



# WASTEWATER REPORT — STERLING RANCH EAST FILING NO 3-FINAL PLAT



**PREPARED BY**

John McGinn, PE CO-19534

**RESPEC**

5540 Tech Center Drive, Suite 100  
Colorado Springs, Colorado 80919

**PREPARED FOR**

Falcon Area Water and Wastewater Authority

**OCTOBER 14, 2024**

Project Number W0242.22001





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# 1.0 INTRODUCTION

This wastewater report is for the Sterling Ranch East Filing No. 3 Final Plat. The service entity is the Falcon Area Water and Wastewater Authority, and the property is in the service area. The service areas and location of tie-in point are shown in *Appendix A*. Filing 3 includes 74.745 gross acres and includes 187 single family lots. The proposed subdivision layout is shown in *Appendix B*.

## 1.1 OVERALL DEVELOPMENT DESCRIPTION

The Sterling Ranch East Filing No. 3 Final Plat development is east of Vollmer Road and north of and adjacent to Briargate Pkwy.

# 2.0 WASTEWATER REPORT

## 2.1 PROJECTED WASTEWATER LOADS

Wastewater unit user loading projections are based on similar District historical use developed in the Falcon area. Average daily- maximum monthly wastewater loads are expected to be roughly 172 gallons per day per single family residence. For Sterling Ranch East Filing No 3 Final Plat population estimate, we are using 2.6 persons per household.

NOTE: Sterling Ranch East Filing No 3 Final Plat includes an elementary school that had services dedicated on a final basis with a prior plat Branding Iron 2 (See letter June 10, 2022 and see also Wastewater Report for Sterling Ranch East Phase One Preliminary). The school was estimated at 13 SFE and is not considered here.

Table 1. Calculation of Wastewater Loads

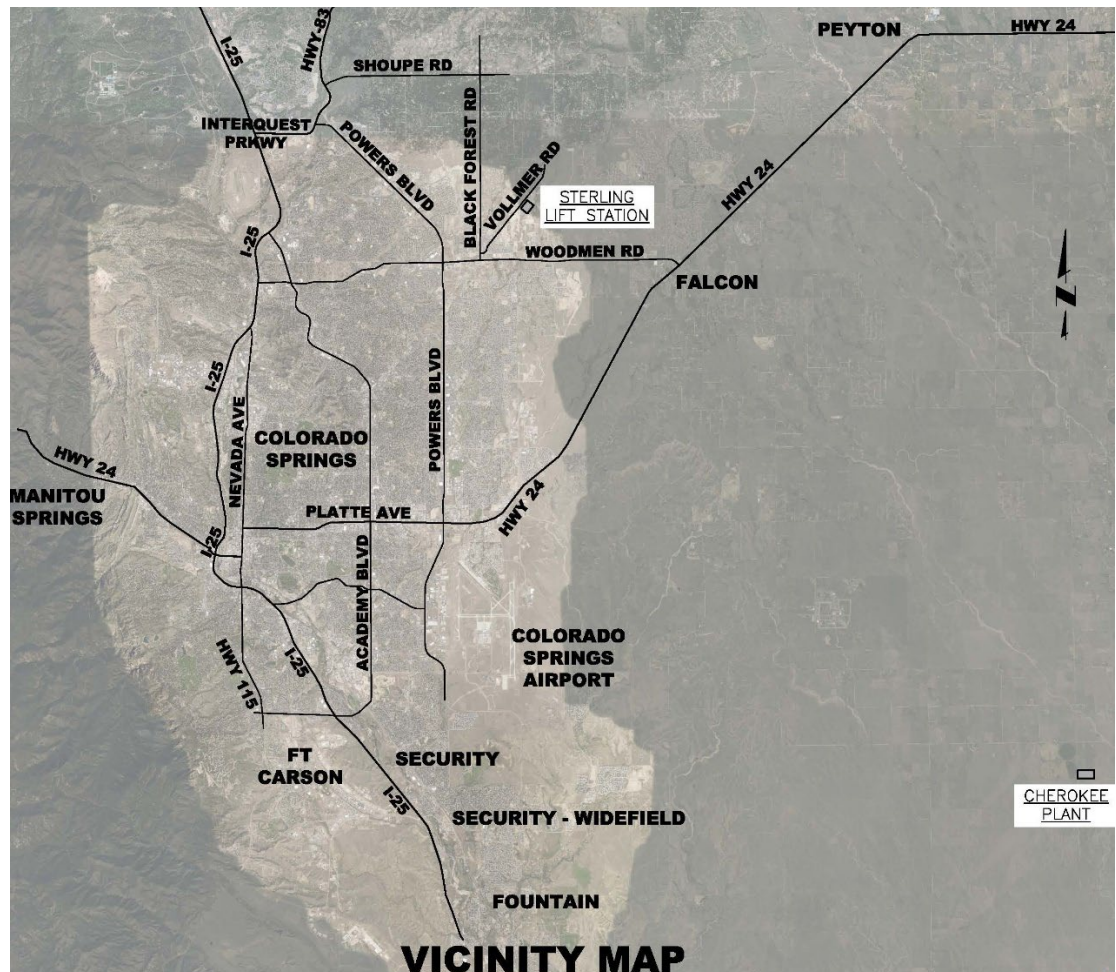
Use	Units	Single Family Equivalent	Average Daily Max-Month Flows	Estimated Population
	#	#	GPD	#
Residential Units				
Single family	187	187	32,164	486
Non-Residential Use				
NONE				
<b>Total</b>			<b>32,164</b>	

## 2.2 WASTEWATER TREATMENT PLANT

Interim Wastewater Treatment Services will be provided by Colorado Springs Utilities. A copy of the Interim Service Agreement was attached in prior Water and Wastewater Reports and therefor is not included here. FAWWA also has access to 1.006 MGD of wastewater treatment capacity in the Cherokee Wastewater Treatment Plant via Meridian Service Metro District.

MSMD owns 2.2 million gallons per day of wastewater capacity in the Cherokee Wastewater Treatment Facility. The plant operator, Cherokee Metropolitan District (CMD) has already approved the systems associated with transport and treatment. MSMD and CMD are in compliance with their current COC issued by the Colorado Department of Public Health and Environment. The location of the 4.6 MGD Cherokee Wastewater Treatment Plant is shown below:

*Figure 1. Location of Cherokee Wastewater Treatment Plant*





## 2.3 ADEQUACY OF WASTEWATER TREATMENT CAPACITY

The Falcon Area Water and Wastewater Authority has a perpetual contract with the Meridian Service Metropolitan District (MSMD) for the provision of wastewater treatment. The contract allows for the purchase of up to 5849 SFEs of wastewater capacity from MSMD which is equivalent to 1.006 Million Gallons/Day (MGD). Wastewater projections are based on similar District historical use developed in the Falcon area. Average daily-maximum monthly wastewater loads of 172 gallons per day per single family residence are iterated in the Wastewater Contract.

The loading projected from Sterling Ranch East Filing No. 3 Final Plat has been previously dedicated under Sterling Ranch East Phase One Preliminary Plan so contractual capacity available to the Falcon Area Water and Wastewater Authority remains unchanged. FAWWA therefore has more than adequate wastewater treatment capacity to provide service to serve the Subdivision.

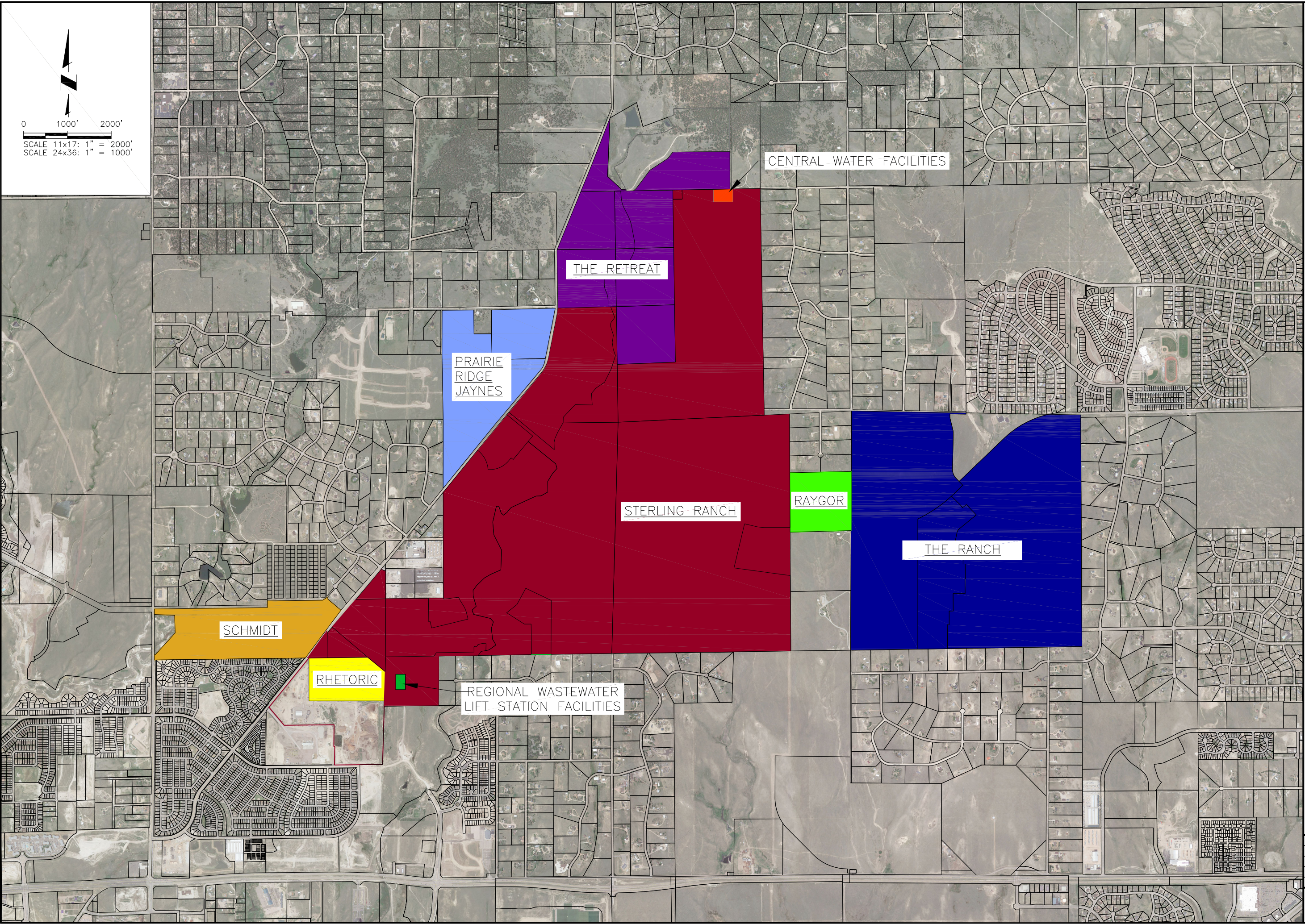
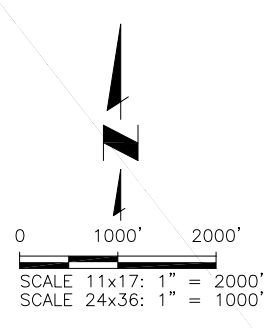
Including all commitments to date, (October 14, 2024) and including Sterling Ranch East Filing No. 3 Final Plat, the current committed capacity is for 3180 SFE which is 54.37 % of FAWWA contractual treatment capacity, unchanged as prior dedication of capacity under Sterling Ranch East Phase One Preliminary.

## 2.4 COLLECTION, PUMPING, AND PIPING

All lands to be developed within the Falcon Area Water and Wastewater Authority (FAWWA) areas will gravity feed to the southern portion of the Sterling site. This will be the main collection point for most of the entire future development as well. FAWWA has completed construction of the Lift Station and Force Main to serve the area. The force main is constructed across the lower portion of The Ranch. From this point wastewater is intercepted by Meridian Service Metropolitan District and delivered to Cherokee through the Meridian system.

2023/12/05 9:44 AM By: Kathy Nisto N:\Projects\W0242.22001-FAWMA General Engineering\Drawings\16104\_Sterling\_Ranch.dwg

IF BAR DOES NOT MEASURE ONE INCH, SCALE OF THIS DRAWING HAS BEEN ALTERED



**Colorado Springs, CO**  
 5540 Tech Center Dr., Suite 100  
 Colorado Springs, CO 80919  
 Phone: 719.227.0072  
 www.respec.com

**APPENDIX A**  
**FALCON AREA WATER AND WASTEWATER AUTHORITY**  
**SERVICE AREA**

REVISIONS		
NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		

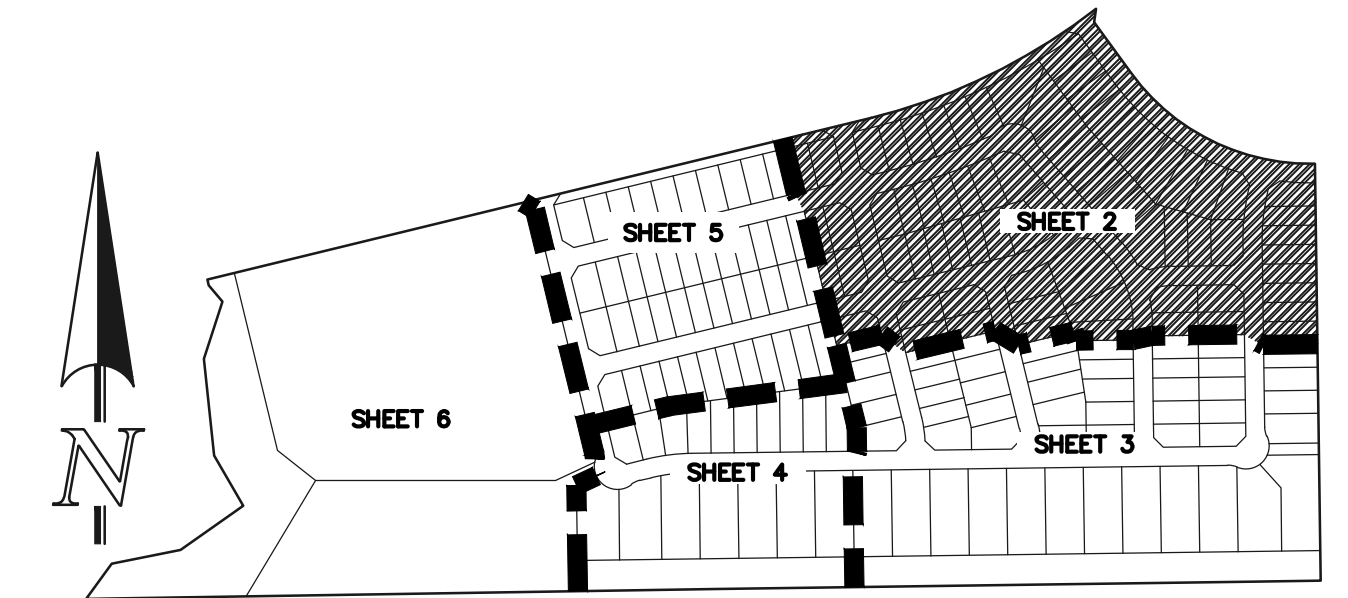
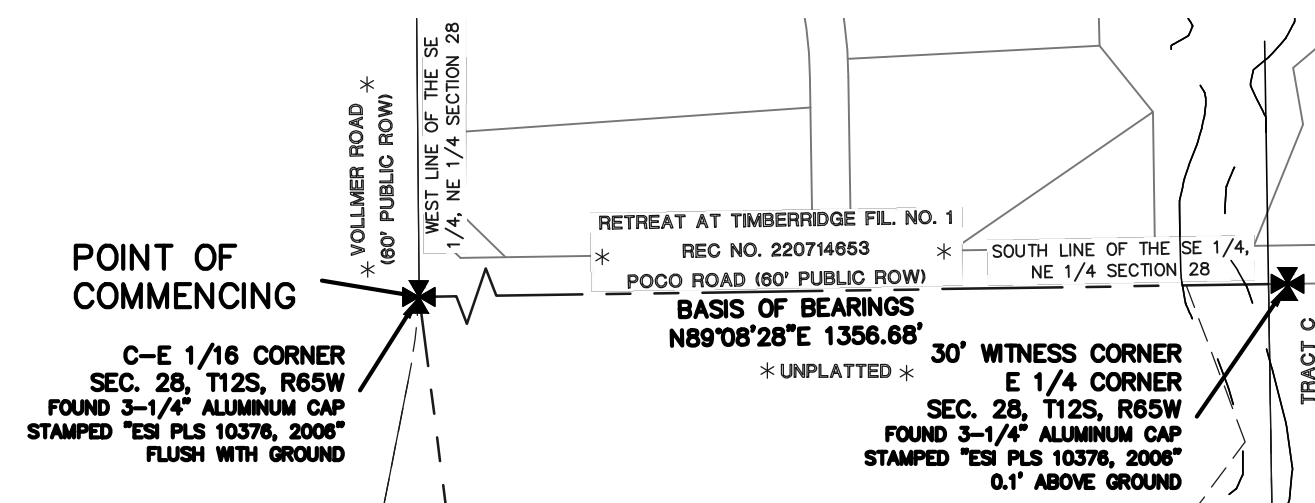
**EXHIBIT**

Proj #: 161.04  
 Date: 12/05/2023  
 Design: JPM  
 Drawn: JLB  
 Check: JPM

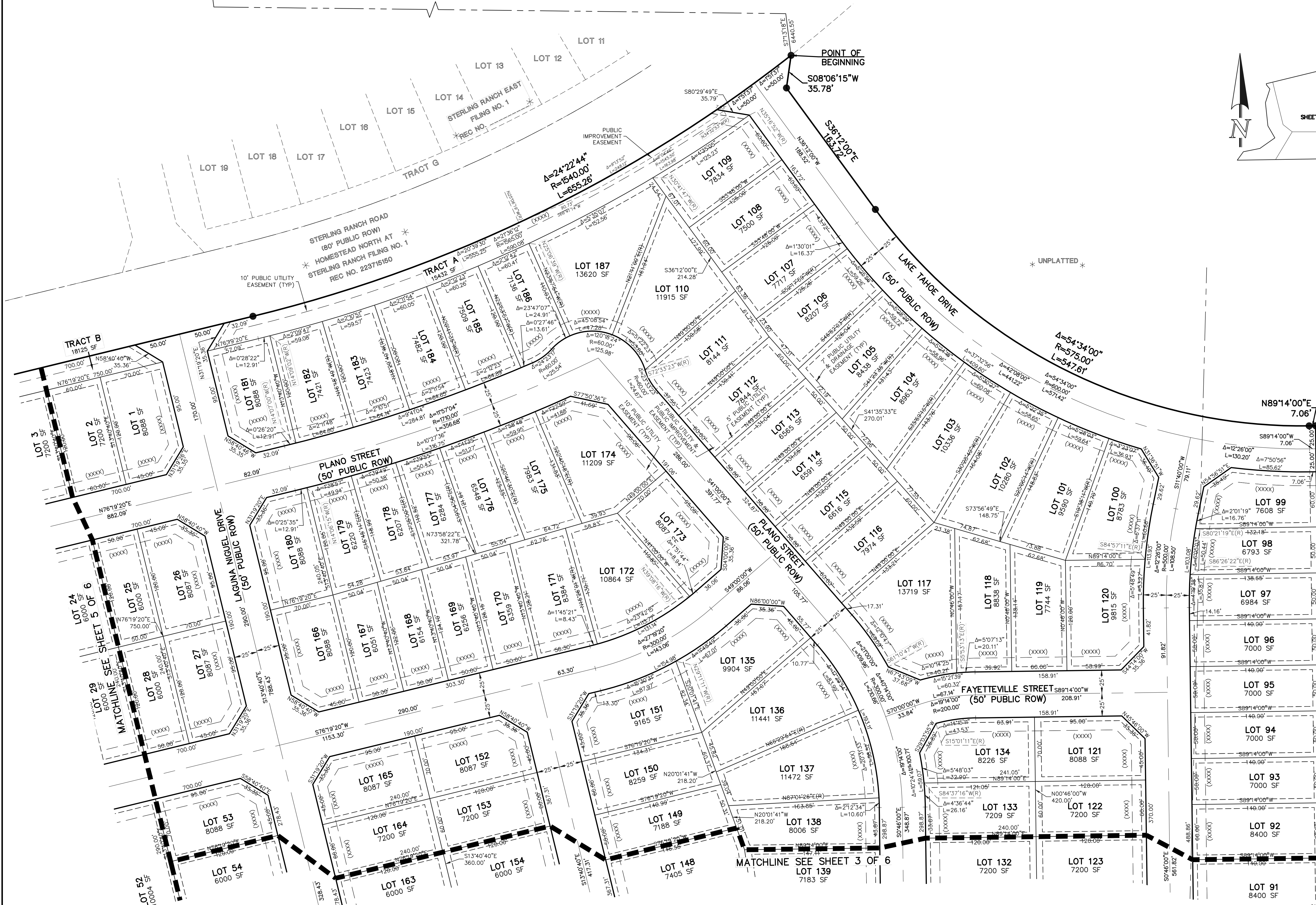


# STERLING RANCH EAST FILING NO. 3

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RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
EL PASO COUNTY, COLORADO

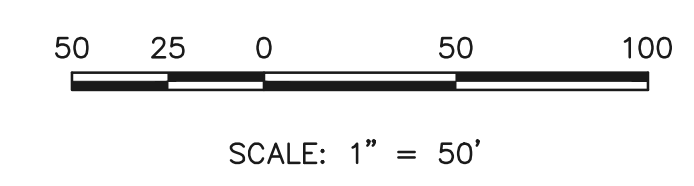
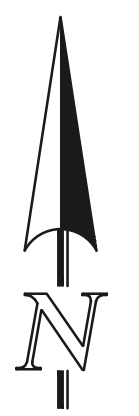


KEY MAP  
N.T.S.



### LEGEND

- (R) RADIAL BEARING
- SF SQUARE FEET
- (XXXX) ADDRESS
- ✱ NOT PART OF THIS SUBDIVISION
- ◻ RECOVERED AS NOTED
- 1-1/2" ALUMINUM SURVEYORS CAP STAMPED "CES LLC, PLS. 30118" RECOVERED FLUSH UNLESS OTHERWISE NOTED
- 1-1/2" ALUMINUM SURVEYORS CAP STAMPED "CES LLC, PLS. 34977" TO BE SET FLUSH UNLESS OTHERWISE NOTED



**PRELIMINARY**  
THIS DOCUMENT HAS NOT BEEN  
PLAT CHECKED

STERLING RANCH EAST  
FILING NO. 3  
JOB NO. 1183.33  
FEBRUARY 20, 2023  
SHEET 2 OF 6



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

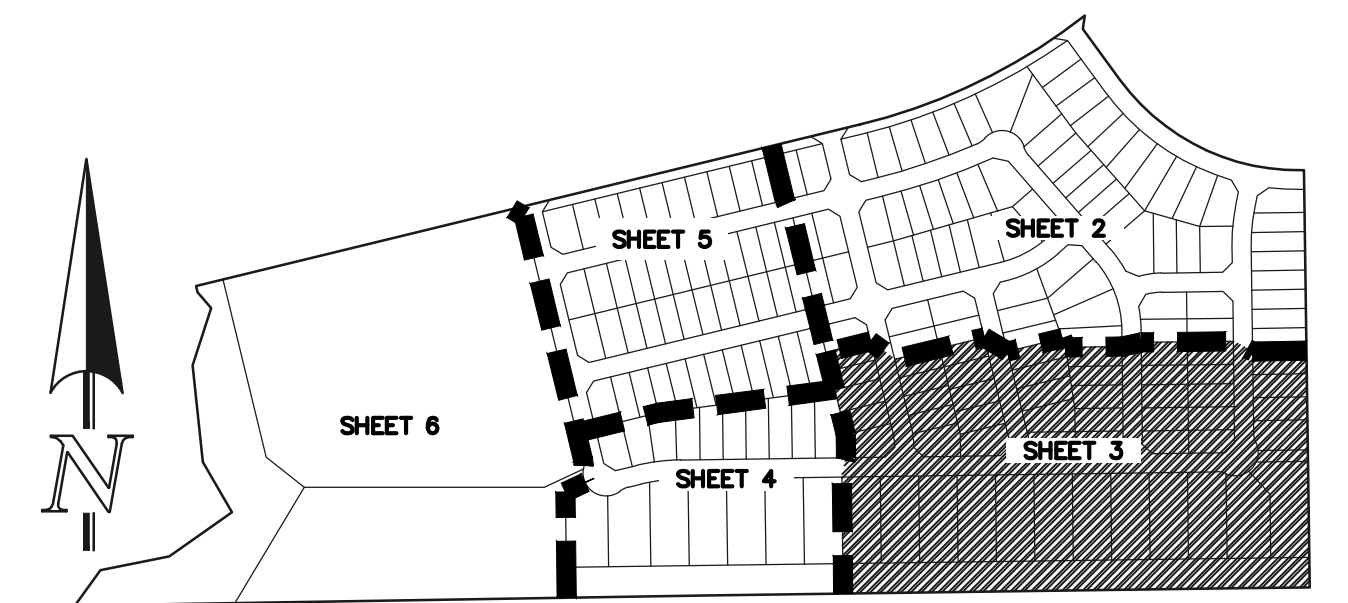
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# STERLING RANCH EAST FILING NO. 3

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RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
EL PASO COUNTY, COLORADO



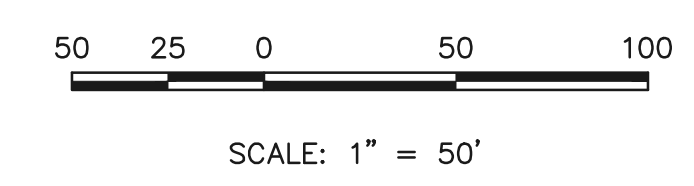
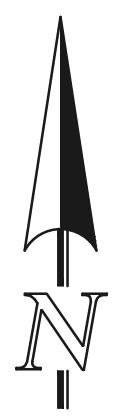
KEY MAP  
N.T.S.



\* UNPLATTED \*

### LEGEND

- (R) RADIAL BEARING
- AC ACRES
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SHEET 3 OF 6



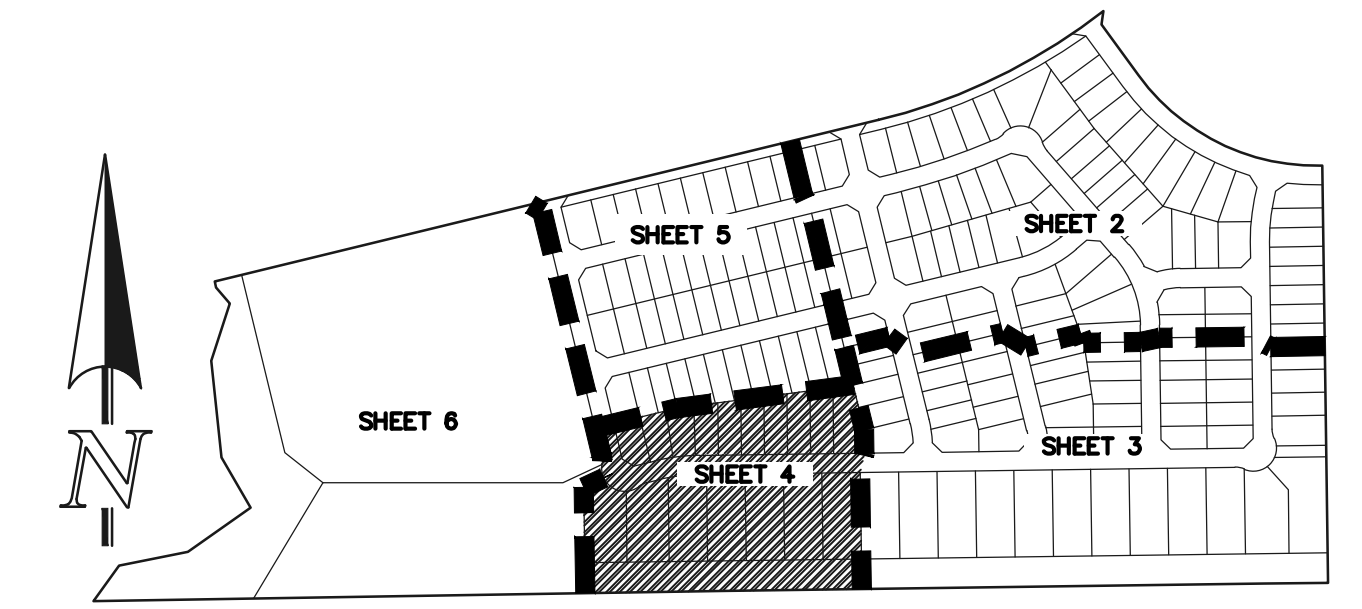
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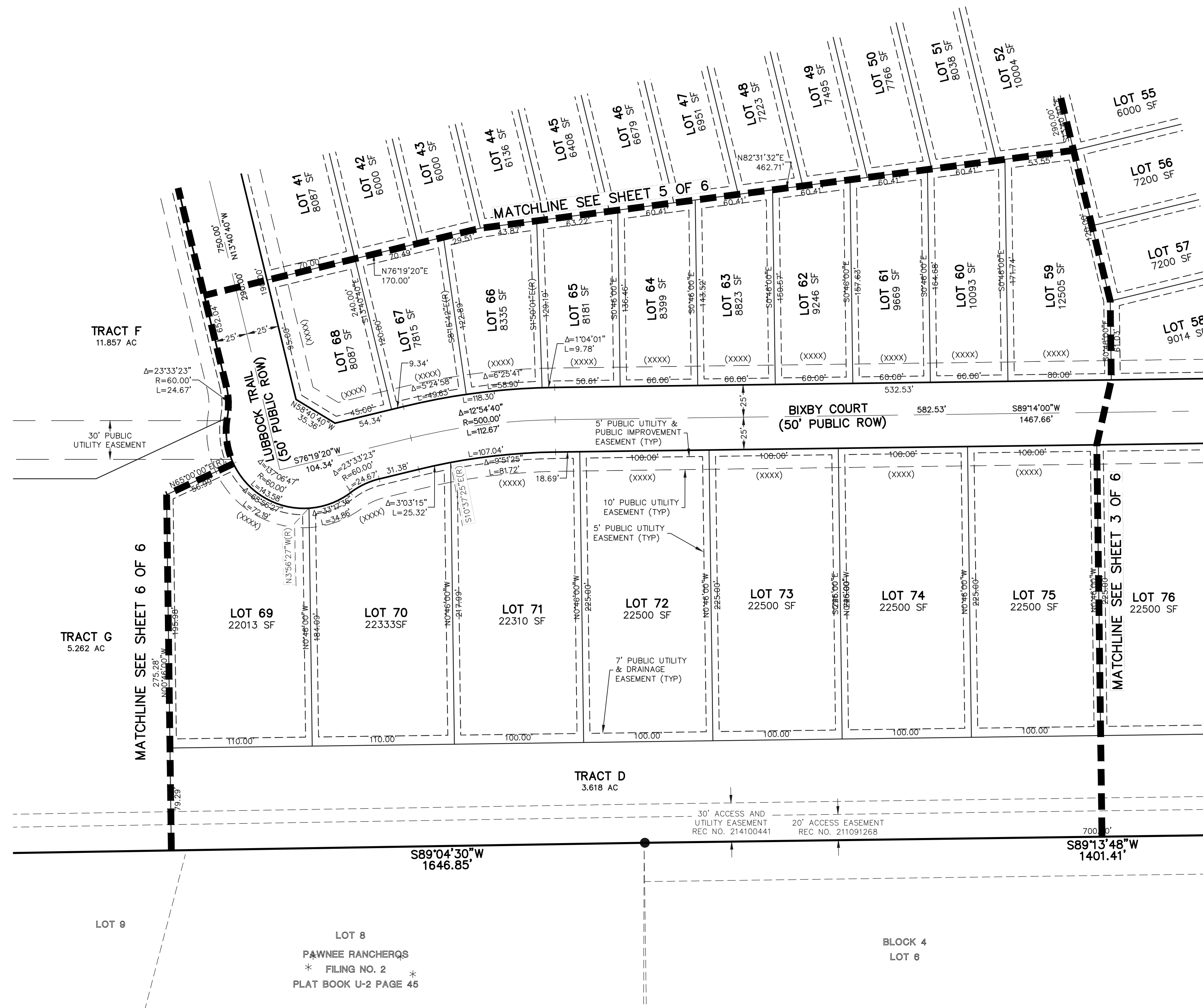
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# STERLING RANCH EAST FILING NO. 3

A PORTION OF SECTION 33, TOWNSHIP 12 SOUTH,  
RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
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KEY MAP  
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SCALE: 1" = 50'

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FEBRUARY 20, 2023  
SHEET 4 OF 6



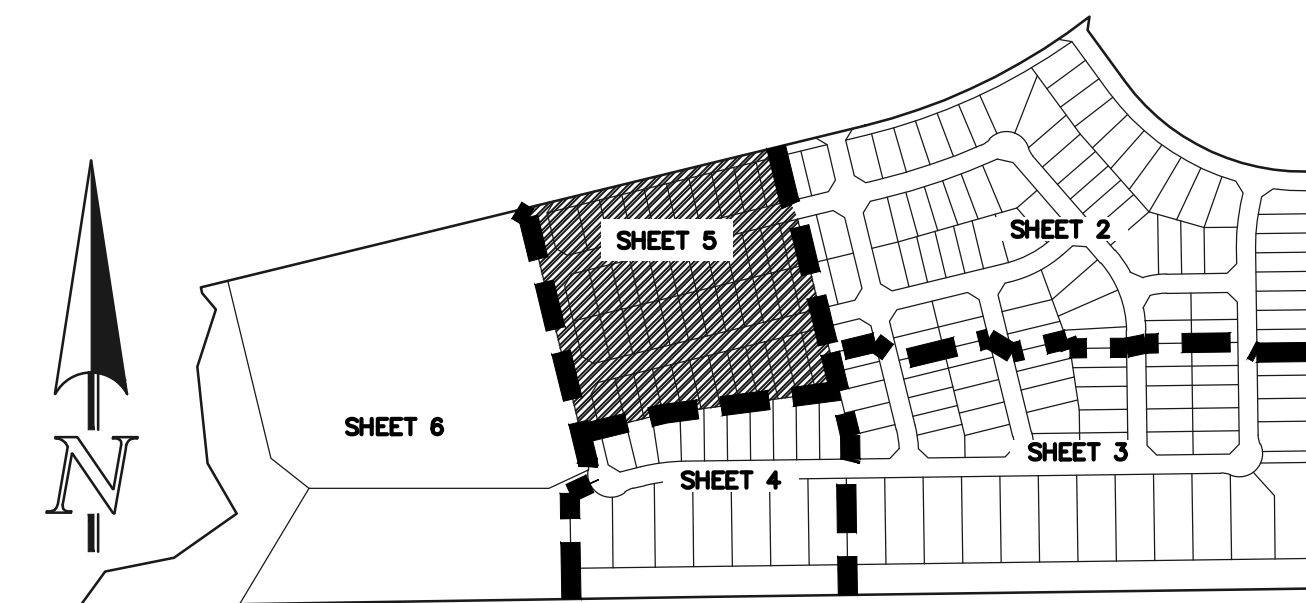
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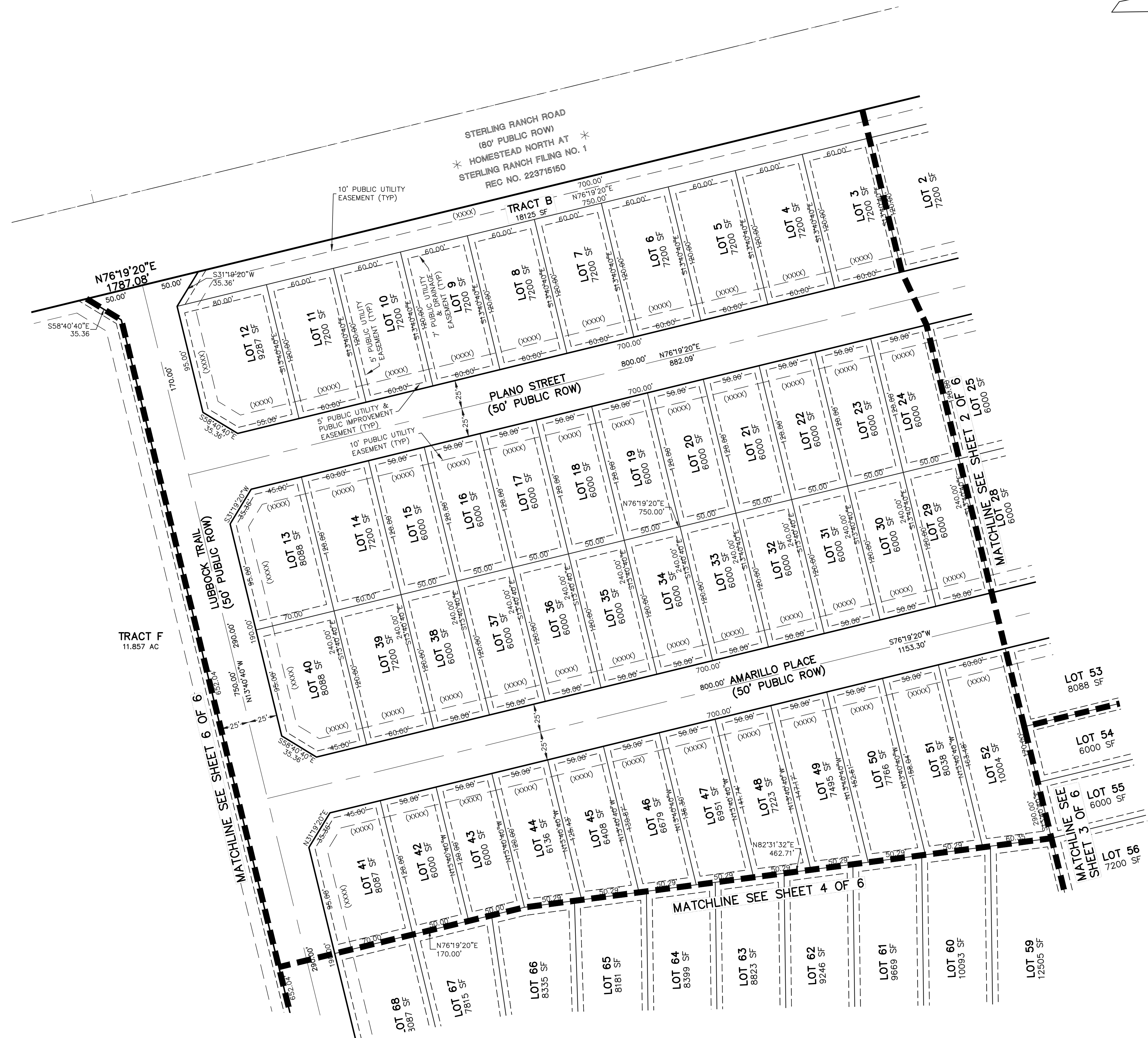
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EL PASO COUNTY, COLORADO

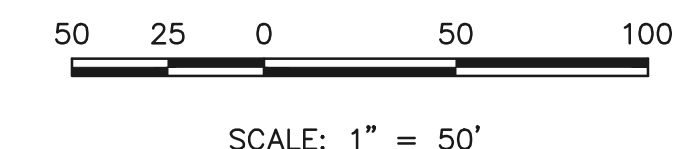


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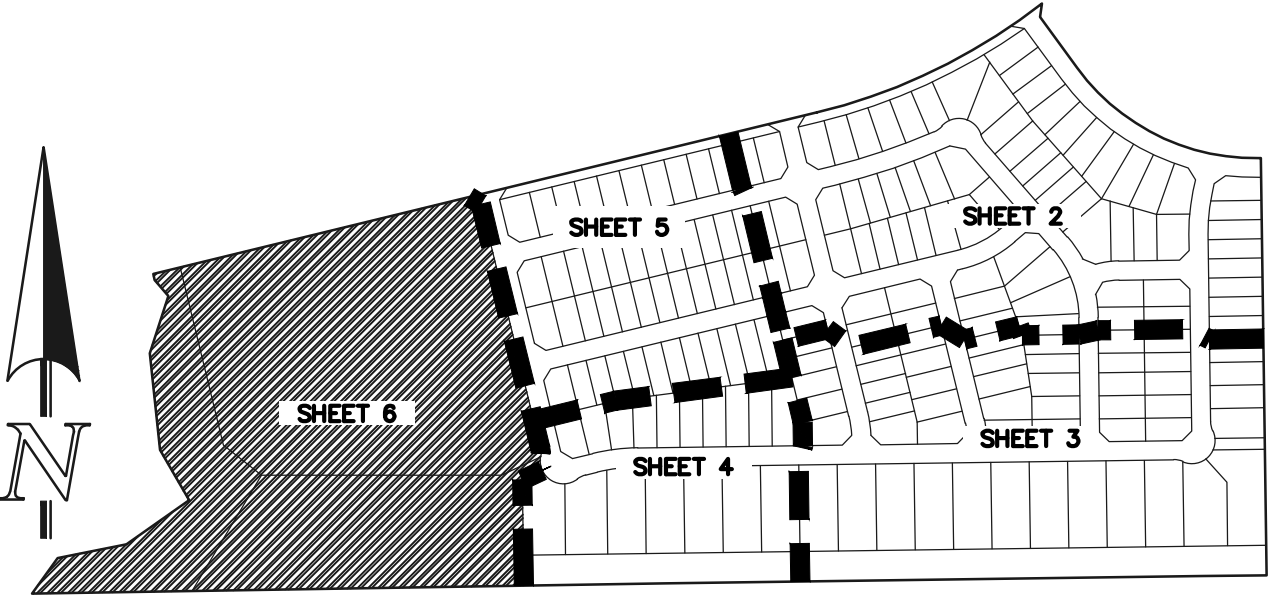
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JOB NO. 1183.33  
FEBRUARY 20, 2023  
SHEET 5 OF 6

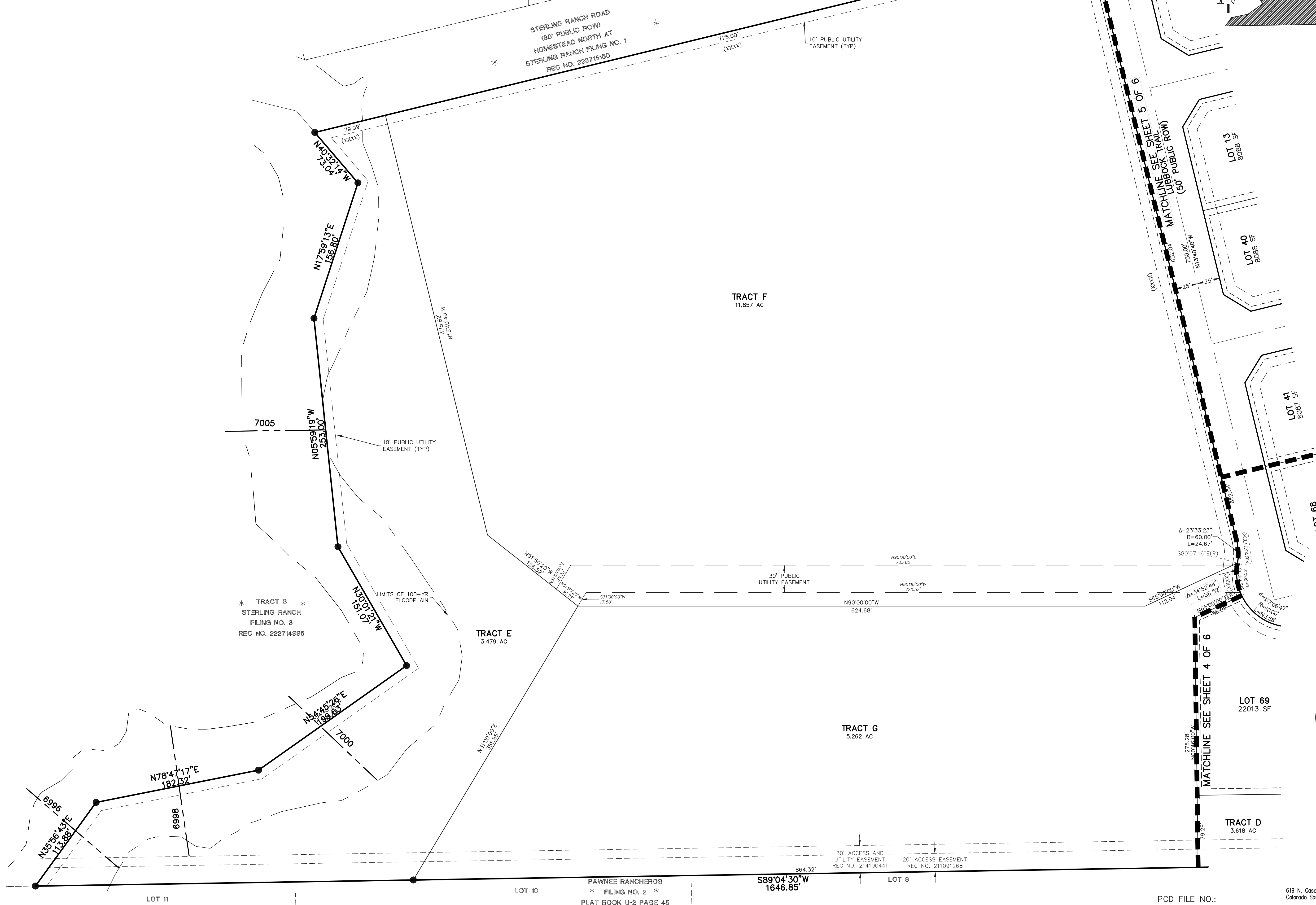


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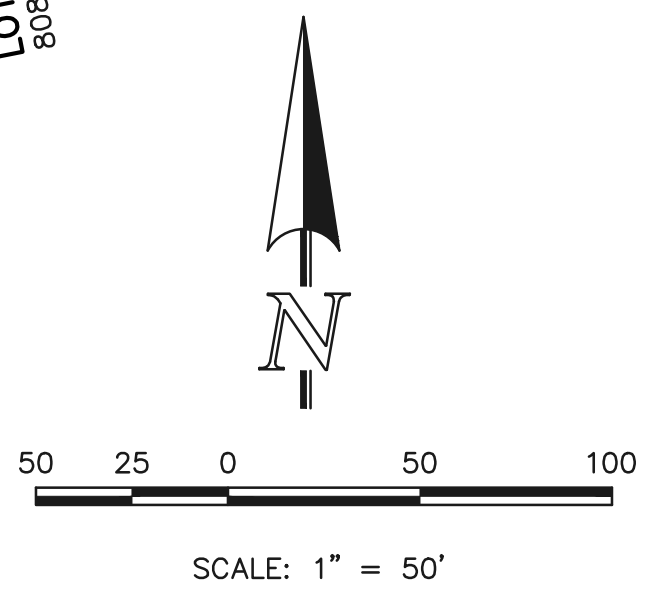
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KEY MAP  
N.T.S.



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  - SF SQUARE FEET
  - (XXXX) ADDRESS
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  - 1-1/2" ALUMINUM SURVEYORS CAP STAMPED "CCES LLC PLS 34977" TO BE SET FLUSH UNLESS OTHERWISE NOTED
  - 7025 BASE FLOOD ELEVATION



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FEBRUARY 20, 2023  
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