APPENDIX B

Geophysical Investigation

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

GPR
MAGNETICS
ELECTROMAGNETICS
SEISMICS
RESISTIVITY
UTILITY LOCATION
UXO DETECTION
BOREHOLE CAMERA
STAFF SUPPORT

Results of Geophysical Investigation

Former Pratt Oil Works Inland Parcels
Parcel A: 38-40 Railroad Avenue
Parcel D: 38-84 Railroad Avenue
Parcel E: 38-54 Railroad Avenue & 38-50 Review Avenue
Parcel G: 38-78 Review Avenue
Long Island City, New York

Prepared for: **Kleinfelder, Inc.**
Bohemia, New York

Dates of Investigation: **June 8-10, 15, 17-19**

Prepared by:

Gerald Williamson
Geologist: Project Manager
NAEVA Geophysics Inc.
50 North Harrison Avenue, Suite 11
Congers, NY 10920

MARYLAND
4707 Benson Ave.
Suite 104
Baltimore
Maryland 21227
(410) 536-7600
(410) 536-7602 Fax

NEW YORK
50 N. Harrison Ave.
Suite 11
Congers
New York 10920
(845) 268-1800
(845) 268-1802 Fax

VIRGINIA
P.O. Box 7325
Charlottesville
Virginia 22906
(434) 978-3187
(434) 973-9791 Fax

Contents

Results of a Geophysical Investigation
Former Pratt Oil Works
Inland Parcels A, D, E, and G
Long Island City, New York

1.0 Introduction

1.1 Purpose

On June 8, 9, 10, 15, 17, 18, and 19, 2009 NAEVA Geophysics conducted geophysical investigations on portions of Parcels A, D, E, and G of the former Pratt Oil Works facility in Long Island City, New York. Parcel A is located at 38-40 Railroad Avenue and Parcel D at 38-84 Railroad Avenue. Parcel E consists of the properties located at 38-54 Railroad Avenue and 38-50 Review Avenue. Parcel G is located at 38-78 Review Avenue. The purpose of the investigations was to delineate detectable active and inactive subsurface utilities, features and former oil works structures. Additionally, NAEVA individually delineated the detectable subsurface utilities and features in the vicinity of two proposed monitoring well locations, designated by Kleinfelder as MW-20 and MW-21. Aboveground structures associated with the former oil terminal operations no longer exist on site. Only exterior portions of each property were investigated.

1.2 Areas of Investigation

There were six areas of investigation, referred to in this report as Areas 1-6. EM-61 and GPR data were collected in Areas 1-4, and Areas 5 and 6 consisted of the proposed locations for monitoring wells MW-20 and MW-21 respectively. Area 1 consisted of portions of Parcel A, D, and E (see Plate 1). The area of investigation contains a parking lot, an active roadway, and an alleyway. The parking lot is approximately 130 feet by 70 feet in size and covered by asphalt. Several vehicles could not be moved prior to the investigation. The roadway located along the north side of 38-84 Railroad Avenue and 38-50 Review Avenue, is approximately 420 feet long and 45 feet wide, and covered by asphalt. Several vehicles parked along the edges of the roadway could not be moved prior to the investigation. The alleyway located along the eastern side of 38-84 Railroad Avenue is approximately 65 feet long and 20 feet wide and covered by asphalt.

Area 2 covers a portion of Parcel E, the alleyway on the north side of 38-54 Railroad Avenue. The area of investigation is irregular shaped, with a maximum extent of approximately 170 feet by 60 feet, and covered with asphalt (see Plate 2). Area 3 consists of portions of Parcel E. The area of investigation includes the alleyways on the east and south side of 38-54 Railroad Avenue. The eastern alleyway is approximately 230 feet long and 35 feet wide, and covered with asphalt. The southern alleyway is approximately 225 feet long and 20 feet wide and covered with asphalt, broken asphalt, and dirt/gravel (see Plate 3). Area 4 consists of the loading dock area of Parcel G. The area was L-shaped with a maximum extent of approximately 165 feet by 110 feet, and was covered by asphalt, concrete, and reinforced concrete (see Plate 4). Areas 5 and 6 are the areas in the vicinity of proposed monitoring wells MW-20 and MW-21 (see plate 5). MW-20 is located in the concrete sidewalk along Review Avenue in front of 38-20 Review Avenue. MW-21 is in the concrete sidewalk along Review Avenue in front of 38-30 Review Avenue. Each

property was operating as an active business with a moderate to heavy volume of vehicle traffic. Areas that contained stored materials or vehicles could not be investigated.

2.0 Instrumentation

The equipment selected for this investigation included a Geonics EM-61 electromagnetic (EM) metal-detector, a Malå RAMAC/Ground Penetrating Radar (GPR) system with a 250-Megahertz (MHz) antenna, a Fisher TW-6 Pipe and Cable Locator (a type of hand-held EM metal-detector), a 3M Dynatel 2250 Cable Locator, and a Subsite 950 utility locator.

2.1 EM-61

The EM-61 is a high-resolution time-domain metal detector that is capable of detecting both ferrous and non-ferrous metallic materials. The EM-61 consists of three major parts: a hand-pulled cart housing the twin transmitter/receiver coil assembly, a backpack containing the battery and processing electronics, and a digital data recorder.

EM-61 electromagnetic metal-detector

The EM-61's transmitter generates a pulsed primary magnetic field, which then induces eddy currents in nearby metallic objects. The decay of these eddy currents are measured by each of two spatially separated receiver coils, and is expressed in millivolts (mV). The coils' responses are recorded by an integrated data logger and displayed as two channel data. The response curves from the receiver coils are typically well-defined positive peaks that allow accurate lateral location of targets. Because of its trailer-mounted configuration, the EM-61 is ideally suited for use over the relatively open and smooth ground.

2.2 TW-6

The Fisher TW-6 Pipe and Cable Locator, also known as the M-Scope, is a type of hand-held electromagnetic metal-detector. The instrument consists of a transmitter coil and a receiver coil mounted at opposite ends of a 4-foot horizontal staff. The transmitter is fixed in a vertical position. The receiver's orientation is adjusted to the horizontal, exactly perpendicular to the transmitter. When the receiver is in this perpendicular orientation, its response to the transmitter is at a minimum. Metallic objects in the vicinity of the instrument pick up the transmitted signal; acting as secondary transmitters, they cause detectable interference at the receiver. By adjusting the gain and the position of the instrument relative to a buried metallic object, an experienced operator can often obtain information as to the size or shape of the target.

2.3 Ground Penetrating Radar

The Malå GPR system consists of four major parts: a 4-wheeled chassis with an integrated odometer, a transmitter/receiver antenna, a battery unit, and a digital video logger (DVL). The GPR's transmitter radiates a short pulse of electromagnetic energy into the ground. When this pulse strikes an interface between layers of material having different electrical properties, a

portion of the energy is reflected back to the surface while the remaining energy continues on to the next interface. The GPR records these reflections versus time in nanoseconds (two-way travel time), or depth when using an appropriate radar velocity, and displays them real-time via the DVL as a vertical column of data on the screen.

As the GPR moves, the integrated odometer triggers the system to collect data at a fixed scan interval of 1.2 inches. As the individual data lines build up, they create a continuous image. These profiles are examined for parabolic reflections that could be interpreted as representing buried objects.

Malå RAMAC/Ground Penetrating Radar (GPR) system with a 250 MHz antenna

2.4 Utility Locating Instruments

The Subsite and the Dynatel were utilized both actively and passively to search for subsurface utilities. The instruments work by applying a radio frequency signal onto metallic/electrically conductive lines. The signal is traced at the surface using the instrument's receiver.

The Dynatel is particularly suited for locating the surface trace of telephone, electric, and other narrow-gauge wiring, but it can also detect larger metallic conduits and piping. Using this instrument in a split-box fashion, two operators (one carrying the transmitter and one carrying the receiver) walked bi-directionally across each area of investigation at a fixed distance to one another while listening for increases in signal strength that would suggest possible subsurface utilities.

Passive signals are EM fields that occur without any input from the utility locating instrument's transmitter. Many utilities carry electric currents, and therefore produce EM fields that are detectable at the surface. In addition, buried metallic lines, acting as antennae, often pick up and re-radiate background vibrations and commercial radio signals. The sites were searched for evidence of these passive signals using the Subsite receiver.

To investigate non-metallic utilities such as ceramic or PVC sewers, a radio frequency signal was conducted onto a flexible steel antenna that was inserted into the lines. This signal allowed the lines to be detected at the ground surface by an operator using a specialized receiver. For larger diameter pipes (in excess of about 12 inches), a radio frequency transmitting beacon was advanced into the lines using a fiberglass rod.

3.0 Field Operations

The GPR and EM-61 were utilized to investigate Areas 1-4 for existing subsurface features. A grid was established in each Area to facilitate a systematic approach to data collection and the reacquisition of sample locations. The TW-6 and GPR were used in an attempt to further characterize EM-61 anomalies. The Subsite and Dynatel were used to locate detectable subsurface utilities. Due to the small areas of investigation for Areas 5 and 6, the TW-6 was used as the primary metal-detector. The Subsite, Dynatel, and GPR were used to delineate

detectable subsurface utilities. GPR was also used to further characterize non-metallic utilities and the anomalies detected with the TW-6.

3.1 Geophysical Sampling Grid Set-up

NAEVA determined that a 5-foot line spacing for the EM-61 and a 2.5-foot line spacing for the GPR would make it possible to locate the targets of this investigation within the depth range of the instruments. The grids are generally orthogonal to the existing buildings. The coordinates of each line were painted on the ground. All references to compass direction in this report refer to grid north, which is approximately 15 degrees west of north.

AREA 1
A survey grid of parallel east/west lines spaced 5 feet apart was established in the area of investigation using the orientation of the building face of 38-84 Railroad Avenue as the easting orientation for the grid. The grid has an irregular shape with a maximum range of 50S to 100N and 0E to 410E. The locations of vehicles changed between the collection of the EM-61 data and the collection of GPR data, causing a slightly different data coverage for the two instruments.

AREA 2
Using the same orientation as the grid in Area 1, a survey grid of parallel east/west lines spaced 5 feet apart was established in the area of investigation. The grid was not square and had a maximum range of 100N to 155N and 100E to 265E. The locations of vehicles and storage material changed between the collection of the EM-61 data and the collection of GPR data, causing a slightly different data coverage for the two instruments.

AREA 3
Using the same orientation as the grids in Areas 1 and 2, a survey grid of north/south parallel lines spaced 5 feet apart was established in the area of investigation. The grid formed an irregular L-shape with a maximum range of 25N to 240N and 100E to 165E. A large portion of the alleyway to the south of 38-54 Railroad Avenue (in Parcel E) was determined to be too narrow for the EM-61. In this area GPR, the TW-6, and utility locating instruments were used to delineate the subsurface utilities and features. The locations of vehicles and storage material changed between the collection of the EM-61 data and the collection of GPR data, causing a slightly different data coverage for the two instruments.

AREA 4
Using the eastern building face of 38-78 Review Avenue as the northing orientation, a survey grid of parallel east/west lines spaced 5 feet apart was established in the area of investigation. The grid formed an L-shape with a maximum range of 0N to 85N and 0E to 155E. The locations of vehicles changed between the collection of the EM-61 data and the collection of GPR data, causing a slightly different data coverage for the two instruments.

3.2 Geophysical Data Collection

EM-61
The EM-61, operating in wheel-triggered mode, collected data at approximately 0.63-foot intervals along each 5-foot spaced grid line. The operator entered the grid line number, sampling direction, sample interval, and starting location into the instrument at the beginning of each line.

The beginning and ending point of each line were also hand recorded in a field notebook, along with notes about cultural features, such as fences, vehicles, and other metallic objects that could potentially affect the data. Fiducial markers were entered into the data at regularly spaced intervals, both as quality control and to assist in the data processing. EM-61 data could not be collected in areas covered by stored materials and parked vehicles.

GPR

The GPR, operating in wheel-triggered mode, collected data profiles along each traverse at a fixed scan interval of 1.2 inches along each line. The line number, sampling direction, and starting/ending locations of each line were hand recorded in field notebooks. Because of its cart-mounted configuration, the GPR is only suited for use over relatively open and smooth ground. This instrument needs to be in contact with the ground, therefore, data could not be collected in areas covered by stored materials and vehicles.

4.0 Data Processing

The EM-61 and GPR data were processed and analyzed as described below and an attempt was made to locate the surface trace for the suspected subsurface features creating the anomalies identified in the data.

4.1 EM-61

The raw data from the digital recorder were transferred to a computer and processed using Geonics' DAT61W software. First, the start and end points of each line were individually checked against the written field notebook for accuracy. The software then automatically adjusted the location for the data between fiducial marks by either compressing or expanding them. The data were converted to a spreadsheet format compatible with Surfer mapping software for contouring.

The spreadsheet data available for contouring includes bottom coil, top coil, and differential (top coil minus bottom coil). The EM-61 bottom coil contour map was selected as the final contour map. More advanced processing to produce the final report quality contour map was performed using GEOSOFT® Oasis Montaj software (see Plates 6 through 13).

4.2 Ground Penetrating Radar

GPR data were transferred to a computer and processed with the ground penetrating radar imaging software GPR-SLICE. The interpretation and presentation of GPR data can often be aided by two-dimensional (2D) displays of the data. This type of display provides a means of obtaining detailed subsurface information. The ability to see GPR responses in 2D view can aid in the spatial correlation of targets.

Several data processing features were applied to the GPR data to create depth slice maps. After reviewing the processed data, individual GPR data profiles transecting anomalies seen in the slice maps (see Plates 14 through 21) were examined for evidence of strong reflections that could be interpreted as being caused by subsurface features.

5.0 Results and Interpretation

NAEVA delineated numerous active subsurface utilities, including electric, sewer and water lines, many linear features interpreted as utilities of unknown use and several metal detector anomalies. The EM-61 and GPR data displayed many anomalies and features of an unknown source.

5.1 EM-61 Investigation

The processed EM-61 data displayed 102 anomalies identified for follow-up investigations in Areas 1 through 4, 54 in Area 1, 20 in Area 2, 13 in Area 3, and 15 in Area 4. When interpreting EM-61 data, the lowest mV readings indicate the least responses by the instrument and represent the background signal. As the response of the EM-61 increases due to conductive material entering the electromagnetic field, the mV readings increase. For this investigation, the background signal is represented in the maps by the grey color starting at 0 mV and the anomalies are interpreted as areas with responses above approximately 200 mV.

Follow-up investigations were conducted utilizing the hand-held metal detector and utility line locators at the grid coordinates where the contour maps displayed high mV responses. The TW-6 indicated an elevated response across at least a portion of each area of investigation, which could be explained by a conductive fill such as ash or slag in the subsurface. Due to instrumentation design differences conductive fills commonly are not detected by the EM-61. The elevated background over the site made follow-up investigations with the TW-6 difficult. As a result, only a few anomalies were further characterized using the TW-6.

Notes concerning the locations, dimensions and possible sources for the 102 anomalies identified in the EM-61 data are listed in Tables 1, 2, 3, and 4.

5.2 GPR Investigation

The 2D GPR images displayed a maximum penetration depth of approximately 2 feet. The limited depth of penetration could be caused by conductive soil and/or groundwater, both of which tend to absorb the GPR signal. Due to the limited depth of penetration at this site, known utilities were generally not detectable. 2D images representing a depth range of approximately 1.1 to 1.7 feet were selected as best representing the GPR anomalies in each area of investigation. The 2D images revealed anomalies that were not detected during the EM-61 or utility investigation, which could suggest a nonmetallic source. In the Plates depicting the GPR data, blue indicates the background signal and the higher intensity colors are the anomalies, with red representing the strongest reflections. Although no further information could be obtained to characterize or identify the sources for the anomalies, it should be noted that all anomalies identified in the data have the potential of being caused by subsurface features. The results of the GPR investigation indicated 117 anomalies identified within Areas 1 through 4; 27 in Area 1, 23 in Area 2, 25 in Area 3, and 42 in Area 4. Notes concerning the locations, dimensions, and possible sources for the 117 anomalies are listed in Tables 5, 6, 7, and 8.

5.3 Utility Investigation

AREA 1

Within the area of investigation, NAEVA identified three electric lines and two water lines. The first electric line entered the property at 1W/15S, continues northeast to 140E/22N, turns and continues more easterly until it leaves the property at 410E/34N. A second electric line branches off the first at approximately 40E/2N heads east for approximately six feet, turns northeast and heads to 140E/20N, continues east to 401E/22N, then turns north to 401E/33N where it appears to terminate. The third electric line exits the building at 203E/13N heading north to 203E/37N, turns east to 410E/44N where it leaves the property.

Two water lines were traced from a water vault centered at approximately 406E/49N. One water line left the vault heading southwest to 398E/44N, turns west to 33E/33N where it appears to terminate. The EM-61 data shows that this line may continue past the last point NAEVA could detect it (see Plates 2 and 3, and Table 1 anomalies 10 and 11). The second water line leaves the vault and heads southwest to 398E/43N, turns west to 222E/35N, and then heads south into the building at 217E/13N.

Several lines of unknown use were also detected. An unknown line enters the property at approximately 5W/61N, heads northeast to 64E/73N, and turns east to 107E/71N where it appears to terminate. A second line begins at 43E/37N and continues east to 241E/40N where it appears to terminate. Three lines branch off this line with the first starting at 238E/40N heading north to 238E/53N where it appears to terminate. The second line branches off the first at 200E/40N, heads southwest to 195E/34N, then continues west to 43E/34N where it appears to terminate. The last line branches off the first at 156E/38N, heads south to 155E/22N, then turns west until it leaves the property at 5W/25N. Another line begins at 25E/32N heads south to 23E/11N where it terminates. A line begins at 45E/55N, heads south to 42E/22N where it appears to terminate. A line exits the building at approximately 93E/11N heads north to 92E/42N where it terminates. A line exits a building at approximately 239E/13N, heads northwest to 237E/11N, and turns north to 237E/43N where it continues underneath vehicles and towards a building. Another line is first detected at 233E/20N heading northwest to 230E/25N, and then turns north to 230E/43N where it continues underneath vehicles. A line exited from beneath a row of parked vehicles at 231E/48N headed south to 231E/43N, turned east to 268E/45N, and headed northeast to 293E/52N where it continued underneath vehicles. Another line exited a row of parked vehicles at approximately 305E/54N headed southwest to 303E/50N, continued south to 303E/37N, and turned east to 414E/43N where it left the property. A line exits the parked vehicles at 315E/51N heading south to 315E/46N, turns east to 367E/47N, and turns northeast to 371E/50N where it continues underneath vehicles. Another line exits the parked vehicles at 318E/51N heading south underneath parked vehicles at 318E/23N. The last unknown line exits the row of parked vehicles at 344E/50N and heads south underneath more parked vehicles at 343E/23N.

The TW-6 identified two metallic linear features in the alleyway between the two buildings that did not appear in the EM-61 data. The first feature exits one building at approximately 219E/38S and heads east into the other building at approximately 239E/38S. The second feature leaves one building at approximately 219E/42S and heads east into the other building at approximately 239E/42S. These features maybe represent small amounts of metal that could not be detected by the EM-61 and/or were masked by the surrounding aboveground metallic features.

AREA 2

Several lines of unknown use were identified within the area of investigation. An unknown line exits a building at approximately 235E/115N, heads north for 3 feet, and then turns northeast to 267E/134E where it leaves the property. Another line enters the property at approximately 269E/148N heading west to 229E/148N where it continues underneath a large metal container. A line exits a building at approximately 218E/114N and heads north for 34 feet where it appears to terminate near a large metal container. This line may turn underneath the container and join the previous unknown line. Another line enters the area of investigation at approximately 102E/109N heads east to 195E/113N, turns northeast to 205E/120N, and then heads east again to 235E/119N where it appears to terminate. A line exits a building at approximately 186E/94N and heads north for nine feet where it appears to terminate. A second line branches off this line at 186E/105N and continues west to 107E/99N where it continues toward an inaccessible area. Another line branches off the last line at 175E/100N and heads southwest and enters a building at 166E/94N. A small metal anomaly was identified outside the area of the EM-61 investigation. The anomaly was a 6 foot by 3 foot rectangular feature centered at approximately 160E/97N.

AREA 3

A water line, electric line, and several sewer lines were identified within the area of investigation. The water line enters the property at approximately 208E/234N, heads west to 168E/234N, and turns southwest to 135E/213N where it enters a building. The electric line enters the property at approximately 203E/231N, heads west to 162E/229N, turns southwest to 140E/214N and then continues into a building.

Four sewer lines were delineated leaving a sewer vault centered at approximately 163E/245N. One line exits the vault heading west until 131E/244N where it leaves the area of investigation. Another line exits the vault to the north to approximately 163E/250N, turns west underneath some vehicles to 130E/252N where it leaves the area. A third line exits the vault to east to 206E/247N and then continues outside the area. The fourth line exits the vault to the south to 162E/217N where it appears to end near three sewer manholes. Two sewer lines were traced from their surface exposures alongside a building. The first line begins at approximately 169E/157N, heads northwest to 166E/162N, continues north to 166E/229N, and turns east to 201E/231N where it continues outside the area. The second line begins at approximately 168E/157N, heads southwest to 160E/147N, and turns south to 160E/70N where it exits the area.

Several lines of unknown use were identified in the area of investigation. A line enters the area at approximately 155E/19N and heads north to 158E/244N where it continues underneath some vehicles. Another line enters the area at approximately 202E/232N and heads west to 136E/225N where it leaves the area. A second line branches off the previous line at approximately 147E/227N, heads south to 154E/118N, and turns west to 137E/118N where it continues underneath a concrete ramp. A line exits from under a large container at approximately 142E/173N, heads south to 142E/95N, and continues underneath stored material. A line exits an area of stored material at approximately 141E/132N heading south to 143E/112N, turns west to 110E/108N, turns southwest to 100E/100N, continues west to 0E/93N and the continues underneath an area of stored material. A line exits from a concrete ramp at approximately 106E/113N, heads south for approximately 23 feet, and continues underneath an inaccessible area. Another line exits from a loading dock at approximately 96E/103N and heads east to 132E/102N where it appears to terminate. Several unknown lines exit from the southwest corner of the loading dock. One line exits at 64E/104N and heads southwest to 16W/93N where

it continues underneath stored material. Three lines exit the loading dock at approximately 64E/105N. The first line heads west to 64W/109N where it leaves the area of investigation. The second line heads west to 59W/108N, turns southwest to 71W/95N and continues underneath an inaccessible area. The third line heads west to 55W/108N, turns north to 55W/114N where it heads into a building. Another line exits a building at 63W/114N, heads south to 62W/94N and continues into an inaccessible area.

AREA 4

NAEVA identified a water line, electric line, gas line, several storm lines, and several lines of unknown use in the area of investigation. The water line enters the area at approximately 35E/35N, heads west to 27E/36N, turns north for 7 feet, and turns west to 1E/44N where it continues into the building. The gas line enters the area at approximately 35E/32N, heads west for 22 feet, turns northwest to 4W/47N where it enters the building. The electric line enters the area at approximately 35E/28N, heads west to 3W/26N, and turns southwest to 5W/24N where it enters the building.

A storm line starts at a storm vault located at approximately 16E/85N, heads west and terminates at a floor drain at approximately 1E/82N. Another storm line begins at a storm vault at approximately 16E/66N, heads southwest through a floor drain and terminates at another storm vault at 7E/18N. A storm line exits this vault at approximately 5E/17N and heads northwest where it forms a "T" with another storm line at 1W/22N. This storm line starts at a floor drain at approximately 0E/32N and heads south where it terminates at another floor drain at 1W/15N.

An unknown utility enters the property at approximately 36E/37N, heads west for 5 feet, and turns north to 33E/92N where it appears to leave the property. Another unknown line exits the building at approximately 0E/5N, heads east to 49E/4N, and then turns south for 9 feet where it leaves the property. A third unknown line enters the property at approximately 146E/0N and heads north to 146E/20N, where it leaves the property.

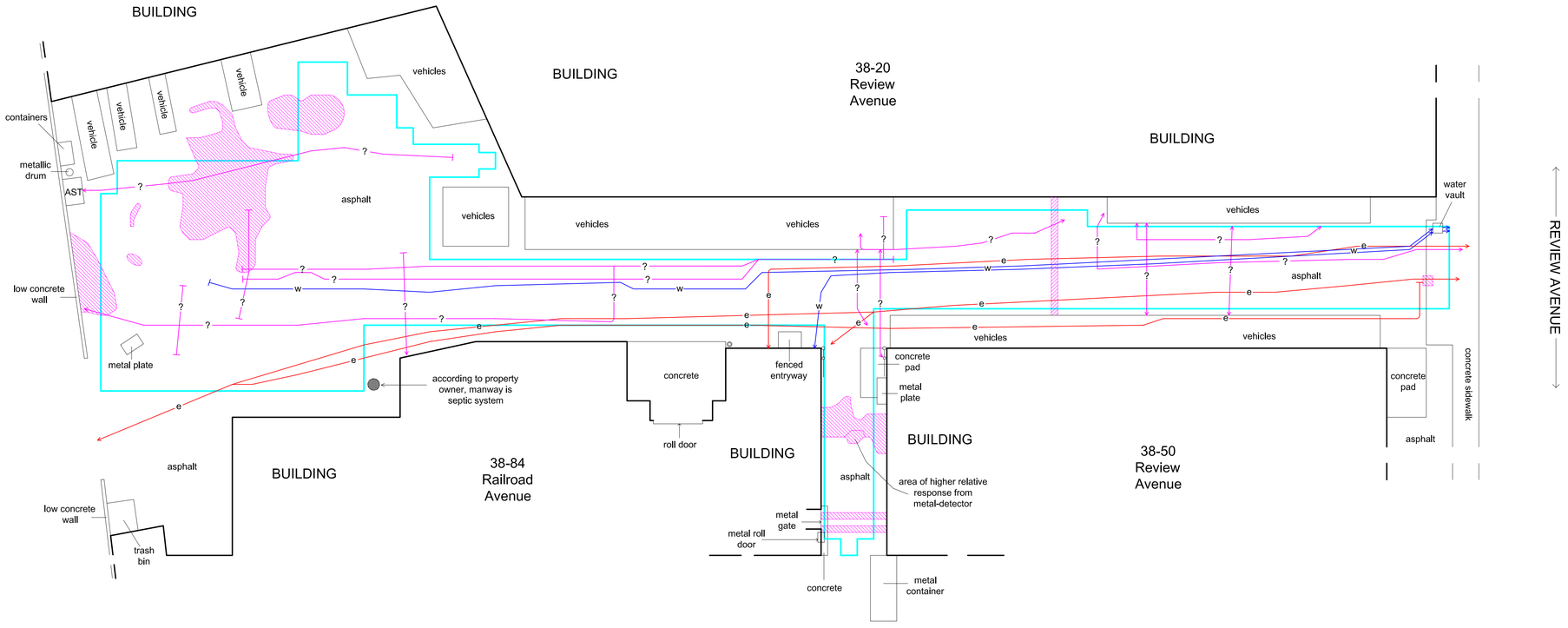
AREA 5

A water line, electric line, natural gas line, and an unknown line were identified in the vicinity of the proposed monitoring well location MW-20. The water, electric, and natural gas lines were located in Review Avenue and ran parallel with the street. An unknown line was identified approximately three feet south of MW-20 and headed north and south.

AREA 6

A water line, electric line, and an unknown line were identified in the vicinity of proposed monitoring well location MW-21. The water line was located in Review Avenue and ran parallel to the street. An electric line exited the building approximately 55 feet north of MW-21, and headed east into Review Avenue. An unknown line exited the building approximately 52 feet north of MW-21, headed east for 10 feet, then turned northeast and headed into Review Avenue.

Detected subsurface utilities were marked on the ground with paint using the American Public Works Association color code (red for electric, green for sewers, ect.). Fluorescent pink paint was used for unknown lines and anomalies. NAEVA recommends you exercise caution when excavating near any detected or marked out features.



approximately

LEGEND

- boundary of EM-61/GPR survey
- e — electric line
- w — water line
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- bollard
- fence post

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

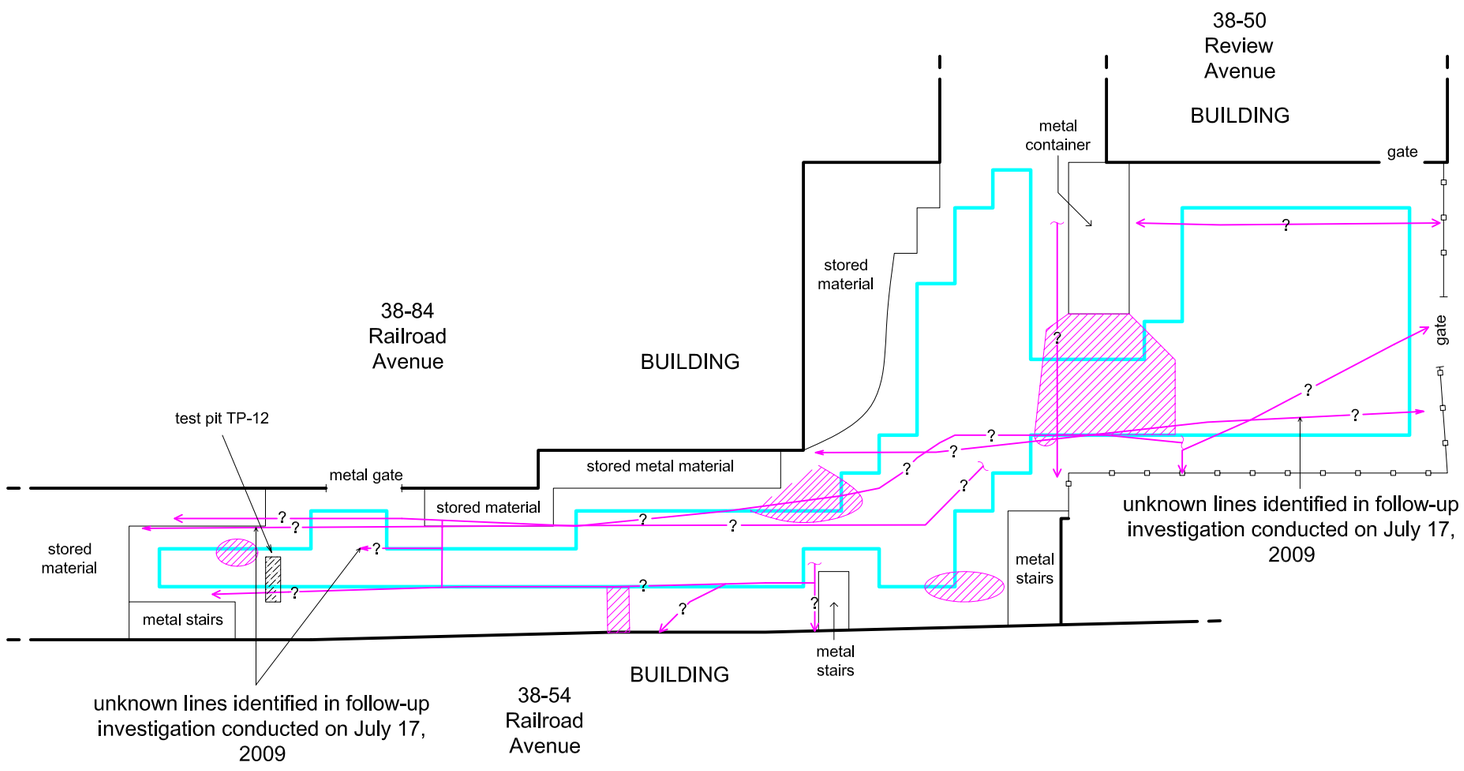
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 1: Utility and Culture Map of Former Pratt Oil Works Facility
AREA 1 Consisting of Parcels A, D, and E Located at 38-40 Railroad Avenue, 38-84 Railroad Avenue, and 38-50 Review Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Dates of Work	June 8-10, 15, 17-19
Project No.	C0908061X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



LEGEND

- suspected utility
- chain-link fence
- metal-detector anomaly
- area of EM-61/GPR survey

approximately

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

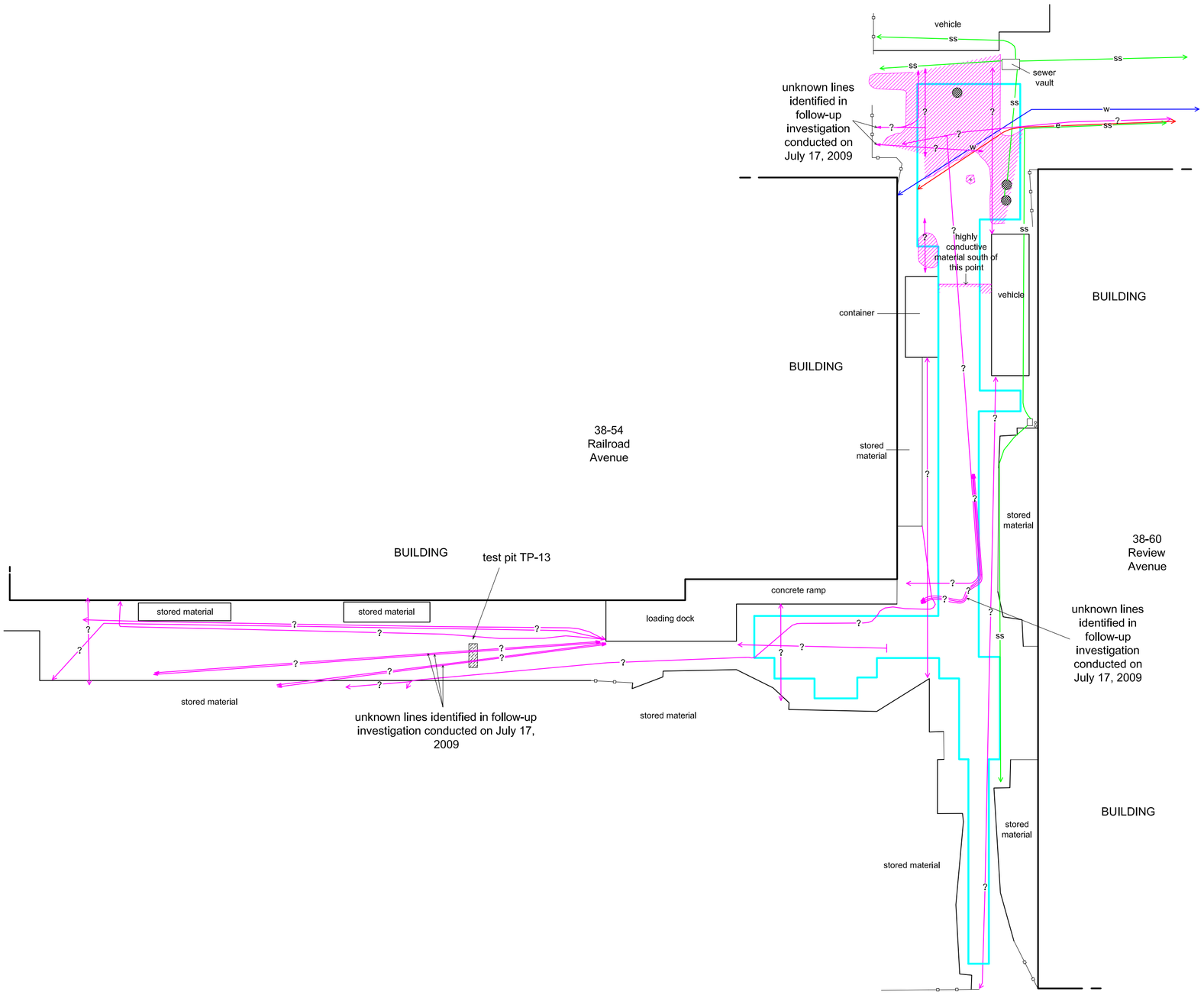
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 2: Utility and Culture map of Former Pratt Oil Works Facility AREA 2 Consisting of Parcel E (North Side) Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 15, 2009
Project No.	C0906081X	Map By	Amelia Paruch

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



approximately

LEGEND

- e — electric line
- w — water line
- ss — sanitary sewer
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- boundary of EM-61/GPR survey
- manhole cover

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

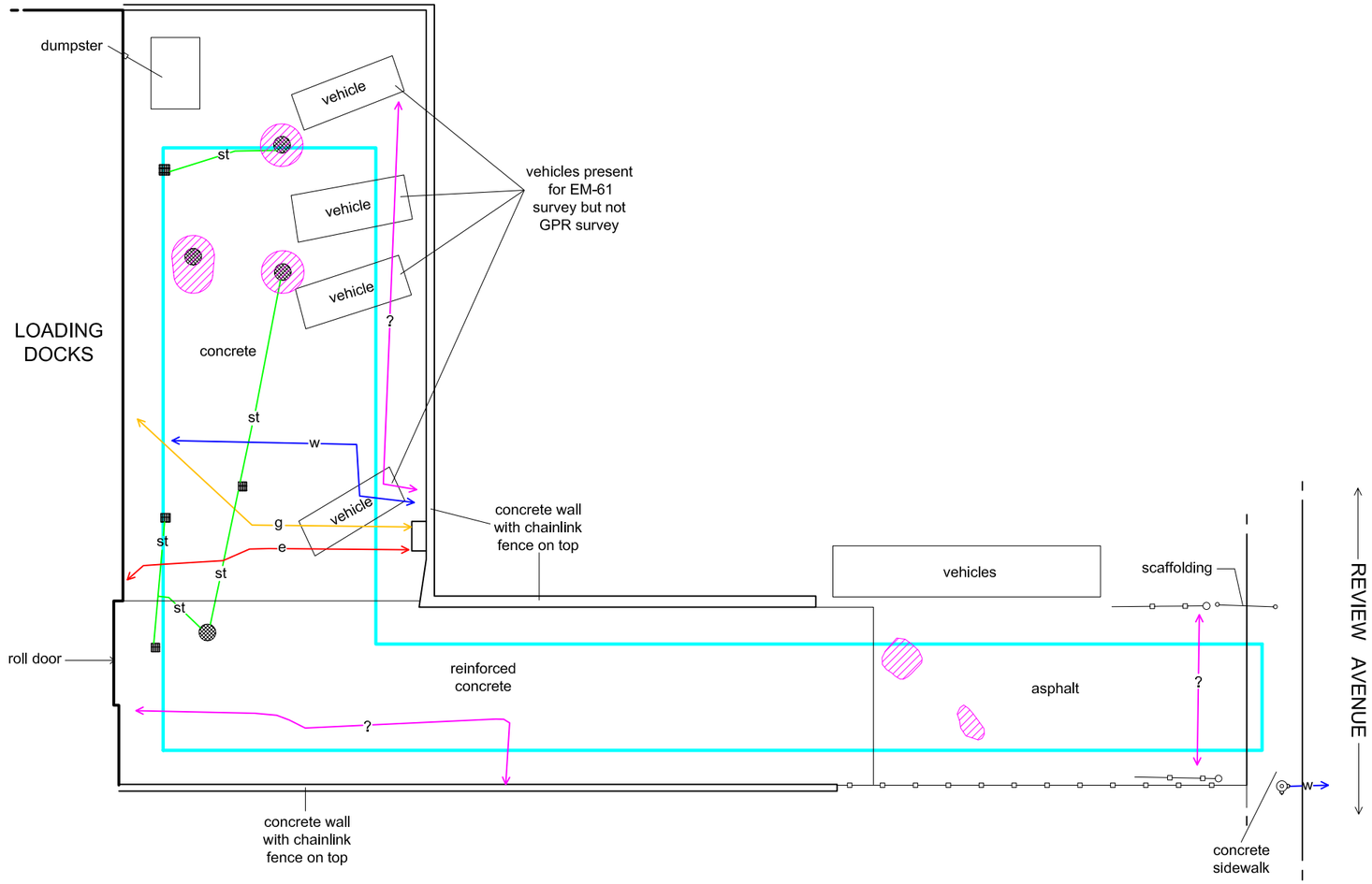
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N. Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 3: Utility and Culture Map of Former Pratt Oil Works Facility AREA 3 Consisting of Parcel E Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder Inc.	Date of Work	June 19, 2009
Project No.	C0906081X	Map By	Amelia Paruch, Daniel Latini

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



approximately

LEGEND

- e — electric line
- w — water line
- g — gas line
- st — storm sewer
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- boundary of EM-61/GPR survey
- fire hydrant
- storm drain
- manhole cover

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

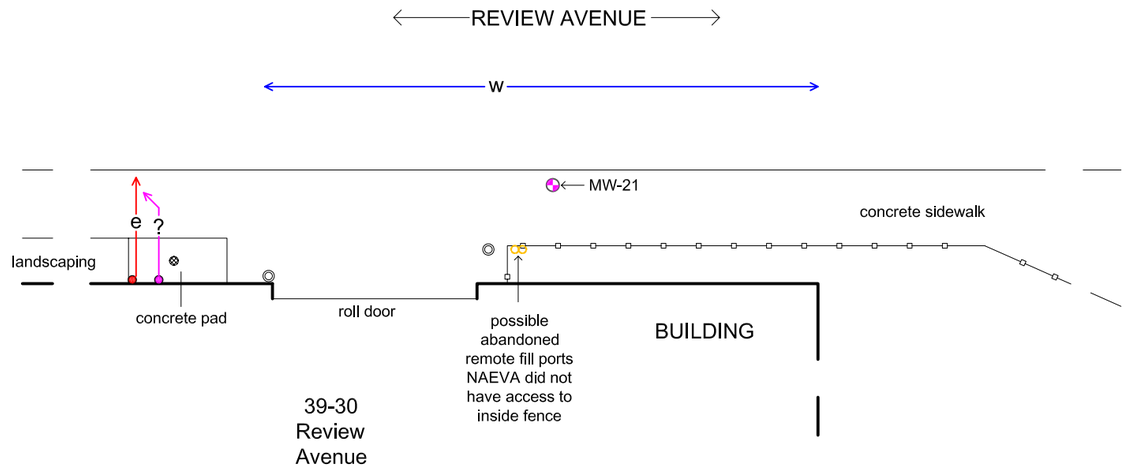
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

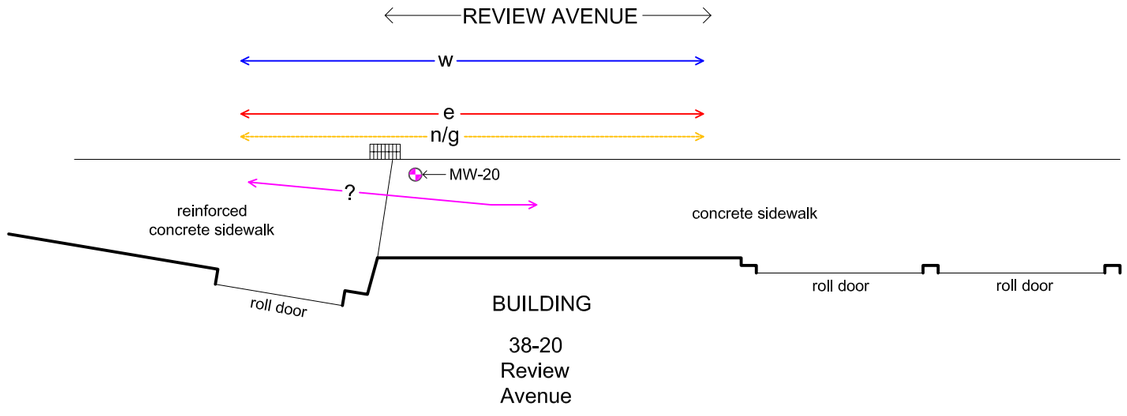
225 N. Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

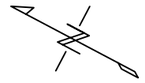
Plate 4: Utility and Culture Map of Former Pratt Oil Works Facility AREA 4 Consisting of Parcel G Located at 38-78 Review Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 10, 2009
Project No.	C0906081X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP







approximately

LEGEND

- e — electric line
- w — water line
- g — gas line
- ? — suspected utility
- chain-link fence
- catch basin
- proposed exploratory boring site
- bollard
- manhole cover
- electrical conduit
- unknown conduit

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

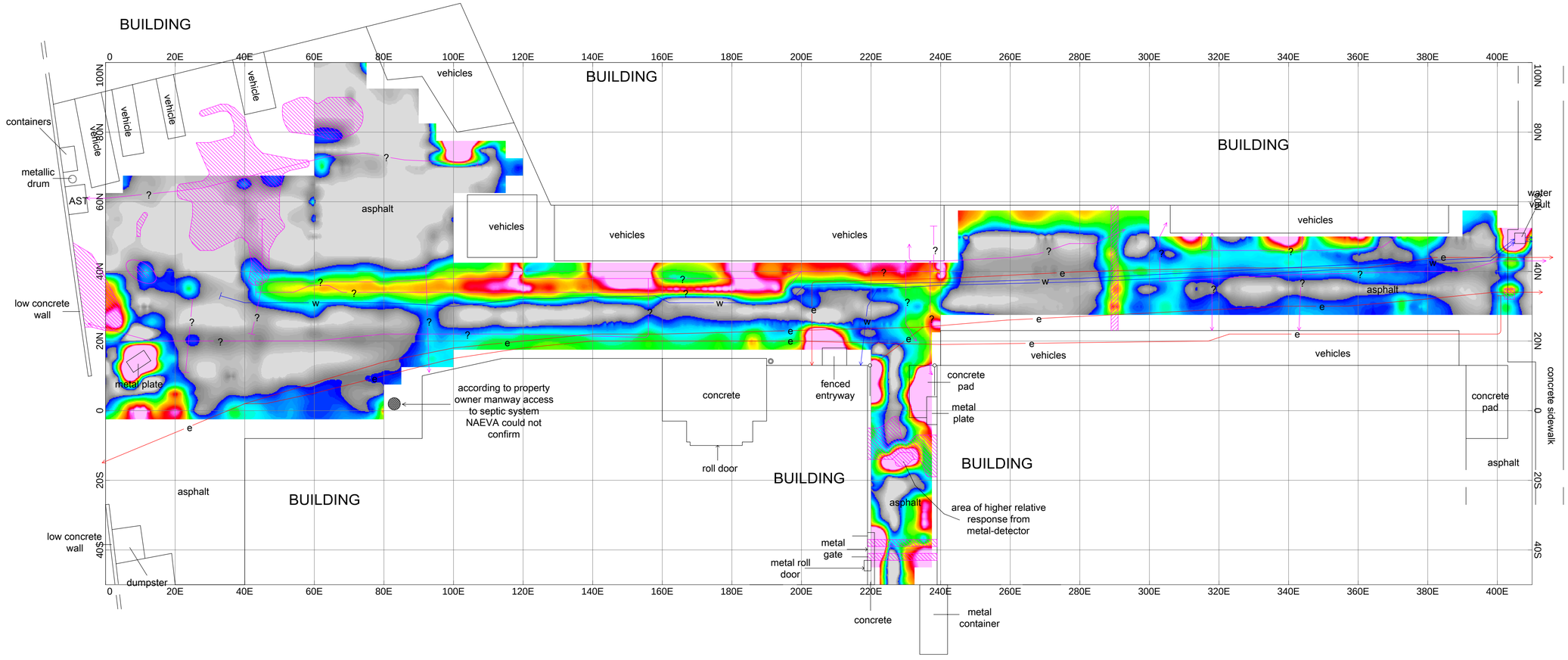
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N. Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 5: Utility and Culture Map of AREAS 5 and 6 Consisting of Proposed Monitoring Wells MW-20 and MW-21 Located at the Former Pratt Oil Works Facility in Long Island City, New York

Client	Kleinfelder, Inc.	Dates of Work	June 17-18, 2009
Project No.	C0906081X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



Scale 1:240

10 0 10 20 30 40 50 60

(feet)

Plate 6

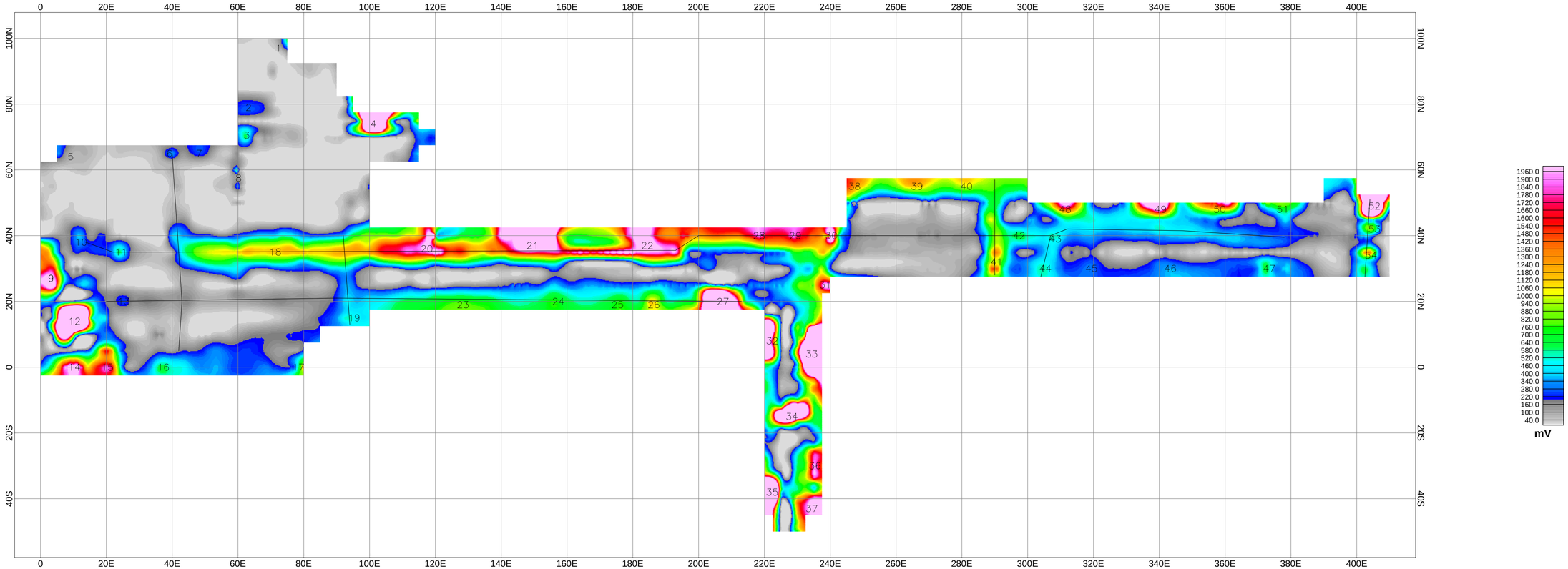
NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

Kleinfelder, Inc.

Project Number: C0906081X
EM-61 Bottom Coil Contour Map with Utilities and Culture
AREA 1: Former Pratt Oil Works Facility, Parcels A, D, E
Long Island City, New York

Date of Survey: June 8, 9, 10, 17, 2009
Map By: Gerald Williamson

ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.



Scale 1:240

10 0 10 20 30 40 50 60

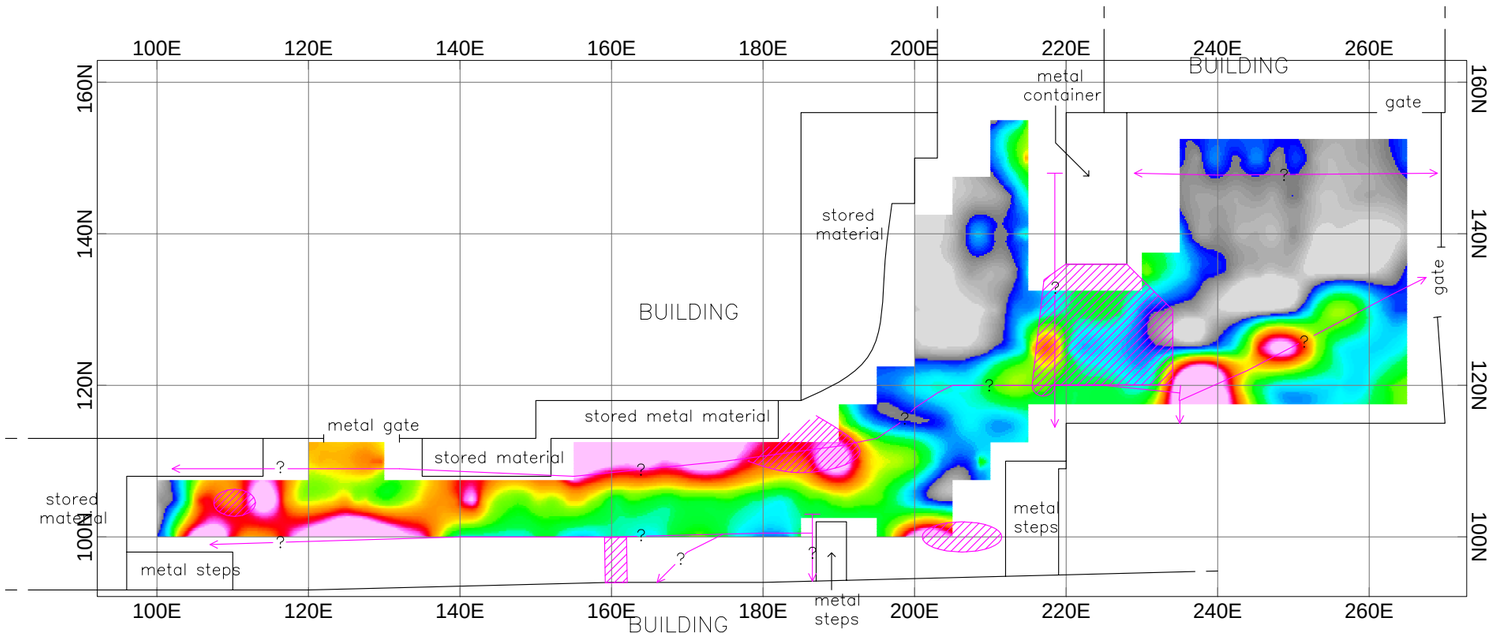
(feet)

Plate 7

***Numbers 1-54 indicate EM-61 anomalies listed on Table 1**

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

Kleinfelder, Inc.
Project Number: C0906081X **EM-61 Bottom Coil Contour Map** **AREA 1: Former Pratt Oil Works Facility, Parcels A, D, E** **Long Island City, New York**
Date of Survey: June 8, 9, 10, 17, 2009 Map By: Gerald Williamson
ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.



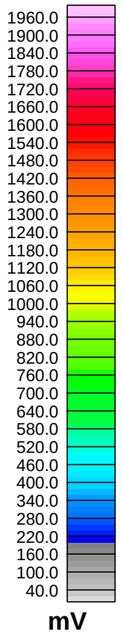


Plate 8

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

Scale 1:240

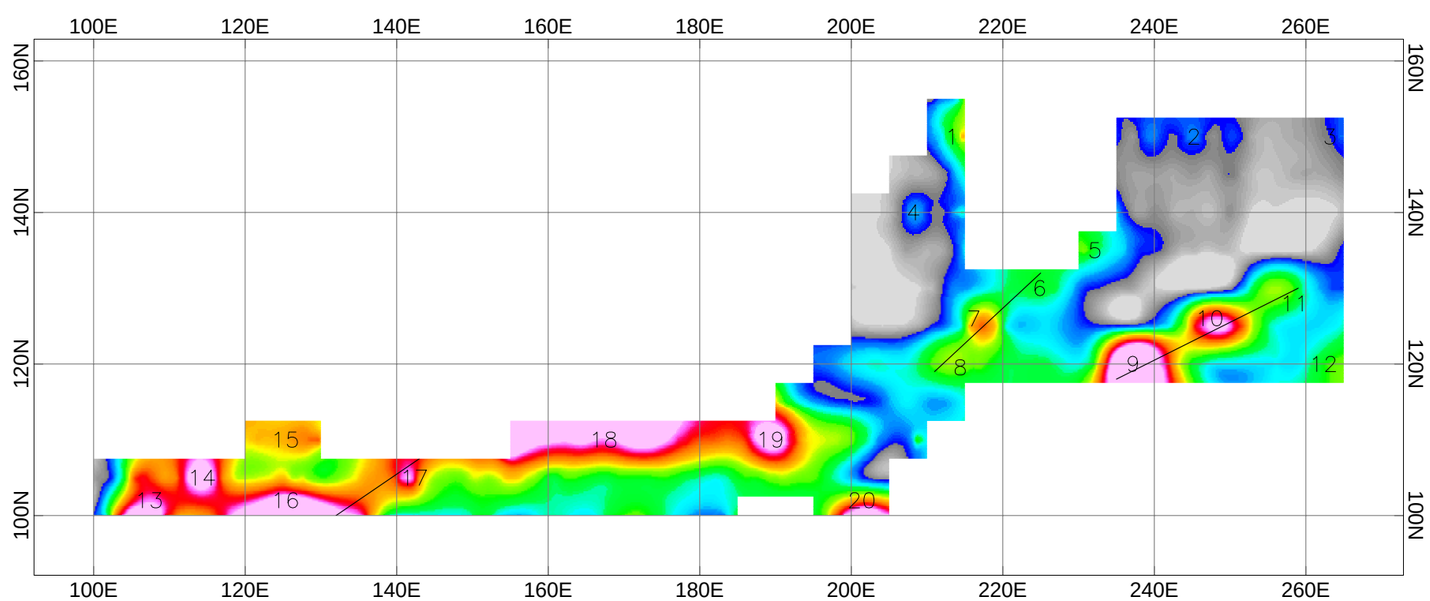
10 0 10 20 30 40
(feet)

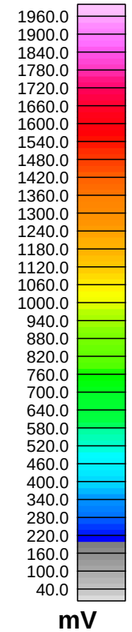
Kleinfelder, Inc.

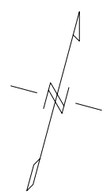
Project Number: C0906081X
EM-61 Bottom Coil Contour Map with Utilities and Culture
AREA 2: Former Pratt Oil Works Facility, Parcel E (North Side)
Long Island City, New York

Date of Survey: June 15, 2009
Map By: Gerald Williamson

ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.







Scale 1:240

10 0 10 20 30 40

(feet)

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

Plate 9

***Numbers 1-20 indicate EM-61 anomalies listed on Table 2**

Kleinfelder, Inc.

Project Number: C0906081X
EM-61 Bottom Coil Contour Map
AREA 2: Former Pratt Oil Works Facility, Parcel E (North Side)
Long Island City, New York

Date of Survey: June 15, 2009
Map By: Gerald Williamson

ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.

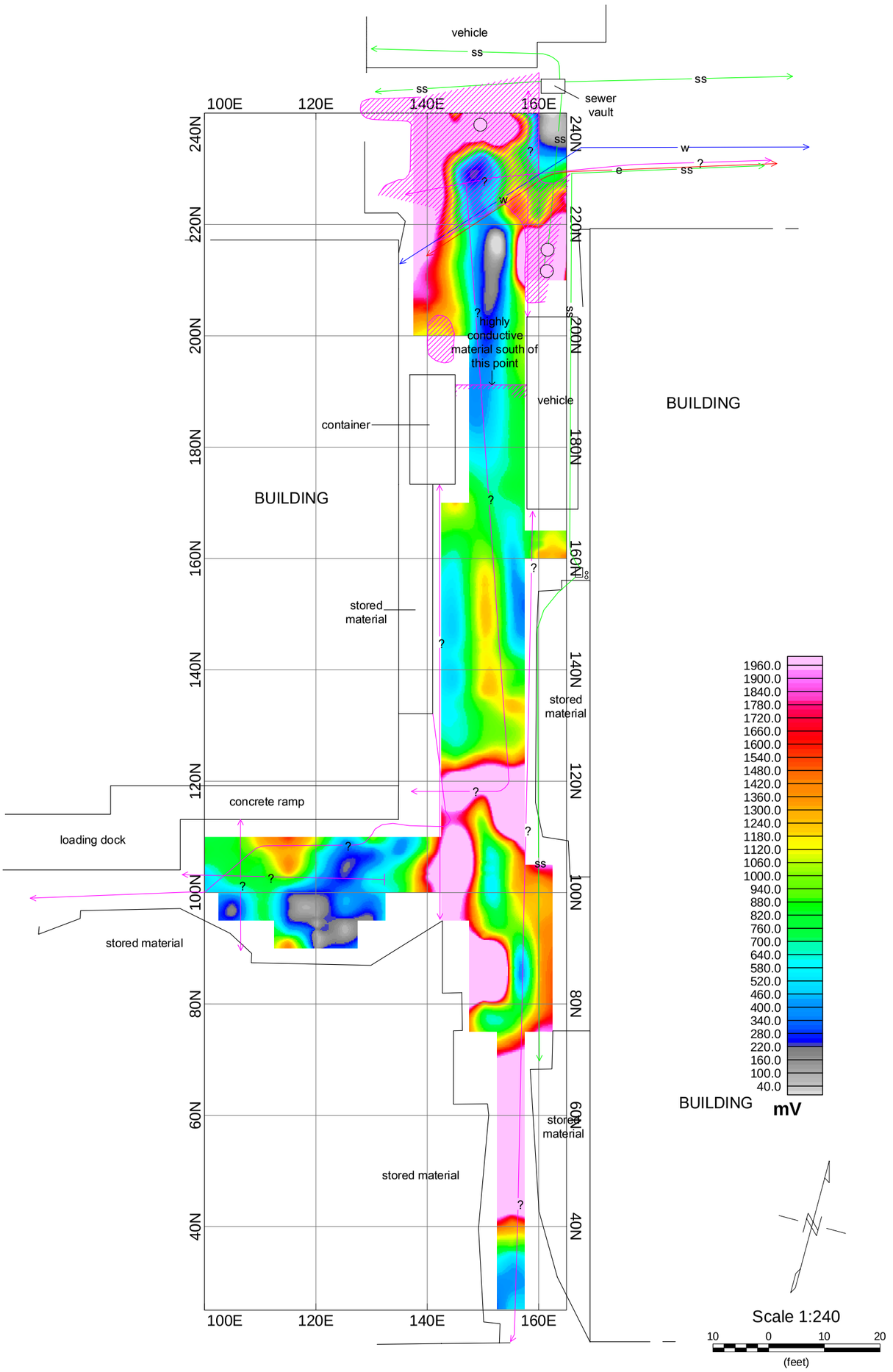
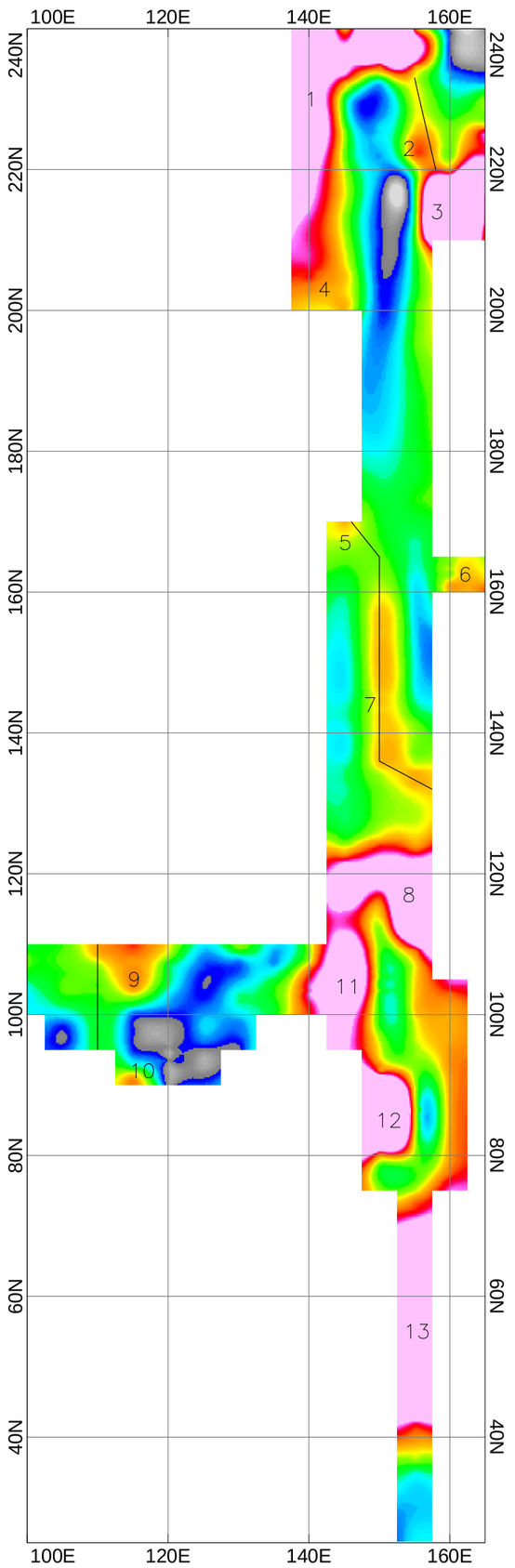


Plate 10

Kleinfelder, Inc.
Project Number: C0906081X **EM-61 Bottom Coil Contour Map with Utilities and Culture** **AREA 3: Former Pratt Oil Works Facility, Parcel E (South and East Sides)** **Long Island City, New York**
Date of Survey: June 19, 2009 Map By: Gerald Williamson
ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys



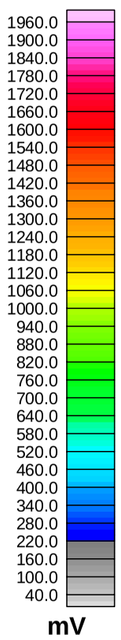
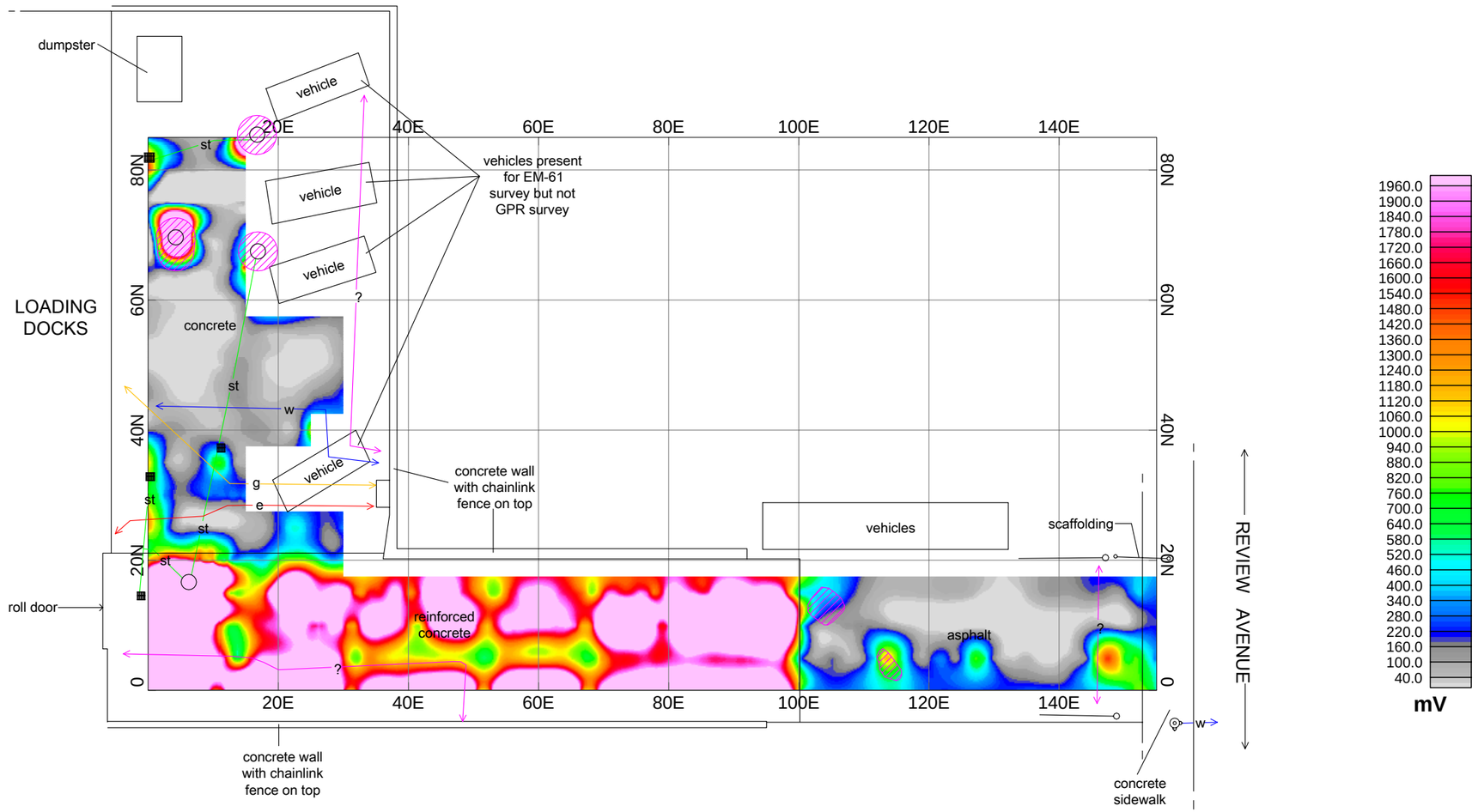


Plate 11

***Numbers 1-13 indicate EM-61 anomalies listed on Table 3**

Kleinfelder, Inc.
Project Number: C0906081X **EM-61 Bottom Coil Contour Map** **AREA 3: Former Pratt Oil Works Facility, Parcel E (South and East Sides)** **Long Island City, New York**
Date of Survey: June 19, 2009 Map By: Gerald Williamson
ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys



Scale 1:240

10 0 10 20 30

(feet)

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

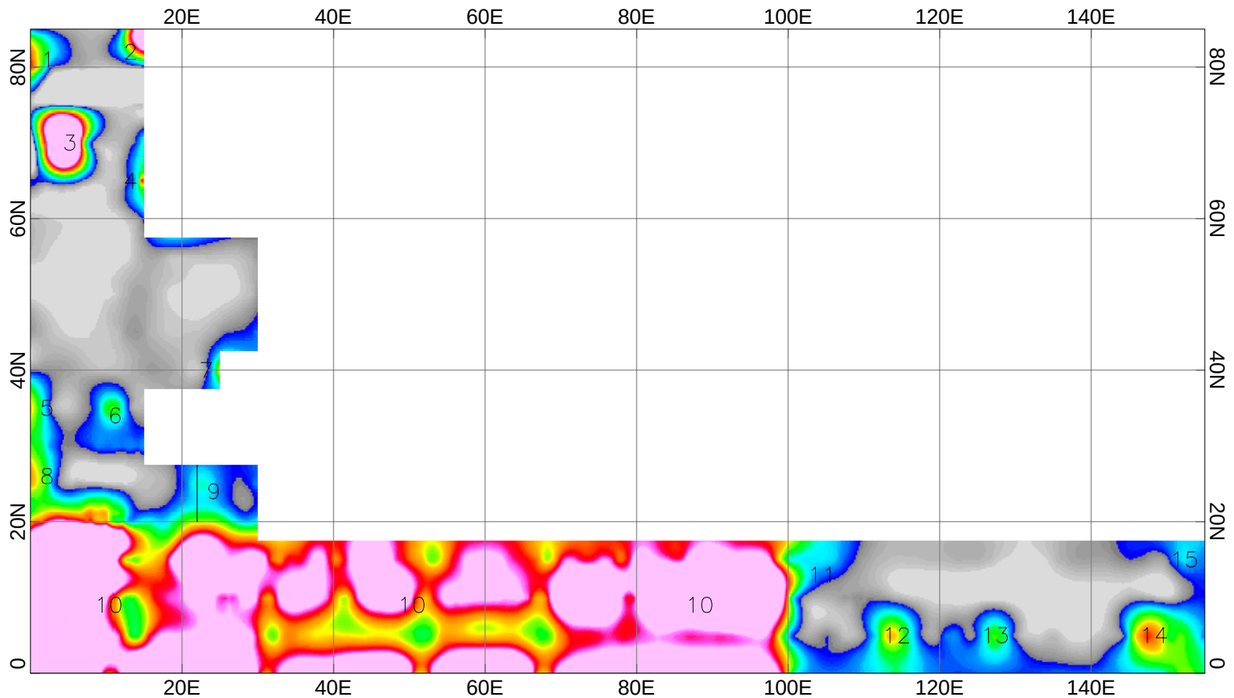
Plate 12

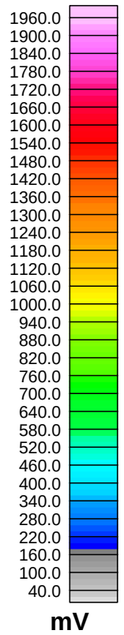
Kleinfelder, Inc.

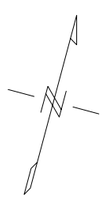
Project Number: C0906081X
EM-61 Bottom Coil Contour Map with Utilities and Culture
AREA 4: Former Pratt Oil Works Facility, Parcel G
Long Island City, New York

Date of Survey: June 10, 2009
Map By: Gerald Williamson

ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.







Scale 1:240

10 0 10 20 30

(feet)

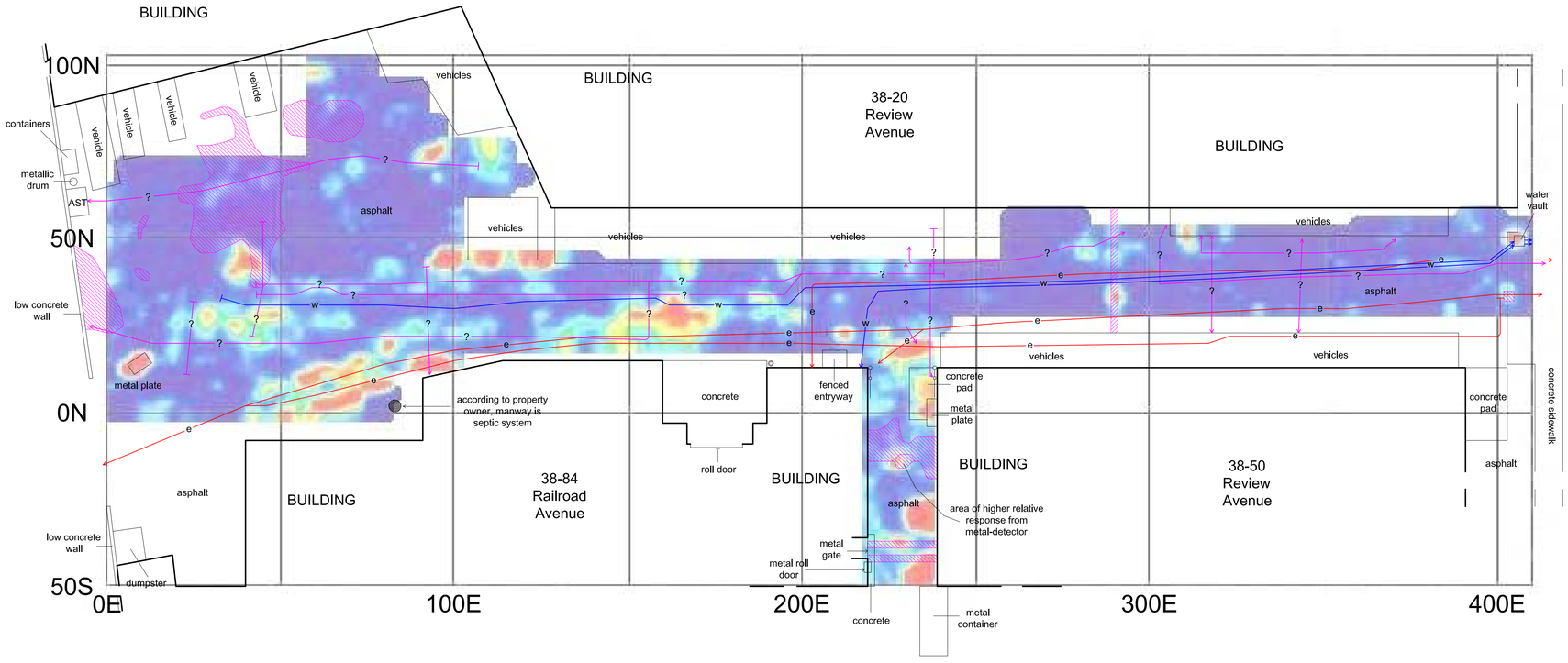
Plate 13

***Numbers 1-15 indicate EM-61 anomalies listed on Table 4**

NAEVA GEOPHYSICS INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

Kleinfelder, Inc.
Project Number: C0906081X **EM-61 Bottom Coil Contour Map** **AREA 4: Former Pratt Oil Works Facility, Parcel G** **Long Island City, New York**
Date of Survey: June 10, 2009 Map By: Gerald Williamson
ALL BELOW GROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP.

Time Slice Depth: 1.1ft - 1.7ft



approximately

LEGEND

- e — electric line
- w — water line
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- bollard
- fence post

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

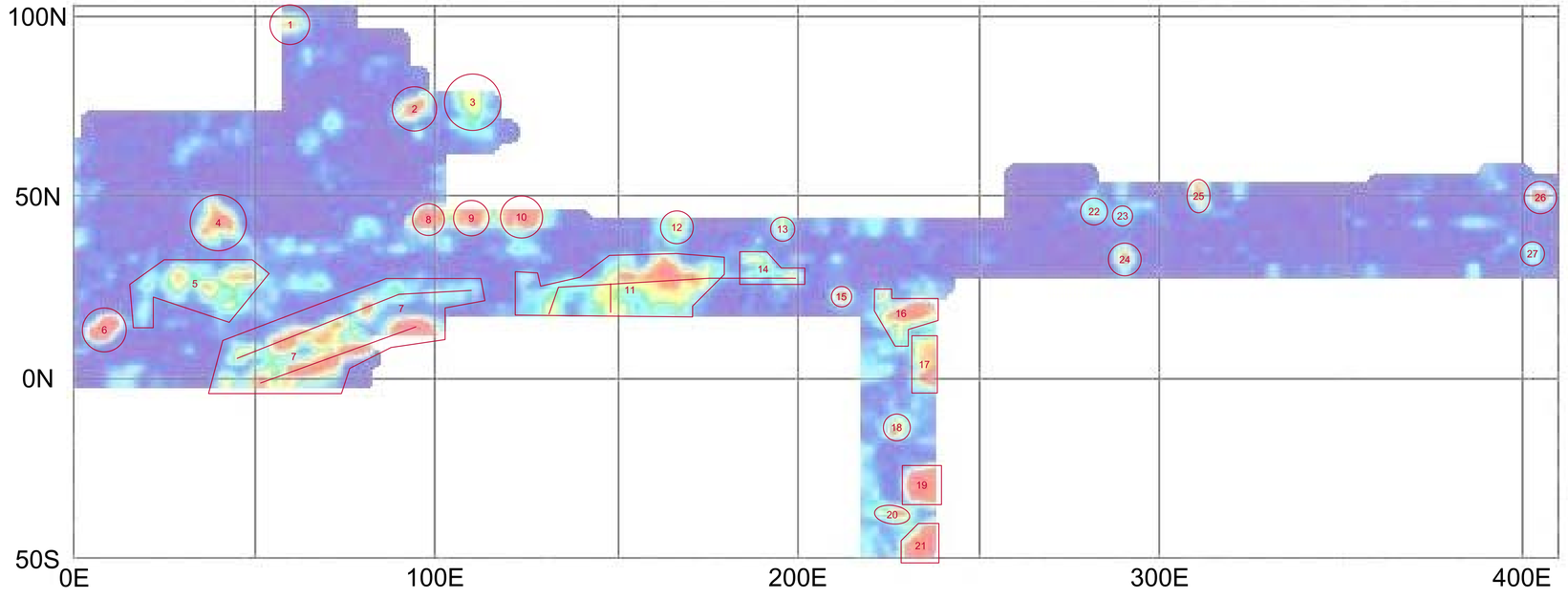
225 N Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 14: Utility and Culture Map with GPR Overlay of Former Pratt Oil Works Facility AREA 1 Consisting of Parcels A, D, and E Located at 38-40 Railroad Avenue, 38-84 Railroad Avenue, and 38-50 Review Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Dates of Work	June 8-10, 15, 17-19
Project No.	C0908061X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

Time Slice Depth: 1.1ft - 1.7ft



approximately

LEGEND

GPR anomaly

* Numbers 1-27 indicate GPR anomalies listed on Table 5

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

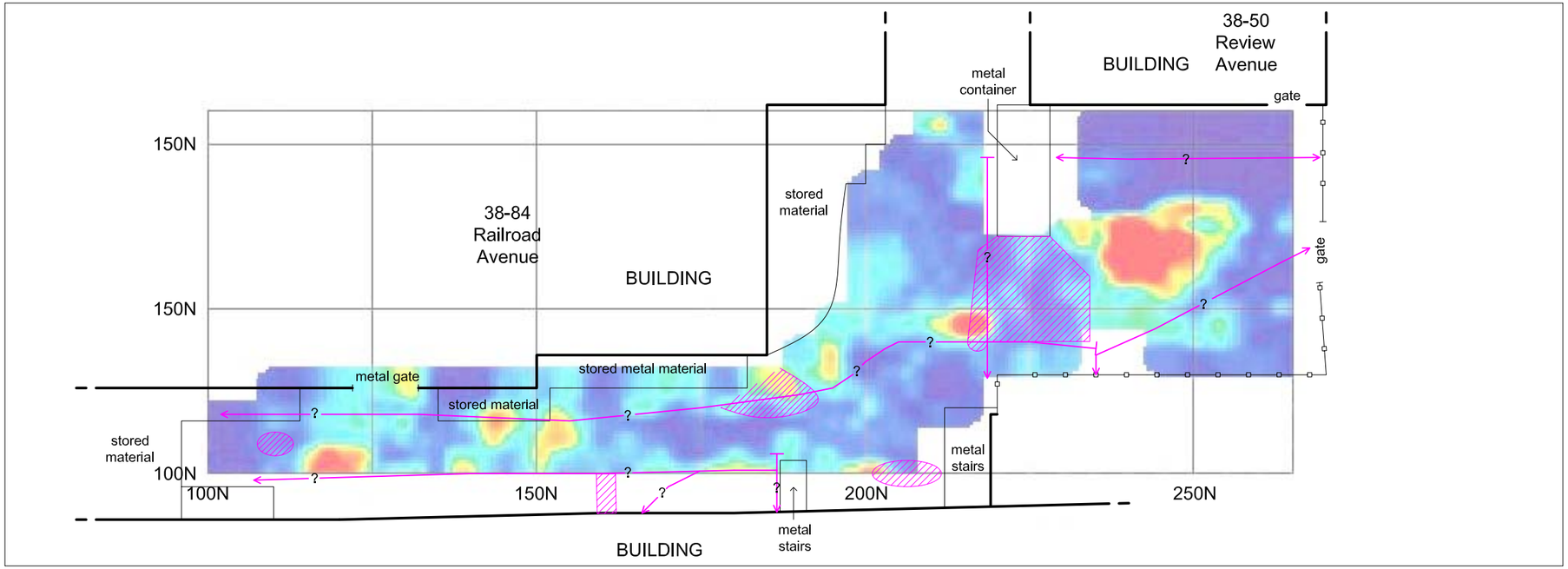
225 N Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 15: GPR Time Slice (Depth: 1.1ft - 1.7ft) with Anomalies
Former Pratt Oil Works Facility AREA 1 Consisting of Parcels A, D, and E Located at 38-40 Railroad Avenue, 38-84 Railroad Avenue, and 38-50 Review Avenue In Long Island City, New York

Client	Kleinfelder, Inc.	Dates of Work	June 8-10, 15, 17-19
Project No.	C0908061X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

Time Slice Depth: 1.1ft - 1.7ft



38-54
Railroad
Avenue

LEGEND

? suspected utility

chain-link fence

metal-detector anomaly

approximately

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

NACVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

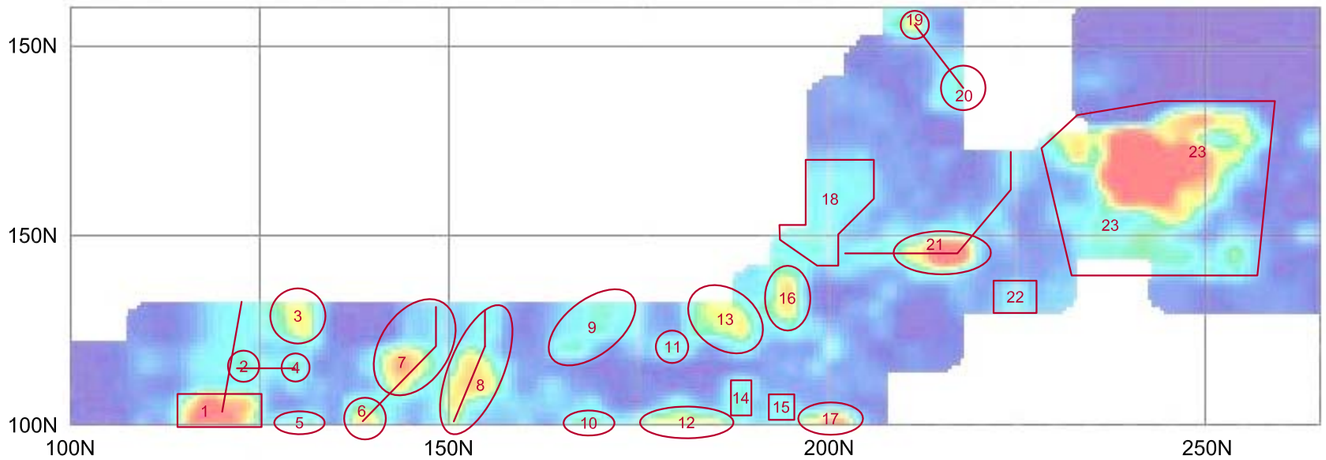
225 N Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 16: Utility and Culture map With GPR Overlay of Former Pratt Oil Works Facility AREA 2 Consisting of Parcel E (North Side) Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 15, 2009
Project No.	C0906081X	Map By	Amelia Paruch

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

Time Slice Depth: 1.1ft - 1.7ft



LEGEND

GPR Anomaly

*Numbers 1-23 indicate GPR anomalies listed on Table 6

approximately

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

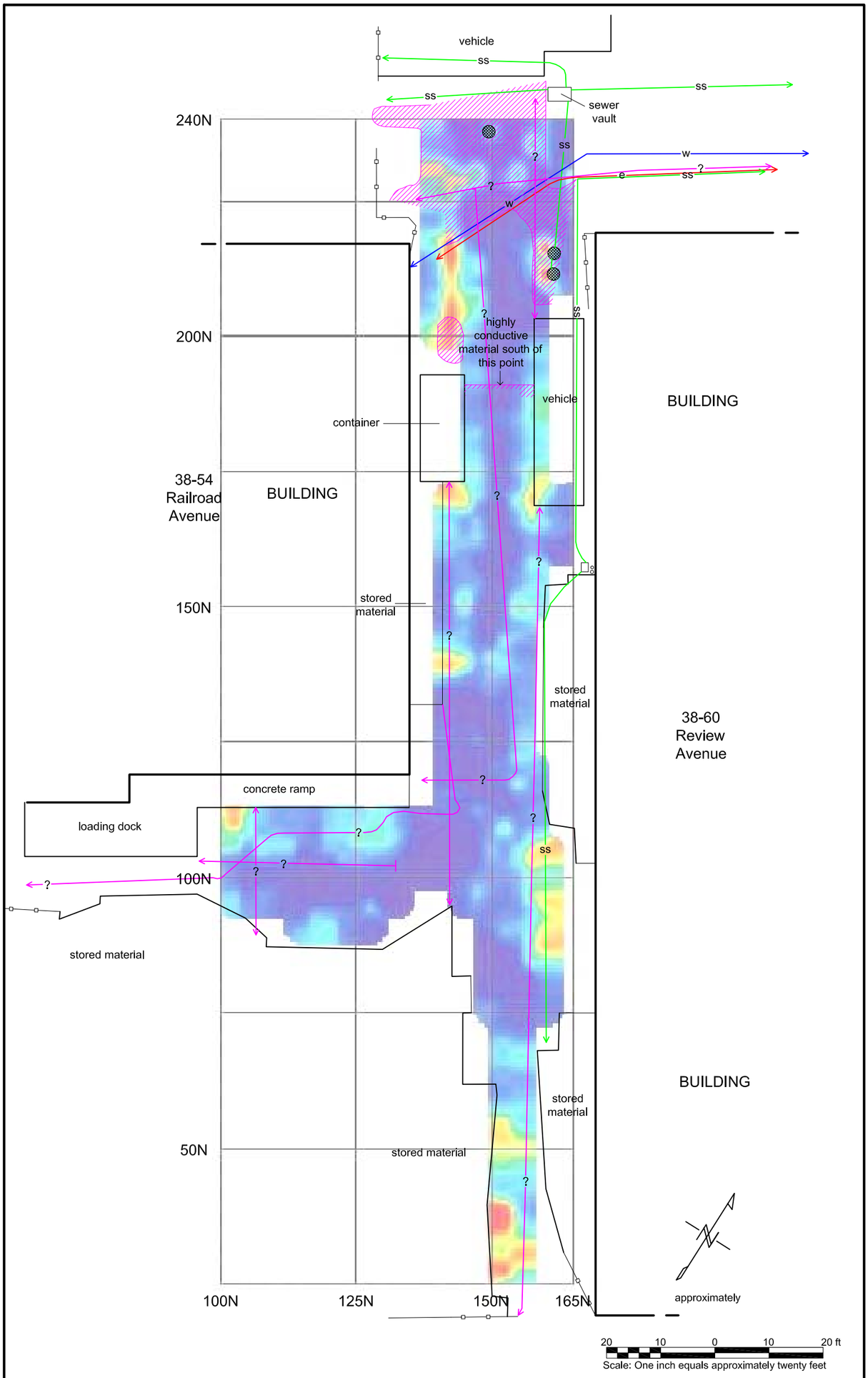
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 17: GPR Time Slice (Depth: 1.1ft - 1.7ft) with Anomalies Former Pratt Oil Works Facility AREA 2 Consisting of Parcel E (North Side) Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 15, 2009
Project No.	C0906081X	Map By	Amelia Paruch

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



LEGEND

- e — electric line
- w — water line
- ss — sanitary sewer
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- manhole cover

NACVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

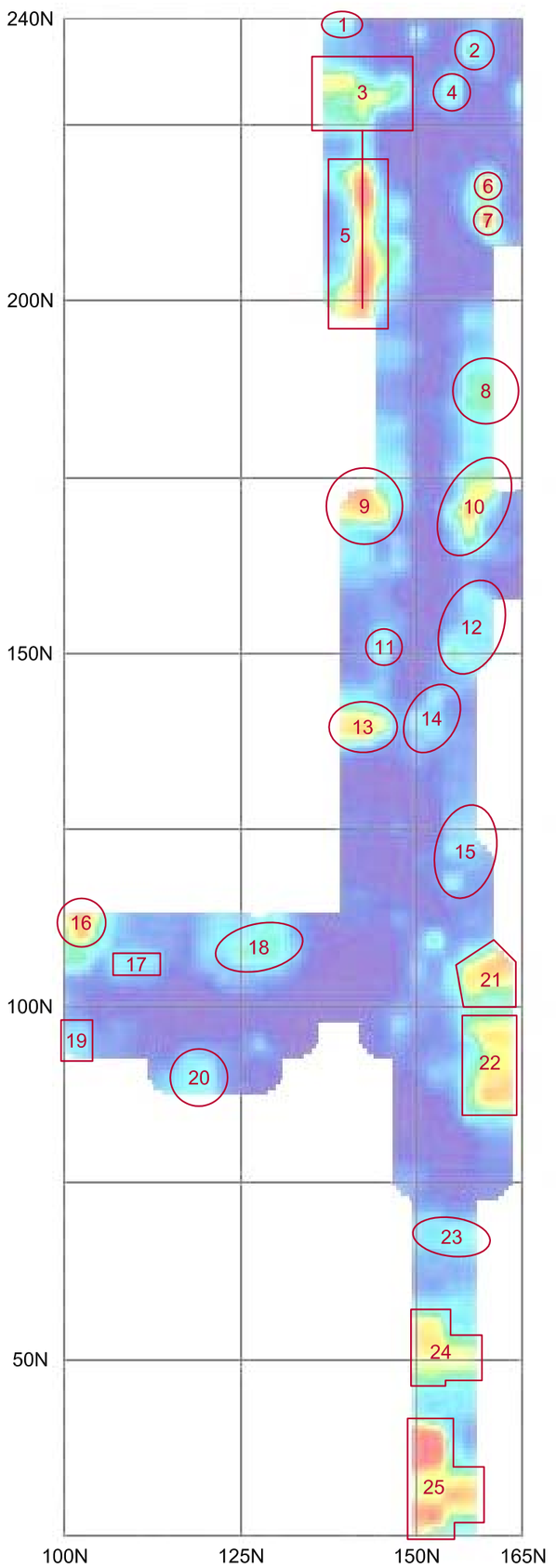
225 N. Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 18: Utility and Culture Map with GPR Overlay of Former Pratt Oil Works Facility AREA 3 Consisting of Parcel E (South and East Sides) Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder Inc.	Date of Work	June 19, 2009
Project No.	C0906081X	Map By	Amelia Paruch, Daniel Latini

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

Time Slice Depth: 1.1ft - 1.7ft



approximately

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

LEGEND

GPR Anomaly

*Numbers 1-25 indicate GPR anomalies listed in Table 7

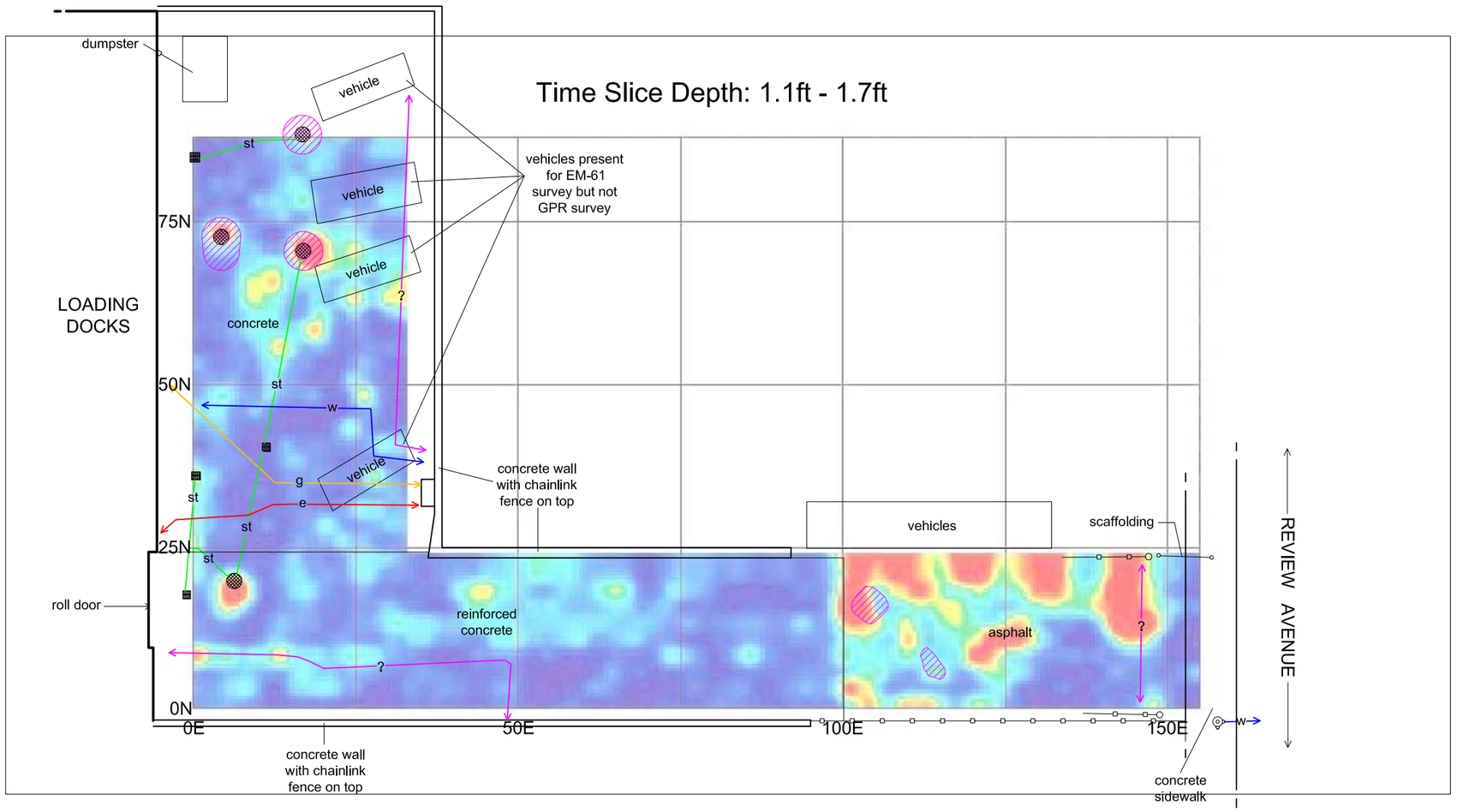
NACVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N. Route 303, Suite 102
Congers, NY. 10920
(845) 268-1800
(845) 268-1802 FAX

Plate 19: GPR Time Slice (Depth: 1.1ft - 1.7ft) with Anomalies Former Pratt Oil Works Facility AREA 3 Consisting of Parcel E (South and East Sides) Located at 38-54 Railroad Avenue in Long Island City, New York

Client	Kleinfelder Inc.	Date of Work	June 19, 2009
Project No.	C0906081X	Map By	Amelia Paruch, Daniel Latini

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



approximately

LEGEND

- e — electric line
- w — water line
- g — gas line
- st — storm sewer
- ? — suspected utility
- chain-link fence
- metal-detector anomaly
- fire hydrant
- storm drain
- manhole cover

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

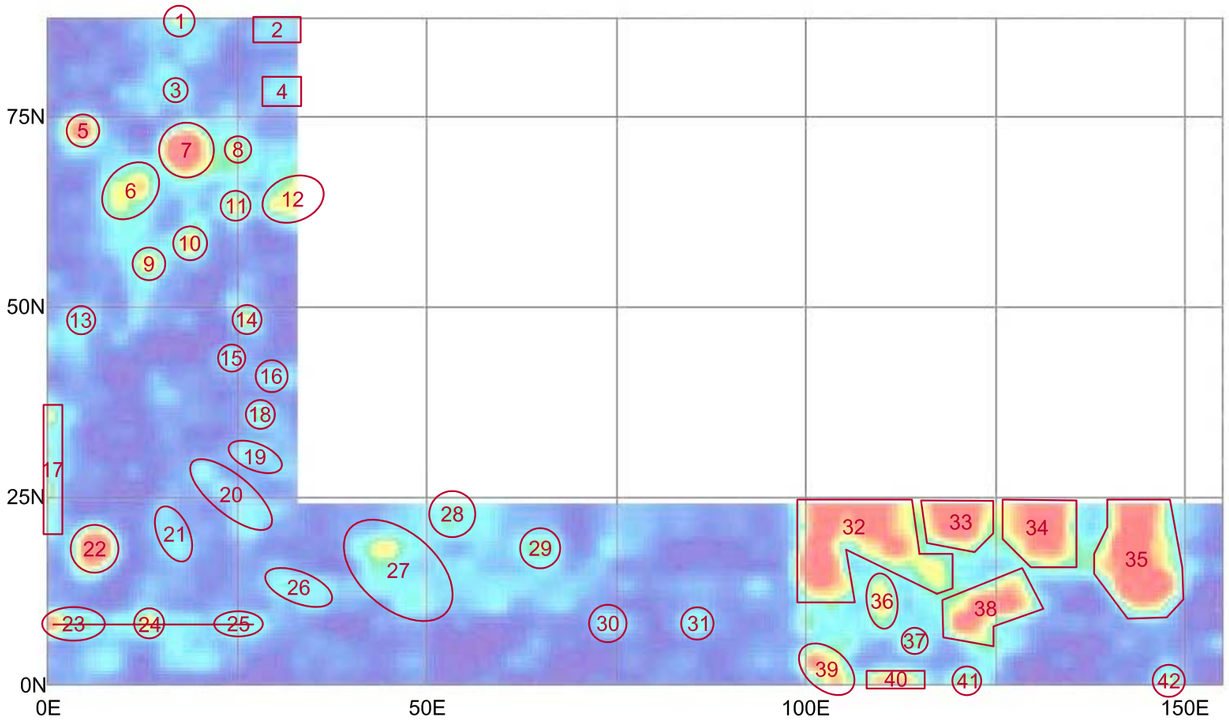
NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N. Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 20: Utility and Culture Map with GPR Overlay Former Pratt Oil Works Facility AREA 4 Consisting of Parcel G Located at 38-78 Review Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 10, 2009
Project No.	C0906081X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP



approximately

LEGEND

GPR Anomaly

*Numbers 1-42 indicate GPR anomalies listed on Table 8

20 10 0 10 20 ft

Scale: One inch equals approximately twenty feet

NAEVA GEOPHYSICS, INC.
THE LEADER IN SUBSURFACE DETECTION
Subsurface Geophysical Surveys

225 N. Route 303, Suite 102
Congers, NY. 10920
(845)268-1800
(845)268-1802 FAX

Plate 21: GPR Time Slice (Depth: 1.1ft - 1.7ft) with Anomalies
Former Pratt Oil Works Facility AREA 4 Consisting of Parcel G
Located at 38-78 Review Avenue in Long Island City, New York

Client	Kleinfelder, Inc.	Date of Work	June 10, 2009
Project No.	C0906081X	Map By	Gerald Williamson

ALL UNDERGROUND FACILITIES MAY NOT BE DEPICTED ON THIS MAP

Table 1. List of EM-61 Anomalies in Parcels A, D, and E (Plate 7)

Anomaly #	Easting	Northing	Suspected Source
1	69	99	unknown, possibly due to nearby parked vehicles
2	64	79	unknown, located inside 23' diameter metal detector anomaly centered at 61E/84N, see Plates 2 and 3
3	62	70	unknown
4	101	74	uknown, possibly due to nearby parked vehicles
5	6	66	unknown, possibly due to nearby parked vehicle
6	40	65	unknown, located inside irregular shaped metal detector anomaly located approximately between 21E-50E and 40N-85N. Also may be part of N-S linear feature with anomaly 16, see Plates 2 and 3
7	48	66	unknown, located inside irregular shaped metal detector anomaly located approximately between 21E-50E and 40N-85N, see Plates 2 and 3
8	60	47	unknown, 2 small circular anomalies
9	3	26	unknown, located in 23'x12' metal detector anomaly, see Plates 2 and 3
10	12	40	maybe be extension of water line, forms E-W linear feature with anomalies 11, 18, 20, 21, 22, 28, 29, 30, 42, and 43 which contain several unknown utilities and water lines, see Plates 2 and 3
11	24	35	maybe be extension of water line, forms E-W linear feature with anomalies 10, 18, 20, 21, 22, 28, 29, 30, 42, and 43 which contain several unknown utilities and water lines, see Plates 2 and 3
12	10	15	large metal plate on surface, see Plates 2 and 3
13	25	20	forms E-W linear feature with anomalies 23, 24, 25, 26, and 27 that follows trace of several unknown utilities and electric lines, see Plates 2 and 3
14	10	0	unknown
15	20	0	unknown
16	37	0	unknown, near building
17	80	0	manway access to septic system

Anomaly #	Easting	Northing	Suspected Source
18	71	35	forms E-W linear feature with anomalies 10, 11, 20, 21, 22, 28, 29, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, see Plates 2 and 3
19	94	15	unknown, forms N-S linear feature, and follows trace of unknown utility, see Plates 2 and 3
20	118	37	forms E-W linear feature with anomalies 10, 11, 18, 21, 22, 28, 29, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
21	149	39	forms E-W linear feature with anomalies 10, 11, 18, 20, 22, 28, 29, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
22	183	39	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 28, 29, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
23	128	19	forms E-W linear feature with anomalies 13, 24, 25, 26, and 27 that follows trace of several unknown utilities and electric lines, see Plates 2 and 3
24	156	20	forms E-W linear feature with anomalies 13, 23, 25, 26, and 27 that follows trace of several unknown utilities and electric lines, see Plates 2 and 3
25	175	19	forms E-W linear feature with anomalies 13, 23, 24, 26, and 27 that follows trace of several unknown utilities and electric lines, see Plates 2 and 3
26	186	19	forms E-W linear feature with anomalies 13, 23, 24, 25, and 27 that follows trace of several unknown utilities and electric lines, see Plates 2 and 3
27	206	20	forms E-W linear feature with anomalies 13, 23, 24, 25, and 26 that follows trace of several unknown utilities and electric lines, also nearby fenced entryway, see Plates 2 and 3

Anomaly #	Easting	Northing	Suspected Source
28	218	42	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 22, 29, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
29	229	42	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 22, 28, 30, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
30	240	41	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 22, 28, 29, 42, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
31	239	25	unknown, in the vicinity of several electric lines and parked vehicles, see Plates 2 and 3
32	221	9	unknown, nearby chain link fence and building, see Plates 2 and 3
33	235	5	
34	229	14 south	unknown, located in approximately 20'x15' metal detector anomaly centered at 230E/10S, see Plates 2 and 3
35	222	39 south	unknown, near metal gate and metal roll door, see plates 2 and 3
36	236	30 south	unknown, near building
37	235	42 south	unknown, near building and large metal container, see Plates 2 and 3
38	246	57	unknown, near building and parked vehicles
39	266	57	unknown, near building
40	281	57	unknown, near building
41	290	32	unknown, follows 2' wide linear metal detector anomaly located approximately between 290E/23N and 290E/59N, see Plates 2 and 3
42	297	40	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 22, 28, 29, 30, and 43. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
43	308	40	forms E-W linear feature with anomalies 10, 11, 18, 20, 21, 22, 28, 29, 30, and 42. Several unknown utilites, electric lines and water lines are identified in this linear feature, also near parked vehicles, see Plates 2 and 3
44	305	30	unknown, may form linear feature with anomaly 43, also near parked vehicles, see Plates 2 and 3

Anomaly #	Easting	Northing	Suspected Source
45	318	29	unknown, in the vicinity of an electric line and near parked vehicles, see Plates 2 and 3
46	344	29	unknown, in the vicinity of an electric line and near parked vehicles, see Plates 2 and 3
47	372	30	unknown, in the vicinity of an electric line and near parked vehicles, see Plates 2 and 3
48	311	49	unknown, in the vicinty of several unknown utilities and parked vehicles, see Plates 2 and 3
49	339	49	unknown, in the vicinty of several unknown utilities and parked vehicles, see Plates 2 and 3
50	360	50	unknown, in the vicinity of an unknown utility and parked vehicles, see Plates 2 and 3
51	377	50	unknown, in the vicinity of an unknown utility and parked vehicles, see Plates 2 and 3
52	405	49	metal water vault centered at 403E/49N, may form N-S linear feature with anomalies 53 and 54, see Plates 2 and 3
53	404	42	unknown, in the vicinity of electric and water lines, may form N-S linear feature with anomalies 52 and 54, see Plates 2 and 3
54	403	32	unknown, 3'x3' metal detector anomaly idenitifed centered at 403E/23N, may form linear feature with anomalies 52 and 53, see Plates 2 and 3

Table 2. List of EM-61 Anomalies in Parcel E, North Side (Plate 9)

Anomaly #	Easting	Northing	Suspected Source
1	215	150	unknown, near large metal container
2	245	150	unknown, in the vicinity of an unknown utility and near a building, see Plates 7 and 8
3	264	150	unknown, in the vicinity of an unknown utility and near a building, see Plates 7 and 8
4	213	140	unknown
5	232	135	unknown, near large metal container, and near 18'x16' metal detector anomaly, see plates 7 and 8
6	225	131	unknown, in 18'x16' metal detector anomaly centered at approximately 225E/128N, near large metal containers, may form NE-SW linear featuer with anomalies 7 and 8, see Plates 7 and 8
7	217	125	unknown, in 18'x16' metal detector anomaly centered at approximately 225E/128N, may form NE-SW linear featuer with anomalies 6 and 8, see Plates 7 and 8
8	212	120	unknown, near 18'x16' metal detector anomaly centered at approximately 225E/128N, may form NE-SW linear featuer with anomalies 6 and 7, see Plates 7 and 8
9	237	120	forms NE-SW linear feature with anomalies 10 and 11, follows trace of unknown utility, see Plates 7 and 8
10	248	125	forms NE-SW linear feature with anomalies 9 and 11, follows trace of unknown utility, see Plates 7 and 8
11	251	129	forms NE-SW linear feature with anomalies 9 and 10, follows trace of unknown utility, see Plates 7 and 8
12	264	119	unknown, near building
13	107	101	unknown, near 5' diameter metal detector anomaly centered at approximately 110E/105N, see Plates 7 and 8
14	114	105	unknown, near 5' diameter metal detector anomaly centered at approximately 110E/105N, see Plates 7 and 8
15	125	111	unknown, near metal gate and unknown utility
16	125	101	unknown, in the vicinity of an unknown utility, may form linear feature with anomaly 17, see Plates 7 and 8

Anomaly #	Easting	Northing	Suspected Source
17	141	105	unknown, in the vicinity of an unknown utility, may form linear feature with anomaly 16, see Plates 7 and 8
18	167	110	unknown, near building and stored materials
19	190	110	unknown, in approximately 14'x13' metal detector anomaly centered at approximately 186E/112N, see Plates 7 and 8
20	202	101	unknown, in 11'x4' metal detector anomaly centered at approximately 207E/100N

Table 3. List of EM-61 Anomalies in Parcel E, South and East Sides (Plate 11)

Anomaly #	Easting	Northing	Suspected Source
1	140	230	unknown, in an approximately 30'x20' irregular shaped metal detector anomaly centered at 151E/232N, in the vicinity of several utilities and a sewer manhole, may form N-S linear feature with anomalies 2 and 3, see Plates 12 and 13
2	156	223	unknown, in an approximately 30'x20' irregular shaped metal detector anomaly centered at 151E/232N, in the vicinity of several utilities, may form N-S linear feature with anomalies 1 and 3, see Plates 12 and 13
3	160	214	2 sewer manholes and the sewer vaults below them, may form N-S linear feature with anomalies 1 and 2, representing sewer line(s) associated with the sewer vault, see Plates 12 and 13
4	141	201	unknown, identified approximately 8' diameter metal detector anomaly centered at 142E/200N, near container and building, see Plates 12 and 13
5	145	169	unknown, near container, may form N-S linear feature with anomaly 7, see Plates 12 and 13
6	162	162	unknown, near stored materials and a vehicle
7	151	144	unknown, N-S linear anomaly, may form longer N-S linear feature with anomaly 5, near unknown utilities, see Plates 12 and 13
8	154	117	unknown, may be associated with anomalies 11 and 12, see Plates 12 and 13
9	115	107	unknown, near concrete ramp and in the vicinity of several unknown utilities, may form N-S linear feature with anomaly 10, see Plates 12 and 13
10	115	91	unknown, may form N-S linear feature with anomaly 9, see Plates 12 and 13
11	144	104	unknown, may be associated with anomalies 8 and 12, see Plates 12 and 13
12	150	86	unknown, may be associated with anomalies 8 and 11, see Plates 12 and 13
13	155	56	unknown, unknown utility runs through anomaly, see Plates 12 and 13

Table 4. List of EM-61 Anomalies in Parcel G (Plate 13)

Anomaly #	Easting	Northing	Suspected Source
1	0	81	floor drain
2	14	83	sewer manhole
3	5	70	sewer manhole
4	14	65	sewer manhole, and near vehicles
5	0	35	unknown, near floor drain and building, see Plates 17 and 18
6	11	34	floor drain
7	25	40	unknown, near vehicle
8	0	26	unknown, near building and storm sewer line, see Plates 17 and 18
9	23	24	unknown, may represent N-S linear feature between vehicle and reinforced concrete (anomaly 10), see Plates 17 and 18
10	0-100	0-20	reinforced concrete
11	104	16	unknown, identified approximately 5' diameter circular metal detector anomaly centered at 104E/13N, see plates 17 and 18
12	114	5	unknown, identified approximately 3' diameter circular metal detector anomaly centered at 114E/4N, see Plates 17 and 18
13	127	5	unknown
14	147	5	unknown, in the vicinity of a suspected utility, see Plates 17 and 18
15	153	16	unknown, in the vicinity of a suspected utility, see Plates 17 and 18

Table 5. List of GPR Anomalies in Parcels A, D, and E (Plate 15)

Anomaly #	Approximate Location	Anomaly Source
1	centered at 60E/98N	unknown
2	centered at 95E/75N	unknown
3	centered 110E/76N	unknown
4	centered at 40E/43N	unknown source, near large metal detector anomaly with maximum dimensions between 20-59E and 35-88N, see Plates 4 and 5
5	irregular shape, with maximum dimensions between 17-52E and 14-31N	unknown source, in the vicinity of several unknown utility lines and a water line, see Plates 4 and 5
6	centered at 9E/14N	metal plate at surface
7	irregular shape, with maximum dimensions between 40-110E and 3S-26N	unknown source, contains 2 NE-SW linear features, in the vicinity of electric lines, see Plates 4 and 5
8	centered at 98E/44N	unknown source, may represent E-W linear feature with anomalies 9 and 10, see Plates 4 and 5
9	centered at 110E/44N	unknown source, may represent E-W linear feature with anomalies 8 and 10, see Plates 4 and 5
10	centered at 124E/44N	unknown source, may represent E-W linear feature with anomalies 8 and 9, see Plates 4 and 5
11	irregular shape, with maximum dimensions between 129-180E and 16-35N	unknown source, possibly represents E-W linear feature with anomaly 14 (134E/25N to 200E/28N), and 2 N-S linear features (134E/25N to 131E/18N, and 148E/26N to 148E/18N), see Plates 4 and5
12	centered at 167E/42N	unknown
13	centered at 195E/41N	unknown
14	irregular shape, with maximum dimensions between 184-201E and 26-35N	unknown source, possibly represents E-W linear feature with anomaly 11, see Plates 4 and 5
15	centered at 212E/22N	unknown
16	irregular shape, with maximum dimensions between 221-238E and 9-24N	unknown, in the vicinity of several underground utilities
17	rectangular shape between 232-238E and 3S-11N	concrete pad and metal plate at surface
18	centered at 227N/13S	unknown, located in metal detector anomaly with maximum dimensions between 219-239E and 2-19S, see Plates 4 and 5

Anomaly #	Approximate Location	Anomaly Source
19	rectanuglar shape between 229-238E and 25-35S	unknown
20	centered at 226E/38S	unknown, contained in a E-W linear metal detector anomaly (between 219-239E and 37-39S), see Plates 4 and 5
21	irregular shape, with maximum dimensions between 229-238E and 40-50S	unknown
22	centered at 282E/46N	unknown
23	centered at 290E/45N	unknown, possible represents N-S linear feature with anomaly 24, contained in N-S linear metal detector anomaly located between 289-291E and 23-59S, See plates 4 and 5
24	centered at 290E/33N	unknown, possible represents N-S linear feature with anomaly 23, contained in N-S linear metal detector anomaly located between 289-291E and 23-59S, See plates 4 and 5
25	centered at 311E/50N	unknown, in the vicinity of serveral unknown utilities
26	centered at 405E/50N	metal cover to underground water vault
27	centered at 403E/34N	unknown, identified rectangular metal detector anomaly between 402-405E and 32-35N

Table 6. List of GPR Anomalies in Parcel E, North Side (Plate 17)

Anomaly #	Approximate Location	Anomaly Source
1	rectangular shape between 114-125E and 100-105N	unknown, possibly forms N-S linear feature with anomaly 2, see Plates 9 and 10
2	centered at 123E/108N	unknown, possibly forms N-S linear feature with anomaly 1 and E-W linear feature with anomaly 4, see Plates 9 and 10
3	centered at 130E/114N	unknown
4	centered at 130E/108N	unknown, possibly forms E-W linear feature with anomaly 2, see Plates 9 and 10
5	centered at 130E/100N	unknown
6	centered at 139E/101N	unknown, may form NE-SW linear feature with anomaly 7, see Plates 9 and 10
7	irregular shape with maximum dimensions between 140-150E and 103-115N	unknown, may form NE-SW linear feature with anomaly 6, see Plates 9 and 10
8	irregular shape with maximum dimensions between 148-157E and 100-115N	unknown, possibly contains NE-SW linear feature, see Plates 9 and 10
9	irregular shape with maximum dimensions between 163-175E and 109-116N	unknown
10	centered at 168E/100N	unknown, suspected utility runs through anomaly as well as anomaly 12, see Plates 9 and 10
11	centered at 179E/110N	unknown, located inside metal detector anomaly with approximate dimensions between 175-193E and 108-116N, see Plates 9 and 10
12	E-W linear feature between 175-187E and 100-102N	unknown, suspected utility runs through anomaly as well as anomaly 10, see Plates 9 and 10
13	irregular shape with dimensions between 180-190E and 110-116N	unknown, located inside metal detector anomaly with approximate dimensions between 175-193E and 108-116N, see Plates 9 and 10
14	centered at 188E/103N	unknown
15	centered at 194E/102E	unknown
16	rectangular shape between 192-196E and 113-121N	unknown
17	E-W linear feature between 196-204E and 100-102N	unknown, near metal detector anomaly with approximate dimensions betewen 200-212E and 97-102N, see Plates 9 and 10

Anomaly #	Approximate Location	Anomaly Source
18	irregular shape with dimensions between 193-206E and 121-135N	unknown
19	centered at 211E/153N	unknown, possibly forms NW-SE linear feature with anomaly 20, see Plates 9 and 10
20	centered at 217E/145N	unknown, possibly forms NW-SE linear feature with anomaly 19, see Plates 9 and 10
21	centered at 215E/123N	unknown, possibly represents E-W to N-S linear feature, also partially inside rectangular metal detector anomaly with approximate dimensions between 216-234E and 120-136N, see Plates 9 and 10
22	centered at 224E/117N	unknown
23	irregular shape with maximum dimensions between 229-257E and 120-142N	unknown

Table 7. List of GPR Anomalies in Parcel E, South and East Side (Plate 19)

Anomaly #	Approximate Location	Anomaly Source
1	centered at 139E/239N	unknown source, located within irregular shaped metal detector anomaly with approximate dimensions between 127-165E and 205-247N, see Plates 14 and 15
2	centered at 158E/236N	unknown source, located within irregular shaped metal detector anomaly with approximate dimensions between 127-165E and 205-247N, see Plates 14 and 15
3	irregular shape with approximate dimensions between 136-149E and 225-233N	unknown source, located within irregular shaped metal detector anomaly with approximate dimensions between 127-165E and 205-247N, see Plates 14 and 15
4	centered at 155E/230N	unknown source, located within irregular shaped metal detector anomaly with approximate dimensions between 127-165E and 205-247N, see Plates 14 and 15
5	linear feature between 138-145E and 197-220N	unknown source, contains small metal detector anomaly located between 140-145E and 195-204N, may represent a N-S linear feature, see Plates 14 and 15
6	centered at 160E/216N	sewer manhole
7	centered at 160E/211N	sewer manhole
8	centered at 159E/187N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
9	centered at 142E/171N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
10	irregular shape with approximate dimensions between 155-160E and 165-	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
11	centered at 145E/151N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
12	irregular shape with approximate dimensions	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
13	centered at 142E/140N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
14	centered at 152E/140N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
15	irregular shape with approximate dimensions between 154-159E and 116-	unknown source, in the vicinity of 2 suspected utilities, see Plates 14 and 15
16	centered at 102E/111N	unknown source
17	centered at 110E/106N	unknown source, in the vicinity of several suspected utilities, see Plates 14 and 15

Anomaly #	Approximate Location	Anomaly Source
18	centered at 128E/108N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
19	centered at 101E/95N	unknown source
20	centered at 119E/90N	unknown source
21	irregular shape with approximate dimensions between 155-164E and 100-	unknown source, in the vicinity of a sewer line and a suspected utility, see Plates 14 and 15
22	rectangular shape with approximate dimensions between 157-164E and 85-98N	unknown source, in the vicinity of a sewer line and a suspected utility, see Plates 14 and 15
23	centered at 156E/67N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
24	irregular shape with approximate dimensions between 150-158E and 46-56N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15
25	irregular shape with approximate dimensions between 150-158E and 25-41N	unknown source, in the vicinity of a suspected utility, see Plates 14 and 15

Table 8. List of GPR Anomalies in Parcel G (Plate 21)

Anomaly #	Approximate Location	Anomaly Source
1	centered at 17E/85N	sewer manhole
2	centered at 30E/83N	unknown source, in the vicinity of a suspected utility, see Plates 19 and 20
3	centered at 17E/75N	unknown source
4	centered at 31E/75N	unknown source, in the vicinity of a suspected utility, see Plates 19 and 20
5	centered at 4E/70N	sewer manhole
6	centered at 11E/62N	unknown source
7	centered at 18E/67N	sewer manhole
8	centered at 25E/68N	unknown source
9	centered at 13E/53N	unknown source, in the vicinity of a sewer line, see Plates 19 and 20
10	centered at 19E/55N	unknown source
11	centered at 25E/60N	unknown source
12	centered at 31E/61N	unknown source, in the vicinity of a suspected utility, see Plates 19 and 20
13	centered at 4E/45N	unknown source, in the vicinity of a water line, see Plates 19 and 20
14	centered at 26E/45N	unknown source, in the vicinity of a water line, see Plates 19 and 20
15	centered at 24E/40N	unknown source
16	centered at 30E/38N	unknown source, in the vicinity of a water line and a suspected utility, see Plates 19 and 20
17	N-S linear feature between 0-2E and 17-34N	unknown source, near building, a sewer drain is located in the anomaly at approximately 0E/33N; in the vicinity of a sewer line and an electric line, see Plates 19 and 20
18	centered at 28E/33N	unknown source, in the vicinity of a gas line, see Plates 19 and 20
19	centered at 27E/28N	unknown source, in the vicinity of an electric line, see Plates 19 and 20
20	irregular shape with approximate dimensions between 19-30E and 16-26N	unknown source, partially located in reinforced concrete
21	centered at 16E/17N	unknown source, located in reinforced concrete
22	centered at 6E/15N	sewer manhole
23	centered at 3E/5N	unknown source, may represent E-W linear feature with anomalies 24 and 25, in the vicinity of a suspected utility, see Plates 19 and 20

Anomaly #	Approximate Location	Anomaly Source
24	centered at 13E/5N	unknown source, may represent E-W linear feature with anomalies 23 and 25, in the vicinity of a suspected utility, see Plates 19 and 20
25	centered 25E/5N	unknown source, may represent E-W linear feature with anomalies 23 and 24, in the vicinity of a suspected utility, see Plates 19 and 20
26	centered at 33E/10N	unknown source, located in reinforced concrete
27	irregular shape with approximate dimensions between 40-51E and 6-17N	unknown source, located in reinforced concrete
28	centered at 53E/19N	unknown source, located in reinforced concrete
29	centered at 65E/15N	unknown source, located in reinforced concrete
30	centered at 74E/5N	unknown source, located in reinforced concrete
31	centered at 86E/5N	unknown source, located in reinforced concrete
32	irregular shape with approximate dimensions between 100-119E and 8-21N	unknown source, metal detector anomaly located in GPR anomaly approximately between 101-107E and 10-16N, see Plates 19 and 20
33	rectangular shape with approximate dimensions between 115-125E and 15-21N	unknown source
34	rectangular shape with approximate dimensions between 126-135E and 13-21N	unknown source
35	irregular shape with approximate dimensions between 139-149E and 6-21N	unknown source, a suspected utility runs through anomaly, see Plates 19 and 20
36	centered at 110E/8N	unknown source
37	centered at 114E/3N	unknown source, identified metal detector anomaly approximately between 112-116N and 1-6N, see Plates 19 and 20
38	centered at 103E/1S	unknown source
39	centered at 103E/1S	unknown source
40	centered at 112E/2S	unknown source
41	centered at 121E/2S	unknown source
42	centered at 148E/2S	unknown source, in the vicinity of a suspected utility, see Plates 19 and 20