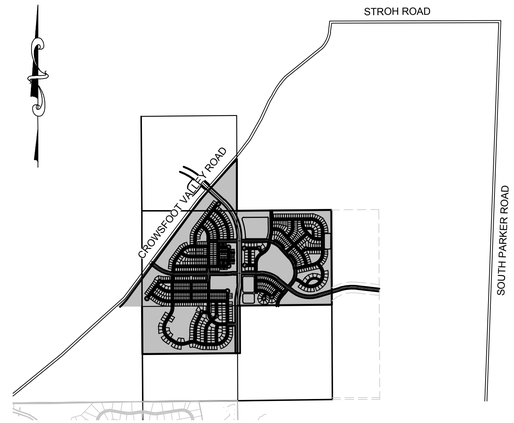
TRAILS AT CROWFOOT

PRELIMINARY UTILITY CONSTRUCTION PLANS

SECTIONS 4, 8, AND 9 TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN COUNTY OF DOUGLAS, STATE OF COLORADO

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56	STREET U
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59	STREET W
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62	STREET Z
63	STREET AA & BB
64	STREET FF
65	STREET GG
66	STREET HH
67	SANITARY OFFSITE CROWFOOT
68	SANITARY OFFSITE CROWFOOT
69	SANITARY OFFSITE CROWFOOT
70	SANITARY OFFSITE CROWFOOT
71	SANITARY OFFSITE CROWFOOT
72	SANITARY OFFSITE CROWFOOT
73	SANITARY OFFSITE NORTH
74	SANITARY OFFSITE NORTH
75	SANITARY OFFSITE NORTH
76	SANITARY OFFSITE NORTH
77	SANITARY OFFSITE NORTH
78	SANITARY SEWER DETAILS
79	SANITARY SEWER DETAILS
80	SANITARY SEWER DETAILS
81	WATER DETAILS
82	WATER DETAILS
83	WATER DETAILS
84	WATER DETAILS
85	WATER DETAILS
86	WATER DETAILS



VICINITY MAP
SCALE: 1" = 2000'

FIRE DEPARTMENT 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.

_____ _____
(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) DATE

(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULINE INSPECTIONS.
ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____
(DISTRICT REPRESENTATIVE)

DATE SIGNED: _____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____
(DISTRICT ENGINEER)

DATE SIGNED: _____

DEVELOPER

E5X MANAGEMENT
7353 SOUTH ALTON WAY
CENTENNIAL, CO 80112
TEL: (303) 770-9111
CONTACT: MATT JANKE

PLANNER/ LANDSCAPE DESIGNER:

PCS GROUP, INC.
200 KALAMATH STREET
DENVER, CO 80233
TEL: (303) 531-4905
CONTACT: JOHN PRESTWICH

SURVEYOR/ ENGINEER:

CVL CONSULTANTS OF COLORADO, INC.
10333 E. DRY CREEK RD. STE 240
ENGLEWOOD, CO 80112
TEL: (720) 482-9526
CONTACT: JIM JANNICKE

UTILITY DISTRICT

PARKER WATER AND SANITATION DISTRICT
18100 E. WOODMAN DRIVE
PARKER, CO 80134
TEL: (303) 841-4627

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\COVER.DWG, BRIANW, 2/5/2017 1:59 PM

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
COVER SHEET

SCALE:	AS SHOWN	FILE NO:	8130283701
DRAWN BY:	KJD	DATE:	FEBRUARY 2017
CHECKED BY:	JJJ		

SHEET NUMBER 1

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH PARKER WATER AND SANITATION DISTRICT SPECIFICATIONS.
2. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER 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 OWN EXPENSE.
3. 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 SHALL CONTACT THE ENGINEER IMMEDIATELY.
4. THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS THAT ARE NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000–POUND COMPRESSION STRENGTH.
7. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) 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 PARKER WATER AND SANITATION DISTRICT OFFICE.
8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS 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.
11. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE 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.
12. 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.
13. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SERVICE SEWERS "V" FOR WATER SERVICES
14. NO TREES SHALL BE ALLOWED IN EASEMENTS OR WITHIN 8' OF ANY WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
15. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.

WATER MAIN NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PARKER WATER AND SANITATION DISTRICT ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISIONS. ALL WORK SHALL BE INSPECTED AND APPROVED BY PERSONNEL OF THE PARKER WATER SANITATION DISTRICT AND THE DISTRICT ENGINEER.
2. ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS.
3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA–LUGGED. ALL FITTINGS SHALL BE WRAPPED WITH 8–MIL MINIMUM THICKNESS POLYETHYLENE MATERIAL PER PWSD MATERIALS SPECIFICATIONS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. FIRE HYDRANTS SHALL CONFORM TO AWWA C–502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPE, FITTINGS, VALVES, MATERIALS, AND LABOR WHICH ARE NECESSARY TO INSTALL THE HYDRANT COMPLETE IN PLACE. SEE MATERIALS SPECIFICATIONS FOR APPROVED MODELS
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. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS. THE MORE CLOSELY THE RATE OF DELIVERY IS CORRELATED TO THE RATE OF PIPE LAYING, THE LOWER THE RISK OF CONTAMINATION.
8. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PARKER WATER AND SANITATION STANDARDS AND SPECIFICATIONS. THE LINES SHALL BE CHLORINATED IN ACCORDANCE WITH ANSI/AWWA C–651–92., "DISINFECTING WATER MAINS." PARKER WATER AND SANITATION DISTRICT REQUIRES THE INITIAL DOSAGE RATE OF DISINFECTION BE AT LEAST 50 MG PER LITER. CHLORINE 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.
9. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PARKER WATER AND SANITATION 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 PARKER WATER AND SANITATION DISTRICT INSPECTOR. LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINES VALVES SHALL NOT EXCEED THE LIMITS SET FOURTH IN THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS.
10. VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES WHERE AN ADDITIONAL VALVES SHALL BE PLACED ON THE TAPPING TEE. OTHER VALVE LOCATIONS, SUCH AS WHERE CROSS PANS EXIST, ARE SHOWN ON THE PLANS.
11. WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.50 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
12. THE CONTRACTOR SHALL NOTIFY THE PARKER WATER AND SANITATION 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.
13. PIPE BEDDING SHALL BE A CLEAN, WELL–GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
14. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINED 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.
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 INCHES CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE. CLAY AND BAILEY SCREW–TYPE 6 INCH CAST IRON VALVE BOX ASSEMBLY NO. P–108 WITH NO. 106 LARGE OVAL BASE.
17. ALL PIPE LENGTHS ARE APPROXIMATE.
18. AT LEAST FIVE (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.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE PARKER WATER AND SANITATION DISTRICT SPECIFICATION.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D–3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PARKER WATER AND SANITATION DISTRICT STANDARD AND SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
4. 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.
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. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
7. SEWER SERVICE TEES 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 CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.
8. ALL MANHOLES SHALL BE 48–INCHES IN DIAMETER WITH 24–INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C–33 OR D–448 GRADATION NO. 6 OR NO. 67.
10. AT LEAST FIVE (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.
11. ALL PIPE LENGTHS ARE APPROXIMATE.
12. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.
13. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
14. ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
15. PRIOR TO START WORK WHERE SEWER MAIN 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.
16. PRIOR TO PROBATIONARY ACCEPTANCE WALK–THROUGH, THE CLIENT SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

DISTRICT ACCEPTANCE NOTES:

1. 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–THRU AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
2. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO TWO (2) YEARS 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.
3. 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.

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
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Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
PARKER WATER AND SANITATION NOTES

SCALE:	AS SHOWN	FILE NO:	8130283701
DRAWN BY:	KJD	DATE:	FEBRUARY 2017
CHECKED BY:	JJJ		
SHEET NUMBER	2		

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\COVER.DWG, BRIANW, 2/5/2017 1:59 PM

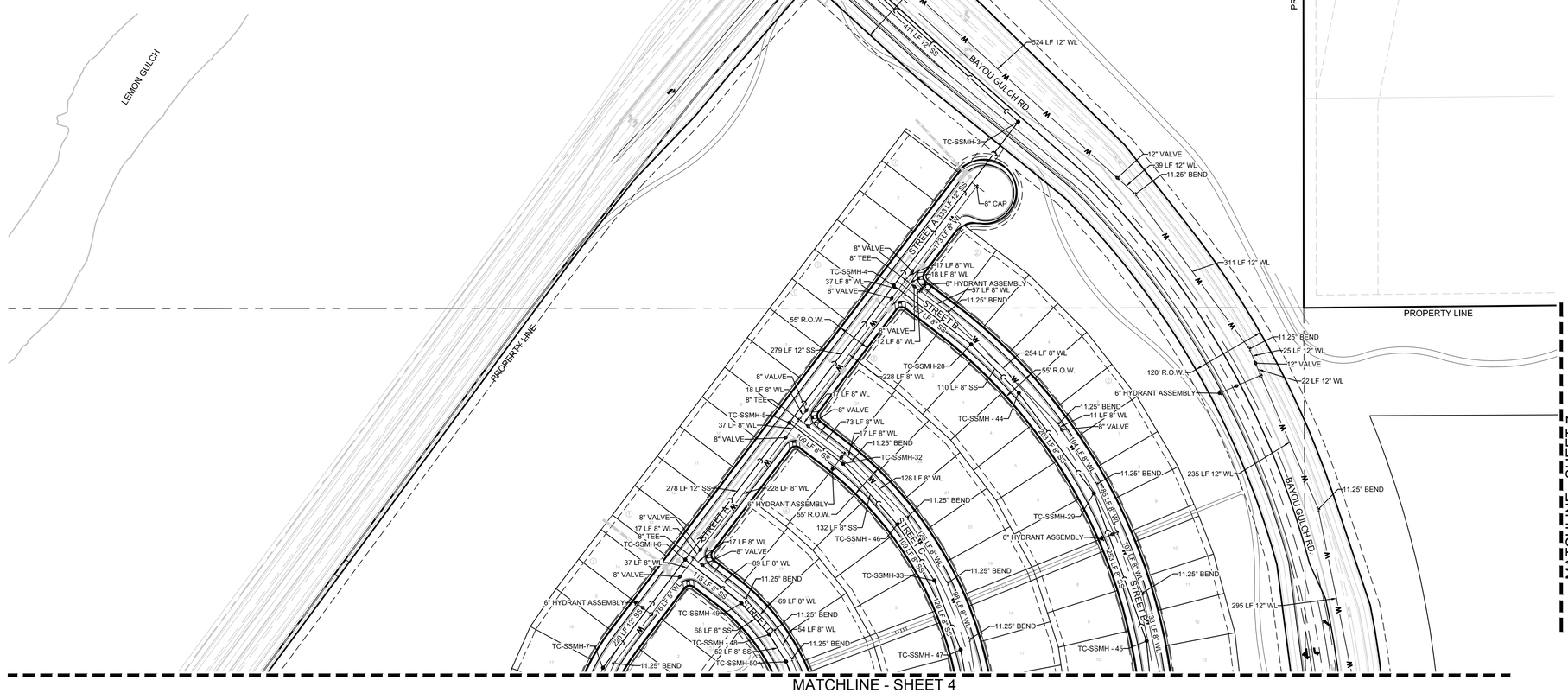
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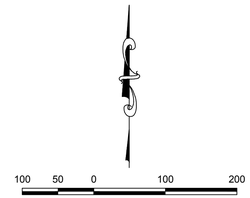
REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

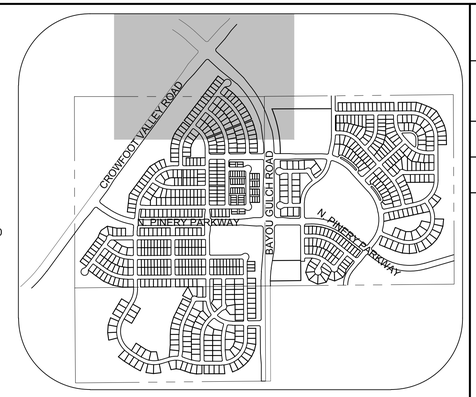
APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE





SCALE: 1" = 100'



KEYMAP
N.T.S.

LEGEND

(2)	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
	PROPOSED REDUCER		PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6)	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

FIRE DEPARTMENT 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.

_____ _____
(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) DATE

(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 3

N:\PROJECTS\HSESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY PLAN.DWG, BRIANW, 2/5/2017 2:02 PM

LEGEND

(2)	BLOCK NUMBER	⚠	PROPOSED RANGE POINT
(A)	LOT TYPE	— — —	CENTERLINE
6	LOT NUMBER	———	RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE	———	PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF	———	EDGE OF PAVEMENT
	PROPOSED REDUCER	➡	PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(S)(6)	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULINE INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

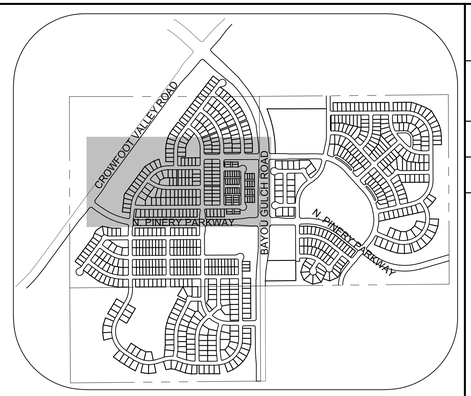
BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION		
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
HCR	HANDICAP CURB RAMP	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	T.O.S.	TOP OF PIPE
K	CURVATURE COEFFICIENT	UE	UTILITY EASEMENT
LF	LINEAR FEET	VC	VERTICAL CURVE
MH	MANHOLE	WL	WATER LINE
N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

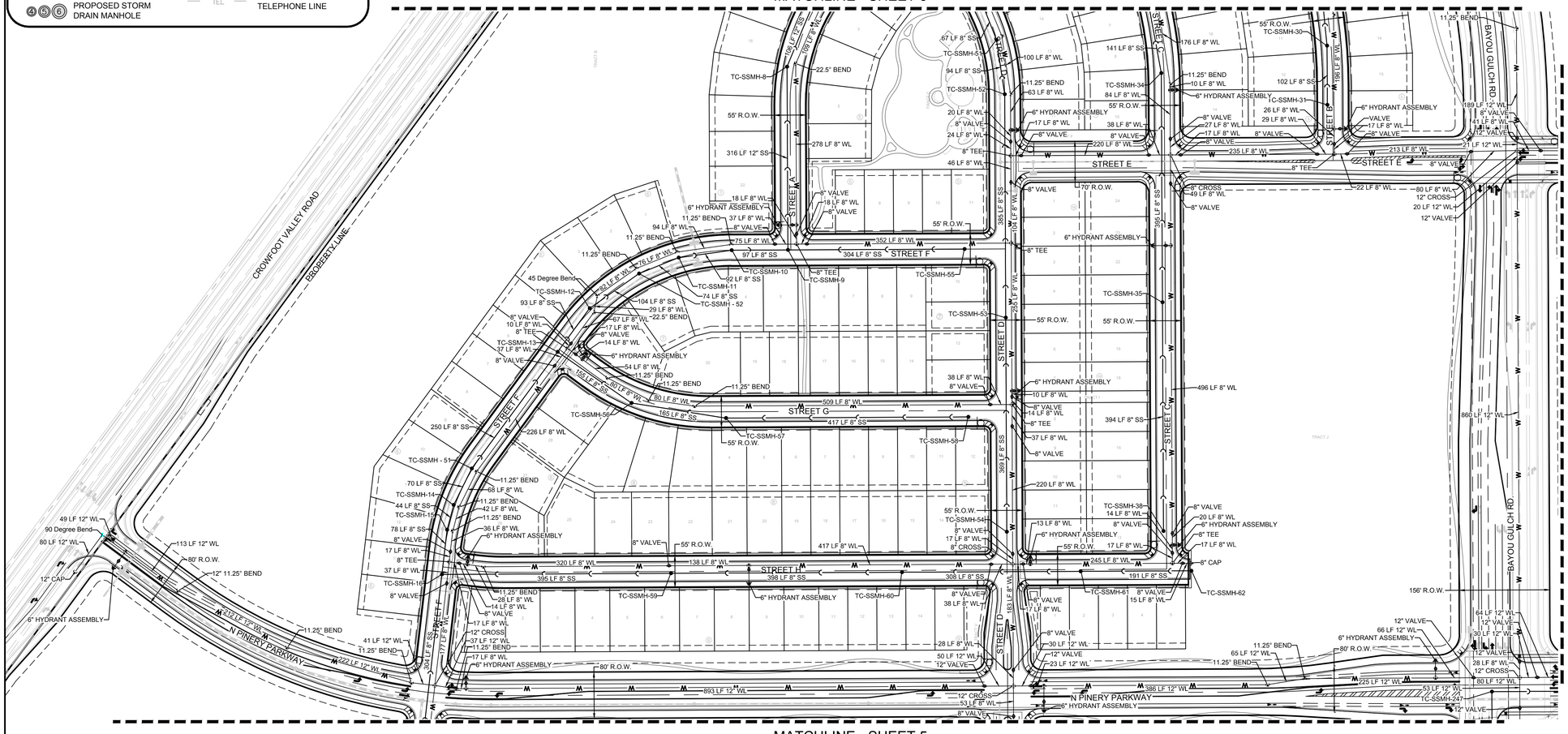


KEYMAP
N.T.S.

100 50 0 100 200

SCALE: 1" = 100'

MATCHLINE - SHEET 3



MATCHLINE - SHEET 7

MATCHLINE - SHEET 5

FIRE DEPARTMENT APPROVAL
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 4

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY PLAN.DWG, BRIANW, 2/5/2017 2:02 PM

LEGEND

(2)	BLOCK NUMBER
(A)	LOT TYPE
6	LOT NUMBER
	PROPOSED BUTTERFLY VALVE
	PROPOSED CAP WITH END OF LINE BLOWOFF
	PROPOSED REDUCER
	PROPOSED VALVE
	PROPOSED FIRE HYDRANT
	PROPOSED WL FITTING WITH THRUST BLOCK
	PROPOSED FLARED END SECTION
BO	PROPOSED LOW POINT BLOW-OFF
AV	PROPOSED AIR VALVE
BO	EXISTING BLOW OFF VALVE
	EXISTING VALVE
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	PROPOSED LIGHT POLE
	PROPOSED SIDEWALK
	PROPOSED SIDEWALK RAMP
10.00	EXISTING ELEVATION
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△	PROPOSED RANGE POINT
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	RIGHT-OF-WAY
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	PROPOSED WATER LATERAL W/ METER
RW	EXISTING 60" RAW WATER LINE
	SECTION LINE
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N.T.S.	NOT TO SCALE		
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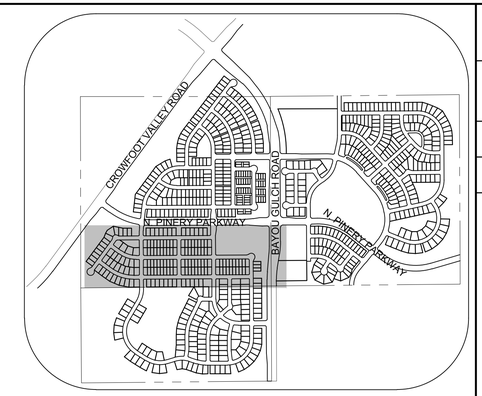
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REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ _____
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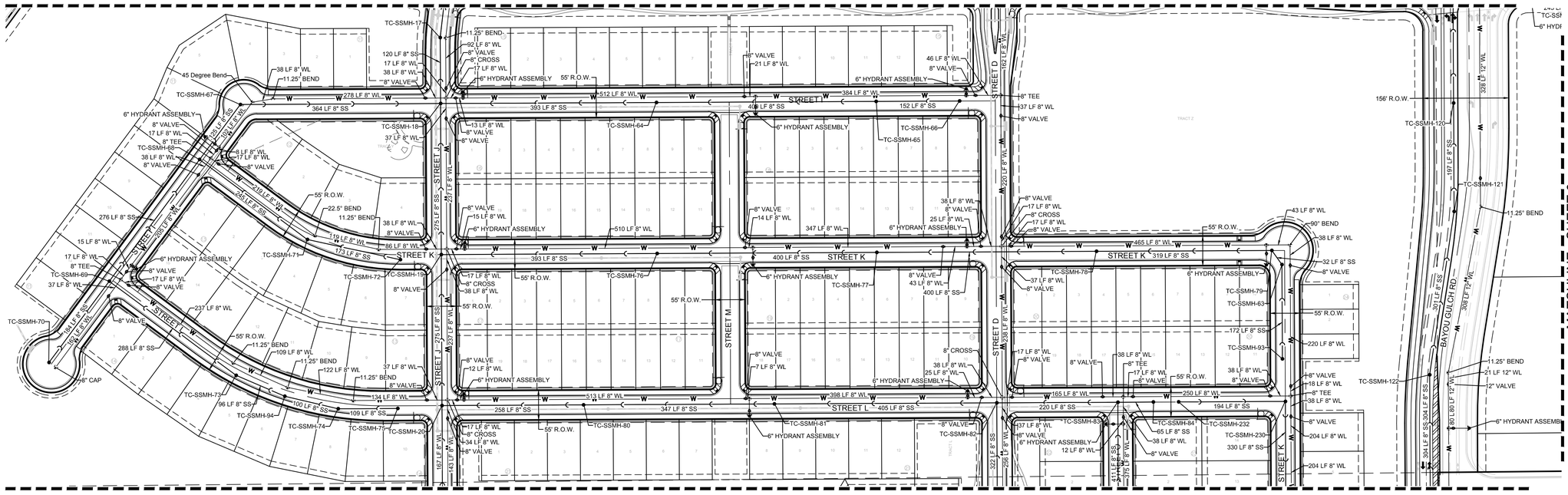


KEYMAP
N.T.S.

100 50 0 100 200

SCALE: 1" = 100'

MATCHLINE - SHEET 4



MATCHLINE - SHEET 6

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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 5

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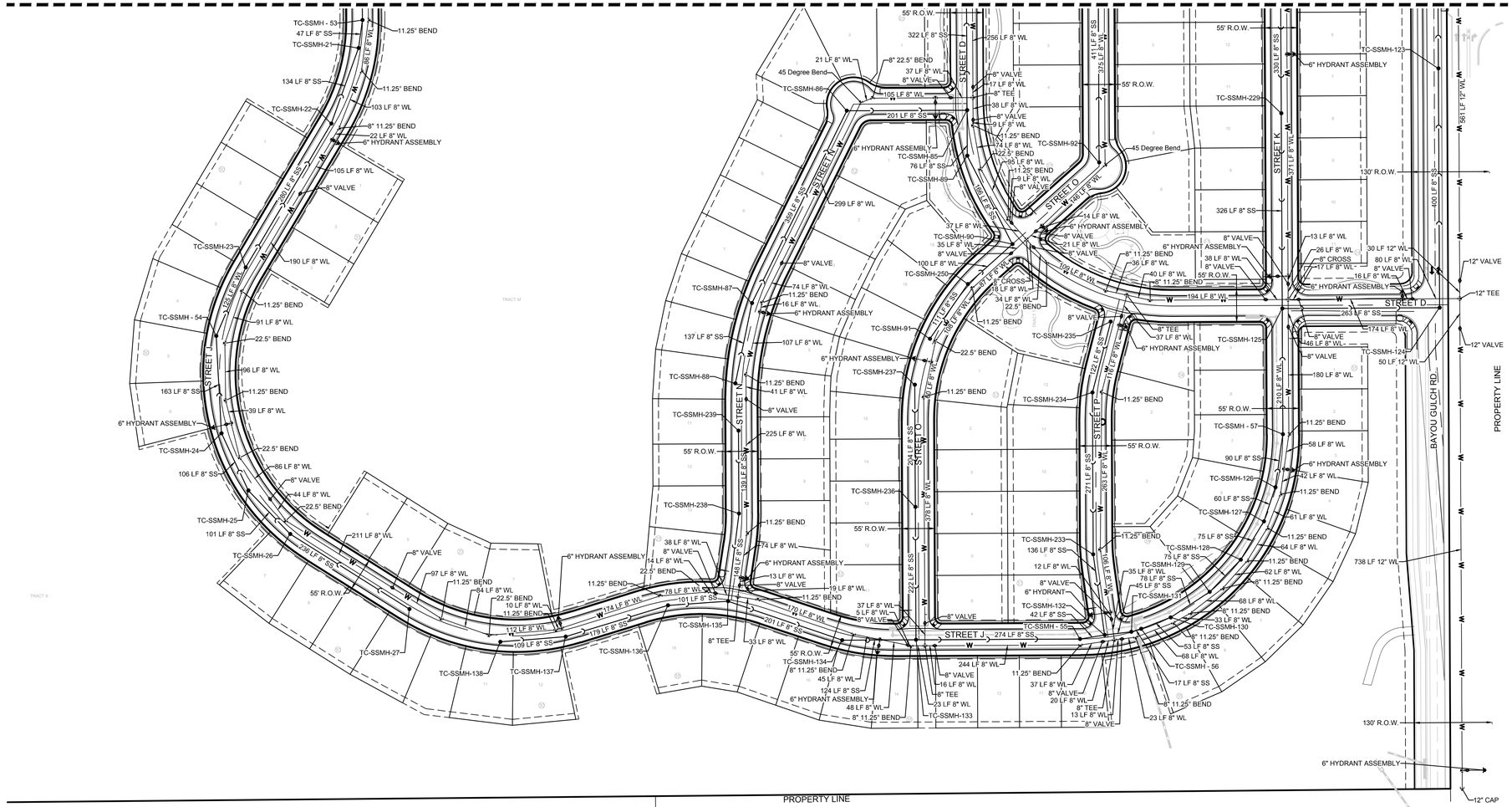
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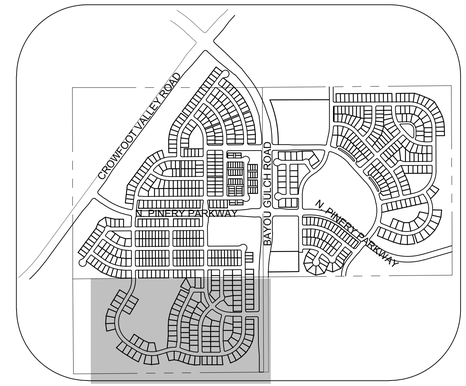
BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

MATCHLINE - SHEET 5





KEYMAP
N.T.S.

LEGEND

2	BLOCK NUMBER		PROPOSED RANGE POINT
A	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
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100 50 0 100 200

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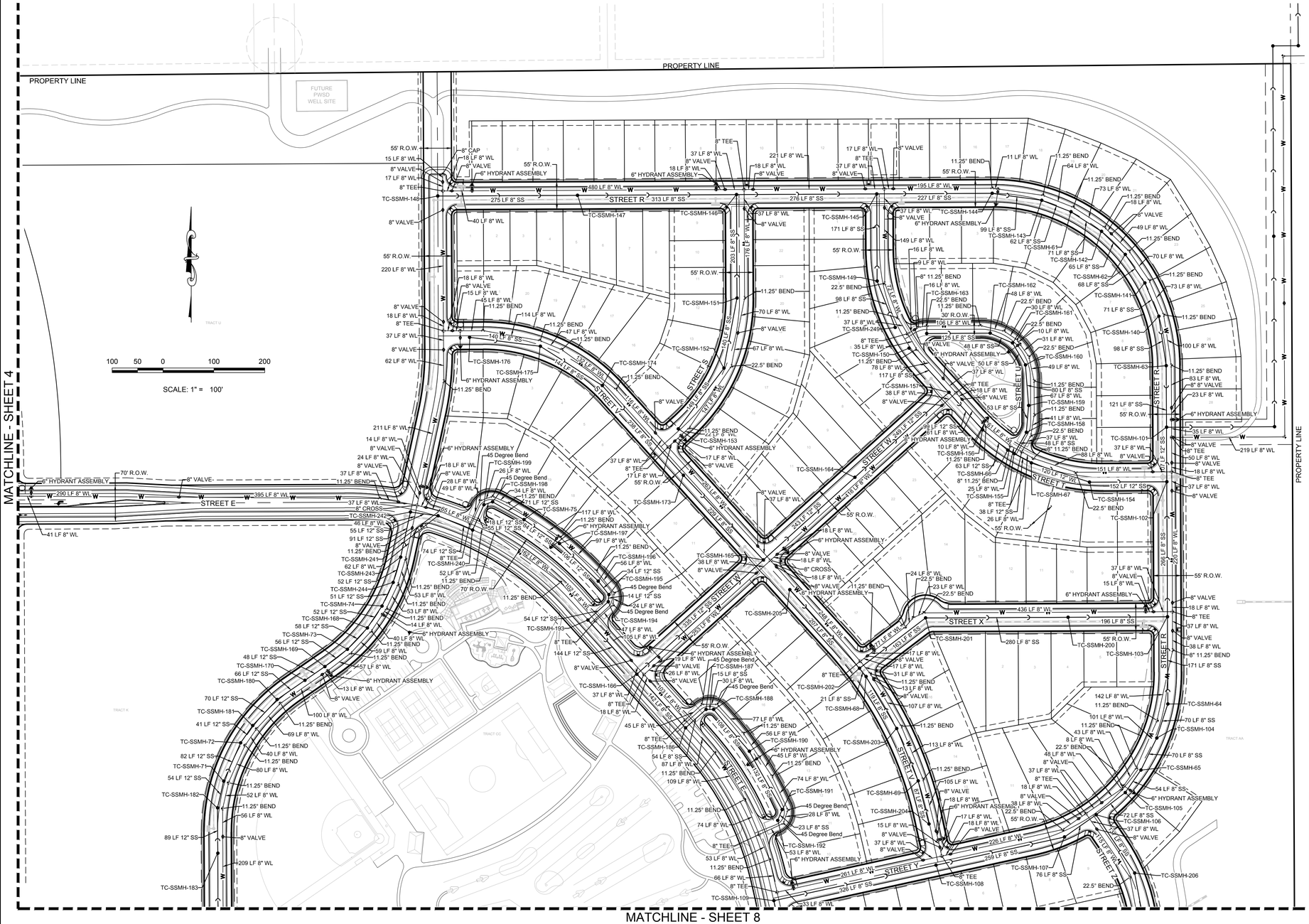
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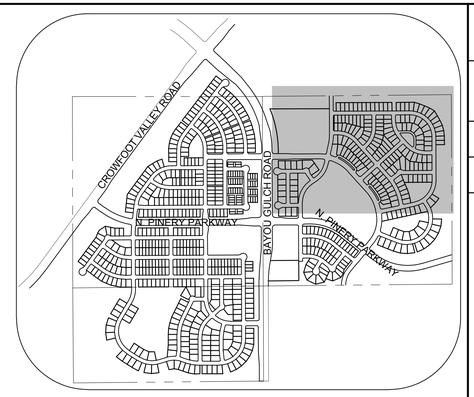
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PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE:	AS SHOWN	FILE NO:	8130283701
DRAWN BY:	JLR		
CHECKED BY:	JJJ		
DATE:	FEBRUARY 2017		
SHEET NUMBER	6		

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY PLAN.DWG, BRIANW, 2/5/2017 2:02 PM





KEYMAP
N.T.S.

LEGEND

2	BLOCK NUMBER		PROPOSED RANGE POINT
A	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
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FILE NO: 8130283701
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CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 7

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULINE INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

FIRE DEPARTMENT 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.

_____ _____
(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) DATE

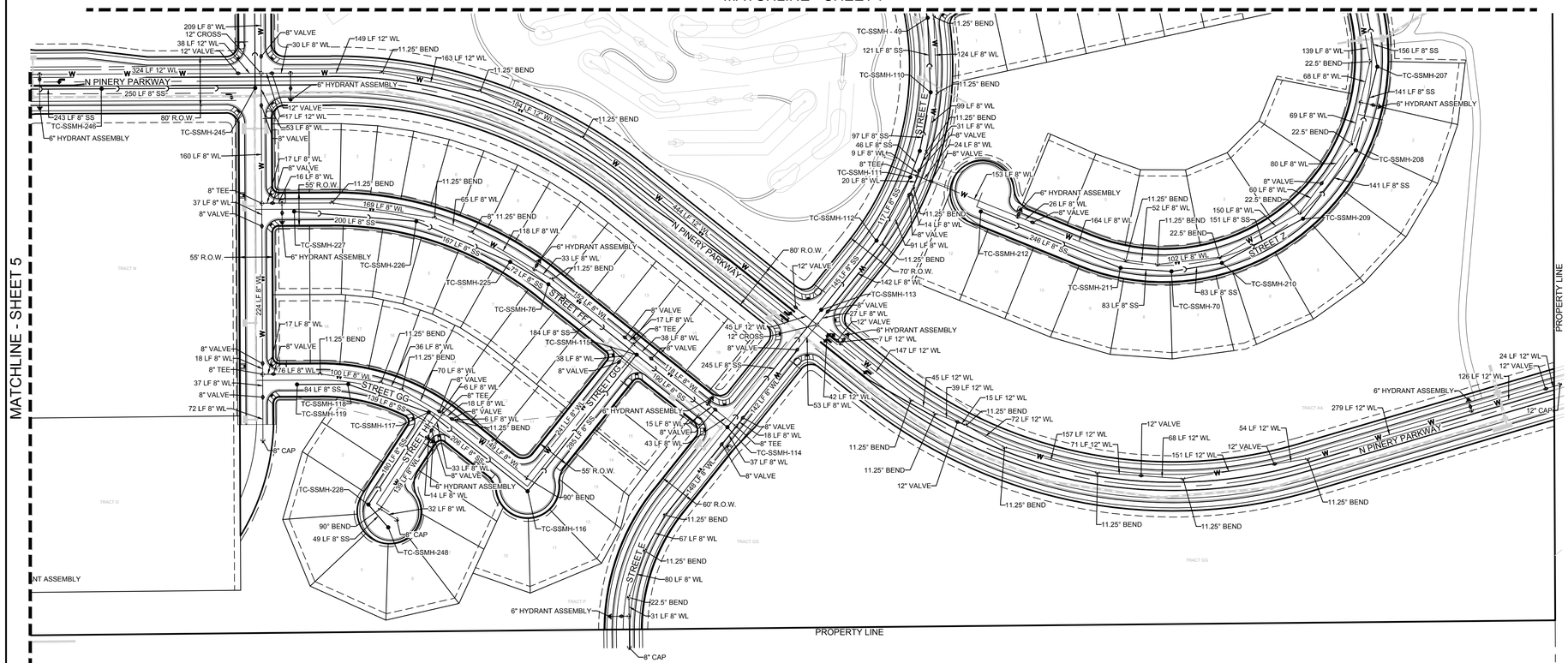
(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

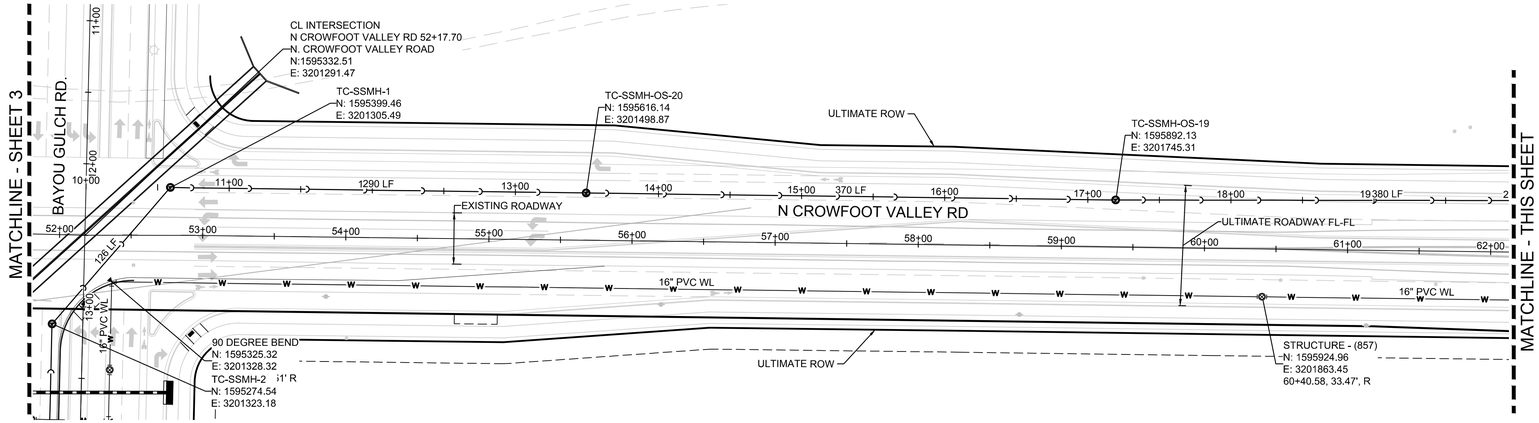
CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

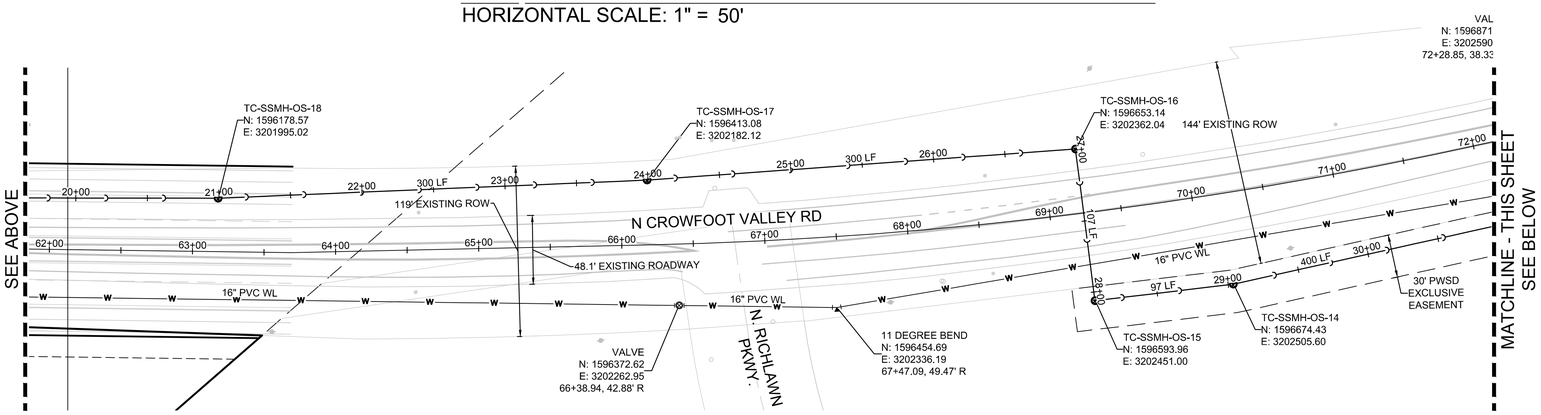
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY PLAN.DWG, BRIANW, 2/5/2017 2:03 PM

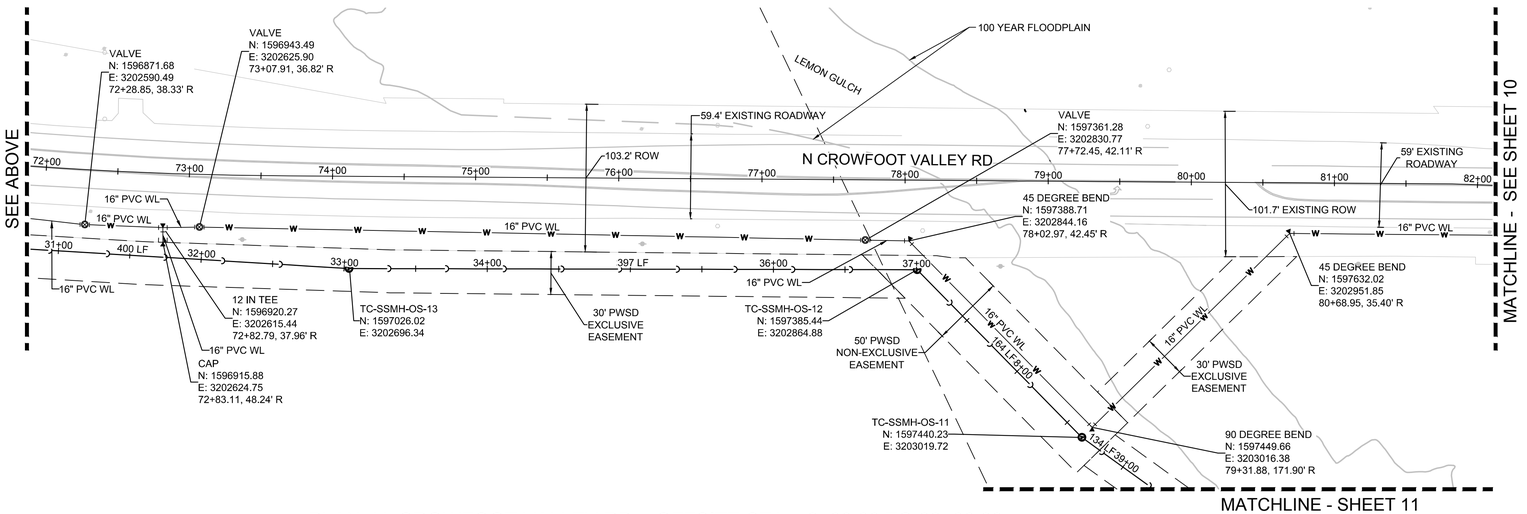

MATCHLINE - SHEET 5
MATCHLINE - SHEET 7
N PINERY PARKWAY
STREET E
STREET F
STREET G
STREET H
STREET I
STREET J
PROPERTY LINE
TC-SSMH-245
TC-SSMH-246
TC-SSMH-227
TC-SSMH-226
TC-SSMH-225
TC-SSMH-76
TC-SSMH-115
TC-SSMH-118
TC-SSMH-119
TC-SSMH-117
TC-SSMH-228
TC-SSMH-248
TC-SSMH-116
TC-SSMH-112
TC-SSMH-111
TC-SSMH-110
TC-SSMH-113
TC-SSMH-114
TC-SSMH-212
TC-SSMH-211
TC-SSMH-70
TC-SSMH-210
TC-SSMH-209
TC-SSMH-208
TC-SSMH-207
80' R.O.W.
55' R.O.W.
60' R.O.W.
70' R.O.W.
6" HYDRANT ASSEMBLY
8" VALVE
12" VALVE
8" TEE
8" CAP
90° BEND
11.25° BEND
22.5° BEND
12" CROSS
209 LF 8" WL
12" CROSS
38 LF 12" WL
12" VALVE
149 LF 12" WL
30 LF 8" WL
163 LF 12" WL
324 LF 12" WL
250 LF 8" SS
243 LF 8" SS
53 LF 8" WL
17 LF 12" WL
17 LF 8" WL
16 LF 8" WL
160 LF 8" WL
37 LF 8" WL
169 LF 8" WL
200 LF 8" SS
167 LF 8" SS
118 LF 8" WL
33 LF 8" WL
224 LF 8" WL
184 LF 8" SS
36 LF 8" WL
70 LF 8" WL
18 LF 8" WL
72 LF 8" WL
76 LF 8" WL
100 LF 8" WL
84 LF 8" SS
49 LF 8" SS
32 LF 8" WL
14 LF 8" WL
33 LF 8" WL
199 LF 8" WL
199 LF 8" SS
199 LF 8" WL
199 LF 8" SS
199 LF 8" WL
199 LF 8" SS



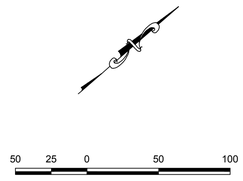
PLAN: N. CROWFOOT VALLEY RD. - OFFSITE STA: 52+00.00 TO 62+00.00
HORIZONTAL SCALE: 1" = 50'

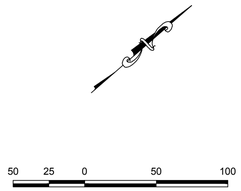


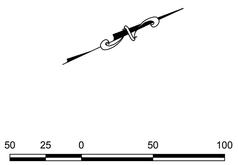
PLAN: N. CROWFOOT VALLEY RD. - OFFSITE STA: 62+00.00 TO 72+00.00
HORIZONTAL SCALE: 1" = 50'

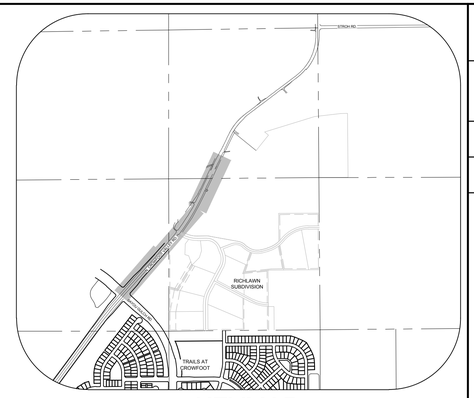


PLAN: N. CROWFOOT VALLEY RD. - OFFSITE STA: 72+00.00 TO 82+00.00
HORIZONTAL SCALE: 1" = 50'









KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

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No.	Revisions	Date	Init.	Appr.	Date

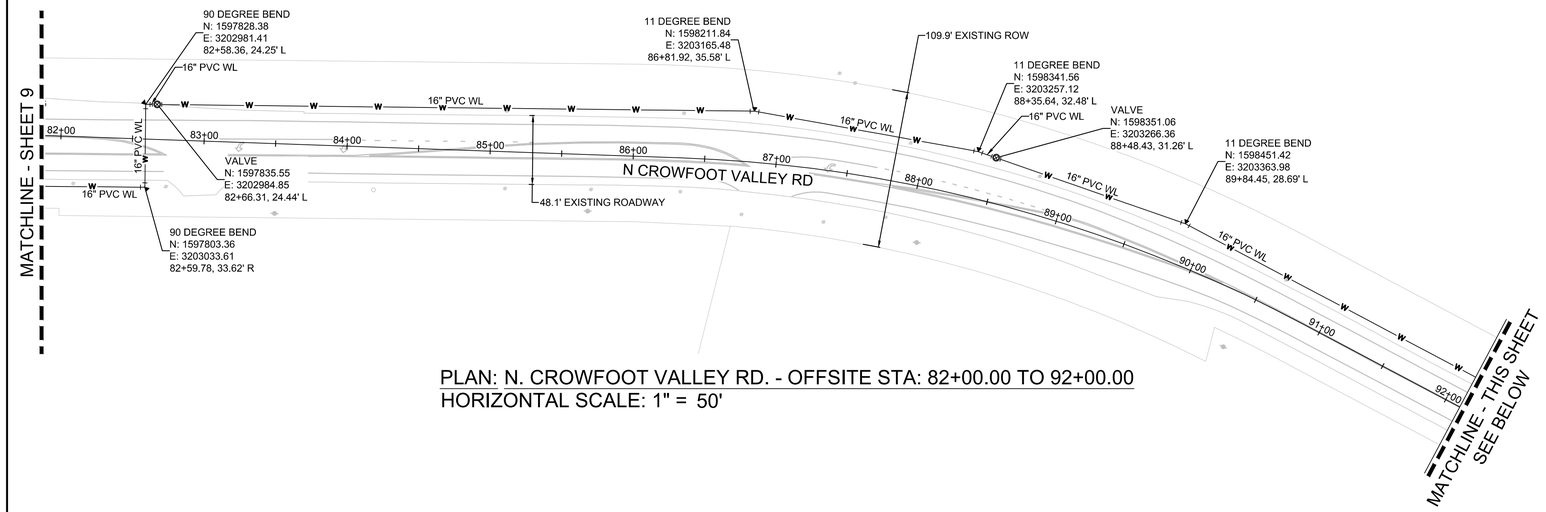
CVL CONSULTANTS
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY OFFSITE CROWFOOT

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 9

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY OFFSITE CROWFOOT.DWG, BRIANW, 2/5/2017 2:06 PM

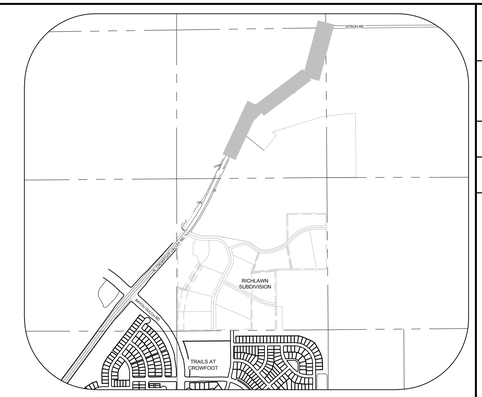


PLAN: N. CROWFOOT VALLEY RD. - OFFSITE STA: 82+00.00 TO 92+00.00
HORIZONTAL SCALE: 1" = 50'

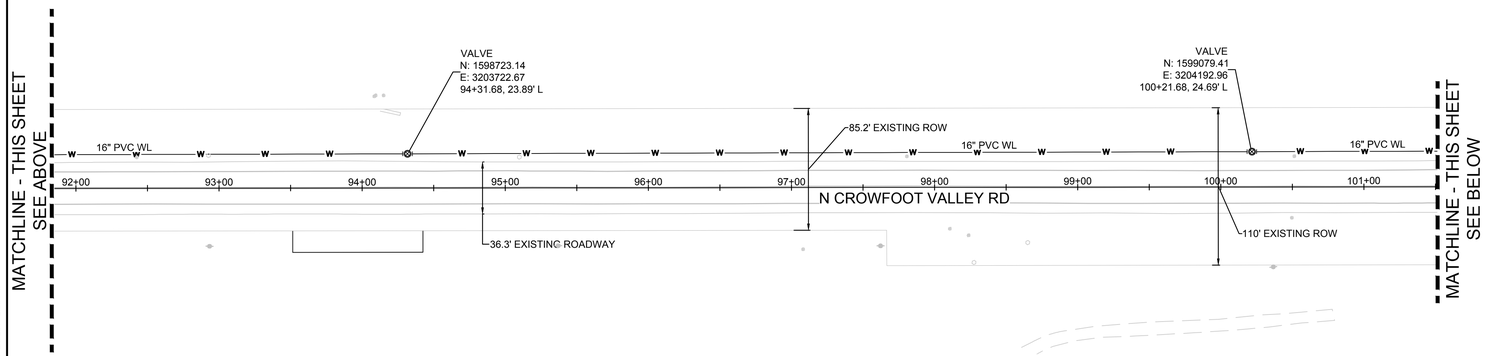


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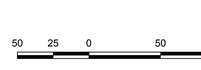
SCALE: 1" = 50'



KEYMAP
N.T.S.

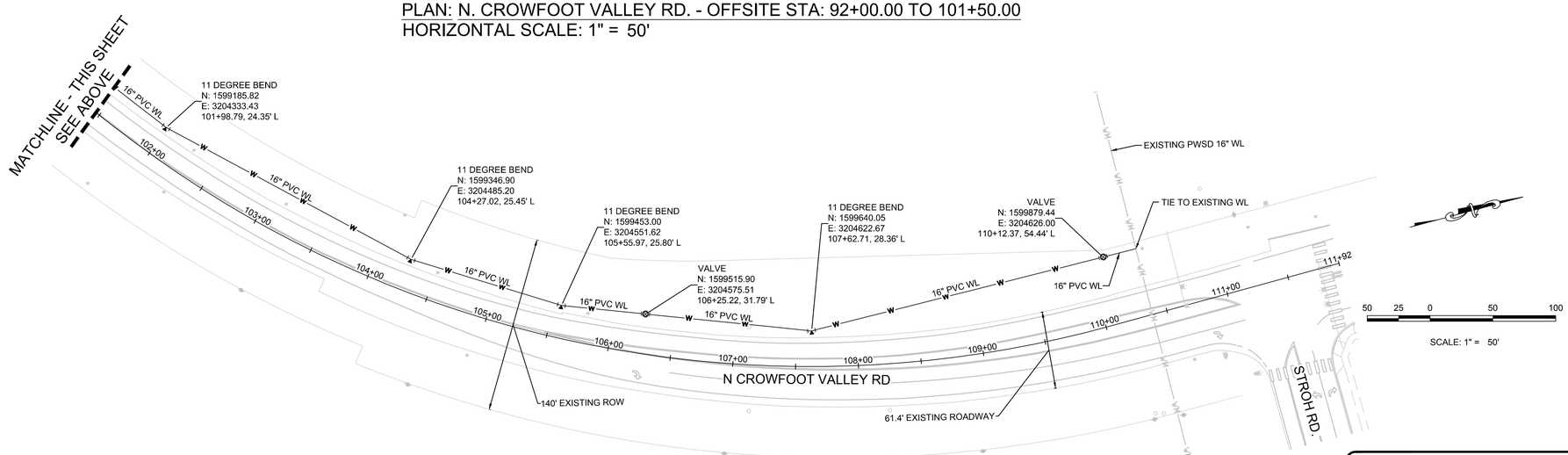


PLAN: N. CROWFOOT VALLEY RD. - OFFSITE STA: 92+00.00 TO 101+50.00
HORIZONTAL SCALE: 1" = 50'



50 25 0 50 100

SCALE: 1" = 50'



50 25 0 50 100

SCALE: 1" = 50'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
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CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
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HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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BENCHMARK
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PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

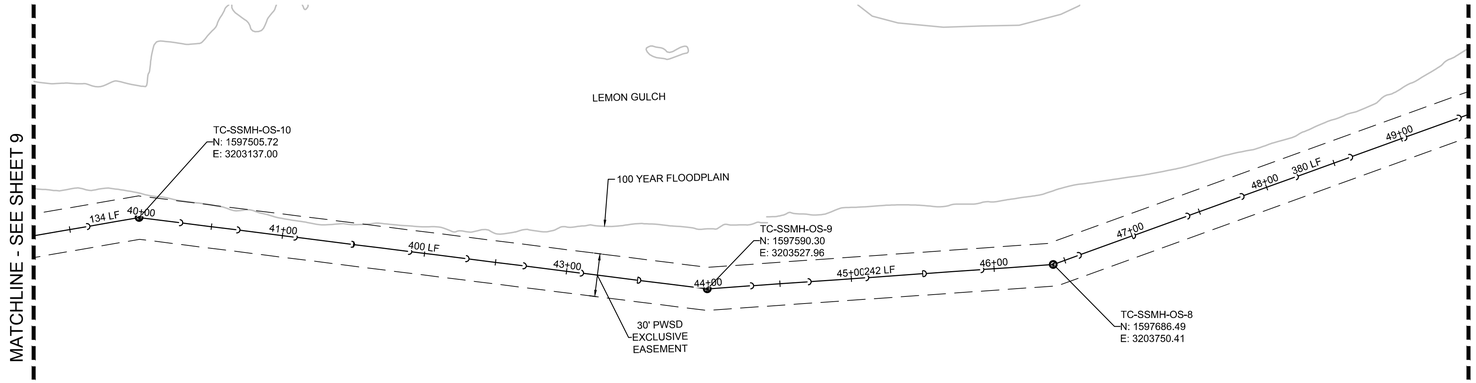
E5X MANAGEMENT
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PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY OFFSITE CROWFOOT

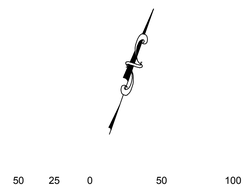
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DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 10

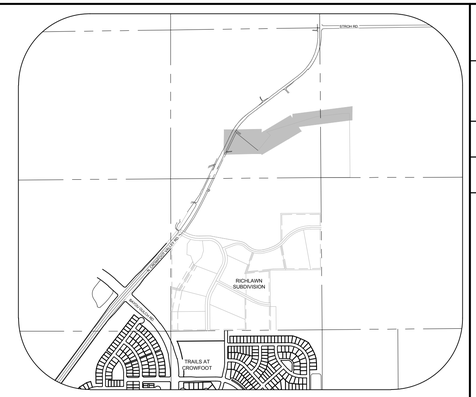
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PLAN: LEMON GULCH OUTFALL - OFFSITE STA: 39+50.00 TO 49+50.00
HORIZONTAL SCALE: 1" = 50'

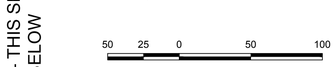


SCALE: 1" = 50'



KEYMAP
N.T.S.

PLAN: LEMON GULCH OUTFALL - OFFSITE STA: 49+50.00 TO 59+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'

PLAN: LEMON GULCH OUTFALL - OFFSITE STA: 59+50.00 TO 65+54.00
HORIZONTAL SCALE: 1" = 50'

SCALE: 1" = 50'

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
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EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
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MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
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(DISTRICT ENGINEER)

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

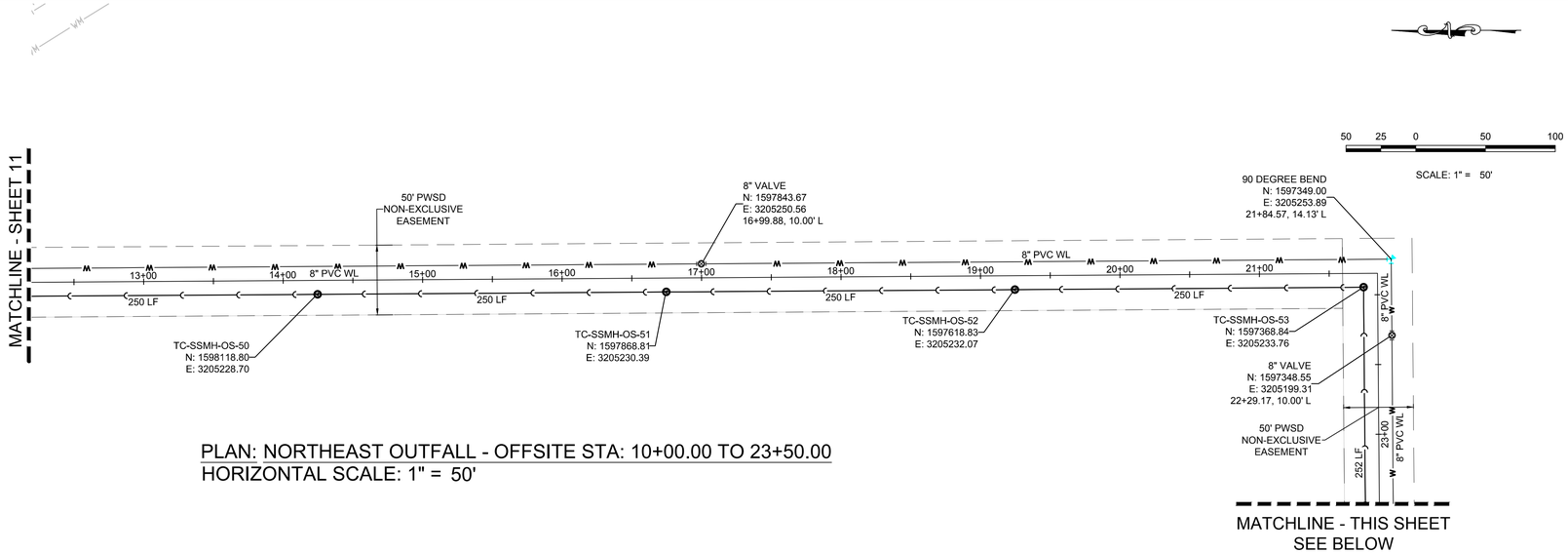
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY OFFSITE LEMON GULCH

DRAWN BY:	JLR	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

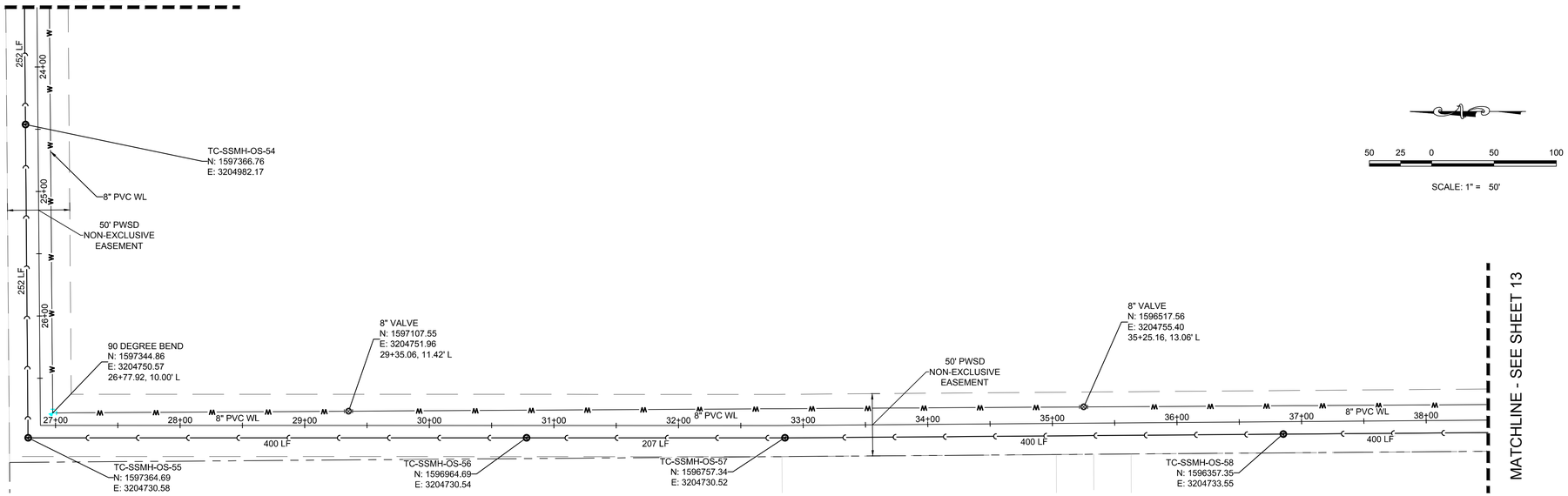
SHEET NUMBER 11

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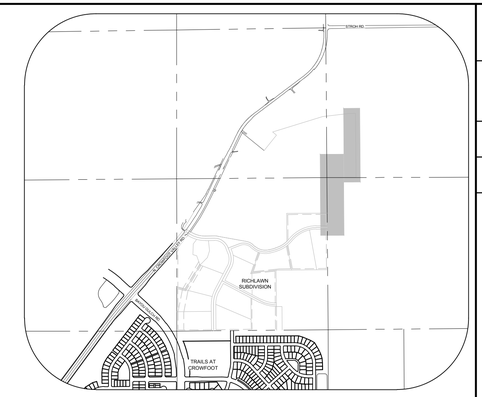


PLAN: NORTHEAST OUTFALL - OFFSITE STA: 10+00.00 TO 23+50.00
HORIZONTAL SCALE: 1" = 50'

MATCHLINE - THIS SHEET
SEE ABOVE



PLAN: NORTHEAST OUTFALL - OFFSITE STA: 23+50.00 TO 38+50.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
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PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULINE INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ _____
(DISTRICT REPRESENTATIVE) DATE

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ _____
(DISTRICT ENGINEER) DATE

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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

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No.	Revisions	Date	Init.	Appr.	Date

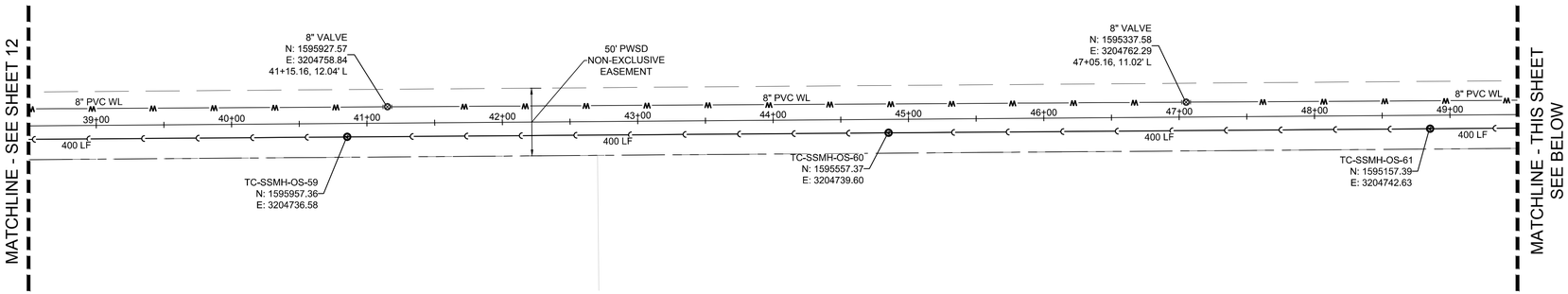
10333 E. Dry Creek Rd.
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CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY OFFSITE NORTHEAST

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 12

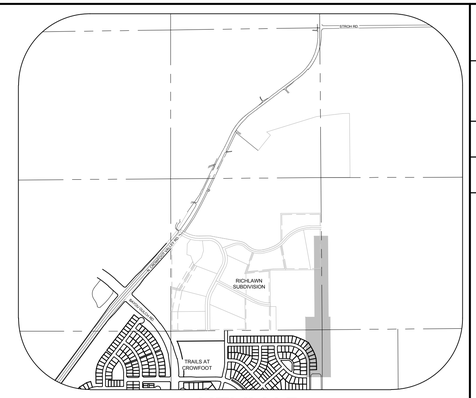
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PLAN: NORTHEAST OUTFALL - OFFSITE STA: 38+50.00 TO 49+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



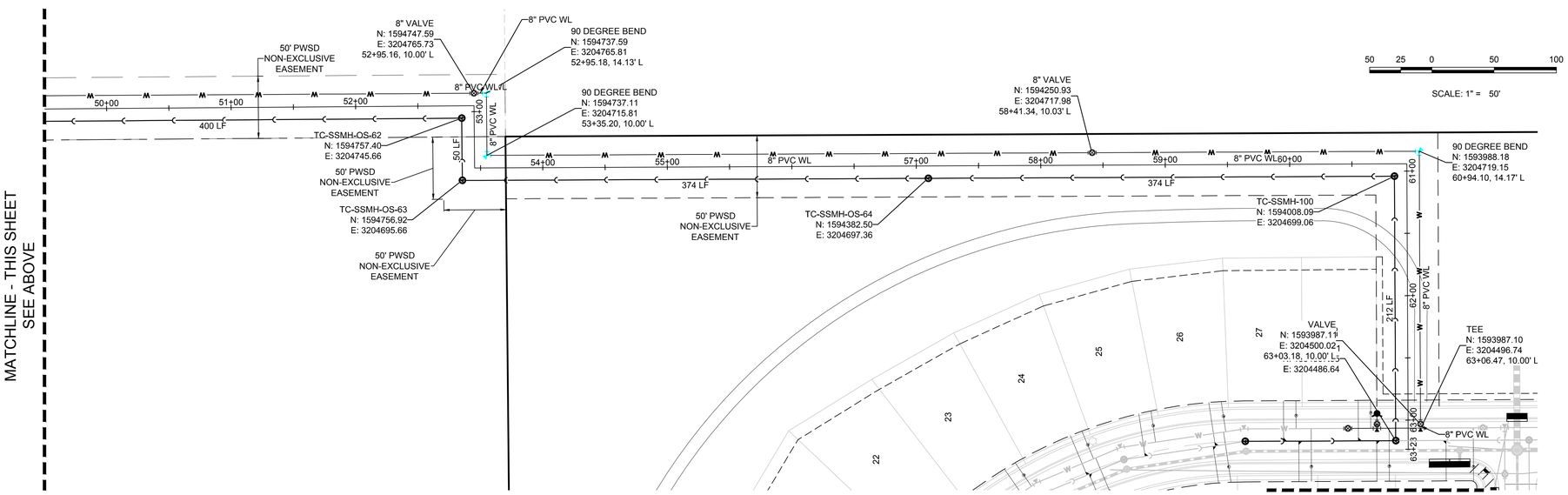
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
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PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
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PROPOSED AIR VALVE	PROPOSED STORM DRAIN
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ABBREVIATIONS

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LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PLAN: NORTHEAST OUTFALL - OFFSITE STA: 49+50.00 TO 63+23.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'

MATCHLINE - SHEET 7

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REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ DATE _____
(DISTRICT REPRESENTATIVE)

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ DATE _____
(DISTRICT ENGINEER)

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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

N:\PROJECTS\HSESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\AREA UTILITY OFFSITE NORTHEAST.DWG, BRIANW, 2/5/2017 2:09 PM

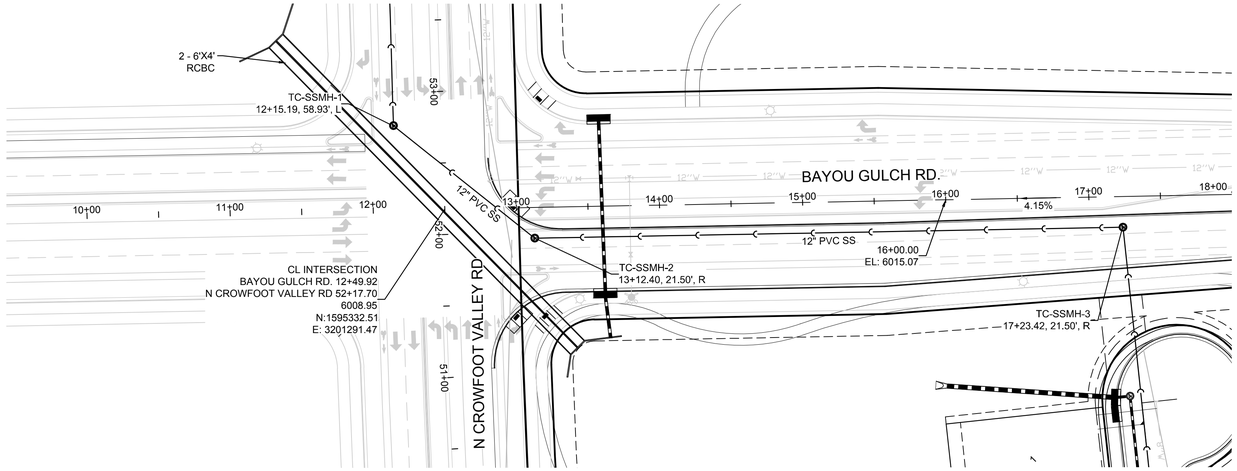
No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
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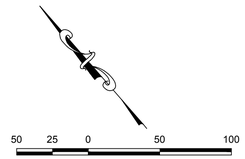
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

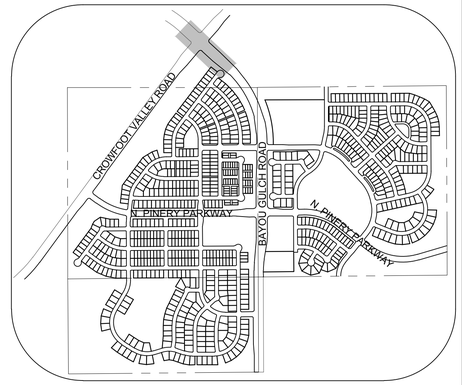
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
AREA UTILITY OFFSITE NORTHEAST

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 13

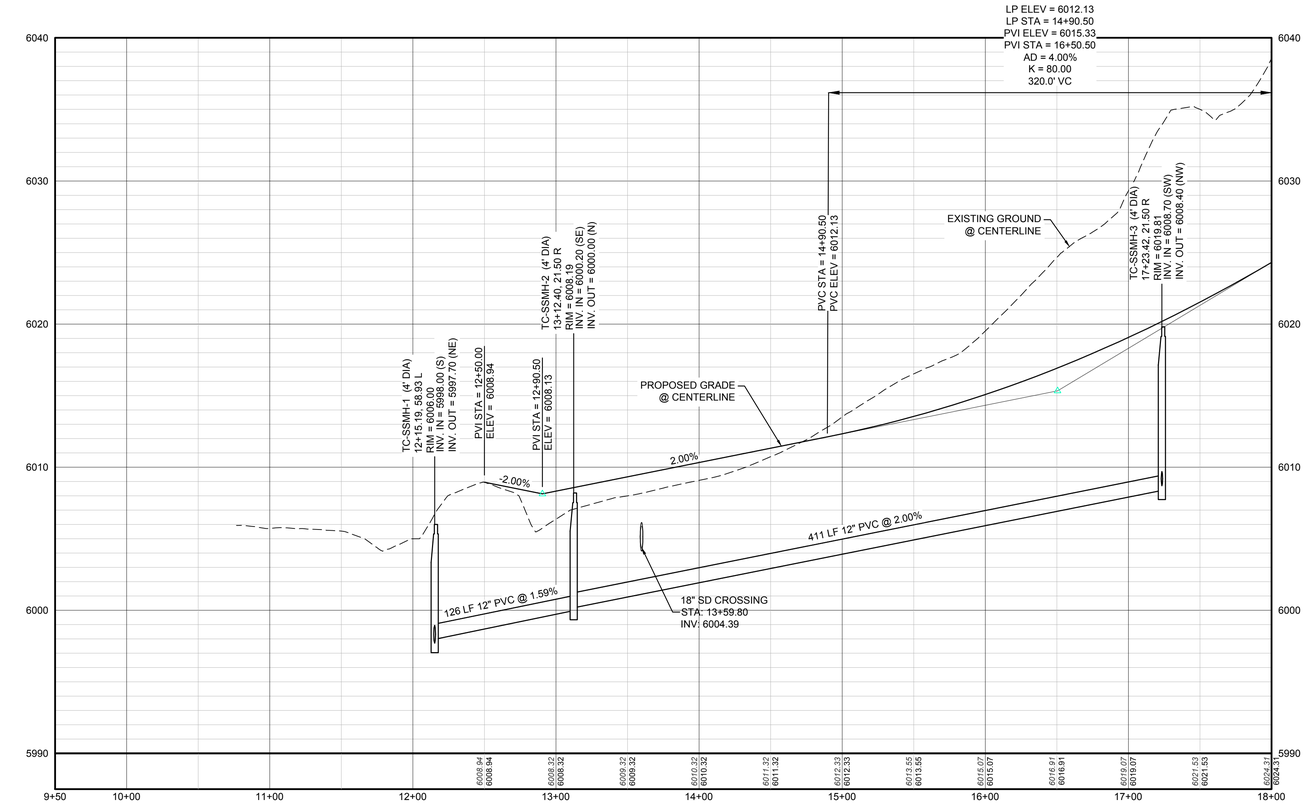


PLAN: BAYOU GULCH RD STA: 10+00.00 TO 18+00.00
HORIZONTAL SCALE: 1" = 50'





KEYMAP
N.T.S.



PROFILE: BAYOU GULCH RD. STA: 9+50.00 TO 18+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
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PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
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PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
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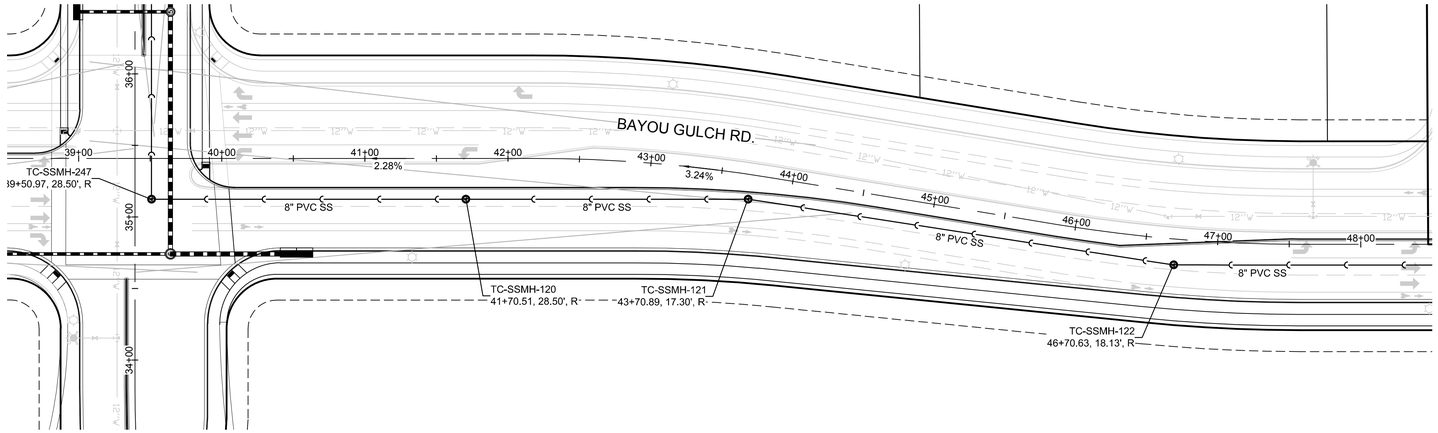
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
BAYOU GULCH RD

SCALE:	FILE NO:
AS SHOWN	8130283701

DRAWN BY:	CHECKED BY:	DATE:
JLR	JJJ	FEBRUARY 2017

SHEET NUMBER 14

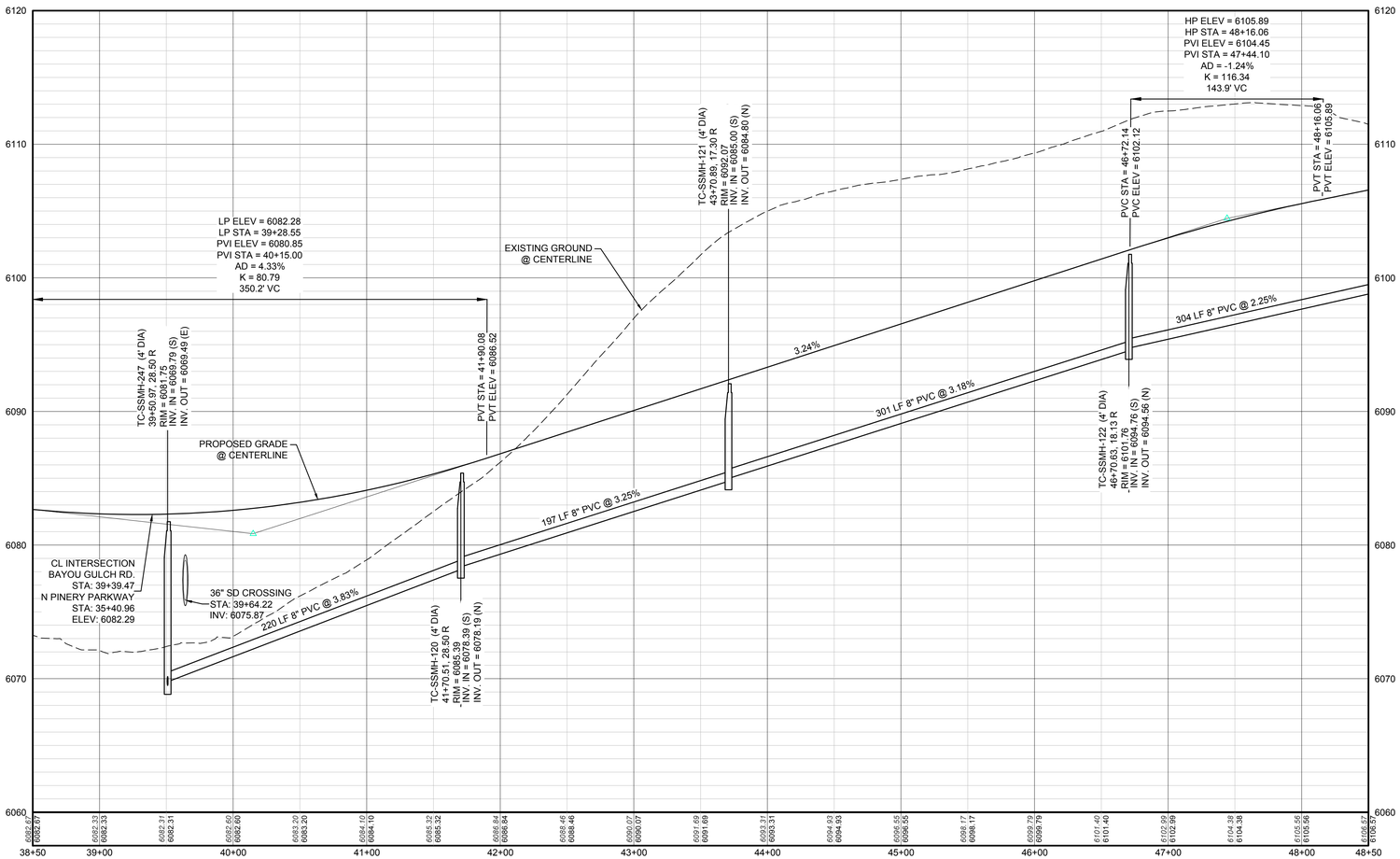
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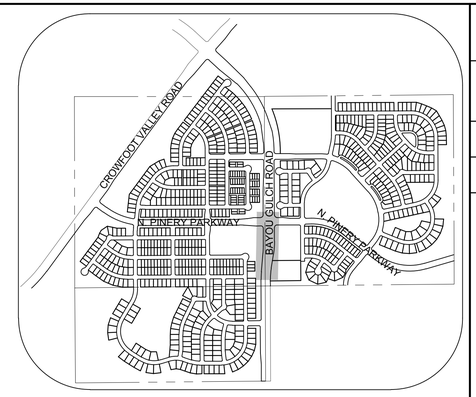
50 25 0 50 100

SCALE: 1" = 50'

PLAN: BAYOU GULCH ROAD STA: 38+50.00 TO 48+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: BAYOU GULCH RD. STA: 38+50.00 TO 48+50.00
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KEYMAP
N.T.S.

LEGEND

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N.T.S.	NOT TO SCALE		
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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
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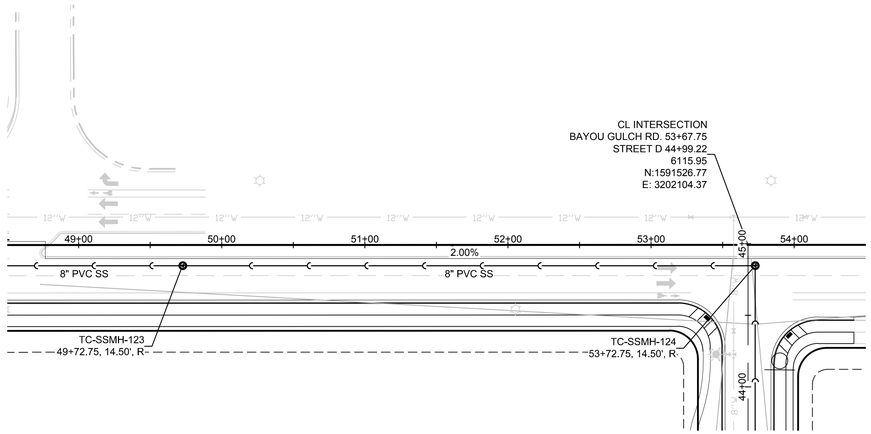
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
BAYOU GULCH ROAD

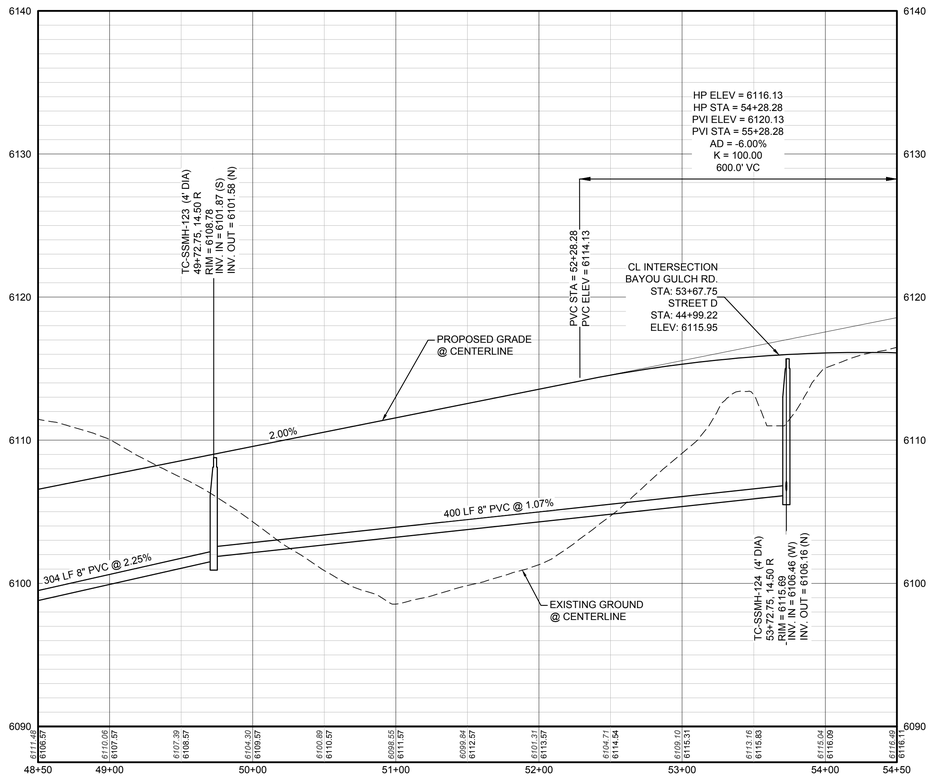
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DATE:	FEBRUARY 2017		

SHEET NUMBER 15

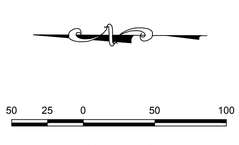
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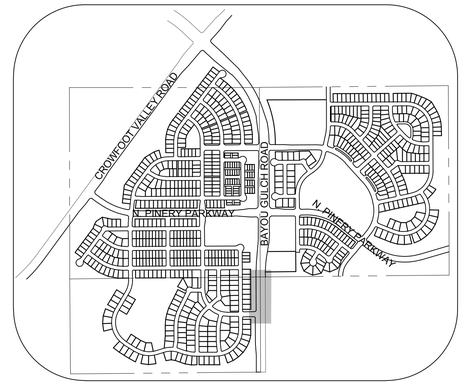
PLAN: BAYOU GULCH ROAD STA: 10+00.00 TO 18+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: BAYOU GULCH RD. STA: 48+50.00 TO 54+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2)	BLOCK NUMBER		PROPOSED RANGE POINT
(A)	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
	PROPOSED REDUCER		PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
BO	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
AV	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6)	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
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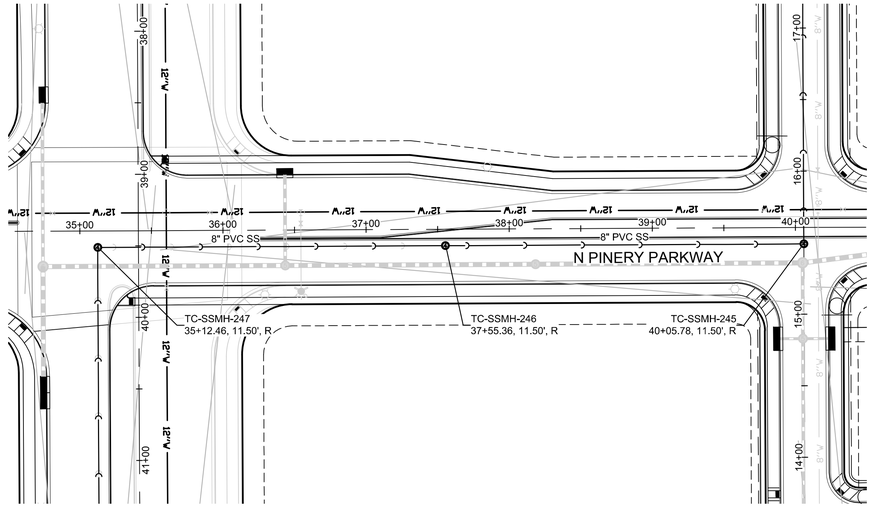
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PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
BAYOU GULCH ROAD

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DRAWN BY:	JLR		
CHECKED BY:	JJJ		
DATE:	FEBRUARY 2017		

SHEET NUMBER 16

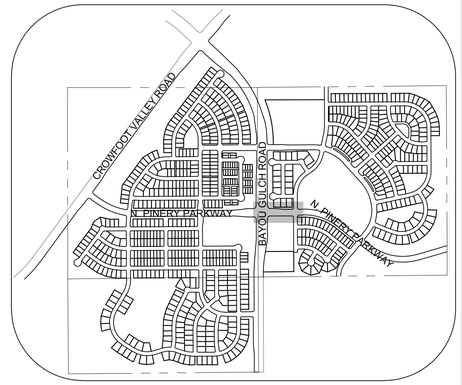
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PLAN: NORTH PINERY PARKWAY STA: 34+50.00 TO 40+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



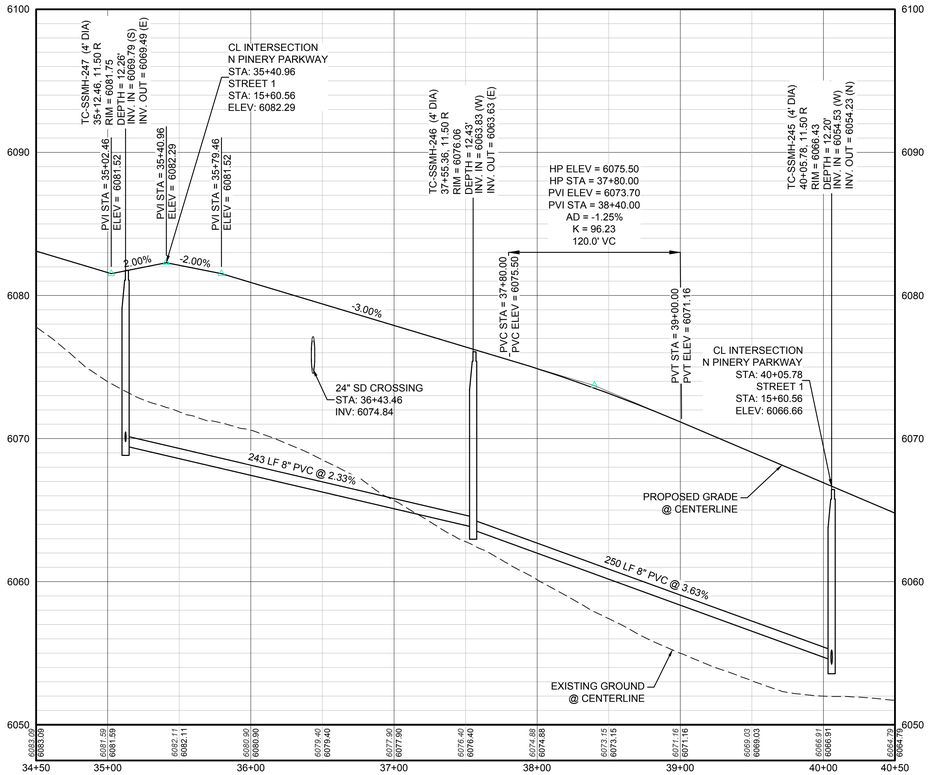
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: N PINERY PARKWAY STA: 34+50.00 TO 40+50.00
HORIZONTAL: 1" = 50'
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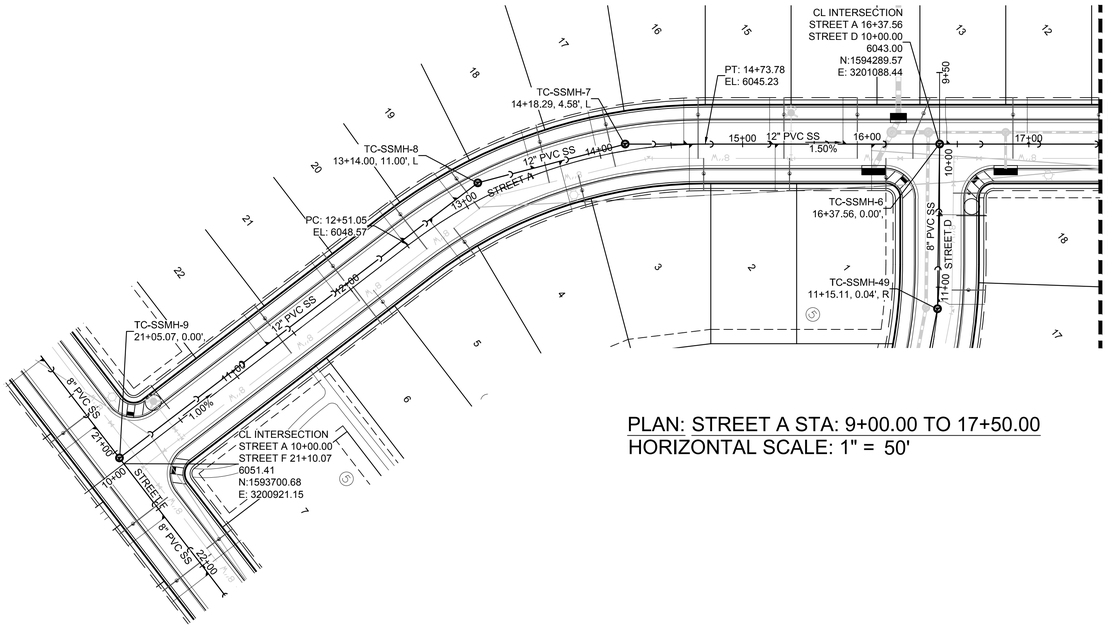
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SANITARY SEWER PLAN AND PROFILE
NORTH PINERY PARKWAY

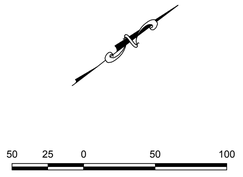
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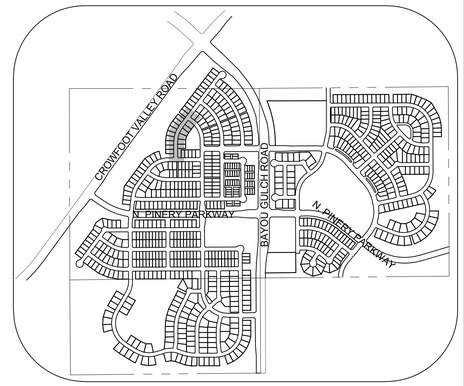
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PLAN: STREET A STA: 9+00.00 TO 17+50.00
HORIZONTAL SCALE: 1" = 50'





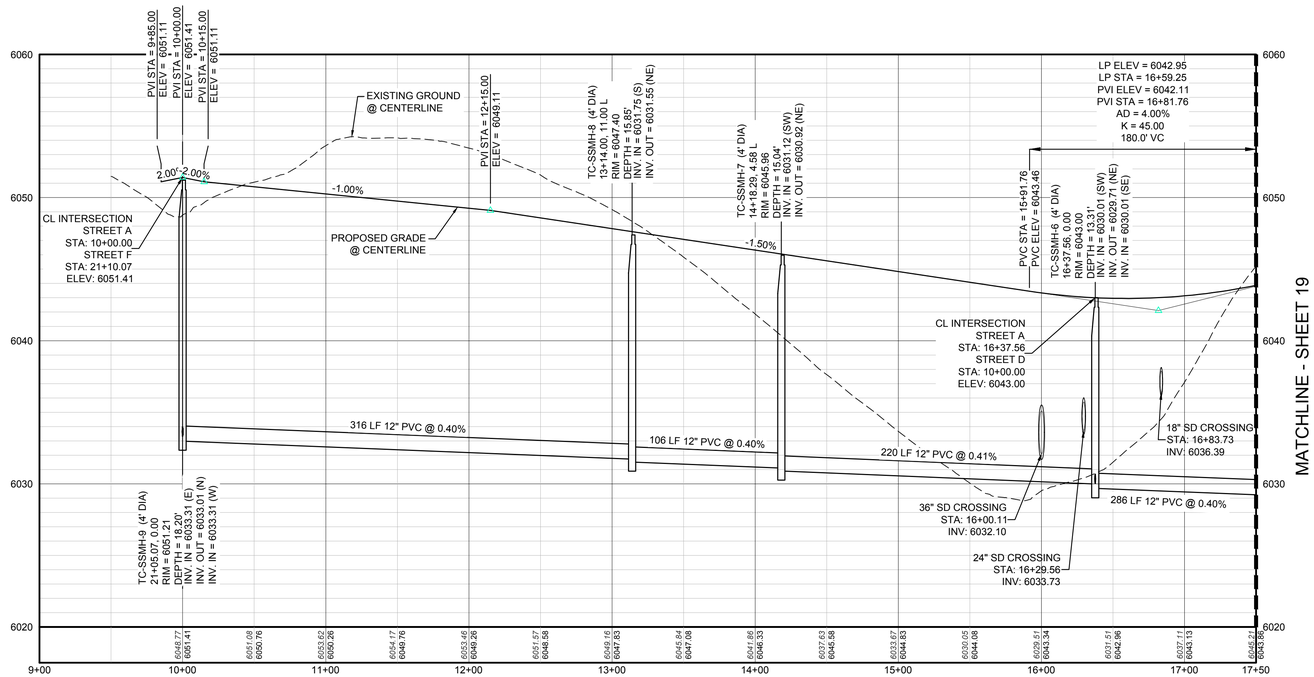
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
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EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
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INV	INVERT	UE	UTILITY EASEMENT
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MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET A STA: 9+00.00 TO 17+50.00
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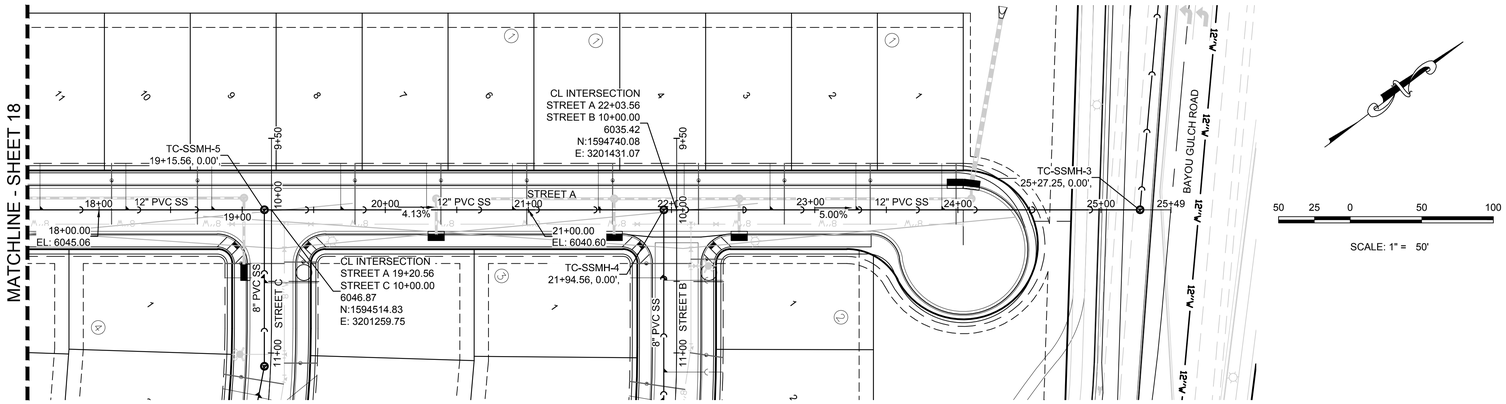
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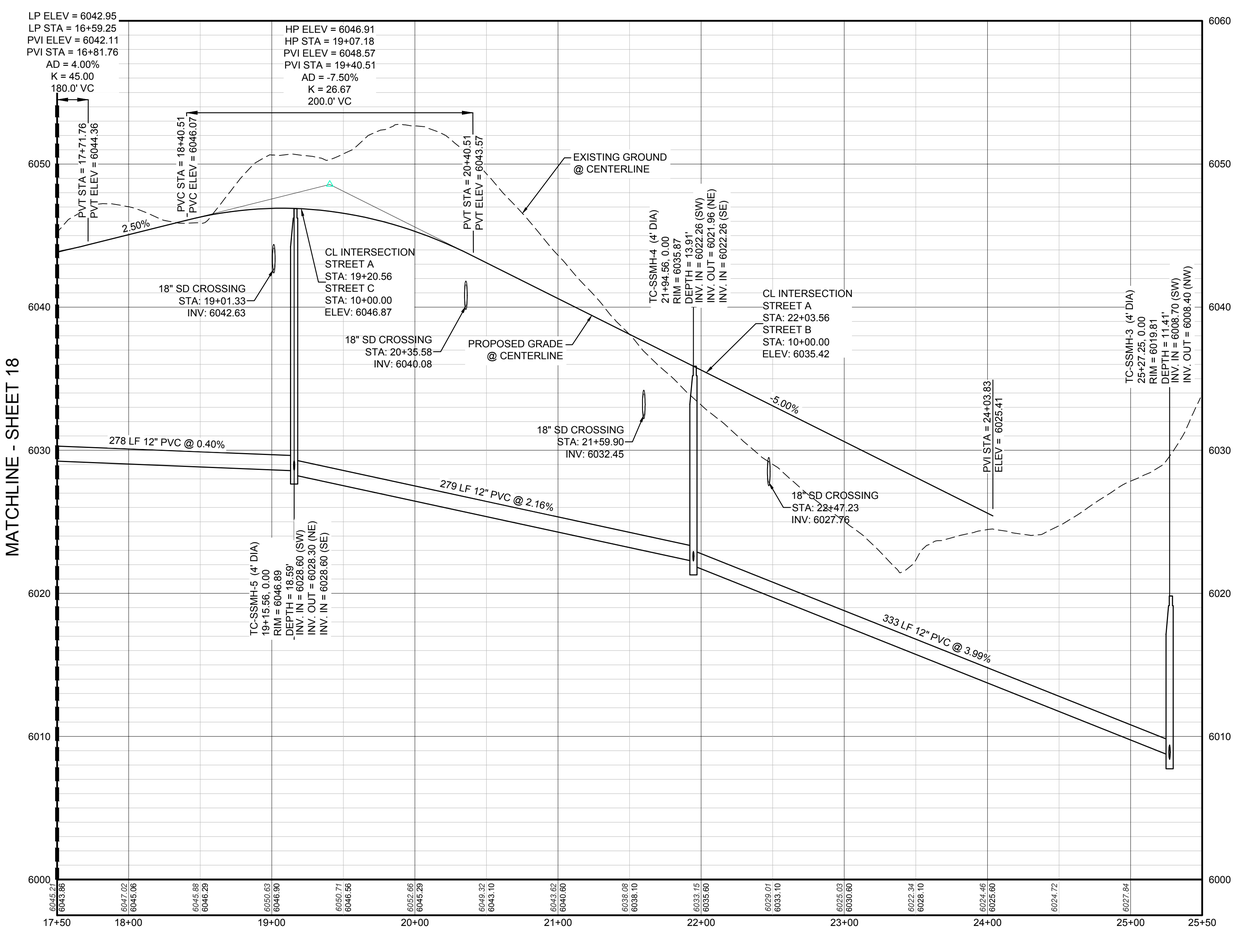
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STREET A

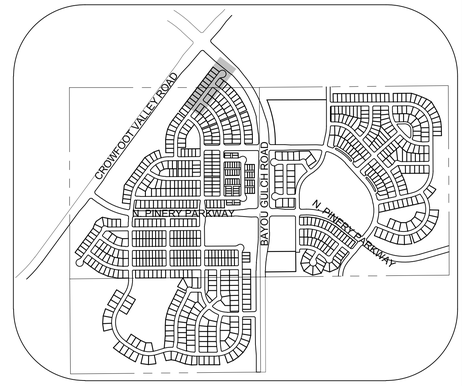
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FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 18



PLAN: STREET A STA: 17+50.00 TO 25+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET A STA: 17+50.00 TO 25+50.00
HORIZONTAL: 1" = 50'
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KEYMAP
N.T.S.

LEGEND

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LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
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PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
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PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

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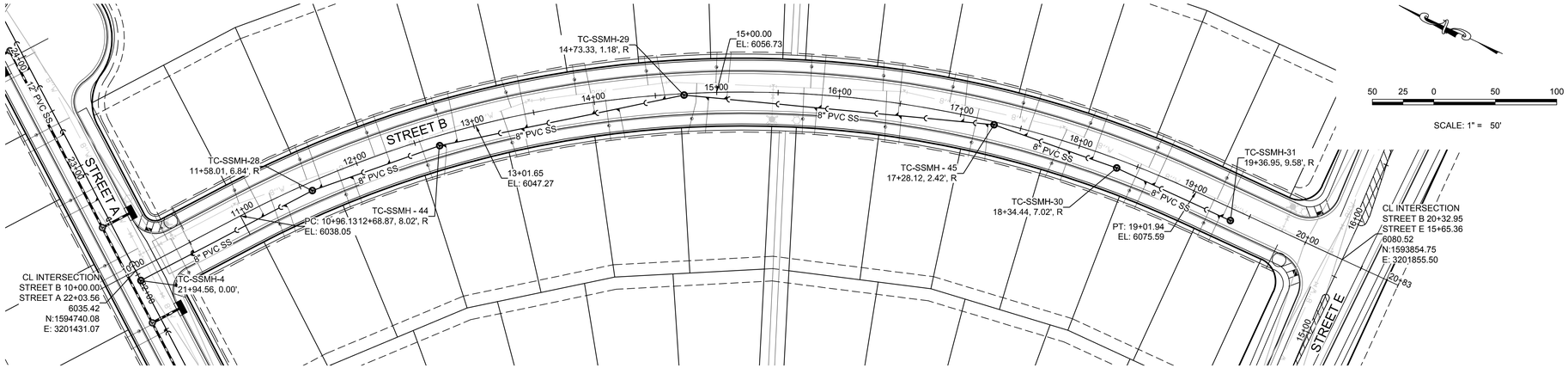
E5X MANAGEMENT
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CENTENNIAL, CO 80112

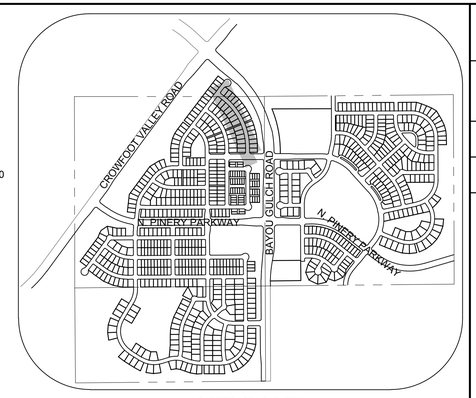
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET A

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CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 19

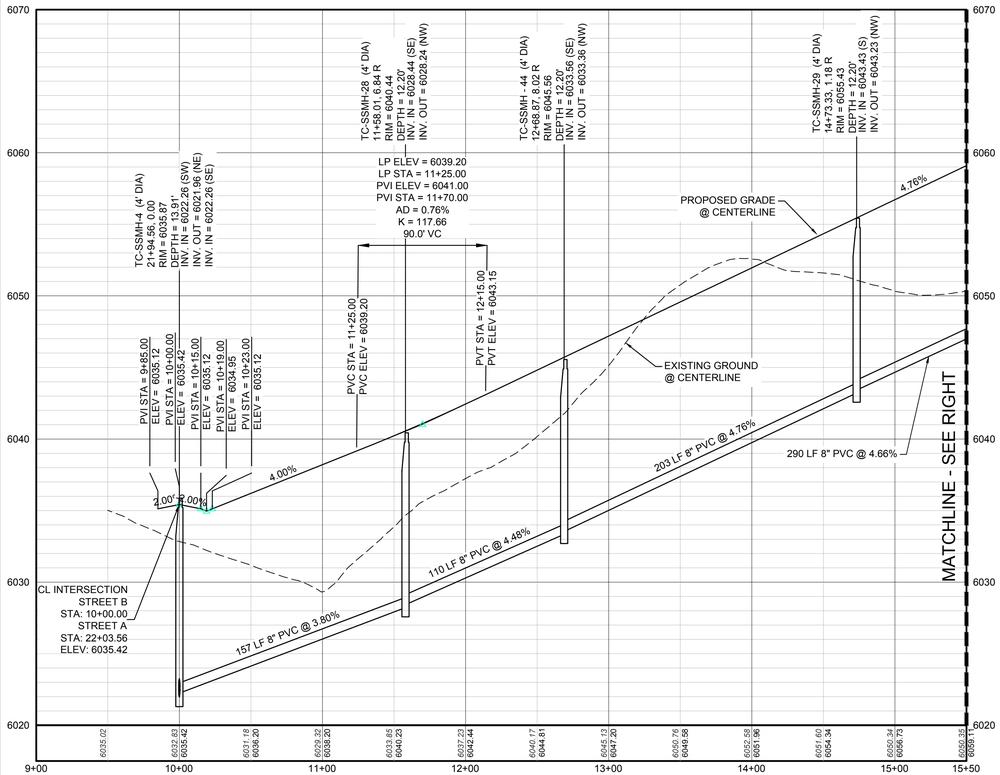
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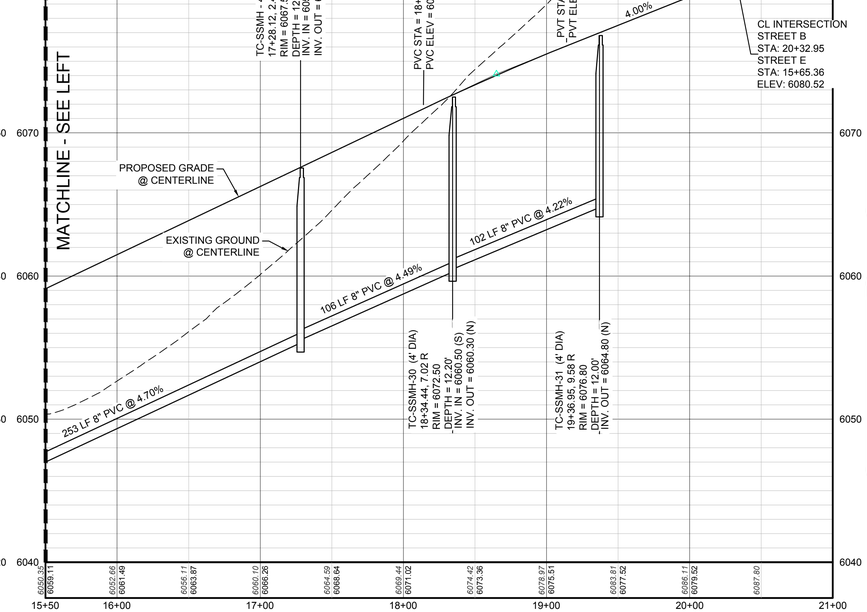


KEYMAP
N.T.S.

PLAN: STREET B STA: 09+00.00 TO 21+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET B STA: 09+00.00 TO 15+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: STREET B STA: 15+50.00 TO 21+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4 5 6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
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No.	Revisions	Date	Init.	Appr.	Date

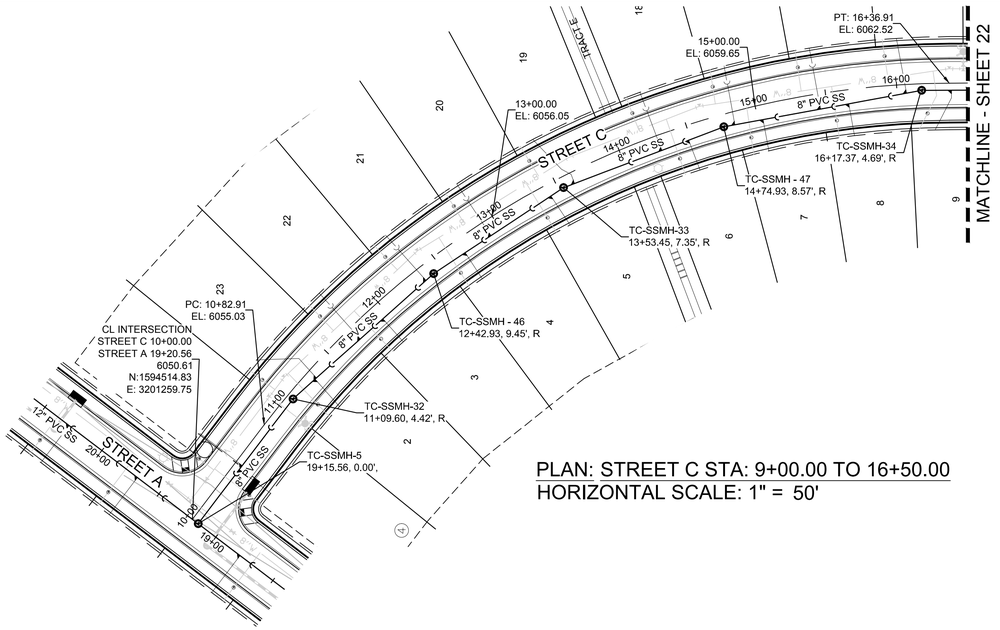
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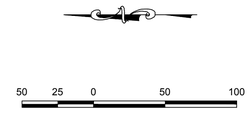
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
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STREET B

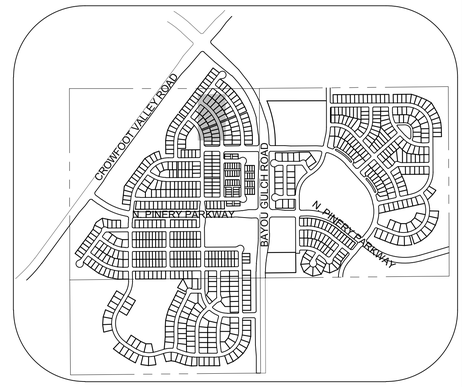
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DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 20

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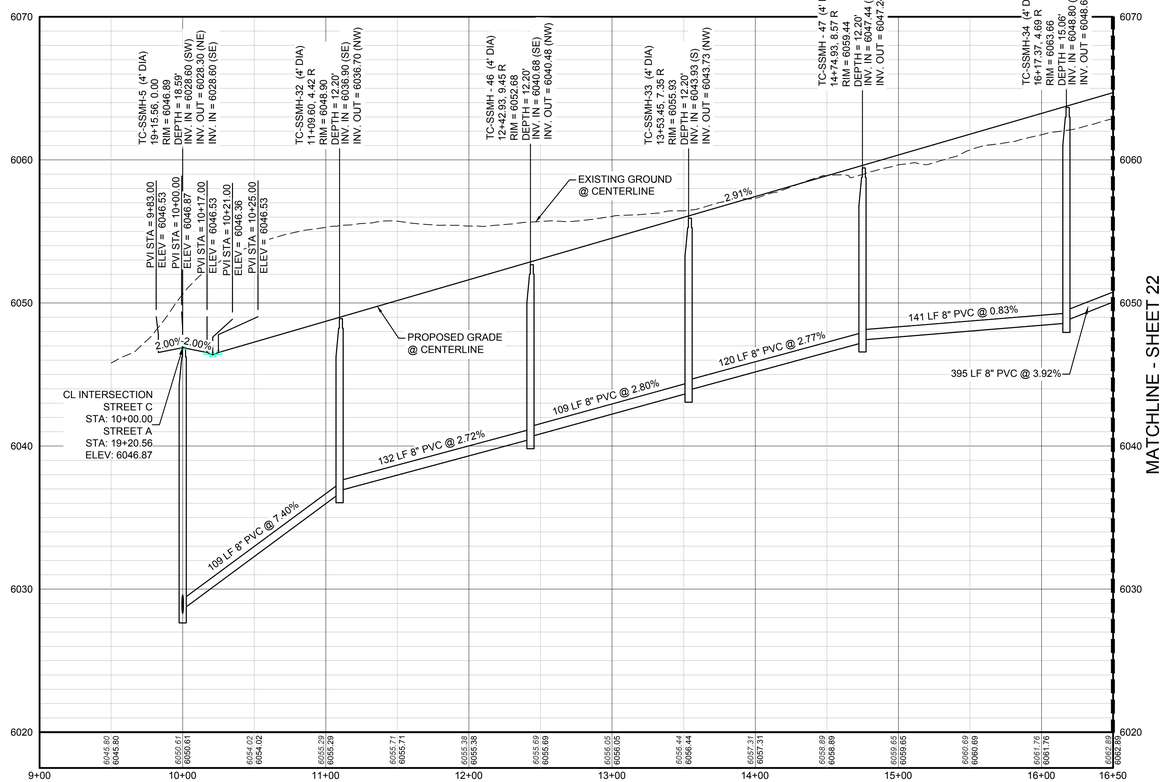


PLAN: STREET C STA: 9+00.00 TO 16+50.00
HORIZONTAL SCALE: 1" = 50'





KEYMAP
N.T.S.



PROFILE: STREET C STA: 9+00.00 TO 16+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGN, 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.

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

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Tel: (720) 482-9526
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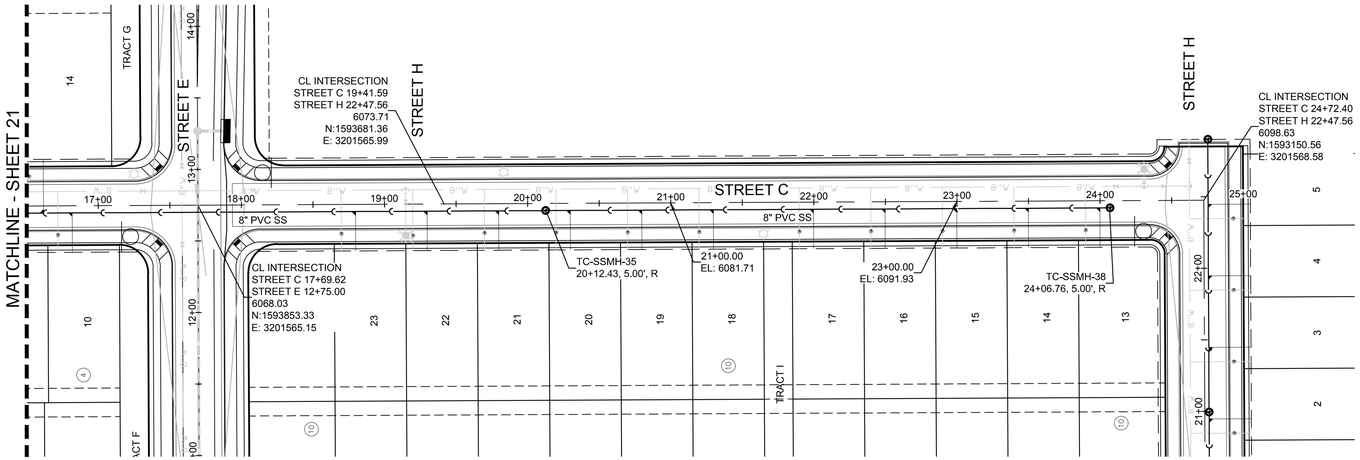
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET C

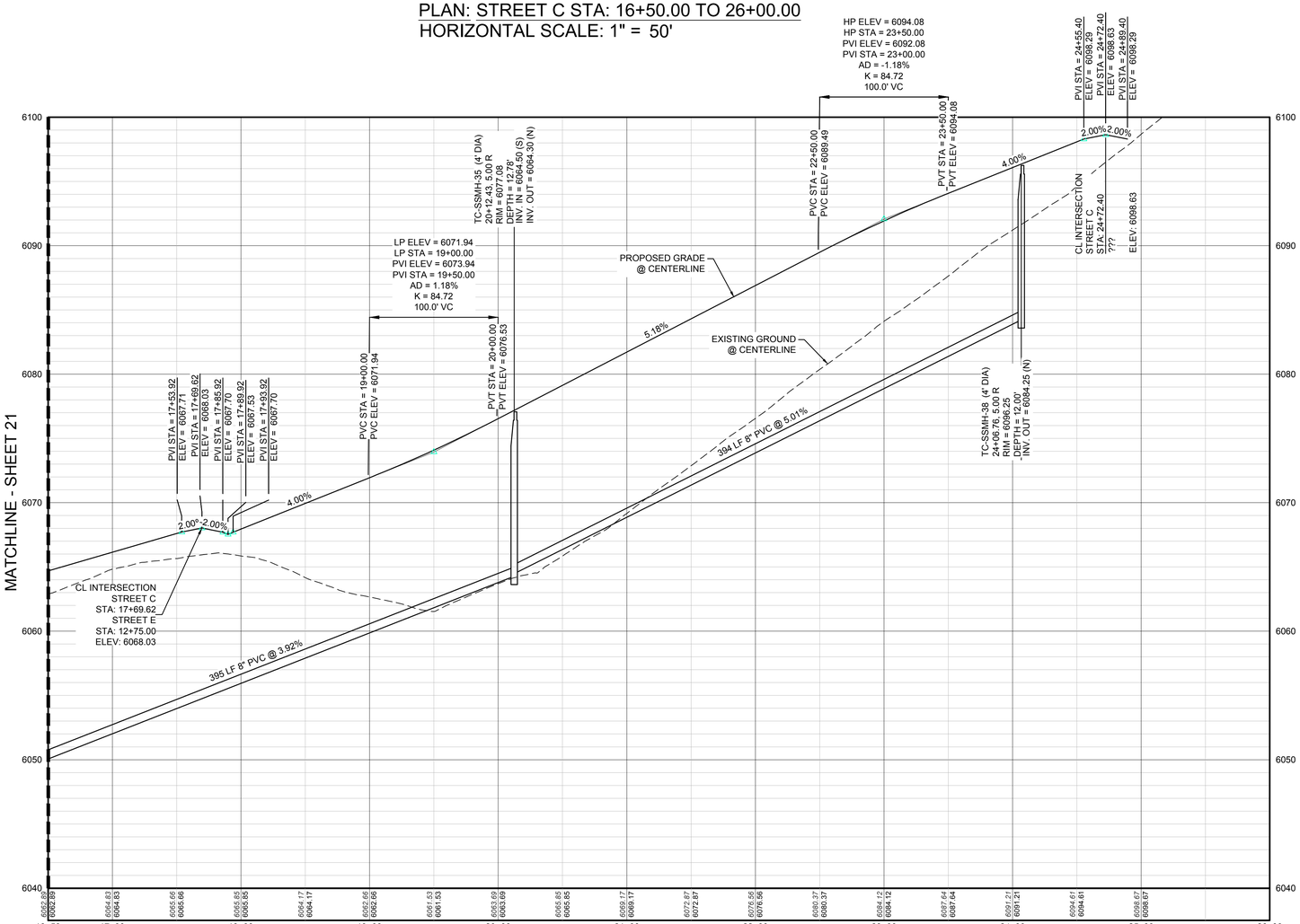
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DATE:	FEBRUARY 2017		

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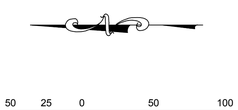
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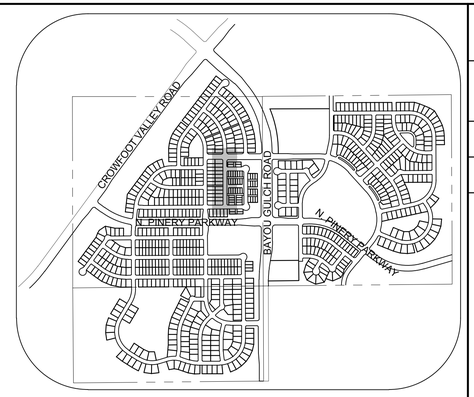


PLAN: STREET C STA: 16+50.00 TO 26+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET C STA: 16+50.00 TO 26+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'





KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF (BO)	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE (AV)	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE (BO)	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION		
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
HCR	HANDICAP CURB RAMP	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	T.O.S.	TOP OF PIPE
K	CURVATURE COEFFICIENT	UE	UTILITY EASEMENT
LF	LINEAR FEET	VC	VERTICAL CURVE
MH	MANHOLE	WL	WATER LINE
N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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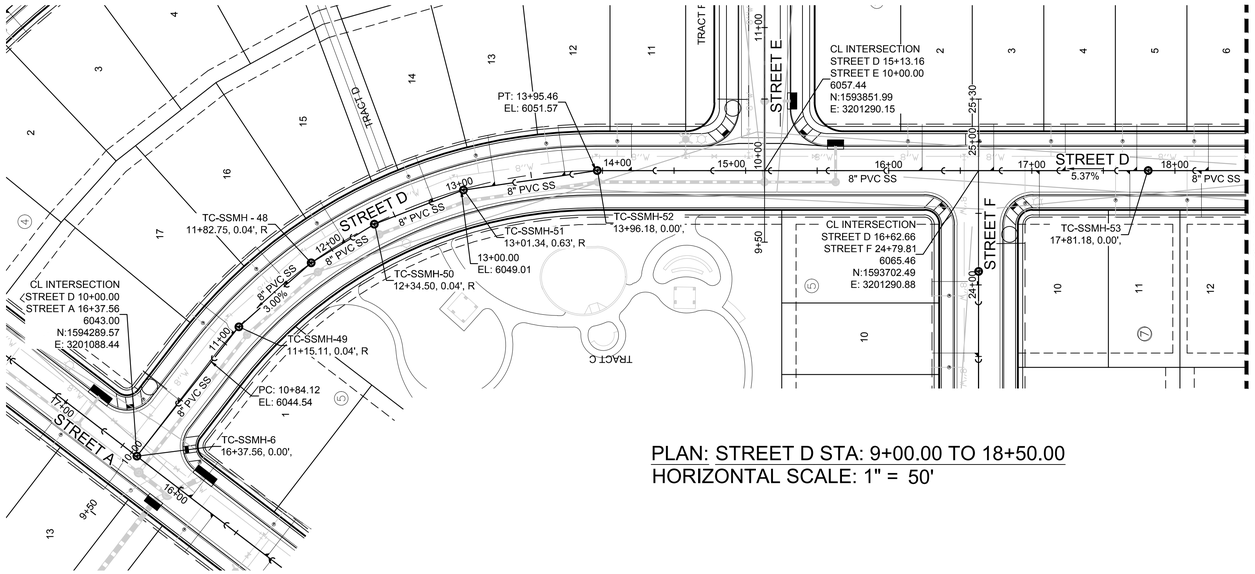
ESX MANAGEMENT
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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET C

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DRAWN BY:	KJD		
CHECKED BY:	JJJ	DATE:	FEBRUARY 2017

SHEET NUMBER 22

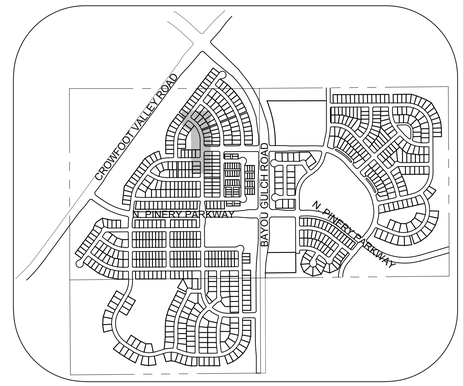
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PLAN: STREET D STA: 9+00.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



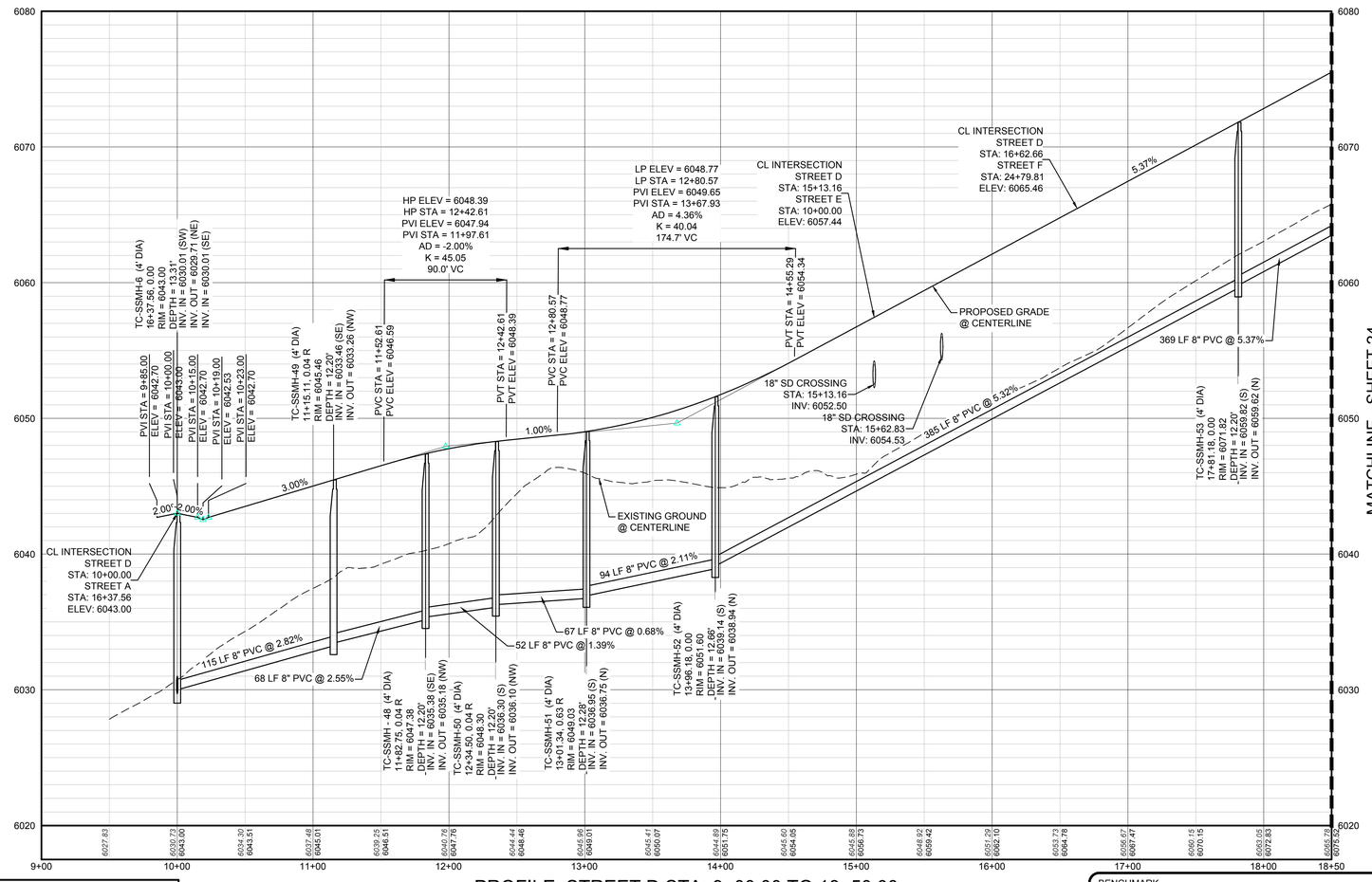
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
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N.T.S.	NOT TO SCALE		
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HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

CVL CONSULTANTS
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

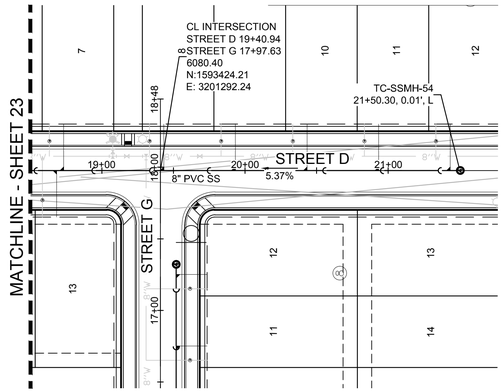
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET D

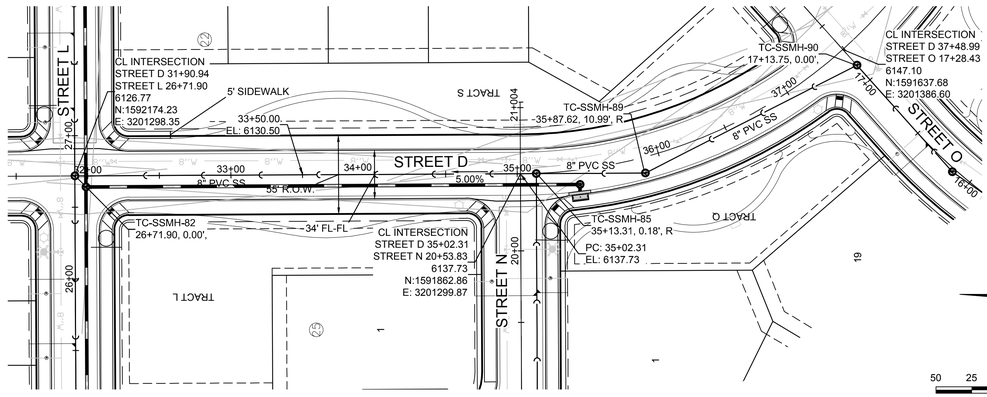
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DATE: FEBRUARY 2017

SHEET NUMBER 23

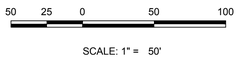
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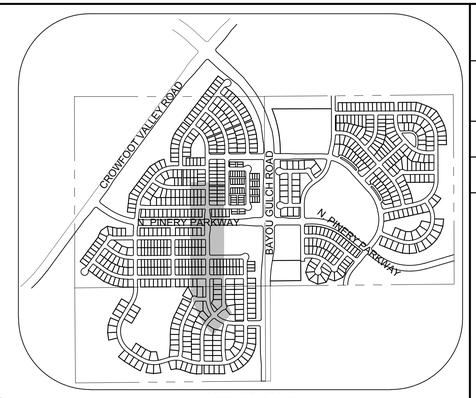
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HORIZONTAL SCALE: 1" = 50'



PLAN: STREET D STA: 31+50.00 TO 38+00.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



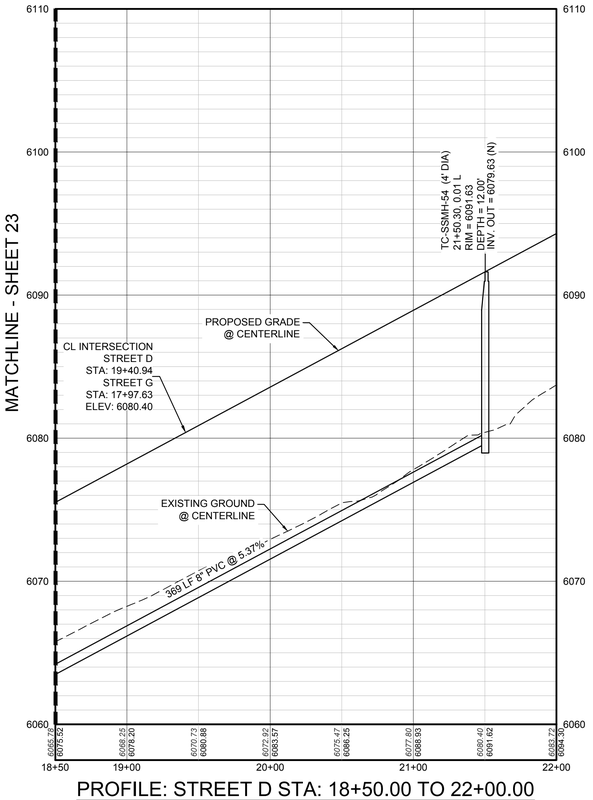
KEYMAP
N.T.S.

LEGEND

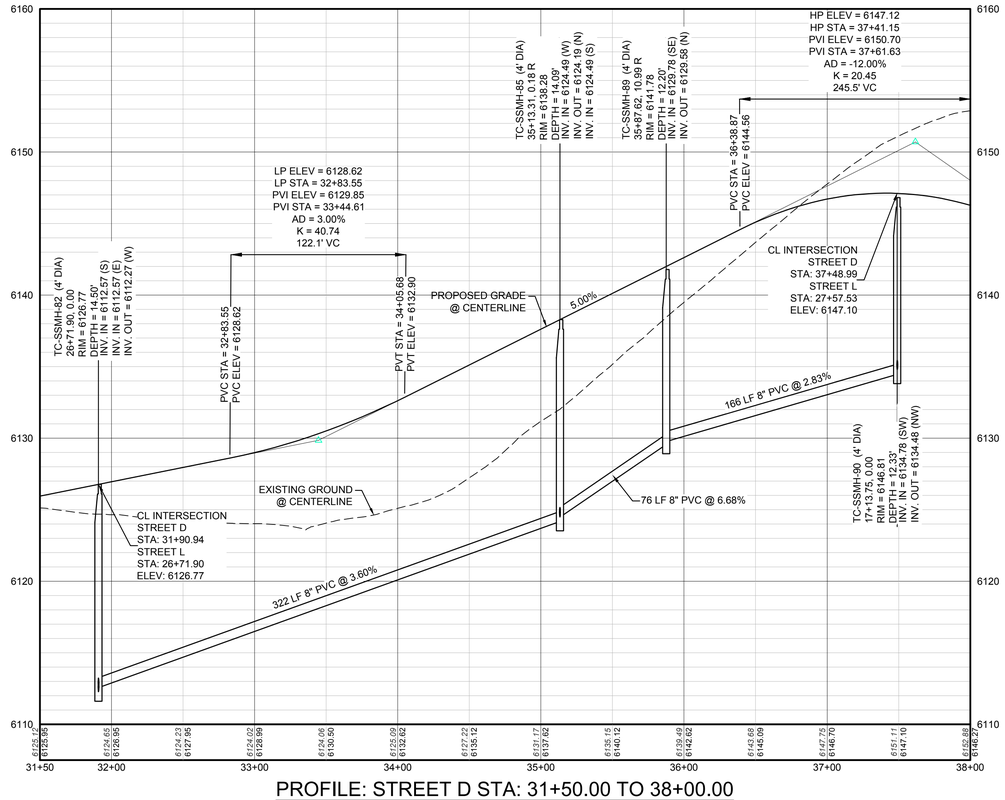
BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET D STA: 18+50.00 TO 22+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: STREET D STA: 31+50.00 TO 38+00.00
HORIZONTAL: 1" = 50'
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No.	Revisions	Date	Init.	Appr.	Date

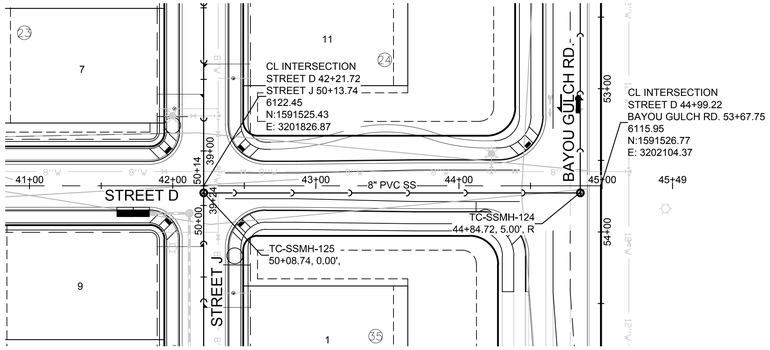
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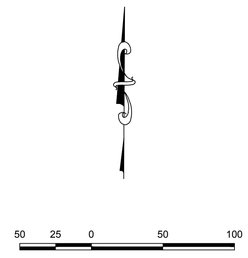
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET D

SCALE: AS SHOWN
FILE NO: 8130283701
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CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 24

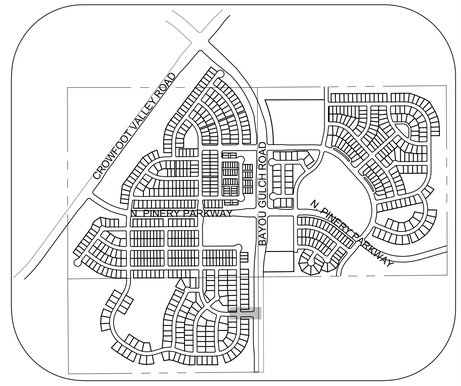
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PLAN: STREET D STA: 41+50.00 TO 46+00.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



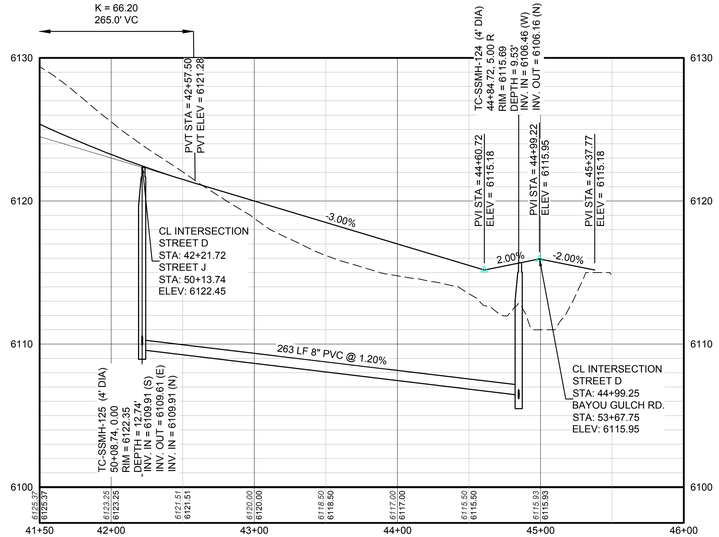
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

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EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET D STA: 41+50.00 TO 46+00.00
HORIZONTAL: 1" = 50'
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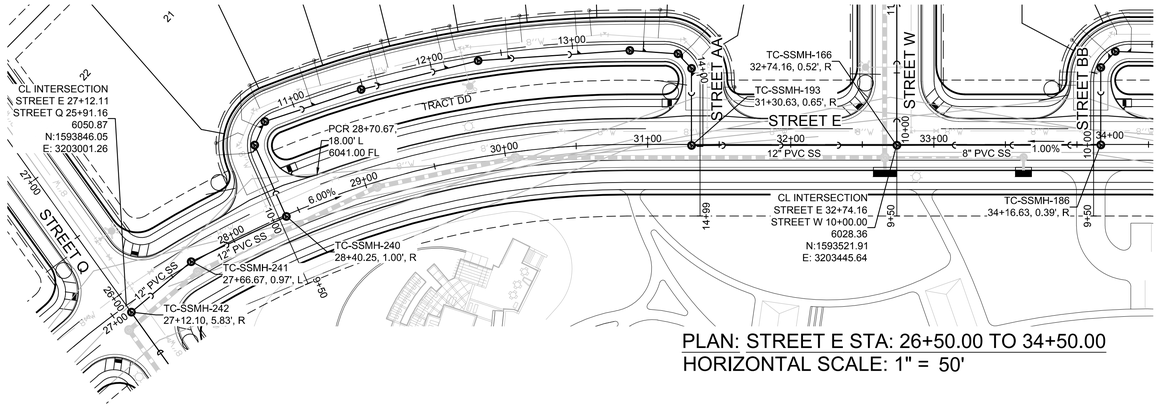
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CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

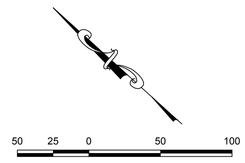
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET D

SCALE: AS SHOWN
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CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 25

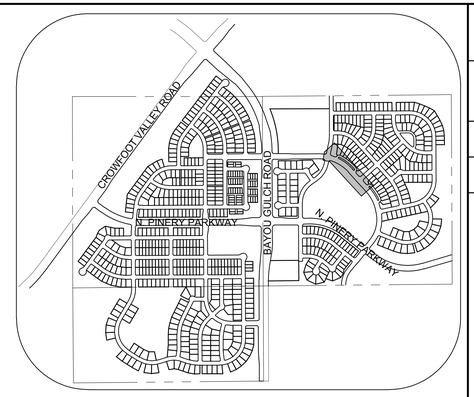
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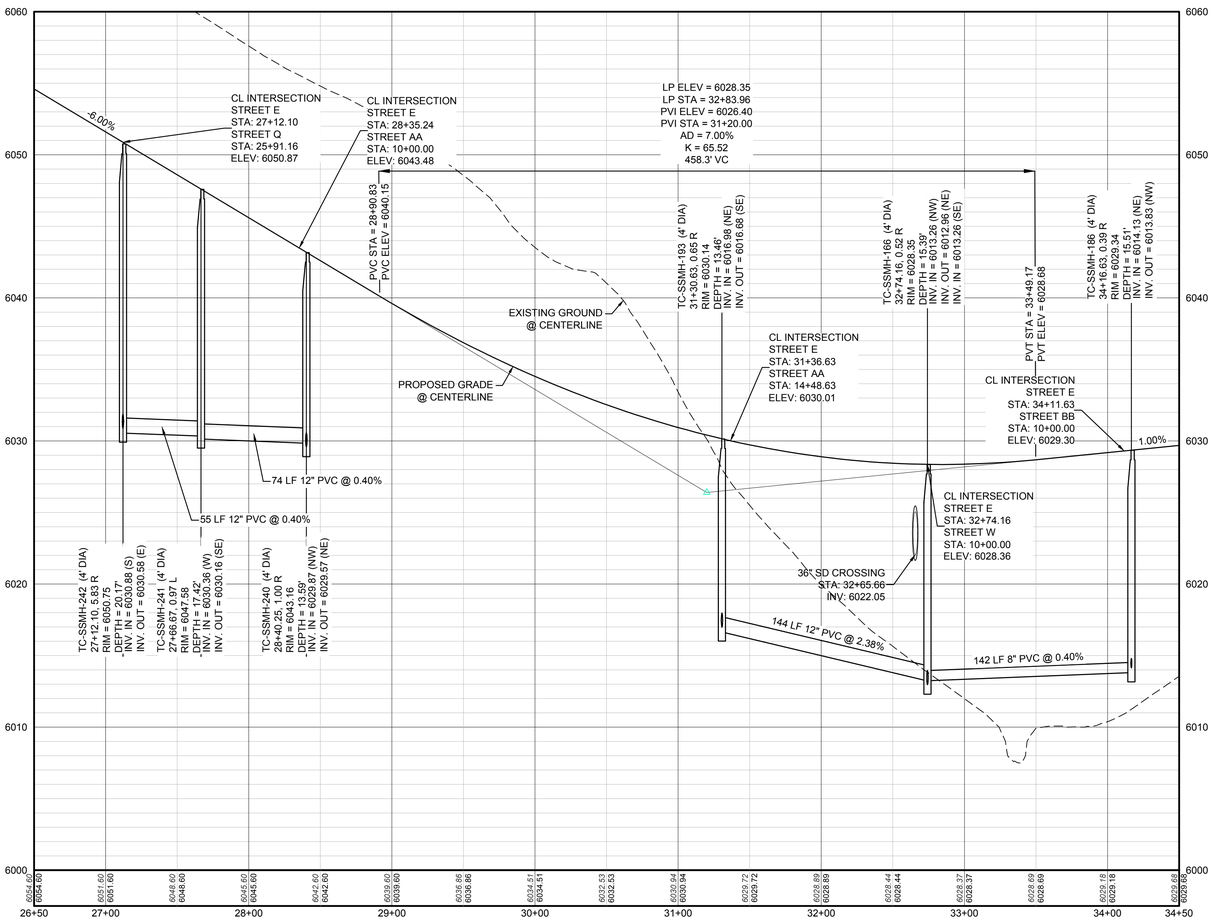
PLAN: STREET E STA: 26+50.00 TO 34+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: STREET E STA: 26+50.00 TO 34+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- EXISTING ELEVATION
- PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- 1.0% PROPOSED SLOPE & DIRECTION
- 5615 EXISTING 5' CONTOUR
- 5616 EXISTING 1' CONTOUR
- 5620 PROPOSED 5' CONTOUR
- 5607 PROPOSED 1' CONTOUR
- 36" SS PROPOSED STORM DRAIN
- 18" SS PROPOSED SEWER LINE WITH MANHOLE
- PROPOSED SEWER LATERAL
- 8"W PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- RW EXISTING 60" RAW WATER LINE
- SECTION LINE
- FILING BOUNDARY
- FO EXISTING FIBER OPTIC LINE
- HV EXISTING OVERHEAD HIGH VOLTAGE LINE
- TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
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N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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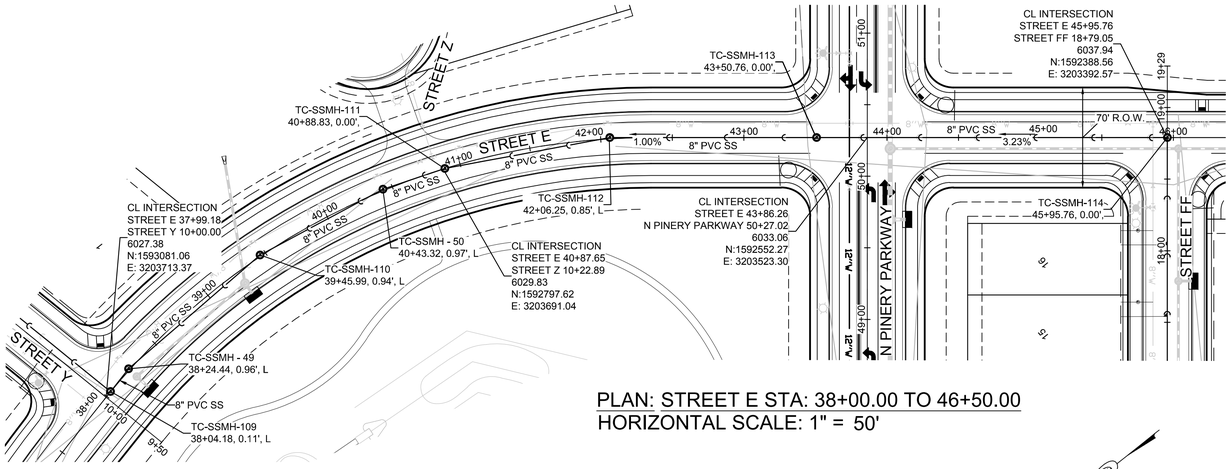
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET E

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 26

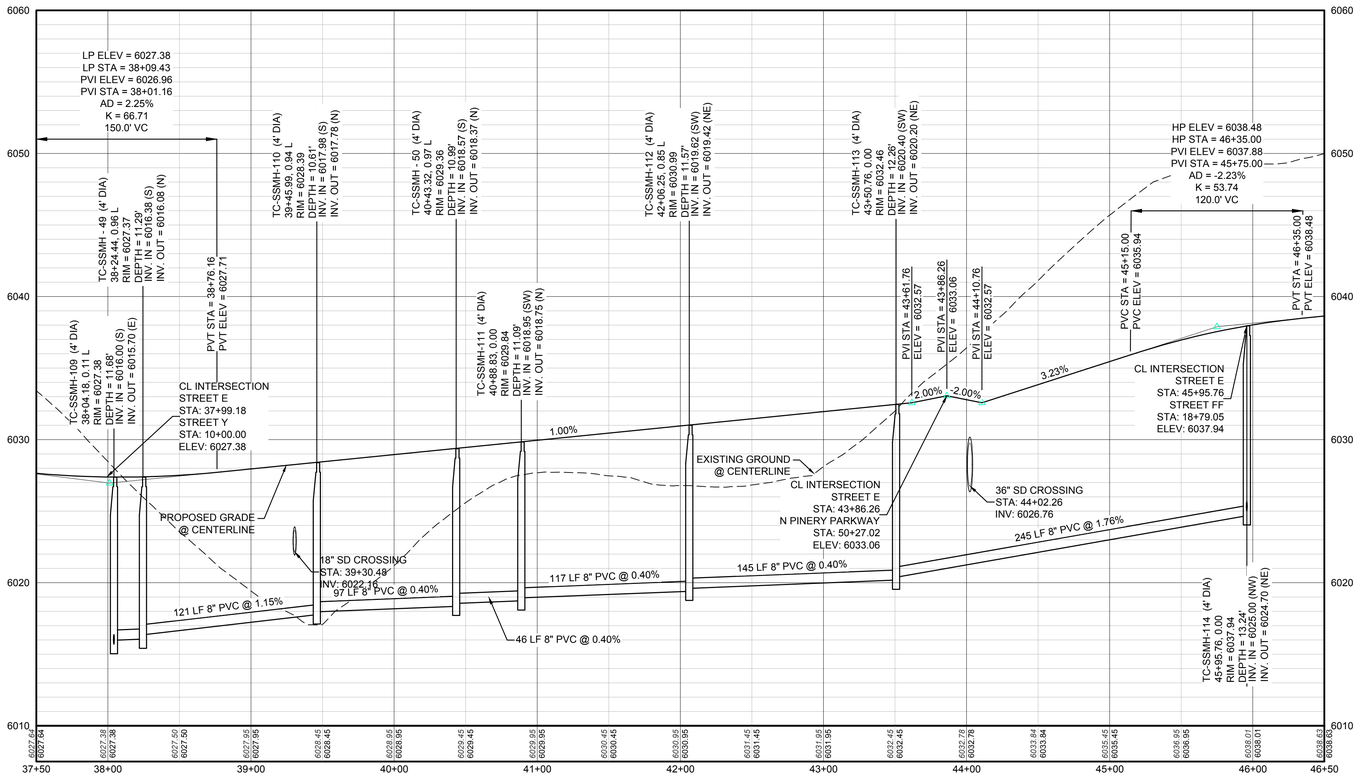
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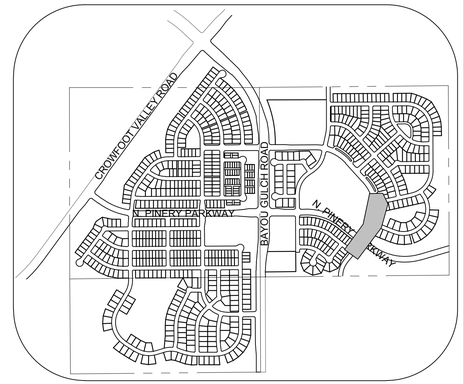
PLAN: STREET E STA: 38+00.00 TO 46+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



PROFILE: STREET E STA: 37+50.00 TO 46+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	PT. OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION

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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

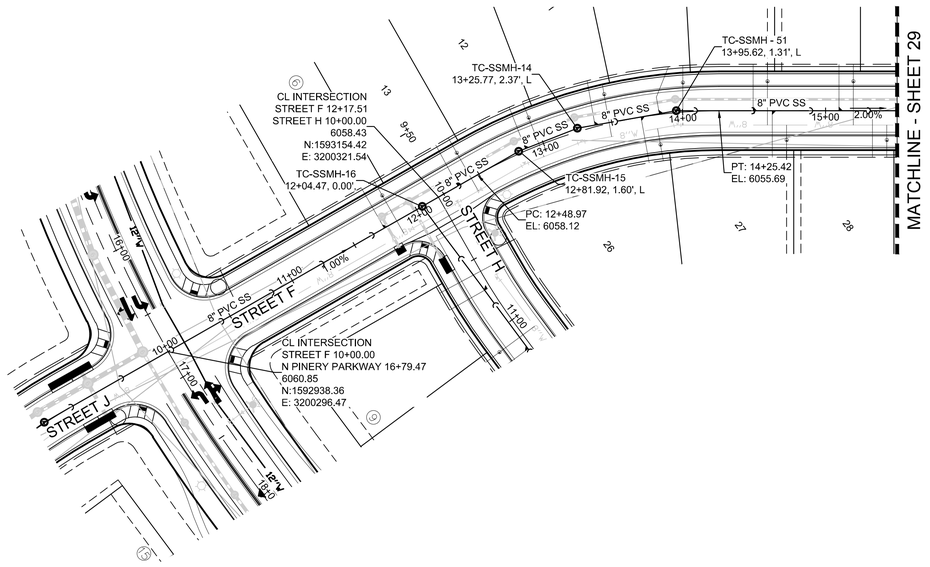
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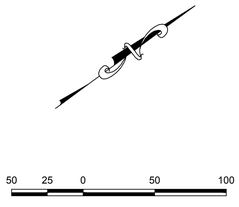
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET E

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 26

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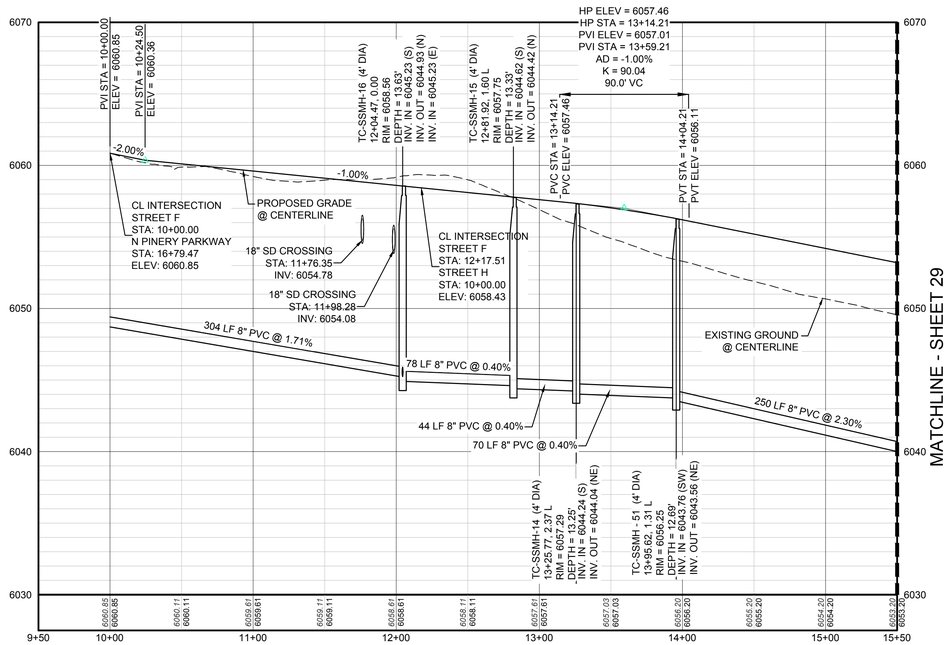


PLAN: STREET F STA: 9+50.00 TO 15+50.00
HORIZONTAL SCALE: 1" = 50'

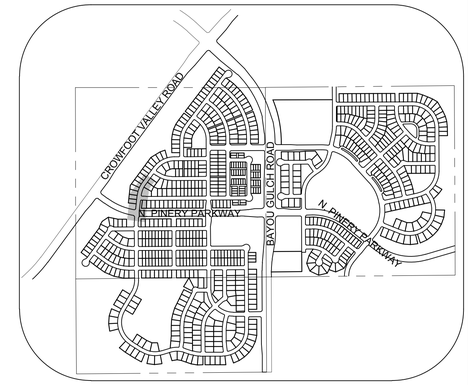


50 25 0 50 100

SCALE: 1" = 50'



PROFILE: STREET F STA: 9+50.00 TO 15+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4 5 6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date	Init.	Appr.	Date

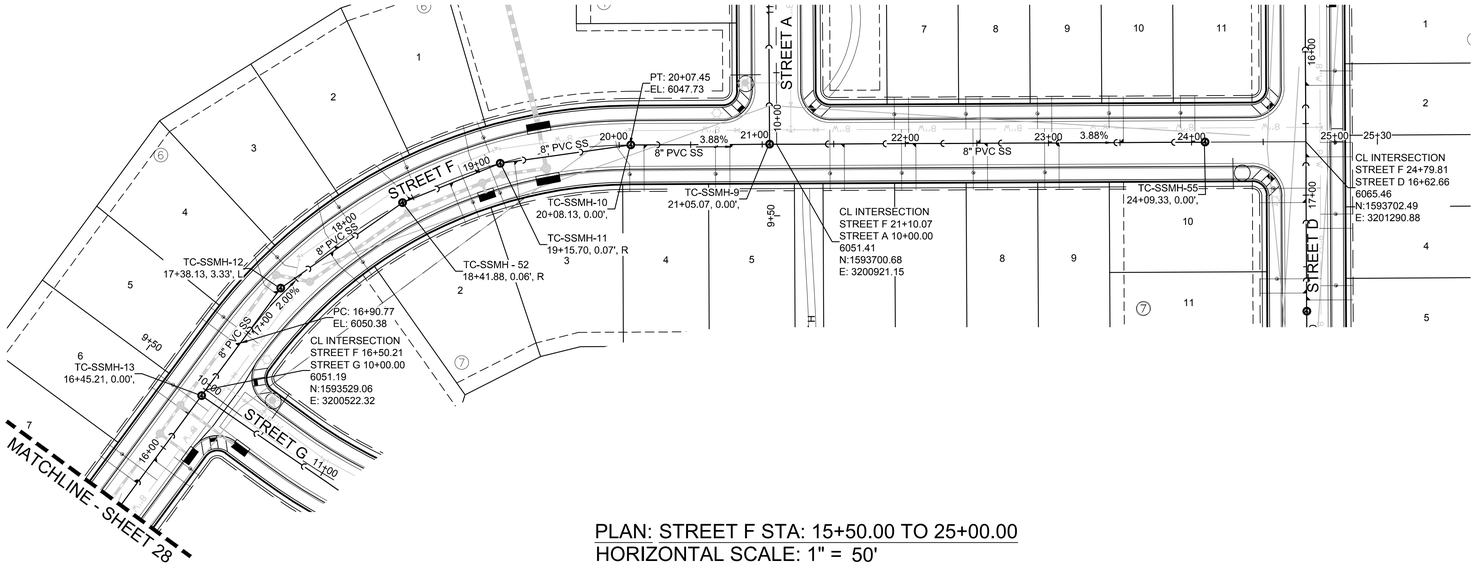
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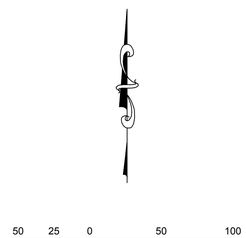
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET F

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 28

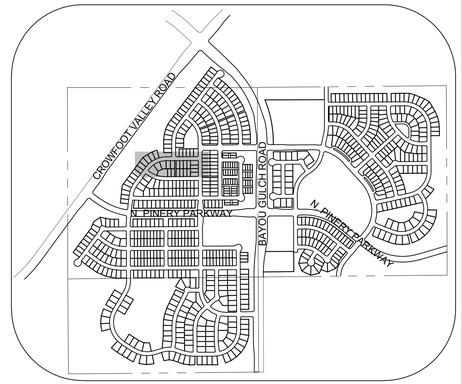


PLAN: STREET F STA: 15+50.00 TO 25+00.00
HORIZONTAL SCALE: 1" = 50'



50 25 0 50 100

SCALE: 1" = 50'



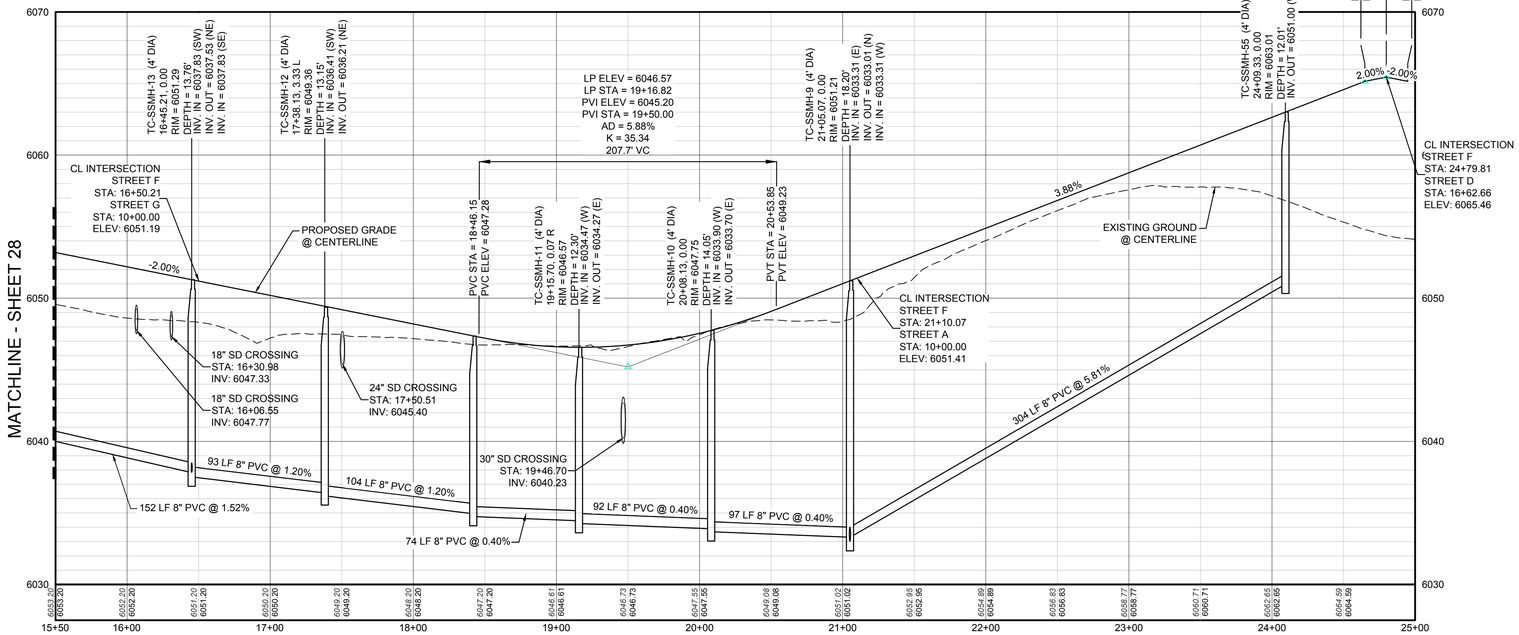
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION



PROFILE: STREET F STA: 15+50.00 TO 25+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

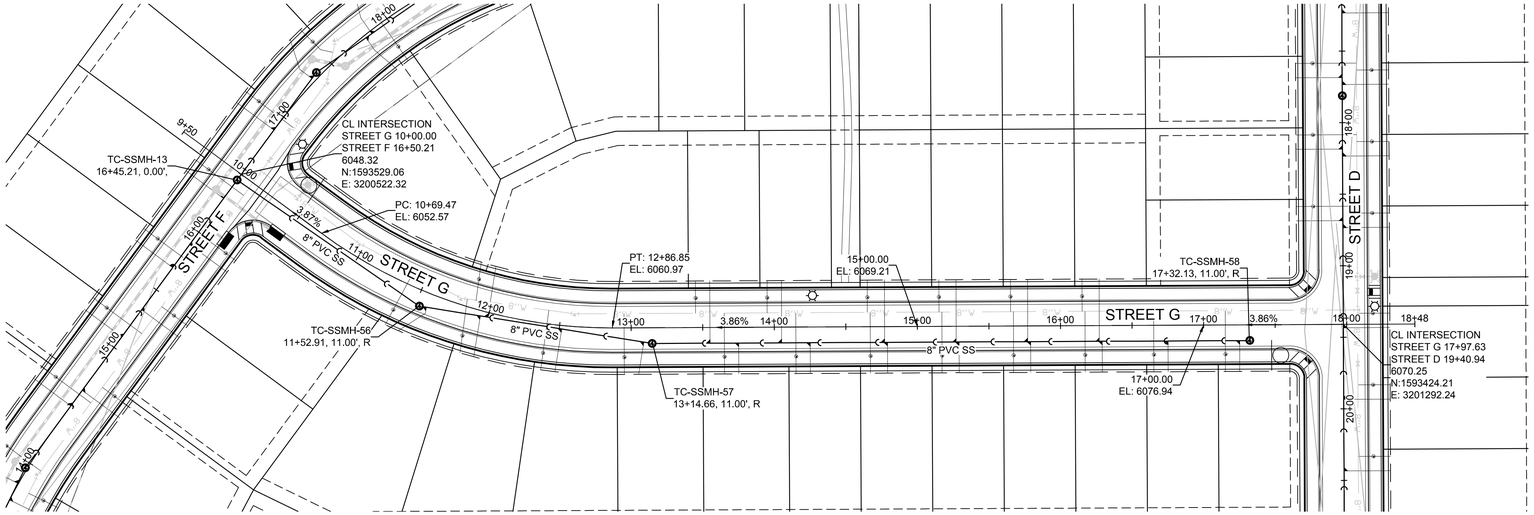
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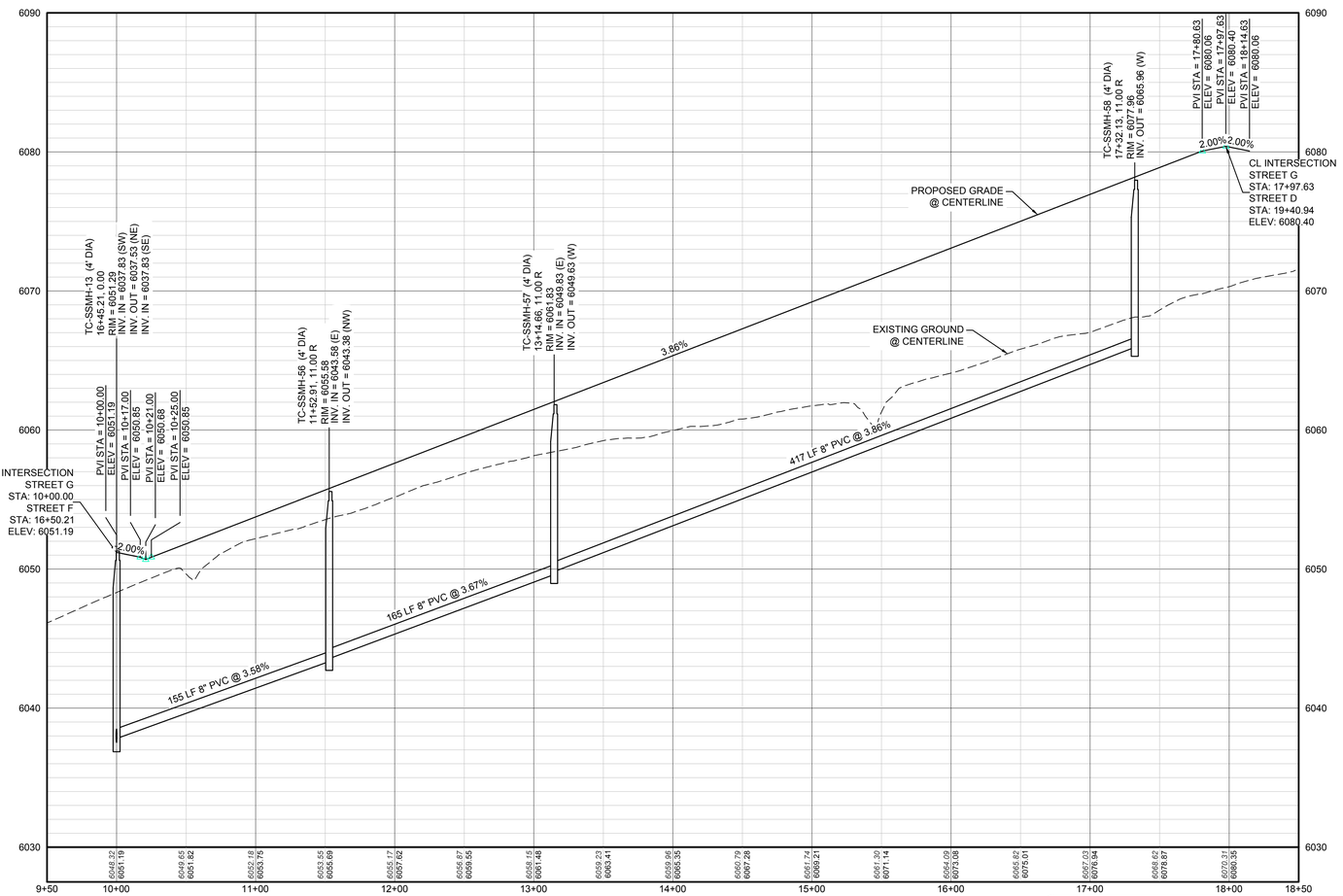
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET F

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

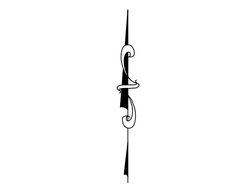
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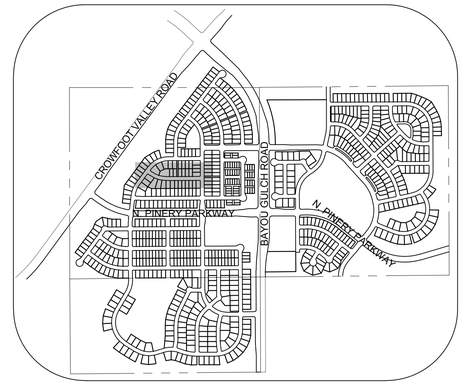
PLAN: STREET G STA: 9+50.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET G STA: 9+50.00 TO 18+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

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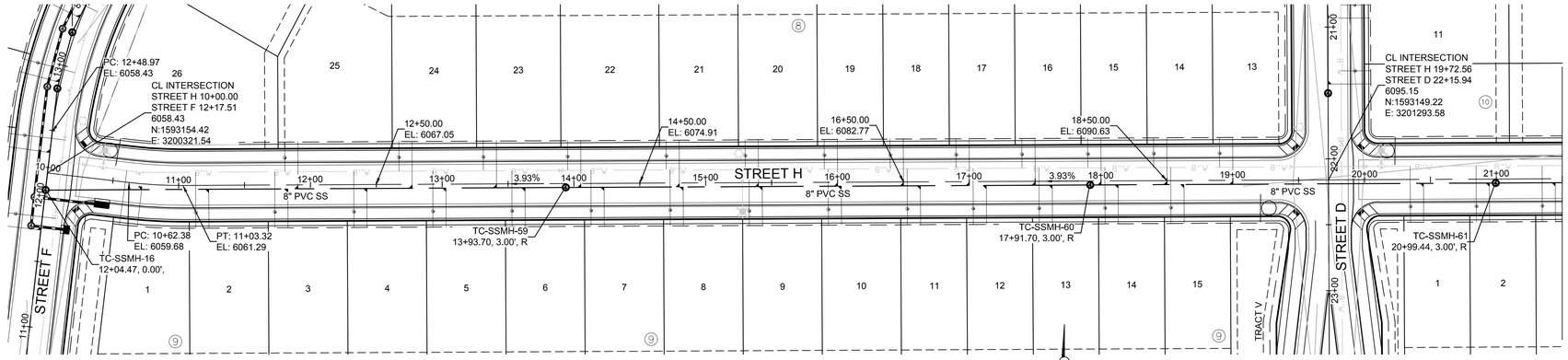
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET G

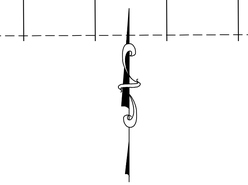
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DATE:	FEBRUARY 2017		

SHEET NUMBER 30

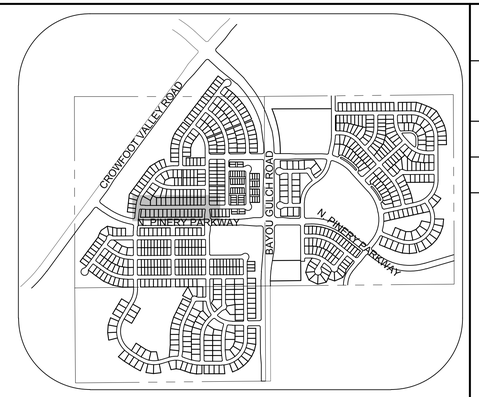
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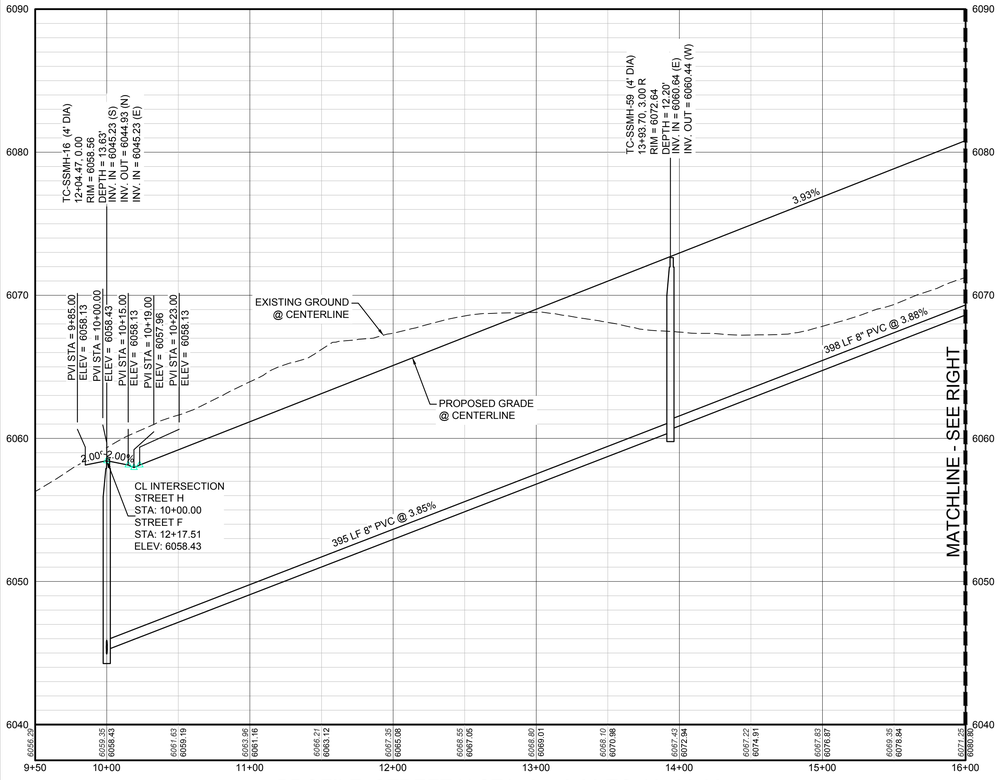
PLAN: STREET H STA: 9+50.00 TO 21+50.00
HORIZONTAL SCALE: 1" = 50'



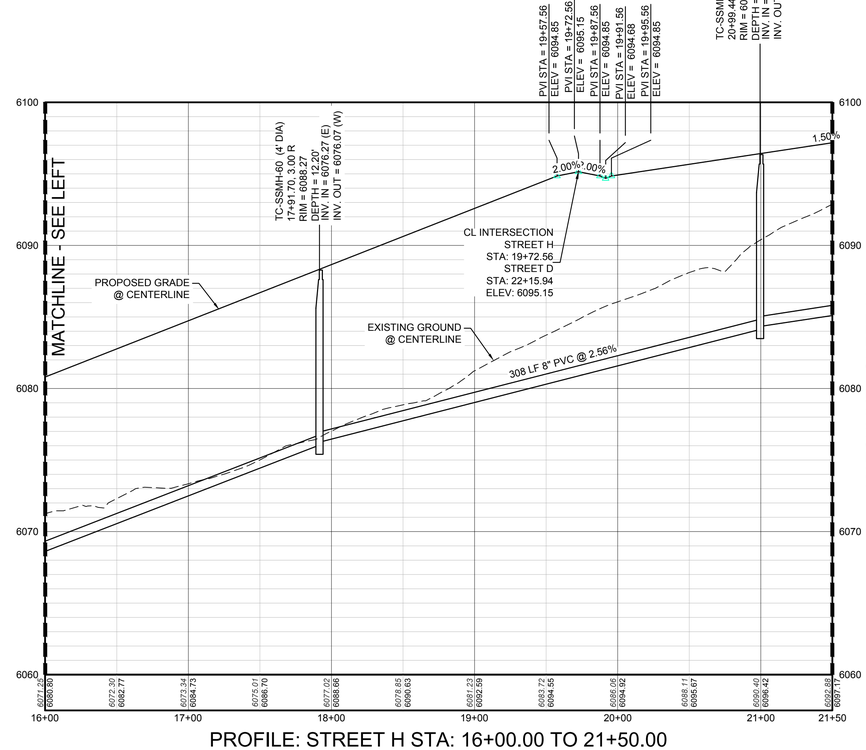
SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: STREET H STA: 9+50.00 TO 16+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: STREET H STA: 16+00.00 TO 21+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION		
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
HCR	HANDICAP CURB RAMP	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	T.O.S.	TOP OF PIPE
K	CURVATURE COEFFICIENT	UE	UTILITY EASEMENT
LF	LINEAR FEET	VC	VERTICAL CURVE
MH	MANHOLE	WL	WATER LINE
N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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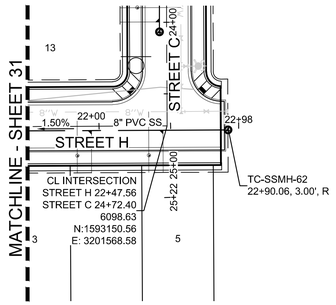
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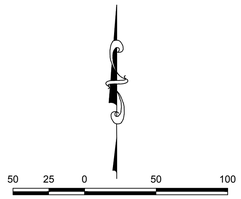
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Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET H

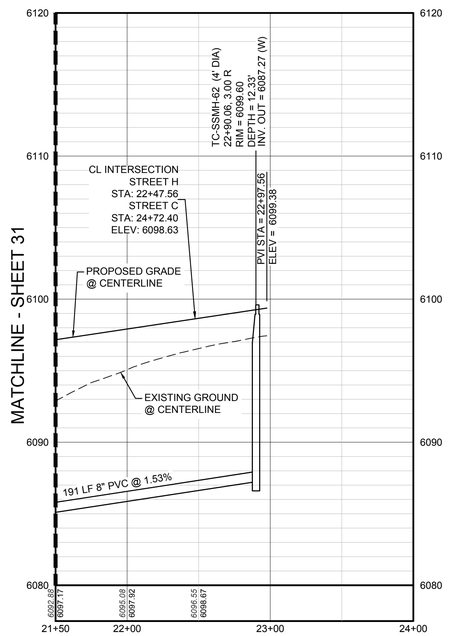
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SHEET NUMBER 31



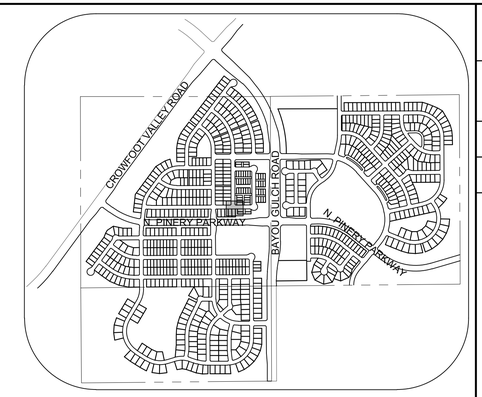


SCALE: 1" = 50'

PLAN: STREET H STA: 21+50.00 TO 24+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET H STA: 21+50.00 TO 24+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

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No.	Revisions	Date	Init.	Appr.	Date

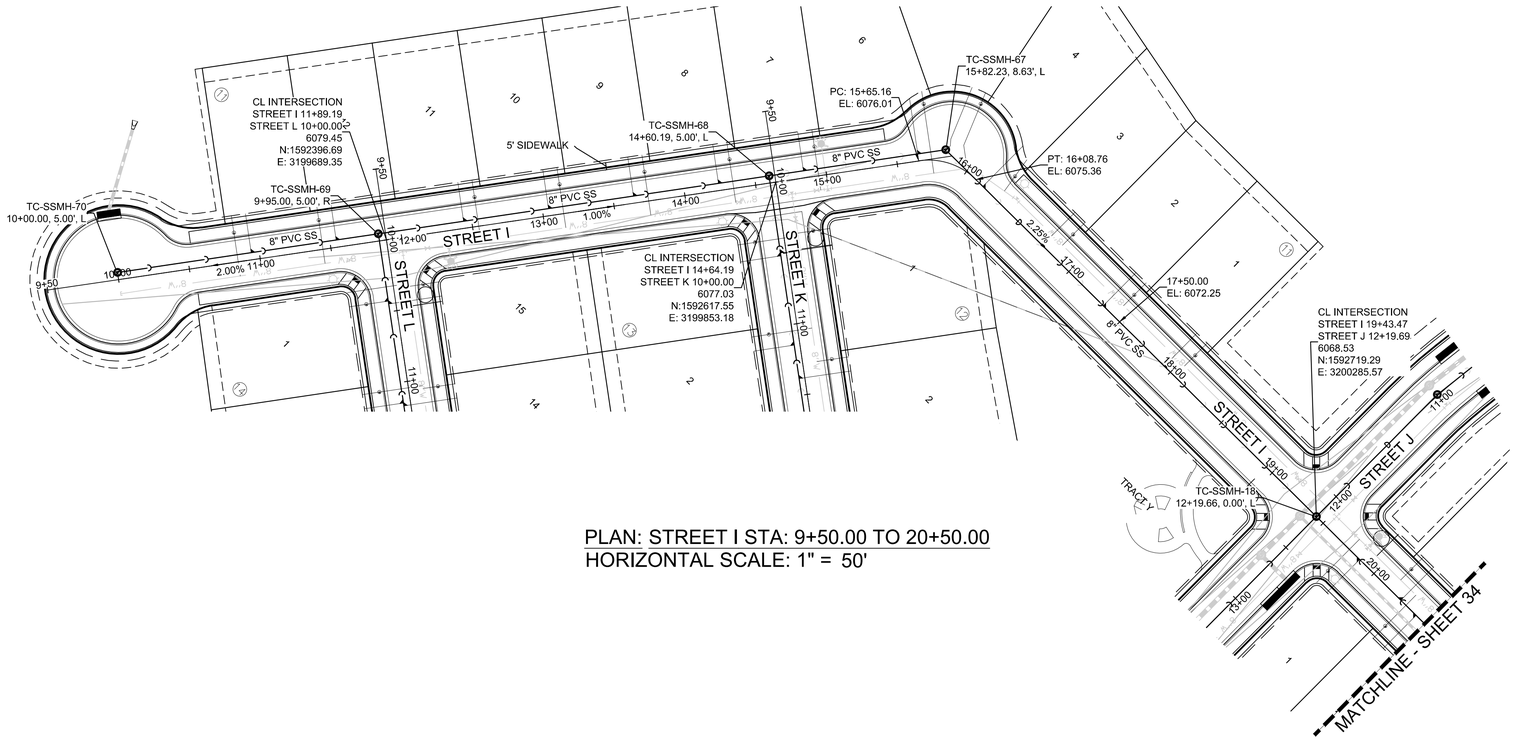
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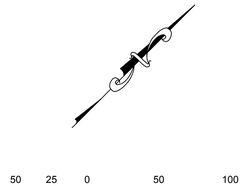
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET H

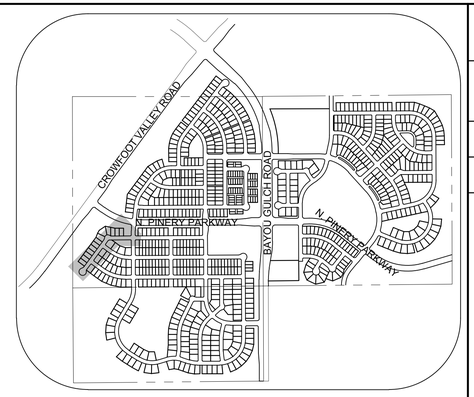
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DRAWN BY:	KJD		
CHECKED BY:	JJJ		
DATE:	FEBRUARY 2017		

SHEET NUMBER 32



PLAN: STREET I STA: 9+50.00 TO 20+50.00
HORIZONTAL SCALE: 1" = 50'





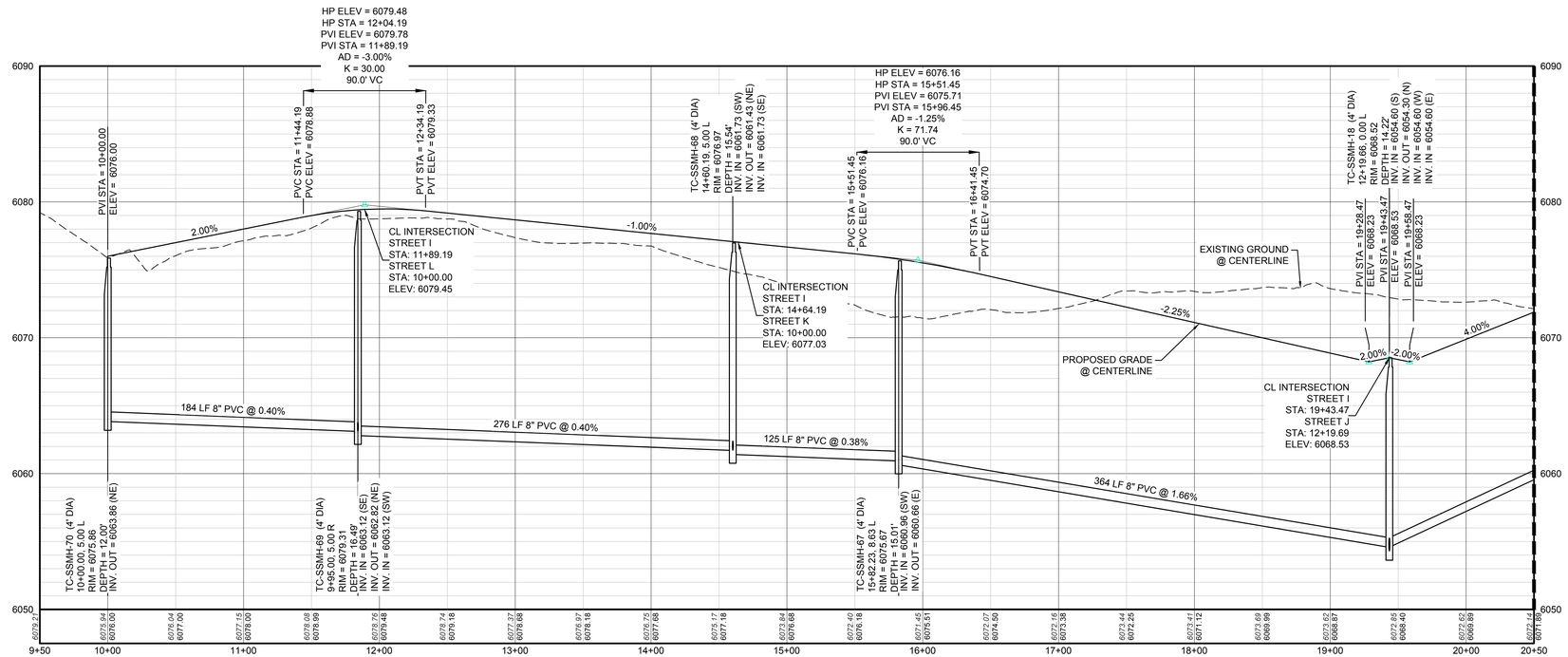
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
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EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET I STA: 9+50.00 TO 20+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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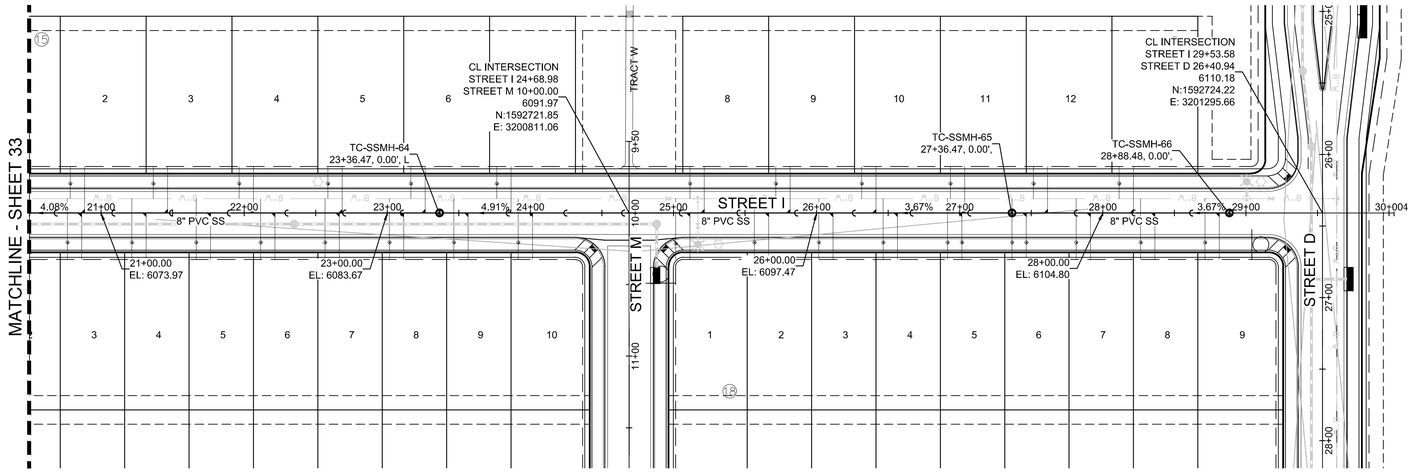
No.	Revisions	Date	Init.	Appr.	Date

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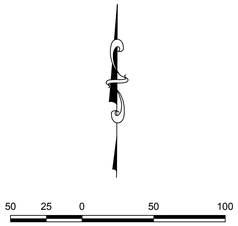
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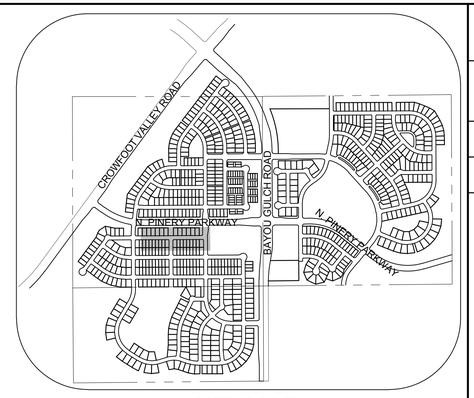
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PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET I

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DRAWN BY: KJD
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DATE: FEBRUARY 2017
SHEET NUMBER 33



PLAN: STREET I STA: 20+50.00 TO 30+00.00
HORIZONTAL SCALE: 1" = 50'





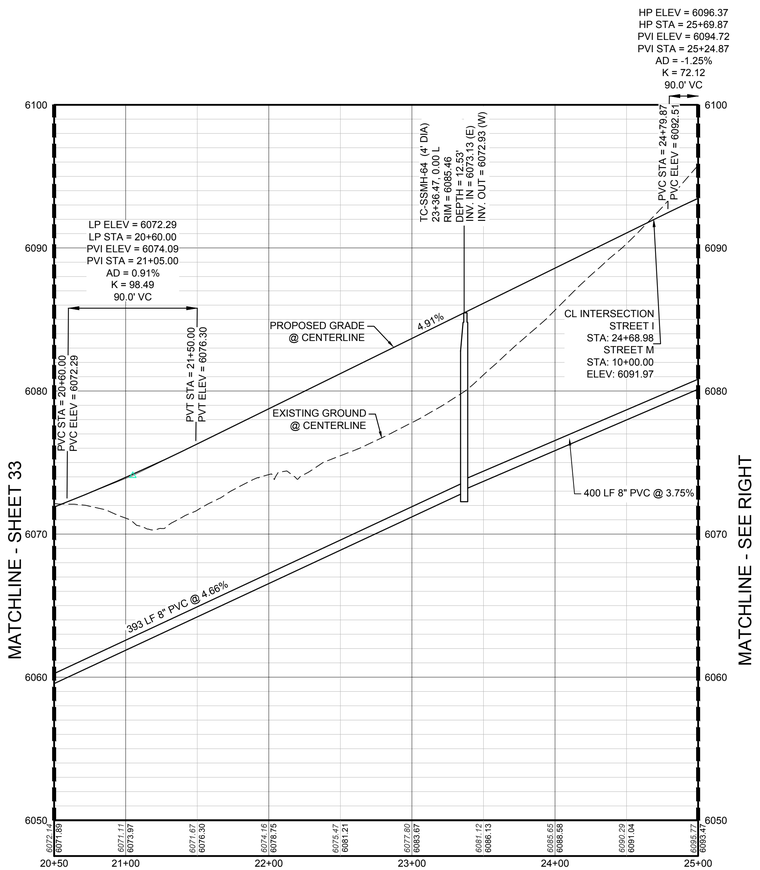
KEYMAP
N.T.S.

LEGEND

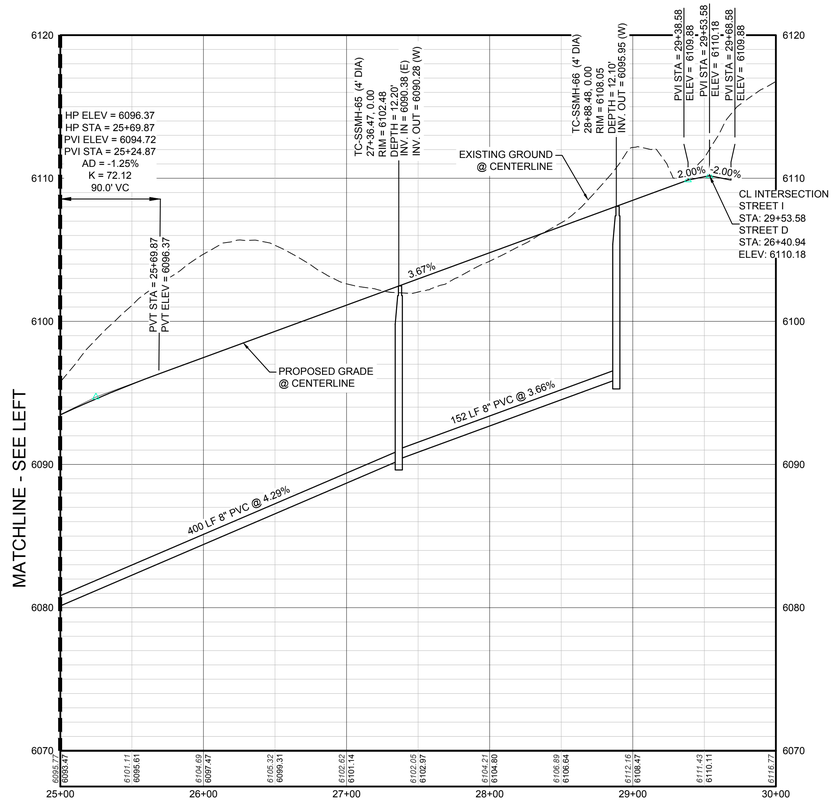
(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
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K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET I STA: 20+50.00 TO 25+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: STREET I STA: 25+00.00 TO 30+00.00
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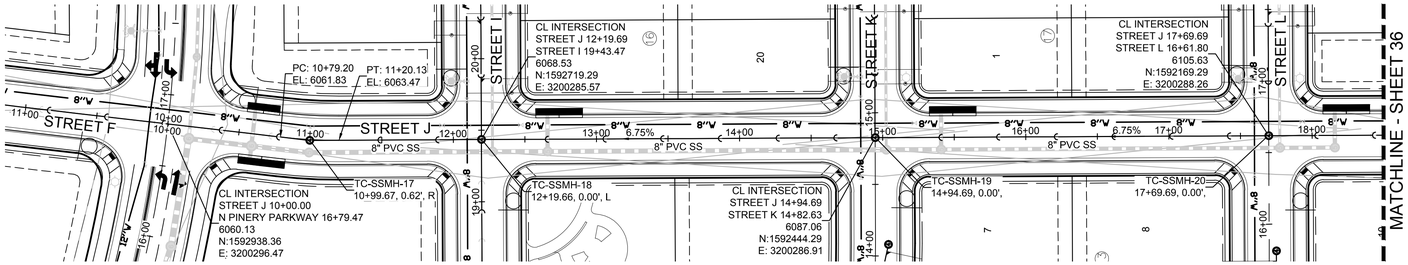
No.	Revisions	Date	Init.	Appr.	Date

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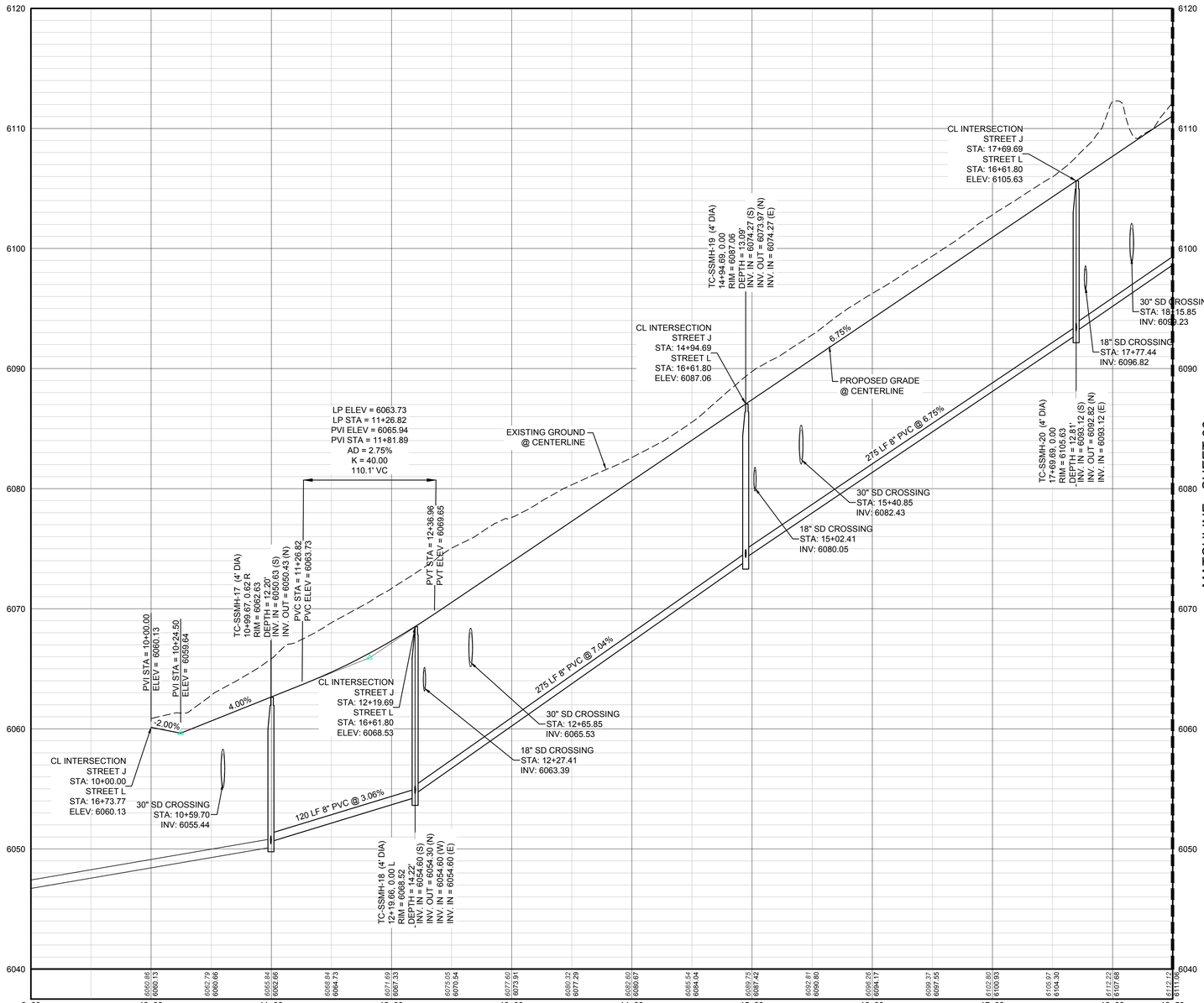
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET I

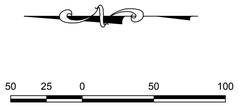
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CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 34



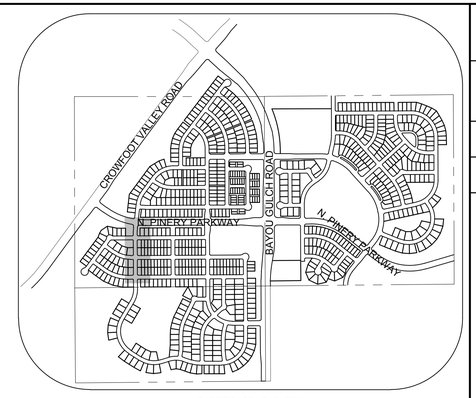
PLAN: STREET J STA: 9+00.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET J STA: 9+00.00 TO 18+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

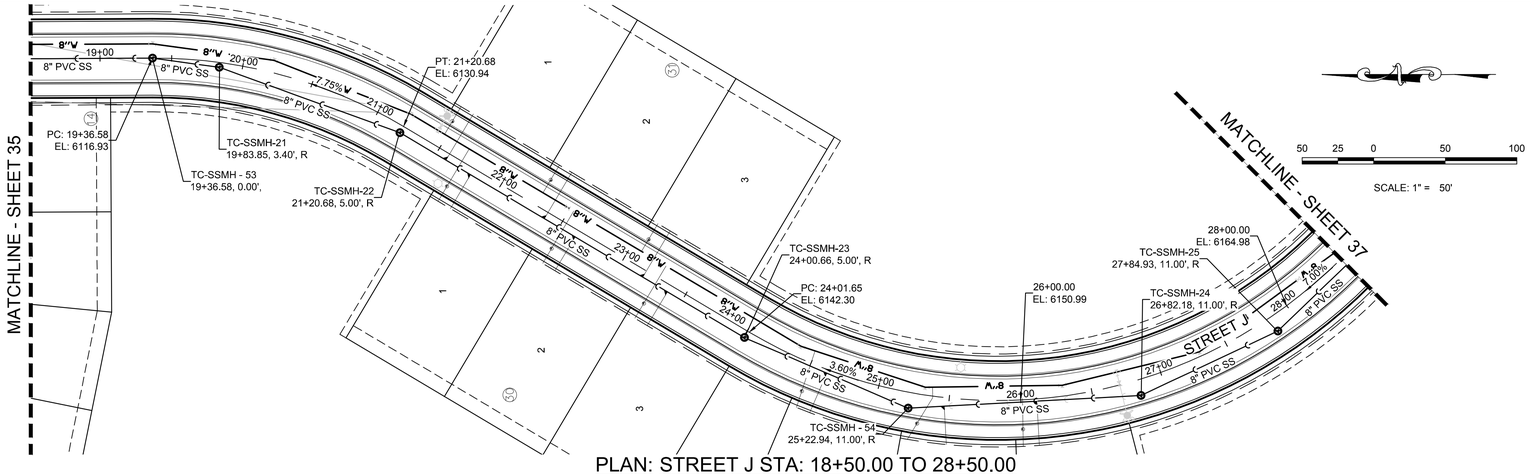
10333 E. Dry Creek Rd.
Suite 240
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Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

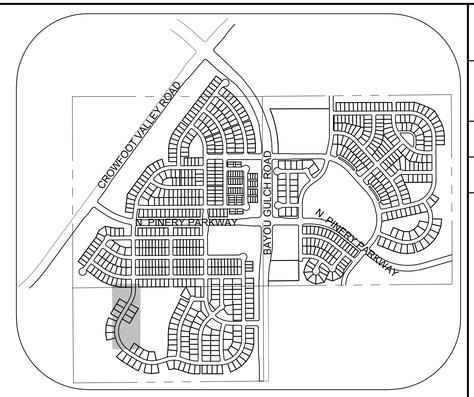
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET J

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 35

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\SANITARY PLAN AND PROFILE\STREET J.DWG, DOUGK, 2/5/2017 2:29 PM



PLAN: STREET J STA: 18+50.00 TO 28+50.00
HORIZONTAL SCALE: 1" = 50'



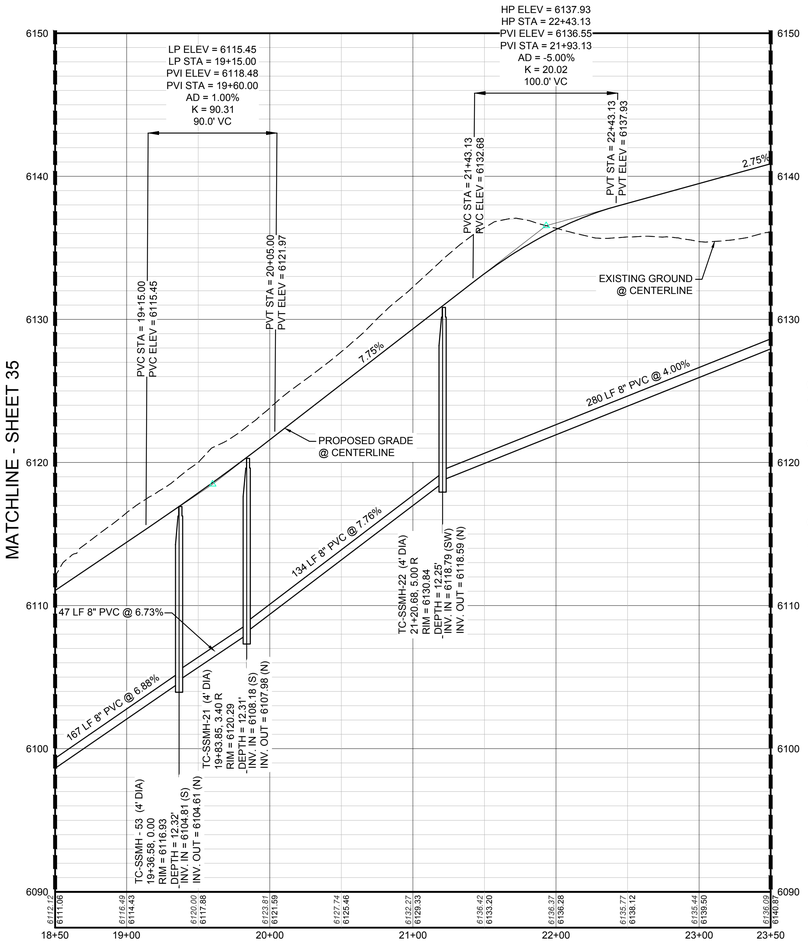
KEYMAP
N.T.S.

LEGEND

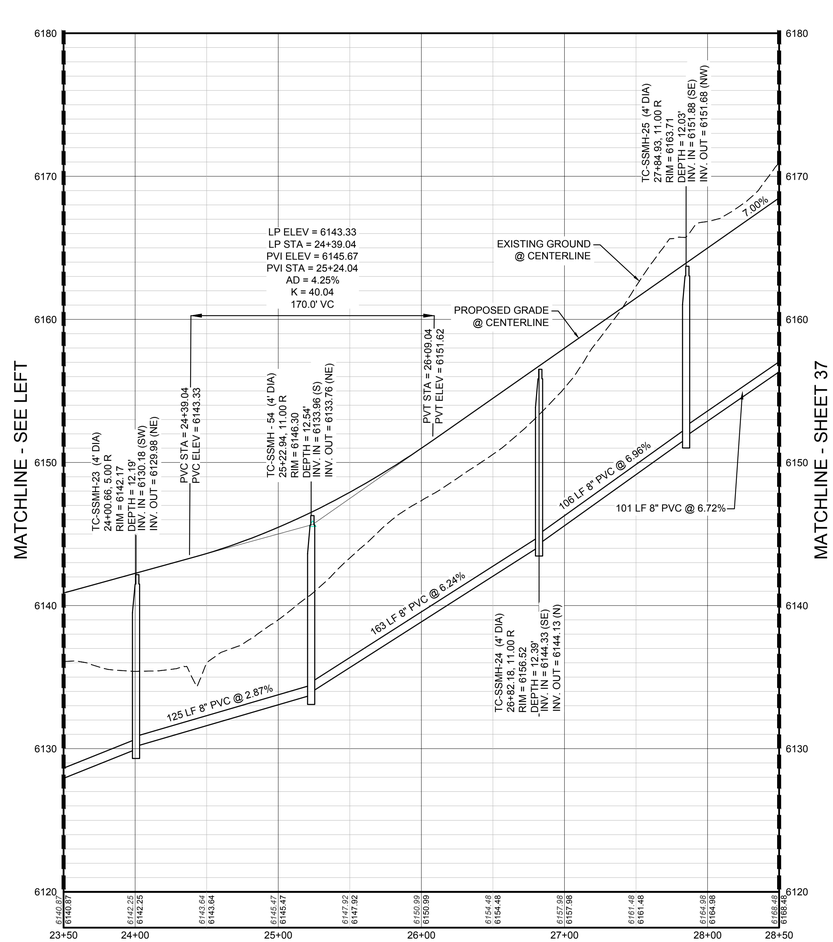
BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED SEWER LINE (8" W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
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EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET J STA: 18+50.00 TO 23+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: STREET J STA: 23+50.00 TO 28+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

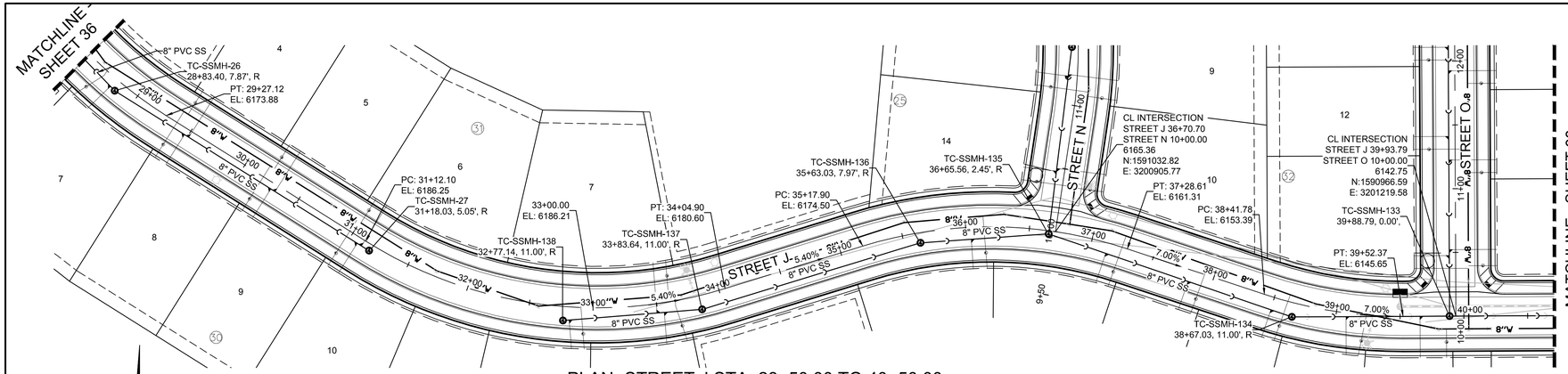
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Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET J

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 36

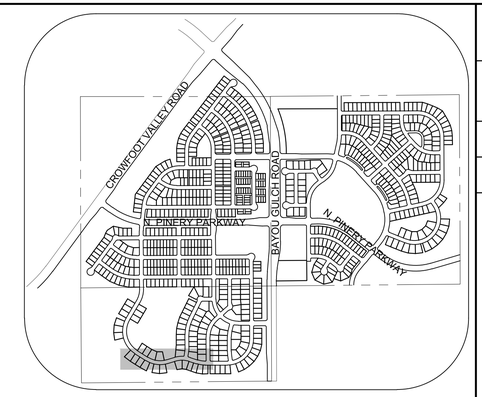
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PLAN: STREET J STA: 28+50.00 TO 40+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



KEYMAP
N.T.S.

PROFILE: STREET J STA: 28+50.00 TO 35+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

PROFILE: STREET J STA: 35+00.00 TO 40+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF (BO)	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE (AV)	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE (BO)	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

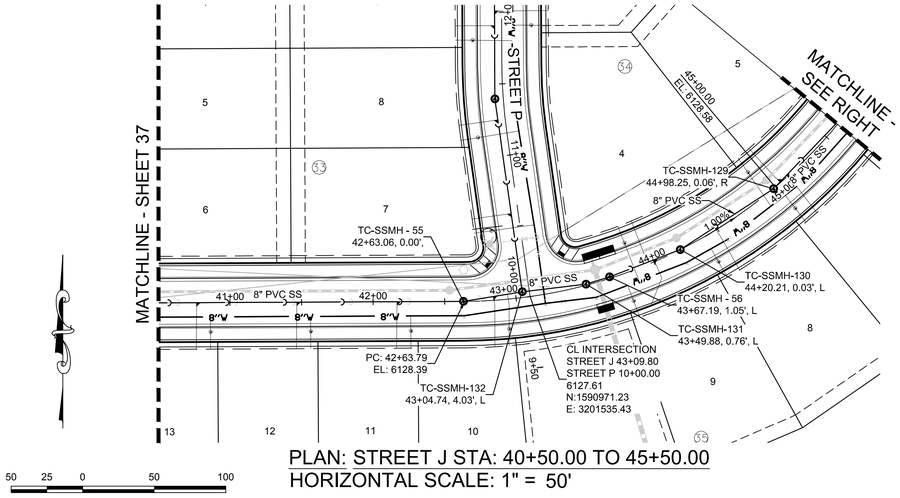
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Fax: (720) 482-9546
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7353 South Alton Way
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET J

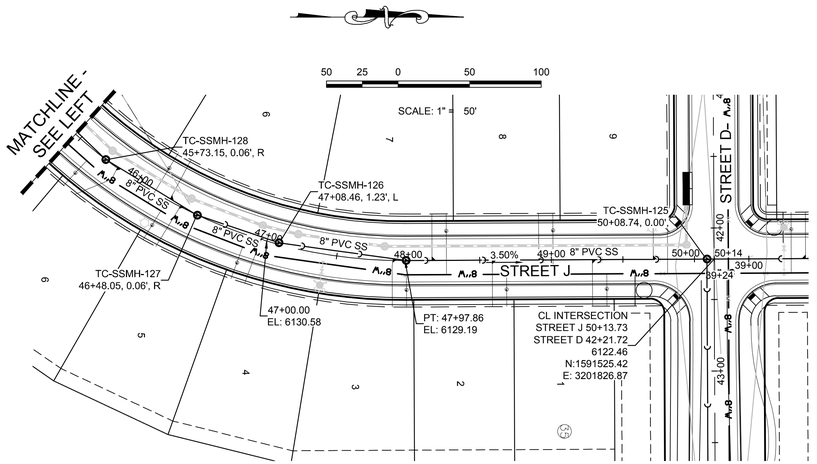
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CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017	SHEET NUMBER	37

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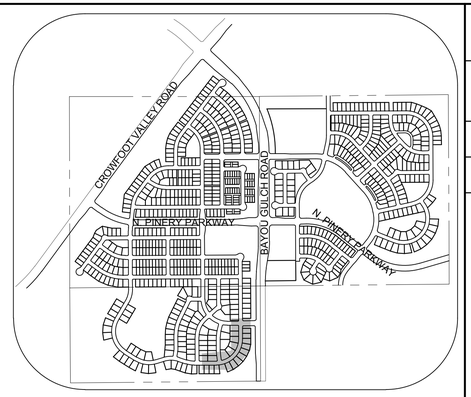


PLAN: STREET J STA: 40+50.00 TO 45+50.00
HORIZONTAL SCALE: 1" = 50'

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



PLAN: STREET J STA: 45+50.00 TO 50+50.00
HORIZONTAL SCALE: 1" = 50'



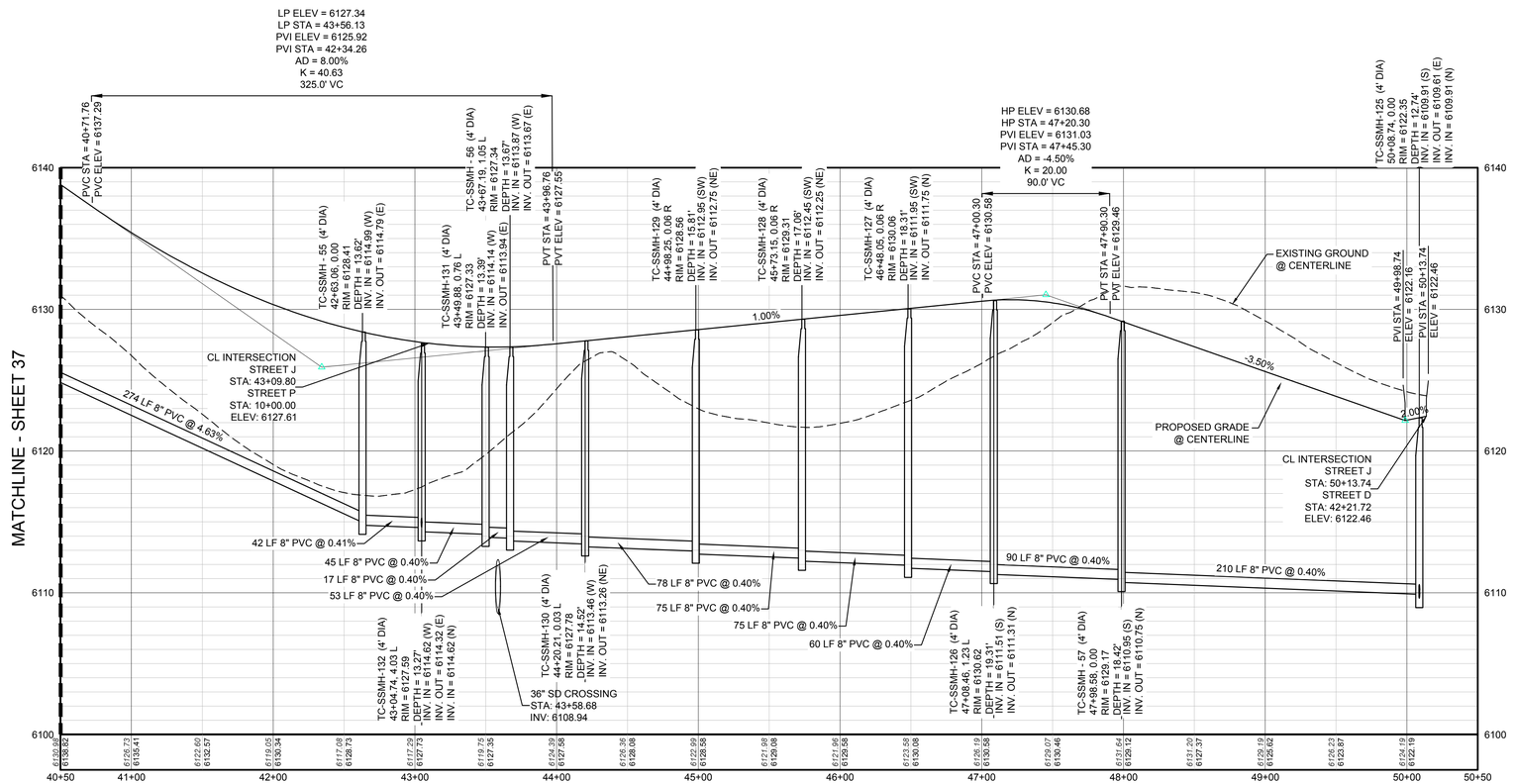
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8" W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION



PROFILE: STREET J STA: 40+50.00 TO 50+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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No.	Revisions	Date	Init.	Appr.	Date

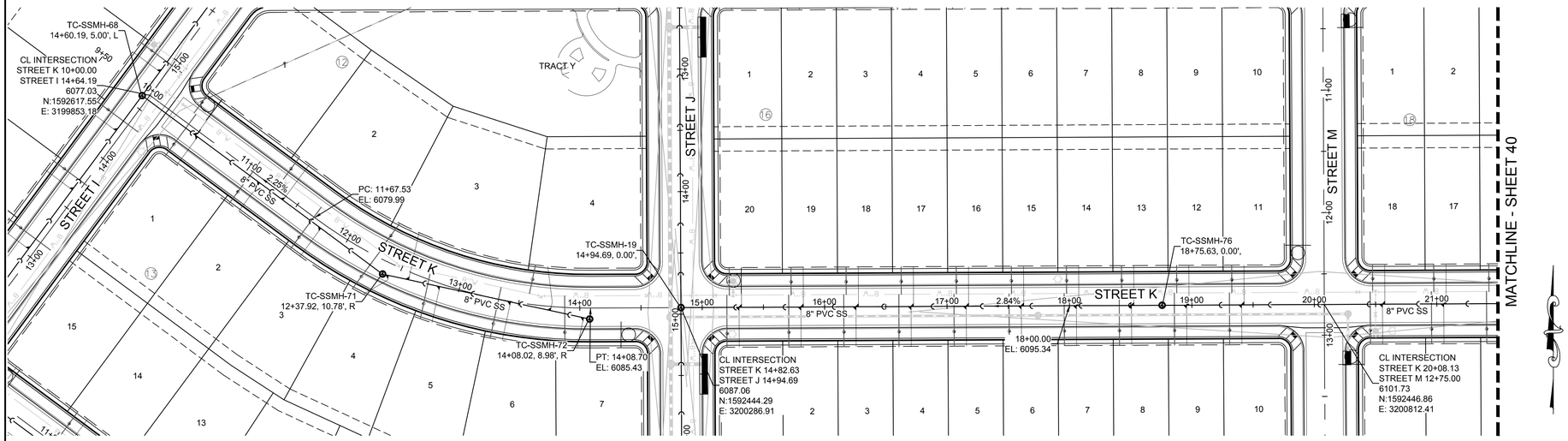
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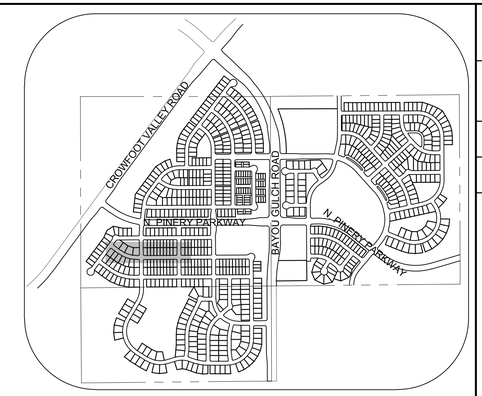
DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 38



PLAN: STREET K STA: 9+00.00 TO 21+50.00
HORIZONTAL SCALE: 1" = 50'

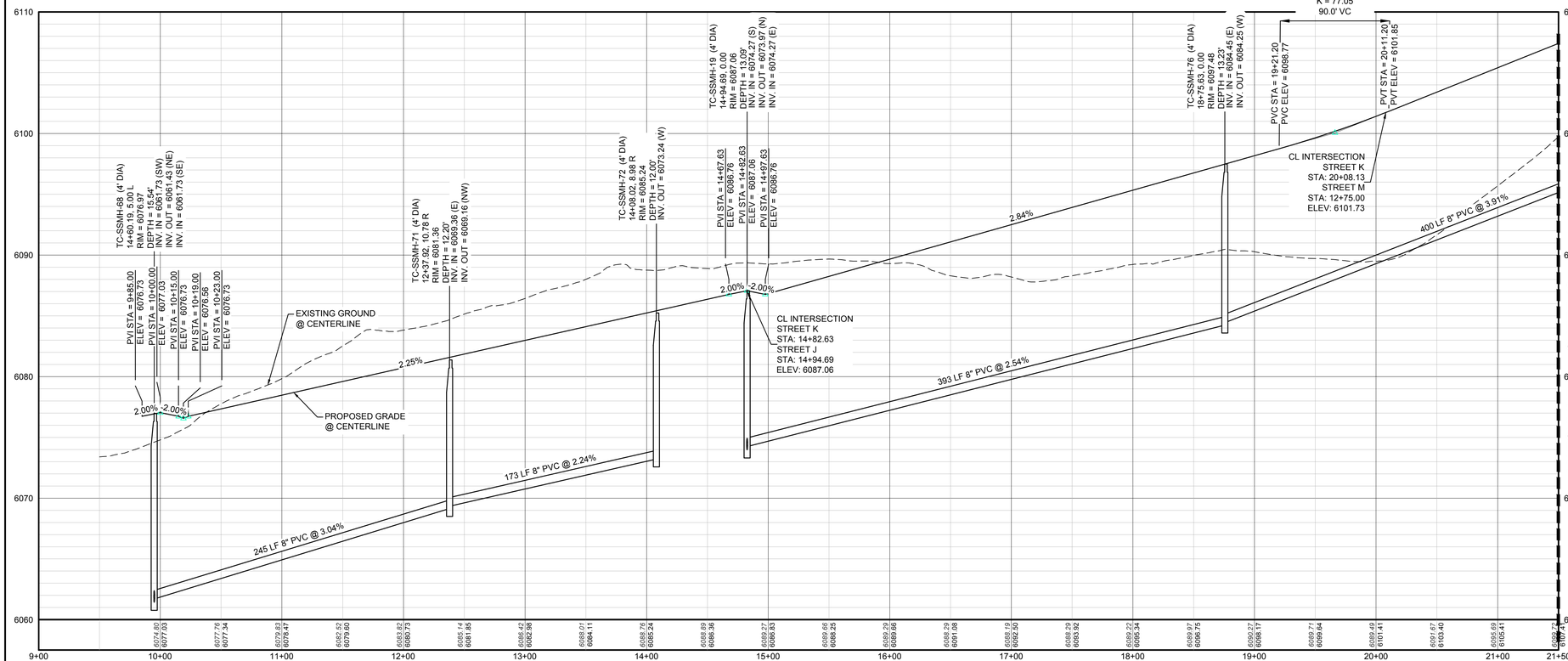
SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- EXISTING ELEVATION
- PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE & DIRECTION
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE WITH MANHOLE
- PROPOSED SEWER LATERAL
- PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- EXISTING 60" RAW WATER LINE
- SECTION LINE
- FILING BOUNDARY
- EXISTING FIBER OPTIC LINE
- EXISTING OVERHEAD HIGH VOLTAGE LINE
- EXISTING TELEPHONE LINE



ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
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K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
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MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

PROFILE: STREET K STA: 9+00.00 TO 21+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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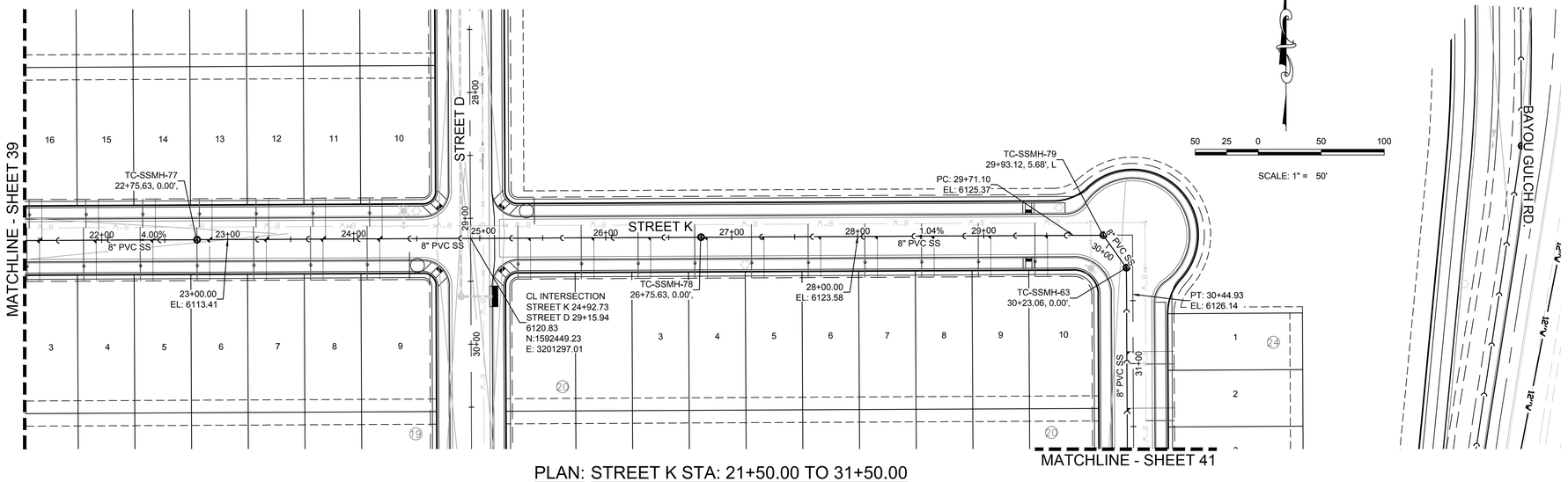
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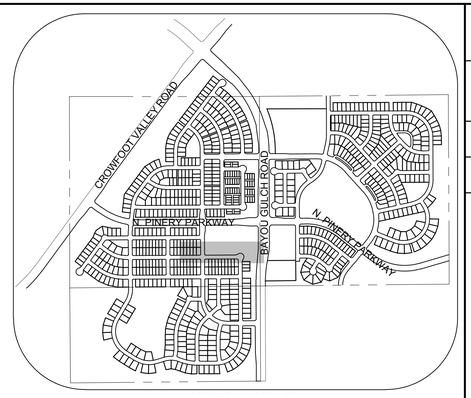
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET K

DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 39



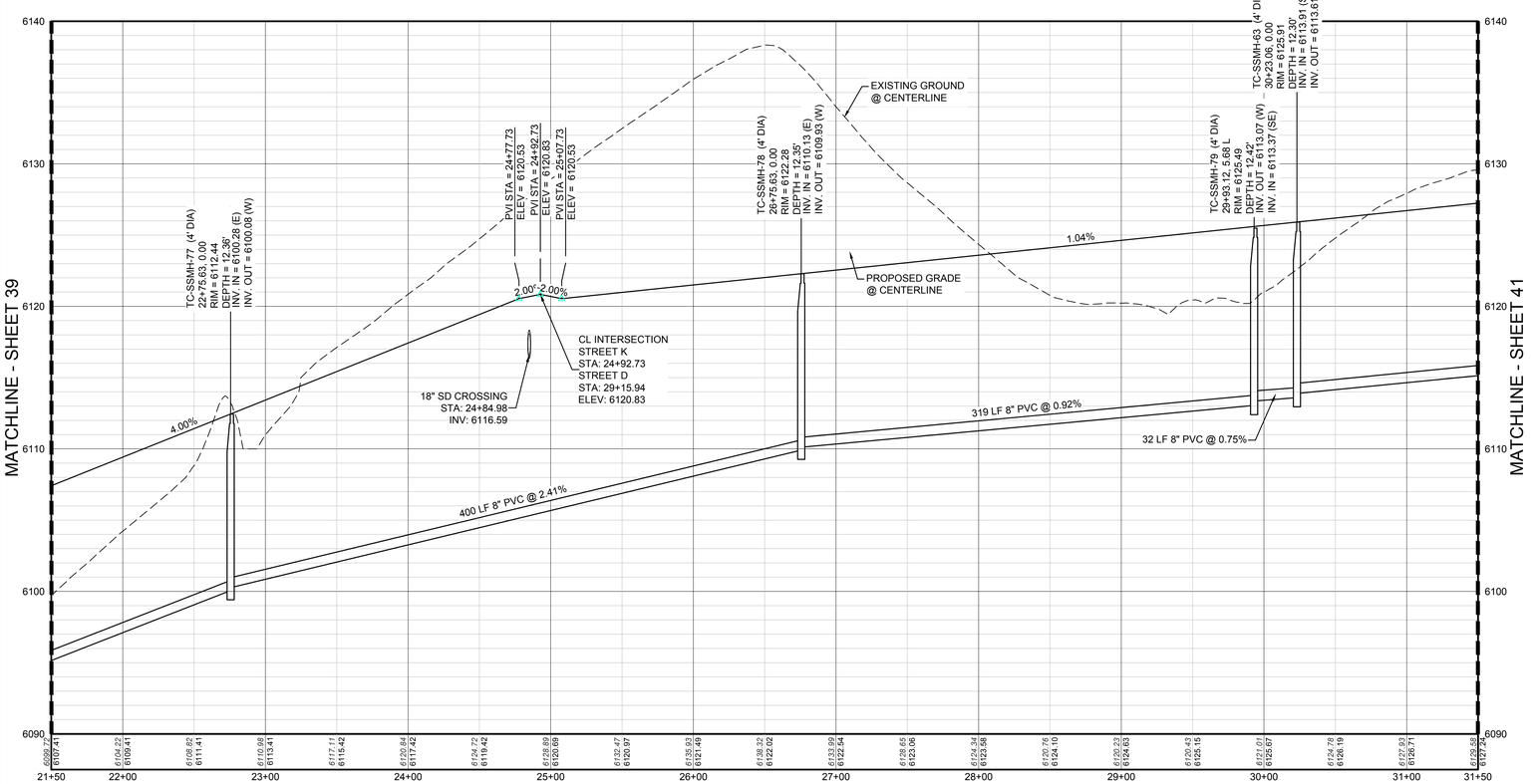
PLAN: STREET K STA: 21+50.00 TO 31+50.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE



PROFILE: STREET K STA: 21+50.00 TO 31+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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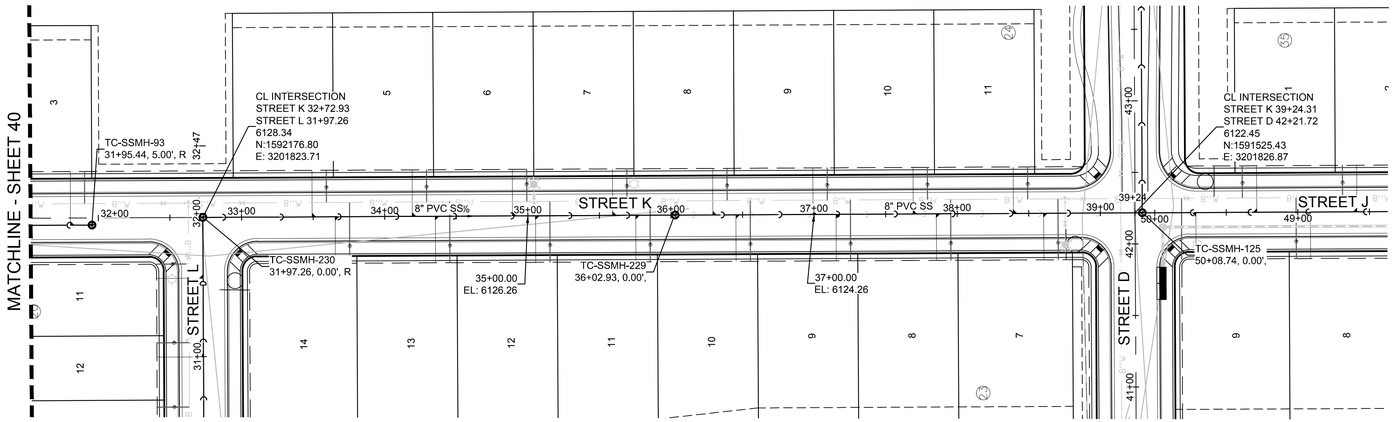
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SANITARY SEWER PLAN AND PROFILE
STREET K

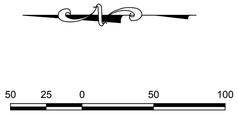
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SHEET NUMBER 40

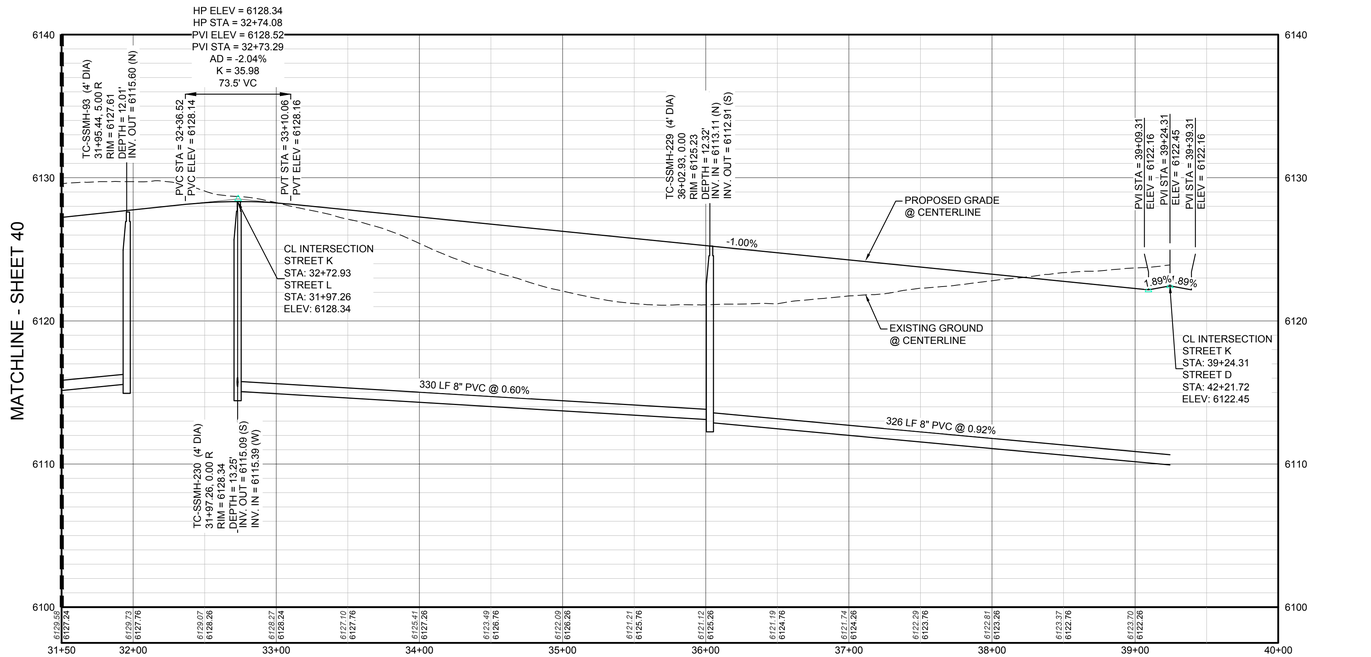
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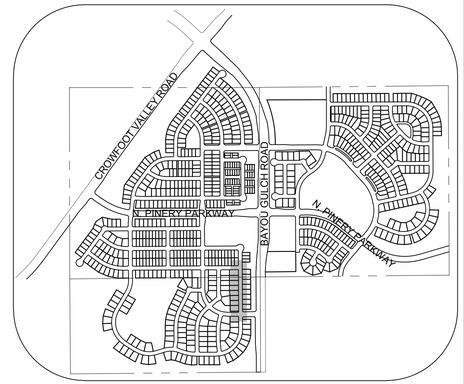
PLAN: STREET K STA: 31+50.00 TO 40+00.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



PROFILE: STREET K STA: 31+50.00 TO 40+00.00
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VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

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LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
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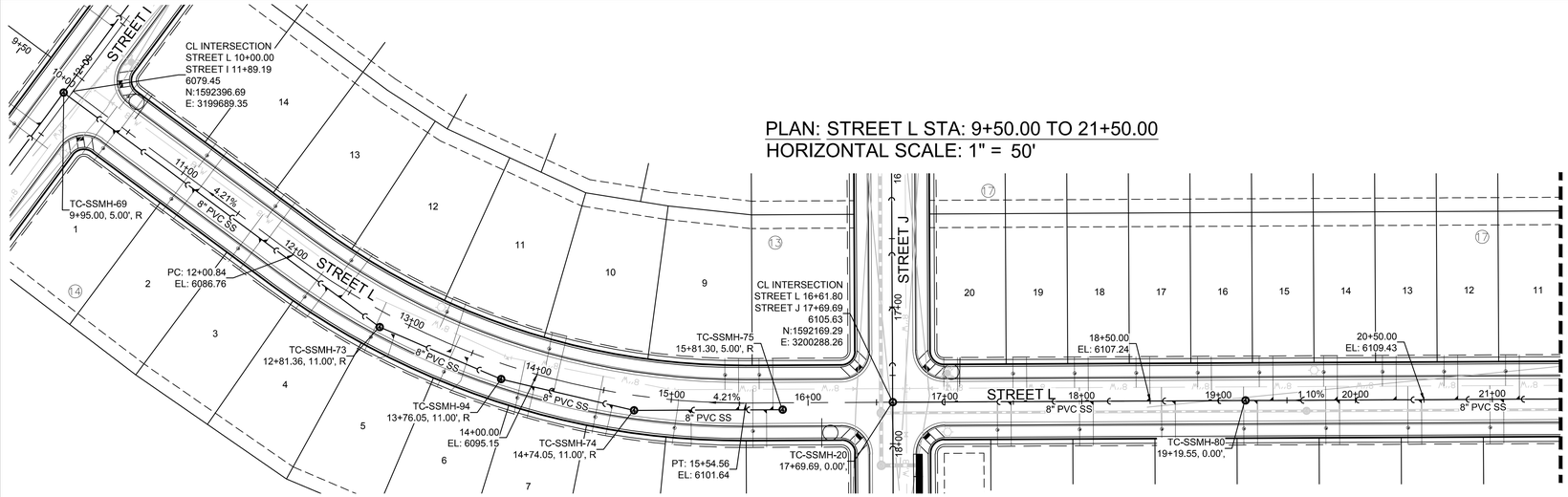
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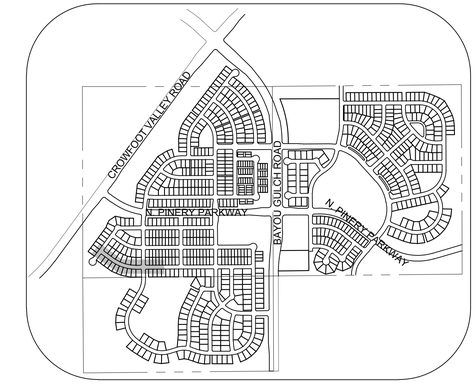
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET K

SCALE: AS SHOWN
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DRAWN BY: KJD
CHECKED BY: JJJ
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SHEET NUMBER 41

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KEYMAP
N.T.S.

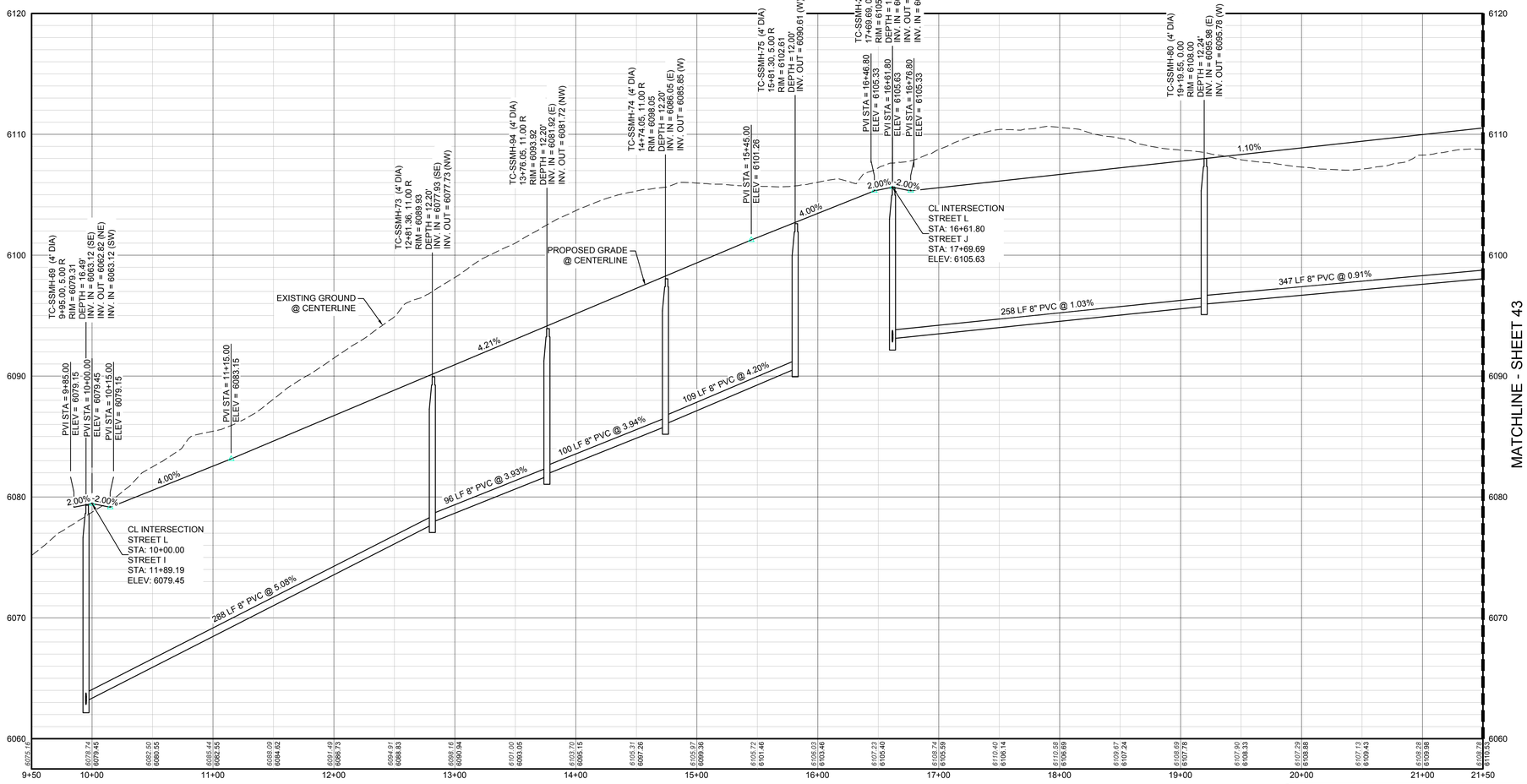
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SCALE: 1" = 50'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4 5 6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
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EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
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FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
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MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



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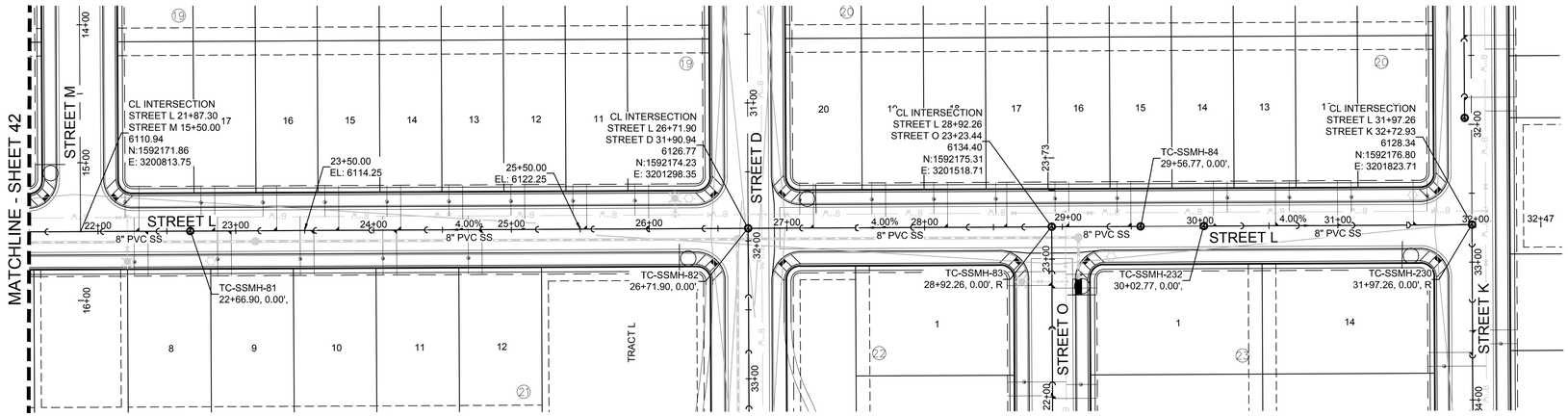
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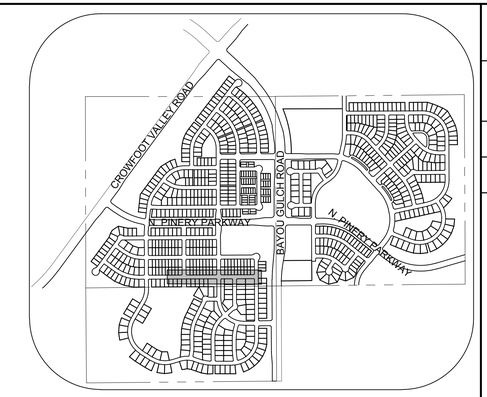
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET L

DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 42

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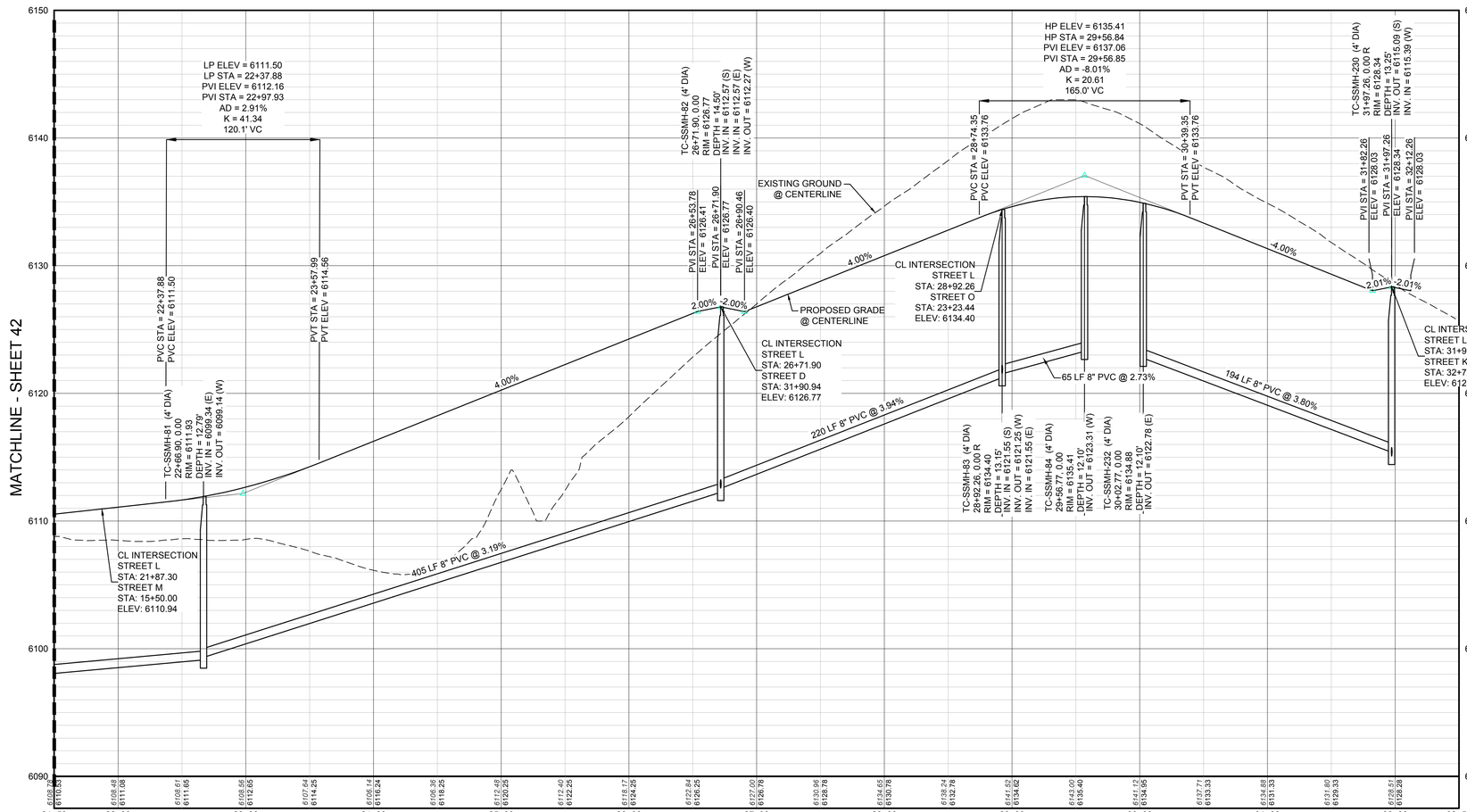




KEYMAP
N.T.S.

PLAN: STREET L STA: 21+50.00 TO 32+50.00
HORIZONTAL SCALE: 1" = 50'

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



PROFILE: STREET L STA: 21+50.00 TO 32+50.00
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LEGEND

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PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
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EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
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INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
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N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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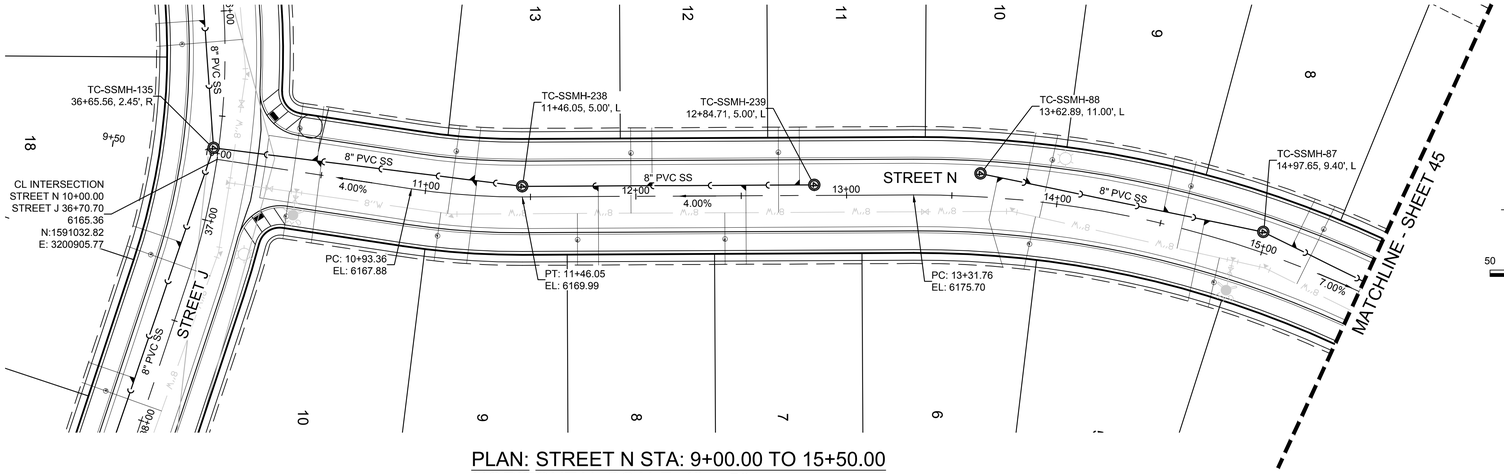
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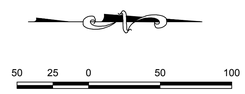
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SANITARY SEWER PLAN AND PROFILE
STREET L

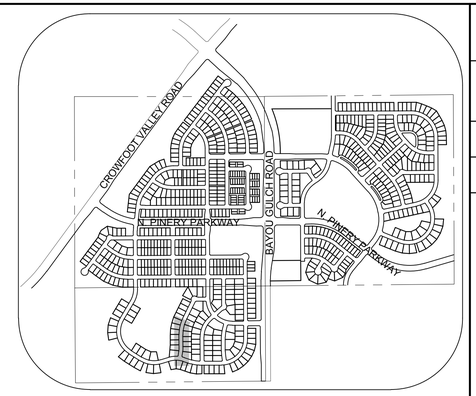
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FILE NO: 8130283701
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DATE: FEBRUARY 2017
SHEET NUMBER 43

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PLAN: STREET N STA: 9+00.00 TO 15+50.00
HORIZONTAL SCALE: 1" = 50'





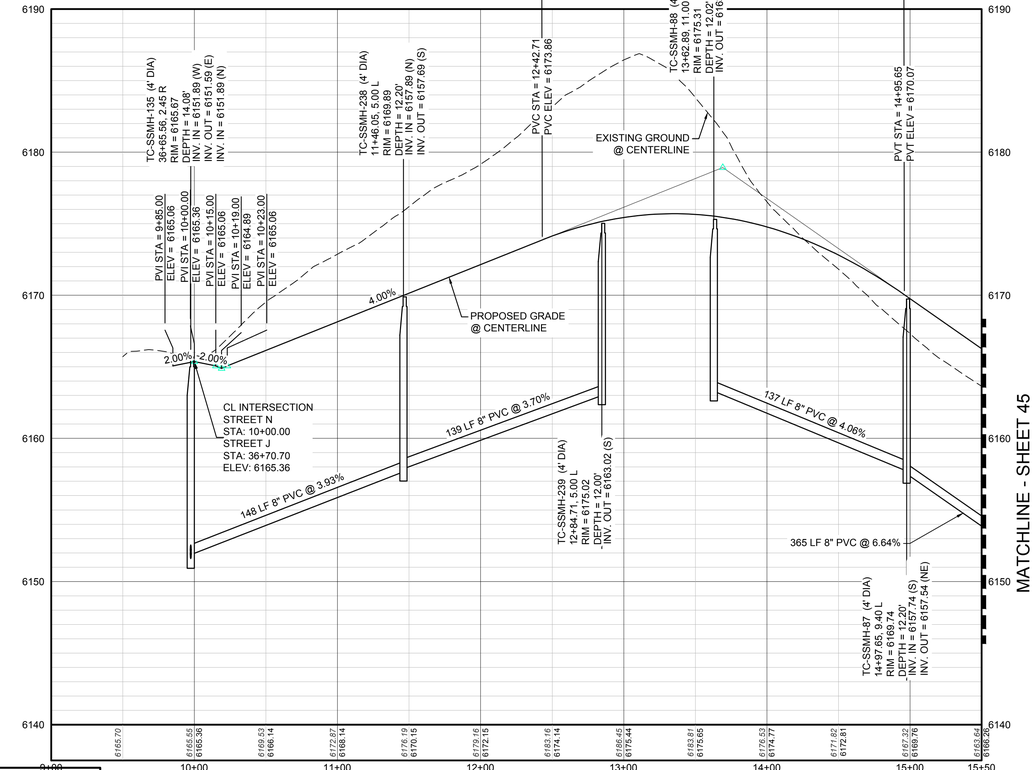
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET N STA: 9+00.00 TO 15+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

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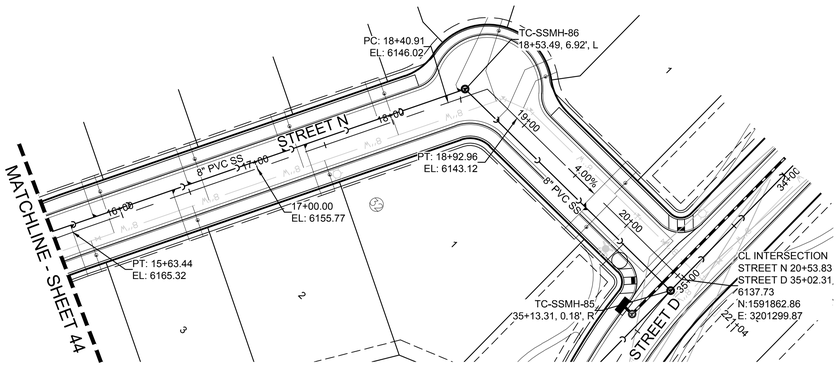
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET N

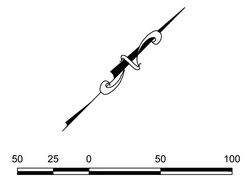
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SCALE: AS SHOWN
FILE NO: 8130283701

SHEET NUMBER 44

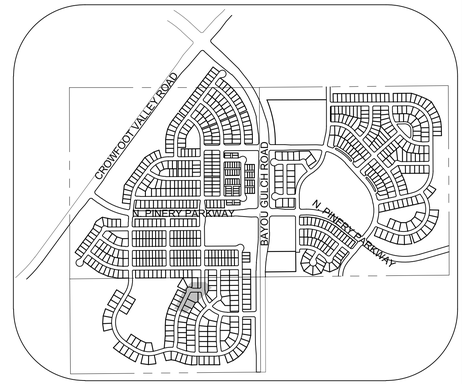


PLAN: STREET N STA: 15+50.00 TO 22+00.00
HORIZONTAL SCALE: 1" = 50'

PROFILE: STREET N STA: 15+50.00 TO 22+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

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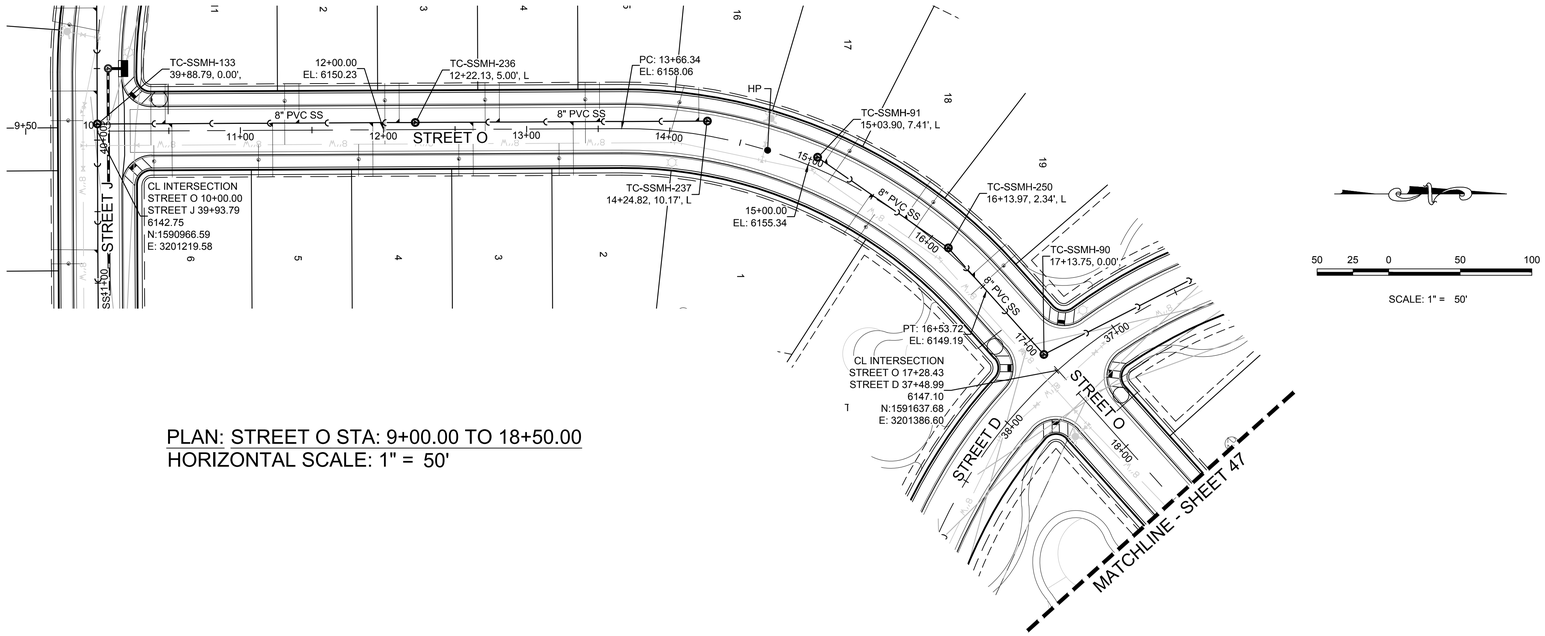
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TRAILS AT CROWFOOT
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SANITARY SEWER PLAN AND PROFILE
STREET N

DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

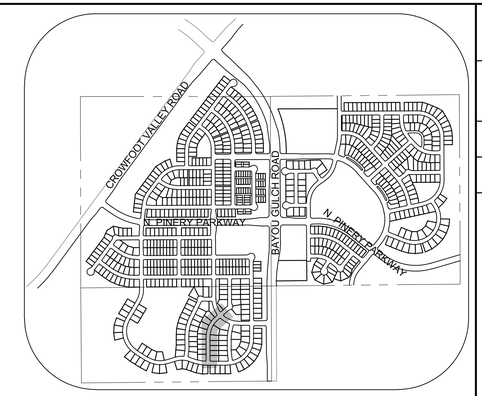
SHEET NUMBER 45



PLAN: STREET O STA: 9+00.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



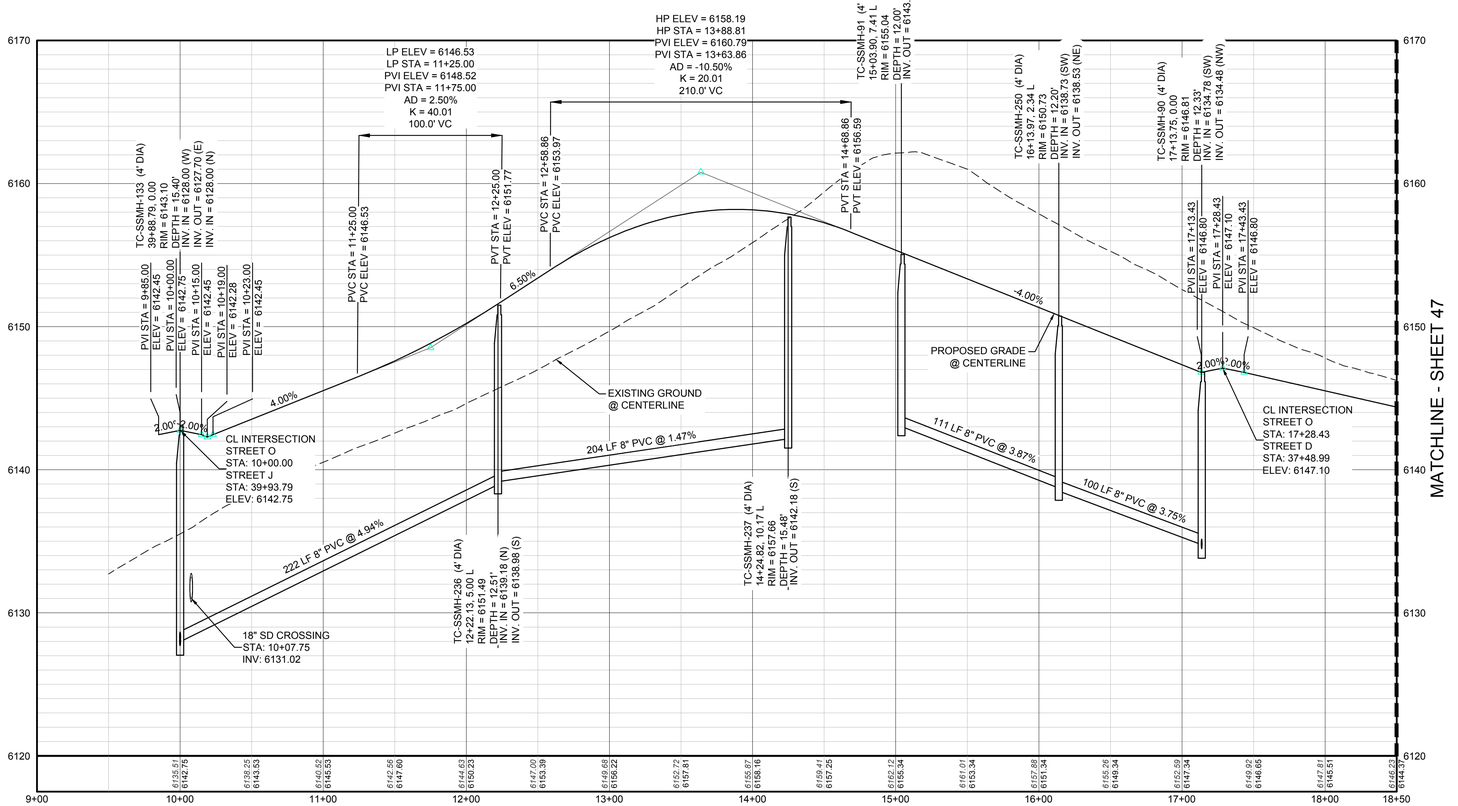
KEYMAP
N.T.S.

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- EXISTING ELEVATION
- PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE & DIRECTION
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE WITH MANHOLE
- PROPOSED SEWER LATERAL
- PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- EXISTING 60" RAW WATER LINE
- SECTION LINE
- FILING BOUNDARY
- EXISTING FIBER OPTIC LINE
- EXISTING OVERHEAD HIGH VOLTAGE LINE
- EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION



PROFILE: STREET O STA: 9+00.00 TO 18+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
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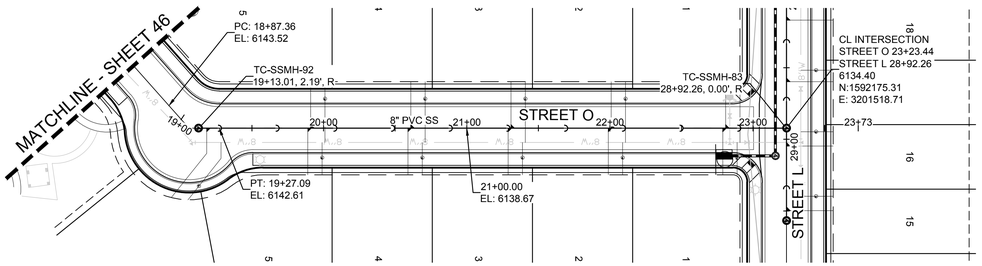
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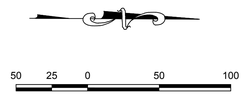
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET O

DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
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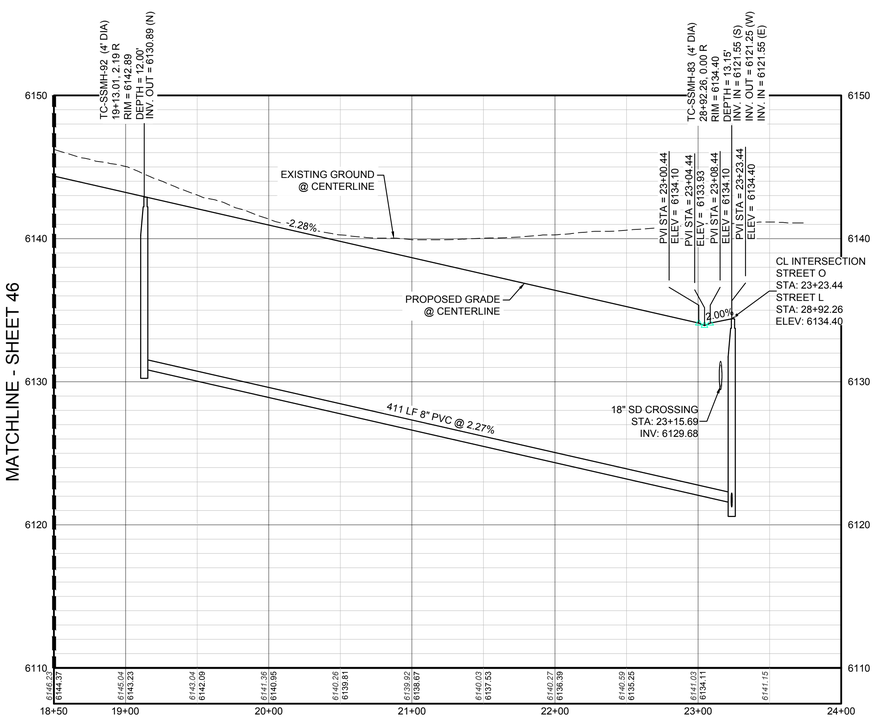
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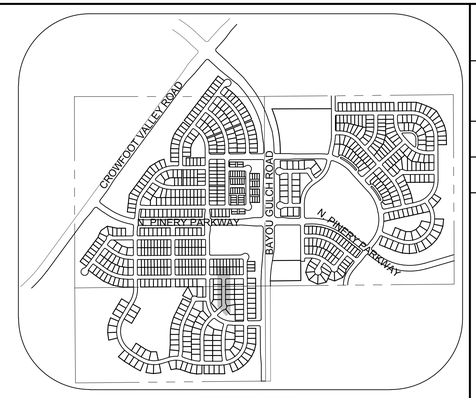


SCALE: 1" = 50'

PLAN: STREET O STA: 18+50.00 TO 24+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET O STA: 18+50.00 TO 24+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX
EL	ELEVATION		CULVERT
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
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N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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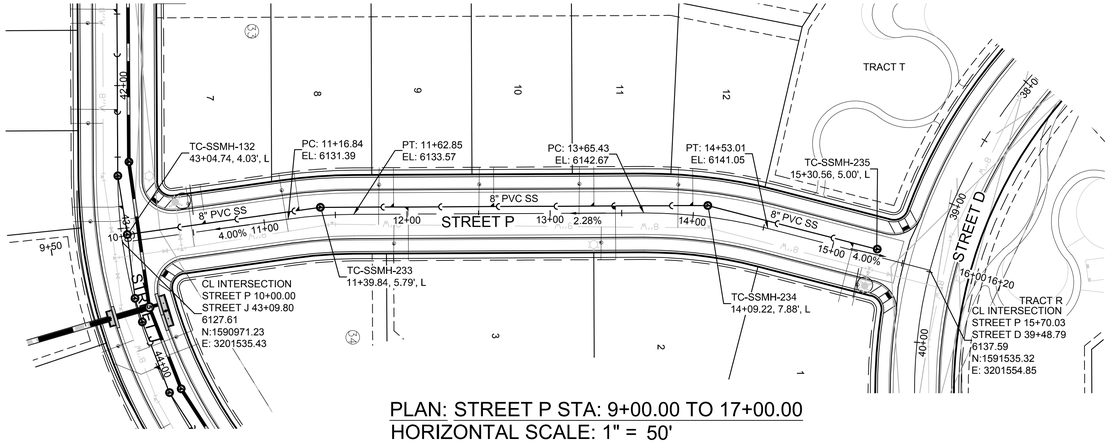
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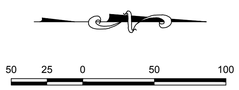
TRAILS AT CROWFOOT
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SCALE: AS SHOWN
FILE NO: 8130283701
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DATE: FEBRUARY 2017

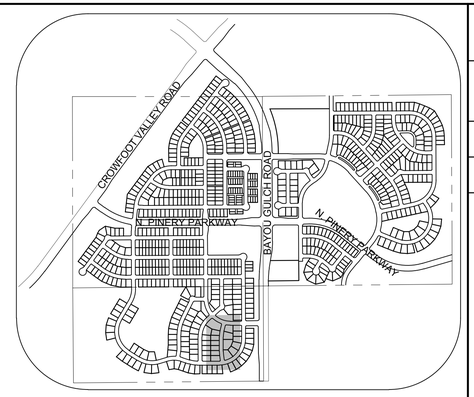
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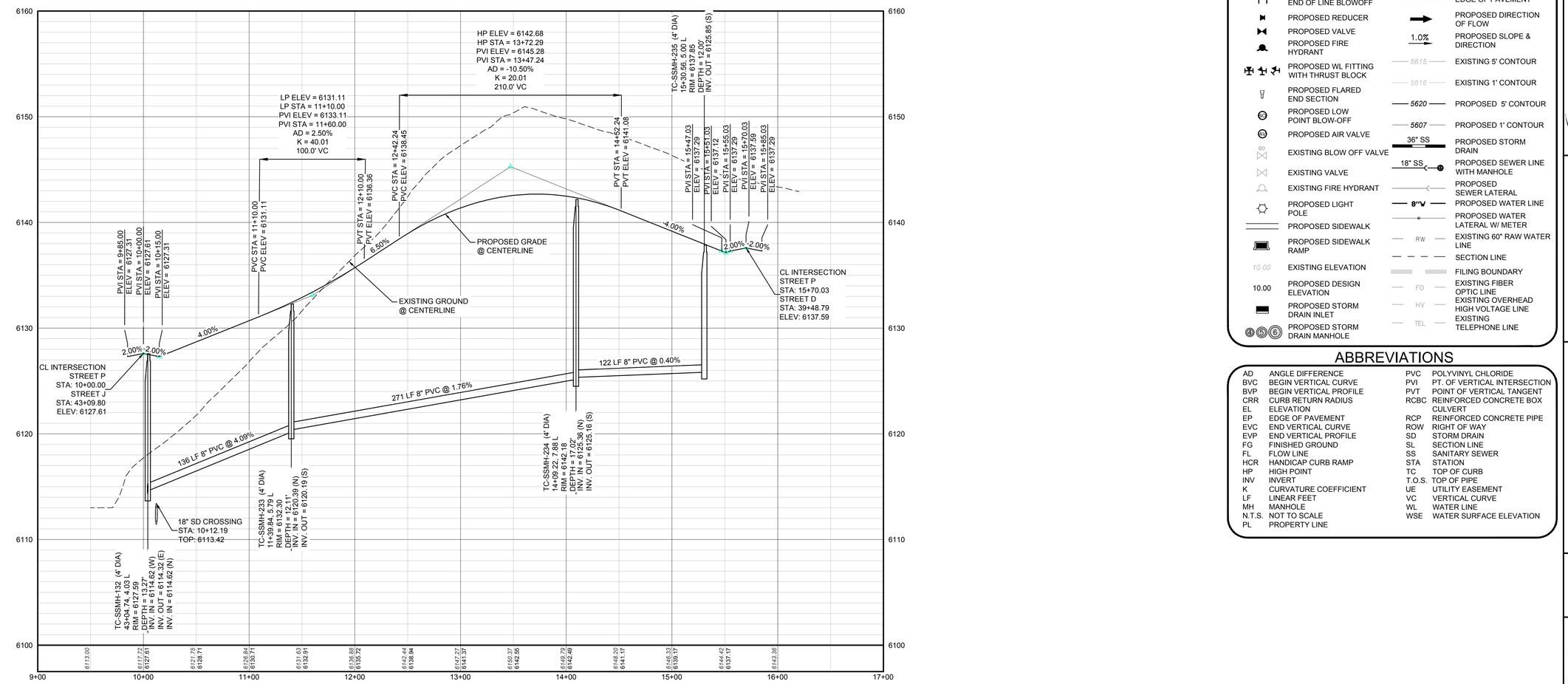
PLAN: STREET P STA: 9+00.00 TO 17+00.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: STREET P STA: 9+00.00 TO 17+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION

CALL 811
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1-800-922-1987

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

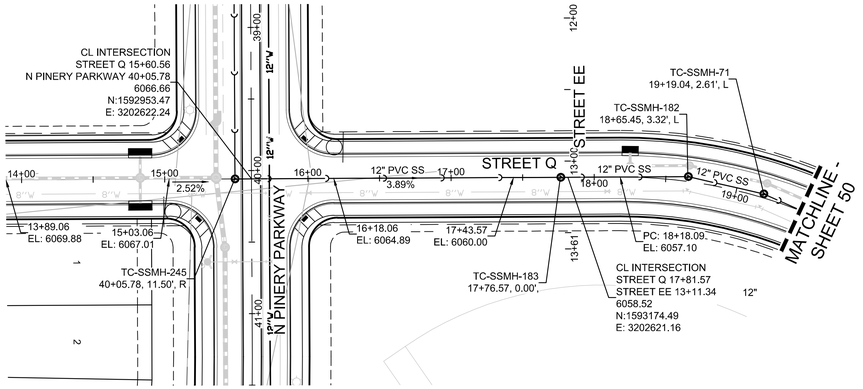
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET P

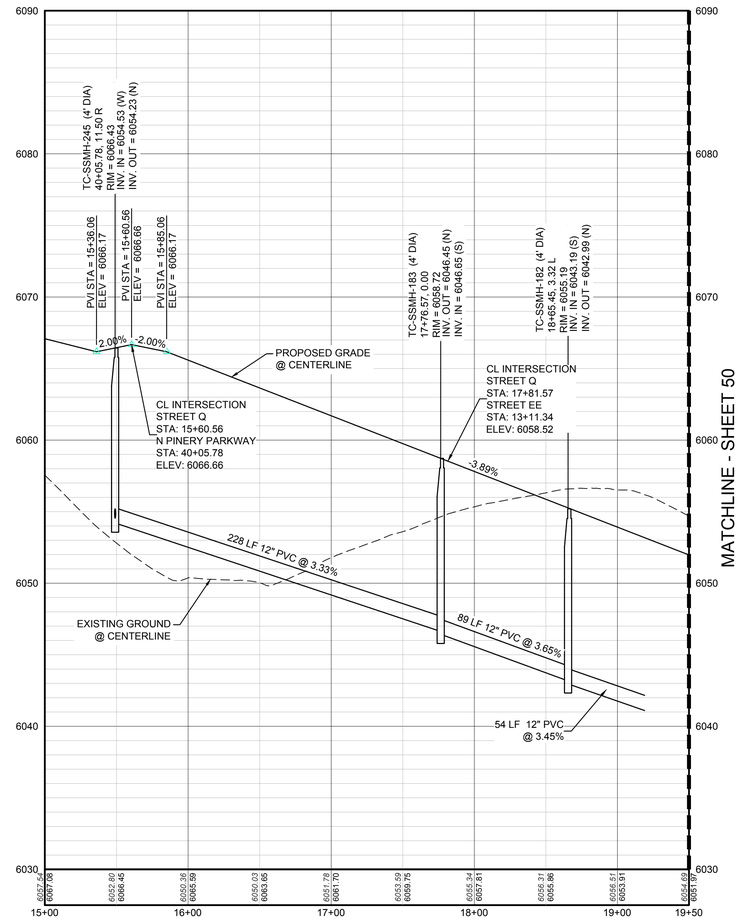
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DATE:	FEBRUARY 2017		

SHEET NUMBER 48

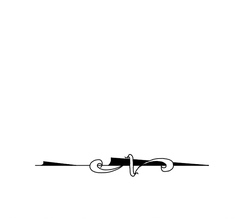
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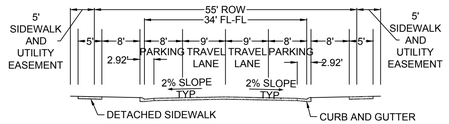
PLAN: STREET Q STA: 10+00.00 TO 21+00.00
HORIZONTAL SCALE: 1" = 50'



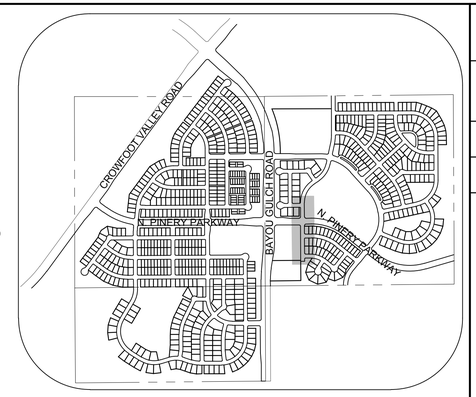
PROFILE: STREET Q STA: 15+00.00 TO 19+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



SCALE: 1" = 50'



RESIDENTIAL LOCAL



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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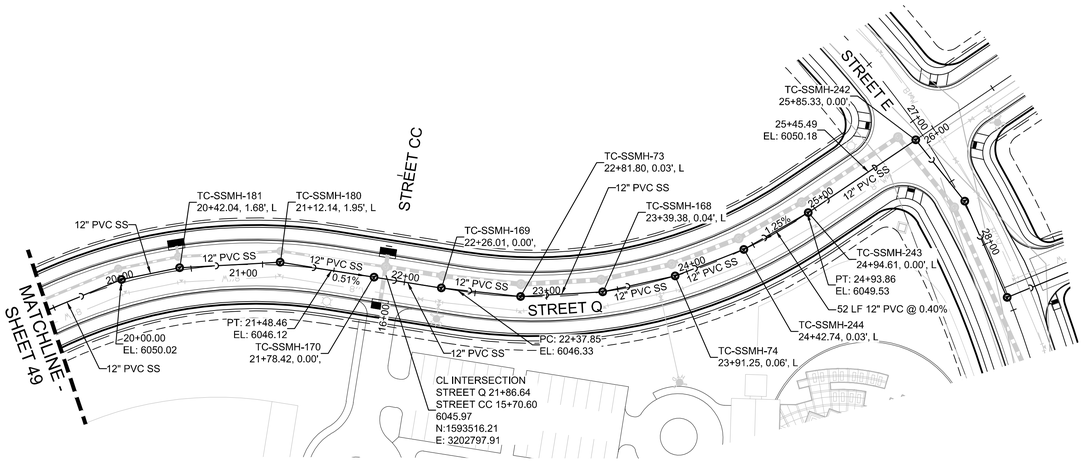
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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET Q

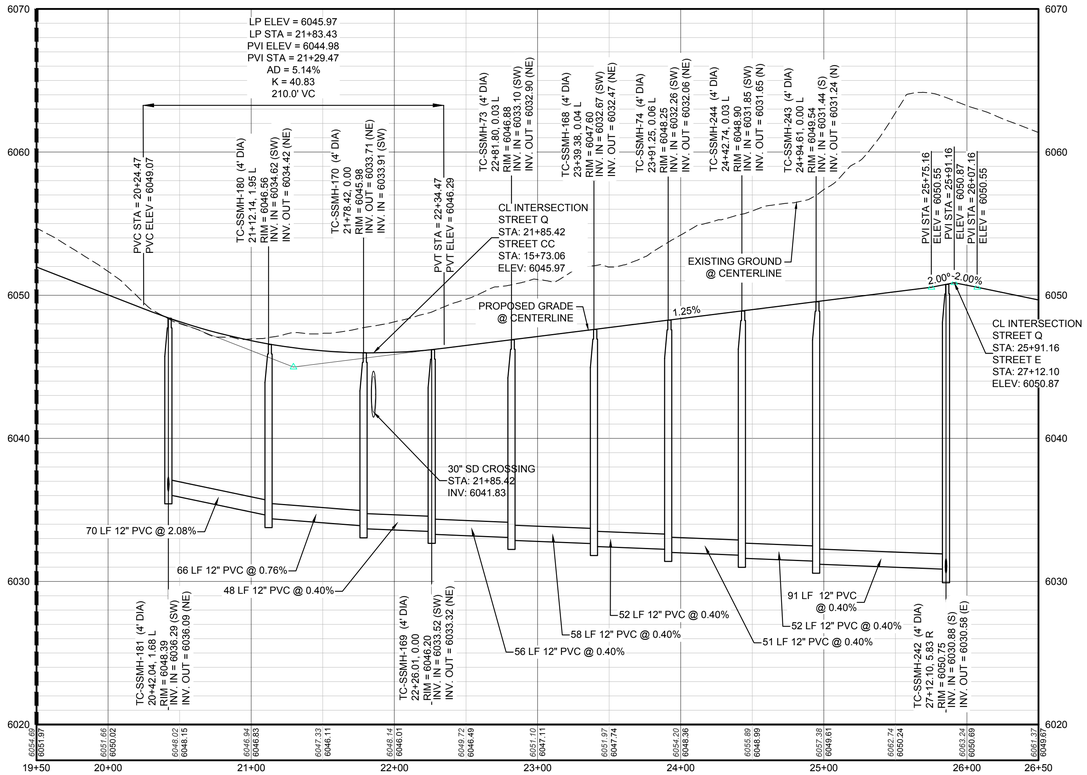
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DATE:	FEBRUARY 2017		

SHEET NUMBER 49

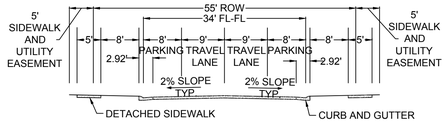
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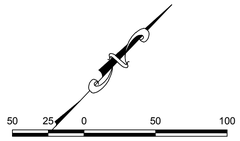
PLAN: STREET Q STA: 21+00.00 TO 31+00.00
HORIZONTAL SCALE: 1" = 50'



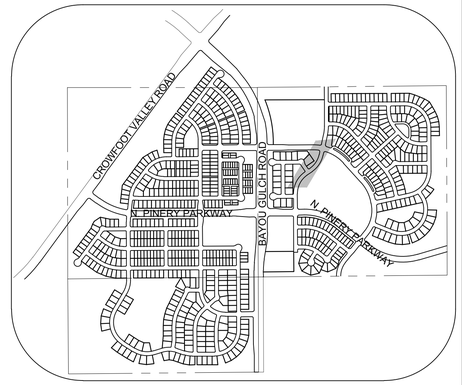
PROFILE: STREET Q STA: 19+50.00 TO 26+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



RESIDENTIAL LOCAL



SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2)	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
	PROPOSED REDUCER		PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
PO	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
AV	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6)	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGN, 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.

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date	Init.	Appr.	Date

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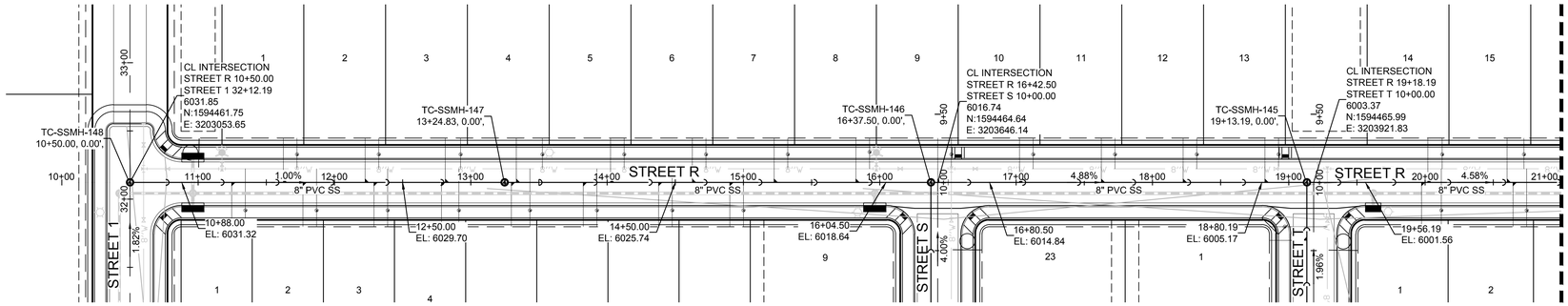
E5X MANAGEMENT
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET Q

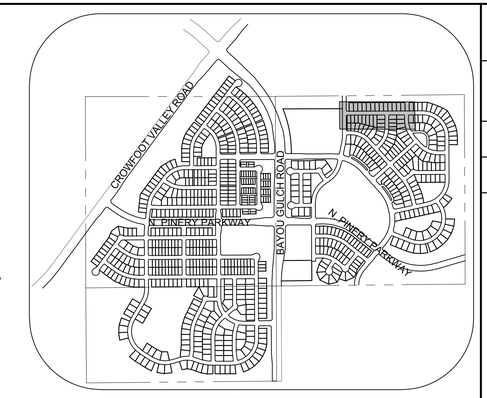
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DATE: FEBRUARY 2017

SHEET NUMBER 50

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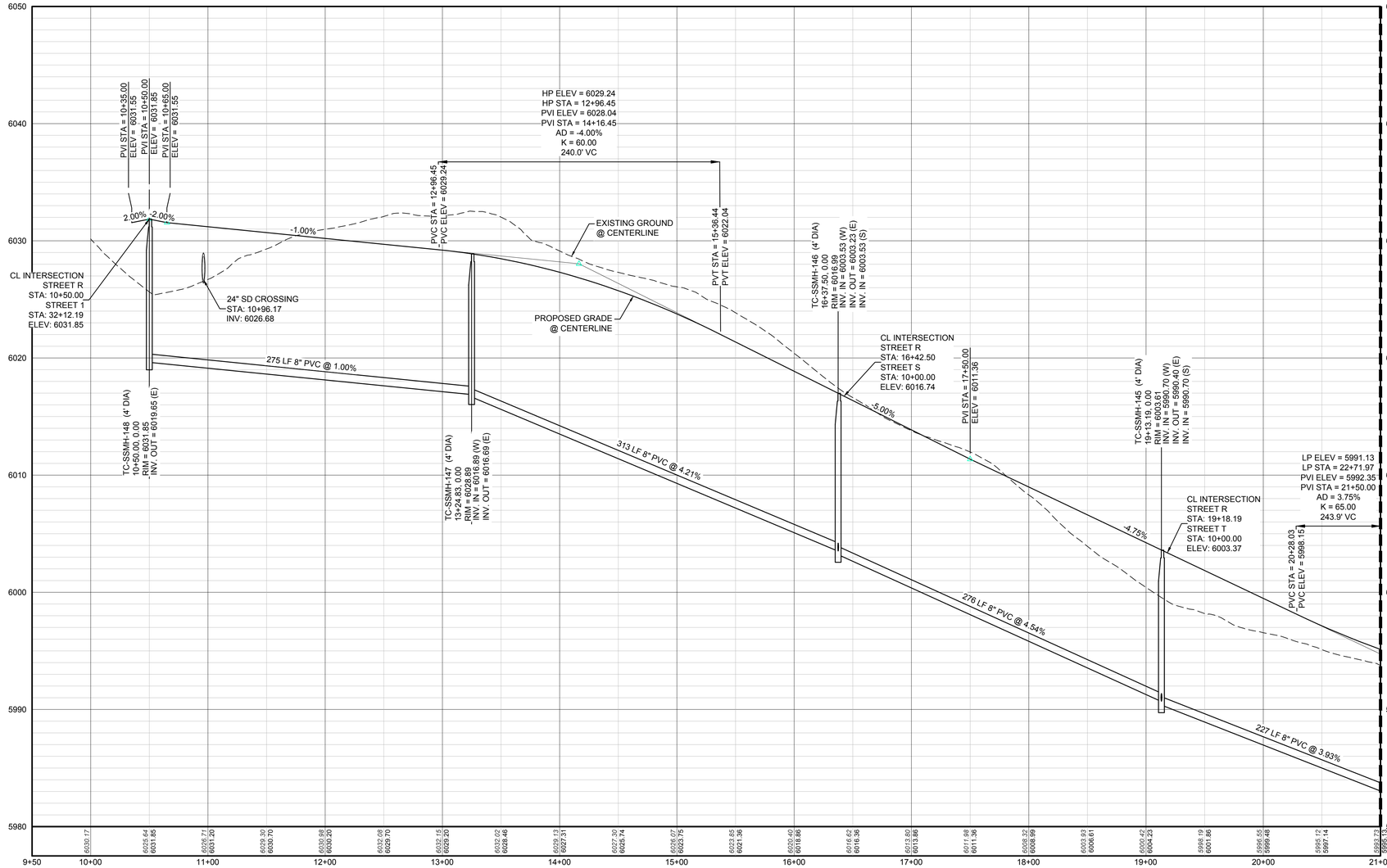


PLAN: STREET R STA: 10+00.00 TO 21+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.

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



PROFILE: STREET R STA: 9+50.00 TO 21+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- EXISTING ELEVATION
- PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE & DIRECTION
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE WITH MANHOLE
- PROPOSED SEWER LATERAL
- PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- EXISTING 60" RAW WATER LINE
- SECTION LINE
- FILING BOUNDARY
- EXISTING FIBER OPTIC LINE
- EXISTING OVERHEAD HIGH VOLTAGE LINE
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ABBREVIATIONS

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INV	INVERT	UE	UTILITY EASEMENT
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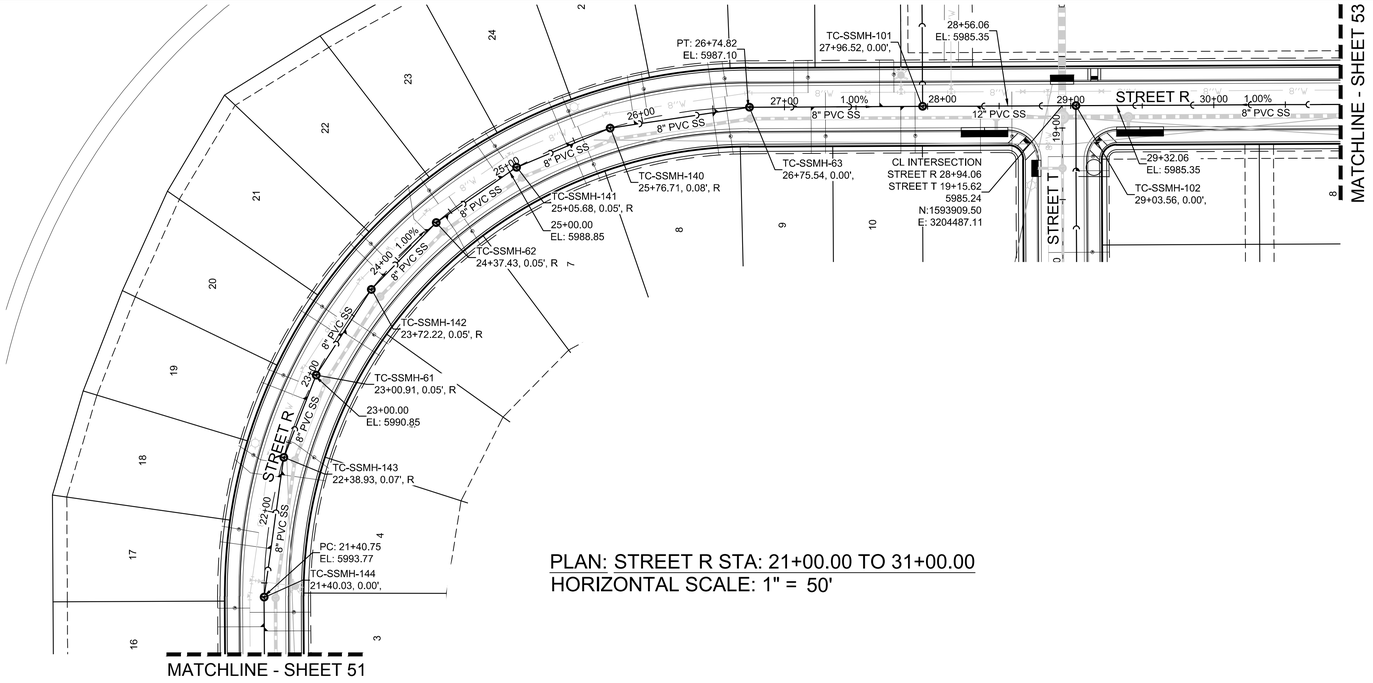
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
STREET SEWER PLAN AND PROFILE
STREET R

SCALE:	AS SHOWN	FILE NO:	8130283701
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CHECKED BY:	JJJ	DATE:	FEBRUARY 2017

SHEET NUMBER 51

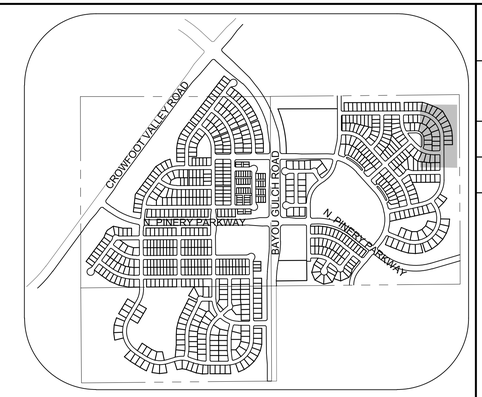
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PLAN: STREET R STA: 21+00.00 TO 31+00.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



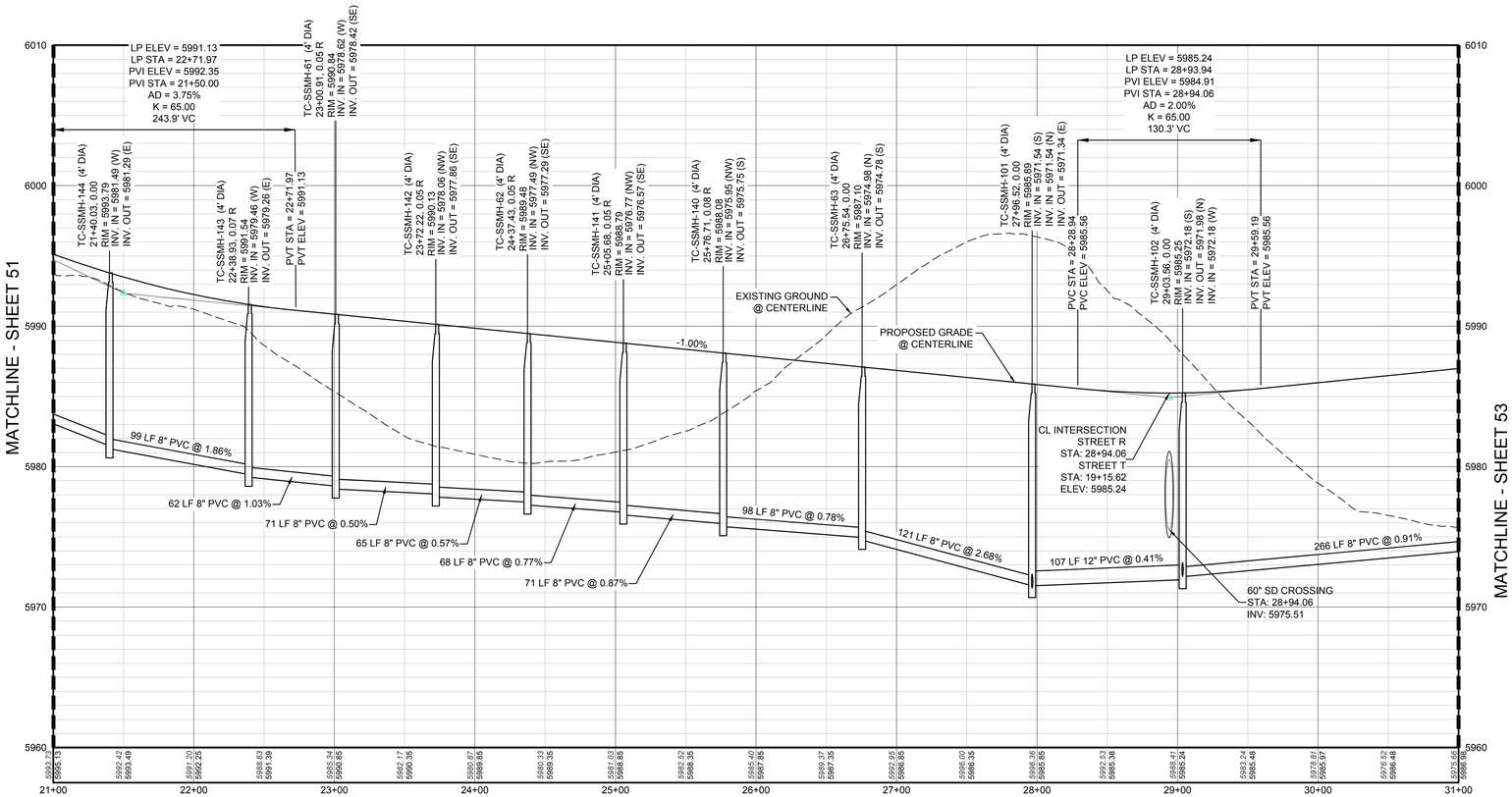
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		



PROFILE: STREET R STA: 21+00.00 TO 31+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
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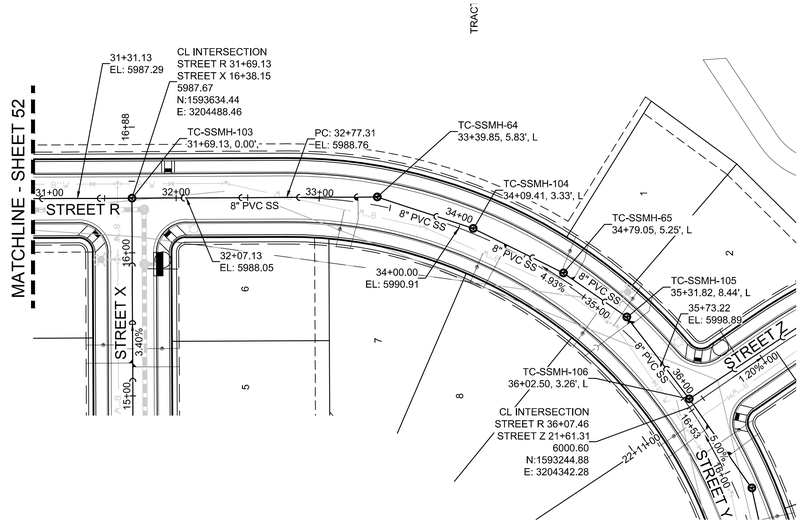
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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET R

DRAWN BY:	JLR	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 52

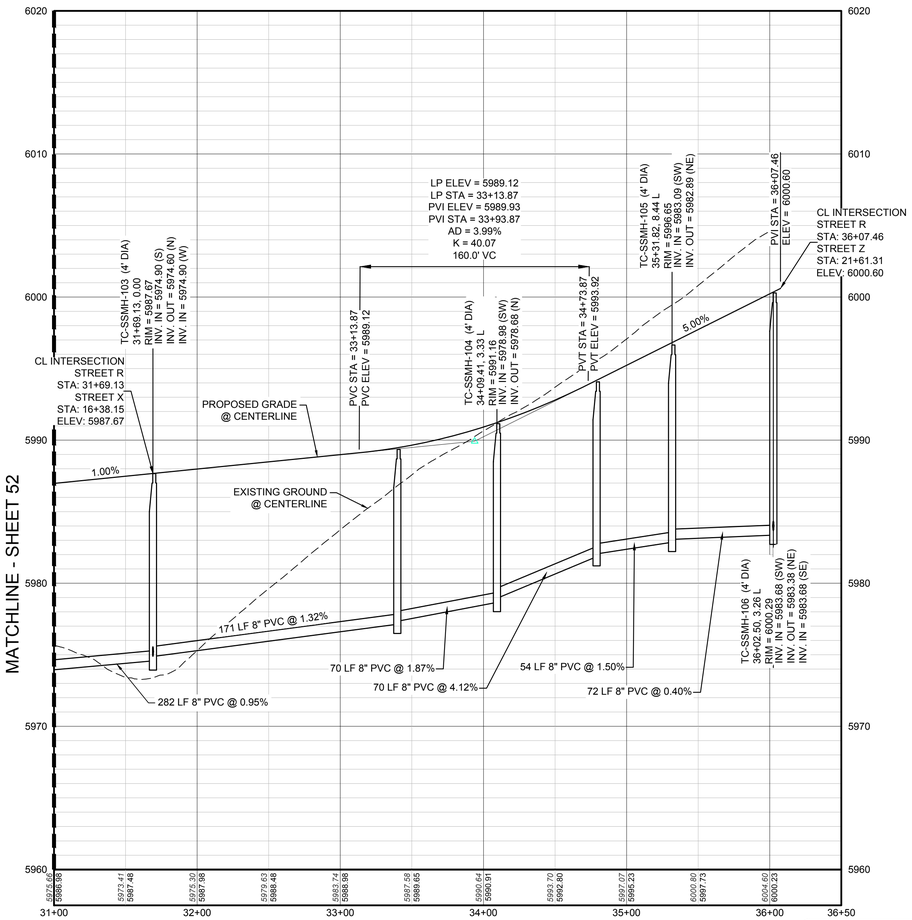
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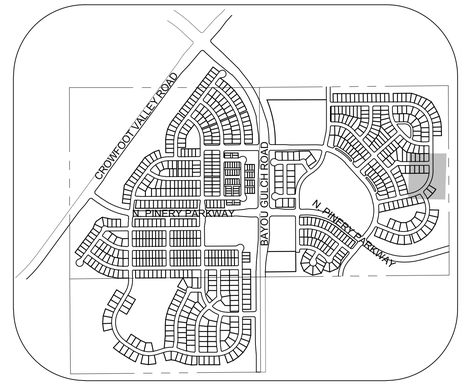
PLAN: STREET R STA: 31+00.00 TO 36+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



PROFILE: STREET R STA: 31+00.00 TO 36+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60' RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

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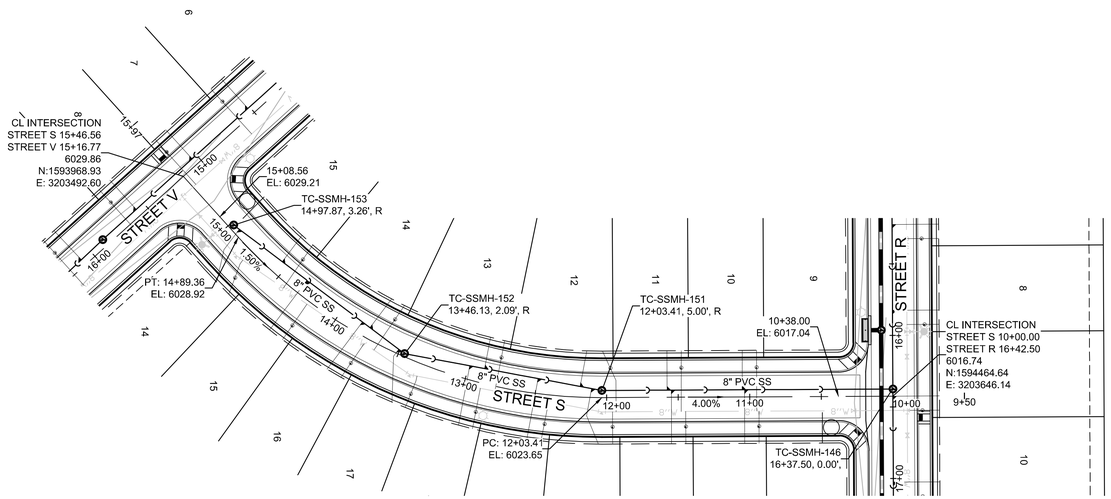
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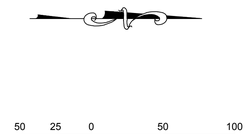
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET R

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

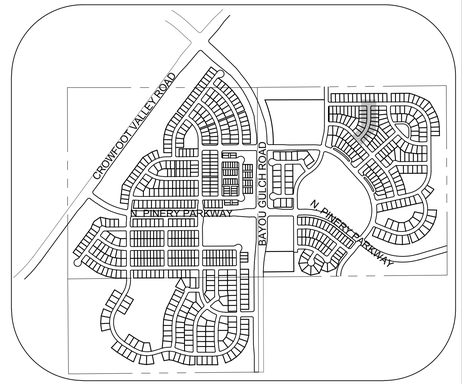
SHEET NUMBER 53



PLAN: STREET S STA: 9+50.00 TO 16+00.00
HORIZONTAL SCALE: 1" = 50'



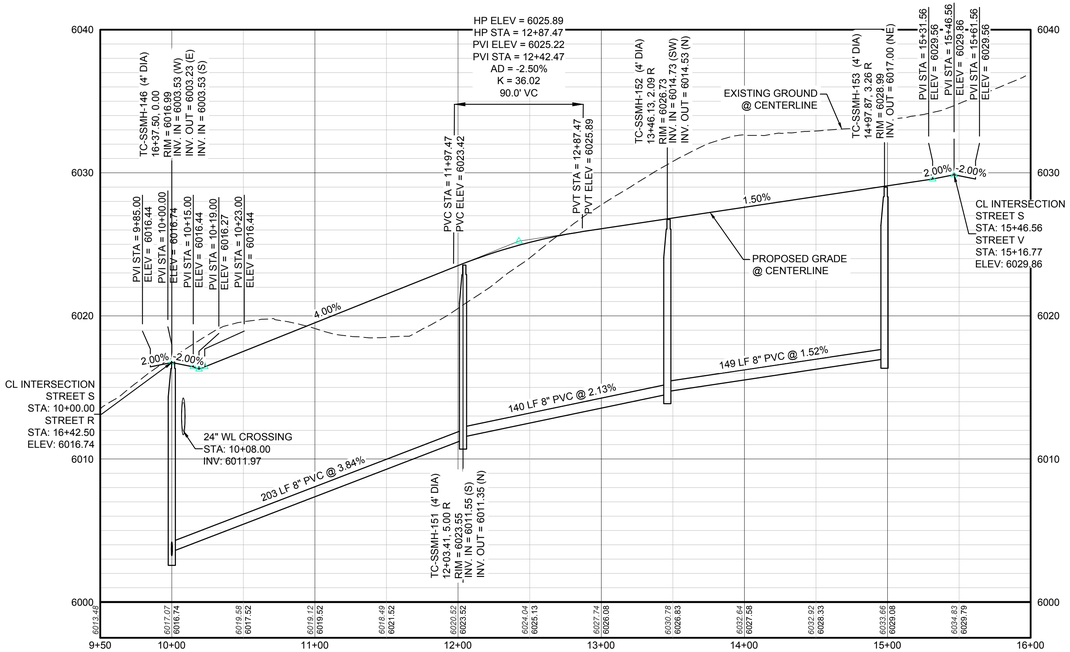
SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE



PROFILE: STREET S STA: 9+50.00 TO 16+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
FG	FINISHED GROUND
FL	FLOW LINE
HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION

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BENCHMARK
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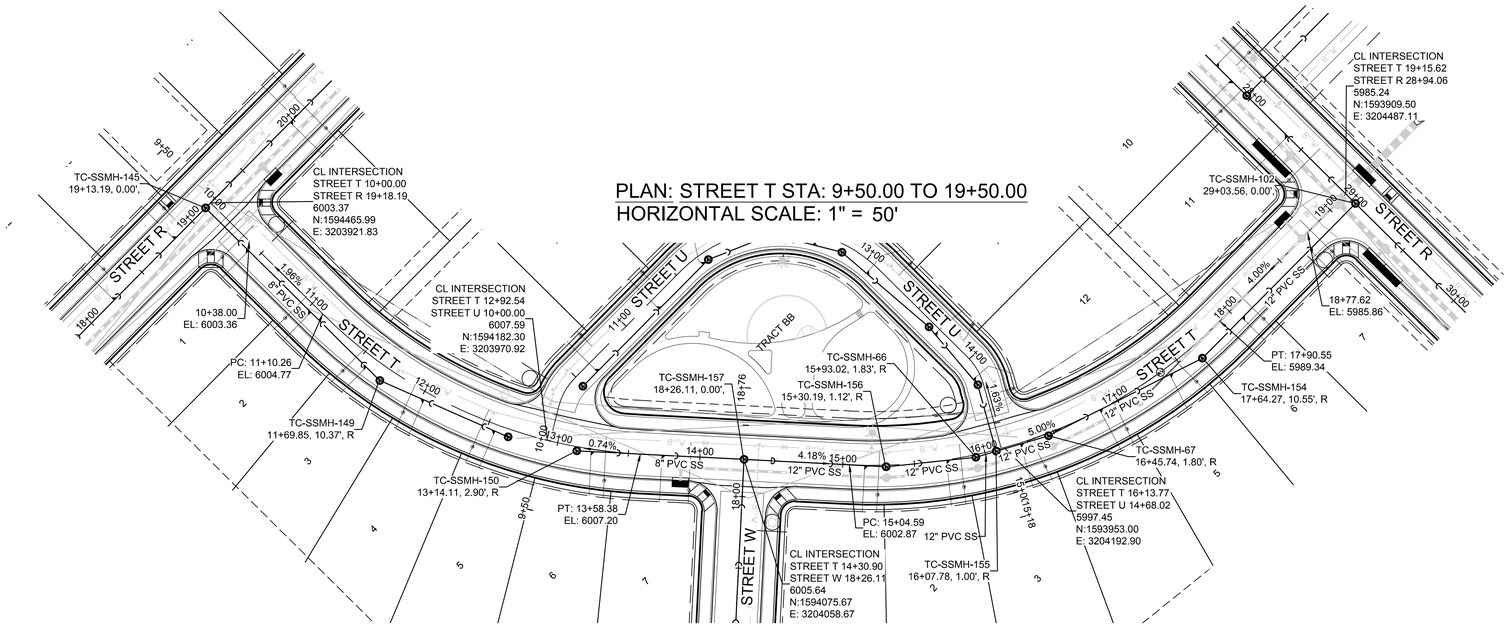
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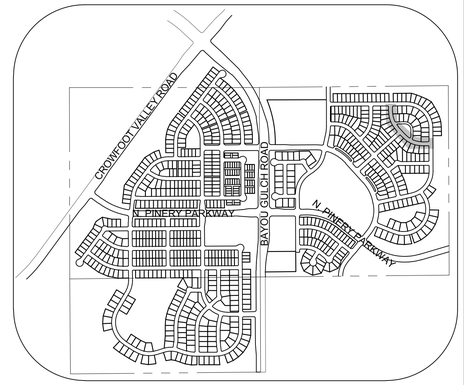
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET S

DRAWN BY:	JLR	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 54

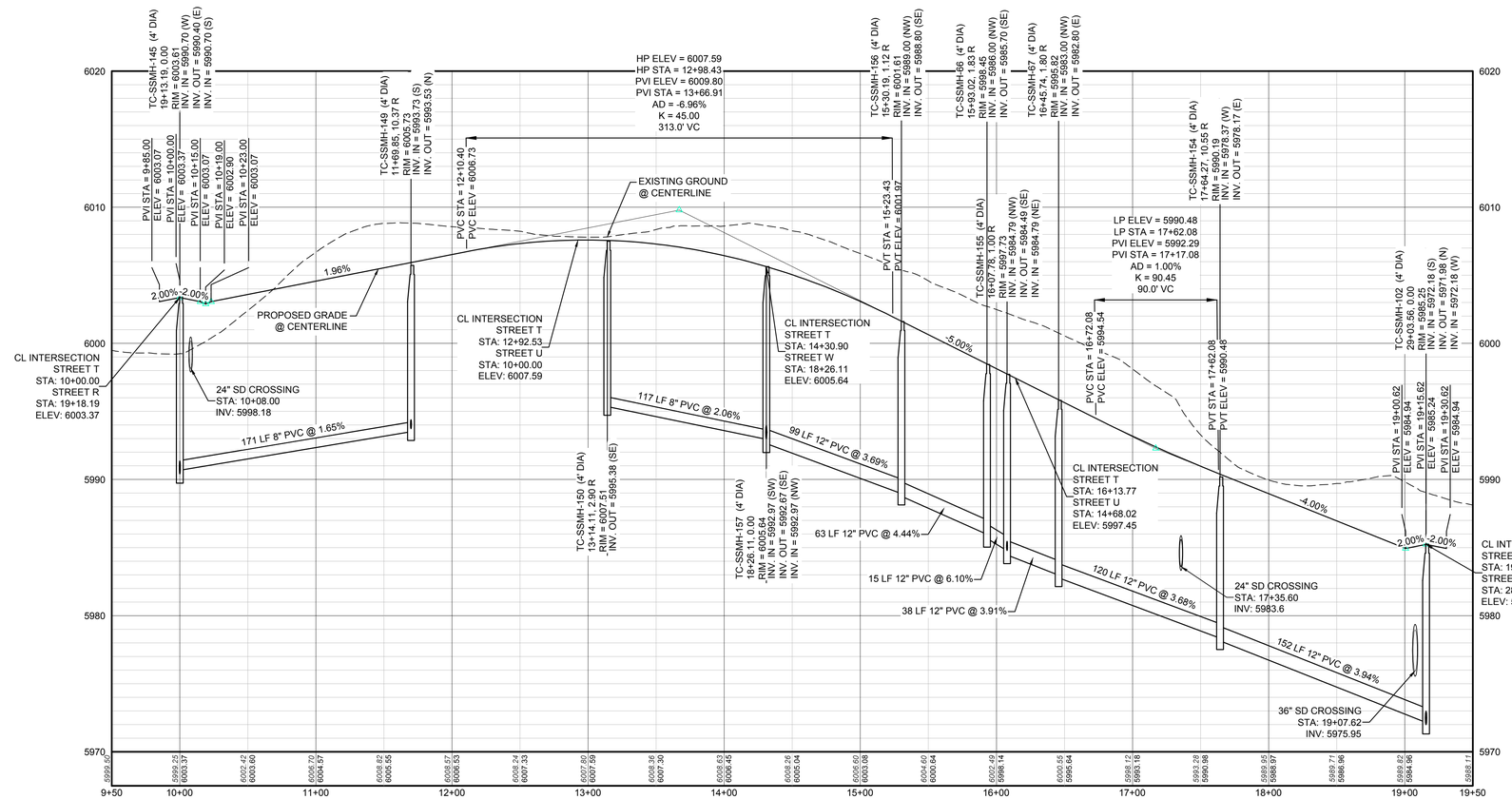
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KEYMAP
N.T.S.

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



PROFILE: STREET T STA: 9+50.00 TO 19+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF (BO)	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE (AV)	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE (BO)	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4)(5)(6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

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BVC	BEGIN VERTICAL CURVE
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CRR	CURB RETURN RADIUS
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EVC	END VERTICAL CURVE
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FG	FINISHED GROUND
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BENCHMARK
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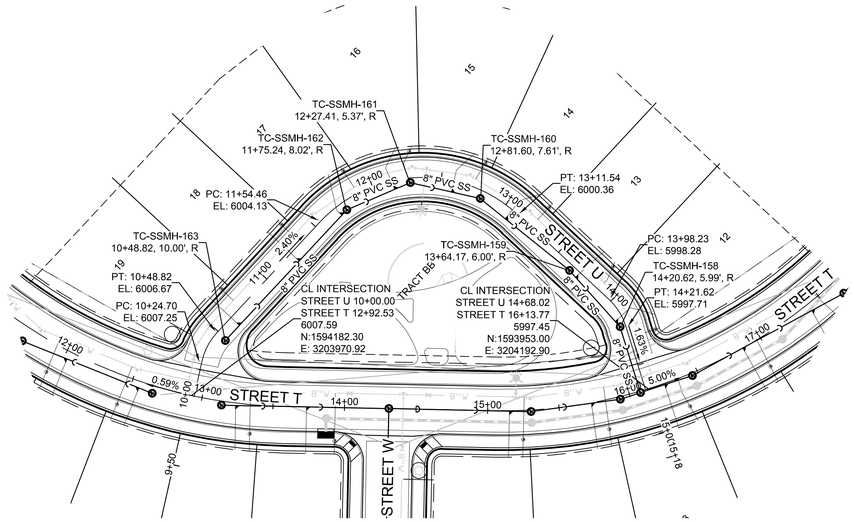
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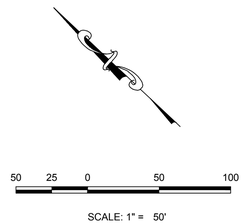
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET T

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 55

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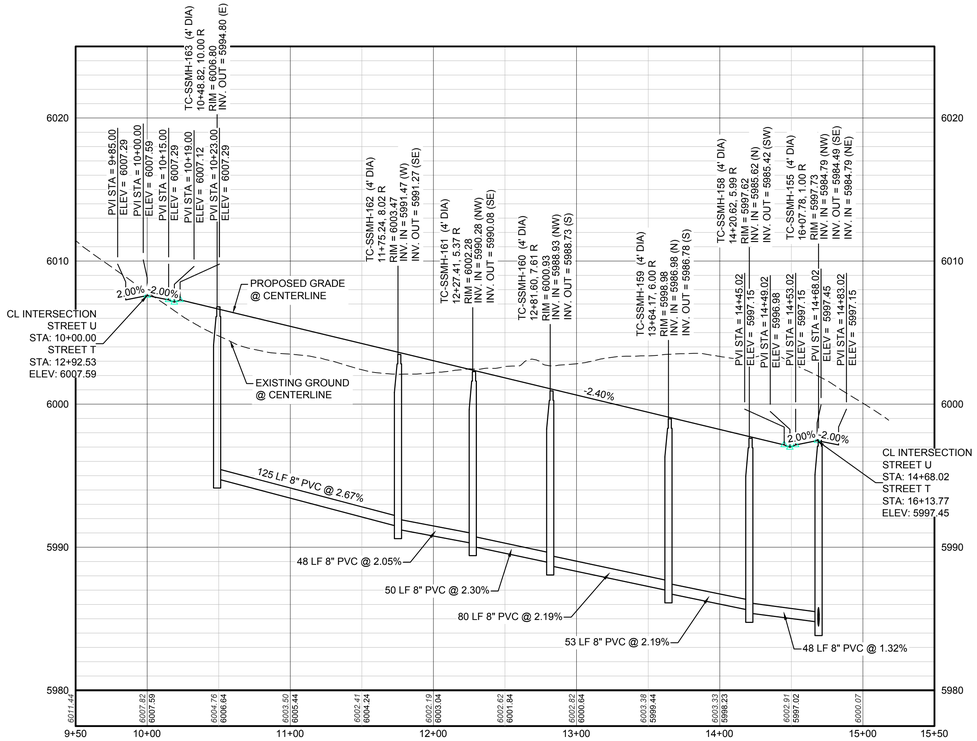


PLAN: STREET U STA: 9+50.00 TO 15+50.00
HORIZONTAL SCALE: 1" = 50'

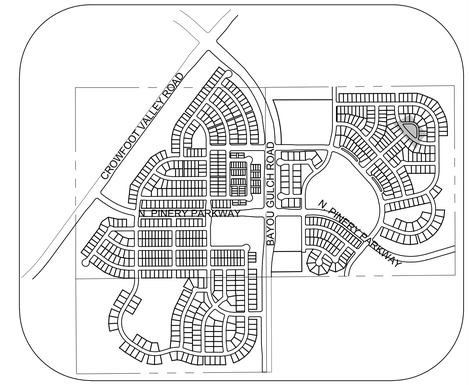


50 25 0 50 100

SCALE: 1" = 50'



PROFILE: STREET U STA: 9+50.00 TO 15+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
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No.	Revisions	Date	Init.	Appr.	Date

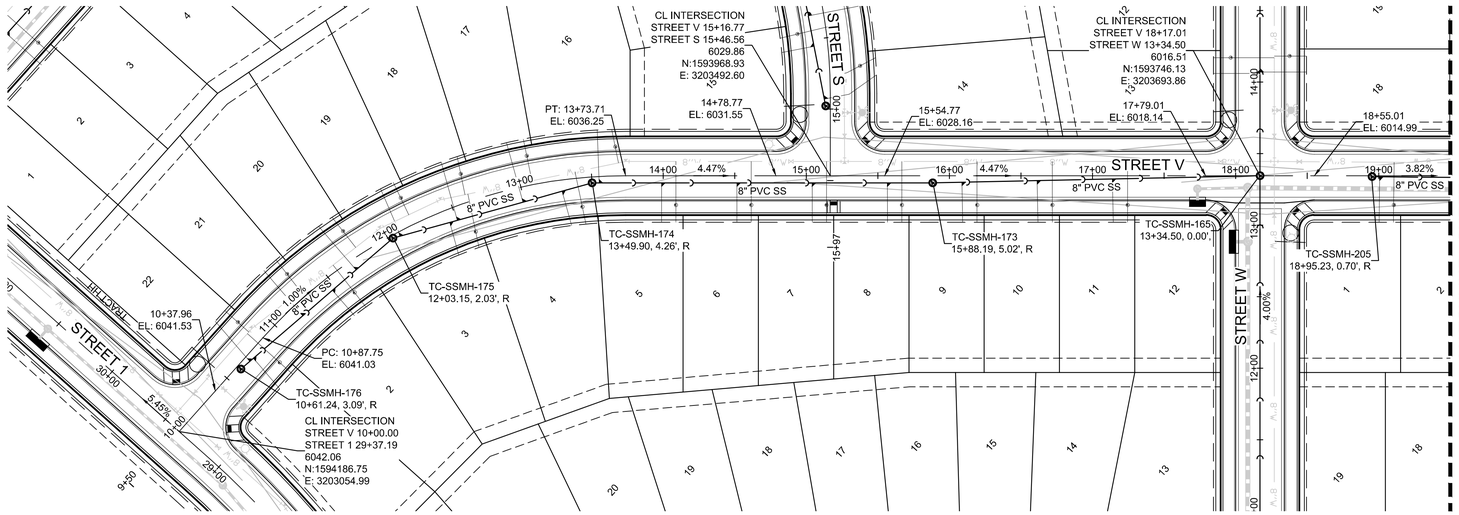
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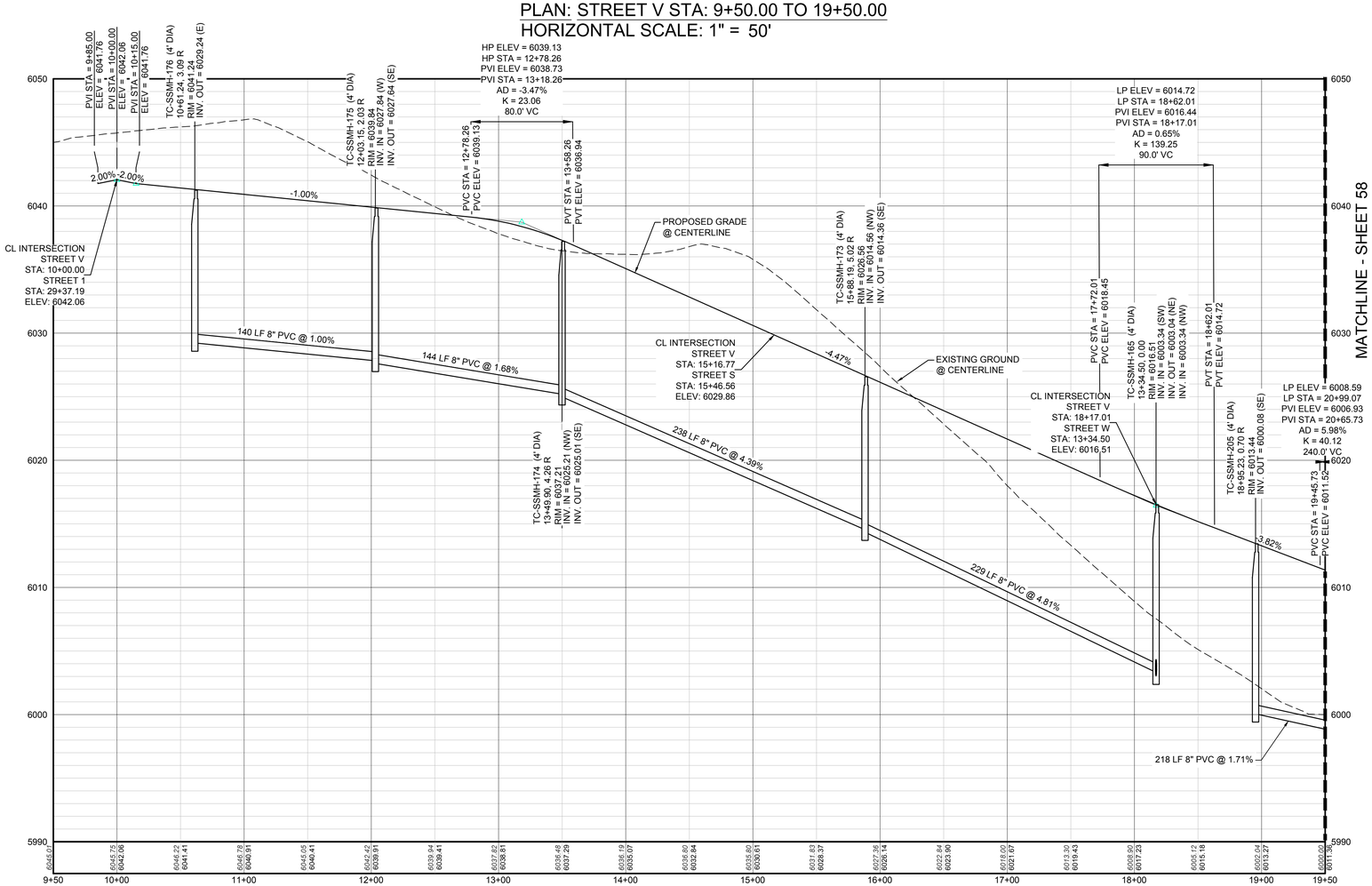
TRAILS AT CROWFOOT
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SANITARY SEWER PLAN AND PROFILE
STREET U

DRAWN BY:	JLR	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

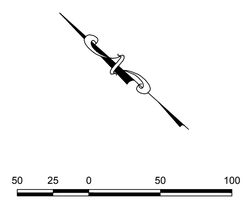
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PLAN: STREET V STA: 9+50.00 TO 19+50.00
HORIZONTAL SCALE: 1" = 50'

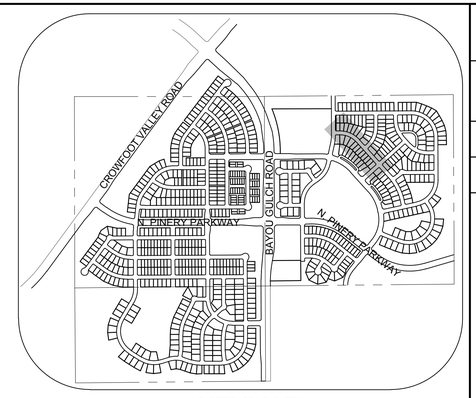


PROFILE: STREET V STA: 9+50.00 TO 19+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



50 25 0 50 100

SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
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EXISTING VALVE	PROPOSED SEWER LATERAL
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PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
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10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
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ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
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N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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No.	Revisions	Date	Init.	Date	Appr.	Date

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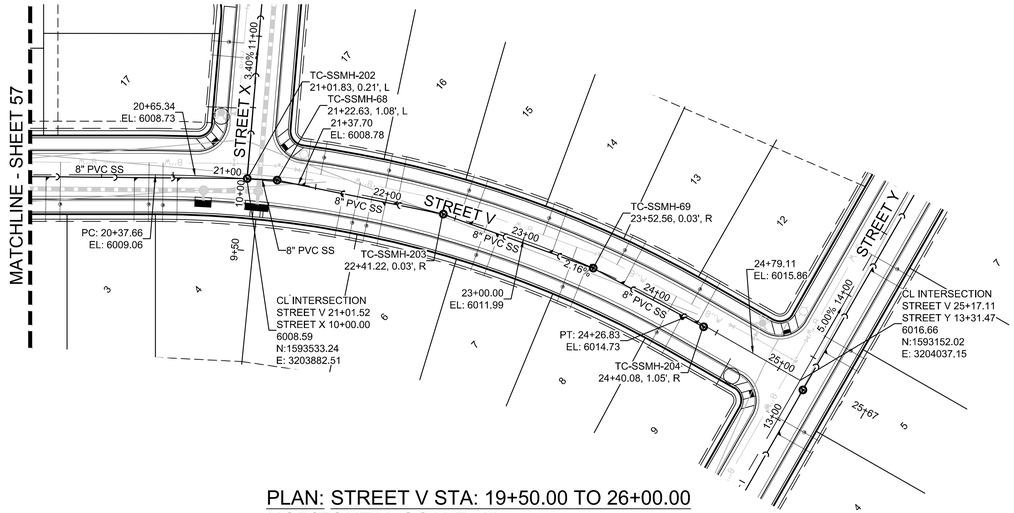
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TRAILS AT CROWFOOT
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SANITARY SEWER PLAN AND PROFILE
STREET V

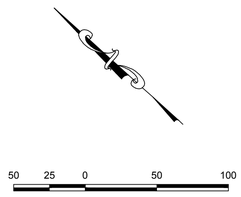
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DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

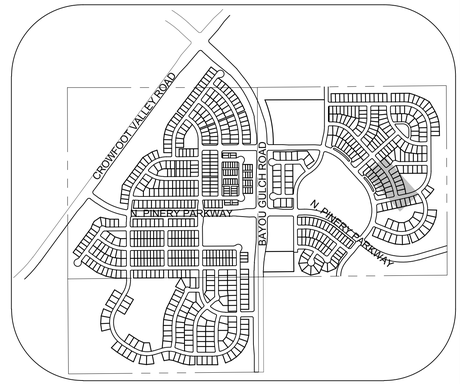
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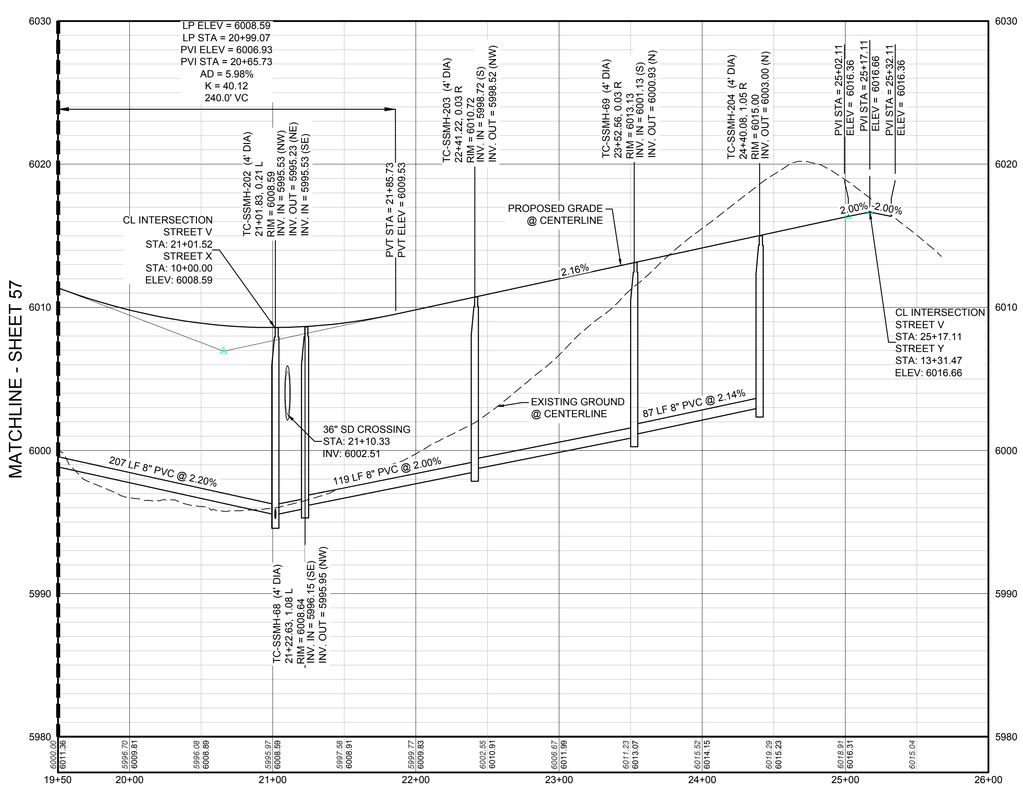


PLAN: STREET V STA: 19+50.00 TO 26+00.00
HORIZONTAL SCALE: 1" = 50'





KEYMAP
N.T.S.



PROFILE: STREET V STA: 19+50.00 TO 26+00.00
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N.T.S.	NOT TO SCALE		
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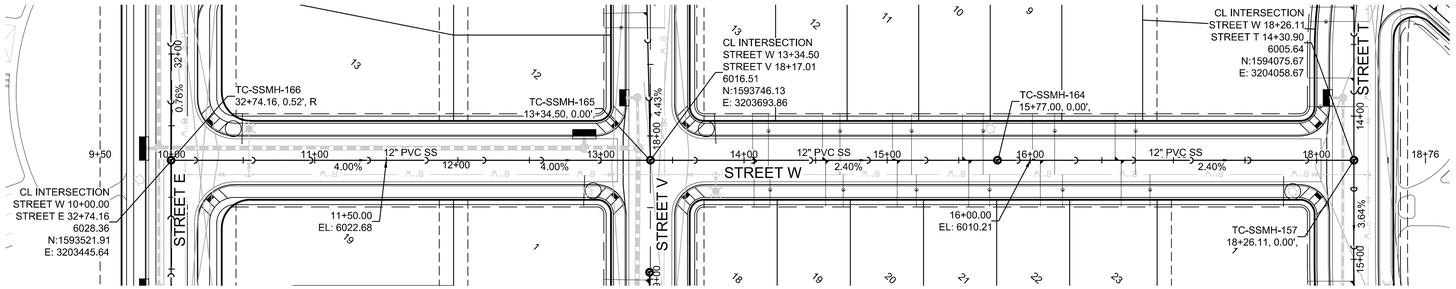
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STREET V

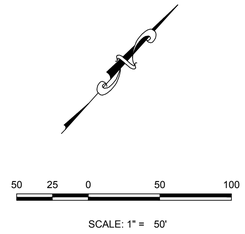
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DATE:	FEBRUARY 2017		

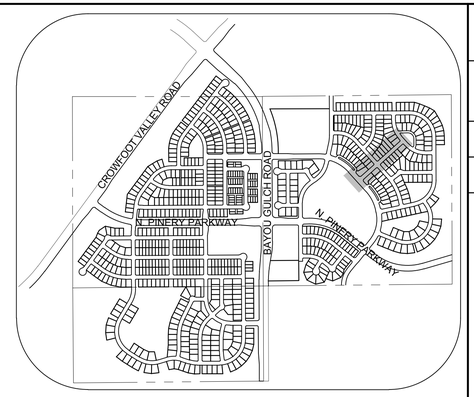
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PLAN: STREET W STA: 9+50.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'





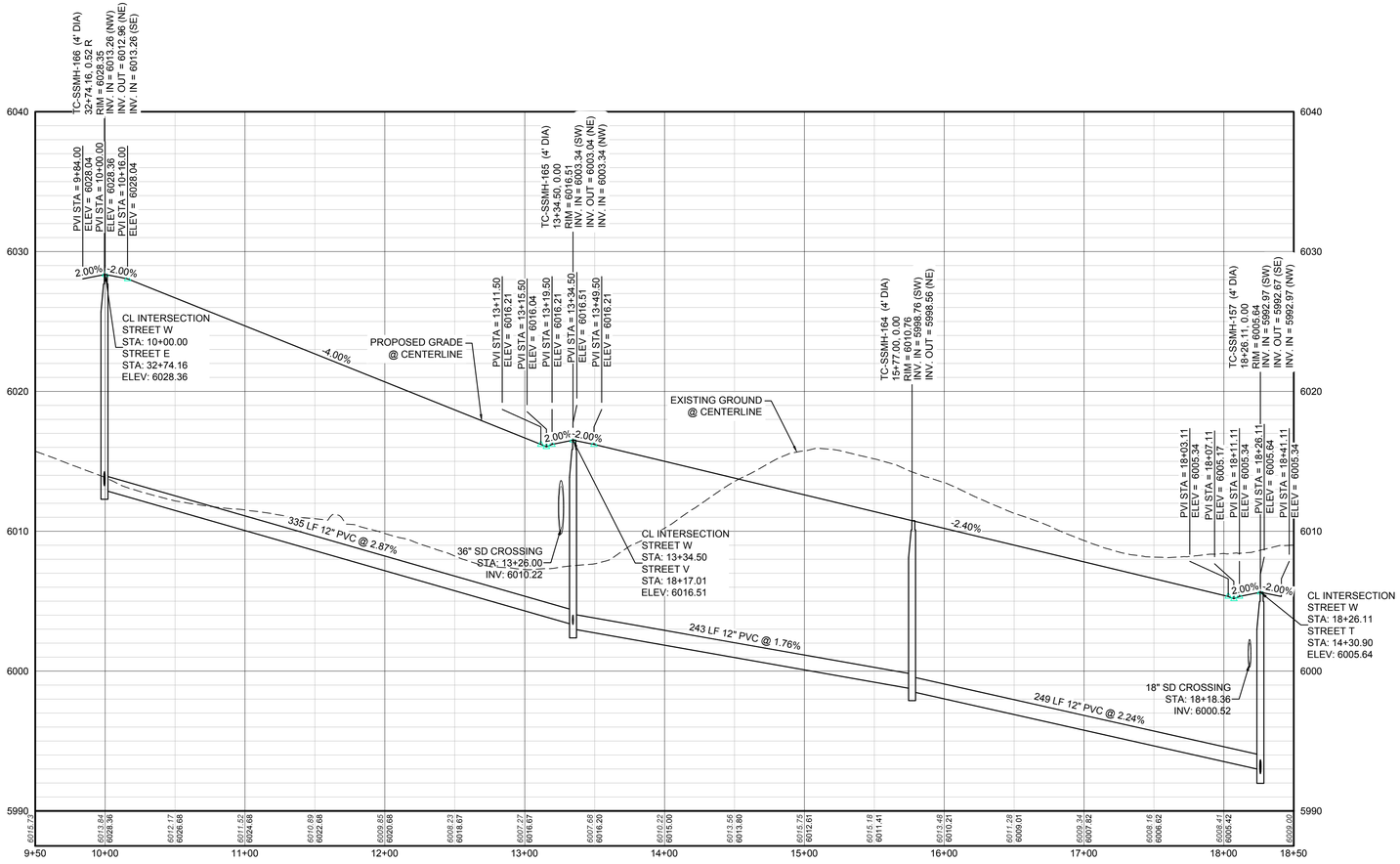
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
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PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4) (5) (6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

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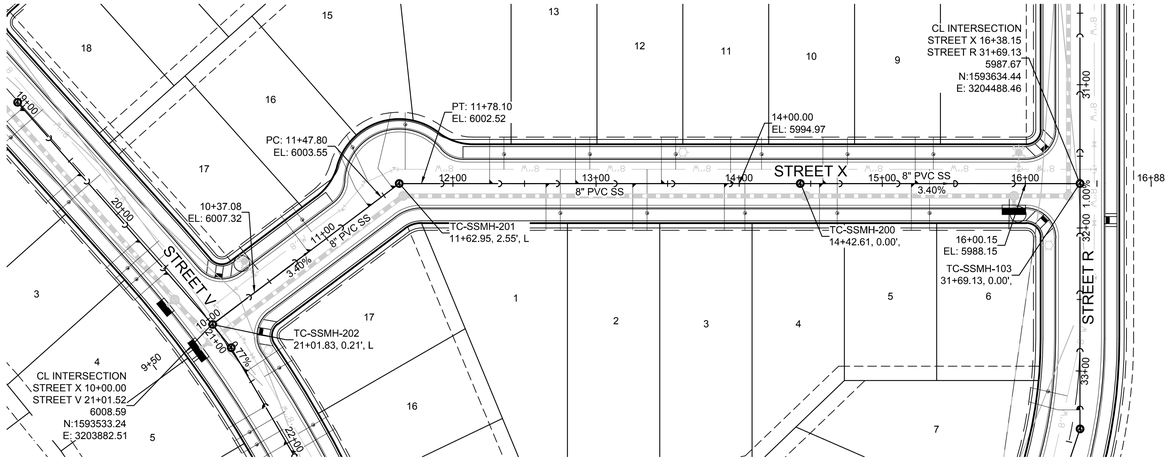
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DRAWN BY:	JLR	SCALE:	AS SHOWN
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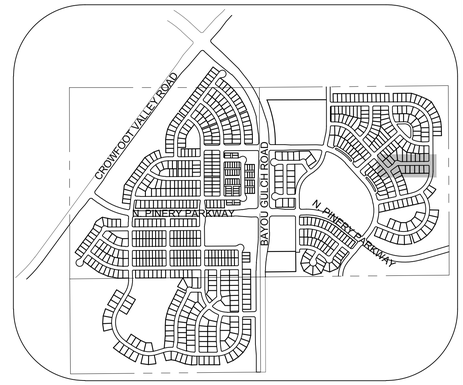
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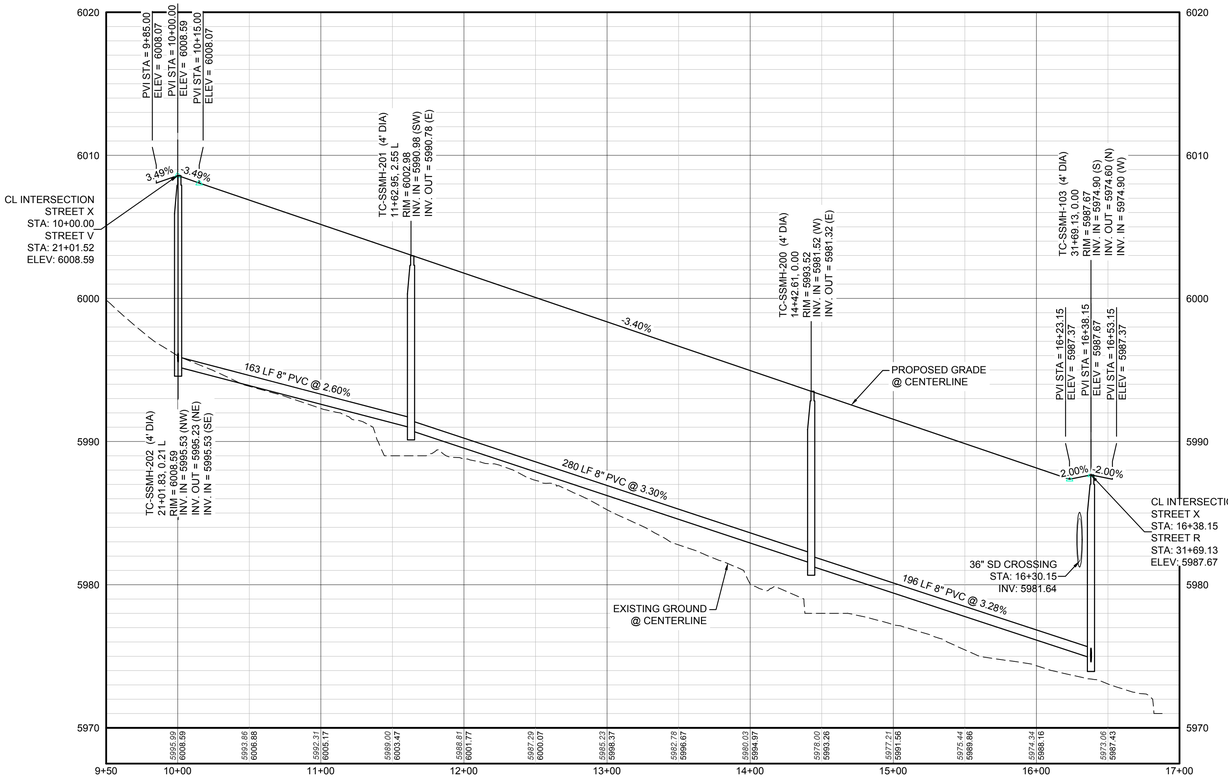
PLAN: STREET X STA: 9+50.00 TO 17+00.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: STREET X STA: 9+50.00 TO 17+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

2	BLOCK NUMBER		PROPOSED RANGE POINT
A	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
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	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
4 5 6	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

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No.	Revisions	Date	Init.	Appr.	Date

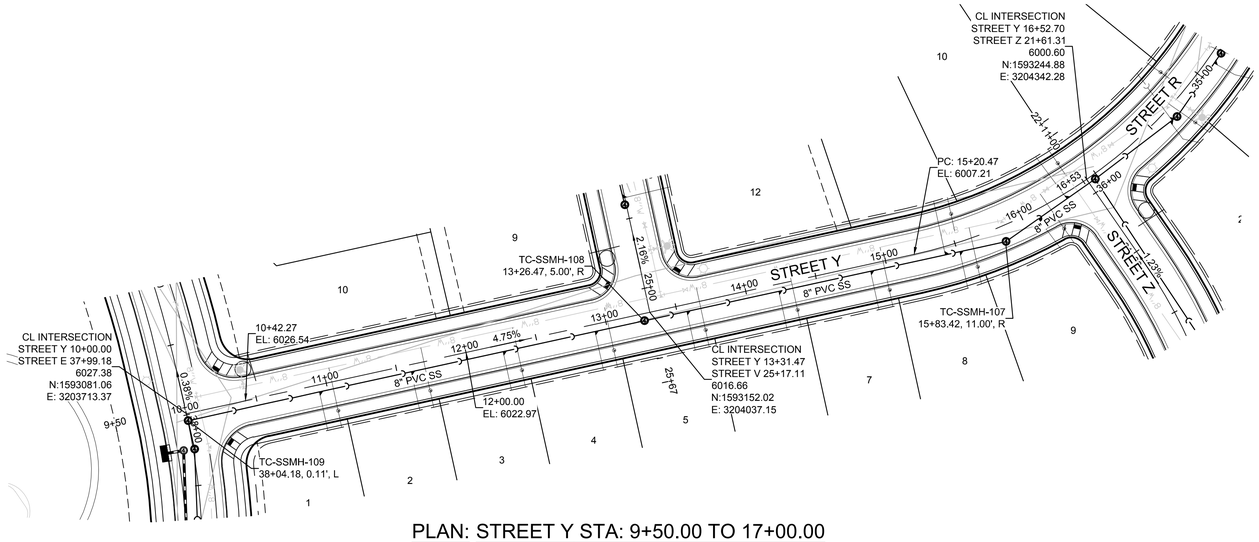
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Fax: (720) 482-9546
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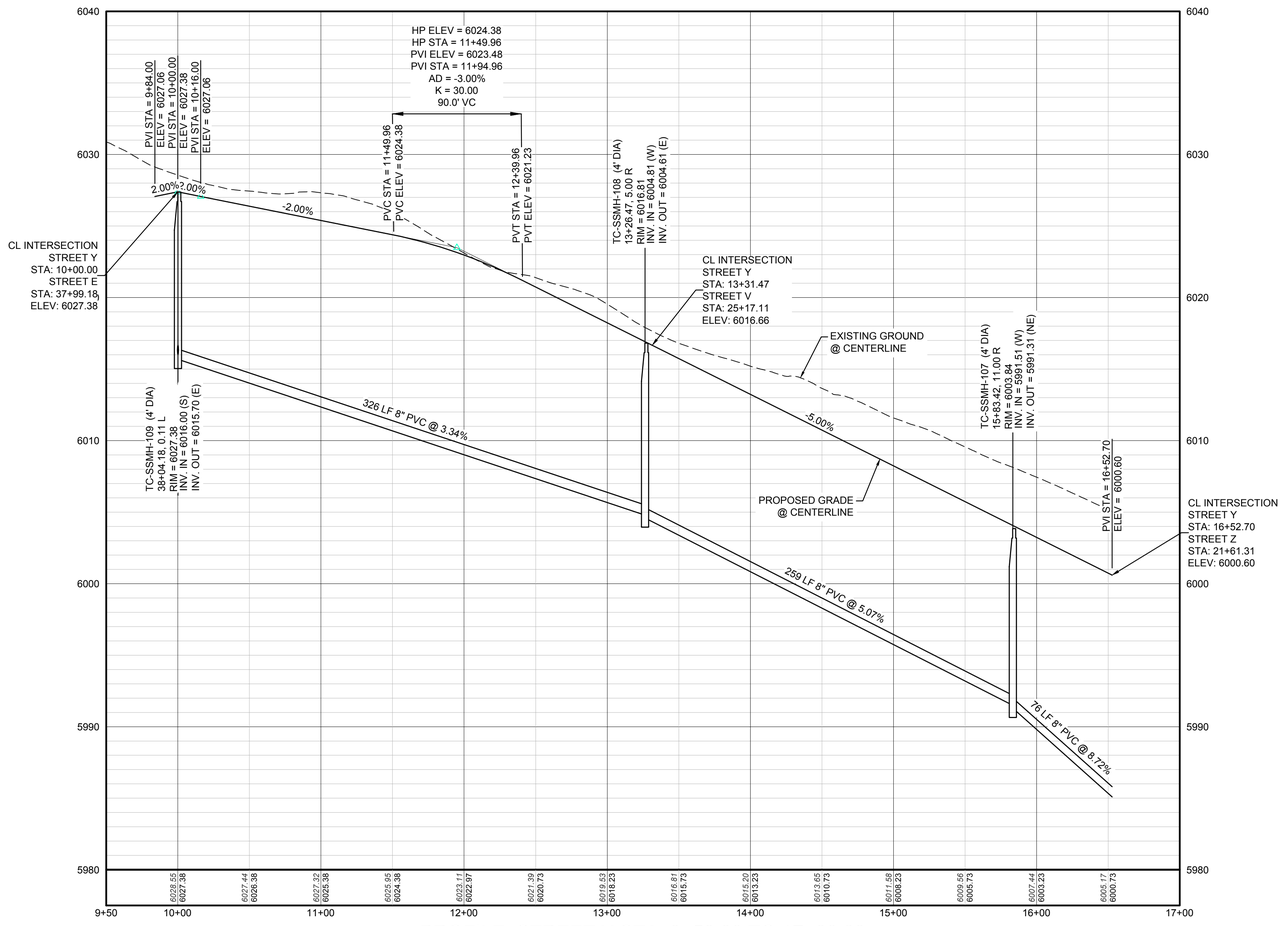
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET X

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 60

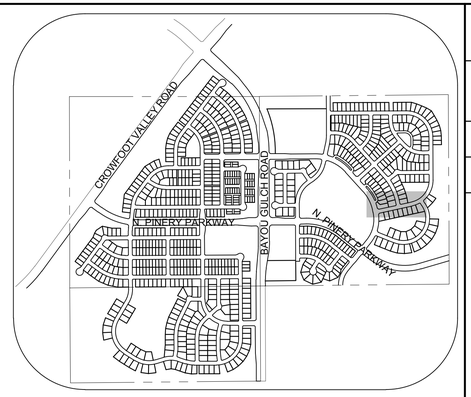
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PLAN: STREET Y STA: 9+50.00 TO 17+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET Y STA: 9+50.00 TO 17+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

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

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- EXISTING ELEVATION
- PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE & DIRECTION (1.0%)
- EXISTING 5' CONTOUR (5615)
- EXISTING 1' CONTOUR (5616)
- PROPOSED 5' CONTOUR (5620)
- PROPOSED 1' CONTOUR (5607)
- PROPOSED STORM DRAIN (36" SS)
- PROPOSED SEWER LINE WITH MANHOLE (18" SS)
- PROPOSED SEWER LATERAL
- PROPOSED WATER LINE (8"W)
- PROPOSED WATER LATERAL W/ METER
- EXISTING 60" RAW WATER LINE (RW)
- SECTION LINE
- FILING BOUNDARY
- EXISTING FIBER OPTIC LINE (FO)
- EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
- EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION		
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
HCR	HANDICAP CURB RAMP	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	T.O.S.	TOP OF PIPE
K	CURVATURE COEFFICIENT	UE	UTILITY EASEMENT
LF	LINEAR FEET	VC	VERTICAL CURVE
MH	MANHOLE	WL	WATER LINE
N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date	Init.	Date	Appr.	Date

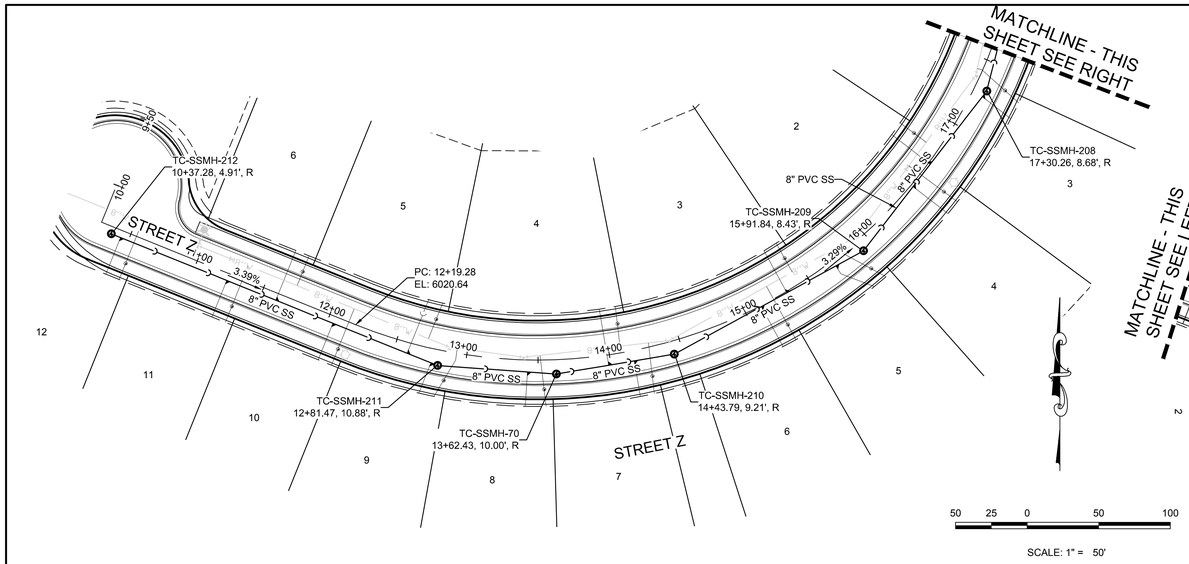
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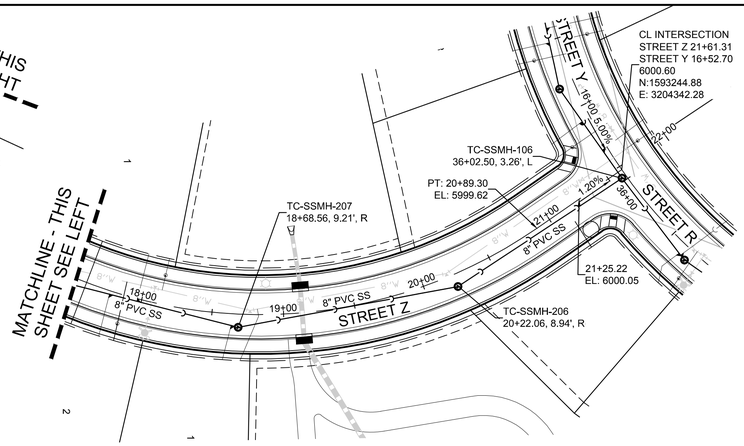
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7353 South Alton Way
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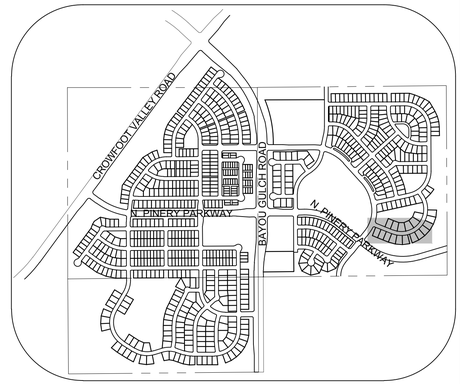
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET Y

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 61

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KEYMAP
N.T.S.

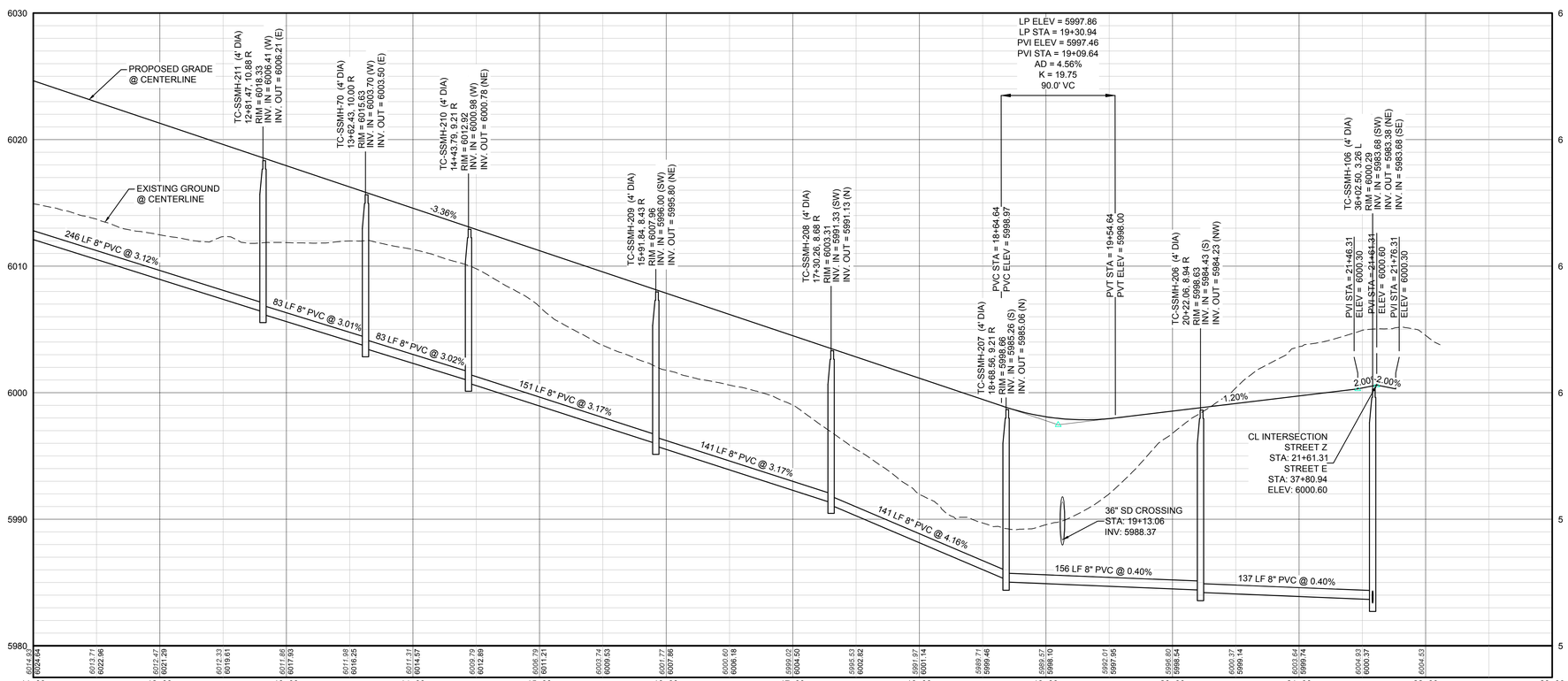
LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60' RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

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BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
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EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

PLAN: STREET Z STA: 9+50.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: STREET Z STA: 11+00.00 TO 23+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date

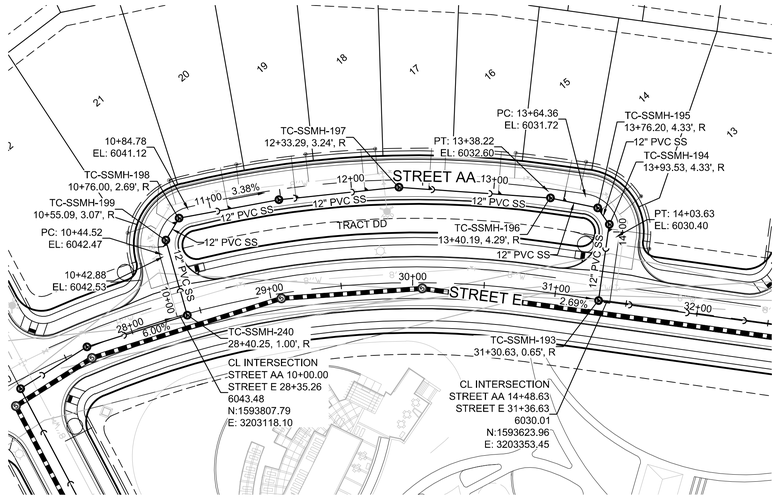
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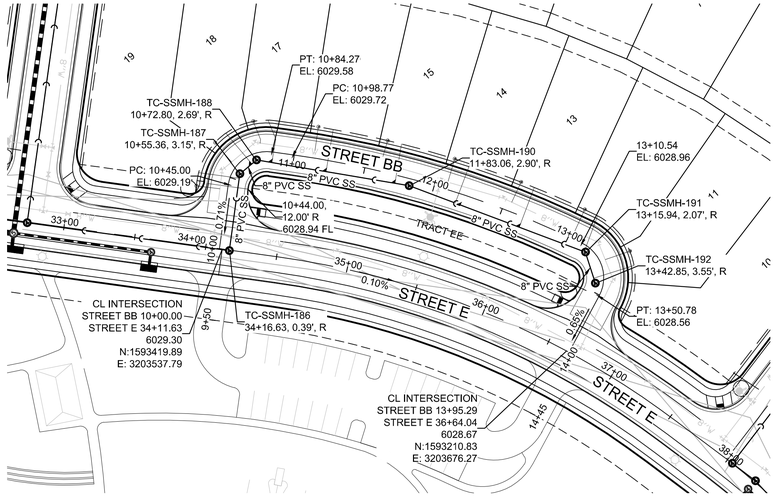
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET Z

DRAWN BY:	JLR	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

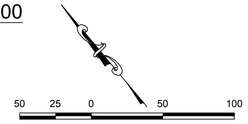
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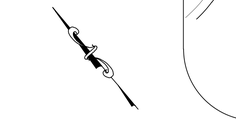
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HORIZONTAL SCALE: 1" = 50'



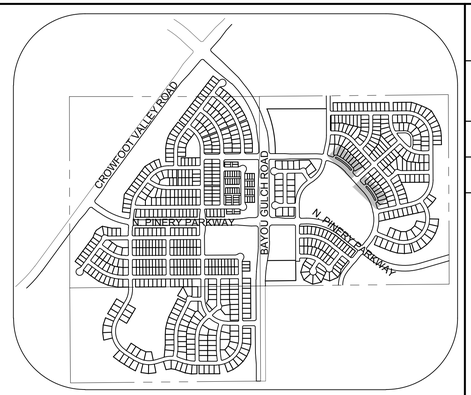
PLAN: STREET BB STA: 9+50.00 TO 14+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



SCALE: 1" = 50'



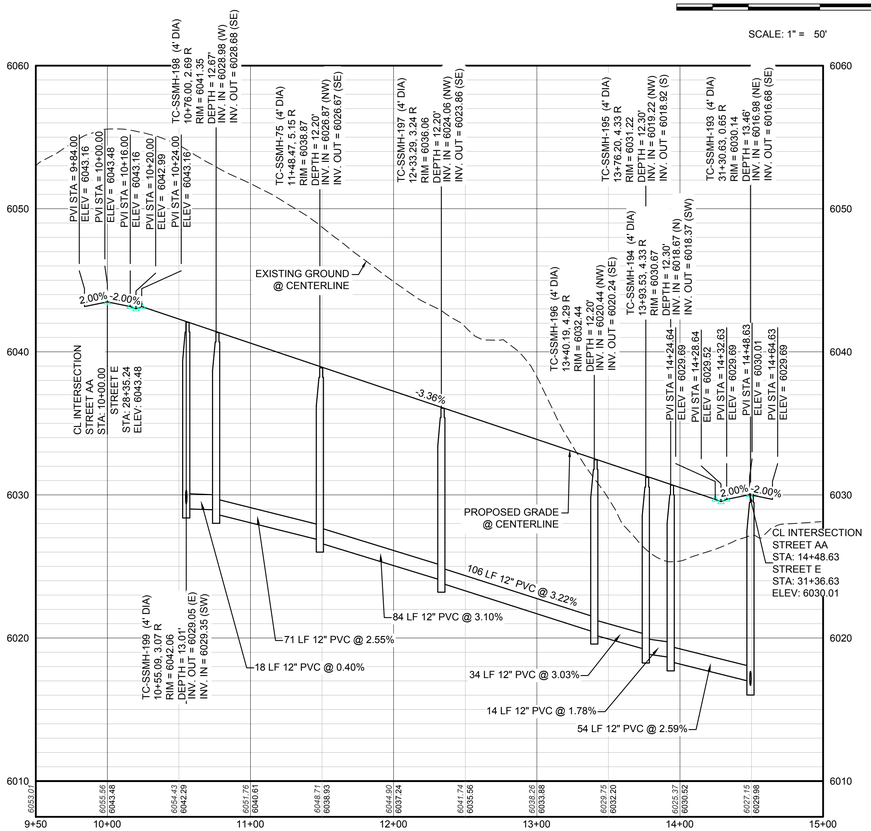
KEYMAP
N.T.S.

LEGEND

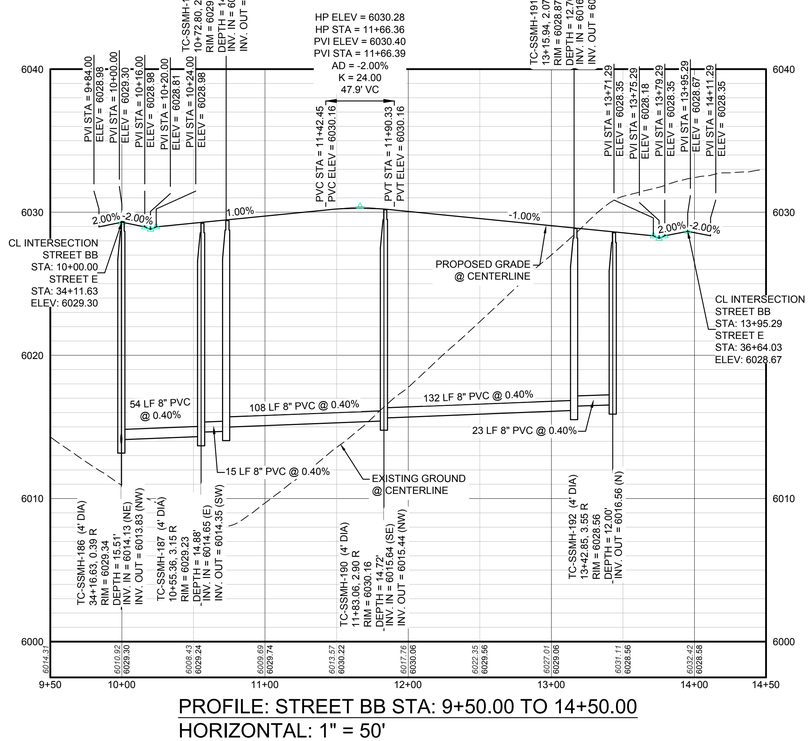
(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
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EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CRR	CURB RETURN RADIUS
EL	ELEVATION
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
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HCR	HANDICAP CURB RAMP
HP	HIGH POINT
INV	INVERT
K	CURVATURE COEFFICIENT
LF	LINEAR FEET
MH	MANHOLE
N.T.S.	NOT TO SCALE
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
PVI	PT. OF VERTICAL INTERSECTION
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RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SL	SECTION LINE
SS	SANITARY SEWER
STA	STATION
TC	TOP OF CURB
T.O.S.	TOP OF PIPE
UE	UTILITY EASEMENT
VC	VERTICAL CURVE
WL	WATER LINE
WSE	WATER SURFACE ELEVATION



PROFILE: STREET AA STA: 9+50.00 TO 15+00.00
HORIZONTAL: 1" = 50'
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PROFILE: STREET BB STA: 9+50.00 TO 14+50.00
HORIZONTAL: 1" = 50'
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No.	Revisions	Date	Init.	Appr.	Date

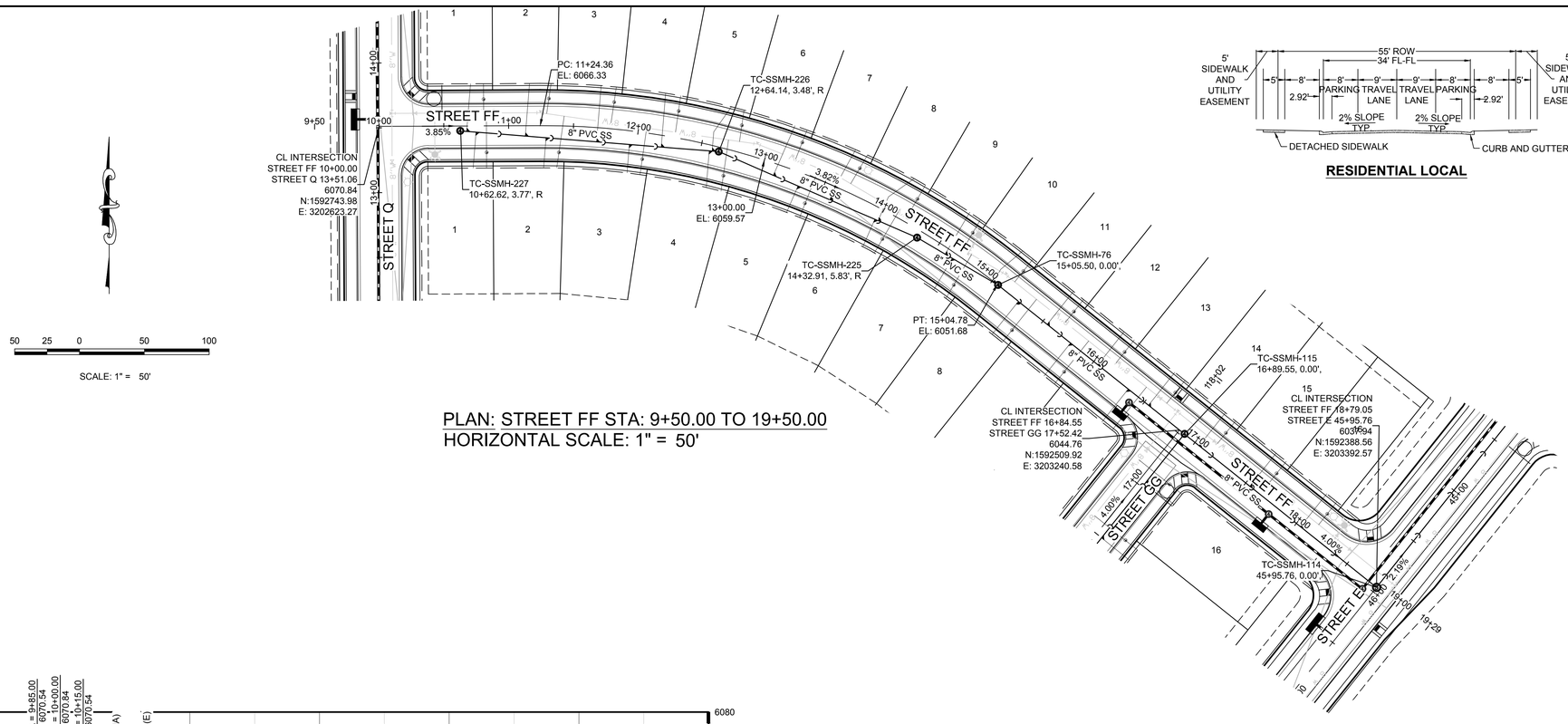
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE -
STREET AA & BB

DRAWN BY:	KJD	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 63

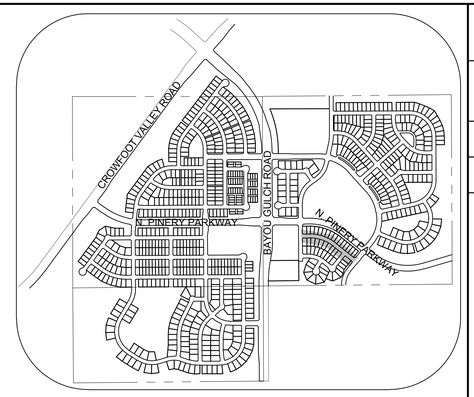


50 25 0 50 100

SCALE: 1" = 50'

PLAN: STREET FF STA: 9+50.00 TO 19+50.00
HORIZONTAL SCALE: 1" = 50'

RESIDENTIAL LOCAL



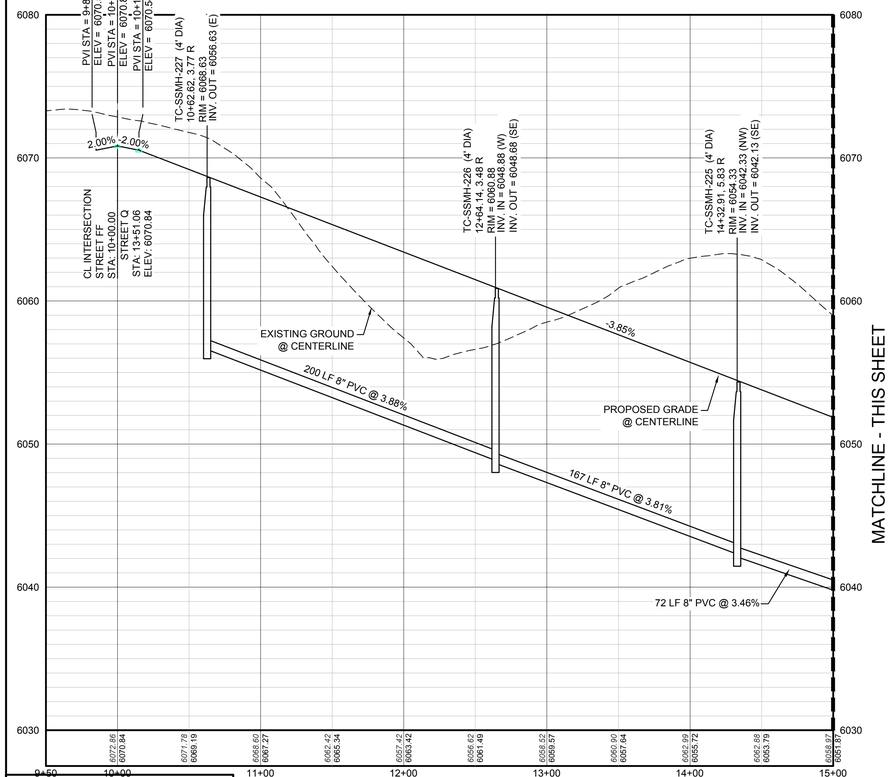
KEYMAP
N.T.S.

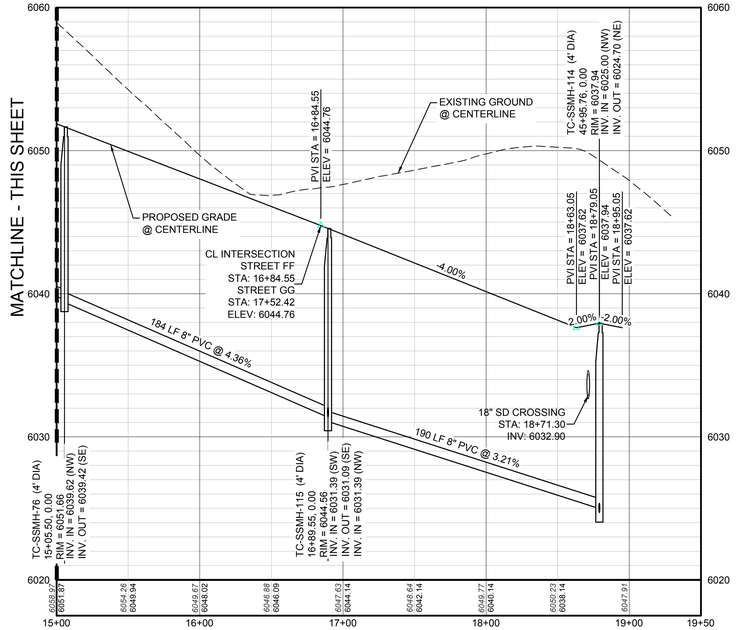
LEGEND

(2)	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	— - — - —	CENTERLINE
6	LOT NUMBER	———	RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE	———	PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF	———	EDGE OF PAVEMENT
	PROPOSED REDUCER	➡	PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0% ➡	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
BO	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
AV	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6)	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		





PROFILE: STREET FF STA: 15+00.00 TO 19+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

PROFILE: STREET FF STA: 9+50.00 TO 15+00.00
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UNCC UTILITY NOTIFICATION CENTER OF COLORADO

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
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No.	Revisions	Date	Init.	Appr.	Date

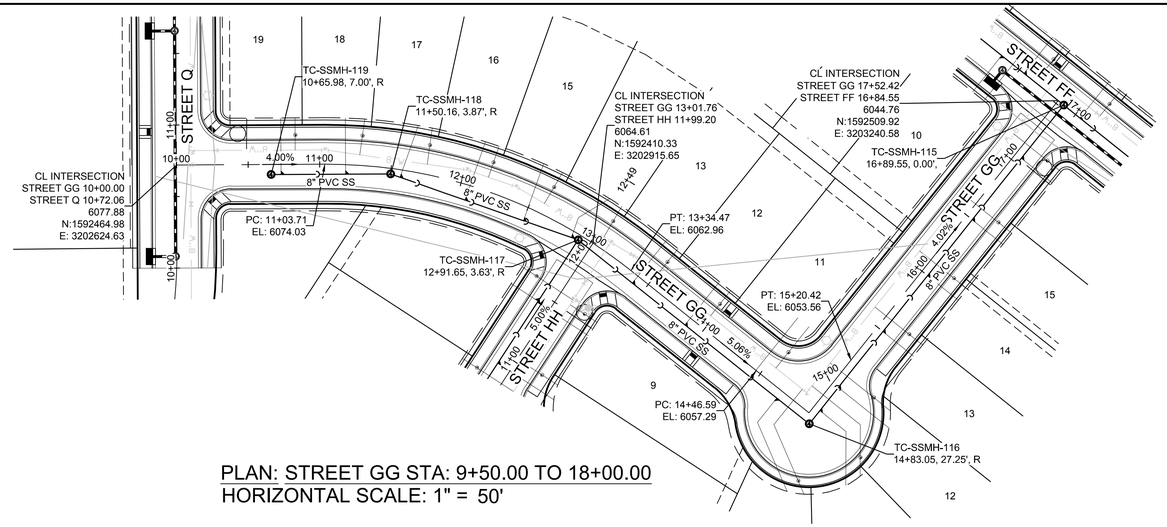
10333 E. Dry Creek Rd.
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Englewood, CO 80112
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Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET FF

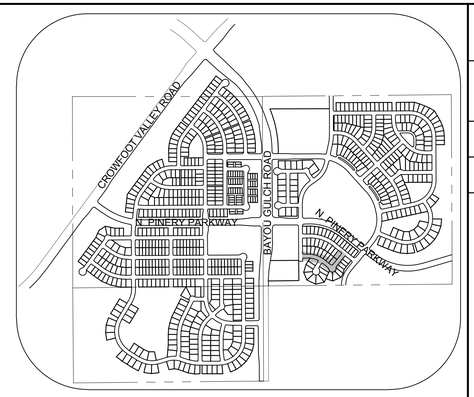
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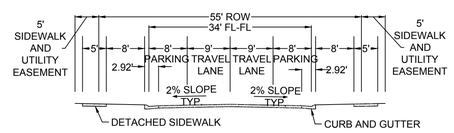


PLAN: STREET GG STA: 9+50.00 TO 18+00.00
HORIZONTAL SCALE: 1" = 50'

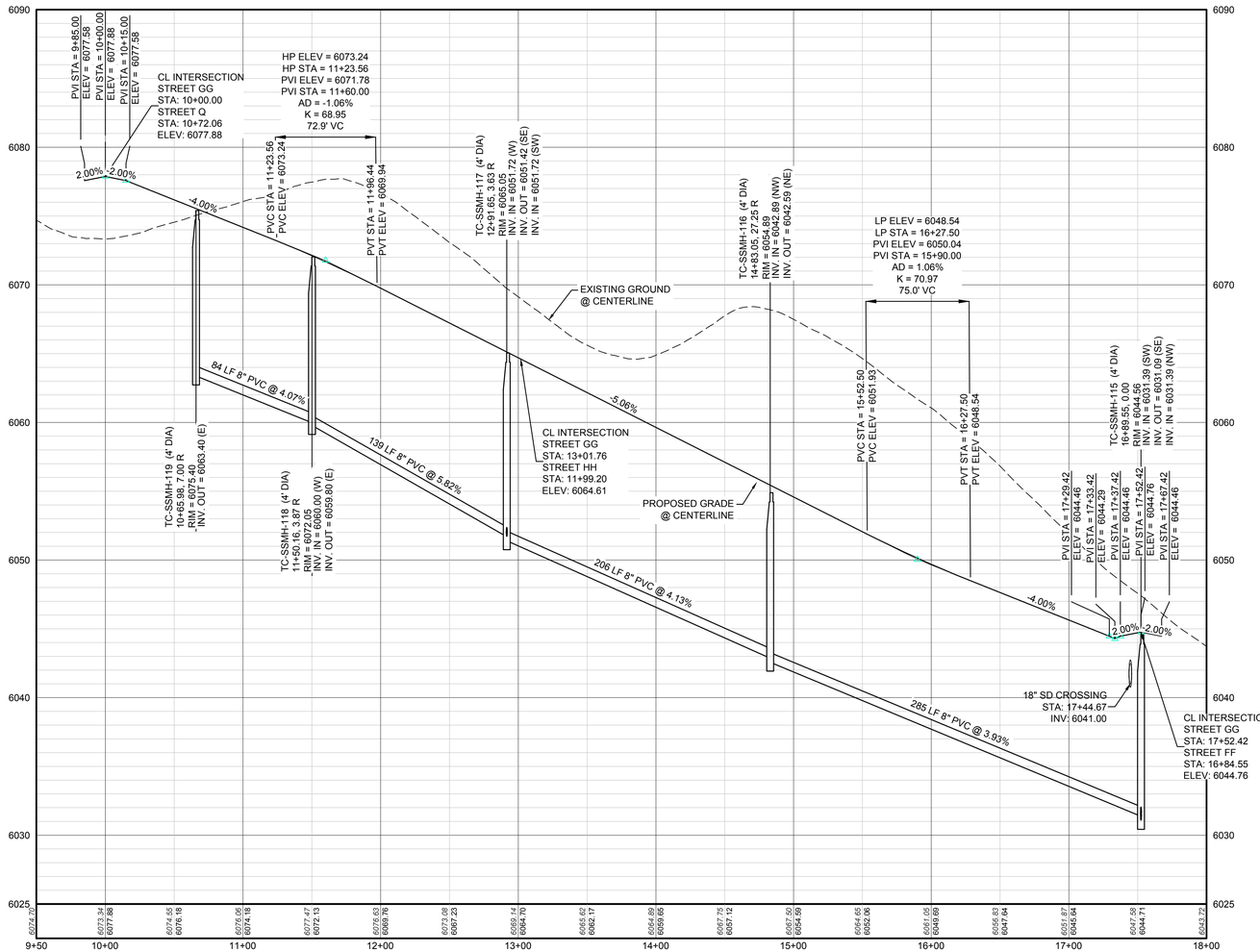




KEYMAP
N.T.S.



RESIDENTIAL LOCAL



PROFILE: STREET GG STA: 9+50.00 TO 18+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

- BLOCK NUMBER
- LOT TYPE
- LOT NUMBER
- PROPOSED BUTTERFLY VALVE
- PROPOSED CAP WITH END OF LINE BLOWOFF
- PROPOSED REDUCER
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WL FITTING WITH THRUST BLOCK
- PROPOSED FLARED END SECTION
- PROPOSED LOW POINT BLOW-OFF
- PROPOSED AIR VALVE
- EXISTING BLOW OFF VALVE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED SIDEWALK
- PROPOSED SIDEWALK RAMP
- 10.00 EXISTING ELEVATION
- 10.00 PROPOSED DESIGN ELEVATION
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED RANGE POINT
- CENTERLINE
- RIGHT-OF-WAY
- PROPERTY LINE
- EDGE OF PAVEMENT
- PROPOSED DIRECTION OF FLOW
- 1.0% PROPOSED SLOPE & DIRECTION
- 5615 EXISTING 5' CONTOUR
- 5616 EXISTING 1' CONTOUR
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- PROPOSED SEWER LATERAL
- 8"W PROPOSED WATER LINE
- PROPOSED WATER LATERAL W/ METER
- RW EXISTING 60" RAW WATER LINE
- SECTION LINE
- FILING BOUNDARY
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- HV EXISTING OVERHEAD HIGH VOLTAGE LINE
- TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
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FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
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HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
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N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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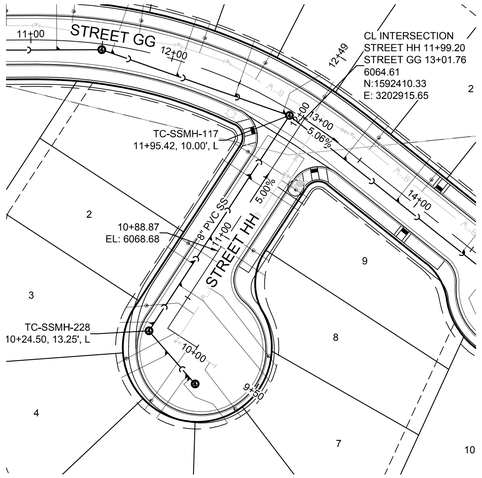
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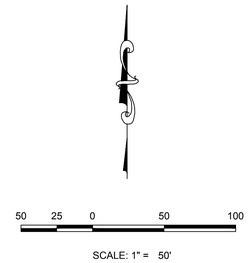
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET GG

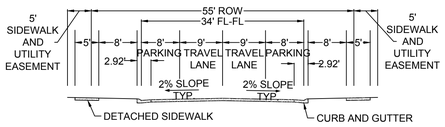
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DATE: FEBRUARY 2017
SHEET NUMBER 65

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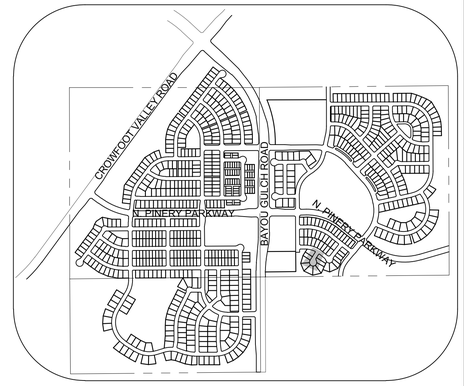
PLAN: STREET HH STA: 8+50.00 TO 12+50.00
HORIZONTAL SCALE: 1" = 50'





RESIDENTIAL LOCAL

PROFILE: STREET HH STA: 8+50.00 TO 12+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
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PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4)(5)(6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

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EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
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FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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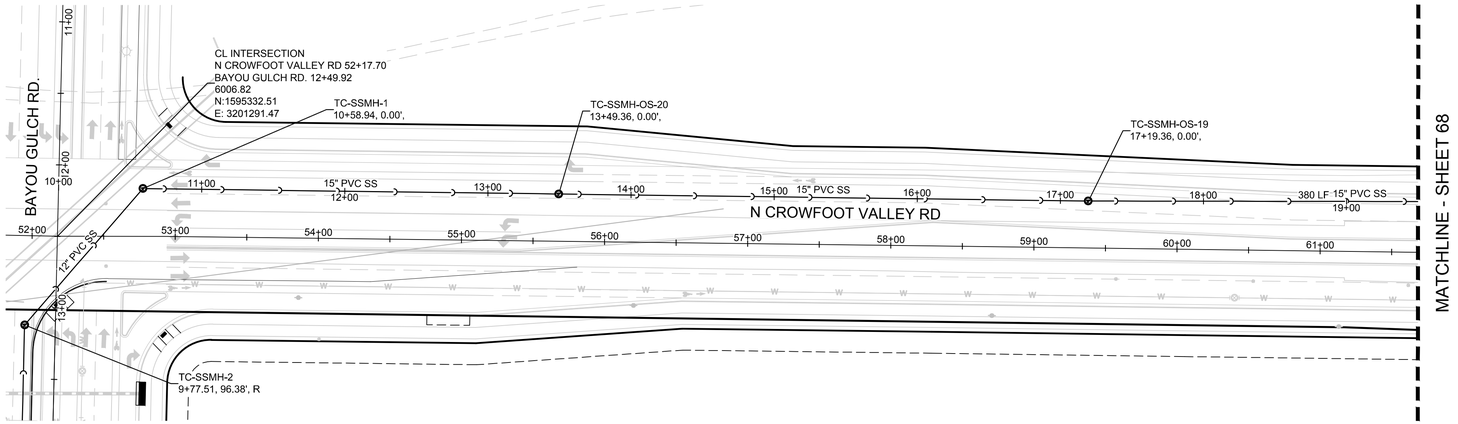
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CENTENNIAL, CO 80112

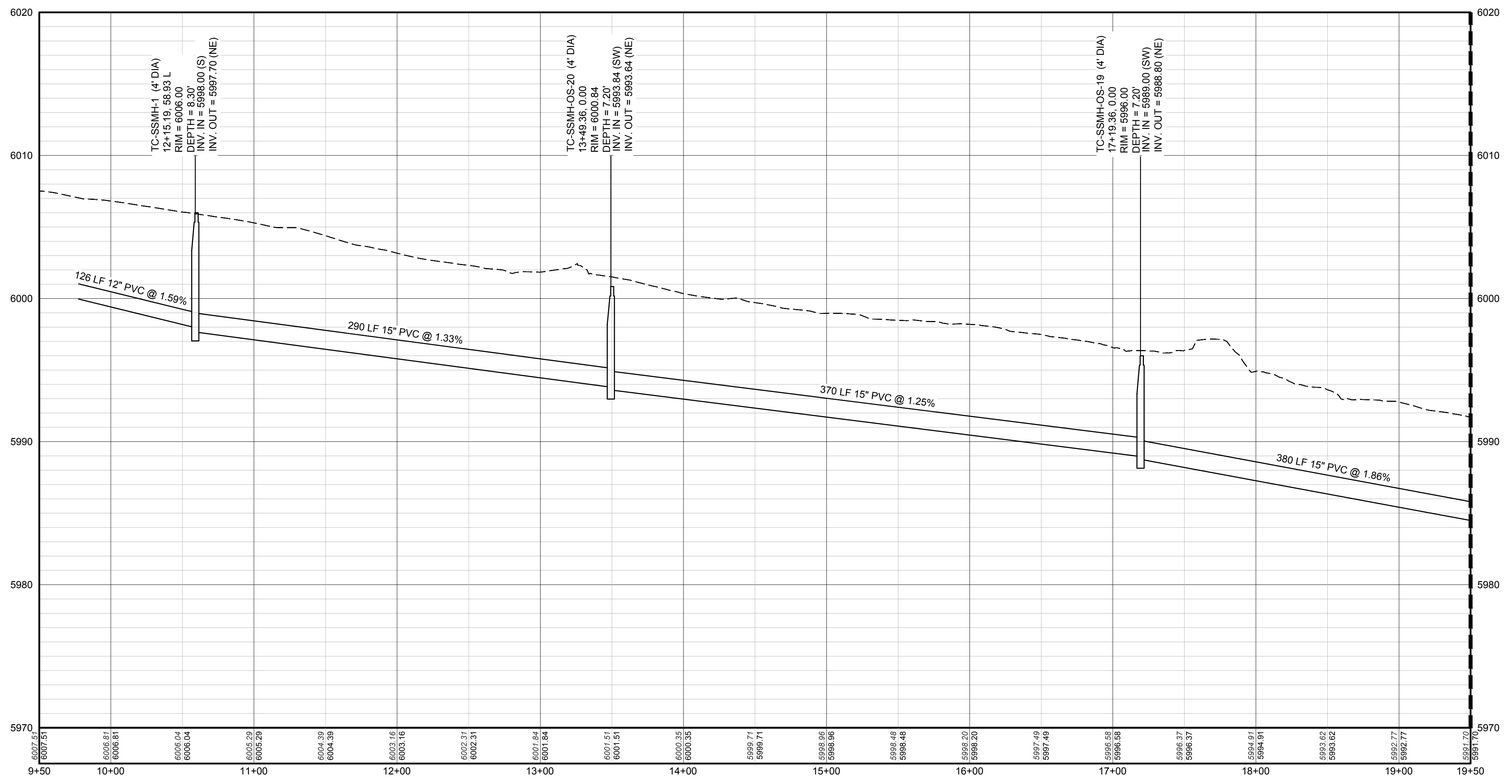
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
STREET HH

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 66

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PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 9+50.00 TO 19+50.00
HORIZONTAL SCALE: 1" = 50'

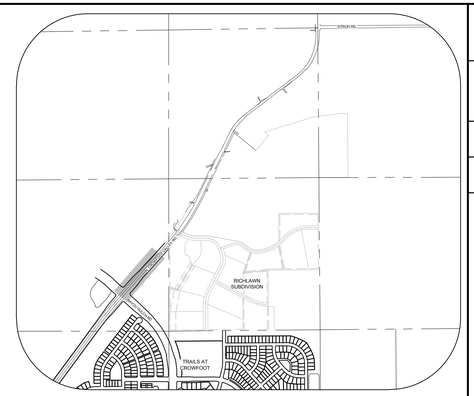


PROFILE: SS N BAYOU GULCH OUTFALL STA: 9+50.00 TO 19+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'





SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
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PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
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N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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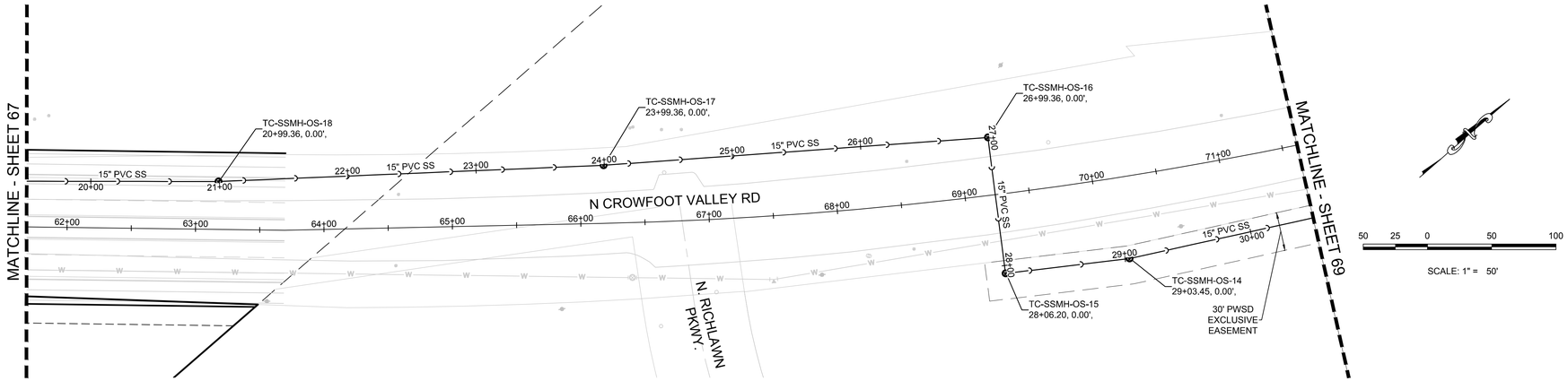
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE CROWFOOT

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 67

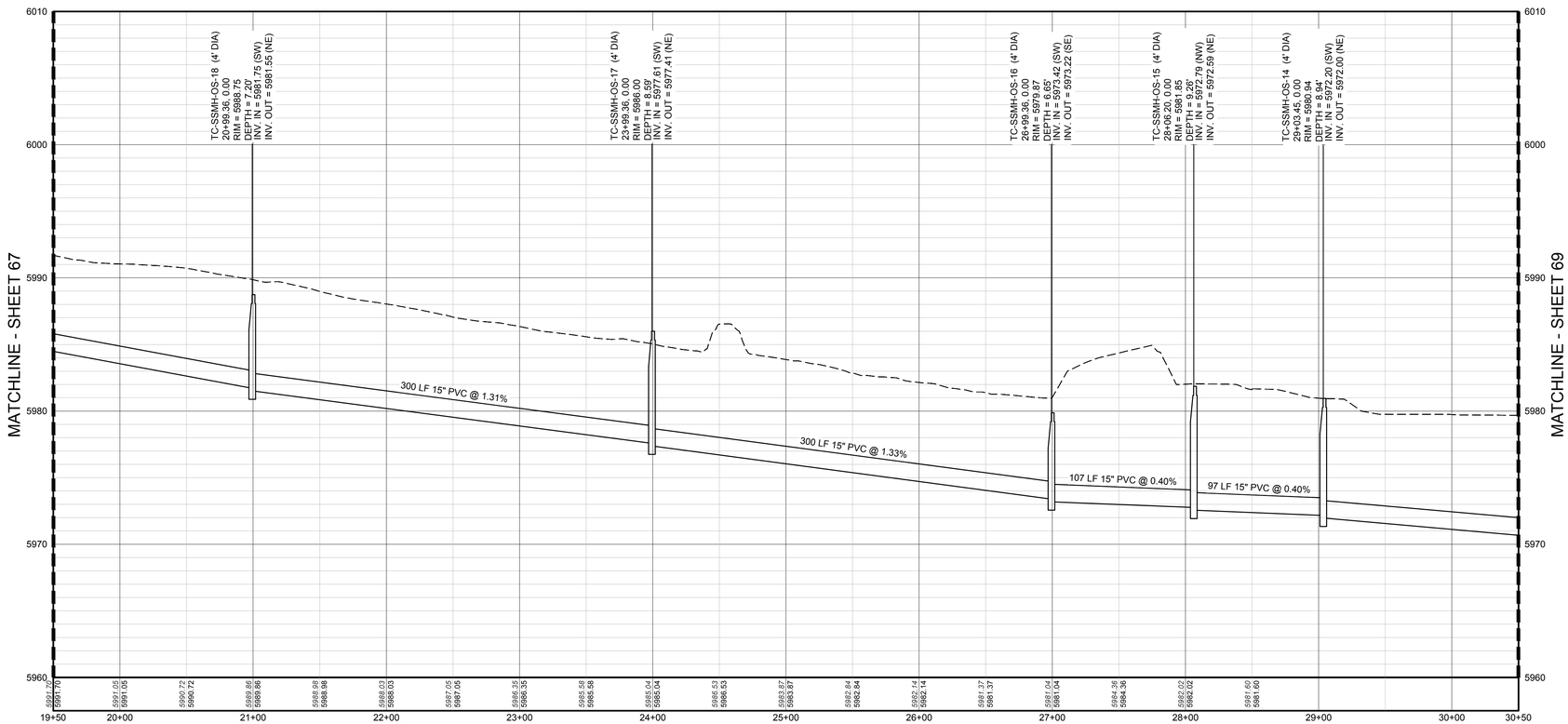
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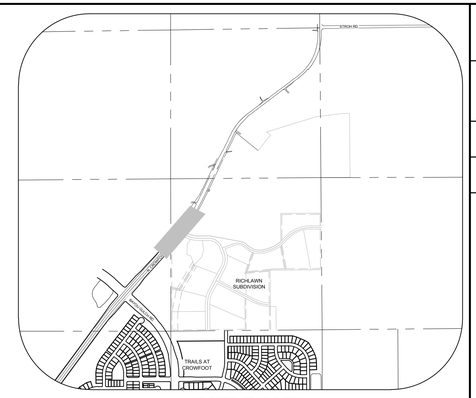
50 25 0 50 100

SCALE: 1" = 50'

PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 19+50.00 TO 30+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS N BAYOU GULCH OUTFALL STA: 19+50.00 TO 30+50.00
HORIZONTAL: 1" = 50'
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KEYMAP
N.T.S.

LEGEND

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LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION	FILING BOUNDARY
PROPOSED DESIGN ELEVATION	EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE
PROPOSED STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE

ABBREVIATIONS

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BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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No.	Revisions	Date	Init.	Appr.	Date

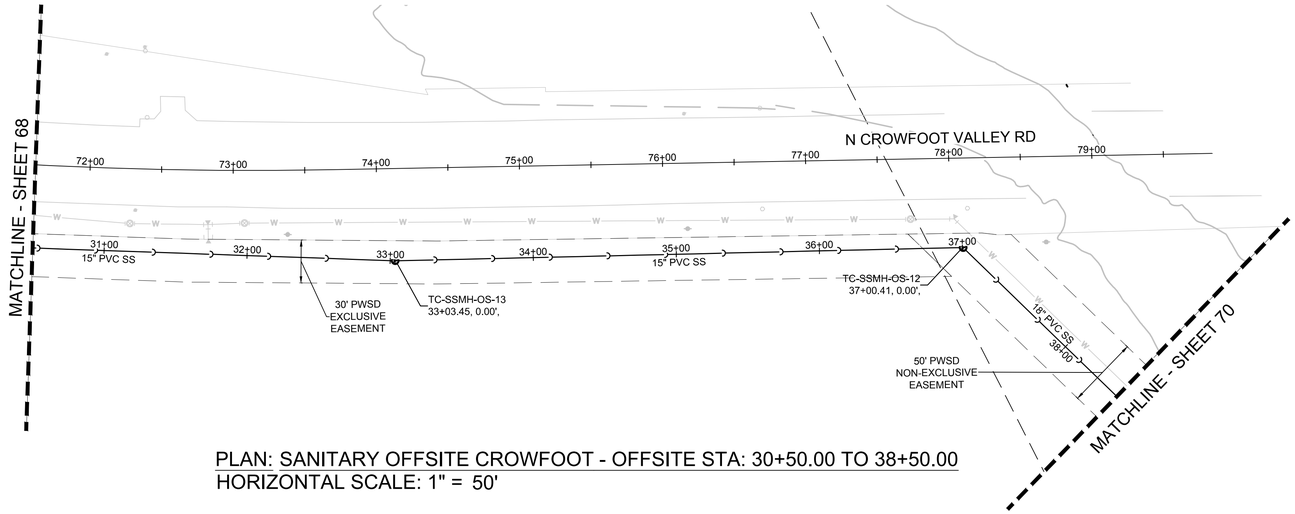
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Fax: (720) 482-9546
CVL CONSULTANTS

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CENTENNIAL, CO 80112

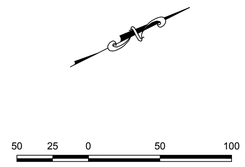
TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE CROWFOOT

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 68

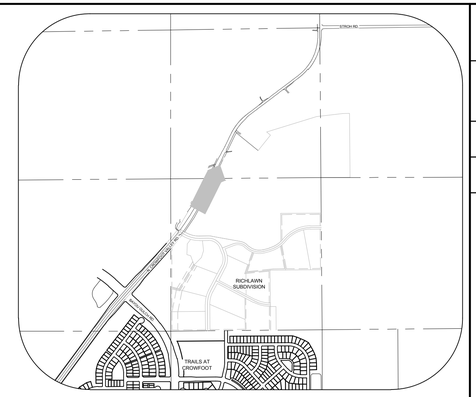
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PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 30+50.00 TO 38+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



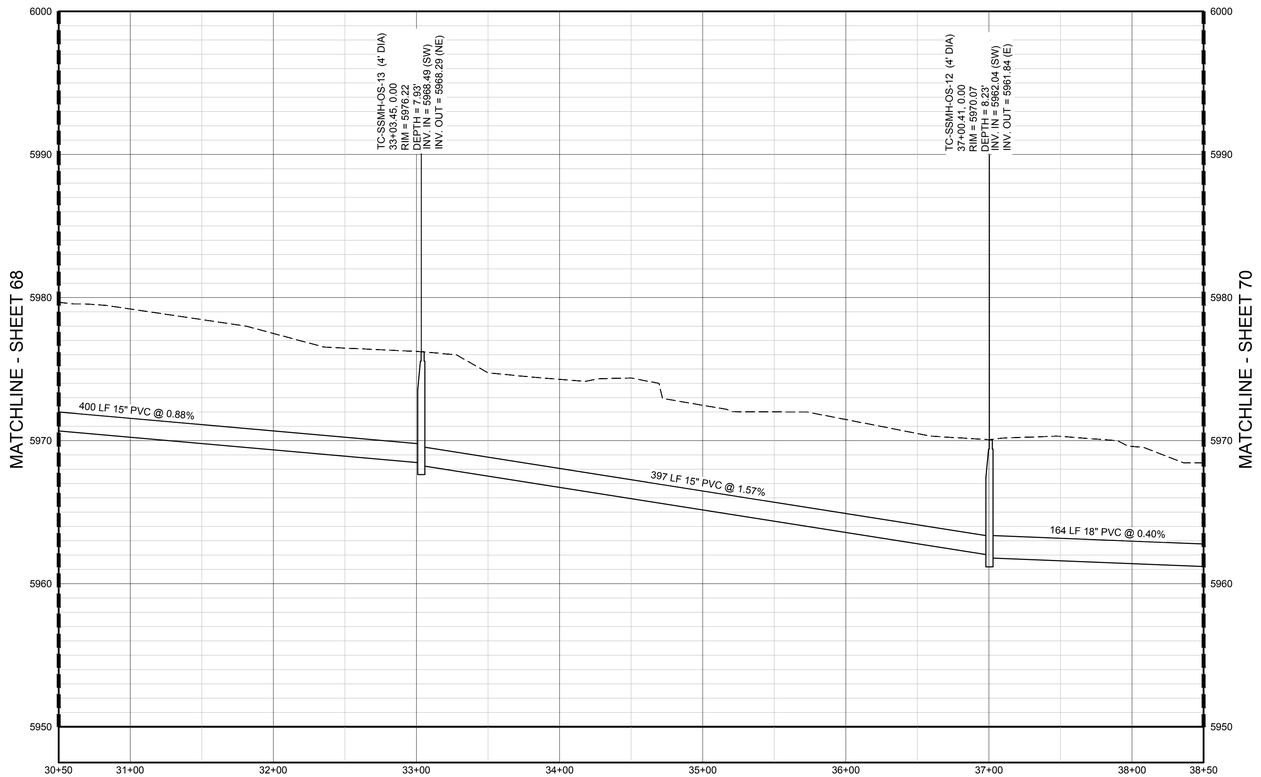
KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
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N.T.S.	NOT TO SCALE		
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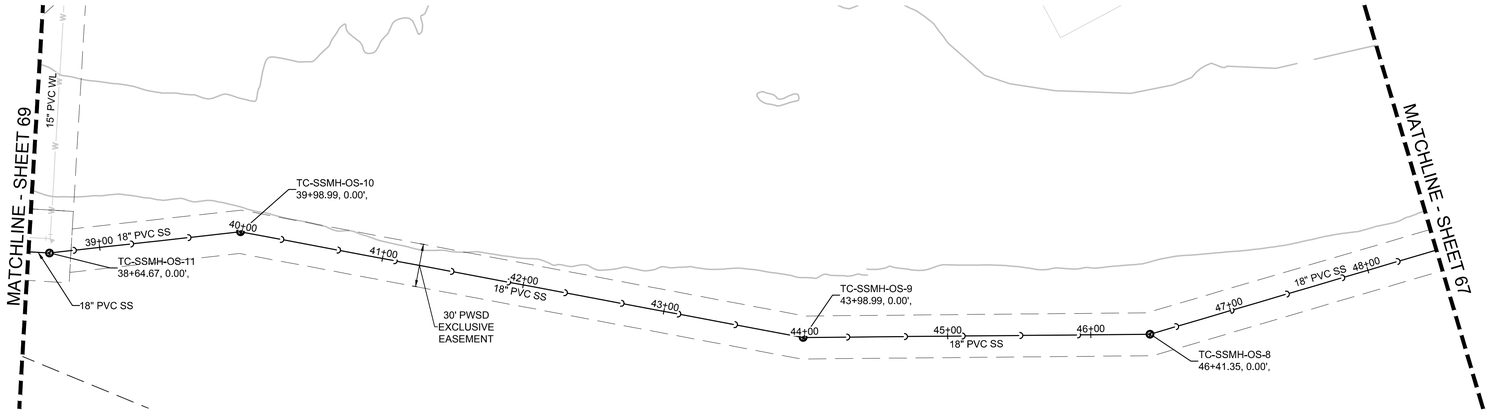
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Suite 240
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Tel: (720) 482-9526
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CVL CONSULTANTS

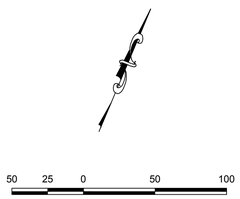
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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE CROWFOOT

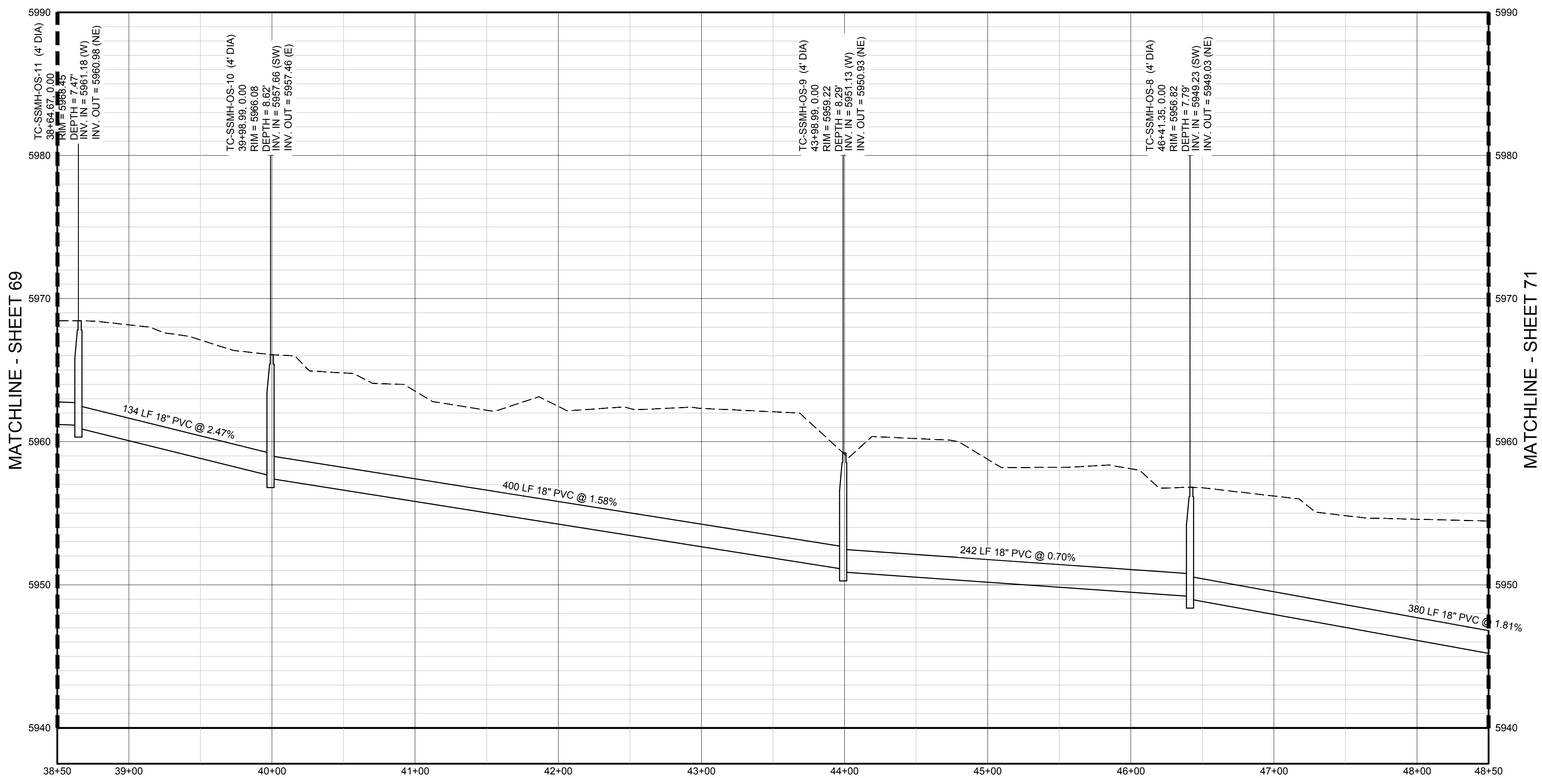
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CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 69

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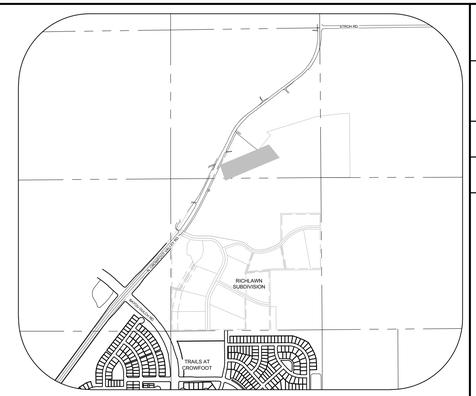




PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 38+50.00 TO 48+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS N BAYOU GULCH OUTFALL STA: 38+50.00 TO 48+50.00
HORIZONTAL: 1" = 50'
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KEYMAP
N.T.S.

LEGEND

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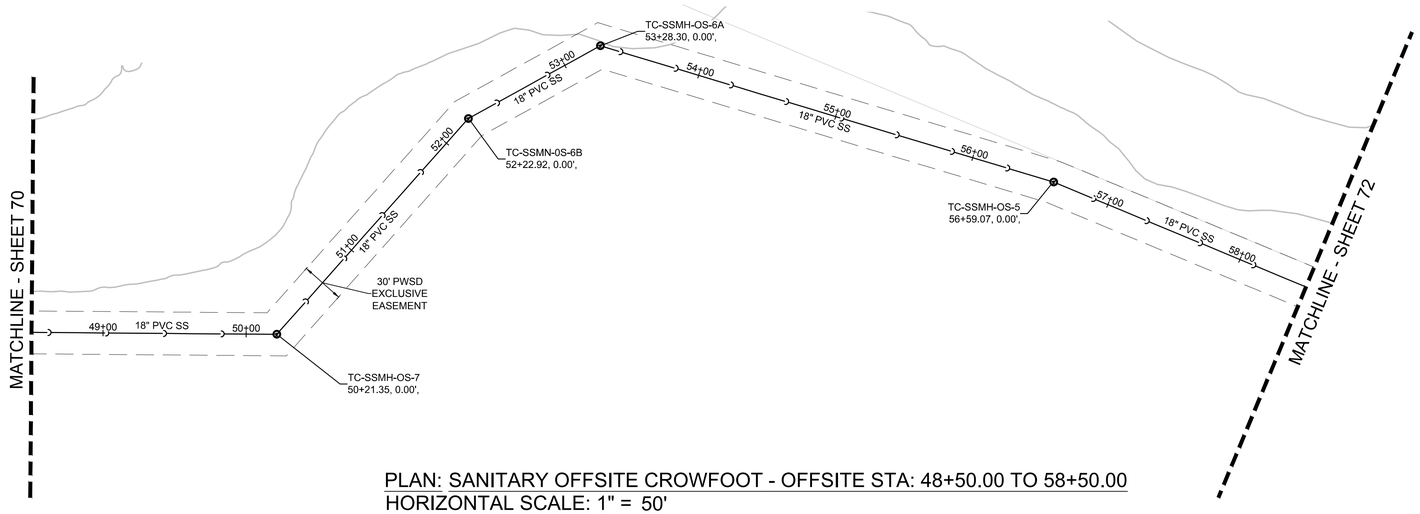
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Tel: (720) 482-9526
Fax: (720) 482-9546

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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE CROWFOOT

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 70

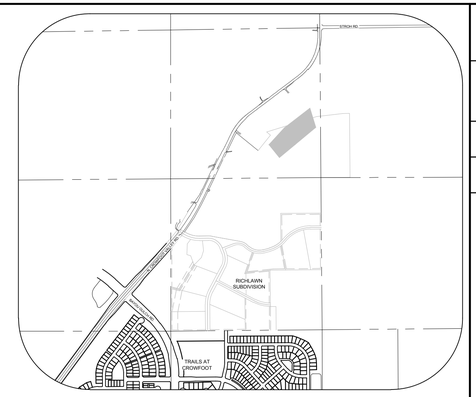
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PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 48+50.00 TO 58+50.00
HORIZONTAL SCALE: 1" = 50'



SCALE: 1" = 50'



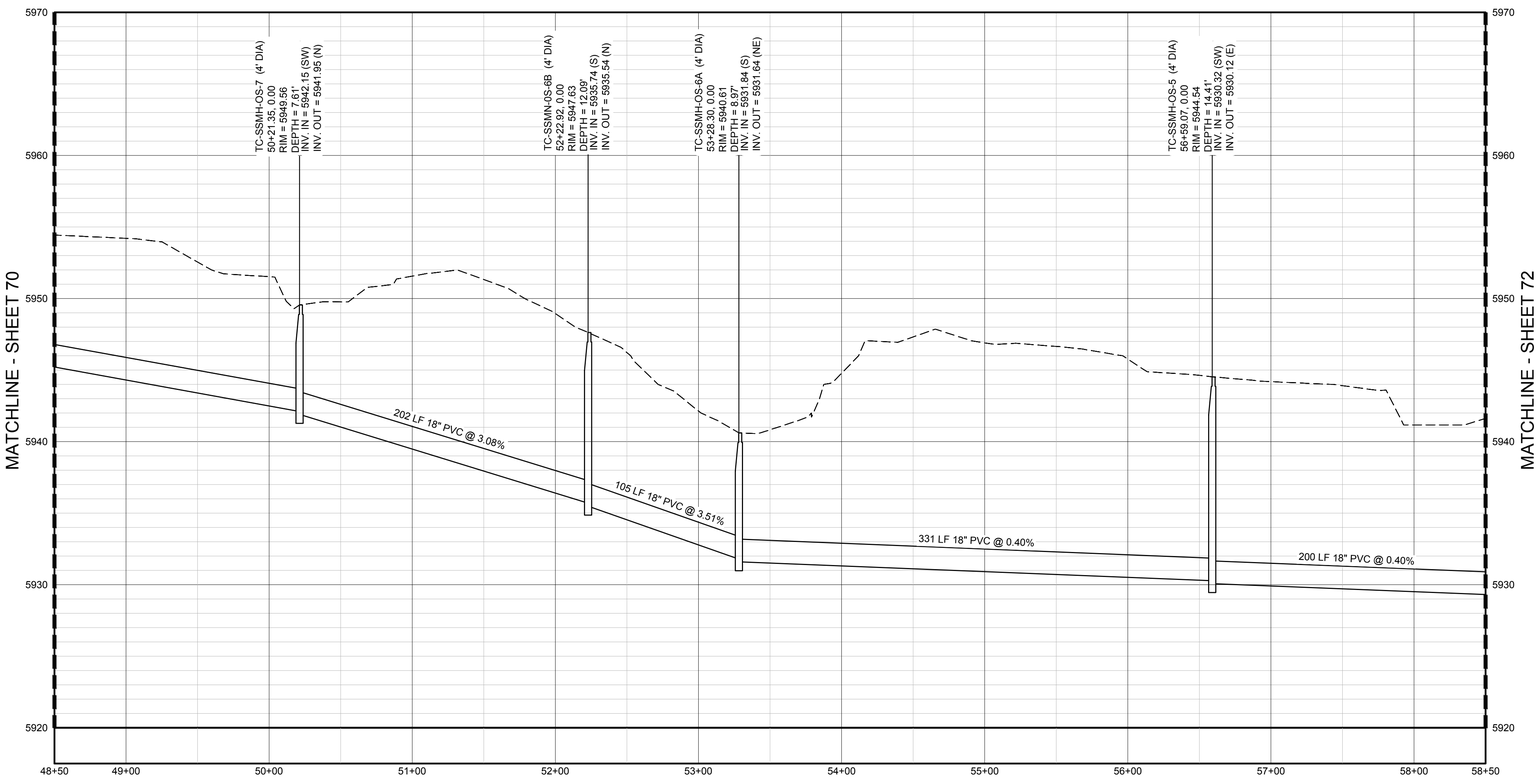
KEYMAP
N.T.S.

LEGEND

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PROFILE: SS N BAYOU GULCH OUTFALL STA: 48+50.00 TO 58+50.00
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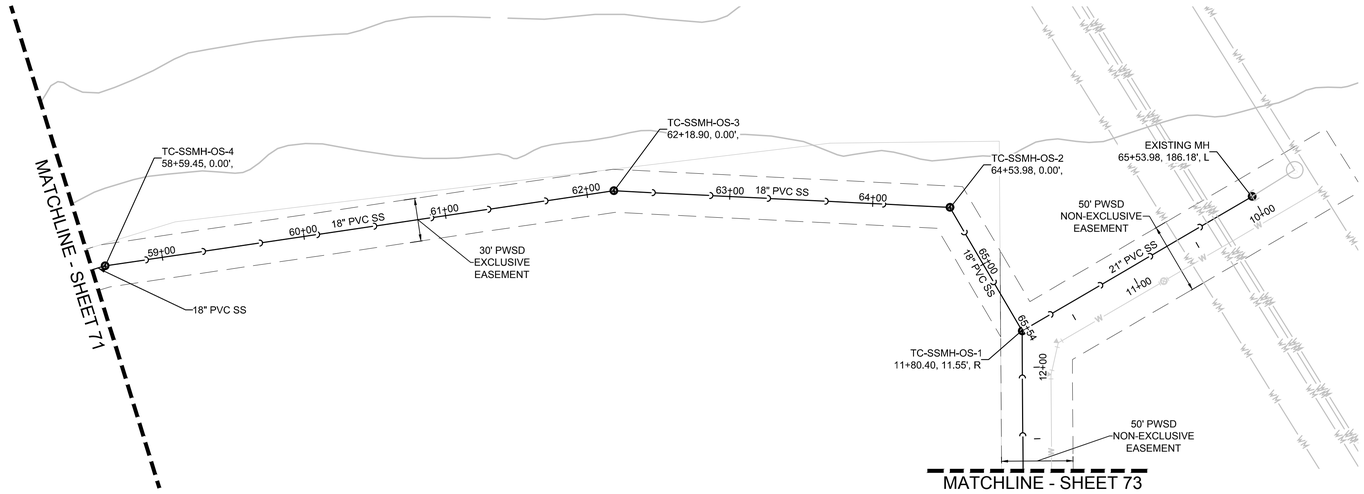
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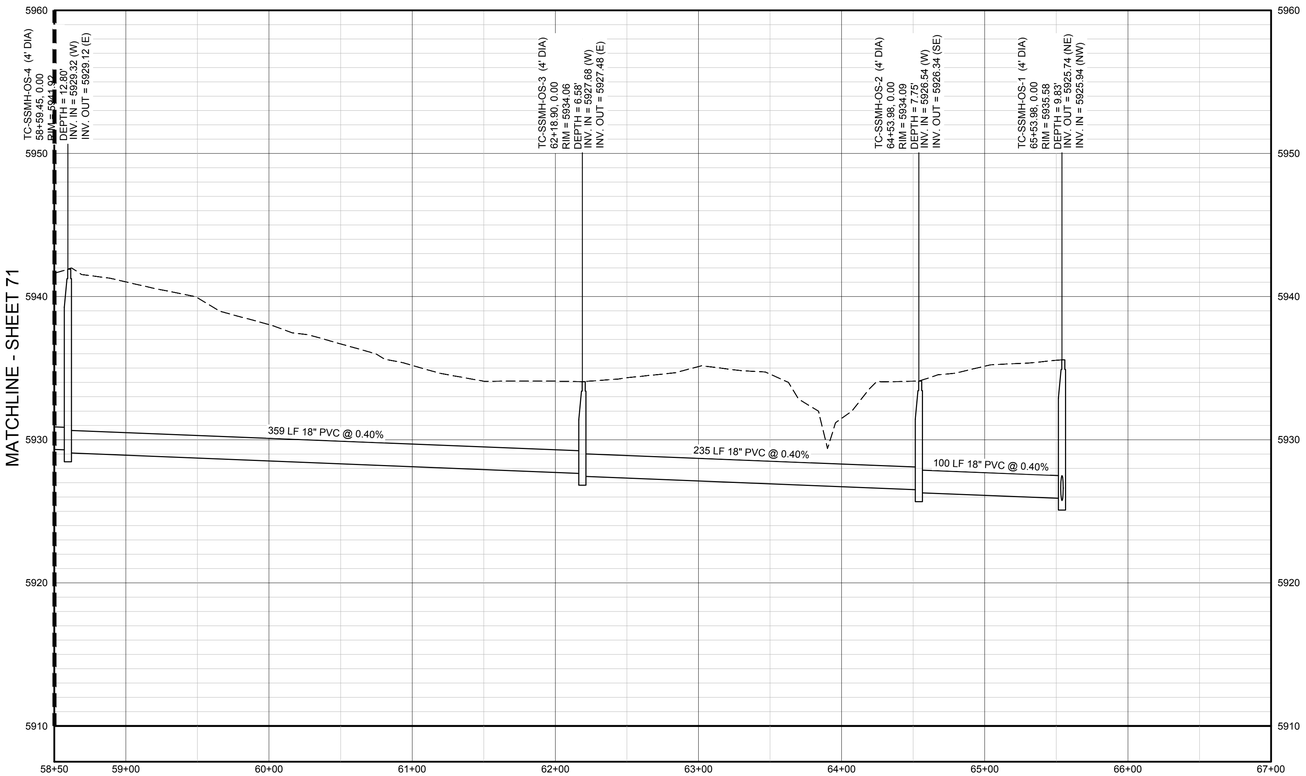
TRAILS AT CROWFOOT
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SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 71

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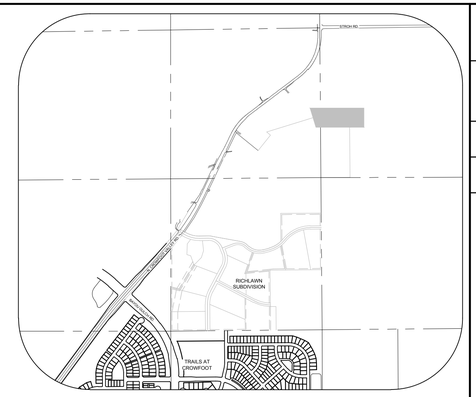
PLAN: SANITARY OFFSITE CROWFOOT - OFFSITE STA: 58+50.00 TO 67+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS N BAYOU GULCH OUTFALL STA: 58+50.00 TO 67+00.00
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EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

CALL 811
TWO WORKING DAYS
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UNCC UTILITY NOTIFICATION CENTER OF COLORADO
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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

No.	Revisions	Date	Init.	Appr.	Date

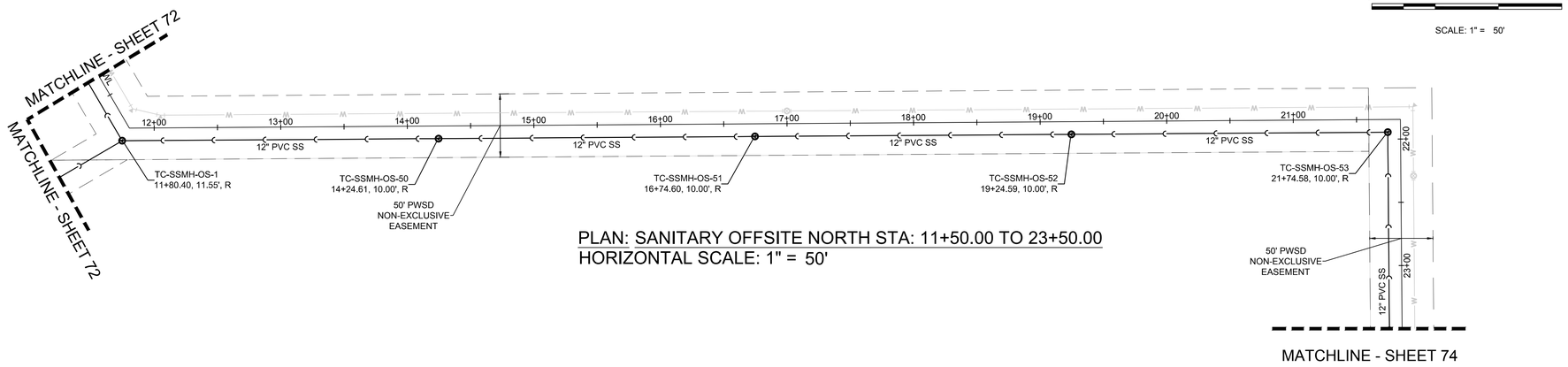
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Tel: (720) 482-9526
Fax: (720) 482-9546
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E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE CROWFOOT

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 72

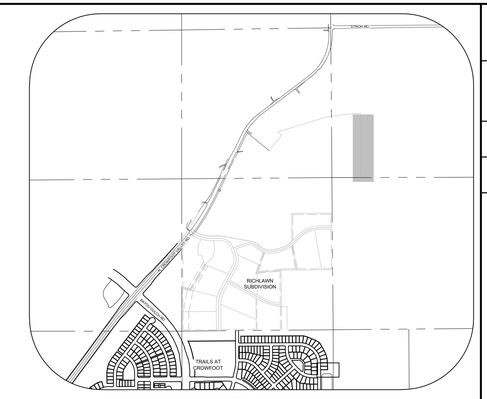
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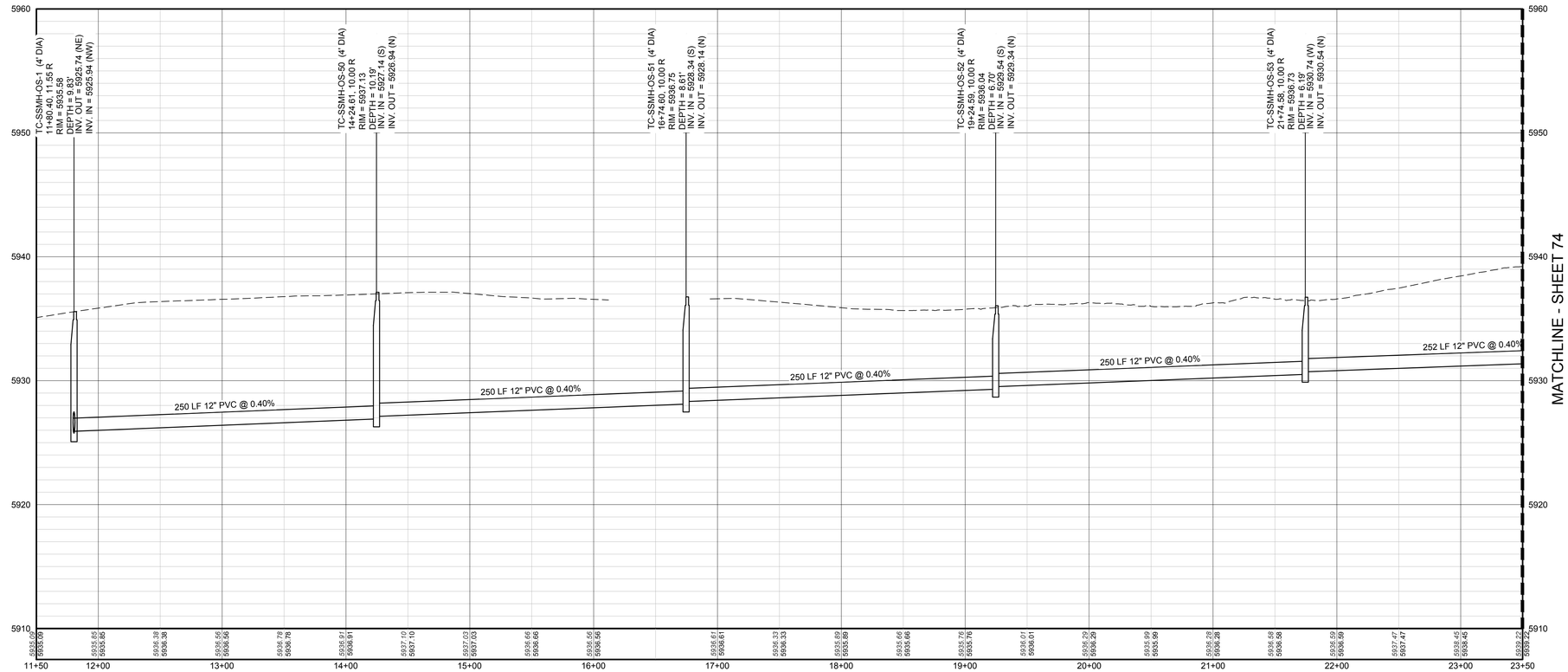
PLAN: SANITARY OFFSITE NORTH STA: 11+50.00 TO 23+50.00
HORIZONTAL SCALE: 1" = 50'

50 25 0 50 100

SCALE: 1" = 50'



KEYMAP
N.T.S.



MATCHLINE - SHEET 74

PROFILE: SS NORTH OUTFALL STA: 11+50.00 TO 23+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

2	BLOCK NUMBER		PROPOSED RANGE POINT
A	LOT TYPE		CENTERLINE
6	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
	PROPOSED REDUCER		PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	5615	EXISTING 5' CONTOUR
	PROPOSED WL FITTING WITH THRUST BLOCK	5616	EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION	5620	PROPOSED 5' CONTOUR
BO	PROPOSED LOW POINT BLOW-OFF	5607	PROPOSED 1' CONTOUR
AV	PROPOSED AIR VALVE	36" SS	PROPOSED STORM DRAIN
BO	EXISTING BLOW OFF VALVE	18" SS	PROPOSED SEWER LINE WITH MANHOLE
	EXISTING VALVE		PROPOSED SEWER LATERAL
	EXISTING FIRE HYDRANT	8"W	PROPOSED WATER LINE
	PROPOSED LIGHT POLE		PROPOSED WATER LATERAL W/ METER
	PROPOSED SIDEWALK	RW	EXISTING 60" RAW WATER LINE
	PROPOSED SIDEWALK RAMP		SECTION LINE
10.00	EXISTING ELEVATION		FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	FO	EXISTING FIBER OPTIC LINE
	PROPOSED STORM DRAIN INLET	HV	EXISTING OVERHEAD HIGH VOLTAGE LINE
4 5 6	PROPOSED STORM DRAIN MANHOLE	TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
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FG	FINISHED GROUND	SS	SANITARY SEWER
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HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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No.	Revisions	Date	Init.	Appr.	Date

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Tel: (720) 482-9526
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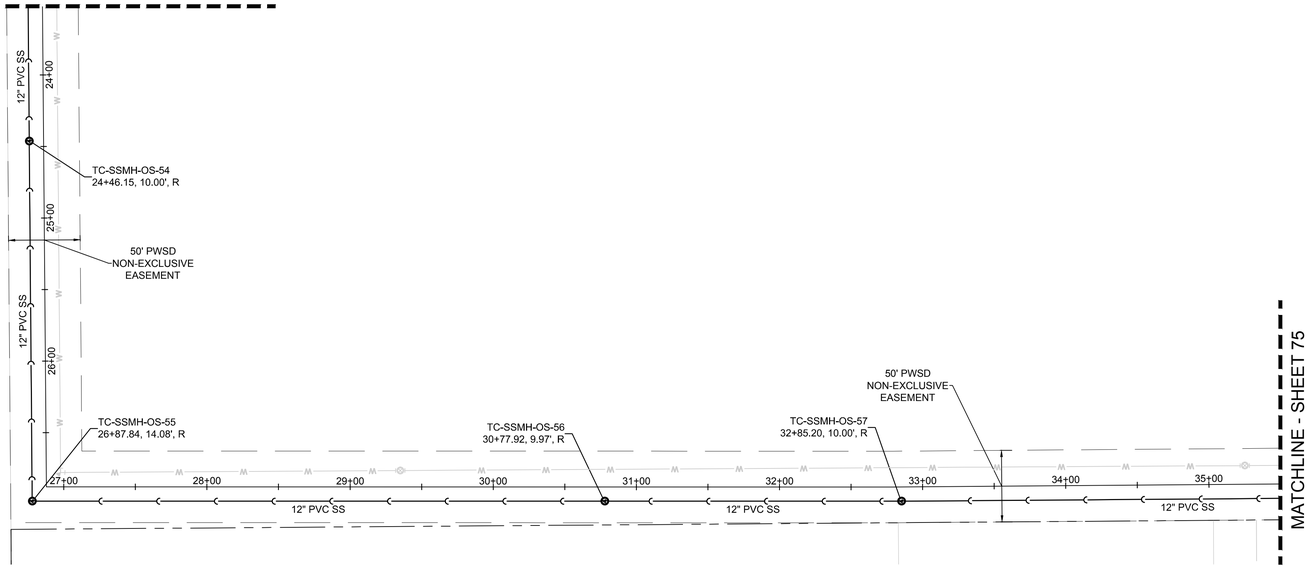
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7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE NORTH

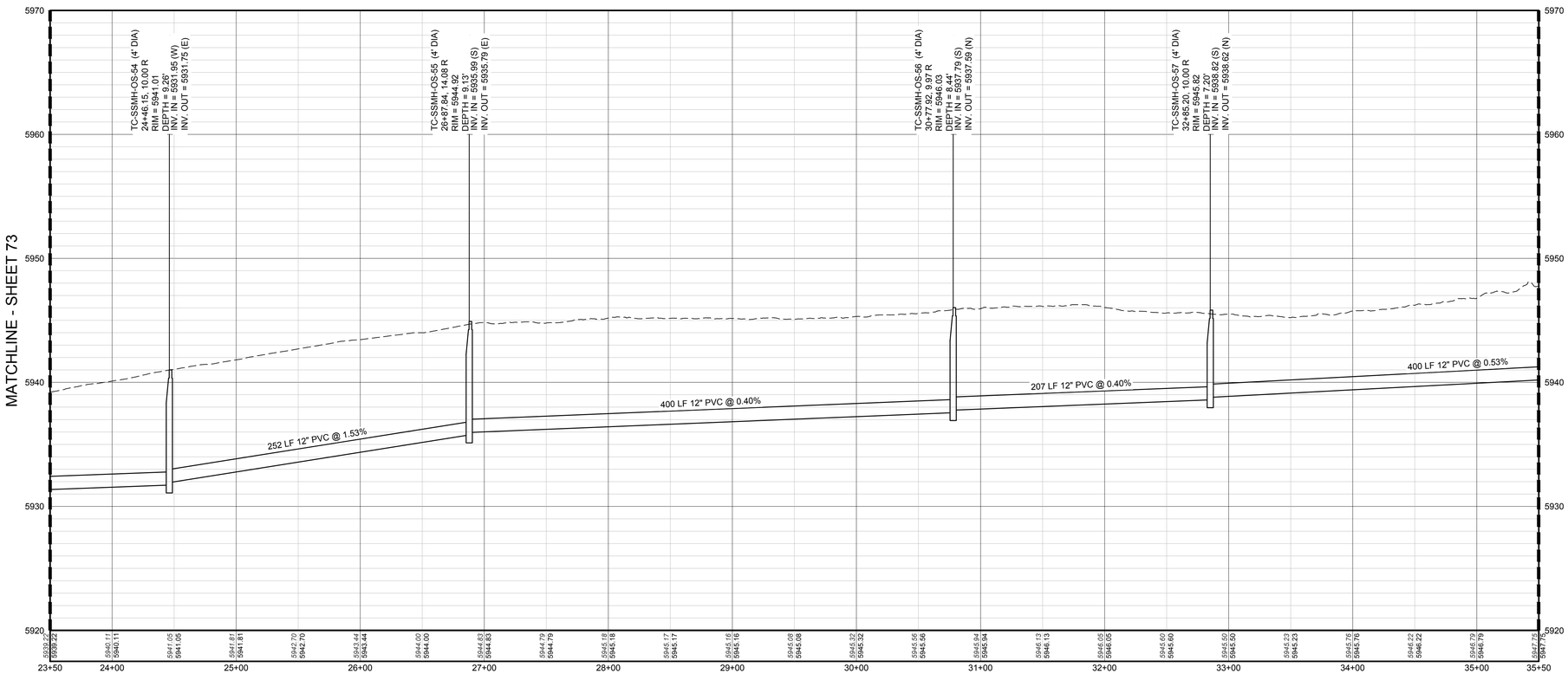
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DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 73

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MATCHLINE - SHEET 73

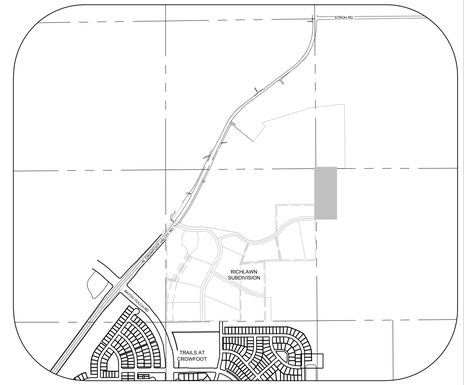


PLAN: SANITARY OFFSITE NORTH STA: 23+50.00 TO 35+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS NORTH OUTFALL STA: 23+50.00 TO 35+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

SCALE: 1" = 50'



KEYMAP
N.T.S.

LEGEND

(2) BLOCK NUMBER	PROPOSED RANGE POINT
(A) LOT TYPE	CENTERLINE
6 LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	1.0% PROPOSED SLOPE & DIRECTION
PROPOSED FIRE HYDRANT	5615 EXISTING 5' CONTOUR
PROPOSED WL FITTING WITH THRUST BLOCK	5616 EXISTING 1' CONTOUR
PROPOSED FLARED END SECTION	5620 PROPOSED 5' CONTOUR
PROPOSED LOW POINT BLOW-OFF	5607 PROPOSED 1' CONTOUR
PROPOSED AIR VALVE	36" SS PROPOSED STORM DRAIN
EXISTING BLOW OFF VALVE	18" SS PROPOSED SEWER LINE WITH MANHOLE
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	8"W PROPOSED WATER LINE
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	RW EXISTING 60" RAW WATER LINE
PROPOSED SIDEWALK RAMP	SECTION LINE
10.00 EXISTING ELEVATION	FILING BOUNDARY
10.00 PROPOSED DESIGN ELEVATION	FO EXISTING FIBER OPTIC LINE
PROPOSED STORM DRAIN INLET	HV EXISTING OVERHEAD HIGH VOLTAGE LINE
(4) (5) (6) PROPOSED STORM DRAIN MANHOLE	TEL EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
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INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

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No.	Revisions	Date	Init.	Appr.	Date

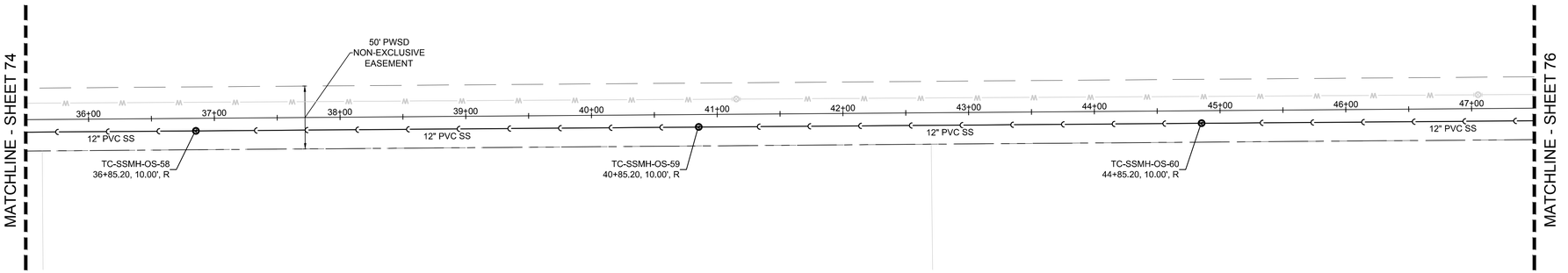
10333 E. Dry Creek Rd.
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Tel: (720) 482-9526
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CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE NORTH

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 74

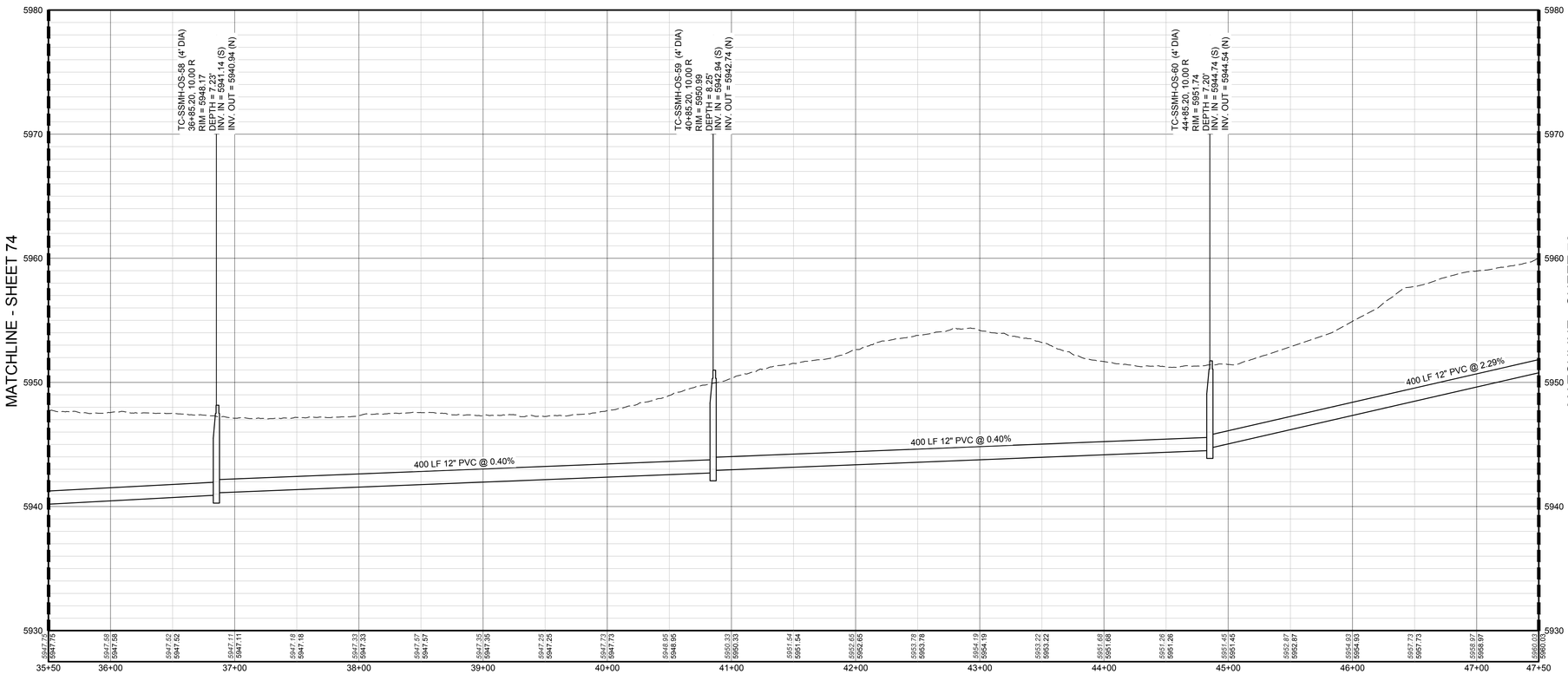
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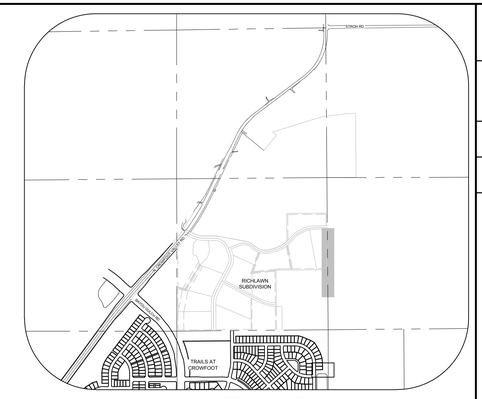
50 25 0 50 100

SCALE: 1" = 50'

PLAN: SANITARY OFFSITE NORTH STA: 35+50.00 TO 47+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS NORTH OUTFALL STA: 35+50.00 TO 47+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4)(5)(6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION		
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EVC	END VERTICAL CURVE	ROW	RIGHT OF WAY
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
HCR	HANDICAP CURB RAMP	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
INV	INVERT	T.O.S.	TOP OF PIPE
K	CURVATURE COEFFICIENT	UE	UTILITY EASEMENT
LF	LINEAR FEET	VC	VERTICAL CURVE
MH	MANHOLE	WL	WATER LINE
N.T.S.	NOT TO SCALE	WSE	WATER SURFACE ELEVATION
PL	PROPERTY LINE		

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BENCHMARK
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No.	Revisions	Date	Init.	Appr.	Date

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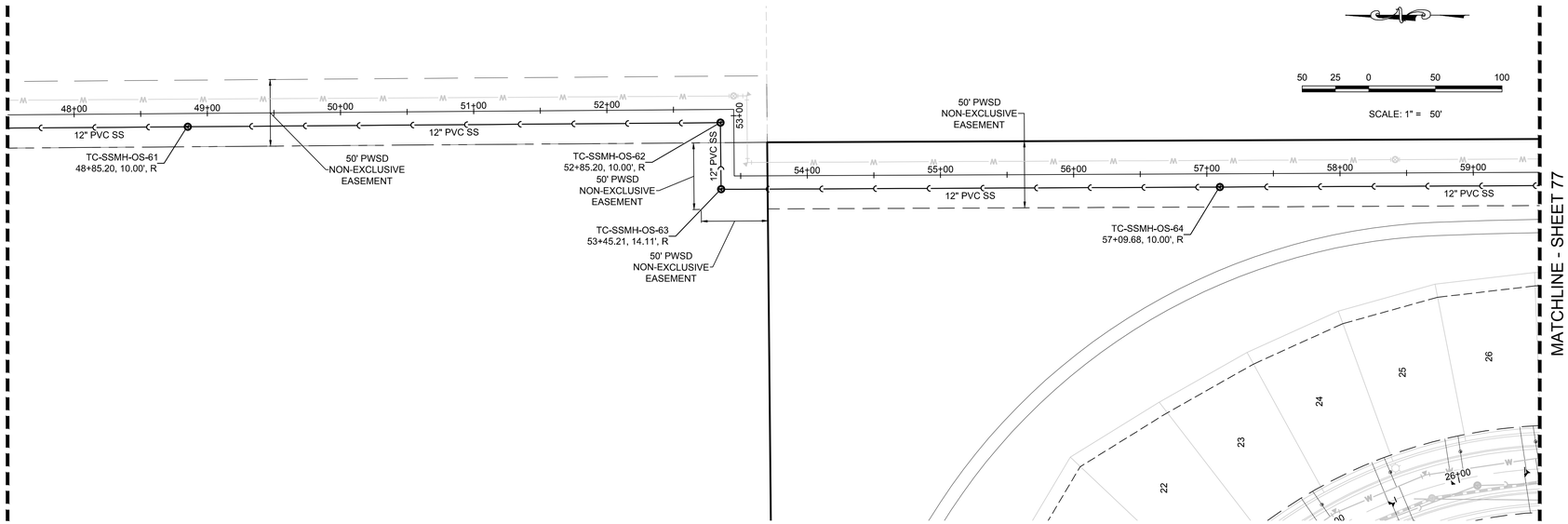
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TRAILS AT CROWFOOT
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SANITARY OFFSITE NORTH

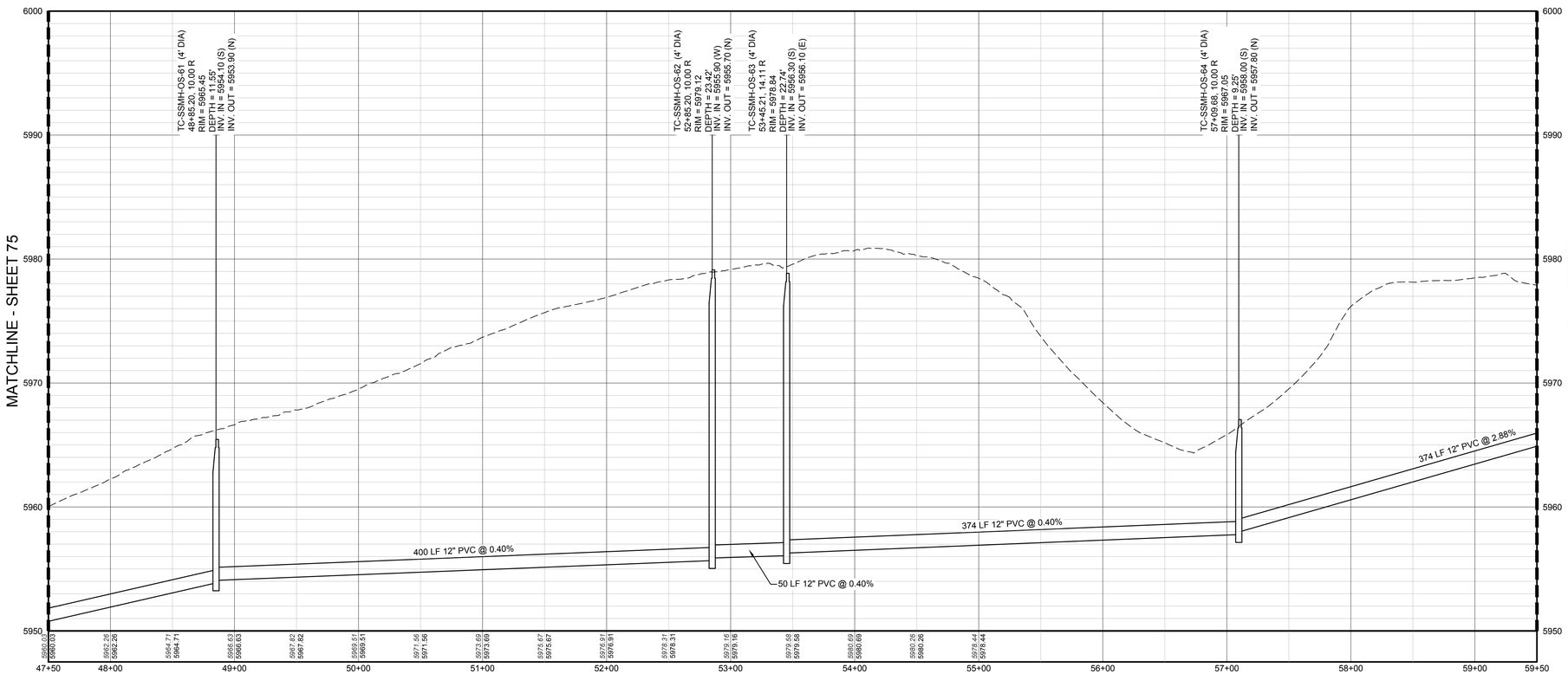
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FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 75

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PLAN: SANITARY OFFSITE NORTH STA: 47+50.00 TO 59+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS NORTH OUTFALL STA: 47+50.00 TO 59+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
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PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4 5 6)	EXISTING TELEPHONE LINE (TEL)

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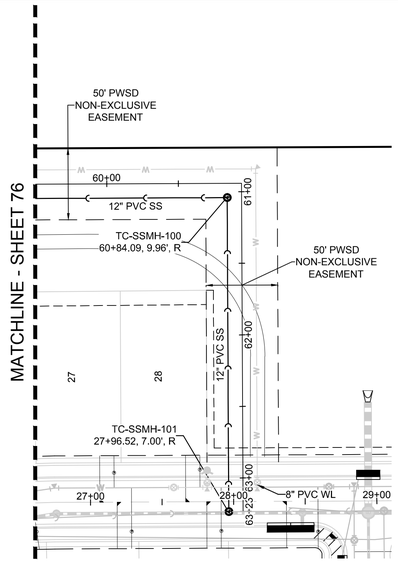
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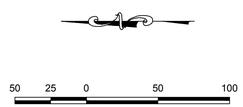
ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY OFFSITE NORTH

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JLR
CHECKED BY: JJJ
DATE: FEBRUARY 2017
SHEET NUMBER 76

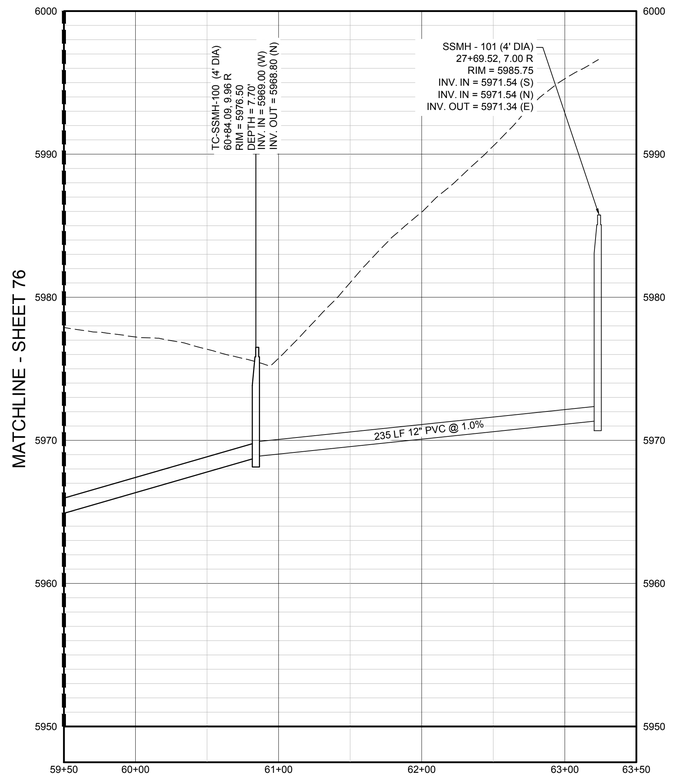
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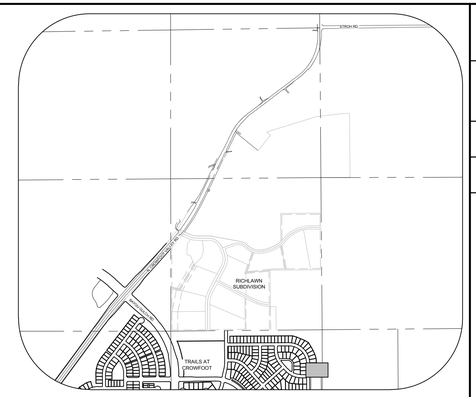


SCALE: 1" = 50'

PLAN: SANITARY OFFSITE NORTH STA: 59+50.00 TO 63+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SS NORTH OUTFALL STA: 59+50.00 TO 63+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



KEYMAP
N.T.S.

LEGEND

BLOCK NUMBER	PROPOSED RANGE POINT
LOT TYPE	CENTERLINE
LOT NUMBER	RIGHT-OF-WAY
PROPOSED BUTTERFLY VALVE	PROPERTY LINE
PROPOSED CAP WITH END OF LINE BLOWOFF	EDGE OF PAVEMENT
PROPOSED REDUCER	PROPOSED DIRECTION OF FLOW
PROPOSED VALVE	PROPOSED SLOPE & DIRECTION (1.0%)
PROPOSED FIRE HYDRANT	EXISTING 5' CONTOUR (5615)
PROPOSED WL FITTING WITH THRUST BLOCK	EXISTING 1' CONTOUR (5616)
PROPOSED FLARED END SECTION	PROPOSED 5' CONTOUR (5620)
PROPOSED LOW POINT BLOW-OFF	PROPOSED 1' CONTOUR (5607)
PROPOSED AIR VALVE	PROPOSED STORM DRAIN (36" SS)
EXISTING BLOW OFF VALVE	PROPOSED SEWER LINE WITH MANHOLE (18" SS)
EXISTING VALVE	PROPOSED SEWER LATERAL
EXISTING FIRE HYDRANT	PROPOSED WATER LINE (8"W)
PROPOSED LIGHT POLE	PROPOSED WATER LATERAL W/ METER
PROPOSED SIDEWALK	EXISTING 60" RAW WATER LINE (RW)
PROPOSED SIDEWALK RAMP	SECTION LINE
EXISTING ELEVATION (10.00)	FILING BOUNDARY
PROPOSED DESIGN ELEVATION (10.00)	EXISTING FIBER OPTIC LINE (FO)
PROPOSED STORM DRAIN INLET	EXISTING OVERHEAD HIGH VOLTAGE LINE (HV)
PROPOSED STORM DRAIN MANHOLE (4 5 6)	EXISTING TELEPHONE LINE (TEL)

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVC	POLYVINYL CHLORIDE
BVC	BEGIN VERTICAL CURVE	PVI	PT. OF VERTICAL INTERSECTION
BVP	BEGIN VERTICAL PROFILE	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
HCR	HANDICAP CURB RAMP	TC	TOP OF CURB
HP	HIGH POINT	T.O.S.	TOP OF PIPE
INV	INVERT	UE	UTILITY EASEMENT
K	CURVATURE COEFFICIENT	VC	VERTICAL CURVE
LF	LINEAR FEET	WL	WATER LINE
MH	MANHOLE	WSE	WATER SURFACE ELEVATION
N.T.S.	NOT TO SCALE		
PL	PROPERTY LINE		

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

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No.	Revisions	Date	Init.	Appr.	Date

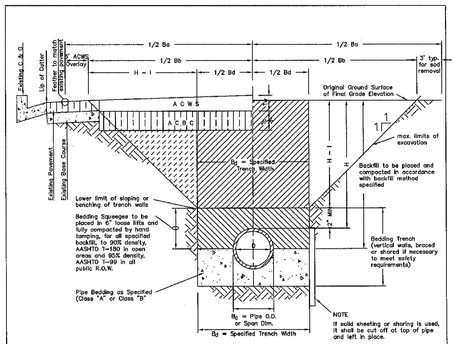
10333 E. Dry Creek Rd.
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Tel: (720) 482-9526
Fax: (720) 482-9546
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ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
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TYPICAL TRENCH DETAIL

T_b = Thickness of Asphaltic Concrete Base Course (A C B C)

T_w = Thickness of Asphaltic Concrete Wearing Surface (A C W S)

T_o = Depth of Asphaltic Thickness ($T_w + T_b$)

B_o = Outside Pipe or Conduit Span Dimension

B_d = Specified Bedding Trench Width and Max Bedding Trench Width at a point 12" above Top of Pipe (See Note 2)

B_b = Max. Pay Width of Asphaltic Concrete Base Course (or Asphaltic Concrete Cold Mix) (See Note 3)

B_w = Max. Pay Width of Asphaltic Concrete Wearing Surface or Sod Replacement (See Note 3)

H = Depth of Surface to Top of Pipe

H-1= Depth from Surface to 1 ft. above Top of Pipe

TABLE II
ASPHALT AND BASE COURSE REPLACEMENT SCHEDULE

STREET WIDTH	ASPHALTIC BASE COURSE (T_b)	ASPHALTIC WEARING SURFACE (T_w)	TOTAL THICKNESS (T_o)
UP TO 36'	4"	2"	6"
36' TO 44'	4"	3"	7"
44' TO 48'	5"	3"	8"
WIDER THAN 48'	6"	3"	9"

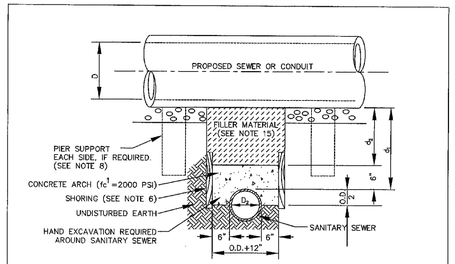
NOTES

1. *Sloping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.*
2. *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, sidewalk, driveways, structures, etc. Suitable the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.*
3. *If dimension "B_b" is ≤ 5', then existing asphalt pavement shall be removed and replaced up to the gutter. Maximum asphalt pay widths, B_b & B_w shall then be based upon this actual width.*

PARKER WATER & SANITATION DISTRICT	
SEWER TRENCHING AND BEDDING DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	5/98
DISTRICT ENGINEER	

2008 REVISION

SHEET 1



TYPE I
CONCRETE ENCASEMENT FOR SANITARY SEWERS

(CONCRETE ARCH)

GENERAL NOTES FOR TYPE I,II& III ENCASEMENT

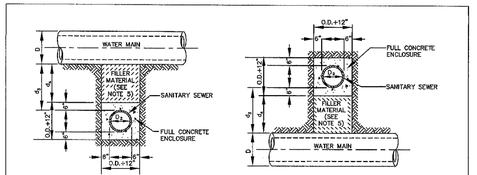
1. CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED A BOTTOM HALF OF ENCASEMENT IS POURED SEPARATELY, A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
2. LENGTH OF ENCASEMENT FOR-
   (a) TYPE I & TYPE III ENCASEMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
   (b) TYPE II ENCASEMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
3. UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASEMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
4. TYPE I, II OR III ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
   (a) TYPE I OR TYPE III IF $d_c < 18"$ ($d_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.

   WATER MAINS AND $d_s \leq 24"$ ($d_s \leq 18"$)
   (c) TYPE IIb IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION "d_s".
   (d) EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASEMENT WILL NORMALLY BE SATISFACTORY.
   (e) IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASEMENT MAY NOT BE REQUIRED.
5. FILLER MATERIAL BETWEEN CONDUITS TO BE:
   (a) APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC
   (b) COMPACTED CLASS "B" BEDDING IF d_s & $d_c > 6"$ (IF $d_s > 6"$ FOR TYPE IIb ENCASEMENT POUR CONCRETE ON UNDISTURBED SOIL)
6. SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.
7. THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
8. IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIER SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT TYPE I	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	01/02
DISTRICT ENGINEER	

2008 REVISION

SHEET 6



TYPE IIa
SANITARY SEWER CROSSING UNDER WATER MAIN
IF $d_s > 2$ ft., ENCASEMENT NOT REQUIRED

TYPE II b
SANITARY SEWER CROSSING OVER TOP OF WATER MAIN
FULL ENCASEMENT REQUIRED REGARDLESS OF DIMENSION d_s.

TYPE II
CONCRETE ENCASEMENT FOR SANITARY SEWERS CROSSING OVER OR UNDER WATER MAIN

GENERAL NOTES FOR TYPE I,II& III ENCASEMENT

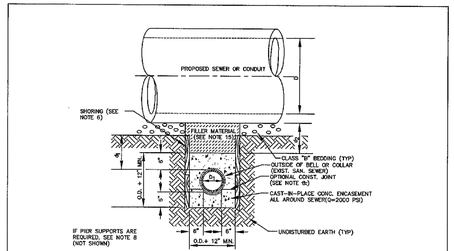
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   (c) TYPE IIb IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION "d_s".
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PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT TYPE II	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	5/98 4/01 1/08
DISTRICT ENGINEER	

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SHEET 7



TYPE III
CONCRETE ENCASEMENT FOR SANITARY SEWERS

(FULL ENCASEMENT) NO SCALE

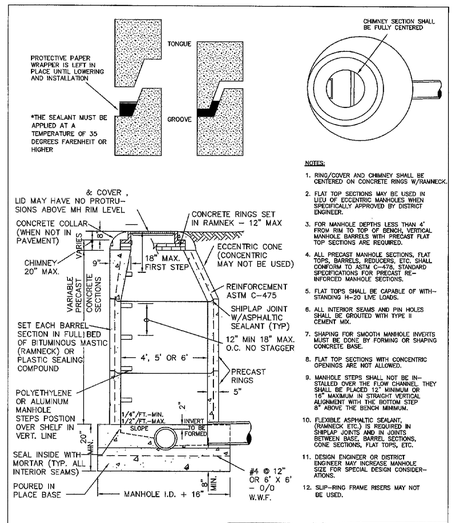
GENERAL NOTES FOR TYPE I,II& III ENCASEMENT

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PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT TYPE III	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	5/98
DISTRICT ENGINEER	

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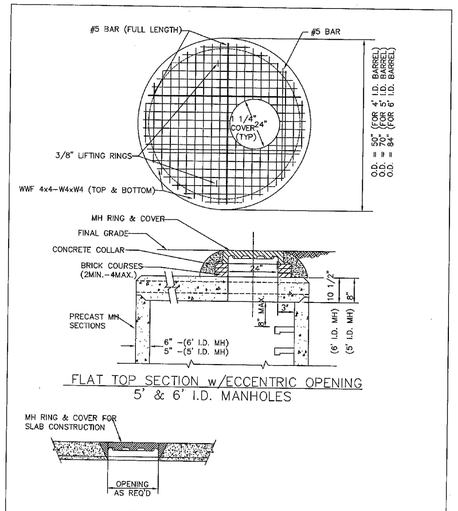


PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

PARKER WATER & SANITATION DISTRICT	
PARKER MANHOLE ECCENTRIC CONE	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	4/01 01/02 1/08
DISTRICT ENGINEER	

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SHEET 9



FLAT TOP SECTION w/ECCENTRIC OPENING 5' & 6' I.D. MANHOLES

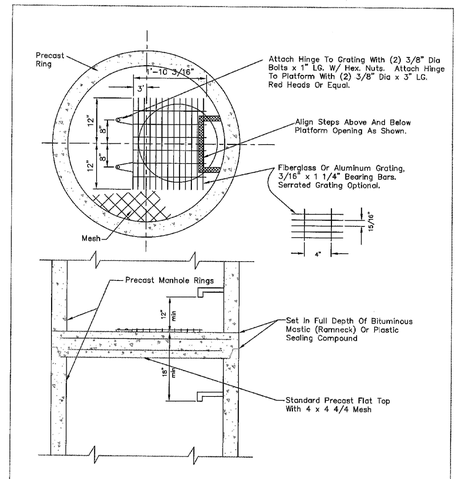
SECTION
(NON-ADJUSTABLE RING & COVER TO BE CAST IN FLAT TOP)

ALTERNATE RING & COVER
(TO BE USED ONLY WHEN SPECIFICALLY AUTHORIZED.)

PARKER WATER & SANITATION DISTRICT	
PRECAST MANHOLE - 5' & 6' I.D. WITH ECCENTRIC CONE	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	01/02
DISTRICT ENGINEER	

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SHEET 11



NOTES:

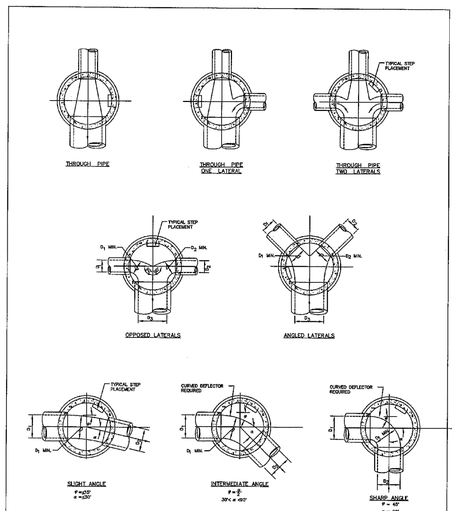
1.1 Maximum distance between platforms shall be 15' vertically.

1.2 Minimum distance between platforms shall be 10' vertically.

PARKER WATER & SANITATION DISTRICT	
INTERMEDIATE PLATFORM FOR MANHOLES OVER 20' DEPTH	
SCALE: NONE	DATE: 2/98
APPROVED: RJG	2/00
DISTRICT ENGINEER	

2008 REVISION

SHEET 14



PARKER WATER & SANITATION DISTRICT	
TYPICAL BASE CHANNELIZATION DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION

SHEET 15

No.	Revisions	Date	Init.	Date	Appr.	Date

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Englewood, CO 80112
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Fax: (720) 482-9546

CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

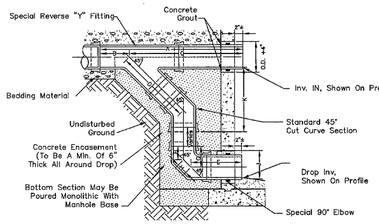
TRAILS AT CROWFOOT
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SANITARY SEWER DETAILS

SCALE: AS SHOWN
DRAWN BY: JF
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FILE NO: 8130283701

SHEET NUMBER 78

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SECTION THRU DROP

PIPE I.D.	A	B	C	D	E	F	G	H	J	K	J+K
8"	60°	30°	34"	68°	21"	5 1/2"	6"	6 3/8"	14"	19 7/8"	27 3/8"
12"	60°	30°	36"	68°	21"	5 1/2"	8"	6 3/8"	14"	19 7/8"	27 3/8"
15"	60°	30°	38"	68°	21"	5 1/2"	10 3/4"	6 3/8"	14 3/4"	19 7/8"	27 3/8"
18"	60°	30°	40"	68°	21"	5 1/2"	12 1/2"	7 3/4"	20"	25 7/8"	45 7/8"

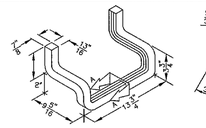
NOTES:

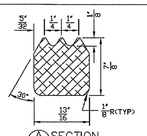
1. VII Clay Pipe & fittings (A.S.T.M. C-700) shown, details similar for all other pipe.
2. For payment purposed, all fittings, pipe, concrete encasement except special "Y" fitting shall be included in the cost of outside drop. The cost of the special "Y" fitting shall be included in the unit price bid for fine pipe.
3. Diameter of drop shall not be less than the line pipe diameter.
4. For 18" diameter and larger, outside drop detail shall be a special design.

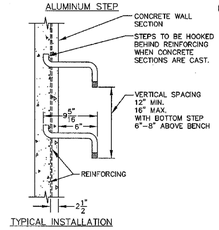
OUTSIDE DROP MANHOLE CONSTRUCTION

PARKER WATER & SANITATION DISTRICT	
OUTSIDE DROP MANHOLE CONSTRUCTION	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION — SHEET 16



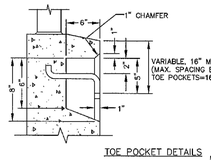




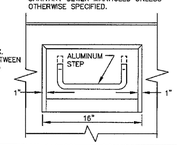
TYPICAL INSTALLATION

NOTES:

1.1 ALUMINUM ALLOY SPECIFICATIONS
a. FED. SPEC. QQ-A-200/8 (ALUMINUM-MAGNESIUM-SILICATE ALLOY)
b. MINIMUM TENSILE STRENGTH= 38,000 p.s.i.
c. MINIMUM YIELD STRENGTH= 35,000 p.s.i.
d. MINIMUM ELONGATION=10% IN 2
1.2 MINIMUM LOAD CAPACITY (APPLIED AT CENTER OF STEP
a. 1000 lb. WITH 6" PROJECTION FROM WALL.
b. 1500 lb. WITH 4" PROJECTION FROM WALL.
1.3 WEIGHT PER STEP=2.23 POUNDS.
1.4 STEPS TO BE CAST, UNALTERED, IN MAN-HOLE WALL IN STRAIGHT LINE, VERTICALLY, AT THE SAME TIME THE BARREL OR CONE SECTIONS ARE CAST.
1.5 VERTICAL SPACING BETWEEN STEPS SHALL BE CONSISTENT IN EACH INDIVIDUAL MANHOLE.
1.6 TOE POCKETS ARE REQUIRED IN STORM SEWER MANHOLES IF TOP OF BENCH IS MORE THAN 18" ABOVE INVERT. TOE POCKETS ARE NOT REQUIRED IN SANITARY SEWER MANHOLED UNLESS OTHERWISE SPECIFIED.



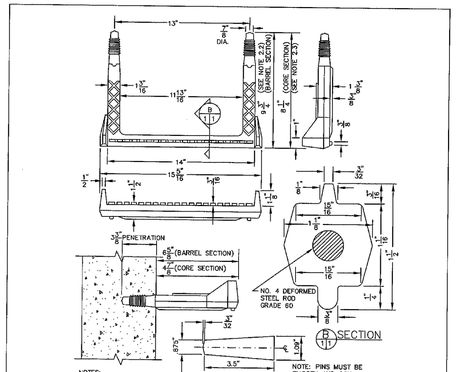
TOE POCKET DETAILS



STANDARD EXTRUDED ALUMINUM MANHOLE STEP

PARKER WATER & SANITATION DISTRICT	
STANDARD EXTRUDED ALUMINUM MANHOLE STEP	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION — SHEET 18



B SECTION

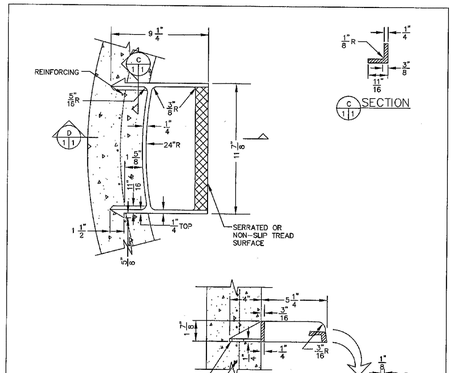
NOTES:

2.1 ASTM SPECIFICATIONS:
a) ASTM C-478
b) ASTM A-615 GRADE 60 (STEEL ROD)
c) ASTM 2146-69, TYPE II, GRADE 16906 (POLYPROPYLENE)
2.2 STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 6-3/4 INCH LEG AND SHALL PROJECT FROM THE WALL 6-5/8 INCHES.
2.3 STEPS INSTALLED IN MAN-HOLE CONE SECTIONS SHALL HAVE AN 8-1/4 INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8 INCHES.
2.4 ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8 INCHES.
2.5 STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.
2.6 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.
2.7 STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.

POLYPROPYLENE REINFORCED PLASTIC STEP

PARKER WATER & SANITATION DISTRICT	
POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP	
SCALE: NONE	DATE: 2/00
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION — SHEET 19A



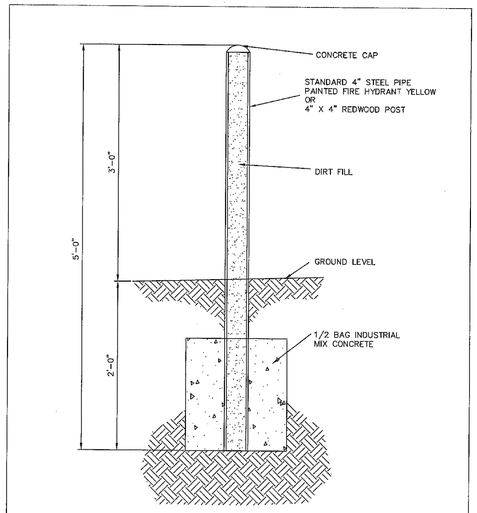
CAST ALUMINUM MANHOLE STEP

NOTES:

3.1 THE CAST ALUMINUM MANHOLE STEP SHALL ONLY BE USED WHEN SPECIFIED ON THE DRAWINGS.
3.2 ALUMINUM ALLOY SPECIFICATIONS:
a. ALLOY DESIGNATION ALMAG 35
b. MIN. TENSILE STRENGTH= 40 K.S.I.
c. MIN. YIELD STRENGTH= 20 K.S.I.
d. MIN. SHEAR STRENGTH= 27.45 K.S.I.
e. ELONGATION= 10% IN 2
f. BRINELL HARDNESS= 70
3.3 MINIMUM LOAD CAPACITY, STEP SPACING AND ALIGNMENT, TOE POCKET DETAILS AND OTHER APPLICABLE NOTES OR DETAILS SPECIFIED FOR EXTRUDED ALUMINUM MANHOLE STEP SHALL ALSO APPLY TO THIS STANDARD.
3.4 MIN. WT. = 2.0 lb.

PARKER WATER & SANITATION DISTRICT	
CAST ALUMINUM MANHOLE STEP	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION — SHEET 19



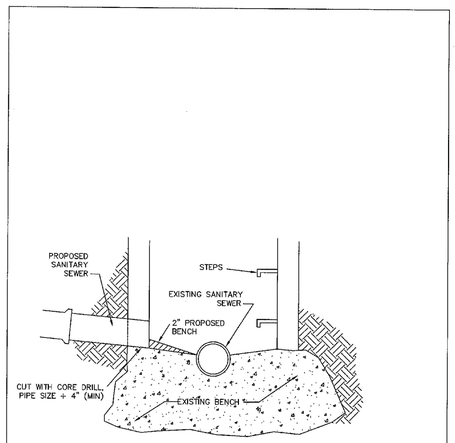
MARKER POST DETAIL

STEEL PIPE
STENCILED IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPURTENANCE WITH 2" STENCILS INDICATING TYPE OF APPURTENANCE (MH, 12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST.

REDWOOD POST
ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.

PARKER WATER & SANITATION DISTRICT	
MARKER POST DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 4/01 1/08
DISTRICT ENGINEER	

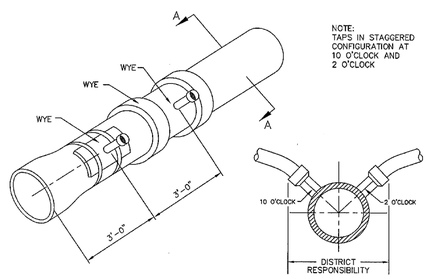
2008 REVISION — SHEET 20



MANHOLE INVERT TIE-IN

PARKER WATER & SANITATION DISTRICT	
MANHOLE INVERT TIE-IN DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION — SHEET 21



SECTION A – A

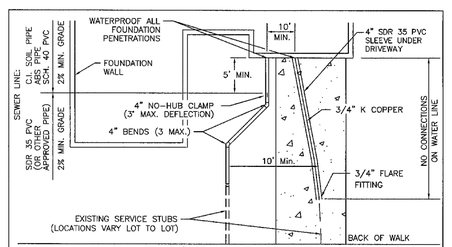
SEWER

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 al 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.

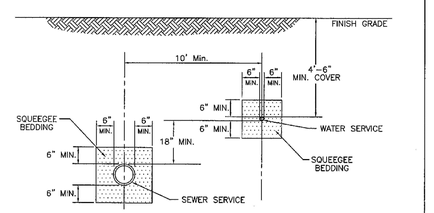
DOMESTIC SEWER TAPPING DETAIL

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	4/01 1/08
DISTRICT ENGINEER	

2008 REVISION — SHEET 26



TYPICAL SERVICES PLAN VIEW
NTS



TYPICAL SERVICES SECTION
NTS

NOTE
SEE SHEET 28 FOR DISTRICT POLICIES AND INSTALLATION NOTES.

PARKER WATER & SANITATION DISTRICT	
TYPICAL SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 01/02
DISTRICT ENGINEER	

2008 REVISION — SHEET 27

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

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No.	Revisions	Date	Init.	Date	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JF
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 79

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE (303-841-4627) AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 4:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. 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 AND A RE-INSPECTION FEE CHARGED.
4. 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.
5. 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.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.

INSTALLATION NOTES:

SEWER

1. 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.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3°.
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100'.
6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.

PARKER WATER & SANITATION DISTRICT	
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	01/02 1/08

2008 REVISION

SHEET 28

CALL 811
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No.	Revisions	Date	Init.	Appr.	Date

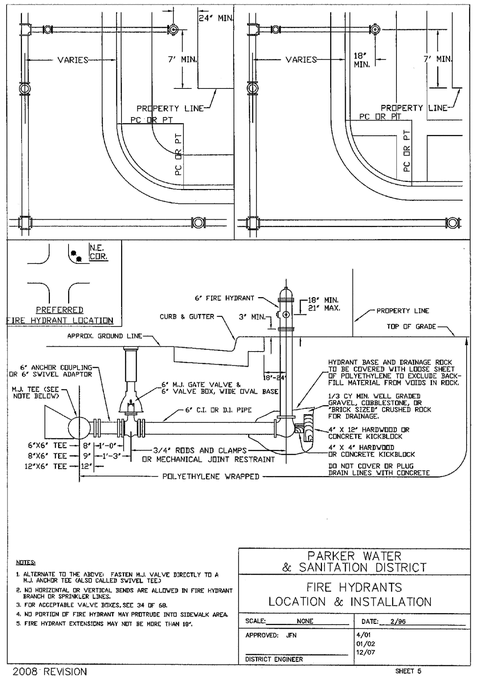
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

DRAWN BY:	JF	SCALE:	AS SHOWN
CHECKED BY:	JJJ	FILE NO:	8130283701
DATE:	FEBRUARY 2017		

SHEET NUMBER 80



NOTES:
1. ALTERNATE TO THE ABOVE: FASTEN M.J. VALVE DIRECTLY TO A M.J. ANCHOR TEE (ALSO CALLED SWIVEL TEE)
2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH OR SPRINKLER LINES.
3. FOR ACCEPTABLE VALVE BOXES, SEE 34 OF 60.
4. NO PORTION OF FIRE HYDRANT MAY PROTRUDE INTO SIDEWALK AREA.
5. FIRE HYDRANT EXTENSIONS MAY NOT BE MORE THAN 18".

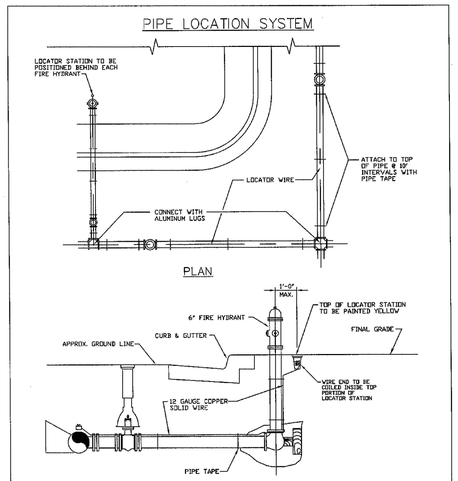
PARKER WATER & SANITATION DISTRICT

FIRE HYDRANTS LOCATION & INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01 01/02 12/07

2008 REVISION

SHEET 5



NOTES:
1. FOR USE ON ALL DUCTILE IRON AND PVC WATER MAINS.
2. LOCATOR STATION POSITION MAY BE MODIFIED AT THE DIRECTION OF THE DISTRICT ENGINEER.
3. A CONTINUITY TEST WILL BE REQUIRED PRIOR TO PRELIMINARY ACCEPTANCE.

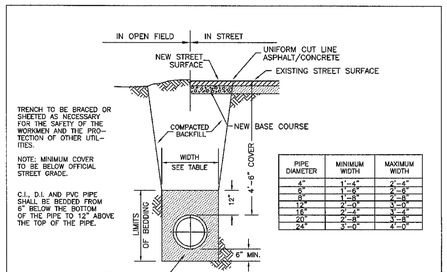
PARKER WATER & SANITATION DISTRICT

LOCATOR WIRE DETAILS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01 01/02

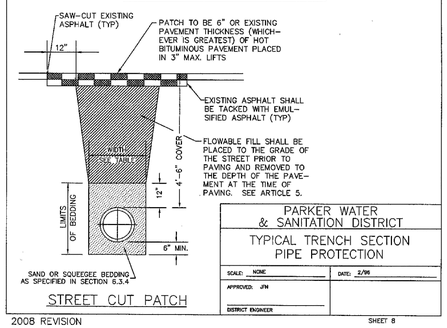
2008 REVISION

SHEET 6



PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
18"	2'-4"	3'-4"
20"	2'-8"	3'-8"
24"	3'-0"	4'-0"

STANDARD TRENCH SECTION



STREET CUT PATCH

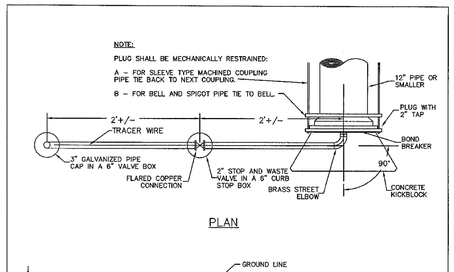
PARKER WATER & SANITATION DISTRICT

TYPICAL TRENCH SECTION PIPE PROTECTION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION

SHEET 8



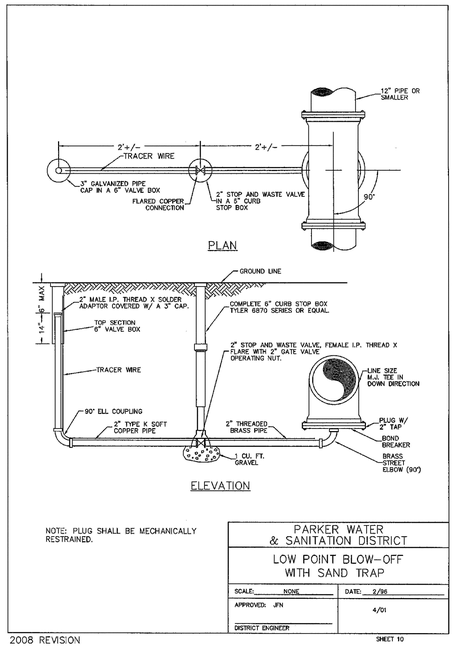
PARKER WATER & SANITATION DISTRICT

BLOW-OFF INSTALLATION FOR 12" & SMALLER PIPE

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION

SHEET 9



NOTE: PLUG SHALL BE MECHANICALLY RESTRAINED.

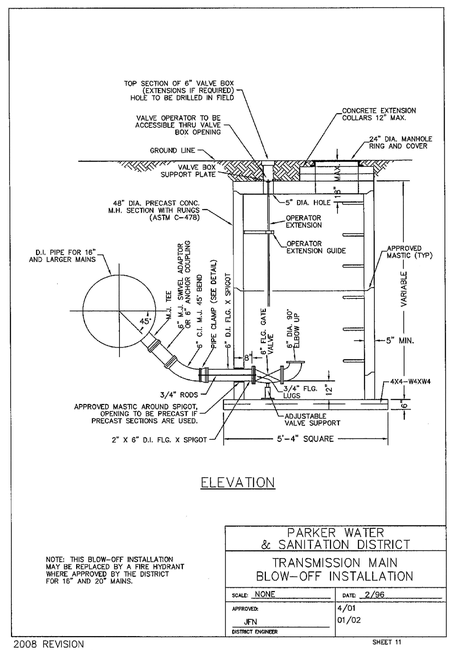
PARKER WATER & SANITATION DISTRICT

LOW POINT BLOW-OFF WITH SAND TRAP

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION

SHEET 10



NOTE: THIS BLOW-OFF INSTALLATION MAY BE REPLACED BY A FIRE HYDRANT WHERE APPROVED BY THE DISTRICT FOR 16" AND 20" MAINS.

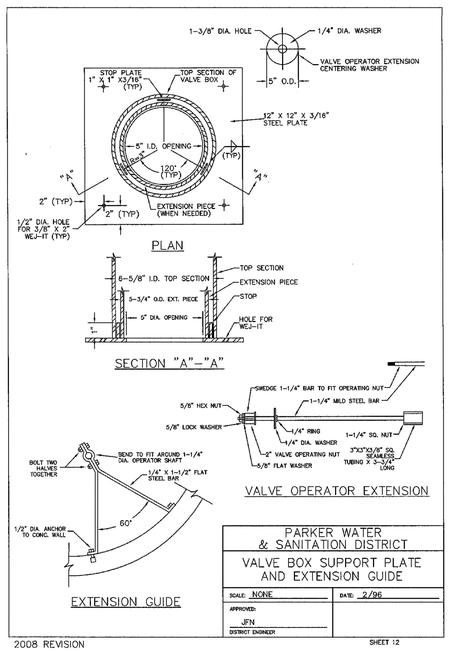
PARKER WATER & SANITATION DISTRICT

TRANSMISSION MAIN BLOW-OFF INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01 01/02

2008 REVISION

SHEET 11



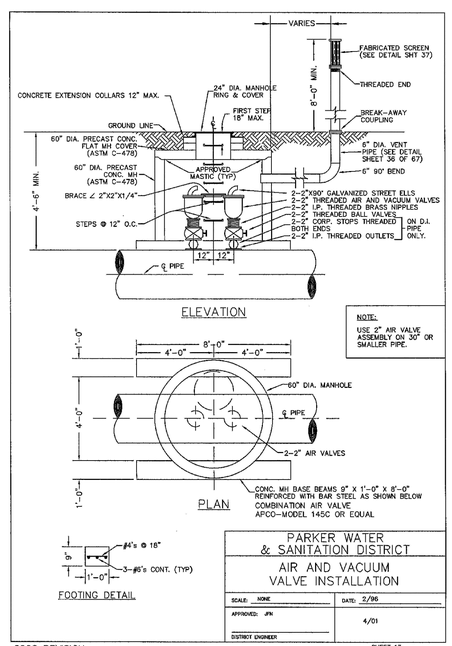
PARKER WATER & SANITATION DISTRICT

VALVE BOX SUPPORT PLATE AND EXTENSION GUIDE

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION

SHEET 12



PARKER WATER & SANITATION DISTRICT

AIR AND VACUUM VALVE INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION

SHEET 13

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No.	Revisions	Date	Init.	Appr.	Date

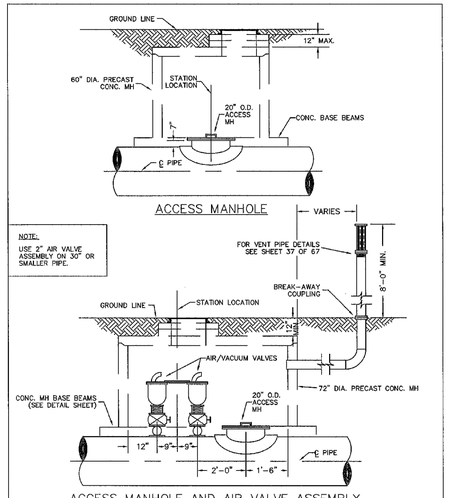
CVL CONSULTANTS
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
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Fax: (720) 482-9546

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

DRAWN BY: JF	SCALE: AS SHOWN
CHECKED BY: JJJ	FILE NO: 8130283701
DATE: FEBRUARY 2017	

SHEET NUMBER 81



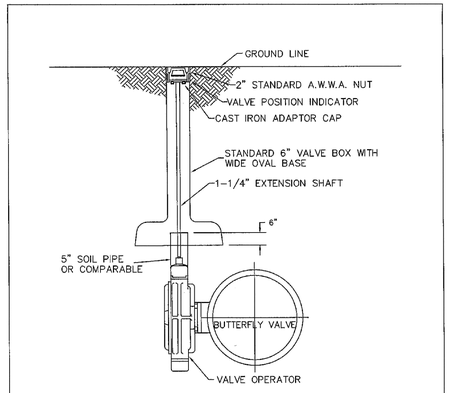
NOTE:
SEE SHEET 13 OF 67 FOR CONCRETE MANHOLE BASE BEAMS AND AIR/VACUUM VALVE DETAILS.

PARKER WATER & SANITATION DISTRICT

ACCESS MANHOLE ASSEMBLY

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION — SHEET 14



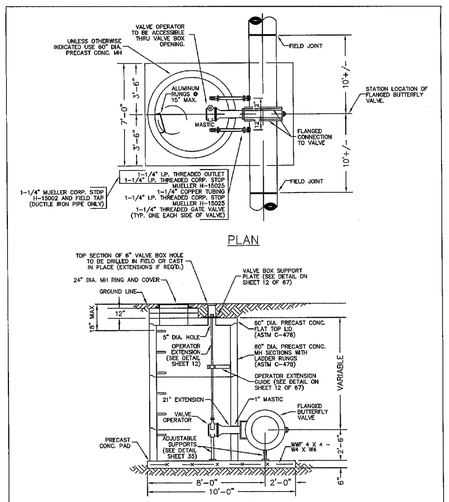
NOTE: THE VALVE BOX SHALL NOT BE PLACED DIRECTLY ON SOIL PIPE.

PARKER WATER & SANITATION DISTRICT

TRANSMISSION MAIN BUTTERFLY VALVE INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION — SHEET 15

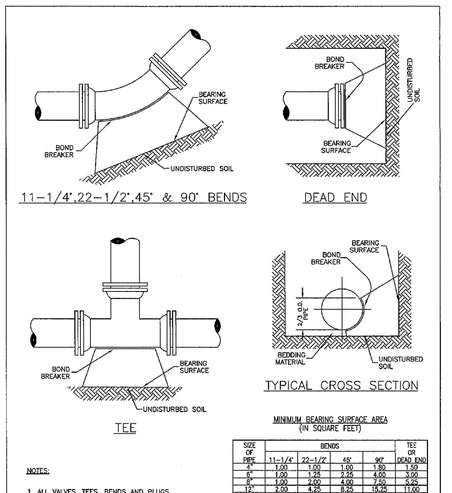


PARKER WATER & SANITATION DISTRICT

20",24" AND 30" BUTTERFLY VALVE ASSEMBLY

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION — SHEET 16



NOTES:

1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RODDED AND KICKBLOCKED.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. BASED ON 150 PSI PIPE PRESSURE PLUS WATER HAMMER:
   4", 6" AND 8" WATER HAMMER = 120 PSI
   12" WATER HAMMER = 110 PSI
   16", 20" AND 24" WATER HAMMER = 70 PSI.
4. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

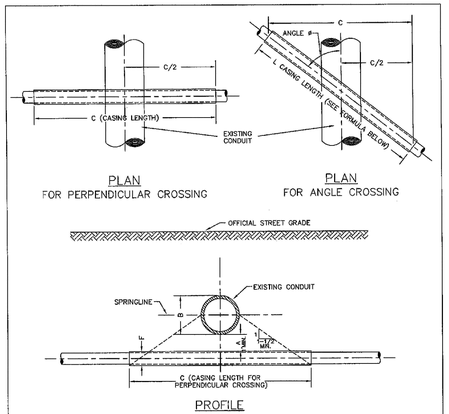
SIZE OF PIPE	BENDS				TEE OR DEAD END
	11-1/4°	22-1/2°	45°	90°	
4"	1.00	1.00	1.60	1.80	1.50
6"	1.00	1.25	2.25	4.00	3.00
8"	1.00	2.00	4.00	7.00	5.25
12"	2.00	4.25	8.25	15.25	11.00
16"	3.50	8.50	17.50	23.50	16.50
20"	5.00	10.00	19.50	33.50	25.00
24"	6.50	13.00	26.00	47.00	33.00

PARKER WATER & SANITATION DISTRICT

CONCRETE KICKBLOCKS
BEARING SURFACES AND INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	4/01

2008 REVISION — SHEET 17



FORMULA FOR FINDING C:

$$C = B + (2)(1.5)\left[\frac{D}{2}\right] + A + F$$

- B: PERPENDICULAR CROSSING CASING LENGTH
- D: O.D. WATER DEPARTMENT CONDUIT
- (2): CONSTANT
- 1.5: RATIO OF MIN. SLOPE
- D/2: 1/2 O.D. WATER DEPARTMENT CONDUIT
- A: VERTICAL DISTANCE BETWEEN CASING AND WATER DEPARTMENT CONDUIT
- F: CASING O.D.

FORMULA FOR FINDING L:

$$L = \frac{C}{\sin \phi}$$

NOTES:

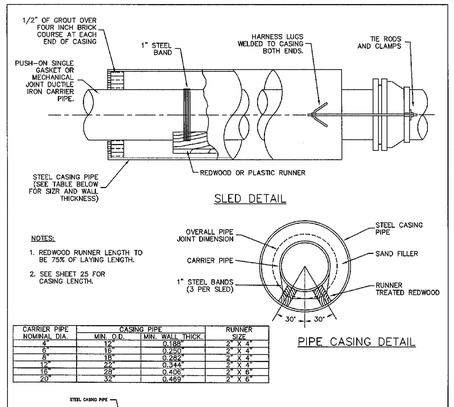
1. FINAL APPROVAL OF BORING AND CASING METHOD AND MATERIALS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION.

PARKER WATER & SANITATION DISTRICT

BORED CROSSINGS BENEATH CONDUITS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	2/00

2008 REVISION — SHEET 25



NOTES:

1. REDWOOD RUNNER LENGTH TO BE 75% OF LAYING LENGTH.
2. SEE SHEET 25 FOR CASING LENGTH.

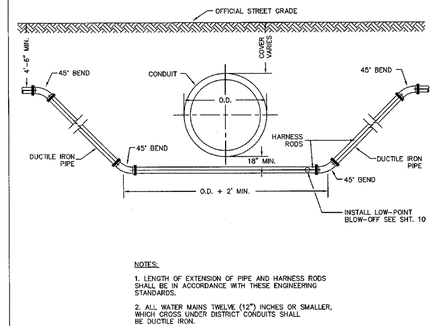
CARRIER PIPE NOMINAL DIA.	CASING PIPE MIN. O.D.	CASING PIPE MIN. WALL THICK.	RUNNER SIZE
4"	12"	0.188"	3" X 4"
6"	16"	0.250"	3" X 4"
8"	18"	0.322"	3" X 4"
12"	24"	0.344"	3" X 4"
16"	30"	0.406"	3" X 6"
20"	32"	0.469"	3" X 6"

PARKER WATER & SANITATION DISTRICT

BORE CASING DETAILS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	2/00

2008 REVISION — SHEET 26



NOTES:

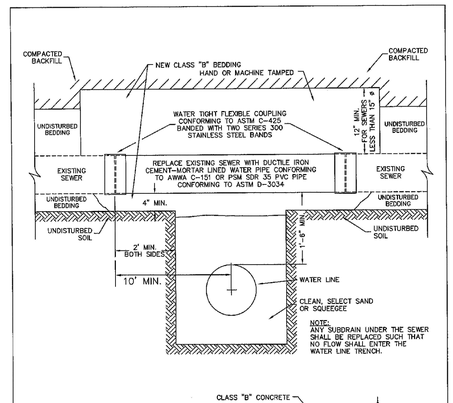
1. LENGTH OF EXTENSION OF PIPE AND HARNESS RODS SHALL BE IN ACCORDANCE WITH THESE ENGINEERING STANDARDS.
2. ALL WATER MAINS TWELVE (12") INCHES OR SMALLER, WHICH CROSS UNDER DISTRICT CONDUITS SHALL BE DUCTILE IRON.
3. A BORED CROSSING MAY BE REQUIRED BY THE ENGINEER.

PARKER WATER & SANITATION DISTRICT

CONDUIT OR STORM SEWER CROSSING

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	5/98 2/00 12/07

2008 REVISION — SHEET 27



PARKER WATER & SANITATION DISTRICT

CROSSING STORM & SANITARY SEWERS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION — SHEET 28

CALL 811
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N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\WATER DETAILS.DWG, RYANR, 2/5/2017 3:08 P.M.

No.	Revisions	Date	Init.	Appr.	Date

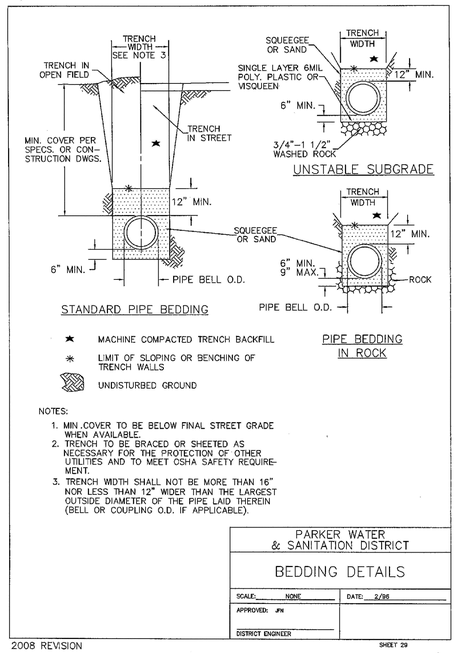
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JF
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 82



STANDARD PIPE BEDDING

PIPE BEDDING IN ROCK

NOTES:

1. MIN. COVER TO BE BELOW FINAL STREET GRADE WHEN AVAILABLE.
2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE PROTECTION OF OTHER UTILITIES AND TO MEET OSHA SAFETY REQUIREMENT.
3. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE LAID THEREIN (BELL OR COUPLING O.D. IF APPLICABLE).

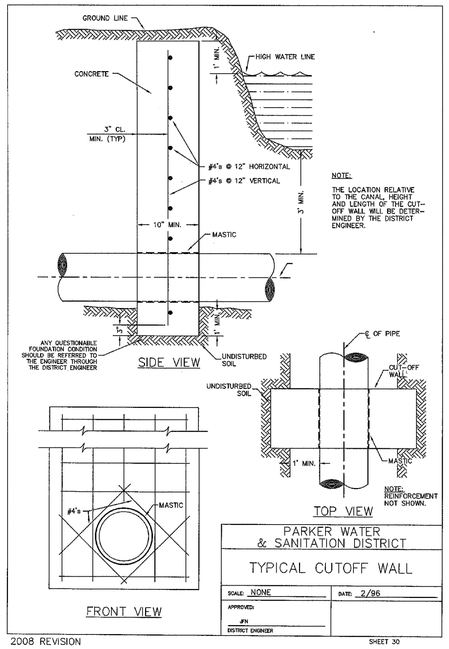
PARKER WATER & SANITATION DISTRICT

BEDDING DETAILS

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2008 REVISION SHEET 29



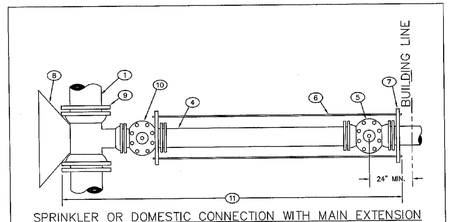
PARKER WATER & SANITATION DISTRICT

TYPICAL CUTOFF WALL

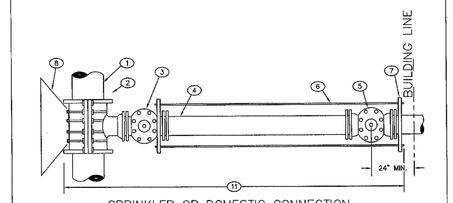
SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2008 REVISION SHEET 30



SPRINKLER OR DOMESTIC CONNECTION WITH MAIN EXTENSION



SPRINKLER OR DOMESTIC CONNECTION

1. EXISTING MAIN
2. TAPPING SLEEVE
3. TAPPING VALVE
4. DOUBLE SPIGOT PIPE
5. PROPERTY LINE VALVE
6. TIE RODS
7. PIPE CLAMP
8. CONCRETE KICKBLOCK
9. M.J. ANCHORING TEE (SWIVEL TEE)
10. M.J. VALVE
11. POLYETHYLENE WRAPPED

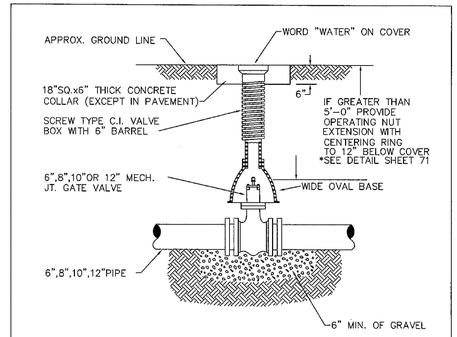
PARKER WATER & SANITATION DISTRICT

3" AND LARGER DOMESTIC AND SPRINKLER CONNECTIONS

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2008 REVISION SHEET 31



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.

NOTES:

1. ALL C.I. SHALL BE WRAPPED WITH 8 MIL. MIN. THICKNESS POLYETHYLENE.
2. VALVE NUT SHALL BE CENTERED.
3. VALVE BOX SHALL BE PLUMB.

PARKER WATER & SANITATION DISTRICT

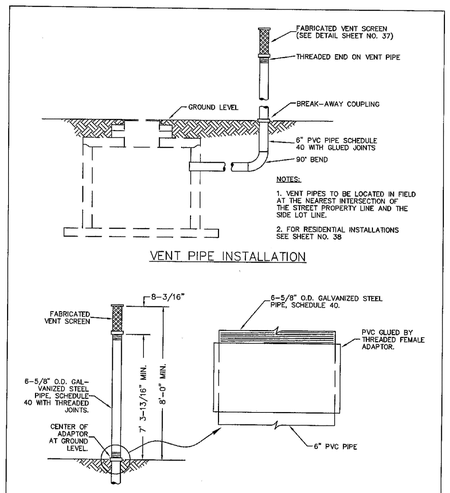
VALVE BOX DETAIL

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

5/98 6/99 12/07

2008 REVISION SHEET 34



VENT PIPE INSTALLATION

VENT PIPE AND BREAK-AWAY COUPLING DETAILS

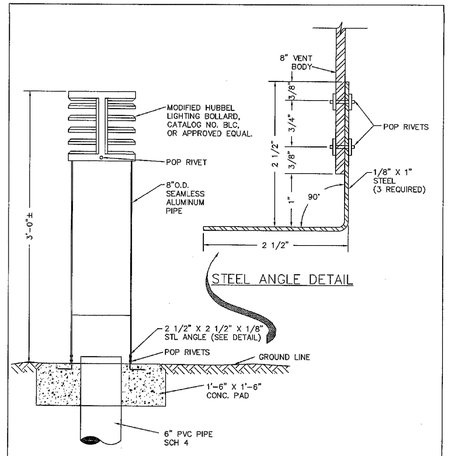
PARKER WATER & SANITATION DISTRICT

VENT PIPE INSTALLATION AND DETAILS

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2008 REVISION SHEET 36



ROUND VENT SCREEN

NOTE: COLOR SHALL BE OLIVE GREEN OR FLAT BLACK TO MATCH SURROUNDINGS.

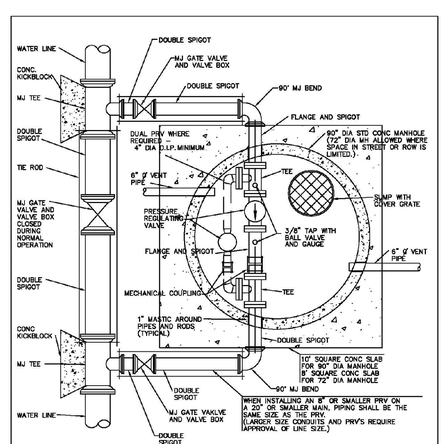
PARKER WATER & SANITATION DISTRICT

RESIDENTIAL VENT ASSEMBLY

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2008 REVISION SHEET 38



NOTES:

1 – A RECTANGULAR VAULT IS REQUIRED WHERE TELEMETRY OR ELECTRICAL EQUIPMENT IS ANTICIPATED INSIDE THE VAULT.

2 – ACCESS STAIRS WITH DOOR OUTSIDE OF PAVEMENT MAY BE REQUIRED ON STREETS WITH HEAVY TRAFFIC.

3 – FOR ELEVATION VIEW SEE CROSS SECTION DWG SHEET NO. 40

4 – DO NOT PLACE SUMP DIRECTLY UNDER MANHOLE.

5 – POLYETHENE STEPS SHALL BE INSTALLED.

PARKER WATER & SANITATION DISTRICT

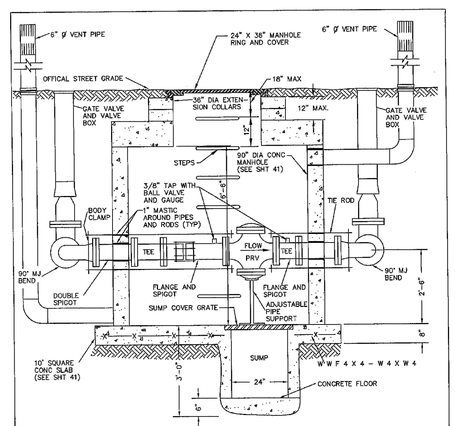
PRESSURE REGULATING VALVE MANHOLE INSTALLATION TYPICAL PLAN

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

2/00 3/03

2008 REVISION SHEET 39



NOTES:

1 – SEE SHT. 41 FOR PLAN VIEW AND ADDITIONAL NOTES.

2 – POLYETHENE STEPS SHALL BE INSTALLED AND ANY STEPS IN CHIMNEY SECTION SHALL BE INSTALLED AS A HANDHOLD & SHALL NOT IMPEDE ACCESS THRU THE CHIMNEY.

PARKER WATER & SANITATION DISTRICT

PRESSURE REGULATING VALVE MANHOLE INSTALLATION CROSS SECTION

SCALE: NONE DATE: 2/96

APPROVED: JFN DISTRICT ENGINEER

4/01 3/03

2008 REVISION SHEET 40

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No.	Revisions	Date	Init.	Appr.	Date

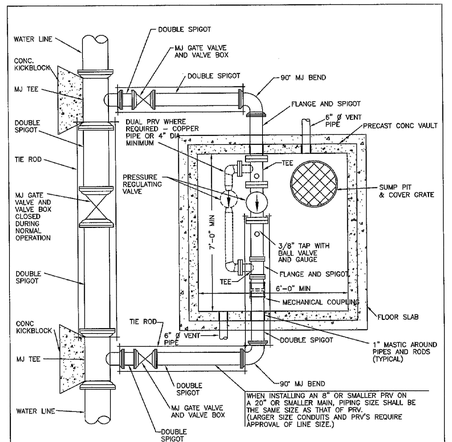
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TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JF
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 83



NOTES:

1 – A RECTANGULAR VAULT IS REQUIRED WHERE TELEMETRY OR ELECTRICAL EQUIPMENT INSIDE THE VAULT IS ANTICIPATED.

2 – ACCESS STAIRS WITH DOOR OUTSIDE OF PAVEMENT MAY BE REQUIRED ON STREETS WITH HEAVY TRAFFIC.

3 – FOR ELEVATION VIEW SEE CROSS SECTION DWG SHEET NO. 42.

4 – SUMP PUMP AND VENT FAN REQUIRED IN VAULTS WITH ELECTRICAL OR TELEMETRY EQUIPMENT.

5 – POLYETHENE STEPS SHALL BE INSTALLED.

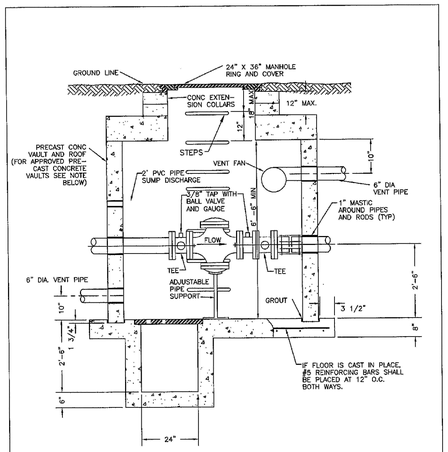
PARKER WATER & SANITATION DISTRICT

PRESSURE REGULATING VALVE
RECTANGULAR VAULT
TYPICAL PLAN

SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 3/03
DISTRICT ENGINEER	

2008 REVISION

SHEET 41



NOTES:

1 – APPROVED PRECAST CONCRETE VAULTS ARCO CONC INC – 10' X 10' X 7', 7080M, 7080 – 12 ADAMS CITY MFG – 11' X 12', 8' X 8'-6", 7' X 12'-6"

2 – A PERMIT IS REQUIRED FOR SUMP PUMP DISCHARGE TO STORM SEWERS.

3 – SEE SHEET 41 FOR PLAN VIEW AND ADDITIONAL NOTES.

4 – POLYETHENE STEPS SHALL BE INSTALLED.

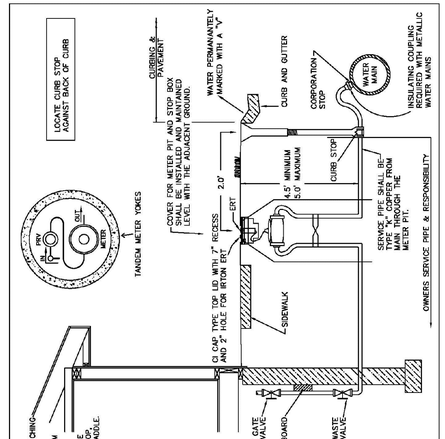
PARKER WATER & SANITATION DISTRICT

PRESSURE REGULATING VALVE
RECTANGULAR VAULT
CROSS SECTION

SCALE: NONE	DATE: 2/96
APPROVED: JFN	4/01 3/03
DISTRICT ENGINEER	

2008 REVISION

SHEET 42



NOTES

1 – PLACEMENT OF STOP BOX MUST BE TOUCHING BACK OF CURB

2 – OWNER'S RESPONSIBILITY SHALL BE FROM THE BUILDING TO THE CURBSTOP

3 – THE DISTRICT'S RESPONSIBILITY SHALL BE FROM THE WATER MAIN, THE CORPORATION STOP, THE CURBSTOP AND THE TAPPING SADDLE TO THE CURB STOP AND METER PIT.

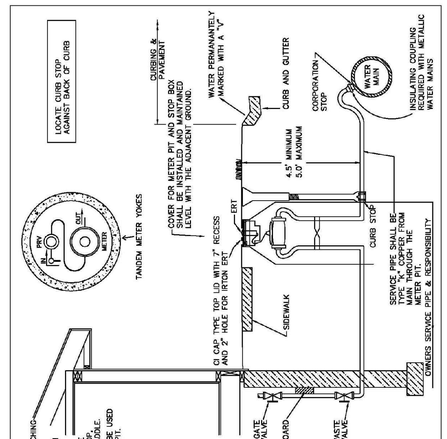
PARKER WATER & SANITATION DISTRICT

SERVICE LINE, STOP BOX AND OUTSIDE METER INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 5/05 4/01 1/12 01/02 12/03
DISTRICT ENGINEER	

2008 REVISION

SHEET 44



NOTES

1 – PLACEMENT OF STOP BOX MUST BE TOUCHING EDGE OF METER PIT.

2 – OWNER'S RESPONSIBILITY SHALL BE FROM THE BUILDING TO THE CURBSTOP

3 – THE DISTRICT'S RESPONSIBILITY SHALL BE FROM THE WATER MAIN, THE CORPORATION STOP, THE CURBSTOP AND THE TAPPING SADDLE TO THE CURB STOP AND METER PIT.

4 – 1" SERVICE LINE AND STOP BOX MAY BE USED TO SECURE CURB STOP BOX TO METER PIT.

PARKER WATER & SANITATION DISTRICT

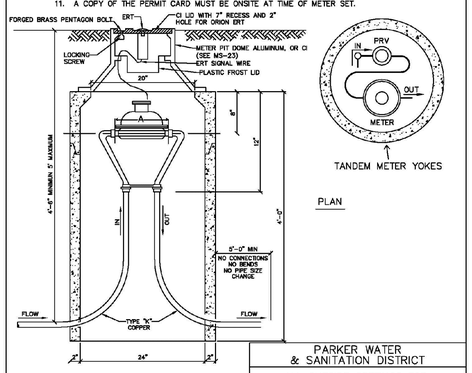
SERVICE LINE, STOP BOX AND OUTSIDE METER INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 5/05 4/01 1/12 01/02 12/03
DISTRICT ENGINEER	

2008 REVISION

SHEET 44a

1. NOT FOR INSTALLATION IN ROADWAYS, PARKING AREAS OR DRIVEWAYS.
2. IF SURFACE IS NOT TO FINAL GRADE AT TIME OF INSTALLATION OF METER, OWNER MUST RAISE OR LOWER PIT WHEN SURFACE IS GRADED.
3. METER SETTING MUST BE INSPECTED BY THE DISTRICT BEFORE BACKFILLING.
4. LOCATION OF METER TO BE ESTABLISHED BY A DISTRICT REPRESENTATIVE.
5. NO CONCRETE FLOOR TO BE LAID IN METER PIT.
6. METER PIT SHALL BE CONSTRUCTED OF FOUR 12", OR ONE 12" AND ONE 36" RINGS. WALLS SHALL BE 2" THICK.
7. 8" FROM BOTTOM OF BONNET TO YOKE SPREAD FOR METER
8. ADJUSTMENT RINGS SHALL BE 2", 3" 4" OR 6" IN HEIGHT AND SHALL BE INSERTED BETWEEN THE TOP TWO RINGS.
9. NO CONNECTIONS OR CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR IN THE DISTANCE OF FIVE FEET BEYOND THE METER PIT WALL ON THE OUTLET SIDE.
10. LAWN SPRINKLER CONNECTION SHALL BE A MINIMUM OF FIVE FEET FROM THE METER PIT WALL ON THE OUTLET SIDE.
11. A COPY OF THE PERMIT CARD MUST BE ONSITE AT TIME OF METER SET.



METER SIZE	A
5/8" X 3/4"	7 1/2"
1"	11 1/16"

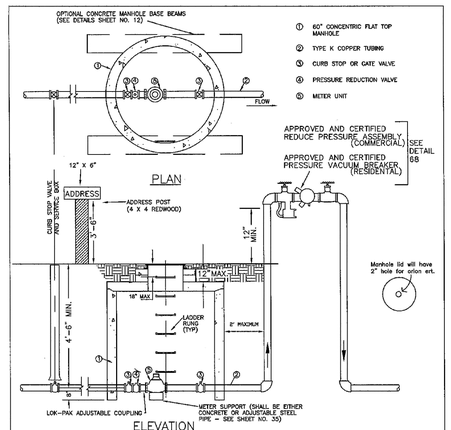
PARKER WATER & SANITATION DISTRICT

ALL OUTSIDE SETTINGS FOR 5/8" X 3/4" & 1" METERS

SCALE: NONE	DATE: 2/96
APPROVED: JFN	01/04 06/05 01/08 01/12
DISTRICT ENGINEER	

2008 REVISION

SHEET 45



① 60" CONCENTRIC FLAT TOP MANHOLE
② TYPE K COPPER TUBING
③ CURB STOP OR GATE VALVE
④ PRESSURE REDUCTION VALVE
⑤ METER UNIT

APPROVED AND CERTIFIED REDUCE PRESSURE ASSEMBLY (COMMERCIAL) SEE DETAIL 88

APPROVED AND CERTIFIED PRESSURE VACUUM BREAKER (RESIDENTIAL)

NOTES:

1 – MANHOLE BASE BEAMS SHALL BE REQUIRED FOR INSTALLATIONS IN DRIVEWAYS, OR PARKING AREAS.

2 – A 60" DIA. MANHOLE PIT WILL ACCOMODATE 1 1/2" AND 2" SPUT BASE METERS.

3 – JOINTS INSIDE METER VAULT SHALL BE EITHER THREADED OR SOLDERED WITH 95–5 TINANTIMONY SOLDER.

4 – SEE SECTION 10.0, WATER SYSTEM SPECIFICATIONS FOR GENERAL METER NOTES.

5 – NO CONCRETE TO BE LAID IN FLOOR OF METER M.H.

6 – METER SHALL BE FLANGED WITH BRASS COMPANION FLANGES.

7 – NO CONNECTIONS OR CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR IN THE DISTANCE OF FIVE FEET BEYOND THE METER PIT ON THE OUTLET SIDE.

8 – LADDER RUNGS SHALL BE ON OPPOSITE SIDE OF BYPASS.

9 – VALVE MUST BE CENTERED IN STOP BOX. NO DEBRIS OR STANDING WATER IN STOP BOX.

10 – PLACEMENT OF STOP BOX MUST BE TOUCHING BACK OF CURB

11 – SEE SHEET 75 FOR MANHOLE RING AND COVER DETAIL.

12 – BACKFLOW MUST BE INSTALLED PRIOR TO SETTING METER

13 – BADGER METER USED BY DISTRICT

METER	YOKE DISTANCE
1.5"	13.25"
2"	17.25" WITH ADJUSTABLE FLANGE FOR GASKET

IRRIGATION ONLY.

NOT TO BE USED IN COMMERCIAL WITHOUT EXPRESS PERMISSION OF THE DISTRICT MANAGER.

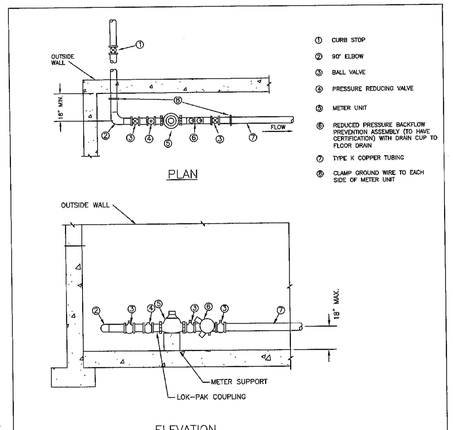
PARKER WATER & SANITATION DISTRICT

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

SCALE: NONE	DATE: 2/96
APPROVED: JFN	1/04 06/05
DISTRICT ENGINEER	

2008 REVISION

SHEET 49



① CURB STOP
② 90° ELBOW
③ BALL VALVE
④ PRESSURE REDUCING VALVE
⑤ METER UNIT
⑥ REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (TO HAVE CERTIFICATION) WITH DRAIN CUP TO FLOOR DRAIN
⑦ TYPE K COPPER TUBING
⑧ CLAMP GROUND WIRE TO EACH SIDE OF METER UNIT

NOTES

METER	YOKE DISTANCE
1.5"	13.25"
2"	17.25" WITH ADJUSTABLE FLANGE FOR GASKET

1 – PIPE JOINT SHALL BE THREADED OR SOLDERED WITH SILVER SOLDER.

2 – INSTALLATION MUST ALLOW ACCESS FOR MAINTENANCE AND BE PROTECTED FROM FREEZING.

3 – SEE SECTION 10.0, WATER SYSTEM SPECIFICATIONS FOR GENERAL METER NOTES.

4 – COMPANION FLANGES SHALL BE BRASS.

5 – METER SUPPORT SHALL BE EITHER CONCRETE OR ADJ. STEEL PIPE (SEE SHEET NO. 35)

6 – 1.0' MINIMUM CLEARANCE AROUND BACKFLOW DEVICE

7 – FLOOR DRAIN TO BE 2X PIPE SIZE

*8 – INSIDE METER WITH CHECK VALVE ONLY INSTALLED WITH EXPRESSED WRITTEN PERMISSION OF THE DISTRICT

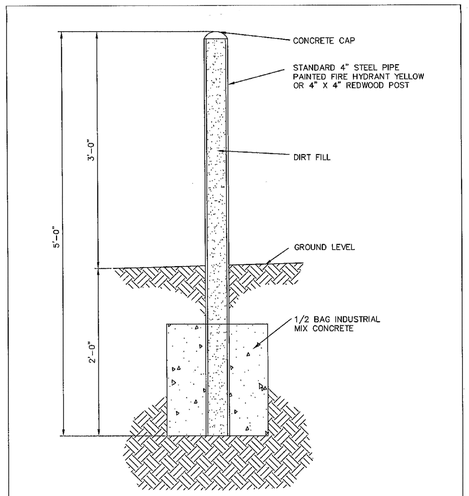
PARKER WATER & SANITATION DISTRICT

INSIDE SETTING FOR 1 1/2" & 2" METER WITH CHECK VALVE

SCALE: NONE	DATE: 2/96
APPROVED: JFN	8/99 01/02 2/00 06/05 4/01 07/06
DISTRICT ENGINEER	

2008 REVISION

SHEET 51



STEEL PIPE
STENCILED IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPURTENANCE, WITH 2" STENCILS INDICATING TYPE OF APPURTENANCE (MH, 12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST.

REDWOOD POST
ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.

PARKER WATER AND SANITATION DISTRICT

MARKER POST

SCALE: NONE	DATE: 2/96
APPROVED: JFN	2/00 4/01 12/07
DISTRICT ENGINEER	

2008 REVISION

SHEET 58

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

N:\PROJECTS\HESS RANCH\CAD\ENGINEERING\SHEET SETS\PRELIMINARY\PARKER WATER AND SANITATION\WATER DETAILS.DWG, RYANR, 2/5/2017 3:08 PM

No.	Revisions	Date	Init.	Appr.	Date

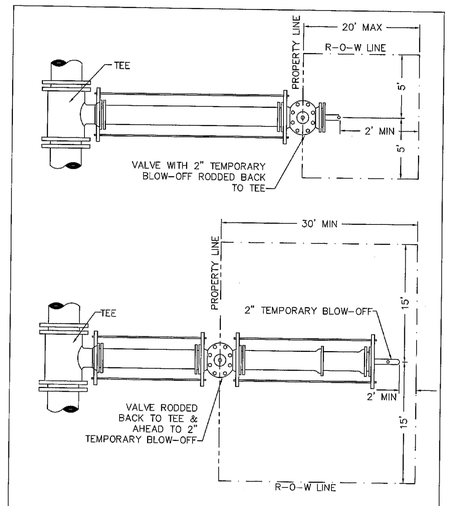
CVL CONSULTANTS
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JF
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 84



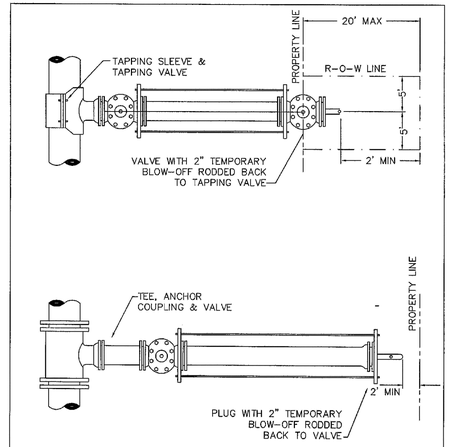
PARKER WATER & SANITATION DISTRICT

STUB-OUT CONFIGURATIONS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION

SHEET 59



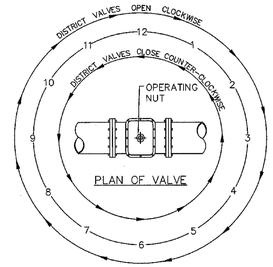
PARKER WATER & SANITATION DISTRICT

STUB-OUT CONFIGURATIONS

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION

SHEET 60



NOTE:
NORMALLY VALVES WITH A RED OPERATING NUT INDICATE A STANDARD DENVER VALVE.

VALVE OPENING & CLOSING PROCEDURE

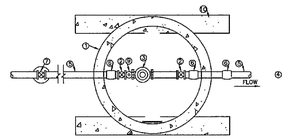
PARKER WATER & SANITATION DISTRICT

VALVE OPERATION

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	

2008 REVISION

SHEET 61



PLAN

1. 60" DIA. CONCRETE MANHOLE
2. CURB STOP VALVE
3. METER UNIT
4. APPROVED AND CERTIFIED REDUCED PRESSURE BACKFLOW PREVENTER INSTALLED DIRECTLY AFTER MANHOLE
5. TYPE K COPPER TUBING
6. SILVER-SOLDERED COPPER TO IRON COUPLING OR D.W.D. APPOVED EQUAL
7. CURB STOP VALVE AND SERVICE BOX MUST BE CENTERED AND FREE OF DEBRIS
8. FLANGE TO MATCH METER UNIT
9. APPROVED PRESSURE REDUCTION VALVE
10. OPTIONAL CONCRETE MANHOLE BASE BEAMS

NOTES:

1. DASHED LINES REPRESENT THE 2" METER PIPING PLAN
2. OUTSIDE METER SETTING ONLY ALLOWED WITH EXPRESSED WRITTEN PERMISSION OF THE DISTRICT.
3. SILVER SOLDER ALL JOINTS.

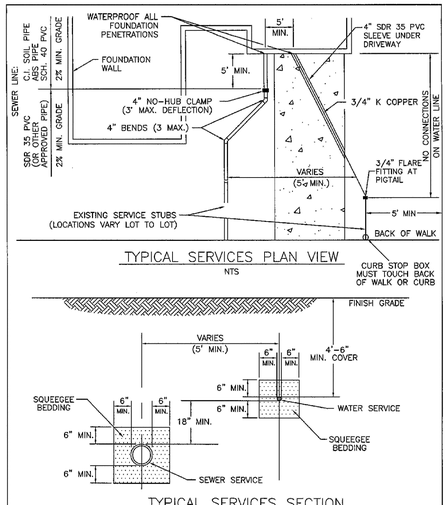
PARKER WATER & SANITATION DISTRICT

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

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	1/04 06/05

2008 REVISION

SHEET 62



TYPICAL SERVICES PLAN VIEW

NTS

TYPICAL SERVICES SECTION

NTS

NOTE

SEE SHEET 67 OF 68 FOR DISTRICT POLICIES AND INSTALLATION NOTES.

PARKER WATER & SANITATION DISTRICT

TYPICAL WATER SERVICES

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	1/04 06/05 12/07

2008 REVISION

SHEET 66

INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE (303)841-2058 AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A $60 RE-INSPECTION FEE CHARGED.
4. 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.
5. 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.
6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
7. LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
8. CONTRACTOR MUST BE PRESSENT AT TIME OF INSPECTION.

INSTALLATION NOTES:

WATER

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. 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 PWSD PRIOR TO BURIAL.
4. 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.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD. CRAW SPACE REQUIRES CONTINOUS COPPER WITH A 1' BURY.
6. STOPBOX MUST BE PLUMB AND CENTERED OVER NUT AT THE BACK OF CURB, AND MUST BE SET AT OR SLIGHTLY ABOVE FINISHED GRADE.
7. STOPBOXES MUST BE SET AT BACK OF SIDEWALK OR CURB (MUST BE TOUCHING).
8. NO CRAWLSPACE MOUNTED METERS ALLOWED.
9. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
10. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
11. CURBSTOP BOXES CANNOT BE IN DRIVEWAYS.
12. WATERLINES PASSING UNDER DRIVEWAYS NEED TO BE SLEEVED IN 4" P.V.C. AND HAVE EXPRESS PERMISSION OF THE DISTRICT.
13. YOKES SHOULD BE MOUNTED NO GREATER THAN 6 INCHES ABOVE BOTTOM SHUTTOFF. EACH SERVICE MUST INCLUDE A STOP AND WASTE VALVE AND A PRESSURE REDUCING VALVE LOCATED WITHIN THE ABOVE REFERENCED 6 INCH SPACE.
14. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDIERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDIERED JOINTS MUST BE INSPECTED BY PWSD PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
15. ONLY 3/4" (JUMPER OR CHEATER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER OR CHEATER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
16. ALL SERVICES WILL BE PERMANANTELY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SEWER SERVICE "V" FOR WATER SERVICES
17. CONTRACTOR MUST BE PRESENT AT TIME OF THE INSPECTION

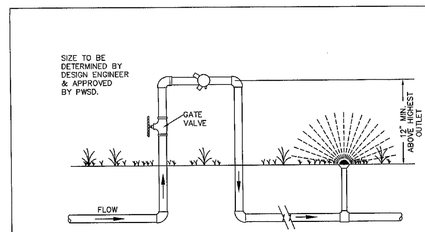
PARKER WATER & SANITATION DISTRICT

DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES

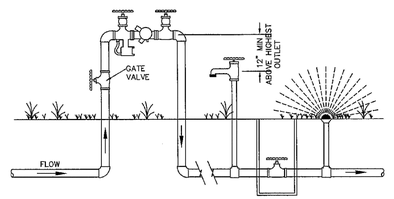
SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	1/04

2008 REVISION

SHEET 67



REDUCED PRESSURE BACKFLOW



REDUCED PRESSURE BACKFLOW ON IRRIGATION SYSTEM

* NOTE:
ALL IRRIGATION SYSTEMS MUST BE CONNECTED DOWN STREAM OF METER.

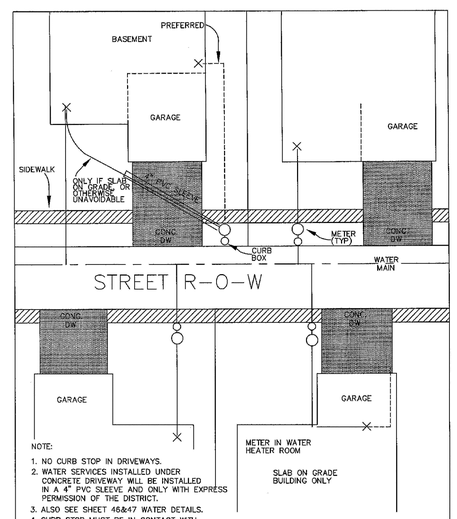
PARKER WATER & SANITATION DISTRICT

REDUCED PRESSURE BACKFLOW

SCALE: NONE	DATE: 2/96
APPROVED: JFN DISTRICT ENGINEER	2004 06/05

2008 REVISION

SHEET 68



NOTE:

1. NO CURB STOP IN DRIVEWAYS.
2. WATER SERVICES INSTALLED UNDER CONCRETE DRIVEWAY WILL BE INSTALLED IN A 4" PVC SLEEVE AND ONLY WITH EXPRESS PERMISSION OF THE DISTRICT.
3. ALSO SEE SHEET 46&47 WATER DETAILS.
4. CURB STOP MUST BE IN CONTACT WITH BACK OF WALK.
5. WATERLINE MUST BE CAULKED AT ENTRY THROUGH CONCRETE.
6. WATER LINE THROUGH CRAWL SPACE MUST BE CONTINOUS COPPER AND AT A 1' MIN. BURY.

PARKER WATER & SANITATION DISTRICT

METER/REMOTE LOCATIONS

SCALE: NONE	DATE: 4/98
APPROVED: JFN DISTRICT ENGINEER	1/04 06/05

2008 REVISION

SHEET 69

CALL 811
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No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

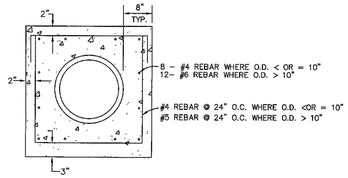
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701
DRAWN BY: JF
CHECKED BY: JJJ
DATE: FEBRUARY 2017

SHEET NUMBER 85



TYPICAL SECTION

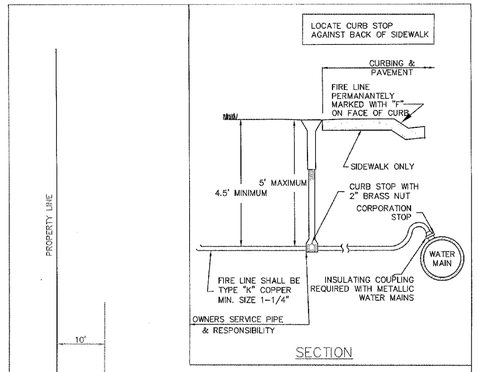
NTS

NOTES:
1. ALL CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI USING TYPE I PORTLAND CEMENT AND 3/4" AGGREGATE. ALL CONCRETE SHALL HAVE 5-7% ENTRAINED AIR CONTENT AND A MAXIMUM SLUMP OF 4".
2. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615,GRADE 60.
3. ALL REINFORCEMENT SHALL HAVE 2" MIN. CONCRETE COVER.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY PRIOR TO FORMING THE STRUCTURE.

PARKER WATER & SANITATION DISTRICT	
WATERLINE ENCASEMENT	
SCALE: NONE	DATE: 5/88
APPROVED: JFN	
DISTRICT ENGINEER	

2008 REVISION

SHEET 70

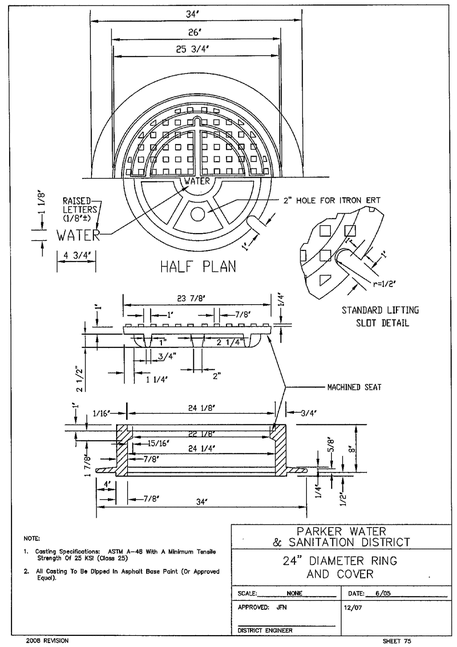


NOTES:
1. AN "F" WILL BE PERMANENTELY MARKED ON CURB FACE OVER FIRE LINE.
2. DOMESTIC WATER SERVICE SHALL BE INSTALLED A MINIMUM OF FIVE (5) FEET FROM THE FIRE LINE.
3. SANITARY SEWER SERVICE SHALL BE INSTALLED A MINIMUM OF TEN (10) FEET FROM THE WATER SERVICE (EITHER DOMESTIC OR FIRE LINE).

PARKER WATER & SANITATION DISTRICT	
RESIDENTIAL FIRE LINES	
SCALE: NONE	DATE: 6/89
APPROVED: RJG	2/00 06/05 12/07
DISTRICT ENGINEER	

2008 REVISION

SHEET 73



NOTE:
1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
2. All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equal).

PARKER WATER & SANITATION DISTRICT	
24" DIAMETER RING AND COVER	
SCALE: NONE	DATE: 6/05
APPROVED: JFN	12/07
DISTRICT ENGINEER	

2008 REVISION

SHEET 75

No.	Revisions	Date	Init.	Appr.	Date

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Fax: (720) 482-9546
CVL CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
PRELIMINARY CONSTRUCTION DRAWINGS
WATER DETAILS

DRAWN BY:	JF
CHECKED BY:	JJJ
DATE:	FEBRUARY 2017

SCALE: AS SHOWN
FILE NO: 8130283701

SHEET NUMBER 86

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