Department of Environmental Conservation

Division of Environmental Remediation

Environmental Restoration
Record of Decision
Boone Park Site
Buffalo, Erie County, New York
Site Number B00196-9

March 2006

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* DENISE M. SHEEHAN, *Commissioner*

DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION

Boone Park Environmental Restoration Site
Buffalo, Erie County, New York
Site No. B00196-9

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Boone Park site, an environmental restoration site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Boone Park environmental restoration site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous substances from this site have been addressed by implementing the interim remedial measure identified in this ROD. The removal of contaminated soil from the site has significantly reduced the threat to public health and the environment. This site does not present a current or potential threat to public health or the environment.

Description of Selected Remedy

Based on the results of the Site Investigation/Remedial Alternatives Report (SI/RAR) for the Boone Park site and the criteria identified for evaluation of alternatives, the NYSDEC has selected No Further Action. The City of Buffalo, as site owner, will place a copy of this Record of Decision in the park file and make it available to City maintenance employees who may conduct work in and around the park in the future.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective.

MAR 31 2006
Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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Environmental Restoration
RECORD OF DECISION

Boone Park Site
Buffalo, Erie County, New York
Site No. B00196-9
March 2006

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the Boone Park Site.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Under the Environmental Restoration (Brownfields) Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated the property can then be reused.

As more fully described in Sections 3 and 5 of this document, the original construction of the park may have resulted in the disposal of arsenic-contaminated material, which was utilized as fill at the site. The source of this fill material is unknown. The presence of the arsenic-contaminated soil at the park was identified during a 1999-2000 investigation overseen by the United States Environmental Protection Agency (USEPA). As a public health precaution, the City of Buffalo closed the park.

In April 2004, a Site Investigation was initiated under the Environmental Restoration Program to determine the extent of arsenic contamination at the site. During the course of the investigation an interim remedial measure (IRM), was undertaken in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the site investigation/remedial alternatives report (SI/RAR). The IRM undertaken at this site included excavation and off-site disposal of approximately 5,500 cubic yards of arsenic-contaminated soil.

Based on the implementation of the above IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment, therefore No Further Action was selected as the remedy for this site.

Theselected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially 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.

SECTION 2: SITE LOCATION AND DESCRIPTION

Figure 1 provides the location of Boone Park, in South Buffalo, Erie County, New York. Boone Park, which is approximately 3 acres in size, is located in an urban setting and is bounded to the north and south by residential, commercial, and vacant properties, to the east by Boone Street, and to the west by Germania Street. The site is located approximately 1,000 feet south of the Buffalo River and approximately two miles east of Lake Erie (Buffalo Outer Harbor). The area is relatively flat and low-lying. There are presently no surface waterways at the site. Accounts from long-time neighbors indicate that, prior to the development of the park, a drainage ditch bisected the parcel, in an east-west direction. Fill materials were apparently utilized in the development of the park for public use. Located approximately one-half mile west of Boone Park is the Steelfields Voluntary Cleanup Project.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The early history of the Boone Park area was likely characterized by its proximity to the industrial and transportation infrastructure to the west. Prior to the creation of the park in 1949-1950, there is no indication that the parcels that comprise the present-day park were developed, although the immediate environs were generally residential in nature. Although there are no specific records indicating sources or quantities of materials brought to the site, it is assumed that fill materials were imported to create the park landscape.

3.2: Remedial History

As part of environmental investigations of the South Buffalo neighborhood known as Hickory Woods, which included Boone Park, the United States Environmental Protection Agency (USEPA) conducted sampling of the park soils in May 2000. URS Corporation conducted additional sampling under the auspices of the USEPA and the City of Buffalo between 1999 and 2001. Samples collected during those investigations were analyzed for VOCs, SVOCs, TCL metals, and pesticide compounds. The results of those investigations indicated that elevated arsenic levels were present in site soils.

SECTION 4: ENFORCEMENT STATUS

Since no viable Potentially Responsible Parties (PRPs) have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of Buffalo will assist the state in its efforts by providing all information to the state which identifies PRPs. The City

will also not enter into any agreement regarding response costs without the approval of the NYSDEC.

SECTION 5: SITE CONTAMINATION

The City of Buffalo has recently completed a site investigation (SI) report to determine the nature and extent of any contamination by hazardous substances at this environmental restoration site.

5.1: Summary of the Site Investigation

The purpose of the SI was to define the nature and extent of arsenic contamination resulting from previous activities at the site. The SI was conducted between April 2004 and November 2004. The field activities and findings of the investigation are described in the SI report.

The following activities were conducted during the SI:

- Research of historical information;
- Completion of 24 soil borings and 4 monitoring wells for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions; and
- Sampling of the four new monitoring wells.

To determine whether the soil and groundwater contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels". A site-specific remedial action objective (RAO) for arsenic in soil of 20 milligrams per kilogram (ppm) was developed by the NYSDEC and NYSDOH, based on surface soil background values for the area.

Based on the SI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized below. More complete information can be found in the SI report.

5.1.1: Site Geology and Hydrogeology

A summary of the significant features of the site geology and hydrogeology, as they relate to the nature and extent of contamination, follows:

- Imported historic fill materials were generally present from the ground surface to a depth of several feet or greater. Within the fill materials were areas with notable quantities of C&D materials (concrete, brick, etc.) and materials generally recognized as industrial solid waste (ash, foundry sands, etc.).

- From measurements taken on April 22, 2004, the static groundwater surface at the site is approximately nine feet below the ground surface. The April 2004 water level data indicated local flow to the south or southeast.

- Regional bedrock geologic mapping indicates that bedrock underlying the site consists of Onondaga limestone. These formations were not encountered at the bottom of site borings completed during the SI.

5.1.2: Nature of Contamination

As described in the SI report, the presence of arsenic-contaminated soil at the site was established based on the USEPA sampling conducted during the period from 1999 through 2001. The SI soil sampling program was designed to determine the horizontal and vertical extent of that contamination on the park property.

As part of the SI, four temporary groundwater monitoring wells were installed and sampled to characterize groundwater quality. SI groundwater data indicated that only one organic compound (toluene) and several inorganic parameters (antimony, arsenic, chromium, cobalt, copper, cyanide, iron, lead, magnesium, manganese, nickel, and selenium) were detected at concentrations exceeding NYSDEC Class GA groundwater standards (see Table 1).

5.1.3: Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

Seventeen surface soil samples were collected by the USEPA in May 2000 from the Boone Park playground and baseball fields. Most of these contained elevated levels of arsenic. Arsenic levels in surface soils ranged from 5.4 ppm up to a maximum concentration of 304 ppm with an average concentration of 73.4 ppm for the 17 samples collected from Boone Park. Arsenic levels in 15 subsurface soils collected at depths from 6 inches to 54 inches ranged from 3.8 ppm to 38.4 ppm with an average concentration of 14.5 ppm.

Sixty soil samples from discrete depths were collected during the SI to characterize the extent of arsenic contamination in shallow overburden soils at the site. The soil sample results were utilized, along with the USEPA historical data, to determine excavation depths that would be needed to achieve the Remedial Action Objective (RAO) of 20 ppm arsenic at the limits of excavation. The following conclusions were made from the SI data:

- The majority of the soils sampled in the 0-inch to 6-inch depth interval contained arsenic concentrations exceeding the RAO; with concentrations ranging from 5.7 to 67.1 ppm and averaging 27.8 ppm.

- Some samples in the 6-inch to 12-inch depth interval and within the 12-inch to 18-inch depth interval, contained arsenic at concentrations exceeding the RAO; the highest concentration found was 353 ppm. However, the majority of the soils had arsenic concentrations less than the RAO; the average concentrations in the 6- to 12-inch and 12- to 18-inch intervals were just 33.8 and 15.2 ppm respectively.

A discussion of the extent of arsenic-impacted soils, by depth, follows:

Surface Soil
{depth: 0-6 inches}

Pre-IRM data indicated that the majority of these soils were arsenic-impacted. The IRM removed all of those soils.

Shallow Subsurface Soil
{ depth: 6-18 inches}

Figure 2 shows the areas where IRM excavation to 12 inches or eighteen inches was anticipated, based on SI arsenic data. Figure 3 provides the final depth to which excavation was completed. Soil confirmation data indicate that the RAO was achieved at the vertical limits of excavation (excavation bottom) within each of the 31 soil confirmation sampling areas.

Deeper Subsurface Soil
{depth exceeding 18 inches)

USEPA data indicated two locations at the site where soils from deeper than eighteen inches below the ground surface contained arsenic at concentrations exceeding the RAO. IRM excavations in two areas (Areas 7 and 17, Figure 3) extended deeper than eighteen inches before the RAO could be achieved. A limited zone of material that exceeded the site RAO for arsenic was left in place beneath a sidewalk and curb near the northwest corner of the site at a depth of approximately two feet. It is unlikely that routine future maintenance or repair of the sidewalk or curb would disturb this material. However, the City will place a copy of the Record of Decision in the park file and make it available to City maintenance employees who may conduct work in and around the park in the future to alert them to this remaining material.

Groundwater

One VOC (toluene) and several inorganic parameters were detected at concentrations exceeding NYSDEC Class GA Groundwater Standards (see Table 1). Only iron and manganese were present at greater than one order of magnitude above the Class GA Standard. The SI Report concluded that the levels of inorganic parameters detected were consistent with expected groundwater quality from temporary monitoring wells, where high turbidity can contribute to matrix interference and can skew inorganics results.

5.2: 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 completion of the SI/RAR. Based on the site investigation data, an IRM for the Boone Park site was designed to remove soil within the site to target depths required to achieve the RAO for arsenic. Removal of arsenic contamination would be confirmed via sampling.

The IRM soil confirmation sampling results (see Table 2) indicated that the RAO was achieved at the vertical limits of excavation (excavation bottom) within each of the 31 soil confirmation sampling areas.

The September 2005 IRM Construction Certification Report documented the removal and off-site disposal of approximately 5,500 cubic yards of arsenic-impacted soil and the replacement of those soils with certified clean backfill materials. The post-IRM site condition may then be characterized thus:

- The 20 ppm RAO was achieved at the vertical limits of excavation (bottom of excavation) at each soil confirmation sampling area.
- The site-wide average arsenic concentration at the bottom of the excavation was 9.7 ppm.
- Due to practical limits of excavation a limited volume of arsenic-impacted materials were left beneath a recently installed sidewalk and curb near the northwestern corner of the site at a depth of approximately two feet below the ground surface. It is unlikely that routine future maintenance or repair of the sidewalk or curb would disturb this material.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 10 (Qualitative Human Health Exposure Assessment) of the September 2005 IRM Construction Certification Report, which can be found at the document repository.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

One potential exposure pathway identified for the site could be the use of groundwater from the area.

The Qualitative Human Health Exposure Assessment concluded that, based on the anticipated continued use of the site as a park, potential pathway was judged to be unlikely as the area has long been served by a reliable public drinking water source and the local public is aware that past industrial activity in the area has impacted shallow groundwater. In addition the City of Buffalo has a prohibition on using groundwater as a potable water supply.

5.4: Summary of Environmental Impacts

Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

No environmental exposure pathways or ecological risks were identified during the SI.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS, SELECTED REMEDY, AND THE PROPOSED USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

The proposed future use for the Boone Park Site is as a public park.

Prior to the completion of the IRM described in Section 5.2, the remediation goal for this site was to eliminate or reduce to the extent practicable exposures of park visitors to arsenic in the site soils. The NYSDEC believes that the IRM has accomplished this remediation goal.

The main SCGs applicable to this project are as follows:

- The site-specific RAO of 20 ppm arsenic based on surface soil background values in the area.

- NYSDEC Class GA Groundwater Standards.

The soil confirmation data from the IRM indicates that the remediation goals for arsenic in surface and subsurface soils have been satisfied. The IRM soil removal will also mitigate further deterioration in groundwater quality at the site.

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the NYSDEC has selected No Further Action as the preferred alternative for the site. The City, as owner, will place a copy of the Record of Decision in the park file and make it available to City maintenance employees who may conduct work in and around the park in the future.

The basis for this selection is the NYSDEC's conclusion that No Further Action will be protective of human health and the environment and will satisfy all SCGs as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the NYSDEC concludes that No Further Action is needed.

TABLE 1
Nature and Extent of Contamination
Groundwater samples collected in 2004 from SI temporary monitoring wells

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic	toluene	16-140	5	3-4
Inorganics	antimony	3.2-8.2	3	4-4
	arsenic	31.8-97.7	25	4-4
	chromium	111-289	50	4-4
	cobalt	53.1-129	5	4-4
	copper	277-862	200	4-4
	iron	161,000-362,000	300	4-4
	lead	74.4-344	25	4-4
	magnesium	59,500-158,000	35,000	4-4
	manganese	1,330-7,870	300	4-4
	nickel	202-420	100	4-4
	selenium	11.5-11.8	10	2-4
	cyanide	0.38 mg/l	0.2 mg/l	1-4

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
mg/l = milligrams per liter, which is equivalent to ppm

[b] SCG = standards, criteria, and guidance values; for subsurface soil = site-specific Remedial Action objective; for groundwater = NYSDEC Class GA Groundwater Standard

Table 2
Boone Park
SOIL CONFIRMATION SAMPLE AREAS AND TOTAL ARESENIC RESULTS

Area	Area (sq. ft.)	Cut Depth(ft)	Sample ID(date-05)	Result (ppm)	Notes
1	5,500	1.33	SC-1(4-7)	7.4	
2	4453	1	SC-2 (4-11)	9.8	
3	4688	1.5	SC-3 (4-12)	11.4	
4	4688	1.5	SC-4 (4-12)	9.9	
5	4922	1.5	SC-5 (4-12)	5.6	
6	2813	1	SC-6 (4-13)	12.9	
7	1953	1.75	SC-7R(5-4)	8.9	1.25 ft deeper than design
8	3750	1	SC-8 (4-13)	10.8	
9	5000	1	SC-9 (4-13)	9.1	
9 (add)	336	0.75	NA	NA	foundry sand excavated
10	4238	1	SC-10 (4-13)	9.9	
11	1406	1	SC-11R (4-18)	11.2	0.5 ft deeper than design
12	4238	1	SC-12 (4-14)	17.3	
13	4238	1	SC-13 (4-14)	8.8	
14	4238	1	SC-14 (4-14)	12.8	
15	4297	1	SC-15 (4-14)	19	
16	4297	1	SC-16 (4-14)	8.7	
17	2735	3.5	SC-17R2 CLAY (5-5)	3.3	native silt/clay at depth
			SC-17R2 GRAN (5-5)	**104**	fill materials beneath curb, road & sidewalk
18	4219	1	SC-18R (4-20)	9.6	0.5 ft deeper than design
19	4995	1	SC-19 (4-15)	9.3	
20	4922	1.5	SC-20 (4-15)	7.1	
21	3750	0.5	SC-21 (4-15)	18.2	
22	3438	1	SC-22R (4-20)	6.3	0.5 ft deeper than design
22-add	2112	0.75	NA	NA	foundry sand excavated
23	3125	1	SC-23R (4-20)	6.1	0.5 ft deeper than design
24	3125	1	SC-24R (4-20)	5.9	0.5 ft deeper than design
24-add	594	0.75	NA	NA	foundry sand excavated
25	4995	1	SC-25 (4-15)	8.2	
26	4995	1	SC-26 (4-15)	14.7	
27	2500	1	SC-27R (4-20)	6.4	0.5 ft deeper than design
28	3438	0.5	SC-28 (4-18)	11.3	
29	2188	1.5	SC-29R2 (4-26)	3.3	1 ft deeper than design
30	1328	1	SC-30R (4-21)	6.0	0.5 ft deeper than design
31	4,844	1	SC-31 (4-29)	12.2	
DECON			DECON (5-5)	3.8	vehicle decontamination pad sample

Notes: 1. See Figure 1 for Soil Confirmation Sample Locations
2. Sample results that exceeded the Remedial Goal of 20 ppm for total arsenic are shaded

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Boone Park Environmental Restoration Site
City of Buffalo, Erie County, **New York**
Site No. B-00196-9

The Proposed Remedial Action Plan (PRAP) for the Boone Park site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 9, 2006. The PRAP outlined the remedial measure proposed for the contaminated soil at the Boone Park site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on February 22, 2006, which included a presentation of the Site Investigation (SI) and the Remedial Alternatives Report (RAR) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 27, 2006.
This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received during the February 22 public meeting, with the NYSDEC's responses:

COMMENT 1: The "standard levels" (recently proposed 6NYCRR Part 375 regulations) for contaminants that you met in cleanup of this site have only been proposed within the last 6 months, after work on this site was completed. These new "standard levels" will receive significant statewide public comment. The levels are too high.
RESPONSE 1: The cleanup goal for this Environmental Restoration Program project was to remediate to "pre-release conditions" to the extent practicable, i.e. on-site concentrations of inorganic contaminants such as arsenic should be reduced to background or natural levels. At the time that plans were being made for the Boone Park cleanup, the background concentration of arsenic was estimated to be 20 ppm. Though the Boone Park cleanup goal was 20 ppm arsenic, the confirmatory soil sampling indicated that the concentrations remaining beneath the park after the IRM soil excavation was completed averaged only 9.7 ppm arsenic.

COMMENT 2: Did the imported fill used meet TAGM requirements for arsenic?
RESPONSE 2: The clean soils brought to the site to backfill the excavation and restore the park were tested and found to contain less than 3 ppm arsenic. The TAGM- (NYSDEC Technical Administrative and Guidance Memorandum) recommended soil cleanup objective for arsenic is site background or 7.5 ppm arsenic.

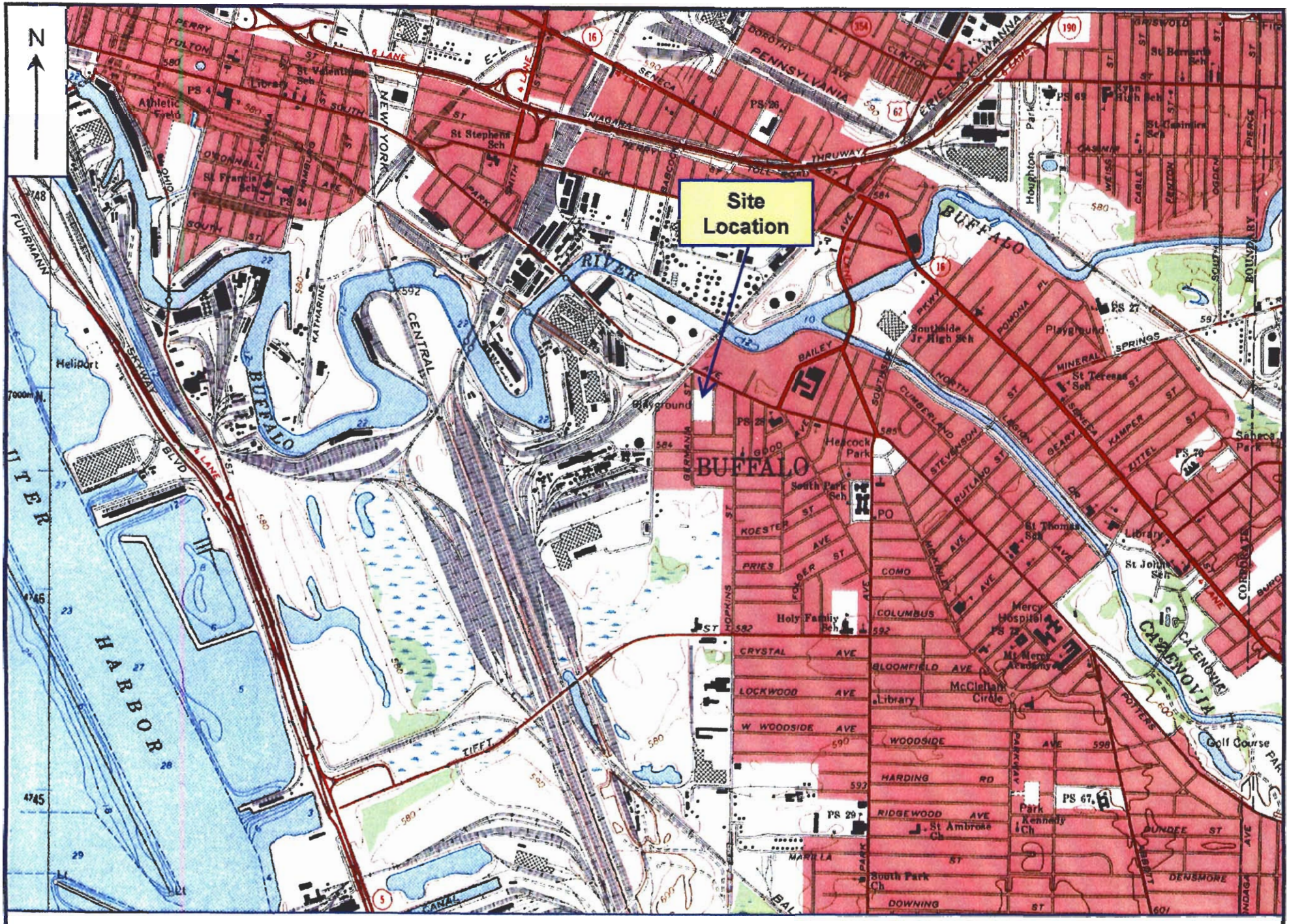
COMMENT 3: Was any additional fill put into the site? Was backfill made to meet the original grade of the site?

RESPONSE 3: Slightly more fill was brought on site than the volume of soils excavated and removed, to provide a "crown" to the park and promote proper drainage.

COMMENT 4: The plan for cleanup of this area was limited only to city-owned property (the park) despite EPA data indicating that equivalent levels of contamination exist in residential areas outside of the park. The EPA data also indicated that the source of elevated levels of residential area contamination is consistent with levels in the park, suggesting the same source for contamination.

RESPONSE 4: In 2001, the EPA sampled residential yards surrounding the park at the recommendation of the NYSDOH. The results of that sampling showed arsenic levels in yard soils to be significantly lower and, in general, consistent with the range of average arsenic levels typically found in New York State soils. For further information, the commenter should refer to the April 30, 2001 Health Consultation for the Abby Street/Hickory Woods Subdivision prepared by the NYSDOH under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry.

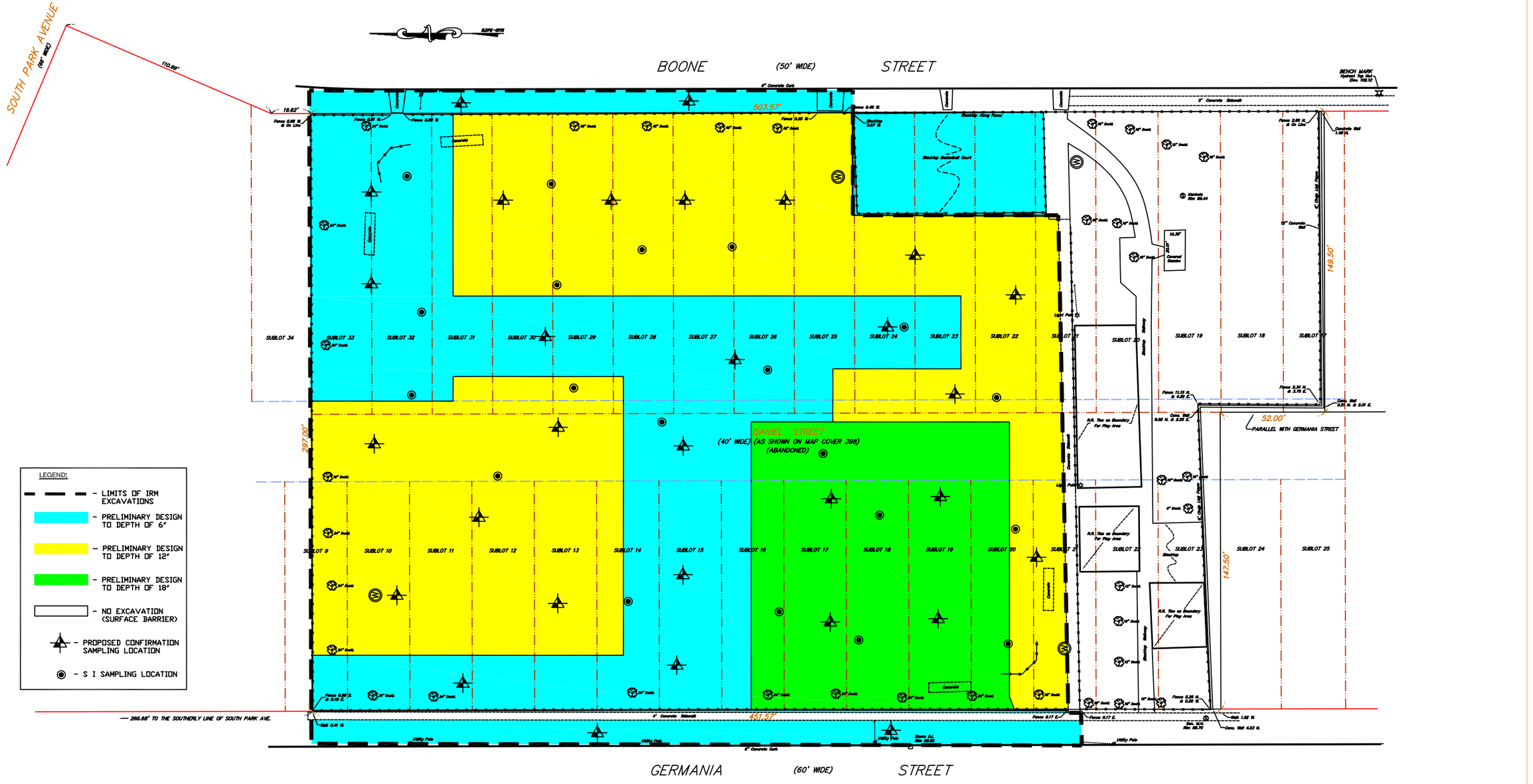
There were no other comments received following the February 22 public meeting.



Source: USGS Topographic Maps
Not to Scale

Figure 1
Site Location Map
Boone Park Brownfield Project – Proposed Remedial Action Plan
Buffalo, New York

C&S COMPANIES
ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS



Sep 09, 2005 – 10:33am
F:\Project\201 – City of Buffalo\201011001 – Boone Park\cadd\201011001\PRAP FIG 2.DWG

BASED ON A SURVEY DRAWING PROVIDED BY MILLARD, MACKAY & DELLES LAND SURVEY, LLP DATED 4-23-04

C&S COMPANIES
ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS

BOONE PARK BROWNFIELDS PROJECT
PROPOSED REMEDIAL ACTION PLAN

FIGURE 2
IRM DESIGN EXCAVATION AREAS
AND CONFIRMATION SAMPLING LOCATIONS

LEGEND AND NOTES:

- ——— – DELINEATES SPECIFIC SOIL CONFIRMATION SAMPLING AREA
- **SC-13 (1)** – CONFIRMATION SAMPLE I.D. (FINAL DEPTH OF EXCAVATION IN FEET)

NOTE:
SEE TABLE 1 FOR SOIL CONFIRMATION SAMPLING DATES, ANALYTICAL RESULTS, AND APPROXIMATE AREAS AND VOLUMES EXCAVATED.

- (W) – SI MONITORING WELL LOCATION
- (W) – MONITORING WELL REMOVED AND DISPOSED
- – SI SOIL SAMPLE LOCATION
- – MATURE DECIDUOUS TREE
- – MATURE TREE REMOVED, DISPOSED AND REPLACED
  NOTE:
  REPLACEMENT TREES PLANTED AT EVEN INTERVALS ALONG GERMANIA AND BOONE STREET BONDARIES.
- – FENCE REMOVED AND DISPOSED
- – FENCE REMOVED, DISPOSED, AND REPLACED
- – BASEBALL FIELD STRUCTURE REMOVED AND DISPOSED
- – APPROXIMATE AREA WHERE APPARENT FOUNDRY SAND MATERIALS WERE FOUND

Sep 09, 2005 – 10:35am
F:\Project\201 – City of Buffalo\201011001 – Boone Park\cadd\201011001\CONSTRUCTION\PRAP FIG 3.DWG

BASED ON A SURVEY DRAWING PROVIDED BY MILLARD, MACKAY & DELLES LAND SURVEY, LLP DATED 4-23-04

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BOONE PARK BROWNFIELDS PROJECT
PROPOSED REMEDIAL ACTION PLAN

FIGURE 3
IRM SOIL CONFIRMATION SAMPLE AREAS AND EXCAVATION DEPTHS

APPENDIX B

Administrative Record

Administrative Record

Boone Park

Site No. B-00196-9

1. Proposed Remedial Action Plan for the Boone Park site, dated February 2006, prepared by the NYSDEC.

2. Letter dated February 1, 2006 from Daniel Kruez, City of Buffalo Department of Public Works.

3. "Interim Remedial Measure, Construction Certification Report, Including Qualitative Human Health Exposure Assessment and Remedial Alternatives Assessment", September 2005, prepared by C&S Engineers Inc.

4. "Brownfields Site Investigation Report for Boone Park, Buffalo, New York", November 2004, prepared by C&S Engineers Inc.

5. "Phase I Environmental Site Assessment, Boone Park, Buffalo, New York", September 2004, prepared by C&S Engineers Inc.

6. "Brownfield Interim Remedial Measure Site Investigation Work Plan", March 2004, prepared by C&S Engineers Inc.

7. "Boone Park, Soil Sampling Results, City of Buffalo - USEPA May 2000 and URS Corp June-July 1999 & 2001", December 2002, prepared by City of Buffalo.