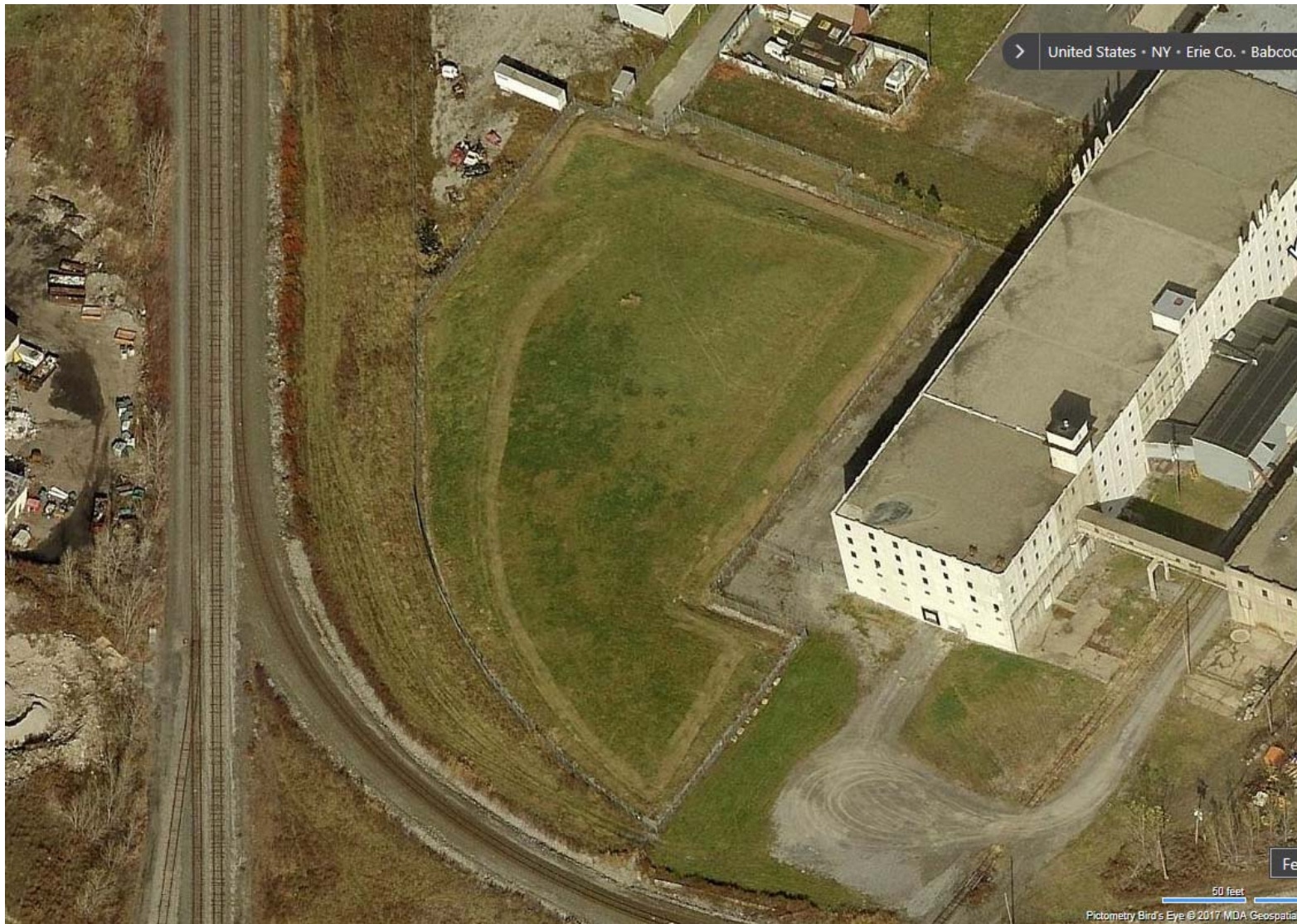




2019 PERIODIC REVIEW REPORT

Bern Metal Corporation
NYSDEC ID: 915135

17-039-1144

Prepared for:



City of Buffalo
Office of Strategic Planning
Division of Environmental Affairs

Prepared by:



LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York 14209

February 7, 2020

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1.0 Introduction

LiRo Engineers, Inc. (LiRo) has prepared this Periodic Review Report (PRR) on behalf of the City of Buffalo (COB) to summarize the post remedial status of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. 915135, located at 22 Bender Street in the City of Buffalo, Erie County, New York (Site; see Figure 1).

This PRR has been prepared for the Bern Metal Corporation Site in accordance with NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation*. The NYSDEC Institutional and Engineering Controls (IC/EC) Certification Form has been completed for the Site (Appendix A). This PRR and associated inspection form have been completed for the post-remedial activities at the Site for the reporting period from May 15, 2018 to May 15, 2019.

1.1 Background Information

The Bern Metal Corporation Site (Site) is located at 22 Bender Street in the City of Buffalo, Erie County, New York (Figure 1).

The Site previously consisted of two properties known as: Bern Metals (approximately 3.7 acres) and Universal Metals (approximately 1.5 acres). The Site was an abandoned scrap reprocessor. Based on complaints from citizens, NYSDEC conducted a Phase I Investigation in 1987. Approximately 200 55-gallon drums were found on the Bern Metals property, along with other wastes including: metal turnings, waste chemicals, sludges, battery cases, and spilled battery acids. Subsequently, 25 leaking transformers containing PCBs were found on the Universal Metals property.

1.2 Regulatory History

In 1990 the United States Environmental Protection Agency (USEPA) conducted an emergency removal at the Site. Drums, gas cylinders, and transformers were removed from the Site. Under order by USEPA in 1994, a group of potentially responsible parties (PRPs) remediated neighboring residential properties and erected a fence around the contaminated Site. The PRPs conducted a Remedial Investigation and Feasibility Study (RI/FS) of the Site during the period from 1993 to 1995.

The Record of Decision (ROD) was signed in 1996 which required the contaminated soils be consolidated and properly capped. Under a separate New York State consent order, the PRPs consolidated and capped the waste onto the property known as Bern Metals (approximately 3.7 acres), completing the project in 2002. The long-term Operation, Maintenance, and Monitoring Plan is in effect and is being implemented by the City of Buffalo.

The Universal Metals property has been remediated as required by the ROD.

2.0 Site Overview

The Bern Metal Site is an approximately 3.7 acre capped landfill located at 22 Bender Street in the City of Buffalo, Erie County, New York (Figure 1). The landfill was completed in 2002 and the long-term Operation, Maintenance, and Monitoring Plan (OMM) prepared by Blasland, Bouk, and Lee, Inc. (BBL) was implemented in 2003 by the City of Buffalo.

3.0 Site Management

3.1 Monitoring and Maintenance Program

3.1.1 Groundwater Monitoring

The OMM specified that during the first two years of the OMM program, groundwater sampling would be performed on a semi-annual basis and the first two groundwater sampling events would include analysis for cadmium, chromium, lead, manganese, zinc, polychlorinated biphenyls (PCBs), and benzene, toluene, ethylbenzene, and xylenes (BTEX). After a review of the first two rounds of groundwater sampling data and as approved by the NYSDEC, the analyses were reduced to lead analysis only. Following the first two years of groundwater sampling, the groundwater sampling frequency was reduced to annually. The last groundwater sampling event was performed on May 3, 2017 and recommendation was made to modify the groundwater monitoring frequency to quinquennially (every 5 years). NYSDEC approved the modification to the groundwater monitoring frequency on November 21, 2017. As a result, routine groundwater monitoring activities were not performed during this PRR reporting period.

3.1.2 Site Inspection and Certification

In accordance with NYSDEC DER-10 6.3(a)(4), this PRR is to provide the information necessary to document the basis for the IC/EC certification. The certification primarily consists of a Site inspection to complete the NYSDEC's IC/EC Certification Form in order to confirm that the IC/ESs:

- Are in place, performing properly, and remain effective;
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls; and,
- That access is available to the Site to evaluate continued maintenance of such controls.

A Site inspection of the property was conducted on July 1, 2019 by a LiRo employee who meets the requirements of a Qualified Environmental Professional (QEP) and a representative of the NYSDEC. The Site inspection included the following components:

- Final cover system;
- Stormwater drainage system;
- Site access and security systems; and
- Site monitoring wells.

During the inspection of the final cover system, three (3) inactive rodent burrows were found in the same general area that active burrows were encountered during the 2019 inspection. The vegetative cover was found to have substantial overgrowth. Erosion, vehicle ruts, ponding water, tree and brush growth and protruding objects were not observed.

During the inspection of the stormwater drainage system, Japanese Knotweed and other shrubs were observed in areas within the perimeter drainage ditch. Japanese Knotweed growth was particularly heavy in areas of the stormwater drainage system where water is retained.

Four of the five site monitoring wells were found to be in good condition, however, one monitoring well, RD-3/RD-3R was found to be damaged. The upper 2 to 3 inches of the steel protective casing and PVC well casing at RD-3/RD-3R appear to have been crushed and the lockable lid on the protective casing was missing.

At the time of the inspection, the Site was generally in compliance with the EC/ICs. Appendix A includes the completed Institutional and Engineering Controls Certification form and Appendix B contains the completed Site inspection form. Appendix C provides a photographic log showing the condition of the Site at the time of inspection. This well was subsequently repaired in January 2020.

3.2 Engineering and Institutional Control Requirements and Compliance

The following engineering and institutional controls are to be maintained as a requirement of the Brownfield Cleanup Agreement (BCA) for the Site:

- **Engineering Controls:** Engineering controls for the Site consist of a cover system and fencing.

The Site cover system and Site fencing continue to operate as designed and are being maintained and monitored as required.

- **Institutional Controls:** Institutional controls for the Site consist of a groundwater use restriction and implementation of the Site Operation, Maintenance, and Monitoring Plan.

The monitoring and maintenance activities are being conducted.

4.0 Conclusions and Recommendations

Conclusions from the monitoring, maintenance, and inspection activities performed during the current PRR reporting period are as follows:

- At the time of the Site inspection, the Site was in compliance with the Engineering and Institutional Controls including: groundwater monitoring, inspection, and, inspection and maintenance of the Site cover and fencing.
- Based on visual inspection, the groundwater monitoring wells were observed to be structurally sound with the following exception:
 - The steel protective casing and PVC well casing at monitoring well RD-3/RD-3R have been damaged resulting in the inability to secure the well. This condition was temporarily remedied by cutting off the damaged portions of the casings and installing a lockable expandable well cap. This well was fully repaired with a new protective casing in January 2020.

Based on the conclusions presented above, the Site has been in operation and compliance with the Site Monitoring and Maintenance Plan for nearly 14 years with little to no change in groundwater quality since 2003. Similarly, the groundwater flow pattern has shown little to no change during this period. LiRo recommends the following with regards to the operation, maintenance, and monitoring at the Site:

- Site inspections should continue to be performed annually during the spring;
- Groundwater monitoring should be performed during the certifying period ending in May 2022, as approved by NYSDEC;
- The steel protective casing at monitoring well RD-3/RD-3R should be replaced;
- The vegetative cover on the landfill cap should be mowed annually;
- Baiting and trapping for rodent control should be initiated each spring;
- Backfilling of rodent burrows should be completed following removal of rodents; and,
- Continued removal of vegetation from the perimeter drainage ditch to reduce the risk of vegetative spread onto the landfill cap.

4.1 Corrective Actions

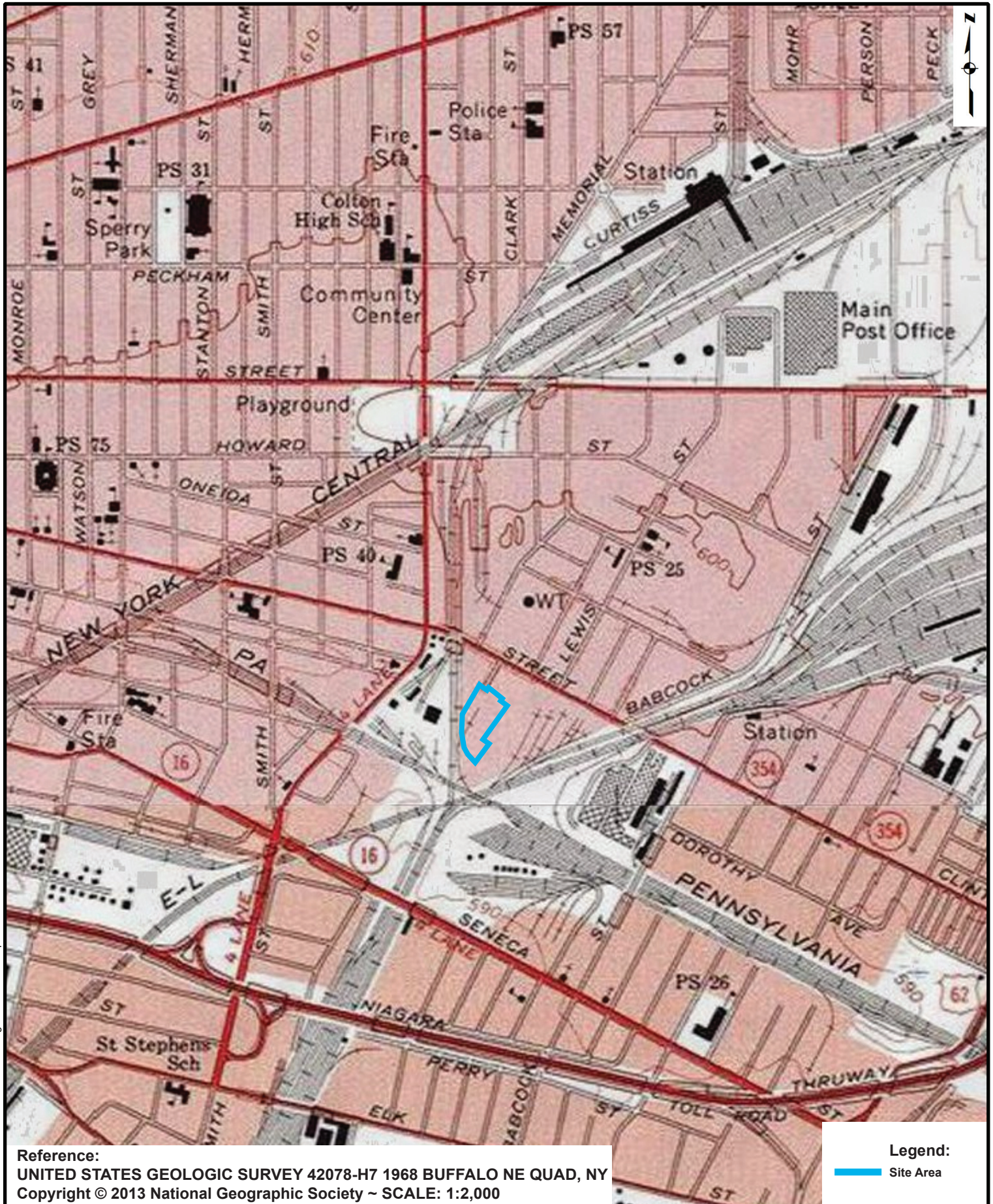
Corrective actions to address the identified maintenance items were completed in January 2020. As of that time the following maintenance items were corrected/repared:

- The steel protective casing at monitoring well RD-3/RD-3R was removed and replaced;

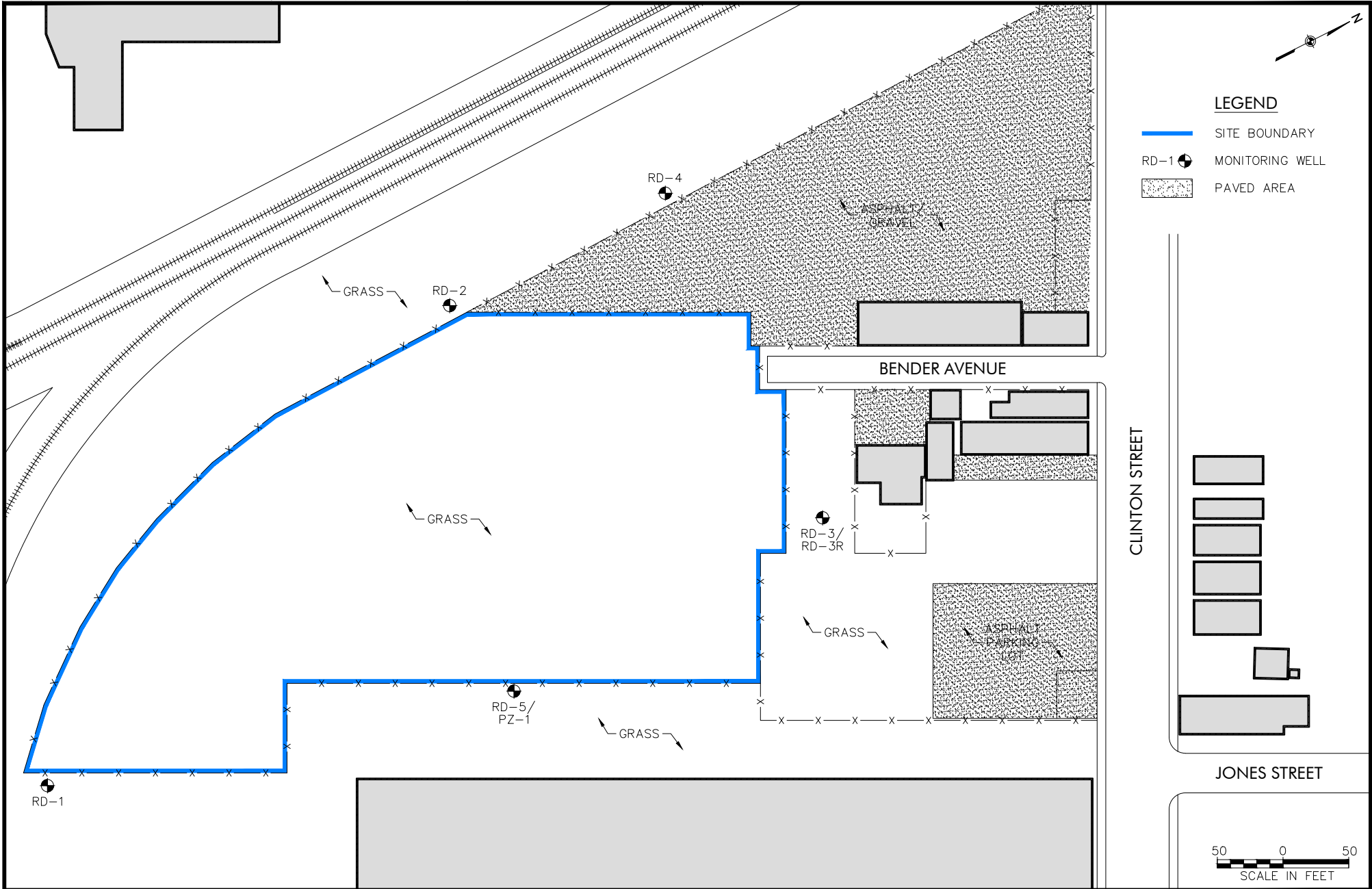
- Three breeches of the Site perimeter fencing have been repaired; and,
- All excessive vegetative growth within the Site perimeter drainage swale have been cut down to prohibit future growth.

Due to the wetness of the ground surface at the time of the maintenance activities, the rodent burrows have not yet been backfilled. The rodent burrows will be backfilled at the earliest time as when the ground becomes firm enough to support light construction equipment to place topsoil.

Figures



BERN METAL CORPORATION SITE TOPOGRAPHIC LOCATION MAP



LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

BERN METAL CORPORATION SITE PLAN

FIGURE NO.

2

Appendix A
PRR Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1
Site No.	915135	
Site Name Bern Metal Corp.		
Site Address: 22 Bender Street Zip Code: 14206		
City/Town: Buffalo		
County: Erie		
Site Acreage: 3.7		
Reporting Period: May 15, 2018 to May 15, 2019		
		YES NO
1. Is the information above correct?		☒ ☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		☐ ☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		☐ ☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		☐ ☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		☐ ☒

Box 2	
	YES NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	☒ ☐
7. Are all ICs/ECs in place and functioning as designed?	☒ ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative	Date
---	------

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
111.84-2-15.1	Bernard Arwitz	Ground Water Use Restriction O&M Plan
111.84-2-16	Bernard Arwitz	i) Implementation of Operation, Maintenance, and Monitoring Plan, dated May, 2003. ii) Prohibition of use of groundwater iii) Maintenance of fencing Ground Water Use Restriction O&M Plan
		Ground Water Use Restriction O&M Plan
		i) Implementation of Operation, Maintenance, and Monitoring Plan, dated May, 2003. ii) Prohibition of use of groundwater iii) Maintenance of fencing

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
111.84-2-15.1	Cover System Fencing/Access Control
111.84-2-16	i) Implementation of Operation, Maintenance, and Monitoring Plan, dated May, 2003. ii) Prohibition of use of groundwater iii) Maintenance of fencing Cover System Fencing/Access Control Cover System Fencing/Access Control

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 915135

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jan Williams at 690 Delaware Avenue, Buffalo, NY
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

2/4/2020
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Martin Wesolowski at 690 Delaware Avenue, Buffalo, NY
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)

[Signature]
Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification



Stamp
(Required for PE)

2/6/2020
Date

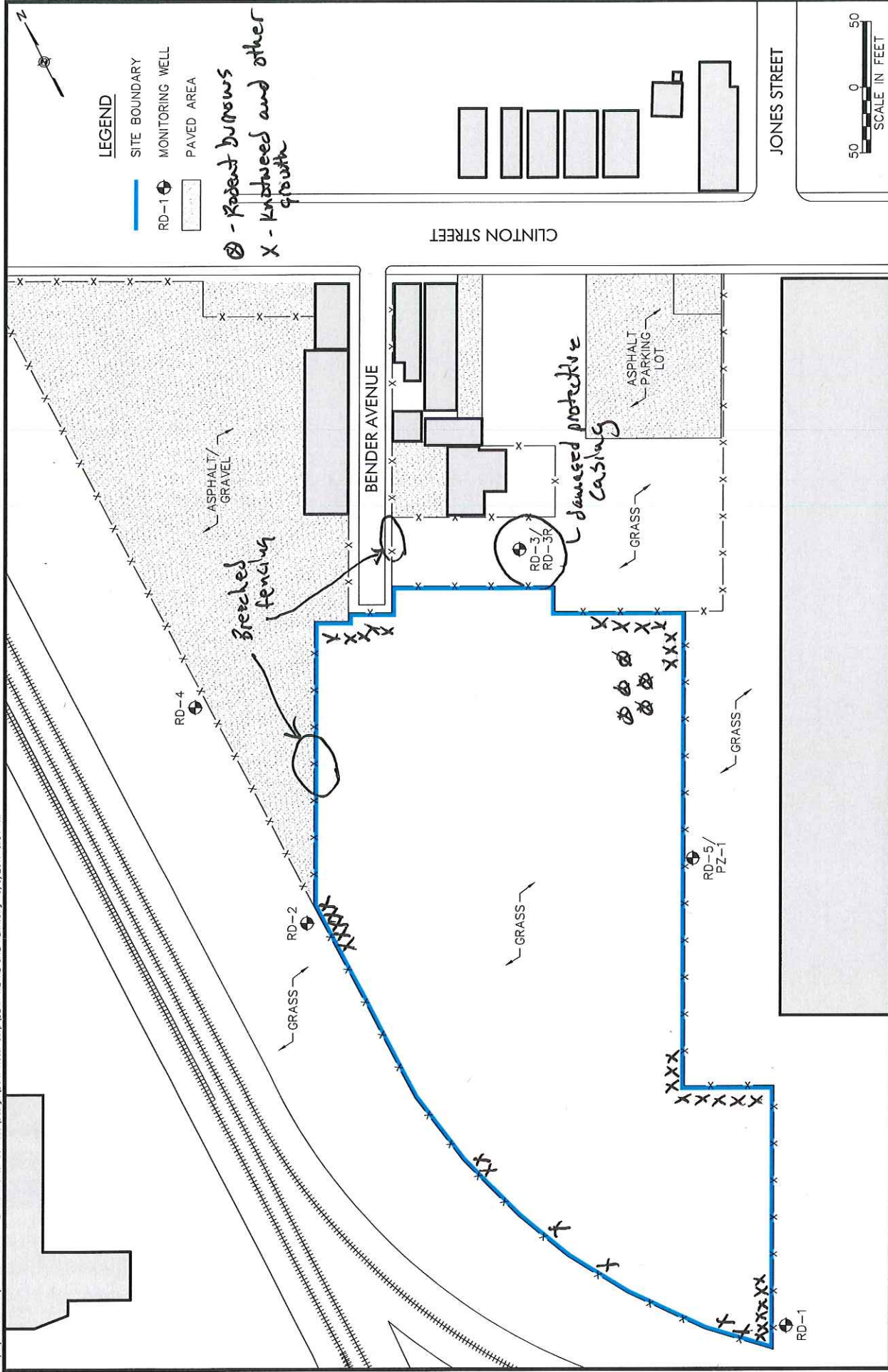
Appendix B
Site Inspection Form

Post-Closure Inspection Form for Operation, Maintenance, and Monitoring
Bern Metal/Universal Metal Site
Buffalo, New York

Date: July 1, 2019
 Weather: Partly cloudy ~ 70°

Inspector(s): Jon Williams - L'Ro
Paul Szymanski - DEC

Inspection Items	Acceptable		Comments/Conditions
	Yes	No	
1. General Site Conditions			
Gates Locked and Secure	X		cut along east side regularly repair Japanese knotweed and other growth in perimeter drainage
Perimeter Fence/ Warning Signs	X		
Perimeter Vegetation		X	
Trash or Litter	X		
Survey Control Monuments	X		
2. Maintenance Road Condition			
Surface	X		
Accessibility	X		
3. Final Cover Vegetation			
General Grass Growth	X		~ 5-6 inactive burrows should be filled Growth in perimeter drainage swale
Stressed Vegetation	X		
Animal Burrows		X	
Tree or Bush Growth		X	
Protruding Objects/Settlement	X		
Ponding Water	X		
Erosion	X		
4. Storm Water Drainage System			
Mid-Slope Drainage Swales	X		Growth in perimeter swale
Perimeter Drainage Ditch		X	
Outlet Drainage Ditch	X		
Catch Basins	X		
5. Groundwater Monitoring Wells			
Casings Secure and Locked		X	RD-3 pro. casing damaged
6. Other Items			
Sketch			
See attached sketch and photographic log.			



Appendix C

Site Photographs

Site Photos



Photo No. 1 – Monitoring well RD-3/RD-3R with damaged protective casing and damaged PVC riser.



Photo No. 2 – Monitoring well RD-3/RD-3R with new protective casing and repaired PVC riser.

Site Photos



Photo No. 3 – View towards site from the east.

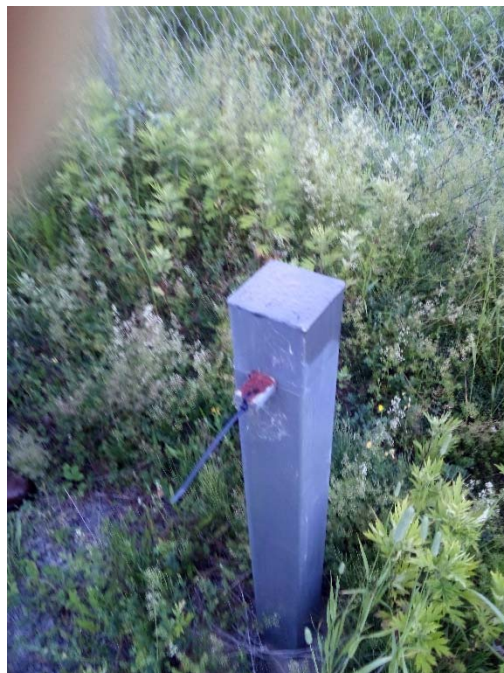


Photo No. 4 – Monitoring well RD-5/PZ-1.

Site Photos



Photo No. 5 – View towards site from the east towards the west.



Photo No. 6 – Japanese Knot wood growing near fence corner.

Site Photos



Photo No. 7 – Vegetation growth within drainage swale along fence line.



Photo No. 8 – Vegetation growth within drainage swale along fence line.

Site Photos



Photo No. 9 – View of southern portion of site.



Photo No. 10 – View towards site from the west, hole cut in fence.

Site Photos



Photo No. 11 – View from top of site towards the east.



Photo No. 12 – View from top of site towards the north.

Site Photos



Photo No. 13 – View from top of site towards the south.



Photo No. 14 – View from top of site towards the northwest.

Site Photos



Photo No. 15 – View along north side of site towards the west.



Photo No. 16 – Monitoring well RD-2.

Site Photos



Photo No. 17 – Monitoring well RD-4.



Photo No. 18 – Monitoring well RD-1.

Site Photos



Photo No. 19 – View towards landfill from the south near the site entrance.