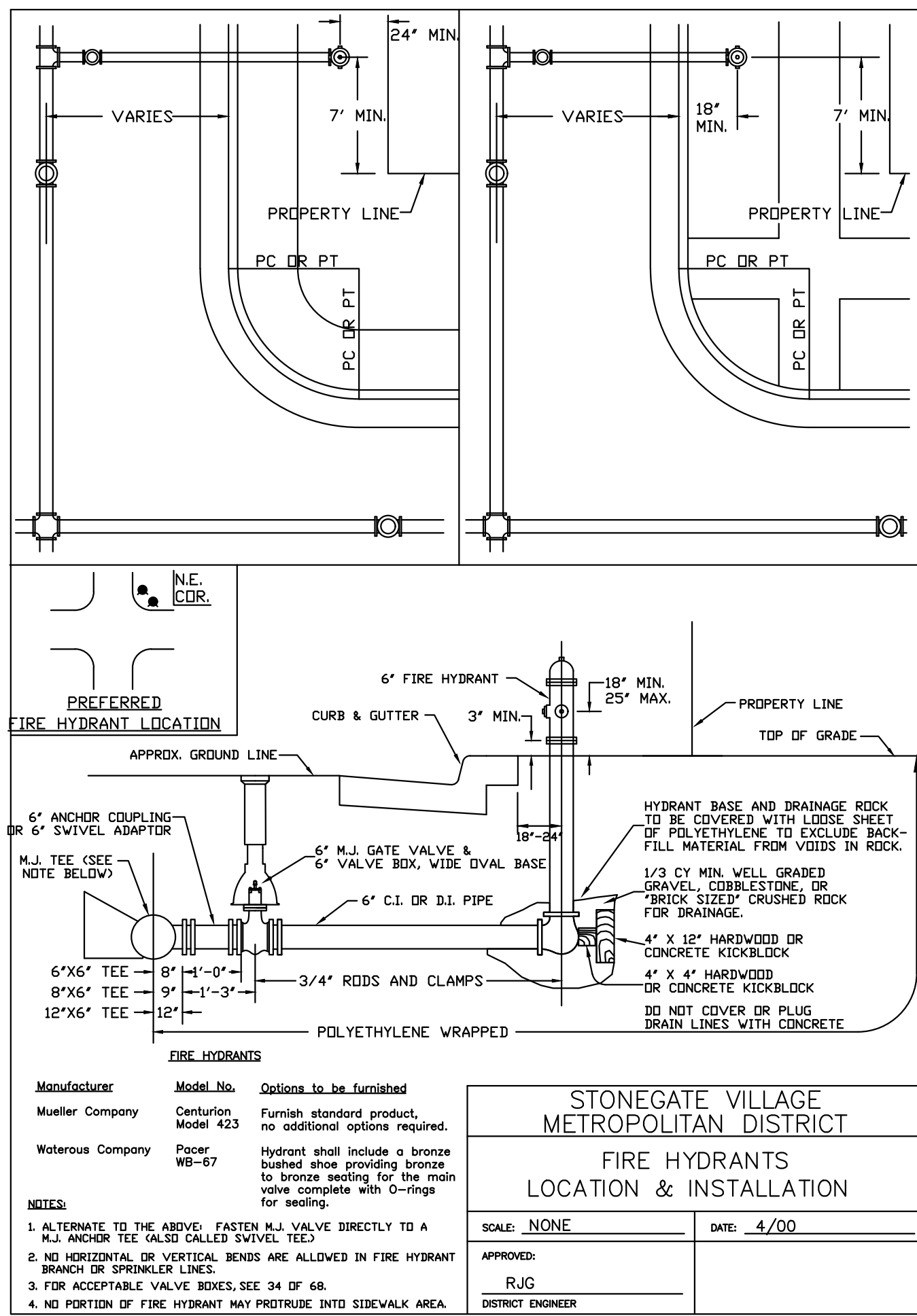
**COMPARK VILLAGE SOUTH, FILING NO. 1**  
**TOWN OF PARKER, COLORADO**  
**SANITARY DETAILS**

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

**SHANE J. MOFFAT**  
 30677  
 11-20-2020  
 PROFESSIONAL ENGINEER

**20 OF 23**  
 CLCPK3

Plotfile: 11/20/2020 9:05 AM Draw Name: c:\clients\compark\2-filing\_1\_no\_sap\master\_water\_and\_sewer\OFFICE\WATER\_DETAILS.dwg Updated By: JAH/cdr



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REVISIONS

DATE	BY	REVISIONS
11/20/2020	JAH	UPDATED PER STORMWATER REVISIONS
3/4/2020	JAH	UPDATED PER STORMWATER REVISIONS
1/7/2019	SKK	REVISED UNDER E-770 PER LOCATE
10/20/2018	SKK	REVISED PER STONEGATE 9/2/18 LETTER
10/17/2018	BRB	REVISED PER STONEGATE 9/2/18 LETTER
06/2016	BRB	REVISED PER STONEGATE 5/17/16 LETTER
11/2015	EG	LIST SUBMITAL

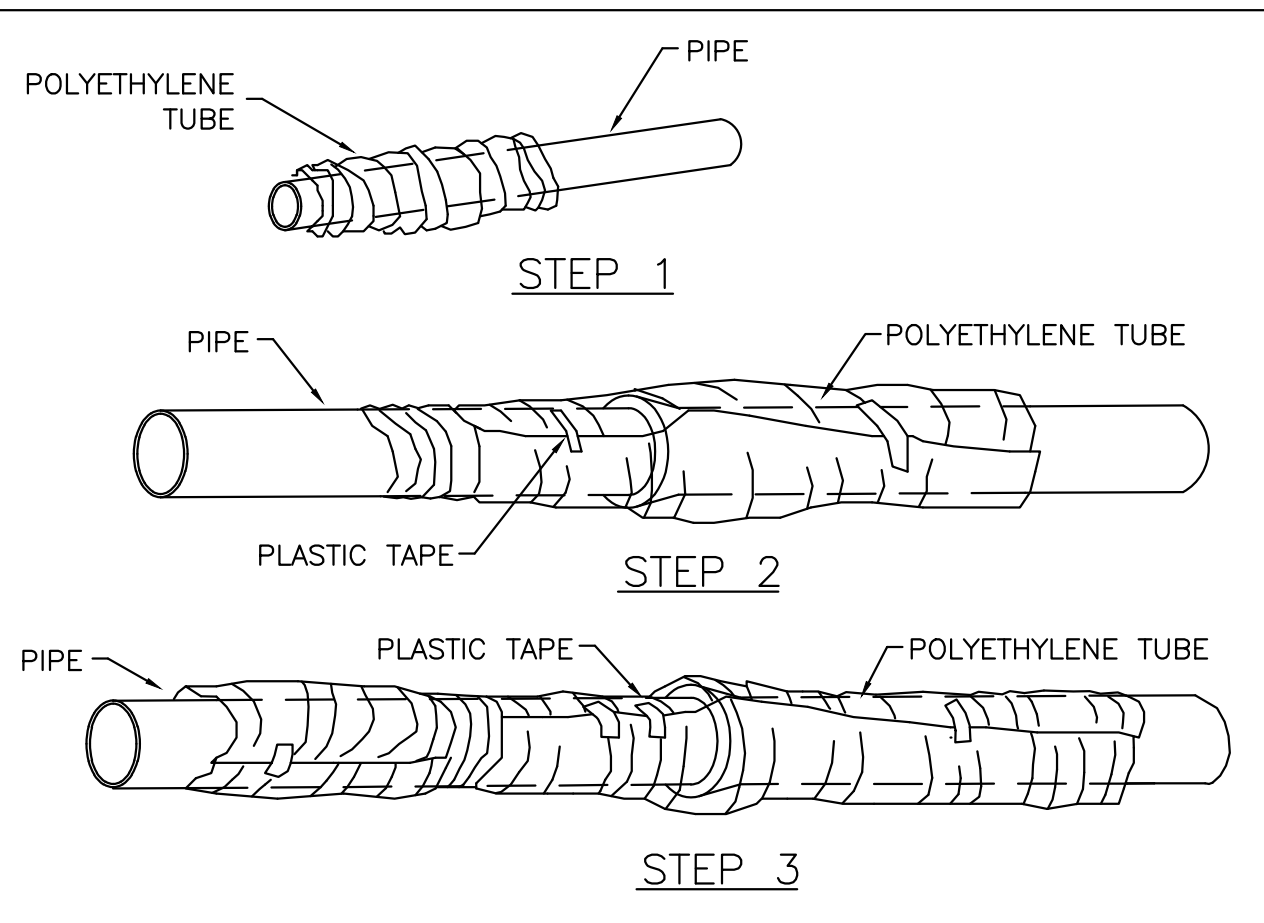
COMPARK VILLAGE SOUTH, FILING NO. 1  
 TOWN OF PARKER, COLORADO  
 WATER DETAILS

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

SCALE: NONE DATE: 4/00  
 APPROVED: R/JG DISTRICT ENGINEER

SHET  
 21 OF 23  
 CLCPK63

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**FIELD INSTALLATION – POLYETHYLENE WRAP**

STEP 1 – PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO TRENCH.

STEP 2 – PULL THE TUBE OVER THE LENGTH OF THE PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE.

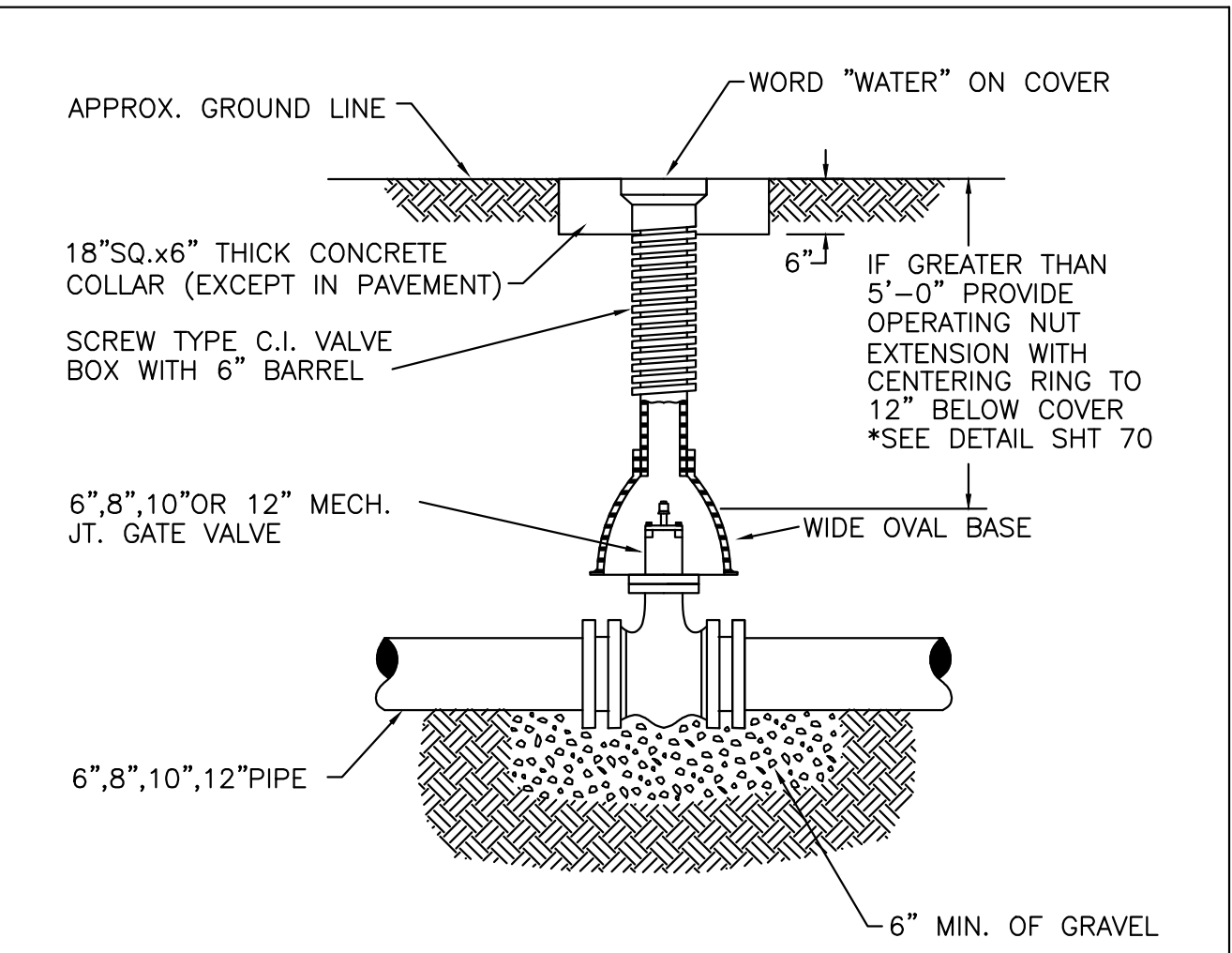
STEP 3 – OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF PIPE AND TAPED IN PLACE.

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**POLYETHYLENE WRAP**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**VALVE BOX DETAIL**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

**INSPECTION POLICY:**

- ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE (303)841-2058 AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
- SERVICE INSPECTIONS WILL OCCUR BETWEEN 8:00 A.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
- IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
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- ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

**INSTALLATION NOTES:**

- ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
- APPROVED BEDDING TO BE SQUEEGEE.
- ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. A COUPLING MAY BE EITHER FLARED OR SILVER-SOLDERED. COMPRESSION COUPLINGS WILL NOT BE ALLOWED. MOVED CURB BOXES MUST BE INSPECTED BY PWS PRIOR TO BURIAL.
- A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 90°± ANGLE MAXIMUM, 45° ANGLE MINIMUM. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
- WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD.
- STOPBOX MUST BE PLUMB AND CENTERED OVER NUT, AND MUST BE SET AT OR SLIGHTLY ABOVE FINISHED GRADE.
- STOPBOXES MUST BE SET AT BACK OF SIDEWALK ONLY (TOUCHING) NOT AT CURBS.
- NO CRAWLSPACE MOUNTED METERS ALLOWED.
- WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
- NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
- METER SHOULD BE LOCATED ON SAME SIDE OF HOUSE AS CURBSTOP IF POSSIBLE.
- WATERLINES PASSING UNDER DRIVEWAYS NEED TO BE SLEEVED IN 4" P.V.C. AND HAVE EXPRESS PERMISSION OF THE DISTRICT.
- YOKES SHOULD BE MOUNTED NO GREATER THAN 6 INCHES ABOVE BOTTOM SHUTOFF. EACH SERVICE MUST INCLUDE A STOP AND WASTE VALVE AND A PRESSURE REDUCING VALVE LOCATED WITHIN THE ABOVE REFERENCED 6 INCH SPACE.
- NO SPLICES OR FLARED COUPLINGS ALLOWED ON WATERLINES. SILVER SOLDER JOINTS MUST BE USED IN MOVING STOPBOXES, AND SILVER SOLDER JOINT MUST BE INSPECTED BY P.W.S.D. PRIOR TO BURIAL.
- ONLY 3/4" (JUMPER OR CHEATER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER OR CHEATER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SEWER SERVICE "W" FOR WATER SERVICES

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**OUTSIDE SETTING FOR 1 1/2" & 2" METER FOR IRRIGATION**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

**LENGTH OF TIED PIPE**

PIPE SIZE	4"			6"			8"			12"			16"			20"			24"								
	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G						
VALVE	3/4"	6.0"	M.S.	3/4"	13.0"	M.S.	3/4"	20.0"	M.S.	3/4"	40.0"	M.S.	3/4"	60.0"	M.S.	3/4"	80.0"	M.S.	3/4"	100.0"	M.S.	3/4"	120.0"	M.S.			
45° BEND	3/4"	2.0"	M.S.	3/4"	4.0"	M.S.	3/4"	6.0"	M.S.	3/4"	11.0"	M.S.	3/4"	18.0"	M.S.	3/4"	24.0"	M.S.	3/4"	45.0"	M.S.	3/4"	60.0"	M.S.	3/4"	120.0"	M.S.
22-1/2° BEND	3/4"	1.0"	M.S.	3/4"	2.0"	M.S.	3/4"	3.0"	M.S.	3/4"	5.0"	M.S.	3/4"	9.0"	M.S.	3/4"	18.0"	M.S.	3/4"	30.0"	M.S.	3/4"	60.0"	M.S.	3/4"	120.0"	M.S.
11-1/4° BEND	3/4"	0.0"	M.S.	3/4"	0.0"	M.S.	3/4"	1.0"	M.S.	3/4"	1.0"	M.S.	3/4"	1.0"	M.S.	3/4"	1.0"	M.S.	3/4"	2.0"	M.S.	3/4"	3.0"	M.S.	3/4"	6.0"	M.S.

**NOTES:**

- LENGTH OF TIED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
- CLAMPS AND RODS NOT ALLOWED FOR 24" AND LARGER PIPES.
- D = DIAMETER, L = LENGTH, G = GRADE, M.S. = MILD STEEL.
- A-193 GRADE B-7.
- MINIMUM 4.5" GROUND COVER REQUIRED.
- BASED ON 150 PSI INTERNAL PRESSURE.
- M.S. MEANS MILD STEEL ROD A.S.T.M. STANDARD DESIGNATION A-36.
- A-193 GRADE B-7.
- NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-307 GRADE A OR B HEXAGON HEAVY SERIES.
- SEE THE ROD DETAIL DRAWING. ALSO, THE ROD COUPLING DETAILS.
- CLAMPS ARE TO BE USED TO HOLD THE TIED PIPE WHICH MUST BE TIED TOGETHER AND IS NOT NECESSARILY THE LENGTH OF THE RODS.
- STAR BOLTS NOT ALLOWED ON PIPE LARGER THAN 16".
- MINIMUM OF 4 RODS REQUIRED ON 16" PIPE IF STAR BOLTS ARE USED.
- TEES ARE TO BE RODDED ON BRANCH ONLY.
- ALL VALVES TO BE RODDED IN BOTH DIRECTIONS.

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**PIPE BEDDING**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**MECHANICAL JOINT RESTRAINT DETAILS**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

**AIR RELEASE VALVE VAULT**

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

**Manhard CONSULTING**

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

**COMPARK VILLAGE SOUTH, FILING NO. 1**

**TOWN OF PARKER, COLORADO**

**WATER DETAILS**

SHEET 22 OF 23

CLCPK3

