

SVMD SANITARY SEWER AND WATER CONSTRUCTION PLANS FOR COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1 PARKER, COLORADO

AGENCY CONTACT LIST

470 COMPARK, LLC MICHAEL VICKERS 1001 BANNOCK STREET, SUITE #240 DENVER, CO 80204	303-881-6292
MANHARD CONSULTING RICK J. MOORE, P.E. 8008 E ARAPAHOE COURT, SUITE 110 CENTENNIAL, CO 80112	303-708-0500
PARKER PUBLIC WORKS 20120 E. MAINSTREET PARKER, CO. 80138 STREETS - ALEX MESTDAGH STORM WATER - JACOB JAMES EROSION CONTROL - KURT PATRICK LIFE SAFETY - RANDY CARPRA	303-840-9546
TOWN OF PARKER POLICE DEPARTMENT 13600 E. PARKER SQUARE DR. PARKER, CO. 80134	303-841-9800
PARKER BUILDING DEPT 20120 E. MAINSTREET PARKER, CO. 80138 LIFE SAFETY - RANDY CARPRA	303-805-3169
STONEGATE VILLAGE METROPOLITAN DISTRICT DISTRICT ENGINEER SCOTT BARNETT 303-649-9857 MULHERN MRE, INC. 188 INVERNESS DRIVE WEST, SUITE 140 ENGLEWOOD, CO 80112	303-649-9857
DISTRICT MANAGER: SARAH SJOBAKKEN 10252 STONEGATE PARKWAY PARKER, CO 80134	303-858-9909
SOUTH METRO FIRE RESCUE AUTHORITY MICHELLE HERIAN 9195 E. MINERAL AVE. CENTENNIAL, CO 80112	720-488-7200
UTILITY NOTIFICATION COMPANY OF COLORADO 2801 SOUTH YOUNGFIELD ST, SUITE 301 GOLDEN, CO 80401 LOCAL CALLS	1-800-922-1987 (811)
XCEL ENERGY MICHELLE O'NAN 5909 E. 38TH AVE. DENVER, CO 80207	303-329-1618
QWEST WILLIAM BENSON 9750 E. COSTILLA AVE. ENGLEWOOD, CO 80112	720-490-3867
COMCAST KEVIN YOUNG 6850 S. TUCSON WAY ENGLEWOOD, CO 80112	303-792-6069
COLORADO DEPARTMENT OF HEALTH 4210 E. 11TH AVE. DENVER, CO 80220	303-320-8333
INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION BROOKS KAUFMAN 5495 NORTH US HWY 85 P.O. BOX DRAWER A SEDALIA, CO 80135	303-688-3100

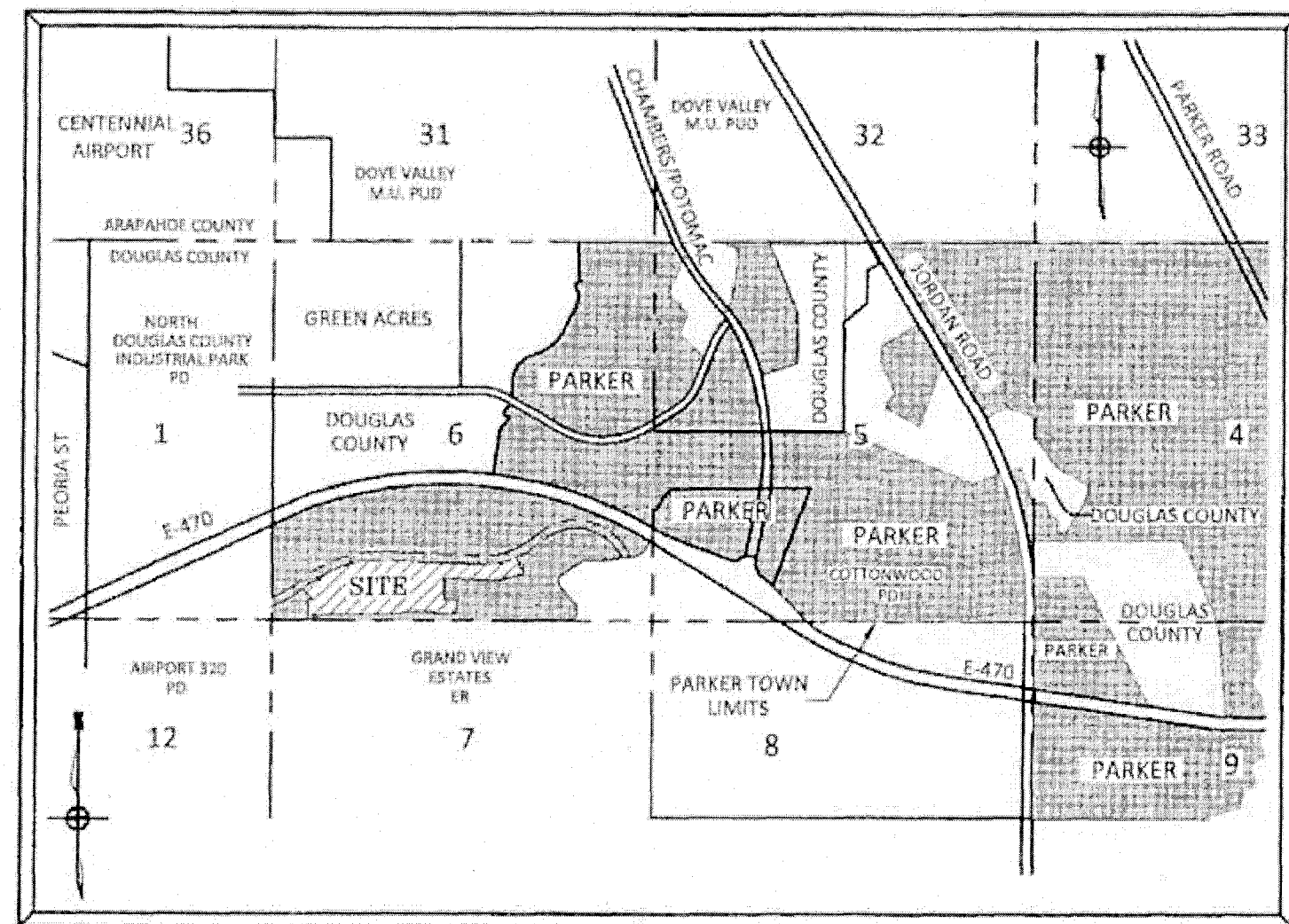
BENCHMARKS: (COMPARK SOUTH)

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)

SITE BENCHMARKS:
1. A NO. 5 REBAR WITH 2" ALUMINUM CAP STAMPED "1S 28286, 2001" FOUND AT THE SOUTHEAST CORNER OF SECTION 6, T6S, R66W LOCATED ON THE WEST LINE OF FIRST STREET APPROXIMATELY 1000 FEET NORTH OF ELM AVENUE.
ELEVATION = 5845.51
2. A 1.5" IRON PIPE WITH 3.25" ALUMINUM CAP STAMPED "PLS 12405, 1997" FOUND AT THE SOUTHEAST CORNER OF SECTION 6, T6S, R66W LOCATED APPROXIMATELY 960 FEET NORTH OF THE CENTERLINE OF AVENTERRA PARKWAY AND APPROXIMATELY 1050 FEET WEST OF THE CENTERLINE OF CHAMBERS ROAD.
ELEVATION = 5808.06

STONEGATE VILLAGE METRO DISTRICT WATER AND SANITARY SEWER PLAN

THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON HAVING A BEARING OF NORTH 00°29'49" WEST, AS DETERMINED BY GPS OBSERVATION FROM NGS CONTROL POINTS IN THE COLORADO CENTRAL ZONE, STATE PLANE COORDINATE SYSTEM TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO



VICINITY MAP
N.T.S.

WATER MAIN QUANTITIES

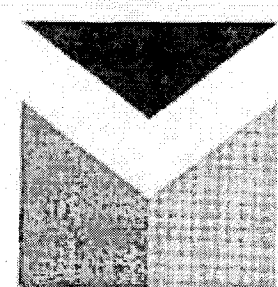
1	8" PVC Water Main	3,152	L.F.
2	8" Gate Valve and Box	16	Each
3	8" Plug w/ BO and KB	3	Each
4	8" x 6" Tee w/ Kick Block	11	Each
5	8" x 8" Tee w/ KB	2	Each
6	8" x 8" Cross w/ KB	1	Each
7	8" 45 Degree Bend w/ KB	1	Each
8	8" 22.5 Degree Bend w/ 8"x6" Reducor & Kick Block	1	Each
9	6" PVC Water Main	1,184	L.F.
10	6" Gate Valve and Box	5	Each
11	6" Plug w/ BO & KB	5	Each
12	Fire Hydrant Assembly	9	Each
13	5" Manhole	2	Each
14	6" Check Valve	2	Each
15	6" Turbine Meter	2	Each
16	Remove Existing 8" Plug and Make Dry Connection	3	Each
17	Air Release	1	Each
18	Water Quality Sampling Station	1	Each

SANITARY SEWER MAIN QUANTITIES

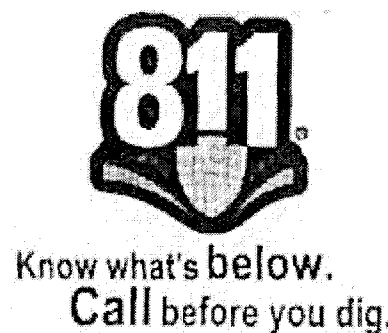
1	8" Sanitary Sewer Main (0-16' Depth)	2,630	L.F.
2	8" Sanitary Sewer Main (>16' Depth)	540	L.F.
3	4" Diameter Manholes (0-20' Depth)	20	Each
4	8" Plug	1	Each
5	Connection to Existing Sanitary Sewer	2	Each

I HEREBY AFFIRM THAT THESE CONSTRUCTION PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

FOR AND ON BEHALF OF MANHARD CONSULTING



Manhard CONSULTING
7000 East Orchard Road, Suite 1504, Greenwood Village, CO 80111 | 303.708.0500 | manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management



SHEET INDEX - SVMD DISTRICT PLAN SET

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	OVERALL UTILITY PLAN
4	WATER PLAN - WEST
5	WATER PLAN - EAST
6	SANITARY SEWER PLAN AND PROFILE - DEERTRACK LANE
7	SANITARY SEWER PLAN AND PROFILE - BUNNY HOP LANE
8	SANITARY SEWER PLAN AND PROFILE - BUNNY HOP LANE
9	SANITARY SEWER PLAN AND PROFILE - RACCOON TAIL WAY
10	SANITARY SEWER PLAN AND PROFILE - ALLEY 10-12
11	SANITARY SEWER PLAN AND PROFILE - ALLEY 13-15
12	SANITARY SEWER CONSTRUCTION DETAILS
13	WATER SYSTEM CONSTRUCTION DETAILS
14	WATER SYSTEM CONSTRUCTION DETAILS

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.

Scott Barnett 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 *Scott Barnett* 11/23/2020
STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEER DATE
BY *Scott Barnett* 11/23/2020
STONEGATE VILLAGE METROPOLITAN DISTRICT MANAGER DATE

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
COVER SHEET

Manhard CONSULTING
7000 East Orchard Road, Suite 1504, Greenwood Village, CO 80111 | 303.708.0500 | manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

DATE	11/23/2020
REVISION	
NO.	
DATE	
BY	
DESCRIPTION	

PROJ. MGR.: RJM
PROJ. ASSOC.: BAK
DRAWN BY: ASD
DATE: 10/2016

SHEET
1 OF 14
CLCPK3

GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL COMPLY WITH STONEGATE VILLAGE METROPOLITAN DISTRICT SPECIFICATIONS.
2. 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.
3. THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48-HOURS PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL OBTAIN, AT HIS/HER EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
5. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3,000-POUND COMPRESSION STRENGTH.
6. 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.
7. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
8. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
9. 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.
10. 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.
11. 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.
12. GRADING IS REQUIRED TO BE ADVANCED TO AT LEAST SUBGRADE LEVEL PRIOR TO UTILITY INSTALLATION. SURVEYOR CONFIRMATION WILL BE REQUIRED.

WATER MAIN NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
2. 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.
3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS ARE TO BE RODDED.
4. THERE SHALL BE A MINIMUM COVER OF 4-1/2- FEET OVER ALL WATER MAINS.
5. FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE.
6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS.
7. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
8. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
9. 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.
10. 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.
11. 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.
12. THE CONTRACTOR SHALL NOTIFY THE STONEGATE VILLAGE METROPOLITAN DISTRICT AND THE DISTRICT ENGINEER AT LEAST 48-HOURS PRIOR TO ANY CONSTRUCTION.
13. PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
14. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION.
15. 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.
16. VALVE BOXES: TYLER SCREW-TYPE 6-INCH CAST-IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE.
17. ALL PIPE LENGTHS ARE APPROXIMATE.
18. 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.
19. ALL WATER VALVES SHALL BE OPEN RIGHT.
20. 12 GAUGE COPPER TRACER WIRE REQUIRED ALONG ALL WATER LINES.

DISTRICT ACCEPTANCE NOTE:

- 1. UPON COMPLETION OF SANITARY SEWER AND WATER CONSTRUCTION AND TESTING, THE DEVELOPER OR CONTRACTOR SHALL CONTACT THE DISTRICT FOR PROBATIONARY ACCEPTANCE INSPECTION.
2. 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.
3. THE DATE OF FINAL ACCEPTANCE WILL BE INDICATED IN THE CONDITIONS OF THE PROBATIONARY ACCEPTANCE LETTER.

SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE STONEGATE VILLAGE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL.
3. SEWER LINES SHALL BE INSTALLED 5- FEET SOUTH OR WEST OF RACCOON TAIL WAY CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS.
4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS.
5. 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.
6. SEWER WYES SHALL BE USED RATHER THAN TEES.
7. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER.
8. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
9. 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.
10. ALL PIPE LENGTHS ARE APPROXIMATE.
11. 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.
12. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
13. 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.
14. 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.
15. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR/DEVELOPER SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMPOUT AT THE PLUGGED MANHOLE.
16. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
17. ALL WAREHOUSE BUILDING COMPANIES WITH AN SIC CODE SHALL FILL OUT AN INDUSTRIAL WASTE AND SILVER MERCURY WASTE DISCHARGE QUESTIONNAIRE PRIOR TO DISTRICT APPROVAL.
18. 12 GAUGE TRACER WIRE REQUIRED ALONG ALL SANITARY SEWER LINES.

MASTER LEGEND

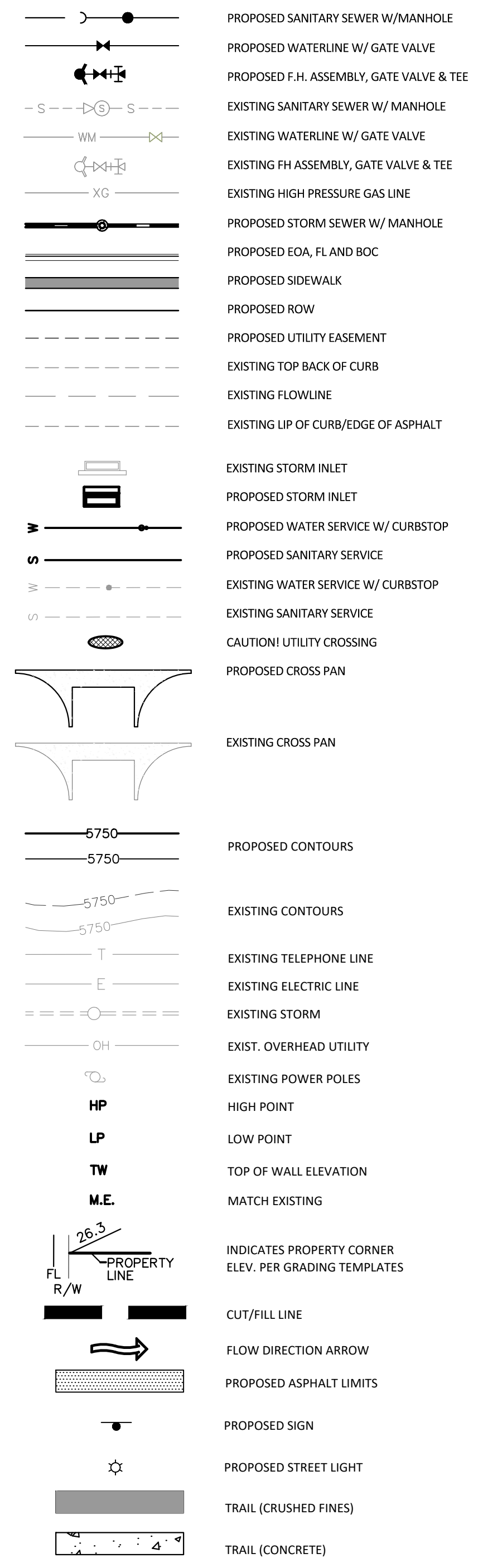
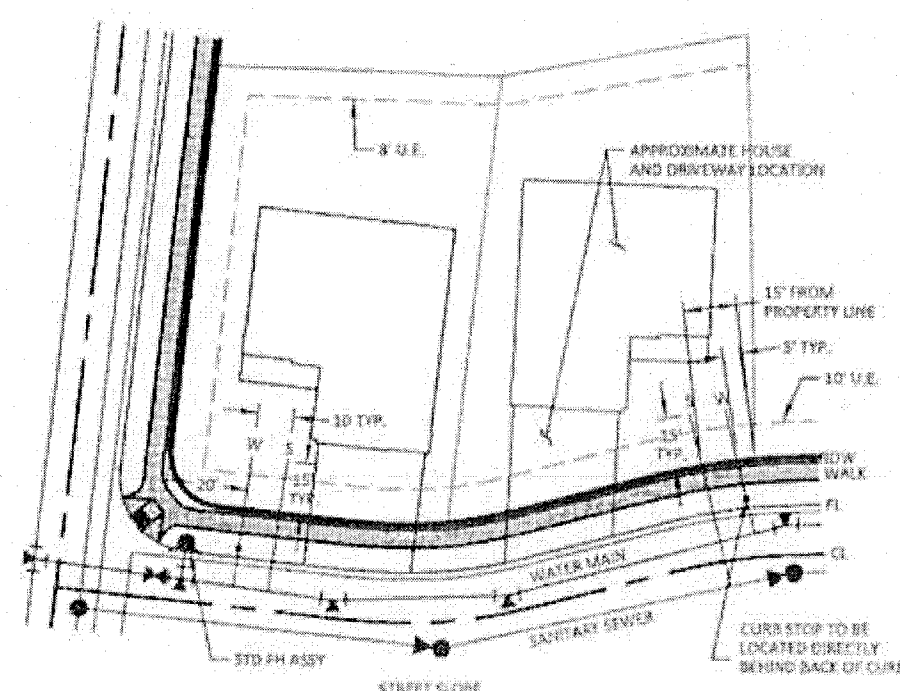
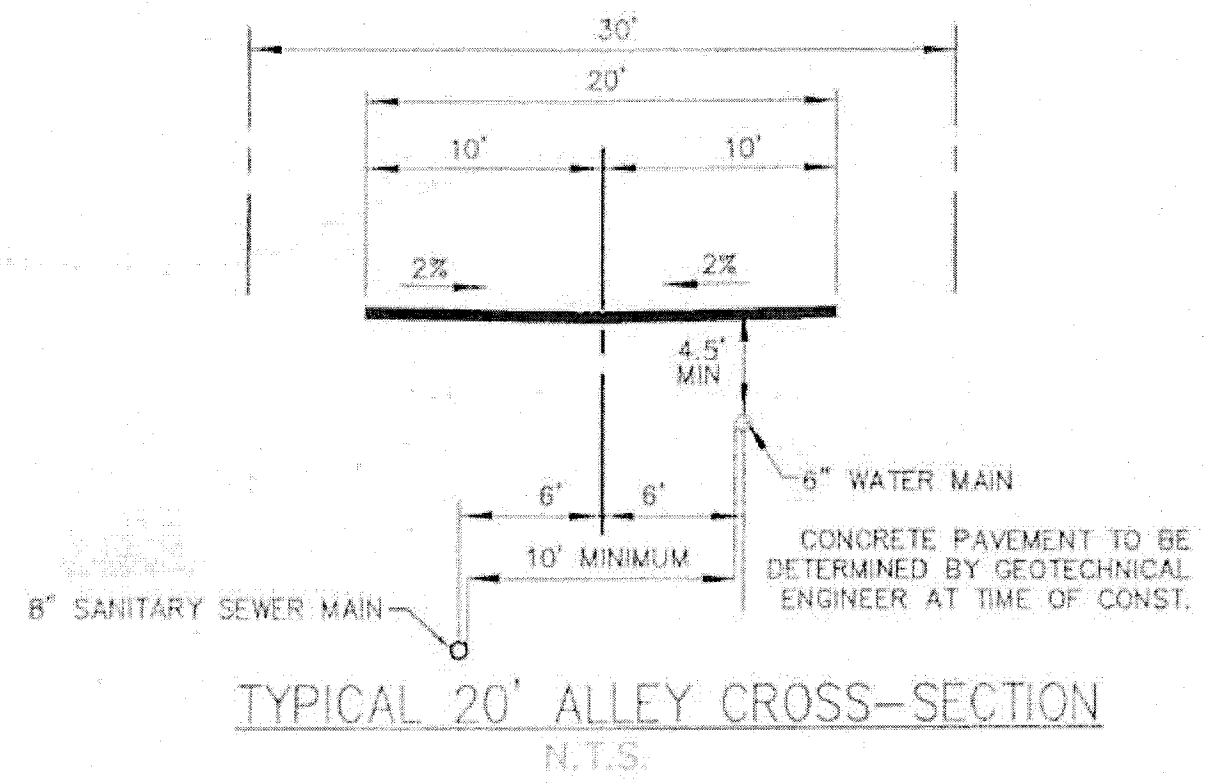
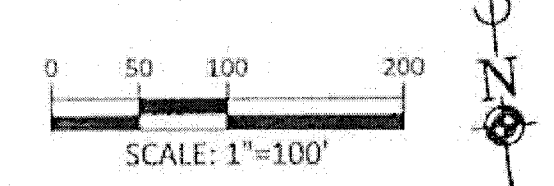
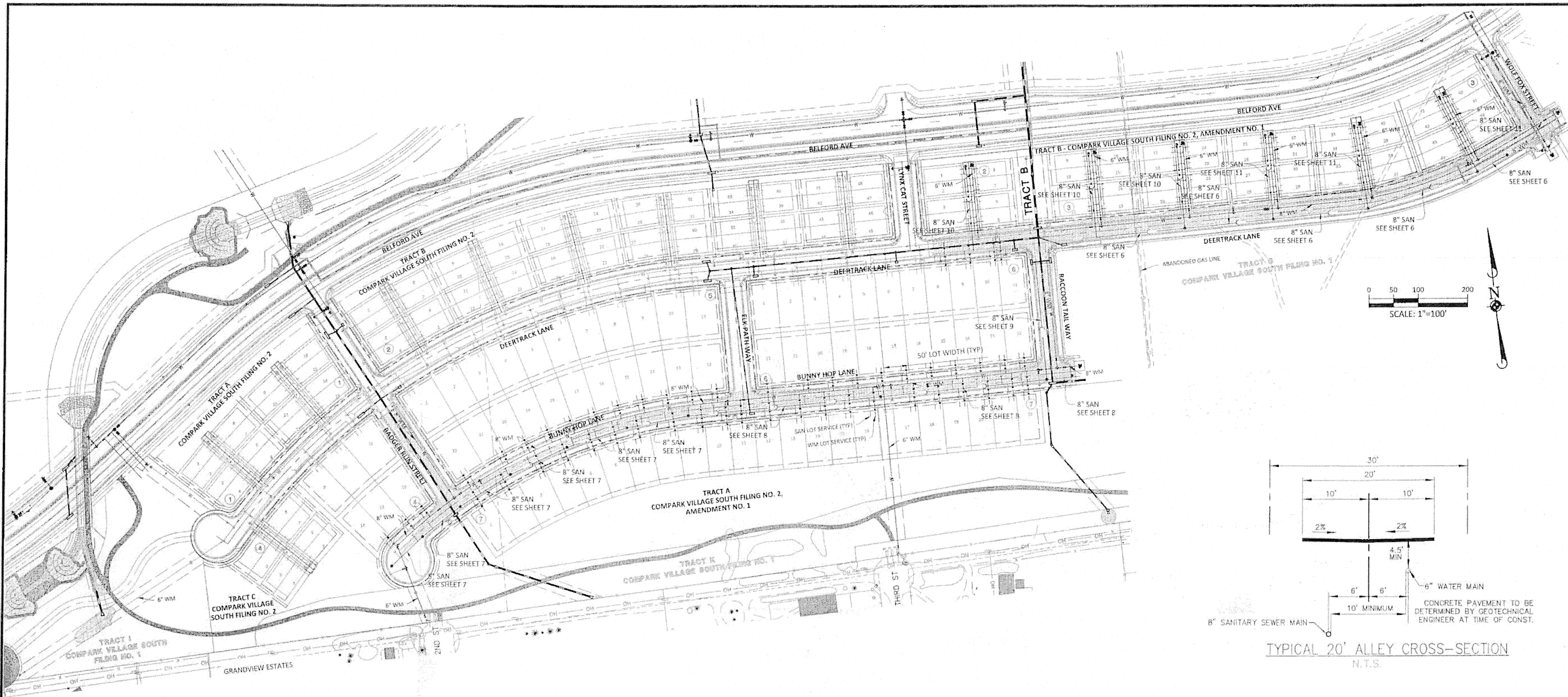


Table with columns for REVISIONS, DATE, and a grid for tracking changes to the drawing.

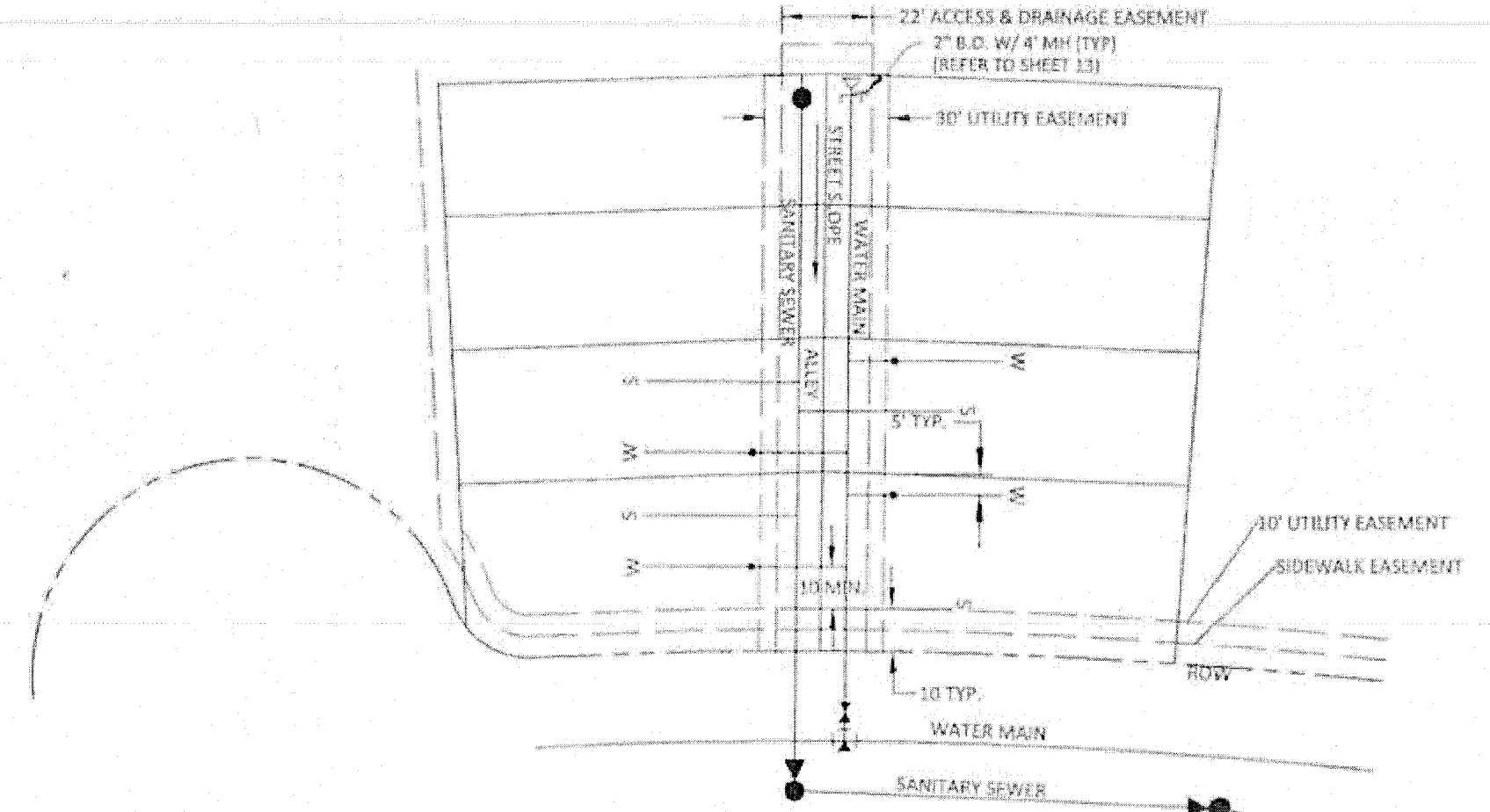
Manhard CONSULTING LTD logo and contact information, including address and phone number.

Project information including 'COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1', 'TOWN OF PARKER, COLORADO', 'GENERAL NOTES', and a professional engineer seal for R. JIM RAK.

Plotfile: 11/20/2020 9:29 AM Dwg Name: D:\C:\pck3\yomsoouth05-residential.ctb\Drawn\Envt\District\PHASE 2\05B-GENERAL NOTES.dwg Updated By: jhawthorne



NOTES:
1.) SERVICE LOCATIONS ARE TYPICAL, UNLESS OTHERWISE NOTED. REFER TO STREET & UTILITY PLAN AND PROFILES, AND AREA GRADING PLAN FOR EXACT LOCATIONS.
2.) INSIDE METER SETTING IS REQUIRED FOR RESIDENTIAL DEVELOPMENT. WRITTEN PERMISSION MAY BE ALLOWED BY THE DISTRICT FOR SPECIFIC SITUATIONS.



NOTE:
SERVICE LOCATIONS ARE TYPICAL, UNLESS OTHERWISE NOTED. REFER TO UTILITY PLAN AND PROFILES FOR EXACT LOCATIONS.

TOWN OF PARKER APPROVALS

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.

TOWN OF PARKER, DIRECTOR OF ENGINEERING/PUBLIC WORKS DATE

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.

Scott Barnett 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.

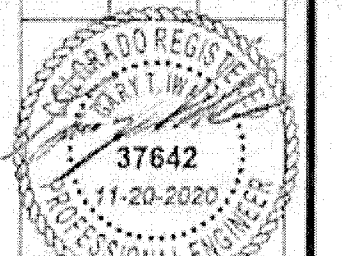
APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

BY *Scott Barnett* 11/23/2020
STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEER DATE
BY *Scott Barnett* 11/23/2020
STONEGATE VILLAGE METROPOLITAN DISTRICT MANAGER DATE

DATE	REVISIONS
11/20/2020	REVISED PER VAND COMMENTS
07/20/2020	FINAL SUBMITTAL
06/20/2020	REVISED ALLEY EASEMENTS
05/20/2020	REVISED PER COMMENTS

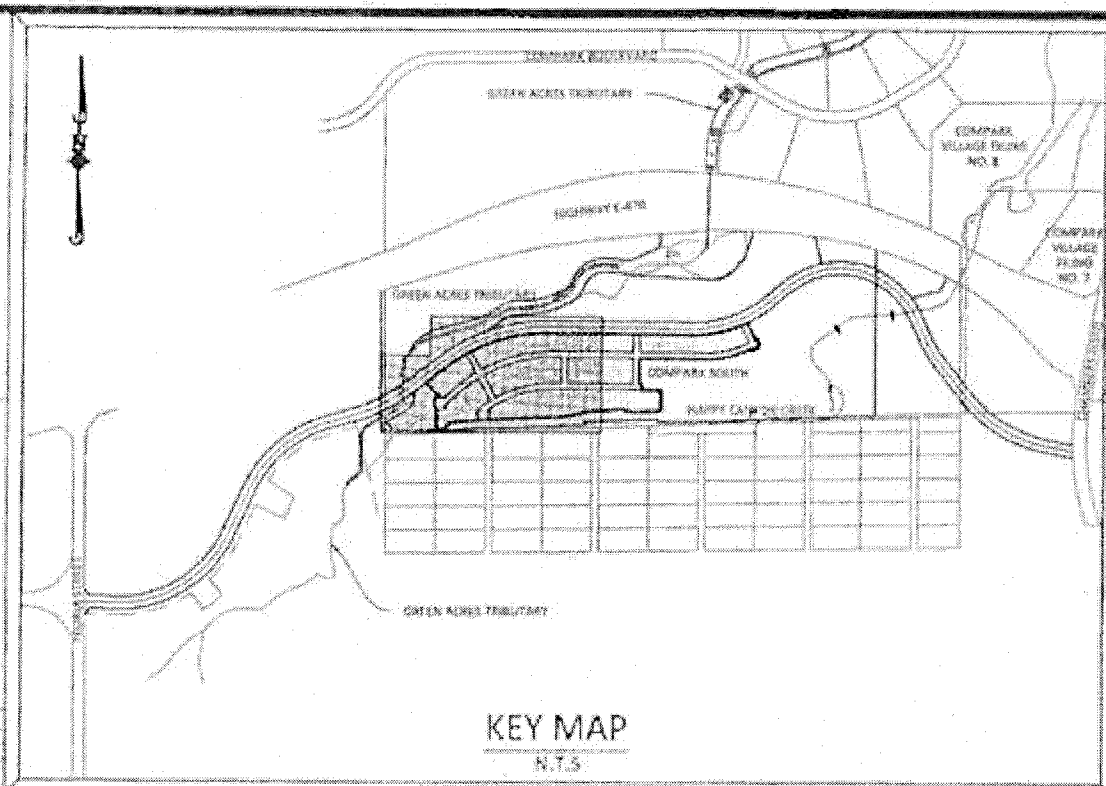
Manhard CONSULTING
7620 East Orchard Road, Suite 150-N, Greenwood Village, CO 80111
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
OVERALL UTILITY PLAN

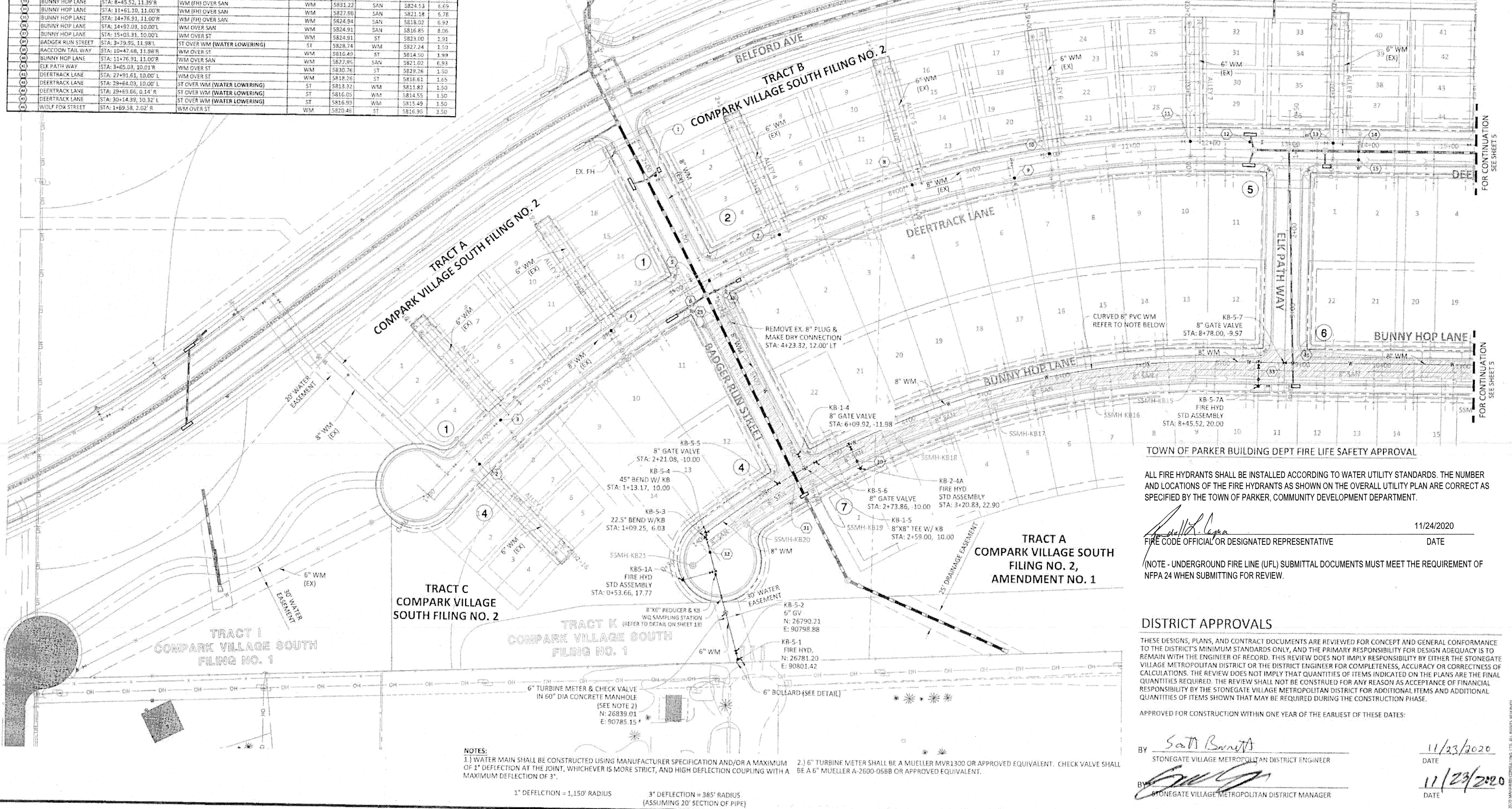


PROJ. NO.: N/A
PROJ. AREA: RAK
DRAWN BY: ASD
DATE: 10/20/16
SHEET 3 OF 14
CLCPK3

CROSSING	STREET	STATION/OFFSET	TYPE OF CROSSING	UPPER UTILITY	B.O.P.	LOWER UTILITY	T.O.P.	CLEAR
(1)	BADGER RUN STREET	STA: 2+16.17, 11.98'L	ST OVER WM (WATER LOWERING)	ST	5825.14	WM	5823.14	2.00
(2)	DEERTRACK LANE	STA: 1+72.35, 11.24'R	WM OVER SAN	WM	5814.33	SAN	5827.95	6.78
(3)	DEERTRACK LANE	STA: 2+29.06, 10.00'L	WM OVER SAN	WM	5813.46	SAN	5827.48	6.00
(4)	DEERTRACK LANE	STA: 4+05.15, 10.00'L	WM OVER SAN	WM	5810.74	SAN	5824.96	5.78
(5)	DEERTRACK LANE	STA: 5+30.36, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5826.36	WM	5824.36	2.00
(6)	DEERTRACK LANE	STA: 6+41.93, 11.81'R	WM OVER SAN	WM	5823.42	SAN	5823.33	6.09
(7)	DEERTRACK LANE	STA: 6+45.71, 10.00'L	WM OVER SAN	WM	5826.07	SAN	5822.52	5.55
(8)	DEERTRACK LANE	STA: 8+21.94, 10.00'L	WM OVER SAN	WM	5826.24	SAN	5820.55	5.71
(9)	DEERTRACK LANE	STA: 9+45.78, 12.78'R	WM (FH) OVER SAN	WM	5824.95	SAN	5818.60	6.35
(10)	DEERTRACK LANE	STA: 9+58.17, 10.00'L	WM OVER SAN	WM	5824.46	SAN	5818.63	5.83
(11)	DEERTRACK LANE	STA: 11+76.40, 10.00'L	WM OVER SAN	WM	5822.65	SAN	5816.66	5.99
(12)	DEERTRACK LANE	STA: 12+49.16, 9.95'L	ST OVER WM (WATER LOWERING)	ST	5820.82	WM	5818.82	2.00
(13)	DEERTRACK LANE	STA: 13+45.59, 9.06'L	WM OVER SAN	WM	5815.99	SAN	5813.84	2.15
(14)	DEERTRACK LANE	STA: 13+45.84, 10.81'R	ST OVER WM (FH) (WATER LOWERING)	ST	5820.81	SAN	5814.69	6.12
(15)	DEERTRACK LANE	STA: 13+45.81, 10.81'R	WM (FH) OVER SAN	WM	5815.06	WM	5816.66	2.00
(16)	DEERTRACK LANE	STA: 15+43.55, 9.97'L	WM OVER SAN	WM	5818.07	SAN	5812.69	6.28
(17)	DEERTRACK LANE	STA: 17+89.84, 9.59'L	WM OVER SAN	WM	5816.34	SAN	5809.90	6.44
(18)	DEERTRACK LANE	STA: 18+38.84, 0.00'L	ST OVER WM (FH) (WATER LOWERING)	ST	5812.43	WM	5810.93	1.50
(19)	DEERTRACK LANE	STA: 18+33.86, 11.00'R	WM (FH) OVER SAN	WM	5810.26	SAN	5808.33	1.93
(20)	DEERTRACK LANE	STA: 19+22.47, 10.00'L	WM OVER SAN	WM	5815.56	SAN	5806.28	9.28
(21)	DEERTRACK LANE	STA: 19+23.34, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5810.79	WM	5808.79	2.00
(22)	DEERTRACK LANE	STA: 19+35.32, 4.57'R	ST OVER WM (WATER LOWERING)	ST	5811.94	WM	5810.94	2.00
(23)	DEERTRACK LANE	STA: 19+35.32, 11.00'R	WM OVER SAN	WM	5810.27	SAN	5806.75	3.52
(24)	DEERTRACK LANE	STA: 20+39.84, 10.00'L	WM OVER SAN	WM	5816.85	SAN	5808.11	8.74
(25)	DEERTRACK LANE	STA: 22+19.84, 10.00'L	WM OVER SAN	WM	5820.02	SAN	5809.46	10.56
(26)	DEERTRACK LANE	STA: 23+09.84, 10.00'L	WM OVER SAN	WM	5822.66	SAN	5810.74	11.92
(27)	DEERTRACK LANE	STA: 25+91.77, 10.00'L	WM OVER SAN	WM	5820.85	SAN	5811.57	9.27
(28)	DEERTRACK LANE	STA: 28+22.75, 10.00'L	WM OVER SAN	WM	5818.42	SAN	5812.41	6.02
(29)	BADGER RUN STREET	STA: 4+12.17, 0.64'R	ST OVER WM (FH) (WATER LOWERING)	ST	5827.92	WM	5825.92	2.00
(30)	BUNNY HOP LANE	STA: 30+20.88, 12.81'R	WM OVER SAN	WM	5827.37	SAN	5828.96	8.41
(31)	BUNNY HOP LANE	STA: 2+43.56, 10.00'L	WM OVER ST	WM	5838.34	ST	5835.18	3.16
(32)	BUNNY HOP LANE	STA: 1+01.67, 11.83'R	WM (FH) OVER SAN	WM	5840.25	SAN	5831.63	8.62
(33)	BUNNY HOP LANE	STA: 6+45.52, 11.39'R	WM (FH) OVER SAN	WM	5831.27	SAN	5824.53	6.74
(34)	BUNNY HOP LANE	STA: 11+61.10, 11.00'R	WM (FH) OVER SAN	WM	5827.96	SAN	5821.18	6.78
(35)	BUNNY HOP LANE	STA: 14+76.91, 11.00'R	WM (FH) OVER SAN	WM	5824.94	SAN	5818.02	6.92
(36)	BUNNY HOP LANE	STA: 14+97.03, 10.00'L	WM OVER SAN	WM	5824.91	SAN	5816.85	8.06
(37)	BUNNY HOP LANE	STA: 15+03.91, 10.00'L	WM OVER ST	WM	5828.74	ST	5824.00	4.74
(38)	BADGER RUN STREET	STA: 3+79.95, 11.98'L	ST OVER WM (WATER LOWERING)	ST	5827.92	SAN	5821.02	6.90
(39)	RACCOON TAIL WAY	STA: 10+47.66, 11.98'R	WM OVER ST	WM	5820.76	ST	5820.36	0.40
(40)	BUNNY HOP LANE	STA: 11+76.91, 10.01'R	WM OVER ST	WM	5830.76	ST	5829.36	1.40
(41)	ELK PATH WAY	STA: 3+65.03, 10.01'R	WM OVER ST	WM	5818.26	ST	5816.61	1.65
(42)	DEERTRACK LANE	STA: 27+91.61, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5813.32	WM	5811.82	1.50
(43)	DEERTRACK LANE	STA: 29+84.03, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5816.05	WM	5814.55	1.50
(44)	DEERTRACK LANE	STA: 30+14.39, 10.32'L	ST OVER WM (WATER LOWERING)	ST	5816.05	WM	5815.49	0.56
(45)	WOLF FOX STREET	STA: 1+69.58, 2.02'R	WM OVER ST	WM	5820.41	ST	5816.95	3.46



SOURCE BENCHMARKS:
DOUGLAS COUNTY BM 1.135010
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)



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

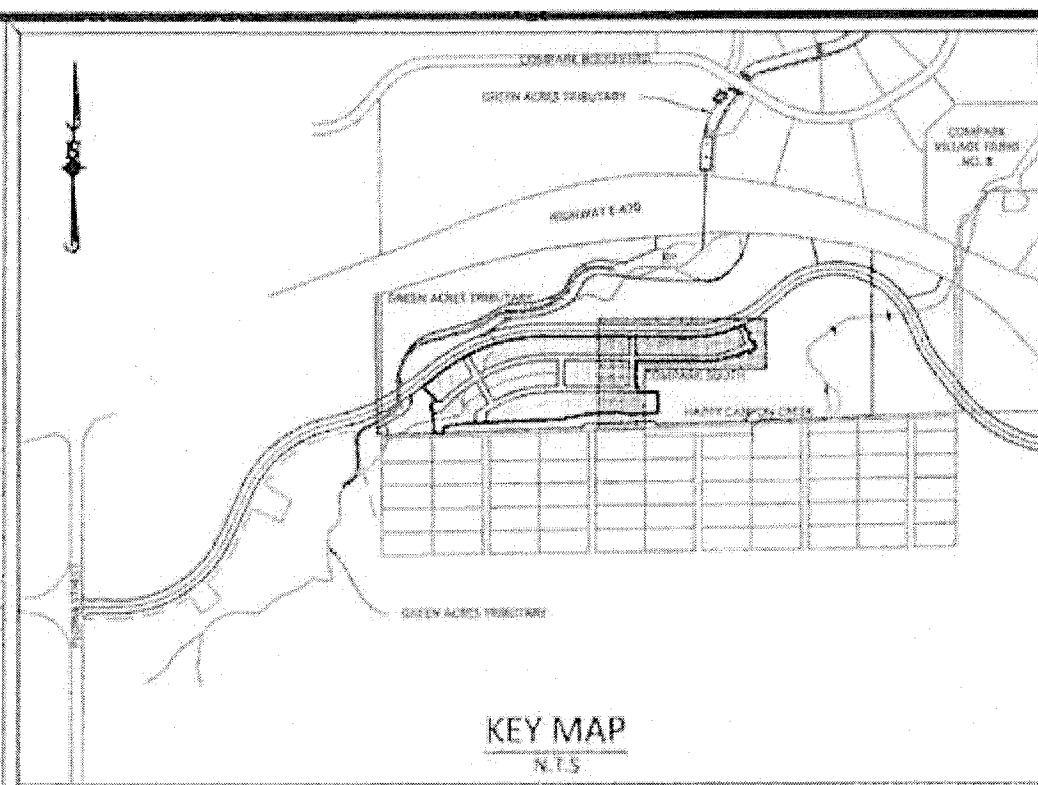
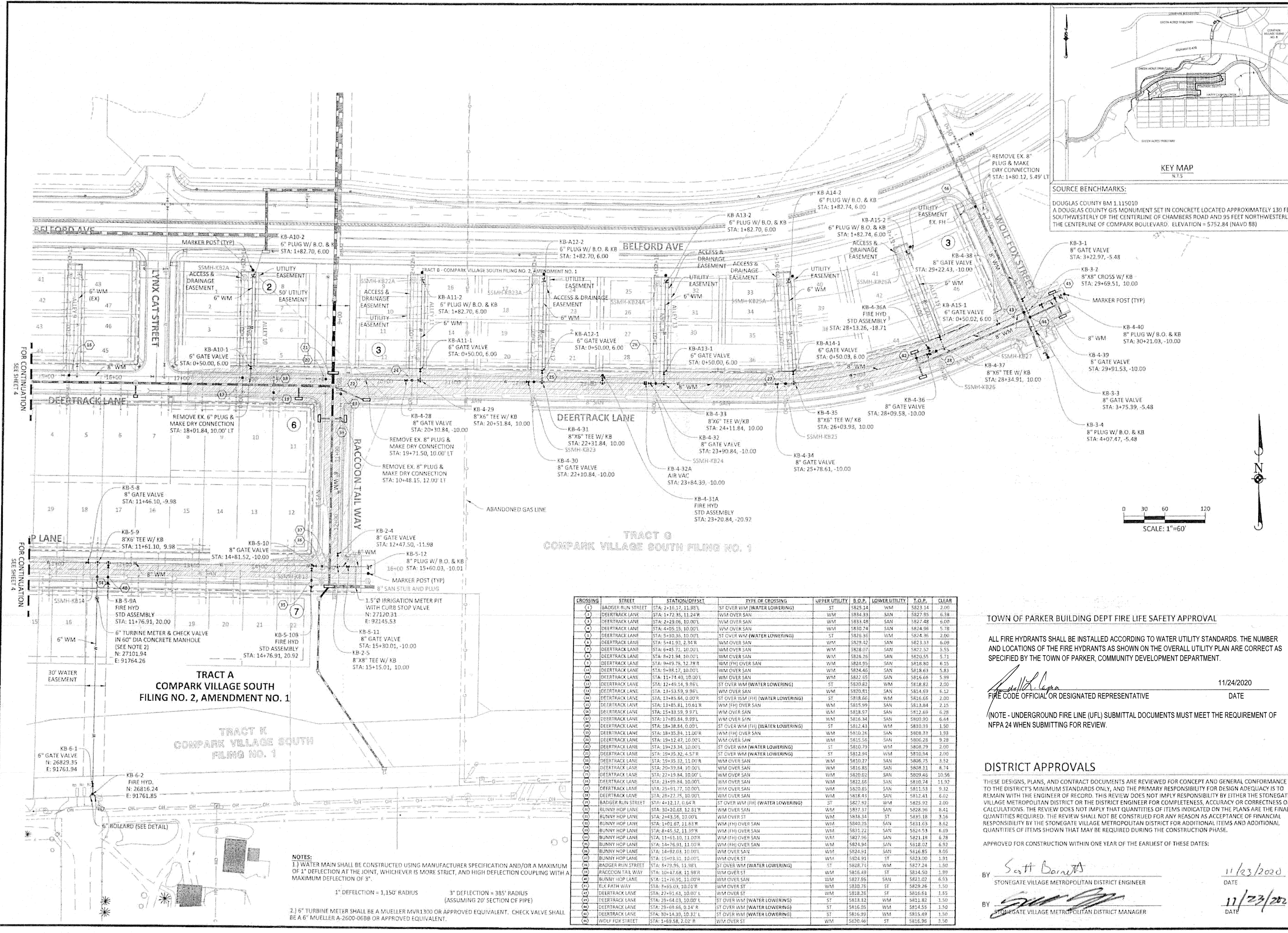
NOTES:
1) WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION AND/OR A MAXIMUM OF 1" DEFLECTION AT THE JOINT, WHICHEVER IS MORE STRICT, AND HIGH DEFLECTION COUPLING WITH A MAXIMUM DEFLECTION OF 3".
2) 6" TURBINE METER SHALL BE A MUELLER MVR1300 OR APPROVED EQUIVALENT. CHECK VALVE SHALL BE A 6" MUELLER A-2600-056B OR APPROVED EQUIVALENT.
3" DEFLECTION = 1,150' RADIUS
(ASSUMING 20' SECTION OF PIPE)

Manhard CONSULTING
7600 East Orchard Road, Suite 300N, Greenwood Village, CO 80111
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

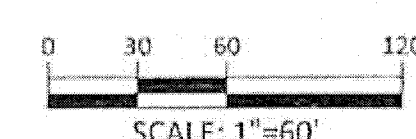
COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
WATER PLAN - WEST

37642
11-20-2020
PROFESSIONAL ENGINEER

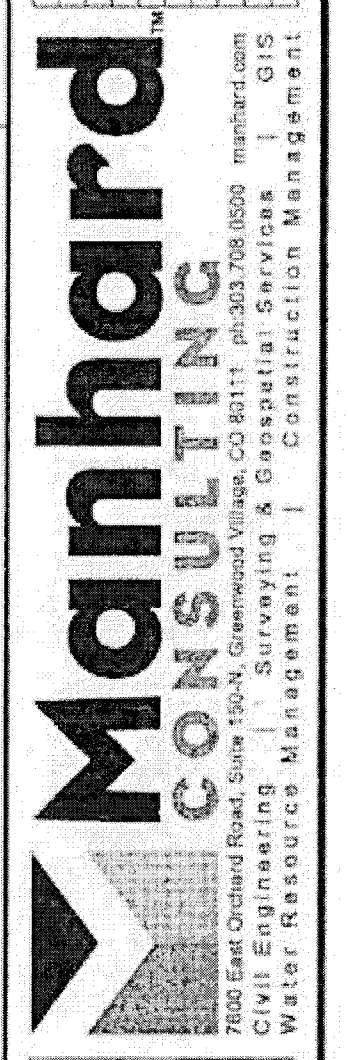
SHEET 4 OF 14
CLEPKC3



SOURCE BENCHMARKS:
 DOUGLAS COUNTY BM 111500
 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)



DATE	REVISION
11/20/20	ISSUED FOR PERMITS
07/20/21	FINAL SUBMITTAL
06/20/23	REVISED ALLEYS
01/20/24	REVISED FIRE HYDRANT



COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
 TOWN OF PARKER, COLORADO
 WATER PLAN - EAST

CROSSING	STREET	STATION/OFFSET	TYPE OF CROSSING	UPPER UTILITY	B.O.D.	LOWER UTILITY	T.O.P.	CLEAR
(1)	BADGER RUN STREET	STA: 1+12.17, 11.92'R	ST OVER WM (WATER LOWERING)	WM	5834.33	SAN	5827.95	6.38
(2)	DEERTRACK LANE	STA: 1+72.15, 11.24'R	WM OVER SAN	WM	5834.33	SAN	5827.95	6.38
(3)	DEERTRACK LANE	STA: 2+28.06, 10.00'L	WM OVER SAN	WM	5834.33	SAN	5827.95	6.38
(4)	DEERTRACK LANE	STA: 4+05.15, 10.00'L	WM OVER SAN	WM	5834.33	SAN	5827.95	6.38
(5)	DEERTRACK LANE	STA: 5+30.36, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5828.36	WM	5824.36	2.00
(6)	DEERTRACK LANE	STA: 5+41.93, 2.34'R	WM OVER SAN	WM	5829.42	SAN	5823.33	6.09
(7)	DEERTRACK LANE	STA: 6+45.71, 10.00'L	WM OVER SAN	WM	5828.97	SAN	5823.57	5.55
(8)	DEERTRACK LANE	STA: 8+21.94, 10.00'L	WM OVER SAN	WM	5828.37	SAN	5820.55	5.71
(9)	DEERTRACK LANE	STA: 9+49.75, 12.78'R	WM (FH) OVER SAN	WM	5824.95	SAN	5818.80	6.15
(10)	DEERTRACK LANE	STA: 9+88.17, 10.00'L	WM OVER SAN	WM	5824.46	SAN	5818.69	5.83
(11)	DEERTRACK LANE	STA: 11+74.40, 10.00'L	WM OVER SAN	WM	5822.85	SAN	5816.65	5.99
(12)	DEERTRACK LANE	STA: 12+49.14, 9.95'L	ST OVER WM (WATER LOWERING)	ST	5820.82	WM	5818.82	2.00
(13)	DEERTRACK LANE	STA: 13+52.59, 9.95'L	WM OVER SAN	WM	5820.81	SAN	5814.69	6.12
(14)	DEERTRACK LANE	STA: 13+85.84, 0.00'R	ST OVER WM (FH) (WATER LOWERING)	ST	5818.66	WM	5816.66	2.00
(15)	DEERTRACK LANE	STA: 13+85.81, 10.81'R	WM (FH) OVER SAN	WM	5815.99	SAN	5813.84	2.15
(16)	DEERTRACK LANE	STA: 15+83.59, 9.97'L	WM OVER SAN	WM	5818.07	SAN	5812.69	6.28
(17)	DEERTRACK LANE	STA: 17+85.84, 9.99'L	WM OVER SAN	WM	5816.34	SAN	5809.90	6.44
(18)	DEERTRACK LANE	STA: 18+38.84, 0.00'L	ST OVER WM (FH) (WATER LOWERING)	ST	5812.43	WM	5810.33	1.50
(19)	DEERTRACK LANE	STA: 18+35.84, 11.00'R	WM (FH) OVER SAN	WM	5810.28	SAN	5808.39	1.95
(20)	DEERTRACK LANE	STA: 18+41.27, 10.00'L	WM OVER SAN	WM	5815.56	SAN	5806.28	9.28
(21)	DEERTRACK LANE	STA: 19+23.34, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5810.79	WM	5808.79	2.00
(22)	DEERTRACK LANE	STA: 20+35.32, 4.57'R	ST OVER WM (WATER LOWERING)	ST	5812.94	WM	5810.94	2.00
(23)	DEERTRACK LANE	STA: 20+39.84, 10.00'L	WM OVER SAN	WM	5810.27	SAN	5806.75	3.52
(24)	DEERTRACK LANE	STA: 20+39.84, 10.00'L	WM OVER SAN	WM	5816.83	SAN	5808.11	6.74
(25)	DEERTRACK LANE	STA: 22+19.84, 10.00'L	WM OVER SAN	WM	5820.02	SAN	5809.46	10.96
(26)	DEERTRACK LANE	STA: 23+49.84, 10.00'L	WM OVER SAN	WM	5822.66	SAN	5810.24	14.92
(27)	DEERTRACK LANE	STA: 25+11.77, 10.00'L	WM OVER SAN	WM	5820.85	SAN	5811.53	9.32
(28)	DEERTRACK LANE	STA: 26+27.75, 10.00'L	WM OVER SAN	WM	5818.43	SAN	5812.41	6.02
(29)	BADGER RUN STREET	STA: 4+12.17, 0.64'R	ST OVER WM (FH) (WATER LOWERING)	ST	5827.92	WM	5825.92	2.00
(30)	BUNNY HOP LANE	STA: 30+20.88, 12.81'R	WM OVER SAN	WM	5827.36	SAN	5828.36	8.41
(31)	BUNNY HOP LANE	STA: 2+43.56, 10.00'L	WM OVER ST	WM	5838.34	ST	5835.18	3.16
(32)	BUNNY HOP LANE	STA: 1+01.87, 11.83'R	WM (FH) OVER SAN	WM	5803.75	SAN	5821.03	8.82
(33)	BUNNY HOP LANE	STA: 8+45.52, 11.97'R	WM (FH) OVER SAN	WM	5813.22	SAN	5824.93	6.09
(34)	BUNNY HOP LANE	STA: 11+61.10, 11.00'R	WM (FH) OVER SAN	WM	5827.96	SAN	5821.18	6.78
(35)	BUNNY HOP LANE	STA: 14+76.91, 11.00'R	WM (FH) OVER SAN	WM	5824.94	SAN	5818.02	6.92
(36)	BUNNY HOP LANE	STA: 14+82.04, 10.00'L	WM OVER SAN	WM	5824.91	SAN	5816.85	8.05
(37)	BUNNY HOP LANE	STA: 15+03.31, 10.00'L	WM OVER ST	WM	5824.91	ST	5823.00	1.91
(38)	BUNNY HOP LANE	STA: 15+03.31, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5828.73	WM	5827.24	1.50
(39)	BADGER RUN STREET	STA: 8+79.95, 11.96'L	ST OVER WM (WATER LOWERING)	ST	5816.75	WM	5814.50	1.99
(40)	RACCOON TAIL WAY	STA: 10+47.68, 11.98'R	WM OVER ST	WM	5813.22	ST	5824.93	6.09
(41)	BUNNY HOP LANE	STA: 21+78.91, 11.00'R	WM OVER SAN	WM	5827.95	SAN	5823.02	4.93
(42)	ELK PATH WAY	STA: 3+45.04, 10.01'R	WM OVER ST	WM	5830.76	ST	5829.26	1.50
(43)	DEERTRACK LANE	STA: 27+51.63, 10.00'L	WM OVER ST	WM	5818.26	ST	5816.63	1.63
(44)	DEERTRACK LANE	STA: 29+64.03, 10.00'L	ST OVER WM (WATER LOWERING)	ST	5818.32	WM	5812.41	1.50
(45)	DEERTRACK LANE	STA: 29+69.86, 0.14'R	ST OVER WM (WATER LOWERING)	ST	5816.05	WM	5814.55	1.50
(46)	DEERTRACK LANE	STA: 30+14.39, 10.31'L	ST OVER WM (WATER LOWERING)	ST	5816.99	WM	5813.49	1.50
(47)	WOLF FOX STREET	STA: 1+68.58, 2.02'R	WM OVER ST	WM	5820.46	ST	5816.96	1.50

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

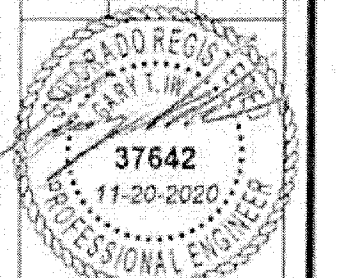
THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE DISTRICT'S MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY EITHER THE STONEGATE VILLAGE 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:

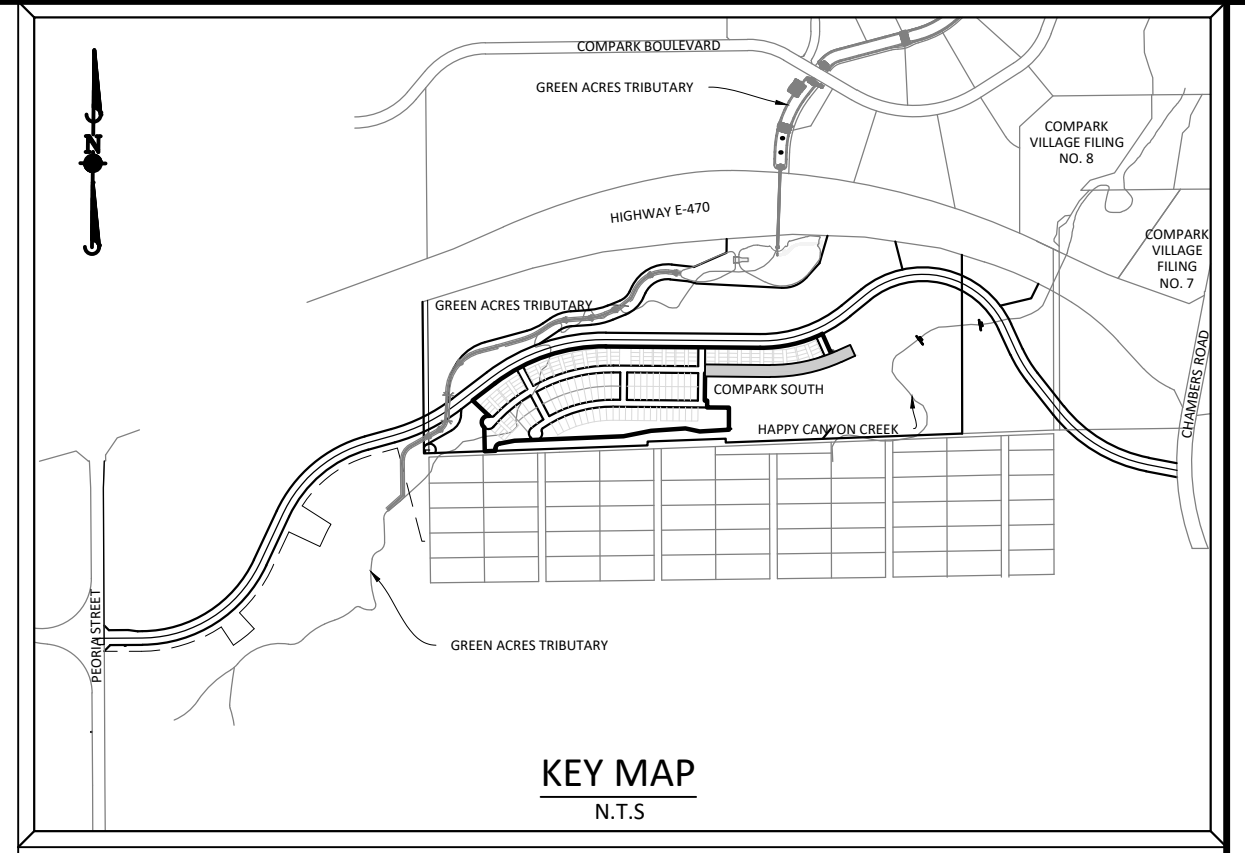
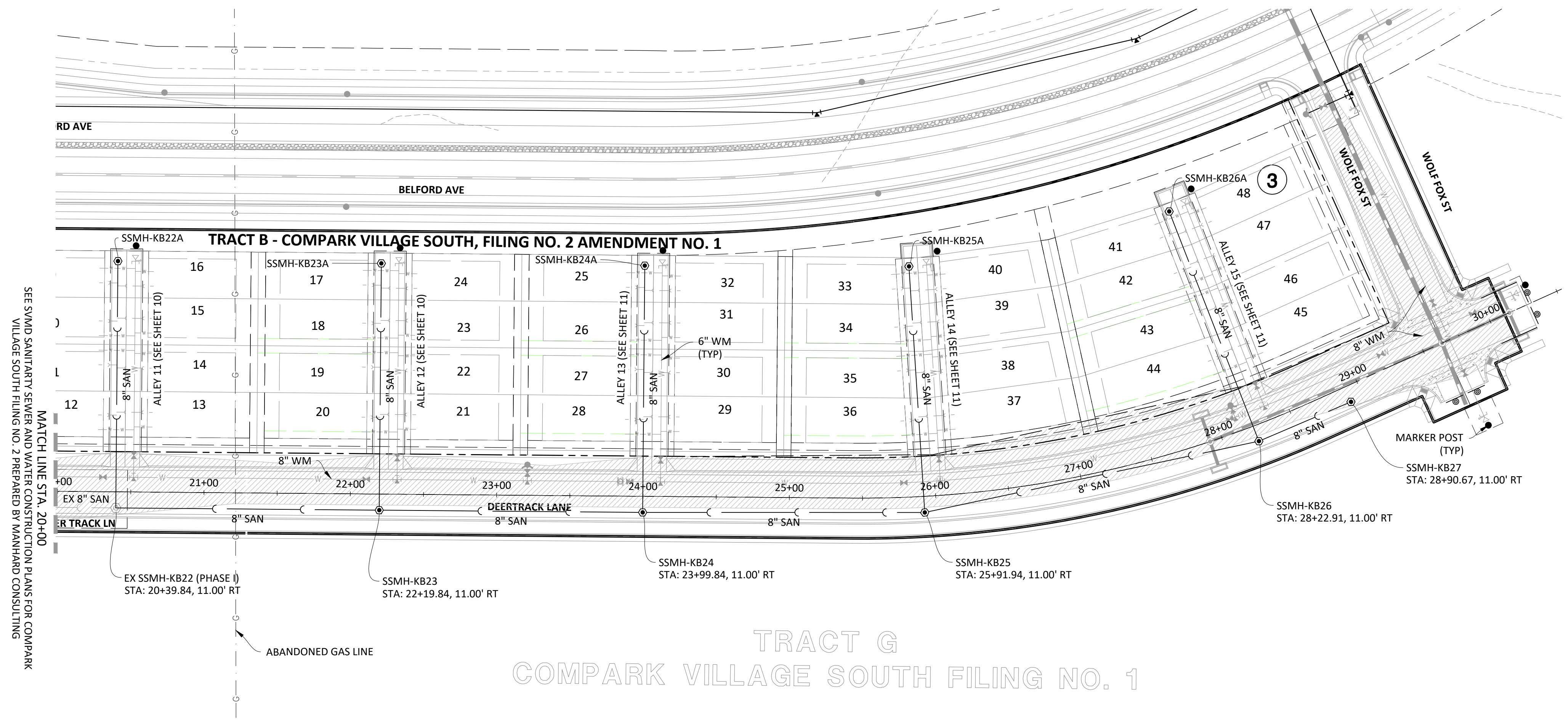
BY *[Signature]* 11/23/2020
 STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEER DATE

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

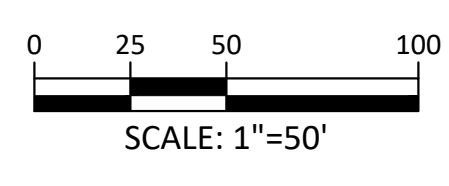
NOTES:
 1) WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION AND/OR A MAXIMUM OF 1" DEFLECTION AT THE JOINT, WHICHEVER IS MORE STRICT, AND HIGH DEFLECTION COUPLING WITH A MAXIMUM DEFLECTION OF 3".
 1" DEFLECTION = 1,150' RADIUS
 3" DEFLECTION = 385' RADIUS (ASSUMING 20' SECTION OF PIPE)
 2) 6" TURBINE METER SHALL BE A MUELLER MVR1300 OR APPROVED EQUIVALENT. CHECK VALVE SHALL BE A 6" MUELLER A-2600-06BB OR APPROVED EQUIVALENT.



PROJ. MGR.: EAM
 PROJ. ASSOC.: BAK
 DRAWN BY: ASD
 DATE: 10/2016
 SHEET 5 OF 14
 CLCPK3

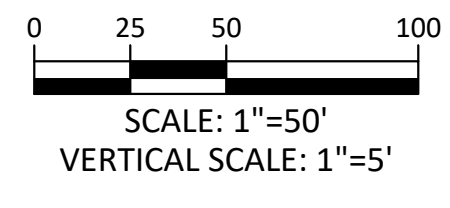
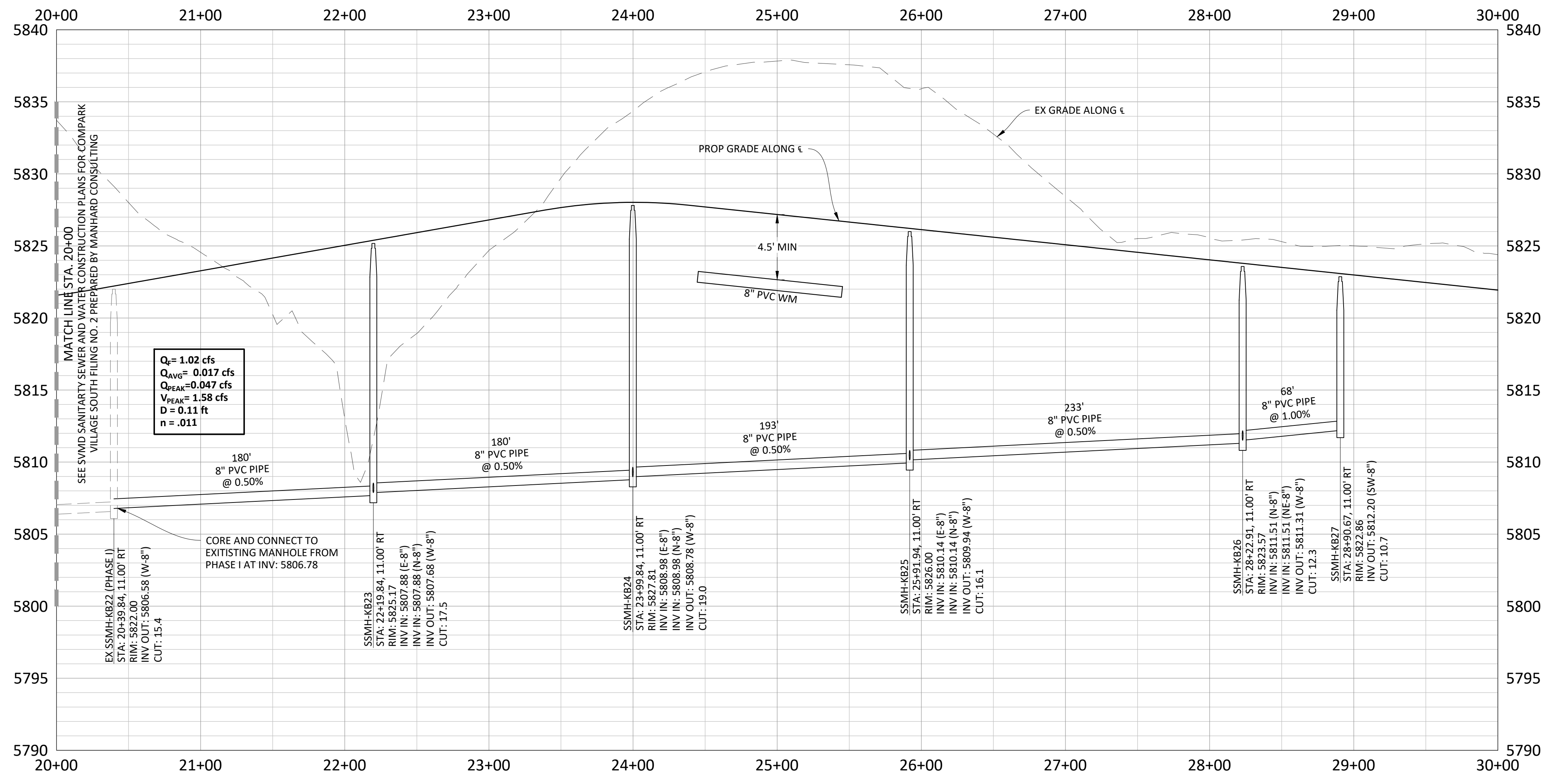


SOURCE BENCHMARKS:
 DOUGLAS COUNTY BM 1.115010
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET
 SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF
 THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



TRACT G
 COMPARK VILLAGE SOUTH FILING NO. 1

DEERTRACK LANE



- NOTES:**
1. SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.
 2. ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C9000 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.
 3. WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION, EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.
 4. ALL PLUGS AT END OF WATER LINES SHALL HAVE A 2" BLOWOFF IN MANHOLE. REFER TO SHEET 13 FOR DETAIL.

SEE SVID SANITARY SEWER AND WATER CONSTRUCTION PLANS FOR COMPARK VILLAGE SOUTH FILING NO. 2 PREPARED BY MANHARD CONSULTING

MATCH LINE STA. 20+00

EX SSMH-KB22 (PHASE I)
 STA: 20+39.84, 11.00' RT

SSMH-KB23
 STA: 22+19.84, 11.00' RT

SSMH-KB24
 STA: 23+99.84, 11.00' RT

SSMH-KB25
 STA: 25+91.94, 11.00' RT

SSMH-KB26
 STA: 28+22.91, 11.00' RT

MARKER POST (TYP)
 SSMH-KB27
 STA: 28+90.67, 11.00' RT

Plotted: 11/20/2020 9:42 AM. Dwg Name: c:\projects\compark\residential\csl\csl\env\final drawings\plan set\District\PHASE 2\USB-P&P-1-Street-G.dwg. Updated By: Jhawthorne

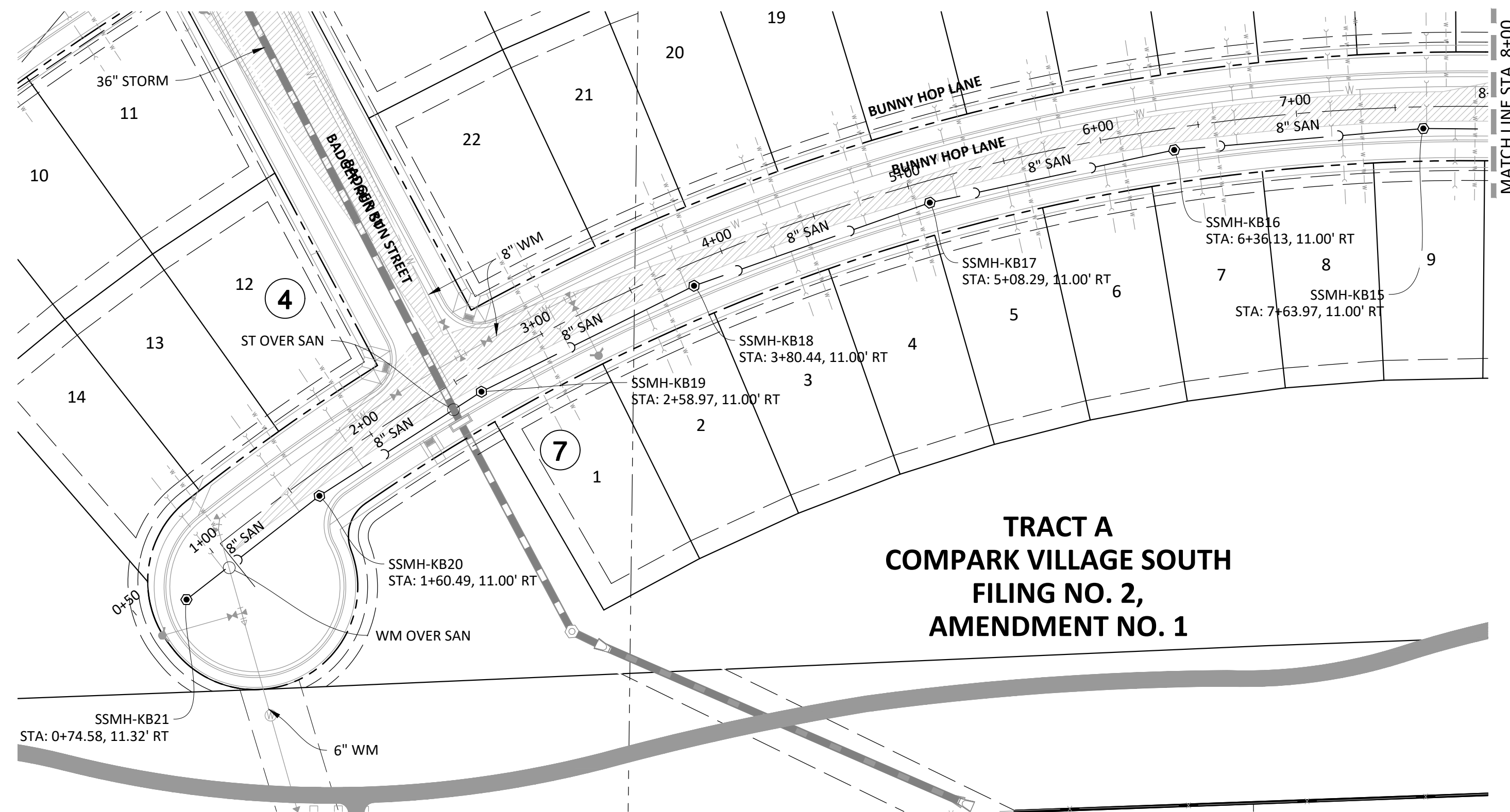
Manhard CONSULTING
 7600 East Orchard Road, Suite 100-1003, Greenwood Village, CO 80111, phone: 303.778.0800 manhard.com
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

DATE	REVISIONS
11/20/20	REVISED PER SVID COMMENTS
07/20/17	FINAL SUBMITTAL
06/20/17	REVISED ALLEY EASEMENTS
08/20/16	REVISED PER SVID COMMENTS

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
 TOWN OF PARKER, COLORADO
 SANITARY SEWER PLAN AND PROFILE - DEERTRACK LANE

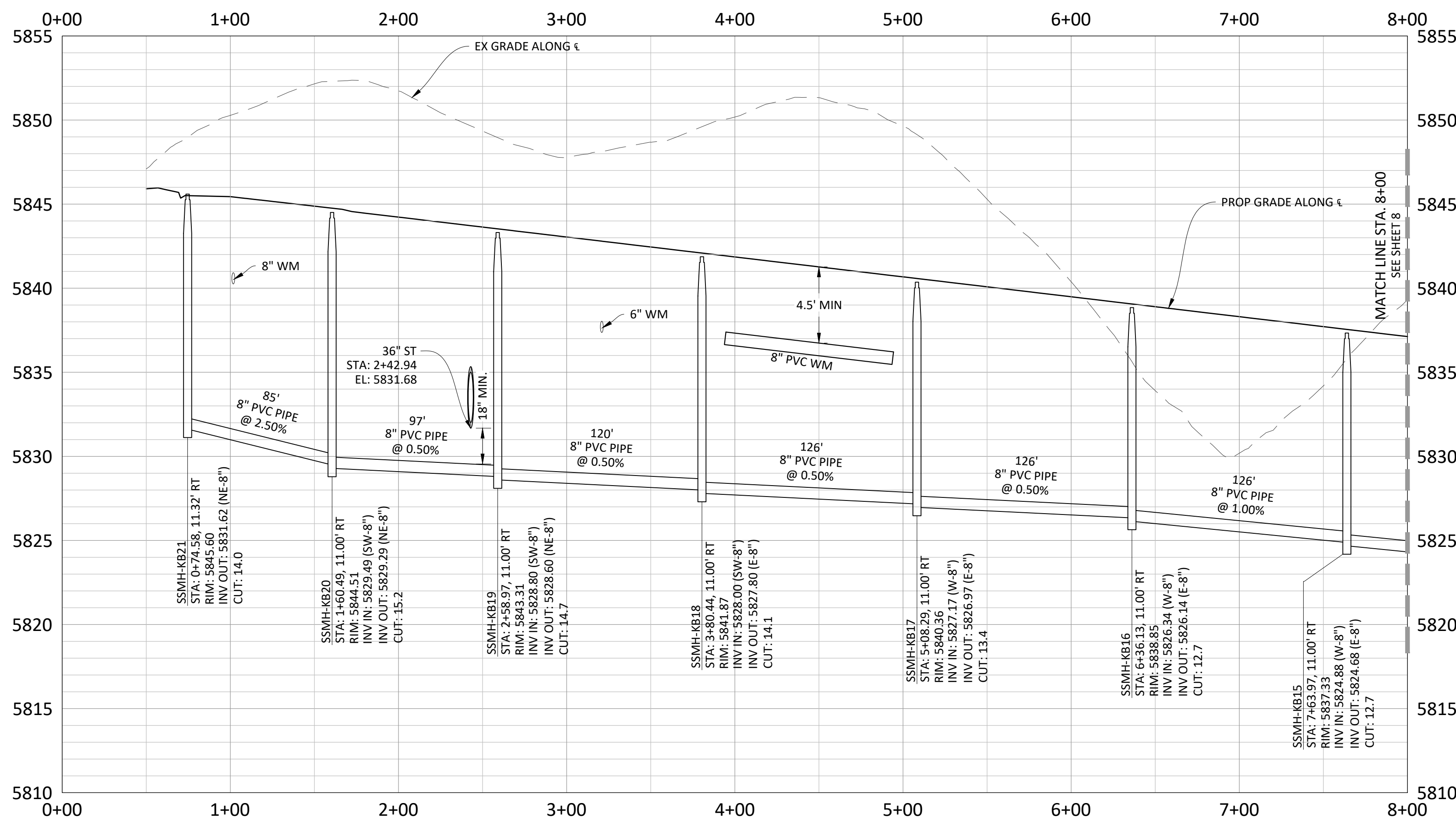
PROJ. MGR.: RJM
 PROJ. ASSOC.: RAK
 DRAWN BY: ASD
 DATE: 10/20/16

SHEET
6 OF 14
 CLCPK3



**TRACT A
COMPARK VILLAGE SOUTH
FILING NO. 2,
AMENDMENT NO. 1**

BUNNY HOP LANE

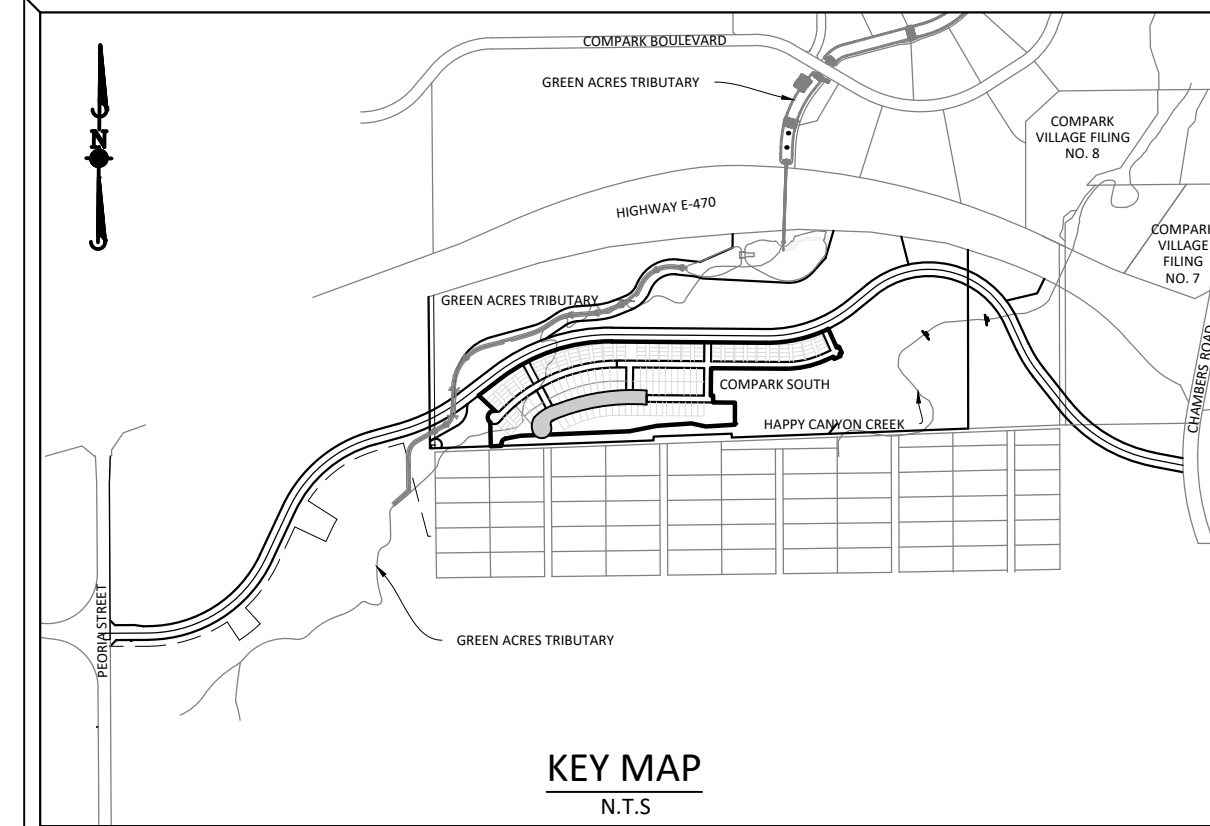


NOTES:

1. SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.
2. ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C9000 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.
3. WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION, EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.
4. ALL PLUGS AT END OF WATER LINES SHALL HAVE A 2" BLOWOFF IN MANHOLE. REFER TO SHEET 13 FOR DETAIL.

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)



DATE	REVISIONS

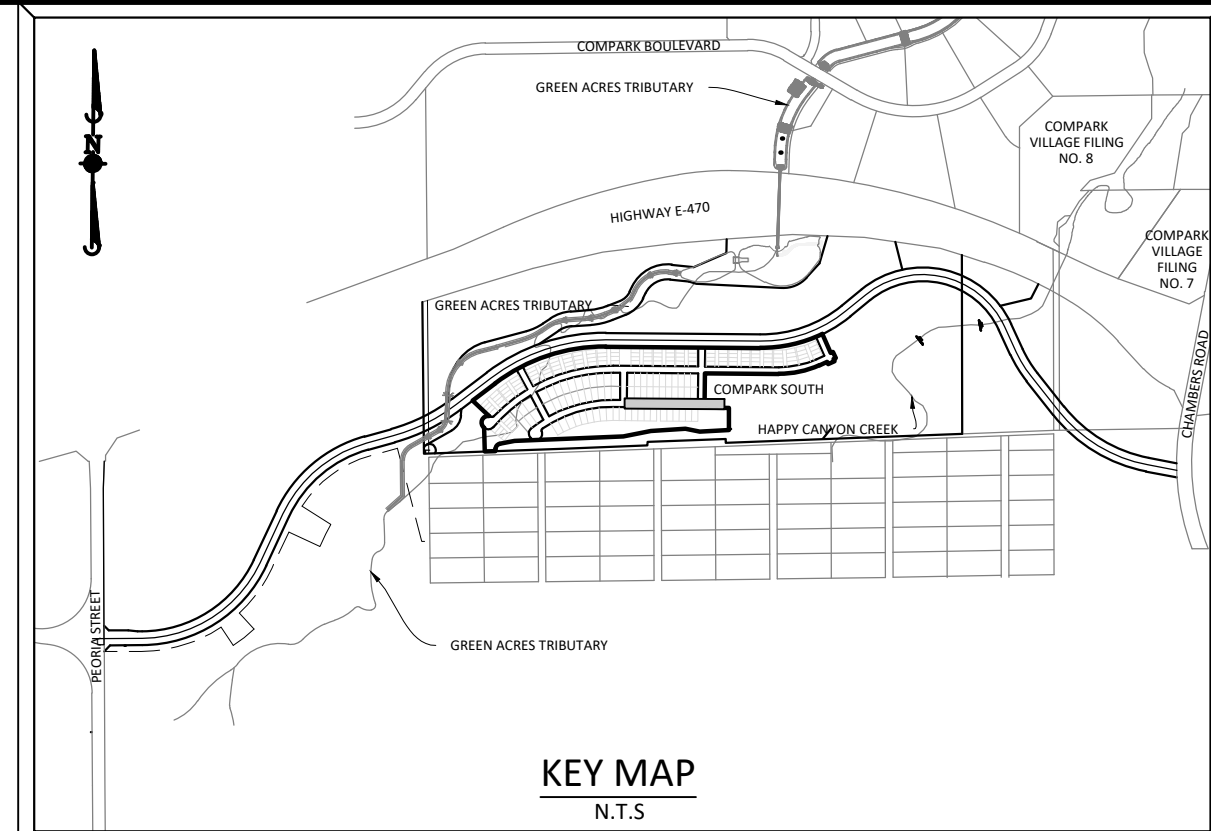
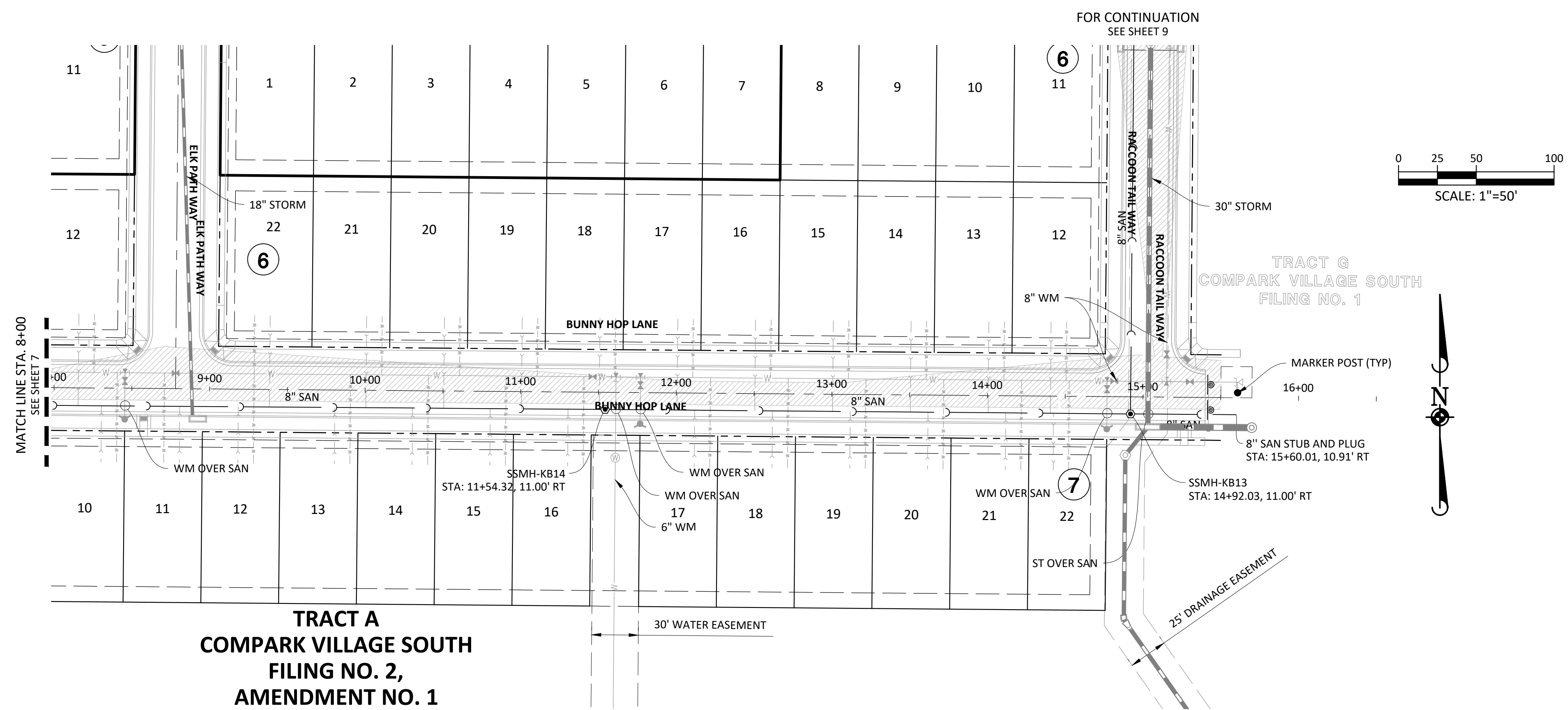
Manhard CONSULTING
7600 East Orchard Road, Suite 100, Greenwood Village, CO 80111, phone: 303.770.0500 manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
SANITARY SEWER PLAN AND PROFILE - BUNNY HOP LANE

PROJ. MGR.: RJM
PROJ. ASSOC.: RAK
DRAWN BY: ASD
DATE: 10/20/16
SHEET
7 OF 14
CLCPK3

Plotted: 11/20/2020 9:44 AM. Dwg Name: C:\cplk3\ycomsouth05_residential.cad\cplk3\District\PHASE 2\05B-P&P-2-Street-11.dwg. Updated By: JHawthorne

Plotted: 11/20/2020 11:41 AM Dwg Name: P:\C06k3\comsouth05-residential\cds\dwg\Eng\Final Drawings\Plan Set\District\PHASE 2\05B-P&P-2-Street II.dwg Updated By: jhawthorne

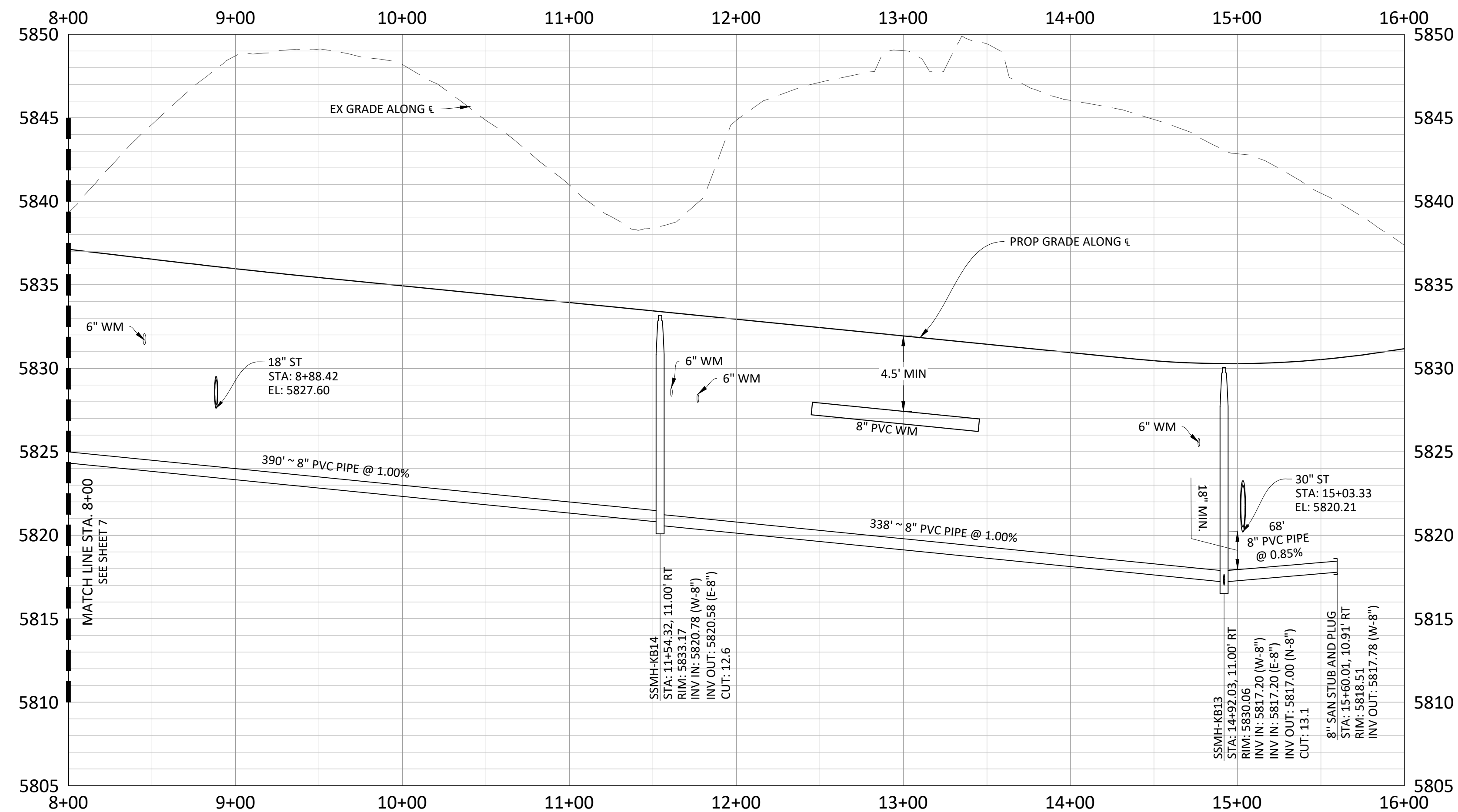


SOURCE BENCHMARKS:
 DOUGLAS COUNTY BM 1.115010
 A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET
 SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF
 THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

DATE	REVISIONS
11/20/2020	REVISED PER SVD COMMENTS
07/2017	FINAL SUBMITTAL
06/2017	REVISED ALLEY EASEMENTS
09/2016	REVISED PER SVD COMMENTS

Manhard CONSULTING
 7600 East Orchard Road, Suite 100-2, Greenwood Village, CO 80111, phone: 303.780.0500 manhard.com
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management

BUNNY HOP LANE



- NOTES:**
- 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 C9000 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.
 - ALL PLUGS AT END OF WATER LINES SHALL HAVE A 2" BLOWOFF IN MANHOLE. REFER TO SHEET 13 FOR DETAIL.

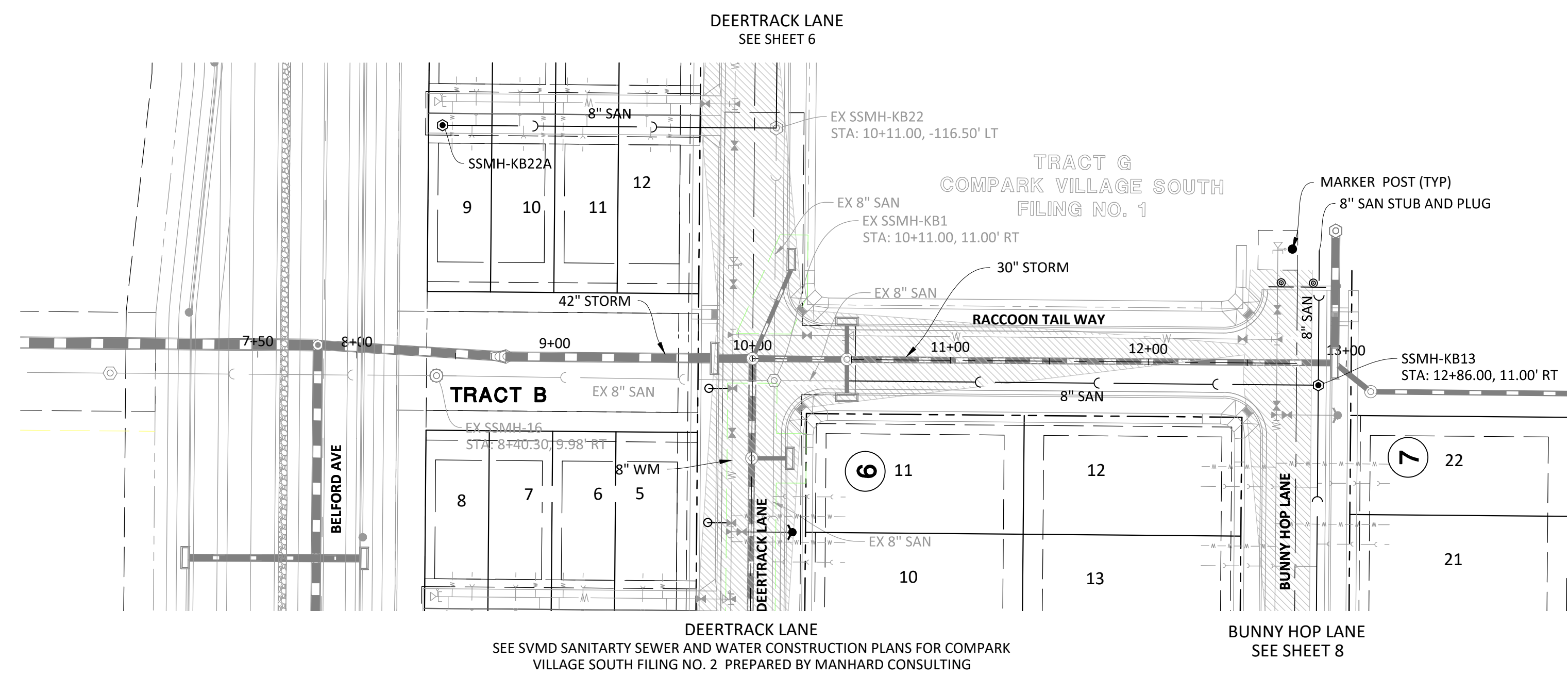
COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
SANITARY SEWER PLAN AND PROFILE - BUNNY HOP LANE

PROJECT NO: 37642
 DATE: 11-20-2020
 PROFESSIONAL ENGINEER

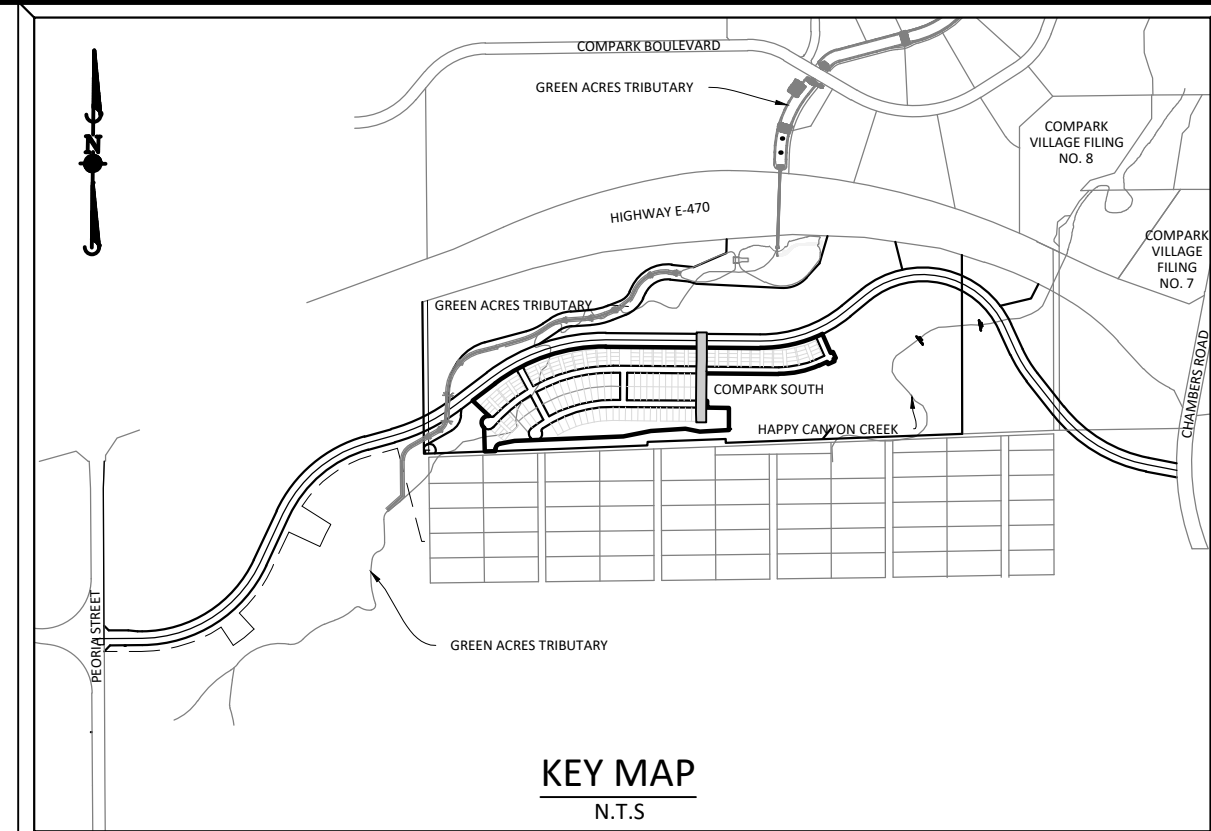
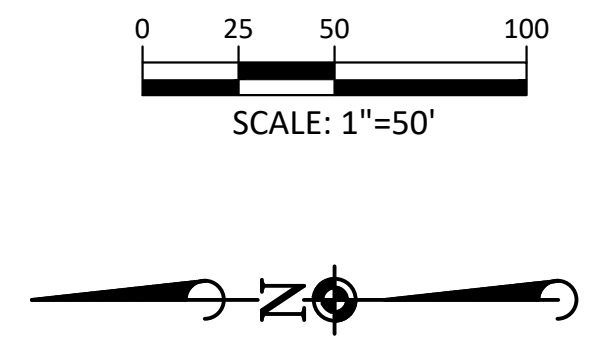
PROJ MGR: RJM
 PROJ ASSOC: RAK
 DRAWN BY: ASD
 DATE: 10/20/16

SHEET
8 OF 14
 CLCPK3

Plotted: 11/20/2020 11:54 AM Dwg Name: P:\C\0633\CompSouth05-Residential\CD\Drawings\Final Drawings\Plan Set\District\PHASE 2\USB-#8-P-3-Street_Cdwg_Updated By: MMK\Guide



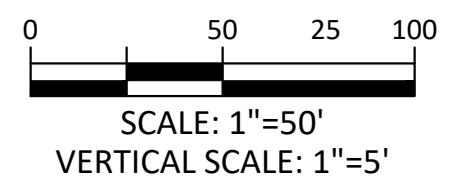
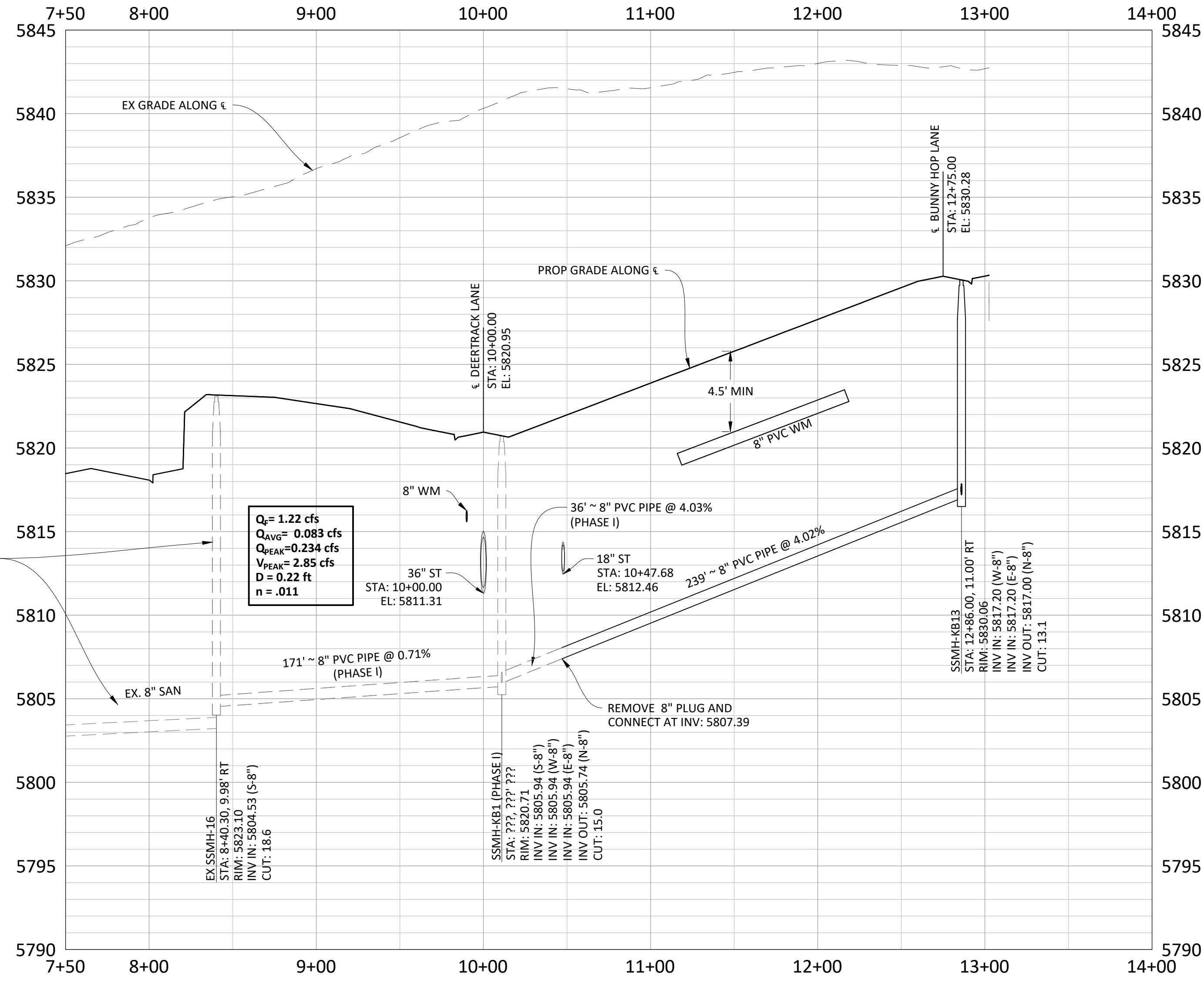
RACCOON TAIL WAY



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)

DATE	REVISIONS
11/20/20	REVISED PER SVMD COMMENTS
07/2017	FINAL SUBMITTAL
06/2017	REVISED ALLEY EASEMENTS
09/2016	REVISED PER SVMD COMMENTS

Manhard CONSULTING
 7600 East Orchard Road, Suite 100, Greenwood Village, CO 80111, phone: 303.750.0500 manhard.com
 Civil Engineering | Surveying & Geospatial Services | GIS | Construction Management | Water Resource Management



- NOTES:**
- 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 C9000 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.
 - ALL PLUGS AT END OF WATER LINES SHALL HAVE A 2" BLOWOFF IN MANHOLE. REFER TO SHEET 13 FOR DETAIL.

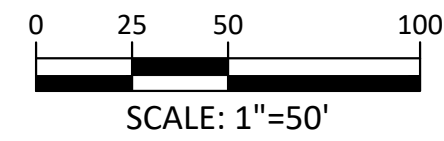
REFER TO COMPARK VILLAGE SOUTH FILING NO. 1 SVMD SANITARY SEWER AND WATER CONSTRUCTION PLANS PREPARED BY MANHARD CONSULTING

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1
TOWN OF PARKER, COLORADO
SANITARY SEWER PLAN AND PROFILE - RACCOON TAIL WAY

PROJ. MGR.: RJM
 PROJ. ASSOC.: RAK
 DRAWN BY: ASD
 DATE: 10/2016

PROFESSIONAL ENGINEER
 37642
 11-20-2020

SHEET
9 OF 14
 CLCPK3



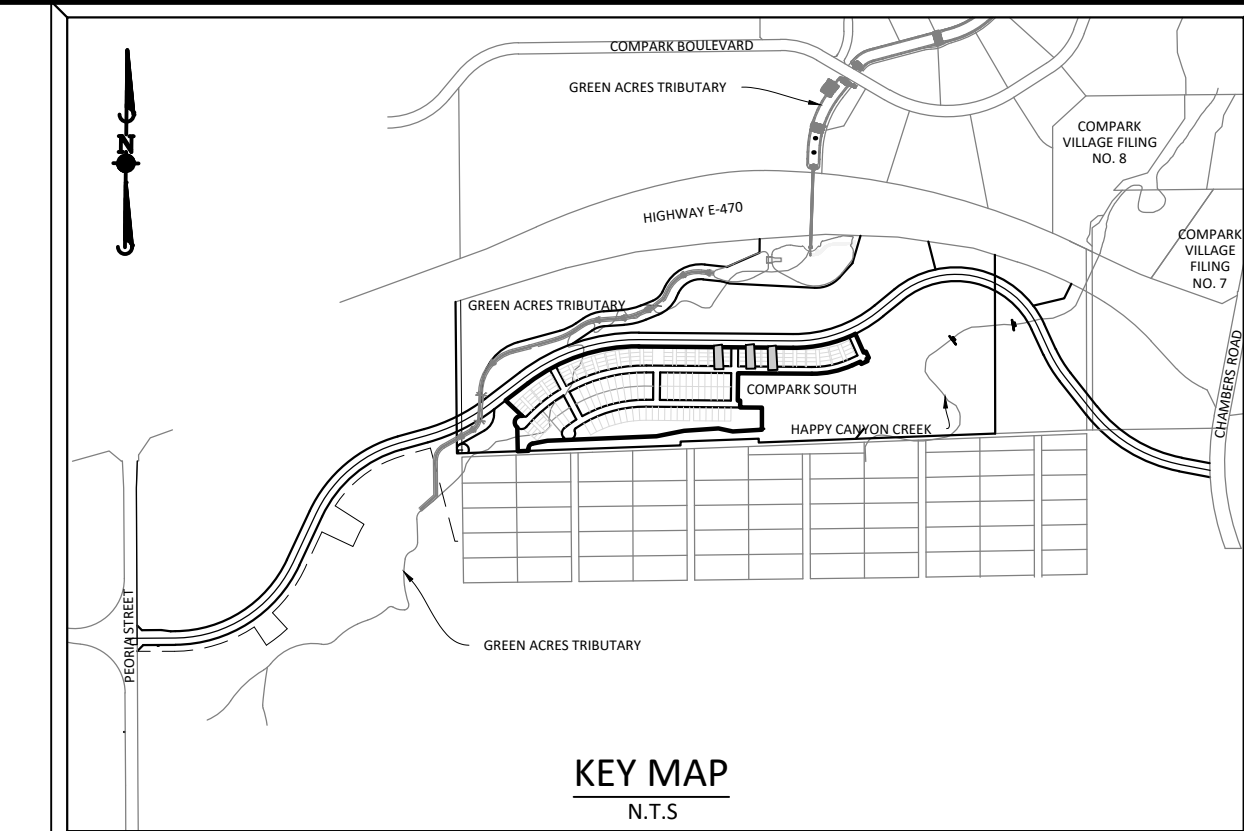
SCALE: 1"=50'



SCALE: 1"=50'

NOTES:

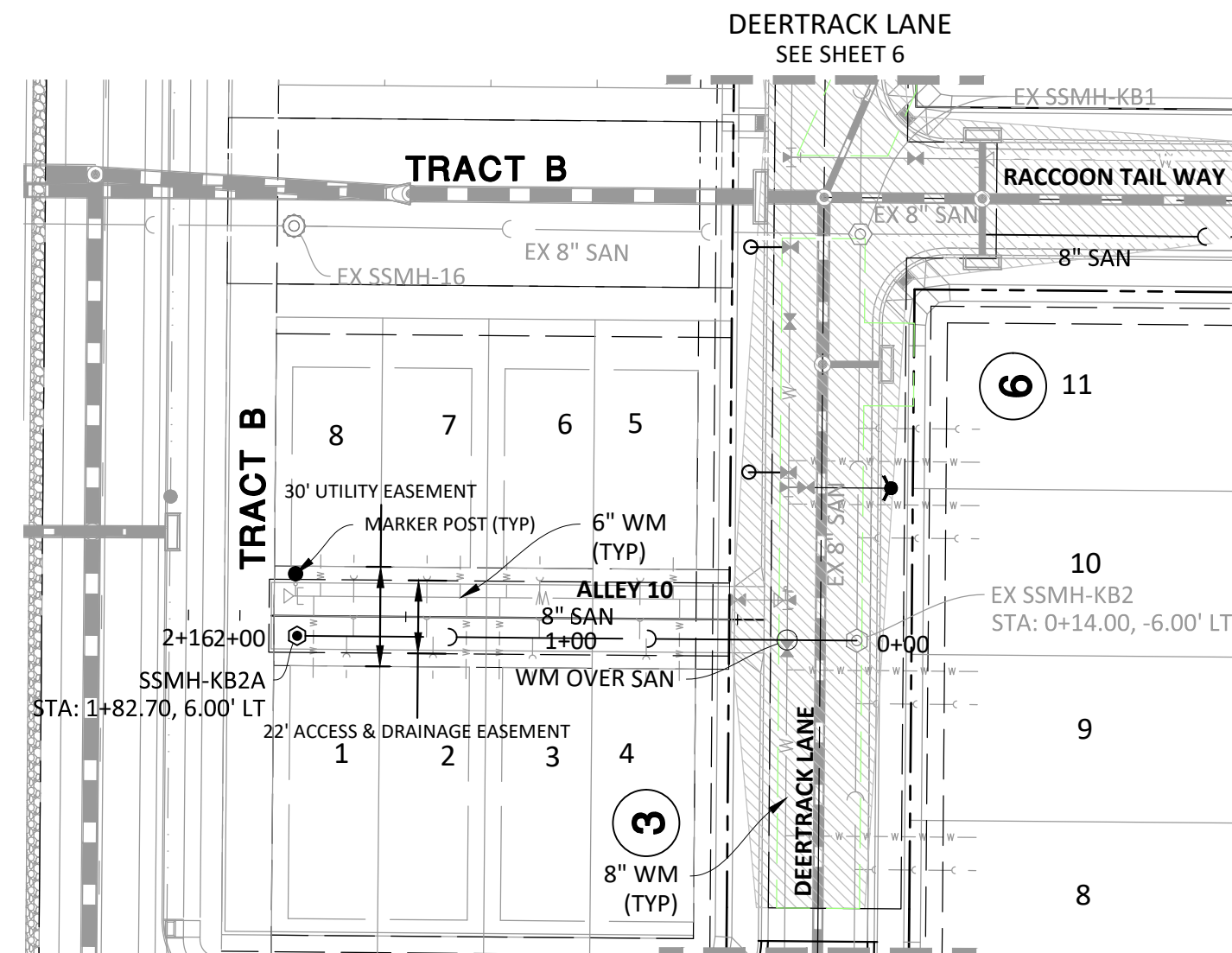
1. SET ALL MANHOLE RIMS NOT IN PAVED AREAS 6" ABOVE FINISHED GRADE AND PROVIDE CARSONITE MARKER POST AT 5' OFFSET W/ CONCRETE COLLAR.
2. ALL WATER LINES WITHIN THE COMPARK SOUTH DEVELOPMENT WILL BE REQUIRED TO BE C9000 DR14 PIPE MATERIAL WITH A MINIMUM 4.5' OF COVER.
3. WATER MAIN SHALL BE CONSTRUCTED USING MANUFACTURER SPECIFICATION: EBAA IRON SERIES 3800 MEGACOUPLING HIGH DEFLECTION COUPLINGS SHALL BE UTILIZED FOR ALL DEFLECTIONS AT JOINTS.
4. ALL PLUGS AT END OF WATER LINES SHALL HAVE A 2" BLOWOFF IN MANHOLE. REFER TO SHEET 13 FOR DETAIL.



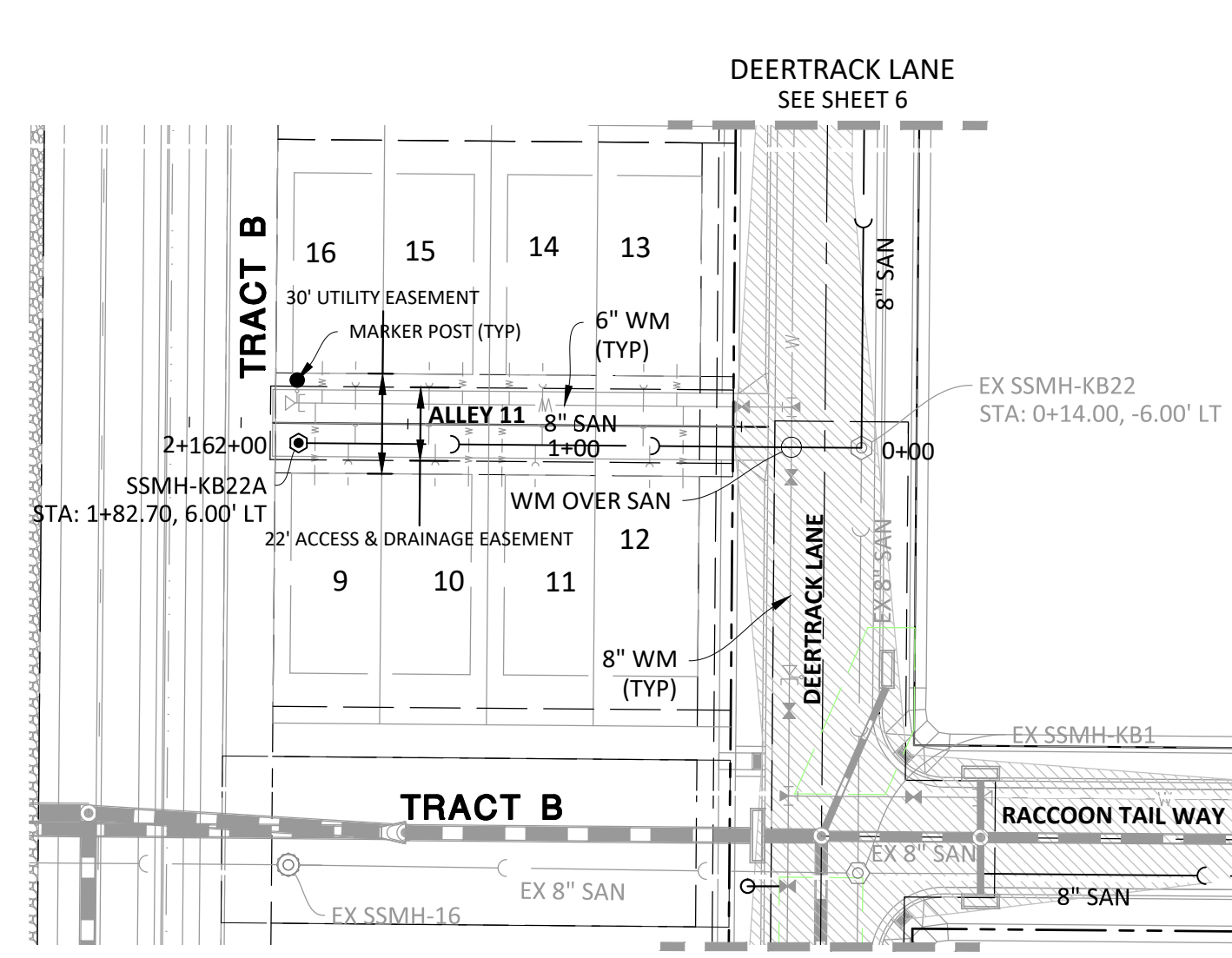
SOURCE BENCHMARKS:

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)

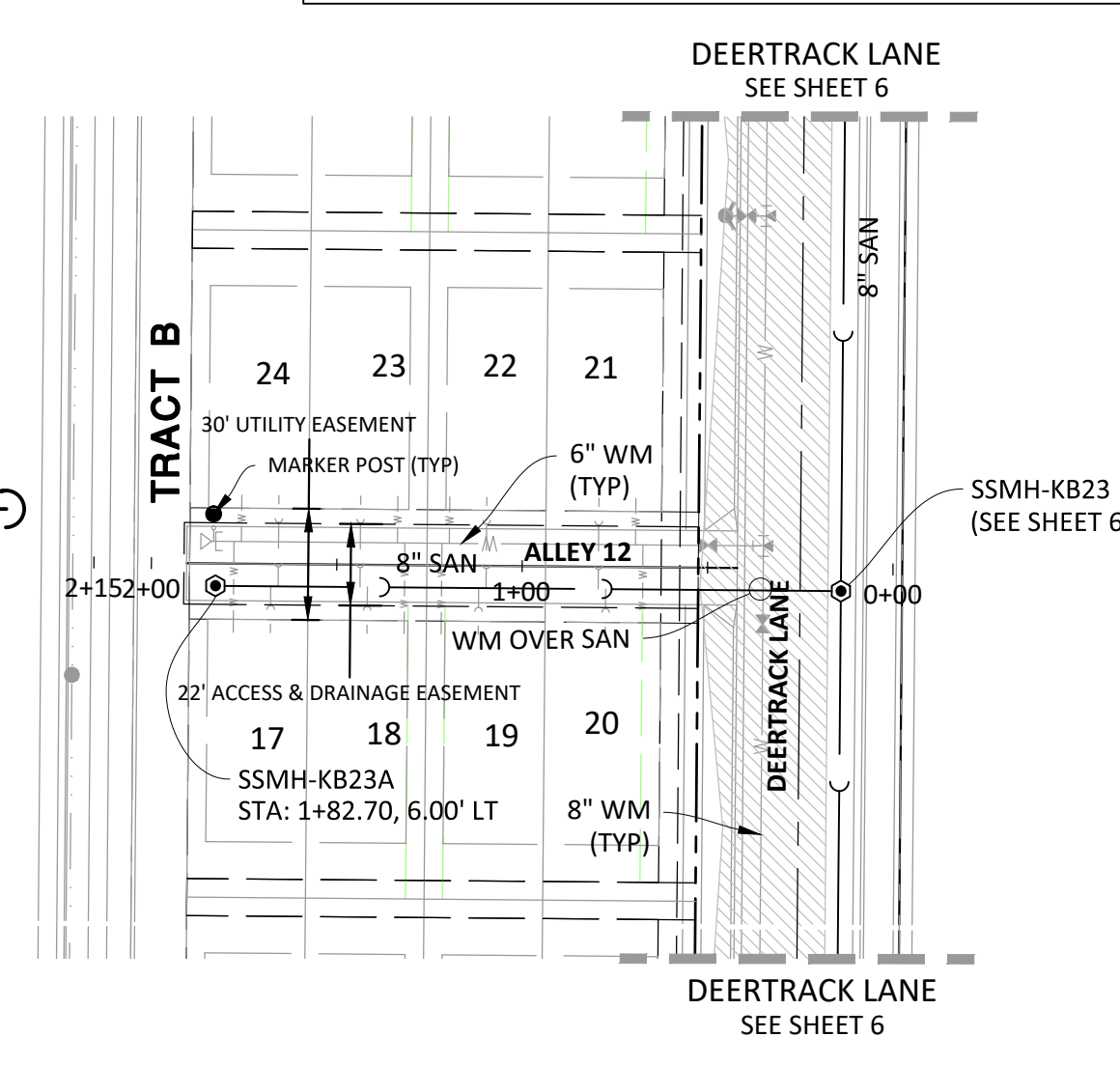
DATE	REVISIONS
11/20/20	REVISED PER SWM COMMENTS
07/20/17	FINAL SUBMITTAL
06/20/17	REVISED ALLEY EASEMENTS
08/20/16	REVISED PER SWM COMMENTS



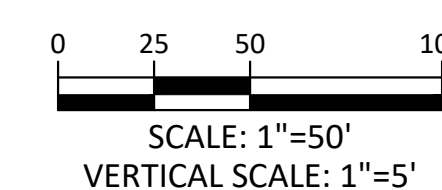
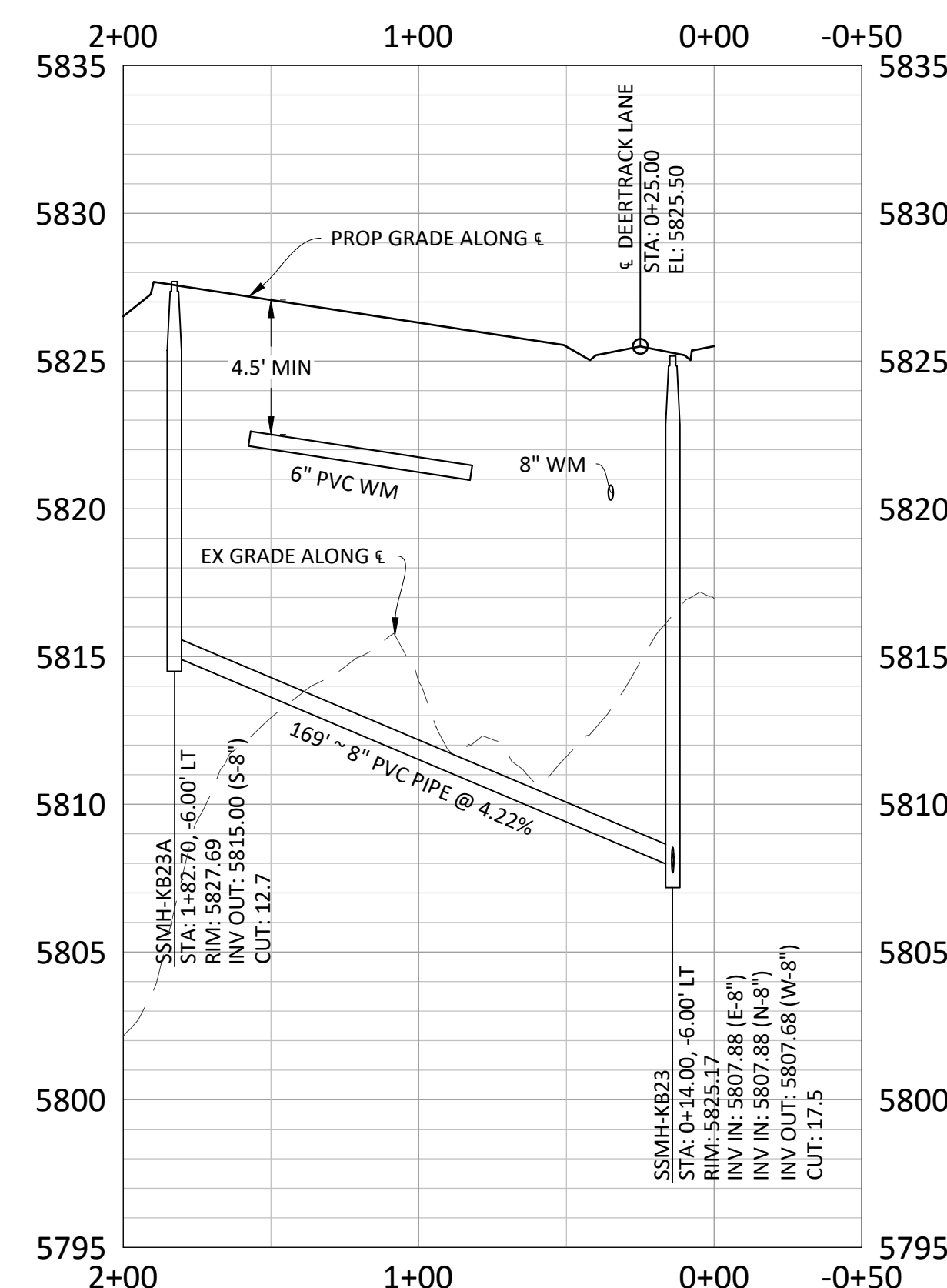
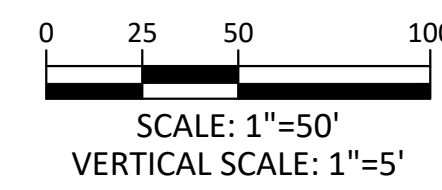
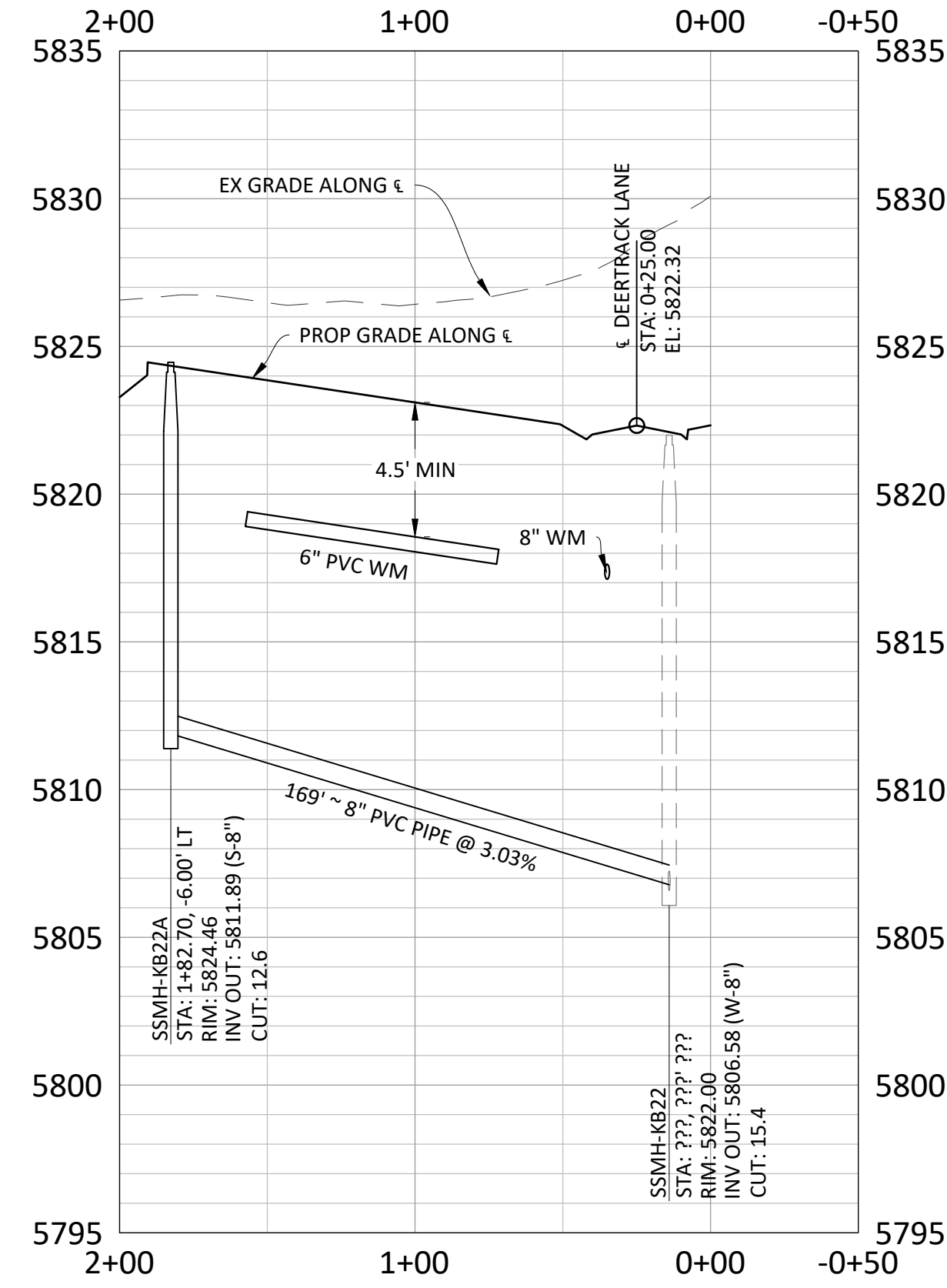
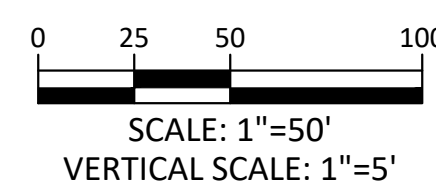
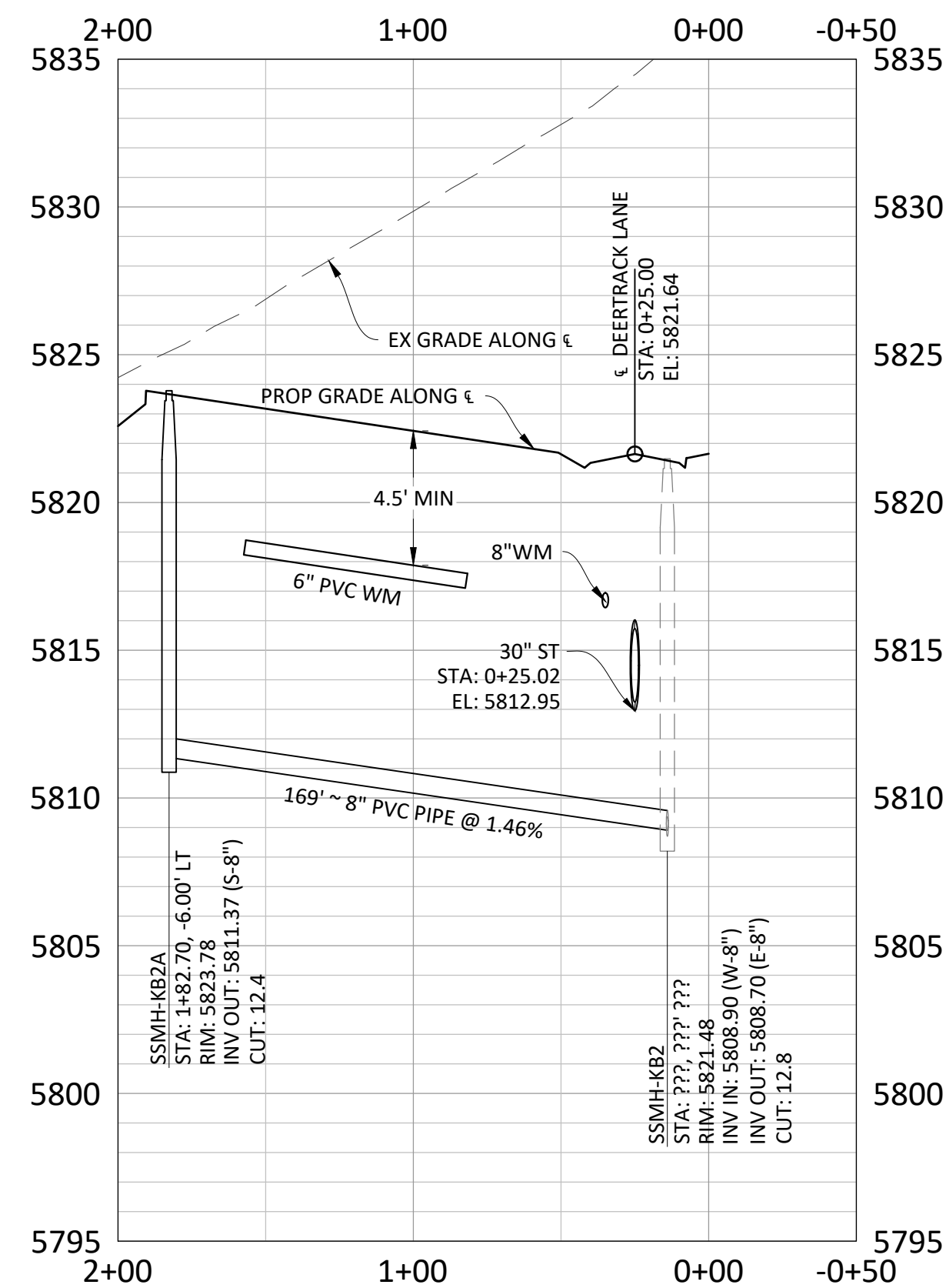
ALLEY 10



ALLEY 11



ALLEY 12



Plotted: 11/20/2020 9:50 AM. Draw Name: C:\pdk3\homsouth05-residential.ctb\Drawings\Plan Set\District\PHASE 2\05B-P&P-7-Alley 10-12.dwg. Updated By: JHawthorne

Manhard
CONSULTING

7600 East Orchard Road, Suite 100-2, Greenwood Village, CO 80111, ph:303.778.0800 manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

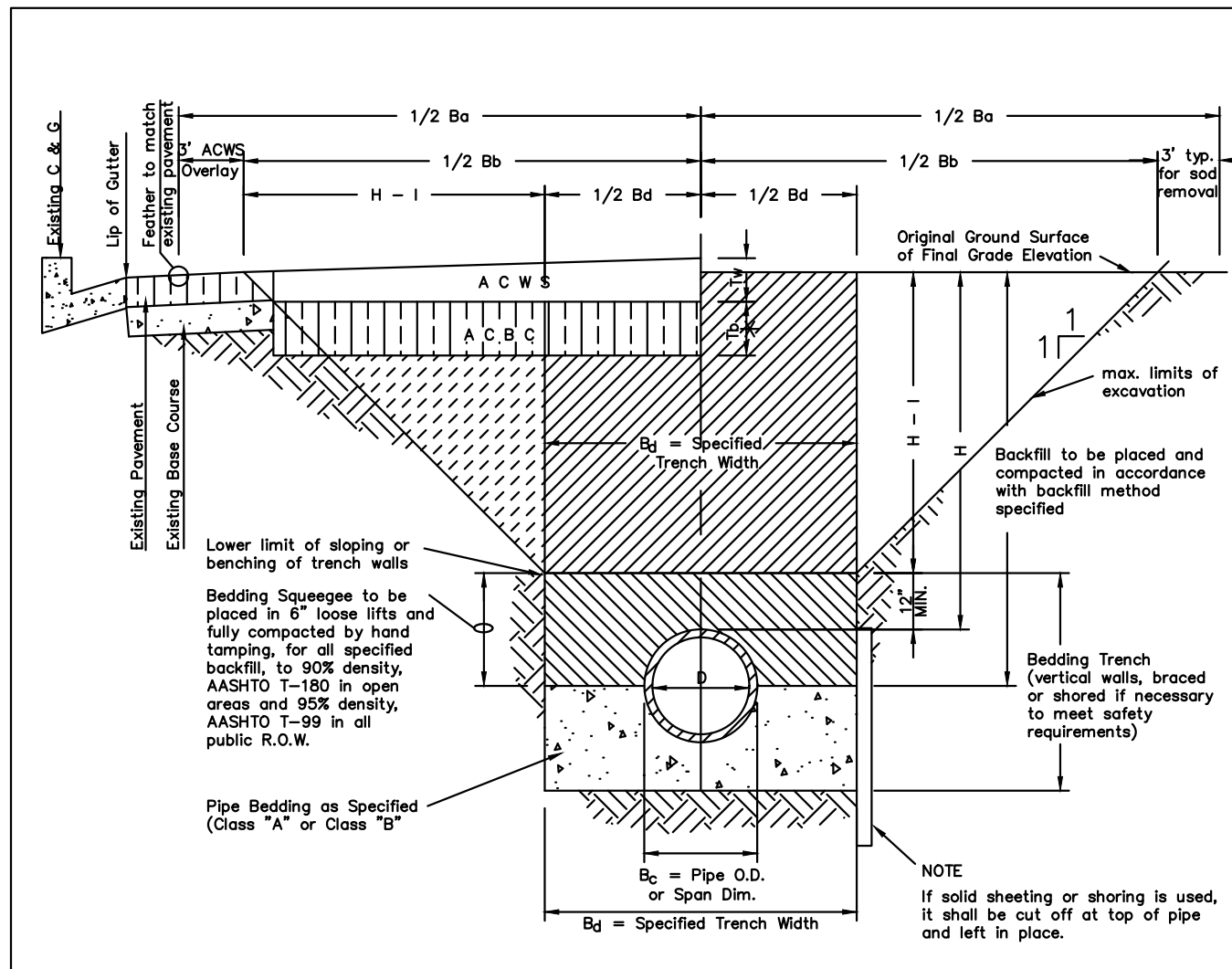
COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1

TOWN OF PARKER, COLORADO

SANITARY SEWER PLAN AND PROFILE - ALLEY 10-12

PROJ. MGR.: RJM
PROJ. ASSOC.: RAK
DRAWN BY: ASD
DATE: 10/20/16

SHEET
10 OF 14
CLCPK3



TYPICAL TRENCH DETAIL

NOTES:

- Sliping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.
- Trench shall be braced and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, etc. Unless otherwise specified on the plans, no pavement will be made for removal, replacement or relocation of curb and gutter, utilities, sidewalk, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.
- If dimension T_2 is $\leq 5'$, then existing asphalt pavement shall be removed and replaced up to the gutter. Maximum asphalt pay width, B_2 & B_3 shall then be based upon this actual width.

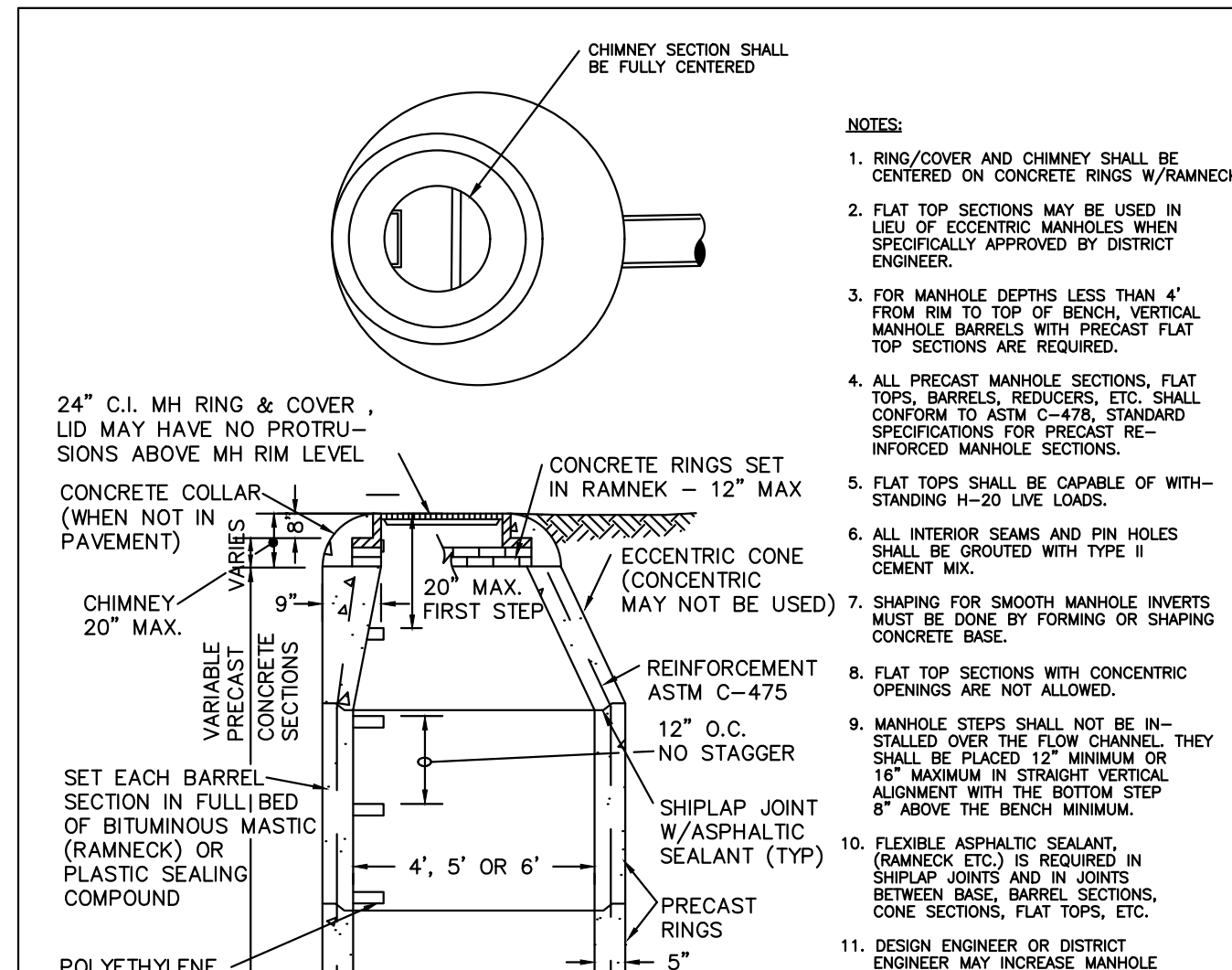
ASPHALT AND BASE COURSE REPLACEMENT SCHEDULE

STREET WIDTH	ASPHALTIC BASE COURSE (T ₂)	ASPHALTIC WEARING SURFACE (T ₃)	TOTAL THICKNESS (T ₂ + T ₃)
UP TO 36'	4"	2"	6"
36' TO 44'	4"	3"	7"
44' TO 48'	5"	3"	8"
WIDER THAN 48'	6"	3"	9"

STONEGATE VILLAGE METROPOLITAN DISTRICT SEWER TRENCHING AND BEDDING DETAIL

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER

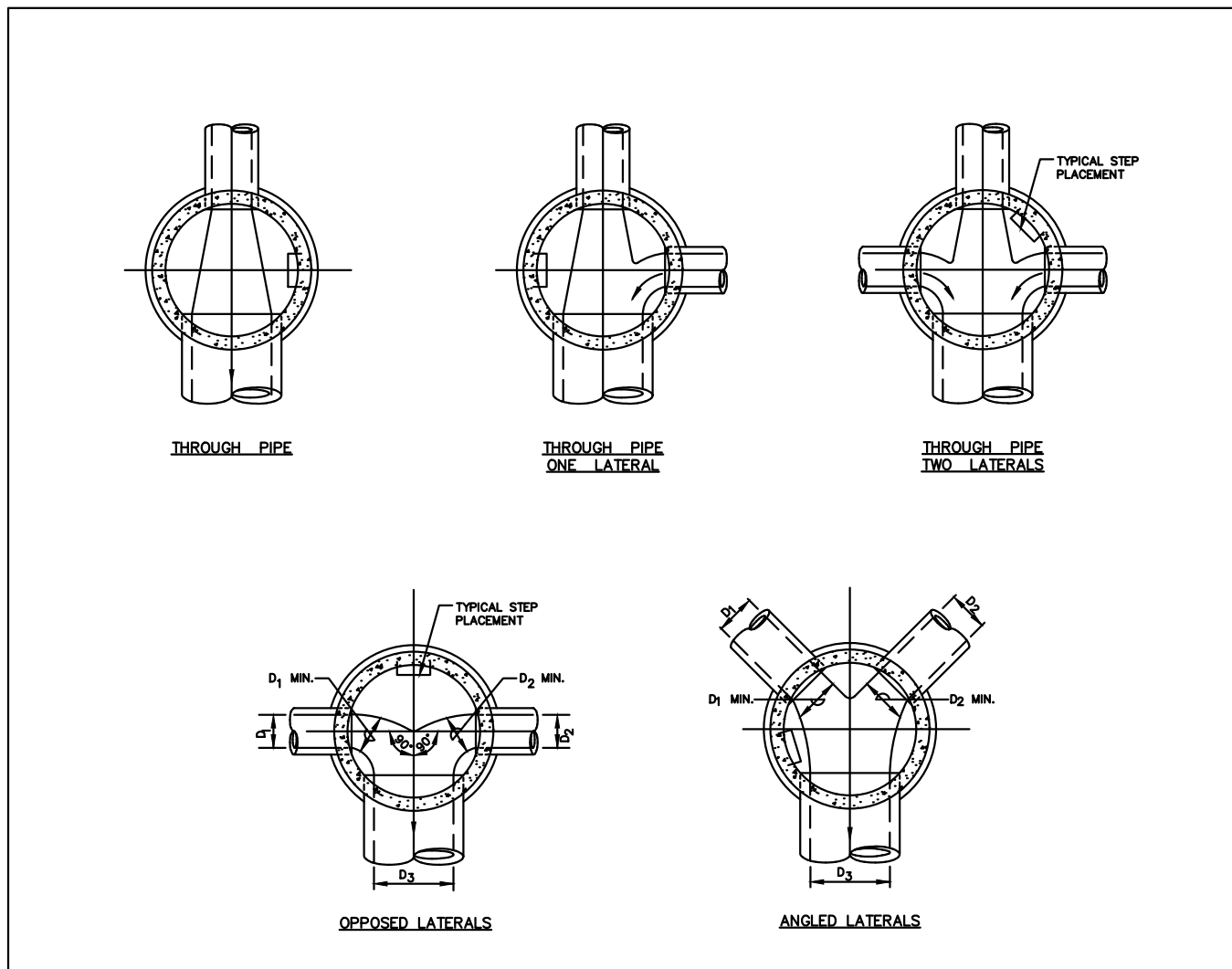


STONEGATE VILLAGE METROPOLITAN DISTRICT PRECAST MANHOLE ECCENTRIC CONE

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER

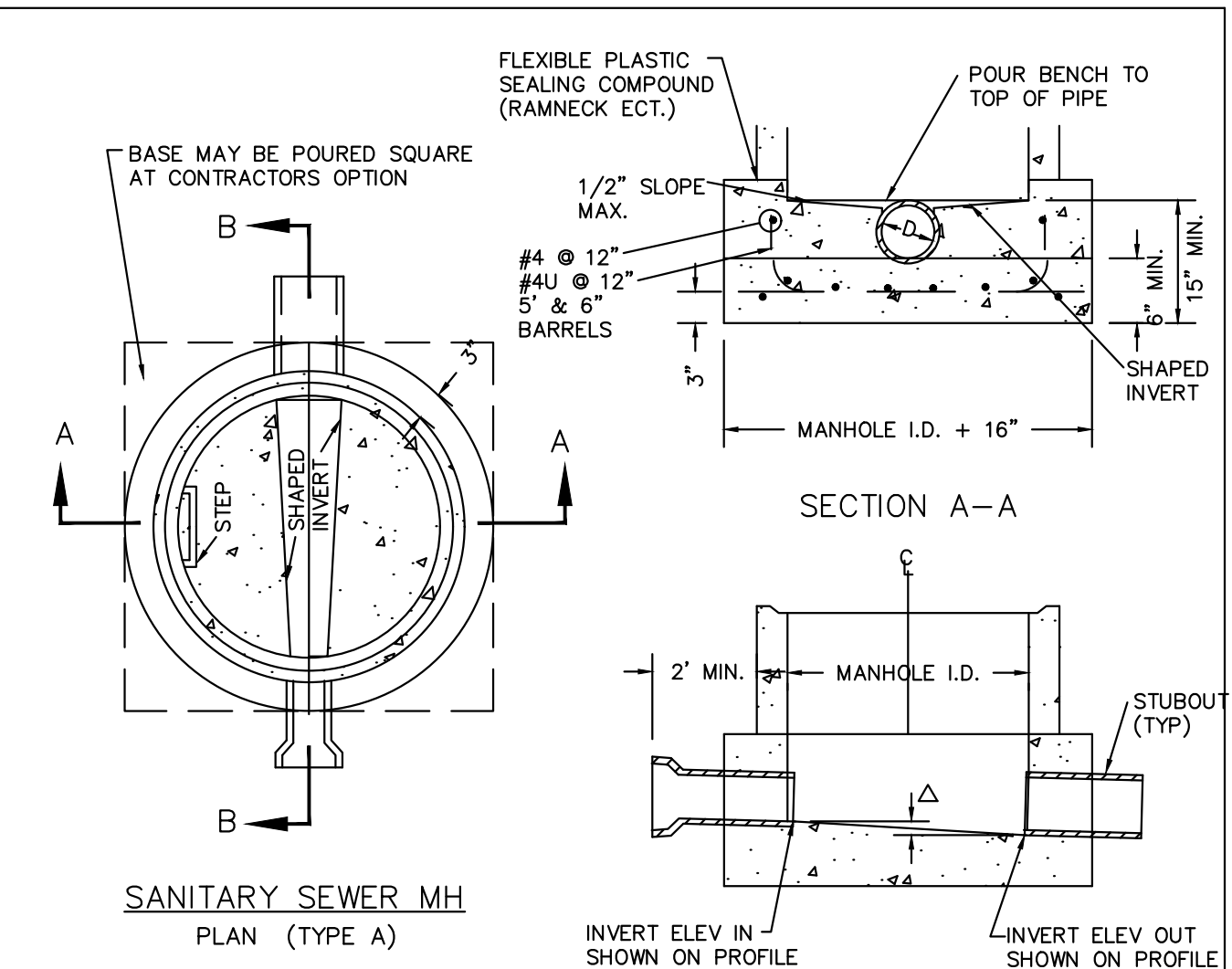
PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN



STONEGATE VILLAGE METROPOLITAN DISTRICT TYPICAL BASE CHANNELIZATION DETAILS

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER

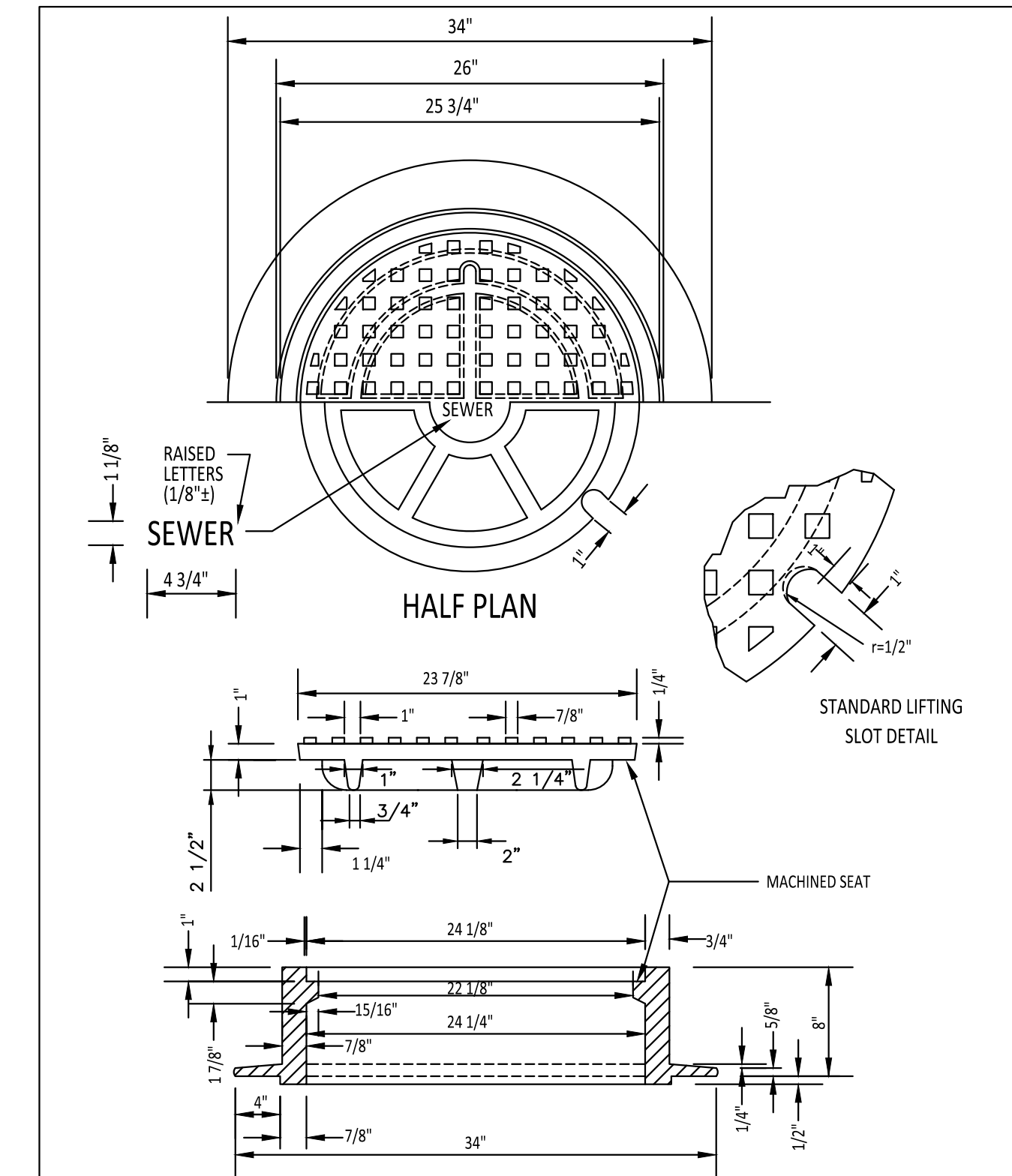


STONEGATE VILLAGE METROPOLITAN DISTRICT CAST-IN-PLACE MANHOLE BASE DETAIL

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER

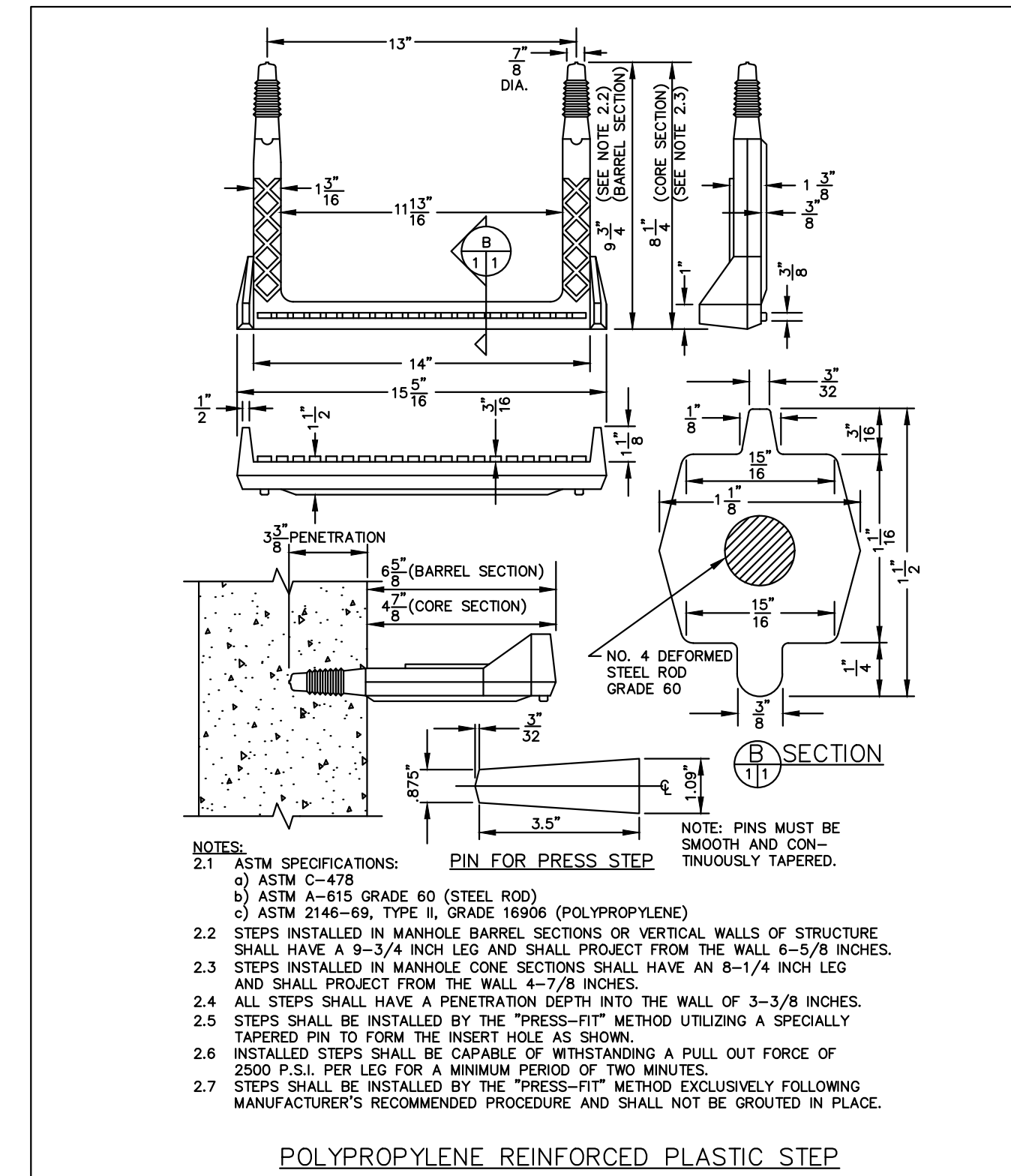
2000 REVISION



STONEGATE VILLAGE METROPOLITAN DISTRICT 24" DIAMETER RING AND COVER

SCALE: NONE DATE: 4/20

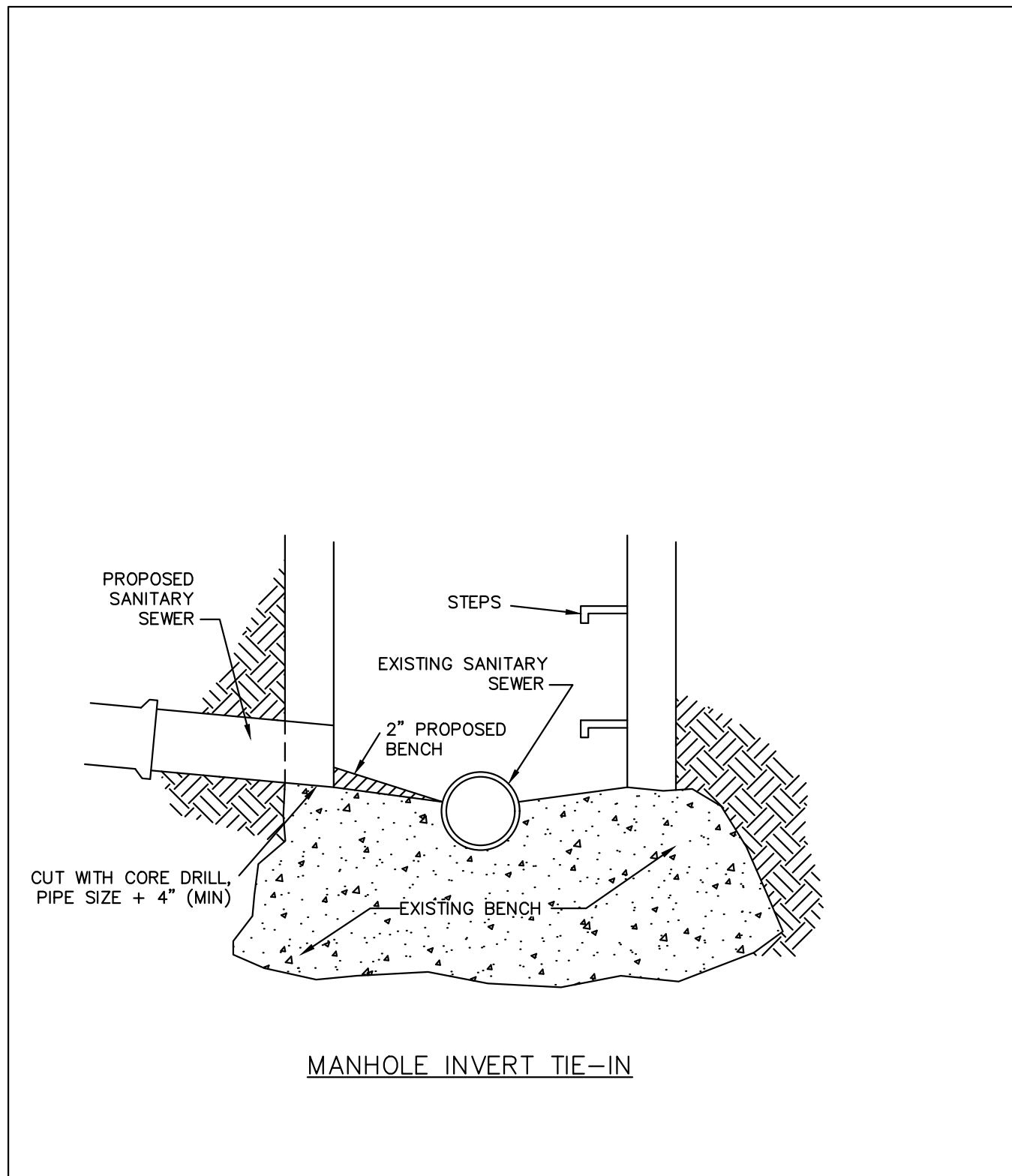
APPROVED: RJC DISTRICT ENGINEER



STONEGATE VILLAGE METROPOLITAN DISTRICT POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP

SCALE: NONE DATE: 4/20

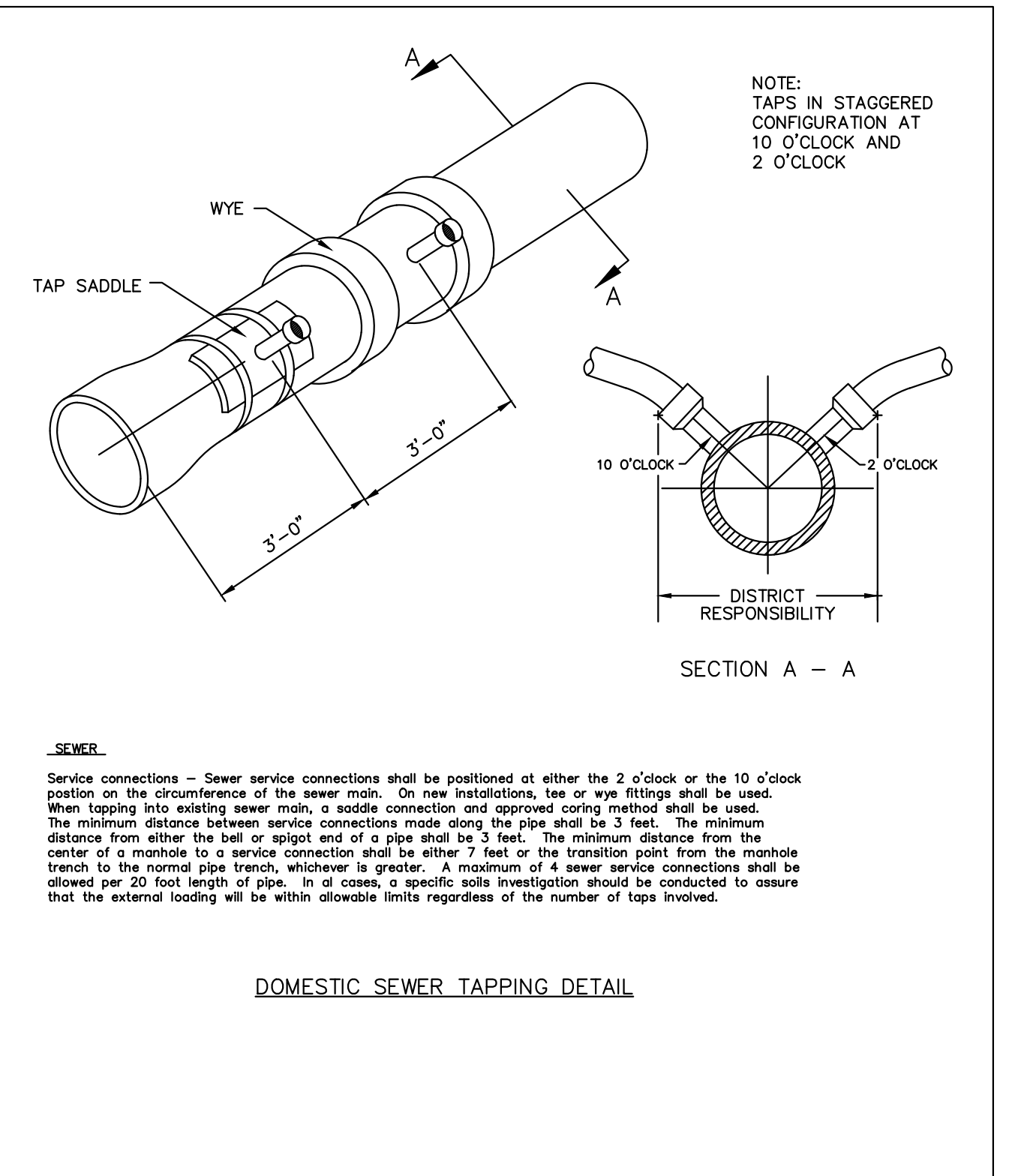
APPROVED: RJC DISTRICT ENGINEER



STONEGATE VILLAGE METROPOLITAN DISTRICT MANHOLE INVERT TIE-IN DETAIL

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER



STONEGATE VILLAGE METROPOLITAN DISTRICT DOMESTIC SEWER TAPPING DETAIL

SCALE: NONE DATE: 4/20

APPROVED: RJC DISTRICT ENGINEER

NOTE:

- CASTING SPECIFICATIONS: ASTM A-48 WITH A MINIMUM TENSILE STRENGTH OF 25 KSI (CLASS 25)
- All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equal)
- Casting Shall Be As Specified Below Or Equal:

Comco Foundry Inc C-1161
Hutchinson Foundry & Steel Inc MH-400

NOTES:

- ASTM SPECIFICATIONS:
 - ASTM C-475
 - ASTM A-615 GRADE 60 (STEEL ROD)
 - ASTM 2146-89, TYPE I, GRADE 1500S (POLYPROPYLENE)
- STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 9-3/4" INCH LEG AND SHALL PROJECT FROM THE WALL 6-5/8" INCHES.
- STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8-1/4" INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8" INCHES.
- ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8" INCHES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.
- INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 P.S.I. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.

NOTE: TAPS IN STAGGERED CONFIGURATION AT 10 O'CLOCK AND 2 O'CLOCK

SEWER: Service connections - Sewer service connections shall be positioned at either the 2 o'clock or the 10 o'clock position on the circumference of the sewer main. On new installations, tee or wye fittings shall be used. When tapping into existing sewer main, a saddle connection and approved coring method shall be used. The minimum distance between service connections made along the pipe shall be 3 feet. The minimum distance from either the bell or spigot end of a pipe shall be 3 feet. The minimum distance from the center of a manhole to a service connection shall be either 7 feet or the transition point from the manhole trench to the normal pipe trench, whichever is greater. A maximum of 4 sewer service connections shall be allowed per 20 foot length of pipe. In all cases, a specific soils investigation should be conducted to assure that the external loading will be within allowable limits regardless of the number of taps involved.

Plotted: 11/20/2020 9:53 AM. Dwg Name: D:\C:\p3\3\homsou005-residential\cd\1\dwg\Enr\Final Drawings\Plan Set\District\PHASE 2\05B-SANITARY DETAILS.dwg. Updated By: RKAZ

Manhard CONSULTING

7600 East Orchard Road, Suite 100, Greenwood Village, CO 80121, phone: 303.750.0500 manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS | Water Resource Management

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1

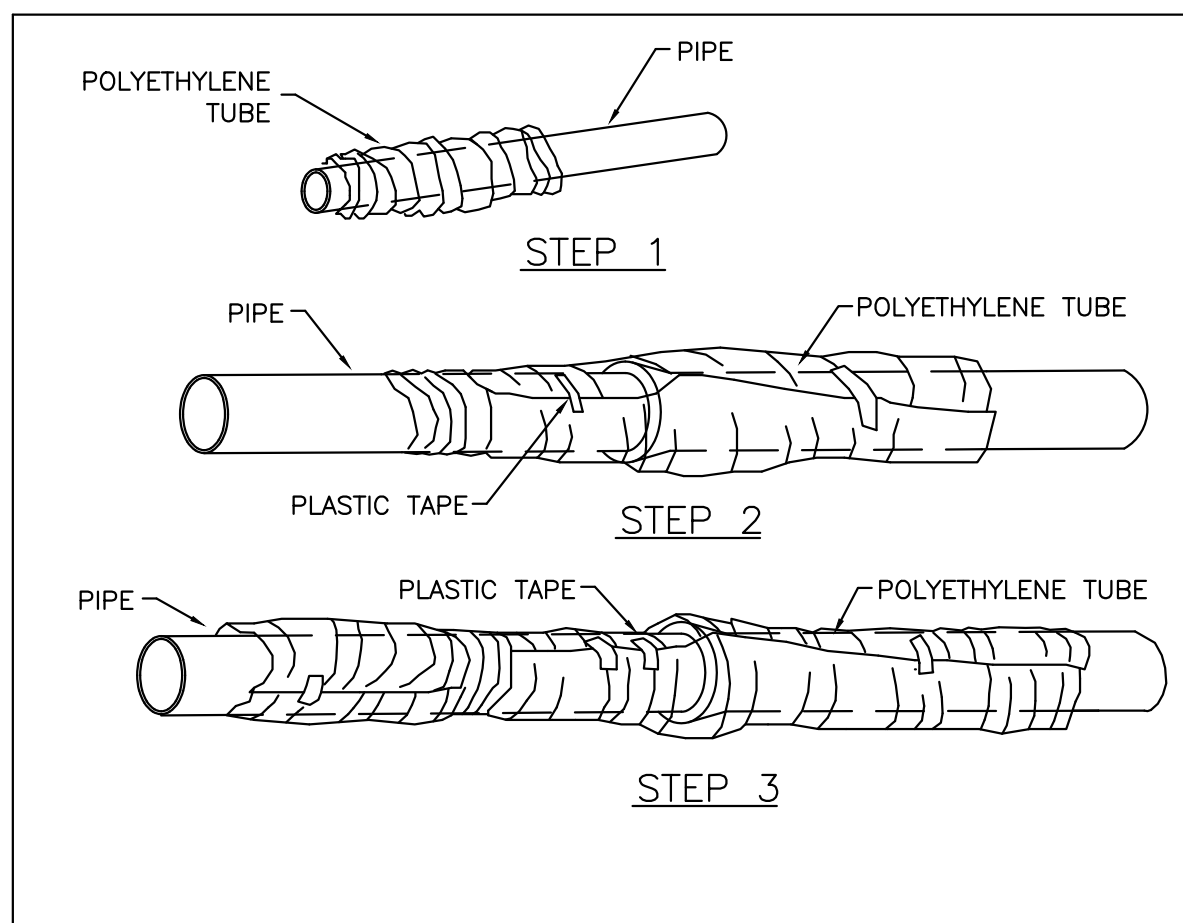
TOWN OF PARKER, COLORADO

SANITARY SEWER CONSTRUCTION DETAILS

PROJ. MGR.: RJM
PROJ. ASSOC.: RAK
DRAWN BY: ASD
DATE: 10/2016

SHEET 14 OF 14

CLCPK3



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.

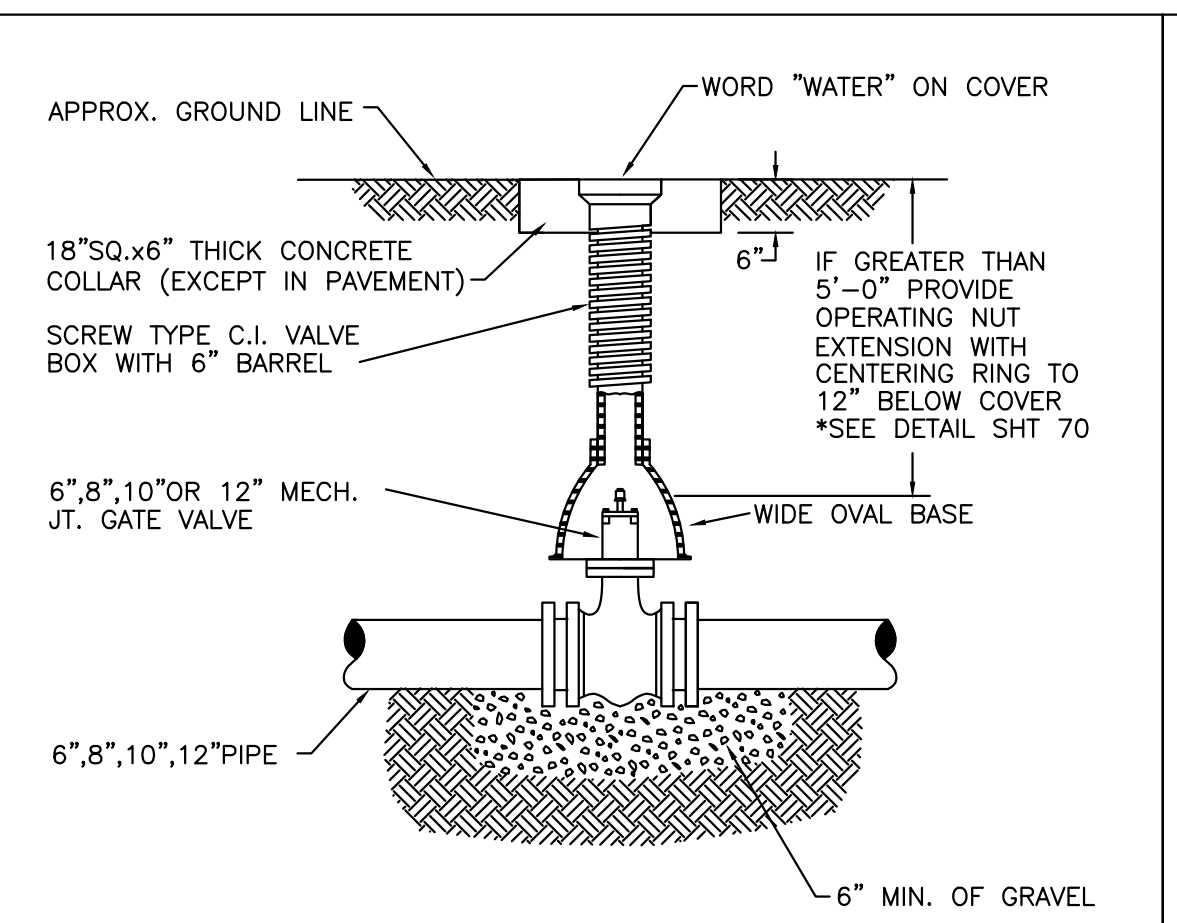
STEP 3 - OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF PIPE AND TAPED IN PLACE.

STONEGATE VILLAGE METROPOLITAN DISTRICT

POLYETHYLENE WRAP

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



6-INCH VALVE BOXES

Materials:
Valve box parts shall be made from gray cast iron, ASTM A48 Class 20A. Use of an aluminum alloy as a casting material is not acceptable.

Approved Patterns:
Valve boxes shall be the three-piece adjustable screw type and the following two patterns are acceptable.

1. Tyler screw-type 6-inch cast iron valve box assembly series 6860 with No. 160 oval base.
2. Clay and Bailey screw-type 6-inch cast iron valve box assembly No. P-108 with No. 160 large oval base.

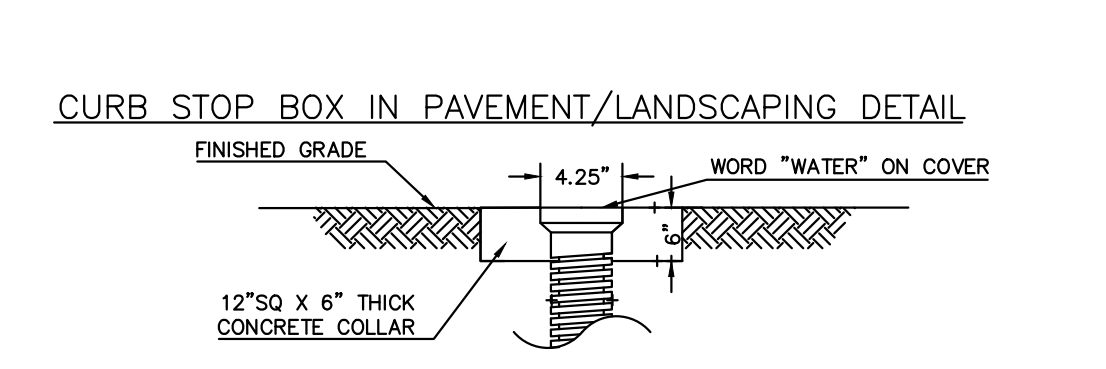
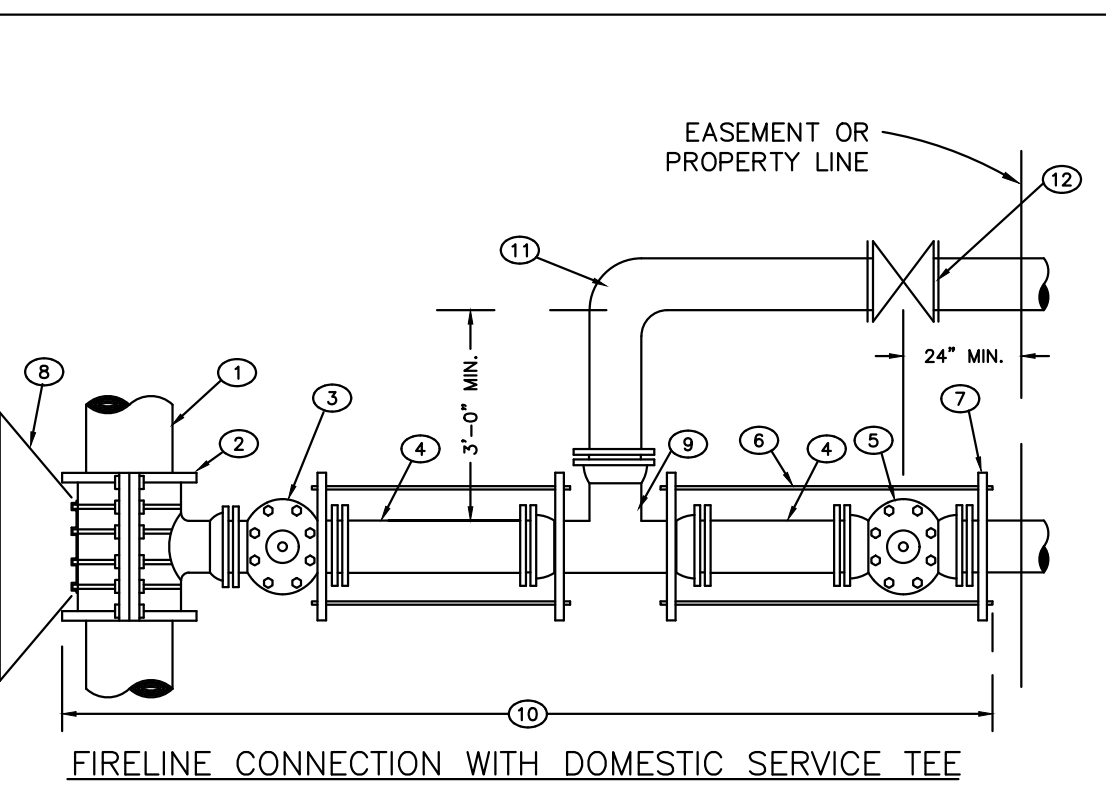
NOTES:
1. VALVE BOXES SHALL BE:
A. TYLER SCREW-TYPE 6\"/>

STONEGATE VILLAGE METROPOLITAN DISTRICT

VALVE BOX DETAIL

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



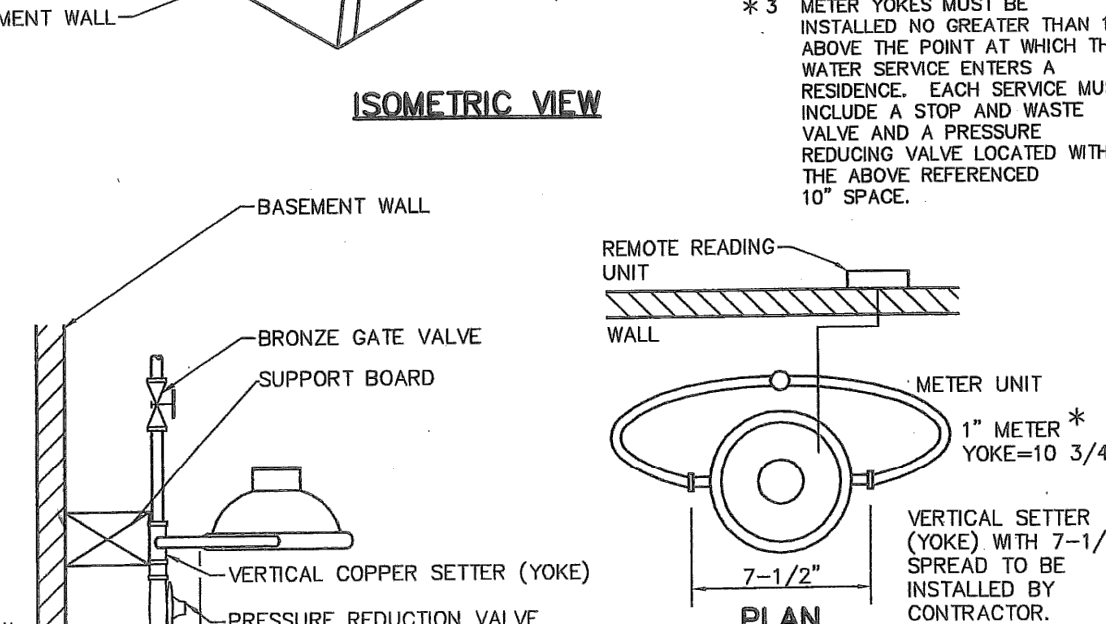
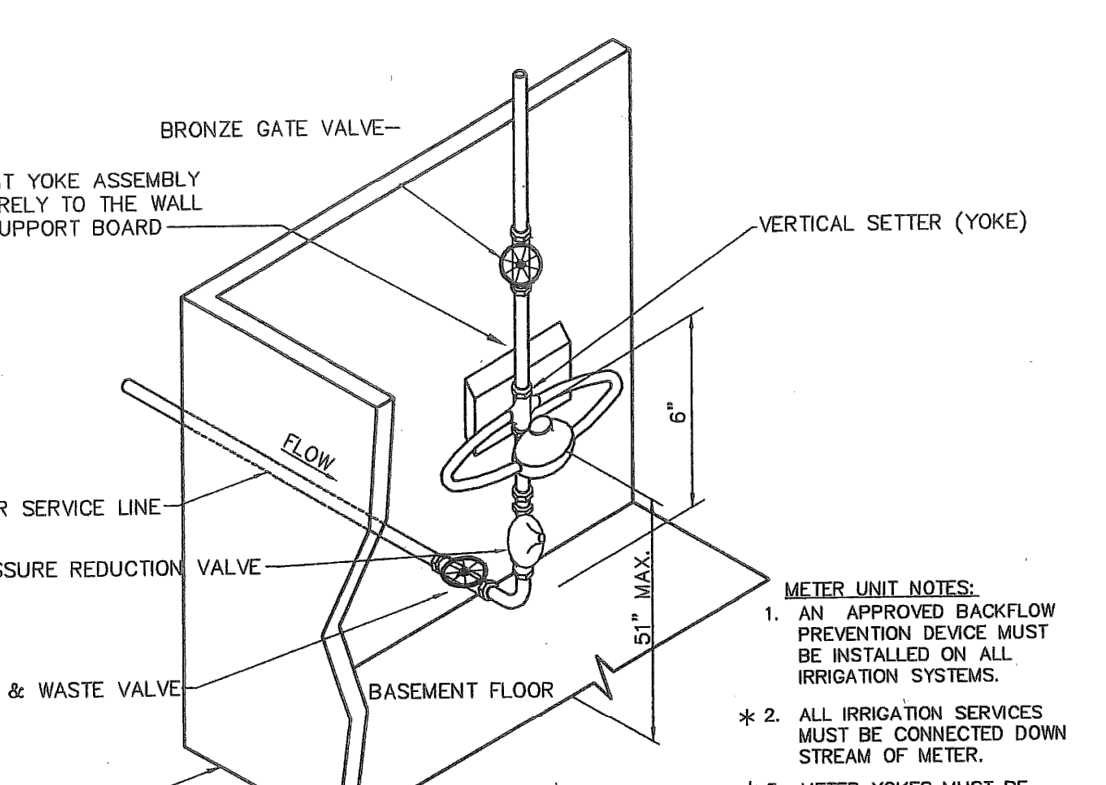
COMMERCIAL AND MULTI-FAMILY USE ONLY

STONEGATE VILLAGE METROPOLITAN DISTRICT

COMBINATION FIRE/SERVICE TAP

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

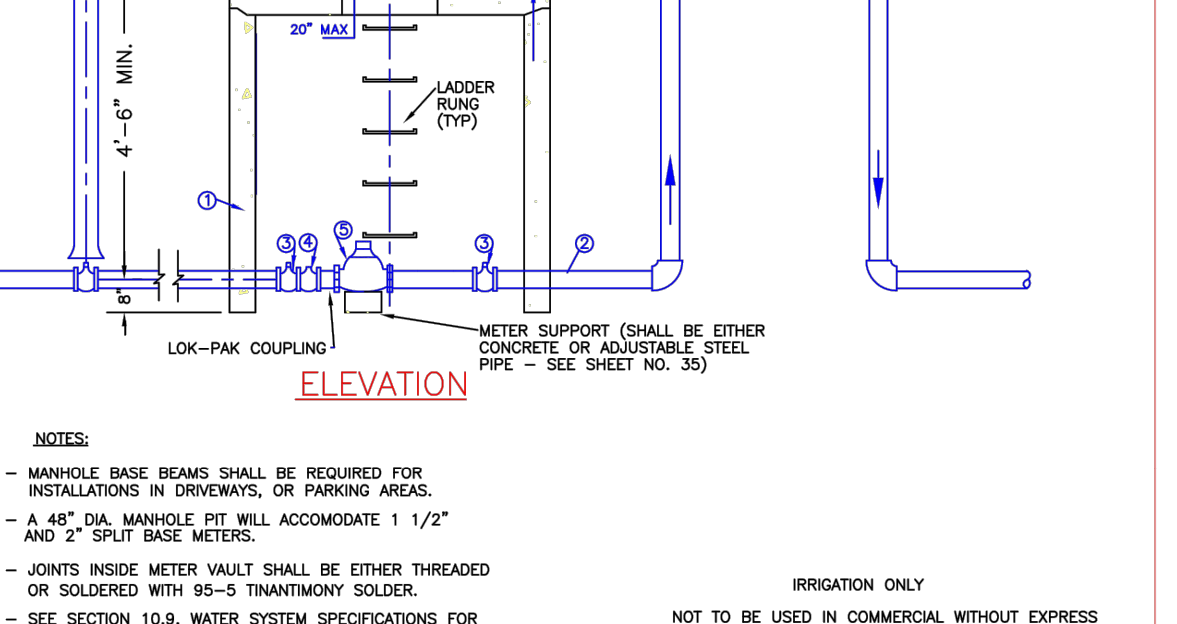
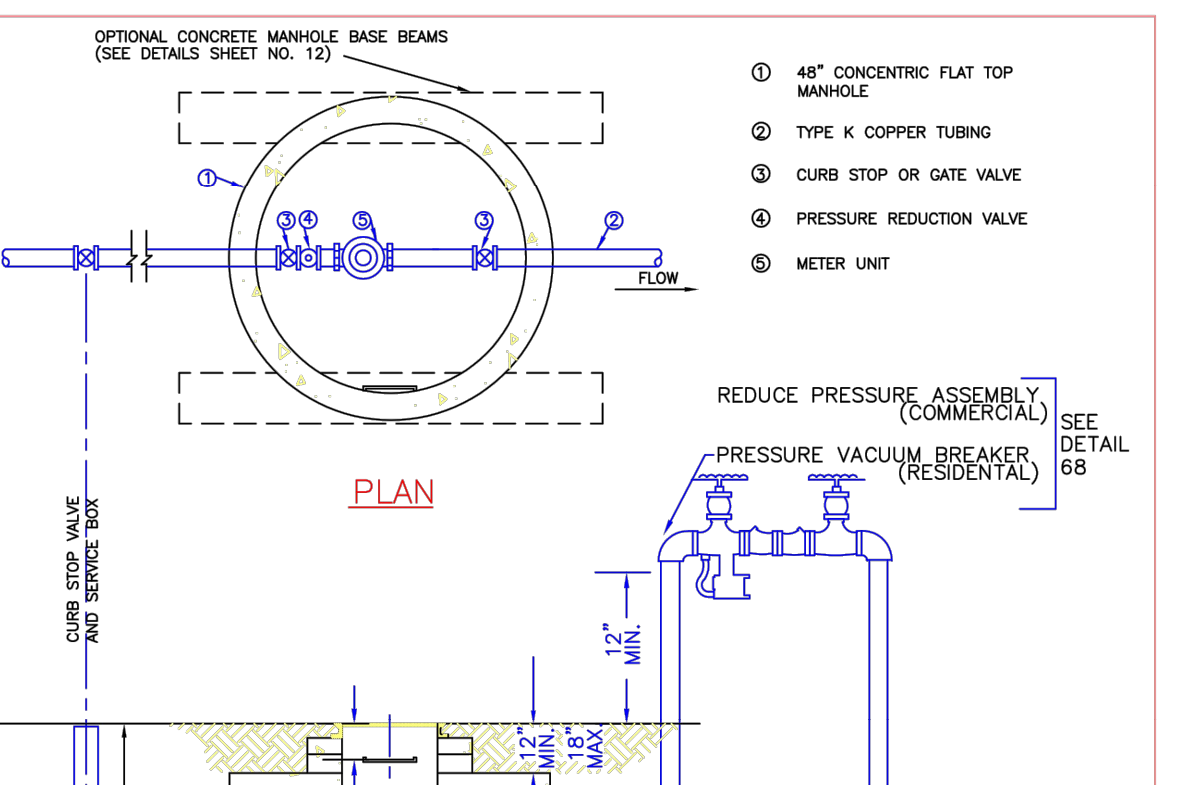


STONEGATE VILLAGE METROPOLITAN DISTRICT

SERVICE LINE, STOP BOX & INSIDE METER SETTING

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



STONEGATE VILLAGE METROPOLITAN DISTRICT

OUTSIDE SETTING FOR 1 1/2\"/>

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

LENGTH OF TIED PIPE

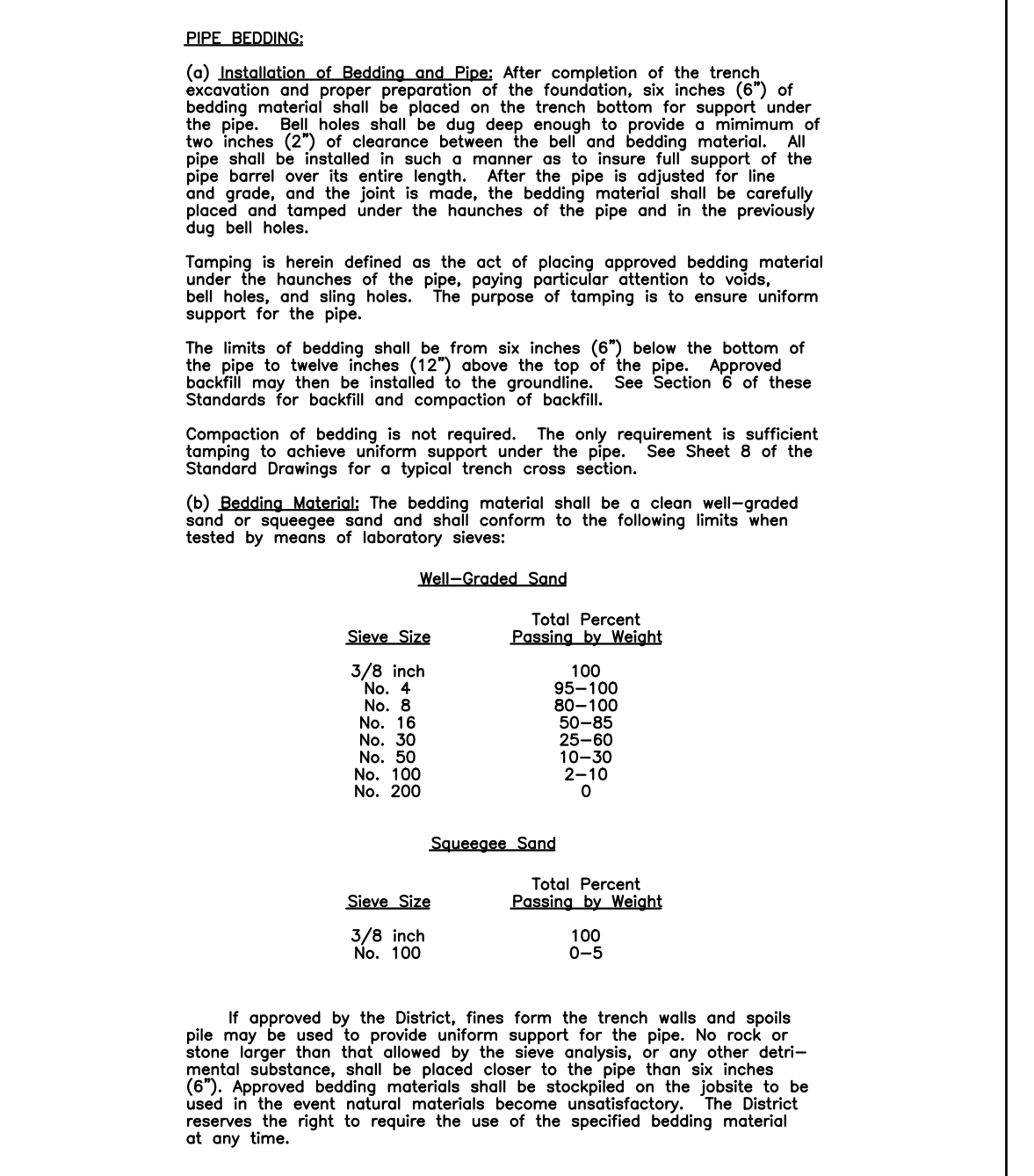
PIPE SIZE	4"		6"		8"		12"		16"		20"		24"	
	D	L	D	L	D	L	D	L	D	L	D	L	D	L
TEE OR VALVE	3/4"	16.0"	3/4"	13.0"	3/4"	10.0"	3/4"	6.0"	3/4"	4.0"	3/4"	2.0"	3/4"	1.0"
90° BEND	3/4"	16.0"	3/4"	13.0"	3/4"	10.0"	3/4"	6.0"	3/4"	4.0"	3/4"	2.0"	3/4"	1.0"
45° BEND	3/4"	16.0"	3/4"	13.0"	3/4"	10.0"	3/4"	6.0"	3/4"	4.0"	3/4"	2.0"	3/4"	1.0"
22-1/2° BEND	3/4"	16.0"	3/4"	13.0"	3/4"	10.0"	3/4"	6.0"	3/4"	4.0"	3/4"	2.0"	3/4"	1.0"
11-1/4° BEND	3/4"	16.0"	3/4"	13.0"	3/4"	10.0"	3/4"	6.0"	3/4"	4.0"	3/4"	2.0"	3/4"	1.0"

STONEGATE VILLAGE METROPOLITAN DISTRICT

LENGTH OF TIED PIPE

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

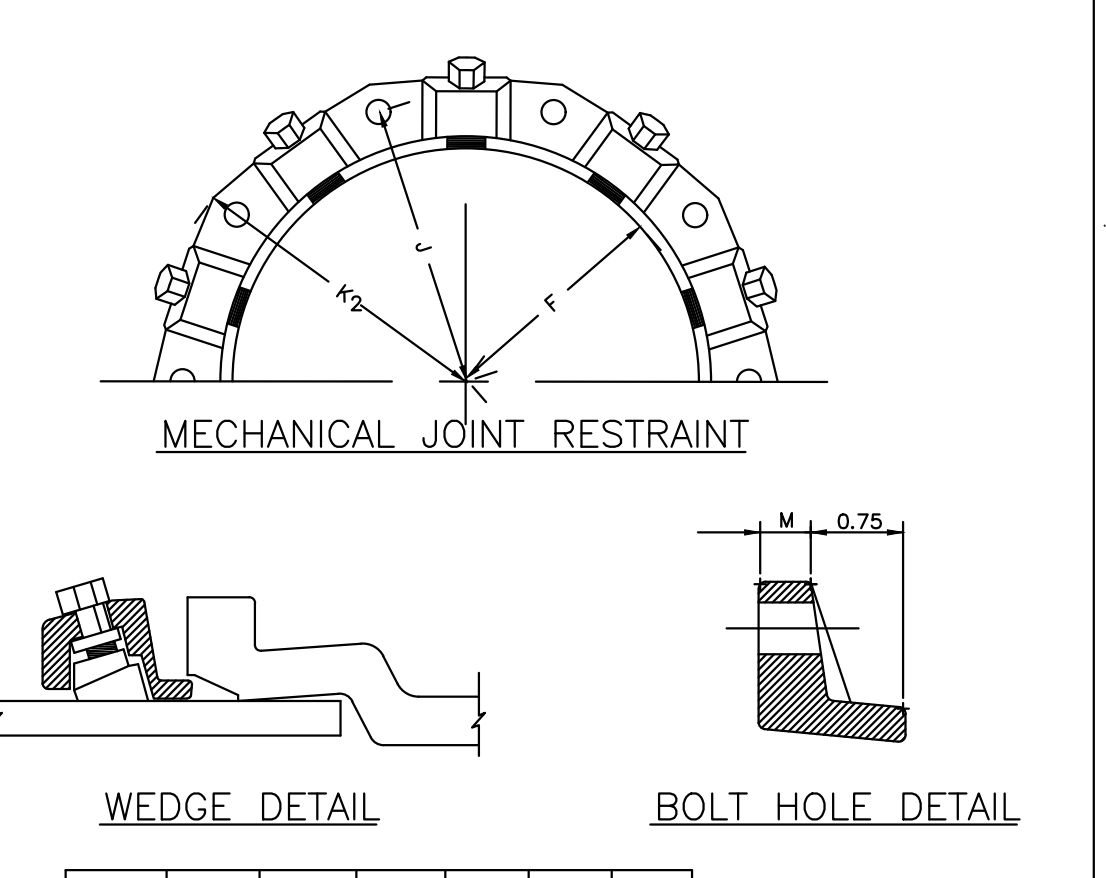


STONEGATE VILLAGE METROPOLITAN DISTRICT

PIPE BEDDING

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



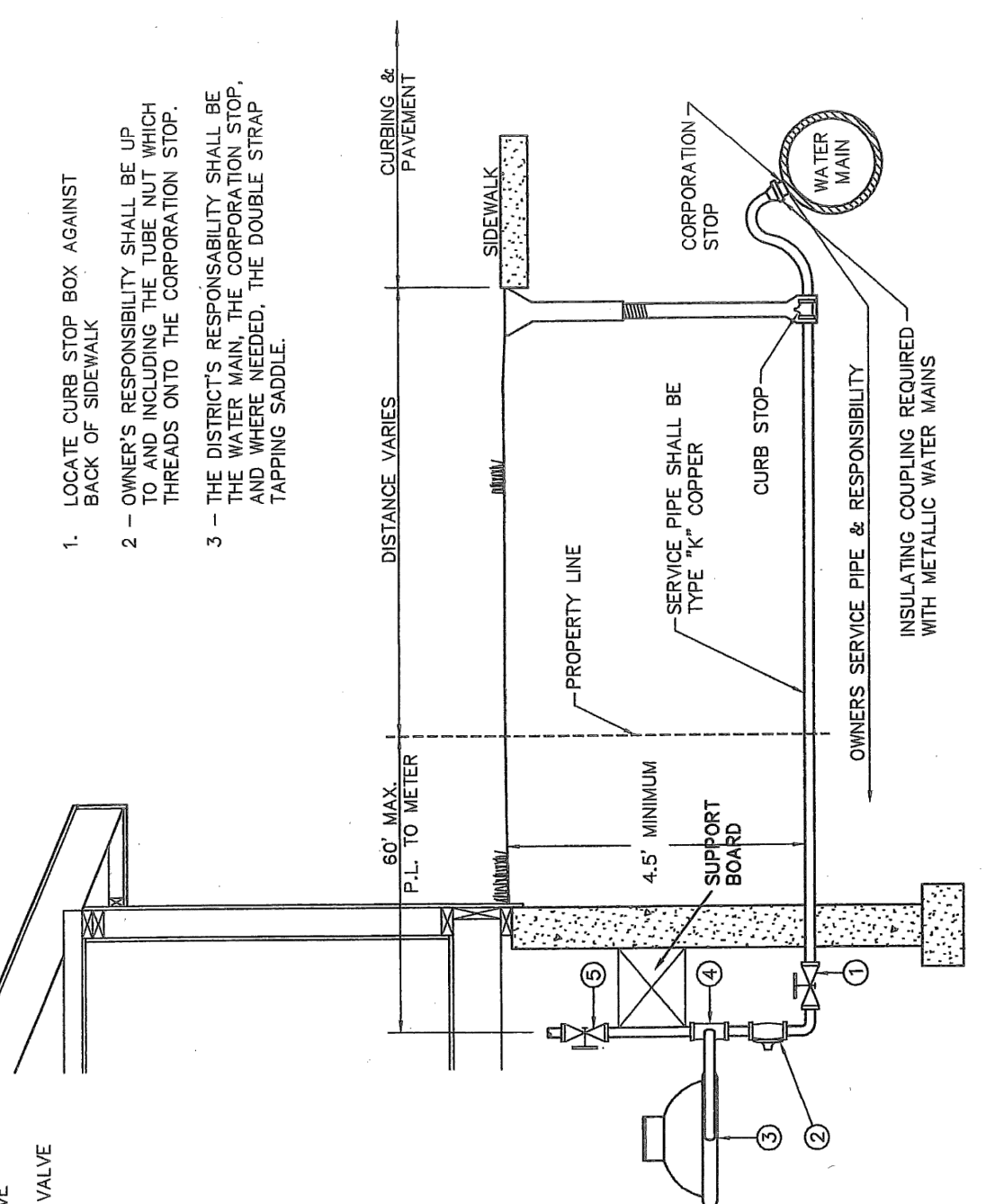
NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	J INCHES	F INCHES	M INCHES
P 4"	2	2				
V 6"	6	3	11.12	9.5	7.00	0.88
V 8"	6	4	13.37	11.75	9.15	1.00
C 10"	8	6	15.62	14.00	11.20	1.00
C 12"	8	8	17.88	16.25	13.30	1.25
D 4"	4	2				
D 6"	6	3	11.12	9.5	7.00	0.88
D 8"	6	4	13.37	11.75	9.15	1.00
D 10"	8	6	15.62	14.00	11.20	1.00
D 12"	8	8	17.88	16.25	13.30	1.25

STONEGATE VILLAGE METROPOLITAN DISTRICT

MECHANICAL JOINT RESTRAINT DETAILS

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

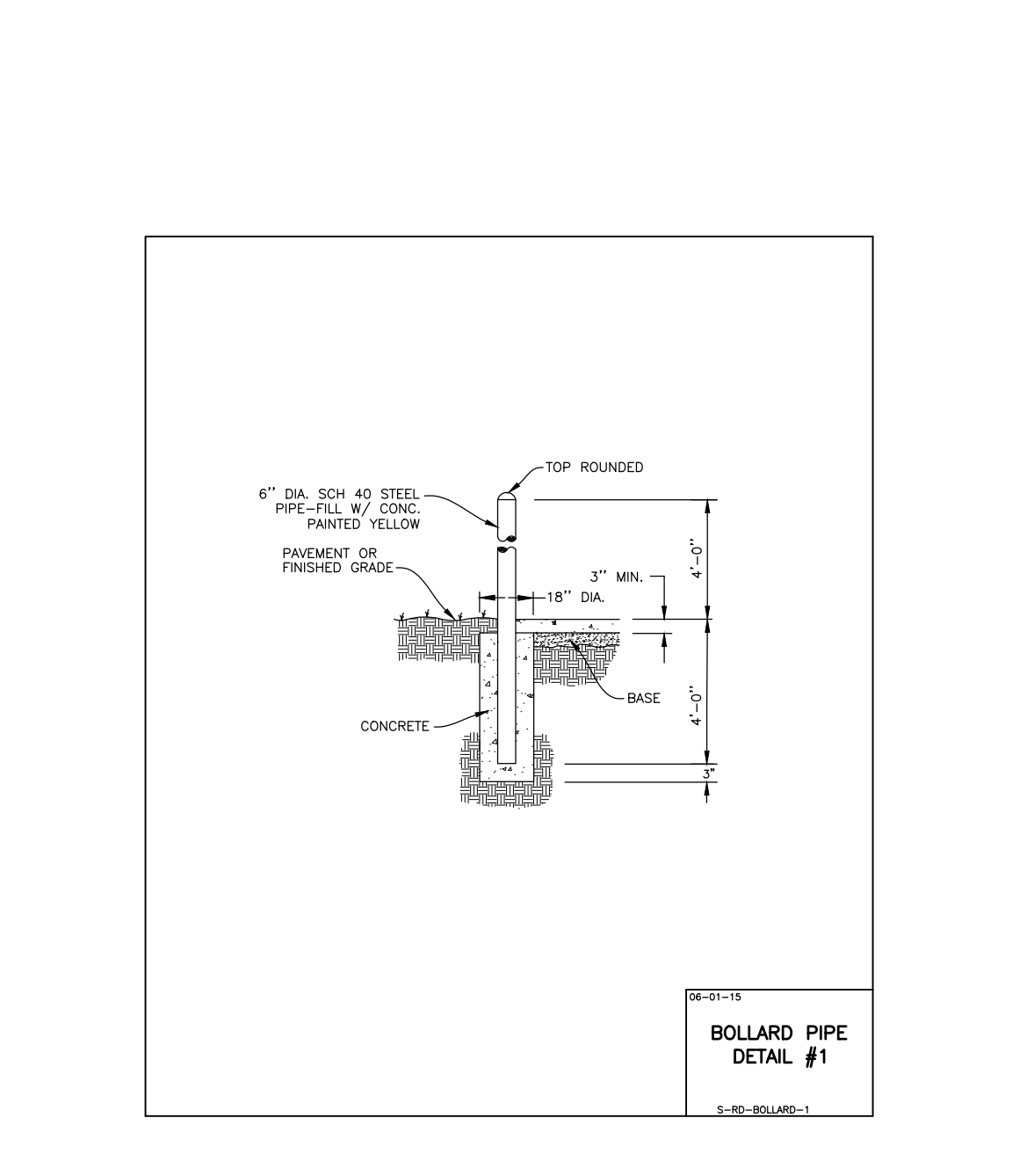


STONEGATE VILLAGE METROPOLITAN DISTRICT

REMOTE READING 3/4\"/>

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER



STONEGATE VILLAGE METROPOLITAN DISTRICT

BOLLARD PIPE DETAIL #1

SCALE: NONE DATE: 4/00

APPROVED: R/JG DISTRICT ENGINEER

Manhard CONSULTING

1700 East Orchard Road, Suite 100-100, Greenwood Village, CO 80120, phone: 303.778.0500 manhard.com

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

DATE: 11/20/2020

REVISIONS:

NO.	DATE	DESCRIPTION
1	11/20/2020	REVISED PER SAND COMMENTS
2	07/20/2017	FINAL SUBMITTAL
3	06/20/2017	REVISED ALLEY EASEMENTS
4	08/20/2016	REVISED PER SAND COMMENTS

COMPARK VILLAGE SOUTH FILING NO. 2 - AMENDMENT NO. 1

TOWN OF PARKER, COLORADO

WATER SYSTEM CONSTRUCTION DETAILS

PROJ. MGR.: R/JM

PROJ. ASSOC.: RAK

DRAWN BY: ASD

DATE: 10/20/16

SHEET 14 OF 14

CLCPK3