

***WASTEWATER DISPOSAL REPORT***

*for*

***FOUNDATION LUTHERAN CHURCH***

**July 2023**

**Prepared By:**



**Colorado Springs, CO**

5540 Tech Center Dr., Suite 100

Colorado Springs, CO 80919

**Phone:** 719.227.0072

**[www.respec.com](http://www.respec.com)**

# FOUNDATION LUTHERAN CHURCH

## WASTEWATER DISPOSAL REPORT

July 2023

Prepared for:

Woodmen Hills Metropolitan District  
8046 Eastonville Road,  
Peyton, CO 80831

Prepared by:

RESPEC, LLC  
5540 Tech Center Drive, Suite 100  
Colorado Springs, CO 80919

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### **APPENDICES**

*Appendix A – Service Area Exhibit*

*Appendix B – Land Use Exhibit*

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## 1.0 INTRODUCTION AND EXECUTIVE SUMMARY

The purpose of this report is to address the specific wastewater loads for the proposed Foundation Lutheran Church at 9960 Towner Avenue in Falcon, CO. This project is currently seeking approval of *Final Plat* through El Paso County, and this report is a requirement of approval.

***EXECUTIVE SUMMARY: The Woodmen Hills Metropolitan District has adequate wastewater system and treatment capacity to provide wastewater service to this land use.***

## 2.0 PROJECTED LAND USES

### 2.1 *Projected Land Uses*

The subject property is planned as commercial land use, more specifically, a church. This report and associated commitments pertain to a roughly 6-acre parcel. Please refer to the Land Use Exhibit in ***Appendix B***.

### 2.2 *Wastewater Loads for the Subject Property*

The proposed subject property consists of a roughly 9,730 square-foot church. Since this is a single building, typical water demand calculations using the El Paso County Land Development Code do not apply. Therefore, plumbing fixture counts were done based on the building design using Table E103.3(2) from the International Plumbing Code (IPC).

Using the fixture counts and fixture values planned for the church, a water demand of 207,229 gallons per year was determined. Assuming 90% of indoor use becomes wastewater, a volume of 186,506 gallons per year is calculated as wastewater.

A single-family equivalent (SFE) in Woodmen Hills Metropolitan District (WHMD), which is the entity providing wastewater treatment for the church, an SFE is planned for 115,025 gallons per year.

**Therefore, it is determined that the proposed church is 2.0 SFEs regarding wastewater produced.** (186,506/115,025 = 1.6)

### 3.0 WASTEWATER REPORT

#### 3.1 Unit Use Wastewater Loads:

A typical SFE in Woodmen Hills is planned to contribute 172 gallons per day of wastewater. For planning purposes of 2.0 SFEs, the wastewater load produced by the church is 344 gallons per day.

#### 3.2 Treatment Facilities:

The WHMD constructed a new regional wastewater treatment facility which was placed on-line in the spring of 2019. This facility serves the Falcon regional area, including Falcon Highlands Metropolitan District and Paint Brush Hills Metropolitan District. The new facility is an advanced wastewater treatment plant with a hydraulic capacity of 1.3 MGD. WHMD is both in compliance with its discharge permit and has substantial adequate capacity for the additional flows.

Current average daily hydraulic loading to the treatment plant is roughly 65%, and max month hydraulic loading is roughly 76%. **The addition of the subject property marks 0.03% of the plant's permitted capacity.**

#### 3.3 Collection and Pumping Facilities:

The District operates over 51 miles of wastewater collection system and owns and operates three lift stations. This proposed land use may be required to install gravity sewer facilities (if not already in place) in accordance with WHMD standards and approvals. Said gravity sewer facilities will connect to existing collection systems owned and operated by WHMD.

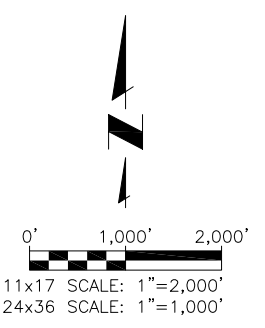
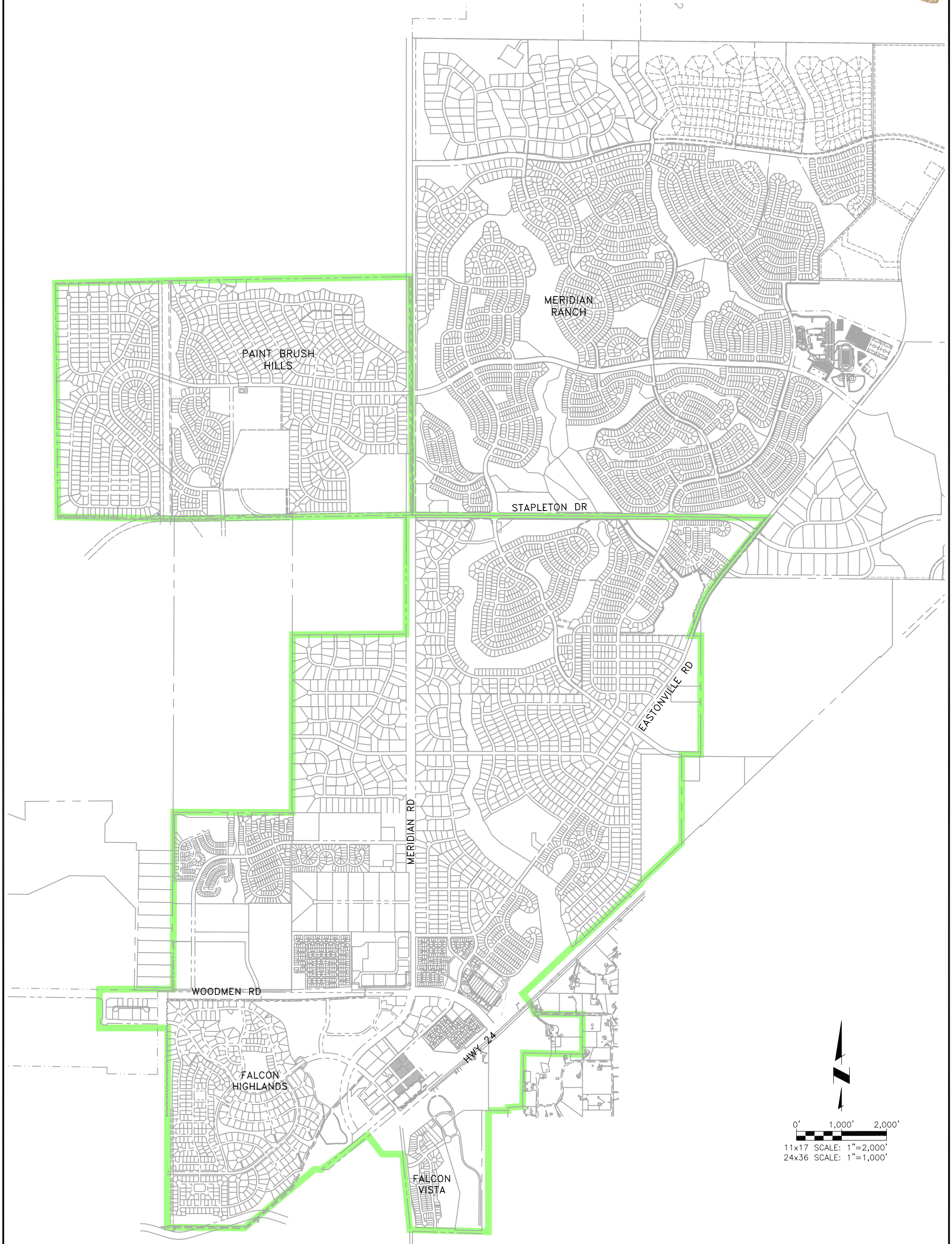
### 4.0 CONCLUSION

**The Woodmen Hills Metropolitan District has adequate wastewater system and treatment capacity to provide wastewater service to this proposed land use.**

# *Appendix A*

# WOODMEN HILLS

## METROPOLITAN DISTRICT



SHEET 1 OF 1

Proj.#: 112.113  
 Date: 06/10/20  
 Design: JPM  
 Drawn: RMM  
 Check: JPM

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

WOODMEN HILLS METROPOLITAN DISTRICT

DISTRICT MAPPING

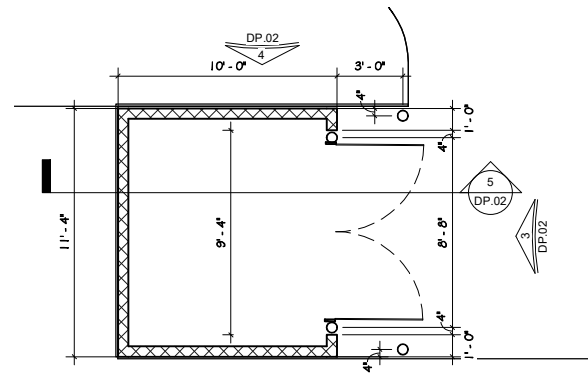
SEWER SERVICE AREA



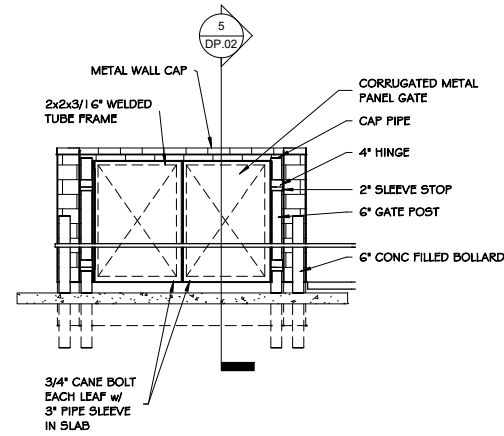
**Colorado Springs, CO**  
 5540 Tech Center Dr., Suite 100  
 Colorado Springs, CO 80919  
 Phone: 719.227.0072  
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## *Appendix B*

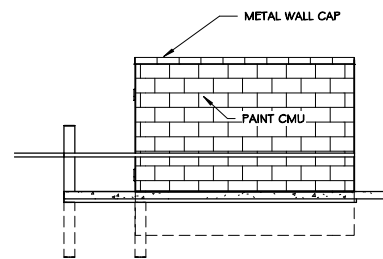




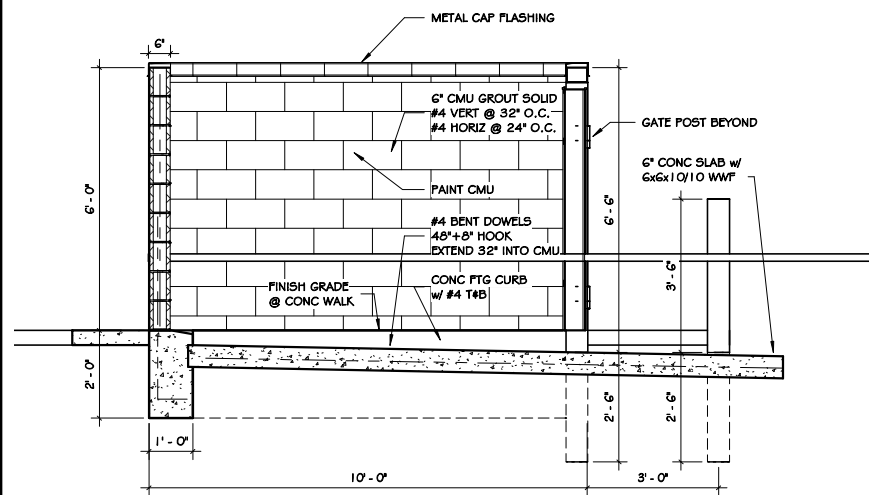
**2 ENLARGED PLAN - DUMPSTER ENCLOSURE**  
 DP.02 SCALE: 1/4" = 1'-0"



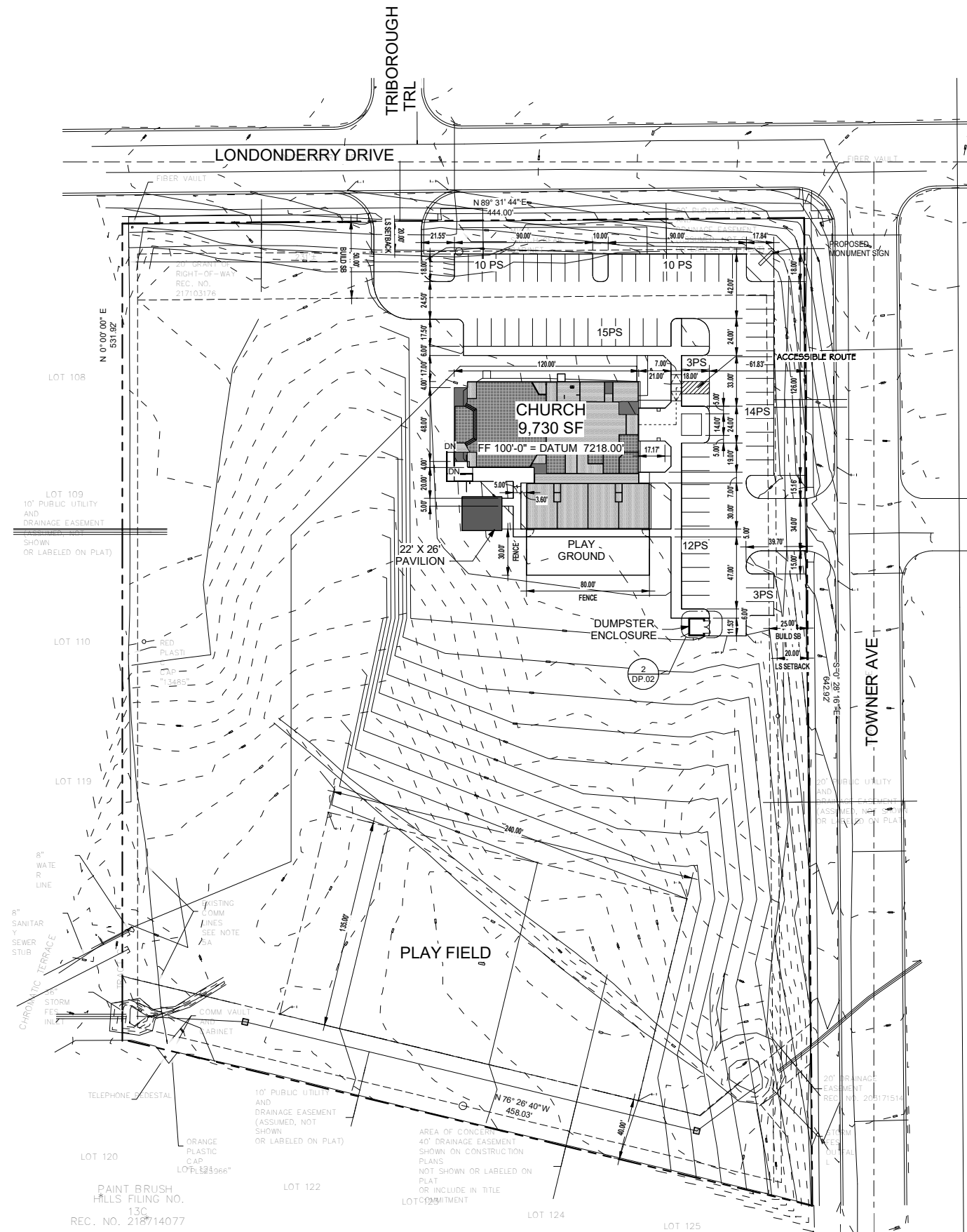
**3 DUMPSTER FRONT ELEV**  
 DP.02 SCALE: 1/4" = 1'-0"



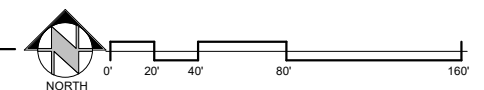
**4 DUMPSTER SIDE ELEV**  
 DP.02 SCALE: 1/4" = 1'-0"



**5 DUMPSTER SECTION**  
 DP.02 SCALE: 1/2" = 1'-0"



**1 ARCHITECTURAL SITE PLAN**  
 DP.02 SCALE: 1" = 40'-0"



ARCHITECT	KEM
DRAWN	
CHECKED	
DATE	05.02.23
REVISION	DATE
SHEET NO.	191726
	DP.02

# *Appendix C*

# WOODMEN HILLS

## METROPOLITAN DISTRICT

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July 25, 2023

Keith Moore

RMG-Rocky Mountain Group

2910 Austin Bluffs Pkwy, Suite 100

Colorado Springs, CO 80918

**Re: Commitment Letter for Foundation Lutheran Church, 9960 Towner Ave, Peyton, CO 80831  
(Tract C in Paint Brush Hills Filing 13A)**

Dear Mr. Moore,

The above-named property is located within Paint Brush Hills Metropolitan District (PBHMD) boundary. Through a 2011 Intergovernmental Agreement between PBHMD and Woodmen Hills Metropolitan District (WHMD), WHMD is the exclusive provider of wastewater treatment services for PBHMD. The above property is slated to become a single building church with an estimated yearly wastewater flow equivalent to 2 SFE (Single Family Equivalents).

WHMD Wastewater Treatment Facility has adequate capacity to serve this property as submitted.

If you have any questions, please do not hesitate to call.

Sincerely,



Wally Eaves, Wastewater Enterprise Director, Woodmen Hills Metropolitan District

Cc: John P. McGinn, District Engineer, Respec