



Know what's below. Call before you dig.

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

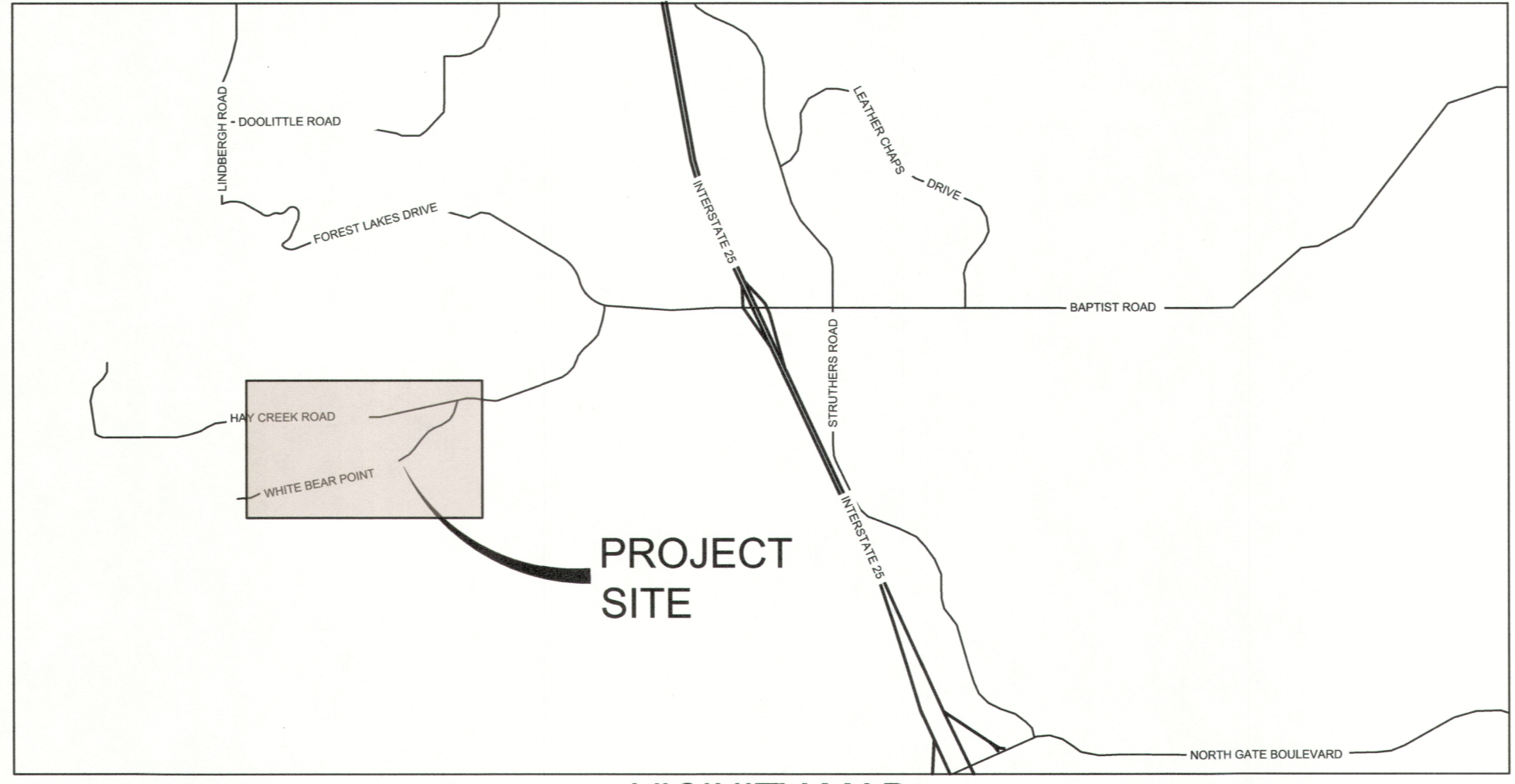
# HAY CREEK VALLEY EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS MAY 2024

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OWNER/DEVELOPER	VIEW HOMES, INC. 555 MIDDLE CREEK PARKWAY, SUITE 500 COLORADO SPRINGS, CO 80921 TIM BUSCHAR, (719)-382-9433
CIVIL ENGINEER	MATRIX DESIGN GROUP 2435 RESEARCH PARKWAY, SUITE 300 COLORADO SPRINGS, CO 80920 (719)-575-0100
ELECTRIC	MOUNTAIN VIEW ELECTRIC ASSOCIATION 15706 JACKSON CREEK PARKWAY, SUITE 100 MONUMENT, CO 80132 GINA PERRY, (719) 494-2636
GAS	BLACK HILLS ENERGY 105 S VICTORIA AVENUE PUEBLO, CO 81003 (800) 303-0752
ENGINEERING	EL PASO COUNTY PUBLIC WORKS DEPARTMENT 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460
TRAFFIC	EL PASO COUNTY PUBLIC WORKS DEPARTMENT 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460
DRAINAGE	EL PASO COUNTY PUBLIC WORKS DEPARTMENT 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460
FIRE DEPARTMENT	MONUMENT FIRE DISTRICT 16055 OLD FOREST POINT, SUITE 102 MONUMENT, CO 80132 (719)-484-0911



SITE MAP  
1" = 500'



VICINITY MAP  
N.T.S

### OWNER/DEVELOPER'S STATEMENT:

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

*Tim Buschar*  
NAME

6/4/24  
DATE

TIM BUSCHAR, (719)-382-9433  
VIEW HOMES, INC.  
555 MIDDLE CREEK PARKWAY, SUITE 500  
COLORADO SPRINGS, CO 80921

### DESIGN 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.

BY: *Jeffrey A. Odor*

DATE: 5/29/2024

JEFFREY A. ODOR, PE #39265  
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.

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

DATE

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

PCD FILE #: SF2324

REFERENCE DRAWINGS	No.	DATE	DESCRIPTION	BY
X-TITLE-CD				
X-886-PR-SITE				
FEMA_XS				
X-886-066-EX-MAP-1				
164022-01 Hay Creek Road Bldg				
X-886-AL-TA-SURVEY				
Hay Creek BFEs				
COMPUTER FILE MANAGEMENT				
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\TS01.dwg				
CTB FILE: Matrix.ctb				
PLOT DATE: 5/29/2024 9:46 AM				
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.				

**BENCHMARK**  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING**  
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.



SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

HAY CREEK VALLEY				
EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS				
TITLE SHEET				
DESIGNED BY:	JAO	SCALE:		DATE ISSUED:
DRAWN BY:	CWV	HORIZ:	N/A	MAY 2024
CHECKED BY:	JAO	VERT:	N/A	01 OF 26
				DRAWING No.
				TS01

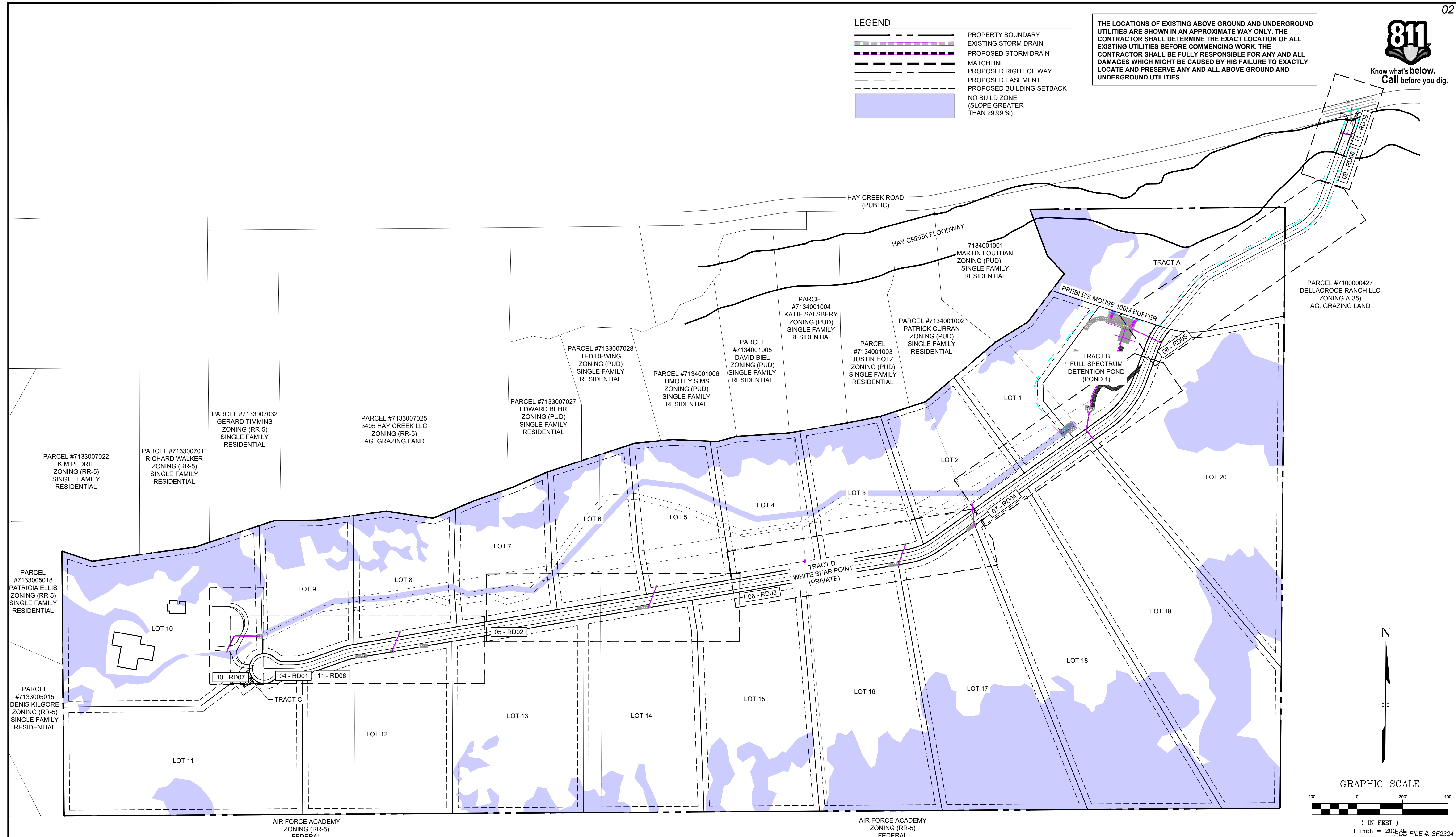


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**LEGEND**

- PROPERTY BOUNDARY
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- MATCHLINE
- PROPOSED RIGHT OF WAY
- PROPOSED EASEMENT
- PROPOSED BUILDING SETBACK
- NO BUILD ZONE (SLOPE GREATER THAN 29.99%)



**GRAPHIC SCALE**

200' 0' 200' 400'

( IN FEET )

1 inch = 200 feet

PD FILE #: SF2324

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X-TITLE-CD				
X-886-PR-SITE				
FEMA_X3				
X-886-066-EX-MAP-1				
164022-01 Hay Creek Road BNDY				
X-886-ALTA-SURVEY				
Hay Creek BFEs				

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SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**OVERALL SHEET KEY**

DESIGNED BY:	JAO	SCALE:	HORIZ. 1"=200'	DATE ISSUED:	MAY 2024	DRAWING No.	GN01
DRAWN BY:	CVW	VERT.	N/A	SHEET	02 OF 26		
CHECKED BY:	JAO						



Know what's below. Call before you dig.

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.
4. 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.

GENERAL NOTES con't.:

- 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.
28. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES 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.
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.
3. ANY SOIL LYING BELOW THE SUBGRADE ELEVATION WHICH IS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL IN ACCORDANCE WITH THE SPECIFICATION REQUIREMENTS.

BENCHMARK AND SURVEY CONTROL:

- 1. 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 ON THESE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR INTERPRETATION AND INFORMATION IN STAKING OF THE PROJECT FOR CONSTRUCTION.
2. 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 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 DEPARTMENT OF PUBLIC WORKS FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS IN ACCORDANCE WITH THE M.U.T.C.D.
2. 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.
3. APPROVAL OF THESE PLANS BY THE COUNTY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
4. THE APPROVAL OF THESE PLANS OR ISSUANCE OF A PERMIT BY EL PASO COUNTY DOES NOT AUTHORIZE 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.
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 TO THE PROJECT.

CONSTRUCTION NOTES:

- 1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
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 CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL 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 ALL TIMES, INCLUDING THE FOLLOWING:
a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
b. EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
d. CDOT M & S STANDARDS
4. 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 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 CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

CONSTRUCTION NOTES con't.:

- 6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. 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.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM 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 :

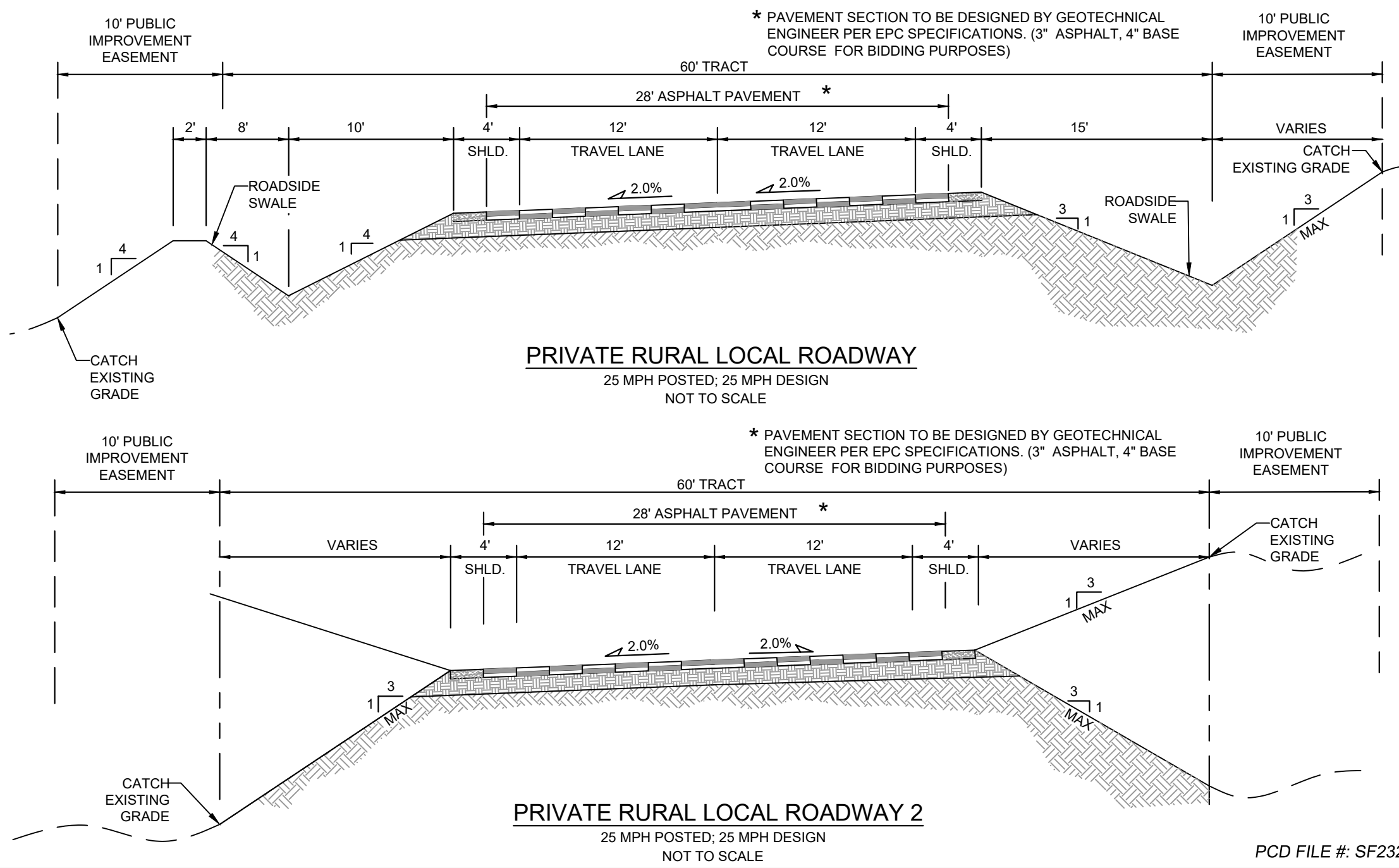
- 1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT 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.
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR 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.
7. 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"
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. 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 PERFORMED 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.

ABBREVIATIONS:

Table with 2 columns: Abbreviation and Full Name. Includes AD (ALGEBRAIC DIFFERENCE), ASSY (ASSEMBLY), ASTM (AMERICAN SOCIETY OF TESTING AND MATERIALS), APPROX (APPROXIMATE or APPROXIMATELY), AVE (AVENUE), AVG (AVERAGE), B/C (BACK OF CURB), B/L (BASELINE), BLVD (BOULEVARD), BTM (BOTTOM), BOW (BOTTOM OF WALL), CI (CAST IRON), CEN (CENTER), CL (CENTERLINE), CFS (CUBIC FEET PER SECOND), CLR (CLEAR), CMP (CORRUGATED METAL PIPE), CONC (CONCRETE), CONST (CONSTRUCTION), CONT (CONTINUOUS), DIA (DIAMETER), DN (DOWN), DWG (DRAWING), EA (EACH), EGL (ENERGY GRADE LINE), ELEV or EL (ELEVATION), ELL (ELBOW), ESMT (EASEMENT), EW (EACHWAY), EX or EXIST (EXISTING), FES (FLARED END SECTION), FIN (FINISHED), FL (FLOWLINE), FLG (FLANGE), FT (FOOT / FEET), FRP (FIBERGLASS REINFORCED PIPE), GAL (GALLON), GALV (GALVANIZED), GAU (GAUGE (MATERIAL)), GV (GATE VALVE), GW (GROUNDWATER), HBP (HOT BITUMINOUS PAVEMENT), HGL (HYDRAULIC GRADE LINE), HP (HIGH POINT), HORIZ (HORIZONTAL), HCL (HORIZONTAL CONTROL LINE), HR (HOUR), INV (INVERT), K (VERTICAL CURVE FACTOR), LBS (POUNDS), LF (LINEAR FEET), LN (LANE), LP (LOW POINT), LS (LANDSCAPING), LT (LEFT), MAX (MAXIMUM), MFGR (MANUFACTURER), MH (MANHOLE), MID (MIDDLE or MIDPOINT), MIN (MINIMUM), MJ (MECHANICAL JOINT), MSL (MEAN SEA LEVEL).

ABBREVIATIONS con't:

Table with 2 columns: Abbreviation and Full Name. Includes NC (NORMAL CROWN), NIC (NOT IN CONTRACT), NO (NUMBER), NOM (NOMINAL), NTS (NOT TO SCALE), OC (ON CENTER), OFS (OFFSET), P (PROPOSED), PC (POINT OF CURVATURE), PCC (POINT OF COMPOUND CURVE), BTM (POINT OF CURB RETURN), PE (PLAIN END), PIE (PUBLIC IMPROVEMENT EASEMENT), PGL (PROFILE GRADE LINE), P (PROPERTY LINE), PRC (POINT OF REVERSE CURVE), CLR (POINT OF TANGENCY), PVC (POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE), PVI (POINT OF VERTICAL INTERSECTION), PVMT (PAVEMENT), PVT (POINT OF VERTICAL TANGENT), R OR RAD (RADIUS), RC (REVERSE CROWN), RCP (REINFORCED CONCRETE PIPE), RED (REDUCER), REF (REFERENCE), REINF (REINFORCING), REQ (REQUIRED), REV (REVISION), ROW (RIGHT-OF-WAY), RT (RIGHT), SCH (SCHEDULE), SD (STORM SEWER), SHLD (SHOULDER), SQ (SQUARE), ST (STREET), STA (STATION), STD (STANDARD), STL (STEEL), SS OR SAN (SANITARY SEWER), SW OR S/W (SIDEWALK), TAN (TANGENT), TB (THRUST BLOCK), TBC (TOP BACK OF CURB), TFC (TOP FACE OF CURB), THD (THREADED), THK (THICKNESS), TOW (TOP OF WALL), TYP (TYPICAL), UG (UNDERGROUND), UTILITY (UTILITY), VC (VERTICAL CURVE), VERT (VERTICAL), W (WIDTH), W/ (WITH).



REFERENCE DRAWINGS table with columns: No., DATE, DESCRIPTION, REVISIONS, BY. Includes file name: S:\22.886.076 Hay Creek-Forest Manor-CLeary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\TS01.dwg.

BENCHMARK: PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92. BASIS OF BEARING: THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PL325955 C1/4 S22 T16S, R65W 1999," AND THE WESTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000," BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

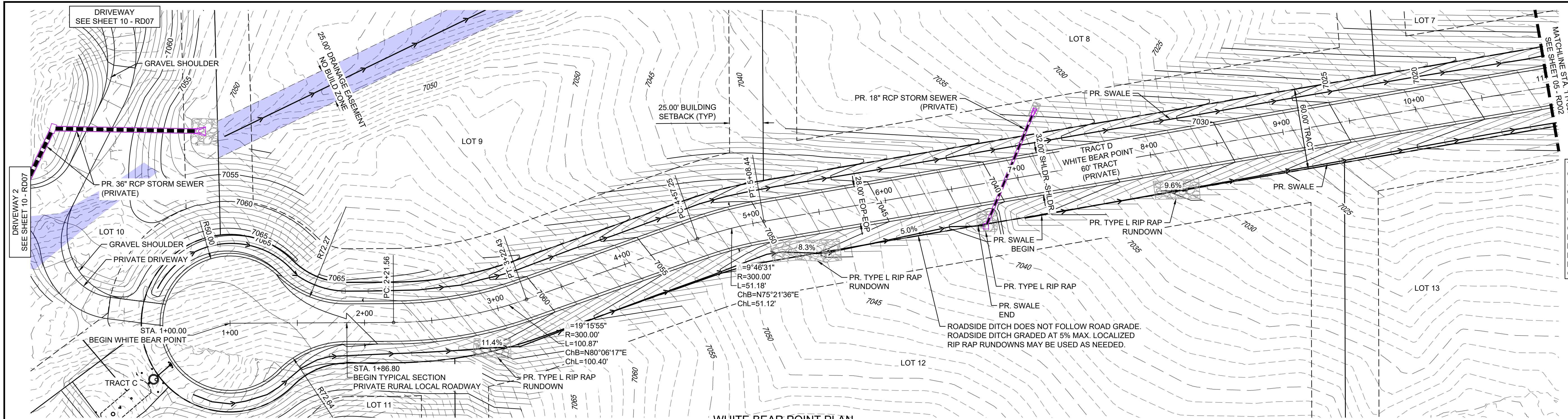
Professional Engineer Seal for Jeffrey A. Jao, Colorado License No. 16265, dated 05/28/2024. Prepared by Matrix, Excellence by Design.

HAY CREEK VALLEY EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS GENERAL NOTES. DESIGNED BY: JAO, SCALE: N/A, DATE ISSUED: MAY 2024, DRAWING No. GN02. DRAWN BY: CVW, CHECKED BY: JAO, VERT. SHEET: 03 OF 26.

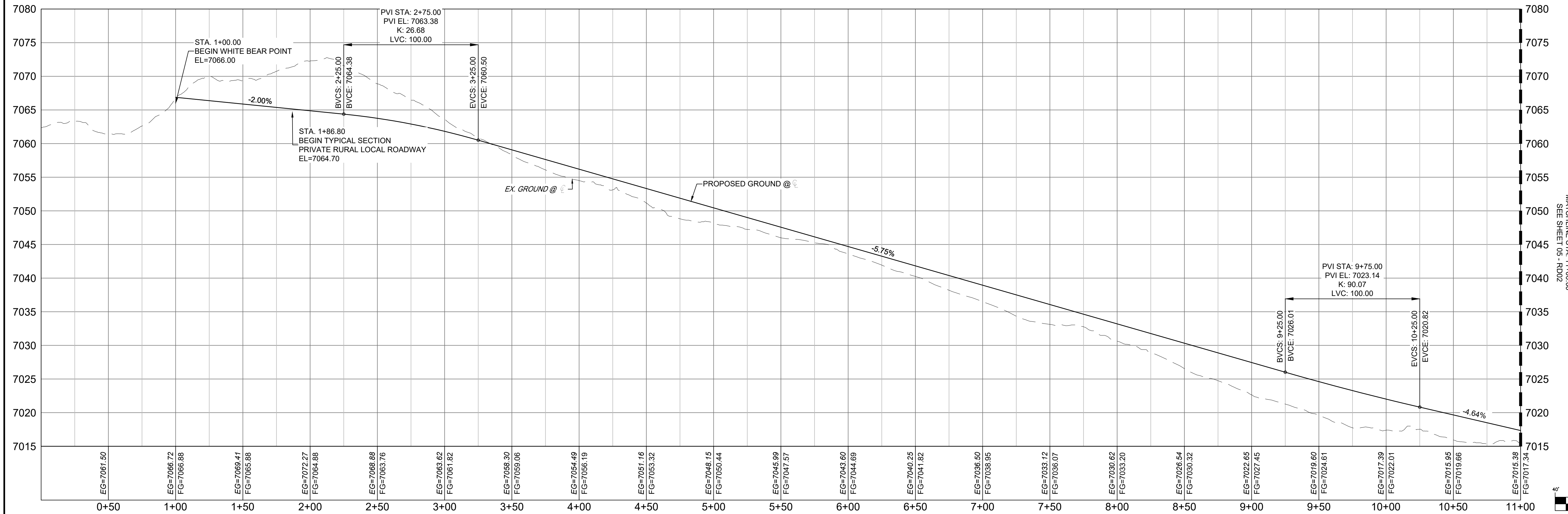


Know what's below.  
Call before you dig.

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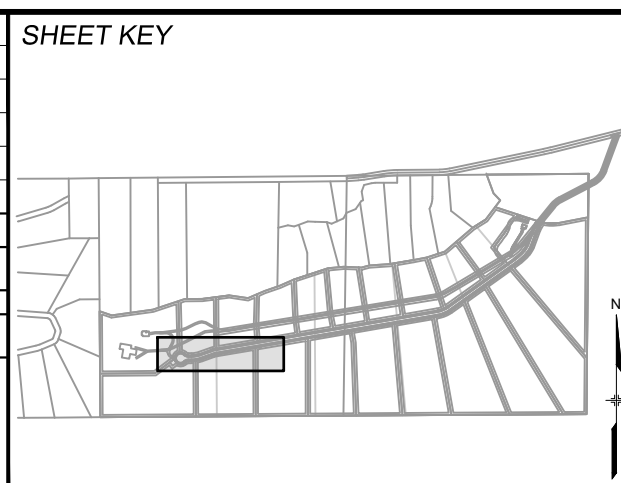


WHITE BEAR POINT PLAN  
(PRIVATE)



WHITE BEAR POINT ROAD PROFILE 1  
SCALE: (H) 1" = 40' (V) 1" = 8'  
START STA: 0+00.00, END STA: 11+00.00

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:47 AM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			



**BENCHMARK**  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING**  
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T16S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

PREPARED BY:

Excellence by Design

SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**ROADWAY PLAN & PROFILE**

DESIGNED BY: JAO	SCALE: HORIZ 1" = 40'	DATE ISSUED: MAY 2024	DRAWING No. RD01
DRAWN BY: CVW	VERT. 1" = 8'	SHEET 04 OF 26	
CHECKED BY: JAO			

PCD FILE #: SF2324

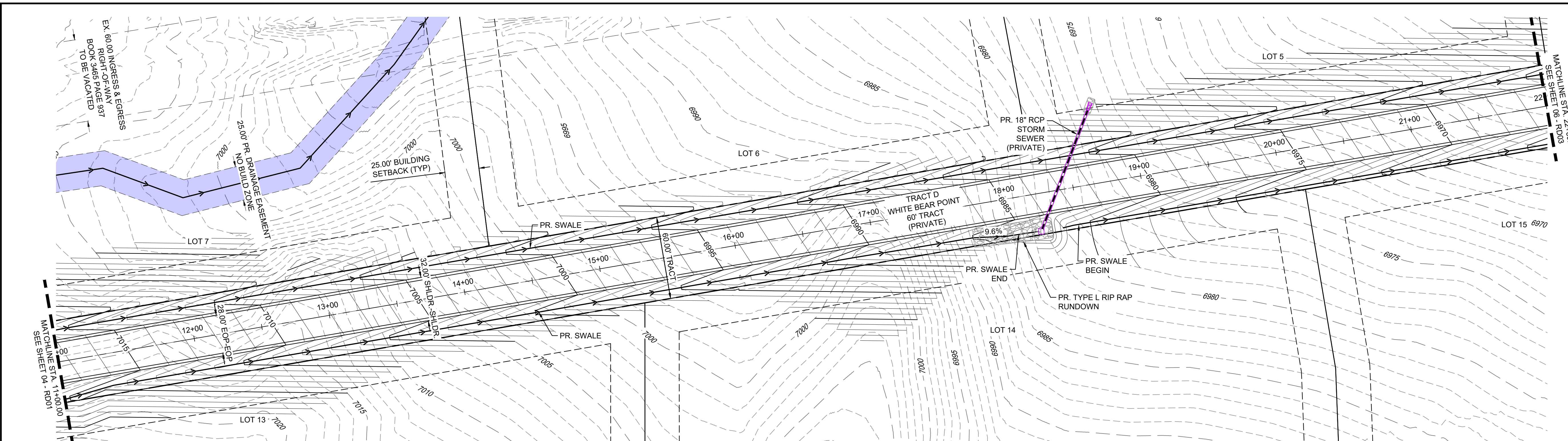
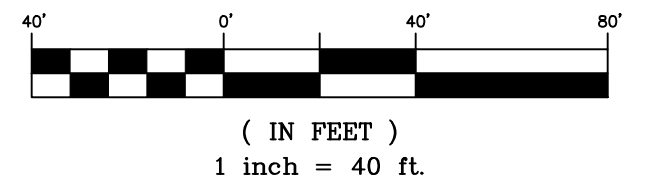


Know what's below. Call before you dig.

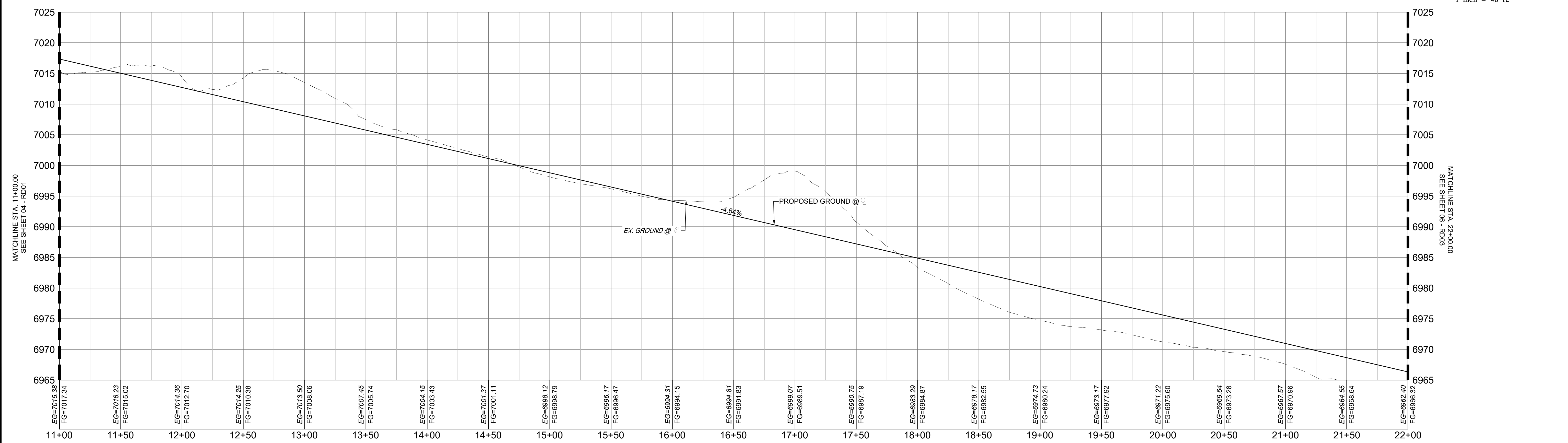
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GRAPHIC SCALE



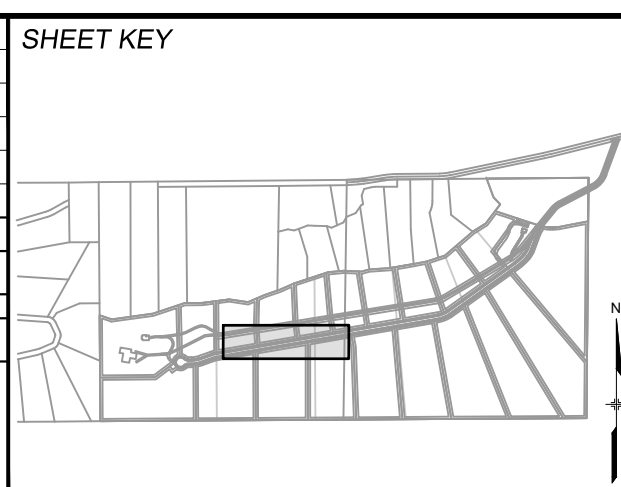
WHITE BEAR POINT ROAD (PRIVATE)



WHITE BEAR POINT ROAD PROFILE 2  
SCALE: (H) 1" = 40' (V) 1" = 8'  
START STA: 11+00.00, END STA: 22+00.00

PCD FILE #: SF2324

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:47 AM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			



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PREPARED BY:

Excellence by Design

SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**ROADWAY PLAN & PROFILE**

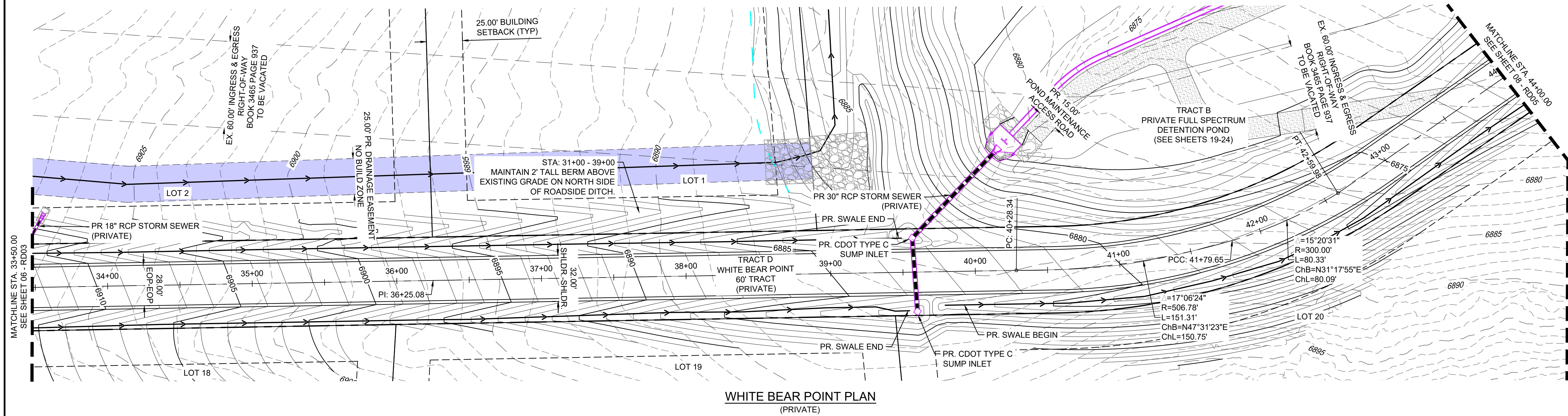
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CHECKED BY: JAO	HORIZ. 1" = 40'	05 OF 26	
	VERT. 1" = 8'		



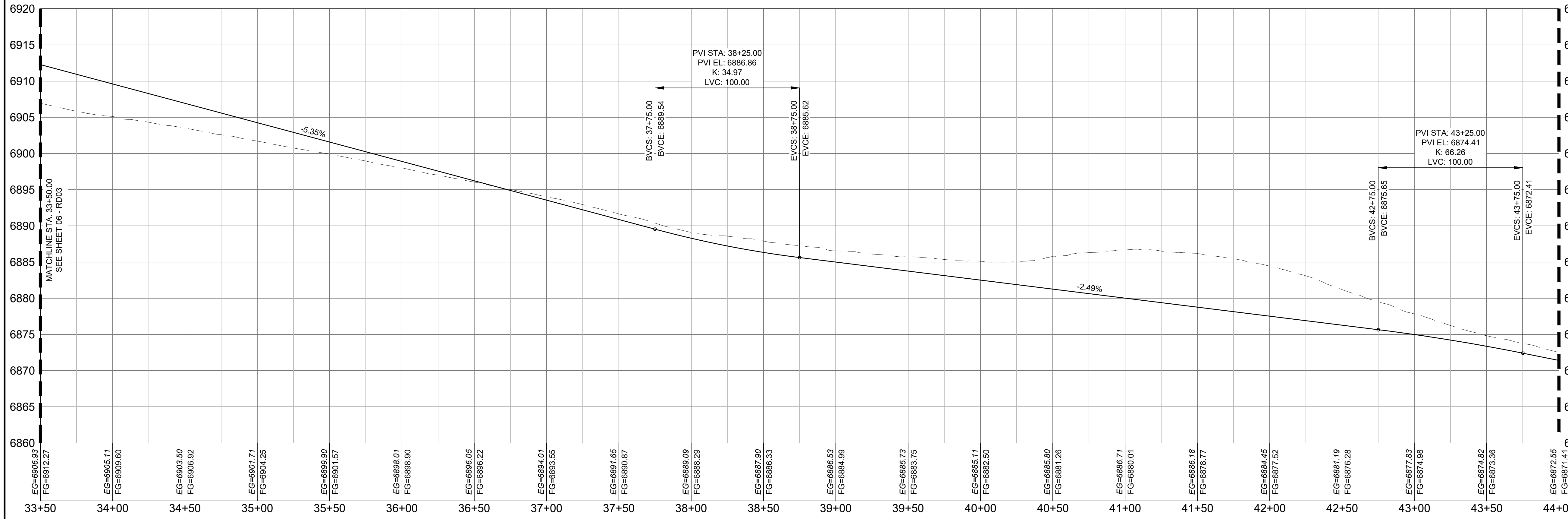


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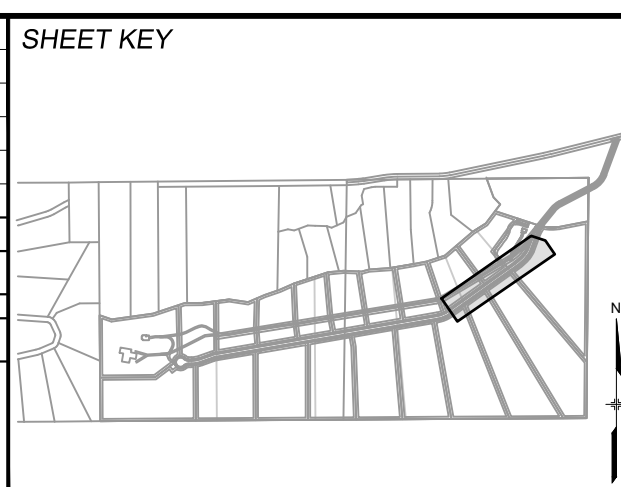


WHITE BEAR POINT ROAD (PRIVATE)



WHITE BEAR POINT ROAD PROFILE 4  
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No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:47 AM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			



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PREPARED BY:  
**Matrix**  
Excellence by Design

SEAL  
COLORADO LICENSED PROFESSIONAL ENGINEER  
JEFFREY [Signature]  
14265  
05/29/2024

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**ROADWAY PLAN & PROFILE**

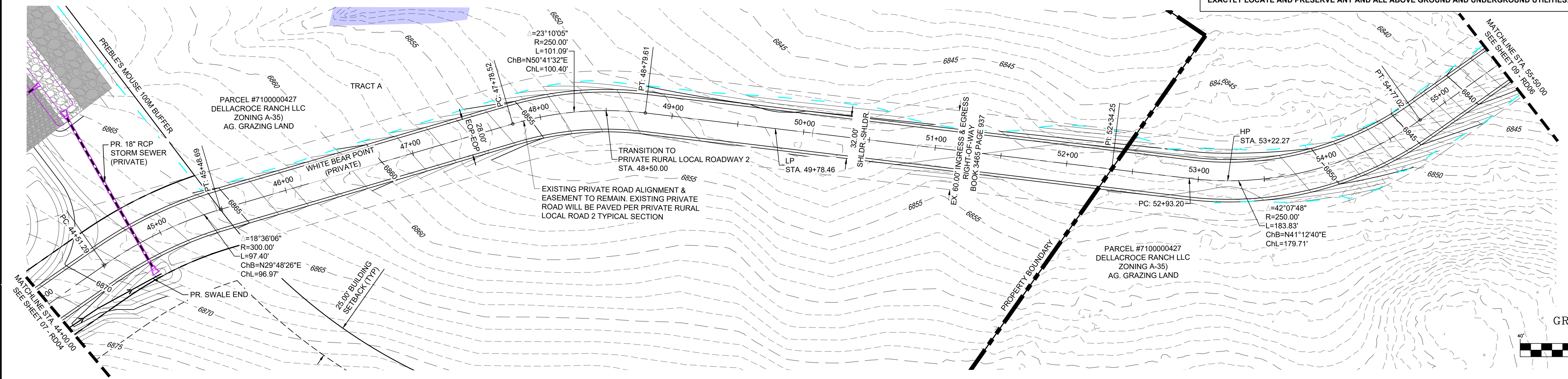
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CHECKED BY: JAO	VERT. 1" = 8"		

PCD FILE #: SF2324

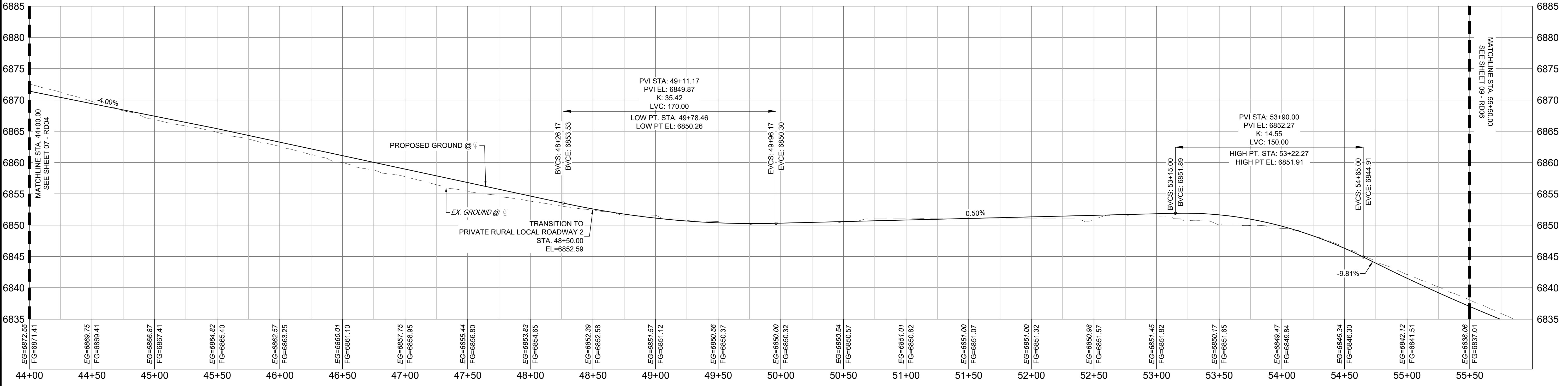
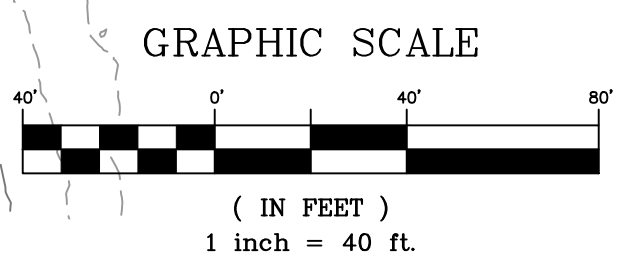
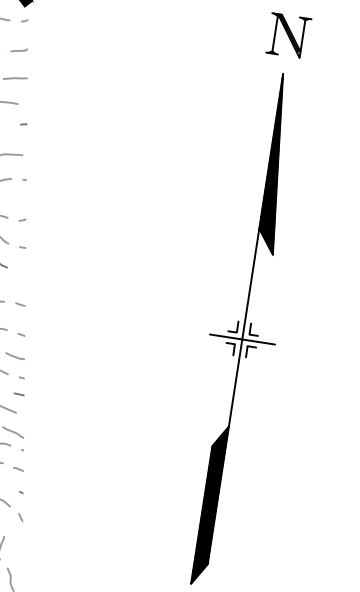


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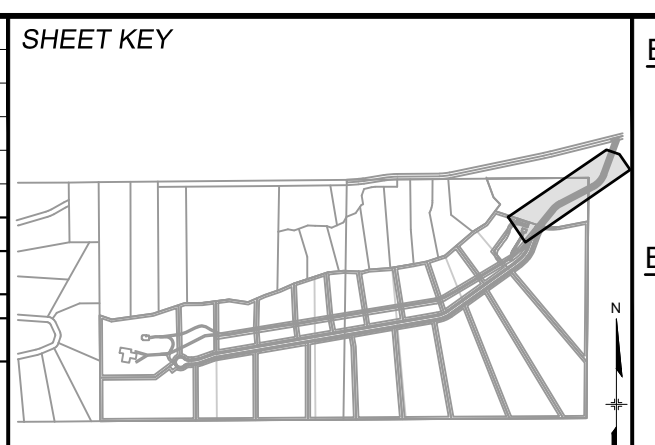
WHITE BEAR POINT PLAN (PRIVATE)



WHITE BEAR POINT ROAD PROFILE 5 SCALE: (H) 1" = 40' (V) 1" = 8' START STA: 44+00.00, END STA: 56+00.00

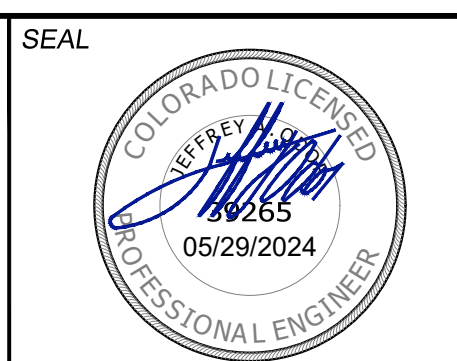
REFERENCE DRAWINGS table with columns for drawing name and date.

REVISIONS table with columns for No., DATE, DESCRIPTION, and BY.



BENCHMARK and BASIS OF BEARING text describing survey points and coordinates.

Matrix logo and 'Excellence by Design' slogan.



HAY CREEK VALLEY EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

ROADWAY PLAN & PROFILE

DESIGNED BY, DRAWN BY, CHECKED BY, SCALE, DATE ISSUED, and DRAWING No. table.

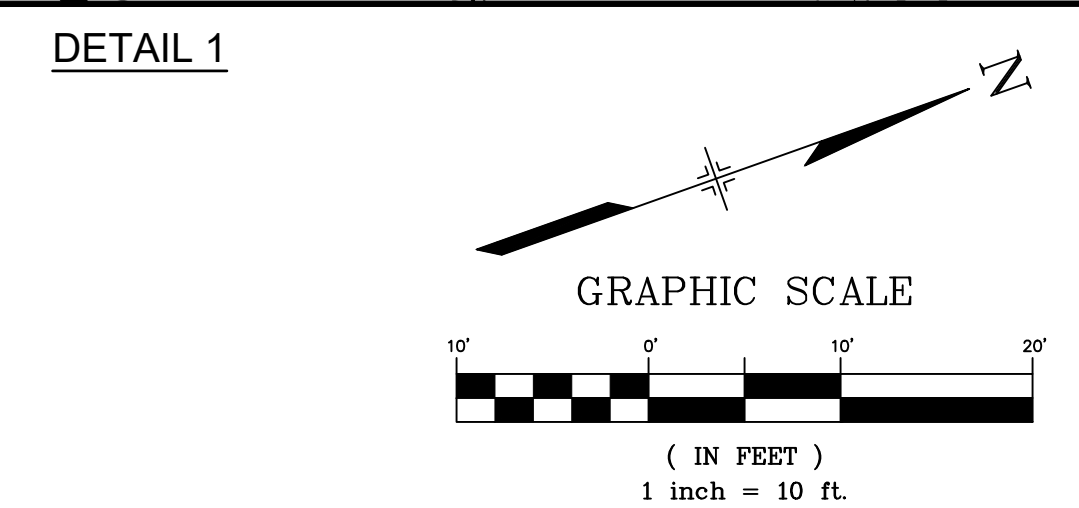
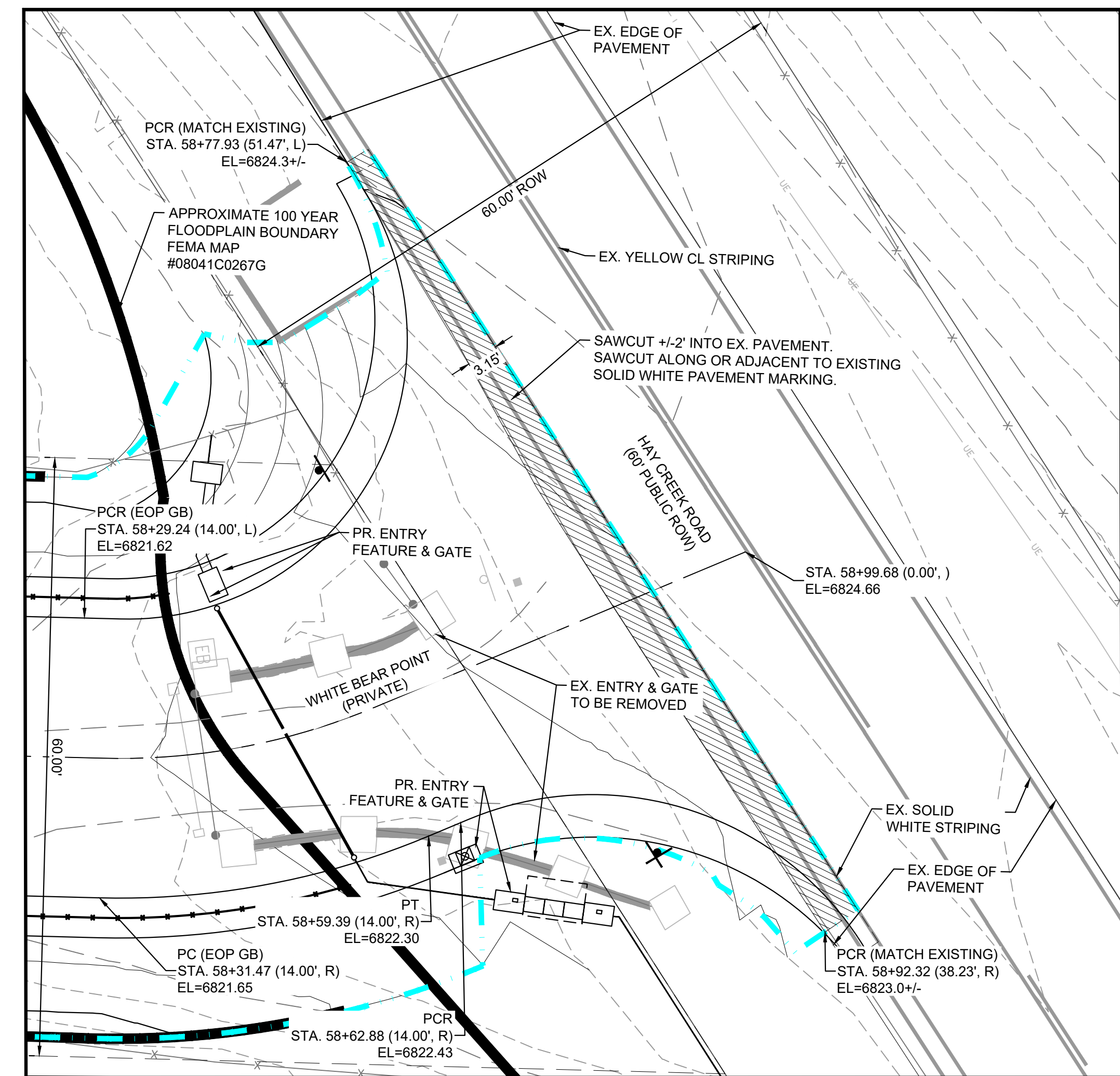
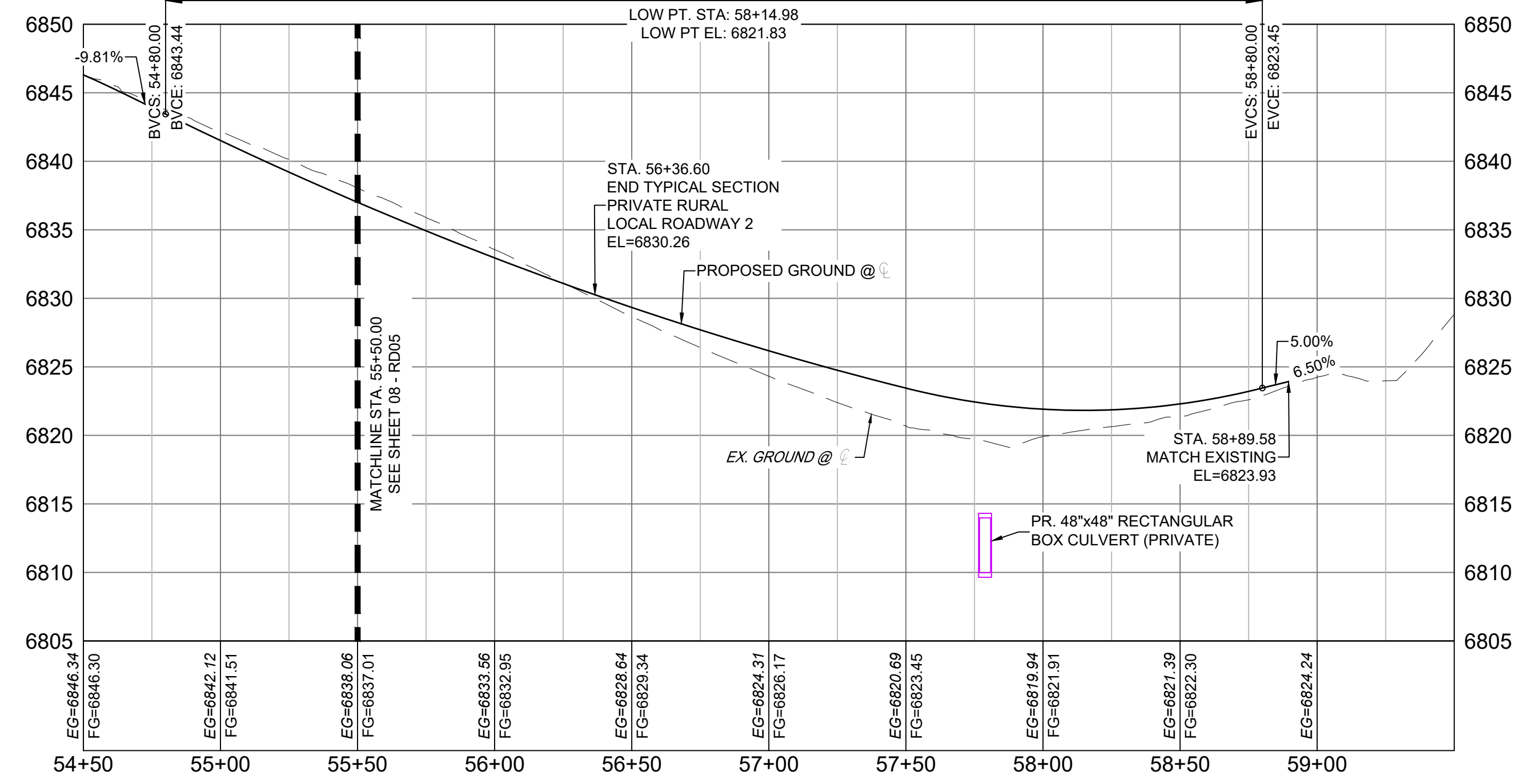
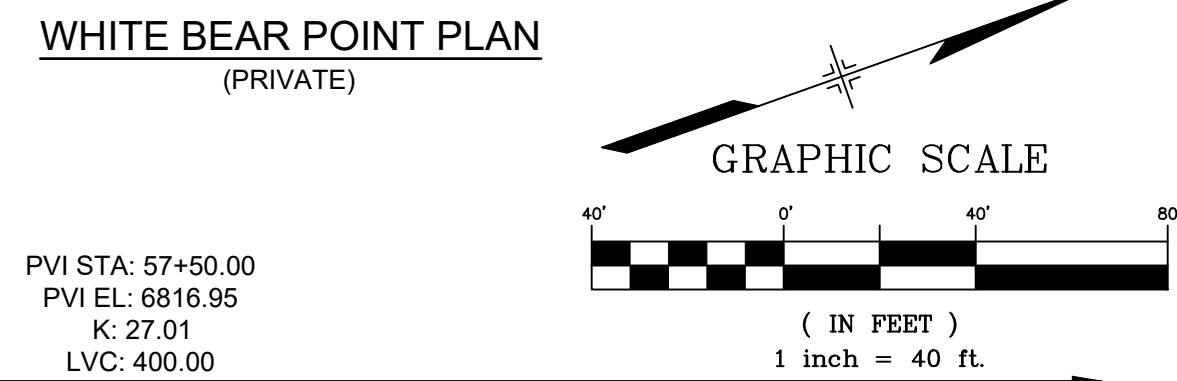
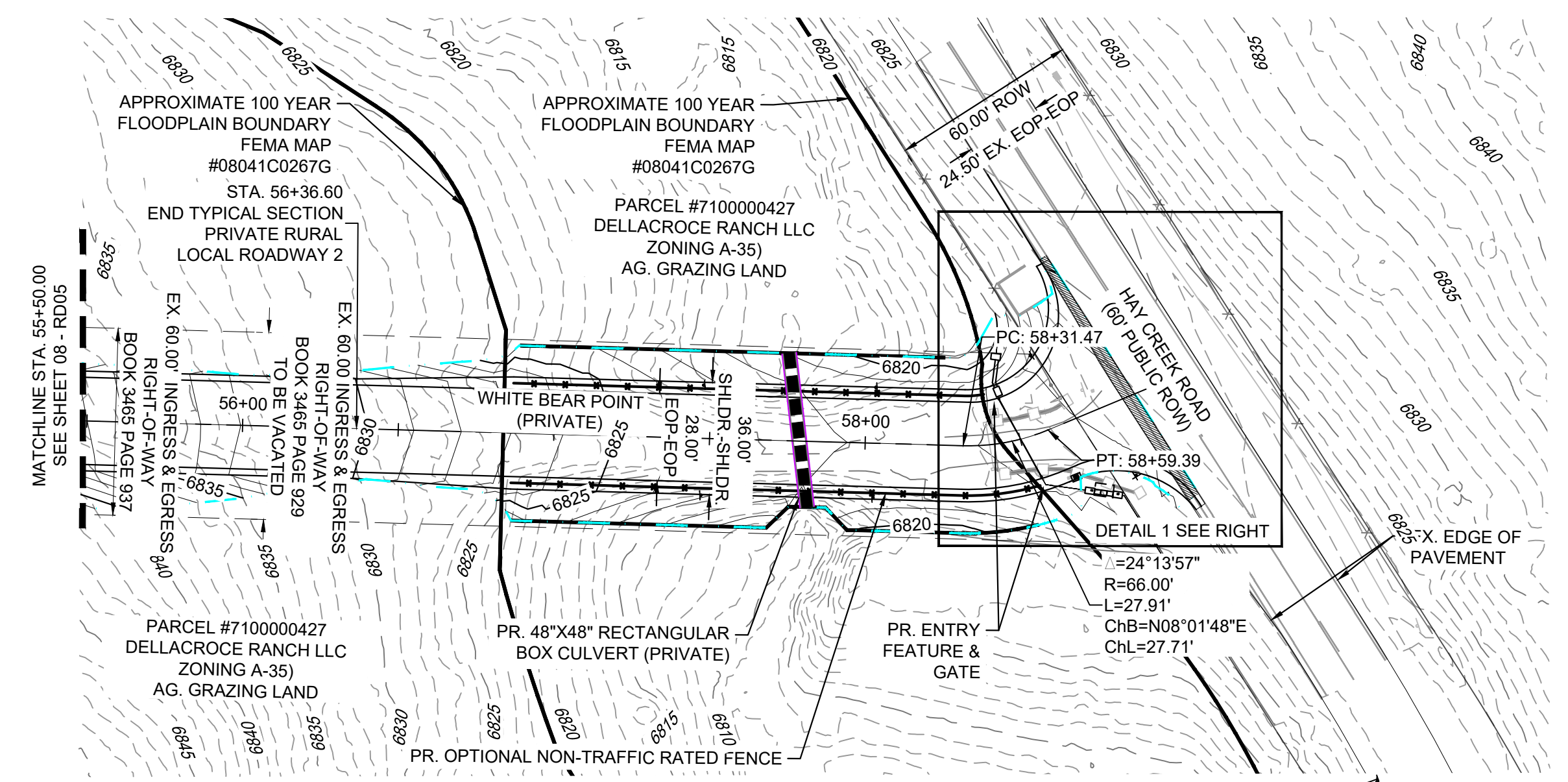
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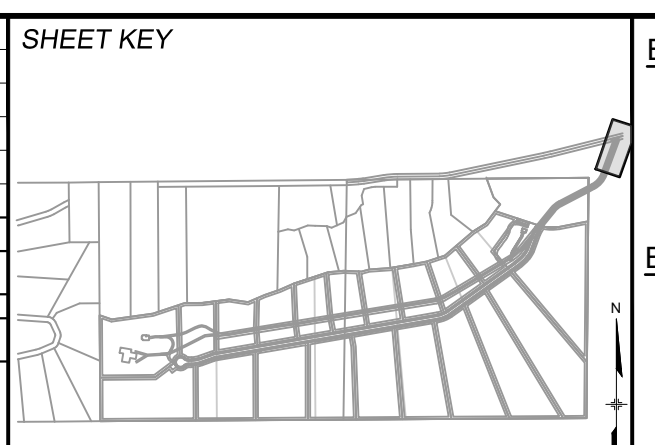
REFERENCE DRAWINGS

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X-886-PR-SITE	
FEMA_X3	
X-886-066-EX-MAP-1	
164022-01 Hay Creek Road BNMV	
X-886-ALTA-SURVEY	
Hay Creek BFEs	
2023-02-28 TOPO 164022-01	

COMPUTER FILE MANAGEMENT

No.	DATE	DESCRIPTION	BY
REVISIONS			

FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg  
 CTB FILE: Matrix.ctb  
 PLOT DATE: 5/29/2024 9:47 AM  
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



BENCHMARK  
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BASIS OF BEARING  
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PREPARED BY:

Excellence by Design

SEAL

FOR AND ON BEHALF OF  
 MATRIX DESIGN GROUP, INC.  
 PROJECT No. 22.886.076

HAY CREEK VALLEY  
 EL PASO COUNTY, COLORADO  
 CONSTRUCTION DOCUMENTS

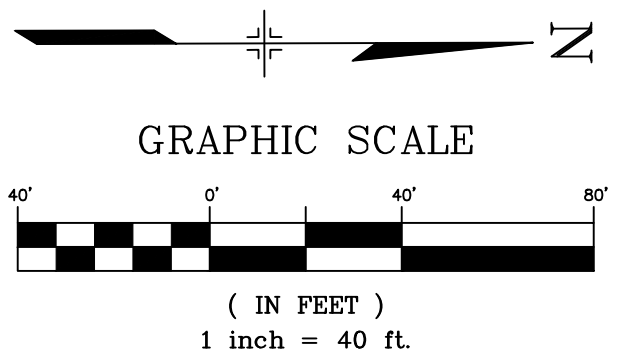
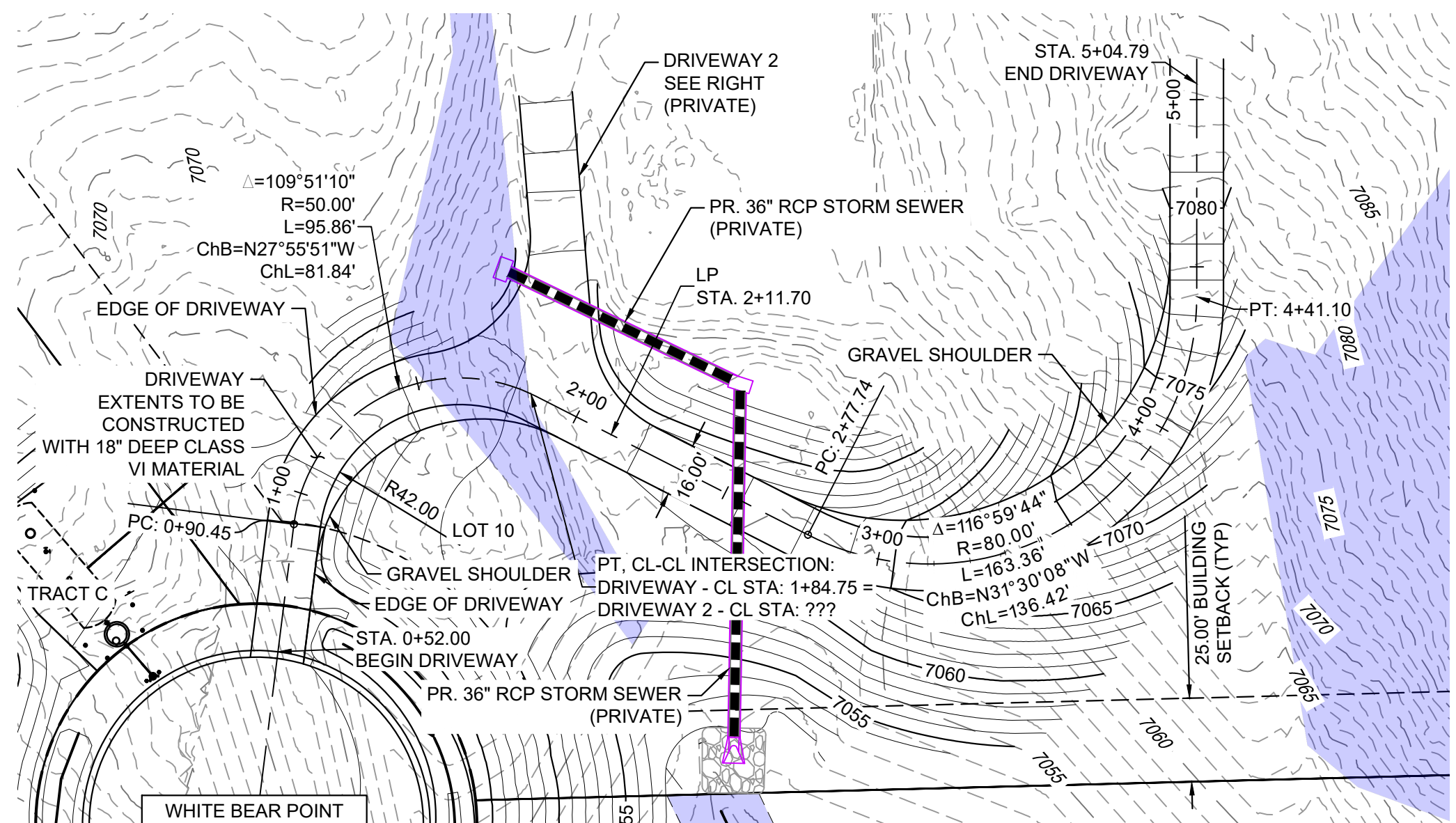
ROADWAY PLAN & PROFILE

DESIGNED BY: JAO	SCALE: 1"=8'	DATE ISSUED: MAY 2024	DRAWING No. RD06
DRAWN BY: CVW	HORIZ. VARIES	SHEET 09 OF 26	
CHECKED BY: JAO	VERT. 1"=8'		

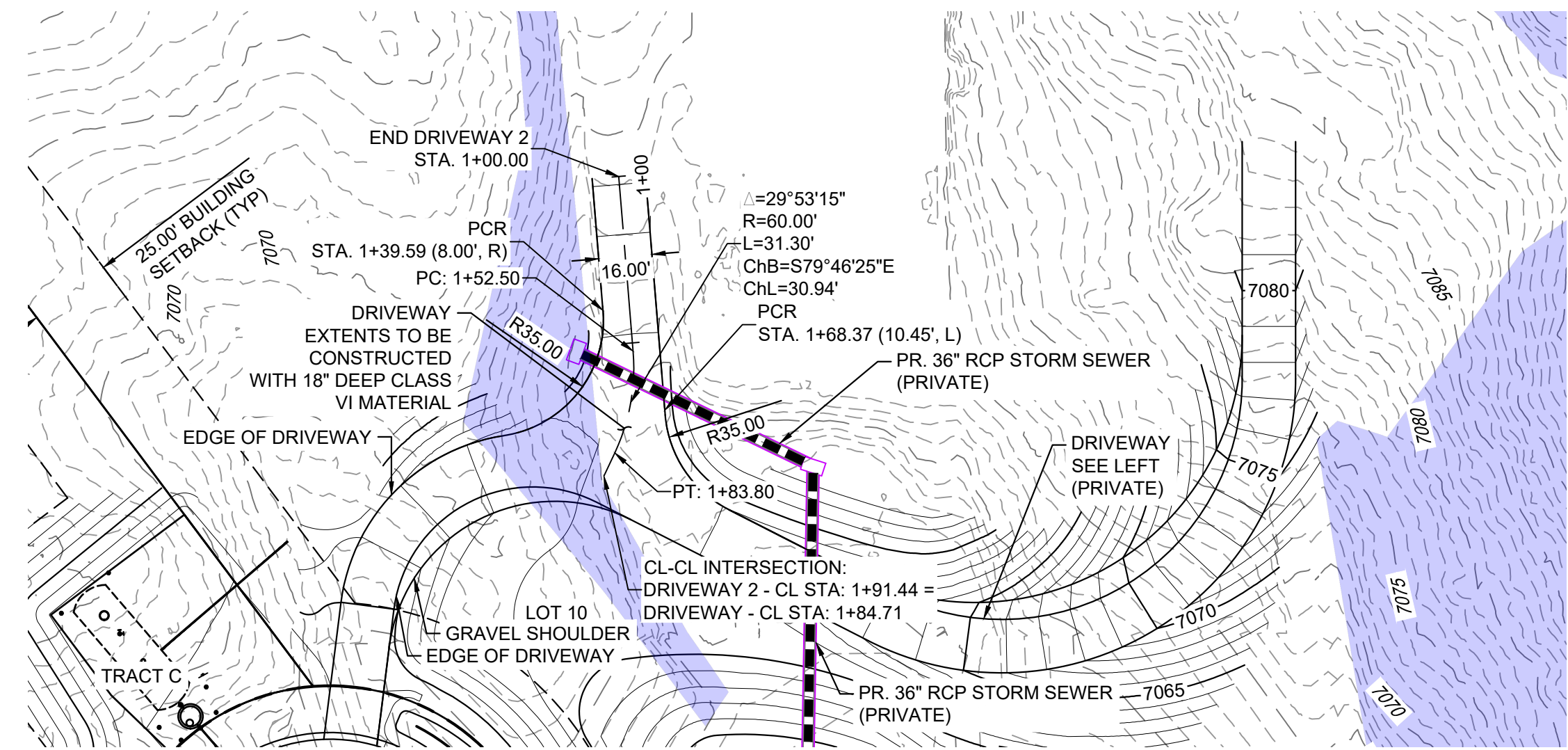


Know what's below.  
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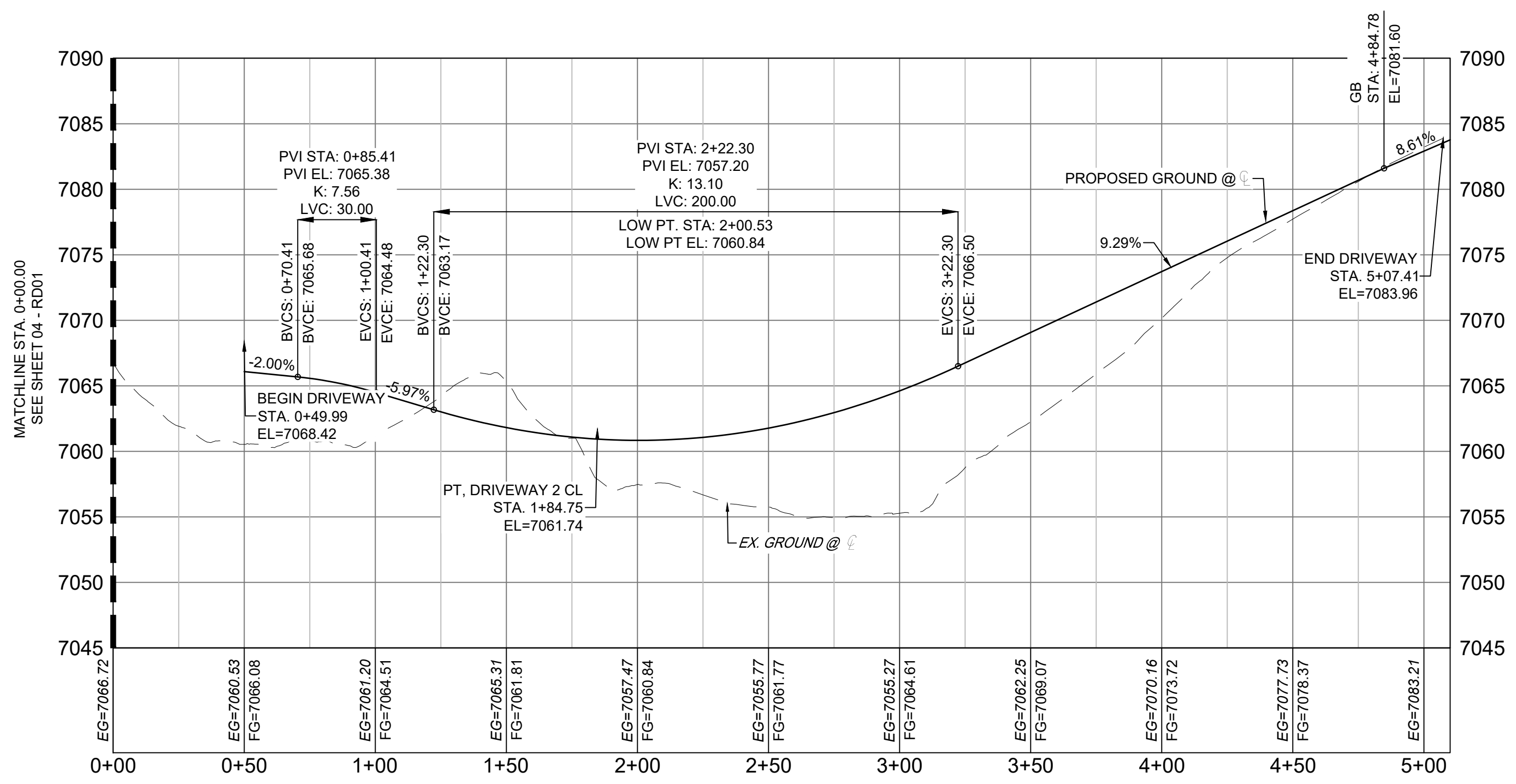
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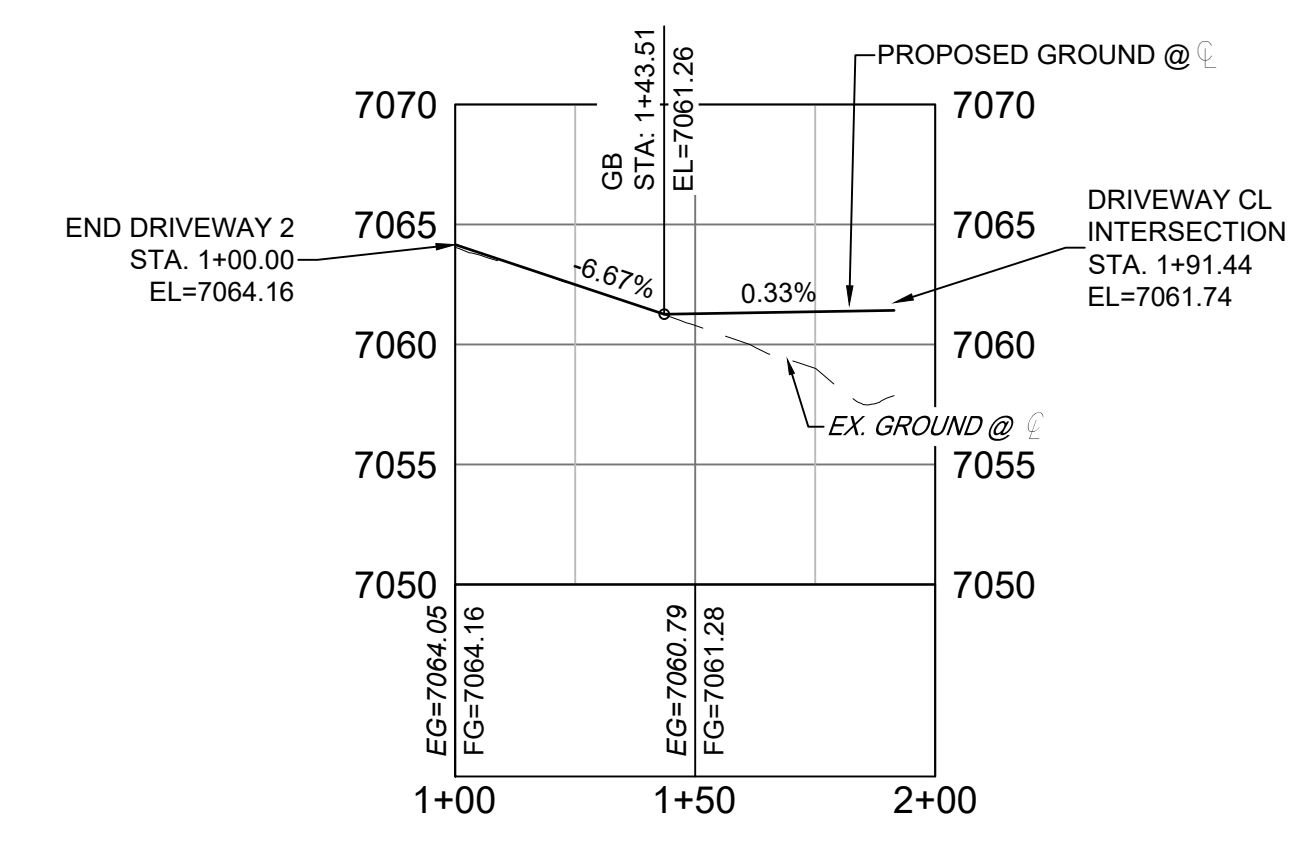
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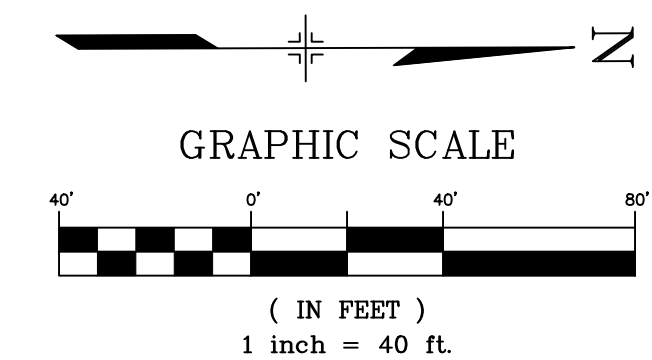
DRIVEWAY 2 PLAN (PRIVATE)



DRIVEWAY 1 ROAD PROFILE  
SCALE: (H) 1" = 40' (V) 1" = 8'  
START STA: 0+00.00, END STA: 5+10.00



DRIVEWAY 2 ROAD PROFILE  
SCALE: (H) 1" = 40' (V) 1" = 8'  
START STA: 1+00.00, END STA: 2+00.00



REFERENCE DRAWINGS		SHEET KEY									
X-TITLE-CD											
X-886-PR-SITE											
FEMA_X3		BENCHMARK									
X-886-066-EX-MAP-1		PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.									
164022-01 Hay Creek Road BNDY		BASIS OF BEARING									
X-886-ALTA-SURVEY		THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T16S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.									
Hay Creek BFEs		<table border="1"> <thead> <tr> <th>No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">REVISIONS</td> </tr> </tbody> </table>		No.	DATE	DESCRIPTION	BY	REVISIONS			
No.	DATE	DESCRIPTION	BY								
REVISIONS											
2023-02-28 TOPO 164022-01		<table border="1"> <thead> <tr> <th colspan="2">COMPUTER FILE MANAGEMENT</th> </tr> </thead> <tbody> <tr> <td>FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg</td> </tr> <tr> <td>CTB FILE: Matrix.ctb</td> </tr> <tr> <td>PLOT DATE: 5/29/2024 9:47 AM</td> </tr> <tr> <td>THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.</td> </tr> </tbody> </table>		COMPUTER FILE MANAGEMENT		FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg	CTB FILE: Matrix.ctb	PLOT DATE: 5/29/2024 9:47 AM	THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.		
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CTB FILE: Matrix.ctb											
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SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

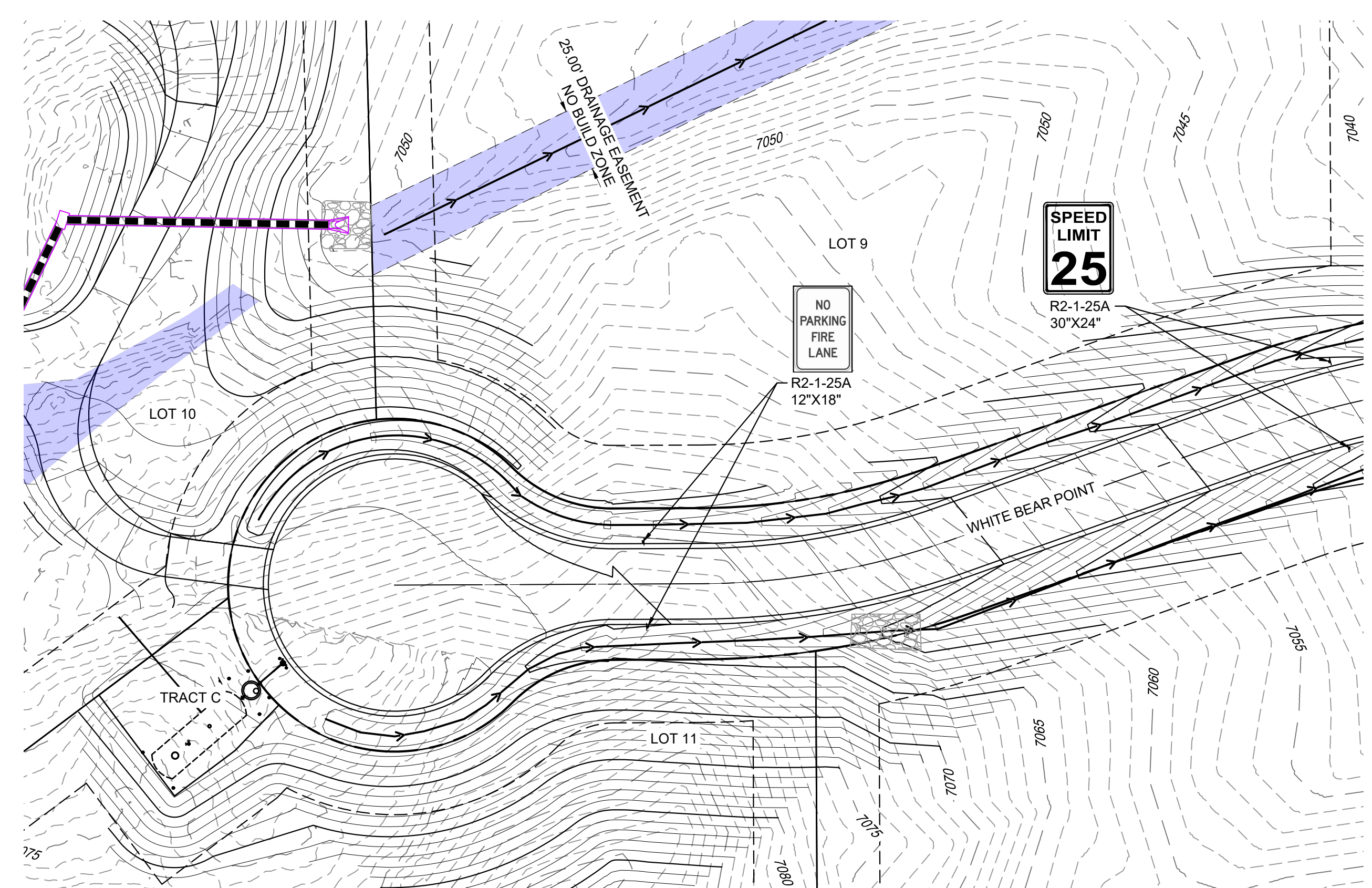
**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**ROADWAY PLAN & PROFILE**

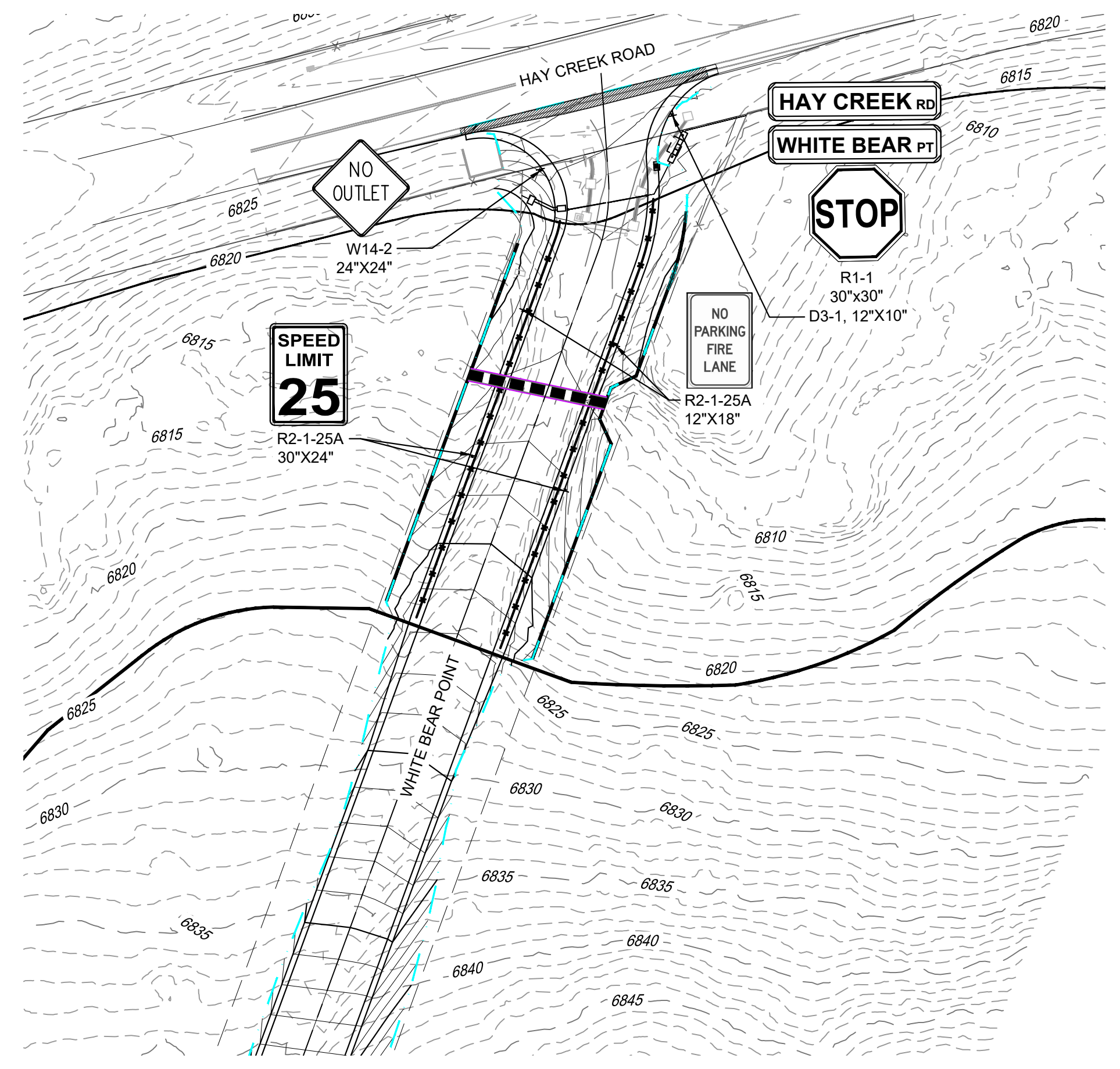
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DRAWN BY: CVW	HORIZ. 1" = 40'	SHEET 10 OF 26	
CHECKED BY: JAO	VERT. 1" = 8'		



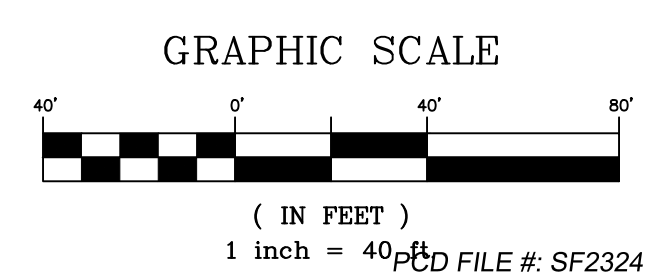
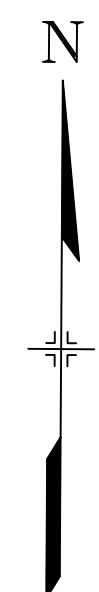
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE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



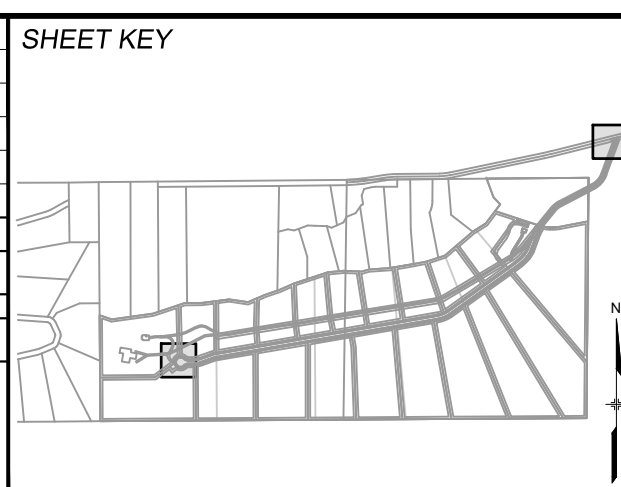
WHITE BEAR POINT SIGNAGE (SOUTHWEST END)



WHITE BEAR POINT SIGNAGE (SOUTHEAST END)



No.	DATE	DESCRIPTION	BY
REVISIONS			
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg			
CTB FILE: Matrix.ctb			
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**BENCHMARK**  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING**  
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T16S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

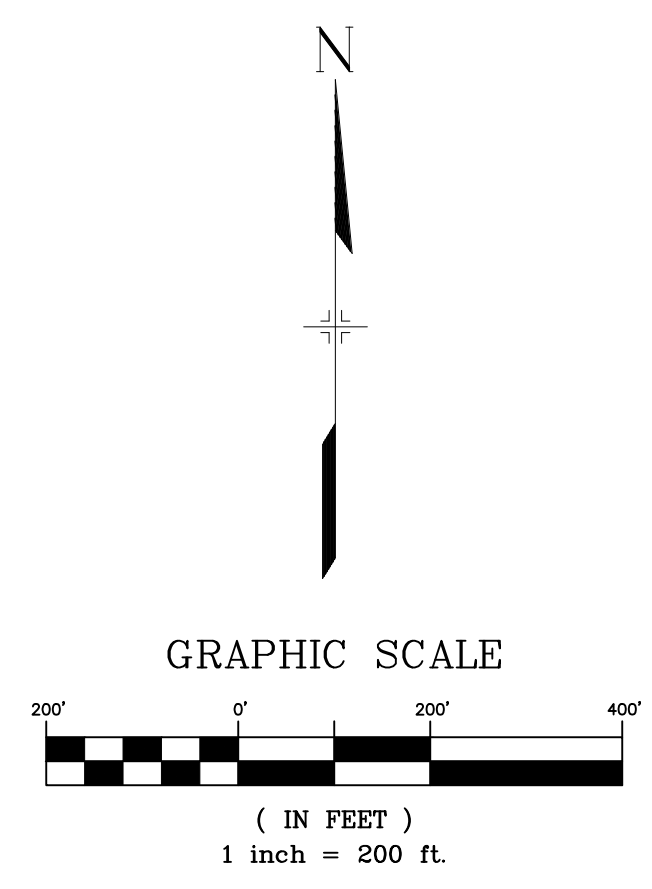
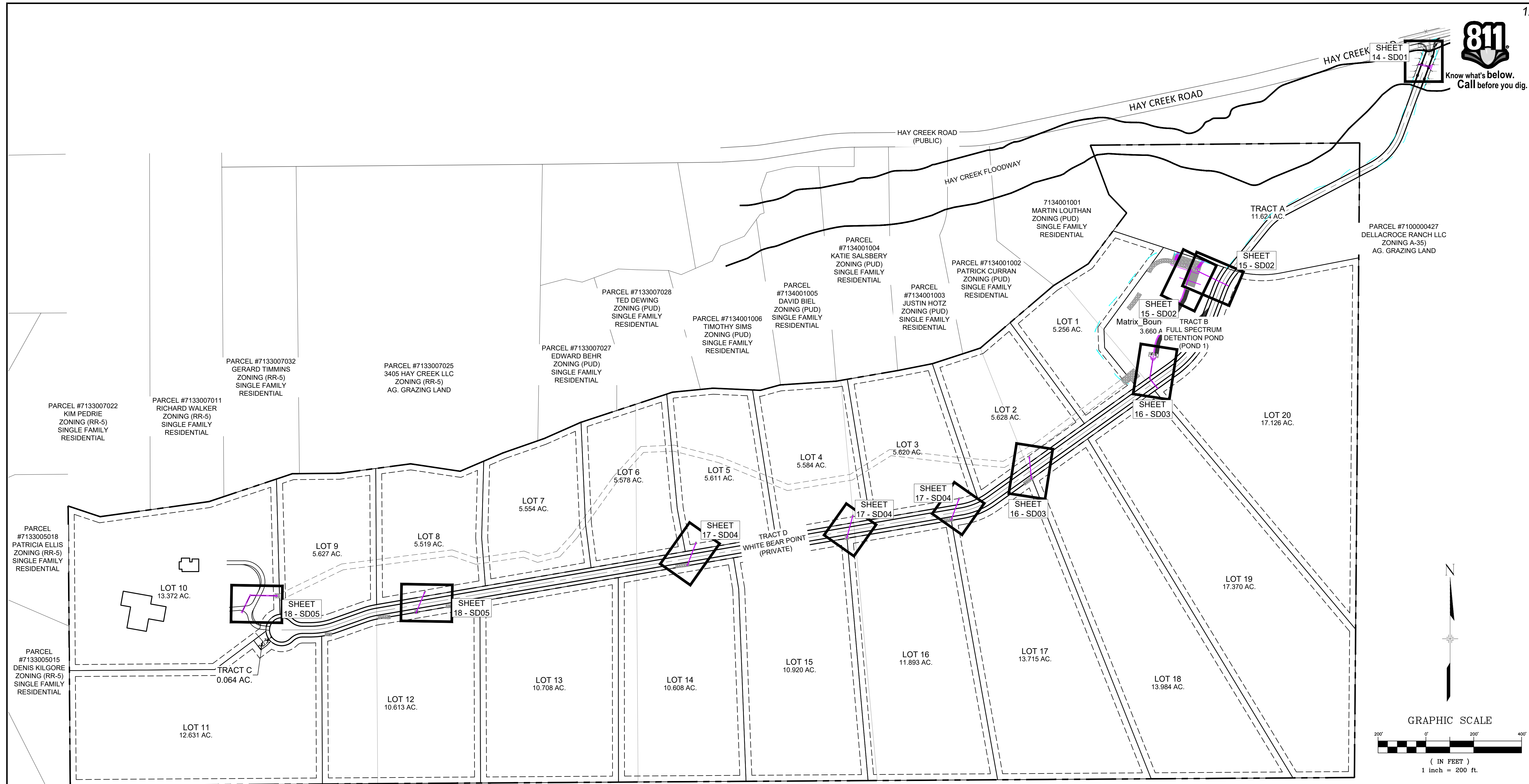
PREPARED BY:  
**Matrix**  
Excellence by Design

SEAL  
  
 FOR AND ON BEHALF OF  
 MATRIX DESIGN GROUP, INC.  
 PROJECT No. 22.886.076

<b>HAY CREEK VALLEY</b>			
EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS			
<b>SIGNAGE PLAN</b>			
DESIGNED BY: JAO	SCALE: 1"=40'	DATE ISSUED: MAY 2024	DRAWING No. RD08
DRAWN BY: CVW	HORIZ. 1"=8'	SHEET 11 OF 26	
CHECKED BY: JAO	VERT. 1"=8'		



Know what's below. Call before you dig.



- NOTES:**
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, AND ARE HORIZONTAL LENGTHS.
  3. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STRUCTURES.
  4. ALL RCP PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.
  5. STRUCTURES WITH PIPES OF DIFFERENT SIZES SHALL MATCH THE CROWN OF THE INSIDE WALL OF PIPE.
  6. MANHOLES SHALL BE INSTALLED 1/8" BELOW THE SURFACE OF THE PAVEMENT ON THE LOWEST SIDE OF THE MANHOLE, OR IN ACCORDANCE WITH THE GOVERNING CRITERIA.
  7. ALL STORM SEWER IS PUBLIC UNLESS OTHERWISE NOTED.
  8. ALL TYPE I AND II MANHOLES TO FOLLOW EL PASO COUNTY STANDARDS.
  9. JOINT FASTENERS TO BE INSTALLED ON ALL FLARED END SECTIONS AND 2 PIPE SECTIONS LEADING DOWN TO FLARED END SECTIONS.

HAY CREEK SITE MAP

PCD FILE #: SF2324

<b>REFERENCE DRAWINGS</b> X-886-066-EX-MAP-1 184022-01 Hay Creek Road BNDY X-886-PR-SITE X-TITLE-CD X-886-ALTA-SURVEY new block	<b>SHEET KEY</b> 		<b>BENCHMARK</b> PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.	<b>FOR AND ON BEHALF OF</b>  MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076	<b>HAY CREEK VALLEY</b> EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS							
	<b>COMPUTER FILE MANAGEMENT</b> FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg CTB FILE: Matrix.ctb PLOT DATE: 5/29/2024 9:48 AM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.				<b>BASIS OF BEARING</b> THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25985 C1/4 S22 T15S, R65W 1999," AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000," BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.	<b>STORM DRAIN SHEET KEY</b>						
<table border="1"> <thead> <tr> <th>No.</th> <th>DATE</th> <th>DESCRIPTION REVISIONS</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DATE	DESCRIPTION REVISIONS	BY					<b>DESIGNED BY:</b> WCG <b>DRAWN BY:</b> RWO <b>CHECKED BY:</b> JAO	<b>SCALE:</b> HORIZ 1"=200' VERT. N/A	<b>DATE ISSUED:</b> MAY 2024 <b>SHEET:</b> 12 OF 26	<b>DRAWING No.:</b> SDGN01
No.	DATE	DESCRIPTION REVISIONS	BY									



Know what's below.  
Call before you dig.

**GENERAL NOTES:**

**TRACER WIRE:**

- PER THE COLORADO SENATE BILL 18-167, ALL UNDERGROUND UTILITIES, INCLUDING STORM SEWER, MUST BE INSTALLED WITH A DETECTABLE MATERIAL SO THEY CAN BE TRACED AT GROUND LEVEL. ENSURE ALL PIPES INSTALLED ARE EQUIPPED WITH MEANS OF BEING DETECTED, AS PER CITY STANDARD D-37
- DO NOT BACKFILL INLETS PRIOR TO ONE-POUND ANODE AND 1.5# MAGNESIUM GROUND ROD INSTALLATION.
- TRACER WIRE SHALL BE INSTALLED IN ALL UNDERGROUND PIPE.
- TRACER WIRE FOR STORM SEWER AND DRAIN LINES SHALL BE GREEN IN ACCORDANCE WITH AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE.
- "OPEN TRENCH" TRACER WIRE SHALL BE #8 OR #10 AWG COPPER SOLID OR #12 AWG COPPER CLAD HIGH STRENGTH WITH MINIMUM 30 MIL HDPE INSULATION THICKNESS COMPLYING WITH ASRM D-1248, AND A MINIMUM AVERAGE TENSILE BREAK LOAD OF 450-LBS, AND A 30-MIL HDPE JACKET-GREEN (TYPICAL).
- "PIPE/SLIP LINING" TRACER WIRE SHALL BE 7X7 STRANDED COPPER CLAD STEEL, EXTREME STRENGTH WITH 4,700 LB. BREAK LOAD, WITH MINIMUM 50-MIL HDPE INSULATION THICKNESS.
- TRACER WIRE SHALL BE SECURED EVERY 5-FEET TO 8-FEET ON THE TOP OF THE PIPE BY TAPING OR TYING TO THE PIPE.
- A 4-WAY CONNECTOR OR (2) 3-WAY CONNECTORS WITH SHORT JUMP WIRE ARE REQUIRED AT ALL CROSSINGS.
- TRACER WIRE SHALL BE AS CONTINUOUS AS POSSIBLE. IF SPLICING IS NECESSARY, THE ONLY APPROVED SPLICE METHOD IS A SPLIT BOLT CONNECTOR HOUSED IN A SPLIT BOLT HOUSING.
- ANY DAMAGE OCCURRING DURING INSTALLATION OF THE TRACER WIRE MUST BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE WITH APPROVED CONNECTORS. TAPING AND/OR SPRAY COATING SHALL NOT BE ALLOWED AS A CONNECTION.
- EXPOSED WIRE SHALL BE WRAPPED WITH SCOTCH LINERLESS RUBBER SPLICING TAPE TO SEAL OUT MOISTURE, AND THEN COATED WITH SCOTCH SUPPER 33+ VINYL ELECTRIC TAPE TO SEAL THE RUBBER TAPE.
- TRACER WIRE CAN NOT BE PLACED INSIDE DRAINAGE INLETS.

**TERMINATION/ACCESS:**

- TRACER WIRE SHALL BE BROUGHT ABOVE GROUND AND CONNECT AT EACH INLET AND MANHOLE IN A GRADE LEVEL TRACER WIRE TEST BOX.
- A MINIMUM OF 2-FEET OF EXCESS/SLACK WIRE IS REQUIRED IN ALL TRACER WIRE ACCESS BOXES AFTER MEETING FINAL ELEVATION.
- DRIVE-IN 1.5# MAGNESIUM GROUND RODS (ANODE) WHICH SHALL BE ATTACHED TO THE END OF THE TRACER WIRE.
- TRACER WIRE MUST BE PROPERLY GROUNDING AT ALL DEAD ENDS (INLETS, OUTFALL, ETC.), AND DRIVEN INTO NATIVE SOIL AT PIPE LEVEL.
- TRACER WIRE TERMINATION POINTS MUST UTILIZE A WIRE ACCESS BOX.
- TRACER WIRE ACCESS BOXES MUST INCLUDE A MANUAL INTERRUPTIBLE CONDUCTIVE/CONNECTIVE LINK BETWEEN TERMINAL FOR TRACER WIRE CONNECTION AND TERMINAL FOR GROUND ROD WIRE CONNECTION.
- GROUNDING ANODE WIRE AND 1.5# MAGNESIUM GROUND ROD WIRE SHALL BE CONNECTED TO THE IDENTIFIED LOCATION (BOTTOM) TERMINAL IN ALL ACCESS BOXES.
- ALL SERVICE LATERAL TRACER WIRE MUST BE PROPERLY CONNECTED TO THE MAINLINE TRACER WIRE TO ENSURE FULL TRACING/LOCATING CAPABILITIES FROM A SINGLE CONNECTION POINT.
- TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, BY-PASSING AROUND THE OUTSIDE OF MANHOLES/STRUCTURES ON THE NORTH OR EAST SIDE, UNLESS ON THE END SECTION.
- ALL NEW TRACER WIRE INSTALLATIONS SHALL BE TESTED AND LOCATED PRIOR TO ACCEPTANCE. TESTING AND LOCATING SHALL BE PERFORMED BY A THIRD PARTY AT THE COMPLETION OF ROUGH GRADING AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO FINAL ACCEPTANCE.
- WHEN REPAIRS ARE PERFORMED ON STORMWATER LINE, TRACER WIRE SHALL BE TESTED PRIOR TO FINAL ACCEPTANCE.

**GENERAL NOTES:**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT CITY OF COLORADO SPRINGS ENGINEERING DIVISION (THE CITY) STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS (EXCAVATION, CONCRETE, TRAFFIC CONTROL, ETC.), AND NOTIFY THE CITY BY 1500 HOURS THE BUSINESS DAY BEFORE INSPECTION IS REQUIRED.
- DO NOT BACKFILL INLETS PRIOR TO ONE-POUND ANODE AND 1.5# MAGNESIUM GROUND ROD INSTALLATION.

**TRACER WIRE:**

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**TRACER WIRE GENERAL NOTES**

APPROVED: [Signature] DATE: 5/16/19

**TYPICAL CURB INLET PLAN**

**TYPICAL CURB INLET SECTION**

**INLET OR MANHOLE LOCATED IN PAVED SURFACE**

**TRACER WIRE AT STORM SEWER LATERALS**

APPROVED: [Signature] DATE: 5/16/19

**TRACER WIRE SAMPLE STORM SEWER PLAN**

APPROVED: [Signature] DATE: 5/16/19

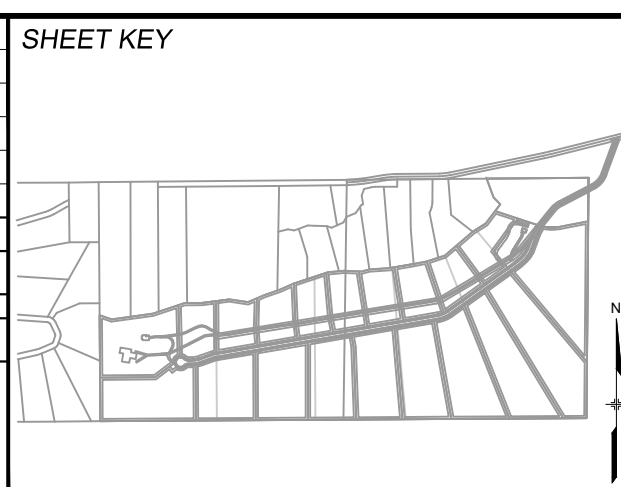
**TRACER WIRE AT STORM SEWER MANHOLE**

APPROVED: [Signature] DATE: 5/16/19

**TRACER WIRE SPLICE DETAIL**

APPROVED: [Signature] DATE: 5/16/19

No.	DATE	DESCRIPTION	BY
<b>REVISIONS</b>			
<b>COMPUTER FILE MANAGEMENT</b>			
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CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:48 AM			
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PREPARED BY:

**Matrix**  
Excellence by Design

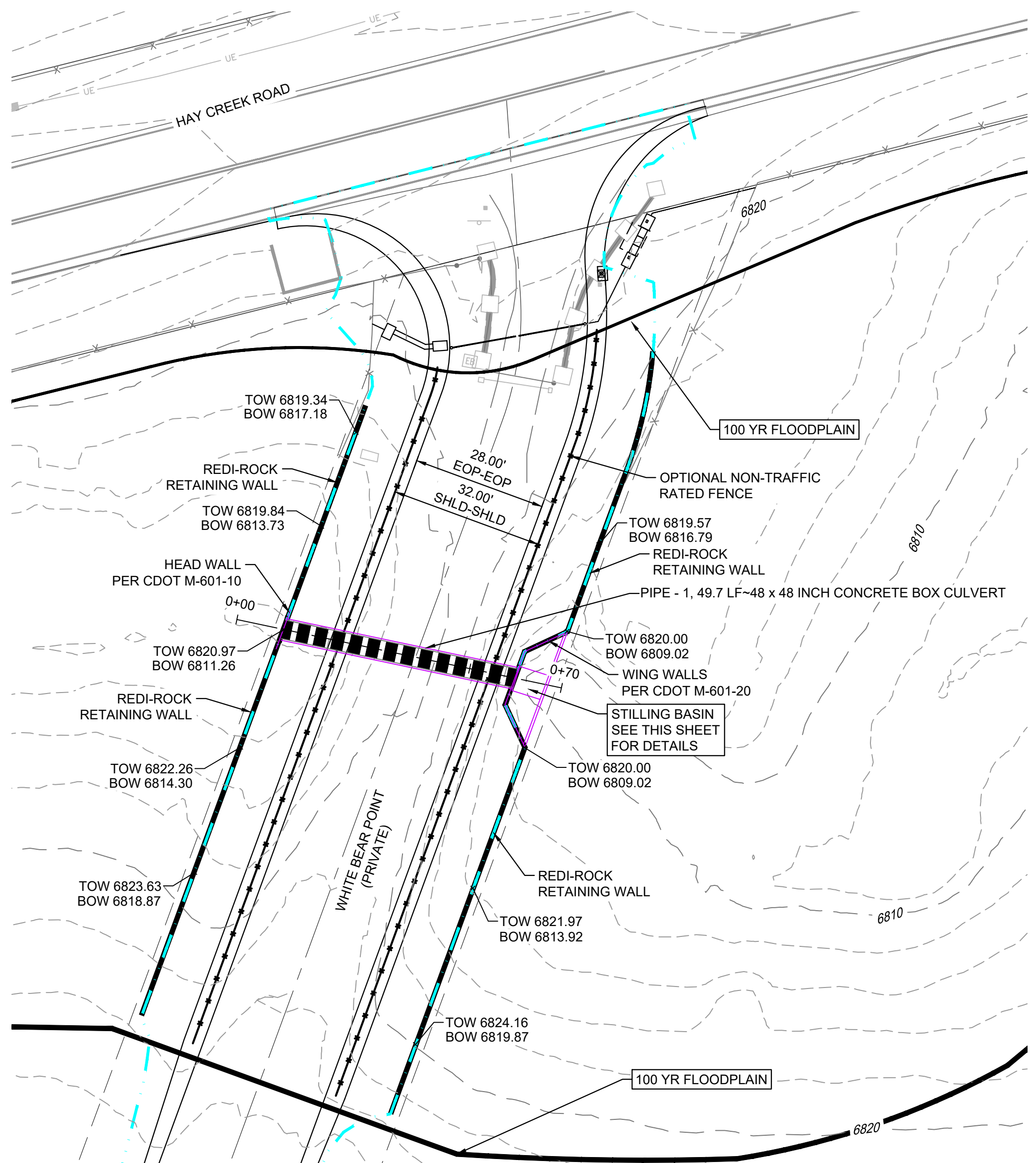
SEAL

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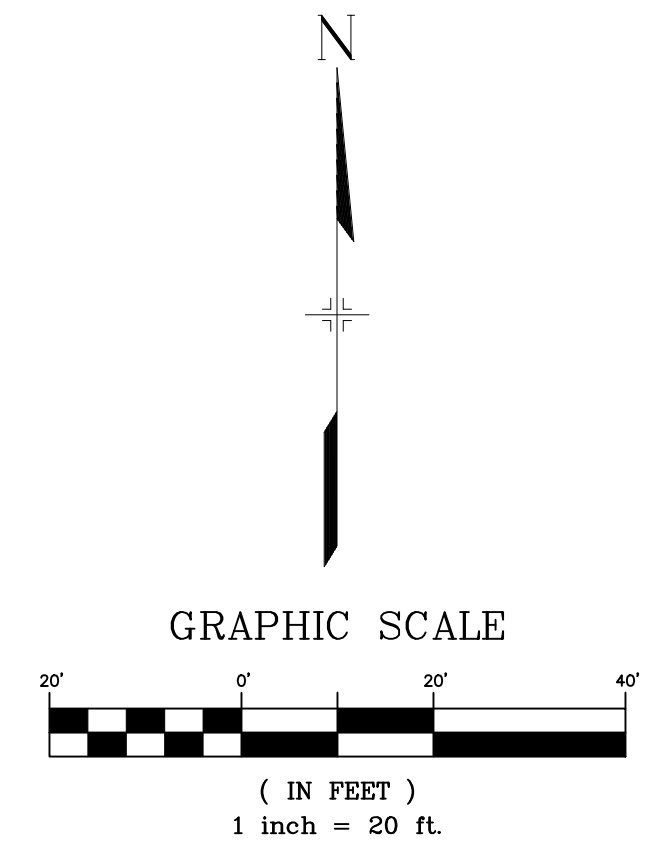
**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**STORM DRAIN GENERAL NOTES & DETAILS**

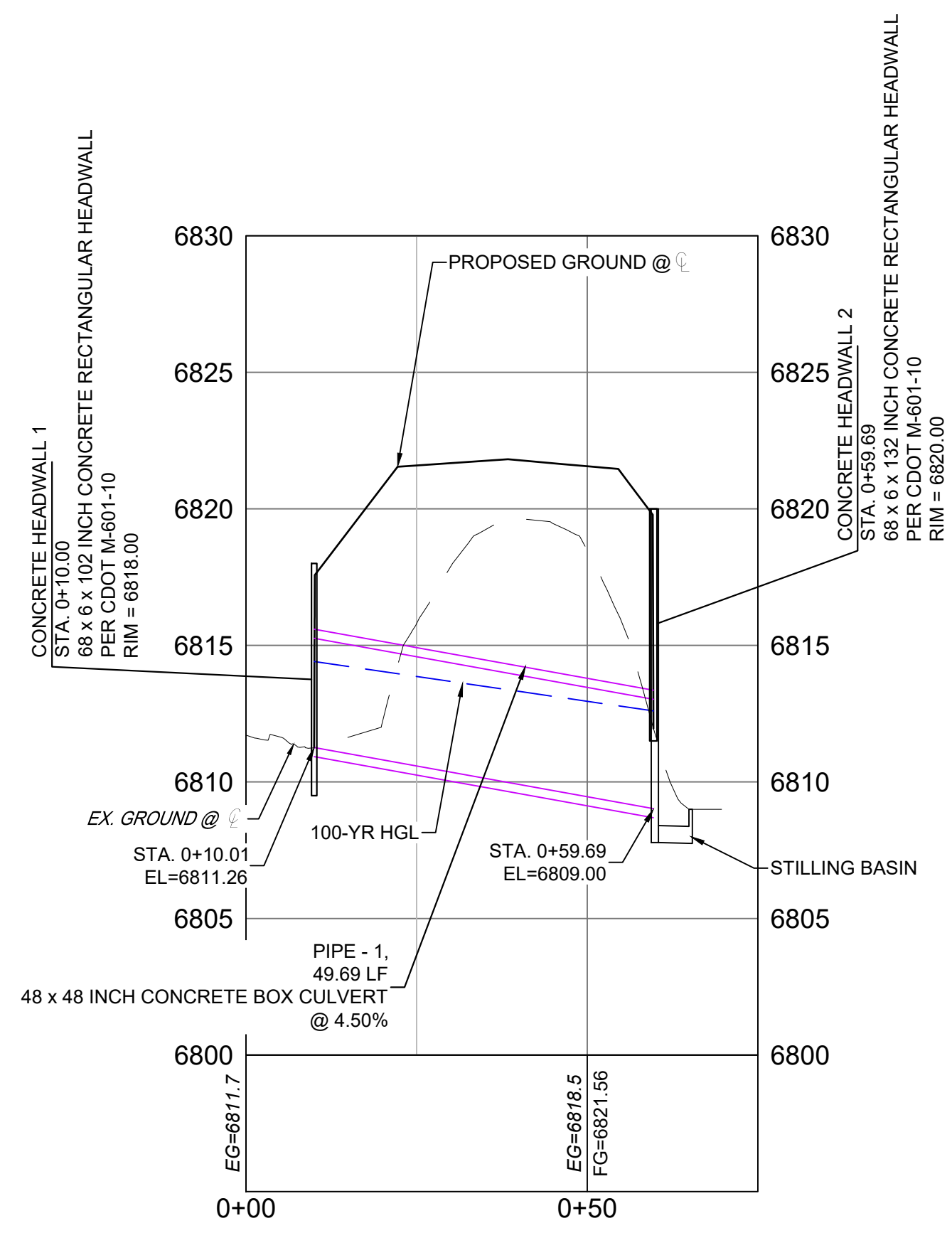
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	VERT. N/A	SHEET	



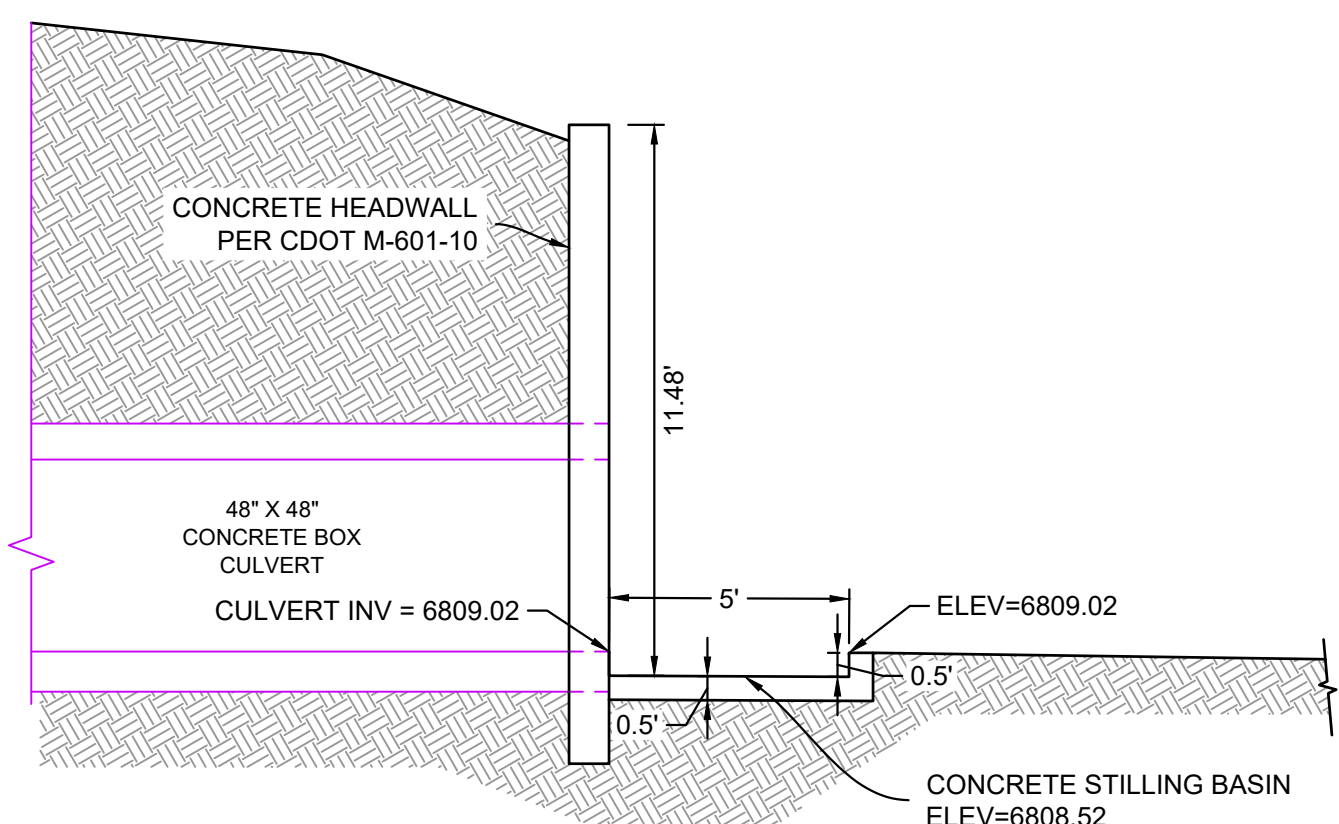
WHITE BEAR POINT CULVERT PLAN



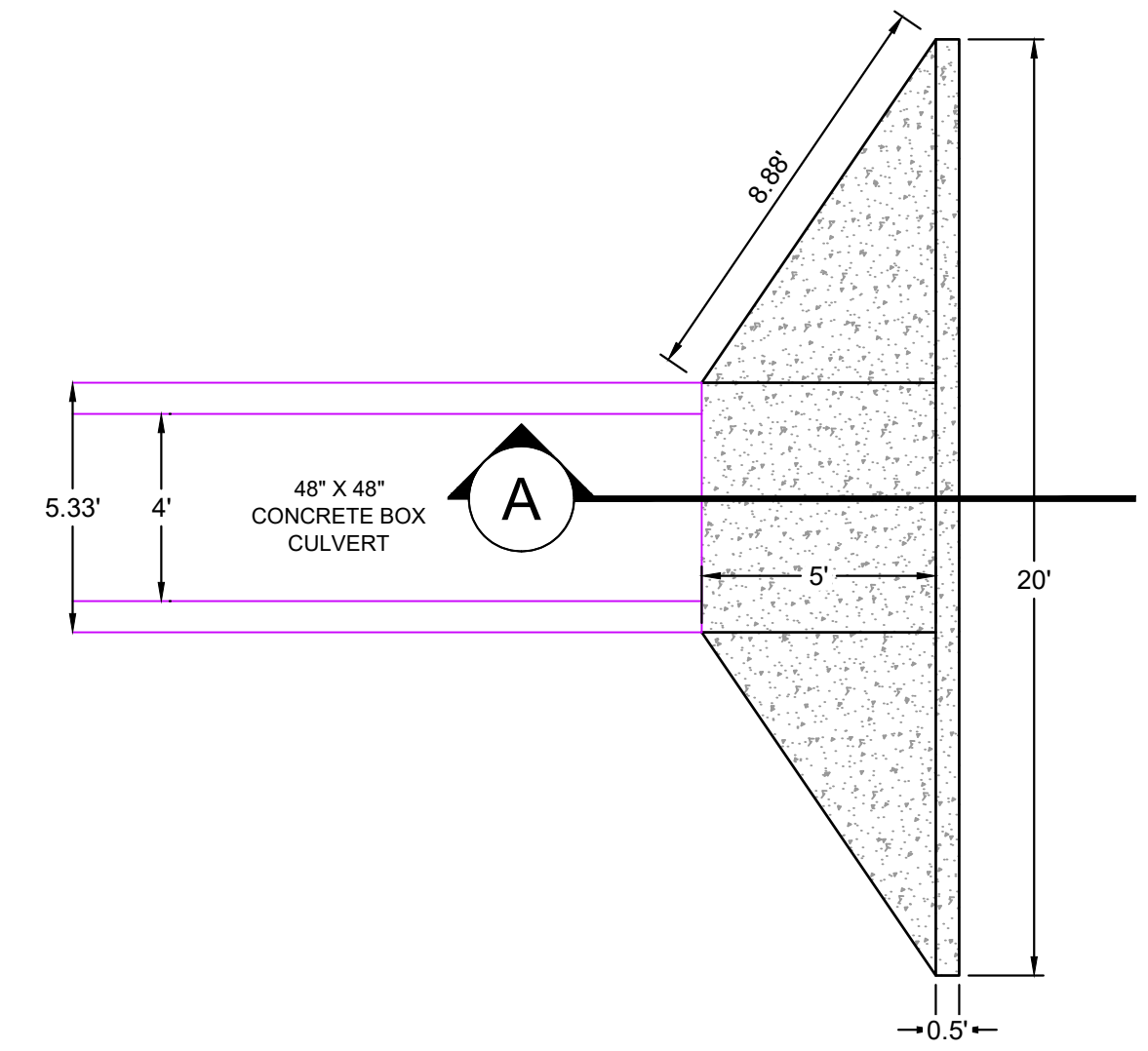
PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
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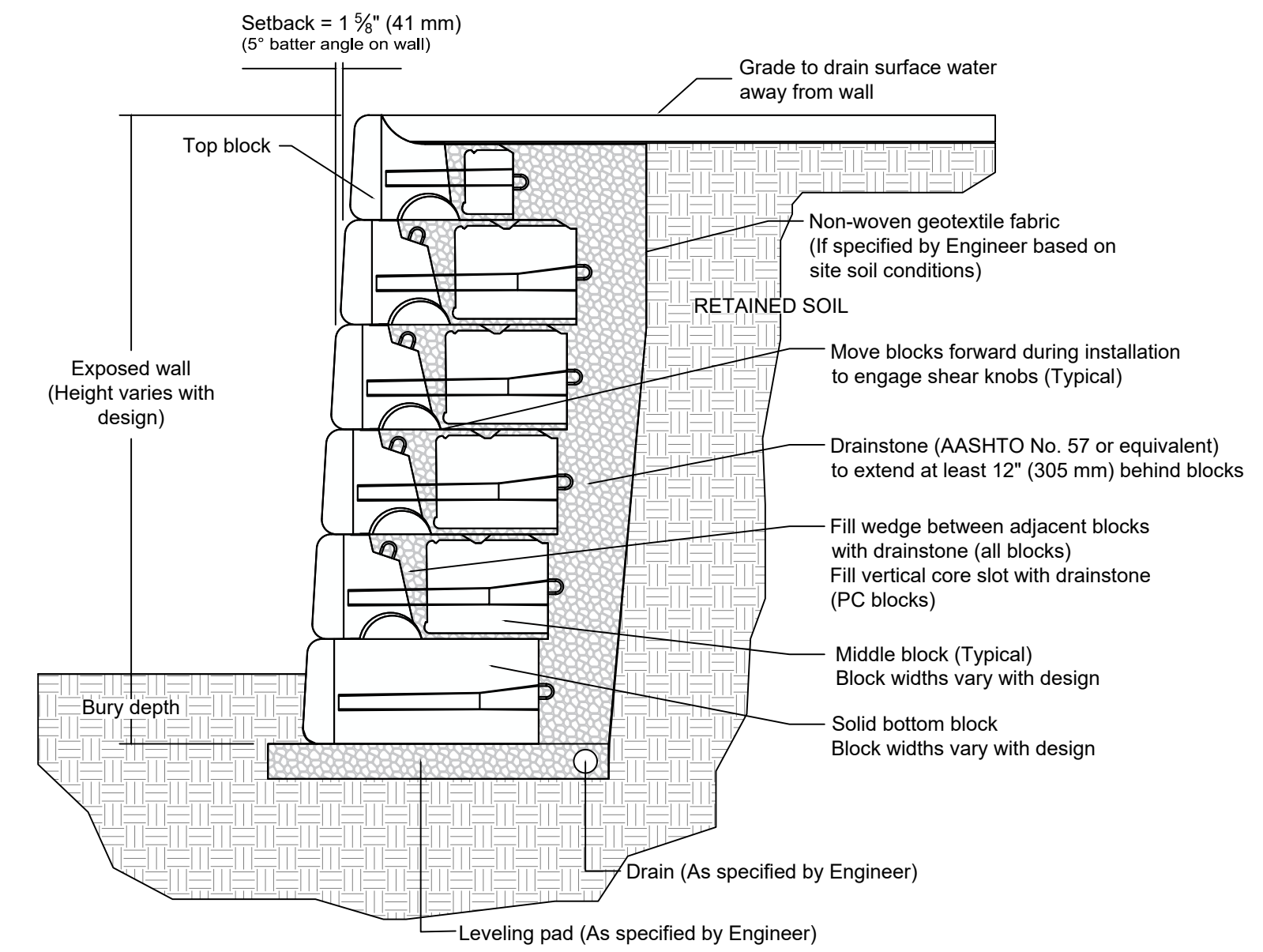
Alignment - HAY CREEK CULVERT PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+00.00, END STA: 0+75.00



SECTION A  
H: 1" = 4'



STILLING BASIN  
H: 1" = 4'



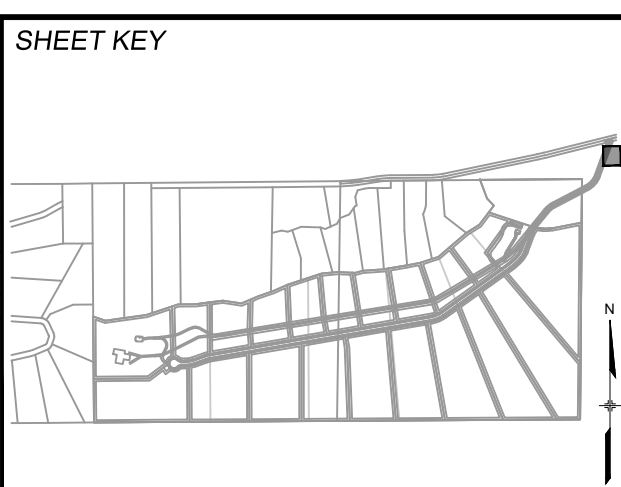
REDI ROCK RETAINING WALL SECTION  
NOT TO SCALE

This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

- NOTES:
1. ALL STATION, OFFSET, AND NORTHING/EASTING VALUES ARE TO THE CENTER OF ALL STRUCTURES UNLESS OTHERWISE NOTED.
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  10. THIS PLAN SET PROVIDES WALL ELEVATIONS AND EXPOSED WALL HEIGHTS. STRUCTURAL DESIGN IS NOT INCLUDED AS PART OF THIS PLAN SET.

PCD FILE #: SF2324

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:48 AM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			



BENCHMARK  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

BASIS OF BEARING  
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25985 C1/4 S22 T15S, R65W 1999," AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000," BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

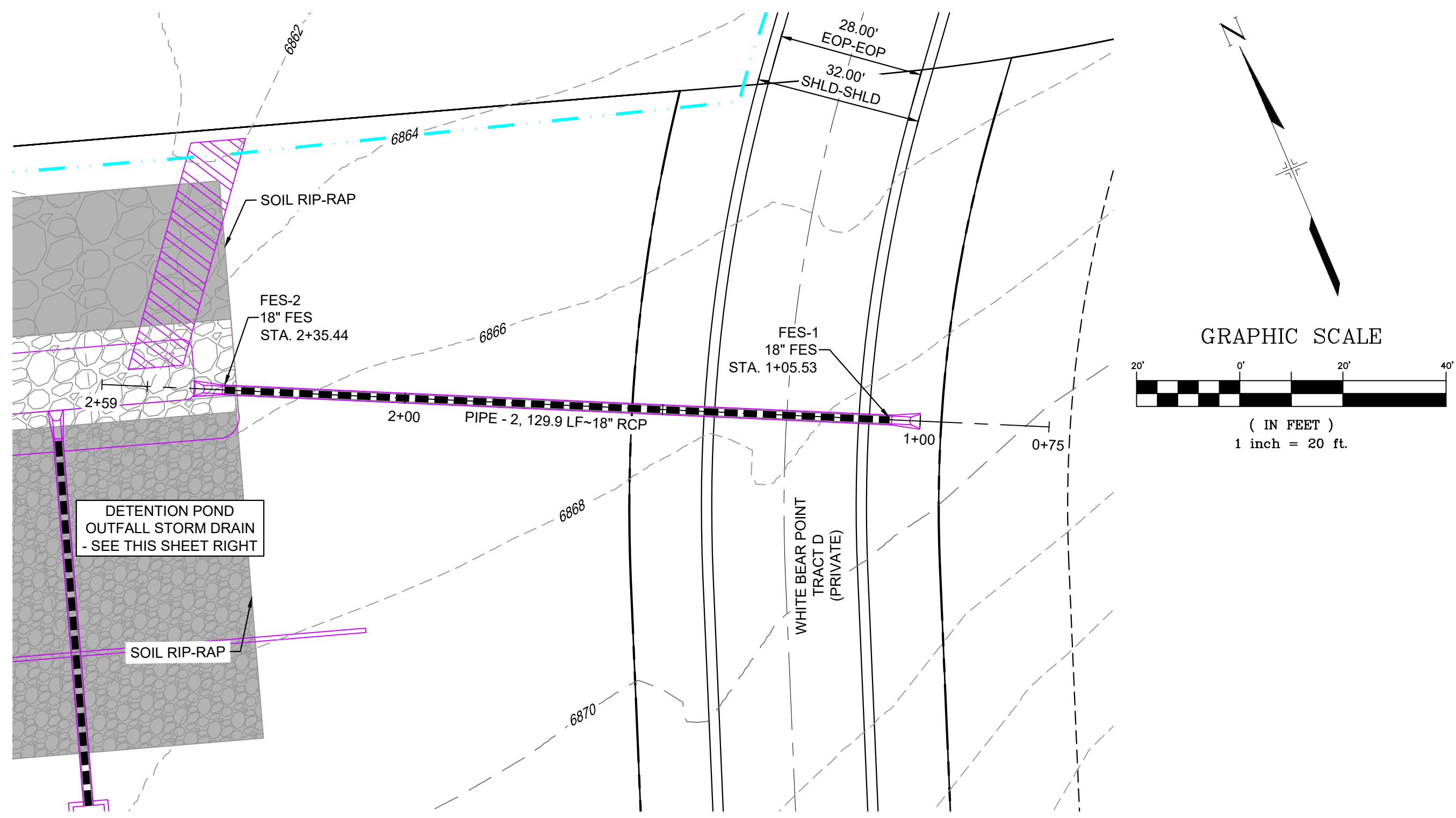
PREPARED BY:  
**Matrix**  
Excellence by Design



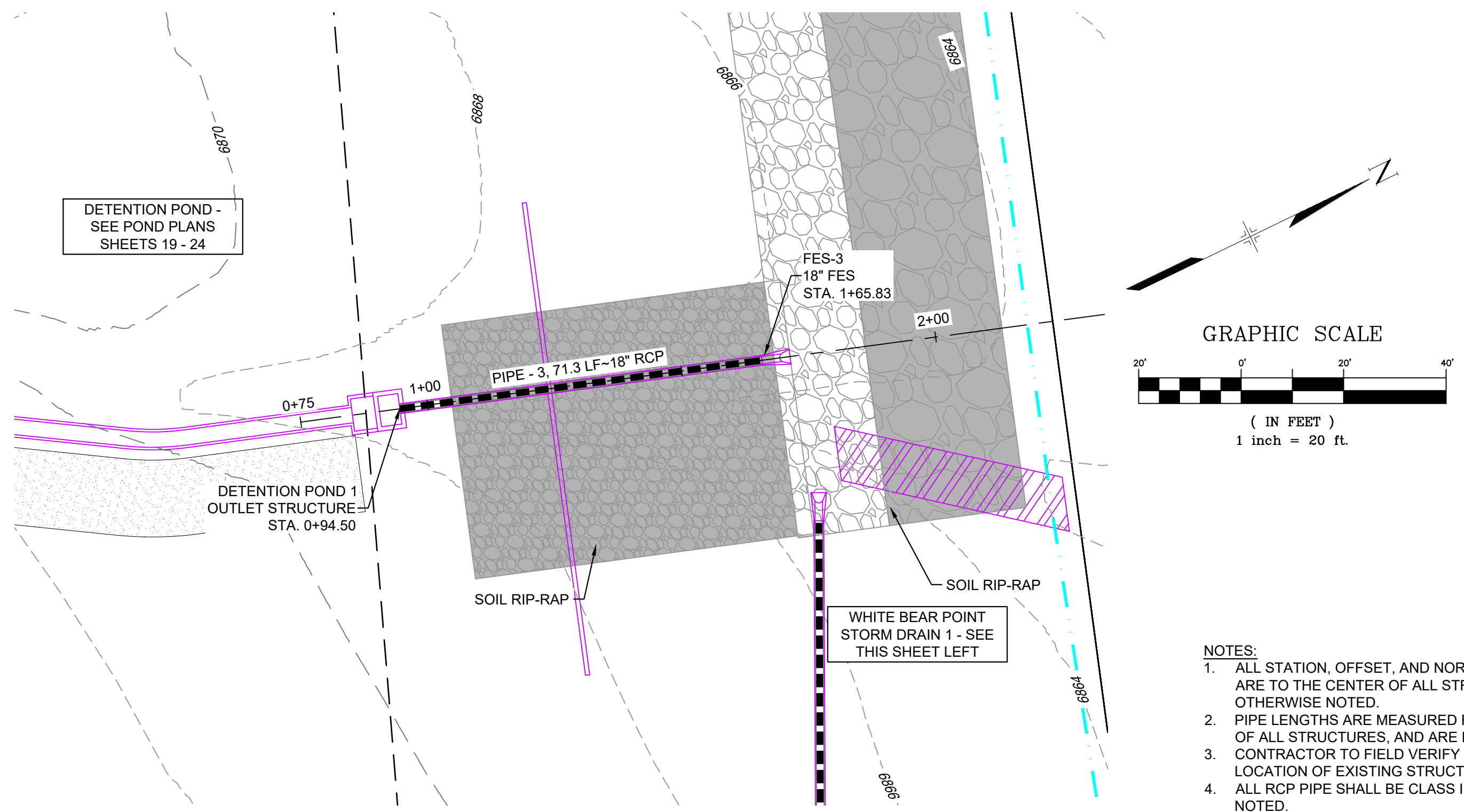
**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**STORM DRAIN PLAN & PROFILE**

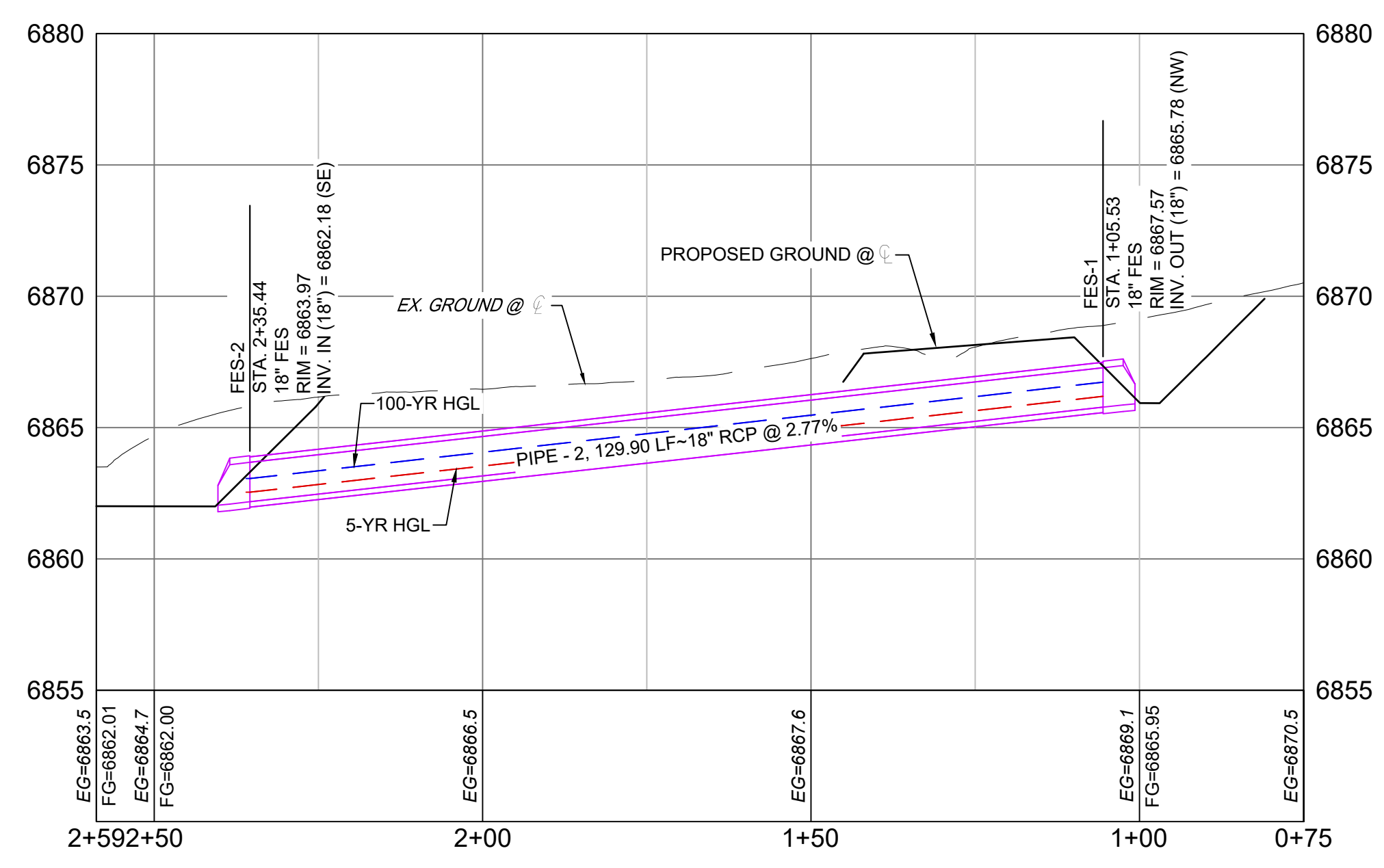
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DRAWN BY: RWO	VERT. 1"=5'	SHEET 14 OF 26	
CHECKED BY: JAO			



WHITE BEAR POINT STORM DRAIN 1 PLAN



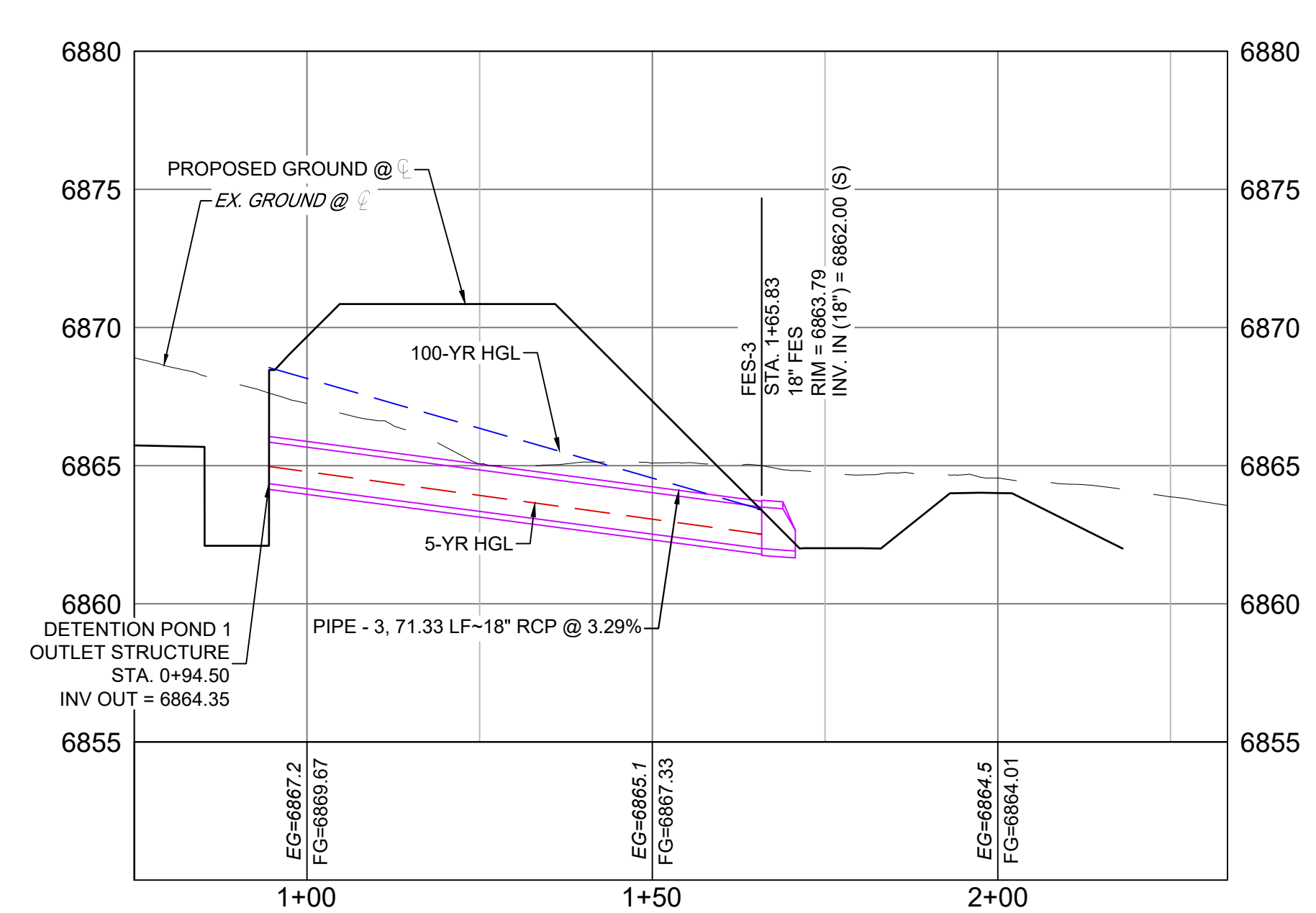
DETENTION POND OUTFALL STORM DRAIN PLAN



WHITE BEAR POINT STORM DRAIN 1 PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+75.00, END STA: 2+58.82

PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 2	18" RCP	2.77%	129.90	N64°28'08"W

STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES-1	18" FES	RIM = 6867.569 PIPE - 2 INV OUT (18") = 6865.778	N: 443481.74 E: 177430.74
FES-2	18" FES	RIM = 6863.972 PIPE - 2 INV IN (18") = 6862.180	N: 443517.73 E: 177313.52



DETENTION POND OUTFALL STORM DRAIN PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+75.00, END STA: 2+33.26

PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 3	18" RCP	3.29%	71.33	N18°12'29"E

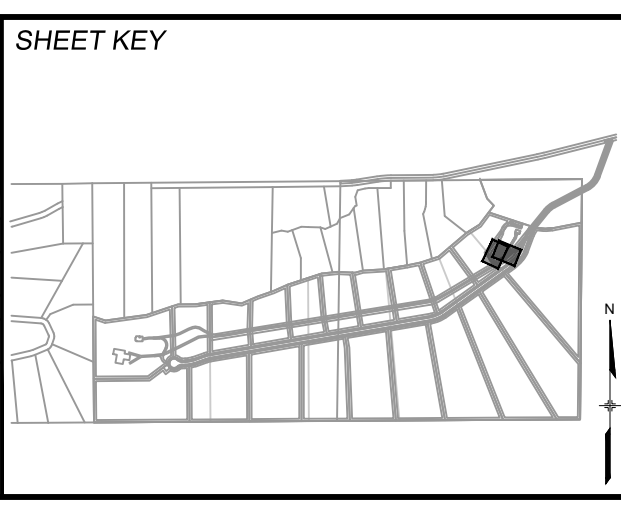
STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES-3	18" FES	RIM = 6863.792 PIPE - 3 INV IN (18") = 6862.000	N: 443521.42 E: 177280.49

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  6. MANHOLES SHALL BE INSTALLED 1/8" BELOW THE SURFACE OF THE PAVEMENT ON THE LOWEST SIDE OF THE MANHOLE, OR IN ACCORDANCE WITH THE GOVERNING CRITERIA.
  7. ALL STORM SEWER IS PUBLIC UNLESS OTHERWISE NOTED.
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  9. JOINT FASTENERS TO BE INSTALLED ON ALL FLARED END SECTIONS AND 2 PIPE SECTIONS LEADING DOWN TO FLARED END SECTIONS.

REFERENCE DRAWINGS

- X-886-066-EX-MAP-1 184022-01 Hay Creek Road BNDY
- X-886-PR-SITE
- X-TITLE-CD
- X-886-ALTA-SURVEY new block

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:48 AM			
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BENCHMARK  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

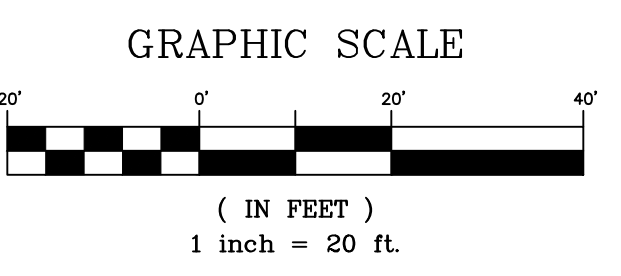
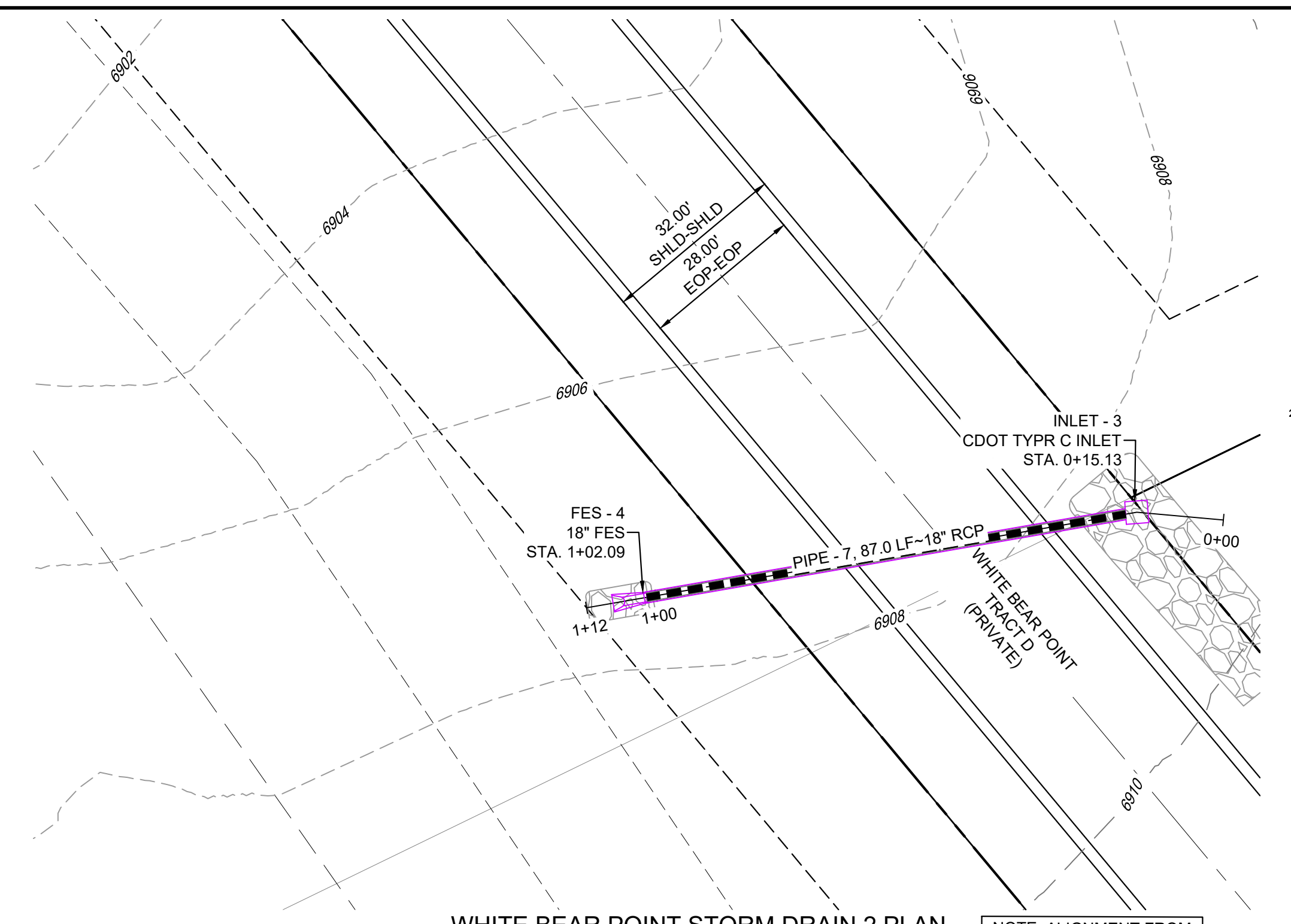
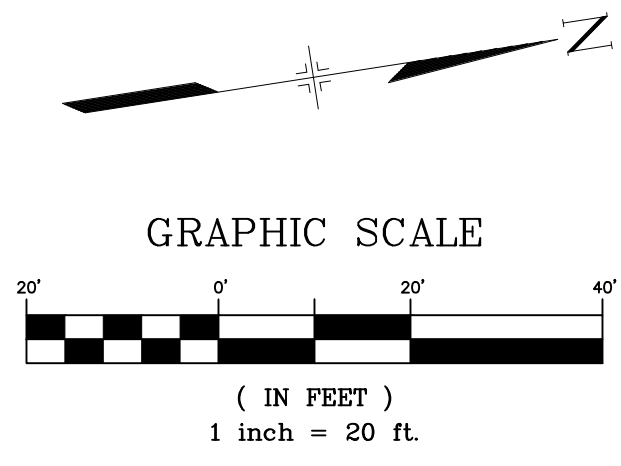
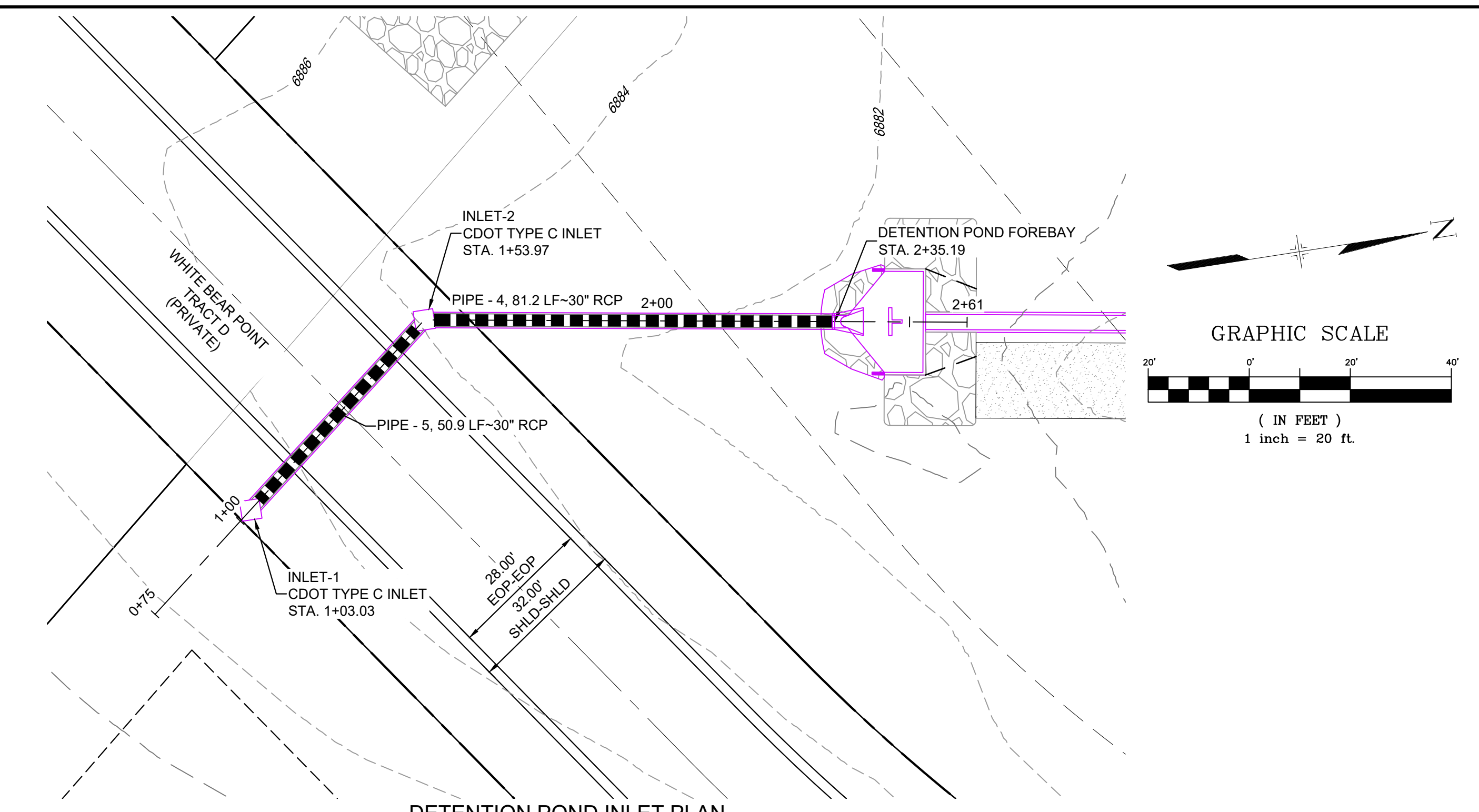
BASIS OF BEARING  
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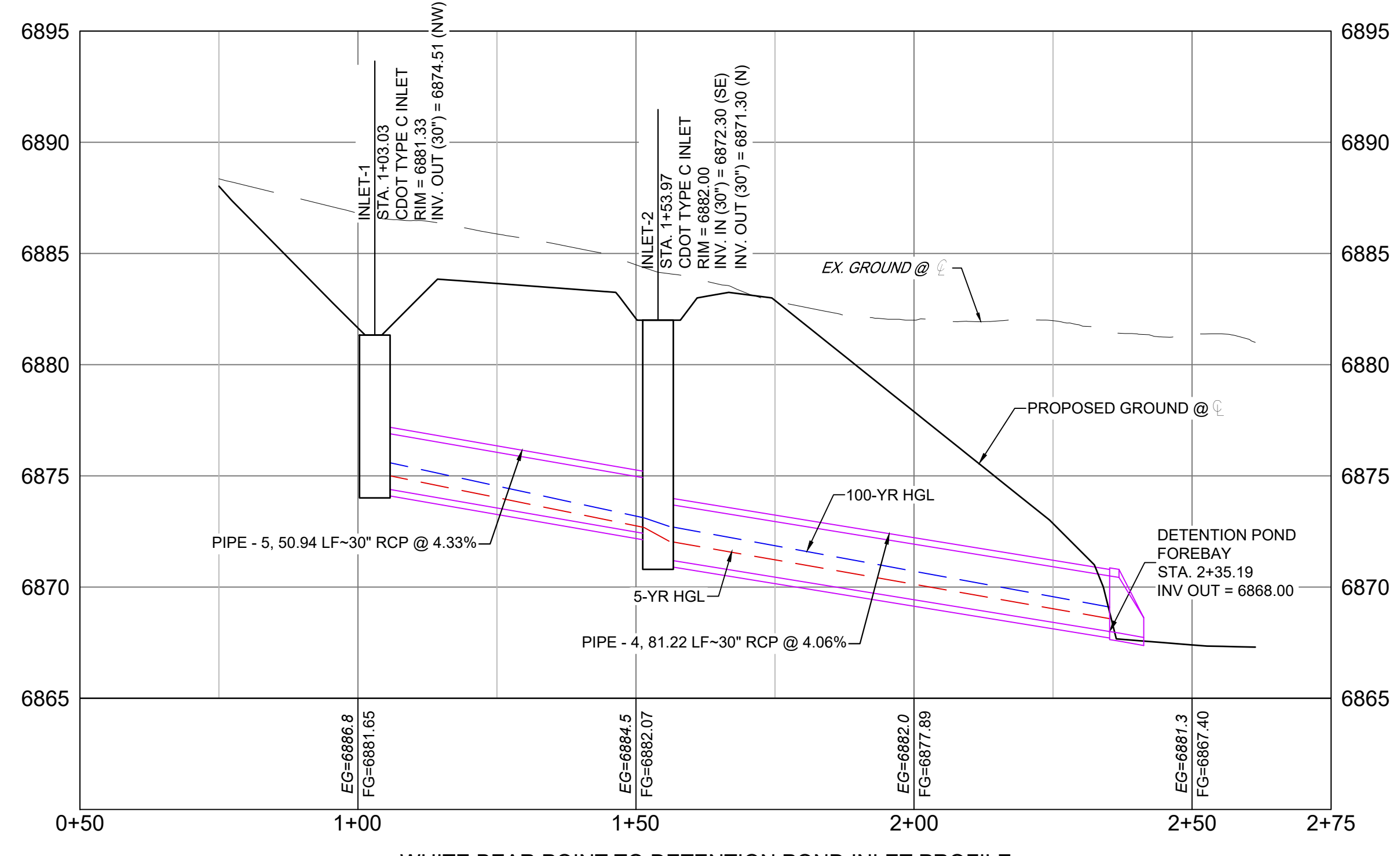
HAY CREEK VALLEY  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

STORM DRAIN PLAN & PROFILE

DESIGNED BY: WCG	SCALE: 1"=20'	DATE ISSUED: MAY 2024	DRAWING No. SD02
CHECKED BY: JAO	HORIZ. 1"=20'	SHEET 15 OF 26	
	VERT. 1"=5'		

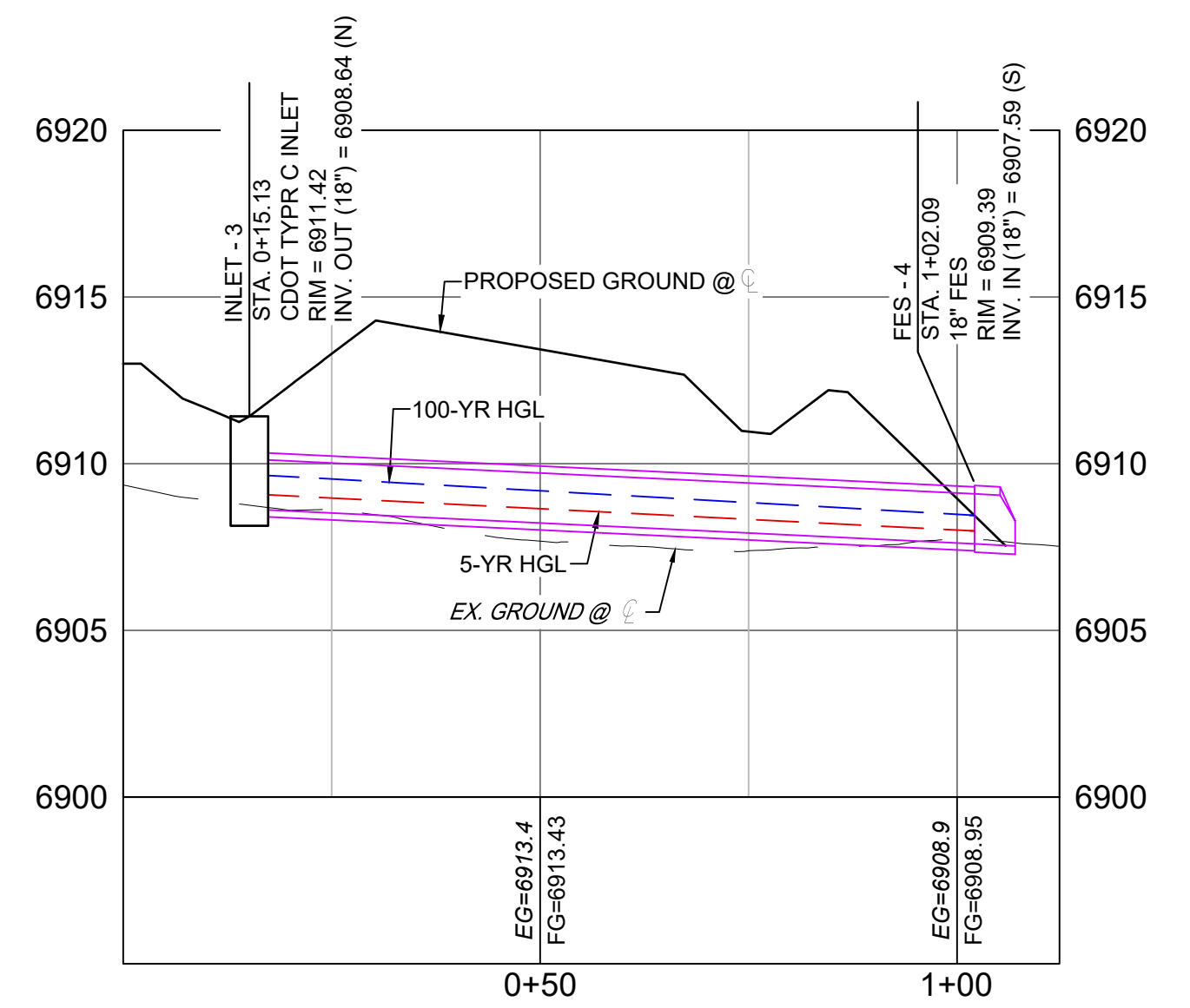


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  9. JOINT FASTENERS TO BE INSTALLED ON ALL FLARED END SECTIONS AND 2 PIPE SECTIONS LEADING DOWN TO FLARED END SECTIONS.



PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 4	30" RCP	4.06%	81.22	N09°03'48"E
PIPE - 5	30" RCP	4.33%	50.94	N38°44'13"W

STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
INLET-1	CDOT TYPE C INLET	RIM = 6881.330 PIPE - 5 INV OUT (30") = 6874.508	N: 443030.80 E: 177140.29
INLET-2	CDOT TYPE C INLET	RIM = 6882.000 PIPE - 5 INV IN (30") = 6872.300 PIPE - 4 INV OUT (30") = 6871.297	N: 443070.53 E: 177108.42



PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 7	18" RCP	1.20%	86.96	N05°34'40"W

STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 4	18" FES	RIM = 6908.385 PIPE - 7 INV IN (18") = 6907.594	N: 442738.25 E: 176605.10
INLET - 3	CDOT TYPR C INLET	RIM = 6911.419 PIPE - 7 INV OUT (18") = 6908.637	N: 442651.70 E: 176613.56

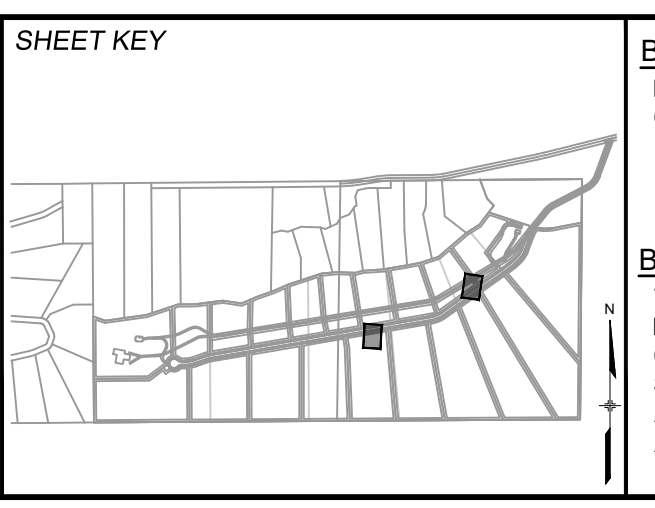
**REFERENCE DRAWINGS**

X-886-066-EX-MAP-1  
 184022-01 Hay Creek Road BNDY  
 X-886-PR-SITE  
 X-TITLE-CD  
 X-886-ALTA-SURVEY  
 new block

No.	DATE	DESCRIPTION	BY
REVISIONS			

**COMPUTER FILE MANAGEMENT**

FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg  
 CTB FILE: Matrix.ctb  
 PLOT DATE: 5/29/2024 9:48 AM  
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PREPARED BY:

**Matrix**  
 Excellence by Design

SEAL  
 COLORADO LICENSED PROFESSIONAL ENGINEER  
 WYF/RS  
 16265  
 05/29/2024

FOR AND ON BEHALF OF  
 MATRIX DESIGN GROUP, INC.  
 PROJECT No. 22.886.076

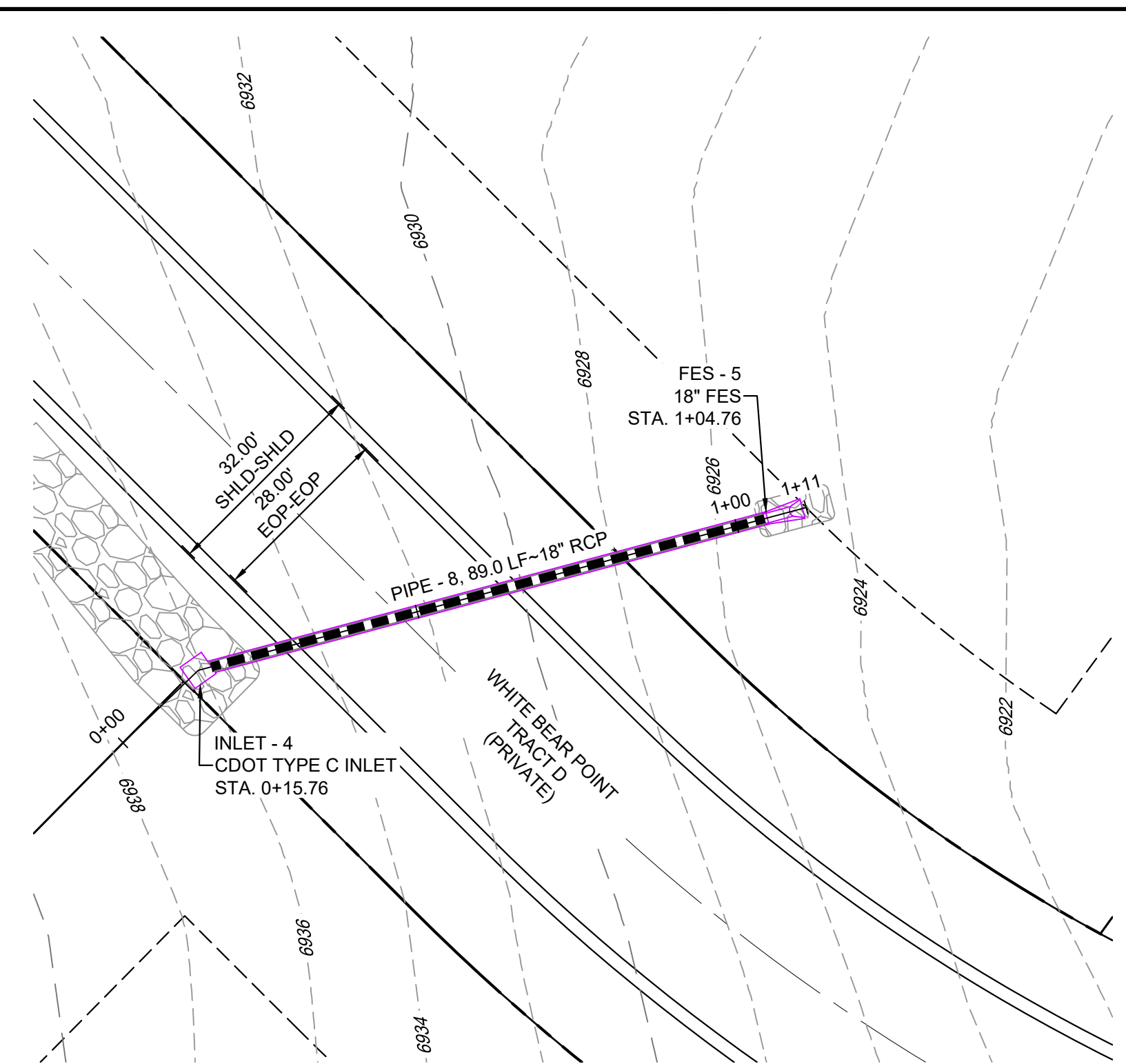
**HAY CREEK VALLEY**  
 EL PASO COUNTY, COLORADO  
 CONSTRUCTION DOCUMENTS

**STORM DRAIN PLAN & PROFILE**

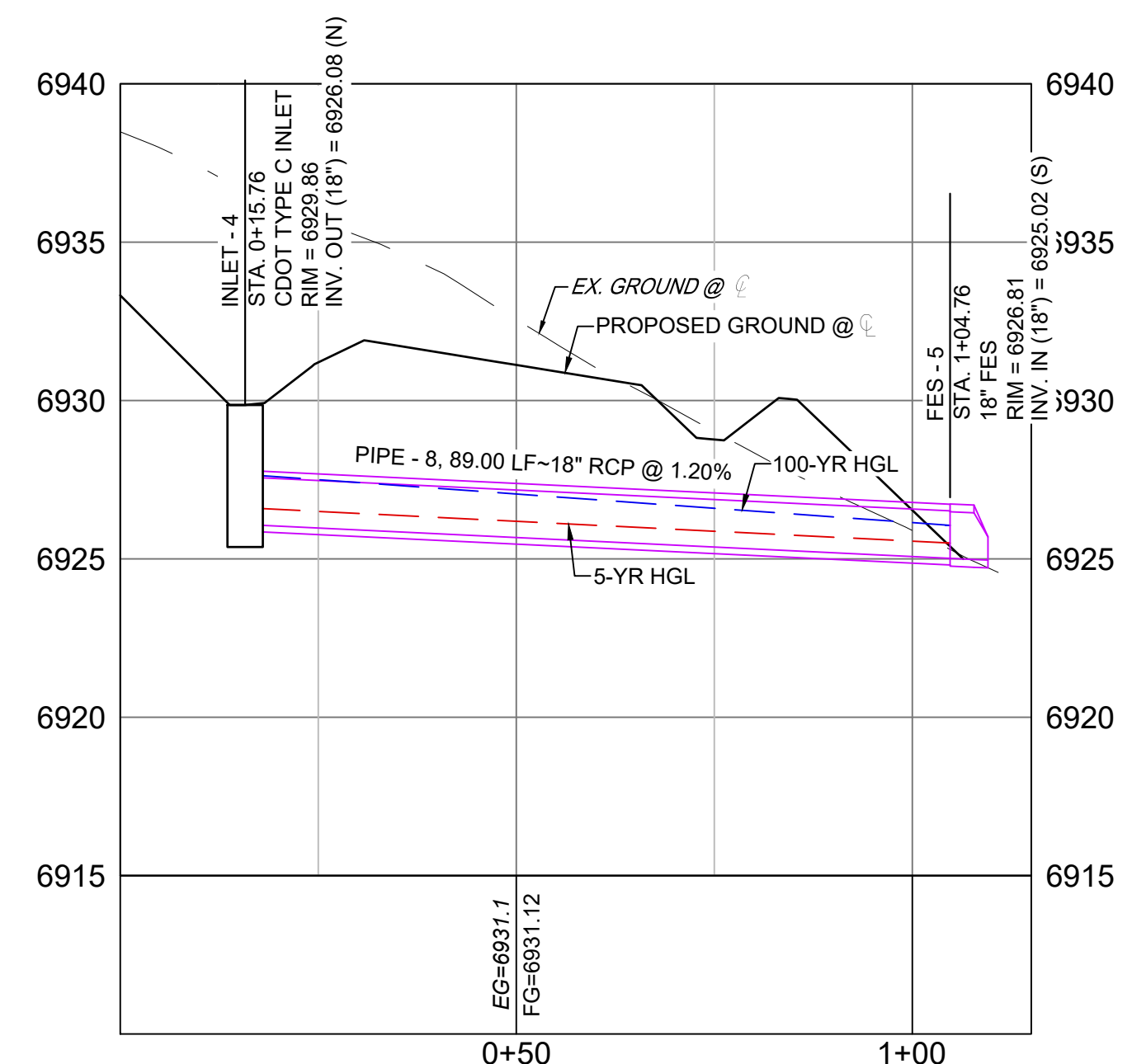
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CHECKED BY: JAO	SHEET		

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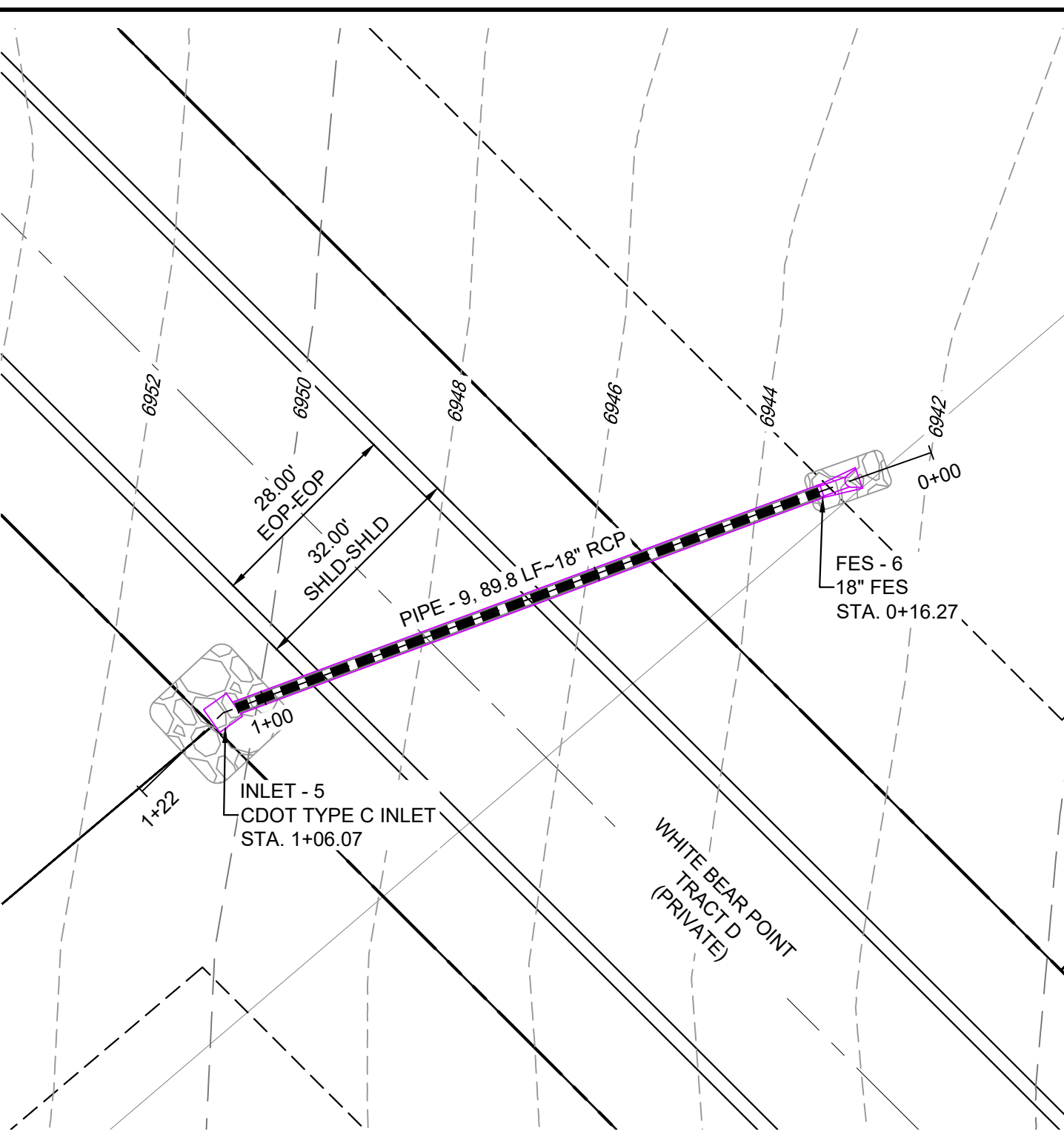




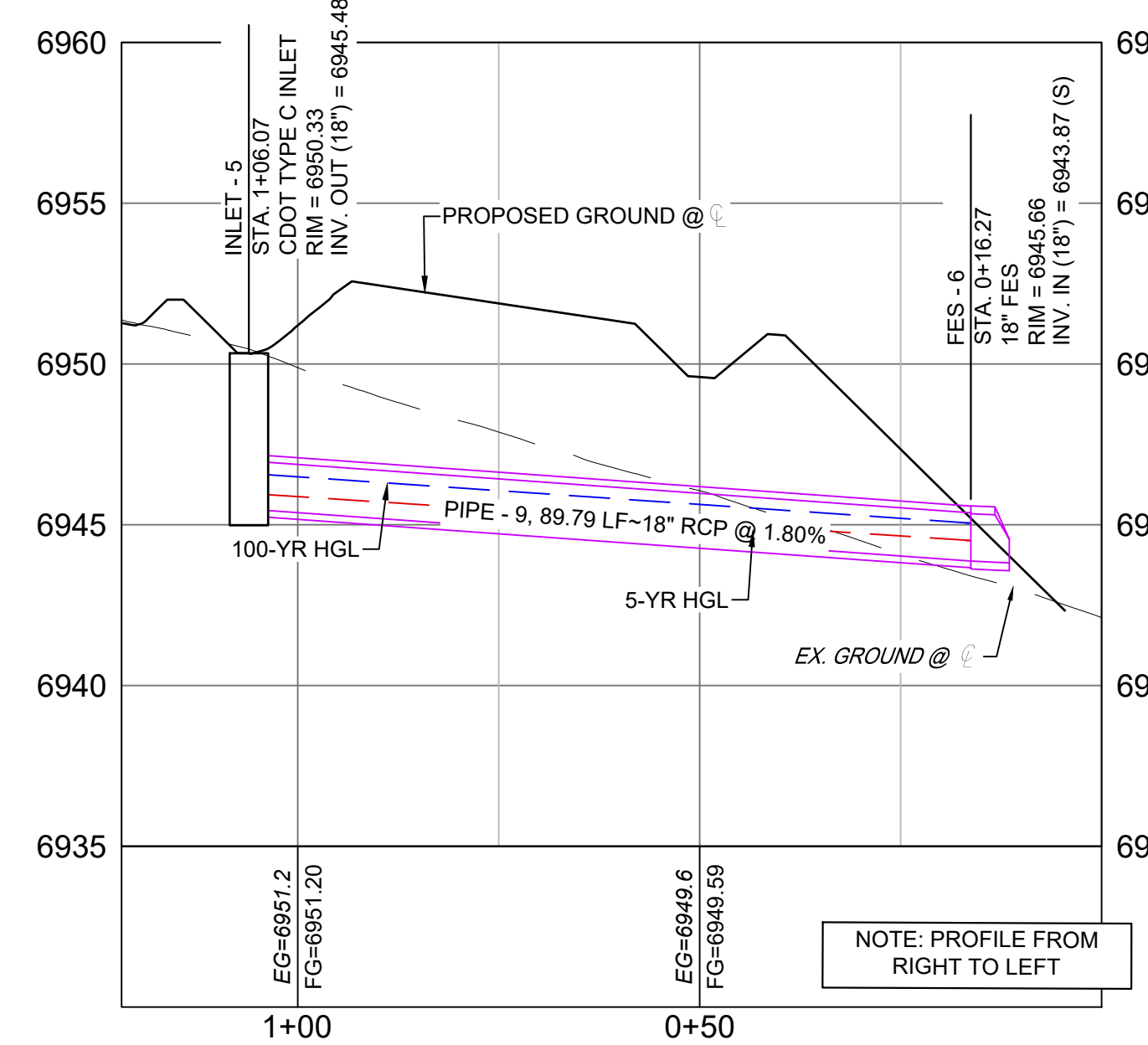
WHITE BEAR POINT STORM DRAIN 3 PLAN



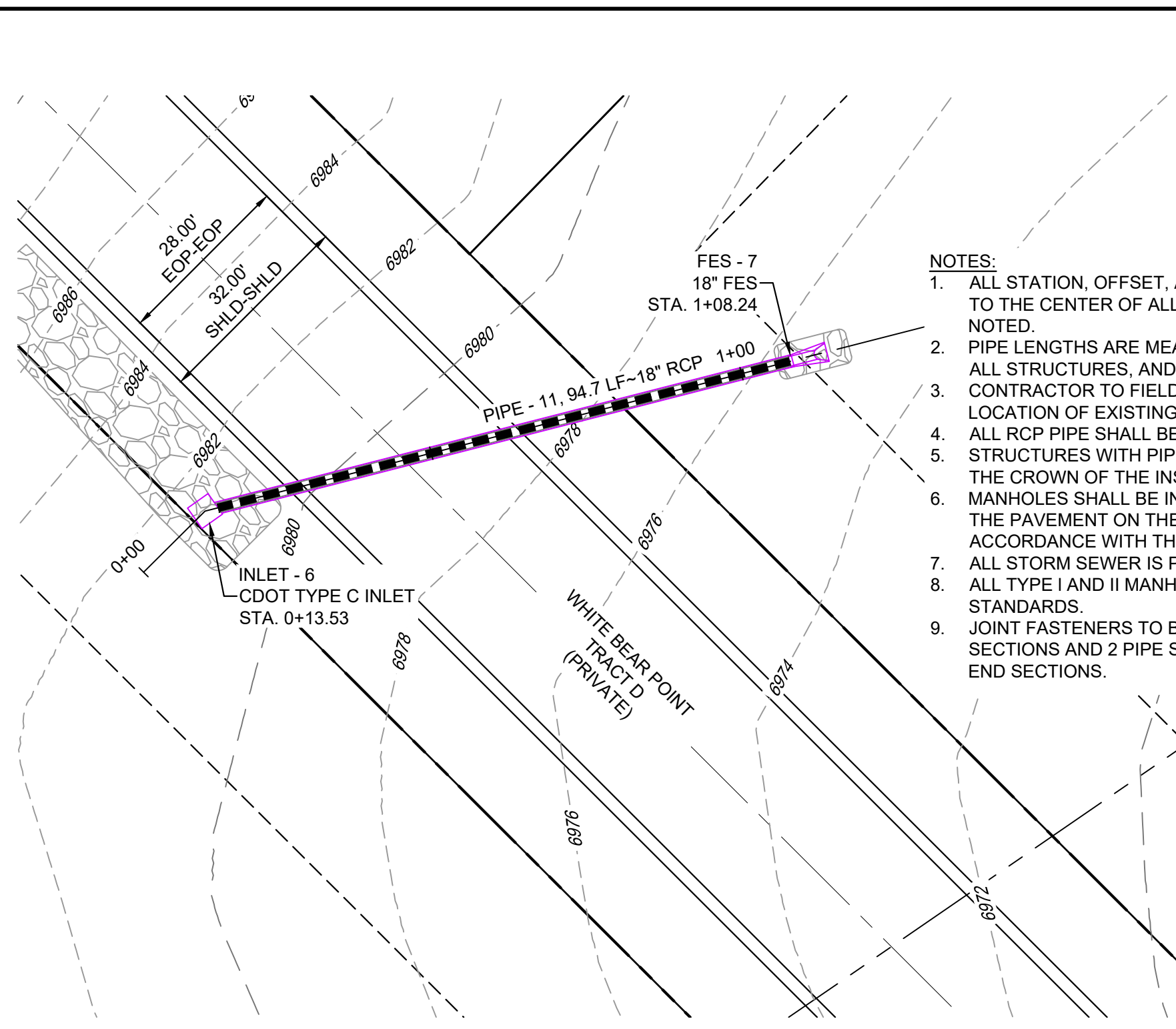
WHITE BEAR POINT STORM 3 PROFILE  
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START STA: 0+00.00, END STA: 1+15.00



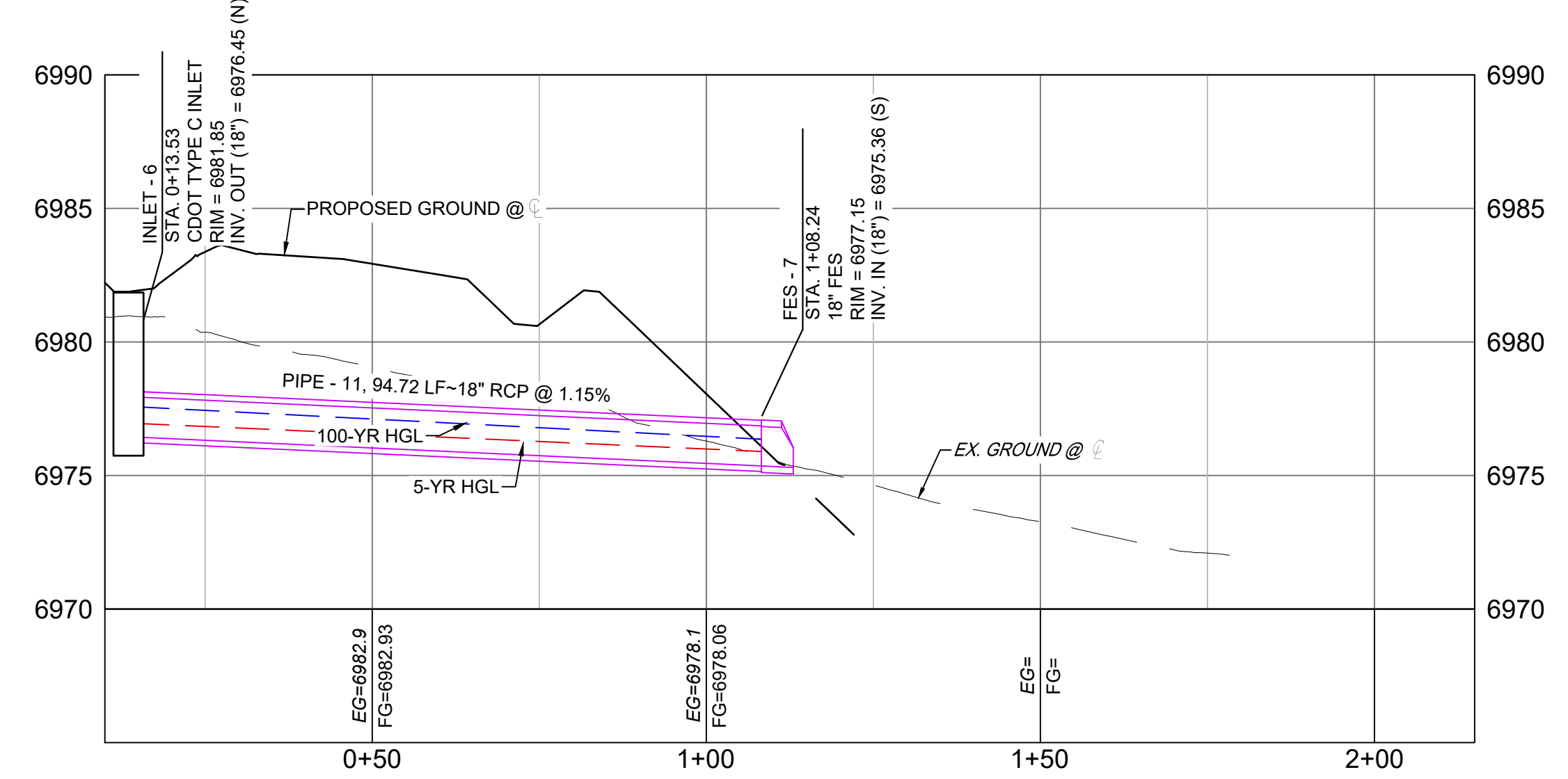
WHITE BEAR POINT STORM DRAIN 4 PLAN



WHITE BEAR POINT STORM 4 PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+00.00, END STA: 1+21.91



WHITE BEAR POINT STORM DRAIN 5 PLAN



WHITE BEAR POINT STORM 5 PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+10.00, END STA: 2+15.00

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PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 8	18" RCP	1.20%	89.00	N20°14'51"E

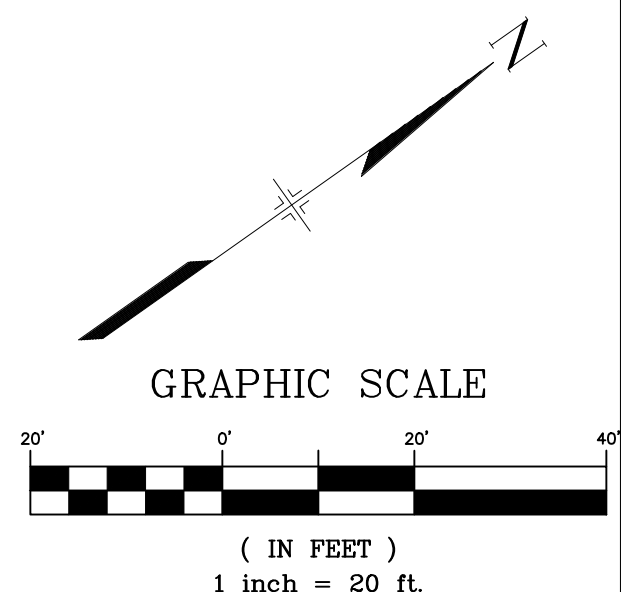
STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 5	18" FES	RIM = 6926.807 PIPE - 8 INV IN (18") = 6925.016	N: 442563.81 E: 176309.15
INLET - 4	CDOT TYPE C INLET	RIM = 6929.861 PIPE - 8 INV OUT (18") = 6926.084	N: 442480.31 E: 176278.35

PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 9	18" RCP	1.80%	89.79	N14°56'27"E

STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 6	18" FES	RIM = 6945.660 PIPE - 9 INV IN (18") = 6943.869	N: 442491.78 E: 175865.24
INLET - 5	CDOT TYPE C INLET	RIM = 6950.331 PIPE - 9 INV OUT (18") = 6945.483	N: 442405.02 E: 175842.09

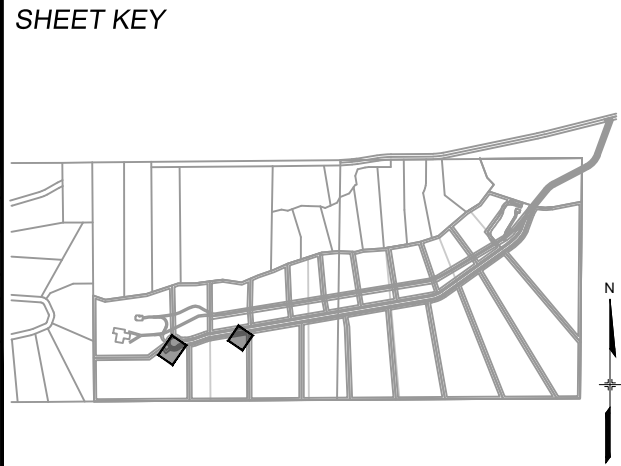
PIPE SUMMARY TABLE				
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 11	18" RCP	1.15%	94.72	N20°54'21"E

STRUCTURE TABLE			
STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 7	18" FES	RIM = 6977.149 PIPE - 11 INV IN (18") = 6975.358	N: 442378.97 E: 175209.32
INLET - 6	CDOT TYPE C INLET	RIM = 6981.850 PIPE - 11 INV OUT (18") = 6976.450	N: 442290.49 E: 175175.52



PCD FILE #: SF2324

<p>REFERENCE DRAWINGS</p> <p>X-886-066-EX-MAP-1 184022-01 Hay Creek Road BNDY X-886-PR-SITE X-TITLE-CD X-886-ALTA-SURVEY new block</p>	<table border="1"> <thead> <tr> <th>No.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">REVISIONS</td> </tr> </tbody> </table>	No.	DATE	DESCRIPTION	BY	REVISIONS			
No.	DATE	DESCRIPTION	BY						
REVISIONS									
<p>COMPUTER FILE MANAGEMENT</p> <p>FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg CTB FILE: Matrix.ctb PLOT DATE: 5/29/2024 9:48 AM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.</p>									



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PREPARED BY:

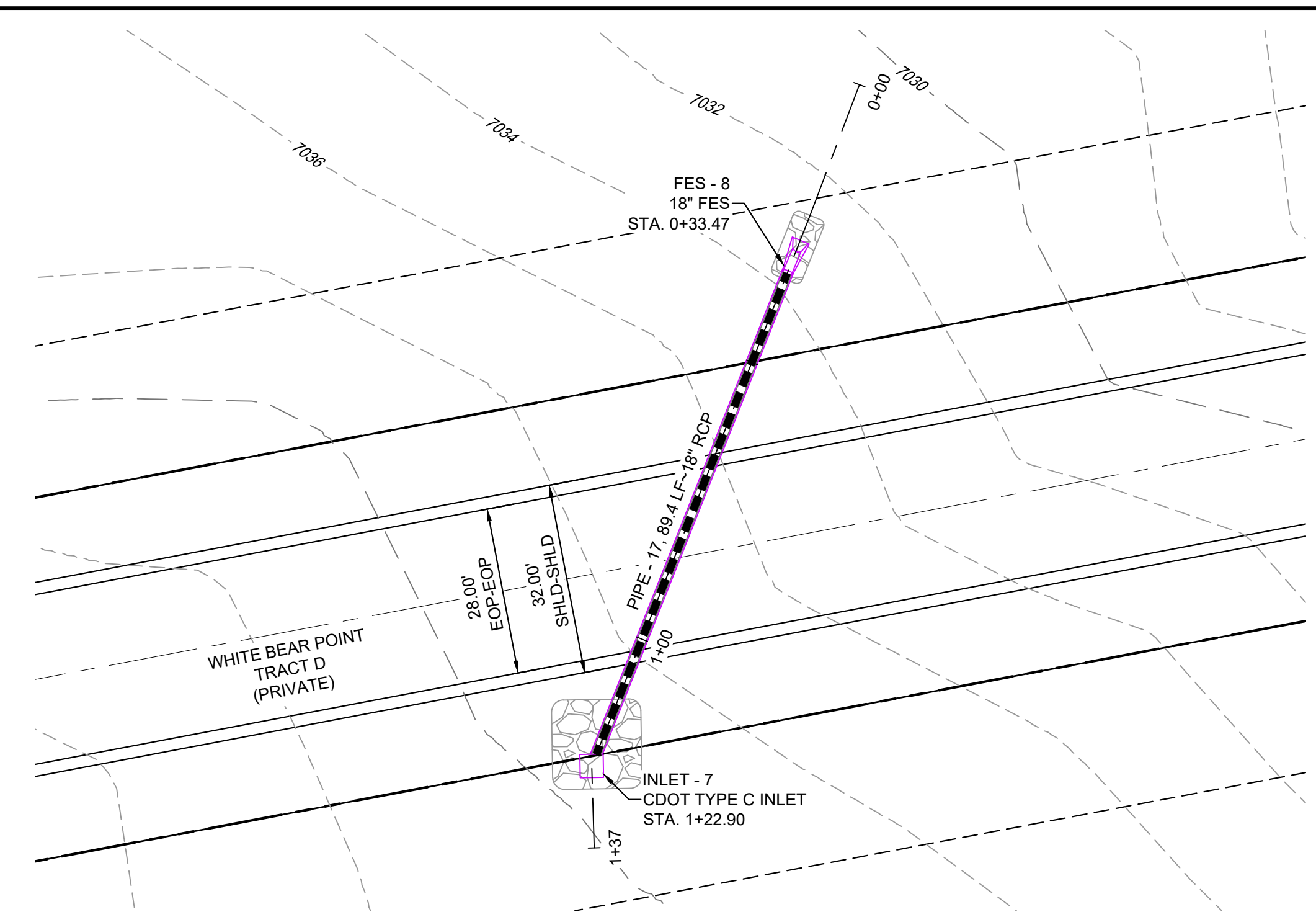
SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

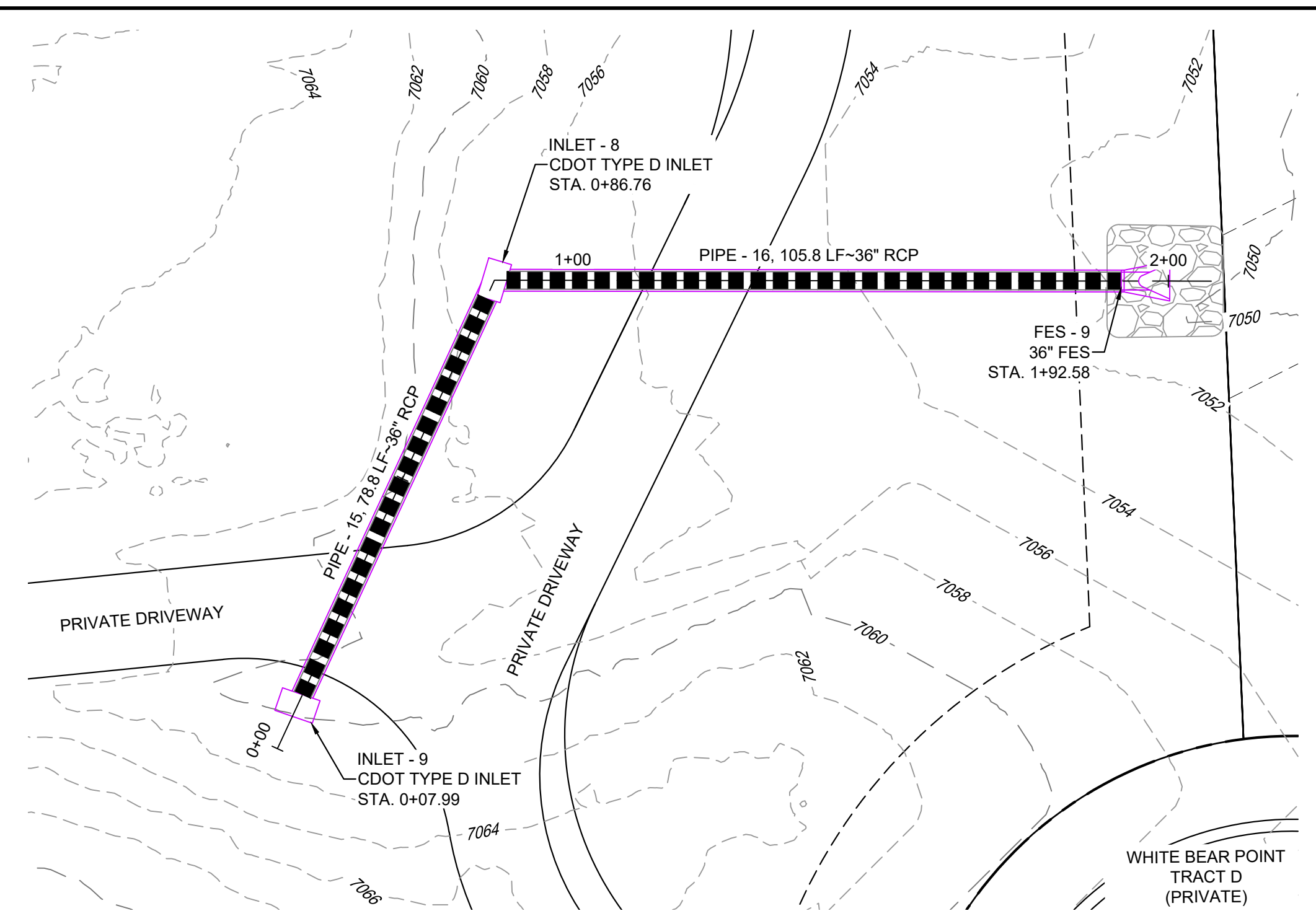
**STORM DRAIN PLAN & PROFILE**

DESIGNED BY: WCG	SCALE: 1"=20'	DATE ISSUED: MAY 2024	DRAWING No. SD04
DRAWN BY: RWO	HORIZ. 1"=20'	SHEET 17 OF 26	
CHECKED BY: JAO	VERT. 1"=5'		



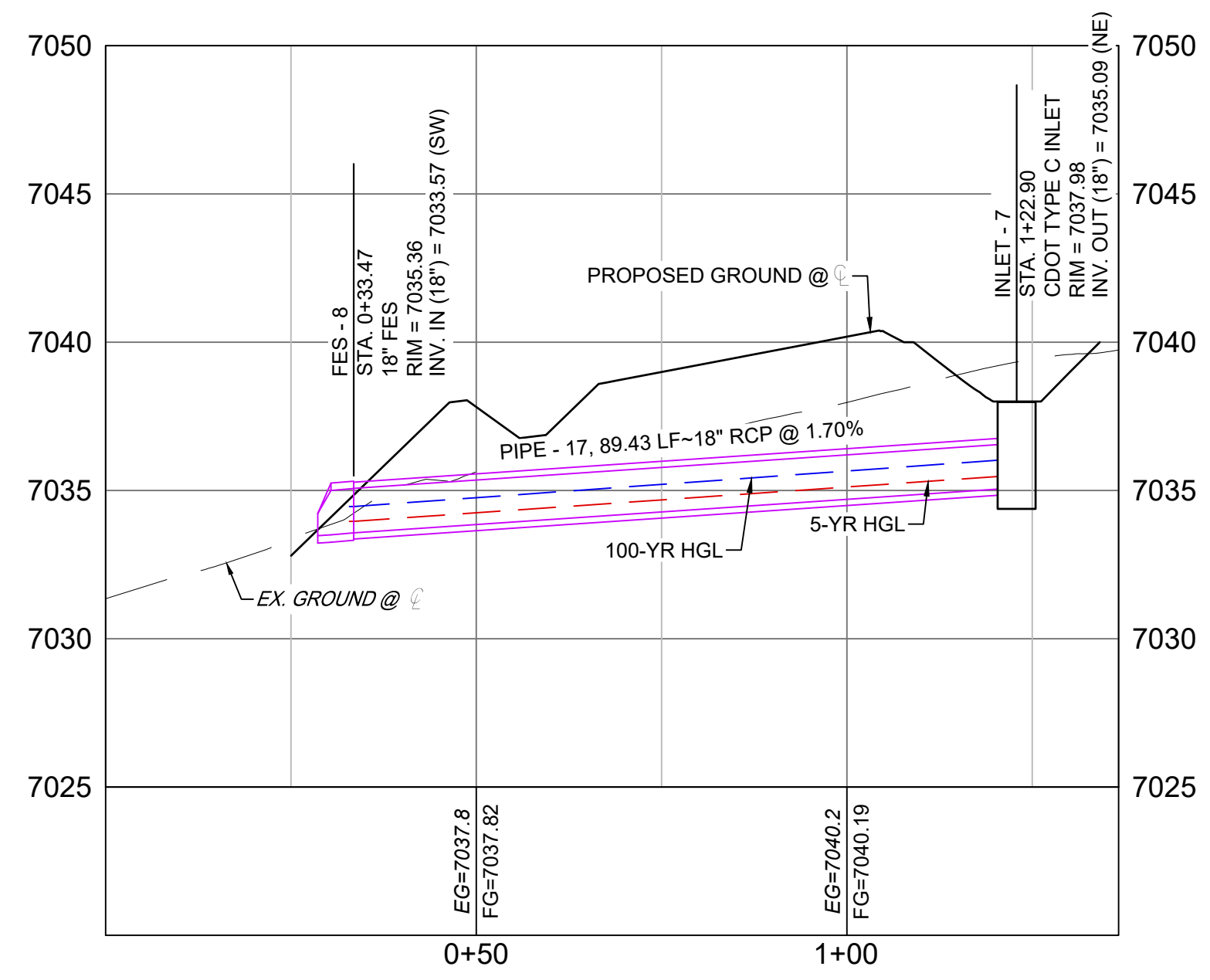
WHITE BEAR POINT STORM DRAIN 6 PLAN

INLET - 6	CDOT TYPE C INLET	RIM = 6981.850 PIPE - 11 INV OUT (18") = 6976.450	N: 442290.49 E: 175175.52
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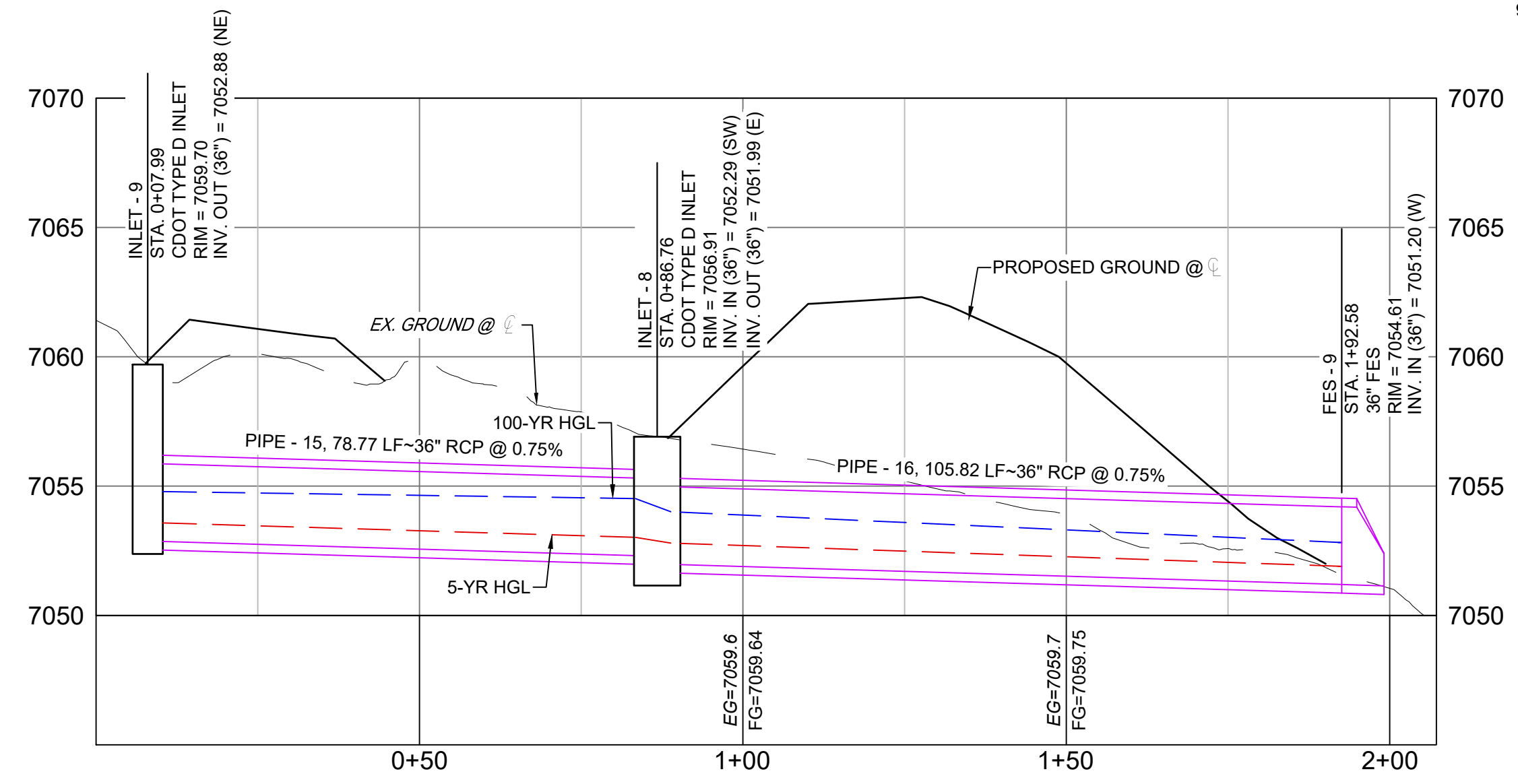


WHITE BEAR POINT STORM DRAIN 7 PLAN

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WHITE BEAR POINT STORM 6 PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+00.00, END STA: 1+36.66



WHITE BEAR POINT STORM 7 PROFILE  
SCALE: (H) 1" = 20' (V) 1" = 5'  
START STA: 0+00.00, END STA: 2+07.22

PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 17	18" RCP	1.70%	89.43	N22°36'18"E

STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 8	18" FES	RIM = 7035.362 PIPE - 17 INV IN (18") = 7033.570	N: 442174.07 E: 174075.87
INLET - 7	CDOT TYPE C INLET	RIM = 7037.985 PIPE - 17 INV OUT (18") = 7035.081	N: 442091.50 E: 174041.49

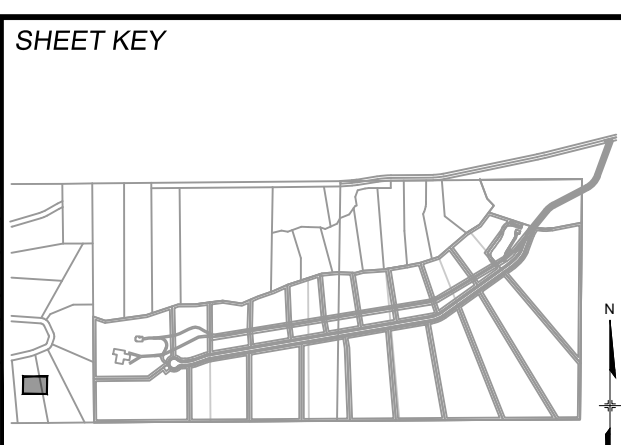
PIPE NAME	PIPE DESCRIPTION	PIPE SLOPE	PIPE LENGTH	PIPE BEARING
PIPE - 15	36" RCP	0.75%	78.77	N25°48'45"E
PIPE - 16	36" RCP	0.75%	105.82	S88°58'29"E

STRUCTURE NAME	STRUCTURE TYPE	STRUCTURE DETAILS	NORTHING & EASTING
FES - 9	36" FES	RIM = 7054.613 PIPE - 16 INV IN (36") = 7051.196	N: 442162.35 E: 173453.57
INLET - 8	CDOT TYPE D INLET	RIM = 7056.912 PIPE - 15 INV IN (36") = 7052.288 PIPE - 16 INV OUT (36") = 7051.990	N: 442164.25 E: 173347.76
INLET - 9	CDOT TYPE D INLET	RIM = 7059.702 PIPE - 15 INV OUT (36") = 7052.879	N: 442093.34 E: 173313.47

X-886-066-EX-MAP-1	184022-01 Hay Creek Road BNDY
X-886-PR-SITE	X-TITLE-CD
X-886-ALTA-SURVEY	new block

No.	DATE	DESCRIPTION	BY
REVISIONS			

**COMPUTER FILE MANAGEMENT**  
 FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg  
 CTB FILE: Matrix.ctb  
 PLOT DATE: 5/29/2024 9:49 AM  
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



**BENCHMARK**  
 PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING**  
 THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25985 C1/4 S22 T15S, R65W 1999," AND THE WESTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000," BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.



**HAY CREEK VALLEY**  
 EL PASO COUNTY, COLORADO  
 CONSTRUCTION DOCUMENTS

**STORM DRAIN PLAN & PROFILE**

DESIGNED BY: WCG	SCALE: 1"=20'	DATE ISSUED: MAY 2024	DRAWING No. SD05
DRAWN BY: RWO	HORIZ: 1"=5'	SHEET 18 OF 26	
CHECKED BY: JAO	VERT: 1"=5'		



Know what's below. Call before you dig.

GENERAL CONSTRUCTION NOTES:

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH EL PASO COUNTY SPECIFICATIONS, UNLESS NOTED OTHERWISE.
2. IT IS SUGGESTED THAT THE CONTRACTOR INITIATE A REQUEST TO MOUNTAIN VIEW ELECTRIC ASSOCIATION FOR ANY CONSTRUCTION RELATED TEMPORARY ELECTRICAL POWER SOURCES AS SOON AS POSSIBLE. IN SOME INSTANCES UP TO 30 DAYS MAY BE REQUIRED TO PROVIDE THE SOURCE.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.
5. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
6. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURES AS NECESSARY TO RETURN THEM TO EXISTING CONDITIONS OR BETTER.
7. CONTRACTOR SHALL ADJUST AND/OR REMOVE AND REPLACE EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
8. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.

GENERAL GRADING NOTES:

- 1. THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE AND STOCKPILED IN CONFORMANCE WITH THE SWMP MANAGEMENT DIRECTION.
2. MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED. ALL SLOPES MUST BE PROTECTED FROM EROSION.
3. IF DURING THE OVERLOT GRADING PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE AN UNIDENTIFIED SITUATION IS PRESENT, THE SOILS ENGINEER SHALL BE CONTACTED FOR RECOMMENDATIONS.
4. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
5. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION.
6. SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE SPOT ELEVATIONS THAT DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES.
7. BENCHMARK VERIFICATION: CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARK, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
8. SPOT ELEVATIONS REPRESENT FLOW LINE OR FINISH GRADE UNLESS OTHERWISE NOTED.
9. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
10. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
11. LOCATION OF SOILS STOCKPILES, DESIGNATED FOR TOPSOIL AND SUBSOIL STORAGE AREAS, WILL BE DETERMINED IN THE FIELD AT THE START OF CONSTRUCTION ACTIVITY AND INDICATED ON THE PLAN BY THE CONTRACTOR WHEN REQUIRED.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT THE POND IN A MANNER WHICH COMPLIES WITH THE GEOTECHNICAL RECOMMENDATIONS FOR THE SITE AND/OR DETENTION FACILITIES

PROJECT DATA

HAY CREEK VALLEY
REPORT CONTAINING PCM DESIGN CALCULATIONS: HAY CREEK VALLEY FINAL DRAINAGE REPORT (PENDING APPROVAL)
PARCEL NUMBERS: TAX SCHEDULE NUMBERS 7100000269, 7100000268, 7100000267, 7100000270, 7133000001, 7133007014
GEC/STORMWATER QC PLAN: HAY CREEK VALLEY GRADING & EROSION CONTROL PLANS
FLOODPLAIN: THERE ARE PORTIONS OF THE SITE THAT ARE LOCATED WITHIN A REGULATORY FLOODPLAIN ZONE (FIRM 08041C0267G DECEMBER 7, 2018)
FUNCTIONAL MAINTENANCE OF PCM: HAY CREEK VALLEY HOMEOWNER'S ASSOCIATION
AESTHETIC MAINTENANCE OF PCM: HAY CREEK VALLEY HOMEOWNER'S ASSOCIATION
DETENTION POND
WQCV WATER SURFACE ELEVATION: 6867.87
EURV WATER SURFACE ELEVATION: 6868.31
100-YR WATER SURFACE ELEVATION: 6869.95

OPINION OF PROBABLE PCM IMPROVEMENT COSTS

Table with 3 columns: Item, Description, Cost. Includes items like DETENTION POND GRADING (\$35,000.00), FOREBAY (\$40,000.00), OUTLET STRUCTURE (\$40,000.00), TRICKLE CHANNEL (\$77,500.00), EMERGENCY SPILLWAY (\$5,000.00), STILLING BASIN (\$30,000.00), 10% CONTINGENCY (\$22,750.00), and a TOTAL of \$250,250.00.

MATRIX DESIGN GROUP, INC. CANNOT AND DOES NOT GUARANTEE THAT THE CONSTRUCTION COSTS WILL NOT VARY FROM THESE OPINIONS OF PROBABLE COSTS. THESE OPINIONS REPRESENT OUR BEST JUDGEMENT AS A DESIGN PROFESSIONAL, FAMILIAR WITH THE CONSTRUCTION INDUSTRY AND THIS DEVELOPMENT.

NRCS SOIL SURVEY FOR EL PASO COUNTY

Table with 3 columns: SOIL ID NO., SOIL TYPE, HYDROLOGIC CLASSIFICATION. Includes entries for 38 (JARRE-TECOLOTE COMPLEX), 71 (PRING COARSE SANDY LOAM), and 93 (TOMAH-CROWFOOT COMPLEX).

ABBREVIATIONS

- APPROX APPROXIMATE or APPROXIMATELY
B/C BACK OF CURB
BTM BOTTOM
CDOT COLORADO DEPARTMENT OF TRANSPORTATION
CFS CUBIC FEET PER SECOND
C or CL CENTERLINE
CMP CORRUGATED METAL PIPE
CONC CONCRETE
CONST CONSTRUCTION
CONT CONTINUOUS
EA EACH
EASEM EASEMENT
ELEV or EL ELEVATION
EK or EXIST EXISTING
FES FLARED END SECTION
E or FL FLOWLINE
FT FOOT/FEET
HGL HYDRAULIC GRADE LINE
HP HIGH POINT
HORIZ HORIZONTAL
INV INVERT
K VERTICAL CURVE FACTOR
LBS POUNDS
LF LINEAR FEET
LP LOW POINT
LT LEFT
MAX MAXIMUM
MH MANHOLE
MIN MINIMUM
MJ MECHANICAL JOINT
NTS NOT TO SCALE
PC POINT OF CURVATURE
PCC POINT OF COMPOUND CURVE
PCR POINT OF CURB RETURN
PRC POINT OF REVERSE CURVE
PT POINT OF TANGENCY
PVC POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE
PVI POINT OF VERTICAL INTERSECTION
PVT PAVEMENT
R or RAD POINT OF VERTICAL TANGENT
RADIUS
RCP REINFORCED CONCRETE PIPE
RED REDUCER
ROW RIGHT-OF-WAY
RT RIGHT
SCH SCHEDULE
SD STORM SEWER
ST STREET
STA STATION
STD STANDARD
SS SANITARY SEWER
SW or S/W SIDEWALK

LEGEND

- PROPERTY LINE
EXISTING STORM DRAIN
PROPOSED STORM DRAIN
MATCHLINE
PROPOSED RIGHT OF WAY

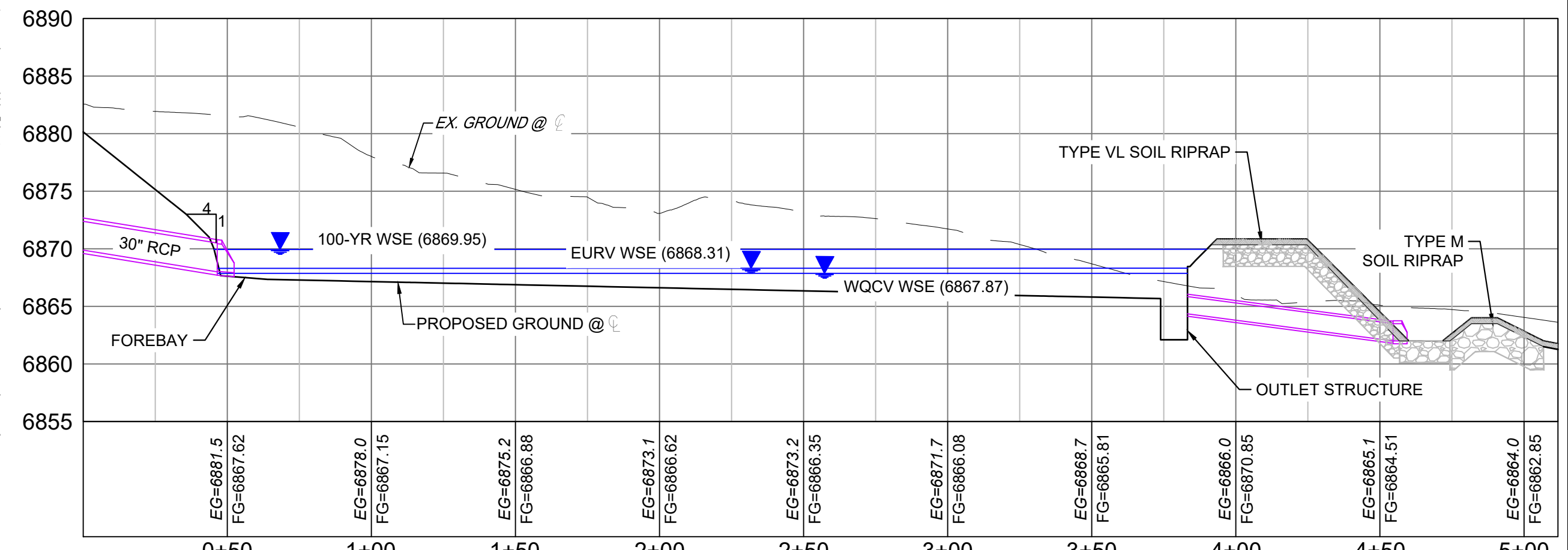
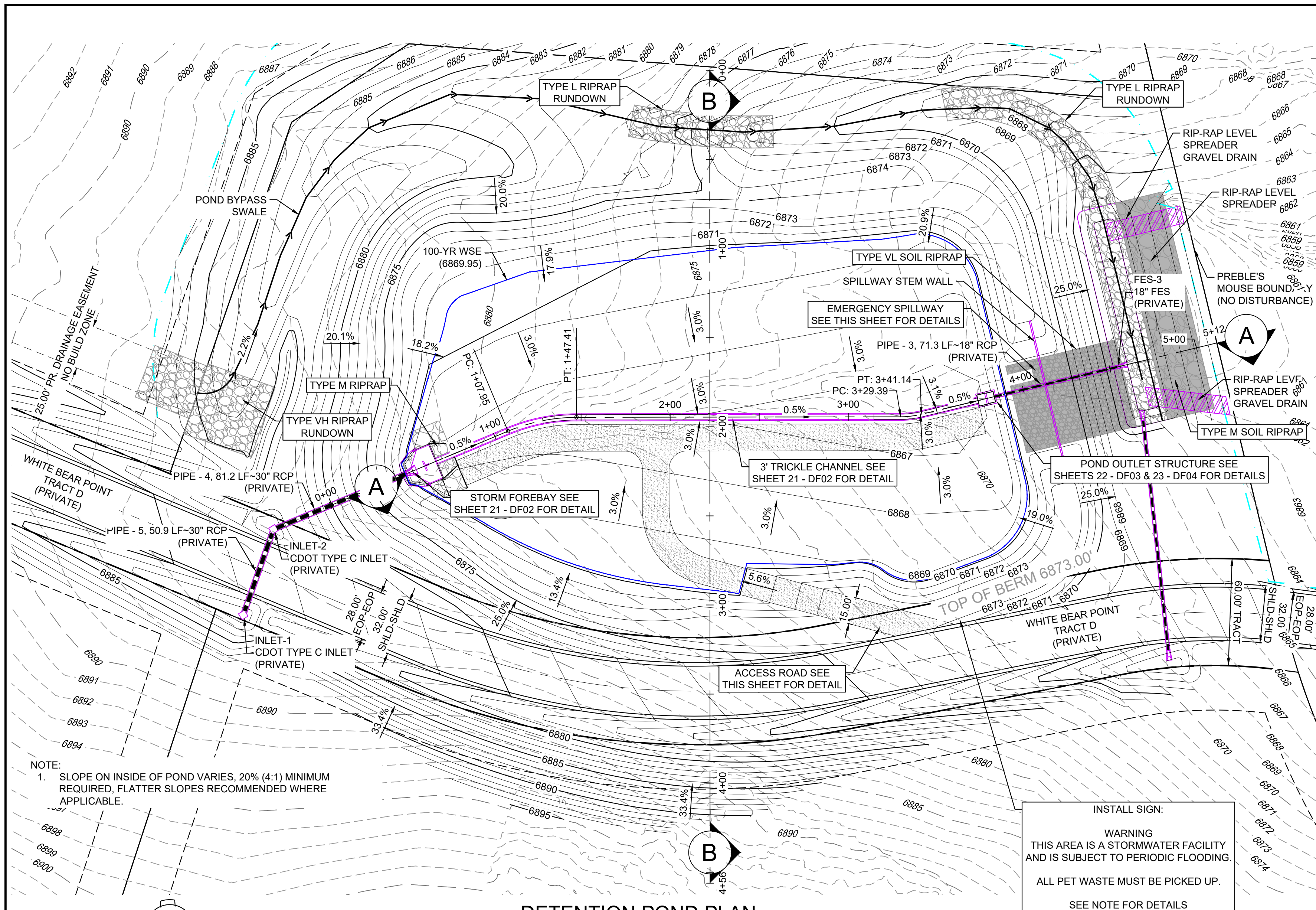
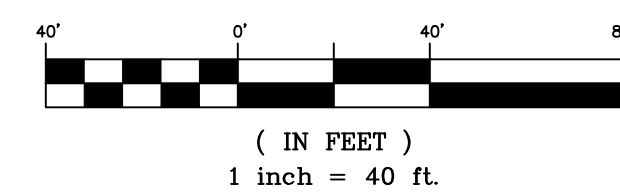
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Bottom section of the drawing containing: REFERENCE DRAWINGS, SHEET KEY, BENCHMARK information, BASIS OF BEARING, PREPARED BY Matrix logo, PROFESSIONAL ENGINEER seal, HAY CREEK VALLEY title, EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS, DETENTION POND GENERAL NOTES, and a table with columns for DESIGNED BY, DRAWN BY, CHECKED BY, SCALE, DATE ISSUED, SHEET, and DRAWING No.

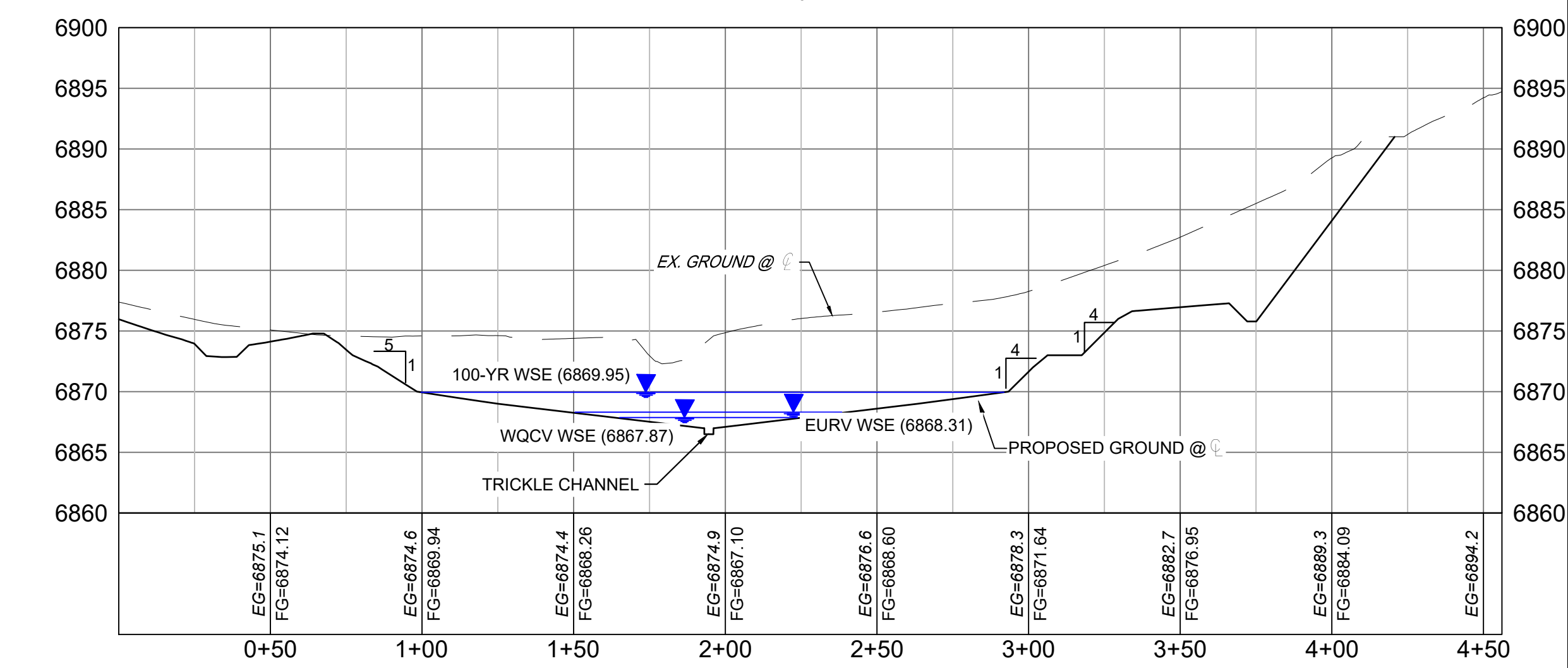


Know what's below.  
Call before you dig.

GRAPHIC SCALE



SECTION A  
H: 1"=40'  
V: 1"=10'

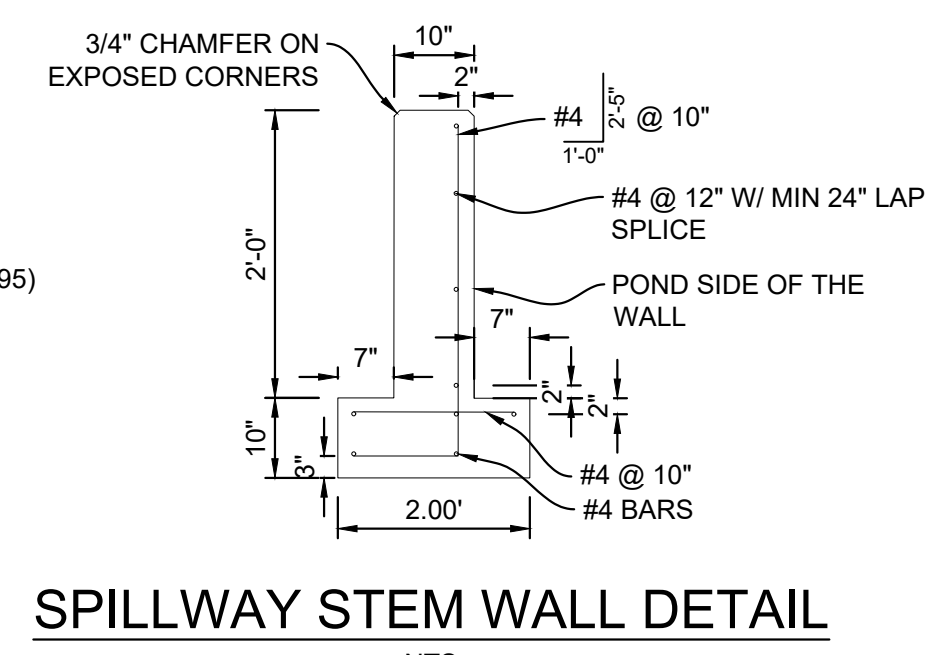
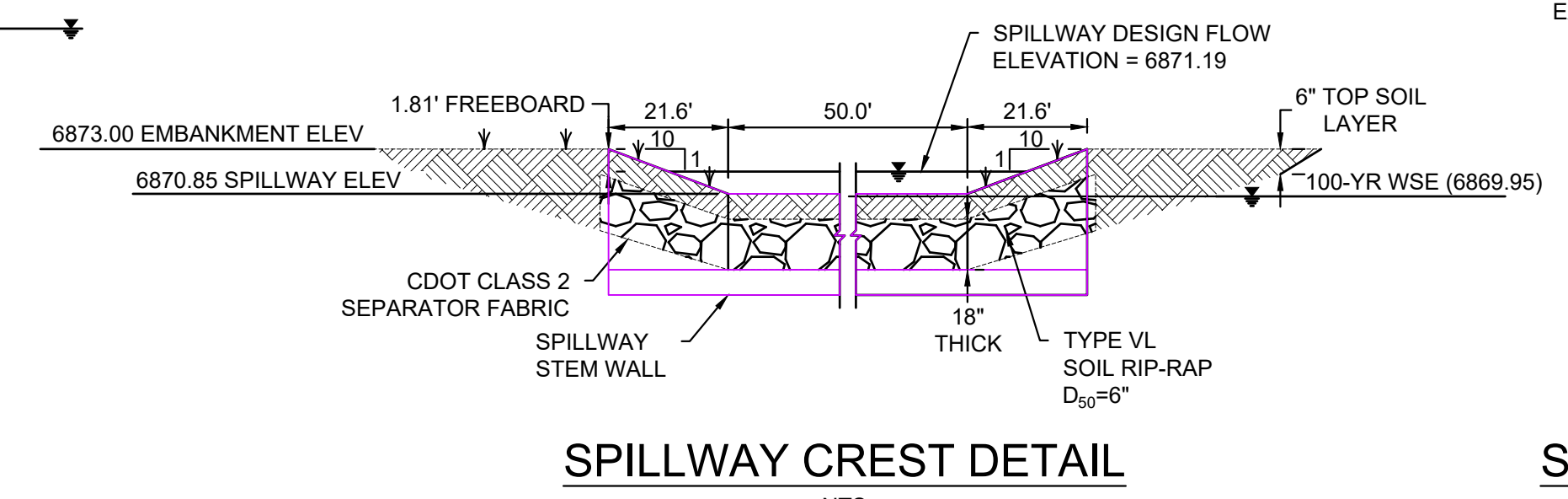
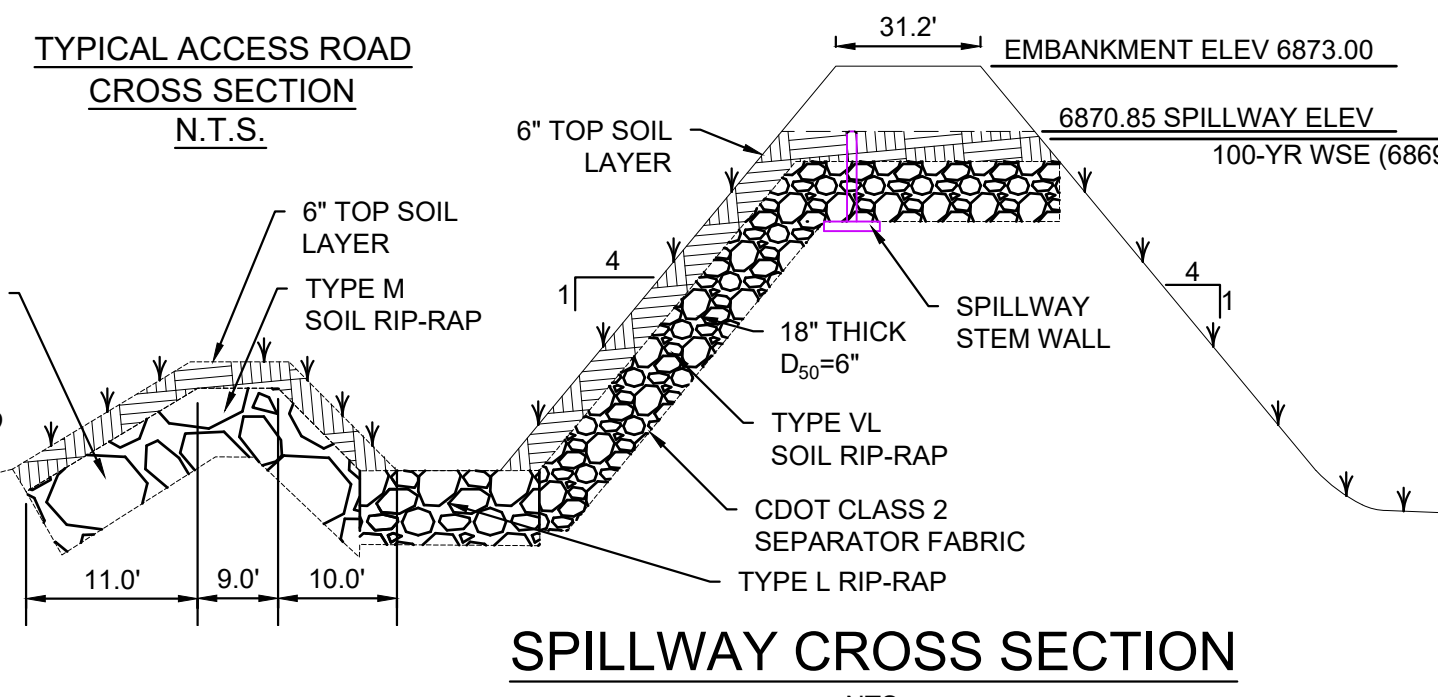
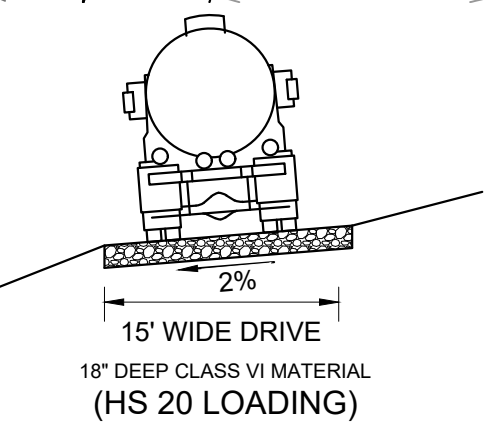


SECTION B  
H: 1"=40'  
V: 1"=10'

NOTE:  
1. SLOPE ON INSIDE OF POND VARIES. 20% (4:1) MINIMUM REQUIRED. FLATTER SLOPES RECOMMENDED WHERE APPLICABLE.

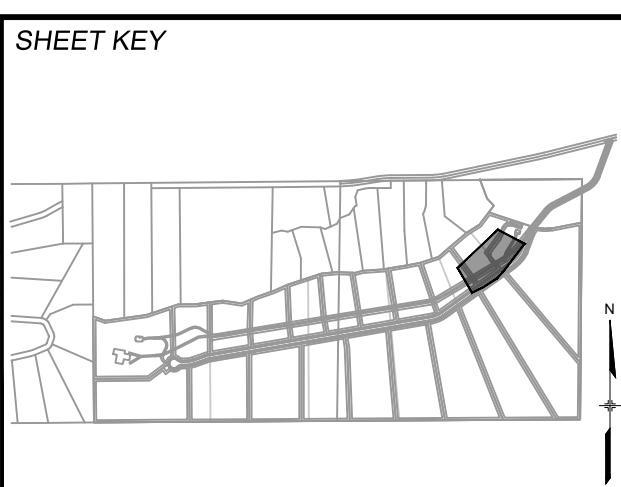
INSTALL SIGN:  
WARNING  
THIS AREA IS A STORMWATER FACILITY  
AND IS SUBJECT TO PERIODIC FLOODING.  
ALL PET WASTE MUST BE PICKED UP.  
SEE NOTE FOR DETAILS

DETENTION POND PLAN  
H: 1" = 40'



- NOTES:
- ALL CONCRETE SHALL BE CDOT CLASS D; F<sub>c</sub> = 4500 PSI
  - ALL REINFORCING STEEL SHALL BE F<sub>y</sub>: 60 KSI
  - CONCRETE COVER FOR STEEL REINFORCING BARS SHALL BE AS FOLLOWS:  
CONCRETE PLACED AGAINST EARTH.....3"  
CONCRETE EXPOSED TO EARTH OR WEATHER.....2"
  - ALL EXPOSED CONCRETE CORNERS SHALL HAVE A MINIMUM 3/8" CHAMFER
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AS RELATED TO SHORING AND PROTECTION OF NEW AND EXISTING STRUCTURES AS NECESSARY TO PREVENT DAMAGE OR COLLAPSE DUE TO WIND, EARTH, CONSTRUCTION OR OTHER LOADS.
  - STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CDOT STANDARD PLAN M-206-2
  - ALL BEDDING SHALL BE A MINIMUM OF 12" THICK CDOT CLASS 6 COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY DETERMINED IN CONFORMANCE WITH AASHTO 180
  - INLET STEPS SHALL BE ALUMINUM & CONFORM TO CITY OF COLORADO SPRINGS STANDARD DETAIL D-20D
  - WINGWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CDOT STANDARD M-601-20
  - SAWCUT APRON JOINTING SHALL BE SPACED AT 10' MAX. SPACING. NO ACUTE ANGLES WILL BE ALLOWED. TURN JOINTS PERPENDICULAR TO FOOTING AT 2' OFFSET.
  - ALL WARNING SIGNS TO HAVE A MINIMUM AREA OF 3 SF AND SHALL BE FABRICATED OF METAL OR PLASTIC WITH RED LETTERING ON A WHITE BACKGROUND

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
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CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:49 AM			
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PREPARED BY:  
**Matrix**  
Excellence by Design

SEAL  
COLORADO LICENSED PROFESSIONAL ENGINEER  
5/29/2024

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

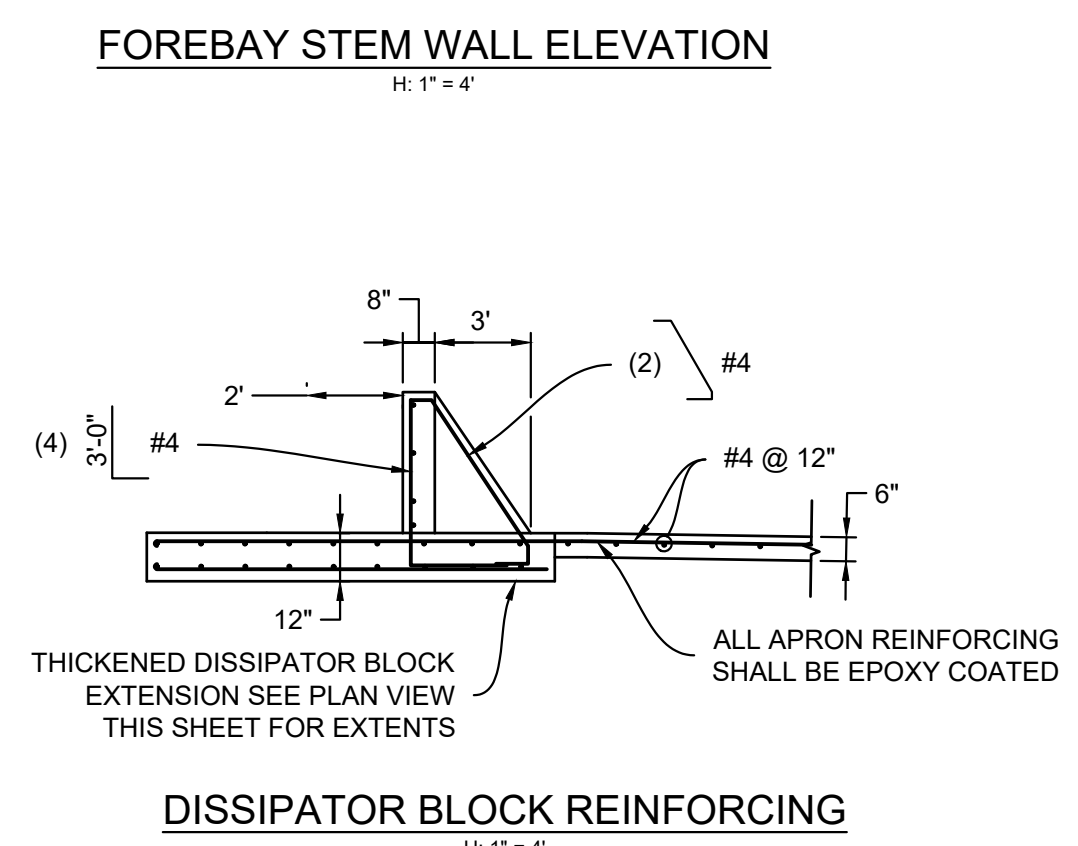
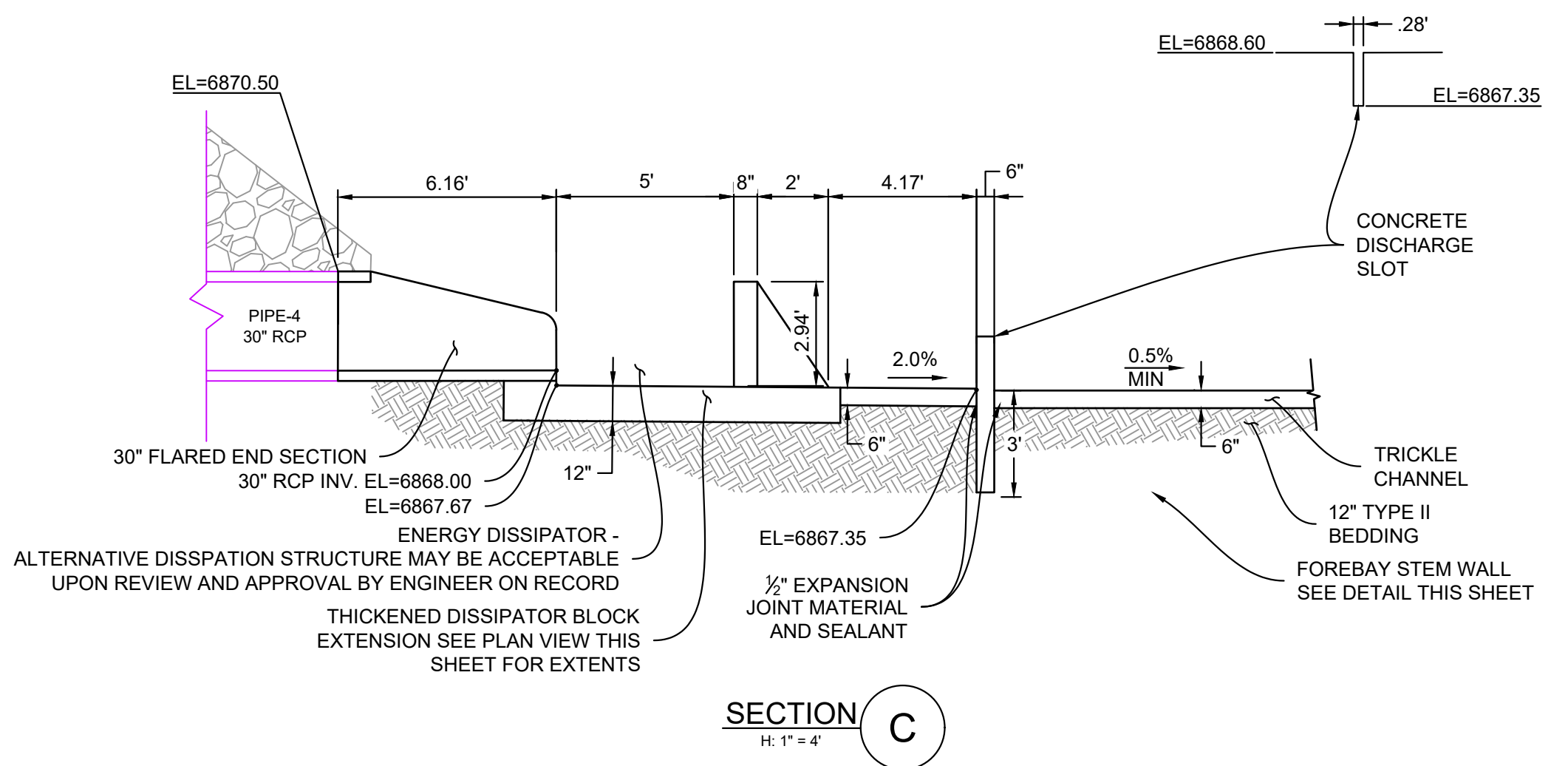
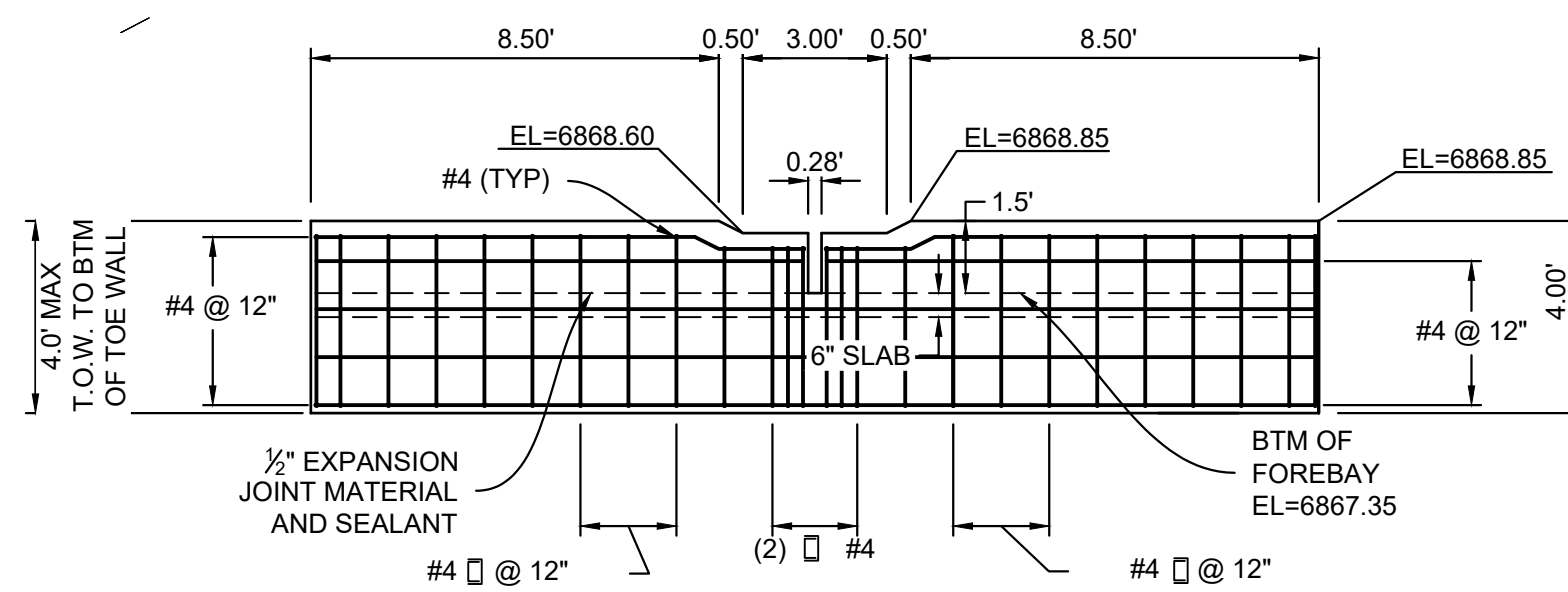
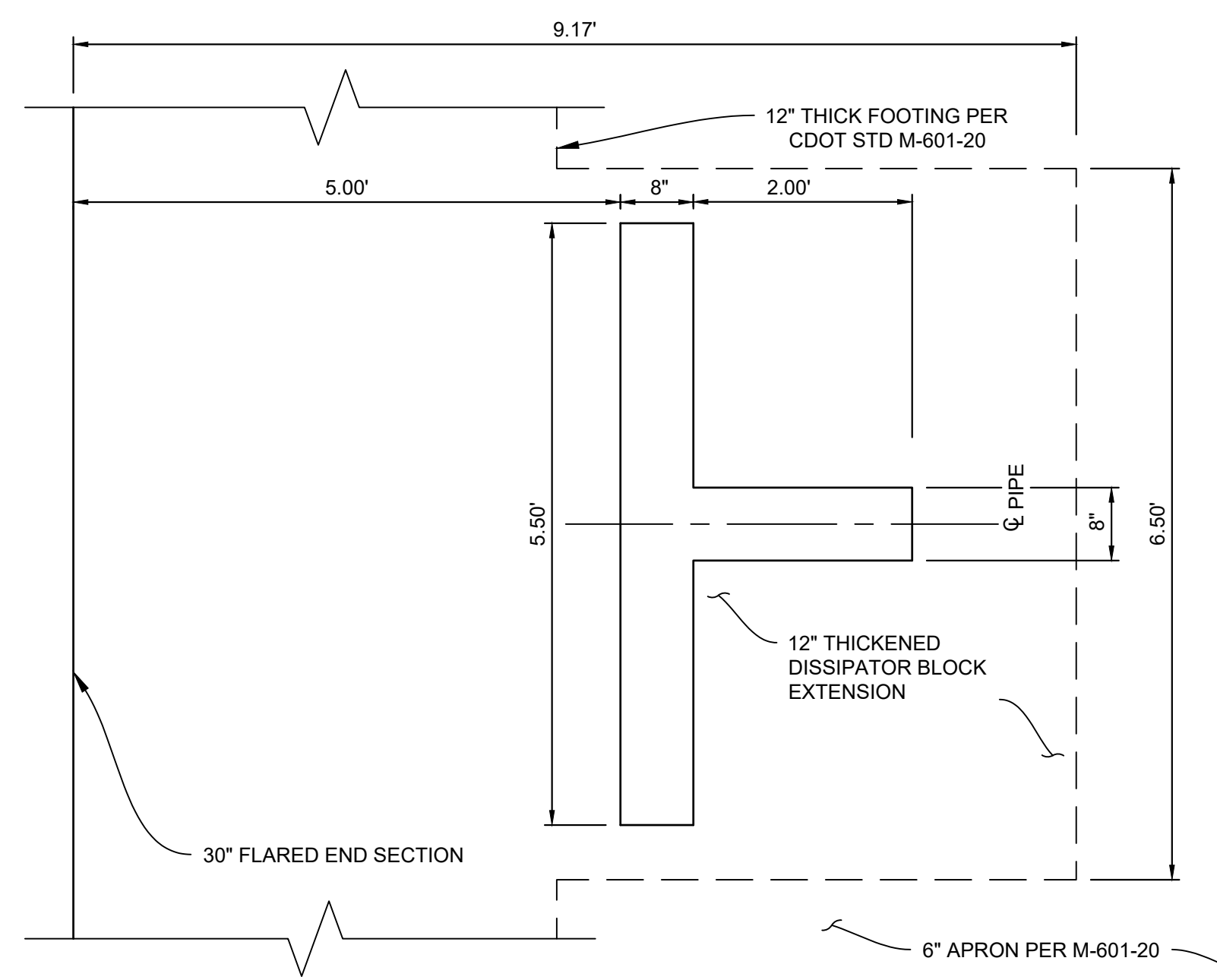
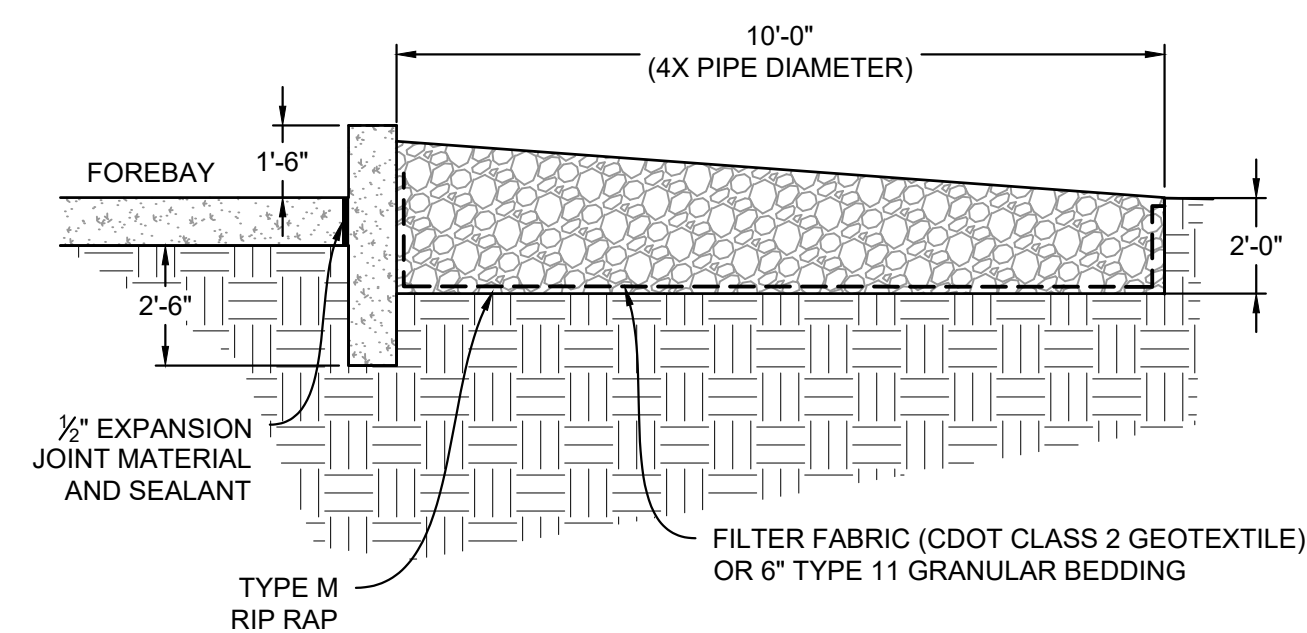
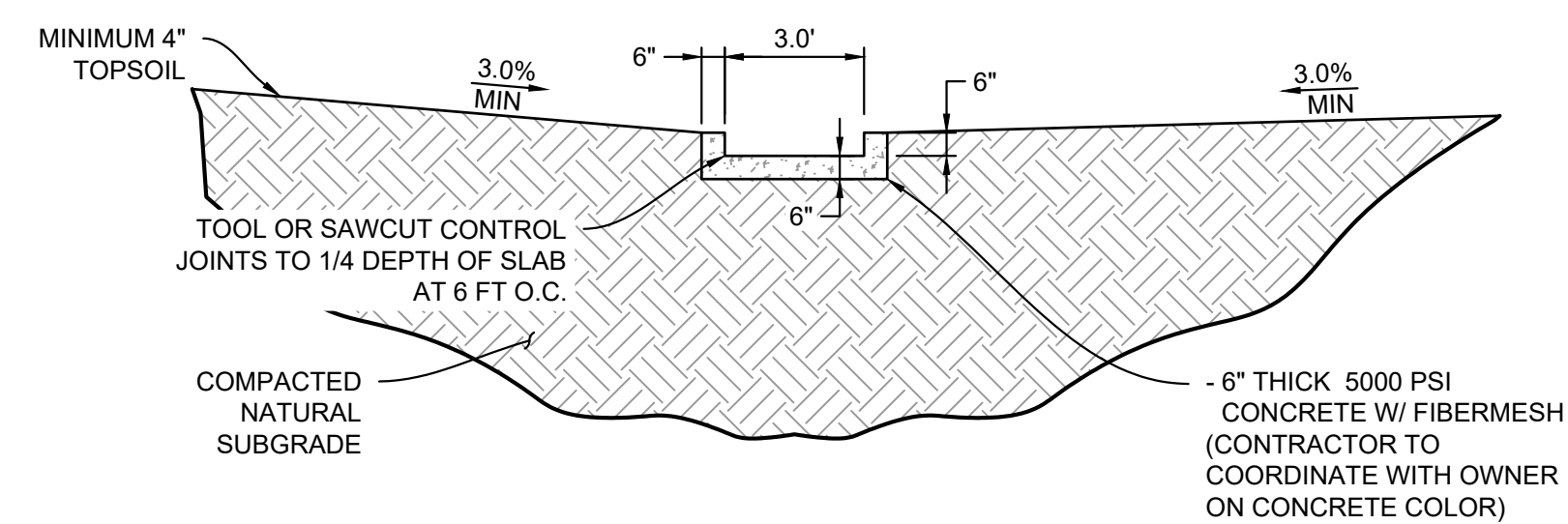
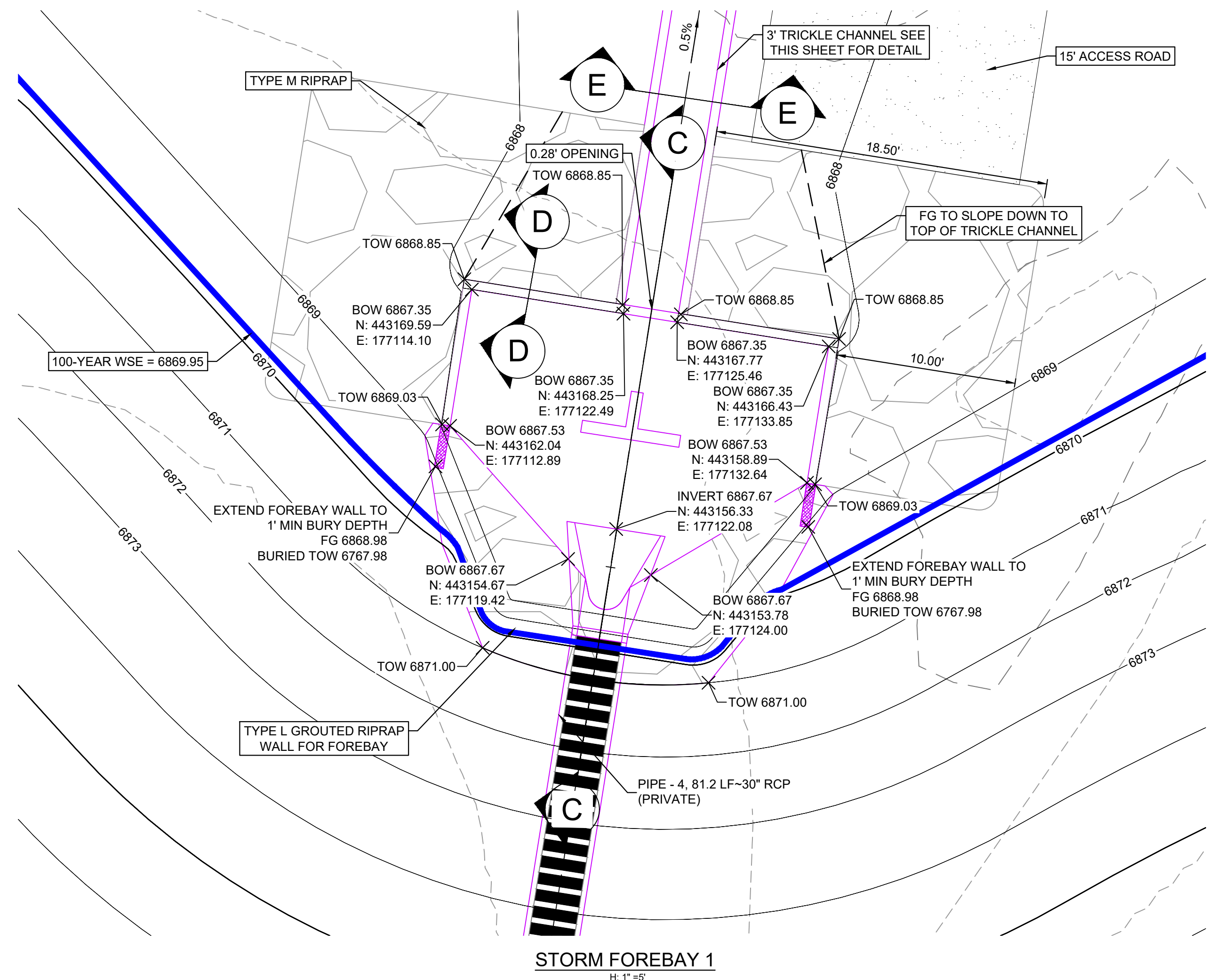
**DETENTION POND 1 SITE PLAN**

DESIGNED BY: WCG  
DRAWN BY: RWO  
CHECKED BY: JAO

SCALE: HORIZ 1"=40'  
VERT. VARIES

DATE ISSUED: MAY 2024  
SHEET 20 OF 26

DRAWING No. **DF01**

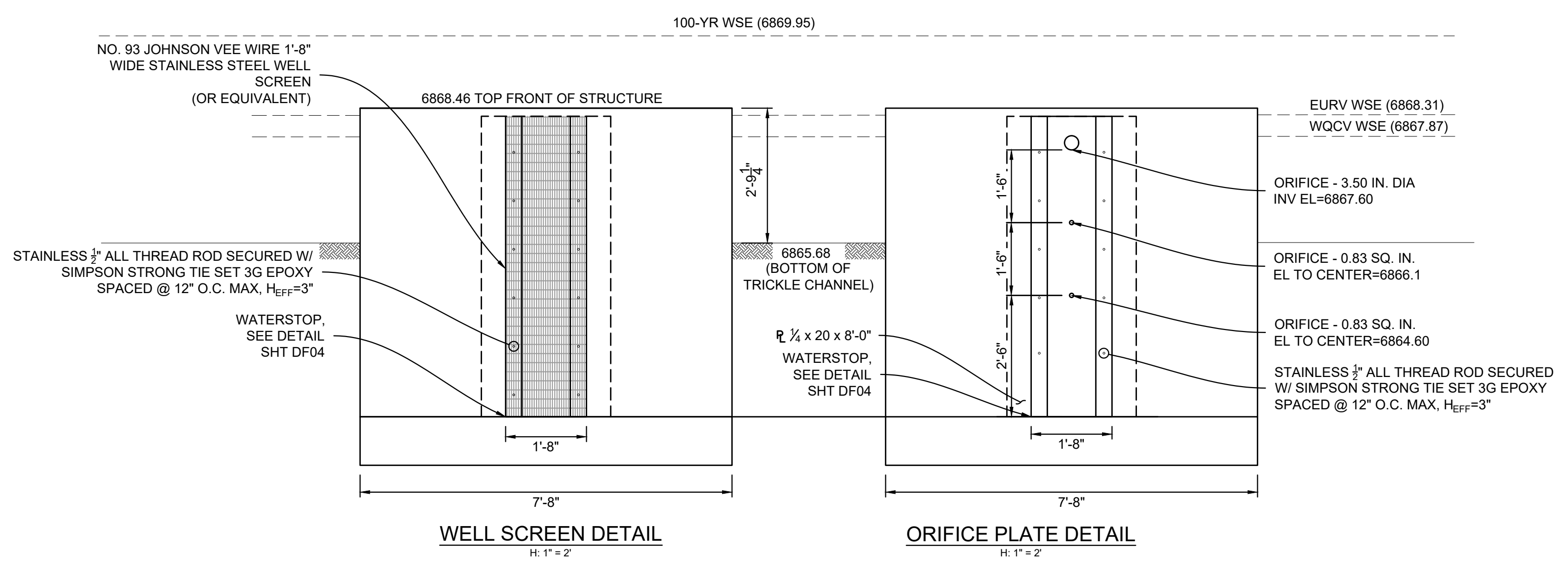
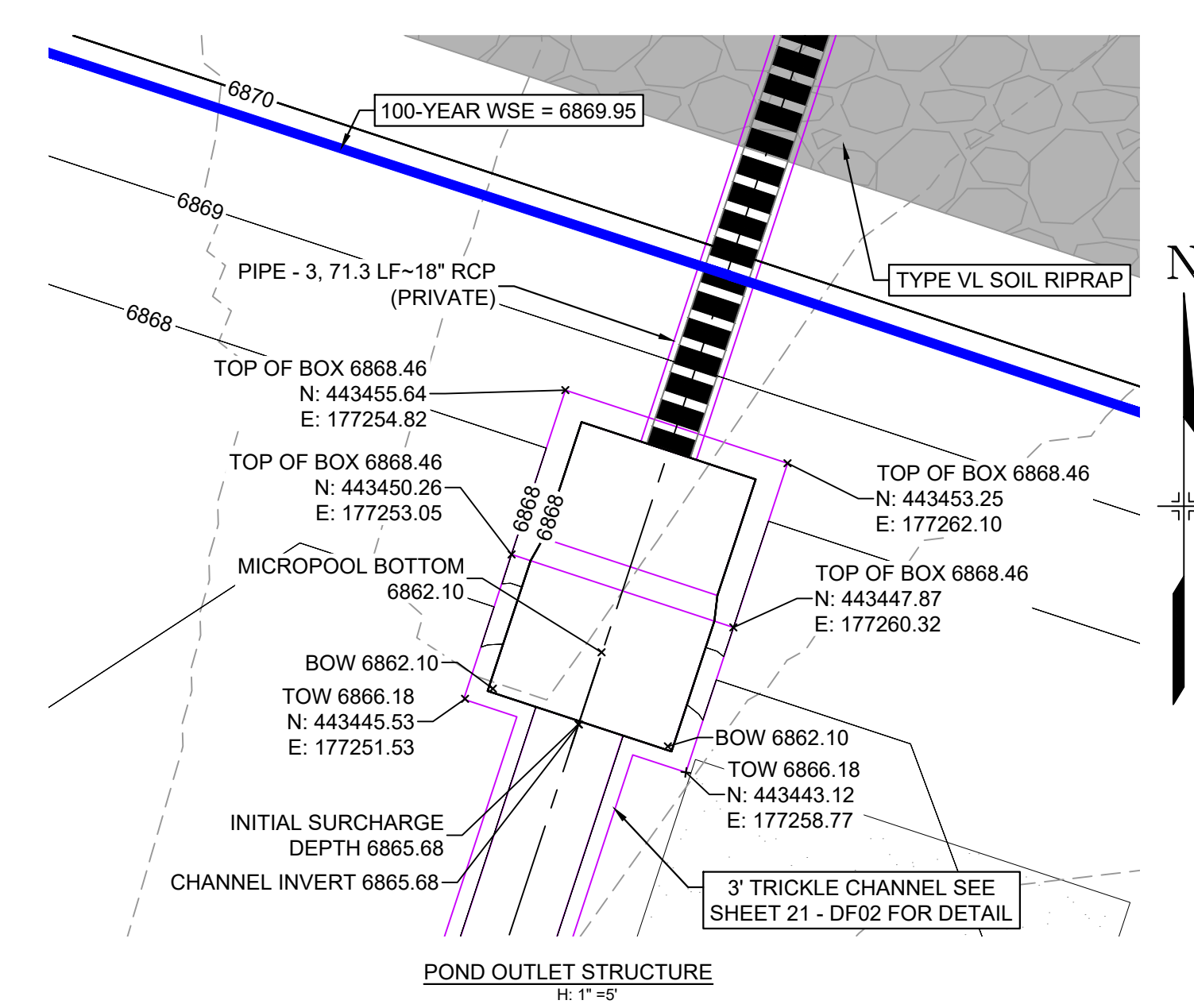


- NOTES:
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  - ALL REINFORCING STEEL SHALL BE F<sub>y</sub> = 60 KSI
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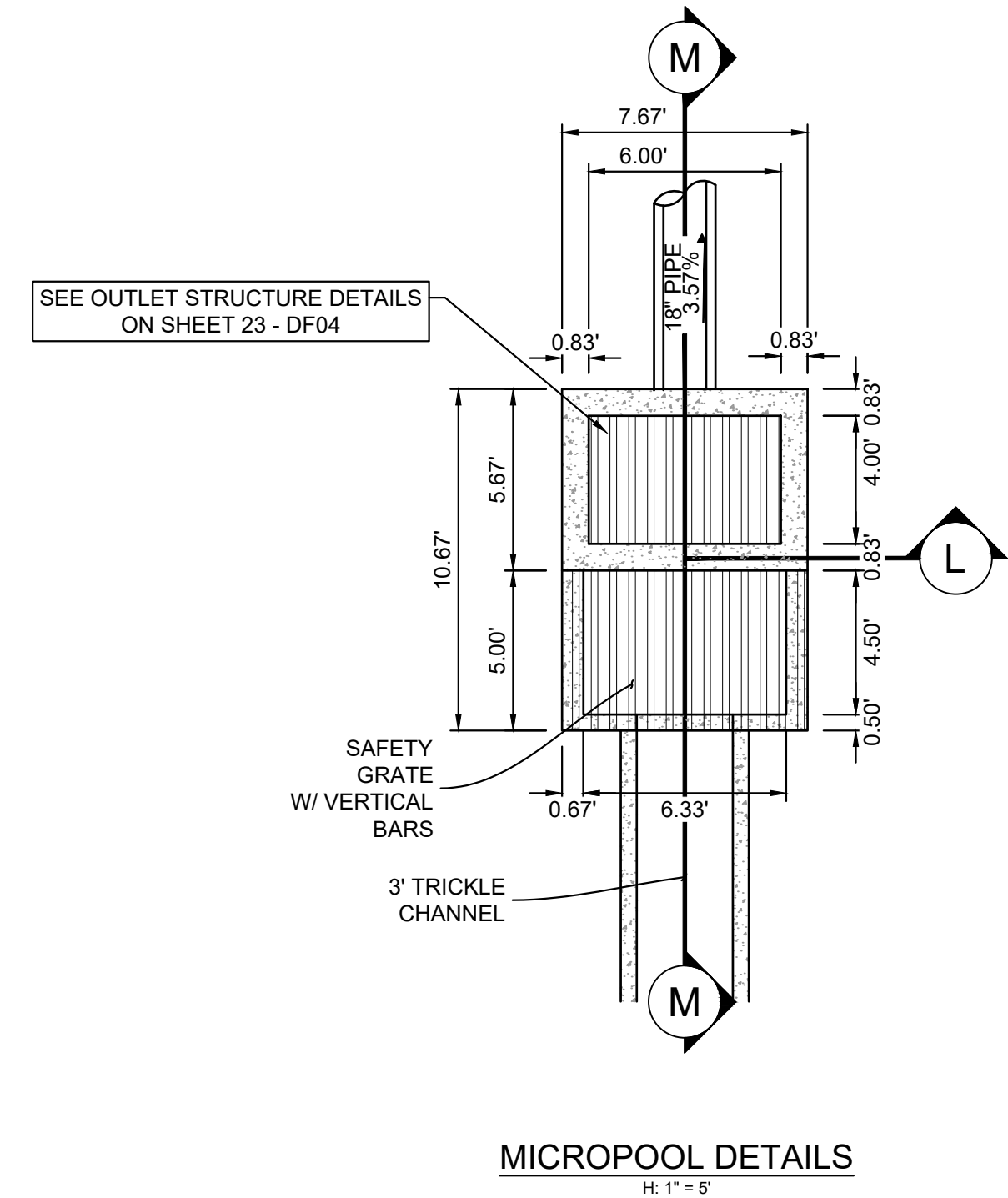
<b>REFERENCE DRAWINGS</b> X-886-066-EX-MAP-1 184022-01 Hay Creek Road BNDY X-886-PR-SITE X-TITLE-CD X-Title_EXHIBIT_D_(H)	<b>COMPUTER FILE MANAGEMENT</b> FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Pond Plans\DF01.dwg CTB FILE: Matrix.ctb PLOT DATE: 5/29/2024 9:49 AM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.		<b>SHEET KEY</b> 	<b>BENCHMARK</b> PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.	<b>PREPARED BY:</b>  <b>Matrix</b> Excellence by Design	<b>SEAL</b>  FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076	<b>HAY CREEK VALLEY</b> EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS			
	<table border="1"> <thead> <tr> <th>No.</th> <th>DATE</th> <th>DESCRIPTION REVISIONS</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	DATE	DESCRIPTION REVISIONS			BY			
No.	DATE	DESCRIPTION REVISIONS	BY							
DESIGNED BY: WCG DRAWN BY: RWO CHECKED BY: JAO		SCALE: VARIES DATE ISSUED: MAY 2024 SHEET: 21 OF 26	DRAWING No. DF02							



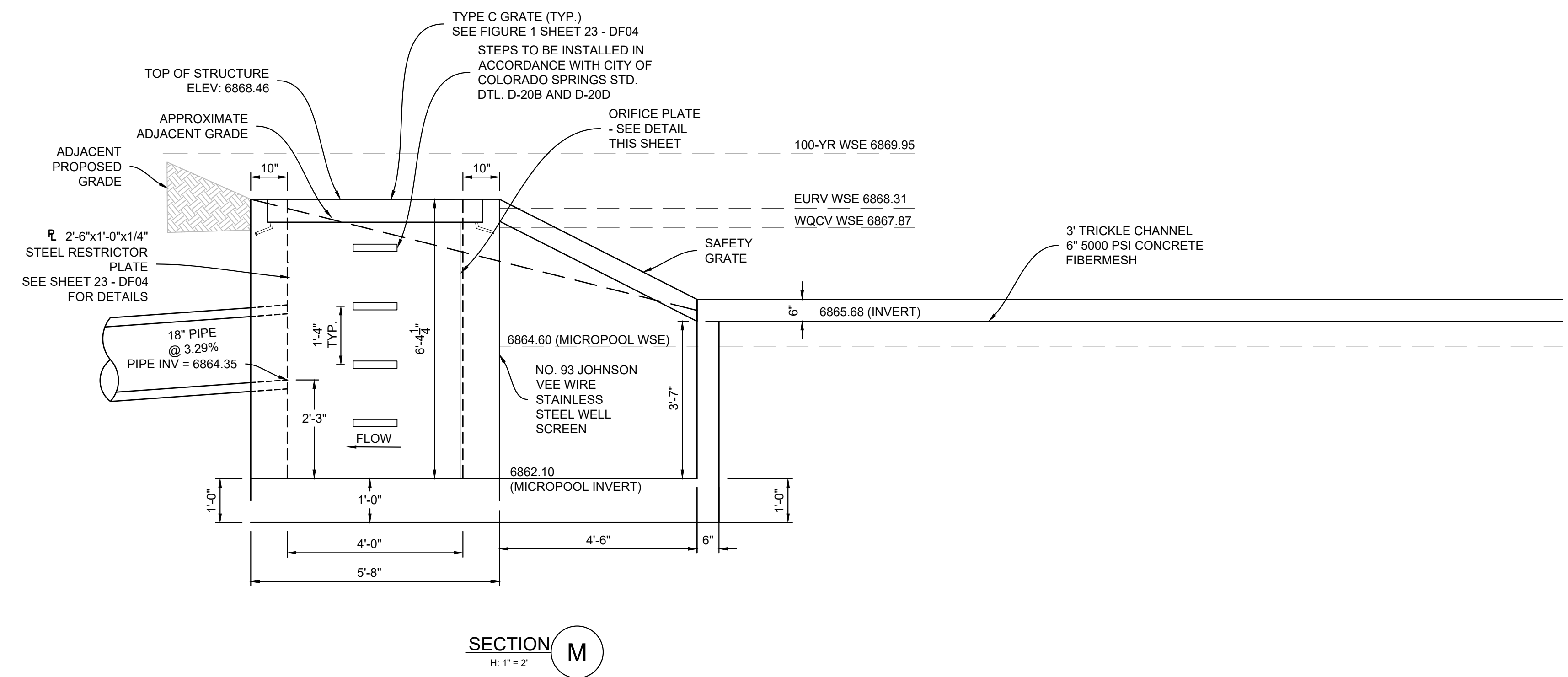
Know what's below.  
Call before you dig.



SECTION L  
H: 1" = 2"



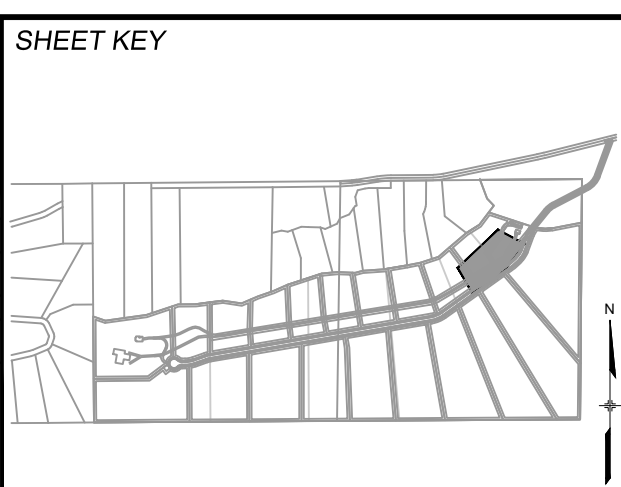
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X-886-066-EX-MAP-1 184022-01 Hay Creek Road BNDY X-886-PR-SITE X-TITLE-CD X-Title_EXHIBIT_D_(H)		

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PREPARED BY:  
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05/29/2024

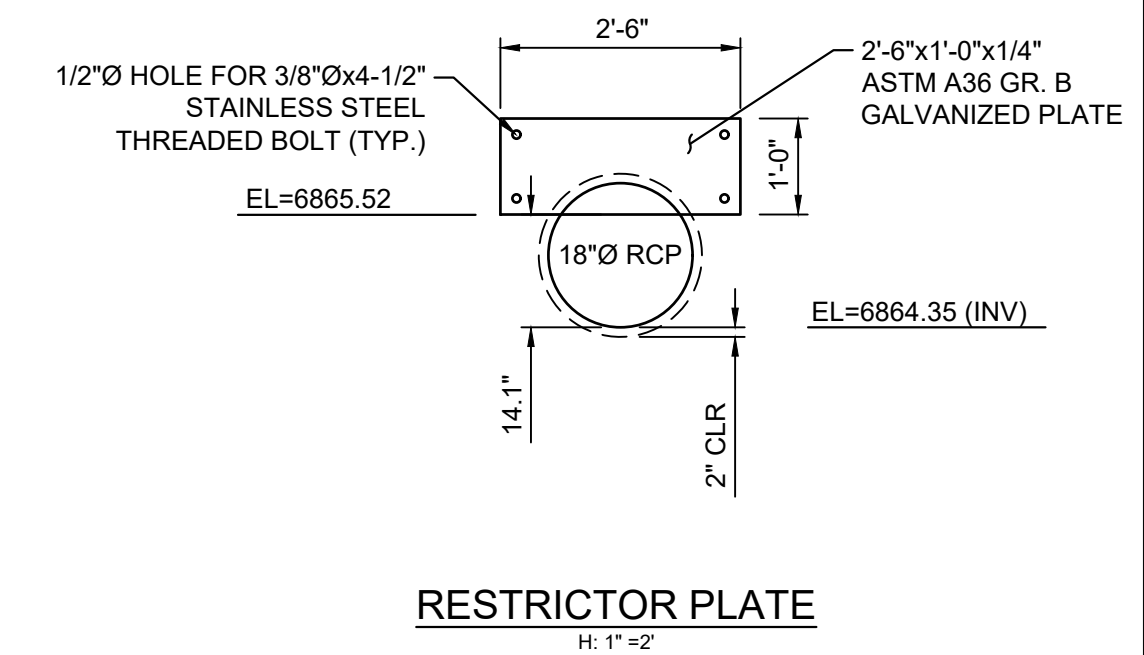
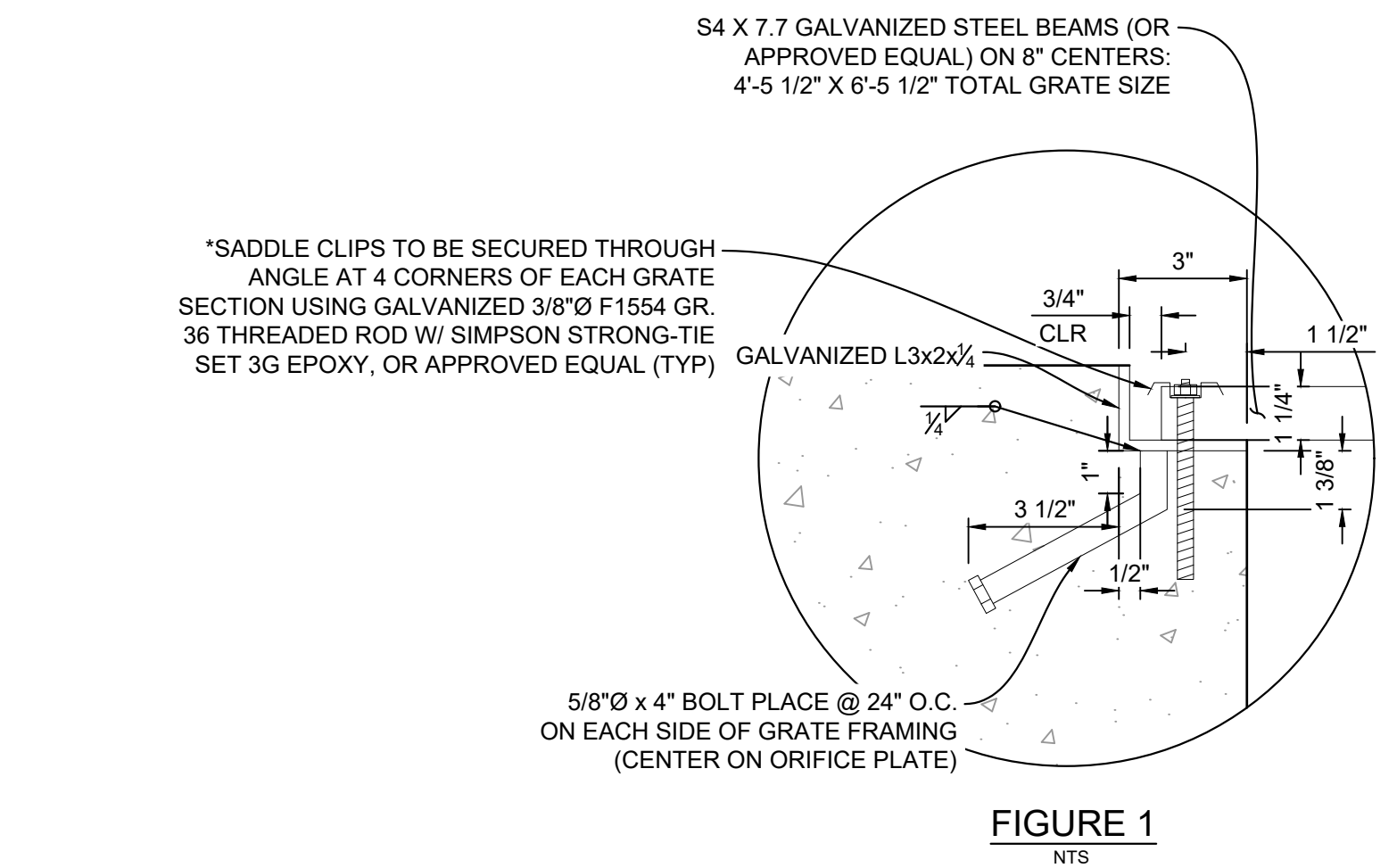
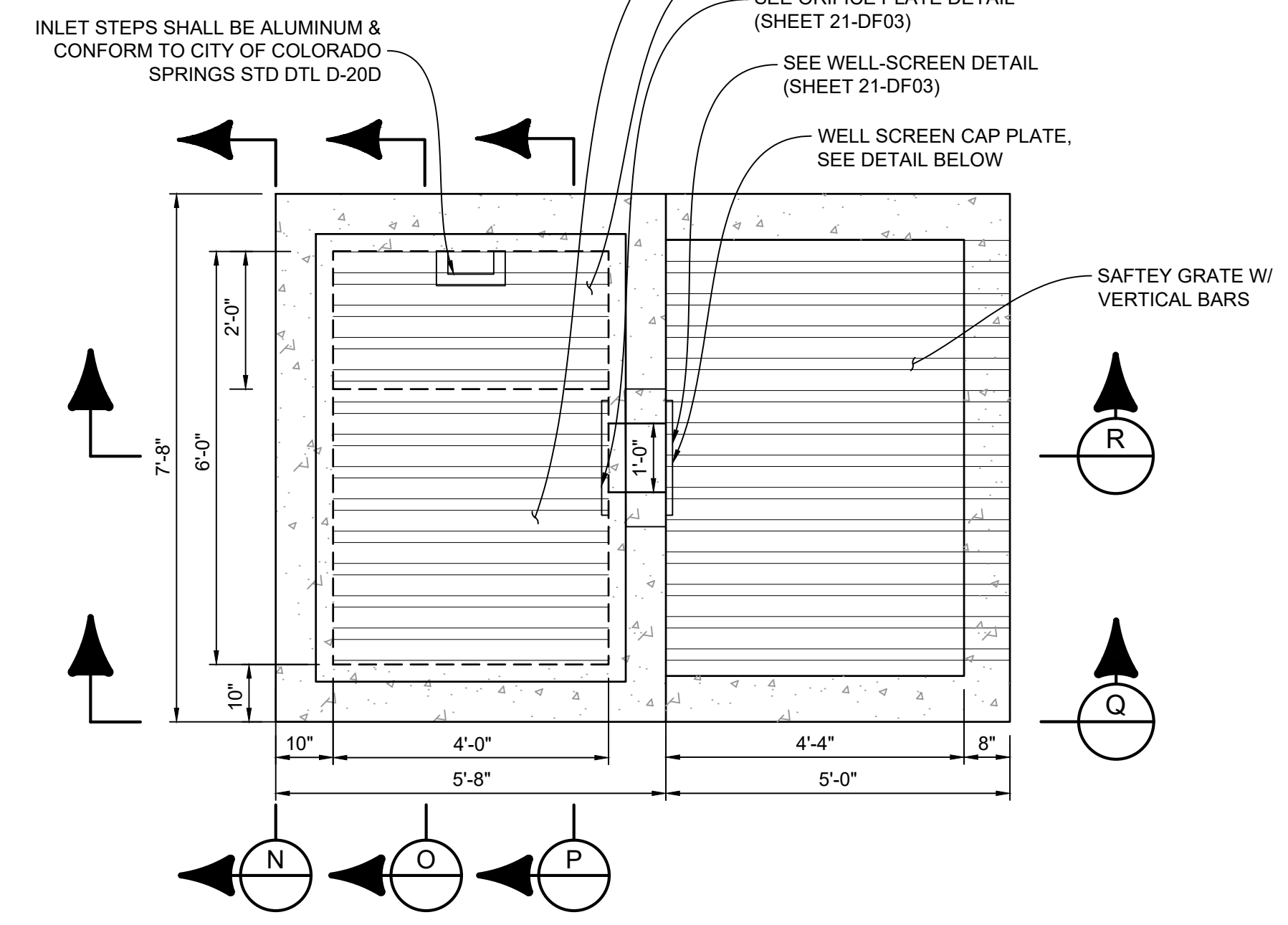
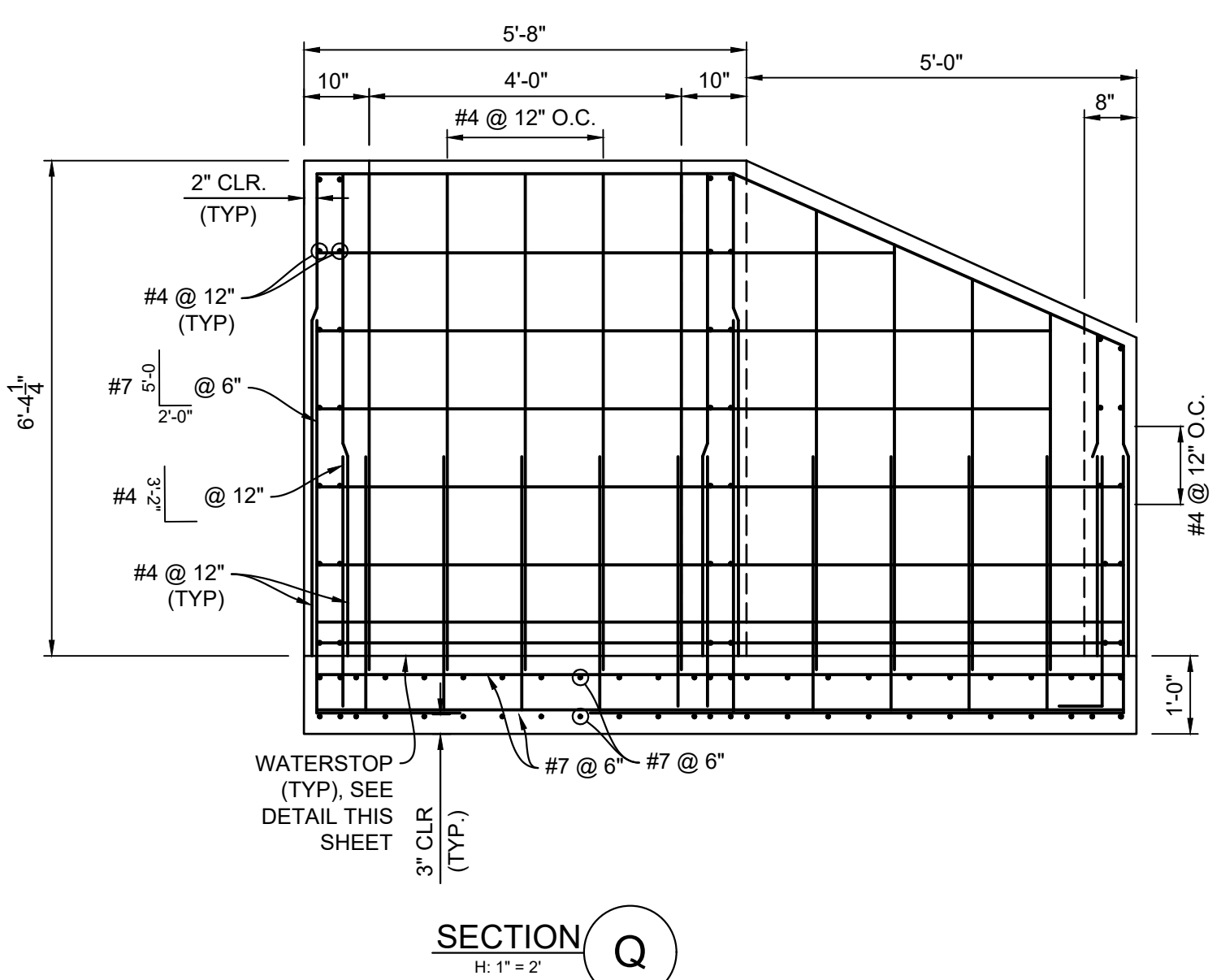
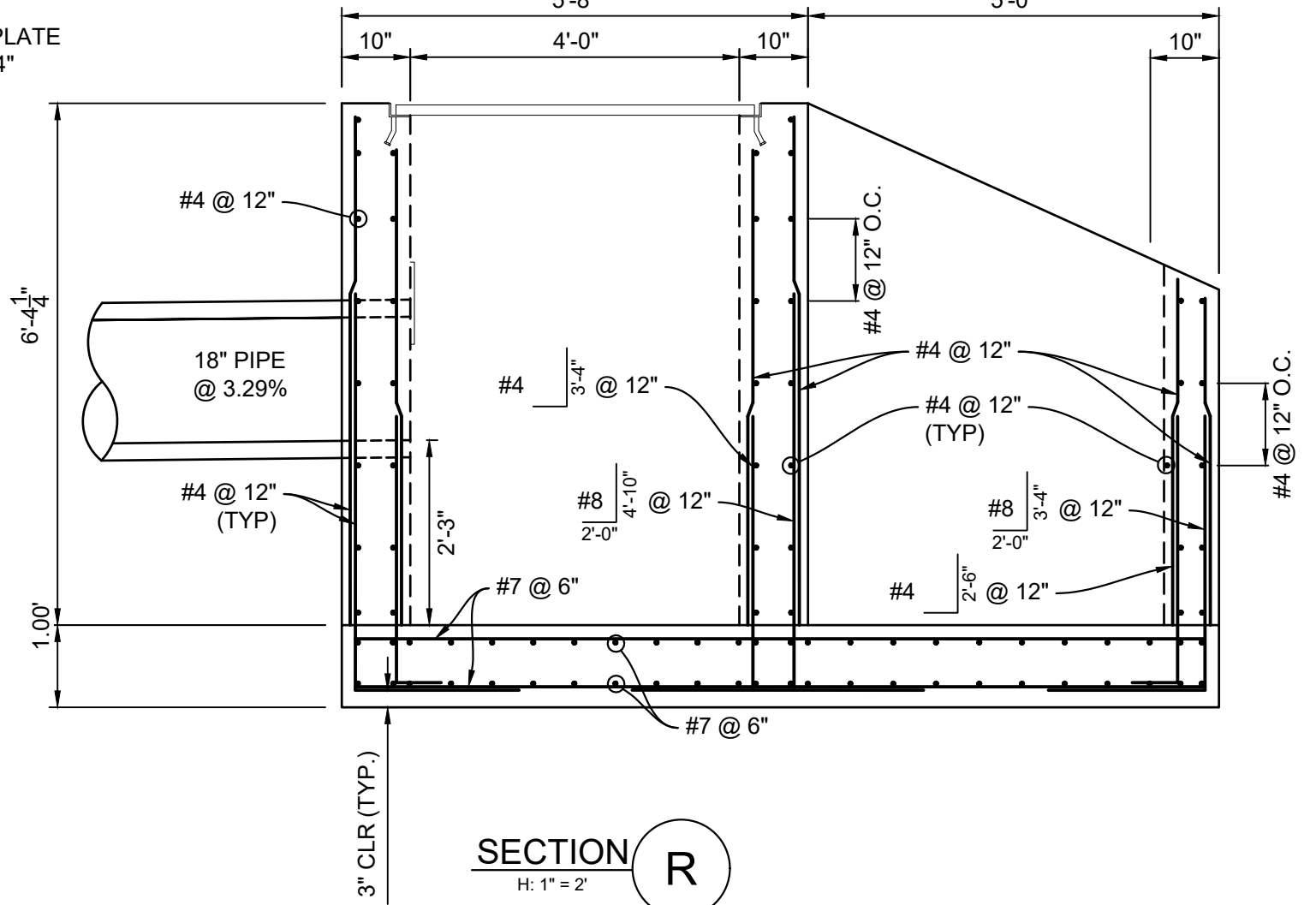
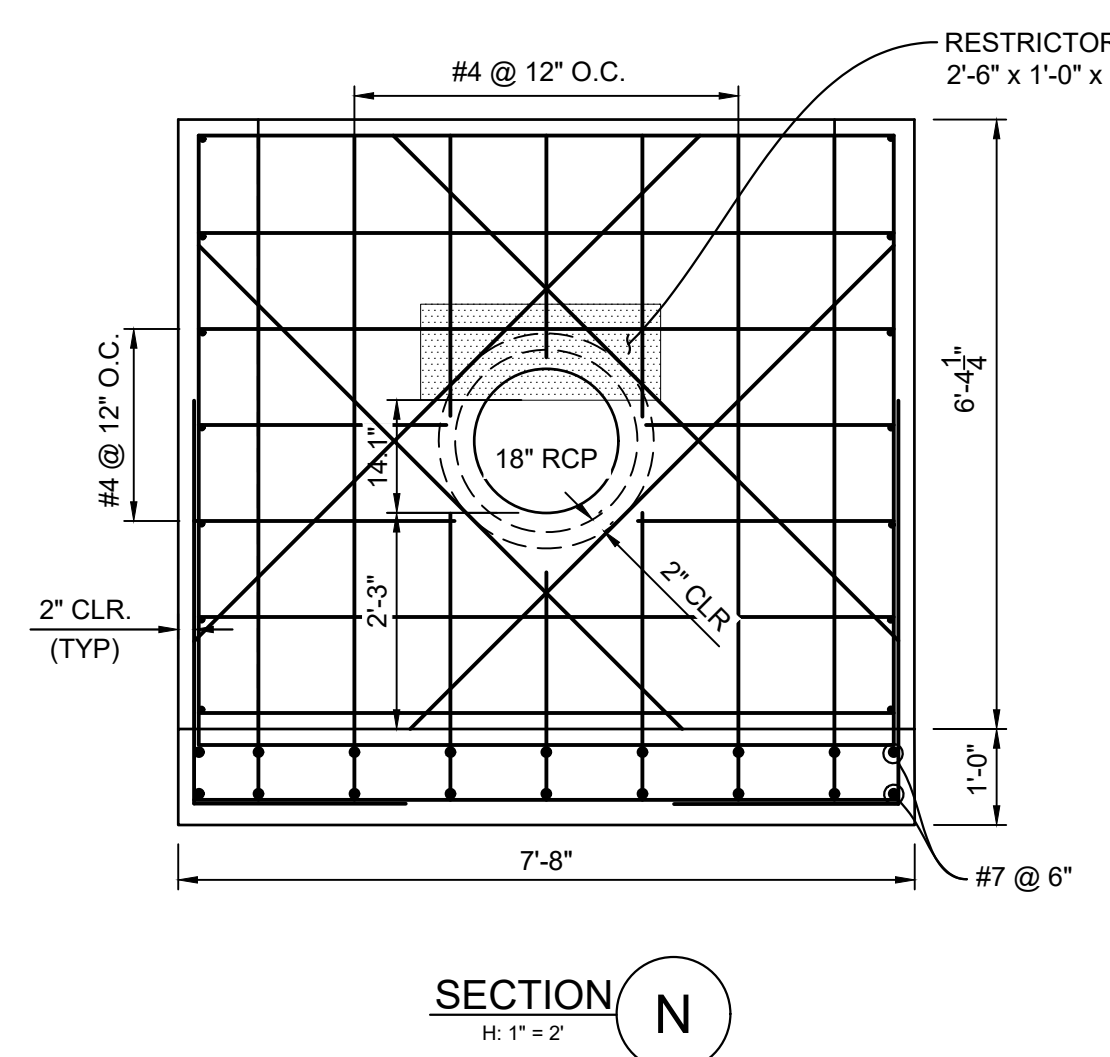
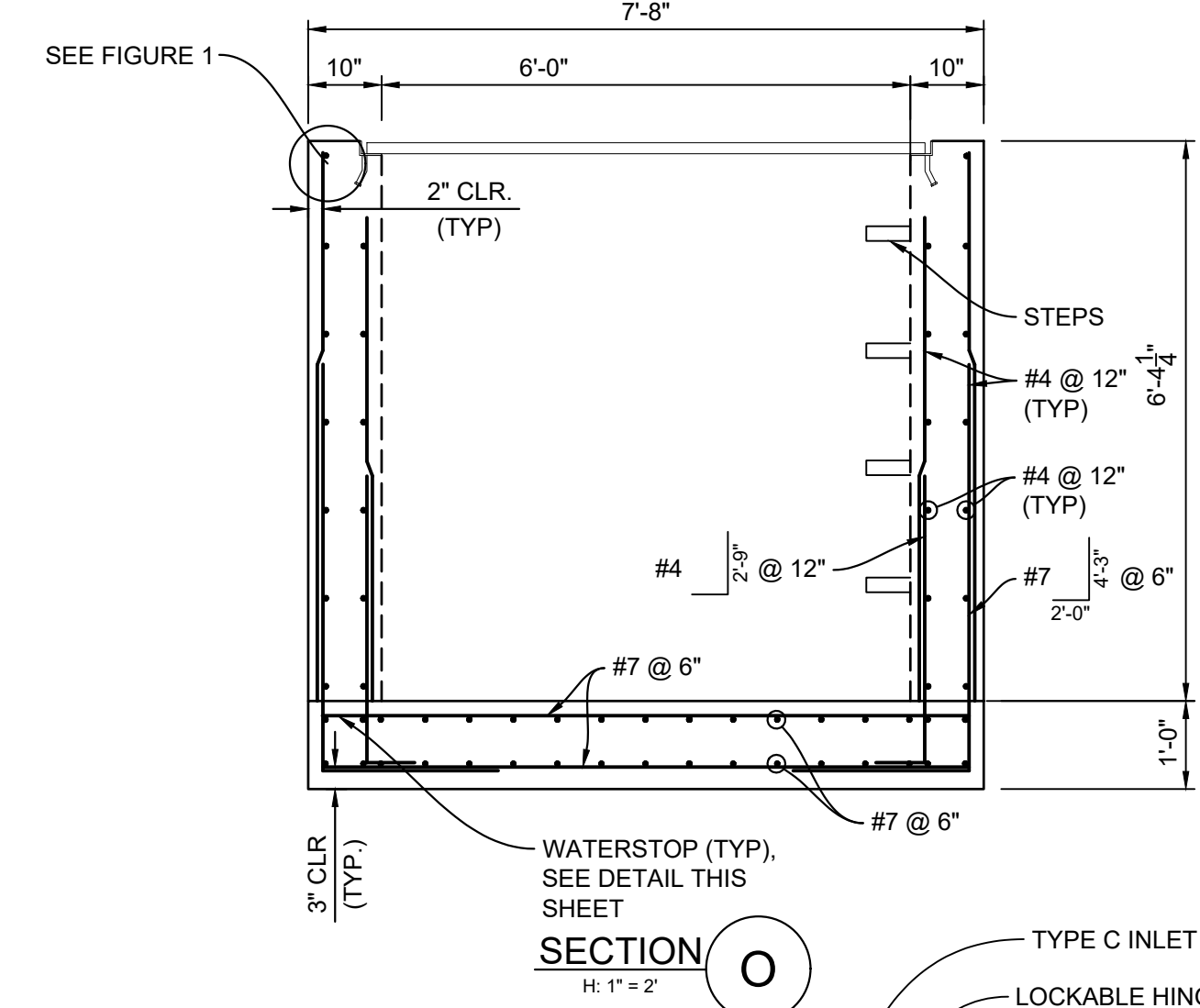
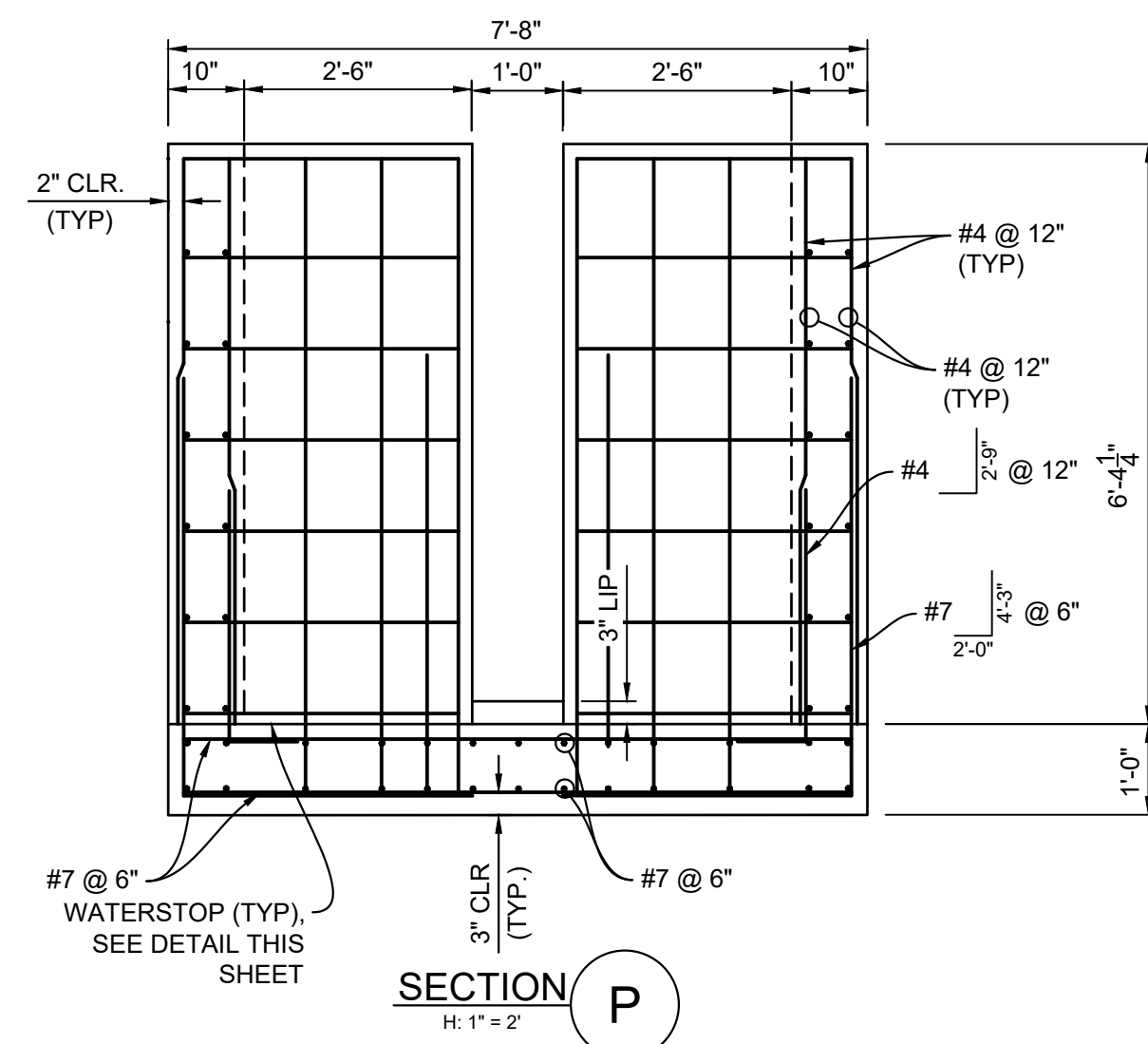
**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**DETENTION POND 1 DETAILS**

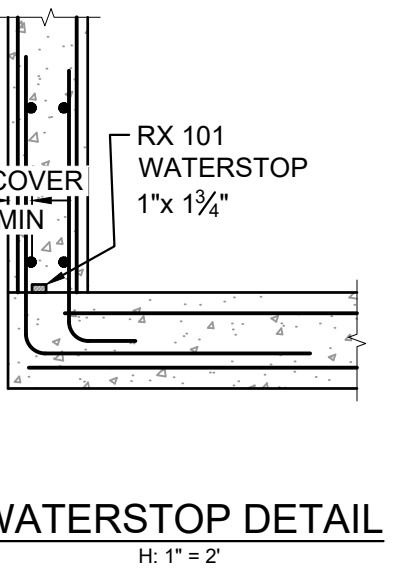
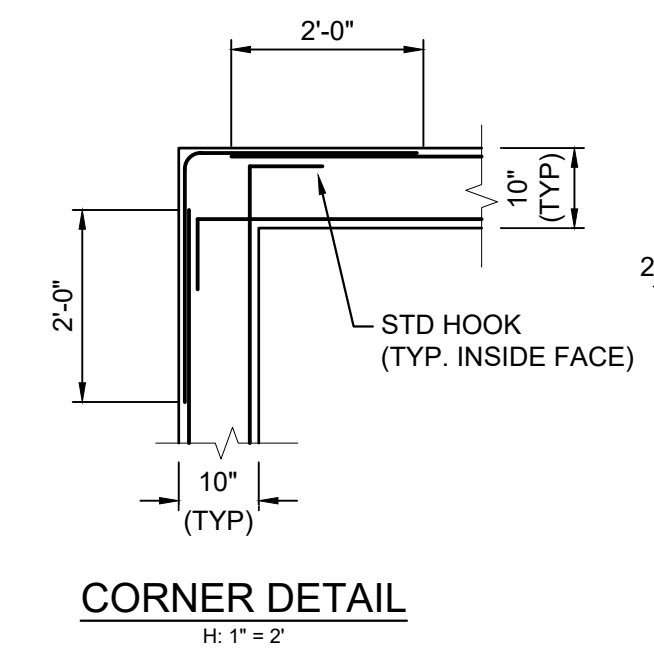
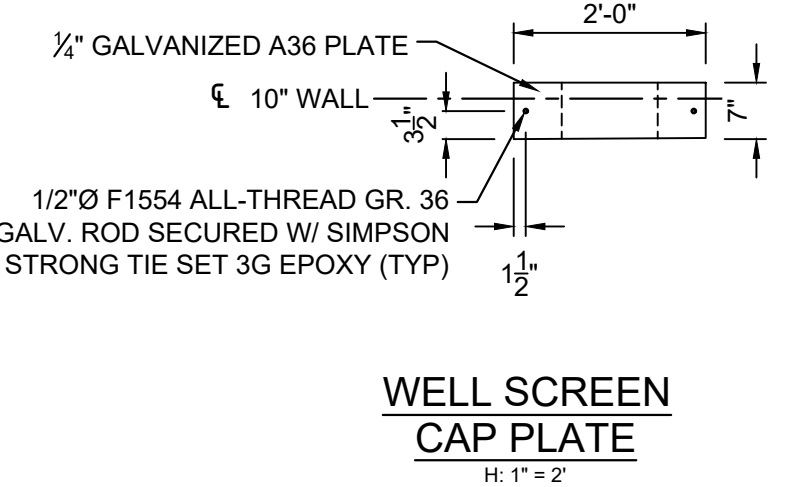
DESIGNED BY: WCG	SCALE: VARIES	DATE ISSUED: MAY 2024	DRAWING No. DF03
DRAWN BY: RWO	HORIZ: VARIES	SHEET 22 OF 26	
CHECKED BY: JAO	VERT: N/A		



Know what's below.  
Call before you dig.



- NOTES:**
- ALL CONCRETE SHALL BE CDOT CLASS D; F<sub>c</sub> = 4500 PSI
  - ALL REINFORCING STEEL SHALL BE F<sub>y</sub>: 60 KSI
  - CONCRETE COVER FOR STEEL REINFORCING BARS SHALL BE AS FOLLOWS  
CONCRETE PLACED AGAINST EARTH.....3"  
CONCRETE EXPOSED TO EARTH OR WEATHER.....2"
  - ALL EXPOSED CONCRETE CORNERS SHALL HAVE A MINIMUM 3/8" CHAMFER
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AS RELATED TO SHORING AND PROTECTION OF NEW AND EXISTING STRUCTURES AS NECESSARY TO PREVENT DAMAGE OR COLLAPSE DUE TO WIND, EARTH, CONSTRUCTION OR OTHER LOADS
  - STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CDOT STANDARD PLAN M-206-2
  - ALL BEDDING SHALL BE A MINIMUM OF 12" THICK CDOT CLASS 6 COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY DETERMINED IN CONFORMANCE WITH AASHTO 180
  - INLET STEPS SHALL BE ALUMINUM & CONFORM TO CITY OF COLORADO SPRINGS STANDARD DETAIL D-20D
  - WINGWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CDOT STANDARD M-601-20
  - SAWCUT APRON JOINTING SHALL BE SPACED AT 10' MAX. SPACING. NO ACUTE ANGLES WILL BE ALLOWED. TURN JOINTS PERPENDICULAR TO FOOTING AT 2' OFFSET.



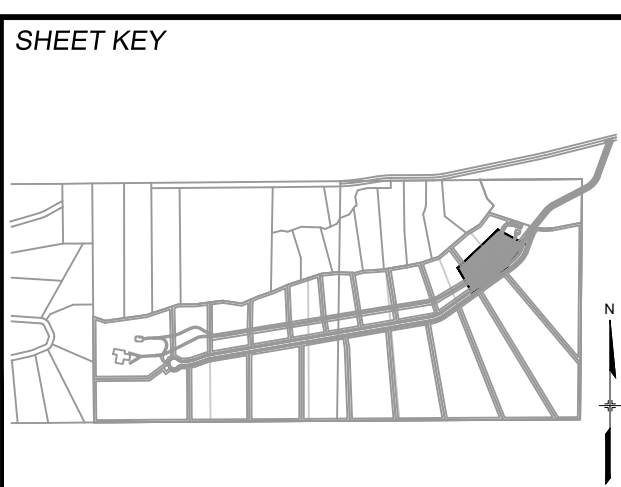
**WATERSTOP NOTES:**

WATERSTOP SHALL BE VOLCLAY WATERSTOP RX 101 OR EARTHSHIELD JP 648 OR APPROVED EQUAL.

PLACE WATERSTOP FOR ENTIRETY OF EACH HORIZONTAL & VERTICAL CONSTRUCTION JOINT.

FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.

No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Pond Plans\DF01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:49 AM			
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**BENCHMARK**  
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING**  
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999," AND THE WESTERLY END BY A 2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000," BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

PREPARED BY:  
**Matrix**  
Excellence by Design

SEAL  
COLORADO LICENSED PROFESSIONAL ENGINEER  
WALTER J. RYAN  
16165  
05/29/2024

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

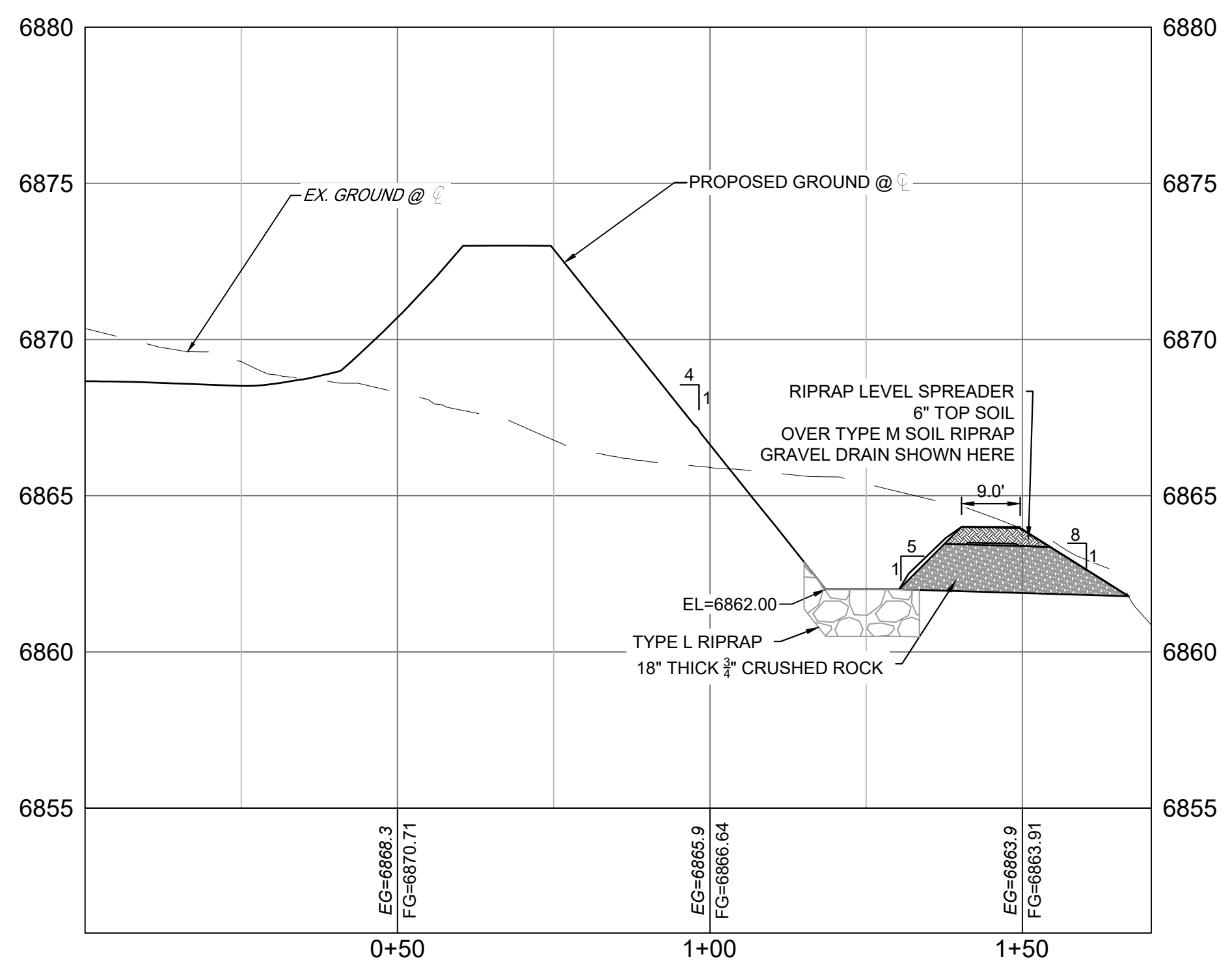
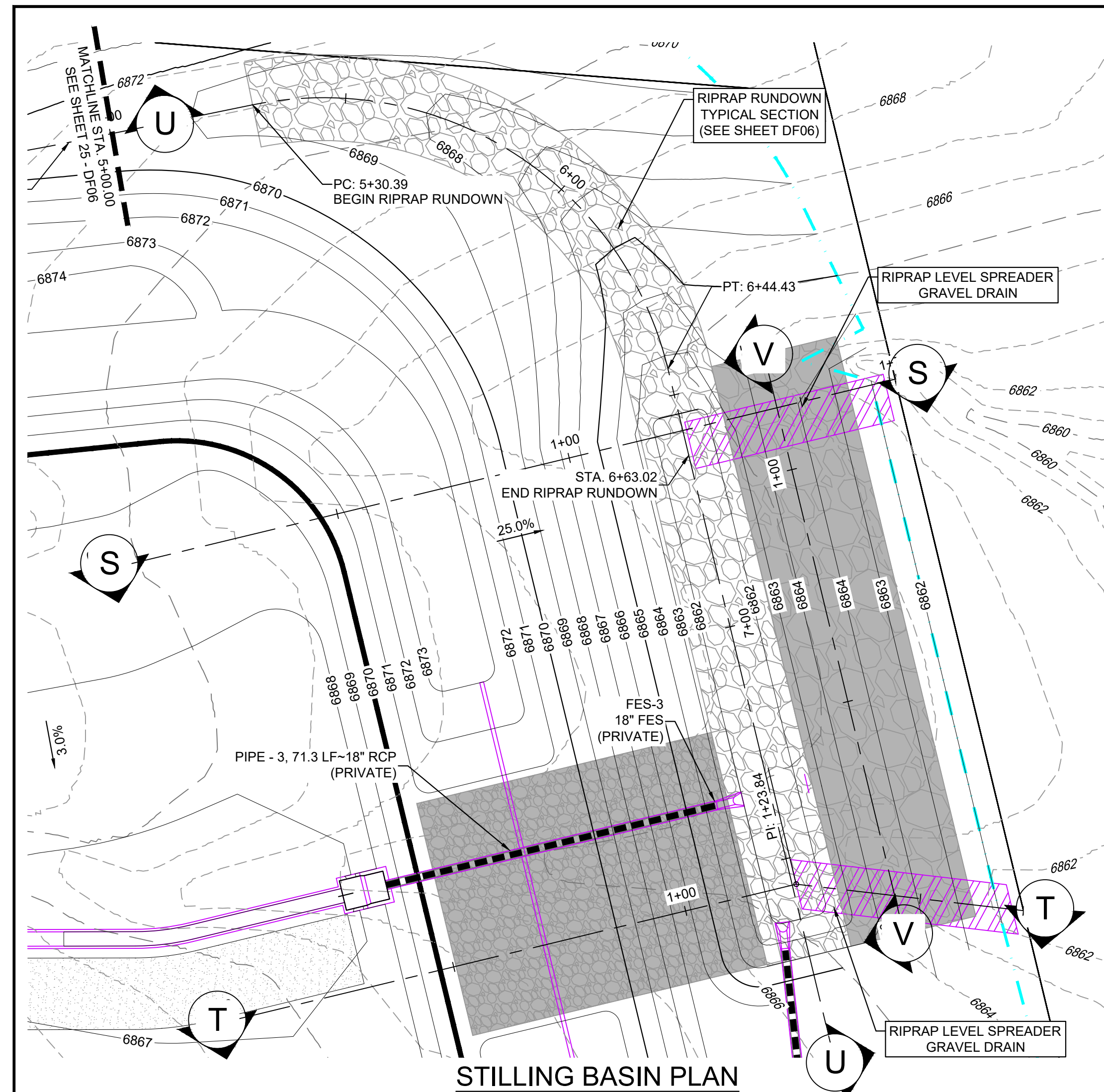
**DETENTION POND 1 DETAILS**

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DRAWN BY: RWO  
CHECKED BY: JAO

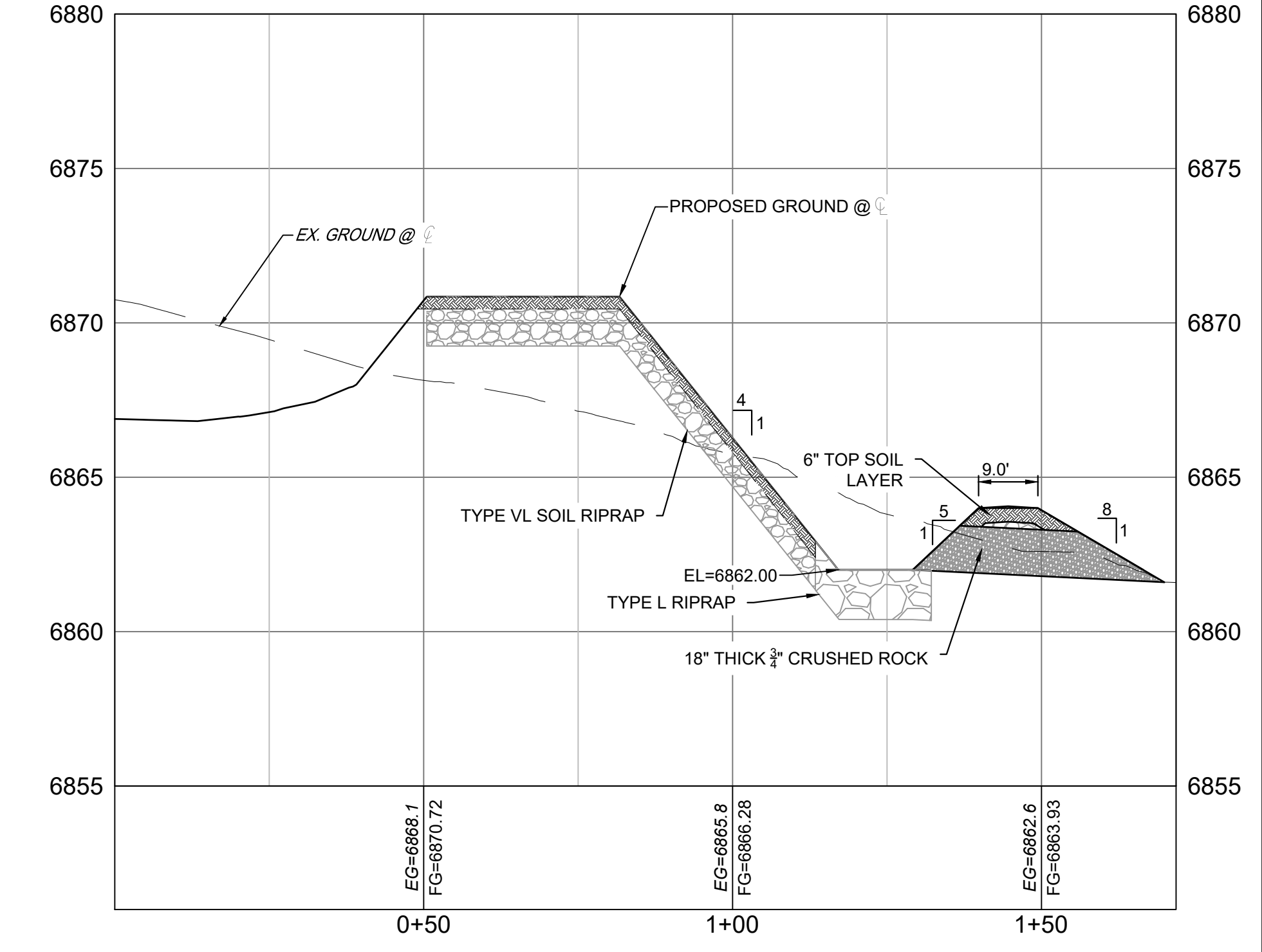
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VERT. N/A

DATE ISSUED: MAY 2024  
SHEET 23 OF 26

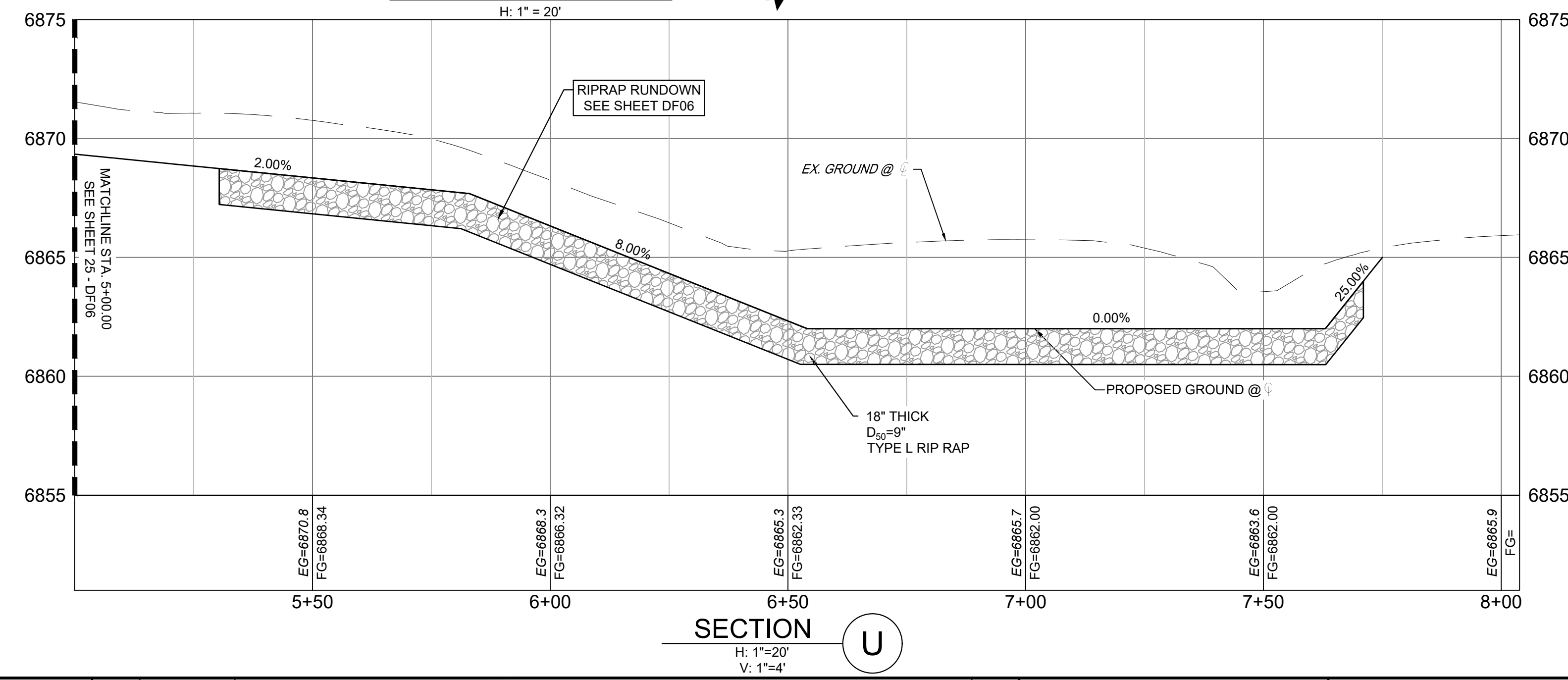
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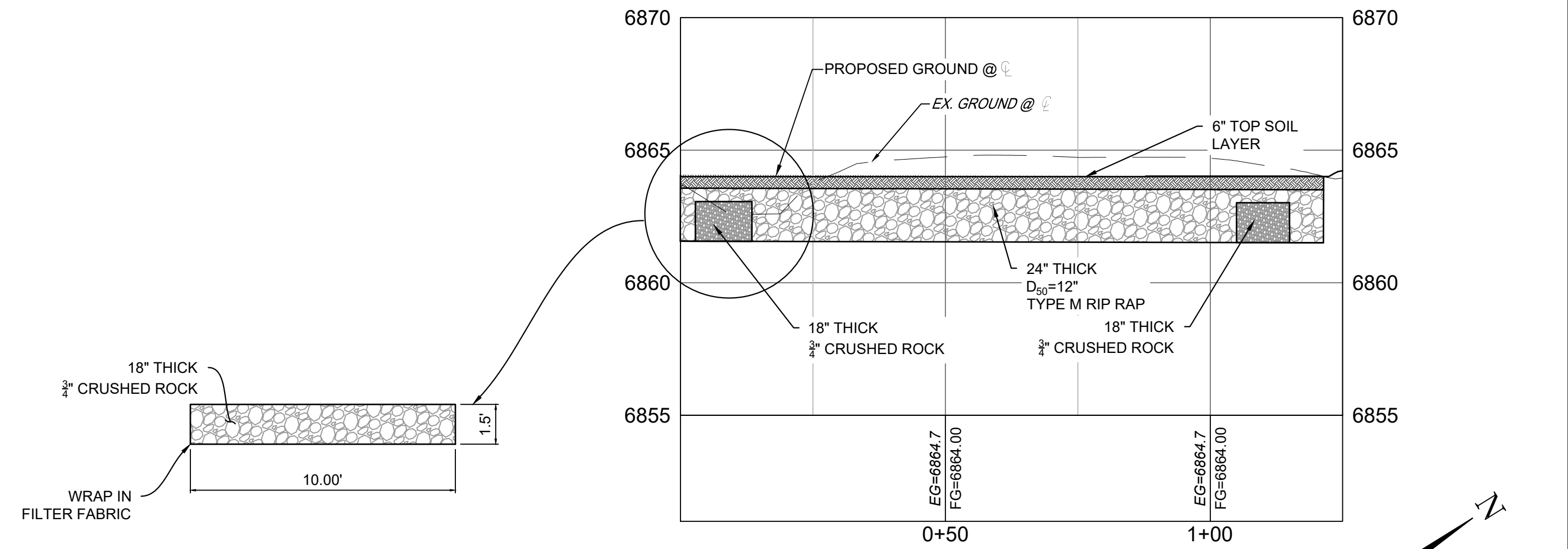
SECTION S  
H: 1"=20'  
V: 1"=4'



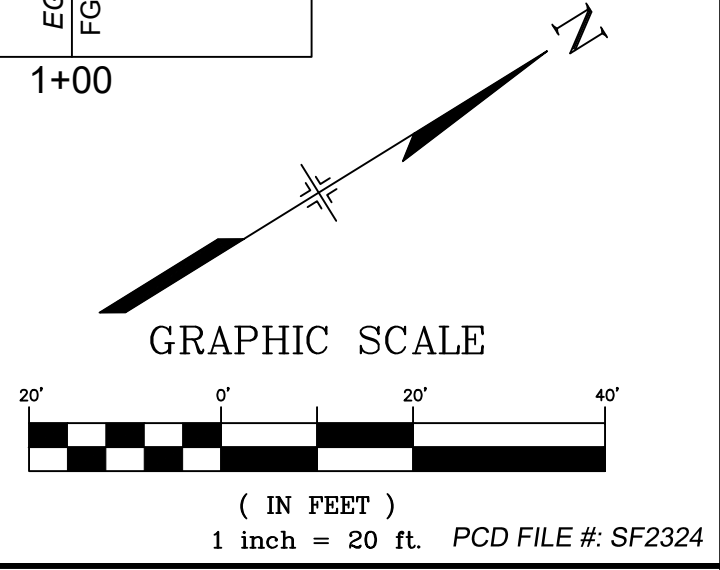
SECTION T  
H: 1"=20'  
V: 1"=4'



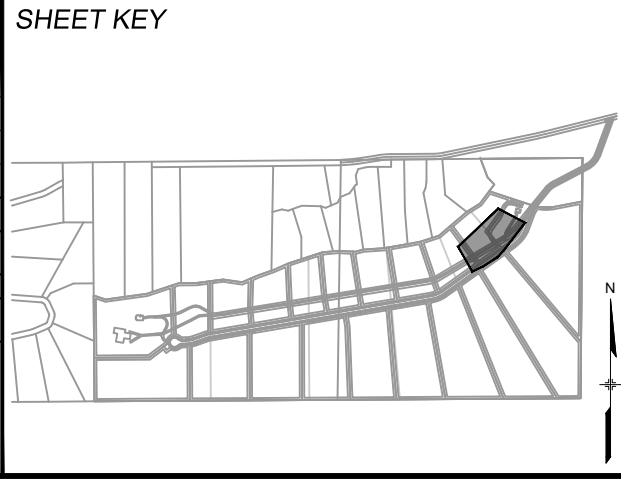
SECTION U  
H: 1"=20'  
V: 1"=4'



STILLING BASIN DRAIN SECTION  
H: 1"=4'  
V: 1"=4'

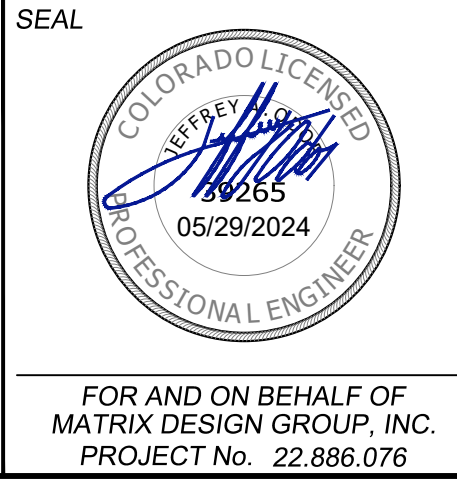


No.	DATE	DESCRIPTION REVISIONS	BY
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CTB FILE: Matrix.ctb			
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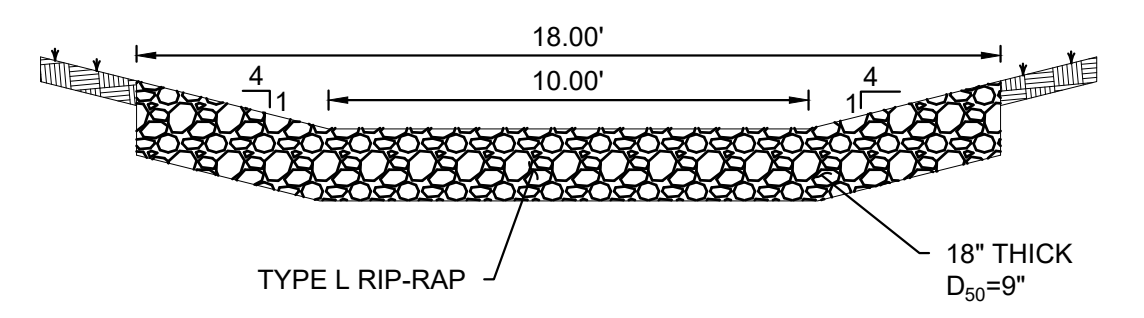
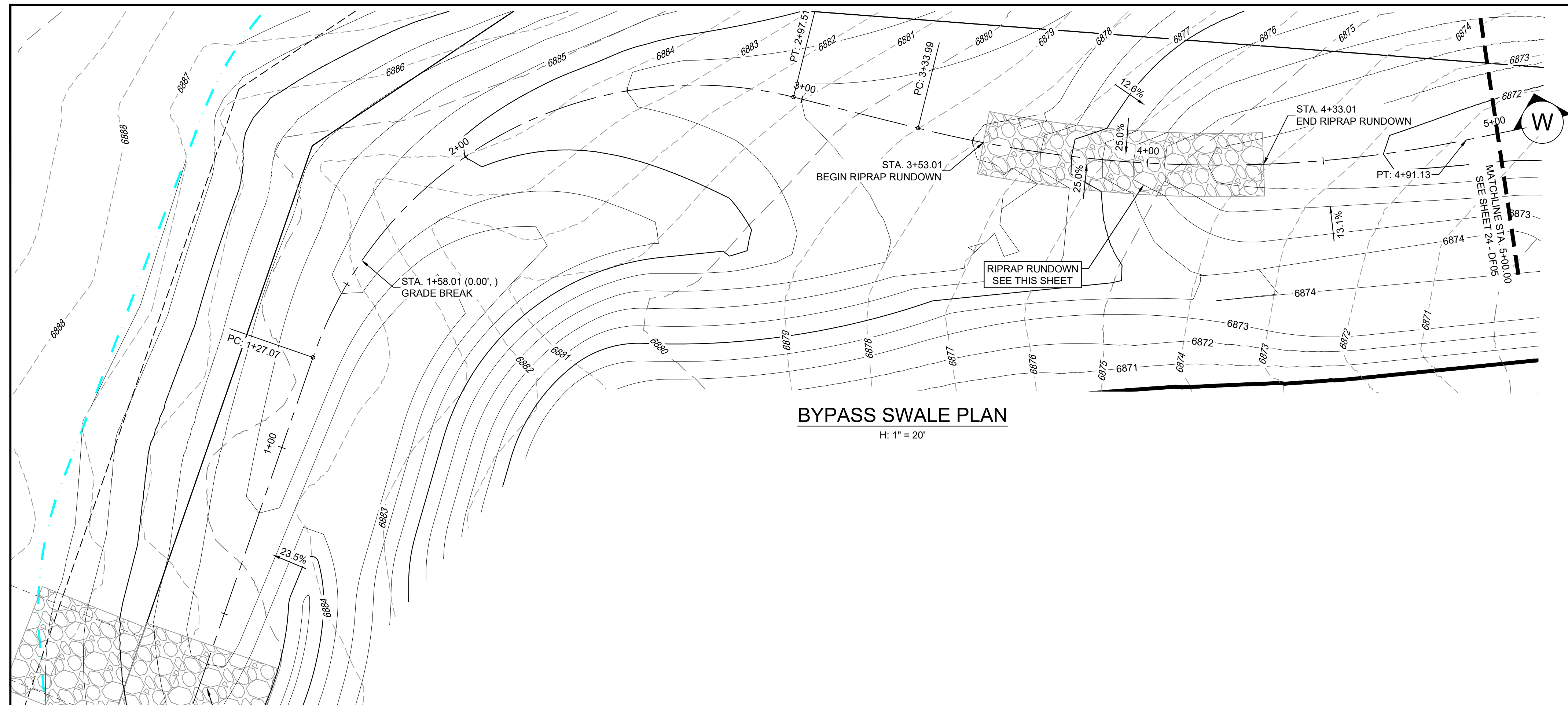
**BENCHMARK**  
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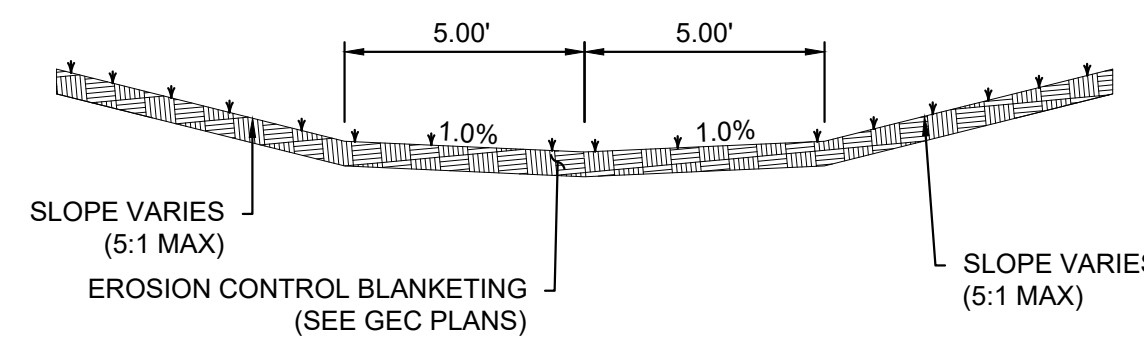


<b>HAY CREEK VALLEY</b>			
EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS			
<b>RIPRAP LEVEL SPREADER DETAILS</b>			
DESIGNED BY: WCG	SCALE: 1"=20'	DATE ISSUED: MAY 2024	DRAWING No. DF05
DRAWN BY: RWO	HORIZ: 1"=20'	SHEET: 24 OF 26	
CHECKED BY: JAO	VERT: N/A		



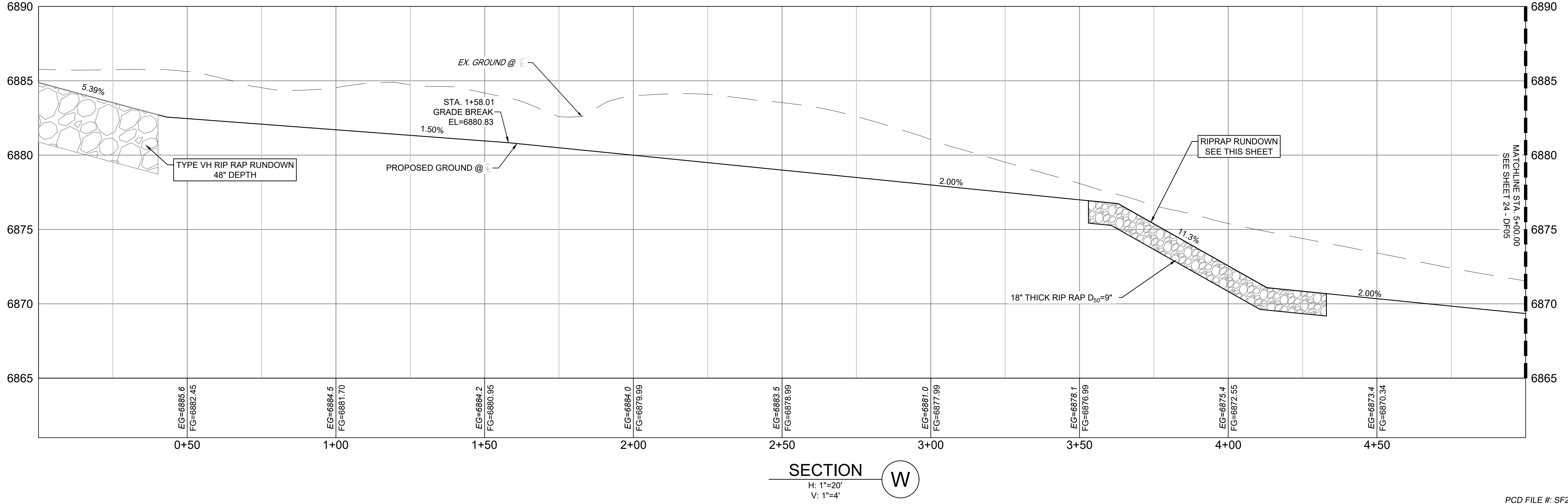
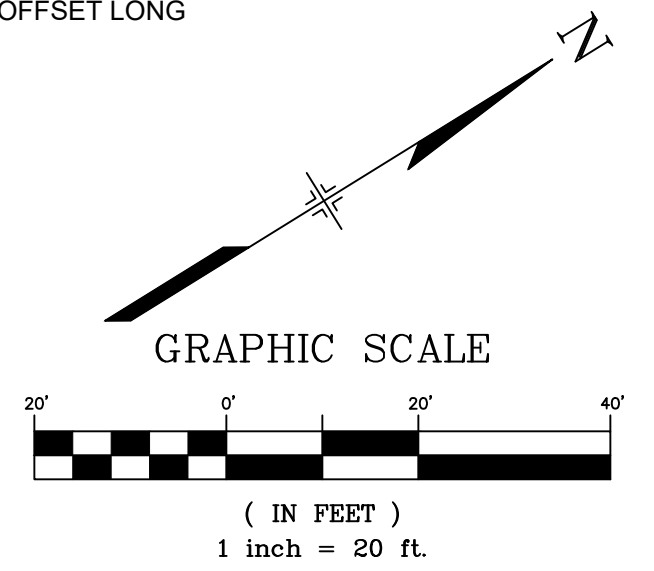


RIPRAP RUNDOWN TYPICAL SECTION  
H: 1" = 4'

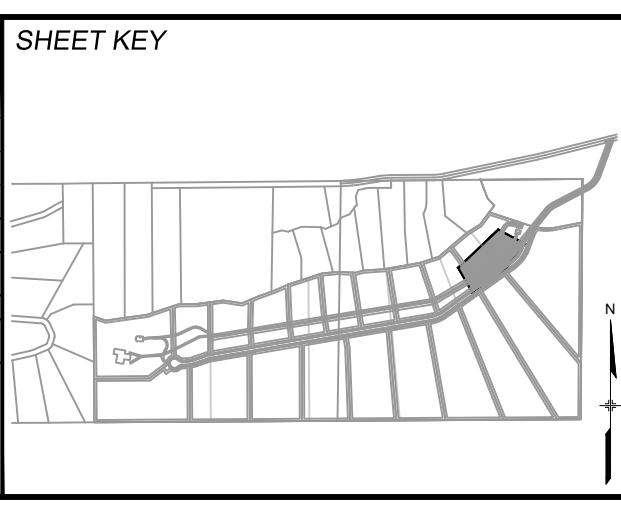


RIPRAP RUNDOWN TYPICAL SECTION  
H: 1" = 4'

- NOTE:
1. BYPASS CHANNEL CAN BE FIELD ADJUSTED TO BETTER FIT THE OVERALL GRADING AND INTENDED PURPOSES. CHANNEL SLOPES SHALL BE 2% MAX GRADE AND 10FT MIN WIDTH
  2. CHANNEL SLOPE SHALL MAINTAIN 2% MAX GRADE. RIP RAP RUNDOWN SHALL MAINTAIN 12% MAX GRADE.
  3. RIP RAP RUNDOWN MAY BE GROUTED AT OWNER'S DISCRETION TO OFFSET LONG TERM MAINTENANCE EFFORTS.



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CTB FILE: Matrix.ctb			
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**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**RIPRAP LEVEL SPREADER DETAILS**

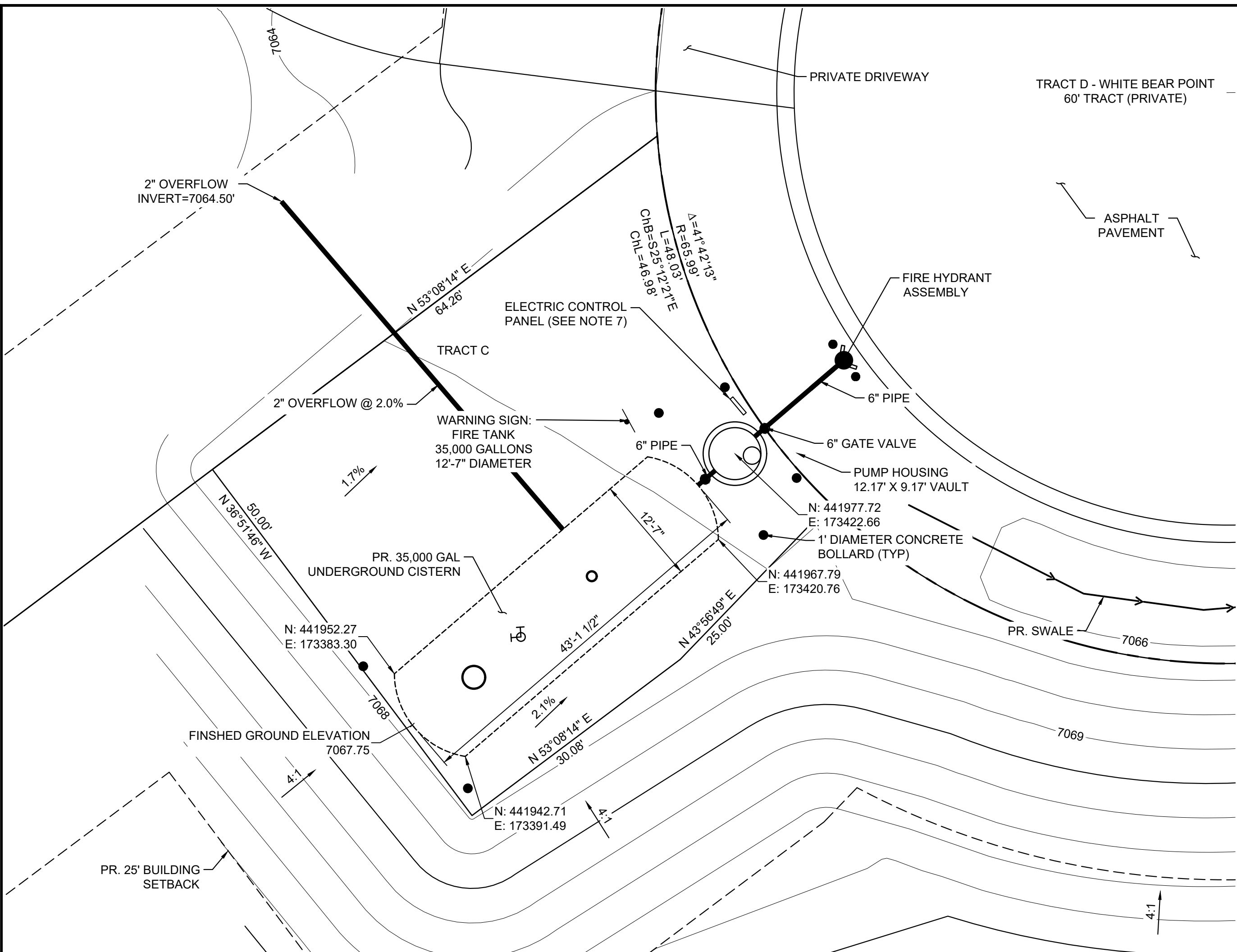
DESIGNED BY: WCG	SCALE: 1"=20'	DATE ISSUED: MAY 2024	DRAWING No. DF06
DRAWN BY: RWO	HORIZ: N/A	SHEET: 25 OF 26	
CHECKED BY: JAO	VERT: N/A		

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076



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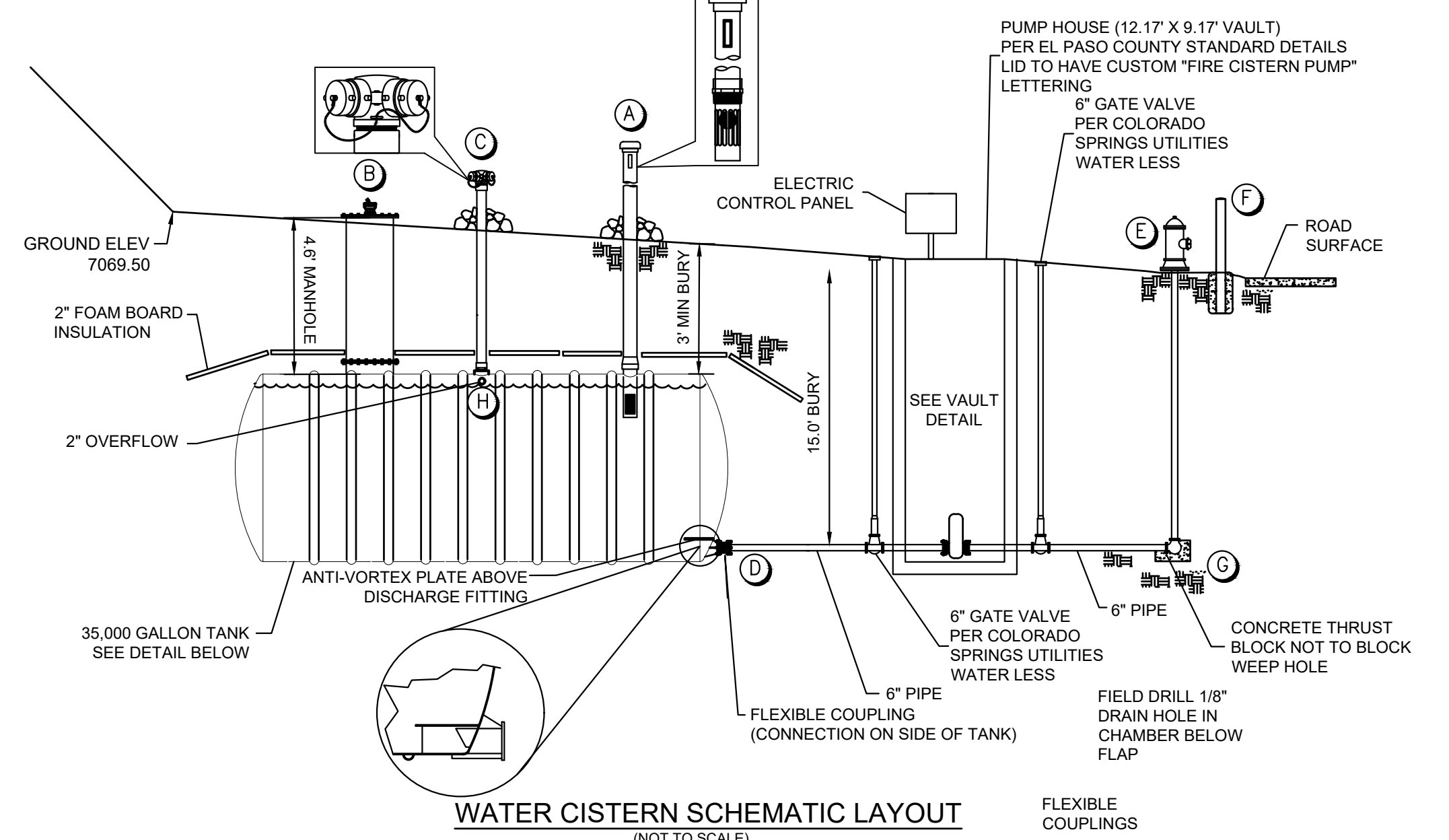
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE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



WATER CISTERN PLAN  
(1"=10')

- APPURTENANCES
- RED/GREEN LEVEL INDICATOR WITH COMBINATION 6 INCH VENT.
  - 30" DIAMETER MANWAY WITH BOLTED COVER AND 4" LOCKING INSPECTION HATCH.
  - 2-1/2" NST-FS CLAPPERED SIAMESE REFILL.
  - FLEXIBLE COUPLING AT OVERFLOW AND DISCHARGE FITTINGS.
  - FIRE HYDRANT ASSEMBLY
  - PIPE BOLLARDS IN CONCRETE
  - CONCRETE THRUST BLOCK (PER CSU WATER LESS) WITH GRAVEL FILLED DRAIN DOWN AREA.
  - OVERFLOW RUNNING CONTINUOUSLY DOWNHILL TO DAYLIGHT WITH RODENT GUARD AND PVC SWING CHECK VALVE.

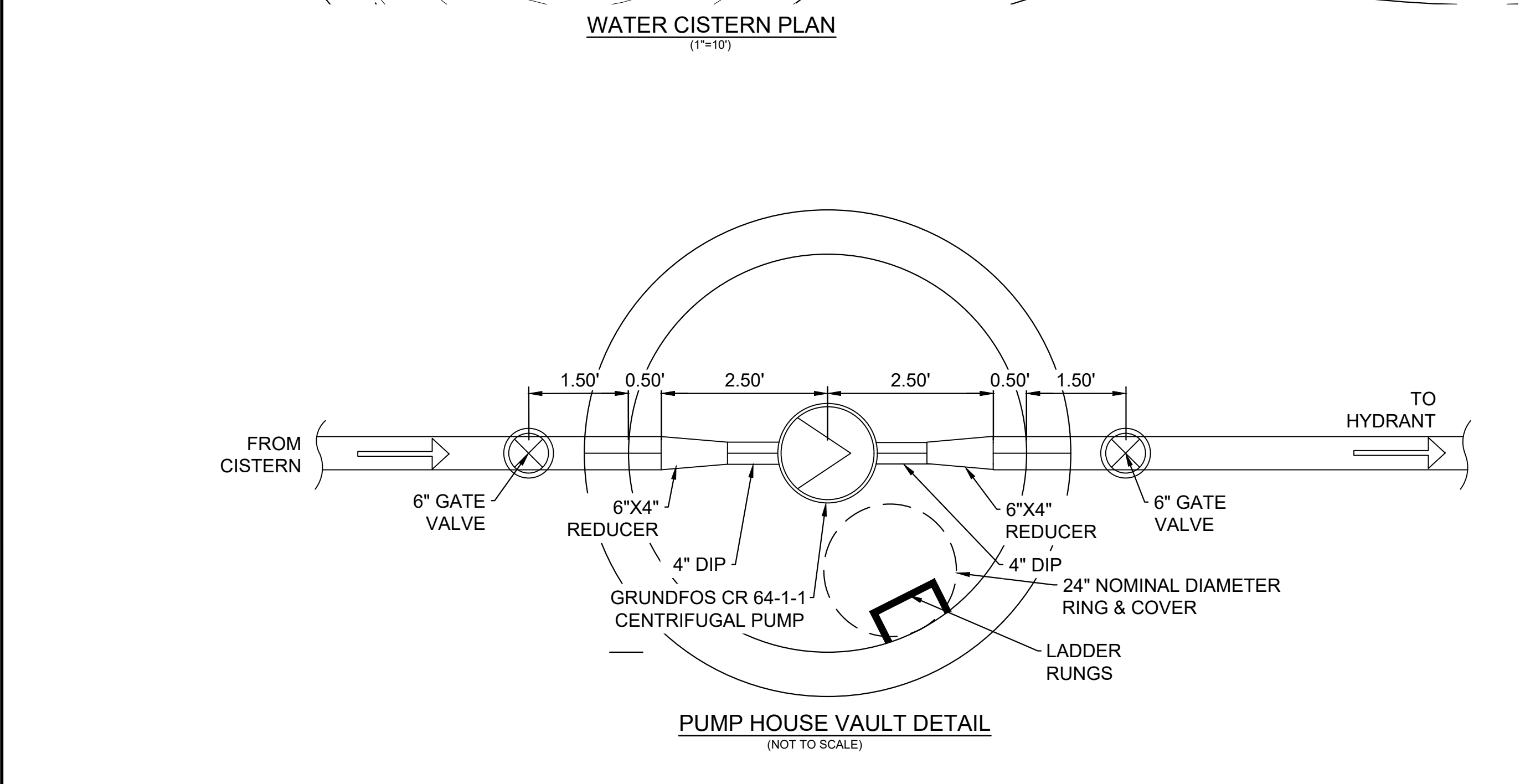
- NOTES
- HYDRANT MUST BE OPENED FULLY WHEN IN USE.
  - LOCATE CISTERNS PERPENDICULAR TO THE ROAD WHEN POSSIBLE.
  - INSULATE ABOVE TANK WITH 2" THICK RIGID FOUNDATION GRADE FOAM BOARD FOR EXTREME COLD WEATHER CONDITIONS.
  - PLACE STABILIZING ROCKS AROUND PVC RISER PIPES.
  - PAINT ALL EXPOSED PVC PIPING FOR UV PROTECTION.
  - SHOP DRAWINGS OF PUMP, HYDRANT, & CISTERN TO BE REVIEWED PRIOR TO PURCHASE.
  - ELECTRIC PANEL MUST INCLUDE "PUMP ON/OFF" & "LOW WATER SHUTOFF" FUNCTIONS. WIRING TO BE COMPLETED BY OTHERS.
  - PROPOSED PUMP MUST AVOID CAVITATION.



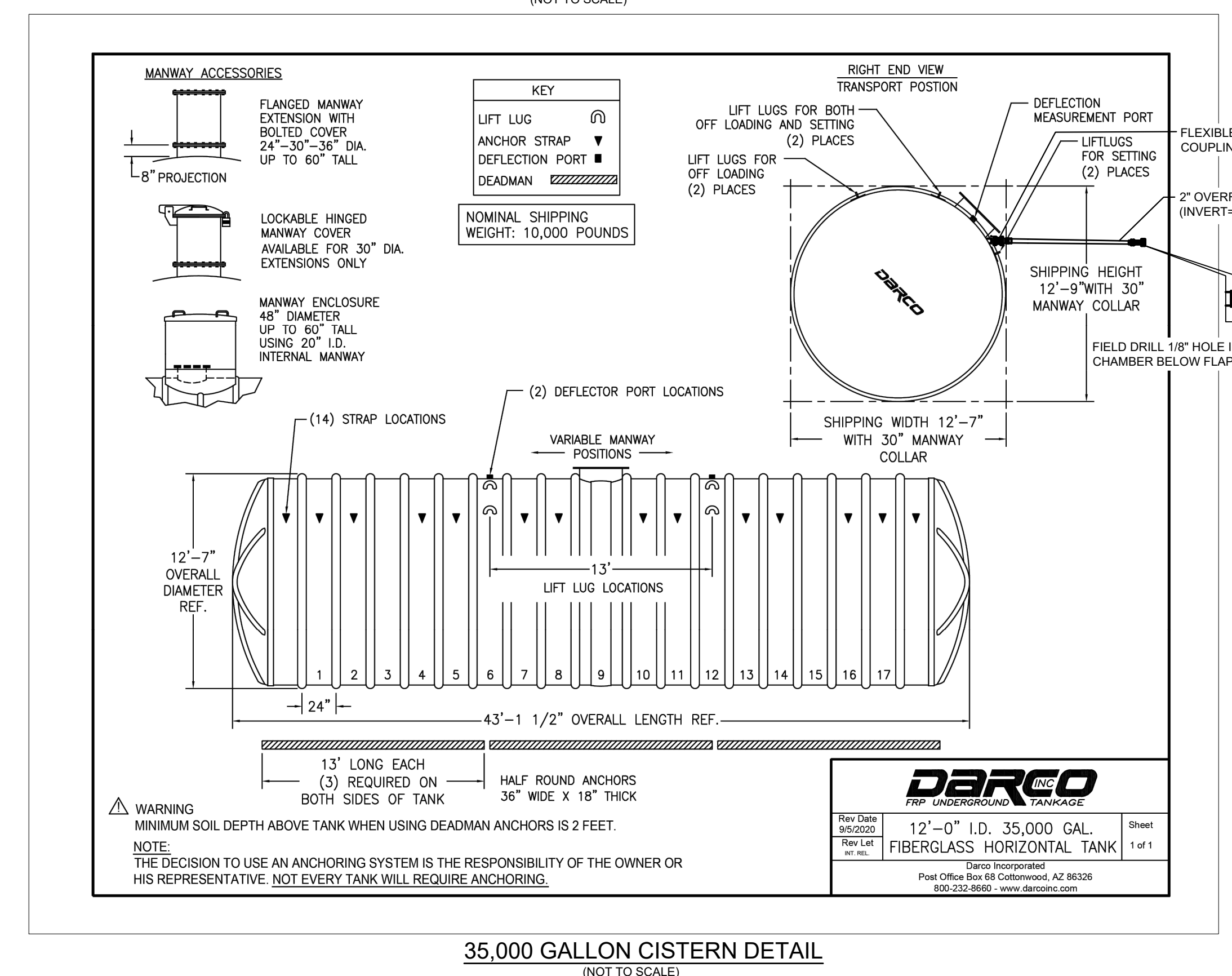
WATER CISTERN SCHEMATIC LAYOUT  
(NOT TO SCALE)

- GENERAL NOTES:
- CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FEATURES.
  - REFER TO MANUFACTURER'S DRAWINGS FOR OTHER PERTINENT INFORMATION.

- GENERAL STRUCTURAL NOTES:
- THIS PROJECT IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (IBC), LATEST EDITION, THE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7 OR LATEST EDITION), AND THE PIKES PEAK REGIONAL BUILDING CODE, LATEST EDITION.
  - ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE CODES SPECIFIED ABOVE.
  - CONTRACTOR AND/OR CLIENT SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO CONSTRUCTION. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST OTHER DISCIPLINE DRAWINGS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER OF RECORD IMMEDIATELY.
  - CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL STRUCTURAL BUILDING COMPONENTS. SHOP DRAWINGS SHALL BE PREPARED BY THE FABRICATOR. COPYING OF THESE CONSTRUCTION DOCUMENTS FOR USE AS SHOP DRAWINGS WILL NOT BE PERMITTED.
  - IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, SHORING, DEWATERING, GUYS OR TIE-DOWNS MAY BE NECESSARY.
  - ALL TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, PROCESS OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE PERTINENT TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS SHALL BE BORNE BY THE APPROPRIATE CONTRACTOR. DURING CONSTRUCTION ALL TANKS, CONCRETE STRUCTURES, ETC. ARE BUOYANT WHEN EMPTY. IN THE EVENT THAT THE EXCAVATION BECOMES FLOODED OR THE SURROUNDING GROUND BECOMES SATURATED, THEY MUST BE FILLED WITH WATER TO PREVENT FLOTATION. PROVIDE OPENINGS OR OTHER DEVICES THAT WILL MAINTAIN THE WATER LEVEL ON THE INSIDE AT THE SAME ELEVATION AS ON THE OUTSIDE AND TAKE OTHER MEASURES AS REQUIRED TO ASSURE THAT THE STRUCTURES DO NOT FLOAT.
  - ALL WATERSTOPS SHALL BE PROPERLY SUPPORTED AND WIRED TO REINFORCING TO REMAIN STRAIGHT AND TRUE.

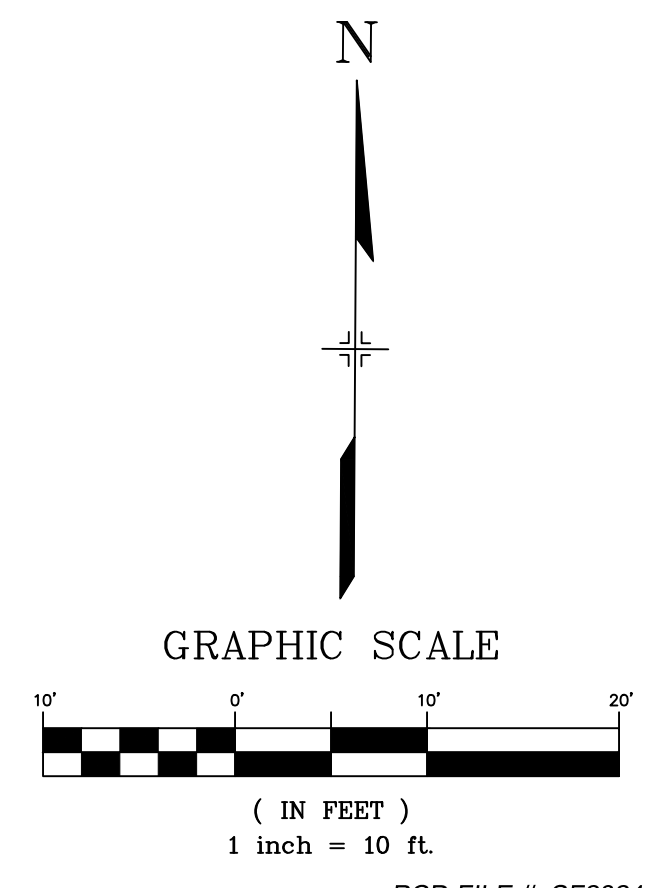


PUMP HOUSE VAULT DETAIL  
(NOT TO SCALE)



35,000 GALLON CISTERN DETAIL  
(NOT TO SCALE)

- OPERATIONAL NOTES:
- SYSTEM IS DESIGNED TO HAVE AN ELECTRICAL CONTROL PANEL WITH AN ON/OFF SWITCH.
  - PUMP MOTOR TO BE SHUT OFF ANYTIME WATER IS NOT BEING PUMPED, INCLUDING DURING A FIRE EVENT.
  - VALVE BETWEEN CISTERN AND PUMP TO REMAIN OPEN EXCEPT WHEN MAINTENANCE/REMOVAL OF THE PUMP IS NECESSARY.
  - VALVE BETWEEN THE PUMP AND HYDRANT TO REMAIN CLOSED UNTIL WATER IS NEEDED.
- 4.1) OPEN THIS VALVE PRIOR TO TURNING ON THE PUMP.  
4.2) CLOSE THIS VALVE AFTER PUMP HAS BEEN TURNED OFF.



No.	DATE	DESCRIPTION	BY
REVISIONS			
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Utility Plans\WT01.dwg			
CTB FILE: Matrix.ctb			
PLOT DATE: 5/29/2024 9:51 AM			
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PREPARED BY:

Matrix  
Excellence by Design

SEAL

FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 22.886.076

**HAY CREEK VALLEY**  
EL PASO COUNTY, COLORADO  
CONSTRUCTION DOCUMENTS

**WATER CISTERN PLAN & DETAILS**

DESIGNED BY: JAO	SCALE: HORIZ. VARIES	DATE ISSUED: MAY 2024	DRAWING No. WT01
DRAWN BY: CVW	VERT. N/A	SHEET 26 OF 26	
CHECKED BY: JAO			

PCD FILE #: SF2324