Exhibit 6 – Cell 4 Expansion Construction Quality Assurance Report and Engineer of Record Statement of Compliance

BURNS McDONNELL

MATANUSKA-SUSITNA BOROUGH

CELL 4 EXPANSION CONSTRUCTION DOCUMENTATION REPORT

MATSU CENTRAL LANDFILL

PROJECT NO. 167550

REVISION 1

JANUARY 2026

CONTENTS

FIGURES

TABLES

List of Abbreviations

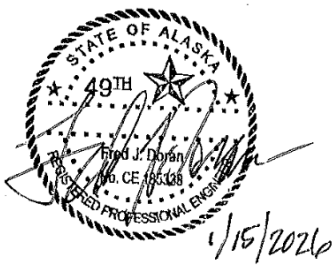
Abbreviation	Term/Phrase/Name
ACC	Alaska Code and Constitution
ADEC	Alaska Department of Environmental Conservation
AK	Alaska
Borough	Matanuska-Susitna Borough
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CQA	Construction Quality Assurance
CQC	Construction Quality Control
CtCR	Conforming to Construction Records
DS	Destructive Seam
ESD	Edge Survey & Design
GCCS	Gas Collection and Control System
GCL	Geosynthetic Clay Liner
GDM	Granular drainage material
GL	Gas Lateral
HDPE	High-Density Polyethylene
Landfill	Matanuska-Susitna Borough Central Landfill, SW1A007-26
lbs/ft^3	pounds per cubic foot
lbs/in	pounds per inch
LFG	Landfill Gas
LLDPE	Linear low-density polyethylene
LLSI	Leak Location Services, Inc.
Matsu	Matanuska-Susitna
mil	One-thousandth of an inch
NWL	Northwest Linings & Geotextiles
oz/yd^2	ounce per square yard
Project	2025 Cell 4 Expansion Construction Project
psi	pounds per square inch
Report	Cell 4 Expansion Construction Documentation Report
RFI	Request for information
SCC	South Central Construction
TRI	TRI Environmental, Inc.

Certification

Matanuska-Susitna Borough
Cell 4 Expansion Construction Documentation Report
Project No. 167550

Certification

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Alaska.



1.0 Introduction

This Cell 4 Expansion Construction Documentation Report (Report) presents the results of construction observations and quality assurance activities for the 2025 Cell 4 Expansion Construction Project (Project) at the Matanuska-Susitna (Matsu) Borough (Borough) Central Landfill, SW1A007-26 (Landfill). This Report addresses the requirements of the Alaska Department of Environmental Conservation (ADEC) Solid Waste Management Alaska Code and Constitution (ACC), Part 18 ACC 60.260, Permit Termination and Modification.

The information presented in the Report is based on construction observations and documentation made by Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell). Information used in the development of this Report includes:

- Discussions with the contractor
- Review of field and laboratory test results
- Construction progress meetings
- Construction staking surveys
- Contractor submittals
- Manufacturer's specifications and information
- Photographs
- Other quality assurance activities

Section 2.0 discusses the following Project construction items:

- Subgrade Preparation
- Geosynthetic Clay Liner
- Geomembrane Liner
- Leachate Collection System
- Landfill Gas Laterals
- Sand Drainage Layer
- Leak Location Services

Construction photo documentation is provided in **Section 4.0**. Conforming to Construction Records (CtCR) Drawings are attached in **Appendix A**. Cell 4 Expansion As-Built Documentation is attached in **Appendix B**. Construction documentation such as inspection reports, survey data, materials during testing reports and other quality control and assurance data, and miscellaneous manufacturer's data is included in the appendices to this Report as referenced in the following sections.

Burns & McDonnell provided full-time observation and monitoring of liner installation construction for the Project. The Borough provided part-time observations and monitoring of earthwork and pipe installation construction for the Project. Construction observation and monitoring was limited to reasonable attempts to visually identify significant discrepancies from the requirements of the approved contract plans and specifications. Based on our visual observations of construction, review of third-party field and laboratory test results, and as-built survey drawings stamped by a Professional Land Surveyor, the construction was performed in substantial compliance with the intent of the approved contract plans and specifications (dated April 2025) submitted to and reviewed by the ADEC. Any deviation from these plans has been noted in this Report and is shown on the As-Built and CtCR Documentation. The deviations are considered minor and do not reduce the environmental protection of these improvements. The April 2025 construction plans and specifications should be available for reference when reviewing this Report.

1.1 Background

The Landfill is located at Mile post 3 of the Palmer-Wasilla Highway at the southern end of North 49th Street. The active landfill is currently limited to approximately 160-acre section of the 620-acre site, within Sections 1, 11, and 12, Township 17 North, Range 1 East, Seward Merdian (address 1201 N 49th State Street, Palmer, Alaska 99645). The Landfill is utilized by the Matanuska Susitna Borough and was originally permitted by the ADEC on December 22, 1986. An existing conditions and general arrangements plan are provided in Drawings G003 and G004 of the CtCR Drawings in **Appendix A**.

Previous landfill cell construction projects at the Landfill included the following:

- Cell 1 was started in 1980.
- Cell 1 was closed in 1990/1991.
- Cell 2A was constructed in 1987.
- Cell 2B was constructed in 2005.
- Cell 3 was constructed in 2010.
- Cell 2A was closed in 2015.
- Cell 4 was constructed in 2018.

1.2 Project Team

The project team for the construction of Cell 4 Expansion was comprised of the following companies and representatives:

Owner:	Matsu Borough Jeff Smith, Solid Waste Division Manager Ed Lohr, Project Manager
Engineer:	Burns & McDonnell Fred Doran, P.E., Project Manager Marcus Ault, P.E., Assistant Project Manager Becca Heaman, Resident Project Representative
Contractor:	South Central Construction, Inc. Dane Dahlegren, Project Manager
Surveyor:	Edge Survey & Design, LLC. Ryan Sorensen, P.L.S., Surveyor
Geosynthetics Testing:	TRI Environmental, Inc.
Geotechnical Testing:	EMC Engineering, LLC

South Central Construction, Inc. (SCC) was selected by the Borough as the general contractor based on a competitive bid. Other subcontractors and suppliers to SCC included:

1. Northwest Linings & Geotextiles (NWL) – geomembrane liner installation and supplier
2. AGRU – geomembrane liner manufacturer
3. CETCO – geosynthetic clay liner (GCL) manufacturer
4. SKAPS Industries – geotextile
5. TRI Environmental, Inc. (TRI) – geosynthetics lab testing
6. WL Plastics – piping
7. Leak Location Services, Inc. (LLSI) – leak location contractor
8. EMC Engineering – soil material lab and field testing

9. Western Construction & Equipment LLC – Granular drainage material manufacturer
10. Central Gravel Products –sand supplier for leveling course
11. QED Environmental Systems – landfill gas wellheads

2.0 Cell 4 Expansion Construction

This section of the Report discusses the construction and quality assurance activities for the construction of Cell 4 Expansion at the Landfill. Cell 4 Expansion is approximately 3.2-acres and was partially constructed over a portion of the old unlined landfill area (Cell 2A) at the Landfill. Cell 4 Expansion was designed to tie into the existing Cell 2B and Cell 4 geomembrane liner systems. Similarly, leachate collection piping in Cell 4 Expansion ties into existing Cell 2B leachate collection piping and drains into Cell 4 leachate collection piping system. Leachate in Cell 4 Expansion gravity drains to the existing Cell 4 sump either by draining directly into Cell 4 or via Cell 2B and Cell 3 to Cell 4. Gas collection and control system (GCCS) piping in the Cell 4 Expansion ties into Cell 4 GCCS piping and the above ground GCCS header on Cell 2A. Refer to the CtCR Drawings in **Appendix A** for more details.

2.1 Subgrade Preparation

SCC began subgrade preparation for Cell 4 Expansion in mid-August 2025. Existing topsoil from the final cover of Cell 2A in the overlay area and the Cell 4 Expansion was stripped and stockpiled at designated areas onsite. After topsoil was removed, SCC graded the Cell 4 Expansion area to establish the design subgrade. The subgrade was compacted to a minimum of 95 percent maximum dry density and maintained within three percent of optimum moisture content.

EMC completed source testing for soils used as general fill to establish the Cell 4 Expansion subgrade. EMC collected subgrade source samples from the on-site borrow area at a frequency of one test per acre. Source testing included particle size distribution (ASTM D422), soil classification and description (ASTM D2487/D2488), and moisture density relationship (ASTM D698) (also known as the Proctor compaction test or “Proctor”).

EMC performed in-place density and moisture tests were completed at a frequency of one test per acre per two feet of fill for general fill and one test per acre of finished subgrade. Subgrade testing was completed on August 25, 2025. Results are summarized in **Table 2-1** and **Table 2-2**, with detailed results in **Appendix C**.

Table 2-1: Cell 4 Expansion General Fill and Subgrade Proctor Lab Results

Proctor ID	Soil Classification	Optimum Moisture Content	Maximum Dry Density (lbs/ft^3)
P25-0896-04	Gravel with Sand	5.5%	148.0

lbs/ft^3 = pounds per cubic foot

Table 2-2: Cell 4 Expansion General Fill and Subgrade In-Place Density Results

Date Tested	Field Sample ID	Proctor ID	Actual Dry Density (lbs/ft^3)	Maximum Dry Density (lbs/ft^3)	Compaction (%)	Specified Compaction (%)
8/25/25	1A	P25-0896-04	147.1	*148.0*	99	*>=95%*
8/25/25	2	P25-0896-04	148.4	*148.0*	100	*>=95%*
8/25/25	3	P25-0896-04	148.1	*148.0*	100	*>=95%*

Notes:
These tests were taken at the top of the finished Cell 4 Expansion subgrade.

2.2 Sand Leveling Course Layer

2.2.1 Material Quality

SCC supplied sand material for the sand leveling course layer from “Central Gravel Products”. Prior to placement a sample of the sand material borrow source was tested to evaluate the acceptability of this material. The source material testing included particle size distribution (ASTM D422 or D6913). The results of this sample were all within the construction specifications except for the percentage of material passing through the No. 200 sieve was less than one percent too high. Per request for information (RFI) #4 submitted by SCC, Burns & McDonnell approved SCC request to modify the specification in Section 31 20 00, Part 2.05.A(1) to allow 0-4 percent of the sample to pass through the No. 200 sieve, as the source material will still be able to perform its intended function as a leveling course for the geosynthetic liner system. **Appendix D** summarizes the results of the sand leveling course material borrow source testing and RFI #4 response.

2.2.2 Sand Leveling Course Installation

Once the source test results were received and accepted, Central Gravel Products began hauling the sand leveling course material onsite. Sand leveling course material placement was completed mid-September 2025.

Outside the Cell 2A final cover overlay area of the Cell 4 Expansion, the sand leveling material was placed in a singular lift of 6 inches and was compacted into a smooth surface with a steel drum roller.

Within the Cell 2A final cover overlay area of the Cell 4 Expansion, unsuitable materials were removed from the existing sand leveling course after removing the existing GCL. Additional sand material was added as needed to create a consistent surface free of ruts or gaps in the sand and compacted into a smooth surface with a steel drum roller.

2.3 Geosynthetic Clay Liner (GCL)

2.3.1 Material Quality

The geosynthetic clay liner (GCL) installed in Cell 4 Expansion was a “BENTOMAT DN” manufactured by CETCO. SCC submitted GCL quality control information from CETCO for each roll delivered to the Landfill, which included quality control test results. The GCL packing list provided GCL lot and roll numbers, roll numbers for the cap and base geotextiles, and clay lot numbers. The data demonstrated that the material met or exceeded the Project specifications. Quality control information from CETCO is available in **Appendix E**.

In addition to quality control data from CETCO, GCL conformance testing was also conducted by TRI, an independent third-party laboratory. Prior to being shipped to site, five GCL samples were cut from the rolls and shipped to TRI for analysis. The conformance testing was conducted at a frequency as specified for a GT-Related Reinforced GCL as stated in Table 1(b) of the Geosynthetic Institute GRI GCL3 Standard Specification for “Test Methods, Required Properties, and Testing Frequencies for Geosynthetics Clay Liners (GCLs)” revision #5 dated 11/21/2019. Test results reported by TRI showed that the GCL installed in Cell 4 Expansion met the specified requirements. Conformance test results from TRI can be found in **Appendix E**.

The manufacturer's 20-year warranty and the installer’s (NWL) two-year warranty for the GCL are also provided in **Appendix E**.

2.3.2 GCL Subgrade Preparation

The geosynthetic clay liner subgrade (i.e., the sand leveling course layer) was prepared by smooth rolling the final lift. At the beginning of each day of GCL deployment, representatives from NWL and Burns & McDonnell visually inspected the sand leveling course layer for large rutting, ponding water, rocks, or other foreign material which could damage the GCL or geomembrane. Daily subgrade acceptance certificates were signed by NWL and Burns & McDonnell prior to the GCL installation for the day and are included in **Appendix C**.

2.3.3 GCL Installation

Burns & McDonnell observed and documented the GCL installation. Deployment of the geosynthetic clay liner began on the northern slope of Cell 4 Expansion on September 28, 2025. The last panel of geosynthetic clay liner was placed on the western side of Cell 4 Expansion on October 6, 2025. NWL used an excavator with a spreader bar to deploy each roll of GCL. In accordance with the Project specifications, GCL panels were overlapped six-inches lengthwise and 12-inches widthwise. NWL spread bentonite along the edge of each overlap, then heat tacked the panels together. NWL overlapped panels so that they were shingled in the direction of the grade. As each panel was deployed and heat-tacked, it was inspected for damage and manufacturing defects. Any such occurrences were noted and flagged for repair.

All panels were heat-tacked and covered with geomembrane the same day they were deployed to avoid bentonite hydration. During placement and heat-tacking, each panel was labelled chronologically by NWL's Construction Quality Control (CQC) Representative. Panel numbers and lengths were documented by Burns & McDonnell (CQA). A panel placement log prepared by Burns & McDonnell and a Certification of Compliance from NWL are included in **Appendix E**.

2.4 Geomembrane Liner Installation

2.4.1 Material Quality

Installation of the double-sided textured 60-one-thousandth of an inch (mil) high-density polyethylene (HDPE) or 60-mil linear low-density polyethylene (LLDPE) geomembrane liner, manufactured by AGRU, followed the placement of the geosynthetic clay liner. LLDPE geomembrane liner was installed over the previous Cell 2A final cover overlay area and the remainder of the Cell 4 Expansion footprint had HDPE geomembrane liner installed. SCC submitted the manufacturer's quality control data for each roll shipped to the site. The manufacturer's data consisted of quality control results and other manufacturing information, such as the roll number and resin lot. The manufacturer's data, which is included in **Appendix F** shows that the material met or exceeded the specifications for this project. The manufacturer's twenty-year warranty on the geomembrane and the installer's (NWL) two-year workmanship warranty stating that NWL warrants the liner system to be free from defects in workmanship are in **Appendix F**.

In addition to quality control data from AGRU, geomembrane conformance testing was also conducted by TRI. The frequency of conformance testing was specified as one per lot/batch or one per 100,000 square feet, whichever was more. Prior to being shipped to site, three HDPE and two LLDPE geomembrane samples were cut from the rolls and shipped to TRI. Test results from TRI demonstrated that the geomembrane material met or exceeded the specified requirements and are included in **Appendix F.**

2.4.2 Geomembrane Subgrade Preparation

The geomembrane subgrade (i.e., geosynthetic clay liner) was placed each day prior to the geomembrane panels. Any GCL that was placed was required to be covered with the geomembrane before the end of the day.

2.4.3 Geomembrane Installation

Burns & McDonnell observed and documented geomembrane installation. Deployment of the geomembrane liner began on September 28, 2025 and was completed on October 6, 2025.

Mid October, SCC completed the north and east liner termination berm of Cell 4 Expansion, placing material over the Cell 4 Expansion liner. Plywood was placed on top of the liner and the berm was constructed over the plywood. These sheets of plywood serve to protect the liner during the construction and closure of future landfill cells.

Trial seaming was performed for each work shift, welding machine, and welder to verify optimum seaming methods based on current ambient conditions. Trial seams were inspected and destructively tested in the field to confirm compliance with specification requirements. Refer to **Appendix F** for trial seam test results.

The methods used for the seaming of the geomembrane liner included double-wedge welding and extrusion welding. All panels were seamed using the double wedge weld. Extrusion welding was limited to hard-to-reach areas, patching, repairs, and the Cell 2A liner tie-in.

Geomembrane panels were deployed using the excavator with a spreader bar, with NWL staff pulling the panels into place for seaming. All panels were seamed the same day they were deployed. An as-built layout of the panels and seams is included in **Appendix F**.

As each panel was deployed and seamed, it was inspected for damage and manufacturing defects. Any such occurrences were noted and flagged for repair. During seaming operations, panel and seam identifications, seam lengths, time of welding, welders name, weather conditions, the temperature and speed of the welding apparatus, and the location of damage and defects were documented by Burns & McDonnell (CQA) as well as by NWL (CQC). Liner documentation, including repairs and locations, is provided in **Appendix F**.

2.4.4 Non-Destructive Field Testing

Non-destructive testing was performed by NWL and consisted of visually observing each panel for damage and defects, monitoring the seaming process, and witnessing the non-destructive testing of seams and repairs.

Each seam was visually inspected and non-destructively tested for continuity and air or watertightness. The competency of the seaming process was checked by one of three methods: air pressure, vacuum, or spark testing. Air pressure testing was performed on double-wedge welds. Vacuum testing was performed on extrusion welds, including repairs, panel seams, and all caps. Spark testing was performed on the RGW-13 pipe penetration LLDPE boot in locations where the vacuum testing could not be conducted.

During air pressure testing, a hollow needle was inserted into the air channel formed by the double-wedge weld. The ends of the seam were sealed, and the channel was pressurized to approximately 30 pounds per square inch (psi) and held for five minutes. If the pressure dropped less than two psi within five minutes, the seam was considered competent. Any seams that experienced a pressure drop greater

than two psi were visually inspected, and vacuum tested to determine the location of the leak. Repairs were then placed as needed along the seam. All the air pressure tested seams passed on this Project.

During vacuum testing, the seam or area of concern was covered with a water and soap solution. A vacuum apparatus was then placed over the area and sealed. A leak was indicated by bubbles forming from the soap solution. If any leaks were found, the seams were repaired and retested. All the extrusion welds passed the vacuum testing on this Project, either initially or after being re-patched.

During spark testing, 24-gage copper wire was place within ¼-inch of edge of extrusion seam. An electrode was passed over the seam and observed for spark. A leak would be indicated by a spark. No sparks were observed, and the extrusion weld passed the spark testing on this Project.

Upon completion of the non-destructive testing, all seams had been tested and found to be competent. The results of the field non-destructive testing are included in **Appendix F**.

2.4.5 Destructive Field Testing and Laboratory Testing

Destructive testing consisted of material conformance testing and destructive seam testing, conducted both in the field and in the laboratory. Refer to **Appendix F** for all destructive test results. The material conformance testing, and laboratory destructive seam tests were performed by TRI.

Destructive seams were first tested in the field by NWL to obtain a preliminary indication of the seam competency. Laboratory samples were then sent to TRI for third party testing. Seam samples were taken every 500 linear feet of seam and tested for peel adhesion and shear strength. A total of 25 destructive seam samples from the Cell 4 Expansion liner were submitted to TRI for testing. Locations are indicated on the panel as-built drawing provided in **Appendix F**. Specifications required that shear strength of the HDPE/HDPE fusion welds be 120-pounds per inch (lbs/in) and the peel strength be 91-lbs/in for fusion weld and 78-lbs/in for extrusion welds. Specifications required that shear strength of the LLDPE/LLDPE and LLDPE/HDPE fusion welds be 90-lbs/in and the peel strength be 75-lbs/in for fusion welds and 66-lbs/in for extrusion welds. The laboratory performed five tests for each destructive sample of shear strength, outside peel adhesion, and inside peel adhesion. The outside and inside peel adhesions are in reference to the use of a double-wedge weld. **Table 2-3** summarizes the averages of the results of this quality assurance testing.

Unacceptable locus-of-break criteria were observed during peel destructive field testing of destructive seam (DS) -13. Two bounding samples of DS-13, DS-13A and DS-13B, were collected and destructively field tested. These samples were collected from approximately 10-feet north and 10-feet south of DS-13. Unacceptable locus-of-break criteria were also observed during the peel destructive field testing of DS-13B. After this second unacceptable destructive field test, NWL elected to cap the entire 104-feet of extrusion welding that took place on October 2, 2025 between the existing Cell 2B liner and Panels 40-43 with a fusion welded patch. This patch encompasses the location of DS-13, DS-13A, DS-13B, and all other extrusion welding that took place between the Cell 4 Expansion HDPE geomembrane and existing Cell 2A HDPE geomembrane on October 2, 2025..

Unacceptable locus-of-break criteria were reported by TRI from the destructive laboratory testing of DS-20. Two bounding samples of DS-20, DS-20A and DS-20B, were collected approximately 10-feet north and 10-feet south of DS-20. Destructive seam field and lab test results met the required strength and locus-of-break criteria for DS-20A and DS-20B. The approximately 23-feet of seam extrusion weld between DS-20A and DS-20B was capped with a patch.

All other destructive seam field and lab test results met the required strength and locus of break criteria.

Table 2-3: Cell 4 Expansion Geomembrane Liner Destructive Seam Lab Results

Sample ID	Seam Number	Locus-of-Break	Shear Evaluation Average (lbs/in)	Outside Peel Evaluation Average (lbs/in)	Inside Peel Evaluation Average (lbs/in)
HDPE Specification		*FTB, SE*	*120*	*91 (fusion)*	*91 (fusion)*
LLDPE Specification		*FTB, SE*	*90*	*75 (fusion)*	*75 (fusion)*
DS-1	P04/P03	FTB, SE	171	123	112
DS-2	P07/P01	FTB, SE	169	119	134
DS-3	P14/P13	FTB, SE	170	123	119
DS-4	P24/P23	FTB, SE	167	125	126
DS-5	P17/P10	FTB, SE	155	137	138
DS-6	SP01/SP03	FTB, SE	147	132	129
DS-7	SP07/SP09	FTB, SE	152	125	122
DS-8	SP04/P29	FTB, SE	133	132	124
DS-9	P30/P31	FTB, SE	169	123	129
DS-10	P28/P06	FTB, SE	153	135	140
DS-11	P33/P34	FTB, SE	169	121	118
DS-12	P36/P37	FTB, SE	162	126	134
DS-14	P42/P43	FTB, SE	170	126	132
DS-15	P02/P32	FTB, SE	156	147	108
DS-16	P49/P48	FTB, SE	194	115	128
DS-17	SP10/P57	FTB, SE	145	140	128
DS-18	SP12/SP13	FTB, SE	139	134	138
DS-19	SP09/SP10	FTB, SE	130	113	114
DS-20	P48/E2B	NON-FTB, AD	155	121	NA; Extrusion
DS-20A	P49/E2B	FTB, SE	153	117	NA; Extrusion
DS-20B	P48/E2B	FTB, SE	154	136	NA; Extrusion
DS-21	SP12/SP15	FTB, SE	151	119	116
DS-22	SP15/P54	FTB, SE	131	133	130
DS-23	R118/P40	FTB, SE	163	153	142
DS-24	R117/E2B	FTB, SE	167	151	151

DS = destructive seam
lbs/in = pounds per inch

In the Seam Number, the “P” represents a HDPE panel placed in Cell 4 Expansion, the “SP” represents a LLDPE panel placed in Cell 4 Expansion, “R” represents a repair patch, and “E” represents an existing geomembrane panel that compose the Cell 2B liner system.

2.5 Geotextile Cushion Installation

2.5.1 Material Quality

Installation of the 16-oz/yd^2 nonwoven geotextile cushion, manufactured by SKAPS Industries, followed the placement of the geomembrane liner. SCC submitted the manufacturer's quality control data for each roll shipped to the site. The manufacturer's data consisted of quality control results and other manufacturing information, such as the roll number. The manufacturer's data, which is included in **Appendix G** shows that the material met or exceeded the specifications for this project.

2.5.2 Geotextile Cushion Subsurface Preparation

The geotextile cushion subsurface (i.e., geomembrane liner) was completely placed in the Cell 4 Expansion area prior to the geotextile cushion placement. The subsurface was cleared of all sandbags, garbage, liner debris, and ponding water prior to geotextile cushion placement.

2.5.3 Geotextile Cushion Installation

Geotextile cushion rolls were deployed using the excavator with a spreader bar, with NWL staff pulling the panels into place for sewing. All panels were sewed the same day they were deployed. On October 8, 2025, 19 rolls of geotextile were placed in the Cell 4 Expansion area outside the Cell 2A final cover overlay. On October 9, 2025, the remaining 20 rolls of geotextile were placed on the Cell 2A final cover overlay area. All geotextile panels were overlapped 6 inches and sewed together with a "prayer" type seam.

2.6 Leachate Collection System

The Cell 4 Expansion leachate collection system was designed and installed as a continuation of the Cell 2B and Cell 4 leachate collection system. The new leachate collection pipes in Cell 4 Expansion were welded to existing leachate collection pipes at the northeast end of Cell 2B and gravity drain into the leachate collection system of Cell 4. Leachate in Cell 4 Expansion gravity drains to Cell 2B and then Cell 3 and Cell 4 to the south and utilizes the existing Cell 4 sump.

There were two 8-inch HDPE SDR 11 perforated leachate collection pipes installed in Cell 4 Expansion. On the north side of Cell 4 Expansion, two leachate cleanout risers were installed between the perimeter access road and northern berm (Detail 5, C005 in **Appendix A**). On the southeast side of Cell 4 Expansion, one leachate cleanout riser was installed between the new perimeter access road and eastern berm.

Cleanouts, were finished with stainless steel cam and groove fitting with dust cap at the end of the pipes.

The leachate collection piping is contained within collection trenches overlain by 18-inches of 2-inch granular drainage material (GDM). A 7.5-feet wide secondary layer of 16 ounce per square yard (oz/yd^2) geotextile cushion was installed on center of the leachate collection pipe for additional protection to the geomembrane liner.

As-built documentation for the leachate collection piping and cleanouts is included in **Appendix B.** Materials were approved for use in the work through the submittal process and are included in **Appendix G**, along with the drainage layer source information in **Appendix H**.

The leachate collection pipes in the Cell 4 Expansion were temporarily cut and capped near their tie-in location to the existing leachate collection systems of Cell 2B and Cell 4. A sacrificial length of 60 mil

HDPE geomembrane liner was placed along the length of Cell 2B and part of Cell 4's connection to Cell 4 Expansion and turned upwards to create a temporary stormwater catch barrier. This temporary stormwater catchment barrier was put into place by SCC to divert stormwater from becoming leachate prior to the Borough beginning waste disposal in Cell 4 Expansion. The Borough will be responsible for pumping out stormwater collected in this temporary catchment area as needed. The Borough will be responsible for reconnecting the leachate pipes and removing the temporary liner barrier prior to waste disposal in Cell 4 Expansion.

Weather permitting, all piping installed will be jetted and cleaned by SCC to remove any excess dirt or pipe shavings from the pipe.

2.7 Landfill Gas Laterals

One six-inch HDPE SDR 11 perforated landfill gas collection lateral (GL) was installed along high points at the base of the cell to collect landfill gas (LFG) from Cell 4 Expansion in the future. One four-inch HDPE SDR 11 solid landfill gas header was extended along the east slope of Cell 4 Expansion to maintain vacuum to existing Cell 4 GLs. Cleanout risers for this GL and GCCS header were installed at the north side of Cell 4. Similar to the leachate collection piping, the GL piping was covered by 18 inches of 2-inch granular drainage material. A 7.5-feet wide secondary layer of 16 ounce per square yard (oz/yd²) geotextile cushion was installed on center of the GL pipe for additional protection to the geomembrane liner.

Two six-inch HDPE SDR 11 solid GLs were installed down the slope of Cell 2A overlay area. Each of these solid GLs were installed with three 6-inch by 6-inch HDPE SDR 11 tees with blind flanges for future horizontal gas collection pipe connection at design grade elevations 280-feet, 300-feet, and 320-feet. These solid GLs were covered by a minimum of 24 inches of 2-inch GDM.

Approved materials for the GL system are listed in **Appendix G**, along with the drainage layer source information in **Appendix H**.

As-built documentation for the installed gas laterals, cleanouts, stub outs, and LFG wellheads are included in **Appendix B**. SCC will complete the installation of the GCCS header, laterals, and final connection to the GCCS in the Spring of 2026.

2.8 Leak Location Services

Once the granular drainage layer was complete, LLSI completed a leak location survey using electrical leak detection methods to test the geomembrane liner for tears or punctures.

The electrical leak location method detects electrical paths through the liner caused by water or soil moisture soil in the leaks. A voltage is connected to one electrode in the GDM covering the liner and a grounded electrode. Electrical current flowing through the leaks in the liner produces localized anomalous areas of high current density near the leaks. These areas are located by making electrical potential measurements on GDM covering the geomembrane liner. SCC exposed 12 inches of the liner along the termination berm around the perimeter of the Cell 4 Expansion to create an isolation of the GDM covering the liner and the surrounding ground.

The survey was conducted by making potential gradient measurements on the GDM along numbered survey lines. A portable digital data logger was used to collect the data. The data was then transferred to a portable computer for display, plotting, and analysis. If a leak signal were detected, manual potential gradient measurements would be calculated to establish the exact location of the leak between the survey lines.

On October 28, 2025, an LLSI representative began a geomembrane leak location survey of Cell 4 Expansion and concluded the survey on October 29, 2025. No leaks were detected in the Cell 4 Expansion. Complete documentation of LLSI's findings is included in **Appendix I**.

3.0 Miscellaneous Construction

The Project included other miscellaneous construction at the Landfill not directly related to Cell 4 Expansion liner and leachate collection system. Miscellaneous construction completed as part of the Project is discussed in the following subsections.

3.1 Remote Gas Well 13

The wellhead for the existing vertical gas extraction well GW-13 was originally located within the Cell 4 Expansion overlay area of Cell 2A. To preserve this well during construction, SCC excavated to approximately nine feet below the GCL of the existing Cell 2A final cover, cut and removed the solid riser pipe of GW-13, and installed a PVC-to-HDPE adapter. The well was then horizontally rerouted to the western berm of the Cell 4 Expansion, and the GW-13 wellhead was reinstalled.

The relocated GW-13 has been temporarily reconnected to the GCCS. The above-ground lateral connections are currently insulated with compost until a permanent connection can be completed in spring 2026.

Drawings C008-C010 in **Appendix A** depict this relocation of GW-13's wellhead.

4.0 Photo Documentation

Numerous photographs were taken during the construction project of most of the activities described in this Report. Selected photographs of this project have been provided for review in the attached Photo Documentation.

Figure 1: 09/28/25 - Cell 4 Expansion Prepared Sand Leveling Course Layer

Figure 2: 09/28/25 - Cell 4 Expansion Termination Berm Trench

Figure 3: 09/28/25 – Placement of GCL on the Northern Slope of Cell 4 Expansion with a Spreader Bar

Figure 4: 09/28/25 – GCL Panel Overlapped a Min. of 12 Inches and Sprinkled with Granular Bentonite Prior to Heat Tack

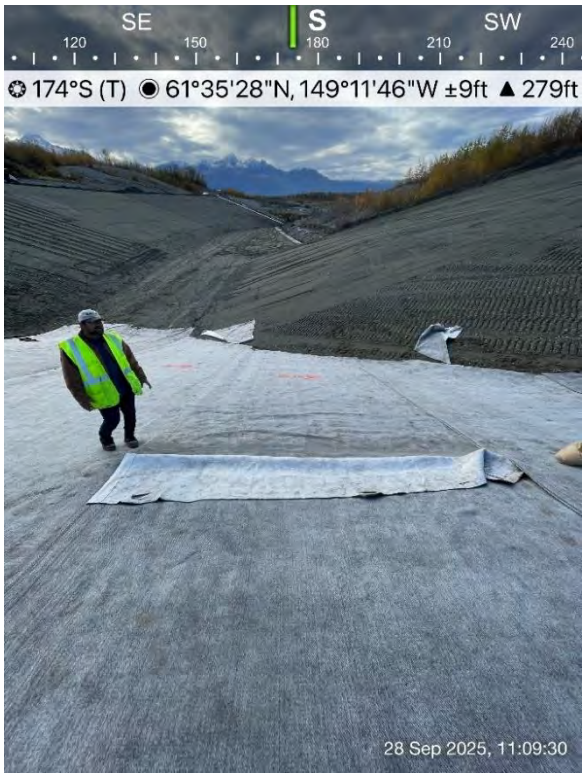


Figure 5: 09/28/25 - Cell 4 Expansion GCL Placement Day 1

Figure 6: 09/28/25 - Placement of HDPE on the Northern Slope of Cell 4 Expansion with a Spreader Bar

Figure 7: 09/28/25 – Trail Weld of HDPE Geomembrane Liner with Fusion Welder

Figure 8: 09/28/25 - Cell 4 Expansion HDPE Geomembrane Liner Placement Day 1

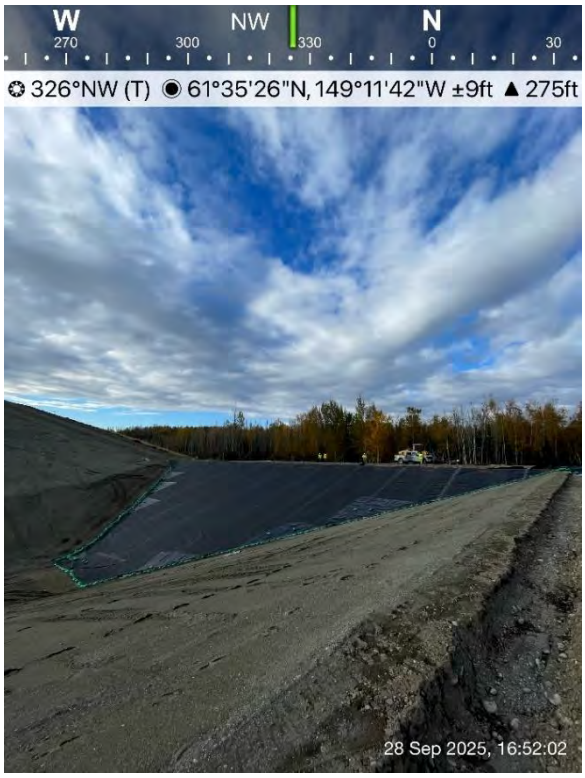


Figure 9: 09/29/25 – Beginning of GCL Placement on the Eastern Slope of Cell 4 Expansion

Figure 10: 09/29/25 - Cell 4 Expansion GCL Placement Day 2

Figure 11: 09/29/25 - Beginning of HDPE Placement on the Eastern Slope of Cell 4 Expansion

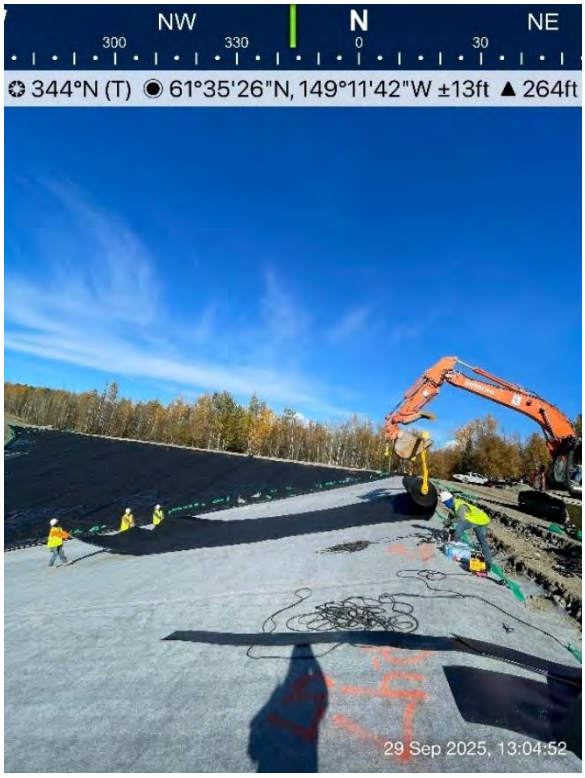


Figure 12: 09/29/25 - Cell 4 Expansion HDPE Geomembrane Liner Placement Day 2

Figure 13: 09/30/25 - Cell 2A Final Cover GCL Exposed for Overlap with Cell 4 Expansion GCL

Figure 14: 09/30/25 - Cell 4 Expansion GCL Placement Day 3

Figure 15: 09/30/25 - Cell 4 Expansion LLDPE Geomembrane Liner Placement of Cell 2A Overlay Area

Figure 16: 09/30/25 - Cell 4 Expansion Extrusion Welding a Patch Over Air Test Holes

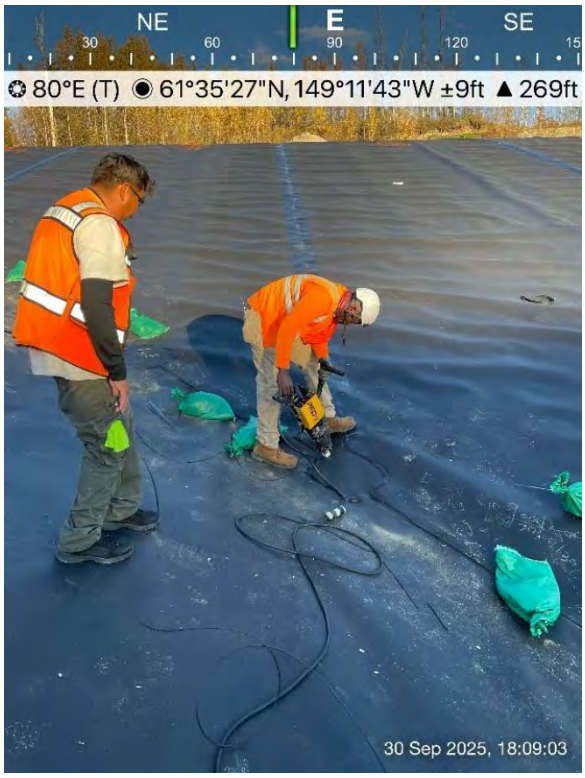


Figure 17: 09/30/25 - Cell 4 Expansion LLDPE Geomembrane Liner Placement Day 3

Figure 18: 10/01/25 - Cell 4 Expansion GCL Placement Day 4

Figure 19: 10/01/25 - Cell 4 Expansion Geomembrane Liner Seam Fusion Weld

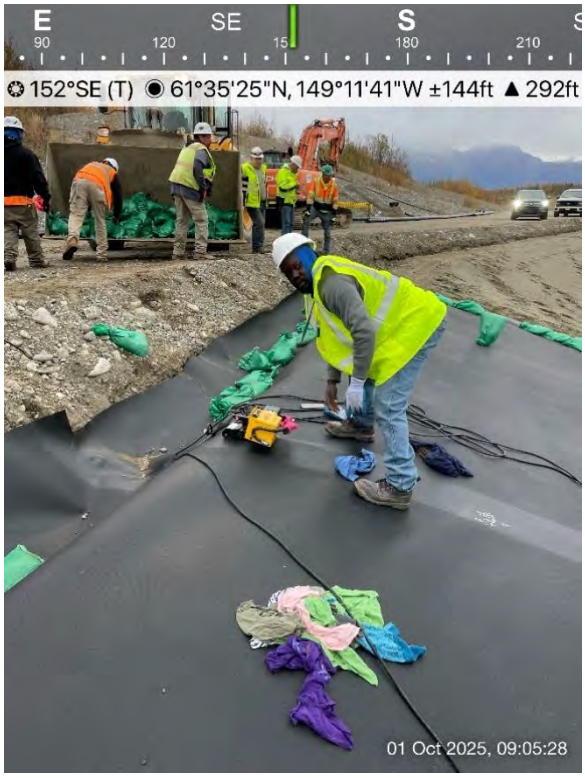


Figure 20: 10/01/25 - Cell 4 Expansion HPDE Geomembrane Liner Placement Day 4

Figure 21: 10/02/25 – Cell 4 Expansion GCL Overlapped with Existing Cell 4 GCL

Figure 22: 10/02/25 - Cell 4 Expansion GCL Overlapped with Existing Cell 2B GCL

Figure 23: 10/02/25 - Cell 4 Expansion GCL Placement Day 5

Figure 24: 10/02/25 - Cell 4 Expansion GCL Placement Day 5

Figure 25: 10/02/25 - Cell 4 Expansion HDPE Geomembrane Liner Placement Day 5

Figure 26: 10/03/25 - Cell 4 Expansion GCL Placement Day 6

Figure 27: 10/03/25 - Cell 4 Expansion LLDPE Geomembrane Placement Day 6

Figure 28: 10/05/25 – West Side of Existing Cell 2B GCL Exposed and Sprinkled with Granular Bentonite

Figure 29: 10/05/25– West Side of Existing Cell 2B GCL Overlapped with Cell 4 Expansion GCL

Figure 30: 10/05/25 – Cell 4 Expansion HDPE Liner Extrusion Welded to Existing Cell 2B HDPE Liner

Figure 31: 10/06/25 – Placement of the Remaining GCL in the Cell 4 Expansion

Figure 32: 10/06/25 – Vacuum Test Apparatus

Figure 33: 10/08/25 - Cell 4 Expansion Termination Berm Backfill and Compaction

Figure 34: 10/07/25 - Cell 4 Expansion Geotextile Cushion Deployment with Spreader Bar

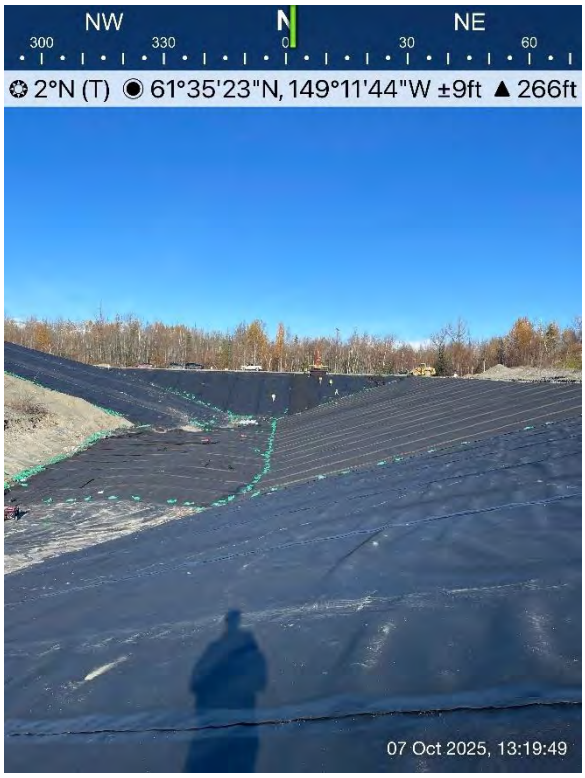


Figure 35: 10/08/25 - Cell 4 Expansion Geotextile Cushion Placement Day 1

Figure 36: 10/08/25 – Remote GW-13 LLDPE Boot

Figure 37: 10/08/25 – Non-Destructive Vacuum Testing of Extrusion Welds

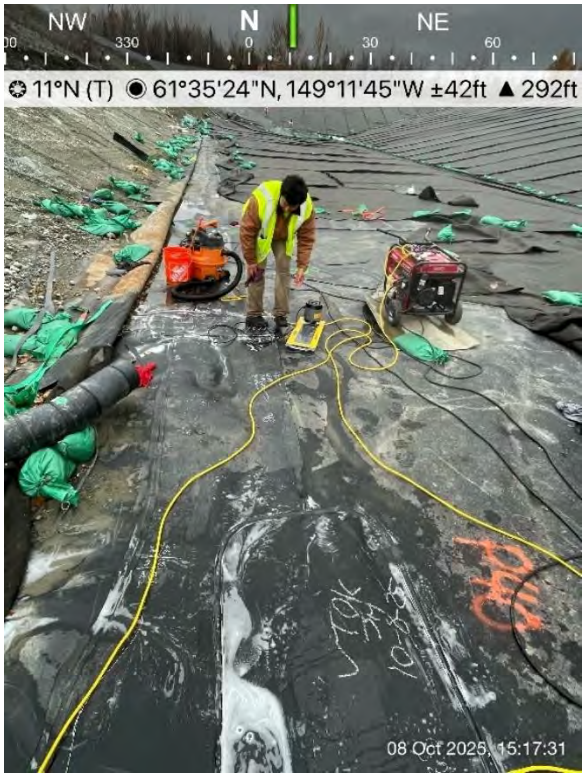


Figure 38:10/08/25 – Non-Destructive Spark Testing of Pipe Boot

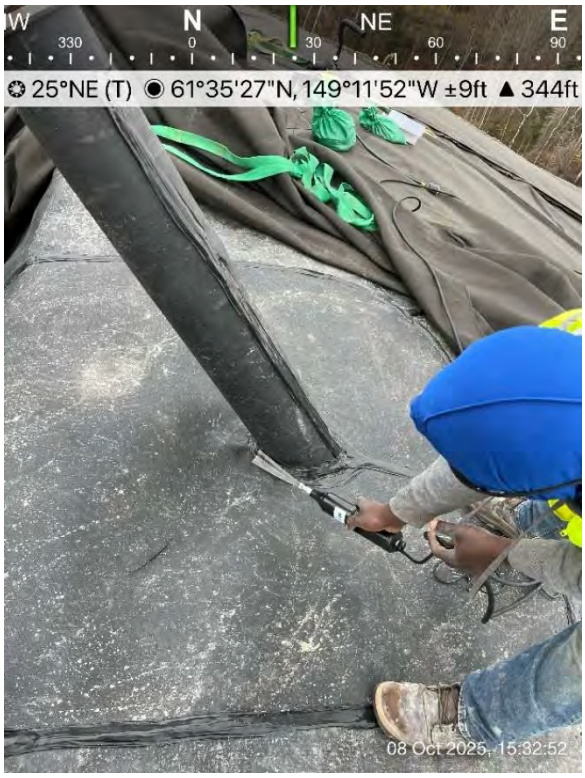


Figure 39:10/08/25 – Bounding Samples of DS-20 Collected for Destructive Testing in the Field and Laboratory

Figure 40:10/08/25 – Extrusion Patch of DS-20 and Bounding Samples

Figure 41:10/09/25 – Cell 4 Expansion Geotextile Cushion Placement Day 2

Figure 42:10/09/25 – Cell 4 Expansion Geotextile Cushion Placement Day 2