



WASTEWATER DISPOSAL REPORT

GRANDVIEW RESERVE PUD/ PRELIMINARY PLAN

August 13, 2021

Prepared by:

HR Green, LLC.
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Prepared for:

Grandview Reserve Metropolitan District
1271 Kelly Johnson Blvd
Colorado Springs, CO 80920



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wastewater report

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2.0 WASTEWATER DISPOSAL

Collection System Description: The Grandview Reserve Filings wastewater effluent will discharge into the Grandview Reserve Metropolitan District (GRMD) trunkline within Curtis Road which is proposed to flow south through a series of two lift stations and forcemains to the Cherokee Metropolitan District Wastewater Treatment Plant interceptor located near the intersection of Curtis Road and Highway 94, eventually flowing to the wastewater treatment facility. GRMD would account for approximately 93.2% of the proposed allowable capacity of the GMD allowed capacity. It is anticipated that equalization basins will be required at the initial lift station for the purposes of fluctuating flow and to act as emergency storage in the event of a system failure.

A. Map Showing Relative Location of Point of Connection to an Existing System

Refer to Appendix B, Exhibit 1

B. Map Showing Relative Location of the Existing or Proposed Treatment Facility

Refer to Appendix B, Exhibit 2

C. Estimate of Projected Population, Units, and Density (Average Day)

Projected Wastewater Loads: Wastewater projections are based on similar districts' historical use in this area. It is expected that each SFE in Grandview Reserve will generate an average of 172 gallons/day of wastewater. Table 1a below summarizes the projected wastewater loads for the entire Grandview Reserve project.

Table 1a: Project Wastewater Loads

Description	SFE's	Average Base (GPD)	Average Day (GPD)
Single Family Residences	3260	172	560,720
School	10		1,720
Recreation Center	4.3		740
Church	5		860
Commercial	59.5		10,234
Grant Totals	3,338.8		



Table 1b below summarizes the projected wastewater loads for the Filing 1 of the Grandview Reserve project.

Table 1b: Projected Wastewater Loads

Description	SFE's	Average Base (GPD)	Average Day (GPD)
Single Family Residences	568	172	97,696
Recreation Center	4.3		740
Church	5		860
Grant Totals	577.3		99,296

D. Capacity of the Existing Treatment Plant and Current Utilization

Cherokee Metropolitan District has allocated 500,000 GPD of wastewater treatment capacity to GMD under the terms of the draft IGA. The capacity is sufficient to serve between 2900-2950 SFE's based on the presumptive use values from El Paso County. Additional capacity will be required in the future but is dependent on the upsizing of downstream pipeline infrastructure, which has already been anticipated and planned for.

The wastewater treatment plants current capacity is 2.4MGD, with an available capacity of 1.9MGD.

E. Anticipated Capacity of any Proposed Treatment Plant [N/A]

F. Letter of Commitment from the Wastewater Provider Proposed for Service w/Service Boundaries

Refer to Appendix B, Exhibit 3 for the Service Commitment letter

G. Statement by the Wastewater Provider that Adequate Capacity Exists

Refer to Appendix B, Exhibit 3 for the Service Commitment letter

H. Estimate of Construction Costs

Refer to the Improvement Guarantee Estimate that will be submitted in the future (not part of this report).



4.0 APPENDIX B

Exhibit 1

LEGEND

METRO DISTRICT BOUNDARY



PROPOSED 18" SANITARY SEWER MAIN



PROPOSED FORCEMAIN

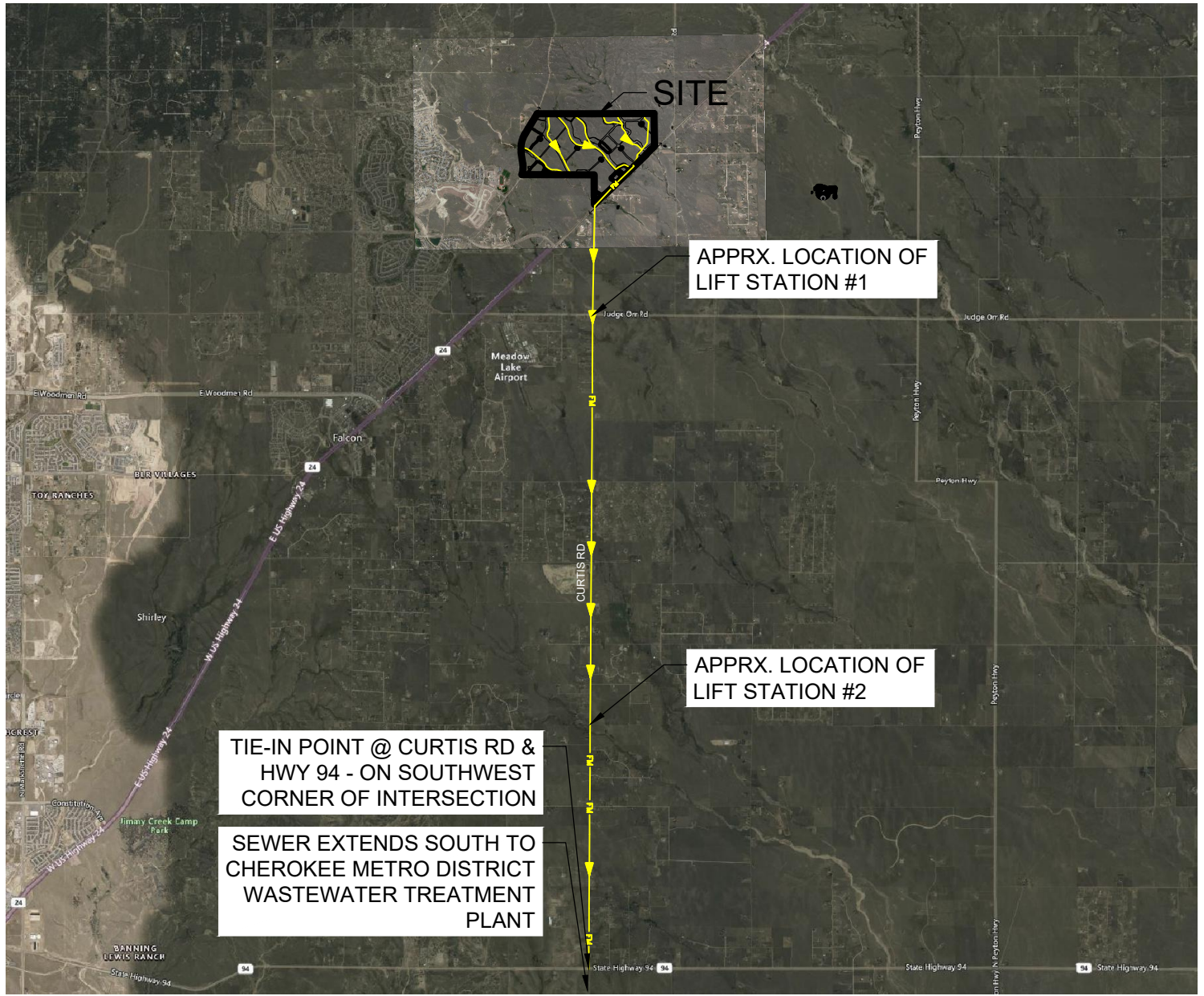


LOCALIZED SEWER COLLECTION



OFFSITE SANITARY IMPROVEMENT DESCRIPTIONS:

SANITARY SEWER WILL RUN DOWN CURTIS ROAD AND TRANSITION FROM FORCE MAIN TO GRAVITY SEWER AS SHOWN. SEWER WILL CONNECT TO EXISTING INFRASTRUCTURE AT HIGHWAY 94 AND CURTIS ROAD.



TIE-IN POINT @ CURTIS RD & HWY 94 - ON SOUTHWEST CORNER OF INTERSECTION

SEWER EXTENDS SOUTH TO CHEROKEE METRO DISTRICT WASTEWATER TREATMENT PLANT

APPRX. LOCATION OF LIFT STATION #1

APPRX. LOCATION OF LIFT STATION #2



HRGreen.com

GRANDVIEW RESERVE
METROPOLITAN DISTRICT
OFFSITE SANITARY SEWER

SHEET

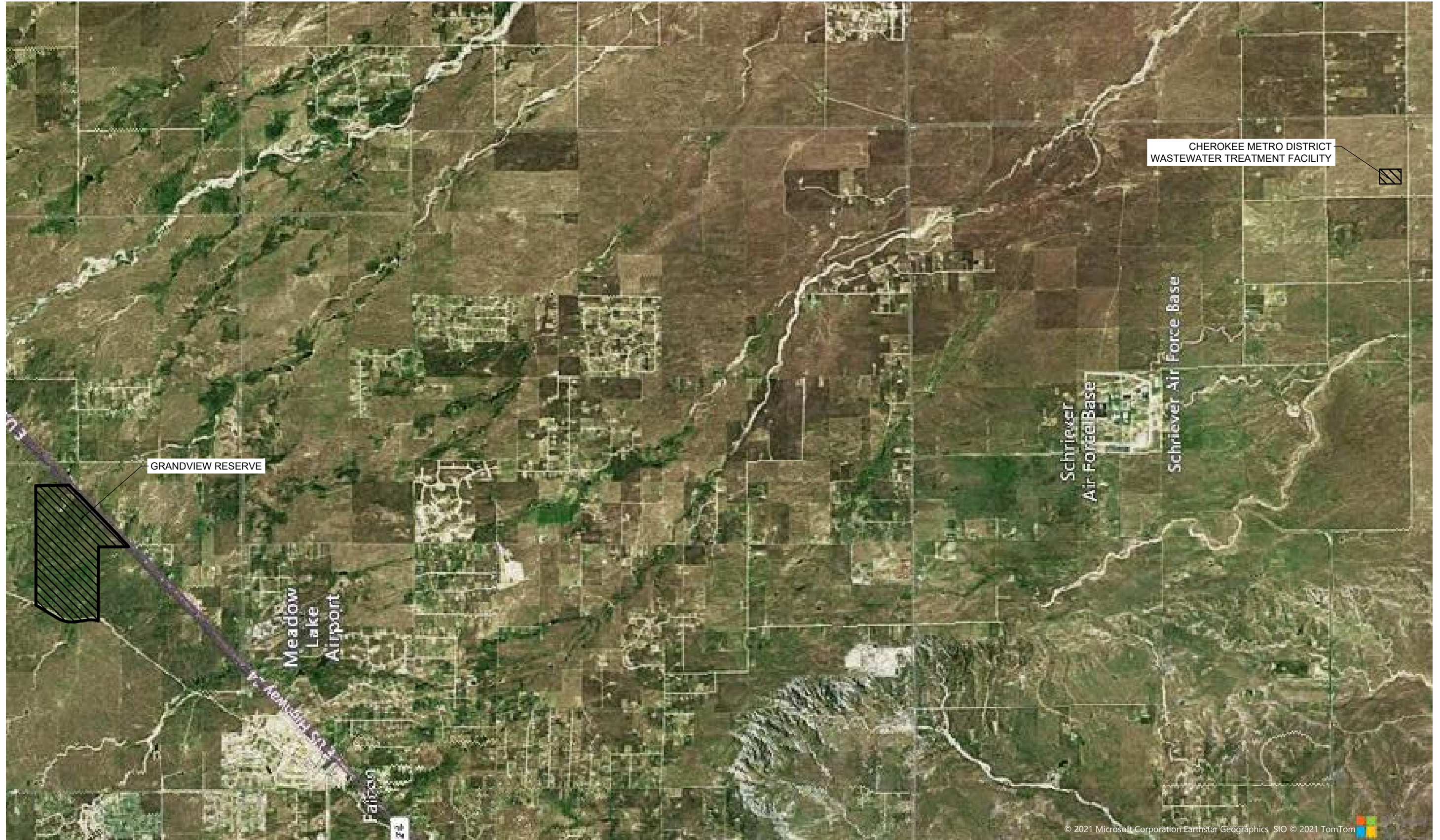
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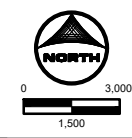
HR GREEN Xrefs: 01-DV-CONCEPT; xgt-1-AV01



Exhibit 2



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Job No.:	201662
Prepared By:	TBI
Date:	8/13/2021

OVERALL AREA EXHIBIT



Exhibit 3



CHEROKEE METROPOLITAN DISTRICT

6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842

Telephone: (719) 597-5080 Fax: (719) 597-5145

July 20, 2021

4 Site Investments, LLC

1271 Kelly Johnson Blvd. #100

Colorado Springs, CO 80919

Sent via email: paulinfinity1@msn.com

Re: Wastewater Treatment Service Commitment to Grandview Reserve Metropolitan District

Dear Grandview Reserve Metropolitan District,

As requested, this document will serve as a formal Letter of Commitment from the Cherokee Metropolitan District to provide wastewater treatment services for the Grandview Reserve development located north and northeast of the intersection of U.S. Highway 24 and Stapleton Road, subject to the mutual execution of a Wastewater Service Intergovernmental Agreement (IGA). Cherokee Metropolitan District owns and operates a wastewater conveyance and treatment system south of the development and has entered good faith negotiations with the development to complete the IGA, which will define the terms of all related wastewater services.

Cherokee Metropolitan District has allocated 500,000 gallons per day of wastewater treatment capacity to this development under the terms of the draft IGA. This capacity is sufficient to serve between 2900-2950 SFEs based on presumptive use values from El Paso County. The developer has determined that this volume is sufficient for the proposed subdivision.

This wastewater commitment is hereby made exclusively for this specific development project up to the daily average volume specified above, contingent upon execution of the IGA. To confirm this commitment, the developer must provide the District with a copy of the final plat approval from El Paso County Development Services within 12 months of the date of this letter. Otherwise, the District may use this allocation for other developments requesting wastewater treatment. If the volume of wastewater treatment in the agreement is changed by a subsequent amendment, this letter will no longer be valid and an updated one reflecting this change will be provided.

If I may be of further assistance, please contact me at your convenience.

Sincerely,



Amy Lathen
General Manager

Cc: Peter Johnson; Water Counsel w/ encl: sent via email
Steve Hasbrouck; Board President w/ encl: sent via email
Jeff Munger; Water Resource Engineer: sent via email
Kevin Brown; Jr. Engineer: sent via email

Wastewater Disposal Report_V1.pdf Markup Summary 10-26-2021

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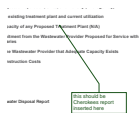
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DELETE this material please from wastewater report



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Page Label: 2
Author: dsdparsons
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