SCOPE OF WORK
DIRECT-PUSH SERVICES
AT NORTH FRANKLIN STREET SITE
VILLAGE OF WATKINS GLEN, NEW YORK
SITE ID #8-49-002
NYSDEC WORK ASSIGNMENT D004433-16

1.0 INTRODUCTION

This Scope of Work describes the requirements for direct push services for the advancement of soil borings and the collection of groundwater samples at the North Franklin Street site, located in the Village of Watkins Glen, Schuyler County, New York (Figure 1). The work will support a Site Investigation at the North Franklin Street site, which is located in the Village of Watkins Glen, Schuyler County, New York (Figure 1). The purpose is the delineation of benzene, ethylbenzene, toluene and xylene (BTEX) contaminated soils and groundwater recently encountered during the soil vapor intrusion study at the North Franklin Street site and to determine the possible source(s) of the BETX contamination. The Contractor will provide the services outlined below.

1.1 Site Description

The North Franklin Street Class 2 inactive hazardous waste site (Site #8-49-002) is an approximately 0.3-acre parcel of land situated in the Village of Watkins Glen, Schuyler County, New York. The site is located in an urban area approximately 400 feet south of Seneca Lake, as shown on Figure 1. Two structures currently exist on site (shown on Figure 2). The building referred to as the "Former Auto Museum" is a single-story metal building on a concrete slab. The second structure is referred to as the "Former Dry Cleaning Building." This is a two-story brick building that also includes two unoccupied single-story brick sheds to the east. Both of these buildings have housed a variety of businesses in the past, including a machine shop and dry cleaning operations.

2.0 SCOPE OF WORK

This contract is for direct-push services for the advancement of soil boring to be performed as part of a contract between URS Corporation - New York (URS) and NYSDEC. The Contractor will be a subcontractor to URS. All work is to be performed in accordance with applicable NYSDEC guidance and regulatory documents. The Contractor will provide the services outlined below.

2.1 Mobilization/Demobilization

The Contractor shall provide a Geoprobe® direct-push rig (or equivalent) with a two-man crew and the necessary support vehicle(s) and equipment to sustain the crew without delays in schedule. The direct-push rig shall be operational at all times and will be inspected for hydraulic leaks and general condition by a URS representative prior to site entry. The direct-push rig shall be capable of advancing 2-inch Macrocore samplers to depths of up to 15 feet below grade. The borings may be installed through concrete or asphalt paving.

2.2 Decontamination of Equipment

Prior to their introduction or reintroduction, all down hole tools and equipment used during the advancement of the borings be cleaned using a non-phosphate detergent and potable water, between sample locations. The Contractor shall provide potable water for the decontamination of equipment and tools. The Contractor shall use clean transport containers, which will not contaminate any transported water.

2.4 Geoprobe ® Borings

This work will consist of advancing up to 37 Geoprobe® borings. The total number of borings will be determined in the field by NYSDEC personnel. Boring locations within the vicinity of SG-03 and the two former filling stations will be determine based upon the findings of the geophysical survey (Figure 2) and the location of utilities. The Contractor will advance approximately 21 borings using a 25-foot grid pattern around soil-gas conduit location SG-03.

The Contractor will then advance an additional 16 borings along the west side of Route 14 in the vicinity of the two former filling stations, for a total of 37 borings (Figure 3). The borings will be advanced to a maximum of 15 feet below ground surface (bgs) with 2-inch outside diameter (O.D.) by 4-foot long acetate lined Macrocore sampler to approximately two feet below the water table, which is anticipated to be approximately 3 to15 feet bgs. The borings may be installed through concrete pavement or fill material. One soil sample will be collected from each boring from interval exhibiting highest PID reading or from just above water table if no elevated PID readings be encountered. The soil samples collected will be shipped to a New York State Department of Health New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis by STARS volatile organic compounds (VOCs) by USEPA Method 8260B and STARS semi-volatile organic compounds (SVOCs) by USEPA Method 8270C.

After the boring is advanced below the water table, ground water samples will be collected from 12 borings located around soil-gas conduit location SG-03 and from the 16 borings along the west side of Route 14 in the vicinity of the two former filling stations. The groundwater samples will be collected from using a Geoprobe® screen point sampler. A minimum of 1 gallon of water will be purged prior to the collection of a groundwater sample. The groundwater samples collected will be shipped to a NYSDOH ELAP certified laboratory for analysis by STARS VOCs by USEPA Method 8260B and STARS SVOCs by USEPA Method 8270C.

Following the collection of the groundwater samples, the borings will be backfilled with hydrated bentonite chips to within 6 inches of the surface and the surface will be repaired using materials similar to those found at the boring location.

2.5 Permits

Prior to the start of activities at the site, the Contractor shall obtain all necessary permits (i.e., street/sidewalk, obstruction, road opening, drilling permits) for conducting intrusive activities. The Contractor will also obtain permits for water usage, if needed.

2.6 Investigation Derived Waste (IDW)

It is anticipated that investigation derived waste (IDW) will need to be containerized in 55-gallon drums during this investigation. The Contractor shall provide DOT-approved, open top 55-gallon drums to segregate, contain, and stage the IDW (soil cuttings, spent acetate liners, PPE, etc.) as necessary and as directed by the supervising URS geologist. It is estimated at least three drums will be required.

3.0 PROJECT SCHEDULE

Upon receipt of authorization to proceed by its client, URS will notify the Contractor to proceed. The Contractor is expected to mobilize within five days of the Notice to Proceed. The work is expected to begin the week of August 7, 2005. It is anticipated that the fieldwork for this site will be completed within four (10-hour) days.

4.0 UNIT PRICE SCHEDULE

Payment for work performed under this Scope of Work shall be in accordance with the attached Unit Price Schedule (Table 1). The contractor shall complete Table 1 with their unit prices. The estimated quantities shown are approximate and may change depending on the conditions encountered. Payment shall be made for actual quantities of work performed by the Contractor, based on approval of the supervising URS geologist.

Four (10-hour) days have been estimated to complete all work at the site.

5.0 SPECIFIC RESPONSIBILITIES

The following specific responsibilities will be assumed by URS.

a. URS shall provide an onsite representative to monitor Contractor's work.

b. URS shall be responsible for determining the presence of any buried utilities in the proposed drilling areas.

c. URS shall survey the location and elevations of the Geoprobe® borings.

d. URS shall coordinate with a subcontractor for pick-up of drums containing IDW.

The following responsibilities shall be assumed by the Contractor:

a. It is the Contractor's responsibility to complete all work to the satisfaction of the URS site representative. Work so performed will form the basis for compensation.

b. In the event of equipment malfunction, the Contractor shall provide replacement equipment of equivalent specification in a timely manner so as not to incur a delay unacceptable to URS.

c. The Contractor shall provide for the security of his equipment and will ensure the security of the borings prior to completion.

d. The contractor shall provide all necessary equipment, parts, and supplies to collect the soil and groundwater samples.

e. The Contractor shall provide all necessary permits for intrusive work and water use for each phase of work.

6.0 HEALTH AND SAFETY

The work to be performed under this Scope of Work will occur in an area of suspected soil contamination. It is anticipated that all work will be conducted in 10-hour days in USEPA Level "D" personal protective equipment (PPE). The Contractor shall provide safety equipment necessary for its own employees.

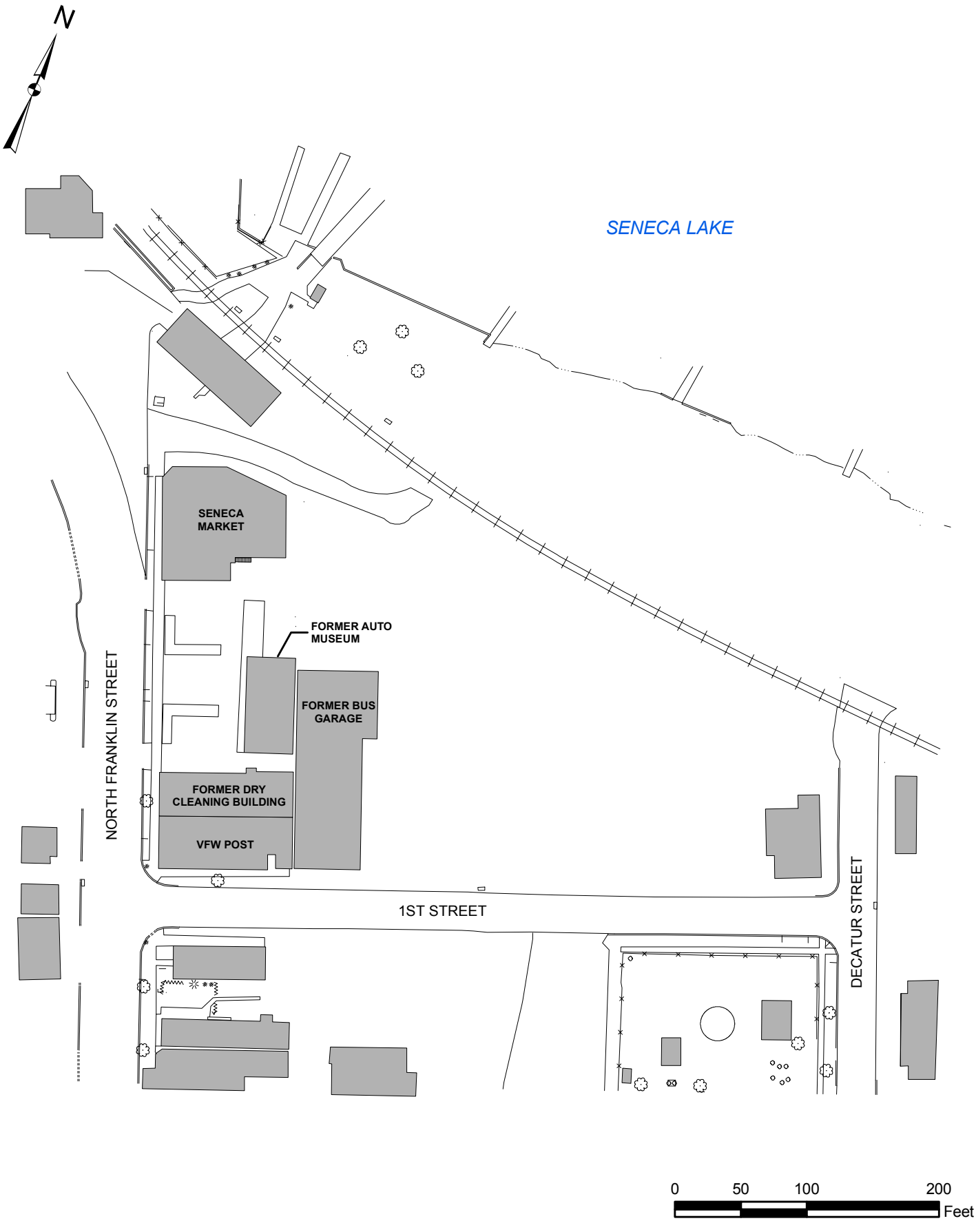
The Contractor shall, at a minimum, satisfy all applicable federal, state, and local statutes, regulations and ordinances regarding health and safety. Beyond this minimum requirement, the

Contractor shall develop and submit to URS for review a health and safety plan specific to this Scope of Work before start of work. As an alternative, the Contractor has the option of adopting in writing the URS Health and Safety Plan for the site.

All personnel onsite must be appropriately trained to comply with the OSHA regulations found in 29 CFR 1910.120(e) and are required to bring copies of all certificates with them on the first day of field activities. All onsite personnel must participate in a medical surveillance program to comply with 29 CFR 1910.120(f) and are required to bring copies of certificates indicating their ability to participate in hazardous waste site work with them on the first day of field activities. All copies of certificates must be submitted to the URS Site Health and Safety Officer.

7.0 CONFIDENTIALITY

It is important that all information produced by the activities of the Contractor, and all information be treated, developed, or compiled in connection with this project must be kept confidential. All information developed by, or on behalf of Contractor in connection with this subcontract, shall be the sole and exclusive property of URS/NYSDEC and must be promptly turned over to URS at the completion of work. Data, reports, memoranda, and correspondence developed or compiled in connection with this project must be kept confidential.



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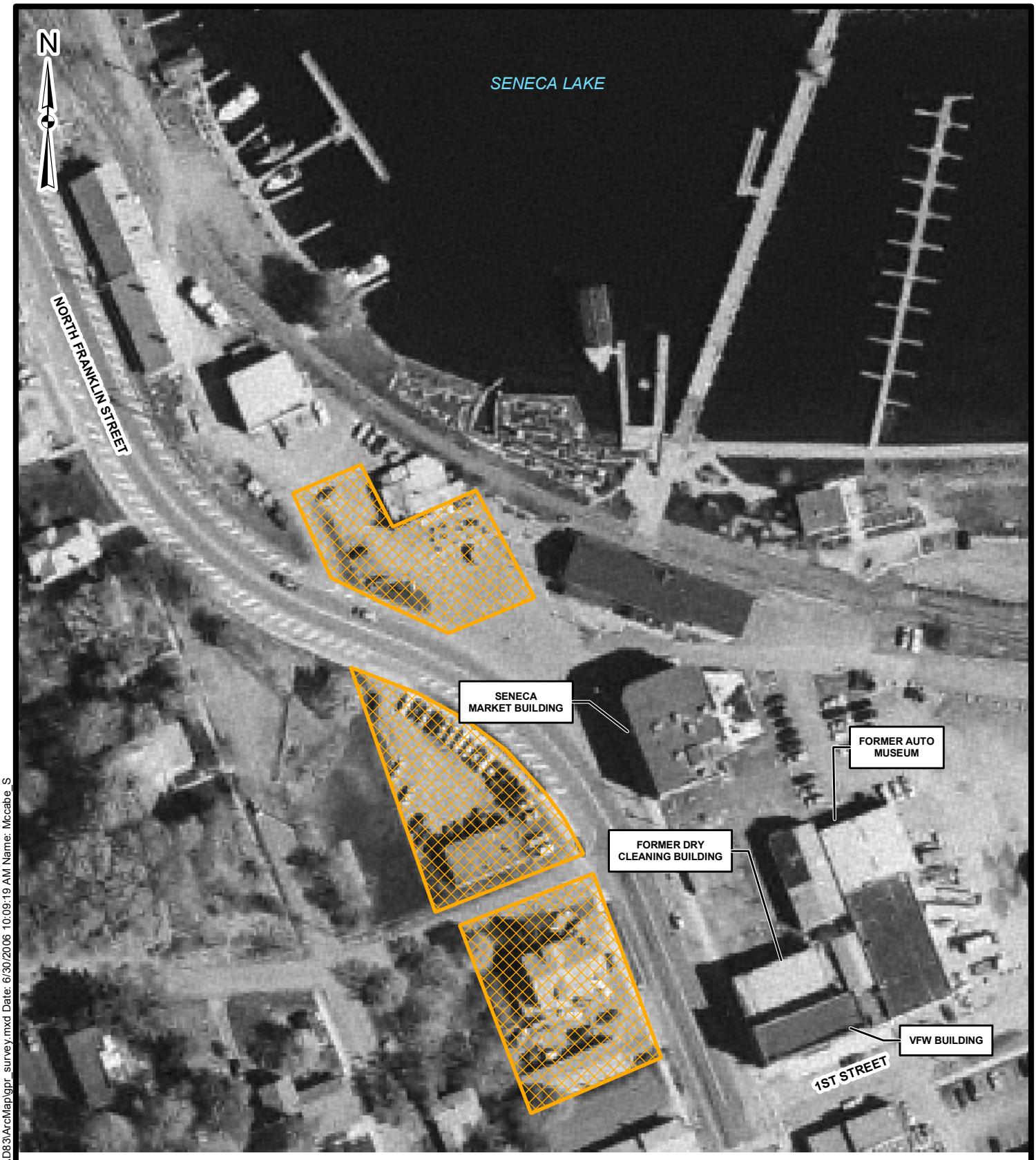
URS

NORTH FRANKLIN STREET
PROJECT SITE

FIGURE 1



Legend

Proposed Area of Geophysical Survey

0 50 100 200 Feet

URS

NORTH FRANKLIN STREET
PROPOSED GEOPHYSICAL SURVEY LOCATIONS

FIGURE 2

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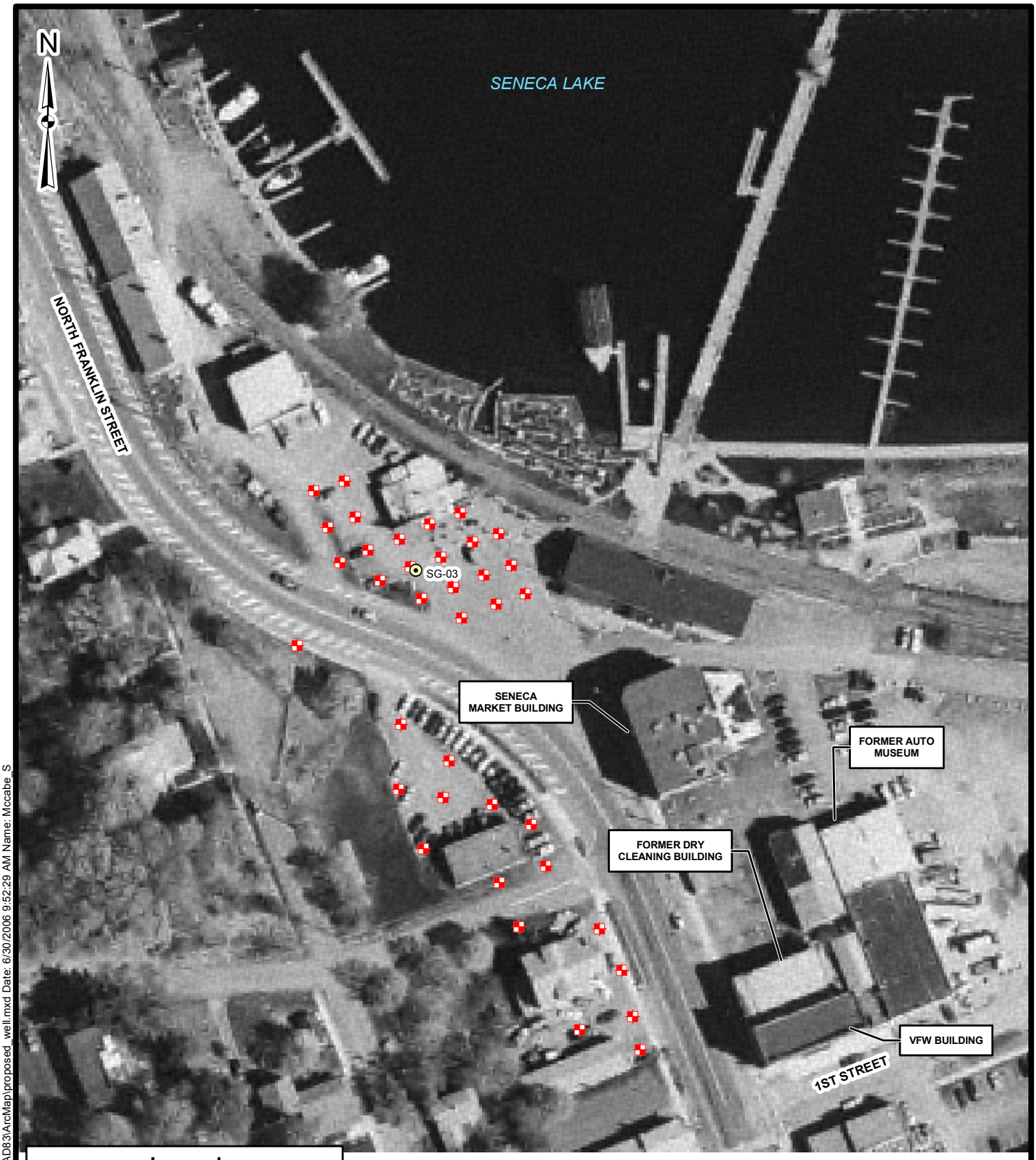

Legend

- Proposed Geoprobe Boring
- Soil-Gas Conduit Location

0 50 100 200 Feet

URS

NORTH FRANKLIN STREET
PROPOSED SOIL BORING LOCATIONS

FIGURE 3

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UNIT PRICE SCHEDULE

TABLE 1

UNIT PRICE SCHEDULE

DIRECT PUSH SERVICES

NORTH FRANKLIN STREET SITE

VILLAGE OF WATKINS GLEN, NEW YORK - SITE ID #8-49-002

BID				
Description - IDW services	Unit	Estimated Quantity	Unit Cost Level D	Estimated Total Level D Cost
Mobilization/Demobilization *	lump sum	1		
Direct Push unit with 2-person crew	per day	4		
DOT-approved 55-gallon drums	each	3		
			Total	

Notes:

1. The cost of all activities required by the Scope of Work and not specifically identified above as Payment Items shall be spread among and included within the quoted costs for the listed Payment Items.

2. Quanties are estimated. Actual payment will be made based on the actual, approved work performed. The unit prices are fixed and not subject to renegotiation due to an increase or decrease in quantities.

3. * - Prices shall include travel to/from site, per diem and subsistence (if needed).

4. Decontamination, drum handling, and IDW management is included in the daily rate.

Company Name _____

Authorizing Signature _____

Name / Title _____

Date _____