



New York State Electric & Gas Corporation
Border City Former Manufactured Gas Plant
Geneva, New York

FINAL REMEDIAL INVESTIGATION WORK PLAN ADDENDUM

September 2, 2005



Prepared For:
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Binghamton, New York



URS Corporation - New York
28 Corporate Drive, Suite 200
Clifton Park, New York 12065



September 2, 2005

Mr. Douglas MacNeal
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7017

**RE: Final Remedial Investigation Work Plan Addendum
New York State Electric & Gas Corporation
Geneva/Border City Former MGP Site, Waterloo (T), Seneca County
Site No. 8-50-008**

Dear Mr. MacNeal:

On behalf of New York State Electric & Gas Corporation (NYSEG), URS Corporation (URS) is pleased to present the New York State Department of Environmental Conservation (NYSDEC) with the *Final Remedial Investigation Work Plan Addendum* for additional investigations at the site. Additional investigations are needed in the Western Property Extension Area of the facility to delineate the extent of MGP related contamination that was identified in this portion of the site as part of the Interim Remedial Measure (IRM) conducted in 2004. This *Final Remedial Investigation Work Plan Addendum* has been revised to address the NYSDEC/NYSDOH comments on the *Draft Remedial Investigation Work Plan Addendum* dated December 8, 2004 that were provided in a letter dated May 24, 2005.

NYSEG and URS appreciate NYSDEC's assistance with this project. Please contact me at 716-856-5636 or Tracy Blazicek of NYSEG at 607-792-8839 if you have any questions.

Very Truly Yours,

URS Corporation

Michael Gutmann
Project Manager

Enc.

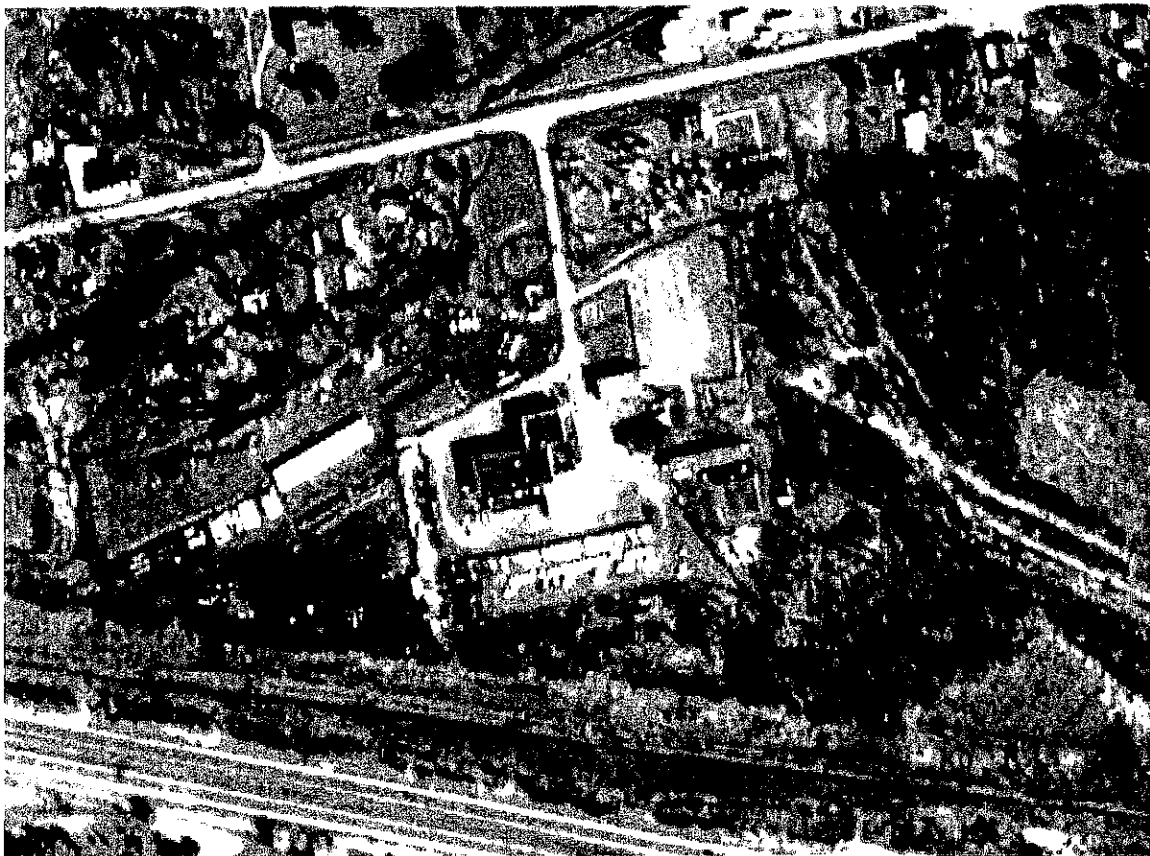
cc: Tracy Blazicek – NYSEG
Eriko Fujita – URS-Clifton Park



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1.0 INTRODUCTION

On behalf of NYSEG (New York State Electric & Gas Corporation), URS Corporation-New York (URS) is pleased to present the New York State Department of Environmental Conservation (NYSDEC) with this *Remedial Investigation Work Plan Addendum (RI Work Plan Addendum)* for NYSEG's Geneva-Border City Former Manufactured Gas Plant (MGP) site in Border City, Seneca County, New York. The location of the former MGP facility is shown in Figure 1. The NYSDEC's identification number for the site is 8-50-008.

The *Draft RI Work Plan Addendum* was submitted to the NYSDEC on December 8, 2004. This *RI Work Plan Addendum* addresses comments on the *Draft RI Work Plan Addendum* provided by the NYSDEC in a letter dated May 24, 2005.

This *RI Work Plan Addendum* is being submitted to the NYSDEC as required under the Order on Consent (#DO-0002-9309) between NYSEG and the NYSDEC, dated March 25, 1994. Based upon information gathered as part of an Interim Remedial Measure (IRM) conducted in the Former MGP Site Area (FMSA) and Western Property Extension Area (WPEA) of the facility during May-September 2004, additional investigation is needed to more fully delineate the extent of soil impacts and to further evaluate the lateral extent of several underground pipes that were uncovered during the IRM. This *RI Work Plan Addendum* is to be used in conjunction with the *Supplemental Remedial Investigation Work Plan* and the supporting documents (*Quality Assurance Project Plan (QAPP)*, *Field Sampling Plan (FSP)*, and *Health and Safety Plan (HASP)*) dated October 2002.

The *RI Work Plan Addendum* contains six sections. Background information for the site is provided in section 2.0. The objectives of this *RI Work Plan Addendum* are provided in Section 3.0. NYSEG's and URS' proposed technical approach and scope are provided in Section 4.0. The proposed schedule to implement the scope of work is described in Section 5.0. References used to prepare this document are listed in Section 6.0. A listing of the uses of the buildings currently onsite to assist NYSDOH and NYSDEC in evaluating potential current exposure scenarios is included as Appendix A.

2.0 BACKGROUND

The site is in Border City, Seneca County near the north end of Seneca Lake (Figure 1), two miles east of the City of Geneva. The site is approximately 1,500 feet north of the north shore of Seneca Lake. Between the site and Seneca Lake is Seneca Lake State Park and New York State Route 5 and US Route 20. Currently there are approximately eight buildings onsite, several of which were previously used in the gas manufacturing process while the facility was in operation. The majority of the site is paved, with the exception of the western property extension. The current uses of each on-site building used by NYSEG employees is provided in Appendix A.

There is an electric substation, which is currently in use, at the north end of the facility. There is a liquefied natural gas vehicle refueling area on the west side of the entrance road. The western end of the facility is an open storage area, which has been graded flat and is used to store pipes and poles along with other large pieces of equipment.

There are two unnamed streams on-site. These streams are shown on Figure 1. The eastern stream originates in the wetlands in the northern part of the site. The second stream is in the southwestern part of the site. Both streams cross Seneca Lake State Park located to the south of Routes 5 and 20 and flow into Seneca Lake.

2.1 SITE HISTORY

The Empire Coke Company constructed the original MGP plant at the site between 1901 and 1903. The original plant consisted of 31 coke ovens and two gas holders. The plant produced gas as a by-product of the coking operation. In 1909, the facility was expanded to allow the production of blue gas. The 1909 expansion included a 100,000 cubic foot holder associated with the Blue Gas operation and fourteen additional coke ovens, bringing the total number of ovens to 45. In 1914, the plant was sold to Empire Gas and Electric Company. In 1925, New York Central Electric Corporation purchased Empire Gas and Electric Company. NYSEG has owned the property since 1932. Historical plant operations were described in TRC's *Task 1 Report*, dated May 14, 1986.

On August 29, 1934, the gas plant was officially closed. After the gas plant closed, some of the gas making structures were razed and the remaining ones were converted for use as NYSEG's operations center for the Geneva area. Currently, the site is a NYSEG Service Center and gas and utility substation. Maintenance and utility trucks are stored onsite and there is an office building used for accounting and customer service. Large utility poles, transformers, gas pipes and various utility scrap materials (old transformers and pylons) are also stored at the site.

2.2 SITE GEOLOGY AND HYDROGEOLOGY

The geology and hydrogeology in the site vicinity were studied as part of the *RI*. The following subsections summarize the site-specific geology and hydrogeology.

2.2.1 Site Geology

The overburden deposits in the vicinity of the site consist of: fill; interbedded sand, silt and clay; clay; fine to medium sand; and till. The soil and rock units underlying the site are described below.

2.2.1.1 Overburden

The fill, when present, varies in thickness and characteristics across the site. Fill thickness varies from approximately a thin veneer (less than one foot) to approximately 20 feet. In general, the fill south of the main service center building in the FMSA consists of mixed construction debris including refractory bricks, concrete, and miscellaneous demolition debris. In the other areas of the site, the fill consists of a re-graded mixture of native soil, brick fragments, gravel, slag and cinders, and wood chips.

Underlying the fill are alternating layers of clay and silt, silty sand, and lacustrine clay layers. A clay and silty clay layer was identified in many borings immediately beneath the fill layer. This layer, where penetrated, ranged in thickness from a few feet to 20 feet. It was characterized as a stiff brown clay to silty clay.

A brown sand layer with seams of silt was encountered beneath the clay/silty clay layer. Depth to the top of the sand layer was variable and ranged from approximately 14 to 27 feet below ground surface (bgs) in the FMSA and from eight to 12.5 feet bgs in the WPEA.

The sand layer extends to a clay layer approximately 40 to 70 feet bgs. This clay layer was characterized as a ten to 20 foot layer of soft, plastic, light gray to dark reddish-gray clay with some silt.

A relatively permeable fine to medium sand unit underlies the clay. In some areas, the sand unit is interbedded with silt, gravel and occasional clay seams, down to the till layer. Based upon soil samples collected while drilling bedrock monitoring wells, till was identified at a depth of approximately 160 feet bgs. The till was characterized as a dense to very dense, gray mixture of sand, silt, and gravel with some clay. The till extends to the bedrock surface, which was encountered between 204 and 216 feet bgs.

2.2.1.2 Bedrock

Approximately 60 to 80 feet of Onondaga limestone is present beneath the site. The lower contact of the Seneca Member lies near the top of the bedrock surface and is represented by a one-inch thick bentonitic clay layer. The Akron dolostone is also present beneath the site and is approximately five to six feet thick. The Bertie Group was present beneath the Akron dolostone approximately 80 feet below the top of bedrock. The geologic contact between the Bertie Group and the Salina Group could not be distinguished in the rock core samples collected from the site.

2.2.2. Site Hydrogeology

There are two important aquifer systems in the Geneva area. The glacial unconsolidated deposits in the valleys serve as an aquifer. The underlying Onondaga Limestone and the Camillus Shale are also commonly used bedrock aquifers. The bedrock aquifers are believed to be hydraulically connected and therefore referred to as one aquifer for this site. Reportedly, there were

previously several pumping wells within one mile of the site. The uses of the wells included industrial, commercial, domestic, and agricultural water supply. Well yields were reported to be up to 75 gallons per minute (gpm) in the unconsolidated deposits, up to 200 gpm in the Onondaga Limestone, and up to 1,000 gpm in the Camillus Shale (Mozola, 1951).

Four separate water-bearing zones (aquifers) have been identified beneath the site during the *RI*. Three of the zones are in the overburden and the fourth is in the bedrock. Groundwater in the overburden is found in the coarser sand and sandy silt partings and seams within the silty clay/clayey silt deposits. The uppermost hydrogeologic unit identified beneath the site is the unconfined water-table aquifer present in the shallow overburden (i.e., less than 15 feet bgs). The next hydrogeologic unit is at an intermediate depth (i.e., less than 35 feet bgs) within the overburden deposits. The third hydrogeologic unit is the deep groundwater in the overburden (i.e., less than 100 feet bgs), and was monitored at three locations, MW-01D, MW-02D, and MW-03D. These three wells monitor a sand zone beneath a 10 to 20 foot clay layer found approximately 40 to 70 feet bgs. Although hydraulically connected to the intermediate overburden groundwater, the clay layer is likely a semi-confining unit to the underlying deposits. Therefore, for the purposes of discussion, this sand zone will be considered a third hydrologic unit in the overburden. A confined aquifer in the Onondaga limestone and underlying bedrock units is found beneath the till layer.

The fourth water-bearing unit at the site is the bedrock. Groundwater in the bedrock flows primarily through secondary porosity features in the rock including faults, joints, solution cavities, and bedding planes. The Onondaga limestone, Akron dolostone, and Bertie Formation have little primary porosity so groundwater flow is controlled by the distribution of fractures and solution cavities within the rock. Depth to groundwater is generally shallow, ranging from approximately one to four feet bgs.

2.2.2.1 Overburden

Reportedly, there were previously several pumping wells within one mile of the site. The uses of the wells included industrial, commercial, domestic, and agricultural water supply. Well yields were reported to be up to 75 gpm from the unconsolidated deposits (Mozola, 1951).

Previous investigations have shown that groundwater in the shallow and deep overburden flows from the northwest to the southeast. Wetlands, which are southeast of the site, act as local discharge areas and Seneca Lake, which is south of the site, is considered the regional groundwater discharge point. Downward vertical gradients were reported for the overburden deposits across the site, with the exception of the monitoring well clusters in the eastern wetlands, which show upward vertical gradients. This upward vertical gradient supports the assumption that the wetlands east of the site are local discharge areas for the groundwater leaving the site.

Shallow Overburden Aquifer

Based on the water level data, groundwater flow in the shallow overburden at the FMSA is generally to the south-southeast. The shallow overburden wells at the site monitor the fill, silt, and clay units. The water table surface at the site slopes gently toward the south-southeast.

Intermediate Overburden Aquifer

Based on the water level data, groundwater flow in the intermediate overburden trends to the south toward Seneca Lake. The water level data gathered in the intermediate overburden wells indicate a slightly deeper potentiometric surface in the FMSA compared to the shallow overburden deposits.

Deep Overburden Aquifer

The potentiometric surface of the deep overburden aquifer indicates a very shallow hydraulic gradient to the south. It is likely that the flow direction within the deep overburden aquifer is generally to the south, similar to the upper two overburden aquifers. Additional rounds of water levels will be collected from the bedrock wells during the upcoming field work at the site. The new data will be evaluated to confirm the bedrock flow direction beneath the site.

2.2.2.2 Bedrock

Reportedly, there were previously several pumping wells within one mile of the site. The uses of the wells included industrial, commercial, domestic, and agricultural water supply. Well yields were reported to be up to 200 gpm from the Onondaga Limestone and up to 1,000 gpm from the Camillus Shale (Mozola, 1951).

Groundwater in bedrock flows primarily through secondary porosity features in the rock including faults, joints, solution cavities, and bedding planes. The Onondaga Limestone, Akron Dolostone, and Bertie and Salina Groups have little primary porosity so groundwater flow is controlled by the distribution of fractures within the rock. Groundwater flow within the bedrock onsite is expected to be through secondary porosity features, such as fractures and solution cavities. As indicated by production well logs in the area, the bedrock wells are capable of producing several hundred gallons per minute.

Hydraulic conductivities calculated from packer testing conducted in bedrock wells BR-02, BR-03, and BR-04 range from 10^{-2} centimeters per second (cm/sec) to 10^{-5} cm/sec or less. Based upon observations during drilling, hydraulic conductivities were generally greater in the Onondaga Limestone and Bertie Group rocks compared to that of the underlying Salina Group rocks.

Groundwater flow within the confined bedrock aquifer is generally south towards Seneca Lake.

2.3 PREVIOUS INVESTIGATIONS

From 1984 through 1993, NYSEG conducted five investigative phases at the site. The most recent investigative phase was completed in 2002 and 2003. Previous investigations completed at the site through 2003 were presented in URS' *Draft Remedial Investigation (RI) Report* dated January 30, 2004. The 2004 IRM was conducted between May and October 2004. The work conducted during the 2002 and 2003 *RI* relevant to the 2004 IRM area and the results of the 2004 IRM are briefly described below.

2.3.1 2002 and 2003 Supplemental Remedial Investigation

Between November 4, 2002 and June 11, 2003, NYSEG conducted field investigation activities at the site in accordance with the NYSDEC-approved *Supplemental Remedial Investigation Work Plan* dated October 25, 2002. The results of the SRI were documented in the *Draft Remedial Investigation (RI) Report* dated January 30, 2004.

Based on the results of the *RI*, the sources for the MGP-related contaminants present in the subsurface beneath the site were attributed to the former MGP structures. One of the former structures, the former tar vessel that was in western end of the FMSA, appears to be a primary source area. The location of the former tar vessel is shown in Figure 2. Figure 2 also shows the 2002 and 2003 sampling locations. Soil samples collected in the area of the former tar vessel prior to the *RI* and during the *RI* indicate that the soil has been impacted by benzene, PAHs, and total recoverable phenolics. During the *RI*, soil boring SB-18 was advanced to a depth of 30 feet near the northern side of the former tar vessel. Coal tar was observed at boring SB-18 between 0.5 and 4 feet bgs.

2.3.2 2004 Interim Remedial Measure

NYSEG completed an IRM in the WPEA and FMSA between May and October 2004. The IRM consisted of excavating an approximately 1.7-acre area to approximately three feet bgs. The limits of the excavation that was dug in the WPEA during the 2004 IRM is shown on Figure 3.

The north-end of the excavation was dug to approximately 2.5 feet deep. The eastern end of the excavation was approximately 3.5 feet deep and the western portion of the excavation was approximately three feet deep.

During the IRM, subsurface piping was encountered at three locations. The locations of the piping encountered during excavation are shown in Figure 3. An eight-inch to ten-inch diameter polyvinyl chloride (PVC) pipe that was generally oriented north-south was found in the ~~eastern~~^{western} end of the FMSA. The southern end for the PVC piping appears to originate near the eastern side of the former tar vessel. Approximately 90 feet of the PVC piping was unearthed within the boundaries of the IRM excavation. The PVC piping appeared to have been recently installed. The northern extent of the PVC piping beyond the excavation area is unknown and the purpose of the pipe was not determined. The exposed PVC pipe was backfilled with sand. A six-inch cast iron pipe was found within the IRM excavation in the WPEA. Approximately 40 feet of the cast iron piping that was generally oriented southwest-northeast was encountered near the northern boundary of the excavation. The cast iron piping was empty and the portion within the excavation was removed. The end of the cast iron piping at the north end of the excavation was capped. The northern extent of the cast iron piping beyond the boundaries of the excavation is unknown. An eight-inch clay pipe that was generally oriented west-east was found within the western portion of the excavation. The clay piping extended to the west beyond the limits of the excavation. ~~The portion of the clay pipe that was removed during the IRM is show in Figure 3.~~ ✓
The clay piping contained tar and appears to have been associated with the former MGP.

Figure 3 also shows the confirmation soil sampling locations. A total of 52 confirmation soil samples (401 through 444, 448 through 450, and 452, 453, 455, 456, and 458) were collected. Most of the confirmation soil samples were collected from 5.5 feet bgs. Confirmation soil sample 422 was collected from eight feet bgs. Confirmation soil sample 458 was collected from 12 feet bgs. The confirmation soil samples were collected and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using Method 8260 and for polycyclic aromatic hydrocarbons (PAHs) using Method 8270B. The soil analytical results are summarized in Table 1. The NYSDEC's recommended soil cleanup objectives (RSCOs) from the *Technical and Administrative Guidance Memorandum 4046* are included in Table 1. The distribution of BTEX

concentrations in the confirmation soil samples is shown in Figure 4. Figure 5 shows the distribution of total PAHs in the confirmation soil samples. Figure 6 shows the distribution of total carcinogenic PAHs (cPAHs) in the confirmation soil samples. Figure 7 lists the compounds that were detected at concentrations that exceed NYSDEC RSCOs for each of the confirmation soil samples.

Table 1 shows that BTEX concentrations in the confirmation soil samples ranged from not detected at 40 sample locations to 1,204 mg/kg at location 458. As shown in Figures 2 and 4, BTEX was generally detected in two areas of the IRM excavation: near the former tar vessel and PVC piping found in the FMSA and at sample 458 in the WPEA. All four BTEX compounds were detected at concentrations that are more than one order of magnitude greater than their respective RSCOs in sample 458. The total BTEX concentrations were less than 2.0 mg/kg in the confirmation samples collected near the former tar vessel. Benzene was the only BTEX compound that was detected at concentrations that exceed its RSCO (0.06 mg/kg) in the confirmation samples collected in the FMSA.

The distribution of total PAHs and total cPAHs in the confirmation soil samples are shown in Figures 5 and 6, respectively. The cPAHs include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno (1,2,3-cd) pyrene. Figure 5 shows that PAHs are still present within the limits and near the boundaries of the IRM excavation. PAHs detected in the soil along the northern edge of the IRM excavation within the WPEA including the area near the cast iron piping indicate that soil impacted by PAHs extend further north toward the storage area. Similar to BTEX, the two areas with elevated concentrations of PAHs are near the former tar vessel that is within FMSA and near sample 458 in the WPEA. PAHs were detected at most of the confirmation soil sampling locations within the FMSA and PAH concentrations greater than 500 mg/kg were detected in the area of the former tar vessel. At confirmation soil sampling locations 401 and 424 in the FMSA the detected total PAH concentrations were 1,055 mg/kg and 1,399 mg/kg respectively. The total PAH concentration at confirmation soil sample location 458 in the WPEA was 8,210 mg/kg. Figures 6 and 7 shows that in contrast to most of the PAH impacts in the soil at the site, the PAHs detected at location 458 are non-carcinogenic PAHs.

Based upon the information gathered as part of the IRM, and communications with NYSEG, URS has developed a scope of work that is focused on delineating the extent of MGP-related residuals near and within the WPEA and to determine the lateral extent of the underground pipes in the area.

3.0 RI WORK PLAN ADDENDUM OBJECTIVES

The objectives of this *RI Work Plan Addendum* are to:

- Review and compile contaminant distribution from information gathered as part of the IRM;
- Evaluate the distribution of MGP-related contaminants in the soils and groundwater in the WPEA;
- Locate the underground pipes identified during the IRM and determine their horizontal extent; and
- Further evaluate the bedrock groundwater flow direction beneath the site.

4.0 TECHNICAL APPROACH AND SCOPE

Additional field investigations will be performed in the WPEA to obtain data not already available to determine the horizontal and vertical extent of MGP-related contamination and the extent to which releases or potential releases from the site pose a threat to human health or the environment. New York State Standards, Criteria, and Guidelines will be identified and compared with conditions at the sites. In addition, the lateral extent of the underground pipes identified during the IRM will be determined. The results of this investigation will be used to select a cost-effective remedial action to address significant risks to human health and the environment. In addition, a round of groundwater samples will be collected from the existing site monitoring wells and additional rounds of water levels will be collected to further evaluate groundwater flow paths beneath the site.

4.1 PROPOSED SCOPE OF WORK

To meet the specific project objectives, URS is proposing the following field activities and sampling programs to be conducted:

- Excavate test pits to identify lateral extent of underground pipes;
- Conduct soil borings/soil sampling;
- Conduct groundwater sampling using Hydropunch™ (or equivalent);
- Collect a round of groundwater samples from monitoring wells; and
- Collect additional rounds of water levels.

In addition, the results of the field activities and sampling programs will be summarized in a letter report. The proposed activities are described in more detail in the following sections. The proposed sampling locations are shown on Figure 8 and the sample location rationale is provided in Table 2. Table 3 provides a summary of the soil and groundwater sampling analysis program.

4.1.1 Task 1 Excavate test pits

Test pits will be dug near the subsurface piping that was encountered during the IRM. The purpose of these test pits is to determine the lateral extent of the subsurface piping and to further characterize the soil. The proposed locations of these nine test pits are shown on Figure 8. The pits will be excavated to a maximum of approximately 8 feet deep and will be of sufficient length to locate the pipes. Additional test pits will be excavated as needed to meet the project objective. The proposed scope of work includes excavation activities only up to the property limits. If it is determined that the pipes extend off or beyond NYSEG's property limits, then NYSEG will secure access to the property before additional test pit excavations are conducted.

4.1.2 Task 2 Soil Borings

Six soil borings will be advanced upgradient and downgradient of the impacted area near confirmation soil sample location 458 using a conventional drilling rig using hollow stem augers (HSAs). The soil borings will be advanced to approximately 30 feet bgs to the top of the light gray to reddish gray clay layer. Groundwater samples will be collected from the sand layer at three of the six boring locations using Hydropunch™, or equivalent equipment. The proposed soil boring locations are shown in Figure 8.

URS proposes to advance a total of six soil borings (GP-23 through GP-28) near confirmation soil sample location 458. The borings will be advanced using HSAs and standard split-spoon samplers. Soil samples will be collected continuously up to 30 feet. All samples will be screened visually and with a photoionization detector (PID) for the presence of contamination.

All soil samples will be screened using a PID and placed in sample jars for potential analysis. Once all of the borings are advanced, soil samples will be selected and submitted for laboratory analysis.

Two soil samples will be submitted for laboratory analysis from each of the 6 borings. One soil sample will be collected from the two-foot interval exhibiting the highest levels of contamination

based on field screening. The second sample will be collected from the two-foot interval at the base of the boring.

Each of the soil samples submitted to the laboratory will be analyzed for BTEX (USEPA Method 8260B) and PAHs (USEPA Method 8270C). The analytical data generated from soil sampling will be reported by the laboratory with ASP Category B QA/QC deliverables. The soil sampling procedures are more fully described in the *FSP* and *QAPP* dated October 2002.

Following completion of each soil boring, the boring will be backfilled to the surface with cement-bentonite grout or bentonite pellets.

Hydropunch™ Samples

URS will also collect groundwater samples using Hydropunch™, or equivalent equipment from the sand layer from borings GP-26 through GP-28. Each of the Hydropunch™ groundwater samples will be submitted to the laboratory and analyzed for BTEX (USEPA Method 8260B) and PAHs (USEPA Method 8270C). The analytical data generated from Hydropunch™ sampling will be reported by the laboratory with ASP Category B QA/QC deliverables. The Hydropunch™ sampling procedures are described in the *FSP* and *QAPP* dated October 2002.

4.1.3 Task 3 Collect Water Level Measurements and Conduct Groundwater Sampling

Additional rounds of water level measurements will be collected at each monitoring well throughout the field investigation.

Prior to groundwater sampling, water level measurements will be taken at each new and existing monitoring well location. Monitoring wells will also be checked for visual or olfactory evidence of coal tar. Figures 9 and 10 show the monitoring well locations for the site.

Groundwater samples will be collected from each of the existing four bedrock and 21 overburden monitoring wells. Approximately three to five well volumes of water will be removed from each well prior to sampling (unless the well is pumped dry). A peristaltic or hydrolift pump will be

used to purge the overburden wells, and a submersible pump will be used to purge the bedrock wells. The purge water generated will be containerized and staged at an on-site location designated by NYSEG. Field parameters, which include temperature, pH, conductivity, and turbidity of the samples, will be recorded during the purging process. Once the field parameters have stabilized (to within 10 percent), water samples will be collected directly from the pump effluent.

All groundwater samples will be collected within 24 hours of purging of the well. A total of 25 groundwater samples will be collected from the new and existing monitoring wells. The samples for VOCs and natural attenuation parameters will be collected immediately following purging. To minimize the collection of turbid samples, SVOCs and metals samples will be collected after the wells have stabilized for approximately two hours. At this time, we have assumed that only unfiltered samples will be collected, with the exception of dissolved iron samples. The groundwater samples from all 25 monitoring wells will be analyzed for TCL VOCs (USEPA Method 8260B), TCL SVOCs (USEPA Method 8270C), TCL PCBs (USEPA Method 8082), total phenols (USEPA Method 9066), TAL metals (USEPA Method 6010B/7470A), and total cyanide (USEPA Method 9012A). The bedrock groundwater samples will also be analyzed for wet chemistry parameters. The wet chemistry parameters include alkalinity (USEPA Method 310.2), chloride (USEPA Method 300.0), nitrate (USEPA Method 353.2), nitrite (USEPA Method 353.2), sulfate (USEPA Method 300.0), sulfide (USEPA Method 376.1), dissolved iron (USEPA Method 6010B), ammonia (USEPA Method 350.1), total Kjeldahl nitrogen (USEPA Method 351.2), total organic carbon (USEPA Method 9060), hardness (USEPA Method 130.2), and total dissolved solids (USEPA 160.1). The analytical data generated from groundwater sampling will be reported by the laboratory with ASP Category B QA/QC deliverables.

4.1.4 Task 4 Prepare Summary Report

Information and data gathered as part of this supplemental investigation will be summarized in a letter report for submittal to the NYSDEC. The letter report will include a summary of the background information, investigative procedures, and a discussion of the analytical results. Supporting data, including the analytical data, water level measurements, test pit logs, and boring logs will be included in the letter report.

5.0 SCHEDULE

Figure 9 is a tentative schedule to implement the scope of work described in Section 4.0. Some sampling activities will require access agreements with private and State agencies. NYSEG will arrange for all private site access, and URS will seek all permits and site access agreements for State owned properties.

6.0 REFERENCES

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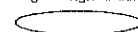
Tables

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			401	402	403	404	405
Sample ID			401	402	403	404	405
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/19/04	05/19/04	05/19/04	05/19/04	05/19/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.001 J	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.018 U	0.019 U	0.018 U	0.018 U
Total BTEX	MG/KG	-	ND	ND	ND	0.001	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	20 U	4 U	4.4 U	0.4 U	4.4 U
Acenaphthene	MG/KG	50	20 U	4 U	4.4 U	0.4 U	4.4 U
Acenaphthylene	MG/KG	41	25	4 U	4.4 U	0.4 U	4.4 U
Anthracene	MG/KG	50	12 J	4 U	4.4 U	0.4 U	4.4 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	130	4 U	2.9 J	0.4 U	16
Benzo(a)pyrene	MG/KG	0.061 or MDL	110	1.5 J	3 J	0.4 U	18
Benzo(b)fluoranthene	MG/KG	1.1	120	4 U	5.3	0.4 U	16
Benzo(g,h,i)perylene	MG/KG	50	20 U	4 U	4.4 U	0.4 U	7.4
Benzo(k)fluoranthene	MG/KG	1.1	73	4 U	5.1	0.4 U	15
Chrysene	MG/KG	0.4	130	4 U	2.9 J	0.4 U	19
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	16 J	4 U	4.4 U	0.4 U	4.4 U
Dibenzofuran	MG/KG	6.2	20 U	4 U	4.4 U	0.4 U	4.4 U
Fluoranthene	MG/KG	50	210	4 U	4.7	0.4 U	16
Fluorene	MG/KG	50	20 U	4 U	4.4 U	0.4 U	4.4 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	20 U	4 U	4.4 U	0.4 U	8.3
Naphthalene	MG/KG	13	20 U	4 U	4.4 U	0.4 U	4.4 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

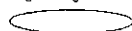
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			401	402	403	404	405
Sample ID			401	402	403	404	405
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/19/04	05/19/04	05/19/04	05/19/04	05/19/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	39	4 U	2.4 J	0.4 U	4.8
Pyrene	MG/KG	50	190	4 U	3.1 J	0.4 U	15
Total Carcinogenic PAHs	MG/KG	-	579	1.5	19.2	ND	92.3
Total Non-Carcinogenic PAHs	MG/KG	-	476	ND	10.2	ND	43.2
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	1,055	1.5	29.4	ND	135.5

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			406	407	408	409	410
Sample ID			406	407	408	409	410
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/19/04	05/19/04	05/19/04	05/20/04	05/20/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.002 J	0.006 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.018 U	0.018 U	0.018 U	0.017 U
Total BTEX	MG/KG	-	ND	ND	0.002	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.39 U	2 U	0.16 BJ	4.4 U	8 U
Acenaphthene	MG/KG	50	0.39 U	2 U	2.1	4.4 U	8 U
Acenaphthylene	MG/KG	41	0.39 U	2 U	0.39 U	4.4 U	8 U
Anthracene	MG/KG	50	0.39 U	2 U	0.75	4.4 U	8 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.39 U	2 U	0.39 U	5	8 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.39 U	2 U	0.39 U	4.7	8 U
Benzo(b)fluoranthene	MG/KG	1.1	0.39 U	2 U	0.39 U	3.9 J	8 U
Benzo(g,h,i)perylene	MG/KG	50	0.39 U	2 U	0.39 U	3.7 J	8 U
Benzo(k)fluoranthene	MG/KG	1.1	0.39 U	2 U	0.39 U	3.5 J	8 U
Chrysene	MG/KG	0.4	0.39 U	2 U	0.39 U	5.8	8 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.39 U	2 U	0.39 U	4.4 U	8 U
Dibenzofuran	MG/KG	6.2	0.39 U	2 U	2.2	4.4 U	8 U
Fluoranthene	MG/KG	50	0.16 J	2 U	1	7.1	8 U
Fluorene	MG/KG	50	0.39 U	2 U	1.5	4.4 U	8 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.39 U	2 U	0.39 U	3.2 J	8 U
Naphthalene	MG/KG	13	0.39 U	2 U	0.39 U	4.4 U	8 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			406	407	408	409	410
Sample ID			406	407	408	409	410
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/19/04	05/19/04	05/19/04	05/20/04	05/20/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.39 U	2 U	2.9	2.4 J	8 U
Pyrene	MG/KG	50	0.39 U	2 U	0.42	7.7	8 U
Total Carcinogenic PAHs	MG/KG	-	ND	ND	ND	26.1	ND
Total Non-Carcinogenic PAHs	MG/KG	-	0.16	ND	8.67	20.9	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	0.16	ND	8.83	47	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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D - Result reported from a secondary dilution analysis.

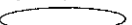
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			411	412	413	414	415
Sample ID			411	412	413	414	415
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/20/04	05/20/04	05/26/04	05/26/04	06/04/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.7 DJ	0.65 J	0.55 J	0.99 D
Ethylbenzene	MG/KG	5.5	0.006 U	0.74 U	0.71 U	0.76 U	0.027 U
Toluene	MG/KG	1.5	0.006 U	0.26 DJ	0.55 J	0.28 J	0.12 D
Xylene (total)	MG/KG	1.2	0.018 U	2.2 U	0.74 J	2.3 U	0.037 DJ
Total BTEX	MG/KG	-	ND	0.96	1.94	0.83	1.147
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.41 U	0.4 U	0.4 U	0.41 U	0.32 J
Acenaphthene	MG/KG	50	0.41 U	0.4 U	0.4 U	0.41 U	0.72
Acenaphthylene	MG/KG	41	0.41 U	0.4 U	0.13 J	0.41 U	0.41 U
Anthracene	MG/KG	50	0.41 U	0.4 U	0.44	0.41 U	0.41 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.41 U	0.4 U	0.38 J	0.41 U	0.41 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.41 U	0.4 U	0.27 J	0.41 U	0.41 U
Benzo(b)fluoranthene	MG/KG	1.1	0.41 U	0.4 U	0.22 J	0.41 U	0.41 U
Benzo(g,h,i)perylene	MG/KG	50	0.41 U	0.4 U	0.4 U	0.41 U	0.41 U
Benzo(k)fluoranthene	MG/KG	1.1	0.41 U	0.4 U	0.27 J	0.41 U	0.41 U
Chrysene	MG/KG	0.4	0.41 U	0.4 U	0.44	0.41 U	0.41 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.41 U	0.4 U	0.4 U	0.41 U	0.41 U
Dibenzofuran	MG/KG	6.2	0.41 U	0.4 U	0.4 U	0.41 U	0.37 J
Fluoranthene	MG/KG	50	0.41 U	0.4 U	0.7	0.41 U	0.41 U
Fluorene	MG/KG	50	0.41 U	0.4 U	0.25 J	0.41 U	0.24 J
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.41 U	0.4 U	0.4 U	0.41 U	0.41 U
Naphthalene	MG/KG	13	0.41 U	0.9	0.9	1.7	3.8

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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D - Result reported from a secondary dilution analysis.

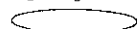
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			411	412	413	414	415
Sample ID			411	412	413	414	415
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			05/20/04	05/20/04	05/26/04	05/26/04	06/04/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.41 U	0.4 U	0.81	0.41 U	0.16 J
Pyrene	MG/KG	50	0.41 U	0.4 U	0.5	0.41 U	0.41 J
Total Carcinogenic PAHs	MG/KG	-	ND	ND	1.58	ND	ND
Total Non-Carcinogenic PAHs	MG/KG	-	ND	0.9	3.73	1.7	5.33
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	ND	0.9	5.31	1.7	5.65

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

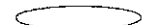
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			416	417	418	419	420
Sample ID			416	417	418	419	420
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/09/04	06/10/04	06/11/04	06/14/04	06/17/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.006 U	0.007
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.018 U	0.018 U	0.019 U	0.005 J
Total BTEX	MG/KG	-	ND	ND	ND	ND	0.012
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Acenaphthene	MG/KG	50	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Acenaphthylene	MG/KG	41	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Anthracene	MG/KG	50	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Benzo(b)fluoranthene	MG/KG	1.1	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Benzo(g,h,i)perylene	MG/KG	50	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Benzo(k)fluoranthene	MG/KG	1.1	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Chrysene	MG/KG	0.4	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Dibenzofuran	MG/KG	6.2	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Fluoranthene	MG/KG	50	0.36 J	0.4 U	0.4 U	0.62 U	0.39 U
Fluorene	MG/KG	50	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U
Naphthalene	MG/KG	13	0.4 U	0.4 U	0.4 U	0.62 U	0.39 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

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D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

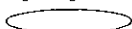
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			416	417	418	419	420
Sample ID			416	417	418	419	420
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/09/04	06/10/04	06/11/04	06/14/04	06/17/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.3 J	0.4 U	0.4 U	0.62 U	0.39 U
Pyrene	MG/KG	50	0.3 J	0.4 U	0.4 U	0.62 U	0.39 U
Total Carcinogenic PAHs	MG/KG	-	ND	ND	ND	ND	ND
Total Non-Carcinogenic PAHs	MG/KG	-	0.96	ND	ND	ND	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	0.96	ND	ND	ND	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			421	422	423	424	425
Sample ID			421	422	423	424	425
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	8.0-8.0	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/17/04	06/17/04	06/21/04	06/21/04	06/21/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	1.5 D	1.2 D	0.006 U	0.007 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.77 U	0.77 U	0.006 U	0.007 U	0.006 U
Toluene	MG/KG	1.5	0.77 U	0.77 D	0.006 U	0.007 U	0.006 U
Xylene (total)	MG/KG	1.2	2.3 U	2.3 U	0.018 U	0.022 U	0.019 U
Total BTEX	MG/KG	-	1.5	1.97	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.83	0.41 U	4.3 U	49 U	0.41 U
Acenaphthene	MG/KG	50	0.18 J	0.41 U	4.3 U	49 U	0.41 U
Acenaphthylene	MG/KG	41	1	0.41 U	4.3 U	49 U	0.41 U
Anthracene	MG/KG	50	1.4	0.41 U	1.9 J	59	0.41 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.99	0.41 U	8.2	170	0.41 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.62	0.41 U	7.9	100	0.41 U
Benzo(b)fluoranthene	MG/KG	1.1	0.46	0.41 U	7	100	0.41 U
Benzo(g,h,i)perylene	MG/KG	50	0.41 U	0.41 U	5.3	49 U	0.41 U
Benzo(k)fluoranthene	MG/KG	1.1	0.55	0.41 U	6.9	69	0.41 U
Chrysene	MG/KG	0.4	1.2	0.41 U	8.3 U	130	0.41 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.41 U	0.41 U	4.3 U	49 U	0.41 U
Dibenzofuran	MG/KG	6.2	0.82	0.41 U	4.3 U	49 U	0.41 U
Fluoranthene	MG/KG	50	2.4	0.41 U	13	290	0.41 U
Fluorene	MG/KG	50	1.2	0.41 U	4.3 U	32 J	0.41 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.41 U	0.41 U	5.6	49	0.41 U
Naphthalene	MG/KG	13	3.7	0.66	4.3 U	49 U	0.41 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL


N:\38353614\00000108\Program\Program.mdo
 Printed: 12/06/04 4:31:47 PM
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			421	422	423	424	425
Sample ID			421	422	423	424	425
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	8.0-8.0	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/17/04	06/17/04	06/21/04	06/21/04	06/21/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	4	0.41 U	8.3 U	190	0.41 U
Pyrene	MG/KG	50	1.6	0.41 U	9.1 U	210	0.41 U
Total Carcinogenic PAHs	MG/KG	-	3.82	ND	35.6	618	ND
Total Non-Carcinogenic PAHs	MG/KG	-	15.48	0.66	20.2	781	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	20.13	0.66	55.8	1,399	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			426	427	428	429	430
Sample ID			426	427	428	429	430
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/21/04	06/21/04	06/21/04	06/29/04	06/24/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.019 U	0.019 U	0.018 U	0.019 U	0.019 U
Total BTEX	MG/KG	-	ND	ND	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Acenaphthene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Acenaphthylene	MG/KG	41	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Anthracene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Benzo(b)fluoranthene	MG/KG	1.1	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Benzo(g,h,i)perylene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Benzo(k)fluoranthene	MG/KG	1.1	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Chrysene	MG/KG	0.4	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Dibenzofuran	MG/KG	6.2	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Fluoranthene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Fluorene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Naphthalene	MG/KG	13	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

N:\38383514.00000\BIP\Program\Program.mxd
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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			426	427	428	429	430
Sample ID			426	427	428	429	430
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/21/04	06/21/04	06/21/04	06/29/04	06/24/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Pyrene	MG/KG	50	0.4 U	0.44 U	0.41 U	0.41 U	0.41 U
Total Carcinogenic PAHs	MG/KG	-	ND	ND	ND	ND	ND
Total Non-Carcinogenic PAHs	MG/KG	-	ND	ND	ND	ND	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	ND	ND	ND	ND	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

N:\363936\14.00600\08\Program\Program.mds
Printed: 12/09/04 4:31:47 PM
[SITEID] = '02' AND [LOGDATE] >= #05/18/04# AND [LOGDATE] <= #06/30/04# AND [MATRIX] = 'SO'

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			431	432	433	434	435
Sample ID			431	432	433	434	435
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/24/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.005 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.005 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.005 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.017 U	0.017 U	0.018 U	0.018 U
Total BTEX	MG/KG	-	ND	ND	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.42 U	0.37 U	0.38 U	7.5 U	0.39 U
Acenaphthene	MG/KG	50	0.42 U	0.37 U	0.38 U	2.7 D	0.39 U
Acenaphthylene	MG/KG	41	0.42 U	0.37 U	0.38 U	8.9 DJ	0.39 U
Anthracene	MG/KG	50	0.42 U	0.37 U	0.38 U	9.4 D	0.39 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.42 U	0.37 U	0.38 U	22 D	0.39 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.42 U	0.37 U	0.38 U	19 D	0.39 U
Benzo(b)fluoranthene	MG/KG	1.1	0.42 U	0.37 U	0.38 U	15 D	0.39 U
Benzo(g,h,i)perylene	MG/KG	50	0.42 U	0.37 U	0.38 U	7 DJ	0.39 U
Benzo(k)fluoranthene	MG/KG	1.1	0.42 U	0.37 U	0.38 U	18 D	0.39 U
Chrysene	MG/KG	0.4	0.42 U	0.37 U	0.38 U	20 D	0.39 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.42 U	0.37 U	0.38 U	7.5 U	0.39 U
Dibenzofuran	MG/KG	6.2	0.42 U	0.37 U	0.38 U	4.3 DJ	0.39 U
Fluoranthene	MG/KG	50	0.42 U	0.37 U	0.38 U	40 D	0.39 U
Fluorene	MG/KG	50	0.42 U	0.37 U	0.38 U	7.4 DJ	0.39 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.42 U	0.37 U	0.38 U	7.2 DJ	0.39 U
Naphthalene	MG/KG	13	0.42 U	0.37 U	0.38 U	3.9 DJ	0.39 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			431	432	433	434	435
Sample ID			431	432	433	434	435
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/24/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.42 U	0.37 U	0.38 U	31 D	0.39 U
Pyrene	MG/KG	50	0.42 U	0.37 U	0.38 U	33 D	0.39 U
Total Carcinogenic PAHs	MG/KG	-	ND	ND	ND	101.2	ND
Total Non-Carcinogenic PAHs	MG/KG	-	ND	ND	ND	143.3	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	ND	ND	ND	244.5	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			436	437	438	439	440
Sample ID			436	437	438	439	440
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/24/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.022 U	0.018 U	0.019 U	0.018 U
Total BTEX	MG/KG	-	ND	ND	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	1.9 U	2.1 U	2 U	0.42 U	0.41 U
Acenaphthene	MG/KG	50	1.9 U	2.1 U	2 U	0.42 U	0.41 U
Acenaphthylene	MG/KG	41	1.9 U	2 J	0.76 J	0.42 U	0.41 U
Anthracene	MG/KG	50	1.9 U	1.1 J	1.8 J	0.42 U	0.41 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	1.9 U	4	7.5	0.42 U	0.41 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.94 J	4.7	7.7	0.42 U	0.17 J
Benzo(b)fluoranthene	MG/KG	1.1	0.92 J	4.1	6.3	0.42 U	0.41 U
Benzo(g,h,i)perylene	MG/KG	50	1.9 U	2.6	4.4	0.42 U	0.41 U
Benzo(k)fluoranthene	MG/KG	1.1	1.9 U	3.8	5.6	0.42 U	0.41 U
Chrysene	MG/KG	0.4	0.98 J	4	7.2	0.42 U	0.41 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	1.9 U	2.1 U	2	0.42 U	0.41 U
Dibenzofuran	MG/KG	6.2	1.9 U	2.1 U	2 U	0.42 U	0.41 U
Fluoranthene	MG/KG	50	0.87 J	4.6	11	0.42 U	0.41 U
Fluorene	MG/KG	50	1.9 U	2.1 U	2 U	0.42 U	0.41 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	1.9 U	2.7	4.4	0.42 U	0.41 U
Naphthalene	MG/KG	13	1.9 U	2.1 U	2 U	0.42 U	0.41 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			436	437	438	439	440
Sample ID			436	437	438	439	440
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/24/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.61 J	1.6 J	5.9	0.42 U	0.41 U
Pyrene	MG/KG	50	0.87 J	4.3	9.4	0.42 U	0.16 J
Total Carcinogenic PAHs	MG/KG	-	2.84	23.3	40.7	ND	0.17
Total Non-Carcinogenic PAHs	MG/KG	-	2.35	16.2	33.26	ND	0.16
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	5.19	39.5	73.96	ND	0.33

*Criteria- NYSEDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			441	442	443	444	448
Sample ID			441	442	443	444	448
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/25/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Toluene	MG/KG	1.5	0.001 J	0.006 U	0.006 U	0.006 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.02 U	0.018 U	0.019 U	0.019 U
Total BTEX	MG/KG	-	0.001	ND	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Acenaphthene	MG/KG	50	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Acenaphthylene	MG/KG	41	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Anthracene	MG/KG	50	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.4 U	1.5 J	0.39 U	4.2 U	0.39 U
Benzo(b)fluoranthene	MG/KG	1.1	0.4 U	3 J	0.39 U	4.2 U	0.39 U
Benzo(g,h,i)perylene	MG/KG	50	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Benzo(k)fluoranthene	MG/KG	1.1	0.4 U	2.9 J	0.39 U	4.2 U	0.39 U
Chrysene	MG/KG	0.4	0.4 U	2 J	0.39 U	4.2 U	0.39 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Dibenzofuran	MG/KG	6.2	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Fluoranthene	MG/KG	50	0.4 U	2.5 J	0.39 U	4.2 U	0.39 U
Fluorene	MG/KG	50	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Naphthalene	MG/KG	13	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

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TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			441	442	443	444	448
Sample ID			441	442	443	444	448
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/24/04	06/24/04	06/24/04	06/24/04	06/25/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.4 U	4.1 U	0.39 U	4.2 U	0.39 U
Pyrene	MG/KG	50	0.4 U	2 J	0.39 U	1.8 U	0.39 U
Total Carcinogenic PAHs	MG/KG	-	ND	9.4	ND	ND	ND
Total Non-Carcinogenic PAHs	MG/KG	-	ND	4.5	ND	ND	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	ND	13.9	ND	ND	ND

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

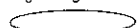
Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			449	450	452	453	455
Sample ID			449	450	452	453	455
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/29/04	06/29/04	06/29/04	06/29/04	06/30/04
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	MG/KG	0.06	0.006 U	0.006 U	0.006 U	0.005 U	0.01
Ethylbenzene	MG/KG	5.5	0.006 U	0.006 U	0.006 U	0.005 U	0.006 U
Toluene	MG/KG	1.5	0.006 U	0.006 U	0.006 U	0.005 U	0.006 U
Xylene (total)	MG/KG	1.2	0.018 U	0.017 U	0.017 U	0.016 U	0.017 U
Total BTEX	MG/KG	-	ND	ND	ND	ND	0.01
Semivolatile Organic Compounds							
2-Methylnaphthalene	MG/KG	36.4	0.39 U	0.38 U	0.38 U	1.8 U	1.5 U
Acenaphthene	MG/KG	50	0.39 U	0.38 U	0.38 U	1.1 J	1.5 U
Acenaphthylene	MG/KG	41	0.39 U	0.38 U	0.38 U	1.8 J	1.5 U
Anthracene	MG/KG	50	0.39 U	0.38 U	0.38 U	4	0.87 J
Benzo(a)anthracene	MG/KG	0.224 or MDL	0.39 U	0.27 J	0.38 U	7.1	2.4
Benzo(a)pyrene	MG/KG	0.061 or MDL	0.39 U	0.24 J	0.38 U	5	2.4
Benzo(b)fluoranthene	MG/KG	1.1	0.39 U	0.24 J	0.38 U	5.6	1.8
Benzo(g,h,i)perylene	MG/KG	50	0.39 U	0.38 U	0.38 U	2.2	1.5 U
Benzo(k)fluoranthene	MG/KG	1.1	0.39 U	0.2 J	0.38 U	3.6	2.5
Chrysene	MG/KG	0.4	0.39 U	0.29 J	0.38 U	6.8	2.2
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	0.39 U	0.38 U	0.38 U	1.8 U	1.5 U
Dibenzofuran	MG/KG	6.2	0.39 U	0.38 U	0.38 U	1.8 U	1.5 U
Fluoranthene	MG/KG	50	0.39 U	0.45	0.38 U	18	3.5
Fluorene	MG/KG	50	0.39 U	0.38 U	0.38 U	1.5 J	1.5 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	0.39 U	0.38 U	0.38 U	2.2	1.5 U
Naphthalene	MG/KG	13	0.39 U	0.38 U	0.38 U	1.8 U	1.5 U

*Criteria- NYSEDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.


Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			449	450	452	453	455
Sample ID			449	450	452	453	455
Matrix			Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5	5.5-5.5
Date Sampled			06/29/04	06/29/04	06/29/04	06/29/04	06/30/04
Parameter	Units	Criteria*					
Semivolatile Organic Compounds							
Phenanthrene	MG/KG	50	0.39 U	0.21 J	0.38 U	16	2.2
Pyrene	MG/KG	50	0.39 U	0.39	0.38 U	14	2.7
Total Carcinogenic PAHs	MG/KG	-	ND	1.24	ND	30.3	11.3
Total Non-Carcinogenic PAHs	MG/KG	-	ND	1.05	ND	58.6	9.27
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	ND	2.29	ND	88.9	20.57

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

N:\063938\14.00009\08Program\Program.mda
Printed: 12/08/04 4:31:48 PM
[SITEID] = '02' AND [LOGDATE] >= #05/19/04# AND [LOGDATE] <= #06/09/04# AND [MATRIX] = 'SO'

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			456	458
Sample ID			456	458
Matrix			Soil	Soil
Depth Interval (ft)			5.5-5.5	12.0-12.0
Date Sampled			06/30/04	06/30/04
Parameter	Units	Criteria*		
Volatile Organic Compounds				
Benzene	MG/KG	0.06	0.006 U	180
Ethylbenzene	MG/KG	5.5	0.006 U	340 J
Toluene	MG/KG	1.5	0.006 U	34 J
Xylene (total)	MG/KG	1.2	0.02 U	650
Total BTEX	MG/KG	-	ND	1,204
Semivolatile Organic Compounds				
2-Methylnaphthalene	MG/KG	36.4	3.3 U	540 DJ
Acenaphthene	MG/KG	50	3.3 U	840 U
Acenaphthylene	MG/KG	41	3.3 U	480 DJ
Anthracene	MG/KG	50	2.1 J	380 DJ
Benzo(a)anthracene	MG/KG	0.224 or MDL	9.7	840 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	8.6	840 U
Benzo(b)fluoranthene	MG/KG	1.1	10	840 U
Benzo(g,h,i)perylene	MG/KG	50	2.4 J	840 U
Benzo(k)fluoranthene	MG/KG	1.1	6.6	840 U
Chrysene	MG/KG	0.4	9.2	840 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	3.3 U	840 U
Dibenzofuran	MG/KG	6.2	3.3 U	290 DJ
Fluoranthene	MG/KG	50	14	900 D
Fluorene	MG/KG	50	3.3 U	420 DJ
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	2.9 J	840 U
Naphthalene	MG/KG	13	3.3 U	3,200 BD

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

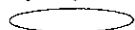
Detection Limits shown are MDL

TABLE 1
CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS - IRM 2004
NYSEG - GENEVA

Location ID			456	458
Sample ID			456	458
Matrix			Soil	Soil
Depth Interval (ft)			5.5-5.5	12.0-12.0
Date Sampled			06/30/04	06/30/04
Parameter	Units	Criteria*		
Semivolatile Organic Compounds				
Phenanthrene	MG/KG	50	4.6	1,600 D
Pyrene	MG/KG	50	12	690 DJ
Total Carcinogenic PAHs	MG/KG	-	47	ND
Total Non-Carcinogenic PAHs	MG/KG	-	35.1	7,670
Total Polycyclic Aromatic Hydrocarbons	MG/KG	500	82.1	8,210

*Criteria- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

J - The reported quantitation limit is an estimated value.

D - Result reported from a secondary dilution analysis.

Detection Limits shown are MDL

TABLE 2
SAMPLE LOCATION RATIONALE

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM
NYSEG - GENEVA

Location ID	Type	Rationale
TP-01	Test Pit	Evaluate lateral extent of PVC subsurface piping and visually inspect the soil
TP-02	Test Pit	Evaluate lateral extent of PVC subsurface piping and visually inspect the soil
TP-03	Test Pit	Evaluate lateral extent of PVC subsurface piping and visually inspect the soil
TP-04	Test Pit	Evaluate lateral extent of Cast Iron subsurface piping and visually inspect the soil
TP-05	Test Pit	Evaluate lateral extent of Cast Iron subsurface piping and visually inspect the soil
TP-06	Test Pit	Evaluate lateral extent of Cast Iron subsurface piping and visually inspect the soil
TP-07	Test Pit	Evaluate lateral extent of Clay subsurface piping and visually inspect the soil
TP-08	Test Pit	Evaluate lateral extent of Clay subsurface piping and visually inspect the soil
TP-09	Test Pit	Evaluate lateral extent of Clay subsurface piping and visually inspect the soil
GP-23	Soil Boring	Delineate horizontal and vertical extent of MGP impacts near confirmation sample 458
GP-24	Soil Boring	Delineate horizontal and vertical extent of MGP impacts near confirmation sample 458
GP-25	Soil Boring	Delineate horizontal and vertical extent of MGP impacts near confirmation sample 458
GP-26	Soil Boring/Hydropunch Groundwater Sampling	Delineate horizontal and vertical extent of MGP impacts in soil and groundwater near confirmation sample 458
GP-27	Soil Boring/Hydropunch Groundwater Sampling	Delineate horizontal and vertical extent of MGP impacts in soil and groundwater near confirmation sample 458
GP-28	Soil Boring/Hydropunch Groundwater Sampling	Delineate horizontal and vertical extent of MGP impacts in soil and groundwater near confirmation sample 458

TABLE 3
SUPPLEMENTAL SOIL AND GROUNDWATER SAMPLING AND ANALYSIS PROGRAM
NYSEG - GENEVA, NY
FORMER MGP SITE

Analytical Method ¹	Matrix	No. of Field Samples	Field Duplicates ²	Equipment Blanks ²	Trip Blanks ³	MS/MSD (Pairs) ³	Total No. of Samples
Soil Boring Samples							
BTEX (USEPA Method 8260B)	Soil	12	1	1	0	1	16
PAHs (USEPA Method 8270C)		12	1	1	0	1	16
Hydropunch Groundwater Samples							
BTEX (USEPA Method 8260B)	Groundwater	3	1	1	1	1	8
PAHs (USEPA Method 8270C)		3	1	1	0	1	7
Monitoring Well Groundwater Samples							
TCL VOCs (USEPA Method 8260B)	Groundwater ⁴	25	2	1	5	2	37
TCL SVOCs (USEPA Method 8270C)		25	2	1	0	2	32
TCL PCBs (USEPA Method 8082)		25	2	1	0	2	32
Total Phenols (USEPA Method 9066)		25	2	1	0	2	32
TAL Metals (USEPA Method 6010B/7470A)		25	2	1	0	2	32
Total Cyanide (USEPA Method 9012A)		25	2	1	0	2	32
Alkalinity (USEPA Method 310.2)		4	1	1	0	1	8
Chloride (USEPA Method 300.0)		4	1	1	0	1	8
Nitrate (USEPA Method 353.2)		4	1	1	0	1	8
Nitrite (USEPA Method 353.2)		4	1	1	0	1	8
Sulfate (USEPA Method 300.0)		4	1	1	0	1	8
Sulfide (USEPA Method 376.1)		4	1	1	0	1	8
Dissolved Iron (USEPA Method 6010B) - Field Filtered		4	1	1	0	1	8
Ammonia (USEPA Method 350.1)		4	1	1	0	1	8
Total Kjeldahl Nitrogen (USEPA Method 351.2)		4	1	1	0	1	8
Total Organic Carbon (USEPA Method 9060)		4	1	1	0	1	8
Hardness (USEPA Method 130.2)		4	1	1	0	1	8
Total Dissolved Solids (USEPA 160.1)		4	1	1	0	1	8

1. Test Methods for Evaluating Solid Waste, Physical Chemical Methods (SW-846) USEPA Final Update III, June 1997
Standard Methods (SM) for the Examination of Water and Wastewater, 20th Edition, 1998
Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, Revised March 1983

TCL/TAL - USEPA Superfund Target Compound List/Target Analyte List

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

PCBs - Polychlorinated Biphenyls

BTEX - Benzene, toluene, ethylbenzene, and xylenes

PAHs - Polyaromatic hydrocarbons

- Assumes a 5% frequency (one per 20 field samples)
- Approximate - Assumes one per day of field sampling for water samples only
- Samples will be collected from 4 bedrock and 21 overburden wells. Only those samples collected from the bedrock wells will be analyzed for wet chemistry parameters.

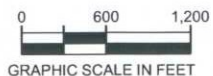
Figures



P:\In Progress\NYSEG\Geneva\2004 Work Plan Addendum\Figure 1 .ai

SOURCE:

USGS 7 1/2 Minute Series Topographic Maps
Geneva North, New York 1978,
and Geneva South, New York 1978



Title: SITE LOCATION MAP

Location: FORMER MGP SITE
GENEVA, NEW YORK

Client:  NEW YORK STATE
ELECTRIC & GAS

URS

URS Corporation
28 Corporate Drive, Suite 200
Clifton Park, New York 12065

Drafter:
BKG

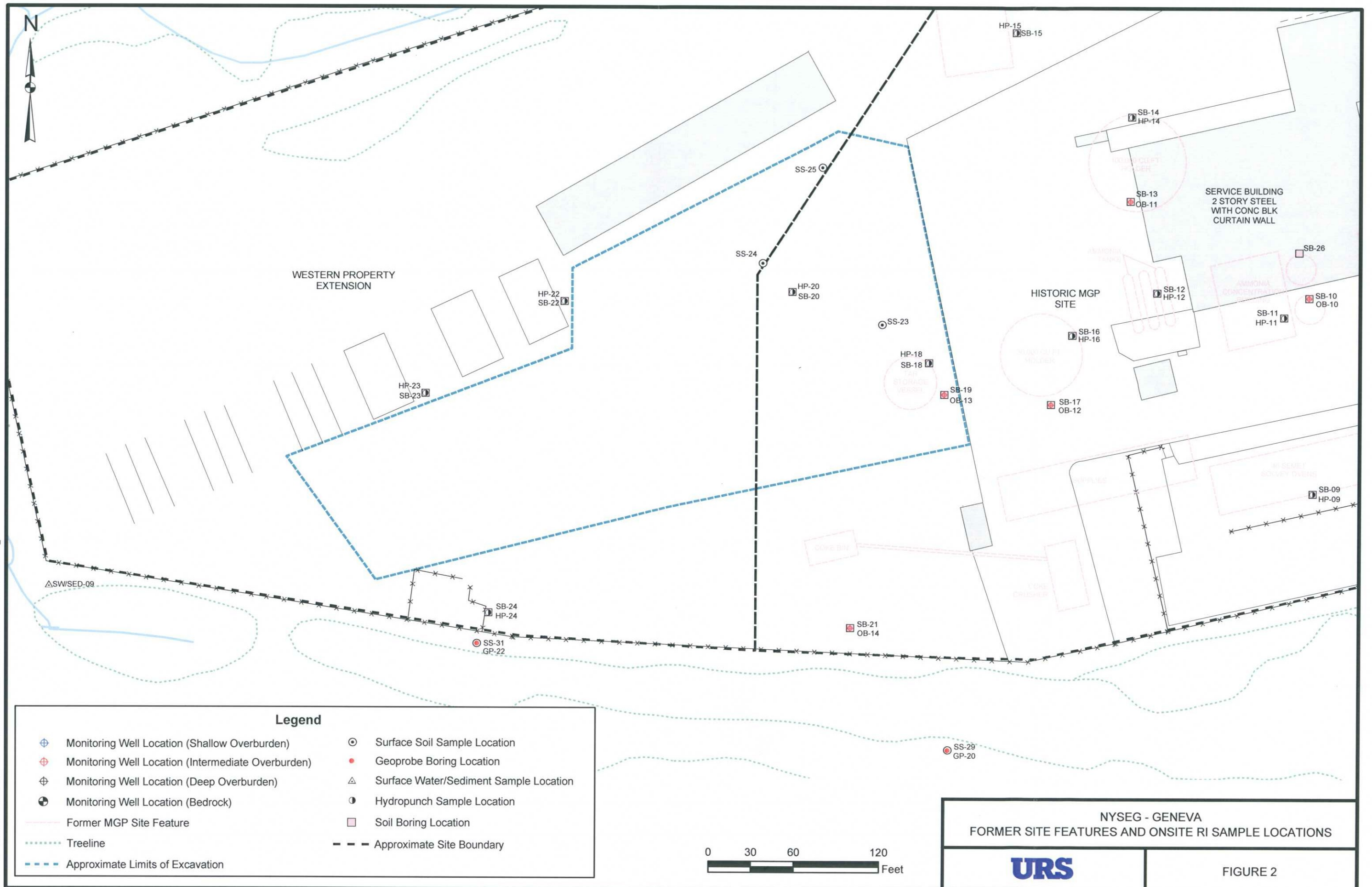
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Date:
January 7, 2004

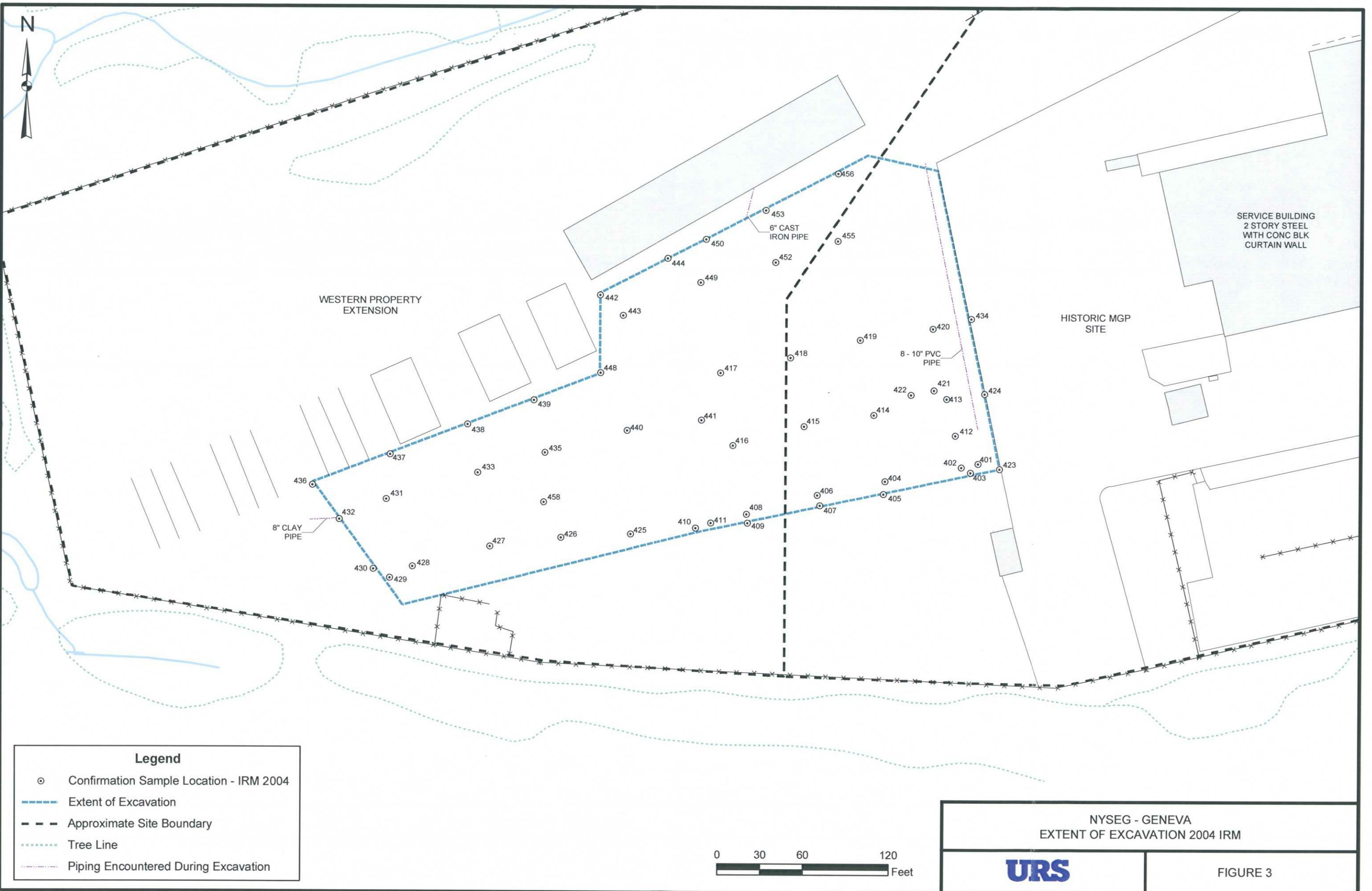
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FIGURE 1

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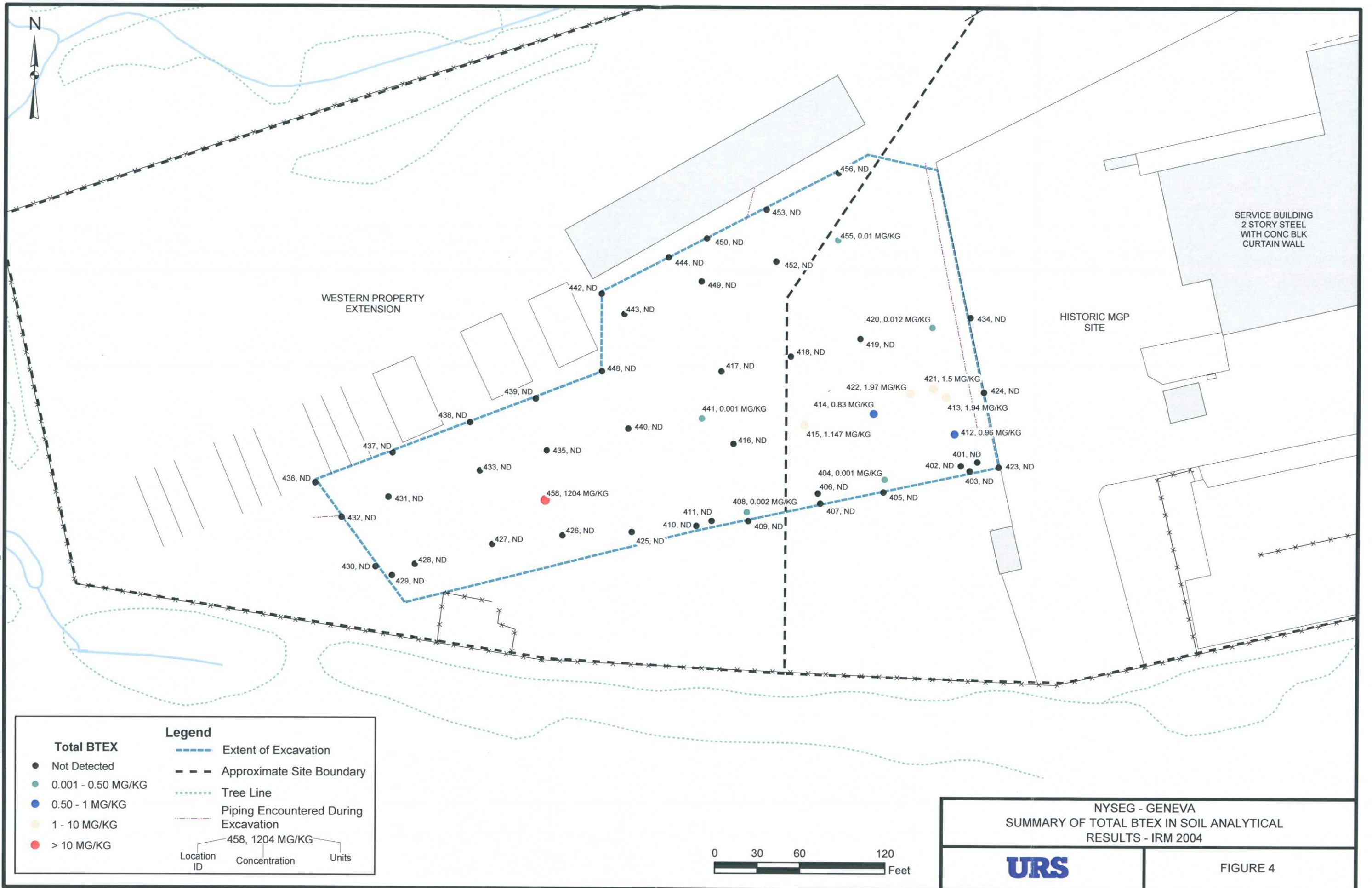


NYSEG - GENEVA
EXTENT OF EXCAVATION 2004 IRM

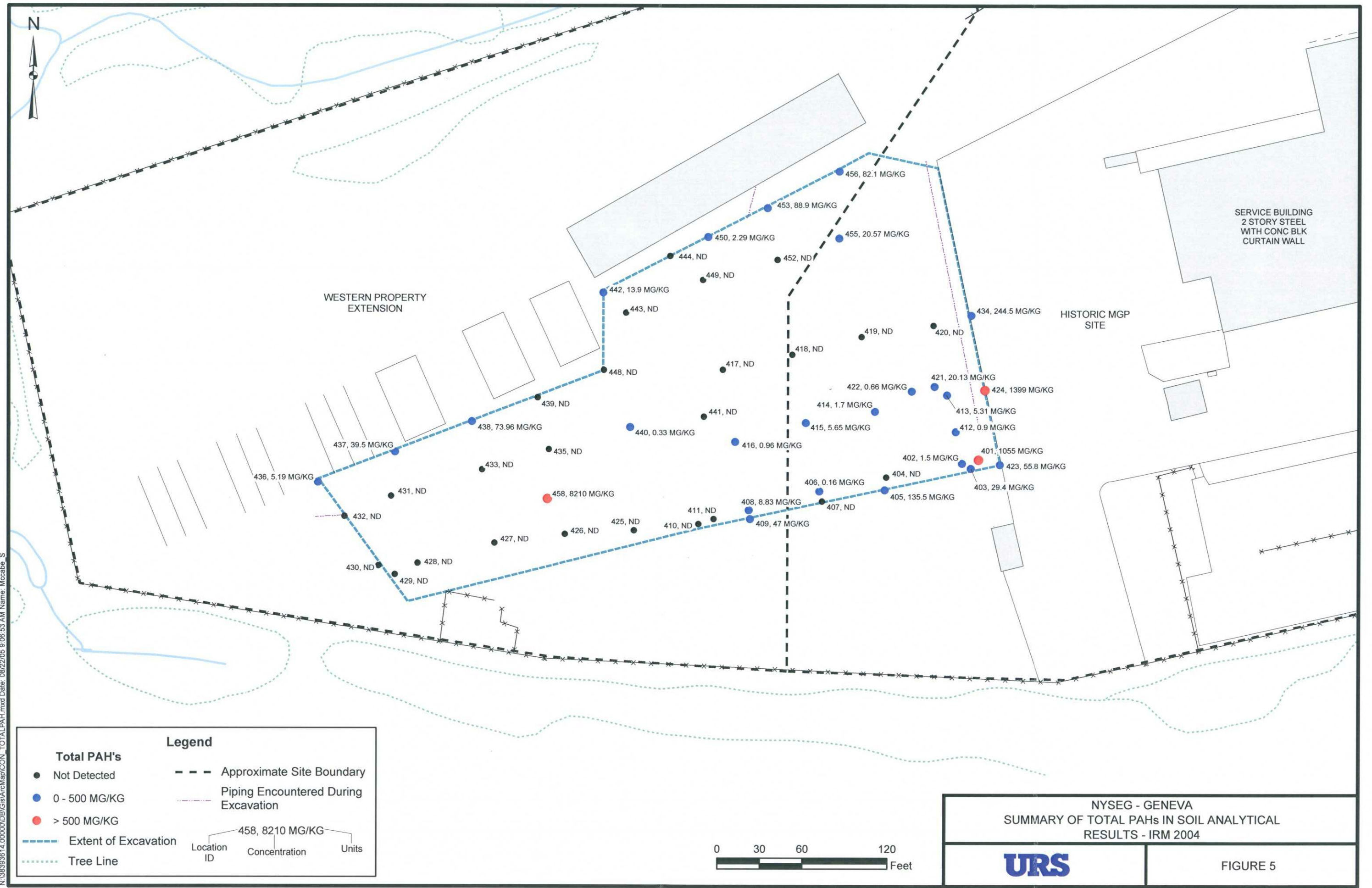


FIGURE 3

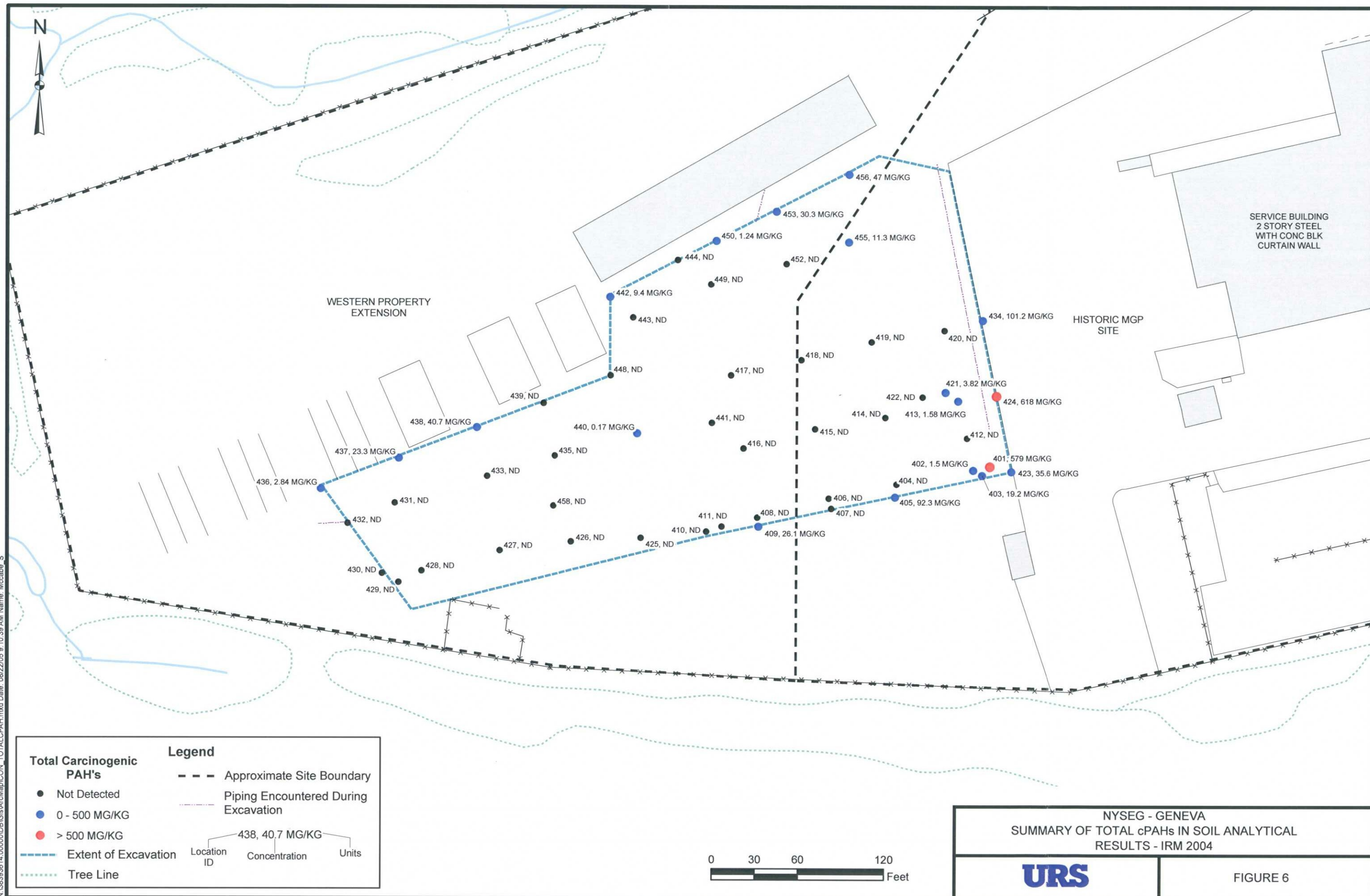
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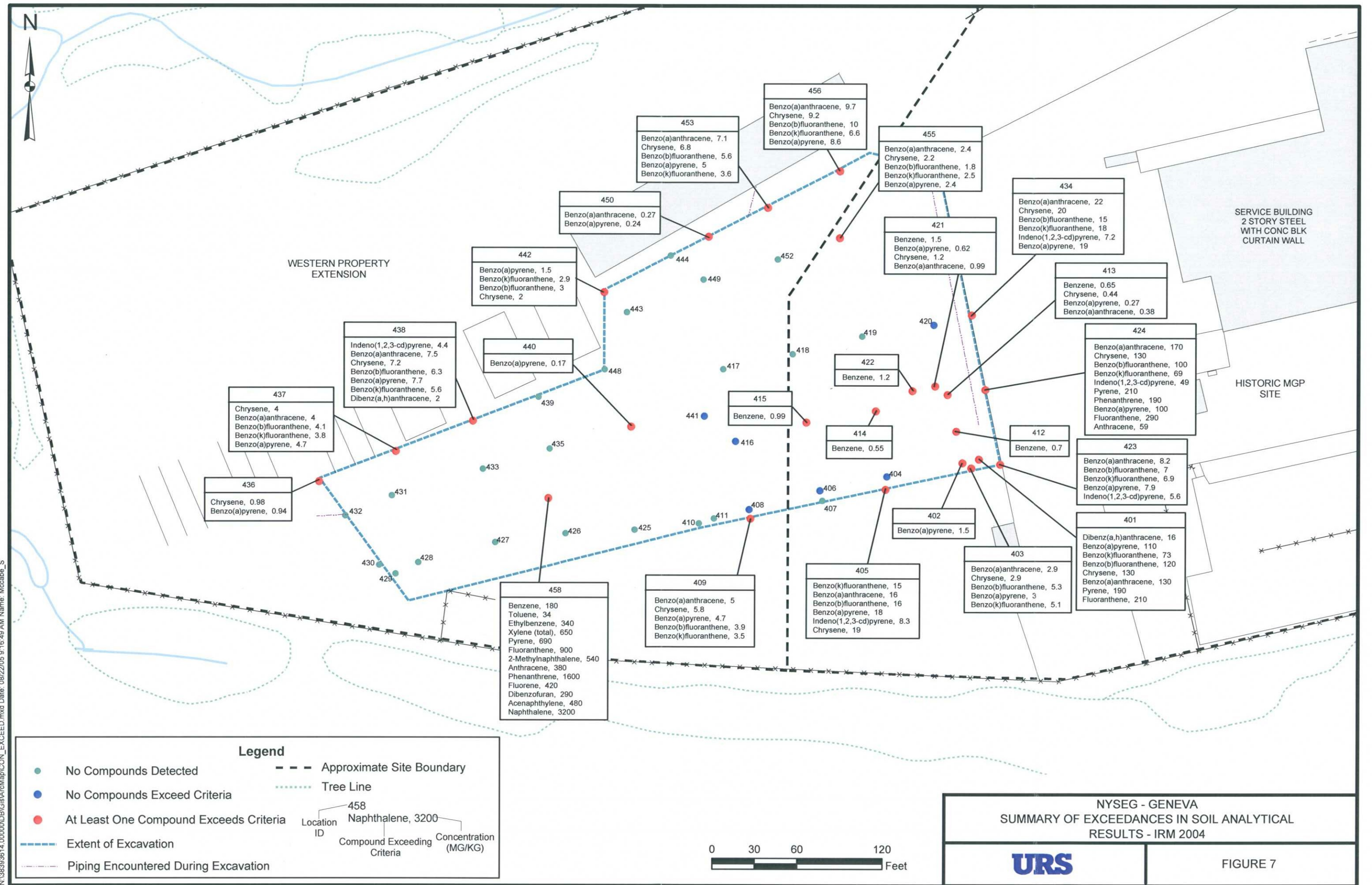
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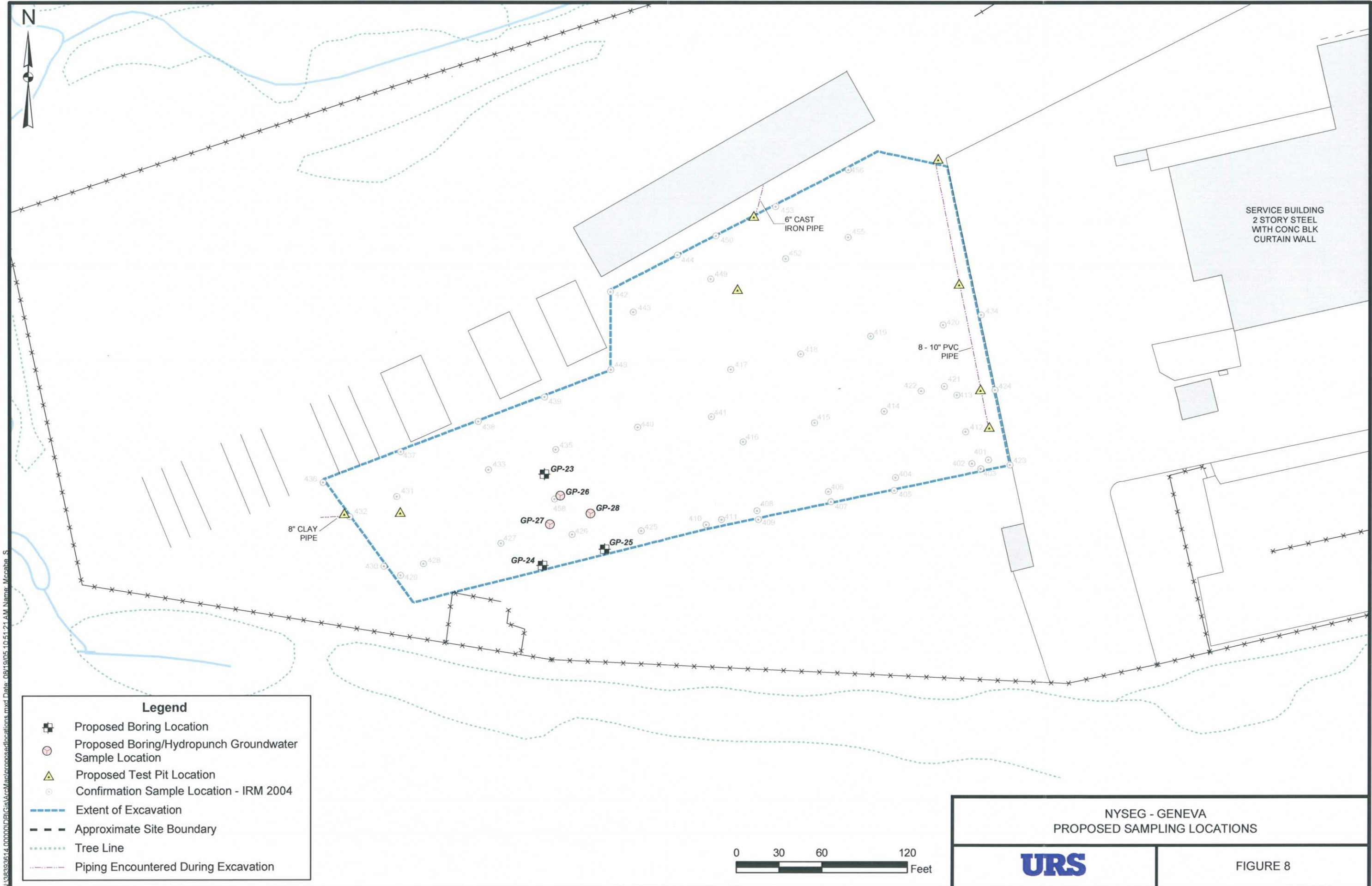


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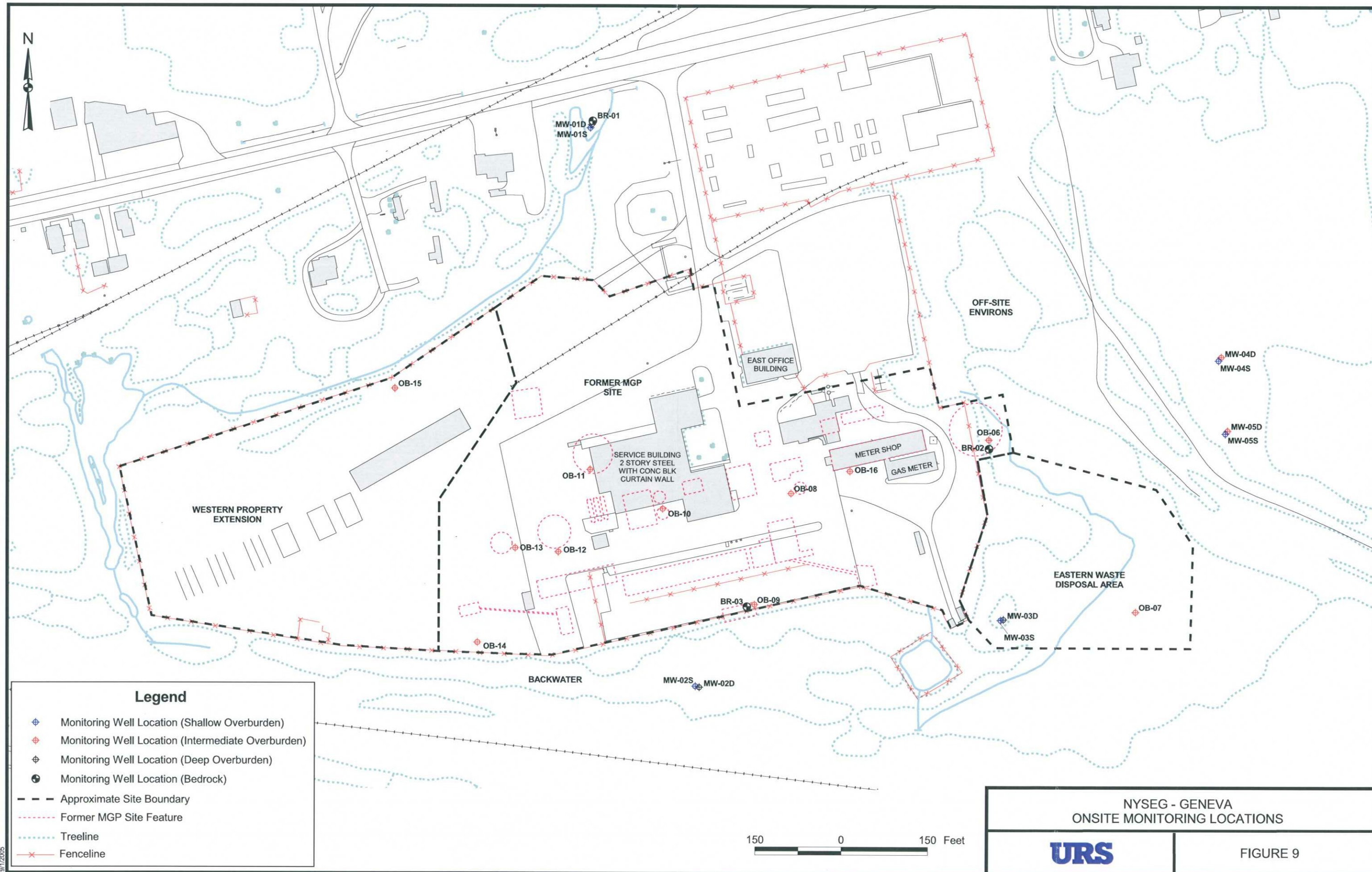
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N:\38393614_000000\BIS\geology.apr.ONSITE MONITORING LOCATIONS
9/17/2005





Legend

- Monitoring Well Location (Bedrock)
- Approximate Site Boundary

200 0 200 Feet

NYSEG - GENEVA
OFFSITE MONITORING LOCATIONS

URS

FIGURE 10

FIGURE 11

PROPOSED SCHEDULE

**REMEDIAL INVESTIGATION WORK PLAN ADDENDUM
NYSEG -GENEVA**

TASK	ANTICIPATED DURATION OF TASK	ANTICIPATED DATE OF TASK COMPLETION
Submit Work Plan Addendum to NYSDEC	6 weeks	December 10, 2004
NYSDEC Review Work Plan	4 weeks	January 10, 2005
Revise Work Plan	1 week	January 17, 2005
Submit Final Work Plan	1 day	September 2, 2005
Notice To Proceed – Field Work	0	August 15, 2005
Start Field Investigation	3 weeks	August 22, 2005
Task 1 – Excavate Test Pits	1 week	September 6, 2005
Task 2 – Soil Borings	1 week	September 12, 2005
Task 3 – Groundwater Sampling	1 week	August 22, 2005
Laboratory Analyses	4 weeks	October 17, 2005
Submit Task 4 Summary Report to NYSDEC	4 week	November 14, 2005

Appendix A

APPENDIX A

USES OF ON-SITE BUILDINGS

REMEDIAL INVESTIGATION WORK PLAN ADDENDUM NYSEG -GENEVA

Compressor Building

The front half of the Compressor Building is used as a welding shop. The welding shop is currently occupied by two people for approximately 2.5 hours or less per day.

The back half of the Compressor Building is used for tool storage. The tool storage area is unoccupied except during retrieval or returning of tools.

Old Purifier Building

The newer portion of the Old Purifier Building consists of a Meter Shop, which is used for the repair and calibration of natural gas meters. The Meter Shop is occupied by 10 to 12 people for approximately eight hours per day.

The older portion of the Old Purifier Building consists of a Meter Storage Area, which is used to store natural gas meters. The Meter Storage Area is unoccupied except during retrieval or replacement of meters.

East Building

The East Building is used as offices and crew rooms for electric line operations, natural gas operations, system protection operations, and control operations. A total of 60 people occupy the East Building. Fifty people occupy the building for approximately 2 hours or less per day. The remaining 10 people occupy the building for approximately eight hours per day.

West Building

The first floor of the West Building consists of the first class lineman's crew room, the utility construction and maintenance offices and crew room, a storeroom, and a vehicle repair garage. A total of 30 people occupy the first floor of the West Building. Twenty people occupy the

building for approximately 2 hours or less per day. The remaining 10 people occupy the building for approximately seven hours or less per day.

The second floor of the West Building consists of administrative offices, engineering offices, the meter reader's crew room, the property management office, and customer service offices. A total of 52 people occupy the second floor of the West Building. Twenty people occupy the building for approximately 2 hours or less per day. Sixteen people occupy the building for approximately seven hours or less per day. The remaining 16 people occupy the building for approximately five hours or less per day.