

July 27, 2026

Alexis Slade
Environmental Engineer
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321



**RE: CONSTRUCTION CERTIFICATION REPORT
NW1 SUMP EXCAVATION
SCISWA SLF
IDNR PERMIT NO. 63-SDP-02-77P
HLW PN 6009-26A.200**

Dear Ms Slade:

This letter shall serve as notice to IDNR that excavation of the leachate collection sump in Cell NW1 at the SCISWA SLF in Marion County, Iowa has been completed. The following is intended to document the project.

I. INTRODUCTION

Elevated leachate levels were recorded in the leachate piezometer in the Cell NW1/NW2 area (LHPZ-NW1) during 2025. A plan to investigate/remediate the Elevated Leachate Levels was submitted to IDNR on November 14, 2025 (Doc #114738). IDNR approved the plan on November 24, 2025. This plan was also discussed with Mike Smith, IDNR, and you during your site visit on May 22, 2026.

LHPZ-NW1 is located adjacent to the leachate collection sump in Cell NW1 and serves as the leachate head monitoring point on the Subtitle D composite liner for Cells NW1, NW2, 4E and 4F. As noted in the IDNR letter approving the Elevated Leachate Levels plan, leachate recirculation “should continue not to be conducted ... until leachate head levels are less than 1 foot”.

II. NW1 SUMP EXCAVATION

Solid waste and soil cover was excavated to expose the leachate collection sump in Cell NW1. The excavated waste and soil cover was stockpiled at two locations. Berms were constructed as needed to keep leachate from the stockpiles on the Subtitle D composite liner.

During excavation, leachate was pumped into the existing leachate forcemain west of Cell NW1 as needed for conveyance to the leachate storage lagoon. The excavation exposed the sand drainage layer, river rock backfill, and riser pipe in the leachate collection sump Cell NW1. Silt was noted in the sand drainage layer as well as in the river rock backfill during excavation which may have impeded leachate flow to the riser pipe.

The existing river rock backfill was removed adjacent to the riser pipe to a level even with the bottom of the riser pipe. When the riser pipe was exposed the perforations in the riser pipe appeared to be open which indicated that flow to the perforations in the riser pipe had been impeded leading to the elevated leachate levels recorded in LHPZ-NW1. Even though the perforations in the riser pipe appeared to be clear, the Contractor added additional ½" diameter perforations in the riser pipe when it was exposed to increase the efficiency of leachate conveyance into the riser pipe.

Once the additional perforations were placed in the riser pipe the excavation was backfilled to approximately elevation 776 with clean river rock to promote leachate movement to the riser pipe. The gradation of the river rock is included in Attachment A. A sacrificial corrugated plastic pipe was placed in the rock backfill for additional pumping from this area if needed.

The work was done by Thorpe Contracting, Adel, Iowa July 14-16, 2026.

Record Drawings are included as Attachment B of this report.

Representative photographs documenting the work are included in Attachment C.

Vertical control staking for the work was performed by HLW Engineering Group. The excavation and backfilling was observed by HLW personnel. Copies of the reports from the Resident Project Representative are included in Attachment D.

Landfill staff applied spray on alternative daily cover to the stockpiled waste upon project completion. Staff also placed a safety fence on a portion of the perimeter of the excavation area.

The excavation (above the rock backfill) was not backfilled immediately in order to document that the project was successful at improving the efficiency of the leachate collection system and reducing the leachate levels on the Subtitle D composite liner system. Landfill staff graded the area around the excavation area to limit surface water flow into the excavation as much as practical. Landfill staff will backfill the remaining excavated area when the effectiveness of the rock backfill is confirmed.

III. RESULTS/CONCLUSION

The leachate head levels in LHPZ-NW1 for July, 2026 are below:

July 1, 2026	37.0 inches
July 6, 2026	36.7 inches
<i>Excavation project started July 14, 2026</i>	
July 15, 2026	28.6 inches
July 16, 2026	23.9 inches
July 17, 2026	21.2 inches
July 18, 2026	19.7 inches
July 20, 2026	18.8 inches
July 21, 2026	17.3 inches
July 22, 2026	16.8 inches
July 23, 2026	16.1 inches
July 24, 2026	15.4 inches
July 27, 2026	14.5 inches

If the rate of decrease continues, it is anticipated that the leachate level in LHPZ-NW1 should drop below the regulatory limit of 12 inches by the end of July.

Based on the documentation provided in this report, the SCISWA SLF seeks permission to resume leachate recirculation in the portion of the Subtitle D composite lined area monitored by LHPZ-NW1 (Cells NW1, NW2, 4E, and 4F) when the leachate level recorded in LHPZ-NW1 drops below 12 inches. Staff will monitor the level in LHPZ-NW1 weekly during recirculation to document that the system is maintaining less than 12" of leachate on the liner.

If the IDNR has any questions or if additional information is needed, please contact me at HLW Engineering Group.



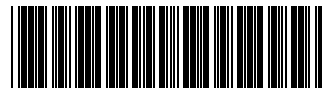
cc: Jennifer Murphy, Executive Director, SCISWA SLF

ATTACHMENT A



Quality Test Report

Plant 26135-New Harvey Sand (IDOT A63512)
Product 0159-Septic Gravel- Bean Pit
Specification Septic Gravel



1795502490

Sample Information

Sample No 1795502490
Date Sampled 07/27/2026 10:36
Sampled By Carl Christenberry
Type Investigative
Method Shovel Methods
Location Stockpile

Split Sample ☐
Resample ☐

Gradation Results

Date Completed 07/27/2026 10:36

Tested By Carl Christenberry

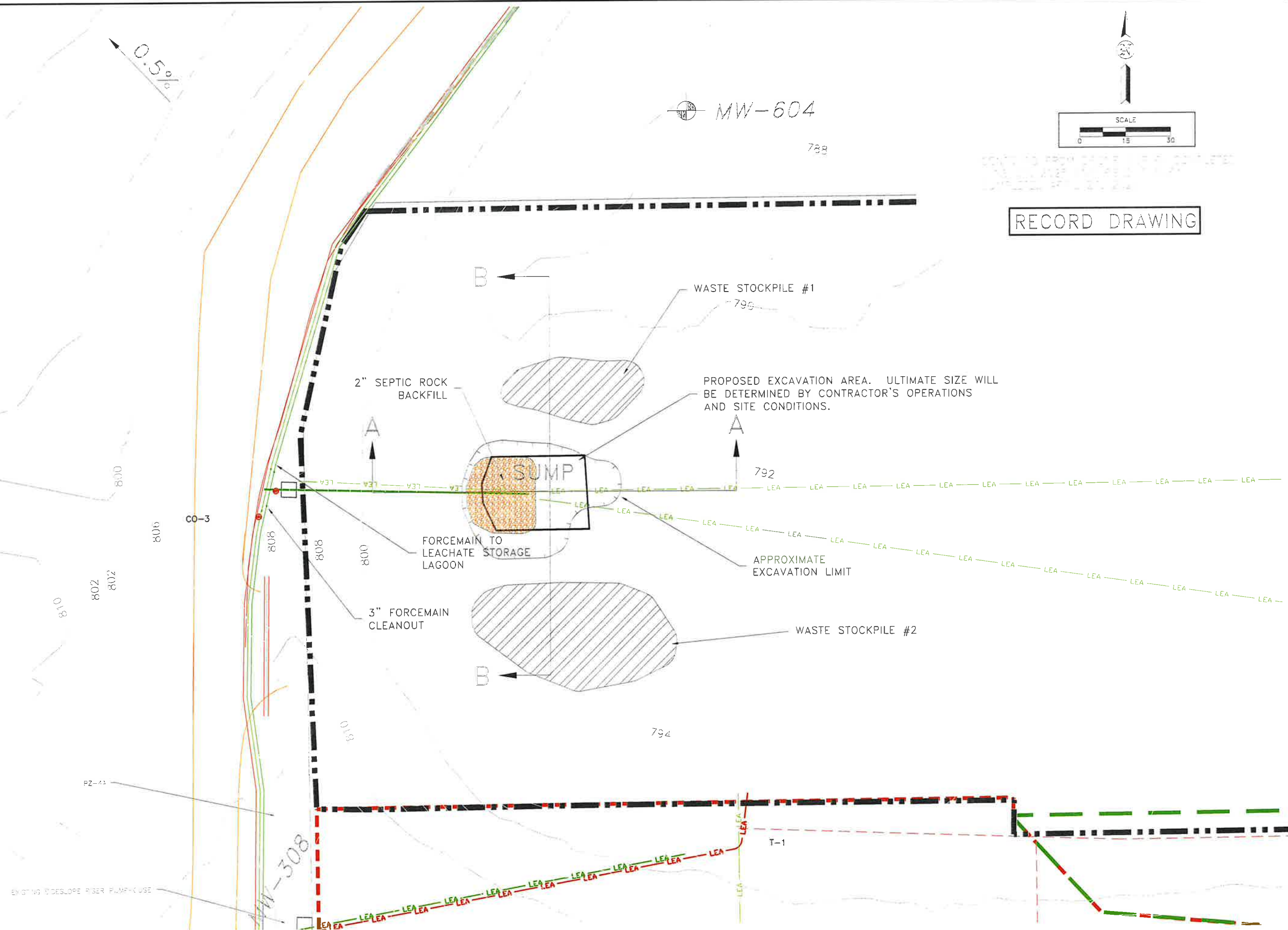
Unit	Moist Mass	Dry Mass	Wash Mass	Moisture %	Wash Loss %	Procedure		
g	5778.80	5746.00		0.6				
Sieve	Mass Retained	Cum Mass Retained	Ind % Retained	% Retained	% Passing	Target	Specification	Comment
2 1/2" (63mm)	0.00	0.00	0.0	0.0	100.0		100-100	
1 1/2" (37.5mm)	1683.30	1683.30	29.3	29.3	70.7			
1" (25mm)	2674.70	4358.00	46.6	75.9	24.1			
3/4" (19mm)	1023.70	5381.70	17.8	93.7	6.3			
1/2" (12.5mm)	284.60	5666.30	5.0	98.7	1.3		0-20	
3/8" (9.5mm)	20.00	5686.30	0.3	99.0	1.0			
#4 (4.75mm)	18.10	5704.40	0.3	99.3	0.7		0-5	
#8 (2.36mm)	6.50	5710.90	0.1	99.4	0.6		0-3	
Pan	37.80	5748.70	0.60	100.00	0.00			

Other Test Results

Test Name	Date	Result	Unit	Target	Specification	Comment
	Procedure	Lab			Tested By	
FM	07/27/2026 10:36	8.20				
		New Harvey Sand (IDOT A63512)			Carl Christenberry	

ATTACHMENT B





SITE PLAN

SITE PLAN

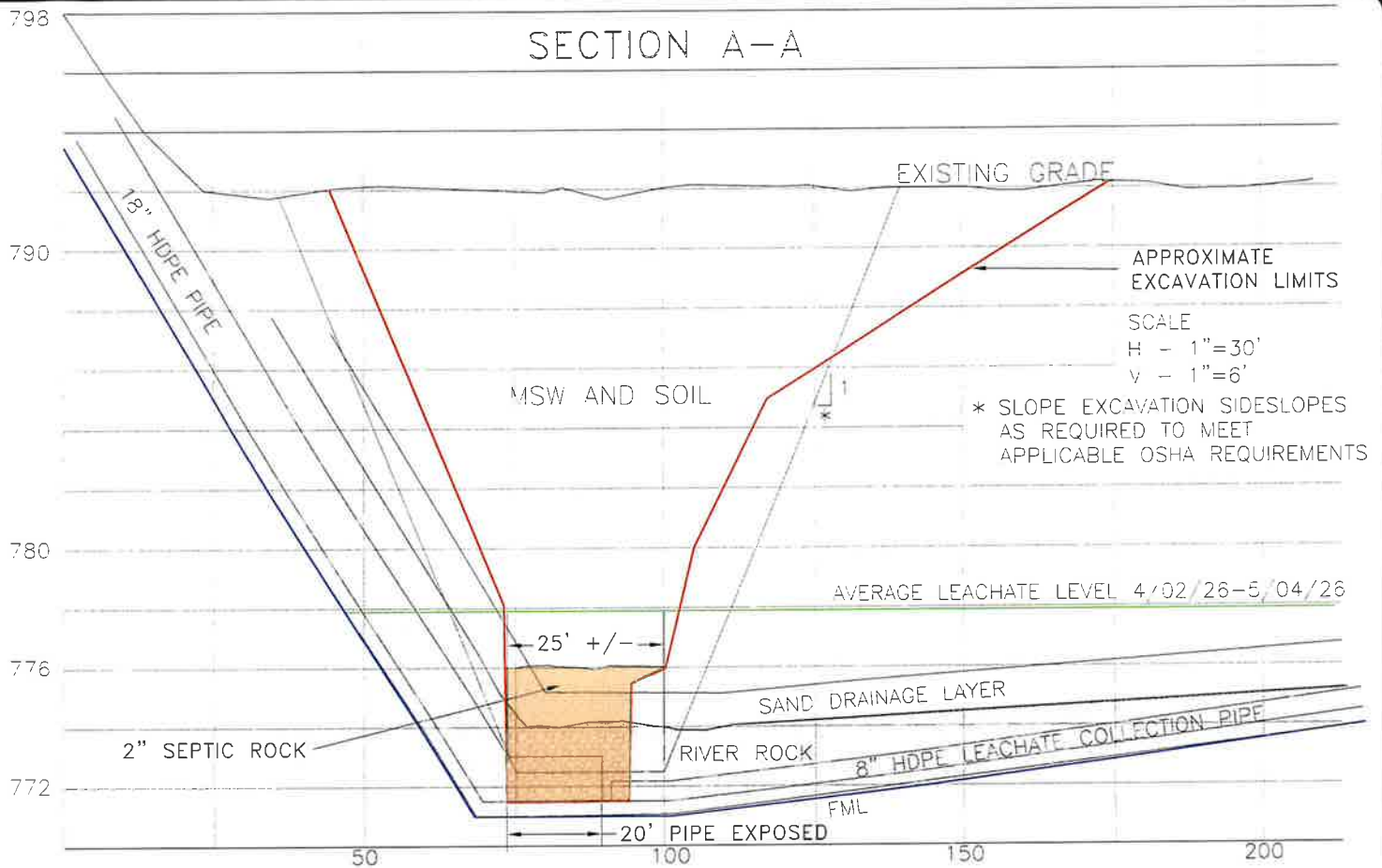
SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF MARION COUNTY, IOWA

HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

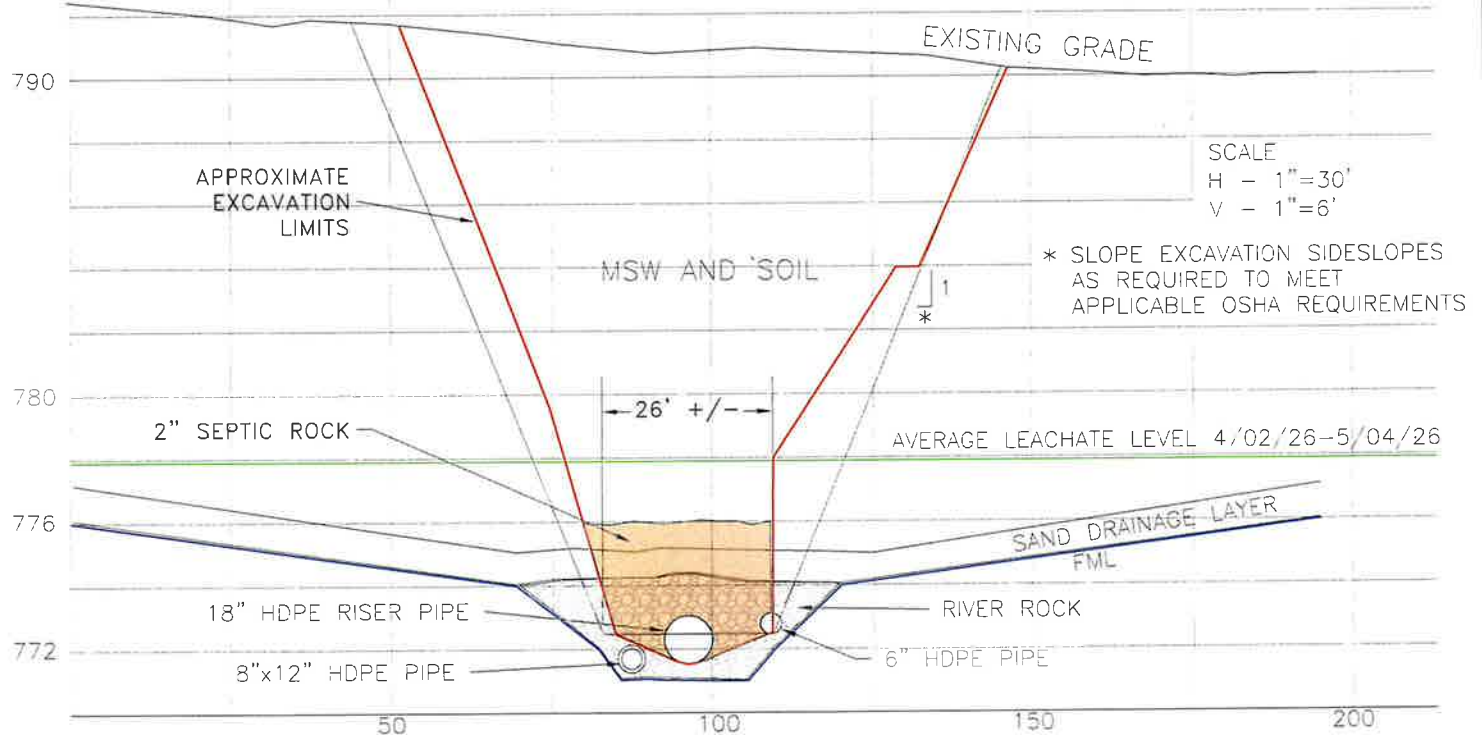


FIGURE: 2		DATE	7/21/26
REVISION	NO.	PROJECT NO.	DATE
	1	6009-26A	5/07/26
DRAWN			
JCH			

SECTION A-A



SECTION B-B



CROSS SECTIONS RECORD DRAWING

SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF
MARION COUNTY, IOWA

FIGURE: 3

REVISION	NO.	DATE
	1	7/21/26
DRAWN	PROJECT NO.	DATE
JGH	6009-26A	5/07/26

ATTACHMENT C

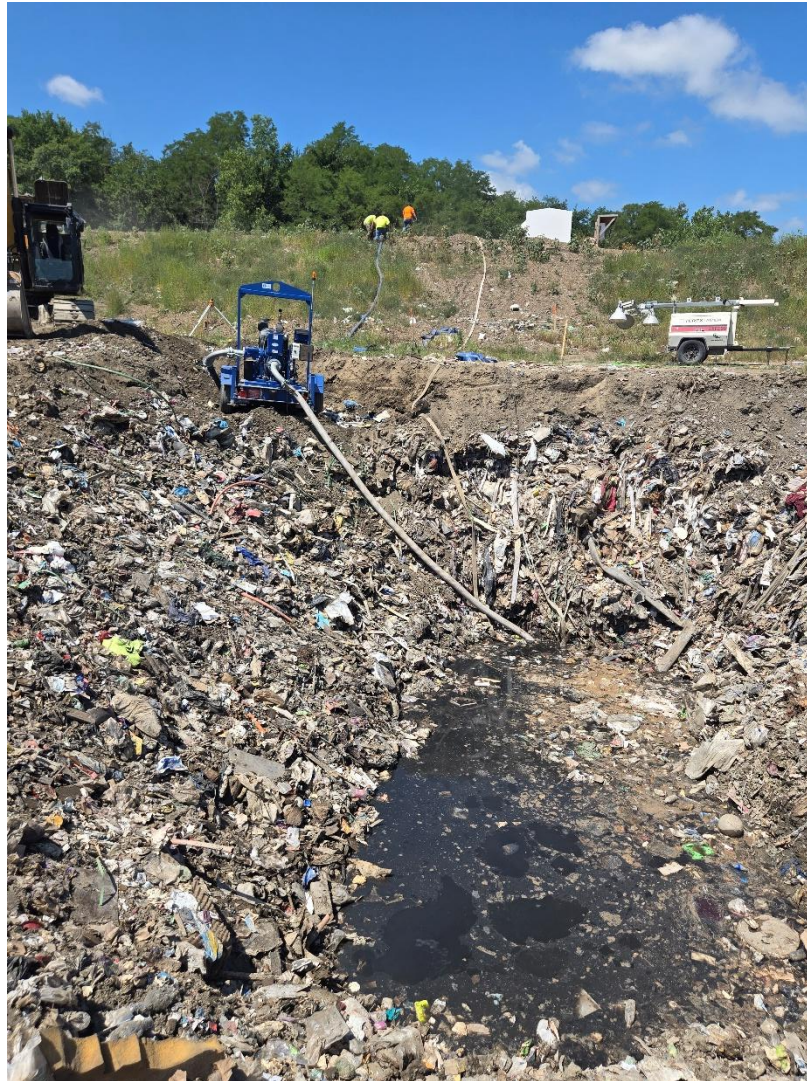


Photo 1: Initial excavation showing leachate level, looking west, 07-14-26.



Photo 2: Excavation area and stockpiled waste, looking east.



Photo 3: Exposing riser pipe, looking north.



Photo 4: Exposed riser pipe, looking northwest.



Photo 5: Removing material adjacent to riser pipe, looking northwest, 07-16-26.



Photo 6: Removing material adjacent to riser pipe, looking northwest, 07-16-26.



Photo 7: Installing rock backfill next to pipe, looking east, 07-16-26.



Photo 8: Completed rock backfill showing dewatering pipe, looking northwest, 07-16-26.

ATTACHMENT D

DAILY FIELD REPORT

Project: SCISWA SLF
NW-1 Excavation Project
Project No: 6009-26A
Date: JULY 14 2026
Contractor: Thorpe Contracting
Supt.: COLBY ROWLEY
Crew Size: 3
Weather: Sunny 90-100



RPR	
Time Arrived:	7:00
Time Left:	15:50

Contractor	
Time Arrived:	7:10
Time Left:	early pm.

Equipment On-Site - Used

CAT 336 EXC
CAT 963 Loader
Light Plant
2" elec. pump
4" diesel pump

Equipment On-Site - Not Used

Description of Work Accomplished:

Took a while to get pumps set up
Thorpe brought in 4" diesel pump.

4" pump lower water level to bottom of excavation (about 3' above top 18" pipe)

Thorpe will bring a sand bucket for the excavator tomorrow to continue digging. Current bucket not ideal for digging in sand & gravel.

Hope is to have pipe exposed by mid day tomorrow

Changes or Extra Work Ordered: _____

Approved By: _____

Items of Interest Occurred: _____

Test Samples Taken: _____

Official Visitors: _____

Other Work Crews (utilities, etc.) and Work Done: _____

Additional Remarks: _____

Contractor's Representative: _____

RPR:



Copies: Client _____ Proj. Mgr _____ Gov't Agcy _____ Other _____

DAILY FIELD REPORT

Project: SCISWA SLF
NW-1 Excavation Project
Project No: 6009-26A
Date: 7/15/26
Contractor: Thorpe Contracting
Supt.: Colby
Crew Size: 3
Weather: Am: clg, 14 winds, 80's Pm: clg, 14 winds, 90's



HLW Engineering Group

Engineering

Management

RPR	
Time Arrived:	7:00
Time Left:	4:00

Contractor	
Time Arrived:	7:10
Time Left:	

Equipment On-Site - Used

CAT 336 Excavator
CAT 963 Loader
Generator
4" Diesel Pump
2" Elec Pump
3" Elec Pump

Equipment On-Site - Not Used

Description of Work Accomplished:

Thorpe brought smooth bucket to dig excavation close to riser pipe. Started excav. at 7:30.

Located riser pipe w/ tile probe.

Thorpe continuing to dig out sand + pump. Sand seemed silty, dark colored + appeared to have low permeability. When sand over pipe removed w/ shut valve on clearest + operated pump on riser in "hard" mode. Could see water swirling above pipe when pump turned on + water flow back out from probe when pump turned off to indicate pipe not plugged.

Thorpe found 6" launch pipe with tile probe.

Colby offsite 11-12 to get more 3" hose.

Thorpe exposed by 8' launch pipe. Right on top of pipe was rock backfill w/ black silt at top. Met w/ Pat + Jen - took a sample to submit to lab. Perturbation in riser pipe appear intact.

Changes or Extra Work Ordered: _____

Approved By: _____

Items of Interest Occurred:

- 5) Staff will not backfill hole until test results come back
- 6) Staff will spray excavated waste
- 7) Staff will put up a snow fence/warning fence to protect access.

Test Samples Taken:

Once river pipe exposed & level in sump pumped down lateral leachate pipe started to flow into sump. Flow was 2.6", lateral pipe must have clog of leachate head built up.

Official Visitors:

Jennifer Murphy, Director, SCISWA

Other Work Crews (utilities, etc.) and Work Done: _____

Additional Remarks:

LP 2 28.6 (7 AM) 28.5 (11 AM) (9 AM) (10 AM) 28.4 (10:30) 28.1 (noon)
27.8 (2:30) 27.5 (4:00)

Met on site w/ Colby, Pat & Jan & decided the following:

- 1) Send rock sample to lab
- 2) They will pump from sump w/ their pump tonight, will remove add'n rock material adjacent to pipe in the tank
- 3) Add ports to pipe
- 4) They will backfill hole w/ clean rock - add add'n 1' to 2' or a plan quantity elev. They will place their potential CPP in rock in run add'n exc. needed.

Contractor's Representative: _____

RPR: _____

Copies: _____

Client _____

Proj. Mgr _____

Gov't Agcy _____

Other _____

DAILY FIELD REPORT

Project: SCISWA SLF
NW-1 Excavation Project
Project No: 6009-26A
Date: 7/14/26
Contractor: Thorpe Contracting
Supt.: Colby
Crew Size: 2
Weather: Sunny 92° Calm



HLW Engineering Group

Engineering

Management

RPR	
Time Arrived:	7:30
Time Left:	

Contractor	
Time Arrived:	
Time Left:	

Equipment On-Site - Used

Cat 336 Excavator
Cat 963 Loader
Generator
4" diesel pump
2" Electric Pump
3" Electric Pump

Equipment On-Site - Not Used

Description of Work Accomplished:

LPZ NW1 = 23' 9" @ 7:30 AM = 22' 6" @ 15:25

Thorpe removed 4" diesel pump. Started 8" electric pump

Cleaned pea gravel from around 18" riser pipe on south side & North side. Cleaned N to the 8" central pipe. Placed 2-3" Sinter rock in Sump on both sides of the riser pipe & above to elev. 716. Left 12 CPP (perforated) as sump standpipe.

Turned SCISWA Pump on Auto.

Pat will berm or grade ditch in NW1 to prevent run-on into open excavation. SCISWA will place MSW into hole after sump area is observed for a period of time. SCISWA will spray on ADC cover on MSW stockpiles.

Changes or Extra Work Ordered:

Rock backfill was changed to larger 3" septic rock @ the request of SCISWA. 140 tons ordered in lieu of the 3/4 pea gravel.

Approved By: _____

Items of Interest Occurred:

Test Samples Taken:

Official Visitors:

Other Work Crews (utilities, etc.) and Work Done:

Additional Remarks:

Contractor's Representative: _____

RPR: _____

Copies:

Client _____

Proj. Mgr _____

Gov't Agcy _____

Other _____