#### WATER SYSTEM CONSTRUCTION NOTES:

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARDS AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS NOTED OTHERWISE. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE METROPOLITAN DISTRICT STANDARDS SHALL GOVERN.
- 2. ALL WATER SYSTEM MAINS PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 200 (DR-14) PER AWWA C-900 AND ASTM D241 SPECIFICATIONS, EXCEPT WHERE NOTED. SPECIFICALLY, SECTIONS OF WATER PIPE THAT CROSS UNDER MAJOR DRAINAGE WAYS (SAND CREEK) R MAJOR THOROUGHFARES SHALL BE DUCTILE IRON PIPE.
- 3. ALL FITTINGS SHALL BE CONSTRUCTED OF GRAY-IRON MATERIAL AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL BE WRAPPED WITH A 9-MIL THICKNESS POLYETHYLENE MATERIAL PER AWWA STANDARD C105.
- 4. ALL WATER PIPES SHALL BE INSTALLED AT A MINIMUM DEPTH OF FIVE (5) FEET BELOW FINISHED GRADE.
- 5. ALL BENDS, TEE, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD END MAINS SHALL BE INSTALLED WITH CONCRETE THRUST BLOCKS.
- 6. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPES, FITTINGS, VALVES, APPURTENANCES, MATERIALS AND LABOR THAT ARE NECESSARY TO INSTALL A COMPLETE AND USEABLE FIRE HYDRANT. FIRE HYDRANT ASSEMBLIES SHALL BE ONE OF THE FOLLOWING TYPES:
- A. MUELLER CENTURION, MODEL A-473 B. KENNEDY VALVE
- C. AMERICAN AVK
  D. OR ENGINEER/DISTRICT APPROVED EQUAL
- 7. VALVE BOXES SHALL BE TYLER SLIP; TYPE "C" CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE OR APPROVED EQUAL.
- 8. CONTRACTOR SHALL PRESSURE TEST AND DISINFECT THE SYSTEM PRIOR TO CONNECTING TO EXISTING MAINS.
- 9. ALL WATER SYSTEM COMPONENTS SHALL BE FLUSHED AND CHLORINATED PER AWWA C-601, "DISINFECTING WATER MAINS" PRIOR TO ACCEPTANCE. THE CONTRACTOR SHALL PRODUCE A 25 MG/L SOLUTION BY ADHERING CHLORINE TABLETS TO THE PIPE SECTION WITH PERMATEX CLEAR TRV INSIDE THE SYSTEM. CHLORINATION SHALL OCCUR PRIOR TO HYDROSTATIC TESTING. THE CONTRACTOR SHALL OBTAIN A BACTERIOLOGICAL SAMPLE AFTER THE SYSTEM HAS BEEN FLUSHED. A CLEAN BACTERIOLOGICAL SAMPLE MUST BE OBTAINED PRIOR TO THE SYSTEM BEING PLACED INTO SERVICE.
- 10.HYDROSTATIC TESTING: ALL WATER SYSTEM MAINS SHALL BE FIELD PRESSURE TESTED TO A MINIMUM OF 150 PSI OR 1½ TIMES THE STATIC OPERATING PRESSURE, WHICH EVER IS GREATER. MAXIMUM ALLOWABLE LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING: \*10 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY.
- 11.ALL VALVES SHALL CONFORM TO OPEN LEFT CONVENTION PER CHEROKEE METROPOLITAN DISTRICT STANDARDS. SERVICE LINE STOP VALVES/BOXES SHALL BE LOCATED A MINIMUM OF 7 FEET BEYOND THE PROPERTY LINE OR PER THE SERVICE DETAIL ON THE UTILITY SERVICE PLAN. ALL OTHER VALVES SHALL BE LOCATED PER THESE PLANS.
- 12. WHEN IT IS NECESSARY TO RAISE OR LOWER WATER MAINS AT OTHER UTILITY CROSSINGS THE CONTRACTOR SHALL INSURE A MINIMUM CLEARANCE OF 18" WHERE POSSIBLE BETWEEN THE OUTSIDE DIAMETER OF PIPES.
- 13. WHILE CONTRUCTING THE WATER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR CONSTRUCTION: SET OF UPDATED PLANS AT ALL TIMES. APPROVED FIELD MODIFICATIONS TO PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE WATER SYSTEM.
- 14.COMPACTION TESTING RESULTS OF ALL TRENCHES AND BEDDING MATERIAL SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE OF THE WATER SYSTEM.
- 15.PRIOR TO TAPPING ANY EXISTING WATER MAIN THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL FOR SAID TAP IN ACCORDANCE WITH THE CHEROKEE METROPOLITAN DISTRICT STANDARDS.
- 16.PVC PIPE MUST BE PRESSURIZED PRIOR TO TAPPING.
- 17.THE WATER SYSTEM CONTRACTOR SHALL INSTALL ALL IRRIGATION TAPS AND METERS PER THESE PLANS.
- 18.FIRE FLOW DEMAND IS 1500 GPM FOR A 3 HOUR DURATION AT A 20-PSI MINIMUM RESIDUAL MAIN LINE PRESSURE.
- 19.ALL NONMETALLIC PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE WITH NO. 12 TYPE COPPER CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERVALS. THE TRACER WIRE SHALL ALSO BE PERMANENTLY CONNECTED TO ALL FIRE HYDRANT TEE, METALLIC PIPE BENDS, MAIN VALVE AND OTHER METALLIC FITTINGS AND APPURTENANCES. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. GROUND TRACER WIRES TO SURFACE AT ALL VALVE BOXES.
- 20. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- 21. ALL VALVES SHALL BE INSTALLED IN ACCORDANCE WITH COLORADO SPRINGS STANDARDS EXCEPT FOR NOTE 11 ABOVE. SPACING SHALL BE EQUIDISTANT FROM TEES, ELBOWS, BENDS AND OTHER APPURTENANCES AT 3 FOOT WHERE POSSIBLE.
- 22. HIGH DEFLECTION COUPLINGS ARE NOT TO BE USED IN THE INSTALLATION OF CURVILINEAR WATER PIPE.
- 23. TAPS WILL NOT BE RELEASE UNTIL THE FOLLOWING CONDITIONS ARE MET:
- A. WATER AND SEWER LINES ARE INSTALLED AND PRESSURE TESTED TO THE DISTRICT STANDARDS. ALL 2X4 MARKERS ARE INTACT AND PAINTED FOR SERVICES
- B. AS CONSTRUCTED DRAWINGS HAVE BEEN SUBMITTED TO THE DISTRICT. DRAWINGS TO INCLUDE ANY CHANGES FROM CONSTRUCTION DRAWINGS. THE LENGTH, DEPTH, GRADE AND LOCATION OF ALL SEWER SERVICES. THE LENGTH DEPTH AND LOCATION OF WATER SERVICES. C. ALL ELECTRIC AND GAS UTILITIES ARE INSTALLED.

  D. THE FIRST LIFT OF HOT MIX ASPHALT MUST BE INSTALLED.
- 24. CONTRACTOR IS TO NOTIFY CHEROKEE METROPOLITAN DISTRICTS' INSPECTOR 24 HOURS PRIOR TO ALL STORM SEWER CRITICAL CROSSING OVER WATER AND SEWER LINES, TO VERIFY CLEARANCE.
- 25. FIRE HYDRANTS MUST BE PAINTED, BLUE CAPS AND BONNETS; WHITE BARREL SECTIONS. COLOR CODES ARE AS FOLLOWS: CHEROKEE BLUE, PRODUCT NUMBER 58155; CHEROKEE WHITE, PRODUCT NUMBER 58101, BOTH GLOSS OIL BASE EXTERIOR DEVOE-BAROX. CAN BE PURCHASED AT THE PAINT SPOT 5849 PALMER PARK BLVD COLORADO SPRINGS, CO 80915, OR EQUAL BRAND.

CURVILINEAR PIPELINE: THERE IS NO DEFLECTION ALLOWED AT THE JOINTS ON 12-INCH AND SMALLER PIPE. NOTICE: MECHANICAL MEANS SHOULD NOT BE EMPLOYED TO ACCOMPLISH THESE RADII. IT IS THE INTENT THAT THE WORKER SHOULD ACCOMPLISH THIS MANUALLY IN THE TRENCH. ON 4-INCH TO 12-INCH PIPE, THE CURVE SHOULD BE ACCOMPLISHED BY BENDING THE PIPE RATHER THAN DEFLECTING JOINTS. THERE SHALL BE NO DEFLECTION IN THE JOINTS UPON COMPLETION TO AVOID OVER-STRESSING THE BELL AND PREVENT POSSIBLE BREAKAGE AND/OR LEAKS.

## **GENERAL UTILITY NOTES**

- 1.) ALL EXISTING UTILITIES SHOWN ON THIS PLAN ARE TRANSLATED FROM RECORDS AVAILABLE FROM CHEROKEE METROPOLITAN DISTRICT OR SURFACE EVIDENCE AS SURVEYED IN THE FIELD. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY UTILITY WORK OR DIGGING (CALL 811). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- 2.) THE CONTRACTOR SHALL VERIFY THE HORIZONTAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONNECTION POINT OF ALL NEW UTILITIES TO EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR ADEQUACY OF GRADE AND SEPARATION FROM OTHER UTILITIES. NOTIFY ENGINEER OF ANY PERCEIVED DEFICIENCIES PRIOR TO CONSTRUCTION.
  3.) IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE WATER RESOURCE
- INSPECTOR AND THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ACTION CAN BE TAKEN BY THE OWNER/DEVELOPER.

  4.) ALL WATER FACILITIES SHALL BE CONSTRUCTED ACCORDING TO "LINE EXTENSION & SERVICE STANDARDS WATER", LATEST EDITION, BY
- COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021.

  5.) ALL WATER TAPS TO BE INSTALLED BY THE OWNER'S CONTRACTOR. ALL WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED "UTILITY SERVICE PLAN" AND IN ACCORDANCE WITH "LINE EXTENSION & SERVICE STANDARDS WATER", LATEST EDITION, BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021.
- 6.) THE CONTRACTOR IS RESPONSIBLE FOR ALL OF HIS OPERATIONS ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE ALL SAFETY AND OSHA REGULATIONS DURING CONSTRUCTION OPERATIONS. TRENCH WIDTHS AND SLOPE ANGLES SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND ACCORDING TO SAFETY AND OSHA REGULATIONS. THE ENGINEER HAS NOT SPECIFIED TRENCH WIDTHS ON
- 7.) THE CONTRACTOR WILL VERIFY AND RECONNECT ALL EXISTING SERVICE CONNECTIONS. THE CONTRACTOR SHALL NOTE THAT SERVICES OTHER
- THAN THOSE FROM ADJACENT STRUCTURES MAY BE ENCOUNTERED.

  8.) THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY FIRE HYDRANT EXTENSION KITS REQUIRED TO BRING THE BOTTOM FLANGE OF PROPOSED FIRE HYDRANTS TO THE FLANGE ELEVATION SHOWN ON THESE PLANS.
- 9.) NO SELECT BEDDING IS SPECIFIED ON THESE PLANS. ANY SELECT BEDDING REQUIRED BY CMD INSPECTOR SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS WATER" BY COLORADO SPRINGS UTILITIES.
- 10.) BACKFILL AND COMPACTION OF THE WATER FACILITIES SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS WATER" BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER
- 11.) THE CONTRACTOR SHALL OBTAIN A STREET-CUT PERMIT FROM THE CITY OF COLORADO SPRINGS FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. ASPHALT SURFACE RESTORATION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE ACCORDING TO CITY OF COLORADO SPRINGS ENGINEERING DIVISION STANDARDS SPECIFICATIONS.
- 12.) CONTRACTOR TO NOTIFY COLORADO SPRINGS UTILITIES IF EXISTING SERVICE IS INTERRUPTED.

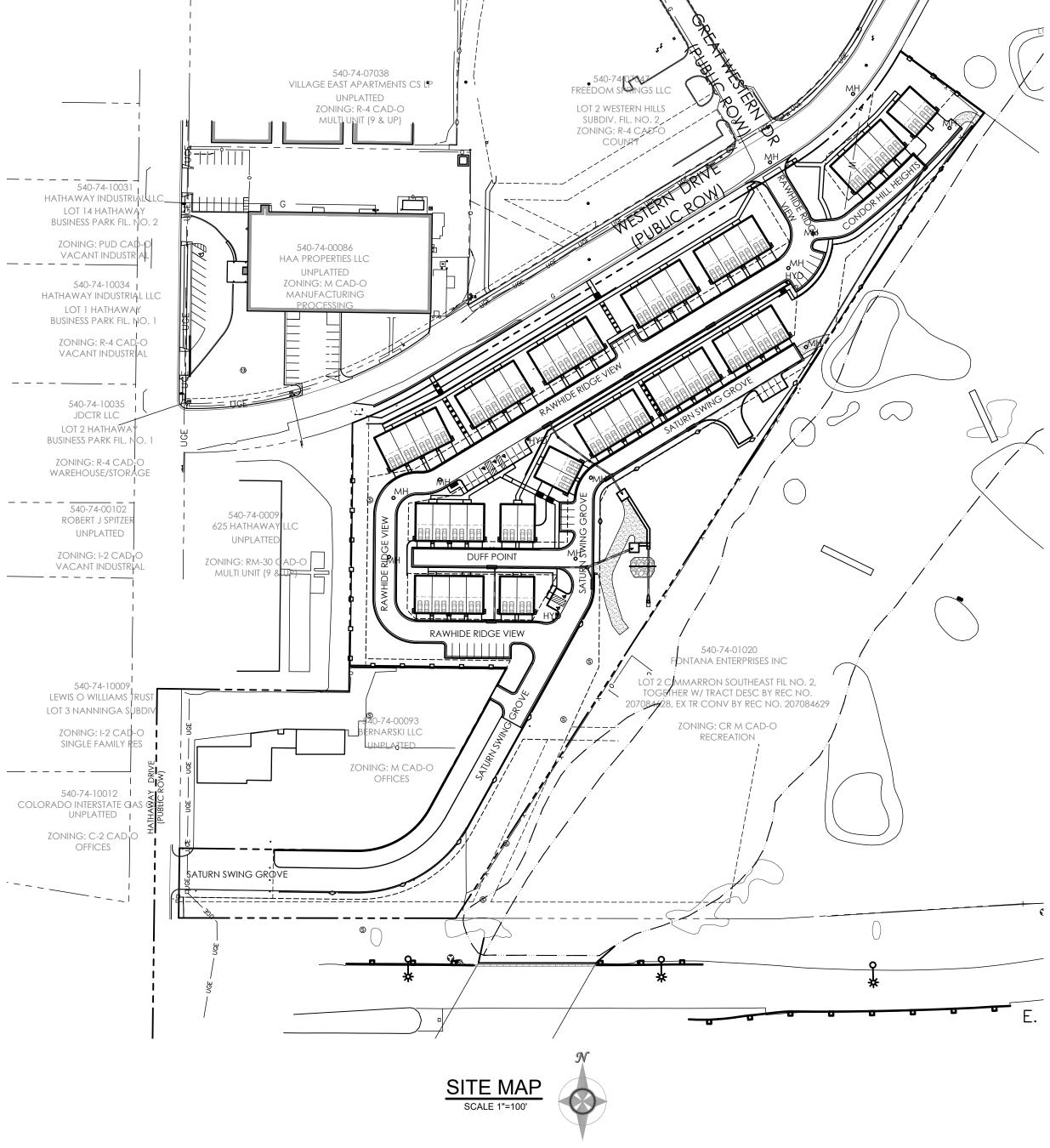


## WATER PLANS

 $F \cap R$ 

## TOWNHOMES AT WESTERN

LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, SOUTHEAST QUARTER SECTION 7, TOWNSHIP 14 SOUTH,
RANGE 66 WEST OF THE 6TH P. M.,
EL PASO COUNTY, COLORADO



## FIRE DEPARTMENT DATA

PROPOSED BUILDINGS - 2 & 4 UNIT TOWN HOMES
(TOTAL OF 52 UNITS)
IBC BUILDING CONSTRUCTION TYPE = V-B
TOTAL GROSS BUILDING SF = 7,728 SF (4 UNIT) & 3,864 SF (2 UNIT)
AREA OF EACH UNIT SEPARATED BY FIREWALLS = 1,932 SF

FIRE FLOW REQUIREMENTS:

REQ. FIRE FLOW = 1,500 GPM

REQ. NO. OF HYDRANTS = 1

REQ. AVG. HYDRANT SPACING = 500 FT

MAX. HOSE LAY DISTANCE = 250 FT

CANNOT REDUCE 50% DUE TO MINIMUM

FIRE SPRINKLERS: NO FIRE WALLS: YES (2 HOUR/UL375)

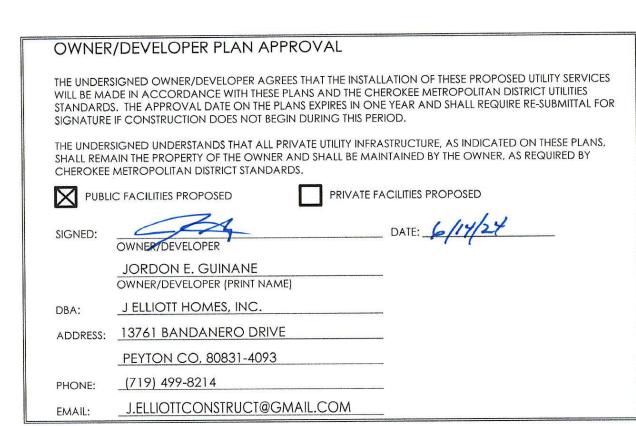
REQUIRED FIRE FLOW = 1,500 GPM

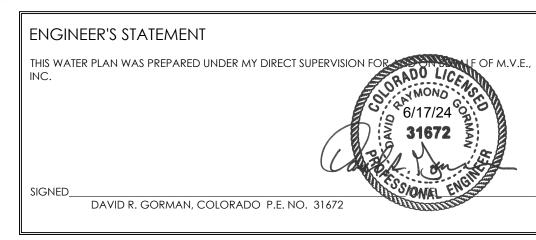
## SHEET INDEX

	SHEET TITLE	MVE DRAWING NO.
C3.1	WATER PLAN COVER SHEET	61203-WP-CS
C3.2	WATER PLAN	61203-WP-PS1
C3.3	WATER PLAN	61203-WP-PS2

## LEGEND

	PROPERTY LINE	ABBREVIATIONS	0.000
	EASEMENT LINE	C & G DCO	CURB & GUTTER DOUBLE CLEAN-OUT
	LOT LINE	ESMT R.O.W.	EASEMENT RIGHT-OF-WAY
	BUILDING SETBACK LINE	SSMH	Sanitary sewer manhole
	ADJACENT PROPERTY LINE		
EXISTING		PROPOSED	
<b></b> -5985 <b></b>	INDEX CONTOUR	5985	INDEX CONTOUR
84	INTERMEDIATE CONTOUR	84	INTERMEDIATE CONTOUR
	CONCRETE AREA	. 4 4 4 4	CONCRETE AREA
	ASPHALT AREA		ASPHALT AREA
	CURB AND GUTTER		CURB AND GUTTER
	BUILDING/ BUILDING OVERHANG		BUILDING/ BUILDING OVERHANG
x	BARBED WIRE FENCE		TOP OF WALL/GRADE AT BOTTOM
W 2" W (PVC) W	WATER MAIN	86.0 TW 83.0 FG	OF WALL TOP OF CURB/FLOWLINE
WW	WATER SERVICE LINE	86.85 83.35	SPOT ELEVATION
1,6544	WATER VALVE	84.96 TSW	FL = FLOWLINE TSW = TOP OF SIDEWALK FINISHED FLOOR ELEVATION
€ 859-B W	FIRE HYDRANT	FF = 5986.00	
—— SAN (PVC) (PUBLIC) SAN ——	SANITARY SEWER MAIN	12" PVC WATER MAIN (PUBLIC)	WATER MAIN
—— SAN ——— SAN ———	SANITARY SEWER SERVICE LINE	1" LIDDE MATED CEDVICE	WATER SERVICE LINE
SAN SAN	SANITARY SEWER MANHOLE	<del></del>	WATER VALVE
— SAN O SAN — SAN —	SANITARY SEWER CLEANOUT	<b>←</b>	FIRE HYDRANT
2" GAS (PLASTIC) (PUBLIC)	GAS MAIN	HYD "A"  10" PVC SANITARY SEWER	SANITARY SEWER MAIN
OHE	OVERHEAD ELECTRIC LINE	(PUBLIC)	SANITARY SEWER SERVICE LINE
UGE UGE	UNDERGROUND ELECTRIC LINE/ MANHOLE	MH-1	SANITARY SEWER MANHOLE
	UTILITY POLE/GUY WIRE	CO DCO	SANITARY SEWER CLEANOUT/
EL	ELECTRIC TRANSFORMER/VAULT		DOUBLE CLEANOUT WATER METER PIT
T	TELEPHONE PEDESTAL	UGE UGE	ELECTRIC METER & SERVICE LINE
<b>\$</b>	LIGHT POLE	GM G G	GAS METER & SERVICE LINE

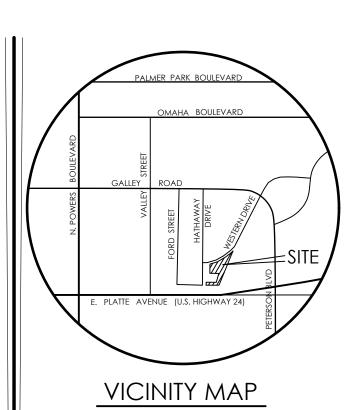




CHFP	D ACCEPTANCE
ALL FIRE HYDRANTS SHALL BE INSTALLE COLORADO SPRINGS UTILITIES' WATER L SERVICE STANDARDS.	
THE NUMBER OF HYDRANTS AND HYDRA ON THIS WATER PLAN ARE CORRECT AND THE FIRE PROTECTION REQUIREMENTS A CIMARRON HILLS FIRE PROTECTION DIST	D ADEQUATE TO SATISFY AS SPECIFIED BY THE
SIGNED:	
CHFPD PLAN REVIEW NO.: -	

CHEROKEE METROPOLITAN DISTRICT WATER PLAN DESIGN APPROVAL		
PROJECT NUMBER:		
WORK ORDER NUMBER:		
CSU SHEET OF		
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF HESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES		

NOT BEGIN DURING THIS PERIOD.



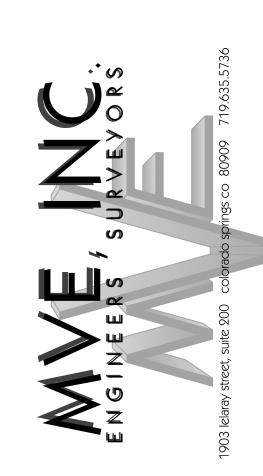
BENCHMARK

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE WEST LINE OF LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, ASSUMED TO BEAR N00°44'42"E.

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS

PREPARED AND PROVIDED BY POLARIS SURVEYING INC.

ELEVATIONS SHOWN ARE RELATIVE TO NAVD88.



REVISIONS

DESIGNED BY DRAWN BY CHECKED BY	
AS-BUILTS BY CHECKED BY	

LOT I, CIMARRON SOUTHEAST

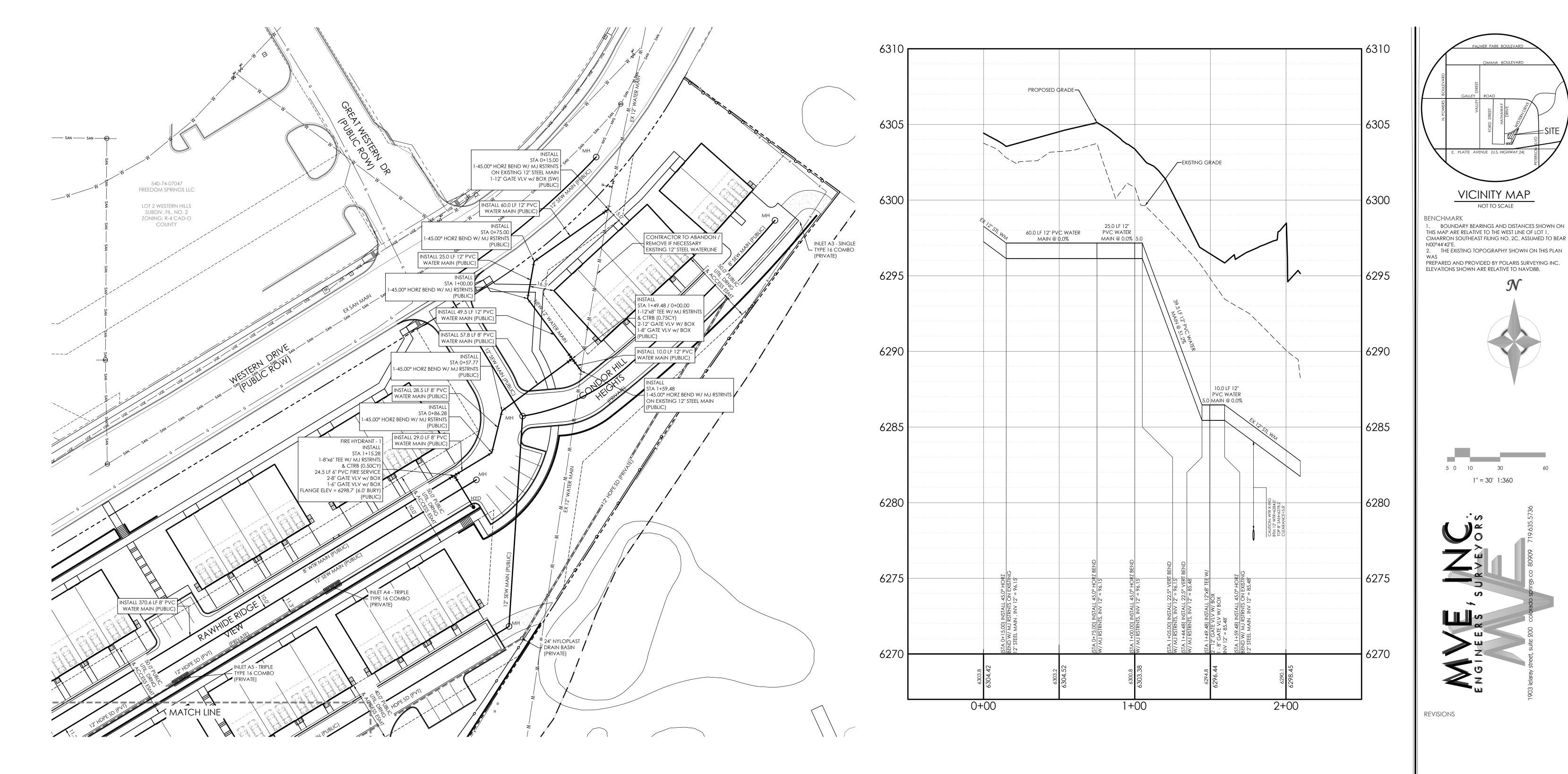
TOWNHOMES AT WESTERN

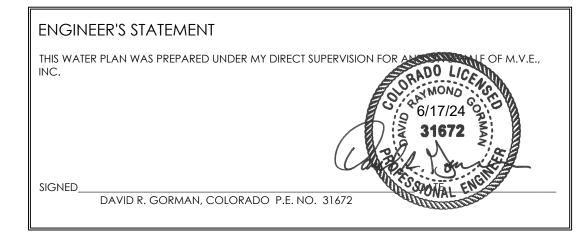
FILLING NO - 2C

WATER PLAN
COVER SHEET

C3.1 MVE PROJECT 61203
MVE DRAWING WP-CS

JUNE 7, 2024





METROPOLITAN DISTRICT AN DESIGN APPROVAL
PROJECT NUMBER:
WORK ORDER NUMBER:
CSU SHEET OF

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

DESIGNED BY
DRAWN BY
CHECKED BY \_\_\_\_\_
AS-BUILTS BY
CHECKED BY \_\_\_\_\_

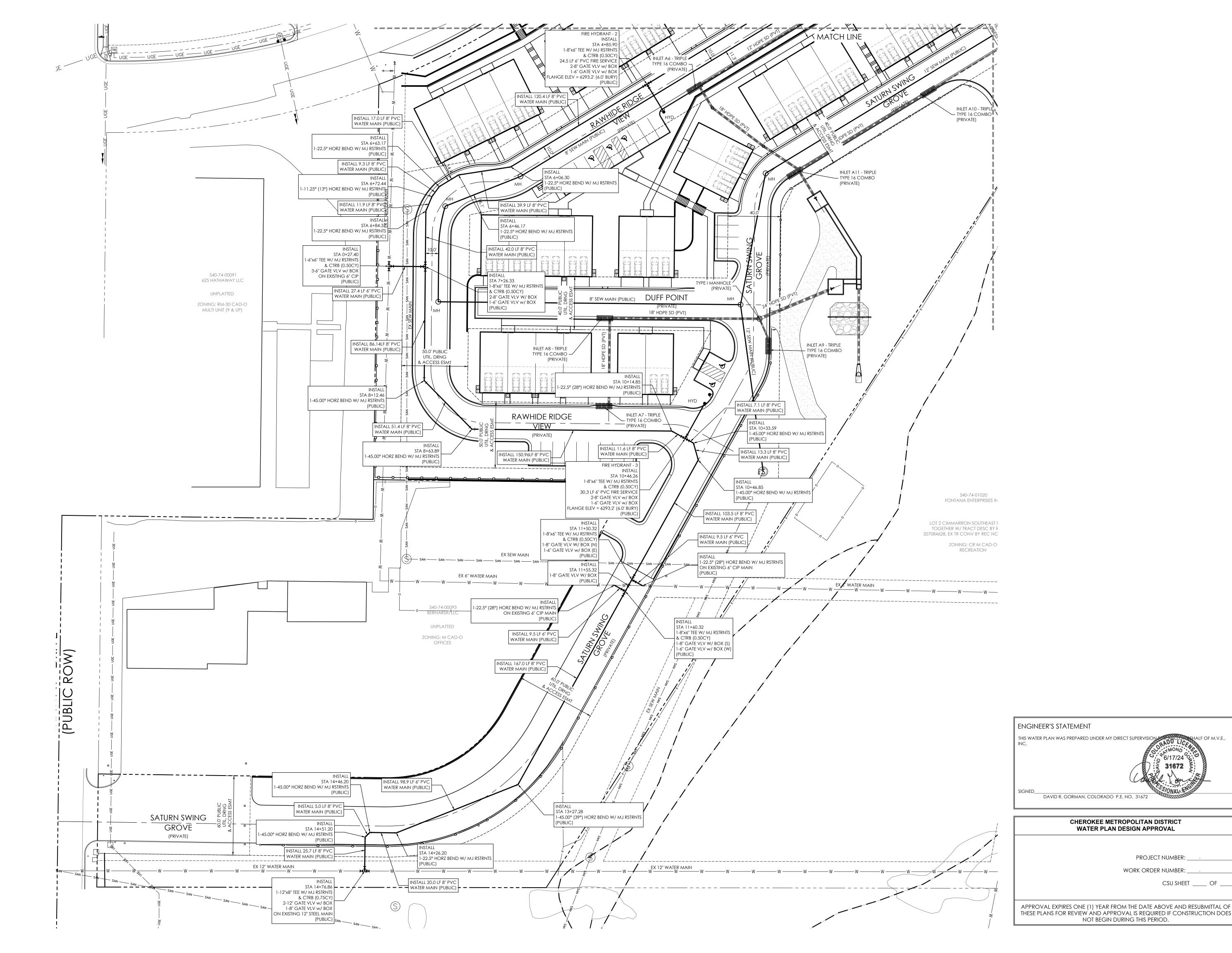
TOWNHOMES AT WESTERN

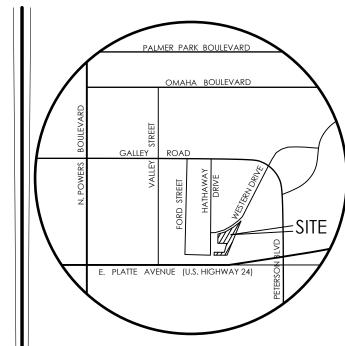
LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

WATER PLAN
PLAN SHEET

C3.2 MVE PROJECT 61203 MVE DRAWING WP-PS1

> JUNE 7, 2024 **SHEET** 2 **OF** 3





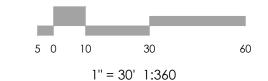
### VICINITY MAP NOT TO SCALE

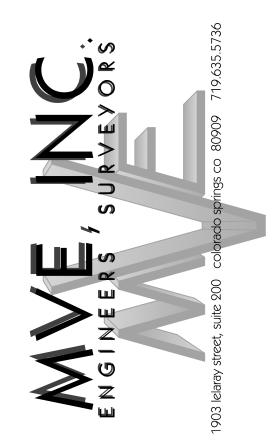
BENCHMARK 1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE WEST LINE OF LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, ASSUMED TO BEAR N00°44'42"E.

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO NAVD88.









REVISIONS

PROJECT NUMBER: \_

CSU SHEET \_\_\_\_ OF \_\_\_

WORK ORDER NUMBER:

DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

TOWNHOMES AT WESTERN

LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

## WATER PLAN PLAN SHEET

MVE DRAWING WP-PS1

JUNE 7, 2024 SHEET 3 OF 3

## SANITARY SEWER PLANS

FOR

## TOWNHOMES AT WESTERN

LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, SOUTHEAST QUARTER SECTION 7, TOWNSHIP 14 SOUTH,

RANGE 66 WEST OF THE 6TH P. M.,

EL PASO COUNTY, COLORADO

#### **SANITARY SEWER CONSTRUCTION NOTES:**

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARD AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS NOTED OTHERWISE. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE METROPOLITAN DISTRICT STANDARDS SHALL GOVERN.

2. SANITARY SEWER PIPE SHALL CONFORM TO ASTM D3034 SDR35 PVC.

- 3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF NEW SANITARY SEWER SYSTEM.
- 4. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- 5. INFILTRATION AND EXFILTRATION TESTS CONDUCTED BY AND AT THE EXPENSE OF THE CONTRACTOR SHALL BE PERFORMED ON A REPRESENTATIVE PORTION OF THE PROJECT IN ACCORDANCE WITH SECTION 7.04 OF THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS
- 6. ALL SANITARY SEWER MANHOLES, LIDS, BASES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH (IAW) COLORADO SPRINGS DETAILS STANDARD MANHOLE DETAIL 1. EXCEPT AS NOTED ON THESE PLANS. WHERE REQUIRED ON THESE PLANS, WATER TIGHT MANHOLES, LIDS AND CONNECTIONS SHALL BE PROVIDED IAW COLORADO SPRINGS STANDARDS.
- 7. WHERE NECESSARY, THE CONTRACTOR SHALL PROVIDE 3 DEGREE BENDS ON ALL CURVILINEAR SANITARY SEWER PIPE
- 8. SANITARY SEWER SERVICE LINES SHALL BE LOCATED PER THE DETAIL ON THE UTILITY SERVICE PLAN, OR AT THE DIRECTION OF THE CONSTRUCTION MANAGER.
- 9. OVERLOT GRADING AND STREET SUBGRADE MUST BE WITHIN ± ONE (1) FOOT PRIOR TO ANY UTILITY INSTALLATION.
- 10. WHILE CONSTRUCTING THE SANITARY SEWER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR CONSTRUCTION" SET OF UPDATED PLANS AT ALL TIMES. APPROVED FILED MODIFICATIONS TO PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE SANITARY SEWER SYSTEM.

#### 11. CONTRACTOR TO CONSTRUCT ALL MANHOLES AND STRUCTURES TO FINISHED GRADE.

- 12.UPON COMPLETION OF CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE DISTRICT, TWO (2) COPIES OF "AS-CONSTRUCTED" PLANS AND TWO (2) SETS OF ELECTRONIC DATA FILES OF THE PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR RECORD.
- A. THE TWO (2) COPIES SHALL BE COMPLETE WITH ALL "AS-CONSTRUCTED" INFORMATION TOGETHER WITH A CERTIFICATION BY THE PARTY RESPONSIBLE FOR CONSTRUCTION THAT ALL DATA THEREON IS ACCURATE AND REPRESENTS ACTUAL CONSTRUCTED CONDITIONS.

  B. THE TWO PLAN SETS SHALL BE SUBMITTED ON SHEETS THAT ARE 24" X 36" IN SIZE.
- C. THE PLAN SET SHALL BE ON A DURABLE MEDIA THAT CAN BE RUN THROUGH PHOTOCOPYING EQUIPMENT.

  D. THE TWO ELECTRONIC DATA FORMATS SHALL BE SUBMITTED. THE FIRST ELECTRONIC DATA FILE SET SHALL BE IN AUTOCAD 2006 OR
- NEWER FORMAT WITH NO EXTERNAL REFERENCE DRAWINGS. ALL EXTERNAL REFERENCES MUST BE BOUND INTO THE DRAWING SET. THE SECOND SET OF ELECTRONIC DATA FILES SHALL BE IN ADOBE ACROBAT .PDF FORMAT.
- E. "AS-CONSTRUCTED" PLANS SHALL BE SUBMITTED WITHIN TWO WEEKS OF COMPLETION OF THE WATER AND/OR SANITARY SEWER UTILITIES.
  F. NO AUTHORIZATION TO CONNECT TO THE SYSTEM OR DISCHARGE TO THE SYSTEM WILL BE ALLOWED UNTIL THE "AS-CONSTRUCTED" DOCUMENTS HAVE BEEN RECEIVED AND ACCEPTED BY THE DISTRICT.
- G. ALL PLANS, SPECIFICATIONS AND SUPPORTING DOCUMENTS SHALL BE PREPARED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF COLORADO. ALL PLANS AND SPECIFICATIONS SHALL BEAR THE SEAL AND SIGNATURE OF SAID LICENSED PROFESSIONAL ENGINEER.

13. TRACER WIRE IS TO BE INSTALLED WITH ALL SANITARY SEWER MAIN LINES AND SERVICES (FROM MAIN LINE TO THE BUILDING STRUCTURE). ALL NONMETALLIC PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE WITH NO. 12 TYPE COPPER CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERVALS. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. ROUTE TRACER WIRE TO SURFACE AT ALL MANHOLES AND CLEANOUT LOCATIONS

## GENERAL UTILITY NOTES

- 1.) ALL EXISTING UTILITIES SHOWN ON THIS PLAN ARE TRANSLATED FROM RECORDS AVAILABLE FROM CHEROKEE METROPOLITAN DISTRICT OR SURFACE EVIDENCE AS SURVEYED IN THE FIELD. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY UTILITY WORK OR DIGGING (CALL 811). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- 2.) THE CONTRACTOR SHALL VERIFY THE HORIZONTAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONNECTION POINT OF ALL NEW UTILITIES TO EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR ADEQUACY OF GRADE AND SEPARATION FROM OTHER UTILITIES. NOTIFY ENGINEER OF ANY PERCEIVED DEFICIENCIES PRIOR TO CONSTRUCTION.
  3.) IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE WATER RESOURCE
- INSPECTOR AND THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ACTION CAN BE TAKEN BY THE OWNER/DEVELOPER.

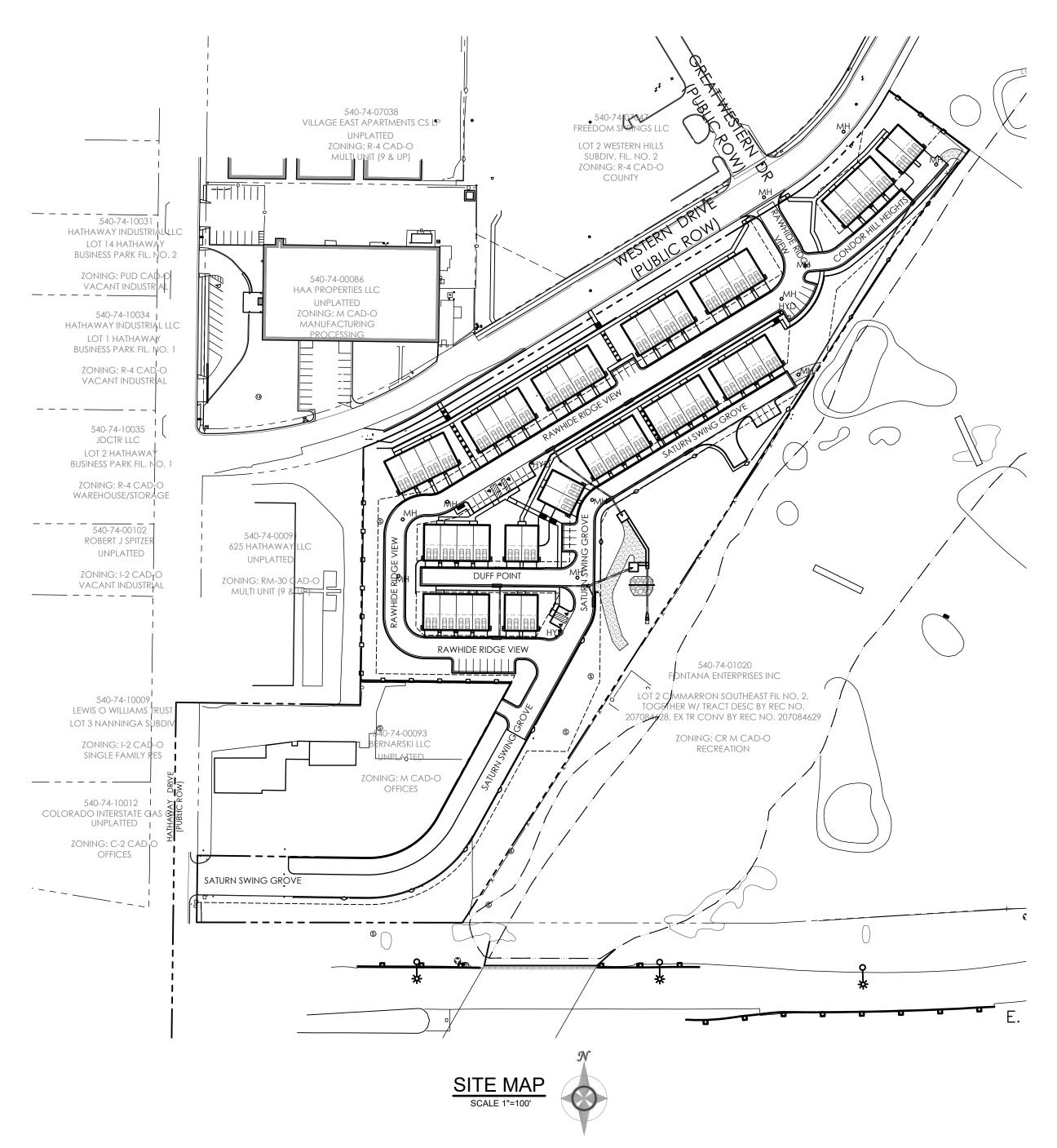
  4.) ALL WATER FACILITIES SHALL BE CONSTRUCTED ACCORDING TO "LINE EXTENSION & SERVICE STANDARDS WATER", LATEST EDITION, BY

COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021.

- COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021.

  5.) ALL WATER TAPS TO BE INSTALLED BY THE OWNER'S CONTRACTOR. ALL WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED "UTILITY SERVICE PLAN" AND IN ACCORDANCE WITH "LINE EXTENSION & SERVICE STANDARDS WATER", LATEST EDITION, BY
- 6.) THE CONTRACTOR IS RESPONSIBLE FOR ALL OF HIS OPERATIONS ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE ALL SAFETY AND OSHA REGULATIONS DURING CONSTRUCTION OPERATIONS. TRENCH WIDTHS AND SLOPE ANGLES SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND ACCORDING TO SAFETY AND OSHA REGULATIONS. THE ENGINEER HAS NOT SPECIFIED TRENCH WIDTHS ON THESE PLANS.
- 7.) THE CONTRACTOR WILL VERIFY AND RECONNECT ALL EXISTING SERVICE CONNECTIONS. THE CONTRACTOR SHALL NOTE THAT SERVICES OTHER THAN THOSE FROM ADJACENT STRUCTURES MAY BE ENCOUNTERED.
- 8.) THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY FIRE HYDRANT EXTENSION KITS REQUIRED TO BRING THE BOTTOM FLANGE OF PROPOSED FIRE HYDRANTS TO THE FLANGE ELEVATION SHOWN ON THESE PLANS.
- 9.) NO SELECT BEDDING IS SPECIFIED ON THESE PLANS. ANY SELECT BEDDING REQUIRED BY CMD INSPECTOR SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS WATER" BY COLORADO SPRINGS UTILITIES.
- 10.) BACKFILL AND COMPACTION OF THE WATER FACILITIES SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS WATER" BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER
- 11.) THE CONTRACTOR SHALL OBTAIN A STREET-CUT PERMIT FROM THE CITY OF COLORADO SPRINGS FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. ASPHALT SURFACE RESTORATION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE ACCORDING TO CITY OF COLORADO SPRINGS ENGINEERING DIVISION STANDARDS SPECIFICATIONS.
- 12.) CONTRACTOR TO NOTIFY COLORADO SPRINGS UTILITIES IF EXISTING SERVICE IS INTERRUPTED.

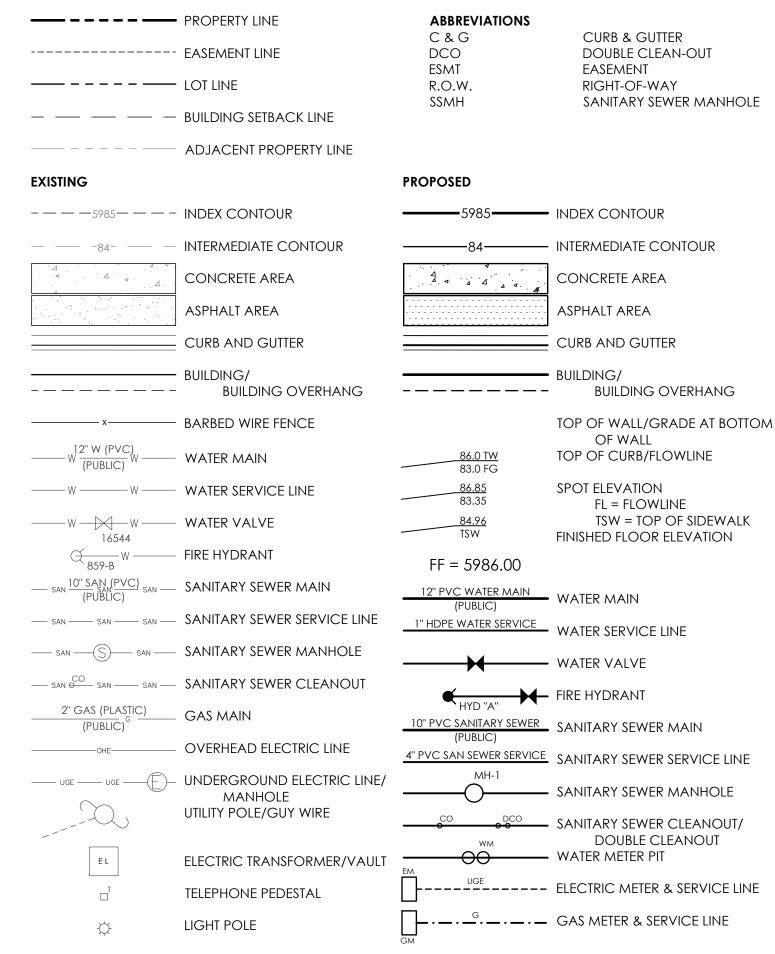


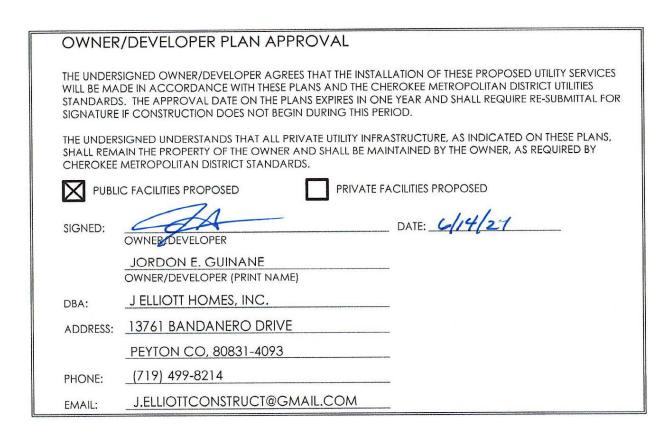


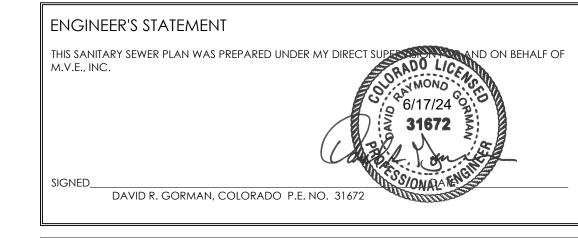
## SHEET INDEX

	SHEET TITLE	MVE DRAWING NO.
C4.1	SANITARY SEWER PLAN COVER SHEET	61203-SEW-CS
C4.2	SANITARY SEWER PLAN	61203-SEW-PS1
C4.3	SANITARY SEWER PLAN	61203-SEW-PS2

## LEGEND

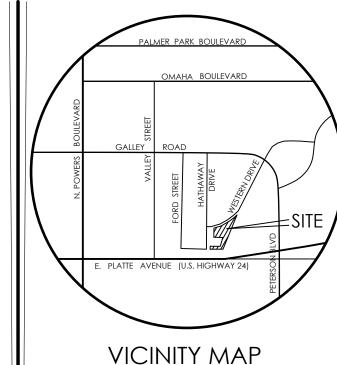






CHEROKEE METROPOLITAN DISTRICT SANITARY SEWER PLAN DESIGN APPROVAL		
PROJECT NUMBER:		
WORK ORDER NUMBER:		
CSU SHEET OF		
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES		

NOT BEGIN DURING THIS PERIOD.



VICINITY MAP

NOT TO SCALE

BENCHMARK

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON

THIS MAP ARE RELATIVE TO THE WEST LINE OF LOT 1,

CIMARRON SOUTHEAST FILING NO. 2C, ASSUMED TO BEAR N00°44'42"E.

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS
PREPARED AND PROVIDED BY POLARIS SURVEYING INC.
ELEVATIONS SHOWN ARE RELATIVE TO NAVD88.



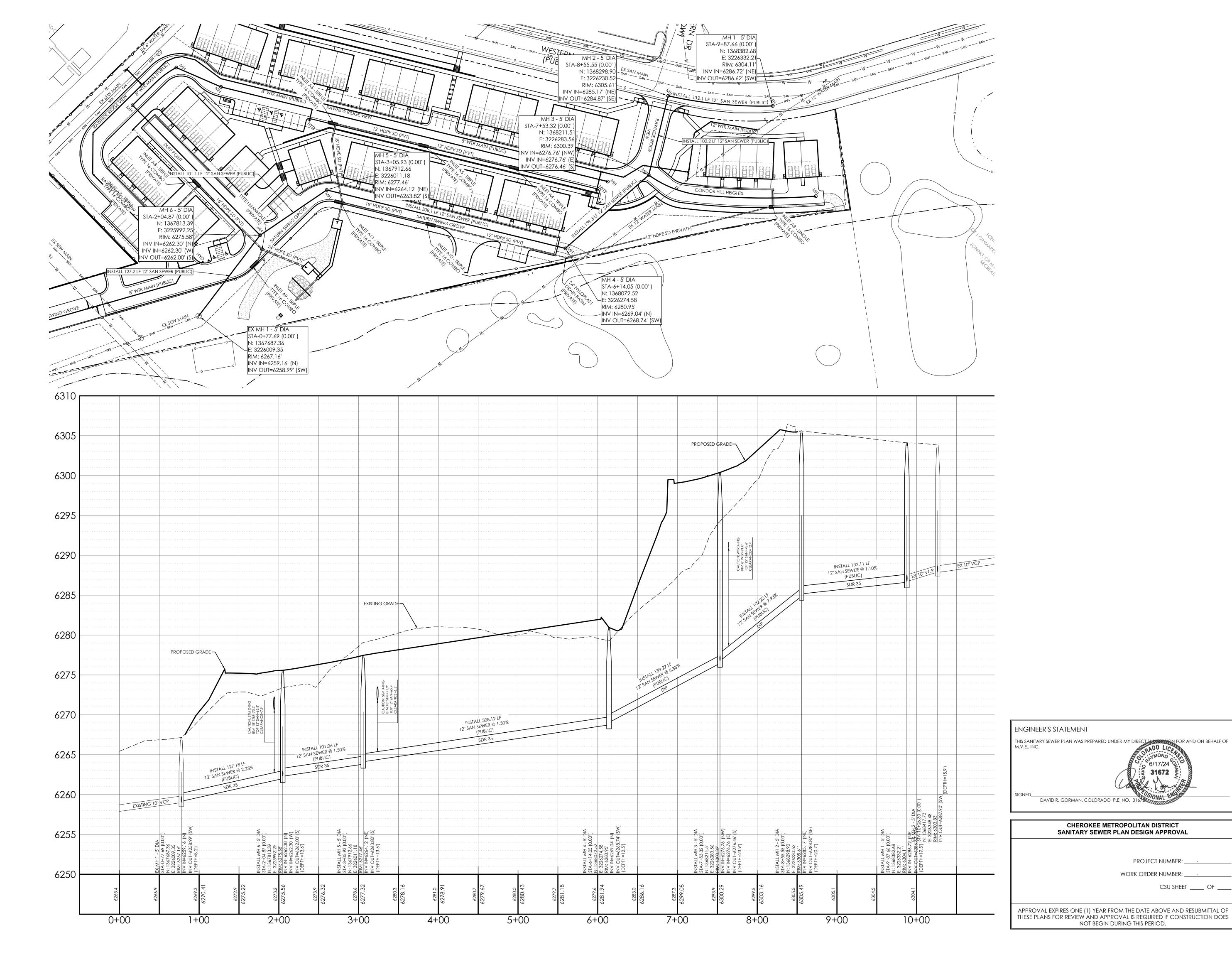
REVISIONS

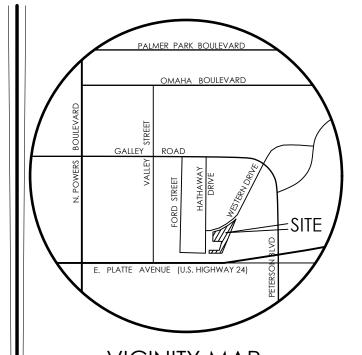
LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

SANITARY SEWER
PLAN
COVER SHEET

C4.1 MVE PROJECT 61203
MVE DRAWING SEW-CS

JUNE 7, 2024 SHEET 1 OF 3

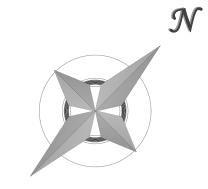


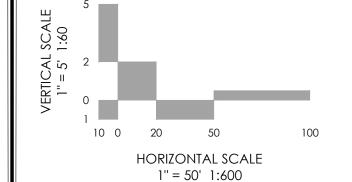


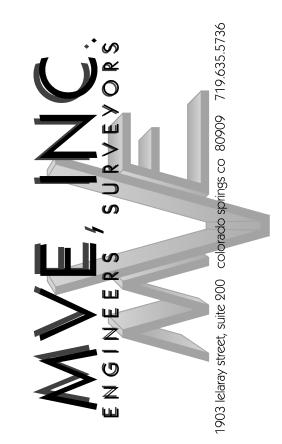
VICINITY MAP NOT TO SCALE

BENCHMARK BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE WEST LINE OF LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, ASSUMED TO BEAR

N00°44'42"E. 2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO NAVD88.







REVISIONS

PROJECT NUMBER:

CSU SHEET \_\_\_\_ OF \_\_\_

WORK ORDER NUMBER:

DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY \_

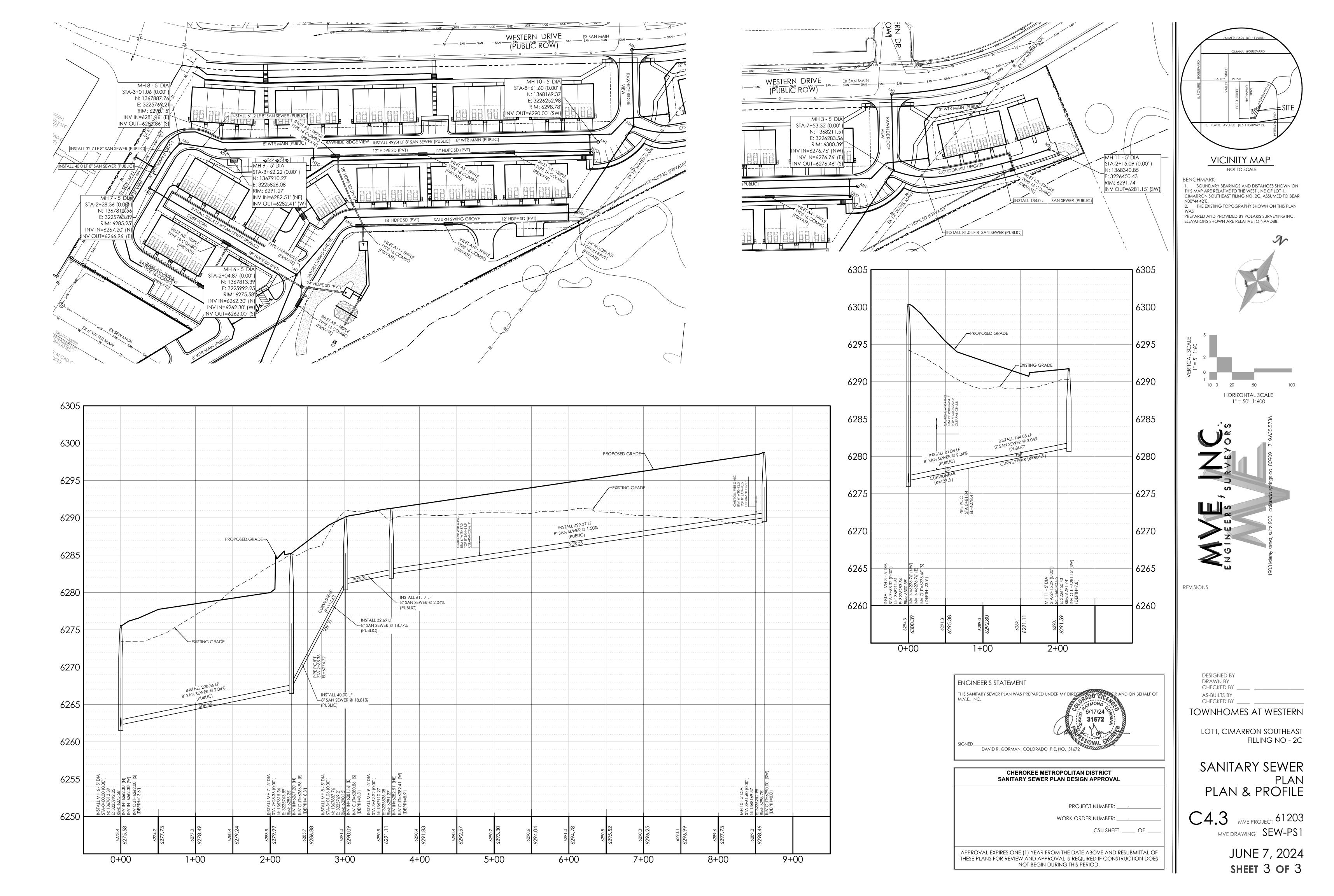
TOWNHOMES AT WESTERN

LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

## SANITARY SEWER PLAN PLAN & PROFILE

**C4.2** MVE PROJECT 61203 MVE DRAWING SEW-PS1

> JUNE 7, 2024 SHEET 2 OF 3



## **UTILITY SERVICE PLAN NOTES**

CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021 SUPERCEDE ANY REFERENCED CSU STANDARDS.

- 1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET COLORADO SPRINGS UTILITIES' WASTEWATER AND WATER LINE EXTENSION AND SERVICE STANDARDS (WATER/WASTEWATER LESS).
- 2. COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE THE ACCURACY OF LOCATIONS OF EXISTING PIPELINES, MANHOLES, HYDRANTS, VALVES AND SERVICE LINES. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL
- NOTIFY THE INSPECTOR AND THE DESIGN ENGINEER IMMEDIATELY. 3. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF COLORADO SPRINGS UTILITIES. 4. ALL FIELD STAKING SHALL COMPLY WITH THE WATER/WASTEWATER LESS.
- 5. CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE WATER/WASTEWATER LESS. 6. FINAL LOCATION OF ALL WASTEWATER AND WATER SERVICES SHALL BE APPROVED IN THE FIELD BY THE COLORADO SPRINGS UTILITIES
- 7. ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL AND SECTION 5.18 OF THE WATER LESS.

- 1. SERVICE STUBS SHALL BE INSTALLED A MINIMUM OF SEVEN FEET (7') INTO THE PROPERTY, UNLESS OTHERWISE SHOWN, AND THE END OF THE STUB SHALL BE MARKED WITH A 2"X4"X12' STEEL OR WOODEN POST.
- 2. SERVICES SHALL BE CONNECTED A MINIMUM OF FIVE FEET (5') FROM THE OUTSIDE EDGE OF ANY MANHOLE ON THE MAIN LINE AND SHALL MAINTAIN TWO FEET (2') OF SEPARATION BETWEEN TAPS CENTER TO CENTER.
- 3. ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LINE. 4. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT WHEN ANY SEPTIC TANK IS TO BE ABANDONED AND PAY ALL FEES NECESSARY TO OBTAIN A PERMIT.

- 1. SERVICE STUBS SHALL BE INSTALLED WITH THE CURB STOP AT OR NEAR PROPERTY LINE AND SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR SIDEWALKS (SEE DETAIL DRAWING B2-3).
- 2. SERVICE TAPS SHALL BE MADE A MINIMUM OF THREE FEET (3') FROM THE BELL OR APPURTENANCE ON THE WATER MAIN. TAPS SHALL BE A MINIMUM OF THREE FEET (3') APART ON THE SAME SIDE OF THE WATER MAIN AND A MINIMUM OF ONE-AND-A-HALF FEET (1.5') WHEN TAPS
- 3. ALL SERVICES FOR COMMERCIAL USE AND SOME RESIDENTIAL USES REQUIRE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY AFTER THE METER. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE APPROVED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC-FCCCHR) AND INSTALLED IN ACCORDANCE WITH THIS LISTING. PLEASE REFERENCE THE WATER LINE EXTENSION STANDARDS FOR ADDITIONAL REQUIREMENTS.
- 4. ALL TAPS ON COLORADO SPRINGS UTILITIES WATER MAINS SHALL BE PERFORMED BY COLORADO SPRINGS UTILITIES. ALL OTHER TAPS SHALL BE PERFORMED BY THE CONTRACTOR.
- 5. ANY ABANDONED SERVICES MUST BE PHYSICALLY DISCONNECTED AT THE MAIN. ANY NECESSARY REPAIRS TO THE MAIN AND/OR SHUT DOWN OF THE TAPPING VALVE SHALL BE AS DIRECTED BY COLORADO SPRINGS UTILITIES. 6. ALL WATER SERVICE LINES SHOULD ENTER THE BUILDING WITHIN 3 FEET OF AN EXTERIOR WALL. EXPOSED WATER PLUMBING SHALL BE
- MINIMIZED INSIDE THE BUILDING PRIOR TO THE WATER METER AND/OR APPROVED BACKFLOW PREVENTION ASSEMBLY OR METHOD. 7. ALL HDPE WATER SERVICE LINES MUST EXTEND A MINIMUM OF 6 INCHES ABOVE THE FLOOR AND BE 90 DEGREES FROM THE FLOOR PLAN TO ALLOW FOR BRACING AND TRANSITION TO THE METER LOOP ASSEMBLY.

### SERVICE LINE NOTES

- 1. UNLESS OTHERWISE SHOWN, ALL WATER SERVICE LINES SHALL BE 1" HDPE AND IN ACCORDANCE WITH CSU STANDARDS.
- 2. THE MINIMUM GRADE ON ALL 4" PVC (SDR 35) SANITARY SEWER SERVICE LINES SHALL BE 1/4" PER FOOT. THE MINIMUM GRADE ON ALL 6" SANITARY SEWER SERVICE LINES SHALL BE 1/8" PER FOOT.

#### 3. WASTEWATER SERVICE LINE MATERIAL, SIZE, DEPTH & SLOPE

WASTEWATER SERVICE LINE MATERIAL	nominal size (inch)	ALLOWABLE BURY DEPTH (FEET)	minim Slope
DIP	4	1 TO 30	1.04%
SCH 40 PVC	4	2 TO 30	1.04%
SDR 35 PVC	4	2 TO 20	2.08%

- 4. 4 INCH SCH 40 PVC INSTALLED WITH SLOPES BETWEEN 1.04% AND 2.08% REQUIRE SELECT BEDDING, SEE SECTION 5.11.D.3 COLORADO SPRINGS UTILITIES WASTEWATER STANDARDS.
- 5. CONTRACTOR TO ADJUST TAP LOCATION TO AVOID PIPE JOINTS AS NECESSARY.
- 6. FOR WASTEWATER SERVICES WITH LESS THAN 6' OF COVER REFER TO CHAPTER 7, SECTION 7.04d OF CSU WASTEWATER STANDARDS.
- 7. SERVICE CONNECTIONS SHALL BE A MINIMUM OF 5' OUTSIDE A MANHOLE AND 2' APART.

## GENERAL UTILITY NOTES

- 1.) ALL EXISTING UTILITIES SHOWN ON THIS PLAN ARE TRANSLATED FROM RECORDS AVAILABLE FROM CHEROKEE METROPOLITAN DISTRICT OR SURFACE EVIDENCE AS SURVEYED IN THE FIELD. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY UTILITY WORK OR DIGGING (CALL 811). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- CONSTRUCTION. THE CONNECTION POINT OF ALL NEW UTILITIES TO EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR ADEQUACY OF GRADE AND SEPARATION FROM OTHER UTILITIES. NOTIFY ENGINEER OF ANY PERCEIVED DEFICIENCIES PRIOR TO CONSTRUCTION. 3.) IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS THE CONTRACTOR SHALL NOTIFY THE WATER

2.) THE CONTRACTOR SHALL VERIFY THE HORIZONTAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO

- RESOURCE INSPECTOR AND THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ACTION CAN BE TAKEN BY THE OWNER/DEVELOPER. 4.) ALL WATER FACILITIES SHALL BE CONSTRUCTED ACCORDING TO "LINE EXTENSION & SERVICE STANDARDS - WATER", LATEST
- EDITION, BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE 5.) ALL WATER TAPS TO BE INSTALLED BY THE OWNER'S CONTRACTOR. ALL WATER SERVICES SHALL BE INSTALLED IN
- ACCORDANCE WITH THE APPROVED "UTILITY SERVICE PLAN" AND IN ACCORDANCE WITH "LINE EXTENSION & SERVICE STANDARDS - WATER", LATEST EDITION, BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021. 6.) THE CONTRACTOR IS RESPONSIBLE FOR ALL OF HIS OPERATIONS ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO
- OBSERVE ALL SAFETY AND OSHA REGULATIONS DURING CONSTRUCTION OPERATIONS. TRENCH WIDTHS AND SLOPE ANGLES SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND ACCORDING TO SAFETY AND OSHA REGULATIONS. THE ENGINEER HAS NOT SPECIFIED TRENCH WIDTHS ON THESE PLANS.
- 7.) THE CONTRACTOR WILL VERIFY AND RECONNECT ALL EXISTING SERVICE CONNECTIONS. THE CONTRACTOR SHALL NOTE THAT SERVICES OTHER THAN THOSE FROM ADJACENT STRUCTURES MAY BE ENCOUNTERED.
- 8.) THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY FIRE HYDRANT EXTENSION KITS REQUIRED TO BRING THE BOTTOM FLANGE OF PROPOSED FIRE HYDRANTS TO THE FLANGE ELEVATION SHOWN ON THESE PLANS.
- 9.) NO SELECT BEDDING IS SPECIFIED ON THESE PLANS. ANY SELECT BEDDING REQUIRED BY CMD INSPECTOR SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS - WATER" BY COLORADO SPRINGS UTILITIES.
- 10.) BACKFILL AND COMPACTION OF THE WATER FACILITIES SHALL BE ACCORDING TO THE LATEST EDITION OF "LINE EXTENSION & SERVICE STANDARDS - WATER" BY COLORADO SPRINGS UTILITIES TOGETHER WITH CHEROKEE METROPOLITAN DISTRICT EXCEPTIONS EFFECTIVE OCTOBER 29, 2021.
- 11.) THE CONTRACTOR SHALL OBTAIN A STREET-CUT PERMIT FROM THE CITY OF COLORADO SPRINGS FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY, ASPHALT SURFACE RESTORATION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE ACCORDING TO CITY
- OF COLORADO SPRINGS ENGINEERING DIVISION STANDARDS SPECIFICATIONS.
- 12.) CONTRACTOR TO NOTIFY COLORADO SPRINGS UTILITIES IF EXISTING SERVICE IS INTERRUPTED.

## EXISTING TOPOGRAPHIC MAP NOTES

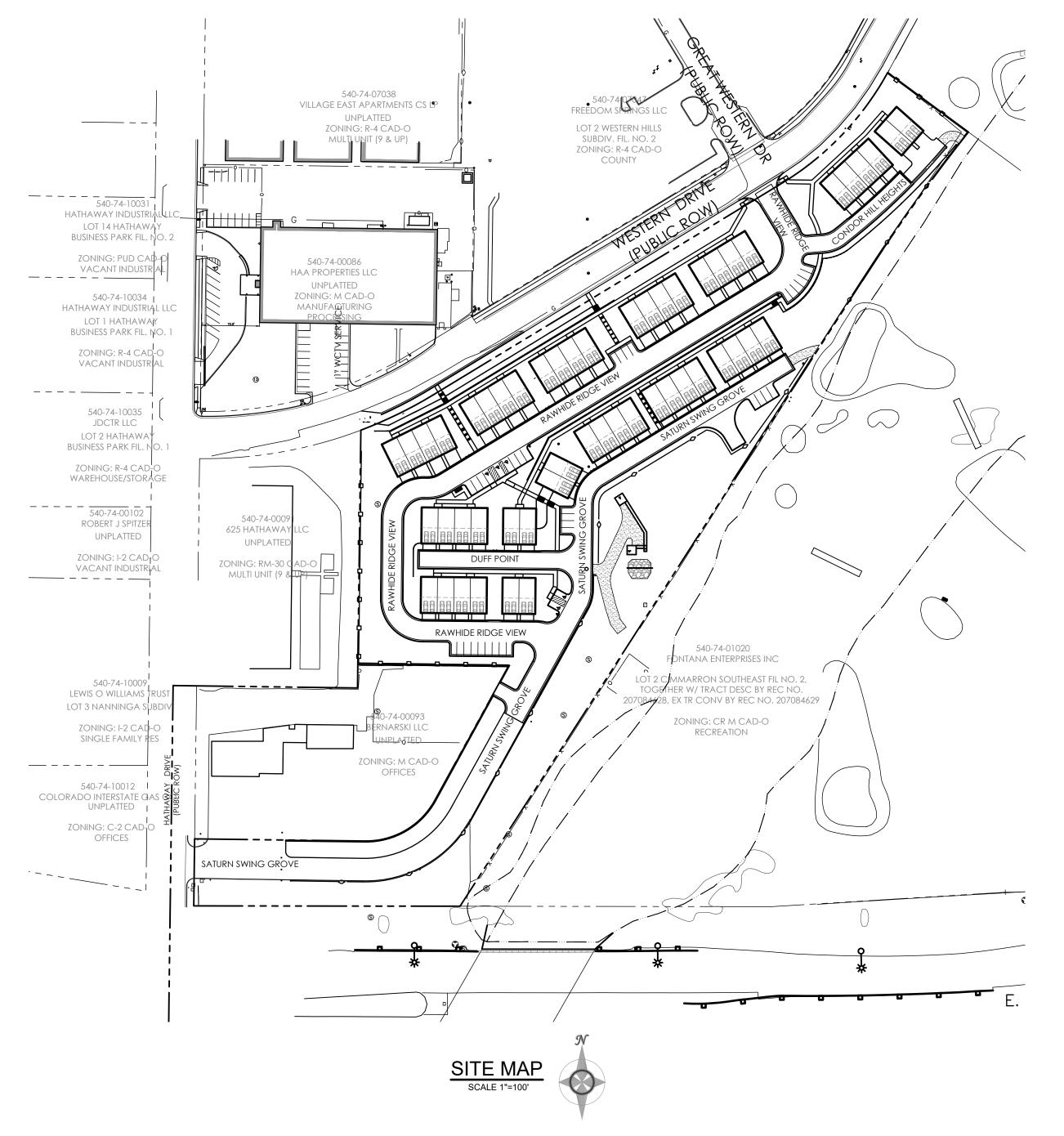
1. ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM UTILITY MAIN RECORD MAPS AND UTILITY SERVICE LOCATION MAPS OBTAINED FROM COLORADO SPRINGS UTILITIES. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED. EXISTING TOPO MAPPING BASE PREPARED BY ALTITUDE LAND CONSULTANTS AND PROVIDED BY OWNER.

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY ALTITUDE LAND CONSULTANTS, AND COLLECTED IN SEPTEMBER, 2016.

# UTILITY SERVICE PLAN

## TOWNHOMES AT JETWING

COLORADO SPRINGS, COLORADO



## SHEET INDEX

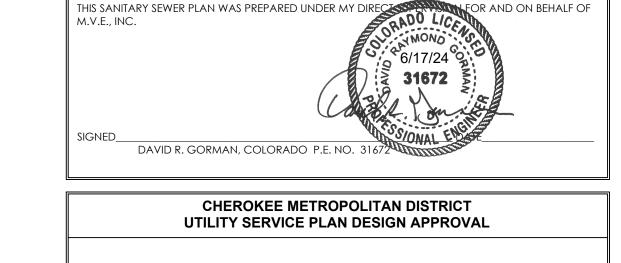
AN SET HEET NO.	SHEET TITLE	MVE DRAWING NO.
C5.1	UTILITY SERVICE PLAN COVER SHEET	51440-USP-CS
C5.2	UTILITY SERVICE PLAN	51440-USP-PS
C5.3	UTILITY SERVICE PLAN	51440-USP-PS

## **LEGEND**

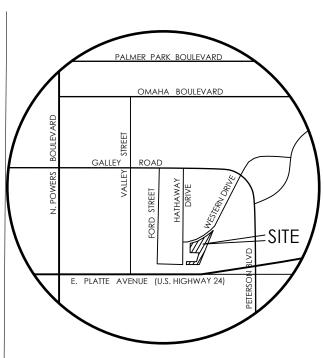
	PROPERTY LINE	<b>ABBREVIATIONS</b>	OUDD & OUTTED	
	EASEMENT LINE	C & G DCO	CURB & GUTTER DOUBLE CLEAN-OUT	
	LOT LINE	ESMT R.O.W.	EASEMENT RIGHT-OF-WAY	
	BUILDING SETBACK LINE	SSMH	Sanitary sewer manhole	
	ADJACENT PROPERTY LINE			
EXISTING		PROPOSED		
<b></b> 5985 <b></b>	INDEX CONTOUR	<del></del> 5985 <del></del>	INDEX CONTOUR	
84	INTERMEDIATE CONTOUR	84	INTERMEDIATE CONTOUR	
	CONCRETE AREA	4 4 4 4 4 4	CONCRETE AREA	
	ASPHALT AREA		ASPHALT AREA	
	CURB AND GUTTER		CURB AND GUTTER	
	BUILDING/ BUILDING OVERHANG		BUILDING/ BUILDING OVERHANG	
x	BARBED WIRE FENCE		TOP OF WALL/GRADE AT BOTTOM	
W 12" W (PVC) (PUBLIC) W	WATER MAIN	86.0 TW 83.0 FG	OF WALL TOP OF CURB/FLOWLINE	
, ,	WATER SERVICE LINE	86.85 83.35	SPOT ELEVATION	
	WATER VALVE	84.96 TSW	FL = FLOWLINE TSW = TOP OF SIDEWALK	
16544 <del>859-B</del> W ———	FIRE HYDRANT	FF = 5986.00	FINISHED FLOOR ELEVATION	
	SANITARY SEWER MAIN	12" PVC WATER MAIN	WATER MAIN	
	SANITARY SEWER SERVICE LINE	(PUBLIC) 1" HDPE WATER SERVICE	WATER SERVICE LINE	
SAN SAN	SANITARY SEWER MANHOLE		WATER VALVE	
SAN CO SAN SAN	SANITARY SEWER CLEANOUT	<u>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>	FIRE HYDRANT	
2" GAS (PLASTIC) (PUBLIC)	GAS MAIN	HYD "A"  10" PVC SANITARY SEWER	SANITARY SEWER MAIN	
OHE	OVERHEAD ELECTRIC LINE	(PUBLIC)	SANITARY SEWER SERVICE LINE	
UGE	UNDERGROUND ELECTRIC LINE/ MANHOLE	MH-1	SANITARY SEWER MANHOLE	
	UTILITY POLE/GUY WIRE	<u> </u>	SANITARY SEWER CLEANOUT/	
EL	ELECTRIC TRANSFORMER/VAULT		DOUBLE CLEANOUT WATER METER PIT	
	TELEPHONE PEDESTAL	EM UGE	ELECTRIC METER & SERVICE LINE	
⇔	LIGHT POLE	G	GAS METER & SERVICE LINE	
*		GM E	PROPOSED ELECTRIC METER BOX	
		G	PROPOSED GAS METER BOX	

## OWNER/DEVELOPER PLAN APPROVAL THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THE INSTALLATION OF THESE PROPOSED UTILITY SERVICES WILL BE MADE IN ACCORDANCE WITH THESE PLANS AND THE CHEROKEE METROPOLITAN DISTRICT UTILITIES STANDARDS. THE APPROVAL DATE ON THE PLANS EXPIRES IN ONE YEAR AND SHALL REQUIRE RE-SUBMITTAL FOR SIGNATURE IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD. THE UNDERSIGNED UNDERSTANDS THAT ALL PRIVATE UTILITY INFRASTRUCTURE, AS INDICATED ON THESE PLANS, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE MAINTAINED BY THE OWNER, AS REQUIRED BY CHEROKEE METROPOLITAN DISTRICT STANDARDS. PRIVATE FACILITIES PROPOSED JORDON E. GUINANE OWNER/DEVELOPER (PRINT NAME) ADDRESS: 13761 BANDANERO DRIVE PEYTON CO, 80831-4093 (719) 499-8214 J.ELLIOTTCONSTRUCT@GMAIL.COM

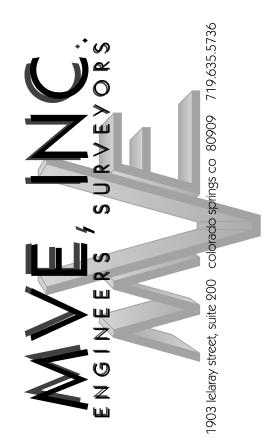
ENGINEER'S STATEMENT



CHEROKEE METROPOLITAN DISTRICT UTILITY SERVICE PLAN DESIGN APPROVAL
PROJECT NUMBER:
WORK ORDER NUMBER:
CSU SHEET OF
OVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.



BENCHMARK FIMS NGVD 29, 1960 SUPPLEMENT MONUMENT AG08 IS A 2 INCH ALUMINUM CAP SET IN THE SIDEWALK OPPOSITE DOUBLE OVERHEAD ELECTRIC POLES #22140 AT THE RIGHT TURN ENTRANCE TO THE STRIP MALL APPROXIMATELY 375 FEET NORTH OF JET WING DRIVE, EAST OF ACADEMY



REVISIONS

DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

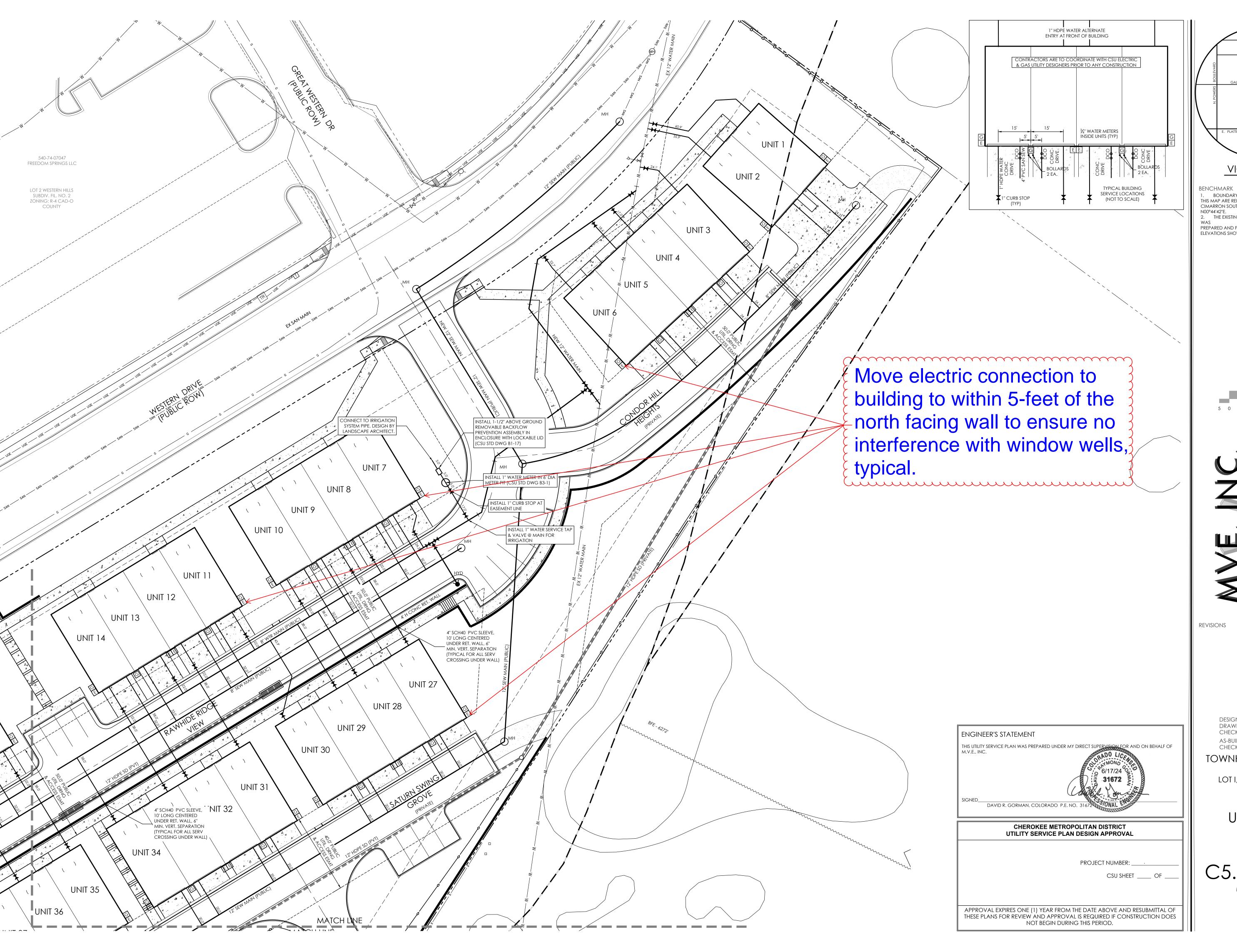
TOWNHOMES AT WESTERN

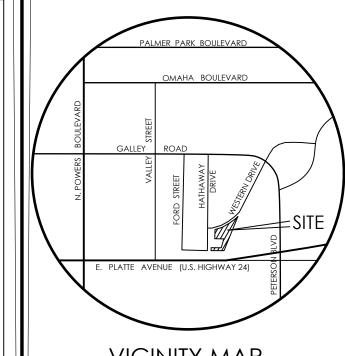
LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

UTILITY SERVICE

MVE DRAWING USP-CS

**APRIL 12, 2024** SHEET 1 OF 3



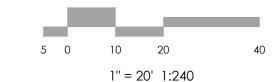


BENCHMARK

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE WEST LINE OF LOT 1, CIMARRON SOUTHEAST FILING NO. 2C, ASSUMED TO BEAR

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS
PREPARED AND PROVIDED BY POLARIS SURVEYING INC.
ELEVATIONS SHOWN ARE RELATIVE TO NAVD88.







DESIGNED BY
DRAWN BY
CHECKED BY \_\_\_\_\_
AS-BUILTS BY
CHECKED BY \_\_\_\_\_

TOWNHOMES AT WESTERN

LOT I, CIMARRON SOUTHEAST FILLING NO - 2C

UTILITY SERVICE PLAN PLAN SHEET

C5.2 MVE PROJECT 61203
MVE DRAWING USP-PS

JUNE 7, 2024 **SHEET** 2 **OF** 3

