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July 22, 2026
File No. 01.0171094.40

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
150 Presidential Way
Woburn, Massachusetts 01801

Re: Release Abatement Measure Plan
Former Malden Manufactured Gas Plant (MGP) Site
Installation of Automated Non-Aqueous Phase Liquid (NAPL) Recovery System
65-77 Commercial Street, Malden, Massachusetts
MassDEP Release Tracking Number (RTN) 3-362

To Whom it May Concern:

On behalf of Massachusetts Electric Company d/b/a National Grid (National Grid), GZA GeoEnvironmental, Inc. (GZA) has prepared this Release Abatement Measure (RAM) Plan for the installation of an automated non-aqueous phase liquid (NAPL) recovery system at a portion of the former Malden manufactured gas plant (MGP) site located in Malden, Massachusetts (Site). The RAM will be conducted under the primary Release Tracking Number (RTN) 3-362 assigned to the Site by the Massachusetts Department of Environmental Protection (MassDEP). A Locus Plan is included as Figure 1, a Site Plan showing the parcels that comprise the Site and locations of the RAM work areas is included as Figure 2, and a detail of the RAM work area is shown on Figure 3. The RAM will be completed on properties located between 51 and 77 Commercial Street (Parcel A), with temporary soil storage located within the Site boundary at a National Grid-owned secure facility at 100 Commercial Street (Parcel E).

This RAM Plan has been prepared in accordance with Section 310 CMR 40.0444 of the Massachusetts Contingency Plan (MCP). A copy of the RAM Transmittal Form BWSC-106 is included in Appendix A. The RAM work will not include the construction of any new buildings or permanent structures; therefore, the assessment, risk characterization, feasibility evaluation, and source control provisions of 310 CMR 40.0441(3) for RAMs involving the construction of structures that could impede response actions do not apply. In GZA's opinion, the proposed RAM work will not limit or prevent any likely future response actions. The RAM Plan is subject to the limitations in Appendix B.

CONTACT INFORMATION (310 CMR 40.0444(1)(a))

The National Grid project manager responsible for response actions related to RTN 3-362 is:

Mr. Patrick Lydon
Program Manager, Site Investigation & Remediation
Massachusetts Electric Company d/b/a National Grid
170 Data Drive, Waltham, MA 02451
(508) 571-4268



The Licensed Site Professional (LSP) overseeing the RAM is:

Mr. Charles A. Lindberg (LSP License No. 6891)
GZA GeoEnvironmental, Inc.
249 Vanderbilt Avenue
Norwood, Massachusetts 02062
Phone: (781) 278-3830

DESCRIPTION OF RELEASE, SITE CONDITIONS AND SURROUNDING RECEPTORS (310 CMR 40.0444(1)(b))

RELEASE DESCRIPTION AND STATUS OF MCP RESPONSE ACTIONS

The Malden MGP was formerly owned and operated by the Malden and Melrose Gas Light Company (MMGLC) and its successor, the Mystic Valley Gas Company (MVGC). Between approximately the mid-1800s and early 1970s, the MGP expanded to include approximately 16.4 acres of land in the vicinity of Commercial and Charles Streets on Parcels A through E shown on Figure 2. The former MGP facilities were decommissioned during the 1970s. As a result of the historical MGP operations, coal tar residuals including NAPL and related compounds are present in soil and groundwater at the Site.

Portions of the former MGP have been the subject of MCP assessment and remedial activities since 1988. Several MassDEP RTNs have been issued for the Site and have been addressed either separately or in connection with the main Site RTN 3-362. Response actions for some areas within and adjacent to the disposal Site boundary for RTN 3-362 resulted in the prior closure under the MCP of the following areas:

- Parcel C (3.4 acres) was closed with a Waiver Completion Statement under RTN 3-2066 in 1990; and,
- A portion of Parcel D including Callahan Park (2.4 acres) was closed with a Partial Class A-3 Response Action Outcome (RAO¹) under RTN 3-13310 in 1997.

In February 2004, a partial Class C Response Action Outcome (RAO) was submitted for the Site by Haley & Aldrich, Inc. (H&A) in February 2004. The Class C RAO was submitted for portions of the disposal Site which had not been previously closed with a Waiver Completion Statement or a Permanent Solution RAO. Subsequently, the following partial Class A-2 RAOs or Permanent Solution Statements with Conditions (PSSCs) were filed under RTN 3-362:

- A Partial Class A-2 RAO was filed for the Malden River portion of the Site (2.2 acres) in 2007;
- The Partial Site Parcel B and vicinity (2.9 acres) was closed with a partial PSSC in 2022; and
- The Partial Site at Parcel E (6.5 acres) was closed with a partial PSSC in 2024 (RTN 3-0362).

Figure 2 shows the Partial RAO/PSS and TSS portions of the Site. Post-TSS MCP response actions continue to be performed at Parcel A, a portion of Parcel D and an adjacent section of Charles Street, the southwestern corner of Parcel E, and portions of roadways and a portion of the MBTA Orange Line right-of way that lie within the Temporary Solution area. These response actions are documented in semi-annual status reports in April and October of each year, and a Periodic Review of the TSS is filed once every five years, most recently in March 2024.

¹ Following the promulgation of changes to the MCP in 2014, the term the term "Permanent Solution Statement (PSS)" replaced all former categories of Class A and Class B RAOs and the term "Temporary Solution Statement (TSS)" replaced the former category of "Class C RAO."



The Site was classified as Tier IB in 1999, and Tier IB Permit Extension requests were submitted in November 2004, 2009, 2011, and 2013. Following the 2014 MCP revisions, Tier Classification Extension requests were submitted in November 2015, 2017, 2019, 2021, and 2023; the November 2017 submittal included documentation to support re-classification of the Site as Tier II. These requests were presumptively approved by MassDEP; thus, the Site is currently classified as a Tier II site. Following the promulgation of changes to the MCP in 2024, no additional Tier Classification Extensions are required as long as post-TSS status reports and Periodic Review documents (as applicable) are submitted.

SITE CONDITIONS AT THE RAM WORK AREAS

Following the decommissioning of the former MGP, the properties within the Site boundary were redeveloped and are now owned and/or controlled by various entities. During the RAM, active subsurface activities will take place in portions of Parcel A, and above-ground (non-intrusive) soil management activities will take place at Parcel E. As shown on Figure 2, Parcel A is bordered by Commercial Street to the east, Charles Street to the south, a Massachusetts Bay Transit Authority (MBTA) Orange Line railroad right-of-way to the west, and Centre Street to the north. By 1912, the American Tar Company was operating a tar refining operation on the northern portion of Parcel A and on land currently occupied by the Centre Street Right of Way. Today, Parcel A comprises six commercial properties located between 51 and 109 Commercial Street. Within Parcel A, the southern properties at 89 Commercial Street, 99-103 Commercial Street, and 105-109 Commercial Street lie outside the RAM work area and are not discussed further in this submittal. The RAM will be conducted at the three northern properties at Parcel A, i.e., 51, 65, and 77 Commercial Street, which are described below.

Parcel A - 51 Commercial Street

This property is owned by National Grid and is leased to a bank. In 2007, Innovative Engineering Solutions, Inc. (IESI) on behalf of National Grid submitted a RAM Plan for NAPL recovery at this location. In 2008, prior to the construction of the bank, IESI oversaw the installation of seven extraction wells designated as EW-1 through EW-7, which were connected via subsurface piping to a treatment system enclosure located in the southwestern corner of the property. Construction of the bank building under the 2007 RAM included soil management activities, the installation of clean utility corridors, a passive sub-slab venting system, and a cap system intended to meet the requirements of an engineered barrier (as outlined in the MCP) on the property. Well gauging activities completed after construction of the system building did not detect recoverable NAPL in the seven extraction wells at the property. Based on these observations, the installation of ancillary mechanical components and startup of the recovery system was postponed in 2008 and a program of periodic extraction well gauging was initiated. As documented in semi-annual post-TSS and RAM status reports, routine gauging at this property on an annual basis has not detected recoverable NAPL in the wells at 51 Commercial Street in the past 18 years. However, the treatment system enclosure is still in place, and will be modified during the upcoming RAM to house system controls and piping connections. A NAPL storage tank (installed as part of the previous system) will be used for the temporary storage of recovered NAPL from the active pumping of wells on the 65 and 77 Commercial Street properties. Note that the system will not include NAPL recovery from the 51 Commercial Street property.

Parcel A - 65 Commercial Street and 77 Commercial Street

The two properties at 65 Commercial Street and 77 Commercial Street are owned by different private entities, but are discussed together in this RAM because they will be the location of similar trenching and piping installation activities for NAPL recovery at Parcel A. As discussed in GZA's semi-annual status reports, dense non-aqueous phase liquid (DNAPL) has been consistently observed in monitoring and recovery wells previously installed at both properties. Previous investigations indicated that DNAPL is not uniformly distributed across the properties but rather is preferentially located with a buried stream channel. The channel runs under the western portion of 65 Commercial Street property and south of the building onto the 77 Commercial Street property. The NAPL is generally present within a fill unit that extends to



depths of 12 to 15 feet below ground surface (bgs); the fill is underlain by an organic silty-clay deposit that limits the downward migration of the DNAPL. Manual recovery between 2010 and March 2019 resulted in the cumulative removal of approximately 950 gallons of NAPL from wells at the two properties, with most of the recovered NAPL generated from B1401-OW and 00A-B913-OW on the 65 Commercial Street property. GZA observed that NAPL could often be successfully pumped from a thin seam of coal tar that is known to be present at well 00A-B913-OW even when no measurable DNAPL was observed at this location. In contrast, the DNAPL at 00A-B914-OW was too thick to be removed using a peristaltic pump. A NAPL recovery evaluation found that the average DNAPL transmissivity at B1401-OW is substantially lower than the MassDEP NAPL recovery feasibility criterion of 0.8 ft²/day and confirmed that recoverable DNAPL is present at well 00A-B913-OW and could be recovered at a consistent, low flow rate.

The property at 65 Commercial Street is owned by a private party that has granted National Grid access to install and operate a NAPL recovery system. This property is currently occupied by a Midas muffler and auto repair shop and will be the location of trenching and piping installation activities to connect five recovery wells to the treatment system enclosure at 51 Commercial Street. Similar RAM activities are also planned at the property at 77 Commercial Street to connect a sixth recovery well to the treatment system enclosure but may be deferred pending the completion of a property transaction and associated access negotiations.

As discussed in the October 2020 post-TSS status report, GZA installed six NAPL recovery wells in August 2020 within the assumed alignment of the buried stream channel. As shown on Figure 3, wells RW-A1 through RW-A4 were installed at 65 Commercial Street along the northern and western property boundaries, well RW-A5 was installed to the south of the 65 Commercial Street building near B1401-OW, and well RW-A6 was installed in the northeastern corner of the 77 Commercial Street property. A peat layer was encountered at three of the locations between the granular fill material and the organic silt layer, and the highest PID readings and evidence of coal tar saturation were observed at the fill-peat or fill-organic silt boundary. The recovery wells were screened across this impacted zone, with a 2-foot-long solid stainless-steel sump installed at the bottom of each well within the less permeable organic silt deposit. The wells were constructed of 4-inch stainless steel well screen and 4-inch PVC riser. The field screening data, soil classifications, NAPL observations, and monitoring well construction details were presented on well logs included in the October 2020 status report.

During a subsequent well development event in September 2020, no measurable NAPL was detected in wells RW-A1, RW-A3, and RW-A4, but blebs of product were observed on the probe when gauging RW-A1 and RW-A3, and emulsified NAPL was observed in the fluids generated during development. DNAPL was detected at an accumulation of 3.2 feet in RW-A2 and 6.3 feet in RW-A5²; these two wells also had a thin layer of light non-aqueous phase liquid (LNAPL) present. Well RW-A6 had approximately 5.5 feet of DNAPL; no LNAPL was observed at this location. Both LNAPL and DNAPL were found to recharge back into the wells to approximately their original measured thickness/accumulation within 24 to 36 hours after development. During subsequent field events over the following year, GZA observed DNAPL of varying viscosity in wells RW-A2 through RW-A6 at accumulations ranging from approximately 2.3 feet in RW-A2 to 6.2 feet in RW-A5 and oversaw the manual recovery of DNAPL using absorbent socks. An additional 242 gallons of fluids were generated when developing wells RW-A1 through RW-A6 in September 2020, although it was not possible to estimate a separate volume of NAPL recovered due to the emulsified nature of the pumped liquids.

Manual recovery was suspended between June 2021 and August 2025. Well gauging indicated that no measurable DNAPL was present in wells 00A-B913-OW (sheen on probe), B1401-OW, and RW-A1 (trace blebs). The estimated DNAPL accumulation in the other wells ranged from 1.39 feet at RW-A4 to 5.62 feet at RW-A5. NAPL recovery was not performed on the recovery wells since plans were underway to install the active recovery system at the time. These plans were

² In cases where the depth to bottom could not be accurately gauged, the DNAPL thickness was estimated based on either a previously gauged depth to bottom or, in the case of newly installed wells, the depth of the well sump as documented on the well log.



subsequently delayed due to the COVID pandemic and on-going remedial projects underway at the 100 and 129 Commercial Street properties. It is estimated that a cumulative volume of 1,022 gallons of NAPL was recovered from the two properties at 65 and 77 Commercial Street through August 2025.

Upon receipt of updated access agreements with the property owners, absorbent socks were used to recover NAPL from the affected wells in September 2025 and April 2026. Approximately 14.49 and 14.70 gallons of NAPL were recovered from the recovery wells and selected monitoring wells during the September 2025 and April 2026 rounds, respectively. Most of the NAPL was removed from recovery wells RW-A2 through RW-A6 during both recovery rounds. These wells are anticipated to be connected to the planned recovery system depending upon the performance of pre-remedial recovery tests. Monitoring well 00A-B913-OW will also be connected to the system and tested prior to installing a recovery pump to evaluate the efficacy of recovery from this well.

Parcel E – 100 Commercial Street

In addition to the active subsurface activities at the properties described above, non-intrusive temporary storage of excess soils and remediation waste will be conducted at Parcel E. This parcel is located at 100 Commercial Street; it is owned by National Grid and used as an active natural gas operations and maintenance center. It consists of approximately 6.6 acres of land and is occupied by three buildings and associated paved parking and landscaped areas. The facility is fenced and gated, with access limited to National Grid employees and approved contractors; as such, it offers a secure location for the temporary storage of remediation waste within the disposal Site boundary. The temporary soil storage area will be located in the southeastern corner of the facility (Figure 2) and will be managed as described later in this RAM Plan.

As shown on Figure 2, most of this parcel was included within a Partial PSSC filed in 2024. The limited scope of the proposed RAM at Parcel E, which does not include any subsurface activities at this property, is allowed under the terms of the 2024 Activity and Use Limitation (AUL) for this parcel.

SURROUNDING RECEPTORS

The primary receptors during the RAM will include construction workers and GZA employees in the work zone performing subsurface activities and oversight, and to a lesser extent the employees of the properties at Parcel A where subsurface activities will be conducted, as well as passers-by in the vicinity of these properties. GZA and contractor personnel within the work area will perform work under their company's Site-specific Health and Safety Plan (HASP). Soil operations and handling in areas where MGP-impacted soils are anticipated will be conducted by Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER)-trained individuals and managed in accordance with state and federal regulations. As discussed in the Monitoring Plan section of this document, volatile organic compounds (VOCs) and dust that may be generated during the work will be monitored, and measures will be implemented as necessary to protect the health of the construction workers, employees, and the public.

The closest residential properties are located approximately 300 feet southeast of the southeastern corner of Parcel E; no residences are located in the immediate vicinity of the RAM areas. One recreational area, Callahan Park and MacDonald Stadium, lies within 500 feet to the west of Parcel A and is separated from the RAM Area by the elevated rail bed for the MBTA Orange Line train. Callahan Park/MacDonald Stadium houses a baseball field, football stadium, and a track and field facility. No institutions (as defined by the MCP) were identified within 500 feet of Parcel A or E.

Surface water resources in the vicinity of the Site include the Malden River and West End Brook (WEB). Both waterways are contained within buried culverts which traverse or run adjacent to Parcels A and/or E. The WEB culvert extends west to east beneath Parcels D, A, and E and discharges into the Malden River culvert on the 100 Commercial Street property. The Malden River runs beneath Centre Street from the north and along the eastern boundary of Parcel E. The culvert



extends beneath Charles Street to the south and the river exits the culvert approximately 400 feet south of Parcel E. As indicated on the MassGIS Priority Resource Map included in Appendix C, no Zone II areas, Interim Wellhead Protection areas, Zone A areas, or Potentially Productive Aquifers have been identified within 500 feet of the Site. Additionally, there are no Areas of Critical Environmental Concern, Sole Source Aquifers, or habitats of Species of Special Concern or Threatened or Endangered Species within 500 feet of the Site as depicted on available resource maps.

OBJECTIVE, PLAN, AND SCHEDULE (310 CMR 40.0444(1)(c))

OBJECTIVE

The primary objective of the RAM work is to perform environmental monitoring and manage remediation waste that may be generated during trenching and piping installation for the NAPL recovery system. As such, the RAM will be deemed complete once the trenches have been backfilled and remediation waste has been transported off the Site. Subsequent activities related to the start-up of the NAPL recovery system, including the installation of NAPL recovery pumps and aboveground system components, as well as operation, maintenance, and monitoring (OMM), will be conducted as RAM activities connected to the on-going RAM for the B108-RW system at the 100 Commercial Street property and reported in the semi-annual Post-TSS and RAM Status reports submitted to MassDEP under RTN 3-362.

RAM PLAN

The construction work will be performed by Strategic Environmental Services (SES) of Sutton, Massachusetts under contract to National Grid. GZA will provide full-time field oversight of the construction activities.

Pre-RAM Activities

Prior to the initiation of the trenching and piping installation activities under this RAM, GZA will oversee utility clearance at the Parcel A properties via Ground-Penetrating Radar (GPR), and SES will mobilize to the Site to set up the facilities required for RAM implementation. It is anticipated that SES will set up a secure work area within the western section of the 65 Commercial Street property that will occupy the parking spaces in this area of the property. The secured area will be surrounded by temporary fencing that will extend from the northwestern corner of the building to the northern property boundary. The fencing will be marked with orange cones and/or caution tape to make it more visible to customers and employees. The temporary fencing may have to be moved periodically to transfer excavated soil to dump trucks or roll-off containers for subsequent transport to a staging location on the National Grid property at 100 Commercial Street and/or to deliver equipment and materials to the work area. The SES crew will be responsible for controlling traffic to and from the work area so that vehicles (mainly 10-wheel dump trucks and delivery vehicles) are safely maneuvered within the RAM work area, 65 and 77 Commercial Street properties, public roads, and within the 100 Commercial Street facility.

During this phase, SES will also contact DigSafe to clear the site/work area for utilities and may perform localized test-pitting to expose the depth of a retaining wall footing along the western extent of the RAM work area, the lateral extent of a dry well believed to be present behind the building at 65 Commercial Street, and unknown subsurface features that may be identified by the GPR. SES will likely also explore the area immediately around the treatment system enclosure at 51 Commercial Street to investigate the depth and extent of subsurface utilities associated with the 2007 (inactive) system installed by IESI. No excess soil will be generated during these pre-RAM activities.



RAM Activities

Trenches will be excavated along the alignment shown on Figure 3 to install subsurface PVC piping that will contain the compressed air and NAPL recovery tubing to operate pneumatic downhole NAPL recovery pumps connected to five recovery wells (RW-A2 through RW-A6) and one monitoring well (00A-B913-OW) at the Site. The piping will be installed between each well and the existing treatment system enclosure on the 51 Commercial Street property where the pump controls and NAPL recovery tank are located. Prior to trenching for the piping installation, the pavement and the concrete pad (located west of the Midas building) above the planned trench alignment will be saw-cut and the asphalt and concrete will be collected for off-Site recycling. It is anticipated that the work sequence will progress from north to south, and will include soil excavation, installation of system piping and manholes (installed at each recovery well and pull box location shown on Figure 3) and backfilling of the trench areas with bedding sand and suitable excess soil from the trench areas. We have estimated a total of approximately 150 cubic yards of soil will be disturbed as part of the RAM work and approximately 70 to 80 cubic yards of excess soil may require off-site thermal treatment and reuse at the Clean Earth Thermal Treatment (Clean Earth) facility in Loudon, New Hampshire.

Upon completion of the backfilling and soil compaction activities, SES will prepare the excavated trench areas for pavement by placing and compacting an approximately 8 to 12-inch layer of free-draining sand and gravel fill (or processed dense-grade fill) within the upper portion of the trench as a base layer for the pavement. The pavement area above the trench, and areas where severe cracking is observed immediately adjacent to the trench, will be repaved with a two-inch-thick base course and two-inch-thick topcoat layer of asphalt. SES will subcontract this work to a professional paving company.

Procedures for Soil and Water Storage and Management

As the trenching progresses, SES will stage excavated soil in temporary stockpiles placed on polyethylene sheeting in proximity to the trench. It is National Grid's intent to re-use as much soil as possible and to limit the volume of material that has to be transported off the Site for disposal. To that end, SES will place and compact structurally suitable and visually unimpacted excavated soil as backfill material above the bedding sand in the trenches. However, it is expected that some excess soil will be generated due to the need for specific grades of imported fill material to be used as bedding soil around the piping and as a base layer beneath the pavement. Excess soil, including material that shows field evidence of significant MGP impacts and/or the presence of excessive debris, will be loaded into a 10-wheel dump truck and transported to a staging area on the National Grid-owned 100 Commercial Street property at the end of each day's work as needed to maintain adequate space within the work area.

Soil Storage at Parcel A

It is anticipated that temporary stockpiles created for re-use at the Parcel A properties will be small and of limited duration due to space constraints at these properties. Such stockpiles will be located in close proximity to the trench, and will not require lining and/or covering, unless the soil indicates evidence of coal tar or other visible MGP impacts or is expected to be stored overnight. The pile will then be covered with polyethylene sheeting until it is reused. Air monitoring will be performed during excavation and periodically along open excavation and stockpile areas as described in the Monitoring Plan section of this document. Action levels will be established as part of this monitoring program that would prompt control measures, including the covering or wetting down of temporary stockpiles to control dust and/or foaming to control odors and potential airborne VOCs to limit potential impacts outside of the work areas.



Soil and Excess Materials Storage at Parcel E

The excess soil transported to Parcel E will be stored in either lined stockpiles or roll-off containers in the southeast corner of the property, which has been designated as the support area for this project and approved by National Grid facility personnel. Stockpiles, if used, will be placed on and covered with polyethylene sheeting weighted down at the edges to limit rain infiltration, erosion, and dust generation. MGP-impacted soils generated during the work will be managed in accordance with the provisions of 310 CMR 40.0030 of the MCP and soils requiring off-Site management will most likely be transported to the Clean Earth thermal and recycling facility. We anticipate that a composite soil sample will be collected from the stockpiles/roll-off containers and submitted for characterization analyses to confirm that the material meets the facility acceptance criteria.

Aphalt, brick, or concrete (ABC), metal, or other materials deemed unsuitable for reuse as fill material within the project area will be segregated and stored/disposed separately from soil containing MGP residuals. These materials will not require lining or covering of the stockpiles. It is not anticipated that significant quantities of painted or coal tar-coated debris will be encountered, but if present, such material will be segregated and processed in accordance with MassDEP guidance and with the proper documentation.

Water Management

It is not anticipated that significant quantities of groundwater will be encountered during the work. However, provisions will be in place to manage construction water or stormwater generated during significant rain events. Such water will be pumped to totes and if required to a fractionation tank for temporary storage pending on-Site infiltration or off-Site disposal. If the on-Site infiltration option is selected, discharges will be to the subsurface within the RAM work area at Parcel A and will be managed in accordance with 310 CMR 40.0045. We anticipate that the provisions of 310 CMR 40.0045(4) or 40.0045(6) – upgradient discharge or discharges of nonreportable OHM concentrations – will apply. If impacted groundwater is encountered requiring pumping and temporary storage, the impacted water will be tested and transported for off-site treatment/disposal/recycling.

Safety Precautions

As noted earlier, SES and GZA personnel will be HAZWOPER-trained and will perform work in accordance with their company's HASP. Safety precautions will be implemented during the RAM to secure the work area(s) at Parcel A from unauthorized access at the end of each workday. On the south side of the building at 65 Commercial Street, trenching and piping installation work may require the placement of steel plates over open excavations within areas where temporary fencing cannot be installed within the 77 Commercial Street parking lot. As needed, traffic cones and/or caution tape will be used to mark off areas where specific hazards may be identified throughout and adjacent to the work areas. It is anticipated that most of the project will be performed during regular daytime hours, although some work may be required at night to limit disruptions to facility operations. In the event of night work, SES will set up adequate lighting and barriers to create a safe work environment for both its crew and passers-by.

SCHEDULE

The RAM work is anticipated to begin in July 2026 and is expected to take approximately six weeks to complete, excluding any significant delays associated with the pending property transaction at 77 Commercial Street. We anticipate that a RAM Completion Report will be filed within 60 days of completion of the RAM activities and/or the final shipment of remediation waste from the project, or within 120 days of the submittal of the RAM Plan.



REMEDIATION WASTE, REMEDIAL WASTEWATER AND/OR REMEDIAL ADDITIVES (310 CMR 40.0444(1)(d))

National Grid intends to reuse the excavated soil on the Site to the extent feasible; however, it is anticipated that some soil will require off-Site treatment/reuse due to project constraints and soil quality. Based on the dimensions of the trenches, as described above, it is estimated that approximately 150 cubic yards of soil will be disturbed during the RAM and that up to 80 cubic yards of soil may require off-site treatment and recycling at Clean Earth. This material will be properly characterized and transported off the Site in accordance with 310 CMR 40.0030.

ABC materials will be transported to a licensed ABC facility in Massachusetts for recycling and reuse by SES.

It is not anticipated that significant quantities of groundwater will be generated during the RAM. However, remedial wastewater in the form of construction water or stormwater, and/or groundwater encountered during excavation during the project will be temporarily stored and managed on the Site or transported off-Site for appropriate treatment/disposal/recycling as noted above.

Use of remedial additives is not anticipated as part of this RAM.

ENVIRONMENTAL MONITORING PLAN (310 CMR 40.0444(1)(e))

The work will be performed under a Site-specific HASP, and during excavation, GZA will monitor ambient air around the work zone for the presence of VOCs using a Photoionization Detector (PID) and for fugitive dust using a portable dust meter. Action levels for work zone monitoring will be documented in the HASP. Perimeter monitoring of the work zone area will also be conducted periodically during soil disturbance activities. If VOCs are detected at concentrations greater than 1 part per million by volume (ppmv) sustained over a 15-minute period or dust readings are detected above 0.150 milligrams per cubic meter (mg/m³) at the work zone perimeter, work will be discontinued to evaluate conditions and assess mitigation measures. These action levels were derived based on previous evaluations of Site conditions and a review of soil data for the RAM area and are considered conservative based on the constituent types and concentrations detected at the Site. As noted above and if required, odor suppressant foam will be used to control VOCs and odors and dust control measures (e.g., soil wetting, covering of stockpiles) will be implemented. Should elevated readings persist despite these measures, additional engineering controls will be considered and implemented if needed and/or personal protective equipment (PPE) will be upgraded to allow work to resume.

FEDERAL, STATE AND/OR LOCAL PERMITS (310 CMR 40.0444(1)(f))

National Grid's contractor will obtain Dig Safe clearance prior to excavation activities. MCP Bills of Lading and/or hazardous waste manifests will be prepared prior to transporting soil and/or groundwater for off-Site disposal or treatment, as necessary. GZA did not identify additional permits that would be required for the RAM work.

SEAL AND SIGNATURE OF LSP (310 CMR 40.0444(1)(g))

The LSP certification is provided on the attached Transmittal Form BWSC-106.

CERTIFICATION FOR GREATER THAN 1500 CUBIC YARDS OF SOIL ((310 CMR 40.0444(1)(h))

At this time, there is no expectation that more than 1,500 cubic yards of soil will need to be managed as part of this RAM.

OTHER INFORMATION REQUIRED BY THE DEPARTMENT ((310 CMR 40.0444(1)(i))

No other information has been requested by MassDEP regarding RAM implementation.



PUBLIC INVOLVEMENT

The Site was designated as a Public Involvement Plan (PIP) site on April 6, 2022. In accordance with the PIP provisions, a public comment draft of this RAM Plan was filed on July 1, 2026. No comments were received during the 20-day waiting period.

In addition, in accordance with 310 CMR 40.1403(3)(d)2, the Chief Municipal Officer and Board of Health will be notified within the 20 days prior to the implementation of the RAM. A copy of the letter, which will be submitted electronically in accordance with agreement received from the City on January 22, 2025, is included in Appendix D.

We trust that this report addresses the relevant MCP requirements. If you have questions or need additional information, please feel free to contact Mr. Lindberg at (781) 278-3700.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'V Radics'.

Vijayalakshmi Radics
Senior Technical Specialist

A handwritten signature in blue ink, appearing to read 'Michael A. Gray'.

Michael A. Gray
Senior Consultant, LSP

A handwritten signature in blue ink, appearing to read 'Charles A. Lindberg'.

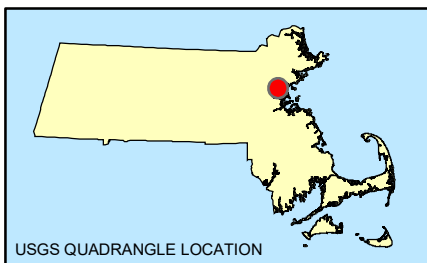
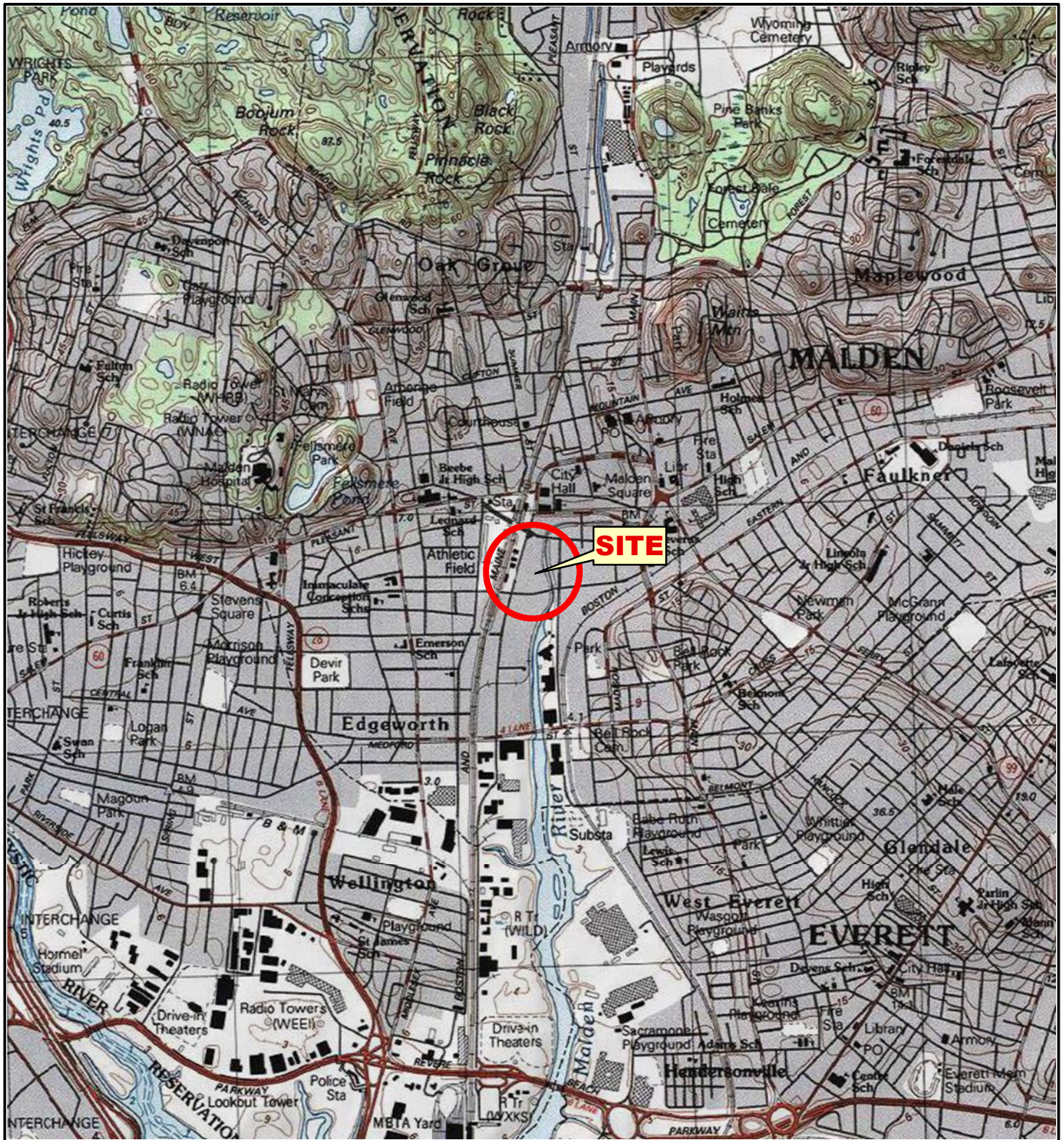
Charles A. Lindberg, LSP
Senior Principal

Attachments: Figures 1 through 3
Appendix A – Transmittal Form BWSC106
Appendix B – Limitations
Appendix C – MassDEP Priority Resource Map
Appendix D – Public Notice

cc: Patrick Lydon (National Grid)



Figures



USGS QUADRANGLE LOCATION

SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE USA TOPOGRAPHIC MAP SERVICE, PUBLISHED JUNE 19, 2019 BY ESRI ARCGIS SERVICES AND UPDATED AS NEEDED. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

Data Supplied by :



SCALE IN FEET



PROJ. MGR.: MAG
DESIGNED BY: VKR
REVIEWED BY: CAL
OPERATOR: EMD

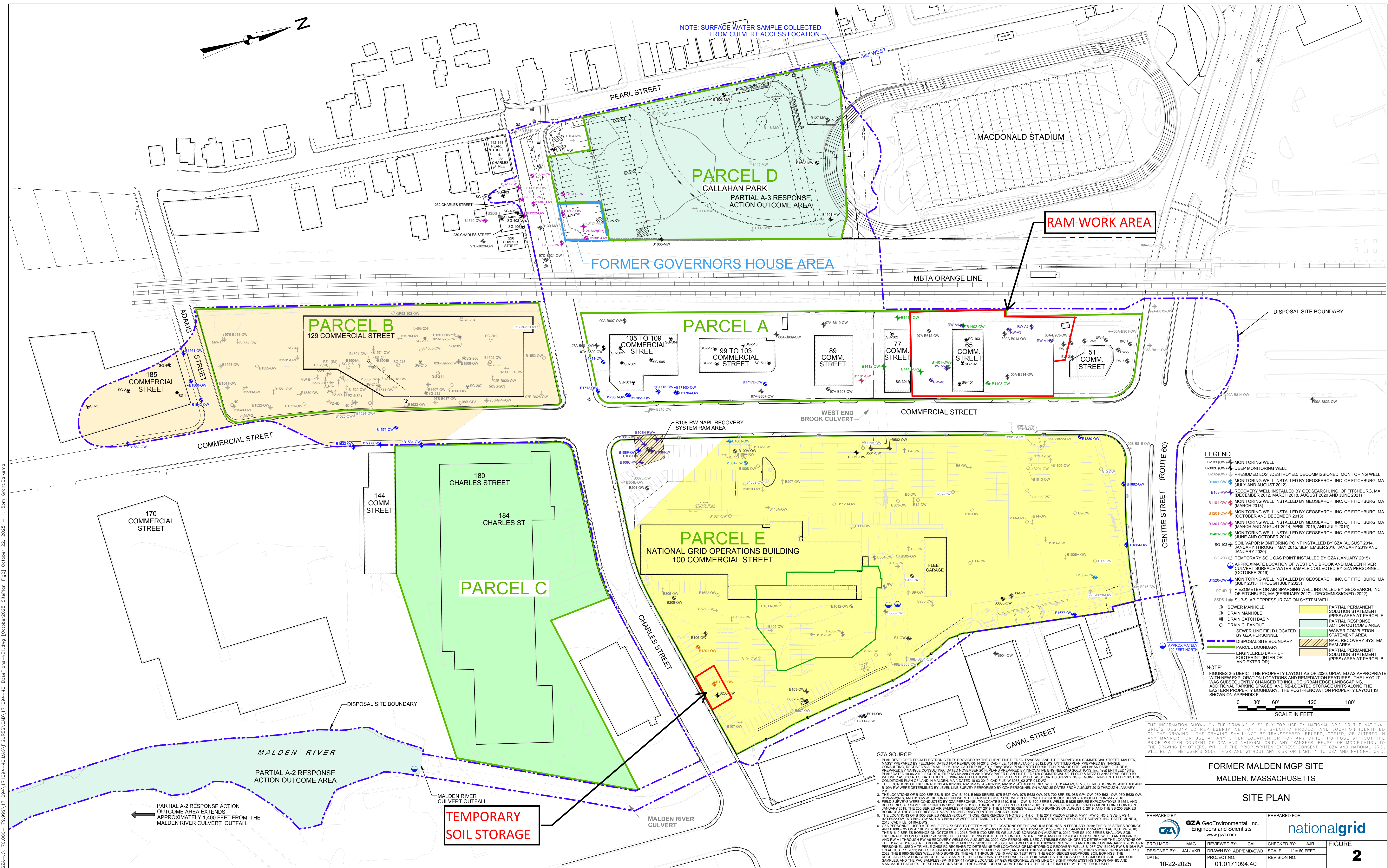
DATE: 01-08-2024

LOCUS PLAN

FORMER MALDEN MGP SITE
MALDEN, MASSACHUSETTS

JOB NO.
01.0171094.40

FIGURE NO.
1



97A-B612-OW MONITORING WELL

97A-B613 SOIL BORING

B1101-OW MONITORING WELL INSTALLED BY GEOSearch, INC. OF FITCHBURG, MA (MARCH 2013)

B-1102 SOIL BORING ADVANCED BY GEOSearch, INC. OF FITCHBURG, MA (MARCH 2013)

B1401-OW MONITORING WELL INSTALLED BY GEOSearch, INC. OF FITCHBURG, MA (JUNE AND OCTOBER 2014)

SG-301 SOIL VAPOR MONITORING POINT INSTALLED BY GZA (AUGUST 2014 THROUGH JANUARY 2020)

B1420 BORING ADVANCED BY GEOSearch, INC. OF FITCHBURG, MA (JULY 2015 THROUGH AUGUST 2020)

RW-1A RECOVERY WELLS INSTALLED BY GEOSearch, INC. OF FITCHBURG, MA (DECEMBER 2012, MARCH 2018 AND AUGUST 2020)

 WELLS WHERE NAPL HAS BEEN DETECTED

----- 2017 LEVEL-3 ASSESSORS' PARCEL BOUNDARY DATA DISTRIBUTED BY MASSGIS IN NOVEMBER 2018

1. PLAN DEVELOPED FROM ELECTRONIC FILES PROVIDED BY THE CLIENT ENTITLED "ALTA/ACSM LAND TITLE SURVEY 100 COMMERCIAL STREET, MALDEN, MASS" PREPARED BY FELDMAN, DATED FOR REVIEW 06-14-2012, CAD FILE: 13418-ALTA-6-18-2012.DWG; UNTITLED PLAN PREPARED BY NANGLE CONSULTING, RECEIVED VIA EMAIL 08-06-2012, CAD FILE: BB_XR_1 Entry.DWG; PLAN ENTITLED "SKETCH PLAN OF SITE CALLAHAN PARK", FIGURE 6, PREPARED BY NANGLE CONSULTING, DATED NOVEMBER 2014; PLANS PREPARED BY INNOVATIVE ENGINEERING SOLUTIONS, Inc. (iesi), ENTITLED "SITE PLAN" DATED 10-06-2010, FIGURE 6, FILE: NG Malden Oct 2010.DWG; PAPER PLAN ENTITLED "129 COMMERCIAL ST. FLOOR & MEZZ PLANS" DEVELOPED BY WEIDNER ASSOCIATES, DATED SEPT. 5, 1984; AND ELECTRONIC FILES DEVELOPED BY DGT ASSOCIATES SURVEYING & ENGINEERING ENTITLED "EXISTING CONDITIONS PLAN OF LAND IN MALDEN, MA.", DATED 10-03-2019, CAD FILE: W-6038 02-2TP-01.DWG.
2. THE LOCATIONS OF EXPLORATIONS A1-101-108, A3-101-119, A5-101-112, A6-101-104, B1000 SERIES WELLS, B14A-OW, GP700 SERIES BORINGS, AND B108 AND B109A-RW WERE DETERMINED BY LEVEL LINE SURVEY PERFORMED BY GZA PERSONNEL ON VARIOUS DATES FROM AUGUST 2012 THROUGH JANUARY 2013.
3. THE LOCATIONS OF B1300 SERIES, B1503-OW, B1504, B1600 SERIES, 97B-B627-OW, 97B-B628-OW, 97B-700 SERIES, 98B-GP4-OW, 97D-B621-OW, 97D-B620-OW, B124-MW(RP), AND B130-MW EXPLORATIONS WERE DETERMINED BY GPS SURVEY PERFORMED BY HANCOCK SURVEY ASSOCIATES IN MAY 2016.
4. FIELD SURVEYS WERE CONDUCTED BY GZA PERSONNEL TO LOCATE B1510, B1511-OW, B1520 SERIES WELLS, B1525 SERIES EXPLORATIONS, B1551, AND BCG SERIES AIR SAMPLING POINTS IN 2017; B601 & B1603 THROUGH B1608D IN OCTOBER 2018; THE SG-500 SERIES SOIL VAPOR MONITORING POINTS IN JANUARY 2019; THE 200-SERIES AIR SAMPLES IN FEBRUARY 2019; THE B1570 SERIES WELLS AND BORINGS ON AUGUST 5, 2019; AND THE SB-200 SERIES BORINGS & THE SG-1 SERIES SOIL VAPOR MONITORING POINTS IN JANUARY 2020.
5. THE LOCATIONS OF B1500 SERIES WELLS (EXCEPT THOSE REFERENCED IN NOTES 3, 4 & 6), THE 2017 PIEZOMETERS, MW-1, MW-5, NC-3, SVE-1, AS-1, 02B-B922-OW, 97B-B617-OW AND 97B-B618-OW WERE DETERMINED BY A "DRAFT" ELECTRONIC FILE PROVIDED BY DOUCET SURVEY, INC. DATED: JUNE 4, 2018, CAD FILE: 5410A.DWG.
6. GZA PERSONNEL USED A TRIMBLE GEO-7X GPS TO DETERMINE THE LOCATIONS OF THE VACUUM BORINGS IN FEBRUARY 2018; THE B108 SERIES BORINGS AND B108C-RW ON APRIL 26, 2018; B1540-OW, B1541-OW & B1542-OW ON JUNE 6, 2018; B1552-OW, B1553-OW, B1554-OW & B1555-OW ON AUGUST 24, 2018; THE B1610-SERIES BORINGS ON OCTOBER 11, 2018; THE B1700 SERIES WELLS AND BORINGS ON AUGUST 9, 2019; THE SS-100-SERIES SHALLOW SOIL EXPLORATIONS ON OCTOBER 24, 2019; THE ISS SOIL BORINGS & TEST PITS ON DECEMBER 3, 2019; AND THE B1700 & B1800 SERIES WELLS AND BORINGS AND RW-A1 THROUGH RW-A6 RECOVERY WELLS ON AUGUST 20, 2020. GZA PERSONNEL USED A TRIMBLE GEO-XH GPS TO DETERMINE THE LOCATIONS OF THE B1420 & B1430-SERIES BORINGS ON NOVEMBER 12, 2018; THE B1560-SERIES WELLS & THE B1620-SERIES WELLS AND BORING ON JANUARY 3, 2019. THESE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.



THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY NATIONAL GRID OR THE NATIONAL GRID'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA AND NATIONAL GRID. ANY TRANSFER, REUSE, OR MODIFICATION OF THE DRAWING BY OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF GZA AND NATIONAL GRID, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA AND NATIONAL GRID.

65 & 77 COMMERCIAL STREET
MALDEN, MASSACHUSETTS

CONSTRUCTION LAYOUT PLAN

PREPARED BY:

 **GZA** GeoEnvironmental, Inc.
Engineers and Scientists
www.qza.com

PREPARED FOR:

nationalgrid

PROJ MGR: MAG	REVIEWED BY: CAL	CHECKED BY: JRC	FIGURE 3
DESIGNED BY: JAI/VKR	DRAWN BY: EMD	SCALE: 1" = 30 FEET	
DATE: 10-15-2020	PROJECT NO. 01.0171094.40	REVISION NO.	



Appendix A

Transmittal Form BWSC106



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **KGERRA**

Transaction ID: **2031383**

Document: **BWSC106 Release Abatement Measure Transmittal Form**

Size of File: **184.23K**

Status of Transaction: **In Process**

Date and Time Created: **7/21/2026:4:40:50 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

A. SITE LOCATION:

1. Site Name/Location Aid: BOSTON GAS COMPANY MALDEN PLANT
2. Street Address: 100 COMMERCIAL ST
3. City/Town: MALDEN 4. Zip Code: 021480000
- ☒ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.
- ☐ a. Tier I ☐ b. Tier ID ☒ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): _____
(mm/dd/yyyy)
- ☒ 2. Submit an **Initial Release Abatement Measure (RAM) Plan**.
- ☐ a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.
- b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial
☐ iv. Industrial ☐ Other Specify: _____
- ☐ 3. Submit a **Modified RAM Plan** of previously submitted RAM Plan.
- ☐ 4. Submit a **RAM Status Report**.
- ☐ 5. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)
- a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
- b. Frequency of Submittal:
- ☐ i. A Remedial Monitoring Report(s) submitted every six months, concurrent with a RAM Status Report.
- ☐ ii. A Remedial Monitoring Report(s) submitted annually, concurrent with a RAM Status Report.
- c. Number of Remedial Systems and/or Monitoring Programs: _____
- A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.
- ☐ 6. Submit a **RAM Completion Statement**.
- ☐ 7. Submit a **Revised RAM Completion Statement**.
8. Provide Additional RTNs:
- ☐ a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.
- b. Provide the additional Release Tracking Number(s) - -
- ☐ 9. Include in the **RAM Plan** or **Modified RAM Plan** a **Plan for the Application of Remedial Additives** near a sensitive receptor, pursuant to 310 CMR 40.0046(3).

(All sections of this transmittal form must be filled out unless otherwise noted above)



**RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM**

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

Release Tracking Number

3 - 362

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:

1. Media Impacted and Receptors Affected: (check all that apply)
- | | | |
|---|---|---|
| ☐ a. Paved Surface | ☐ b. Basement | ☐ c. School |
| ☐ d. Public Water Supply | ☐ e. Surface Water | ☐ f. Zone 2 |
| ☐ g. Private Well | ☐ h. Residence | ☒ i. Soil |
| ☒ j. Ground Water | ☐ k. Sediments | ☐ l. Wetland |
| ☐ m. Storm Drain | ☐ n. Indoor Air | ☐ o. Air |
| ☐ p. Soil Gas | ☐ q. Sub-Slab Soil Gas | ☐ r. Critical Exposure Pathway |
| ☒ s. NAPL | ☐ t. Unknown | |
| ☐ u. Others | Specify: _____ | |

2. Sources of the Release or TOR: (check all that apply)
- | | | |
|--|---|-------------------------------------|
| ☐ a. Transformer | ☐ b. Fuel Tank | ☐ c. Pipe |
| ☐ d. OHM Delivery | ☐ e. AST | ☐ f. Drums |
| ☐ g. Tanker Truck | ☐ h. Hose | ☐ i. Line |
| ☐ j. UST | Describe: _____ | ☐ k. Vehicle |
| ☐ l. Boat/Vessel | | |
| ☐ m. Unknown | ☒ n. Other: _____ | HISTORICAL MGP OPERATIONS |

3. Type of Release or TOR: (check all that apply)
- | | | | |
|--|---|---|--------------------------------------|
| ☐ a. Dumping | ☐ b. Fire | ☐ c. AST Removal | ☐ d. Overfill |
| ☐ e. Rupture | ☐ f. Vehicle Accident | ☐ g. Leak | ☐ h. Spill |
| ☐ i. Test Failure | ☐ j. TOR Only | | |
| ☐ k. UST Removal | Describe: _____ | | |
| ☐ l. Unknown | ☒ m. Other: _____ | HISTORICAL MGP OPERATIONS | |

4. Identify Oils and Hazardous Materials Released: (check all that apply)
- | | |
|---|--|
| ☐ a. Oils | ☐ b. Chlorinated Solvents |
| ☐ c. Heavy Metals | ☒ d. Others |
| Specify: COAL TAR RESIDUALS, POLYCYCLIC AROMATIC HYDROCARBONS, EXTRACTABLE/VOLATILE PETROLEUM HYDROCARBONS. | |

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|---|---|
| ☐ 1. Assessment and/or Monitoring Only | ☐ 2. Temporary Covers or Caps |
| ☐ 3. Deployment of Absorbent or Containment Materials | ☐ 4. Temporary Water Supplies |
| ☐ 5. Structure Venting System/HVAC Modification System | ☐ 6. Temporary Relocation or Relocation of Residents |
| ☐ 7. Product or NAPL Recovery | ☐ 8. Fencing and Sign Posting |
| ☐ 9. Groundwater Treatment Systems | ☐ 10. Soil Vapor Extraction |
| ☐ 11. Remedial Additives | ☐ 12. Air Sparging |
| ☐ 13. Active Exposure Pathway Mitigation System | ☐ 14. Passive Exposure Pathway Mitigation System |
| ☐ 15. Monitored Natural Attenuation | ☐ 16. In-Situ Chemical Oxidation |



RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☒ 17. Excavation of Contaminated Soils

☒ a. Re-use, Recycling or Treatment ☒ i. On Site Estimated volume in cubic yards 70
☒ ii. Off Site Estimated volume in cubic yards 80
 iia. Receiving Facility: CLEAN EARTH Town: LOUDON State: NH
 iib. Receiving Facility: Town: State:
 iii. Describe: REUSE OF SUITABLE SOIL FOR TRENCH BACKFILL; THERMAL TREATMENT AND RECYCLING FOR EXCESS SOIL.

☐ b. Store ☐ i. On Site Estimated volume in cubic yards
☐ ii. Off Site Estimated volume in cubic yards
 iia. Receiving Facility: Town: State:
 iib. Receiving Facility: Town: State:
☐ c. Landfill ☐ i. Cover Estimated volume in cubic yards
 Receiving Facility: Town: State:
☐ ii. Disposal Estimated volume in cubic yards
 Receiving Facility: Town: State:

☐ 18. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount:

b. Receiving Facility: Town: State:
c. Receiving Facility: Town: State:

☐ 19. Removal of Other Contaminated Media:

a. Specify Type and Volume:

b. Receiving Facility: Town: State:
c. Receiving Facility: Town: State:

☐ 20. Other Response Actions:

Describe:

☐ 21. Use of Innovative Technologies:

Describe:



**RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM**

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

E. LSP SIGNATURE AND STAMP :

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Status Report** and/or **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply (ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal:

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate, or materially incomplete.

1. LSP #: 689
2. First Name: CHARLES A 3. Last Name: LINDBERG
4. Telephone: 7812783830 5. Ext: 6. Email: charles.lindberg@gza.com
7. Signature:
8. Date: 9. LSP Stamp:
(mm/dd/yyyy)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 106 12

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

F. PERSON UNDERTAKING RAM:

1. Check all that apply: ☒ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: MASSACHUSETTS ELECTRIC COMPANY
3. Contact First Name: PATRICK 4. Last Name: LYDON
5. Street: 170 DATA DR 6. Title: PROGRAM MANAGER SIR GROUP NE
7. City/Town: WALTHAM 8. State: MA 9. ZIP Code: 024510000
10. Telephone: 5085714268 11. Ext.: 12. Email: PATRICK.LYDON@NATIONALGRID.COM

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

☐ Check here to change relationship

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
☒ e. Other RP or PRP Specify: NON-SPECIFIED PRP
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking RAM Specify Relationship:

H. REQUIRED ATTACHMENTS AND SUBMITTALS:

- ☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the Remedial Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC 08).
- ☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach statement identifying the applicable provisions thereof.
- ☒ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.
- ☐ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to bwsc.edep@mass.gov.
- ☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 106 12

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

I. CERTIFICATION OF PERSON UNDERTAKING RAM:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: PROGRAM MANAGER SIR GROUP NE
(Signature)

4. For: MASSACHUSETTS ELECTRIC COMPANY 5. Date: _____
(Name of person or entity recorded in Section F) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____
8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____
11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER
BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT
SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM,
YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE

Date Stamp (EP USE ONLY)



DRAFT COPY



Appendix B

Limitations

GZA LIMITATIONS

1. This Release Abatement Measure (RAM) Plan has been prepared on behalf of and for the exclusive use of the Massachusetts Electric Company d/b/a National Grid, solely for use in summarizing work at the properties located at 51, 65, 77, and 100 Commercial Street in Malden, Massachusetts under the Massachusetts Contingency Plan (MCP - 310 CMR 40.0000). This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of GZA or National Grid. However, GZA acknowledges and agrees that the report may be conveyed to the Massachusetts Department of Environmental Protection (MassDEP).
2. GZA's work was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and GZA observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. GZA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA in preparation of this RAM Plan.
3. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based upon services performed and observations made by GZA.
4. In preparing this report, GZA has relied on reports prepared by others involved in this project under direct contract to National Grid, as well as certain information provided by state and local officials, and on information contained in the files of state and/or local agencies available to GZA at the time of the study. Although there may have been some degree of overlap in the information provided by these various sources, GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.
5. In the event that National Grid or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.
6. The conclusions and recommendations contained in this report are based in part upon the data obtained from environmental samples obtained from relatively widely spread subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
7. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more gradual. For specific information, refer to the boring logs.

8. In the event this work included the collection of water level data, these readings have been made in the test pits, borings and/or observation wells at times and under conditions stated on the exploration logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
9. The conclusions contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA and the conclusions and recommendations presented herein modified accordingly.



Appendix C

MassDEP Priority Resource Map

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

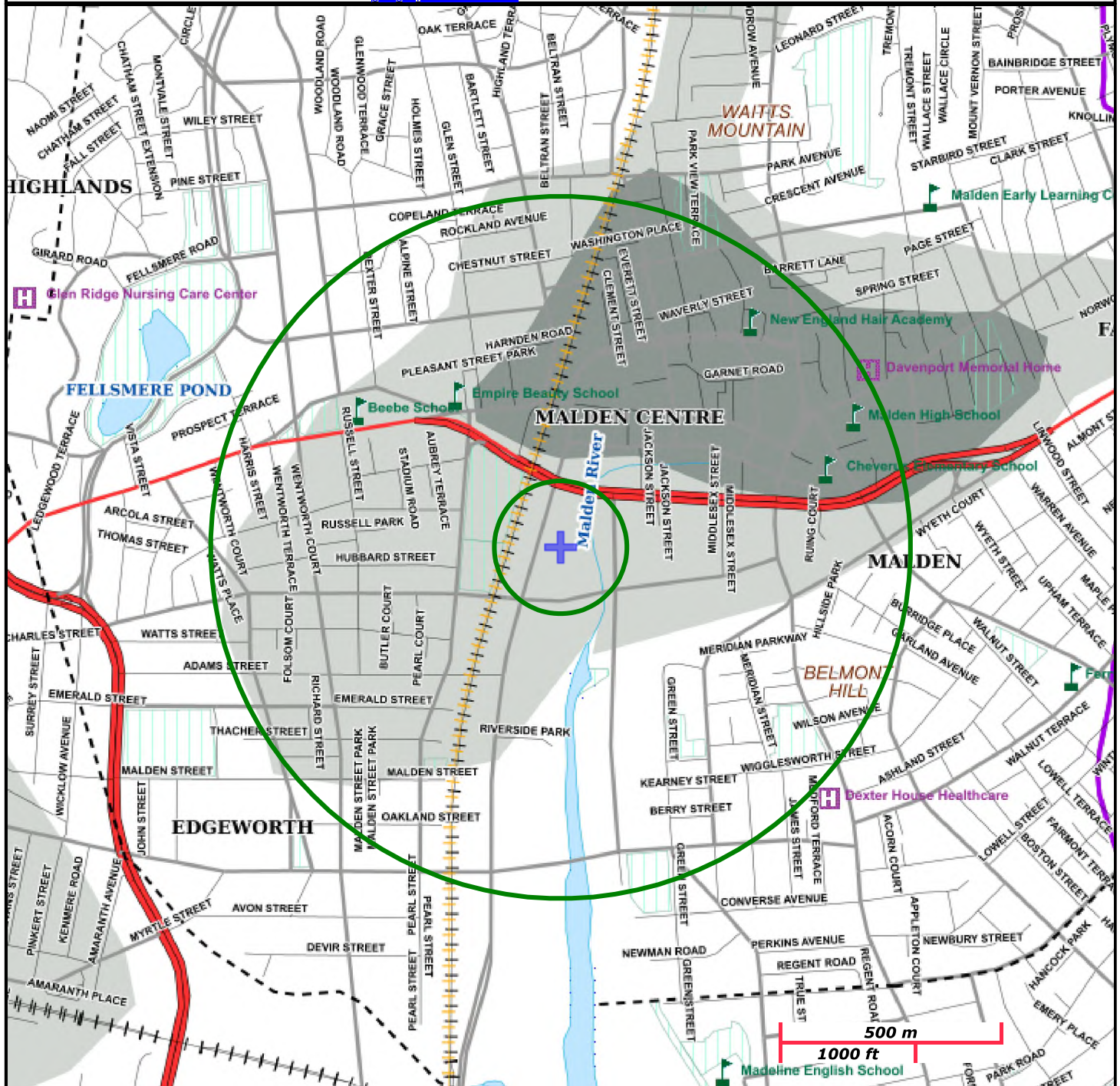
100 COMMERCIAL STREET MALDEN, MA
3-000000362
NAD83 UTM Meters:
4698974mN , 329400mE (Zone: 19)
June 30, 2026

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:
<https://www.mass.gov/orgs/massgis-bureau-of-geographic-information>.



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

NHESP Pri-Hab of Rare Species; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.

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Appendix D

Public Notice



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GEOTECHNICAL

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MANAGEMENT

249 Vanderbilt Avenue
Norwood, MA 02062

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F: 781.278.5701

F: 781.278.5702

www.gza.com



July 22, 2026
File No. 01.0171094.40

Mayor Gary Christenson
Office of the Mayor
215 Pleasant Street, 4th Floor
Malden, Massachusetts 02148

Laura Vlasuk
City of Malden - Director of Health and Human Services
215 Pleasant Street, Room 310
Malden, Massachusetts 02148

Re: Release Abatement Measure (RAM) Plan
National Grid - Former Malden Manufactured Gas Plant (MGP) Site
Installation of a Non-Aqueous Phase Liquid (NAPL Recovery System)
65-77 Commercial Street, Malden, MA
Release Tracking Number (RTN) 3-0000362

To Whom It May Concern:

On behalf of Massachusetts Electric Company d/b/a National Grid, GZA GeoEnvironmental, Inc. (GZA) is providing notification in accordance with 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP) that a Release Abatement Measure (RAM) is being implemented at the above-referenced Site. A RAM Plan was prepared in accordance with 310 CMR 40.0444 and filed with the Massachusetts Department of Environmental Protection (MassDEP) to outline procedures for environmental monitoring and soil and water management during the installation of subsurface piping for a non-aqueous phase liquid (NAPL) recovery system at 65 and 77 Commercial Street. The Plan also describes the connection of the piping to a treatment system enclosure at 51 Commercial Street. Soils will be stored at the Site pending off-Site disposal. These properties lie within the disposal boundary for the former Malden Manufactured Gas Plant (MGP) Site (RTN 3-0000362), where soil and groundwater have been impacted by historical MGP operations, prompting the need for this RAM filing. Work covered under the RAM Plan is anticipated to start on July 22, 2026 and will continue for approximately 6 weeks. In accordance with 310 CMR 40.0445 and 40.0446, RAM Status Reports will be submitted at prescribed intervals and a RAM Completion Report will be submitted to MassDEP within 60 days of the completion of the RAM activities. The RAM Plan is available for review at MassDEP's Northeast Regional Office located at 150 Presidential Way in Woburn, Massachusetts or on the MassDEP website under RTN 3-0000362 at <https://eeaonline.eea.state.ma.us/portal/dep/wastesite/>.

If you require further information or have any questions, please do not hesitate to call the undersigned at 781-278-3700.

Very truly yours,
GZA GEOENVIRONMENTAL, INC.

Charles Lindberg, LSP
Senior Principal

cc: Patrick Lydon (National Grid)
MassDEP, NERO

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Final BOH-CMO letter.docx