
PERIODIC REVIEW REPORT
for the
NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
(SITE NO. C915223)
BUFFALO, NEW YORK

September 2019

0136-013-010

Prepared for:

1093 Group, LLC

Prepared By:



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

PERIODIC REVIEW REPORT
Niagara Street and Pennsylvania Avenue Site
Table of Contents

1.0	INTRODUCTION.....	1
1.1	Site Background.....	1
1.2	Remedial History	1
1.3	Compliance	2
1.4	Recommendations.....	2
2.0	SITE OVERVIEW.....	3
3.0	REMEDY PERFORMANCE	4
4.0	SITE MANAGEMENT PLAN.....	5
4.1	Institutional Control Plan.....	5
4.1.1	<i>Excavation Work Plan</i>	<i>5</i>
4.1.2	<i>Site Land Use</i>	<i>5</i>
4.2	Annual Inspection and Certification Program	5
4.3	Engineering and Institutional Control Requirements and Compliance	6
4.3.1	<i>Engineering Controls.....</i>	<i>6</i>
4.3.2	<i>Institutional Controls.....</i>	<i>7</i>
5.0	WELL DECOMMISSIONING	8
6.0	CONCLUSIONS AND RECOMMENDATIONS.....	9
7.0	DECLARATION/LIMITATION.....	10

PERIODIC REVIEW REPORT
Niagara Street and Pennsylvania Avenue Site
Table of Contents

FIGURES

Figure 1	Site Location and Vicinity Map
Figure 2	Site Plan and Former Groundwater Monitoring Locations

APPENDICIES

Appendix A	EC/IC Certification Form
Appendix B	Site Photograph Log
Appendix C	Well Decommissioning Logs

1.0 INTRODUCTION

TurnKey Environmental Restoration, LLC (TurnKey), has prepared this Periodic Review Report (PRR), on behalf of 1093 Group, LLC, to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Niagara Street and Pennsylvania Avenue Site (Site) (C915223).

This PRR has been prepared in accordance with the NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation* (May 2010) and the NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been completed for the Site (see Appendix A).

NYS Department of Environmental Conservation (NYSDEC) approved of the cessation of groundwater monitoring at the Site, and the groundwater monitoring wells were decommissioned in accordance with Commissioner Policy CP-43 (November 2009). Details of the decommissioning are provided below.

This PRR and the associated inspections form have been completed for the post-remedial activities at the Site for the June 24, 2016 to August 31, 2019 reporting period.

1.1 Site Background

The Site encompasses approximately 0.27 acres property that was redeveloped as part of a larger commercial retail operation (Family Dollar) in the City of Buffalo, New York (see Figure 1). The Site was formerly comprised of two separate adjoining tax parcels which were historically used as a filling station and automobile service operation. Those historic operations impacted on-Site soil and groundwater.

1.2 Remedial History

1093 Group, LLC a related entity, entered into a Brownfield Cleanup Agreement (BCA) (Index #B9-0759-07-11, Site #C915223) with the New York State Department of Environmental Conservation (NYSDEC) in October 2008. 1093 Group, LLC completed the investigation and remediation of the Site under the supervision of the NYSDEC and NYSDOH.

The Remedial Investigation/Interim Remedial Measures (RI/IRM) Work Plan was approved by the NYSDEC on November 18, 2008. Remedial activities were performed at the Site between February and July 2009. The remedial program was successful in achieving the remedial objectives for the Site, and the Site Management Plan (SMP) and Final Engineering Report (FER) were approved by the Department in December 2009. The NYSDEC issued a COC for the Site on December 24, 2009.

1.3 Compliance

At the time of the Site inspection, the Site was fully compliant with the Department's approved SMP.

1.4 Recommendations

No modifications to the current SMP are recommended at this time.

2.0 SITE OVERVIEW

The Niagara Street and Pennsylvania Avenue Site (Site) is located in the City of Buffalo, County of Erie, New York and is addressed at 517 Niagara Street (SBL# 110.27-5-1.1) on the Erie County Tax Map. The Site is located on the southeast corner of Niagara Street and Pennsylvania Avenue, and bordered by Reynolds Alley, Pennsylvania Avenue, and Niagara Street.

The remedial activities were completed from February through July 2009. The remedial activities included:

- Demolition of the former service station building and product dispenser canopy;
- Removal of five (5) underground storage tanks (USTs), including associated dispensing units and underground product piping. Extraction and off-site disposal of residual product/water mixture from the USTs and the in-ground lift.
- Excavation of petroleum-impacted soil/fill followed by off-site transportation and disposal at a commercial landfill.
- Excavation and disposal of surface soil/fill with slightly elevated SVOCs (above restricted-residential SCOs) across the southeast portion of the Site. That material was also transported off-Site and disposed of at a commercial landfill.
- Extraction and treatment of groundwater from the excavation during remediation activities.
- Placement and compaction of backfill.

Remedial activities were completed in July 2009. The FER and SMP for the Site were approved by the Department in December 2009. The COC was issued for the Site on December 24, 2009.

3.0 REMEDY PERFORMANCE

The completed remedial measures, as identified above, and more fully detailed in the FER, removed the former UST system and petroleum impacted on-Site soil/fill to the property boundary along Niagara Street and Pennsylvania Avenue, and/or achieved a Track 2 Restricted Residential Use cleanup. Redevelopment activities included the construction of a new commercial building (see Figure 2 and photolog).

Post-remedial monitoring has been completed at the Site in accordance with the SMP (2009). The Site inspection including a walk-over of the entire BCP Site to visually observe and document the use of the Site, restriction of groundwater use, and conformance with the Site Management Plan (SMP). Cessation of groundwater monitoring was approved by the Department in 2016, and the groundwater monitoring wells were decommissioning in general accordance with the NYSDEC CP-43 guidelines in 2019.

The 2016-2019 site inspection indicates that the controls are in-place and functioning as intended in accordance with the SMP. The completed IC/EC Certification form and site photographs are included in Appendix A and Appendix B, respectively.

4.0 SITE MANAGEMENT PLAN

The Niagara Street and Pennsylvania Avenue Site post-remedial SMP was approved by the NYSDEC in December 2009. The SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Institutional Controls; and, (2) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

A brief description of these SMP components is presented below.

4.1 Institutional Control Plan

As a requirement of the SMP a series of Institutional Controls are required to (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface; and, (2) limit the land use and development of the Site to restricted-residential use or more restricted uses (i.e., commercial or industrial).

4.1.1 Excavation Work Plan

The Excavation Work Plan, which is included within the approved-SMP for the Site, provides guidelines for the management of soil and fill material during any future intrusive activities.

No intrusive activities were completed during this reporting period.

4.1.2 Site Land Use

The Site is currently utilized as a commercial retail operation and is in compliance with the Site's land use criteria (restricted-residential use).

4.2 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines the requirements for the Site, to certify and attest that the institutional controls and/or engineering controls employed at the Site are unchanged from the previous certification. The Annual Certification will primarily consist of an annual Site Inspection to complete the auto generated NYSDEC

Institutional and Engineering Controls (IC/EC) Certification Form. The site inspection will verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- 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.
- Access is available to the Site to evaluate continued maintenance of such controls.

The 2019 Site Inspection was completed by TurnKey personnel on August 29, 2019. At the time of the inspection, the property was being used as a commercial retail operation (Family Dollar), with surface parking, paved walkways and landscaped areas. No observable indication of intrusive activities was noted during the Site Inspection. The Site is on municipal water supply, and no observable use of groundwater was noted during the site inspection.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A. A photolog of the site inspection is included in Appendix B.

4.3 Engineering and Institutional Control Requirements and Compliance

As detailed in the Environmental Easements, several Institutional Controls (ICs) need to be maintained as a requirement of the BCA for the Site.

4.3.1 Engineering Controls

No engineering controls are required for the Site.

4.3.2 Institutional Controls

- Groundwater-Use Restriction – the use of groundwater for potable and non-potable purposes is prohibited; and
- Land-Use Restriction: The controlled property may be used for restricted-residential, commercial and/or industrial use; and,
- Implementation of the SMP.

5.0 WELL DECOMMISSIONING

Well decommissioning was completed on August 29th, 2019 with TREC Environmental Inc. providing drilling services, and TurnKey personnel providing oversight and documentation of the decommissioning. The groundwater well decommissioning was completed in general accordance with the Department's CP-43 guidelines.

Decommissioning activities included the six (6) wells, identified as MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6. Wells were grouted in place while removing the riser and road box to the extent practical, and grouting the well and void space of the former roadbox with concrete grout. Surfaces were finished with either asphalt patch or surrounding soil and landscaping materials, based on the surrounding surface condition for each well location. Photos of the decommissioning activities are included in the Photolog provided in Appendix B and well decommissioning logs are provided in Appendix C.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are as follows:

- Based on the site inspections, the Site was in compliance with the Site Management Plan.

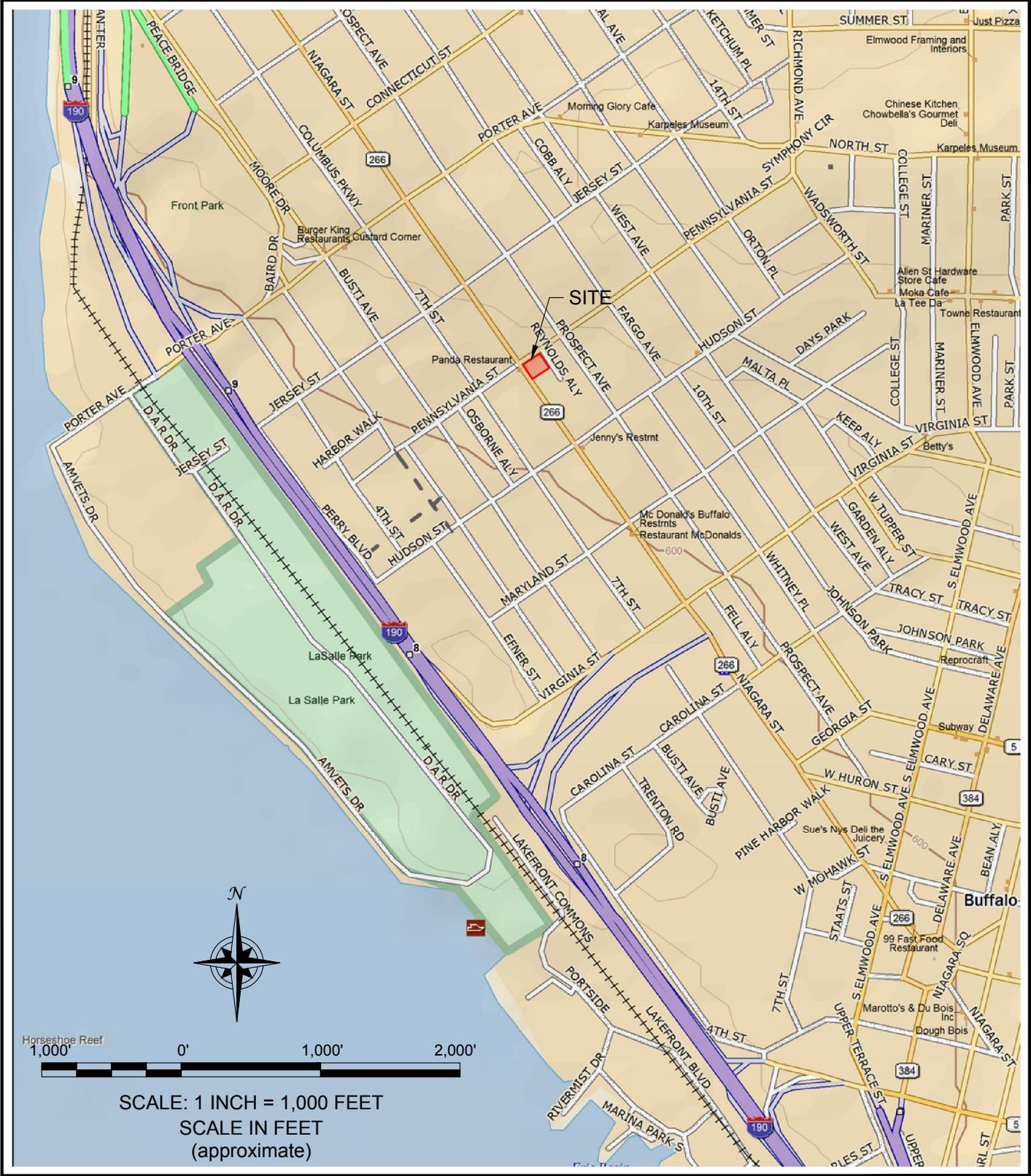
7.0 DECLARATION/LIMITATION

TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering and Science, PLLC, personnel conducted the annual site inspections for Brownfield Cleanup Program Site No. C915223, located in Buffalo, New York, according to generally accepted practices. This report complied with the scope of work provided to 1093 Group, LLC by TurnKey Environmental Restoration, LLC.

This report has been prepared for the exclusive use of 1093 Group, LLC. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of 1093 Group, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

FIGURES

FIGURE 1



SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

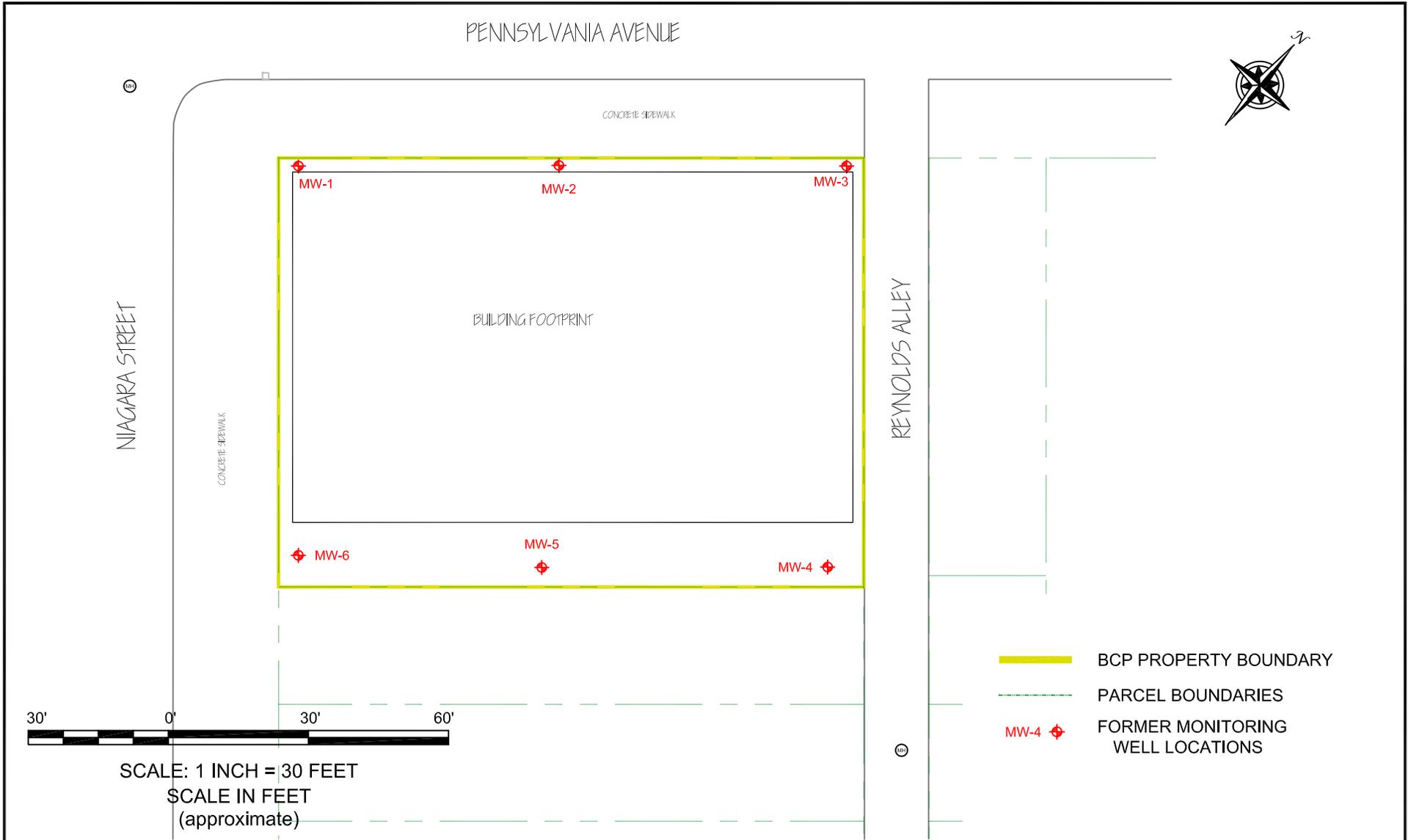
NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
 BCP SITE No. C915223
 BUFFALO, NEW YORK

PREPARED FOR
 1093 GROUP, LLC



2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0635

PROJECT NO.: 0136-013-010
DATE: SEPTEMBER 2019
DRAFTED BY: CEH



TURNKEY
ENVIRONMENTAL
RESTORATION, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 858-0635

PROJECT NO.: 0136-002-600

DATE: SEPTEMBER 2019

DRAFTED BY: CEH

SITE PLAN AND FORMER MONITORING WELL LOCATIONS
PERIODIC REVIEW REPORT

NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
BCP SITE No. C915223
BUFFALO, NEW YORK
PREPARED FOR
1093 GROUP, LLC

FIGURE 2

APPENDIX A

INSTITUTIONAL CONTROLS 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. C915223		
Site Name Niagara Street and Pennsylvania Avenue Site		
Site Address: 517 Niagara Street	Zip Code: 14201	
City/Town: Buffalo		
County: Erie		
Site Acreage: 0.3		
Reporting Period: June 24, 2016 to August 31, 2019 June 24, 2016 to August 31, 2019		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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

Box 2A

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? YES NO

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? YES NO

(The Qualitative Exposure Assessment must be certified every five years)

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915223 **Box 3**

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
110.27-5-1.1	1093 Group, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan - DEC Approved Cessation of Groundwater Monitoring Site Management Plan IC/EC Plan

No engineering controls. Institutional controls include an Environmental Easement (EE), and a Site Management Plan, Ground Water Monitoring Plan, and periodic certification. EE restricts site to "restricted residential" use, ground water is prohibited for consumptive use, and SMP is required.

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

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. C915223

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 William Paladino at 295 Main St, St 210, Buffalo NY
print name print business address 14203

am certifying as Manager of 1093 Group, LLC (Owner or Remedial Party)

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

William Paladino Manager
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

10/3/19
Date

APPENDIX B

SITE PHOTOGRAPH LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Subject Property (Looking north along Niagara Street)

Photo 2: Subject Property (Parking area – looking northeast from Niagara Street)

Photo 3: Subject Property (Rear parking area – looking northeast)

Photo 4: Subject Property (Rear parking Area – looking south from Pennsylvania Avenue)

Niagara Street and Pennsylvania Avenue Site
Buffalo, New York
August 29, 2019



SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: Subject Property (looking east along Pennsylvania Avenue)

Photo 6: Subject Property (looking south along Niagara Street)

Photo 7: PVC well pipe and metal casing being removed from MW-4

Photo 8: Preparation of grout for well decommissioning.

Niagara Street and Pennsylvania Avenue Site
Buffalo, New York
August 29, 2019



SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 9: Example of well casing and former roadbox void grouted with concrete.

Photo 10: Example of surface asphalt patch after grouting well casing.

Photo 11: Example of well casing and former road box void grouted with concrete in grass landscaped areas.

Photo 12: Example of final surface cover in grass landscape areas after grouting well casing.

Niagara Street and Pennsylvania Avenue Site
Buffalo, New York
August 29, 2019



APPENDIX C

WELL DECOMMISSIONING LOGS



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <u>517 Niagara Street</u>	WELL I.D.: <u>MW-1</u>
Client: <u>Ellicott Development</u>	Stick-up (feet): <u>4</u>
Project Job Number: <u>0136-002-600</u>	Screen Interval (fbgs): <u>8-17.5'</u>
Date: <u>8-29-19</u>	Drilling Company:
Weather: <u>69°F Mostly Sunny</u>	Drill Rig Type:
Prepared by: <u>CEH</u>	Drilling Company Personnel:

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

<p>Well visible? (If not, provide directions below)</p> <p>Well I.D. visible?</p> <p>Well location matches site map? (If not, sketch actual location on back)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">YES</th> <th style="width: 50%;">NO</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>	YES	NO	X			X	X			
YES	NO										
X											
	X										
X											
<p>Well I.D. as it appears on protective casing or well:</p>											
<p>Surface seal present?</p> <p>Surface seal competent? (If cracked, heaved, etc., describe below)</p> <p>Protective casing in good condition? (If damaged, describe below)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>	X		X		X					
X											
X											
X											
<p>Headspace reading (ppm) and instrument used: <u>N/A</u></p> <p>Type of protective casing and height of stickup in feet (if applicable): <u>Flush to ground</u></p> <p>Protective casing material type: <u>metal</u></p> <p>Measure protective casing inside diameter (inches): <u>0.50'</u></p>											
<p>Lock present?</p> <p>Lock functional?</p> <p>Did you replace the lock?</p> <p>Is there evidence that the well is double cased? (If yes, describe below)</p> <p>Well measuring point visible?</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td></td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>		X		-		-			X	
	X										
	-										
	-										
X											
<p>Measure depth to water from measuring point (feet): <u>5.40'</u></p> <p>Measure well depth from measuring point (feet): <u>17.99'</u></p> <p>Measure well diameter (inches): <u>2"</u></p> <p>Well casing material: <u>PVC</u></p> <p>Physical condition of visible well casing: <u>good</u></p> <p>Attach I.D. marker (if well I.D. is confirmed) and identify marker type:</p> <p>Proximity to underground or overhead utilities:</p>											
<p>Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.</p> <p><u>Approx. less than one foot away from building.</u></p>											
<p>Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <u>in grass lawn</u></p>											
<p>Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.)</p> <p><u>None</u></p>											
<p>Remarks:</p>											



WELL ABANDONMENT/ DECOMMISSIONING LOG

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10) - continued

PROJECT/SITE NAME: 517 Niagara Street WELL I.D.: MW-1

Decommissioning Data (Fill in all that apply)

Well Schematic*

Overdrilling

Interval Drilled _____
 Drilling Method(s) _____
 Borehole Diameter (in.) _____
 Temp. Casing Installed? (Y/N) _____
 Depth temp. casing installed _____
 Casing type/diam (in.) _____
 Method of Installation _____

Casing Pulling

Method employed _____
 Casing retrieved (feet) _____
 Casing type/diam. (in.) _____

Casing Perforating

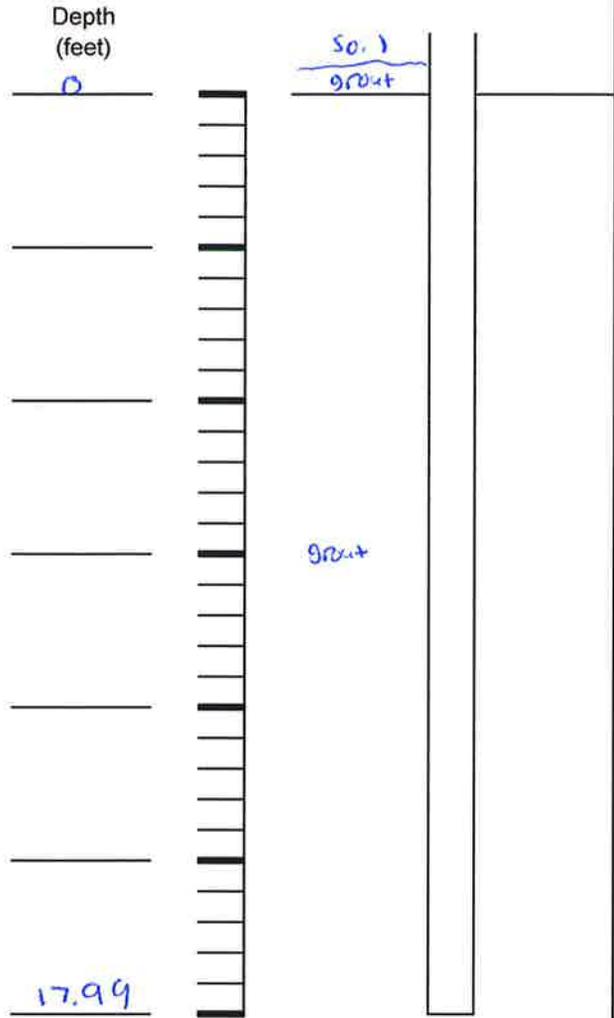
Equipment used _____
 Number of perforations/foot _____
 Size of perforations _____
 Interval perforated _____

Grouting

Interval grouted (fbgs) 0-17.99'
 No. of batches prepared 1
 For each batch record:
 Quantity of water used (gal.) 8 gal
 Quantity of cement used (lbs.) 94 lb bag
 Cement type Portland
 Quantity of bentonite used (lbs.) 0.5'
 Quantity of calcium chloride used (lbs.) _____
 Volume of grout prepared (gal.) _____
 Volume of grout used (gal.) _____

Comments

Grouted in place, well below ground no. 5' surface,



* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor: _____

Department Rep.: _____



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <i>517 Niagara Street</i>	WELL I.D.: <i>MW-2</i>
Client: <i>Ellicott Development</i>	Stick-up (feet): <i>-</i>
Project Job Number: <i>0136-002-600</i>	Screen Interval (fbgs): <i>8-17.5'</i>
Date: <i>8-29-19</i>	Drilling Company:
Weather: <i>Mostly Sunny</i>	Drill Rig Type:
Prepared by: <i>CEH</i>	Drilling Company Personnel:

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

Well visible? (If not, provide directions below)		YES	NO
Well I.D. visible?			X
Well location matches site map? (If not, sketch actual location on back)	X		
Well I.D. as it appears on protective casing or well:			
Surface seal present?		X	
Surface seal competent? (If cracked, heaved, etc., describe below)		X	
Protective casing in good condition? (If damaged, describe below)		X	
Headspace reading (ppm) and instrument used: <i>N/A</i>			
Type of protective casing and height of stickup in feet (if applicable): <i>0.10'</i>			
Protective casing material type: <i>metal</i>			
Measure protective casing inside diameter (inches): <i>0.50'</i>			
Lock present?			X
Lock functional?			-
Did you replace the lock?			-
Is there evidence that the well is double cased? (If yes, describe below)			
Well measuring point visible?	X		
Measure depth to water from measuring point (feet): <i>12.97</i>			
Measure well depth from measuring point (feet): <i>15.65</i>			
Measure well diameter (inches): <i>2"</i>			
Well casing material: <i>PVC</i>			
Physical condition of visible well casing: <i>good</i>			
Attach I.D. marker (if well I.D. is confirmed) and identify marker type:			
Proximity to underground or overhead utilities:			
Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.			
<i>close to building and in landscaping. Approx. 1 Foot away from building.</i>			
Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <i>in landscaping</i>			
Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.)			
<i>NONE</i>			
Remarks: <i>well located in landscaping proximate small pine tree and bush</i>			



WELL ABANDONMENT/ DECOMMISSIONING LOG

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10) - continued

PROJECT/SITE NAME: 517 Niagara Street WELL I.D.: MW-2

Decommissioning Data (Fill in all that apply)

Well Schematic*

Overdrilling

Interval Drilled _____
 Drilling Method(s) _____
 Borehole Diameter (in.) _____
 Temp. Casing Installed? (Y/N) _____
 Depth temp. casing installed _____
 Casing type/diam (in.) _____
 Method of Installation _____

Casing Pulling

Method employed by -
 Casing retrieved (feet) -
 Casing type/diam. (in.) 2 in

Casing Perforating

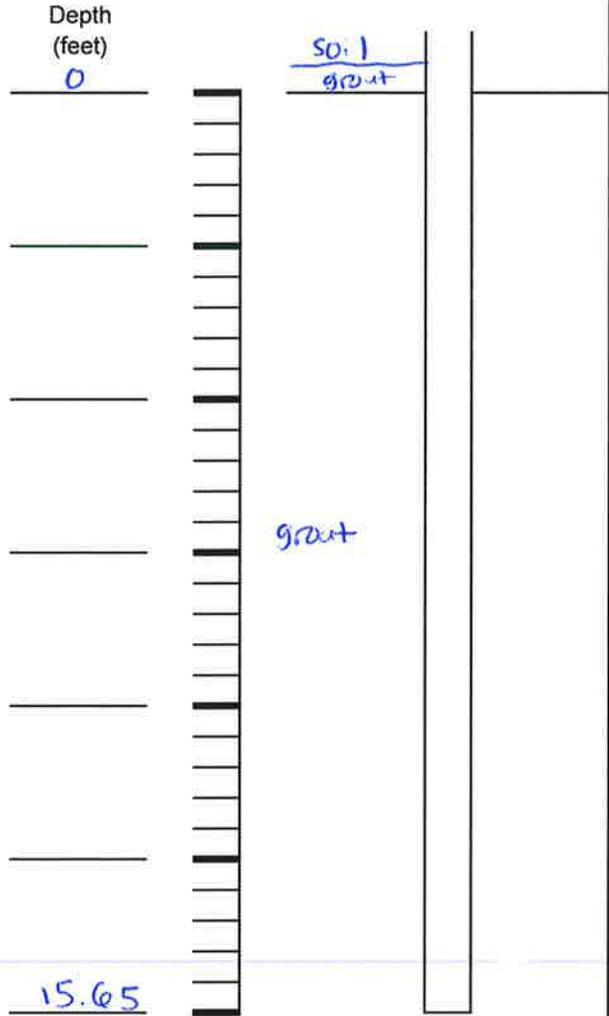
Equipment used _____
 Number of perforations/foot _____
 Size of perforations _____
 Interval perforated _____

Grouting

Interval grouted (fbgs) 0 - 15.65'
 No. of batches prepared 1
 For each batch record:
 Quantity of water used (gal.) 8 gal
 Quantity of cement used (lbs.) 94 lbs
 Cement type Portland
 Quantity of bentonite used (lbs.) 0.5
 Quantity of calcium chloride used (lbs.) _____
 Volume of grout prepared (gal.) _____
 Volume of grout used (gal.) _____

Comments

Well Below grade ~~underground~~ left in place and grouted.



* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor: _____

Department Rep.: _____



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <u>517 Niagara Street</u>	WELL I.D.: <u>MW-3</u>
Client: <u>Ellicott Development</u>	Stick-up (feet): <u>-</u>
Project Job Number: <u>0136-002-600</u>	Screen Interval (fbgs): <u>8-17.5</u>
Date: <u>8-29-19</u>	Drilling Company:
Weather: <u>64°F Mostly Sunny</u>	Drill Rig Type:
Prepared by: <u>CEH</u>	Drilling Company Personnel:

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

<p>Well visible? (If not, provide directions below)</p> <p>Well I.D. visible?</p> <p>Well location matches site map? (If not, sketch actual location on back)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">YES</th> <th style="width: 50%;">NO</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">N</td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>	YES	NO	X	N		X	X			
YES	NO										
X	N										
	X										
X											
<p>Well I.D. as it appears on protective casing or well:</p>											
<p>Surface seal present?</p> <p>Surface seal competent? (If cracked, heaved, etc., describe below)</p> <p>Protective casing in good condition? (If damaged, describe below)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>	X			X	X					
X											
	X										
X											
<p>Headspace reading (ppm) and instrument used: <u>N/A</u></p> <p>Type of protective casing and height of stickup in feet (if applicable): <u>Metal, 0.4'</u></p> <p>Protective casing material type: <u>metal</u></p> <p>Measure protective casing inside diameter (inches): <u>0.50'</u></p>											
<p>Lock present?</p> <p>Lock functional?</p> <p>Did you replace the lock?</p> <p>Is there evidence that the well is double cased? (If yes, describe below)</p> <p>Well measuring point visible?</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td></td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>		X		-		-			X	
	X										
	-										
	-										
X											
<p>Measure depth to water from measuring point (feet): <u>6.78'</u></p> <p>Measure well depth from measuring point (feet): <u>17.75'</u></p> <p>Measure well diameter (inches): <u>2"</u></p> <p>Well casing material: <u>PVC</u></p> <p>Physical condition of visible well casing: <u>good</u></p> <p>Attach I.D. marker (if well I.D. is confirmed) and identify marker type:</p> <p>Proximity to underground or overhead utilities:</p>											
<p>Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.</p> <p><u>close to building, less than one foot away</u></p>											
<p>Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <u>In grass lawn</u></p>											
<p>Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.)</p> <p><u>None</u></p>											
<p>Remarks: <u>appears well was hit by vehicle or mower. Well protective metal casing pushed to the side.</u></p>											



WELL ABANDONMENT/ DECOMMISSIONING LOG

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10) - continued

PROJECT/SITE NAME: 517 Niagara street WELL I.D.: MW-3

Decommissioning Data (Fill in all that apply)

Well Schematic*

Overdrilling

Interval Drilled _____
 Drilling Method(s) _____
 Borehole Diameter (in.) _____
 Temp. Casing Installed? (Y/N) _____
 Depth temp. casing installed _____
 Casing type/diam (in.) _____
 Method of Installation _____

Casing Pulling

Method employed Twist off 3.5' of casing
 Casing retrieved (feet) 3.5'
 Casing type/diam. (in.) 2 in

Casing Perforating

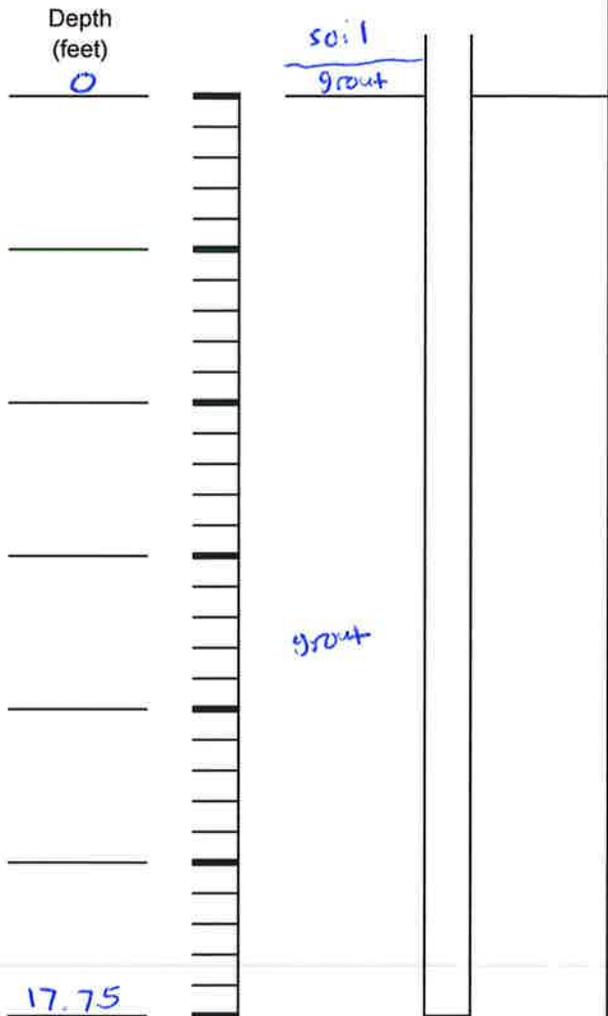
Equipment used _____
 Number of perforations/foot _____
 Size of perforations _____
 Interval perforated _____

Grouting

Interval grouted (fbgs) 0-17.75'
 No. of batches prepared 2
 For each batch record:
 Quantity of water used (gal.) 8 gallons
 Quantity of cement used (lbs.) 94 lb bags
 Cement type Portland
 Quantity of bentonite used (lbs.) 0.5'
 Quantity of calcium chloride used (lbs.) _____
 Volume of grout prepared (gal.) _____
 Volume of grout used (gal.) _____

Comments

Removed metal protective casing and grouted in place



* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor: _____

Department Rep.: _____



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <u>517 Niagara Street</u>	WELL I.D.: <u>MW-4</u>
Client: <u>Ellicott Development</u>	Stick-up (feet): <u>-</u>
Project Job Number: <u>T0136-CO2-600</u>	Screen Interval (fbgs): <u>8-17.5'</u>
Date: <u>3-29-19</u>	Drilling Company: <u>Trec Environmental</u>
Weather: <u>69°F Mostly Sunny</u>	Drill Rig Type:
Prepared by: <u>CEH</u>	Drilling Company Personnel: <u>Shone, Eric, Steve</u>

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

Well visible? (If not, provide directions below)	YES	NO
Well I.D. visible?	<input checked="" type="checkbox"/>	
Well location matches site map? (If not, sketch actual location on back)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Well I.D. as it appears on protective casing or well:		
Surface seal present?	<input checked="" type="checkbox"/>	
Surface seal competent? (If cracked, heaved, etc., describe below)	<input checked="" type="checkbox"/>	
Protective casing in good condition? (If damaged, describe below)	<input checked="" type="checkbox"/>	
Headspace reading (ppm) and instrument used: <u>N/A</u>		
Type of protective casing and height of stickup in feet (if applicable): <u>Flush</u>		
Protective casing material type: <u>Metal</u>		
Measure protective casing inside diameter (inches): <u>0.50'</u>		
Lock present?		<input checked="" type="checkbox"/>
Lock functional?		<input type="checkbox"/>
Did you replace the lock?		<input type="checkbox"/>
Is there evidence that the well is double cased? (If yes, describe below)		<input type="checkbox"/>
Well measuring point visible?	<input checked="" type="checkbox"/>	
Measure depth to water from measuring point (feet): <u>4.95</u>		
Measure well depth from measuring point (feet): <u>17.14</u>		
Measure well diameter (inches): <u>2"</u>		
Well casing material: <u>PVC</u>		
Physical condition of visible well casing: <u>good</u>		
Attach I.D. marker (if well I.D. is confirmed) and identify marker type:		
Proximity to underground or overhead utilities: <u>storm water drain located approximately approx. 4 feet - 5 feet East of well</u>		
Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.		
Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <u>asphalt parking lot</u>		
Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.) <u>None</u>		
Remarks:		



WELL ABANDONMENT/ DECOMMISSIONING LOG

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10) - continued

PROJECT/SITE NAME: 517 Niagara Street WELL I.D.: MW-4

Decommissioning Data (Fill in all that apply)

Well Schematic*

Overdrilling

Interval Drilled _____
 Drilling Method(s) _____
 Borehole Diameter (in.) _____
 Temp. Casing Installed? (Y/N) _____
 Depth temp. casing installed _____
 Casing type/diam (in.) _____
 Method of Installation _____

Casing Pulling

Method employed Twisted off top 3 feet
 Casing retrieved (feet) 3 feet
 Casing type/diam. (in.) 2 inches

Casing Perforating

Equipment used _____
 Number of perforations/foot _____
 Size of perforations _____
 Interval perforated _____

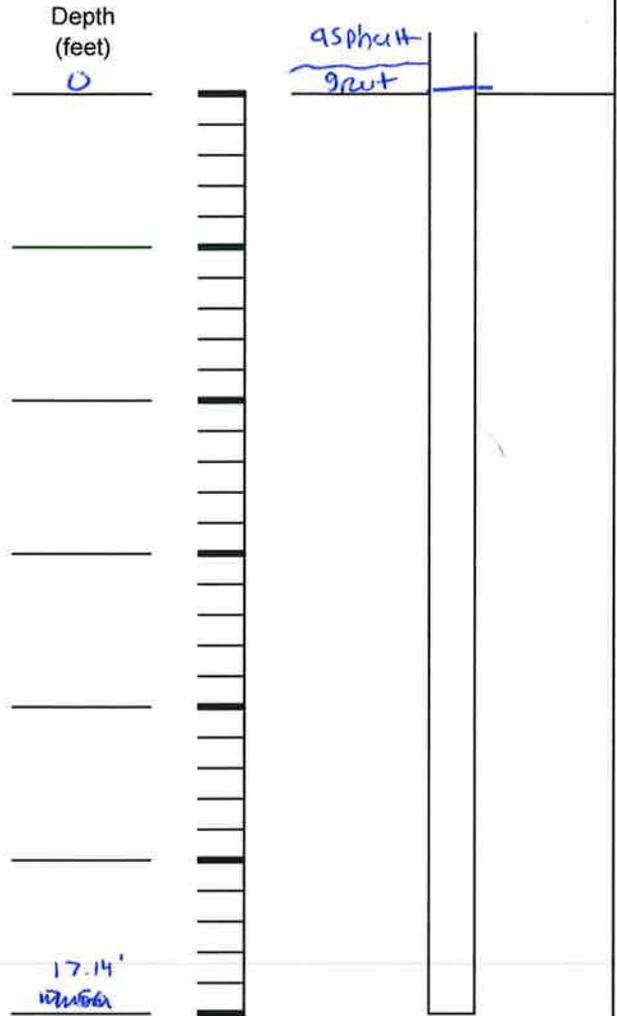
Grouting

Interval grouted (fbgs) 0 - 17.14'
 No. of batches prepared 1
 For each batch record:
 Quantity of water used (gal.) approximately 8 gallons
 Quantity of cement used (lbs.) 1 94 lbs bag
 Cement type Portland
 Quantity of bentonite used (lbs.) _____
 Quantity of calcium chloride used (lbs.) _____
 Volume of grout prepared (gal.) _____
 Volume of grout used (gal.) _____

Comments

Removed metal protective casing and grouted in place.

Asphalt placed on top of grout to get to grade with parking lot.



* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor: _____

Department Rep.: _____



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <u>517 Niagara Street</u>	WELL I.D.: <u>MW-5</u>
Client: <u>Ellicott Development</u>	Stick-up (feet): <u>-</u>
Project Job Number: <u>0136-002-600</u>	Screen Interval (fbgs): <u>8-17.5'</u>
Date: <u>8-29-19</u>	Drilling Company:
Weather: <u>69°F Mostly Sunny</u>	Drill Rig Type:
Prepared by: <u>LEH</u>	Drilling Company Personnel:

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

<p>Well visible? (If not, provide directions below)</p> <p>Well I.D. visible?</p> <p>Well location matches site map? (If not, sketch actual location on back)</p> <p>Well I.D. as it appears on protective casing or well:</p> <p>Surface seal present?</p> <p>Surface seal competent? (If cracked, heaved, etc., describe below)</p> <p>Protective casing in good condition? (If damaged, describe below)</p> <p>Headspace reading (ppm) and instrument used: <u>N/A</u></p> <p>Type of protective casing and height of stickup in feet (if applicable): <u>Flush</u></p> <p>Protective casing material type: <u>Metal</u></p> <p>Measure protective casing inside diameter (inches): <u>0.50'</u></p> <p>Lock present?</p> <p>Lock functional?</p> <p>Did you replace the lock?</p> <p>Is there evidence that the well is double cased? (If yes, describe below)</p> <p>Well measuring point visible?</p> <p>Measure depth to water from measuring point (feet): <u>4.45</u></p> <p>Measure well depth from measuring point (feet): <u>16.68</u></p> <p>Measure well diameter (inches): <u>2</u></p> <p>Well casing material: <u>PVC</u></p> <p>Physical condition of visible well casing: <u>good</u></p> <p>Attach I.D. marker (if well I.D. is confirmed) and identify marker type:</p> <p>Proximity to underground or overhead utilities:</p> <p>Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.</p> <p>Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <u>Asphalt parking lot</u></p> <p>Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.)</p> <p><u>None</u></p> <p>Remarks:</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 50%;">YES</th> <th style="width: 50%;">NO</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>u</td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td>X</td> <td></td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <tr> <td style="width: 50%;">X</td> <td style="width: 50%;"></td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <tr> <td style="width: 50%;"></td> <td style="width: 50%;">X</td> </tr> <tr> <td></td> <td>-</td> </tr> <tr> <td></td> <td>-</td> </tr> <tr> <td></td> <td>u</td> </tr> <tr> <td>X</td> <td></td> </tr> </tbody> </table>	YES	NO	X	u		X	X		X		X		X			X		-		-		u	X	
YES	NO																								
X	u																								
	X																								
X																									
X																									
X																									
X																									
	X																								
	-																								
	-																								
	u																								
X																									



WELL ABANDONMENT/ DECOMMISSIONING LOG

PROJECT INFORMATION	WELL INFORMATION
PROJECT/SITE NAME: <i>517 Niagara Street</i>	WELL I.D.: <i>mw-6</i>
Client: <i>Ellicott Development</i>	Stick-up (feet): <i>-</i>
Project Job Number: <i>0136-002-600</i>	Screen Interval (fbgs): <i>8-17.5'</i>
Date: <i>8-29-19</i>	Drilling Company:
Weather: <i>69° E Mostly Sunny</i>	Drill Rig Type:
Prepared by: <i>CEH</i>	Drilling Company Personnel:

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10)

Well visible? (If not, provide directions below)		YES	NO
Well I.D. visible?		<input checked="" type="checkbox"/>	
Well location matches site map? (If not, sketch actual location on back)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Well I.D. as it appears on protective casing or well:			
Surface seal present?			<input checked="" type="checkbox"/>
Surface seal competent? (If cracked, heaved, etc., describe below)			<input checked="" type="checkbox"/>
Protective casing in good condition? (If damaged, describe below)	<input checked="" type="checkbox"/>		
Headspace reading (ppm) and instrument used: <i>N/A</i>			
Type of protective casing and height of stickup in feet (if applicable): <i>0.15'</i>			
Protective casing material type: <i>pvc</i>			
Measure protective casing inside diameter (inches): <i>0.50</i>			
Lock present?			<input checked="" type="checkbox"/>
Lock functional?			<input type="checkbox"/>
Did you replace the lock?			<input type="checkbox"/>
Is there evidence that the well is double cased? (If yes, describe below)			
Well measuring point visible?	<input checked="" type="checkbox"/>		
Measure depth to water from measuring point (feet): <i>8.18</i>			
Measure well depth from measuring point (feet): <i>17.01</i>			
Measure well diameter (inches): <i>2"</i>			
Well casing material: <i>pvc</i>			
Physical condition of visible well casing: <i>good</i>			
Attach I.D. marker (if well I.D. is confirmed) and identify marker type:			
Proximity to underground or overhead utilities:			
Describe access to well: (Include accessibility to truck mounted rig, natural obstructions, overhead utilities, proximity to permanent structures, etc.); Add sketch of location on back, if necessary.			
<i>In landscaping bed with bush and other plants.</i>			
Describe well setting (for example, located in a field, in a playground, on pavement, in a garden, etc.) and assess the type of restoration required. <i>In landscaping bed</i>			
Identify any nearby potential sources of contamination, if present (e.g., gas station, salt pile, etc.)			
<i>None, J-plug intact and in good condition</i>			
Remarks:			



WELL ABANDONMENT/ DECOMMISSIONING LOG

DECOMMISSIONING PROCEDURES (per NYSDEC DER-10) - continued

PROJECT/SITE NAME: 517 Niagara Street

WELL I.D.: MW-6

**Decommissioning Data
(Fill in all that apply)**

Well Schematic*

Overdrilling

- Interval Drilled _____
- Drilling Method(s) _____
- Borehole Diameter (in.) _____
- Temp. Casing Installed? (Y/N) _____
- Depth temp. casing installed _____
- Casing type/diam. (in.) _____
- Method of Installation _____

Casing Pulling

- Method employed —
- Casing retrieved (feet) —
- Casing type/diam. (in.) 2 in

Casing Perforating

- Equipment used _____
- Number of perforations/foot _____
- Size of perforations _____
- Interval perforated _____

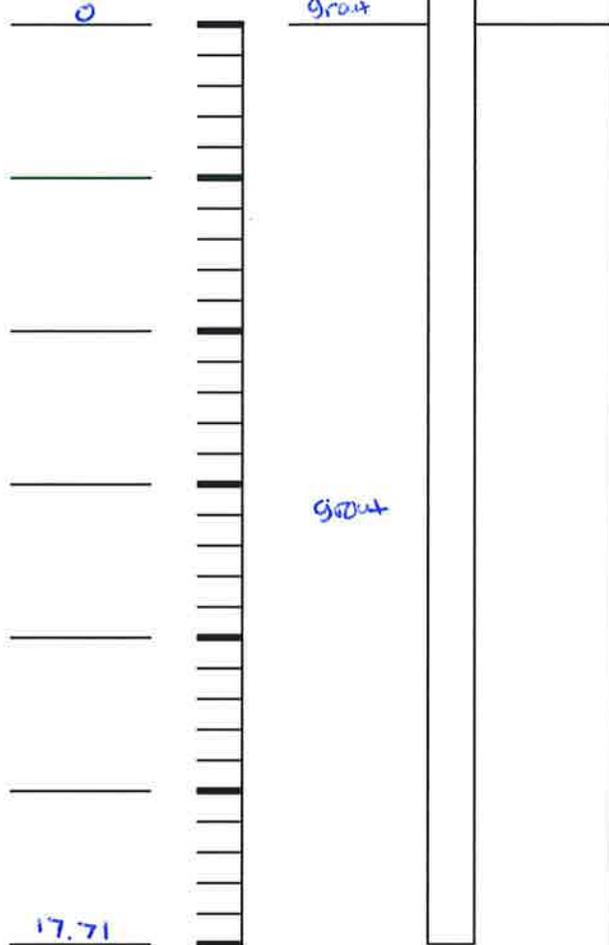
Grouting

- Interval grouted (fbgs) 0 - 17.71
- No. of batches prepared 1
- For each batch record:
 - Quantity of water used (gal.) 8 gal
 - Quantity of cement used (lbs.) 94 lb bag
 - Cement type Portland
 - Quantity of bentonite used (lbs.) 0.5
 - Quantity of calcium chloride used (lbs.) _____
 - Volume of grout prepared (gal.) _____
 - Volume of grout used (gal.) _____

Comments

Removed PVC outer casing and grouted in place, well casing more than one foot below ground so left in place

Depth (feet)



* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor: _____

Department Rep.: _____