

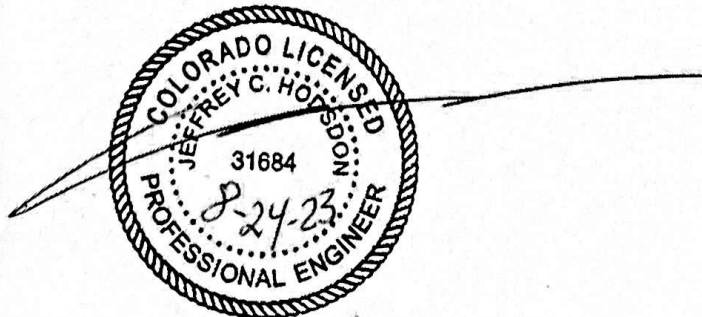


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**Sterling Recycling Facility  
Transportation Memorandum  
PCD File No.: PPR2241  
(LSC #S224330)  
August 24, 2023**

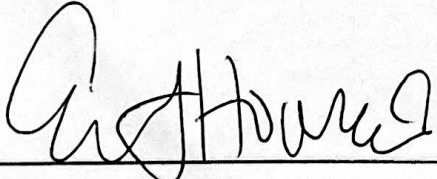
**Traffic Engineer's Statement**

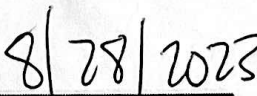
This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



**Developer's Statement**

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

  
\_\_\_\_\_

  
\_\_\_\_\_  
Date

# Colorado Concrete Crushing Transportation Memorandum

Prepared for:

Colorado Concrete Crushing, LLC  
20 Boulder Crescent, Suite 100  
Colorado Springs, CO 80903

Contact: Mr. Eric S. Howard, Manager

AUGUST 24, 2023

---

LSC Transportation Consultants

Prepared by: Kirstin D. Ferrin, P.E.

Reviewed by: Jeffrey C. Hodsdon, P.E.

PCD FILE NO.: PPR2241

LSC #S224330



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August 24, 2023

Mr. Eric S. Howard, Manager  
Colorado Concrete Crushing, LLC  
20 Boulder Crescent, Suite 100  
Colorado Springs, CO 80903

RE: Sterling Recycling Facility  
Transportation Memorandum  
El Paso County, Colorado  
PCD FILE NO.: PPR2241  
LSC #S224330

Dear Mr. Howard:

LSC Transportation Consultants, Inc. has prepared this updated transportation memorandum for the asphalt and concrete recycling operation currently located east of Vollmer Road and south of Marksheffel Road in El Paso County, Colorado. The site location is shown in Figure 1.

## REPORT CONTENTS

The preparation of this report included the following:

- A summary of the existing land use and access;
- The existing roadway and traffic conditions in the site's vicinity, including the roadway widths, surface conditions, lane geometries, traffic controls, and posted speed limits; and in-progress changes to the existing conditions, based on the design plans and construction of Vollmer Road improvements, Marksheffel Road and Sterling Ranch Road, as shown on the construction plans by Sterling Ranch;
- Estimates of projected short-term traffic volumes; the projected average weekday and peak-hour vehicle trips generated by the concrete recycling operation during the design hour;
- The assignment of the estimated design-hour site-generated traffic volumes at the intersection of Marksheffel Road/Sterling Ranch Road;
- The projected short-term total design-hour traffic volumes;
- The projected levels of service at the intersection of Marksheffel Road/Sterling Ranch Road/proposed site-access intersection; and
- Recommendations for auxiliary turn lanes at the intersection of Marksheffel Road/Sterling Ranch Road.

## **LAND USE AND ACCESS**

### **Land Use**

The 32.4263-acre parcel (EPC Parcel No. 5300000743) is currently being used for an asphalt and concrete recycling operation. Operating hours are Monday through Friday from 7:00 a.m. to 5:30 p.m. and one Saturday per month from 7:00 a.m. to noon. The operation currently has four employees but that may increase to up to six in the future.

Tandem trucks and semi-trucks that are owned by third parties transport materials on and off the site throughout the operating hours. No trucks are stored on-site overnight, so each truck load results in one entering truck trip and one exiting truck trip.

LSC was provided with information on the truck operations at the current facility from March 1, 2022, to December 31, 2022. The number of truck loads per day varies throughout the year based on construction activity in the Colorado Springs metropolitan area with the heaviest activity occurring from June to September. The applicant has noted a recent slowdown in demand for recycled materials product due to rising interest rates and reduced housing starts. The applicant anticipates that the summer 2022 traffic likely represents peak demand and resulting production with low probability/potential for future increases in production and associated truck traffic in the foreseeable future.

The maximum number of truck loads on a single day during that time period was 135 (127 tandem trucks and seven semi-trucks). The 85<sup>th</sup>-percentile weekday (Monday through Friday) number of truck loads was 61 loads per day (47 tandem trucks and 15 semi-trucks).

### **Access**

The site is located just north of the Pioneer Landscape Center. The recycling operation currently shares the existing Pioneer access to Vollmer Road located about 905 feet southwest of the future Marksheffel alignment in the jurisdiction of the City of Colorado Springs. Access for the Sterling Recycling Facility is planned to be moved to Marksheffel Road aligning with Sterling Ranch Road. The street improvement plan that shows the proposed access have been attached.

In the long-term, this site is planned to be incorporated into the Rhetoric site. See [PCD File Number P2216](#) for details.

## **EXISTING ROAD AND TRAFFIC CONDITIONS**

The adjacent streets are shown in Figure 1 and are described below. Copies of the *2016 El Paso County Major Transportation Corridors Plan (MTCP)*, *2040 Roadway Plan*, and *2016 MTCP 2060 Corridor Preservation Plan* with the site location identified on them have been attached to this report.

**Marksheffel Road** is a Principal Arterial extending north from the City of Fountain to about three quarters of a mile north of Woodmen Road. Marksheffel Road is planned ultimately to be widened to six lanes and extended north and west from Woodmen Road to connect to Research Parkway at Black Forest Road. Marksheffel Road is shown as a four-lane Principal Arterial adjacent to the site on the El Paso County *MTCP*. The City of Colorado Springs intends to take ownership and maintenance of Marksheffel Road when it is constructed from Vollmer to the east and south to where it will connect to the segment constructed north of Woodmen Road in the City.

The section of Marksheffel Road adjacent to Sterling Ranch (and this site) is planned to be constructed on 107 feet of right-of-way to the City's required cross section(s) and criteria. The section of Marksheffel Road between Sterling Ranch Road and Vollmer Road was recently finished and the section of Marksheffel Road southeast of Sterling Ranch Road (to connect to the segment recently constructed) will be completed in 2024 and will open the connection to Woodmen Road. Marksheffel will be constructed as a four-lane roadway to the previously-agreed-upon cross section.

**Vollmer Road** is currently a five-lane urban street within the City of Colorado Springs limits between Black Forest Road and Cowpoke Road; and a two-lane, rural, paved roadway north of Cowpoke Road extending to north of Hodgen Road. In the southbound direction, Vollmer Road has a posted speed limit of 45 mph. South of the existing site access, Vollmer Road is within the City limits and has a 40-mph posted speed limit. The *2040 El Paso County Major Transportation Corridors Plan (MTCP)* and the Sterling Ranch master traffic study show Vollmer Road as a four-lane Urban Minor Arterial just north of the existing site access. South of the existing site access, Vollmer is classified as a Minor Arterial (including four through lanes, a center turn lane, bicycle lanes in each direction, and a detached sidewalk). The Sterling Ranch development is currently working on improvements to Vollmer Road north of the existing site access. The section south of the existing site access to Dry Needle Place is a three-lane cross section (two southbound travel lanes and one northbound travel lane) with a striped bicycle lane in the southbound direction. South of Dry Needle Place, the cross section has been completed to the full City cross section.

## **TRIP GENERATION**

LSC conducted the traffic counts at the existing access to Vollmer Road that Colorado Concrete Crushing shares with Pioneer Sand on May 25, 2022. As the count data did not identify the portion related to the site operations, LSC has estimated the number of trips based on the number of employees and operation data provided by Colorado Concrete Crushing. Table 1 shows the trip-generation estimates. The estimated trips on May 24, 2022 due to the employees was based on the number of existing employees and the nationally published trip-generation rates for ITE Land Use 110 – Light Industrial from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). The number of truck trips during the peak hours was estimated by LSC by assuming that trucks arrive and depart from the site evenly throughout the operating hours.

As shown in Appendix Table 1, the truck activity on the site varies throughout the year with peak activity occurring from July to September. As traffic counts were conducted in May, LSC has selected a “design” day to use for this analysis. The “design” day selected was the 85<sup>th</sup> percentile from the weekday truck-load data for 2022 provided by Colorado Concrete Crushing. The “design” day also assumes two additional employees in the future. Based on the existing economic conditions, no increases in truck traffic from what was recorded in 2022 are anticipated in the short-term/intermediate-term future. Table 1 shows the projected “design day” traffic volumes and the difference between the May 24, 2022 traffic volumes and the “design day” volumes.

### **TRIP DISTRIBUTION AND ASSIGNMENT**

The directional distribution of the site-generated traffic volumes on the street and roadway system serving the site is one of the most important factors in determining the site’s traffic impacts. Figure 2 shows the estimated directional distribution of the site-generated traffic, as well as the “design day” site-generated traffic volume estimates at the intersection of Marksheffel/Sterling Ranch.

### **BACKGROUND TRAFFIC**

Background traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development’s trip generation of site-generated traffic volumes. Background traffic includes the through traffic and the traffic generated by nearby developments but assumes zero traffic generated by the site.

Figure 3 shows the projected short-term background traffic volumes. The background traffic volumes are estimates by LSC, based on work completed by LSC in the area including Sterling Ranch East Filings 1 and 2, FourSquare at Sterling Ranch, Sterling Ranch Filing 5, and Sterling Ranch East Filing 5. The short-term background traffic volumes assume the section of Marksheffel Road between Sterling Ranch Road and the existing terminus north of Woodmen Road has been constructed.

In the long-term, this site is planned to be incorporated into the Rhetoric site. See [PCD File Number P2216](#) for details.

### **TOTAL TRAFFIC**

Figure 4 shows the sum of the short-term background traffic volumes from Figure 4 plus the site-generated traffic volumes from Figure 3.

**LEVEL OF SERVICE ANALYSIS**

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from “A” to “F.” LOS A represents control delay of less than 10 seconds for unsignalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections. Table 2 shows the level of service delay ranges.

**Table 2: Intersection Levels of Service Delay Ranges**

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) <sup>(1)</sup>
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

The intersection of Marksheffel/Sterling Ranch Road has been analyzed to determine the projected short-term total intersection levels of service based on the unsignalized intersection analysis procedures from the *Highway Capacity Manual 6th Edition*. The intersection was also analyzed assuming signal control using Synchro.

Figure 4 shows the level of service analysis results. The level of service reports are attached. The southbound left-turn movement at this intersection is projected to operate at LOS F during the afternoon peak hour, based on projected short-term **background** traffic volumes. This intersection is planned as a future signalized intersection. However, traffic-signal warrant(s) may not be met in the short-term. It is not uncommon for the minor street approach/movements at a stop-sign-controlled intersection to operate at LOS E or F as the traffic volumes approach the levels needed to meet vehicular-volume traffic-signal warrants. The addition of the site-generated traffic is projected to increase the delay for the southbound left-turn movement from 62.3 seconds per vehicle to 88.3 seconds per vehicle. If this intersection is converted to traffic-signal control in the short-term, all movements are projected to operate at LOS D or better.



## **SIGNAL WARRANT THRESHOLD ANALYSIS – AM AND PM PEAK HOURS**

The intersection of Marksheffel/Sterling Ranch was analyzed to determine if the thresholds for Four-Hour and/or Eight-Hour Vehicular-Volume Traffic-Signal Warrant thresholds would be reached or exceeded, based on the projected short-term traffic volumes.

The off-peak-hour volumes are estimates by LSC, based on the peak-hour traffic volumes, 72-hour machine counts conducted by LSC on Vollmer Road in November 2020, and vehicle time-of-day distribution data for single-family homes published by the Institute of Transportation Engineers.

Table 3 shows the results of the analysis for the intersection of Marksheffel/Sterling Ranch. As shown in Table 3, in the short-term, only four of the hours analyzed are projected to meet the thresholds for an Eight-Hour Vehicular-Volume Traffic-Signal and only three of the hours analyzed are projected to meet the thresholds for a Four-Hour Vehicular-Volume Traffic-Signal Warrant. This analysis indicates that traffic-signal warrant(s) will likely **not** be met at the intersection of Marksheffel/Sterling Ranch in the short-term.

## **FINDINGS & RECOMMENDATIONS**

- Please refer to the trip generation section of this report for details regarding the estimated site trip-generation estimate used in the access design volumes. The trip-generation estimate has been based on actual daily load data for the concrete recycling operation.
- Colorado Concrete Crushing is currently operating on the site (and currently using the Vollmer access). Truck activity on the site varies based on daily demand and overall construction activity in the Colorado Springs metropolitan area. Based on current economic conditions it is not anticipated that activity will increase significantly from the activity levels in 2022 in the foreseeable future. In the long-term, this site is planned to be incorporated into the Rhetoric site. See [PCD File Number P2216](#) for details.
- A northwest-bound left-turn lane on Marksheffel Road approaching Sterling Ranch Road should be included with the design plans for Marksheffel Road currently under review by the City of Colorado Springs. This lane should be designed per the requirements for the Rhetoric site. See [PCD File Number P2216](#) for details.

\* \* \* \* \*

Please contact me if you have any questions regarding this report.

Respectfully submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By Jeffrey C. Hodsdon, P.E.  
Principal

JCH/KDF:jas

Enclosures: Table 1 and 3  
Figures 1-4  
Traffic Count Reports  
Level of Service Reports  
Appendix Table 1  
Sterling Recycling Facility Street Improvement Plan  
Vollmer Road Approved CD

# Tables 1 and 3

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**Table 1  
Trip Generation Estimate  
Colorado Concrete Crushing**

Vehicle Type	Number of Employees or Truck Loads	Trip Generation Rates <sup>(1)</sup>							Total Trips Generated						
		Average Weekday Traffic			Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic			Morning Peak Hour		Afternoon Peak Hour	
		In	Out	Total	In	Out	In	Out	In	Out	Total	In	Out	In	Out
<b>Estimated site-generated trips on the day traffic counts were conducted at the existing site access (May 24, 2022)</b>															
Passenger Car (employee)	4	1.55	1.55	3.10	0.44	0.09	0.11	0.38	6	6	12	2	0	0	2
Tandem Truck	18	1	1	2	0.10	0.10	0.10	0.10	18	18	36	2	2	2	2
Semi-Truck	6	1	1	2	0.10	0.10	0.10	0.10	6	6	12	1	1	1	1
							<b>Total</b>		<b>30</b>	<b>30</b>	<b>60</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>5</b>
<b>Estimated site-generated trips on the "design" day (Weekday 85th Percentile)</b>															
Passenger Car (employee)	6	1.55	1.55	3.10	0.44	0.09	0.11	0.38	9	9	18	3	1	1	2
Tandem Truck	47	1	1	2	0.10	0.10	0.10	0.10	47	47	94	5	5	5	5
Semi-Truck	15	1	1	2	0.10	0.10	0.10	0.10	15	15	30	2	2	2	2
							<b>Total</b>		<b>71</b>	<b>71</b>	<b>142</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>9</b>
<b>Difference between the "counted" day and the "design" day</b>									<b>41</b>	<b>41</b>	<b>82</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>

Notes:

(1) Employee trip generation rates were based on the rates for ITE Land Use 110 - General Light Industrial from "*Trip Generation, 11th Edition, 2021*" by the Institute of Transportation Engineers (ITE)  
Truck trip generation rates assume the trucks arrive and exit evenly throughout the operating hours (7:00 am to 5:30 pm)

**Table 3  
Traffic Signal Warrant Analysis  
Marksheffel Road/Sterling Ranch Road**

**Warrant Analysis<sup>(1)</sup>**

Hour	Traffic Volumes <sup>(2)</sup>		Warrant Thresholds				Warrant 1: Eight Hour Vehicular Volume Evaluation				Warrant 2: Four Hour Vehicular Volume Evaluation			
	Major Marksheffel <sup>(3)</sup>	Minor SB Sterling Ranch <sup>(4)</sup>	Minor SB Sterling Ranch <sup>(4)</sup>	Condition A		Condition B		Warrant Threshold Met?		Short-Term Background		Warrant Threshold Minimum	Warrant Threshold Met? SB	Warrant Threshold Met? NB
				Major	Minor	Major	Minor	Condition A	Condition B	Condition A	Condition B			
					Condition A	Condition B	Condition A	Condition B	Condition A	Condition B	Condition A	Condition B	Condition A	Condition B

**Short-Term Background Traffic**

12-1 AM	35	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
1-2 AM	16	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
2-3 AM	13	0	0	600	150	900	75	No	No	No	No	Low Volume	No	No
3-4 AM	16	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
4-5 AM	24	34	0	600	150	900	75	No	No	No	No	Low Volume	No	No
5-6 AM	57	83	0	600	150	900	75	No	No	No	No	Low Volume	No	No
6-7 AM	175	247	0	600	150	900	75	No	No	No	No	Low Volume	No	No
7-8 AM	393	427	0	600	150	900	75	No	No	No	No	Low Volume	No	No
8-9 AM	443	360	0	600	150	900	75	No	No	No	No	369	No	No
9-10 AM	384	226	0	600	150	900	75	No	No	No	No	Low Volume	No	No
10-11 AM	463	226	0	600	150	900	75	No	No	No	No	359	No	No
11-12 PM	548	214	0	600	150	900	75	No	No	No	No	316	No	No
12-1 PM	567	212	0	600	150	900	75	No	No	No	No	307	No	No
1-2 PM	589	224	0	600	150	900	75	No	No	No	No	296	No	No
2-3 PM	683	235	0	600	150	900	75	Yes	No	No	No	257	No	No
3-4 PM	781	227	0	600	150	900	75	Yes	No	No	No	210	Yes	No
4-5 PM	897	284	0	600	150	900	75	Yes	No	No	No	176	Yes	No
5-6 PM	827	280	0	600	150	900	75	Yes	No	No	No	193	Yes	No
6-7 PM	644	224	0	600	150	900	75	Yes	No	No	No	272	No	No
7-8 PM	446	163	0	600	150	900	75	No	No	No	No	367	No	No
8-9 PM	427	117	0	600	150	900	75	No	No	No	No	377	No	No
9-10 PM	298	91	0	600	150	900	75	No	No	No	No	Low Volume	No	No
10-11 PM	149	41	0	600	150	900	75	No	No	No	No	Low Volume	No	No
11-12 AM	86	27	0	600	150	900	75	No	No	No	No	Low Volume	No	No

**Numbers of Hours the Warrant Thresholds Are Met**

5	0	0	0		3	0	
<b>Warrant Met?</b>				No	<b>Warrant Met?</b>		No

**Short-Term Total Traffic**

12-1 AM	35	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
1-2 AM	16	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
2-3 AM	13	0	0	600	150	900	75	No	No	No	No	Low Volume	No	No
3-4 AM	16	8	0	600	150	900	75	No	No	No	No	Low Volume	No	No
4-5 AM	25	34	0	600	150	900	75	No	No	No	No	Low Volume	No	No
5-6 AM	59	83	0	600	150	900	75	No	No	No	No	Low Volume	No	No
6-7 AM	180	247	0	600	150	900	75	No	No	No	No	Low Volume	No	No
7-8 AM	403	427	2	600	150	900	75	No	No	No	No	Low Volume	No	No
8-9 AM	450	360	1	600	150	900	75	No	No	No	No	365	No	No
9-10 AM	391	226	1	600	150	900	75	No	No	No	No	Low Volume	No	No
10-11 AM	470	226	1	600	150	900	75	No	No	No	No	355	No	No
11-12 PM	555	214	1	600	150	900	75	No	No	No	No	313	No	No
12-1 PM	574	212	1	600	150	900	75	No	No	No	No	303	No	No
1-2 PM	596	224	1	600	150	900	75	No	No	No	No	292	No	No
2-3 PM	690	235	1	600	150	900	75	Yes	No	No	No	254	No	No
3-4 PM	788	227	1	600	150	900	75	Yes	No	No	No	206	Yes	No
4-5 PM	904	284	1	600	150	900	75	Yes	Yes	No	No	174	Yes	No
5-6 PM	835	280	2	600	150	900	75	Yes	No	No	No	191	Yes	No
6-7 PM	649	224	0	600	150	900	75	Yes	No	No	No	270	No	No
7-8 PM	449	163	0	600	150	900	75	No	No	No	No	366	No	No
8-9 PM	429	117	0	600	150	900	75	No	No	No	No	376	No	No
9-10 PM	300	91	0	600	150	900	75	No	No	No	No	Low Volume	No	No
10-11 PM	150	41	0	600	150	900	75	No	No	No	No	Low Volume	No	No
11-12 AM	87	27	0	600	150	900	75	No	No	No	No	Low Volume	No	No

**Numbers of Hours the Warrant Thresholds Are Met**

5	1	0	0		3	0	
<b>Warrant Met?</b>				No	<b>Warrant Met?</b>		No

**Notes:**

- (1) Thresholds are based on 2 or more lanes on the major approach and 1 lane on the minor approach (Warrant evaluation assuming the southbound left turn only for the minor street)
- (2) Off peak hour traffic volumes are based on the projected peak hour traffic volumes, 72-hour machine counts conducted on Vollmer Road in November 2020 and vehicle time-of-day distribution data published by the Institute of Transportation Engineers
- (3) The major street traffic includes all movements (left, through, and right)
- (4) The minor street traffic includes only the left turns from the minor street

Source: LSC Transportation Consultants, Inc.

# Figures 1-4

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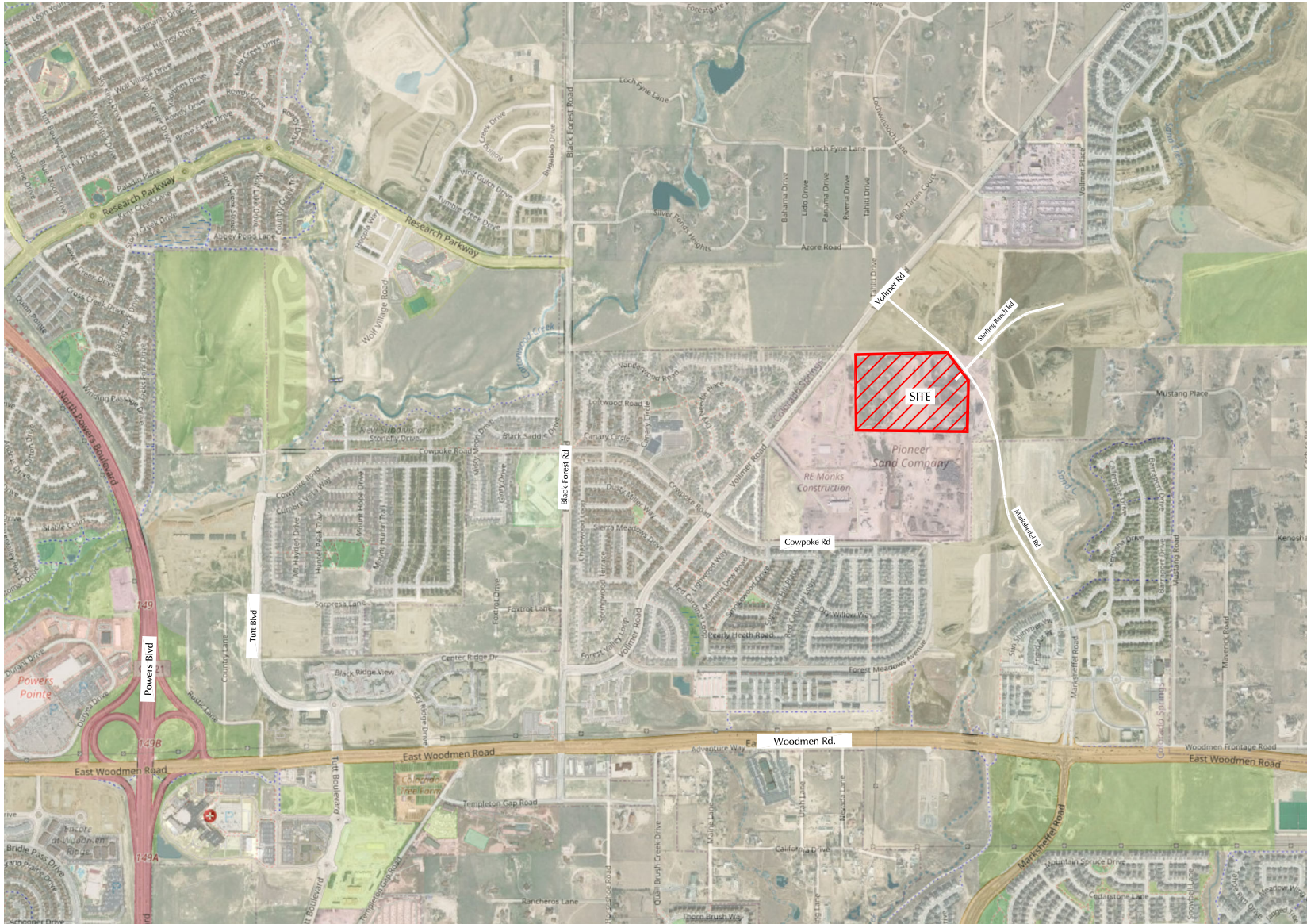
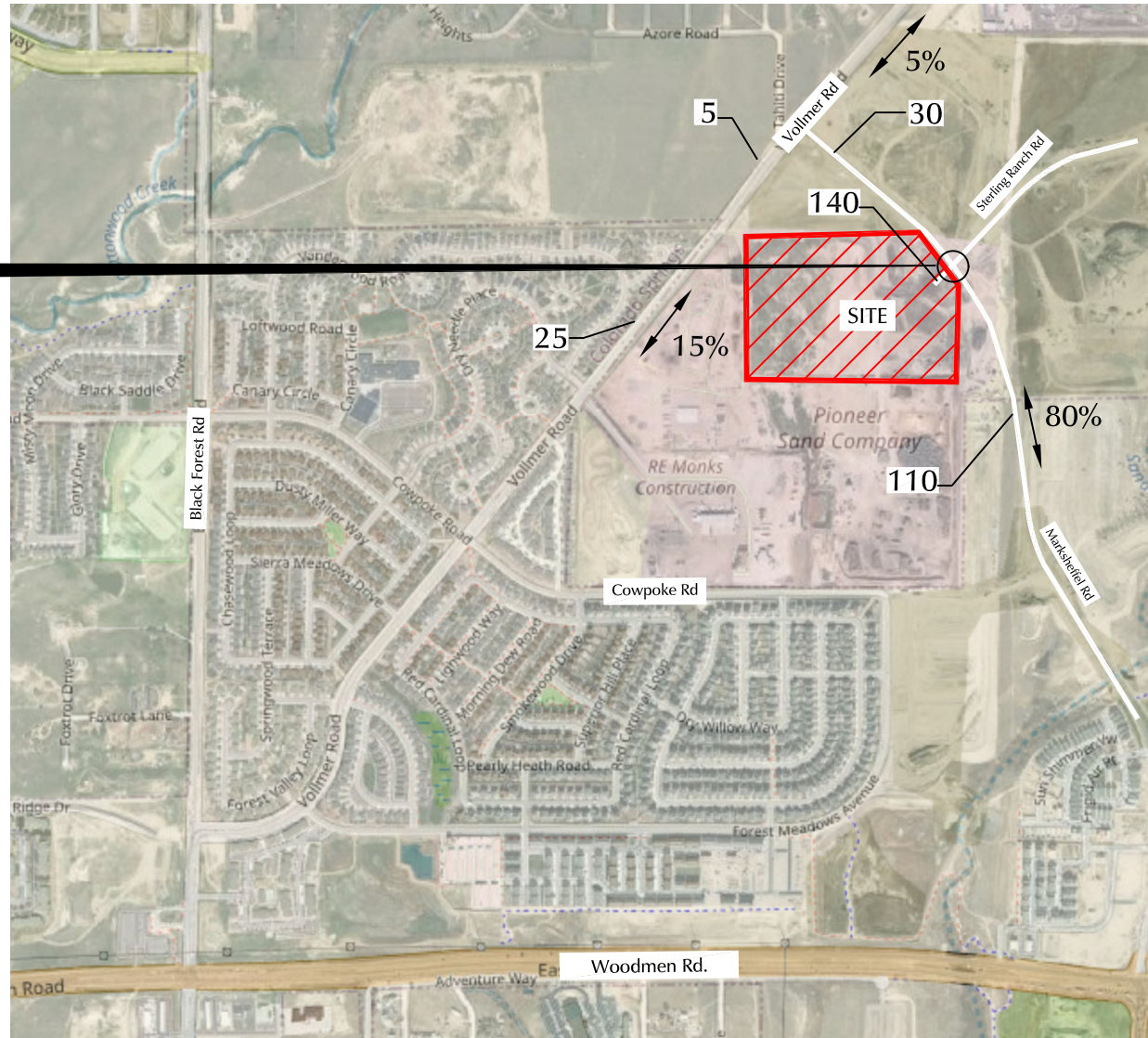
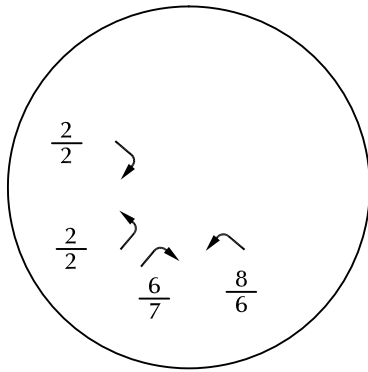


Figure 1

# Vicinity Map

Sterling Recycling Facility (LSC# S224330)



LEGEND:  $\frac{XX}{XX} = \frac{\text{AM Peak-Hour Traffic (veh/hr)}}{\text{PM Peak-Hour Traffic (veh/hr)}}$   
 $\longleftrightarrow 35\%$  = Percent Directional Distribution  
 XXX = Average Weekday Traffic (vehicles per day)

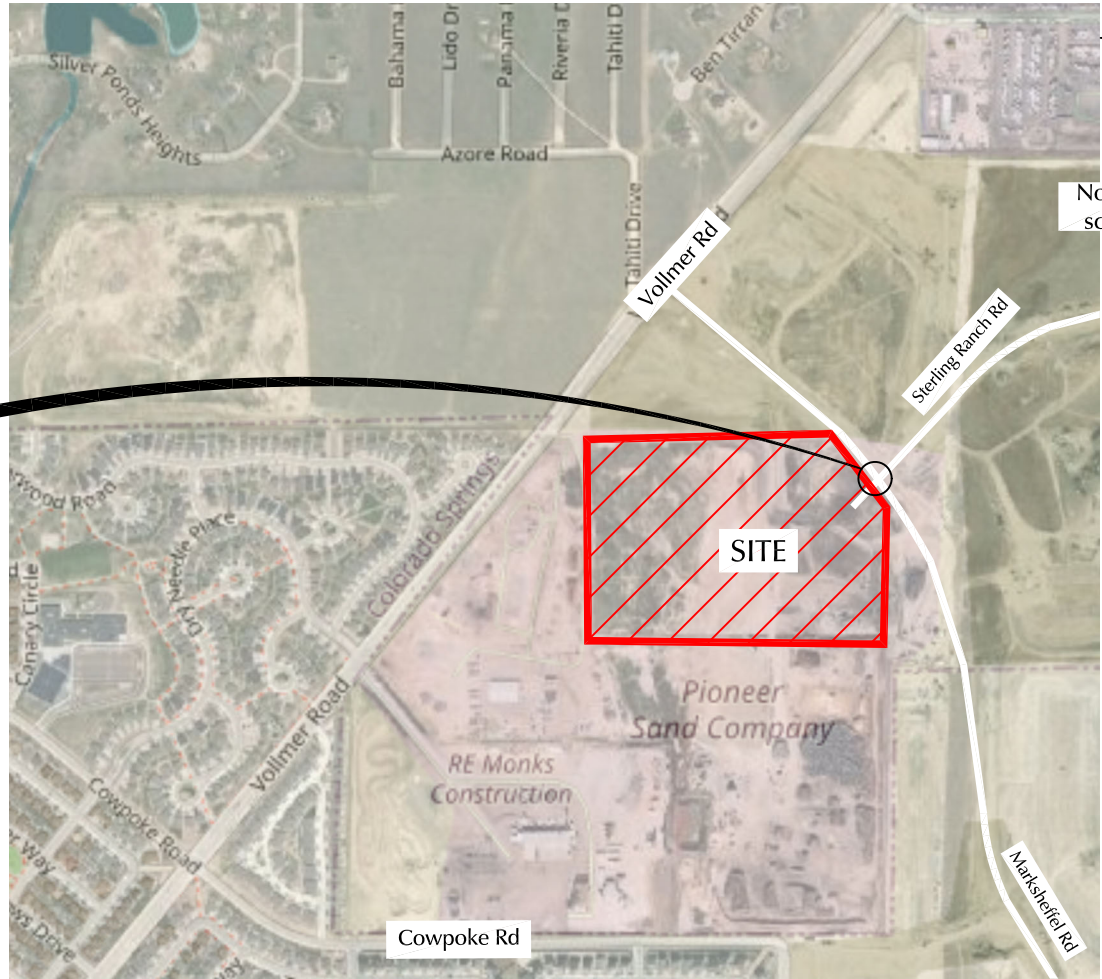
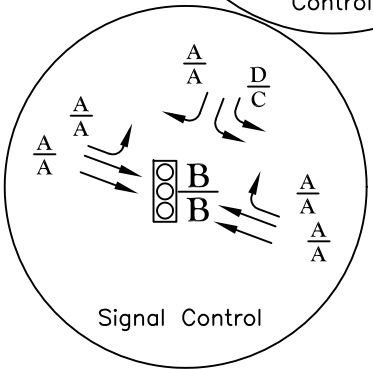
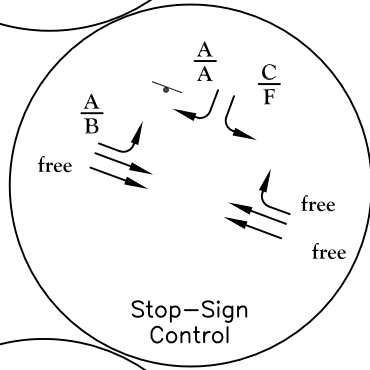
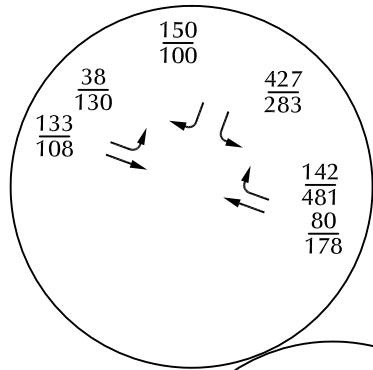
## "Design Day" Site-Generated Traffic

Figure 2

Sterling Recycling Facility (LSC# S224330)







Not to scale

LEGEND:

$$\frac{XX}{XX} = \frac{\text{AM Peak-Hour Traffic (veh/hr)}}{\text{PM Peak-Hour Traffic (veh/hr)}}$$

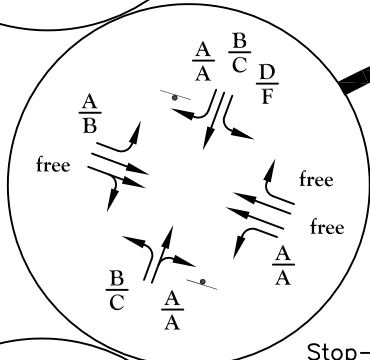
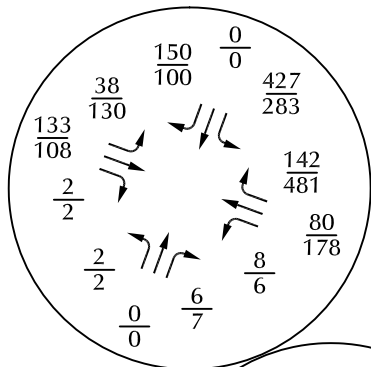
$$\frac{C}{D} = \frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$$

$$\frac{A}{B} = \frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$$

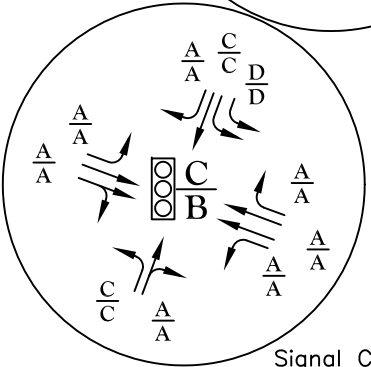
⊥ = Stop Sign      ⊞ = Traffic Signal

## Figure 3 Short-Term Background Traffic

Sterling Recycling Facility (LSC# S224330)



Stop-Sign Control



Signal Control



LEGEND:

$$\frac{XX}{XX} = \frac{\text{AM Peak-Hour Traffic (veh/hr)}}{\text{PM Peak-Hour Traffic (veh/hr)}}$$

$$\frac{C}{D} = \frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$$

$$\frac{A}{B} = \frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$$

┆ = Stop Sign

⬮ = Traffic Signal

# Figure 4 Short-Term Total Traffic

Sterling Recycling Facility (LSC# S224330)



# Traffic Counts

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# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Vollmer Rd - Pioneer Sand Trucks AM  
 Site Code : S22433  
 Start Date : 5/25/2022  
 Page No : 1

**Passenger Cars/  
 Pickup-Trucks**

## Groups Printed- Unshifted

Start Time	Vollmer Rd Southbound					Pioneer Sand Acces Westbound					Vollmer Rd Northbound					Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	0	49	0	0	49	3	0	2	0	5	13	15	0	0	28	0	0	0	0	0	82
06:45	0	49	3	0	52	1	0	0	0	1	14	26	0	0	40	0	0	0	0	0	93
Total	0	98	3	0	101	4	0	2	0	6	27	41	0	0	68	0	0	0	0	0	175
07:00	0	63	1	0	64	2	0	6	0	8	5	38	0	0	43	0	0	0	0	0	115
07:15	0	68	1	0	69	8	0	8	0	16	7	44	0	0	51	0	0	0	0	0	136
07:30	0	82	2	0	84	3	0	8	0	11	9	57	0	0	66	0	0	0	0	0	161
07:45	0	79	1	0	80	2	0	2	0	4	5	68	0	0	73	0	0	0	0	0	157
Total	0	292	5	0	297	15	0	24	0	39	26	207	0	0	233	0	0	0	0	0	569
08:00	0	58	4	0	62	1	0	8	0	9	7	64	0	0	71	0	0	0	0	0	142
08:15	0	57	1	1	59	1	0	7	0	8	3	52	0	0	55	0	0	0	0	0	122
Grand Total	0	505	13	1	519	21	0	41	0	62	63	364	0	0	427	0	0	0	0	0	1008
Apprch %	0	97.3	2.5	0.2		33.9	0	66.1	0		14.8	85.2	0	0		0	0	0	0		
Total %	0	50.1	1.3	0.1	51.5	2.1	0	4.1	0	6.2	6.2	36.1	0	0	42.4	0	0	0	0	0	



# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Vollmer Rd - Pioneer Sand Trucks AM

Site Code : S224330

Start Date : 5/25/2022

Page No : 1

Trucks

## Groups Printed- Bank 1

Start Time	Vollmer Rd Southbound					Pioneer Sand Acces Westbound					Vollmer Rd Northbound					Eastbound					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
06:30	0	0	0	0	0	3	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	5
06:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	3	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	6
07:00	0	0	0	0	0	2	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	6
07:15	0	0	0	0	0	6	0	7	0	13	1	0	0	0	1	0	0	0	0	0	0	14
07:30	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
Total	0	0	0	0	0	9	0	12	0	21	3	0	0	0	3	0	0	0	0	0	0	24
08:00	0	0	1	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3
08:15	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	0	3	0	3	12	0	16	0	28	5	0	0	0	5	0	0	0	0	0	0	36
Apprch %	0	0	100	0		42.9	0	57.1	0		100	0	0	0		0	0	0	0			
Total %	0	0	8.3	0	8.3	33.3	0	44.4	0	77.8	13.9	0	0	0	13.9	0	0	0	0	0	0	

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Vollmer Rd - Pioneer Sand Trucks PM

Site Code : S224330

Start Date : 5/24/2022

Page No : 1

**Passenger Cars/  
 Pickup-Trucks**

## Groups Printed- Unshifted

Start Time	Vollmer Rd Southbound					Pioneer Sand Acces Westbound					Vollmer Rd Northbound					Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
16:00	0	72	1	0	73	2	0	8	0	10	6	69	0	0	75	0	0	0	0	0	158
16:15	0	61	2	0	63	1	0	7	0	8	11	69	0	0	80	0	0	0	0	0	151
16:30	0	64	1	0	65	2	0	8	0	10	6	75	0	0	81	0	0	0	0	0	156
16:45	0	54	2	0	56	6	0	8	0	14	2	72	0	0	74	0	0	0	0	0	144
Total	0	251	6	0	257	11	0	31	0	42	25	285	0	0	310	0	0	0	0	0	609
17:00	0	60	1	0	61	1	0	9	0	10	3	58	0	0	61	0	0	0	0	0	132
17:15	0	65	2	0	67	0	0	5	0	5	1	58	0	0	59	0	0	0	0	0	131
17:30	0	50	0	0	50	2	0	21	0	23	2	68	0	0	70	0	0	0	0	0	143
17:45	0	48	1	0	49	0	0	2	0	2	0	77	0	0	77	0	0	0	0	0	128
Total	0	223	4	0	227	3	0	37	0	40	6	261	0	0	267	0	0	0	0	0	534
Grand Total	0	474	10	0	484	14	0	68	0	82	31	546	0	0	577	0	0	0	0	0	1143
Apprch %	0	97.9	2.1	0		17.1	0	82.9	0		5.4	94.6	0	0		0	0	0	0	0	
Total %	0	41.5	0.9	0	42.3	1.2	0	5.9	0	7.2	2.7	47.8	0	0	50.5	0	0	0	0	0	





# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Vollmer Rd - Pioneer Sand Trucks PM

Site Code : S224330

Start Date : 5/24/2022

Page No : 1

Trucks

### Groups Printed- Bank 1

Start Time	Vollmer Rd Southbound					Pioneer Sand Acces Westbound					Vollmer Rd Northbound					Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
16:00	0	0	1	0	1	1	0	2	0	3	3	0	0	0	3	0	0	0	0	0	7
16:15	0	0	1	0	1	0	0	2	0	2	5	0	0	0	5	0	0	0	0	0	8
16:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	4
16:45	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
<b>Total</b>	0	0	4	0	4	1	0	4	0	5	13	0	0	0	13	0	0	0	0	0	22
17:00	0	0	1	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	3
17:15	0	0	2	0	2	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	5
17:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
17:45	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
<b>Total</b>	0	0	4	0	4	0	0	3	0	3	4	0	0	0	4	0	0	0	0	0	11
Grand Total	0	0	8	0	8	1	0	7	0	8	17	0	0	0	17	0	0	0	0	0	33
Apprch %	0	0	100	0		12.5	0	87.5	0		100	0	0	0		0	0	0	0		
Total %	0	0	24.2	0	24.2	3	0	21.2	0	24.2	51.5	0	0	0	51.5	0	0	0	0	0	

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Vollmer Rd - Pioneer Sand Trucks PM

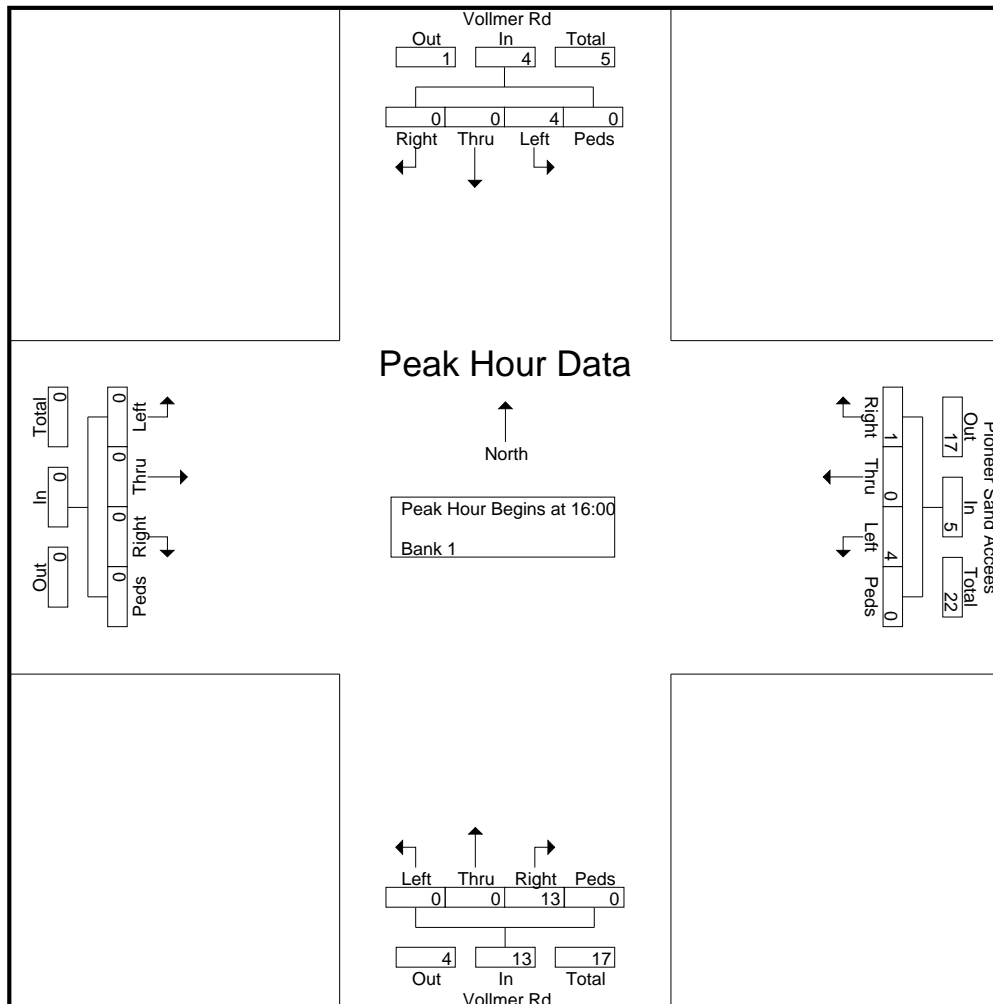
Site Code : S224330

Start Date : 5/24/2022

Page No : 2

## Trucks

Start Time	Vollmer Rd Southbound					Pioneer Sand Access Westbound					Vollmer Rd Northbound					Eastbound					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 4:00:00 PM																						
4:00:00 PM	0	0	1	0	1	1	0	2	0	3	3	0	0	0	3	0	0	0	0	0	0	7
4:15:00 PM	0	0	1	0	1	0	0	2	0	2	5	0	0	0	5	0	0	0	0	0	0	8
4:30:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	4
4:45:00 PM	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
Total Volume	0	0	4	0	4	1	0	4	0	5	13	0	0	0	13	0	0	0	0	0	0	22
% App. Total	0	0	100	0		20	0	80	0		100	0	0	0		0	0	0	0	0		
PHF	.000	.000	.500	.000	.500	.250	.000	.500	.000	.417	.650	.000	.000	.000	.650	.000	.000	.000	.000	.000	.000	.688



# Levels of Service

---



Intersection						
Int Delay, s/veh	12.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	38	133	80	142	427	150
Future Vol, veh/h	38	133	80	142	427	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	205	155	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	156	94	167	502	176

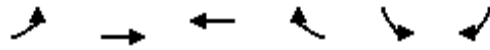
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	261	0	-	0	262 47
Stage 1	-	-	-	-	94 -
Stage 2	-	-	-	-	168 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1300	-	-	-	705 1012
Stage 1	-	-	-	-	919 -
Stage 2	-	-	-	-	844 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1300	-	-	-	680 1012
Mov Cap-2 Maneuver	-	-	-	-	680 -
Stage 1	-	-	-	-	887 -
Stage 2	-	-	-	-	844 -

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	20
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1300	-	-	-	680	1012
HCM Lane V/C Ratio	0.034	-	-	-	0.739	0.174
HCM Control Delay (s)	7.9	-	-	-	23.7	9.3
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.1	-	-	-	6.6	0.6

Timings  
13: Marksheffel Rd & Sterling Ranch Rd

Short-Term Background Traffic  
AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↑↑	↑↑	↗	↘↘	↘
Traffic Volume (vph)	38	133	80	142	427	150
Future Volume (vph)	38	133	80	142	427	150
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		7	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	7	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	23.0	23.0	10.0	23.0
Total Split (s)	12.0	60.0	48.0	48.0	30.0	30.0
Total Split (%)	13.3%	66.7%	53.3%	53.3%	33.3%	33.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Max	Max	Max	None	None
Act Effct Green (s)	55.1	55.1	48.3	48.3	17.1	17.1
Actuated g/C Ratio	0.67	0.67	0.59	0.59	0.21	0.21
v/c Ratio	0.05	0.07	0.05	0.17	0.71	0.38
Control Delay	5.6	5.3	9.7	2.5	35.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.6	5.3	9.7	2.5	35.9	7.0
LOS	A	A	A	A	D	A
Approach Delay		5.4	5.1		28.4	
Approach LOS		A	A		C	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 82.2  
 Natural Cycle: 60  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.71  
 Intersection Signal Delay: 19.0  
 Intersection LOS: B  
 Intersection Capacity Utilization 29.3%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 13: Marksheffel Rd & Sterling Ranch Rd



Intersection						
Int Delay, s/veh	15.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗↗	↗↗	↘	↘	↘
Traffic Vol, veh/h	130	108	178	481	283	100
Future Vol, veh/h	130	108	178	481	283	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	205	155	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	153	127	209	566	333	118

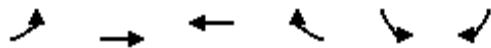
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	775	0	-	0	579 105
Stage 1	-	-	-	-	209 -
Stage 2	-	-	-	-	370 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	837	-	-	-	446 929
Stage 1	-	-	-	-	806 -
Stage 2	-	-	-	-	669 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	837	-	-	-	364 929
Mov Cap-2 Maneuver	-	-	-	-	364 -
Stage 1	-	-	-	-	659 -
Stage 2	-	-	-	-	669 -

Approach	EB	WB	SB
HCM Control Delay, s	5.6	0	48.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	837	-	-	-	364	929
HCM Lane V/C Ratio	0.183	-	-	-	0.915	0.127
HCM Control Delay (s)	10.3	-	-	-	62.3	9.4
HCM Lane LOS	B	-	-	-	F	A
HCM 95th %tile Q(veh)	0.7	-	-	-	9.4	0.4

Timings  
13: Marksheffel Rd & Sterling Ranch Rd

Short-Term Background Traffic  
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↑↑	↑↑	↗	↘↘	↘
Traffic Volume (vph)	130	108	178	481	283	100
Future Volume (vph)	130	108	178	481	283	100
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		7	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	7	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	23.0	23.0	10.0	23.0
Total Split (s)	12.0	60.0	48.0	48.0	30.0	30.0
Total Split (%)	13.3%	66.7%	53.3%	53.3%	33.3%	33.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Max	Max	Max	None	None
Act Effct Green (s)	55.1	55.1	43.3	43.3	12.7	12.7
Actuated g/C Ratio	0.71	0.71	0.56	0.56	0.16	0.16
v/c Ratio	0.19	0.05	0.11	0.50	0.59	0.33
Control Delay	4.6	3.9	8.8	2.7	34.7	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.6	3.9	8.8	2.7	34.7	8.7
LOS	A	A	A	A	C	A
Approach Delay		4.3	4.3		27.9	
Approach LOS		A	A		C	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 77.8  
 Natural Cycle: 60  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.59  
 Intersection Signal Delay: 11.4  
 Intersection LOS: B  
 Intersection Capacity Utilization 45.3%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 13: Marksheffel Rd & Sterling Ranch Rd



Intersection												
Int Delay, s/veh	14.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕↘		↘	↕↕	↘	↘	↕		↘	↕	↘
Traffic Vol, veh/h	38	133	2	8	80	142	2	0	6	427	1	150
Future Vol, veh/h	38	133	2	8	80	142	2	0	6	427	1	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	-	250	-	205	0	-	-	155	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	156	2	9	94	167	2	0	7	502	1	176

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	158	0	0	313	526	79	280	360	47
Stage 1	-	-	-	-	-	-	247	247	-	112	112	-
Stage 2	-	-	-	-	-	-	66	279	-	168	248	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1300	-	-	1419	-	-	616	455	965	650	565	1012
Stage 1	-	-	-	-	-	-	735	701	-	881	802	-
Stage 2	-	-	-	-	-	-	937	678	-	817	700	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1300	-	-	1419	-	-	492	436	965	625	542	1012
Mov Cap-2 Maneuver	-	-	-	-	-	-	492	436	-	625	542	-
Stage 1	-	-	-	-	-	-	709	676	-	850	797	-
Stage 2	-	-	-	-	-	-	768	674	-	783	676	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.3			9.7			24.7		
HCM LOS							A			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	492	965	1300	-	-	1419	-	-	625	542	1012
HCM Lane V/C Ratio	0.005	0.007	0.034	-	-	0.007	-	-	0.804	0.002	0.174
HCM Control Delay (s)	12.4	8.8	7.9	-	-	7.6	-	-	30.1	11.7	9.3
HCM Lane LOS		B	A	A	-	-	A	-	D	B	A
HCM 95th %tile Q(veh)		0	0	0.1	-	-	0	-	8.1	0	0.6



Timings  
13: Sterling Ranch Rd & Marksheffel Rd

Short-Term Total Traffic  
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	38	133	8	80	142	2	0	427	1	150
Future Volume (vph)	38	133	8	80	142	2	0	427	1	150
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8	7	4	
Permitted Phases	2		6		6	8				4
Detector Phase	5	2	1	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	10.0	23.0	23.0	10.0	10.0	9.5	10.0	10.0
Total Split (s)	11.0	50.0	10.0	49.0	49.0	10.0	10.0	20.0	20.0	20.0
Total Split (%)	12.2%	55.6%	11.1%	54.4%	54.4%	11.1%	11.1%	22.2%	22.2%	22.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	50.4	49.4	47.8	45.0	45.0	5.9	5.1	14.6	14.1	14.1
Actuated g/C Ratio	0.65	0.64	0.62	0.58	0.58	0.08	0.07	0.19	0.18	0.18
v/c Ratio	0.05	0.07	0.01	0.05	0.17	0.01	0.01	0.77	0.00	0.41
Control Delay	5.6	6.8	5.8	9.3	1.6	29.5	0.0	40.2	29.0	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.6	6.8	5.8	9.3	1.6	29.5	0.0	40.2	29.0	8.6
LOS	A	A	A	A	A	C	A	D	C	A
Approach Delay		6.5		4.4			6.6		32.0	
Approach LOS		A		A			A		C	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 77.1  
 Natural Cycle: 60  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.77  
 Intersection Signal Delay: 20.9  
 Intersection LOS: C  
 Intersection Capacity Utilization 36.0%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 13: Sterling Ranch Rd & Marksheffel Rd



Intersection												
Int Delay, s/veh	21.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗	↖	↖	↗		↖	↖	↖
Traffic Vol, veh/h	130	108	2	6	178	481	2	0	7	283	1	100
Future Vol, veh/h	130	108	2	6	178	481	2	0	7	283	1	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	-	250	-	205	0	-	-	155	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	153	127	2	7	209	566	2	0	8	333	1	118

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	775	0	0	129	0	0	553	1223	65	593	658	105
Stage 1	-	-	-	-	-	-	434	434	-	223	223	-
Stage 2	-	-	-	-	-	-	119	789	-	370	435	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	837	-	-	1454	-	-	416	178	986	389	383	929
Stage 1	-	-	-	-	-	-	570	579	-	759	718	-
Stage 2	-	-	-	-	-	-	873	400	-	622	579	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	837	-	-	1454	-	-	310	145	986	~ 330	311	929
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	145	-	~ 330	311	-
Stage 1	-	-	-	-	-	-	466	473	-	620	714	-
Stage 2	-	-	-	-	-	-	758	398	-	504	473	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	5.6			0.1			10.5			67.6		
HCM LOS							B			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	310	986	837	-	-	1454	-	-	330	311	929
HCM Lane V/C Ratio	0.008	0.008	0.183	-	-	0.005	-	-	1.009	0.004	0.127
HCM Control Delay (s)	16.7	8.7	10.3	-	-	7.5	-	-	88.3	16.6	9.4
HCM Lane LOS		C	A	B	-	-	A	-	F	C	A
HCM 95th %tile Q(veh)		0	0	0.7	-	-	0	-	11.4	0	0.4

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
13: Sterling Ranch Rd & Marksheffel Rd

Short-Term Total Traffic  
PM Peak Hour

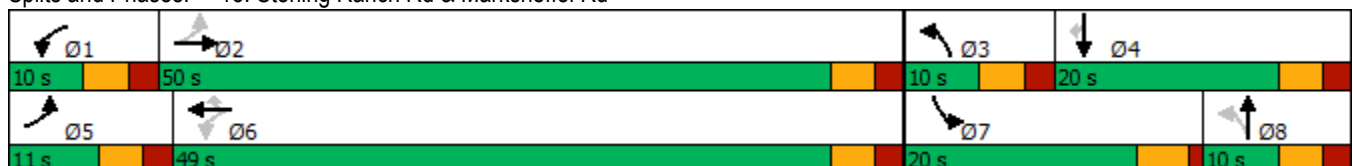


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	130	108	6	178	481	2	0	283	1	100
Future Volume (vph)	130	108	6	178	481	2	0	283	1	100
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8	7	4	
Permitted Phases	2		6		6	8				4
Detector Phase	5	2	1	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	10.0	23.0	23.0	10.0	10.0	9.5	10.0	10.0
Total Split (s)	11.0	50.0	10.0	49.0	49.0	10.0	10.0	20.0	20.0	20.0
Total Split (%)	12.2%	55.6%	11.1%	54.4%	54.4%	11.1%	11.1%	22.2%	22.2%	22.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	Max	Max	None	None	None	None	None
Act Effct Green (s)	54.5	53.5	49.2	44.2	44.2	5.9	5.0	12.5	11.3	11.3
Actuated g/C Ratio	0.69	0.68	0.62	0.56	0.56	0.07	0.06	0.16	0.14	0.14
v/c Ratio	0.20	0.05	0.01	0.11	0.50	0.02	0.01	0.62	0.00	0.34
Control Delay	5.6	6.3	5.7	9.3	2.8	29.0	0.0	36.7	30.0	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.6	6.3	5.7	9.3	2.8	29.0	0.0	36.7	30.0	6.6
LOS	A	A	A	A	A	C	A	D	C	A
Approach Delay		5.9		4.6			5.8		28.9	
Approach LOS		A		A			A		C	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 79  
 Natural Cycle: 60  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay: 12.0  
 Intersection LOS: B  
 Intersection Capacity Utilization 53.7%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 13: Sterling Ranch Rd & Marksheffel Rd



# Appendix Table 1



Appendix Table 1  
Existing Truck Operations  
Colorado Concrete Crushing

DATE	Day of the Week	Tandem	Semi	TOTAL LOADS	DATE	Day of the Week	Tandem	Semi	TOTAL LOADS
3/6/2022	Sunday	0	0	0	5/23/2022	Monday	19	4	23
3/13/2022	Sunday	0	0	0	10/17/2022	Monday	19	4	23
3/20/2022	Sunday	0	0	0	11/3/2022	Thursday	17	6	23
3/27/2022	Sunday	0	0	0	9/30/2022	Friday	17	6	23
4/3/2022	Sunday	0	0	0	5/24/2022	Tuesday	18	6	24
4/10/2022	Sunday	0	0	0	10/13/2022	Thursday	20	4	24
4/17/2022	Sunday	0	0	0	10/21/2022	Friday	18	6	24
4/24/2022	Sunday	0	0	0	9/17/2022	Saturday	23	1	24
5/1/2022	Sunday	0	0	0	5/2/2022	Monday	25	0	25
5/8/2022	Sunday	0	0	0	11/21/2022	Monday	17	8	25
5/15/2022	Sunday	0	0	0	12/6/2022	Tuesday	23	2	25
6/12/2022	Sunday	0	0	0	10/6/2022	Thursday	12	13	25
6/19/2022	Sunday	0	0	0	10/27/2022	Thursday	21	4	25
6/26/2022	Sunday	0	0	0	12/29/2022	Thursday	25	0	25
7/3/2022	Sunday	0	0	0	5/27/2022	Friday	17	8	25
7/10/2022	Sunday	0	0	0	12/2/2022	Friday	20	5	25
7/17/2022	Sunday	0	0	0	10/31/2022	Monday	18	8	26
7/24/2022	Sunday	0	0	0	8/16/2022	Tuesday	26	0	26
7/31/2022	Sunday	0	0	0	10/12/2022	Wednesday	20	6	26
8/7/2022	Sunday	0	0	0	3/3/2022	Thursday	21	5	26
8/14/2022	Sunday	0	0	0	6/30/2022	Thursday	17	9	26
8/21/2022	Sunday	0	0	0	9/1/2022	Thursday	18	8	26
9/4/2022	Sunday	0	0	0	10/18/2022	Tuesday	21	6	27
9/11/2022	Sunday	0	0	0	10/19/2022	Wednesday	21	6	27
9/18/2022	Sunday	0	0	0	6/16/2022	Thursday	26	1	27
9/25/2022	Sunday	0	0	0	11/9/2022	Wednesday	20	8	28
10/2/2022	Sunday	0	0	0	12/28/2022	Wednesday	24	4	28
10/9/2022	Sunday	0	0	0	11/17/2022	Thursday	13	15	28
10/16/2022	Sunday	0	0	0	12/1/2022	Thursday	18	11	29
10/23/2022	Sunday	0	0	0	6/3/2022	Friday	25	4	29
10/30/2022	Sunday	0	0	0	4/12/2022	Tuesday	15	15	30
11/6/2022	Sunday	0	0	0	5/31/2022	Tuesday	23	7	30
11/13/2022	Sunday	0	0	0	12/14/2022	Wednesday	30	0	30
11/20/2022	Sunday	0	0	0	8/4/2022	Thursday	8	22	30
11/27/2022	Sunday	0	0	0	7/1/2022	Friday	14	16	30
12/4/2022	Sunday	0	0	0	12/20/2022	Tuesday	28	3	31
12/11/2022	Sunday	0	0	0	5/6/2022	Friday	31	0	31
12/18/2022	Sunday	0	0	0	12/5/2022	Monday	28	4	32
12/25/2022	Sunday	0	0	0	12/19/2022	Monday	29	3	32
3/21/2022	Monday	0	0	0	12/7/2022	Wednesday	26	6	32
7/4/2022	Monday	0	0	0	8/25/2022	Thursday	17	15	32
7/11/2022	Monday	0	0	0	6/10/2022	Friday	29	3	32
9/5/2022	Monday	0	0	0	5/17/2022	Tuesday	32	1	33
10/3/2022	Monday	0	0	0	6/15/2022	Wednesday	27	6	33
11/28/2022	Monday	0	0	0	8/30/2022	Tuesday	10	24	34
12/26/2022	Monday	0	0	0	10/25/2022	Tuesday	26	8	34
4/26/2022	Tuesday	0	0	0	12/27/2022	Tuesday	19	15	34
11/29/2022	Tuesday	0	0	0	3/30/2022	Wednesday	20	14	34
8/31/2022	Wednesday	0	0	0	5/18/2022	Wednesday	26	8	34
3/10/2022	Thursday	0	0	0	4/28/2022	Thursday	34	0	34
3/17/2022	Thursday	0	0	0	11/24/2022	Thursday	25	9	34
4/14/2022	Thursday	0	0	0	7/15/2022	Friday	26	8	34
4/21/2022	Thursday	0	0	0	8/26/2022	Friday	18	16	34
12/22/2022	Thursday	0	0	0	5/16/2022	Monday	35	0	35
4/1/2022	Friday	0	0	0	3/15/2022	Tuesday	29	6	35
4/22/2022	Friday	0	0	0	10/4/2022	Tuesday	28	7	35
11/18/2022	Friday	0	0	0	5/20/2022	Friday	27	8	35
11/25/2022	Friday	0	0	0	6/24/2022	Friday	24	11	35
12/23/2022	Friday	0	0	0	5/11/2022	Wednesday	36	0	36
12/30/2022	Friday	0	0	0	6/9/2022	Thursday	34	2	36
3/5/2022	Saturday	0	0	0	3/4/2022	Friday	36	0	36
4/2/2022	Saturday	0	0	0	9/9/2022	Friday	26	10	36
4/9/2022	Saturday	0	0	0	6/6/2022	Monday	24	13	37
4/16/2022	Saturday	0	0	0	10/24/2022	Monday	28	11	39
4/23/2022	Saturday	0	0	0	10/11/2022	Tuesday	31	8	39
4/30/2022	Saturday	0	0	0	3/2/2022	Wednesday	29	10	39
5/7/2022	Saturday	0	0	0	5/25/2022	Wednesday	38	1	39
5/14/2022	Saturday	0	0	0	10/5/2022	Wednesday	35	4	39
6/11/2022	Saturday	0	0	0	7/14/2022	Thursday	30	9	39
6/18/2022	Saturday	0	0	0	9/6/2022	Tuesday	30	10	40
6/25/2022	Saturday	0	0	0	3/14/2022	Monday	36	5	41
7/2/2022	Saturday	0	0	0	6/1/2022	Wednesday	43	0	43
7/16/2022	Saturday	0	0	0	8/17/2022	Wednesday	41	2	43
7/23/2022	Saturday	0	0	0	9/22/2022	Thursday	37	6	43
7/30/2022	Saturday	0	0	0	6/27/2022	Monday	40	4	44
8/13/2022	Saturday	0	0	0	8/12/2022	Friday	30	14	44
9/10/2022	Saturday	0	0	0	7/25/2022	Monday	36	9	45
10/8/2022	Saturday	0	0	0	8/15/2022	Monday	22	23	45
10/15/2022	Saturday	0	0	0	8/2/2022	Tuesday	28	17	45
10/22/2022	Saturday	0	0	0	5/26/2022	Thursday	42	3	45
10/29/2022	Saturday	0	0	0	7/19/2022	Tuesday	34	12	46
11/12/2022	Saturday	0	0	0	7/13/2022	Wednesday	32	14	46
11/19/2022	Saturday	0	0	0	5/12/2022	Thursday	47	0	47
11/26/2022	Saturday	0	0	0	8/8/2022	Monday	28	20	48
12/3/2022	Saturday	0	0	0	10/10/2022	Monday	35	13	48
12/10/2022	Saturday	0	0	0	6/14/2022	Tuesday	39	9	48
12/17/2022	Saturday	0	0	0	7/20/2022	Wednesday	40	8	48
12/24/2022	Saturday	0	0	0	9/16/2022	Friday	40	8	48
12/31/2022	Saturday	0	0	0	9/7/2022	Wednesday	39	10	49
3/7/2022	Monday	1	0	1	9/2/2022	Friday	49	0	49
5/4/2022	Wednesday	3	0	3	8/28/2022	Sunday	43	7	50
11/30/2022	Wednesday	0	3	3	9/12/2022	Monday	50	0	50
10/28/2022	Friday	3	0	3	7/26/2022	Tuesday	25	25	50
5/5/2022	Thursday	4	0	4	6/8/2022	Wednesday	34	16	50
3/19/2022	Saturday	4	0	4	11/2/2022	Wednesday	44	6	50
3/12/2022	Saturday	5	0	5	12/8/2022	Thursday	34	16	50
4/6/2022	Wednesday	6	0	6	11/5/2022	Saturday	34	16	50
11/16/2022	Wednesday	4	3	7	6/29/2022	Wednesday	48	3	51
3/26/2022	Saturday	8	0	8	5/19/2022	Thursday	39	12	51
4/7/2022	Thursday	9	0	9	6/13/2022	Monday	45	7	52
12/9/2022	Friday	7	2	9	9/28/2022	Wednesday	35	17	52
9/3/2022	Saturday	9	0	9	7/21/2022	Thursday	50	2	52
5/30/2022	Monday	10	0	10	7/27/2022	Wednesday	45	8	53
4/19/2022	Tuesday	10	0	10	8/29/2022	Monday	32	22	54
11/22/2022	Tuesday	4	6	10	9/13/2022	Tuesday	46	9	55
12/13/2022	Tuesday	10	0	10	9/23/2022	Friday	47	8	55
3/9/2022	Wednesday	10	0	10	6/20/2022	Monday	56	0	56
11/23/2022	Wednesday	3	7	10	6/22/2022	Wednesday	48	8	56
4/4/2022	Monday	9	2	11	4/8/2022	Friday	11	45	56
3/22/2022	Tuesday	11	0	11	8/6/2022	Saturday	50	7	57
4/27/2022	Wednesday	11	0	11	8/22/2022	Monday	48	10	58
3/11/2022	Friday	11	0	11	9/19/2022	Monday	53	6	59
3/18/2022	Friday	11	0	11	6/23/2022	Thursday	45	14	59
11/11/2022	Friday	3	8	11	6/28/2022	Tuesday	53	7	60
4/18/2022	Monday	12	0	12	8/9/2022	Tuesday	48	12	60
5/3/2022	Tuesday	12	0	12	7/6/2022	Wednesday	38	23	61
10/1/2022	Saturday	3	9	12	8/3/2022	Wednesday	38	23	61
4/25/2022	Monday	13	0	13	9/15/2022	Thursday	54	8	62
6/21/2022	Tuesday	9	4	13	3/25/2022	Friday	4	58	62
4/13/2022	Wednesday	13	0	13	4/11/2022	Monday	17	46	63
12/15/2022	Thursday	13	0	13	8/24/2022	Wednesday	53	10	63
9/27/2022	Tuesday	12	2	14	9/14/2022	Wednesday	56	7	63
3/16/2022	Wednesday	8	6	14	7/22/2022	Friday	53	10	63
4/20/2022	Wednesday	14	0	14	11/8/2022	Tuesday	26	39	65
12/12/2022	Monday	11	4	15	5/10/2022	Tuesday	66	0	66
11/1/2022	Tuesday	15	0	15	7/28/2022	Thursday	51	15	66
3/24/2022	Thursday	15	0	15	8/23/2022	Tuesday	50	18	68
8/20/2022	Saturday	9	6	15	3/1/2022	Tuesday	64	6	70
11/7/2022	Monday	7	9	16	8/18/2022	Thursday	47	23	70
12/21/2022	Wednesday	12	4	16	7/29/2022	Friday	43	27	70
4/15/2022	Friday	16	0	16	11/4/2022	Friday	44	27	71
12/16/2022	Friday	16	0	16	9/26/2022	Monday	67	6	73
11/14/2022	Monday	9	8	17	6/7/2022	Tuesday	65	8	73
11/15/2022	Tuesday	11	6	17	3/28/2022	Monday	13	62	75
10/14/2022	Friday	13	4	17	7/5/2022	Tuesday	65	10	75
3/23/2022	Wednesday	12	6	18	8/10/2022	Wednesday	47	29	76
9/8/2022	Thursday	10	8	18	6/2/2022	Thursday	72	4	76
6/17/2022	Friday	18	0	18	8/19/2022	Friday	59	17	76
9/24/2022	Saturday	13	6	19	3/31/2022	Thursday	16	61	77
3/8/2022	Tuesday	20	0	20	5/9/2022	Monday	79	0	79
9/29/2022	Thursday	20	0	20	7/18/2022	Monday	66	13	79
10/20/2022	Thursday	12	8	20	3/29/2022	Tuesday	17	68	85
11/10/2022	Thursday	12	8	20	8/11/2022	Thursday	81	8	89
4/29/2022	Friday	20	0	20	8/1/2022	Monday	75	24	99
4/5/2022	Tuesday	13	8	21	7/9/2022	Saturday	91	12	103
10/26/2022	Wednesday								

# Sterling Recycling Facility Street Improvement Plan

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# STERLING RECYCLING FACILITY

## COUNTY OF EL PASO, STATE OF COLORADO

### STREET IMPROVEMENT PLAN



Know what's below.  
Call before you dig.

#### GENERAL CONSTRUCTION NOTES:

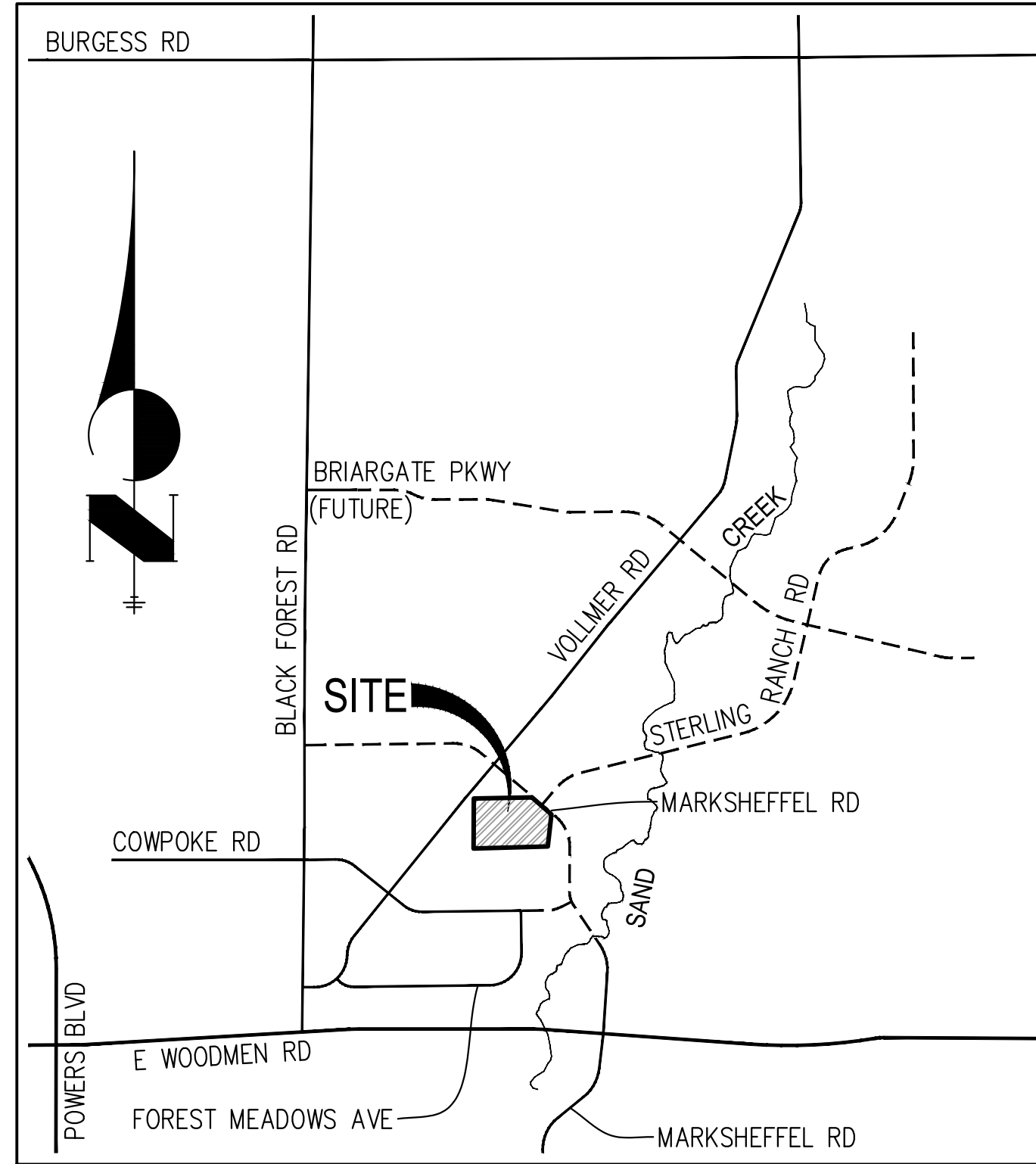
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
- ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
- ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED PER THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY PCD.
- ALL STATIONING IS CENTERLINE OF IMPROVEMENTS UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED AS TOP BACK OF CURB (TBC), ASPHALT (ASP), OR TOP OF INLET OR BOX (TOB).
- ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO EPC ECM APPENDIX K - 1.2C.
- ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" VERTICAL IN THIS AREA.
- ALL CULVERTS AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 - CULVERTS.
- ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT THE TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION PRIOR TO CONSTRUCTION.

#### SIGNING AND STRIPING NOTES:

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

#### 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 SOILS 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 FOR ROAD 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 VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- 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 (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- 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 AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PCD AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, 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.



VICINITY MAP  
1"=1000'

#### BASIS OF BEARINGS

THE NORTH LINE OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, BEING MONUMENTED AT THE NORTHEAST CORNER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 5 BY A 3-1/4" ALUMINUM CAP STAMPED "LS 10376" AND AT THE NORTH QUARTER CORNER BY A 3-1/4" ALUMINUM CAP STAMPED "LS 4842 1996", BEARING S89°14'13"W.

#### BENCHMARKS

- THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411416.273  
EASTING = 235167.071  
ELEVATION = 7023.42
- THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION  
NORTHING = 410095.404  
EASTING = 235052.131  
ELEVATION = 7000.40
- THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDIVISION  
NORTHING = 411399.962  
EASTING = 233849.817  
ELEVATION = 7030.82

#### SHEET INDEX

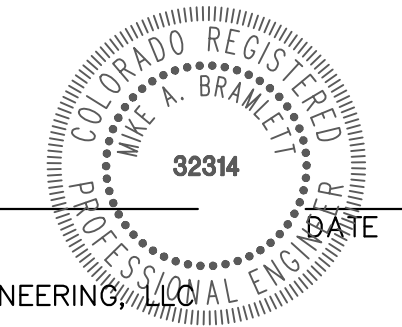
- COVER SHEET
- LEGEND
- HORIZONTAL CONTROL PLAN
- 4-6 STREET PLAN & PROFILE INTERIM
- 7 STREET PLAN & PROFILE ULTIMATE
- 8 SIGNAGE & STRIPING INTERIM
- 9 SIGNAGE & STRIPING ULTIMATE
- 10 DETAIL SHEET
- 10 TOTAL

#### AGENCIES

OWNER/DEVELOPER:	RHETORIC, LLC 20 BOULDER CRESCENT, SUITE 200 COLORADO SPRINGS, CO 80903 ERIC HOWARD (719) 964-0064	FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK (719) 495-4300
CIVIL ENGINEER:	JR ENGINEERING, LLC 5475 TECH CENTER DRIVE COLORADO SPRINGS, CO 80919 MIKE BRAMLETT P.E. (303) 267-6240	GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 7710 DURANT DR. COLORADO SPRINGS, CO 80947 TIM WENDT (719) 668-3556
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 JEFF RICE, P.E. (719) 520-6300	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, CO 80831 (719) 495-2283
TRAFFIC ENGINEERING:	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 JENNIFER IRVINE, P.E. (719) 520-6460	ARCHITECT/PLANNER:	NES LANDSCAPE ARCHITECTS 619 N CASCADE AVE COLORADO SPRINGS, CO 80903 JENNIFER SHAGIN (719) 884-1374
WATER RESOURCES:	STERLING RANCH METRO DISTRICT ENGINEERS JDS-HYDRO CONSULTANTS 545 E. PIKES PEAK AVE., SUITE 300 COLORADO SPRINGS, CO 80903 JOHN MCGINN (719) 668-8769		

#### 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

#### 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.

JOSHUA PALMER, P.E. DATE

COUNTY ENGINEER/ECM ADMINISTRATOR

#### DISTRICT APPROVALS

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO DISTRICT DATE

#### OWNER/DEVELOPER STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

ERIC HOWARD DATE

RHETORIC, LLC  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO 80903

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  
RHETORIC, LLC  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ATTN: ERIC HOWARD  
EHOWARD@MAIL.COM  
(719) 964-0064

J.R. ENGINEERING  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-588-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=1000'	N/A	08/07/23	APL	APL	

STERLING RECYCLING FACILITY  
COVER SHEET

SHEET 1 OF 10  
JOB NO. 25188.14

**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	A ---	A ---
CENTERLINE	---	---
CITY LIMITS		
WIRE FENCE	-x-x-	-x-x-
CHAIN LINK FENCE	-o-o-	-o-o-
WOOD FENCE	-◇-◇-	-◇-◇-
MASONRY FENCE	-□-□-	-□-□-
GUARDRAIL	-□-□-	-□-□-
CONC. BARRIER	-□-□-	-□-□-
CABLE TV	-TV-TV-	-TV-TV-
ELECTRIC	-E-E-	-E-E-
FIBER OPTIC	-FO-FO-	-FO-FO-
GAS MAIN	-G-G-	-G-G-
IRRIGATION MAIN	-IRR-IRR-	-IRR-IRR-
OIL/PETRO. MAIN	-O-O-	-O-O-
OVERHEAD UTILITY	-OHU-OHU-	-OHU-OHU-
SANITARY SEWER	-S-S-	-S-S-
STORM DRAIN	---	---
TELEPHONE	-T-T-	-T-T-
WATER MAIN	-W-W-	-W-W-
RAW WATER LINE	-RWL-RWL-	-RWL-RWL-
SWALE/WATERWAY FLOWLINE	~>~>	~>~>
DIVERSION DITCH	---	---
DIVERSION CHANNEL	---	---
MAJOR DRAINAGE BASIN	---	---
MINOR DRAINAGE BASIN	---	---
TOP OF SLOPE	~V~V~	~V~V~
TOE OF SLOPE	~V~V~	~V~V~
EDGE OF WATER	~V~V~	~V~V~
INDEX CONTOUR	~6100~	~6100~
INTERMEDIATE CONTOUR	~6100~	~6100~
DEPRESSION CONT. (INDEX)	~6100~	~6100~
DEPRESSION CONT. (INTER)	~6100~	~6100~
TOP OF CUTS	~V~V~	~V~V~
TOE OF FILLS	~V~V~	~V~V~
CUT AND FILL LINE	---	---
SILT FENCE	-SF-SF-	-SF-SF-
100 YEAR FLOODPLAIN	---100YR---	---100YR---
500 YEAR FLOODPLAIN	---500YR---	---500YR---
FLOODWAY	---FLDWY---	---FLDWY---
BASE FLOOD ELEVATION	~V~V~	~V~V~
EDGE OF WETLANDS	~V~V~	~V~V~
STONE WALL	---o---o---	---o---o---

**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	Mkr San <sup>o</sup>	
SERVICE MARKER	△	
CLEAN-OUT	o	+
MANHOLE W/ DIRECTIONAL FLOW ARROW	⊙	●
<b>WATER LINE</b>		
LINE MARKER	Mkr W <sup>o</sup>	
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	Mkr G <sup>o</sup>	
SERVICE MARKER	△	
METER	⊕	⊕
VALVE	⊕	⊕
PLUG	⊕	⊕
TEE		⊕
<b>DRY UTILITIES</b>		
CABLE TV MARKER	Mkr TV <sup>o</sup>	
CABLE TELEVISION PEDESTAL	⊞	
ELECTRIC MARKER	Mkr E <sup>o</sup>	
ELECTRIC SERVICE MARKER	△	
ELECTRICAL PEDESTAL	⊞	
ELECTRICAL METER	⊕	
ELECTRICAL MANHOLE	⊙	
FIBER-OPTIC MARKER	Mkr FO <sup>o</sup>	
IRRIGATION PEDESTAL	⊞	
TELEPHONE MARKER	Mkr T <sup>o</sup>	
TELEPHONE PEDESTAL	⊞	
TELEPHONE MANHOLE	⊙	
UTILITY POLE	⊕	+
GUY ANCHOR	⊕	+
GUY POLE	⊕	+
<b>MISC. UTILITIES</b>		
VENT PIPE	VP	●
TEST HOLE DESIGNATOR	TH#	●
	FIRM	
	FIRM/AGENCY	

**LANDSCAPE LEGEND**

	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, THE USER AGREES TO HOLD THE USER ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**RHECTOR, LLC**  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@GMAIL.COM  
 (719) 964-0064

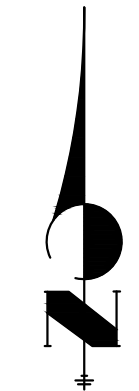
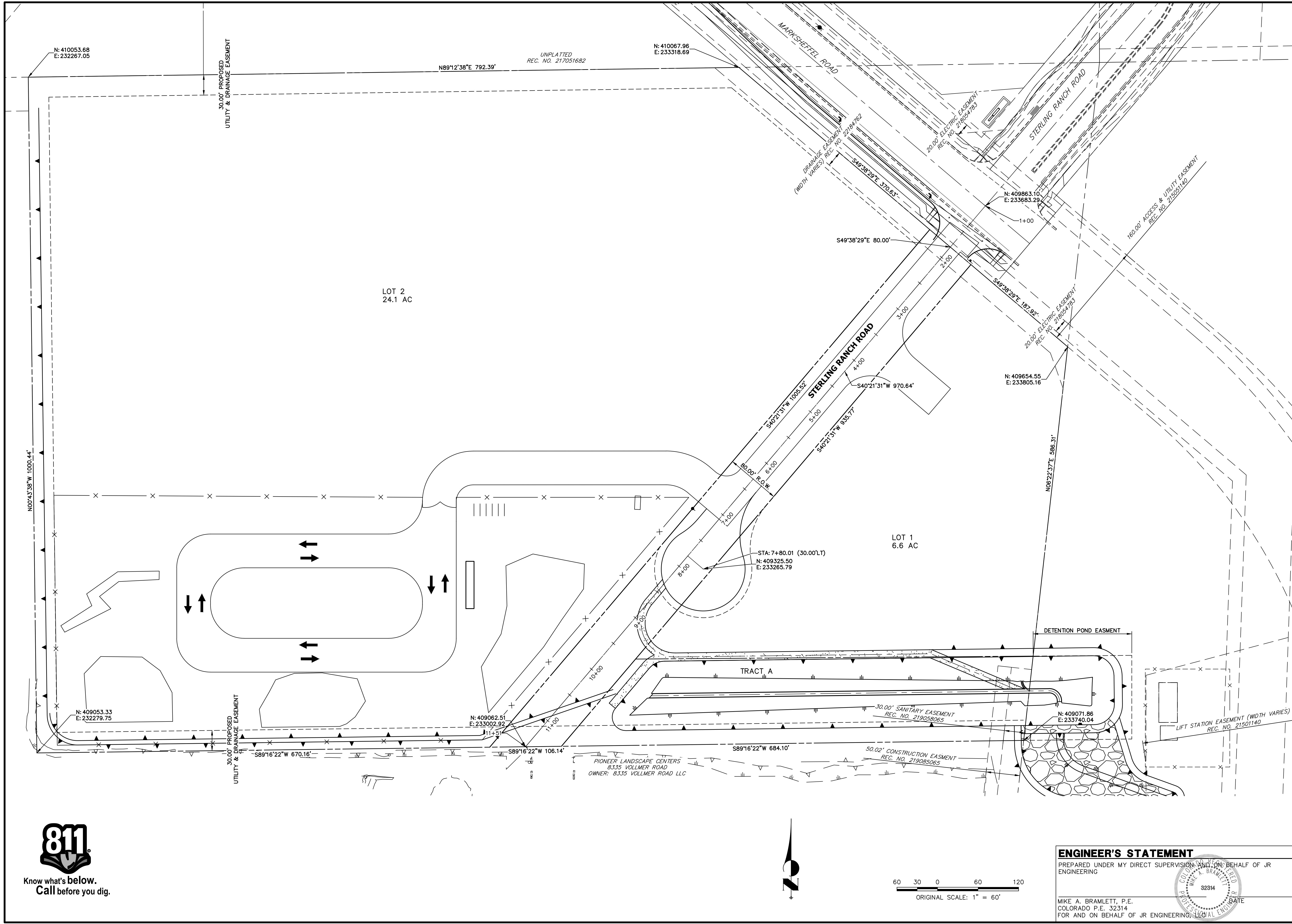
**J.R. ENGINEERING**  
 A Weatman Company  
 Centennial 303-740-9883 • Colorado Springs 719-589-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

DATE	BY	REVISION	No.	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	N/A	08/07/23			

STERLING RECYCLING FACILITY  
 LEGEND



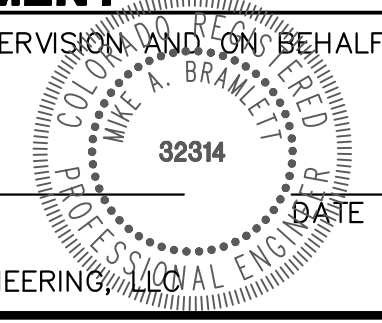




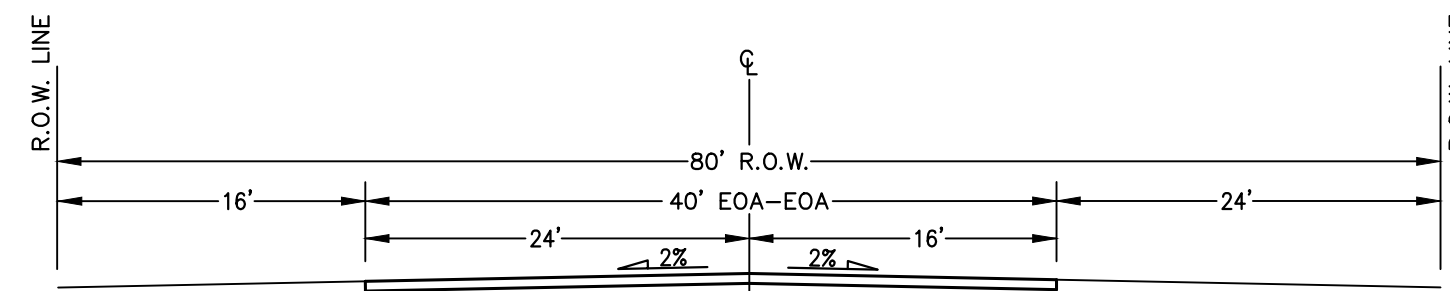
**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

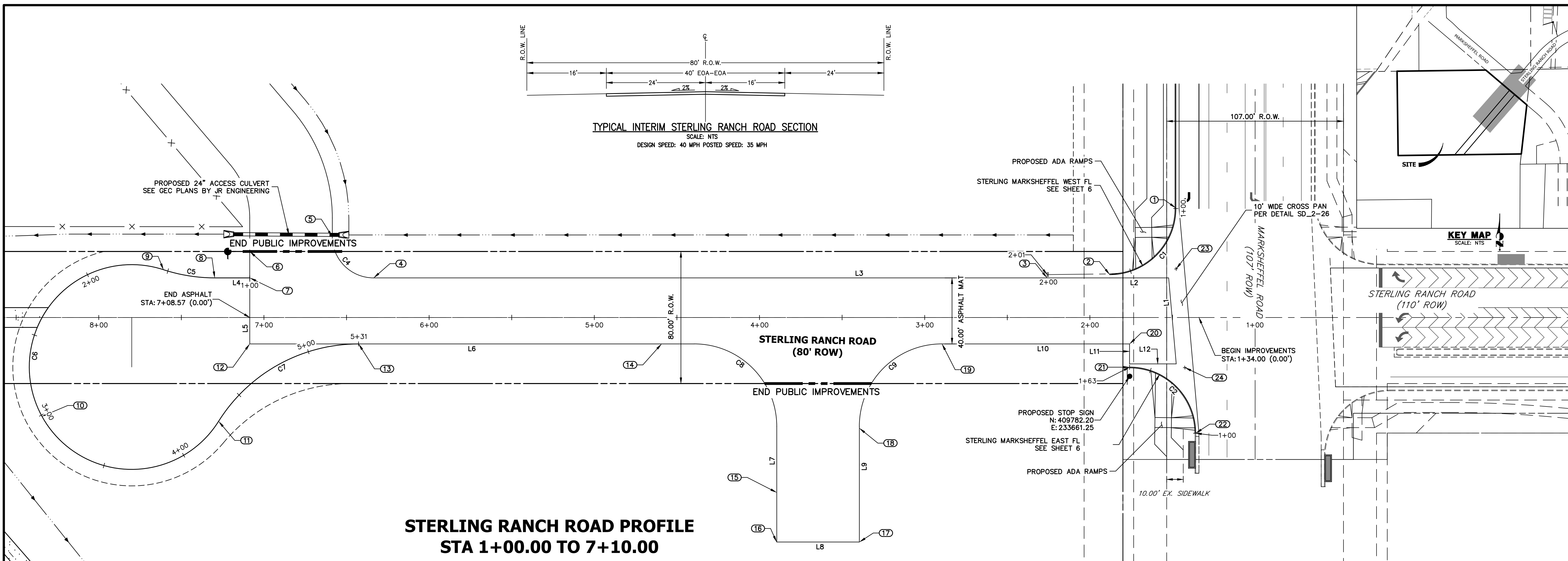
MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING



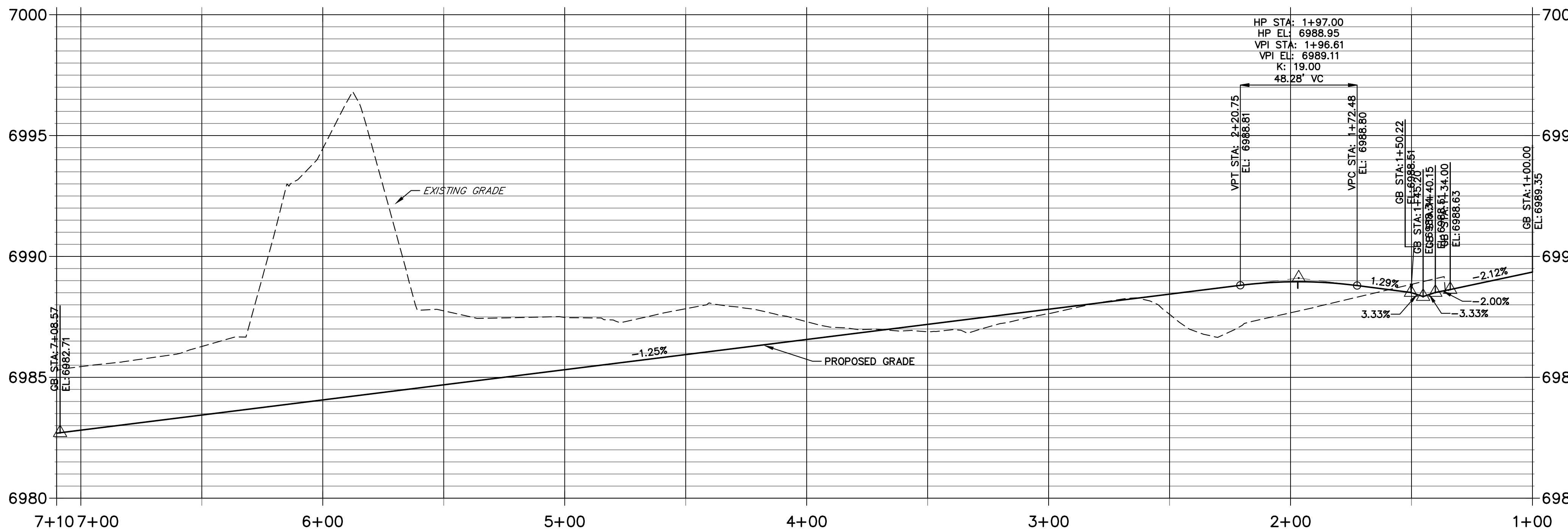
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR <b>RHETORIC, LLC</b> 20 BOULDER CRESCENT, SUITE 200 COLORADO SPRINGS, CO ATTN: ERIC HOWARD EHOWARD@MAIL.COM (719) 964-0064	UNPLATTED REC. NO. 217051682
<b>J.R. ENGINEERING</b> A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY DATE No. REVISION H-SCALE 1"=60' V-SCALE N/A DATE 08/07/23 DESIGNED BY APL DRAWN BY APL CHECKED BY
<b>STERLING RECYCLING FACILITY</b> <b>HORIZONTAL CONTROL PLAN</b>	
SHEET 3 OF 10 JOB NO. 25188.14	



TYPICAL INTERIM STERLING RANCH ROAD SECTION  
SCALE: NTS  
DESIGN SPEED: 40 MPH POSTED SPEED: 35 MPH



STERLING RANCH ROAD PROFILE  
STA 1+00.00 TO 7+10.00



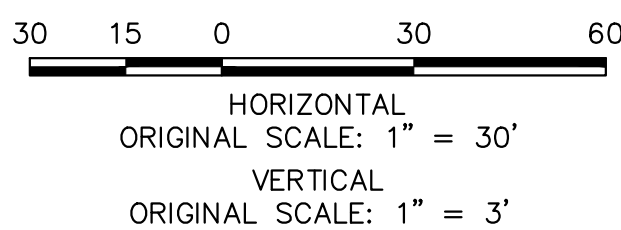
LINE	BEARING	DISTANCE
L1	N54°40'49\"W	52.30'
L2	S40°21'31\"W	35.66'
L3	N40°21'31\"E	150.37'
L4	S40°21'31\"W	21.16'
L5	N49°38'29\"W	40.00'
L6	S40°21'31\"W	269.01'
L7	N49°38'29\"W	70.00'
L8	S40°21'31\"W	50.00'
L9	S49°38'29\"E	70.00'
L10	S40°21'31\"W	113.56'
L11	N49°38'29\"W	12.10'
L12	S40°21'31\"W	28.26'

CURVE	DELTA	RADIUS	LENGTH
C1	90°36'21\"	40.00'	63.25'
C2	90°00'00\"	40.00'	62.83'
C4	90°00'00\"	25.00'	39.27'
C5	18°04'52\"	100.00'	31.56'
C6	256°01'02\"	62.00'	277.04'
C7	57°56'10\"	100.00'	101.12'
C8	90°00'00\"	50.00'	78.54'
C9	90°00'00\"	50.00'	78.54'

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	DESCRIPTION
1	1+48.00	66.42' (RT)	Sterling Ranch Road	6989.04	PCR/ CONNECT TO EX FL
2	1+88.00	26.00' (RT)	Sterling Ranch Road	6988.97	PCR (FL)
3	2+25.87	24.00' (RT)	Sterling Ranch Road	6988.26	END TRANSITION EOA
4	6+33.60	24.00' (RT)	Sterling Ranch Road	6983.13	PC (EOA)
5	6+58.60	49.00' (RT)	Sterling Ranch Road	6982.55	PT (EOA)
6	7+08.60	40.00' (RT)	Sterling Ranch Road	6981.86	PI (EOA)
7	7+08.57	24.00' (RT)	Sterling Ranch Road	6982.18	BEGIN GRAVEL
8	7+29.73	24.00' (RT)	Sterling Ranch Road	6981.97	PC (GRAVEL)

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	DESCRIPTION
9	7+60.77	28.94' (RT)	Sterling Ranch Road	6981.65	PT (GRAVEL)
10	8+34.34	59.87' (LT)	Sterling Ranch Road	6980.41	LP (GRAVEL)
11	7+27.47	62.91' (LT)	Sterling Ranch Road	6981.78	PCC (GRAVEL)
12	7+08.57	16.00' (LT)	Sterling Ranch Road	6982.34	END ASPHALT
13	6+42.72	16.00' (LT)	Sterling Ranch Road	6983.17	PT (GRAVEL)
14	4+59.27	16.00' (LT)	Sterling Ranch Road	6985.48	PC (EOA)
15	3+89.56	106.00' (LT)	Sterling Ranch Road	6984.56	PT (EOA)
16	3+89.56	136.00' (LT)	Sterling Ranch Road	6983.96	END OF ASPHALT

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	DESCRIPTION
17	3+39.56	136.00' (LT)	Sterling Ranch Road	6984.59	END OF ASPHALT
18	3+39.56	67.06' (LT)	Sterling Ranch Road	6985.97	PT (EOA)
19	2+89.56	16.00' (LT)	Sterling Ranch Road	6987.62	PC (EOA)
20	1+76.00	16.00' (LT)	Sterling Ranch Road	6988.47	PI (EOA)
21	1+76.00	30.10' (LT)	Sterling Ranch Road	6988.11	PCR (FL)
22	1+36.00	70.10' (LT)	Sterling Ranch Road	6987.65	PCR/ CONNECT TO EX. FL
23	1+47.80	29.47' (RT)	Sterling Ranch Road	6988.65	FL-FL INTERCEPT
24	1+42.52	30.35' (LT)	Sterling Ranch Road	6988.02	FL-FL INTERCEPT



**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, INC. LOCAL ENGINEER  
 DATE

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

PREPARED FOR  
**RHETORIC, LLC**  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@MAIL.COM  
 (719) 964-0064

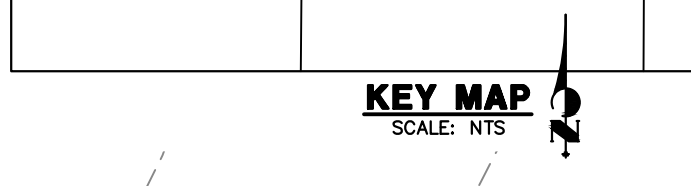
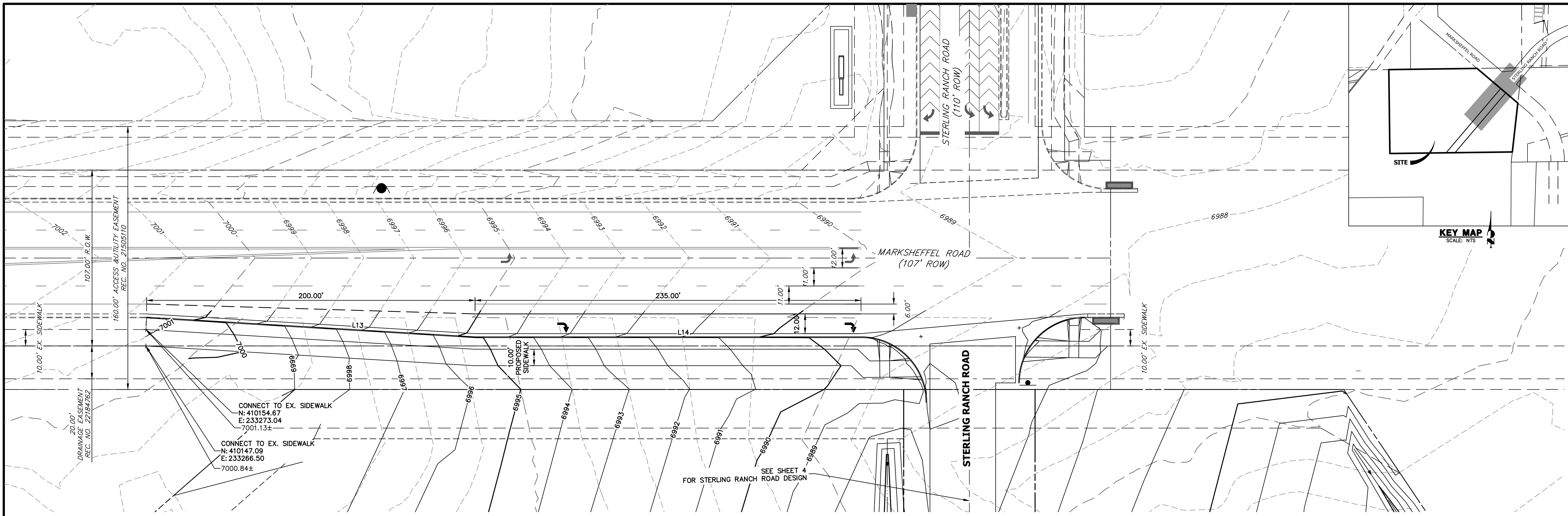
**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 300-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	NO.	REVISION

H-SCALE 1"=30'  
 V-SCALE 1"=3'  
 DATE 08/07/23  
 DESIGNED BY APL  
 DRAWN BY APL  
 CHECKED BY

**STERLING RECYCLING FACILITY**  
**STREET PLAN & PROFILE**  
**INTERIM**

SHEET 4 OF 10  
 JOB NO. 25188.14



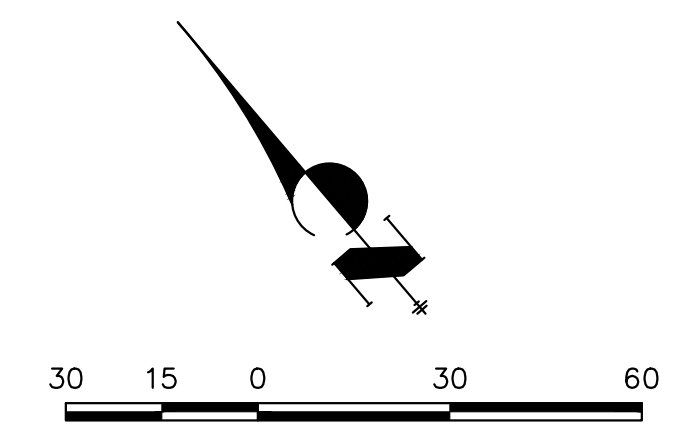
CONNECT TO EX. SIDEWALK  
N: 410154.67  
E: 233273.04  
7001.13±

CONNECT TO EX. SIDEWALK  
N: 410147.09  
E: 233266.50  
7000.84±

SEE SHEET 4  
FOR STERLING RANCH ROAD DESIGN

SEE SHEET 4

LINE TABLE		
LINE	BEARING	DISTANCE
L13	S46°12'09"E	200.33'
L14	S49°38'27"E	234.58'

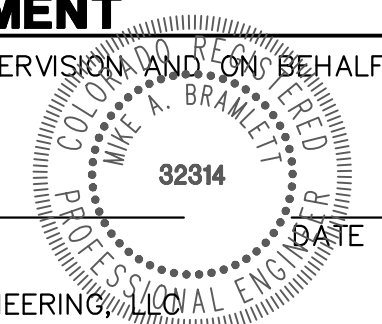


**ENGINEER'S STATEMENT**

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

DATE



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

PREPARED FOR  
RHETORIC, LLC  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ATTN: ERIC HOWARD  
EHOWARD@MAIL.COM  
(719) 964-0064

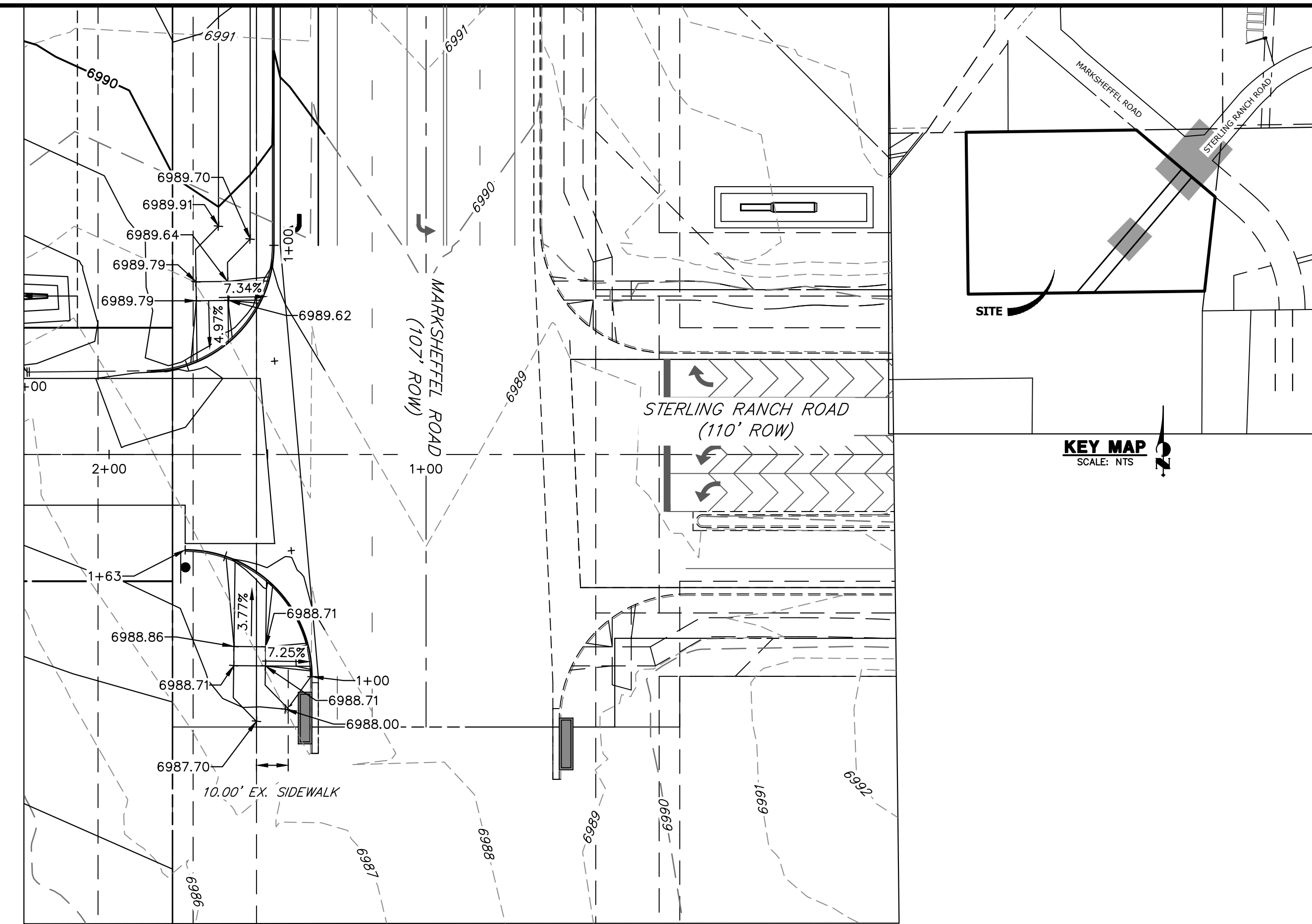
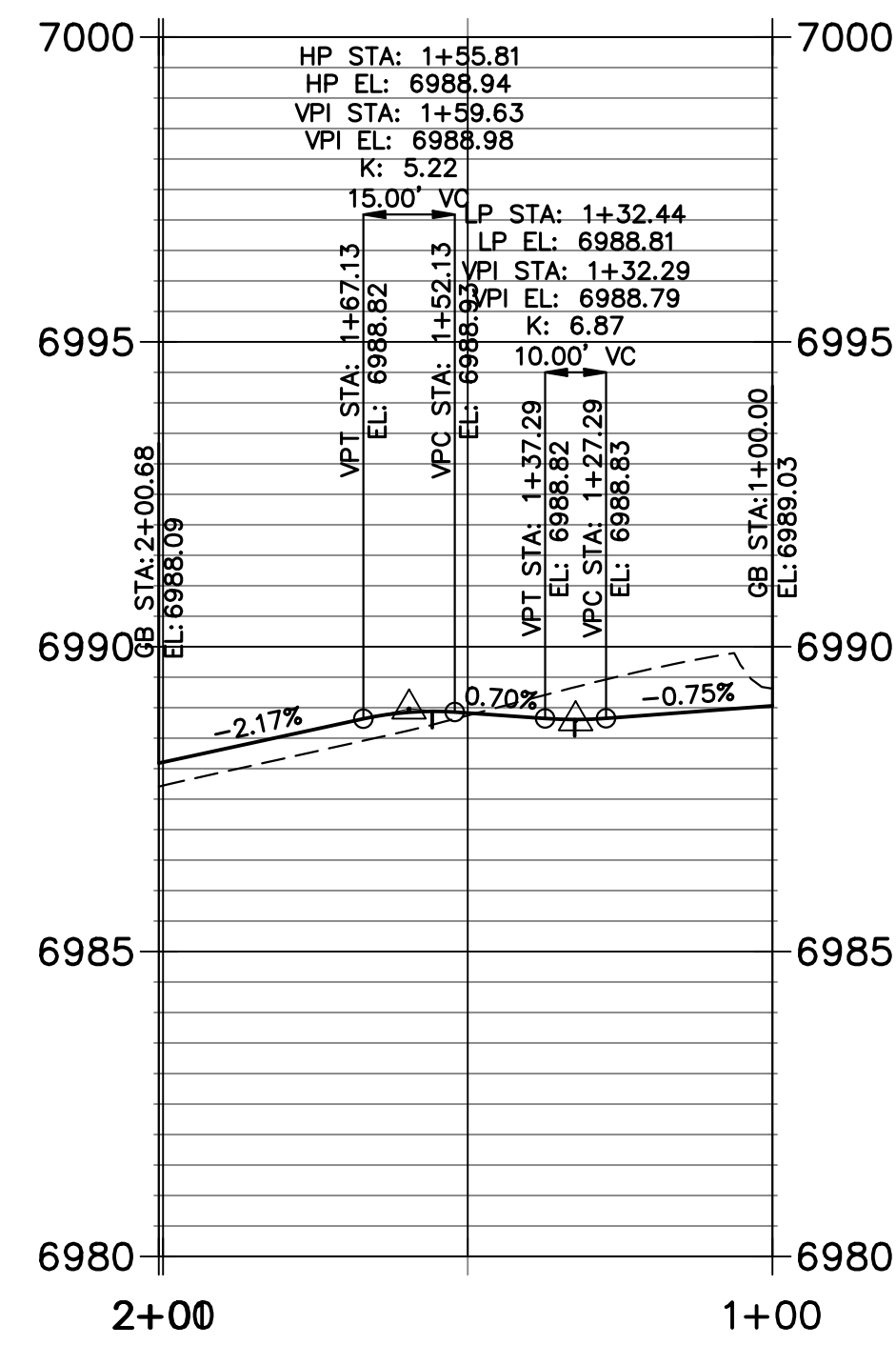
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
1"=30'	1"=3'	08/07/23	APL	APL					

STERLING RECYCLING FACILITY  
STREET PLAN & PROFILE  
INTERIM

SHEET 5 OF 10  
JOB NO. 25188.14

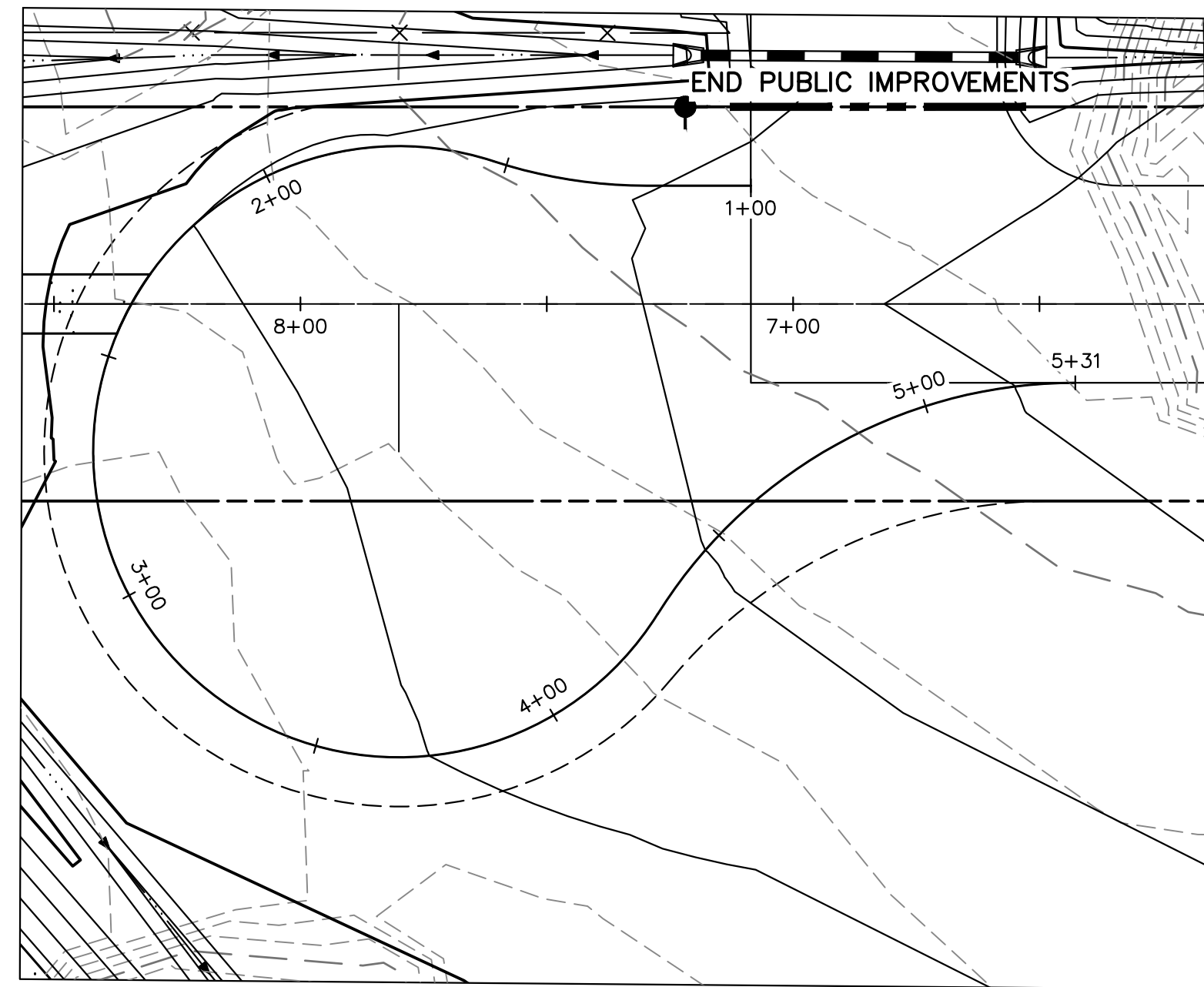
**STERLING MARKSHEFFEL WEST FL PROF  
STA 1+00.00 TO 2+00.68**



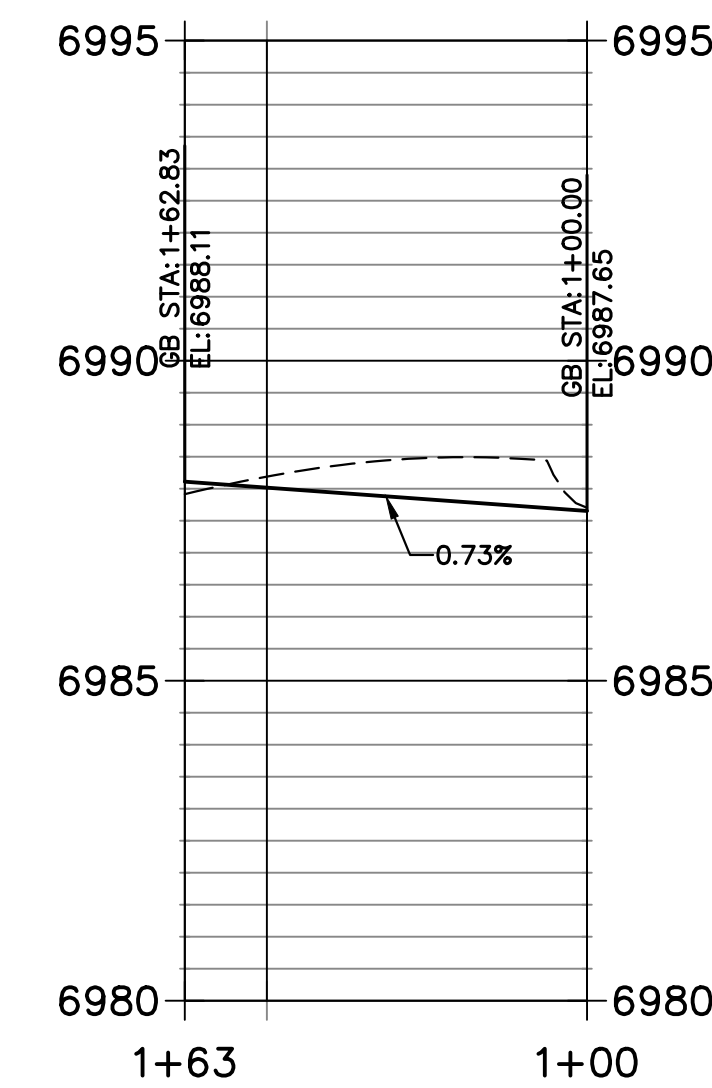
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**RHETORIC, LLC**  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ATTN: ERIC HOWARD  
EHOWARD@MAIL.COM  
(719) 964-0064

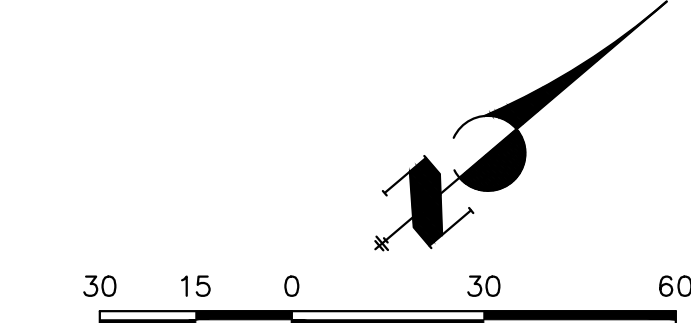
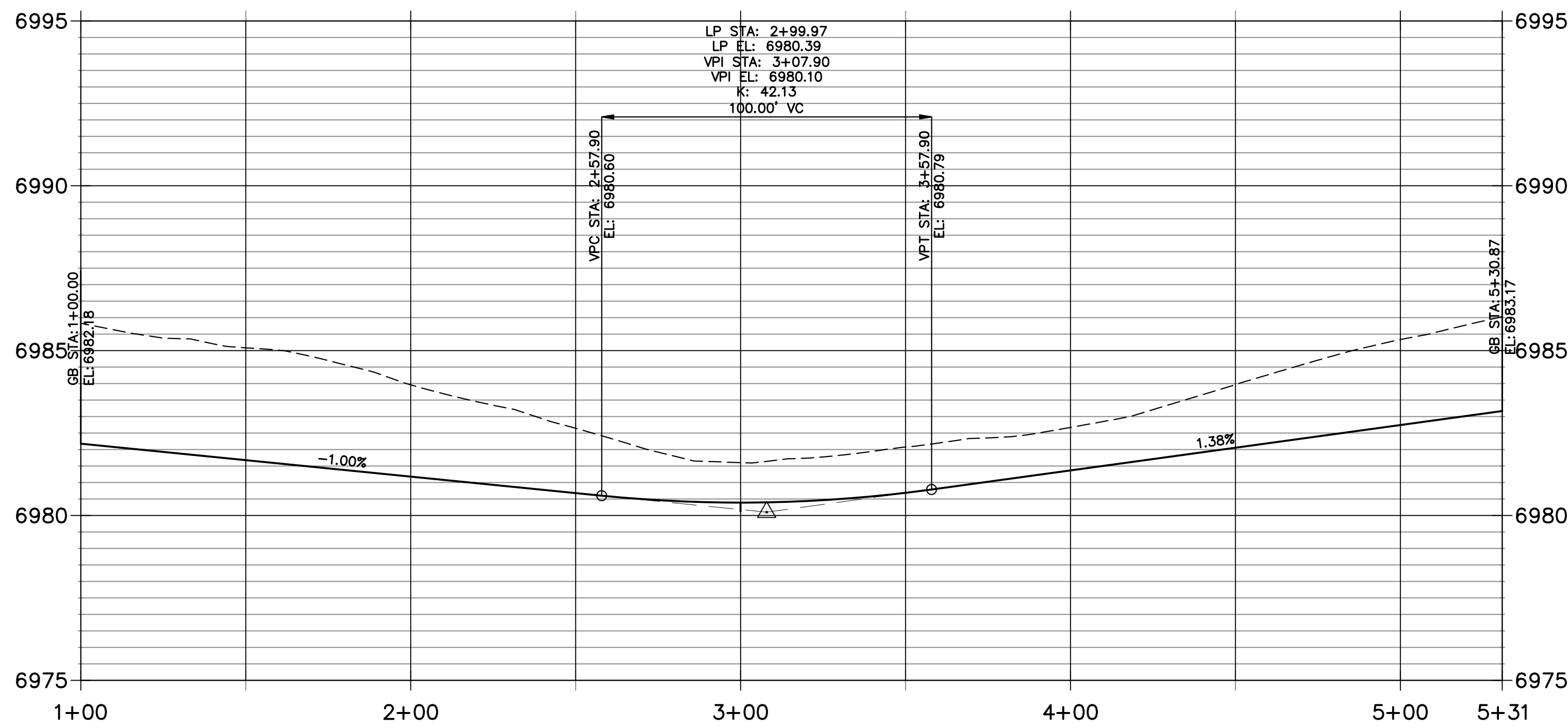
**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com



**STERLING MARKSHEFFEL EAST FL PROFILE PROFILE  
STA 1+00.00 TO 1+62.83**



**TEMP CUL-DE-SAC PROFILE  
STA 1+00.00 TO 5+30.87**



**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

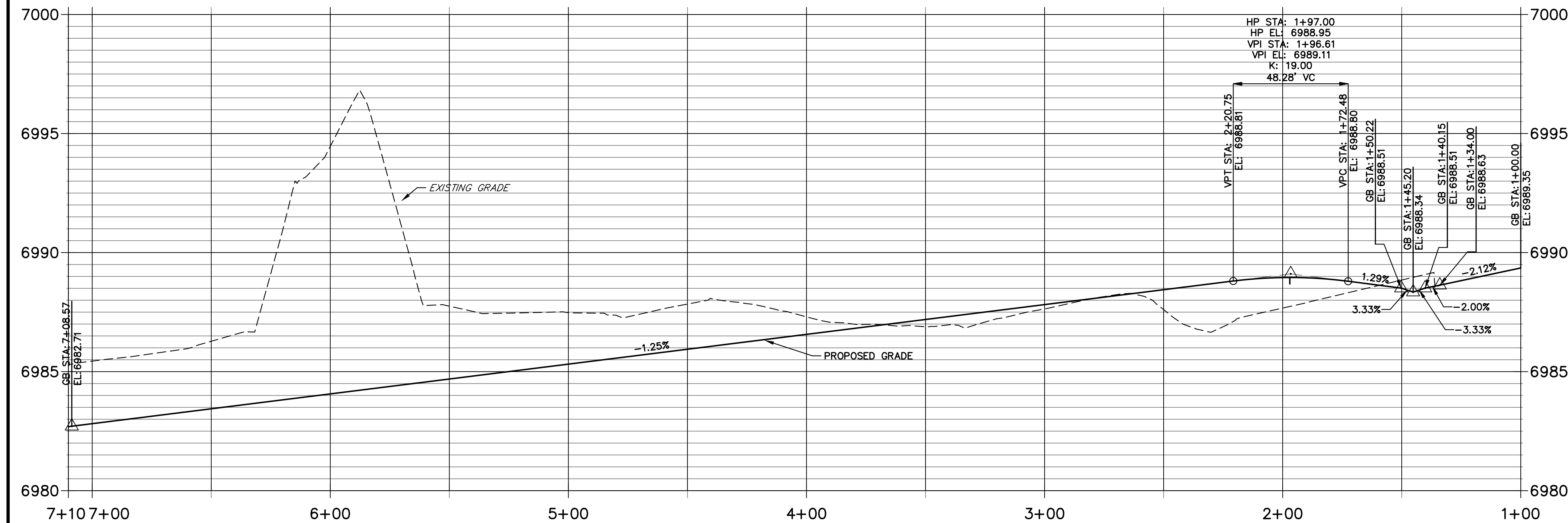
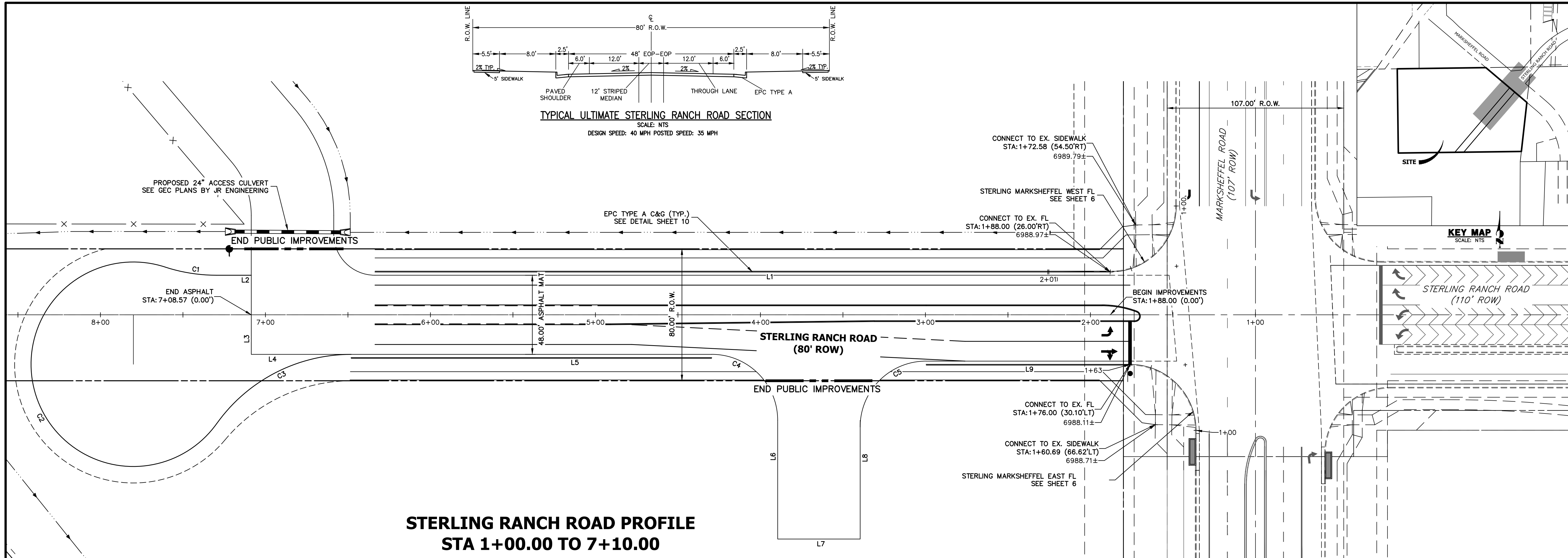
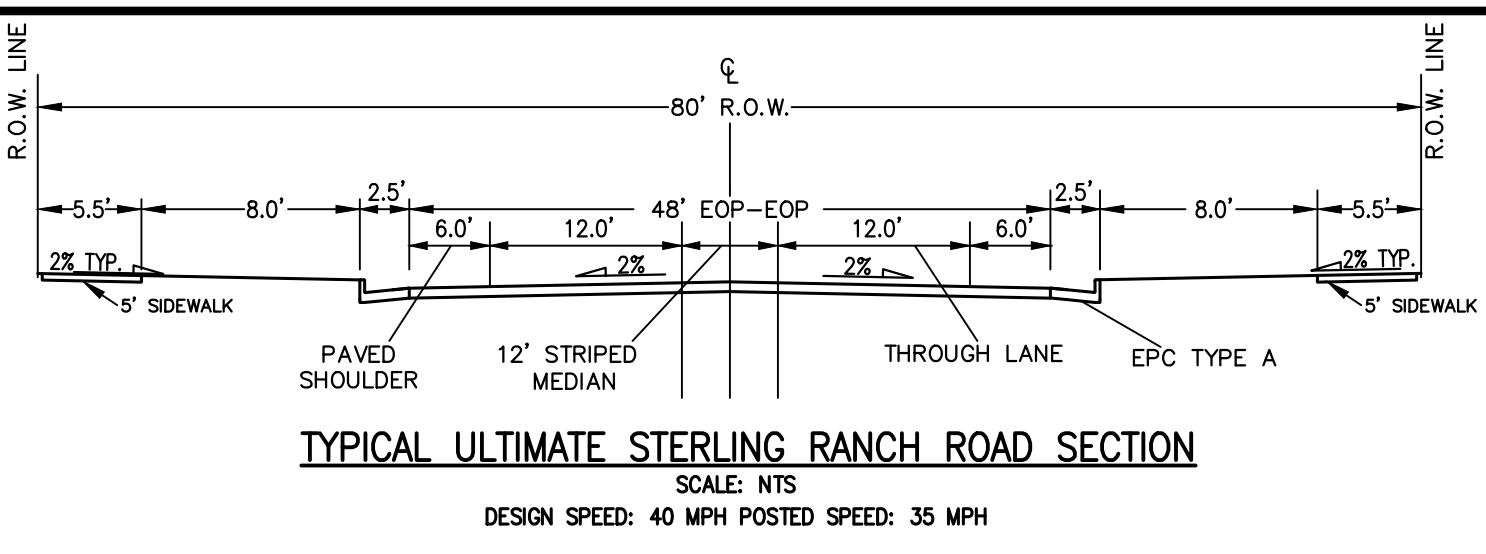
DATE

BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=30'	1"=3'	08/07/23	APL	APL	

STERLING RECYCLING FACILITY  
STREET PLAN & PROFILE  
INTERIM

SHEET 6 OF 10  
JOB NO. 25188.14

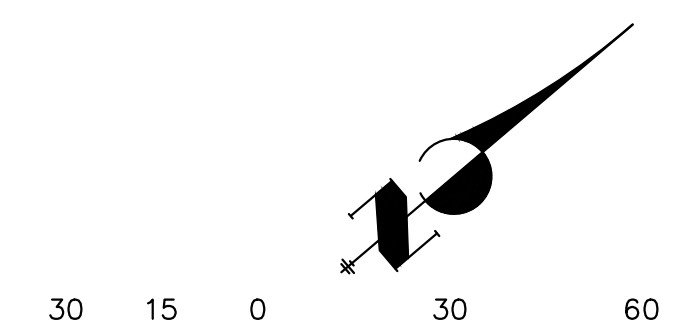


LINE	BEARING	DISTANCE
L1	S40°21'31"W	445.60'
L2	S40°21'31"W	21.16'
L3	N49°38'29"W	48.00'
L4	S40°21'31"W	60.50'
L5	S40°21'31"W	218.51'
L6	N49°38'29"W	72.00'
L7	S40°21'31"W	50.00'
L8	S49°38'29"E	72.00'
L9	S40°21'31"W	123.56'

CURVE	DELTA	RADIUS	LENGTH
C1	18°04'52"	100.00'	31.56'
C2	252°36'48"	62.00'	273.35'
C3	54°31'56"	100.00'	95.18'
C4	90°00'00"	40.00'	62.83'
C5	83°22'14"	40.41'	58.80'



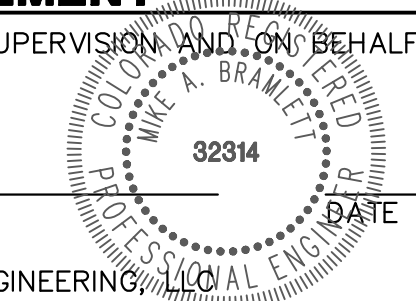
Know what's below.  
Call before you dig.



**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



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

PREPARED FOR  
**RHETORIC, LLC**  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@MAIL.COM  
 (719) 964-0064

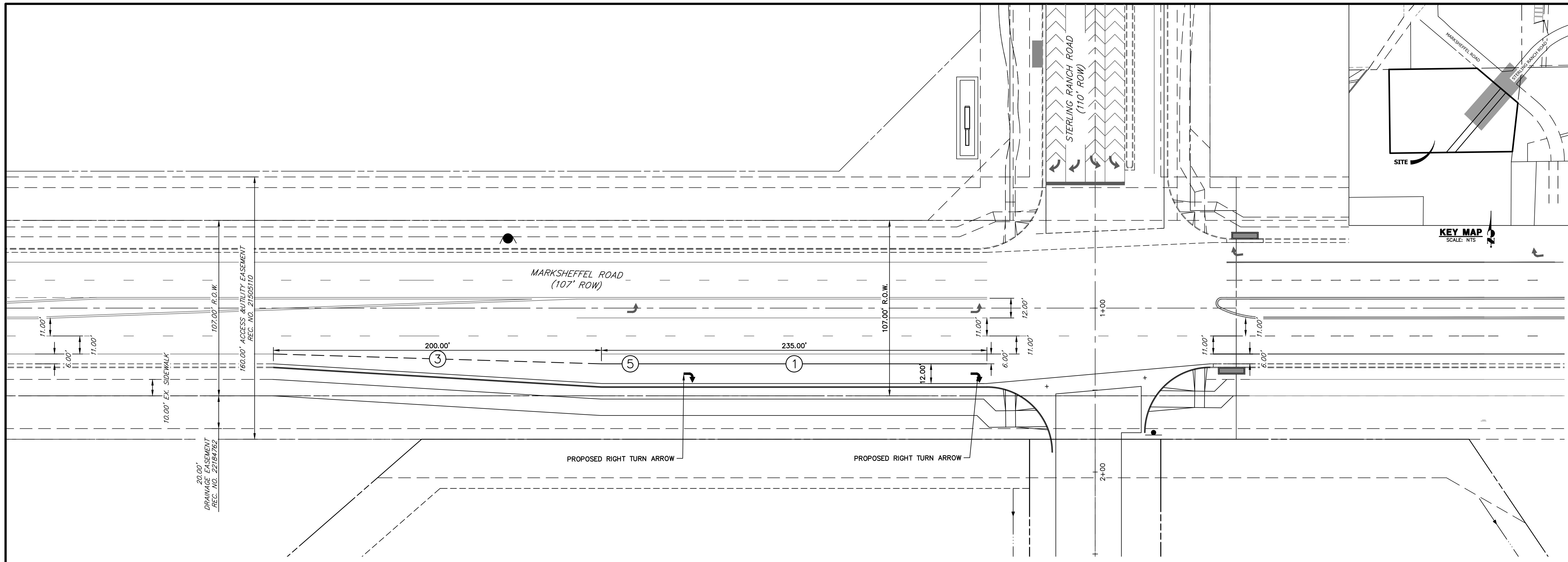
**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 303-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

STERLING RECYCLING FACILITY

STREET PLAN & PROFILE ULTIMATE

SHEET 7 OF 10  
 JOB NO. 25188.14



**NOTE TO CONTRACTOR:**

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	DOUBLE CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
②	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30' GAPS
③	LANE DROP LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 3' SEGMENTS WITH 12' GAPS
④	EDGE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑤	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑥	DOTTED EXTENSION LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 2' SEGMENTS WITH 4' GAPS

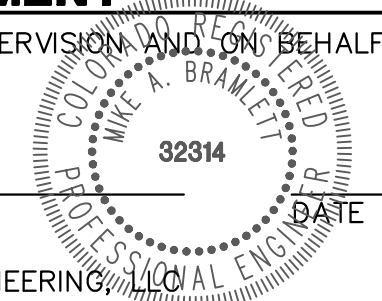
NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.



**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



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.

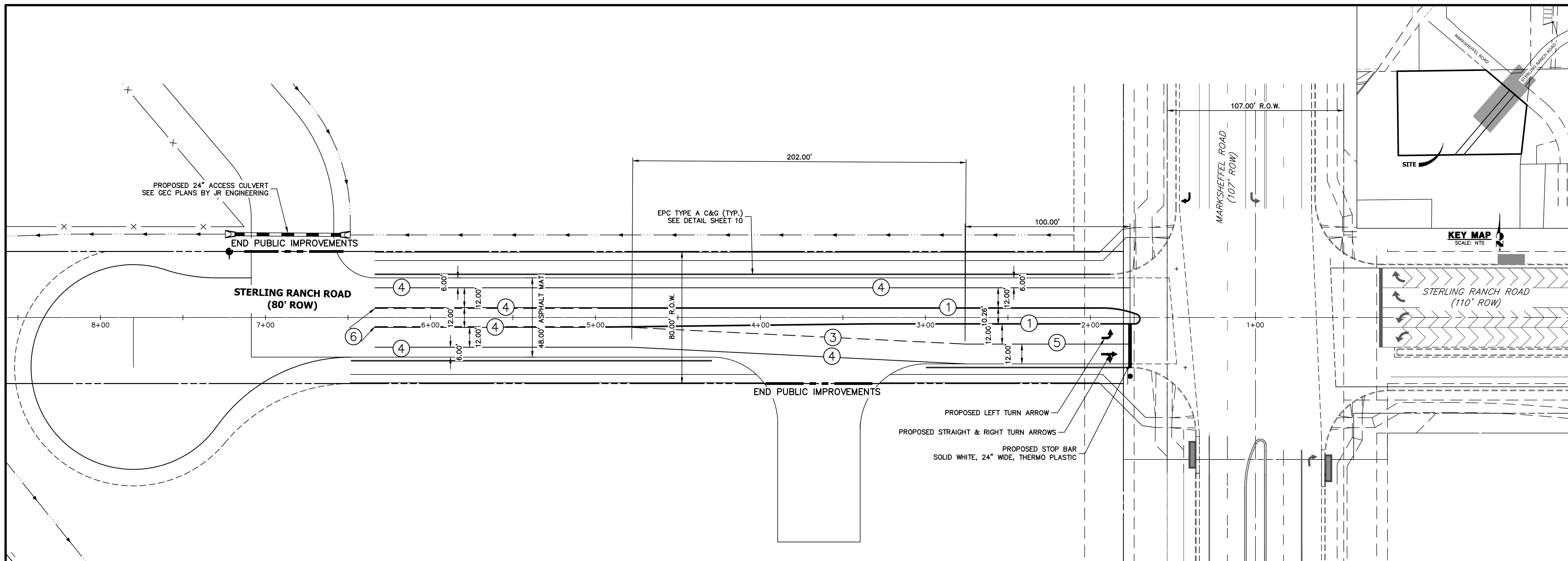
PREPARED FOR  
**RHETORIC, LLC**  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@MAIL.COM  
 (719) 964-0064

**J.R. ENGINEERING**  
 A Westman Company  
  
 Central 303-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	1"=30'
V-SCALE	N/A
DATE	08/07/23
DESIGNED BY	APL
DRAWN BY	APL
CHECKED BY	

STERLING RECYCLING FACILITY  
 SIGNAGE & STRIPING INTERIM  
 SHEET 8 OF 10  
 JOB NO. 25188.14

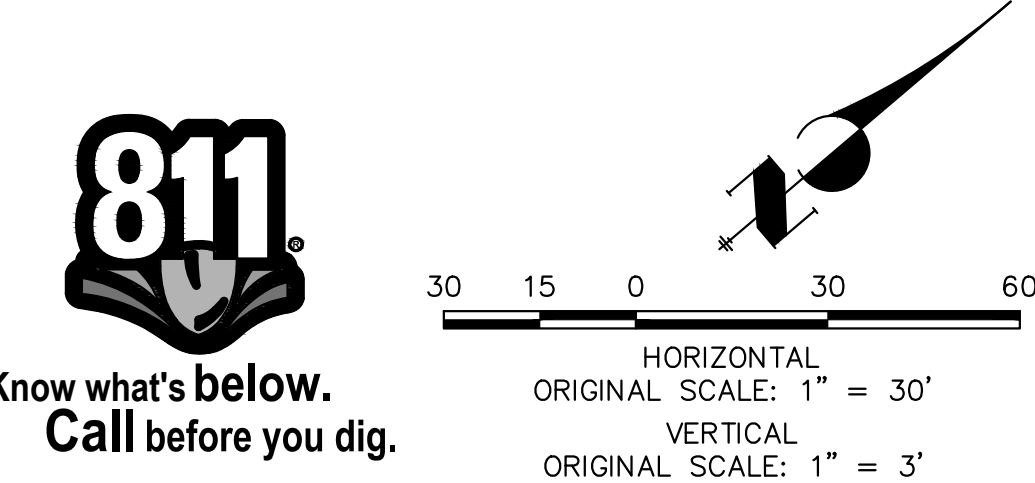
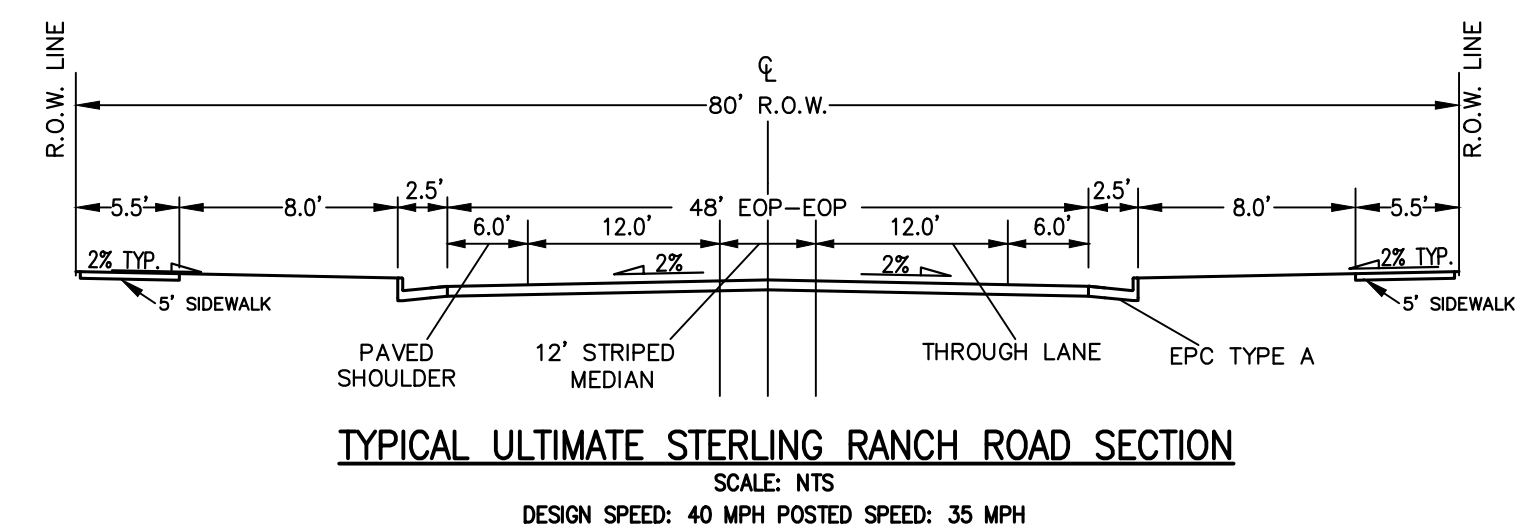


**NOTE TO CONTRACTOR:**

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	DOUBLE CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
②	LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30' GAPS
③	LANE DROP LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 3' SEGMENTS WITH 12' GAPS
④	EDGE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑤	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑥	DOTTED EXTENSION LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 2' SEGMENTS WITH 4' GAPS

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.



**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

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

PREPARED FOR  
**RHETORIC, LLC**  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@MAIL.COM  
 (719) 964-0064

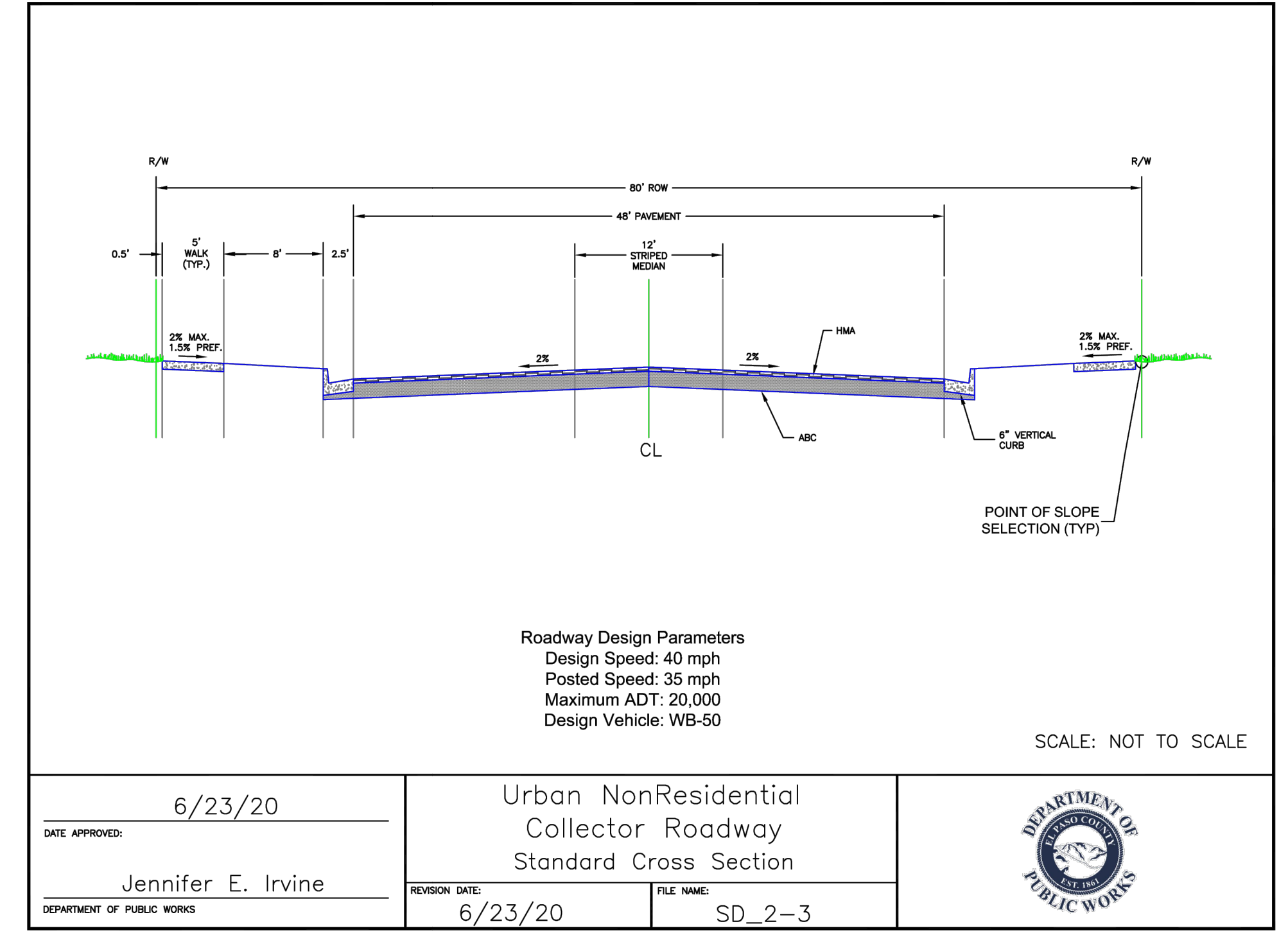
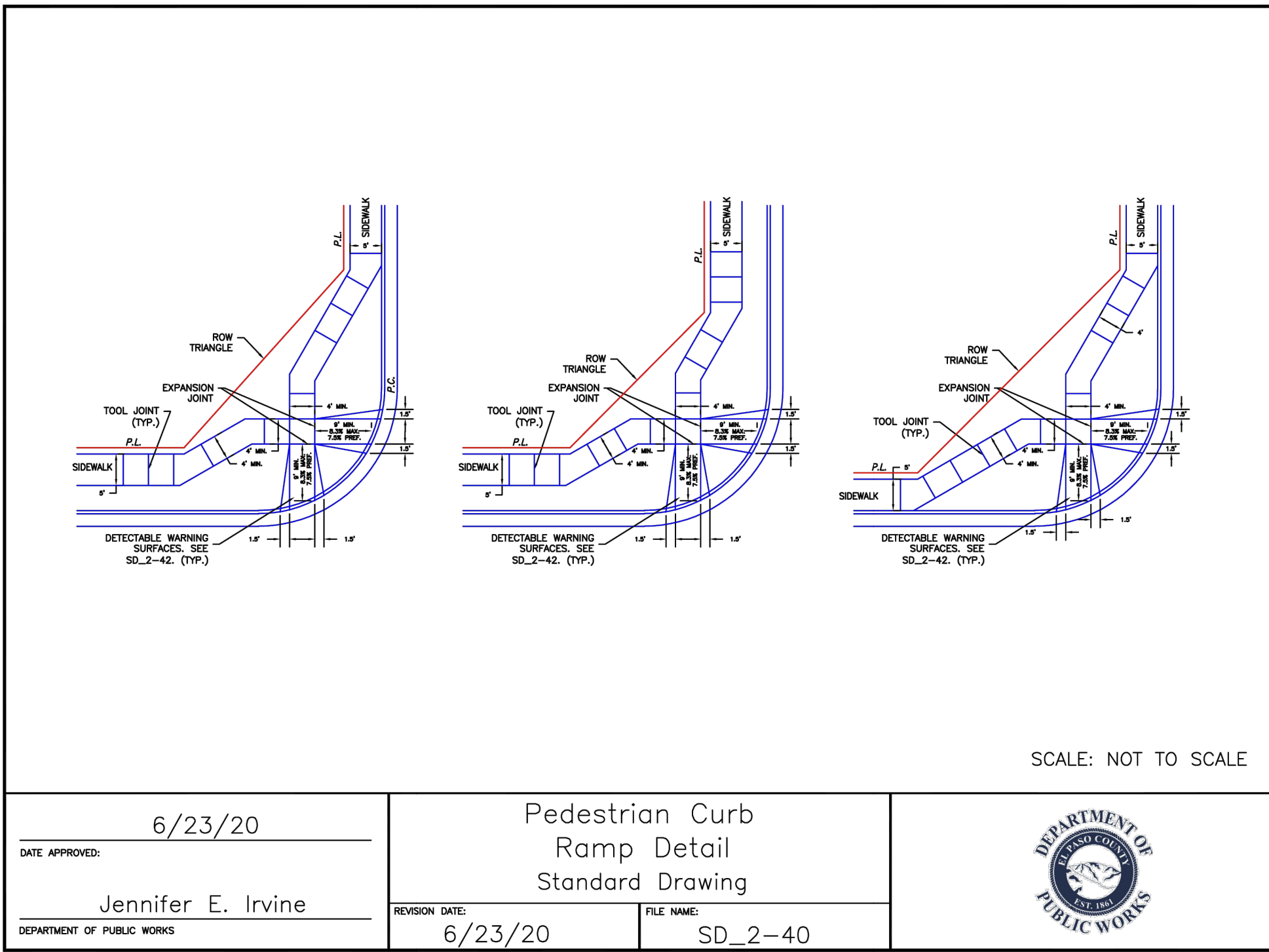
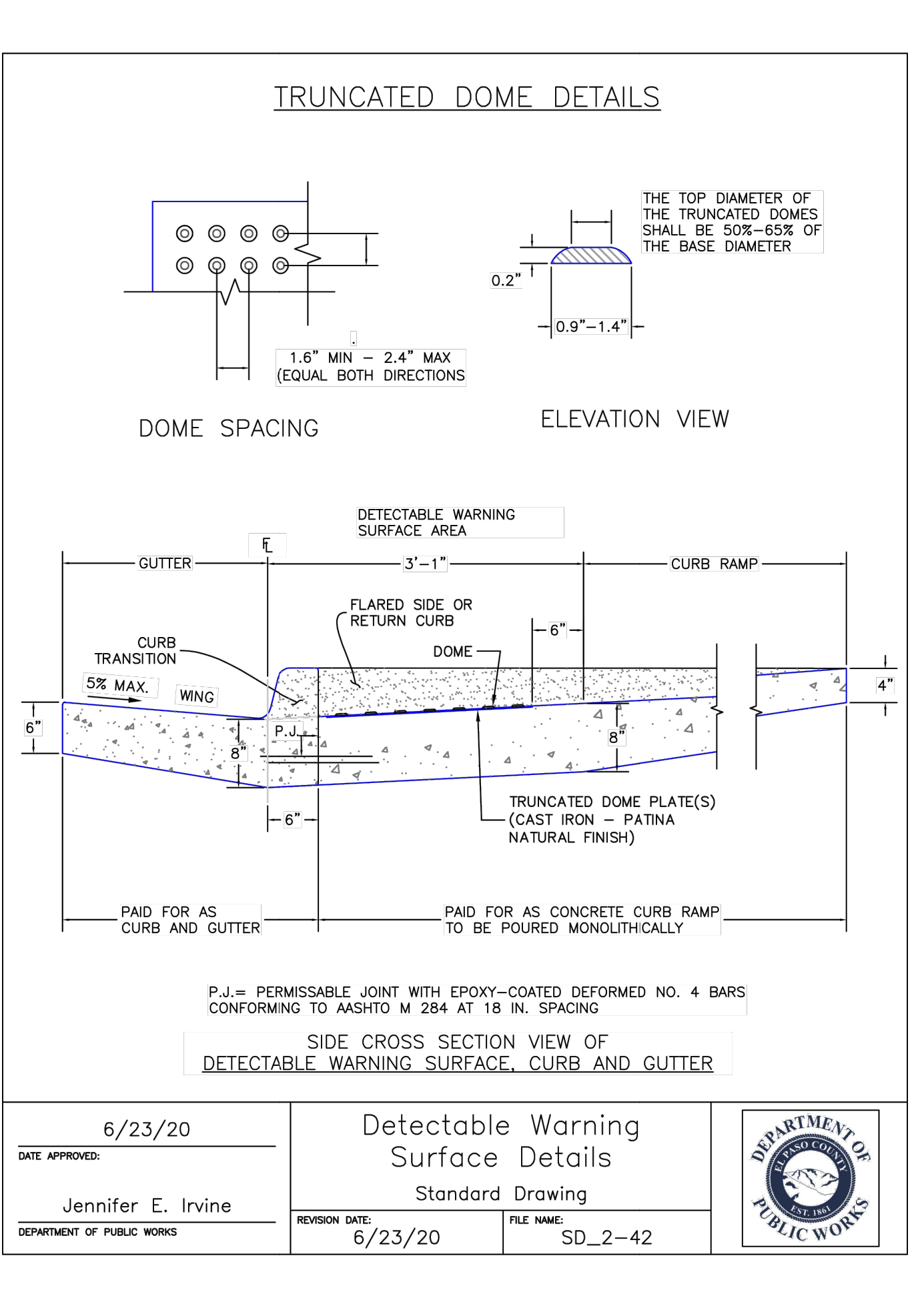
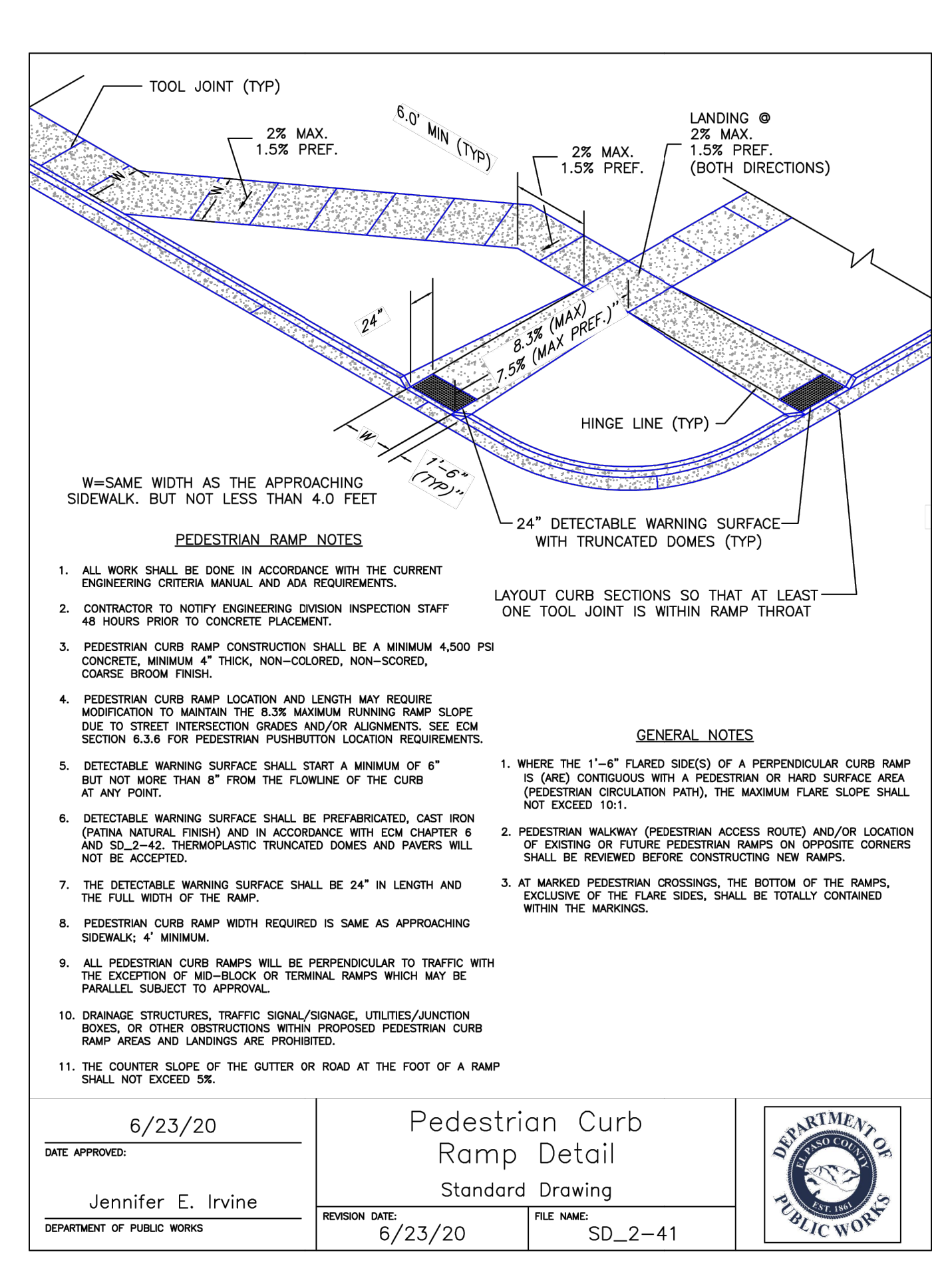
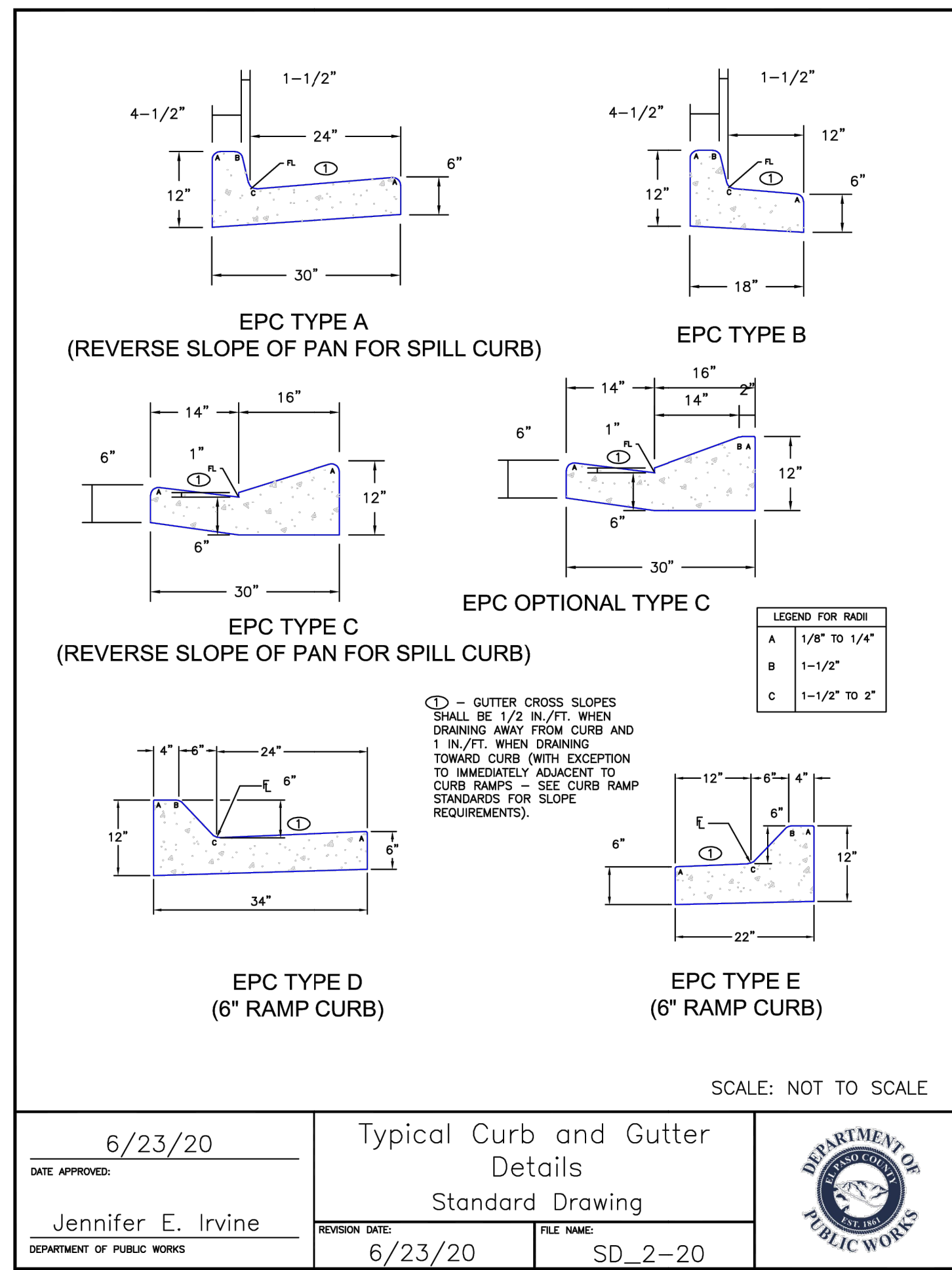
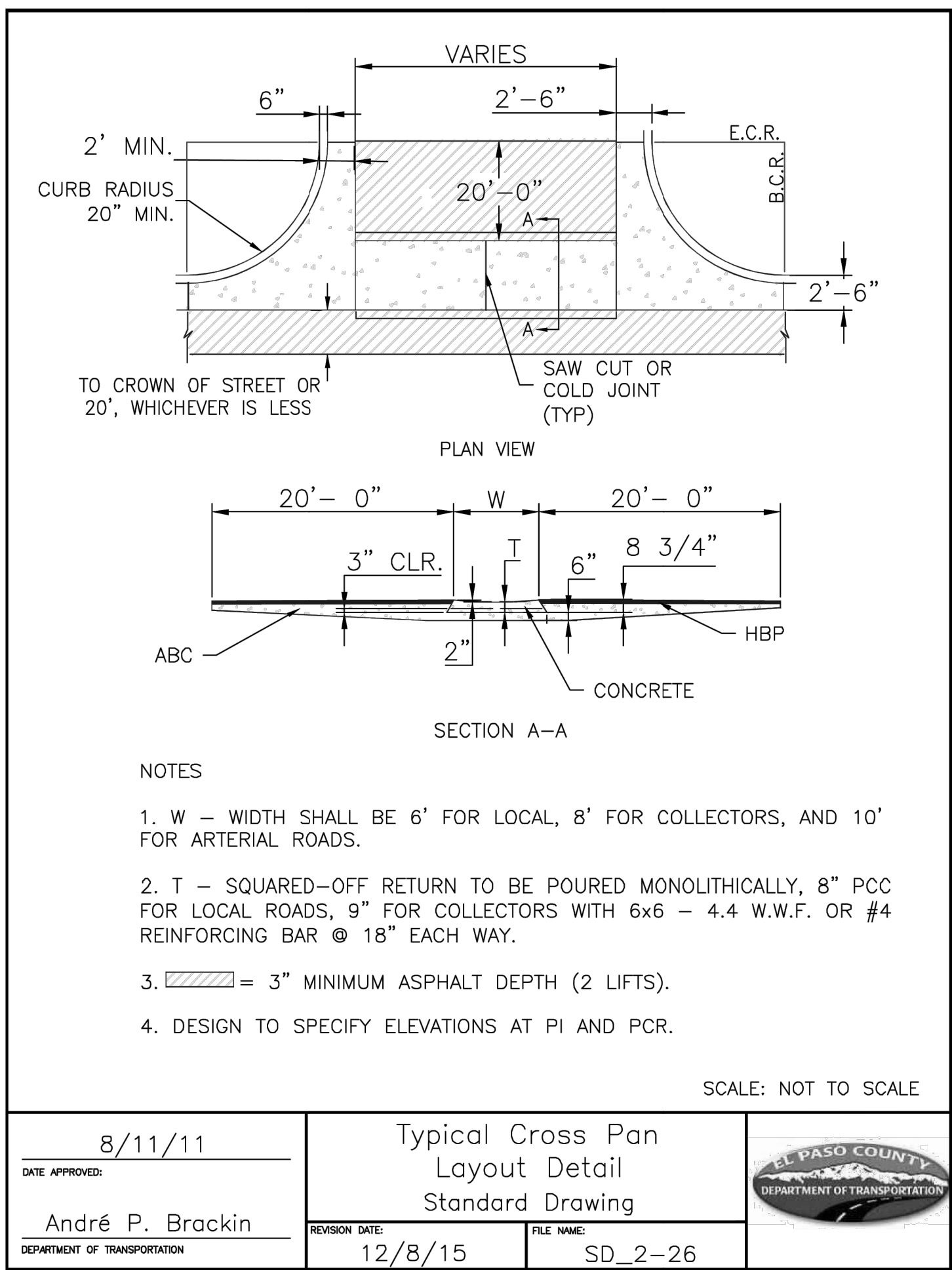
**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 303-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

H-SCALE 1"=30'  
 V-SCALE 1"=3'  
 DATE 08/07/23  
 DESIGNED BY APL  
 DRAWN BY APL  
 CHECKED BY

STERLING RECYCLING FACILITY  
 SIGNAGE & STRIPING ULTIMATE

SHEET 9 OF 10  
 JOB NO. 25188.14



**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

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

PREPARED FOR: RHECTORIC, LLC  
 20 BOULDER CRESCENT, SUITE 200  
 COLORADO SPRINGS, CO  
 ATTN: ERIC HOWARD  
 EHOWARD@MAIL.COM (719) 964-0064

**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 303-740-9383 • Colorado Springs 719-583-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE: N/A  
 V-SCALE: N/A  
 DATE: 08/07/23  
 DESIGNED BY: APL  
 DRAWN BY: APL  
 CHECKED BY:

STERLING RECYCLING FACILITY  
 DETAIL SHEET

SHEET 10 OF 10  
 JOB NO. 25188.14

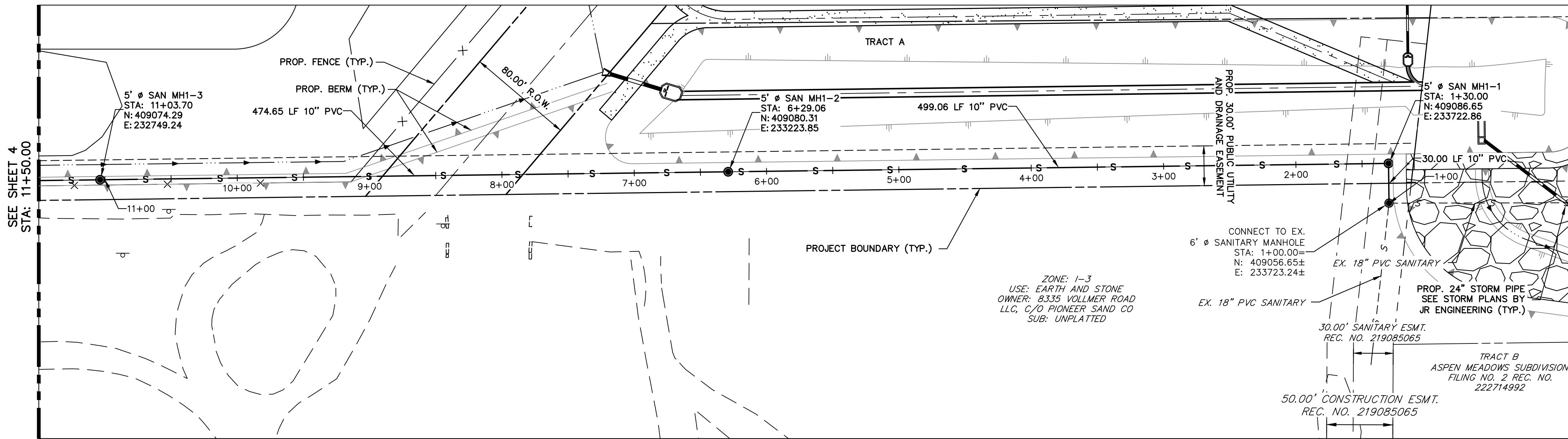


Know what's below.  
 Call before you dig.

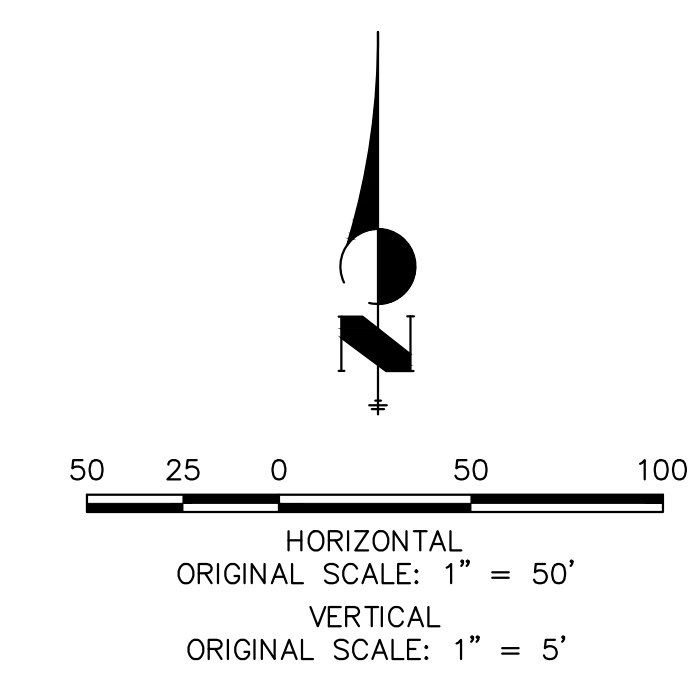
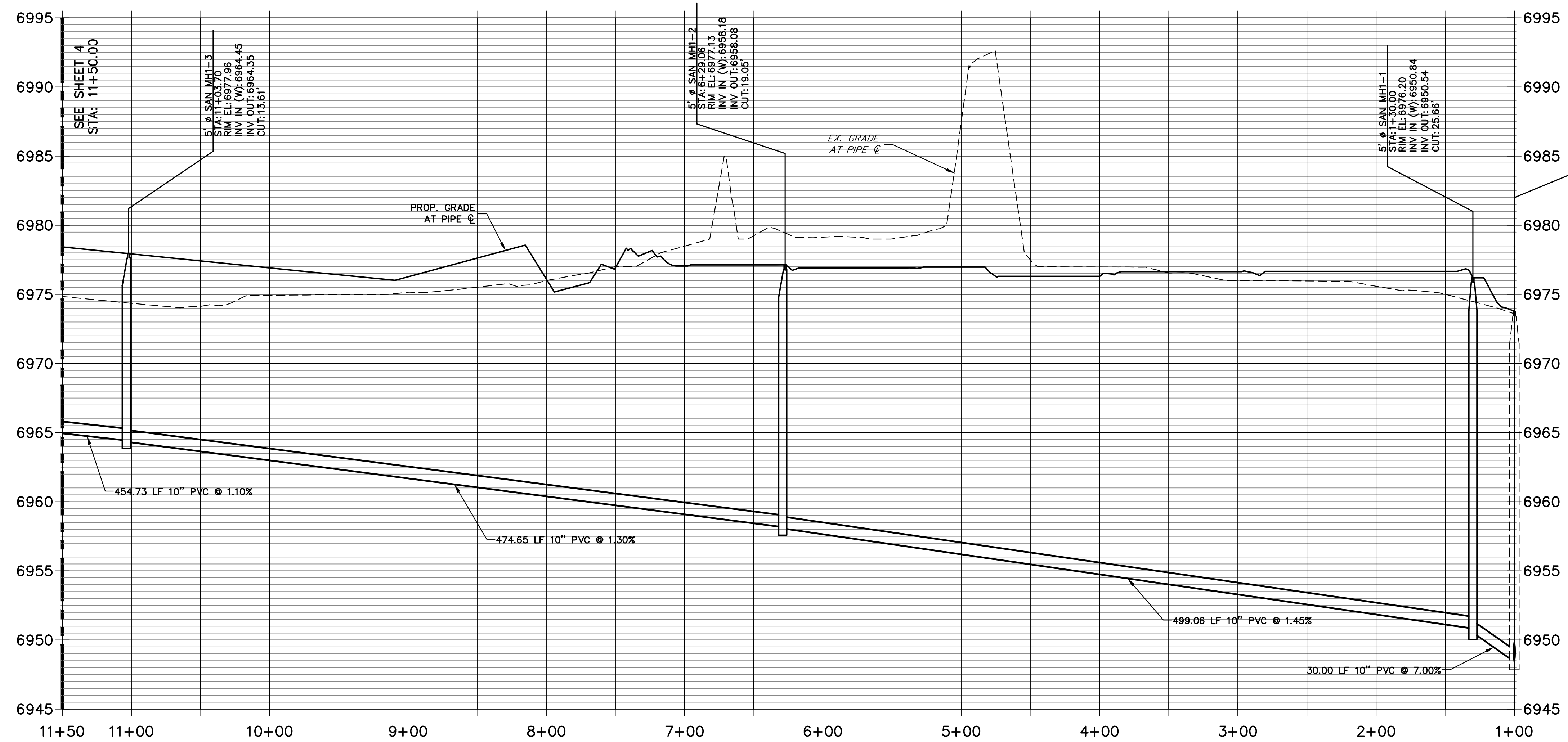








**ALIGNMENT SP01 PROFILE  
STA 1+00.00 TO 11+50.00**



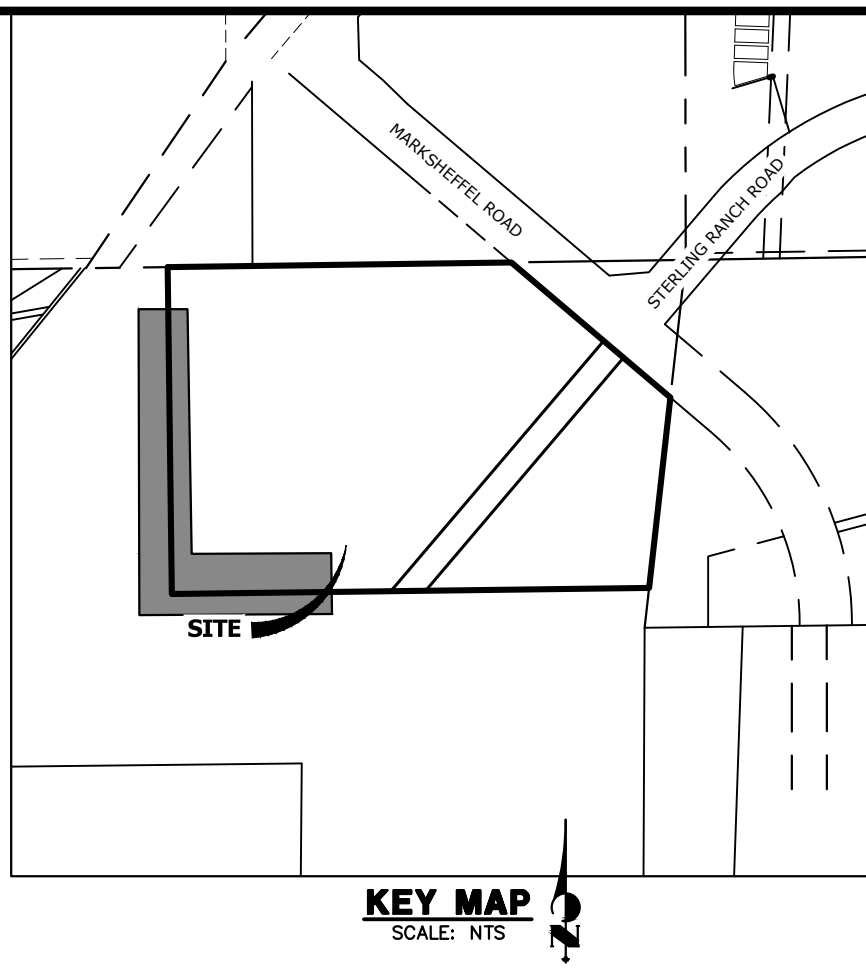
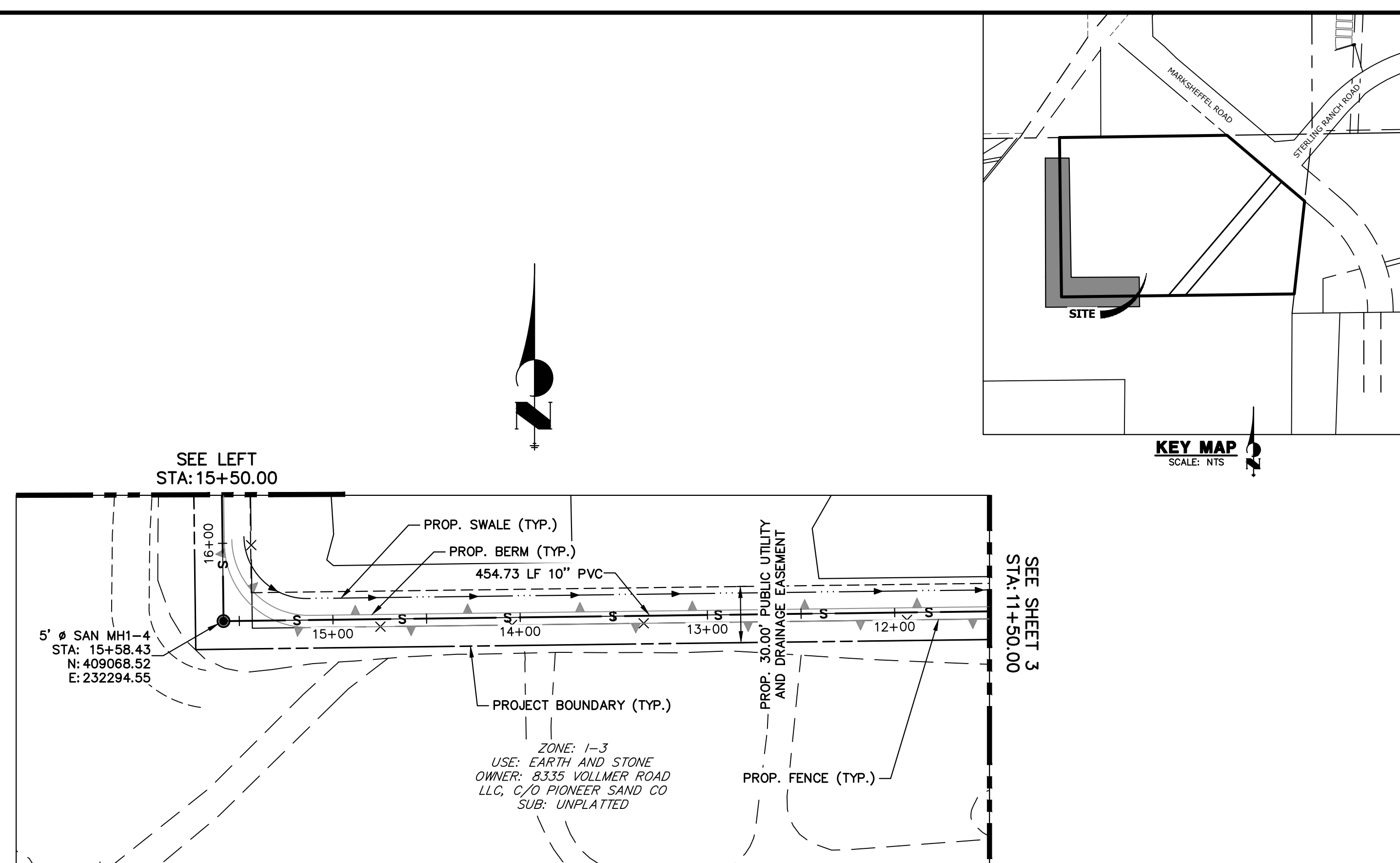
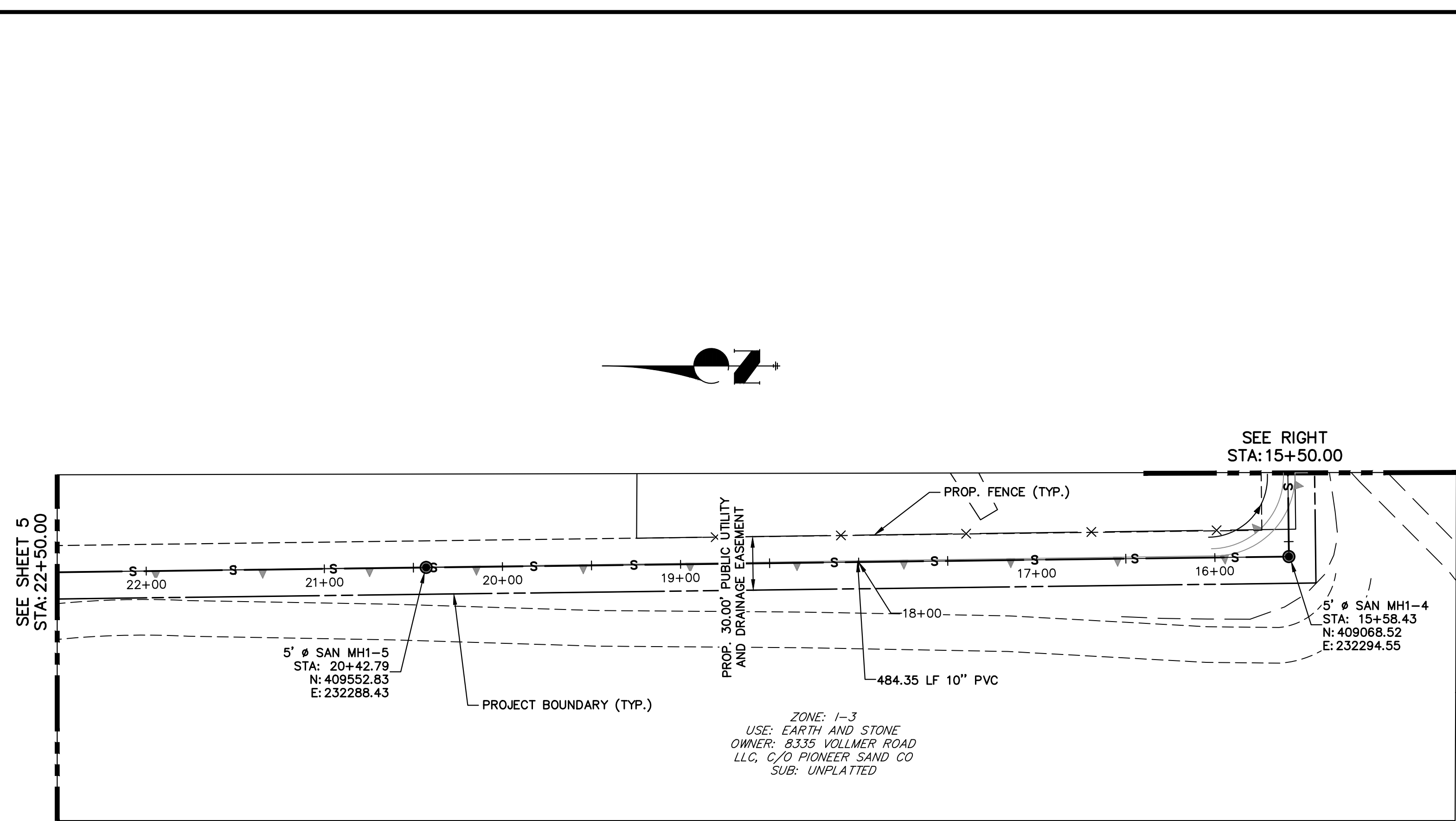
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE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



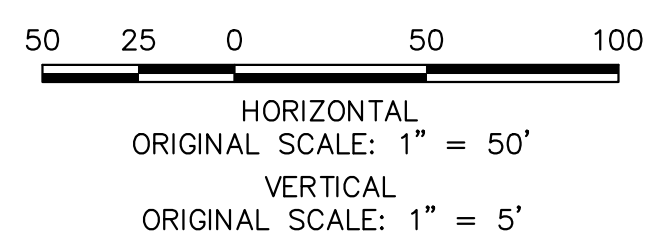
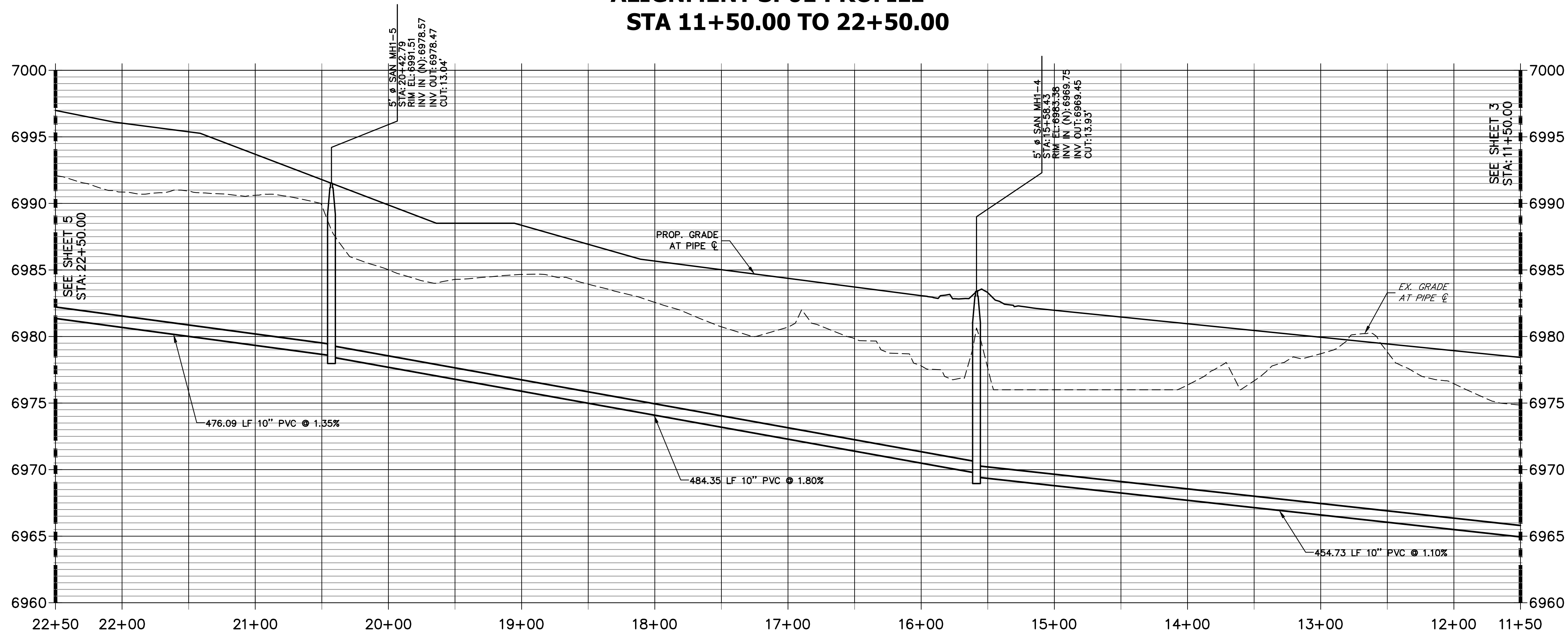
**ENGINEER'S STATEMENT**  
 PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING

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 <b>RHETORIC, LLC</b> 20 BOULDER CRESCENT, SUITE 200 COLORADO SPRINGS, CO ERIC HOWARD EHOWARDPC@GMAIL.COM (719) 964-0064	<b>J.R. ENGINEERING</b> A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	No.	REVISION	BY	DATE
		H-SCALE 1"=50'	V-SCALE 1"=5'	DATE 8/1/23	DESIGNED BY PAL
<b>STERLING RECYCLING FACILITY</b>		<b>SANITARY SEWER PLANS</b>			
SHEET 3 OF 6		JOB NO. 25188.14			

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**ALIGNMENT SP01 PROFILE  
STA 11+50.00 TO 22+50.00**



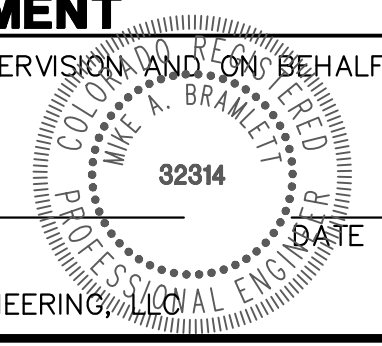
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**ENGINEER'S STATEMENT**

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



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

PREPARED FOR  
**RHETORIC, LLC**  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ERIC HOWARD  
EHOWARDPC@GMAIL.COM  
(719) 964-0064

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

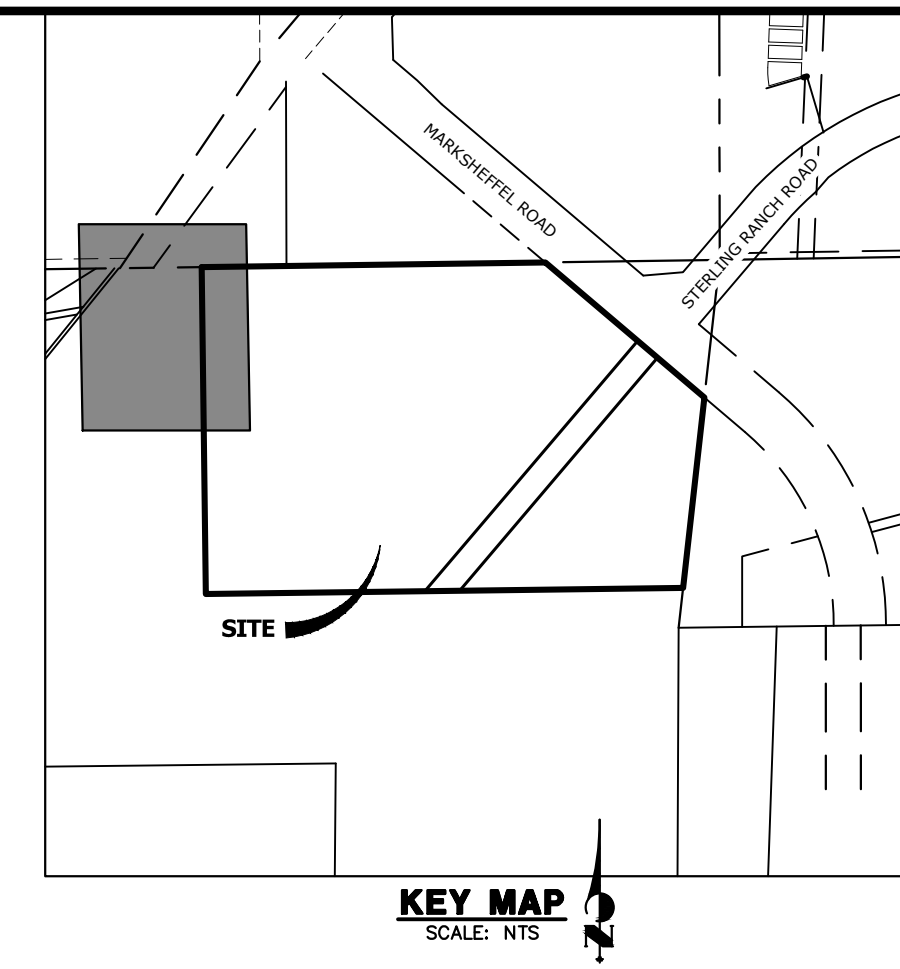
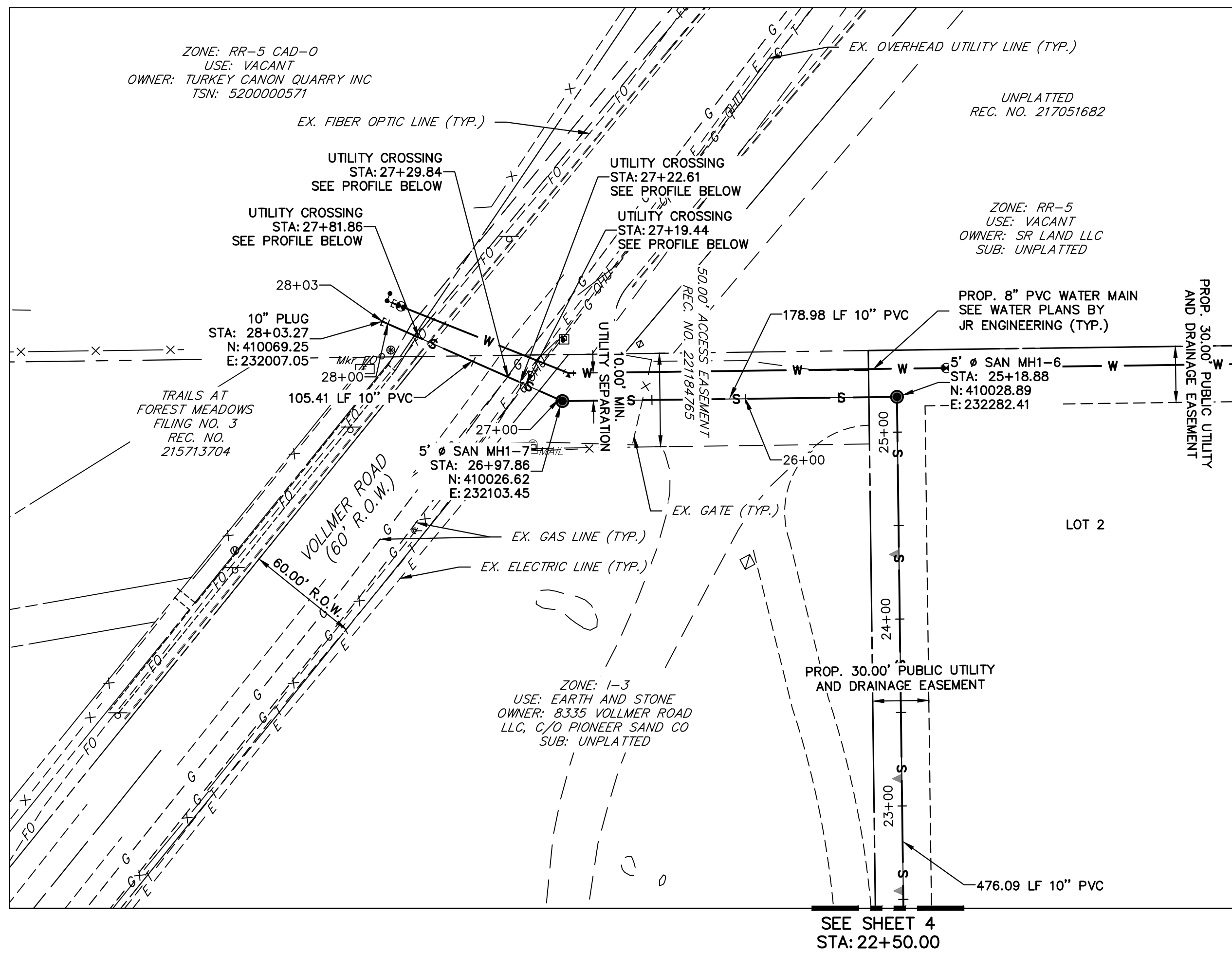
No.	REVISION	BY	DATE

STERLING RECYCLING FACILITY

SANITARY SEWER PLANS

H-SCALE 1"=50'  
V-SCALE 1"=5'  
DATE 8/1/23  
DESIGNED BY PAL  
DRAWN BY PAL  
CHECKED BY

SHEET 4 OF 6  
JOB NO. 25188.14



UNPLATTED  
REC. NO. 217051682

ZONE: RR-5  
USE: VACANT  
OWNER: SR LAND LLC  
SUB: UNPLATTED

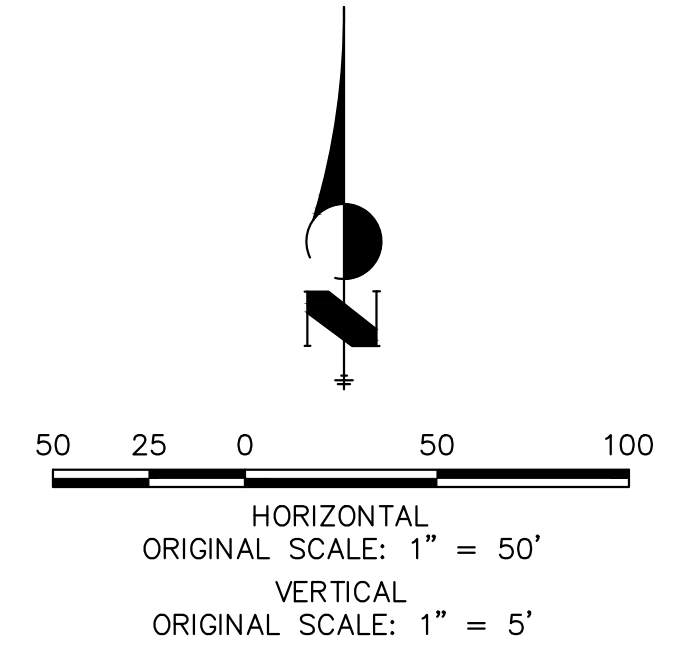
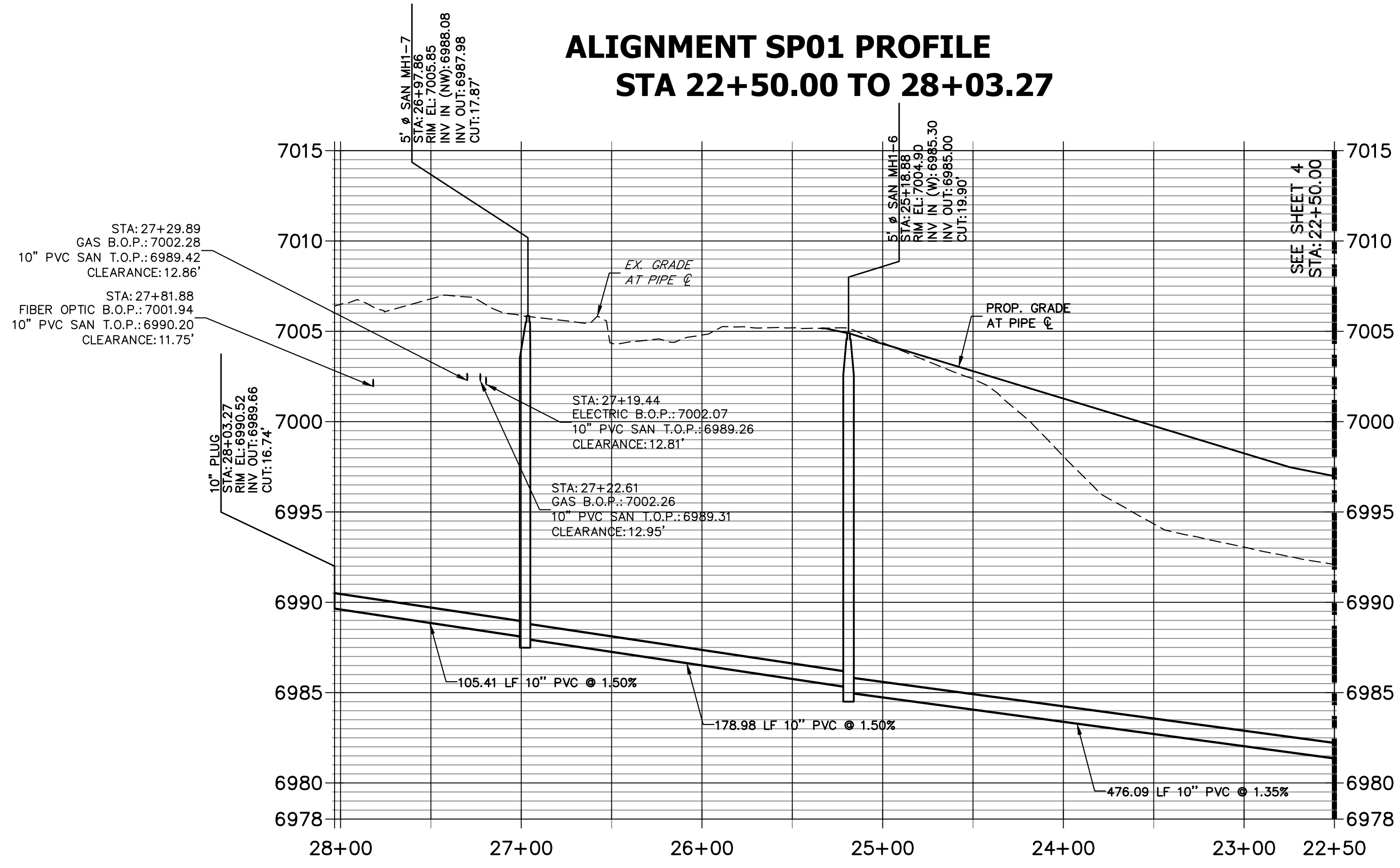
ZONE: I-3  
USE: EARTH AND STONE  
OWNER: PIONEER SAND CO  
SUB: UNPLATTED

PREPARED FOR  
**RHETORIC, LLC**  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ERIC HOWARD  
EHOWARDPC@GMAIL.COM  
(719) 964-0064

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION

**ALIGNMENT SP01 PROFILE  
STA 22+50.00 TO 28+03.27**



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.



**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

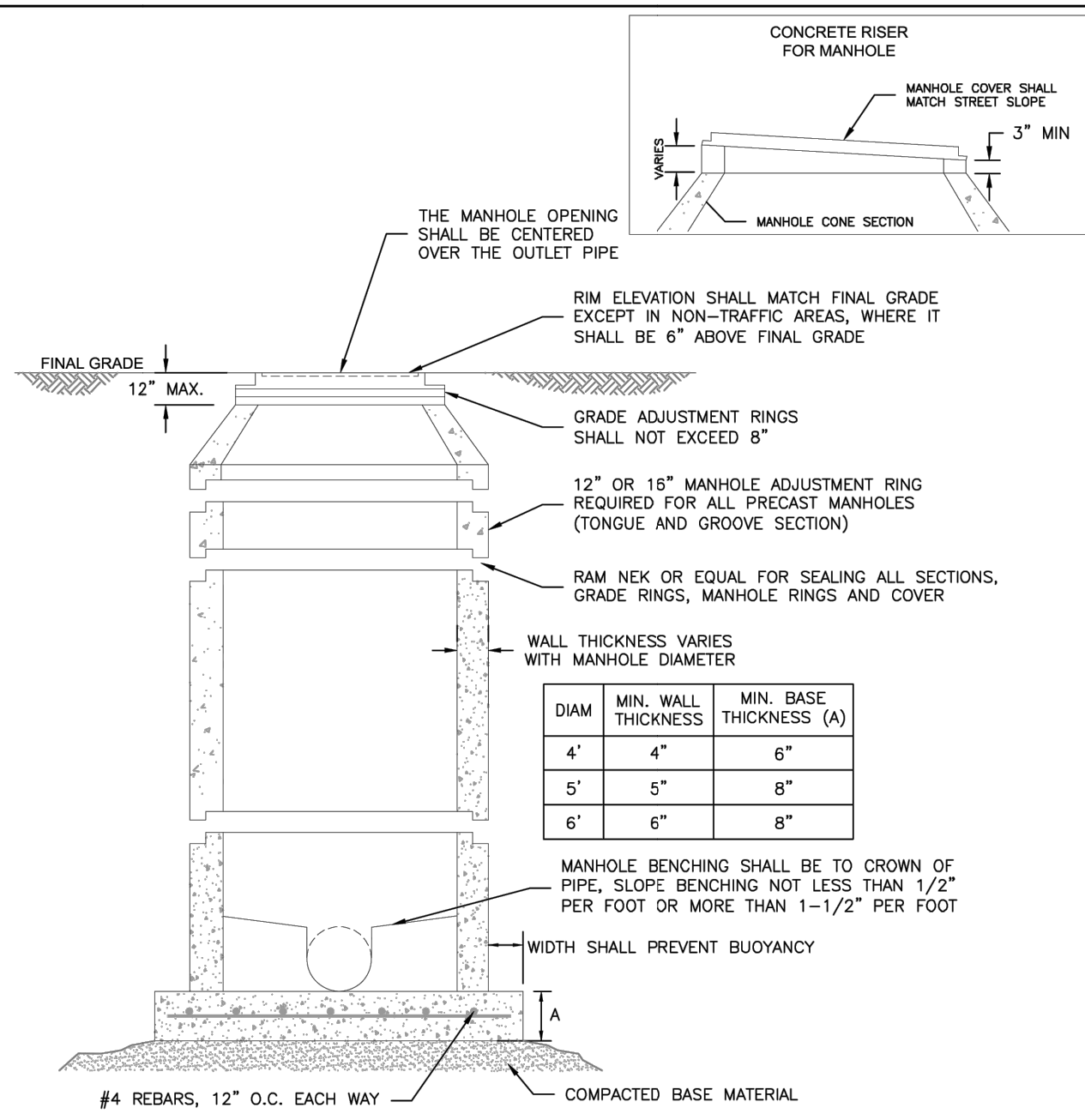
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

STERLING RECYCLING FACILITY  
SANITARY SEWER PLANS

H-SCALE 1"=50'  
V-SCALE 1"=5'  
DATE 8/1/23  
DESIGNED BY PAL  
DRAWN BY PAL  
CHECKED BY

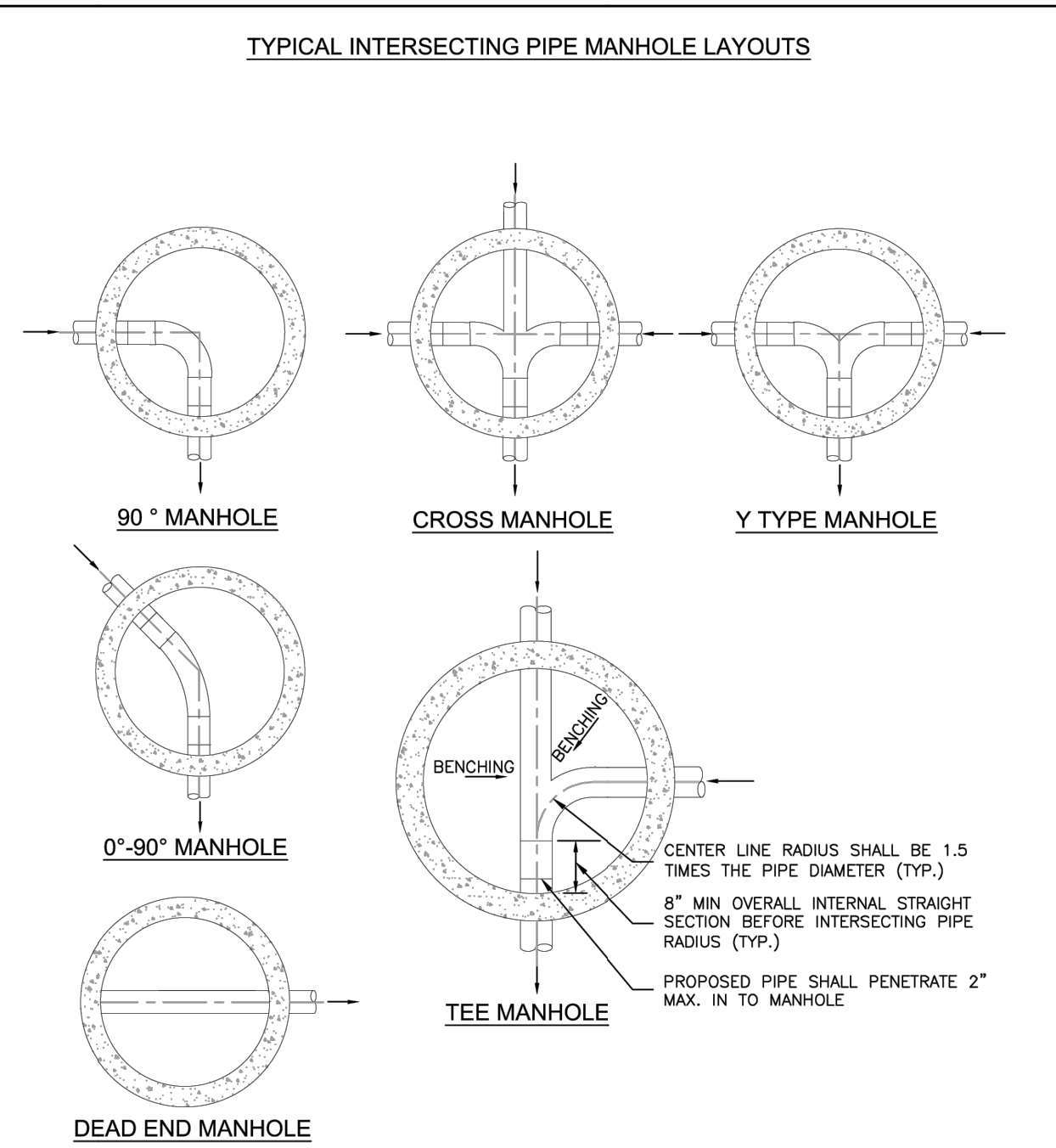
SHEET 5 OF 6  
JOB NO. 25188.14

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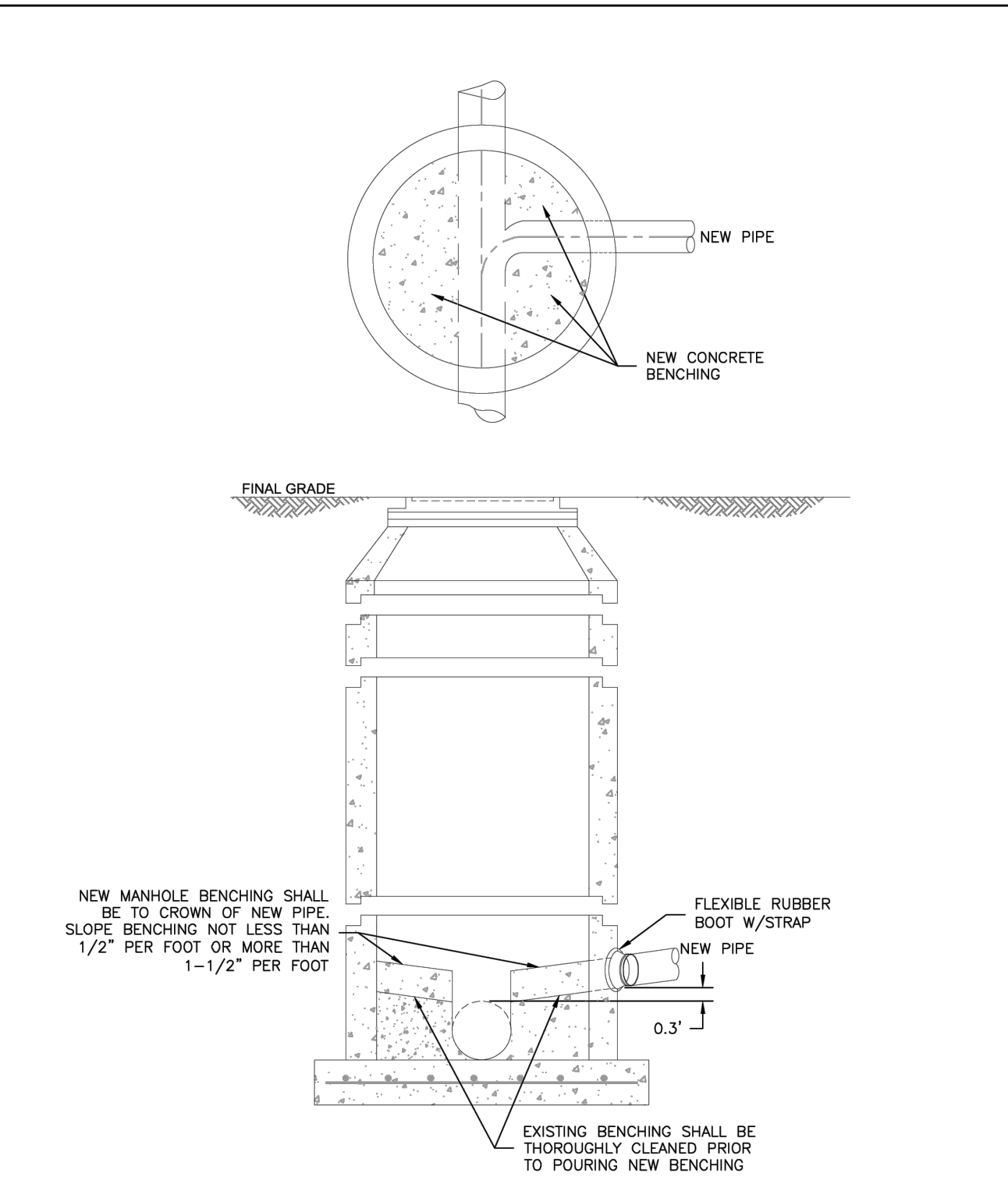
- NOTES:**
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI @ 28 DAYS AND DESIGNED FOR HS-20 LOADING CONDITIONS.
  2. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED.
  3. FOR CAST IN PLACE MANHOLES, DO NOT DROP CONCRETE A DISTANCE OF MORE THAN 5' UNLESS APPROVED BY COLORADO SPRINGS UTILITIES.
  4. 3/4" CRUSHED ROCK REQUIRED UNDER BASE TO A DEPTH OF 6" UP TO SPRINGLINE OF PIPE, 2'-3" RADIUS AROUND BASE.
  5. ALL STEPS SHALL BE REMOVED FOLLOWING CONSTRUCTION.
  6. STRUCTURAL REINFORCEMENT SHALL COMPLY TO ASTM C-478. ASTM C-478 SHALL BE STAMPED ON THE OUTSIDE OF THE MANHOLE.

Colorado Springs Utilities  
STANDARD CONCRETE MANHOLE  
C3-1  
DATED: 5/2015



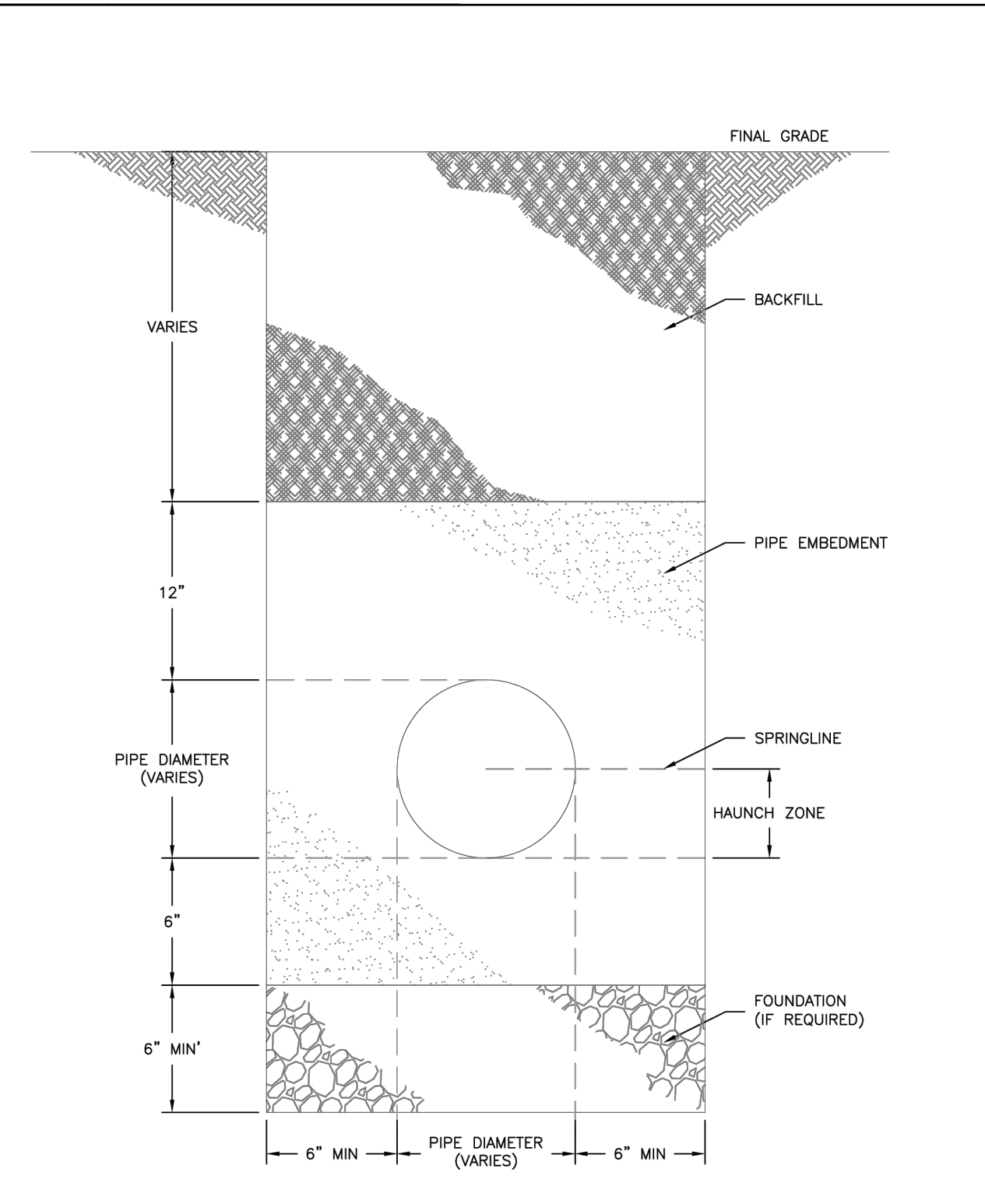
- NOTES:**
1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.
  2. LAYOUTS SHOWN ARE FOR 8"-12" PIPES; LAYOUTS FOR LARGER DIAMETER PIPELINES AND MANHOLES SHALL BE DESIGNED BY THE DESIGN ENGINEER AND APPROVED BY COLORADO SPRINGS UTILITIES.
  3. TO BE READ IN CONJUNCTION WITH CHAPTER 2, MANHOLE SIZES.

Colorado Springs Utilities  
TYPICAL MANHOLE LAYOUTS AND INTERSECTIONS  
C3-2  
DATED: 5/2015



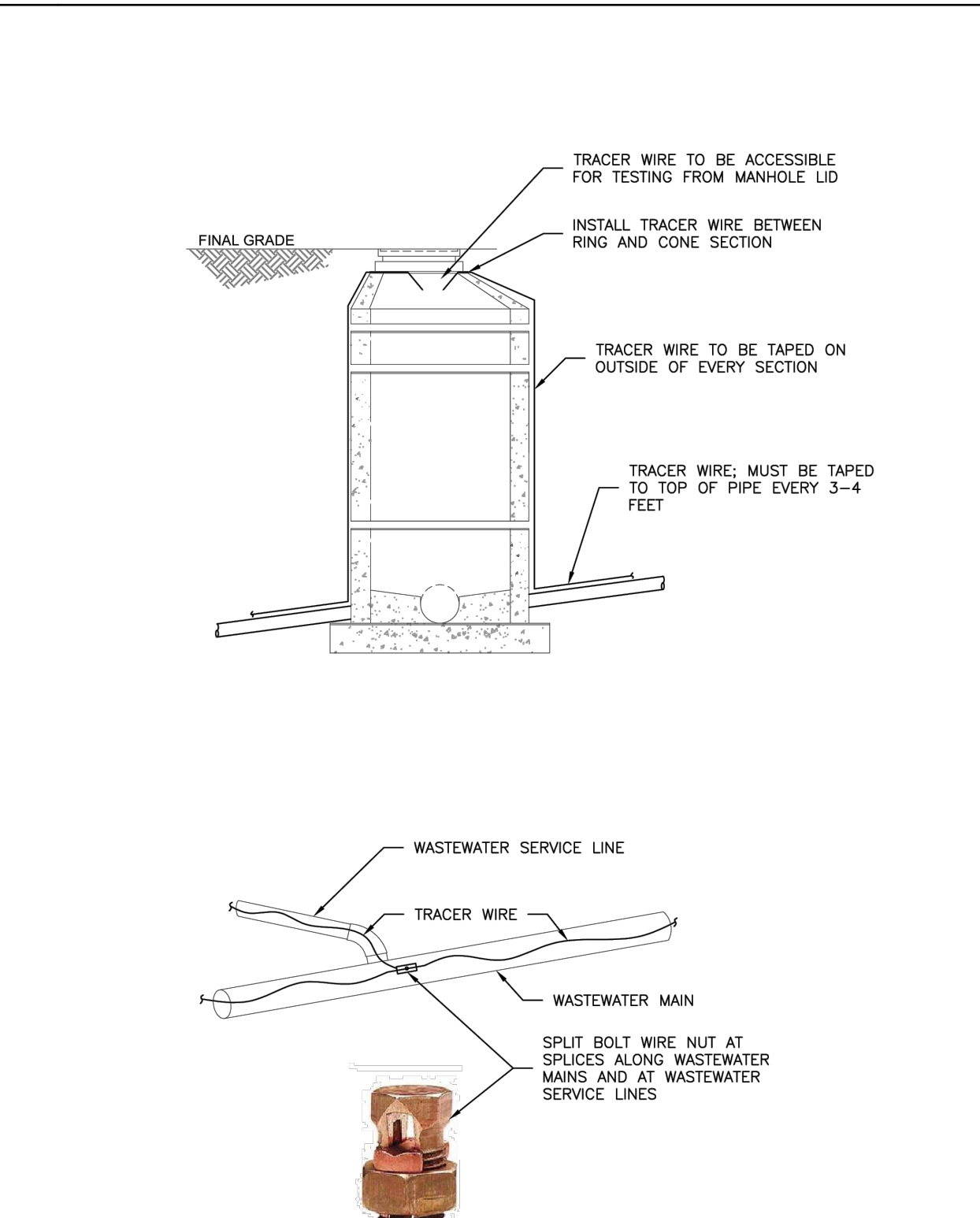
- NOTES:**
1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.

Colorado Springs Utilities  
CORE DRILLING INTO AN EXISTING MANHOLE  
C3-3  
DATED: 5/2015



- NOTE:**
1. TRENCH BACKFILL SHALL CONFORM TO THE SPECIFICATIONS OF THE AUTHORITY HAVING JURISDICTION AND ASTM D2321.

Colorado Springs Utilities  
TYPICAL TRENCH SECTION  
C2-1  
DATED: 5/2015

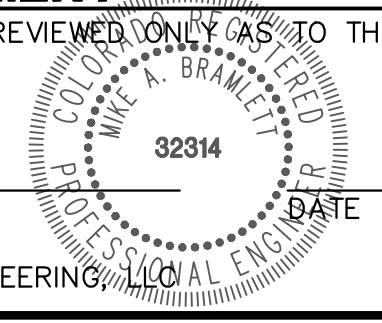


Colorado Springs Utilities  
TRACER WIRE ON PVC OR HDPE PIPE  
C2-3  
DATED: 5/2015



**ENGINEER'S STATEMENT**  
STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS APPLIED TO THEIR APPLICATION ON THIS PROJECT

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



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

PREPARED FOR  
**RHETORIC, LLC**  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ERIC HOWARD  
EHOWARDPC@GMAIL.COM  
(719) 964-0064

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	N/A	8/1/23	PAL	PAL	

STERLING RECYCLING FACILITY  
DETAILS

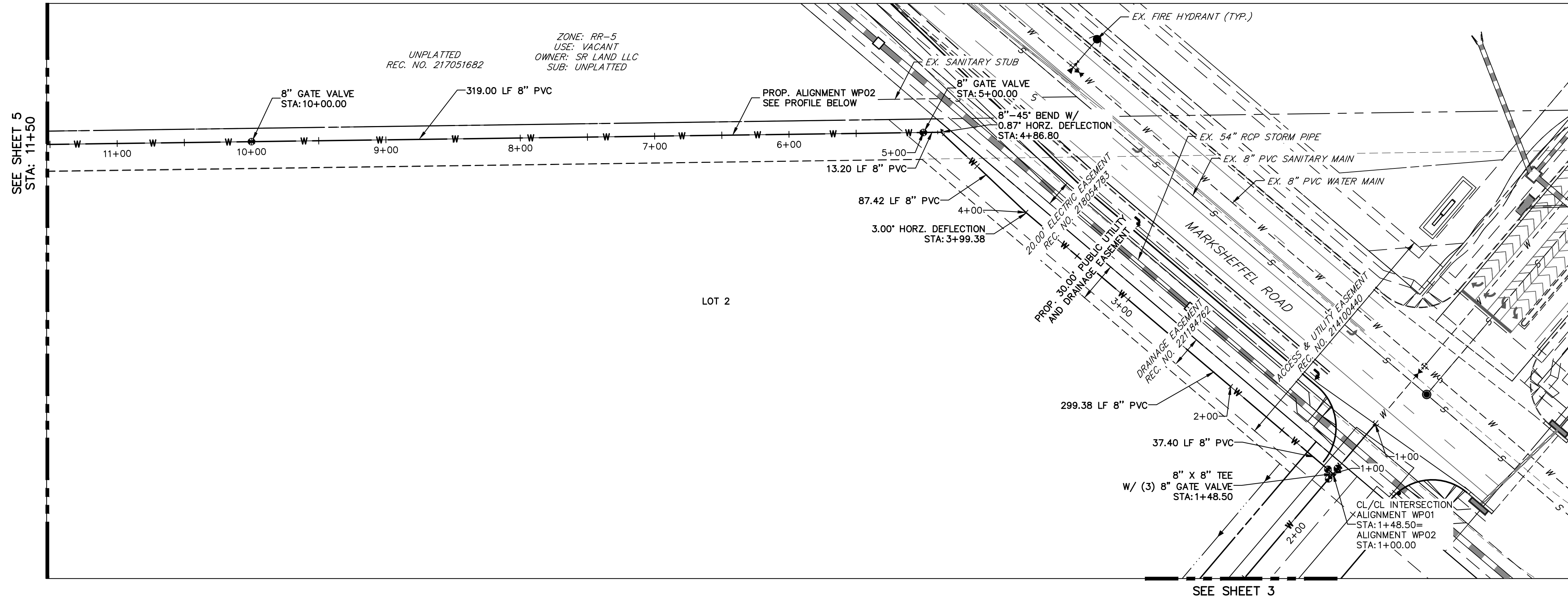
SHEET 6 OF 6  
JOB NO. 25188.14



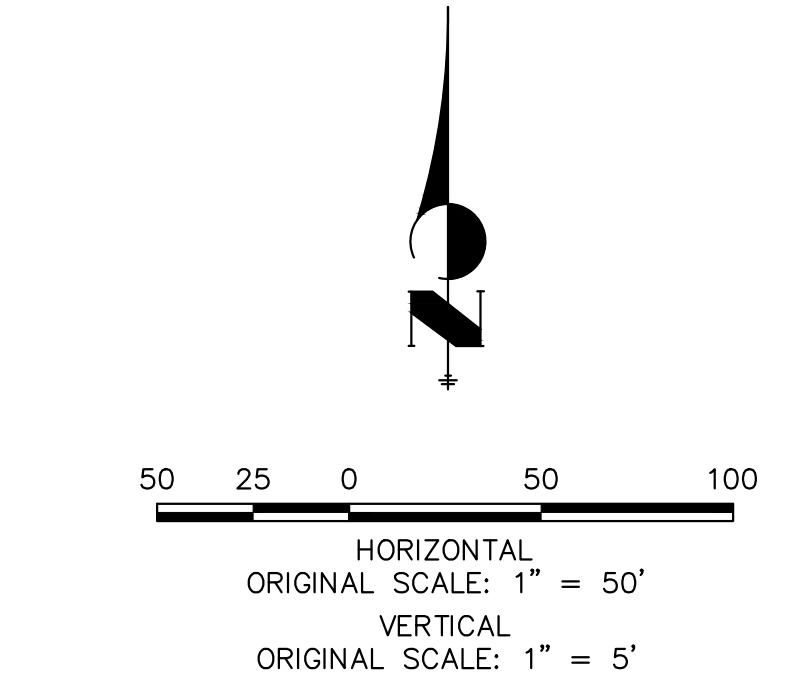
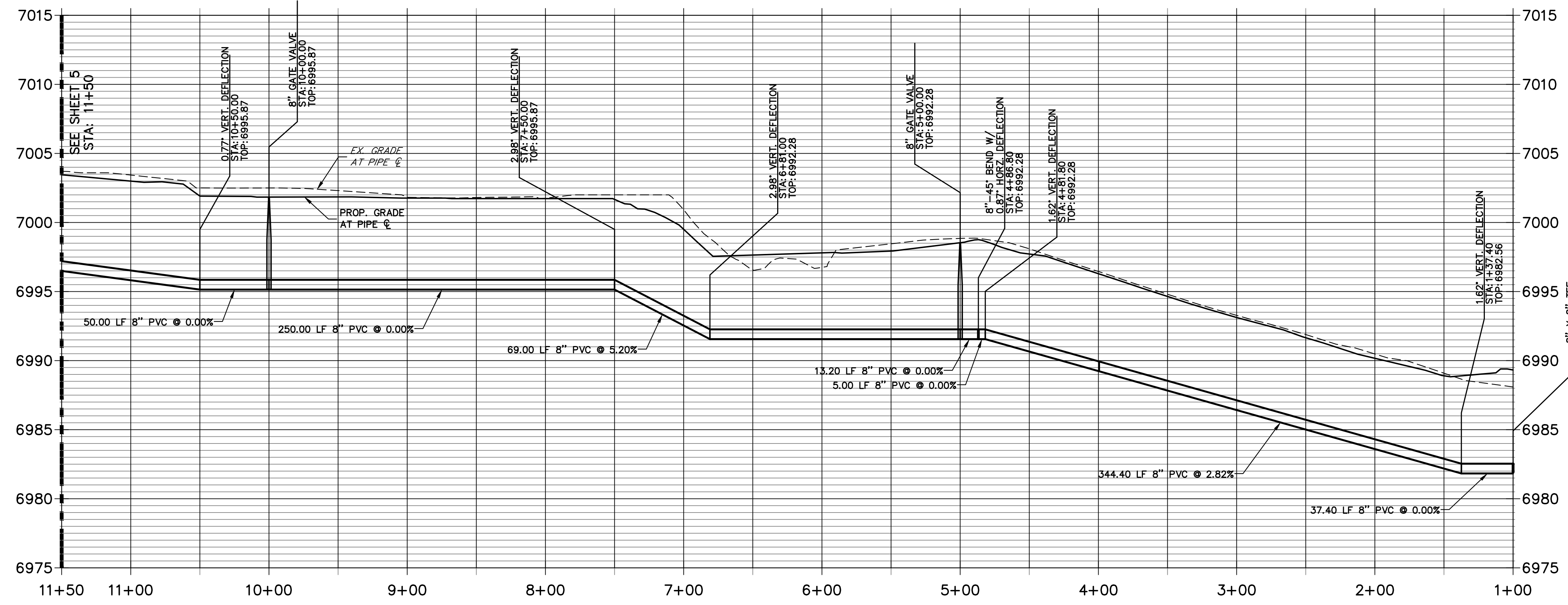








**ALIGNMENT WP02 PROFILE  
STA 1+00.00 TO 11+50.00**



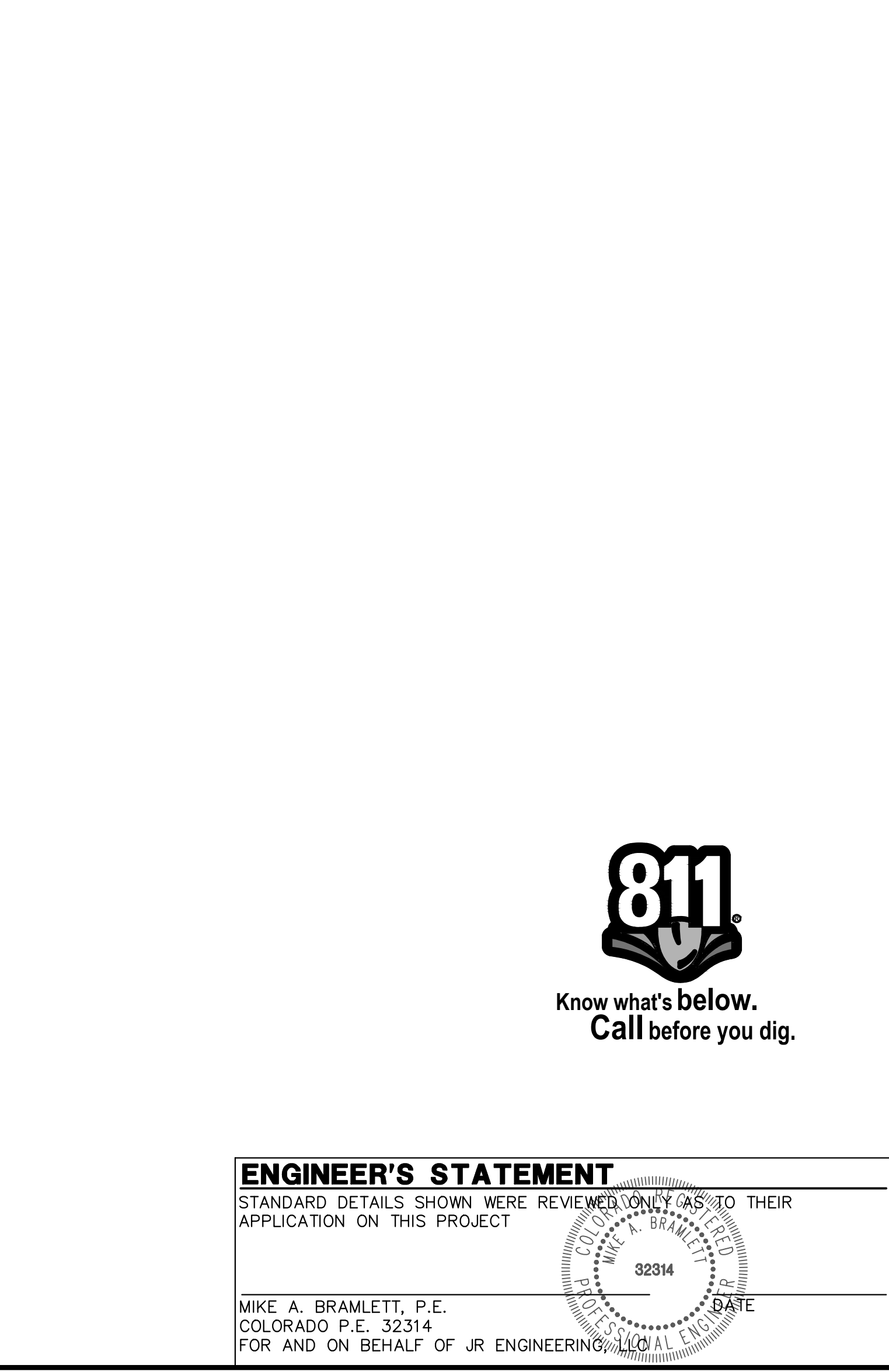
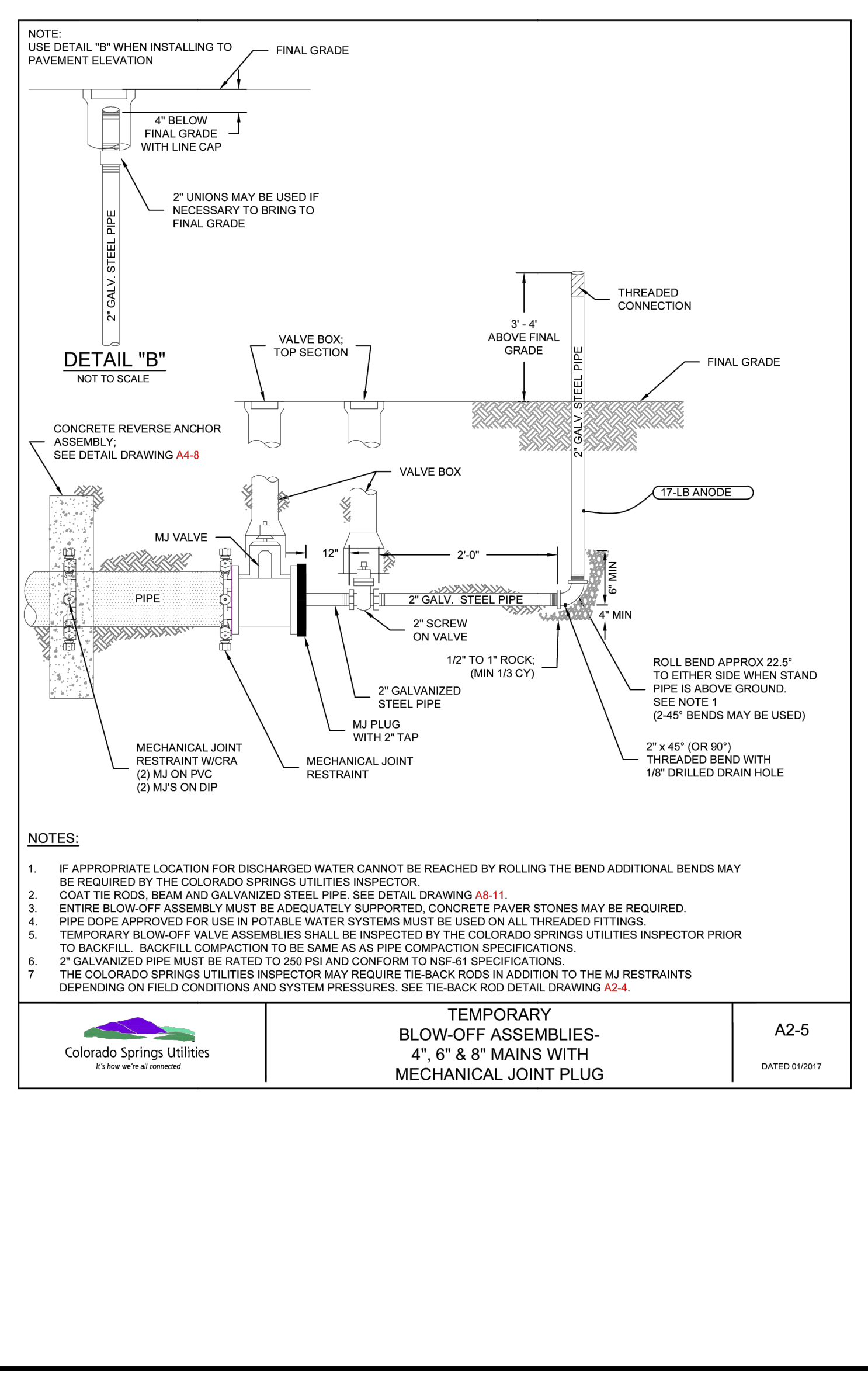
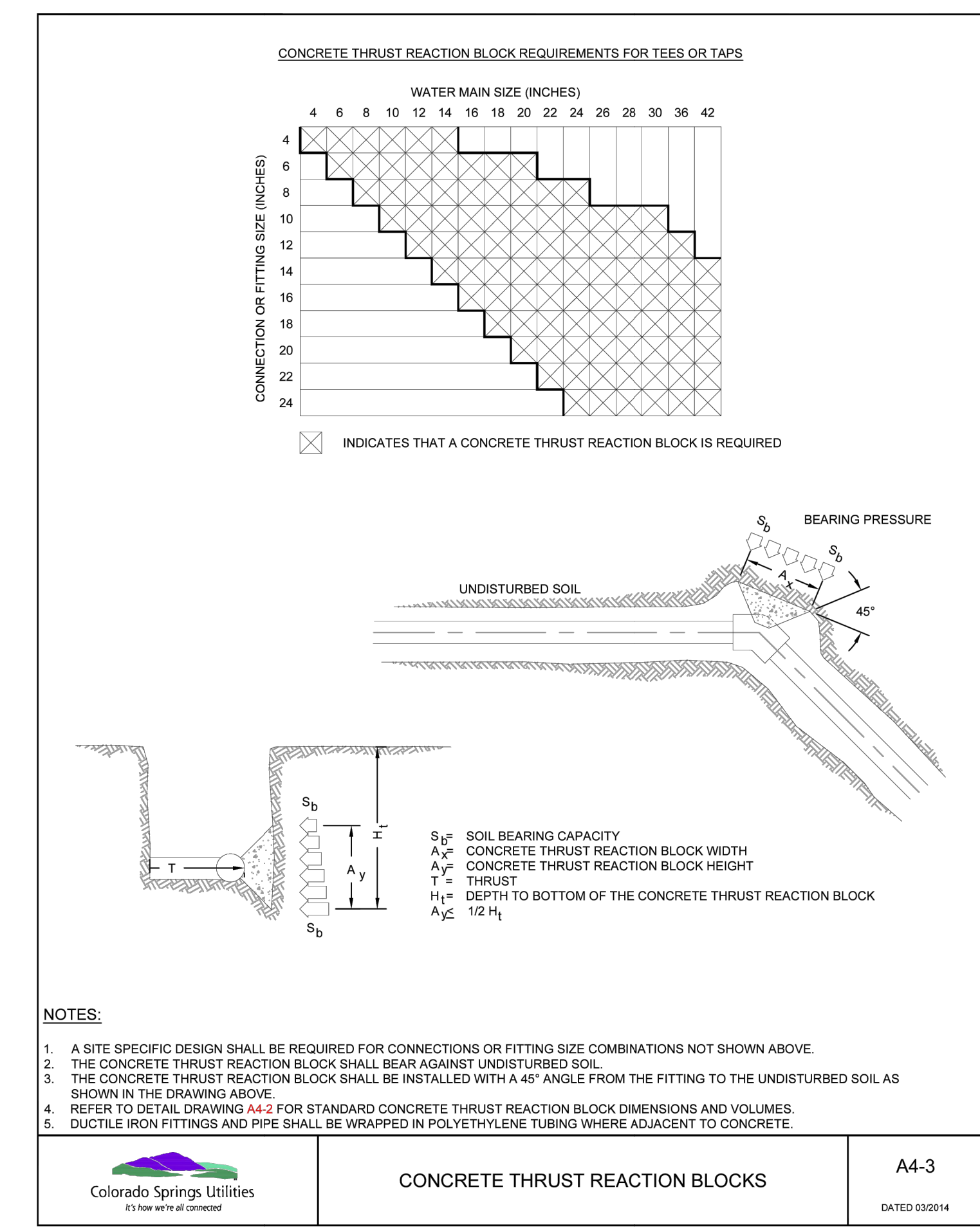
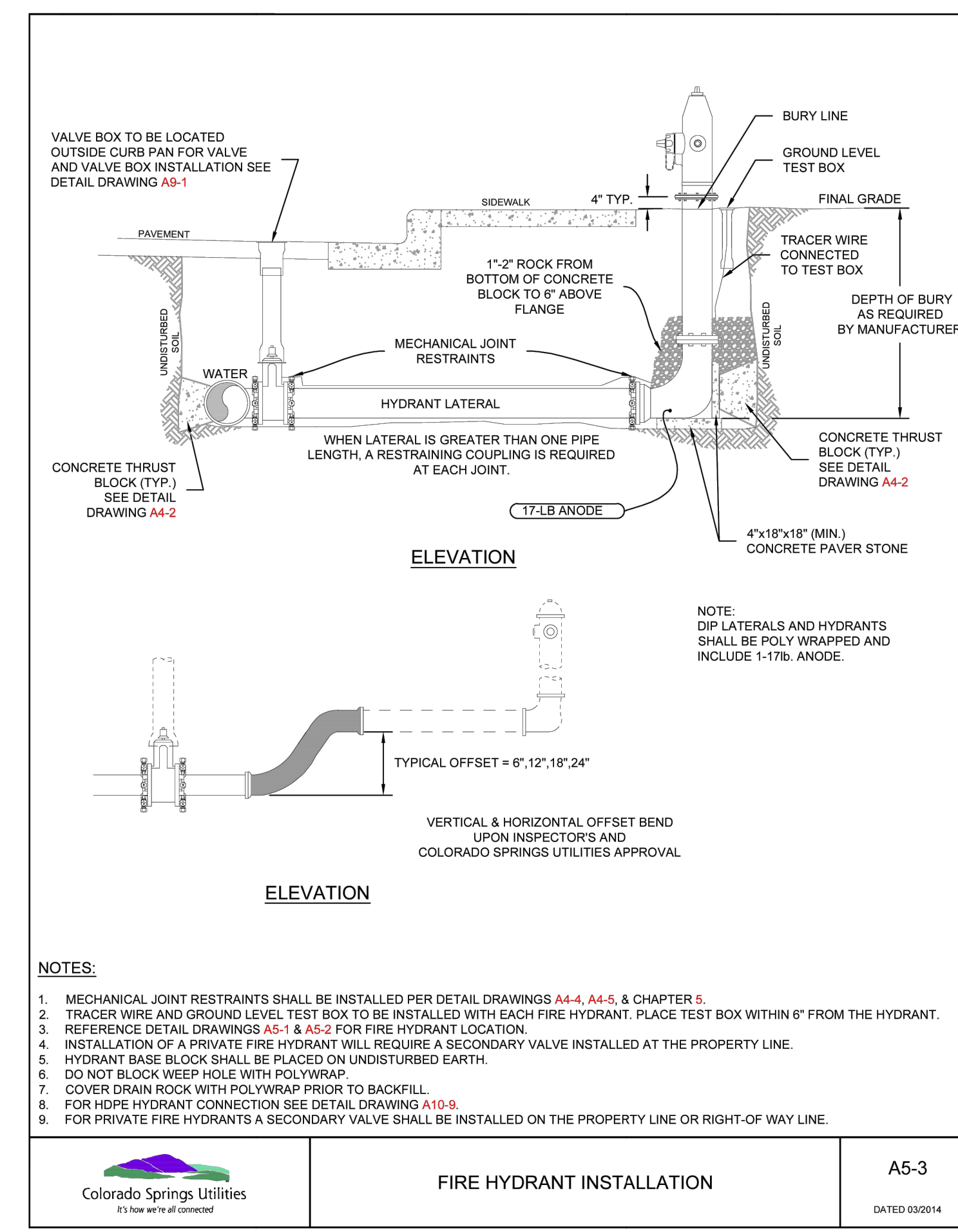
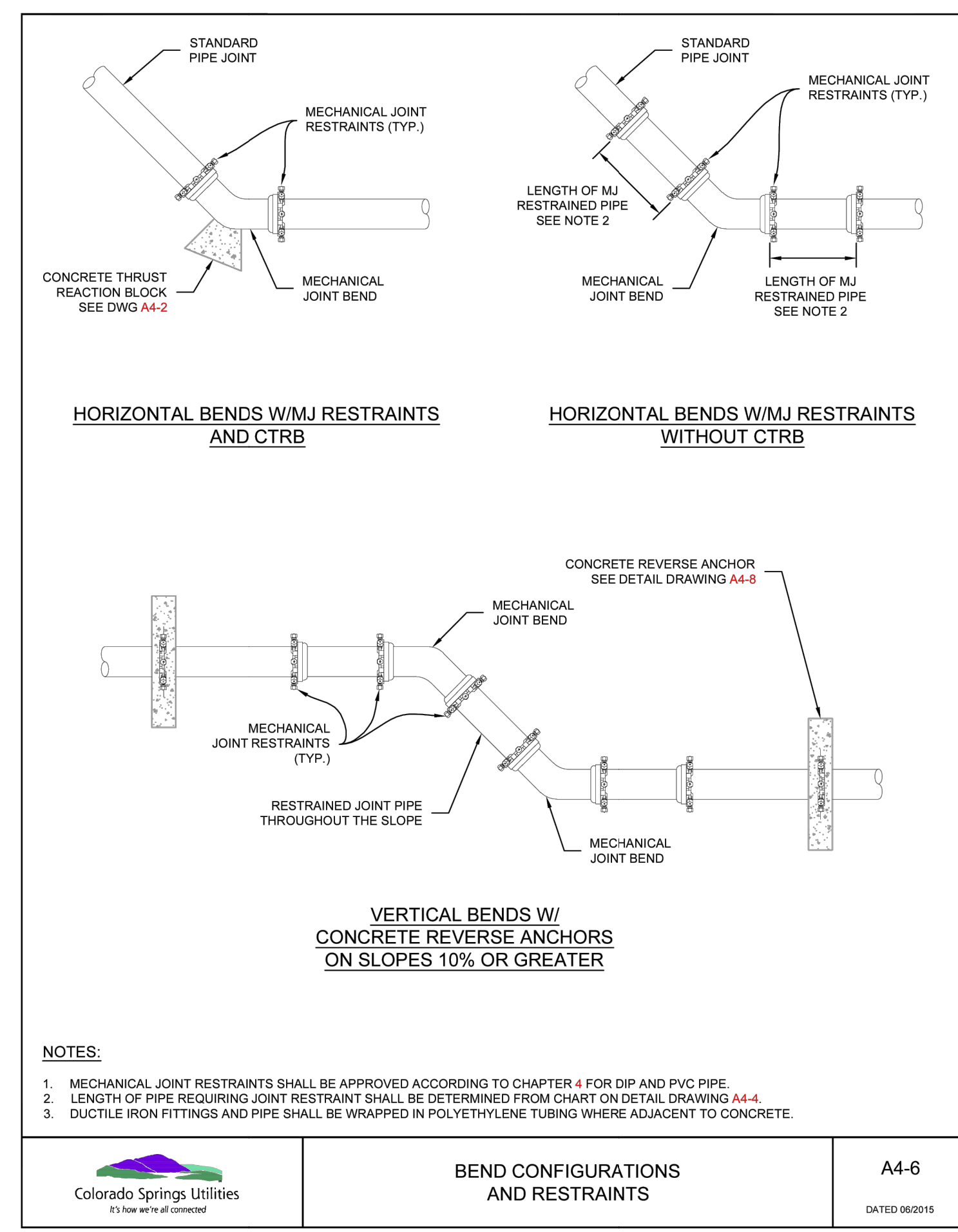
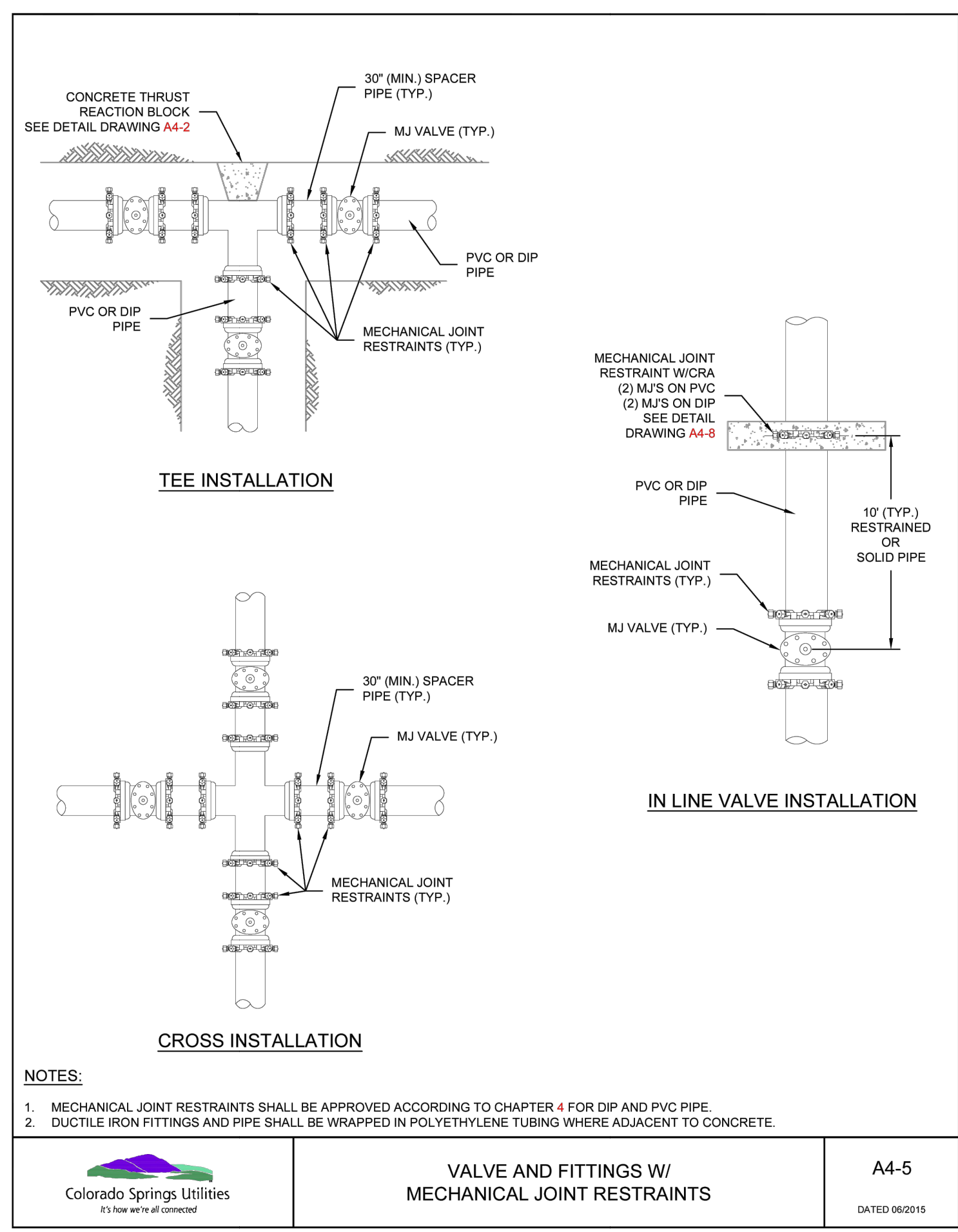
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE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



**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

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION. PREPARED FOR <b>RHETORIC, LLC</b> 20 BOULDER CRESCENT, SUITE 200 COLORADO SPRINGS, CO ERIC HOWARD EHOWARDPC@GMAIL.COM (719) 964-0064	<b>J.R. ENGINEERING</b> A Westman Company Centennial 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE	1"=50'	DESIGNED BY	PAL
V-SCALE	1"=5'	DRAWN BY	PAL
DATE	8/1/23	CHECKED BY	
<b>STERLING RECYCLING FACILITY</b>			
<b>WATER PLANS</b>			
SHEET 4 OF 6		JOB NO. 25188.14	





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

PREPARED FOR  
**RHETORIC, LLC**  
20 BOULDER CRESCENT, SUITE 200  
COLORADO SPRINGS, CO  
ERIC HOWARD  
EHOWARDPC@GMAIL.COM  
(719) 964-0064

**J.R. ENGINEERING**  
A Westman Company  
Centennial 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	N/A	8/1/23	PAL	PAL	
STERLING RECYCLING FACILITY									
DETAILS									
SHEET 6 OF 6									
JOB NO. 25188.14									

**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

32314  
DATE



X:\2510000\all\2518814\Drawings\Sheet\Drawings\CD-Utility\Water Plans\2518814.D101.dwg, DT01, 8/2/2023 8:53:23 AM, CS

# Vollmer Road Approved CD

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Vollmer South CL										
Point	Design Pt	Station	Distance	Bearing	Northing	Easting	Radius	Delta	Length	Tangent
C1	PC	10+00.00			410021.2566	232043.6991				
	PI	11+22.75			410116.7139	232120.8669	10000	1'24'23"	245.48	122.75
	PT	12+45.48			410210.2482	232200.3545				
L1	Begin Line	12+45.48	1304.444	N40° 21' 27.79"E	410210.2482	232200.3545				
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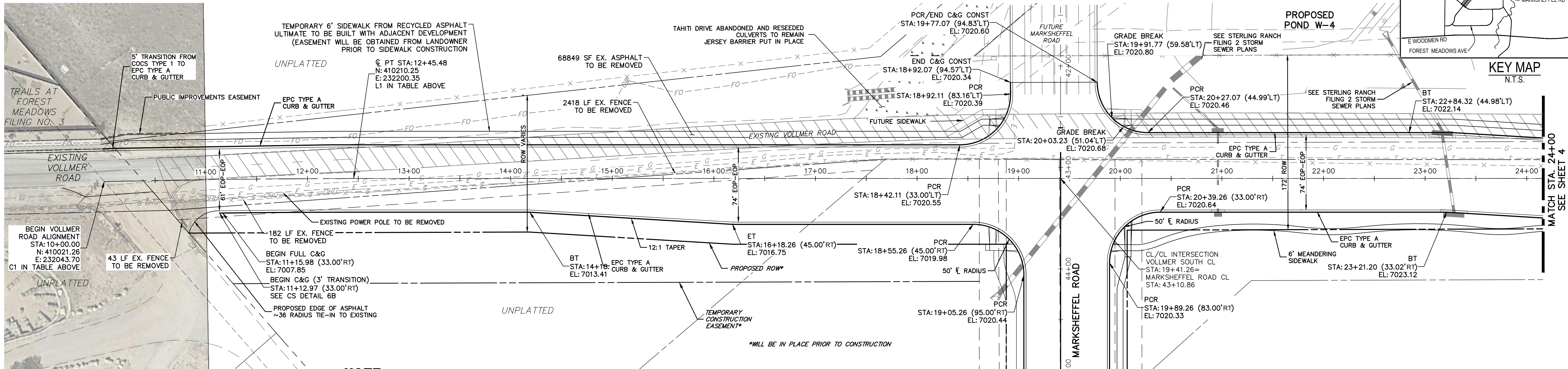
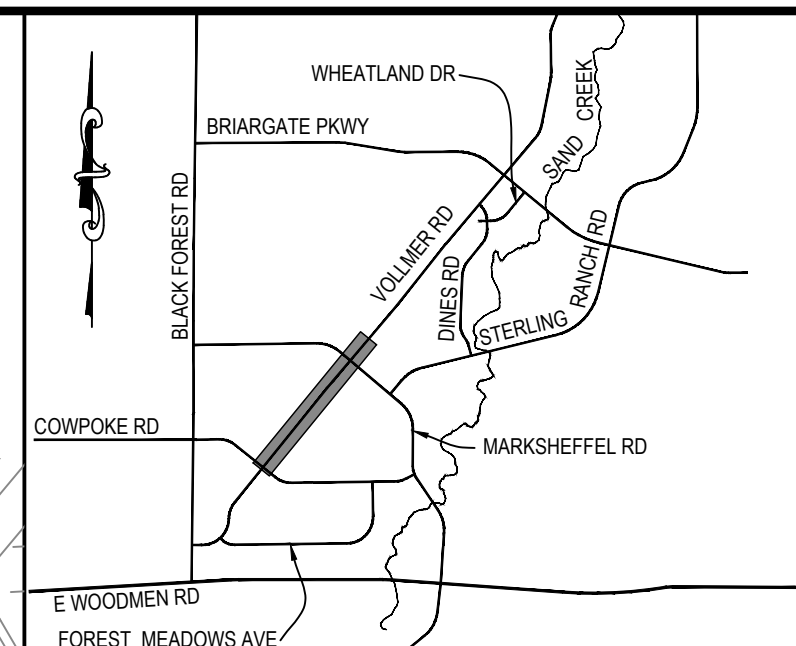
ASPHALT TO BE REMOVED

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HORIZONTAL ORIGINAL SCALE: 1" = 50'  
VERTICAL ORIGINAL SCALE: 1" = 5'



Know what's below. Call before you dig.

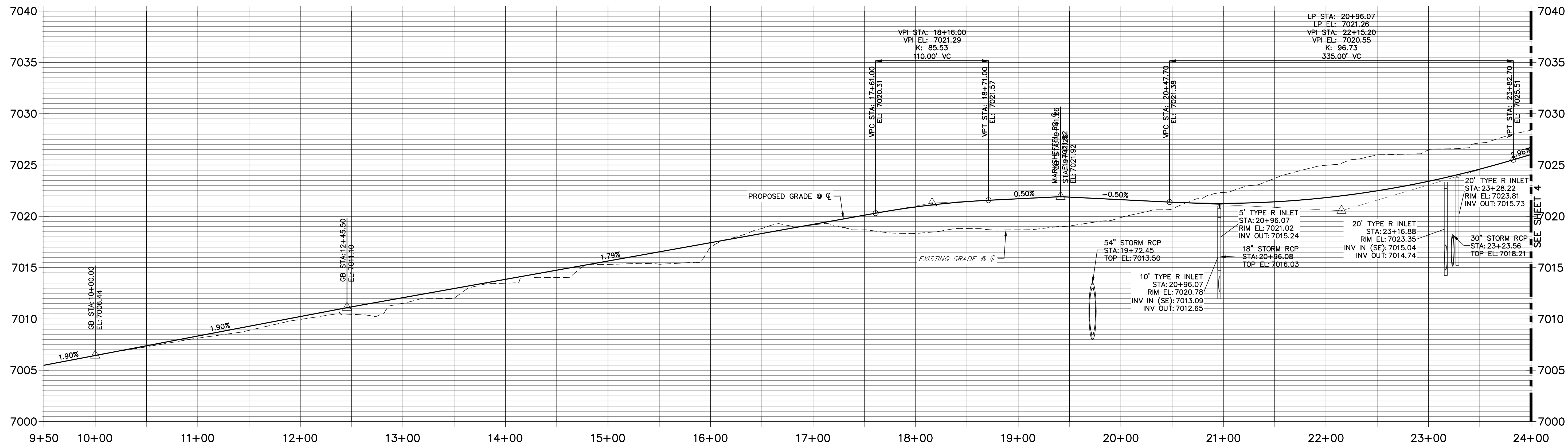


**NOTE**  
OVERHEAD ELECTRIC LINE TO BE PLACED UNDERGROUND AT POLE SOUTH OF PIONEER DRIVE. CONTRACTOR TO COORDINATE WITH MVEA FOR ROUTING.  
CONTRACTOR TO COORDINATE WITH BLACK HILLS AND OTHER EXISTING UTILITIES WITHIN PROJECT LIMITS TO COORDINATE RELOCATION IF NECESSARY

**VOLLMER ROAD**  
**STA 10+00.00 TO STA 24+00.00**

SEE STERLING RANCH-MARKSHEFFEL ROAD STREET IMPROVEMENT PLANS

**VOLLMER SOUTH CL PROFILE**  
**STA 9+50.00 TO 24+00.00**



**VOLLMER ROAD**  
**STA 10+00.00 TO STA 23+50.00**

**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
*Mike A. Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LOCAL ENGINEER  
DATE 3/7/22

EPC 4/5/2022

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

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

**J.R. ENGINEERING**  
A Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

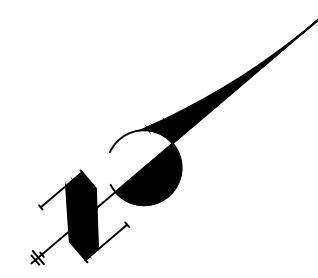
BY	DATE	REVISION

STERLING RANCH -  
VOLLMER ROAD FILING 2  
PLAN & PROFILE  
DESIGNED BY RAB  
DRAWN BY KRW  
CHECKED BY  
SHEET 3 OF 11  
JOB NO. 25188.01



Vollmer South CL										
Point	Design Pt	Station	Distance	Bearing	Northing	Easting	Radius	Delta	Length	Tangent
L2	Begin Line	25+49.93	1025.900	N37° 33' 44.75"E	411204.2559	233045.0573				
	End Line	35+75.83			412017.4765	233670.4724				
L3	Begin Line	35+75.83	223.394	N39° 52' 40.53"E	412017.4765	233670.4724				
	End Line	37+99.22			412188.9114	233813.7020				

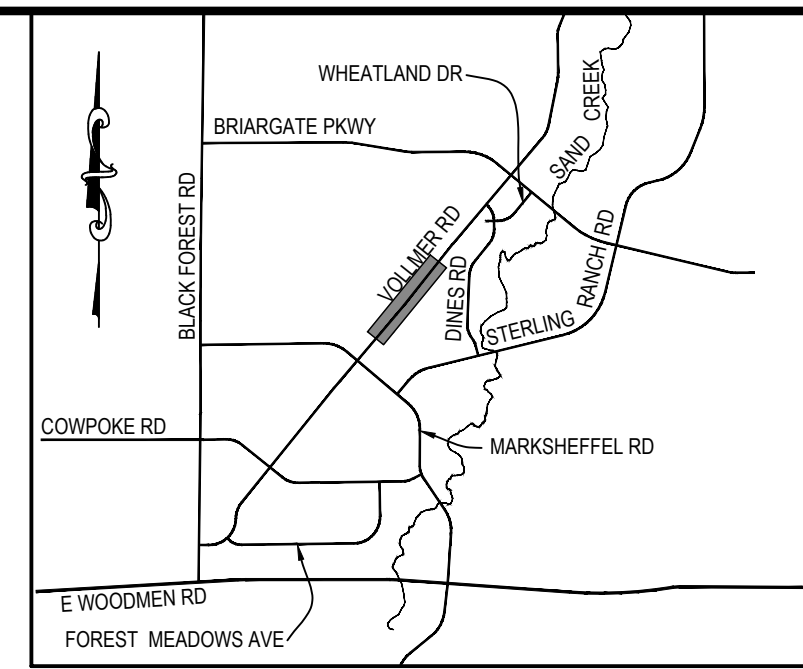
ASPHALT TO BE REMOVED



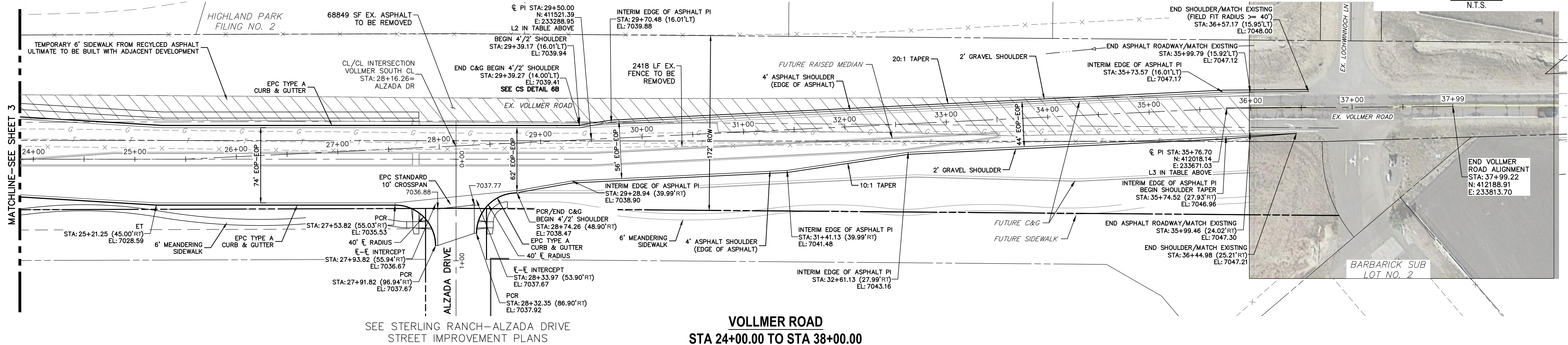
50 25 0 50 100  
 HORIZONTAL ORIGINAL SCALE: 1" = 50'  
 VERTICAL ORIGINAL SCALE: 1" = 5'



Know what's below.  
 Call before you dig.



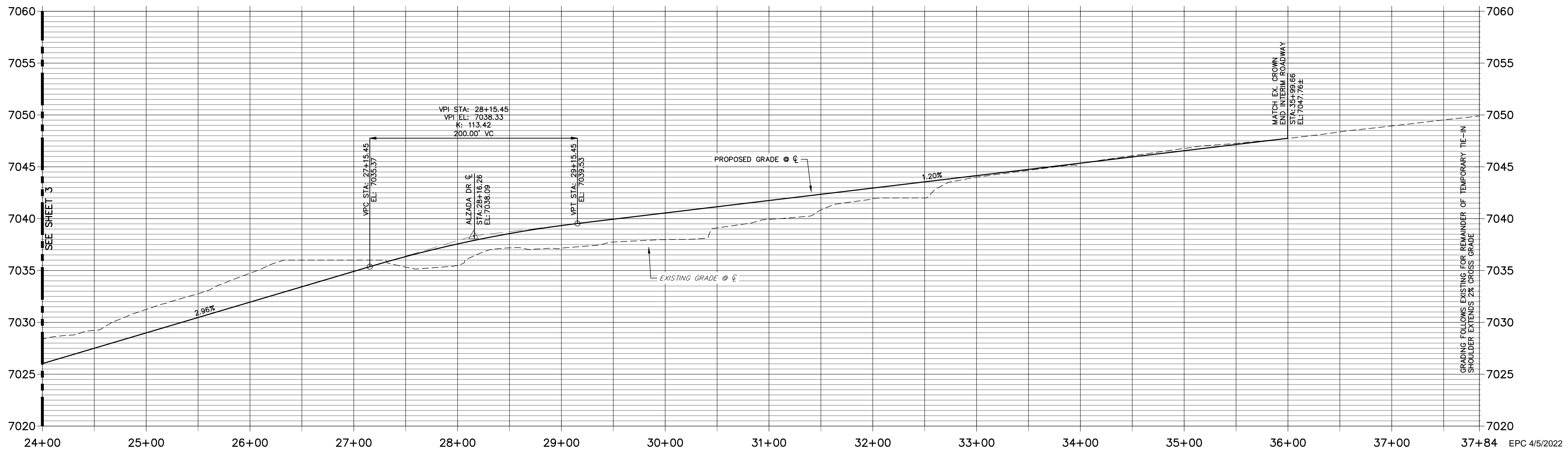
KEY MAP  
 N.T.S.



SEE STERLING RANCH-ALZADA DRIVE STREET IMPROVEMENT PLANS

**VOLLMER ROAD**  
**STA 24+00.00 TO STA 38+00.00**

**VOLLMER SOUTH CL PROFILE**  
**STA 24+00.00 TO 37+84.39**



**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, INC. LOCAL ENGINEER  
 DATE 3/7/22

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

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT SUITE 201  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY (719) 471-1742

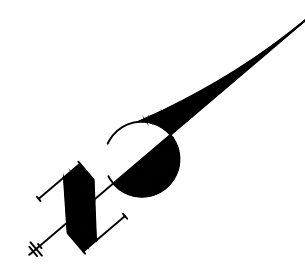
**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 303-740-9383 • Colorado Springs 719-583-2593  
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE 1"=50'  
 V-SCALE 1"=5'  
 DATE 3/7/22  
 DESIGNED BY RAB  
 DRAWN BY KRW  
 CHECKED BY

STERLING RANCH -  
 VOLLMER ROAD FILING 2  
 PLAN & PROFILE

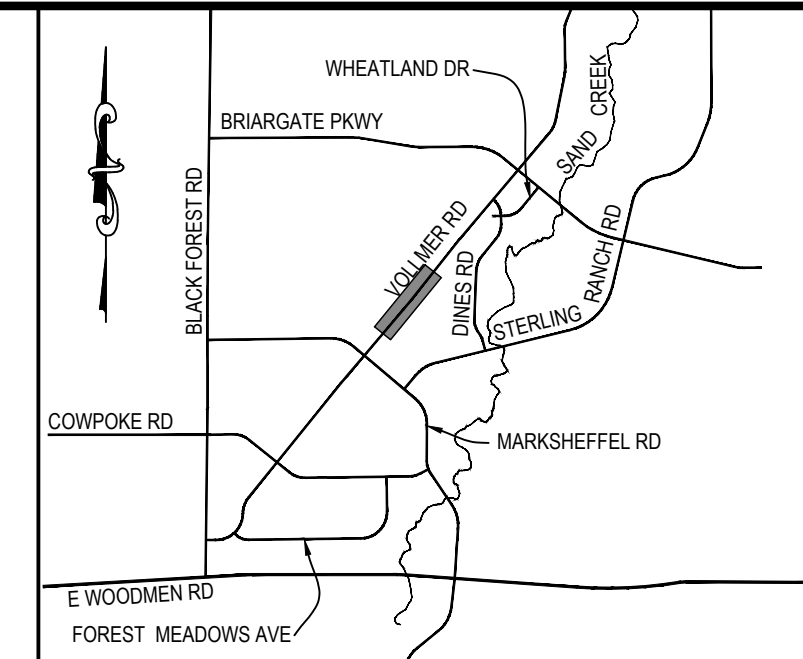
SHEET 4 OF 11  
 JOB NO. 25188.01



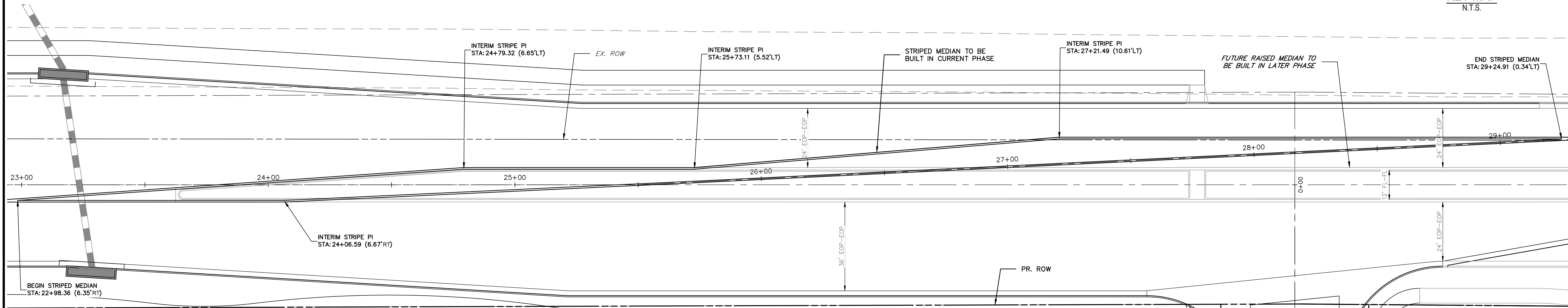
20 10 0 20 40  
ORIGINAL SCALE: 1" = 20'



Know what's below.  
Call before you dig.



KEY MAP  
N.T.S.



**VOLLMER ROAD INTERIM STRIPED MEDIAN  
(AND FUTURE RAISED MEDIAN)  
STA 22+98.00 TO STA 29+25.00**

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

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

**J.R. ENGINEERING**  
A Westman Company

Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	3/7/22
DESIGNED BY	RAB
DRAWN BY	KRW
CHECKED BY	

STERLING RANCH -  
VOLLMER ROAD FILING 2  
MEDIAN DETAILS

ENGINEER'S STATEMENT  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

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

DATE 3/7/22

EPC 4/5/2022

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
②	DOUBLE CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

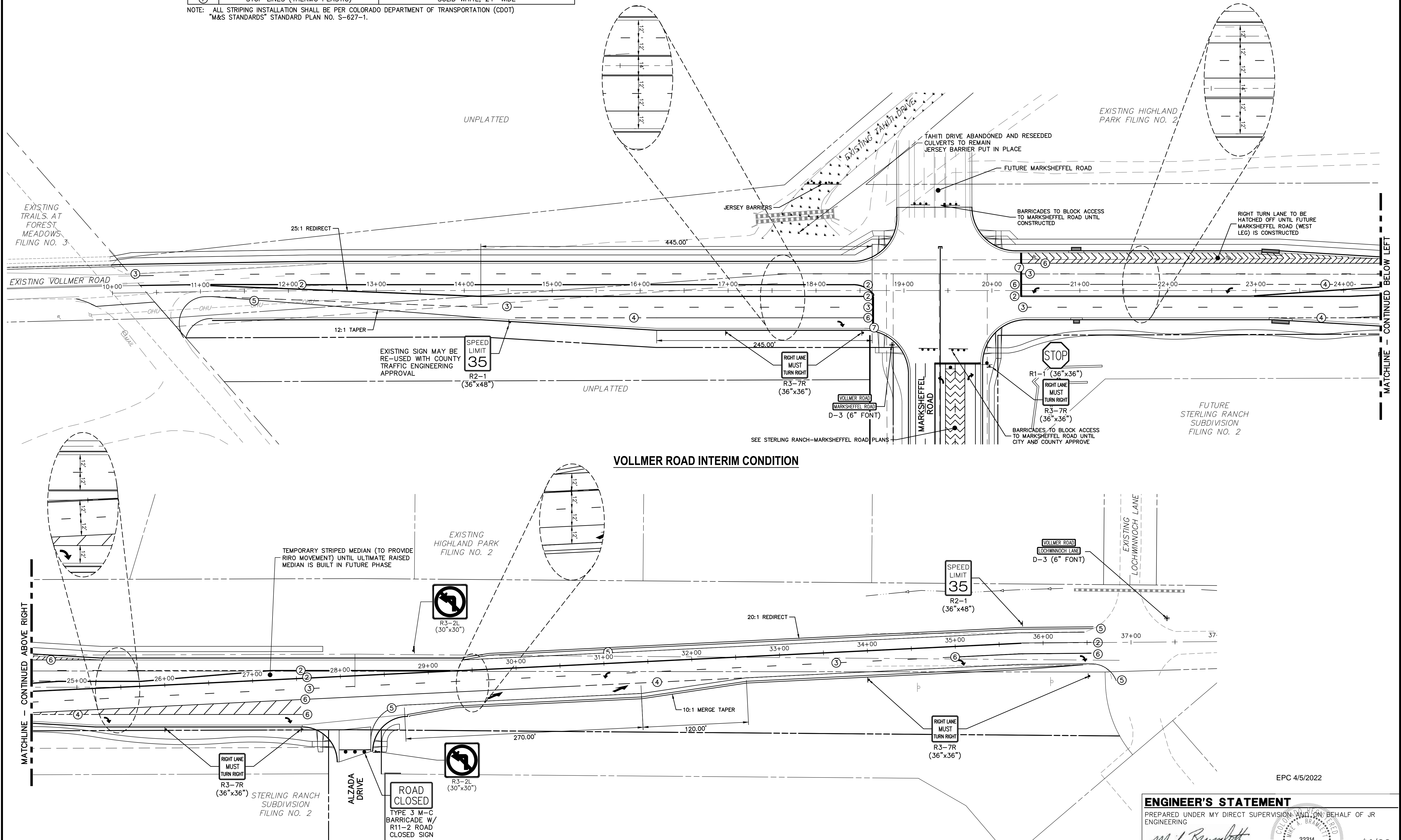
**NOTE TO CONTRACTOR:**

- ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
- SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
- ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

50 25 0 50 100  
ORIGINAL SCALE: 1" = 50'



Know what's below.  
Call before you dig.



**VOLLMER ROAD INTERIM CONDITION**

EPC 4/5/2022

**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 3/7/22

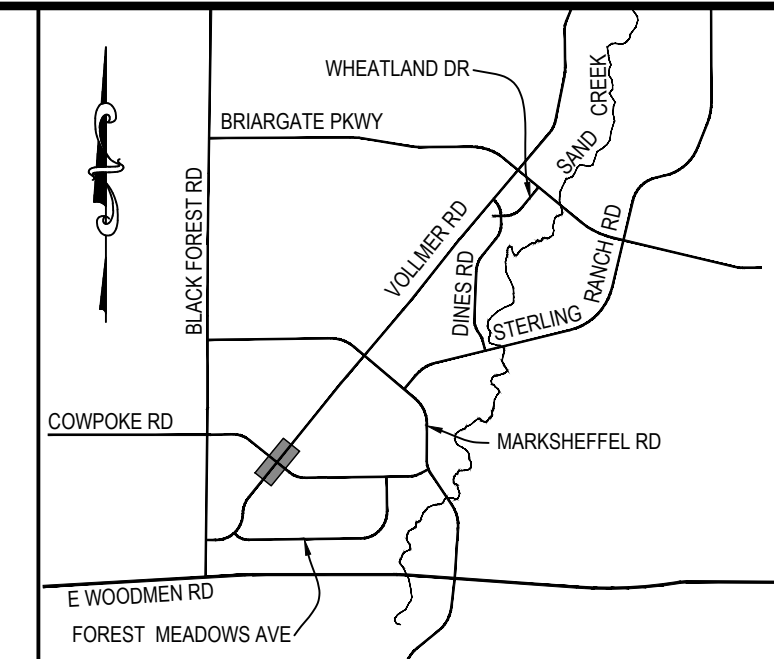
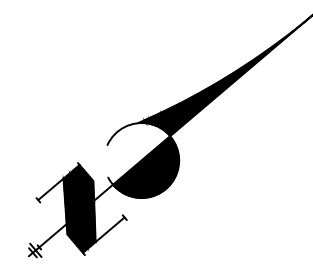
PREPARED FOR <b>SR LAND, LLC</b> 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742	<b>J.R. ENGINEERING</b> A Westman Company  Centennial 300-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	BY	DATE
		No.	REVISION
H-SCALE	1"=50'	DESIGNED BY	RAB
V-SCALE	N/A	DRAWN BY	KRW
DATE	3/7/22	CHECKED BY	
<b>STERLING RANCH - VOLLMER ROAD FILING 2</b> <b>SIGNAGE &amp; STRIPING</b>			
SHEET 6 OF 11		JOB NO. 25188.01	

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
②	DOUBLE CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
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⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

**NOTE TO CONTRACTOR:**

- ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
- SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
- ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

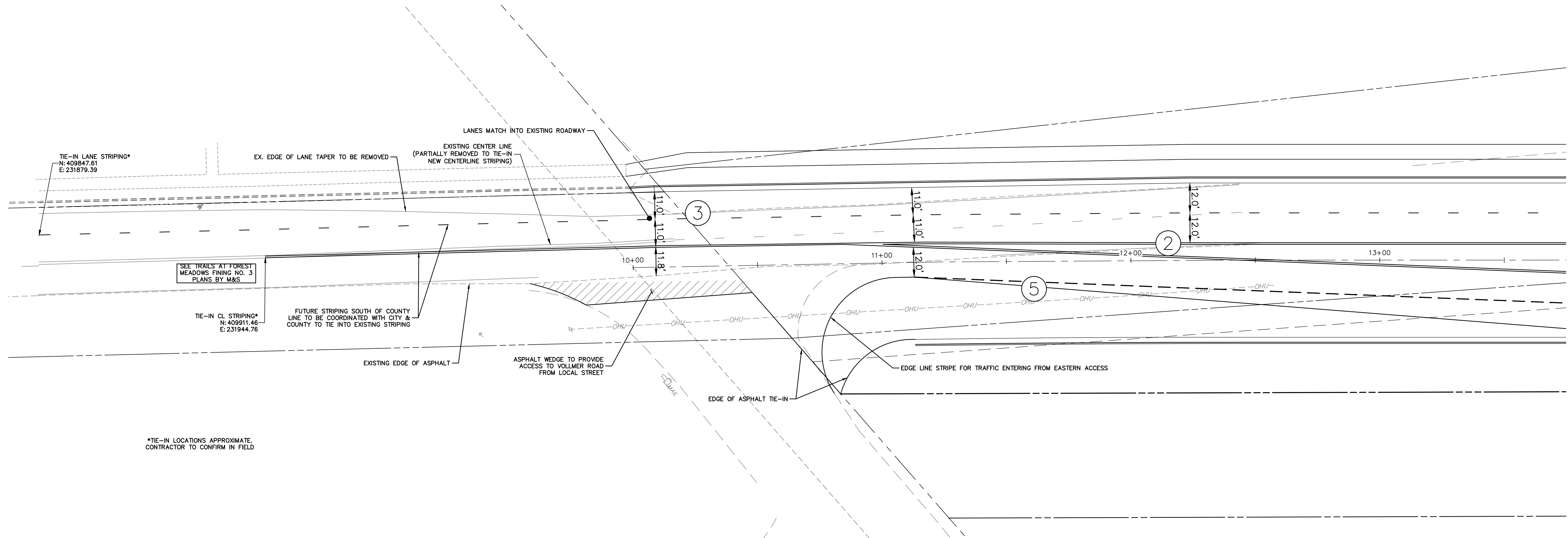


KEY MAP  
N.T.S.

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

PREPARED FOR  
**SR LAND, LLC**  
20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

**J.R. ENGINEERING**  
A Westman Company  
  
Central 303-740-9888 • Colorado Springs 719-588-2583  
Fort Collins 970-491-9888 • www.jrengineering.com



\*TIE-IN LOCATIONS APPROXIMATE. CONTRACTOR TO CONFIRM IN FIELD

**VOLLMER ROAD SOUTHERN TIE-IN TO EXISTING**

No.	REVISION	BY	DATE						
				H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1				1"=50'	N/A	3/7/22	RAB	KRW	

EPC 4/5/2022

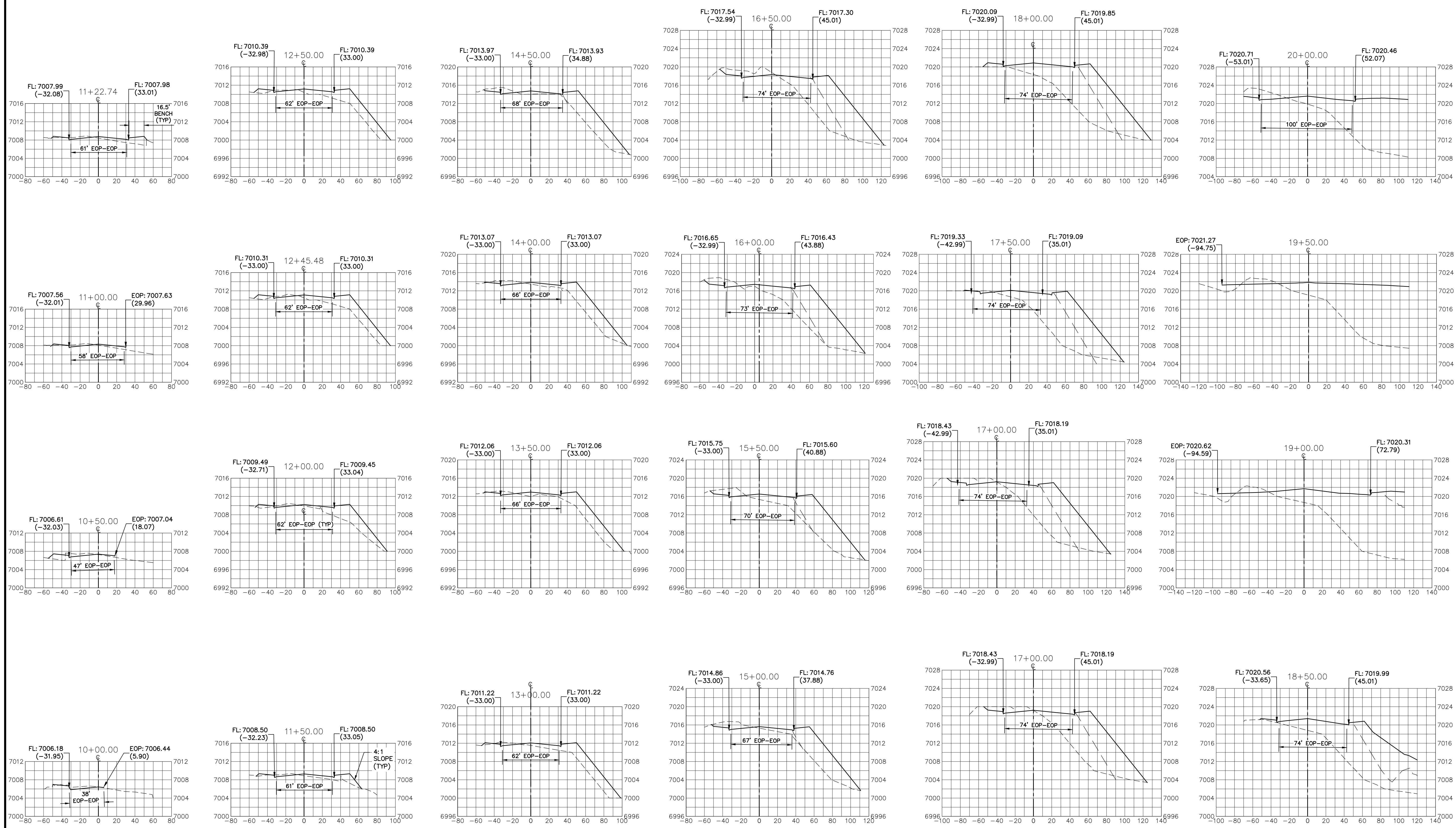
**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
*Mike A. Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, INC.  
DATE 3/7/22

STERLING RANCH -  
VOLLMER ROAD FILING 2  
SIGNAGE & STRIPING

SHEET 7 OF 11  
JOB NO. 25188.01

**LEGEND**

- PROPOSED SURFACE
- - - EXISTING SURFACE
- - - FILING NO. 2 SURFACE



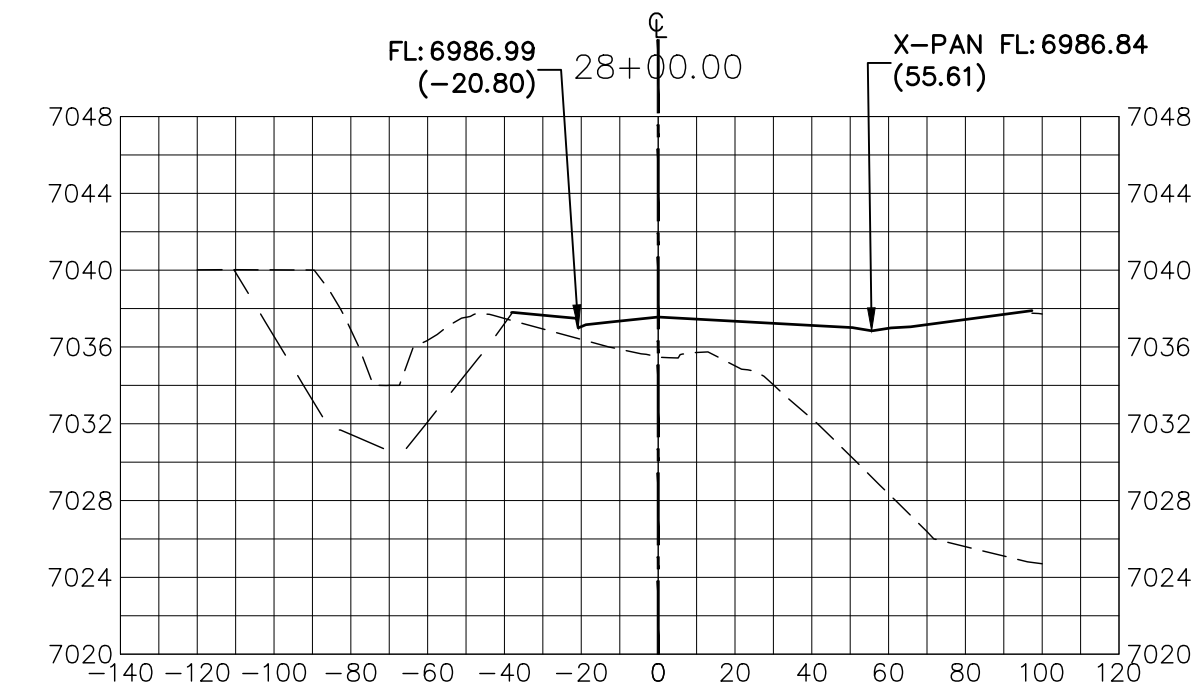
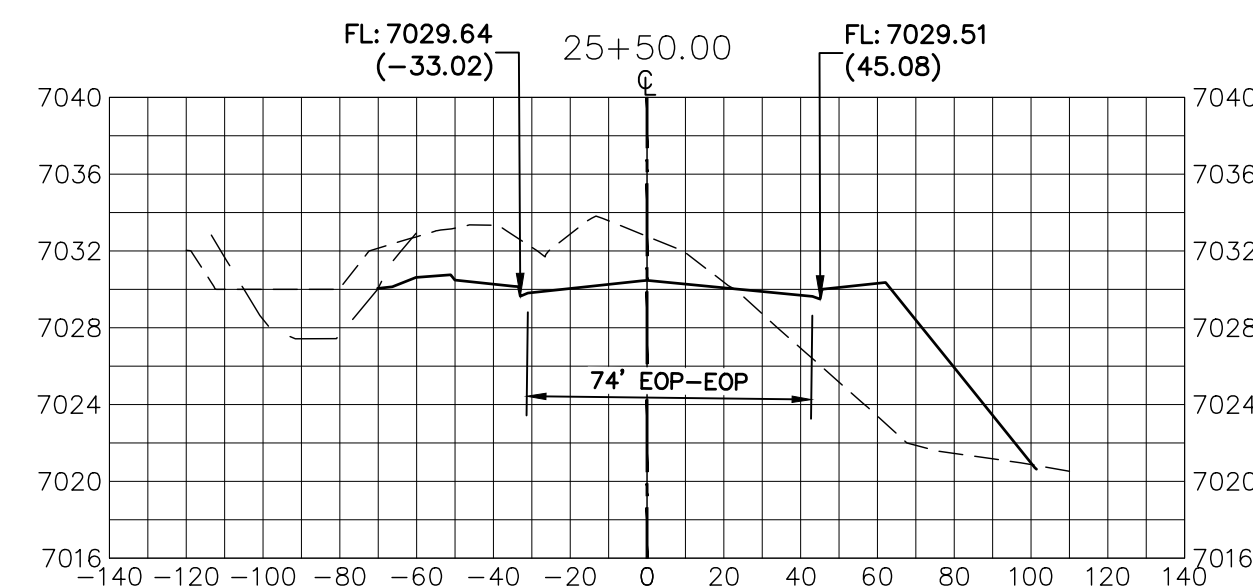
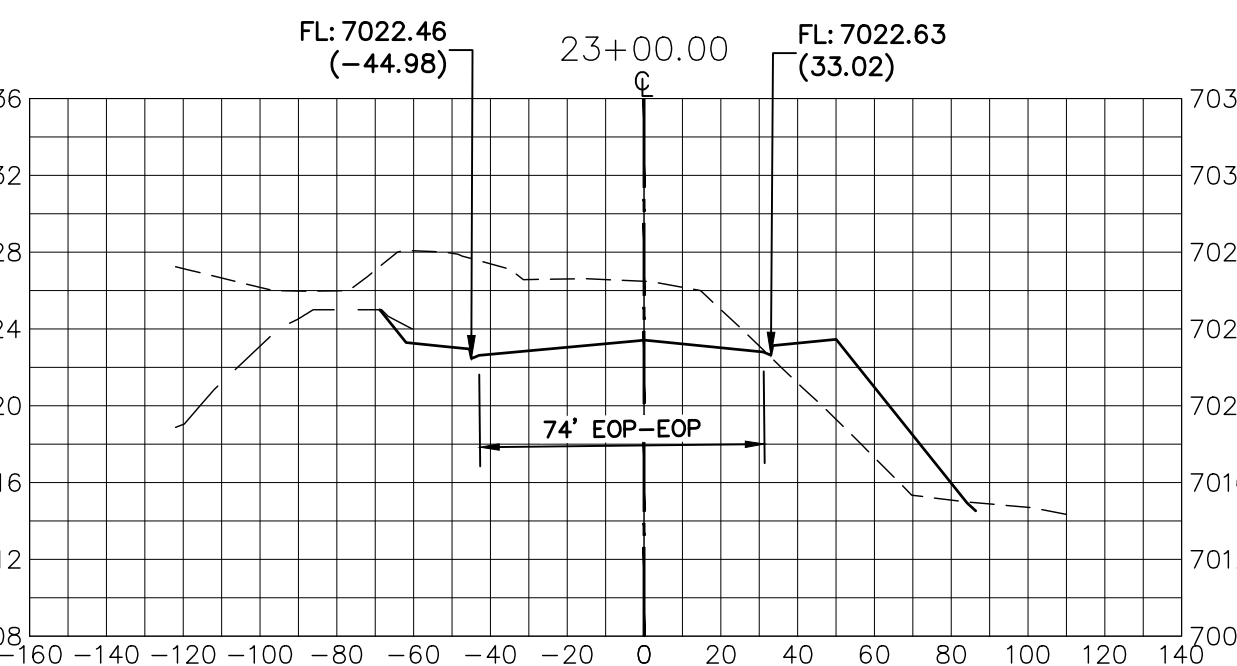
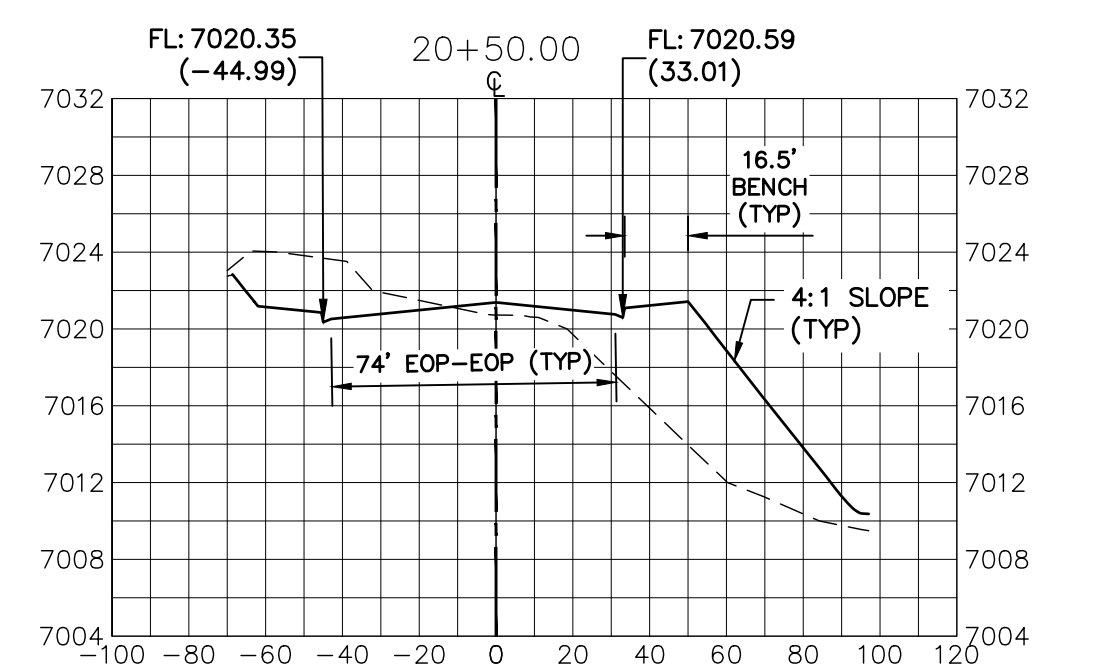
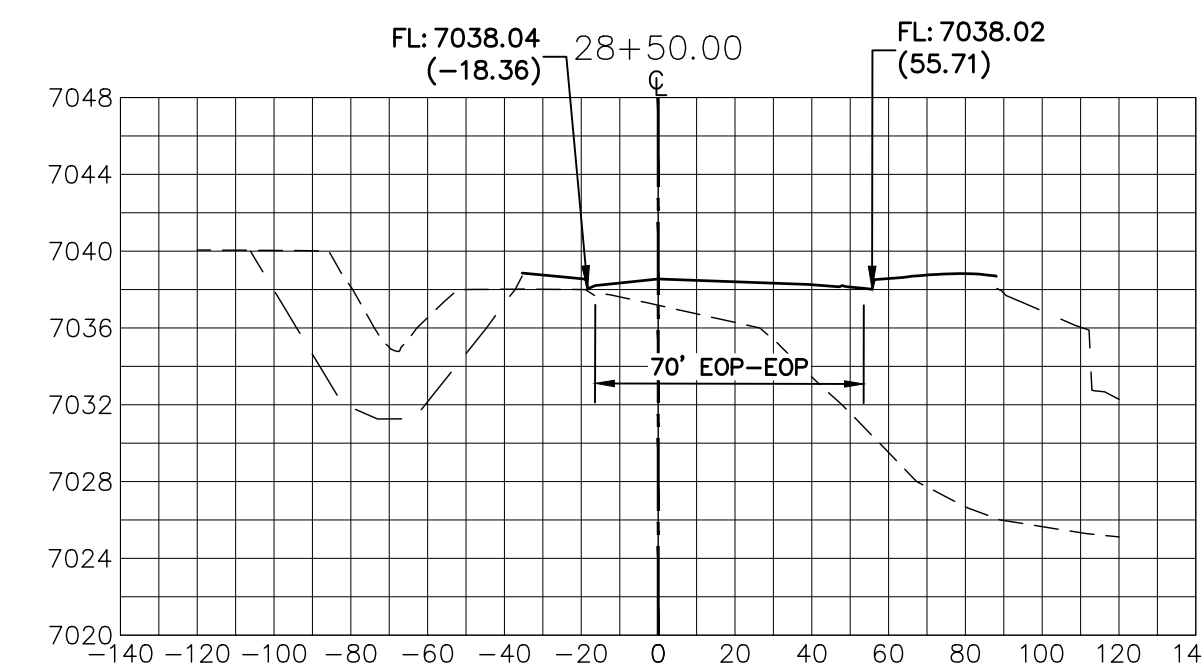
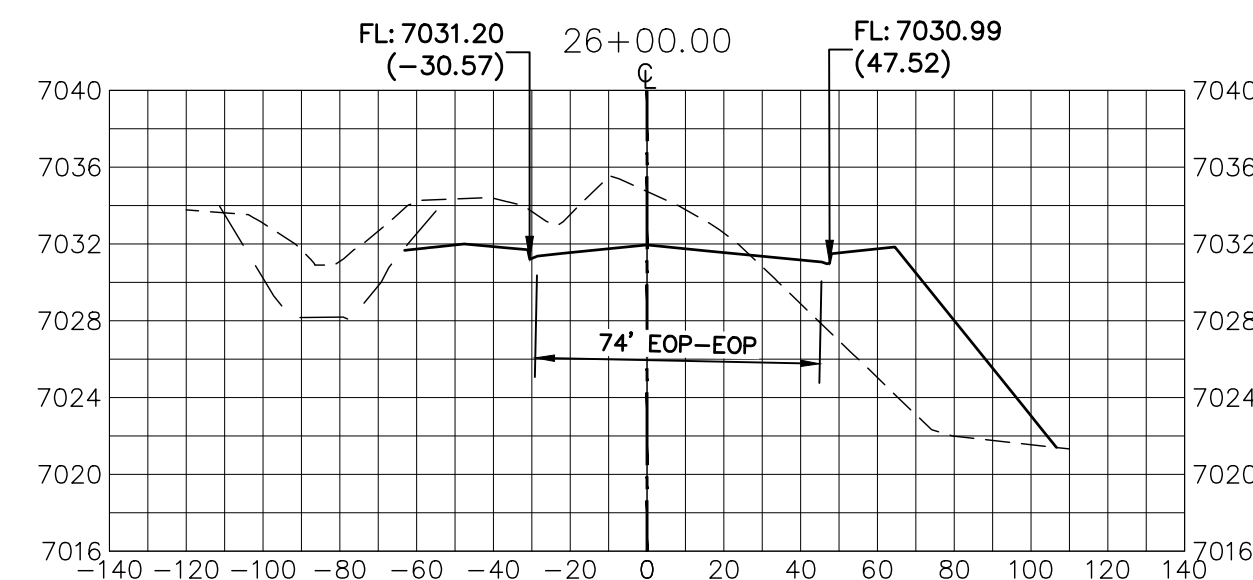
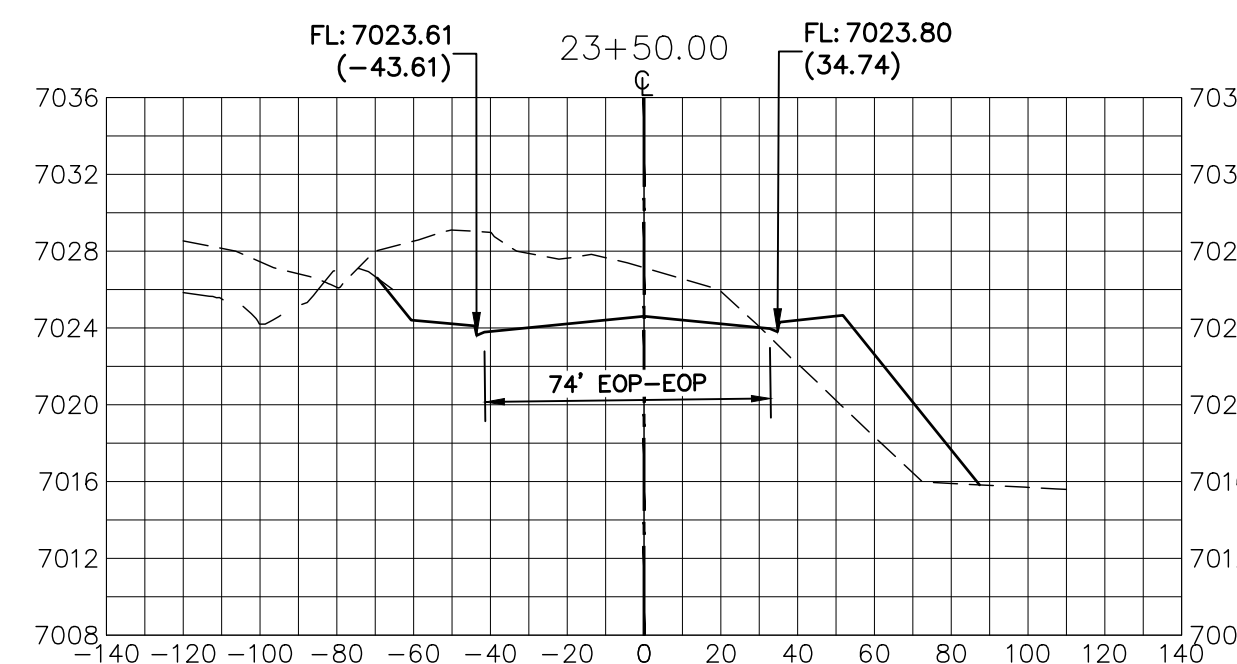
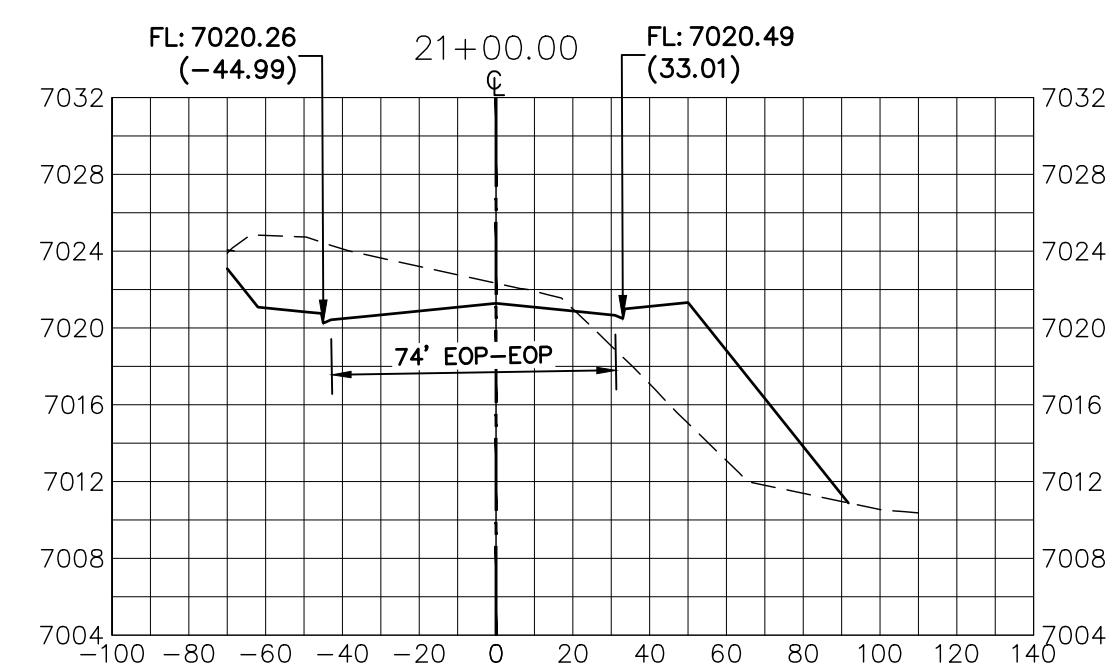
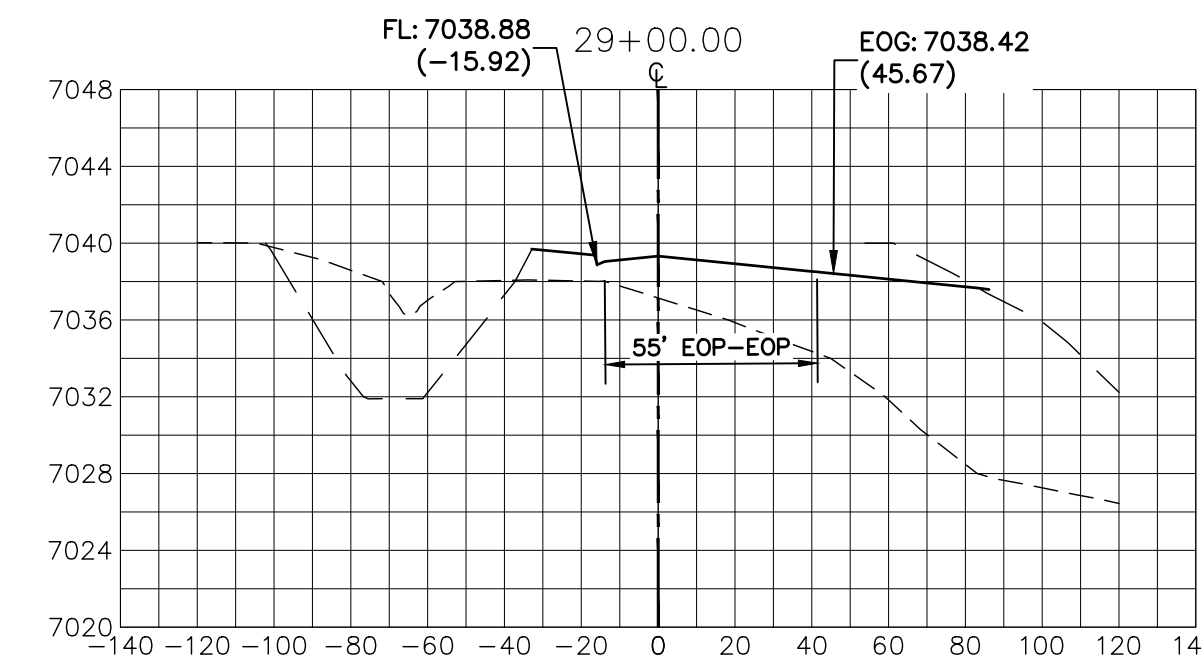
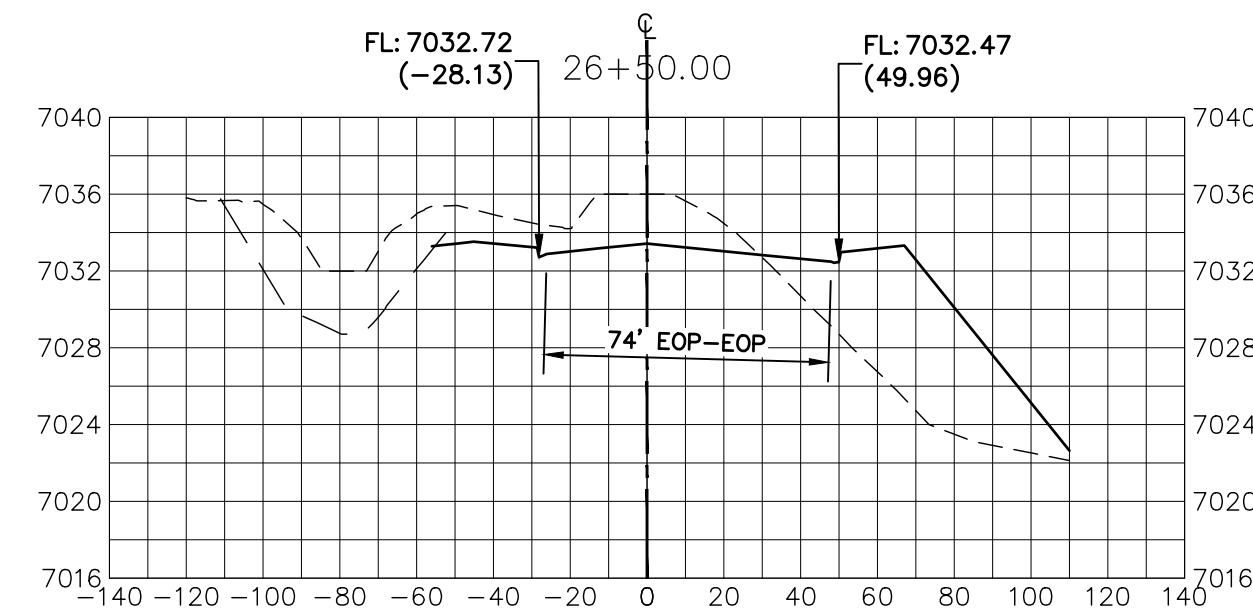
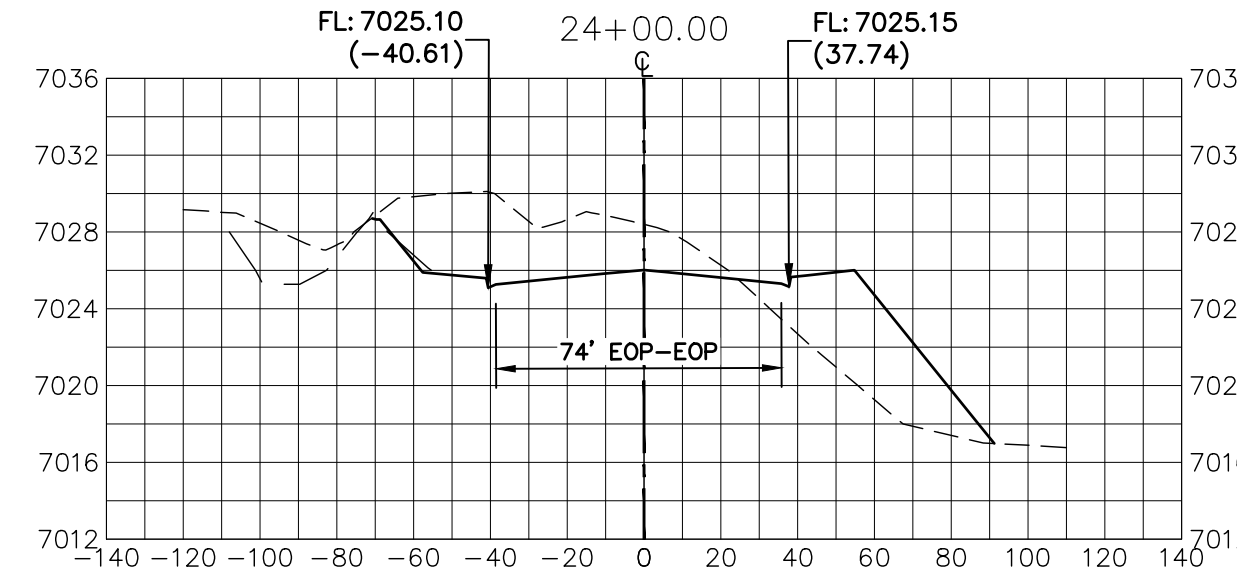
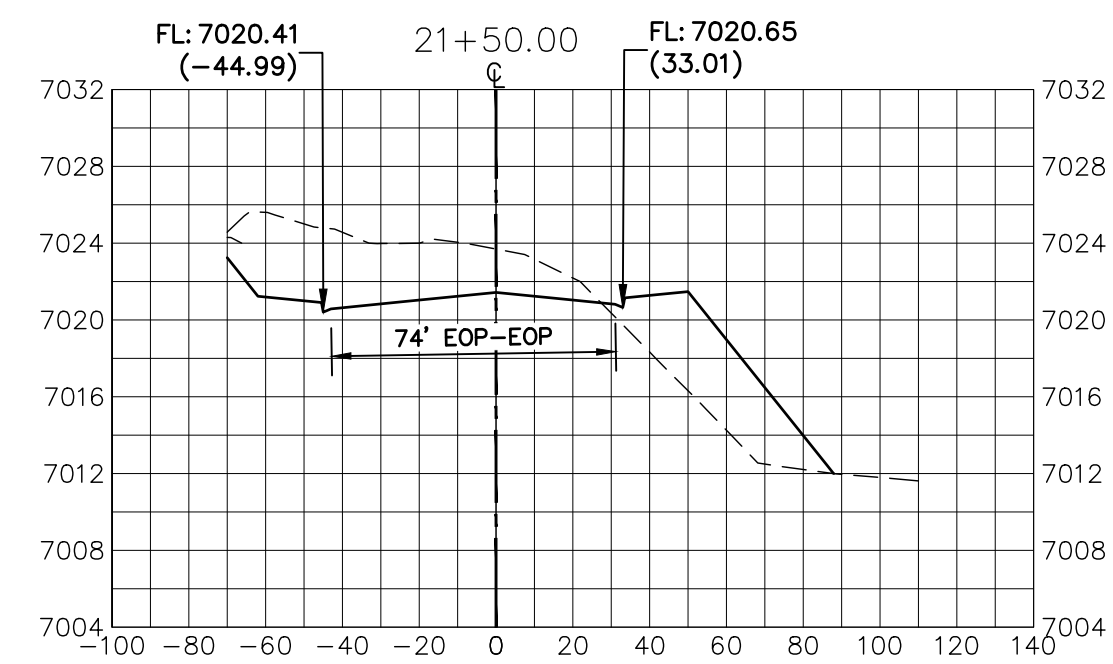
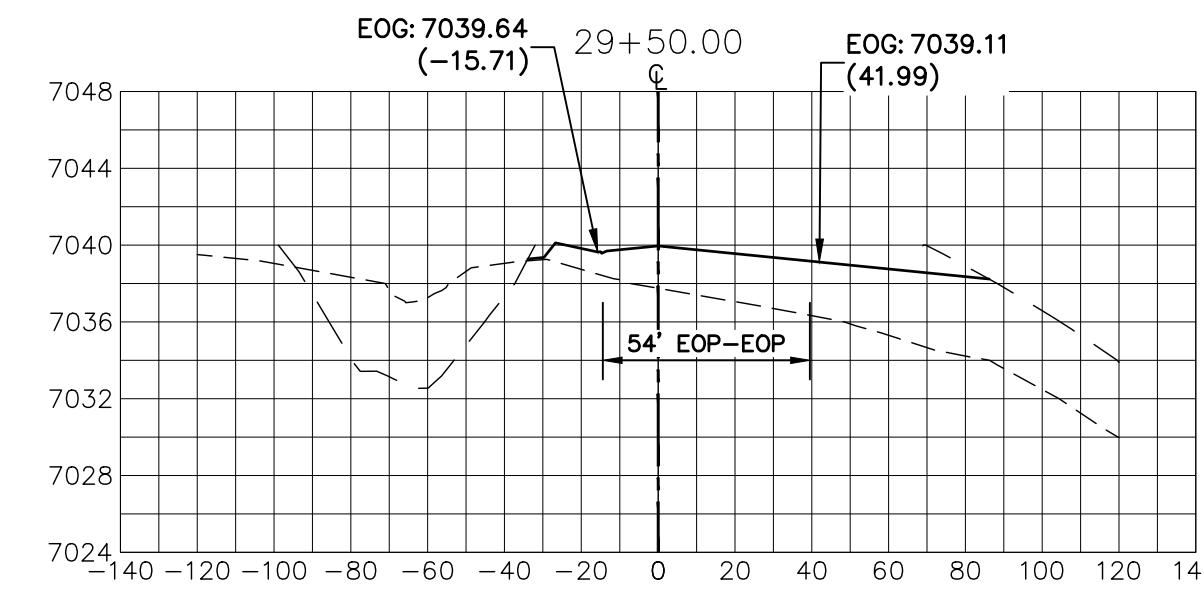
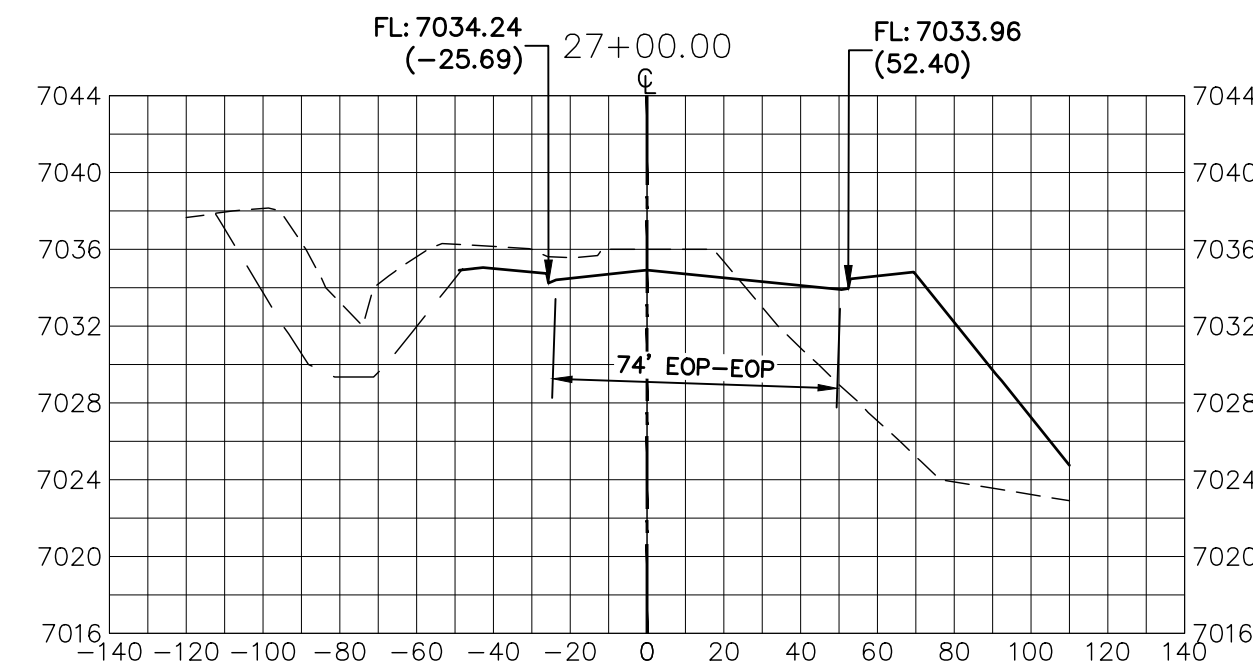
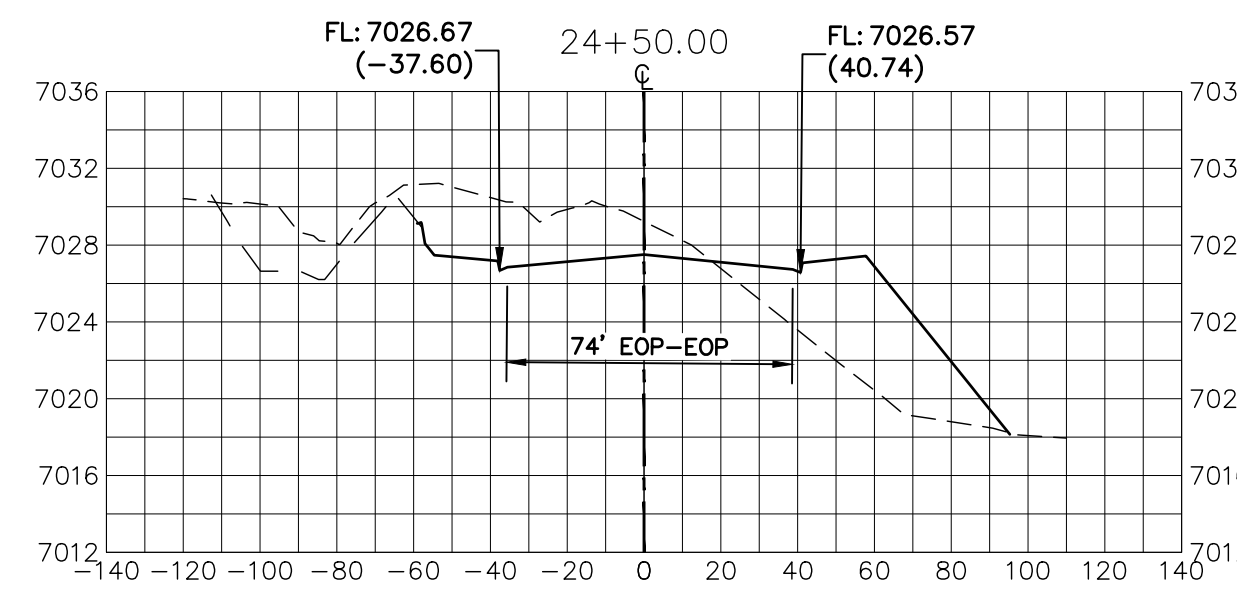
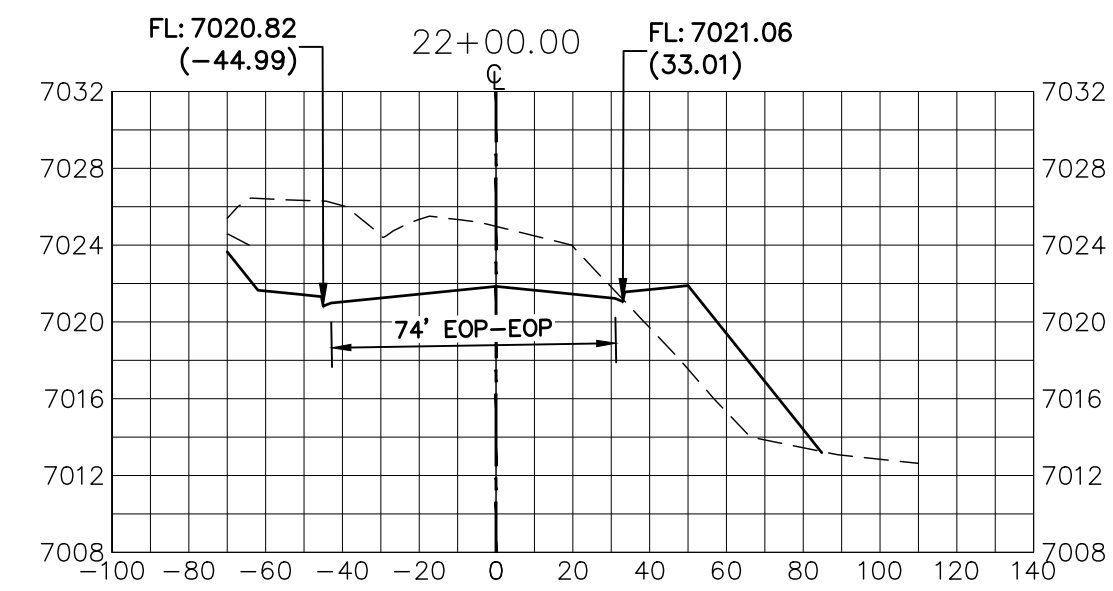
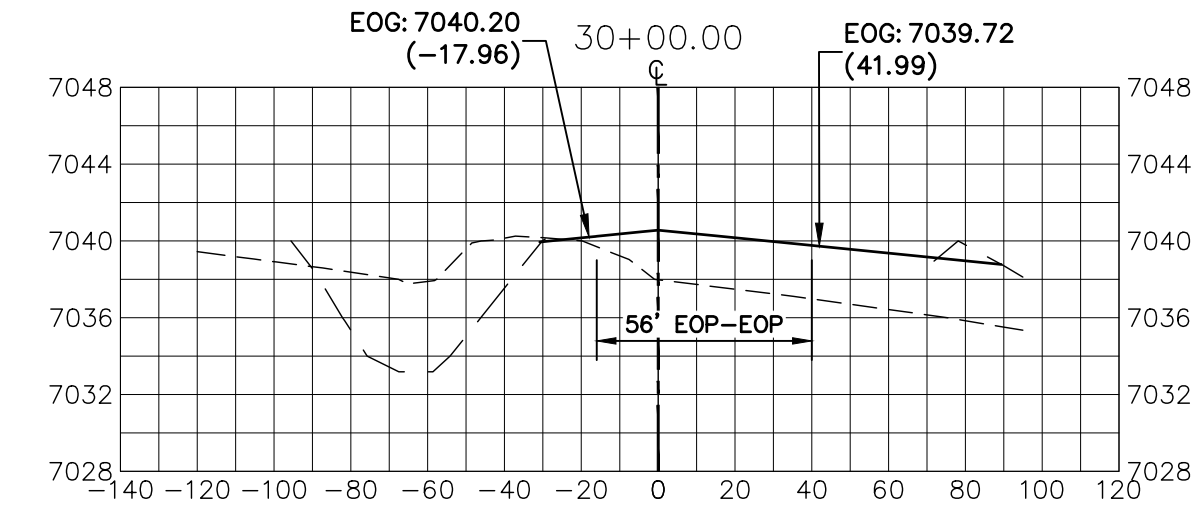
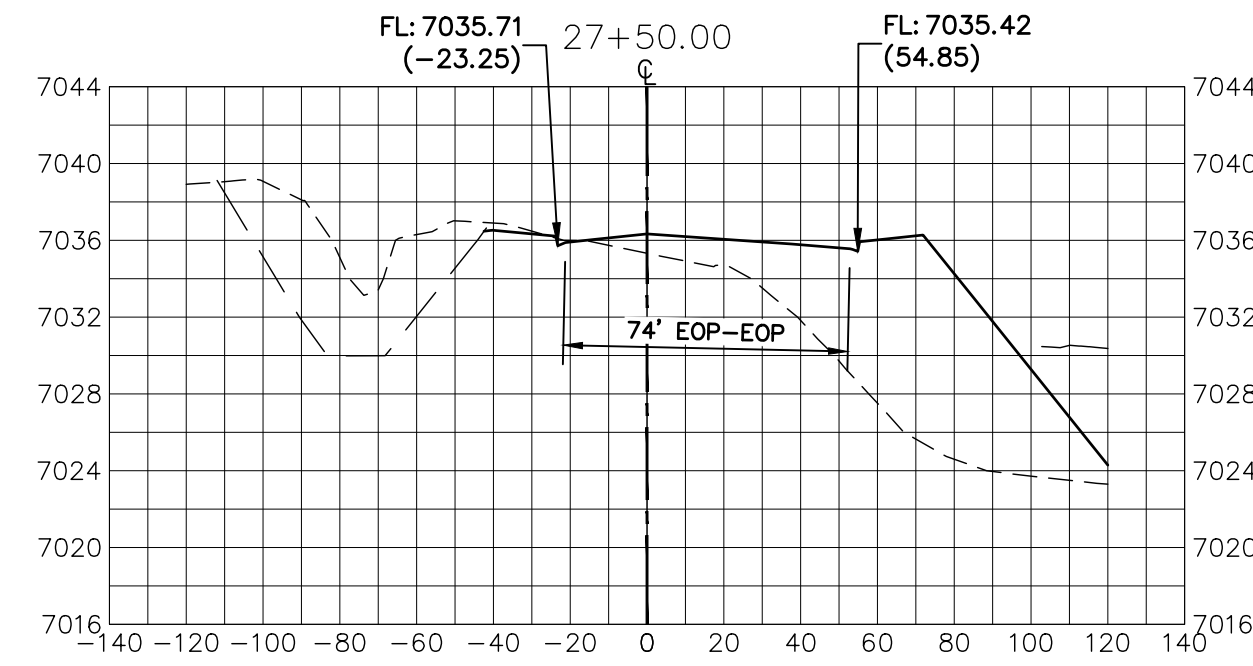
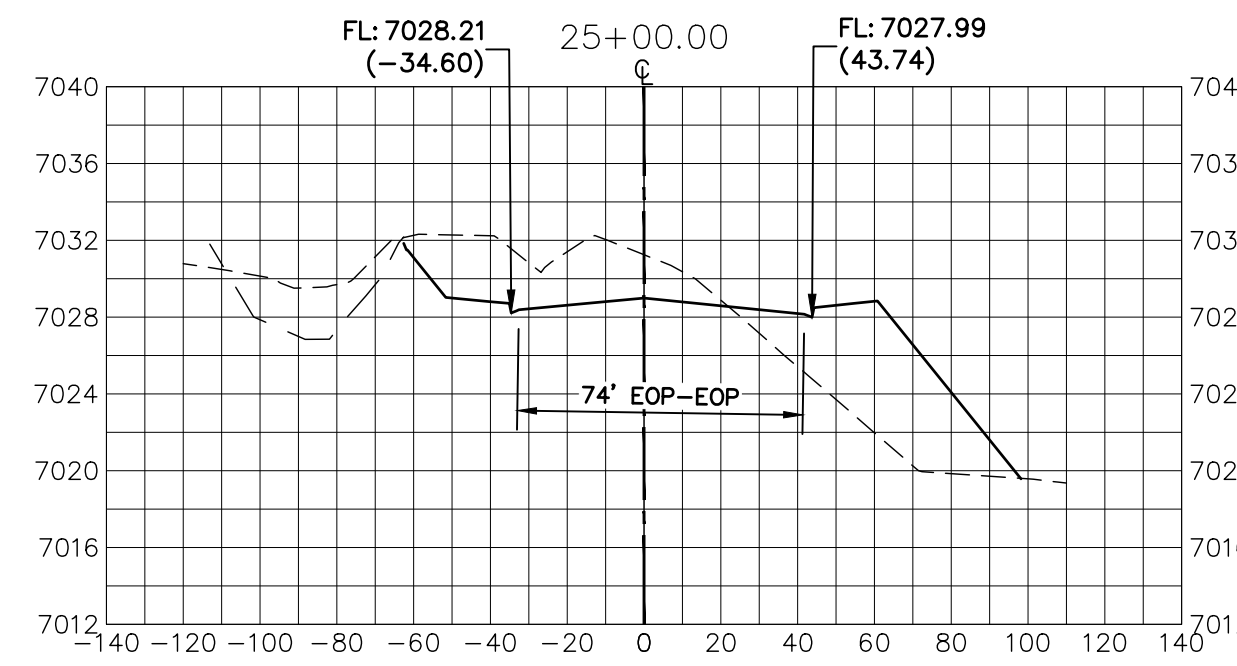
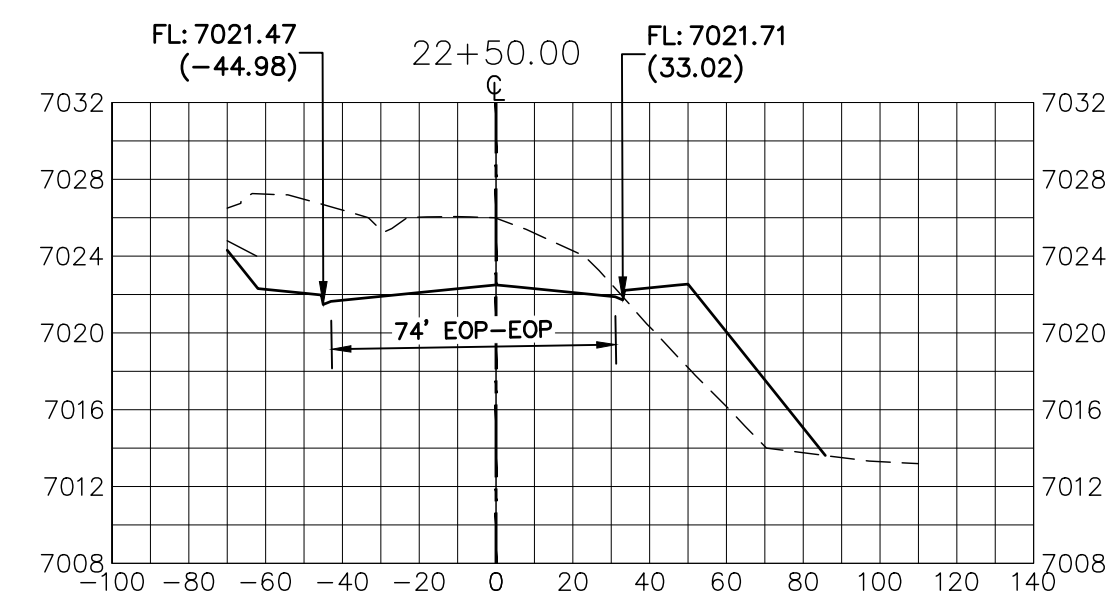
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 SUITE 201  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 471-1742

**J.R. ENGINEERING**  
 A Westman Company  
 Centennial 300-740-9888 • Colorado Springs 719-583-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	REVISION	
						No.	DATE
1"=50'	1"=10'	3/7/22	RAB	KRW			

**STERLING RANCH -  
 VOLLMER ROAD FILING 2  
 CROSS SECTIONS**



EPC 4/5/2022

**LEGEND**

- PROPOSED SURFACE
- - - EXISTING SURFACE
- - - FILING NO. 2 SURFACE

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

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20 BOULDER CRESCENT  
SUITE 201  
COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
(719) 471-1742

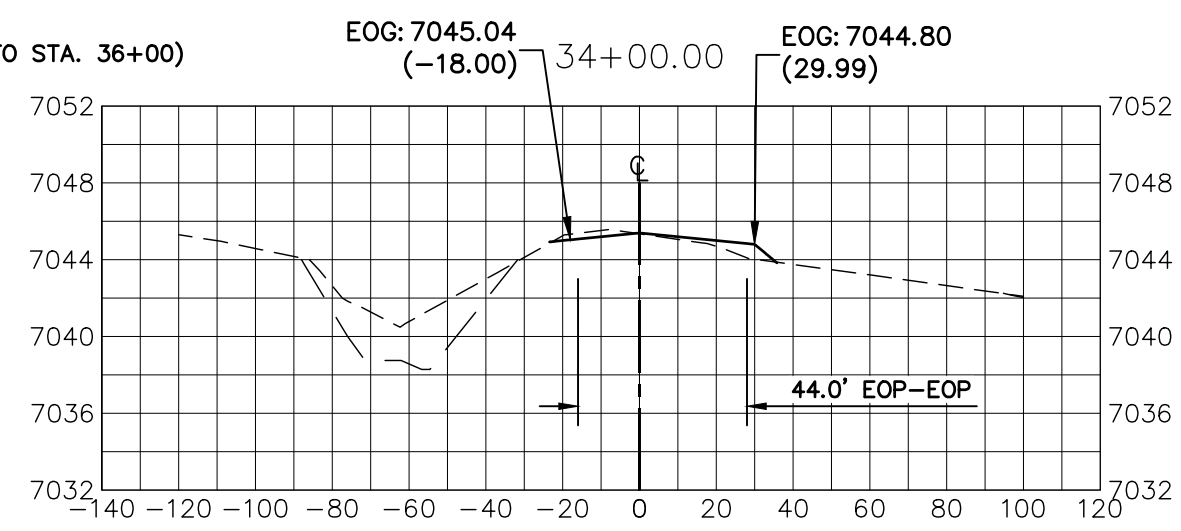
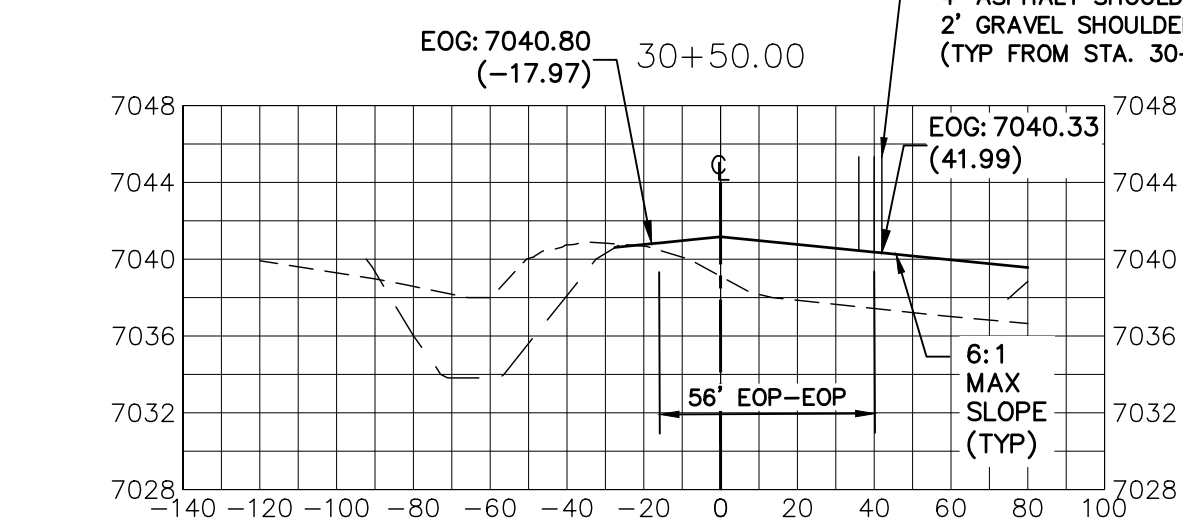
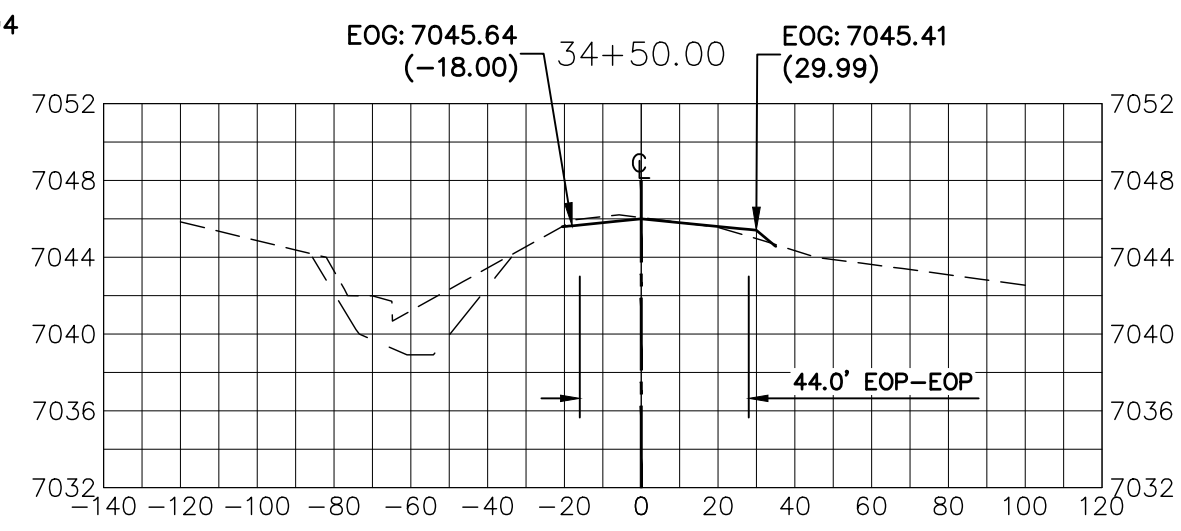
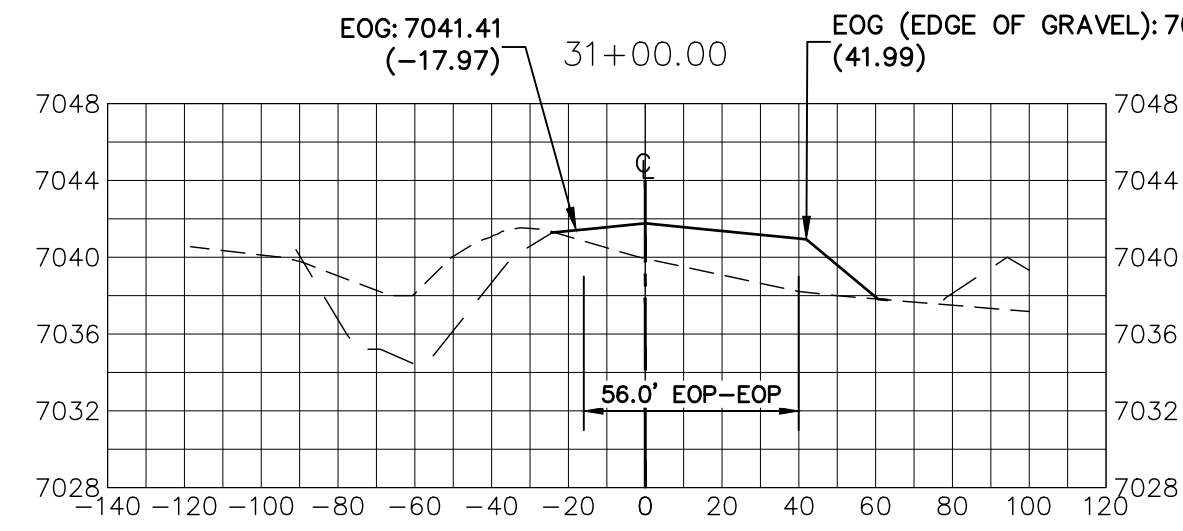
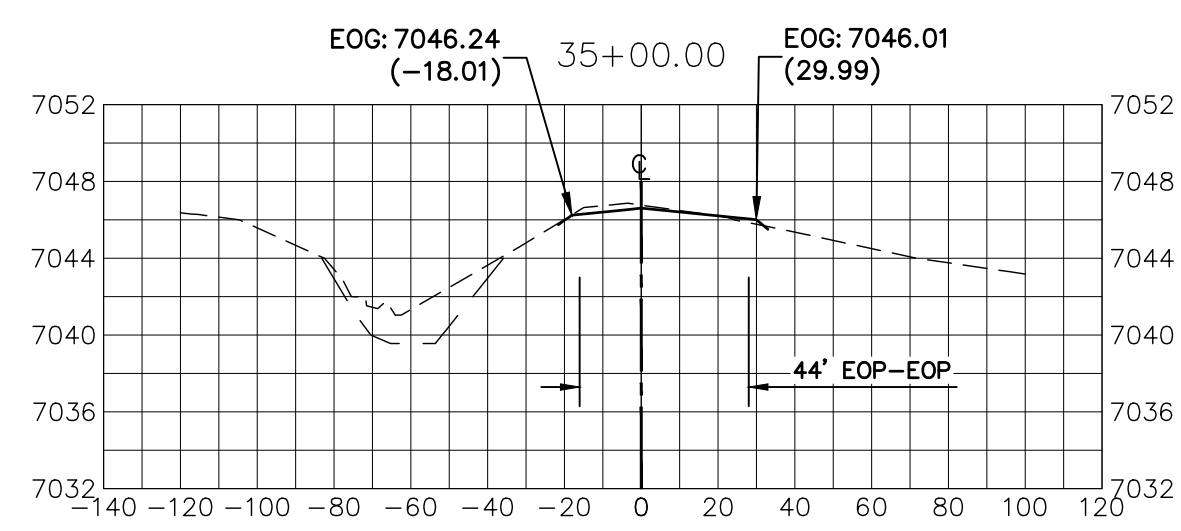
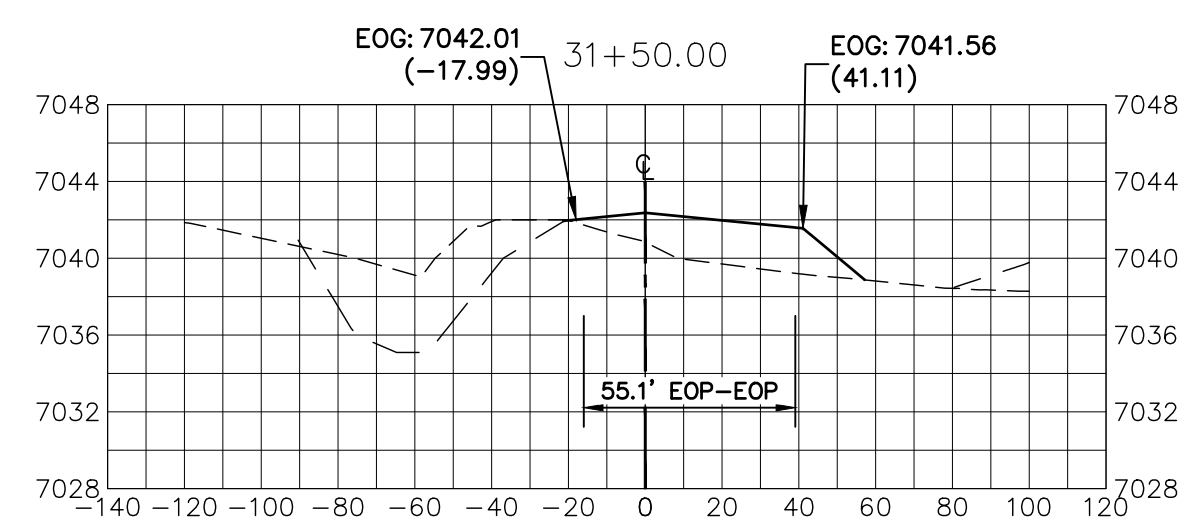
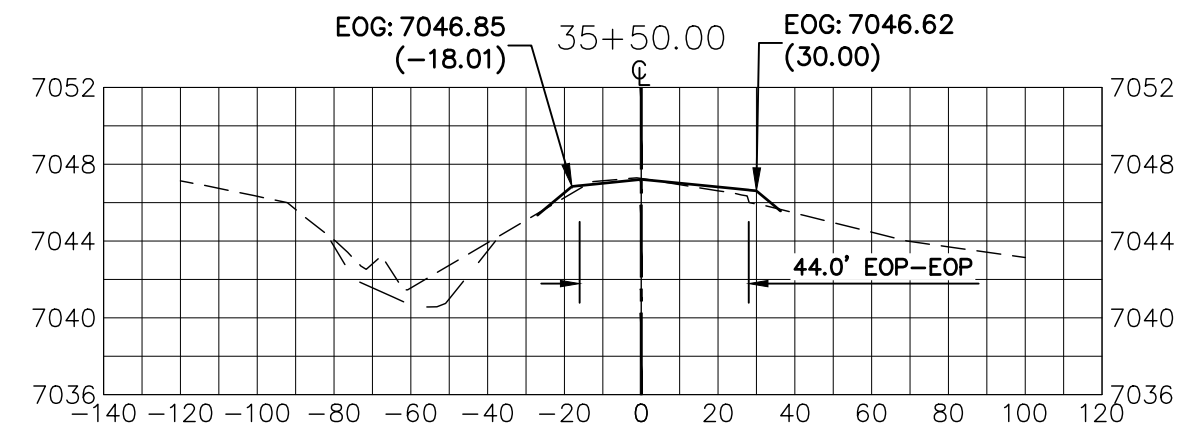
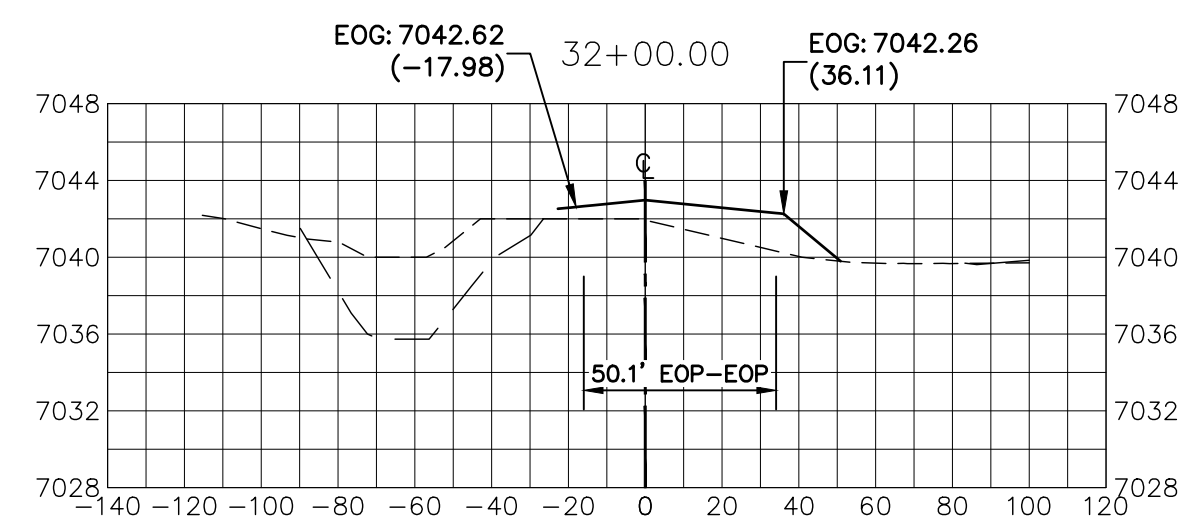
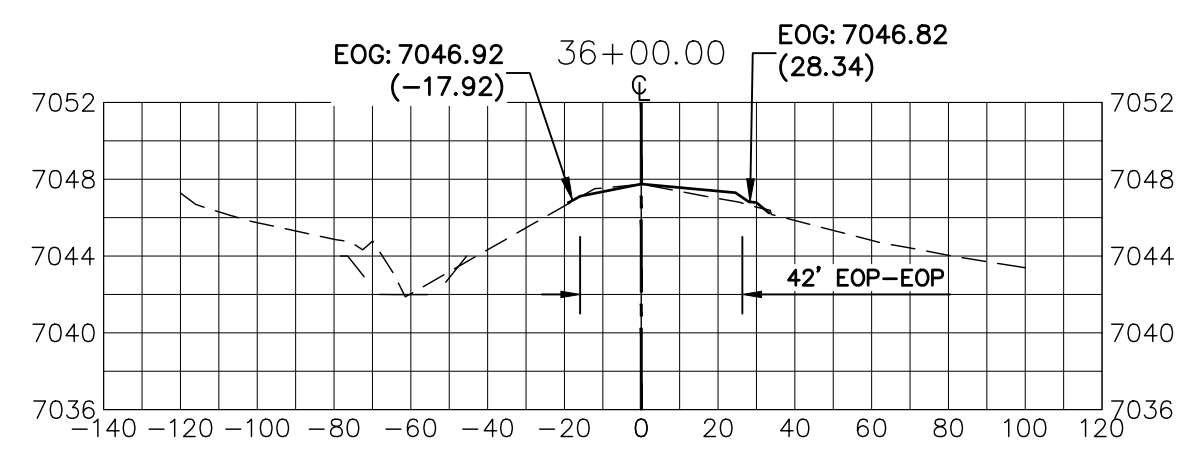
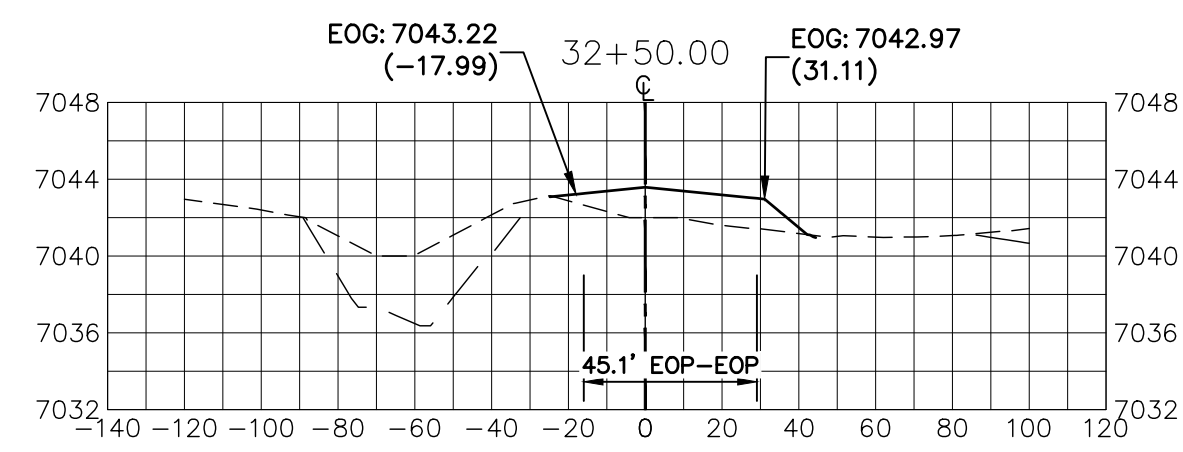
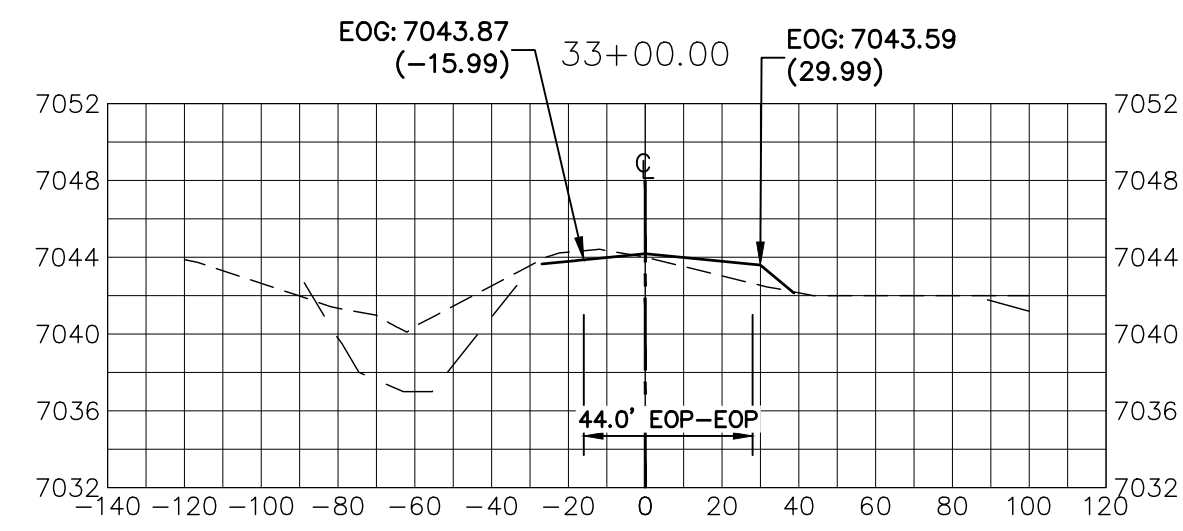
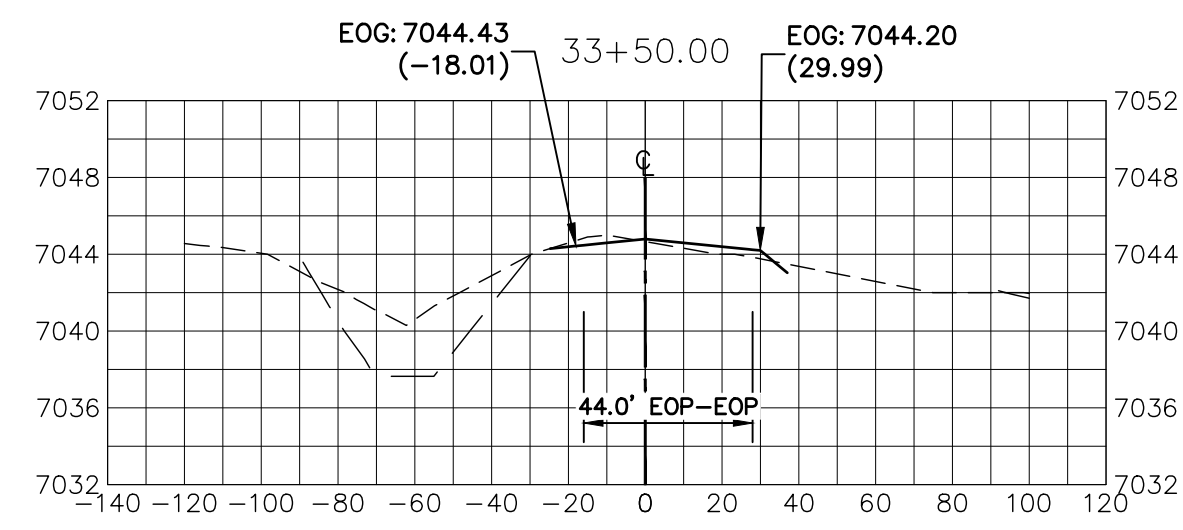
**J.R. ENGINEERING**  
A Westman Company  
Central 300-740-9888 • Colorado Springs 719-588-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY DATE	
1"=50'	1"=10'	3/7/22	RAB	KRW					

STERLING RANCH -  
VOLLMER ROAD FILING 2  
CROSS SECTIONS

SHEET 9 OF 11

JOB NO. 25188.01



EPC 4/5/2022

**LEGEND**

- PROPOSED SURFACE
- - - EXISTING SURFACE
- - - FILING NO. 2 SURFACE

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

**SR LAND, LLC**  
 20 BOULDER CRESCENT  
 SUITE 201  
 COLORADO SPRINGS, CO 80903  
 JAMES F. MORLEY  
 (719) 471-1742

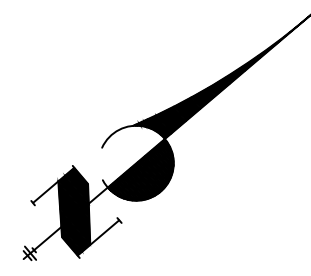
**J.R. ENGINEERING**  
 A Westman Company



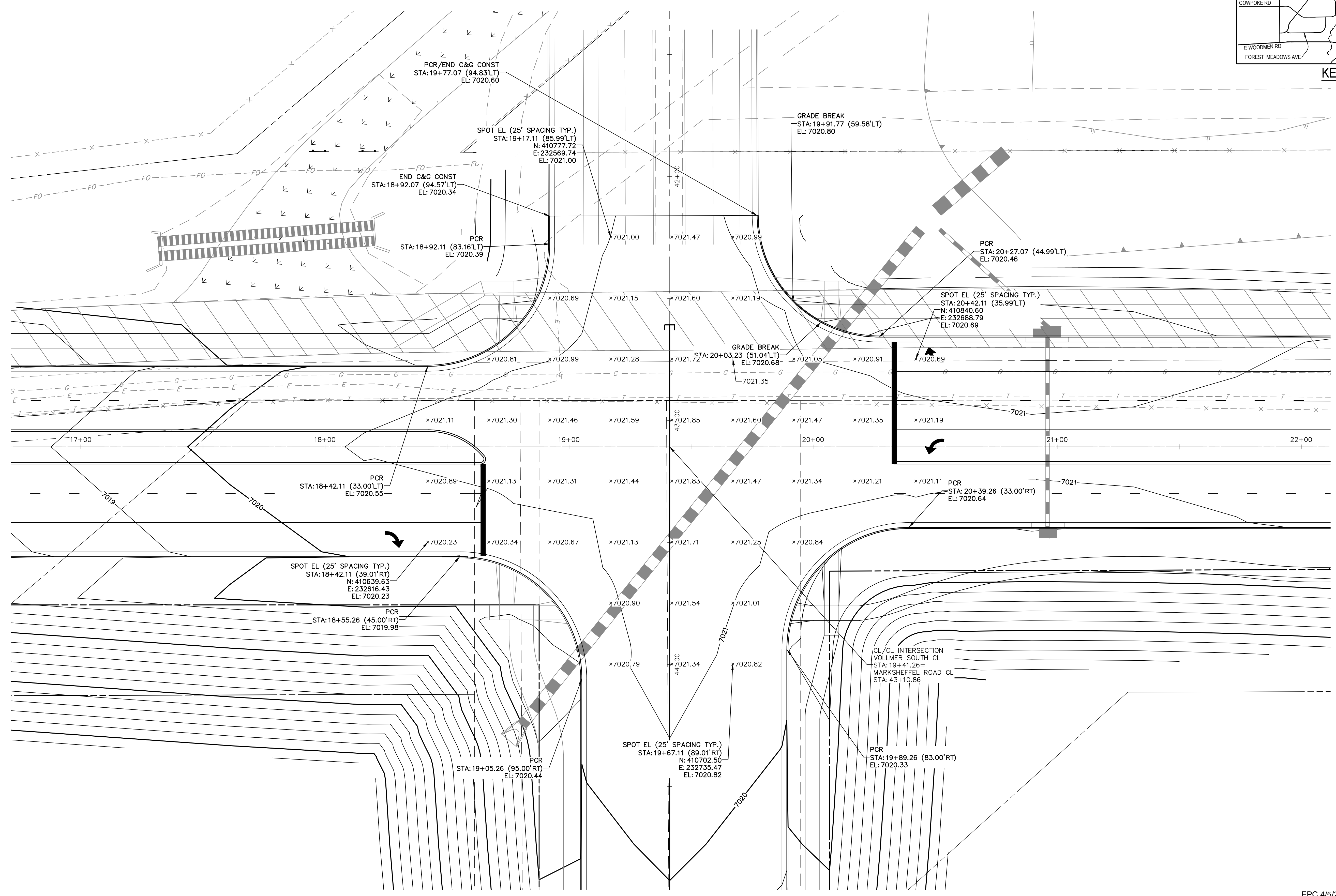
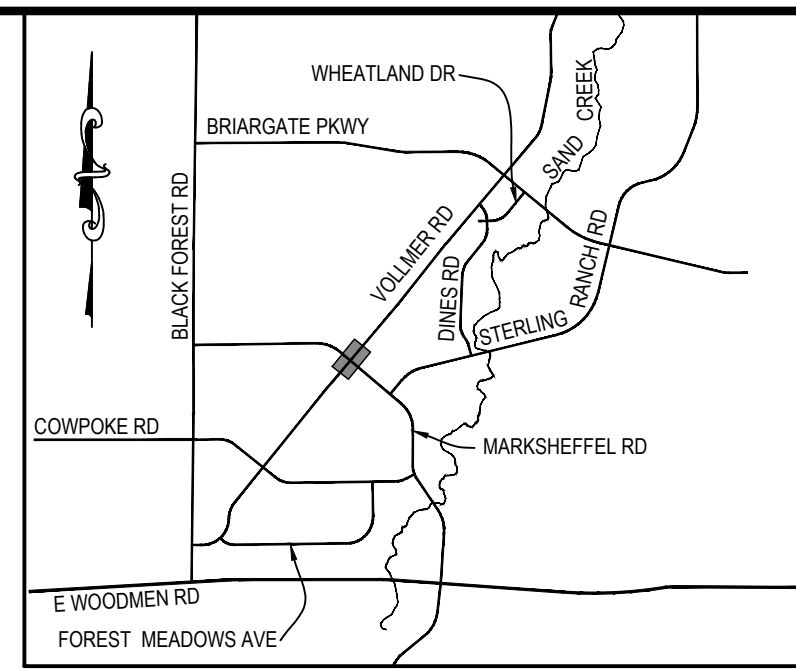
Central 303-740-9888 • Colorado Springs 719-588-2583  
 Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	REVISION	
						No.	DATE
1"=50'	1"=10'	3/7/22	RAB	KRW			

STERLING RANCH -  
 VOLLMER ROAD FILING 2  
 CROSS SECTIONS



20 10 0 20 40  
ORIGINAL SCALE: 1" = 20'



**VOLLMER ROAD  
INTERSECTION AT MARKSHEFFEL ROAD DETAIL**

EPC 4/5/2022

**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
*Mike A. Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC  
DATE 3/7/22

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COLORADO SPRINGS, CO 80903  
JAMES F. MORLEY  
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A Westman Company  
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BY	DATE	No.	REVISION

STERLING RANCH -  
VOLLMER ROAD FILING 2  
INTERSECTION DETAIL

H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	3/7/22
DESIGNED BY	RAB
DRAWN BY	KRW
CHECKED BY	

SHEET 11 OF 11  
JOB NO. 25188.01