

CANYON RANCH UNIT 5

COMAL COUNTY CIVIL CONSTRUCTION DRAWINGS

WATER, SEWER, STREET AND DRAINAGE IMPROVEMENTS

MARCH 2026

STREETS - COMAL COUNTY
WATER - TEXAS WATER COMPANY, SJWTX
DRAINAGE - COMAL COUNTY
WASTEWATER - CANYON RANCH MUD OF COMAL COUNTY

FEMA PANEL: #48091C0080F, DATED SEPTEMBER 9, 2009
TRACT SIZE: 47.771 ACRES
TYPE: SINGLE FAMILY RESIDENTIAL

CONTACT INFORMATION FOR COORDINATION AND EMERGENCY

COMAL COUNTY ENGINEER'S OFFICE : (830) 608-2090
ELECTRIC UTILITY: PEDERNALES ELECTRIC COOPERATIVE: (512) 262-2161
WATER UTILITY: TEXAS WATER COMPANY, SJWTX: (830) 312-4600
WASTEWATER UTILITY: CANYON RANCH MUD OF COMAL COUNTY: (512) 328-2008
TEXAS DEPARTMENT OF TRANSPORTATION: (512) 832-7000
FIRE DEPARTMENT: COMAL COUNTY ESD #1 & #4: (830) 228-4501

BENCHMARK

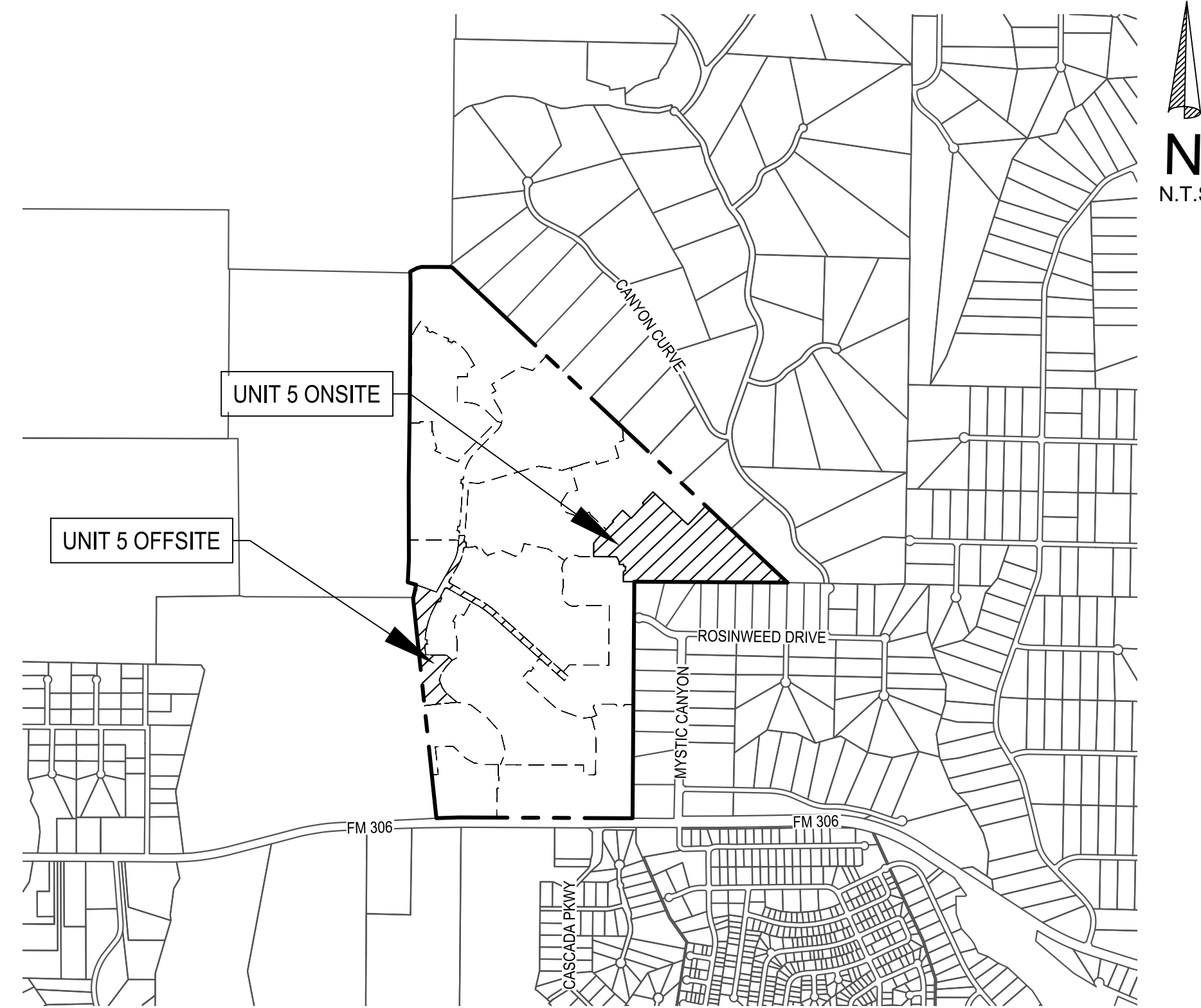
BM #101: MAG NAIL SET IN ASPHALT DRIVEWAY APRON LOCATED ON THE SOUTH SIDE OF FARM TO MARKET 306, ±614' FROM THE SOUTHWEST CORNER OF THE 400.00 ACRE PARENT TRACT. ELEVATION: 1,228.08'

BM #102: MAG NAIL SET 2' SOUTH FROM THE EDGE OF ASPHALT PAVEMENT OF FARM TO MARKET 306, ± 278' FROM THE SOUTHEAST CORNER OF THE 400.00 ACRE PARENT TRACT. ELEVATION: 1,195.17'

ACCEPTED FOR CONSTRUCTION:

COMAL COUNTY	DATE
TEXAS WATER COMPANY, SJWTX	DATE
CANYON RANCH MUD	DATE

VICINITY MAP



NAME: CANYON RANCH UNIT 5

OWNER: CANYON RANCH 400
CONTACT: KELLY LEACH, PRESIDENT
1141 N. LOOP 1604
SUITE 105-114
SAN ANTONIO, TEXAS 78232
PHONE: (210) 827-7918

ENGINEER: BGE, INC., TBPE-1046
CONTACT: MARIANNE HERNANDEZ
EMAIL: MHERNANDEZ@BGEINC.COM
7330 SAN PEDRO AVENUE SUITE 202
SAN ANTONIO, TEXAS 78216
PHONE: (210) 581-3600

WATER: TEXAS WATER COMPANY, SJWTX
1399 SATTLER RD
NEW BRAUNFELS, TEXAS 78132
PHONE: (830) 312-4600

ELECTRIC: PEDERNALES COOP, INC.
PO BOX 1
JOHNSON CITY, TEXAS 78636
PHONE: (877) 372-0391

DEVELOPER: LENNAR HOMES OF TEXAS LAND & CONSTRUCTION, LTD
CONTACT: RICHARD MOTT, P.E.
100 NE LP 410, SUITE 1155
SUITE 1155
SAN ANTONIO, TX 78216
PHONE: (210) 403-8200

LAND SURVEYOR: BGE INC., TBPE F1046
CONTACT: DION ALBERTSON R.P.L.S.
901 SOUTHMOOR SUITE 225
SAN ANTONIO, TX 78216
PHONE: (210) 581-3600

WASTEWATER: CANYON RANCH MUD OF COMAL COUNTY
ATTN: MCLEAN & HOWARD LLP
901 SOUTHMOOR SUITE 225
AUSTIN, TX 78746
PHONE: (512) 328-2008

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REVISIONS/CORRECTIONS

SHEET LIST	DESCRIPTION	DATE	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	ACCEPTED BY	APPROVAL DATE
C08.00, 08.02, 08.07	ALIGNMENT, APPERTENANCE	03/31/2026	R		
C03.22, 03.23	REVISED WALLS	03/31/2026	R		

SUBMITTED BY



BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 www.browngay.com
TBPE Registration No. F-1046

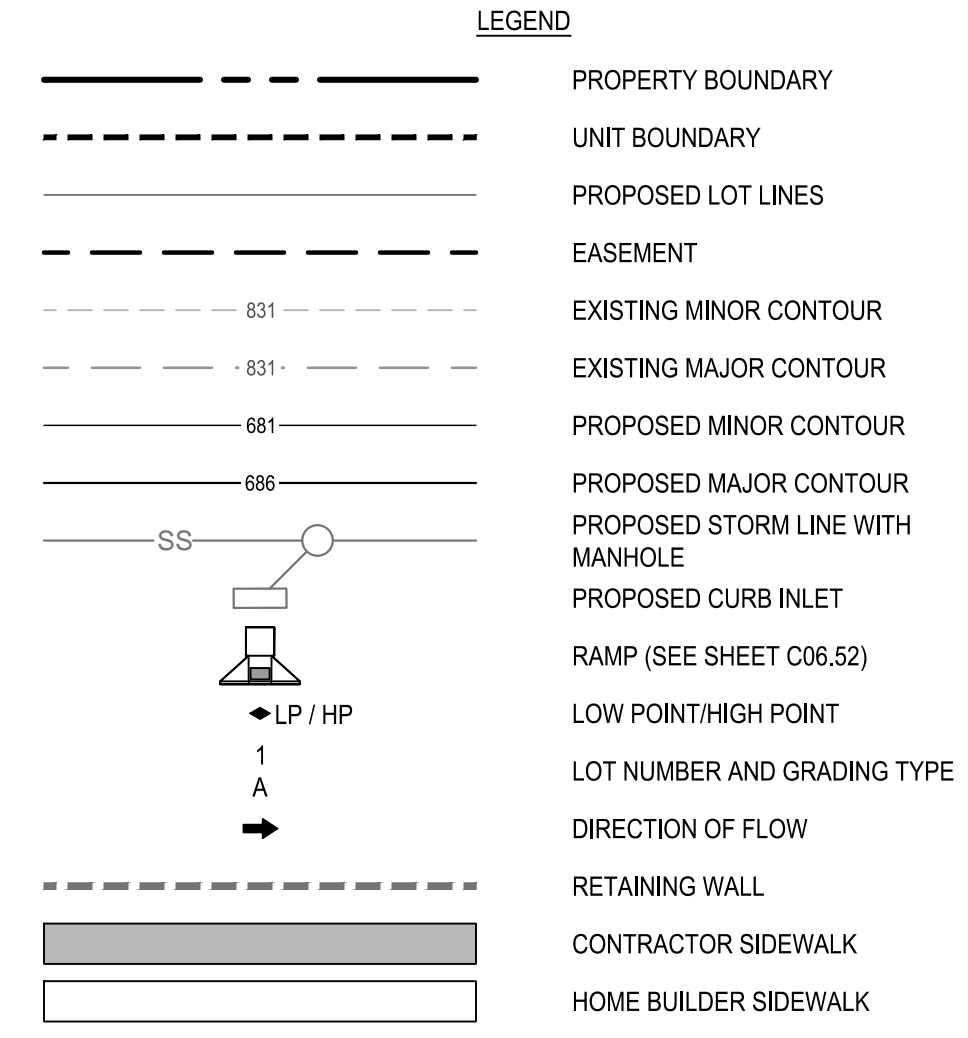
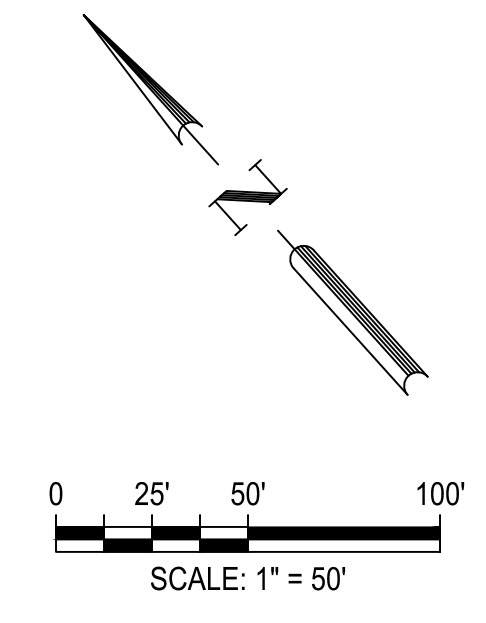
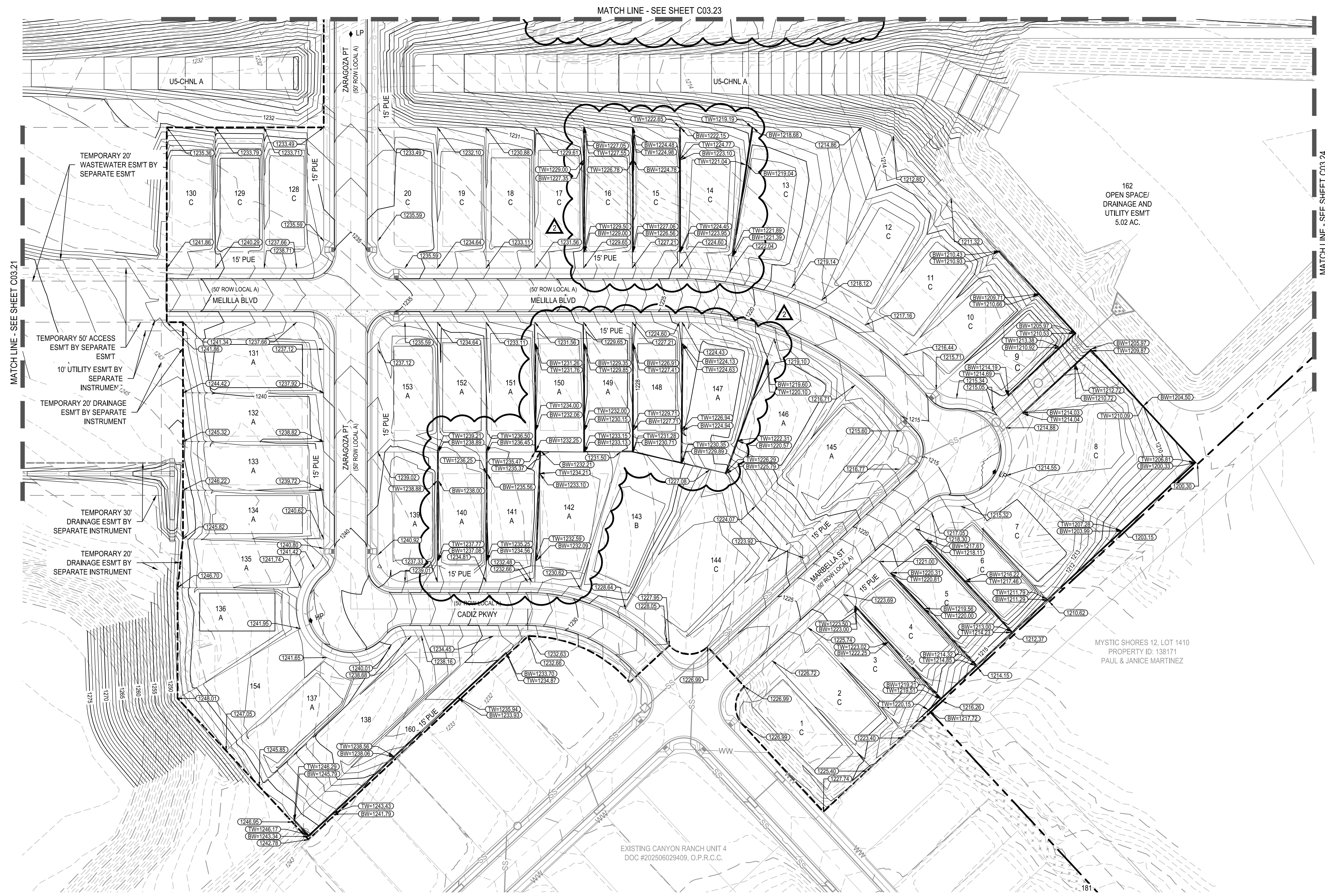
MARIANNE O. HERNANDEZ, P.E.
BGE, INC. TBPE NO. 152821
7330 SAN PEDRO AVENUE
SUITE 202
SAN ANTONIO, TEXAS 78216
(210) 581-3600 (MAIN)



Know what's below.
Call before you dig.

THE LOCATION 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. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

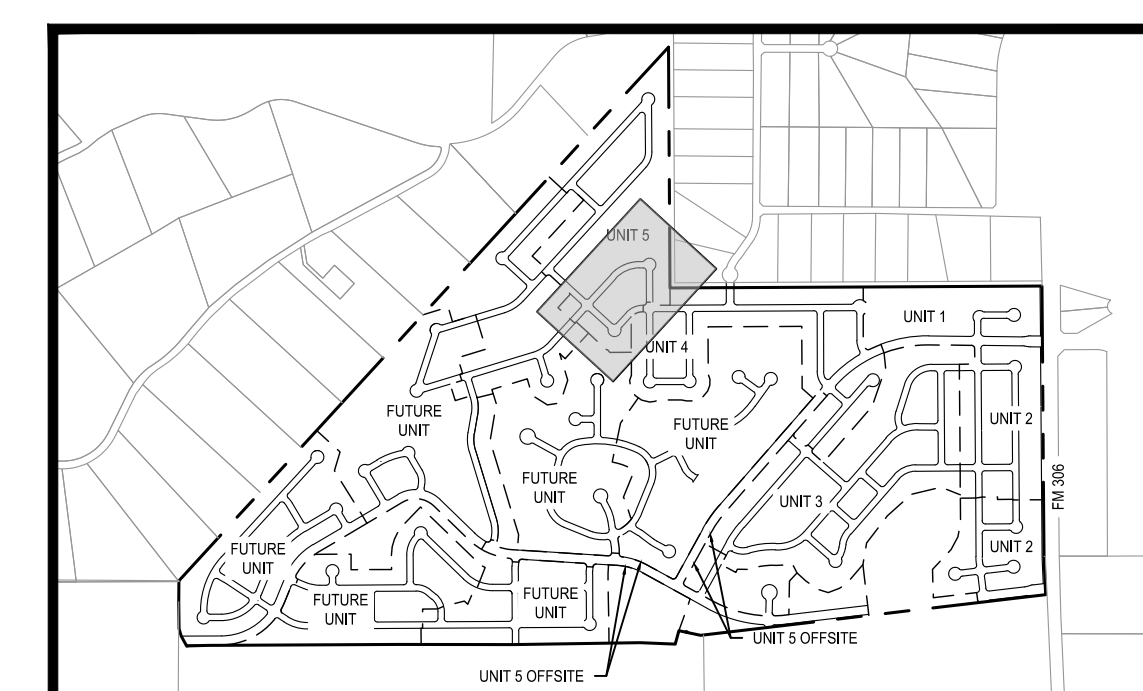
\\ngbc\data\TXC\Projects\San Antonio Projects\1728-00 - Canyon Ranch\30 - Unit 5\LD Single - Phase01_CADD\01_SHT\SC-GRAD-PL-PH-05.dwg Layout: DETAILED LOT GRADING PLAN (SHEET 1 OF 3) Plotted: 3/31/2026 10:58:37 AM By: Mhemandaz



- GENERAL NOTES:**
- HOME BUILDER SHALL REFER TO THE APPROVED SUBDIVISION PLAT TO CONFIRM ALL BUILDING SETBACKS PRIOR TO ANY FOUNDATION WORK.
 - AS SOON AS PRACTICAL, HOME BUILDER SHALL ESTABLISH VEGETATION (HYDROMULCH, SEEDING, SODDING, ETC...) TO PREVENT EROSION FROM OCCURRING. CONTRACTOR SHALL CONTACT ENGINEER REGARDING ANY QUESTIONS ON THE INTENT OF THIS PLAN.
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 - SEE SHEET C03.12 FOR TYPICAL LOT GRADING TYPE DETAILS
 - CONTRACTOR TO CUTBACK AND BACKFILL TO GRADE 70% OF WALL HEIGHT FOR THE ENTIRETY OF THE RETAINING WALL. MINIMUM OUTBACK OF 3 FEET NO MATTER HEIGHT.
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- LOT FILL NOTES:**
- ALL LOTS WITH FILL SHALL BE COMPACTED IN ACCORDANCE WITH THE 79% PROCEDURE THAT MEETS THE REQUIREMENTS OF THE FHA DATA SHEET. DOCUMENTATION AND THE EVIDENCE OF COMPACTED SHALL BE FURNISHED TO THE ENGINEER & OWNER.

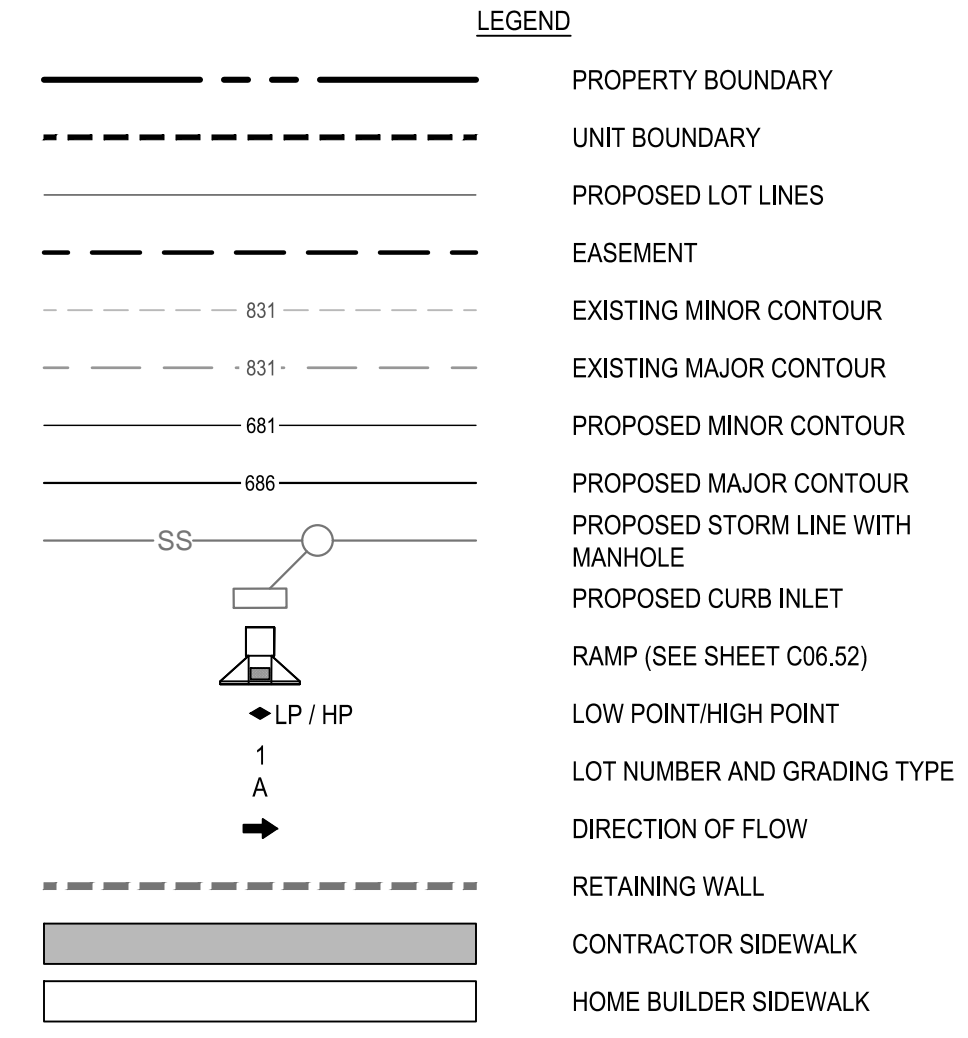
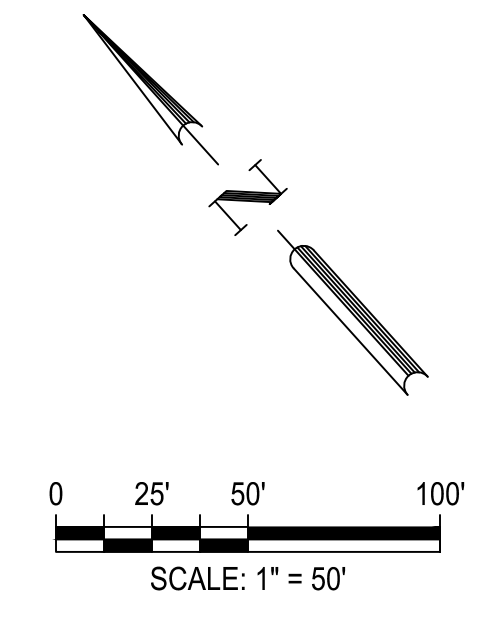
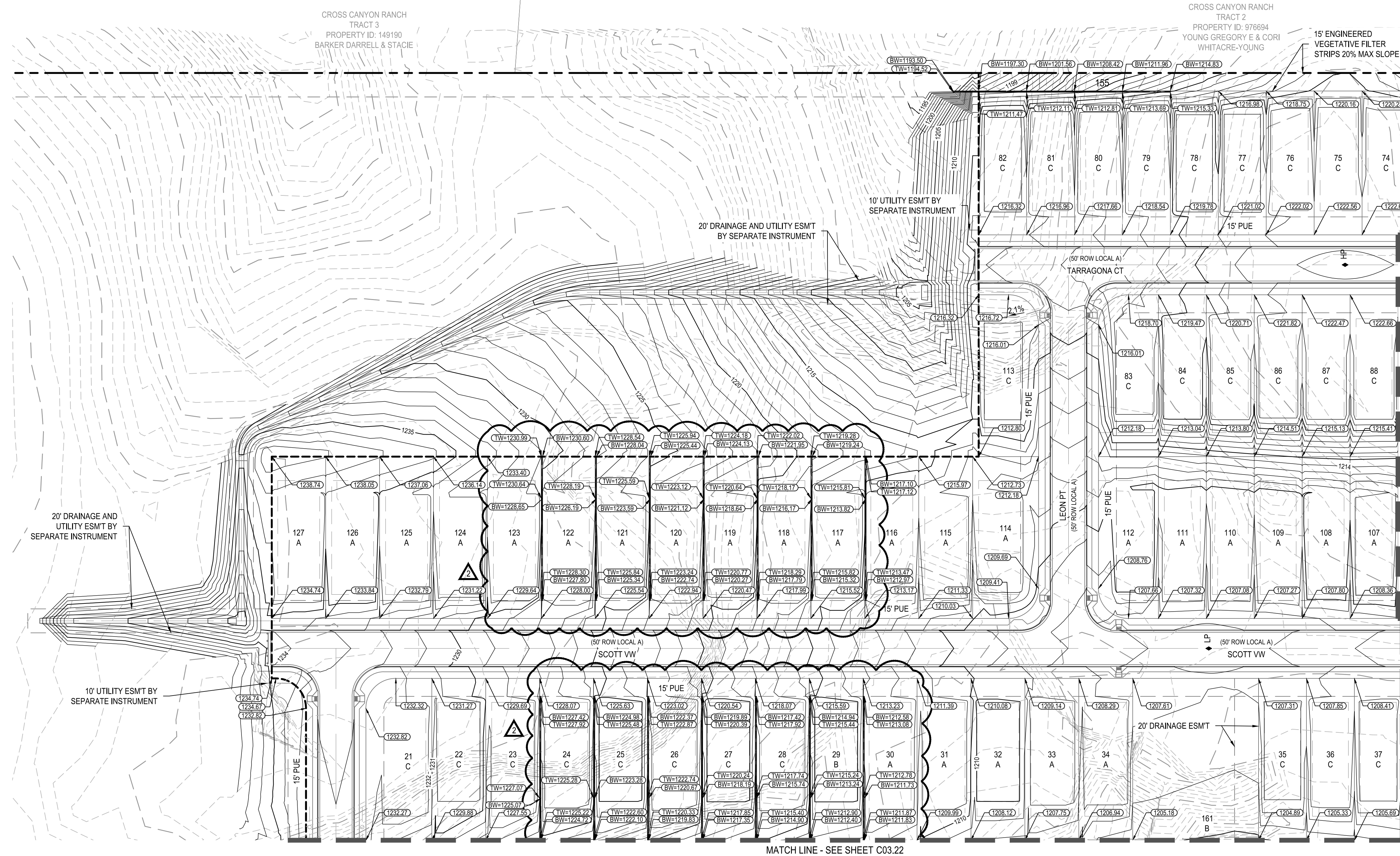
FINISHED FLOOR ELEVATIONS

THE ELEVATION OF THE LOWEST FLOOR SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND OR FINISHED FLOOR ELEVATION WHICH EVER IS HIGHER, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORM WATER AWAY FROM THE STRUCTURE. PROPERTIES ADJACENT TO THE STORM WATER CONVEYANCE STRUCTURES MUST HAVE FLOOR SLAB ELEVATION OR BOTTOM OF FLOOR JOISTS A MINIMUM OF ONE FOOT ABOVE THE 100-YEAR WATER FLOW ELEVATION IN THE STRUCTURE. DRIVEWAYS SERVING HOUSES ON THE DOWNHILL SIDE OF THE STREET SHALL HAVE PROPERLY SIZED CROSS SWALE PREVENTING RUNOFF FROM ENTERING THE STRUCTURE.

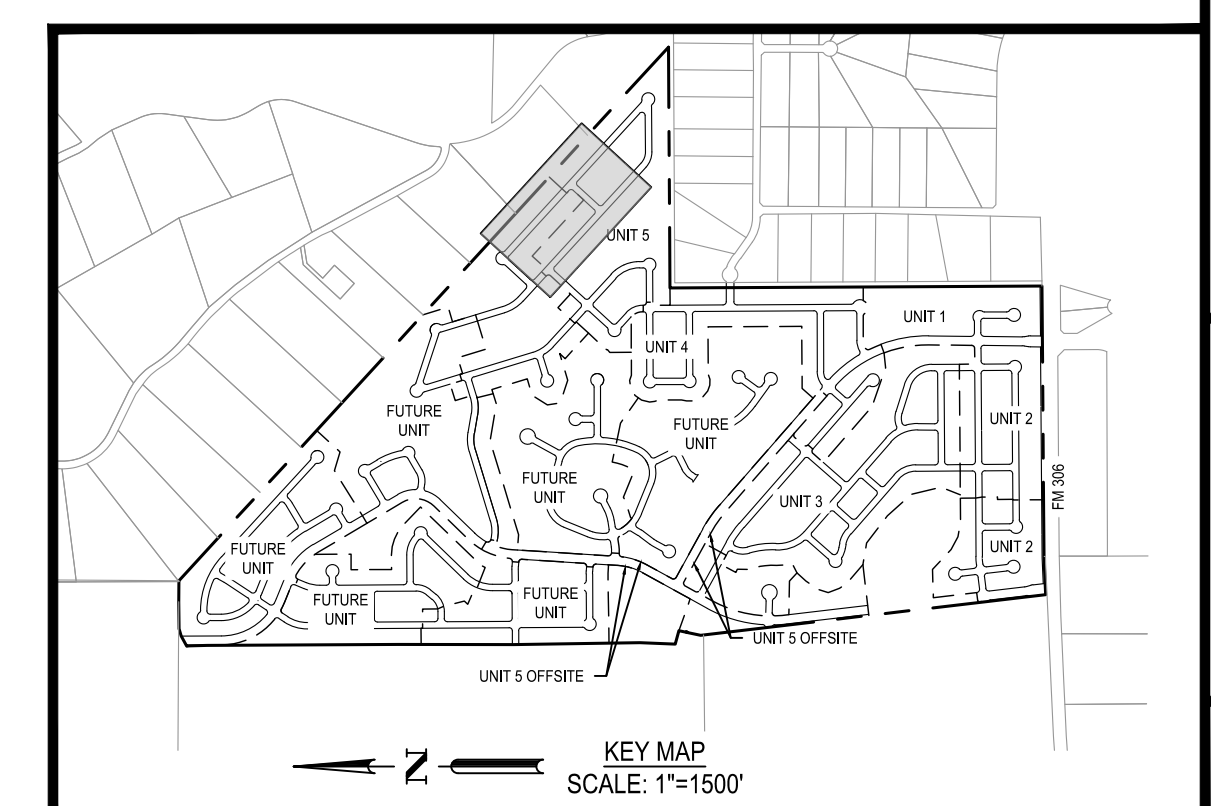


<p>CANYON RANCH UNIT 5</p> <p>DETAILED LOT GRADING PLAN</p> <p>(SHEET 1 OF 3)</p>	<p>STATE OF TEXAS</p> <p>MARRIANNE O. HERNANDEZ</p> <p>152821</p> <p>LICENSED ENGINEER</p> <p>03/31/2026</p>										
<p>SHEET</p> <p>C03.22</p>	<p>REVISED WALLS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>REV</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table> <p>DESIGNED BY: ####</p> <p>REVIEWED BY: ####</p> <p>DRAWN BY: ####</p> <p>DATE: APR</p>	REV	DESCRIPTION								
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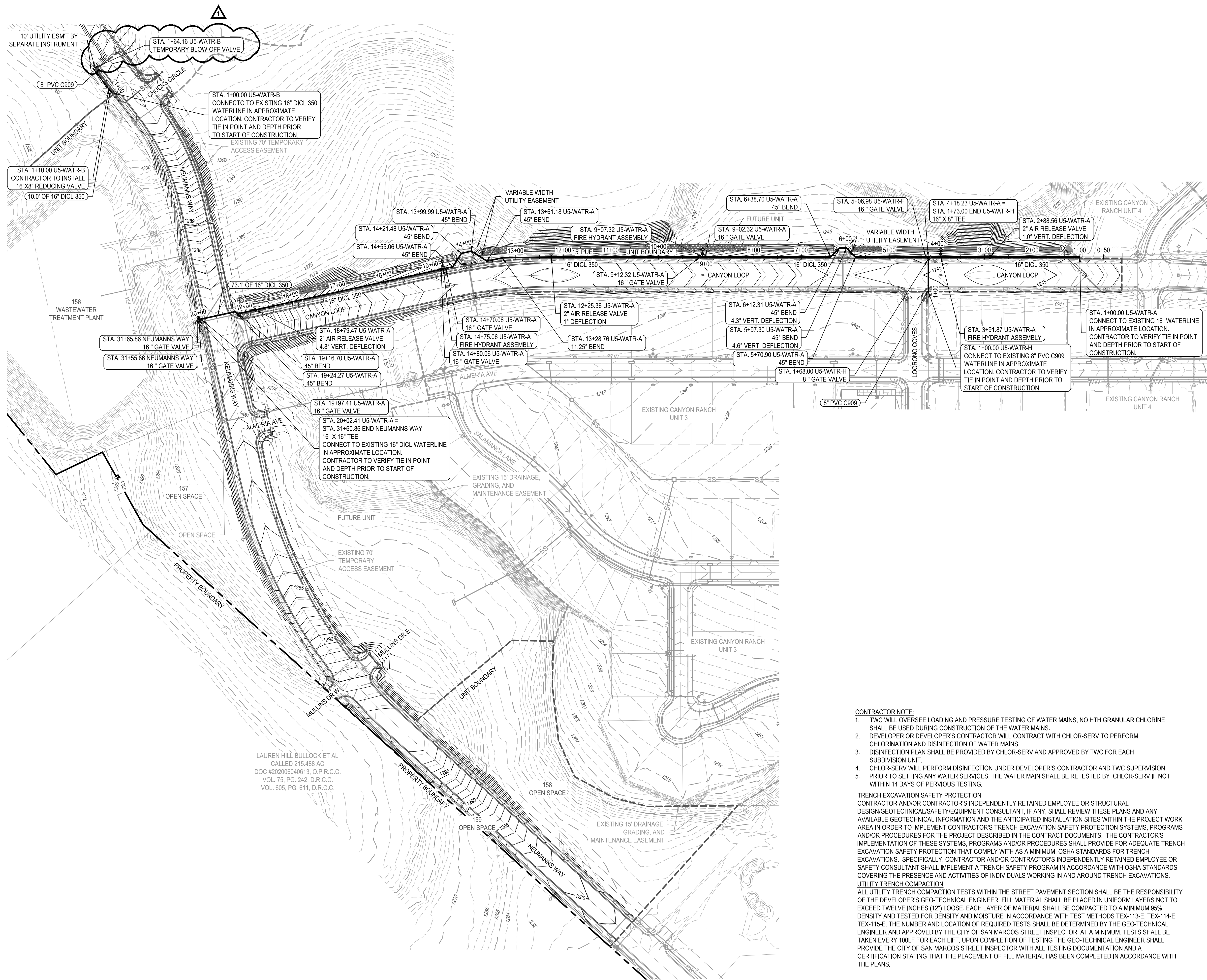
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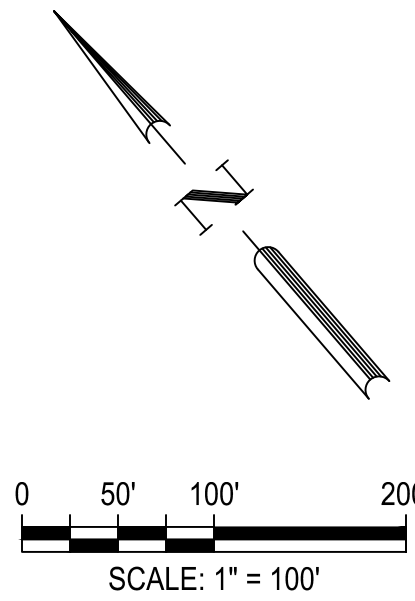
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NO.	DATE	REV	DESCRIPTION						
<p>BGE, INC. 7330 San Pedro, Suite 202 San Antonio, TX 78216 TEL: 214-360-3600 www.bgeinc.com TXPE Registration No. P-1046</p>									
<p>CANYON RANCH UNIT 5 DETAILED LOT GRADING PLAN (SHEET 2 OF 3)</p>									
<p>SHEET C03.23</p>									



LAUREN HILL BULLOCK ET AL
 CALLED 215.488 AC
 DOC #202006040613, O.P.R.C.C.
 VOL. 75, PG. 242, D.R.C.C.
 VOL. 605, PG. 611, D.R.C.C.



LEGEND

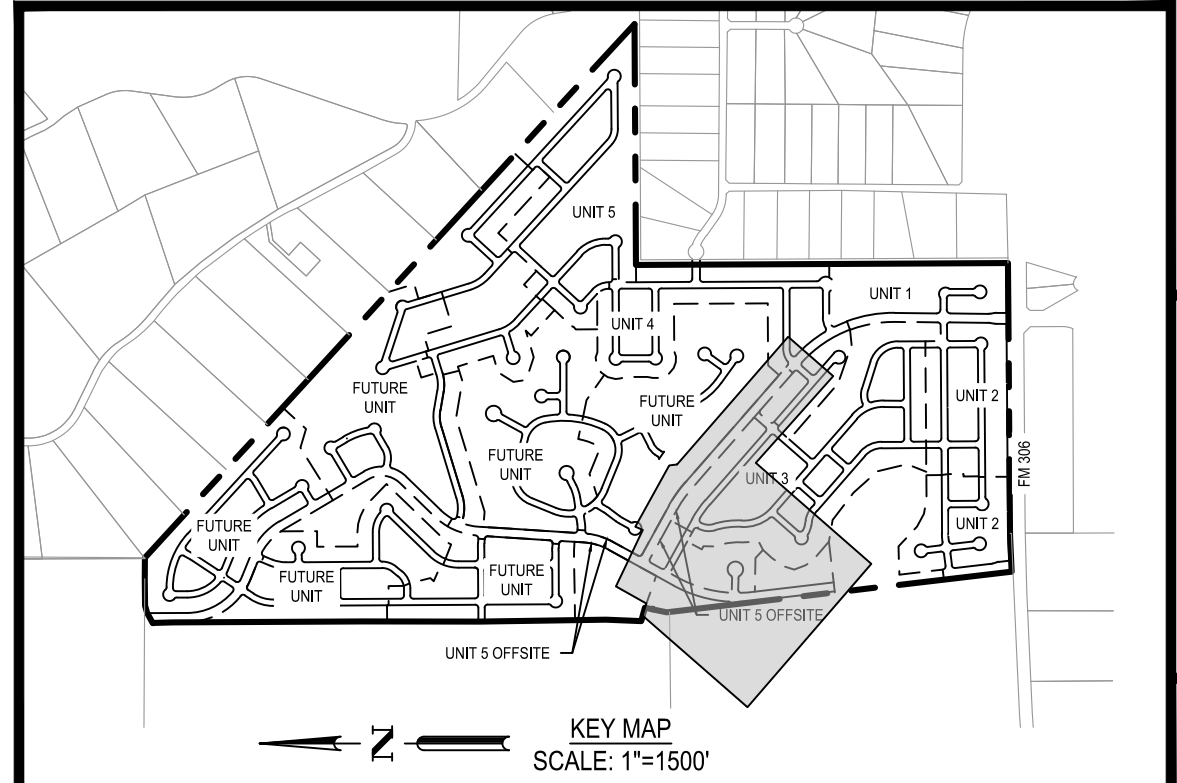
	PROPERTY BOUNDARY
	UNIT BOUNDARY
	BUILDING SETBACK
	PROPOSED LOT LINES
	PROPOSED EASEMENT
	PROPOSED WATER MAIN
	PROPOSED WATER MAIN ENCASEMENT
	WATER SERVICES
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE
	PROP WATER SLEEVE
	PROPOSED SANITARY SEWER
	WASTEWATER SERVICES
	PROPOSED STORM LINE WITH MANHOLE
	PROPOSED CURB INLET
	PROPOSED NATURAL GAS LINE
	PROPOSED ELECTRIC LINE
	PROPOSED FIBER OPTIC LINE
	EXISTING FORCE MAIN
	PROPOSED STREET LIGHT
	RAISED REFLECTIVE HYDRANT MARKER
	UTILITY CROSSING

PROFILE LEGEND

	PROPOSED WATER MAIN
	EXISTING SURFACE
	PROPOSED SURFACE
	PROPOSED SUBGRADE

- UTILITY GENERAL NOTES:**
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND WILL BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, RETAINING WALLS AND STRUCTURES UNLESS OTHERWISE NOTED.
 - WATER LINES 3" AND SMALLER SHALL BE SCH 40 PVC OR CLASS 200 PVC WATER PIPE. WATER LINES 4" THROUGH 10" SHALL BE AWWA C-909. ALL WATER MAINS 12" THROUGH 36" SHALL BE DI CL 350.
 - GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. NOT ALL FITTINGS ARE NOTED, SHOWN, OR INDICATED. REFER TO GENERAL NOTES SHEET OR SPECIFIC DETAIL SHEET IN THIS SET FOR FURTHER INSTRUCTIONS. FOR ANY DISCREPANCIES THE MORE STRINGENT WILL APPLY.
 - REFER TO PLAN AND PROFILE SHEETS IN THIS SET FOR SANITARY SEWER AND STORM SEWER DESIGN INFORMATION.
 - RADIUS WATERLINE PIPE SHALL BE LAID IN 20 FT INCREMENTS AT 1" DEFLECTIONS.
 - COMPACTION OF TRENCH UNDER PROPOSED PAVING SHOULD USE APPROPRIATE REPLACEMENT GRANULAR MATERIAL IF UNSUITABLE SOIL IS EXCAVATED FROM TRENCH.
 - ALL OTHER UTILITIES SHALL BE INSTALLED BELOW THE WATER LINE WITH AT LEAST 1' SEPARATION.
 - WATER OR SEWER LINE MUST BE ENCASED WHEN CROSSING UNDER UTILITY.
 - WATERLINE UNDER ROADWAYS SHALL BE DI CL 350.
 NOTE: ALL MAINS SHALL BE FLUSHED, HYDROSTATICALLY TESTED, AND DISINFECTED BY THE CONTRACTOR. SEE "CONNECTION TO EXISTING WATER SYSTEM" NOTE BELOW.
 CONTRACTOR TO TIE INTO EXISTING WATER MAIN AFTER ALL NEW MAINS HAVE BEEN DISINFECTED AND PASSED ALL TESTS AND HAVE BEEN APPROVED BY COMAL COUNTY FOR CHLORINATION INJECTION:
 1- 1" CORPORATION INJECTION
 1- 1" COMP X 1" CPL, CURB STOP
 1- 1" 1/4" THD SOLID CAP FOR MACHINE CHLORINATION
 1- 1" COPPER TUBING, CUT AS REQ'D
 CONTRACTOR TO PROVIDE A 2" JUMPER CONNECTION TO LOAD NEW MAIN

- CONTRACTOR NOTE:**
- TWC WILL OVERSEE LOADING AND PRESSURE TESTING OF WATER MAINS, NO HTH GRANULAR CHLORINE SHALL BE USED DURING CONSTRUCTION OF THE WATER MAINS.
 - DEVELOPER OR DEVELOPER'S CONTRACTOR WILL CONTRACT WITH CHLOR-SERV TO PERFORM CHLORINATION AND DISINFECTION OF WATER MAINS.
 - DISINFECTION PLAN SHALL BE PROVIDED BY CHLOR-SERV AND APPROVED BY TWC FOR EACH SUBDIVISION UNIT.
 - CHLOR-SERV WILL PERFORM DISINFECTION UNDER DEVELOPER'S CONTRACTOR AND TWC SUPERVISION.
 - PRIOR TO SETTING ANY WATER SERVICES, THE WATER MAIN SHALL BE RETESTED BY CHLOR-SERV IF NOT WITHIN 14 DAYS OF PVIOUS TESTING.
- TRENCH EXCAVATION SAFETY PROTECTION**
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.
- UTILITY TRENCH COMPACTION**
 ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-114-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEO-TECHNICAL ENGINEER AND APPROVED BY THE CITY OF SAN MARCOS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF SAN MARCOS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.



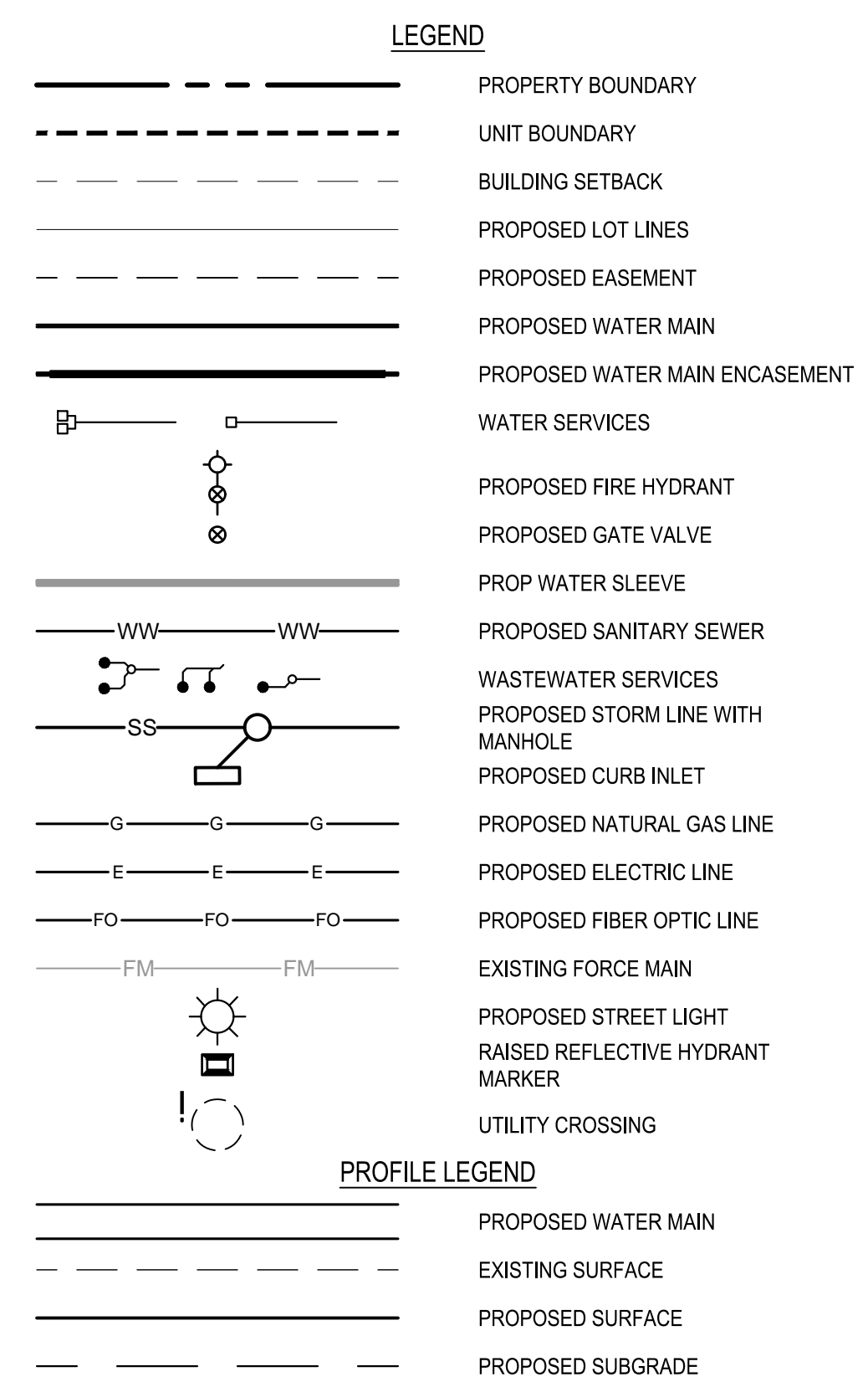
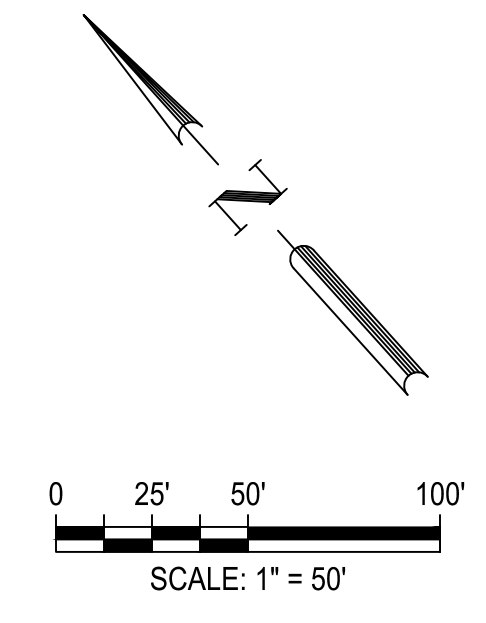
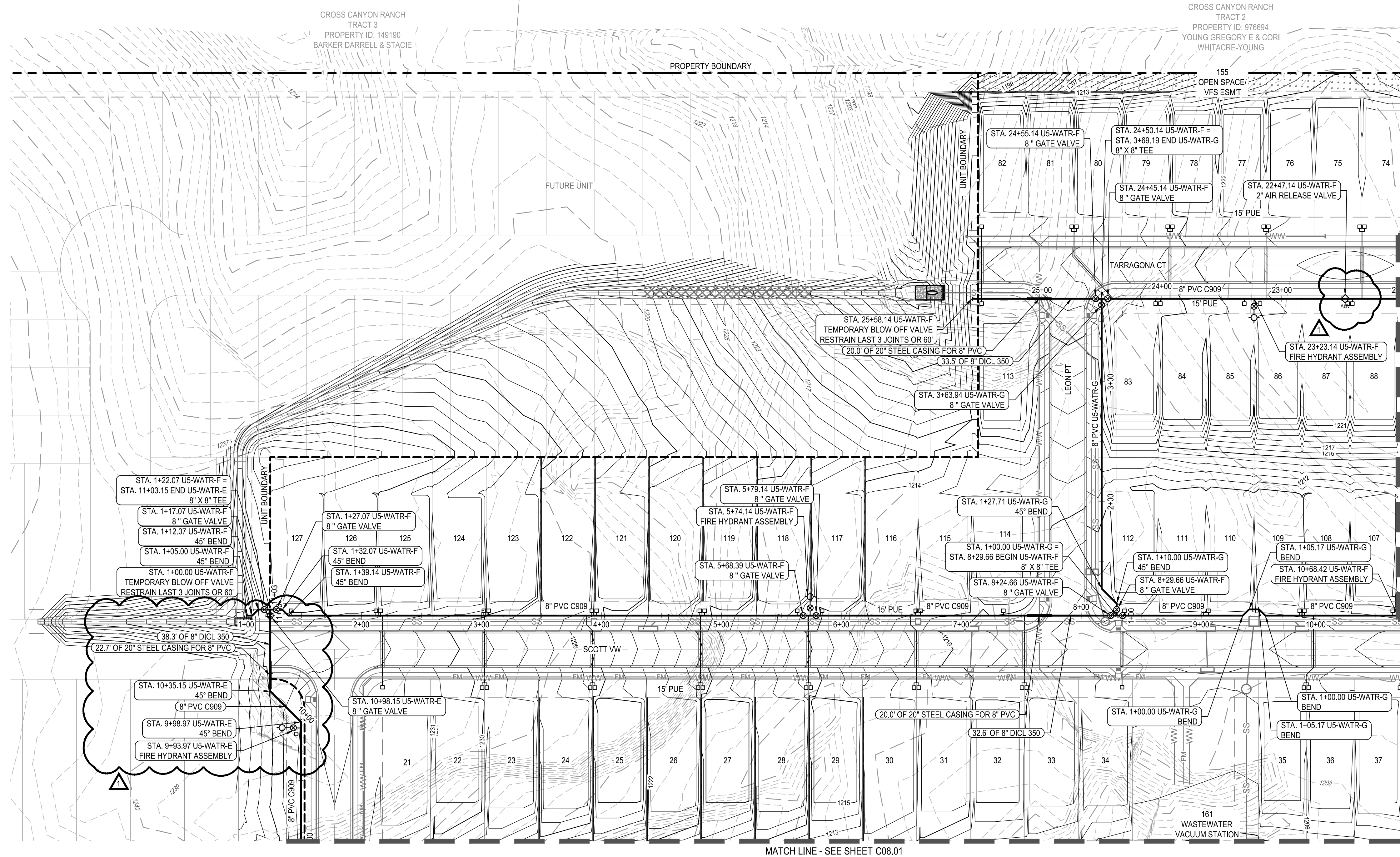
CANYON RANCH UNIT 5	OFFSITE WATER DISTRIBUTION PLAN
	SHEET C08.00

REVISED WATER ALIGNMENT, ADDED APPURTENANCE

DESIGNED BY: ####
 REVIEWED BY: ####
 DRAWN BY: ####

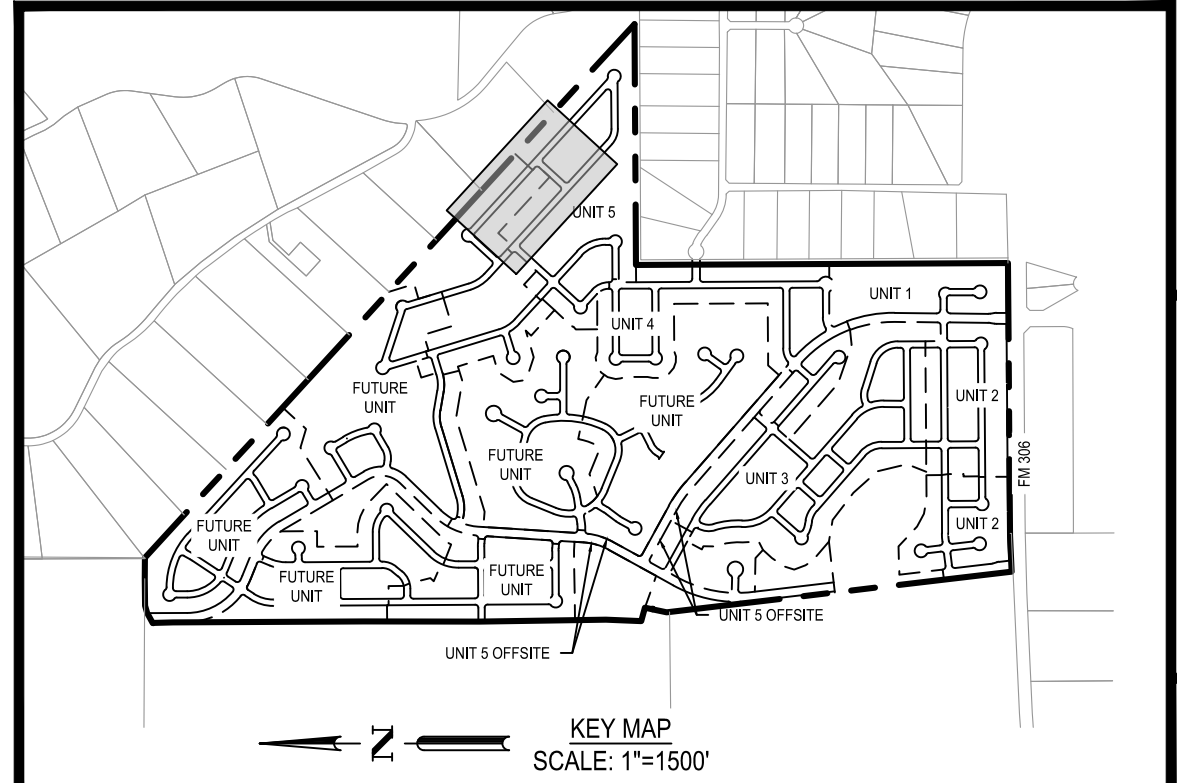
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G:\TXC\Projects\San Antonio Projects\2278-00 - Canyon Ranch\20 - Unit 5\LD-Single_Phase01_CADD\01_SHT\SC-WATR-PL-Pl-05.dwg Layout: ONSITE WATER DISTRIBUTION PLAN (SHEET 2 OF 3) Plotted: 3/31/2026 3:00:23 PM By: Mhermandaz



- UTILITY GENERAL NOTES:**
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND WILL BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, RETAINING WALLS AND STRUCTURES UNLESS OTHERWISE NOTED.
 - WATER LINES 3" AND SMALLER SHALL BE SCH 40 PVC OR CLASS 200 PVC WATER PIPE. WATER LINES 4" THROUGH 10" SHALL BE AWWA C-909. ALL WATER MAINS 12" THROUGH 36" SHALL BE D1CL 350.
 - GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. NOT ALL FITTINGS ARE NOTED, SHOWN, OR INDICATED. REFER TO GENERAL NOTES SHEET OR SPECIFIC DETAIL SHEET IN THIS SET FOR FURTHER INSTRUCTIONS. FOR ANY DISCREPANCIES THE MORE STRINGENT WILL APPLY.
 - REFER TO PLAN AND PROFILE SHEETS IN THIS SET FOR SANITARY SEWER AND STORM SEWER DESIGN INFORMATION.
 - RADIUS WATERLINE PIPE SHALL BE LAID IN 20 FT INCREMENTS AT 1" DEFLECTIONS.
 - COMPACTION OF TRENCH UNDER PROPOSED PAVING SHOULD USE APPROPRIATE REPLACEMENT GRANULAR MATERIAL IF UNSUITABLE SOIL IS EXCAVATED FROM TRENCH.
 - ALL OTHER UTILITIES SHALL BE INSTALLED BELOW THE WATER LINE WITH AT LEAST 1' SEPARATION.
 - WATER OR SEWER LINE MUST BE ENCASED WHEN CROSSING OPPOSING UTILITY.
 - WATERLINE UNDER ROADWAYS SHALL BE D1CL 350.
- NOTE:** ALL MAINS SHALL BE FLUSHED, HYDROSTATICALLY TESTED, AND DISINFECTED BY THE CONTRACTOR. SEE "CONNECTION TO EXISTING WATER SYSTEM" NOTE BELOW
- CONTRACTOR TO TIE INTO EXISTING WATER MAIN AFTER ALL NEW MAINS HAVE BEEN DISINFECTED AND PASSED ALL TESTS AND HAVE BEEN APPROVED BY COMAL COUNTY FOR CHLORINATION INJECTION:**
- 1- 1" CORPORATION STOP C.C. X.I.P.
 - 1- 1" COMP X 1R" CPL, CURB STOP
 - 1- 1" 1/4" THD SOLID CAP FOR MACHINE CHLORINATION
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REVISED WATER ALIGNMENT, ADDED APPURTENANCE	DATE	APR
DESIGNED BY: ####	REV	
REVIEWED BY: ####	REV	
DRAWN BY: ####	REV	

BGE

BGE, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 214-368-3600 www.bge.com
TDE Registration No. P-1046

CANYON RANCH UNIT 5
ONSITE WATER DISTRIBUTION PLAN (SHEET 2 OF 3)

STATE OF TEXAS
15282
LICENSED PROFESSIONAL ENGINEER
MAY 2021/2026

SHEET
C08.02

