	ETS		SHEET N	lo.
GN01-GN02 TY01 RD00-RD17 SD01-SD06 DF01-DF10	STORM PL WATER QI	NOTES	1 2-3 4 5-22 23-28 29-38 39-40	
AGENCIES				
<u>SERVICE</u> DEVELOPER:		<u>ENTITY</u> SYLVAN VISTA, INC. 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, COLORADO 80921		<u>P.O.C.</u> WILLIAM F. HEREBIC (719) 651-9152
CIVIL ENGINEER:		MATRIX DESIGN GROUP, INC. 2435 RESEARCH PKWY, SUITE 300 COLORADO SPRINGS, COLORADO 80920		COREY PETERSEN (719) 575-0100
EPC INSPECTIONS	:	EPC PLANNING AND COMMUNITY DEVELOPMENT SERVICES 2880 INTERNATIONAL CIR, SUITE 110 COLORADO SPRINGS, COLORADO 80903		BRAD WALTERS (719) 520-6300
EPC STORMWATER TEAM:		EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DR. COLORADO SPRINGS, COLORADO 80922		GLEN REESE (719) 675-2654
GAS:		BLACK HILLS ENERGY 105 SOUTH VICTORIA AVENUE PUEBLO, COLORADO 81003		(888) 890-5554
ELECTRIC:		MOUNTAIN VIEW ELECTRIC ASSOCIATIO 11140 E. WOODMEN RD, PEYTON, COLORADO, 80831	N	CATHY HANSEA-LEE (719) 495-2283
TELEPHONE COMP		XFENITY/COMCAST 6850 S TUSCON ENGLEWOOD, CO 80112		STEVEN CREIGHTON (720) 854-5745
		FORCE BROADBAND 18410 APPALOOSA RD. MONUMENT, CO 80132		GEOFF CANNON (719) 896-2120
		TRI-LAKES MONUMENT FIRE RESCUE		JAMEY BUMGARNER
FIRE DEPARTMENT		16055 OLD FOREST PT, SUITE 103 MONUMENT, COLORADO, 80132		(719) 484-0911
De de la composition de la com		16055 OLD FOREST PT, SUITE 103		
De soonwoor D	8	16055 OLD FOREST PT, SUITE 103 MONUMENT, COLORADO, 80132		(719) 484-0911

## VICINITY MAP

N.T.S.

REFERENCE DRAWINGS X-1105-PR-SITE X-Title-Plan & Profile

CTB FILE: ----

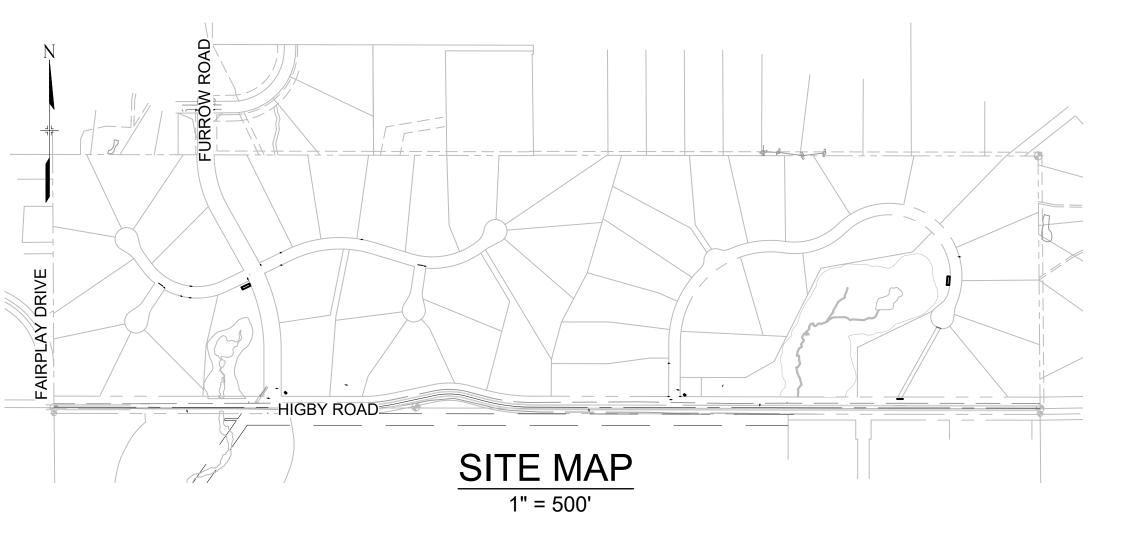
PLOT DATE: December 8, 2022 3:35:56 PM

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

## ENGINEERING RECORD DRAWINGS

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE BECORD DRAWINGS. REFER TO ORIGINAL DRAWINGS FOR SIGNATURES AND SEALS. Date: <u>8/12/22</u> COREY PETERSEN, PE #56571 FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. FILE NAME: S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\Road & Storm Plans\TS01.dwg

# GRANDWOOD RANCH EL PASO COUNTY, CO ROAD AND STORM PLANS FEBRUARY, 2021



### OWNER/DEVELOPER STATEMENT:

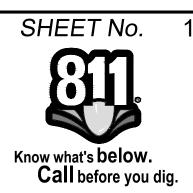
I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

H WILLIAM F. HEREBIC II

2-5-21 DATE

SYLVAN VISTA, INC. 14160 GLENEAGLE DRIVE COLORADO SPRINGS, CO 80921

			EPC PUD#: SF 2026
BENCHMARK NGS T 294 ELEVATION - 7247.10' NAVD 88	<u>OWNER:</u> SYLVAN VISTA, INC. WILLIAM F. HEREBIC II,	SEAL	GRANDWOOD RANCH
	MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921		EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS
BASIS OF BEARING: A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION READER COORDINATE SYSTEM. CENTRAL ZONE, N.A.D. 1082, THE UNE IS MONUMENTED	PREPARED BY:		TITLE SHEET
STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"	Matrix		DESIGNED BY:CAPSCALEDATE ISSUED:FEBRUARY, 2021DRAWING No.DRAWN BY:CAPHORIZ.N/ASHEET1 OF 40TS01CHECKED BY:NMSVERT.N/ASHEET1 OF 40TS01



## ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERION ESTABLISHED BY THE COUNTY FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSE FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED DRAINAGE PLANS AND SPECIFICATIONS.

Bv<sup>.</sup>

ORADO LICEN ORADO LICEN SOLAN PETERS 2/5/2021

COREY A. PETERSEN, PE #56571

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

### 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.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E. COUNTY ENGINEER / ECM ADMINISTRATOR APPROVED Engineering Department 04/16/2021 9:16:57 AM dsdnijkamp EPC Planning & Community Development Department

### **GENERAL NOTES**

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL, REVISED 12-13-2016 AND CDOT STANDARD SPECIFICATIONS, LATEST REVISION.
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- 3. NO FIELD CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE FIELD ENGINEER.
- SUBMITTALS SHALL BE MADE FOR ALL MATERIALS TO BE INCORPORATED INTO THE PROJECT.
- 5. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PROTECTION OF ALL UTILITIES IN PLACE.
- 6. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 TWO BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION OR GRADING.
- 7. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITY AND STRUCTURES AFFECTED BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE RESPECTIVE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL UTILITY RELOCATIONS AS NECESSARY. THE COUNTY ENGINEERING INSPECTIONS, UTILITY DEPARTMENTS AND UTILITY OWNERS SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WHERE THESE UTILITIES MAY BE AFFECTED.
- 8. IN SOME OF THE PROPOSED AREAS OF CONSTRUCTION EXISTING UNDERGROUND TELEPHONE, FIBER AND CABLE TELEVISION FACILITIES MAY BE LOCATED IN CLOSE PROXIMITY TO THE WORK. THE CONTRACTOR MAY, IF NECESSARY, TEMPORARILY DISPLACE THE CABLES DURING CONSTRUCTION AND REINSTALL THEM IN ACCORDANCE WITH THE APPROPRIATE TELEPHONE, FIBER OR CABLE COMPANY'S GUIDELINES. COORDINATION WITH BOTH THE TELEPHONE AND CABLE TELEVISION COMPANY IS REQUIRED TO BE DONE BY THE CONTRACTOR.
- 9. THE CONTRACTOR SHALL OBTAIN AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- 10. THE PHYSICAL FEATURES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FEATURES SHOWN. THE CONTRACTOR SHALL REVIEW AND VERIFY EXISTING PHYSICAL FEATURES AND ELEVATIONS THEMSELVES OF THE CONDITIONS TO BE ENCOUNTERED DURING THE CONSTRUCTION.
- 11. THE CONTRACTOR SHALL LIMIT ALL WORK AND STORAGE AREAS TO THE PUBLIC RIGHT-OF-WAYS AND EASEMENTS. USE OF ANY PRIVATE AREAS FOR THIS PROJECT BY THE CONTRACTOR MUST BE APPROVED IN WRITING BY THE PROPERTY OWNER WITH A COPY OF THIS APPROVAL PROVIDED TO THE FIELD ENGINEER PRIOR TO USAGE.
- 12. ALL CONSTRUCTION IS TO INCLUDE COMPACTION AND FINISH GRADING IN THE UNIT PRICE RELATED WORK ITEM.
- 13. ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE FIELD ENGINEER.
- 14. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY EL PASO COUNTY AND THE FIELD ENGINEER.
- 15. THE FIELD ENGINEER SHALL BE NOTIFIED WITHIN 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- 16. PAYMENT, DIMENSIONS AND RADII ARE SHOWN TO THE LIP OF CURB UNLESS OTHERWISE NOTED.
- 17. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
- 18. THE CONTRACTOR SHALL CLOSELY MONITOR ACCESS FOR HEAVY CONSTRUCTION EQUIPMENT THROUGH THE PROJECT AREAS
- 19. WHERE PAVEMENT IS TO ABUT EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE REMOVED TO A NEAT VERTICAL LINE BY FULL DEPTH SAWING. SAWING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO "REMOVAL OF ASPHALT PAVEMENT". THE CONTRACTOR WILL BE REQUIRED TO PAINT THE EDGE OF CUT PAVEMENT WITH DILUTED EMULSIFIED ASPHALT (SLOW SETTING) PRIOR TO PAVING OPERATIONS. VERTICAL EDGES SHALL NOT REMAIN OVERNIGHT. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF ONE PART EMULSIFIED ASPHALT AND ONE PART WATER.
- 20. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED. THE COST OF WATER SHALL BE INCIDENTAL TO OTHER BID ITEMS.
- 21. THE PHYSICAL FEATURES REQUIRING REMOVAL OR OBLITERATION WITHIN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFF-SITE.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ANY MONUMENT, RANGE POINTS, TIES, BENCHMARKS AND/OR SURVEY CONTROL POINTS WHICH MAY BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENT BY A REGISTERED PROFESSIONAL LAND SURVEYOR AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF COLORADO.
- 23. THE CONTRACTOR SHALL HAVE A COPY OF ALL APPLICABLE STANDARDS AND PLANS ON SITE FOR THE DURATION OF THE PROJECT.
- 24. THE CONTRACTOR SHALL NOT STOCKPILE MATERIAL WITHIN 10 FEET OF THE EDGE OF TRAVELED WAY.
- 25. ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.
- 26. BEFORE PLACEMENT OF THE TACK COAT, THE CONTRACTOR SHALL CLEAN THE PRESENT ROADWAY AS DIRECTED. CLEANING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT.
- 27. A TACK COAT OF EMULSIFIED ASPHALT (SLOW SETTING) IS TO BE APPLIED BETWEEN PAVEMENT COURSES TO IMPROVE BOND. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.

### GENERAL NOTES con't.

- 28. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES
- 29. ANY DISCREPANCY WITHIN THESE PLANS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND WORK SHALL STOP UNTIL THE DISCREPANCY IS DISCUSSED AND DECISIONS/AGREEMENTS HAVE BEEN MADE.

#### EARTHWORK:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LEGAL DISPOSAL OF ANY EXCESS SOIL, DEBRIS AND WASTE MATERIAL OFF OF THE PROJECT SITE.
- 2. ANY MATERIAL NOT SUITABLE FOR BACKFILL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF, BY AND AT THE EXPENSE OF THE CONTRACTOR.
- ANY SOIL LYING BELOW THE SUBGRADE ELEVATION WHICH IS DISTURBED BY CONSTRUCTION SPECIFICATION REQUIREMENTS.

#### BENCHMARK AND SURVEY CONTROL:

- ON THESE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR INTERPRETATION AND INFORMATION IN STAKING OF THE PROJECT FOR CONSTRUCTION.
- SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

#### TRAFFIC GENERAL NOTES:

- 1. THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN, SUBMIT TO EL PASO COUNTY WITH THE M.U.T.C.D.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL, INCLUDING PEDESTRIAN DETOURS. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING THE TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
- APPROVAL OF THESE PLANS BY THE COUNTY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
- THE OWNER OR CONTRACTOR TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, **REGULATIONS, OR POLICIES.**
- 5. ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS SHALL MEET OR EXCEED M.U.T.C.D. STANDARDS.
- TO THE PROJECT.

#### CONSTRUCTION NOTES:

- 1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- 3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL ALL TIMES, INCLUDING THE FOLLOWING:
- a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
- EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
- COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
- d. CDOT M & S STANDARDS
- DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- 5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO TO RECTIFY.

REFERENCE DRAWINGS	ENGINEERING RECORD DRAWINGS
X-Title-Plan & Profile X-1105-PR-SITE	THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS. REFER TO ORIGINAL DRAWINGS FOR SIGNATURES AND SEALS. Date: <u>8/12/22</u> COREY PETERSEN, PE #56571 FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.
	FILE NAME:       S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\Road & Storm Plans\GN01.dwg         CTB FILE:          PLOT DATE:       December 8, 2022 3:36:07 PM         THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS IN ADVANCE FOR ANY REQUIRED MODIFICATION OF TRAFFIC SIGNALS WITHIN CONSTRUCTION AREAS AS NECESSARY TO MAINTAIN SAFE OPERATIONS.

OPERATIONS SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL IN ACCORDANCE WITH THE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING OF BOTH HORIZONTAL AND VERTICAL LAYOUT ON THIS PROJECT. COORDINATES ARE REFERENCED IN THE COORDINATE LIST SHOWN

PRIOR TO PROJECT COMPLETION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PROPERTY MONUMENTATION DISTURBED OR REMOVED BY CONSTRUCTION OPERATIONS. THIS WORK SHALL BE PERFORMED BY A LAND SURVEYOR LICENSED IN THE STATE OF COLORADO. PROPERTY CORNERS WHICH FALL WITHIN NEW CONCRETE FLATWORK SHALL BE DURABLE AND SET FLUSH. THIS

DEPARTMENT OF PUBLIC WORKS FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS IN ACCORDANCE

THE APPROVAL OF THESE PLANS OR ISSUANCE OF A PERMIT BY EL PASO COUNTY DOES NOT AUTHORIZE

6. THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING SIGNS, PAVEMENT MARKINGS, OR TRAFFIC SIGNALS DURING THE PROJECT WITHOUT SIGNED AUTHORIZATION OF THE EL PASO COUNTY INSPECTOR ASSIGNED

THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2,

CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO

PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT

NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE

CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY

### CONSTRUCTION NOTES con't.

- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM 8. THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- 9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- 10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- 11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- 13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]
- 14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- 15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

#### SIGNING & STRIPING NOTES

- 1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 2 REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
- 3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT.
- ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR 4. BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
- 5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
- 6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
- ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING UPPER-LOWER CASE ON 12" BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS"
- ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
- ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
- 10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
- 11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
- 12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
- 13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
- 14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

MATERIALS LEC	GEND		E-SD	
	AGGREGATE BASE COURSE		P-W 8	
	CONCRETE			
	COMPACTED SUBGRADE		6 <sub>400</sub> 6 <sub>400</sub>	
	BITUMINOUS PAVEMENT (ASPHALT)	1	\0400_	_
		OWNER:	S	EΑ

BENCHMARK	OWNER:
NGS T 294 ELEVATION - 7247.10' NAVD 88	SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921
BASIS OF BEARING:	PREPARED BY:
A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"	Matrix

#### ABBREVIATIONS:

AD ALGEBRAIC DIFFERENCE ASSY ASSEMBLY ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS APPROX APPROXIMATE or APPROXIMATELY AVE AVENUE AVG AVERAGE ABBREVIATIONS con't: B/C BACK OF CURB ₽ or B/L BASELINE NC BLVD BOULEVARD NIC BTM BOTTOM NO NUMBER NOM NOMINAL CI CAST IRON NTS CEN CENTER CENTERLINE OC CUBIC FEET PER SECOND CFS O/S OFFSET CLR CLEAR CMP CORRUGATED METAL PIPE CONC CONCRETE PC CONST CONSTRUCTION PCC CONT CONTINUOUS PCR PE DIA DIAMETER ΡIΕ DN DOWN PGL DWG DRAWING ₽ or P/L PRC EΑ EACH PΤ ENERGY GRADE LINE EGL PVC ELEVATION ELEV or EL ELL ELBOW PVI EOP EDGE OF PAVEMENT PVMT EOS EDGE OF SHOULDER PVT ESMT EASEMENT EACHWAY EW R OR RAD RADIUS EX or EXIST EXISTING RC RCP FES FLARED END SECTION RED FIN FINISHED REF ₠ or FL FLOWLINE REINF FLG FLANGE REQ FT FOOT / FEET REV FRP FIBERGLASS REINFORCED PIPE ROW RT RIGHT GAL GALLON GALV GALVANIZED SCH GAU GAUGE (MATERIAL) SD GV GATE VALVE SQ SQUARE GW GROUNDWATER STREET ST STA HBP HOT BITUMINOUS PAVEMENT STD HGL HYDRAULIC GRADE LINE STL STEEL HP **HIGH POINT** HORIZ HORIZONTAL HCL HORIZONTAL CONTROL LINE HR HOUR TAN TB INV INVERT TBC TFC VERTICAL CURVE FACTOR Κ THD LBS POUNDS TYP TYPICAL ΙF LINEAR FEET LN LANE UG LOW POIN UTIL UTILITY LS LANDSCAPING LT LEFT VC VERT MAX MAXIMUM MFGR MANUFACTURER WIDTH W MH MANHOLE WITH W MID MIDDLE or MIDPOINT MIN MINIMUM MJ MECHANICAL JOINT MSL MEAN SEA LEVEL SYMBOLS  $(\bigcirc)$ PROPOSED CENTERLINE EXISTING PAVED ROAD EXISTING UNDERGROUND UTILITY **EXISTING POWER POLE** PROPOSED UNDERGROUND UTILITY THRUST BLOCK RIGHT OF WAY FIRE HYDRANT EASEMENT  $\bowtie$ EXISTING WATER VALVE **EXISTING CURB & GUTTER**  $\otimes$  M PROPOSED WATER VALVE **PROPOSED CURB & GUTTER** Η WATER FITTINGS **EXISTING STORM INLET EXISTING CONTOUR** PROPOSED STORM DRAIN/INLET PROPOSED CONTOUR PLUG PIPE PROPERTY LINE **PROPOSED SIGN** 100 YEAR HGL 5 YEAR HGL EXISTING SIGN \_\_\_\_ **GRANDWOOD RANCH** EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS



NORMAL CROWN NOT IN CONTRACT NOT TO SCALE ON CENTER PROPOSED POINT OF CURVATURE POINT OF COMPOUND CURVE POINT OF CURB RETURN PLAIN END PUBLIC IMPROVEMENT EASEMENT PROFILE GRADE LINE PROPERTY LINE POINT OF REVERSE CURVE POINT OF TANGENCY POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE POINT OF VERTICAL INTERSECTION PAVEMENT POINT OF VERTICAL TANGENT **REVERSE CROWN** REINFORCED CONCRETE PIPE REDUCER REFERENCE REINFORCING REQUIRED REVISION **RIGHT-OF-WAY** SCHEDULE STORM SEWER STATION STANDARD SS OR SAN SANITARY SEWER SW OR S/W SIDEWALK TANGENT THRUST BLOCK TOP BACK OF CURB TOP FACE OF CURB THREADED THK OR THICK THICKNESS UNDERGROUND VERTICAL CURVE VERTICAL PROPOSED MANHOLE PROPOSED AREA INLET PROPOSED END SECTION

### ROADWAY GENERAL NOTES

FOR AND ON BEHALF OF	DESIGNED BY:	CAP	SCALE		DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	CAP	HORIZ.	N/A			
		-	HORIZ.	11/7	0	0.05 40	GN01
PROJECT No. 20.1120.003	CHECKED BY:	NMS	VERT.	N/A	SHEET	2 OF 40	

### STANDARD PERMANENT BEST MANAGEMENT PRACTICE (BMP) NOTES:

1. NO CLEARING, GRADING, EXCAVATION, FILLING, OR OTHER LAND DISTURBANCE ACTIVITIES SHALL BE PERMITTED PRIOR TO APPROVAL OF THE SITE GRADING AND EROSION CONTROL (GEC) PLAN. REFERENCE THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL (DCM) VOLUME 2, CHAPTER 7 FOR MORE INFORMATION.

2. ANY LAND DISTURBANCE BY ANY OWNER, DEVELOPER, BUILDER, CONTRACTOR, OR OTHER PERSON SHALL COMPLY WITH THE POLICIES AND PROCEDURES OUTLINED IN THE COUNTY DCM, AND THE APPROVED PRELIMINARY AND FINAL GEC PLAN.

3. THIS PERMANENT BMP PLAN WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY EL PASO COUNTY IF WORK ON THE PERMANENT BMP DOES NOT COMMENCE WITHIN 12 MONTHS OF PLAN APPROVAL, OR SHOULD ANY OF THE FOLLOWING OCCUR: A CHANGE IN PROPERTY OWNERSHIP, A CHANGE IN THE PROPOSED DEVELOPMENT, OR CHANGES TO THE DESIGN OF THE BMP.

4. ACCEPTANCE OF THIS PLAN DOES NOT CONSTITUTE APPROVAL TO GRADE OR CAUSE ANY DISTURBANCE WITHIN ANY UTILITY EASEMENT OR RIGHT-OF-WAY. APPROVALS TO WORK WITHIN UTILITY EASEMENTS MUST BE OBTAINED FROM THE APPROPRIATE UTILITY COMPANY. IT IS NOT PERMISSIBLE FOR ANY PERSON TO MODIFY THE GRADE OF THE EARTH ON ANY UTILITY EASEMENT OF RIGHT-OF-WAY WITHOUT THE APPROPRIATE WRITTEN APPROVAL. THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARD UTILITY FACILITIES. ANY CHANGES TO EXISTING UTILITY FACILITIES TO ACCOMMODATE THE PLAN MUST BE APPROVED BY THE AFFECTED UTILITY OWNER PRIOR TO IMPLEMENTING THE PLAN. THE APPLICANT IS RESPONSIBLE FOR THE COST TO RELOCATE OR PROTECT EXISTING UTILITIES OR TO PROVIDE INTERIM ACCESS.

5. A PROFESSIONAL ENGINEER (PE) CERTIFICATION THAT THE BMP HAS BEEN INSTALLED AND CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE PLANS WILL BE REQUIRED ONCE THE BMP IS FULLY CONSTRUCTED. AN AS-CONSTRUCTED SURVEY MUST BE COMPLETED TO VERIFY FACILITY VOLUMES AND ELEVATIONS. THE AS-BUILT DRAWINGS MUST BE SUBMITTED ALONG WITH THE PE CERTIFICATION. A PE CERTIFICATION REQUIRES PERIODIC ON-SITE OBSERVATIONS BY THE ENGINEER OF RECORD OR A PERSON UNDER THEIR RESPONSIBLE CHARGE. COORDINATION WITH THE ENGINEER OF RECORD TO ENSURE THAT THE NECESSARY ON-SITE OBSERVATIONS ARE COMPLETED IS THE RESPONSIBILITY OF THE APPLICANT.

6. THE CONTRACTOR SHOULD CONTACT THE ENGINEER OF RECORD AND GEC INSPECTOR IMMEDIATELY SHOULD CONSTRUCTION OF THE BMP VARY IN ANY WAY FROM THE PLANS.

### PROJECT DATA

POND DF-1, POND DF-2, POND DF-3, POND DF-4

**REPORT CONTAINING BMP DESIGN CALCULATIONS:** 

PARCEL NUMBER:

GEC/STORMWATER QC PLAN:

DESIGN

FUNCTIONAL MAINTENANCE OF BMP:

**AESTHETIC MAINTENANCE OF BMP:** 

#### POND DF-1

WQCV WATER SURFACE ELEVATION: EURV WATER SURFACE ELEVATION: 100-YR WATER SURFACE ELEVATION:

#### POND DF-2

WQCV WATER SURFACE ELEVATION: EURV WATER SURFACE ELEVATION: 100-YR WATER SURFACE ELEVATION:

#### POND DF-3

WQCV WATER SURFACE ELEVATION: EURV WATER SURFACE ELEVATION: 100-YR WATER SURFACE ELEVATION:

#### POND DF-4

WQCV WATER SURFACE ELEVATION: EURV WATER SURFACE ELEVATION: 100-YR WATER SURFACE ELEVATION: PRELIMINARY DRAINAGE REPORT FOR GRANDWOOD RANCH (APPROVED 10/05/2020)

TAX SCHEDULE NUMBER 6119000003

SEE "GRANDWOOD RANCH FINAL GRADING & EROSION CONTROL PLANS", SEPTEMBER 2020, BY MATRIX GROUP, INC.

GRANDWOOD RANCH HOMEOWNER ASSOCIATION, INC.

GRANDWOOD RANCH HOMEOWNER ASSOCIATION. INC.

7176.20 7177.86

7175.72

7162.84 7164.21

7165.47

7246.02

7246.53

7248.14

7296.44

7296.84

7298.66

REFERENCE DRAWINGS	ENGINEERING RECORD DRAWINGS	Γ
X-Title-Plan & Profile	THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS. REFER TO ORIGINAL DRAWINGS FOR SIGNATURES AND SEALS.	
	COREY PETERSEN, PE #56571       FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.         FILE NAME:       S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\Road & Storm Plans\DFGEN01.dwg	
	CTB FILE: PLOT DATE: December 8, 2022 3:36:13 PM This DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.	

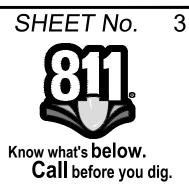
INRC	3 SUL SURVET FOR EL PASO COUNT	<u>T</u>
SOIL ID NO.	SOIL TYPE	HYDROLOGIC CLASSIFICATION
1	ALAMOSA LOAM (1%-3% SLOPES)	D
41	KETTLE GRAVELLY, LOAMY SAND (8%-40% SLOPES)	В
42	KETTLE-ROCK OUTCROP COMPLEX	X B/D
71	PRING COARSE SANDY LOAM (3%-8% SLOPES)	В
93	TOMAH-CROWFOOT COMPLEX (8%-15% SLOPES)	В

### NRCS SOIL SURVEY FOR EL PASO COUNTY

## DEVIATION REQUESTS APPROVED WITH PRELIMINARY PLAN - EL PASO COUNTY JOB #SP195

- THROUGH THE PROPOSED CUL-DE-SAC FOR EMERGENCY TURNAROUND USE.
- PROPOSED DEVIATION IS FOR CONNECTION TO EXISTING GRADES ALONG HIGBY ROAD AND FURROW ROAD.
- 5. DEVIATION FROM SECTION 2.3.2 DESIGN STANDARDS BY FUNCTIONAL CLASSIFICATION FOR A MODIFIED RURAL MAJOR COLLECTOR SECTION.

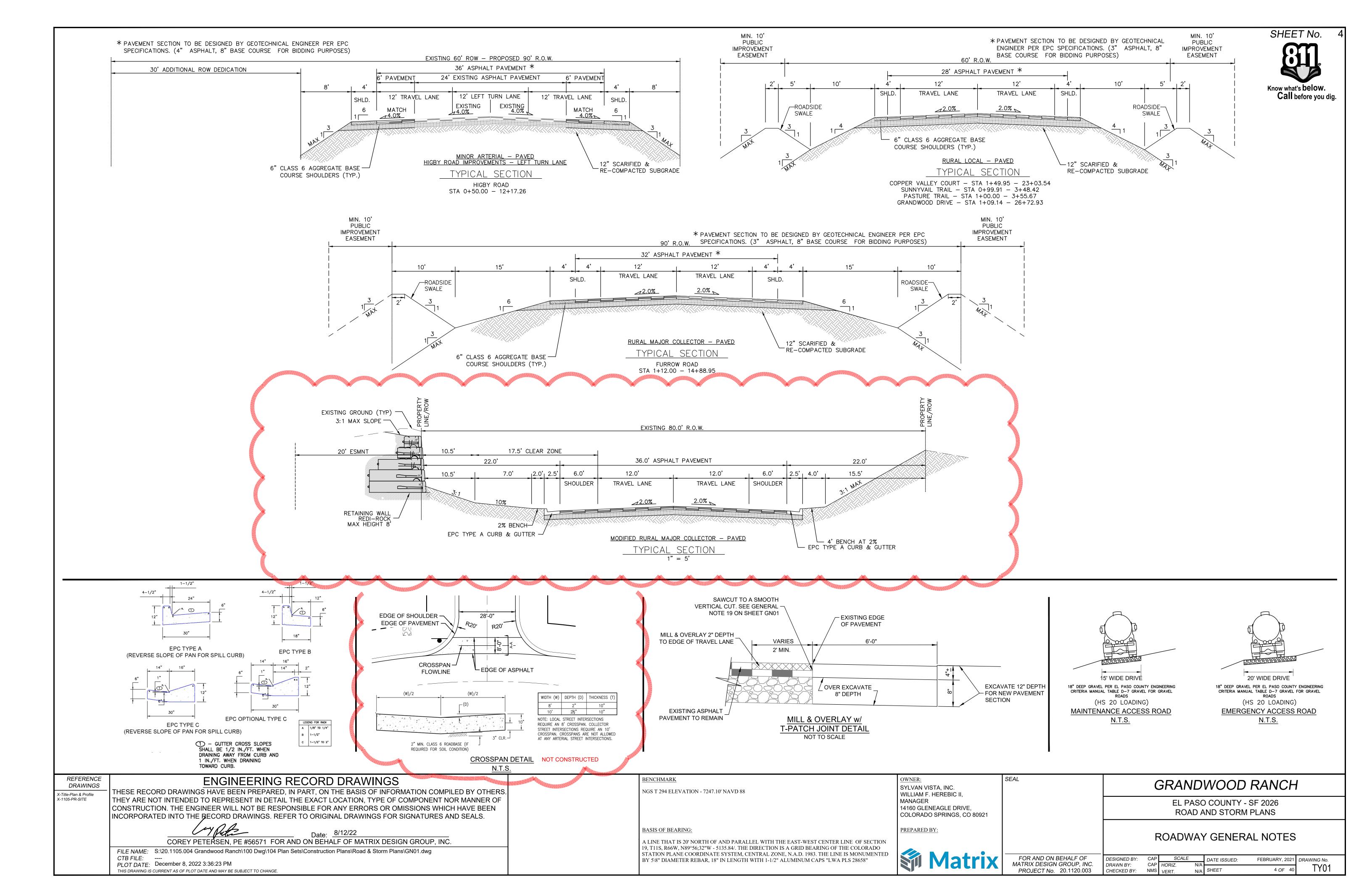
BENCHMARK NGS T 294 ELEVATION - 7247.10' NAVD 88	<u>OWNER:</u> SYLVAN VISTA, INC. WILLIAM F. HEREBIC II,	SEAL	GRANDWOOD RANCH
	MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921		EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS
BASIS OF BEARING: A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO	PREPARED BY:		GENERAL NOTES
STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"	Matrix	FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DESIGNED BY:     CAP     SCALE     DATE ISSUED:     FEBRUARY, 2021     DRAWING No.       DRAWN BY:     CAP     HORIZ.     N/A     SHEET     3 OF 40     GN02

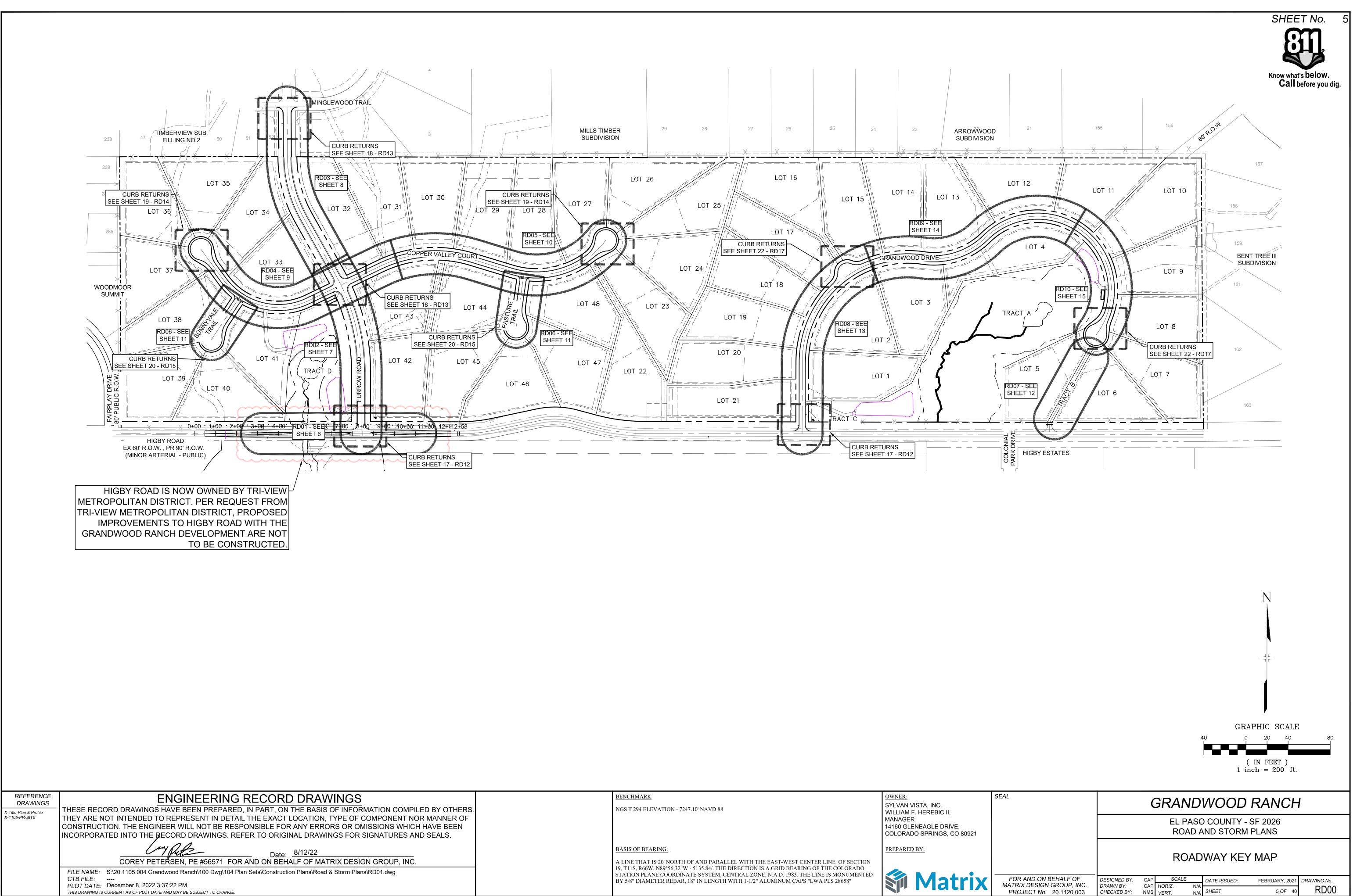


1. DEVIATION FROM SECTION 2.2.5.B AND 2.2.5.D ROADWAY ACCESS CRITERIA - RURAL MINOR ARTERIAL AND COLLECTOR ACCESS STANDARDS AND FROM SECTION 2.3.2 DESIGN STANDARDS BY FUNCTION CLASSIFICATION. THE PROPOSED DEVIATION IS FOR INTERSECTION SPACING FOR THE ROADWAY CONNECTION POINTS TO HIGBY ROAD. 2. DEVIATION FROM SECTION 2.3.8.A ROADWAY TERMINATIONS - CUL-DE-SACS TO ALLOW FOR INCREASED CUL-DE-SAC LENGTH WITH THE USE OF A KNUCKLE MID-LENGTH

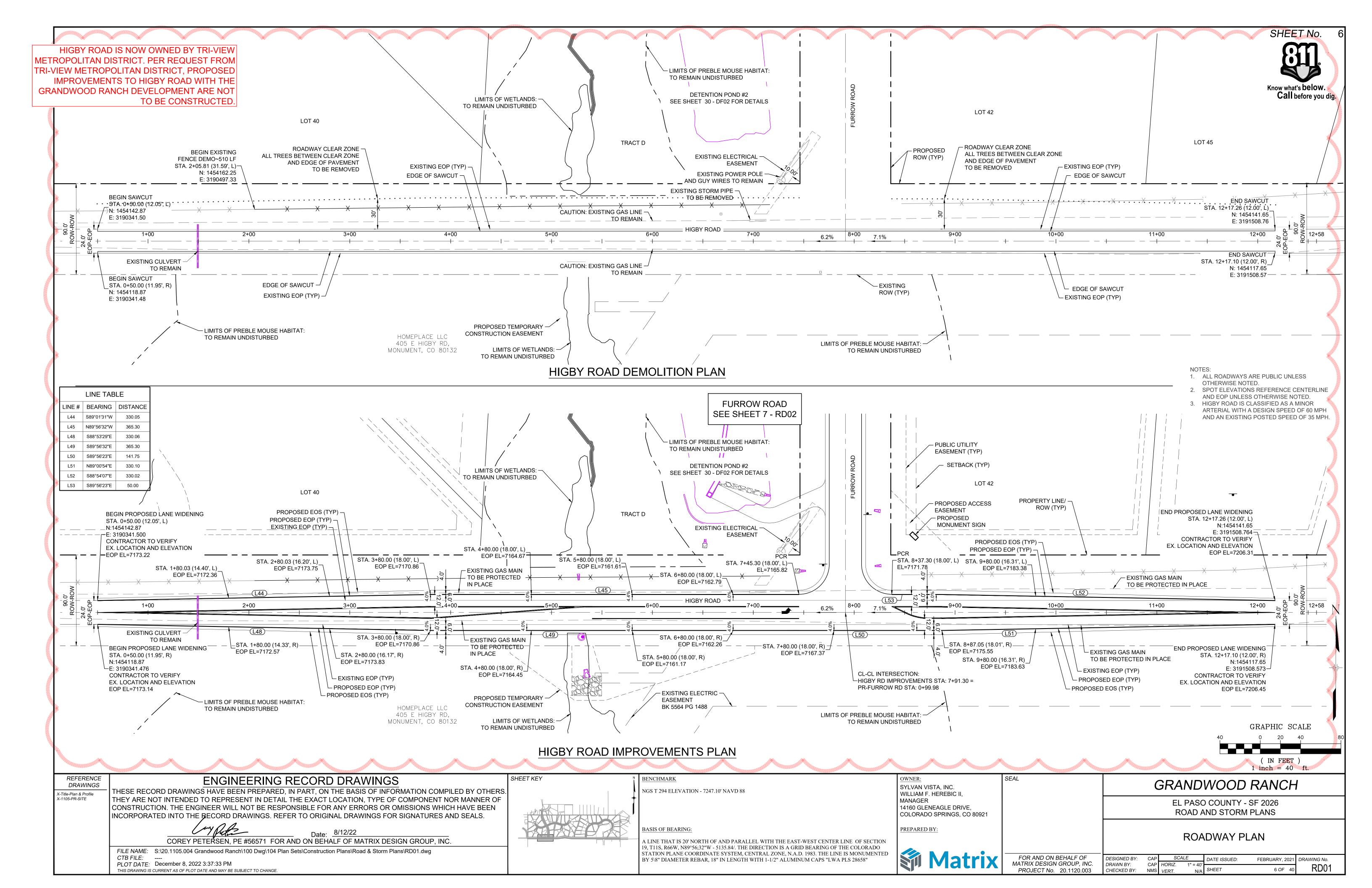
3. DEVIATION FROM SECTION 2.3.4.B MAXIMUM AND MINIMUM GRADES FOR ROADWAYS AND FROM SECTION 2.3.7.C.4 INTERSECTION ALIGNMENT (VERTICAL ALIGNMENT). THE

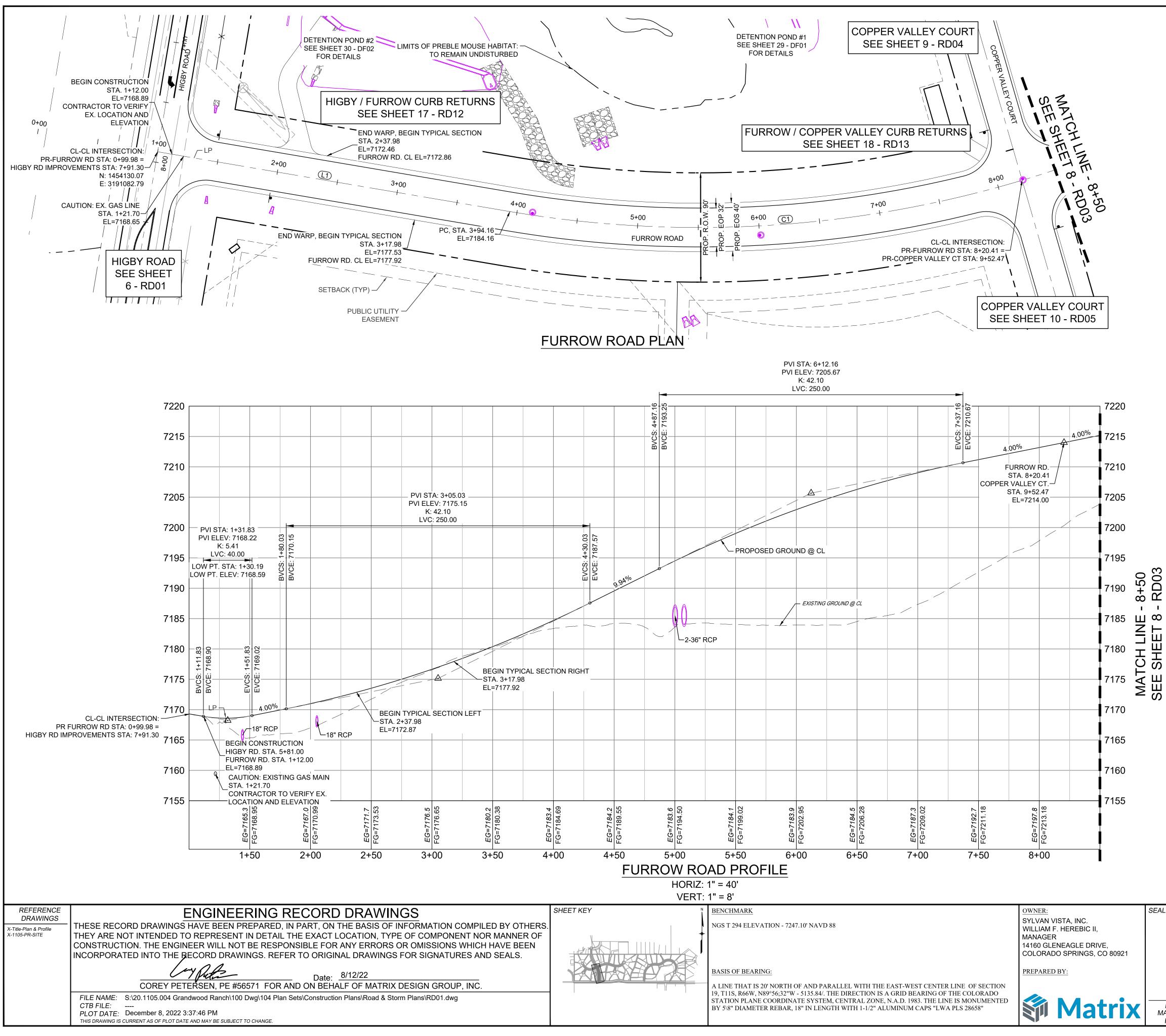
4. DEVIATION FROM SECTION 2.3.2 DESIGN STANDARDS BY FUNCTIONAL CLASSIFICATION FOR MODIFIED RURAL MAJOR COLLECTOR HORIZONTAL CURVE RADIUS AND SPEED LIMIT.

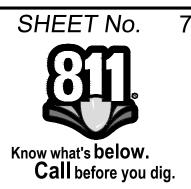




BENCHMARK	OWNER: SE
NGS T 294 ELEVATION - 7247.10' NAVD 88	SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921
BASIS OF BEARING:	PREPARED BY:
A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST O 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEAR STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. T BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAN	RING OF THE COLORADO THE LINE IS MONUMENTED







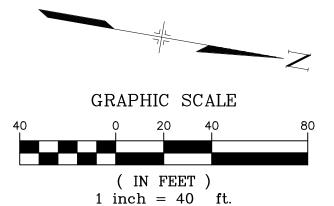
LINE TABLE					
LINE # BEARING DISTANCE					
L1	N00°03'30"E	276.18			

CURVE TABLE					
CURVE # ARC LENGTH RADIUS DELTA ANGLE CHORD BEARING CHORD LENGTH					CHORD LENGTH
C1	476.11	930.00	29°19'57"	N14°36'30"W	470.93

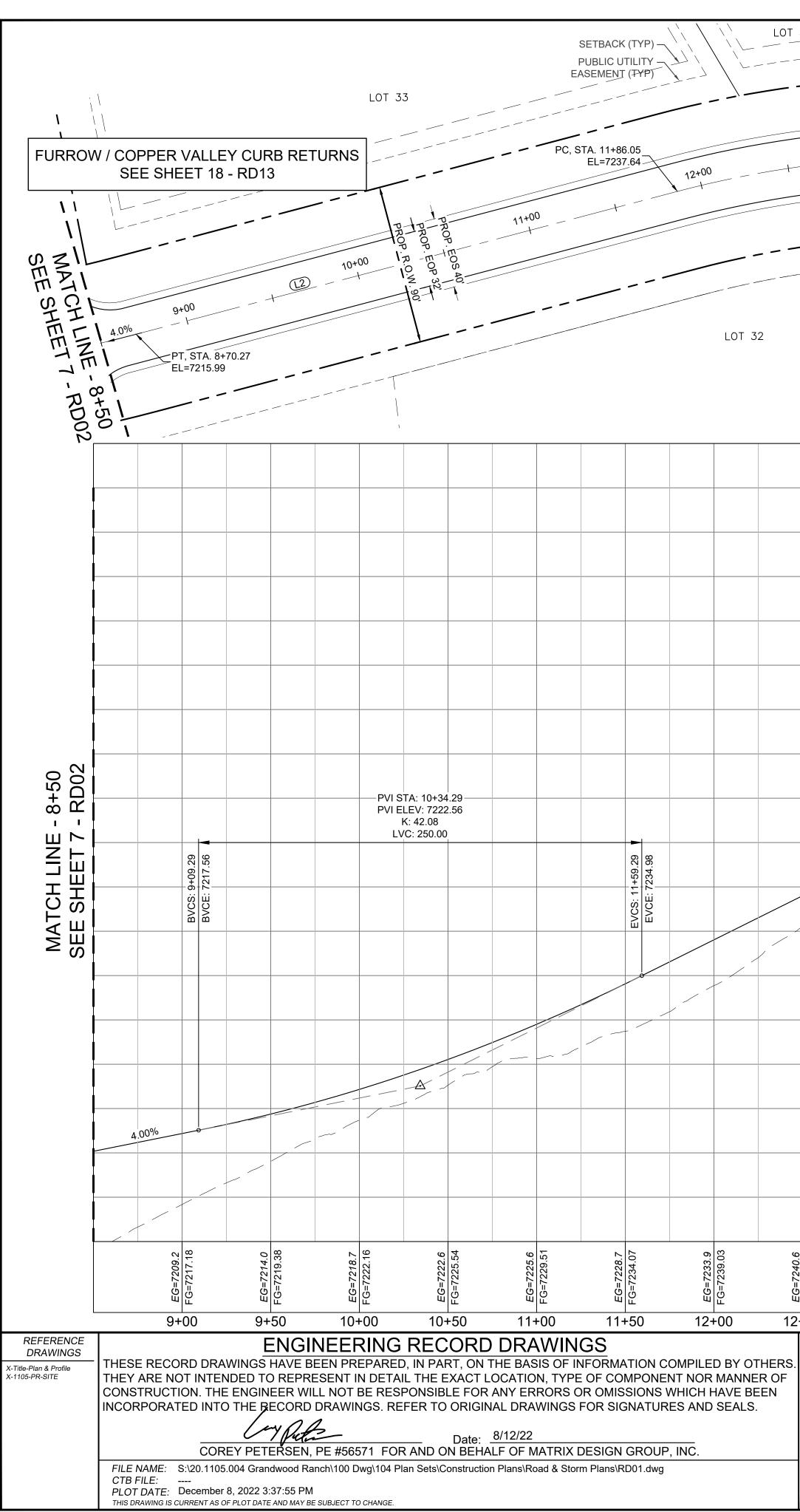
NOTES:

1. ALL ROADWAYS ARE PUBLIC UNLESS OTHERWISE NOTED.

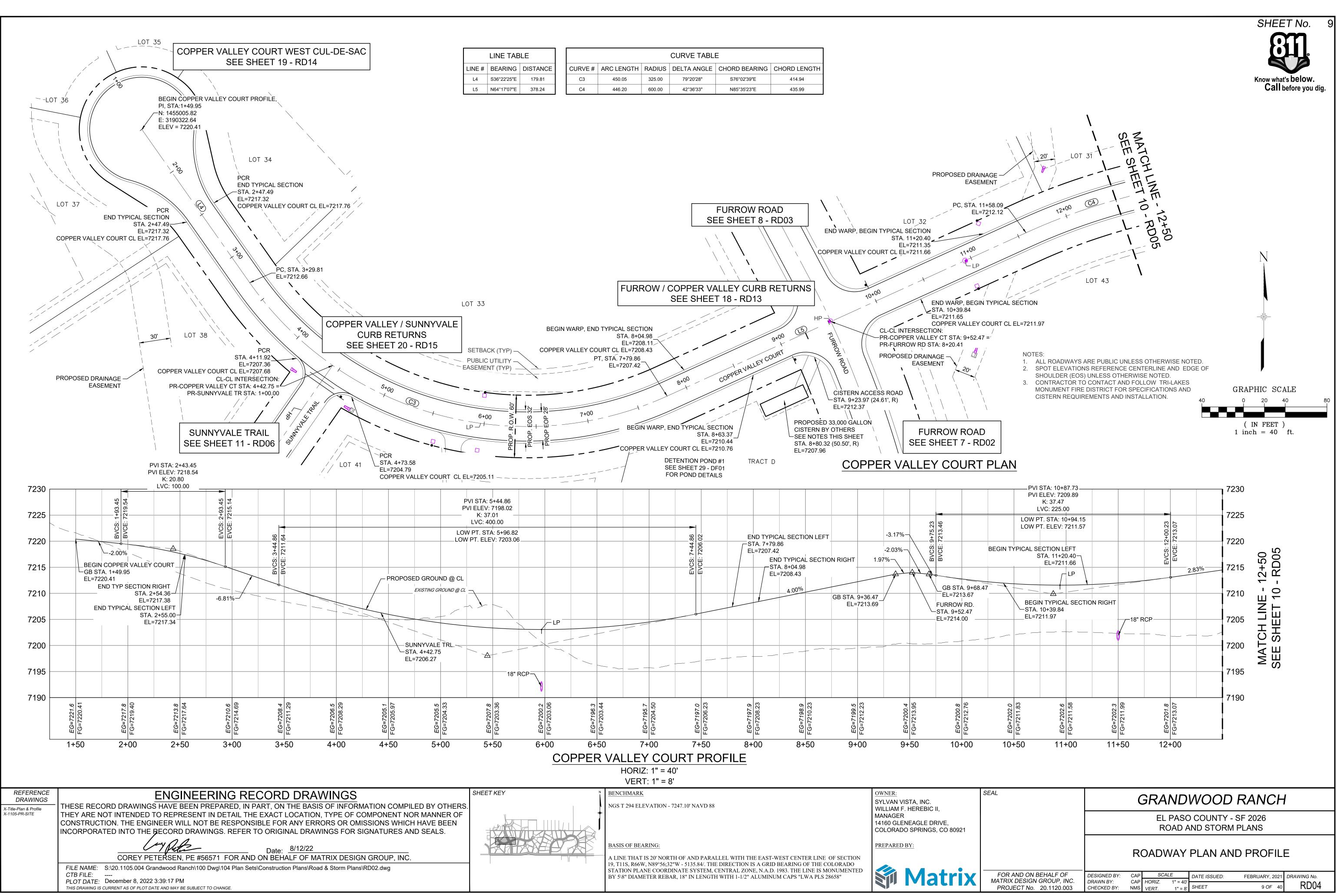
2. SPOT ELEVATIONS REFERENCE CENTERLINE AND EOS UNLESS OTHERWISE NOTED.



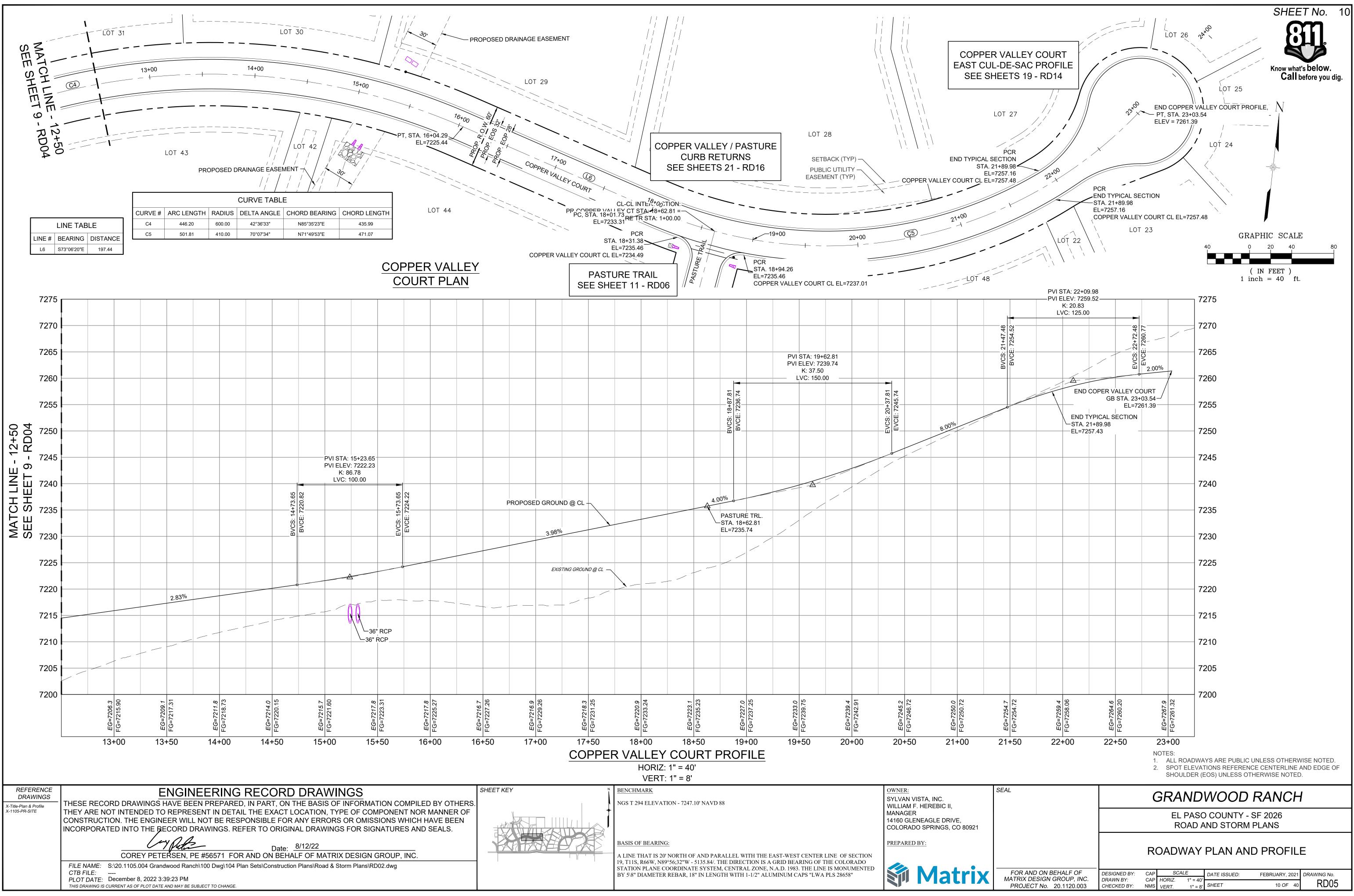
EAL	GRANDWOOD RANCH								
	EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS								
		ROADW	VAY	PLAN ANE	) PROFILI	E			
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DRAWN BY:	CAP SCAL CAP HORIZ. NMS VERT.	1" = 40'	DATE ISSUED: SHEET	FEBRUARY, 2021 7 <i>OF</i> 40	drawing no.			

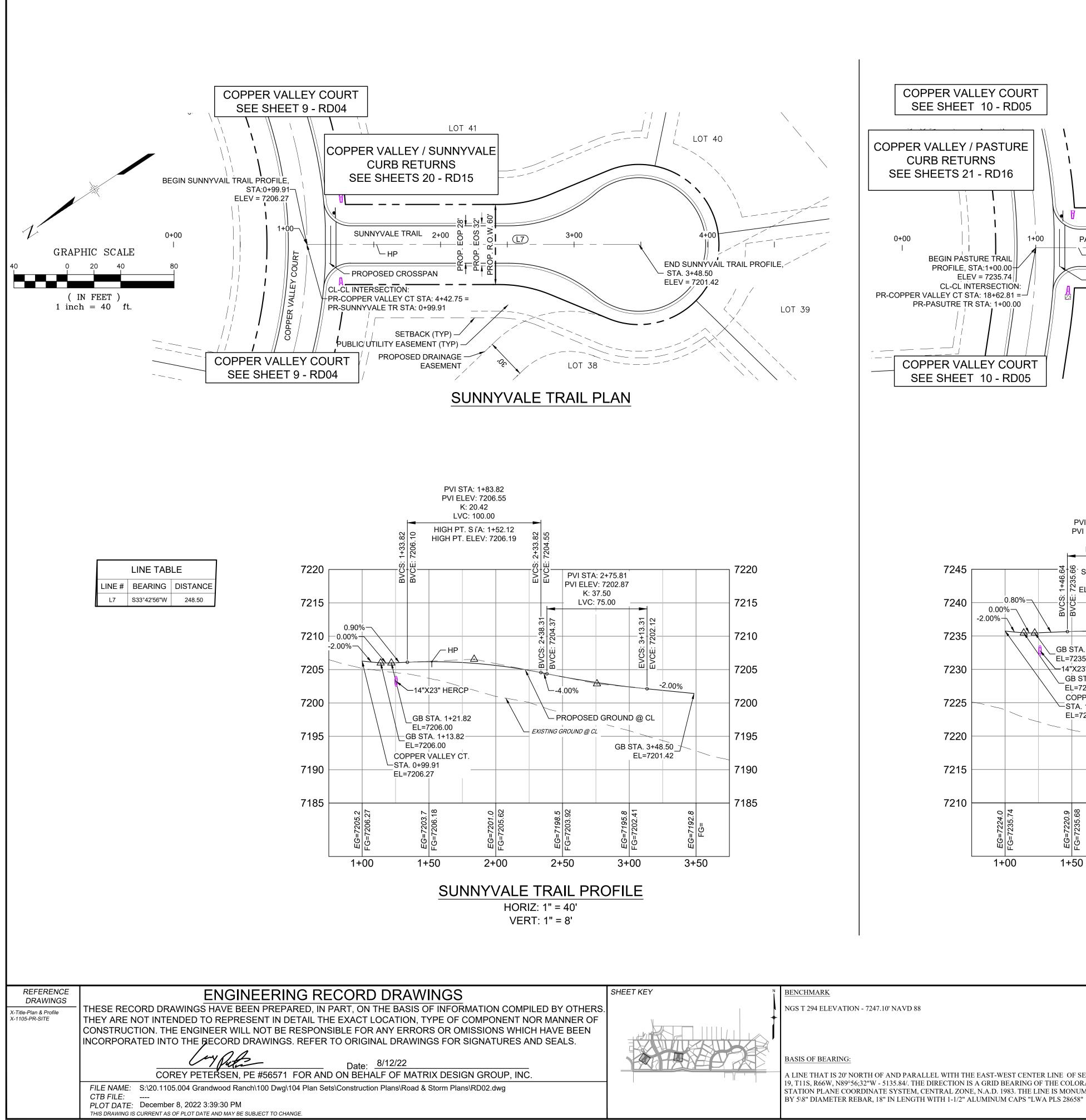


34PT, STA. 14+88.95 END TYPICAL MAJOR COLLECTOR SECTION BEGIN MODIFIED COLLECTOR SECTION EL=7266.64 OFFSITE IMPROVEMENTS SHALL NOT COMMENCE UNTIL APPROVAL AND EASEMENT ACQUISITION THROUGH	TO C&G SECTION / SEE GRANDWO	TAINING WALL, MAX HEIGHT ~ 8' OD RANCH FINAL GRADING AND ROL PLANS FOR RETAINING WALL 52 HAINES, JOHN 17230 LAMPLIGHT DR.	SHEET No. 8
$\frac{13+00}{1+1} - \frac{14+00}{1-1} + \frac{14+00}{1-1$	FL EL=7266.24 FVPE A C&G STA. 15+79.88 EL=7272.24 FURROW RD. 0	ARP MONUMENT, CO 80132 BOX SECTION EOP, PCR	Know what's below. Call before you dig.
BEGIN 5' TRANSITION TO C&G SECTION - STA. 14+83.81 (16.00', R) EOP EL=7265.92 BEGIN TYPE A C&G SECTION	A	END CONSTRUCTION CONNECT TO EXISTING EDGE OF PAVEMENT CONTRACTOR TO VERIFY STA. 17+25.03	
STA. 14+88.95 (20.00', R) FL EL=7266.24 / PROPERTY LINE	4 EOP, BEGII MILLS TRUST AINGLEWOOD TRL, IENT, CO 80132 END TYPICAL S STA. 16+80.03 (1 EL=	ECTION CAUTION: EXISTING DRY 8.00', R) 7276.70 CAUTION: EXISTING DRY UTILITIES TO BE LOCATED AND VERIFIED PRIOR TO	ROW / COPPER VALLEY CURB RETURNS SEE SHEET 18 - RD13
FURROW ROAD PLAN		A. 16+94.86 EL=7277.18 EL=7277.66 CAUTION: EXISTING HYDRANT TO REMAIN. HYDRANT FLANGE TO REMAIN A MINIMUM 6-INCHES ABOVE GRADE	
		PICAL SECTION     7295       B AND GUTTER     7290       STA. 16+94.86     7290	
BVCE: 7258.11		7285 EACS: 19+41:97 2.92% 7280 7280	LINE #         BEARING         DISTANCE           L2         N29°16'28"W         315.78           L3         N00°21'00"W         236.08
	A END TYPICAL	7275 CURVE # ARC LE	ENGTHRADIUSDELTA ANGLECHORD BEARINGCHORD LENGTH2.90600.0028°55'28"N14°48'44"W299.69
EXISTING GROUND @ CL	END TYPICAL SECTION LEFT STA. 15+79.87 EL=7272.60	END CONSTRUCTION (MINGLEWOOD TRL.) STA. 17+25.03 EL=7278.86	ES: ALL ROADWAYS ARE PUBLIC UNLESS OTHERWISE NOTED. SPOT ELEVATIONS REFERENCE CENTERLINE UNLESS OTHERWISE NOTED.
PROPOSED GROUND @ CL END TYPICAL MAJOR COLLECTOR SECTION		CONTRACTOR TO FIELD VERIFY 7260 EX. LOCATION AND ELEVATION 7255	
9.94% BEGIN MODIFIED COLLECTOR SECTION STA. 14+88.19 EL=7266.59 OFFSITE IMPROVEMENTS SHALL NOT COMMENCE UNTIL APPROVAL AND EASEMENT ACQUISITION THROUGH		7250	
EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS		7240	
		7230	
		7220	
		7215	GRAPHIC SCALE
FG=7249.8         FG=7244.00         FG=7249.8         FG=7244.00         FG=7249.8         FG=7261.0         FG=7269.6         FG=7263.94         FG=7263.48         FG=7263.48         FG=7263.34         FG=7263.48	EG=7272.0       EG=7272.0       FG=7267.47       EG=7275.6       EG=7275.6       FG=7273.65       FG=7273.65	7205 7205 FURROW ROAE HORIZ: 1" = 16+50 17+00 7205 FURROW ROAE NORIZ: 1" = VERT: 1" =	= 40' 1 inch = 40 ft.
SHEET KEY NGS T 294 ELEVATION - 7247.10' NAVD	38	OWNER:SEALSYLVAN VISTA, INC.WILLIAM F. HEREBIC II,WIANAGER14160 GLENEAGLE DRIVE,COLORADO SPRINGS, CO 80921	GRANDWOOD RANCH EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS
19, T11S, R66W, N89°56;32"W - 5135.84/. T Station plane coordinate system	ALLEL WITH THE EAST-WEST CENTER LINE OF SECTION HE DIRECTION IS A GRID BEARING OF THE COLORADO I, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED TH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"	PREPARED BY: FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	ROADWAY PLAN AND PROFILE         DESIGNED BY: CAP         DRAWN BY: CAP         MORIZ. 1" = 40'         CHECKED BY: NMS         SCALE         DATE ISSUED: FEBRUARY, 2021       DRAWING No.         RD03



	LINE TAB	LE	CURVE TABLE						
LINE #	BEARING	DISTANCE	CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	
L4	S36°22'25"E	179.81	C3	450.05	325.00	79°20'28"	S76°02'39"E	414.94	
L5	N64°17'07"E	378.24	C4	446.20	600.00	42°36'33"	N85°35'23"E	435.99	



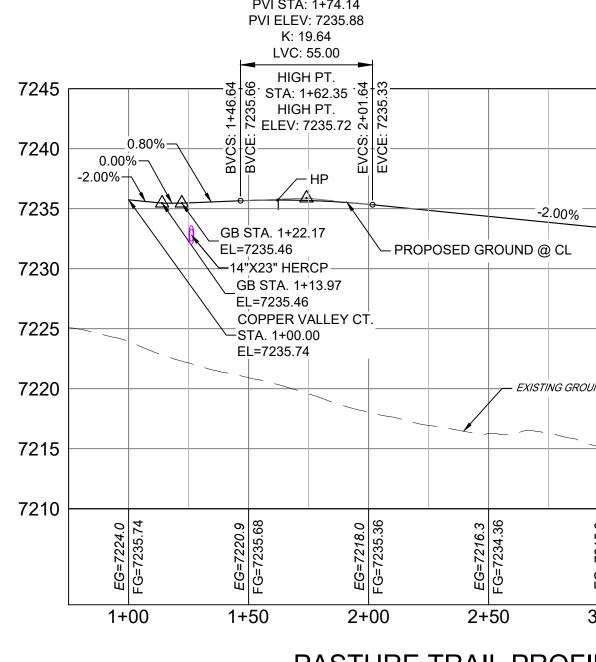


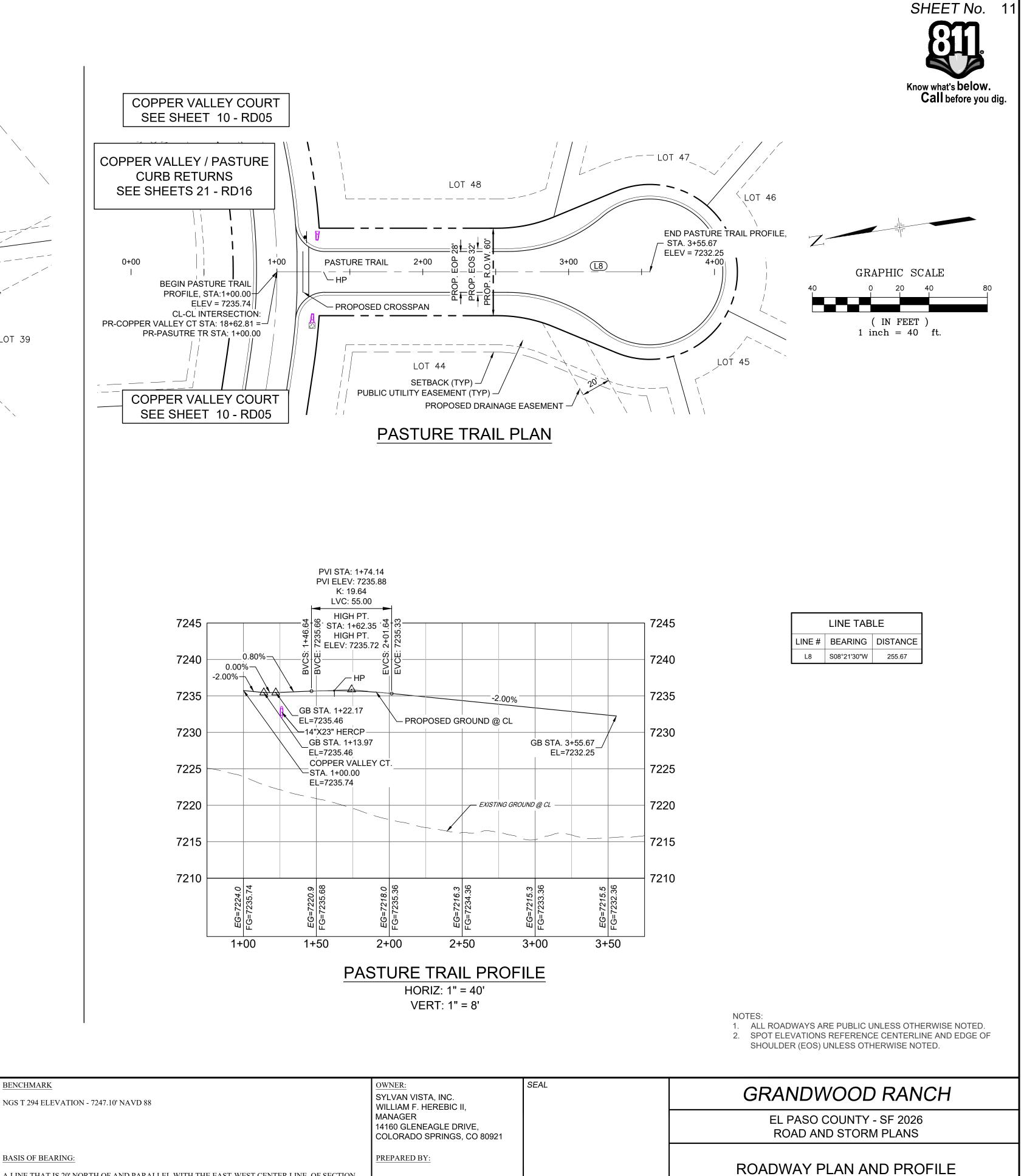
BASIS OF BEARING:

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED

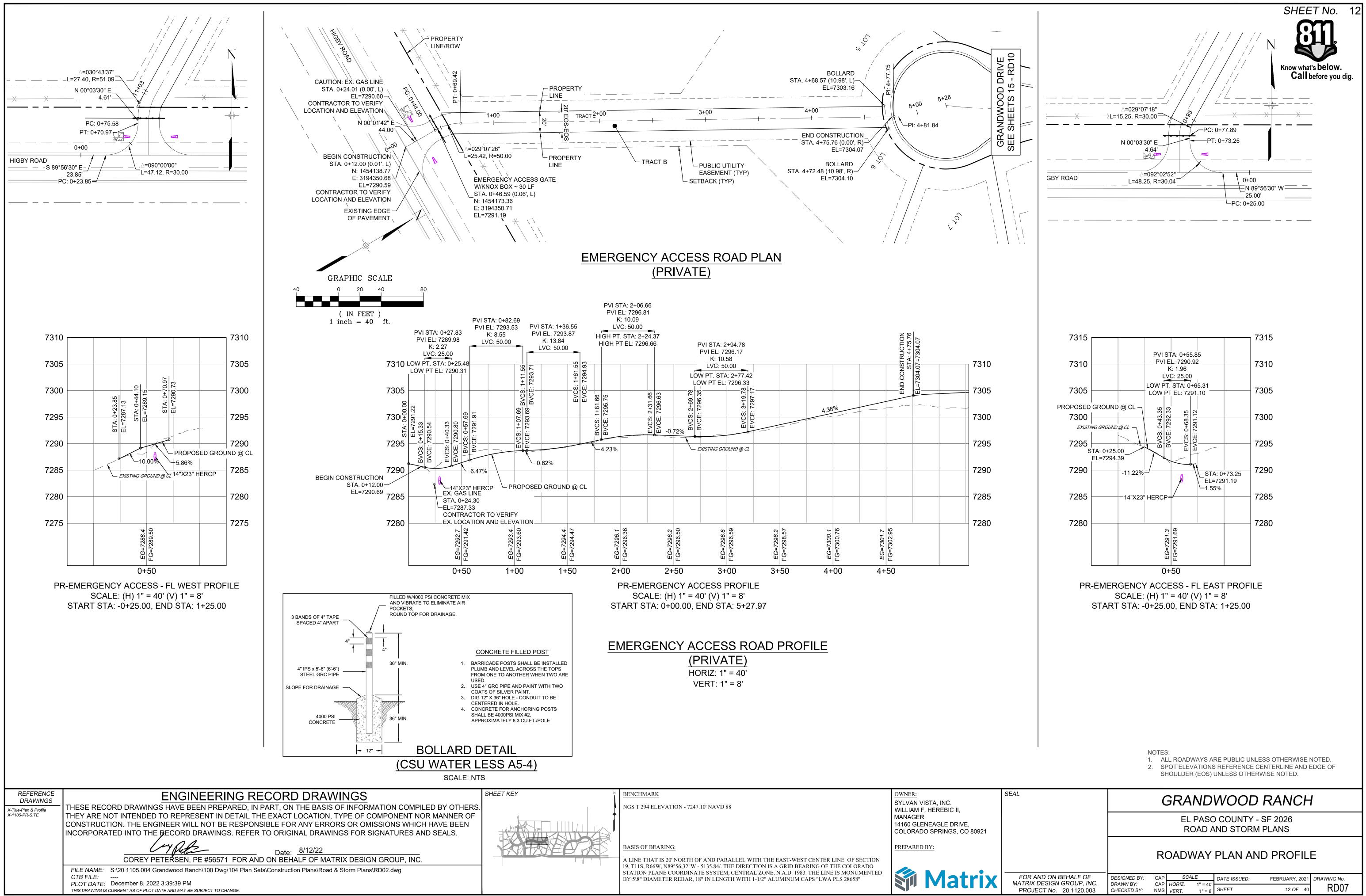
OWNER: SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921 PREPARED BY:

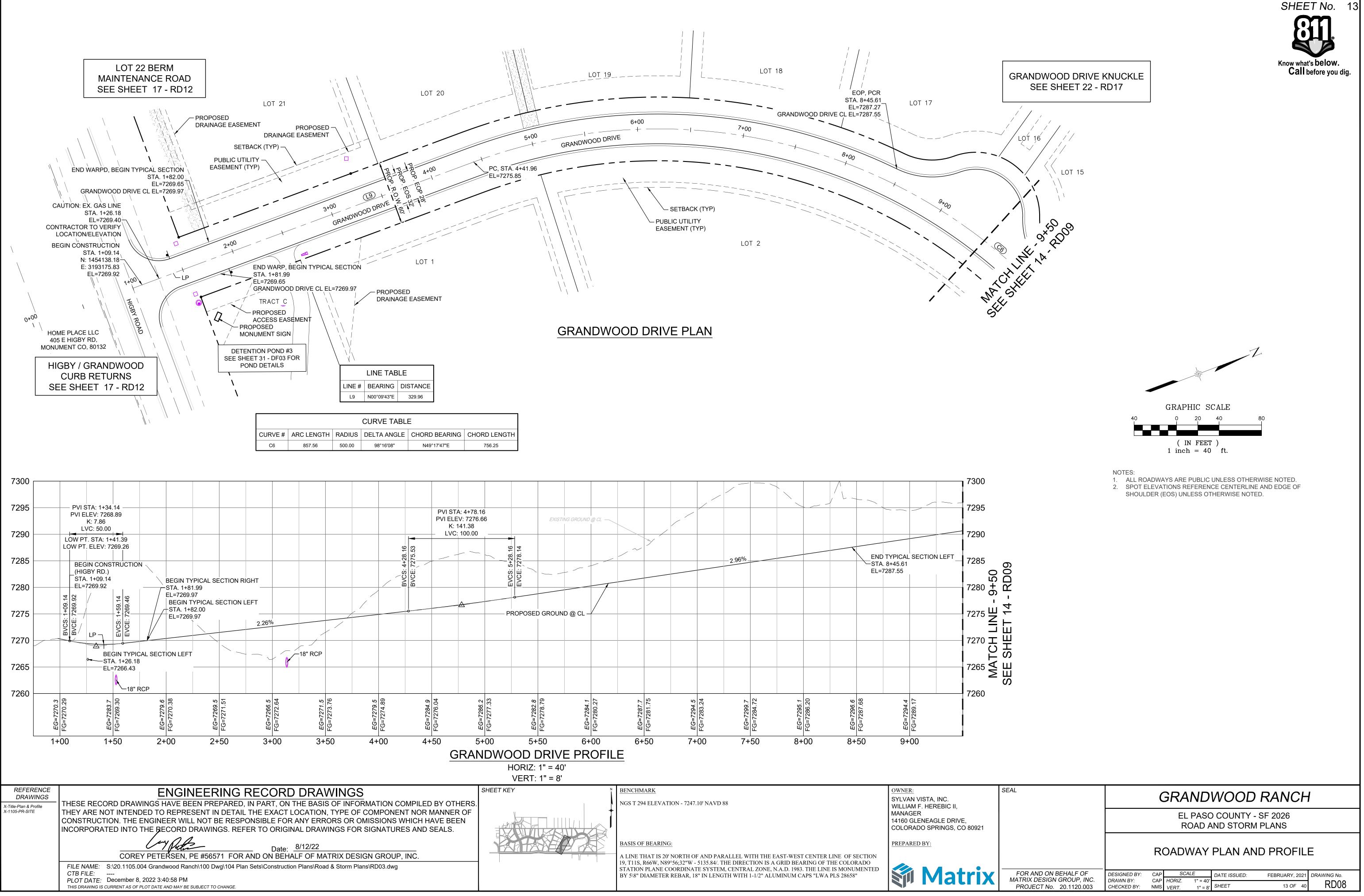
Matrix





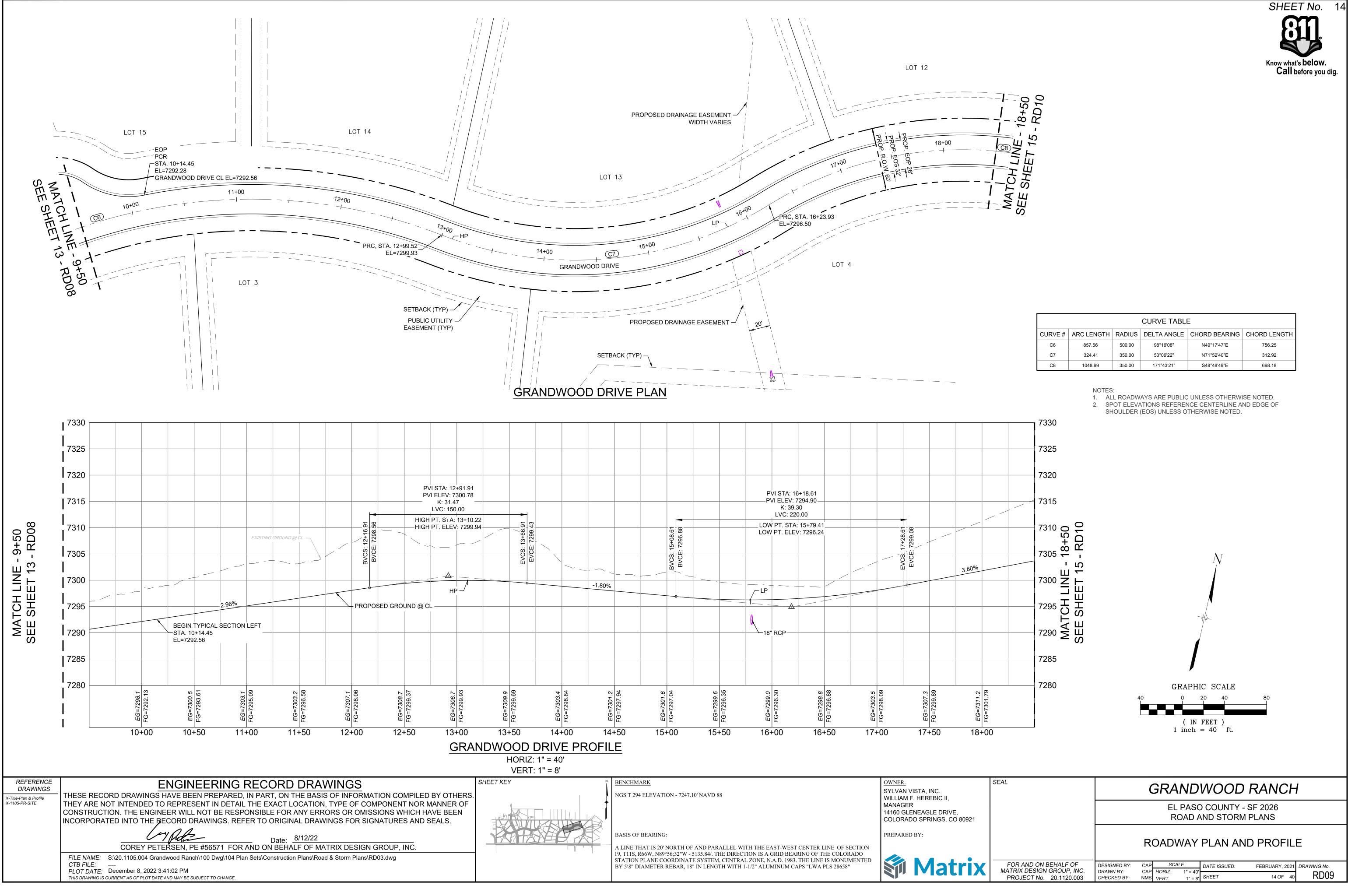
FOR AND ON BEHALF OF	DESIGNED BY:	CAP	SCA	LE	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	CAP	HORIZ.	1" = 40'		,	
PROJECT No. 20.1120.003	CHECKED BY:	NMS	VERT.	1" = 8'	SHEET	11 OF 40	RD06





EL PASO COUNTY - SF 2026
ROAD AND STORM PLANS

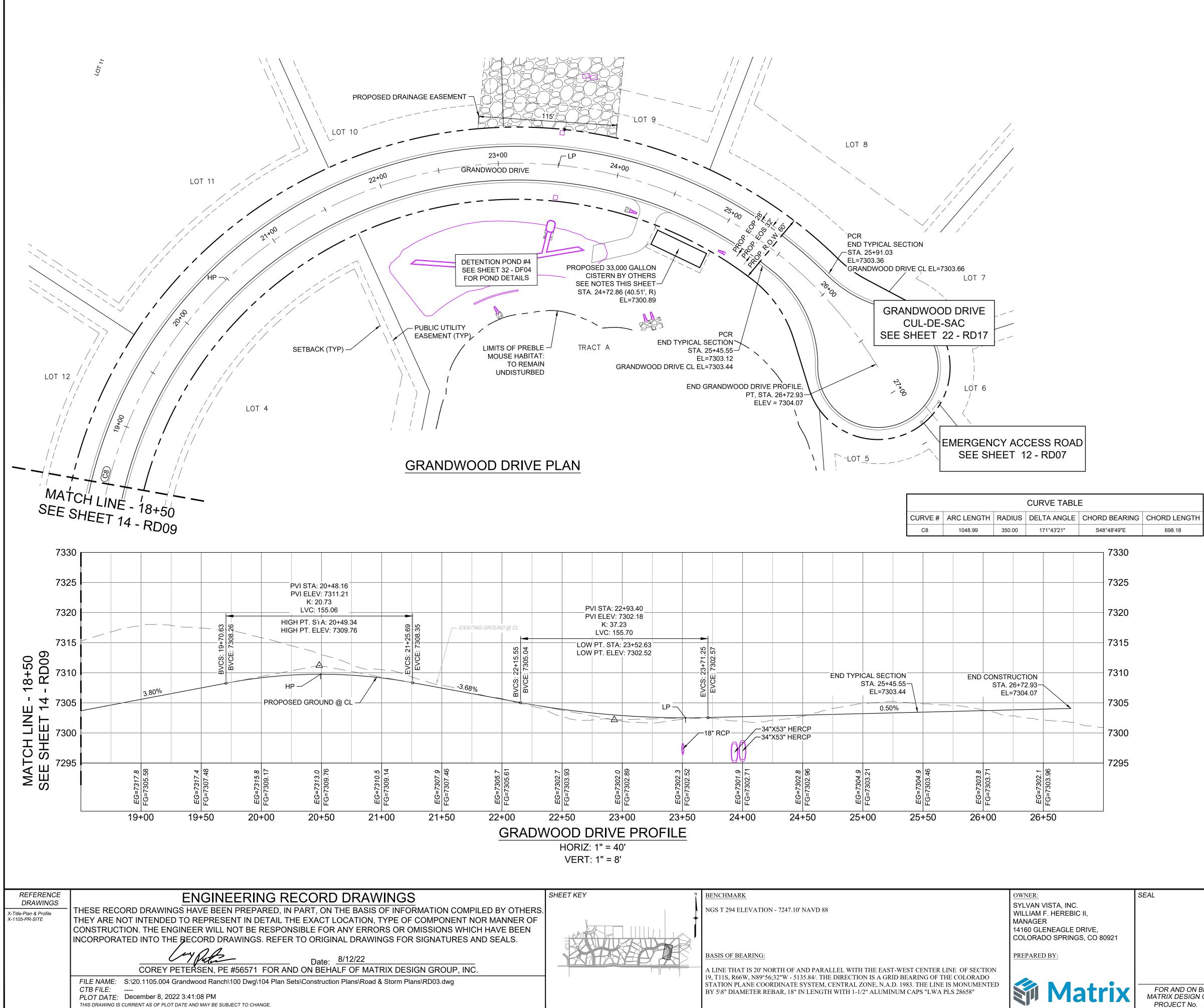
FOR AND ON BEHALF OF	DESIGNED BY:	CAP	SC	٩LE	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	CAP	HORIZ.	1" = 40'			RD08
PROJECT No. 20.1120.003	CHECKED BY:	NMS	VERT.	1" = 8'	SHEET	13 OF 40	

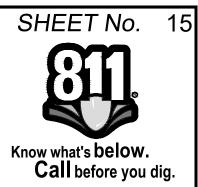




CURVE TABLE								
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH			
C6	857.56	500.00	98°16'08"	N49°17'47"E	756.25			
C7	324.41	350.00	53°06'22"	N71°52'40"E	312.92			
C8	1048.99	350.00	171°43'21"	S48°48'49"E	698.18			

SEAL	GRANDWOOD RANCH					
	EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS					
	ROADWAY PLAN AI	ND PROFILE				
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DESIGNED BY: CAP <u>SCALE</u> DATE ISSUED: DRAWN BY: CAP HORIZ. 1" = 40' CHECKED BY: NMS VERT. 1" = 8' SHEET	FEBRUARY, 2021 DRAWING No. 14 OF 40 RD09				

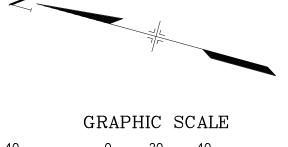


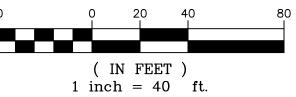


NOTES:

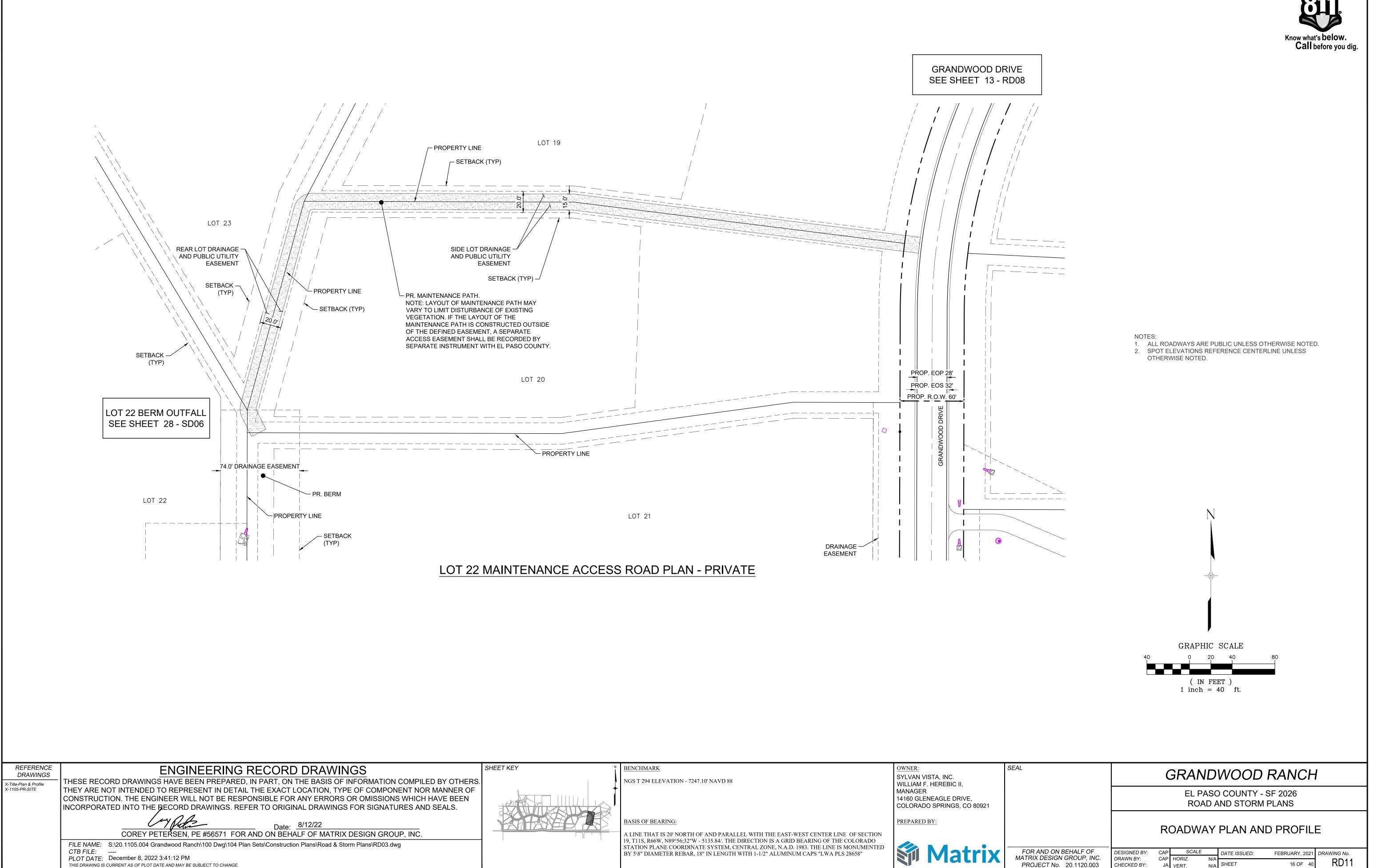
1. ALL ROADWAYS ARE PUBLIC UNLESS OTHERWISE NOTED.

- 2. SPOT ELEVATIONS REFERENCE CENTERLINE AND EDGE OF SHOULDER (EOS) UNLESS OTHERWISE NOTED.
- CONTRACTOR TO CONTACT AND FOLLOW TRI-LAKES MONUMENT FIRE DISTRICT FOR SPECIFICATIONS AND CISTERN REQUIREMENTS AND INSTALLATION.

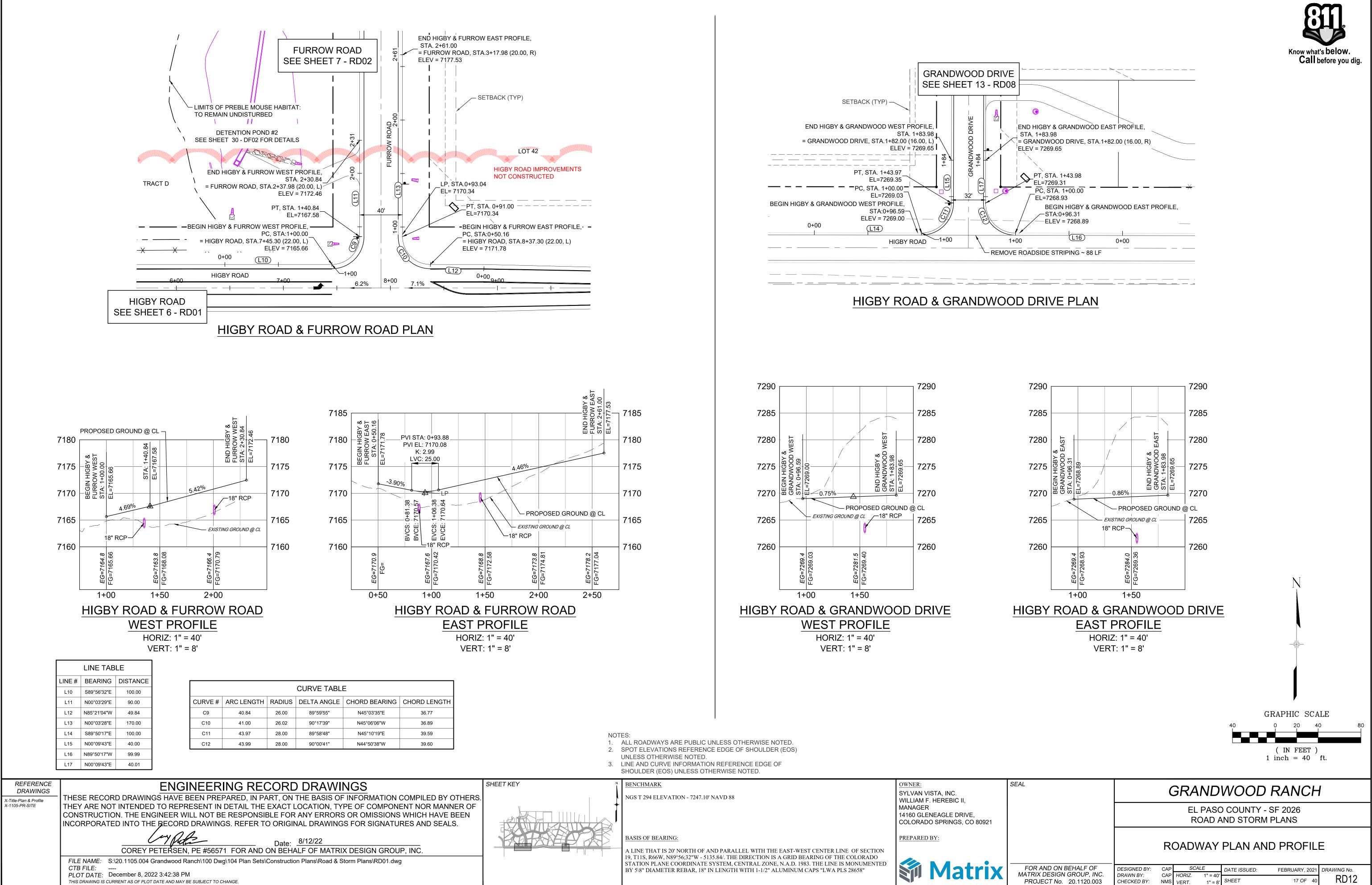




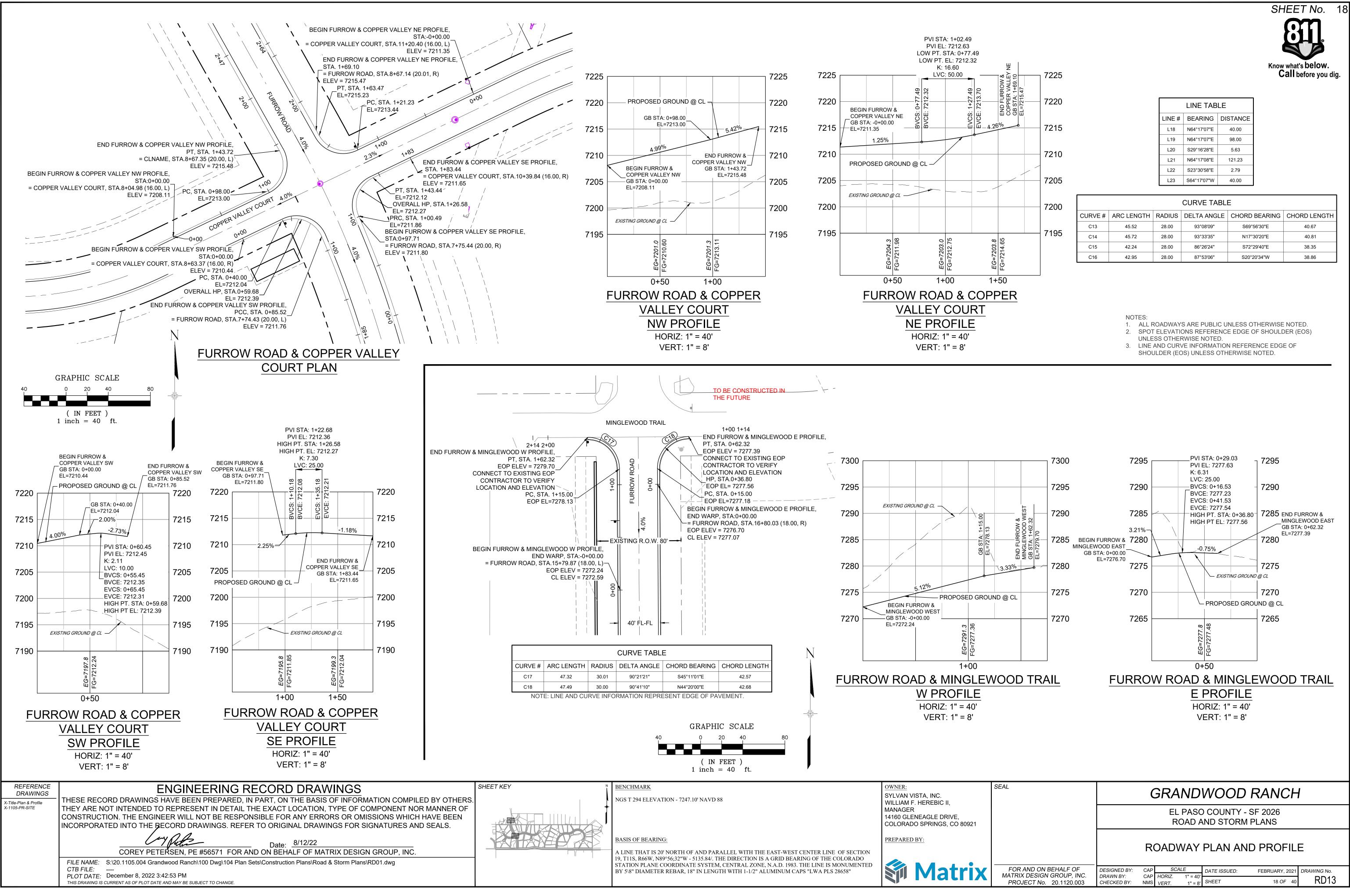
SEAL	GRANDWOOD RANCH						
	EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS						
	ROADWAY PLAN AND PROFILE						
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DESIGNED BY:CAPSCALEDATE ISSUED:FEBRUARY, 2021DRAWING No.DRAWN BY:CAPHORIZ.1" = 40'SHEET15 OF 40RD10CHECKED BY:NMSVERT.1" = 8'SHEET15 OF 40RD10						

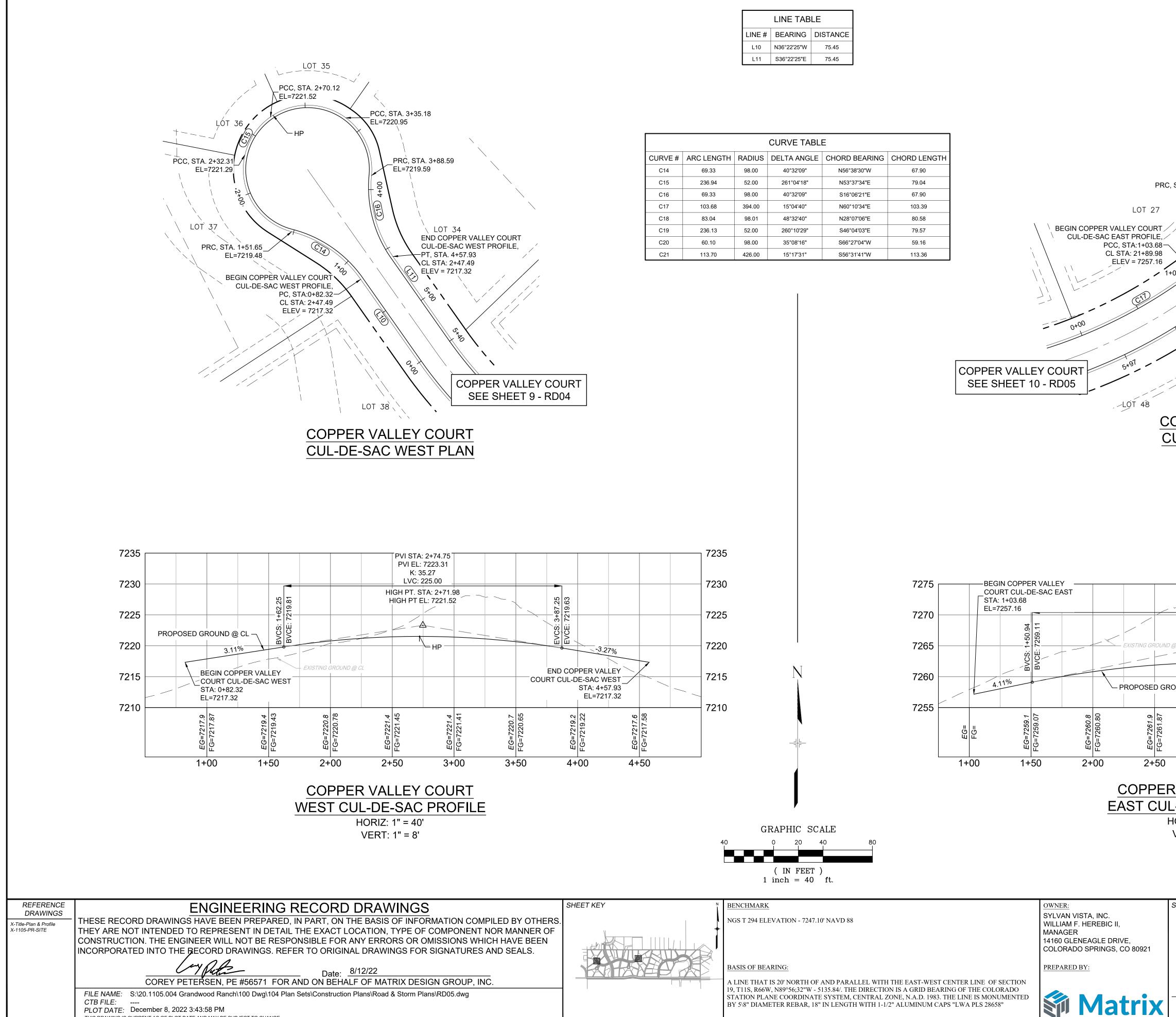


SHEET No. 16



SHEET No. 17

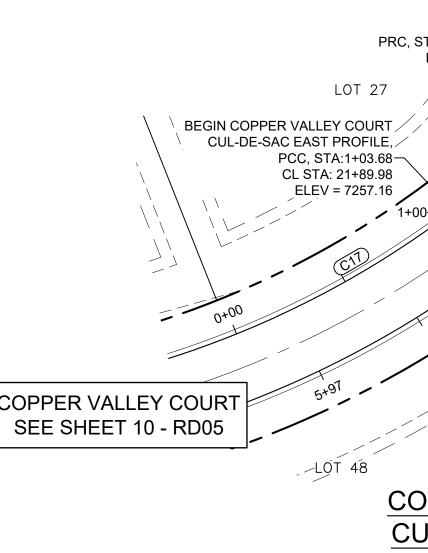




THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

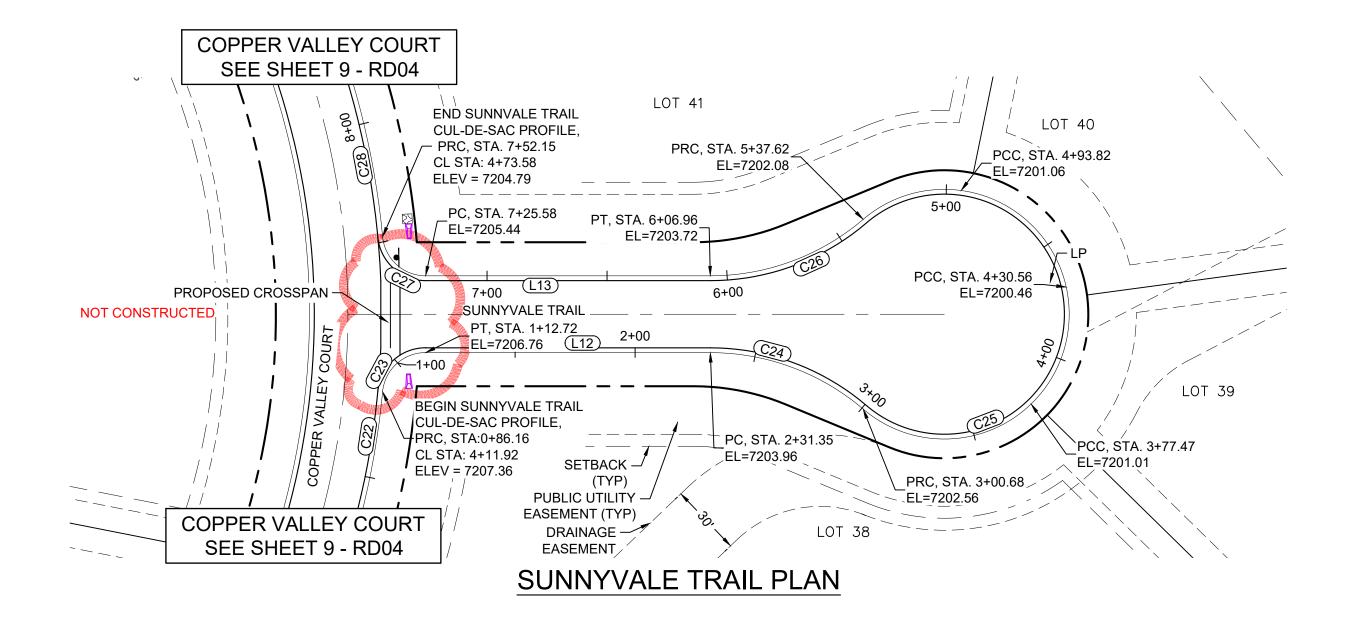
LINE TABLE							
LINE #	BEARING	DISTANCE					
L10	N36°22'25"W	75.45					
L11	S36°22'25"E	75.45					

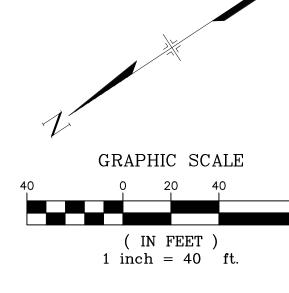
	CURVE TABLE							
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH			
C14	69.33	98.00	40°32'09"	N56°38'30"W	67.90			
C15	236.94	52.00	261°04'18"	N53°37'34"E	79.04			
C16	69.33	98.00	40°32'09"	S16°06'21"E	67.90			
C17	103.68	394.00	15°04'40"	N60°10'34"E	103.39			
C18	83.04	98.01	48°32'40"	N28°07'06"E	80.58			
C19	236.13	52.00	260°10'29"	S46°04'03"E	79.57			
C20	60.10	98.00	35°08'16"	S66°27'04"W	59.16			
C21	113.70	426.00	15°17'31"	S56°31'41"W	113.36			



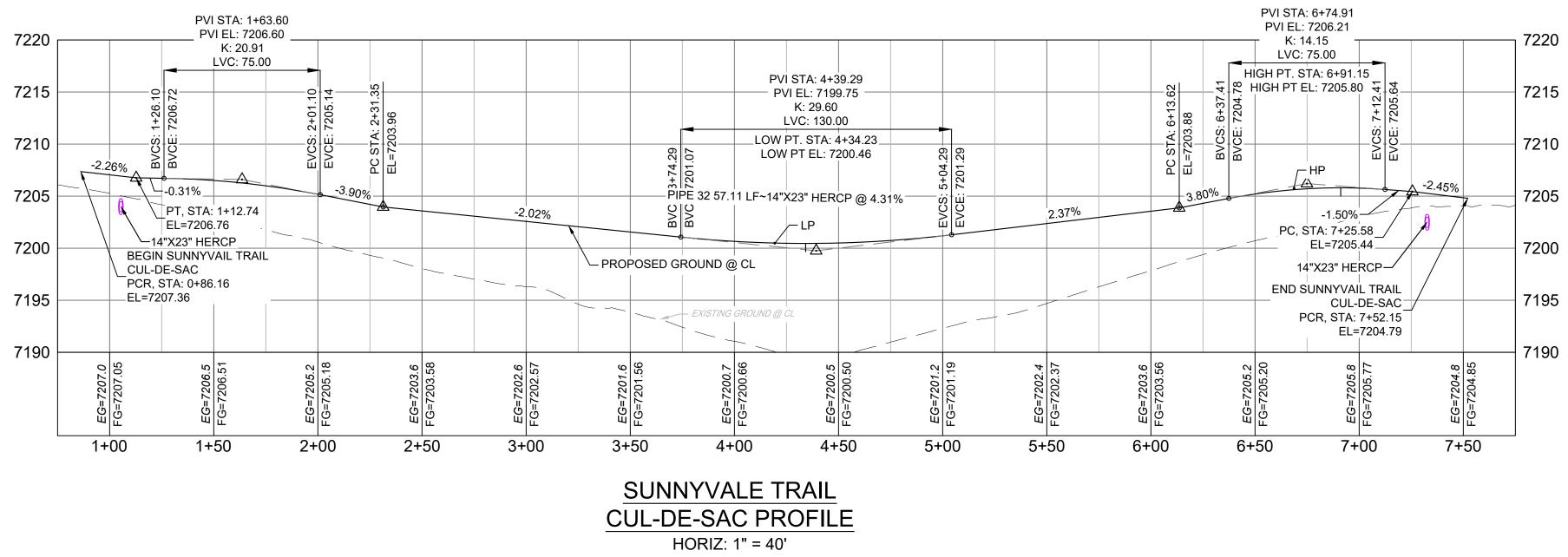
	LÕT 26				what's <b>below.</b> all before you dig.
	<u> </u>				
5+00	HP	$\mathbf{V}$	25		
STA. 1+86.72 EL=7260.41			24		
CT	20 A+00 PRC, ST EL=7260	A. 4+23.25			
5+00 EL	RC, STA. 4+82.95 =7258.24	.OT 23			
	+89.98				
OPPER VALLEY C	OURT				
JL-DE-SAC EAST					
PVI STA: 3+00.94 PVI EL: 7265.27 K: 37.62 LVC: 300.00			D COPPER VAL CUL-DE-SAC E STA: 5+10 EL=725	AST D.87	7275
HIGH PT. STA: 3+05.61 HIGH PT EL: 7262.29		N	7259.48		— 7270 — 7265
UND @ CL		EVCS:	EVCE:		7260
	<u>51.1</u> 1.10		3.86%	7.58	<b>→</b> 7255
00+5 66=7262.3 66=7262.3 FG=7262.02 FG=7262.02	6++ EG=7261.1 FG=7261.10	G=7259.5 C4+ EG=7259.5		00 FG=7257.6	
VALLEY COURT		410		+00	
-DE-SAC PROFILE ORIZ: 1" = 40' /ERT: 1" = 8'	- - -				
	NO 1. 2. 3.	SPOT ELEVA UNLESS OTH LINE AND CU	ATIONS REFERE HERWISE NOTE JRVE INFORMA	IC UNLESS OTHEF ENCE EDGE OF SF D. TION REFERENCE OTHERWISE NOTI	HOULDER (EOS) E EDGE OF
EAL	(			D RANC	
			SO COUNT AND STOF		
				AND PROF	
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003		HORIZ. I	DATE ISSUED: N/A N/A SHEET	FEBRUARY, 2 19 <i>OF</i>	

SHEET No. 19





SHEET KEY



REFERENCE DRAWINGS	ENGINEERING RECORD DRAWINGS
X-Title-Plan & Profile X-1105-PR-SITE	THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS. REFER TO ORIGINAL DRAWINGS FOR SIGNATURES AND SEALS. Date: <u>8/12/22</u> COREY PETERSEN, PE #56571 FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.
	FILE NAME:       S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\Road & Storm Plans\RD05.dwg         CTB FILE:          PLOT DATE:       December 8, 2022 3:44:04 PM         THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

	LINE TAB	LE
LINE #	BEARING	DISTANCE
L12	S33°42'56"W	118.63
L13	N33°42'56"E	117.51

CURVE TABLE							
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH		
C22	86.16	341.00	14°28'35"	S43°36'43"E	85.93		
C23	26.57	18.00	84°33'56"	S08°34'02"E	24.22		
C24	69.33	98.00	40°32'08"	S53°59'00"W	67.90		
C25	236.94	52.00	261°04'18"	S56°17'04"E	79.04		
C26	69.33	98.00	40°32'09"	N13°26'51"E	67.90		
C27	27.68	18.08	87°43'15"	N74°16'50"E	25.06		
C28	92.56	341.00	15°33'10"	S69°29'44"E	92.28		

VERT: 1" = 8'

NGS T 294 ELEVATION - 7247.10' NAVD 88

OWNER: SYLVAN VISTA, INC. WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921

PREPARED BY:



A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

BASIS OF BEARING:

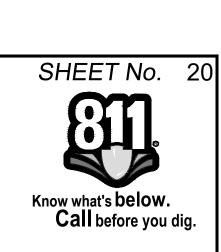
l ll

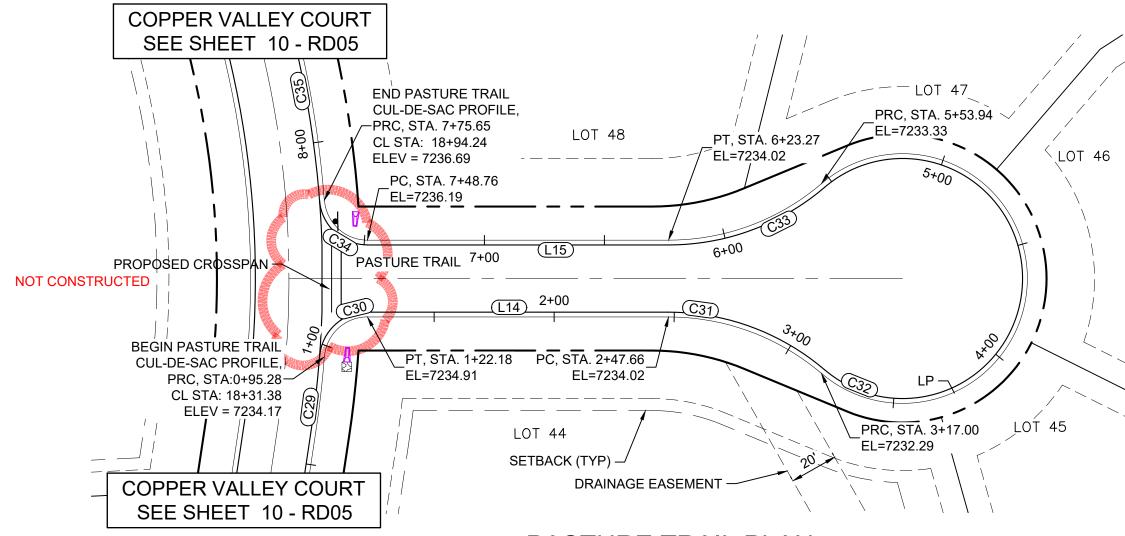
BENCHMARK

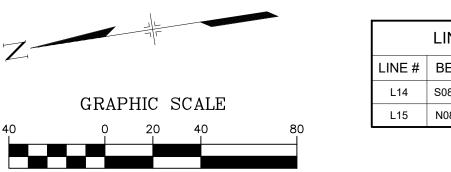
SEAL	GRANDWOOD RANCH						
	EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS						
	ROADWAY PLAN AND PROFILE						
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DESIGNED BY:CAPSCALEDATE ISSUED:FEBRUARY, 2021DRAWING No.DRAWN BY:CAPHORIZ.N/ASHEET20 OF 40RD15CHECKED BY:JAVERT.N/ASHEET20 OF 40RD15						

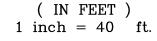
NOTES:

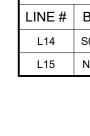
1. ALL ROADWAYS ARE PUBLIC UNLESS OTHERWISE NOTED. 2. SPOT ELEVATIONS REFERENCE EDGE OF SHOULDER (EOS) UNLESS OTHERWISE NOTED.

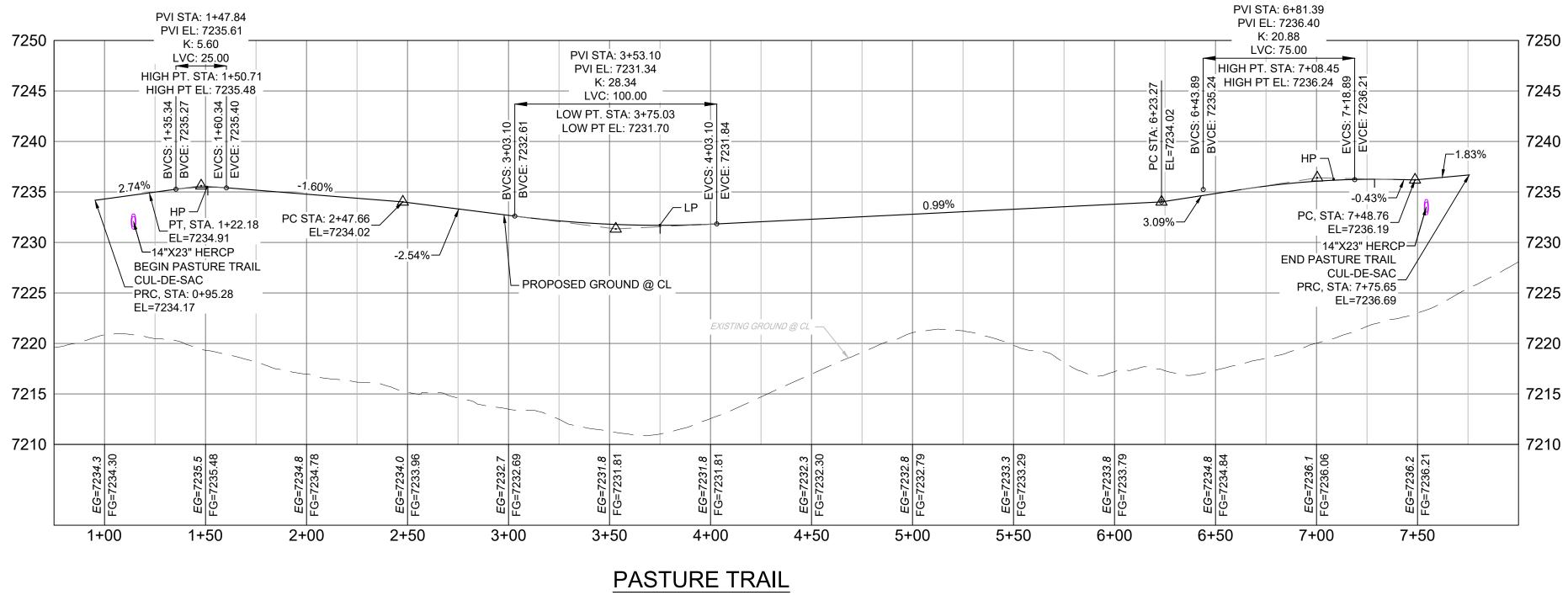












REFERENCE DRAWINGS	ENGINEERING RECORD DRAWINGS
X-Title-Plan & Profile X-1105-PR-SITE	THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS. REFER TO ORIGINAL DRAWINGS FOR SIGNATURES AND SEALS. Date: <u>8/12/22</u> COREY PETERSEN, PE #56571 FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.
	FILE NAME:       S:\20.1105.004 Grandwood Ranch\100 Dwg\104 Plan Sets\Construction Plans\Road & Storm Plans\RD05.dwg         CTB FILE:          PLOT DATE:       December 8, 2022 3:44:08 PM         THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

## PASTURE TRAIL PLAN

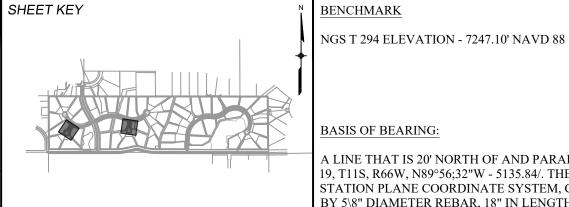
INE TABLE					
EARING	DISTANCE				
08°21'30"W	125.49				
08°21'30"E	125.48				

	CURVE TABLE							
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH			
C29	30.81	426.00	4°08'39"	S75°10'40"E	30.81			
C30	26.89	18.00	85°36'29"	S34°26'45"E	24.46			
C31	69.33	98.00	40°32'08"	S28°37'34"W	67.90			
C32	236.94	52.00	261°04'20"	S81°38'31"E	79.04			
C33	69.33	98.00	40°32'08"	N11°54'34"W	67.90			
C34	26.89	18.00	85°36'29"	N51°09'44"E	24.46			
C35	93.23	426.00	12°32'22"	N87°41'48"E	93.05			

## CUL-DE-SAC PROFILE HORIZ: 1" = 40'

VERT: 1" = 8'

BENCHMARK



BASIS OF BEARING:

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

14160 GLENEAGLE DRIVE, COLORADO SPRINGS, CO 80921

SYLVAN VISTA, INC.

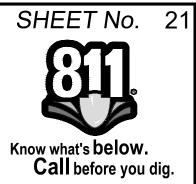
WILLIAM F. HEREBIC II,



OWNER:

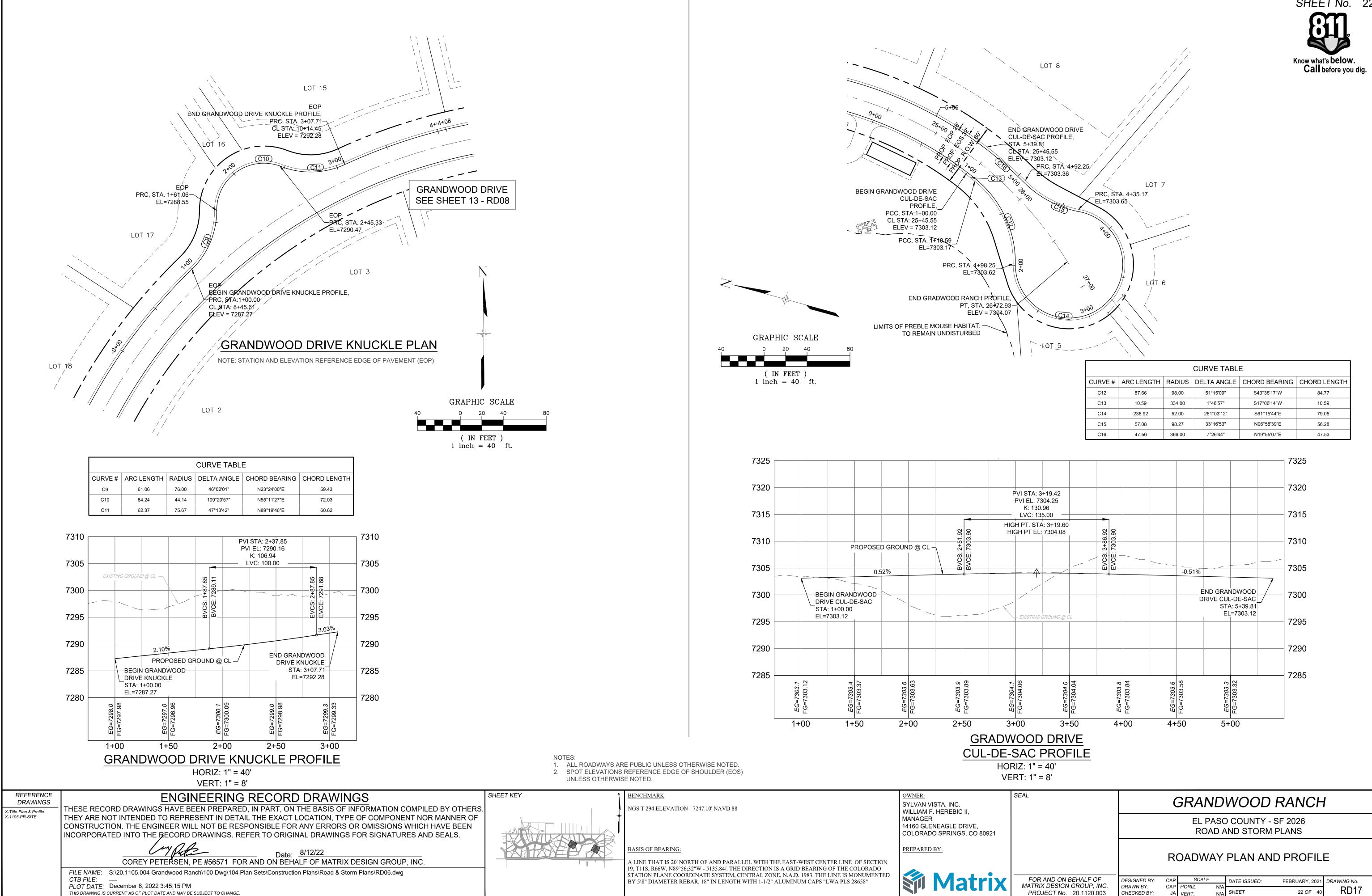
MANAGER





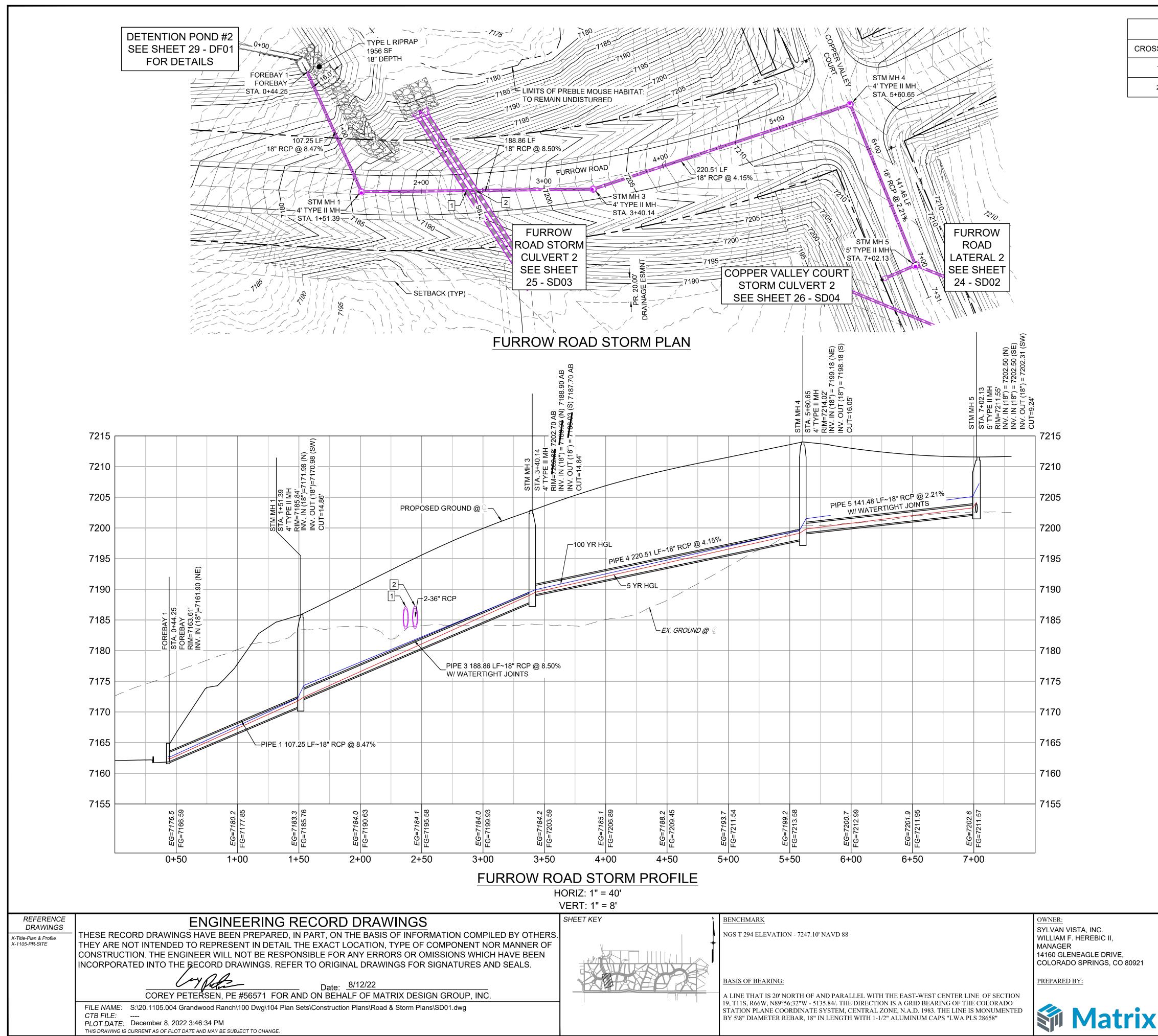
NOTES: 1. ALL ROADWAYS ARE PUBLIC UNLESS OTHERWISE NOTED. 2. SPOT ELEVATIONS REFERENCE EDGE OF SHOULDER (EOS) UNLESS OTHERWISE NOTED.

EAL	GRANDWOOD RANCH						
EL PASO COUNTY - SF 20 ROAD AND STORM PLAN							
		RC	DADWA	Y	PLAN AND	D PROFIL	E
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.	DESIGNED BY: DRAWN BY:	CAP CAP	SCALE HORIZ. N	N/A	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
PROJECT No. 20.1120.003	CHECKED BY:			N/A	SHEET	21 OF 40	RD16





CURVE TABLE							
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH		
C12	87.66	98.00	51°15'09"	S43°38'17"W	84.77		
C13	10.59	334.00	1°48'57"	S17°06'14"W	10.59		
C14	236.92	52.00	261°03'12"	S61°15'44"E	79.05		
C15	57.08	98.27	33°16'53"	N06°58'39"E	56.28		
C16	47.56	366.00	7°26'44"	N19°55'07"E	47.53		



CROSSIN 1 2

SEAL

UTILITY CROSSING DETAILS							
NG #	N & E	TOP OF PIPE	BTM OF PIPE	SEPARATION			
	N 1,454,528.27 E 3,191,074.79	18" RCP STM EL=7180.97	36" RCP STM EL=7183.52	2.55'			
	N 1,454,535.93 E 3,191,074.27	18" RCP STM EL=7181.62	36" RCP STM EL=7183.60	1.98'			

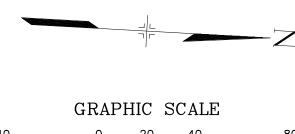
		PIPE TAE	BLE	
NAME	SIZE	LENGTH	SLOPE	BEARING
PIPE 1	18" RCP	107.25	8.47%	S62°23'11"W
PIPE 3	18" RCP	188.86	8.50%	S03°53'02"E
PIPE 4	18" RCP	220.51	4.15%	S21°28'15"E
PIPE 5	18" RCP	141.48	2.21%	S64°37'53"W

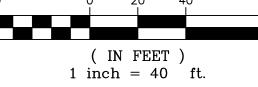
SHEET No. 23

Know what's **below**.

Call before you dig.

STRUCTURE TABLE							
NAME	TYPE	DETAILS	N&E				
FOREBAY 1	FOREBAY	RIM=7163.61 PIPE 1 INV IN=7161.90	N: 1454393.08 E: 3190985.55				
STM MH 1	4' TYPE II MH	RIM=7185.84 PIPE 3 INV IN=7171.98 PIPE 1 INV OUT=7170.98 7202.70 AB — 7	N: 1454442.79 E: 3191080.59				
STM MH 3	4' TYPE II MH	RIM= <u>7292.68</u> PIPE 4 INV IN= <u>7199.03</u> PIPE 3 INV OUT= <u>7199.03</u> —7187.70 AB	188.90 AB N: 1454631.22 E: 3191067.80				
STM MH 4	4' TYPE II MH	RIM=7214.02 PIPE 5 INV IN=7199.18 PIPE 4 INV OUT=7198.18	N: 1454836.42 E: 3190987.09				
STM MH 5	5' TYPE II MH	RIM=7211.55 PIPE 15 INV IN=7202.50 PIPE 16 INV IN=7202.50 PIPE 5 INV OUT=7202.31	N: 1454897.04 E: 3191114.93				





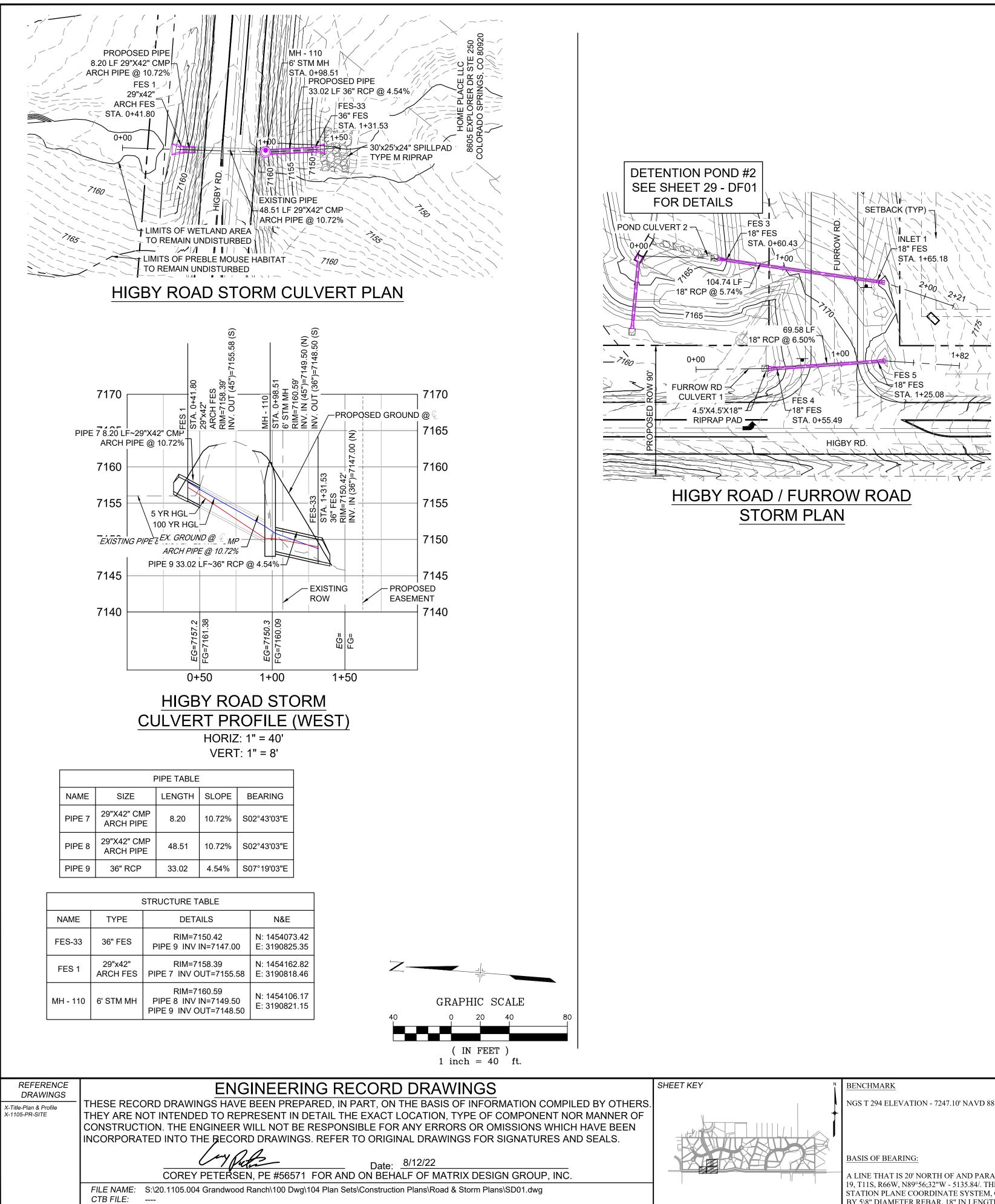
- 1. ALL STATION, OFFSET, AND NORTHING/EASTING VALUES ARE TO THE CENTER OF ALL STRUCTURES UNLESS OTHERWISE NOTED.
- 2. PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF ALL STRUCTURES.
- 3. ALL PIPE BENDS ANGLES ARE MEASURED FROM THE CENTER OF PIPE.
- 4. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING
- STRUCTURES, 5. ALL TYPE C AND TYPE D INLETS SHALL BE CONSTRUCTED AND INSTALLED PER CDOT M&S STANDARD DETAILS. ELEVATIONS PROVIDED REFER TO TOP OF
- GRATE/STRUCTURE ELEVATION.
- 6. ALL RCP PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED. 7. PIPES OF DIFFERENT SIZES ARE TO BE MATCHED TO THE CROWN OF THE INSIDE WALL OF PIPE.
- 8. PER THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL, MANHOLES SHALL BE INSTALLED 1/8" BELOW THE SURFACE OF THE PAVEMENT ON THE LOWEST SIDE OF THE MANHOLE."
- 9. SECTIONS OF STORM PIPE WITH PRESSURE HEAD DURING THE 100 YR STORM SHALL USE WATERTIGHT JOINTS WITH A 100 YR SERVICE LIFE PER ECM 3.3.1.B.2.
- 10. ALL STORM SEWER IS PUBLIC UNLESS OTHERWISE NOTED. ALL DETENTION PONDS ARE PRIVATE AND SHALL BE OWNED AND MAINTAINED BY THE GRANDWOOD RANCH HOMEOWNERS ASSOCIATION, INC.
- 11. ALL CDOT TYPE C AND CDOT TYPE D INLET TO BE PLACED WITH A OM2-1V OBJECT TO BE LOCATED ON THE BACK SIDE OF THE INLET. ROADSIDE EDGE OF CDOT TYPE C INLET TO BE PLACED AT FLOWLINE OF ROADSIDE DITCH. BACKSLOPE BEHIND TYPE C INLET TO BE GRADED BACK TO EXISTING AT MAX 3:1 SLOPE.

## **GRANDWOOD RANCH**

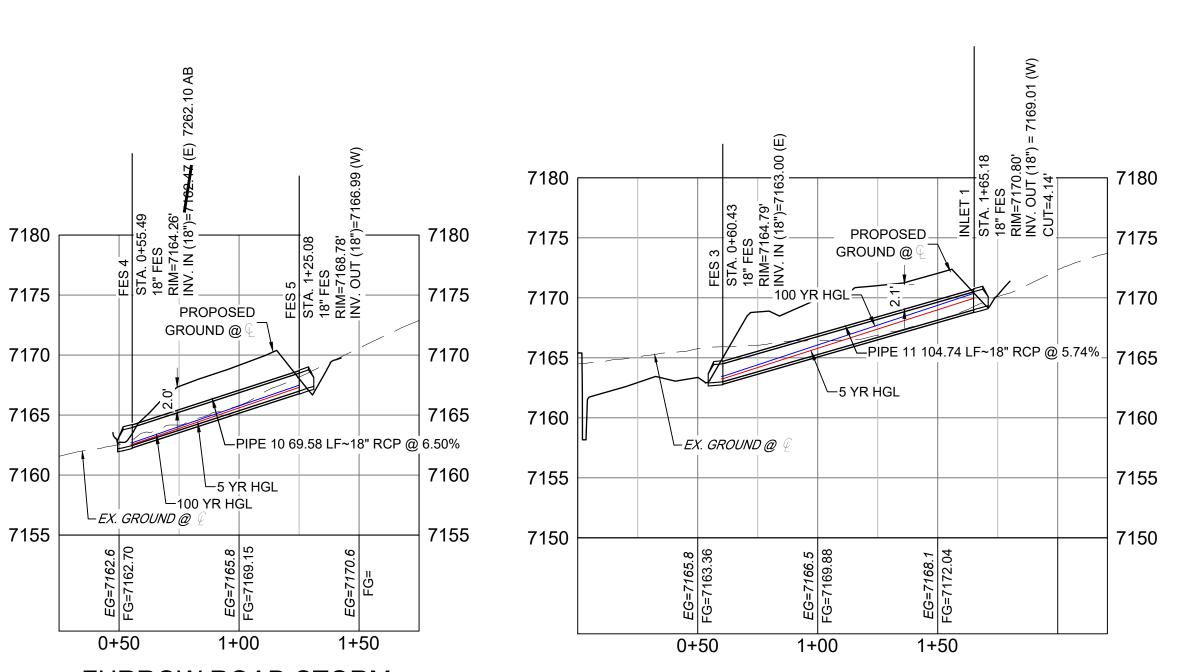
### EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS

## STORM PLAN AND PROFILE

FOR AND ON BEHALF OF	DESIGNED BY:	CAP	SCA	LE	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	CAP	HORIZ.	1" = 40'		,	
,		-		-	OUEET		SD01
PROJECT No. 20.1120.003	CHECKED BY:	NMS	VERT.	1" = 8'	SHEET	23 OF 40	5001



PLOT DATE: December 8, 2022 3:46:42 PM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

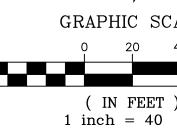


### FURROW ROAD STORM **CULVERT 1 PROFILE** HORIZ: 1" = 40' VERT: 1" = 8'

PIPE TABLE					
NAME SIZE LENGTH SLOPE BEARING					
PIPE 10	18" RCP	69.58	6.50%	S86°04'11"W	

	STRUCTURE TABLE					
NAME	TYPE	DETAILS	N&E			
FES 4	18" FES	RIM=7164.26 PIPE 10 INV IN= <del>7162.47</del> 7262.10 AF	N: 1454171.36 E: 3191043.14			
FES 5	18" FES	RIM=7168.78 PIPE 10 INV OUT=7166.99	N: 1454176.13 E: 3191112.56			

N	A٨
F	ES
IN	LE



14160 GLENEAGLE DRIVE,

PREPARED BY:



COLORADO SPRINGS, CO 80921

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"



### POND STORM CULVERT 2 PROFILE HORIZ: 1" = 40'

SHEET No. 24

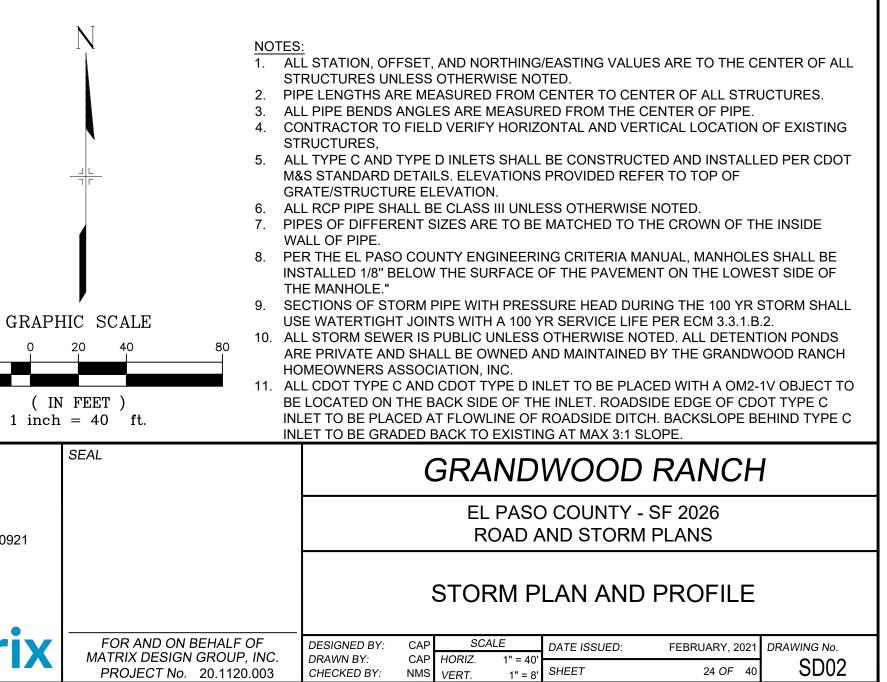
Know what's **below**.

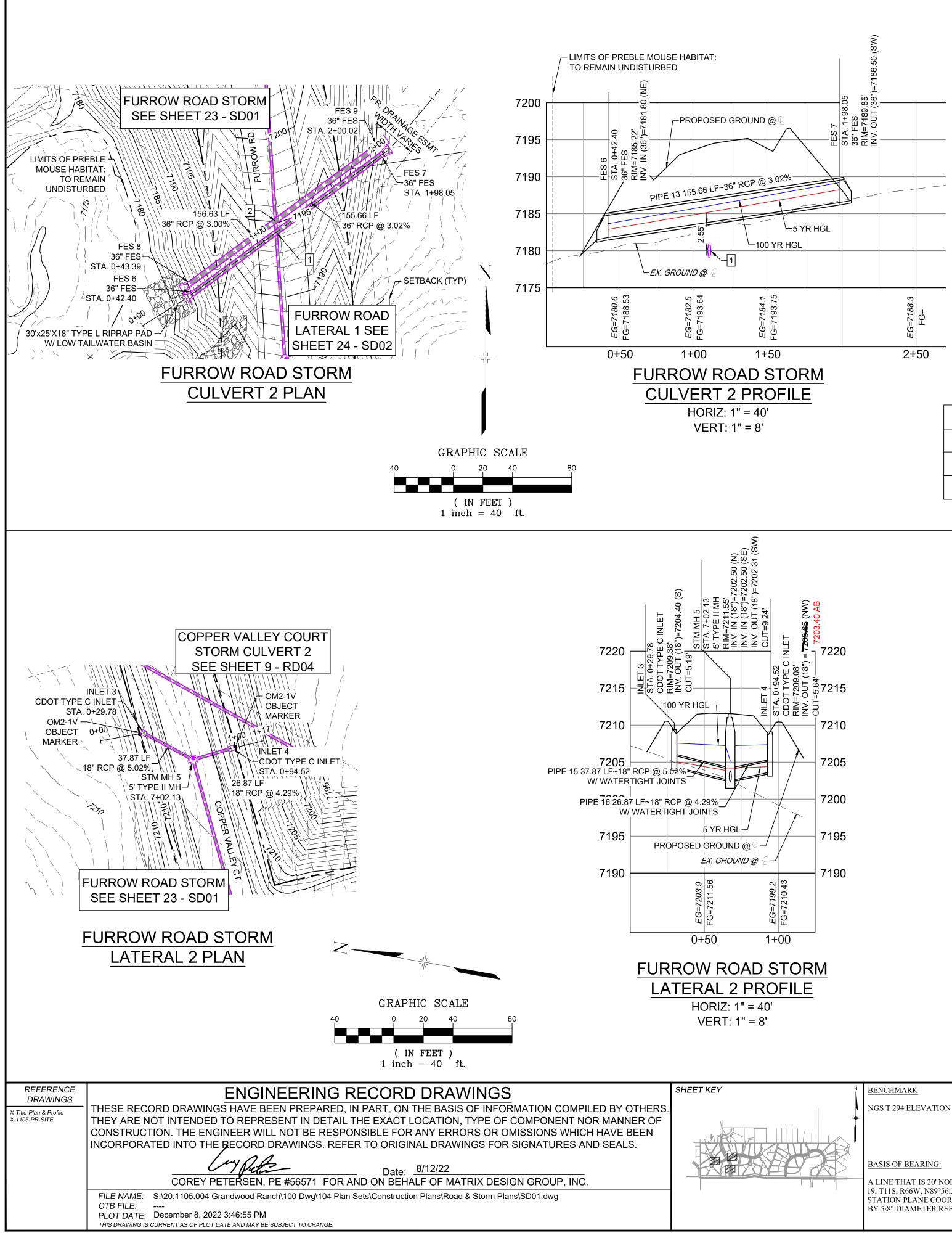
Call before you dig.

VERT: 1" = 8'

PIPE TABLE					
NAME SIZE LENGTH SLOPE BEARING					
PIPE 11	18" RCP	104.74	5.74%	N81°55'24"W	

	STRUCTURE TABLE						
ИE	TYPE	DETAILS	N&E				
S 3	18" FES	RIM=7164.79 PIPE 11 INV IN=7163.00	N: 1454245.94 E: 3191008.37				
ET 1	18" FES	RIM=7170.80 PIPE 11 INV OUT=7169.01	N: 1454231.22 E: 3191112.07				





	STRUCTURE TABLE					
NAME	TYPE	DETAILS	N&E			
FES 6	36" FES	RIM=7185.22 PIPE 13 INV IN=7181.80	N: 1454488.06 E: 3191020.12			
FES 7	36" FES	RIM=7189.85 PIPE 13 INV OUT=7186.50	N: 1454580.35 E: 3191145.46			
FES 8	36" FES	RIM=7185.22 PIPE 14 INV IN=7181.80	N: 1454493.95 E: 3191017.02			
FES 9	36" FES	RIM=7189.92 PIPE 14 INV OUT=7186.50	N: 1454586.57 E: 3191143.34			
r			•			

PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	BEARING	
PIPE 13	36" RCP	155.66	3.02%	S53°38'04"W	
PIPE 14	36" RCP	156.63	3.00%	S53°45'03"W	

UTILITY CROSSING DETAILS					
CROSSING #	N & E	TOP OF PIPE	BTM OF PIPE	SEPARATION	
1	N 1,454,528.27 E 3,191,074.79	18" RCP STM EL=7180.97	36" RCP STM EL=7183.52	2.55'	
2	N 1,454,535.93 E 3,191,074.27	18" RCP STM EL=7181.62	36" RCP STM EL=7183.60	1.98'	

PIPE TABLE

37.87

26.87

STRUCTURE TABLE

LENGTH SLOPE

DETAILS

RIM=7209.38

RIM=7209.08

RIM=7211.55

PIPE 5 INV OUT=7202.31

BEARING

N&E

N: 1454932.94

N: 1454872.97

5.02% S18°32'52"W

4.29% N26°24'14"W

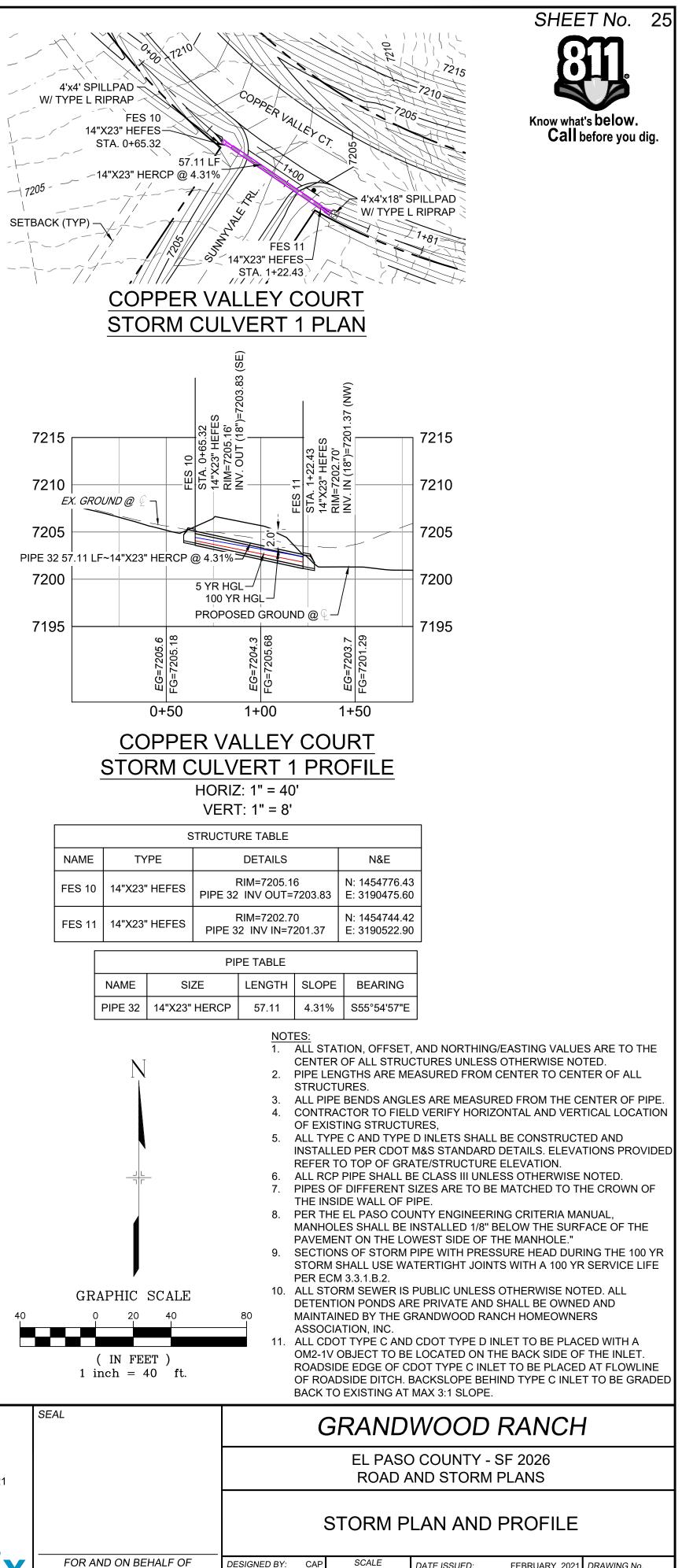
PIPE 15 INV OUT=7204.40 | E: 3191126.97

PIPE 16 INV OUT=7203.65 | E: 3191126.88

PIPE 15 INV IN=7202.50 N: 1454897.04

PIPE 16 INV IN=7202.50 E: 3191114.93

7203 40 AF



NGS T 294 ELEVATION - 7247.10' NAVD 88

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMETER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

NAME

PIPE 15

PIPE 16

TYPE

CDOT TYPE C INLET

CDOT TYPE C INLET

5' TYPE II MH

NAME

INLET 3

INLET 4

STM MH 5

SIZE

18" RCP

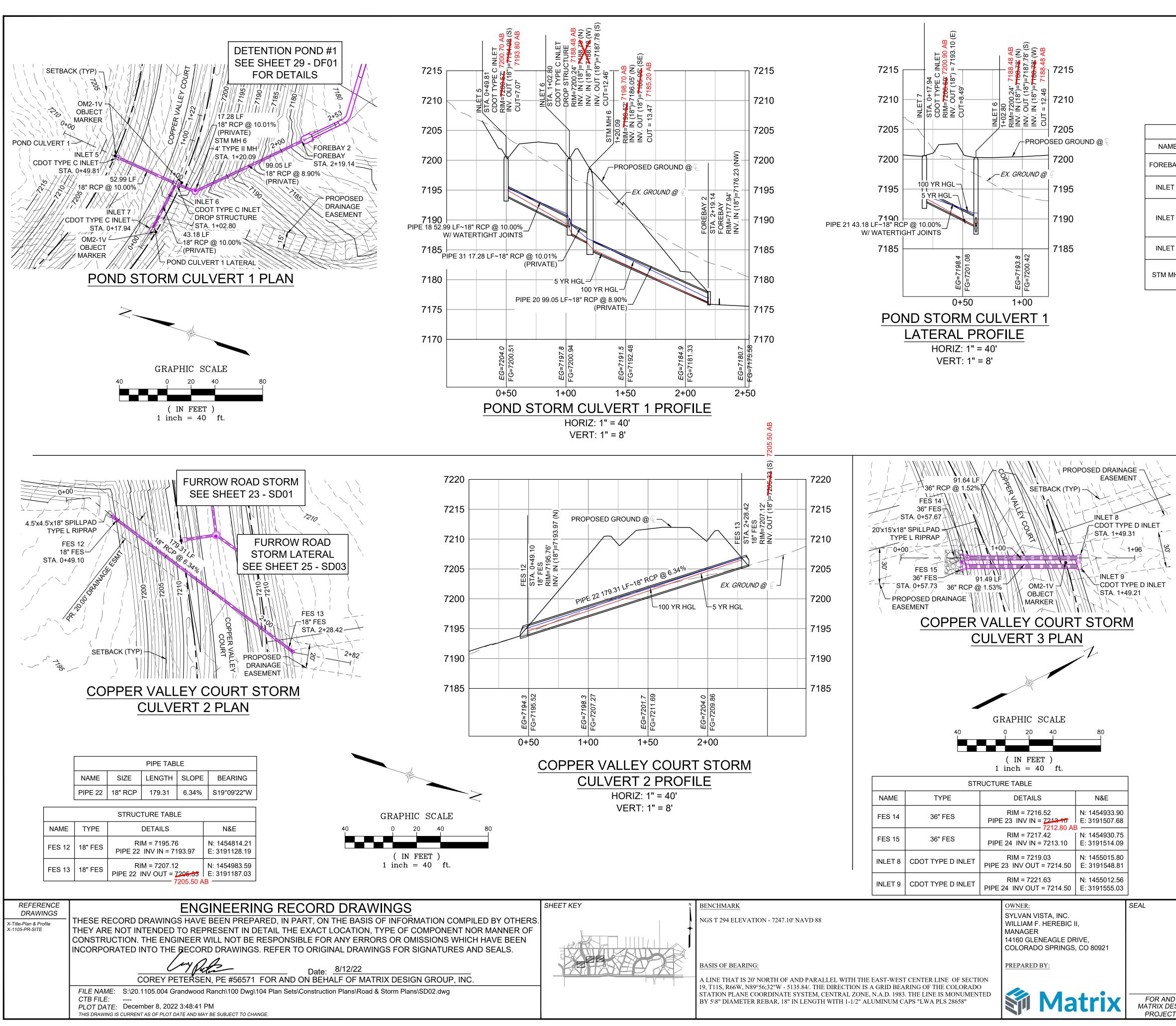
18" RCP



PREPARED BY:



DATE ISSUED: FEBRUARY, 2021 DRAWING No. MATRIX DESIGN GROUP, INC. DRAWN BY: CA HORIZ. 1" = 100' SD03 <sub>1" =8'</sub> SHEET 25 OF 4 PROJECT No. 20.1120.003 CHECKED BY: NMS VERT



	PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	BEARING		
PIPE 18	18" RCP	52.99	10.00%	S06°25'58"W		
PIPE 20	18" RCP	99.05	8.90%	S43°01'59"E		
PIPE 21	18" RCP	43.18	10.00%	S79°58'47"E		
PIPE 31	18" RCP	17.28	10.01%	S04°55'04"W		



STRUCTURE TABLE					
NAME	TYPE	DETAILS	N&E		
FOREBAY 2	FOREBAY	RIM = 7177.94 PIPE 20 INV IN = 7176.23 7200.70 AB	N: 1454615.42 E: 3190717.02		
INLET 5	CDOT TYPE C INLET	RIM = 7200.70 AB RIM = 720 <del>0.57</del> PIPE 18 INV OUT = 7194. <del>08</del> 7193.80 AE			
INLET 6	CDOT TYPE C INLET DROP STRUCTURE	RIM = 7200.24 7188.48 PIPE 18 INV IN = 7488.78 PIPE 21 INV IN = 7488.78 PIPE 31 INV OUT = 7187.78			
INLET 7	CDOT TYPE C INLET	7200.90 AB RIM = 7209.59 PIPE 21 INV OUT = 7193.10	N: 1454712.56 E: 3190608.38		
STM MH 6	4' TYPE II MH	7198.70 AB RIM = 7198.52 PIPE 31 INV IN = 7186.05 PIPE 20 INV OUT = 7185.05 7185.20 A	N: 1454687.82 E: 3190649.43		

NOTES:

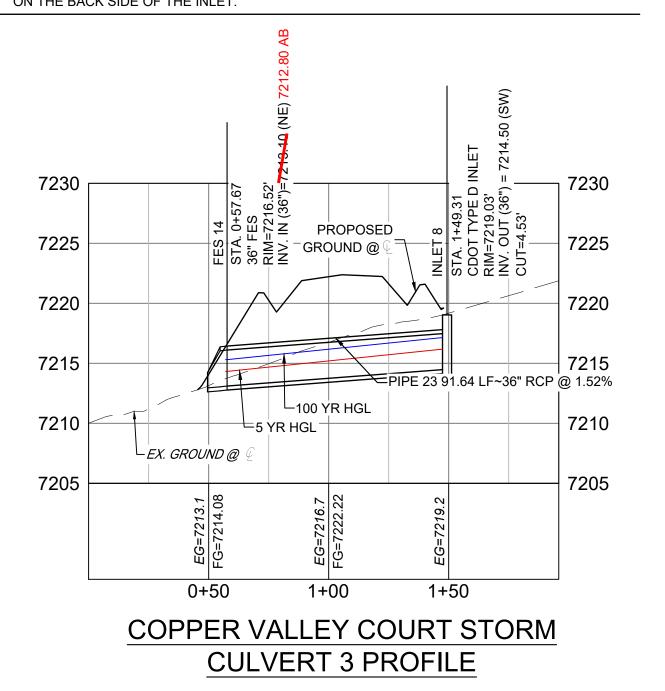
1. ALL STATION, OFFSET, AND NORTHING/EASTING VALUES ARE TO THE CENTER OF ALL STRUCTURES UNLESS OTHERWISE NOTED.

PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF ALL STRUCTURES.

- 3. ALL PIPE BENDS ANGLES ARE MEASURED FROM THE CENTER OF PIPE.
- CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STRUCTURES
   ALL TYPE C AND TYPE D INLETS SHALL BE CONSTRUCTED AND INSTALLED PER CDOT M&S STANDARD DETAILS. ELEVATIONS PROVIDED REFER TO TOP OF GRATE/STRUCTURE ELEVATION.
- ALL RCP PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

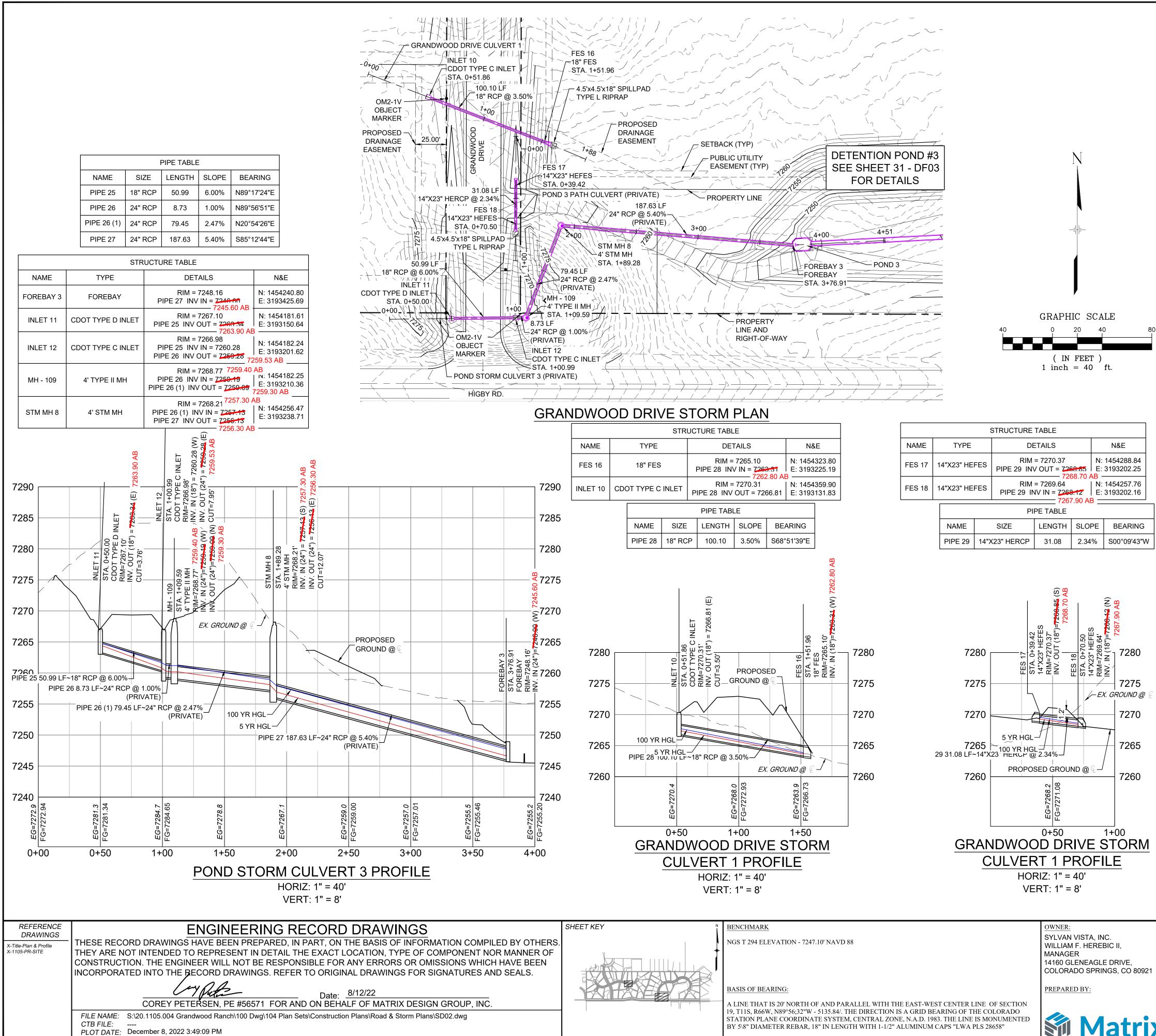
 PIPES OF DIFFERENT SIZES ARE TO BE MATCHED TO THE CROWN OF THE INSIDE WALL OF PIPE.
 PER THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL, MANHOLES SHALL BE INSTALLED 1/8" BELOW THE SURFACE OF THE PAVEMENT ON THE LOWEST SIDE OF THE MANHOLE."

- SECTIONS OF STORM PIPE WITH PRESSURE HEAD DURING THE 100 YR STORM SHALL USE WATERTIGHT JOINTS WITH A 100 YR SERVICE LIFE PER ECM 3.3.1.B.2.
- ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED. STORM SEWER SHALL BE OWNED
- AND MAINTAINED BY THE GRANDWOOD RANCH HOMEOWNER ASSOCIATION, INC. 11. ALL CDOT TYPE C AND CDOT TYPE D INLET TO BE PLACED WITH A OM2-1V OBJECT TO BE LOCATED ON THE BACK SIDE OF THE INLET.

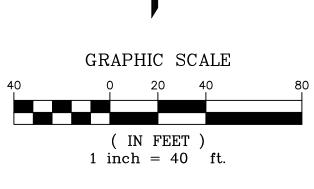


PIPE TABLE					
NAME	SIZE	LENGTH	SLOPE	BEARING	
PIPE 23	36" RCP	91.64	1.52%	S26°40'11"W	
PIPE 24	36" RCP	91.49	1.53%	S26°35'02"W	

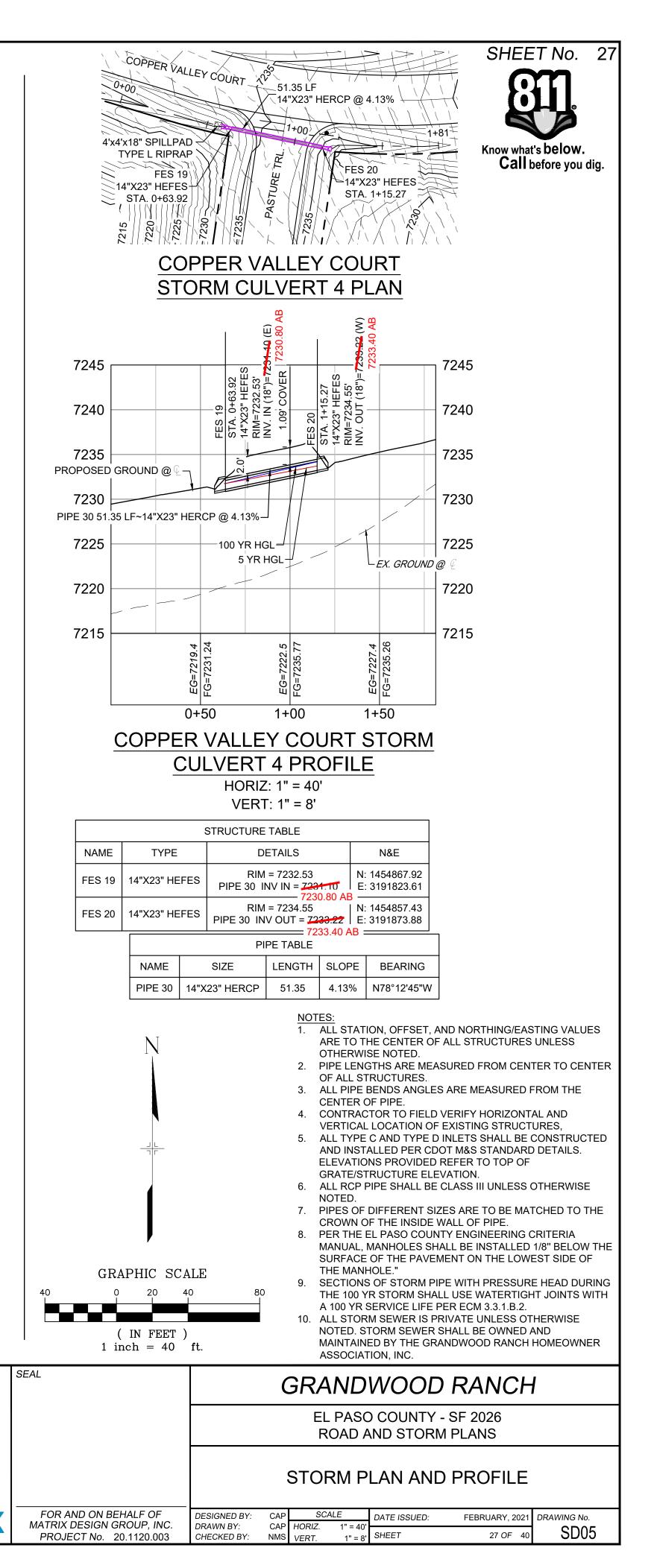
SEAL	GRANDWOOD RANCH								
	EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS								
	STORM PLAN AND PROFILE								
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DESIGNED BY:CAPSCALEDATE ISSUED:FEBRUARY, 2021DRAWING No.DRAWN BY:CAPHORIZ.1" = 40'SHEET26 OF 40SD04CHECKED BY:NMSVERT.1" = 8'SHEET26 OF 40SD04								

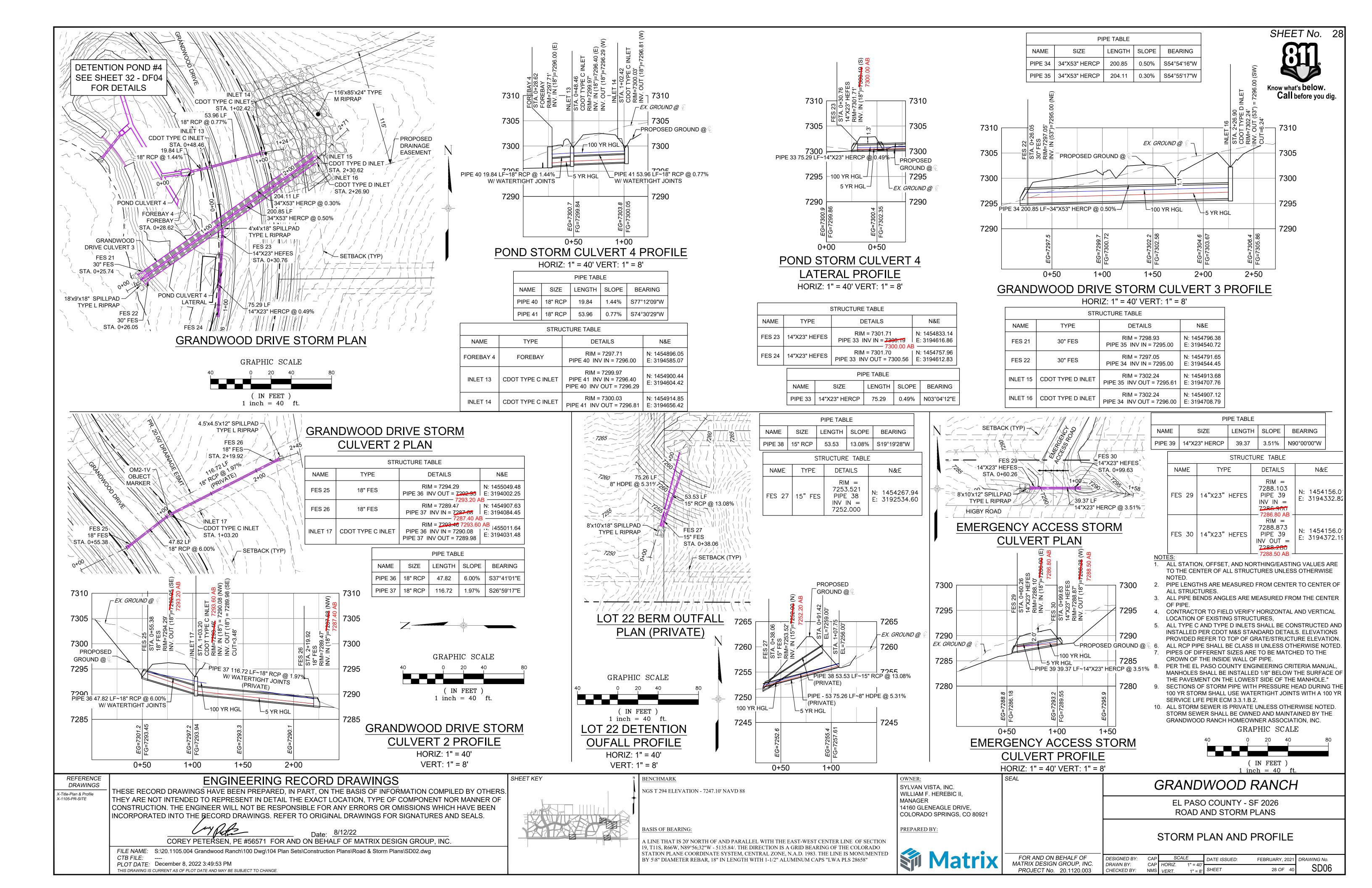


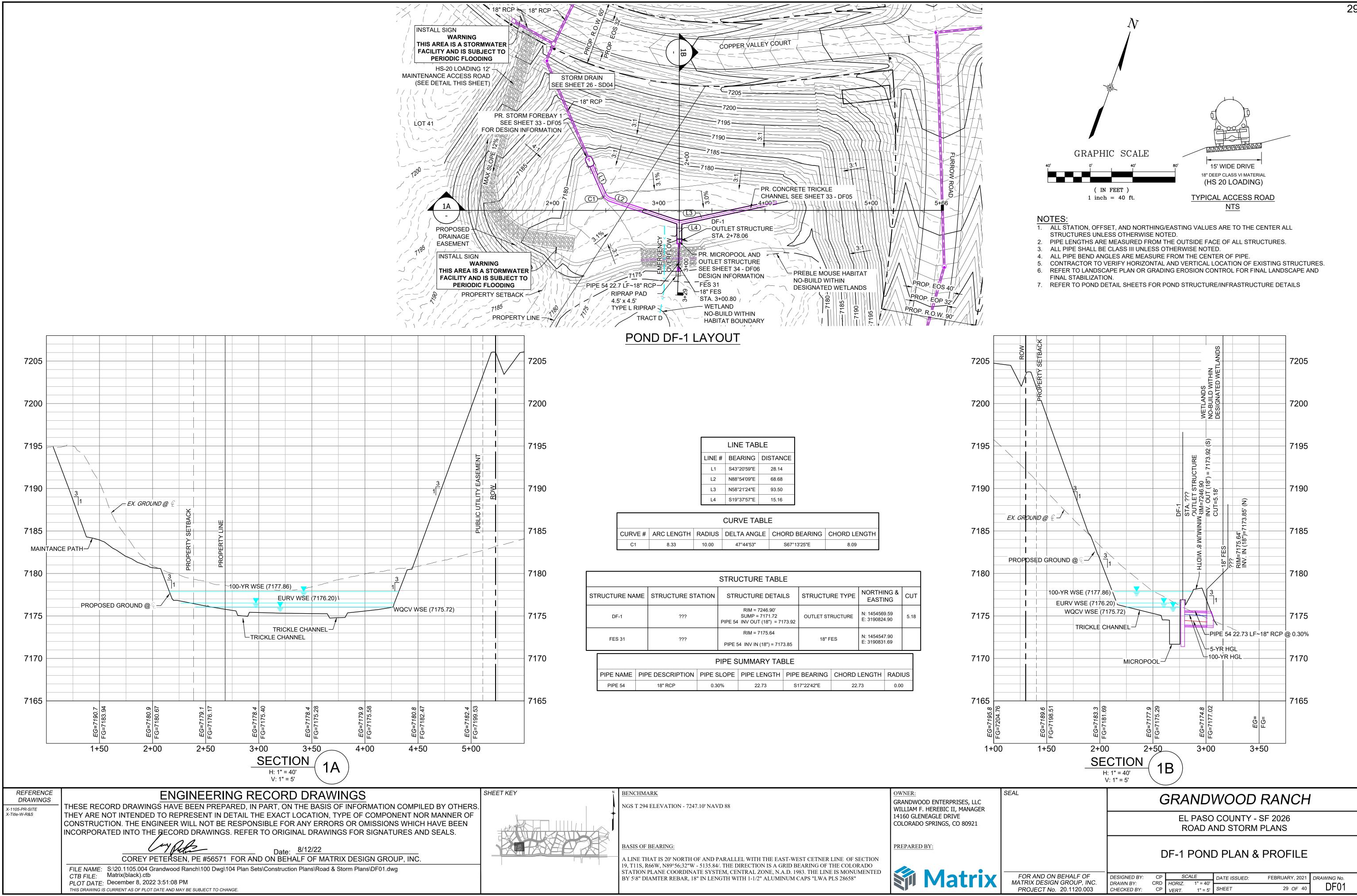
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE

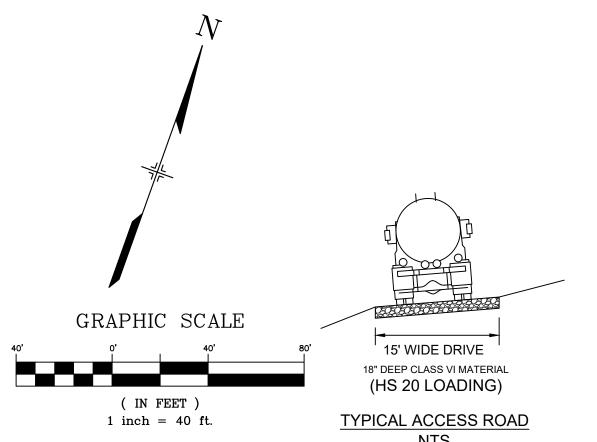


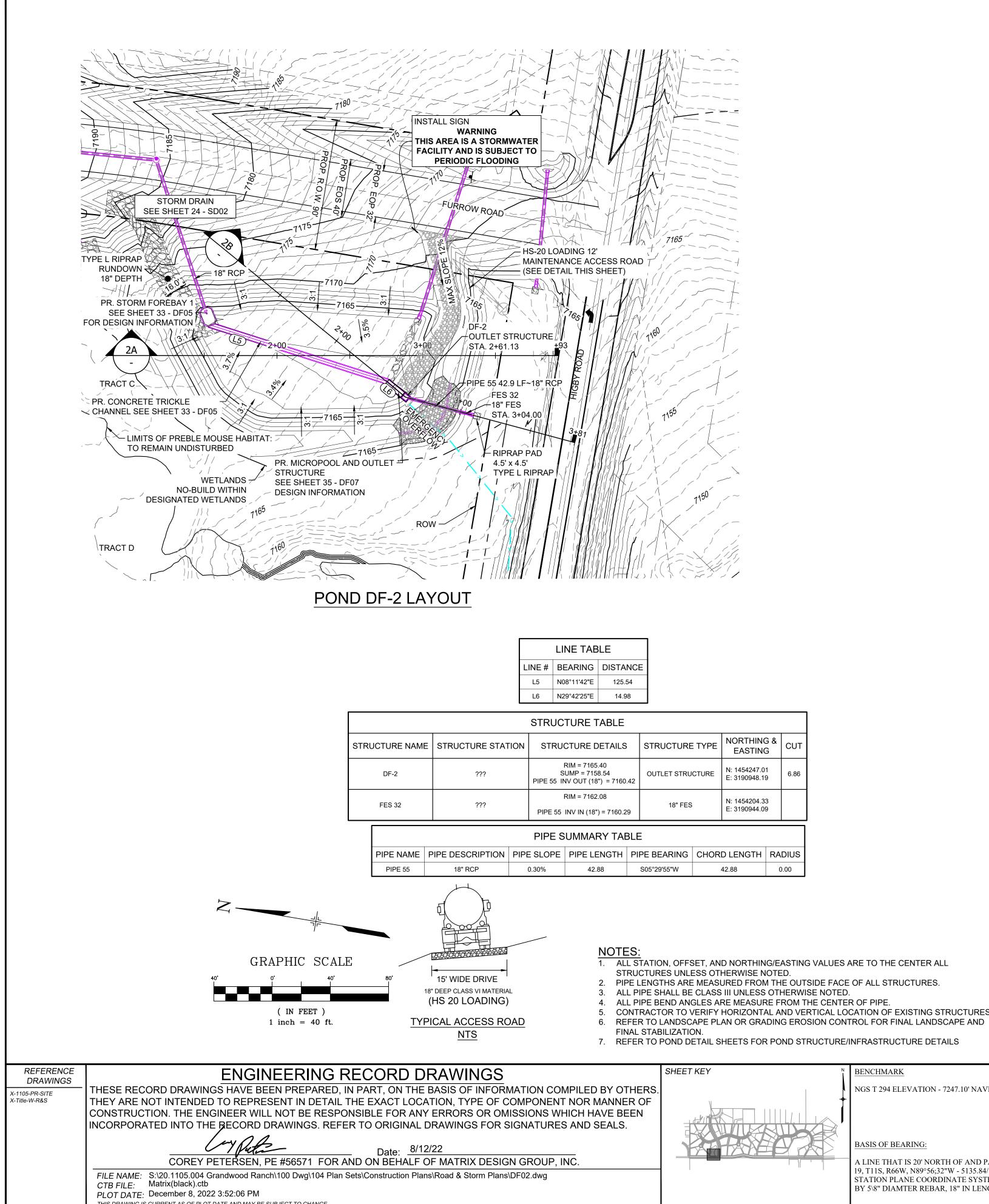
	STRUCTURE TABLE									
NAME		TYPE		DE	ETAILS		N&E			
FES 17	1	14"X23" HEFES		RIM PIPE 29 IN	8.85 E	: 1454288.84 : 3193202.25				
FES 18	1	4"X23" HE	RIM = 7269.64 N: PIPE 29 INV IN = 7268.12 E:		PIPE 29 INV IN = 7268.12					
	PIPE TABLE									
		NAME		SIZE	LENGTH	SLOPE	BEARING			
						0.040/	000000140004			





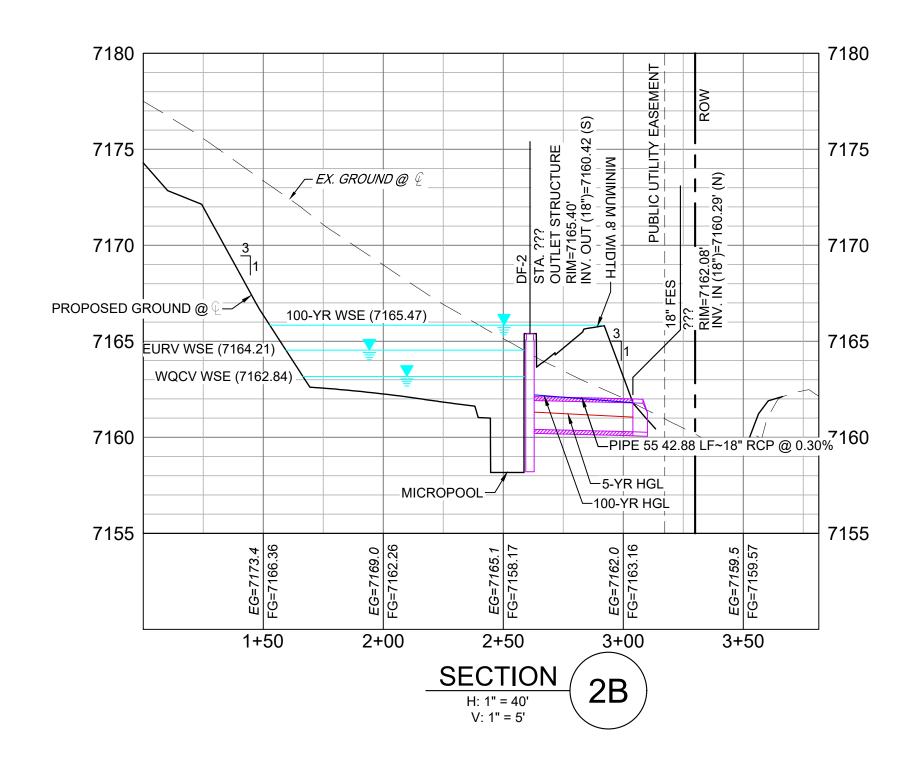






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7180								
7175		-E	X. GROUN	D@ Q —				
7170		3						
7165			EURV W	00-YR WS SE (7164.2 SV WSE (7	21) —	47)		
7160				PR	OPOSED	/ =TRICKLE GROUND	E CHANN @@	
EG=7174.5	=94	EG=7173.8	FG=7164.69	EG=7170.8	FG=7162.09	EG=7167.8	FG=7161.98	EG=7164.7
1+	00	1+	50	2+		2+ SECT H: 1" = V: 1" :	= 40'	-(2A



RUCTURE	JCTURE TYPE NORTHING & EASTING						
TLET STRUCTURE N: 1454247 E: 3190948			-	6.86			
18" FES		N: 1454204.3 E: 3190944.0					
BEARING	CHOR	D LENGTH RADIUS					
29'55"W		42.88	C	0.00			

1. ALL STATION, OFFSET, AND NORTHING/EASTING VALUES ARE TO THE CENTER ALL

PIPE LENGTHS ARE MEASURED FROM THE OUTSIDE FACE OF ALL STRUCTURES.

CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STRUCTURES.

7. REFER TO POND DETAIL SHEETS FOR POND STRUCTURE/INFRASTRUCTURE DETAILS

NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:

A LINE THAT IS 20' NORTH OF AND PARALLEL WITH THE EAST-WEST CETNER LINE OF SECTION 19, T11S, R66W, N89°56;32"W - 5135.84/. THE DIRECTION IS A GRID BEARING OF THE COLORADO STATION PLANE COORDINATE SYSTEM, CENTRAL ZONE, N.A.D. 1983. THE LINE IS MONUMENTED BY 5\8" DIAMTER REBAR, 18" IN LENGTH WITH 1-1/2" ALUMINUM CAPS "LWA PLS 28658"

OWNER: GRANDWOOD ENTERPRISES, LLC WILLIAM F. HEREBIC II, MANAGER 14160 GLENEAGLE DRIVE COLORADO SPRINGS, CO 80921

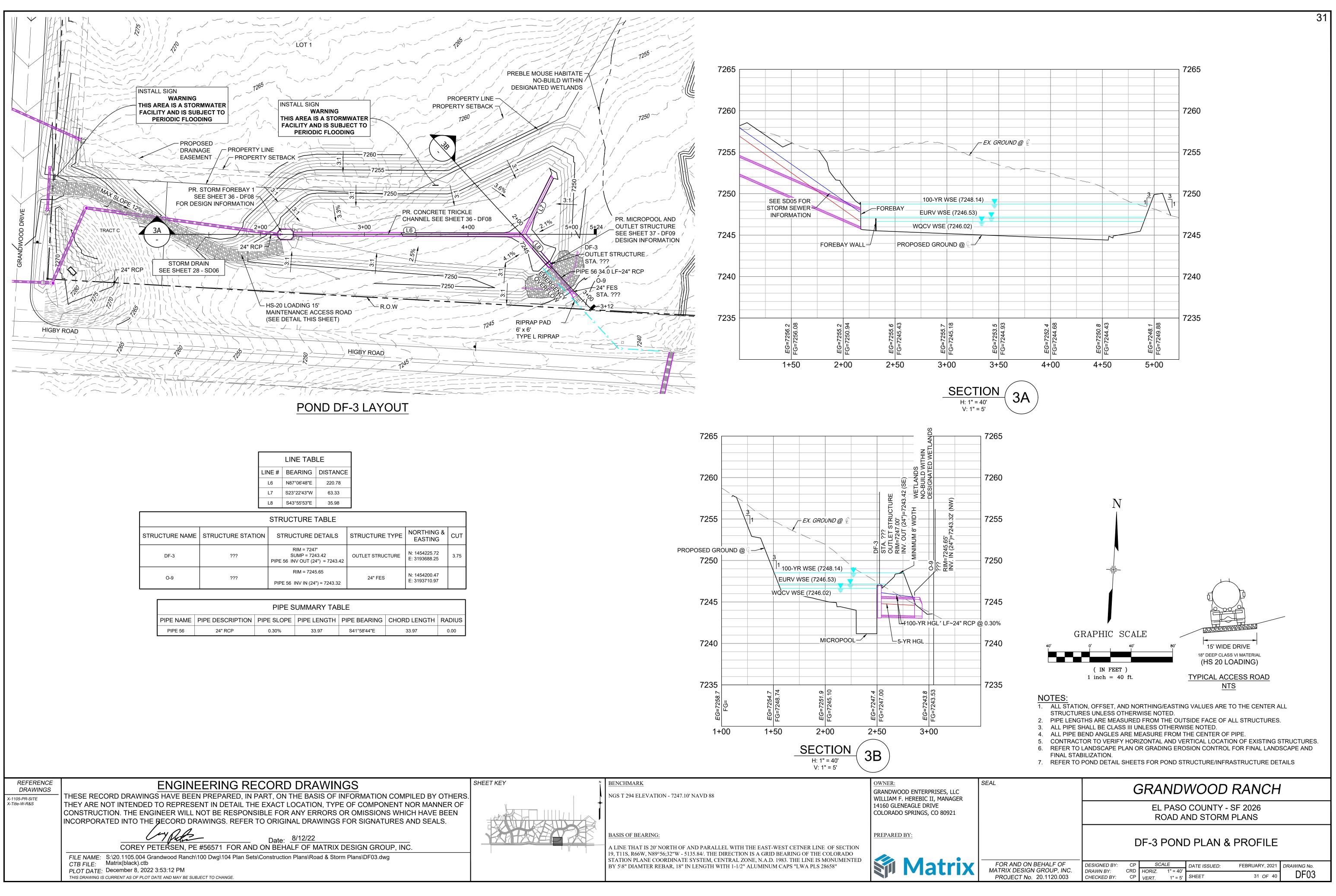
PREPARED BY:



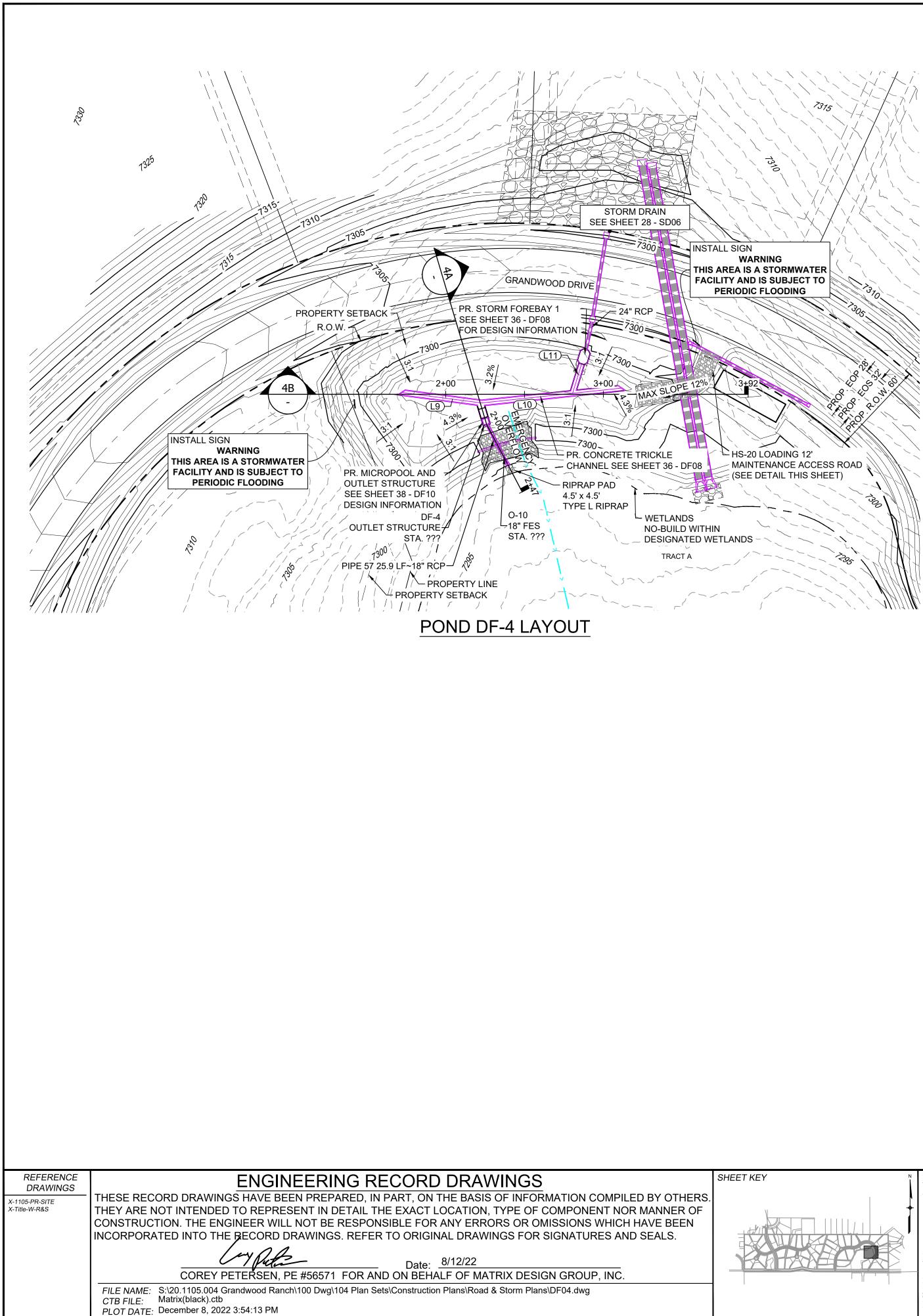


SEAL	GRANDWOOD RANCH							
EL PASO COUNTY - SF 2026 ROAD AND STORM PLANS								
		D	F-2 PONI	D PLAN &	PROFILE			
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.		CP CRD	SCALE HORIZ. 1"=40'	DATE ISSUED:	FEBRUARY, 2021	DRAWING №.		
MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003	DRAWN BY: C CHECKED BY:	CRD CP	HORIZ. 1"=40' VERT. 1"=5'	SHEET	30 OF 40	DF02		

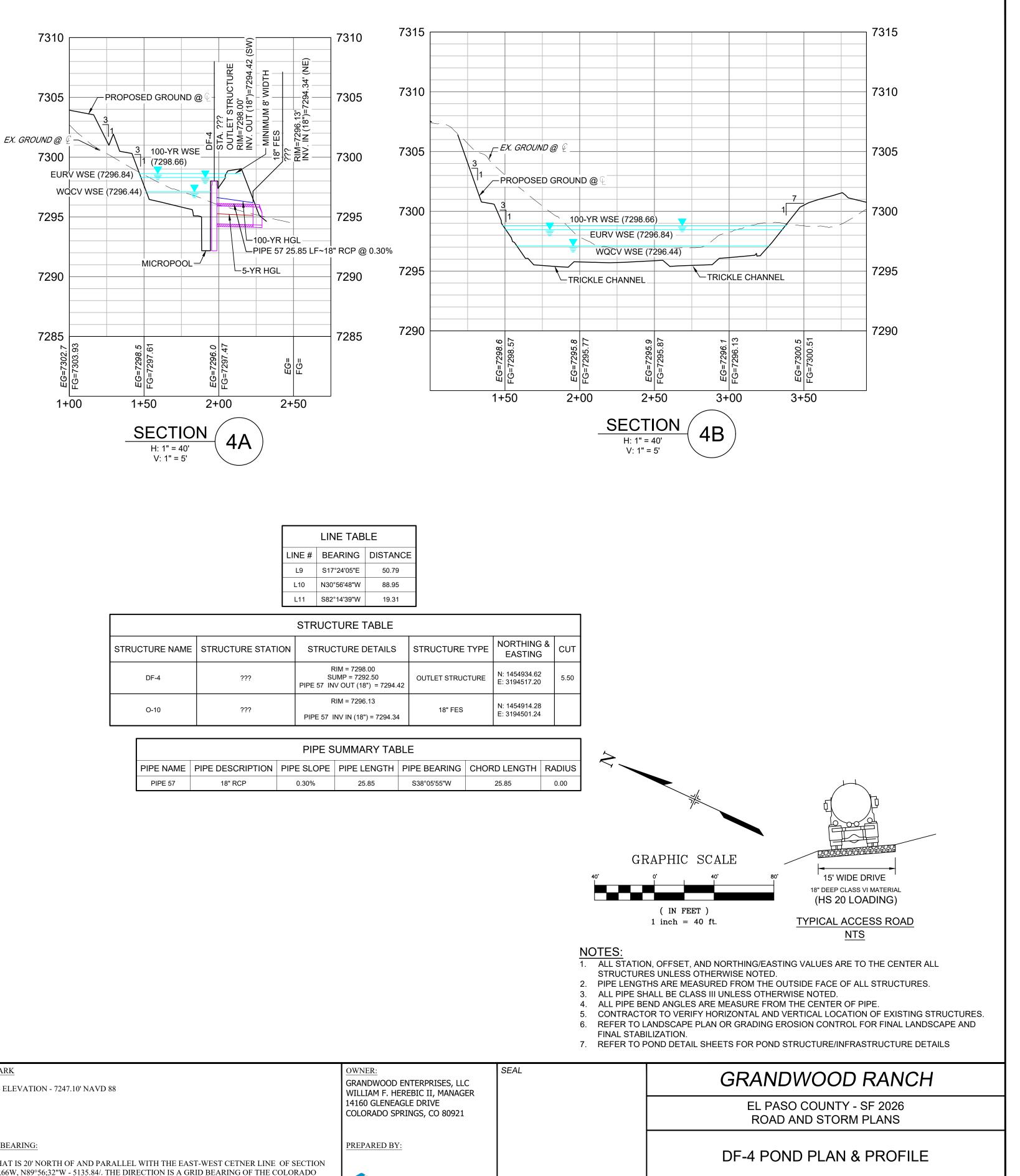
30



MATRIX DESIGN GROUP, INC. DRAWN BY: CRD HORIZ. 1" = 40' PROJECT No. 20.1120.003 CHECKED BY: CP VERT. 1" = 5' SHEET 31 OF 40 DF03	FOR AND ON BEHALF OF	DESIGNED BY:	CP	SC/	4LE	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
	MATRIX DESIGN GROUP, INC. PROJECT No. 20.1120.003					SHEET	31 OF 40	DF03



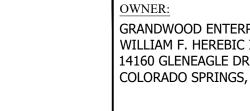
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LINE TABLE							
LINE #	BEARING	DISTANCE					
L9	S17°24'05"E	50.79					
L10	N30°56'48"W	88.95					
L11	S82°14'39"W	19.31					

STRUCTURE TABLE								
STRUCTURE NAME	STRUCTURE STATION	STRUCTURE DETAILS	STRUCTURE TYPE	NOI E				
DF-4 ???		RIM = 7298.00 SUMP = 7292.50 PIPE 57 INV OUT (18") = 7294.42	OUTLET STRUCTURE	N: 14 E: 31				
O-10	???	RIM = 7296.13 PIPE 57 INV IN (18") = 7294.34	18" FES	N: 14 E: 31				

PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING	CHORD LE
PIPE 57	18" RCP	0.30%	25.85	S38°05'55"W	25.85



BENCHMARK

NGS T 294 ELEVATION - 7247.10' NAVD 88

BASIS OF BEARING:

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FOR AND ON BEHALF OF	DESIGNED BY:	CP	SC.	ALE	DATE ISSUED:	FEBRUARY, 2021	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	CRD	HORIZ.	1" = 40'			
PROJECT No. 20.1120.003	CHECKED BY:	CP	VERT.	1" = 5'	SHEET	32 OF 40	DF04

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