STERLING RANCH EAST FILING NO. 2

COUNTY OF EL PASO, STATE OF COLORADO

UTILITY CONSTRUCTION PLANS

SPRING 2023

(SECTIONS 28 & 33, TOWNSHIP 12 SOUTH, RANGE 65 WEST)

NOTES:

1. ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT FALCON AREA WATER AND WASTEWATER AUTHORITY (FAWWA, THE AUTHORITY SPECIFICATIONS.

2. ALL PLANS ON THE JOB SITE SHALL BE SIGNED BY THE AUTHORITY AND THE AUTHORITY'S ENGINEER. ANY REVISION TO THE PLANS SHALL BE SO NOTED WITH THE OLD DRAWING MARKED NOT VALID.

3. ALL STATIONING IS CENTER LINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE CENTER LINE UNLESS OTHERWISE NOTED.

4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE AUTHORITY. THE AUTHORITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS

5. ALL OVER-LOT GRADING MUST BE COMPLETED TO WITHIN ONE (1) FOOT OF FINAL GRADE PRIOR TO INSTALLATION OF WATER AND WASTEWATER INFRASTRUCTURE.

6. ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE CLEARLY MARKED ON WITHER THE CURB HEAD OR THE FACE OF THE CURB, WITH AN "S" FOR SEWER AND A "W" FOR WATER.

7. DUCTILE IRON AND CARBON STEEL PIPES, INCLUDING FITTINGS, VALVES AND FIRE HYDRANTS, SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL BE THOROUGHLY COATED WITH BITUMINOUS COATINGS.

8. ALL DUCTILE IRON AND CARBON STEEL PIPE LESS THAN 12 INCHES AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON AND CARBON STEEL PIPE 12 INCHES AND GREATER AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING.

9. ALL PIPE MATERIAL, BACKFILL AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, COLORADO DEPARTMENT OF TRANSPORTATION, EL PASO COUNTY DEPARTMENT OF TRANSPORTATION, COLORADO SPRINGS UTILITIES AND THE GEOTECHNICAL ENGINEER.

10. COMPACTION TESTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE AUTHORITY OR HIGHER STANDARD AS IMPOSED BY ANOTHER AGENCIES HAVING RIGHT-OF-WAY JURISDICTION. THIS SHALL INCLUDE ALL VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES AND MANHOLES. ALL REPORTS SHALL BE SUBMITTED TO THE AUTHORITY FOR REVIEW AND APPROVAL.

11. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE AUTHORITY SHALL BE NOTIFIED OF ANY DEVIATIONS TO THE LINE AND/OR GRADE AS DEPICTED ON THE PLANS. CONTRACTOR SHALL SUBMIT TO THE AUTHORITY AND THE ENGINEER OF RECORD A REPORT OF THE FIELD VERIFIED INFORMATION PRIOR TO THE START OF CONSTRUCTION.

12. ALL BENDS SHALL BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION.

13. BENDS, DEFLECTION & CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5' FROM THE DESIGNED ALIGNMENT. CONSTRUCTION STAKES TO BE AT 25' INTERVALS ALONG CURVES TO SURE LOCATION OF PIPE LINE CONSTRUCTION.

14. AT ALL LOCATIOONS WHERE CAP AND STUB IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS.

15. ALL UNUSED SALVAGED WATER UTILITY MATERIAL SHALL BE RETURNED TO THE AUTHORITY AS REQUESTED.

16. AT THE CONTRACTORS EXPENSE, ALL UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED SUCH THAT THEY SHALL FUNCTION CONTINUOUSLY DURING CONSTRUCTION OPERATIONS. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTORS'S OPERATION, IT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR OR BY THE AUTHORITY AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR/DEVELOPER.

17. PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY BOTH THE AUTHORITY AND THE AUTHORITY ENGINEER PRIOR TO EXECUTION.

18. THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.

19. ALL CONTRACTORS WORKING ON OR NEAR A WATER OR SEWER FACILITY (TO INCLUDE SERVICE LINES) SHALL HAVE LIABILITY INSURANCE NAMING THE AUTHORITY AS AN ADDITIONAL INSURED AND SHALL PROVIDE A CURRENT COPY OF WORKERS COMPENSATION INSURANCE ON FILE WITH THE AUTHORITY NO WORK CAN PROCEED WITHOUT CURRENT CERTIFICATES ON FILE AT THE AUTHORITY'S OFFICE.

20. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A WEEKLY CONSTRUCTION MEETING SHALL BE REQUIRED WITH THE CONTRACTOR, AUTHORITY ENGINEER AND ALL OTHER PARTIES AS DEEMED NECESSARY BY THE DISTRICT.

21. COMMENCEMENT OF CONSTRUCTION OF WATER/ SEWER SYSTEMS WITHIN FAWWA:

A) PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING IS REQUIRED A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. A REPRESENTATIVE OF THE OWNER OR DEVELOPER, A REPRESENTATIVE OF THE CONTRACTOR AND DESIGN ENGINEER ARE REQUIRED TO ATTEND. CONTACT THE AUTHORITY TO SCHEDULE THE PRE-CONSTRUCTION MEETING. NO PRE-CONSTRUCTION MEETING CAN BE SCHEDULED PRIOR TO FOUR (4) SIGNED/APPROVED PLAN SETS ARE RECEIVED BY THE AUTHORITY.

B) THE CONTRACTOR IS REQUIRED TO NOTIFY THE AUTHORITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.

22. TESTING OF FACILITIES:

A) THE CONTRACTOR SHALL NOTIFY THE AUTHORITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING.

B) ALL SECTIONS OF WATER LINE ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
- TEST 100% OF ALL LINES
- MUST PASS PRESSURE TEST TO 200 PSI FOR TWO HOURS (UNLESS OTHERWISE APPROVED ON THE PLANS).

C) ALL SANITARY SEWER FACILITIES ARE TO MEET THE FOLLOWING TESTING REQUIREMENTS
- ALL LINES SHALL BE JET CLEANED PRIOR TO VACUUM OR PRESSURE TESTING
- ALL MANHOLES SHALL BE VACUUM TESTED WITH AUTHORITY STAFF PRESENT PRIOR TO CCTV INSPECTION.
- SEWER MAINS TO BE PRESSURE TEST PRIOR TO CCTV INSPECTION
- ALL LINES SHALL BE CCTV INSPECTED AND VIDEO SHALL TO BE SUBMITTED TO THE AUTHORITY FOR REVIEW AND APPROVAL.

23. PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN THE TIME THAT AUTHORITY ACCEPTS THE FACILITY FOR USE. ALL SURFACE IMPROVEMENTS AND RESTORATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMMENCEMENT. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL SURFACE IMPROVEMENTS AND RESTORATION WITHIN 30 DAYS OF COMMENCEMENT OF SERVICE, THE AUTHORITY, AT THEIR DISCRETION, MAY ELECT TO COMPLETE THE IMPROVEMENTS AT THE CONTRACTORS COST.

24. FINAL ACCEPTANCE BY THE AUTHORITY OF ANY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL COMPLETION AND/OR RESTORATION OF ALL SURFACE IMPROVEMENTS THE WARRANTY PERIOD FOR ALL FACILITIES PRIOR TO FINAL ACCEPTANCE SHALL BE 24 MONTHS COMMENCING AFTER PRELIMINARY ACCEPTANCE.

25 ACCEPTANCE:
A) THE AUTHORITY MAY GIVE PRELIMINARY ACCEPTANCE ONCE ALL OF THE TESTS ON ALL THE LINES HAVE BEEN COMPLETED AND A WALK-THRU HAS OCCURRED.

B) A SECOND ACCEPTANCE MAY OCCUR ONCE FIRST LIFT OF ASPHALT GOES DOWN AND A SECOND WALK-THRU OF THE SYSTEM OCCURS. IF ALL FACILITIES ARE CLEAN AND ACCESSIBLE, A FINAL ACCEPTANCE MAY OCCUR (THE AUTHORITY MAY REQUIRE CLEANING AND RE-VIDEO OF THE SYSTEM, DEPENDING ON THE SEVERITY OF THE CONTAMINATION).

26. ALL WATER AND SEWER MAINS, INCLUDING SERVICES LINES, SHALL HAVE "AS-BUILT" DRAWINGS PREPARED AND APPROVED PRIOR TO PRELIMINARY ACCEPTANCE BY THE AUTHORITY.

27. ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE AN EIGHT INCH (MIN.) WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS THE PROPERTY LINE. AN EIGHT INCH SEWER MAIN SHALL BE INSTALLED FOR SERVICE TO COMMERCIAL/BUSINESS DEVELOPMENTS, AND A MANHOLE SHALL BE LOCATED WHERE THE MAIN ENTERS THE PROPERTY. THE END OF THE MAINS SHALL BE MARKED WITH THE APPROPRIATE COLORED CARSONITE MARKER ALONG WITH TRACER WIRE.

28. AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES AND/OR SERVICES, CONSTRUCTION MUST BE COMMENCED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS.

WATER SYSTEM INSTALLATION NOTES:

29. ALL WATER AND FORCE MAN PIPE SHALL BE AWWA C900 PVC, OR EQUAL, PRESSURE CLASS 200. ALL WATER AND FORCE MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER AND FORCE MAIN PIPE SHALL HAVE A MINIMUM COVER DEPTH OF FIVE AND ONE-HALF (5.5) FEET.

30. ALL WATER VALVES ASSOCIATED WITH THE POTABLE WATER SYSTEM SHALL BE OPEN CLOCKWISE. ALL VALVES INSTALLED IN LANDSCAPED AREAS AND/OR NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL VALVES ASSOCIATED WITH THE RAW WATER SYSTEM SHALL BE OPEN COUNTERCLOCKWISE AND MARKED WITH CARSONITE MARKERS AS APPLICABLE.

31. THE DEVELOPER OR HIS ENGINEER SHALL LOCATE ALL FIRE HYDRANTS AND SERVICE STUB OUTS FOR FUTURE DEVELOPMENTS. ANY REQUIRED REALIGNMENT (HORIZONTAL OR VERTICAL), SHALL BE AT THE EXPENSE OF THE DEVELOPER. FIRE HYDRANT LOCATION SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE AUTHORITY.

32. FIRE HYDRANTS SHALL BE OPEN RIGHT WITH 7/8" X 7/8" SQUARE TAPERED ALONG WITH SERVICE CAPS. LUBRICATION TYPE: (GREASE). ACCEPTABLE BRANDS ARE AMERICAN AVK SERIES 2700 (MODERN) AND KENNEDY IHYDRANT. EACH FIRE HYDRANT LOCATION SHALL ALSO BE USED AS TEST STATION.

33. ALL MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH COATED #12 TRACER WIRE WITH TEST STATIONS AT INTERVALS NO GREATER THAN 500 FT (VALVE BOXES CAN BE USED AT INTERSECTIONS AND SERVICE STUBS).

34. CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING WATER LINE WITHOUT SHUTDOWN, OR ELSE NOTIFY THE AUTHORITY OF ANY SERVICE SHUTDOWNS NECESSARY TO CONNECT TO EXISTING LINES.

35. IRRIGATION SERVICES SHALL HAVE A STOP AND WASTE CURB STOP VALVE INSTALLED ALONG WITH TRACER WIRE EXTENDING BACK TO THE MAIN LINE.

36. COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS:

A) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL AFTER THE COMPLETION OF ALL PRESSURE TESTING, FLUSHING, BAC-T TESTING, COMPACTION TESTING AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE AUTHORITY.

B) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.

C) ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE AUTHORITY AND RECORDED.

WASTEWATER SYSTEM INSTALLATION NOTES:

38. SANITARY SEWER LENGTHS ARE MH CENTER-MH CENTER. ALL SANITARY SEWER PIPES SHALL BE SDR 35 PVC OR EQUAL. SEWER LINES MAY NOT EXCEED 7% GRADE FOR ANY SIZE WITHOUT PRIOR APPROVAL OF THE AUTHORITY. ALL NEWLY CONSTRUCTED RESIDENTIAL SANITARY SEWER TAPS SHALL USE PRE-MANUFACTURED IN-LINE PVC PUSH-ON WYES. TAPPING SADDLES MAY ONLY BE USED FOR TAPPING PRE-EXISTING MAINS.

39. ALL SANITARY SEWER MANHOLES SHALL BE WRAPPED WITH RU116 - RUBR-NEK JOINT WRAP OR EQUIVALENT AND COATED.

40. COMMENCEMENT OF USE OF SEWER LINES AND/OR SYSTEMS:

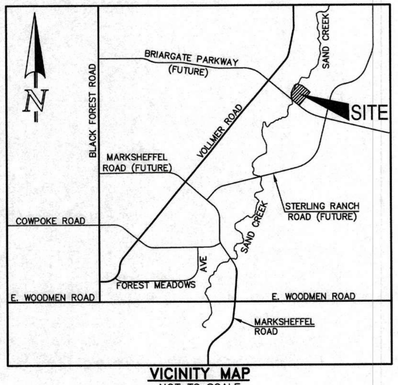
A) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL THE COMPLETION OF ALL JET CLEANING, PRESSURE TESTING, VACUUM TESTING, CCTV INSPECTION, COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE AUTHORITY.

B) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, ANY REQUIRED SURFACE IMPROVEMENTS SHALL BE COMPLETES PRIOR TO USE OF THE FACILITY.

C) ALL NECESSARY EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE AUTHORITY, AND RECORDED.

D) DOWNSTREAM PLUG CAN BE REMOVED ONCE FIRST LIFT OF ASPHALT IS DOWN AND THE ABOVE REQUIREMENTS ARE MET.

THE ABOVE GUIDELINES ARE SUBJECT TO CHANGE AT ANY TIME.



VICINITY MAP
NOT TO SCALE

TITLE SHEET	SHEET 1 OF 5
SANITARY SEWER PLAN – BOISE COURT & MARICOPA COURT STA: 1+00.00 – 12+02.00	SHEET 2 OF 5
SANITARY SEWER PLAN – BOULDER CITY DRIVE STA: 1+00.00 – STA: 8+67.00	SHEET 3 OF 5
PUBLIC 8" PVC WATER SYSTEM PLAN	SHEET 4 OF 5
UTILITY SERVICE PLAN	SHEET 5 OF 5

KEY MAP
SCALE: 1" = 250'

AGENCIES:

DEVELOPER:	CLASSIC SRJ LAND, LLC 2138 FLYING HORSE CLUB DR. COLORADO SPRINGS, CO 80921 MR. LOREN J. MORELAND (719) 592-9333
CIVIL ENGINEER:	CLASSIC CONSULTING ENGINEERS & SURVEYORS 619 N. CASCADE AVENUE, SUITE 200 COLORADO SPRINGS, CO 80903 MR. KYLE R. CAMPBELL, P.E. (719) 785-2800
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 MR. JEFF RICE, (719) 520-7877
WATER & SANITATION DISTRICT:	FALCON AREA WATER & WASTEWATER AUTHORITY
FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK, (719) 495-4300
GAS COMPANY:	BLACK HILLS ENERGY 37 WIDEFIELD BOULEVARD WIDEFIELD, COLORADO 80911 MR. GEORGE M. PETERSON, (719) 392-3491
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC P.O. BOX 1600 LIMON, COLORADO 80828 MR. LES ULFERS, (719) 495-2283
TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800)-922-1987 A.T.&T. (LOCATORS) (719) 635-3674

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

8-9-24
DATE

KYLE R. CAMPBELL, COLORADO P.E. #29794
FOR AND ON THE BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS

OWNER/DEVELOPER STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

8/9/2024
DATE

LOREN J. MORELAND
CLASSIC SRJ LAND, LLC
2138 FLYING HORSE CLUB DR.
COLORADO SPRINGS, CO 80921

BLACK FOREST FIRE PROTECTION DISTRICT:

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO THE BLACK FOREST FIRE PROTECTION DISTRICT SPECIFICATIONS. THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THIS WATER INSTALLATION PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS.

8/13/24
DATE

FOR AND ON BEHALF OF BLACK FOREST FIRE PROTECTION DISTRICT

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

JOSHUA PALMER, P.E. COUNTY ENGINEER / ECM ADMINISTRATOR
DATE

ENGINEERING APPROVALS

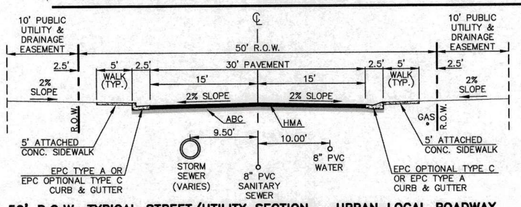
THE FALCON AREA WATER AND WASTEWATER AUTHORITY RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN AND HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.

FALCON AREA WATER AND WASTEWATER AUTHORITY
WATER AND WASTEWATER DESIGN APPROVAL

DATE 8/9/24 BY

PROJECT NO.

IN CASE OF ERRORS OR OMISSIONS WITH THE WATER AND/OR WASTEWATER DESIGN AS SHOWN ON THIS DOCUMENT THE STANDARDS AS DEFINED IN THE "GENERAL NOTES" SHALL RULE.



50' R.O.W. TYPICAL STREET/UTILITY SECTION - URBAN LOCAL ROADWAY
SCALE 1" = 10'

PCD FILE # SF2237

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811
UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO.	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS, LLC

COLORADO LICENSED KYLE RATE CAMPBELL 29794 PROFESSIONAL ENGINEER

8-9-24
DATE

KYLE R. CAMPBELL, COLORADO P.E. #29794

CLASSIC CONSULTING
619 N. Cascade Avenue, Suite 200 (719)785-0790
Colorado Springs, Colorado 80903 (719)785-0799(Fax)

STERLING RANCH EAST FILING NO. 2
UTILITY CONSTRUCTION PLANS
TITLE SHEET

DESIGNED BY	JDP	SCALE	DATE	8/8/24	
DRAWN BY	JDP	(H) 1"= N/A	SHEET	1	OF 5
CHECKED BY	KRC	(V) 1"= N/A	JOB NO.	1183.31	

I:\1183.31\DRAWINGS\CONSTRUCTION\SANITARY\01-118331-SAN-TITLE.dwg, 8/8/2024 3:09:54 PM, 1:1
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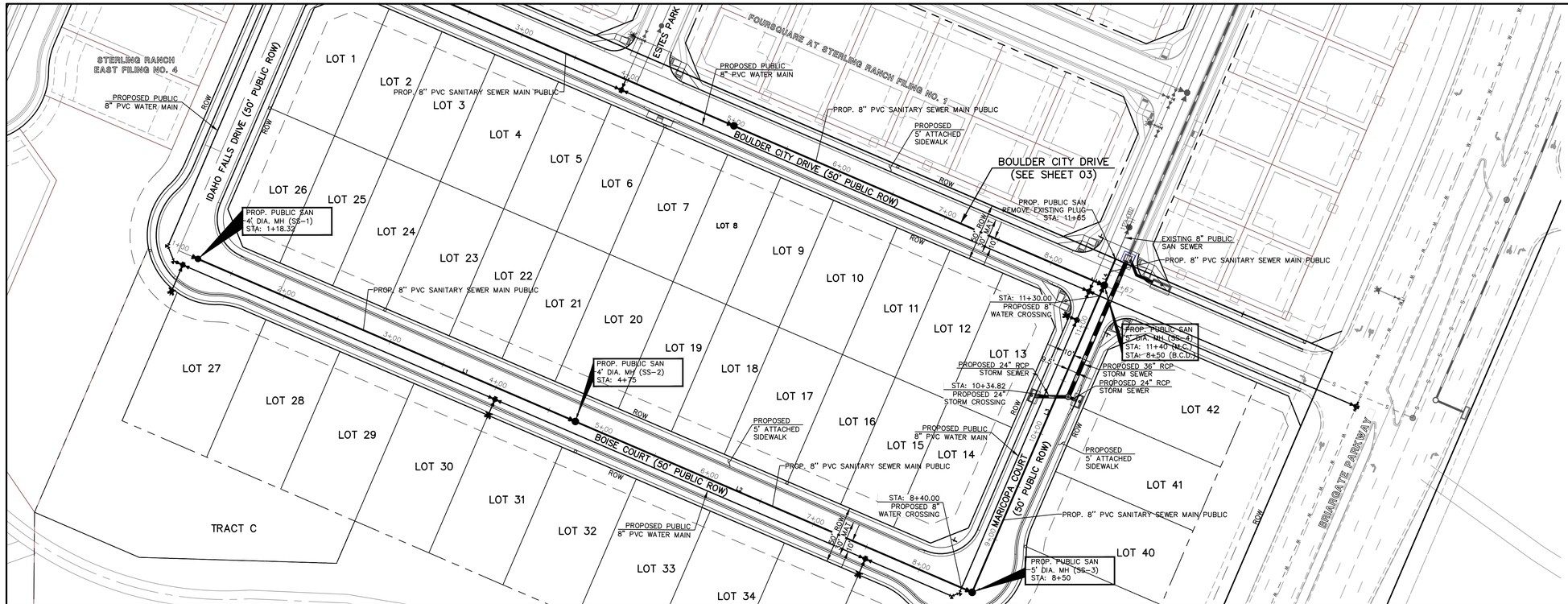
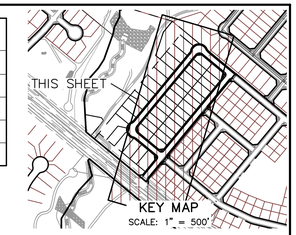


Parcel Line Table		
Line #	Length	Direction
L1	356.68	S39° 33' 48.00"W
L2	375.00	S39° 33' 48.00"W
L3	290.00	S50° 26' 12.00"E
L4	25.00	S50° 26' 12.00"E



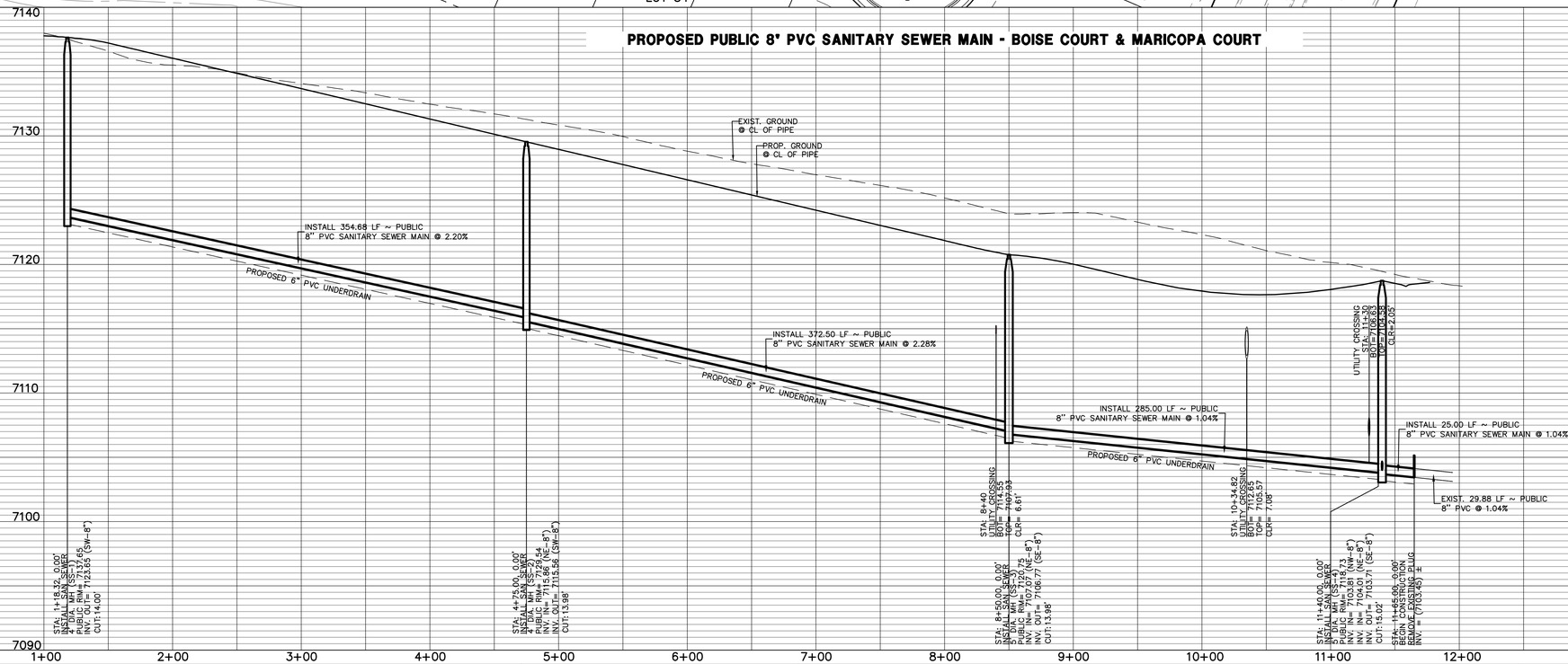
50 25 0 50 100

SCALE: 1" = 50'

STREET ABBREVIATION INDEX	
B.C.	BOISE COURT
B.C.D.	BOULDER CITY DRIVE
M.C.	MARICOPA COURT
E.P.	ESTES PARK
I.F.D.	IDAHO FALLS DRIVE

NOTE:
EXISTING UTILITIES AND STORM SEWER SHOWN IN AN APPROXIMATE WAY ONLY. ALL EXISTING UTILITIES AND STORM SEWER TO BE POTHOLED AND VERIFIED BOTH HORIZONTALLY & VERTICALLY PRIOR TO CONSTRUCTION & CONFLICTS REPORTED TO ENGINEER.

PROPOSED PUBLIC 8" PVC SANITARY SEWER MAIN - BOISE COURT & MARICOPA COURT



PCD FILE # SF2237

LEGEND

PROPOSED FIRE HYDRANT	EXISTING FIRE HYDRANT
PROPOSED WATER MAIN	EXISTING WATER MAIN
PROPOSED SANITARY SEWER MAIN	EXISTING SANITARY SEWER MAIN
PROPOSED STORM SEWER	EXISTING STORM SEWER
PROPOSED STORM INLET	EXISTING STORM INLET
ROW/BOUNDARY LINE	EXISTING GAS MAIN
	EXISTING ELECTRIC

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NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	8/8/24

REVIEW:
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS, LLC

29794
COLORADO LICENSED
KYLE RAYE CAMPBELL
PROFESSIONAL ENGINEER
8-9-24
KYLE R. CAMPBELL, COLORADO #29794 DATE

CLASSIC CONSULTING
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799(Fax)

STERLING RANCH EAST FILING NO. 2
PUBLIC 8" PVC SANITARY SEWER PLAN
BOISE COURT & MARICOPA COURT –
STA: 1+00 – END

DESIGNED BY	JDP	SCALE		DATE	8/8/24
DRAWN BY	JDP	(H) 1"= 50'		SHEET	2 OF 5
CHECKED BY	KRC	(V) 1"= 5'		JOB NO.	1183.31

11183.01 DRAWINGS\CONSTRUCTION\SANITARY\02-11833-SAN.DWG PRINTED BY: MINGORTON 8:18:24 @ 3:18 PM, LAST SAVED BY: MINGORTON
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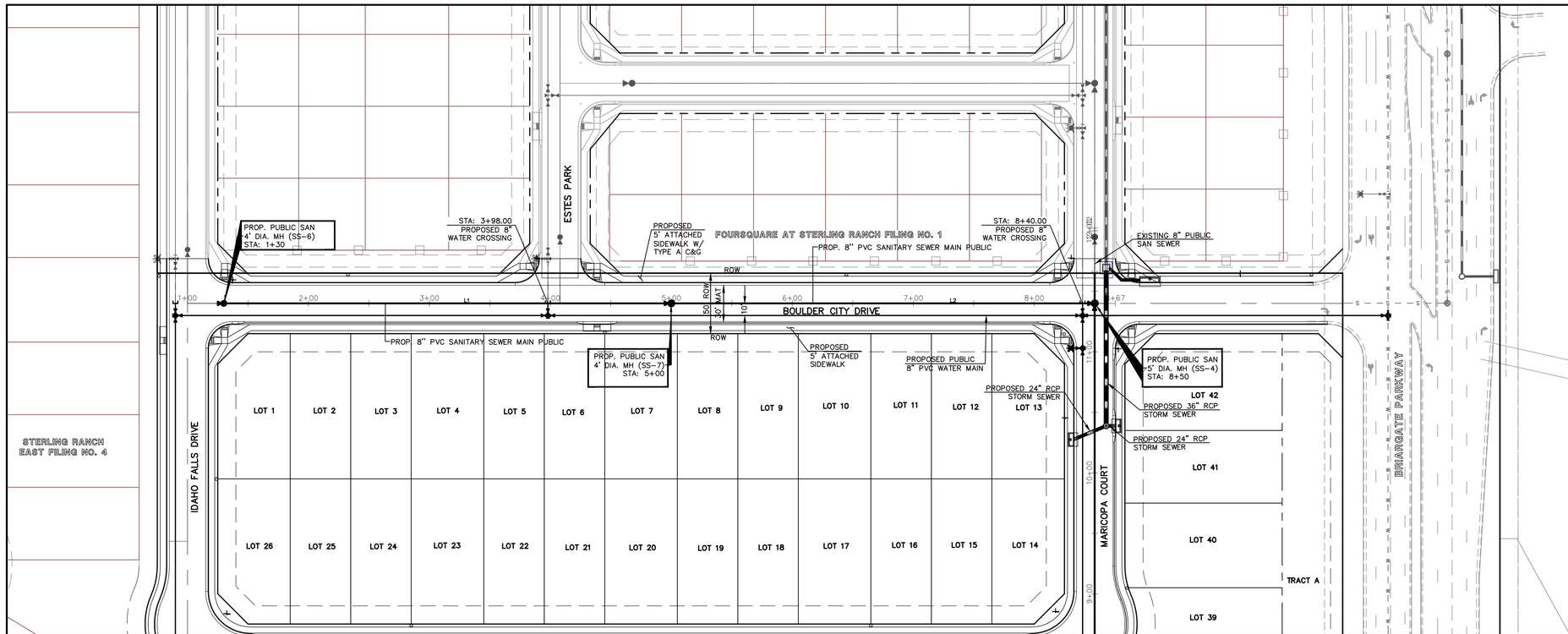
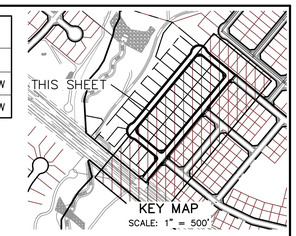


Parcel Line Table

Line #	Length	Direction
L1	370.00	S39° 33' 48.00"W
L2	350.00	S39° 33' 48.00"W



N

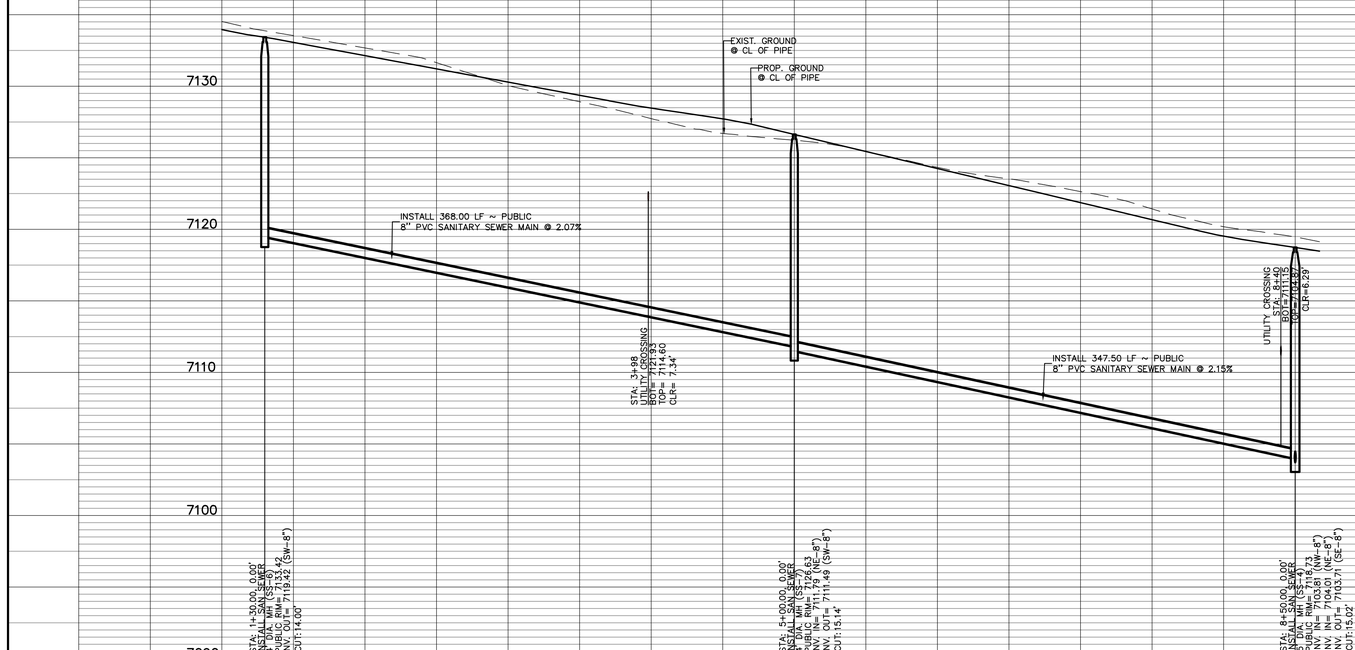
50 25 0 50 100

SCALE: 1" = 50'

STREET ABBREVIATION INDEX	
B.C.	BOISE COURT
B.C.D.	BOULDER CITY DRIVE
M.C.	MARICOPA COURT
E.P.	ESTES PARK
I.F.D.	IDAHO FALLS DRIVE

NOTE:
EXISTING UTILITIES AND STORM SEWER SHOWN IN AN APPROXIMATE WAY ONLY. ALL EXISTING UTILITIES AND STORM SEWER TO BE POTHOLED AND VERIFIED BOTH HORIZONTALLY & VERTICALLY PRIOR TO CONSTRUCTION & CONFLICTS REPORTED TO ENGINEER.

PROPOSED PUBLIC 8" PVC SANITARY SEWER MAIN - BOULDER CITY DRIVE



PCD FILE # SF2237

LEGEND

PROPOSED FIRE HYDRANT	EXISTING FIRE HYDRANT
PROPOSED WATER MAIN	EXISTING WATER MAIN
PROPOSED SANITARY SEWER MAIN	EXISTING SANITARY SEWER MAIN
PROPOSED STORM SEWER	EXISTING STORM SEWER
PROPOSED STORM INLET	EXISTING STORM INLET
ROW/BOUNDARY LINE	EXISTING GAS MAIN
	EXISTING ELECTRIC

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NO.	REVISION	DATE

REVIEW:
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

COLORADO LICENSED KYLE RAYE CAMPBELL #29794 PROFESSIONAL ENGINEER

8-9-24
KYLE R. CAMPBELL, COLORADO #29794 DATE

CLASSIC CONSULTING
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799(Fax)

STERLING RANCH EAST FILING NO. 2
PUBLIC 8" PVC SANITARY SEWER PLAN
BOULDER CITY DRIVE –
STA: 1+00 – END

DESIGNED BY	JDP	SCALE		DATE	8/8/24
DRAWN BY	JDP	(H) 1"=	50'	SHEET 3	OF 5
CHECKED BY	KRC	(V) 1"=	5'	JOB NO.	1183.31

V:\1183\DRAWINGS\CONSTRUCTION\SANITARY\03-1183-SAN.dwg, 8/8/2024 3:20:23 PM, 1:1
01118331\DRAWINGS\CONSTRUCTION\SANITARY\03-1183-SAN.DWG PRINTED BY: MANCORTON 8-08-24 @ 3:20 PM LAST SAVED BY: MANCORTON

Parcel Line Table			Parcel Line Table			Parcel Line Table		
Line #	Length	Direction	Line #	Length	Direction	Line #	Length	Direction
L1	3.00	N39° 33' 48.00"E	L21	3.00	N50° 26' 12.00"W	L41	7.00	S50° 26' 12.00"E
L2	218.00	N39° 33' 48.00"E	L22	102.23	N50° 26' 12.00"W	L42	3.00	S50° 26' 12.00"E
L3	24.58	N39° 33' 48.00"E	L23	152.77	N50° 26' 12.00"W	L43	7.00	S50° 26' 12.00"E
L4	4.05	N39° 33' 48.00"E	L24	7.07	N5° 26' 12.00"W			
L5	2.87	N39° 33' 48.00"E	L25	78.68	N39° 33' 48.00"E			
L6	3.00	N39° 33' 48.00"E	L26	3.00	N39° 33' 48.00"E			
L7	3.00	N39° 33' 48.00"E	L27	3.00	N39° 33' 48.00"E			
L8	430.00	N39° 33' 48.00"E	L28	344.00	N39° 33' 48.00"E			
L9	3.00	N39° 33' 48.00"E	L29	3.00	N39° 33' 48.00"E			
L10	3.00	N39° 33' 48.00"E	L30	3.00	N39° 33' 48.00"E			
L11	3.00	N39° 33' 48.00"E	L31	286.00	N39° 33' 48.00"E			
L12	3.00	N39° 33' 48.00"E	L32	3.00	N39° 33' 48.00"E			
L13	296.00	N39° 33' 48.00"E	L33	3.00	N39° 33' 48.00"E			
L14	3.00	N39° 33' 48.00"E	L34	3.00	N39° 33' 48.00"E			
L15	3.00	N39° 33' 48.00"E	L35	5.32	N39° 33' 48.00"E			
L16	3.00	N50° 26' 12.00"W	L36	14.14	N84° 33' 48.00"E			
L17	4.00	N50° 26' 12.00"W	L37	3.00	S50° 26' 12.00"E			
L18	3.00	N50° 26' 12.00"W	L38	274.00	S50° 26' 12.00"E			
L19	3.00	N50° 26' 12.00"W	L39	3.00	S50° 26' 12.00"E			
L20	24.00	N50° 26' 12.00"W	L40	3.00	S50° 26' 12.00"E			

WATER NOTES:

UNLESS OTHERWISE INDICATED, MJ RESTRAINTS WILL BE USED ON ALL HORIZONTAL BENDS. MJ RESTRAINED PIPE LENGTHS ARE BASED ON TRIVIEW WATER & SANITATION DISTRICT SPECIFICATIONS. IF DETERMINED IN THE FIELD THAT THE MJ RESTRAINTS WILL NOT WORK THEN USE CONCRETE THRUST BLOCKS PER TRIVIEW WATER & SANITATION DISTRICT SPECIFICATIONS.

WHEN WATER MAIN CROSSES UNDER A WASTEWATER MAIN OR STORM SEWER MAIN SECONDARY CONTAINMENT MUST BE PROVIDED:

1. WATER MAIN OR ABOVE UTILITY SHALL BE CONSTRUCTED WITHOUT MECHANICAL JOINTS FOR 9 FEET ON EITHER SIDE OF THE CROSSING. PER TRIVIEW WATER & SANITATION DISTRICT SPECIFICATIONS.
2. THE WATER MAIN OR ABOVE UTILITY SHALL BE ENCASED IN FLOW FILL PER TRIVIEW WATER & SANITATION DISTRICT SPECIFICATIONS FOR 10 FEET ON EITHER SIDE OF CROSSING.

STREET ABBREVIATION INDEX

B.C.	BOISE COURT
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M.C.	MARICOPA COURT
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NOTE:
NO TREES WILL BE ALLOWED WITHIN 15' OF ANY PUBLIC WATER/WASTEWATER MAINLINES.

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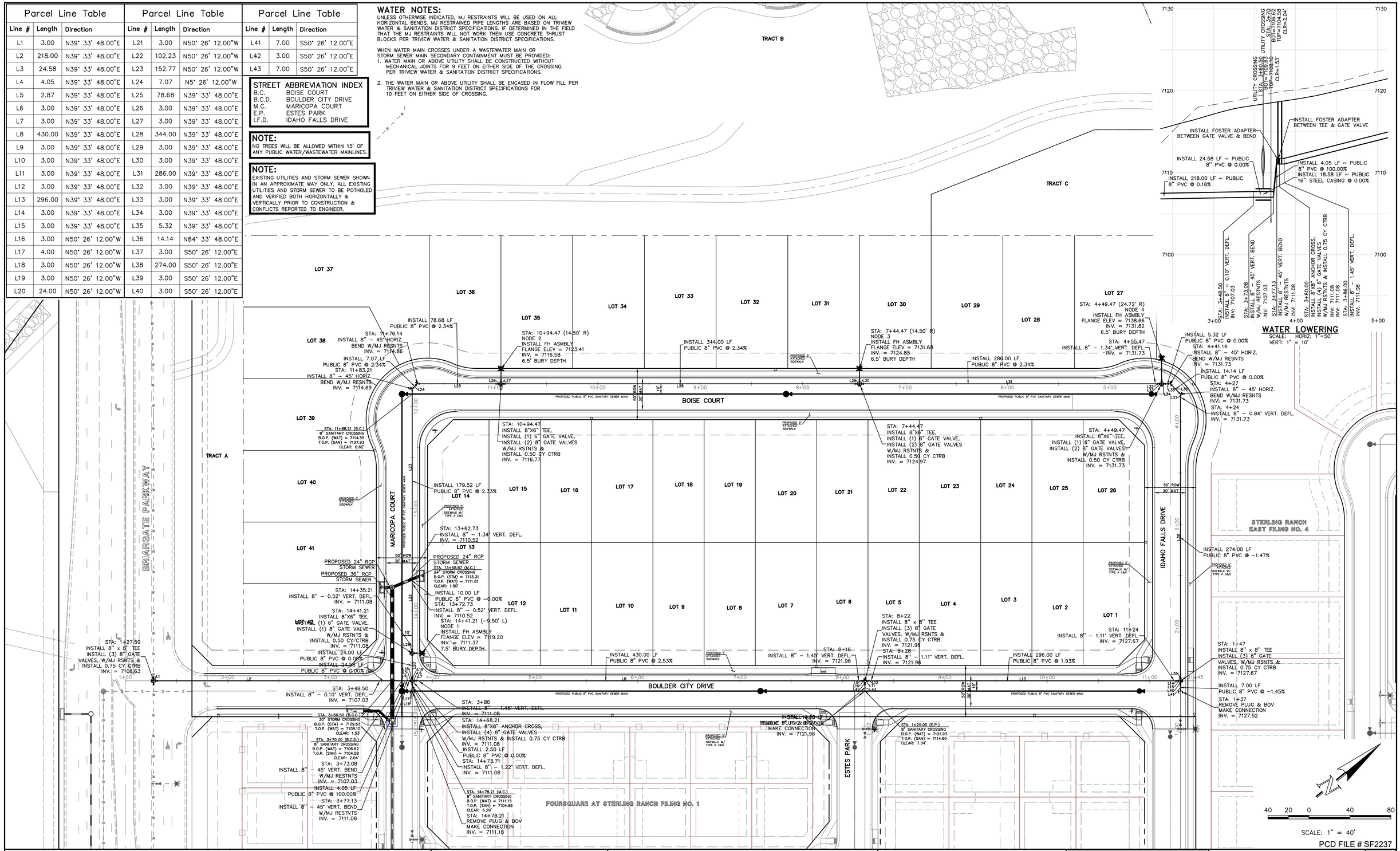

WATER LOWERING

SCALE: HORIZ: 1"=50'
VERT: 1" = 10'

PCD FILE # SF2237

LEGEND

PROPOSED FIRE HYDRANT	EXISTING FIRE HYDRANT
PROPOSED WATER MAIN	EXISTING WATER MAIN
PROPOSED SANITARY SEWER MAIN	EXISTING SANITARY SEWER MAIN
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NO.	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS, LLC

COLORADO LICENSED KYLE R. CAMPBELL #29794 PROFESSIONAL ENGINEER

KYLE R. CAMPBELL, COLORADO #29794 — 8-9-24 DATE

CLASSIC CONSULTING℠
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799(Fax)

STERLING RANCH EAST FILING NO. 2
PUBLIC 8" PVC WATER SYSTEM PLAN

DESIGNED BY	JDP	SCALE		DATE	8/8/24
DRAWN BY	JDP	(H) 1"= 40'		SHEET 4	OF 5
CHECKED BY	KRC	(V) 1"= N/A		JOB NO.	1183.31

1183.31 DRAWINGS\CONSTRUCTION\WATER\SR-1183.31-WAT.DWG PRINTED BY: MINNORTON 8-9-24 @ 3:31 PM LAST SAVED BY: MINNORTON
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DETAIL: UTILITY SERVICE LOCATIONS

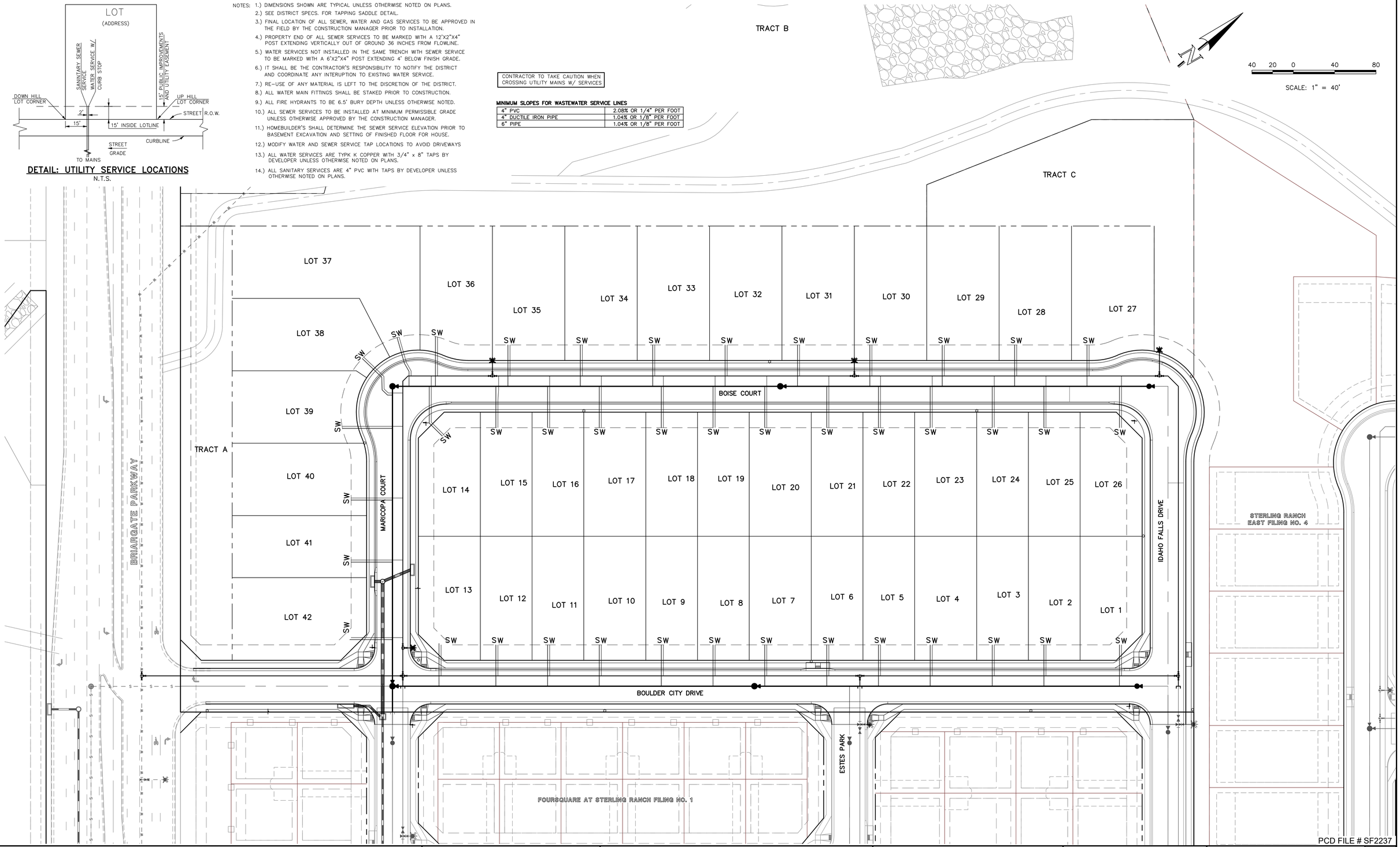
N.T.S.

NOTES:
1.) DIMENSIONS SHOWN ARE TYPICAL UNLESS OTHERWISE NOTED ON PLANS.
2.) SEE DISTRICT SPECS. FOR TAPPING SADDLE DETAIL.
3.) FINAL LOCATION OF ALL SEWER, WATER AND GAS SERVICES TO BE APPROVED IN THE FIELD BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
4.) PROPERTY END OF ALL SEWER SERVICES TO BE MARKED WITH A 12'x2"x4" POST EXTENDING VERTICALLY OUT OF GROUND 36 INCHES FROM FLOWLINE.
5.) WATER SERVICES NOT INSTALLED IN THE SAME TRENCH WITH SEWER SERVICE TO BE MARKED WITH A 6'x2"x4" POST EXTENDING 4' BELOW FINISH GRADE.
6.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DISTRICT AND COORDINATE ANY INTERUPTION TO EXISTING WATER SERVICE.
7.) RE-USE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE DISTRICT.
8.) ALL WATER MAIN FITTINGS SHALL BE STAKED PRIOR TO CONSTRUCTION.
9.) ALL FIRE HYDRANTS TO BE 6.5' BURY DEPTH UNLESS OTHERWISE NOTED.
10.) ALL SEWER SERVICES TO BE INSTALLED AT MINIMUM PERMISSIBLE GRADE UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
11.) HOMEBUILDER'S SHALL DETERMINE THE SEWER SERVICE ELEVATION PRIOR TO BASEMENT EXCAVATION AND SETTING OF FINISHED FLOOR FOR HOUSE.
12.) MODIFY WATER AND SEWER SERVICE TAP LOCATIONS TO AVOID DRIVEWAYS
13.) ALL WATER SERVICES ARE TYPK K COPPER WITH 3/4" x 8" TAPS BY DEVELOPER UNLESS OTHERWISE NOTED ON PLANS.
14.) ALL SANITARY SERVICES ARE 4" PVC WITH TAPS BY DEVELOPER UNLESS OTHERWISE NOTED ON PLANS.

CONTRACTOR TO TAKE CAUTION WHEN CROSSING UTILITY MAINS W/ SERVICES

MINIMUM SLOPES FOR WASTEWATER SERVICE LINES

4" PVC	2.08% OR 1/4" PER FOOT
4" DUCTILE IRON PIPE	1.04% OR 1/8" PER FOOT
6" PIPE	1.04% OR 1/8" PER FOOT



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UTILITY SERVICE PLAN

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N:\1183.31\DRAWINGS\CONSTRUCTION\UPSD-1183.31.dgn DWG PRINTED BY: MANHORTON 8-08-24 @ 3:42 PM LAST SAVED BY: MANHORTON
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