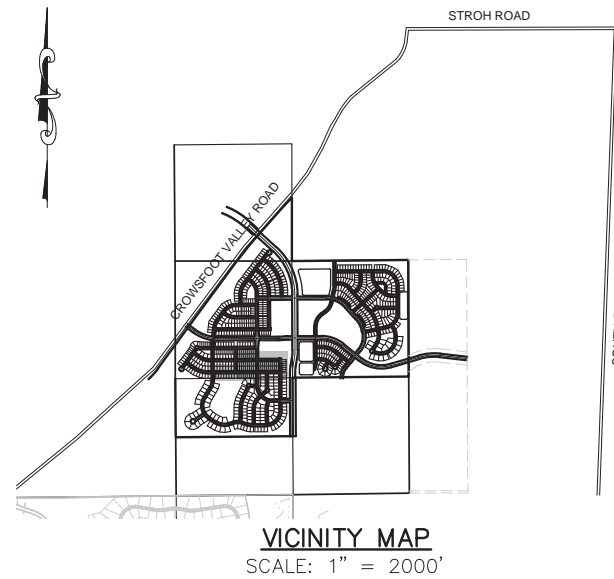


TRAILS AT CROWFOOT FILING 5

PARKER WATER AND SANITATION CONSTRUCTION PLANS

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

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	PARKER WATER AND SANITATION NOTES
3	AREA UTILITY PLAN
4	SANITARY P&P BIRDS FOOT AVENUE
5	SANITARY P&P BIRDFOOT AVENUE & HOP CLOVER TRAIL
6	SANITARY P&P HOP CLOVER AVENUE
7	SANITARY P&P HOP CLOVER AVENUE
8	WATER P&P BIRDS FOOT AVENUE
9	WATER P&P BIRDFOOT AVENUE & HOP CLOVER TRAIL
10	WATER P&P HOP CLOVER AVENUE
11	WATER P&P HOP CLOVER AVENUE
12	SANITARY SEWER DETAILS
13	SANITARY SEWER DETAILS
14	SANITARY SEWER DETAILS
15	WATER DETAILS
16	WATER DETAILS
17	WATER DETAILS
18	WATER DETAILS
19	WATER DETAILS
20	WATER DETAILS
21	WATER DETAILS



MATERIALS LIST		
DESCRIPTION	QUANTITY	UNIT
6" WATERPIPE (DIP)	124	L.F.
8" WATERPIPE (PVC)	2,671	L.F.
6" GATE VALVE	5	EA.
8" GATE VALVE	13	EA.
8" MISC. FITTINGS	8	EA.
AIR/VAC VALVE	1	EA.
8" CAP WITH BLOW OFF VALVE	5	EA.
FIRE HYDRANT WITH 6" LEAD	5	EA.
WATER SERVICE LATERAL W/ WATER METER AND PIT	77	EA.
CONNECTION TO EXISTING MAIN	7	EA.
8" SEWER (SDR-35 PVC)	2,496	L.F.
4' DIA. MANHOLE	10	EA.
SEWER SERVICE LATERAL W/ WYE TAP	77	EA.
CONNECTION TO EXISTING MAIN	6	EA.

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 SCHEDULED 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

HR 935 LLC
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.

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

N:\PROJECTS\HARRACH\ENGINEERING\PROJECTS\TRAILS AT CROWFOOT\WATER AND SANITATION\COVER.DWG, CDDVA, 3/7/2018 10:23 AM

 CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

SHEET NUMBER	DRAWN BY:	CHECKED BY:	DATE:	SCALE:	AS SHOWN	FILE NO:	Revisions		
							No.	Date	Appr.
1	KJD	JJ	AUGUST 2017	AS SHOWN	8130283701				

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

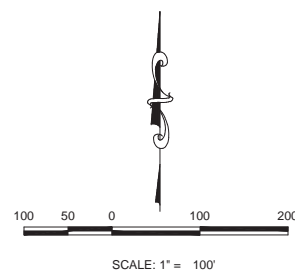
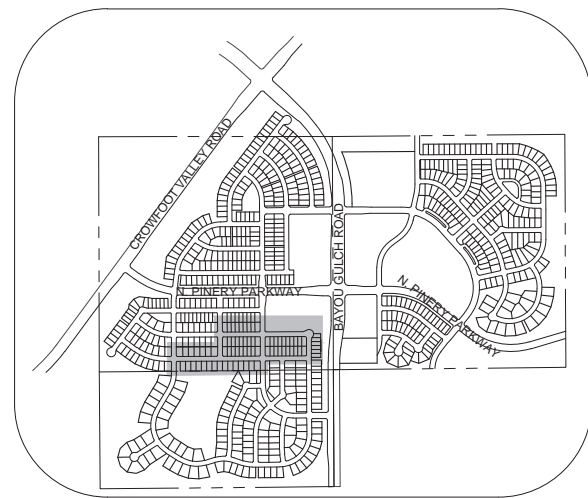
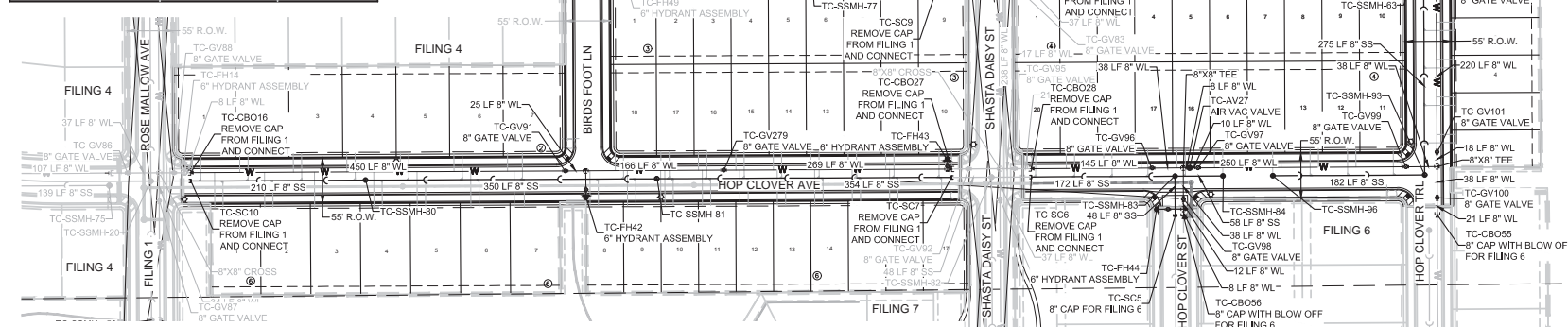
CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
COVER SHEET

SERVICE TABLE			
FILING, BLOCK, LOT	STREET	SANITARY STATIONING	WATER STATIONING
F5,B1,L1	BIRDS FOOT AVE	20+62.94	20+52.94
F5,B1,L2	BIRDS FOOT AVE	21+07.63	20+97.63
F5,B1,L3	BIRDS FOOT AVE	21+52.63	21+42.63
F5,B1,L4	BIRDS FOOT AVE	21+97.63	21+87.63
F5,B1,L5	BIRDS FOOT AVE	22+42.63	22+32.63
F5,B1,L6	BIRDS FOOT AVE	22+87.63	22+77.63
F5,B1,L7	BIRDS FOOT AVE	23+32.63	23+22.63
F5,B1,L8	BIRDS FOOT AVE	23+77.63	23+67.63
F5,B1,L9	BIRDS FOOT AVE	24+32.73	24+44.73
F5,B2,L1	HOP CLOVER AVE	17+21.78	17+11.78
F5,B2,L2	HOP CLOVER AVE	17+78.65	17+68.65
F5,B2,L3	HOP CLOVER AVE	18+43.00	18+33.00
F5,B2,L4	HOP CLOVER AVE	19+07.35	18+97.35
F5,B2,L5	HOP CLOVER AVE	19+71.70	19+61.70
F5,B2,L6	HOP CLOVER AVE	20+36.05	20+26.05
F5,B2,L7	HOP CLOVER AVE	21+08.30	20+90.40
F5,B3,L1	BIRDS FOOT AVE	20+64.94	20+54.94
F5,B3,L2	BIRDS FOOT AVE	21+05.63	20+95.63
F5,B3,L3	BIRDS FOOT AVE	21+50.63	21+40.63
F5,B3,L4	BIRDS FOOT AVE	21+95.63	21+85.63
F5,B3,L5	BIRDS FOOT AVE	22+40.63	22+30.63
F5,B3,L6	BIRDS FOOT AVE	22+95.63	22+85.63
F5,B3,L7	BIRDS FOOT AVE	23+30.63	23+20.63
F5,B3,L8	BIRDS FOOT AVE	23+75.63	23+65.63
F5,B3,L9	BIRDS FOOT AVE	24+29.73	24+42.73
F5,B3,L10	HOP CLOVER AVE	26+08.90	26+23.90
F5,B3,L11	HOP CLOVER AVE	25+54.80	25+44.80
F5,B3,L12	HOP CLOVER AVE	25+09.80	24+99.80
F5,B3,L13	HOP CLOVER AVE	24+64.80	24+54.80
F5,B3,L14	HOP CLOVER AVE	24+19.80	24+09.80
F5,B3,L15	HOP CLOVER AVE	23+74.80	23+64.80
F5,B3,L16	HOP CLOVER AVE	23+29.80	23+19.80
F5,B3,L17	HOP CLOVER AVE	22+84.80	22+74.80
F5,B3,L18	HOP CLOVER AVE	22+29.80	22+19.80
F5,B4,L1	BIRDS FOOT AVE	25+45.24	25+35.24
F5,B4,L2	BIRDS FOOT AVE	25+90.60	25+80.60
F5,B4,L3	BIRDS FOOT AVE	26+35.60	26+25.60
F5,B4,L4	BIRDS FOOT AVE	26+80.60	26+70.60
F5,B4,L5	BIRDS FOOT AVE	27+25.60	27+15.60
F5,B4,L6	BIRDS FOOT AVE	27+70.60	27+60.60
F5,B4,L7	BIRDS FOOT AVE	28+15.60	28+05.60
F5,B4,L8	BIRDS FOOT AVE	28+60.60	28+50.60
F5,B4,L9	BIRDS FOOT AVE	29+05.60	28+95.60
F5,B4,L10	BIRDS FOOT AVE	29+50.60	29+40.60
F5,B4,L11	HOP CLOVER AVE	31+54.77	31+44.77
F5,B4,L12	HOP CLOVER AVE	31+00.00	31+09.77
F5,B4,L13	HOP CLOVER AVE	30+54.77	30+64.77
F5,B4,L14	HOP CLOVER AVE	30+09.77	30+19.77
F5,B4,L15	HOP CLOVER AVE	29+49.77	29+39.77
F5,B4,L16	HOP CLOVER AVE	29+04.77	28+94.77
F5,B4,L17	HOP CLOVER AVE	28+59.77	28+51.77
F5,B4,L18	HOP CLOVER AVE	28+16.77	28+06.77
F5,B4,L19	HOP CLOVER AVE	27+71.77	27+61.77
F5,B4,L20	HOP CLOVER AVE	27+24.90	27+14.90

SERVICE TABLE			
FILING, BLOCK, LOT	STREET	SANITARY STATIONING	WATER STATIONING
F5,B5,L1	HOP CLOVER TRL	13+13.24	13+03.24
F5,B5,L2	HOP CLOVER TRL	13+58.24	13+48.24
F5,B5,L3	HOP CLOVER TRL	14+03.24	13+93.24
F5,B5,L4	HOP CLOVER TRL	14+48.24	14+38.24
F5,B5,L5	HOP CLOVER TRL	14+93.24	14+83.24
F5,B5,L6	HOP CLOVER TRL	15+38.24	15+28.24
F5,B6,L1	HOP CLOVER AVE	17+48.30	17+38.30
F5,B6,L2	HOP CLOVER AVE	18+08.30	17+98.30
F5,B6,L3	HOP CLOVER AVE	18+68.30	18+58.30
F5,B6,L4	HOP CLOVER AVE	19+39.55	19+29.55
F5,B6,L5	HOP CLOVER AVE	19+91.70	19+81.70
F5,B6,L6	HOP CLOVER AVE	20+56.05	20+46.05
F5,B6,L7	HOP CLOVER AVE	21+10.30	20+98.30
F5,B6,L8	HOP CLOVER AVE	21+99.40	21+89.40
F5,B6,L9	HOP CLOVER AVE	22+44.40	22+34.40
F5,B6,L10	HOP CLOVER AVE	22+89.40	22+79.40
F5,B6,L11	HOP CLOVER AVE	23+34.40	23+24.40
F5,B6,L12	HOP CLOVER AVE	23+79.40	23+69.40
F5,B6,L13	HOP CLOVER AVE	24+24.40	24+14.40
F5,B6,L14	HOP CLOVER AVE	24+69.40	24+59.40
F5,B6,L15	HOP CLOVER AVE	25+14.40	25+04.40
F5,B6,L16	HOP CLOVER AVE	25+59.40	25+49.40
F5,B6,L17	HOP CLOVER AVE	26+11.90	26+21.90
F16,B7,L21	BIRDS FOOT AVE	28+63.60	
F16,B7,L22	BIRDS FOOT AVE	28+40.92	
F16,B7,L23	BIRDS FOOT AVE	27+96.92	
F16,B7,L24	BIRDS FOOT AVE	27+76.92	
F16,B7,L25	BIRDS FOOT AVE	27+32.92	
F16,B7,L26	BIRDS FOOT AVE	27+12.92	
F16,B7,L27	BIRDS FOOT AVE	26+68.63	
F16,B7,L28	BIRDS FOOT AVE	26+48.92	



KEYMAP

N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	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	---	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
⊕	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
⊖	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊙	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK	---	PROPOSED WATER LATERAL W/ METER
⊖	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
⊗	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	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	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

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.

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.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILLSON
COLORADO P.E. 0050067

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 SCHEDULED 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: _____ DATE _____
(DISTRICT REPRESENTATIVE)

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ DATE _____
(DISTRICT ENGINEER)

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC 1-800-922-1987

10338 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

CVL CONSULTANTS

HR 935 LLC
7363 South Alton Way
CENTENNIAL, CO 80112

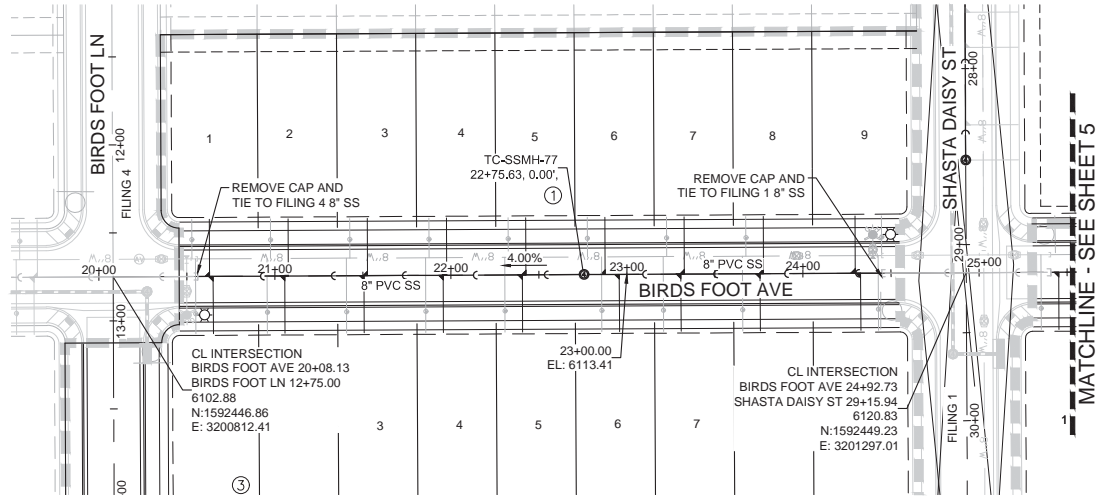
TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE: AS SHOWN
DRAWN BY: JLR
CHECKED BY: JLR
DATE: AUGUST 2017

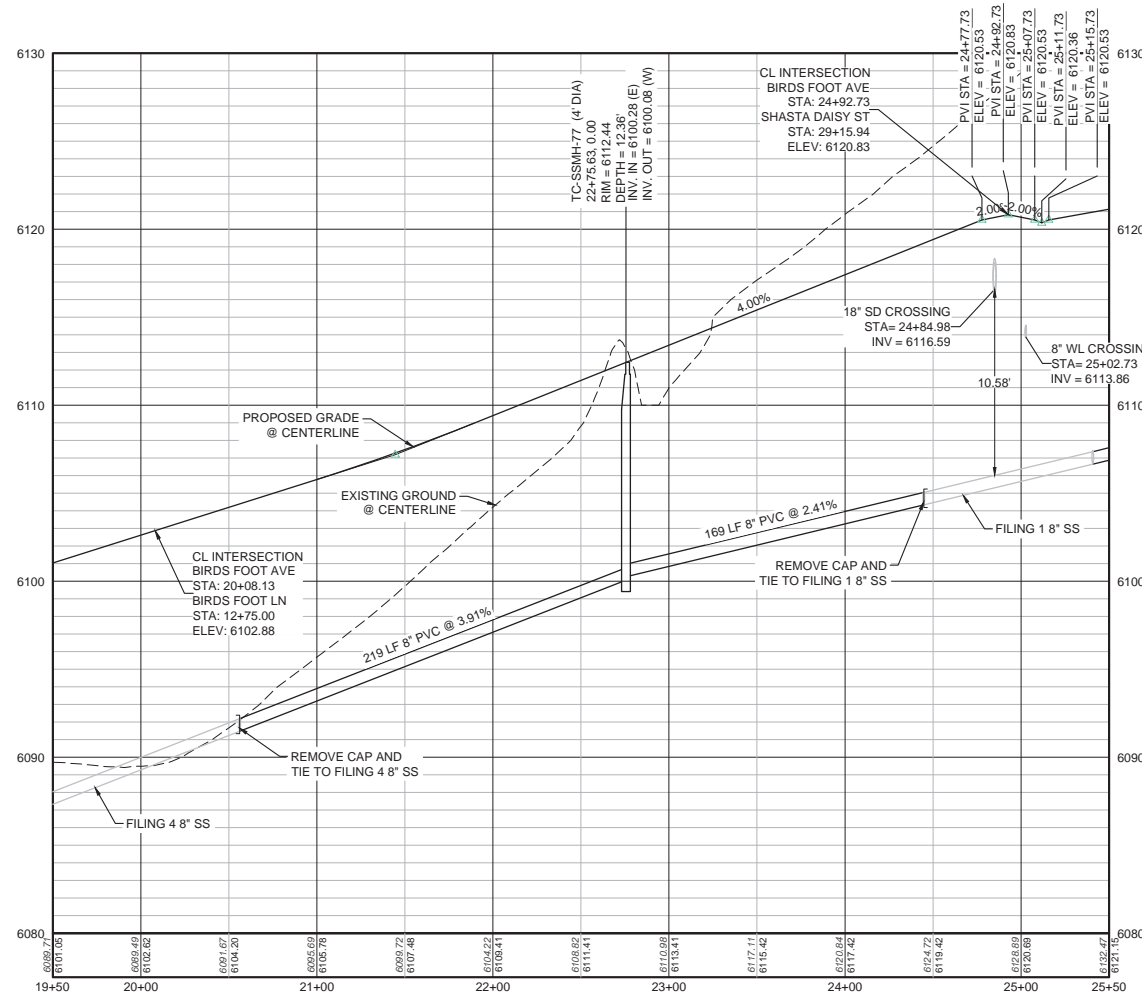
FILE NO: 8130283701

NO. _____ DATE _____
REVISIONS _____ DATE _____
APPR. _____ DATE _____

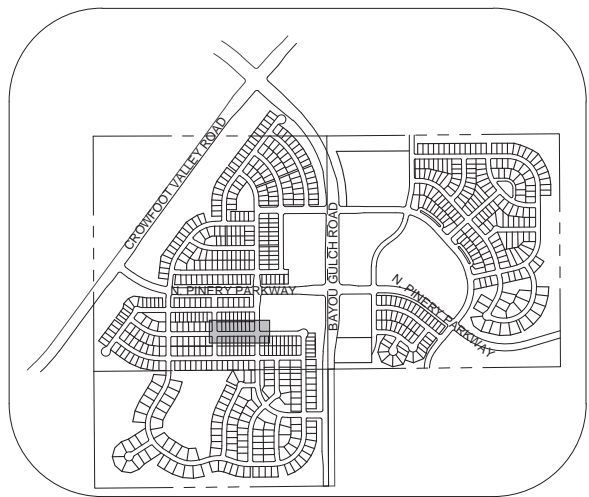
SHEET NUMBER **3**



PLAN: BIRDS FOOT AVENUE STA: 19+50.00 TO 25+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: BIRDS FOOT AVENUE STA: 19+50.00 TO 25+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



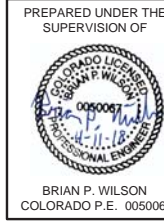
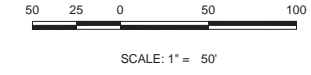
KEYMAP
N.T.S.
LEGEND

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	— — — — —	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	— — — — —	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	— — — — —	PROPOSED SEWER LATERAL WITH MANHOLE
⊕	PROPOSED LIGHT POLE	— — — — —	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	— — — — —	PROPOSED WATER LATERAL W/ METER
10.00	EXISTING ELEVATION	— — — — —	SECTION LINE
10.00	PROPOSED DESIGN ELEVATION	— — — — —	FILING BOUNDARY
⊕	PROPOSED STORM DRAIN INLET	— FO —	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN MANHOLE	— OH —	EXISTING OVERHEAD POWER
		— TEL —	EXISTING TELEPHONE LINE

FILING, BLOCK, LOT	STREET	STATIONING
F5,B1,L1	BIRDS FOOT AVE	20+62.94
F5,B1,L2	BIRDS FOOT AVE	21+07.63
F5,B1,L3	BIRDS FOOT AVE	21+52.63
F5,B1,L4	BIRDS FOOT AVE	21+97.63
F5,B1,L5	BIRDS FOOT AVE	22+42.63
F5,B1,L6	BIRDS FOOT AVE	22+87.63
F5,B1,L7	BIRDS FOOT AVE	23+32.63
F5,B1,L8	BIRDS FOOT AVE	23+77.63
F5,B1,L9	BIRDS FOOT AVE	24+32.73
F5,B3,L1	BIRDS FOOT AVE	20+64.94
F5,B3,L2	BIRDS FOOT AVE	21+05.63
F5,B3,L3	BIRDS FOOT AVE	21+50.63
F5,B3,L4	BIRDS FOOT AVE	21+95.63
F5,B3,L5	BIRDS FOOT AVE	22+40.63
F5,B3,L6	BIRDS FOOT AVE	22+95.63
F5,B3,L7	BIRDS FOOT AVE	23+30.63
F5,B3,L8	BIRDS FOOT AVE	23+75.63
F5,B3,L9	BIRDS FOOT AVE	24+29.73

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	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	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION



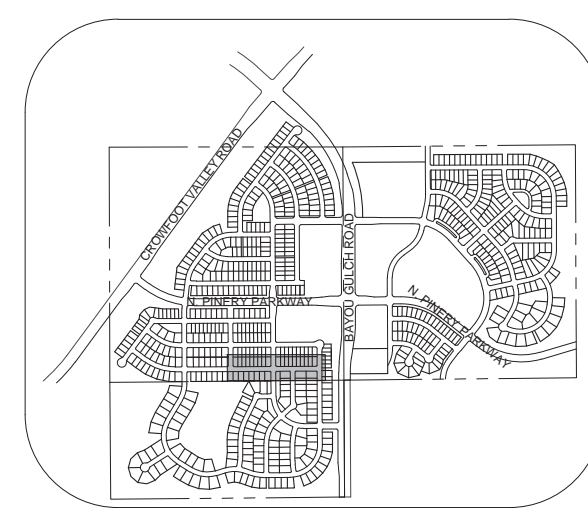
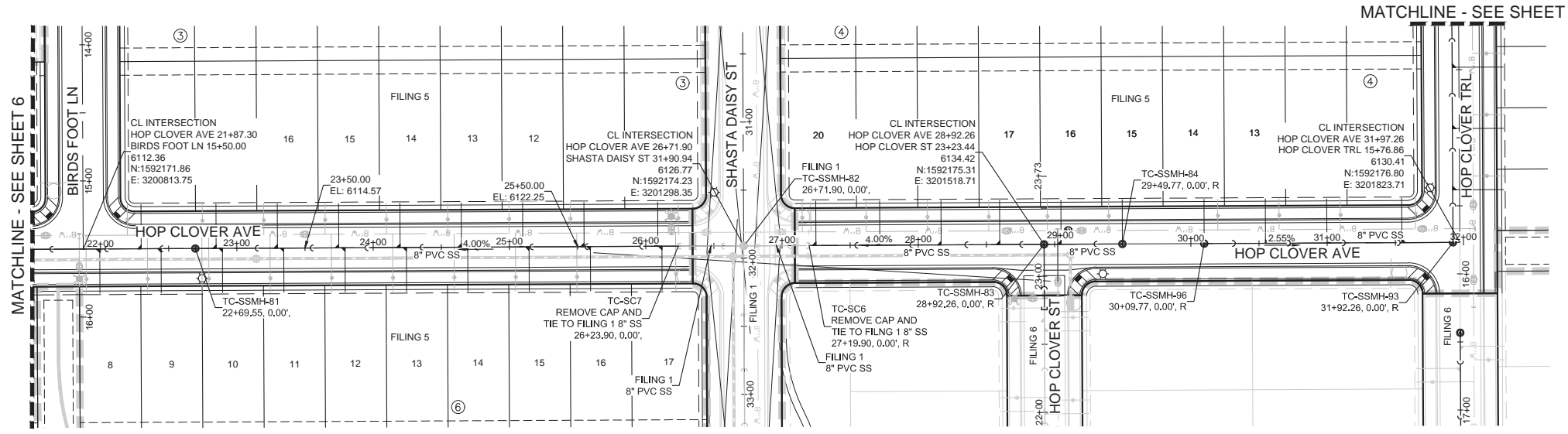
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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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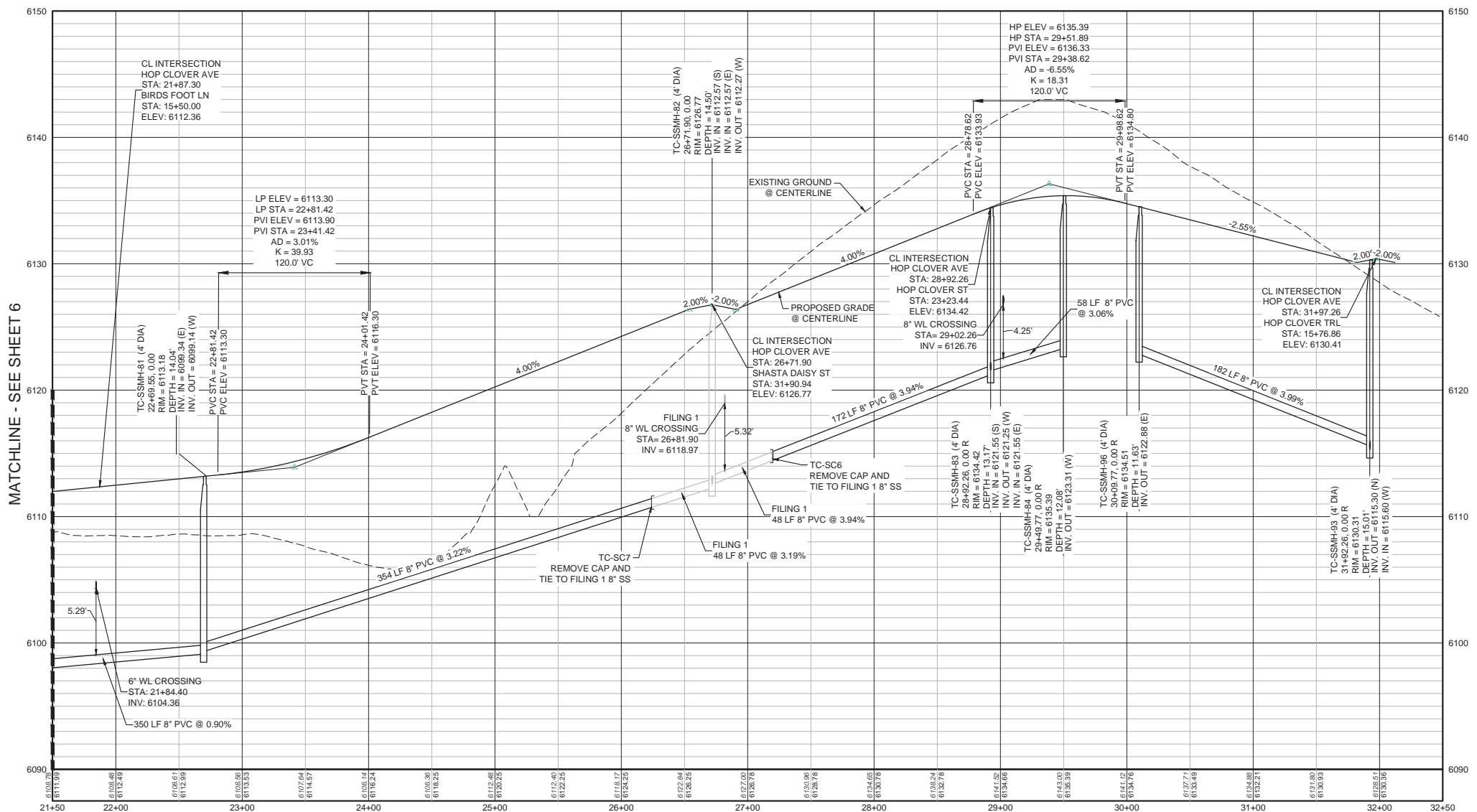
No.	Revisions	Date	Appr.	Date
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				
TRAILS AT CROWFOOT FILING 5 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN AND PROFILE BIRDS FOOT AVENUE				
SCALE:	AS SHOWN	FILE NO:	81302283701	
DRAWN BY:	KJD	CHECKED BY:	JJJ	DATE: AUGUST 2017
SHEET NUMBER	4			



PLAN: HOP CLOVER AVENUE STA: 21+50.00 TO 32+50.00
HORIZONTAL SCALE: 1" = 50'

KEYMAP
N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	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	— — — — —	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	— — — — —	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	— — — — —	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	— — — — —	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK	— — — — —	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	— — — — —	SECTION LINE
10.00	EXISTING ELEVATION	— — — — —	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	— — — — —	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	— — — — —	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	— — — — —	EXISTING TELEPHONE LINE

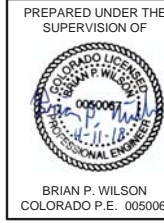


PROFILE: HOP CLOVER AVE STA: 21+50.00 TO 32+50.00
HORIZONTAL: 1" = 50'
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ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
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INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

NOTES:
1. SEE SHEET 3 FOR F5, B3, L10-18 & F5, B4, L11-20 & F5, B6, L8-17 FOR SANITARY SERVICE TABLES.



BRIAN P. WILSON
COLORADO P.E. 0050067

BENCHMARK
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Tel: (720) 482-9528
Fax: (720) 482-9546

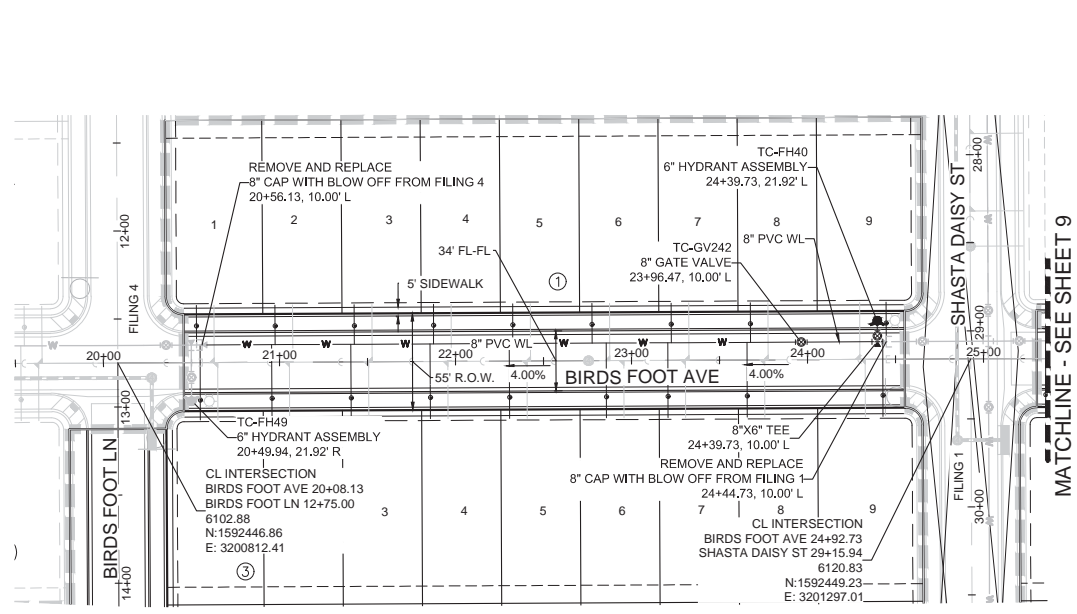
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7393 South Alton Way
CENTENNIAL, CO 80112

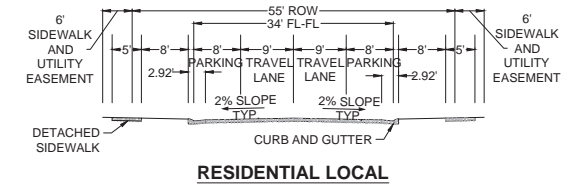
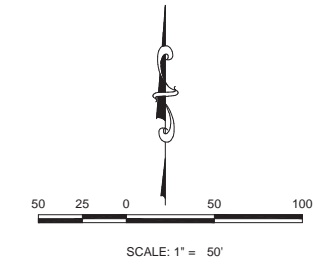
TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
HOP CLOVER AVENUE

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

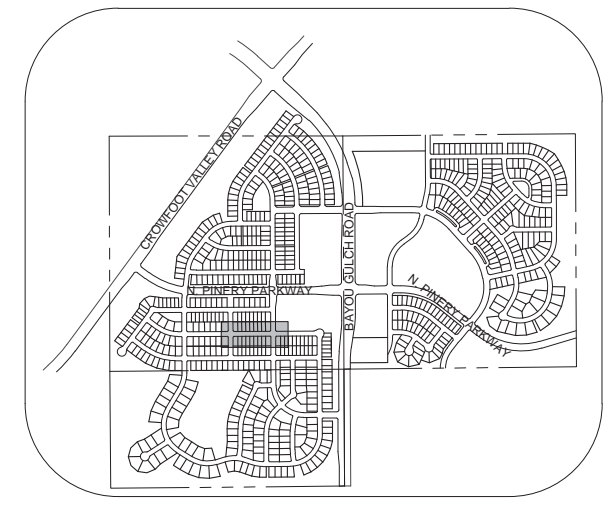
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PLAN: BIRDS FOOT AVE STA: 19+50.00 TO 25+50.00
HORIZONTAL SCALE: 1" = 50'



RESIDENTIAL LOCAL



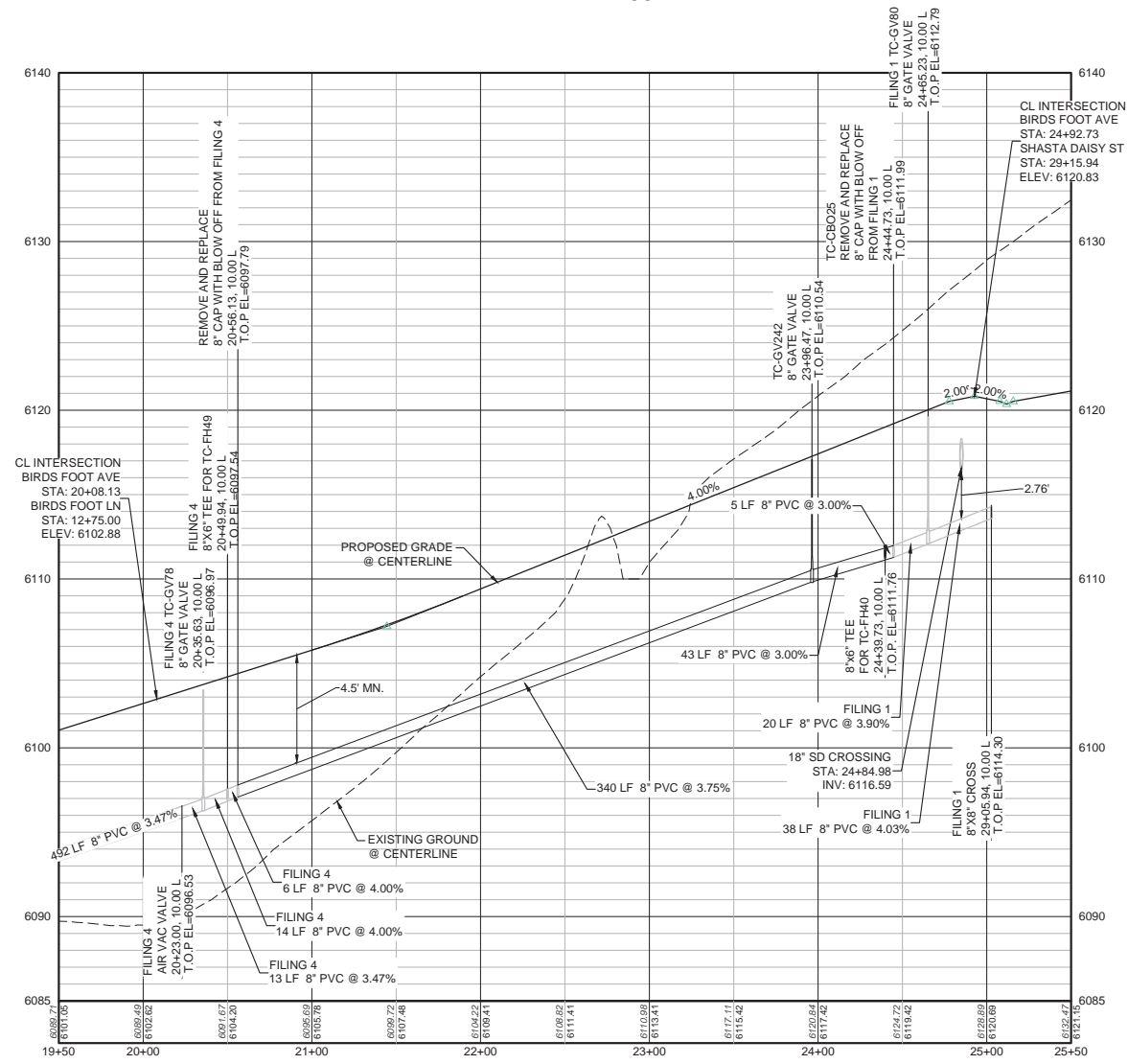
KEYMAP
N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
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6	LOT NUMBER	—	RIGHT-OF-WAY
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⊕	FUTURE PHASE VALVE	—	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	—	PROPOSED WATER LINE
⊕	PROPOSED LIGHT POLE	—	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK	—	SECTION LINE
⊕	PROPOSED SIDEWALK RAMP	—	FILING BOUNDARY
10.00	EXISTING ELEVATION	—	EXISTING FIBER OPTIC LINE
10.00	PROPOSED DESIGN ELEVATION	—	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN INLET	—	EXISTING TELEPHONE LINE
⊕	PROPOSED STORM DRAIN MANHOLE	—	

ABBREVIATIONS

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LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F5.B1.L1	BIRDS FOOT AVE	20+52.94
F5.B1.L2	BIRDS FOOT AVE	20+97.63
F5.B1.L3	BIRDS FOOT AVE	21+42.63
F5.B1.L4	BIRDS FOOT AVE	21+87.63
F5.B1.L5	BIRDS FOOT AVE	22+32.63
F5.B1.L6	BIRDS FOOT AVE	22+77.63
F5.B1.L7	BIRDS FOOT AVE	23+22.63
F5.B1.L8	BIRDS FOOT AVE	23+67.63
F5.B1.L9	BIRDS FOOT AVE	24+44.73
F5.B3.L1	BIRDS FOOT AVE	20+54.94
F5.B3.L2	BIRDS FOOT AVE	20+95.63
F5.B3.L3	BIRDS FOOT AVE	21+40.63
F5.B3.L4	BIRDS FOOT AVE	21+85.63
F5.B3.L5	BIRDS FOOT AVE	22+30.63
F5.B3.L6	BIRDS FOOT AVE	22+85.63
F5.B3.L7	BIRDS FOOT AVE	23+20.63
F5.B3.L8	BIRDS FOOT AVE	23+65.63
F5.B3.L9	BIRDS FOOT AVE	24+42.73



PROFILE: BIRDS FOOT AVE STA: 19+50.00 TO 25+50.00
HORIZONTAL: 1" = 50'
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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

NO.	REVISIONS	DATE	INIT.	APPR.	DATE

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Suite 240
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Tel: (720) 483-9528
Fax: (720) 483-9546

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TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
BIRDS FOOT AVENUE

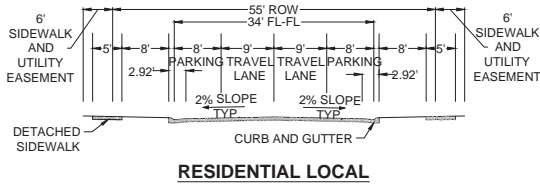
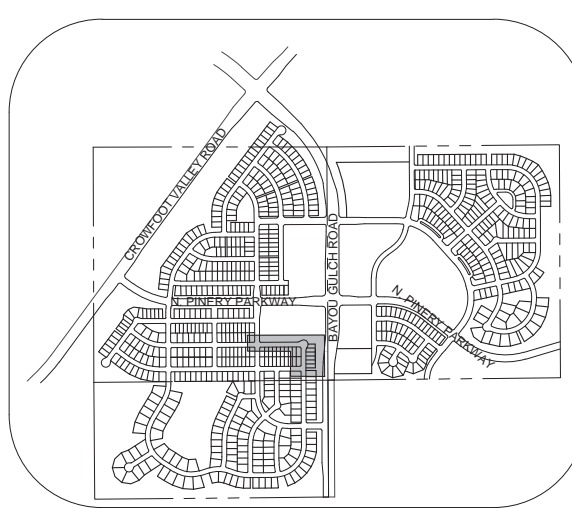
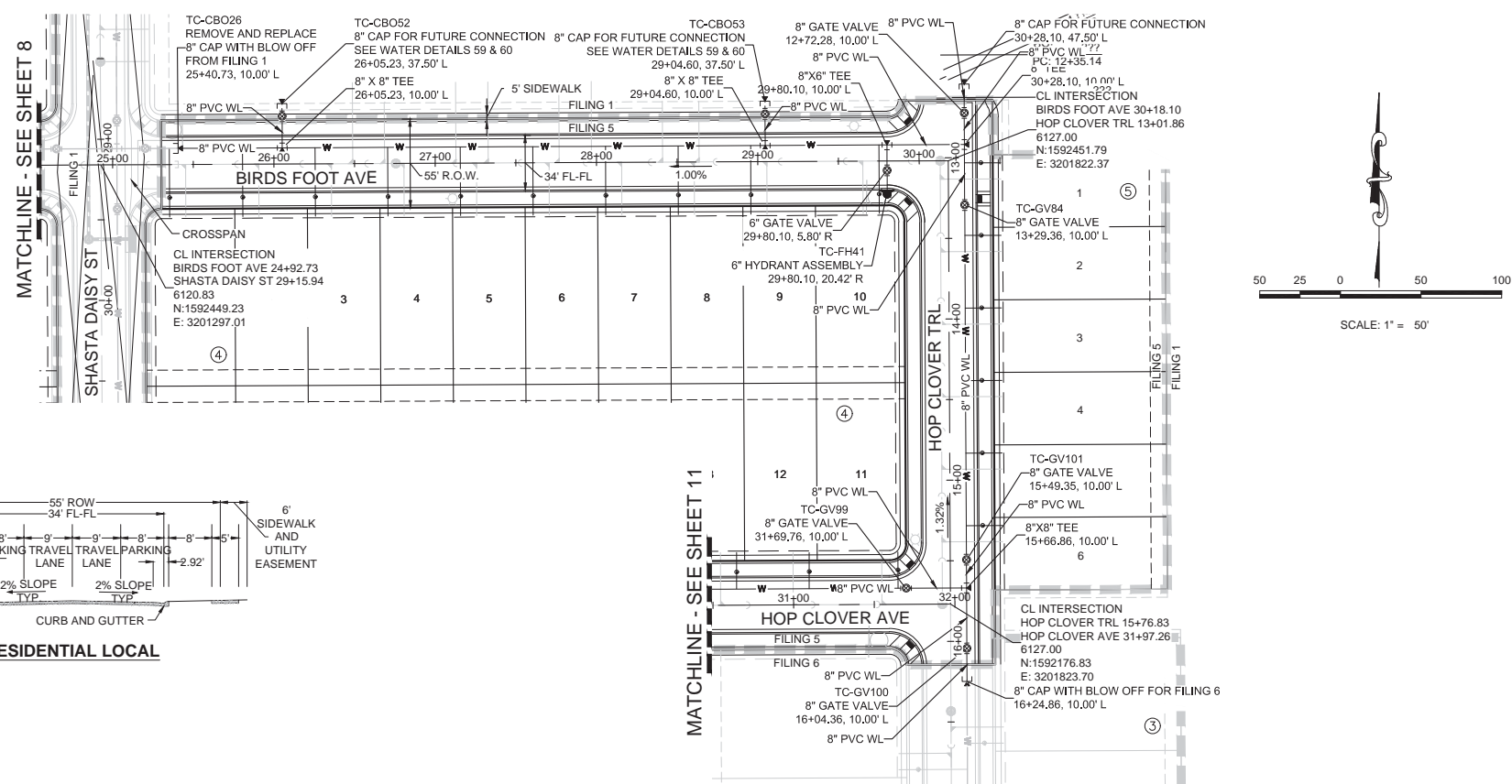
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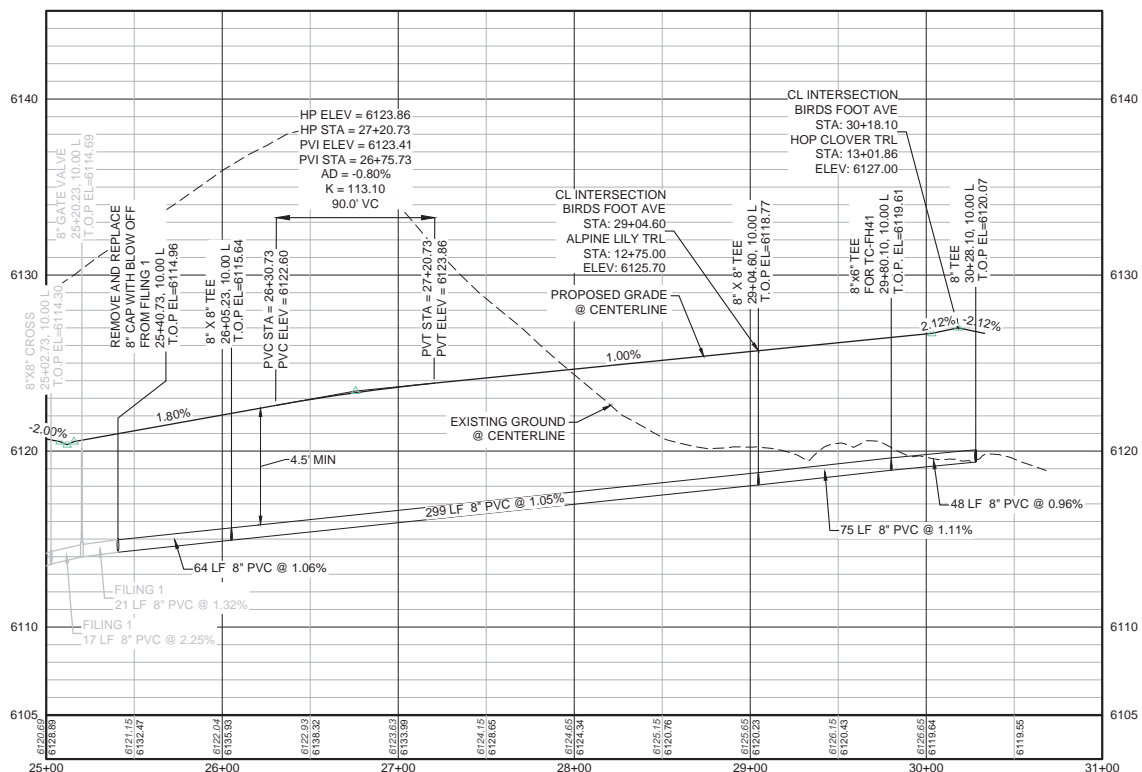
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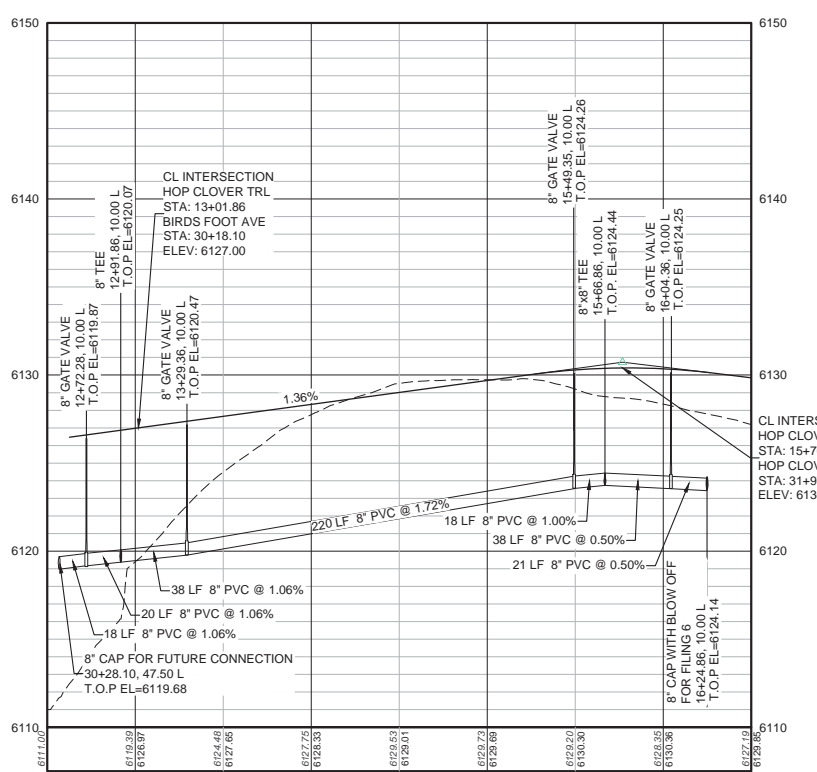
WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F5,B4,L1	BIRDS FOOT AVE	25+35.24
F5,B4,L2	BIRDS FOOT AVE	25+80.60
F5,B4,L3	BIRDS FOOT AVE	26+25.60
F5,B4,L4	BIRDS FOOT AVE	26+70.60
F5,B4,L5	BIRDS FOOT AVE	27+15.60
F5,B4,L6	BIRDS FOOT AVE	27+60.60
F5,B4,L7	BIRDS FOOT AVE	28+05.60
F5,B4,L8	BIRDS FOOT AVE	28+50.60
F5,B4,L9	BIRDS FOOT AVE	28+95.60
F5,B4,L10	BIRDS FOOT AVE	29+75.10
F5,B5,L1	HOP CLOVER TRL	13+03.24
F5,B5,L2	HOP CLOVER TRL	13+48.24
F5,B5,L3	HOP CLOVER TRL	13+93.24
F5,B5,L4	HOP CLOVER TRL	14+38.24
F5,B5,L5	HOP CLOVER TRL	14+83.24
F5,B5,L6	HOP CLOVER TRL	15+28.24



PLAN: BIRDS FOOT AVE STA: 25+00.00 TO 31+00.00 & HOP CLOVER TRL STA: 12+50.00 TO 16+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: BIRDS FOOT AVE STA: 25+00.00 TO 31+00.00
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PROFILE: HOP CLOVER TRL STA: 12+50.00 TO 16+50.00
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LEGEND	
(2)	BLOCK NUMBER
(A)	LOT TYPE
6	LOT NUMBER
(B)	PROPOSED BUTTERFLY VALVE
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(N)	PROPOSED SIDEWALK
(O)	PROPOSED SIDEWALK RAMP
(P)	10.00 EXISTING ELEVATION
(Q)	10.00 PROPOSED DESIGN ELEVATION
(R)	PROPOSED STORM DRAIN INLET
(S)	PROPOSED STORM DRAIN MANHOLE
(T)	PROPOSED RANGE POINT
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(Z)	PROPOSED SLOPE & DIRECTION
(AA)	5615 EXISTING 5' CONTOUR
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TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
BIRDFOOT AVENUE & HOP CLOVER TRAIL

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RHR
CHECKED BY: JJJ
DATE: AUGUST 2017

SHEET NUMBER: 9

No. Revisions: _____
Date: _____
Init.: _____
Date: _____
Apr.: _____
Date: _____

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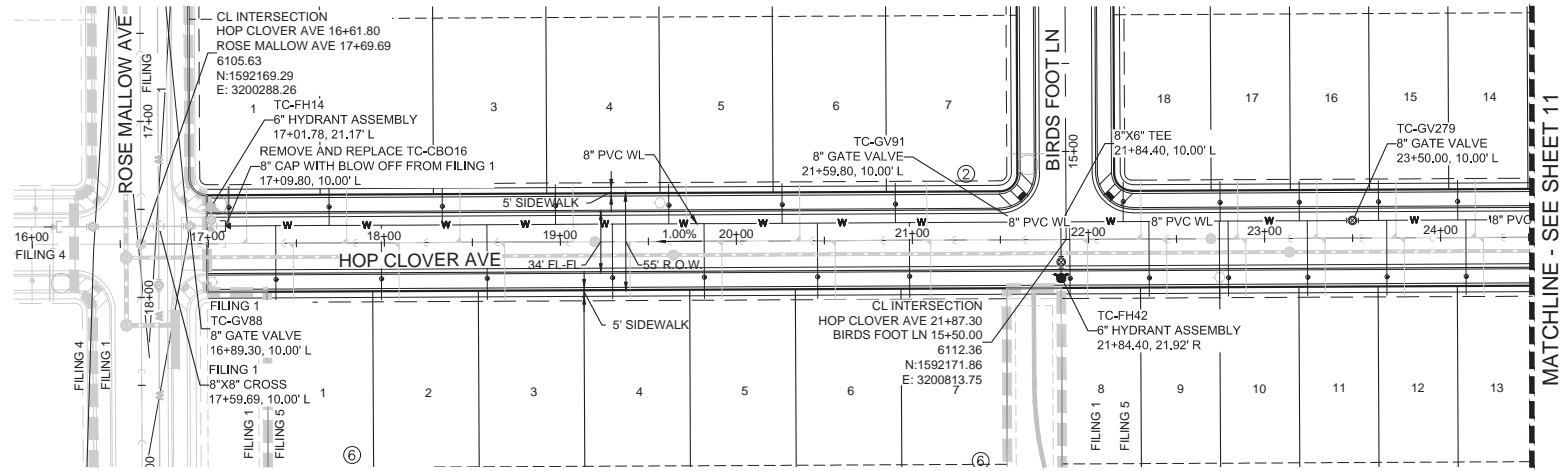
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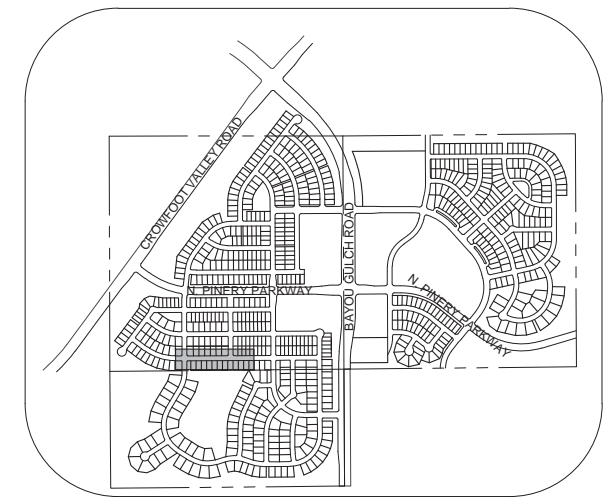
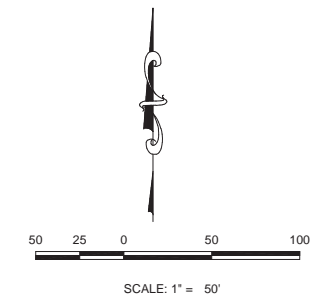
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BRIAN P. WILSON
COLORADO P.E. 0050067

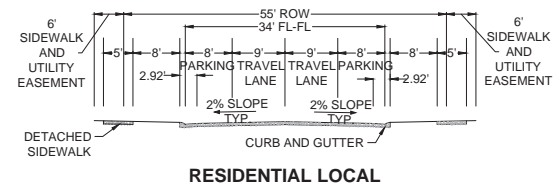


PLAN: HOP CLOVER AVE STA: 16+00.00 TO 24+50.00
HORIZONTAL SCALE: 1" = 50'



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	— — — — —	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	— — — — —	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	— — — — —	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	— — — — —	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK	— — — — —	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	— — — — —	SECTION LINE
10.00	EXISTING ELEVATION	— — — — —	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	— — — — —	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	— — — — —	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	— — — — —	EXISTING TELEPHONE LINE



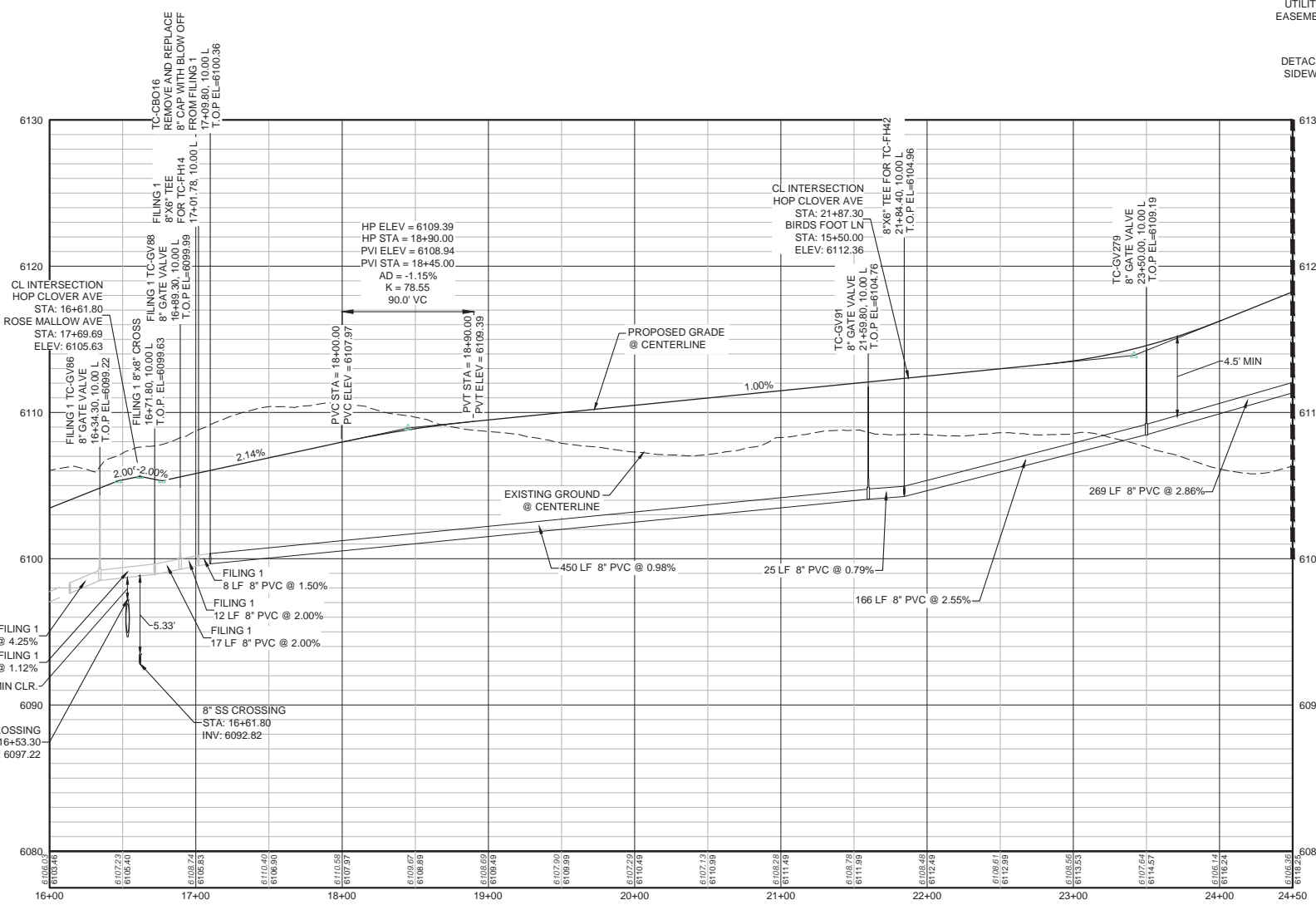
RESIDENTIAL LOCAL

WATER SERVICE TABLE

FILING, BLOCK, LOT	STREET	STATIONING
F5,B2,L1	HOP CLOVER AVE	17+11.78
F5,B2,L2	HOP CLOVER AVE	17+68.65
F5,B2,L3	HOP CLOVER AVE	18+33.00
F5,B2,L4	HOP CLOVER AVE	18+97.35
F5,B2,L5	HOP CLOVER AVE	19+61.70
F5,B2,L6	HOP CLOVER AVE	20+26.05
F5,B2,L7	HOP CLOVER AVE	20+90.40
F5,B3,L14	HOP CLOVER AVE	24+09.80
F5,B3,L15	HOP CLOVER AVE	23+64.80
F5,B3,L16	HOP CLOVER AVE	23+19.80
F5,B3,L17	HOP CLOVER AVE	22+74.80
F5,B3,L18	HOP CLOVER AVE	22+19.80
F5,B6,L1	HOP CLOVER AVE	17+38.30
F5,B6,L2	HOP CLOVER AVE	17+98.30
F5,B6,L3	HOP CLOVER AVE	18+58.30
F5,B6,L4	HOP CLOVER AVE	19+29.55
F5,B6,L5	HOP CLOVER AVE	19+81.70
F5,B6,L6	HOP CLOVER AVE	20+46.05
F5,B6,L7	HOP CLOVER AVE	20+98.30
F5,B6,L8	HOP CLOVER AVE	21+89.40
F5,B6,L9	HOP CLOVER AVE	22+34.40
F5,B6,L10	HOP CLOVER AVE	22+79.40
F5,B6,L11	HOP CLOVER AVE	23+24.40
F5,B6,L12	HOP CLOVER AVE	23+69.40

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCPC	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION



PROFILE: HOP CLOVER AVE STA: 16+00.00 TO 24+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 86 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.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

NO.	REVISIONS	DATE	INIT.	APPR.	DATE

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 882-9528
Fax: (720) 882-9546

CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

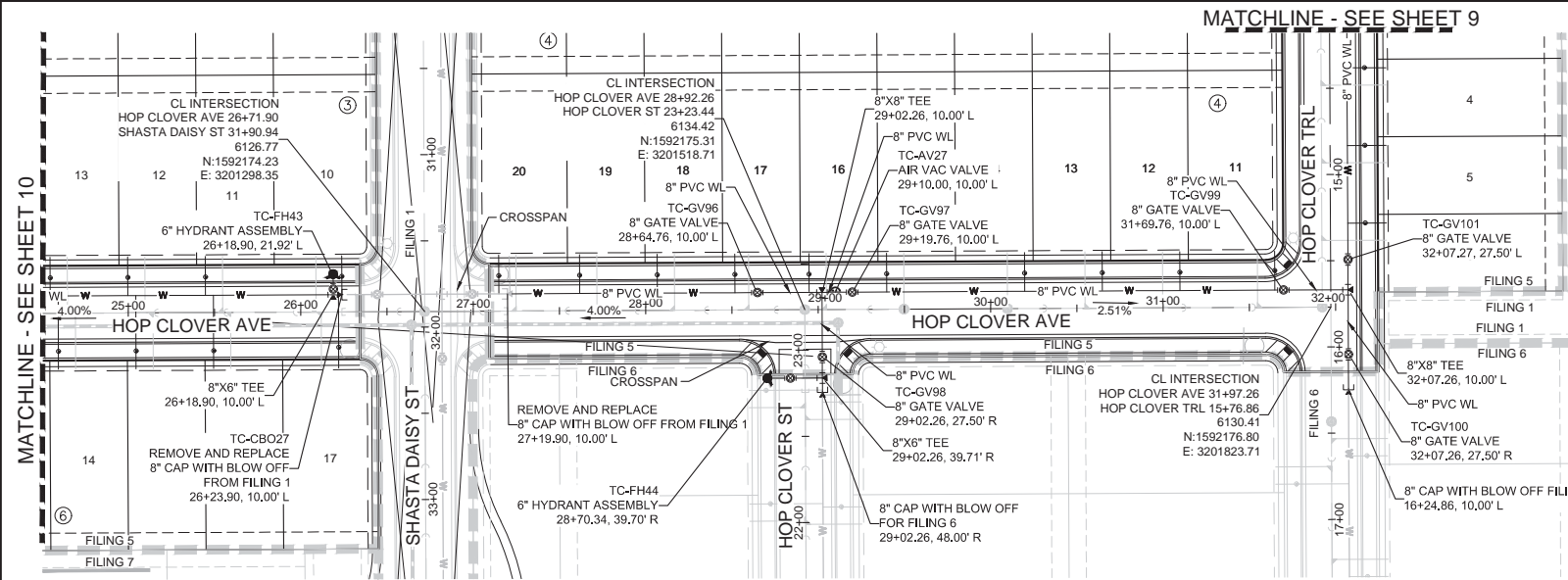
TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
HOP CLOVER AVENUE

SCALE: AS SHOWN
DRAWN BY: RHR
CHECKED BY: JJ
DATE: AUGUST 2017
FILE NO.: 8130283701

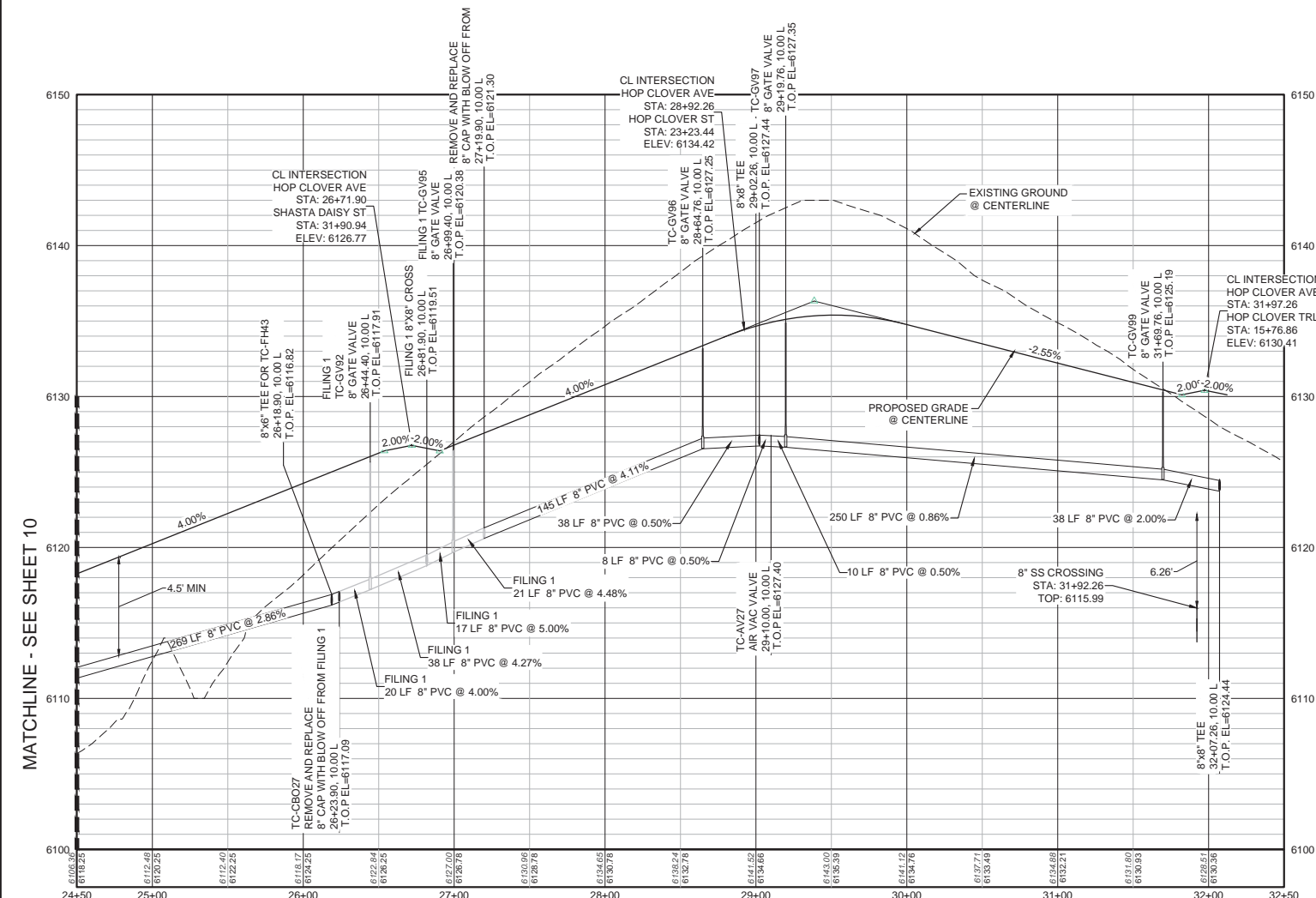
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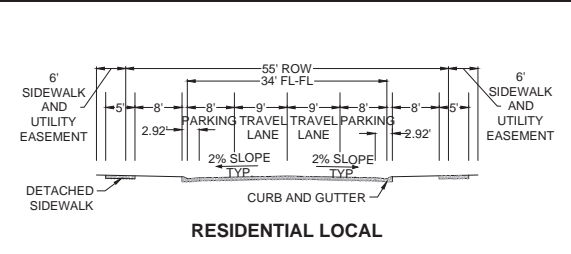
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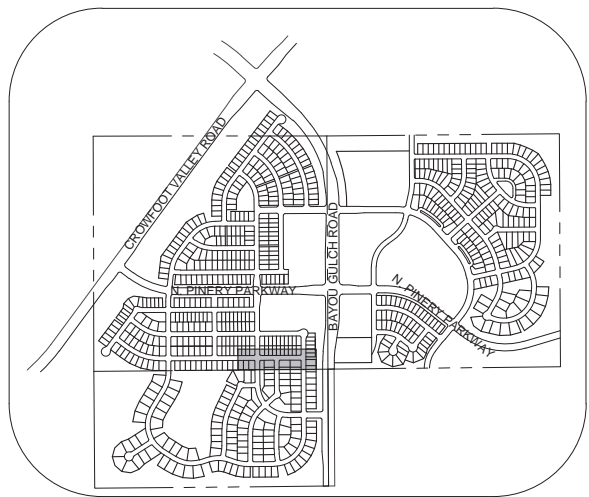
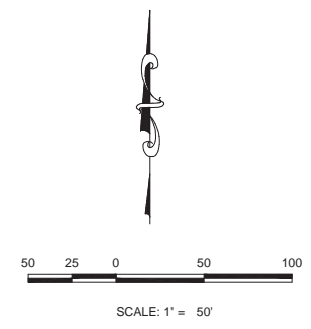
PLAN: HOP CLOVER AVE STA: 24+50.00 TO 32+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: HOP CLOVER AVE STA: 24+50.00 TO 32+50.00
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RESIDENTIAL LOCAL



KEYMAP
N.T.S.

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
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⊕	PROPOSED LIGHT POLE	— — — — —	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK	— — — — —	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	— — — — —	SECTION LINE
10.00	EXISTING ELEVATION	— — — — —	FILING BOUNDARY
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K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

NOTES:
1. SEE SHEET 3 FOR F5, B3, L10-13 & F5, B4, L11-20 & F5, B5, L4-6 & F5, B6, L13-17 WATER SERVICE TABLES.

PROFILE: HOP CLOVER ST STA: 22+50.00 TO 23+75.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

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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 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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UNCC 1-800-922-1987

DATE			
APPROVED			
INITIALS			
DATE			
REVISIONS			
NO.			
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112			
TRAILS AT CROWFOOT FILING 5 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE HOP CLOVER AVENUE			
SCALE:	AS SHOWN	FILE NO.:	8130283701
DRAWN BY:	RHR	CHECKED BY:	JU
DATE:	AUGUST 2017		
SHEET NUMBER	11		

ALUMINUM STEP

NOTES:

- ALUMINUM ALLOY SPECIFICATIONS
 - FED SPEC. QQ-A-200/9 (ALUMINUM-MAGNESIUM-SILICATE ALLOY)
 - MINIMUM TENSILE STRENGTH= 35,000 p.s.i.
 - MINIMUM YIELD STRENGTH= 35,000 p.s.i.
 - MINIMUM ELONGATION=10% IN 2
- MINIMUM LOAD CAPACITY (APPLIED AT CENTER OF STEP)
 - 1000 LB. WITH 6" PROJECTION FROM WALL
 - 1500 LB. WITH 4" PROJECTION FROM WALL
- WEIGHT PER STEP=2.23 POUNDS
- STEPS TO BE CAST, UNALTERED, IN MAN-HOLE WALL IN STRAIGHT LINE, VERTICALLY, AT THE SAME TIME THE BARREL OR CONE SECTIONS ARE CAST.
- VERTICAL SPACING BETWEEN STEPS SHALL BE CONSISTENT IN EACH INDIVIDUAL MANHOLE.
- 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 MANHOLES UNLESS OTHERWISE SPECIFIED.

TYPICAL INSTALLATION

TOE POCKET DETAILS

STANDARD EXTRUDED ALUMINUM MANHOLE STEP

PARKER WATER & SANITATION DISTRICT
STANDARD EXTRUDED ALUMINUM MANHOLE STEP

SCALE: NONE DATE: 2/96
 APPROVED: PVR 01/16 10/16
 DIRECTOR OF ENGINEERING

POLYPROPYLENE REINFORCED PLASTIC STEP

NOTES:

- ASTM SPECIFICATIONS:
 - ASTM C-118
 - ASTM A-815 GRADE 60 (STEEL ROD)
 - ASTM 2145-89, TYPE 1, GRADE 1000 (POLYPROPYLENE)
- STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 3/4" INCH LEG AND SHALL PROJECT FROM THE WALL 8-7/8 INCHES.
- STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8-7/8 INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8 INCHES.
- ALL STEPS SHALL MAKE A PENETRATION DEPTH INTO THE WALL OF 3-3/8 INCHES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.
- INSTALL STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 P.S.I. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GRouted IN PLACE.

PARKER WATER & SANITATION DISTRICT
POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP

SCALE: NONE DATE: 2/96
 APPROVED: PVR 01/16 10/16
 DIRECTOR OF ENGINEERING

CAST ALUMINUM MANHOLE STEP

NOTES:

- THE CAST ALUMINUM MANHOLE STEP SHALL ONLY BE USED WHEN SPECIFIED ON THE DRAWINGS.
- ALUMINUM ALLOY SPECIFICATIONS:
 - ALLOY DESIGNATION: ALMAG 35
 - MIN. TENSILE STRENGTH: 40 K.S.I.
 - MIN. YIELD STRENGTH: 20 K.S.I.
 - MIN. SHEAR STRENGTH: 27.45 K.S.I.
 - ELONGATION: 10% IN 2
 - BRENNEL HARDNESS: 70
- 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.
- MIN. WT. = 2.0 LB.

PARKER WATER & SANITATION DISTRICT
CAST ALUMINUM MANHOLE STEP

SCALE: NONE DATE: 2/96
 APPROVED: PVR 01/16 10/16
 DIRECTOR OF ENGINEERING

MARKER POST DETAIL

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

BEDROCK 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: PVR 2/00 10/16 4/01 1/06 1/19
 DIRECTOR OF ENGINEERING

TYPICAL TRENCH DETAIL

NOTES:

- Spacing or benching of trench side walls with applicable shoring, struts and local safety regulations.
- Trench shall be benched and shored as necessary to limit earth settling and to protect adjacent existing structures, unless otherwise specified in the plans. No settlement will be made for removal, replacement or relocation of earth and utility, utilities, structures, etc. within the maximum depth of excavation or shoring and the contractor shall be responsible for protection of work.
- If dimension B_2 is $< 4'$, then existing asphalt pavement shall be removed and replaced up to the gutter. Minimum subgrade pay width, B_2 shall then be based upon this subgrade width.

PARKER WATER & SANITATION DISTRICT
SEWER TRENCHING AND BEDDING DETAIL

SCALE: NONE DATE: 2/96
 APPROVED: PVR 01/16 1/06 10/16
 DIRECTOR OF ENGINEERING

2016 REVISION SHEET 53.10

2016 REVISION SHEET 53.11

2016 REVISION SHEET 53.12

2016 REVISION SHEET 53.13

2016 REVISION SHEET 53.14

CONCRETE ARCH

CONCRETE CRADLE CLASS "A" BEDDING

TABLE III

NOMINAL DIAMETER (D)	MINIMUM THICKNESS (t)	MIN. WIDTH OF CRADLE (B ₁)
18" & smaller	6"	B ₁ = 6"
21" to 24"	6"	B ₁ = 6"
27" to 33"	8"	B ₁ = 8"
36" to 42"	10"	1.25 B ₁
48" & larger	1/4 D	1.25 B ₁

PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "A"

SCALE: NONE DATE: 2/96
 APPROVED: PVR 1/16 10/16
 DIRECTOR OF ENGINEERING

IDEAL TRENCH CONDITIONS

CLASS "B" BEDDING

TABLE IV

MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE	PIPE SIZE - D	B ₂
18" & SMALLER	6"	6"
21" TO 24"	6"	6"
27" TO 36"	6"	6"
42" TO 60"	6"	6"
66" TO 96"	6"	6"
104" & LARGER	12"	12"

PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"

SCALE: NONE DATE: 2/96
 APPROVED: PVR 3/98 2/00 1/16 10/16
 DIRECTOR OF ENGINEERING

ROCK EXCAVATION

CLASS "B" BEDDING

TABLE IV

MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE	PIPE SIZE - D	B ₂
18" & SMALLER	6"	6"
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27" TO 36"	6"	6"
42" TO 60"	6"	6"
66" TO 96"	6"	6"
104" & LARGER	12"	12"

PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"

SCALE: NONE DATE: 2/96
 APPROVED: PVR 3/98 2/00 1/16 10/16
 DIRECTOR OF ENGINEERING

UNSTABLE SUBGRADE CONDITION

CLASS "B" BEDDING

TABLE IV

MIN. DEPTH OF BEDDING MAT'L. BELOW BOTTOM OF PIPE	PIPE SIZE - D	B ₂
18" & SMALLER	6"	6"
21" TO 24"	6"	6"
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PARKER WATER & SANITATION DISTRICT
TRENCHING AND BEDDING DETAIL - CLASS "B"

SCALE: NONE DATE: 2/96
 APPROVED: PVR 3/98 2/00 1/16 10/16
 DIRECTOR OF ENGINEERING

CONCRETE ENCASEMENT FOR SANITARY SEWERS (CONCRETE ARCH)

GENERAL NOTES FOR TYPE I & II ENCASEMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED IN BOTTOM HALF OF ENCASEMENT IS FLOURED SEPARATELY. A ONE INCH LAYER OF SAND OR SORTEK SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASEMENT PER:
 - TYPE I & II ENCASEMENT SHALL EXTEND FULL TRENCH WITH EXCAVATION FOR PROPOSED SEWER OR CONDUIT.
 - TYPE I ENCASEMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
 - UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I & II ENCASEMENT SHALL NOT BE REQUIRED. REINFORCING, IF REQUIRED, SHALL BE SPECIFIED AND DETAIL SEPARATELY ON PLAN & PROFILE DRAWINGS.
 - TYPE I OR II ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR II IF $D \le 18"$ (E.G. 18" DIA.) EXCEPT FOR SANITARY SEWER CROSSINGS OVER OR UNDER WATER MAINS.
 - TYPE I OR II IF $D \le 24"$ (E.G. 24" DIA.) EXCEPT FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS UNLESS OTHERWISE NOTED.
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, ENCASEMENT SHALL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS SATISFACTORY, REINFORCED DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASEMENT MAY BE REQUIRED.
 - FILLER MATERIAL BETWEEN CONCRETE TO SO:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC.
 - COMPACTED CLASS "B" BEDDING IF $B_2 \le 6"$ AND $B_2 > 6"$ (E.G. 8" DIA.) TYPE II ENCASEMENT FOUR CONCRETE ON UNDISTURBED SOIL.
 - SHORING OR STRUTS, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.
 - THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDITIONS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
 - IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PER SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAIL SEPARATELY ON PLAN AND PROFILE DRAWINGS.

PARKER WATER & SANITATION DISTRICT
CONCRETE ENCASEMENT TYPE I

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

2016 REVISION SHEET 53.2

2016 REVISION SHEET 53.3

2016 REVISION SHEET 53.4

2016 REVISION SHEET 53.5

2008 REVISION SHEET 6

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10333 E. Dry Creek Rd.
 Suite 240
 Englewood, CO 80112
 Tel: (720) 885-2628
 Fax: (720) 882-9546

CVL CONSULTANTS

DATE: AUGUST 2017

FILE NO: 8130283701

SCALE: AS SHOWN

DRAWN BY: JF

CHECKED BY: JJ

DATE: AUGUST 2017

NO. REVISIONS

DATE

INIT.

APPR.

DATE

TRAILS AT CROWFOOT
 FILING 5 CONSTRUCTION DRAWINGS
 SANITARY SEWER DETAILS

HR 935 LLC
 7353 South Alton Way
 CENTENNIAL, CO 80112

SCALE: AS SHOWN

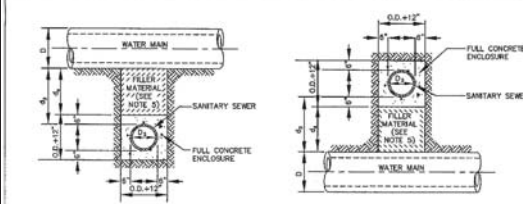
FILE NO: 8130283701

DRAWN BY: JF

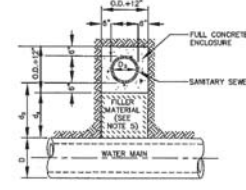
CHECKED BY: JJ

DATE: AUGUST 2017

SHEET NUMBER 13



TYPE IIa
SANITARY SEWER CROSSING UNDER WATER MAIN
IF 4" > 2 ft, ENCASMENT NOT REQUIRED



TYPE IIb
SANITARY SEWER CROSSING OVER TOP OF WATER MAIN
FULL ENCASMENT REQUIRED REGARDLESS OF DIMENSION 4"

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

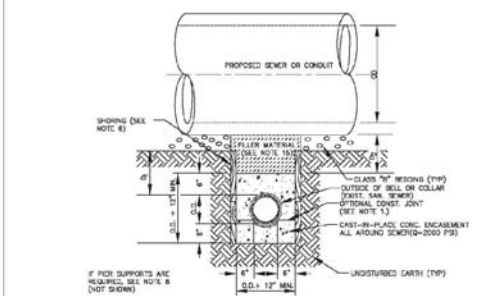
GENERAL NOTES FOR TYPE I & II ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF ORIGINAL CONSTRUCTION JOINT IS USED A BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL BE LAID BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCEPT FOR PROPOSED SEWER OR CONDUIT.
 - TYPE II ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I & II ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF 4" ϕ 12" (4" ϕ 12") EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE II IF 12" ϕ 24" (4" ϕ 24") EXCEPT FOR SANITARY SEWER CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION 4".
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (APRAX C-150 OR C-155), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC IF 4" ϕ 8" ϕ 8"
 - COMPACTED CLASS "B" BEDDING IF 4" ϕ 8" ϕ 8" OR 8" ϕ 8" FOR TYPE IIb ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OVER 20" DIAMETER SANITARY SEWER INSTALLATIONS. IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE 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 ENCASMENT TYPE II

SCALE: NONE	DATE: 2/06
APPROVED: PWR	3/08
	4/01
DIRECTOR OF ENGINEERING	1/08

2008 REVISION SHEET 7



TYPE III
CONCRETE ENCASMENT FOR SANITARY SEWERS (FULL ENCASMENT) NO SCALE

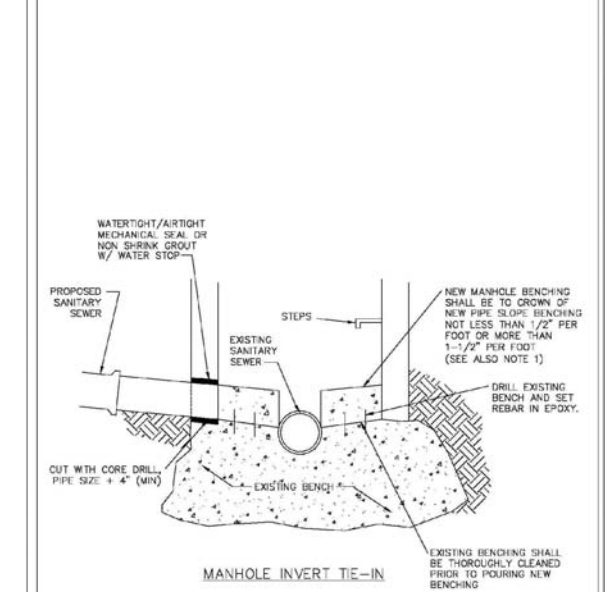
GENERAL NOTES FOR TYPE III ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF ORIGINAL CONSTRUCTION JOINT IS USED A BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCEPT FOR PROPOSED SEWER OR CONDUIT.
 - TYPE III ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I & II ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, TO BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF 4" ϕ 12" (4" ϕ 12") EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE II IF 12" ϕ 24" (4" ϕ 24") EXCEPT FOR SANITARY SEWER CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION 4".
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION 4".
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (APRAX C-150 OR C-155), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC IF 4" ϕ 8" ϕ 8"
 - COMPACTED CLASS "B" BEDDING IF 4" ϕ 8" ϕ 8" OR 8" ϕ 8" FOR TYPE III ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OVER 20" DIAMETER SANITARY SEWER INSTALLATIONS. IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE 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.
- CONDUIT ENCASED PIPING SHALL BE UNID WITH FELT LAYER.

PARKER WATER & SANITATION DISTRICT
CONCRETE ENCASMENT TYPE III

SCALE: NONE	DATE: 2/06
APPROVED: PWR	3/08
	1/15
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.8



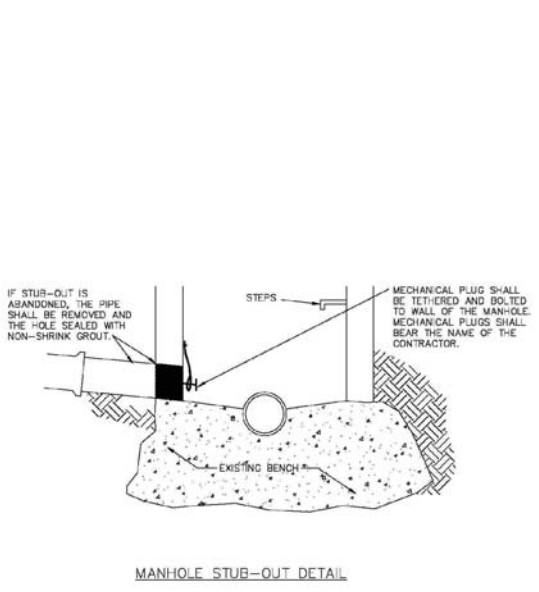
MANHOLE INVERT TIE-IN

NOTES
1 - NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

PARKER WATER & SANITATION DISTRICT
MANHOLE INVERT TIE-IN DETAIL

SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.9

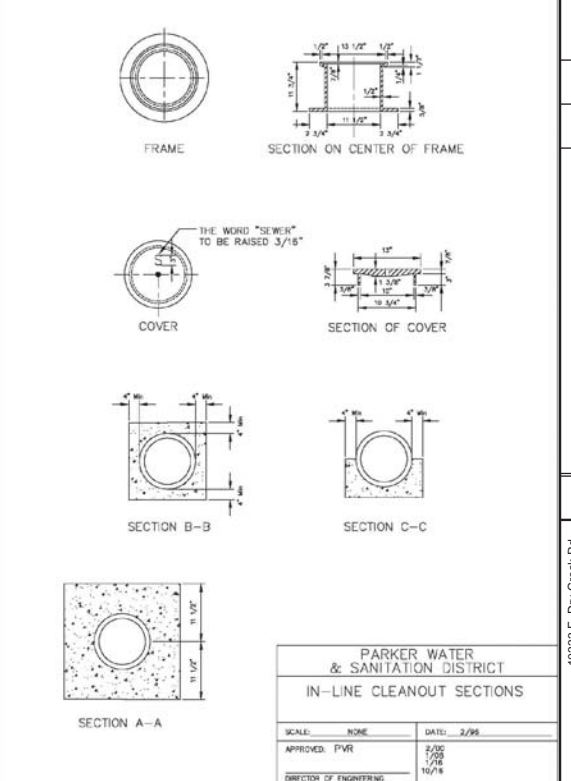


MANHOLE STUR-OUT DETAIL

PARKER WATER & SANITATION DISTRICT
MANHOLE STUR-OUT DETAIL

SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.10



PARKER WATER & SANITATION DISTRICT
IN-LINE CLEANOUT SECTIONS

SCALE: NONE	DATE: 2/06
APPROVED: PWR	2/06
	1/08
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.12

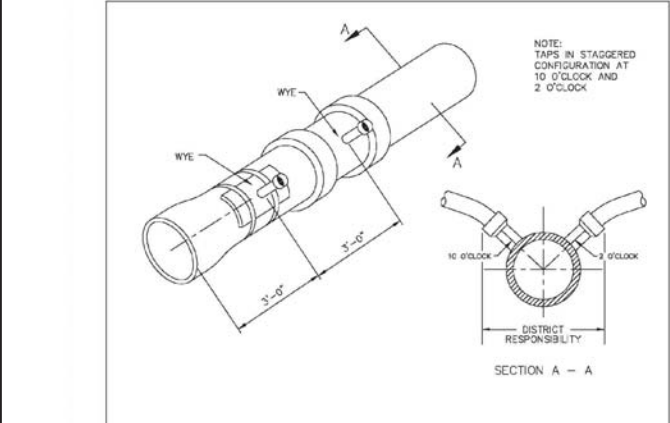
2008 REVISION SHEET 7

2016 REVISION SHEET 5A.8

2016 REVISION SHEET 5A.9

2016 REVISION SHEET 5A.10

2016 REVISION SHEET 5A.12



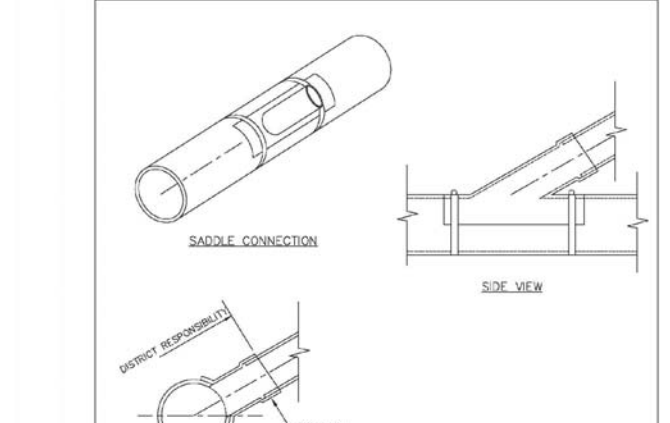
DOMESTIC SEWER TAPPING DETAIL

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

PARKER WATER & SANITATION DISTRICT
DOMESTIC SEWER TAPPING DETAIL

SCALE: NONE	DATE: 2/06
APPROVED: PWR	4/01
	1/08
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.13



P.V.C. SADDLE CONNECTION DETAIL

NOTES:
1. SADDLE FITTINGS TO BE PER ASTM D3034.
2. CONNECTION SHALL BE Y - SADDLE WITH TWO BONDS

PARKER WATER & SANITATION DISTRICT
P.V.C. SADDLE CONNECTION DETAIL

SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.14

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HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

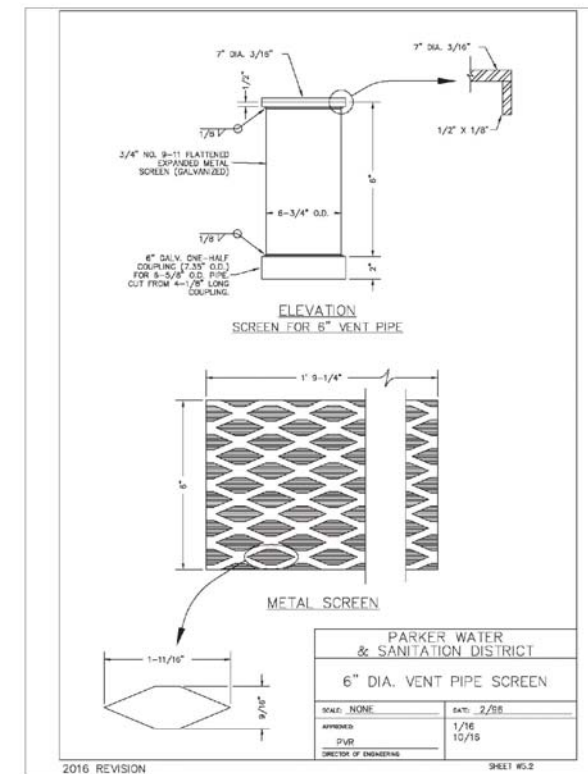
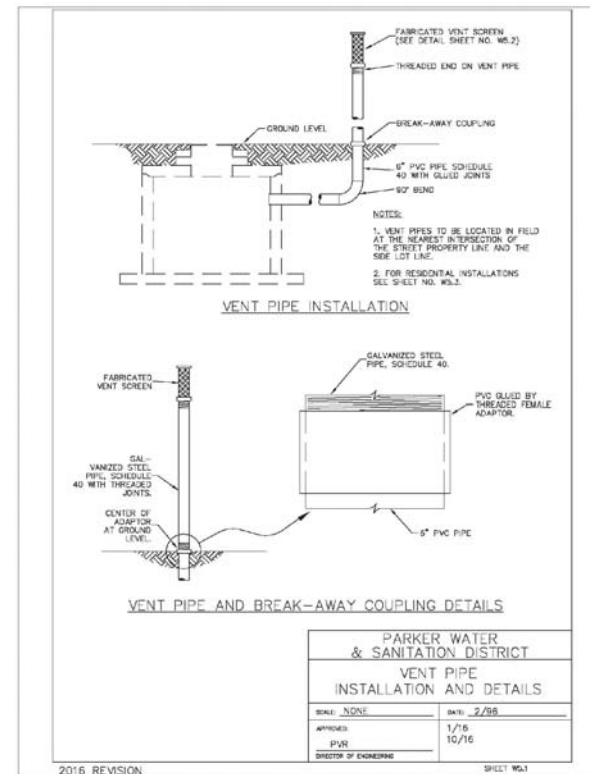
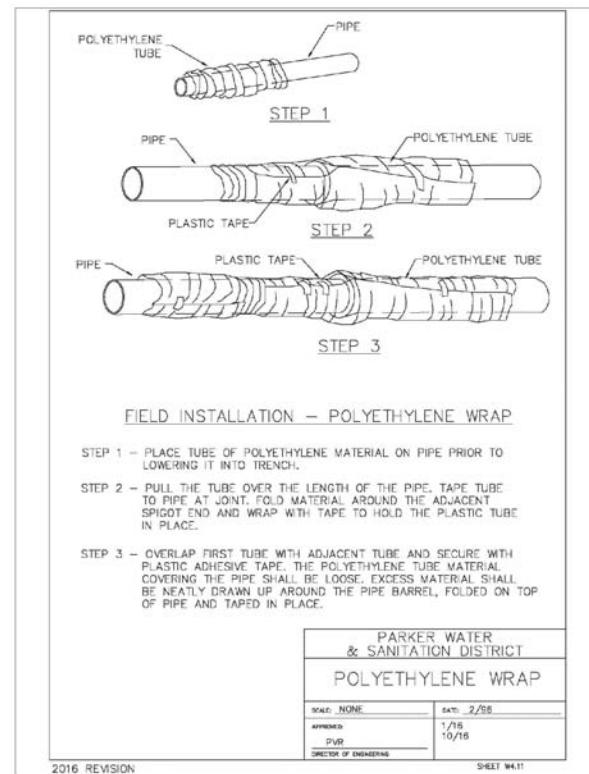
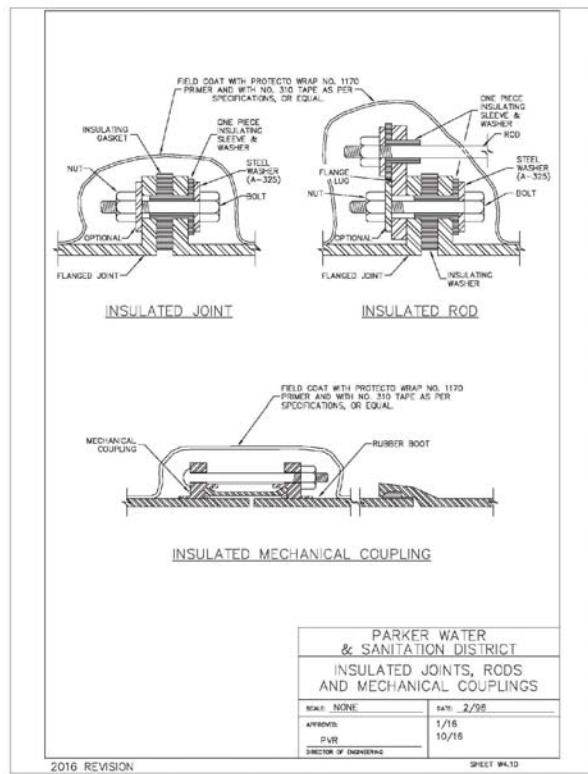
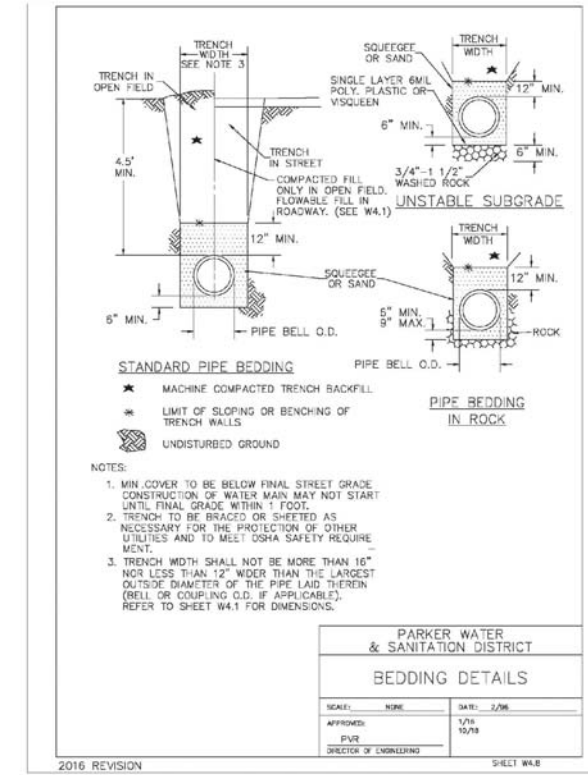
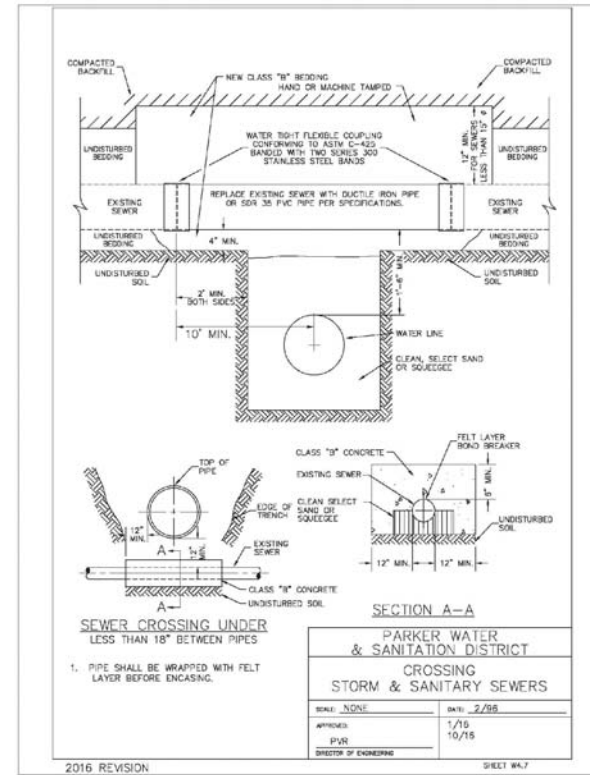
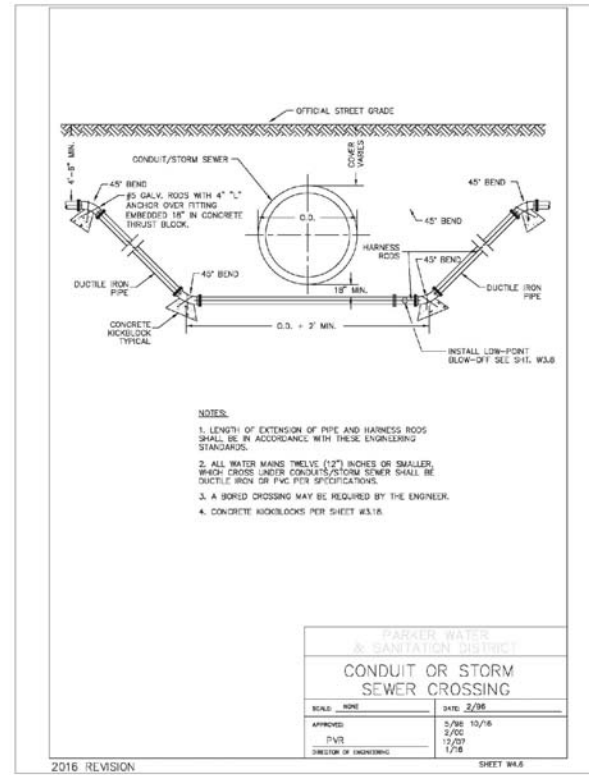
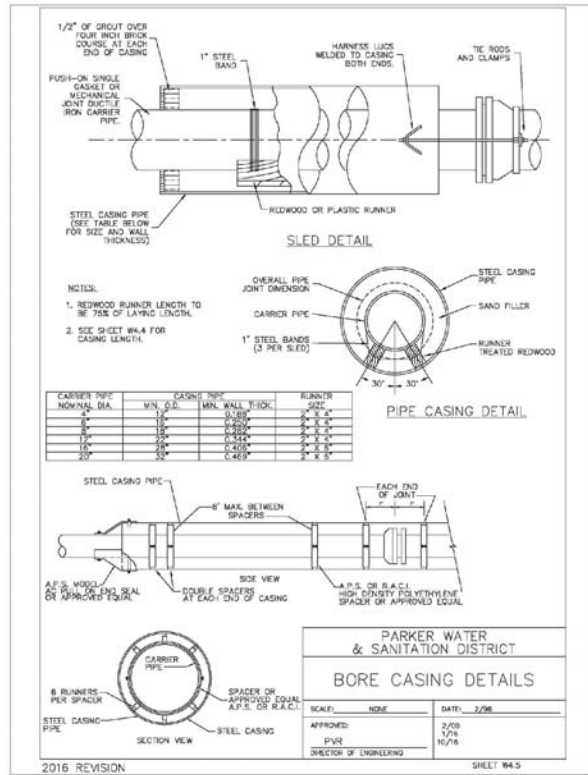
TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: JF
CHECKED BY: JJ
DATE: AUGUST 2017

SHEET NUMBER 14

No.	Revisions	Date	Init.	Apr.	Date



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NO.					

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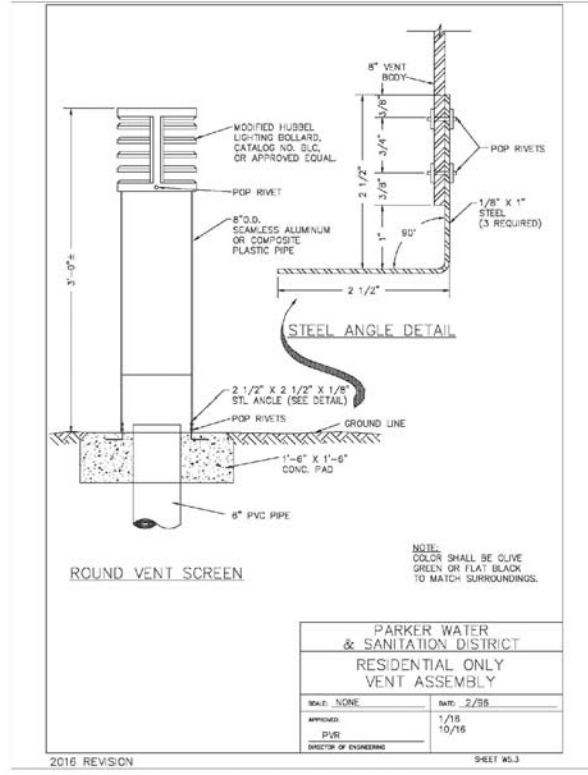
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7353 South Alton Way
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TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
WATER DETAILS

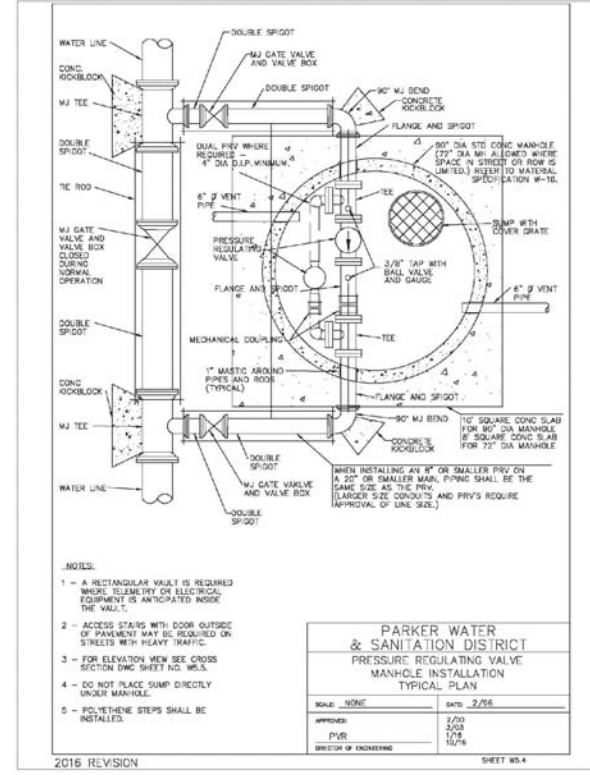
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DRAWN BY:	JF	CHECKED BY:	JJ
DATE:	AUGUST 2017		

SHEET NUMBER **19**



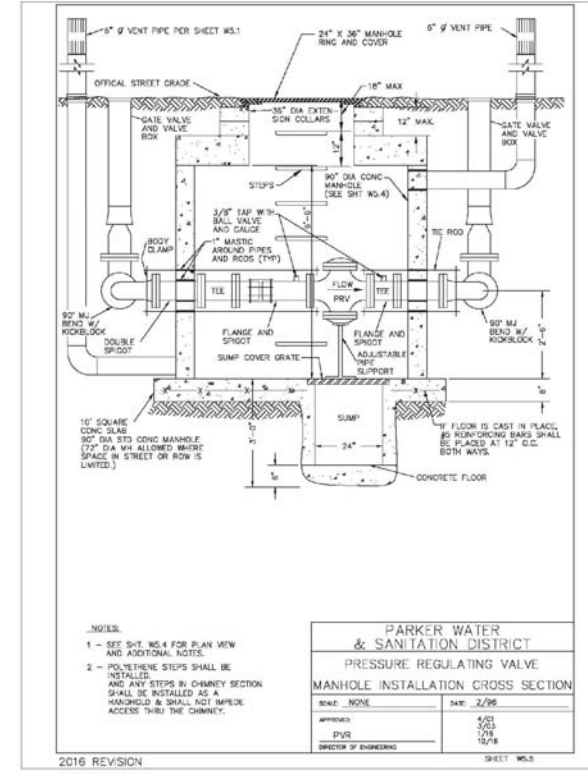
PARKER WATER & SANITATION DISTRICT RESIDENTIAL ONLY VENT ASSEMBLY	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 1/18
DIRECTOR OF ENGINEERING	DATE: 10/16

2016 REVISION



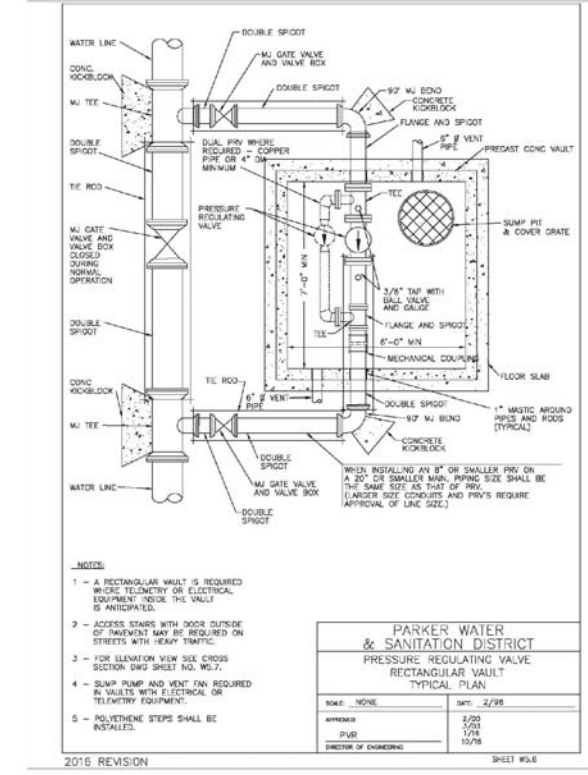
PARKER WATER & SANITATION DISTRICT PRESSURE REGULATING VALVE MANHOLE INSTALLATION TYPICAL PLAN	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 2/20
DIRECTOR OF ENGINEERING	DATE: 1/18

2016 REVISION



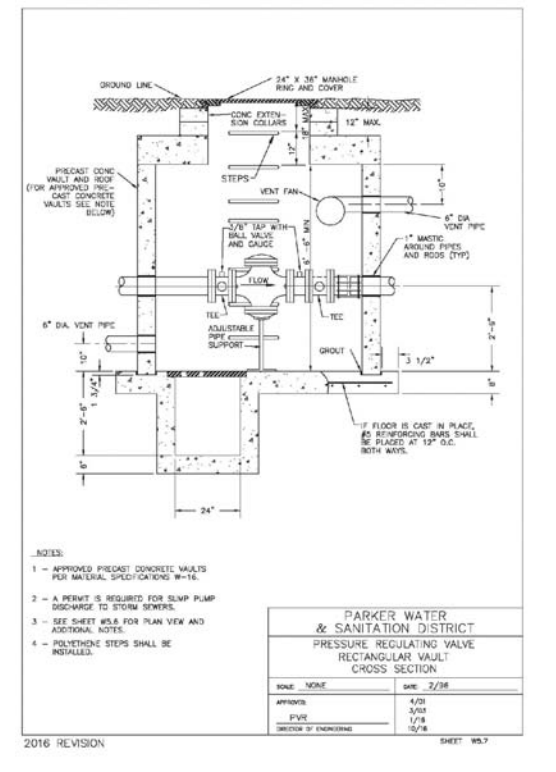
PARKER WATER & SANITATION DISTRICT PRESSURE REGULATING VALVE MANHOLE INSTALLATION CROSS SECTION	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 4/23
DIRECTOR OF ENGINEERING	DATE: 1/18

2016 REVISION



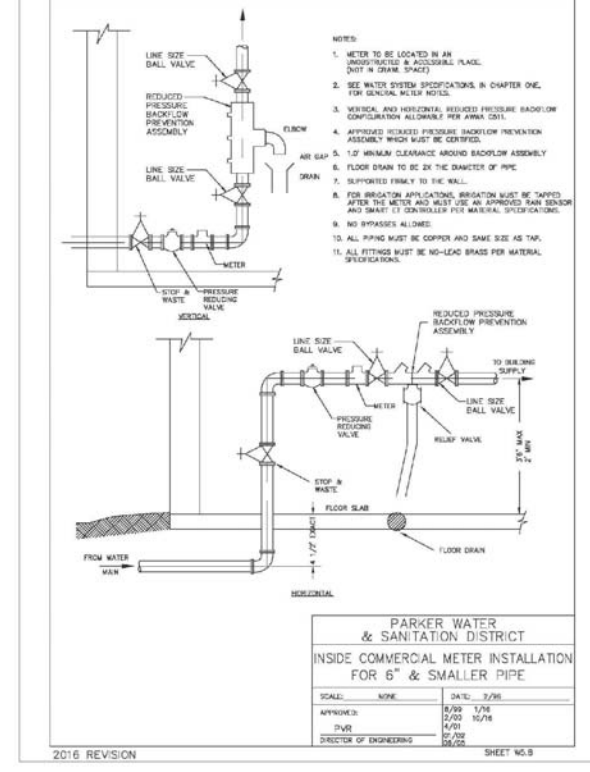
PARKER WATER & SANITATION DISTRICT PRESSURE REGULATING VALVE RECTANGULAR VAULT TYPICAL PLAN	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 1/18
DIRECTOR OF ENGINEERING	DATE: 10/16

2016 REVISION



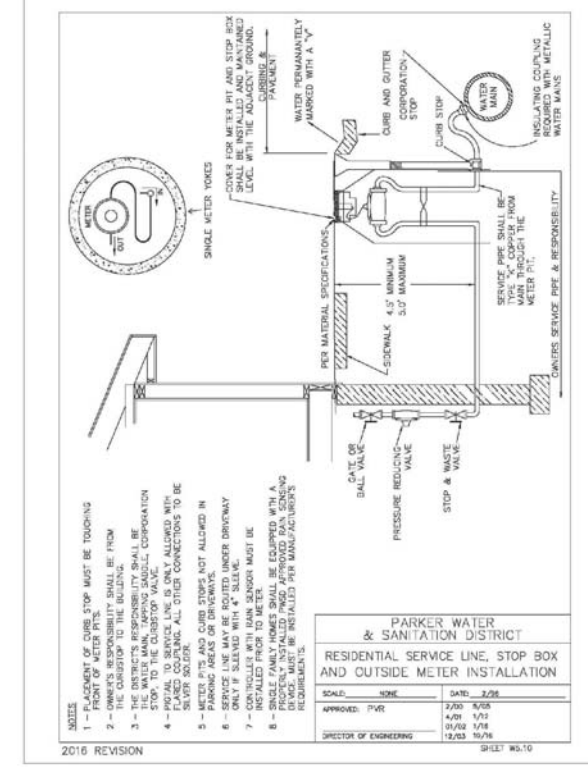
PARKER WATER & SANITATION DISTRICT PRESSURE REGULATING VALVE RECTANGULAR VAULT CROSS SECTION	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 4/23
DIRECTOR OF ENGINEERING	DATE: 10/16

2016 REVISION



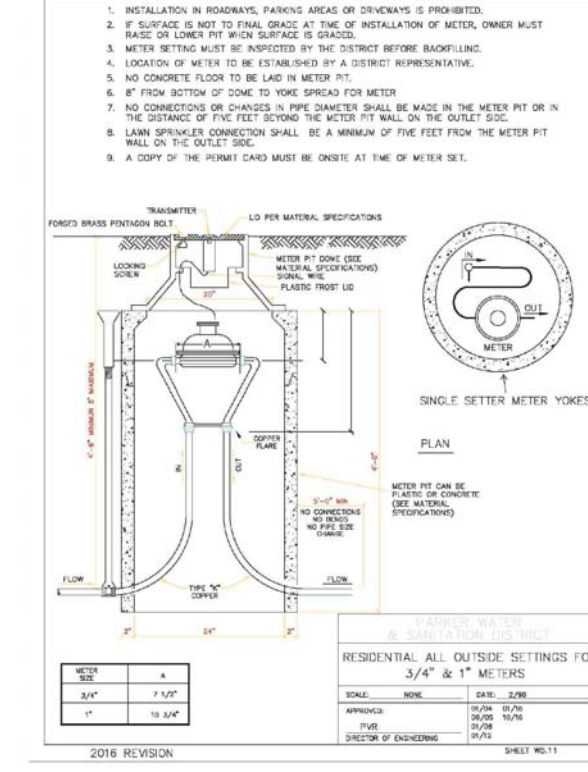
PARKER WATER & SANITATION DISTRICT INSIDE COMMERCIAL METER INSTALLATION FOR 6" & SMALLER PIPES	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 2/20
DIRECTOR OF ENGINEERING	DATE: 1/18

2016 REVISION



PARKER WATER & SANITATION DISTRICT RESIDENTIAL SERVICE LINE, STOP BOX AND OUTSIDE METER INSTALLATION	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 2/20
DIRECTOR OF ENGINEERING	DATE: 1/18

2016 REVISION



PARKER WATER & SANITATION DISTRICT RESIDENTIAL ALL OUTSIDE SETTINGS FOR 3/4" & 1" METERS	
SCALE: NONE	DATE: 2/28
APPROVED: PVR	DATE: 2/20
DIRECTOR OF ENGINEERING	DATE: 1/18

2016 REVISION

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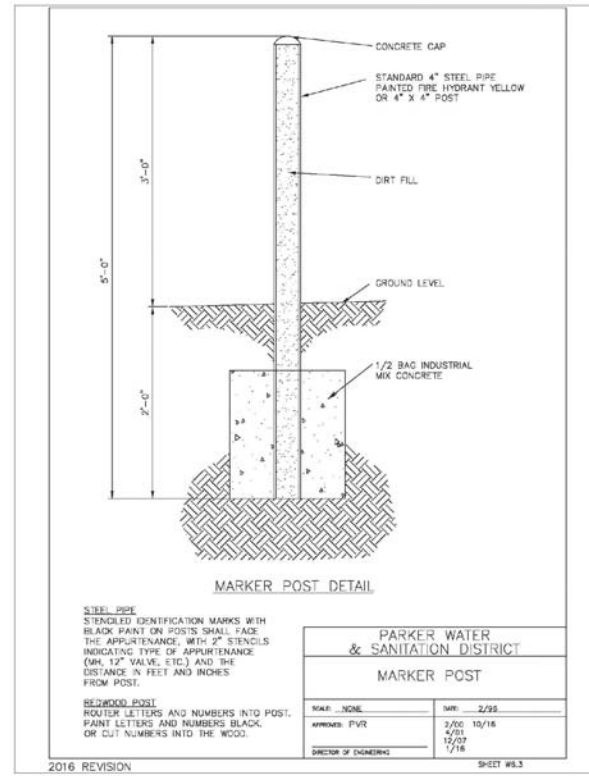
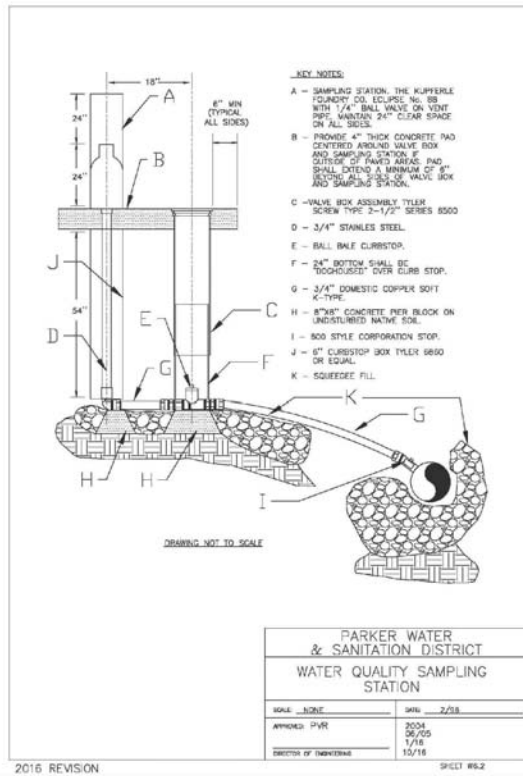
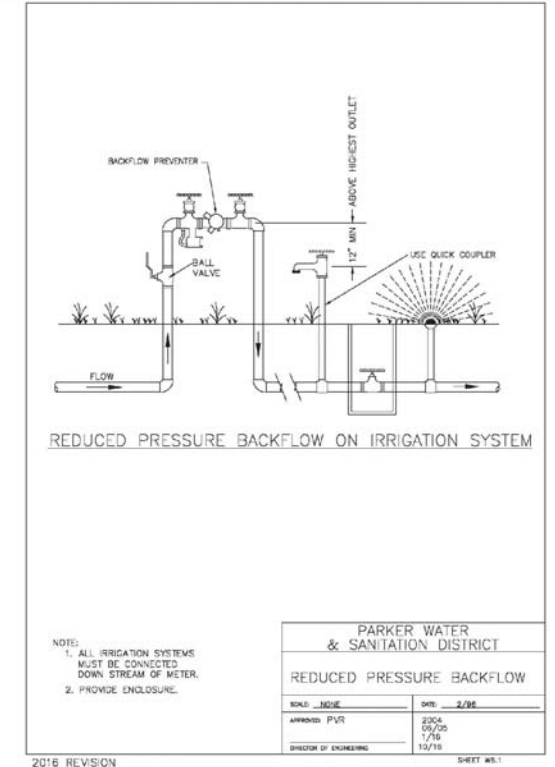
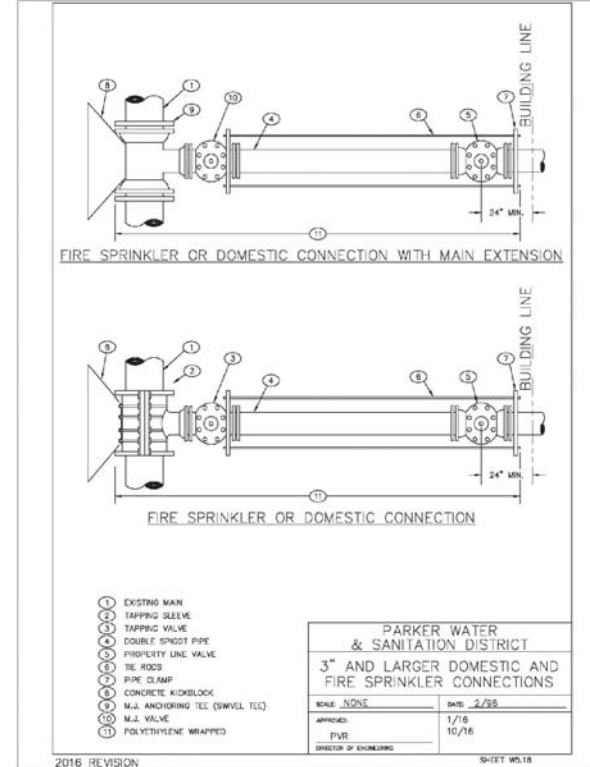
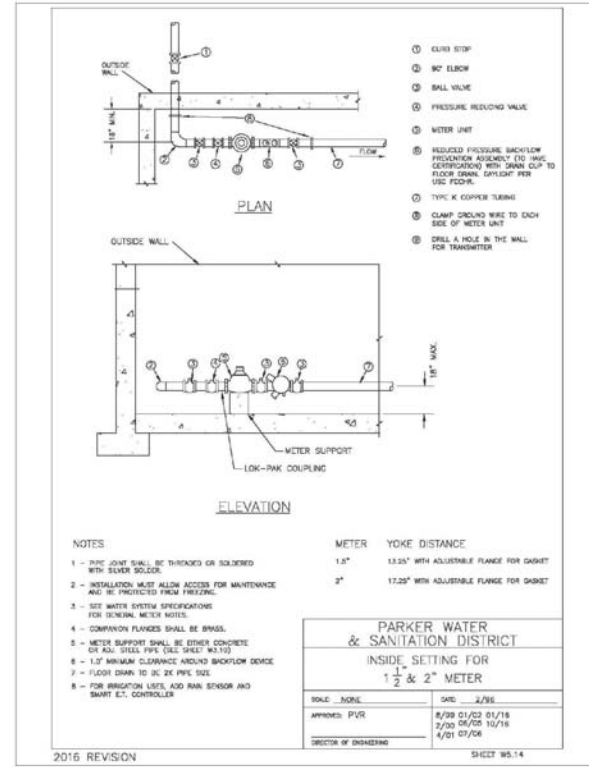
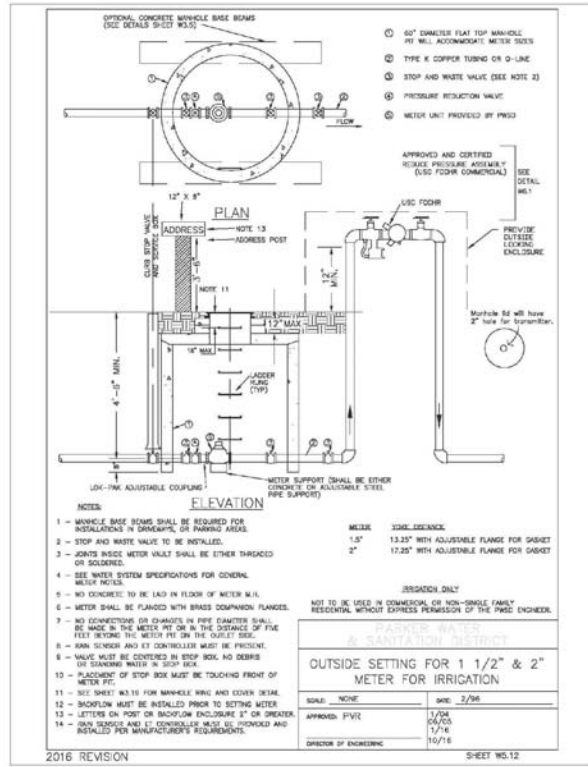
TRAILS AT CROWFOOT
FILING 5 CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: JF
CHECKED BY: JJ
DATE: AUGUST 2017

SHEET NUMBER: 20

No.	Revisions
Date	Apr.
Date	Apr.
Date	Apr.



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SHEET NUMBER	DRAWN BY: JF	CHECKED BY: JJ	DATE: AUGUST 2017	SCALE: AS SHOWN	FILE NO: 8130283701	TRAILS AT CROWFOOT FILING 5 CONSTRUCTION DRAWINGS WATER DETAILS	HR 835 LLC 7363 South Alton Way CENTENNIAL, CO 80112		10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 882-6228 Fax: (720) 882-9546	No.	Revisions	Date	Appr.	Date	Init.
				21											