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**PHASE 2 CONSTRUCTION PLAN FOR LANDLOCKED  
BARGE LOADING AREA**

**Appendix B**

to

**Phase 2 Remedial Action Work Plan for Landlocked  
Dredging Operations**

**HUDSON RIVER PCBs SUPERFUND SITE**

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*Prepared for:*

**GENERAL ELECTRIC**

319 Great Oaks Boulevard  
Albany, New York 12203

*Prepared by:*

**PARSONS**

GE Company – Parsons Project Office  
381 Broadway, Bldg 40-2  
Fort Edward, NY 12828  
Phone: 518 746-5322

**May 2014**

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**ACRONYMS AND ABBREVIATIONS**

CD	Consent Decree
CFR	Code of Federal Regulations
CM	Construction Manager
CU	certification unit
DQAP	Dredging Construction Quality Control/Quality Assurance Plan
EHS	environmental health and safety
EPA	United States Environmental Protection Agency
GE	General Electric Company
GPS	global positioning system
HASP	Health and Safety Plan
LBLA	Landlocked Barge Loading Area
LDOC	Landlocked Dredging Operations Contractor
OSHA	Occupational Safety and Health Administration
PCBs	polychlorinated biphenyls
QA	quality assurance
QC	quality control
QoLPS	Quality of Life Performance Standards
RA	Remedial Action
RA HASP	Remedial Action Health and Safety Plan
RAM QAPP	Remedial Action Monitoring Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
SOW	Statement of Work for RA and Operations, Maintenance and Monitoring
SWPPP	Storm Water Pollution Prevention Plan

## SECTION 1

### INTRODUCTION

This Phase 2 Construction Plan for the Landlocked Barge Loading Area (LBLA Construction Plan) has been prepared in accordance with the revised Statement of Work (SOW; Environmental Protection Agency (EPA) 2010) for Remedial Action and Operations, Maintenance and Monitoring, which is Appendix B to the Consent Decree (CD; EPA and GE 2005). This LBLA Construction Plan is an appendix to the Remedial Action Work Plan for Landlocked Dredging Operations (Landlocked RAWP).

This LBLA Construction Plan describes the construction activities necessary for the LBLA including; mobilization, site clearing, erosion control, installation of access roads, as well as construction of the material staging areas, truck unloading areas and barge loading areas. The LBLA will provide river-access for the Landlocked Dredging Operations Contractor (LDOC) and will also be used by the LDOC as their support property for the Landlocked Dredging Operations. Specifically, backfill and capping material will be delivered, staged and transferred on to barges at the LBLA to be used within the Landlocked dredging area (Certification Units [CUs] 61-66). The proposed location of the LBLA is shown on Figure 1-1.

Construction of the LBLA will commence with tree removal, tree trimming and grubbing of the LBLA area as well as the construction of access roads. The access roads will be constructed from West River Road to the aggregate staging areas and site facilities at the LBLA. In addition, gravel parking areas will be provided for employees and oversight personnel. Once the access roads have been built, the material staging areas, truck unloading areas and barge loading areas will be constructed.

#### 1.1 LBLA CONSTRUCTION PLAN ORGANIZATION

This LBLA Construction Plan addresses the following operations:

- Civil construction activities;
- Transportation and routing of equipment and materials;
- Equipment installation; and
- Equipment startup and testing.

The LBLA construction will be performed by the LDOC.

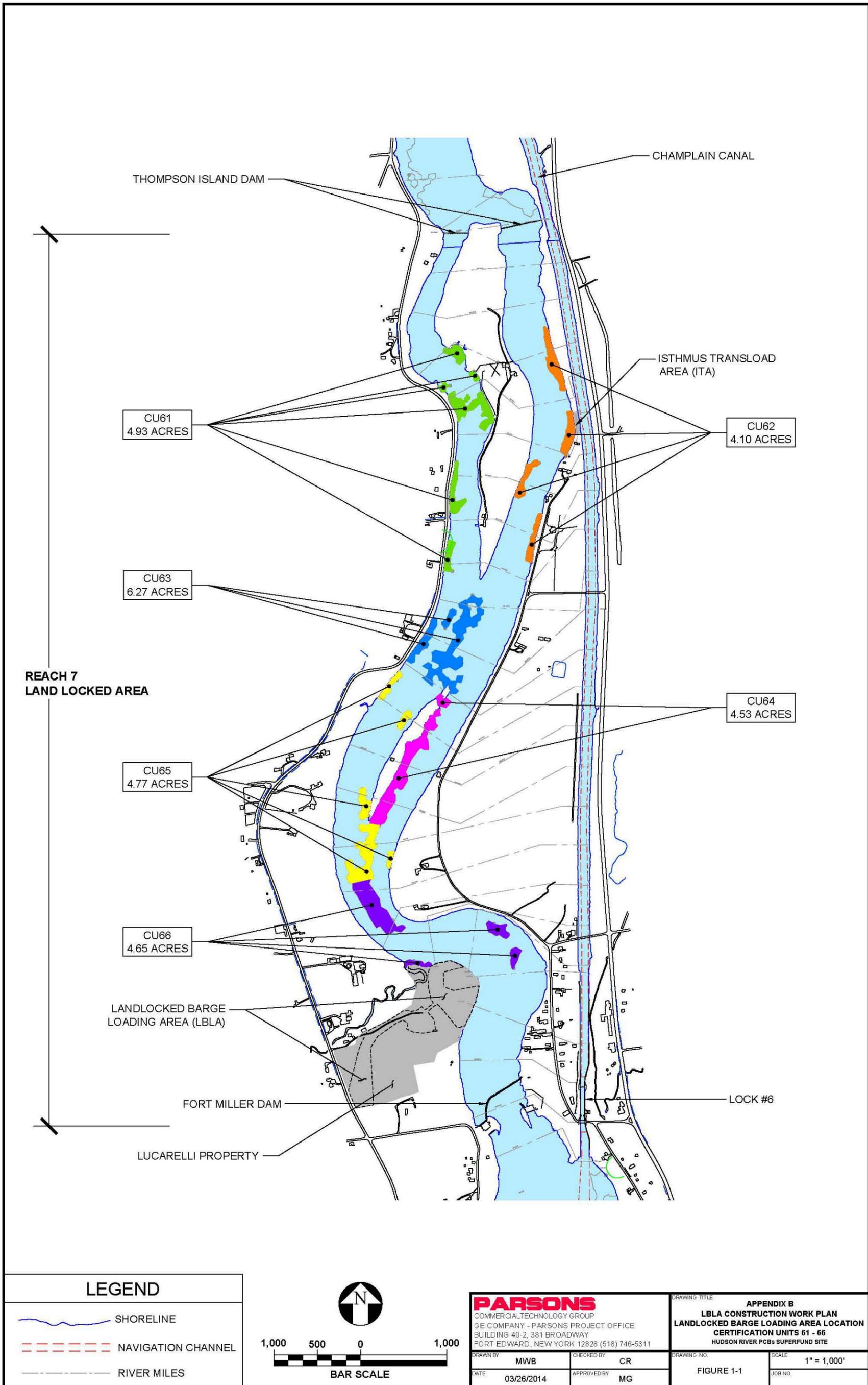
This document is organized into sections as follows:

- **Section 1 – Introduction:** provides an introduction to the LBLA Construction Plan, including its purpose, an overview of LBLA construction activities, and the document organization.

## Construction Plan For Reach 7 Barge Loading Area

- **Section 2 – Description of Civil Construction Activities:** presents a description of site access, preparation and civil work. Transportation methods and routing are described, as well as protection of archaeological resources and wetlands.
- **Section 3 – Installation of Equipment:** summarizes the approach for the installation of the truck unloading equipment and barge unloading equipment.
- **Section 4 – Startup and Testing:** describes the startup and testing of the LBLA equipment.
- **Section 5 – Safety:** describes: (a) general worker health and safety measures; (b) spill control/containment measures covering releases of hazardous materials and; (c) emergency response contact information and related information; and (d) the noise and lighting monitoring to be conducted by the relevant contractor to assess and verify compliance with the contract specifications.
- **Section 6 – References:** provides references to key documents referred to in the body of the report.

Construction Plan For Reach 7 Barge Loading Area



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**SECTION 2**

**DESCRIPTION OF CONSTRUCTION ACTIVITIES**

A Site Plan Overview is presented in Figure 2-1, and depicts the LBLA. The activities covered by this LBLA Construction Plan will include tree trimming and removal, clearing, grubbing and leveling the site, construction of office/administration areas, material staging areas, truck unloading areas and the barge loading area. The LBLA Site Plan is presented in Figure 2-1.

**2.1 LBLA SITE ACCESS AND PREPARATION**

During the initial stage of the project, access to the LBLA site will be by way of the existing unimproved driveway from West River Road. This access route will be used to conduct initial survey work and to mobilize the site clearing equipment necessary to commence constructing access roads and parking areas. Once the access roads have been constructed, they will become the primary access way to the LBLA.

**2.1.1 Equipment Mobilization**

The equipment required for construction operations is listed in Table 2-1 and will be mobilized to the site. Maintenance and repairs of this equipment will be conducted on site whenever practicable. The equipment required for the construction of the site will be demobilized upon completion of the construction.

**Table 2-1 List of Construction Equipment for Facility Site Work Construction**

<b>Construction Equipment</b>	<b>Quantity (approximate)</b>
Low Ground Pressure Dozer	1
Track Excavator	1
Wheeled Front Loader	1
50 - 100 Ton Mobile Crane	1
Vibratory Roller	1

**2.1.2 Access Road and Parking Area Construction**

The LBLA access road and parking areas will be constructed after grubbing of the roadway alignment and removal of any topsoil. Topsoil will be stockpiled on the site. Debris and woody material generated from grubbing will be disposed of by the LDOC. The necessary grading for the access road will be conducted using a low ground pressure bulldozer. Once grading is complete the

## **Construction Plan For Reach 7 Barge Loading Area**

gravel road base will be installed over a layer of geotextile fabric, using a loader and then compacted using a smooth single drum roller.

### **2.1.3 Erosion Control**

Site erosion and sediment controls will be implemented on the project. Monitoring of these controls will be documented in accordance with the Storm Water Pollution Prevention Plan (SWPPP) prepared by the LDOC and stored onsite. To prevent the tracking of sediment onto adjacent public roadways stabilized construction entrances will be installed at locations where vehicles are expected to enter and/or exit the site. The stabilized construction entrance will be constructed wide enough to cover the entire width of the entrance/exit and allow two vehicles to pass comfortably. It will also be flared where it meets the public roadway to accommodate longer construction vehicles. The length of the stabilized construction entrance will be as required to allow mud and sediment to become dislodged from vehicle tires before the vehicle enters the public roadway. Materials to be used to stabilize the construction entrance have been reviewed and approved by Saratoga County as part of obtaining approval for the driveway construction.

Prior to the installation of the construction entrance and site clearing, a silt fence will be installed down gradient of any planned soil disturbance activity to prevent sediment-laden runoff from leaving the site or entering wetland areas on the site. The silt fence will be inspected for rips, tears, and gaps between the fence and the ground. An adequate reserve of silt fence will be kept on site at all times for emergency and/or routine replacement. Silt fence shall be removed only after exposed soils in the contributing drainage area are stable. A natural undisturbed vegetated buffer shall be maintained beyond the limit of disturbance.

Stockpiles of erodible material, including any topsoil removed during construction, will have a perimeter silt fence installed on the down gradient side of the pile to prevent storm water runoff from being contaminated by eroded sediment.

### **2.1.4 Fencings and Gates**

In order to restrict unauthorized access to the LBLA, a temporary gate and fence will be installed at the entrance in the vicinity of West River Road.

## **2.2 CIVIL WORK**

The LBLA will consist of an administration/office area, parking area, material management and staging area, truck unloading area, barge loading area, and decontamination pad. The civil work construction necessary to establish the LBLA includes general earthwork, construction of the access road and parking areas, construction of work platform for backfill barge loading, and construction of a support dock.

### **2.2.1 Fill Sources**

As part of the civil work construction a variety of select fill materials will be used for grading, structural fill, base material and bedding at the LBLA. All borrow material imported to the LBLA

## Construction Plan For Reach 7 Barge Loading Area

site for the project will be certified clean fill. The various fill types are anticipated to be provided by local sources. Table 2.2 details the proposed fill sources.

**Table 2-2 Proposed Fill Source**

<b>Fill Type</b>	<b>Source</b>	<b>Location</b>
Road Base, Crushed Stone	Peckham Materials- Hudson Falls	438 Vaughn Road, Hudson Falls, NY
Road Base, Crushed Rock	Peckham Materials- Easton Quarry	Rt 40, Greenwich, NY
Topsoil	Lucarelli	George Thompson Rd, Stillwater, NY
Topsoil	Troy Topsoil	748 Hudson River Road, Mechanicville, NY

### 2.2.2 Earthwork and Site Clearing

The earthwork necessary to construct the LBLA includes: clearing, grubbing and grading.

Site clearing - The LDOC will remove only the trees and vegetation necessary for the construction of the LBLA. All trees will be surveyed visually and located using a global positioning system (GPS) to identify and locate any trees that will affect the barge loading and material staging operations. Approval for removal and trimming of trees will be obtained from EPA and from the landowner prior to cutting any trees. Removal of trees will be done selectively using chain saws, removal of grub and other vegetation will be conducted using a rotary cutter. Brush, limbs and trees less than 12-inches in diameter will be processed at the LBLA with a large brush chipper, discharging wood chips into controlled piles adjacent to the area being cleared. Logs greater than 12-inches in diameter will be cut into 8-foot lengths; and staged adjacent to the clearing area. Wood chips may be used to create pathways and other suitable uses at the LBLA site, excess chips and logs will be stockpiled at the LBLA, and transported to a local municipality for re-use.

Removal of stumps required for the construction of the barge loading and material staging area will be performed by excavators as part of the grading operations. In Zone A, after stripping and stockpiling of topsoil, rough grading will be performed with a track excavator and bulldozer once the excavation and fill activities are completed. Deep fill areas will be compacted as work progresses. Once the trafficked portions of the LBLA site have been rough graded a sub-base layer in accordance with the SWPPP will be placed over those portions and will be compacted.

## **Construction Plan For Reach 7 Barge Loading Area**

### **2.2.3 Installation of Material Staging Areas**

The material management and staging area will be installed at the east side of the LBLA Zone A area (Figure 2-1). Storage bins will be constructed from modular concrete blocks to separate the different backfill and cap materials. The material staging area will be overlain with a geotextile fabric prior to placement of 6 to 8" of road base aggregate.

### **2.2.4 Installation of Barge Loading Area**

The LBLA barge loading system will consist of work platforms constructed on the eastern portion of the LBLA to provide access from the shoreline for equipment and material. The platforms will extend into the river to allow barges to be located in deeper water and will also provide an additional mooring location for dredging and capping equipment. Sediment probing will be conducted along the anticipated platform alignment to estimate the approximate depths of sediment, and thus defining the bedrock upper limits. This geotechnical survey will be one of the first activities to be conducted at the LBLA site. The work platforms will consist of two structural steel fabricated platforms with a dock face running between the two platforms. The platforms will be supported by columns resting on the top of bed rock in the river. The platform and columns will be tied back to deadman style anchors set into the LBLA Zone A area some 40 ft inland from the river bank as shown in Figure 2-1.

### **2.2.5 Installation of Support Dock**

River access for employees and oversight personnel will be provided via a support dock located at the northern edge of the LBLA (Figure 2-1). The support dock will provide slips for support vessels and will consist of a modular floating dock system. The dock frame will be constructed of aluminum and rigid urethane foam. Decking will be constructed of aluminum slates finished with a non-skid surface.

## **2.3 TRANSPORTATION METHODS AND ROUTING**

During civil work construction, all structural fill, equipment, and materials will be trucked to the site. Truck routes from proposed fill sources are presented in Attachment 1.

## **2.4 PROTECTION OF CULTURAL/ARCHEOLOGICAL RESOURCES**

A number of areas have been identified within the extent of the LBLA site (Figure 2-1), which include:

- Archeological upland Zone A – available for construction and operation, LBLA construction is focused on this zone.
- Archeological upland Zone B – limited construction and operation, LBLA construction is limited to pathways and administrative facilities such as portajons, office trailers and parking areas. To distribute wheel loads in the parking areas located in Zone B, the

## Construction Plan For Reach 7 Barge Loading Area

LDOC will lay down a layer of geotextile (to act as a marker layer) then 6 to 10” inches of gravel in this area.

- Archeological upland Zone C – off limits for construction and operation, no LBLA construction activities are planned for this area.

In order to clearly delineate permissible work areas, high visibility fencing will be placed at the perimeter of the planned work areas as shown in Figure 2-1. All fences, signage and marking will be inspected throughout the duration of the project and maintained on a regular basis. No work will be conducted in Archeological upland Zone C and high visibility fencing will be used to limit access to unused portions of Archeological upland Zone B.

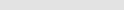
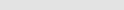
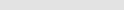
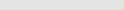
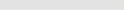
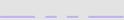
### 2.5 PROTECTION OF WETLAND AREAS

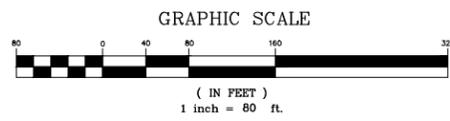
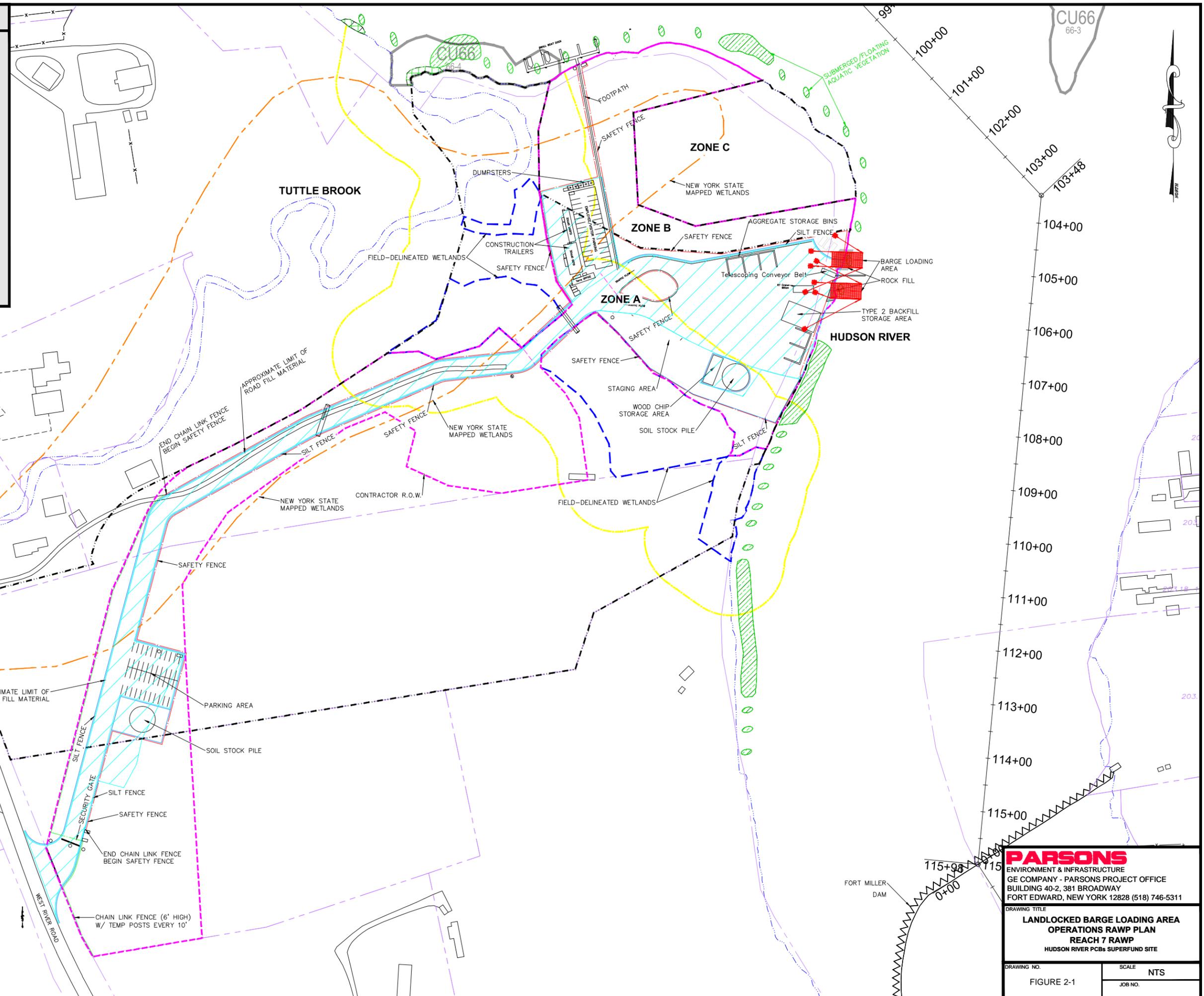
In addition to the archeological zones identified within the extent of the LBLA work area; a wetland area and the 100 ft wide area adjacent to the wetland areas have also been identified in the southern portion of the LBLA (Figure 2-1). No disturbance to the wetland area is anticipated and disturbance to the 100 ft adjacent area will be limited to access roads, footpaths, administrative trailers, and vehicle parking areas.

Highly visible markers and signage will be placed at the boundary of the limits of use within the 100 ft wide areas adjacent to the wetlands to alert project participants to not enter those areas.

A pre-construction survey will be performed to document the type and extent of vegetation at the proposed work areas within the LBLA site, including the 100 foot area adjacent to wetlands. This information will be used during the restoration activities following demobilization of the LBLA site. In addition the CM and representatives of EPA jointly conducted a survey of the wetlands shown on the drawings at LBLA to confirm the limits are correctly shown. Figure 2-1 reflects the updated field delineated wetland and the associated 100’ buffer.

**LEGEND**

-  NEW YORK STATE MAPPED WETLANDS
-  LBLA CONTRACTOR WORK AREA
-  FIELD DELINEATED WETLAND AREAS
-  100-FOOT WETLAND ADJACENT AREA
-  ZONE DELINEATION
-  CHAIN LINK FENCE
-  SAFETY FENCE
-  SILT FENCE
-  PROPERTY LINES
-  FILL AREAS
-  SUBMERGED/FLOATING AQUATIC VEGETATION
-  LBLA WATERSIDE LOADING AREA



**PARSONS**  
 ENVIRONMENT & INFRASTRUCTURE  
 GE COMPANY - PARSONS PROJECT OFFICE  
 BUILDING 40-2, 381 BROADWAY  
 FORT EDWARD, NEW YORK 12828 (518) 746-5311

DRAWING TITLE  
**LANDLOCKED BARGE LOADING AREA  
 OPERATIONS RAWP PLAN  
 REACH 7 RAWP  
 HUDSON RIVER PCBs SUPERFUND SITE**

DRAWING NO. FIGURE 2-1	SCALE NTS
JOB NO.	

**SECTION 3**

**INSTALLATION OF EQUIPMENT**

This section covers the installation of equipment in the truck unloading and barge unloading areas of the LBLA.

**3.1 DELIVERY AND INSTALLATION OF EQUIPMENT AT LBLA SITE**

The LDOC will furnish all equipment, materials and supplies necessary to operate the material staging and barge loading areas at the LBLA. The equipment to be mobilized for the truck loading operations is provided in Table 3-1.

A truck scale may be set up near the stockpile location (alternatively trucks may be weighed at the material sources, in which case no truck scale will be installed) and a conveyor system will be established at the barge loading platform to load backfill and cap material onto barges. The dozer, excavator, mobile crane and front loader used during construction will remain onsite for use during LBLA operations.

**3.2 ELECTRICAL POWER**

Electric power required to support the construction activities will be provided by diesel powered generators. Electrical work will be done in accordance with all applicable local, state and federal codes. At the conclusion of the construction activities, the generators will remain at the LBLA site to provide power during loading and unloading operations.

**Table 3-1 List of Equipment to be Mobilized to LBLA**

<b>Equipment</b>	<b>Quantity (approximate)</b>
Wheeled Front Loader	1
Low Ground Pressure Dozer	1
50 - 100 Ton Mobile Crane	1
Conveyor System	1
Generator Set	3
Light Set	3

### SECTION 4

#### STARTUP AND TESTING

This section covers the startup and testing of the LBLA. The LDOC will perform the work in accordance with specification Section 01810. The LDOC will submit a startup and testing plan that describes the startup and testing procedure for the truck unloading area and barge loading area. The startup and testing plan will be submitted for Construction Manager (CM) approval prior to commencing startup and testing of any equipment. The test data and startup results will be submitted to the CM for review and approval.

Key elements of the LDOC's startup and testing process include:

1. Field testing and quality control of material staging area equipment;
2. Field testing and quality control of barge loading area equipment; and
3. Visual inspection by Contractor and CM of each individual component of the constructed LBLA system prior to commencing barge loading operations.

#### 4.1 CONSTRUCTION QC/QA

The quality of the LBLA construction will be achieved through the use of engineered designs for critical items (e.g., work platforms, equipment installation) and a program of quality oversight (QC/QA) conducted during implementation. The construction QC/QA program is summarized below.

##### 4.2.1 Technical Requirements

Specific engineered designs that will define technical requirements will be developed for the following items:

- Loading Platforms;
- Roadways; and
- Electrical Distribution.

##### 4.2.2 Monitoring for QC/QA

Monitoring of construction quality performance will be conducted in accordance with the *Dredging Construction Quality Control/Quality Assurance Plan* (DQAP) (Parsons, 2014), Appendix A to the 2014 RAWP. The DQAP has been prepared in accordance with the requirements of Section 2.1.2 and Section 2.2.2 of the CD SOW. In addition to the requirements specified in the DQAP, tests and inspections specific to LBLA construction are presented in Attachment 2.

QA inspection and testing performed by the CM will be used to verify the adequacy and effectiveness of the LDOC's QC program. The QA inspection and testing frequency will be based

## **Construction Plan For Reach 7 Barge Loading Area**

on results of QC tests, evaluation of daily reports, audits of the QC program and verification testing conducted by the CM and owner's third party testing firm. QA oversight of the contractor's QC is also indicated on Attachment 2.

### **4.2.3 Construction Quality Control**

The LDOC will be responsible for implementing QC for the scope of work under its contract. Attachment 2 provides a list of the required inspections and testing to be implemented by qualified QC personnel to ensure that equipment, materials, and the constructed product are inspected and tested in accordance with applicable specifications, codes, regulations, and industry standards.

## **SECTION 5**

### **SAFETY**

#### **5.1 GE ENVIRONMENTAL HEALTH AND SAFETY POLICY**

GE provides a safe and healthy working environment in all the communities in which it does business. GE's environmental health and safety (EHS) programs combine clear leadership by management; the participation of all employees, contractors, and functions; and the use of appropriate technology to ensure the health and safety of its employees and the public.

GE requires that each of its facilities and sites identify and control potential hazards in order to protect the public, its employees, and the environment. Reviews are conducted regularly; deficiencies, if any, are identified; issues are tracked to closure; improvements are made to prevent potential hazards; and mitigation measures are implemented as a result of these reviews. The end result enhances injury prevention, increases operations knowledge, improves communications, and helps assure compliance with required EHS standards.

The LDOC will abide by the requirements of GE's world-class EHS program.

#### **5.2 CONSTRUCTION MANAGER HEALTH AND SAFETY PROGRAM**

The project CM also holds the highest standards for project health and safety. The safety goal for this project is zero incidents, zero injuries – a Zero Incident philosophy. This approach originated with a study by the Construction Industry Institute, which identified specific control measures shown to dramatically reduce the probability of incidents. These control measures, known as Zero Incident Techniques, provide the framework for safety on this project, and the Project Team's proactive approach to manage the interrelated areas of safety, health, environment, and risk management. The definition of an incident is any unplanned or unexpected event that results in or has the potential to result in a personal injury, property damage or environmental release.

#### **5.3 HEALTH AND SAFETY PLAN**

##### **5.3.1 RA HASP**

A *Remedial Action Health and Safety Plan* (RA HASP) (Parsons, 2014a) defines minimum safety and health requirements, guidelines, and practices applicable to the overall Phase 2 RA project, including the processing equipment installation and remaining site work. The RA HASP is an umbrella document covering all Phase 2 work.

The RA HASP reflects the corporate policy of both GE and the CM. The RA HASP uses the zero incident management approach and defines the safety goal for this project as *zero incidents and zero injuries*.

## **Construction Plan For Reach 7 Barge Loading Area**

The RA HASP provides a general description of anticipated types of field activities. Specific field activities are described in more detail in the Contractor HASP. The objectives of the RA HASP are to:

- Establish minimum health and safety requirements;
- Identify the physical, chemical, and biological hazards potentially present during field work;
- Prescribe the protective measures necessary to control those hazards;
- Define emergency procedures; and
- Prescribe training and medical qualification criteria for site personnel.

The RA HASP must be reviewed by all contractor and subcontractor managers, supervisors, foremen, and safety personnel. All craft personnel performing field activities will receive a site specific project orientation summarizing the content of the RA HASP. All personnel will be required to sign the appropriate documentation acknowledging an understanding of the RA HASP requirements.

The RA HASP was written to comply with the requirements of the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response Standard (29 Code of Federal Regulations [CFR] 1910.120). All activities covered by the RA HASP will be conducted in compliance with applicable federal, state, and local health and safety regulations, including 29 CFR 1910.120.

### **5.3.2 Contractor HASP**

Under the RA HASP and this LBLA Construction Plan, the Contractor is required to prepare a “worker HASP” (referred to herein as Contractor HASP). The Contractor HASP will discuss tasks and provide detailed procedures and activity hazard analyses specific to its scope of work. The Contractor HASP will conform to the RA HASP.

## Construction Plan For Reach 7 Barge Loading Area

### SECTION 6

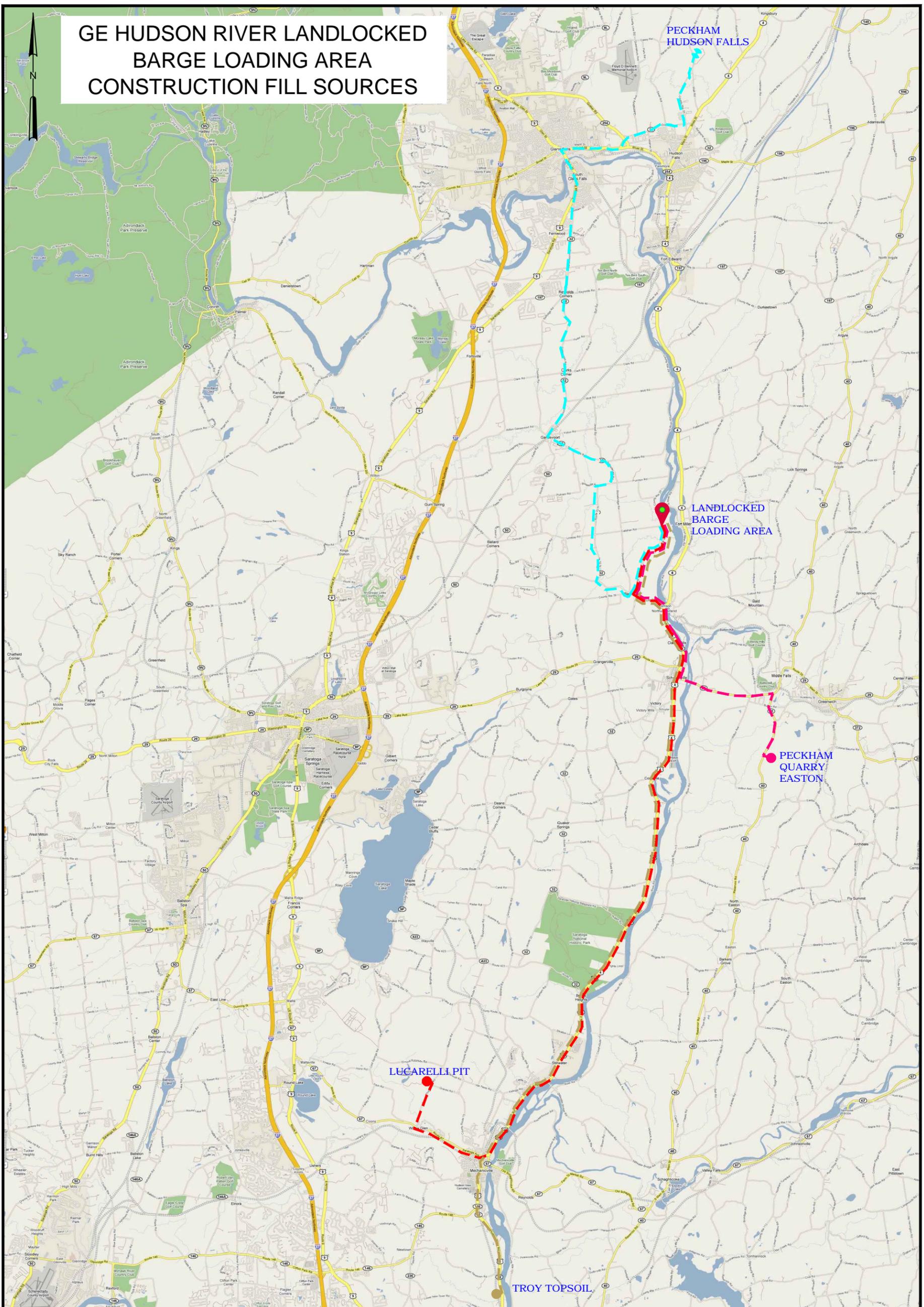
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**ATTACHMENT 1**

**CONTRACTOR TRUCK ROUTES  
FROM THE SELECTED FILL  
SOURCES**

# GE HUDSON RIVER LANDLOCKED BARGE LOADING AREA CONSTRUCTION FILL SOURCES



SOURCE: BASE MAP SUPPLIED BY GREAT LAKES DREDGE & DOCK COMPANY

**KEY:**

- PECKHAM QUARRY GREENWICH ---
- PECKHAM HUDSON FALLS ---
- LUCARELLI PIT ---
- TROY TOPSOIL ---
- BARGE LOADING AREAS 📍
- GRAVEL PIT ●

**PARSONS**  
 ENVIRONMENT & INFRASTRUCTURE  
 GE COMPANY - PARSONS PROJECT OFFICE  
 BUILDING 40-2, 381 BROADWAY  
 FORT EDWARD, NEW YORK 12828 (518) 746-5311

DRAWING TITLE  
**LANDLOCKED BARGE LOADING AREA  
 CONSTRUCTION FILL TRUCK ROUTES**  
 HUDSON RIVER PCBs SUPERFUND SITE

DRAWING NO.	SCALE	NTS
	JOB NO.	

**ATTACHMENT 2**

**LBLA FACILITY OPERATIONS  
TEST AND INSPECTION TABLES**

## Construction Plan For Reach 7 Barge Loading Area

**Table 1 Structural Fill Inspections and Tests**

<b>Inspection Schedule</b>				
<b>Inspection Parameter</b>	<b>Specification Reference</b>	<b>Inspection Method</b>	<b>Minimum Inspection Frequency</b>	<b>Acceptance Criteria</b>
Site Inspection	02205-2.02C	Visual	Once Prior to delivery, and for every two days of trucking	<b>CM Approval</b>
Site Inspection (for new source locations)	02205-2.02C	Visual, Field Screening with FID	Prior to mining if new area at source site	<b>Project Specifications</b>
<b>Test Schedule</b>				
<b>Test Parameter</b>	<b>Specification Reference</b>	<b>Test Method</b>	<b>Minimum Testing Frequency</b>	<b>Acceptance Criteria</b>
Gradation Testing	02205-2.02B	Sieve Analysis	Once prior to delivery, and for every 5,000 tons	CM Approval
Chemical	02205-2.02C	EPA SW-846 Method 8260B, 8270C, 8082, 8150, 6000/7000 Series, 9012,	<b>Once prior to delivery</b>	Project Specifications
Chemical DRO/GRO	02205-2.02C	EPA SW-846 Method 8015C	<b>Once prior to delivery, and for every 1,000 tons</b>	Project Specifications

**Construction Plan For Reach 7 Barge Loading Area**

**Table 2 Granular Fill Inspections and Tests**

<b>Inspection Schedule</b>				
<b>Inspection Parameter</b>	<b>Specification Reference</b>	<b>Inspection Method</b>	<b>Minimum Inspection Frequency</b>	<b>Acceptance Criteria</b>
Site Inspection	02205-2.02C	Visual	Once Prior to delivery, and for every two days of trucking	<b>CM Approval</b>
Site Inspection (for new source locations)	02205-2.02C	Visual, Field Screening with FID	Prior to mining if new area at source site	<b>Project Specifications</b>
<b>Test Schedule</b>				
<b>Test Parameter</b>	<b>Specification Reference</b>	<b>Test Method</b>	<b>Minimum Testing Frequency</b>	<b>Acceptance Criteria</b>
Gradation Testing	02205-2.02B	Sieve Analysis	Once prior to delivery, and for every 5,000 tons	CM Approval
Chemical	02205-2.02C	EPA SW-846 Method 8260B, 8270C, 8082, 8150, 6000/7000 Series, 9012,	<b>Once prior to delivery</b>	Project Specifications
Chemical DRO/GRO	02205-2.02C	EPA SW-846 Method 8015C	<b>Once prior to delivery, and for every 1,000 tons</b>	Project Specifications

**Construction Plan For Reach 7 Barge Loading Area**

**Table 3 Geo-Synthetic Fabrics Inspections and Tests**

<b>Inspection Schedule</b>				
<b>Inspection Parameter</b>	<b>Specification Reference</b>	<b>Inspection Method</b>	<b>Minimum Inspection Frequency</b>	<b>Acceptance Criteria</b>
Field Quality Control inspection	<b>13756-1.09K</b>	TBD	Per Manufacturer's recommendations	<b>Manufacturer's recommendations</b>

**Table 4 Pre-cast Concrete Inspections and Tests**

<b>Inspection Schedule</b>				
<b>Inspection Parameter</b>	<b>Specification Reference</b>	<b>Inspection Method</b>	<b>Minimum Inspection Frequency</b>	<b>Acceptance Criteria</b>
Exposed Rebar	<b>Not Available</b>	Visual Inspection of Condition	Prior to installation	<b>CM Approval</b>
Stress Fractures	<b>Not Available</b>	Visual Inspection of Condition	Prior to installation	<b>CM Approval</b>

**Construction Plan For Reach 7 Barge Loading Area**

**Table 5 SWPPP Controls Inspections and Tests**

<b>Inspection Schedule</b>				
<b>Inspection Parameter</b>	<b>Specification Reference</b>	<b>Inspection Method</b>	<b>Minimum Inspection Frequency</b>	<b>Acceptance Criteria</b>
Silt Fence / Staked Hay Bale Inspection	Not available	Visual Inspection of Condition	Upon installation, and daily once installed	Silt Fence / Staked Hay Bale is in place and in similar integrity to when originally installed. Any sediment deposits are less than one half the height of the Silt Fence / Staked Hay Bale.
Stabilized Construction Entrance inspections	Not available	Visual Inspection of Condition	Daily during construction activities	Construction related soils not being tracked onto public roadway.
Temporary stockpile inspection	Not available	Visual Inspection of Condition	Weekly once stockpile is established	Erosion control is in place and material run-off is minimized.