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February 26, 2002

James Ludlam, P.E.
Bureau of Central Remedial Action
Division of Hazardous Waste Remediation
NYSDEC
50 Wolf Road
Albany, NY 12233-7010

Re: Completion Report
Mead Road Pond Area Interim Remedial Measures
Loeffel Site Environs
Nassau, New York
Project #: 301.63.001 #2

Dear Jim:

On behalf of the General Electric Company, this cover letter transmits the Completion Report for the Mead Road Pond Area Interim Remedial Measures conducted during the summer and fall of 2001. Please let us know if you have any questions, or desire additional copies.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

Christopher Torell
Project Manager

CRT/tld
Enclosure

cc: Michael Komoroske, P.E., NYSDEC (w/enclosure)
Kevin Farrar, NYSDEC (w/enclosure)
John Sheehan, NYSDOH (w/enclosure)
Alan Belenz, NYSDOL (w/enclosure)
David Munro, Esq., Environmental Protection Bureau (w/enclosure)
Michael Elder, Esq., General Electric Company (w/enclosure)
Edward LaPoint, P.E., General Electric Company (w/enclosure)
Mark Brown, Ph.D., Blasland, Bouck & Lee, Inc. (w/enclosure)
Patrick McGuire, Blasland, Bouck & Lee, Inc. (w/enclosure)
David Hale, P.E., Blasland, Bouck & Lee, Inc. (w/enclosure)

Completion Report

Mead Road Pond Area
Interim Remedial Measures

Loeffel Site Environs
Nassau, New York

General Electric Company
Corporate Environmental Programs
320 Great Oaks Office Park
Albany, New York 12203

February 2002

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1. Introduction

1.1 Objective

This Completion Report documents the Interim Remedial Measures (IRM) activities completed at the Mead Road Pond (MRP) Area of the Loeffel Site Environs, located in Nassau, New York (Figure 1). Blasland, Bouck & Lee, Inc. (BBL) has prepared this report on behalf of the General Electric Company (GE).

The IRM at the MRP Area was conducted in the summer and fall of 2001. The IRM was performed voluntarily by GE and in accordance with the *Revised IRM Work Plan* (Work Plan) submitted to the New York State Department of Environmental Conservation (NYSDEC) on October 17, 2000 (BBL, 2000a). The Work Plan was approved by NYSDEC on November 29, 2000 (Appendix A). Additionally, the MRP Area IRM have recently become part of the final remedy for Operable Unit 3 of the Loeffel Site Environs as described in NYSDEC's January 2002 Record of Decision.

As defined in the Work Plan, the objective of the IRM was to reduce potential human exposure to polychlorinated biphenyls (PCBs) associated with the ingestion of and/or contact with PCB-containing materials in the MRP Area. As such, the primary activities associated with the IRM included:

- Site preparation activities;
- Construction of a trailer pad and septic system to support relocation of the mobile home to the south side of Mead Road (formerly located on the Mead Road Pond Spoil Banks);
- Temporary water diversion around the Northwest Drainage Ditch and Mead Road Pond;
- Removal and treatment of surface water;
- Mechanical excavation and off-site disposal of materials associated with the former Mead Road Pond, Mead Road Pond Spoil Banks, Mead Road Pond inlet and outlet, portions of the Northwest Drainage Ditch, and a portion of the Low-Lying Area;
- Permanent diversion of the former Mead Road Pond inlet directly to Tributary T11A;
- Wetland restoration/mitigation; and
- Overall site restoration.

In summary, the Work Plan presented the removal of a total of approximately 4,900 cubic yards (cy) of PCB-containing materials from the Mead Road Pond Area. It was anticipated that this volume of soil would constitute approximately 1,100 cy of Toxic Substances Control Act (TSCA) materials and 3,800 cy of non-TSCA materials. Furthermore, based generally on an assumed density of 1.5 tons/cy, the assumed weights of TSCA/non-TSCA materials presented in the Work Plan were 1,700 and 5,700 tons (total 7,400 tons), respectively. Presented below, and as described in detail in the remainder of this report, is a summary of the actual removed material amounts relative to anticipated material amounts.

Area	Anticipated Tons		Actual Tons	
	TSCA	Non-TSCA	TSCA	Non-TSCA
Northwest Drainage Ditch	675	963	502	863
Former Mead Road Pond, Mead Road Pond Spoil Banks, Inlet and Outlet	1,034	4,325	1,083	6,701
Low Lying Area	---	378	---	457
Totals	1,709	5,666	1,585	8,021
	7,375		9,606	

Notes:
1. "Anticipated tons" assumes 1.5 tons/cy.
2. Increase in actual tons over anticipated tons due to additional excavation in former Mead Road Pond, re-excavating due to NYSDEC post-excavation sample results, and changes in actual density of materials relative to assumed density.

The IRM was designed and implemented to meet the performance standards and specifications set forth in the Work Plan. Key documents developed to support the IRM include:

- *Revised Interim Remedial Measures Work Plan, Mead Road Pond Area* (BBL, 2000a);
- *Revised Interim Remedial Measures Work Plan, Construction Quality Assurance Plan* (CQAP) (BBL, 2000b);
- *Revised Interim Remedial Measures Work Plan, Health and Safety Plan* (HASP) (BBL, 2000c);
- *Wetland Mitigation Plan, Mead Road Pond Area* (WMP) (BBL, 2000d); and
- *Request for Proposal* (RFP), *Interim Remedial Measures, Mead Road Pond Area* (BBL, 2001).

1.2 Site Description and History

The MRP Area consists of Mead Road Pond, the Mead Road Pond Spoil Banks, the Mead Road Pond inlet and outlet, portions of the Northwest Drainage Ditch, and a portion of the Low-Lying Area (Figure 2). As described in the Work Plan, the Loeffel Site Environs (of which the MRP Area is a portion) includes Nassau Lake and approximately 2.5 miles of its drainage basin from the former Dewey Loeffel Landfill (landfill). The MRP Area is the uppermost portion of the drainage basin, located adjacent to the landfill. The landfill was a commercial disposal, storage, and transfer site for hazardous materials from 1952 to 1980. In 1983 and 1984, the landfill was remediated by the NYSDEC. Between 1992 and 1998, GE conducted Remedial Investigation (RI) activities in the Nassau Lake drainage basin that focused on the potential fate and transport of PCBs that migrated from the landfill prior to 1983. The NYSDEC-approved RI activities conducted in the MRP Area included the collection of surface water, soil/soft material, and biota samples.

In addition to the RI activities conducted in the MRP Area, more than 300 predesign soil samples were collected in the spring of 2000 to support the design of the IRM described herein. The purpose of the predesign sampling was to delineate PCBs and to estimate excavation volumes. The predesign sampling results were reported to the NYSDEC in a letter from BBL on June 6, 2000 and provided in the Work Plan (BBL, 2000a).

The former Mead Road Pond was a shallow (less than 2 feet deep) and small (approximately ¼-acre) impoundment. Materials in the pond were soft in the upper few feet, and stiff and clayey below. Reportedly, materials were formerly excavated (by the landowner) from the pond and placed in an area southwest of and adjacent to the pond to create the area referred to as the Mead Road Pond Spoil Banks. The outlet of the former Mead Road Pond was the first 50 feet of Tributary T11A downstream of the former Mead Road Pond; the inlet was the portion of the Northwest Drainage Ditch between the pond and the culvert under the access road (Figure 2).

The Northwest Drainage Ditch (NWDD) is located north of the landfill and begins at the culvert at the northwest corner of the landfill and flows west. Prior to IRM activities, the Northwest Drainage Ditch flowed into the former Mead Road Pond Inlet. IRM activities resulted in rerouting the flow from the NWDD directly to Tributary T11A via a newly-constructed permanent diversion ditch located north of the former Mead Road Pond.

The Low-Lying Area is a small (approximately 1-acre) bog located upstream of the former Mead Road Pond. The Low-Lying Area drains out of a small rivulet that enters the Northwest Drainage Ditch north of the former Mead Road Pond.

1.3 Project Roles and Responsibilities

Implementation of the IRM at the MRP Area involved several organizations. Each organization had a specific role in completing the IRM activities; these roles are briefly described below.

- **GE** – GE secured the services of the various firms to execute the IRM and provided overall direction and coordination during implementation.

- **NYSDEC** – The NYSDEC served as the regulatory agency for this project. The NYSDEC provided field- and office-based project coordinators to administer NYSDEC responsibilities and to review and approve various documentation required by the Work Plan. The NYSDEC also provided construction observation.

- **BBL** – BBL served as the design engineer for the MRP Area IRM.

- **Blasland, Bouck & Lee Environmental Services, Inc. (BBLES)** – BBLES provided overall project coordination and construction observation activities.

- **Clean Harbors Environmental Services, Inc. (Clean Harbors)** – Clean Harbors, an environmental services company, was retained by GE to implement the MRP Area IRM.

- **Clough, Harbour and Associates, LLP (Clough Harbour)** – Clough Harbour was retained by Clean Harbors to provide surveying services.

- **Adirondack Environmental Services, Inc. (Adirondack)** – Both GE and Clean Harbors retained Adirondack for laboratory analytical services.

- **Patrick J. Prendergast, P.E., Consulting Engineer** – Patrick Prendergast was retained by BBLES to design and provide installation oversight for a concrete pad, septic system, and leach field south of Mead Road in support of the mobile home relocation.

- **Cedar Flow, Inc. (Cedar Flow)** – Cedar Flow was retained by Patrick Prendergast to construct items related to the mobile home relocation described above.

- **B&T Forest Products, LLC (B&T)** – B&T was retained by BBLES to perform initial clearing, grubbing, and grading activities associated with the project.

- **Southern Tier Consulting, Inc. (STC)** – STC was the wetland contractor retained by Clean Harbors to restore and mitigate the Northwest Drainage Ditch and Low-Lying Area wetlands.

- **Construction Technologies, Inc. (Construction Technologies) –** Construction Technologies was retained by Clean Harbors to perform geotechnical testing.

- **Waste Management, Inc. (WM)** – WM provided disposal facilities for site-related TSCA materials (sent to Model City disposal facility near Buffalo, New York) and non-TSCA materials (sent to High Acres disposal facility near Rochester, New York).

- **Command Security Corporation (CS)** – CS was retained by Clean Harbors for after-hours security services.

1.4 Format of Document

This Completion Report summarizes and documents the activities implemented by GE in accordance with the approved Work Plan. The remainder of this report is organized as follows:

- Section 2 – Site Preparation and Support Activities;
- Section 3 – IRM Activities at the Northwest Drainage Ditch;
- Section 4 – IRM Activities at the Former Mead Road Pond, Mead Road Pond Spoil Banks, Inlet and Outlet;

- Section 5 – IRM Activities at the Low-Lying Area;
- Section 6 – Wetland Mitigation; and
- Section 7 – Overall Site Restoration and Demobilization.

In addition, this report is supplemented by the following appendices: project correspondence (Appendix A); representative photographs (Appendix B); as-built survey (Appendix C); laboratory analytical results (Appendices D, E, and F); and air monitoring field data (Appendix G).

2. Site Preparation and Support Activities

Upon commencing the IRM activities at the MRP Area, several site preparation activities were performed. These included provisions for site security, construction of access roads, clearing and grubbing, installation of temporary erosion/sedimentation control measures, installation of a temporary water treatment system, and relocation of the mobile home located on the Mead Road Pond spoil banks. Additionally, several support activities, described below, were conducted throughout the IRM.

2.1 Site Security/Utilities

Temporary construction fencing was installed at the perimeter of the excavation areas to restrict unauthorized access to the MRP Area. The temporary fencing was constructed of high-density polyethylene (HDPE), 4 feet in height, and orange in color. Vertical posts that supported the fencing were installed at depths into the ground and at intervals that would withstand high wind loads. On May 17, 2001, two locking 7-foot chain-link swing gates were installed at the beginning of the access road that led into the staging area. Additionally, a security guard was posted between 4 p.m. and 12 a.m. on a daily basis throughout the project.

Telephone and electrical services were also provided to the site by the local utility companies. The electrical service remains in place at the request of the landowner.

2.2 Access Roads

Access roads were built/modified as needed throughout the duration of the IRM. These included roads into the staging area and into the Northwest Drainage Ditch. The access road into the staging area was constructed between Mead Road Pond and the Low-Lying Area with geotextile and crusher run stone compacted via a smooth drum roller. The access road into the staging area remains in place at the request of the landowner. The temporary access road into the Northwest Drainage Ditch was constructed of backfill material followed by crusher run stone. The access road into the Northwest Drainage Ditch was removed during site restoration/wetland mitigation activities.

2.3 Erosion and Sedimentation Controls

Temporary erosion and sedimentation controls were installed at the MRP Area prior to initiation of earth moving activities. Temporary control measures were used to eliminate erosion and sediment loading to Tributary T11A, and to prevent sediment from being carried beyond the limits of work activities. The specific control measures for each activity associated with the IRM are discussed with each specific activity in later sections.

2.3.1 Temporary Erosion and Sedimentation Controls

Silt Fencing - Silt fencing was used to reduce storm water runoff velocity and sediment loading to the adjacent low areas and Tributary T11A. Silt fencing was installed in accordance with the Work Plan and consisted of filter fabric secured to posts set in the ground. Silt fencing was typically installed along the perimeter of the areas where the potential for erosion and sedimentation required fencing. Hay bales were added to sections of the silt fencing were velocities and sediment loading were assumed to be higher. Silt fencing and hay bales were used during the IRM and will be removed after establishment of vegetation in the summer of 2002.

Watering - Fugitive dust generated during the IRM was controlled by watering access roads and excavation areas on an as-needed basis throughout the IRM at a rate that prevented dust, but did not cause soil erosion.

2.3.2 Permanent Erosion and Sedimentation Controls

Vegetative Cover - The vegetative cover layer consisted of native grasses or a hay mixture that were planted throughout the MRP Area in areas other than those restored as wetlands. The native grass vegetation was installed in accordance with the New York State Department of Transportation (NYSDOT) material specification number 713-04. The hay mixture (planted north and west of the staging area) was planted using a culti-packer and standard planting techniques.

Riprap Apron - A riprap apron was constructed at the culvert from under Mead Road Pond at the southeast portion of the Mead Road Pond Spoil Banks to reduce runoff velocities and accommodate concentrated flows with minimal erosion of the underlying soils.

Riprap-Lined Diversion Ditch - A riprap-lined diversion ditch was constructed in accordance with the Work Plan as modified (Appendix A) to connect the Northwest Drainage Ditch directly to Tributary T11A. The riprap was placed sufficient to protect the ditch from peak discharge based on a 25-year, 24-hour storm event in which excessive creek flow velocities could cause undermining, erosion, or scour.

2.4 Decontamination Stations

Working personnel, vehicles, and equipment underwent decontamination before leaving each work area. Routine decontamination measures included:

- Removal of gross contamination from the outer clothing and boots of personnel leaving the work area;
- Removal of any contaminated outer garments and gloves by personnel and placement of the garments into waste receptacles; and
- Decontamination of vehicles and equipment used during the IRM before departure from the work site. Pressure washing was performed on those vehicles and equipment in direct contact with PCB-containing materials. The Contractor then performed wipe sampling on the equipment as part of the pre-demobilization inspection (Section 7 and Appendix F).

Wash water generated during equipment cleaning was either used for dust control on those excavation areas not yet removed, or collected and treated by the on-site water treatment system (Section 2.5). Solids and other materials generated during cleaning of equipment used in TSCA areas were applied to only TSCA areas to be removed and were collected and disposed of with other TSCA materials; solids and other materials generated during cleaning of equipment used in non-TSCA areas were applied to only non-TSCA areas to be removed and were collected and disposed of with other non-TSCA materials.

2.5 Water Treatment System

A water treatment system consisting of equalization tank(s) (for solids settlement), filtration (for solids removal), and granular two-stage activated carbon (for adsorption of PCBs) was installed to treat water generated by the IRM activities and decontamination procedures. Water was pumped via a centrifugal pump and was sent in parallel through two bag filters equipped with a minimum 10-micron polyester filter bags and to the carbon treatment system consisting of two 1,000-pound carbon canisters. Water then passed through another

bag filter equipped with a 1-micron polyester bag. After treatment, the water was sampled and stored in equalization tank(s) to await laboratory results indicating that PCBs were less than 0.065 micrograms per liter (μg/L) and Total Suspended Solids (TSS) were less than 10 μg/L.

Once the laboratory reported that the water was below discharge limits, the water was discharged to Tributary T11A in conformance with the Effluent and Monitoring Requirements set by the NYSDEC. The Effluent and Monitoring Requirements prescribed sampling frequencies and analytical protocol for compliance monitoring for PCB in accordance with U.S. Environmental Protection Agency (USEPA) Method 608. A Minimum Detection Level (MDL) of 0.065 μg/L was to be used. Non-detect at the MDL was the discharge goal. The laboratory analytical data are included in Appendix E.

Approximately 250,000 gallons of water were treated and discharged to Tributary T11A downstream of the excavation limits without disrupting the existing stream conditions. The outfall area was constructed of outfall piping submersed in riprap underlain with geotextile to minimize erosion to the existing bank. During site restoration activities, the outfall area was restored to its existing conditions.

2.6 Air Monitoring

Air monitoring was conducted throughout the IRM activities at the MRP Area at locations around the perimeter of the work area during project components that included material handling, as prescribed in the RFP. Air monitoring was conducted for the purpose of gauging the contribution, if any, of remedial activities to the ambient presence of airborne particulates. The objective was to monitor and control dust levels associated with the project. Additionally, as required by NYSDEC, air monitoring was conducted to maintain project compliance with NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites. TAGM 4031 provides the basis for implementing a particulate monitoring program as an element of a project's health and safety program.

Air monitoring was conducted by Clean Harbors during IRM activities and consisted of both visual inspection of the site for airborne particles and monitoring when precipitation was not occurring or had not recently occurred. Air monitoring was conducted at 4 locations along the perimeter of the excavation activities: 1 upwind location, and 3 downwind locations. The downwind locations were determined on a daily basis,

dependent upon the prevailing wind direction, with locations at approximate 30° increments of the prevailing downwind direction and one location at the centerline of the downwind impacts.

The action level for suspended particulates was 150 micrograms per cubic meter ($\mu g/m^3$) above the corresponding upwind value, in compliance with the NYSDEC's TAGM 4031. Over the course of IRM activities, the action level was not exceeded. However, on particularly dusty days, control measures (e.g., applying potable water to Mead Road) were instituted in compliance with the Work Plan.

Air monitoring data are included in Appendix G; however, it should be noted that the recorded air monitoring data must be multiplied by 1,000 to get the actual reading (e.g., 0.150 noted on the data form equals 150 $\mu g/m^3$).

2.7 Permanent Relocation of Mobile Home

Prior to excavation activities at the Mead Road Pond Spoil Banks, the property owner removed the mobile home located on the Mead Road Pond Spoil Banks (Figure 2). A 5-foot deep trench was dug by B&T across Mead Road and a 4-inch PVC pipe was installed. The pipe will be used by the landowner to reconnect the water supply well from the north side of Mead Road to the south side. Additionally, Patrick Prendergast and Cedar Flow, under subcontract to BBLES, constructed a new concrete pad, septic tank, leach field, and gravel parking area on the south side of Mead Road.

3. IRM Activities at the Northwest Drainage Ditch

PCB-containing materials from the Northwest Drainage Ditch were removed between June 21 and June 29, 2001 in accordance with the Work Plan (BBL, 2000a). The Work Plan specified methods and procedures for site preparation, excavation, water management, environmental monitoring, and site restoration. Activities associated with each of these components are described below.

3.1 Site Preparation

Site preparation activities in May and June 2001 consisted of clearing of trees and shrubs, construction of temporary access roads, installing temporary fencing, erecting erosion and sedimentation control structures, construction of temporary water diversion measures, and demarcation (by survey) of excavation limits.

3.1.1 Clearing

Approximately ½ acre of vegetation, including trees and shrubs, within the limits of excavation above grade were removed, as necessary. The cleared materials were chipped and used onsite as mulch and for stabilization of excavated materials, as needed.

3.1.2 Access Road Construction

A temporary access road was built on June 19, 2001 to enable trucks to back into the Northwest Drainage Ditch excavation area during removal of materials and to deliver topsoil during site restoration. A portion of the access road extended into a completed portion of the excavation area. The PCB-containing materials within this area were excavated and stockpiled within the excavation area to facilitate access road construction. The road was constructed of backfill followed by a layer of crusher run stone.

3.1.3 Erosion and Sedimentation Controls

Temporary erosion and sedimentation controls, consistent with the Work Plan, were installed during the IRM activities at the Northwest Drainage Ditch. These controls consisted of silt fencing and hay bales.

Silt Fence - Approximately 1,100 lineal feet of silt fencing were installed in May 2001, along the perimeter of the excavation area (Figure 3).

Hay Bales - Hay bales were added just north of the culvert under the access road at the southwest corner of the Northwest Drainage Ditch, between the Low-Lying Area and the Northwest Drainage Ditch excavation limits, and at the culverts at the southeast corner of the Northwest Drainage Ditch (Figure 3). Hay bales were also installed in the temporary diversion ditch as described below.

3.1.4 Temporary Diversion Ditch

To minimize water from entering the excavation area, a temporary diversion ditch was constructed in June 2001. The ditch was constructed to divert water entering the Northwest Drainage Ditch to flow north then west around the excavation area. Sixty feet of 18-inch diameter corrugated HDPE pipe were installed along the east side of the excavation area at the beginning of the temporary diversion ditch (Figure 3). At the end of the piping, water flowed to the west in an earthen ditch to the Low-Lying Area. Hay bales were installed in sections of the ditch to reduce water velocity and sediment transport. Upon completion of the excavation activities, the temporary diversion piping was removed and the ditch was backfilled to original grade.

3.2 Excavation Activities

At certain locations within the Northwest Drainage Ditch, materials containing greater than or equal to 50 parts per million (ppm) (TSCA materials) were identified during predesign soil sampling activities. TSCA materials were excavated and handled separately from materials containing less than 50 parts per million (ppm) PCBs (non-TSCA materials). The materials were subject to final disposition based on chemical composition and in accordance with applicable regulations.

On June 5, 2001, prior to the start of excavation in the Northwest Drainage Ditch, the temporary diversion ditch was constructed as described in Section 3.1.4 to route the flow around the excavation area to the Low-Lying Area and then into the Mead Road Pond Inlet. With surface water flow diverted, water in the Northwest Drainage Ditch was allowed to drain naturally to perform excavation activities in the dry.

Excavation activities began on June 21, 2001, at the eastern end of the excavation area and progressed to the west. Materials from the Northwest Drainage Ditch were removed to the horizontal and vertical limits identified on Figure 3. The removal areas were discerned using a discrete volume/Theissen polygon approach as described in the Work Plan (BBL, 2000a).

Between June 21 and June 29, 2001, 1,365 tons of PCB-containing materials were excavated from the Northwest Drainage Ditch. A total of 502 tons of TSCA material were transported to Model City disposal facility and 863 tons of non-TSCA material were transported to High Acres disposal facility. A summary of the excavation weights removed daily from the Northwest Drainage Ditch is shown on Table 3-1. Section 1 presents a comparison to anticipated excavation weights.

Following excavation for remedial purposes, an additional excavation of clean soil was completed adjacent to the Northwest Drainage Ditch to create a wetland area to replace the former Mead Road Pond as described in Section 3.5 and Section 6.

Excavated materials observed to contain free water were gravity-dewatered within the excavation and/or mixed with drier materials within the excavation area as necessary to pass the Paint Filter Test (USEPA Method 9095-SW846) before being placed into vehicles and transported to the off-site disposal facilities. Materials not containing free water were placed directly into vehicles for transport to the disposal facilities.

3.3 Post-Excavation Sampling and Analysis

As prescribed in the Work Plan (BBL, 2000a), post-excavation sampling locations and frequencies were determined based on on-site decisions by the NYSDEC. Samples were collected from native soil below the vertical extent of excavation (0 to 2 inches) (Figure 3). The sampling results are summarized on Tables 3-2 and 3-3 and presented in Appendix D.

The NYSDEC initially collected three post-excavation samples from the Northwest Drainage Ditch excavation area on June 28, 2001. These samples were identified as B428-01 through B428-03. PCB analytical results were 0.053, 2.9 (duplicate of 4.4), and 0.045 milligrams per kilogram (mg/kg), respectively (Table 3-2 [B428-01, B428-03] and Table 3-3 [B428-02]). At location B428-02, an additional excavation measuring 6 feet by 6 feet, with a 1 foot depth, was excavated. An additional post-excavation sample was collected at the bottom of the excavation (B428-04). Laboratory analysis for sample B428-04 resulted in a PCB concentration of 0.098

mg/kg (Table 3-3). Upon analysis of all laboratory results, the NYSDEC verbally approved completion of excavation activities in the Northwest Drainage Ditch.

3.4 Transportation

As stated previously, TSCA materials from the Northwest Drainage Ditch were transported directly from the excavation areas to Model City disposal facility located near Buffalo, New York. Non-TSCA materials from the Northwest Drainage Ditch were transported from the excavation areas directly to the High Acres disposal facility located near Rochester, New York.

3.5 Site Restoration

Following excavation at the Northwest Drainage Ditch and assessment of post-excavation sampling results, the excavated areas were restored as specified in the Work Plan. Portions of the existing Northwest Drainage Ditch were identified as wetlands in the Wetland Mitigation Plan (WMP) (BBL, 2000d). The disturbance of these wetland areas during excavation activities required the restoration/mitigation of wetlands. Approximately 0.25 acres of wetlands were created in the Northwest Drainage Ditch as identified on Figure 2 of the Wetland Mitigation Plan to mitigate wetland impacts to the former 0.25-acre Mead Road Pond (identified as a wetland prior to excavation activities). Wetlands were restored/mitigated as specified in the Wetland Mitigation Plan (BBL, 2000d) and further described in Section 6.

The excavation area at the Northwest Drainage Ditch was graded to the elevations required beneath the one-foot layer of wetland topsoil. The 1-foot layer of topsoil was placed in a single lift during the week of November 13, 2001 to the grades specified in the WMP and as shown on Figure 4. Under subcontract to Clean Harbors, STC completed planting of the vegetation at the Northwest Drainage Ditch on November 21, 2001.

4. IRM Activities at the Former Mead Road Pond, Mead Road Pond Spoil Banks, Inlet and Outlet

PCB-containing materials from the former Mead Road Pond, the Mead Road Pond Spoil Banks, and the inlet and outlet were removed between July 19 and September 21, 2001 in accordance with the Work Plan (BBL, 2000a). The Work Plan specified methods and procedures for site preparation, excavation, water management, environmental monitoring, and site restoration. A summary of activities associated with each of these components is presented below.

4.1 Site Preparation

Site preparation activities conducted in June and July 2001 consisted of clearing trees and shrubs, constructing temporary access roads, installing temporary fencing, erecting erosion and sedimentation control structures, constructing temporary water diversion measures, and demarcation (by survey) of excavation limits.

4.1.1 Clearing

Approximately 1 acre of woody vegetation (including trees and shrubs), within the limits of excavation above ground, was removed, as necessary. The cleared materials were chipped and used onsite as mulch and for stabilization of materials, as needed.

4.1.2 Access Road Construction

A temporary access road was built in June 2001 into the staging area north of Mead Road Pond to enable trucks to remove excavated materials and deliver materials. The road was constructed of a layer of crusher run stone underlain with a geotextile. The stone was compacted with a smooth drum roller. The access road was left in place at the request of the property owner.

4.1.3 Erosion and Sedimentation Controls

Temporary erosion and sedimentation controls, consistent with the Work Plan, were installed during the IRM activities at the MRP Area. These controls consisted of silt fencing and hay bales.

Silt Fence - Approximately 800 lineal feet of silt fencing were installed beginning in June 2001, along the east, west and south sides of the excavation area (Figure 5).

Hay Bales - Hay bales were placed at the culvert south of the access road at the beginning of the Mead Road Pond Inlet and in Tributary T11A at the western most area of the Mead Road Pond Spoil Banks excavation area (Figure 5).

4.1.4 Temporary Diversion Ditch

A temporary diversion ditch was constructed in June 2001 to minimize water from entering the excavation area. The ditch was constructed to divert water entering the former Mead Road Pond to flow west directly to Tributary T11A. Two hundred feet of 24-inch diameter corrugated HDPE pipe was installed along the north side of the excavation area (Figure 5). At the end of the piping, hay bales, geotextile, and riprap were installed in the ditch to minimize scour, turbidity, and flow velocities as the diverted water entered Tributary T11A.

4.2 Excavation Activities

At certain locations within the Mead Road Pond Spoil Banks, and the former Mead Road Pond, its inlet, and outlet, TSCA and non-TSCA materials were identified. The materials were excavated and subject to final disposition based on chemical composition and in accordance with applicable regulations.

In June 2001, prior to the start of excavation at Mead Road Pond, the temporary diversion ditch was constructed as described in Section 4.1.4 to route water from entering Mead Road Pond directly to Tributary T11A. With surface water flow diverted, water in Mead Road Pond and its inlet and outlet was allowed to drain naturally to Tributary T11A in order for excavation activities to be conducted in the dry. Remaining standing water in Mead Road Pond was pumped and treated at the on-site water treatment system.

Excavation activities at the Mead Road Pond Spoil Banks began on July 19, 2001. Initially, TSCA material was excavated followed by non-TSCA material. Materials from the Mead Road Pond Spoil Banks were removed to the horizontal and vertical limits identified on Figure 5. The excavation activities at Mead Road Pond began on July 25, 2001 with removal of the upper soft materials. The elevations of the excavated subgrade within the former Mead Road Pond can be found on the as-built survey contained in Appendix C. Mead Road Pond inlet and outlet were excavated to the horizontal and vertical limits indicated on Figure 5.

7,784 tons of PCB-containing materials from Mead Road Pond, the Mead Road Pond Spoil Banks, and the inlet and outlet were excavated and transported to the appropriate disposal facilities based on the chemical composition. 1,083 tons of TSCA material and 6,701 tons of non-TSCA material was excavated between July 19 and September 21, 2001. Summaries of the excavation weights removed daily from the Mead Road Pond, the Mead Road Pond Spoil Banks, and the inlet and outlet are shown on Table 4-1. Section 1 presents a comparison to anticipated excavation weights.

Excavated materials observed to contain free water were gravity-dewatered within the excavation and/or mixed with drier materials within the excavation area as necessary to pass the Paint Filter Test (USEPA Method 9095-SW846) before being placed into vehicles and transported to the off-site disposal facilities. Materials not containing free water were placed directly into vehicles for transport to the disposal facilities.

4.3 Post-Excavation Sampling and Analysis

As prescribed in the Work Plan (BBL, 2000a), post-excavation sampling locations and frequencies were determined based on on-site decisions by the NYSDEC. Post-excavation samples were collected from native soil below the vertical extent of excavation (0 to 2 inches) (Figure 6). The sampling results are summarized on Tables 4-2 and 4-3 and presented in Appendix D.

At NYSDEC request, 10 initial post-excavation samples were collected. These samples, identified on Figure 6 as B428-05, B428-06, B428-07, B428-08, B428-09, B428-10, B428-11, B428-12, B428-16, and B428-17, exhibited PCB concentrations of 0.36, 29, 33, 67, 8.3, 11, 2.7, 3.2, 5.6, and 30 mg/kg, respectively (Table 4-2 [B428-05, -09, -10, -11, -12,] and Table 4-3 [B428-06, -07, -08, -16, -17]). Based on these results, NYSDEC requested additional excavation and sampling at locations B428-06, B428-07, B428-08, and B428-17. As shown in Table 4-3, excavation and sampling activities were completed at each location until the following results were obtained:

- B428-13; 3.1 mg/kg (initial location B428-06);
- B428-23; <1 mg/kg (initial location B428-07);
- B428-22; 1.3 mg/kg (initial location B428-08); and
- B428-21; <1 mg/kg (initial location B428-17).

The total depth of each excavation below each initial sample depth was (lateral dimensions of each re-excavation were 6 feet by 6 feet):

- initial sample location B428-06; 1 foot;
- initial sample location B428-07; 6 feet;
- initial sample location B428-08; 3 feet; and
- initial location B428-17; 2 feet.

Upon analysis of all analytical results, the NYSDEC verbally approved completion of the excavation activities in Mead Road Pond and the Mead Road Pond Spoil Banks.

4.4 Transportation

As stated previously, TSCA materials from the Mead Road Pond Spoil Banks and the Mead Road Pond outlet were transported directly from the excavation areas to Model City disposal facility located near Buffalo, New York. Non-TSCA materials from Mead Road Pond, Mead Road Pond Spoil Banks, and the Mead Road Pond inlet were transported directly from the excavation areas and/or stockpile areas to the High Acres disposal facility located near Rochester, New York.

4.5 Water Treatment

Water resulting from IRM activities and the initial removal of water from Mead Road Pond (following decanting) was pumped to the on-site water treatment system. The water was treated, sampled, and stored in equalization tank(s) until analytical results (Appendix E) indicated that discharge was appropriate in accordance with the Effluent and Monitoring Requirements as described in Section 2.5.

4.6 Site Restoration

Following excavation at Mead Road Pond, Mead Road Pond Spoil Banks, inlet and outlet and assessment of sampling results, the excavated area was restored as specified in the Work Plan (BBL, 2000a). Mead Road Pond, prior to excavation, was identified as a wetland in the Wetland Mitigation Plan (BBL, 2000d). The elimination of this wetland area during excavation activities required mitigation. An additional 0.25 acre of wetlands was created in the Northwest Drainage Ditch (as identified on Figure 2 of the Wetland Mitigation Plan) to mitigate wetland impacts to the former 0.25-acre Mead Road Pond. Wetlands restoration/mitigation activities are further described in Section 6.

Restoration of the former Mead Road Pond consisted of backfilling to form a uniform sloping grade toward the permanent diversion ditch and Tributary T11A to eliminate future ponding. The Mead Road Pond Spoil Banks were backfilled and graded to the elevations shown on Figure 7. Seed, mulch, and appropriate erosion controls were installed over the disturbed areas as appropriate. The culvert area under Mead Road in the southeast corner of the Mead Road Pond Spoil Banks was backfilled followed by 12 inches of select fill in an apron fashion as shown on Figure 7. Additionally, the temporary diversion ditch and associated piping was backfilled and removed, respectively, and that area was restored to original conditions.

A permanent diversion ditch was constructed to connect the former Mead Road Pond inlet and Tributary T11A. The location of the ditch was modified from the original location shown in the RFP due to the low load-bearing capacity clay in the former Mead Road Pond below materials designated for excavation, as detailed in Modification 1 to the RFP (Appendix A). The ditch was constructed with 18 inches of select fill. A layer of geotextile was installed at the former Mead Road Pond inlet to the invert of the culvert under the access road as shown on in Modification 1. The ditch was designed specifically to replace the hydrologic functions of the former Mead Road Pond from peak discharge based on a 25-year, 24-hour storm event. A detail of the diversion ditch is shown on Figure 8.

5. IRM Activities at the Low-Lying Area

Non-TSCA materials from the Low-Lying Area were removed between September 19 and October 3, 2001 in accordance with the Work Plan (BBL, 2000a). The Work Plan specified methods and procedures for site preparation, excavation, water management, environmental monitoring, and site restoration.

5.1 Site Preparation

Site preparation activities in September 2001 consisted of clearing of trees and shrubs, erecting erosion and sedimentation control structures, construction of a dewatering pad, and demarcation (by survey) of excavation limits.

5.1.1 Clearing

Approximately ¼ acre of vegetation (including trees and shrubs) within the limits of excavation above grade, was removed, as necessary.

5.1.2 Erosion and Sedimentation Controls

Temporary erosion and sedimentation controls consistent with the Work Plan (BBL, 2000a) were installed during the IRM activities at the Low-Lying Area. These controls consisted of silt fencing and hay bales.

Silt Fence - Approximately 380 lineal feet of silt fencing were installed in September 2001, along the perimeter of the excavation area (Figure 9).

Hay Bales - Hay bales were added to the Low-Lying Area outlet, just north of the connection to the Northwest Drainage Ditch (Figure 9).

5.2 Construction of Dewatering Pad

A dewatering pad was constructed in the staging area adjacent to the Low-Lying Area prior to excavation activities at the Low-Lying Area. The 60-foot by 60-foot dewatering pad was constructed of 60 mil smooth liner and hay bales. At the downgradient perimeter, the liner was draped over a line of hay bales to form a basin that was used to hold materials and water.

5.3 Excavation Activities

On August 14, 2001, a trench was constructed along the western perimeter of the Low-Lying Area to the connection with the Northwest Drainage Ditch to decant surface water out of the excavation area. Remaining standing water in the Low-Lying Area and water resulting from excavation activities was pumped and treated by the on-site water treatment system.

Excavation activities began on September 19, 2001, at the eastern end of the excavation area and progressed to the west. Materials from the Low-Lying Area, all non-TSCA, were removed to the horizontal and vertical limits identified on Figure 9.

Between September 19 and October 3, 2001, a total of 457 tons of non-TSCA materials were excavated from the Low-Lying Area. A summary of the excavated weights of materials removed daily from the Low-Lying Area are shown in Table 5-1. Section 1 presents a comparison to anticipated excavation weights.

Excavated materials observed to contain free water were gravity-dewatered and/or mixed with drier materials within the excavation area and on the constructed dewatering pad as necessary to pass the Paint Filter Test (USEPA Method 9095-SW846) before being placed into vehicles and transported to the off-site disposal facilities. Materials not containing free water were placed directly into vehicles for transport to the disposal facilities.

5.4 Post-Excavation Sampling and Analysis

As prescribed in the Work Plan (BBL, 2000a), post-excavation sampling locations and frequencies were determined based on on-site decisions by the NYSDEC. Post-excavation samples were collected from native

soil below the vertical extent of excavation (0 to 2 inches) (Figure 9). The sampling result is summarized on Table 5-2 and presented in Appendix D.

One post-excavation sample was collected from the Low-Lying Area excavation area on September 19, 2001. This sample was identified as B428-24, and exhibited a PCB concentration of 1.2 mg/kg (Table 5-2). Upon analysis of the laboratory results, the NYSDEC verbally approved the completion of excavation activities in the Low-Lying Area.

5.5 Transportation

As stated previously, Non-TSCA materials from the Low-Lying Area (467 tons) were transported from the excavation area and/or stockpile area directly to the High Acres disposal facility located near Rochester, New York.

5.6 Site Restoration

Following excavation at the Low-Lying Area and assessment of post-excavation sampling results, the excavated area was restored as specified in the Work Plan (BBL, 2000a). Prior to excavation, the Low-Lying Area was identified as a wetland in the Wetland Mitigation Plan (BBL, 2000d). The disturbance of this wetland during excavation activities required the restoration/mitigation of the wetland. The wetland restoration/mitigation activities are further described in Section 6.

A 1-foot layer of wetland topsoil was placed in a single lift on November 15, 2001 to restore the area to original grade (Figure 10). Under subcontract to Clean Harbors, STC completed planting of the area on November 21, 2001. This vegetative cover will serve as a permanent form of erosion control.

6. Wetland Mitigation

The wetlands that existed prior to excavation activities at the MRP Area are identified on Figure 1 of the Wetland Mitigation Plan (WMP) (BBL, 2000d). Prepared as a component of the Nationwide Permit (NWP) Application to the United States Army Corps of Engineers (USACE) for the MRP Area, the WMP addressed wetland restoration and mitigation activities to compensate for wetland impacts resulting from IRM activities at the MRP Area. Specifically, the WMP called for the restoration of approximately 0.40 acre of emergent and scrub-shrub wetlands and the creation of a 0.25-acre wetland in a current upland location to mitigate the wetland impacts to the former Mead Road Pond.

The disturbance to portions of the Northwest Drainage Ditch and Low-Lying Area required the restoration/mitigation of wetlands. Approximately 0.25 acre of the excavated areas was restored as wetlands. An additional 0.25 acre of wetlands was created in the Northwest Drainage Ditch as identified on Figure 2 of the Wetland Mitigation Plan (BBL, 2000d) to mitigate the loss of the former 0.25-acre Mead Road Pond, identified as a wetland. Approximately 0.15 acre of wetlands was restored in the Low-Lying Area. All wetlands were restored/mitigated as specified in the Wetland Mitigation Plan (BBL, 2000d).

The excavation areas within the Northwest Drainage Ditch that were restored/mitigated were graded prior to placement of the wetland topsoil. A 1-foot layer of topsoil was spread over the area during the week of November 13, 2001. Under subcontract to Clean Harbors, STC planted the areas as specified in the Wetland Mitigation Plan on November 21, 2001.

7. Overall Site Restoration and Demobilization

In addition to restoration of the remedial areas, other portions of the work area were subject to restoration activities, including the support areas that were not located within the excavation areas (e.g., temporary access areas, ancillary support areas). Restoration activities for these areas included placing a 6-inch-thick layer of topsoil to match surrounding grades and planting of vegetation (i.e., seeding, trees, etc.) and repair of surfaces, where needed. Similar vegetation was used for replanting of disturbed areas and surfaces were repaired consistent with the existing conditions.

The restoration work will be maintained and adequately protected using erosion control measures, as appropriate, such that conditions similar to pre-removal conditions exist during a period of one year following the Date of Substantial Completion (November 21, 2001), as described in the Work Plan (BBL, 2000c) and the Wetland Mitigation Plan (BBL, 2000d).

Excavation/support equipment, unused supplies and materials, and the project trailers were demobilized from the site. Prior to demobilization, all equipment used for excavation activities (i.e., excavators, dump trucks, etc.) were subjected to wipe sampling in accordance with the Work Plan (BBL, 2000a). The results are presented in Appendix F.

References

BBL. 2000a. *Revised Interim Remedial Measures Work Plan, Mead Road Pond Area* (October 2000).

BBL. 2000b. *Revised Interim Remedial Measures Work Plan, Construction Quality Assurance Plan* (October 2000).

BBL. 2000c. *Revised Interim Remedial Measures Work Plan, Health and Safety Plan* (October 2000).

BBL. 2000d. *Wetland Mitigation Plan, Mead Road Pond Area* (October 2000).

BBL. 2001. *Request for Proposal, Interim Remedial Measures, Mead Road Pond Area* (March 2001).

Tables

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Table 3-1

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Daily Excavation Weights from the Northwest Drainage Ditch

Date	Non-TSCA (tons)	TSCA (tons)	TOTAL (tons)
6/21/2001	259	0	259
6/22/2001	301	0	301
6/25/2001	174	167	341
6/27/2001	0	335	335
6/29/2001	129	0	129
TOTAL	**863**	**502**	**1,365**

Notes:

1. Weights are as received from the disposal facilities.

Table 3-2

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Post-Excavation PCB Soil Sampling Results from the Northwest Drainage Ditch

Locations Not Requiring Additional Excavation

Sample ID	Sample Date	NYSDEC Total PCB (mg/kg)
B428-01	6/28/2001	0.053
B428-03	6/28/2001	0.045

Notes:
1. Samples were collected and analyzed by the NYSDEC.
2. Please refer to Figure 3 for sample locations.

Table 3-3

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Post-Excavation PCB Soil Sampling Results from the Northwest Drainage Ditch

Locations Requiring Additional Excavation

Sample ID	Sample Date	NYSDEC Total PCB (mg/kg)
B428-02	6/28/2001	2.9[4.4]
B428-04	7/18/2001	0.098

Notes:

1. Initial sample in group represents first post-excavation sample for that location. Following sample(s) from bottom of subsequent re-excavation(s) at that location.
2. Samples were collected and analyzed by the NYSDEC.
3. Duplicate sample results are presented in brackets.
4. Please refer to Figure 3 for sample locations.

Table 4-1

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Daily Excavation Weights from
Mead Road Pond, Spoil Banks, Inlet and Outlet

Date	Non-TSCA (tons)	TSCA (tons)	TOTAL (tons)
7/19/2001	0	180	180
7/20/2001	0	172	172
7/23/2001	0	240	240
7/24/2001	97	140	237
7/25/2001	253	0	253
7/26/2001	171	76	246
7/27/2001	173	0	173
7/30/2001	66	70	136
7/31/2001	182	0	182
8/1/2001	105	63	168
8/2/2001	0	37	37
8/3/2001	143	0	143
8/4/2001	175	0	175
8/6/2001	172	0	172
8/7/2001	238	0	238
8/8/2001	110	0	110
8/9/2001	67	0	67
8/10/2001	190	0	190
8/11/2001	65	0	65
8/13/2001	233	0	233
8/14/2001	319	0	319
8/15/2001	193	41	235
8/16/2001	222	0	222
8/17/2001	334	0	334
8/18/2001	32	0	32
8/20/2001	227	0	227
8/21/2001	224	0	224
8/22/2001	254	0	254
8/23/2001	314	0	314
8/24/2001	159	0	159
8/27/2001	148	0	148
8/28/2001	189	0	189
8/29/2001	398	0	398
8/30/2001	324	0	324
8/31/2001	273	0	273
9/4/2001	169	0	169
9/7/2001	86	0	86
9/10/2001	87	0	87
9/11/2001	95	0	95
9/12/2001	59	0	59
9/13/2001	63	34	97
9/17/2001	31	31	62
9/21/2001	64	0	64
TOTAL	**6,701**	**1,083**	**7,784**

Notes:

1. Weights are as received from the disposal facilities.

Table 4-2

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Post-Excavation PCB Soil Sampling Results from Mead Road Pond, Spoil Banks, Inlet and Outlet

Locations Not Requiring Additional Excavation

Sample ID	Sample Date	BBLTotal PCB (mg/kg)	NYSDEC Total PCB (mg/kg)
B428-05	7/27/2001	--	0.36
B428-09	7/27/2001	--	8.3
B428-10	7/27/2001	--	11
B428-11	7/27/2001	--	2.7
B428-12	7/27/2001	--	3.2
B428-13	8/24/2001	--	3.1
B428-16	8/24/2001	--	5.6
B428-18	9/6/2001	5.2	--
B428-21	9/6/2001	< 1	--
B428-22	9/11/2001	1.3	--
B428-23	9/11/2001	< 1	--

Notes:
1. Samples were collected and analyzed as noted.
2. Please refer to Figure 6 for sample locations.

-- Not analyzed

Table 4-3

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Post-Excavation PCB Soil Sampling Results from Mead Road Pond, Spoil Banks, Inlet and Outlet

Locations Requiring Additional Excavation

Sample ID	Sample Date	BBLTotal PCB (mg/kg)	NYSDEC Total PCB (mg/kg)
B428-06	7/27/2001	100	29
B428-13	8/24/2001	--	3.1
B428-07	7/27/2001	51	33
B428-14	8/24/2001	--	63
B428-19	9/6/2001	97	--
B428-23	9/11/2001	< 1	--
B428-08	7/27/2001	97	67
B428-15	8/24/2001	--	50
B428-20	9/6/2001	34	--
B428-22	9/11/2001	1.3	--
B428-17	8/24/2001	--	30
B428-21	9/6/2001	< 1	--

Notes:

1. Initial sample in group represents first post-excavation sample for that location. Following sample(s) from bottom of subsequent re-excavation(s) at that location.
2. Samples were collected and analyzed as noted.
3. Please refer to Figure 6 for sample locations.

-- Not analyzed

Table 5-1

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Excavation Weights from the Low-Lying Area

Date	Non-TSCA (tons)
9/19/2001	56.13
9/20/2001	28.70
9/25/2001	58.19
9/26/2001	84.59
9/27/2001	59.74
10/1/2001	112.13
10/3/2001	57.50
TOTAL	**457**

Notes:

1. Weights are as received from the disposal facilities.

Table 5-2

General Electric Company
Mead Road Pond Area
Interim Remedial Measures Completion Report

Summary of Post-Excavation PCB Soil Sampling Results from the Low-Lying Area

Locations Not Requiring Additional Excavation

Sample ID	Sample Date	Total PCB (mg/kg)
B428-24	9/19/2001	1.2

Note:

1. Sample was collected and analyzed by GE.
2. Please refer to Figure 9 for sample location.

Figures

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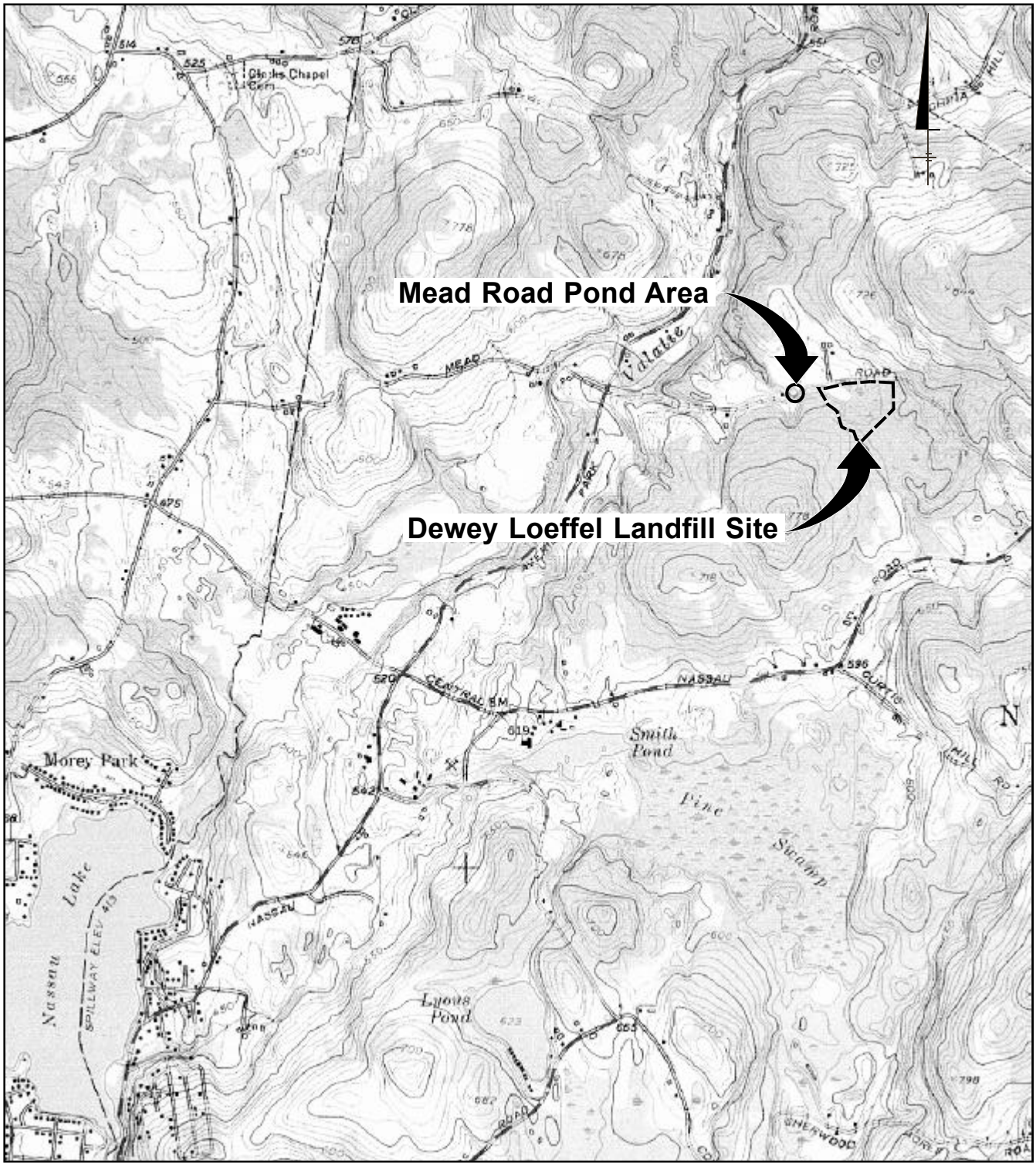
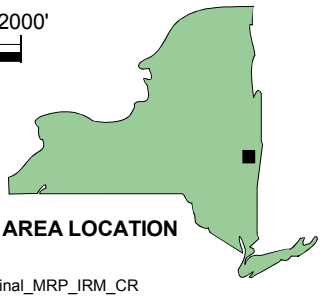


REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Nassau, New York, 1953.

2000' 0 2000'

Approximate Scale: 1" = 2000'



AREA LOCATION

02/26/02 SYR-D54-LBR LAS
30163001/30163n01.cdr
GE_Loeffel Site Environs_Reports and Presentations_Final_MRP_IRM_CR

GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

SITE LOCATION MAP

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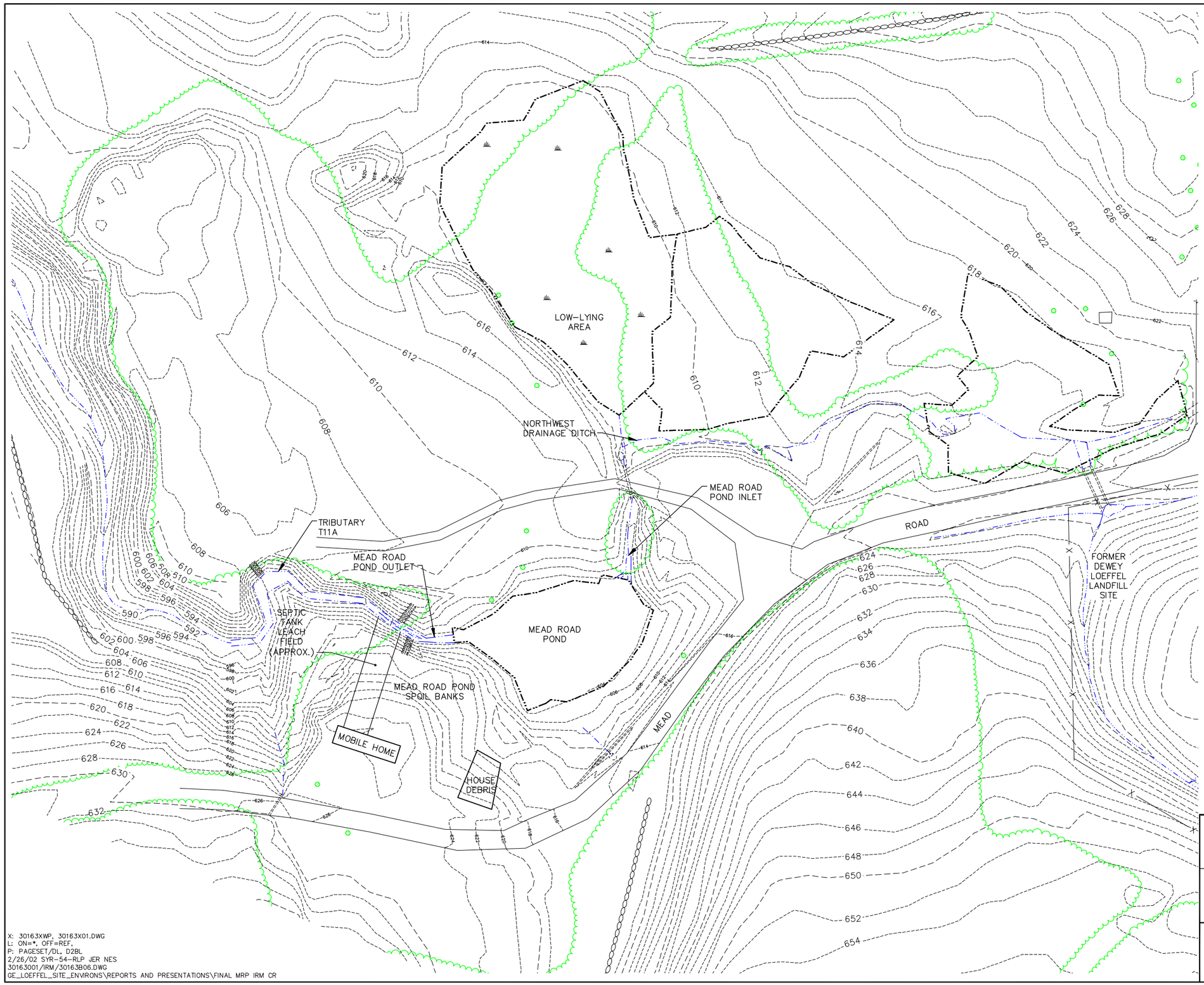
FIGURE
1



LEGEND:

- TREE
- TREE LINE
- UTILITY POLE
- OUTLET STRUCTURE
- EDGE OF WATER
- 638 — TOPOGRAPHIC COUNTOUR
- EDGE OF WETLANDS

NOTES:

1. CONDITIONS REPRESENT PRE-IRM ACTIVITIES.
2. BASE MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
3. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
4. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
5. DURING SURVEY ACTIVITIES, THE EDGE OF WETLANDS AT THE MEAD ROAD POND WAS APPROXIMATELY THE EDGE OF WATER.

0 40' 80'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

MEAD ROAD POND AREA LOCATION PLAN

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FIGURE 2

X: 30163XWP, 30163X01.DWG
L: ON=*, OFF=REF,
P: PAGESET/DL, D2BL
2/26/02 SYR-54-RLP JER NES
30163001/IRM/30163B06.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR

APPROXIMATE LOCATION OF TEMPORARY EARTHEN DIVERSION DITCH

LOW-LYING AREA

NORTHWEST DRAINAGE DITCH

APPROXIMATE LOCATION OF 18-INCH TEMPORARY DIVERSION PIPE

B428-01

B428-02
B428-04

B428-03

1'

1'

1'

2'

MEAD ROAD POND

610 612 614 616 618 620 622 624 626 628 630 632 634 636

604 606 608

LEGEND:

- B428-01 — APPROXIMATE POST-EXCAVATION SAMPLE LOCATION AND ID
- TREE
- TREE LINE
- UTILITY POLE
- OUTLET STRUCTURE
- EDGE OF WATER
- 628 — TOPOGRAPHIC CONTOUR
- EDGE OF WETLANDS
- AREA CONTAINED NON-TSCA MATERIALS
- AREA CONTAINED TSCA MATERIALS
- 1' — DEPTH OF EXCAVATION
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING ENHANCED WITH HAY BALES
- FENCE

NOTES:

1. NORTHWEST DRAINAGE DITCH MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. DURING SURVEY ACTIVITIES, THE EDGE OF WETLANDS AT THE MEAD ROAD POND WAS APPROXIMATELY THE EDGE OF WATER.

0 20' 40'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

EXTENT OF EXCAVATION AT THE NORTHWEST DRAINAGE DITCH

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FIGURE 3

X: 30163XWP, 30163X04.DWG
L: ON=*, OFF=REF*
P: PAGESET/DL, D2BL
2/26/02 SYR-54-GMS JER NES
30163001/IRM/30163B10.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR

WETLAND 3 (A)
~460 SQ. FT.

WETLAND 3 (B)
~430 SQ. FT.

~10,900 SQ. FT.

WETLAND 1
~9,250 SQ. FT.

1'

2'

NORTHWEST DRAINAGE DITCH

CREATED WETLAND

LEGEND:

- TREE
- TREE LINE
- UTILITY POLE
- OUTLET STRUCTURE
- EDGE OF WATER
- WETLAND BOUNDARY
- EXCAVATION BOUNDARIES
- EDGE OF CREATED WETLAND
- 616 NEW TOPOGRAPHIC CONTOUR
- 620 TOPOGRAPHIC CONTOUR
- FENCE
- SCRUB–SHRUB WETLAND PLANTED PER WETLANDS MITIGATION PLAN (WMP)TABLE 2
- EMERGENT WETLAND PLANTED PER WMP TABLE 2
- SCRUB–SHRUB WETLAND PLANTED PER WMP TABLE 4
- EMERGENT WETLAND PLANTED PER WMP TABLE 5
- SCRUB–SHRUB WETLAND PLANTED PER WMP TABLE 5
- 1' DEPTH OF EXCAVATION

NOTES:

1. NORTHWEST DRAINAGE DITCH MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. TEMPORARY DIVERSION PIPING WAS REMOVED AND DITCH WAS BACKFILLED TO ORIGINAL CONDITIONS.
5. AREA RESTORED TO ORIGINAL GRADES EXCEPT WHERE NOTED.

0 20' 40'
GRAPHIC SCALE

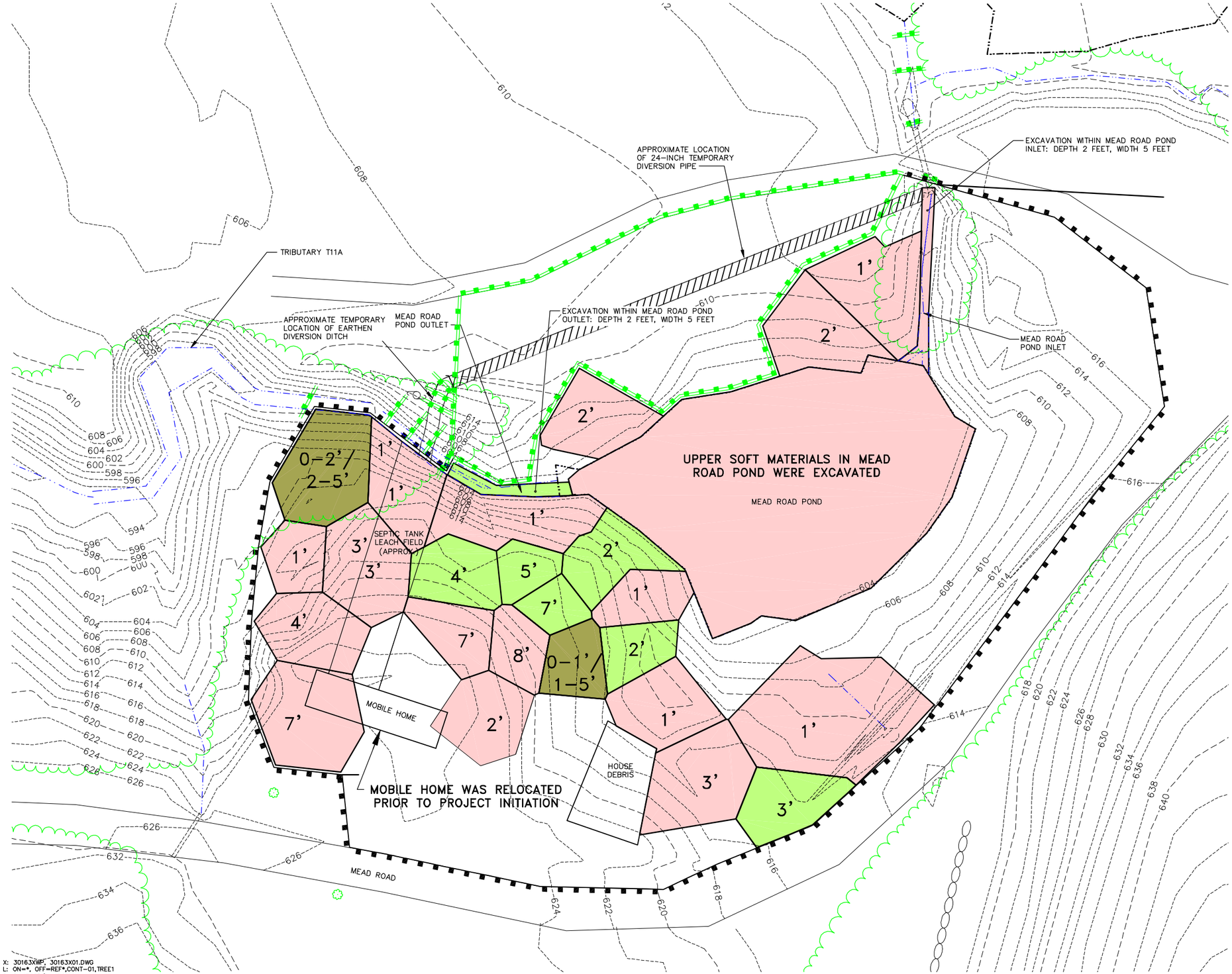
GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

NORTHWEST DRAINAGE DITCH RESTORATION PLAN

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 4

X: 30163XWP, 10073X01.DWG
L: ON=*, OFF=REF*
P: PAGESET/DL, D2BL
2/26/02 SYR-54-KMD JER NES
30163001/IRM/30163B12.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR



LEGEND:

- TREE
- TREE LINE
- UTILITY POLE
- OUTLET STRUCTURE
- EDGE OF WATER
- 628 — TOPOGRAPHIC CONTOUR
- EDGE OF WETLANDS
- AREA CONTAINED NON-TSCA MATERIALS
- AREA CONTAINED TSCA MATERIALS
- AREA CONTAINED BOTH TSCA AND NON-TSCA MATERIALS
- 2' — DEPTH OF EXCAVATION
- 0-2'/ 2-5' — DEPTH OF EXCAVATION FOR TSCA/NON-TSCA MATERIALS
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING ENHANCED WITH HAY BALES

NOTES:

1. MEAD ROAD POND MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. DURING SURVEY ACTIVITIES, THE EDGE OF WETLANDS AT THE MEAD ROAD POND WAS APPROXIMATELY THE EDGE OF WATER.

0 20' 40'
GRAPHIC SCALE

X: 30163XWF, 30163X01.DWG
L: ON=*, OFF=REF*,CONT-01,TREE1
P: PAGESET/DL, D2BL
2/26/02 SYR-54-KMD JER NES
30163001/IRM/30163B13.DWG
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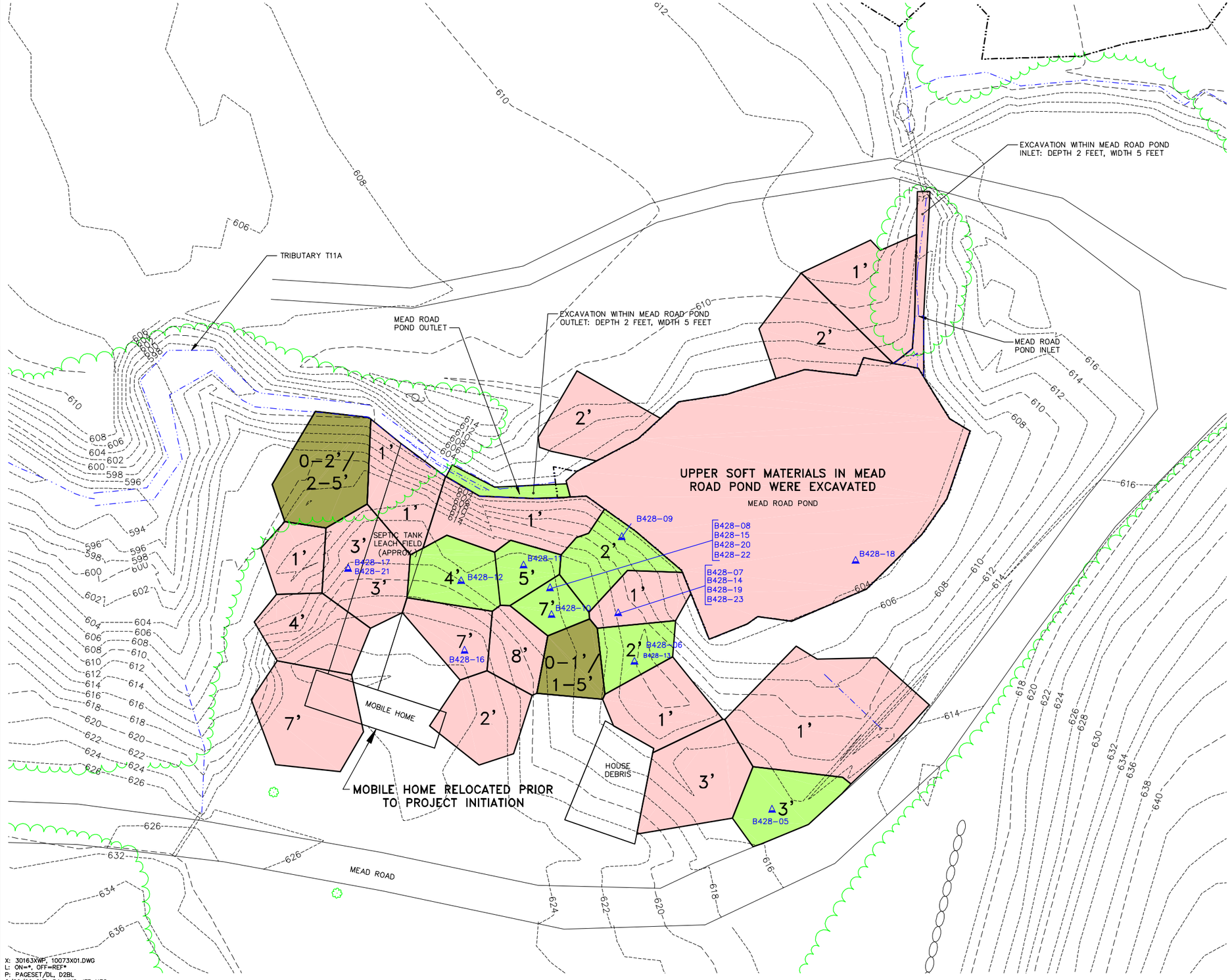
GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

EXTENT OF EXCAVATION AT MEAD ROAD POND, SPOIL BANKS, INLET AND OUTLET

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 5



LEGEND:

- B428-09 — APPROXIMATE POST-EXCAVATION SAMPLE LOCATION AND ID
- TREE
- TREE LINE
- UTILITY POLE
- OUTLET STRUCTURE
- EDGE OF WATER
- 628 — TOPOGRAPHIC CONTOUR
- EDGE OF WETLANDS
- AREA CONTAINED NON-TSCA MATERIALS
- AREA CONTAINED TSCA MATERIALS
- AREA CONTAINED BOTH TSCA AND NON-TSCA MATERIALS
- 2' — DEPTH OF EXCAVATION
- 0–2'/ 2–5' — DEPTH OF EXCAVATION FOR TSCA/NON-TSCA MATERIALS

NOTES:

1. MEAD ROAD POND MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. DURING SURVEY ACTIVITIES, THE EDGE OF WETLANDS AT THE MEAD ROAD POND WAS APPROXIMATELY THE EDGE OF WATER.

0 20' 40'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

POST-EXCAVATION SAMPLE LOCATIONS AT MEAD ROAD POND, SPOIL BANKS, INLET AND OUTLET

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 6

X: 30163XWP, 10073X01.DWG
L: ON=*, OFF=REF*
P: PAGESET/DL, D2BL
2/25/02 SYR-54-KMD JER NES
30163001/IRM/30163B16.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR

LEGEND:

- TREE LINE
- EDGE OF WATER
- 608 — TOPOGRAPHIC CONTOUR
- STONE FENCE
- APPROXIMATE EXTENT OF RIP RAP

NOTES:

1. MEAD ROAD POND MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY FROM FIGURE ENTITLED "MEAD ROAD POND AS-BUILT SURVEY", OBTAINED FROM CLOUGH, HARBOUR & ASSOCIATES LLP, AT A SCALE OF 1:20, DATED 1/15/02.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. SLOPE ALONG CENTERLINE OF DIVERSION DITCH IS 1.2%.
5. TEMPORARY DIVERSION PIPING WAS REMOVED AND DITCH WAS BACKFILLED AS SHOWN.

25' 0 25' 50'

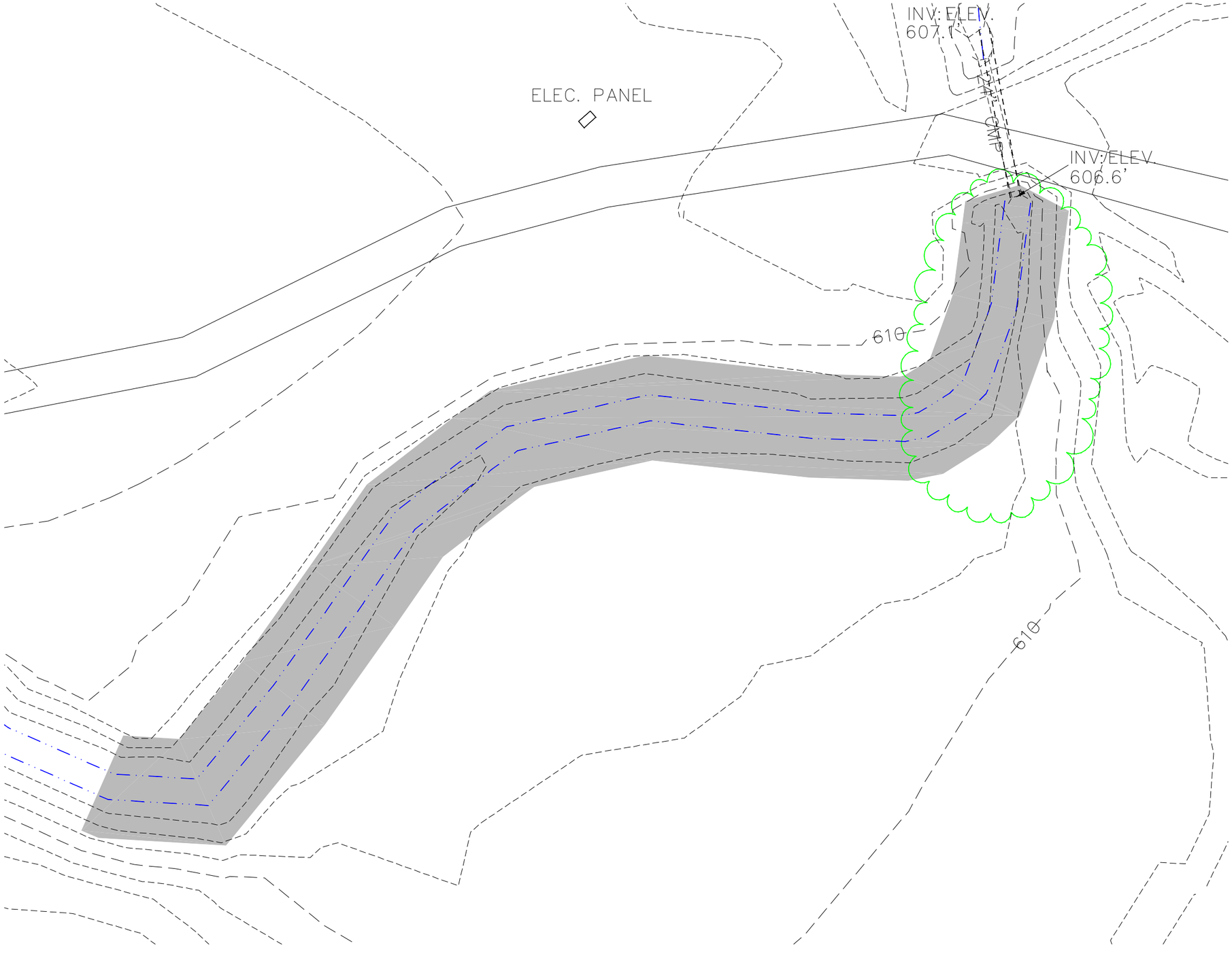
GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

MEAD ROAD POND, SPOIL BANKS, INLET AND OUTLET RESTORATION PLAN

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE 7

X: 30163WXP, 30163X09.DWG
L: ON=*, OFF=REF*, PR-DIVERSION_DITCH
P: PAGESET: STD/DL
2/26/02 SYR-54-YCC JER NES
30163001/IRM/30163G01.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR



LEGEND:

- TREE LINE
- EDGE OF WATER
- TOPOGRAPHIC CONTOUR
- APPROXIMATE EXTENT OF RIP RAP

NOTES:

1. MEAD ROAD POND MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY FROM FIGURE ENTITLED "MEAD ROAD POND AS-BUILT SURVEY", OBTAINED FROM CLOUGH, HARBOUR & ASSOCIATES LLP, AT A SCALE OF 1:20, DATED 1/15/02.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. SLOPE ALONG CENTERLINE OF DIVERSION DITCH IS 1.2%.
5. TEMPORARY DIVERSION PIPING WAS REMOVED AND DITCH WAS BACKFILLED AS SHOWN.

0 10' 20'
GRAPHIC SCALE

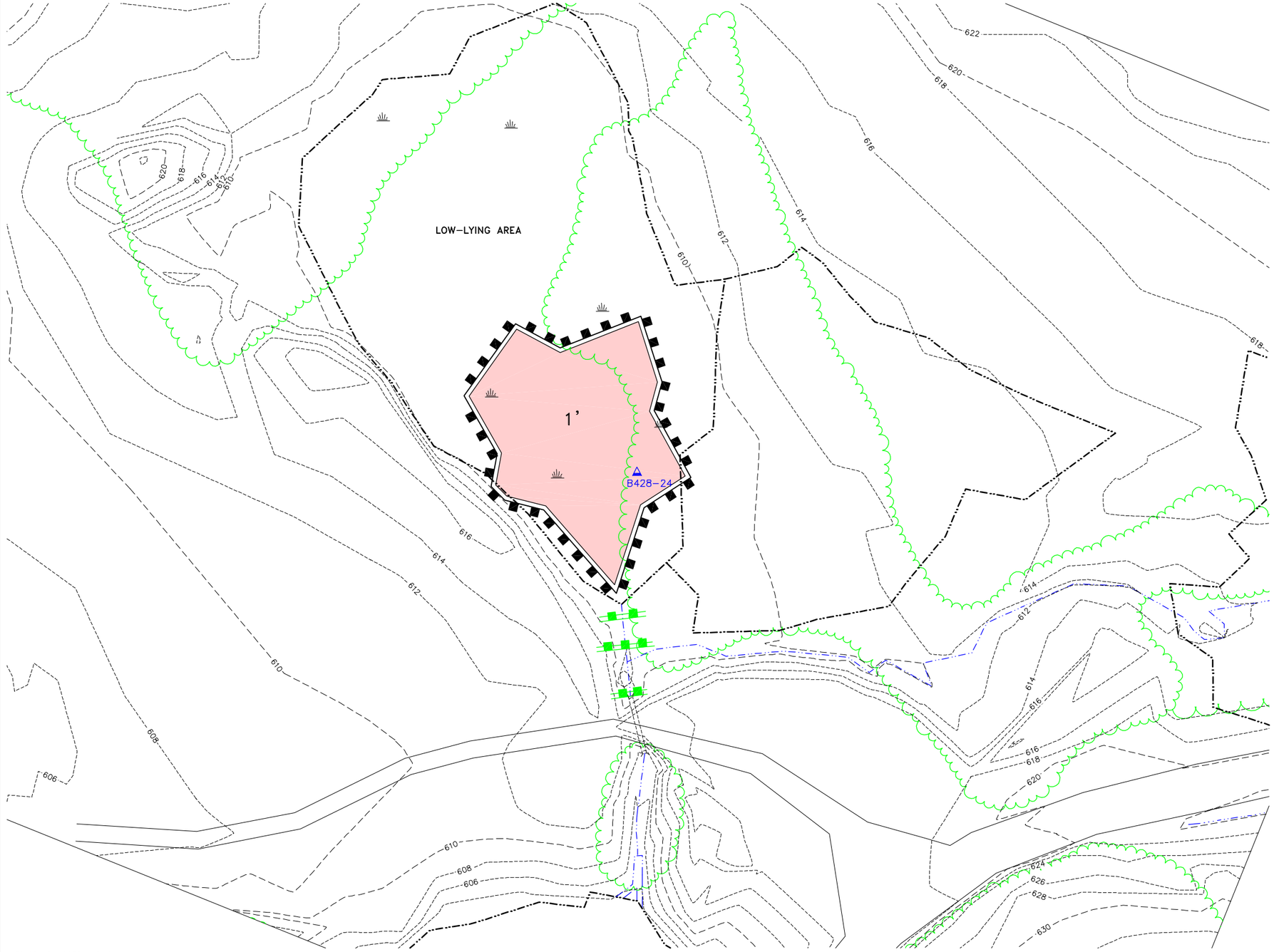
GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

PERMANENT DIVERSION DITCH PLAN

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 8

X: 30163XWP, 30163X09.DWG
L: ON=*, OFF=REF*, PR-DIVERSION_DITCH
P: PAGESET/DL, D2BL
2/25/02 SYR-54-YCC JER NES
30163001/IRM/30163G02.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR



LEGEND:

- B428-24 — APPROXIMATE POST-EXCAVATION SAMPLE LOCATION
- EDGE OF WATER
- 1' — DEPTH OF EXCAVATION
- AREA CONTAINED NON-TSCA MATERIALS
- TREE LINE
- OUTLET STRUCTURE
- WETLAND BOUNDARY
- EXCAVATION BOUNDARIES
- 620 — TOPOGRAPHIC CONTOUR
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING
- APPROXIMATE LOCATION OF TEMPORARY SILT FENCING ENHANCED WITH HAY BALES

NOTES:

1. LOW-LYING AREA MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.

0 25' 50'
GRAPHIC SCALE

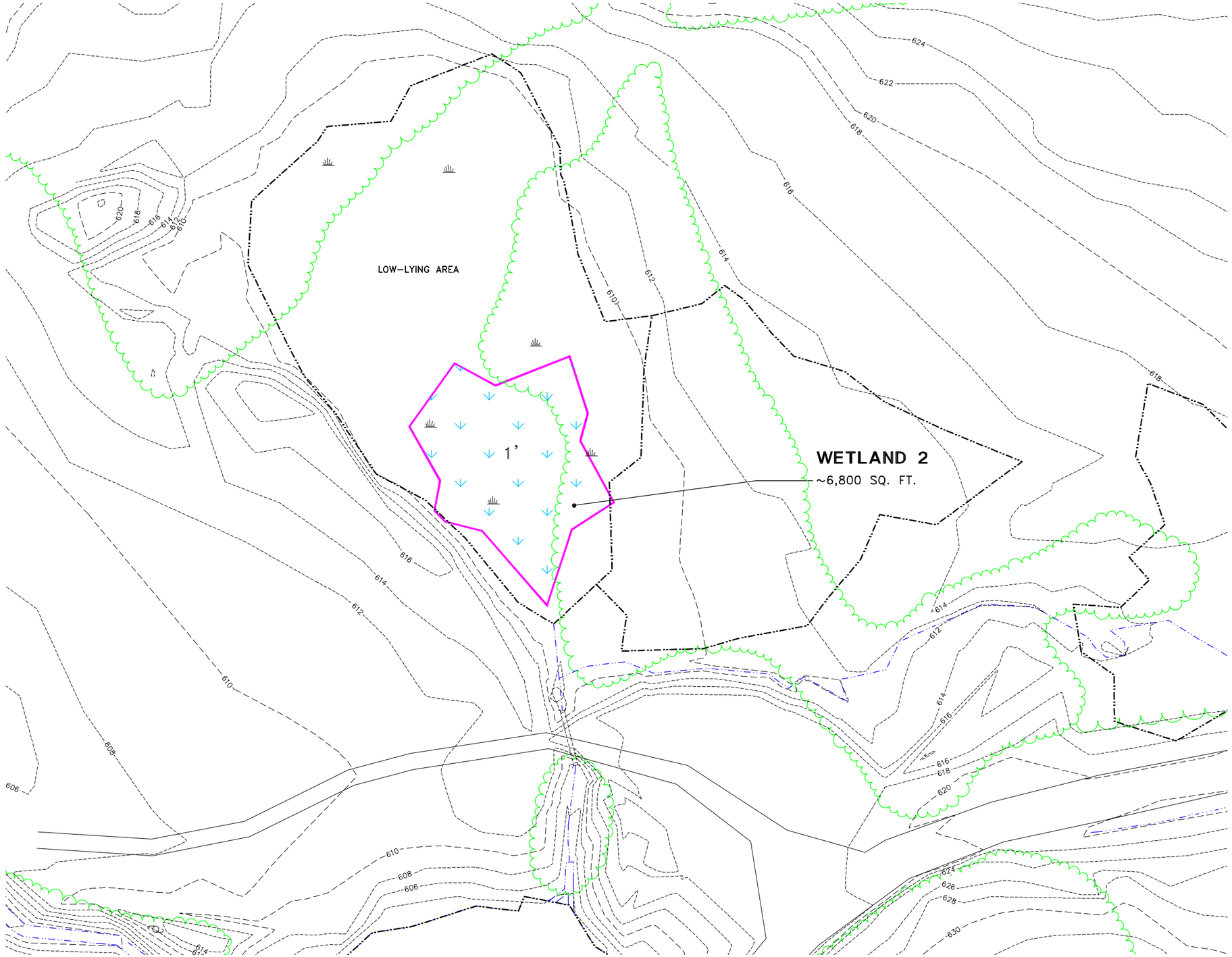
GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

EXTENT OF EXCAVATION AT THE LOW-LYING AREA

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 9

X: 30163XWP, 10073X01.DWG
L: ON=*,OFF=REF*,POND
P: PAGESET: STD/DL
2/26/02 SYR-54-YCC JER NES
30163001/IRM/30163B14.DWG
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR



LEGEND:

- EDGE OF WATER
- 1' DEPTH OF EXCAVATION
- EMERGENT WETLAND PLANTED PER WMP TABLE 3
- TREE LINE
- OUTLET STRUCTURE
- WETLAND BOUNDARY
- EXCAVATION BOUNDARIES
- TOPOGRAPHIC CONTOUR

NOTES:

1. LOW-LYING AREA MAP COMPILED FROM PHOTOGRAMMETRIC METHODS BASED ON PHOTOGRAPHY DATED MARCH 31, 1988 AND SUPPLEMENTED WITH ACTUAL FIELD SURVEY.
2. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. GROUND SURFACE CONTOUR INTERVAL = 2 FEET.
4. DURING SURVEY ACTIVITIES, THE EDGE OF WETLAND AT THE MEAD ROAD POND WAS APPROXIMATELY THE EDGE OF WATER.
5. AREA RESTORED TO ORIGINAL GRADES.

0 50' 100'

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
ALBANY, NEW YORK
COMPLETION REPORT
INTERIM REMEDIAL MEASURES, MEAD ROAD POND AREA

LOW-LYING AREA SITE RESTORATION PLAN

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 10

X: 30163XWP, 10073X01.DWG
L: ON=*,OFF=REF*
P: PAGESET/DL, D2BL
2/26/02 SYR-54-YCC JER NES
30163D01/IRM/30163B17
GE_LOEFFEL_SITE_ENVIRONS\REPORTS AND PRESENTATIONS\FINAL MRP IRM CR