

DECISION DOCUMENT

E.I. du Pont Nemours and Company
Brownfield Cleanup Program
Rochester, Monroe County
Site No. C828142
March 2012



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

E.I. du Pont Nemours and Company
Brownfield Cleanup Program
Rochester, Monroe County
Site No. C828142
March 2012

Statement of Purpose and Basis

This document presents the remedy for the E.I. du Pont Nemours and Company site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the E.I. du Pont Nemours and Company site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

The remedy proposed is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The intended use of the site will be restricted residential. The elements of the proposed remedy are as follows:

- 1) Excavation of soil exceeding the restricted residential cleanup levels for cadmium and silver. An estimated 480 cubic yards of material will be excavate and disposed at an off-site permitted facility. The excavations will be backfilled with clean fill meeting the restricted residential cleanup levels. An interim Site Management Plan (SMP) will be developed to continue the following activities: weekly site inspections to check the integrity of the fence and to check storm drains for proper function; make repairs to fence as necessary; clear storm drains as necessary; periodically cut vegetation; and provide documentation of the inspections to the Department on a periodic basis.
- 2) A site cover will be required to allow for restricted residential. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation

layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

- 3) Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:
 - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
 - Reducing direct and indirect greenhouse gas and other emissions;
 - Increasing energy efficiency and minimizing use of non-renewable energy;
 - Conserving and efficiently managing resources and materials; and
 - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.
- 4) Imposition of an institutional control in the form of an environmental easement for the controlled property that:
 - requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
 - restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
 - requires compliance with the Department approved Site Management Plan.
- 5) A Site Management Plan is required, which includes the following:
 - Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: Placement of an environmental easement as discussed in paragraph 3 above.

Engineering Controls: Placement of the soil cover discussed in Paragraph 2 and evaluate the potential for soil vapor intrusion during future development.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any buildings

- developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
 - Maintaining site access and controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b) Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring for vapor intrusion for any future buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

03/02/2012

Date



Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

E.I. du Pont Nemours and Company
Rochester, Monroe County
Site No. C828142
March 2012

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Maplewood Community Library
1111 Dewey Avenue
Rochester, NY 14613
Phone: (585)428-8220

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email

listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located at 666 Driving Park Avenue in the City of Rochester. The site is approximately 10 acres in area and is bounded to the east and north by residential areas, with industrial areas to the south. The west side of the site is bounded by an active railroad line. The area is served by public water.

Site Features: The site is a vacant lot that is surrounded by a 6-foot high chain-link fence. The demolished former manufacturing building was located on the south side of the property along Driving Park Avenue. The northern portion of the site is a former parking area that is covered with broken asphalt.

Current Zoning/Uses: The site is currently vacant and it is zoned for commercial or industrial uses. A densely populated residential area is immediately adjacent to the site.

Historic Uses: This property is a former manufacturing site that was operated since the early 1900s by DuPont and others to produce photographic film and paper. These manufacturing processes included the use of methanol, silver, cadmium, lead, and mercury. DuPont ceased operations at the facility in 1995 and demolished the building in 1996.

Prior to entering the Brownfield Cleanup Program, DuPont conducted an on-site soil and groundwater investigation. The results of the investigation identified several areas of cadmium and silver contamination in soils located near the former manufacturing building. In May 2007, DuPont signed a Brownfield Cleanup Agreement to investigate and cleanup the site.

Site Geology and Hydrogeology: Based upon the subsurface investigations to date, the site stratigraphy consists of historic fill and native soils over Rochester Shale bedrock. The depth to bedrock ranges from 4 to 12 feet below ground surface. Ground water predominantly exists within bedrock with localized groundwater in the overburden.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the remedial investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

The Brownfield Cleanup Agreement was signed on May 17, 2007.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

cadmium	vinyl chloride
silver	1,1-dichloroethene
trichloroethene	1,2-dichloroethene

The contaminant(s) of concern exceed the applicable SCGs for:

- soil
- groundwater

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People are not coming into contact with the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Since the site is fenced and almost completely covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater may move into the soil vapor (air between soil particles), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Additional investigations are necessary to evaluate whether actions are needed to address exposures related to soil vapor intrusion if/when new on-site development occurs.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Soil: Environmental investigations conducted to date have indicated soil contamination with heavy metals (mainly silver and cadmium) and polycyclic aromatic hydrocarbons (PAHs). Cadmium was detected at several localized sub-surface soil areas at levels exceeding the restricted residential cleanup level of 4.3 ppm. Several of these sample results exceeded 100 ppm, and there was a single detection for cadmium at 1,590 ppm. Silver was detected at several locations exceeding the restricted residential level of 180 ppm. The silver and cadmium contamination is limited to sub-surface soils on-site within these discrete areas.

PAHs were detected predominantly in the historic fill at the site and sporadically above the restricted residential cleanup levels. On-site concentrations of benzo(a)pyrene (BAP) in soils range from ND to 58 ppm and the off-site background surface soil concentration of BAP was 3.4 ppm.

Groundwater: Groundwater flow is to the north and it is impacted by low levels of chlorinated solvents in one well at the southern property border; however, these contaminants are migrating from off-site and do not appear to be site-related. Contaminants detected along the southern property line during the groundwater sampling rounds include: trichloroethene from 21 to 96 ppb; cis-1,2-dichloroethene from 46 to 290 ppb; trans-1,2-dichloroethene from 4.7 to 120 ppb; 1,1-dichloroethene from 1.4 to 8.1 ppb; and vinyl chloride from 4.3 to 24 ppb. Site-related metals were not detected in groundwater above the groundwater standards.

Significant Threat: The site currently does not pose a significant threat to public health or the environment.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The remedy proposed is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The intended use of the site will be restricted residential. The elements of the proposed remedy are as follows:

- 1) Excavation of soil exceeding the restricted residential cleanup levels for cadmium and silver. An estimated 480 cubic yards of material will be excavate and disposed at an off-site permitted facility. The excavations will be backfilled with clean fill meeting the restricted residential cleanup levels. An interim Site Management Plan (SMP) will be developed to continue the following activities: weekly site inspections to check the integrity of the fence and to check storm drains for proper function; make repairs to fence as necessary; clear storm drains as necessary; periodically cut vegetation; and provide documentation of the inspections to the Department on a periodic basis.
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vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

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- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

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Engineering Controls: Placement of the soil cover discussed in Paragraph 2 and evaluate the potential for soil vapor intrusion during future development.

This plan includes, but may not be limited to:

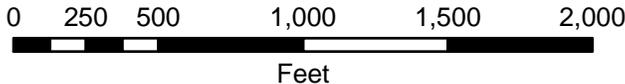
- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
 - A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - provisions for the management and inspection of the identified engineering controls;
 - Maintaining site access and controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring for vapor intrusion for any future buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a above.

Figure 1
 DuPont Site - 666 Driving Park Avenue
 Rochester, New York



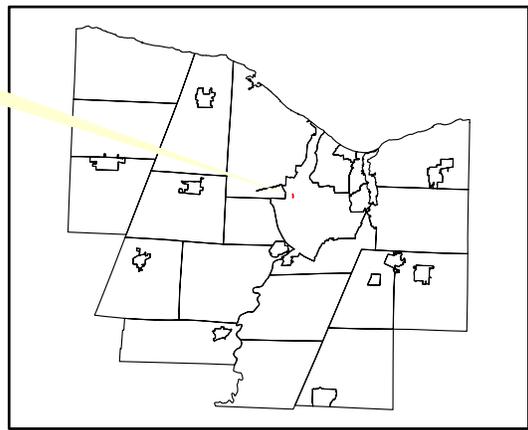
Site Location

Monroe County 2002 Orthoimagery



Monroe County, New York

Site Location



Groundwater

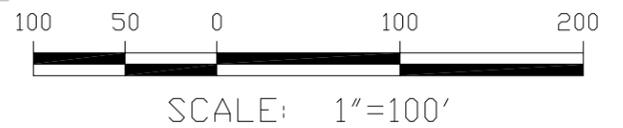
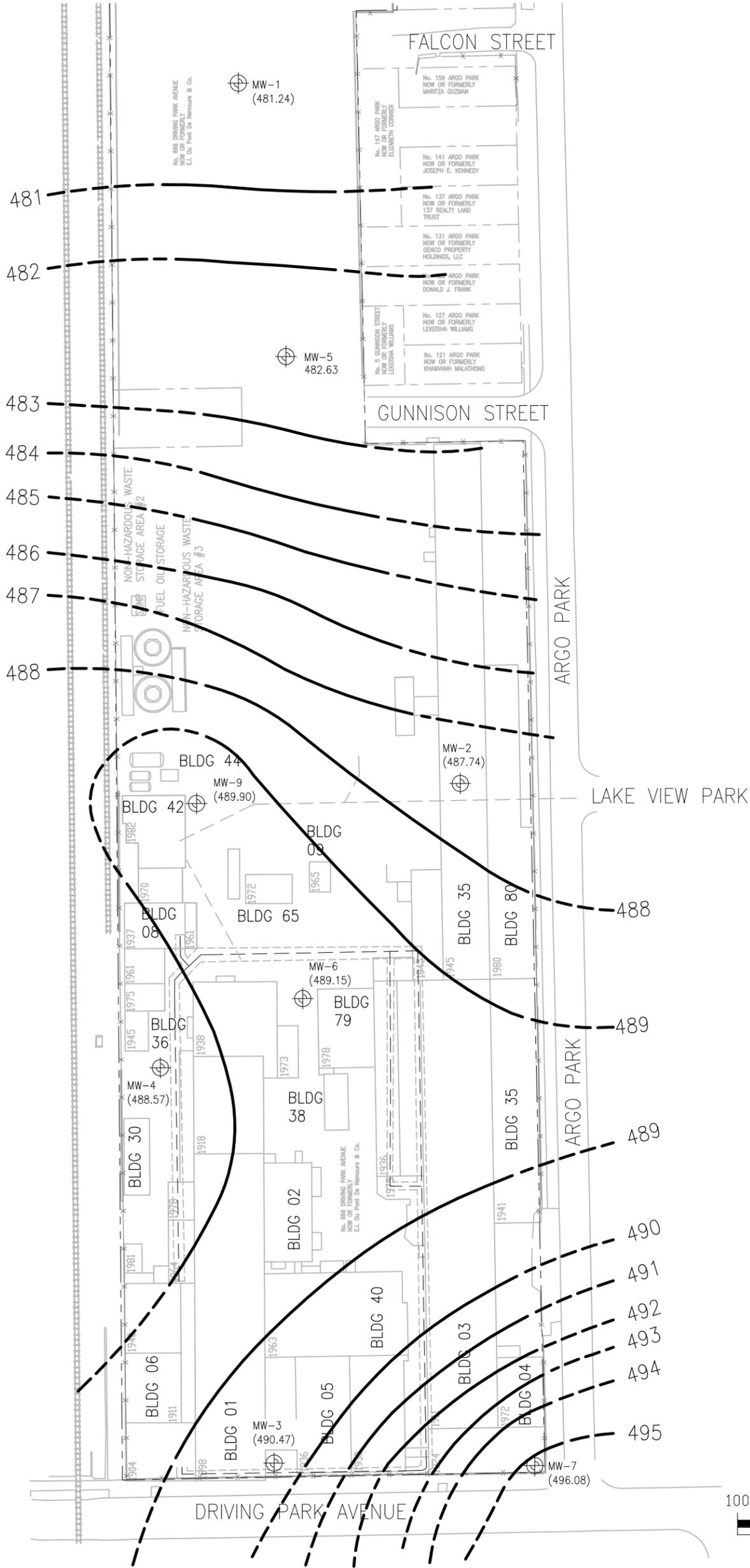
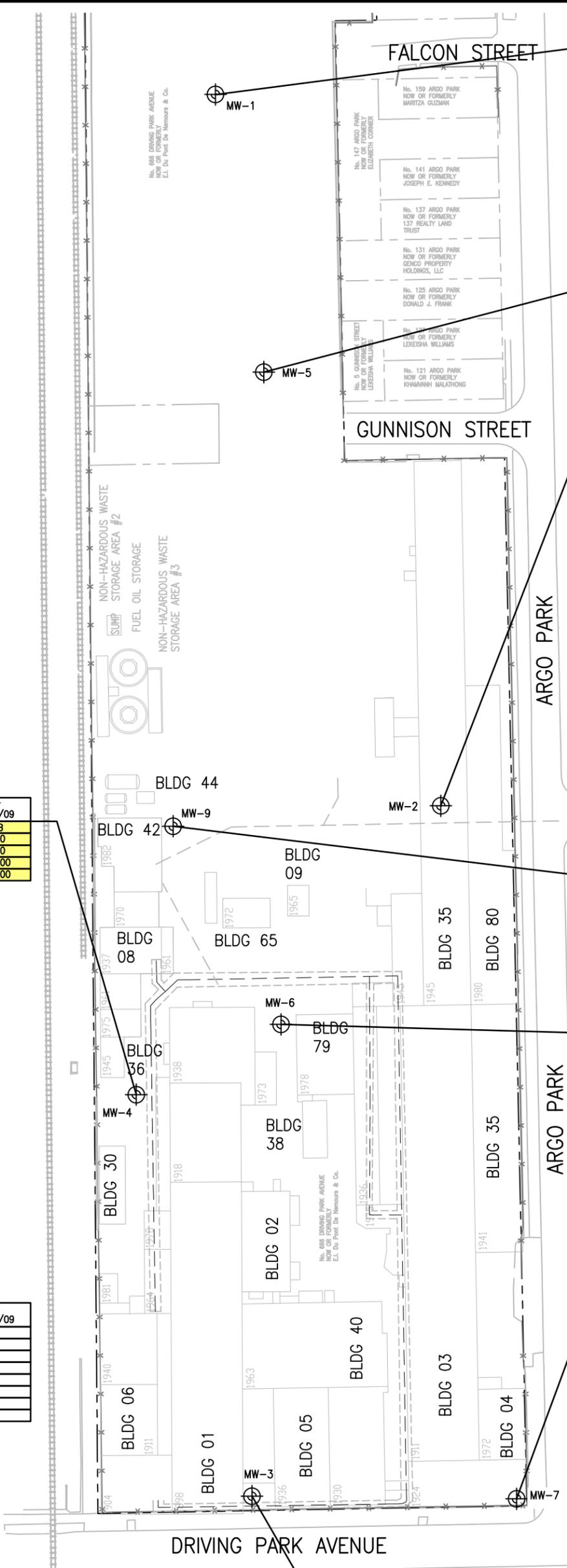


FIGURE 3
DuPont
666 DRIVING PARK SITE
ROCHESTER, NEW YORK
POTENTIOMETRIC SURFACE MAP
MAY 19, 2009
PARSONS
40 LA RIVIERE DRIVE, BUFFALO NY 14202, PHONE: (716)541-0730



ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-1 5/21/09
IRON	ug/L	D	300	5,820 J
IRON	ug/L	T	300	1,250
MAGNESIUM	ug/L	D	35,000	36,600
MAGNESIUM	ug/L	T	35,000	35,900
SODIUM	ug/L	D	20,000	101,000
SODIUM	ug/L	T	20,000	104,000

SAMPLE ID	MW-1
DATE	5/21/09
DUPLICATE	FS
APFO	ug/Kg 0.042
PFOA	ug/Kg 0.04

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-5 5/19/09
IRON	ug/L	T	300	13,800
MAGNESIUM	ug/L	T	35,000	70,700 J
SODIUM	ug/L	T	20,000	358,000

SAMPLE ID	MW-5
DATE	5/19/09
DUPLICATE	FS
APFO	ug/Kg NQ <0.01
PFOA	ug/Kg NQ <0.01

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-2 5/19/09
IRON	ug/L	T	300	3,810
IRON	ug/L	D	300	1,250
MAGNESIUM	ug/L	D	35,000	54,100 J
MAGNESIUM	ug/L	T	35,000	54,800 J
SODIUM	ug/L	D	20,000	149,000
SODIUM	ug/L	T	20,000	150,000

SAMPLE ID	MW-2
DATE	5/19/09
DUPLICATE	FS
APFO	ug/Kg 0.25
PFOA	ug/Kg 0.24

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-4 5/20/09
IRON	ug/L	T	300	358 B
MAGNESIUM	ug/L	D	35,000	52,500
MAGNESIUM	ug/L	T	35,000	55,200
SODIUM	ug/L	D	20,000	378,000
SODIUM	ug/L	T	20,000	360,000

SAMPLE ID	MW-4	MW-4
DATE	5/20/09	5/20/09
DUPLICATE	FS	DUP
APFO	ug/Kg 0.012	0.013
PFOA	ug/Kg 0.012	0.012

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-9 5/20/09
IRON	ug/L	T	300	444 B
SODIUM	ug/L	D	20,000	146,000
SODIUM	ug/L	T	20,000	165,000

SAMPLE ID	MW-9	MW-9
DATE	5/15/09	5/20/09
DUPLICATE	DUP	FS
APFO	ug/Kg 0.45	1.6
PFOA	ug/Kg 0.43	1.5

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-6 5/20/09
SODIUM	ug/L	D	20,000	276,000
SODIUM	ug/L	T	20,000	259,000

SAMPLE ID	MW-6
DATE	5/20/09
DUPLICATE	FS
APFO	ug/Kg 0.18
PFOA	ug/Kg 0.17

GROUNDWATER SAMPLING LEGEND:

SAMPLE ID	MW-1
DATE	5/19/09
DUPLICATE	FS
APFO	ug/Kg 37.3
PFOA	ug/Kg 37.3

GROUNDWATER SAMPLE RESULTS, CRITERIA EXCEEDANCE LEGEND:

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-1 5/19/09
TRICHLOROETHENE	ug/L	ug/L	ug/L	ug/L
VINYL CHLORIDE	ug/L	ug/L	ug/L	ug/L
IRON	ug/L	ug/L	ug/L	ug/L
IRON	ug/L	ug/L	ug/L	ug/L
MAGNESIUM	ug/L	ug/L	ug/L	ug/L
MAGNESIUM	ug/L	ug/L	ug/L	ug/L
SODIUM	ug/L	ug/L	ug/L	ug/L
SODIUM	ug/L	ug/L	ug/L	ug/L

- SHADING INDICATES ANALYTICAL RESULTS EXCEEDS SCREENING CRITERIA.
- ALL ANALYTICAL RESULTS IN ug/L
- FS= FIELD SAMPLE
- DUP= DUPLICATE FIELD SAMPLE RESULT.

NOTES:
 SCREENING CRITERIA = NYGWCLGA, 2002
 ND = NON DETECT AT STATED REPORTING LIMIT.
 NQ = COMPOUND DETECTED AT A LEVEL BETWEEN THE LIMIT OF DETECTION (LOD) AND THE LIMIT OF QUANTITATION (LOQ). RESULT IS NOT QUANTIFIABLE.
 J = ANALYTE PRESENT, REPORTED VALUE MAY NOT BE ACCURATE.
 B = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN THE LABORATORY OR FIELD BLANKS.
 UJ = NOT DETECTED. REPORTING LIMIT MAY NOT BE ACCURATE OR PRECISE.
 R - UNUSABLE RESULTS. ANALYTE MAY OR MAY NOT BE PRESENT IN THE SAMPLE.

ANALYTE	UNITS	TOTAL (T)/ DISS. (D)	SCREENING CRITERIA	MW-3 5/19/09
CIS-1,2-DICHLOROETHENE	ug/L	T	5	45
TRICHLOROETHENE	ug/L	T	5	96
VINYL CHLORIDE	ug/L	T	2	4.3
MAGNESIUM	ug/L	D	35,000	47,900 J
MAGNESIUM	ug/L	T	35,000	48,100 J
SODIUM	ug/L	D	20,000	437,000
SODIUM	ug/L	T	20,000	436,000

SAMPLE ID	MW-3
DATE	5/19/09
DUPLICATE	FS
APFO	ug/Kg 0.29
PFOA	ug/Kg 0.28



FIGURE 4

DuPont
 666 DRIVING PARK SITE
 ROCHESTER, NEW YORK

**GROUNDWATER SAMPLE RESULTS
 MAY 2009**

PARSONS
 40 LA RIVIERE DRIVE, BUFFALO NY 14202, PHONE: (716)541-0730

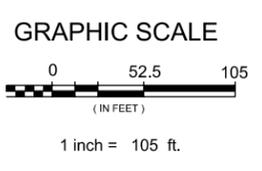
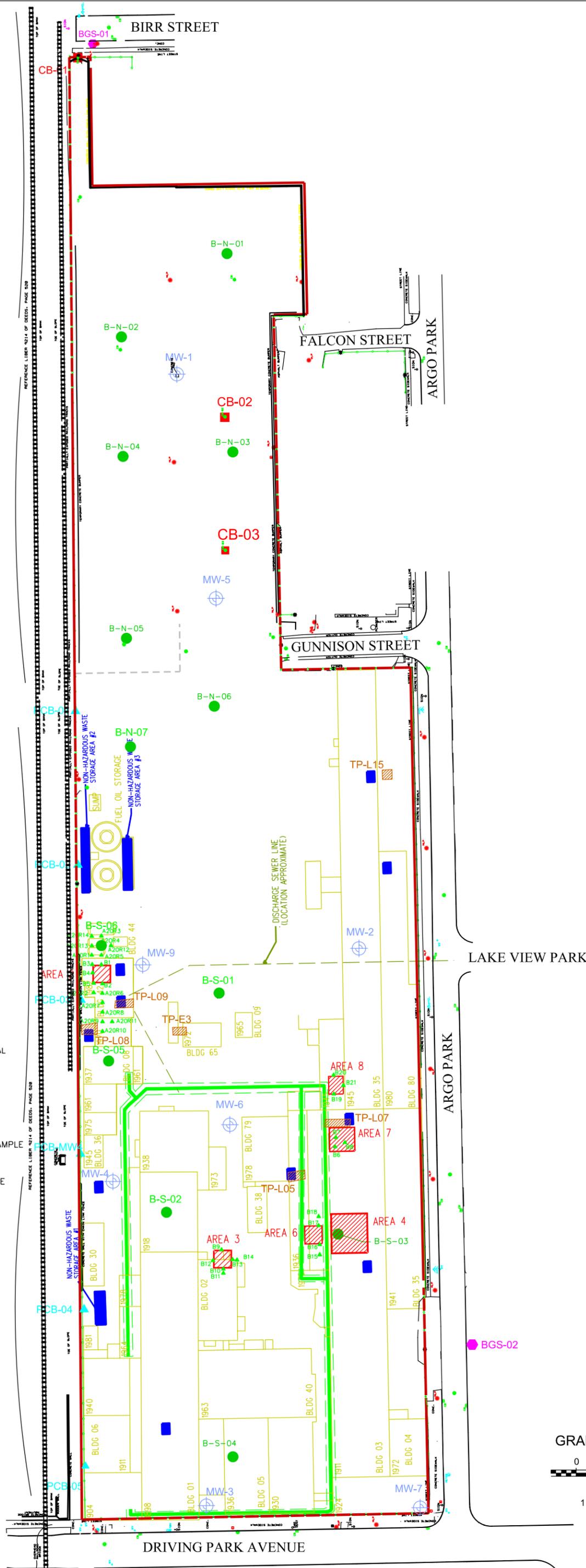
Soil Results

Areas 2, 3, 6, 7, and 8



LEGEND:

- 501— CONTOUR (1.0' INTERVAL)
- CONTOUR (0.25' INTERVAL)
- WLP WOODEN LIGHT POLE
- MLP METAL LIGHT POLE
- FLP FIBERGLASS LIGHT POLE
- WUP WOODEN UTILITY POLE
- SHRUB
- SHRUBROW
- DECIDUOUS TREE & SIZE
- DECIDUOUS TREE LINE
- RECTANGULAR CATCH BASIN
- ROUND CATCH BASIN
- HYDRANT
- WATER VALVE
- METER WATER METER
- SEWER MANHOLE
- TELEPHONE MANHOLE
- ELECTRIC HANDHOLE
- CITY HANDHOLE
- COUNTY HANDHOLE
- MONIT. WELL MONITORING WELL
- HANDICAP RAMP
- CHAIN LINK FENCE
- RAILROAD TRACK
- SCARP
- DISCHARGE SEWER LINE
- FORMER BUILDING LOCATION
- FORMER PROCESS WASTE WATER TRENCH
- FORMER SUMP APPROXIMATE LOCATION
- AREA OF POTENTIAL SOIL REMOVAL BASED ON TARGET METAL CONCENTRATIONS
- MONITORING WELL LOCATIONS
- 2008 RI SOIL BORING
- 2008 RI DELINEATION BORING
- 2008 PCB CHARACTERIZATION SAMPLE
- 2008 CATCH BASIN SAMPLE
- 2008 SITE BACKGROUND SAMPLE
- 2008 TEST PIT



DRAWN	GEB	DESIGNED	DMS	FILE NUMBER
CHECKED	DMS	APPROVED	PFM	Figure4-1.dgn
DATE	2/2/09	REVISION	0	FIGURE NO
				Fig-4-1

NOTES

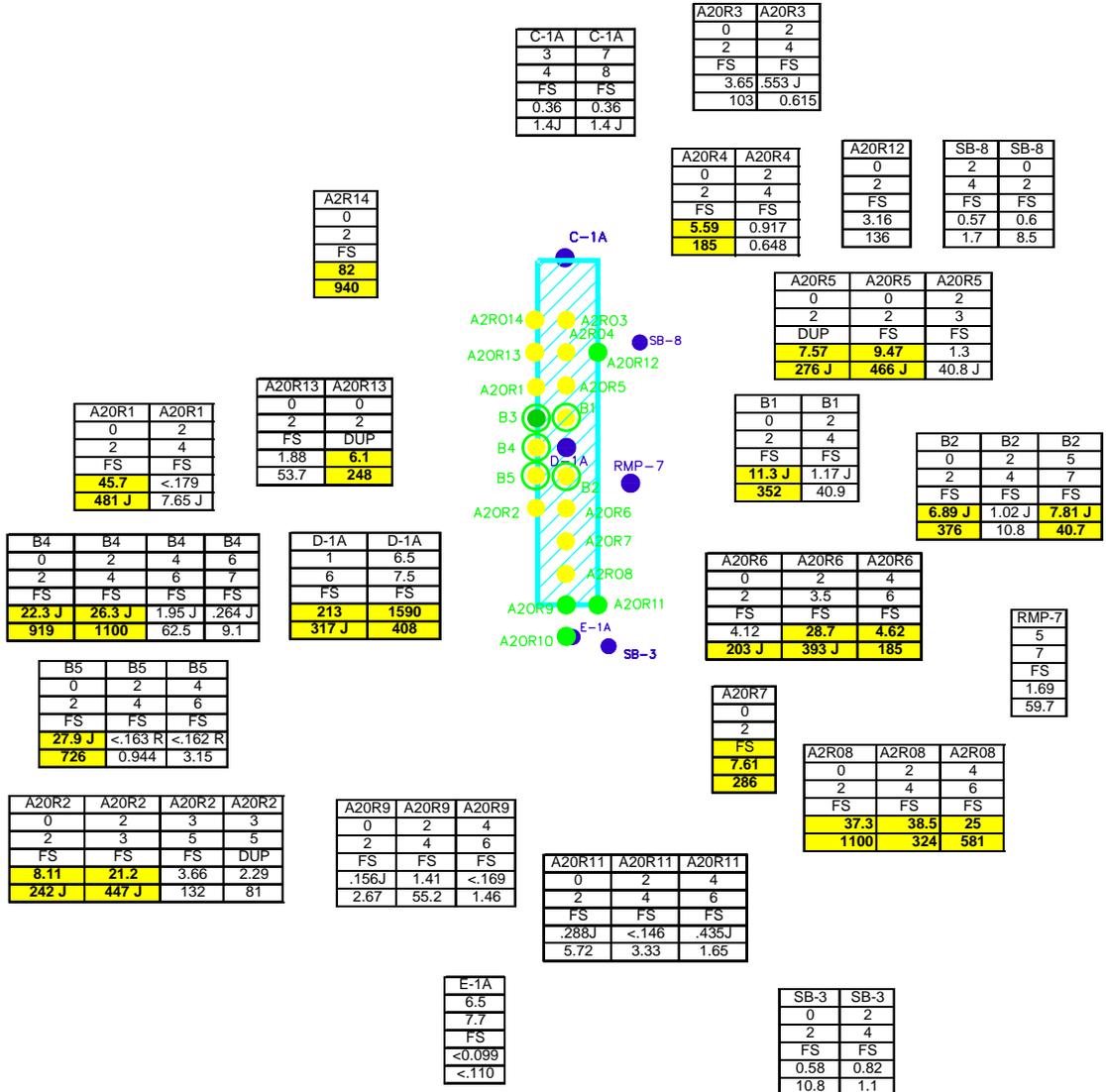
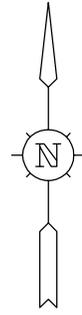
- SEE FIGURE 4-1 FOR AREA 2 LOCATION
- SEE TABLE 4-8 FOR ANALYTICAL RESULTS

Analytical Data Legend

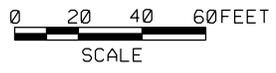
LabAnalyte	Units	Location	
		A20R6	A20R3
		Top (ft)	2
		Bottom (ft)	4
		Duplicate	FS FS
CADMIUM	mg/kg	37.3	0.553 J
SILVER	mg/kg	1100	0.615

Notes:

Bold/Yellow - Analytical Result Exceeds Screening Criteria
 All Analytical Results in mg/kg
 FS = Field Sample
 DUP = Duplicate Field Sample Result
 Cadmium Screening Criteria = 4.3 mg/kg
 Silver Screening Criteria = 180 mg/kg



- TP-07
- PREVIOUS BORING OR TEST PIT SAMPLE
- 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA
- 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA
- 2008 INNER BORING



Area 2 Soil Results
 Cadmium and Silver Results
 DuPont 666 Driving Park Site, Rochester, NY

DRAWN	GEB	DESIGNED	DMS	FILE NUMBER	Areas-2-8.dgn
CHECKED	DMS	APPROVED	PFM	FIGURE NO	Fig4-4
DATE	2/2/09	REVISION	0		



A20R1	A20R1
0	2
2	4
FS	FS
45.7	<0.179
481J	7.65J

A20R2	A20R2	A20R2	A20R2
0	2	3	3
2	3	5	5
FS	FS	FS	DUP
8.11	21.2	3.66	2.29
242J	447J	132	81

B1	B1
0	2
2	4
FS	FS
11.3J	1.17J
352	40.9

B2	B2	B2
0	2	5
2	4	7
FS	FS	FS
6.89J	1.02J	7.81J
376	10.8	40.7

B4	B4	B4	B4
0	2	4	6
2	4	6	7
FS	FS	FS	FS
22.3J	26.3J	1.95J	0.264J
919	1,100	62.5	9.1

B5	B5	B5
0	2	4
2	4	6
FS	FS	FS
27.9J	<0.163R	<0.162R
726	0.944	3.15

D-1A	D-1A	E-1A
1	6.5	6.5
6	7.5	7.7
FS	FS	FS
213	1,590	<0.099
317J	408	<0.110

SB-3	SB-3	RMP-7	SB-8	SB-8
0	2	5	2	0
2	4	7	4	2
FS	FS	FS	FS	FS
0.58	0.82	1.69	0.57	0.6
10.8	1.1	59.7	1.7	8.5

C-1A	C-1A
3	7
4	8
FS	FS
0.36	0.36
1.4J	1.4J

A20R8	A20R8	A20R8
0	2	4
2	4	6
FS	FS	FS
37.3	38.5	25
1,100	324	581

A20R9	A20R9	A20R9
0	2	4
2	4	6
FS	FS	FS
0.156J	1.41	<0.169
2.67	55.2	1.46

A20R11	A20R11	A20R11
0	2	4
2	4	6
FS	FS	FS
0.288J	<0.146	0.435J
5.72	3.33	1.65

A20R6	A20R6	A20R6
0	2	4
2	3.5	6
FS	FS	FS
4.12	28.7	4.62
203J	393J	185

A20R7
0
2
FS
7.61
286

A20R17	A20R16	A20R15
0	0	0
4	4	4
FS	FS	FS
1.35	0.676	9.5J
54.4	18.6	392

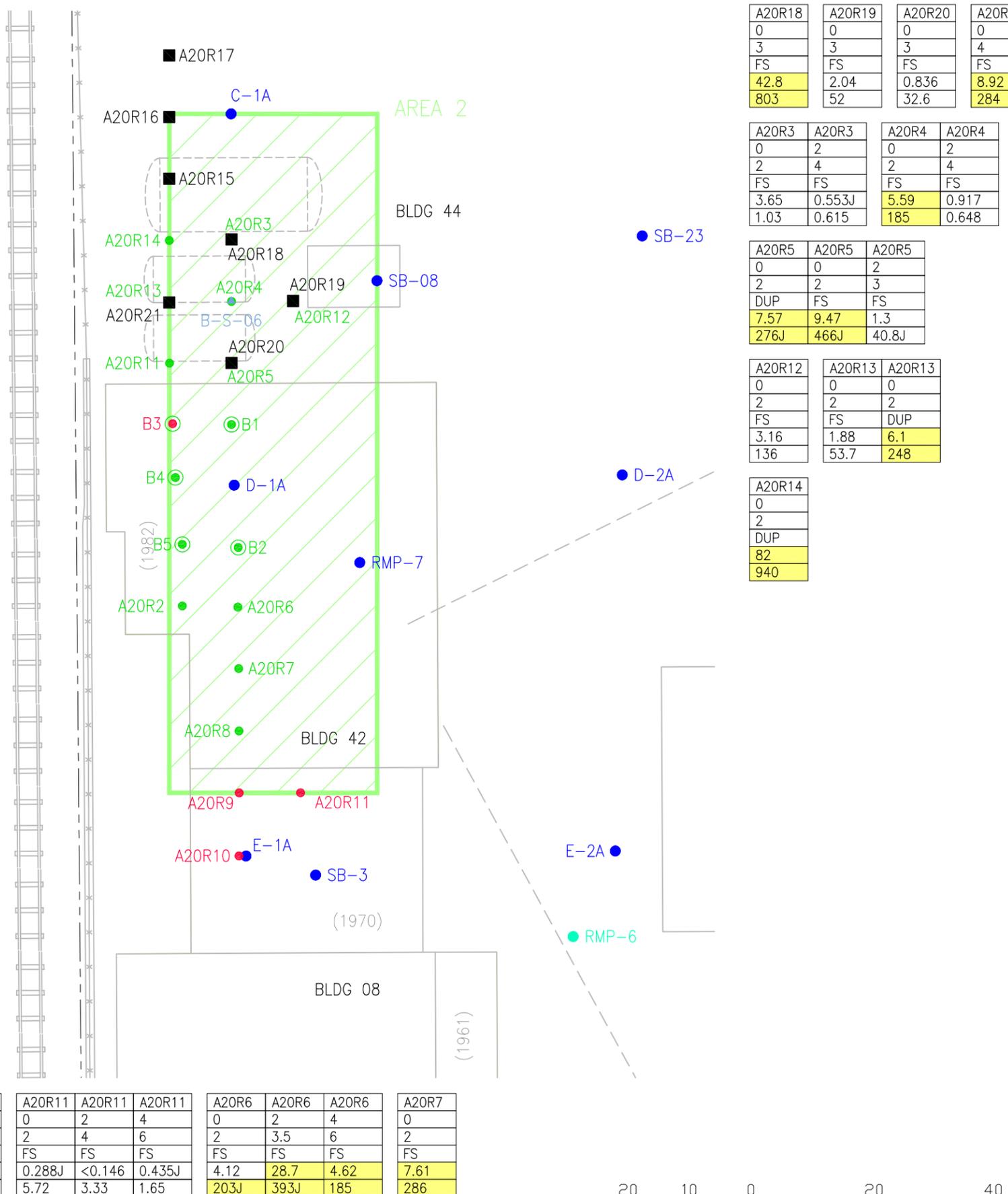
A20R18	A20R19	A20R20	A20R21
0	0	0	0
3	3	3	4
FS	FS	FS	FS
42.8	2.04	0.836	8.92
803	52	32.6	284

A20R3	A20R3	A20R4	A20R4
0	2	0	2
2	4	2	4
FS	FS	FS	FS
3.65	0.553J	5.59	0.917
1.03	0.615	185	0.648

A20R5	A20R5	A20R5
0	0	2
2	2	3
DUP	FS	FS
7.57	9.47	1.3
276J	466J	40.8J

A20R12	A20R13	A20R13
0	0	0
2	2	2
FS	FS	DUP
3.16	1.88	6.1
136	53.7	248

A20R14
0
2
DUP
82
940



NOTES:

1. ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO 2009 CAN BE FOUND IN THE FEBRUARY 2009 REMEDIAL INVESTIGATION REPORT.

ANALYTICAL DATA LEGEND:

		LOCATION	A20R8	A20R3
		TOP (FT)	0	2
		BOTTOM (FT)	2	4
LAB ANALYTE	UNITS	DUPLICATE	FS	FS
CADMIUM	mg/kg		37.3	0.553J
SILVER	mg/kg		1,100	0.615

SHADING INDICATES ANALYTICAL RESULTS EXCEEDS SCREENING CRITERIA.

ALL ANALYTICAL RESULTS IN mg/kg.

FS = FIELD SAMPLE

DUP= DUPLICATE FIELD SAMPLE RESULT.

CADMIUM SCREENING CRITERIA= 4.3 mg/kg.

SILVER SCREENING CRITERIA= 180 mg/kg.

LEGEND:

(1982) FORMER BUILDING NUMBER

--- PROPERTY LINE

CONTAMINATED AREA

● SB-23 PREVIOUS BORING OR TEST PIT SAMPLE LOCATION

● A20R3 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA

● A20R10 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA

● B1 2008 INNER BORING

■ A20R15 2009 SAMPLE LOCATION

FIGURE 1

DuPont
666 DRIVING PARK SITE
ROCHESTER, NEW YORK

AREA 2 SOIL RESULTS
CADMIUM AND SILVER



40 LA RIVIERE DRIVE, BUFFALO NY 14202, PHONE: (716)541-0730



NOTES

- SEE FIGURE 4-1 FOR AREA 3 LOCATION
- SEE TABLE 4-8 FOR ANALYTICAL RESULTS

Analytical Data Legend

Location		B10	A20R3
Top (ft)		0	2
Bottom (ft)		2	4
LabAnalyte	Units	Duplicate	FS
CADMIUM	mg/kg	37.3	0.553 J

Notes:

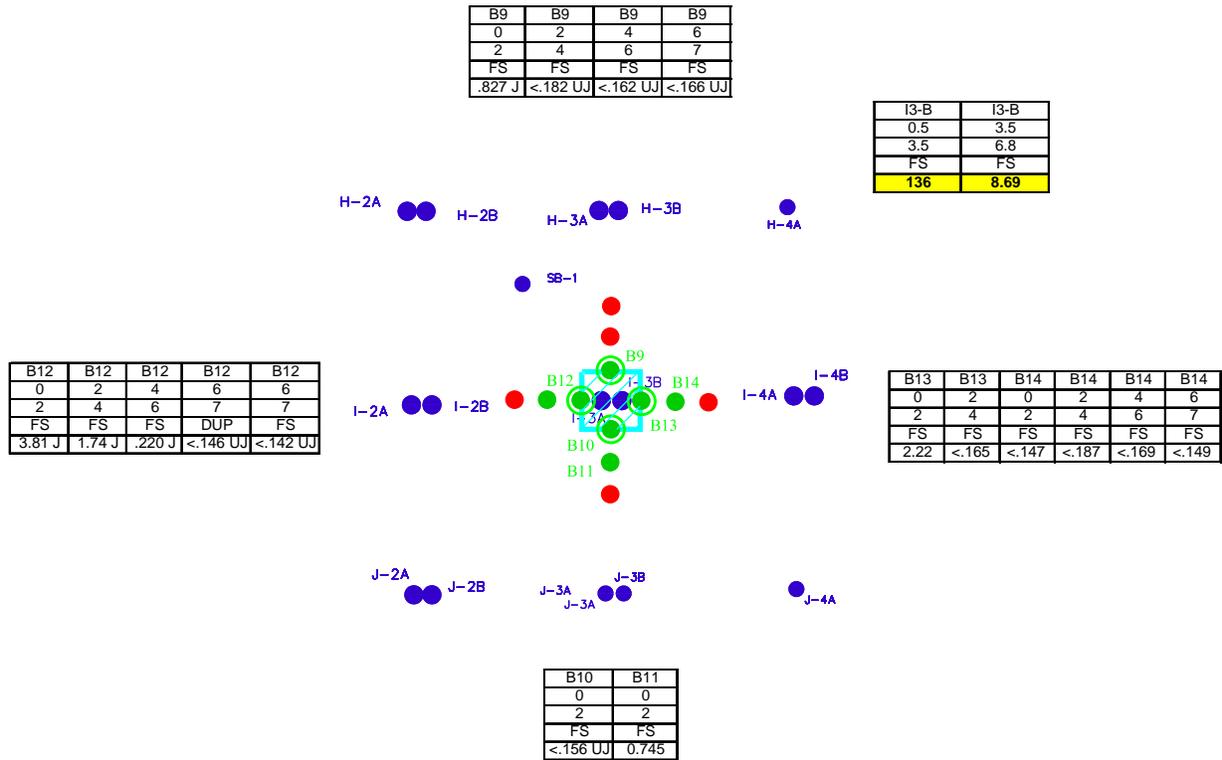
Bold/Yellow - Analytical Result Exceeds Screening Criteria

All Analytical Results in mg/kg

FS = Field Sample

DUP = Duplicate Field Sample Result

Cadmium Screening Criteria = 4.3 mg/kg



- DELINEATION BORING NOT REQUIRED
- TP-07 PREVIOUS BORING OR TEST PIT SAMPLE
- 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA
- 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA
- ◎ 2008 INNER BORING



DUPONT CORPORATE REMEDIATION GROUP
An Alliance between DuPont
and URS Diamond
Buffalo Ave and 26th Street
Niagara Falls, NY 14303



Area 3 Soil Results
Cadmium Results
DuPont 666 Driving Park Site, Rochester, NY

DRAWN	GEB	DESIGNED	DMS	FILE NUMBER	Areas-2-8.dgn
CHECKED	DMS	APPROVED	PFM	FIGURE NO	Fig4-5
DATE	2/2/09	REVISION	0		

NOTES

- SEE FIGURE 4-1 FOR AREA 6 LOCATION
- SEE TABLE 4-8 FOR ANALYTICAL RESULTS

Analytical Data Legend

Location	B10	A20R3
Top (ft)	0	2
Bottom (ft)	2	4
LabAnalyte	Units	Duplicate
CADMIUM	mg/kg	FS FS
		37.3 0.553 J

Notes:

Bold/Yellow - Analytical Result Exceeds Screening Criteria

All Analytical Results in mg/kg

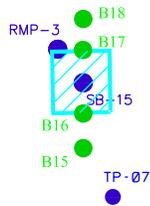
FS = Field Sample

DUP = Duplicate Field Sample Result

Cadmium Screening Criteria = 4.3 mg/kg

B18	B18
0	3
3	5
FS	FS
.950 J	1.06 J

B17	B17
0	3
3	5
FS	FS
1.35 J	3.11 J



SB-15
0.5
4
FS
11

B16	B16	B16
0	0	3
3	3	5
DUP	FS	FS
<.145 UJ	<.146 UJ	<.160 UJ

B15	B15
0	3
3	5
FS	FS
.230 J	<.164 UJ

- DELINEATION BORING NOT REQUIRED
- TP-07 PREVIOUS BORING OR TEST PIT SAMPLE
- 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA
- 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA
- ◎ 2008 INNER BORING



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An Alliance between DuPont
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and URS Diamond
Buffalo Ave and 26th Street
Newport, N.J. 08142



Area 6 Soil Results
Cadmium Results
DuPont 666 Driving Park Site, Rochester, NY

DRAWN	DESIGNED	FILE NUMBER
GEB	DMS	Areas-2-8.dgn
CHECKED	APPROVED	FIGURE NO
DMS	PFM	Fig4-6
DATE	REVISION	
2/2/09	0	

NOTES

1. SEE FIGURE 4-1 FOR AREA 7 LOCATION
2. SEE TABLE 4-8 FOR ANALYTICAL RESULTS

Analytical Data Legend

		Location	B10	A20R3
		Top (ft)	0	2
		Bottom (ft)	2	4
LabAnalyte	Units	Duplicate	FS	FS
CADMIUM	mg/kg		37.3	0.553 J

Notes:

Bold/Yellow - Analytical Result Exceeds Screening Criteria

All Analytical Results in mg/kg

FS = Field Sample

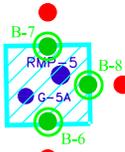
DUP = Duplicate Field Sample Result

Cadmium Screening Criteria = 4.3 mg/kg

B7	B7	B7	B7
0	2	4	4
2	4	6	6
FS	FS	DUP	FS
0.843	1.09	.326 J	.505 J



RMP-5	G5-A	G5-A
4	0.5	6.2
6	6	6.9
FS	FS	FS
5.3	11.9	<0.098



B8	B8	B8	B8
0	2	4	4
2	4	6	6
FS	FS	DUP	FS
5.27	0.945	.381 J	0.761



B6	B6	B6
0	2	4
2	4	6
FS	FS	FS
2.86	0.815	0.647

- DELINEATION BORING NOT REQUIRED
- TP-07
- PREVIOUS BORING OR TEST PIT SAMPLE
- 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA
- 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA
- 2008 INNER BORING



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An Alliance between DuPont
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Buffalo Ave and 26th Street
Niagara Falls, NY 14202



Area 7 Soil Results
Cadmium Results
DuPont 666 Driving Park Site, Rochester, NY

DRAWN	DESIGNED	FILE NUMBER
GEB	DMS	Areas-2-8.dgn
CHECKED	APPROVED	FIGURE NO
DMS	PFM	Fig4-7
DATE	REVISION	
2/2/09	0	



B6	B6	B6	B7	B7	B7	B7	B8	B8	B8	B8	RMP-5	G-5A	G-5A
0	2	4	0	2	4	4	0	2	4	4	4	0.5	6.2
2	4	6	2	4	6	6	2	4	6	6	6	6	6.9
FS	FS	FS	FS	FS	DUP	FS	FS	FS	DUP	FS	FS	FS	FS
2.86	0.815	0.647	0.843	1.09	0.326J	0.505J	5.27	0.945	0.381J	0.761	5.3	11.9	<0.098

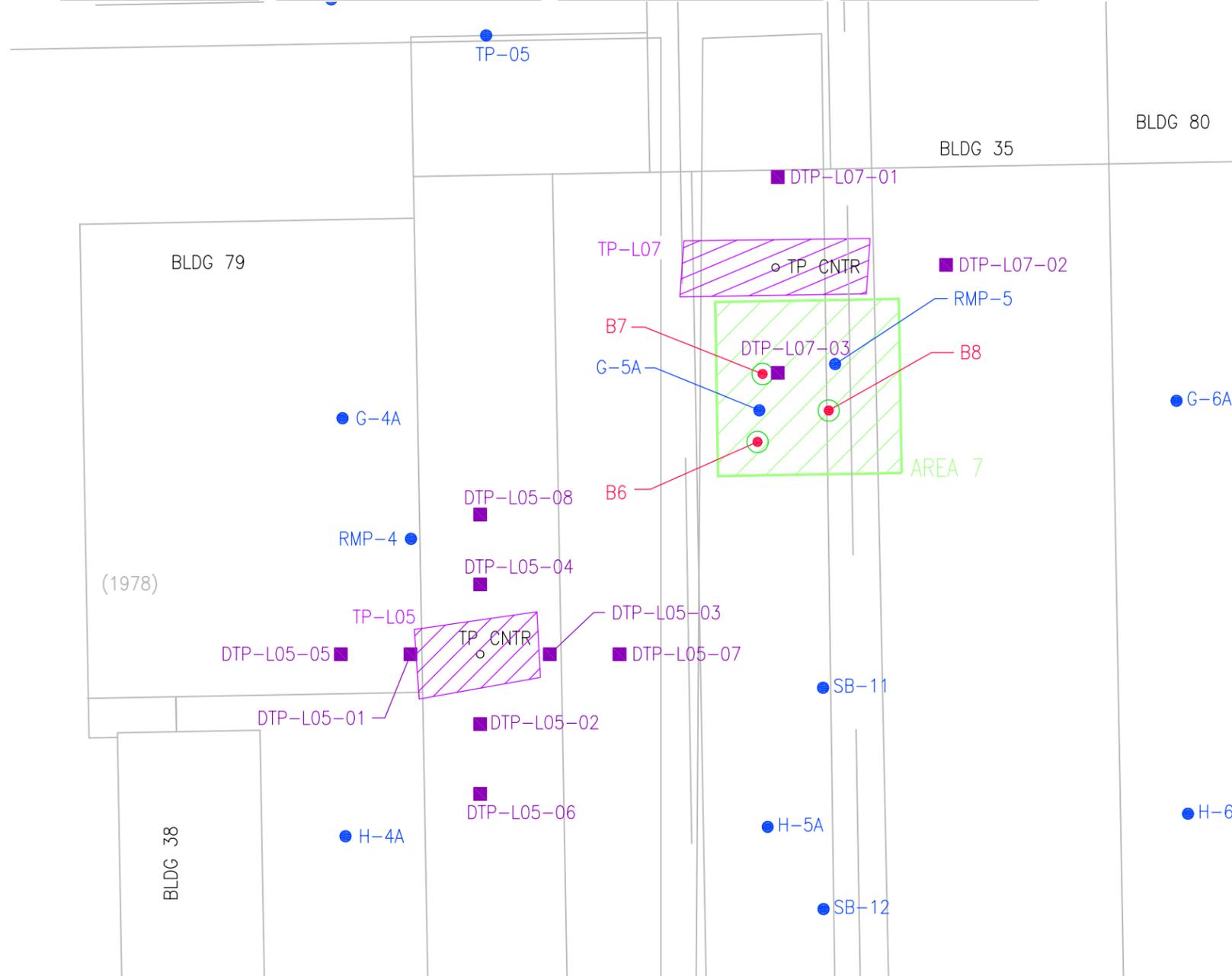
LAB ANALYTE	TP-L05	TP-L05
	8/26/08	8/26/08
	0	5.5
	2	5.5
FILL (F) NATIVE (N)	F	N
ALUMINUM	7,730	17,400
ANTIMONY	ND (0.255) UJ	ND (0.312) UJ
ARSENIC	4.49	7.96
BARIIUM	59.7	59.1
BERYLLIUM	0.276 J	0.733
CADMIUM	17.1 J	ND (0.182)
CALCIUM	104,000 J	7,270 J
CHROMIUM (1)	12.1 J	17.4 J
COBALT	3.42	5.15
COPPER	29.1 J	9.17 J
IRON	13,900	21,400
LEAD	46.8	24
MAGNESIUM	37,200	4,250
MANGNESIUM	325	277
MERCURY	0.0756 B	0.0803 B
NICKEL	8.32	9.8
POTASSIUM	3,130 J	4,120 J
SELENIUM	ND (1)	ND (1.22)
SILVER	530 J	0.694 J
SODIUM	219	341
THALLIUM	ND (0.162) UJ	ND (0.197) UJ
VANADIUM	18	27.8
ZINC	134 J	64.8 J

LAB ANALYTE	TP-L07	TP-L07
	8/26/08	8/26/08
	0	5.5
	2	5.5
FILL (F) NATIVE (N)	F	N
ALUMINUM	8,840	14,500
ANTIMONY	ND (0.273) UJ	ND (0.287) UJ
ARSENIC	4.56	7.28
BARIIUM	44.2	51.4
BERYLLIUM	0.409 J	0.482 J
CADMIUM	43.7 J	58.6 J
CALCIUM	87,200 J	4,540 J
CHROMIUM (1)	14 J	19.4 J
COBALT	4.03	5.35
COPPER	12.7 J	11.2 J
IRON	13,200	17,000
LEAD	18.5	24.6
MAGNESIUM	36,300	3,410
MANGNESIUM	383	284
MERCURY	0.0254 B	0.0587 B
NICKEL	8.4	8.53
POTASSIUM	4,490 J	2,820 J
SELENIUM	ND (1.07)	ND (1.12)
SILVER	43.9 J	36.7 J
SODIUM	161	119 J
THALLIUM	ND (0.173) UJ	ND (0.181) UJ
VANADIUM	15.3	23.5
ZINC	32.2 J	53.8 J

DTP-05-01	DTP-05-02	DTP-05-03	DTP-05-04	DTP-05-04
0	0	0	0	0
2	2	2	2	2
FS	FS	FS	FS	DUP
0.286 J	38.3	6.96	10.3	11.7

DTP-05-05	DTP-05-06	DTP-05-07	DTP-05-08
0	0	0	0
2	2	2	2
FS	FS	FS	FS
1.3	7.12	0.307 J	0.876

DTP-07-01	DTP-07-01	DTP-07-02	DTP-07-02	DTP-07-03	DTP-07-03
0	4.5	0	4.5	0	4.5
2	4.5	2	4.5	2	4.5
FS	FS	FS	FS	FS	FS
20.1	61	6.96	17.9	4.41	17.6



NOTES:

1. ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO 2009 CAN BE FOUND IN THE FEBRUARY 2009 REMEDIAL INVESTIGATION REPORT.

ANALYTICAL DATA LEGEND:

LAB ANALYTE	UNITS	LOCATION		
		A20R8	A20R3	
CADMIUM	mg/kg	TOP (FT)	0	2
		BOTTOM (FT)	2	4
		DUPLICATE	FS	FS
			37.3	0.553J

SHADING INDICATES ANALYTICAL RESULTS EXCEEDS SCREENING CRITERIA.

ALL ANALYTICAL RESULTS IN mg/kg.

FS= FIELD SAMPLE

DUP= DUPLICATE FIELD SAMPLE RESULT.

CADMIUM SCREENING CRITERIA= 4.3 mg/kg.

LEGEND:

- (1982) FORMER BUILDING NUMBER
- PROPERTY LINE
- CONTAMINATED AREA
- SB-23 PREVIOUS BORING OR TEST PIT SAMPLE LOCATION
- A20R3 2008 BORING ANALYTICAL RESULTS ABOVE SCREENING CRITERIA
- A20R10 2008 BORING ANALYTICAL RESULTS BELOW SCREENING CRITERIA
- B1 2008 INNER BORING
- DTP-L05-07 2009 SAMPLE LOCATIONS

FIGURE 2

DuPont
666 DRIVING PARK SITE
ROCHESTER, NEW YORK

AREA 7 TEST PIT AND CADMIUM RESULTS



SCALE: 1"=20'

NOTES

1. SEE FIGURE 4-1 FOR AREA 8 LOCATION
2. SEE TABLE 4-8 FOR ANALYTICAL RESULTS

Analytical Data Legend

LabAnalyte	Units	Location	
		B10	A20R3
		Top (ft)	2
		Bottom (ft)	4
		Duplicate	FS
SILVER	mg/kg		0.553 J

Notes:

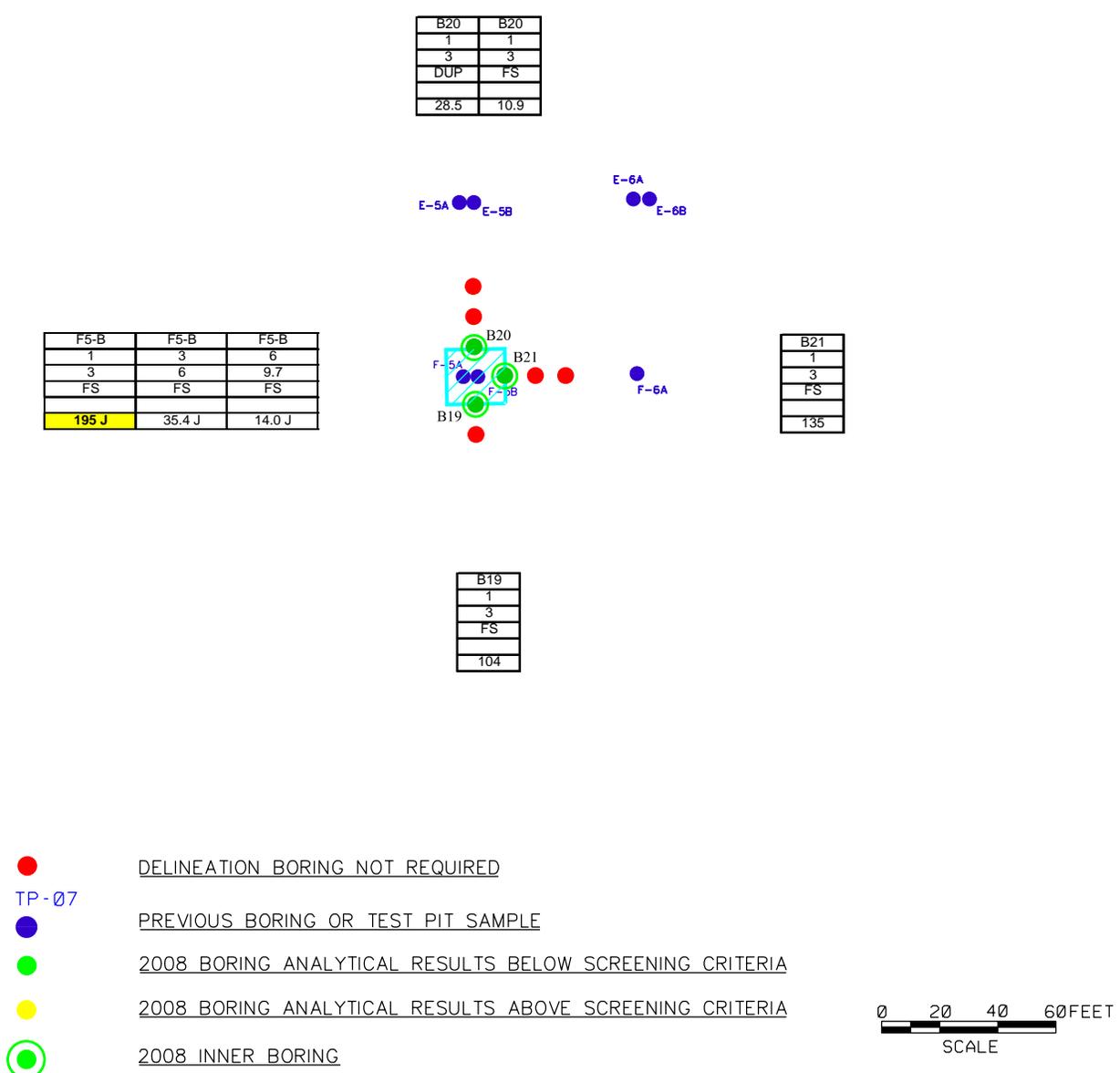
Bold/Yellow - Analytical Result Exceeds Screening Criteria

All Analytical Results in UG/KG

FS = Field Sample

DUP = Duplicate Field Sample Result

Silver Screening Criteria = 180 mg/kg



B20	B20
1	1
3	3
DUP	FS
28.5	10.9

F5-B	F5-B	F5-B
1	3	6
3	6	9.7
FS	FS	FS
195 J	35.4 J	14.0 J

B21
1
3
FS
135

B19
1
3
FS
104



DUPONT CORPORATE REMEDIATION GROUP
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Naperville, IL, NY 14522



Area 8 Soil Results
Silver Results
DuPont 666 Driving Park Site, Rochester, NY

DRINK	DESIGNED	FILE NUMBER
GEB	DMS	Areas-2-8.dgn
CHECKED	APPROVED	FIGURE NO
DMS	PFM	Fig4-8
DATE	REVISION	
2/2/09	0	