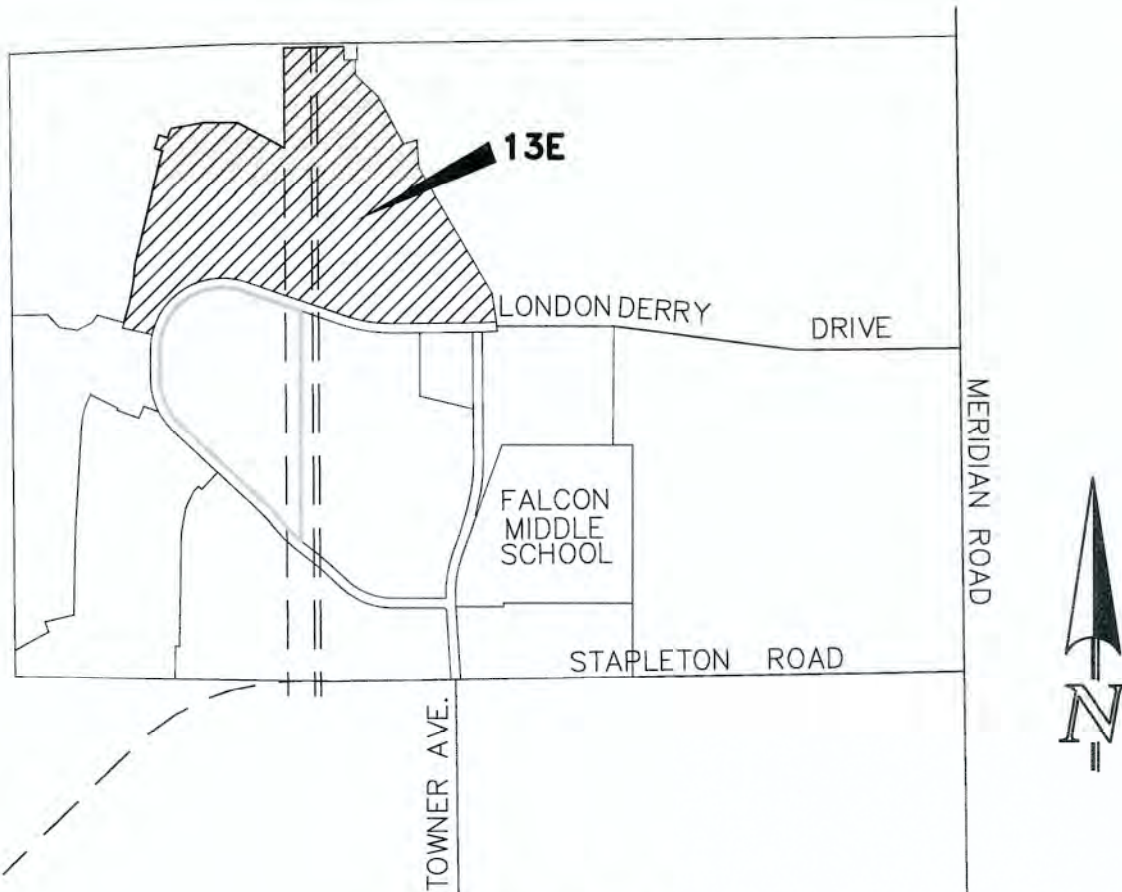


PAINT BRUSH HILLS FILING 13E
COUNTY OF EL PASO, STATE OF COLORADO
CONSTRUCTION PLANS

JULY 2018



VICINITY MAP
NTS

GENERAL CONSTRUCTION NOTES:

1. THE LOCATION OF EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND MAY NOT INCLUDE ALL UTILITIES. THE EXCAVATION CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
2. BEFORE COMMENCING ANY EXCAVATION, CALL 1-800-922-1987 FOR EXISTING UTILITY LOCATIONS.
3. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
4. ALL BACKFILL, SUB-BASE AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED TO THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION.
5. ALL STATIONING IS CENTERLINE UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE INDICATED.
6. THE CONTRACTOR SHALL REVEGETATE ALL DISTURBED AREAS AS SOON AS POSSIBLE AND EROSION CONTROL SHALL BE INSTALLED AND MAINTAINED IN A FUNCTIONAL MANNER AT ALL TIMES. DEVELOPER RESPONSIBLE FOR MAINTAINING DISTURBED AREAS UNTIL REVEGETATION IS COMPLETE.
7. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO THE EPC ECM APPENDIX K - 1.2C.
8. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
9. BUILDING CONTRACTORS WILL BE RESPONSIBLE FOR CONSTRUCTING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
10. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY DEVELOPMENT SERVICES DEPARTMENT PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR SHALL REVEGETATE ALL DISTURBED AREAS WITHIN 21 DAYS OF SUBSTANTIAL GRADING COMPLETION. EROSION CONTROL SHALL BE INSTALLED AND MAINTAINED IN A FUNCTIONAL MANNER AT ALL TIMES. DEVELOPER IS RESPONSIBLE FOR MAINTAINING DISTURBED AREAS UNTIL REVEGETATION IS COMPLETE.
12. TYPE M RIP-RAP WITH 4" OF TYPE II GRANULAR BEDDING AND MIRAFI 180N OR EQUAL MAY BE SUBSTITUTED WHERE TYPE L RIP-RAP WITH MIRAFI FW 700 OR EQUAL IS SPECIFIED
13. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH ANY AND ALL APPLICABLE EL PASO COUNTY STANDARDS AND WITH PAINT BRUSH HILLS METRO DISTRICT CONSULTING ENGINEER APPROVAL.
14. ALL WATER MAINS SHALL BE AWWA C900-SDR18 PVC WITH PUSH-ON SINGLE GASKET TYPE JOINTS.
15. ALL WATER MAIN FITTINGS SHALL BE MADE FROM GRAY-IRON OR DUCTILE IRON AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A PRESSURE RATING OF 250 PSI.
16. ALL WATER LINE BENDS, TEES, BLOW-OFFS AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS AND/OR RODDING AND RESTRAINED PIPE PER THE PAINT BRUSH HILLS METRO DISTRICT CONSULTING ENGINEER APPROVAL.
17. MAXIMUM DEFLECTION OF 8" & 12" PVC WATER MAIN JOINTS IS 4 DEGREES. CORRESPONDING MINIMUM CURVE RADIUS IS 286'. ADDITIONAL 11.25" OR 22.5" BENDS MAY BE REQUIRED FOR PROPER ALIGNMENT.
18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED AS-BUILTS OF ALL WATER MAIN, STORM SEW AND SAN. SEW. MAIN INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, VALVES, FITTINGS, MANHOLES AND LOCATIONS OF WATER AND SEWER SERVICES.
18. SANITARY SEWER PIPE AND FITTINGS: PVC 4"-8" ASTM D3034, TYPE PSM, SDR 35: PUSH-ON JOINTS AND MOLDED RUBBER GASKETS MAXIMUM HORIZONTAL DEFLECTION, AFTER INSTALLATION AND BACK FILLING SHALL NOT EXCEED 3% OF THE PIPE DIAMETER. (MINIMUM CURVE RADIUS IS 100' FOR 8" PVC SAN. SEW. MAIN)

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/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. CITY OF COLORADO SPRINGS/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 MUST BE REQUESTED, AND APPROVED, 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.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT - 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 DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS, 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 AND 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 PREFORMED THERMOPLASTER WITH TAPERED PAINT STANDARD S-627-1 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.

AGENCIES:

OWNER/DEVELOPER:	AEROPLAZA FOUNTAIN LLC & HEIDI LLC 212 NORTH WAHSATCH AVENUE, SUITE 301 COLORADO SPRINGS, CO 80903 MR. JEFF MARK, (719) 635-3200
CIVIL ENGINEER:	CLASSIC CONSULTING ENGINEERS & SURVEYORS 619 N. CASCADE AVENUE, SUITE 200 COLORADO SPRINGS, COLORADO 80903 MR. MARC A. WHORTON, P.E. (719) 785-2802
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, COLORADO 80910 MR. GILBERT LAFORCE (719) 520-7945
METRO DISTRICT:	PAINT BRUSH HILLS METRO DISTRICT 9830 LIBERTY GROVE DR. FALCON, CO 80831 MR. LEON GOMES (719) 495-8188
GAS COMPANY:	BLACKHILLS ENERGY 37 WIDEFIELD BOULEVARD WIDEFIELD, COLORADO 80911 MR. GEORGE M. PETERSON, (719) 392-3491
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC P.O. BOX 1600 LIMON, COLORADO 80828 MR. LES ULFERS, (719) 495-2283
FIRE DEPARTMENT:	FALCON FIRE PROTECTION DISTRICT 7030 N. MERIDIAN RD. FALCON, COLORADO 80831 CHIEF HARWIG (719) 495-4050
TELEPHONE COMPANY:	CENTURY LINK (LOCATORS) 811 AT & T (LOCATORS) 811

APPROVALS:

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY DIRECTLY CAUSED BY THE NEGLIGENCE ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.



MARC A WHORTON, COLORADO, P.E. #37155
FOR AND ON THE BEHALF OF CLASSIC CONSULTING ENGINEERS & SURVEYORS

10/19/18
DATE

OWNER/DEVELOPER'S STATEMENT:

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

MR. JEFF MARK
AEROPLAZA FOUNTAIN LLC AND HEIDI
LLC

9/25/18
DATE

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 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 DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E.
COUNTY ENGINEER / ECM ADMINISTRATOR

Approved

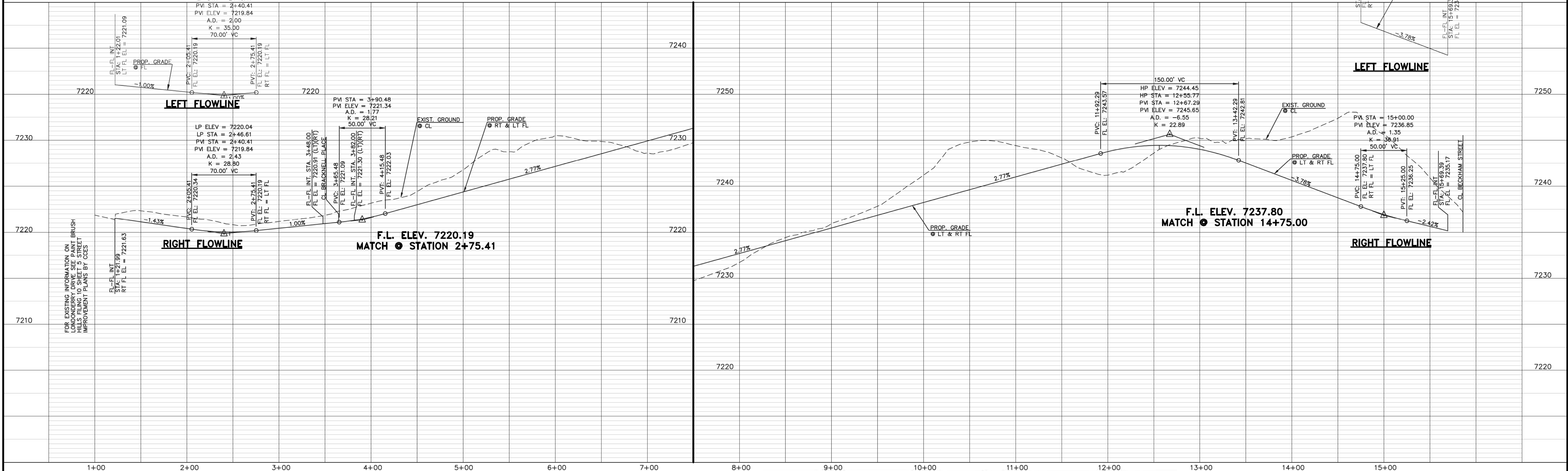
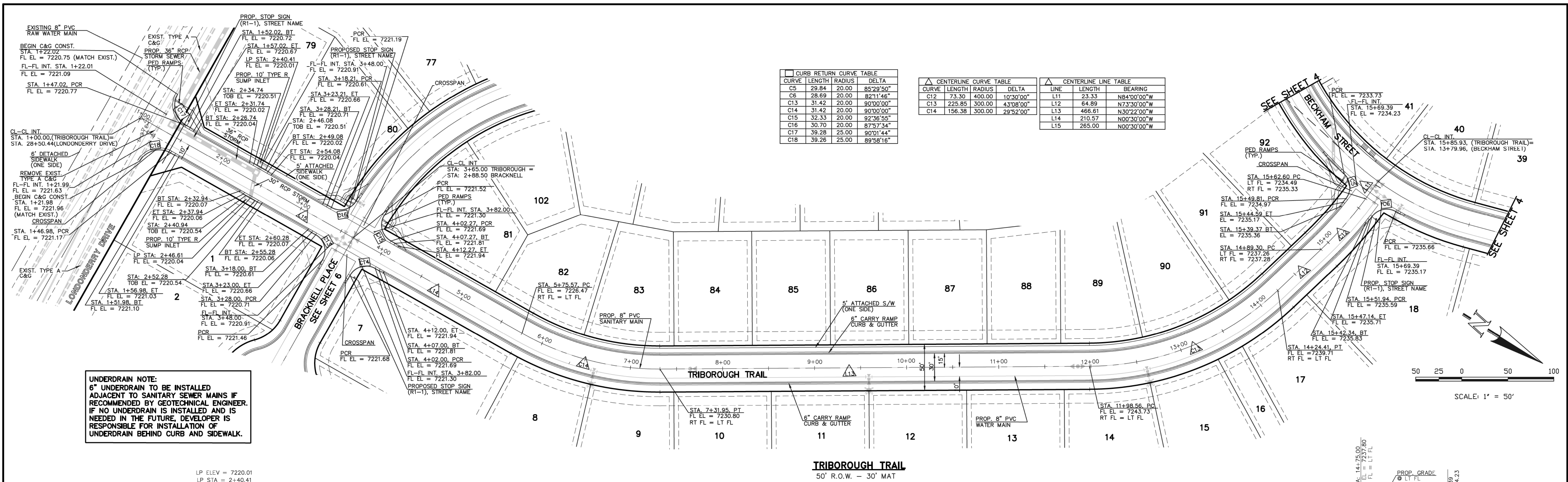
by Elizabeth Nijkamp
El Paso County Planning and Community Development
on behalf of Jennifer Irvine, County Engineer, ECM Administrator





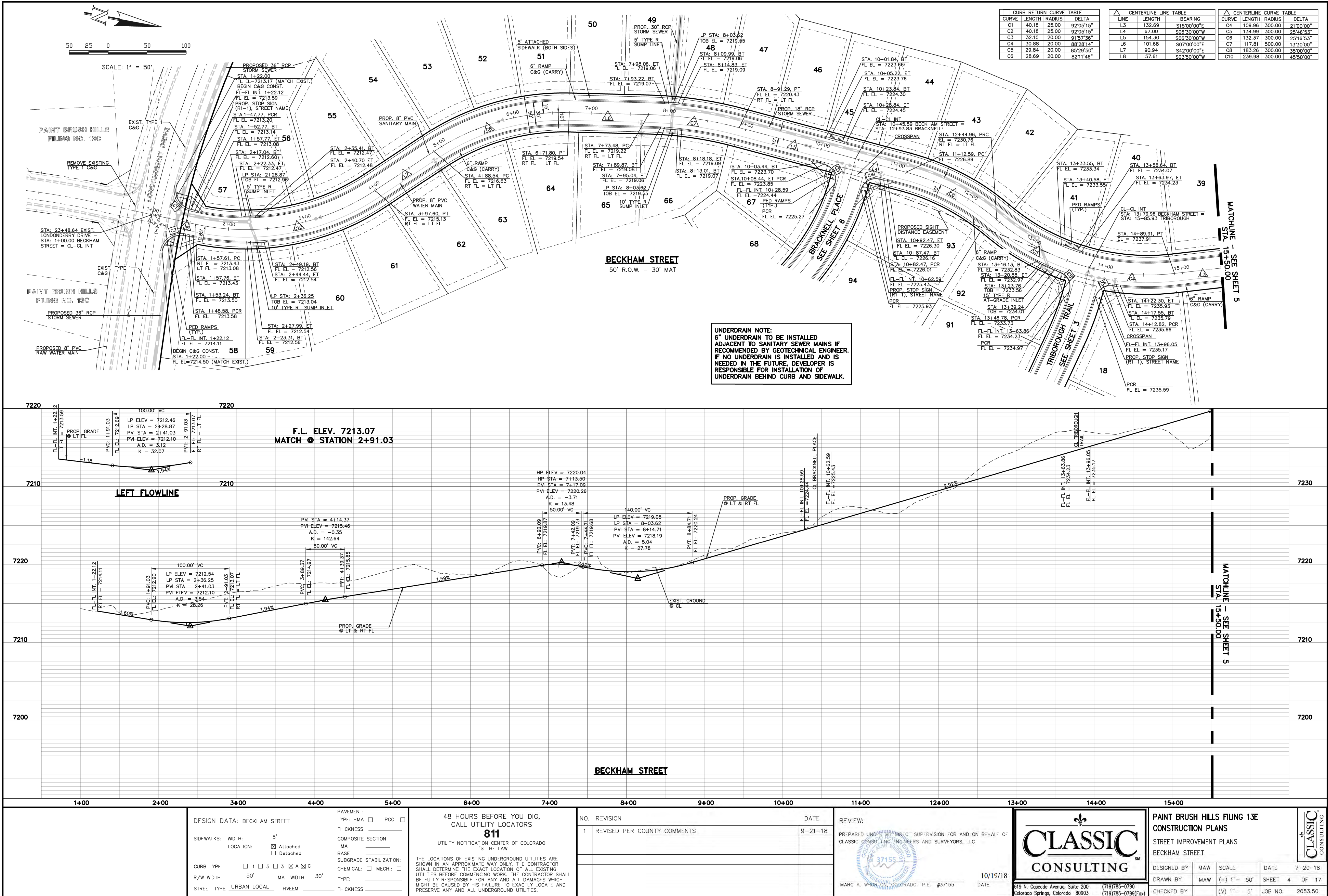
10/29/2018 9:39:17 AM

PCD PROJECT NO. SF-189

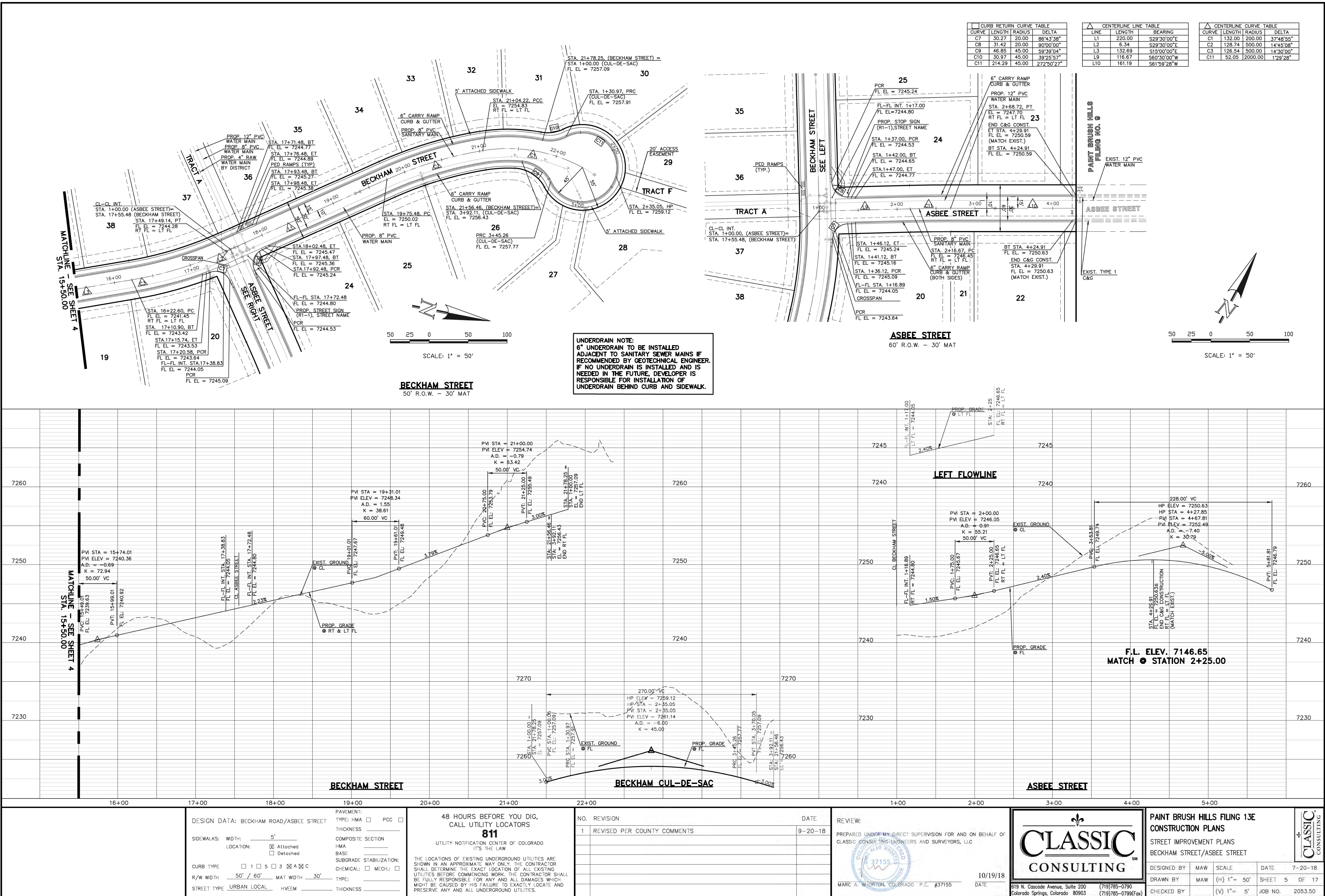
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811 UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.	NO. REVISION <table><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>																					DATE <table><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>																					REVIEW: PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC MARC A. WHORTON, COLORADO, P.E. # 37155 10/19/18 DATE	 CLASSIC CONSULTING 619 N. Cascade Avenue, Suite 200 (719) 785-0790 Colorado Springs, Colorado 80903 (719) 785-0799(Fax)	PAINT BRUSH HILLS FILING 13E CONSTRUCTION PLANS TITLE SHEET <table><tr><td>DESIGNED BY</td><td>MAW</td><td>SCALE</td><td>DATE</td><td>7-12-18</td></tr><tr><td>DRAWN BY</td><td>MAW</td><td>(H) 1"= N/A</td><td>SHEET 1 OF 15</td><td></td></tr><tr><td>CHECKED BY</td><td></td><td>(V) 1"= N/A</td><td>JOB NO.</td><td>2053.50</td></tr></table>	DESIGNED BY	MAW	SCALE	DATE	7-12-18	DRAWN BY	MAW	(H) 1"= N/A	SHEET 1 OF 15		CHECKED BY		(V) 1"= N/A	JOB NO.	2053.50	CLASSIC CONSULTING
DESIGNED BY	MAW	SCALE	DATE	7-12-18																																																									
DRAWN BY	MAW	(H) 1"= N/A	SHEET 1 OF 15																																																										
CHECKED BY		(V) 1"= N/A	JOB NO.	2053.50																																																									

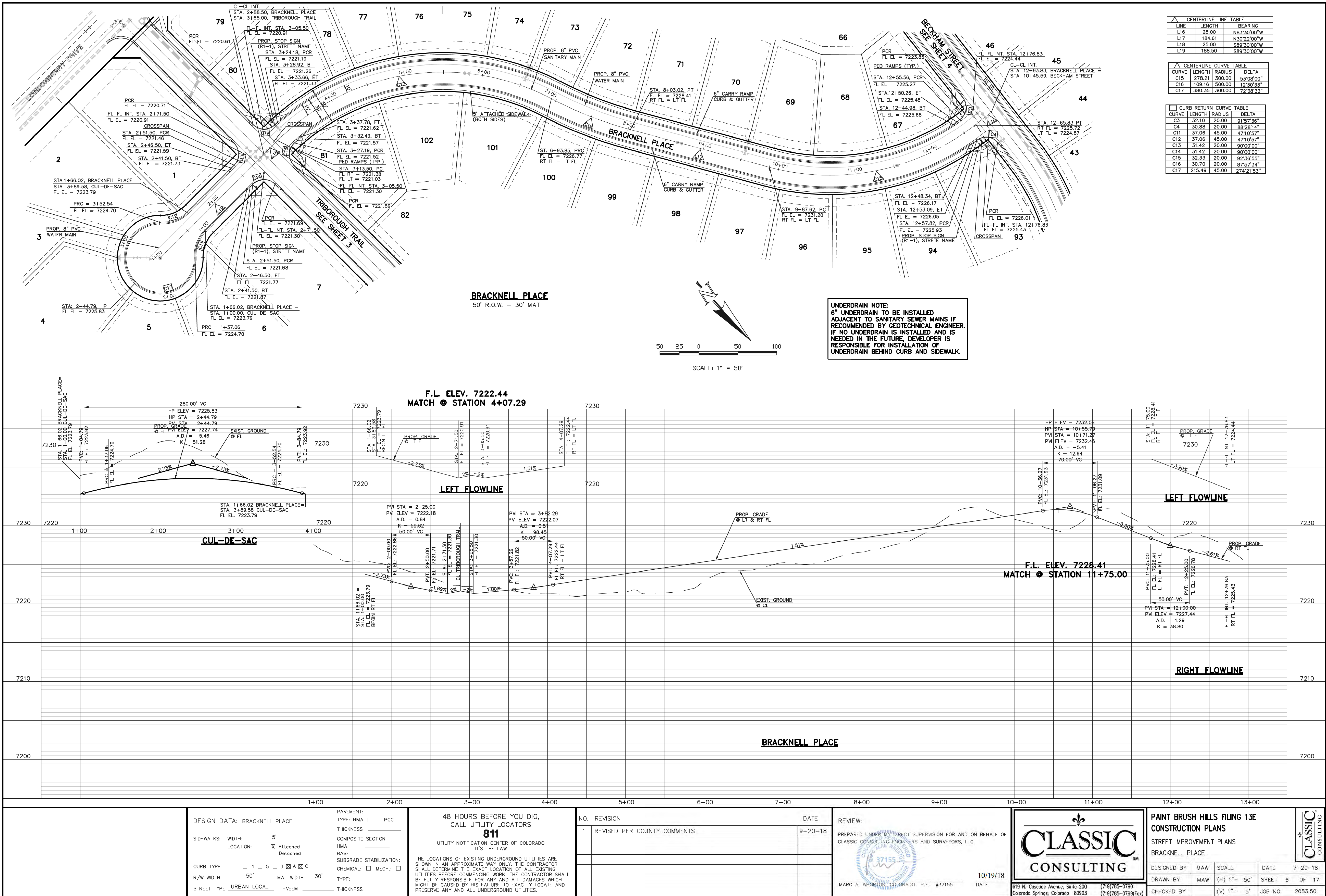


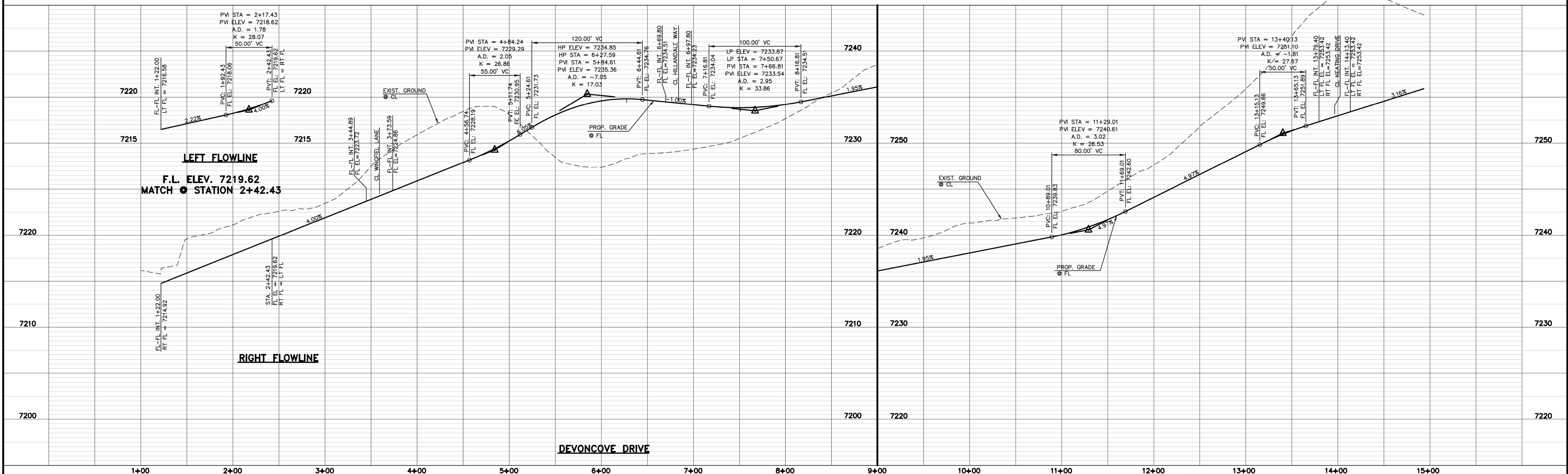
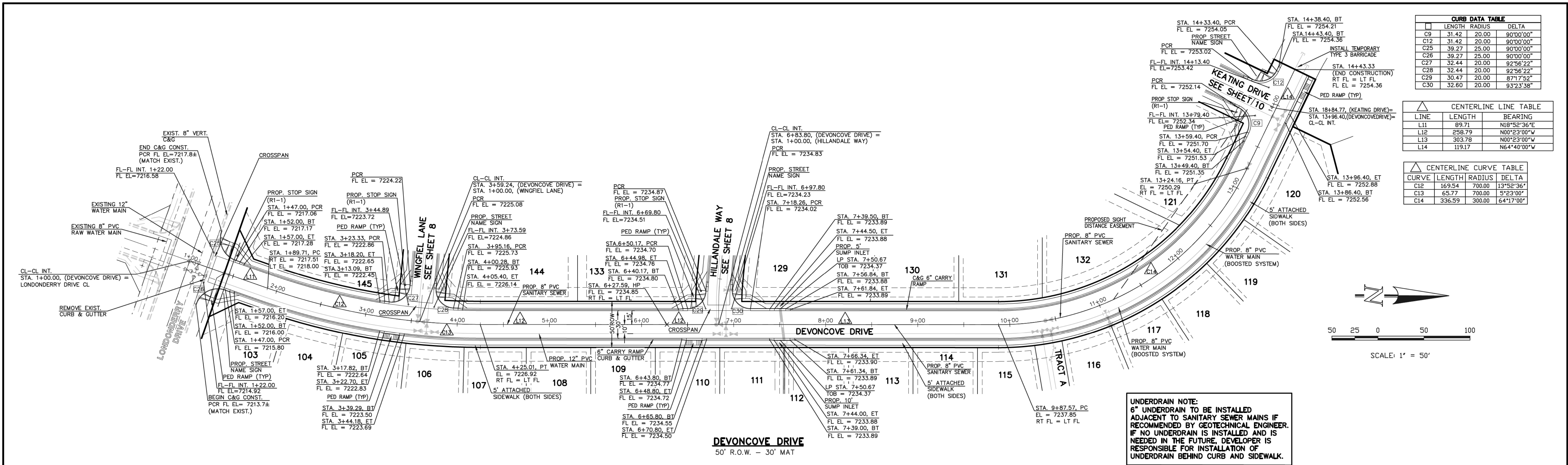
<div style="float: left; width: 30%;"> DESIGN DATA: TRIBOROUGH TRAIL SIDEWALKS: WIDTH: <u> 5' </u> LOCATION: <input checked="" type="checkbox"/> Attached <input type="checkbox"/> Detached CURB TYPE <input type="checkbox"/> 1 <input type="checkbox"/> 5 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> C R/W WIDTH <u> 50' </u> MAT WIDTH <u> 30' </u> STREET TYPE <u>URBAN LOCAL</u> HVEEM _____ THICKNESS _____ PAVEMENT: TYPE: HMA <input type="checkbox"/> PCC <input type="checkbox"/> THICKNESS _____ COMPOSITE SECTION HMA _____ BASE _____ SUBGRADE STABILIZATION: CHEMICAL: <input type="checkbox"/> MECH.: <input type="checkbox"/> TYPE: _____ THICKNESS _____ </div> <div style="float: right; width: 65%; text-align: center;"> 48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811 UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW <small>THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.</small> </div>	NO. REVISION 1 REVISED PER COUNTY COMMENTS _____ _____ _____ _____ _____ _____		DATE 9-21-18 _____ _____ _____ _____ _____ _____	REVIEW: PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC  MARC A. WHORL, COLORADO P.E. #37155 10/19/18 DATE _____	<div style="text-align: center;">  CLASSIC CONSULTINGSM </div> <p>619 N. Cascade Avenue, Suite 200 (719)785-0790 Colorado Springs, Colorado 80903 (719)785-0799(Fax)</p>	PAINT BRUSH HILLS FILING 13E CONSTRUCTION PLANS STREET IMPROVEMENT PLANS TRIBOROUGH TRAIL DESIGNED BY MAW SCALE DATE 7-20-18 DRAWN BY MAW (H) 1"= 50' SHEET 3 OF 17 CHECKED BY (V) 1"= 5' JOB NO. 2053.50	<div style="writing-mode: vertical-rl; transform: rotate(180deg); border: 1px solid black; padding: 2px;"> + CLASSIC CONSULTING </div>
---	---	--	---	---	--	---	--



N:\205350\DRAWINGS\CONSTRUCTION\Construction Plans\STREET AND STORM CDS\205350-503-SHEET 5.dwg, 10/19/2018 11:25:06 AM, 1:1







DESIGN DATA: DEVON COVE DRIVE

SIDEWALKS: WIDTH: 5'
LOCATION: ☒ Attached
☐ Detached

CURB TYPE: ☐ 1 ☐ 5 ☐ 3 ☒ A ☐ C
R/W WIDTH: 50' MAT WIDTH: 30'
STREET TYPE: URBAN LOCAL HVEEM

PAVEMENT: TYPE: HMA ☐ PCC ☐
THICKNESS: _____
COMPOSITE SECTION: HMA _____
BASE: _____
SUBGRADE STABILIZATION: CHEMICAL: ☐ MECH.: ☐
TYPE: _____
THICKNESS: _____

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811

UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO. REVISION

1 REVISED PER COUNTY COMMENTS

DATE

9-20-18

REVIEW:

PREPARED UNDER THE DIRECT SUPERVISION FOR AND ON BEHALF OF
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155

10/19/18

DATE

CLASSIC CONSULTING

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719)785-0790
(719)785-0799(Fax)

PAINT BRUSH HILLS FILING 13E
CONSTRUCTION PLANS

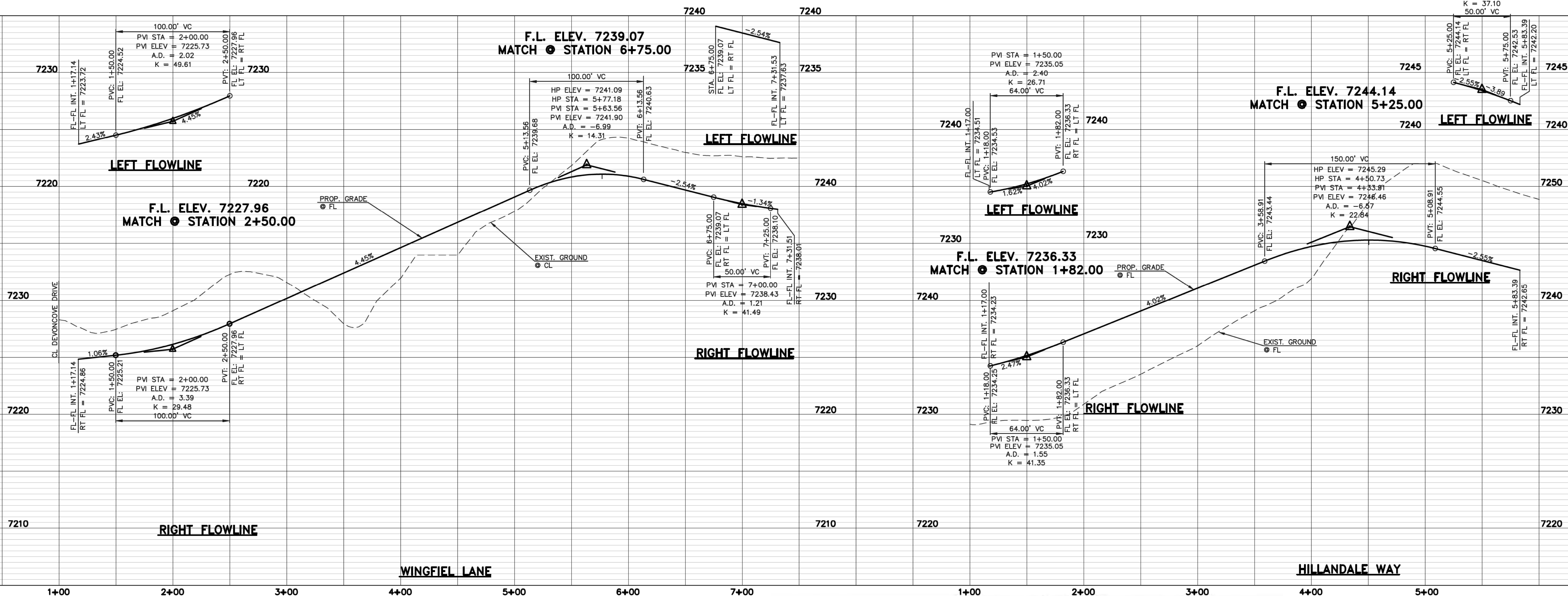
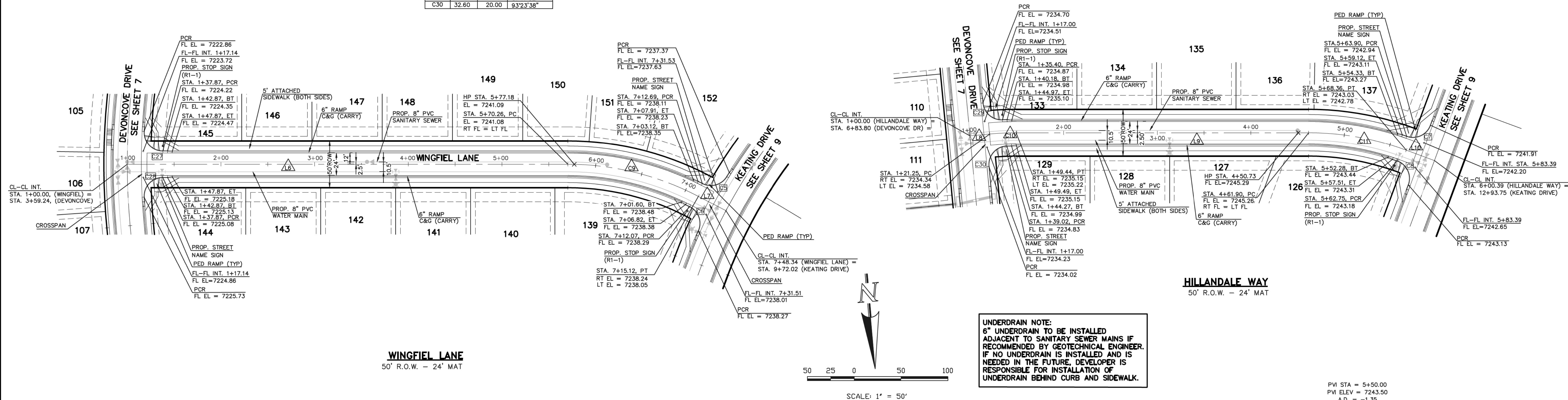
STREET IMPROVEMENT PLANS
DEVON COVE DRIVE

DESIGNED BY: MAW SCALE: DATE: 7-20-18
DRAWN BY: MAW (H) 1"= 50' SHEET 7 OF 17
CHECKED BY: (V) 1"= 5' JOB NO. 2053.50

CURB DATA TABLE			
	LENGTH	RADIUS	DELTA
C5	29.99	20.00	85°54'26"
C6	30.35	20.00	86°57'02"
C7	31.12	20.00	89°08'48"
C8	31.79	20.00	91°04'17"
C27	32.44	20.00	92°56'22"
C28	32.44	20.00	92°56'22"
C29	30.47	20.00	87°17'52"
C30	32.60	20.00	93°23'38"

CENTERLINE LINE TABLE		
LINE	LENGTH	BEARING
L6	470.26	S85°00'00"E
L7	33.22	N57°20'00"W
L8	21.25	N89°37'00"E
L9	312.46	S85°00'00"E
L10	32.03	N64°40'00"W

CENTERLINE CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C9	144.86	300.00	27°40'00"
C10	28.19	300.00	5°23'00"
C11	106.47	300.00	20°20'00"



DESIGN DATA: WINGFIELD LANE/HILLENDALE WAY

SIDEWALKS: WIDTH: 5'
LOCATION: ☒ Attached
☐ DetachedCURB TYPE ☐ 1 ☐ 5 ☐ 3 ☒ A ☐ C

R/W WIDTH 50' MAT WIDTH 24'

STREET TYPE URBAN LOCAL LV HVEEM

PAVEMENT:
TYPE: HMA ☐ PCC ☐
THICKNESS _____
COMPOSITE SECTION
HMA _____
BASE _____
SUBGRADE STABILIZATION:
CHEMICAL: ☐ MECH.: ☐
TYPE: _____
THICKNESS _____48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO. REVISION

1 REVISED PER COUNTY COMMENTS

DATE

9-20-18

REVIEW:

PREPARED UNDER DIRECT SUPERVISION FOR AND ON BEHALF OF
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155

10/19/18

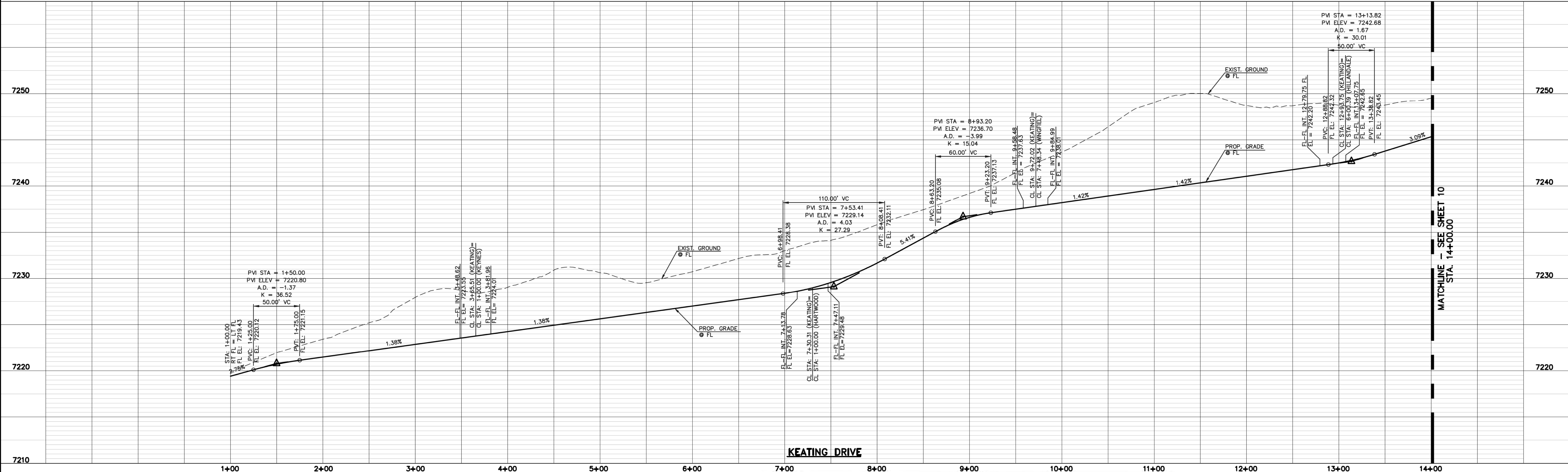
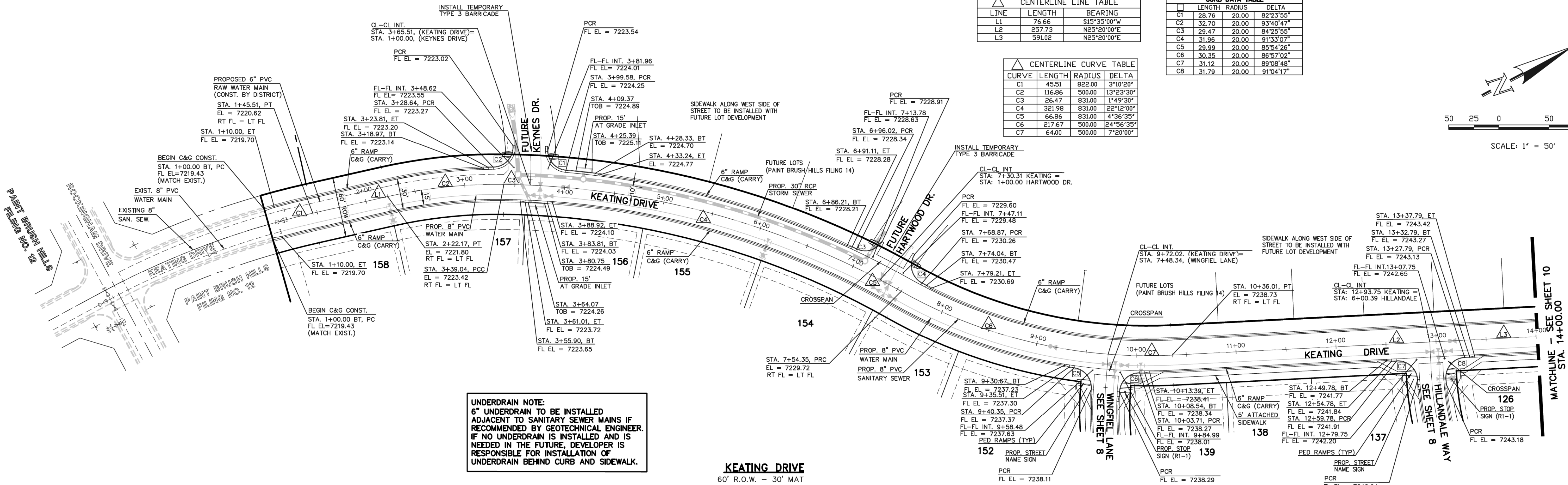
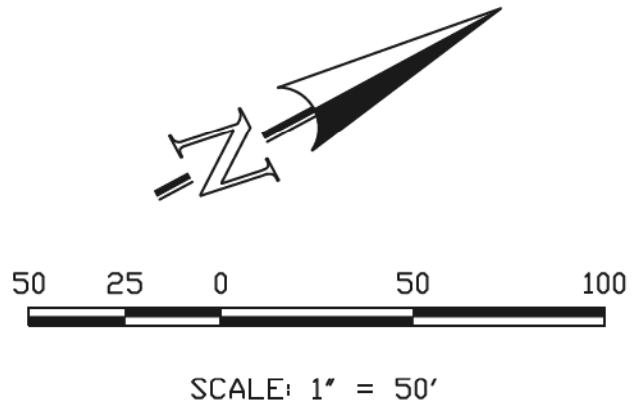
DATE

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903(719)785-0790
(719)785-0799(Fax)PAINT BRUSH HILLS FILING 13E
CONSTRUCTION PLANSSTREET IMPROVEMENT PLANS
WINGFIELD LANE / HILLENDALE WAYDESIGNED BY MAW SCALE DATE 7-20-18
DRAWN BY MAW (H) 1"= 50' SHEET 8 OF 17
CHECKED BY (V) 1"= 5' JOB NO. 2053.50

CENTERLINE LINE TABLE		
LINE	LENGTH	BEARING
L1	76.66	S15°35'00"W
L2	257.73	N25°20'00"E
L3	591.02	N25°20'00"E

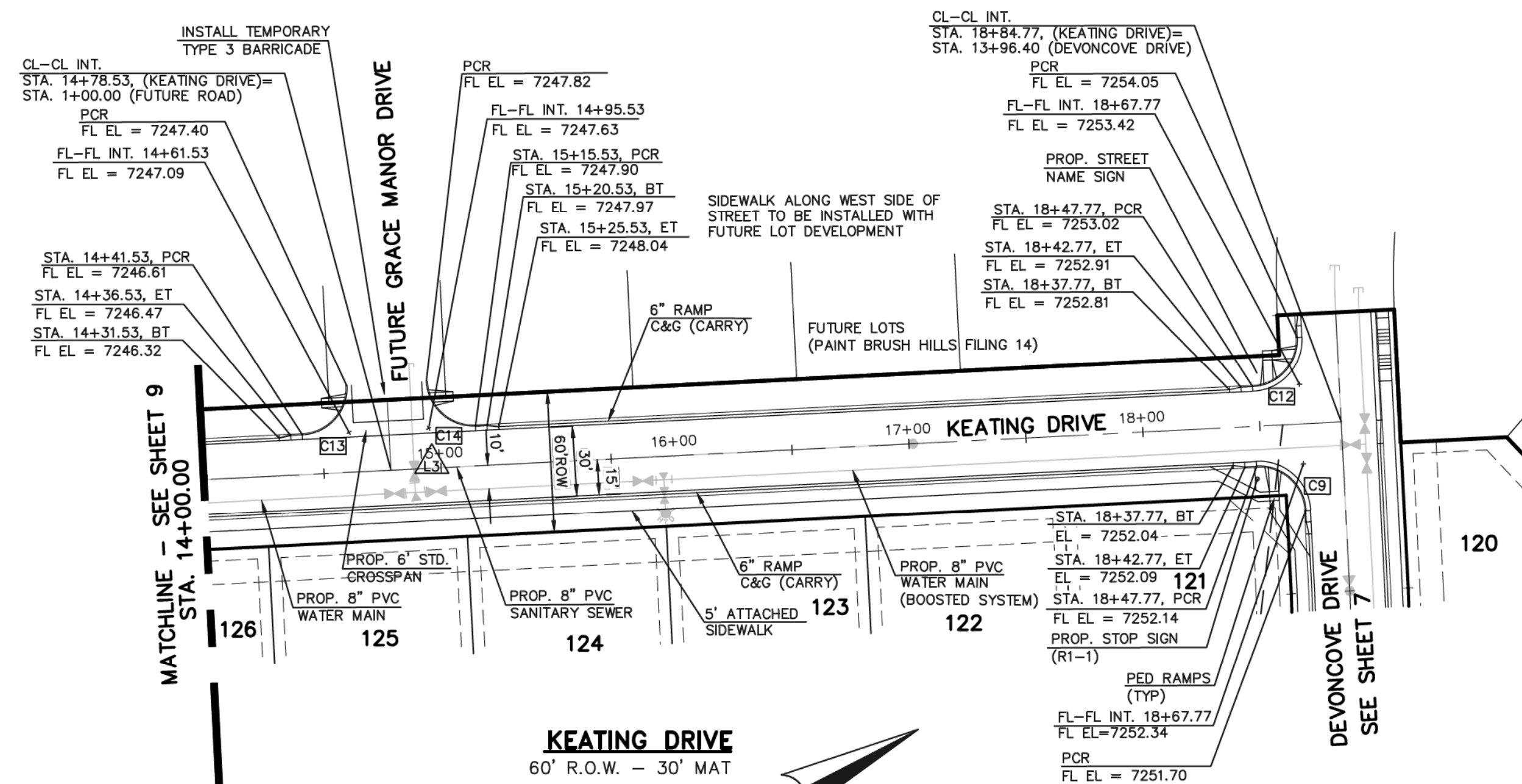
CENTERLINE CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	45.51	822.00	3°10'20"
C2	116.86	500.00	13°23'30"
C3	26.47	831.00	1°49'30"
C4	321.98	831.00	22°12'00"
C5	66.86	831.00	4°36'35"
C6	217.67	500.00	24°56'35"
C7	64.00	500.00	7°20'00"

CURB DATA TABLE			
CURB	LENGTH	RADIUS	DELTA
C1	28.76	20.00	82°23'55"
C2	32.70	20.00	93°40'47"
C3	29.47	20.00	84°25'55"
C4	31.96	20.00	91°33'07"
C5	29.99	20.00	85°54'26"
C6	30.35	20.00	86°57'02"
C7	31.12	20.00	89°08'48"
C8	31.79	20.00	91°04'17"



DESIGN DATA: KEATING DRIVE SIDEWALKS: WIDTH: 5' LOCATION: <input type="checkbox"/> Attached <input type="checkbox"/> Detached CURB TYPE: <input type="checkbox"/> 1 <input type="checkbox"/> 5 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> A <input type="checkbox"/> C R/W WIDTH: 60' MAT WIDTH: 30' STREET TYPE: URBAN LOCAL HVEEM PAVEMENT: TYPE: HMA <input type="checkbox"/> PCC <input type="checkbox"/> THICKNESS: _____ COMPOSITE SECTION: HMA _____ BASE _____ SUBGRADE STABILIZATION: CHEMICAL: <input type="checkbox"/> MECH.: <input type="checkbox"/> TYPE: _____ THICKNESS: _____	38 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811 UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.	NO. REVISION 1 REVISED PER COUNTY COMMENTS DATE 9-20-18 REVIEW: PREPARED UNDER THE DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC MARC A. WHORTON, COLORADO P.E. #37155 10/19/18 DATE	CLASSIC CONSULTING 619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903 (719)785-0790 (719)785-0799(Fax)	PAINT BRUSH HILLS FILING 13E CONSTRUCTION PLANS STREET IMPROVEMENT PLANS KEATING DRIVE DESIGNED BY: MAW DRAWN BY: MAW CHECKED BY: _____ SCALE: (H) 1" = 50' (V) 1" = 5' DATE: 7-20-18 SHEET 9 OF 17 JOB NO.: 2053.50
--	--	---	--	---





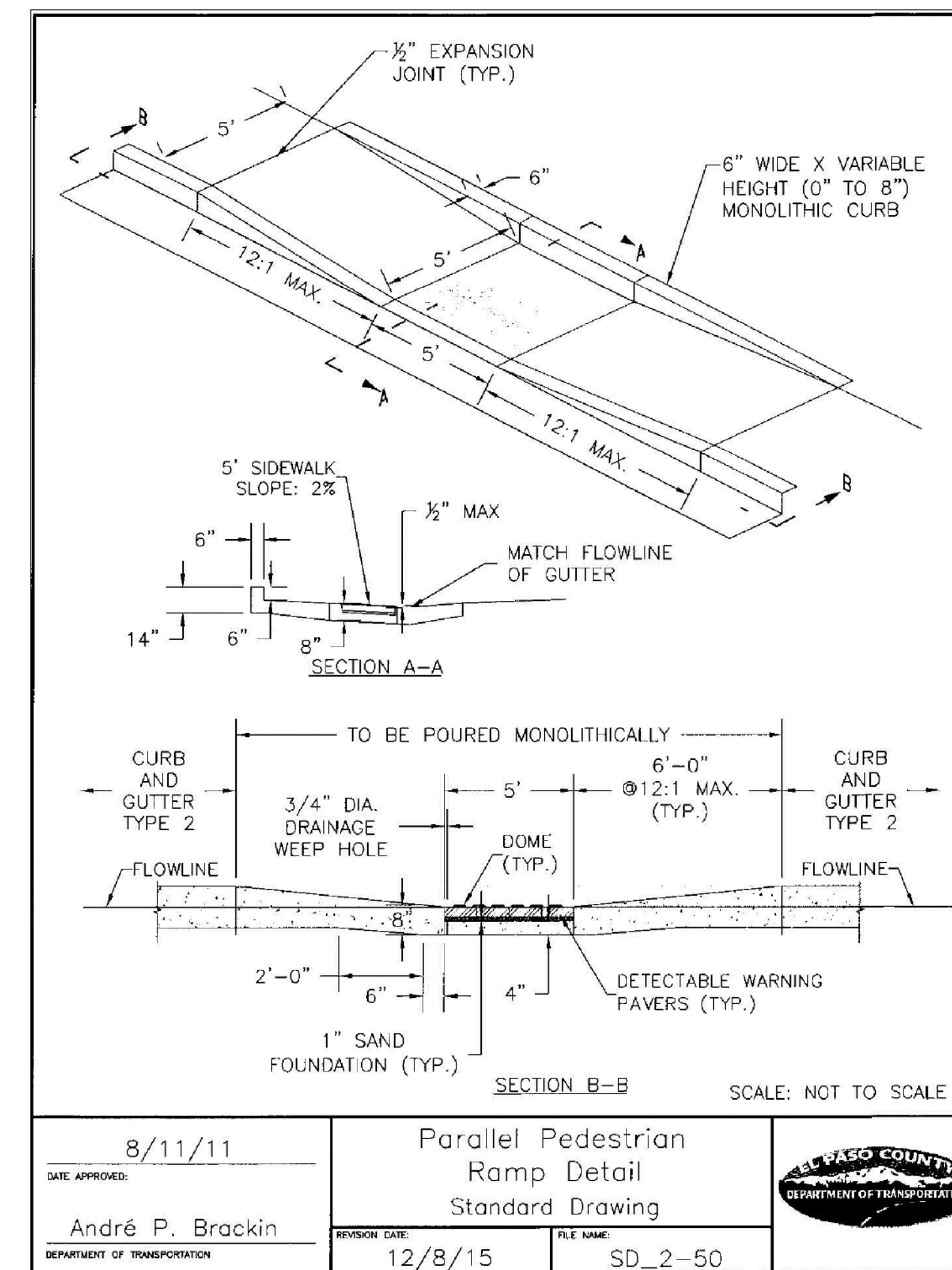
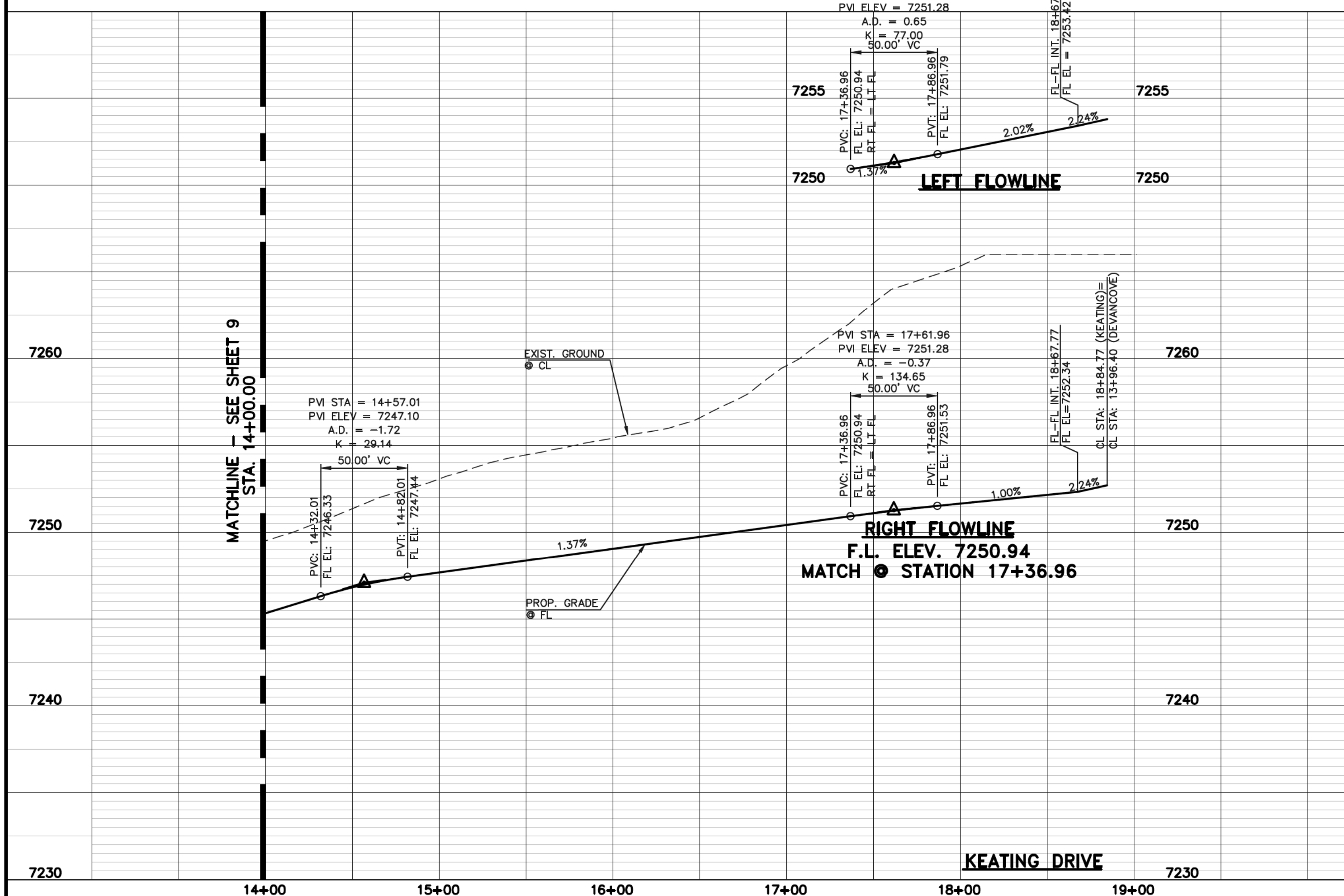
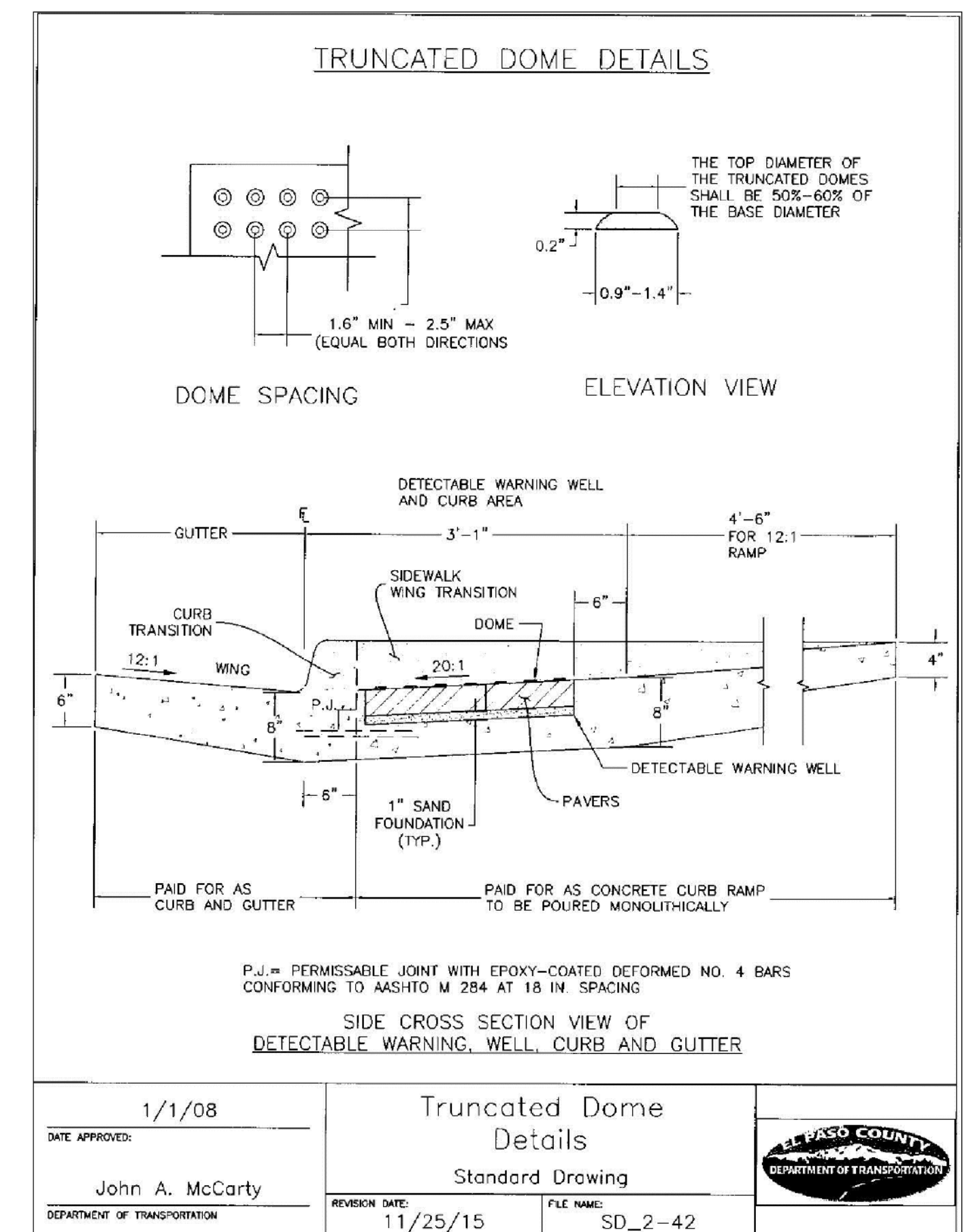
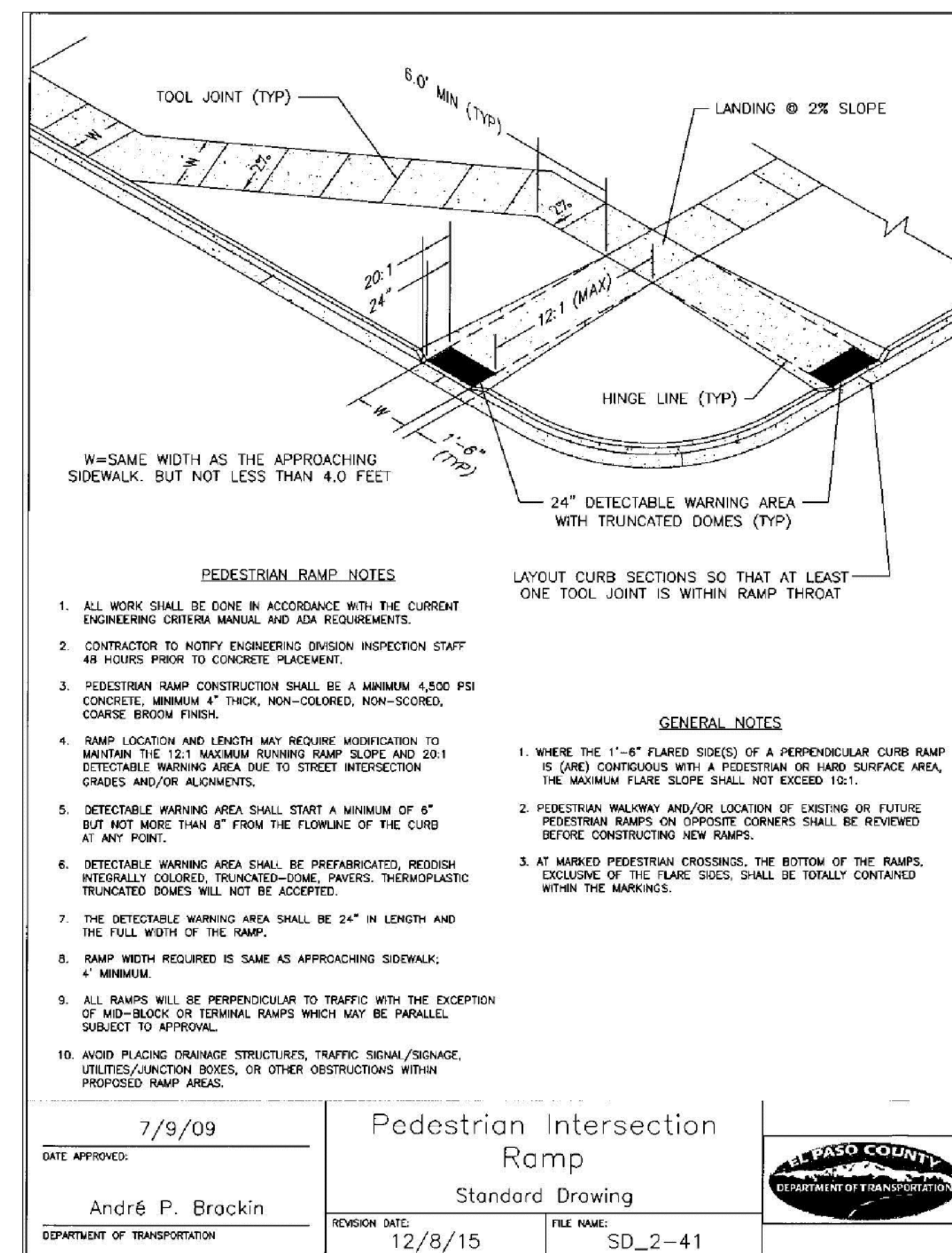
CENTERLINE LINE TABLE		
LINE	LENGTH	BEARING
L3	591.02	N25°20'00"E

CURB DATA TABLE			
	LENGTH	RADIUS	DELTA
C9	31.42	20.00	90°00'00"
C12	31.42	20.00	90°00'00"
C13	31.42	20.00	90°00'00"
C14	31.42	20.00	90°00'00"

50 25 0 50 100

SCALE: 1" = 50'

UNDERDRAIN NOTE:
6" UNDERDRAIN TO BE INSTALLED
ADJACENT TO SANITARY SEWER MAINS IF
RECOMMENDED BY GEOTECHNICAL ENGINEER.
IF NO UNDERDRAIN IS INSTALLED AND IS
NEEDED IN THE FUTURE, DEVELOPER IS
RESPONSIBLE FOR INSTALLATION OF
UNDERDRAIN BEHIND CURB AND SIDEWALK.



DESIGN DATA: KEATING DRIVE

SIDEWALKS: WIDTH: 5'
LOCATION: ☒ Attached
☐ Detached

CURB TYPE ☐ 1 ☐ 5 ☐ 3 ☒ A ☐ C

R/W WIDTH 60' MAT WIDTH 30'

STREET TYPE URBAN LOCAL HVEEM

PAVEMENT: TYPE: HMA ☐ PCC ☐
THICKNESS _____
COMPOSITE SECTION HMA _____
BASE _____
SUBGRADE STABILIZATION: CHEMICAL: ☐ MECH.: ☐
TYPE: _____
THICKNESS _____

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811

UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO. REVISION

1 REVISED PER COUNTY COMMENTS

DATE

9-20-18

REVIEW:

PREPARED UNDER DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON/COLORADO P.E. #37155

10/19/18

DATE

CLASSIC CONSULTING

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719) 785-0790
(719) 785-0799 (Fax)

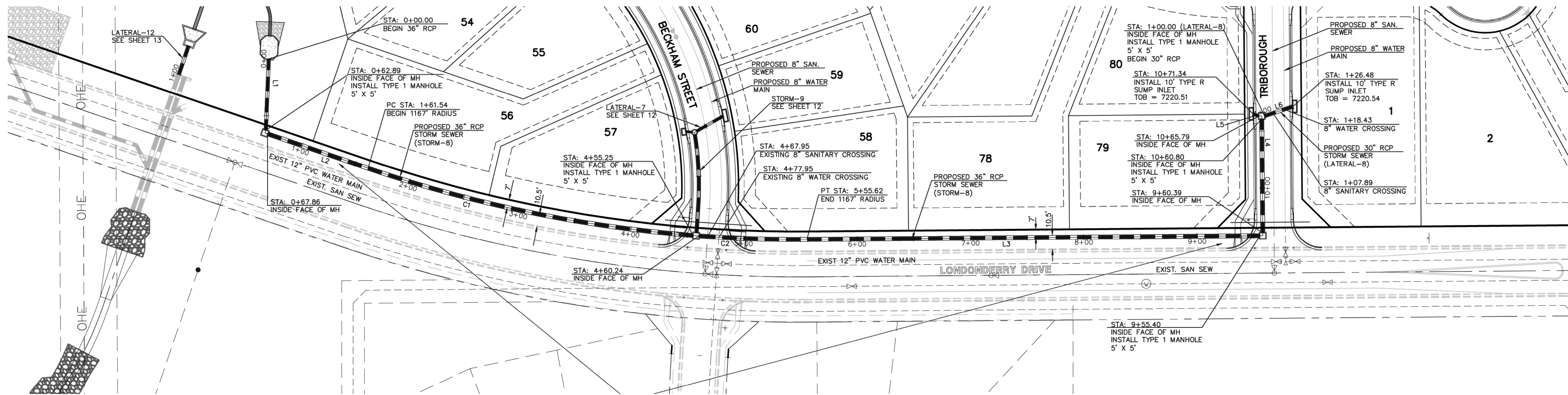
PAINT BRUSH HILLS FILING 13E
CONSTRUCTION PLANS

STREET IMPROVEMENT PLANS
KEATING DRIVE

DESIGNED BY	MAW	SCALE	DATE	7-20-18
DRAWN BY	MAW	(H) 1" = 50'	SHEET	10 OF 17
CHECKED BY		(V) 1" = 5'	JOB NO.	2053.50

CLASSIC CONSULTING

N:\205350\DRAWINGS\CONSTRUCTION\Construction Plans\STREET AND STORM CDS\205350-STW-SHEET 11.dwg, 10/19/2018 11:31:24 AM, 1:1



UTILITY NOTE:
BASED ON RECENT UTILITY LOCATES ALONG
NORTH SIDE OF STREET, CONTRACTOR TO
CONFIRM EXACT LOCATIONS OF ANY
EXISTING UTILITIES PRIOR TO EXCAVATION
FOR STORM SEWER WITHIN THE
RIGHT-OF-WAY OF LONDONDERRY DR.

**STORM-8 & LATERAL-8
(PUBLIC)**

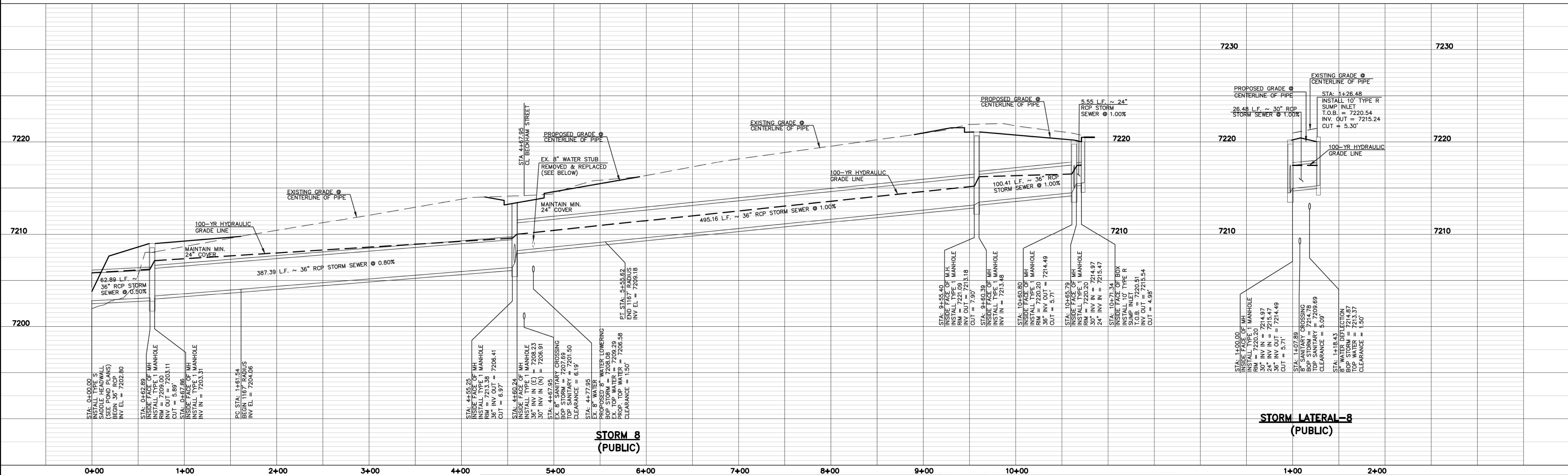
STORM LINE TABLE		
LINE	LENGTH	BEARING
L1	62.89'	S02°22'24"W
L2	93.69'	S71°07'24"E
L3	399.78'	N89°31'44"E
L4	100.41'	N00°30'00"W
L5	5.55'	N89°22'41"W
L6	26.48'	N71°27'12"E

STORM CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	293.71'	1167.00'	14°25'12"
C2	95.38'	1167.00'	4°40'59"



50 25 0 50 100

SCALE: 1" = 50'



**STORM 8
(PUBLIC)**

**STORM LATERAL-8
(PUBLIC)**

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811
UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE
SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR
SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING
UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO. REVISION
1 REVISED PER COUNTY COMMENTS

DATE
8-30-18

REVIEW:

PREPARED UNDER DIRECT SUPERVISION FOR AND ON BEHALF OF
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC



10/19/18
DATE



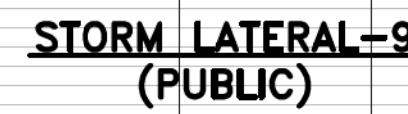
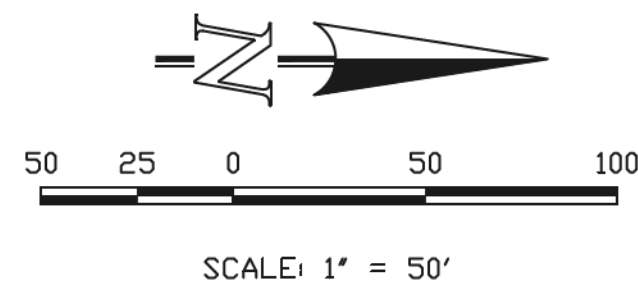
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719)785-0790
(719)785-0799(Fax)

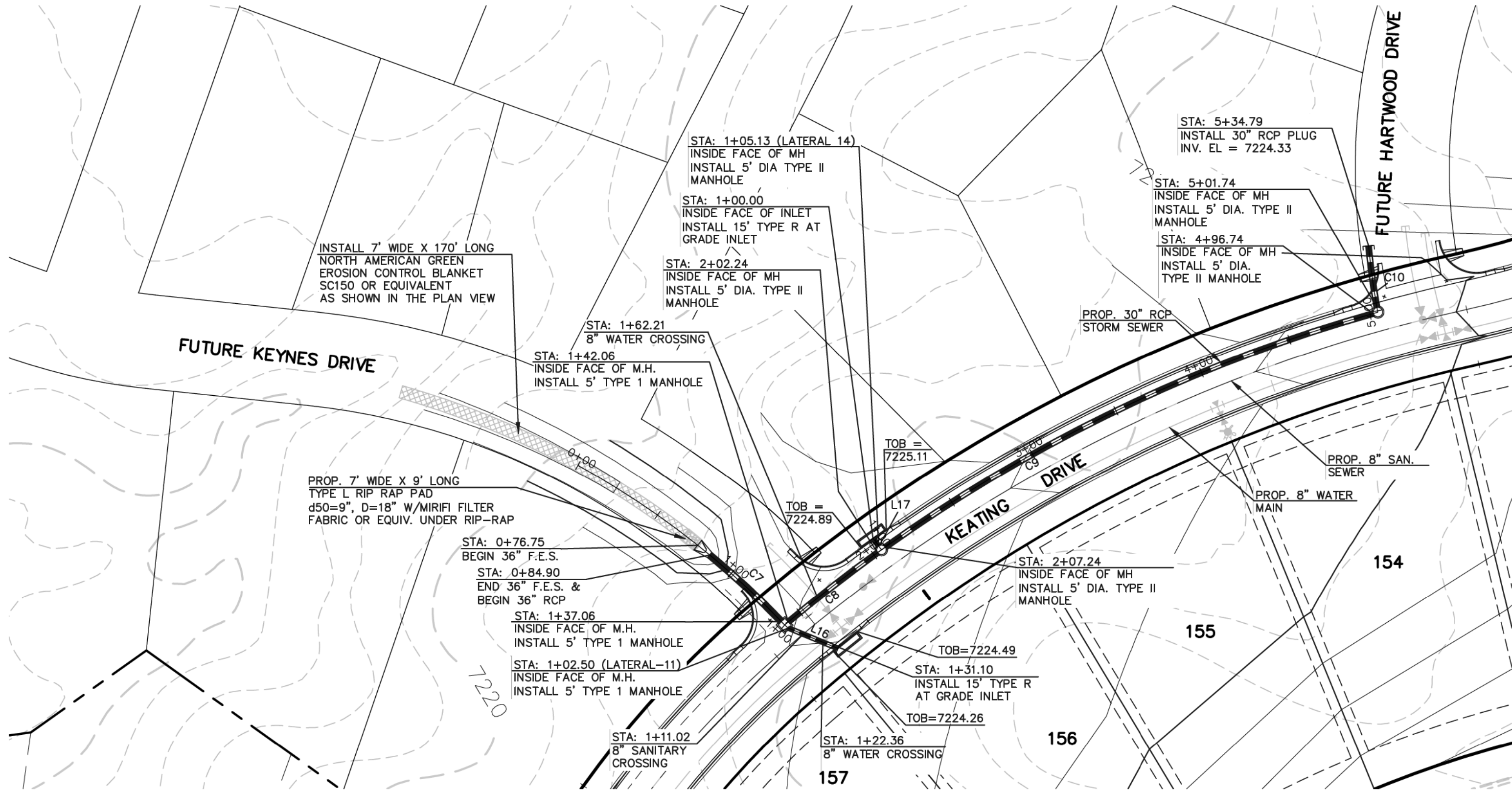
PAINT BRUSH HILLS FILING NO. 13E
CONSTRUCTION PLANS
STORM SEWER PLAN

DESIGNED BY	ESO	SCALE	DATE	7-20-18
DRAWN BY	ESO	(H) 1" = 50'	SHEET	11 OF 17
CHECKED BY		(V) 1" = 5'	JOB NO.	2053.50



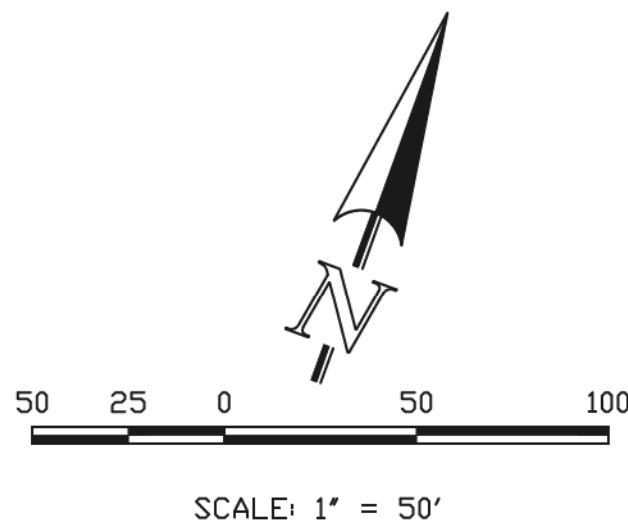


DESIGNED BY	ESO	SCALE	DATE	7-20-18
DRAWN BY	ESO	(H) 1"= 50'	SHEET 12	OF 17
CHECKED BY		(V) 1"= N/A	JOB NO.	2053.50



STORM LINE TABLE		
LINE	LENGTH	BEARING
L16	28.60'	S87°41'10"E
L17	5.13'	N55°37'24"W

STORM CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C7	52.16'	452.00'	06°36'44"
C8	60.18'	841.00'	04°06'00"
C9	289.50'	841.00'	19°43'22"
C10	33.05'	373.00'	05°04'35"



STORM-11 & STORM LATERAL 11 & LATERAL 14
(PUBLIC)

7240

7230

7220

7210

PROP. 7' WIDE X 9' LONG
TYPE L RIP RAP PAD
d50+9", D=18" W/MIRFI FILTER
FABRIC OR EQUIV. UNDER RIP-RAP

INSTALL 7' WIDE X 170' LONG
NORTH AMERICAN GREEN
EROSION CONTROL MATTING
SC150 OR EQUIVALENT
AS SHOWN IN THE PLAN VIEW

STA: 0+76.75
BEGIN 36" F.E.S.
INV EL = 7216.22

STA: 0+84.90
END 36" F.E.S. &
BEGIN 36" RCP
INV EL = 7216.43

STA: 1+37.05
INSIDE FACE OF M.H.
TYPE I MANHOLE
RM = 7223.81

30" INV IN = 7218.32
30" INV OUT = 7217.77
CUT = 5.04'

STA: 2+02.24
INSIDE FACE OF M.H.
TYPE II MANHOLE
INV IN = 7218.02

8" WATER LOWERING
BOP STORM = 7218.23
TOP WATER = 7216.73
CUT = 1.50'

STA: 2+02.24
INSIDE FACE OF M.H.
TYPE II MANHOLE
30" INV IN = 7219.95
30" INV OUT = 7219.40
CUT = 5.31'

STA: 2+07.24
INSIDE FACE OF M.H.
TYPE II MANHOLE
INV IN = 7219.70

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STA: 4+02.50
INSIDE FACE OF M.H.
TYPE II MANHOLE
RM = 7223.81

24" INV IN = 7218.32
24" INV OUT = 7217.77
CUT = 5.04'

STORM 11
(PUBLIC)

LATERAL 11
(PUBLIC)

STORM LATERAL 14
(PUBLIC)

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811
UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE
SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR
SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING
UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	9-20-18

REVIEW:
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155
10/19/18
DATE

CLASSIC CONSULTING

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719) 785-0790
(719) 785-0799 (Fax)

PAINT BRUSH HILLS FILING NO. 13E CONSTRUCTION PLANS STORM SEWER PLAN			
DESIGNED BY	ESO	SCALE	DATE 8-10-12
DRAWN BY	ESO	(H) 1"= 50'	SHEET 13 OF 17
CHECKED BY	(V) 1"= 5'	JOB NO.	2053.50



N:\205350\DRAWINGS\CONSTRUCTION\Construction Plans\STREET AND STORM CDS\205350-5TM4-SHEET 14.dwg, 10/18/2018 11:34:45 AM, 1:1

STORM LINE TABLE		
LINE	LENGTH	BEARING
L19	35.61'	N82°36'44"E
L20	162.27'	N89°37'00"E
L21	64.00'	S62°10'18"E
L22	26.67'	N18°52'36"E

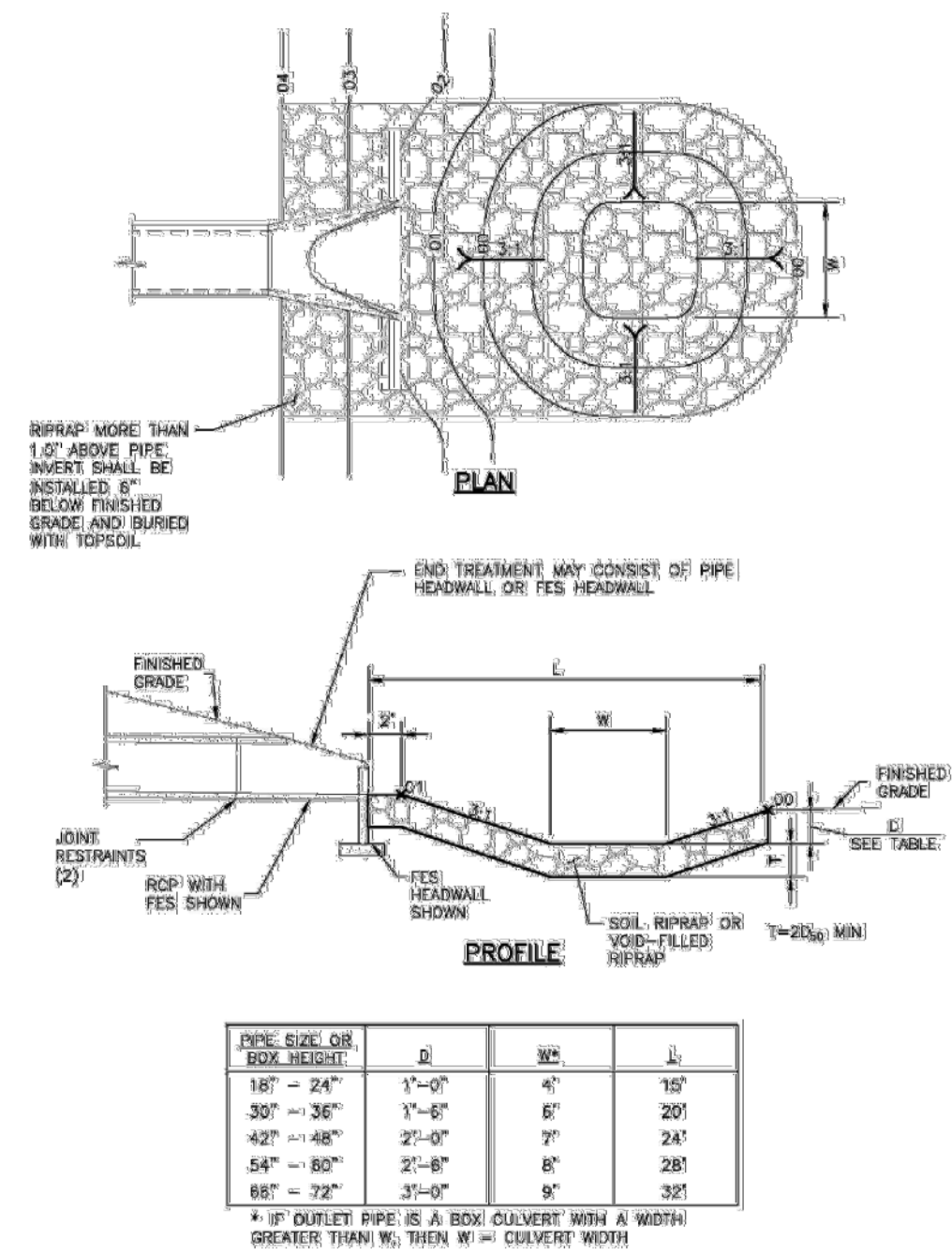
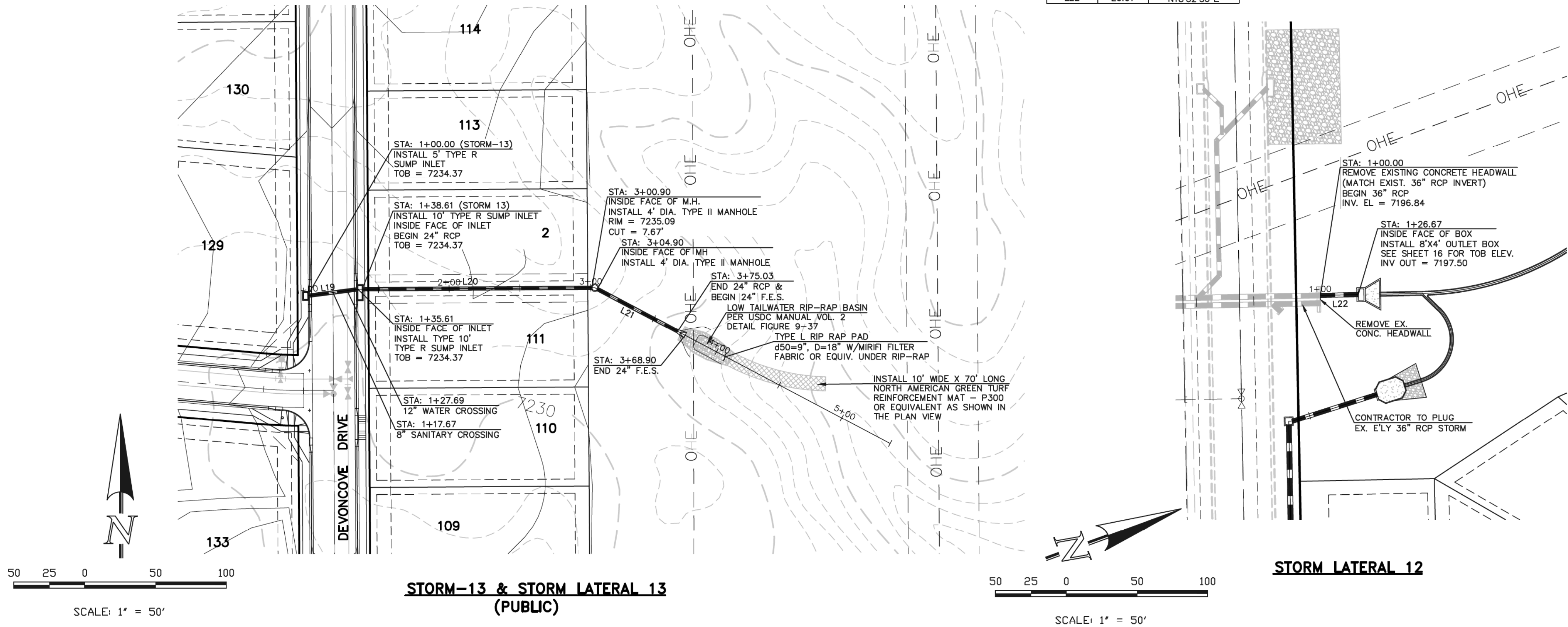
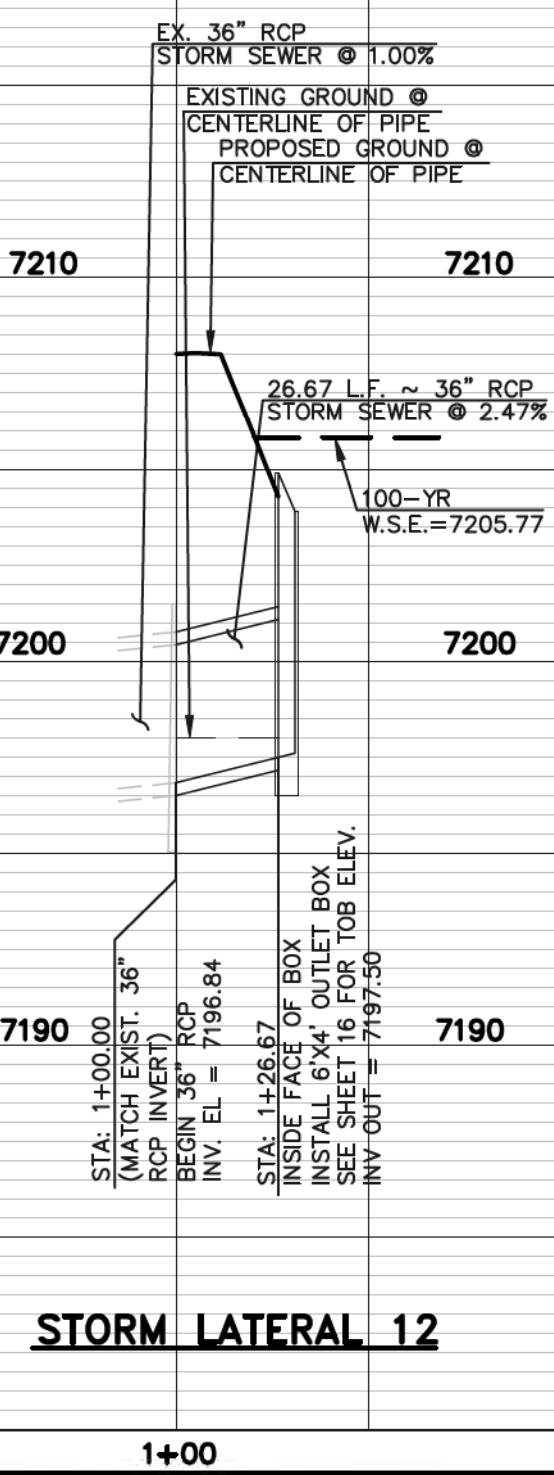
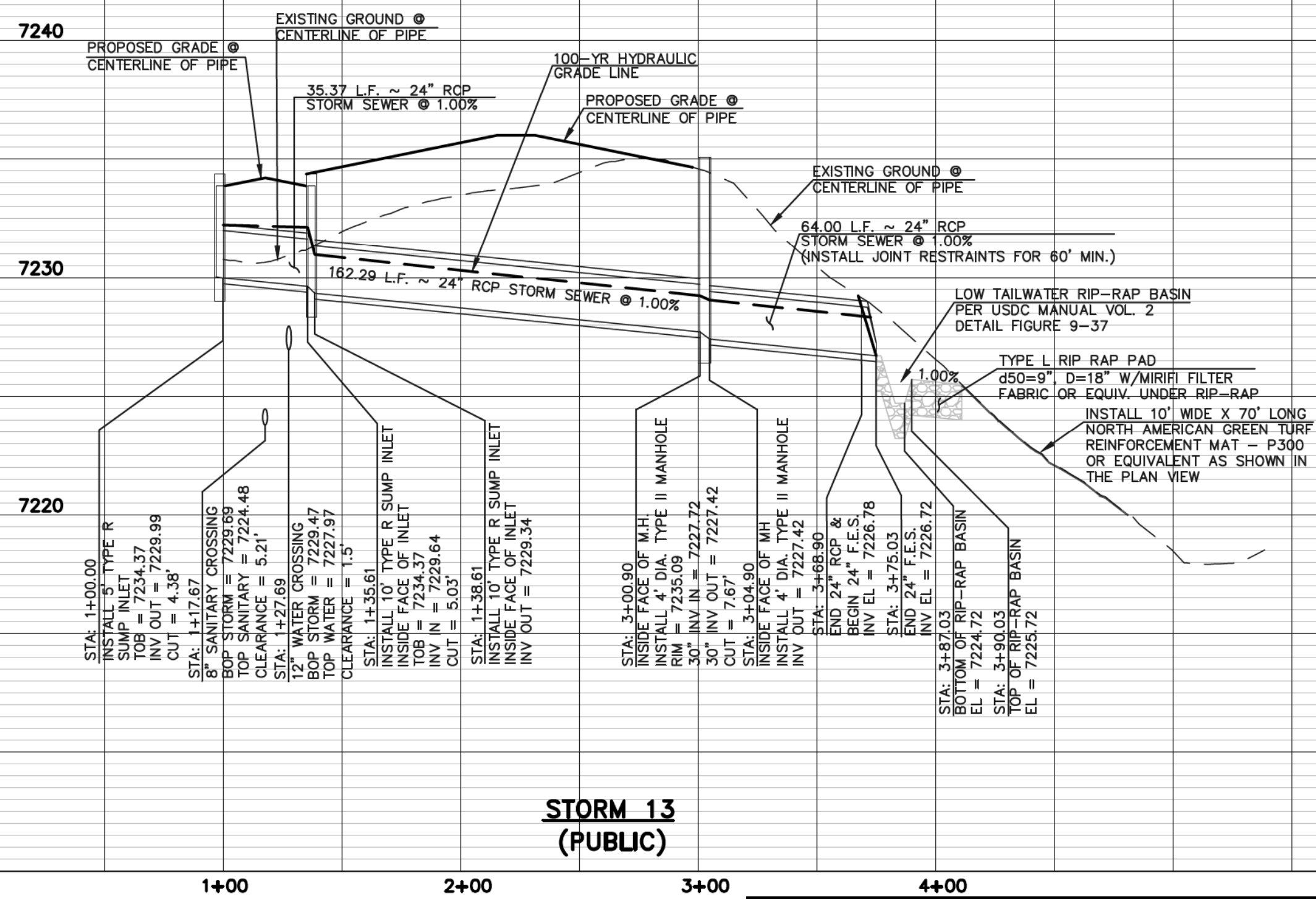


Figure 9-37. Low tailwater riprap basin



48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811
UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.

NO. REVISION

1 REVISED PER COUNTY COMMENTS
2 REVISED PER COUNTY COMMENTS

DATE

9-26-18
10-18-18

REVIEW:

PREPARED UNDER DIRECT SUPERVISION FOR AND ON BEHALF OF
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORNON, COLORADO P.E. #37155

10/19/18

DATE

CLASSIC
CONSULTING

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

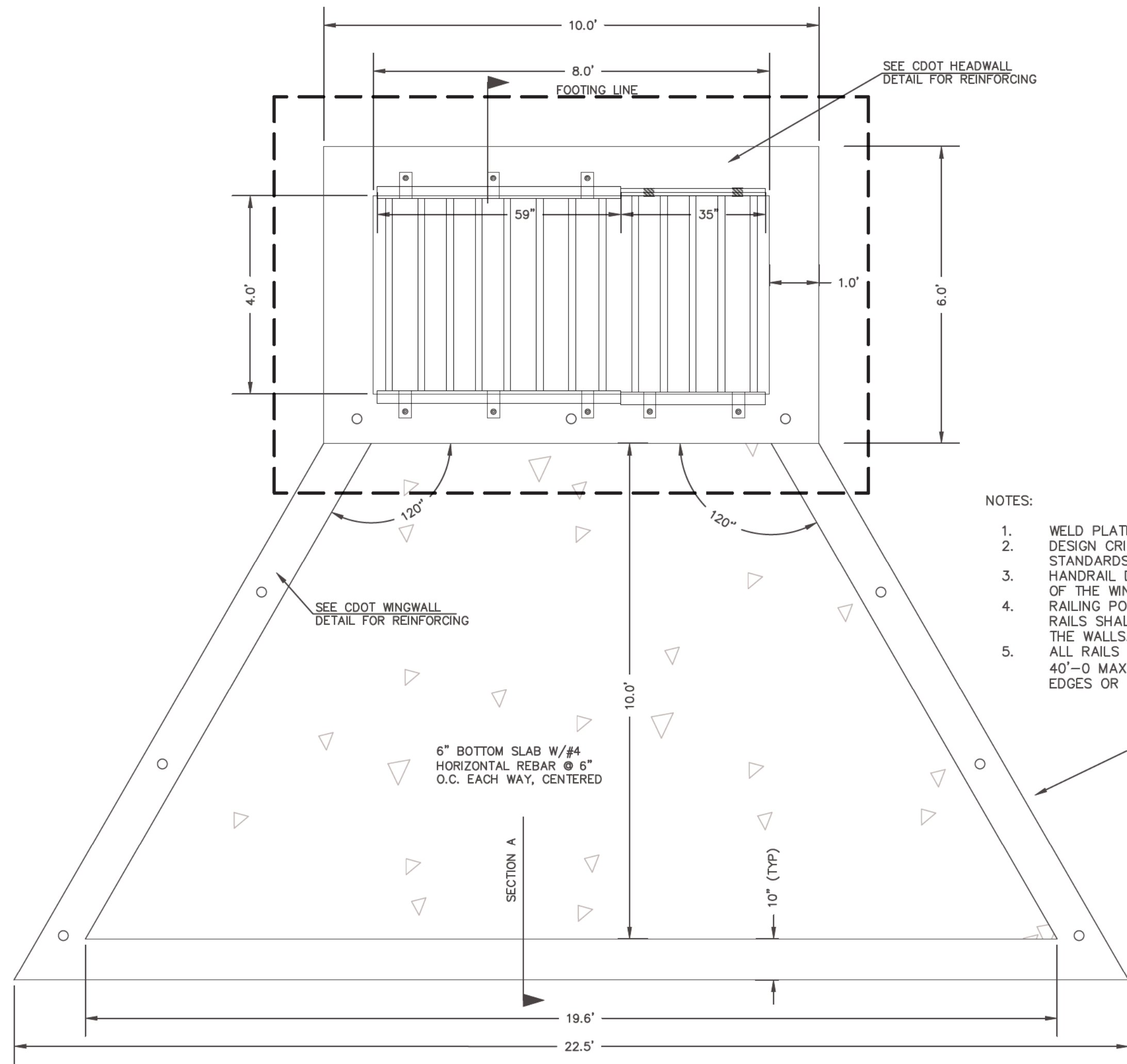
(719)785-0790
(719)785-0799(Fax)

PAINT BRUSH HILLS FILING NO. 13E
CONSTRUCTION PLANS
STORM SEWER PLAN

DESIGNED BY	ESO	SCALE	DATE	8-10-12
DRAWN BY	ESO	(H) 1"= 50'	SHEET 14	OF 17
CHECKED BY		(V) 1"= 5'	JOB NO.	2053.50

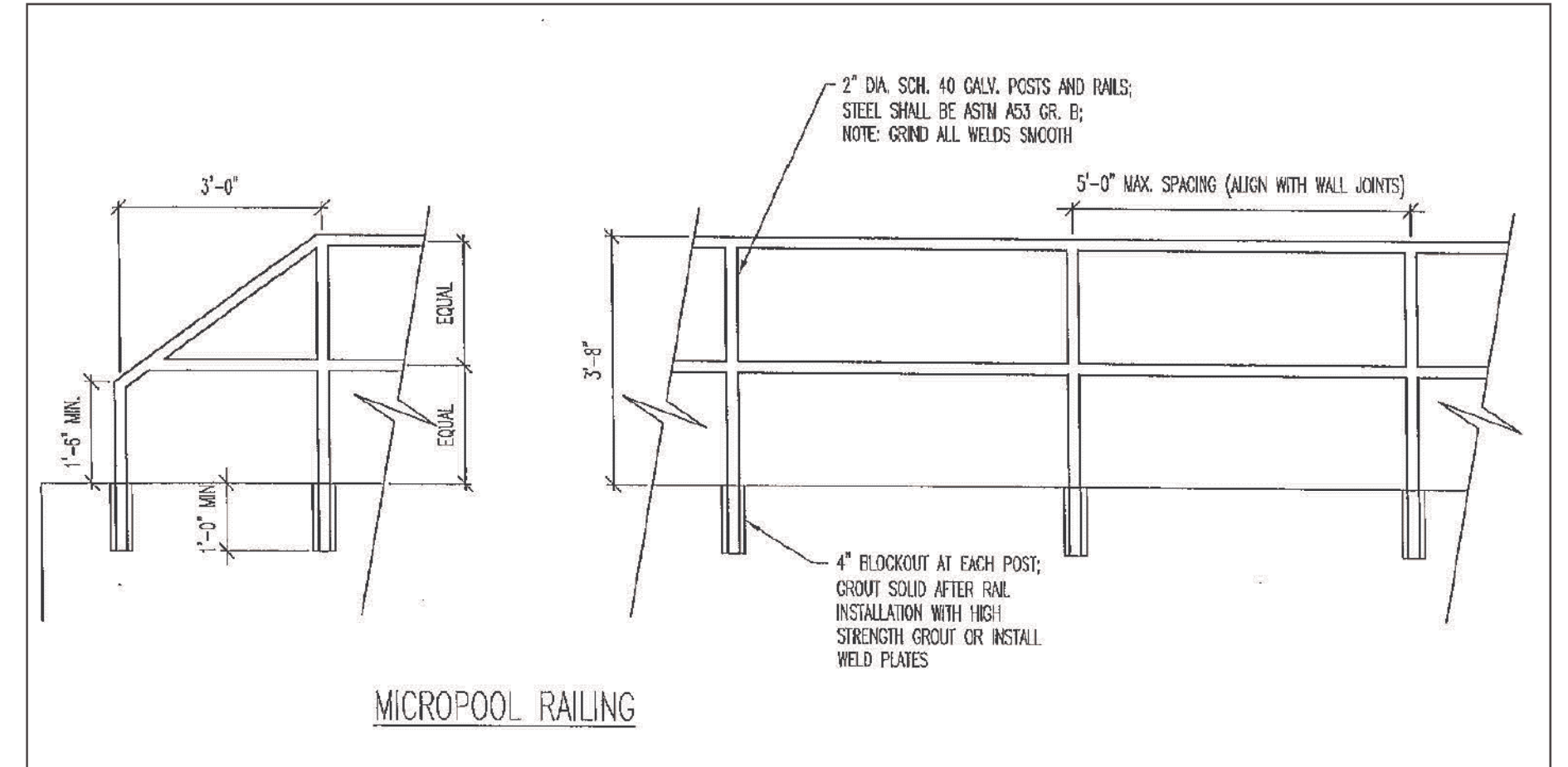
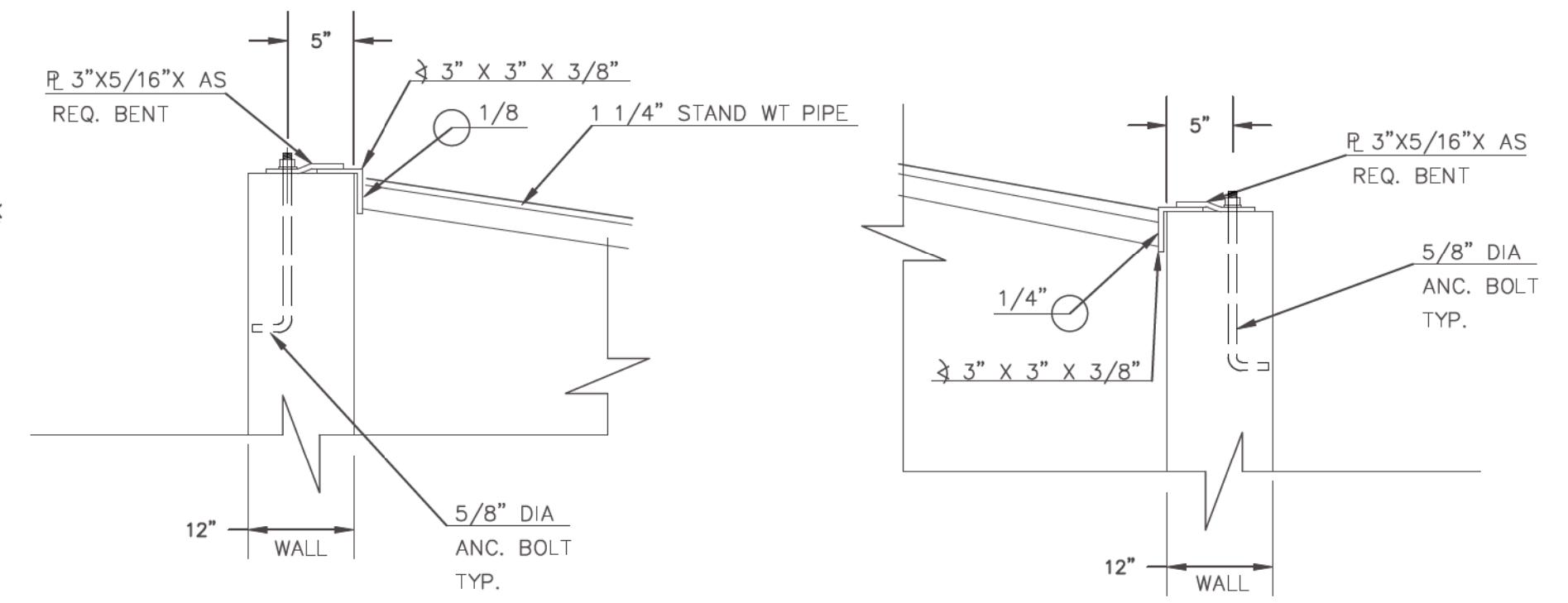
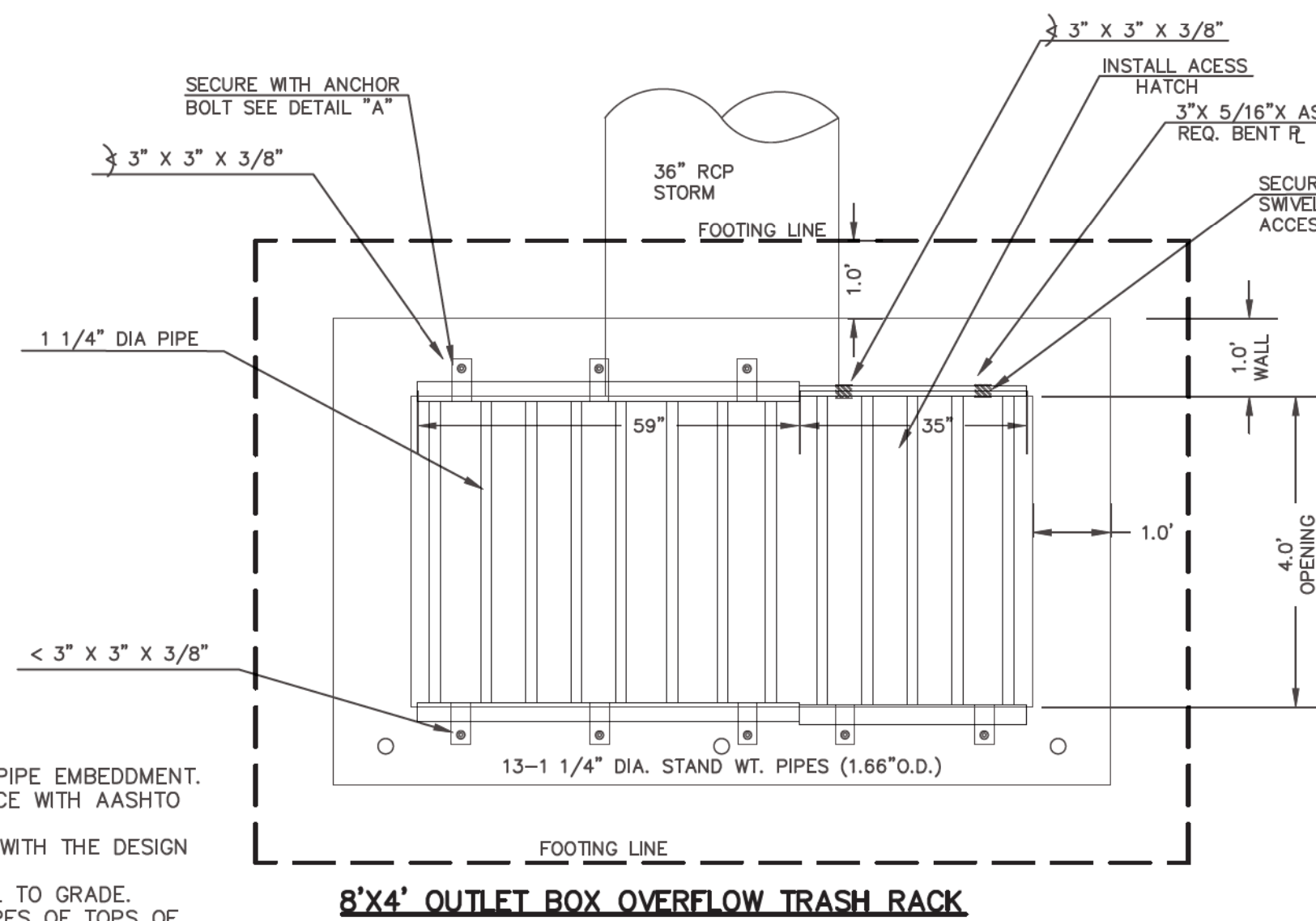
CLASSIC
CONSULTING

N:\205350\DRAWINGS\CONSTRUCTION\Construction Plans\STREET AND STORM CD\205350-POND DETAIL-SHEET 16.dwg, 10/18/2018 11:39:02 AM, 1:1



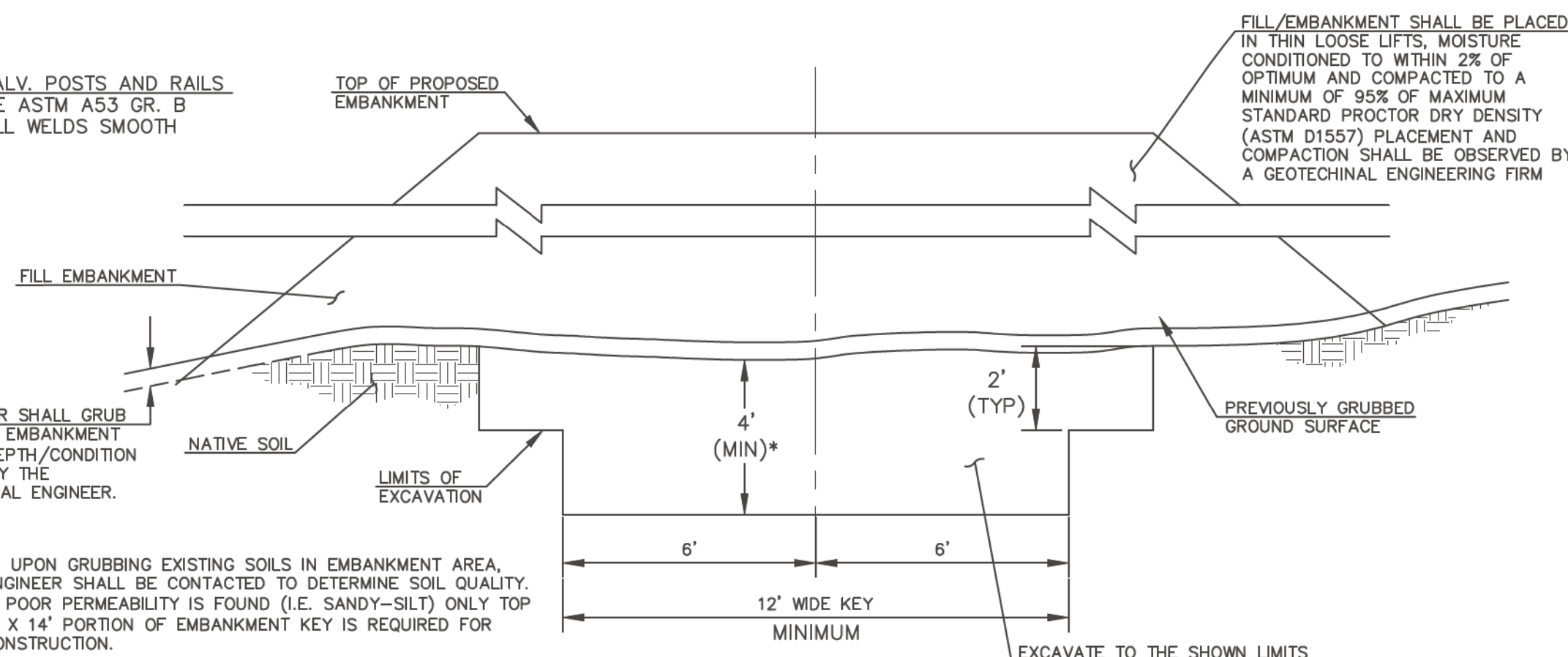
NOTES:

1. WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDMENT. DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH AASHTO STANDARDS.
2. HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
3. RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF TOPS OF THE WALLS.
4. ALL RAILS SHALL HAVE EXPANSION JOINTS SPACED AT 40'-0" MAX. JOINT ENDS SHALL BE FREE OF ANY SHARP EDGES OR CORNERS.



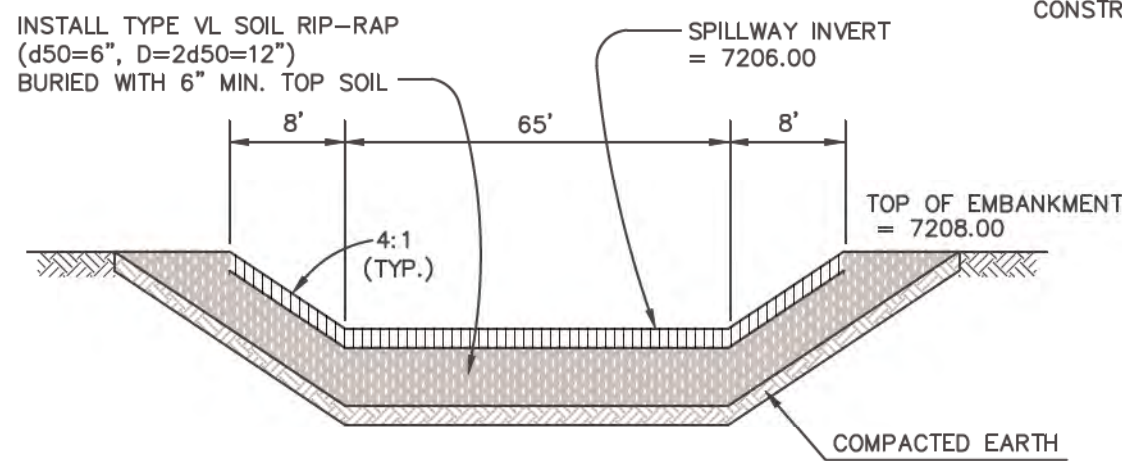
OUTLET BOX RAILING

N.T.S.



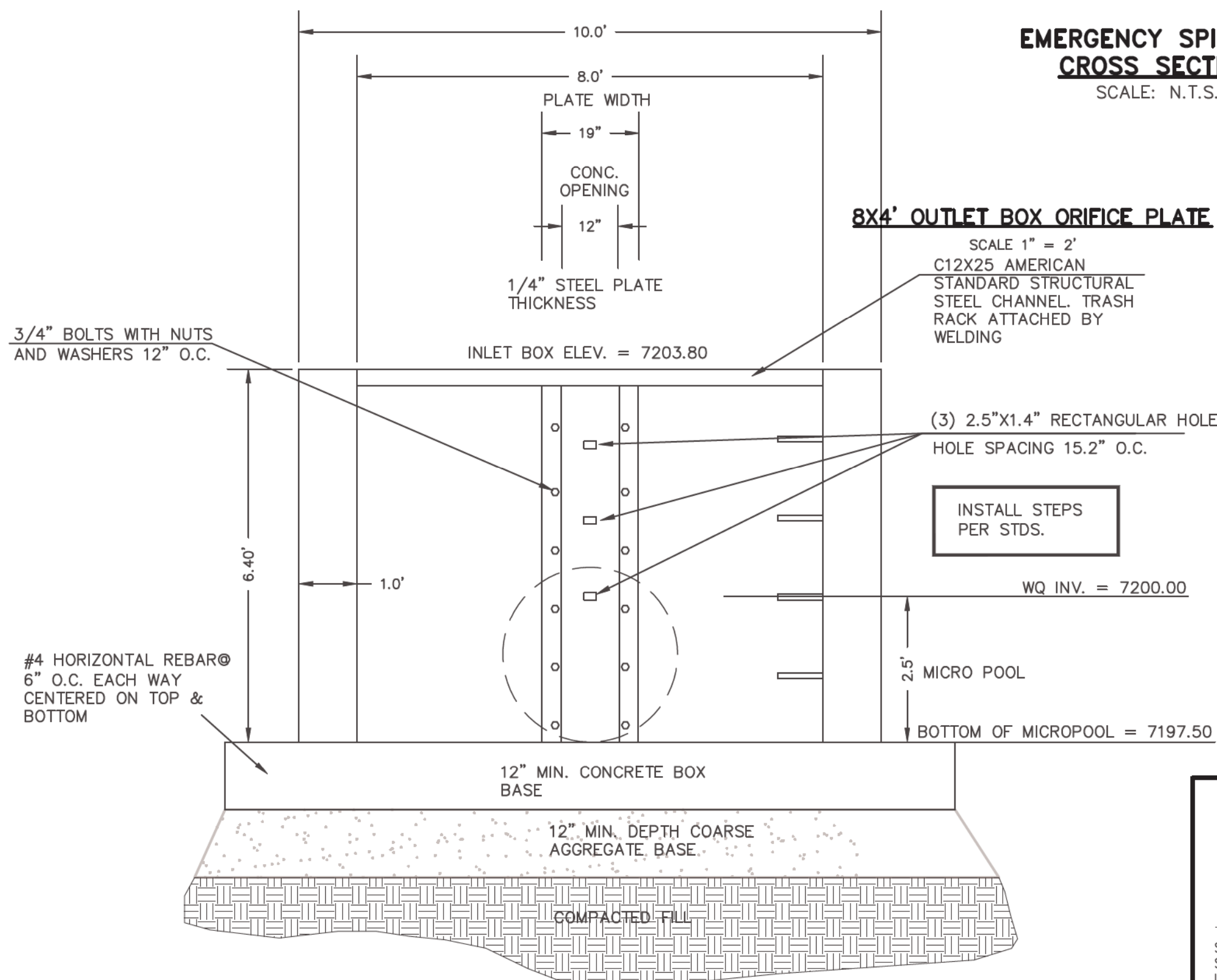
SECTION A
TYPICAL EMBANKMENT
WITH SOIL KEYWAY

SCALE: N.T.S.



EMERGENCY SPILLWAY
CROSS SECTION

SCALE: N.T.S.



(ALL MATERIALS PER EL PASO COUNTY SPECIFICATIONS)

ORIFICE PLATE NOTES:

1. INSTALL HOLES AS SHOWN ON DETAIL TO RIGHT.
2. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE

EURV AND WQCV TRASH RACKS:

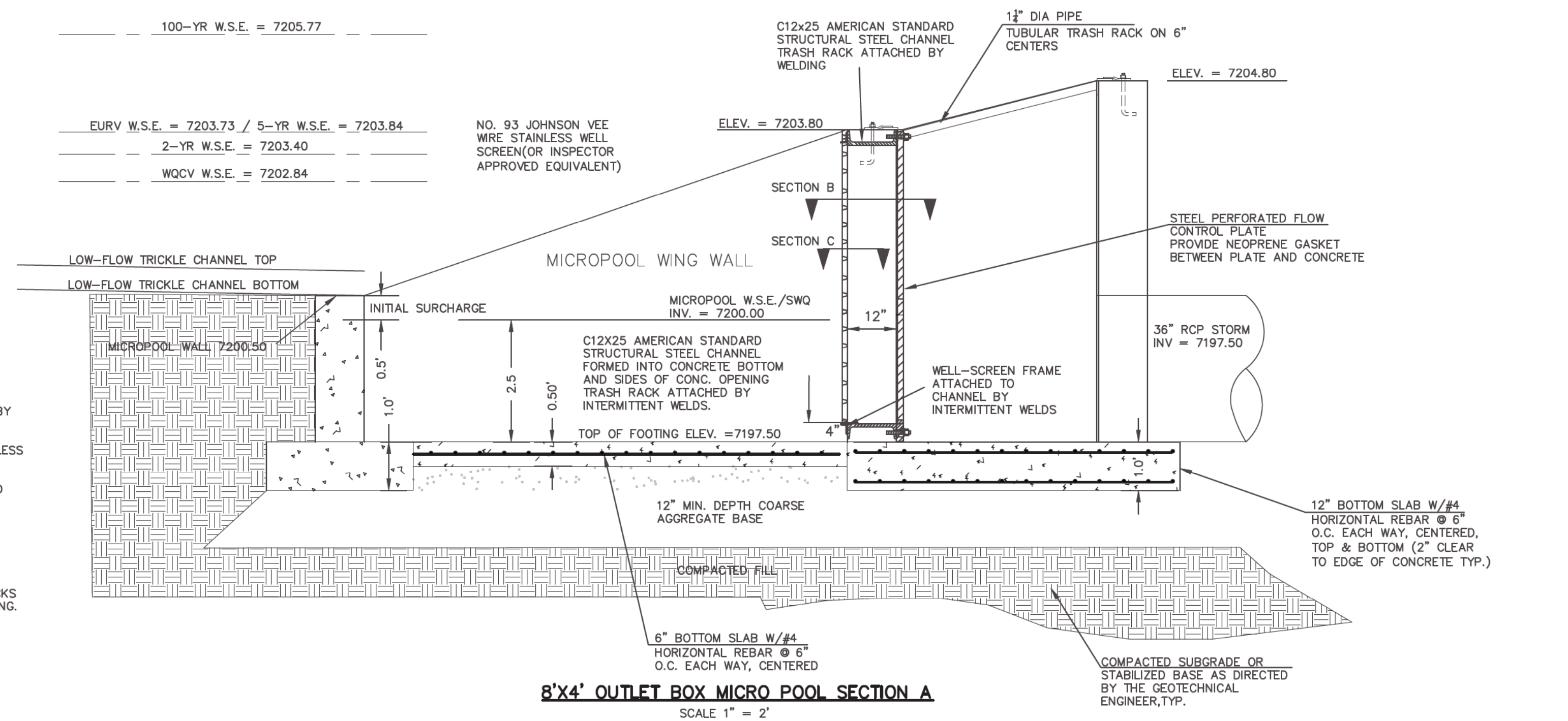
3. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
4. BAR GRATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
5. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF RACK

OVERFLOW TRASH RACKS:

1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS
2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
3. TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
4. STRUCTURAL DESIGN OF THE TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

100-YR W.S.E. = 7205.77
EURV W.S.E. = 7203.73 / 5-YR W.S.E. = 7203.84
2-YR W.S.E. = 7203.40
WQCV W.S.E. = 7202.84

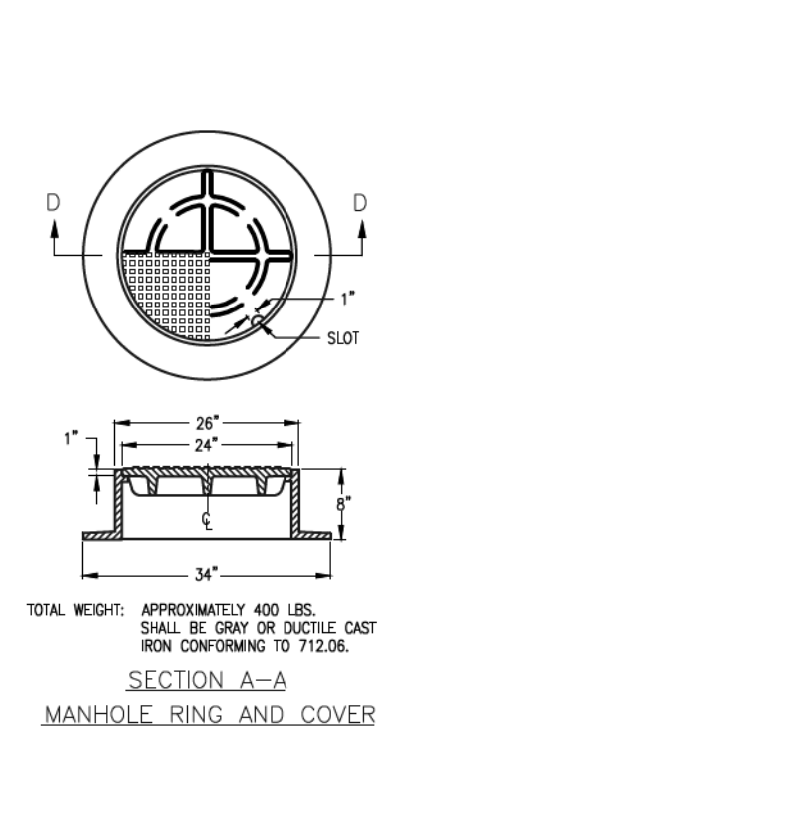
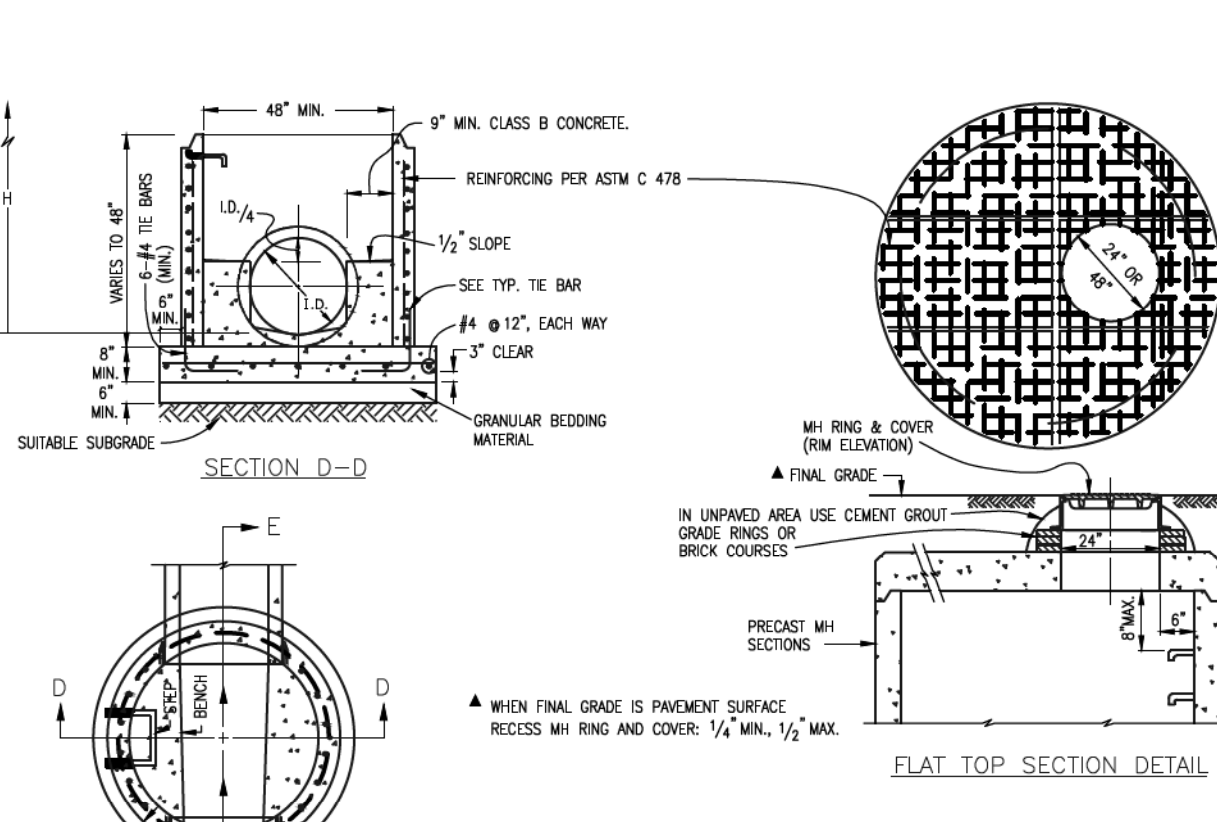
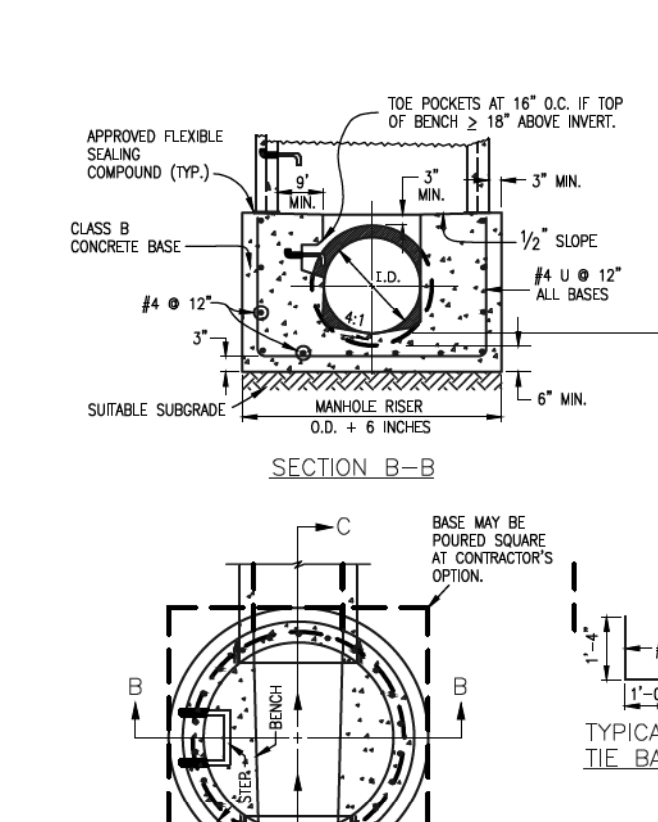
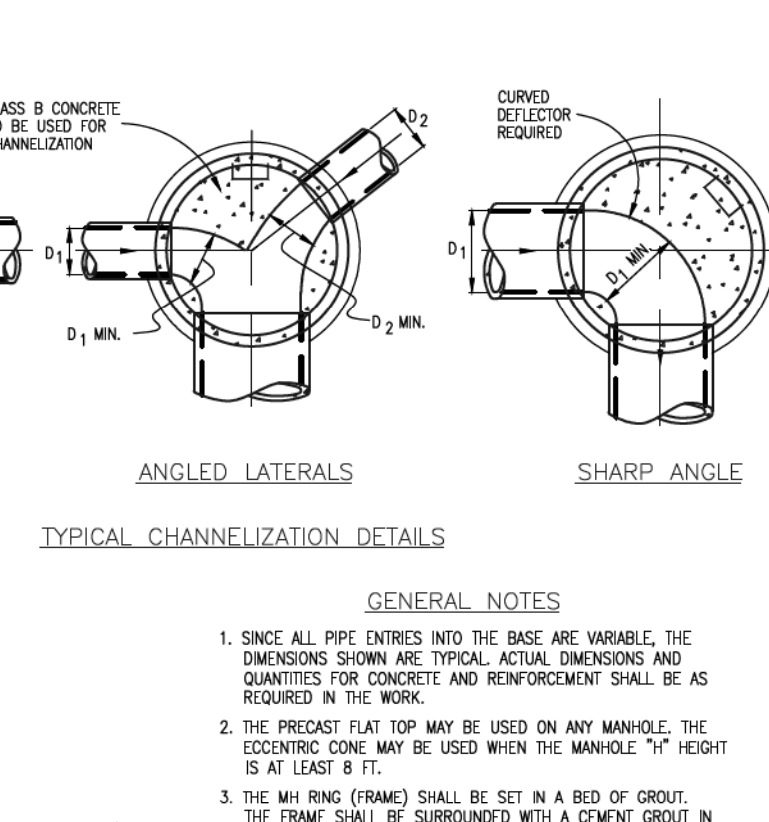
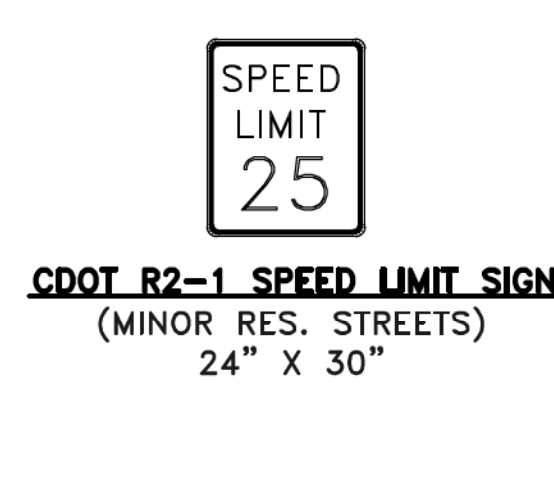
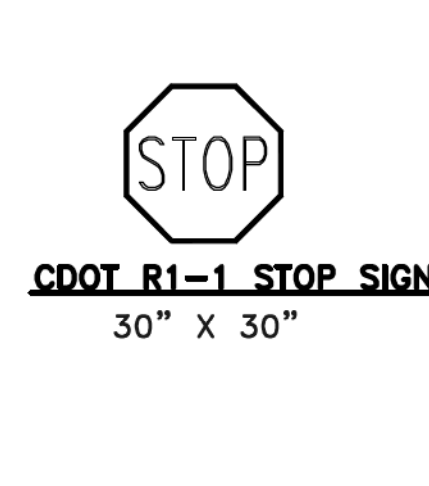
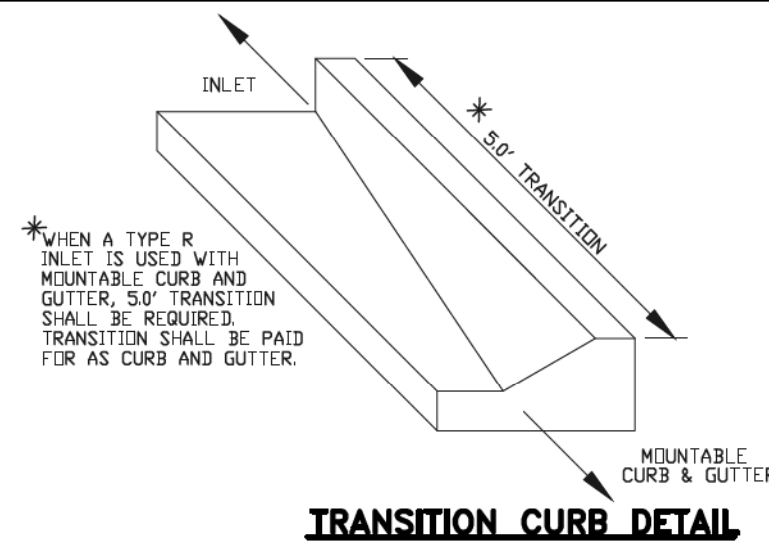
NO. 93 JOHNSON VEE
WIRE STAINLESS WELL
SCREEN (OR INSPECTOR
APPROVED EQUIVALENT)



8'x4' OUTLET BOX MICRO POOL SECTION A

SCALE 1" = 2'

<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811 UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p>THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 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 UNDERGROUND UTILITIES.</p>	<table><tr><th>NO.</th><th>REVISION</th><th>DATE</th></tr><tr><td>1</td><td>REVISED PER COUNTY COMMENTS</td><td>9-21-18</td></tr><tr><td>2</td><td>REVISED PER COUNTY COMMENTS</td><td>10-18-18</td></tr></table>	NO.	REVISION	DATE	1	REVISED PER COUNTY COMMENTS	9-21-18	2	REVISED PER COUNTY COMMENTS	10-18-18	<p>REVIEW:</p> <p>PREPARED UNDER DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WILSON, COLORADO P.E. #37155</p> <p>10/19/18</p>	<p>PAINT BRUSH HILLS FILING 13A CONSTRUCTION PLANS DETENTION FACILITY D OUTLET BOX DETAILS</p> <p>DESIGNED BY MAW SCALE DATE 7-12-18 DRAWN BY MAW (H) 1"= N/A SHEET 16 OF 17 CHECKED BY (V) 1"= N/A JOB NO. 2053.50</p>	<p>CLASSIC CONSULTING</p> <p>619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903</p> <p>(719) 785-0790 (719) 785-0799 (Fax)</p>
NO.	REVISION	DATE											
1	REVISED PER COUNTY COMMENTS	9-21-18											
2	REVISED PER COUNTY COMMENTS	10-18-18											



16" x 16" = 16.0/2
OR 16" x 12" = 12.0/2

5'-4"

50A ± 12" (TYP)
PLAN TO WITHIN 3" OF
(CYLINDRICAL OPENING)

PLAN

9'-401

502 ± 5" CC.

9'-401

5'-4"

SECTION A-A
(SEE IN BOTTOM OF BASIN)

1. UNPAVED AREA OR A CONCRETE COLLAR IN PAVED AREA. SEE DETAILS ON SHEETS 2 AND 3.

2. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.

3. PRECAST MANHOLES AND CONCRETE CAST-IN-PLACE SHALL CONFORM TO ASTM C-478 (ASFOIT 199).

4. CAST-IN-PLACE MANHOLES SHALL BE CLASS B CONCRETE.

5. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 5 FT.-4 IN. AND SHALL BE IN ACCORDANCE WITH ASFOIT M 198.

6. ALL REINFORCED STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT 6".

7. ALL BASE SHALL HAVE A 1/4" MINIMUM CLEARANCE.

8. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL SHAPE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.

9. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE OR APPROVED GROUT.

10. STEP-GUTS SHALL EXTEND 2 FT. MINIMUM BEYOND OUTLET WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.

11. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.

12. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PRO AND CROSS SLOPE.

1. A
2. C
3. I
4. C
5. E
6. C
7. R
8. C
9. D
10. S
11. S
12. S
13. S
14. S
15. S
16. S
17. S
18. S
19. S
20. S
21. S
22. S
23. S
24. S
25. S
26. S
27. S
28. S
29. S
30. S
31. S
32. S
33. S
34. S
35. S
36. S
37. S
38. S
39. S
40. S
41. S
42. S
43. S
44. S
45. S
46. S
47. S
48. S
49. S
50. S
51. S
52. S
53. S
54. S
55. S
56. S
57. S
58. S
59. S
60. S
61. S
62. S
63. S
64. S
65. S
66. S
67. S
68. S
69. S
70. S
71. S
72. S
73. S
74. S
75. S
76. S
77. S
78. S
79. S
80. S
81. S
82. S
83. S
84. S
85. S
86. S
87. S
88. S
89. S
90. S
91. S
92. S
93. S
94. S
95. S
96. S
97. S
98. S
99. S
100. S

CHECKERED TOP DESIGN

TYPICAL MANHOLE COVER

23 $\frac{7}{8}$ "

1"

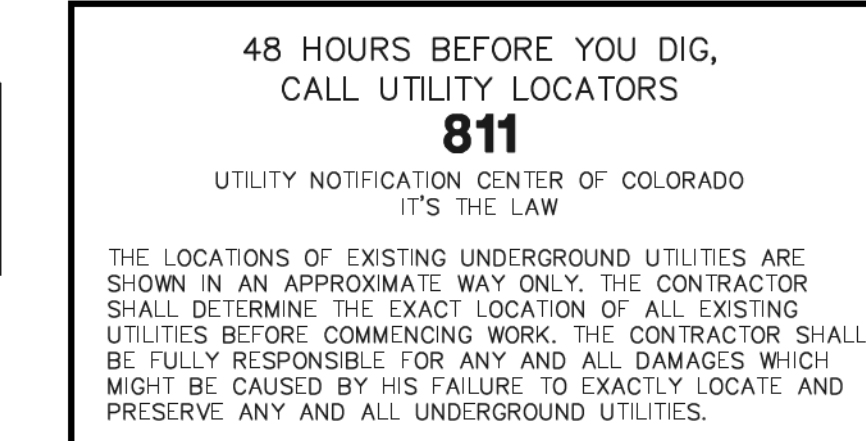
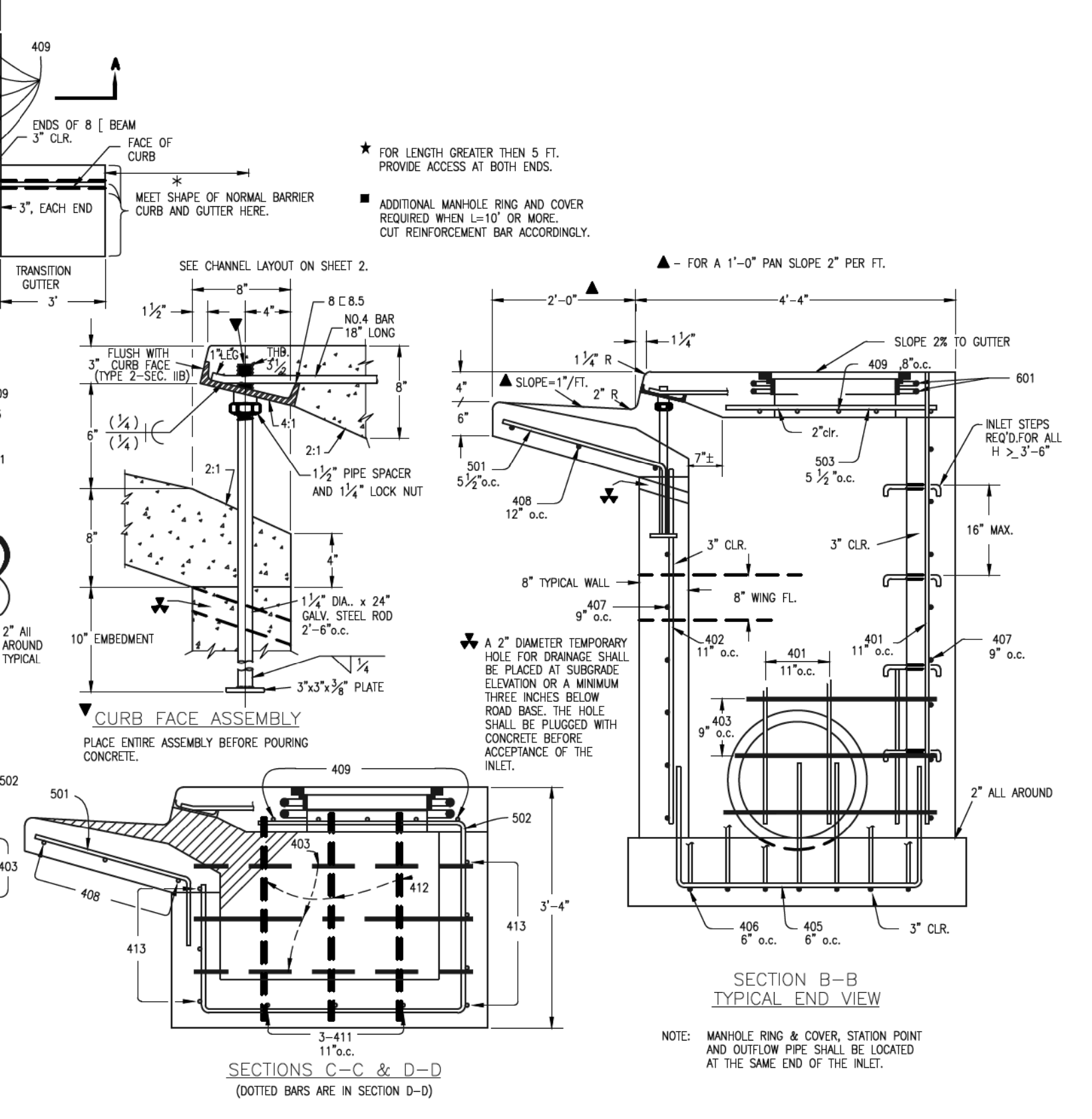
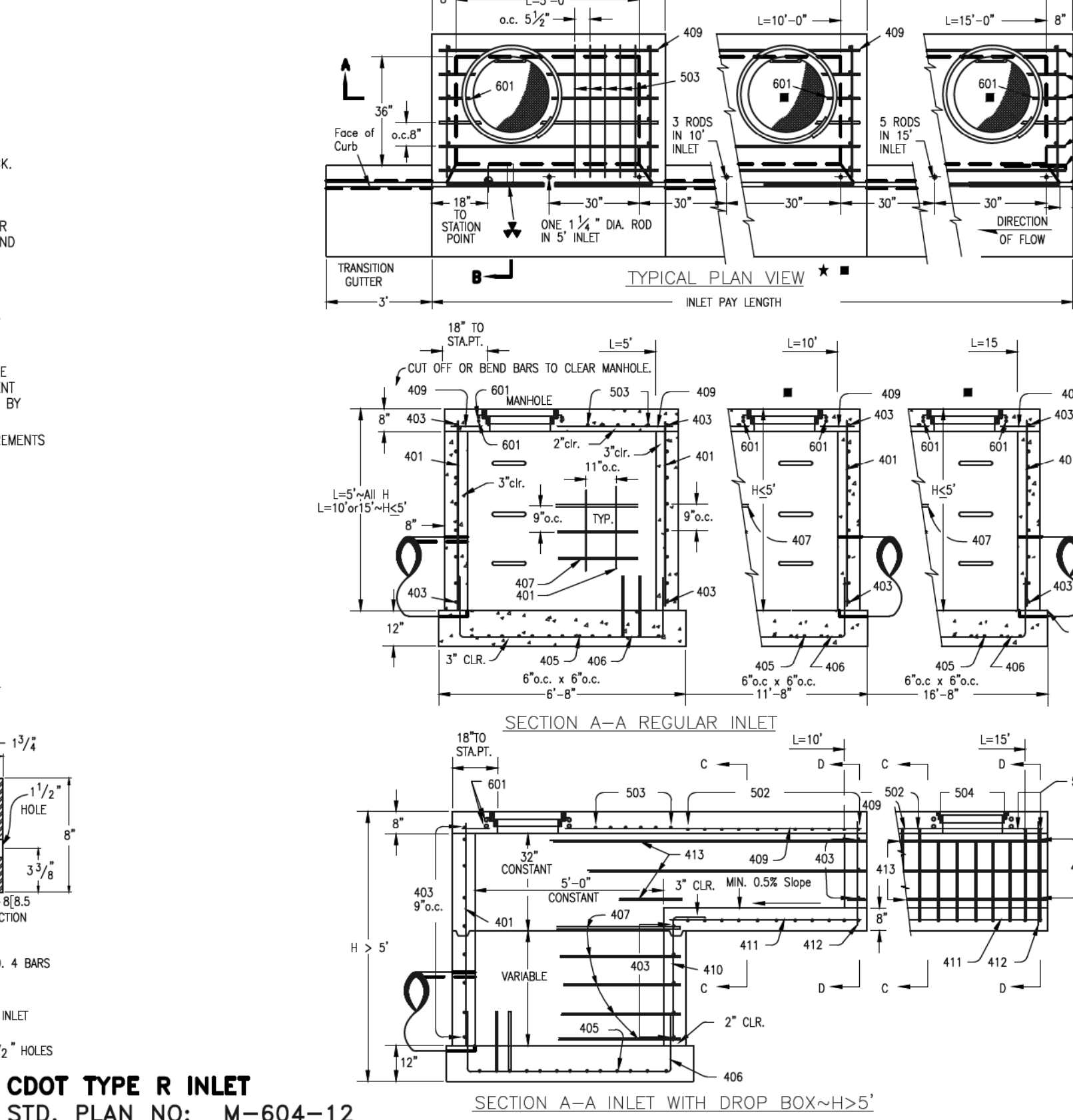
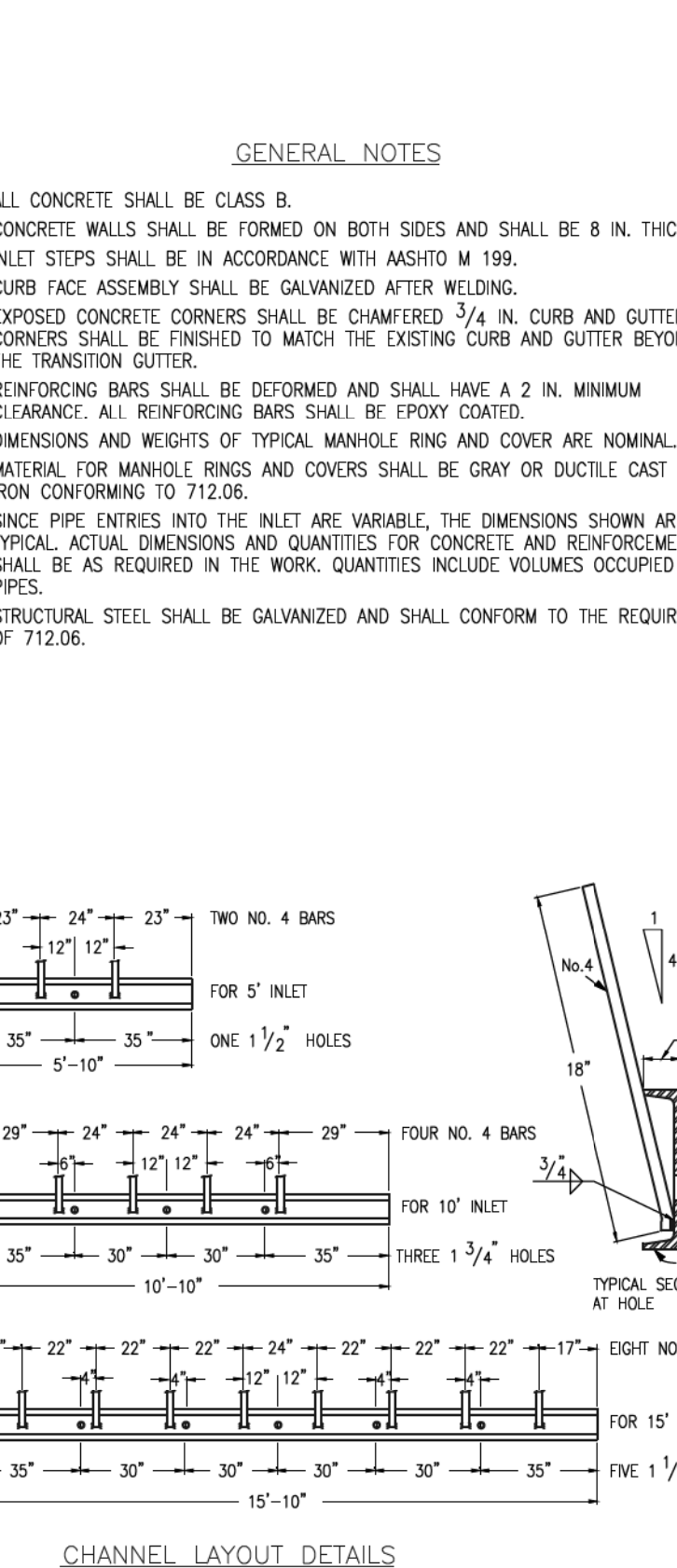
Technical drawing of a typical manhole ring. The top view shows a semi-circular ring with a diameter of 30". The side view shows a cross-section of the ring with a total height of 24 1/8". The ring has a 1" thick top flange and a 2 1/2" thick base. The side view also shows a 4" thick concrete base. The drawing is labeled "TYPICAL MANHOLE RING".


Dimensions:

- Top View: 30" (Diameter)
- Side View: 24 1/8" (Total Height)
- Side View: 1" (Top Flange Thickness)
- Side View: 2 1/2" (Base Thickness)
- Side View: 4" (Concrete Base Thickness)

Weights:

- COVER = 125 LBS.
- RING = 135 LBS.

[illegible]

DATE	REVIEW:
9-26-18	PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC
	
	MARC A. WORTON, COLORADO P.E. #37155
	10/19/18
	DATE

619 N. Cascade Avenue, Suite 200 (719)785-0790
Colorado Springs, Colorado 80903 (719)785-0799(Fax)

PAINT BRUSH HILLS FILING NO. 13E
CONSTRUCTION PLANS
DETAIL SHEET

DESIGNED BY	MAW	SCALE	DATE	7-20-18
DRAWN BY	MAW	(1/4) 1"= NA	SHEET 17	OF 17
CHECKED BY		(1/2) 1"= NA	JOB NO.	2053.50