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FINAL INTERIM REMEDIAL MEASURES WORK PLAN
CULVERT SEDIMENT REMOVAL

BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

PROJECT NO. 129916

April 22, 2008

Submitted to:

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Submitted by:

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CERTIFICATION STATEMENT

I, Daniel T. Servetas, P.E., certify that this Interim Remedial Measures (IRM) Work Plan was prepared by a professional engineer in accordance with Paragraph II.B.2 of the Voluntary Cleanup Agreement for Remedial Investigation/Remedial Action between the New York State Department of Environmental Conservation and Lockheed Martin Corporation (Index #: D7-0001-01-09).

Daniel T. Servetas, P.E.
License Number 079068

In accordance with New York State Education Law, it is a violation for any person, unless he is acting under the direction of a licensed professional engineer, to alter this IRM Work Plan in any way.

1.0 INTRODUCTION

The Onondaga County Department of Water Environment Protection (OCDWEP) has requested Lockheed Martin Corporation (LMC) to remove sediment that has collected in four culverts within the West Branch of Bloody Brook (WBBB) located in the Town of Salina and Village of Liverpool, Onondaga County, New York. The locations of the culverts are within the Bloody Brook site (**Figure 1**) that is the subject of a Voluntary Cleanup Agreement (VCA) between LMC and the New York State Department of Environmental Conservation (NYSDEC) (Index # D7-0001-01-09, effective July 20, 2002). The OCDWEP has requested the sediment removal to increase the hydraulic capacity of the drainage system in the area. The four culverts are located at Brookview Lane, Sunflower Drive, Floradale Road, and Pearl Street.

LMC proposes to conduct the sediment removal as an Interim Remedial Measure (IRM) under the VCA in accordance with this Work Plan.

The remainder of this IRM Work Plan is organized as follows:

Section 2 – Purpose and Objectives: This section presents the purpose and defines the site work area along with the project objectives.

Section 3 – Pre-Mobilization Activities: This section presents a description of the activities that will be completed prior to initiating on-site activities, including public participation, operation plan, health and safety, and permitting.

Section 4 – Site Preparation: This section presents a description of the activities that will be completed as part of site preparation, including access to the work areas, preparation of loading and support areas, and vegetation clearing.

Section 5 – Sediment Control and Surface Water Diversions: This section presents a description of measures that will be taken to control sediment and divert surface water during sediment removal activities.

Section 6 – Sediment Removal: This section presents a description of the activities that will be completed to perform the sediment removal.

Section 7 – Post-Removal Sediment Handling: This section presents a description of the activities that will be completed as part of the post-removal sediment handling, including the stockpiling, dewatering, loading of transport vehicles, and material disposition.

Section 8 – Area Restoration: This section presents a description of the activities that will be completed in connection with the site restoration.

Section 9 – Contingency Plan: This section presents a summary of contingency considerations in connection with the project.

Section 10 – Project oversight and Reporting: This section describes oversight of the on-site field activities and the Interim Remedial Measure Certification Report that will be prepared upon completion of the sediment removal.

Section 11 – Implementation Schedule: This section presents a summary of the estimated time required to complete the sediment removal described in this IRM Work Plan.

2.0 PURPOSE AND OBJECTIVES

Described within this IRM Work Plan are the methods and procedures to be used to remove sediment present within four culverts found along a portion of the WBBB. In addition to removal of material from within each culvert, accumulated material that is immediately upstream and downstream of each culvert will be removed.

This IRM Work Plan represents the "site operations plan" for the culvert sediment removal and has been developed in accordance with good engineering practice consistent with procedures employed by OCDWEP during the maintenance of the drainage district.

2.1 Site Work Area Description

The "site work area" is defined as the four culverts located on the WBBB at Brookview Lane, Sunflower Drive, Floradale Road, and Pearl Street as shown on **Figure 2**. The sediment removal will also include the portions of the WBBB immediately upstream and downstream of each of the culverts (i.e., within the wing walls of the culverts). The current condition of the culverts is shown in photographs taken on January 7, 2008 and included as **Appendix A**. All four of these work areas are located within the section of WBBB that is classified as a Class C stream.

2.2 Culvert Sediment Removal Objectives

The objective of this IRM is to remove the bulk sediment located within the identified culverts as requested by OCDWEP.

3.0 PRE-MOBILIZATION ACTIVITIES

This section provides a discussion of the activities that will be completed prior to initiating on-site activities. Information regarding public participation, operation plan, health and safety, and permitting is discussed below.

3.1 Public Notice

In accordance with subparagraph II.G of the VCA, NYSDEC does not require LMC to provide a public notice or comment period for an IRM. Since the sediment removal related to the culvert maintenance is being completed as an IRM, no public notice or comment period will be conducted.

3.2 Operation Plan

Prior to initiating any on-site work, the contractor selected to complete the sediment removal will be required to submit an Operation Plan to LMC. The purpose of the Operation Plan is to summarize the materials, procedures, timelines, and controls that the contractor intends to utilize during project activities. That plan will include the following:

- List of equipment to be used on-site;
- Work schedule;
- The contractor's proposed plan for controlling vehicular and pedestrian traffic during the performance of construction activities;
- The contractor's statement of qualification package, as appropriate;
- Stormwater, erosion, spill, noise, and dust control measures;
- The contractor's proposed approach to the sediment removal;
- Materials handling and staging approach; and
- Equipment cleaning and decontamination procedures.

This operations plan will be submitted to NYSDEC prior to conducting the IRM.

3.3 Health and Safety

Prior to initiating any on-site work, the contractor selected to complete the sediment removal will be required to submit to LMC a Project Health and Safety Plan (HASP). That HASP will

identify the contractor's project-specific health and safety procedures and will be developed to address the minimum requirements established in 29 CFR 1910 and 1926. The plan will address those activities to be undertaken by the contractor and present required information including, but not limited to, the following (as applicable):

- Training;
- Identification of key personnel (including the contractor's health and safety officer);
- Medical surveillance;
- Site hazards;
- Work zones;
- Personal safety equipment and protective clothing;
- Personal air monitoring;
- Personnel/equipment cleaning;
- Construction safety procedures; and
- Standard operating procedures and safety programs.

The HASP will be submitted to NYSDEC prior to conducting the IRM.

3.4 Permits

As stated in subparagraph XIV.C of the VCA, LMC anticipates that the NYSDEC will provide an exemption to LMC for any required NYSDEC permits related to these IRM activities. In addition, it is not expected that permits will need to be obtained from New York State Department of Health (NYSDOH) or OCDWEP; however, each of these agencies will be informed of the project schedule.

The U.S. Army Corps of Engineers (USACE) has been contacted and has informed LMC that authorization to use a Nationwide Permit will need to be obtained. Specifically, LMC is expecting to use Nationwide Permit 33 (NWP 33) for these activities. A preconstruction notification (PCN) is currently being compiled, and the authorization from USACE is expected to be obtained by LMC within 45 days from the date of submittal of the PCN. Once USACE authorization is obtained, LMC will notify the NYSDEC. LMC will also comply with the conditions set forth in the NYSDEC May 11, 2007 document relating to Section 401 Water Quality Certification.

LMC has also contacted the Town of Salina Highway Department regarding traffic control during the implementation of the IRM. Upon approval of this IRM Work Plan, LMC will coordinate with the Town of Salina and determine exactly how traffic will be controlled.

At least two full working days prior to beginning excavation work, the LMC contractor shall notify Dig Safely New York to obtain utilities clearance.

4.0 SITE PREPARATION

This section provides a discussion of the site access, preparation of loading and support areas, and vegetation clearing.

4.1 Access

Access to the work areas for ingress and egress of personnel and equipment is anticipated to be from public roadways and from within the OCDWEP easement. This will be confirmed upon completion of the Operations Plan. The public roadway access points include the crossings at Brookview Lane, Sunflower Drive, Floradale Road, and Pearl Street.

4.2 Preparation of Loading and Support Areas

The points of access discussed above would also be used as loading and support areas for the sediment removal and maintenance work. Preparation of these areas may include removal of traffic guard rails and establishing temporary traffic controls. These measures will be coordinated with the Town of Salina Highway Department as stated in **Section 3.4**.

4.3 Vegetation Clearing

Clearing of vegetation adjacent to the work area is not anticipated. Any vegetation removed from the stream bed as part of this IRM will be handled and disposed with sediments removed from the work area.

5.0 SEDIMENT CONTROL AND SURFACE WATER DIVERSIONS

This section describes the measures that will be taken to control sediment transport within the WBBB during the work, and to divert the flow of surface water around the work areas while work is ongoing.

5.1 Surface Water Diversion Around Work Areas

Surface water will be diverted around each work area by constructing temporary dams both upstream and downstream of each work area. The location of the temporary dams will be within the narrowest portion of the WBBB where it enters and exits the wing walls of each culvert. The temporary dams will be constructed using sandbags that will be placed on geotextile fabric to maintain separation between the stream bed and the sandbags. The entire flow of the WBBB will be diverted around the work area by pumping from the upstream side of the upstream dam. Water from within the closed work area will be removed by pumping. The pumps will be operated to minimize sediment removal and disturbance during the pumping process. The diverted water will be discharged a sufficient distance downstream from the work area to allow work in a relatively dry channel section. The pump discharge will be directed against a solid object (e.g., concrete slab, stone, or steel container) or straw bales to dissipate the energy from the discharge and prevent erosion of the stream bed and/or banks.

Subsequent to the sediment removal from each culvert, the upstream and downstream sand bag dams will be disassembled prior to shutting down the diversion pump(s). Disassembly in this manner will prevent a sudden rush of water downstream.

5.2 Sediment Control Measures

Disturbance to the bed or banks of the WBBB shall be kept to the minimum necessary to complete the IRM. The four culverts will be excavated sequentially to control flow and sedimentation. In addition, a variety of sediment control measures will be taken to control turbidity as discussed below.

Within each active work area (i.e., slightly downstream of the upstream dam), a temporary collection sump will be maintained to collect any seepage water. If necessary, the water that accumulates in the sump will be removed. The removal of the sump water will be conducted in a manner that minimizes sediment removal and disturbance from the bottom of the sump. In

ıddition, periodic visual inspections in accordance with NYSDEC *Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations* (NYSDEC Part 703) will ɔe made upstream and downstream of the work area. As stated in NYSDEC Part 703, a comparison of the upstream and downstream portions of the WBBB will be used to determine hat "no increase that will cause a substantial visible contrast to natural conditions" has occurred. The water removed from within the work area will be discharged against the energy dissipater described in **Section 5.1**. If necessary, the water removed from within the work area will be lischarged through a filter system.

These measures are expected to protect downstream sections of the WBBB during a typical storm and/or sudden snowmelt. In the event that an atypical storm is predicted, sediment emoval and maintenance activities will be temporarily delayed until after the storm subsides.

7.0 POST REMOVAL SEDIMENT HANDLING

This section describes the methods that will be used to handle the sediments after they are removed from the culverts.

7.1 Sediment Stockpiling and Dewatering

As the sediments are being removed from within the culvert barrels as discussed in **Section 6.0**, the sediments will be stockpiled on the upstream and downstream side of the culverts within the work area and between the wing walls to allow for the sediments to dewater naturally within the dewatered work area. In addition, absorbent material (either vermiculite, sawdust, wood chips, or speedi-dry) may be added to the stockpiles to facilitate the dewatering process. The need for and the amount of absorbent material added to each stockpile will be dependent on the weather and condition of the sediment. The addition of absorbent material will be at the discretion of the LMC representative on-site and in accordance with acceptance criteria at the disposal facility. The stockpiles will be covered with polyethylene sheeting while dewatering and until loaded for deposition to prevent additional water from entering the stockpiles due to precipitation.

7.2 Loading of Transport Vehicles

The stockpiled sediments will be loaded into transport vehicles at roadways over the subject culverts (i.e., Brookview Lane, Sunflower Drive, Floradale Road, and Pearl Street) for transport to Waste Management's High Acres Landfill in Fairport, New York. Transport vehicles will be lined prior to placement of material for transport to the disposal facility (including an absorbent boom around the tailgate). Material loading will be accomplished using standard construction equipment. At each loading area, a temporary containment will be constructed using HDPE sheeting. The containment area will be adequately sized to ensure that any material that may fall off the loading equipment between the stockpile and the transport vehicle will not fall onto the ground surface. As the material is being loaded, absorbent material (either vermiculite, sawdust, wood chips, or speedi-dry) may be added to the truck to absorb water that may separate from the sediments during transportation. The need for and the amount of absorbent material added to each load will be depended on the weather and condition of the sediment. The addition of absorbent material will be at the discretion of the LMC representative on-site and in accordance with acceptance criteria at the disposal facility.

At some material loading areas, it may be necessary to temporarily remove traffic guard rails located above the culverts. Upon completion of the material loading operations, any material that accumulated on the temporary containment area will be cleaned up and placed within the transport vehicle. The material used to construct the temporary containment area will then be disassembled and disposed of properly, and the traffic guard rails will be restored to their original configurations.

7.3 Material Disposition

On January 24, 2008, composite sediment samples were collected from each of the four culverts to evaluate the waste characteristics. Specifically, one composite sample was collected from each culvert for a total of four composite samples. Each composite sample was comprised from four sub samples as shown on **Figure 7**. The material within each culvert was divided roughly into four equal quadrants, and the sub samples were collected from each quadrant. The composite sample was created by taking half of each sub sample and mixing the four parts. The other half of each sub sample was also sampled. Initially only the four composite samples were analyzed.

The analytical results from the four composite samples (summarized in **Table 2**) were evaluated to determine appropriate disposition methods in accordance with applicable laws and regulations. Specifically, the data was compared to Toxicity Characteristic Leaching Procedure limits, Resource Conservation and Recovery Act characteristics, and Toxic Substance Control Act limits. As shown in **Table 2**, the composite samples were found to be below the regulatory standards and to be non-hazardous waste. **Appendix B** contains a set of laboratory analytical results.

Although the analytical results from the composite samples indicate that the sediments subject to removal as part of the culvert maintenance program do not require disposition as a hazardous waste, LMC has chosen to dispose of the sediments at a hazardous waste landfill (i.e., Waste Management's High Acres Landfill). In addition, final transportation and disposal decisions will be at LMC's discretion and will be based upon weather conditions, the availability of suitable disposal facility capacity, and/or scheduling requirements of the disposal facility.

8.0 AREA RESTORATION

Because the construction activities will be conducted in a manner that minimizes impacts on the WBBB and adjacent areas, no restoration activities are expected to be required. The only material being removed will be the non-cohesive material from within the culverts and between the wing walls. Rip-rap (where present) will not be disturbed. If rip-rap is disturbed or any damage occurs to the stream banks, repairs will be made to restore the rip-rap and stream bank to pre-construction conditions. Materials used for sediment control and water diversion (e.g., geotextile fabric, sandbags, etc.) will be completely removed from the WBBB maintaining the pre-construction elevations of the stream bottom in those areas.

LMC does not anticipate any damage to the areas adjacent to the WBBB stream bank. If any damage should occur, damaged areas will be returned to pre-construction conditions through grading, placement of topsoil (if needed), and seeding with similar grasses. Any damaged asphalt paved areas will be restored with hot mix asphalt. If immediate restoration is required, a temporary cold patch asphalt repair may be made.

It is anticipated that during material loading operations, some traffic guard rails may have to be temporarily removed. Upon completion of loading operations, these traffic guard rails will be immediately restored to their original configuration.

Pre- and post-construction photographs will be used to document the completion of area restoration.

9.0 CONTINGENCY PLAN

This section of the IRM Work Plan has been developed to identify steps that will be taken in response to events that may reasonably occur during this work. These events include weather conditions, access, and projects of other parties.

9.1 Weather Conditions

During heavy precipitation events, the work area may not be accessible to the equipment that will be used during implementation. Therefore, to protect the safety of site personnel and to reduce the damage to maintained areas, work activities will not be conducted on days where forecasts predict significant precipitation. Work will resume when conditions are deemed appropriate.

9.2 Access

The IRM described herein will be conducted within the Bloody Brook Drainage District maintained by Onondaga County pursuant to easements and rights-of-way. LMC is working with Onondaga County to finalize an Access Agreement for Temporary Use and Occupancy of Property to permit the implementation of this IRM Work Plan and all other remediation work under the VCA. LMC will provide notice to the Town of Salina regarding the implementation of this IRM Work Plan. If any access discussions are unsuccessful, LMC will notify the NYSDEC in accordance with Subparagraph XIV.C of the VCA for assistance in obtaining access.

9.3 Projects of Other Parties

LMC is not aware of any other projects occurring in the vicinity of the IRM work area. However, the schedule presented in **Section 11** of this work plan may be affected should other projects impede this work.

10.0 PROJECT OVERSIGHT AND REPORTING

In accordance with Subparagraph II.B.2 of the VCA, this IRM Work Plan has been reviewed and sealed by a New York State Professional Engineer. A certification statement is included on page iii of this IRM Work Plan. Once approved, in accordance with Subparagraph II.B.3 of the VCA, all field activities will be supervised by an on-site representative who is qualified to supervise the activities presented herein.

Upon completion of the IRM, LMC will provide the NYSDEC with an Interim Remedial Measure Certification Report. The report will detail the work activities completed at the site. The report will include a map illustrating the work area. The report will be reviewed and sealed by a New York State Professional Engineer.

11.0 IMPLEMENTATION SCHEDULE

This section presents the anticipated schedule required to complete the IRM activities. LMC will complete the IRM activities while the WBBB is at low flow. If it is a dry spring following the snow melt, LMC will initiate the activities prior to the summer season. Below is the schedule that LMC desires to follow for the project which is depended upon NYSDEC review, obtaining the NWP 33, and contractor schedules.

Activity	Anticipated Schedule
Submittal of Work Plan to NYSDEC	0 days
NYSDEC Review	30 days
LMC/NYSDEC Address Comments	15 days
Contractor Bidding, Access Negotiations, Permitting	30 days
Contractor Preparation (Operations and Health and Safety Plan, etc.)	30
Submittal of Contractor Operations and Health and Safety Plans to NYSDEC (for information only)	0 days
Project Execution	30 days
Submittal of IRM Certification Report	15 days

LMC anticipates that any comments provided by NYSDEC can be resolved in a letter format without further review or submittal of a revised IRM Work Plan.

TABLES

Table 1

Characteristics and Estimated Sediment Removal Volumes/Mass

Bloody Brook, Onondaga County, New York

Culvert Location	Description	Inlet Invert (ft msl)	Outlet Invert (ft msl)	Material Located Inside CMP Barrels		Material Located Outside CMP Barrels		Total Volume (cy)	Mass (tons)
				Description	Volume (cy)	Description	Volume (cy)		
Brookview Lane	Double CMP	370.4	370.0	Dark brown, medium grain SAND and subrounded GRAVEL, little silt, moist. (SM)	17.82	Sediment build-up with vegetation	6.67	24.49	33.0615
Sunflower Drive	Double CMP	368.1	367.8	Dark brown medium grain SAND and subrounded COBBLE, little subrounded gravel, trace wood, moist. (SP)	14.52	Sediment build-up with vegetation	5.22	19.74	26.649
Floradale Road	Double CMP	366.1	366.3	Dark brown, medium grain, SAND, some fine grain sand and silt, little subrounded gravel, moist. (SP)	26.18	Sediment build-up with vegetation	20.89	47.07	63.5445
Pearl Street	Double CMP	364.3	364.3	Dark brown, fine to medium grain SAND, some silt, trace wood, trace subrounded	73.34	Sediment build-up with vegetation	7.30	80.64	108.864
							Totals	172	232

Notes:

1. CMP = Corrugated metal pipe
2. ft = feet
3. msl = mean sea level
4. SM = Unified Soil Classification System group symbol for silty sand
5. SP = Unified Soil Classification System group symbol for poorly-graded sand
6. cy = cubic yards

Table 2

Analytical Results and TCLP/TSCA Limits and Characteristics

Bloody Brook, Onondaga County, New York

Sample ID:		BROOK-COMP	FLOR-COMP	SUN-COMP	PEARL-COMP	TCLP/TSCA
Date Sample Collected:		1/24/2008	1/24/2008	1/24/2008	1/24/2008	Limits/Characteristics
Type of Sample:		Sediment	Sediment	Sediment	Sediment	
Volatiles						
1,1-Dichloroethene	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	0.7
1,2-Dichloroethane	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	500
Benzene	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	500
Carbon Tetrachloride	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	500
Chlorobenzene	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	100,000
Chloroform	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	6,000
Methyl Ethyl Ketone	UG/L	ND (50)	ND (50)	ND (50)	ND (50)	200,000
Tetrachloroethene	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	700
Trichloroethene	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	500
Vinyl chloride	UG/L	ND (10)	ND (10)	ND (10)	ND (10)	200
Semivolatiles						
1,4-Dichlorobenzene	MG/L	ND (0.040)	ND (0.040)	ND (0.040)	ND (0.040)	7.5
2,4,5-Trichlorophenol	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	400
2,4,6-Trichlorophenol	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	2.0
2,4-Dinitrotoluene	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	0.13
Cresol, m-	MG/L	ND (0.040)	ND (0.040)	ND (0.040)	ND (0.040)	200
Cresol, o-	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	200
Cresol, p-	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	0.0016 J	200
Hexachlorobenzene	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	0.13
Hexachlorobutadiene	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	0.5
Hexachloroethane	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	3.0
Nitrobenzene	MG/L	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	2.0
Pentachlorophenol	MG/L	ND (0.040)	ND (0.040)	ND (0.040)	ND (0.040)	100
Pyridine	MG/L	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	5.0
Metals						
Arsenic, Total	MG/L	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	5.0
Barium, Total	MG/L	2.8	2.1	2.2	1.6	100
Cadmium, Total	MG/L	0.076	0.082	0.021	0.057	1.0
Chromium, Total	MG/L	ND (0.0040)	ND (0.0040)	ND (0.0040)	0.011	5.0
Lead, Total	MG/L	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.059	5.0
Mercury, Total	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	0.2
Selenium, Total	MG/L	ND (0.015)	ND (0.015)	ND (0.015)	ND (0.015)	1.0
Silver, Total	MG/L	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	5.0
Herbicides						
2,4,5-TP (Silvex)	MG/L	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	1.0
2,4-D	MG/L	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	10
Pesticides						
Chlordane	MG/L	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	0.03
Endrin	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	0.02
Heptachlor	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	0.008
Heptachlor epoxide	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	0.008
Methoxychlor	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	10
Toxaphene	MG/L	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	0.5
gamma-BHC (Lindane)	MG/L	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	0.4
RCRA Characteristics						
Corrosivity (pH)	S.U.	7.74	7.50	7.59	7.28	< 2 or > 12.5
Flashpoint	°F	>176	>176	>176	>176	< 104
HCN Released From Waste	MG/KG	ND (10)	ND (10)	ND (10)	ND (10)	See Note 13
H_2S Released From Waste	MG/KG	ND (10)	ND (10)	ND (10)	ND (10)	See Note 13
Polychlorinated Biphenyls						
PCB 1016	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1221	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1232	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1242	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1248	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1254	UG/KG	ND (18)	ND (99)	ND (41)	ND (1300)	50,000
PCB 1260	UG/KG	270	850	780	ND (1300)	50,000

Table 2

Analytical Results and TCLP/TSCA Limits and Characteristics

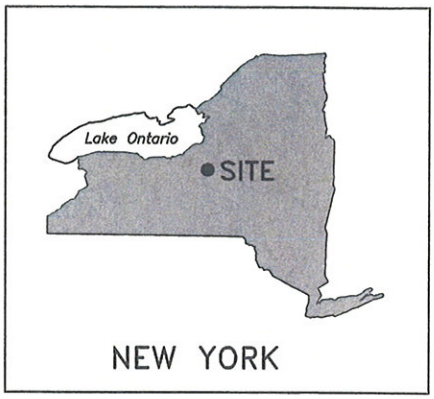
Bloody Brook, Onondaga County, New York

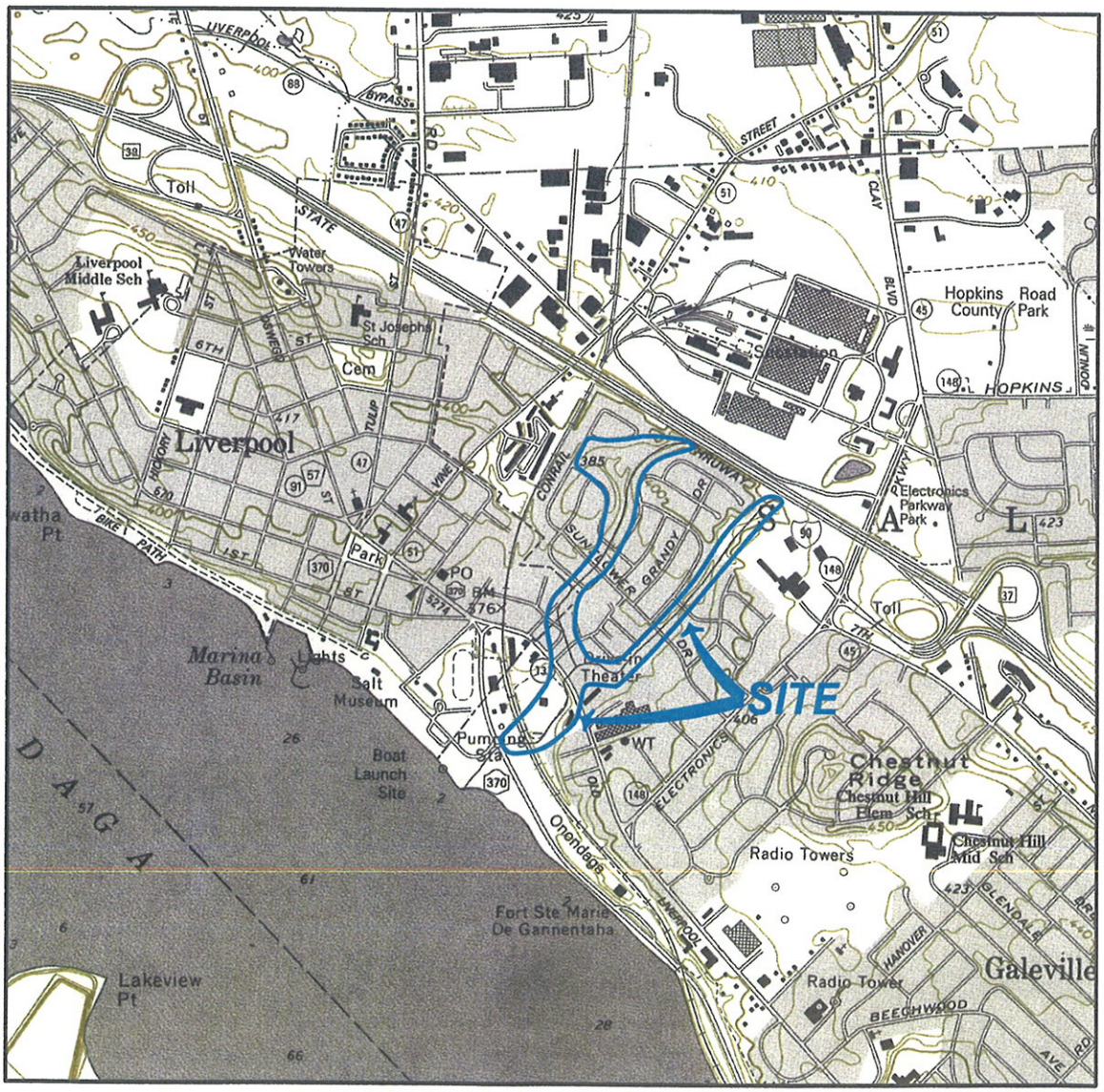
Notes:

1. Samples were collected to characterize sediments within culverts subject to maintenance activities in 2008.
2. Each analysis was performed on a composite sediment sample. Each composite sediment sample (e.g., Brook-Comp) was comprised of equal parts collected at four sub-sampling locations within each culvert work area (e.g., Brook-A, B, C, and D) as shown on Figure 7.
3. TCLP/TSCA = Toxicity Characteristic Leaching Procedure/Toxic Substance Control Act
4. RCRA = Resource Conservation and Recovery Act
5. MG/L = milligrams per liter.
6. UG/L = micrograms per liter.
7. MG/KG = milligrams per kilogram.
8. ^{0}F = degrees Fahrenheit.
9. UG/KG = micrograms per kilogram.
10. S.U. = Standard Units
11. ND = indicates constituent not detected over laboratory detection limit with the detection limit in parentheses.
12. J = data qualifier that indicates the analytical result is an estimated value.
13. For pH conditions between 2 and 12.5, cyanide or sulfide bearing waste can generate toxic gases, vapors or fumes in quantities sufficient to present a danger to human health or the environment.
14. No values in table exceed TCLP/TSCA Limits and Characteristics.

FIGURES

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHKOLNIK 02-22-08	DTS 02-22-08	DTS 02-22-08	129916A1





APPROXIMATE SCALE

0 2000 4000 FEET

REFERENCE:

NYSDOT 7.5 MIN TOPOGRAPHIC MAP OF SYRACUSE WEST, QUADRANGLE 1990, SCALE: 1" = 2000'.

Shaw®
Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
ONONDAGA COUNTY, NEW YORK

FIGURE 1
SITE LOCATION MAP

L:\project\LOCKHEED\BLOODY\IRM\129916A1.dwg
Plot Date/Time: 06/19/08 10:54am Image: BB1
Format Revised: 12/15/99 Xref: .

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	DESIGNED BY	DATE
129916D1	DTS	DTS	SSH/MJS	DTS/NE	02/22/08

OFFICE: ALBANY, NY

WORK AREA 1
BROOKVIEW LANE CULVERTS

WORK AREA 2
SUNFLOWER DRIVE CULVERTS

WORK AREA 3
FLORADALE ROAD CULVERTS

WORK AREA 4
PEARL STREET CULVERTS

BROOKVIEW LANE

SUNFLOWER DRIVE

FLORADALE ROAD

PEARL STREET

SALINA STREET

BLOODY BROOK
(WEST BRANCH)

N 1,131,000

E 923,000

PEARL STREET APARTMENTS #1

PEARL STREET APARTMENTS #2

PEARL STREET APARTMENTS #3

HARBORSIDE MANOR APARTMENTS

APARTMENT BUILDING

STORAGE BUILDING

YOUNG & FRANKLIN

SCALE
0 50 100 150 FEET

MAP LEGEND:

EASEMENT/PROPERTY BORDER

WORK AREA LIMITS

REFERENCE:

BASE MAP SOURCE: IANUZI & ROMANS, P.C.

Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORK PLAN - CULVERT SEDIMENT REMOVAL

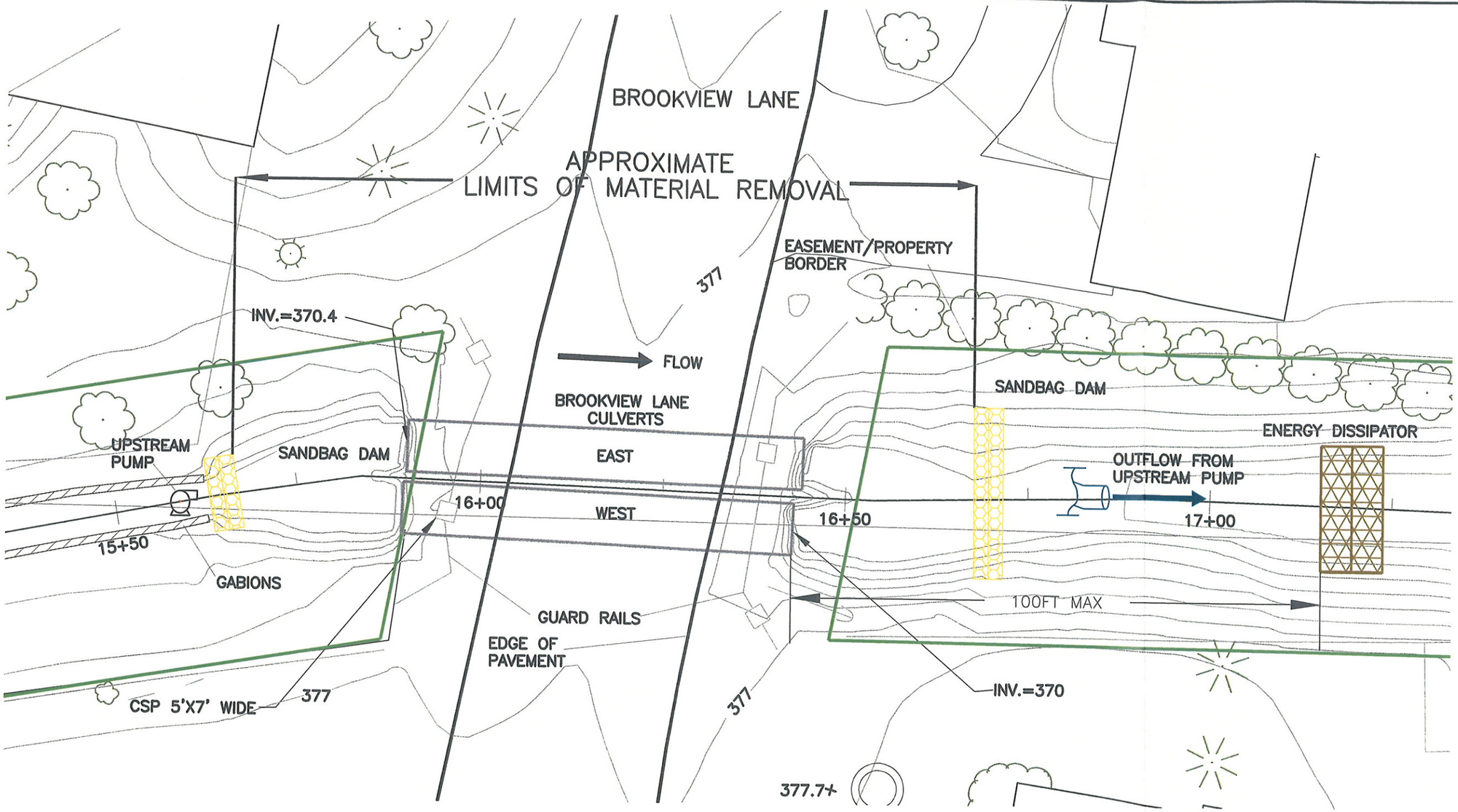
FIGURE 2
PROPOSED CULVERT SEDIMENT REMOVAL AREAS
WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

Xref: 129916
Image: .

L:\project\LOCKHEED\BLOODY\IRM\129916D1.dwg
Plot Date/Time: 06/19/08 10:55am
Plotted by: Samuil.Shkolnik

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	DESIGNED BY	DATE
129916B1	DTS	DTS	SSH/MJS	DTS/NE	02/19/08

OFFICE: LATHAM, NY



SCALE
0 15 30 FEET

N

REFERENCE:

BASE MAP SOURCE: IANUZI & ROMANS, P.C.

NOTES:

1) DIMENSIONS OF SAND BAG DAMS AND ENERGY DISSAPATOR ARE NOT TO SCALE. ADEQUATE SIZING OF THE SAND BAG DAMS AND ENERGY DISSAPATOR SHALL BE DETERMINED BY THE CONTRACTOR AND WILL BE SUBJECT TO THE ENGINEER'S APPROVAL.

2) LOCATION OF UTILITIES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

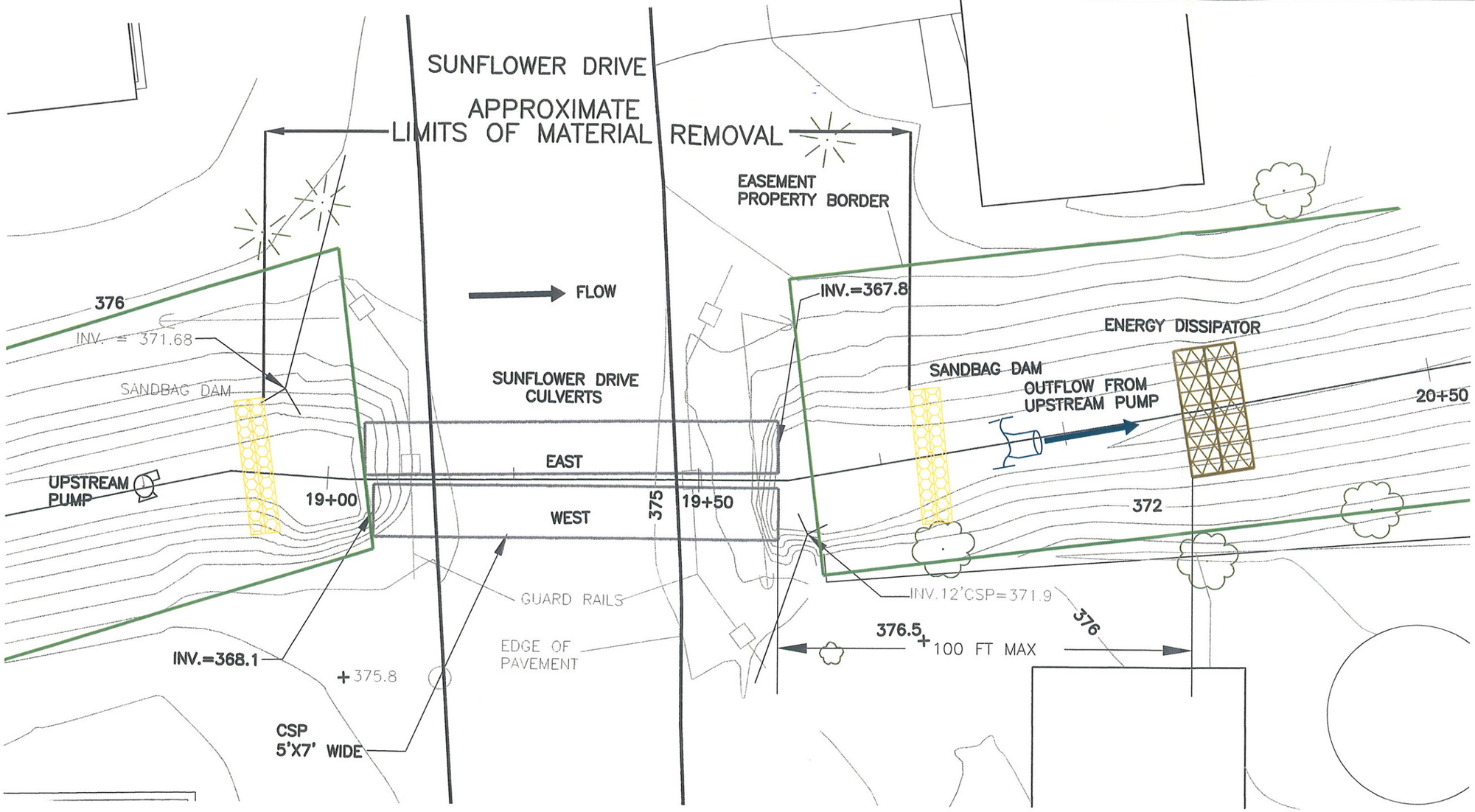
Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORK PLAN - CULVERT SEDIMENT REMOVAL

FIGURE 3
BROOKVIEW LANE CULVERTS

WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

L:\project\LOCKHEED\BLOODY\IRM\129916B1.dwg
Plot Date/Time: 06/19/08 10:55am Xref: 118897X1
Plotted by: Samuil.Shkolnik Image: .



SCALE
0 15 30 FEET

N

REFERENCE:

BASE MAP SOURCE: IANUZI & ROMANS, P.C.

NOTES:

1) DIMENSIONS OF SAND BAG DAMS AND ENERGY DISSAPATOR ARE NOT TO SCALE. ADEQUATE SIZING OF THE SAND BAG DAMS AND ENERGY DISSAPATOR SHALL BE DETERMINED BY THE CONTRACTOR AND WILL BE SUBJECT TO THE ENGINEER'S APPROVAL.

2) LOCATION OF UTILITIES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

Shaw Shaw Environmental, Inc.

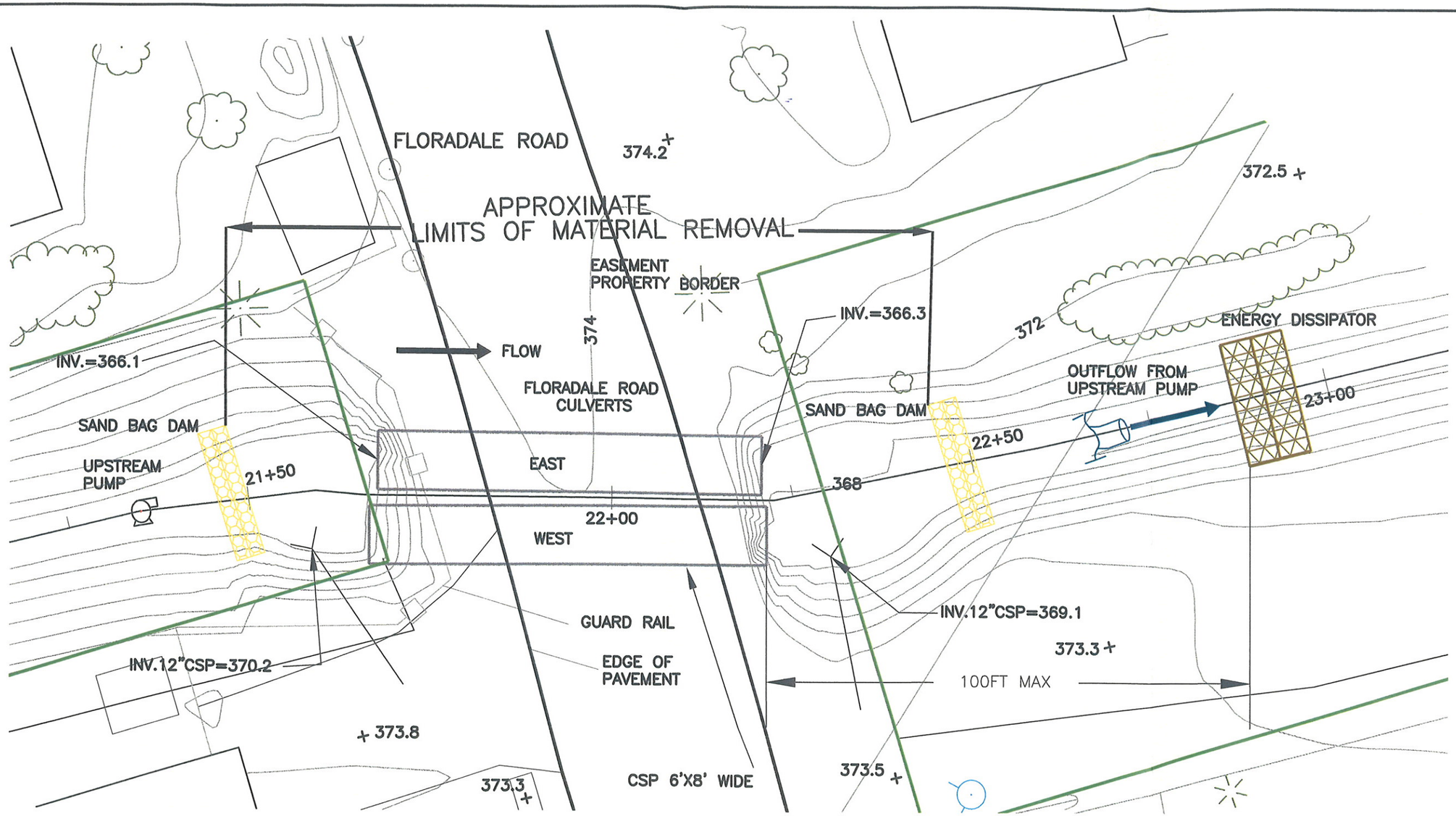
LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORK PLAN - CULVERT SEDIMENT REMOVAL

FIGURE 4
SUNFLOWER DRIVE CULVERTS

WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	DESIGNED BY	DATE	OFFICE
129916B2	DTS	DTS	SSH/MJS	DTS/NE	02/22/08	LATHAM, NY

L:\project\LOCKHEED\BLOODY\IRM\129916B2.dwg
Plot Date/Time: 06/19/08 10:56am Xref: 118897X1
Plotted by: Samuil.Shkolnik Image: .



SCALE
0 15 30 FEET

N

REFERENCE:

BASE MAP SOURCE: IANUZI & ROMANS, P.C.

NOTES:

1) DIMENSIONS OF SAND BAG DAMS AND ENERGY DISSAPATOR ARE NOT TO SCALE. ADEQUATE SIZING OF THE SAND BAG DAMS AND ENERGY DISSAPATOR SHALL BE DETERMINED BY THE CONTRACTOR AND WILL BE SUBJECT TO THE ENGINEER'S APPROVAL.

2) LOCATION OF UTILITIES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORK PLAN - CULVERT SEDIMENT REMOVAL

FIGURE 5
FLORADALE ROAD CULVERTS

WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

OFFICE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
LATHAM, NY	02/22/08	DTS/NE	SSH/MJS	DTS	DTS	129916B3

L:\project\LOCKHEED\BLOODY\IRM\129916B3.dwg
Plot Date/Time: 06/19/08 10:57am Xref: 118897X1
Plotted by: Samuil.Shkolnik Image: .

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	DESIGNED BY	DATE
129916B4	DTS	DTS	SSH/MJS	DTS/NE	02/22/08

OFFICE
LATHAM, NY

372.7 x

APPROXIMATE
LIMITS OF MATERIAL REMOVAL

25+00

FLOW

UPSTREAM
PUMP

INV.=364.3

EASEMENT
PROPERTY BORDER

CSP 6'X9'
WIDE

3" D

SAND BAG
DAM

PEARL STREET APARTMENT
CULVERTS

ENERGY DISSIPATOR

OUTFLOW FROM
UPSTREAM PUMP

EAST

SAND BAG
DAM

25+50

INV.48"CSP=365.6

26+00

WEST

26+50

27+00

GUARD RAIL

100 FT MAX

UTILITY EASEMENT

INV.10"VCP=367.5

x372.6

x372.5

INV.=364.3WEST

N

SCALE
0 15 30 FEET

REFERENCE:

BASE MAP SOURCE: IANUZI & ROMANS, P.C.

NOTES:

1) DIMENSIONS OF SAND BAG DAMS AND ENERGY DISSAPATOR ARE NOT TO SCALE. ADEQUATE SIZING OF THE SAND BAG DAMS AND ENERGY DISSAPATOR SHALL BE DETERMINED BY THE CONTRACTOR AND WILL BE SUBJECT TO THE ENGINEER'S APPROVAL.

2) LOCATION OF UTILITIES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORK PLAN - CULVERT SEDIMENT REMOVAL

FIGURE 6
PEARL STREET APARTMENT CULVERTS

WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

L:\project\LOCKHEED\BLOODY\IRM\129916B4.dwg
Plot Date/Time: 06/19/08 10:57am Xref: 118897X1
Plotted by: Samuil.Shkolnik Image: .

OFFICE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
LATHAM, NY	03/06/08	DTS/NE	SSH/MJS	DTS	DTS	129916D2

BROOKVIEW LANE

SUNFLOWER DRIVE

FLORADALE ROAD

OLD LIVERPOOL ROAD (C.R. [illegible])

PEARL STREET

BLOODY BROOK (WEST BRANCH)

N 1:131,000

SCALE 0 50 100 150 FEET

BROOK-A
BROOK-B
16+00
BROOK-C
BROOK-D
16+50
SCALE 0 10 20 30 FEET

FLOR-A
+50
FLOR-B
OHW
374
22+00
FLOR-C
373.8
368
FLOR-D
SCALE 0 10 20 30 FEET

BL 201
SMH
SUN-A
19+00
SUN-B
SUN-C
19+50
SUN-D
375.8
SCALE 0 10 20 30 FEET

PEARL-C
PEARL-D
20+50
5'
WIDE
20
50'
26+00
SAN. SEWER
372.5
372.6
PEARL-A
PEARL-B
SCALE 0 10 20 30 FEET

#101 #103 #105 #107 #109 #401 #402 #403 #404 #405 #406 #102 #104 #113

HARBORSIDE MANOR APARTMENTS #1
HARBORSIDE MANOR APARTMENTS #2
PEARL STREET APARTMENTS #4
PEARL STREET APARTMENTS #5
YOUNG & FRANKLIN
STORAGE SHELVES
STORAGE BUILDING

MAP LEGEND:
P-4 SAMPLING LOCATIONS

Shaw Shaw Environmental, Inc.

LOCKHEED MARTIN CORPORATION
SYRACUSE, NEW YORK
IRM WORKPLAN - CULVERT SEDIMENT REMOVAL

FIGURE 7
CULVERT SAMPLING LOCATIONS

WEST BRANCH OF BLOODY BROOK
ONONDAGA COUNTY, NEW YORK

Xref: 118897X1
Image: .

L:\project\LOCKHEED\BLOODY\IRM\129916D2.dwg
Plot Date/Time: 05/19/08 10:58am
Plotted by: Samuil.Shkolnik

APPENDIX A

PHOTO LOG

Shaw Environmental & Infrastructure, Inc.
Photographic Record – Brookview Lane Culverts

Customer:	**Lockheed Martin Corporation**	**Project Number:**	**129916**
Site Name:	**Bloody Brook**	**Site Location:**	**Liverpool, New York**

Photographer: Nickcole Evans **Date:** 01/07/08 **Location:** Salina, New York **Comments:** Area Upstream of Brookview Lane Culvert	
Photographer: Nickcole Evans **Date:** 01/07/08 **Location:** Salina, New York **Comments:** Area Downstream of Brookview Lane Culvert	

Shaw™
Shaw E & I, Inc.

Shaw Environmental & Infrastructure, Inc.
Photographic Record – Sunflower Drive Culverts

Customer:	**Lockheed Martin Corporation**	**Project Number:**	**129916**
Site Name:	**Bloody Brook**	**Site Location:**	**Liverpool, New York**

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

Comments:
Area Upstream of Sunflower Drive Culvert

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

Comments:
Area Downstream of Sunflower Drive Culvert

Shaw™
Shaw E & I, Inc.

Shaw Environmental & Infrastructure, Inc.
Photographic Record – Floradale Road Culverts

Customer:	**Lockheed Martin Corporation**	**Project Number:**	**129916**
Site Name:	**Bloody Brook**	**Site Location:**	**Liverpool, New York**

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

Comments:
Area Upstream of Floradale Road Culvert

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

Comments:
Area Downstream of Floradale Road Culvert

Shaw™
Shaw E & I, Inc.

Shaw Environmental & Infrastructure, Inc.
Photographic Record – Pearl Street Culverts

Customer:	**Lockheed Martin Corporation**	**Project Number:**	**129916**
Site Name:	**Bloody Brook**	**Site Location:**	**Liverpool, New York**

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

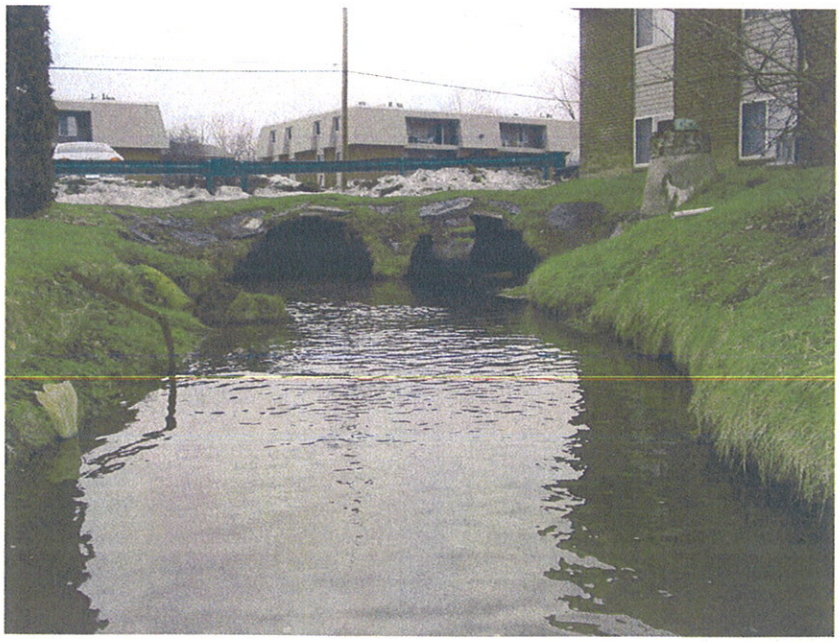
Comments:
Area Upstream of
Pearl Street Culvert

Photographer:
Nickcole Evans

Date:
01/07/08

Location:
Salina, New York

Comments:
Area Downstream of
Pearl Street Culvert



Shaw™
Shaw E & I, Inc.

APPENDIX B

LABORATORY ANALYTICAL RESULTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT
Revised

Job#: A08-0908

Project#: NY3A9090
Site Name:
Task: Electronics Park

Nickcole Evans
Shaw E&I
6992 Knolls Avenue North
Canastota, NY 13032

CC: Daniel Servetas

TestAmerica Laboratories Inc.

Candace L. Fox
Project Manager

02/15/2008

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
1	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

METHOD 8260 - TCLP VOLATILES
ANALYSIS DATA SHEET

Client No.

BROOK-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: P4245.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: not dec. 100 Heated Purge: N Date Analyzed: 01/29/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	10	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
127-18-4	Tetrachloroethene	10	U
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl chloride	10	U

METHOD 8260 - TCLP VOLATILES
ANALYSIS DATA SHEET

Client No.

FLOR-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090803

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: P4243.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: not dec. 100 Heated Purge: N Date Analyzed: 01/29/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	10	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
127-18-4	Tetrachloroethene	10	U
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl chloride	10	U

METHOD 8260 - TCLP VOLATILES
ANALYSIS DATA SHEET

Client No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090801

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: P4241.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: not dec. 100 Heated Purge: N Date Analyzed: 01/29/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	10	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
127-18-4	Tetrachloroethene	10	U
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl chloride	10	U

METHOD 8260 - TCLP VOLATILES
ANALYSIS DATA SHEET

Client No.

SUN-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090804

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: P4244.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: not dec. 100 Heated Purge: N Date Analyzed: 01/29/2008

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	10	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
127-18-4	Tetrachloroethene	10	U
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl chloride	10	U

METHOD 8270 - TCLP BASE NEUTRAL/ACID EXTRACTABLES
ANALYSIS DATA SHEET

Client No.: BROOK-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090805

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: X22032.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: 100 decanted: (Y/N) N Date Extracted: 01/29/2008

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
106-46-7	1,4-Dichlorobenzene	0.040	U
121-14-2	2,4-Dinitrotoluene	0.020	U
118-74-1	Hexachlorobenzene	0.020	U
87-68-3	Hexachlorobutadiene	0.020	U
67-72-1	Hexachloroethane	0.020	U
108-39-4	3-Methylphenol	0.040	U
95-48-7	2-Methylphenol	0.020	U
106-44-5	4-Methylphenol	0.020	U
98-95-3	Nitrobenzene	0.020	U
87-86-5	Pentachlorophenol	0.040	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.020	U
88-06-2	2,4,6-Trichlorophenol	0.020	U

METHOD 8270 - TCLP BASE NEUTRAL/ACID EXTRACTABLES
ANALYSIS DATA SHEET

Client No.: FLOR-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090803

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: X22030.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: 100 decanted: (Y/N) N Date Extracted: 01/29/2008

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
106-46-7	1,4-Dichlorobenzene	0.040	U
121-14-2	2,4-Dinitrotoluene	0.020	U
118-74-1	Hexachlorobenzene	0.020	U
87-68-3	Hexachlorobutadiene	0.020	U
67-72-1	Hexachloroethane	0.020	U
108-39-4	3-Methylphenol	0.040	U
95-48-7	2-Methylphenol	0.020	U
106-44-5	4-Methylphenol	0.020	U
98-95-3	Nitrobenzene	0.020	U
87-86-5	Pentachlorophenol	0.040	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.020	U
88-06-2	2,4,6-Trichlorophenol	0.020	U

METHOD 8270 - TCLP BASE NEUTRAL/ACID EXTRACTABLES
ANALYSIS DATA SHEET

Client No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090801

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: X22028.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: 100 decanted: (Y/N) N Date Extracted: 01/29/2008

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
106-46-7	1,4-Dichlorobenzene	0.040	U
121-14-2	2,4-Dinitrotoluene	0.020	U
118-74-1	Hexachlorobenzene	0.020	U
87-68-3	Hexachlorobutadiene	0.020	U
67-72-1	Hexachloroethane	0.020	U
108-39-4	3-Methylphenol	0.040	U
95-48-7	2-Methylphenol	0.020	U
106-44-5	4-Methylphenol	0.0016	J
98-95-3	Nitrobenzene	0.020	U
87-86-5	Pentachlorophenol	0.040	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.020	U
88-06-2	2,4,6-Trichlorophenol	0.020	U

METHOD 8270 - TCLP BASE NEUTRAL/ACID EXTRACTABLES
ANALYSIS DATA SHEET

Client No.: SUN-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090804

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: X22031.RR

Level: (low/med) LOW Date Samp/Recv: 01/24/2008 01/25/2008

% Moisture: 100 decanted: (Y/N) N Date Extracted: 01/29/2008

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
106-46-7	1,4-Dichlorobenzene	0.040	U
121-14-2	2,4-Dinitrotoluene	0.020	U
118-74-1	Hexachlorobenzene	0.020	U
87-68-3	Hexachlorobutadiene	0.020	U
67-72-1	Hexachloroethane	0.020	U
108-39-4	3-Methylphenol	0.040	U
95-48-7	2-Methylphenol	0.020	U
106-44-5	4-Methylphenol	0.020	U
98-95-3	Nitrobenzene	0.020	U
87-86-5	Pentachlorophenol	0.040	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.020	U
88-06-2	2,4,6-Trichlorophenol	0.020	U

METHOD 8081 - TCLP PESTICIDES
ANALYSIS DATA SHEET

Client No.: BROOK-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090805

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 6A03198.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
58-89-9	gamma-BHC (Lindane)	0.00020	U
57-74-9	Chlordane	0.0020	U
72-20-8	Endrin	0.00020	U
76-44-8	Heptachlor	0.00020	U
1024-57-3	Heptachlor epoxide	0.00020	U
72-43-5	Methoxychlor	0.00020	U
8001-35-2	Toxaphene	0.0020	U

METHOD 8081 - TCLP PESTICIDES
ANALYSIS DATA SHEET

Client No.: FLOR-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090803

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 6A03196.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
58-89-9	gamma-BHC (Lindane)	0.00020	U
57-74-9	Chlordane	0.0020	U
72-20-8	Endrin	0.00020	U
76-44-8	Heptachlor	0.00020	U
1024-57-3	Heptachlor epoxide	0.00020	U
72-43-5	Methoxychlor	0.00020	U
8001-35-2	Toxaphene	0.0020	U

METHOD 8081 - TCLP PESTICIDES
ANALYSIS DATA SHEET

Client No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090801

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 6A03194.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
58-89-9	gamma-BHC (Lindane)	0.00020	U
57-74-9	Chlordane	0.0020	U
72-20-8	Endrin	0.00020	U
76-44-8	Heptachlor	0.00020	U
1024-57-3	Heptachlor epoxide	0.00020	U
72-43-5	Methoxychlor	0.00020	U
8001-35-2	Toxaphene	0.0020	U

METHOD 8081 - TCLP PESTICIDES
ANALYSIS DATA SHEET

Client No.: SUN-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090804

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 6A03197.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
58-89-9	gamma-BHC (Lindane)	0.00020	U
57-74-9	Chlordane	0.0020	U
72-20-8	Endrin	0.00020	U
76-44-8	Heptachlor	0.00020	U
1024-57-3	Heptachlor epoxide	0.00020	U
72-43-5	Methoxychlor	0.00020	U
8001-35-2	Toxaphene	0.0020	U

METHOD 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

Client No.: BROOK-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090805

Sample wt/vol: 30.06 (g/mL) G Lab File ID: 12A16099.TX0

% Moisture: 10 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor 1016	18	U
11104-28-2	Aroclor 1221	18	U
11141-16-5	Aroclor 1232	18	U
53469-21-9	Aroclor 1242	18	U
12672-29-6	Aroclor 1248	18	U
11097-69-1	Aroclor 1254	18	U
11096-82-5	Aroclor 1260	270	

METHOD 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

Client No.: FLOR-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090803

Sample wt/vol: 30.11 (g/mL) G Lab File ID: 12A16097.TX0

% Moisture: 16 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor 1016	99	U
11104-28-2	Aroclor 1221	99	U
11141-16-5	Aroclor 1232	99	U
53469-21-9	Aroclor 1242	99	U
12672-29-6	Aroclor 1248	99	U
11097-69-1	Aroclor 1254	99	U
11096-82-5	Aroclor 1260	850	

METHOD 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

Client No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090801

Sample wt/vol: 30.50 (g/mL) G Lab File ID: 12A16095.TX0

% Moisture: 39 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor 1016	1300	U
11104-28-2	Aroclor 1221	1300	U
11141-16-5	Aroclor 1232	1300	U
53469-21-9	Aroclor 1242	1300	U
12672-29-6	Aroclor 1248	1300	U
11097-69-1	Aroclor 1254	1300	U
11096-82-5	Aroclor 1260	1300	U

METHOD 8082 - POLYCHLORINATED BIPHENYLS
ANALYSIS DATA SHEET

Client No.: SUN-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090804

Sample wt/vol: 30.39 (g/mL) G Lab File ID: 12A16098.TX0

% Moisture: 19 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 2.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	41	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	Aroclor 1254	41	U
11096-82-5	Aroclor 1260	780	

METHOD 8151 - TCLP HERBICIDES
ANALYSIS DATA SHEET

Client No.

BROOK-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090805

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 13B65162.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
94-75-7	2,4-D	0.0020	U
93-72-1	2,4,5-TP (Silvex)	0.0020	U

METHOD 8151 - TCLP HERBICIDES
ANALYSIS DATA SHEET

Client No.

FLOR-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090803

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 13B65160.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
94-75-7	2,4-D	0.0020	U
93-72-1	2,4,5-TP (Silvex)	0.0020	U

METHOD 8151 - TCLP HERBICIDES
ANALYSIS DATA SHEET

Client No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090801

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 13B65157.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
94-75-7	2,4-D	0.0020	U
93-72-1	2,4,5-TP (Silvex)	0.0020	U

METHOD 8151 - TCLP HERBICIDES
ANALYSIS DATA SHEET

Client No.

SUN-COMP

Lab Name: TestAmerica Laboratories Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A8090804

Sample wt/vol: 250.00 (g/mL) ML Lab File ID: 13B65161.TX0

% Moisture: 100 decanted: (Y/N) N Date Samp/Recv: 01/24/2008 01/25/2008

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 01/29/2008

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/30/2008

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
94-75-7	2,4-D	0.0020	U
93-72-1	2,4,5-TP (Silvex)	0.0020	U

TESTAMERICA LABORATORIES INC.

Shaw E & I

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Shaw E & I **SDG No.:** A08-0908 **Method Type:**

Sample ID: A8090805 **Client ID:** BROOK-COMP

Matrix: WATER **Date Received:** 1/25/2008 **Date Collected:** 1/24/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B09517 **Prep Date:** 1/29/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Arsenic	<	10.0	ug/L	U		10.0	10.0	1	1/30/2008	10:47	SUPERTRACE2	A01290x	P
Barium		**2840**	**ug/L**			**2.0**	2.0	**1**	**1/30/2008**	**10:47**	SUPERTRACE2	A01290x	P
Cadmium		**75.9**	**ug/L**			**1.0**	1.0	**1**	**1/30/2008**	**10:47**	SUPERTRACE2	A01290x	P
Chromium	<	4.0	ug/L	U		4.0	4.0	1	1/30/2008	10:47	SUPERTRACE2	A01290x	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	1/30/2008	10:47	SUPERTRACE2	A01290x	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	1/30/2008	10:47	SUPERTRACE2	A01290x	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	1/29/2008	13:53:55	LEEMAN PS2	G01298TC	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	1/30/2008	10:47	SUPERTRACE2	A01290x	P

Comments:

TESTAMERICA LABORATORIES INC.

Shaw E & I

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Shaw E & I **SDG No.:** A08-0908 **Method Type:**

Sample ID: A8090803 **Client ID:** FLOR-COMP

Matrix: WATER **Date Received:** 1/25/2008 **Date Collected:** 1/24/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B09517 **Prep Date:** 1/29/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Arsenic	<	10.0	ug/L	U		10.0	10.0	1	1/30/2008	10:14	SUPERTRACE2	A01290x	P
Barium		**2110**	**ug/L**			**2.0**	2.0	1	**1/30/2008**	**10:14**	SUPERTRACE2	A01290x	P
Cadmium		**82.1**	**ug/L**			**1.0**	1.0	1	**1/30/2008**	**10:14**	SUPERTRACE2	A01290x	P
Chromium	<	4.0	ug/L	U		4.0	4.0	1	1/30/2008	10:14	SUPERTRACE2	A01290x	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	1/30/2008	10:14	SUPERTRACE2	A01290x	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	1/30/2008	10:14	SUPERTRACE2	A01290x	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	1/29/2008	13:46:44	LEEMAN PS2	G01298TC	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	1/30/2008	10:14	SUPERTRACE2	A01290x	P

Comments:

TESTAMERICA LABORATORIES INC.

Shaw E & I

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Shaw E & I **SDG No.:** A08-0908 **Method Type:**

Sample ID: A8090801 **Client ID:** PEARL-COMP

Matrix: WATER **Date Received:** 1/25/2008 **Date Collected:** 1/24/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B09576 **Prep Date:** 1/30/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Arsenic	<	10.0	ug/L	U		10.0	10.0	1	1/30/2008	21:02	SUPERTRACE	101300W	P
Barium		**1600**	**ug/L**			**2.0**	2.0	**1**	**1/30/2008**	**21:02**	SUPERTRACE	101300W	P
Cadmium		**57.3**	**ug/L**			**1.0**	1.0	**1**	**1/30/2008**	**21:02**	SUPERTRACE	101300W	P
Chromium		**11.4**	**ug/L**			**4.0**	4.0	**1**	**1/30/2008**	**21:02**	SUPERTRACE	101300W	P
Lead		**58.8**	**ug/L**			**5.0**	5.0	**1**	**1/30/2008**	**21:02**	SUPERTRACE	101300W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	1/30/2008	21:02	SUPERTRACE	101300W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	2/1/2008	17:02:20	LEEMAN PS2	H02018TC	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	1/30/2008	21:02	SUPERTRACE	101300W	P

Comments:

TESTAMERICA LABORATORIES INC.

Shaw E & I

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Shaw E & I **SDG No.:** A08-0908 **Method Type:**

Sample ID: A8090804 **Client ID:** SUN-COMP

Matrix: WATER **Date Received:** 1/25/2008 **Date Collected:** 1/24/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B09517 **Prep Date:** 1/29/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Arsenic	<	10.0	ug/L	U		10.0	10.0	1	1/30/2008	10:20	SUPERTRACE2	A01290x	P
Barium		**2160**	**ug/L**			**2.0**	2.0	1	**1/30/2008**	**10:20**	SUPERTRACE2	A01290x	P
Cadmium		**21.1**	**ug/L**			**1.0**	1.0	1	**1/30/2008**	**10:20**	SUPERTRACE2	A01290x	P
Chromium	<	4.0	ug/L	U		4.0	4.0	1	1/30/2008	10:20	SUPERTRACE2	A01290x	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	1/30/2008	10:20	SUPERTRACE2	A01290x	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	1/30/2008	10:20	SUPERTRACE2	A01290x	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	1/29/2008	13:48:19	LEEMAN PS2	G01298TC	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	1/30/2008	10:20	SUPERTRACE2	A01290x	P

Comments:

Wet Chemistry Analysis

51/1102

Client Sample No.

BROOK-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A8090805

% Solids: 0.0 Date Samp/Recv: 01/24/2008 01/25/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Corrosivity (pH)	S.U.	7.74				9045	01/28/2008
Flashpoint	°F	>176				1010	01/30/2008
H2S Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008
HCN Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008

Comments:

Wet Chemistry Analysis

Client Sample No.: FLOR-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A8090803

% Solids: 0.0 Date Samp/Recv: 01/24/2008 01/25/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Corrosivity (pH)	S.U.	7.50				9045	01/28/2008
Flashpoint	°F	>176				1010	01/30/2008
H2S Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008
HCN Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008

Comments:

Wet Chemistry Analysis

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Client Sample No.

PEARL-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A8090801

% Solids: 61.3 Date Samp/Recv: 01/24/2008 01/25/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Corrosivity (pH)	S.U.	7.28				9045	01/29/2008
Flashpoint	°F	>176				1010	01/29/2008
H2S Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008
HCN Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008

Comments:

Wet Chemistry Analysis

Client Sample No.: SUN-COMP

Lab Name: TestAmerica Laboratories Inc. Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A8090804

% Solids: 0.0 Date Samp/Recv: 01/24/2008 01/25/2008

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Corrosivity (pH)	S.U.	7.59				9045	01/28/2008
Flashpoint	°F	>176				1010	01/30/2008
H2S Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008
HCN Released From Waste	MG/KG	10	U			SECT7.3	01/29/2008

Comments:

Chain Of Custody Documentation

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
SHAW E & I	DAN Servetas	01-24-08	387520
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
13 American British Blvd	518-783-1996		Page 3 of 3

City	State	Zip Code	Site Contact	Lab Contact
Latham	NY	12110		C. Fox

Project Name and Location (State): Stony Brook Culvert IRM

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PCBS 8082	TCL VOC 8260	TCL METAL	TCL BN	TCL PEST	TCL HERB	CN RECLSD	HS RECLSD	CORR	FLASHPT	Special Instructions/Conditions of Receipt
Brook-Comp	01-24-08	15:20			X		X						X	X	X	X	X	X	X	X	X	X	Analyze 'comp' samples. Do not analyze balance of samples pending client approval.

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5-DAY

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Nichole M Evans	01-24-2008	16:10	1. Received By: R. English, TAL SYR	01-24-08	16:10
2. Relinquished By: R. English	01-24-08	18:30	2. Received By: C. Bell TAL Buffalo	1/25/08	0900
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4@2-0°C

103/1102

	Date	Time		Date	Time
Nichole M Evans	1/24/2008	16:10	R. English, TAL SYR	01/24/08	16:10
2. Relinquished By: R. English	01-24-08	18:30	2. Received By: Bell TAL Buffalo	1/25/08	0900
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4@2.0°C

04/1102

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
SHAW E&I	Dan Stevens	1/24/2008	387521
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
13 American British Blvd.	518-783-1996		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Latham / NY / 12110		C. Fox	
Project Name and Location (State)	**Carrier/Waybill Number**		
Bloody Brook Culvert I2M			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: PCB's 8082	TC VOA 8260	TC METAL	TC SVOA	TC PEST	TC HERB	CN REESD	HS REESD	CORR	FLUSHOT
Flor-C	01-24-08	11:55			X		X						X	X	X	X	X	X	X	X	X	X
Flor-D	01-24-08	11:50			X		X						X	X	X	X	X	X	X	X	X	X
Flor-Comp.	01-24-08	11:50			X		X						X	X	X	X	X	X	X	X	X	X
Syn-A	01-24-08	14:00			X		X						X	X	X	X	X	X	X	X	X	X
Syn-B	01-24-08	14:00			X		X						X	X	X	X	X	X	X	X	X	X
Syn-C	01-24-08	14:00			X		X						X	X	X	X	X	X	X	X	X	X
Syn-D	01-24-08	14:00			X		X						X	X	X	X	X	X	X	X	X	X
Syn-Comp.	01-24-08	14:00			X		X						X	X	X	X	X	X	X	X	X	X
Brook-A	01-24-08	15:20			X		X						X	X	X	X	X	X	X	X	X	X
Brook-B	01-24-08	15:20			X		X						X	X	X	X	X	X	X	X	X	X
Brook C	01-24-08	15:20			X		X						X	X	X	X	X	X	X	X	X	X
Brook D	01-24-08	15:20			X		X						X	X	X	X	X	X	X	X	X	X

Special Instructions/ Conditions of Receipt

Analyze "Comp" Samples. Do not analyze balance of Samples pending client approval.

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 DAY

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Nicholas M Evans	1/24/2008	16:10	1. Received By: R English, TAL SYR	01/24/08	16:10
2. Relinquished By: R English	01-24-08	18:30	2. Received By: Bell TAL Buffalo	1/25/08	0900
3. Relinquished By:			3. Received By:		

Comments

402.0°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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Chain of Custody Record B2349

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
SHAW E&I	Dan Servetus	01-24-08	387519

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
13 American British Blvd.	518-783-1996		Page 1 of 3

City	State	Zip Code	Site Contact	Lab Contact
Latham	NY	12110		

Project Name and Location (State): Brook Culvert TRIM

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.:

Matrix: Air, Aqueous, Sed., Soil. Containers & Preservatives: Unpres., H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH. Analysis (Attach list if more space is needed): PCBs 8082, TC VOA 8260, TC Metal, TC BN, TC Pest, TC Herbs, Cal React SD, H2S React SD, Corr, Flashpt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PCBs 8082	TC VOA 8260	TC Metal	TC BN	TC Pest	TC Herbs	Cal React SD	H2S React SD	Corr	Flashpt
Pearl - A	01-24-08	09:45			X		X						X	X	X	X	X	X	X	X	X	X
Pearl - B	01-24-08	09:45			X		X						X	X	X	X	X	X	X	X	X	X
Pearl - C	01-24-08	09:45			X		X						X	X	X	X	X	X	X	X	X	X
Pearl - D	01-24-08	09:45			X		X						X	X	X	X	X	X	X	X	X	X
Pearl - Comp.	01-24-08	09:45			X		X						X	X	X	X	X	X	X	X	X	X
[illegible] - A	[illegible]	10:50			X		X						X	X	X	X	X	X	X	X	X	X
Town - B	01-24-08	10:50			X		X						X	X	X	X	X	X	X	X	X	X
Town - C	01-24-08	10:50			X		X						X	X	X	X	X	X	X	X	X	X
Town - D	01-24-08	10:50			X		X						X	X	X	X	X	X	X	X	X	X
Town - Comp.	01-24-08	10:50			X		X						X	X	X	X	X	X	X	X	X	X
Flor - A	01-24-08	11:50			X		X						X	X	X	X	X	X	X	X	X	X
Flor - B	01-24-08	11:50			X		X						X	X	X	X	X	X	X	X	X	X

Special Instructions/Conditions of Receipt: Analyze "Comp." Samples. Do not Analyze balance of Samples pending client approval.

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5-DAY

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Nichole Mennano	01-24-2008	16:10	1. Received By: R. English, TAL SYR	01-24-08	16:10
2. Relinquished By: R. English	01-24-08	18:30	2. Received By: Bell TAL Buffalo	1/25/08	0900
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4@2.0°C

105/1102