



**Department of
Environmental
Conservation**

34 Berry Street BCP C224268

**Presentation to Brooklyn Community Board #1
Environmental Protection Committee**

August 11, 2020

Meeting Summary

- Involved Parties
- Citizen Participation Program
- Brownfield Cleanup Program Overview
- Brief Site History
- Environmental Findings
- Additional Environmental Sampling
- Summary of Proposed Remedial Action
- Questions / Comments

Brownfield Cleanup Program Involved Parties

- Environmental Regulation
 - New York State Department of Environmental Conservation (DEC)
- Public Health Regulation
 - New York State Department of Health (DOH)
- Remedial Parties / Property Owners
 - 34 Berry Street, LLC
- Engineering Consultant
 - AKRF, Inc.

Citizen Participation Program

- To receive future Fact Sheets
 - Sign up for email notice through DEC Delivers:
www.dec.ny.gov/chemical/61092.html
 - Or search on DEC's website for "DEC Delivers"
 - Access the RAWP and other project documents online through the DECinfo Locator:
www.dec.ny.gov/data/DecDocs/C224268/

Document Repositories

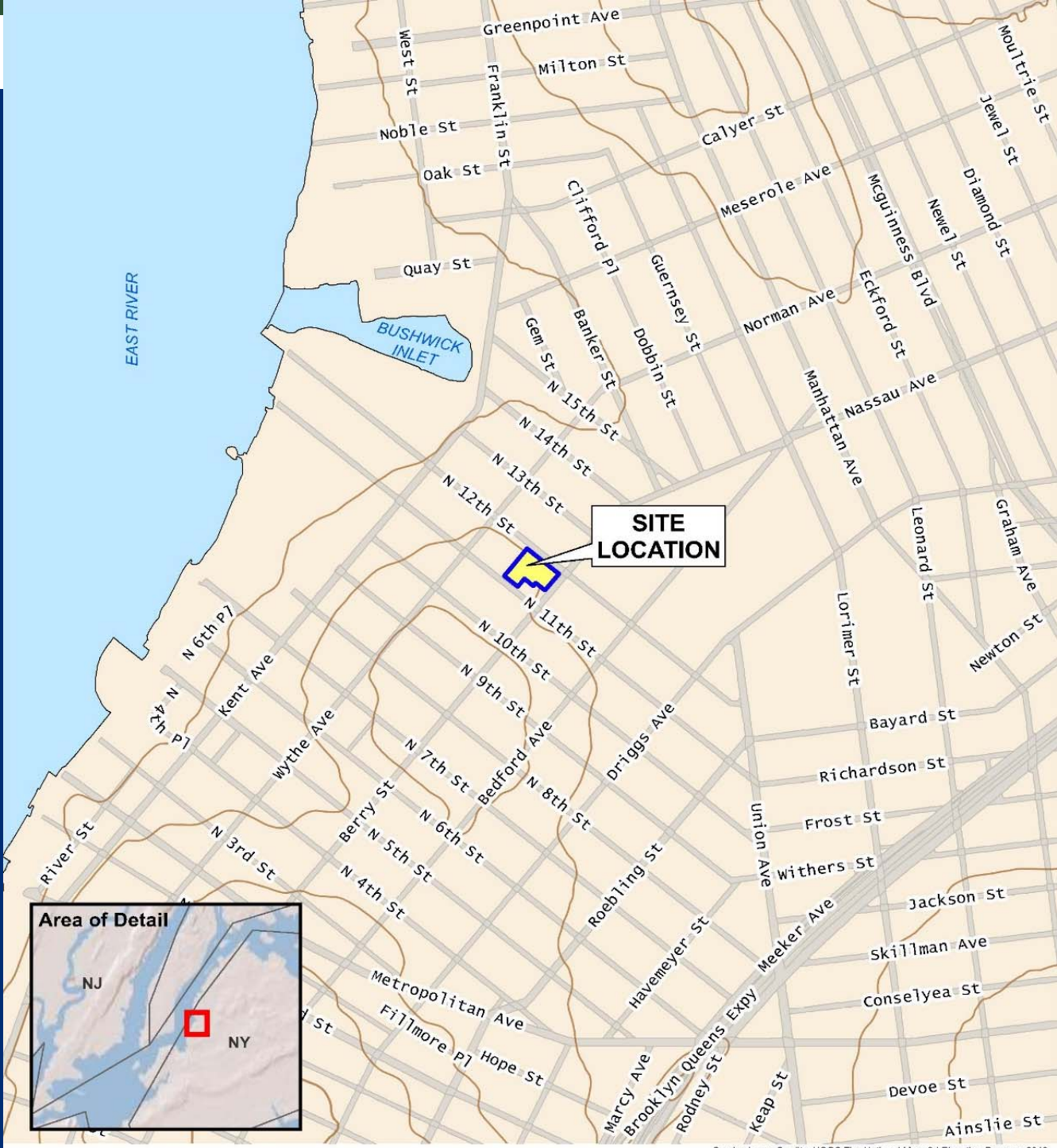
- **Brooklyn Community Board No. 1**
435 Graham Avenue
Brooklyn, NY 11211
- **Brooklyn Public Library - Leonard Branch**
81 Devoe Street
Brooklyn, NY 11211

Brownfield Cleanup Program Process

- Application
 - Public comment period 12/13/17 to 1/12/18
 - **COMPLETED**
- Execute Brownfield Cleanup Agreement
 - **COMPLETED 3/20/18**
- Remedial Investigation Work Plan
 - Submitted with BCP Application
 - Public comment period 12/13/17 to 1/12/18
 - **COMPLETED/APPROVED 10/4/18**
- Remedial Investigation Field Work
 - Collect necessary data; define problem
 - **Additional soil sampling to proceed this week; initial fieldwork completed 8/19**
- Interim Remedial Measures
 - Upgrade existing oil recovery system
 - **COMPLETED 6/2019**
- Propose Remedy (Remedial Action Work Plan, or RAWP)
 - **ONGOING** - Public comment period 7/9/20 to 8/22/20
- RAWP approval and Decision Document issuance
- Implement Remedy
- Monitor Remedy

Site Description

- 36,472 square ft (0.83 acres) footprint located in urban neighborhood
- Tax Block 2289, Lot 14
- Seven story L-shaped building that fronts 2 streets
- Open courtyard area with adjacent small parking
- Basement level parking garage

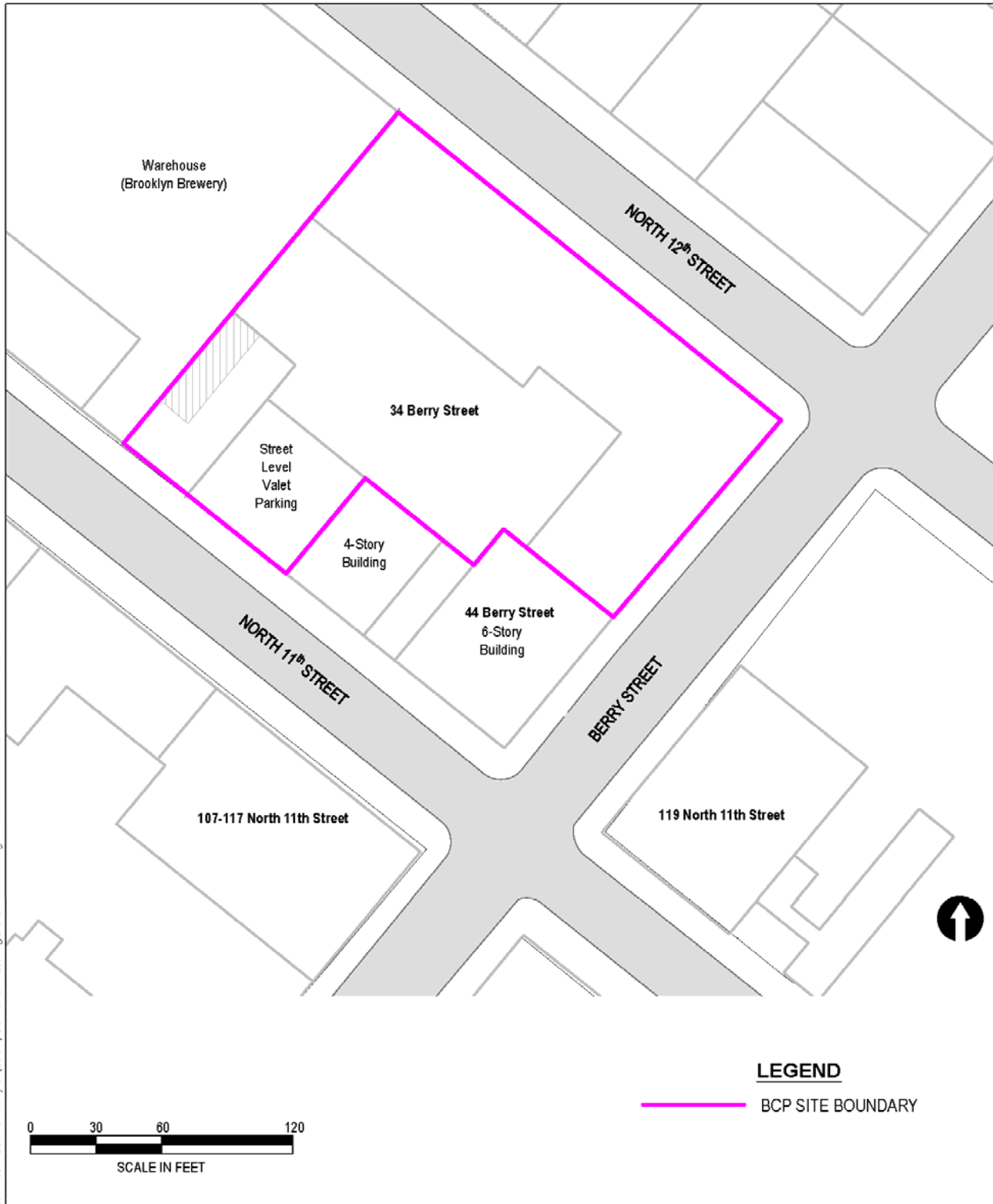


Site Location

Service Layer Credits: USGS The National Map: 3d Elevation Program 2019.



Site Plan



ject: Files\11259 - 34 Berry St (LCCOR)\BCP\CAD\M11259 Fig 2 Site Plan P.R. dwg last save: mvelieux 12/4/2016 10:04 AM

Site History

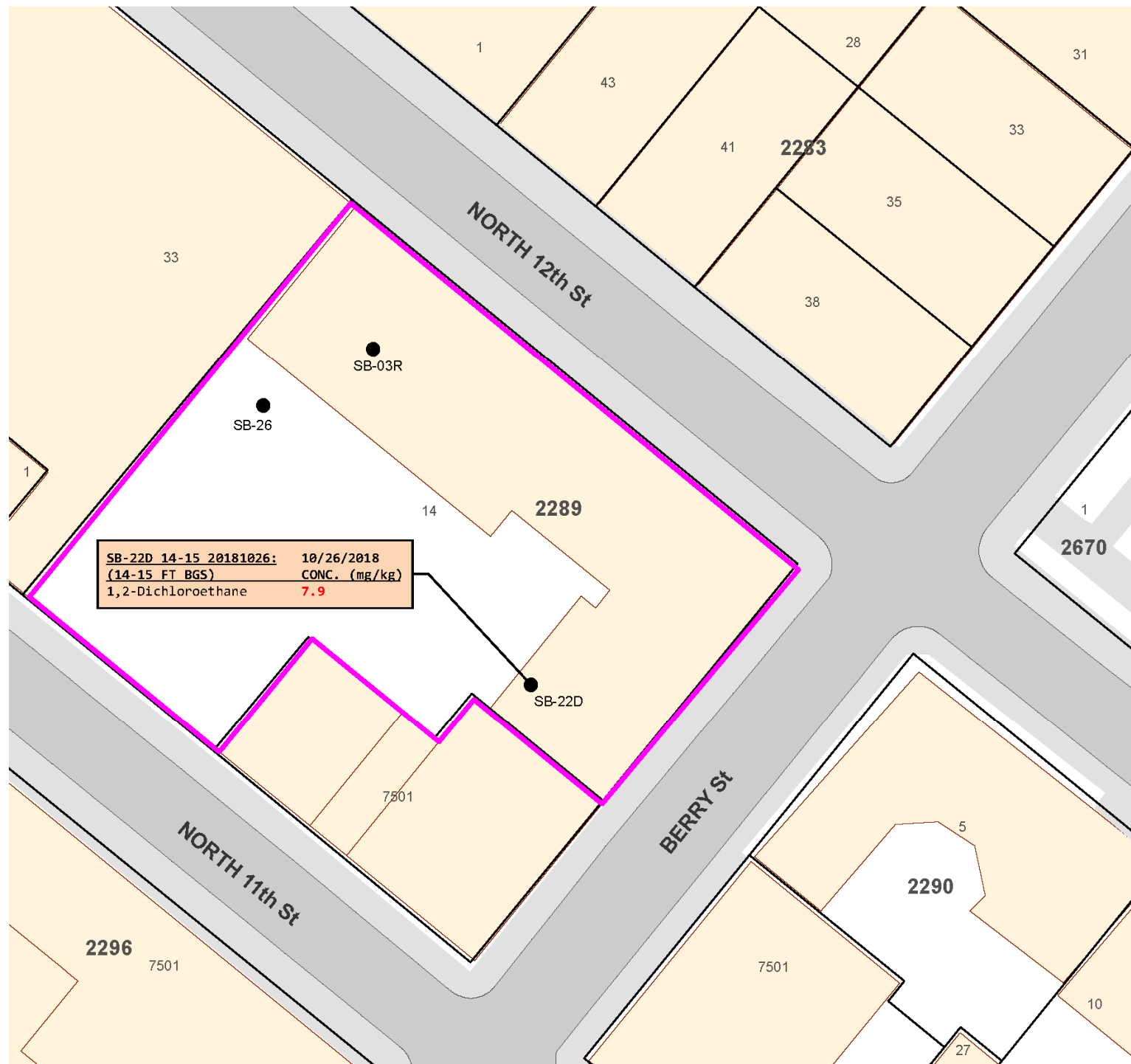
- 1877-1951: Quinine manufacturing facility
 - included morphine, caffeine and ether storage
- 1965-2006: freight loading, warehouse, truck repair, forklift sales and service, parking lot
- 2006: All on-site buildings demolished
- 2008-2009 Construction of current site building
- February 2008: Owner reports a spill to NYSDEC based on findings of contamination related to petroleum storage tanks uncovered during development activities
- Under the NYSDEC Spill program, excavation and remediation of tank contamination began.

Site History (cont'd.)

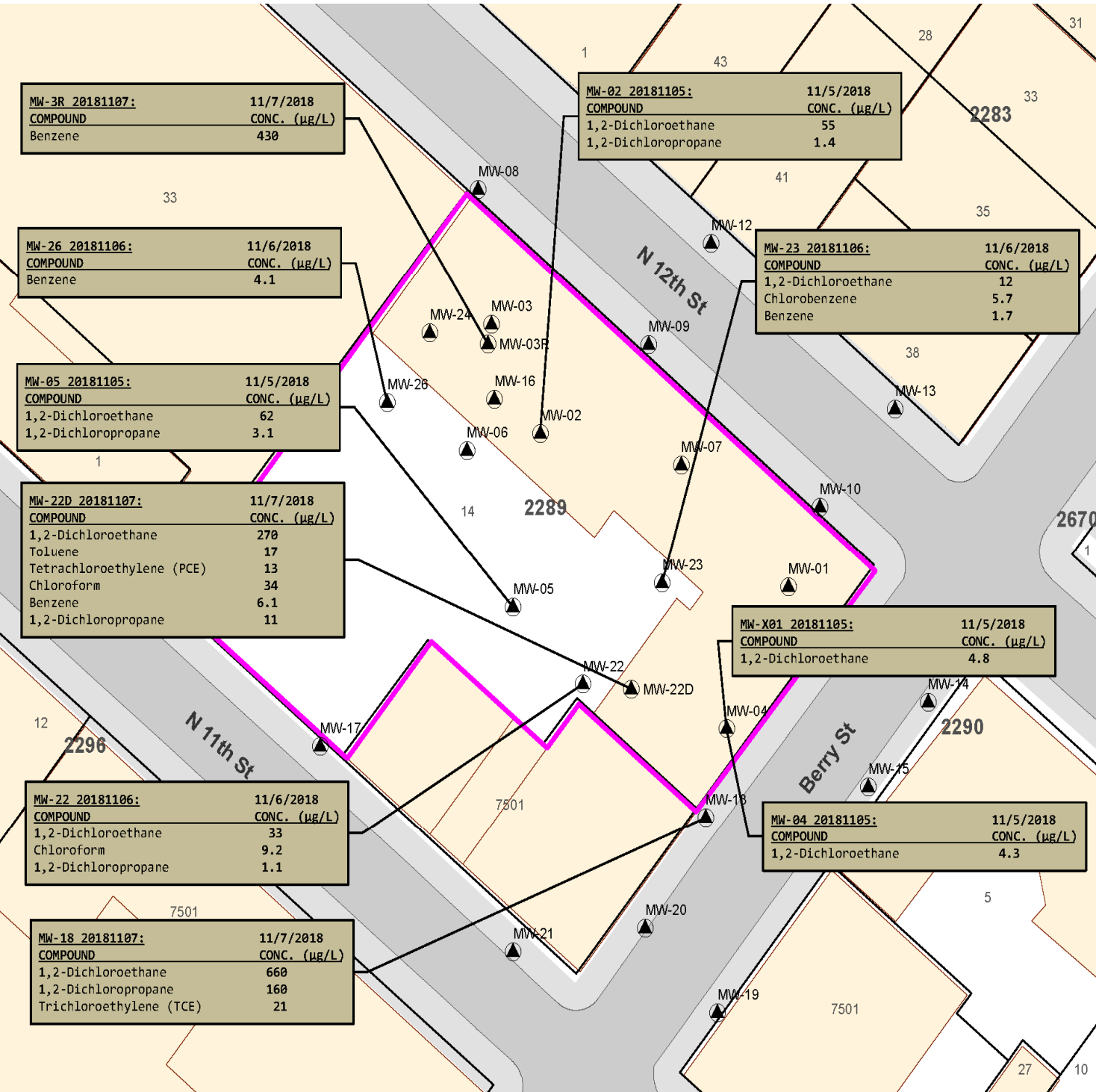
- 2009-2017: Owner continues to implement remedial actions related to the petroleum contamination under NYSDEC Spills program, including:
 - Excavation and disposal of contaminated soil, installation of a petroleum recovery system, vapor barrier, ventilation system for the basement level garage, and a passive sub-slab depressurization system
- 2017: Based on findings of chlorinated solvent contamination in groundwater unrelated to the petroleum, owner applies to NYSDEC Brownfield Cleanup Program (BCP)

BCP Investigation History

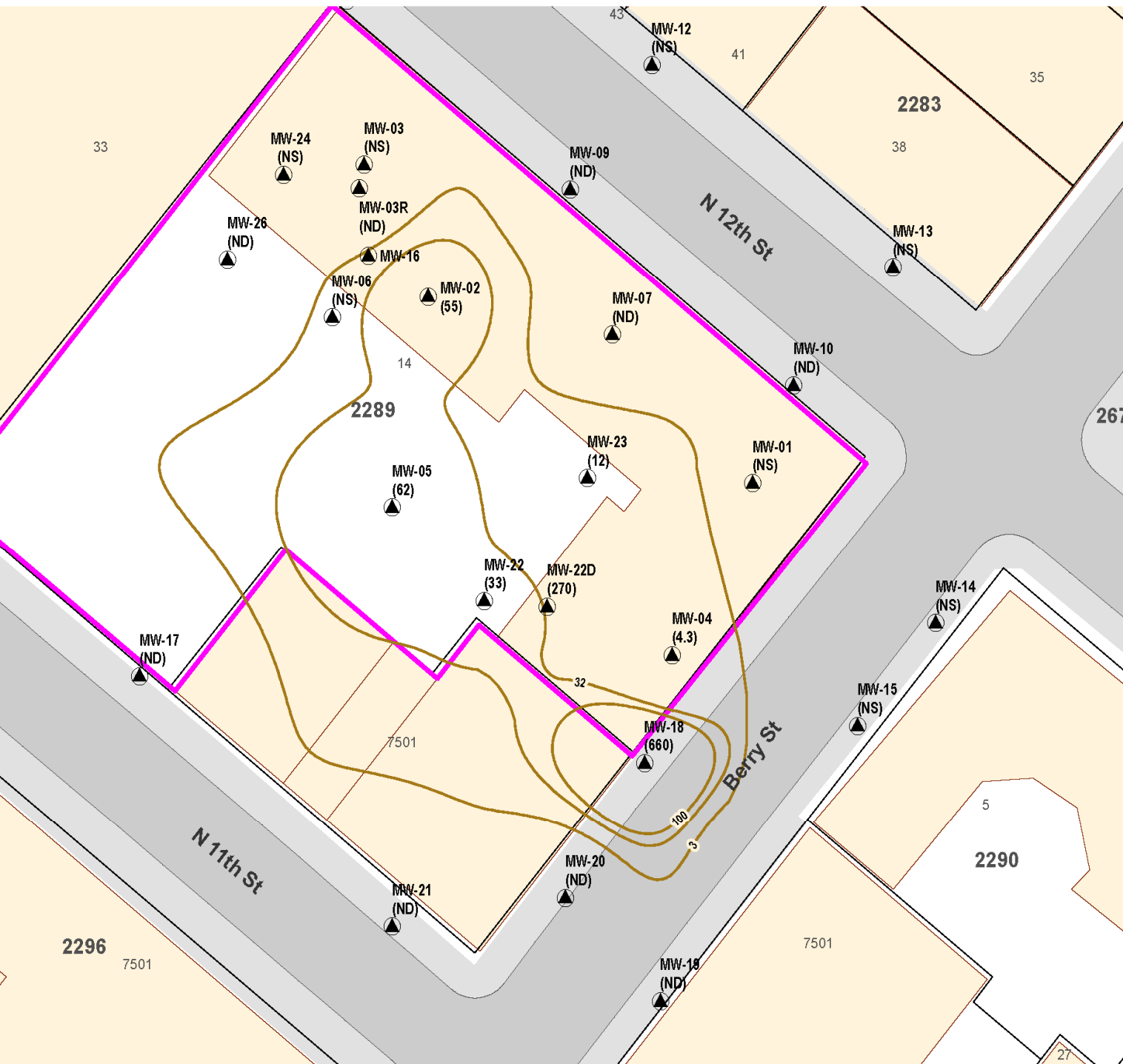
- October 2018 through August 2019 – Remedial Investigation
 - Delineated areal and vertical extent of petroleum contamination in soil and groundwater caused by petroleum LNAPL in 2 distinct zones
 - Identified possible soil source of chlorinated solvent 1,2-DCA in soil (7.9 ppm)
 - Delineated 1,2-DCA contaminant plume in groundwater
 - Results are presented in the Remedial Investigation Report



Soil analytical results



Groundwater analytical results



1,2-DCA in Groundwater

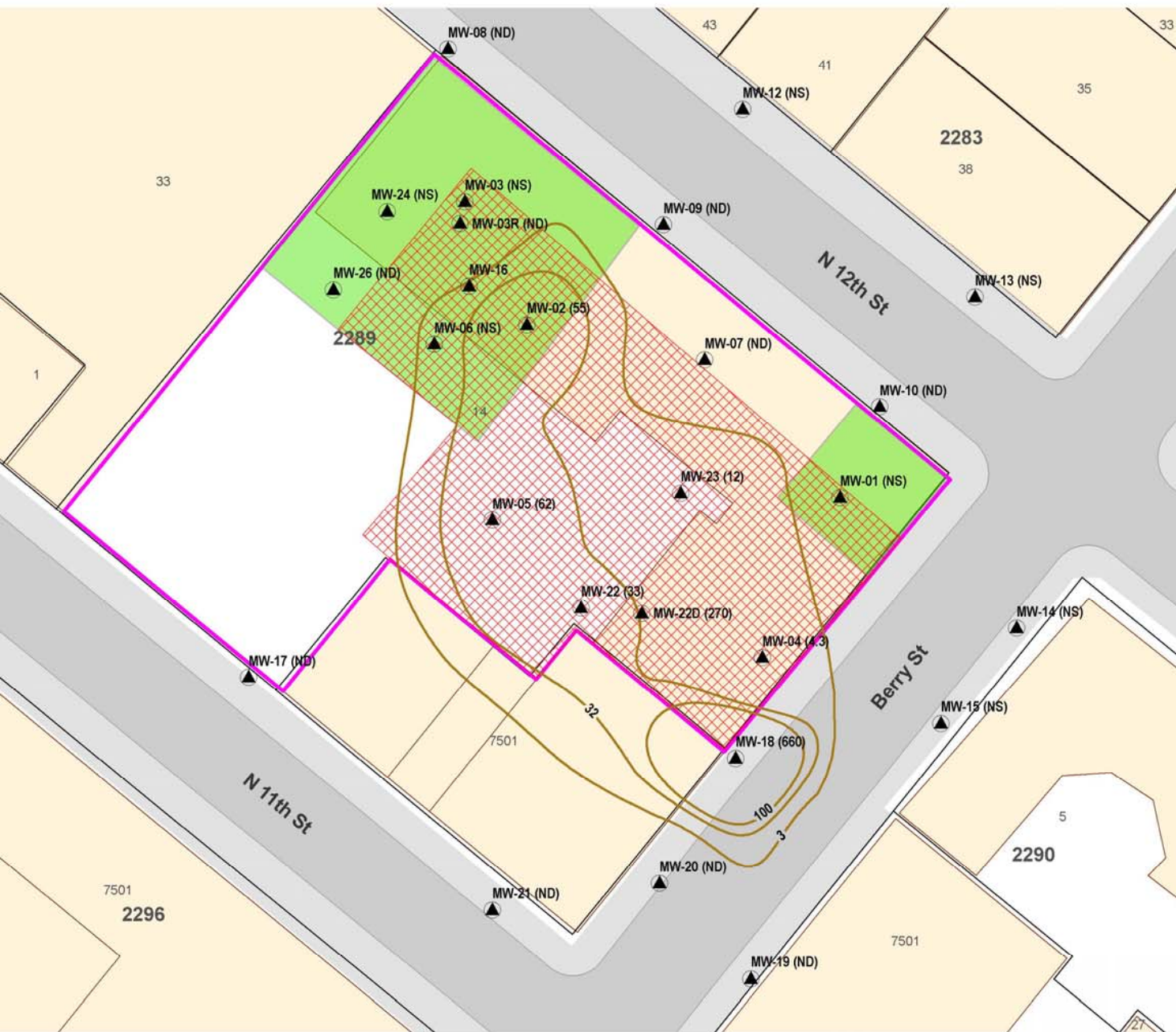
Interim Remedial Measures (IRM)

- Upgrade and refurbishment of existing LNAPL recovery system:
 - Installation of one replacement recovery well
 - Installation of 5 new pumps in existing recovery wells
 - Replacement of the entire length of piping from the wells to the treatment system
 - Upgrade of oil water separator
 - Replacement of transfer pump and piping
 - Installation of new particulate filter

Proposed Remedy

- Maintain the existing site cover, consisting of the building concrete slab and other paved or landscaped surfaces;
- Surfactant-Enhanced LNAPL recovery with groundwater recirculation;
- In-Situ Enhanced Bioremediation and Natural Attenuation to remediate 1,2-DCA;
- Post-remediation groundwater monitoring;
- Institutional and engineering controls (Easement and Site Management Plan); and
- Convert existing passive SSDS to active if bioremediation results in increased soil vapor generation.

Remediation Plan

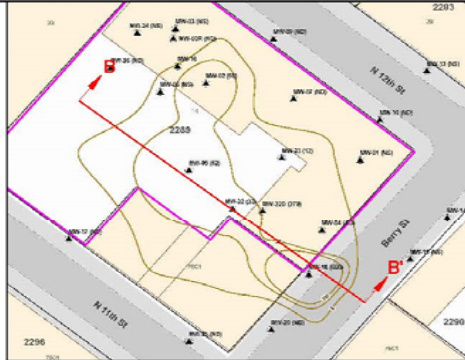


LEGEND

- PROJECT SITE BOUNDARY
 - NOVEMBER 2018 1,2-DCA ISOCONTOUR
 - ▲ MONITORING WELL LOCATION WITH CONCENTRATION (µg/L)
 - 14 LOT BOUNDARY AND TAX LOT NUMBER
 - 2289** BLOCK NUMBER
 - BUILDING
 - AREA OF 1,2-DCA REMEDIATION
 - AREA OF PETROLUEM REMEDIATION
- ND = NOT DETECTED
NS = NOT SAMPLED



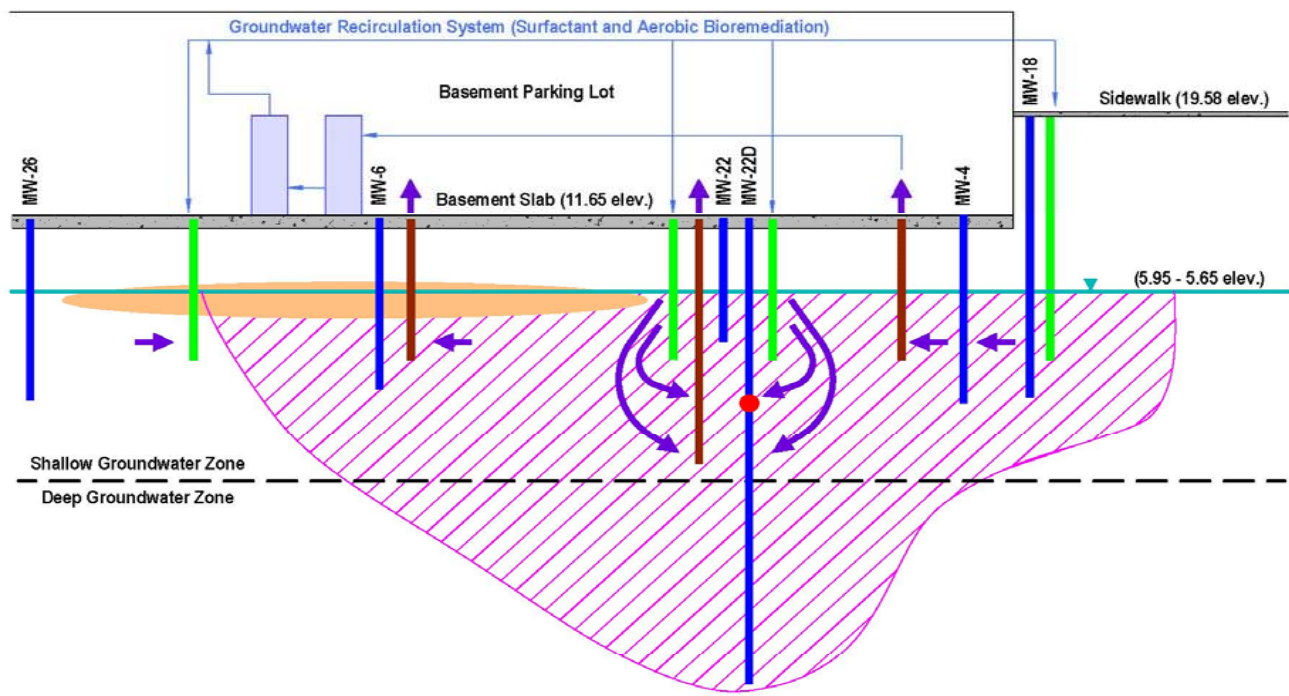
Treatment Area Cross Section



KEY MAP
SCALE: 1" = 100'

B

B'



LEGEND

- WATER TABLE
- SOIL SOURCE AREA
- LNAPL AREA
- 1,2-DCA PLUME
- MONITORING WELL
- EXTRACTION WELL
- INJECTION WELL
- ANTICIPATED GROUNDWATER FLOW DIRECTION
- ABOVEGROUND PIPING AND FLOW

NOTES:
1. ELEVATIONS BASED ON NAVD 88 DATUM
2. INJECTION AND EXTRACTION WELL LOCATIONS PROJECTED ONTO CROSS SECTION.

NOT TO SCALE

Project Schedule

- Decision Document issued and RAWP approval expected in September 2020
- IRM is ongoing; will be documented in the Final Engineering Report
- Remedial Construction – TBD

Thank You

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