

UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

U.S. GENERAL SERVICES ADMINISTRATION SOUTHEAST FEDERAL CENTER PARCEL P

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JUNE 2010

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I. Introduction

A. Facility Name

The United States Environmental Protection Agency (EPA) prepared this Statement of Basis (SB) for the United States General Services Administration (GSA), Southeast Federal Center (the Facility or Site), Parcel P site located within the SEFC at 1st and M Street, SE, Washington, D.C. 20507 (hereinafter referred to as Parcel P).

Parcel P is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901, et seq. The

Corrective Action program is designed to ensure that certain facilities have investigated and addressed any releases of hazardous waste and hazardous constituents that have occurred at their property.

Information on the Corrective Action program as well as a fact sheet for the Facility, is available at http://www.epa.gov/reg3wcmd/correctiveaction.htm.

After reviewing all available data concerning Parcel P, EPA has determined that no additional characterization or remediation is necessary to satisfy RCRA Corrective Action obligations. Based on its review, EPA has selected its proposed final remedy for Parcel P and is now proceeding with its remedy selection process, including providing opportunity for public comment and review.

B. Proposed Remedy

This SB explains EPA's proposed remedy that no further actions to remediate soil or groundwater are necessary given the planned land use at Parcel P. EPA's proposed remedy is to require the owner of Parcel P to develop and maintain certain property restrictions known as Institutional Controls (ICs). The proposed ICs are detailed in Section V, below. These controls will provide assurance that the land use, as anticipated when the remedy was proposed, does not change. EPA's proposed remedy represents "Corrective Action Complete with Controls" as described in EPA Guidance found in the Federal Register / Vol. 68, No. 37 / Tuesday, February 25, 2003 / Notices [FRL – 7454-7] pages 8757 to 8764.

This SB summarizes information contained in the work plans and reports reviewed by EPA and included in the Administrative Record (AR).

C. Importance of Public Input

Before EPA makes a final decision on its proposal for Parcel P, the public may participate in the remedy selection process by reviewing this SB and documents contained in the AR for Parcel P. The AR contains the complete set of reports that document Facility conditions, including a map of Parcel P, in support of EPA's proposed remedy. EPA encourages anyone interested to review the AR. The AR is available for public review at the EPA Region III office, the address of which is provided in Section VIII, below.

EPA will address all significant comments received during the public comment period. If EPA determines that new information or public comments warrant a modification to the proposed remedy, EPA will modify the proposed remedy or select other alternatives based on such new information and/or public comments. EPA will approve its final decision in a document entitled the Final Decision and Response to Comments (FDRTC).

II. Facility Background

Parcel P is located at 1st and M Street, SE, Washington, D.C. 20507. Parcel P occupies approximately 5 acres along the southern end of the Facility (Attachment 1). Parcel P is bordered by the future Water Street, SE and future River Street, SE to the north; by the Washington Navy

Yard to the east; by the Anacostia River to the south; and by 2nd Street, SE to the west (Attachment 2).

Parcel P contains a seawall, a small concrete pier, and Building 173 (the Lumber Storage Shed, a historical building that is being renovated). Parcel P is being developed into a waterfront park. Two new single-story slab on grade buildings, Buildings P2 and P3, will be constructed for retail use and will be located east and southeast of Building 173, respectively. Building 173 was originally constructed in 1919 and used for storage of building maintenance materials. A seawall along the Anacostia River was replaced by a new concrete seawall in 1999. A small concrete pier southwest of Building 173 was also constructed at that time. A significant amount of soil and fill material was removed during seawall construction and replaced with uncontaminated material from off-site sources.

Four other buildings were formerly located on Parcel P: the southern portion of Building 158 (the Brass Foundry), Building 159E (the General Machine Annex), Building 187 (the Brass Smelter), and Building 204 (the Screen House). Hazardous wastes were removed from these buildings and they were demolished in 1998.

An Interim Measures Work Plan for Parcel P (IM Work Plan) was submitted to and approved by EPA in 2008. The IM Work Plan described the proposed remediation of contaminated soil on Parcel P. The latest investigations and cleanup were conducted in accordance with the EPA-approved IM Work Plan. Upon completion of the cleanup, GSA reported the activities and results to EPA in the Interim Measures Completion Report for Parcel P dated April 16, 2010 (Completion Report).

Parcel P is part of the 42-acre SEFC property that is being developed by Forest City Washington. GSA and Forest City Washington signed a Development Agreement to transfer parcels either by sale or ground lease over a period defined in the Development Agreement. Acting as an agent for GSA, a separate entity, FC Remediation SEFC, Inc., conducted remediation required on Parcel P. The remediation work is finished and the Completion Report documents this work.

After public comment and after EPA issues a Final Remedy Decision for Parcel P, the title for the portion of Parcel P that will become parkland will be transferred to the District of Columbia. The title for the land under Building 173 and future Buildings P2 and P3 will be transferred to Forest City Washington when the buildings are completed.

III. Summary of Environmental History

In 1999, GSA and EPA entered into an Administrative Order on Consent pursuant to RCRA Section 3013, whereby GSA agreed to investigate the nature and extent of contamination at the Facility, as well as perform certain Interim Measures to address contamination at the Facility (the 1999 EPA Order). The investigations and cleanup activities are presented in the RCRA Facility Investigation (RFI) Report for the Facility. An Interim Measures Work Plan for Parcel P (IM Work Plan) was submitted to and approved by EPA in 2008. The IM Work Plan described the proposed remediation of contaminated soil on Parcel P. The latest investigations and cleanup were conducted in accordance with the EPA-approved IM Work Plan. Upon

completion of the cleanup, GSA reported the activities and results to EPA in the Interim Measures Completion Report for Parcel P dated April 16, 2010 (Completion Report).

A. Activities Completed Prior to 1999 EPA Order

GSA also conducted several Facility investigations and performed actions to address contamination prior to the 1999 EPA Order. Sampling on Parcel P identified soils containing concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) greater than EPA Region 3 residential Risk-Based Concentrations (RBCs) or Action Levels (ALs) developed as part of the Description of Current Conditions and Interim Measures/Site Stabilization Report, April 2001 (DCCIM/SSR). RBCs and ALs are constituent-specific values used by environmental professionals to determine whether contaminant concentrations detected in environmental media warrant further evaluation. The RBCs and ALs are both conservative screening values but may be slightly different due to the input assumptions when developed. Affected soil was removed from several areas on Parcel P, as described in the following paragraphs and shown in Attachment 2.

In Area M-1, located northwest of the former Building 159E and southwest of Building 159, trichloroethylene (TCE), a VOC, was detected above residential Action Levels (ALs). In 1998, a 40-foot-square area was excavated from 0 to 8 feet below ground surface (bgs), and the soil was disposed of off-site. Confirmation samples were taken from the sidewalls and bottom of the excavation. All TCE concentrations were the EPA Region 3 residential RBC of 1,600 micrograms/kilogram (μ g/kg).

In Area N-3, located directly west of Building 173, benzo(a)pyrene, a SVOC, was detected in soil above residential ALs. In 1998, a 20-foot by 40 foot rectangle was excavated from 0 to 4 feet bgs, and the soil was disposed of off-site. Confirmation samples collected from the four sidewalls and bottom found all benzo(a)pyrene concentrations below the 9,000 μg/kg residential AL except for the west sidewall sample (2CN3 at 14,000 μg/kg). Additional excavation was conducted along the west and north sidewalls to the depth of the water table. Three additional confirmation samples were collected from the north and west sidewalls and the base of the excavation. These confirmation samples contained benzo(a)pyrene concentrations below the 9,000 μg/kg residential AL used for the excavation, but the concentrations exceeded EPA Region 3 residential RBCs for either benzo(a)anthracene or benzo(a)pyrene. These data were carried forward and included in the human health risk assessment for Parcel P.

Lead was detected above EPA's residential AL of 400 milligrams/kilogram (mg/kg) in Area N-4, located east of building 173. In 1999, a semicircular area with a radius of 20 feet was excavated from 0 to 6 feet bgs and the soil was disposed of off-site. Confirmation samples were collected from the sidewalls and base of the excavation and all results were below the residential AL.

Area SF-1 originally represented an area located at the eastern end of the Site near the original seawall. In this area, lead, copper and bis (2-chloroisopropyl) were detected above residential ALs. The fill material placed in this area during the original seawall construction was the likely source of contamination. In 1999, a 250 feet by 75 feet area was excavated from 0-10

feet bgs and disposed of off-site. According to the DCCIM/SS report, three confirmation samples were taken from the excavated soil. Results for bis (2-chloroisopropyl) ether were all non-detect and results for copper were below the residential AL. Two of the samples exceeded EPA's action level for lead of 400 mg/kg. The specific sample locations were not recorded in the DCCIM/SS. Subsequently, the entire original seawall was replaced by a new concrete seawall. This activity resulted in an excavation covering 750 feet by 100 feet by 10 feet. This excavation removed the wooden decking material and overlying fill. Six additional confirmatory soil samples were collected from the base of this seawall excavation in January and February 1999, prior to backfilling. Two of the samples were analyzed for metals. Results indicated that copper concentrations did not exceed the residential AL of 5,475 mg/kg in the DCIMM/SS, and the lead concentrations in the samples were less than EPA's lead AL of 400 mg/kg.

In Area SF2-1, mercury was detected above the AL of 3 mg/kg, and a 20 feet by 30 feet rectangular area was excavated from 0 to 4 feet bgs. Soil from the excavation was disposed off-site. According to the DCCIM/SS report, confirmation samples were taken from the west, north, east, and bottom of the excavation. Nickel concentrations ranged from 4 to 12 mg/kg, which is below the residential AL and the residential RBC. Confirmation samples also contained bis (2-chloroisopropyl) ether and copper at concentrations below the residential RBCs. Two exceedances were noted: 650 mg/kg of lead in the base of the excavation, and 21 mg/kg of mercury in the west sidewall. The excavation was extended to the west and deepened, and two additional confirmation samples were collected. The lead concentrations in these samples were less than 400 mg/kg, and the sample from the base of the excavation contained 6 mg/kg of mercury. These data were not carried forward into the risk assessment because the sample was collected at a depth greater than 5 feet. Given the planned use for Parcel P, is it unlikely that human exposure would occur at this depth, and this potential risk will be addressed through institutional controls.

Nickel was detected in Area SF2-2 in concentrations that exceeded the residential AL of 100 mg/kg. In 1999, Area SF2-2 was excavated from 0 to 14 feet bgs, and the soil was disposed of off-site. Three confirmation samples were collected from the sidewalls of the excavation and all results were below the residential AL.

Nickel was also detected in Area SF2-3 in concentrations that exceeded the residential AL. In 1999, Area SF2-3 was excavated from 0 to 4 feet bgs and disposed of off-site. Two confirmation samples were collected from the sidewalls of the excavation and all results were below the residential AL.

In 1995, GSA conducted a comprehensive environmental survey of former Building 159E, and identified the presence of PCB contaminated concrete in the floor of the interior and exterior transformer rooms attached to the southwest corner of the building. According to the DCCIM/SS report, in 1998, soil containing PCB concentrations greater than 1 part per million (ppm) was removed from below the first floor transformer room. In addition, the Building 159E Abatement Close-out Monitoring Report (2001) states that 4 to 6 inches of PCB-contaminated concrete was removed from the floor of the transformer room. Subsequent soil samples collected in this area did not contain detectable concentrations of PCBs.

B. Activities Completed Under EPA Order

The purpose of the RCRA Facility Investigations (RFIs) was to fully determine the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Facility. Parcel P was investigated in greater detail to prepare the parcel for redevelopment. Areas of interest identified for Parcel P were fully delineated in previous studies and additional areas of interest were identified and delineated.

Groundwater samples were collected in March 2002 and July 2002 from nine newly installed wells on Parcel P (Attachment 3). Results were compared to the EPA Region 3 RBC levels for tap water and maximum contaminant levels (MCLs), where available. MCLs are maximum concentration levels established by EPA pursuant to the Safe Drinking Water Act, 42 U.S.C. §§ 300f, et seq, and codified at 40 C.F.R. Part 141. MN-SBMW09, which is located near former Building 187, contained elevated levels of methyl-tert-butyl ether (MTBE; 7,530 µg/l) and thallium (7 µg/l) in the March 2002 samples. EPA's Region 3 RBC for MTBE is 12 µg/l and the MCL for thallium is 2 µg/l. Elevated levels of MTBE (4,700 µg/l) were also detected in the July 2002 samples. No other samples contained hazardous constituents at concentrations greater than EPA Region 3 RBCs or MCLs. No further investigation of thallium was undertaken due to the low concentration and isolated occurrence.

To evaluate the horizontal and vertical extent of MTBE in groundwater near MN-SBMW09, two supplemental investigations were conducted by GSA in accordance with workplans approved by EPA pursuant to the 1999 EPA Order. The investigations found that MTBE concentrations in samples from MN-SBMW09 decreased consistently between 2002 and 2008. The investigations found that the horizontal extent of MTBE in groundwater was limited to the area around MN-SBMW09, and that the vertical extent was also limited to the unconfined aquifer. MTBE was the only VOC detected in the groundwater samples. The November 2008 MTBE Supplemental Investigation Report concluded that no further action was required for MTBE in groundwater in the vicinity of well MN-SB/MW09. EPA approved the report on December 18, 2008, stating that the concentrations of MTBE detected in the recent sampling were below the EPA Region 3 RBC for tap water of 12 ug/l. EPA stated that no further monitoring was required and the wells could be abandoned. The monitoring wells were abandoned in January 2009 in accordance with the EPA-approved IM Work Plan.

Soil samples were also collected from the monitoring wells as they were installed. Soil samples collected from borings MNSBMW05, N3-SBMW02, N3-SBMW03, and SF-SBMW01 at depths of 7 feet and 12 feet bgs contained concentrations of one or more of the following compounds at concentrations greater than RBCs: benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd) pyrene, and copper. These data were not carried forward into the risk assessment because they were collected from a depth greater than five feet bgs. Given the planned use for Parcel P, is it unlikely that human exposure would occur at this depth, and this potential risk will be addressed through the implementation of institutional controls.

C. Interim Measures

Interim Measures (IM) are actions taken to control or abate ongoing risks to human health and the environment in advance of the final remedy selection. This section describes the

implementation of activities conducted pursuant to the Parcel P IM Work Plan. Previous sampling conducted on Parcel P identified the following materials to be remediated:

- soil containing PCBs
- soil containing total petroleum hydrocarbons (TPH)

The interim measures conducted on Parcel P included the following; excavation, transport and off-site disposal of contaminated soil; management of petroleum-contaminated soils encountered during grading and excavation work for park improvements, utilities, paving, and landscaping. Contaminated soil identified during previous investigations was excavated and transported off-site for disposal. Verification samples demonstrated that remaining soil met standards protective of the future recreational use of the property.

Former Building 158 Process Pit: Soil in and around the former Building 158 process pit was excavated and removed for off-site disposal. Soil within 2 feet of the pit (vertically and horizontally) was removed for off-site disposal as petroleum-contaminated soil. The limits of excavation were extended 10 feet to the east and west of the pit due to visibly stained soil and elevated photoionization detector/flame ionization detector readings at the southeast and southwest limits of the excavation. Confirmation soil samples were analyzed for PCBs and TPH-DRO. PCBs were not detected in the soil samples, and the TPH concentrations were not above the District of Columbia Tier 0 criterion of 100 mg/kg for TPH. Therefore no additional excavation was conducted and the excavation was backfilled to final grade.

Former Building 187 Process Pit: Soil in and around the former Building 187 process pit was excavated and removed for off-site disposal. Soil within 2 feet of the sump (vertically and horizontally) was removed for off-site disposal as petroleum-contaminated soil. Confirmation soil samples collected from the floor and side walls of the excavation were analyzed for TPH-DRO and VOCs (including MTBE). The TPH concentrations were less than the District of Columbia Tier 0 criterion of 100 mg/kg. MTBE was not detected in any of the verification soil samples. Therefore no additional excavation was conducted, and the excavation was backfilled to final grade.

Former Building 187 Transformer Room: PCB contaminated soil beneath the former Building 187 transformer room was excavated and removed for off-site disposal. Soil was removed to a depth of five feet bgs, based on the soil analytical results from three borings collected from beneath the former transformer room. The excavation area extended 5 feet beyond the perimeter of the former transformer room and covered approximately 1,100 square feet. In accordance with the IM Work Plan, GSA classified the soil as Class 5 (PCB-contaminated) and shipped the soil off-site for disposal. Confirmation soil samples were analyzed for PCBs. One soil sample contained 0.3 mg/kg Aroclor 1260, which is above the current EPA Region 3 residential RBC of 0.22 mg/kg. After additional excavation, the second confirmation sample contained PCB concentrations below the EPA Region 3 residential RBC, and no additional excavation was conducted. The excavation was backfilled to final grade.

<u>Canal Basin Excavation:</u> The new waterfront park has a water feature called the Canal Basin on the west side of Building 173. Construction of the Canal Basin required excavation of

existing soil. An environmental technician was present during initial excavation of the Canal Basin to identify potentially contaminated soil. Soil samples were collected and analyzed for PCBs and TPH-DRO. Based on the soil sampling results and as established in the IM Work Plan, GSA classified portions of the soil in the Canal Basin excavation as Class 3 soil (petroleum contaminated). The petroleum-contaminated soil from the Canal Basin excavation was transported for off-site disposal. PCBs were not detected in any of the soil samples from the Canal Basin excavation, which confirms that there is no evidence of a PCB release in this area. The TPH-DRO concentrations in all the samples from the canal area (maximum 42 mg/kg) were less than the District of Columbia Tier 0 criterion of 100 mg/kg.

IV. Evaluation of EPA's Proposed Remedy

This section provides a description of the criteria EPA uses to evaluate proposed remedies under the Corrective Action Program. The criteria are applied in two phases. In the first phase, EPA evaluates three criteria, known as threshold criteria. In the second phase, EPA uses seven balancing criteria to select among alternative solutions, if more than one is proposed. Because current conditions at Parcel P meet the threshold criteria and because EPA is not selecting among alternatives, a complete evaluation of the balancing criteria is not necessary.

The following is a summary of EPA's evaluation of the threshold criteria:

- 1. Protects Human Health and the Environment This proposed remedy protects human health and the environment from exposure to contamination given the planned commercial and recreational use at Parcel P. Soil excavations within Parcel P shall require the owner to follow the soil use restrictions, as described in Section V, to ensure protection of human health in the future. If groundwater from Parcel P is used as a potable water supply, the estimated future potential health risks exceed EPA guidelines. However, the DC Water and Sewer Authority supplies and will continue to supply potable water to Parcel P and the rest of the Facility, which will eliminate this potential source of risk. To further preclude potential exposure, institutional controls will be implemented to limit possible future uses of soil and groundwater at Parcel P.
- 2. Achieves Media Cleanup Objectives EPA's proposed remedy meets the appropriate cleanup objectives based on assumptions regarding current and reasonably anticipated land and groundwater uses, as described in Section V. Therefore, no additional action is required for the planned recreational and commercial use at Parcel P, except for recording the groundwater and land use restrictions, as discussed above, and to comply with those restrictions.
- 3. Remediates the Source(s) of Releases In all remedy decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. GSA, as part of its work at the SEFC, has remediated the sources of releases as described in the Section III, Summary of Environmental History.

V. Institutional Controls

Under this proposed remedy, some concentrations of contaminants may remain in the groundwater and soil at Parcel P above levels appropriate for residential and domestic uses. In response, the proposed remedy will require the owner of Parcel P to implement institutional controls (ICs) to restrict use of Parcel P property and groundwater to ensure that any remaining contamination does not pose a threat to human health or the environment. ICs are generally non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. ICs also help to protect the integrity of the remedy.

ICs to be implemented under the remedy consist of a restrictive covenant to be recorded with the property deed when ownership is transferred from GSA to the District of Columbia, as well as an environmental covenant, to be filed pursuant to the District of Columbia Uniform Environmental Covenants Act of 2006, D.C. Code § 8-671. These ICs will minimize the potential for human exposure to contamination by limiting possible future uses of soil and groundwater at Parcel P. The restrictions to be included in the restrictive covenant and the environmental covenant are:

- 1. The use of the Parcel P shall be limited to recreational and commercial activity. In no event shall Parcel P or any part thereof be used for any of the following purposes:
 - a) Single family or multi-family dwellings and other residential-style facilities, or otherwise as a residence or dwelling quarters for any person or persons.
 - b) Use as a daycare center.
 - c) The planting of crops for human consumption.
- 2. Any digging, excavating, grading, or other soil moving activities shall be conducted on Parcel P or any part thereof including in compliance with all applicable federal, state and local rules, regulations and ordinances. Soil removed from a depth of two feet and below cannot be reused on-site. Soils removed from a depth of two feet and below shall be disposed of off-site in accordance with state, federal and local regulations and replaced with clean fill.
- 3. Groundwater underlying Parcel P shall not be used for any purpose (including, without limitation, human consumption, commercial or agricultural purposes) and no wells for the extraction thereof shall be installed, permitted or utilized on the Parcel P or any part hereof. However, monitoring wells may be installed and operated on Parcel P solely for the purpose of environmental sampling, monitoring and testing of groundwater.

These ICs are enforceable through Section 110 of the District of Columbia Uniform Environmental Covenants Act of 2006, D.C. Code § 8-671.10. If the owner of Parcel P fails to meet its obligations under the environmental covenant or EPA, in its sole discretion, deems that additional ICs are necessary to protect human health or the environment, EPA will consider the

use of enforcement authorities to require and enforce additional ICs.

VI. Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. The SEFC, including Parcel P, met these indicators on September 8, 2003 and September 29, 2004 respectively.

VII. Financial Assurance

Due to the minimal cost associated with the proposed remedy, financial assurance is not required for Parcel P.

VIII. Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Ms. Deborah Goldblum at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Ms. Deborah Goldblum at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location[s]:

U.S. EPA Region III 1650 Arch Street (3LC40) Philadelphia, PA 19103 Phone: (215) 814-3432

Fax: (215) 814 - 3113

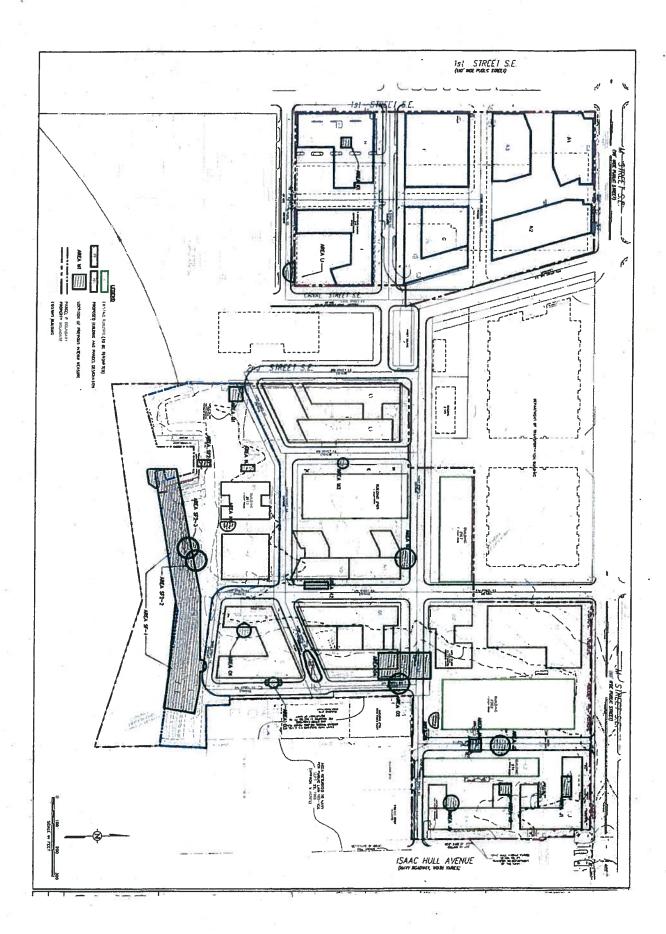
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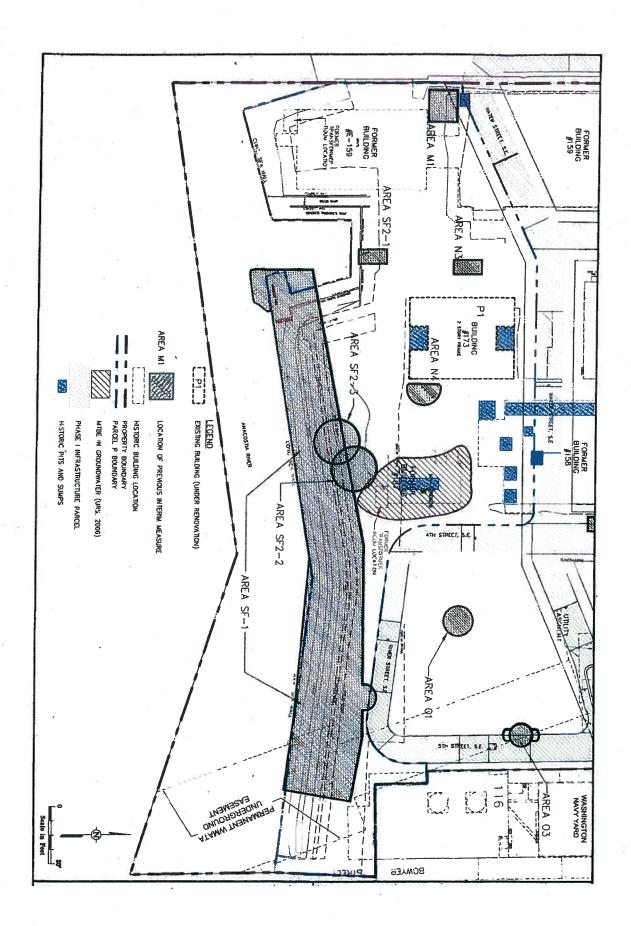
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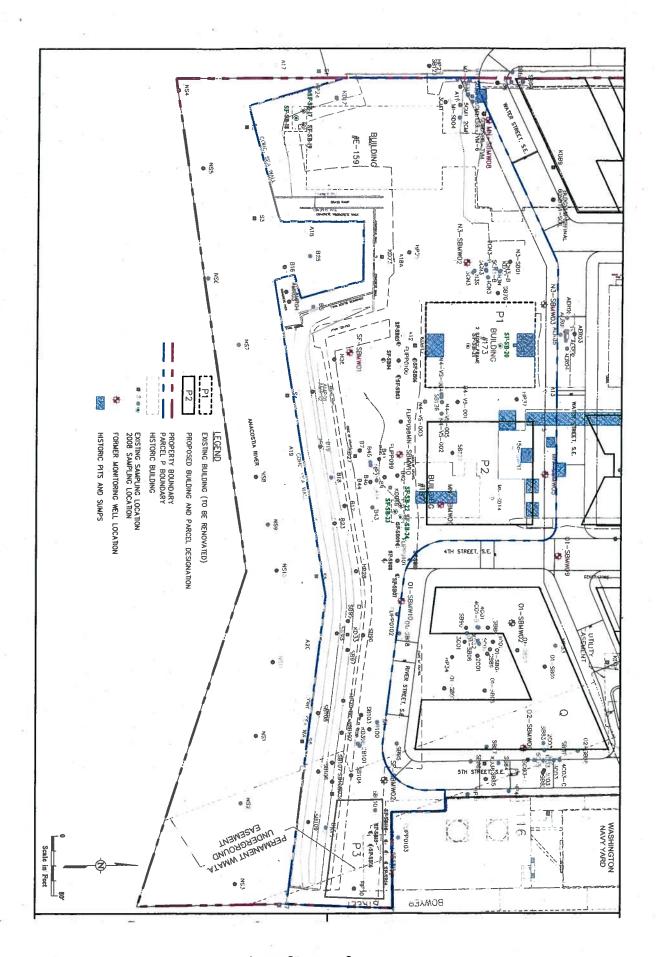
Attachments



Attachment 1



Attachment 2



Attachment 3