



June 17, 2026

Ms. Alexis Slade, Environmental Engineer
IDNR – Land Quality Bureau
6200 Park Avenue, Suite 200
Des Moines, Iowa 50321

RE: Monitoring Well Records – MW-20R
Page County Sanitary Landfill IDNR Permit No. 73-SDP-01-75P

Dear Ms. Slade:

Attached are copies of the boring log, the Monitoring Well Construction Documentation Form, and a Site Plan related to monitoring well MW-20R.

MW-20R was constructed on June 16, 2026, as a replacement well for MW-20. MW-20 was inadvertently destroyed by heavy equipment early in 2026. The well abandonment records for MW-20 were submitted to IDNR under separate cover on June 17, 2026.

We request that the permit and the monitoring plan for the site be amended by acknowledging abandonment of MW-20 and replacement with MW-20R.

I appreciate your assistance and please feel free to contact me with any questions.

Sincerely,
HLW ENGINEERING GROUP

Todd Whipple, CPG.
Project Manager

cc: Brian Ward, Manager – Page County Sanitary Landfill



HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248

Telephone: (515) 733-4144
Fax: (515) 733-4146

HLW Engineering Group

LOG OF TEST BORING

Drillers Team Services Inc Boring No. MW 20R HLW Observer JGH
- Jerome Hobson HLW Project No. 6047-26A

Date Drilled 6/16/2026 Project Page County Sanitary Landfill
Surface Elevation 1120.3 ft 73-SDP-01-75P
Depth Drilled 24.1 ft MW 20 Replacement
Drilling Method 7 1/4" HOLLOW STEM AUGER
Depth to Water 17.1 ft @ completion (▽), _____ ft @ _____ hrs.(▼), _____ ft @ _____ hrs.

DEPTH FT	WELL DETAIL	SAMPLE		COLOR	MC %	CONSISTENCY	ELEV	SOIL DESCRIPTION
		NO.	TYPE					
0				Brown	Damp	Soft		Topsoil - Silty Clay
5				Brown/ Gray	Dry	Loose		Fine Silty Sand
10								Fine Sandy Silt
15					Wet			
20				Brown				Fine Silty Sand
25								
30								

Filter Pack
Screened Interval

E.O.B. @ 24.1 ft

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: Page County Sanitary Landfill Permit No.: 73-SDP-01-75P
Well/Piezometer No.: MW 20R Date Started: 6/16/2026 Date Completed: 6/16/2026
Applicable Requirements¹: ☒ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit
☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other: _____

A. SURVEYED LOCATION² AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 1120.28 Top of Protective Casing: 1123.12
Top of Well Casing: 1122.84
Site Coordinates: Northing: 278469.21 Easting: 1193015.65
World Coordinates: Latitude: _____ Longitude: _____
Elevation and Coordinate Systems: State Plane, Iowa South

B. SOIL BORING INFORMATION

Certified Well Contractor Team Services, Inc
Address 717 SE 7th Street City, State, Zip Code Des Moines, IA 50309
Name of driller Jerome Hobson Cert No. 9062
Drilling method HSA Drilling fluid None Bore hole diameter 7.25 in
Soil sampling method None Depth of boring 24.1 ft

C. MONITORING WELL INSTALLATION

Casing material: <u>PVC - SCH 40</u>	Placement method: <u>Poured through HSA</u>
Length of casing: <u>14.85 ft</u>	Quantity: <u>1.04 cu ft</u>
Casing diameter: <u>2"</u>	Backfill (if different from seal): _____
Casing joint type: <u>Threaded</u>	Material: <u>Bentonite chips</u>
Casing/screen joint type: <u>Threaded</u>	Placement method: <u>Poured</u>
Screen material: <u>PVC - SCH 40</u>	Quantity: <u>0.52 cu ft</u>
Screen opening size: <u>0.006 in</u>	Surface seal design: <u>Concrete</u>
Screen length: <u>10 ft</u>	Material of protective casing: <u>Aluminium</u>
Depth of Well: <u>24.85 ft</u>	Material of grout between protective casing and well casing: <u>Concrete</u>
Filter Pack: _____	Protective cap: <u>Yes</u>
Material: <u>Quartz Filter Material</u>	Material: <u>Aluminium</u>
Grain Size: <u>0.025 effective size</u>	Vented?: ☒ Y ☐ N Locking?: ☐ Y ☐ N
Quantity: <u>3.4 cu ft</u>	Well cap: <u>Yes</u>
Seal (minimum 3 ft. length above filter pack): _____	Material: <u>PVC</u>
Material: <u>Bentonite Chips</u>	Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (± 0.01 foot below top of inner well casing)

Water level 17.1 ft Stabilization time 20 Minutes
Well development method Over pump with Wattera Pump
Average depth of frost line 40 in

¹ Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

² The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to +/- 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature

Thorne Hoban

Certification #

9062

Date

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.

MW-20R Well and Boring Logs

Elevations: ± 0.01 ft. MSL

Depths: ± 0.1 ft from Ground Surface

Top of protective casing (TOP)

Elevation C 1123.12

Top of Well Casing (TOC)

Elevation B 1122.84

Ground surface (GS)

Elevation A 1120.28

Depth Use 0

Top of backfill

Base of concrete plug and
bentonite grout

Elevation A-W 1115.3

Depth W 5.0 ft

Base of Protective Casing

Elevation C-A = 1115.1

Depth PC-C-A = 5.2 ft

Base of Backfill, Top of Seal

Elevation A-X = 1113.3

Depth X 7.0 ft

Top of Filter Pack, Base of Seal

Elevation A-Y = 1109.25

Depth Y 10.5 ft

Top of Screen (TOS)

Elevation B-TD-S-WP = 1108.24

Depth A-TOS^{elev} = 12.04 ft

Bottom of Screen (BOS)

Elevation B-TD-WP = 1098.24

Depth A-BOS^{elev} = 22.0 ft

Bottom of Well

Elevation 1097.99

Depth 24.85 ft TOC

Bottom of Filter Pack

Elevation A-Z = 1096.2

Depth Z 24.1 ft

Required Data:

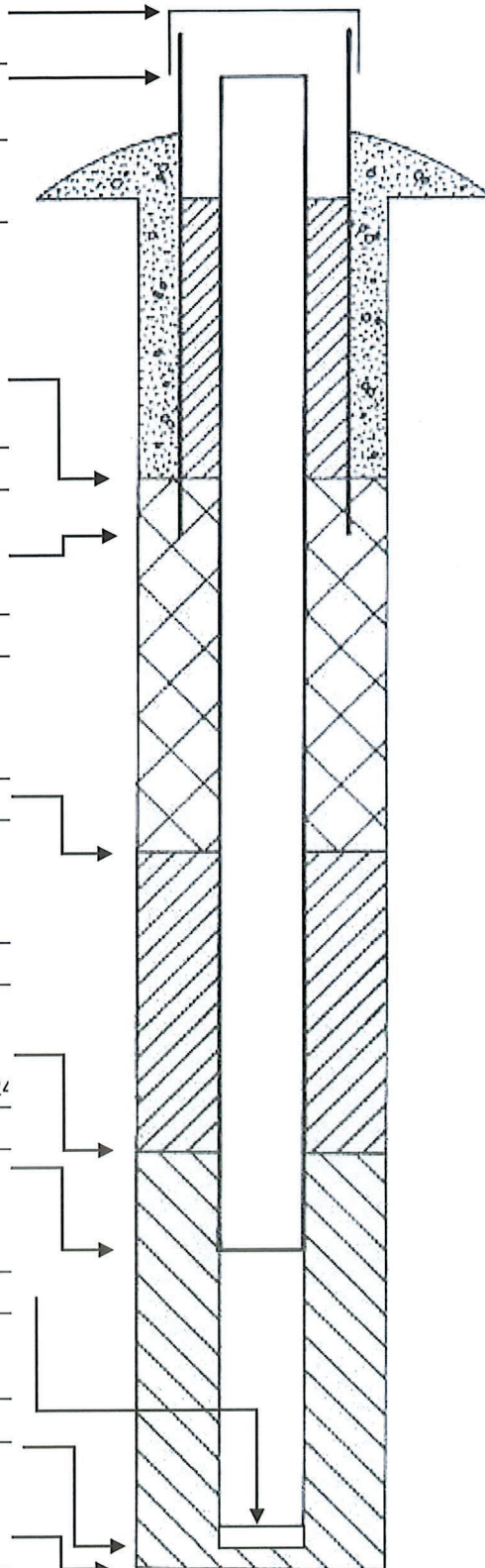
- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

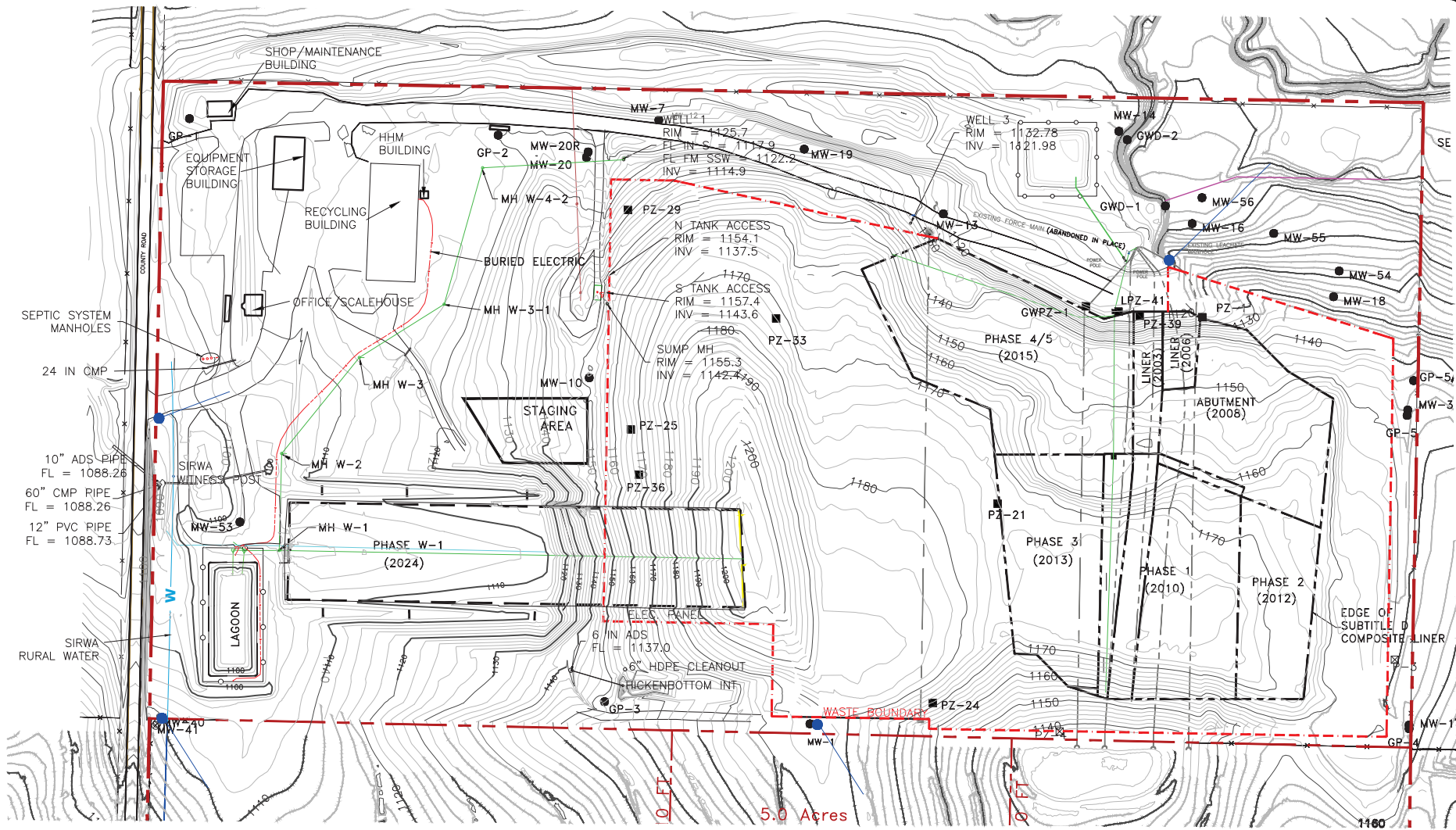
PC: 14.85 ft

S: 10.0 ft

WP: 0.25 ft

TD: 24.85 ft





NOTES:
1. RECORD CONTOURS IN WEST DEVELOPMENT AREA FROM FIELD SURVEY COMPLETED ON AUGUST 1, 2024.

- EXISTING WASTE BOUNDARY
- EXISTING COMPOSITE LINED BOUNDARY
- PROPERTY BOUNDARY
- PROPOSED WASTE BOUNDARY
- PROPOSED TOP OF LINER
- PROPOSED LEACHATE PIPING

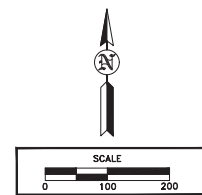


FIGURE: 2		NO.	DATE
REVISION	DRAWN	PROJECT NO.	DATE
	JGH	6047-26A	6/17/26

SITE PLAN
PAGE COUNTY SANITARY LANDFILL
PAGE COUNTY, IOWA

HLW Engineering Group
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Story City, Iowa 50248
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