

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8  
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April 24, 2020

Klauss Rekitt  
c/o Ronald Hull, Esq.  
Heisman Nunes & Hull, LLP  
69 Cascade Drive, Suite 102  
Rochester, New York 14614

**Re: Ex-Eaton Site (#C819022)  
22-40 Clinton Street, Batavia, Genesee County  
2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan  
April 13, 2020**

Dear Mr. Rekitt;

The New York State Departments of Environmental Conservation (NYSDEC) and Health (collectively referred to as the Departments) have completed their review of the document entitled *"2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan"* (the Work Plan) dated April 13, 2020 and prepared by GHD for the Ex-Eaton site. In accordance with 6 NYCRR Part 375-1.6, the Departments have determined that the Work Plan substantially addresses the requirements of the Brownfield Cleanup Program. With the following modifications, the Work Plan is hereby approved.

1. Section 4.2.3, Groundwater samples will be collected in accordance with current DER guidance.
2. The approved Master Schedule dated February 5, 2020 will be adhered to as part of the Work Plan. The schedule is enforceable under the Brownfield Cleanup Agreement and is not 'anticipated'. Extensions to the approved schedule must be requested in writing and approved by the NYSDEC.
3. In accordance with DER 10 Chapter 1.9(a), the HASP is required for any person to conduct investigation or remediation activities at a site and is adhered to by all personnel involved in these activities. The HASP is a requirement of the federal Occupational Safety and Health Administration (OSHA) and is not subject to the approval of NYSDEC.

With the understanding that these modifications are agreed to, the Work Plan is



Department of  
Environmental  
Conservation

hereby approved. If you choose not to accept these modifications, you are required to notify this office within 15 days after receipt of this letter and prior to the start of field activities. In this event, I suggest a meeting be scheduled to discuss your concerns prior to the end of this period.

Please notify me at least 7 days in advance of the start of field activities.

By May 29, 2020, please attach a copy of this letter to the Work Plan and distribute the approved Work Plan as follows:

- Tasha Mumbrue (1 hard copy with an original signature);
- Julia Kenney (NYSDOH, electronic file/CD)
- The document repository at the Richmond Memorial Library, located at 19 Ross Street, Batavia, NY14020 (1 bound hard copy).

If you have questions or concerns, please contact me at (585) 226-5459 or [tasha.mumbrue@dec.ny.gov](mailto:tasha.mumbrue@dec.ny.gov).

Sincerely,



Tasha Mumbrue  
Geologist Trainee

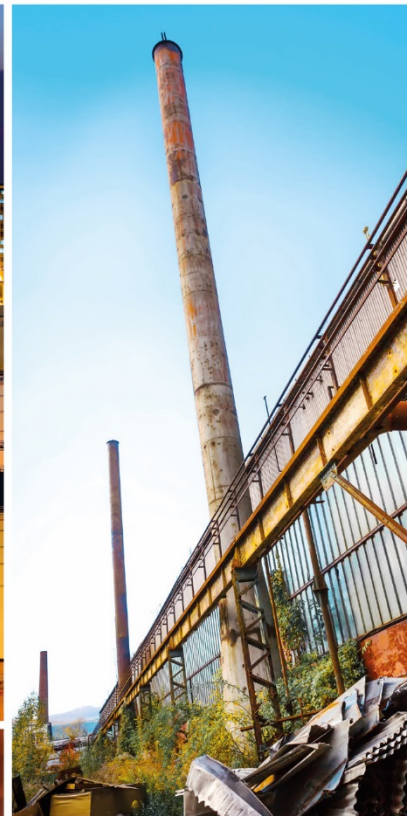
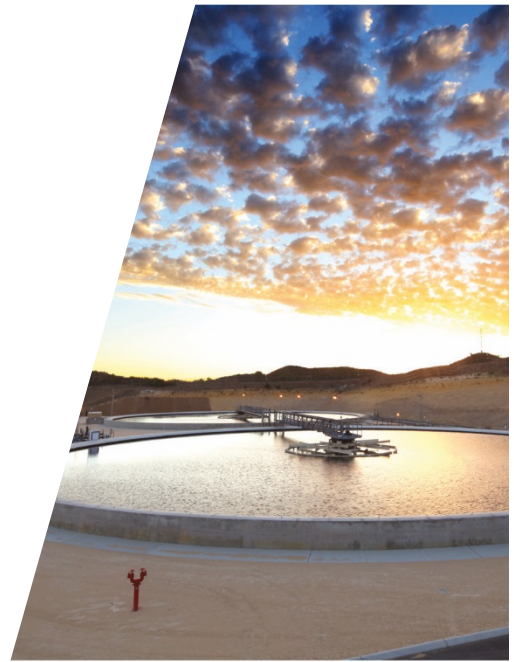
cc: Ronald Hull, HNH LLP  
Dennis Hoyt, GHD  
Margaret Popek, GHD  
Julia Kenney, NYSDOH  
Justin Deming, NYSDOH  
Michael Cruden, NYSDEC  
David Pratt, NYSDEC  
Frank Sowers, NYSDEC  
Lisa Schwartz, NYSDEC



# **2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan**

Ex-Eaton Site  
34-40 Clinton Street  
Batavia, New York  
Site No. C819022

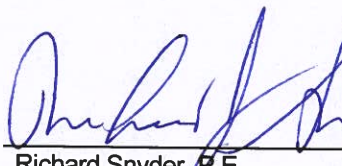
CNH Industrial Baumaschinen GmbH  
Berlin, Germany





## Certification Statement

I Richard J. Snyder certify that I am currently a New York State (NYS) registered professional engineer or Qualified Environmental Professional as in defined in 6NYCRR Part 375 and that this Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

  
Richard Snyder, P.E.  
Associate & Senior Engineer



April 13, 2020  
Date





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# 1. Introduction

CNH Industrial Baumaschinen GmbH (CNH) has entered into the Brownfield Cleanup Program for the Ex-Eaton Site located at 34-40 Clinton Street in the City of Batavia, Genesee County, New York (Figure 1). The implementation of the remediation program is being completed in accordance with the Brownfield Cleanup Agreement (BCA) (Index Number C819022-03-19, New York State Department of Environmental Conservation (NYSDEC) Site No. C819022) between CNH and the NYSDEC. The Site was formerly in the Voluntary Cleanup Program (VCP). While in the VCP, CNH completed a number of on-Site and off-Site investigations to characterize the impacts resulting from historical operations at this Site. A Site plan is presented as Figure 2.

This 2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan (Work Plan) has been prepared on behalf of CNH to outline the proposed scope of work associated with supplemental groundwater sampling activities at the Ex-Eaton Site. These samples are to be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs). This sampling is being completed as part of the overall site-wide Remedial Investigation (RI) activities being conducted as part of the BCA. The sampling results will be used to provide an updated understanding of plume concentrations and configuration at the Site and in off-Site areas, which will be used to evaluate remedies for the groundwater impacts.

This Work Plan was prepared based on historical data and information presented in the following documents:

- Comprehensive Site Investigation Report, July 2003, prepared by URS
- Second Addendum to the Supplemental Sewer Investigation Work Plan, November 2011, prepared by CRA (currently GHD)

The following sections provide the proposed scope of work for the groundwater sampling, laboratory analysis, and associated reporting.

## 1.1 Work Plan Organization

The Work Plan is organized as follows:

- Section 1 - The purpose of the proposed Scope of Work and organization of the Work Plan are presented in Section 1
- Section 2 - The project location, history, and project description are presented in Section 2
- Section 3 - The objectives of the proposed Scope of Work are presented in Section 3
- Section 4 - The Scope of Work is presented and described in Section 4
- Section 5 – The Reporting format for the groundwater sampling results are presented in Section 5
- Section 6 - The schedule for the implementation of the Work Plan is presented in Section 6
- Section 7 - Health and safety requirements are discussed in Section 7
- Section 8 - The Quality Assurance Project Plan (QAPP) is discussed in Section 8



## 2. Site Description and History

### 2.1 Site Description

The Site is situated within the City of Batavia limits as shown on Figure 1. The Ex-Eaton facility/property encompasses approximately 27.7 acres of land, of which 23.25 acres are included in the BCA. For the purposes of this Work Plan, the portion of the property entered into the BCP will be referred to as the "Site": The Site is bordered to the north by Clinton Street (Route 33), to the south by the Erie Railroad, and to the east and west by residences. Properties south of the Erie Railroad are commercial/light industrial in nature with some residences intermixed. Two public water supply wells are located approximately 1 mile south of the Site and reportedly draw from the Tonawanda Creek Aquifer, which is located to the southeast of the Site.

A ditch runs along the northern and eastern Site boundaries. The ditch originates north of the Site and receives stormwater runoff from both on and off-Site sources. The ditch flows east and then south along the Site boundary to a culvert beneath the former Erie Railroad (Figure 2). Due to frequent debris blockages at the culvert along the eastern boundary of the Site, the channel is wide and poorly defined.

A discussion of historical Site ownership and usage was presented in the July 25, 1996 *Site Inspection Prioritization (SIP) Findings* report prepared by Ebasco Services, Incorporated (Ebasco). According to the Ebasco report, the Site had been used to manufacture agricultural and highway equipment since the mid-1920s. The Site was owned and occupied by Contractor Machinery from 1927 until 1963, at which time the property was sold to the Trojan Division of Eaton Corporation. In 1979, Eaton Corporation sold the property to Faun-Werke, which merged with O&K Orenstein and Koppel, Inc. in 1987. In 1996, the Site was sold to the current owner, Willow Specialties (Willow), which operates a warehousing facility for baskets and novelty items.

The Site contains three buildings. The main building at the Site is a two-story concrete block office building connected to a warehouse. Willow occupies the main building. North of the main building is a second building, a former warehouse, also occupied by Willow and formerly occupied by Genesee County ARC, which was a recycling company. East of the main building is the former shipping building, which is currently used by Willow for storage. The eastern portion of the Site was formerly a storage yard, while the western and northern portions of the Site had been used for storage and parking. These areas are currently unused (vacant).

Soil and groundwater at the Site are impacted with chlorinated volatile organic compounds (such as 1,1,1-trichloroethane [TCA] and 1,2-dichloroethane [DCA]), along with petroleum-based contaminants. A number of subsurface investigations have been completed at the Site, and, as a result, in 2003, CNH entered into a Voluntary Cleanup Agreement (VCA) (#B8-0644-03-09) with the NYSDEC to investigate and remediate soil, groundwater, and soil vapor impacts. In 2019, CNH entered into a BCA with the NYSDEC.

### 2.2 Physical Setting

The Site is a relatively flat parcel of land and is located in a commercial and light industrial area of the City of Batavia.



### **2.2.1 Geology**

According to the 1984 United States Geological Survey (USGS) survey, the surficial geology of most of the Site is morainal till. Site investigation activities indicate that the Site is underlain by fill materials ranging in thickness from 2 to 8 feet below ground surface (bgs). Fill materials are underlain by silty sand and fine sand deposits, which range in depth from 2 to 10 feet bgs. Underlying the silty sand and fine sand deposits is a clay and silt layer ranging in thickness from 0 to 24 feet. Underlying the clay and silt layer is a sand and gravel layer, which is up to 43 feet thick. Underlying the sand and gravel deposits is a till unit consisting of clay, small amounts of gravel, and trace silt. This till unit lies above bedrock. Bedrock, identified as Onondaga Limestone, is encountered beneath the till unit at approximately 71 feet bgs.

### **2.2.2 Topography/Hydrology**

The Site is generally flat and is approximately 890 feet above mean sea level (AMSL). Based on the topography of the Site and Site investigation activities, groundwater flow appears to be generally to the southeast.

Figure 3 shows all of the monitoring wells currently in place at the Site. The most recently installed wells were installed as part of the supplemental sewer investigation activities completed in September 2015. Figure 3 also shows the wells that are located off-Site and outside the BCA boundary.

Figure 4 shows the most recent (2010) groundwater contours developed for the Site. The contours were generated based on water levels collected during the July 2010 groundwater sampling event. Based on water levels measured at the Site in July 2010, depth to groundwater at the Site ranges from approximately 4 to 15 feet bgs, with an average depth of approximately 7.5 feet bgs. This range is consistent throughout the Site. Considering the changes in elevation across the Site, groundwater elevations range from approximately 875 to 880 feet AMSL. Groundwater flow at the Site is generally to the southeast.

Based on a review of Site data, there is only one groundwater zone present at the Site. There is no significant difference in groundwater elevations between wells screened above the discontinuous silt and clay layer and those screened below the silt and clay layer. The discontinuous silt and clay layer does not act as an aquitard at the Site; rather, it acts as a retarding layer for the vertical migration of impacts. In areas where the silt and clay layer is present, groundwater elevations are slightly higher than in areas where the silt and clay layer is not present. This is due to the lower vertical hydraulic conductivity of the silt and clay layer, which slows the infiltration rate of precipitation. This mounding effect is especially pronounced proximate to monitoring well URS-3 in the central portion of the Site on the east side of the main building, which causes localized radial groundwater flow in this area (Figure 4).

A stormwater drainage ditch located along the north and east Site boundaries is responsible for much of the surface drainage at the Site. The drainage ditch enters the Site on the north side of the Site and flows from west to east, turning to the south for approximately 100 feet, and then turns east again and flows to the eastern corner of the Site. There it turns southward and parallels the eastern Site boundary, exiting the Site on the southeast corner of the property. Historical maps and aerial photographs indicate the drainage ditch previously flowed diagonally across the Site and emptied





into a former low-lying area located on the eastern portion of the Site, currently referred to as the former storage yard. Over the years, the drainage ditch was relocated at least seven times, eventually being relocated to its current position illustrated on Figure 2.

## **2.3 Previous Groundwater Investigations**

### **July 2010 Sampling**

The objectives of the Site-wide groundwater sampling event conducted in July 2010 were as follows:

- Complete a comprehensive round of sampling in which all wells were sampled at the same time
- Assist with the development of additional investigation activities, if necessary, and
- Establish a baseline of current Site conditions in preparation of Interim Remedial Measure (IRM) activities for the Areas of Concern (AOCs) 1 and 2 (note: an IRM was not completed for these areas).

Groundwater samples were collected from 73 wells associated with the Site (both on and off-Site) during this sampling event and analyzed for TCL VOCs. The wells sampled are indicated on Figure 5. Figure 6 indicates the concentrations of parameters that exceeded the New York State Class GA Ambient Water Quality Standards and Guidance Values (6 NYCRR Part 703) ("groundwater criteria"). Thirty-nine (39) of the 73 wells sampled had VOC detections in groundwater that exceeded the groundwater criteria. Figure 7 presents groundwater plumes at the Site based on the total VOC concentrations from the July 2010 sampling event. The AOCs at the Site, defined based on soil concentrations and suspected historical areas of impact, are shown for reference.

### **September 2015 Sampling**

In support of the *Second Addendum to the Supplemental Sewer Investigation Work Plan* (Second Addendum WP), GHD installed five new monitoring wells and conducted an additional groundwater sampling event in September 2015. The purpose of the sampling event was to further characterize groundwater impacts at the Site, specifically those beneath the main warehouse building. The locations of the 15 wells sampled are presented on Figure 8. No samples were collected south of the Site boundary. The results of the 2015 groundwater sampling event were consistent with those from the 2010 sampling event, and confirmed the presence of a groundwater plume beneath the main building.

## **3. Objectives**

The objectives of the proposed Scope of Work are as follows:

- i) Collect groundwater samples for analysis of TCL VOCs from existing monitoring wells associated with the Site, which will include locations both on-Site and off-Site.
- ii) Utilize the groundwater sample results along with the data from the 2015 sampling event to illustrate current groundwater conditions at the Site and for evaluating remedies for the groundwater impacts. The results of the proposed sampling event and implications for remedy selection will be discussed in the Remedial Investigation/Alternatives Analysis Report (RI/AAR).



The following scope of work has been developed to meet the objectives in Section 3.0 and was developed based on ongoing discussions with the NYSDEC.

## **4. Scope of Work**

### **4.1 Well Selection**

Based on a review of the historical data and the south-southeasterly flow of groundwater at the Site, 22 monitoring wells were selected for sampling. This includes two wells hydraulically upgradient of the Site (CRA-MW-001 and MW-10). The locations of the 22 wells to be sampled are indicated on Figure 9. These wells were selected in order to delineate current plume boundaries and to evaluate current groundwater conditions within the AOCs. All of the locations selected for sampling were last sampled during the 2010 sampling event, but not during the 2015 sampling event since that data is less than 5 years old. Table 1 lists all of the wells associated with the Site and indicates whether the well was sampled in 2010, 2015, or both. Table 1 also identifies which wells will be sampled during the 2020 sampling event.

### **4.2 Groundwater Gauging and Sample Collection**

#### **4.2.1 Well Gauging**

Groundwater samples will be collected from each of the 22 monitoring wells indicated on Figure 9 and analyzed for TCL VOCs. Prior to initiating the sampling activities, a set of static water levels will be collected from all on-Site and off-Site groundwater monitoring wells associated with the Site using an electronic groundwater probe. The depth of each well and depth to groundwater will be measured from the top of the well riser to the nearest 0.01 foot. The water levels will be converted to groundwater elevations and used to create a groundwater elevation contour map for the sampling event. The gauging data will be recorded on field monitoring logs. Any maintenance issues observed at the wells will also be noted for future assessment and repair, if necessary.

#### **4.2.2 Well Purging**

Following completion of groundwater gauging, the 22 wells to be sampled will be purged and sampled using United States Environmental Protection Agency (USEPA) low-flow sampling techniques with a peristaltic pump and dedicated disposable tubing. Field parameters including pH, temperature, conductivity, oxidation-reduction potential (ORP), dissolved oxygen, and turbidity of the purge water will be measured using a flow-through cell apparatus and/or hand-held equipment and recorded immediately while in the field. All meters will be calibrated daily in accordance with the manufacturer's instructions and a calibration record maintained in the field book. Purging will be considered complete (stabilization) once purged groundwater is generally free of sediment and the following conditions are met:

- Conductivity, temperature, and dissolved oxygen are within a range of plus or minus 10 percent of the average values for the last three readings
- pH is within a range of plus or minus 0.1 pH unit of the average value for the last three readings



- ORP is within a range of plus or minus 10 millivolts of the average value for the last three readings

Ideally, turbidity should be less than 50 nephelometric turbidity units (NTU) upon sampling.

If stabilization has not occurred after removal of three well volumes, purging will continue until a maximum of five well volumes has been removed, and then the well will be sampled. If a well goes dry before stabilization of field parameters occurs, the well will be sampled as soon as the well has recharged enough to provide a sample representative of groundwater in the formation. A final set of field parameters will be collected upon sampling.

Purged groundwater will also be inspected for sheen and odor. Purge water will be passed through a carboy/drum of granular activated carbon (GAC) and discharged to the municipal sanitary sewer system during the purging activities. This will be performed in compliance with discharge requirements stipulated by the City of Batavia Bureau of Water and Wastewater (Bureau), and all Federal and State requirements. Based on communications between CNH's consultant and the Superintendent of Water and Wastewater for the City of Batavia, no additional requirements will be necessary to discharge the water to the City sanitary sewer system, provided it is first passed through activated carbon before being discharged to the sewer. The City will not require any additional sampling, testing, or permits for this work. Included in Appendix A is email correspondence from the Superintendent confirming the approach. The Bureau will be notified of the dates when the purging, sampling, and discharge activities will occur.

#### **4.2.3 Groundwater Sampling**

Groundwater samples will be collected directly from the low-flow equipment (peristaltic pump) tubing and will be placed into pre-cleaned, new, laboratory-supplied sample vials preserved with hydrochloric acid. Trip blank(s), one blind field duplicate and one matrix spike/matrix spike duplicate (MS/MSD) sample will be collected. The groundwater samples, blind duplicate, and MS/MSD will be submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis of TCL VOCs via USEPA method SW-846 8260B.

All samples will be collected in accordance with the Site Field Sampling Plan (FSP, 2008), Site Health and Safety Plan (HASP, 2016), and Site Quality Assurance Project Plan (QAPP, 2015) previously submitted to the Department. The laboratory will be required to provide a Category B deliverable. All analytical data generated will be assessed and validated by a GHD Data Validator/Chemist per the QAPP and a Data Usability Summary Report (DUSR) will be generated. An electronic data deliverable (EDD) will also be generated for submittal and upload to the NYSDEC's EQUIS™ database.

## **5. Reporting**

Following receipt and validation of the analytical results, a summary letter will be prepared describing the work performed, sample locations, and presentation of the data. A more detailed description of the work performed and results will be included in the RI/AAR. The summary letter, which will include the DUSR, will be submitted to the NYSDEC in June 2020.



## **6. Schedule**

The schedule for implementation of the Work Plan was provided in the approved Master Schedule dated February 5, 2020. The schedule provides approximate periods for completion of the work, beginning with the submittal of the Work Plan on February 28, 2020. As a result of the new submittal date, the schedule for subsequent associated activities has shifted accordingly on the master schedule. However, it is the intention of CNH to compress the schedule where possible in an attempt to restore the schedule as close to the original schedule as possible. The project schedule is subject to change only with the approval of the NYSDEC. Per the current approved schedule, the groundwater sampling event will be performed no later than May 2020, however CNH plans to schedule the field work as soon as possible after NYSDEC approval of the work plan. The NYSDEC will be notified at least seven calendar days prior to the start of field activities.

The raw, non-validated analytical data package from the sampling event will be provided to the NYSDEC within 2 weeks of data package delivery to GHD or as an attachment to the monthly progress report, whichever is earlier. It is anticipated that the draft summary letter describing the sampling event will be submitted to the NYSDEC no later than June 2020.

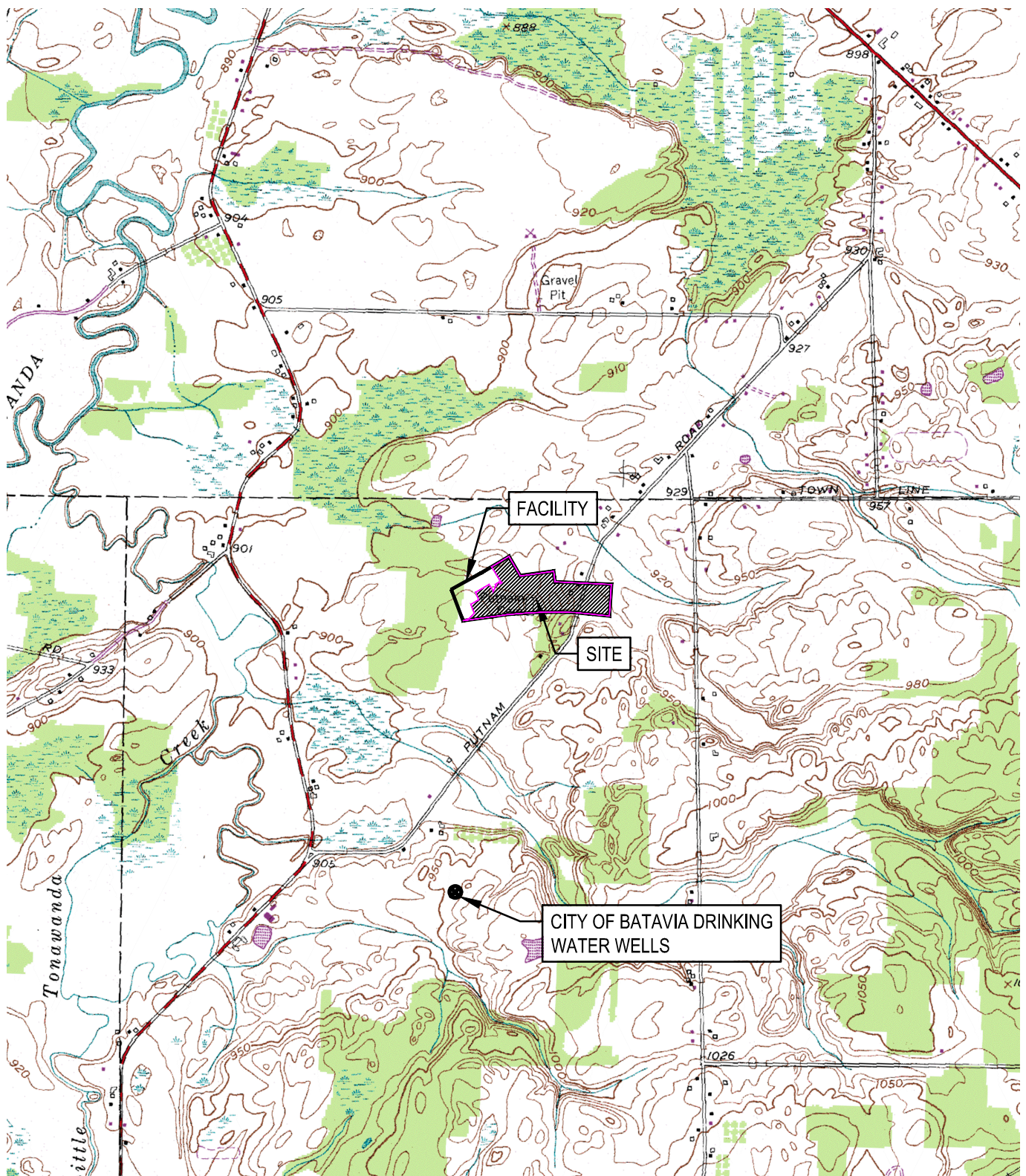
## **7. Health and Safety**

A HASP has been prepared for the Site in accordance with 29 Code of Federal Regulations (CFR) Part 1910 and 29 CFR 1926 and has been reviewed and signed by a health and safety professional. The HASP specifies protective measures and procedures to be followed during the completion of field activities to minimize exposure of workers and the surrounding community to hazardous Site-related materials. The HASP is a separate Site-specific document and was previously submitted and approved by the NYSDEC on March 3, 2008. The HASP was updated in 2016 to reflect more current information and safety-related policies/procedures and is reviewed annually. No changes to the document have occurred since the 2016 update.

## **8. Quality Assurance Project Plan**

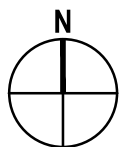
A QAPP has been prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Quality Assurance Project Plan Guidance, NYSDEC, March 1991 and "EPA Guidance for Quality Assurance Project Plans", USEPA QA/G-5, USEPA/600/R-98/018, February 1998. The QAPP describes protocols necessary to achieve specified data quality objectives and is a separate Site-specific document. The QAPP was previously submitted in 2008 and approved by the NYSDEC. It was updated in 2015.





SOURCE: USGS QUADRANGLE MAPS; BATAVIA NORTH AND BATAVIA SOUTH, NEW YORK, 2015

NOTE: SITE BOUNDARIES ARE APPROXIMATE.

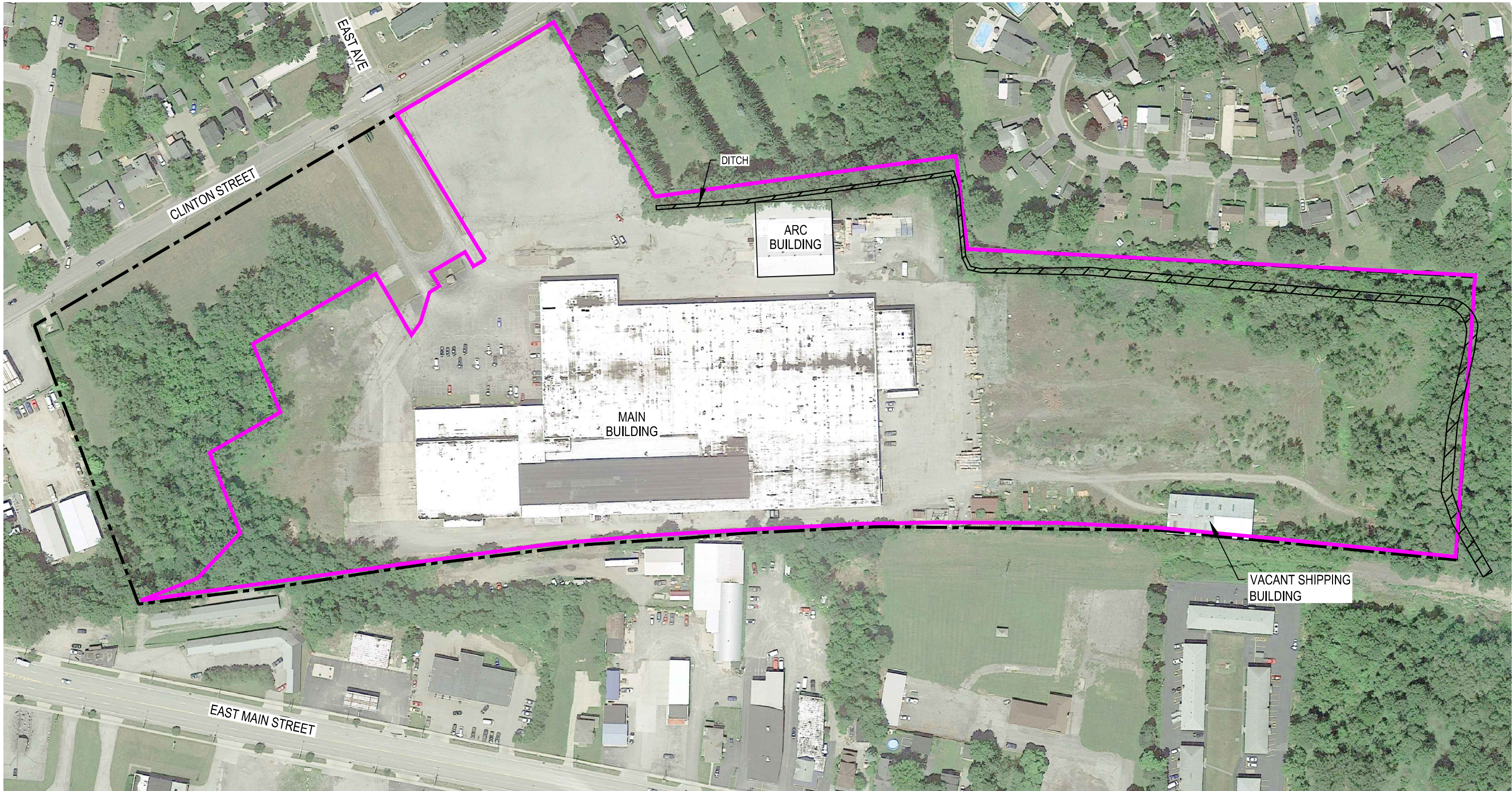


EX-EATON SITE (C819022)  
2020 PRE-REMEDIAL GROUNDWATER  
CONFIRMATION SAMPLING WORK PLAN  
SITE LOCATION AND VICINITY MAP



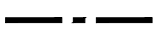
Project No. 048547  
Report No. 033  
Date FEB 2020

**FIGURE 1**





**LEGEND**

-  DRAINAGE DITCH
-  BROWNFIELD SITE BOUNDARY
-  PROPERTY BOUNDARY

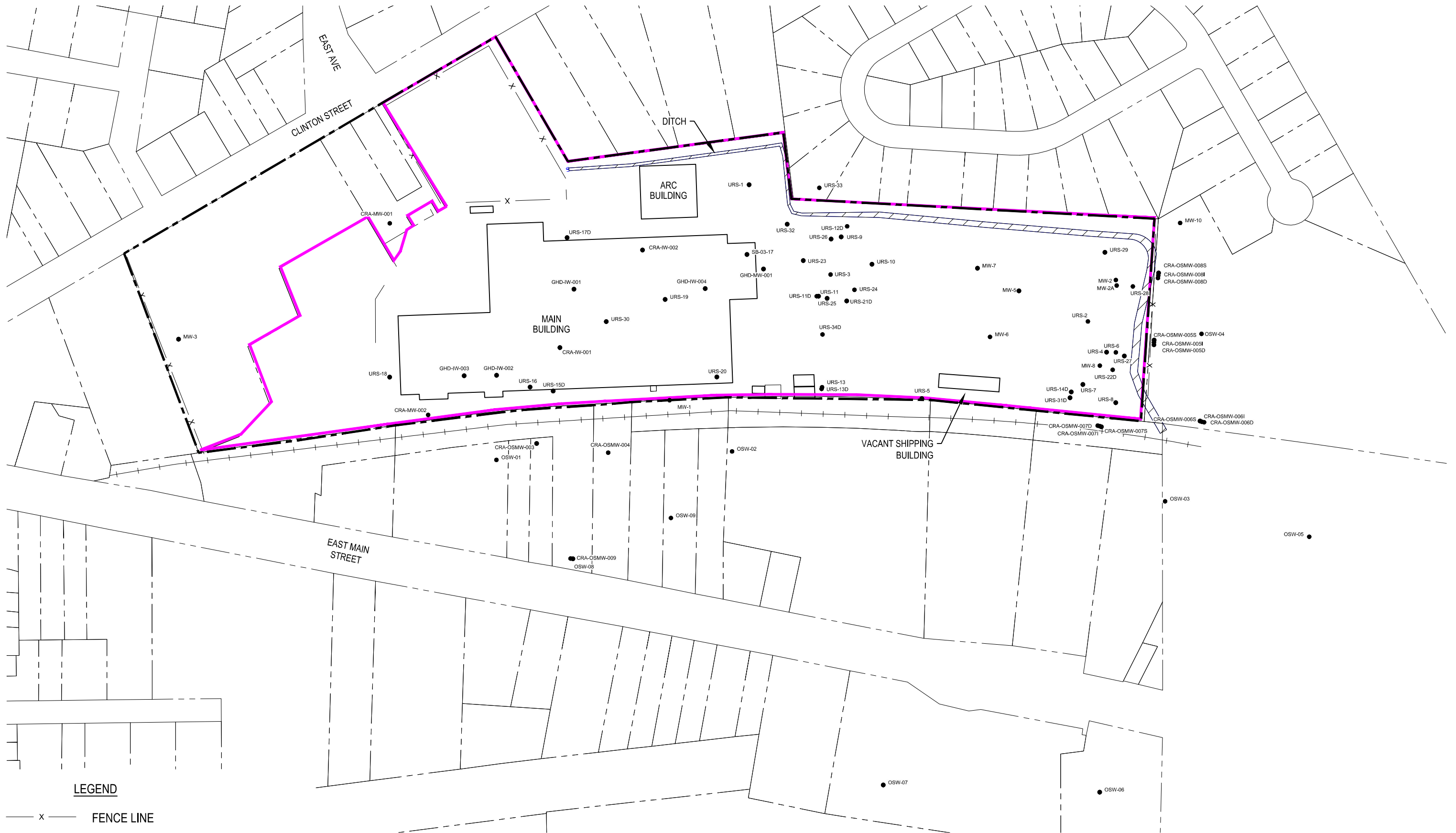


EX-EATON SITE (C819022)  
2020 PRE-REMEDIAL GROUNDWATER  
CONFIRMATION SAMPLING WORK PLAN  
**SITE PLAN**

Project No. **048547**  
Report No. **033**  
Date **FEB 2020**

**FIGURE 2**





**LEGEND**

- x FENCE LINE
- + + + FORMER ERIE RAILROAD
- /// DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- - - PROPERTY BOUNDARY



**EX-EATON SITE (C819022)**  
**2020 PRE-REMEDIATION GROUNDWATER**  
**CONFIRMATION SAMPLING WORK PLAN**  
**ON-SITE AND OFF-SITE**  
**WELL LOCATIONS**

Project No. **048547**  
Report No. **033**  
Date **FEB 2020**

**FIGURE 3**



# LEGEND

- x FENCE LINE
- + + + FORMER ERIE RAILROAD
- /// DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- - - PROPERTY BOUNDARY
- LIMIT OF AREA OF CONCERN (AOC)
- GROUNDWATER ELEVATION (FEET ABOVE SEA LEVEL)



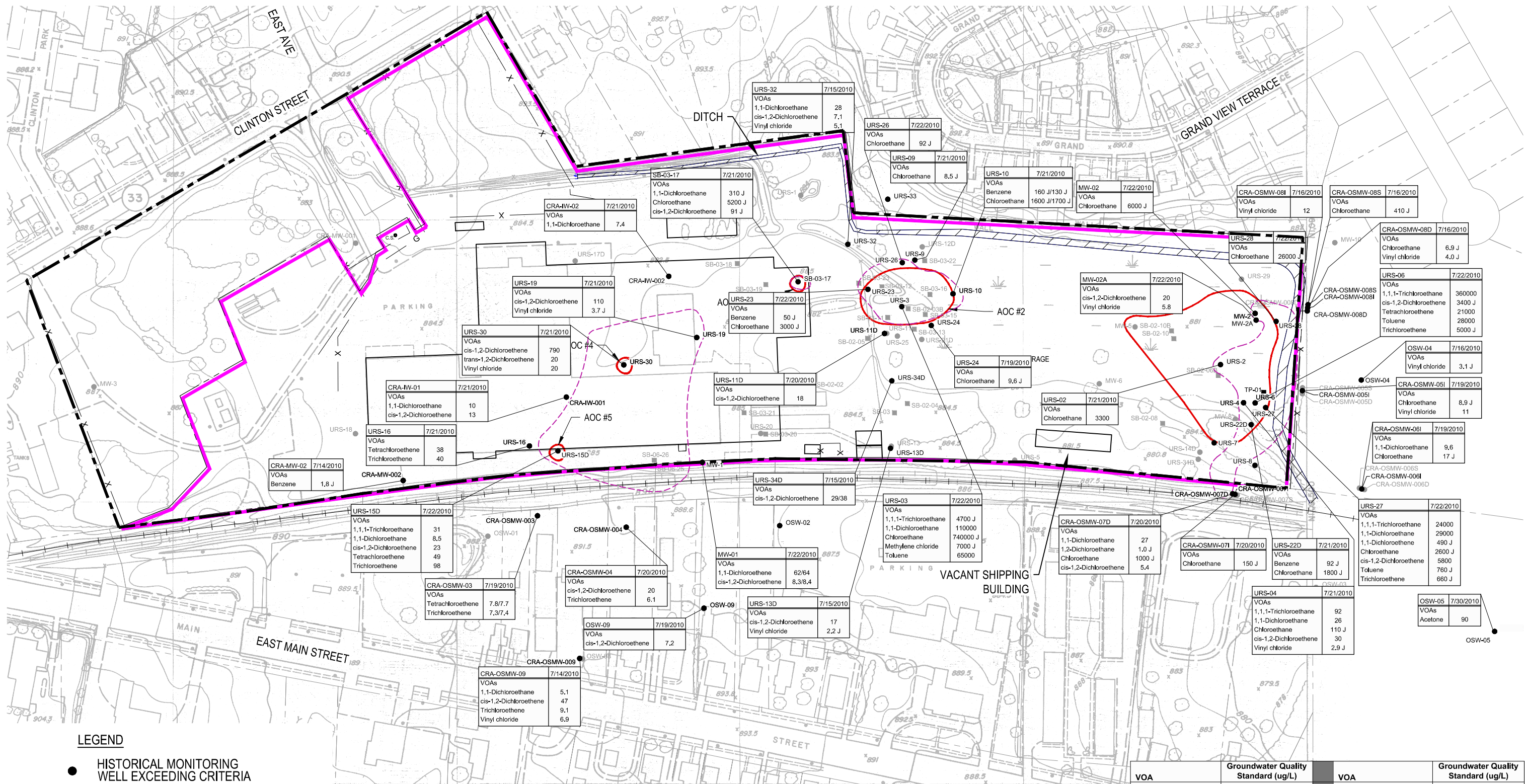
EX-EATON SITE (C819022)  
2020 PRE-REMEDIAL GROUNDWATER  
CONFIRMATION SAMPLING WORK PLAN  
JULY 2010 GROUNDWATER  
CONTOURS

Project No. 048547  
Report No. 033  
Date FEB 2020

FIGURE 4







#### LEGEND

- HISTORICAL MONITORING WELL EXCEEDING CRITERIA
- HISTORICAL MONITORING WELL (NO EXCEEDANCES)
- x FENCE LINE
- FORMER ERIE RAILROAD
- DRAINAGE DITCH
- BROWNFIELD SITE BOUNDARY
- PROPERTY BOUNDARY
- TOTAL GROUNDWATER VOCs ≥ 100 ppb

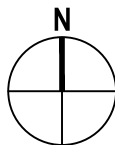
#### NOTE:

- CRITERIA USED FOR THE EVALUATION OF ANALYTICAL RESULTS- NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (6 NYCRR PART 703)

#### DATABOX NOTES:

ALL DATA IS PRESENTED IN UNITS OF MICROGRAMS PER LITERS (ug/L) OR ppb  
- NOT ANALYZED  
J ESTIMATED CONCENTRATION

VOA	Groundwater Quality Standard (ug/L)	VOA	Groundwater Quality Standard (ug/L)
Acetone	50	trans-1,2-Dichloroethene	5
Benzene	1	Methylene Chloride	5
Chloroethane	5	Tetrachloroethene	5
1,1-Dichloroethane	5	Toluene	5
1,2-Dichloroethane	0.6	1,1,1-Trichloroethane	5
1,1-Dichloroethene	5	Trichloroethene	5
cis-1,2-Dichloroethene	5	Vinyl Chloride	2



EX-EATON SITE (C819022)  
2020 PRE-REMEDIAL GROUNDWATER  
CONFIRMATION SAMPLING WORK PLAN  
JULY 2010 GROUNDWATER  
SAMPLING RESULTS

Project No. 048547  
Report No. 033  
Date FEB 2020

FIGURE 6





**LEGEND**

- x — FENCE LINE
- + — FORMER ERIE RAILROAD
- / — DRAINAGE DITCH
- — BROWNFIELD SITE BOUNDARY
- - - — PROPERTY BOUNDARY
- — LIMIT OF AREA OF CONCERN (AOC)

**TOTAL VOC GROUNDWATER CONCENTRATIONS**

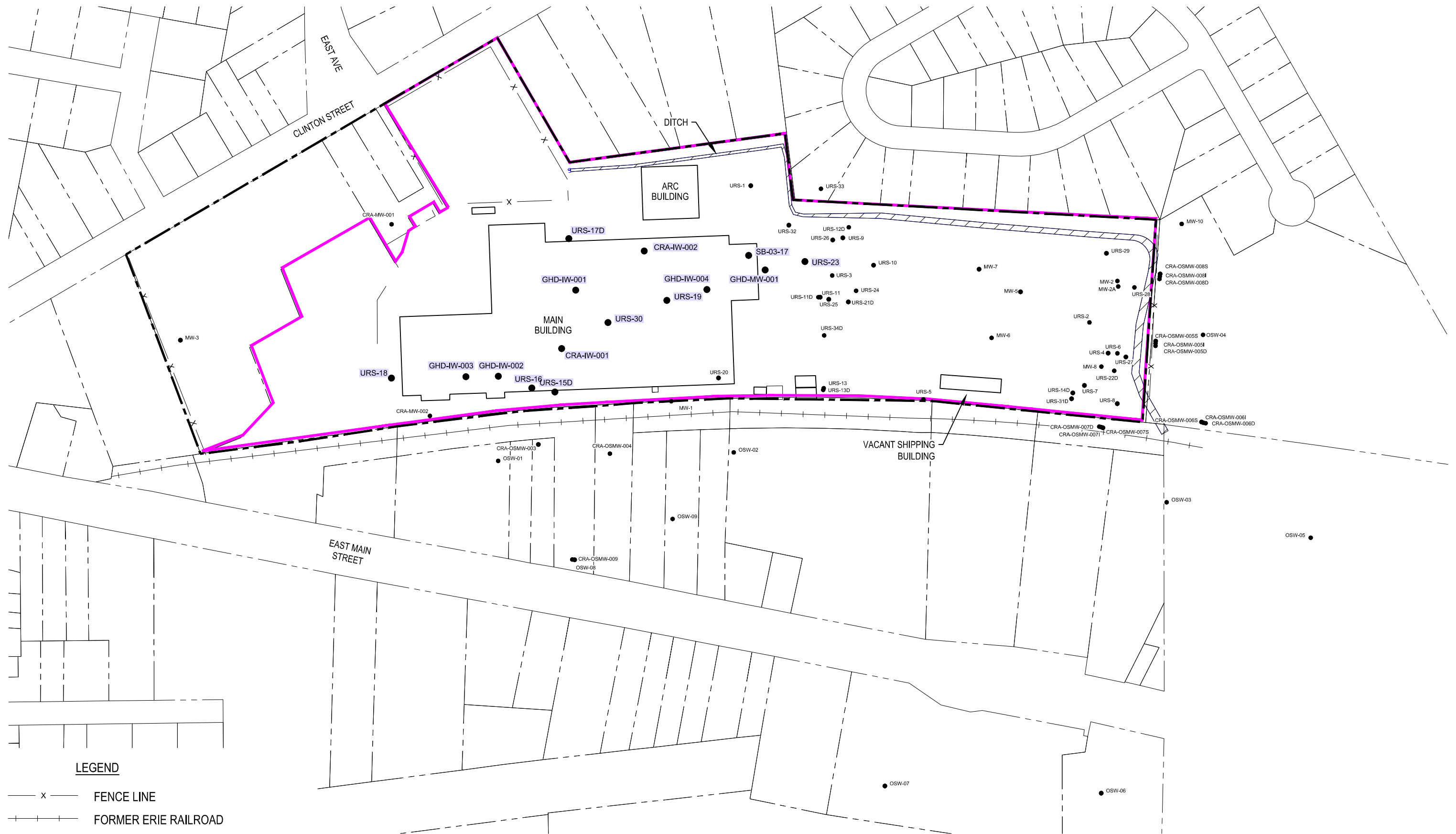
	= < 100 PPB
	= 100 - 1,000 PPB
	= 1,000 - 10,000 PPB
	= 10,000 - 50,000 PPB
	= 50,000 - 100,000 PPB
	= >100,000 PPB



EX-EATON SITE (C819022)  
2020 PRE-REMEDIATION GROUNDWATER  
CONFIRMATION SAMPLING WORK PLAN  
  
JULY 2010 GROUNDWATER  
PLUMES ASSOCIATED WITH  
AREAS OF CONCERN

Project No. 048547  
Report No. 033  
Date FEB 2020

**FIGURE 7**



- LEGEND**
- x — FENCE LINE
  - + — FORMER ERIE RAILROAD
  - /// DRAINAGE DITCH
  - BROWNFIELD SITE BOUNDARY
  - - - PROPERTY BOUNDARY
  - URS-13 SEPTEMBER 2015 SAMPLING LOCATION





**EX-EATON SITE (C819022)**  
**2020 PRE-REMEDIATION GROUNDWATER**  
**CONFIRMATION SAMPLING WORK PLAN**  
**SEPTEMBER 2015 GROUNDWATER**  
**SAMPLING LOCATIONS**

Project No. **048547**  
Report No. **033**  
Date **FEB 2020**

**FIGURE 8**

Filename: N:\US\Niagara Falls\Legacy\Drawings\48000s\48547\48547-REPORTS\48547-00(033)\Figures\48547(033) - Figure 8.dwg  
Plot Date: 21 February 2020 - 9:19 AM



**Monitoring Well Sampling Matrix**  
**2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan**  
**Ex-Eaton Site (C819022)**  
**Brownfield Cleanup Program**

Well ID	Screen Elevation (ft bgs)	July 2010 Sampling Event	September 2015 Sampling Event	2020 Sampling (Proposed)
CRA-IW-01	7.0 to 12.0	X	X	
CRA-IW-02	7.0 to 12.0	X	X	
CRA-MW-01	10.1 to 20.1	X		X
CRA-MW-02	9.9 to 19.9	X		X
CRA-OSMW-03	8.1 to 18.1	X		
CRA-OSMW-04	7.8 to 17.8	X		X
CRA-OSMW-05D	41.9 to 51.9	X		
CRA-OSMW-05I	29.5 to 39.5	X		X
CRA-OSMW-05S	4.9 to 14.9	X		
CRA-OSMW-06D	49.0 to 59.0	X		
CRA-OSMW-06I	24.0 to 34.0	X		X
CRA-OSMW-06S	4.2 to 14.2	X		
CRA-OSMW-07D	44.3 to 54.3	X		X
CRA-OSMW-07I	24.8 to 34.8	X		X
CRA-OSMW-07S	9.9 to 14.9	X		
CRA-OSMW-08D	49.5 to 59.5	X		
CRA-OSMW-08I	35.2 to 45.2	X		X
CRA-OSMW-08S	4.7 to 14.7	X		
CRA-OSMW-09	53.8 to 63.8	X		X
MW-01	5.9 to 15.9	X		
MW-02	3.9 to 13.9	X		X
MW-02A	61.0 to 71.0	X		
MW-03	9.1 to 18.1	X		
MW-05	13.8 to 23.8	X		
MW-06	7.8 to 17.8	X		X
MW-07	5.8 to 15.8	X		
MW-08	8.0 to 18.0	X		
MW-10	7.8 to 17.8	X		X
OSW-01	9.3 to 19.3	X		
OSW-02	15.7 to 25.7	X		X
OSW-03	10.0 to 20.0	X		X
OSW-04	19.7 to 29.7	X		X
OSW-05	24.0 to 34.0	X		
OSW-06	19.7 to 29.7	X		
OSW-07	20.0 to 30.0	X		
OSW-08	20.0 to 30.0	X		
OSW-09	16.8 to 26.8	X		X
SB-03-17	5.0 to 15.0	X	X	
URS-01	18.0 to 28.0	X		
URS-02	19.7 to 29.7	X		
URS-03	7.1 to 17.1	X		X
URS-04	2.9 to 12.9	X		
URS-05	10.1 to 20.1	X		

**Monitoring Well Sampling Matrix**  
**2020 Pre-Remedial Groundwater Confirmation Sampling Work Plan**  
**Ex-Eaton Site (C819022)**  
**Brownfield Cleanup Program**

Well ID	Screen Elevation (ft bgs)	July 2010 Sampling Event	September 2015 Sampling Event	2020 Sampling (Proposed)
URS-06	4.5 to 14.5	X		X
URS-07	2.7 to 6.7	X		
URS-08	5.8 to 15.8	X		
URS-09	1.8 to 6.8	X		
URS-10	2.9 to 7.9	X		
URS-11	1.9 to 6.9	X		
URS-11D	27.9 to 37.9	X		X
URS-12D	16.1 to 26.1	X		
URS-13	1.0 to 5.0			
URS-13D	9.1 to 19.1	X		X
URS-14D	7.0 to 17.0	X		
URS-15D	9.0 to 19.0	X	X	
URS-16	7.1 to 16.1	X	X	
URS-17D	6.8 to 16.8	X	X	
URS-18	3.0 to 13.0	X	X	
URS-19	7.1 to 17.1	X	X	
URS-20	7.0 to 17.0	X		
URS-21D	55.1 to 65.1	X		
URS-22D	50.0 to 60.0	X		
URS-23	5.0 to 15.0	X	X	
URS-24	5.0 to 15.0	X		X
URS-25	5.1 to 15.1	X		
URS-26	5.0 to 15.0	X		
URS-27	5.0 to 15.0	X		
URS-28	4.9 to 14.9	X		X
URS-29	7.2 to 12.2	X		
URS-30	10.0 to 15.0	X	X	
URS-31D	28.9 to 38.9	X		
URS-32	4.9 to 9.9	X		
URS-33	5.6 to 10.6	X		
URS-34D	44.5 to 55.5	X		X
GHD-IW-001	8.0 to 13.0		X	
GHD-IW-002	6.0 to 13.0		X	
GHD-IW-003	5.0 to 10.0		X	
GHD-IW-004	6.0 to 11.0		X	
GHD-MW-001	6.0 to 11.0		X	



## **Appendices**

# **Appendix A**

## **Batavia Bureau of Water and Wastewater Confirmation**

## Maggie Popek

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**From:** Shaun McEvoy  
**Sent:** Wednesday, April 1, 2020 12:23 AM  
**To:** Maggie Popek  
**Subject:** FW: Future groundwater discharge to Batavia Sewer

Maggie

Below is a summary of my conversation with Bill Davis of the City of Batavia, and his confirmation that they do not require sampling or permitting for this disposal.

Shaun

---

**From:** Bill Davis <bdavis@batavianewyork.com>  
**Sent:** Friday, March 13, 2020 10:28 AM  
**To:** Shaun McEvoy <Shaun.McEvoy@ghd.com>  
**Subject:** RE: Future groundwater discharge to Batavia Sewer

Shaun;

*This is all correct, Since the water is not of hazardous nature and the minimal amount of discharge we would not have any requirements in this case.*

*If for some reason you have a substantial larger amount of water than estimated we would have to revisit this, But as long as the amount is only 100-200 gallons we have no issue.*

Regards,

**Bill Davis**

Superintendent  
Water and Wastewater  
One City Centre  
Batavia, NY. 14020  
585-409-9578 Cell  
585-345-6324 Desk  
585-345-1385 FAX



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**From:** [Shaun.McEvoy@ghd.com](mailto:Shaun.McEvoy@ghd.com) <[Shaun.McEvoy@ghd.com](mailto:Shaun.McEvoy@ghd.com)>

**Sent:** Friday, March 13, 2020 9:50 AM

**To:** Bill Davis <[bdavis@batavianewyork.com](mailto:bdavis@batavianewyork.com)>

**Cc:** [Dennis.Hoyt@ghd.com](mailto:Dennis.Hoyt@ghd.com)

**Subject:** Future groundwater discharge to Batavia Sewer

Hello Bill

As per our discussion on 3/5/20, we will be conducting groundwater sampling activities at the Ex-Eaton site (currently operated by Willow Specialties) located at 1 Trojan Circle in Batavia, NY. As part of the sampling, we estimate we will be generating and collecting approximately 100-200 gallons of purge water. It is our intention to treat this water onsite through activated carbon in order to remove any potential contaminants (i.e., VOCs) in the groundwater. After the groundwater is treated, our intention is to discharge the groundwater to the on-site sanitary sewer system. During our discussion on 3/5/2020, you indicated that the City of Batavia Bureau of Water and Wastewater would not have any requirements or conditions prior to this discharge, due to the small quantity of groundwater that would be discharged. You did indicate that we should notify the Bureau ahead of time when we have determined when these sampling and discharge activities will be conducted. The NYSDEC has requested that we provide documentation of our discussion and confirmation on the Bureau's position. As such, can you please confirm that you do not have any additional requirements for this discharge and that the Bureau is in agreement with the summary of our conversation represented in this email?

Thank you for your help.

**Shaun McEvoy**  
**Environmental Engineer**

**GHD**

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