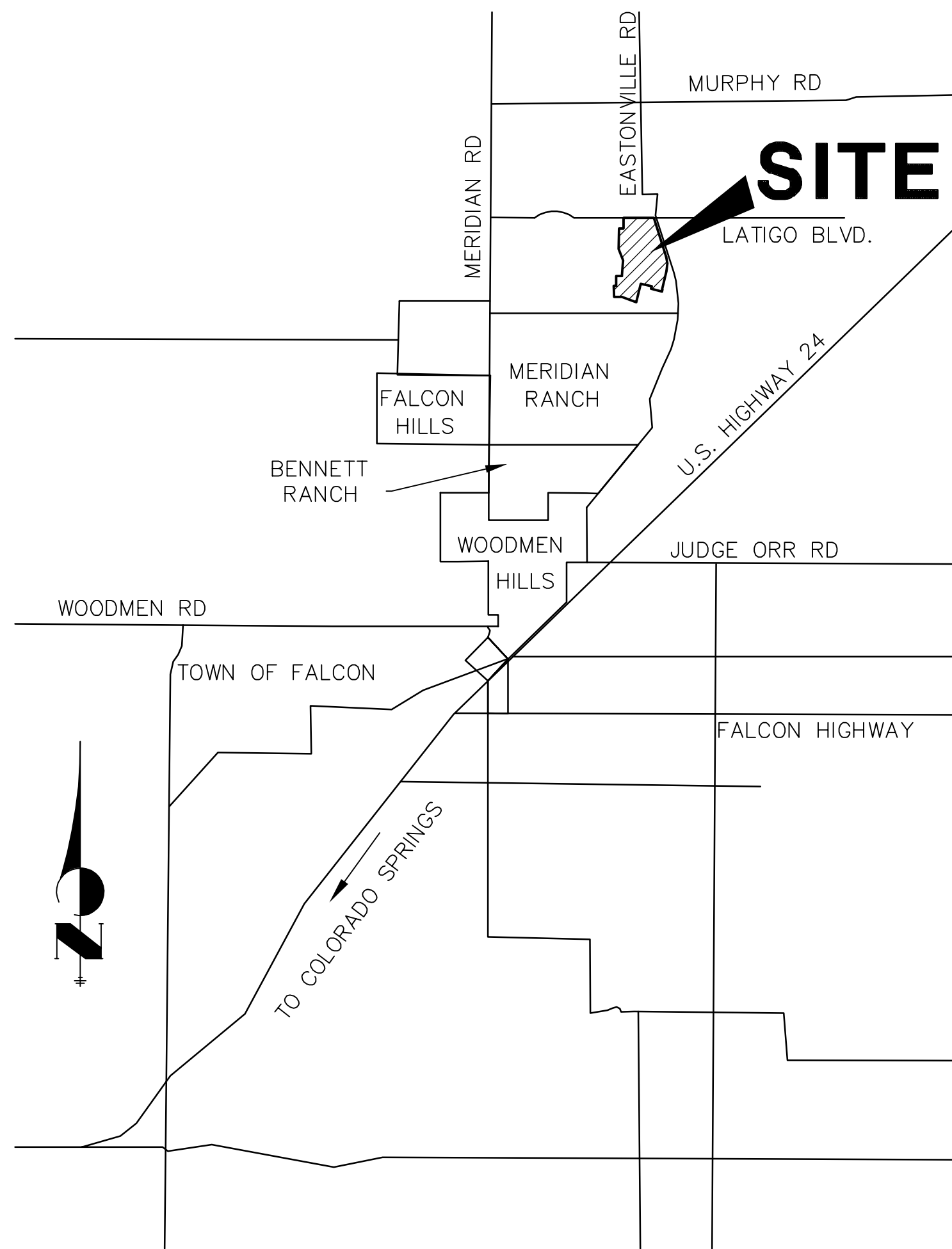


COLORADO STATE

N.T.S.



1	—	COVER SHEET
2	—	LEGEND
3	—	TYPICAL SECTIONS
4	—	HORIZONTAL CONTROL PLAN
5–9	—	STREET IMPROVEMENT PLAN AND PROFILE
10–11	—	SIGNAGE AND STRIPING PLAN
12	—	DETAILS
12	—	TOTAL SHEETS

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 SOIL AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
  - 3.1. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - 3.2. CITY OF COLORADO SPRINGS/ EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
  - 3.3. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS AND BRIDGE CONSTRUCTION
  - 3.4. 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 VERSIONS 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.

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 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 FUTURE PLD 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. 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.
10. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
11. SIGHT VISIBILITY TRIANGLES ARE IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED IN SIGHT TRIANGLES.
12. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
13. 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.
14. 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.

AD	ACRE	FL	FLOWLINE	RT	RIGHT
AE	ALGEBRAIC DIFFERENCE	FIL	FILING	S	SOUTH
AH	AHEAD	FO	FIBER OPTIC CABLE	STE	STEEL
ARCH	ARCHITECT	GB	GRADE BREAK	SAN	SANITARY SEWER
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	GC	GRADE EASEMENT	SF	SQUARE FOOT
		GIS	GEOGRAPHIC INFORMATION SYSTEM	ST	STREET
ASSY	ASSEMBLY			STA	STATION
AV	AVENUE	GL	GAZ LINE	STM	STORM SEWER
BB	BOX BASE	GPS	GLOBAL POSITIONING SYSTEM	SY	SQUARE YARD
BACK	BACK	GV	GATE VALVE	SY-IN	SQUARE YARD INCH
BNDY	BOUNDARY	HBT	HOT BITUMINOUS PAVEMENT	TB	THRUST BLOCK
BOP	BOTTOM OF PIPE	HC	HANDICAP	TBC	TOP BACK OF CURB
BOV	BLOW OFF VALVE	HDC	HIGH DEFLECTION COUPLING	TBW	TOP BACK OF WALK
BFV	BUTTERFLY VALVE	HDPE	HIGH DENSITY POLYETHYLENE	TEL	TELEPHONE
BOVD	BOULEVARD	HE	HYDRAULIC GRADE LINE	TN	TON
BW	BOTTOM OF WALL	HMA	HOT MIX ASPHALT	TOA	TOP OF ASPHALT
C&G	CURB & GUTTER	HOA	HOME OWNERS ASSOCIATION	TOB	TOP OF BOX
CATV	CABLE TELEVISION	HP	HIGH POINT	TOC	TOP OF CURB OR CONCRETE
CB	CATCH BASIN	HR	HOUR	TOF	TOP OF FOUNDATION
CBX	CONCRETE BOX CULVERT	IN	INLET	TOP	TOP OF PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	IE	IRRIGATION EASEMENT	TW	TOP OF WALL
		INT	INTERSECTION	TYP	TYPICAL
CDS	CUL-DE-SAC	INV	INVERT	UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
CF	CUBIC FOOT	IRR	IRRIGATION	UE	UTILITY EASEMENT
CFC	CUBIC FEET PER SECOND	KB	KICK (THRUST) BLOCK	U&DE	UTILITY & DRAINAGE EASEMENT
CL	COMPLETE IN PLACE	LB	POUND	UGE	UNDERGROUND ELECTRIC
CIP	CENTER LINE	LE	LANDSCAPE EASEMENT	VCP	VETRIFIED CLAY PIPE
CLMR	CONDITIONAL LETTER OF REVISION	LF	LINEAR FOOT	VPC	VERTICAL POINT OF CURVATURE
CLR	CLEAR	LN	LANE	VPT	VERTICAL POINT OF INTERSECTION
CMQ	CORRUGATED METAL PIPE	LMWR	LETTER OF MAP REVISION	VPI	VERTICAL POINT OF INTERSECTION
CO	CLEAN OUT	LS	LOW SUM	VPT	VERTICAL POINT OF TANGENCY
COCs	CITY OF COLORADO SPRINGS	LT	LEFT	VTC	VEHICLE TRACKING CONTROL
CONC	CONCRETE	MAX	MAXIMUM	W	WEST
CP	CIRCULAR	M	MOISTURE DENSITY	WL	WATER LINE
CSU	CORRUGATED STEEL PIPE	MDDP	MASTER DEVELOPMENT DRAINAGE PLAN	WM	WATER MAIN
CSU	COLORADO SPRINGS UTILITIES			WRD	WATER RESOURCES DEPARTMENT
CT	COURT	MH	MANHOLE	WS	WATER SURFACE
CTRB	CONCRETE THRUST REDUCER	MIN	MINIMUM	WSE	WATER SURFACE ELEVATION
CBY	CUBIC YARD	N	NORTH	WTR	WATER
CPBS	DRAINAGE BASIN PLANNING STUDY	NRCP	NON-REINFORCED CONCRETE PIPE	YR	YEAR
		ODP	OFFICIAL DEVELOPMENT PLAN		
DE	DRAINAGE EASEMENT	OE	OVERHEAD ELECTRIC		
DIA	DIAMETER	OHU	OVERHEAD UTILITY		
DIP	DUCTILE IRON PIPE	PC	POINT OF CURVATURE		
DR	DRIVE	PCC	POINT OF COMPOUND CURVATURE		
DRC	DESIGN REVIEW COMMITTEE				
DU	DWELLING UNITS	PCR	POINT OF CURB RETURN		
DY	DAY	PDP	PRELIMINARY DEVELOPMENT PLAN		
E	EAST				
EA	EACH	PE	PROFESSIONAL ENGINEER		
EL	ENERGY GRADE LINE	PI	POINT OF INTERSECTION		
LEG	ELEVATION	PKWY	PARKWAY		
ELEC	ELECTRIC	PL	PROPERTY LINE		
EOA	EDGE OF ASPHALT	PR	PROPOSED		
EPC	EL PASO COUNTY	PRC	POINT OF REVERSE CURVATURE		
ERCP	ELLIPTICAL RCP	PT	POINT OF TANGENCY		
ESMT	EASEMENT	EST	ESTIMATE		
EX	EXISTING	PV	PLUG VALVE		
		PVC	POLYVINYL CHLORIDE		
FDP	FINAL DEVELOPMENT PLAN	R	RADIUS		
FDR	FINAL DRAINAGE REPORT	RCCB	REINFORCED CONCRETE BOX CULVERT		
FES	FINLED END SECTION	RCP	REINFORCED CONCRETE PIPE		
FFS	FINISHED FLOOR ELEVATION	RD	ROAD		
FG	FINISHED GRADE	ROW	RIGHT OF WAY		
FH	FIRE HYDRANT				

1. ALL SIGNS AND PAVEMENT MARKING 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 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 BE "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" THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE, STOP BARS SHALL BE 24" IN WIDTH, CROSSWALK LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-267-1.
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 THE 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.

OWNER/DEVELOPER:	BRJM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 P~719-475-7474
ENGINEER/SURVEYOR:	JR ENGINEERING, LLC ATTN: MIKE A. BRAMLETT 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P~303-267-6240
FIRE PROTECTION DISTRICT:	FALCON FIRE FPD 7030 N MERIDIAN RD FALCON, CO 80831 P~719-494-4050
DISTRICT:	MERIDIAN SERVICE METROPOLITAN DISTRICT 11886 STAPLETON DR PEYTON, CO 80831 P~719-495-6567
COUNTY TRANSPORTATION:	EL PASO COUNTY, DEPT. OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, COLORADO 80922 KEVIN MASTIN ~ (719) 520-6300
COUNTY DEVELOPMENT:	EL PASO PLANNING AND COMMUNITY 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 CRAIG DOSSEY ~ (719) 520-6300
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC ASSOC., INC. 11140 EAST WOODMEN ROAD FALCON, COLORADO 80831 (719) 495-2283

THE BASIS OF BEARINGS IS THE WESTERLY LINE OF TRACT, B, WOODMOOR PLACER, BEING MONUMENTED BY A 1-1/4" YELLOW PLASTIC CAP ILLEGIBLE AT BOTH ENDS. SAID LINE BEARING N26°20'33"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

NGS MONUMENT T 294 BEING MONUMENTED BY A 3-1/4" BRASS DISC SET IN A 4'X4' BOULDER, LOCATED 1.8 MILES EAST ALONG HIGBY ROAD FROM ITS INTERSECTION WITH JACKSON CREEK PARKWAY, 40 FEET SOUTH OF THE CENTERLINE OF THE ROAD, 6 FEET SOUTH OF A FENCE, AND 6.2 FEET SOUTH OF A WITNESS POST. SAID MONUMENT HAVING A PUBLISHED ELEVATION OF 7247.10 FEET, NAVD88.

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

BOB IRWIN DATE

BRJM, LLC  
101 N. CASCADE  
COLORADO SPRINGS, CO 80903

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

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

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

JENNIFER IRVINE, P.E. DATE

COUNTY ENGINEER/ECM ADMINISTRATOR

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL. THE PLANS AND SPECIFICATIONS WERE PREPARED IN ACCORDANCE WITH THE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLAN 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 FULL RESPONSIBILITY AND AM ABLE TO GUARANTEE THAT THE PLANS, SPECIFICATIONS, AND ANY OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**BRJM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

**J·R ENGINEERING**  
A Westrian Company



Centennial 303-740-9383 • Colorado Springs 719-592-2533  
Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

LATIGO TRAILS — FILING NO. 9		H-SCALE		1"=XX'		No.		REVISION		BY		DATE	
		V-SCALE		N/A									
		DATE		09/10/21									
		DESIGNED BY		N/A									
		DRAWN BY		QNL									
		CHECKED BY											
JOB NO.		25175.01											
SHEET		1 OF 12											
		COVER SHEET											



Know what's **below**.  
**Call** before you dig

LAYER LINETYPE LEGEND	
EXISTING	PROPOSED
PHASE LINE	
MATCH LINE	
SECTION LINE	
BOUNDARY LINE	
PROPERTY LINE	
EASEMENT LINE	
RIGHT OF WAY	
R.O.W. A LINE	
CENTERLINE	
CITY LIMITS	
WIRE FENCE	
CHAIN LINK FENCE	
WOOD FENCE	
MASONRY FENCE	
GUARDRAIL	
CONC. BARRIER	
CABLE TV	
ELECTRIC	
FIBER OPTIC	
GAS MAIN	
IRRIGATION MAIN	
OIL/PETRO. MAIN	
OVERHEAD UTILITY	
SANITARY SEWER	
STORM DRAIN	
TELEPHONE	
WATER MAIN	
RAW WATER LINE	
SWALE/WATERWAY FLOWLINE	
DIVERSION DITCH	
DIVERSION CHANNEL	
MAJOR DRAINAGE BASIN	
MINOR DRAINAGE BASIN	
TOP OF SLOPE	
TOE OF SLOPE	
EDGE OF WATER	
INDEX CONTOUR	
INTERMEDIATE CONTOUR	
DEPRESSION CONT. (INDEX)	
DEPRESSION CONT. (INTER)	
TOP OF CUTS	
TOE OF FILLS	
OUT AND FILL LINE	
SILT FENCE	
100 YEAR FLOODPLAIN	
500 YEAR FLOODPLAIN	
FLOODWAY	
BASE FLOOD ELEVATION	
EDGE OF WETLANDS	
STONE WALL	

UTILITIES LEGEND	
EXISTING	PROPOSED
<b>STORM SEWER</b>	
MANHOLE	
STORM INLET	
AREA INLET – SQUARE	
AREA INLET – ROUND	
FLARED END SECTION	
RIPRAP	

<b>SANITARY SEWER</b>	
LINE MARKER	
SERVICE MARKER	
CLEAN-OUT	
MANHOLE W/ DIRECTIONAL FLOW ARROW	
<b>WATER LINE</b>	
LINE MARKER	
SERVICE MARKER	
FIRE HYDRANT	
FIRE CONNECTION	
MANHOLE	
BEND	
BLOW-OFF VALVE	
WELL	
METER	
VALVE	
REDUCER	
THRUST BLOCK	
CROSS	
PLUG W/ THRUST BLOCK	
TEE	
REVERSE ANCHOR ANODE	
AIR & VACUUM VALVE ASSEMBLY	
TRANSMISSION BLOW-OFF ASSEMBLY	

<b>GAS LINE</b>	
MARKER	
SERVICE MARKER	
METER	
VALVE	
PLUG	
TEE	
<b>DRY UTILITIES</b>	
CABLE TV MARKER	
CABLE TELEVISION PEDESTAL	
ELECTRIC MARKER	
ELECTRIC SERVICE MARKER	
ELECTRICAL PEDESTAL	
ELECTRICAL METER	
ELECTRICAL MANHOLE	
FIBER-OPTIC MARKER	
IRRIGATION PEDESTAL	
TELEPHONE MARKER	
TELEPHONE PEDESTAL	
TELEPHONE MANHOLE	
UTILITY POLE	
GUY ANCHOR	
GUY POLE	

<b>MISC. UTILITIES</b>	
VENT PIPE	
TEST HOLE DESIGNATOR	

MONUMENTATION LEGEND	
ALUMINUM CAP – FOUND	
BRASS CAP – FOUND	
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	
PANEL – FOUND	
PK NAIL – FOUND	
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER-SECTION CORNER – FOUND	
QUARTER-SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRaverse POINT – SET	

TRAFFIC LEGEND	
EXISTING	PROPOSED
PARKING METER	
TRAFFIC SIGNAL BOX	
TRAFFIC SIGNAL POLE	
TRAFFIC SIGNAL	
BARRICADE	
GUARD RAIL POST	
IMPACT ATTENUATOR	
BRIDGE STYLE HIGHWAY SIGN POST	
CANTILEVER STYLE HIGHWAY SIGN POST	
RAILROAD MARKER/SIGN	
STREET LIGHT	
STREET LIGHT – SINGLE	
STREET LIGHT – DOUBLE	
LUMINAIRE	
ALTERNATE LUMINAIRE	
SIGNAL MAST ARM W/ LUMINAIRE	
PEDESTAL POLE FOUNDATION	
TRAFFIC SIGNAL POLE	
ROUND PULL BOX	
MEDIUM PULL BOX	
LARGE PULL BOX (20X33X15)	
SIGNAL HEAD WITHOUT BACK PLATE	
SIGNAL HEAD WITH BACK PLATE	
PEDESTRIAN SIGNAL HEAD	
VIDEO IMAGE DETECTOR	
OPTICOM DETECTOR	
VEHICLE DETECTION ZONE	

STORM WATER MANAGEMENT	
KEY	SYMBOL
CHECK DAM	
CONSTRUCTION ROAD STABILIZATION	
CURB SOCK INLET PROTECTION	
CONCRETE WASHOUT AREA	
DIVERSION DITCH AND DIKE, TEMPORARY	
DIVERSION CHANNEL, TEMPORARY	
DEWATERING	
EROSION CONTROL BLANKET	
INLET FILTER	
INLET PROTECTION	
MULCHING	
OUTLET PROTECTION	
PAVED FLUME	
PERMENENT SEEDING	
REINFORCED CONCRETE DAM	
ROUGH CUT STREET CONTROL	
SEDIMENT BASIN	
SEDIMENT CONTROL LOG	
SILT FENCE	
SURFACE ROUGHENING	
STABILIZED STAGING AREA	
SEDIMENT TRAP	
STRAW BALE BARRIER	
TERRACING	
TEMPORARY SEEDING	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	
TEMPORARY STREAM CROSSING FORD TYPE	
TEMPORARY SLOPE DRAIN	
VEHICLE TRACKING CONTROL	
VEHICLE TRACKING CONTROL WITH WASH RACK	

DRAINAGE REPORT PLANS	
KEY	SYMBOL
BASIN DESIGNATION (NO COEFFICIENT)	
BASIN DESIGNATION (1 COEFFICIENT)	
BASIN DESIGNATION (2 COEFFICIENTS)	
ANALYSIS POINT IDENTIFIER	
BASIN DESIGNATION (HISTORIC)	
BASIN DESIGNATION (DEVELOPED)	
SUB-BASIN DESIGNATION (DEVELOPED)	
DRAINAGE PIPE IDENTIFIER	
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	
SWMM DESIGNATION 1	
SWMM DESIGNATION 2	
SWMM DESIGNATION 3	
SWMM DESIGNATION 4	

LANDSCAPE LEGEND	
EXISTING	PROPOSED
TREE – CONIFEROUS	
TREE – DECIDUOUS	
SHRUB/BUSH	
SHRUBS AND BUSHES	
IRRIGATION BOX	
IRRIGATION SPRINKLER	
IRRIGATION VALVE	
BOLLARD	
FLAGPOLE	

<b>ENGINEER'S STATEMENT</b>	
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING	
MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314 FOR AND ON BEHALF OF JR ENGINEERING, LLC	DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PROJECTS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)~475~7474

**J.R. ENGINEERING**  
A Westrian Company

Centennial 303-740-9883 • Colorado Springs 719-593-2593  
Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

BY	DATE	REVISION	No.	N/A	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
							09/10/21			

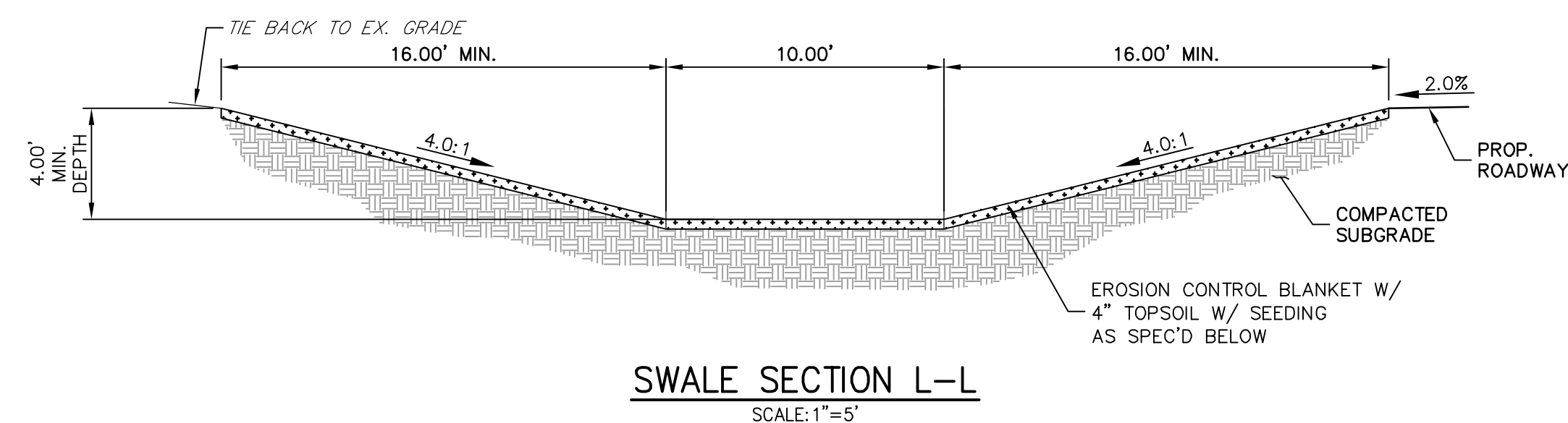
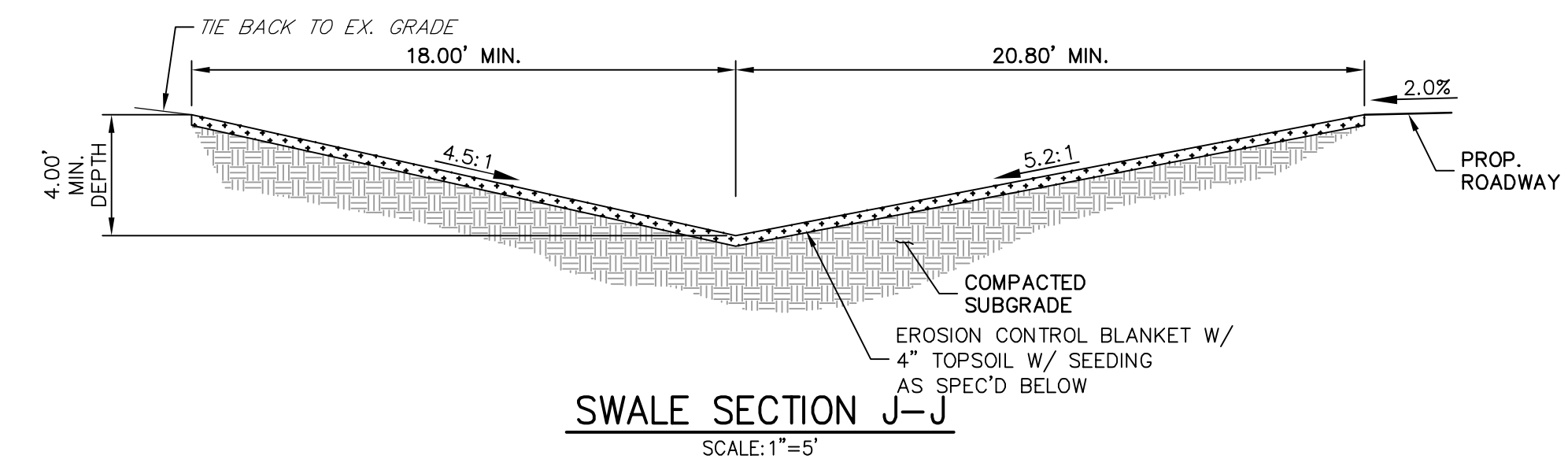
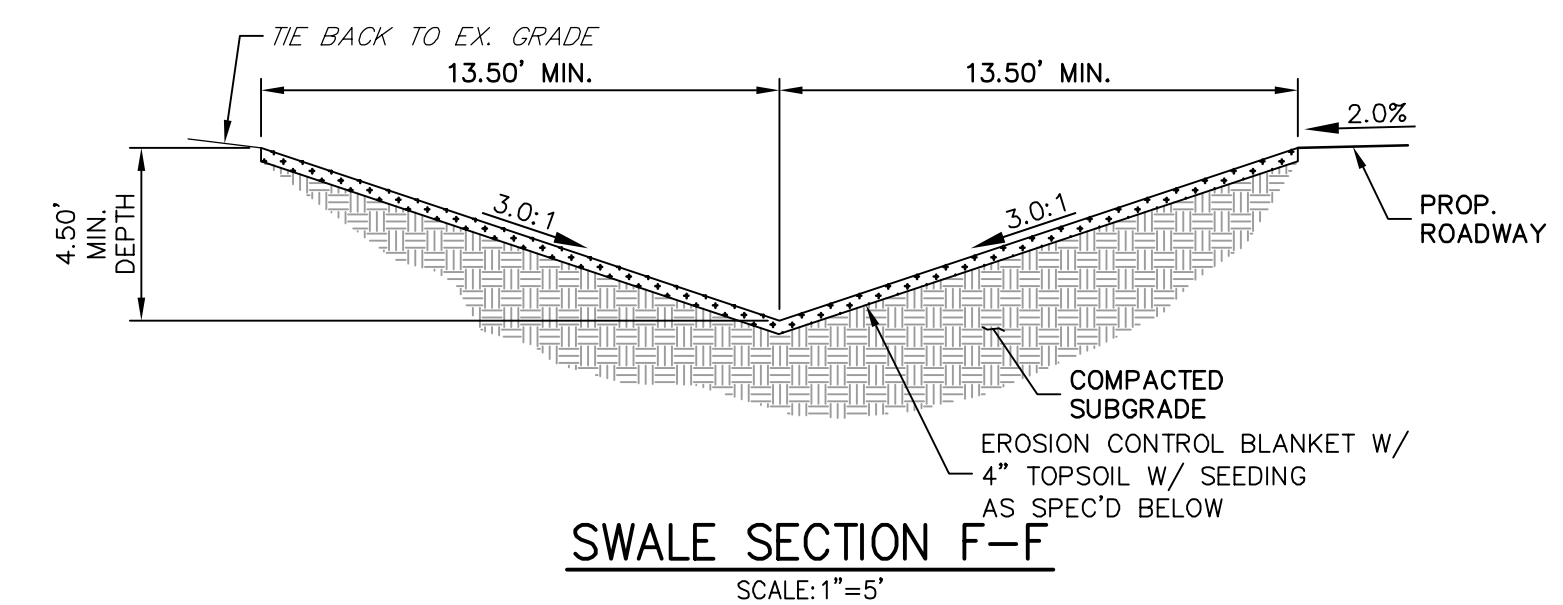
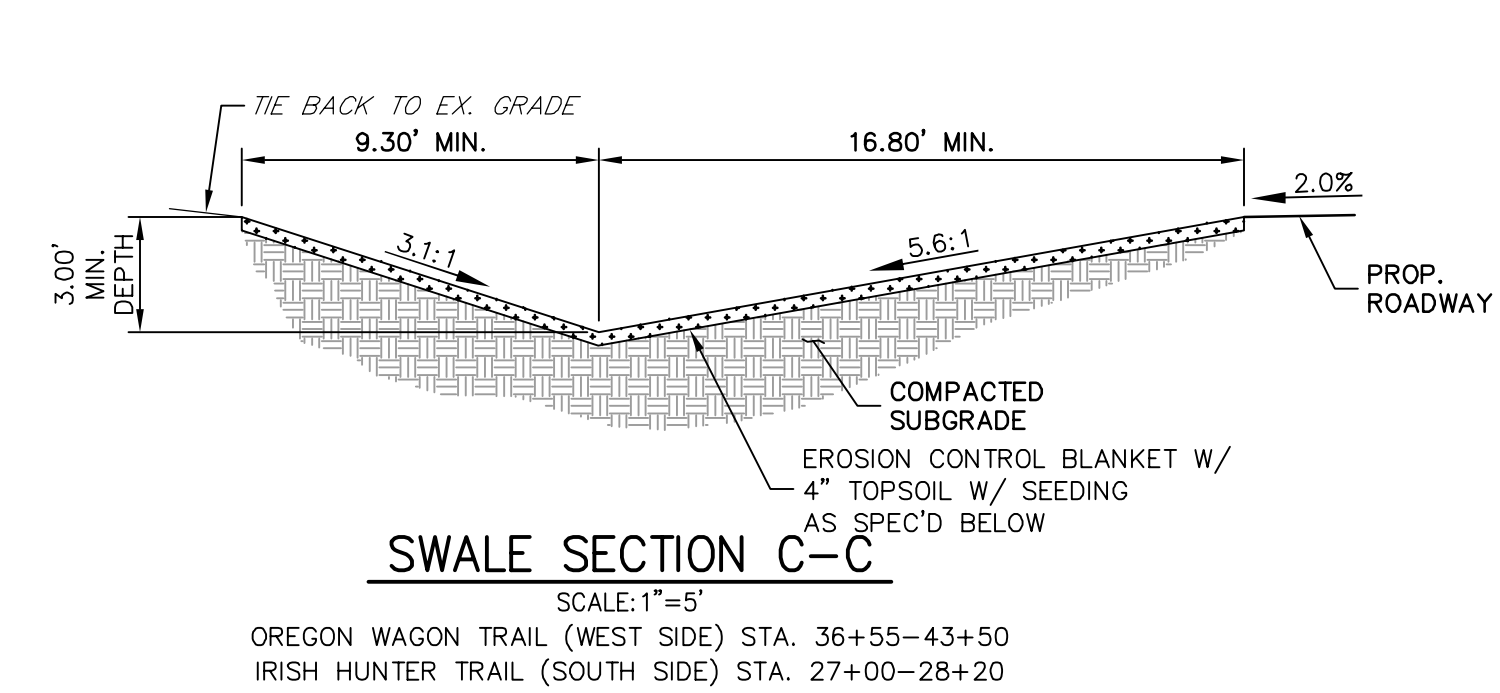
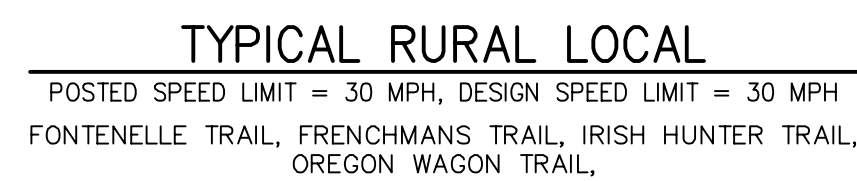
LATIGO TRAILS – FILING NO. 9

LEGEND

SHEET	2	OF	12
JOB NO.	25175.01		



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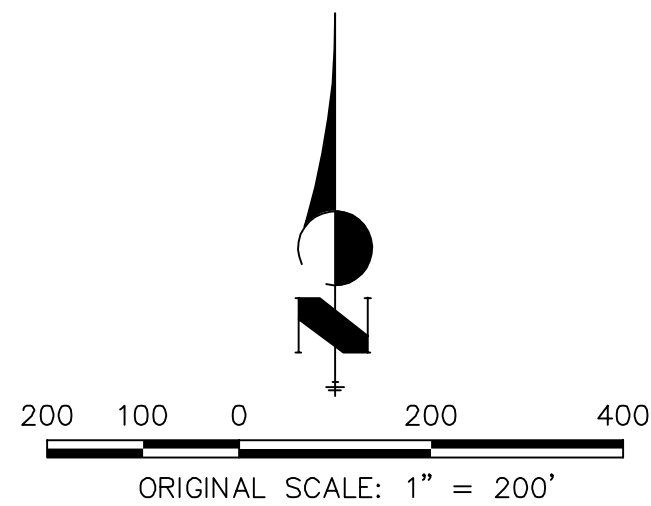
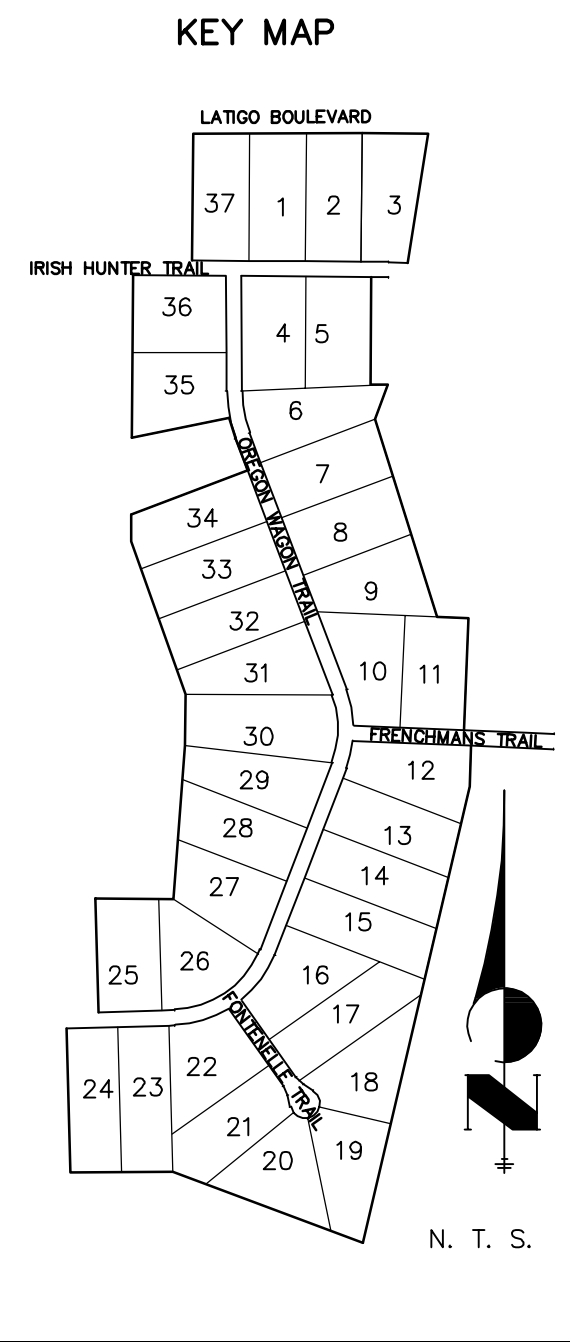
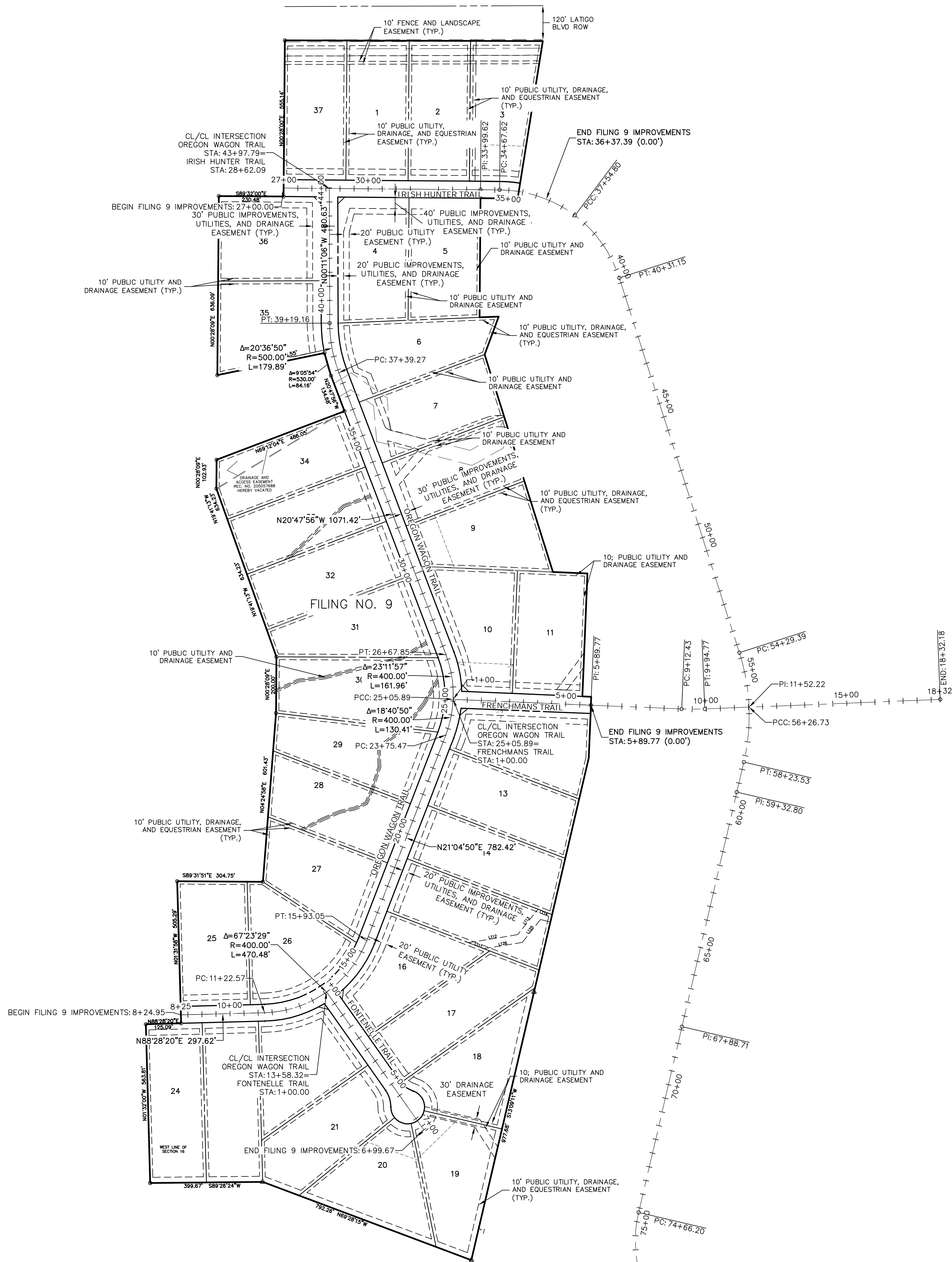


MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF

Fort Collins 970-491-9888 • [www.jengineering.com](http://www.jengineering.com)

LATIGO TRAILS – FILING NO. 9	
TYPICAL SECTIONS	
SHEET 3	OF 12
JOB NO.	25175.01



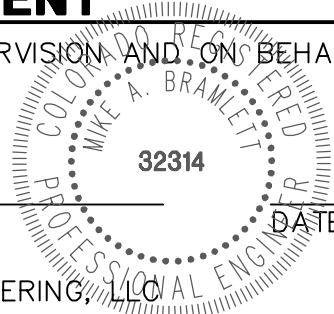


**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



LATIGO TRAILS - FILING NO. 9

HORIZONTAL CONTROL PLAN

SHEET 4 OF 12

JOB NO. 25175.01

REVISION	BY	DATE
No.		
1"		
H-SCALE		
V-SCALE		
N/A		
DATE		
09/10/21		
DESIGNED BY		
XXX		
DRAWN BY		
RWK		
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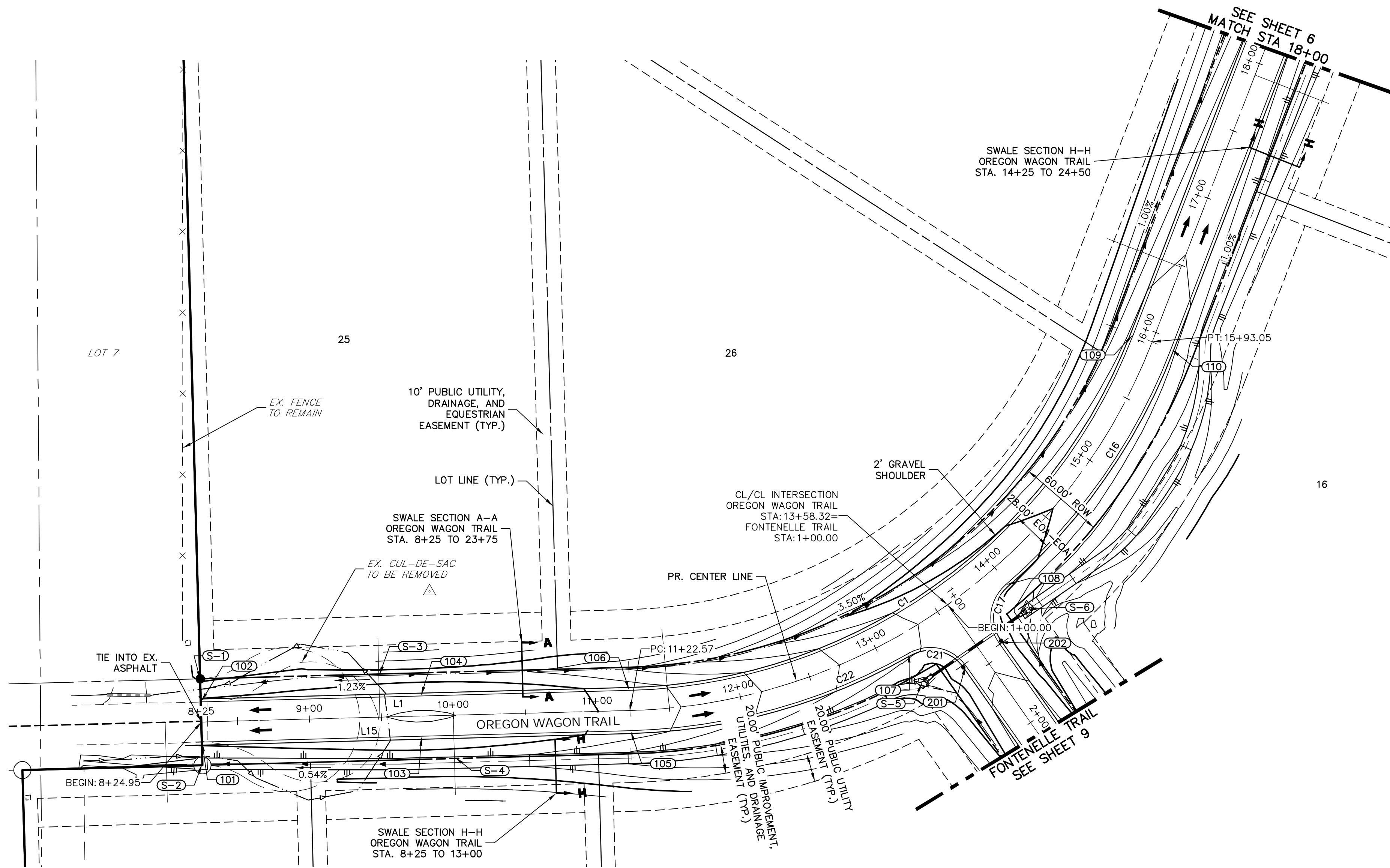
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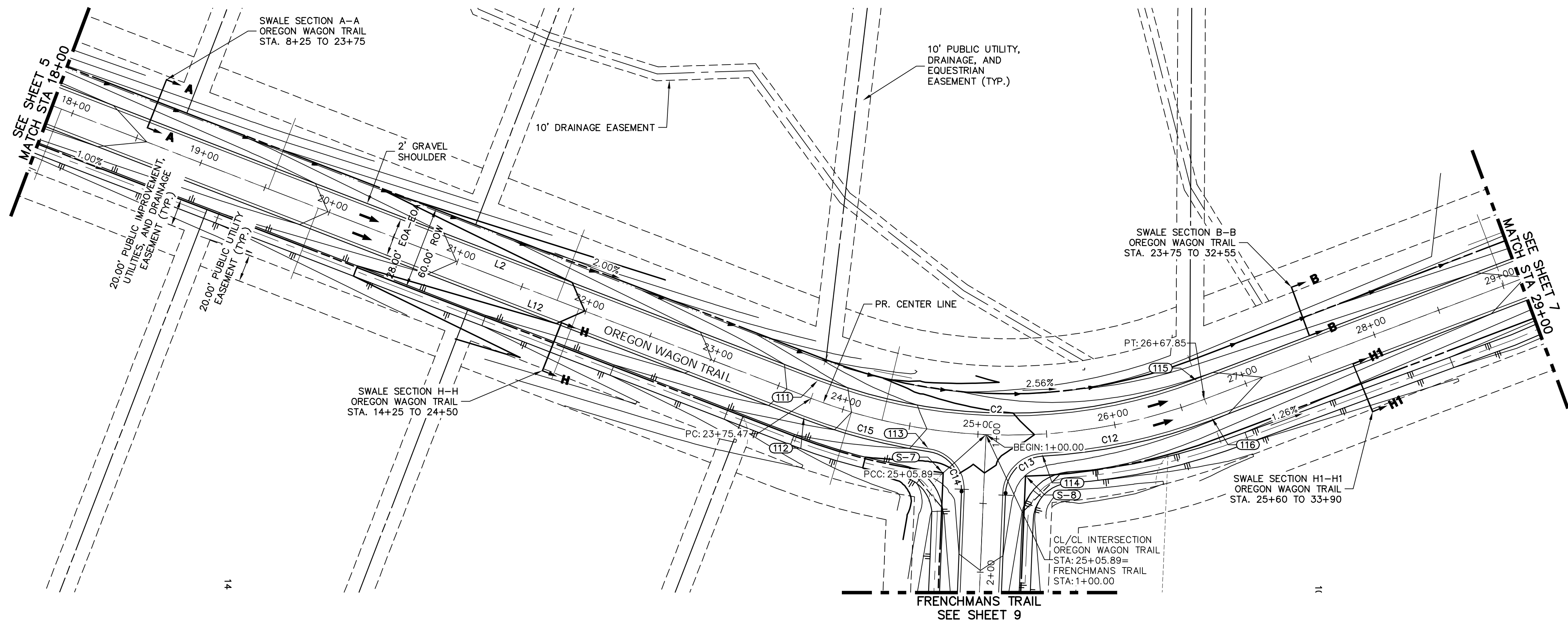
PREPARED FOR

**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

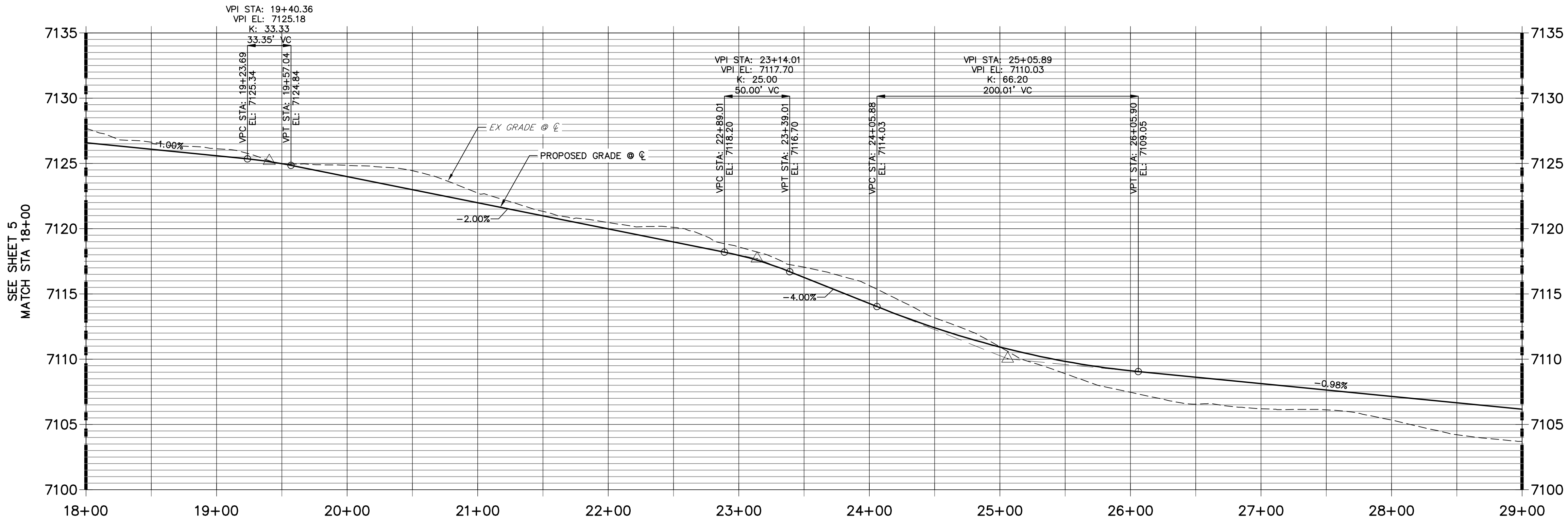
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AUTHORIZATION.







OREGON WAGON TRAIL PROFILE (2)  
STA 18+00.00 TO 29+00.00



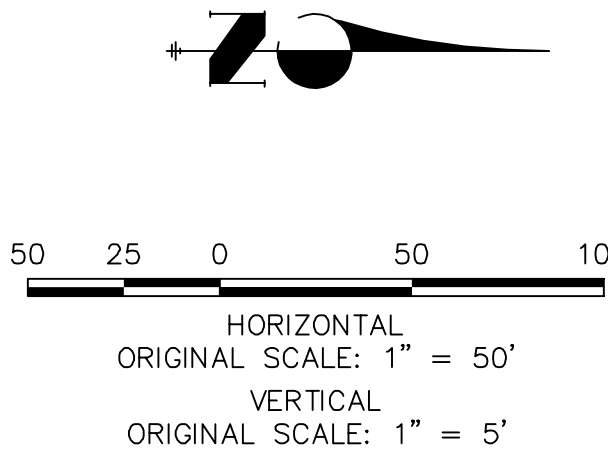
LINE AND CURVE TABLE			
LINE/CURVE	BEARING/DELTA	LENGTH	RADIUS
C2	23°11'57"	156.29'	386.00'
C14	84°18'46"	44.15'	30.00'
C12	17°30'43"	126.54'	414.00'
C13	84°18'46"	44.15'	30.00'
L2	S21°04'50"W	782.42'	
L12	N21°04'50"E	782.42'	
C15	12°59'35"	93.88'	414.00'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
111	23+75.47	14.00' (LT)	OREGON WAGON TRAIL	7114.96		PC
112	23+75.47	14.00' (RT)	OREGON WAGON TRAIL	7114.96		PC
113	24+66.18	14.00' (RT)	OREGON WAGON TRAIL	7111.61		PCR
114	25+45.59	14.00' (RT)	OREGON WAGON TRAIL	7109.64		PCR
115	26+67.85	14.00' (LT)	OREGON WAGON TRAIL	7108.16		PT
116	26+67.85	14.00' (RT)	OREGON WAGON TRAIL	7108.16		PT

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
S-7	24+77.96	30.00' (RT)	OREGON WAGON TRAIL	7109.10		SWALE PI
S-8	25+33.82	30.00' (RT)	OREGON WAGON TRAIL	7107.91		SWALE PI

STREET IMPROVEMENT NOTES

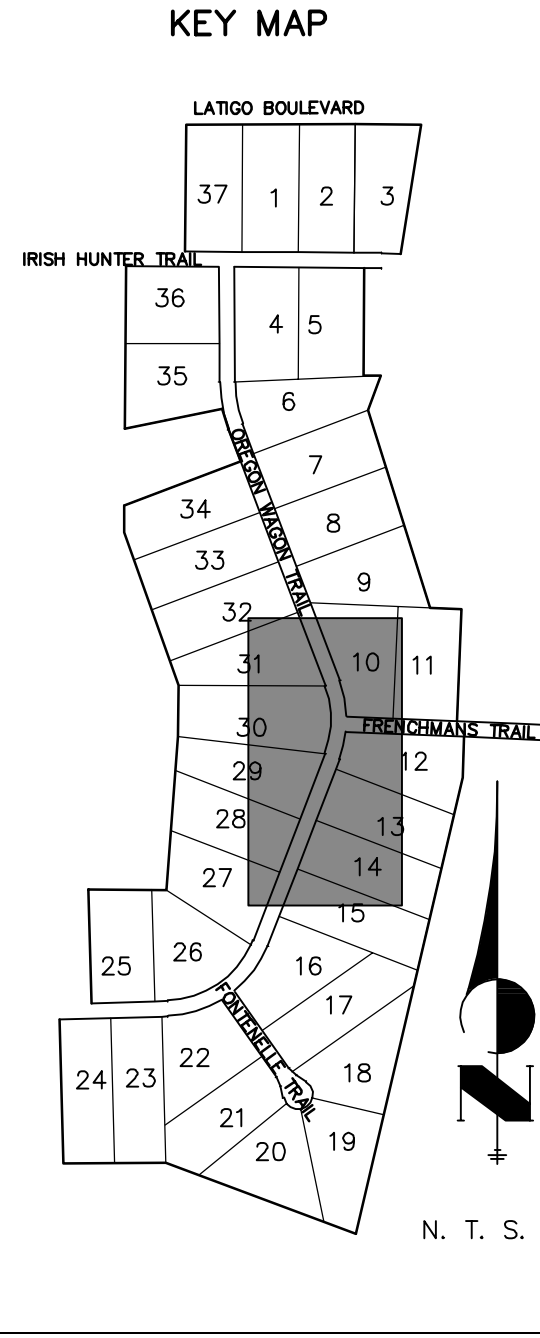
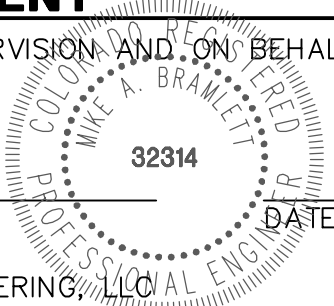
- ALL STATIONING IS @, UNLESS OTHERWISE NOTED.
- ALL PROFILE ELEVATIONS ARE @, UNLESS OTHERWISE NOTED.
- ALL POINT TABULATIONS ARE EDGE OF ASPHALT, UNLESS OTHERWISE NOTED.
- ALL CURB RETURN RADII ARE 20', UNLESS OTHERWISE NOTED.
- ALL SLOPE LABELS ARE SWALE CENTERLINE, UNLESS OTHERWISE NOTED.
- SEE SHEET 3 FOR TYPICAL STREET SECTIONS, SWALE SECTION A-A AND SECTION B-B DIMENSIONS AND DETAILS.
- ALL PROPOSED ROW WIDTHS ARE 60', UNLESS OTHERWISE NOTED.
- ABBREVIATIONS: EOA = EDGE OF ASPHALT, P.I.E. = PUBLIC IMPROVEMENTS EASEMENT.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

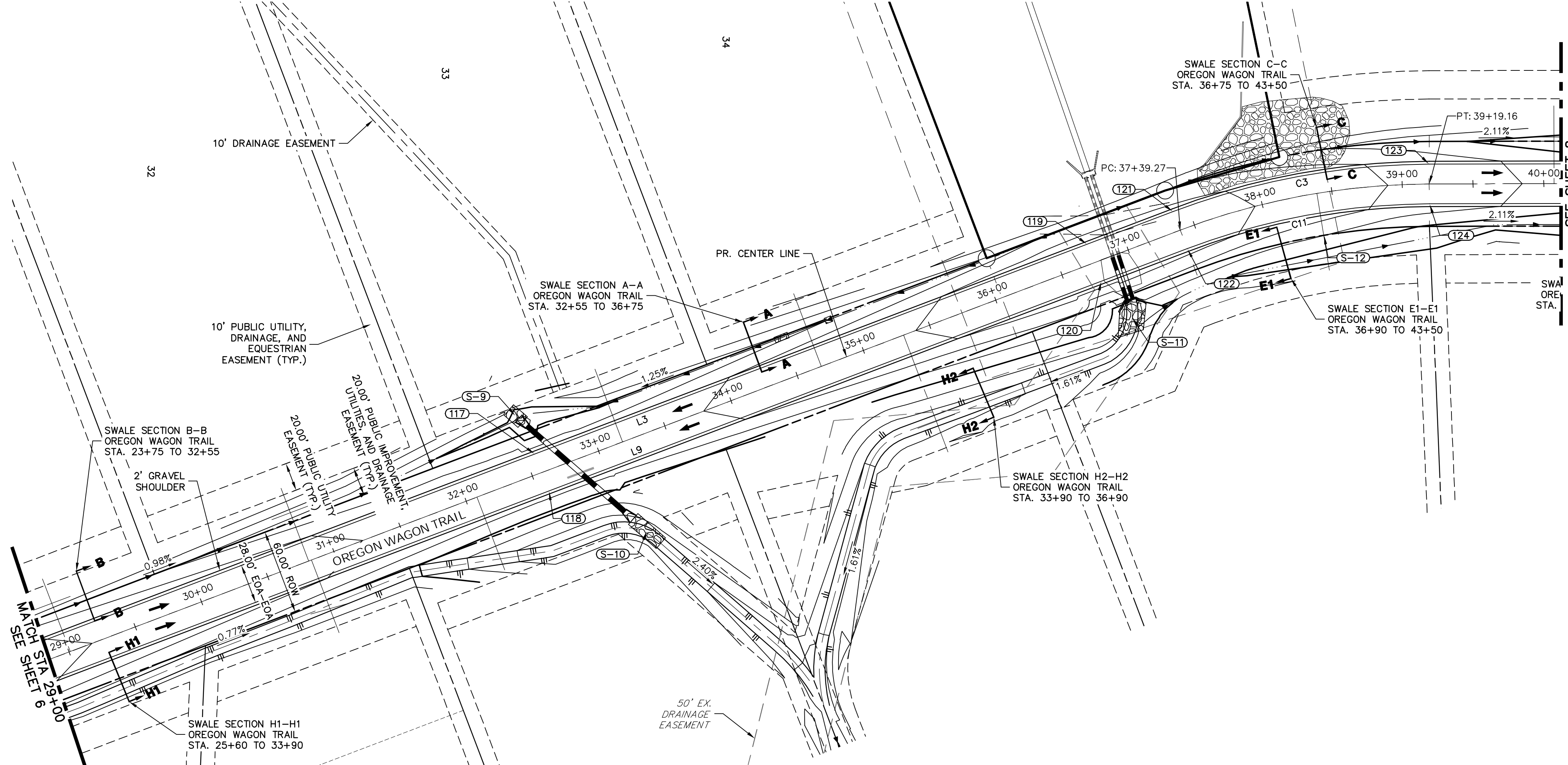


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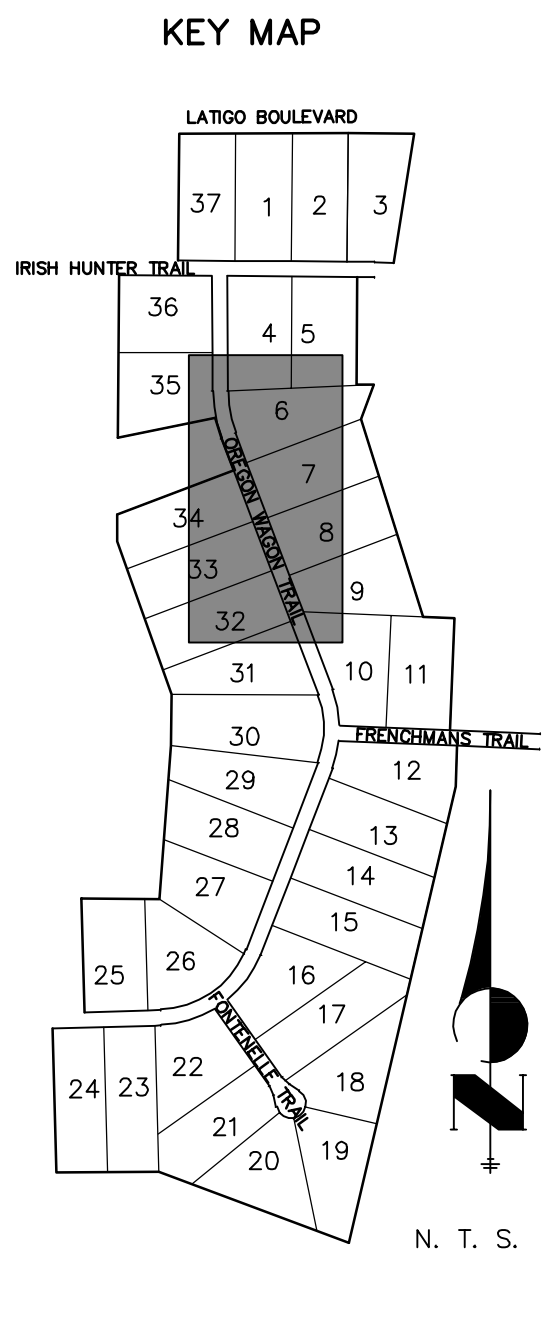
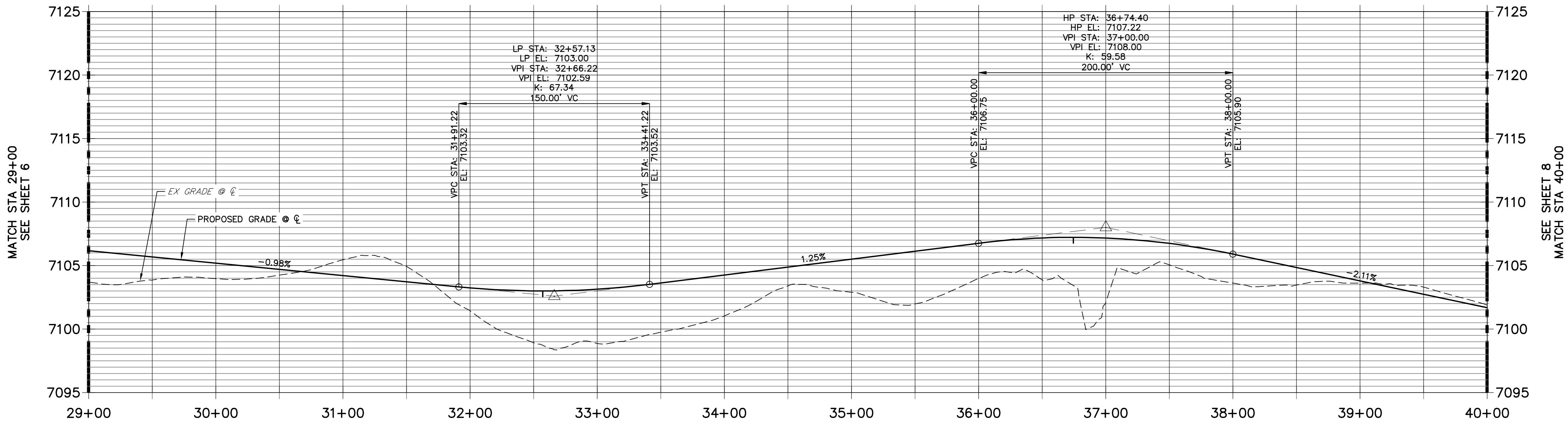
PREPARED FOR  
**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

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						09/10/21	XXX	CRB	



OREGON WAGON TRAIL PROFILE (3)  
STA 29+00.00 TO 40+00.00



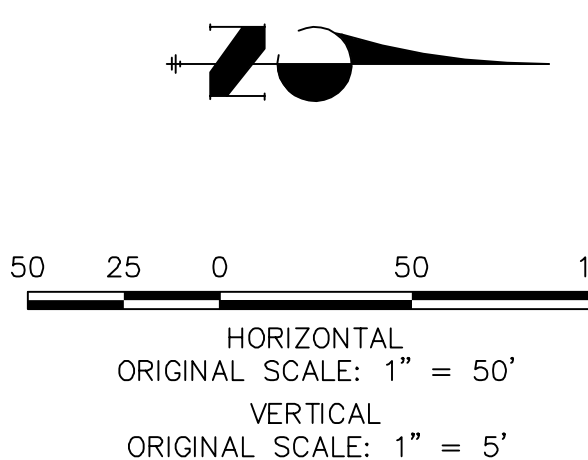
LINE AND CURVE TABLE			
LINE/CURVE	BEARING/Delta	LENGTH	RADIUS
C3	20°36'50"	184.93'	514.00'
L9	N20°47'56"W	1071.42'	
C11	20°36'50"	174.85'	486.00'
L3	S20°47'56"E	1071.42'	

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
117	32+57.13	14.00' (LT)	OREGON WAGON TRAIL	7102.72		LP
118	32+57.13	14.00' (RT)	OREGON WAGON TRAIL	7102.72		LP
119	36+74.40	14.00' (LT)	OREGON WAGON TRAIL	7106.93		HP
120	36+74.40	14.00' (RT)	OREGON WAGON TRAIL	7106.93		HP
121	37+39.27	14.00' (LT)	OREGON WAGON TRAIL	7106.59		PC
122	37+39.27	14.00' (RT)	OREGON WAGON TRAIL	7106.59		PC
123	39+19.16	14.00' (LT)	OREGON WAGON TRAIL	7103.10		PT
124	39+19.16	14.00' (RT)	OREGON WAGON TRAIL	7103.10		PT

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
S-9	32+54.08	43.74' (LT)	OREGON WAGON TRAIL	7098.54		SWALE GB
S-10	33+11.88	65.08' (RT)	OREGON WAGON TRAIL	7095.15		SWALE GB
S-11	36+85.43	45.64' (RT)	OREGON WAGON TRAIL	7097.57		SWALE GB
S-12	38+39.38	30.00' (RT)	OREGON WAGON TRAIL	7102.04		SWALE GB

STREET IMPROVEMENT NOTES

- ALL STATIONING IS C, UNLESS OTHERWISE NOTED.
- ALL PROFILE ELEVATIONS ARE C, UNLESS OTHERWISE NOTED.
- ALL POINT TABULATIONS ARE EDGE OF ASPHALT, UNLESS OTHERWISE NOTED.
- ALL CURB RETURN RADII ARE 20', UNLESS OTHERWISE NOTED.
- ALL SLOPE LABELS ARE SWALE CENTERLINE, UNLESS OTHERWISE NOTED.
- SEE SHEET 3 FOR TYPICAL STREET SECTIONS, SWALE SECTION A-A AND SECTION B-B DIMENSIONS AND DETAILS.
- ALL PROPOSED ROW WIDTHS ARE 60', UNLESS OTHERWISE NOTED.
- ABBREVIATIONS: EOA = EDGE OF ASPHALT, P.I.E. = PUBLIC IMPROVEMENTS EASEMENT.



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

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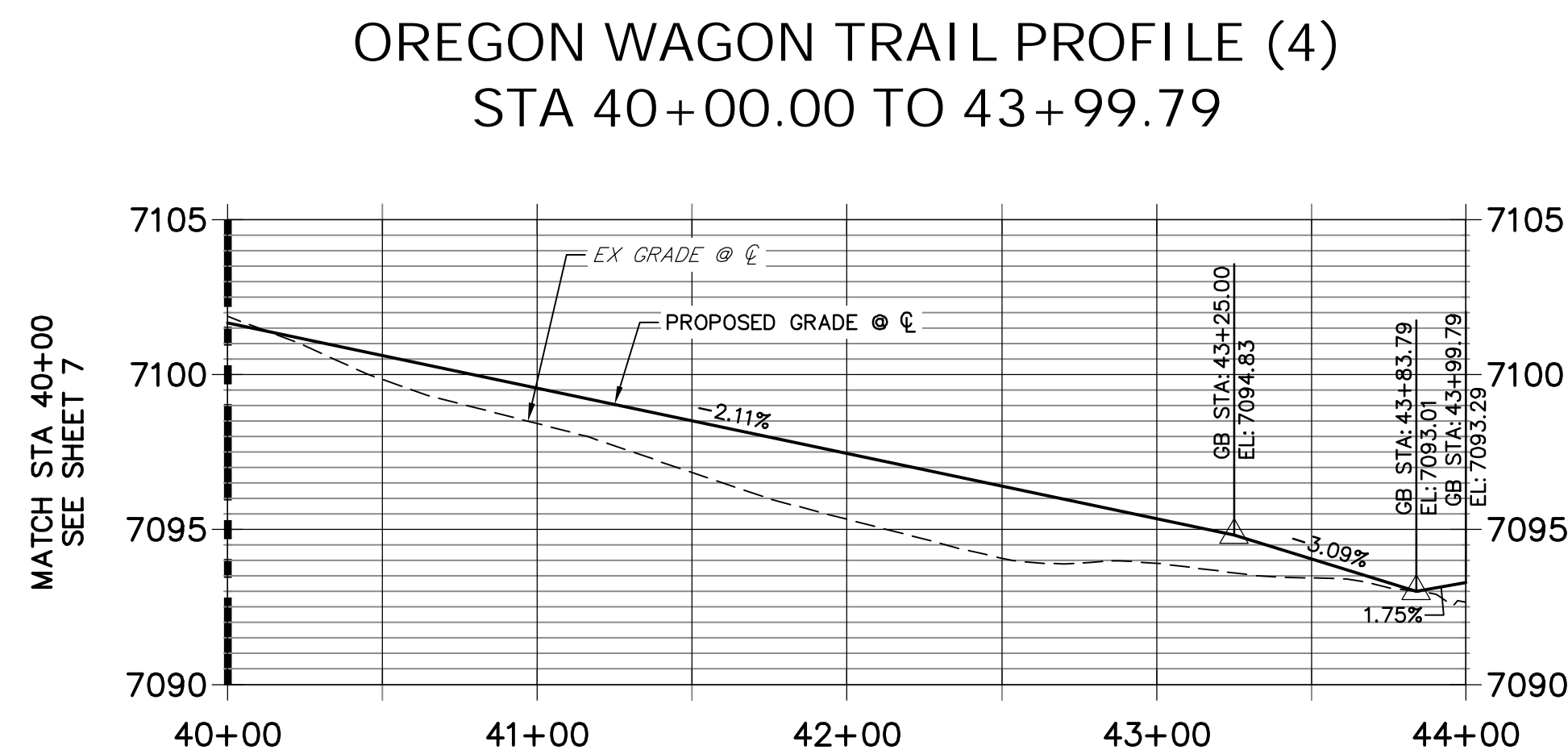
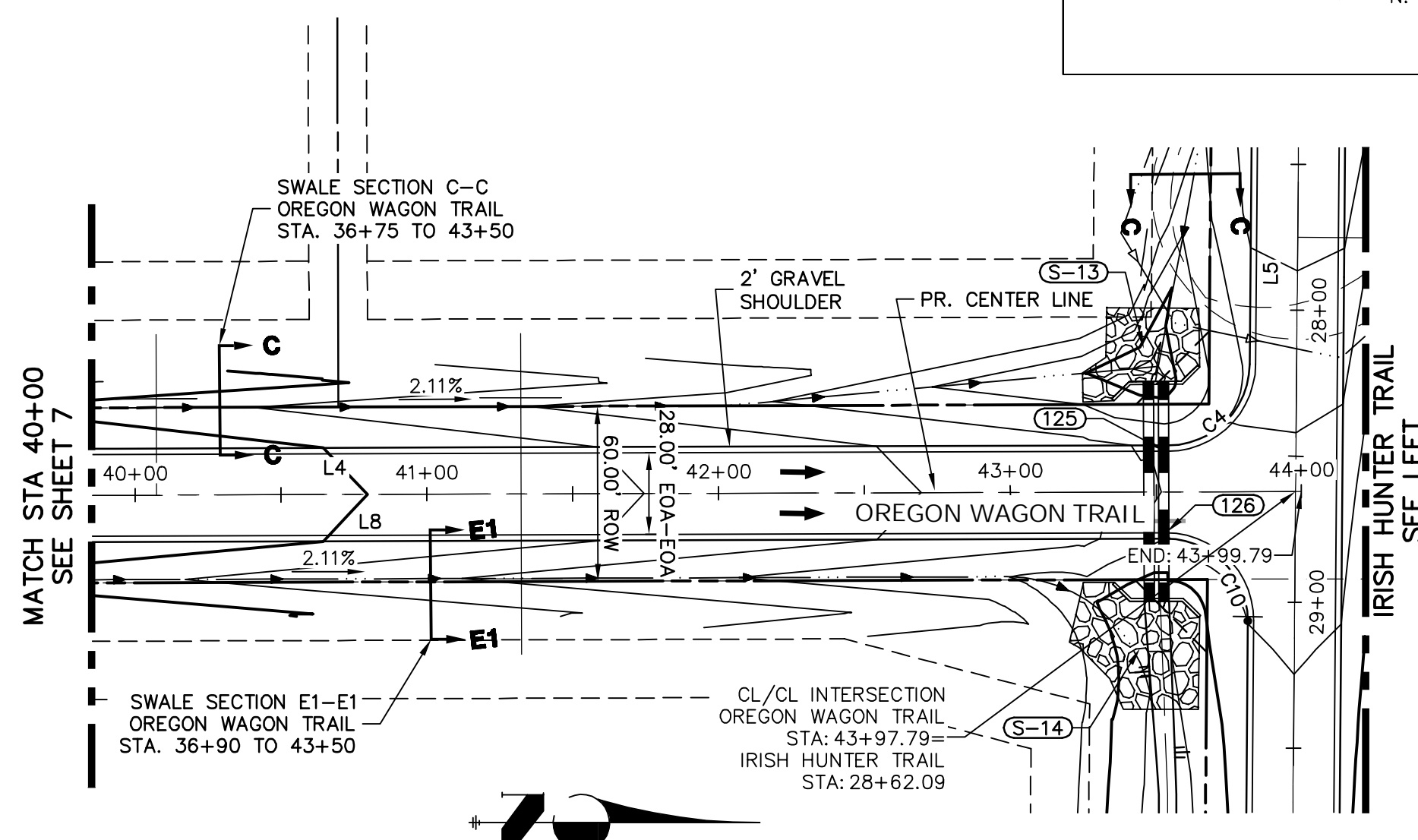
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**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

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BY	DATE								
No.	REVISION								
H-SCALE	1"=50'	V-SCALE	1"=5'	DATE	09/10/21	DESIGNED BY	XXX	DRAWN BY	CRB
LATIGO TRAILS - FILING NO. 9				STREET IMPROVEMENT PLAN AND PROFILE				SHEET 7 OF 12	
								JOB NO. 25175.01	

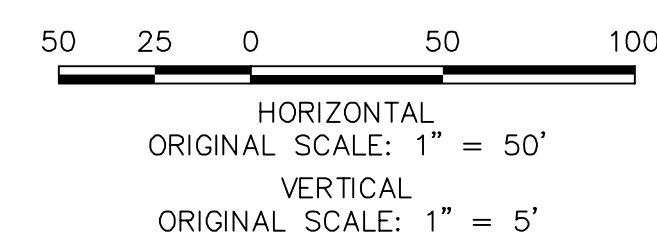




LINE AND CURVE TABLE			
LINE/CURVE	BEARING/DELTA	LENGTH	RADIUS
C6	47°41'32"	41.62'	50.00'
C7	280°17'57"	244.61'	50.00'
C8	53°25'22"	46.62'	50.00'
C9	4°48'16"	36.56'	436.00'
C5	5°37'13"	45.51'	464.00'
L5	S89°32'00"E	118.58'	
C4	89°20'54"	46.78'	30.00'
L8	N00°11'06"W	434.12'	
C10	90°39'06"	47.47'	30.00'
L6	S89°32'00"E	699.62'	
L7	S89°32'00"E	493.03'	
L4	S00°11'06"E	435.12'	

## STREET IMPROVEMENT NOTES

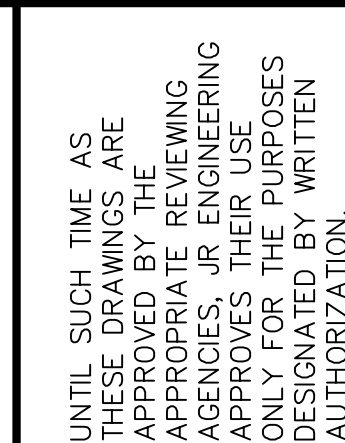
1. ALL STATIONING IS  $\phi$ , UNLESS OTHERWISE NOTED.
2. ALL PROFILE ELEVATIONS ARE  $\phi$ , UNLESS OTHERWISE NOTED.
3. ALL POINT TABULATIONS ARE EDGE OF ASPHALT, UNLESS OTHERWISE NOTED.
4. ALL CURB RETURN RADII ARE 20', UNLESS OTHERWISE NOTED.
5. ALL SLOPE LABELS ARE 1:1, UNLESS OTHERWISE NOTED.
6. SEE SHEET 3 FOR TYPICAL STREET SECTIONS, SWALE SECTION A-A AND SECTION B-B DIMENSIONS AND DETAILS.
7. ALL PROPOSED ROW WIDTHS ARE 60', UNLESS OTHERWISE NOTED.
8. PARABOLAS: EOA = EDGE OF ASPHALT, P.I.E. = PUBLIC IMPROVEMENTS CEMENT.



### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF



PREPARED FOR  
**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

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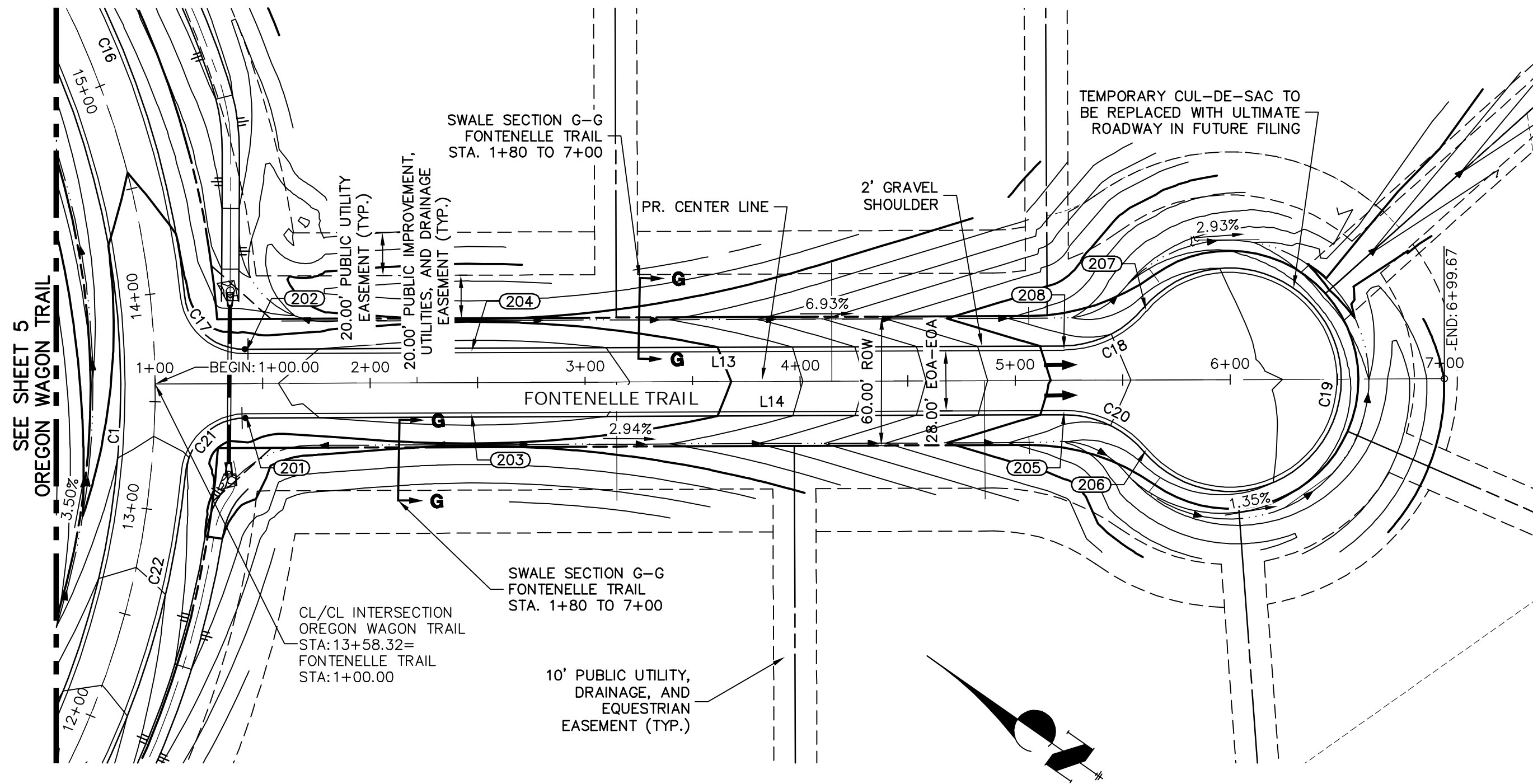
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ATIGO TRAILS - FILING NO. 9

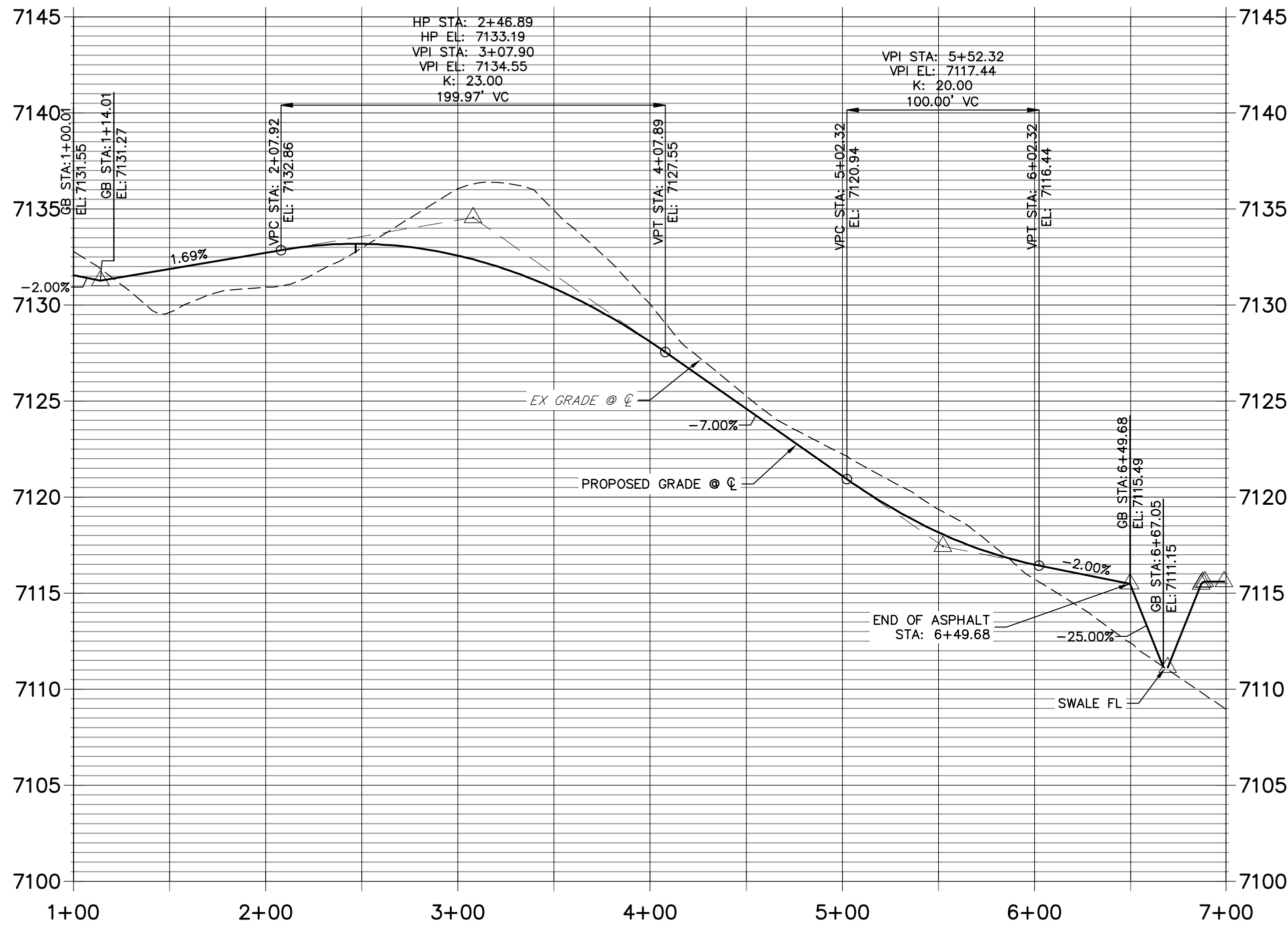
## STREET IMPROVEMENT PLAN AND PROFILE

SHEET 8 OF 12

JOB NO. 25175.01

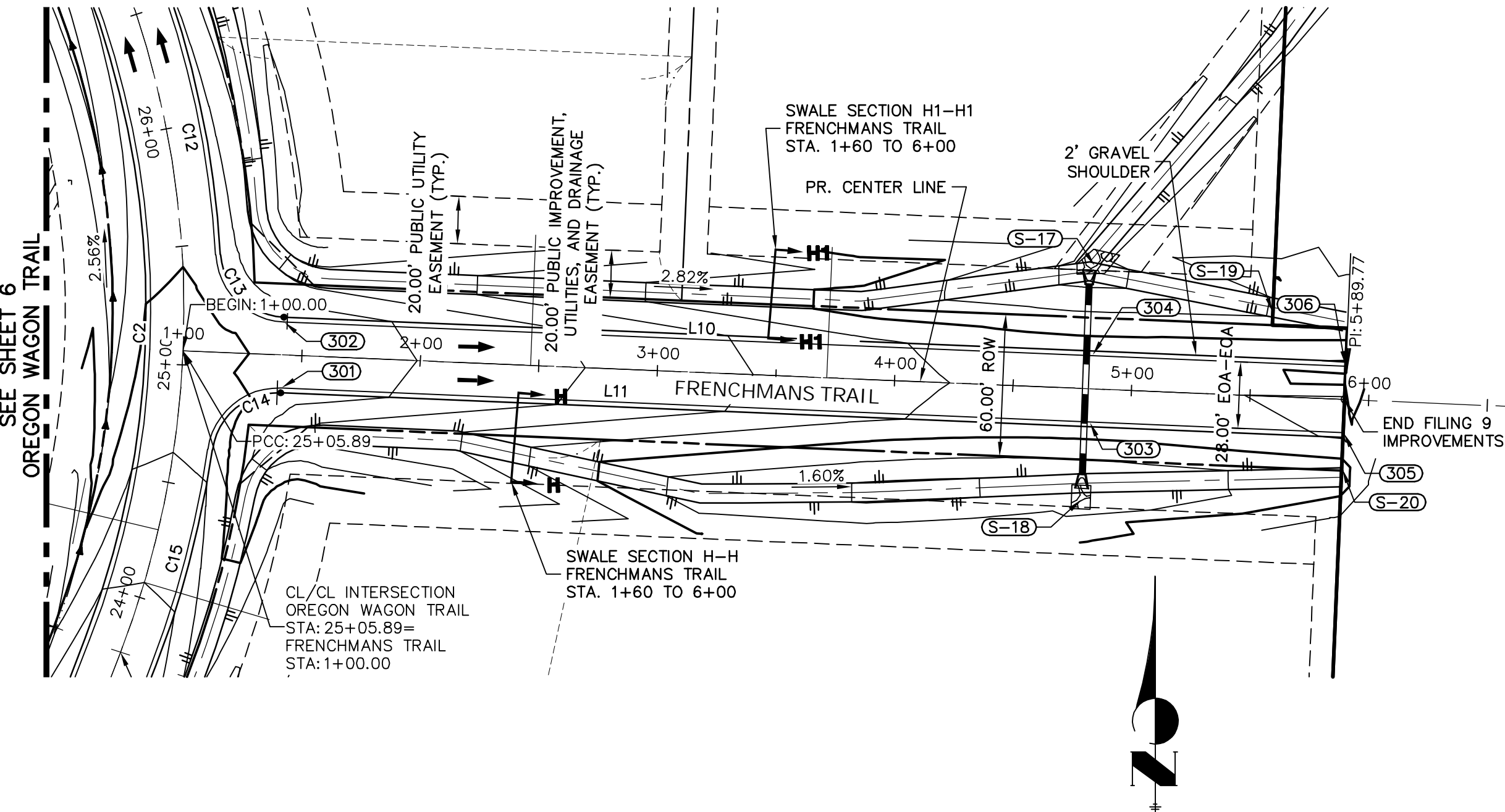


FONTENELLE TRAIL PROFILE  
STA 1+00.00 TO 6+99.67

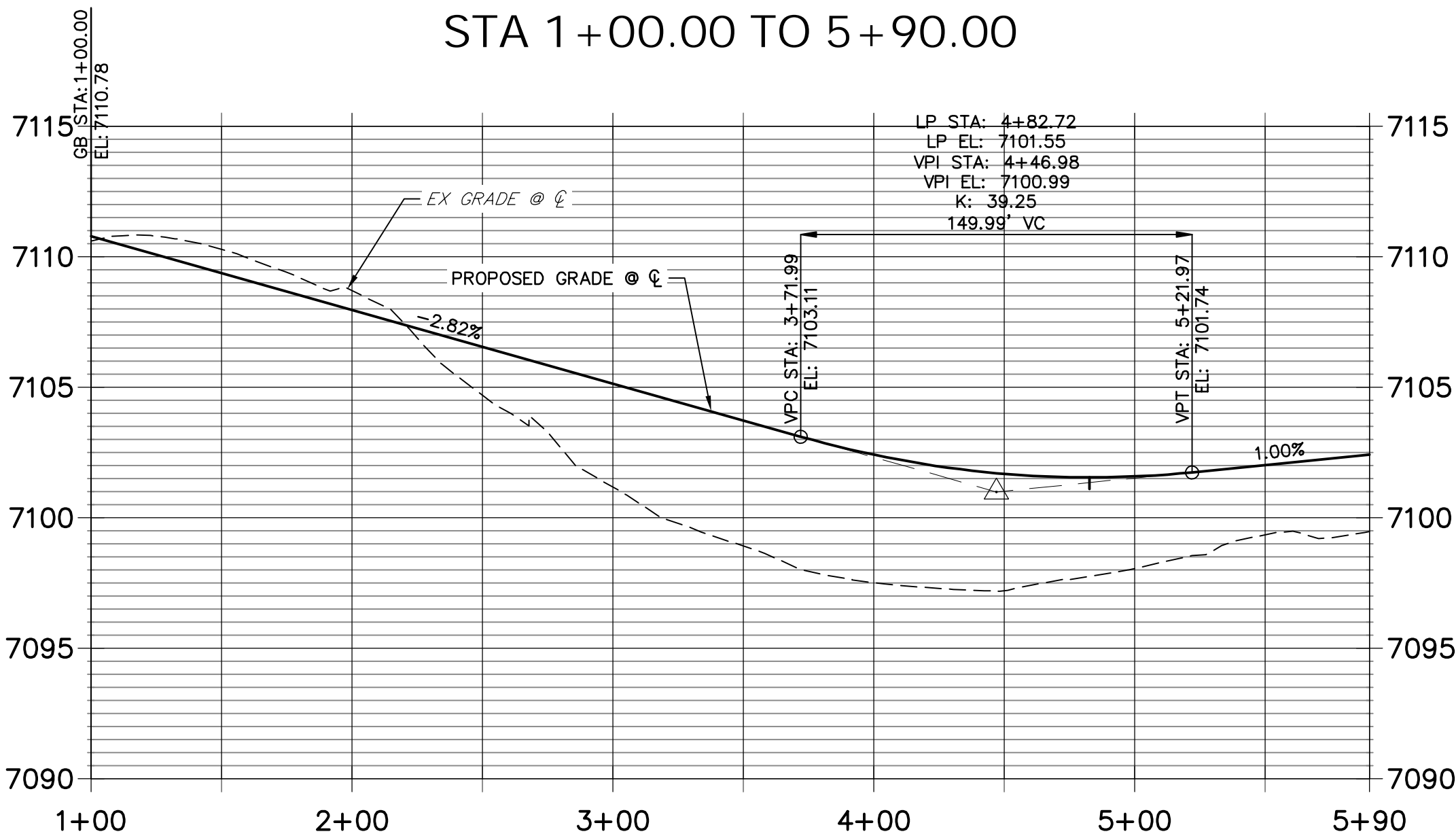


**STREET IMPROVEMENT NOTES**

1. ALL STATIONING IS  $\pm$ , UNLESS OTHERWISE NOTED.
2. ALL PROFILE ELEVATIONS ARE  $\pm$ , UNLESS OTHERWISE NOTED.
3. ALL POINT TABULATIONS ARE EDGE OF ASPHALT, UNLESS OTHERWISE NOTED.
4. ALL CURB RETURN RADII ARE 20', UNLESS OTHERWISE NOTED.
5. ALL SLOPE LABELS ARE SWALE CENTERLINE, UNLESS OTHERWISE NOTED.
6. SEE SHEET 3 FOR TYPICAL STREET SECTIONS, SWALE SECTION A-A AND SECTION B-B DIMENSIONS AND DETAILS.
7. ALL PROPOSED ROW WIDTHS ARE 60', UNLESS OTHERWISE NOTED.
8. ABBREVIATIONS: EOA = EDGE OF ASPHALT, P.I.E. = PUBLIC IMPROVEMENTS EASEMENT.



FRENCHMANS TRAIL PROFILE  
STA 1+00.00 TO 5+90.00



LINE AND CURVE TABLE			
LINE/CURVE	BEARING/DELTA	LENGTH	RADIUS
L13	N35°13'35"W	381.07'	
L14	S35°13'35"E	380.97'	
C20	50°12'29"	43.81'	50.00'
C18	50°12'29"	43.81'	50.00'
C19	280°24'59"	244.71'	50.00'
L11	S87°35'59"E	447.96'	
L10	S87°35'59"E	447.96'	
C2	23°11'57"	156.29'	386.00'
C22	28°04'29"	202.86'	414.00'
C21	84°22'34"	44.18'	30.00'
C16	27°56'32"	201.90'	414.00'
C17	84°14'57"	44.11'	30.00'
C14	84°18'46"	44.15'	30.00'
C12	17°30'43"	126.54'	414.00'
C13	84°18'46"	44.15'	30.00'
C1	33°46'07"	227.50'	386.00'
C15	12°59'35"	93.88'	414.00'

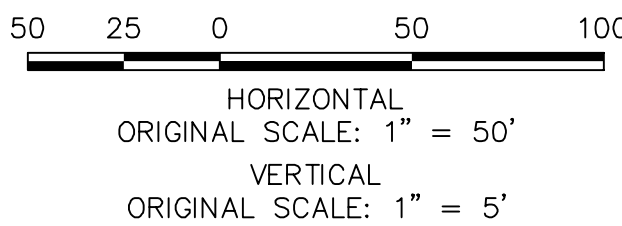
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
201	1+41.86	14.00' (RT)	FONTENELLE TRAIL	7131.59		PCR
202	1+41.77	14.00' (LT)	FONTENELLE TRAIL	7131.46		PCR
203	2+46.89	14.00' (RT)	FONTENELLE TRAIL	7132.90		HP
204	2+46.89	14.00' (LT)	FONTENELLE TRAIL	7132.90		HP
205	5+22.84	14.00' (RT)	FONTENELLE TRAIL	7119.10		PCR
206	5+61.26	32.00' (RT)	FONTENELLE TRAIL	7117.08		PCR
207	5+61.26	32.00' (LT)	FONTENELLE TRAIL	7117.07		PCR
208	5+22.84	14.00' (LT)	FONTENELLE TRAIL	7119.34		PCR
301	1+41.81	14.00' (RT)	FRENCHMANS TRAIL	7109.32		PCR

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
302	1+41.81	14.00' (LT)	FRENCHMANS TRAIL	7109.32		PCR
303	4+82.72	14.00' (RT)	FRENCHMANS TRAIL	7101.27		LP
304	4+82.72	14.00' (LT)	FRENCHMANS TRAIL	7101.27		LP
305	5+89.77	14.00' (RT)	FRENCHMANS TRAIL	7102.14		END OF IMPROVEMENTS
306	5+89.77	14.00' (LT)	FRENCHMANS TRAIL	7102.14		END OF IMPROVEMENTS

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
S-17	4+82.52	51.67' (LT)	FRENCHMANS TRAIL	7095.52		SWALE GB
S-18	4+81.05	46.65' (RT)	FRENCHMANS TRAIL	7096.54		SWALE GB
S-19	5+58.17	35.29' (LT)	FRENCHMANS TRAIL	7098.08		BEGIN SWALE
S-20	5+89.77	29.00' (RT)	FRENCHMANS TRAIL	7099.10		BEGIN SWALE



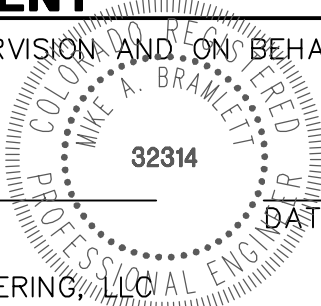
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**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



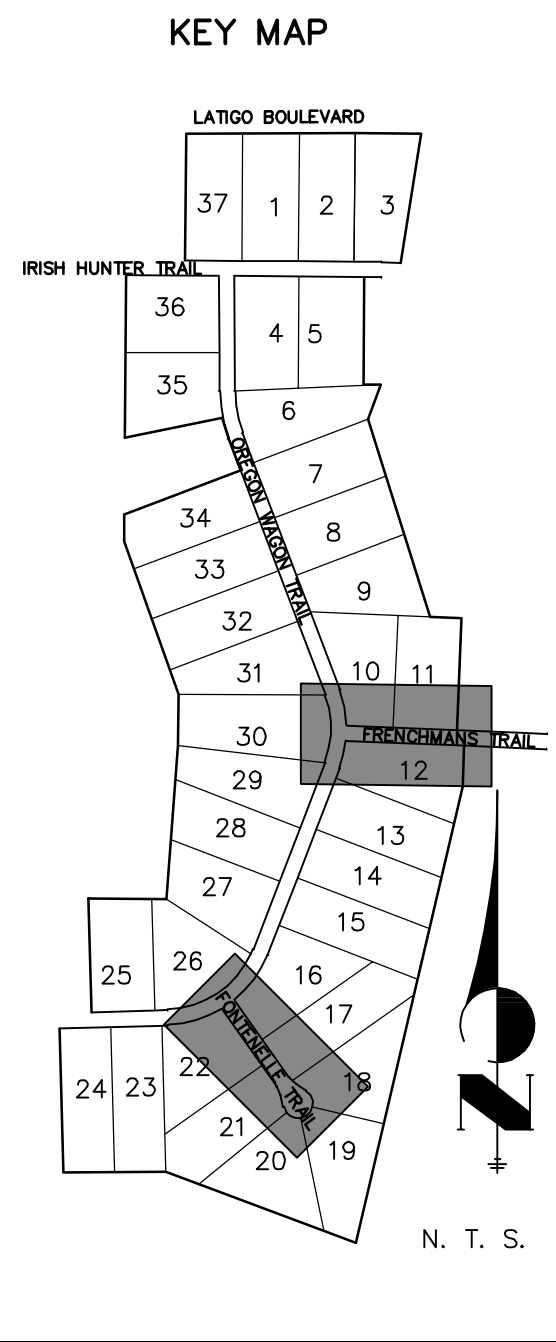
DATE

LATIGO TRAILS - FILING NO. 9

STREET IMPROVEMENT PLAN  
AND PROFILE

SHEET 9 OF 12

JOB NO. 25175.01



PREPARED FOR

BRUM, LLC  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
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J.R. ENGINEERING  
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BY

DATE

No. REVISION

1"=50'

H-SCALE

1"=5'

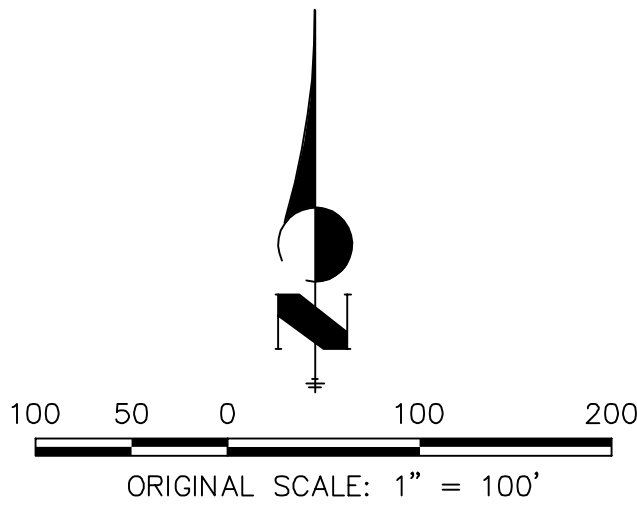
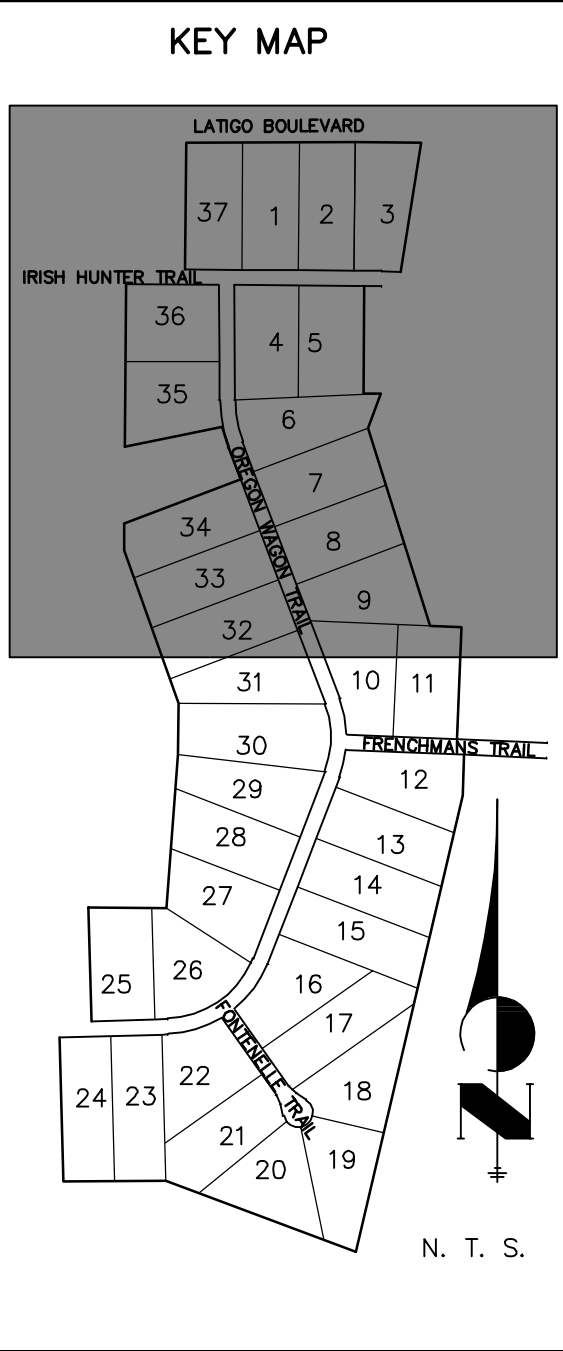
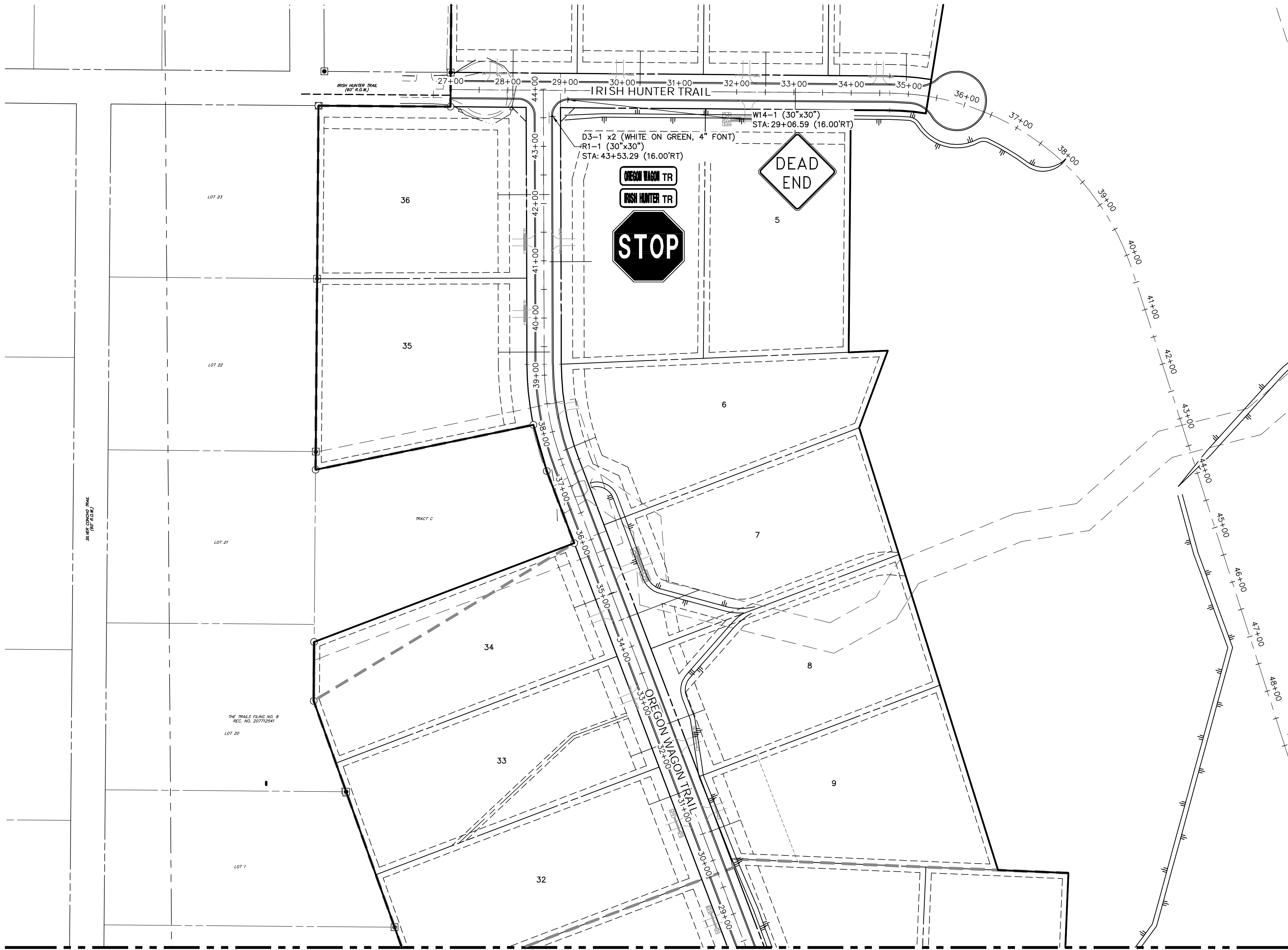
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DATE

DESIGNED BY

DRAWN BY

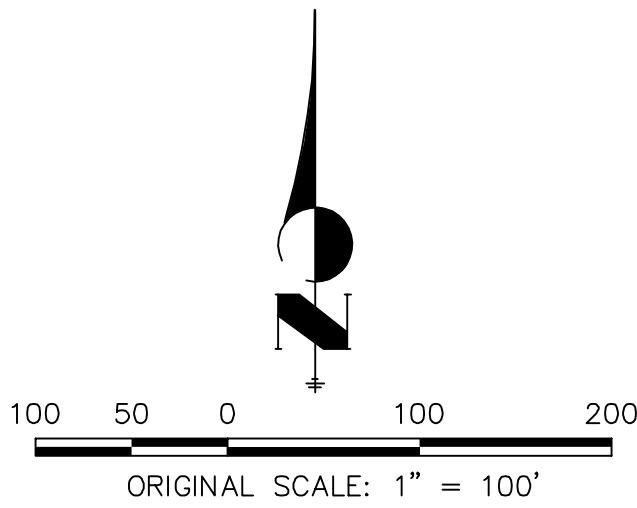
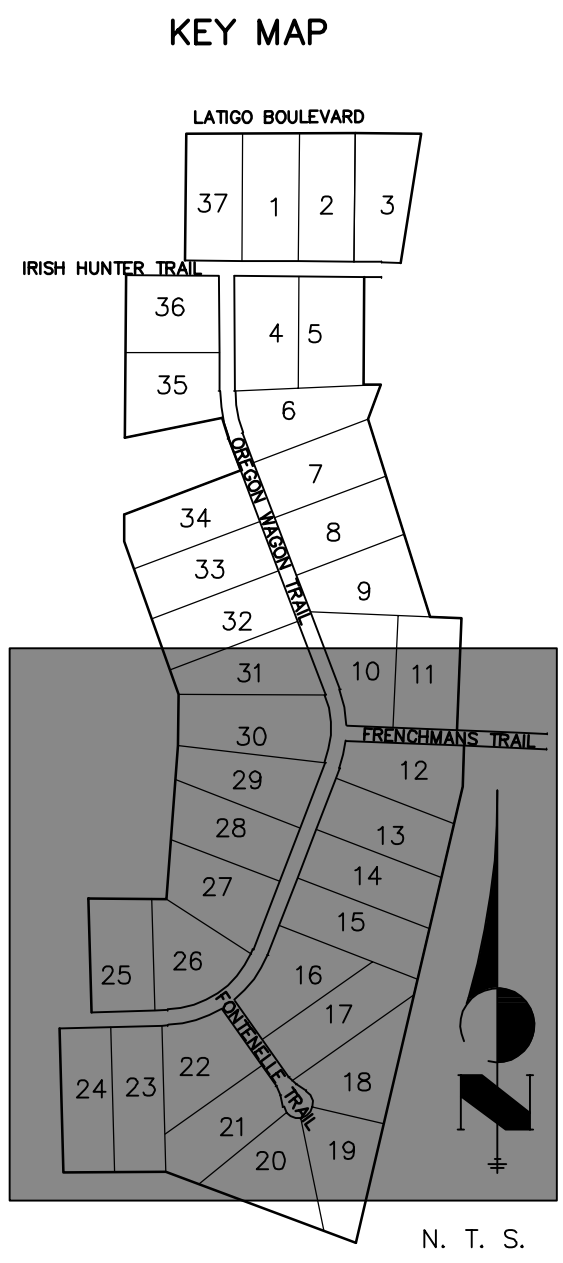
CHECKED BY



ENGINEER'S STATEMENT	
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING	
MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314	DATE
FOR AND ON BEHALF OF JR ENGINEERING, LLC	

LATIGO TRAILS - FILING NO. 9	SHEET 10 OF 12	
	JOB NO. 25175.01	
	LATIGO TRAILS - FILING NO. 9	
	SIGNAGE AND STRIPING PLAN	
LATIGO TRAILS - FILING NO. 9	BY	DATE
	REVISION	
	1"=100'	N/A
	H-SCALE	V-SCALE
LATIGO TRAILS - FILING NO. 9	DESIGNED BY	DATE
	DRAWN BY	
	CHECKED BY	
J.R. ENGINEERING A Westrian Company Central 303-740-9888 • Colorado Springs 719-593-2593 Fort Collins 970-491-9888 • www.jrengineering.com		
BRUM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 ATTN: BOB IRWIN P~(719)-475-7474		
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.		

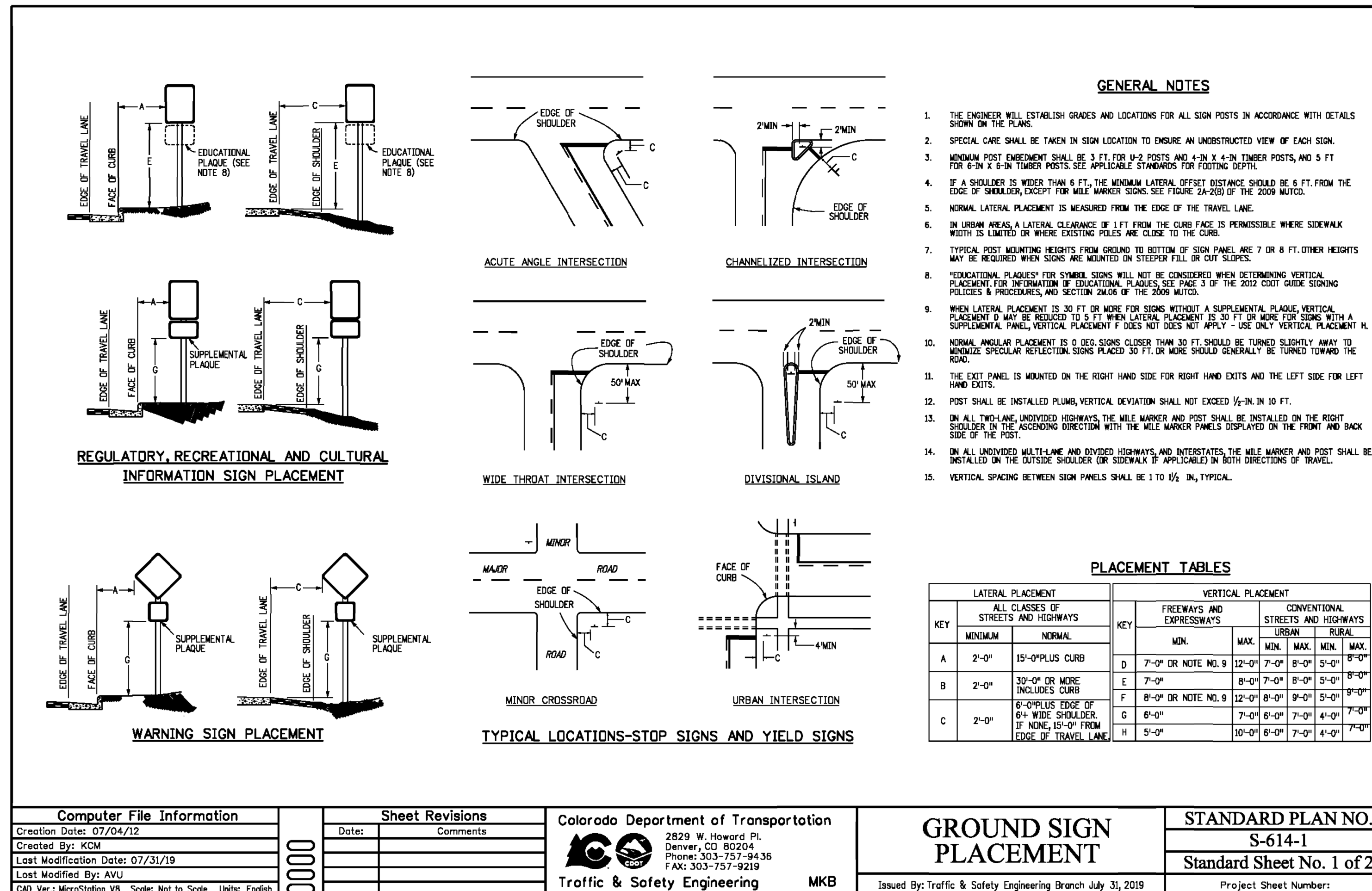




ENGINEER'S STATEMENT				
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING				
MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314 FOR AND ON BEHALF OF JR ENGINEERING, LLC				
DATE		DATE		

LATIGO TRAILS - FILING NO. 9		SHEET 11 OF 12	
SIGNAGE AND STRIPING PLAN		JOB NO. 25175.01	
J.R. ENGINEERING A Westrian Company CENTENNIAL 303-740-9883 • COLORADO SPRINGS 719-593-2593 FORT COLLINS 970-491-9888 • www.jrengineering.com		PREPARED FOR BRUM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 ATTN: BOB IRWIN P-(719)-475-7474	
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.		BY	
DATE		REVISION	
1"=100'		N/A	
V-SCALE		DATE	
DESIGNED BY		XXX	
DRAWN BY		XXX	
CHECKED BY			





UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
APPROVED BY THE  
APPROPRIATE REVIEWING  
AGENCIES, JR ENGINEERING  
APPROVES THEIR USE  
ONLY FOR THE PURPOSES  
DESIGNATED BY WRITTEN  
AUTHORIZATION.

BRUM, LLC  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

 **J.R. ENGINEERING**  
A Westrian Company

Centennial 303-740-9333 • Colorado Springs 719-593-2593  
Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

NO.	REVISION	BY	DATE
H-SCALE	N/A		
V-SCALE	N/A		
DATE	09/10/21		
DESIGNED BY	N/A		
DRAWN BY			
CHECKED BY	N/A		

LATIGO TRAILS – FILING NO. 9

## DETAILS

SHEET 12 OF 12

JOB NO. 25175.01



Know what's **below**.  
**Call** before you dig.

### ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING.

REVIEWED ONLY AS TO

32314

DATE

ENGINEERING, LLC

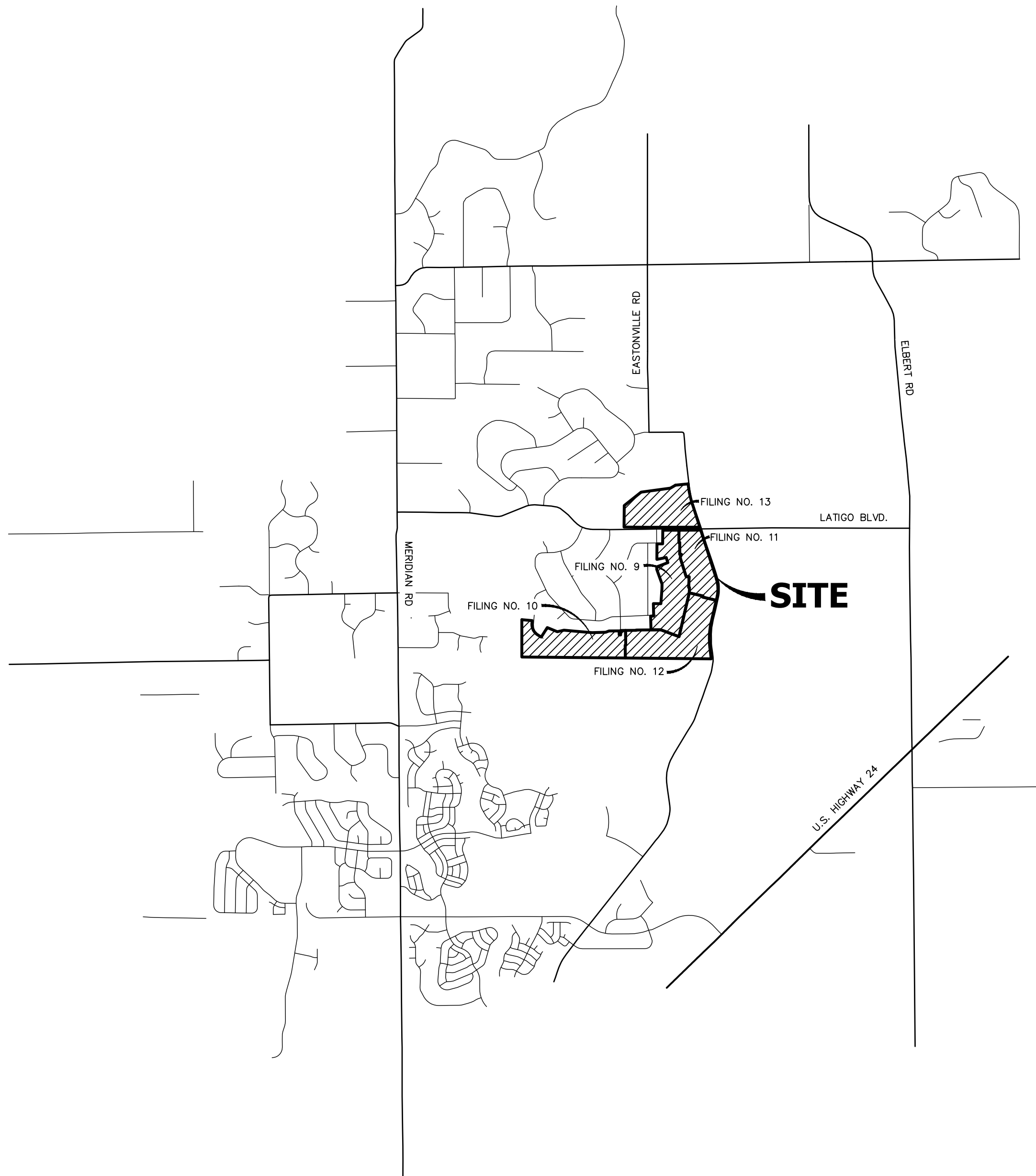


# COLORADO STATE

## 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 SOIL AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
  - 3.1. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - 3.2. CITY OF COLORADO SPRINGS/ EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
  - 3.3. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS AND BRIDGE CONSTRUCTION
  - 3.4. 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 VERSIONS 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.
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 TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (EQSCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUTURE DED 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. 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.
10. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
11. SIGHT VISIBILITY TRIANGLES ARE IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED IN SIGHT TRIANGLES.
12. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
13. 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.
14. 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.

AD	ACRE	FL	FLOWLINE	RT	RIGHT
AD	ALGEBRAIC DIFFERENCE	FL	FILING	S	SOUTH
AD	AHEAD	FO	FIBER OPTIC CABLE	STE	STEEL
ARCH	ARCHITECT	GB	GRADE BREAK	SAN	SANITARY SEWER
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	GC	GRADE EASEMENT	SF	SQUARE FOOT
		GIS	GEOGRAPHIC INFORMATION SYSTEM	ST	STREET
ASSY	ASSEMBLY			STA	STATION
AVE	AVENUE	GL	Gas LINE	STM	STORM SEWER
BB	BOX BASE	GPS	GLOBAL POSITIONING SYSTEM	SY	SQUARE YARD
BACK	BACK	GV	GATE VALVE	SY-IN	SQUARE YARD INCH
BNDY	BOUNDARY	HBP	HOT BITUMINOUS PAVEMENT	TB	THRUST BLOCK
BOP	BOTTOM OF PIPE	HCB	HANDICAP	TBC	TOP BACK OF CURB
BOV	BLOW OFF VALVE	HDC	HIGH DEFLECTION COUPLING	TBW	TOP BACK OF WALK
BFV	BUTTERFLY VALVE	HDPE	HIGH DENSITY POLYETHYLENE	TEL	TELEPHONE
BQ	BOUTLEVARO		HYDRAULIC GRADE LINE	TN	TON
BW	BOTTOM OF WALL	HMA	HOT MIX ASPHALT	TOA	TOP OF ASPHALT
C&G	CURB & GUTTER	HOA	HOME OWNERS ASSOCIATION	TOB	TOP OF BOX
CBT	CABLE TELEVISION	HP	HIGH POINT	TOC	TOP OF CURB OR CONCRETE
CB	CATCH BASIN	HR	HOUR	TOP	TOP OF FOUNDATION
CD	CONCRETE BOX CULVERT	IN	INLET	TOP	TOP OF PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	IE	IRRIGATION EASEMENT	TW	TOP OF WALL
		INT	INTERSECTION	TYP	TYPICAL
CDS	CUL-DE-DE-SAC	INV	INVERT	UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
CF	CUBIC FOOT	IRR	IRRIGATION	UE	UTILITY EASEMENT
CF	CUBIC FEET PER SECOND	KICK	KICK (THRUST) BLOCK	UE	UTILITY EASEMENT
CL	COMPLETE IN PLACE	LB	POUND	U&DE	UTILITY & DRAINAGE EASEMENT
CIP	CENTER LINE	LE	LANDSCAPE EASEMENT	UGE	UNDERGROUND ELECTRIC
CLOMR	CONDITIONAL LETTER OF MAP REVISION	LF	LINE FOOT	VCP	VETRIFIED CLAY PIPE
		LN	LANE	VPC	VERTICAL POINT OF CURVATURE
CLR	CLEAR	LMR	LETTER OF MAP REVISION	VPI	VERTICAL POINT OF INTERSECTION
OMP	CORRUGATED METAL PIPE	LP	LOW POINT	VPT	VERTICAL POINT OF TANGENCY
CO	CLEAN OUT	LS	LUMP SUM	VTC	VEHICLE TRACKING CONTROL
COCs	CITY OF COLORADO SPRINGS	LT	LEFT	W	WEST
CONC	CONCRETE	MAX	MAXIMUM	WL	WATER LINE
CP	CIRCULE	M	MOISTURE DENSITY	WM	WATER MAIN
CSU	CORRUGATED STEEL PIPE	MDPP	MASTER DEVELOPMENT DRAINAGE PLAN	WRD	WATER RESOURCES DEPARTMENT
CS	COLORADO SPRINGS UTILITIES	MH	MANHOLE	WS	WATER SURFACE
CTR	CONCRETE THRUST REDUCER	MIN	MINIMUM	WSE	WATER SURFACE ELEVATION
		N	NORTH	WTR	WATER
CBYS	CUBIC YARD	NRCP	NON-REINFORCED CONCRETE PIPE	YR	YEAR
DE	DRAINAGE BASIN PLANNING STUDY				
DE	DRAINAGE EASEMENT	ODP	OVERHEAD DEVELOPMENT PLAN		
DIA	DIAMETER	OHE	OVERHEAD ELECTRIC		
DIP	DUCTILE IRON PIPE	OHU	OVERHEAD UTILITY		
DR	DRIVE	PC	POINT OF CURVATURE		
DRC	DESIGN REVIEW COMMITTEE	PCC	POINT OF COMPOUND CURVATURE		
DU	DWELLING UNITS	PCR	POINT OF CURB RETURN		
DY	DAY	PDP	PRELIMINARY DEVELOPMENT PLAN		
E	EAST				
EA	EACH	PE	PROFESSIONAL ENGINEER		
EL	ENERGY GRADE LINE	PI	POINT OF INTERSECTION		
EGL	ELEVATION	PKWY	PARKWAY		
ELEC	ELECTRIC	PL	PROPERTY LINE		
EOA	EDGE OF ASPHALT	PR	PROPOSED		
EPC	EL PASO COUNTY	PRV	POINT OF REVERSE CURVATURE		
ERCP	ELLIPTICAL RCP	PT	POINT OF TANGENCY		
ESMT	EASEMENT	PLUG	PLUG VALVE		
EST	ESTIMATE	PVC	POLYVINYL CHLORIDE		
EX	EXISTING	R	RADIUS		
FDP	FINAL DEVELOPMENT PLAN	RCCB	REINFORCED CONCRETE BOX CULVERT		
FDL	FINAL DRAINAGE REPORT				
FES	FLARED END SECTION	RCP	REINFORCED CONCRETE PIPE		
FF	FINISHED FLOOR ELEVATION	RD	ROAD		
FG	FINISHED GRADE	ROW	RIGHT OF WAY		
FH	FIRE HYDRANT				



1	-	COVER SHEET
2	-	LEGEND
3-4	-	STORM SEWER AND POND PLANS
5-6	-	POND PLANS
7	-	DETAILS
<hr/>		
7	-	TOTAL SHEETS



Know what's **below**.  
**Call** before you dig.

OWNER/DEVELOPER:	BRJM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 P~719-475-7474
ENGINEER/SURVEYOR:	JR ENGINEERING, LLC ATTN: MIKE A. BRAMLETT 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P~303-267-6240
FIRE PROTECTION DISTRICT:	FALCON FIRE FPD 7030 N MERIDIAN RD FALCON, CO 80831 P~719-494-4050
DISTRICT:	MERIDIAN SERVICE METROPOLITAN DISTRICT 11886 STAPLETON DR PEYTON, CO 80831 P~719-495-6567
COUNTY TRANSPORTATION:	EL PASO COUNTY, DEPT. OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, COLORADO 80922 KEVIN MASTIN ~ (719) 520-6300
COUNTY DEVELOPMENT:	EL PASO PLANNING AND COMMUNITY 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 CRAIG DOSSEY ~ (719) 520-6300
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC ASSOC., INC. 11140 EAST WOODMEN ROAD FALCON, COLORADO 80831 (719) 495-2283

THE BASIS OF BEARINGS IS THE WESTERLY LINE OF TRACT, B, WOODMOOR PLACER, BEING MONUMENTED BY A 1-1/4" YELLOW PLASTIC CAP ILLEGIBLE AT BOTH ENDS. SAID LINE BEARING N26°20'33"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

NCS MONUMENT T 29 BEING MONUMENTED BY A 3-1/4" BRASS DISC SET IN A 4'X4' BOULDER, LOCATED 1.8 MILES EAST ALONG HIGBY ROAD FROM ITS INTERSECTION WITH JACKSON CREEK PARKWAY, 40 FEET SOUTH OF THE CENTERLINE OF THE ROAD, 6 FEET SOUTH OF A FENCE, AND 6.2 FEET SOUTH OF A WITNESS POST. SAID MONUMENT HAVING A PUBLISHED ELEVATION OF 7247.10 FEET, NAYD88.

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

BOB IRWIN DATE

BRJM, LLC  
101 N. CASCADE  
COLORADO SPRINGS, CO 80903

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

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

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

JENNIFER IRVINE, P.E. DATE

COUNTY ENGINEER/ECM ADMINISTRATOR

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY ENGINEER. DETAILED DRAWINGS, SPECIFICATIONS, AND CONTROL PLANS, PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLAN 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 CERTIFY THAT NO SIGNIFICANT LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
BRJM, LLC  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWN  
P~(719)-475-7474

**J·R ENGINEERING**  
A Westrian Company



Centennial 303-740-9393 • Colorado Springs 719-593-2593  
Fort Collins 970-491-9888 • [www.jirengineering.com](http://www.jirengineering.com)

LATIGO TRAILS — FILING NO.		H-SCALE		1"=XX'		No.		REVISION		BY		DATE	
		V-SCALE		1"=X'									
		DATE		09/10/21									
		DESIGNED BY		XXX									
		DRAWN BY		QNL									
		CHECKED BY											
COVER SHEET													
SHEET 1 OF 7													
JOB NO. 25175.01													



	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE		
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV		
ELECTRIC		
FIBER OPTIC		
GAS MAIN		
IRRIGATION MAIN		
OIL/PETRO. MAIN		
OVERHEAD UTILITY		
SANITARY SEWER		
STORM DRAIN		
TELEPHONE		
WATER MAIN		
RAW WATER LINE		
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR		
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)		
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		
SILT FENCE		
100 YEAR FLOODPLAIN		
500 YEAR FLOODPLAIN		
FLOODWAY		
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

	EXISTING	PROPOSED
<b>STORM SEWER</b>		
MANHOLE		
STORM INLET		
AREA INLET - SQUARE		
AREA INLET - ROUND		
FLARED END SECTION		
RIPRAP		
<b>SANITARY SEWER</b>		
LINE MARKER		
SERVICE MARKER		
CLEAN-OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
<b>WATER LINE</b>		
LINE MARKER		
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW-OFF VALVE		
WELL		
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW-OFF ASSEMBLY		
<b>GAS LINE</b>		
MARKER		
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
<b>DRY UTILITIES</b>		
CABLE TV MARKER		
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER		
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER-OPTIC MARKER		
IRRIGATION PEDESTAL		
TELEPHONE MARKER		
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
<b>MISC. UTILITIES</b>		
VENT PIPE		
TEST HOLE DESIGNATOR		

	EXISTING	PROPOSED
ALUMINUM CAP - FOUND		
BRASS CAP - FOUND		
BENCHMARK - FOUND		
CROSS - FOUND		
MONUMENT - SET		
MONUMENT - FOUND (DEFAULT)		
MONUMENT - FOUND (ALTERNATE 1)		
MONUMENT - FOUND (ALTERNATE 2)		
MONUMENT - FOUND (ALTERNATE 3)		
MONUMENT - FOUND (ALTERNATE 4)		
MONUMENT - FOUND (ALTERNATE 5)		
MONUMENT - FOUND (ALTERNATE 6)		
MONUMENT - FOUND (ALTERNATE 7)		
NAIL & WASHER - FOUND		
PANEL - FOUND		
PK NAIL - FOUND		
ROW MONUMENT - FOUND		
ROW MARKER - FOUND		
SECTION CORNER - FOUND		
SECTION CORNER - SET		
QUARTER-SECTION CORNER - FOUND		
QUARTER-SECTION CORNER - SET		
SECTION CENTER - FOUND		
SECTION CENTER - FOUND		
CONTROL/TRaverse POINT - SET		

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT - SINGLE		
STREET LIGHT - DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		

	KEY	SYMBOL
CHECK DAM		
CONSTRUCTION ROAD STABILIZATION		
CURB SOCK INLET PROTECTION		
CONCRETE WASHOUT AREA		
DIVERSION DITCH AND DIKE, TEMPORARY		
DIVERSION CHANNEL, TEMPORARY		
DEWATERING		
EROSION CONTROL BLANKET		
INLET FILTER		
INLET PROTECTION		
MULCHING		
OUTLET PROTECTION		
PAVED FLUME		
PERMENENT SEEDING		
REINFORCED CONCRETE DAM		
ROUGH CUT STREET CONTROL		
SEDIMENT BASIN		
SEDIMENT CONTROL LOG		
SILT FENCE		
SURFACE ROUGHENING		
STABILIZED STAGING AREA		
SEDIMENT TRAP		
STRAW BALE BARRIER		
TERRACING		
TEMPORARY SEEDING		
TEMPORARY STREAM CROSSING CULVERT/BRIDGE		
TEMPORARY STREAM CROSSING FORD TYPE		
TEMPORARY SLOPE DRAIN		
VEHICLE TRACKING CONTROL		
VEHICLE TRACKING CONTROL WITH WASH RACK		

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	
BASIN DESIGNATION (1 COEFFICIENT)	
BASIN DESIGNATION (2 COEFFICIENTS)	
ANALYSIS POINT IDENTIFIER	
BASIN DESIGNATION (HISTORIC)	
BASIN DESIGNATION (DEVELOPED)	
SUB-BASIN DESIGNATION (DEVELOPED)	
DRAINAGE PIPE IDENTIFIER	
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	
SWMM DESIGNATION 1	
SWMM DESIGNATION 2	
SWMM DESIGNATION 3	
SWMM DESIGNATION 4	

	EXISTING	PROPOSED
TREE - CONIFEROUS		
TREE - DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE		

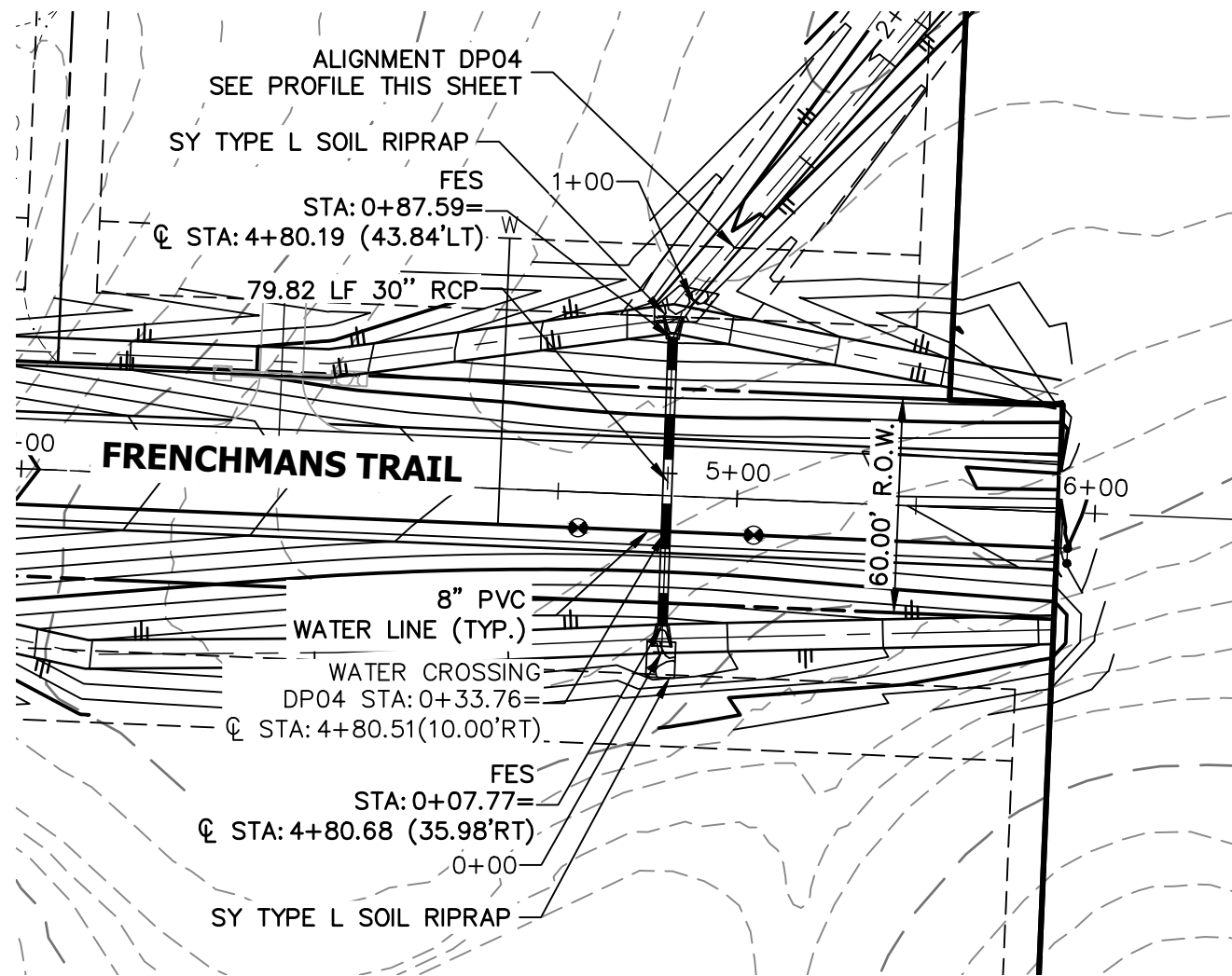
<b>ENGINEER'S STATEMENT</b>
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
FOR AND ON BEHALF OF JR ENGINEERING
DATE



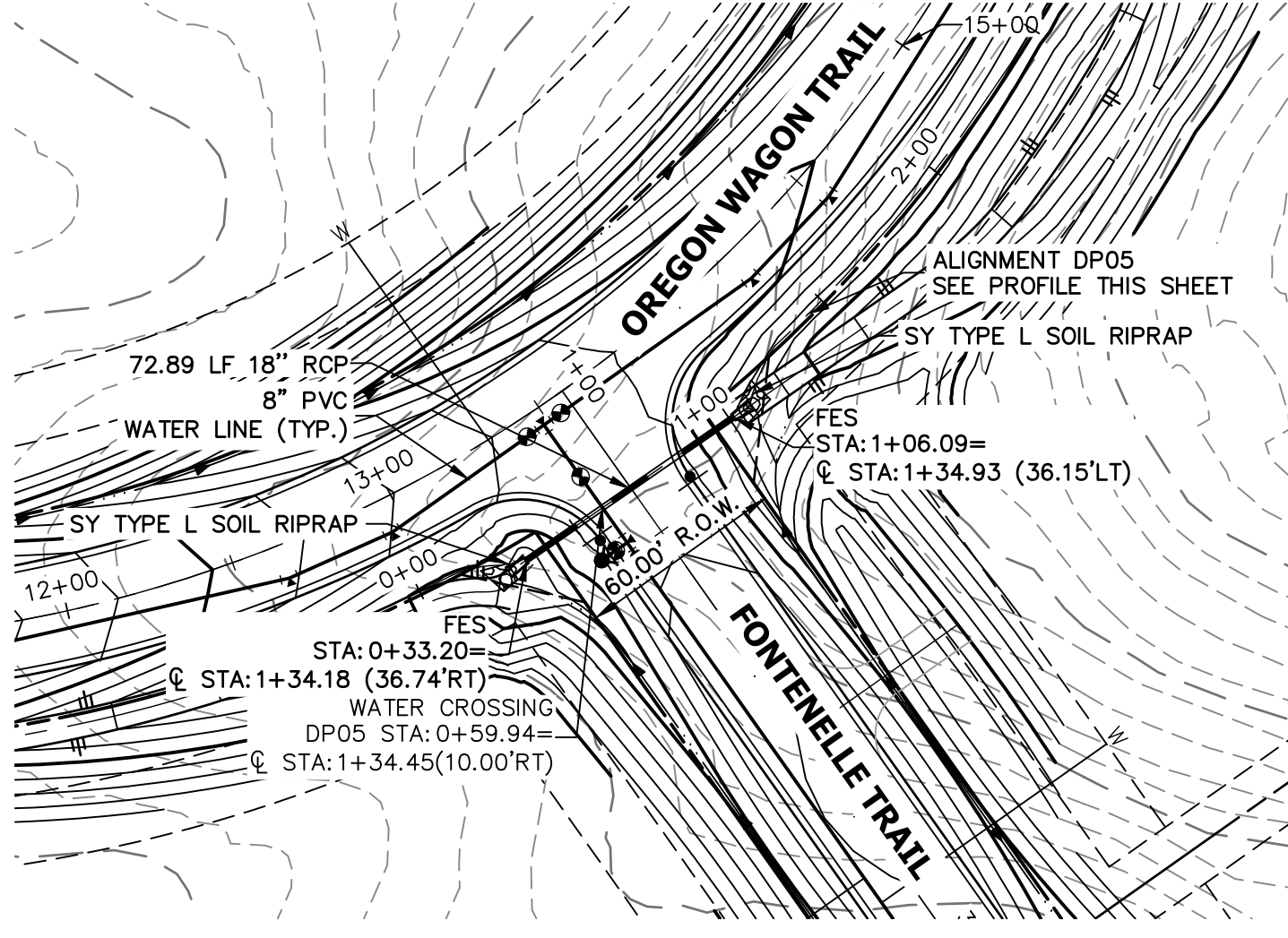
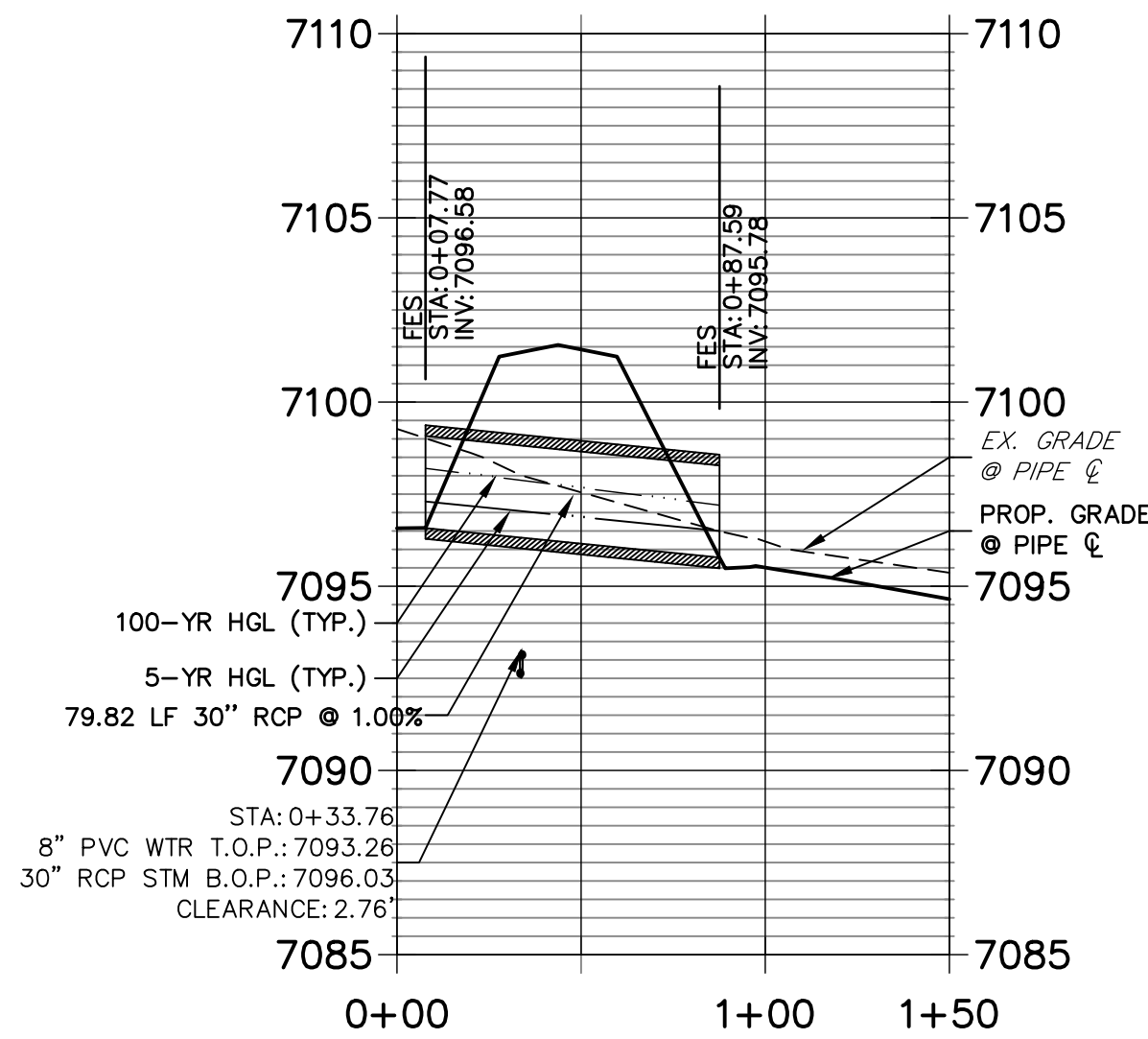
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PREPARED FOR <b>BRUM, LLC</b> 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 ATTN: BOB IRWIN P~(719)-475-7474
<b>J.R. ENGINEERING</b> A Western Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com
BY DATE
REVISION
No.
1"=XX'
H-SCALE
1"=X'
V-SCALE
DATE
DESIGNED BY
N/A
DRAWN BY
QNL
CHECKED BY
LATIGO TRAILS - FILING NO.
9
LEGEND
SHEET 2 OF 7
JOB NO. 25175.01

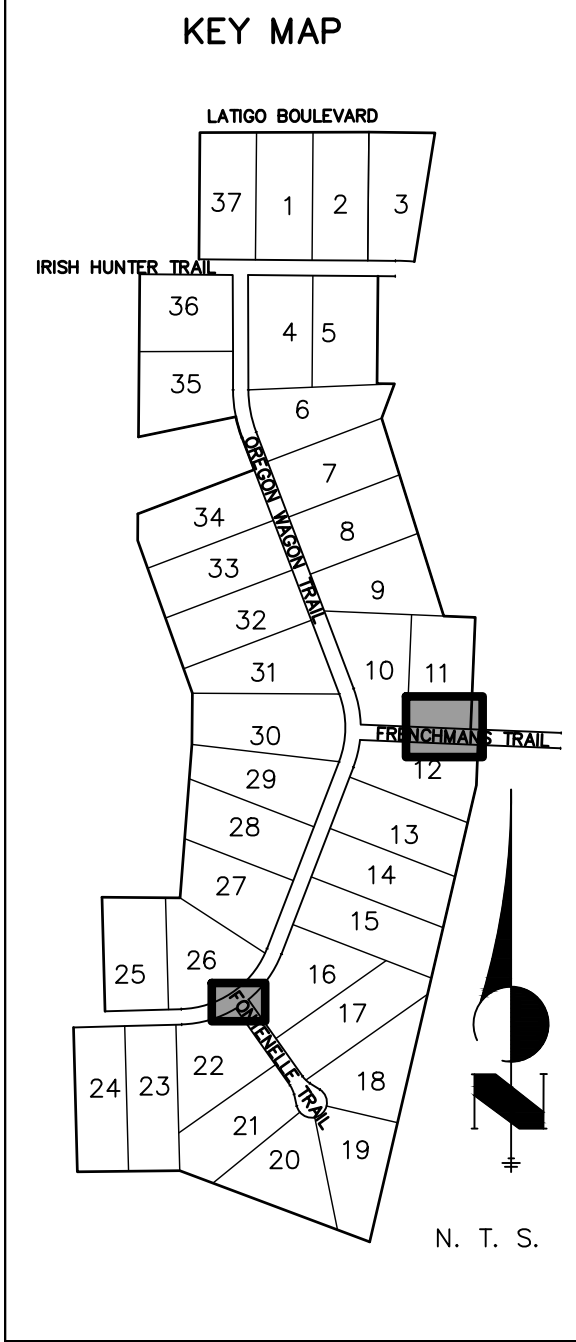
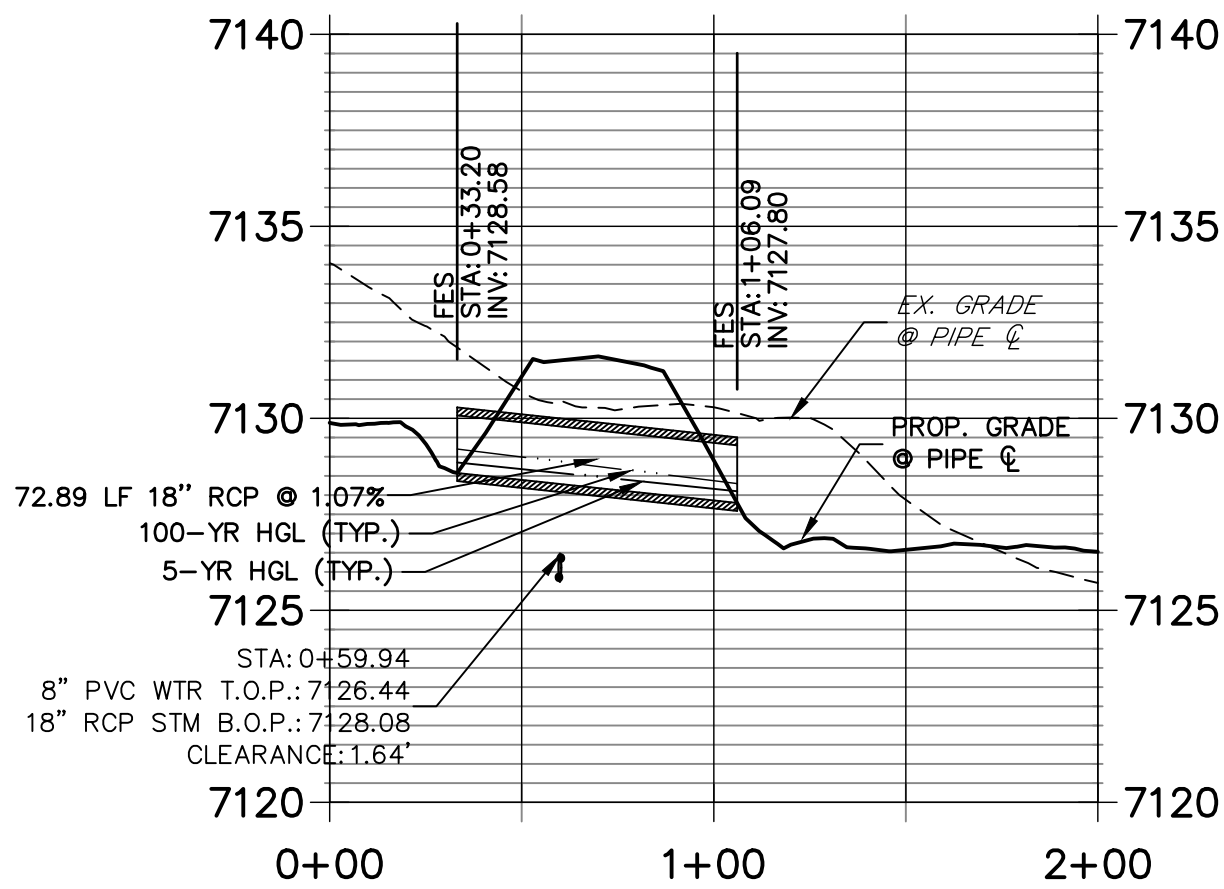




**DP04 PROFILE  
STA 0+00.00 TO 1+50.00**

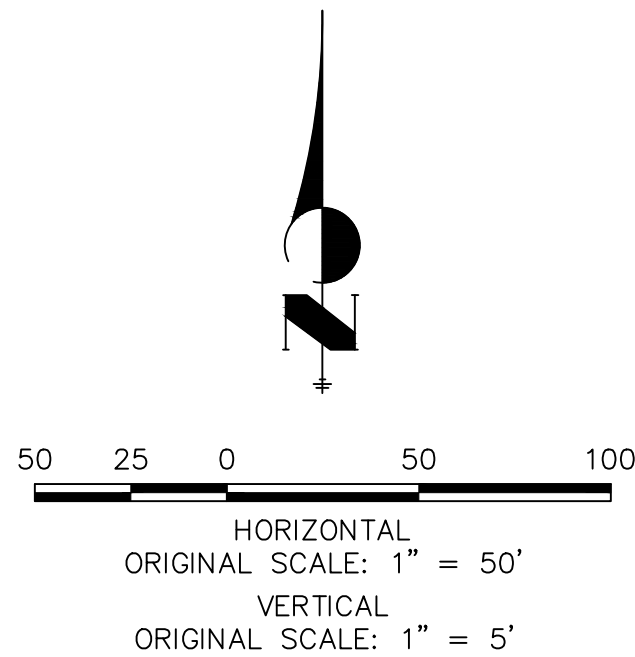


**DP05 PROFILE  
STA 0+00.00 TO 2+00.00**



**NOTES**

1. SEE SHEET 1 FOR BENCHMARK. SEE SHEET 2 FOR LEGEND.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. ALL RCP STORM SEWER SHALL BE CLASS III UNLESS OTHERWISE NOTED.
4. PIPE LENGTHS ARE MEASURED FROM THE INSIDE WALL OF INLETS AND FROM THE CENTER OF MANHOLES. PIPE LENGTHS INCLUDE FES LENGTH AND/OR HEADWALL THICKNESS.
5. ALL MANHOLE COVERS SHALL BE ORIENTED TO AVOID CURB, CUTTER, SIDEWALK AND CROSSPANS UNLESS OTHERWISE NOTED.
4. ALL MANHOLES SHALL HAVE AN ECCENTRIC CONE UNLESS OTHERWISE NOTED.
5. PROVIDE A MINIMUM OF 18" FROM THE RIM TO THE TOP OF SLAB FOR ALL FLAT TOP MANHOLES.
6. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
7. INLET STATIONING IS TO CENTER OF INLET.
8. PIPES SHALL HAVE JOINT RESTRAINTS ON LAST 3 JOINTS AT PIPE OUTFALL.
9. ALL CURVED PIPES SHALL BE BUILT IN ACCORDANCE WITH THE AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) DESIGN DATA 21. PIPE MANUFACTURE TO BE USED MUST BE ABLE TO MEET LENGTH AND JOINT OPENING CRITERIA PER ACPA.



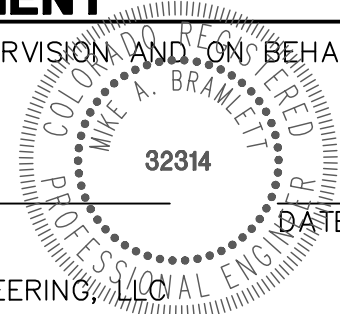
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**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



LATIGO TRAILS - FILING NO.

9

STORM SEWER PLAN AND  
PROFILE

SHEET 4 OF 7

JOB NO. 25175.01

BY

DATE

No. REVISION

H-SCALE  
1"=50'

V-SCALE  
1"=5'

DATE  
09/10/21

DESIGNED BY  
SAV

DRAWN BY  
SAV

CHECKED BY

PREPARED FOR

**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

**J.R. ENGINEERING**  
A Western Company

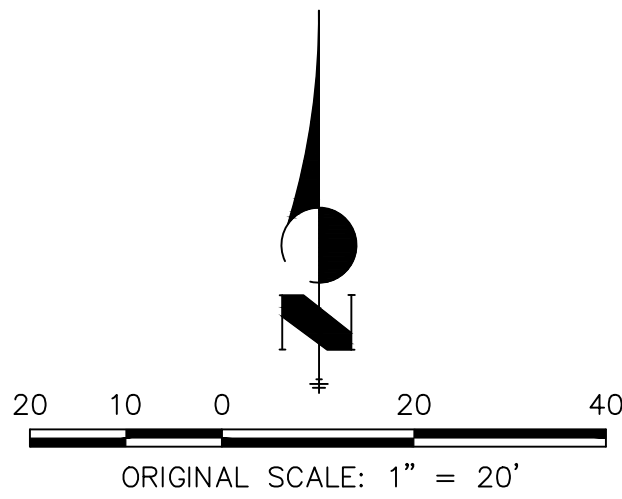
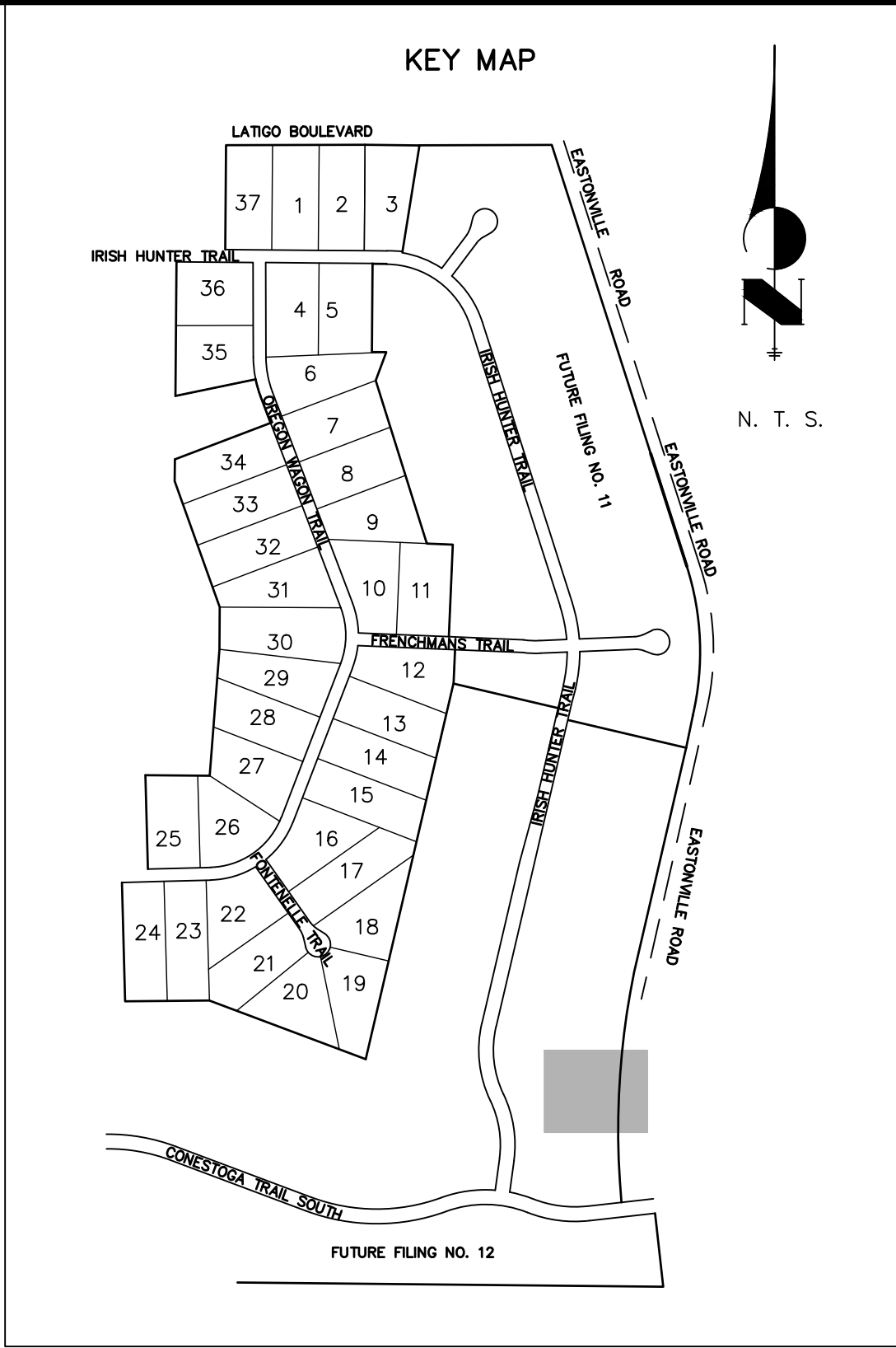
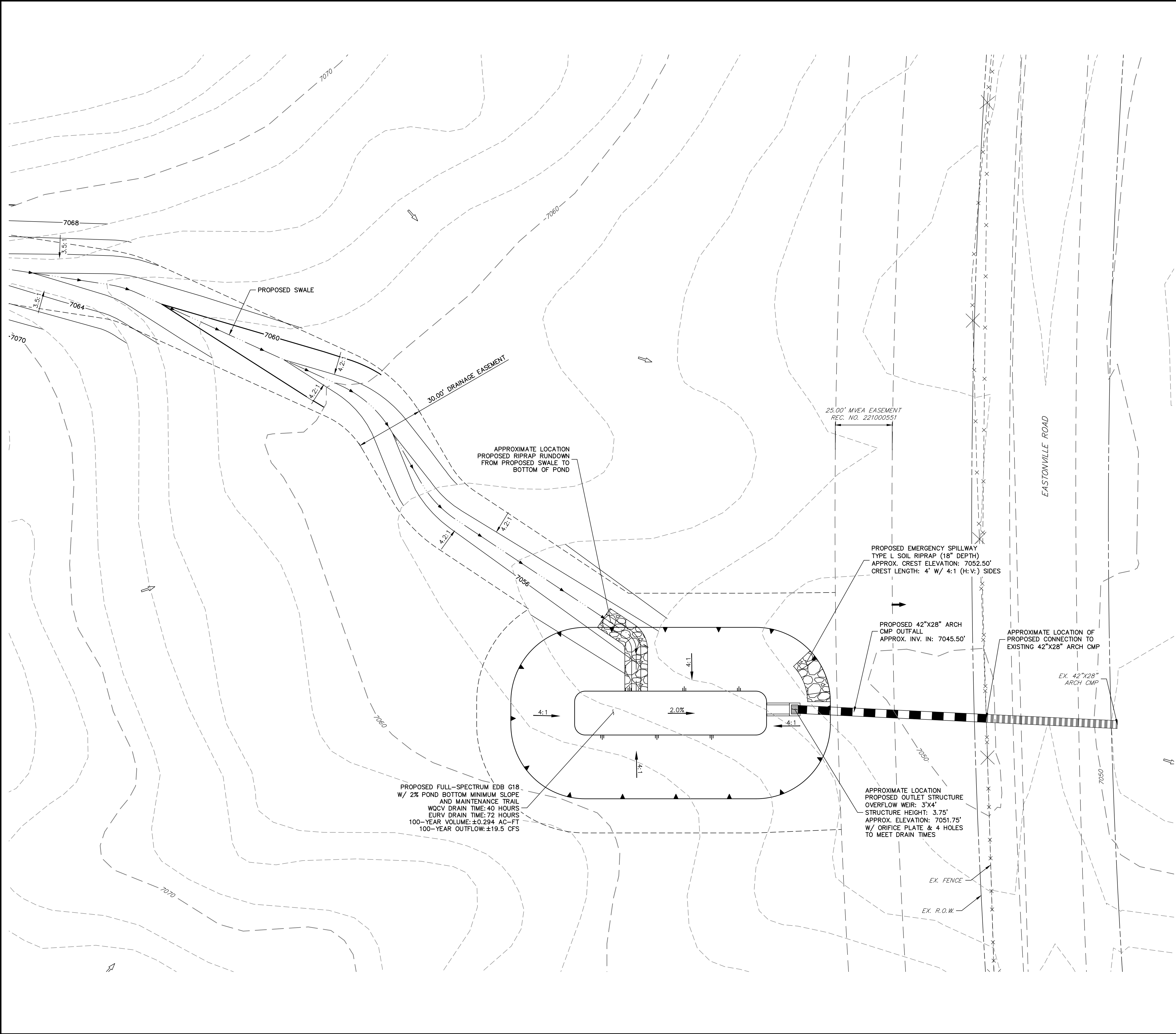


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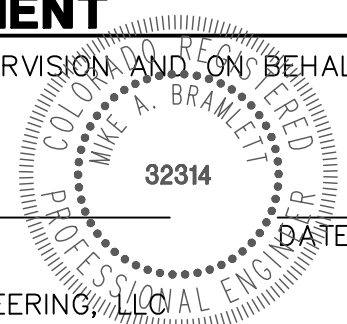




**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



LATIGO TRAILS – FILING NO.		9		POND PLANS	
SHEET	6	OF	7		
JOB NO.	25175.01				
H-SCALE		1"=20'		No.	
V-SCALE		N/A			
DATE		09/10/21		BY	
DESIGNED BY		GAG			
DRAWN BY		GAG			
CHECKED BY					







# LATIGO TRAILS - FILING NO. 9

TOWN OF ELBERT

EL PASO COUNTY

COLORADO STATE

## PUBLIC UTILITY PLAN

### STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

- 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.
- 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).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOIL AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
  - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - CITY OF COLORADO SPRINGS/ EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
  - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS AND BRIDGE CONSTRUCTION
  - CDOT M&S STANDARDS
- 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 VERSIONS 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.
- 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.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES ARE IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED IN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
- 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.
- 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.

### ABBREVIATIONS

AC	ACRE	FL	FLOWLINE	RT	RIGHT
AD	ALGEBRAIC DIFFERENCE	FIL	FILING	S	SOUTH
AH	AHEAD	FO	FIBER OPTIC CABLE	STE	STEEL
ARCH	ARCHITECT	GB	GRADE BREAK	SAN	SANITARY SEWER
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	GE	GAS EASEMENT	SF	SQUARE FOOT
ASSY	ASSEMBLY	GIS	GEOGRAPHIC INFORMATION SYSTEM	ST	STREET
AVE	AVENUE	GL	GAS LINE	STA	STATION
BB	BOX BASE	GPS	GLOBAL POSITIONING SYSTEM	STM	STORM SEWER
BK	BACK	GV	GATE VALVE	SY-IN	SQUARE YARD INCH
BNDY	BOUNDARY	HBP	HOT BITUMINOUS PAVEMENT	TB	THRUST BLOCK
BOP	BOTTOM OF PIPE	HC	HANDICAP	TBC	TOP BACK OF CURB
BOV	BLOW OFF VALVE	HDC	HIGH DEFLECTION COUPLING	TBW	TOP BACK OF WALK
BFV	BUTTERFLY VALVE	HDPE	HIGH DENSITY POLYETHYLENE	TEL	TELEPHONE
BLVD	BOULEVARD	HGL	HYDRAULIC GRADE LINE	TN	TON
BW	BOTTOM OF WALL	HMA	HOT MIX ASPHALT	TOA	TOP OF ASPHALT
C&G	CURB & GUTTER	HOA	HOME OWNERS ASSOCIATION	TOB	TOP OF BOX
CATV	CABLE TELEVISION	HP	HIGH POINT	TOC	TOP OF CURB OR CONCRETE
CB	CATCH BASIN	HR	HOUR	TOF	TOP OF FOUNDATION
CBG	CONCRETE BOX CULVERT	I	INLET	TOP	TOP OF PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	IE	IRRIGATION EASEMENT	TW	TOP OF WALL
CDS	CUL-DE-SAC	INT	INTERSECTION	TYP	TYPICAL
CF	CUBIC FOOT	INV	INVERT	UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
CFS	CUBIC FEET PER SECOND	IRR	IRRIGATION	UE	UTILITY EASEMENT
CIP	COMPLETE IN PLACE	KB	KICK (THRUST) BLOCK	U&DE	UTILITY & DRAINAGE EASEMENT
CL	CENTER LINE	LB	POUND	UGE	UNDERGROUND ELECTRIC
CLOMR	CONDITIONAL LETTER OF MAP REVISION	LE	LANDSCAPE EASEMENT	VCF	VITRIFIED CLAY PIPE
CLR	CLEAR	LF	LINEAR FOOT	VCP	VERTICAL POINT OF CURVATURE
CM	CORRUGATED METAL PIPE	LN	LANE	VPI	VERTICAL POINT OF INTERSECTION
CO	CLEAN OUT	LOMR	LETTER OF MAP REVISION	VPT	VERTICAL POINT OF TANGENCY
COC	CITY OF COLORADO SPRINGS	LP	LOW POINT	VTC	VEHICLE TRACKING CONTROL
CONC	CONCRETE	LS	LUMP SUM	W	WEST
CR	CIRCLE	LT	LEFT	WL	WATER LINE
CSP	CORRUGATED STEEL PIPE	MAX	MAXIMUM	WM	WATER MAIN
CSU	COLORADO SPRINGS UTILITIES	M/D	MOISTURE DENSITY	WRD	WATER RESOURCES DEPARTMENT
CT	COURT	MDDP	MASTER DEVELOPMENT DRAINAGE PLAN	WS	WATER SURFACE
CTRB	CONCRETE THRUST REDUCER BLOCK	MH	MANHOLE	WSE	WATER SURFACE ELEVATION
CY	CUBIC YARD	MIN	MINIMUM	WTR	WATER
DBPS	DRAINAGE BASIN PLANNING STUDY	MS	MOUNTABLE SIDEWALK	YR	YEAR
DE	DRAINAGE EASEMENT	N	NORTH		
DIA	DIAMETER	NRCF	NON-REINFORCED CONCRETE		
DIP	DUCTILE IRON PIPE	ODP	OFFICIAL DEVELOPMENT PLAN		
DR	DRIVE	OHE	OVERHEAD ELECTRIC		
DRC	DESIGN REVIEW COMMITTEE	OHU	OVERHEAD UTILITY		
DU	DWELLING UNITS	PC	POINT OF CURVATURE		
DY	DAY	PCC	POINT OF COMPOUND CURVATURE		
E	EAST	PCR	POINT OF CURB RETURN		
EAL	ENERGY GRADE LINE	PDP	PRELIMINARY DEVELOPMENT PLAN		
EL	ELEVATION	PE	PROFESSIONAL ENGINEER		
ELEC	ELECTRIC	PI	POINT OF INTERSECTION		
EOA	EDGE OF ASPHALT	PKWY	PARKWAY		
EPC	EL PASO COUNTY	PL	PROPERTY LINE		
ERCP	ELLIPTICAL RCP	PR	PROPOSED		
ESMT	EASEMENT	PRC	POINT OF REVERSE CURVATURE		
EST	ESTIMATE	PT	POINT OF TANGENCY		
EX	EXISTING	PV	PLUG VALVE		
EXP	FINAL DEVELOPMENT PLAN	PVC	POLYVINYL CHLORIDE		
FDR	FINAL DRAINAGE REPORT	R	RADIUS		
FES	FLARED END SECTION	RCBC	REINFORCED CONCRETE BOX CULVERT		
FF	FINISHED FLOOR ELEVATION	RCP	REINFORCED CONCRETE PIPE		
FG	FINISHED GRADE	RD	ROAD		
FH	FIRE HYDRANT	ROW	RIGHT OF WAY		

### SHEET INDEX

1	-	COVER SHEET
2-3	-	LEGEND AND NOTES
4	-	OVERALL UTILITY PLAN
5-11	-	WATER DISTRIBUTION PLAN
12-13	-	DETAILS
13	-	TOTAL SHEETS



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### CONTACTS:

OWNER/DEVELOPER:	BRJM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 P~719-475-7474
ENGINEER/SURVEYOR:	JR ENGINEERING, LLC ATTN: MIKE A. BRAMLETT 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P~303-267-6240
FIRE PROTECTION DISTRICT:	FALCON FIRE FPD 7030 N MERIDIAN RD FALCON, CO 80831 P~719-494-4050
DISTRICT:	MERIDIAN SERVICE METROPOLITAN DISTRICT 11886 STAPLETON DR PEYTON, CO 80831 P~719-495-6567
COUNTY TRANSPORTATION:	EL PASO COUNTY, DEPT. OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, COLORADO 80922 KEVIN MASTIN ~ (719) 520-6300
COUNTY DEVELOPMENT:	EL PASO PLANNING AND COMMUNITY 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 CRAIG DOSSEY ~ (719) 520-6300
ELECTRIC COMPANY:	MOUNTAIN VIEW ELECTRIC ASSOC., INC. 11140 EAST WOODMEN ROAD FALCON, COLORADO 80831 (719) 495-2283

### BASIS OF BEARING

THE BASIS OF BEARINGS IS THE WESTERLY LINE OF TRACT, B, WOODMOOR PLACER, BEING MONUMENTED BY A 1-1/4" YELLOW PLASTIC CAP ILLEGIBLE AT BOTH ENDS. SAID LINE BEARING N26°20'33"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

### BENCHMARK

NGS MONUMENT T 294 BEING MONUMENTED BY A 3-1/4" BRASS DISC SET IN A 4'X4' BOULDER, LOCATED 1.8 MILES EAST ALONG HIGBY ROAD FROM ITS INTERSECTION WITH JACKSON CREEK PARKWAY, 40 FEET SOUTH OF THE CENTERLINE OF THE ROAD, 6 FEET SOUTH OF A FENCE, AND 5.2 FEET SOUTH OF A WITNESS POST. SAID MONUMENT HAVING A PUBLISHED ELEVATION OF 7247.10 FEET, NAVD88.

### OWNER/DEVELOPER STATEMENT

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

BOB IRWIN

DATE

BRJM, LLC  
101 N. CASCADE  
COLORADO SPRINGS, CO 80903

### EL PASO COUNTY STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

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

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

JENNIFER IRVINE, P.E.

DATE

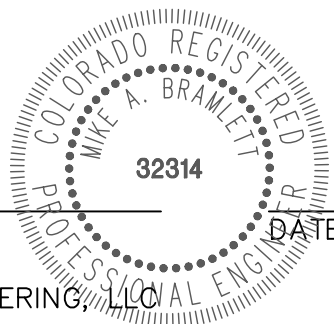
COUNTY ENGINEER/ECM ADMINISTRATOR

### ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT 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 PLAN 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 CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING AGENCIES, OR THEIR USE IS DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**BRJM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

**J.R. ENGINEERING**  
A Western Company



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Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	1"=XX'
V-SCALE	1"=X'
DATE	07/06/21
DESIGNED BY	XXX
DRAWN BY	QNL
CHECKED BY	

LATIGO TRAILS - FILING NO. 9

COVER SHEET

SHEET 1 OF 13

JOB NO. 25175.01

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE		
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV		
ELECTRIC		
FIBER OPTIC		
GAS MAIN		
IRRIGATION MAIN		
OIL/PETRO. MAIN		
OVERHEAD UTILITY		
SANITARY SEWER		
STORM DRAIN		
TELEPHONE		
WATER MAIN		
RAW WATER LINE		
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR		
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)		
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		
SILT FENCE		
100 YEAR FLOODPLAIN		
500 YEAR FLOODPLAIN		
FLOODWAY		
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

	EXISTING	PROPOSED
<b>STORM SEWER</b>		
MANHOLE		
STORM INLET		
AREA INLET - SQUARE		
AREA INLET - ROUND		
FLARED END SECTION		
RIPRAP		
<b>SANITARY SEWER</b>		
LINE MARKER		
SERVICE MARKER		
CLEAN-OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
<b>WATER LINE</b>		
LINE MARKER		
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW-OFF VALVE		
WELL		
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW-OFF ASSEMBLY		
<b>GAS LINE</b>		
MARKER		
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
<b>DRY UTILITIES</b>		
CABLE TV MARKER		
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER		
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER-OPTIC MARKER		
IRRIGATION PEDESTAL		
TELEPHONE MARKER		
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
<b>MISC. UTILITIES</b>		
VENT PIPE		
TEST HOLE DESIGNATOR		

	EXISTING	PROPOSED
ALUMINUM CAP - FOUND		
BRASS CAP - FOUND		
BENCHMARK - FOUND		
CROSS - FOUND		
MONUMENT - SET		
MONUMENT - FOUND (DEFAULT)		
MONUMENT - FOUND (ALTERNATE 1)		
MONUMENT - FOUND (ALTERNATE 2)		
MONUMENT - FOUND (ALTERNATE 3)		
MONUMENT - FOUND (ALTERNATE 4)		
MONUMENT - FOUND (ALTERNATE 5)		
MONUMENT - FOUND (ALTERNATE 6)		
MONUMENT - FOUND (ALTERNATE 7)		
NAIL & WASHER - FOUND		
PANEL - FOUND		
PK NAIL - FOUND		
ROW MONUMENT - FOUND		
ROW MARKER - FOUND		
SECTION CORNER - FOUND		
SECTION CORNER - SET		
QUARTER-SECTION CORNER - FOUND		
QUARTER-SECTION CORNER - SET		
SECTION CENTER - FOUND		
SECTION CENTER - FOUND		
CONTROL/TRaverse POINT - SET		

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT - SINGLE		
STREET LIGHT - DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		

	KEY	SYMBOL
CHECK DAM		
CONSTRUCTION ROAD STABILIZATION		
CURB SOCK INLET PROTECTION		
CONCRETE WASHOUT AREA		
DIVERSION DITCH AND DIKE, TEMPORARY		
DIVERSION CHANNEL, TEMPORARY		
DEWATERING		
EROSION CONTROL BLANKET		
INLET FILTER		
INLET PROTECTION		
MULCHING		
OUTLET PROTECTION		
PAVED FLUME		
PERMENENT SEEDING		
REINFORCED CONCRETE DAM		
ROUGH CUT STREET CONTROL		
SEDIMENT BASIN		
SEDIMENT CONTROL LOG		
SILT FENCE		
SURFACE ROUGHENING		
STABILIZED STAGING AREA		
SEDIMENT TRAP		
STRAW BALE BARRIER		
TERRACING		
TEMPORARY SEEDING		
TEMPORARY STREAM CROSSING CULVERT/BRIDGE		
TEMPORARY STREAM CROSSING FORD TYPE		
TEMPORARY SLOPE DRAIN		
VEHICLE TRACKING CONTROL		
VEHICLE TRACKING CONTROL WITH WASH RACK		

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	
BASIN DESIGNATION (1 COEFFICIENT)	
BASIN DESIGNATION (2 COEFFICIENTS)	
ANALYSIS POINT IDENTIFIER	
BASIN DESIGNATION (HISTORIC)	
BASIN DESIGNATION (DEVELOPED)	
SUB-BASIN DESIGNATION (DEVELOPED)	
DRAINAGE PIPE IDENTIFIER	
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	
SWMM DESIGNATION 1	
SWMM DESIGNATION 2	
SWMM DESIGNATION 3	
SWMM DESIGNATION 4	

	EXISTING	PROPOSED
TREE - CONIFEROUS		
TREE - DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE		

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR

BRUM, LLC

101 N. CASCADE, SUITE 200

COLORADO SPRINGS, CO 80903

ATTN: BOB IRWIN

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J.R. ENGINEERING

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1"=XX'

1"=X'

DATE 07/06/21

DESIGNED BY N/A

DRAWN BY QNL

CHECKED BY

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9

LEGEND AND NOTES

SHEET 2 OF 13

JOB NO. 25175.01

# METROPOLITAN DISTRICT GENERAL UTILITY NOTES FOR MERIDIAN SERVICE METROPOLITAN DISTRICT

## GENERAL NOTES

1.MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) CONTACT TELEPHONE NUMBERS:

- ON SITE OFFICE 719-495-6567.  
MANAGEMENT COMPANY, IN CARE OF CRS OF COLORADO, LLC 303-381-4965.
2. ALL SANITARY SEWER, POTABLE WATER, RECLAIMED WATER, RAW WATER AND STORM DRAIN SYSTEMS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) SPECIFICATIONS. MSMD SPECIFICATIONS HEREINAFTER SHALL BE CONSISTENT WITH THE COLORADO SPRINGS UTILITIES SPECIFICATIONS (CSUS) FOR WASTEWATER LINE EXTENSION & SERVICE STANDARDS, 2010 EDITION AND THE WATER LIND EXTENSION & SERVICE STANDARDS, 2014 EDITION, UNLESS OTHERWISE NOTED AND APPROVED.
3. ALL PLANS ON THE JOB SITE SHALL BE SIGNED AND APPROVED BY MSMD AND MSMD'S ENGINEER. ANY REVISION TO THE PLANS SHALL BE APPROVED BY MSMD AND MSMD'S ENGINEER AND SO NOTED ON THE PLANS.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY MSMD. MSMD RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO MSMD STANDARDS AND SPECIFICATIONS.
5. ALL PIPE MATERIAL, BACKFILL, AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE EL PASO COUNTY DEVELOPMENT SERVICES, COLORADO SPRINGS UTILITIES, MSMD, DISTRICT ENGINEER AND THE SOILS ENGINEER.
6. ALL UTILITY TRENCH BACKFILL SHALL BE PLACED PER THE APPROVED SOILS REPORT RECOMMENDATIONS AND UNDER THE DIRECTION OF THE SOILS ENGINEER. TRENCH BACKFILL SHALL BE MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM AND COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D 1557) OR HIGHER STANDARD AS REQUIRED BY THE EL PASO COUNTY DEVELOPMENT SERVICES OR THE SOILS ENGINEER RECOMMENDATION. THIS SHALL INCLUDE ALL MAIN LINE, VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES, CLEAN OUTS, INLET BOXES, MANHOLES, ETC. A QUALIFIED SOILS ENGINEER SHALL OBSERVE AND TEST THE BACKFILL AND COMPACTION OF ALL TRENCHES AND ALL REPORTS SHALL BE SUBMITTED TO MSMD FOR REVIEW AND APPROVAL.
7. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION DRAWINGS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
8. ALL WATER AND SANITARY SEWER SERVICE LATERAL LOCATIONS SHALL BE CLEARLY MARKED BY STAMPING AN "S" FOR SEWER AND A "W" FOR WATER ON THE CURB FACE AT EACH SERVICE LATERAL LOCATION. ALL SLEEVE LOCATIONS SHALL BE CLEARLY MARKED BY STAMPING AN "X" ON THE CURB FACE. ALL PRIVATE IRRIGATION SLEEVES SHALL BE MARKED BY STAMPING AN "I" ON THE TOP OF THE SIDEWALK.
9. BENDS, DEFLECTIONS & CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5' FROM THE DESIGNED ALIGNMENT.
10. AT ALL LOCATIONS WHERE CAP AND STUB IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS AND BLOW OFFS.
11. ALL EXISTING UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED IN PLACE AND FUNCTION CONTINUOUSLY DURING ALL CONSTRUCTION OPERATIONS. SHOULD A MSMD UTILITY FAIL OR BE DAMAGED AS A RESULT OF THE CONSTRUCTION OPERATION, IT SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR PER ALL MSMD SPECIFICATIONS. IN THE EVENT THE CONTRACTOR CANNOT IMMEDIATELY MAKE THE REPAIRS TO THE FAILED OR DAMAGED MSMD UTILITY TO THE SATISFACTION OF MSMD, MSMD MAY REPAIR OR CAUSE THE REPAIR AND BACK CHARGE ALL SUCH COSTS TO THE CONTRACTOR.
12. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY AND ALL DAMAGE CAUSED BY THE CONTRACTOR DURING CONSTRUCTION ACTIVITIES TO ALL ABOVE OR BELOW GROUND IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB, GUTTER, SIDEWALK, ASPHALT, ELECTRIC SYSTEMS, GAS SYSTEMS, TELEPHONE/TELEVISION SYSTEMS, ETC.
13. A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD AT THE PROJECT SITE A MINIMUM OF 7 DAYS BEFORE CONSTRUCTION BEGINS AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL NOTIFY MSMD AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION FOR SCHEDULING. THE CONTRACTOR SHALL SCHEDULE BI-WEEKLY CONSTRUCTION MEETINGS AT THE PROJECT SITE OR MORE FREQUENTLY AS DEEMED NECESSARY BY MSMD.
14. PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN TIME THAT MSMD ACCEPTS THE FACILITY FOR USE AND ALL SURFACE IMPROVEMENTS AND RESTORATIONS ARE COMPLETED.
15. FINAL ACCEPTANCE BY MSMD OF ANY UTILITY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL COMPLETION AND/OR RESTORATION OF ALL SURFACE IMPROVEMENTS. THE WARRANTY PERIOD FOR ALL FACILITIES SHALL BE 12 MONTHS COMMENCING WITH FINAL ACCEPTANCE. MSMD MAY REQUIRE RETESTING OF THE UTILITY SYSTEM PRIOR TO FINAL ACCEPTANCE.
16. INSPECTION FEES: CALL MSMD FOR FEE SCHEDULE.
17. ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE A MINIMUM EIGHT INCH DIAMETER WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS AND EXITS THE PROPERTY AND A MINIMUM EIGHT INCH SANITARY SEWER MAIN WITH A MANHOLE IN THE STREET WHERE THE MAIN ENTERS THE PROPERTY. THE EXTENT OF THE MAINS SHALL BE MARKED WITH THE APPROPRIATELY COLORED CARSONITE MARKERS AND TRACER WIRE.
18. AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES, AND/OR SERVICES, CONSTRUCTION MUST BE COMPLETED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS. IF WORK IS NOT COMPLETED WITHIN THIS TIME FRAME AND NO EXTENSION HAS BEEN GIVEN, THEN ALL PLANS MUST BE RE-SUBMITTED TO MSMD FOR REVIEW (WITH NEW FEES PAID) AND APPROVAL.
19. PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY MSMD AND THE ENGINEER OF RECORD PRIOR TO EXECUTION.
20. ANY FACILITIES OUTSIDE OF PAVED ROADS MUST BE MARKED APPROPRIATELY WITH CARSONITE MARKERS AT EACH VALVE, MANHOLE, TEST STATION, AND ANY OTHER FACILITIES MSMD DEEMS NECESSARY.

## WATER NOTES

27. ALL WATER MAIN PIPES SHALL BE AWWA C900 PVC, PRESSURE CLASS 200 OR MSMD APPROVED EQUAL, INSTALLED PER MANUFACTURERS' SPECIFICATIONS. ALL WATER MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER MAIN PIPES SHALL HAVE A MINIMUM COVER DEPTH OF 5'-6" INSTALLED WITH A COATED 12 GAUGE U.F. TRACER WIRE.
28. ALL LOTS SHALL RECEIVE A MINIMUM 3/4 " DIAMETER HDPE OR COPPER WATER SERVICE INSTALLED PER APPROVED PLANS CSUS AND MSMD SPECIFICATIONS. HDPE WATER SERVICE SHALL BE HDPE SDR-7 PE4710 RATED FOR 200 PSI WITH THE MARKING SDR-7, AWWA C901, NSF61 PE4710. WATER SERVICES SHALL BE INCREASED IN SIZE TO 1" DIAMETER WHERE THE RESIDENTIAL SERVICE WATER PRESSURE IS LESS THAN 40 PSI AT 10 GPM DEMAND AND ALL 1/2 ACRE OR GREATER LOTS SHALL RECEIVE A MINIMUM 1" DIAMETER WATER SERVICE AS INDICATED ON THE PLANS. THE CURB STOP VALVE AND BOX AT THE END OF EACH WATER SERVICE SHALL BE "LOCATED" WITH A 2" X 4" PIECE OF WOOD EXTENDED 4" ABOVE FINISH GRADE, PAINTED BLUE, DIRECTLY BEHIND THE CURB STOP VALVE AND BOX. ALL TRACER WIRE CONNECTIONS SHALL BE MADE WITH DBY (DIRECT BURY YELLOW) WATER TIGHT STYLE ELECTRICAL CONNECTORS OR EQUAL.
29. IF HDPE WATER SERVICES ARE TO BE USED THEY SHALL INCLUDE A ROMAC 202 NS OR EQUAL TAPPING SADDLE AND A CURB STOP VALVE INSIDE A CURB STOP BOX AT THE END OF THE WATER SERVICE. ALL CORPORATION STOPS SHALL BE AY MCDONALD MODEL NUMBER 74701B-33 FOR SDR HDPE SAME SIZE AS THE WATER SERVICE. ALL CURB STOP VALVES SHALL BE ¾" AY MCDONALD MODEL NUMBER 76100 (FLARE X FLARE) OR EQUIVALENT WITH A MAIN SIDE ONE PACK JOINT (PEP) ADAPTOR AY MCDONALD MODEL NUMBER 74755-33 UNLESS OTHERWISE NOTED ON THE PLANS. ALL 1" DIAMETER WATER SERVICES SHALL RECEIVE A 1" INLET BY ¾" OUTLET CURB STOP VALVE.
30. IF COPPER WATER SERVICES ARE TO BE USED THEY SHALL INCLUDE A ROMAC 202 BS OR EQUAL TAPPING SADDLE AND A CURB STOP VALVE INSIDE A CURB STOP BOX AT THE END OF THE WATER SERVICE. ALL CURB STOP VALVES SHALL BE ¾" UNLESS OTHERWISE NOTED ON THE PLANS. ALL 1" DIAMETER WATER SERVICES SHALL RECEIVE A 1" INLET BY ¾" OUTLET CURB STOP VALVE MANUFACTURED BY AY MCDONALD MODEL NUMBER 6104 (FLARE X FLARE) OR EQUIVALENT.
31. ALL POTABLE WATER VALVES SHALL OPEN CLOCKWISE WITH THE VALVE OPERATING NUT INSTALLED LOW NEAR THE MAIN LINE AND PAINTED RED. ALL POTABLE AND RAW WATER VALVES NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL RAW WATER VALVES SHALL OPEN COUNTERCLOCKWISE WITH THE VALVE OPERATING NUT INSTALLED HIGH WITHIN 1' FROM THE SURFACE AND PAINTED BLACK.
32. ALL POTABLE WATER, RAW WATER AND NON-POTABLE WATER VALVES 14" OR GREATER SHALL BE BUTTERFLY VALVES WITH A SIDE OPERATING NUT. THE OPERATIONAL DEPTH OF THE POTABLE WATER VALVES SHALL NOT EXCEED 6' IN OVERALL DEPTH NOR SHALL IT BE CLOSER TO THE SURFACE THEN 4'
33. FIRE HYDRANT LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE DEPARTMENT AUTHORITY.
34. FIRE HYDRANTS SHALL BE AYK MODEL 2780 NOSTALGIC OPEN RIGHT WITH A 1 ½" PENTAGON OPERATING NUT AND SERVICE CAPS, STANDARD 4 1/2" PUMPER NOZZLE WITH A THREAD PATTERN OF 5 - 3/8" - 6 TPI (THREADS PER INCH) ALONG WITH TWO STANDARD 2 ½" NST (NATIONAL STANDARD THREAD) SIDE NOZZLES.
35. ALL DUCTILE IRON PIPES, FITTINGS, VALVES AND FIRE HYDRANTS SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL BE THOROUGHLY COATED WITH BITUMINOUS COATINGS.
36. ALL DUCTILE IRON PIPE AND FITTINGS LESS THAN 12 INCHES IN DIAMETER SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON PIPE AND FITTINGS 12 INCHES AND GREATER SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. CATHODIC PROTECTION AND ANODES SHALL BE INSTALLED PER MSMD SPECIFICATIONS.
37. ALL EXISTING WATER UTILITY MATERIAL REMOVED AS PART OF THE WORK ON THESE DRAWINGS SHALL BE RETURNED TO MSMD AS REQUESTED.
38. TESTING OF FACILITIES:
- A.THE CONTRACTOR SHALL NOTIFY MSMD A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING TO ALLOW MSMD STAFF TO BE PRESENT AT ALL TIMES DURING TESTING. ALL TESTING SHALL BE PER MSMD SPECIFICATIONS OR CSUS, WHICHEVER IS GREATER.
- B.ALL SECTIONS OF WATER LINES MUST FIRST PASS A CHLORINE TEST WITH A MINIMUM OF 50 PARTS PER MILLION OF RESIDUAL AFTER 24 HOURS. THE WHOLE SECTION OF LINE BEING TESTED MUST BE RE-CHLORINATED AND RE-TESTED IF IT DOES NOT PASS. ONCE THE SECTION OF LINE BEING TESTED PASSES THE CHLORINE TEST THE LINE MUST BE FLUSHED AND BAC-T TESTED PER CSUS. ONCE THE BAC-T TEST PASSES, THE SECTION OF LINE MAY BE PRESSURE TESTED. WATER FLUSHED FROM THE WATER SYSTEM MUST BE PROPERLY DE-CHLORINATED DURING THE FLUSHING PROCESS
- C.ALL SECTIONS OF WATER LINES MUST PASS A TWO HOUR 200 PSI HYDROSTATIC PRESSURE TEST. THE PRESSURE SHALL NOT DECREASE BY MORE THAN 5 PSI DURING THE DURATION OF THE TEST. NO WATER SHALL BE ADDED DURING THE PRESSURE TEST. IF THE PRESSURE TEST FAILS, THE SECTIONS OF LINE THAT FAILED MUST AGAIN PASS THE CHLORINE TEST, BE FLUSHED, AND PASS THE BAC-T TEST PRIOR TO CONDUCTING A NEW PRESSURE TEST.
- D.ONCE WATER SERVICES ARE INSTALLED A SECOND WATER PRESSURE TEST MUST BE DONE TO A WORKING PSI OF 150 PSI FOLLOWING THE ABOVE TESTING STANDARDS.
- E.SECTIONS OF WATER LINES SHALL BE LEFT PRESSURIZED ONCE THE WATER LINES HAVE PASSED ALL TESTING DURING THE REMAINING CONSTRUCTION ACTIVITIES.
39. COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS. NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL:
- A.MSMD HAS APPROVED ALL TESTS AND COMPACTION TESTING REPORTS, AND AS-BUILT DRAWINGS ARE SUBMITTED TO AND APPROVED BY MSMD.
- B.ALL WATER LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
- C.ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED TO MSMD, AND RECORDED.
40. ANY WATER SHUT DOWNS THAT NEED TO OCCUR ON THE CRITICAL LINES AS DEFINED BY THE MSMD SOP (STANDARD OPERATION PROCEDURE) MANUAL SHALL BE COORDINATED WITH MSMD STAFF FOR NIGHT TIME SHUT DOWNS.
41. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO EXISTING WATER MAINS WITHOUT A SHUTDOWN OF THE WATER SYSTEM. IN THE EVENT THAT A SHUTDOWN OF A WATER SYSTEM IS NECESSARY, THE CONTRACTOR SHALL ACQUIRE A PERMIT FROM MSMD.
42. ALL NON-POTABLE WATER MAINS SHALL BE AWWA NON-POTABLE STANDARD (PURPLE PIPE) C900 PVC, PRESSURE CLASS 200 OR MSMD APPROVED EQUAL, INSTALLED PER MANUFACTURERS' SPECIFICATIONS. ALL WATER MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER MAIN PIPES SHALL HAVE A MINIMUM COVER DEPTH OF 5'-6" INSTALLED WITH A COATED 12 GAUGE U.F. TRACER WIRE.
43. ALL NON- POTABLE WATER VALVES SHALL OPEN COUNTER CLOCKWISE WITH A VALVE EXTENSION, EXTENDING TO WITHIN 1' OF THE SURFACE AND PAINTED PURPLE WITH AN OPEN DIRECTION ARROW.
44. IRRIGATION SERVICES SHALL HAVE A STOP AND WASTE CURB STOP VALVE INSTALLED ALONG WITH A TRACER WIRE EXTENDING BACK TO THE MAIN LINE.
- THE ABOVE GUIDELINES ARE SUBJECT TO CHANGE AT ANY TIME.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE. DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR

BRJM, LLC  
101 N. CASCADE, SUITE 200  
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ATTN: BOB IRWIN  
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DATE

BY

REVISION

No.

1"=5'

H-SCALE

V-SCALE

DATE

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9

LEGEND AND NOTES

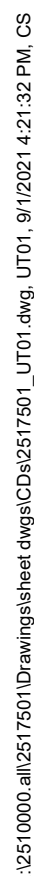
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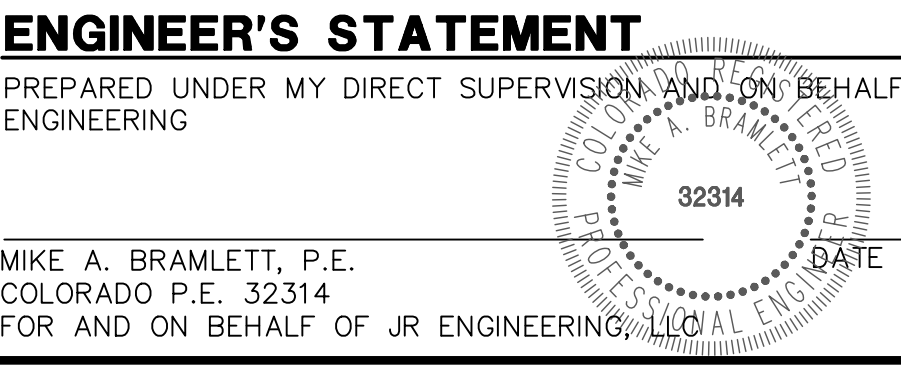
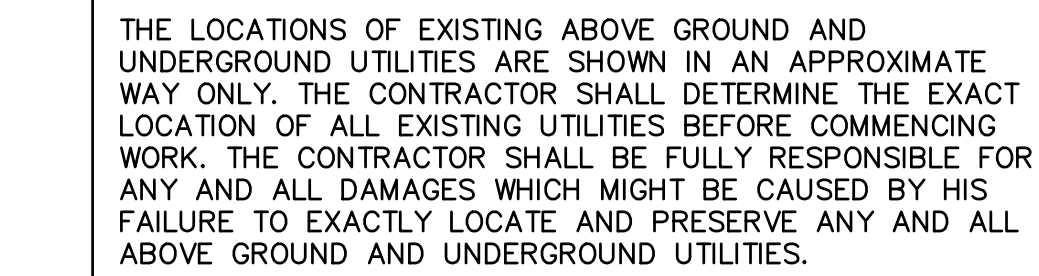


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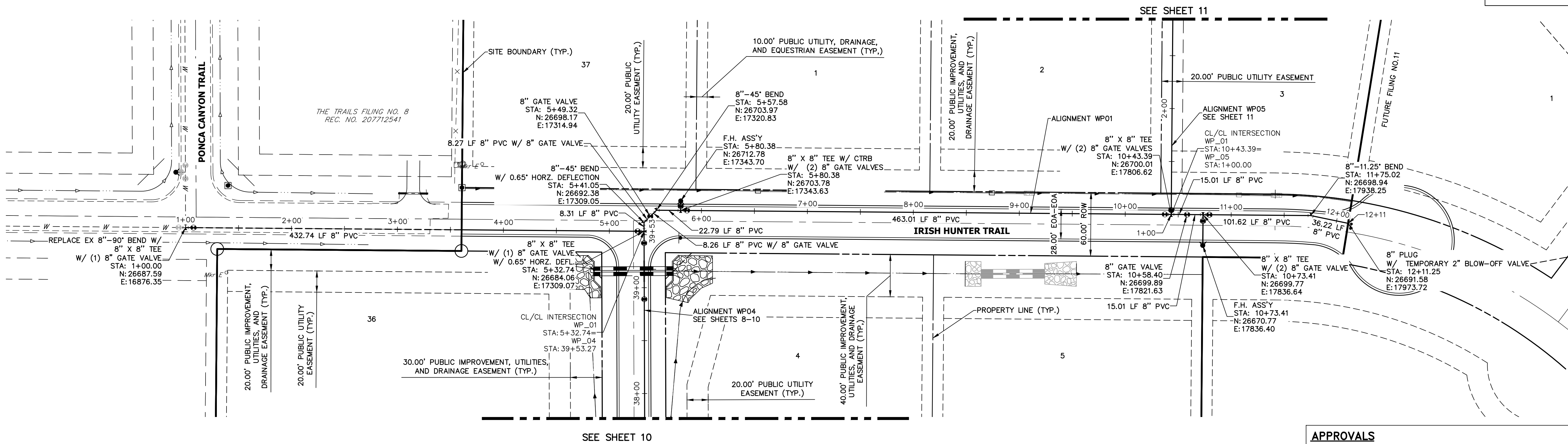
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### WATER PIPE NOTES

1. ALL WATER LINES ARE OWNED AND MAINTAINED BY MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) UNLESS OTHERWISE NOTED.
2. ALL CURVILINEAR PIPE MUST BE ACCOMPLISHED BY HIGH DEFLECTION COUPLERS.
3. ALL HORIZONTAL BENDS, TEES, AND CROSSES REQUIRE CONCRETE THRUST REACTION BLOCKS (C+RB). SEE CSU DETAILS A4-2 AND A4-3.
4. ALL HORIZONTAL AND VERTICAL DEFLECTIONS TO BE ACCOMPLISHED WITH HIGH DEFLECTION (HD) COUPLINGS.
5. ALL VERTICAL BENDS REQUIRE MECHANICAL JOINT RESTRAINTS (MJR). SEE CSU DETAIL A4-4.

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.

### APPROVALS

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO MERIDIAN RANCH METRO DISTRICT SPECIFICATIONS. THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THIS WATER INSTALLATION PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS AS SPECIFIED BY THE FALCON FIRE DEPARTMENT.

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
FALCON FIRE DEPARTMENT  
PLAN REVIEW NUMBER: \_\_\_\_\_

WATER INSTALLATION CORROSION CONTROL REQUIREMENTS: SEE PLAN FOR PLACEMENT

### WATER PLAN APPROVAL

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
MERIDIAN SERVICE METRO DISTRICT  
WORK ORDER NUMBER: \_\_\_\_\_ PROJECT NUMBER: \_\_\_\_\_

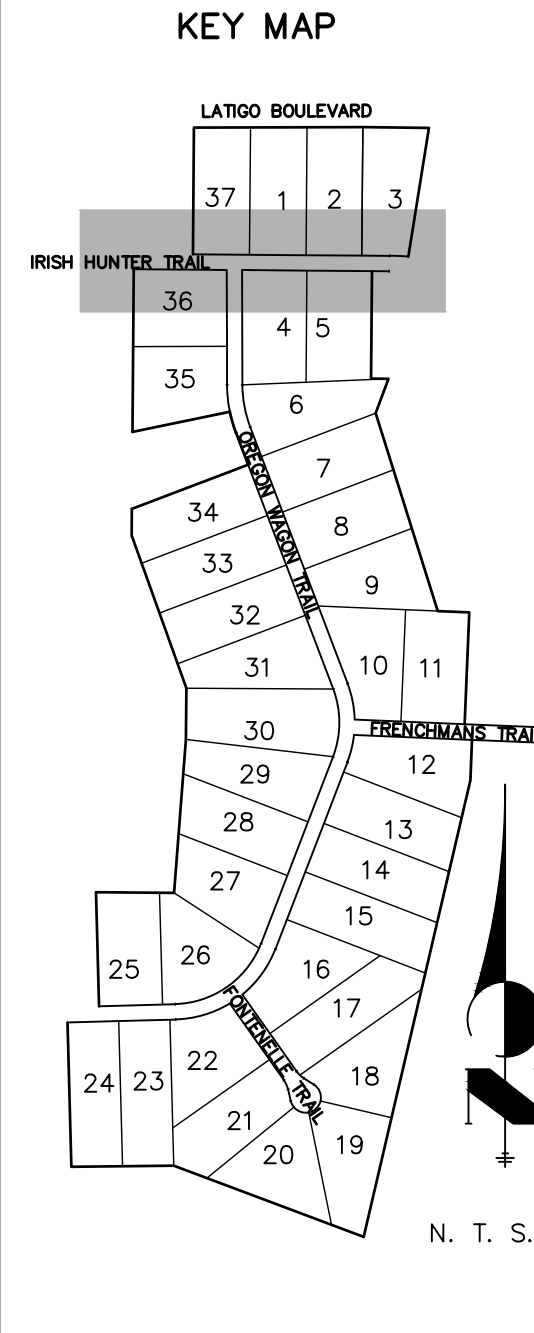
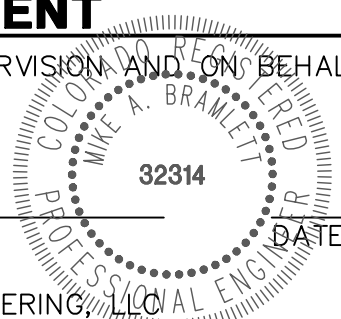
TIM HUNKER  
DISTRICT MANAGER  
DATE \_\_\_\_\_

CHARLES COTHERN  
DISTRICT ENGINEER  
DATE \_\_\_\_\_

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



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BY DATE

REVISION

No. 1"=50'

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V-SCALE

N/A

DATE

07/06/21

DESIGNED BY

QNL

DRAWN BY

QNL

CHECKED BY

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WATER DISTRIBUTION PLAN

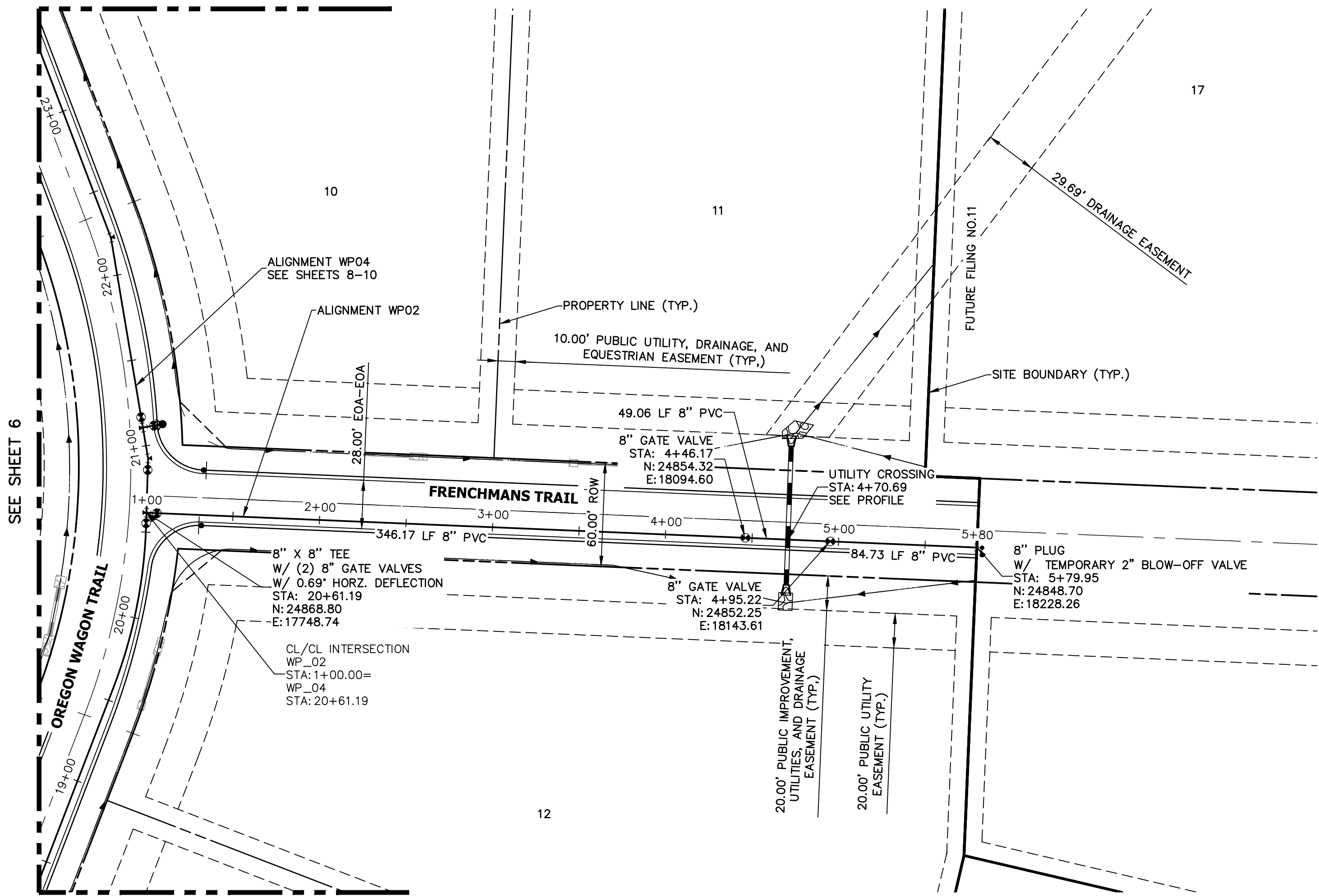
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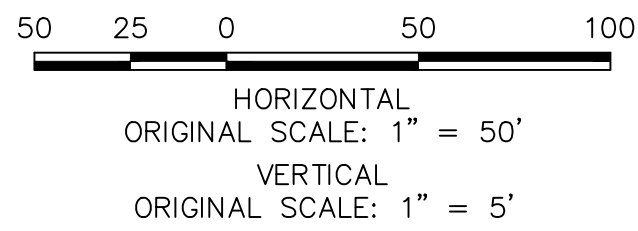




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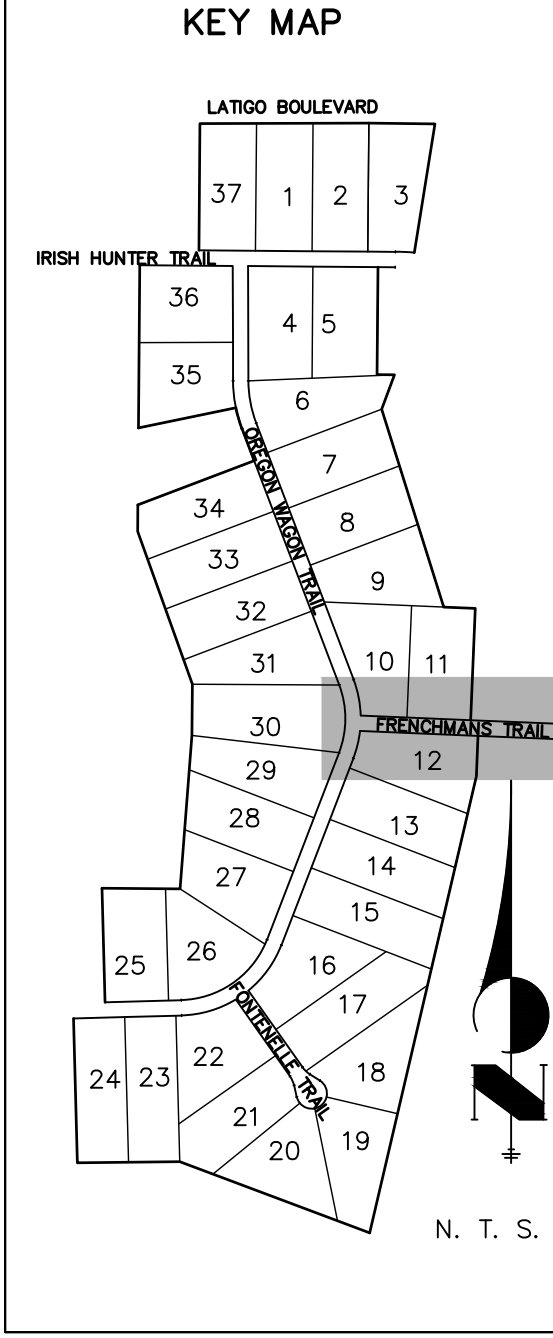
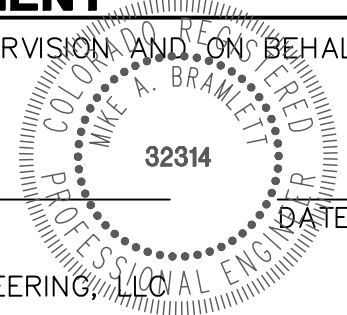


#### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



**J.R. ENGINEERING**  
A Western Company

Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

PREPARED FOR  
**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

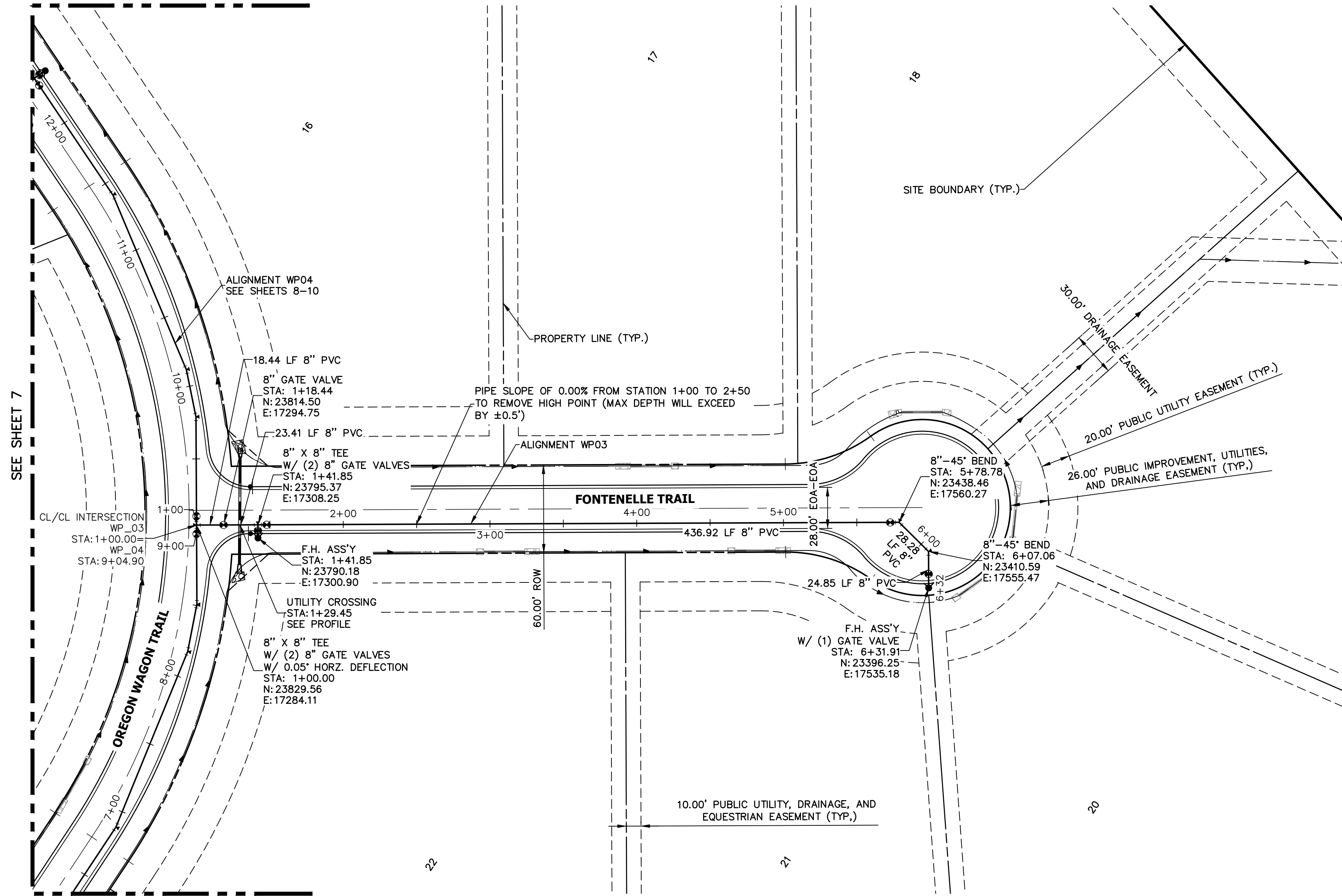
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

LATIGO TRAILS - FILING NO. 9

WATER DISTRIBUTION PLAN

SHEET 6 OF 13

JOB NO. 25175.01








32314

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF

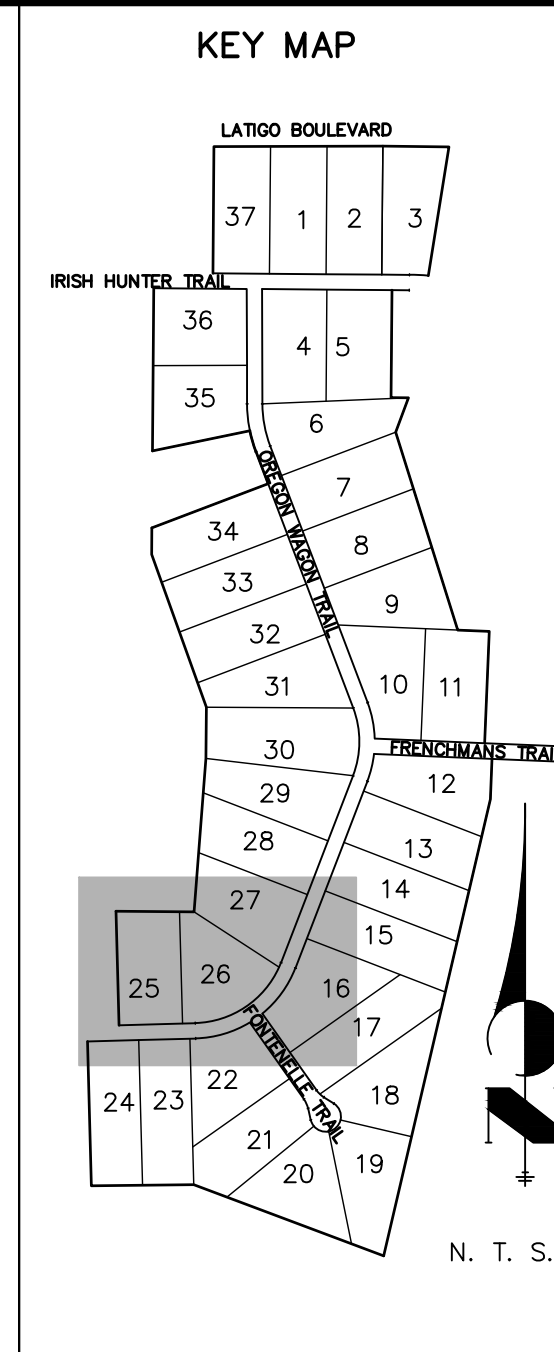
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101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
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P~(719)-475-7474

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.



N. T. S

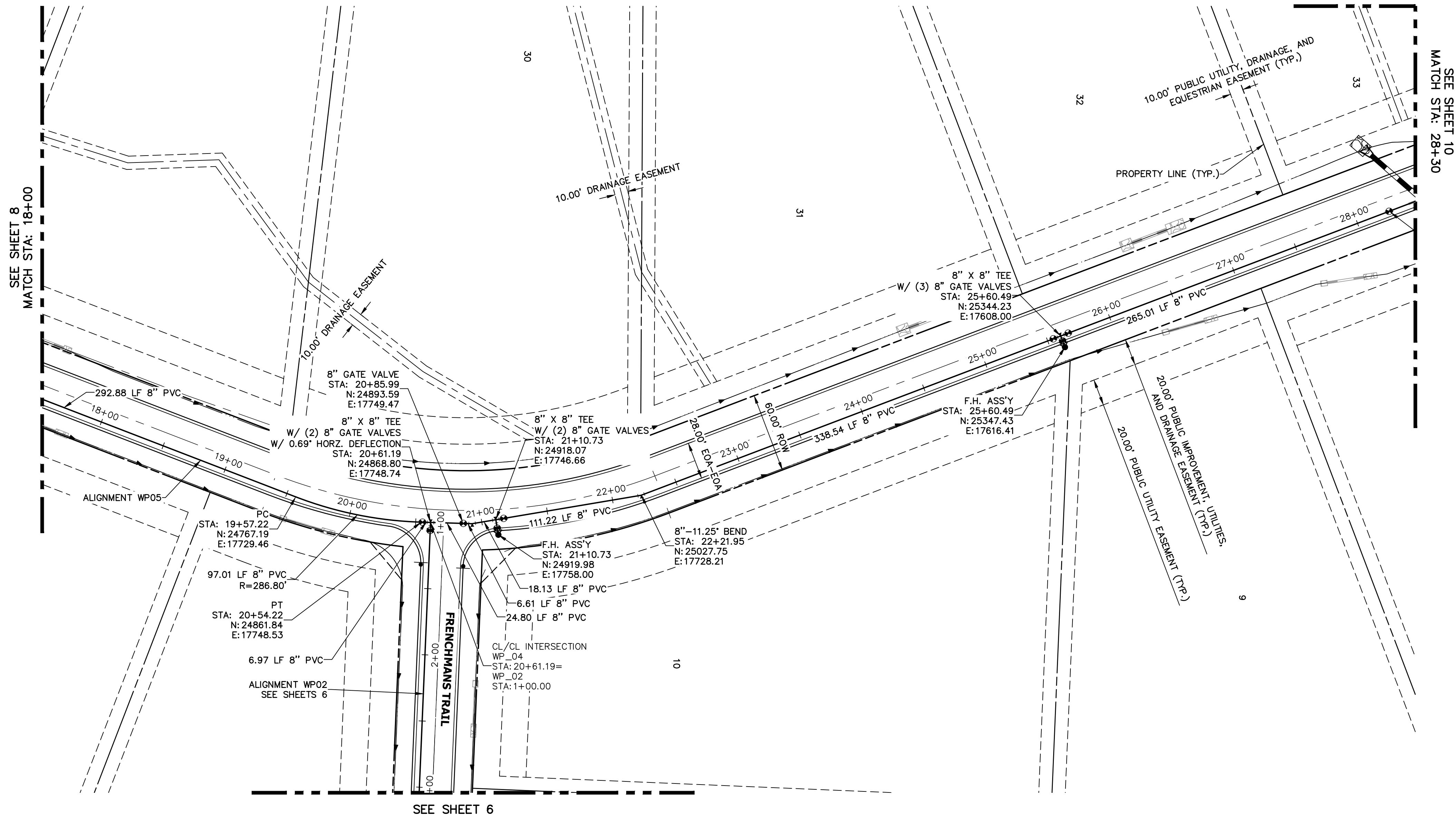
SEE SHEET 9  
MATCH STA: 18+00

SEE SHEET 7



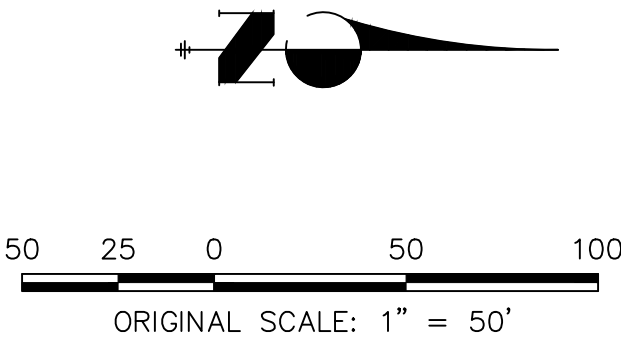
1. ALL WATER LINES ARE OWNED AND MAINTAINED BY MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) UNLESS OTHERWISE NOTED.
2. ALL CURVILINEAR PIPE MUST BE ACCOMPLISHED BY HIGH DEFLECTION COUPLERS.
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5. ALL VERTICAL BENDS REQUIRE MECHANICAL JOINT RESTRAINTS (MJR). SEE CSU DETAIL A4-4.

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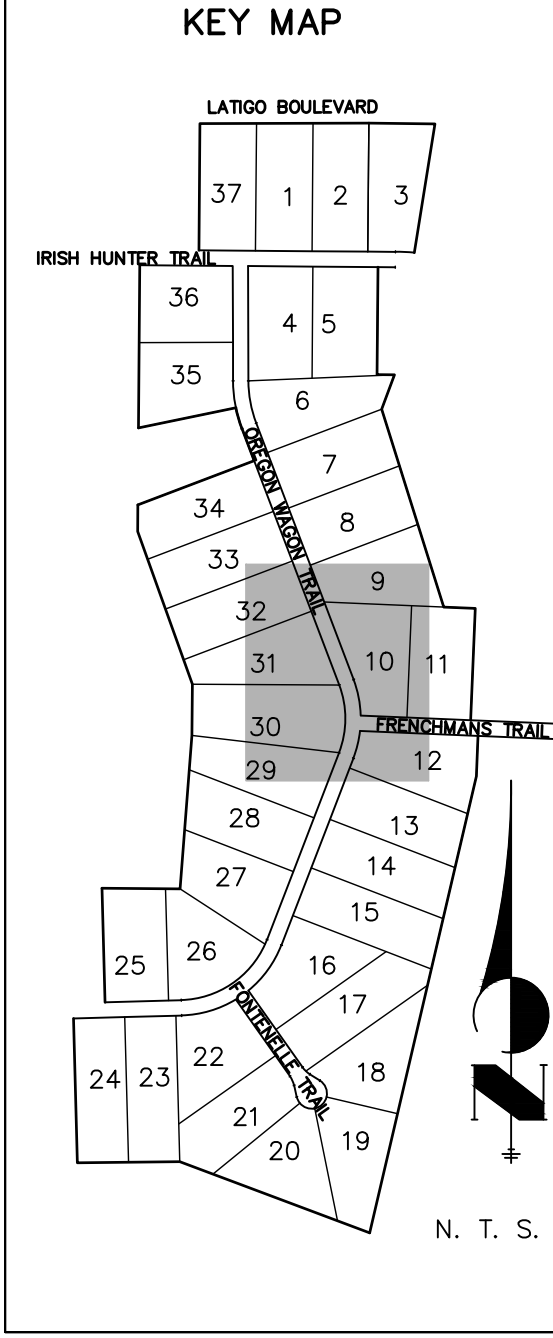
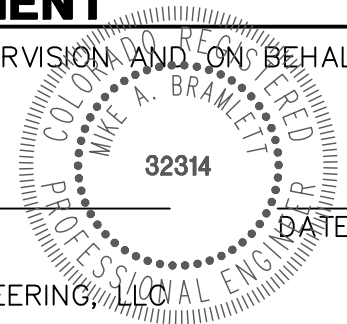
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**ENGINEER'S STATEMENT**

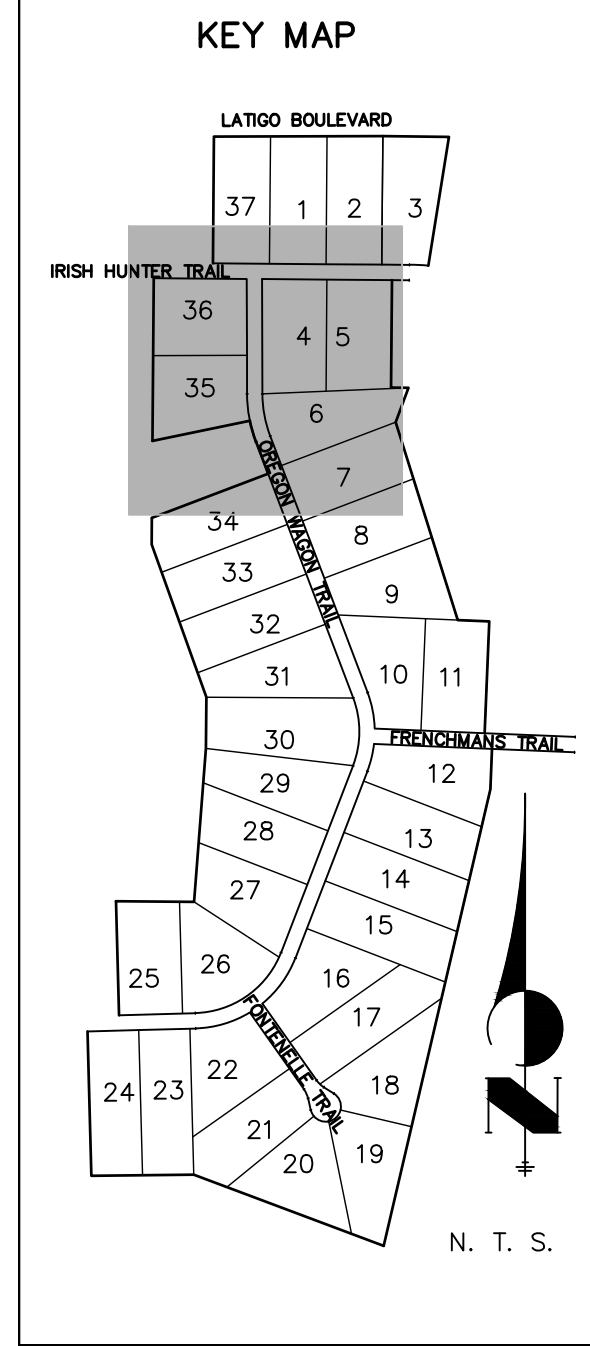
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



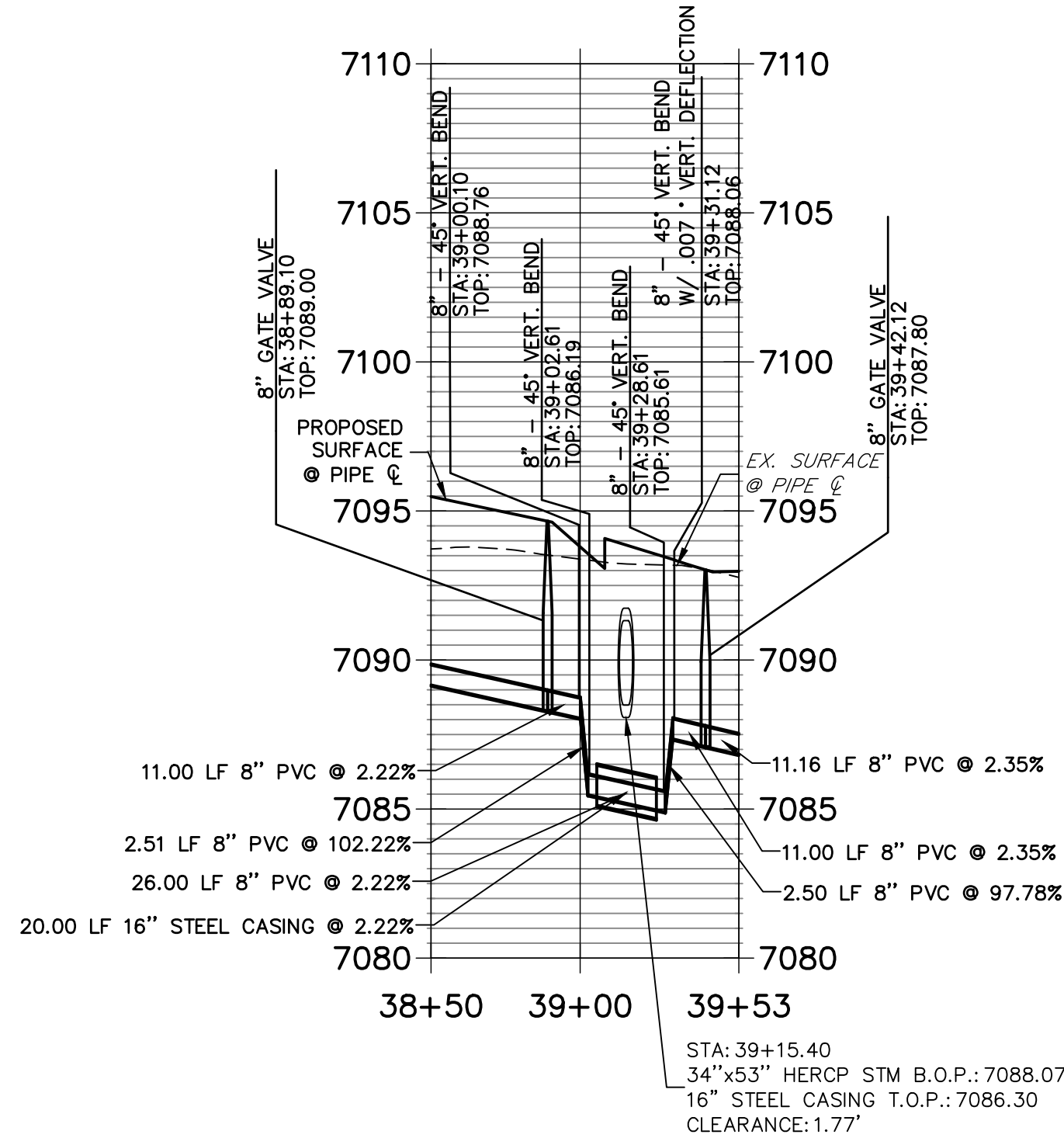
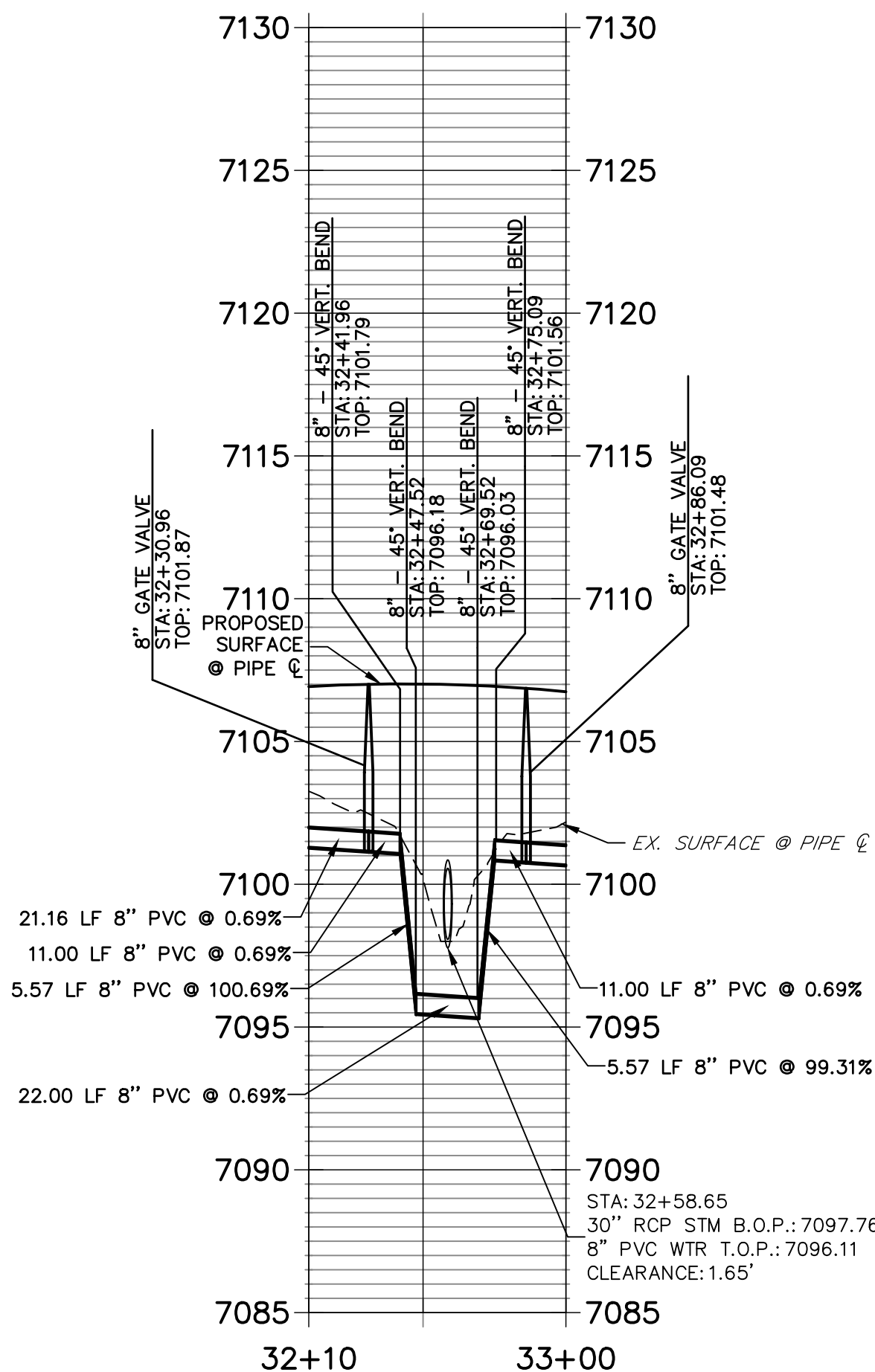
LATIGO TRAILS – FILING NO. 9		SHEET 9 OF 13		JOB NO. 25175.01		WATER DISTRIBUTION PLAN		PREPARED FOR		UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.	
								BRUM, LLC 101 N. CASCADE, SUITE 200 COLORADO SPRINGS, CO 80903 ATTN: BOB IRWIN P~(719)–475–7474			
J-R ENGINEERING  A Westland Company				Central 303-740-3838 • Colorado Springs 719-659-2538 Fort Collins 970-491-9688 • <a href="http://www.jrengineering.com">www.jrengineering.com</a>		BY		DATE		No. REVISION	
H-SCALE		1"=50'		BY		DATE					
V-SCALE		N/A									
DATE		07/06/21									
DESIGNED BY		QNL									
DRAWN BY		QNL									
CHECKED BY											





H-SCALE	1"=50'	NO.	REVISION	BY	DATE
V-SCALE	1"=5'				
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DESIGNED BY	QNL				
DRAWN BY	QNL				
CHECKED BY					

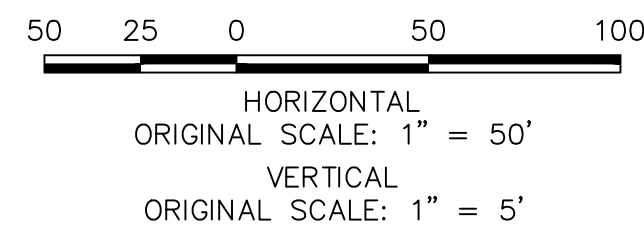
**WP\_04 PROFILE (2)**  
**STA 38+50.00 TO 39+53.27**



- ## WATER PIPE NOTES
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  2. ALL AFRICAN PIPELINE PIPE MUST BE ACCOMPLISHED BY HIGH DEFLECTION COUPLERS.
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  4. ALL HORIZONTAL AND VERTICAL DEFLECTIONS TO BE ACCOMPLISHED WITH HIGH DEFLECTION (+HD) COUPLINGS.
  5. ALL VERTICAL BENDS REQUIRE MECHANICAL JOINT RESTRAINTS (MJR). SEE CSU DETAILS A4-4.



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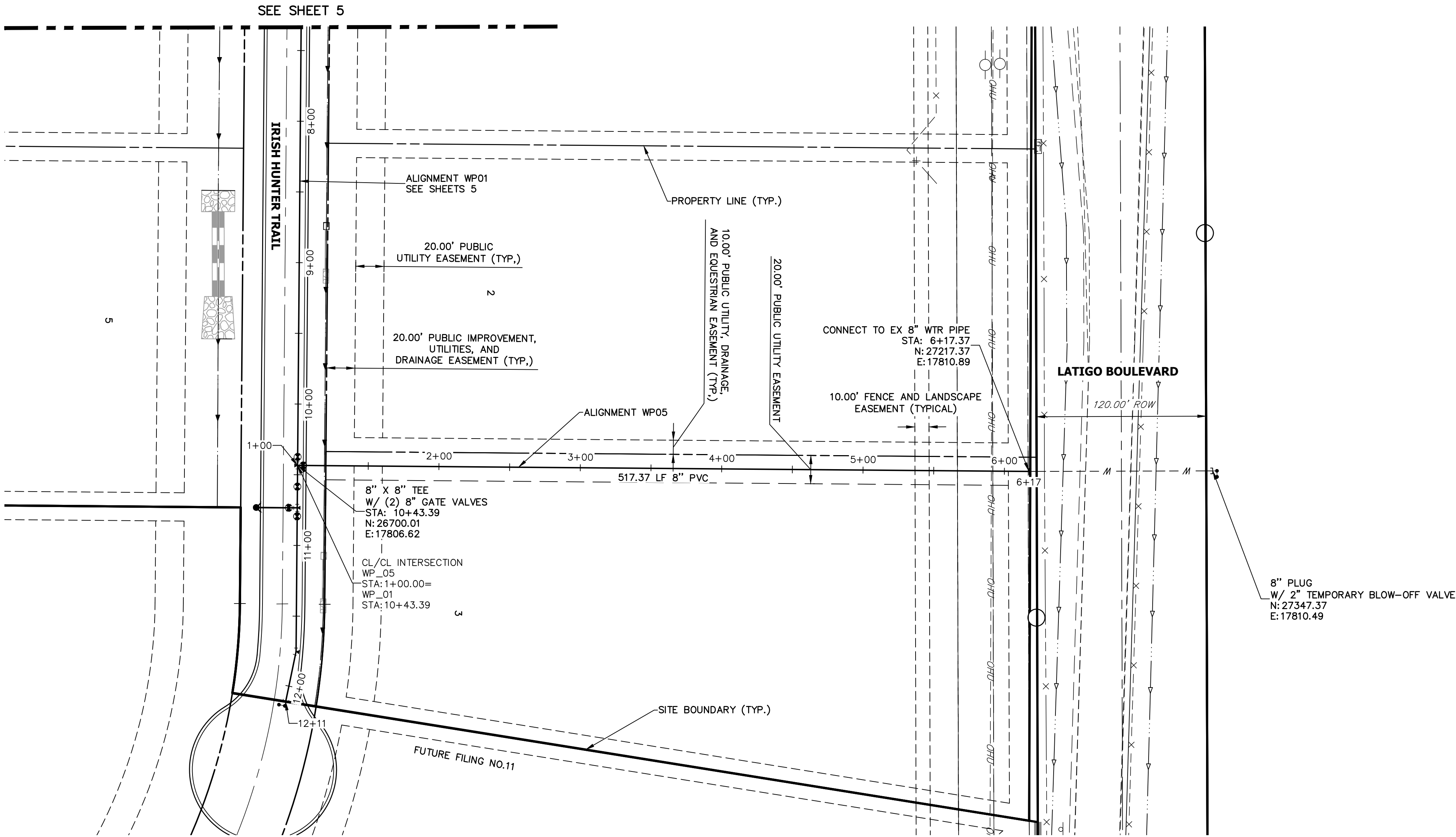


PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF

32314

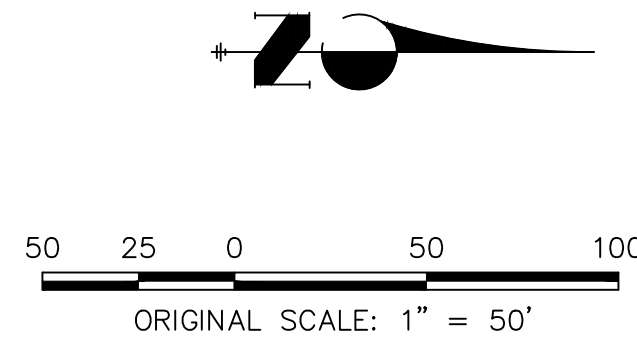
LATIGO TRAILS – FILING NO. 9		WATER DISTRIBUTION PLAN	
SHEET	10	OF	13
JOB NO.	25175.01		



#### WATER PIPE NOTES

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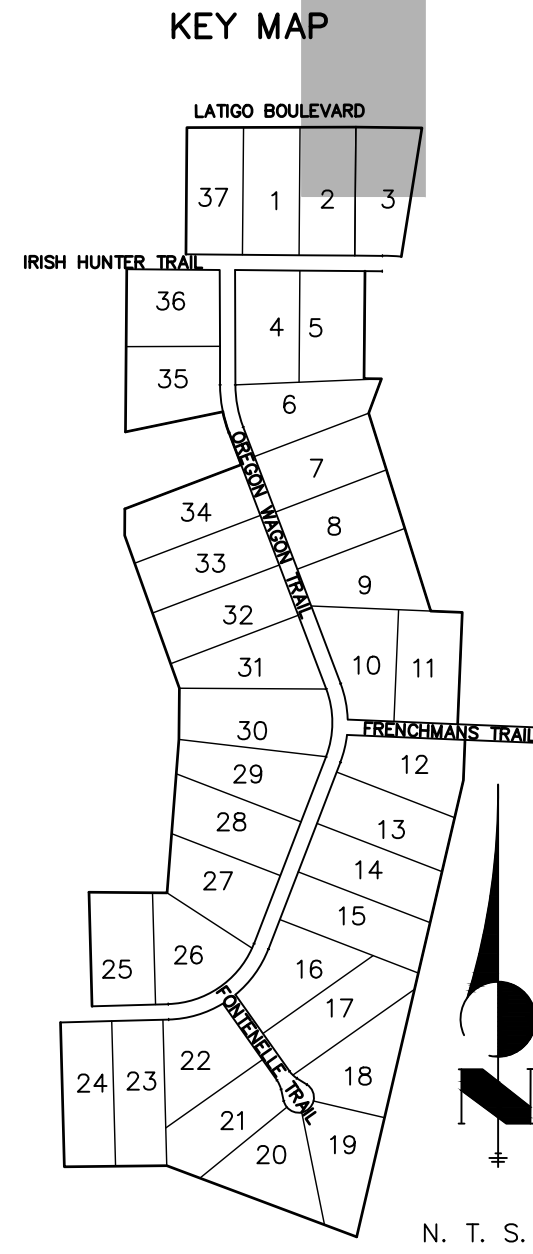
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COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



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Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

PREPARED FOR  
**BRUM, LLC**  
101 N. CASCADE, SUITE 200  
COLORADO SPRINGS, CO 80903  
ATTN: BOB IRWIN  
P~(719)-475-7474

UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
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AGENCIES, JR ENGINEERING  
APPROVES THEIR USE  
FOR THE PROJECTS  
DESIGNATED BY WRITTEN  
AUTHORIZATION.

LATIGO TRAILS - FILING NO.

9

WATER DISTRIBUTION PLAN

SHEET 11 OF 13

JOB NO. 25175.01

BY DATE

No. REVISION

H-SCALE  
V-SCALE  
DATE  
DESIGNED BY  
DRAWN BY  
CHECKED BY

1"=50'  
1"=X'  
07/06/21  
QNL  
QNL



A diagram illustrating the decomposition of a vector  $A$  into its components. A vector  $A$  is shown pointing downwards and to the right. It is decomposed into two perpendicular components:  $A_x$  (horizontal component pointing right) and  $A_y$  (vertical component pointing down). The components are shown as separate vectors originating from the same point as  $A$ .

50 POUNDS PER SQUARE INCH PLUS A SAFETY FACTOR OF 1.5. THE AREA IS ROUNDED UP TO THE NEAREST 0.25 SQUARE FEET.

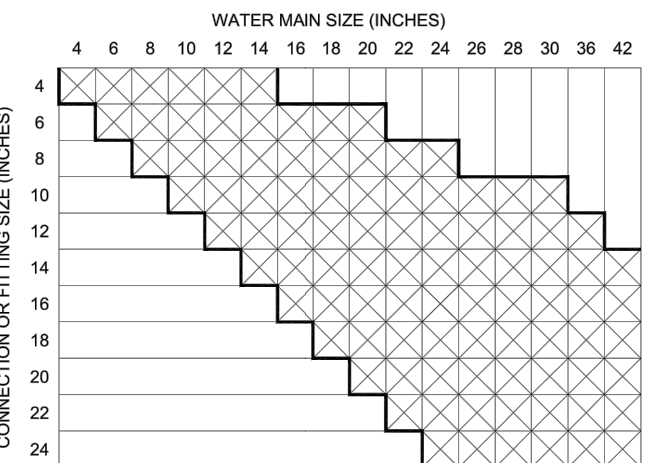
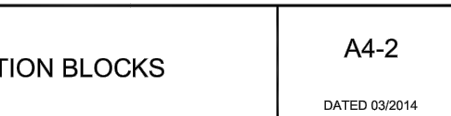
CONDITIONS: IF SITE CONDITIONS VARY FROM THE ASSUMPTIONS OF PIPE - DESIGN AND INSTALLATION AND AWWA M41, THE DESIGN SHALL BE SUBMITTED TO COLORADO SPRINGS UTILITIES FOR REVIEW AND APPROVAL.

THE CONSTRUCTION PLANS FOR ALL CONCRETE THURSTER TRENCHES SHALL BE SUBMITTED TO THE CITY OF COLORADO SPRINGS FOR REVIEW AND APPROVAL.

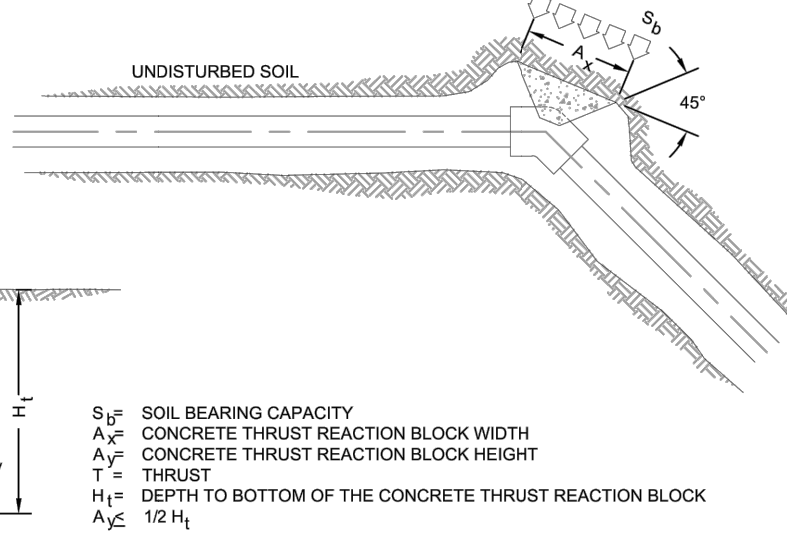
MINIMUM TRENCH DIMENSIONS. THE APPROXIMATE VOLUME OF CONCRETE REQUIRED SHALL BE BASED ON THE FOLLOWING:

1. THE TOTAL DEPTH (H) FROM THE FINISHED GRADE TO THE BOTTOM OF THE TRENCH SHALL BE AS SHOWN ON THE TRENCH DETAIL DRAWING **A-4.3**.

2. THE TRENCH SHALL BE DESIGNED TO WITHSTAND ALL PRESSURES GREATER THAN 250 POUNDS PER SQUARE INCH. THE TRENCH SHALL BE DESIGNED TO WITHSTAND ALL PRESSURES GREATER THAN 16 INCHES OR MAX STATIC PRESSURES LESS THAN 16 INCHES.



$S_D$  BEARING PRESSURE



OR CONNECTIONS OR FITTING SIZE COMBINATIONS NOT SHOWN ABOVE.  
ALL BEAR AGAINST UNDISTURBED SOIL.  
ALL BE INSTALLED WITH A 45° ANGLE FROM THE FITTING TO THE UNDISTURBED SOIL AS  
AND CONCRETE THRUST REACTION BLOCK DIMENSIONS AND VOLUMES.  
APPED IN POLYETHYLENE TUBING WHERE ADJACENT TO CONCRETE.

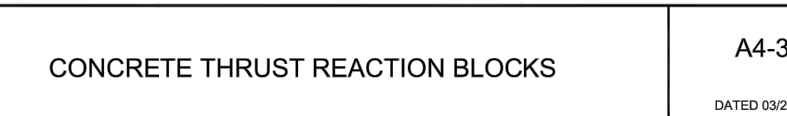



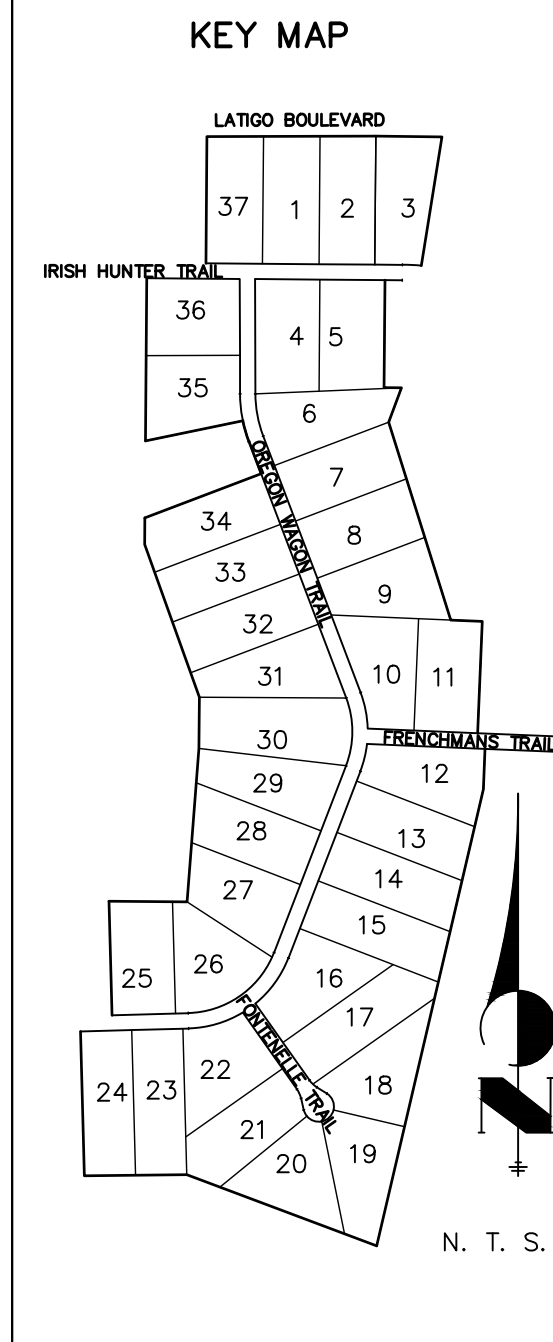
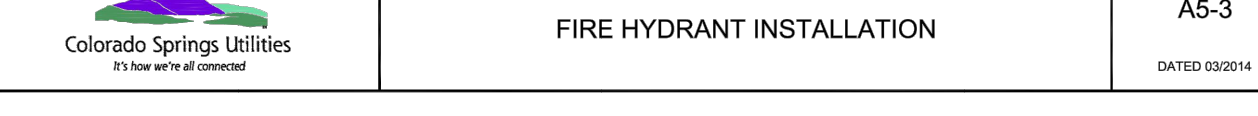
Diagram illustrating the components of a bell harness restraint assembly:

- UNRESTRAINED BELL
- BELL HARNESS RESTRAINTS (TYP.)
- MECHANICAL JOINT RING
- Dimension L indicates the length of the assembly.

 <p>Colorado Springs Utilities It's how we're all connected</p>	<p>RESTRAINED PIPE LENGTH (FEET) W/MECHANICAL JOINT RESTRAINTS</p>	<p>A4-4 DATED 03/2014</p>
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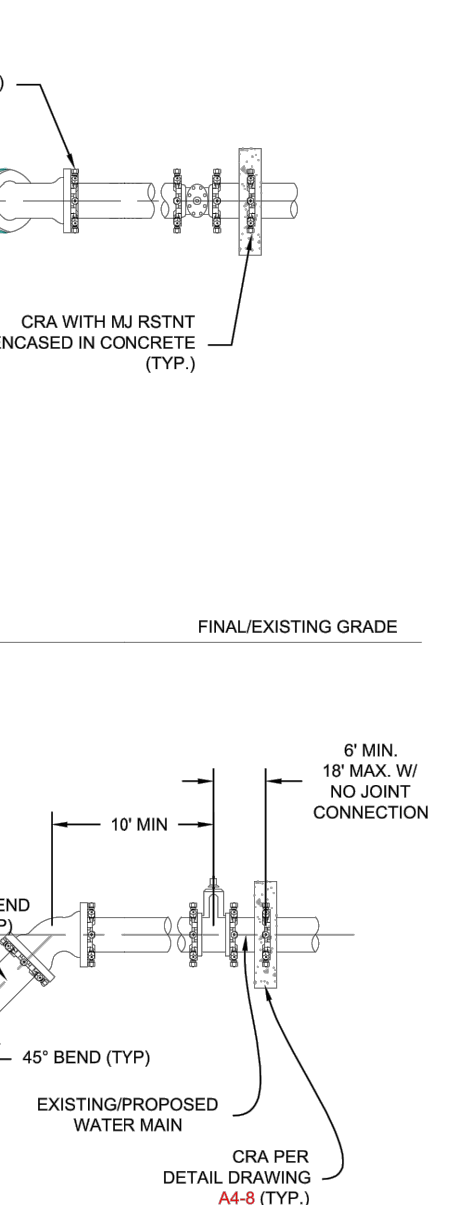
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BRJM, LLC  
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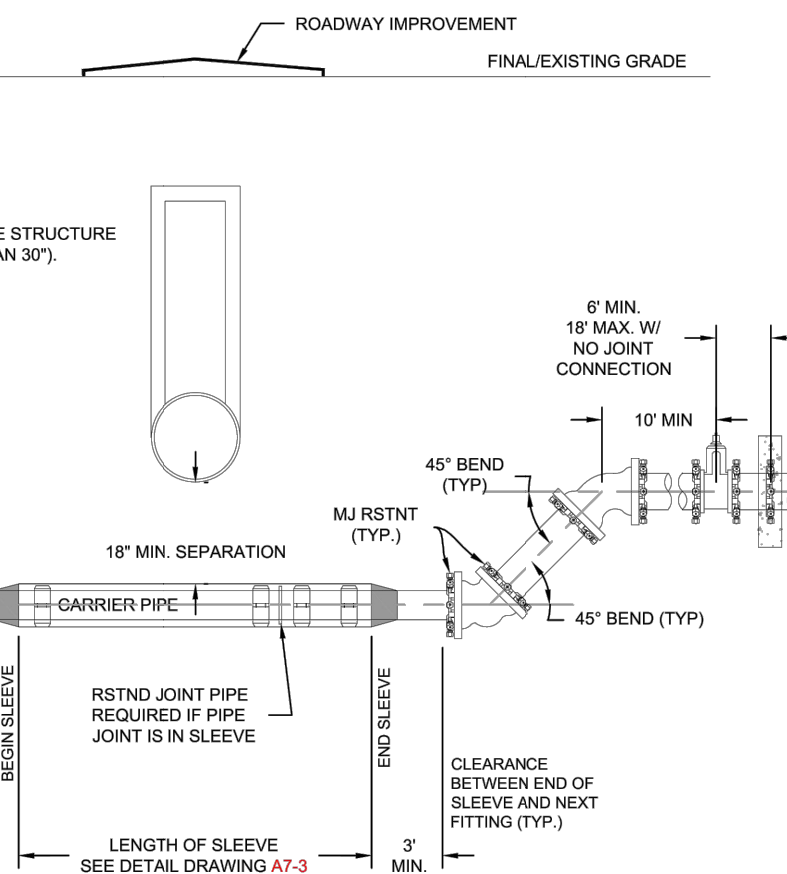
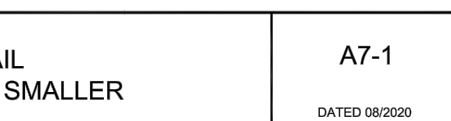


6.1. R'S DIRECTION.

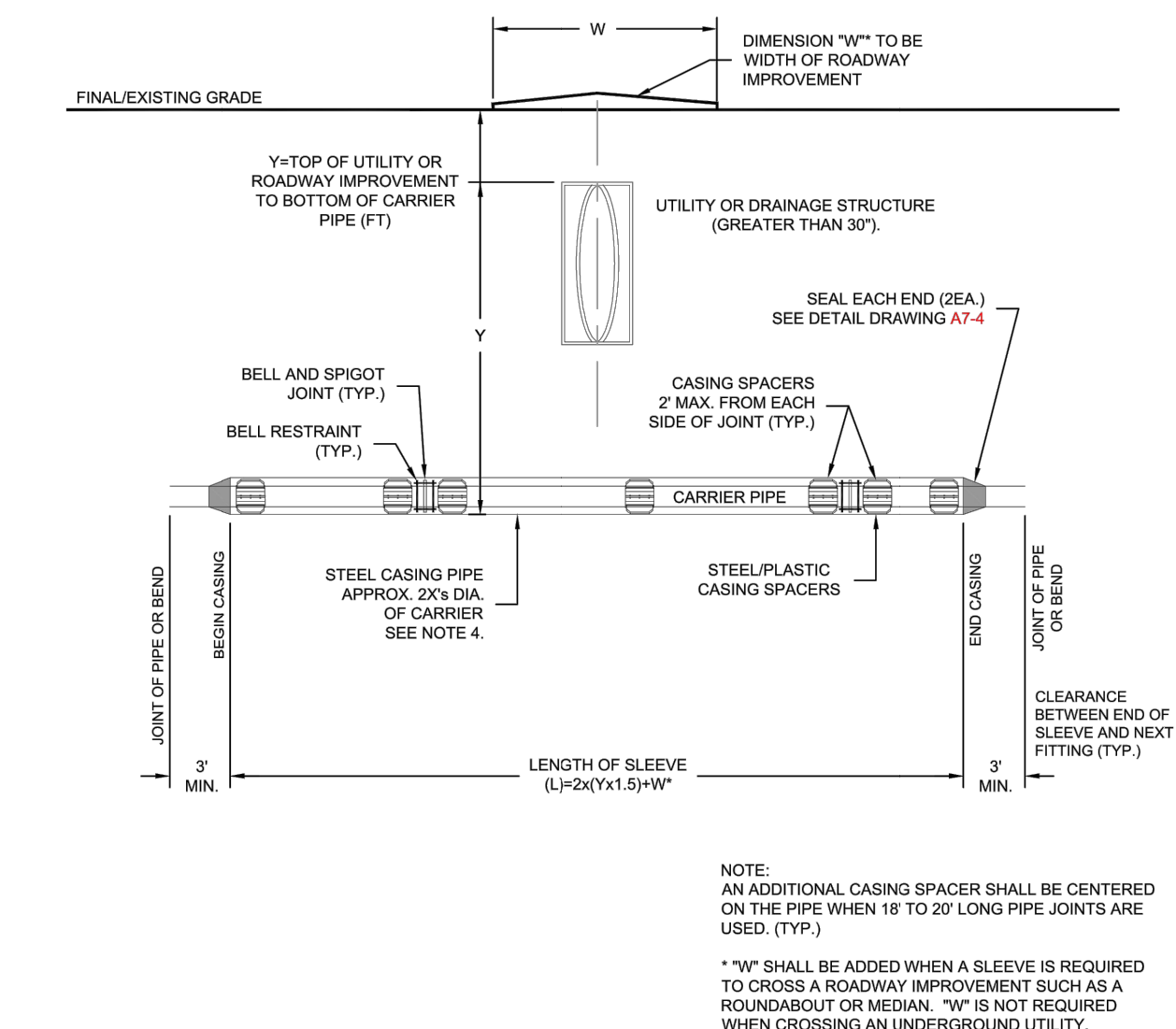
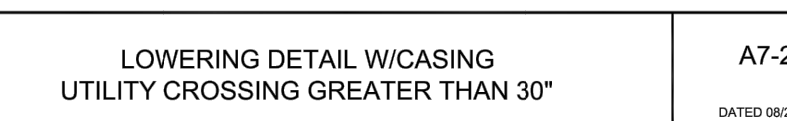
MINIMUM DEGREE OF BEND ALLOWED IS 45 DEGREES.


FOR INFRASTRUCTURE, A MINIMUM OF 9 FEET

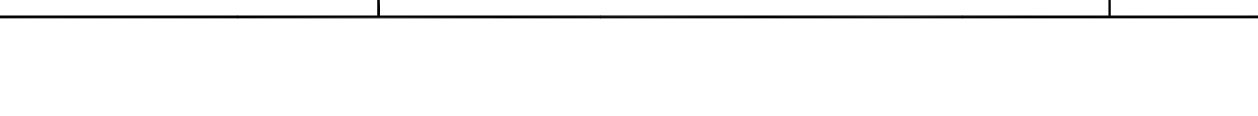
THE REQUIREMENTS FOR SECONDARY



E CATHODICALLY PROTECTED PER SECTION 2.6.1.  
ACCORDANCE WITH CHAPTER 5,  
AND COLORADO SPRINGS UTILITIES INSPECTOR'S DIRECTION.  
OWERING.  
OWERING.  
ANY DEGREE OF BENDS, HOWEVER, THE MAXIMUM DEGREE OF BEND ALLOWED IS 45 DEGREE  
SEWER, WASTEWATER OR NON-POTABLE WATER INFRASTRUCTURE, A MINIMUM OF 9 FEET  
CROSSING AND THE FIRST JOINT, THIS MEETS THE REQUIREMENTS FOR SECONDARY  
12.



 <p>Colorado Springs Utilities It's how we're all connected</p>	<p>TYPICAL STEEL CASING INSTALLATION</p>	<p>A7-3 DATED 06/2015</p>
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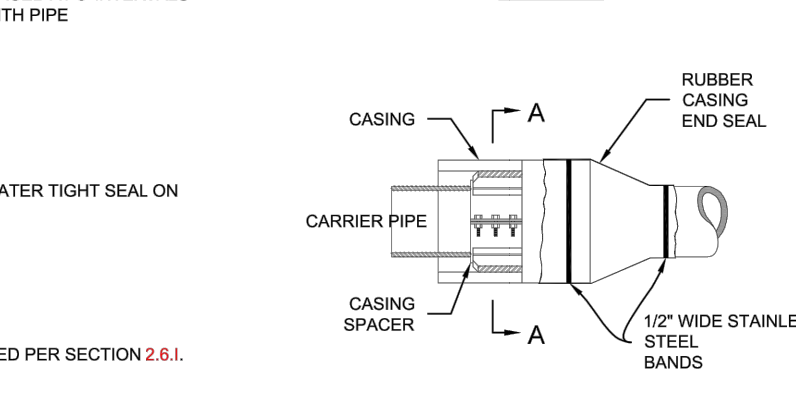
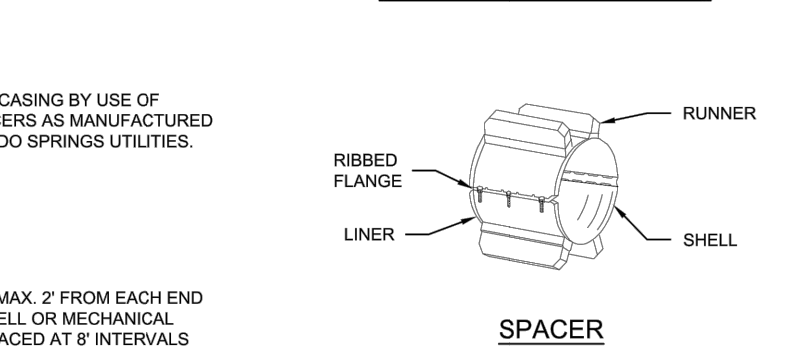
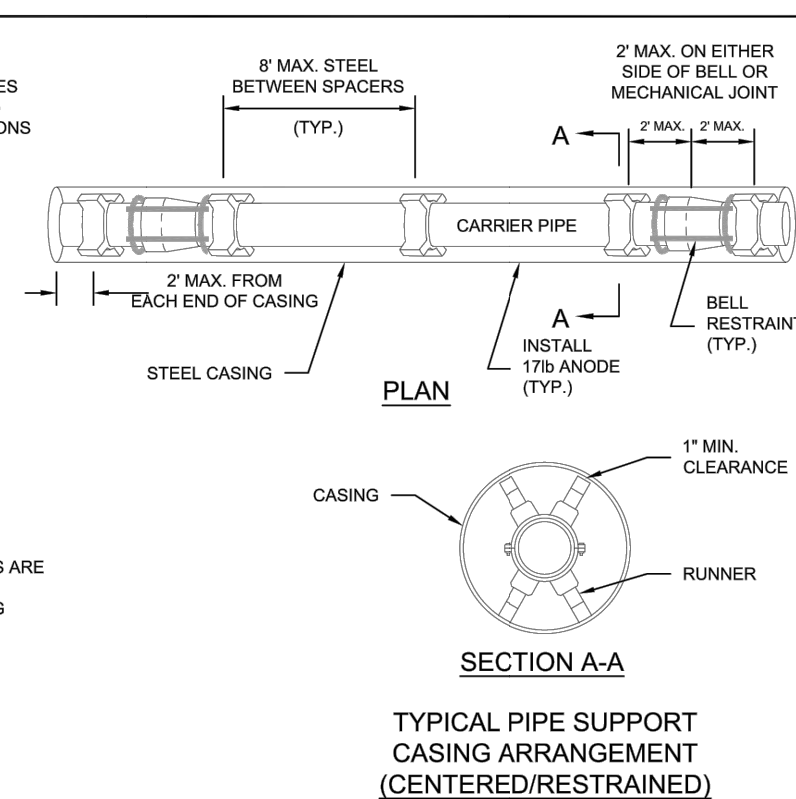
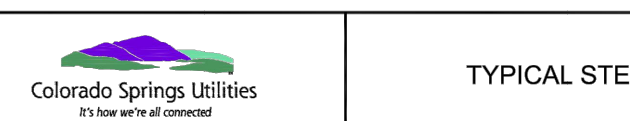
CASING PIPE MINIMUM SIZES AND THICKNESSES  
BASED ON E80 LOADING. VARIANCES TO THESE  
MINIMUMS MAY BE ALLOWED WITH SUPPORTING  
CALCULATIONS FROM THE DESIGN ENGINEER

1. CARRIER PIPE SHALL BE CENTERED WITHIN CASING BY USE OF APPROVED STAINLESS STEEL CASING SPACERS AS MANUFACTURED BY APPROVED MANUFACTURER BY COLORADO SPRINGS UTILITIES. (REFERENCE CHAPTER 2)

1. GENERAL - ONE SPACER SHALL BE PLACED MAX. 2' FROM EACH END OF CASING AND ON EITHER SIDE OF EACH BELL OR MECHANICAL JOINT. SUBSEQUENT SPACERS SHALL BE PLACED AT 8' INTERVALS WITHIN THE CASING, OR IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS.

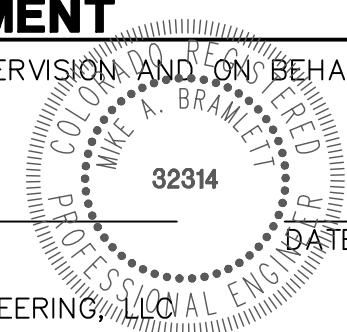
1. END SEALS SHALL BE USED TO ENSURE A WATER TIGHT SEAL ON EITHER END OF THE CASING.

1. CASING SHALL BE CATHODICALLY PROTECTED PER SECTION 2.6.I.



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ENGINEERING

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COLORADO P.E. 32314  
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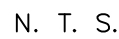
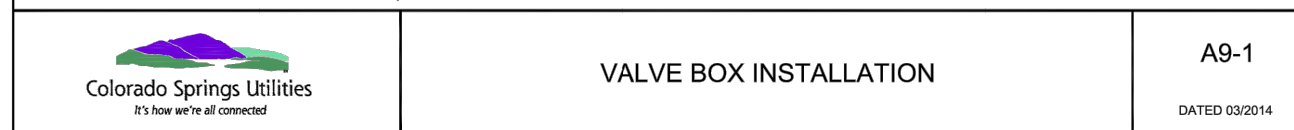
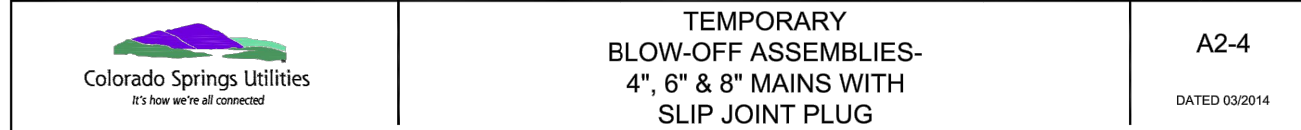


LATIGO TRAILS - FILING NO.

SHEET 12 OF 13

JOB NO. 25175.01





LATIGO TRAILS – FILING NO. 9	
DETAILS	
SHEET 13	OF 13
JOB NO.	25175.01

FOR AND ON BEHALF OF JR ENGINEERING, LLC

