

URBAN COLLECTION AT PALMER VILLAGE

SITUATED IN THE NORTHWEST QUARTER OF SECTION 5,
TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
COUNTY OF EL PASO, STATE OF COLORADO

UTILITY SERVICE PLAN

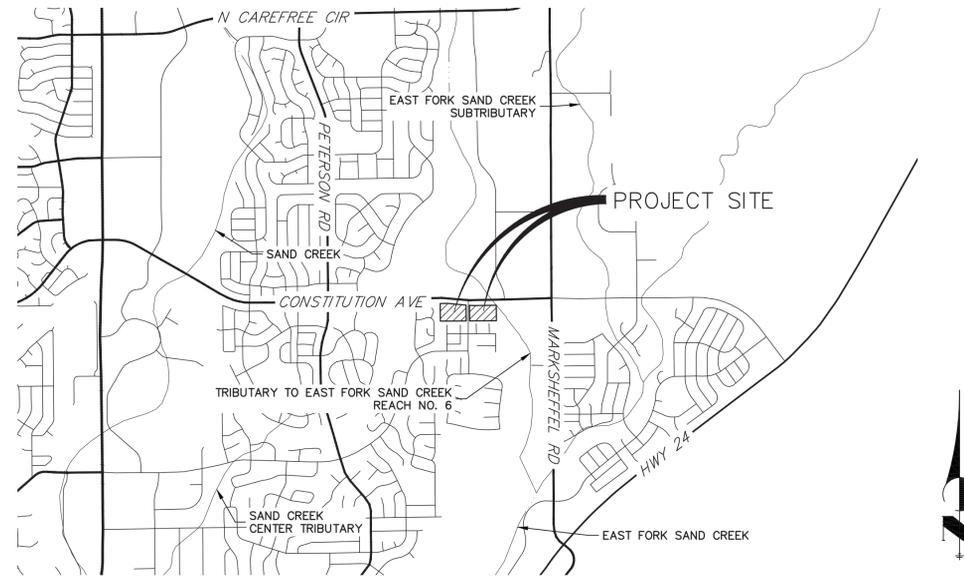


Know what's below.
Call before you dig.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. USES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
MDC HOLDINGS
RICHMOND AMERICAN HOMES
4350 S. MONACO STREET
DENVER, CO 80237
ATTN: JASON POCK
720-977-3827

J.R. ENGINEERING
A Westman Company
Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com



VICINITY MAP
SCALE: 1"=2000'

CONTACTS:

OWNER/DEVELOPER	MDC HOLDINGS - RICHMOND AMERICAN HOMES 4350 S. MONACO STREET DENVER, CO 80237 JASON POCK P~(720)-977-3827
ENGINEER/SURVEYOR	JR ENGINEERING, LLC ATTN: GLENN D. ELLIS 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P~(719) 593-2593
FIRE PROTECTION DISTRICT	FALCON FIRE PROTECTION DISTRICT 730 OLD MERIDIAN ROAD PEYTON, CO 80831 TRENT HARWIG P~(719) 495-4050
WATER AND SEWER DISTRICT	CHEROKEE METRO DISTRICT 6250 PALMER PARK BLVD COLORADO SPRINGS, CO 80915 CONTACT: KEVIN BROWN P~(719) 322-4339
JURISDICTION	EL PASO COUNTY PCD P~(719)-520-6300 EL PASO COUNTY DPW P~(719)-520-6460

BASIS OF BEARING

BEARINGS SHOWN HEREON ARE REFERENCED TO THE NORTH LINE OF NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 14 SOUTH, RANGE 65 WEST, ASSUMED TO BEAR NORTH 89°09'25" EAST BETWEEN THE MONUMENTS SHOWN HEREON.

BENCHMARK

FMS MONUMENT SR06 IS A 2 INCH DIAMETER ALUMINUM CAP ON TOP OF THE SOUTH CURB OF PONY TRACKS DRIVE, APPROXIMATELY 850 FEET EASTERLY OF THE CENTERLINE OF PETERSON ROAD, 125 FEET EASTERLY OF THE EAST CURB OF BANKSIDE DRIVE, AND 10 FEET EASTERLY OF AN ELECTRICAL VAULT.

ELEVATION = 6523.04 (NGVD 29)

SHEET INDEX

- 1 - COVER SHEET
- 2 - LEGEND
- 3 - TYPICAL SECTIONS
- 4-8 - OVERALL UTILITY PLAN
- 9-10 - DETAILS

**CHEROKEE METROPOLITAN DISTRICT
UTILITIES PLAN APPROVAL**

THE CHEROKEE METROPOLITAN DISTRICT RECOGNIZES THE DESIGN PROFESSIONAL OF RECORD AS THE LICENSED ENGINEER HAVING RESPONSIBILITY FOR THE SUBMITTED DESIGN AND THE DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY. AS SUCH, THE APPROVAL GRANTED HEREIN IS FOR THE CONSTRUCTION OF THE FACILITIES AS REPRESENTED ON THESE DOCUMENTS. APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE BELOW AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

APPROVED BY: _____ DATE: _____

OWNER/DEVELOPER STATEMENT

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

Jason J.W. Pock 7-16-2021
JASON POCK DATE

MDC HOLDINGS - RICHMOND AMERICAN HOMES
4359 S. MONACO STREET
DENVER, CO 80237

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

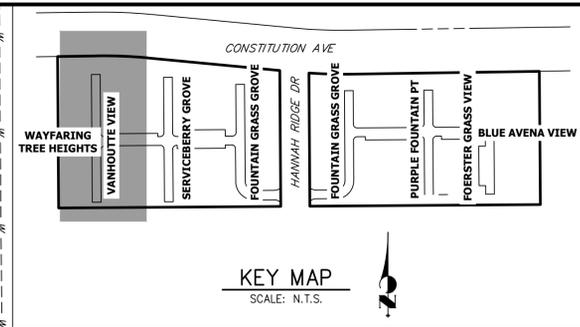
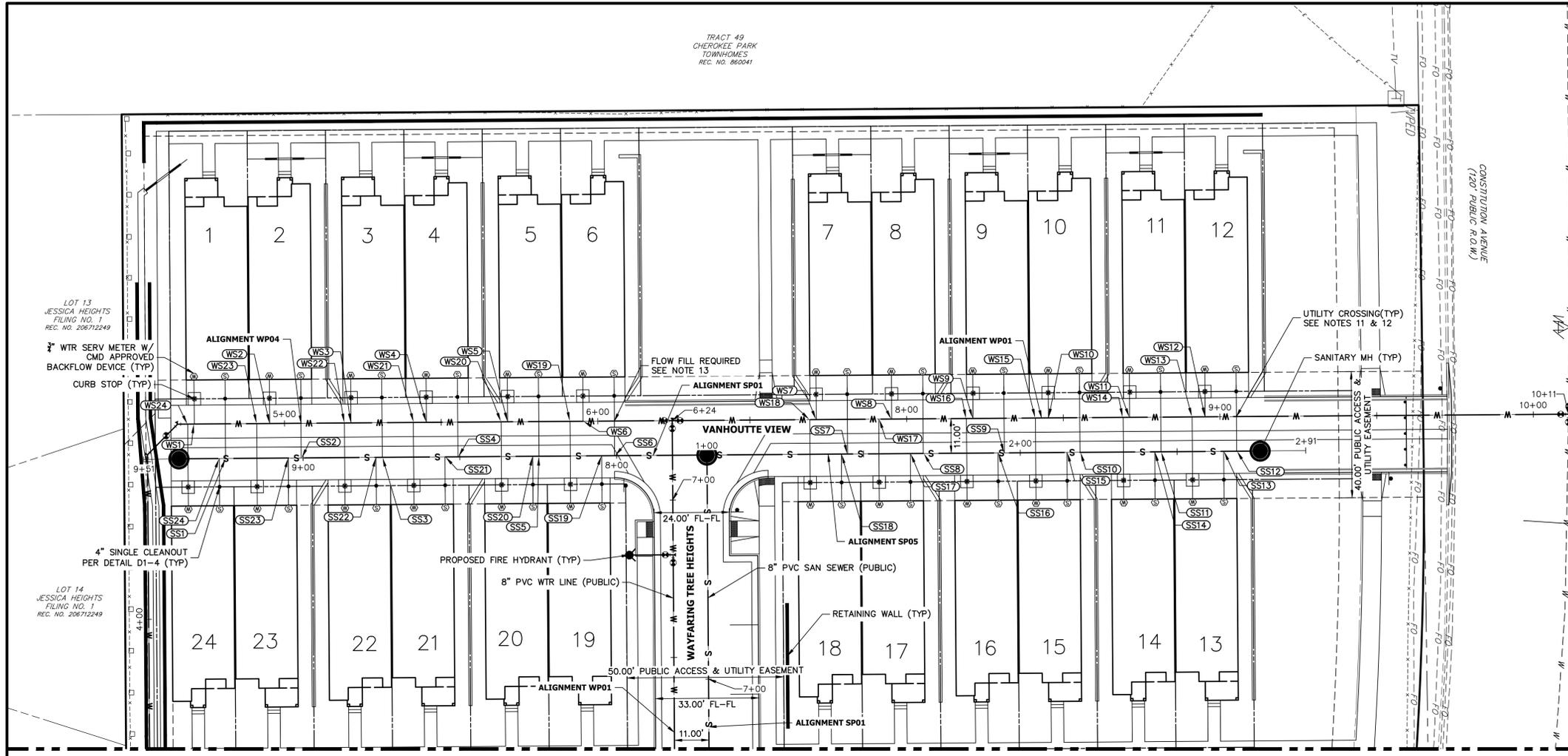
GLENN D. ELLIS, P.E.
COLORADO P.E. 38861
FOR AND ON BEHALF OF JR ENGINEERING



BY	DATE	No.	REVISION	H-SCALE	N/A	V-SCALE	N/A	DATE	DESIGNED BY	APL	DRAWN BY	APL	CHECKED BY
								01-05-21					

URBAN COLLECTION AT
PALMER VILLAGE
COVER SHEET
UTILITY SERVICE PLAN

TRACT 49
CHEROKEE PARK
TOWNHOMES
REC. NO. 860041



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MDC HOLDINGS
RICHMOND - AMERICAN HOMES
4350 S. MONACO STREET
DENVER, CO 80237
ATTN: JASON FOCK
720-977-3827

LOT 13
JESSICA HEIGHTS
FILING NO. 1
REC. NO. 206712249

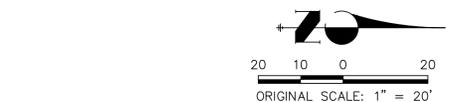
LOT 14
JESSICA HEIGHTS
FILING NO. 1
REC. NO. 206712249

SEE SHEET 5

- NOTES:**
- ALL PROPOSED STORM SEWER AND APPURTENANCES ARE PRIVATE UNLESS OTHERWISE NOTED.
 - ALL PROPOSED WATER AND SANITARY SEWER LINES AND STRUCTURES ARE PUBLIC UNLESS OTHERWISE NOTED.
 - ALL SERVICES SHALL BE INSTALLED PER CHEROKEE METROPOLITAN DISTRICT (CMD) CRITERIA. SEE DETAIL SHEETS 9-10 FOR TYPICAL SERVICE LINE CONNECTIONS, CONFIGURATIONS, AND LAYOUT.
 - ALL WATER SERVICES SHALL BE 1" HDPE SDR9 CTS (COPPER SIZE TUBE), PER CSU DETAIL B1-6.
 - ALL WATER SERVICES SHALL INCLUDE AN APPROVED BACKFLOW DEVICE PER CSU WATER LINE EXTENSION AND SERVICE STANDARDS (WATER LESS) CRITERIA.
 - ALL SANITARY SEWER SERVICE CONNECTIONS SHALL BE 4" PVC SCHEDULE 40 PER CSU DETAIL D1-6.
 - FOR SANITARY SERVICES WITH GREATER THAN 6' OF COVER, REFER TO WASTEWATER LESS 2.6.F.1.
 - SANITARY SERVICE LINE TAPS SHALL BE INSTALLED @ THE LOCATION SHOWN ON THESE PLANS PER DETAILS D1-3 - D1-6. SEE JR WASTEWATER CONSTRUCTION PLANS FOR PROPOSED SANITARY SEWER VERTICAL ALIGNMENT AND DESIGN INFORMATION.
 - ALL SANITARY SERVICES SHALL SLOPE @ 2.08% OR GREATER FOR THE ENTIRE LENGTH OF THE SERVICE.
 - ALL SANITARY SERVICES SHALL INCLUDE A SINGLE CLEANOUT PER DETAIL D1-4.
 - CONTRACTOR SHALL MAINTAIN ALL REQUIRED VERTICAL AND HORIZONTAL SEPARATIONS BETWEEN PROPOSED SERVICES, OTHER UTILITIES, AND STRUCTURES. SEE WATER LESS 2.6.G.3 & 4, AND WASTEWATER LESS 2.5.D.3 & 4.
 - CAUTION! WHERE PROPOSED SERVICES CROSS ANOTHER UTILITY, THE MINIMUM VERTICAL SEPARATION IS 1.5'.
 - CLEARANCE BETWEEN MAIN AND SANITARY SERVICE LINE WILL BE LESS THAN 1.5' FOR SANITARY SERVICE LINES S6, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S35, S41 & S42. CONTRACTOR SHALL FLOWFILL ACCORDING TO CSU WASTEWATER LESS DETAIL C2-7.
 - SEE JR WATER SYSTEM PLANS FOR POTABLE WATER SYSTEM DESIGN INFORMATION.
 - SEE JR GESC, STREET IMPROVEMENT, PBMP, AND STORM PLANS FOR ASSOCIATED DESIGN INFORMATION.

UTILITY SERVICE TABULATION			
SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
SS1	9+24.75	SP01	SANITARY SEWER SERVICE
SS2	9+00.61	SP01	SANITARY SEWER SERVICE
SS3	8+74.75	SP01	SANITARY SEWER SERVICE
SS4	8+50.60	SP01	SANITARY SEWER SERVICE
SS5	8+24.75	SP01	SANITARY SEWER SERVICE
SS6	8+00.60	SP01	SANITARY SEWER SERVICE
SS7	1+44.91	SP05	SANITARY SEWER SERVICE
SS8	1+69.05	SP05	SANITARY SEWER SERVICE
SS9	1+94.91	SP05	SANITARY SEWER SERVICE
SS10	2+19.05	SP05	SANITARY SEWER SERVICE
SS11	2+44.91	SP05	SANITARY SEWER SERVICE
SS12	2+69.05	SP05	SANITARY SEWER SERVICE
SS13	2+64.91	SP05	SANITARY SEWER SERVICE
SS14	2+42.91	SP05	SANITARY SEWER SERVICE
SS15	2+14.91	SP05	SANITARY SEWER SERVICE
SS16	1+92.91	SP05	SANITARY SEWER SERVICE
SS17	1+64.91	SP05	SANITARY SEWER SERVICE
SS18	1+42.91	SP05	SANITARY SEWER SERVICE
SS19	8+04.75	SP01	SANITARY SEWER SERVICE
SS20	8+26.75	SP01	SANITARY SEWER SERVICE
SS21	8+54.75	SP01	SANITARY SEWER SERVICE
SS22	8+76.75	SP01	SANITARY SEWER SERVICE
SS23	9+04.75	SP01	SANITARY SEWER SERVICE
SS24	9+26.75	SP01	SANITARY SEWER SERVICE

UTILITY SERVICE TABULATION			
SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
WS1	4+71.23	WP04	POTABLE WATER SERVICE
WS2	4+95.29	WP04	POTABLE WATER SERVICE
WS3	5+21.23	WP04	POTABLE WATER SERVICE
WS4	5+45.29	WP04	POTABLE WATER SERVICE
WS5	5+71.23	WP04	POTABLE WATER SERVICE
WS6	5+95.29	WP04	POTABLE WATER SERVICE
WS7	7+71.18	WP01	POTABLE WATER SERVICE
WS8	7+95.24	WP01	POTABLE WATER SERVICE
WS9	8+21.18	WP01	POTABLE WATER SERVICE
WS10	8+45.24	WP01	POTABLE WATER SERVICE
WS11	8+71.18	WP01	POTABLE WATER SERVICE
WS12	8+95.24	WP01	POTABLE WATER SERVICE
WS13	8+91.10	WP01	POTABLE WATER SERVICE
WS14	8+69.10	WP01	POTABLE WATER SERVICE
WS15	8+41.10	WP01	POTABLE WATER SERVICE
WS16	8+19.10	WP01	POTABLE WATER SERVICE
WS17	7+91.10	WP01	POTABLE WATER SERVICE
WS18	7+69.10	WP01	POTABLE WATER SERVICE
WS19	5+91.15	WP04	POTABLE WATER SERVICE
WS20	5+69.15	WP04	POTABLE WATER SERVICE
WS21	5+41.28	WP04	POTABLE WATER SERVICE
WS22	5+19.15	WP04	POTABLE WATER SERVICE
WS23	4+91.15	WP04	POTABLE WATER SERVICE
WS24	4+69.15	WP04	POTABLE WATER SERVICE



**CHEROKEE METROPOLITAN DISTRICT
UTILITIES PLAN APPROVAL**

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APPROVED BY: _____ DATE: _____

ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

GLENN D. ELLIS, P.E.
COLORADO P.E. 38861
FOR AND ON BEHALF OF JR ENGINEERING, L.L.C.

07/15/2021

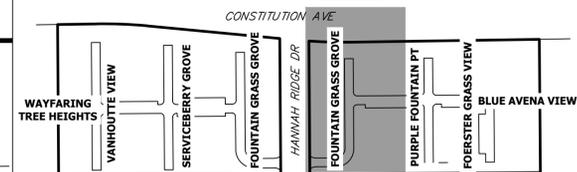
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No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
URBAN COLLECTION AT PALMER VILLAGE									
OVERALL UTILITY PLAN									
LOTS 1-24									
UTILITY SERVICE PLAN									
SHEET 4 OF 10									
JOB NO. 25149.01									

SEE SHEET 6

HANNAH RIDGE DRIVE
(80' PUBLIC R.O.W.)
REC NO. 206712249

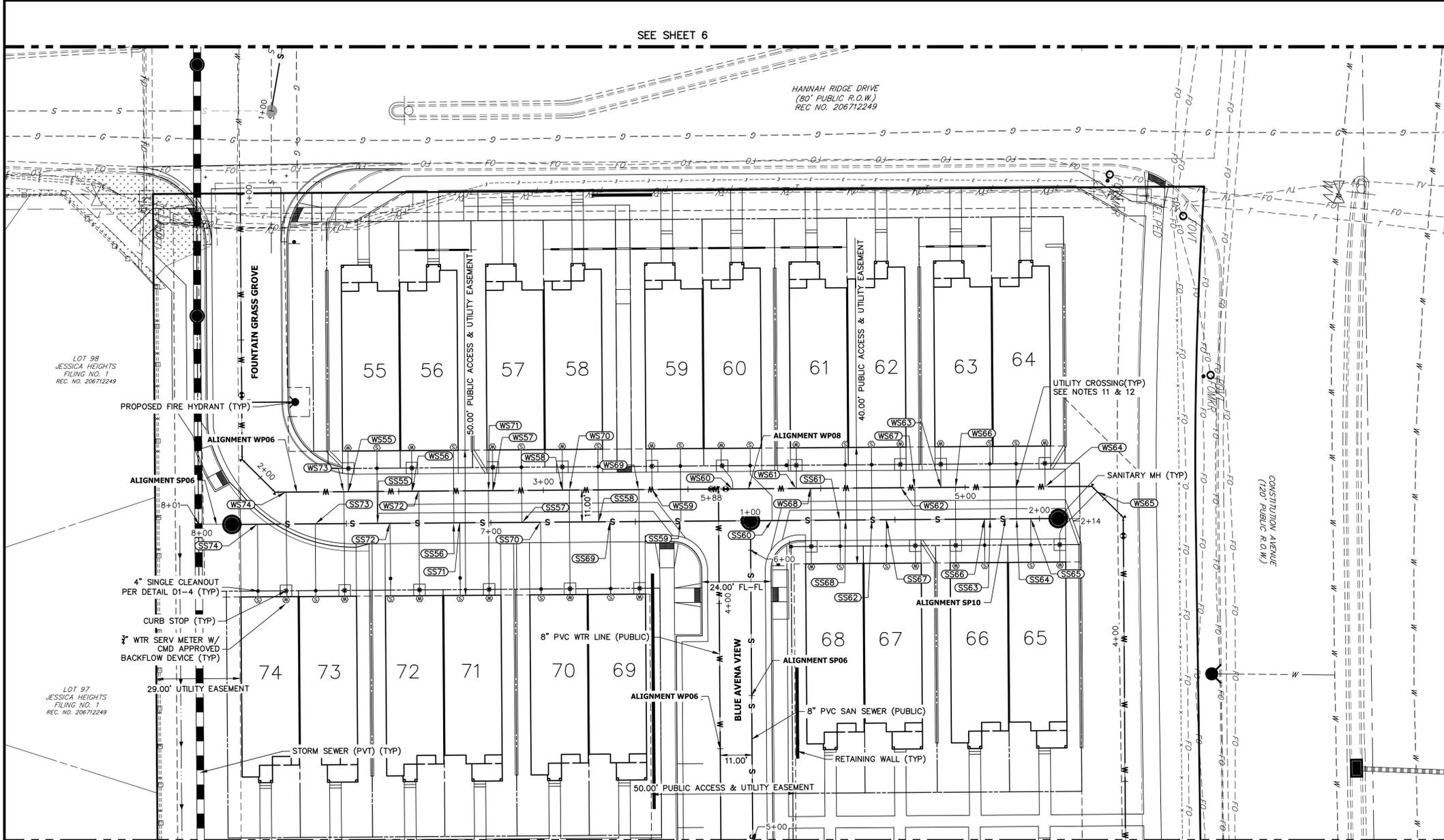


KEY MAP
SCALE: N.T.S.

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SEE SHEET 8

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SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
SS55	7+39.26	SP06	SANITARY SEWER SERVICE
SS56	7+12.78	SP06	SANITARY SEWER SERVICE
SS57	6+89.27	SP06	SANITARY SEWER SERVICE
SS58	6+62.78	SP06	SANITARY SEWER SERVICE
SS59	6+34.27	SP06	SANITARY SEWER SERVICE
SS60	1+07.50	SP10	SANITARY SEWER SERVICE
SS61	1+31.00	SP10	SANITARY SEWER SERVICE
SS62	1+42.06	SP10	SANITARY SEWER SERVICE
SS63	1+83.00	SP10	SANITARY SEWER SERVICE
SS64	1+92.06	SP10	SANITARY SEWER SERVICE
SS65	1+97.00	SP10	SANITARY SEWER SERVICE
SS66	1+81.00	SP10	SANITARY SEWER SERVICE
SS67	1+47.00	SP10	SANITARY SEWER SERVICE
SS68	1+33.00	SP10	SANITARY SEWER SERVICE
SS69	6+58.70	SP06	SANITARY SEWER SERVICE
SS70	6+82.78	SP06	SANITARY SEWER SERVICE
SS71	7+10.77	SP06	SANITARY SEWER SERVICE
SS72	7+34.85	SP06	SANITARY SEWER SERVICE
SS73	7+60.76	SP06	SANITARY SEWER SERVICE
SS74	7+80.76	SP06	SANITARY SEWER SERVICE

UTILITY SERVICE TABULATION			
SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
WS55	2+32.50	WP06	POTABLE WATER SERVICE
WS56	2+54.56	WP06	POTABLE WATER SERVICE
WS57	2+82.49	WP06	POTABLE WATER SERVICE
WS58	3+06.63	WP06	POTABLE WATER SERVICE
WS59	3+37.57	WP06	POTABLE WATER SERVICE
WS60	5+80.39	WP08	POTABLE WATER SERVICE
WS61	5+58.37	WP08	POTABLE WATER SERVICE
WS62	5+22.33	WP08	POTABLE WATER SERVICE
WS63	5+08.37	WP08	POTABLE WATER SERVICE
WS64	4+72.33	WP08	POTABLE WATER SERVICE
WS65	4+53.51	WP08	POTABLE WATER SERVICE
WS66	5+03.39	WP08	POTABLE WATER SERVICE
WS67	5+17.39	WP08	POTABLE WATER SERVICE
WS68	5+53.39	WP08	POTABLE WATER SERVICE
WS69	3+33.06	WP06	POTABLE WATER SERVICE
WS70	3+08.98	WP06	POTABLE WATER SERVICE
WS71	2+80.99	WP06	POTABLE WATER SERVICE
WS72	2+56.91	WP06	POTABLE WATER SERVICE
WS73	2+31.00	WP06	POTABLE WATER SERVICE
WS74	2+11.00	WP06	POTABLE WATER SERVICE

THE LOCATIONS OF EXISTING ABOVE GROUND AND 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 ABOVE GROUND AND UNDERGROUND UTILITIES.



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UTILITIES PLAN APPROVAL

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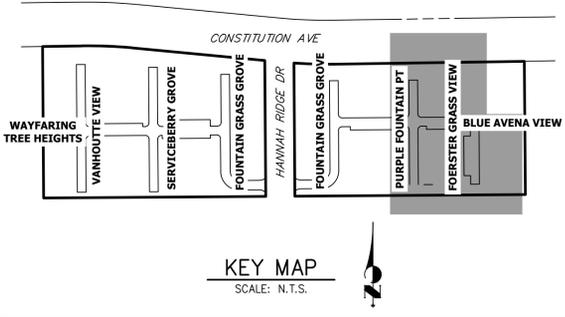
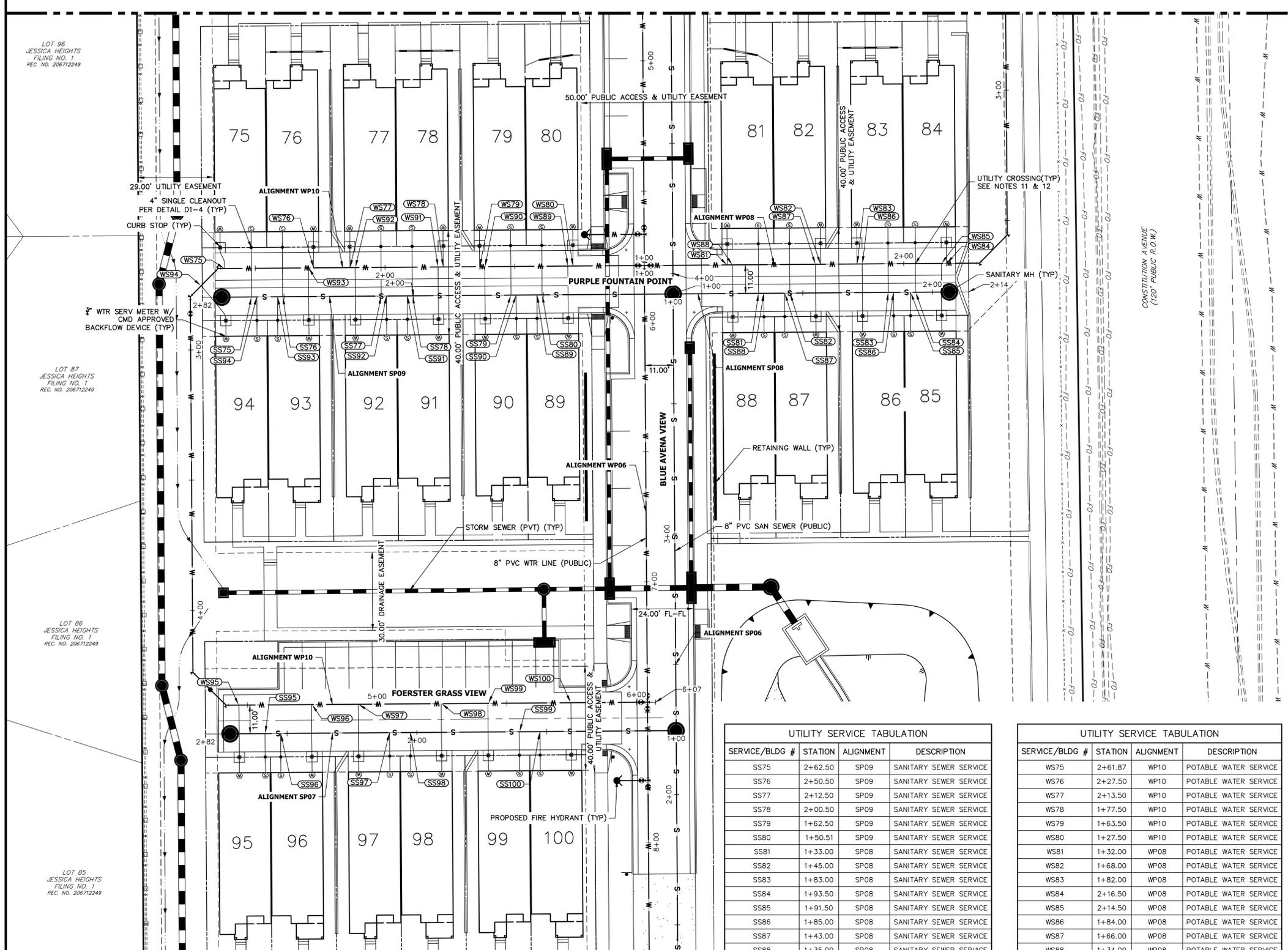
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FOR AND ON BEHALF OF JR ENGINEERING

07/15/2021 DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
URBAN COLLECTION AT PALMER VILLAGE									
OVERALL UTILITY PLAN									
LOTS 55-74									
UTILITY SERVICE PLAN									
SHEET 7 OF 10									
JOB NO. 25149.01									



SEE SHEET 7



NOTES:

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UTILITY SERVICE TABULATION			
SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
SS75	2+62.50	SP09	SANITARY SEWER SERVICE
SS76	2+50.50	SP09	SANITARY SEWER SERVICE
SS77	2+12.50	SP09	SANITARY SEWER SERVICE
SS78	2+00.50	SP09	SANITARY SEWER SERVICE
SS79	1+62.50	SP09	SANITARY SEWER SERVICE
SS80	1+50.51	SP09	SANITARY SEWER SERVICE
SS81	1+33.00	SP08	SANITARY SEWER SERVICE
SS82	1+45.00	SP08	SANITARY SEWER SERVICE
SS83	1+83.00	SP08	SANITARY SEWER SERVICE
SS84	1+93.50	SP08	SANITARY SEWER SERVICE
SS85	1+91.50	SP08	SANITARY SEWER SERVICE
SS86	1+85.00	SP08	SANITARY SEWER SERVICE
SS87	1+43.00	SP08	SANITARY SEWER SERVICE
SS88	1+35.00	SP08	SANITARY SEWER SERVICE
SS89	1+52.50	SP09	SANITARY SEWER SERVICE
SS90	1+60.50	SP09	SANITARY SEWER SERVICE
SS91	2+02.50	SP09	SANITARY SEWER SERVICE
SS92	2+10.50	SP09	SANITARY SEWER SERVICE
SS93	2+52.50	SP09	SANITARY SEWER SERVICE
SS94	2+60.50	SP09	SANITARY SEWER SERVICE
SS95	2+58.50	SP07	SANITARY SEWER SERVICE
SS96	2+52.50	SP07	SANITARY SEWER SERVICE
SS97	2+10.50	SP07	SANITARY SEWER SERVICE
SS98	2+02.50	SP07	SANITARY SEWER SERVICE
SS99	1+60.50	SP07	SANITARY SEWER SERVICE
SS100	1+52.50	SP07	SANITARY SEWER SERVICE

UTILITY SERVICE TABULATION			
SERVICE/BLDG #	STATION	ALIGNMENT	DESCRIPTION
WS75	2+61.87	WP10	POTABLE WATER SERVICE
WS76	2+27.50	WP10	POTABLE WATER SERVICE
WS77	2+13.50	WP10	POTABLE WATER SERVICE
WS78	1+77.50	WP10	POTABLE WATER SERVICE
WS79	1+63.50	WP10	POTABLE WATER SERVICE
WS80	1+27.50	WP10	POTABLE WATER SERVICE
WS81	1+32.00	WP08	POTABLE WATER SERVICE
WS82	1+68.00	WP08	POTABLE WATER SERVICE
WS83	1+82.00	WP08	POTABLE WATER SERVICE
WS84	2+16.50	WP08	POTABLE WATER SERVICE
WS85	2+14.50	WP08	POTABLE WATER SERVICE
WS86	1+84.00	WP08	POTABLE WATER SERVICE
WS87	1+66.00	WP08	POTABLE WATER SERVICE
WS88	1+34.00	WP08	POTABLE WATER SERVICE
WS89	1+29.50	WP10	POTABLE WATER SERVICE
WS90	1+61.50	WP10	POTABLE WATER SERVICE
WS91	1+79.50	WP10	POTABLE WATER SERVICE
WS92	2+11.50	WP10	POTABLE WATER SERVICE
WS93	2+29.50	WP10	POTABLE WATER SERVICE
WS94	2+73.62	WP10	POTABLE WATER SERVICE
WS95	4+46.70	WP10	POTABLE WATER SERVICE
WS96	4+74.70	WP10	POTABLE WATER SERVICE
WS97	4+92.70	WP10	POTABLE WATER SERVICE
WS98	5+24.70	WP10	POTABLE WATER SERVICE
WS99	5+42.70	WP10	POTABLE WATER SERVICE
WS100	5+74.70	WP10	POTABLE WATER SERVICE

THE LOCATIONS OF EXISTING ABOVE GROUND AND 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 ABOVE GROUND AND UNDERGROUND UTILITIES.

CHEROKEE METROPOLITAN DISTRICT
UTILITIES PLAN APPROVAL

THE CHEROKEE METROPOLITAN DISTRICT RECOGNIZES THE DESIGN PROFESSIONAL OF RECORD AS THE LICENSED ENGINEER HAVING RESPONSIBILITY FOR THE SUBMITTED DESIGN AND THE DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY. AS SUCH, THE APPROVAL GRANTED HEREIN IS FOR THE CONSTRUCTION OF THE FACILITIES AS REPRESENTED ON THESE DOCUMENTS. APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE BELOW AND RESUBMITAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

APPROVED BY: _____ DATE: _____

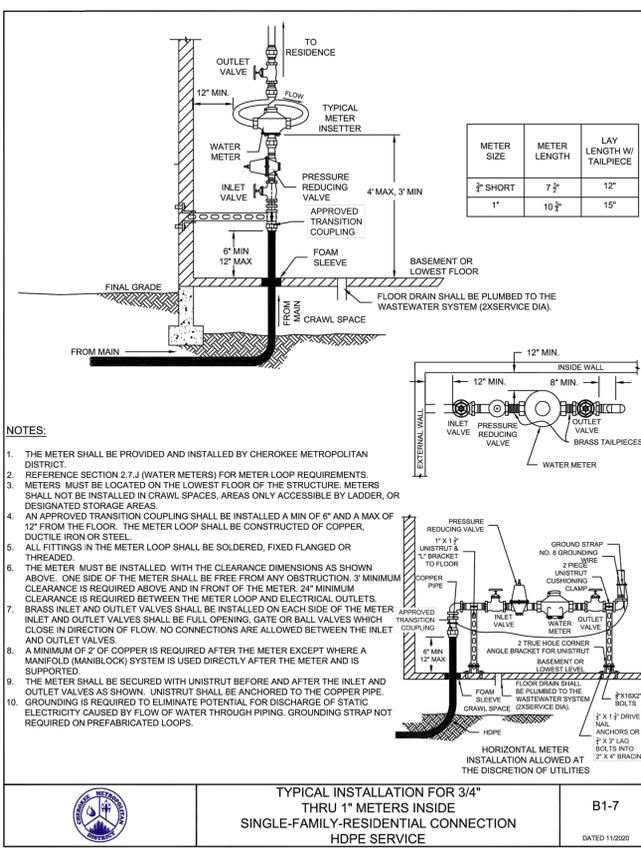
ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

GLENN D. ELLIS, P.E.
 COLORADO P.E. 38861
 FOR AND ON BEHALF OF JR ENGINEERING

07/15/2021 DATE

No.	REVISION	BY	DATE	DESIGNED BY		DRAWN BY		CHECKED BY	
				APL	APL				

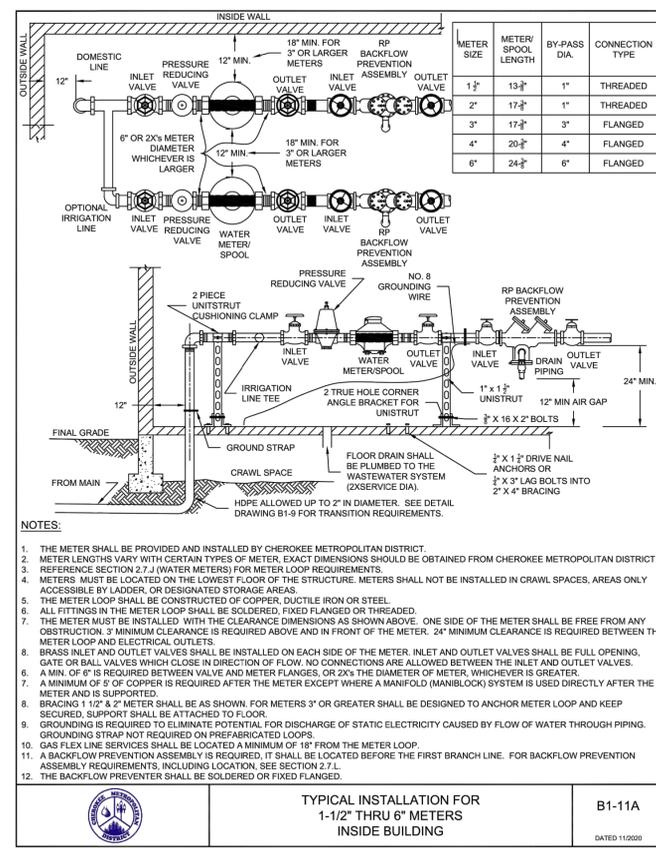




NOTES:
 1. THE METER SHALL BE PROVIDED AND INSTALLED BY CHEROKEE METROPOLITAN DISTRICT.
 2. REFERENCE SECTION 2.7.J (WATER METERS) FOR METER LOOP REQUIREMENTS.
 3. METERS MUST BE LOCATED ON THE LOWEST FLOOR OF THE STRUCTURE. METERS SHALL NOT BE INSTALLED IN CRAWL SPACES, AREAS ONLY ACCESSIBLE BY LADDER, OR DESIGNATED STORAGE AREAS.
 4. AN APPROVED TRANSITION COUPLING SHALL BE INSTALLED A MIN OF 6" AND A MAX OF 12" FROM THE FLOOR. THE METER LOOP SHALL BE CONSTRUCTED OF COPPER, DUCTILE IRON OR STEEL.
 5. ALL FITTINGS IN THE METER LOOP SHALL BE SOLDERED, FIXED FLANGED OR THREADED.
 6. THE METER MUST BE INSTALLED WITH THE CLEARANCE DIMENSIONS AS SHOWN ABOVE. ONE SIDE OF THE METER SHALL BE FREE FROM ANY OBSTRUCTION. 3" MINIMUM CLEARANCE IS REQUIRED ABOVE AND IN FRONT OF THE METER. 24" MINIMUM CLEARANCE IS REQUIRED BETWEEN THE METER LOOP AND ELECTRICAL OUTLETS.
 7. BRASS INLET AND OUTLET VALVES SHALL BE FULL OPENING, GATE OR BALL VALVES WHICH CLOSE IN DIRECTION OF FLOW. NO CONNECTIONS ARE ALLOWED BETWEEN THE INLET AND OUTLET VALVES.
 8. A MINIMUM OF 2" OF COPPER IS REQUIRED AFTER THE METER EXCEPT WHERE A MANIFOLD (MANIBLOCK) SYSTEM IS USED DIRECTLY AFTER THE METER AND IS SUPPORTED.
 9. THE METER SHALL BE SECURED WITH UNISTRUT BEFORE AND AFTER THE INLET AND OUTLET VALVES AS SHOWN. UNISTRUT SHALL BE ANCHORED TO THE COPPER PIPE.
 10. GROUNDING IS REQUIRED TO ELIMINATE POTENTIAL FOR DISCHARGE OF STATIC ELECTRICITY CAUSED BY FLOW OF WATER THROUGH PIPING. GROUNDING STRAP NOT REQUIRED ON PREFABRICATED LOOPS.
 11. THE METER SHALL BE INSTALLED WITH THE CLEARANCE DIMENSIONS AS SHOWN ABOVE. ONE SIDE OF THE METER SHALL BE FREE FROM ANY OBSTRUCTION. 3" MINIMUM CLEARANCE IS REQUIRED BETWEEN THE METER LOOP AND ELECTRICAL OUTLETS.
 12. THE METER MUST BE INSTALLED WITH THE CLEARANCE DIMENSIONS AS SHOWN ABOVE. ONE SIDE OF THE METER SHALL BE FREE FROM ANY OBSTRUCTION. 3" MINIMUM CLEARANCE IS REQUIRED BETWEEN THE METER LOOP AND ELECTRICAL OUTLETS.
 13. BRASS INLET AND OUTLET VALVES SHALL BE FULL OPENING, GATE OR BALL VALVES WHICH CLOSE IN DIRECTION OF FLOW. NO CONNECTIONS ARE ALLOWED BETWEEN THE INLET AND OUTLET VALVES.
 14. A MINIMUM OF 2" OF COPPER IS REQUIRED AFTER THE METER EXCEPT WHERE A MANIFOLD (MANIBLOCK) SYSTEM IS USED DIRECTLY AFTER THE METER AND IS SUPPORTED.
 15. THE METER SHALL BE SECURED WITH UNISTRUT BEFORE AND AFTER THE INLET AND OUTLET VALVES AS SHOWN. UNISTRUT SHALL BE ANCHORED TO THE COPPER PIPE.
 16. GROUNDING IS REQUIRED TO ELIMINATE POTENTIAL FOR DISCHARGE OF STATIC ELECTRICITY CAUSED BY FLOW OF WATER THROUGH PIPING. GROUNDING STRAP NOT REQUIRED ON PREFABRICATED LOOPS.

TYPICAL INSTALLATION FOR 3/4" THRU 1" METERS INSIDE SINGLE-FAMILY-RESIDENTIAL CONNECTION HDPE SERVICE

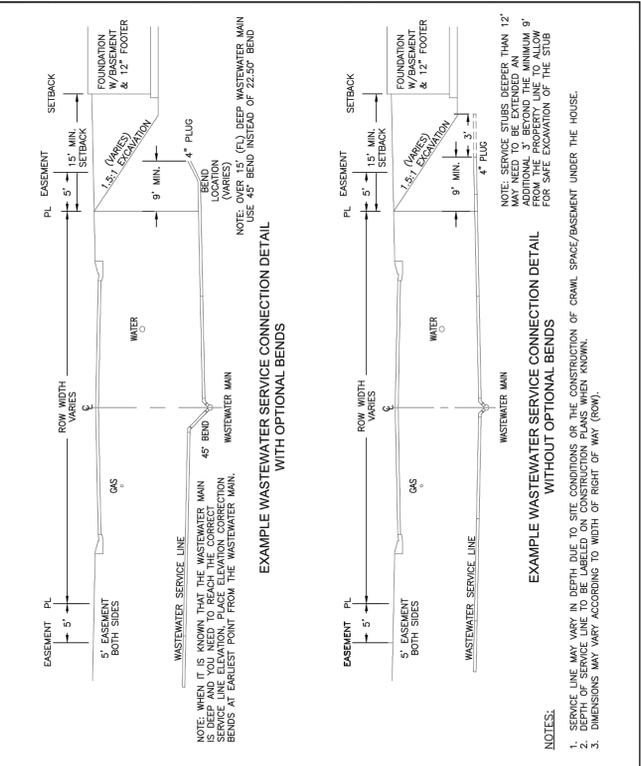
B1-7



NOTES:
 1. THE METER SHALL BE PROVIDED AND INSTALLED BY CHEROKEE METROPOLITAN DISTRICT.
 2. METER LENGTHS VARY WITH CERTAIN TYPES OF METER. EXACT DIMENSIONS SHOULD BE OBTAINED FROM CHEROKEE METROPOLITAN DISTRICT.
 3. REFERENCE SECTION 2.7.J (WATER METERS) FOR METER LOOP REQUIREMENTS.
 4. METERS MUST BE LOCATED ON THE LOWEST FLOOR OF THE STRUCTURE. METERS SHALL NOT BE INSTALLED IN CRAWL SPACES, AREAS ONLY ACCESSIBLE BY LADDER, OR DESIGNATED STORAGE AREAS.
 5. THE METER LOOP SHALL BE CONSTRUCTED OF COPPER, DUCTILE IRON OR STEEL.
 6. ALL FITTINGS IN THE METER LOOP SHALL BE SOLDERED, FIXED FLANGED OR THREADED.
 7. THE METER MUST BE INSTALLED WITH THE CLEARANCE DIMENSIONS AS SHOWN ABOVE. ONE SIDE OF THE METER SHALL BE FREE FROM ANY OBSTRUCTION. 3" MINIMUM CLEARANCE IS REQUIRED ABOVE AND IN FRONT OF THE METER. 24" MINIMUM CLEARANCE IS REQUIRED BETWEEN THE METER LOOP AND ELECTRICAL OUTLETS.
 8. BRASS INLET AND OUTLET VALVES SHALL BE INSTALLED ON EACH SIDE OF THE METER. INLET AND OUTLET VALVES SHALL BE FULL OPENING, GATE OR BALL VALVES WHICH CLOSE IN DIRECTION OF FLOW. NO CONNECTIONS ARE ALLOWED BETWEEN THE INLET AND OUTLET VALVES.
 9. A MIN OF 6" IS REQUIRED BETWEEN VALVE AND METER FLANGES, OR 2X THE DIAMETER OF METER, WHICHEVER IS GREATER.
 10. A MINIMUM OF 5" OF COPPER IS REQUIRED AFTER THE METER EXCEPT WHERE A MANIFOLD (MANIBLOCK) SYSTEM IS USED DIRECTLY AFTER THE METER AND IS SUPPORTED.
 11. BRACING 1 1/2" X 2" METER SHALL BE AS SHOWN. FOR METERS 3" OR GREATER SHALL BE DESIGNED TO ANCHOR METER LOOP AND KEEP SECURED. SUPPORT SHALL BE ATTACHED TO FLOOR.
 12. GROUNDING IS REQUIRED TO ELIMINATE POTENTIAL FOR DISCHARGE OF STATIC ELECTRICITY CAUSED BY FLOW OF WATER THROUGH PIPING. GROUNDING STRAP NOT REQUIRED ON PREFABRICATED LOOPS.
 13. GAS FLEX LINE SERVICES SHALL BE LOCATED A MINIMUM OF 18" FROM THE METER LOOP.
 14. A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED. IT SHALL BE LOCATED BEFORE THE FIRST BRANCH LINE. FOR BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS, INCLUDING LOCATION, SEE SECTION 2.7.L.
 15. THE BACKFLOW PREVENTER SHALL BE SOLDERED OR FIXED FLANGED.

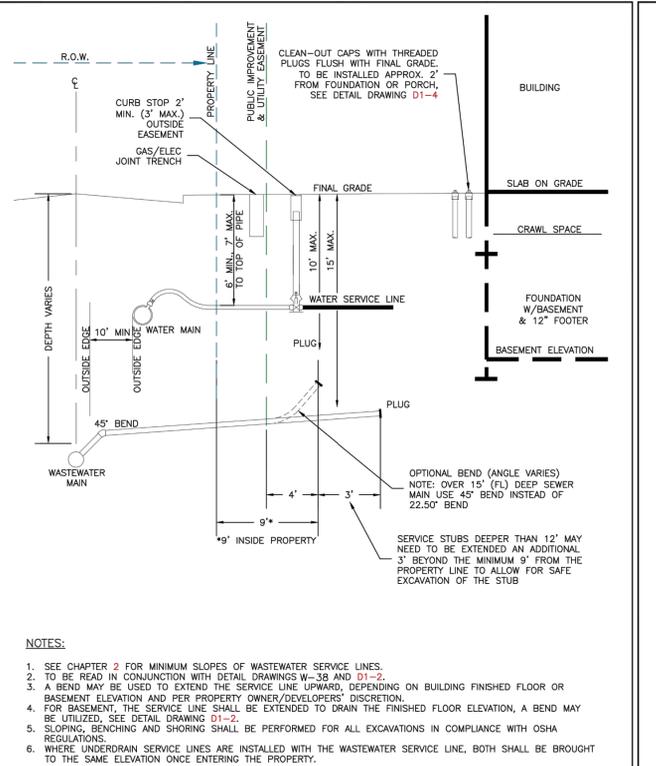
TYPICAL INSTALLATION FOR 1-1/2" THRU 6" METERS INSIDE BUILDING

B1-11A



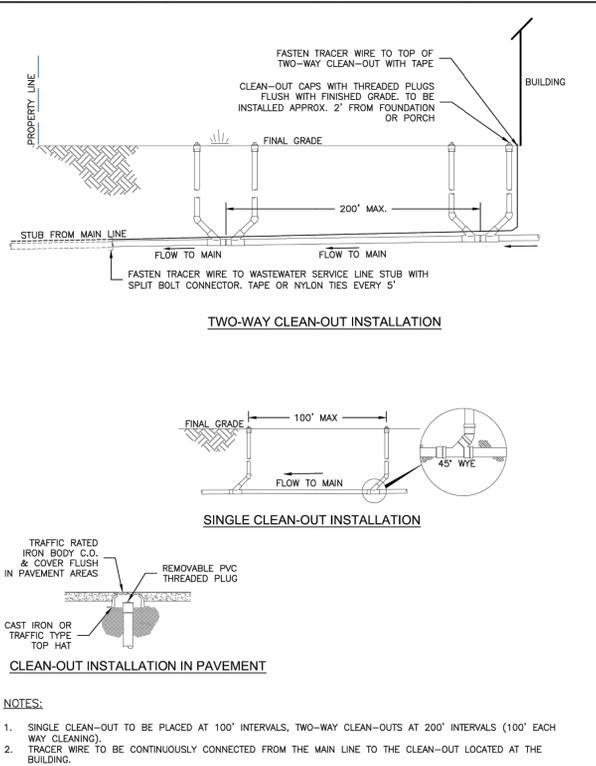
EXAMPLE OF A SERVICE WITH A BASEMENT

D1-2



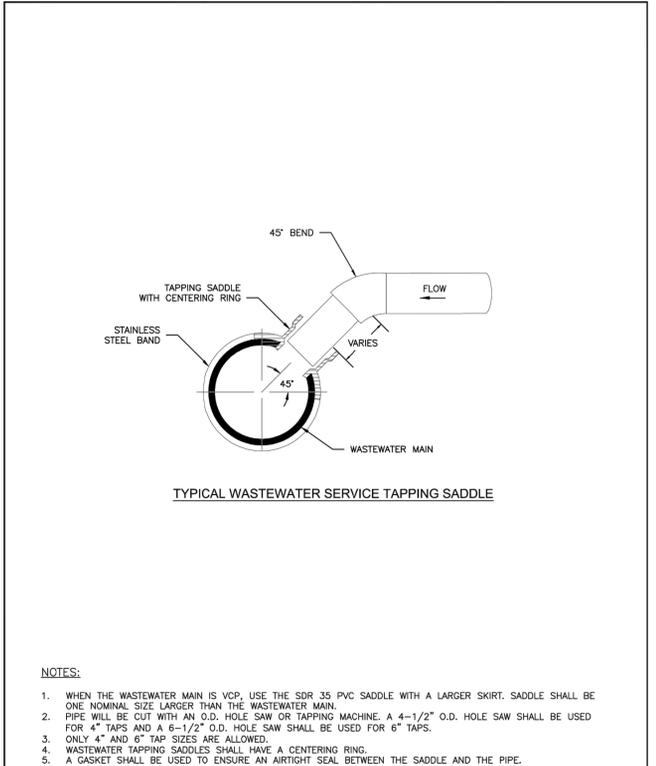
SCHEMATIC OF A DEEP SERVICE CONNECTION

D1-3



TYPICAL WASTEWATER SERVICE LINE WITH TRACER WIRE AND CLEAN-OUTS

D1-4



TYPICAL WASTEWATER SERVICE LINE TAPPING METHOD

D1-6

Colorado Springs Utilities
 EXAMPLE OF A SERVICE WITH A BASEMENT
 DATED 5/2015

Colorado Springs Utilities
 SCHEMATIC OF A DEEP SERVICE CONNECTION
 DATED 5/2015

Colorado Springs Utilities
 TYPICAL WASTEWATER SERVICE LINE WITH TRACER WIRE AND CLEAN-OUTS
 DATED 5/2015

Colorado Springs Utilities
 TYPICAL WASTEWATER SERVICE LINE TAPPING METHOD
 DATED 5/2015



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION, AND ON BEHALF OF JR ENGINEERING
 GLENN D. ELLIS, P.E.
 COLORADO P.E. 38861
 FOR AND ON BEHALF OF JR ENGINEERING, L.L.C.
 07/15/2021 DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE, DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
 MDC HOLDINGS
 RICHMOND AMERICAN HOMES
 4350 S. MONACO STREET
 DENVER, CO 80237
 ATTN: JASON FOCK
 720-977-3827

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 Centennial 303-740-9888 • Colorado Springs 719-588-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
URBAN COLLECTION AT PALMER VILLAGE									
DETAILS									
UTILITY SERVICE PLAN									
SHEET 10 OF 10									
JOB NO. 25149.01									