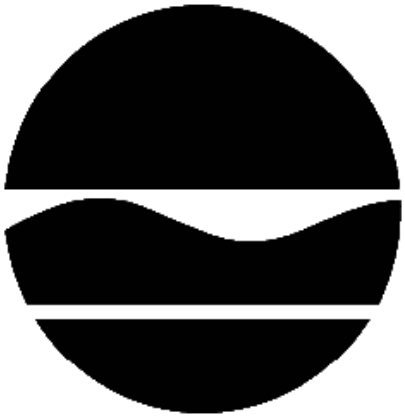
AMENDED DECISION DOCUMENT

NM - Oswego W. Utica St. MGP
Operable Unit Number 01: W.Utica St. MGP
Voluntary Cleanup Program
Oswego, Oswego County
Site No. V00481
September 2016



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT – AMENDED DECISION DOCUMENT

NM - Oswego W. Utica St. MGP
Operable Unit Number: 01
Voluntary Cleanup Program
Oswego, Oswego County
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Statement of Purpose and Basis

This Amended Decision Document presents the remedy for Operable Unit Number: 01: W.Utica St. MGP of the NM - Oswego W. Utica St. MGP site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 01 of the NM - Oswego W. Utica St. MGP site and the public's input to the proposed amended decision document presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development

2. In-situ solidification (ISS) will be implemented in three areas as shown on Figure 2. One area is on the west side of the site in an area approximately 160 feet by 70 feet; in this location ISS will extend to a depth of 22 feet bgs (below ground surface) or bedrock. The other two areas are on the east side of the site each approximately 30 feet by 30 feet; at these locations ISS will extend to a depth of 15 feet bgs or bedrock. The zone of ISS is defined by the presence of a contaminant source, as defined in 6 NYCRR Part 375-1.2(au). A four-foot deep pre-excavation of soil will be required to allow for the swell of soils during mixing. In the ISS process, the contaminated soil will be mixed in-place together with solidifying agents (typically Portland cement) or other binding agents using an excavator or augers. The soil and binding agents are mixed to produce a low permeability solidified mass. The solidified mass will then be covered with a cover system as described in element 5 to prevent direct exposure to any immobilized contaminants within the ISS. The solid mass reduces or eliminates the source of groundwater contamination and reduces or eliminates the mobility of contamination.

3. As described in Section 2.2, source material is suspected to be present underneath the City Electric building. This material is inaccessible for excavation and ISS and will be addressed through the easement and Site Management Plan required in paragraphs 6 and 7 below.

4. Coal tar recovery wells will be installed at the west end of the City Electric building to provide for the periodic measurement and removal of accumulated tar that cannot be excavated due to the presence of utilities. The location and number of recovery wells along with the method and frequency of tar removal will be determined during the remedial design and remedial action phases. Recovered tar will be transported for treatment or disposal off-site. The operation of the tar recovery wells will continue until the Department determines that continued operation is technically impracticable or not feasible.

5. A site cover will be required to allow for commercial use of the site and to protect the ISS component of the remedy. Where the soil cover is required over the ISS treatment area, it will consist of a minimum of four feet of soil meeting the SCOs for commercial use. For areas where solidified material underlies the cover, the solidified material itself will serve as the demarcation layer due to the nature of the material. The cover will also consist of either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the soil cleanup objectives (SCOs) for the protection of public health. Where the soil cover is required over non-ISS areas, it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR part 375-6.7(d) for commercial use. The upper six inches of soil will be of sufficient quality to maintain a vegetation layer.

6. Imposition of an institutional control in the form of an environmental easement for the site (OU1) that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- requires compliance with the Department-approved Site Management Plan.

7. A Site Management Plan is required, which includes the following:

a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:

- The environmental easement discussed in Paragraph 6 above;
- An agreement(s) with the property owners of the site (OU1) to implement the remedy and any necessary future site management.

Engineering Controls: The soil cover discussed in Paragraph 5 above.

This plan includes, but is not limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation to refine the nature and extent of contamination in the following area where access was previously hindered: under the City Electric building if and when the building is demolished;
- a provision for removal or treatment of the contaminant source area located under the City Electric building if and when the building is demolished;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion, if applicable, for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to access the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency for submittals to the Department;
- monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

September 16, 2016
Date

George Heitzman, Director
Remedial Bureau C

AMENDED DECISION DOCUMENT

NM - Oswego W. Utica St. MGP
Oswego, Oswego County
Site No. V00481
September 2016

SECTION 1: INTRODUCTION

On March 13, 2013 the New York State Department of Environmental Conservation (Department), issued a Decision Document which selected a remedy to clean up Operable Unit 1 of the NM Oswego West Utica Street Manufactured Gas Plant Site. Since that time, additional investigations have added to the understanding of the structural conditions of certain on-site buildings as well as revised the estimate of the volume of contaminant source material. Upon evaluation of this recent information, the Department is selecting the use of in-situ stabilization as the primary component of the remedy in place of excavation and off-site disposal of source material.

In August 2016 the Department released for public review a proposal to amend the Decision Document. A 30-day public comment period was provided, during which the public was encouraged to submit comments on the proposed amendment. No comments were received.

SECTION 2: SITE DESCRIPTION AND HISTORY

2.1 Site Description

Location: The Oswego (West Utica St.) site is located on the north side of West Utica Street between 3rd and 4th Streets in the City of Oswego.

Site Features: The former Manufactured Gas Plant (MGP) Site is currently occupied by four buildings, each with the following uses: a medical office building, a dialysis center, an auto repair shop and an electrical wholesale distributer. Paved parking areas occupy the remainder of the flat 1.2 acre site.

Current Zoning and Use: The site is zoned for commercial use. The site is bounded by a mix of residential areas and businesses.

Past Use of the Site: MGP operations occurred at the site from approximately 1852 to 1935. MGP contamination at the site is likely the result of direct disposal or other releases of byproducts from process equipment during the operation.

Operable Units: The site was divided into two operable units. An operable unit represents a portion

of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable Unit 1 (OU1) is the original footprint of the manufactured gas plant. OU2 consists of the off-site groundwater impacted by the MGP. Hereafter in this document, the term "site" refers to OU1.

Site Geology and Hydrogeology: The overburden at the site consists of several feet of fill material overlying glacial till. The fill consists predominantly of coarser-grained materials including sand, gravel, cinders, coal and demolition debris. Sandstone bedrock is found about 20 feet below ground surface. The water table is roughly seven feet below ground surface. Water-bearing zones within the rock are limited to the upper bedrock. Groundwater flows from north to south with a component of the flow to the southwest.

Operable Unit (OU) Number 01 is the subject of this document.

A Decision Document will be issued for OU 02 in the future.

A site location map is attached as Figure 1.

2.2 Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

OU1
Soil and Bedrock: Coal tar was observed from approximately four feet below ground surface to approximately 35 feet in depth. The coal tar is more prevalent in the southwest quadrant of the site, extending over nearly one acre. Specifically, coal tar was identified within the former 40,000 cubic foot gas holder foundation and found to be extending south in the overburden to West Utica Street (See Figure 2 for the locations of former MGP structures). The area of the gas holder is currently a parking lot. Coal tar was also found in the overburden in the area west of the former retort house, adjacent to the east side of the current City Electric building. In addition, tar was found in the upper bedrock underlying tar-contaminated soil and extending off-site (into operable unit 2) to the south. The proximity of tar to the City Electric building suggests that tar is present underneath the building foundation.

Sheens were observed at the top of saturated fill within the former 100,000 cubic foot gas holder foundation while investigating the holder in 2007. However, no sheens or tar has been observed during the periodic gauging of wells installed within the foundation since the time of the initial installation. A portion of the foundation is currently located under Car Shop, an automobile repair business.

Typical MGP contaminants, benzene, toluene, ethylbenzene and xylene (collectively known as BTEX) and polycyclic aromatic hydrocarbons (PAHs) exceeded commercial use soil cleanup objectives (SCOs) within the site at areas generally co-located with observed tar. Total PAH concentrations were found as high as 56,000 parts per million (ppm). As a comparison, the Department's CP-51 Soil Cleanup Guidance recommends achieving a soil cleanup level of 500 ppm total PAHs in soil overlain by a cover system and identified by a Site Management Plan and institutional control prohibiting residential and unrestricted uses.

A soil vapor intrusion study was conducted to determine whether volatile compounds in the subsurface could potentially be adversely impacting the air quality of buildings on the site. The study concluded that the intrusion of soil vapors related to subsurface MGP impacts into on-site buildings is not a concern and no further evaluation of the potential for impacts from soil vapor is required at this time.

Groundwater: Groundwater exceeds class GA standards for BTEX compounds over approximately one acre. Benzene was found as high as 23,000 ppb in overburden groundwater, exceeding the standard of 1 ppb.

OU2
The nature and extent of contamination in OU2 has not yet been fully characterized and delineated. Investigations to-date have found tar in the shallow bedrock and BTEX in the groundwater. Investigation of OU2 is continuing.

2.3 Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as exposure.

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Since the site is covered with pavement and buildings, people are not likely to come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Environmental sampling indicates soil vapor intrusion is not a concern for on-site buildings. The potential for the inhalation of site contaminants due to soil vapor intrusion in off-site buildings needs to be evaluated.

2.4 Original Remedy

The elements of the original March 13, 2013 Decision Document are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development

2. Excavation and off-site disposal of contaminant source areas, including grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u). Specifically, the excavation areas include the former northern (40,000 cubic foot) gas holder to a depth of approximately 22 feet, the Taylor Rental parking lot to the top of bedrock, and the former tar tanks to a depth of approximately 15 feet, as identified on Figure 2. Tar observed at test pit TP-101A will be further evaluated for removal during the design. Approximately 7,000 cubic yards of soil will be removed from the site. On-site soil which does not exceed Soil Cleanup Objectives for commercial use may be used to backfill the excavation and establish the designed grades at the site below the cover system described in remedy element number 5. Clean fill meeting the requirements of DER-10, Appendix 5 will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

3. As described in Section 6.3, source material is suspected to be present underneath the Taylor Rental and Advantage Carpet buildings. This material is inaccessible for excavation and will be addressed through the easement and Site Management Plan required in paragraphs 6 and 7 below.

4. Coal tar recovery wells will be installed at the west end of the Advantage Carpets building to provide for the periodic measurement and removal of accumulated tar that cannot be excavated due to the presence of utilities. The location and number of recovery wells along with the method and frequency of tar removal will be determined during the remedial design and remedial action phases. Recovered tar will be transported for treatment or disposal off-site. The operation of the tar recovery wells will continue until the Department determines that continued operation is technically impracticable or not feasible.

5. A site cover will be required to allow for commercial use of the site. The cover will consist of either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the soil cleanup objectives (SCOs) for the protection of public health. Where the soil cover is required it will be a

minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

6. Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- requires compliance with the Department-approved Site Management Plan; and

7. A Site Management Plan is required, which includes the following:

a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The environmental easement discussed in Paragraph 6 above:

Engineering Controls: The soil cover discussed in Paragraph 5 above.

This plan includes, but is not limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation to refine the nature and extent of contamination in the following areas where access was previously hindered: under the Taylor Rental and Advantage Carpet buildings if and when the building(s) is demolished;
- a provision for removal or treatment of the contaminant source area located under the Taylor Rental and Advantage Carpet buildings if and when the building(s) is demolished;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion, if applicable, for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to access the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency for submittals to the Department;
- monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a above.

SECTION 3: DESCRIPTION OF CHANGES

3.1 New Information

A pre-design investigation (PDI) was conducted in 2014, subsequent to the Decision Document. The following information was determined based on the PDI:

1) Subsurface Construction of the City Electric Building: A test pit excavated at the base of the building's masonry wall revealed that the wall is supported in part on an old brick foundation or wall, which was likely a former MGP structure. The fill adjacent to this foundation was loose brick rubble with cobbles and sandy soil. Further, the 2014 investigation concluded the building is constructed as two separate buildings: an older masonry block to the south, and a newer steel frame to the north. A number of settlement cracks were observed along the northern wall of the masonry portion of the building adjacent to the remediation area.

2) Additional volume of source material: As a result of the PDI, tar or stringy tar-like material was found in the subsurface in additional areas. These additional areas are located south of the former gas holder and in and around the former tar tanks area. The PDI increased the additional volume of source material by about 3,000 cubic yards.

Note, since the issuance of the Decision Document, the Taylor Rental and Advantage Carpet buildings were sold to City Electric, an electrical wholesale distributer.

3.2 Remedy Changes

The substantive change to the 2013 Decision Document is the in-situ solidification of source areas instead of excavation and removal, although some excavation would still be required as identified in Section 5. The change is based on the following:

- The methods that would be necessary to remove soil from the required depths and the removal of soil from below the water table to implement the Decision Document would pose a greater risk than originally anticipated to the integrity and stability of the City Electric building in light of the building's subgrade support structure and settlement cracking. Vibrations which may damage nearby structures are likely to occur while driving sheet piles or installing secant pile casings and rock sockets required for excavation.

- The horizontal limits of the excavation areas would need to be offset a significantly greater distance from adjacent structures for excavation utilizing sheet piles or secant piles in comparison to the use of ISS. As a result, a significantly greater volume of source material (approximately 400 cubic yards) would remain unaddressed at the site.

- Excavation utilizing a sheet pile or secant pile shoring system would require more on-site or off-site space than ISS in order to accommodate a dewatering system, a waste staging area and increased truck traffic.

- The implementation time for ISS would be significantly shorter (approximately 40 to 50 percent) than that of excavation due to less extensive on-site activities. ISS would not require the use of a shoring system or dewatering. Further, ISS would not require as large a waste staging area as compared to excavation. ISS would not require the conditioning of materials as may be necessary for off-site disposal.

Also, the estimated volume of the contaminant source was increased by 3,000 cubic yards based on the findings of the pre-design investigation. This volume is located in active parking lots. The additional areas reduce the square footage available for a dewatering treatment system. The loading of trucks for off-site disposal is hampered by the active parking lots with short turning radius entrances. Thus, off-site disposal of excavated soil under the original remedy was made more difficult and costly by the PDI's finding of less available working space.

SECTION 4: EVALUATION OF CHANGES

4.1 Remedial Goals

The remedial action objectives for the cleanup of the site were established in the Decision Document and remain unchanged.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

4.2 Evaluation Criteria

In comparing the amended remedy and the original remedy with the nine factors identified in 375-1.8(f), both remedies are similar for the majority of the factors. However, the amended remedy will further reduce short-term impacts through a shorter construction schedule. In addition, the potential for damage to adjacent structures is also significantly reduced. In addition, the amended remedy will have a greater reduction of toxicity, mobility, and volume of the contamination since ISS will actively address contamination closer to the City Electric building as compared to excavation. Also, by avoiding the complications of shoring, dewatering, water treatment, and truck loading in parking lots designed for passenger cars, the amended remedy will be easier to implement compared to the 2013 selected remedy. Further, the estimated present worth cost of the amended remedy is $3.8 million ($2.9 million capital cost) while the estimated present work cost of the original remedy is $8.1 million ($7.3 million capital cost), as revised to reflect the PDI findings. Since the original remedy will not provide a substantial benefit over the amended remedy, the amended remedy provides better cost effectiveness without sacrificing protectiveness of human health and the environment.

SECTION 5: SUMMARY OF THE SELECTED CHANGES

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation.

The amended remedy is referred to as the Excavation and In-Situ Solidification of Source Material remedy.

The elements of the amended remedy, as shown in Figure 2, are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship

over the long term;

- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
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- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development

2. In-situ solidification (ISS) will be implemented in three areas as shown on Figure 2. One area is on the west side of the site in an area approximately 160 feet by 70 feet; in this location ISS will extend to a depth of 22 feet bgs (below ground surface) or bedrock. The other two areas are on the east side of the site each approximately 30 feet by 30 feet; at these locations ISS will extend to a depth of 15 feet bgs or bedrock. The zone of ISS is defined by the presence of a contaminant source, as defined in 6 NYCRR Part 375-1.2(au). A four-foot deep pre-excavation of soil will be required to allow for the swell of soils during mixing. In the ISS process, the contaminated soil will be mixed in-place together with solidifying agents (typically Portland cement) or other binding agents using an excavator or augers. The soil and binding agents are mixed to produce a low permeability solidified mass. The solidified mass will then be covered with a cover system as described in element 5 to prevent direct exposure to any immobilized contaminants within the ISS. The solid mass reduces or eliminates the source of groundwater contamination and reduces or eliminates the mobility of contamination.

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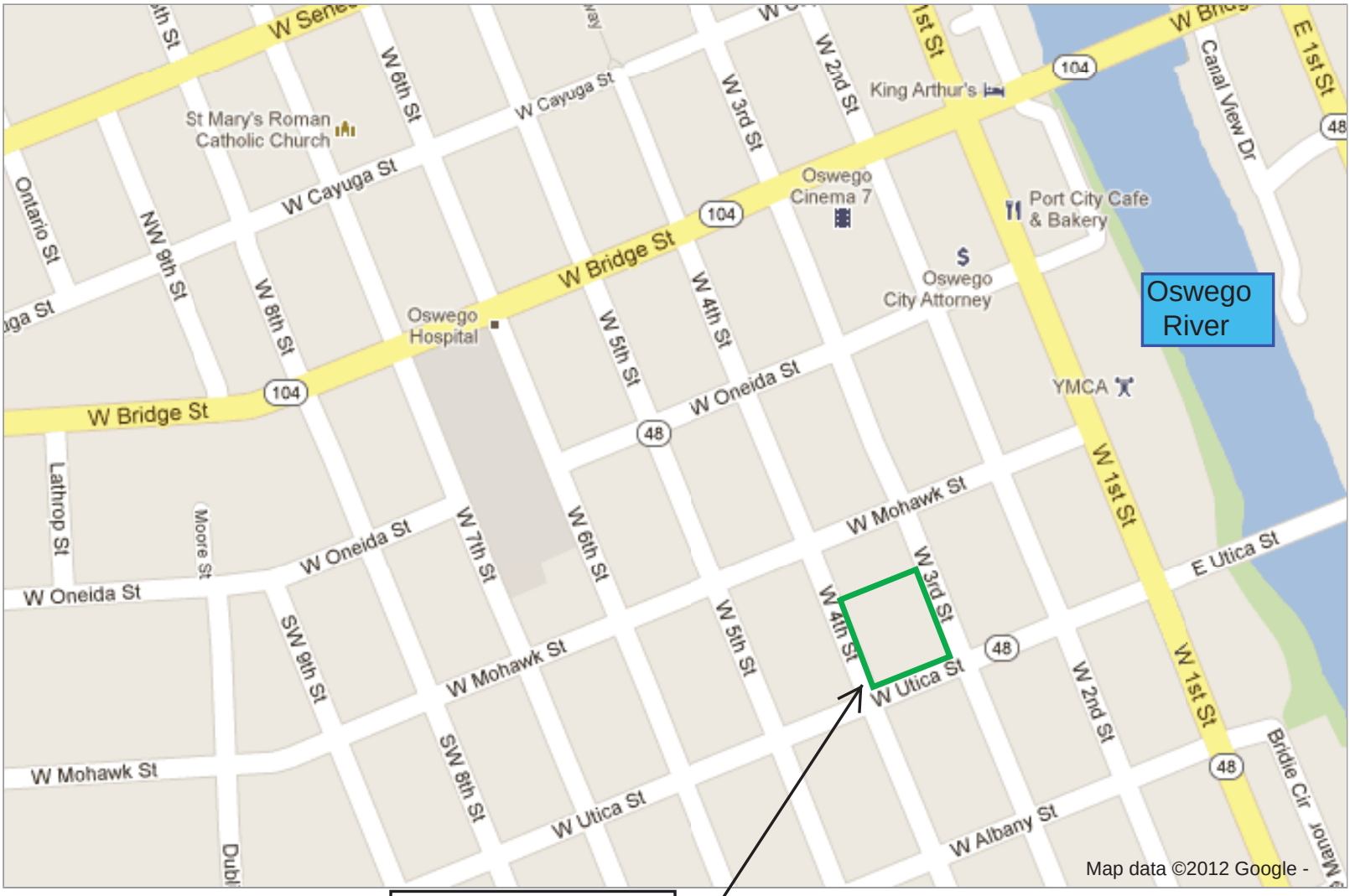


approx 300 ft

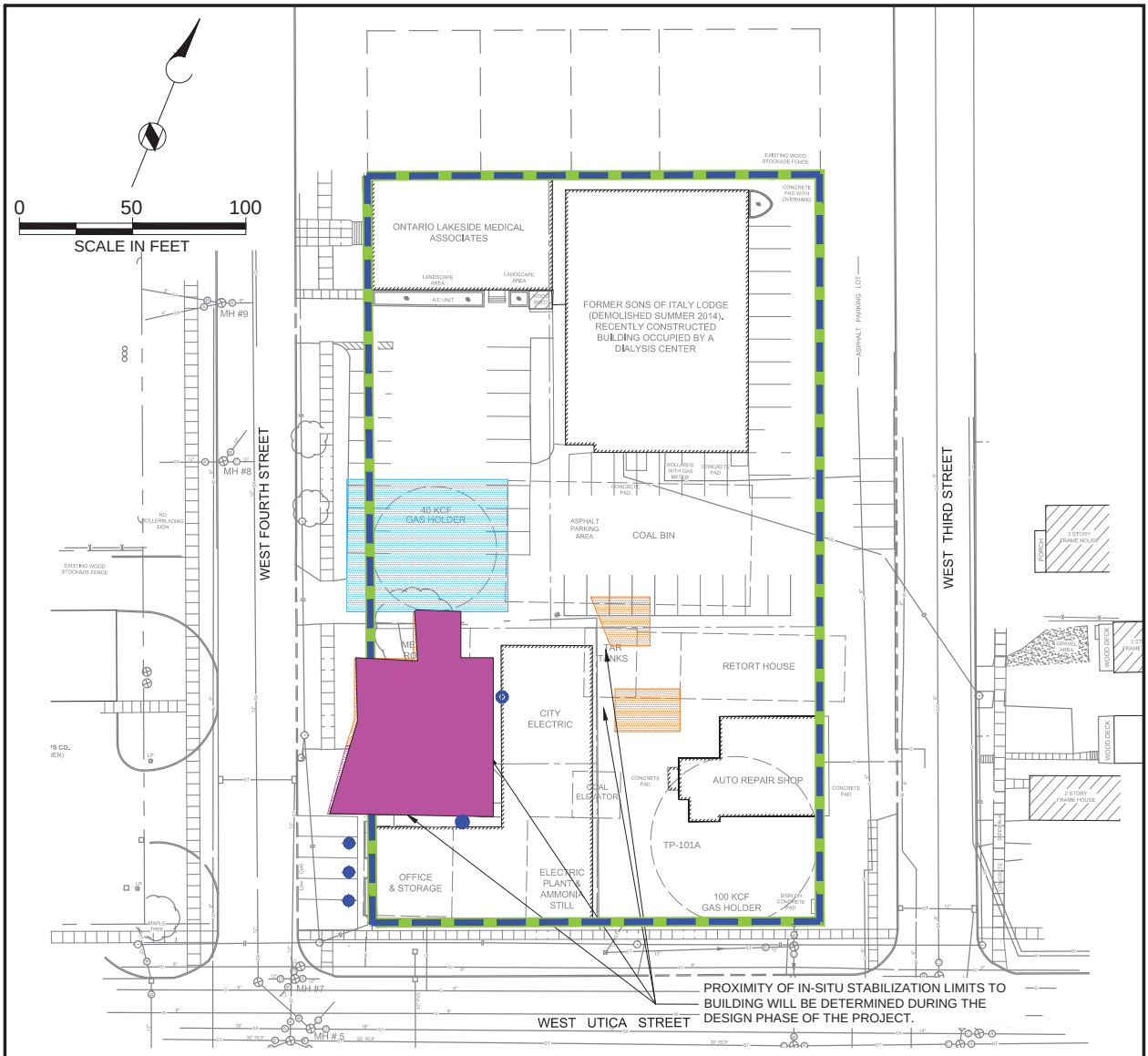
North

Figure 1 Site Location

Oswego (W. Utica St.) Former MGP Site

West Utica St. at West 3rd St.

City of Oswego NY



LEGEND:

- MANHOLE
- POWER POLE
- W — WATER LINE
- G — GAS LINE
- SA — SANITARY SEWER
- ST — STORM SEWER
- UE — UNDERGROUND ELECTRIC LINE
- SITE BOUNDARY AND LIMITS OF OPERABLE UNIT (OU) 1
- LIMIT OF ENGINEERING AND INSTITUTIONAL CONTROLS, (EC/IC)
- TAX PARCEL BOUNDARIES
- FORMER MGP STRUCTURE LOCATION. LOCATIONS ARE APPROXIMATE, BASED ON 1924 SANBORN FIRE INSURANCE MAP.
- IN-SITU STABILIZATION OF FORMER GAS HOLDER AREA ESTIMATED DEPTH: 22 FEET BGS.
- IN-SITU STABILIZATION OF MGP-IMPACTED SOURCE MATERIAL TO TOP OF ROCK, ESTIMATED DEPTH: 18 FEET BGS.
- IN-SITU STABILIZATION OF MGP-IMPACTED SOURCE MATERIAL TO ESTIMATED DEPTH OF 12-15 FEET BGS.
- NAPL RECOVERY WELL

SOURCE:
BASE MAP DEVELOPED BASED ON DRAWING PREPARED BY SNYDER ENGINEERING & LAND SURVEYING, LLP (JANUARY 11, 2005: REVISED DECEMBER 10, 2010).

Brown AND Caldwell

SCALE: 1" = 50'
JOB NUMBER: 146991
DATE: February 29, 2016

REMEDIAL ACTION PLAN
NATIONAL GRID
OSWEGO (WEST UTICA ST.) FORMER MGP SITE
OPERABLE UNIT (OU) 1
OSWEGO, NEW YORK

FIGURE
2

Path: P:\National_Grid\Oswego\146991_Proposed-Additional-Activities\CADD\2-SHEETS\C-CIVIL File Name: FIG-1_Rev-2-29-2016 Plot Date: February 29, 2016 9:32 AM Cadd User: Richard James