

## WASTEWATER REPORT For Sterling Ranch Homestead North Phase 1

November 2020

Prepared By:



#### TABLE OF CONTENTS

#### **SECTION 1 INTRODUCTION**

- 1.1 Overall Development Description
- 1.2 Report Specific Development Description

#### **SECTION 2 WASTEWATER REPORT**

- 2.1 Projected Wastewater Loads and Adequacy of Treatment Capacity
- 2.2 Wastewater Contract and Treatment
- 2.3 Collection, Pumping, and Piping
- 2.4 Wastewater Treatment

#### **APPENDICES**

Appendix A- Map of Overall Sterling Ranch Service Area and Lift Station Site

Appendix B- Proposed Development (Homestead North)

#### SECTION 1 INTRODUCTION

This wastewater report is for the Sterling Comprehensive Service Area which includes two additional service areas.

1.1 Overall Development Description:

Sterling Ranch Development consists of approximately 1,444 acres located east of Vollmer Rd and north of Woodmen Rd, Section 33, Township 12 South, Range 65 West of the 6<sup>th</sup> P.M. Districts 1, 2 and 3 are considered Special Districts and are under the jurisdiction of the Special District Act.

- 1,119 acres is designated for 5,225 residential units. 56.36 acres is designated for commercial use. 270 acres is designated for open space, greenways, trails, parks, and school sites.
- 1.2 Report Specific Development Description: This report is for the Preliminary Plan for Homestead North Preliminary Plan which includes 147 single family lots or SFE's.

#### SECTION 2 WASTEWATER AND WASTEWATER TREATMENT

2.1 Projected Wastewater Loads and Adequacy of Capacity; Wastewater unit user loading projections are based on similar District historical use developed in the Falcon area. Average daily wastewater loads are expected to be roughly 172 gallons per day per single family residence.

The expected Average Daily-Maximum Monthly loads are projected to be:

#### 147 SFE times 172 gal/day-SFE equals 25,284 gal/day wastewater load

The loading projected from Homestead North represents roughly 2.51 % of the contractual capacity available to Sterling Ranch Metropolitan District.

Sterling Ranch therefore has more than adequate wastewater treatment capacity to provide service to Homestead North.

2.2 Wastewater Contract and Treatment

The Sterling Ranch Metropolitan District 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. 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.

Interim Wastewater Treatment Services will be provided by Colorado Springs Utilities for up to one year while Sterling Ranch is completing its connection to the Meridian System. A copy of the Interim Service Agreement was attached in prior Water and Wastewater Reports and therefor is not included here. An agreement relating to completion of the wastewater outfall and the associated EGF has been extended.

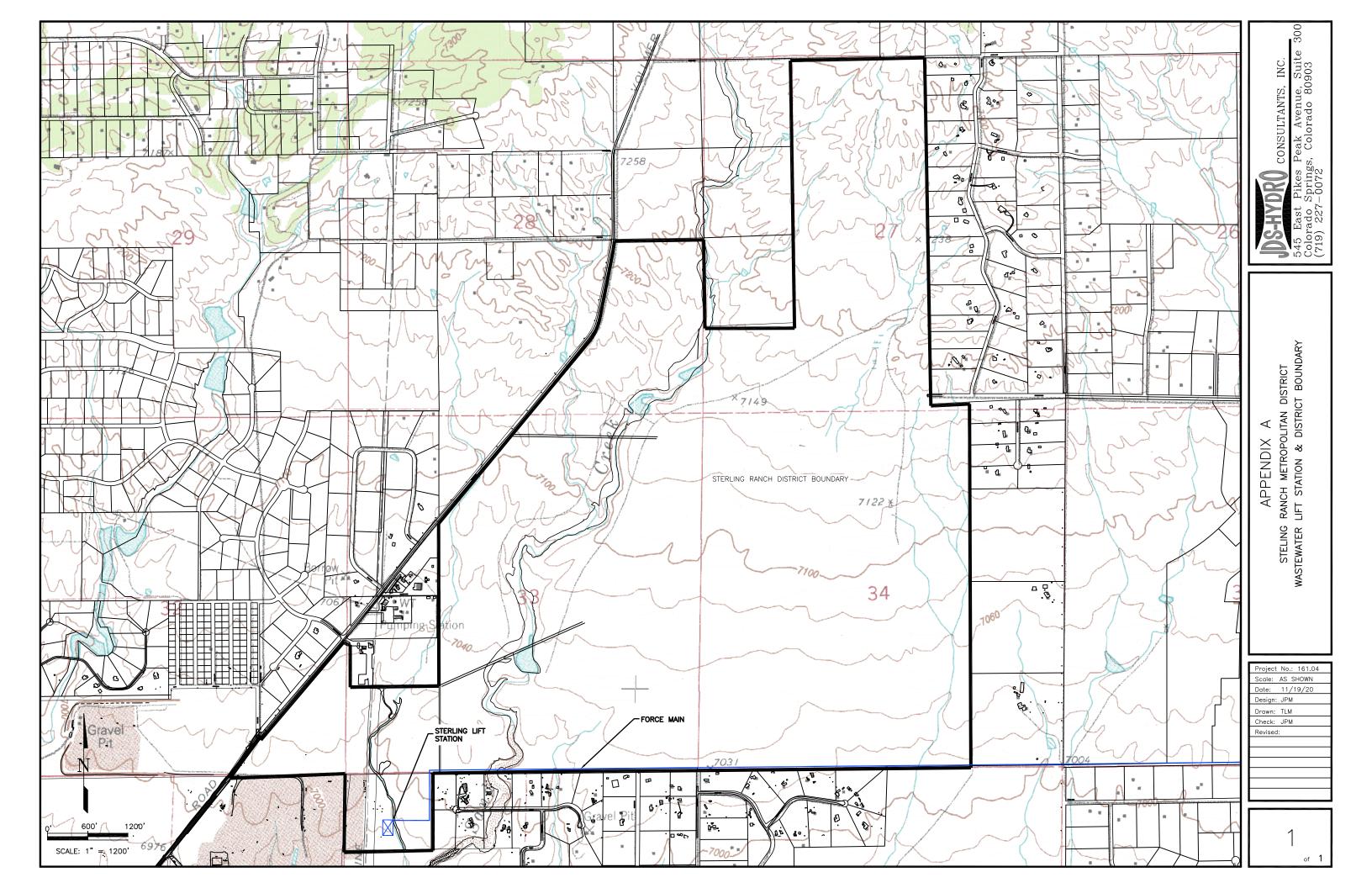
#### 2.3 Wastewater Collection and Pumping

All lands to be developed within the Sterling Ranch and the Retreat 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. Sterling is completing 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.

#### 2.4 Wastewater Treatment

MSMD owns 2.2 million gallons per day of wastewater capacity in the Black Squirrel Wastewater Facility. The plant operator, Cherokee Metropolitan District (CMD) has already approved connections, and 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.

# Appendix A

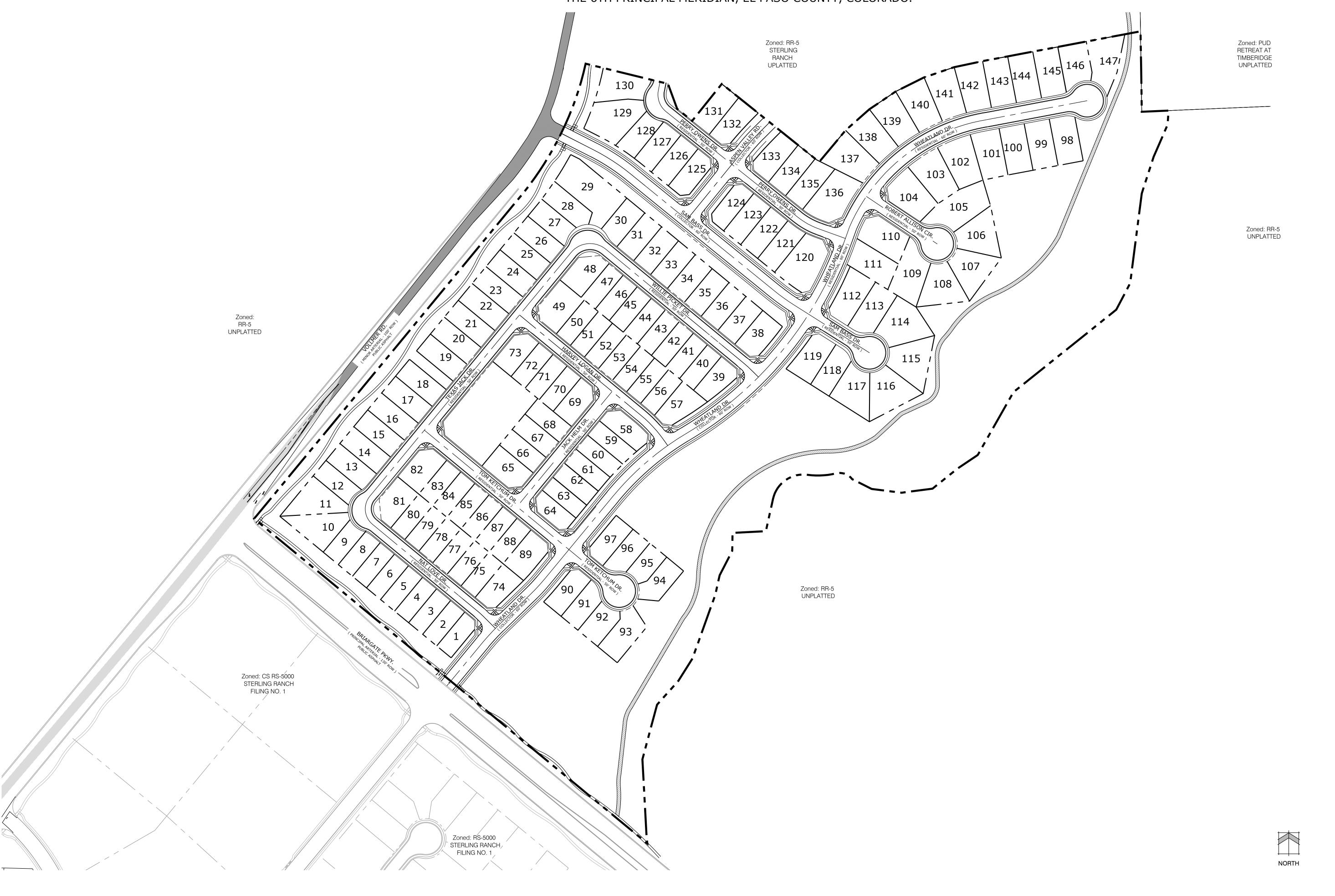


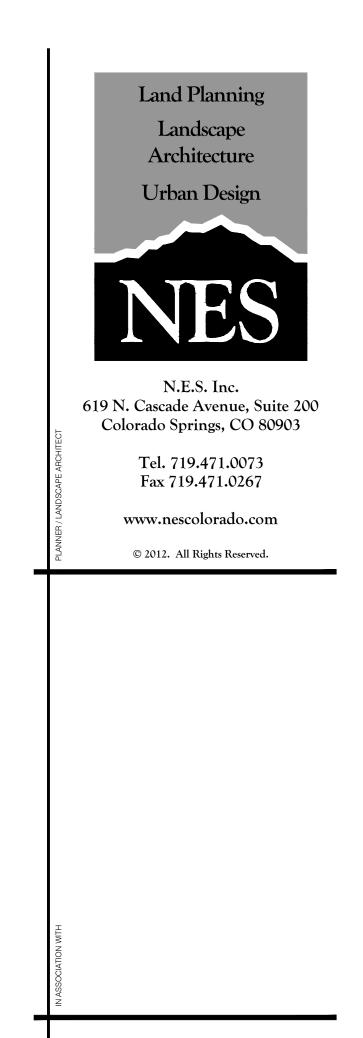
# Appendix B

### HOMESTEAD NORTH PHASE 1

## EL PASO COUNTY, COLORADO PRELIMINARY PLAN

SECTION 27,28 AND 33, IN TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO.





### STERLING RANCH HOMESTEAD NORTH PHASE 1

PRELIMINARY PLAN

EL PASO COUNTY, CO

DATE: 09.15.2020
PROJECT MGR: E. GANAWAY
PREPARED BY: B. ITEN

ENTITLEMENT

TE: BY: DESCRIPTION:

PRELIMINARY PLAN EXHIBIT

**1** of **1**