Besicorp-Empire Power Company, LLC

ARTICLE X CERTIFICATE

PRE-CONSTRUCTION COMPLIANCE FILING

FOR THE

BEPCO Power Generation Facility

Rensselaer, New York



LG Constructors

VOLUME 1

Revision History

Revision	Date	Description
0	Sept. 26, 2007	Submittal of Pre-Construction Compliance Filing

CLP Exhibit 4

CASE 00-F-2057
ACTIVE PARTY LIST
(As of 09/12/07)

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LG Constructors

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September 27, 2007

VIA OVERNIGHT DELIVERY

Hon. Jaclyn A. Brilling
Secretary
New York State Department of Public Service
Three Empire State Plaza
20th Floor
Albany, NY 12223-1350

Subject: Article X Case Number 00-F-2057
Besicorp-Empire Generating Company, LLC Power Generation Facility
Compliance Filings – Initial Submittal – Pre-Construction

Dear Secretary Brilling:

LG Constructors, acting on behalf of Besicorp-Empire Power Company, LLC (BEPCO), is pleased to submit one original and seven copies of the first compliance filing package for the subject power plant, addressing Article X Certificate compliance requirements for site preparation activities including clearing, excavation and grading of the site in preparation for construction of the facility. These documents are being provided in accordance with the Certificate and 16 NYCRR Part 1003.

We respectfully request an expedited review and acceptance of this submittal.

The following items are attached and formally submitted as part of this package:

Compliance Filing Schedule Index No.	Article X Condition No.	Description of Document
3	II.B	Schedule of Compliance Filings
5	II.J.ii	Letter re: NYSRC Requirements
10	III.D	Fugitive Dust Control Plan
13	IV.A	Oil Spill Prevention Plan (for early site activities until SPCC Plan requirement is triggered)
15	V.C (1)	Wetland Mitigation Plan (approved by ACOE)

Compliance Filing Schedule Index No.	Article X Condition No.	Description of Document
16	V.C	Stormwater Pollution Prevention Plan (Erosion and Sedimentation Control Plan Only)
17	VII.A	Unanticipated Discovery Plan
19	VII.D	Site Grading Plans (as currently available for site preparation activity)
23	VIII.G	Tree Protection Plan
28	IX.C	Emergency Response Plan
34	X.G	Report on Obstruction Removal
36, 37	X.I, X.J	Copy of City Services Agreement which includes Police Contract for Traffic Control and Traffic Monitor
42, 44	XI.A, XI.E	Noise Plan with includes Construction Noise Control Measures
46	XII.B	Post-Remediation Construction Plan including the Soil Management Plan
49	XIII.A	Community Liaison Plan

For planning purposes, several additional compliance filings will be forwarded in the near future, following receipt of information to respond to Certificate conditions, and are as follows:

Compliance Filing Schedule Index No.	Article X Condition No.	Description of Document	Expected Filing Date
16	V.C	Stormwater Pollution Prevention Plan (Narrative)	10/1/07
33	X.E	Report on Signal Timing Adjustments	10/15/07
40	X.V	Sources of Supply for Site Fill	10/12/07
41	X.V	Supply Route for Site Fill	10/12/07
45	XII.A	Environmental Compliance Plan	10/8/07
47	XII.G	Pile Driving Alternate Impact Report	11/16/07
48	XII.H	Health & Safety Plan	10/5/07
52	JS-D	Waste Handling Plan	10/8/07

We look forward to your review and acceptance of the above referenced filings. We will coordinate with you to resolve any questions or concerns as quickly as possible so that site preparation activities can begin this fall as planned.

Thank you for your attention to this project. Please don't hesitate to contact me directly if you have any questions. I can be reached at (770) 829-6672.

Sincere regards,

LG Constructors, Inc., on behalf of Besicorp-Empire Power Company, LLC

John Wanalista
Project Manager

Enclosures

cc: Mr. Andrew Davis (NY DPS)
Mr. Chris Hogan (NY DEC)
Active Party List (see attached)

Besicorp-Empire Power Company, LLC.
Schedule of Plans, Filings and Submissions
New York State Board on Electric Generation Siting and the Environment

Item Number	Certificate Condition Number	Topic	Description of Compliance Filing Submittal	Date of Draft Submission	Formal Scheduled Submittal Date	Updated Filing Date	Description of Certificate Condition	Responsible Party
1	I.C	Plans	Facility plans to be certified by NY P.E.		As needed		Plans and specifications must be prepared in conformance with NYS Uniform Fire Prevention and Building Code, except as waived, and certified by P.E. or Architect licensed in NY.	LG Constructors
2	I.C.; X.A.; and X.B.; IX.E	Site Plan drawings, facility design drawings	When ready, submit drawings for review		As available		Facility design plans must demonstrate compliance with NYS Uniform Fire Prevention and Building Code and City codes, except as waived. Include fence on site plan drawing. Include driveway design controlling turns into site.	LG Constructors
3	II.B.	Schedule	Prepare and submit a schedule of compliance filings	9/10/2007	9/27/2007		Prepare schedule of compliance filings and agency submittals, maintain the schedule, track activities	LG Constructors
4	II.J.i	SRIS	NYISO approved SRIS	N/A	30 days after receipt of Certificate.		SRIS approved by the NYISO Operating Committee, which shall be filed within 30 days after receipt of the Certificate	Owner
5	II.J.ii	NYSRC Requirements	File any requirements imposed by the NYSRC	N/A	9/27/2007		Any requirements imposed by the NYSRC, which shall be filed not later than 30 days prior to the commencement of construction of the Project.	LG Constructors
6	II.J.iii	Facility Agreements	File facilities agreements, interconnection agreements, and amendments	N/A	30 days before commercial operation		Submit filings of all facilities agreements, interconnection agreements, and amendments not later than 30 days prior to the commencement of commercial operation of the Project.	Owner
7	II.J.iv	Relay Coordination Study	Filing of Relay Coordination Study	N/A	18 months prior to commercial operation		File Relay Study no later than 18 months prior to operation.	LG Constructors
8	II.J.v	Interconnection Facility Design	Filing of interconnection facilities design	N/A	As available, but not later than 30 days prior to operation		File detailed design of interconnection facilities no later than 30 days prior to commercial operation.	LG Constructors
9	II. L.	Interconnection Facility Design	Document technical considerations of interconnecting to NMPC (now NGrid) switchyards	N/A	Not later than two months prior to purchasing the equipment.		Document technical considerations of interconnecting to NMPC switchyards and provide to DPS and NMPC	LG Constructors
10	III.D.	Air Quality	File final “Fugitive Dust Control Plan”		9/27/2007		Prepare Dust Control Plan. Implement Plan at construction site, construction parking areas and laydown areas. Plan must be no less stringent that the one attached to the Joint Settlement Agreement	LG Constructors
11	III.H.(ii)(c)	LS Distillate Oil Usage	Submit, as a compliance filing, a summary of oil use information with PSC annually before January 31, 2007-2010.		Annually: January 31, 2007 - 2010		Distillate oil to be used in the facility must be summarized in a compliance filing.	Owner
12	III.H.(iii)	ULS Oil Purchase	ULS distillate oil supplier quotes and a summary of what was purchased and from whom must be submitted as a compliance filing with the LS distillate oil use record.		As needed after commencement of commercial operation.		Submit as a compliance filing, with the summary of oil use information in III.H.(ii)(c). Submittal should include quotations from ULS distillate oil suppliers based on price delivered to Cogeneration Plant, summary of purchased oil, and a summary of supplier of purchased oil.	Owner
13	IV.A.	SPCC	Spill Prevention, Control and Countermeasure (SPCC) Plan	N/A	Prior to bringing 1,320 gallons of petroleum onsite (9/27/2007 for early site actvities)		Prepare and implement SPCC Plan addressing all petroleum products to be stored/used on site. NY P.E. needed to certify plan	LG Constructors

Item Number	Certificate Condition Number	Topic	Description of Compliance Filing Submittal	Date of Draft Submission	Formal Scheduled Submittal Date	Updated Filing Date	Description of Certificate Condition	Responsible Party
14	IV.B., IV.C.	Gray Water	A “Gray Water Operation and Maintenance Best Management Practices” manual must be prepared prior to commencing operation. Prepare draft for review and final.	21 days before compliance filing provide draft to NYSDEC, NYSDPS, NYSDOH, City of Rensselaer and Sierra Club.	Prior to commencing operation		Follow outline in Joint Settlement Agreement. Prepare O&M BMP Manual for Gray Water system Submit for review and approval Implement relevant provisions during construction	LG Constructors
15	V.C.(1)	Wetland Mitigation Plan	Submit ACOE approved Wetland Mitigation Plan as part of a licensing package.		9/27/2007		Submit Wetland Mitigation Plan approved by the Army Corp. of Engineers	LG Constructors
16	V.C.	Storm Water Pollution Prevention Plan	A SWPPP is required as part of the licensing package. Include water quality controls for post-construction.	N/A	9/27/2007 (Soil Erosion Plan); 10/1/07 (Narrative)		Obtain construction storm water permit. Prepare Storm Water Pollution Prevention Plan (SWPPP). Reference New York State Stormwater Management manual (October 2001).	LG Constructors
17	VII.A.	Cultural Resources	Finalize and submit UDP as part of licensing package. Implement “Unanticipated Discovery Plan” (UDP) during construction if cultural resources are encountered.		9/27/2007		Implement Plan as needed. Brief contractors/workers regarding the plan and what to do in the event of an unanticipated discovery	LG Constructors
18	VII. B	Cultural Resources	Submit Cultural Resources Management Plan as compliance filing.		12/1/2007		Submit compliance filing of Cultural Resources Management Plan indicating protection and mitigation measures to be employed to prevent adverse impacts to archeological and historic resources.	LG Constructors
19	VII.D.	Cultural Resources	Prepare and submit the final site plans and grading plans.		9/27/2007		Final site plans and grading plans, as well as final design plans for the gray water line route and other utility line routes must be provided to OPRHP	LG Constructors
20	VIII.B.	Visual	Provide vendor data for the plume abatement system.		When available		Provide vendor data. Provide data of plume abatement system in maximized wet mode and maximized plume abatement mode.	LG Constructors
21	VIII.E.	Visual	A Final Lighting Plan is required.		When available		Use relevant standards (IESNA) Details of all proposed outdoor lighting, measures to prevent off-site glare, illumination in work areas, FAA lighting, etc. Base on Preliminary Lighting Plan and criteria in Joint Settlement Agreement.	LG Constructors
22	VIII.F.	Visual	Report on negotiations with FAA		11/1/2007		Report on negotiations with FAA regarding least intrusive aviation-warning lighting	Owner
23	VIII.G.	Visual	Tree Protection Plan		9/27/2007		Finalize and submit Tree Protection Plan (refer to preliminary plan in Exhibit 039, JSA)	LG Constructors
24	VIII.H.	Visual	Landscaping and Restoration Plan		When available		Finalize and submit Landscaping and Restoration Plan (refer to preliminary plan in Exhibit 039, JSA)	LG Constructors
25	VIII.I.	Visual	Submit details regarding color scheme, building façade, and architectural design as a compliance filing.		When available		Architectural design features and color schemes are to be developed to reflect the waterfront setting and nearby land uses. Smooth non-reflective metal cladding. Two-tone color scheme using earth tone colors. All details must be specified in a Compliance Filing.	LG Constructors
26	VIII.J.(ii)	Visual	Submit a plan for monitoring and reporting visible plumes from exhaust stacks.	N/A	Before stack erection		Monitoring plan for reporting visible plumes from exhaust stack.	LG Constructors
27	VIII.J.(iii)	Visual	Development and evaluation process for architectural design		11/1/2007		Incorporate architectural details including historic and contextual design features in accordance with a development and evaluation process to be submitted in a Compliance Filing.	LG Constructors

Item Number	Certificate Condition Number	Topic	Description of Compliance Filing Submittal	Date of Draft Submission	Formal Scheduled Submittal Date	Updated Filing Date	Description of Certificate Condition	Responsible Party
28	IX.C.	Emergency Response	Facility-specific emergency response plan for construction phase	N/A	9/27/2007		Prepare emergency response/evacuation plan addressing site activities during construction and startup. Includes actions to be taken in event of fire, medical emergency, explosion, natural disaster, terrorist incidents, hazmat releases, etc. Coordinate with local emergency response providers	LG Constructors
29	IX.D.	Local issues	Greenway, bikeway at Riverside Avenue		When designed		Design per Exhibit 027 of JSA and City Waterfront Revitalization Plan Submit design in a compliance filing Construct as designed	LG Constructors
30	X.A	Traffic Filings	Submit a copy of all compliance filings to the City of Rensselaer.		As available		Self explanatory.	Owner - Submit LG Constructors-Prepare
31	X.B	Driveway Turns	Submit compliance filing for turns in and out of all driveways of the facility.		As available		Driveway control turns design including depictions of alignment, curbing, signage, lane markings, or other features that preclude turns onto Riverside Avenue northbound when exiting the facility.	LG Constructors
32	X.C, D.	Transportation	Submit report on compliance after installation of signage and again after complete removal.			After signage is installed and again upon complete removal.	Install trailblazer signage, warning signs, message-boards. Obtain DOT approval; report to DOT when complete.	LG Constructors
33	X.E	Signal Timing Adjustment	Develop and submit a report on compliance for adjustments made according to requests from DOT about signal timing.		10/15/2007	Prior to construction, after signal timing monitoring requests to DOT.	Report on compliance describing adjustments undertaken in response to DOT signal timing requests.	Owner
34	X.G	Obstruction Removal	Report on compliance describing DOT and City of Rensselaer removal of objects from line of sight.		9/27/2007		Develop and submit a report on compliance for requests made to DOT and the City of Rensselaer and the actions taken by the City and DOT to mitigate line-of-sight issues.	Owner
35	X.H	Donation to City	Submit compliance report stating that the contribution to the city towards the gate erection has been completed.	N/A		After contribution has been made.	Report on compliance of $100,000 donation to the City of Rensselaer.	Owner
36	X.I	Copy of Police Contract	Report on compliance for police office contract.	N/A	9/27/2007	Prior to start of construction.	Submit compliance report with copy of police contract for traffic control.	Owner
37	X.J	Traffic Monitor	Report on compliance with traffic monitoring.	N/A	9/27/2007	Prior to start of construction.	Submit compliance report with copy of contract with transportation engineer to monitor traffic.	Owner
38	X.L.	Transportation	Prepare and implement Traffic Mitigation Compliance Plan				Describe traffic mitigation measures in a Traffic Mitigation Compliance Plan	LG Constructors
39	X.O	Satellite Parking for Construction	Prepare and submit compliance filing identifying parking locations.	N/A	If needed		Specify satellite parking locations to be used during periods when the need for vehicle parking onsite exceeds 550 vehicles.	Owner
40	X.V.	Transportation	Give preference to suppliers from south of the site for fill.	N/A	10/12/2007		Identify sources Provide plan to PSC	LG Constructors
41	X.V.	Fill Supply Route	Prepare and submit compliance filing.	N/A	10/12/2007		Identify route which will be used to convey fill to the Site and identify significant impacts on roadway conditions or safety with appropriate mitigation measures.	LG Constructors

Item Number	Certificate Condition Number	Topic	Description of Compliance Filing Submittal	Date of Draft Submission	Formal Scheduled Submittal Date	Updated Filing Date	Description of Certificate Condition	Responsible Party
42	XI.A., XI.E.	Noise	Submit, as compliance filing, noise specific noise control monitor measures and Noise Plan.	Jun-03	9/27/2007		Construction allowed between 6:00 AM and 9:00 PM, but no significant noise-making activity before 7:00 AM. Identify in a Compliance Filing the specific noise control measures that will be taken to minimize potential off-site noise impacts. Monitor construction noise	LG Constructors
43	XI.D	Post Construction Noise Report	Submit, as compliance filing, post-construction noise report.	N/A	9/1/2010		The acoustical engineer must submit a post-construction report to demonstrate that the plant complies with the acoustic design goals of the Joint Settlement Agreement (JS-F).	LG Constructors
44	XI.E.	Construction Noise	Prepare and submit compliance filing.		9/27/2007		Specify noise control measures that shall be implemented to minimize potential off-site noise impacts.	LG Constructors
45	XII.A.	Construction Management	Prepare and implement Environmental Compliance Plan	N/A	10/8/2007		Plan must include: Name and quals of environmental inspector(s) Certification of the environmental inspectors' independence from Certificate Holder Certification of environmental inspectors' "stop work" authority Checklist of matters to be inspected Procedure for response/correction of findings Schedule for monthly environmental audits Schedule for annual audits	LG Constructors
46	XII.B.	Construction Management	Post-Remediation Construction Plan	Jun-03	9/27/2007		Prepare and file Post-Remediation Construction Plan. Refer to JS-C, update and finalize.	LG Constructors
47	XII.G	Pile Driving Alternative Impact Report	Submit report on the feasibility assessment of alternative pile driving techniques prior to awarding construction contracts.	N/A	11/16/2007		Assess the feasibility of employing alternative pile driving techniques based on geotechnical information, and other relevant considerations. The feasibility assessment must be submitted as a report prior to the award of construction contracts.	LG Constructors
48	XII.H.	Health & Safety Plan	Prepare and submit a Health & Safety Plan for the project.	Jun-03	10/5/2007		Follow outline in JS-E, develop draft HASP for review, then final.	LG Constructors
49	XIII.A.	Community Liaison Plan	Prepare and submit compliance filing.	N/A	9/27/2007		Provide plan describing adequate notice and means of communication with surrounding communities and stakeholders prior to project construction.	Owner
50	XIV.A.	Decommissioning Standby Trust Agreement	Prepare and submit compliance filing.	N/A			Engage the services of a Trustee and enter into a Standby Trust Agreements for the administration of the site restoration funds and activities in the event of a default.	Owner
51	XIV.B.	Decommissioning Cost Re-estimate	Prepare and submit compliance filing.	N/A	Biennially after commencing commercial operation		Re-estimate decommissioning costs.	Owner
52	JS-D.	Waste Handling Plan	Prepare activity-specific Waste Handling Plan (WHP). Provide draft for review, then final.	Jun-03	10/8/2007		Develop WHP addressing wastes to be generated during construction of the facility. Include federal and state requirements for waste management, including hazardous waste.	LG Constructors

September 24, 2007

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Hon. Jaclyn A. Brilling
Secretary
New York State Department of Public Service
Three Empire State Plaza
20th Floor
Albany, NY 12223-1350

Re: ***Besicorp-Empire Power Company, LLC; Case 00-F-2057***
Certificate Condition II.J.(ii)

Dear Secretary Brilling:

On September 24, 2004, the New York State Board on Electric Generation Siting and the Environment (Siting Board) granted to Besicorp-Empire Development Company a Certificate of Environmental Compatibility and Public Need (Certificate). The Certificate was subsequently transferred to Besicorp-Empire Power Company, LLC (BEPCO) by the Siting Board's Order issued and effective June 21, 2007.

Condition II.J.(ii) of the Certificate Conditions (Appendix A of the Siting Board's Opinion and Order) requires that, not later than thirty days prior to the commencement of construction of the Project, the Certificate Holder file with the Siting Board, the New York State Public Service Commission, and Niagara Mohawk Power Corporation "any requirements imposed by the NYSRC." The System Reliability Impact Study (SRIS), the filing of which was addressed in a Compliance Filing to your honor dated October 18, 2004, demonstrated compliance with the currently effective NYSRC rules dated September 10, 1999. No additional requirements have been imposed on the Project or BEPCO as a generator by the NYSRC.

Therefore, there is no additional information to be filed in connection with Certificate Condition II.J.(ii).

Respectfully submitted,

BESICORP-EMPIRE POWER COMPANY, LLC

Tyler Reeder, Treasurer

cc: Andrew Davis, New York State Department of Public Service
Chris Hogan, New York State Department of Environmental Conservation
Active Parties List

Fugitive Dust Control Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, NY

September 2007

LG Constructors

Fugitive Dust Control Plan

Submitted to

BEPCO CC Cogen Facility

Rensselaer, NY

September 2007

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LG Constructors

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1 FUGITIVE DUST CONTROL PLAN

1.1 Purpose

This Fugitive Dust Control Plan describes the proposed method of dust suppression for the BEPCO CC Cogen Project ("BEPCO" or "Project"). The proposed method consists of sprinkling water when work activities may be expected to generate fugitive dust. Other dust suppression techniques may also be employed (see Section 1.5).

1.2 Action Levels

The term "environmental action level" for fugitive dust shall mean the higher of 150 ug/m^3 or 100 ug/m^3 over the background level based on the average concentration measured by the dust monitoring equipment (see Section 3.1), with a maximum average time of 15 minutes. If the environmental action level is exceeded, the NYSDEC Region 4 Office and the City of Rensselaer (City) Building & Zoning Administrator will be notified in writing (either by postal mail or e-mail) within 5 business days. The notifications will include a description of the control measures implemented to address the exceedance. In addition, the City Building & Zoning Administrator will be notified by telephone of an exceedance of environmental action level by the next business day. Dust suppression techniques to be implemented in the event that the action level is reached are described in section 1.5 below.

Source Material	**Location Sampled**	**Environmental**	**Occupational**
Fugitive Dust	Work Area	Action Level 150ug/m^3 or 100 ug/m^3 over the background level, which ever is higher	Action Level 5mg/m^3 (Respirable Dust)

1.3 Monitoring Frequency

Environmental and Occupational samples will be collected before the initiation of excavation and demolition tasks. At least one air sample will be collected on each of the four sides of the site. These sampling locations are further discussed in Section 3.2. The results of these samples will establish a background level for fugitive dust.

Monitoring will be performed as specified in Sections 1.5 and 3 in an effort to evaluate whether fugitive dust concentrations are below the action levels identified in Section 1.2.

1.4 Watering Dust Suppression Applications

The application (sprinkling) of water as a dust suppressant will be in accordance with this Fugitive Dust Control Plan and will be continued through the completion of the project. The water will be obtained from a city water source or water recycled from stormwater runoff detention that has been treated if necessary.

1.5 Fugitive Dust Suppression

Real-time monitoring of dust will be performed during soil excavation and handling activities. In the event that the environmental action level is reached, or if there is visible dust leaving the site resulting from the soil excavation and handling activities, or if site conditions are otherwise determined by Project representatives to warrant them, dust suppression techniques will be immediately employed.

One or more of the following dust suppression techniques will be employed as appropriate:

- Applying water on haul roads;
- Wetting equipment and excavation faces;
- Spraying water on buckets during excavation and dumping;
- Hauling materials in properly tarped containers;
- Restricting vehicle speeds to 10 mph;
- Covering excavated areas and material after excavation activity ceases;
- Closing excavations as soon as practicable; and
- Construction vehicle wash down.

Atomizing water sprays may be used to prevent overly wet conditions. Given the compact size of the site and the resulting ease of keeping excavated areas moist, it is expected that these dust suppression measures will reduce fugitive dust below the environmental action level.

1.6 Execution

Water will be applied (sprinkled) as needed by pumping devices, sprinkling systems, or water trucks to control dust during the active portions of the project. Water will be applied as required based on dust monitoring levels and visible dust. All dust suppressant dispensing equipment will meet applicable safety and

licensing regulations. Weather conditions will also be considered in selecting and implementing dust control measures.

1.7 Fugitive Dust Emergency Response Plan

If the dust suppression techniques being utilized at the site do not lower particulates below the environmental action level specified in Section 1.2, work causing the excessive dust will be suspended until additional measures are implemented to remedy the situation. It is unlikely that emergency procedures will be encountered based on the type of work being performed at the site. However, discussions with City of Rensselaer and Rensselaer County emergency response officials will be conducted prior to the start of work on the site and appropriate community response plans, including notification procedures and response actions will be prepared and reviewed. Worker contingency plans will include, among other components, the use of full-face respirators with high-efficiency particulate filters, when dust levels are above occupational action levels.

A portable water supply of [to be determined] gallons equipped with a pump and appropriate spraying equipment will be available for providing deluge water in the event of a major dust cloud release. In addition, Project representatives will appoint a Community Liaison Officer for the public to contact should there be a fugitive dust concern. This liaison will be responsible to ensure that corrective action deemed necessary is promptly implemented and timely feedback is provided to the public.

2 SITE SPECIFIC CONSTRUCTION ACTIVITIES AND DUST CONTROL MEASURES

Two construction activities may increase the potential for fugitive dust generation. These are:

- excavation; and
- site grading.

2.2 Excavation Activities

Excavated materials stockpiled on site will be maintained to minimize dust generation. Uncovered soil pile surfaces will be moistened if dust is being generated from the pile(s). Adequately secured tarps, plastic or other material will be used if required to further reduce dust emissions. Material requiring off-site disposal will be handled in accordance with applicable regulations in a timely manner.

Before land clearing/earth moving activities, water will be applied by means of truck(s), hoses, and/or sprinklers as appropriate to minimize dust emissions. Haul vehicles transporting soil into or out of the site will be covered.

2.3 Site Grading

During grading with on-site soils or off-site backfill materials, water will be applied as needed by misting and water spraying to control dust. Vehicles entering or exiting the construction area will adhere to site speed limits and travel at a speed that minimizes dust emissions.

All visibly dry, disturbed, soil surface areas of operation and roadways will be watered as necessary to control dust emissions during site operations. Paved roads will be cleaned if the amount of dirt tracked-out of the active construction area has the potential to cause dust emissions. Unpaved driveways may be graveled to reduce dust emissions.

3 AIR MONITORING

A perimeter and work area air monitoring program will be established prior to performing soil excavating or moving activities that would result in soil disturbance. The air monitoring program will be used to assess the effectiveness of the fugitive dust control measures employed to protect both on-site personnel and the public. The air monitoring program will be coordinated with the Health and Safety Plan (HASP). The HASP will provide a proactive plan to monitor the effectiveness of, and upgrade, as necessary, the fugitive dust control measures used during construction. Perimeter air monitoring will be performed during site preparation activities, which include site grading, excavation, transportation, and stockpiling of soils on the site.

Due to the location of the site and dust suppression measures that will be employed, it is expected the potential to affect the surrounding community will be minimal. Nevertheless, monitoring of particulate emissions as described below will further minimize this potential.

The monitoring program will be developed as required in conjunction with NYSDEC, NYSDOH, and the City.

3.2 Total Particulate Emissions

The particulate monitoring device will be a MIE Miniram Particulate Monitor or equivalent. This device measures real-time concentrations of total dust (all particle sizes), including the respirable (<10 micron) fraction. The device will be periodically calibrated and properly maintained. The MIE Monitor has a wide measurement range from 0.001 mg/m^3 to 400 mg/m^3. Calibration, sometimes known as zeroing, is accomplished by means of a hand-inflatable "zero air" pocket provided with the monitor. In addition, the instrument automatically confirms its factory calibration by checking its optical background during the zeroing sequence. The monitors proposed would be MIE DataRAM Monitors with data loggers and data management. Persons responsible for operation of the monitors will receive appropriate training. The monitoring data will be downloaded to a personal computer.

3.3 Concentrations at Perimeter of Site

At least one air monitoring station (MIE Miniram Particulate Monitor or equivalent) will be established on each of the four sides of the site. The station(s) located on the north side of the site will be placed near the fence, as close as practicable to the Organichem facility. To avoid interference, an attempt will be made to locate the monitors in areas where high fluctuating light can be avoided. The placement of the monitors can be easily modified based on the specific activities being performed on-site. One monitor will be upwind of the work area to establish background concentration. The other three monitors will be placed downwind of the work area.

BEPCO will determine wind direction using standard industry practices (e.g. weather vane, wind sock or visual observation).

Ambient monitoring of dust will be conducted continuously during each work shift when dust causing activities occur (for example, excavation grading or demolition), and monitoring will not be conducted on days when there are no such activities.

4 OTHER REQUIREMENTS

Other applicable construction procedures or requirements contained in the Soil Management Plan and/or Post-Remediation Construction Plan will be followed by BEPCO.

Plan

Oil Spill Prevention Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

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1.0 Introduction

During the initial construction activities for the ***Besicorp-Empire Power Generating Facility*** (BEPCO CC Cogen Facility), this *Oil Spill Prevention Plan* (OSPP), will be used prior to the need for a full Spill Prevention Control and Countermeasure (SPCC) Plan. Storage and containment of petroleum products, which are expected to be on site in amounts well below the SPCC threshold of 1,320 gallons will be managed in accordance with the provisions of this plan through the initial site clearing, grading and excavation activities. This plan also identifies appropriate measures to prevent and control potential oil spills and related incidents. This plan will be implemented in conjunction with the following plans developed for the construction phase of this facility:

- Stormwater Pollution Prevention Plan (SWPPP)
- Soil Erosion and Sedimentation Control Plan (SESC)
- Emergency Response Plan (ERP)
- Health and Safety Plan (HASP)

The key objectives of this OSPP include:

- To identify oil storage that will be used in various construction and development activities at the facility and the appropriate containment measures
- To describe practices that will be implemented to minimize and control oil spills and related incidents during initial construction activities
- To provide a mechanism for response to potential oil spills
- To facilitate the transition of this plan to a fill SPCC Plan per the provisions of 40 CFR § 112, before the total bulk oil storage capacity of the BEPCO CC Cogen Facility construction site equals or exceeds the threshold of 1,320 gallons.

2.0 Construction Facility Description

Facility Name:	***Besicorp-Empire Power Generating Facility*** – BEPCO CC Cogen Facility
Facility Street Address:	36 Riverside Ave, Rensselaer, NY 12144 (Rensselaer County)
Owner Name:	***Besicorp-Empire Power Company, LLC***
Owner Address:	1151 Flatbush Rd, Kingston, NY 12401
NAICS Code:	4911
Latitude/Longitude:	42º 37′ 48″N/ 73° 45' 08"W
Nearest Surface Water Body:	Hudson River
Distance:	< 1 miles (approximate)

BEPCO CC Cogen Facility will construct a cogeneration power plant on an undeveloped parcel of real property known as the "South 40" and located at 36 Riverside Ave in Rensselaer, NY (Rensselaer County). The site is located less than one (1) mile east of the Hudson River and is bounded by Riverside Avenue on the west, by the Port Access Highway on the east and south, and by another industrial facility on the north. A *Site Location Map* (*See Figure 1 in Appendix A*) shows the geographic location of the facility. Construction of the power plant is expected to commence in October of 2007 and be completed by the year 2010.

3.0 Oil Storage and Spill Prevention Program

During the construction phase, no industrial operations are expected to occur at the facility other than construction and construction-related maintenance activities. Oil products, such as diesel oil, hydraulic oil, and gear oil, that will be used for various transportation-related and supporting activities and general maintenance/utility purposes, are listed in Table 1. The facility will not have underground petroleum storage tanks.

Because the current anticipated total storage capacity of aboveground storage tanks equal to or greater than 55 gallons in volume is less than the threshold of 1,320 gallons, the facility will implement this Oil Spill Prevention Plan (OSPP) until the SPCC threshold is reached. When the aboveground storage capacity for petroleum approaches this 1320-gallon threshold, the contractor will develop and implement an SPCC Plan to comply with the provisions of 40 CFR § 112.

Additional measures described in BEPCO CC Cogen Facility's Stormwater Pollution Prevention Plan and Soil Erosion and Sedimentation Control Plan complement those specified in this plan to minimize contact of petroleum products with stormwater, adjacent protected lands, protected waters of the United States, and wastewaters generated on-site.

Table 1 on the following pages summarizes the expected petroleum storage at the site during initial construction activities, as well as planned containment measures and response actions.

TABLE 1. OIL STORAGE AT BEPCO CC COGEN FACILITY, RENSSELAER, NY

Location and Contents	Best Estimate Amount *	Secondary Containment	Other Spill Prevention and Response Measures	Potential Spill Flow Rate (gpm)
Above Ground Storage Tank (AST)- Diesel fuel	300 Gallons	Double-walled tank	Provide absorbent pillows designed to handle minor oil spills and leaks Periodic visual inspection of the tank Fuel transfer per oil/loading unloading operations Provide spill kit to handle small leaks at joints and during loading operations	Rupture: 300 Leak: 0-50 Overfill: 0-50 Oil tank will be double-walled and/or secondary contained on a relatively flat area.
Above Ground Storage Tank (AST)- Heating oil	150 Gallons	Double-walled tank	Provide absorbent pillows designed to handle minor oil spills and leaks Periodic visual inspection of the tank Fuel transfer per oil/loading unloading operations Provide spill kit to handle small leaks at joints and during loading operations Provide a spill mat for loading and unloading the fuel trucks	Rupture: 150 Leak: 0-50 Overfill: 0-50 Oil tank will be double-walled and/or secondary contained on a relatively flat area.
Above Ground Storage Container Used Oil	1 × 55 Gallons	Drums will be contained on corrosion-resistant and weather-proof containment pallets	Provide absorbent pillows designed to handle minor oil spills and leaks Periodic visual inspection of the tank Fuel transfer per oil/loading unloading operations Provide spill kit to handle small leaks at joints and during loading operations	Rupture: 55 Leak: 0-10 Oil tank will be secondary contained on a relatively flat area

TABLE 1. OIL STORAGE AT BEPCO CC COGEN FACILITY, RENSSELAER, NY

Location and Contents	Best Estimate Amount *	Secondary Containment	Other Spill Prevention and Response Measures	Potential Spill Flow Rate (gpm)
Portable Oil Storage Containers - Hydraulic Oil	2 × 55 Gallons	Drums will be contained on corrosion-resistant and weather-proof containment pallets	Provide absorbent pillows designed to handle minor oil spills and leaks Periodic visual inspection of the tank Fuel transfer per oil/loading unloading operations Provide spill kit to handle small leaks at joints and during loading operations	Rupture: 55 Leak: 0-10 Oil tank will be secondary contained on a relatively flat area
Cranes - Gear Oil	1 × 180 Gallons	Per EPA-550-F-06-007, the cranes fall under the motive power category of equipment and are thus exempted from the sized secondary containment requirements	Provide a portable containment unit (spill mat) with built-in sidewalls and flotation system that rises with the liquid level when a leak occurs and automatically locks into place, for fuel transfer operations Provide spill kits and sandbags to handle leaks and spills during loading operations	Rupture: 180 Leak: 0-30 Overfill: 0-10
Cranes - Hydraulic Fluid	1 × 85 Gallons			Rupture: 85 Leak: 0-10 Overfill: 0-10
Transformers - Oil	1 × 85 Gallons	Oil-filled equipment is not subject to the bulk storage container requirements in §§112.8(c), 112.9(c), and 112.12(c). However, oil-filled equipment must meet the general requirements of §112.7.	Temporary secondary containment will be provided, when appropriate and practicable Provide spill kits and sandbags to handle leaks and spills during loading operations	Rupture: 85 Leak: 0-10 Overfill: 0-10

TABLE 1. OIL STORAGE AT BEPCO CC COGEN FACILITY, RENSSELAER, NY

Location and Contents	Best Estimate Amount *	Secondary Containment	Other Spill Prevention and Response Measures	Potential Spill Flow Rate (gpm)
Generators - Diesel	1 × 120 Gallons	A spill kit will be available in close vicinity to handle small leaks at joints and during loading operations	Strip gensets not in operation off the intermodal container box and store in a bermed and non-pervious area with a 6''-high barrier Restrict fuel transfer to the bermed area and/or complies with oil/loading unloading operation instructions Provide spill kits in close vicinity to handle small leaks at joints and during loading operations	Rupture: 120 Leak: 0-30 Overfill: 0-30

* The estimates provided here are expected to vary in different construction stages. Consequently, the "secondary containment" and "stormwater protection measures" will be assessed for their applicability and will be updated as seen necessary and practicable.

4.0 Spill Response Procedures

The "Spill Response Procedures "will be adopted by the facility to respond to potential incidents. Following is the list of contacts, in case of a spill event or emergency:

TABLE 2. SPILL RESPONSE CONTACT LIST FOR BEPCO CC COGEN FACILITY, RENSSELAER, NY

Security and Safety	Security Manager
Facility Response Coordinator	On-site Environmental Monitor
Local Fire Department	911 or (908) 527-1333
Local Police Department	911 or (908) 486-3500
State Police Department	518-279-4426
Coast Guard	(800) 424-8802
St. Peter's Hospital	(518) 434-2526
USEPA National Emergency Response Center (USEPA–NRC)	(800) 424-8802
USEPA Region	2
New York State Department of Environmental Conservation	1-800-457-7362 (within NY State) or (518) 457-7362 (outside NY State)
For Spill Clean Up:	Local contractor TBD

The following actions will be the initial response to a spill or release at the facility. These steps do not provide the necessary actions for remediation of a major release but they do provide guidance to minimize potential damage from a release. The intent of this plan is to provide appropriate guidance for response to spills of petroleum products. However, this plan may not address compliance issues for spills covered by regulations mandated by laws other than the Clean Water Act (for example, RCRA, CERCLA, or State requirements). Refer to the Emergency Response Plan for specific information and guidance on spill response and reporting.

The following guidelines should be followed to the extent possible and practical.

- IF SAFELY POSSIBLE, STOP THE SOURCE OF THE SPILL IMMEDIATELY. Close the valves, shut down pumping, or take whatever actions are possible to stop a release. If conditions are hazardous (for example, fire or potential explosion), do not approach. Call

the Security Manager, who will call the Facility Response Coordinator. The Security Manager and the Facility Response Coordinator (or alternate) will designate the appropriate personal safety equipment that must be worn when approaching releases.

- When the Facility Response Coordinator (or alternate) arrives, other response actions are to be under his or her direction. The Facility Response Coordinator (or alternate) should determine the necessary response actions, including whether evacuation of parts or all of the facility is necessary for employee safety.
- In general, the Facility Response Coordinator (or alternate) will direct the containment of the release and decide on alternate source control.
- Use booms or sandbags, dig small trenches, or place absorbent pads to stop the spread.
- Take immediate action to prevent the spill from reaching off-site or surface waters.
  - Place spill pads, dig a diversion ditch, or use soil to form a berm.
  - If the release reaches water, attempt to place booms to contain the release, or, if necessary, block drainage downstream of the spill to prevent further discharge.
- The facility personnel will immediately report to the Facility Response Coordinator spills of petroleum products greater than or equal to 10 gallons. The Facility Response Coordinator will then contact the following environmental officials, as warranted.
- If any of the listed agencies are contacted, give them as much of the following information as possible. Provide only facts. DO NOT SPECULATE.

If the appropriate person(s) are not available within 24 hours of the spill, the Facility Response Coordinator must determine if the spill is reportable to local, state, and federal authorities. The type and quantity of materials that trigger reporting requirements are summarized as follows:

<table>
<tr><th>Trigger</th><th>Type of Report</th></tr>
<tr><td>For discharges of oil in quantities less than 10 gallons.</td><td>• Oral report immediately to Facility Response Coordinator/ First Alternate
• The Facility Response Coordinator/First Alternate will determine if the spill quantity violates applicable water quality standards and/or forms film on the surface of water and take appropriate reporting actions.</td></tr>
<tr><td>For discharges of oil greater than 10 gallons but less than 1000 gallons as well as for quantities that may be harmful including those that:
• Violate applicable water quality standards;
• Cause a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines; or
• Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.</td><td rowspan="3">Oral report immediately to:
1. Facility Response Coordinator/ First Alternate
2. USEPA- NRC
3. NYS DEC Spill Hotline
4. Local Police Department
5. Local Fire Department
6. NY State Police
7. Clean-up contractors

Follow-up with a written report to NYSDEC and USEPA-NRC.</td></tr>
<tr><td>For oil spills equal to or greater than 1,000 gallons</td></tr>
<tr><td>For two consecutive spills of 42 gallons or more within 12 calendar months.</td></tr>
</table>

5.0 Equipment Inspection and Personnel Training

Equipment

Equipment and tanks will be inspected periodically: informal inspections will be conducted daily and formal recorded inspections are conducted monthly. The frequency depends on the equipment and the release potential; the specific frequencies for inspections are specified in the following sections. The inspection records will be maintained on-site for reference purposes. If a potential deficiency is noted, appropriate action will be taken. If corrosion damage is observed, additional examination and corrective action will be taken, as indicated by the magnitude of the damage.

Prevention Standards for Oil Storage Tanks

- Aboveground oil storage tanks will be visually inspected monthly for leaks.
- Aboveground oil storage tanks will be subjected to integrity testing at least once every 5 years.
- Aboveground oil storage tanks will be equipped with direct reading gauges and have venting capacity suitable for the fill and withdrawal rates.
- Fifty-five-gallon drums will be visually inspected regularly and will not be stored directly on the ground.
- Aboveground oil valves, pipelines, and pump units will be visually inspected monthly (minimum) for leaks.
- No tanks or compartments will be filled without checking reserves prior to commencing the filling operation.
- No pump operations will function, or continue to function, unless attended constantly during their operation.
- At appropriate locations, warning signs will be displayed to remind personnel to check line disconnection before vehicle departures.

Prevention Standards for Oil Storage Tanks

- The tank trailer/tank car will be accurately spotted, brakes will be set, and wheels will be chocked. Drivers will not be allowed to remove wheel chocks until lines are disconnected.
- The driver will be required to remain with the vehicle during the entire fueling period.
- No flame of any kind will be permitted near the tank trailer or within the vapor area around the tank trailer. Smoking is strictly forbidden within this area. Only spark-proof tools will be used.
- Make sure the tank being loaded is vented before connecting the loading line. Connections between dispensing and receiving tanks will be secured before opening the valves for liquid transfer.

- Pumps will be checked for leakage at any of the connections or anywhere along the transfer lines. If a leak is present, the pump will be immediately stopped, the valves will be shut, and the leak will be repaired.
- The level indicator on the receiving tank will be monitored such that sufficient space is available to receive material being transferred.
- The spill mat with an in-built flotation system (that rises with the liquid level when a leak occurs) and with collapsible sidewalls to catch liquid that may leak during the transfer, will be placed on the floor. The truck on will be rolled onto this bermed spill mat during fuel loading/unloading operations. The containment system will be designed to hold at least the maximum capacity of any single compartment of a tank truck refueling the facility.
- Trucks will be parked adjacent to the pump, such that there is enough space to walk between the pump and the vehicle. After use, if the spill mat is not containing any oil/fuel then it will be folded and placed in the spill equipment box for the next use.
- Check the dispenser hoses for cracks, holes, or leaks. If you notice any problems, notify the main office before refueling.
- THE DRIVER MUST REMAIN WITH THE VEHICLE—AT THE FILL PORT—AT ALL TIMES WHILE FUEL IS BEING DISPENSED. YOU WILL BE CONSIDERED NEGLIGENT IF:
    - YOU LEAVE THE VEHICLE DURING REFUELING.
    - YOU FAIL TO REPORT A RELEASE.
- If material is spilled during refueling (no matter how little):
    - Stop refueling and shut down the pumps .
    - Report the release to On-site Construction Manager and/or Environmental Monitor.
    - Implement the posted spill response measures.
    - Refueling will be suspended and the truck will not be moved until cleared by Security or On-site Environmental Coordinator
- After liquid has been transferred, the pump will be stopped, the valves will be closed, the loading or unloading line will be disconnected, valves within the lines will be closed, the lowermost drain and outlets of the vehicle will be inspected for leakage and corrected as necessary, prior to releasing the tank truck/tank car. The amount of fuel used will recorded.
- Prior to departure, the driver of a tank truck will be required to examine the lowest drain and other outlets for leakage. Where necessary, outlets will be adjusted to prevent leakage in transit.

Personnel Training

Facility personnel will be instructed by on-site management on the maintenance of oil pollution prevention equipment and pollution control regulations. Annual spill prevention briefings will be provided to operations personnel for adequate understanding of this plan. These briefings will highlight any past spill events or failures and recently developed precautionary measures. Training will be been held on oil spill prevention, containment, and

retrieval methods. Spill response exercises will be conducted annually to prepare for possible spill response. Records of these briefings and spill prevention training will be kept on site.

Appendix A – Figures

FIGURE 1. SITE LOCATION MAP
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 2. CIVIL OVERALL GRADING AND DRAINAGE PLAN (DWG. NO. C-2000)
Besicorp_Empire Power Generating Facility – Rensselaer, NY

Appendix B - Acronyms and Glossary of Terms

Aboveground tank means a device meeting the definition of "tank" in this subdivision whereby the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

Completely buried tank means any tank completely below grade and covered with earth, sand, gravel, asphalt, or other material. Tanks in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage tanks for purposes of this part.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of this part, the term discharge shall not include any discharge of oil that is authorized by a permit issued under section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407).

Facility means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used. The boundaries of a facility depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the types of activity at the site.

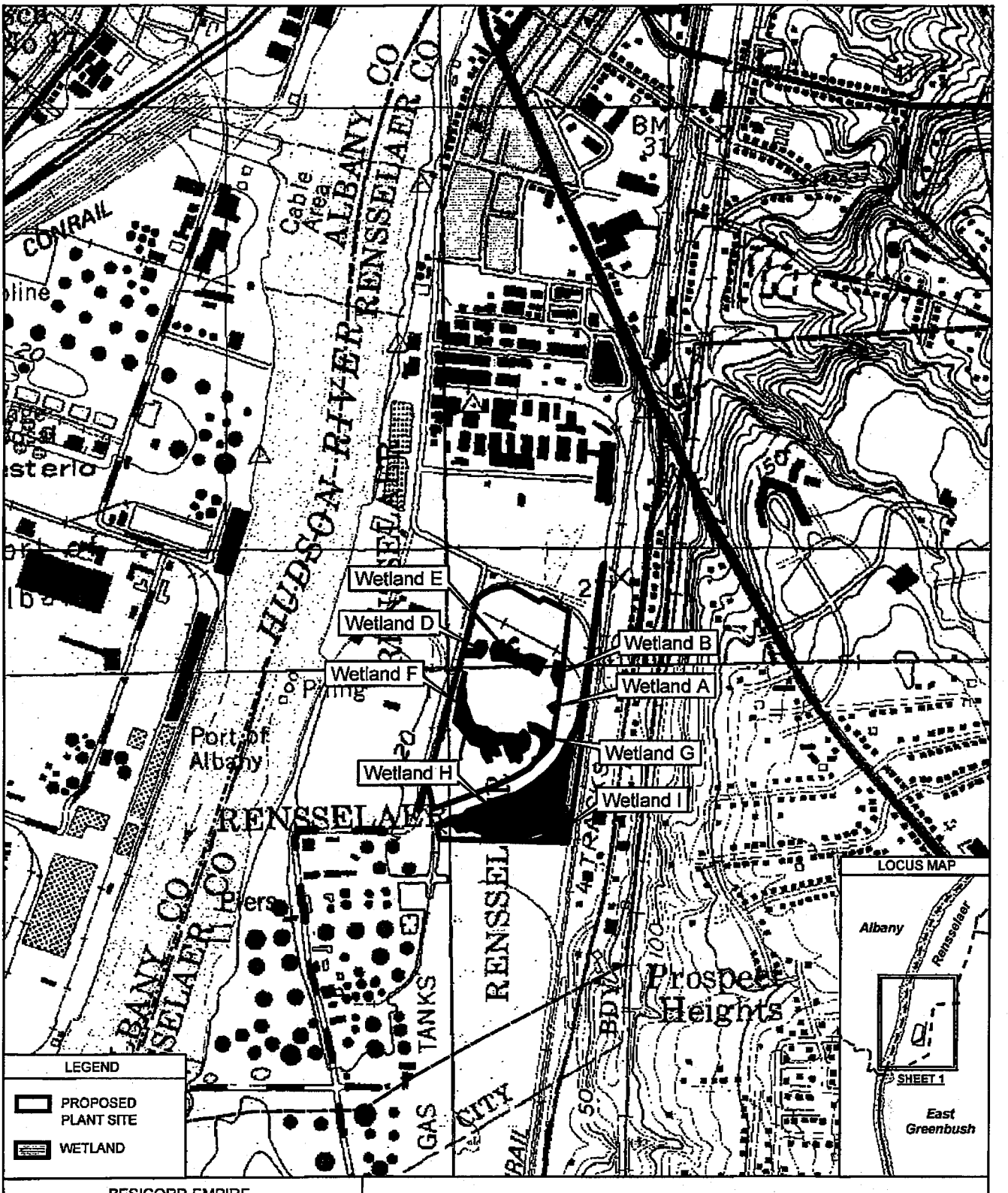
Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Partially buried tank means a storage tank that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage tank for purposes of this part.

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by §112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Storage capacity of a tank means the shell capacity of the tank.

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.



BESICORP-EMPIRE
POWER GENERATING FACILITY

USGS WETLAND LOCATION MAP
SHEET 1 OF 34

GRAPHIC SCALE

1,000 0 1,000

(IN FEET)

1 inch = 1,000 feet

PROPOSED WORK: BESICORP-EMPIRE POWER GENERATING FACILITY
WATERWAYS: HUDSON RIVER
CITY: RENSSELAER
COUNTY: RENSSELAER
STATE: NEW YORK
APPLICANT: BESICORP-EMPIRE POWER COMPANY, LLC
SHEET 1 OF 34
DATE: MARCH 18, 2005

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PSILON ASSOCIATES INC.
Leaders in Environmental Consultants

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DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

July 3, 2007

REPLY TO
ATTENTION OF:

Regulatory Branch

SUBJECT: Department of the Army Permit Application Number NAN-2003-388 issued to Besicorp-Empire Power Company, LLC

Besicorp-Empire Power Company, LLC
c/o Karen M. Gaidasz, Environmental Scientist
C.T. Male Associates, P.C.
50 Century Hill Drive, P.O. Box 727
Latham, NY 12110-0727

Dear Ms. Gaidasz:

The New York District of the U.S. Army Corps of Engineers (NYD) has reviewed your May 2, 2007 correspondence providing a Revised Final Wetland Mitigation Plan Drawings and Supplemental Information for the Capital District Farms Wetland Mitigation Site located in the Town of Brunswick, Rensselaer County, New York. The Final Wetland Mitigation Plan was submitted in accordance with Special Condition "G" of the above referenced permit for review and approval by NYD.

In accordance with Special Condition "G" of the permit, NYD has reviewed, and hereby approves, your Final Wetland Mitigation Plan, dated May 2, 2007. You are reminded that all of the original terms and conditions of the permit, including the expiration date, remain in effect, including Special Condition (M) that requires NYD review and approval of a Conservation Easement for the wetland mitigation site. In addition, the permittee shall comply with all of the stipulations and conditions contained in the Water Quality Certificate and Permit issued by the New York State Department of Environmental Conservation on June 5, 2007 for the Capital District Farms Wetland Mitigation Site, copy enclosed.

Finally, a letter dated June 18, 2007 from the New York State Office of Parks, Recreation and Historic Preservation (SHPO) stating the work at the Capital District Farms Wetland Mitigation Site will have No Effect on cultural resources listed or eligible for listing on the National Register of Historic Places is attached for your information.

If any questions should arise concerning this matter, please contact Steven Schumach, of my staff, at (917) 790-8417.

Sincerely,

FOR George Nieves
Chief, Western Permits Section

Enclosures

Copies furnished (with enclosures)
Stephen Lattanzio, Besicorp
Kevin Bernstein, Esq.
Christine Delorier, NYD, Albany Field Office

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE

Eliot Spitzer
Governor

Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

18 June 2007

Mr. Stephen M. Lattanzio
Besicorp-Empire Power Company, LLC
1151 Flatbush Road
Kingston, NY 12401

Re: CORPS, DEC
Empire State Newsprint Project / Besicorp
Capital District Farms Wetland Mitigation Site
Town of Brunswick, Rensselaer County
04PR01106

Dear Mr. Lattanzio:

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project (*Phase 1 Archeological Survey, Capital District Farms Wetland Mitigation Site, Town of Brunswick, Rensselaer County, New York*, May 2007, prepared by John Milner Associates, Inc.). Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

Based on the submitted information, SHPO recommends that the planned project be determined to have No Effect on cultural resources listed or eligible for listing on the National Register of Historic Places. This recommendation applies only to the areas subjected to archaeological testing.

If you have any questions please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, OPRHP
Phone: 518-237-8643 x3276; FAX: 518-233-9049
Email: Philip.Perazio@oprhp.state.ny.us

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New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, New York 12233-1750
Phone: (518) 402-9167 • **FAX:** (518) 402-9168
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

June 5, 2007

RECEIVED
JUN - 7 2007
CT MALE ASSOCIATES, P.C.

Richard Clark
Besicorp-Empire Power Company, LLC
1151 Flatbush Road
Kingston, New York 12401

RE: Article 15: Stream Disturbance & Section 401 Water Quality Certification; Capital District Farms Wetland Mitigation Project

Dear Mr. Clark:

In conformance with the requirements of the State Uniform Procedures Act, Article 70 of the Environmental Conservation Law and its implementing regulations 6 NYCRR Part 621 (Uniform Procedures), enclosed are the Article 15: Stream Disturbance and Section 401 Water Quality Certification for the above referenced facility.

Please read all terms and conditions carefully. If you have any questions regarding the certification please contact me at 518-402-9151.

Sincerely,

Christopher M. Hogan
Project Manager

cc: N. Adams, DEC -Region 4
COE
J. Fraine, DEC Region 4
K. Gaidasz, CT Male

PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
BESICORP-EMPIRE POWER COMPANY LLC
1151 FLATBUSH RD
KINGSTON, NY 12401
(845) 336-7700

Facility:
CAPITAL DISTRICT FARMS
321 FARM TO MARKET RD
BRUNSWICK, NY

Facility Location: in BRUNSWICK in RENSSELAER COUNTY
Facility Principal Reference Point: NYTM-E: 617.864 NYTM-N: 4729.813
Latitude: 42°42'42.3" Longitude: 73°33'38.4"
Authorized Activity: The applicant proposes to disturb over 100 feet of a protected tributary to the Poesten Kill, as part of a wetland mitigation project. The disturbance of the protected stream includes bank stabilization utilizing stone and vegetation. Grade control structures will also be utilized to stabilize the stream. The overall project includes 5.4 acres of compensatory wetland mitigation at Capital District Farms. The mitigation is being required by the Corps of Engineers for the filling of federal wetlands associated with the construction of electrical and gas transmission lines for Besicorp Power project in the City of Rensselaer.

Permit Authorizations

Stream Disturbance - Under Article 15, Title 5
Permit ID 4-3822-00135/00001
New Permit Effective Date: 6/5/2007 Expiration Date: 12/31/2010
Water Quality Certification - Under Section 401 - Clean Water Act
Permit ID 4-3822-00135/00002
New Permit Effective Date: 6/5/2007 Expiration Date: 12/31/2010

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: WILLIAM R ADRIANCE, Chief Permit Administrator
Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: William R. Adriance Date 6/5/2007

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: STREAM DISTURBANCE; WATER QUALITY CERTIFICATION

1. **State Not Liable for Damage** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

2. **State May Order Removal or Alteration of Work** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

3. **Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

4. **State May Require Site Restoration** If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

CONSTRUCTION REQUIREMENTS

5. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by C.T. Male Associates, P.C. (See Condition #6 below)..

6. **Conformance with Plans (continued)** All work shall be completed in accordance with the

following plans prepared by C.T. Male Associates, P.C., dated May 2, 2007:

- Revised Final Wetland Mitigation Plan Drawings and Supplemental Information; Capital District Farms Wetland Mitigation Site.
- Wetland Mitigation Grading Plan, dated March 5, 2007(Revised 3/8/07, 3/12/07, 4/16/07, 4/23/07).
- Wetland Mitigation Planting Plan, dated March 5, 2007 (Revised 3/08/07, 04/16/07, 04/23/07).
- Details and Specification, dated March 5, 2007 (Revised 3/08/07, 04/16/07).

7. **Work Window** In-stream or stream bank work may only be conducted between June 15 and September 30.

8. **Fish Passage** All cross-vanes shall be constructed in accordance with the Wetland Mitigation Grading Plan (dated March 5, 2007) and shall not impede fish passge.

9. **Notification of Commencement of Work** At least 48 hours prior to the commencement of work the permittee shall notify the Department by send e-mail notification to Jerry Fraine (jafraine@gw.dec.state.ny.us) and Chris Hogan (cmhogan@gw.dec.state.ny.us).

EROSION CONTROLS

10. **Bed and Bank Disturbance** Disturbance to the bed and banks of the stream shall be kept to the minimum necessary to complete the project.

11. **Erosion Controls** Filter fabric barriers, silt fencing, or other methods to control erosion are to be used on the downslope edge of any disturbed areas. These erosion/sediment controls are to be put in place before any disturbance of the ground occurs and are to be maintained in good working order until all disturbed land is heavily vegetated. Said structures must remain "in place" in good working order throughout construction and shall remain until final grading has been completed and final seeding has been established.

12. **Unused Excavated Material** All unused, excavated materials and/or construction debris, shall be immediately removed, upon completion of construction, a minimum of 100 feet from the waterbody or wetland or flood plain.

13. **Soil Stabilization** Any excavated soil shall be suitably retained and covered so that there is no turbid runoff discharged either directly or indirectly into any waterway or wetland.

14. **Establish Vegetative Cover** All areas of soil disturbance resulting from this project shall be shaped/graded, and seeded with an appropriate perennial grass seed (free of other invasive species such as purple loosestrife) and mulched within one week of final grading. Mulch shall be maintained until a suitable vegetative cover is established.

15. **Seeding and Mulching** If seeding is impracticable due to the time of year, a temporary mulch (free of other invasive species such as purple loosestrife) shall be applied and final seeding shall be performed at the earliest opportunity when weather conditions favor germination and growth but not more than six months after project completion.

WATER QUALITY

16. **Isolation of Work Area** The work area shall be isolated from the flowing stream by use of sandbags, cofferdam, or piping or pumping around the work area. Waters accumulated in the isolated work area shall be discharged to an upland settling basin, field or wooded area to provide for settling and filtering of solids and sediments before water is returned to the stream. Return waters must be as clear as the flowing water upstream from the work area.

17. **Equipment Operation** Equipment operation in the water is prohibited.

18. **No Wet of Fresh Concrete or Leachate** During construction, no wet or fresh concrete or leachate shall be allowed to escape into the waters of New York State, nor shall washings from Redi-Mix trucks, mixers or other devices be allowed to enter any wetland or waters.

19. **No Discharge of Sediment ot Turbid Water** There shall be no discharge of sediment or turbid waters to wetlands or water bodies. In the case of stream work, the water below the work area shall remain as clear as the flowing water above the work site.

20. **Heavy Stone Rip Rap** Heavy stone rip rap shall be placed at a one foot vertical to two foot horizontal or flatter slope. The rip rap to be placed along the 35' section shall be keyed into the stable bank area at the upstream and downstream ends to prevent rock from being dislodged by flows.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. **Water Quality Certification** The NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. **Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. **Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Chief Permit Administrator

NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY12233

4. **Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Stream Disturbance, Water Quality Certification.

5. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

May 2, 2007

Mr. Steven A. Schumach
Regulatory Branch, Western Permits
U.S. Army Corps of Engineers
New York District
26 Federal Plaza, Room 1937
New York, NY 10278-0090

Mr. Chris Hogan
Environmental Permits
NYS Dept. of Env. Conservation
Central Office
625 Broadway
Albany, NY 12233-1500

Re: Revised Final Wetland Mitigation Plan Drawings and Supplemental Information
Capital District Farms Wetland Mitigation Site
Town of Brunswick, Rensselaer County, NY
Department of the Army Permit No. 2003-00388
NYSDEC Permit ID 4-3814-00052/00004
C.T. Male Project No.: 00.6678

Dear Mr. Schumach and Mr. Hogan:

The purpose of this letter is to provide revised Final Drawings and Supplemental Information for the Capital District Farms (a.k.a., Schmidt Farm) Wetland Mitigation Site located in the Town of Brunswick, Rensselaer County, New York (refer to Attachment A). The Final Drawings and Supplemental Information have been revised to incorporate comments provided by the U.S. Army Corps of Engineers (USACOE) and New York State Department of Environmental Conservation (NYSDEC) during a field review on April 2, 2007. This letter and its attachments supersede the information previously provided to you on March 9, 2007 and March 12, 2007.

The proposed mitigation at the Capital District Farms is being undertaken to compensate for impacts to wetlands and other waters of the U.S. associated with the construction of a 505 Megawatt Combined-Cycle Cogeneration Power Plant; an approximately 8.1 mile, 345 kilovolt transmission line; an approximately 3,100 foot long 28-inch gray water pipeline; and an approximately 4.5 mile long 16-inch natural gas pipeline proposed by Besicorp - Empire Power Company, LLC, and hereafter referred to as the "Besicorp Project" or "BEPCO".

The Final Drawings for the Capital District Farms Wetland Mitigation Site were prepared in substantial accordance with the following documents:

- "Wetland Mitigation Supplement to Permit Applications Submitted to the US Army Corps of Engineers", dated February 27, 2004 for the "BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline";
- Letter to Mr. Steven A. Schumach dated September 22, 2004 from Epsilon Associates, Inc. with the subject of "Mitigation Site Wetland Delineation";
- Letter to Mr. Steven A. Schumach dated January 11, 2005 from Epsilon Associates, Inc., with the subject of "Wetland Mitigation Concept Plan";
- Department of Army Permit 2003-00388 issued to the Besicorp-Empire Power Company, LLC, dated March 24, 2006; and
- New York District U.S. Army Corps of Engineer's Compensatory Mitigation Plan Checklist (refer to Attachment B), dated January 10, 2005.

Mitigation Goals and Objectives

The goal of the mitigation project is to compensate for the permanent loss of wetlands and other waters of the U.S. associated with the Besicorp Project. It is our understanding that the Besicorp Project will result in permanent impacts to approximately 3.47 acres of wetlands. The permittee has agreed to provide a minimum of 5.4 acres of compensatory wetland mitigation at the Capital District Farms. The mitigation ratios exceed the goal of "no net loss" of wetland functions and values as described in the National Wetlands Mitigation Action Plan.

The Wetland Mitigation Concept Plan previously submitted to the USACOE proposed a combination of wetland creation, wetland enhancement / restoration and stream enhancement measures at the Capital District Farms site. This Final Wetland Mitigation Plan builds upon the Concept Plan that was submitted. Some differences exist between the Concept Plan and the Final Plan; however the overall area and type of wetlands created is substantially the same, if not greater. There are differences in the location of created wetlands which is primarily the result of site constraints, including existing steep slopes which are not conducive for wetland creation. A few of the isolated wetlands were incorporated into the proposed wetland creation areas and associated upland transitional zones since it was determined that trying to grade around the existing wetlands was not feasible. Maintaining the isolated wetlands would have altered their hydrology (i.e., become drier) since they would have been a few feet higher than the surrounding created wetlands, and there would have been less area available for newly created wetlands. Other minor differences between the Concept Plan and Final Plan include placing potholes within the created wetlands and the elimination of level ditches between the potholes.

The following table provides a comparison of the mitigation areas that were proposed in the Concept Plan versus the Final Plan.

Mitigation Summary Table

Covertype	Concept Plan	Final Plan
Wetland Mitigation Areas		
Existing Wetlands Converted to Riparian Corridor	Not calculated	0.18 acres
Existing Wetlands Converted to Scrub-Shrub Wetlands	Not applicable	0.15 acres
Existing Wetlands Converted to Forested Wetlands	Not applicable	0.10 acres
Existing Emergent Wetlands to be Enhanced /Restored	3.0 acres	2.56 acres
Potholes Created in Existing Wetlands	0.1 acres	0.04 acres
Total Existing Wetlands To Be Enhanced / Restored	**3.1 acres**	**3.03 acres**
Created Forested Wetlands from Uplands	1.2 acres	1.47 acres
Created Scrub-Shrub Wetlands from Uplands	0.8 acres	0.96 acres
Created Potholes in Forested Wetland	0.2 acres	0.14 acres
Created Potholes in Scrub-Shrub Wetland	0.1 acres	0.03 acres
Total Forested & Scrub-Shrub Wetland Creation Areas	**2.3 acres**	**2.60 acres**
Total Wetland Mitigation Area	**5.4 acres**	**5.63 acres**
Upland Areas		
Existing Uplands Converted to Riparian Corridor	Not calculated	0.25 acres
Existing Wetlands Converted to Upland Transitional Zone	Not applicable	0.04 acres
Upland Transitional Zone	Not calculated	0.92 acres
Other Upland Areas in Wetland Mitigation Area	2.8 acres	1.36 acres
Total Upland Areas	**2.8 acres**	**2.57 acres**
Total Mitigation Area & Conservation Easement Area	**8.2 acres**	**8.2 acres**

The specific objectives of the Final Wetland Mitigation Plan are as follows:

- *Enhancement / Restoration of existing wetlands.* The proposed mitigation site has been used for agricultural purposes for many years which has resulted in the wetlands being compacted and sparsely vegetated. By restricting agricultural activities within the wetlands and installing fencing to exclude cattle, it is anticipated that the wetlands will revegetate through natural succession. The greater diversity and percent cover of vegetation will enhance the functions currently provided by the existing wetlands including groundwater recharge and water quality improvements (i.e., sediment and pollutant filtering and retention; and nutrient removal and transformation).

- *Enhancement of existing stream channel and creation of approximately 165 linear feet of new stream channel.* A new stream channel will be established to form a connection to the main stream channel (refer to Attachment C for new channel sizing calculations). Stream enhancement measures include the planting of shrubs along the banks, the installation of cross-vanes and the stabilization of stream banks that have been eroded or have the potential to erode. It is anticipated that the stream enhancement and stabilization measures will minimize the existing accelerated erosion and sedimentation conditions within the stream, which will improve water quality. Cross-vanes will be placed to facilitate the movement of fish through the stream and to enhance habitat by creating spawning and resting areas. In addition, the cross-vanes will direct stream flow towards the thalweg of the stream and away from the banks, which will minimize bank erosion.
- *Creation of approximately 1.11 acres of scrub-shrub wetlands.* The scrub-shrub wetlands will be planted with a variety of native shrubs. It is anticipated that one of the functions of the newly created scrub-shrub wetlands is to provide cover and food for wildlife (i.e., habitat), including songbirds.
- *Creation of approximately 1.57 acres of forested wetlands.* The majority of the created forested wetlands will be floodplain wetlands which will be subject to flooding after storm events and/or high flows within the stream. A wood duck box will be installed within the created forested wetland area. It is anticipated that the functions provided by the floodplain wetlands include stormwater and sediment retention and wildlife habitat.
- *Creation of approximately 0.21 acres of potholes within the created wetland areas.* It is anticipated that the potholes will provide habitat for mammals, waterfowl, song birds, amphibians and reptiles.
- *Establishment of an approximately 0.96 acre upland transitional zone.* In the southern portion of the mitigation site, the upland transitional zone will serve as a vegetated buffer between the wetlands and stream and the ongoing agricultural activities located outside of the mitigation site. The upland transitional zone and vegetative buffer will help to improve water quality within the watershed. In addition, the planted upland areas will provide wildlife habitat (i.e., food and cover).

In addition to the proposed wetland mitigation measures, the elements of the Barnyard Water Management System identified in the Concept Plan will be implemented pursuant to an easement agreement. Although not technically part of the proposed wetland mitigation, the Barnyard Water Management System will assist with improving water quality within the watershed with the use of grass filter strips, heavy

use area protections, and other measures to reduce, collect, and treat runoff and leachate from barnyard, silage, animal waste and concentrated livestock areas.

Subsurface Investigation

A subsurface investigation was conducted to characterize the soils and hydrology within the mitigation site. The purpose of this study was to evaluate the suitability of the area for wetland creation and to facilitate wetland mitigation design. Ten (10) test pits were dug to characterize topsoil and subsoil layers. Additionally, geotechnical laboratory testing was conducted to determine soil moisture, texture, gradation and plasticity (refer to Attachment D).

In general, soils were observed to be sand and silt with varying degrees of clay. In most test pits, water was observed seeping in at 2 to 3 feet. On average, test pits were terminated at 6 to 9 feet. No bedrock was observed within the depth of the investigations conducted.

Elements of the Mitigation Plan

Hydrology

The constructed wetlands will utilize direct precipitation, stream flows and seasonal high groundwater as the primary sources of water. In the northern and western portion of the mitigation site, the wetland creation areas were designed to be at a slightly higher elevation than the adjacent main stream channel. During high stream flows, water will enter the adjacent wetland creation areas at specific "interface" points along the stream bank. At these interface points, fine rounded rock (i.e., 3 to 6 inches in diameter) will be placed on the banks of the stream to facilitate water exchange between the creation areas and the stream. The location of the interface points will coincide with the placement of rock cross-vanes within the stream bed. The cross-vanes and rock interface points have been designed to not require maintenance beyond the post-construction monitoring period, if at all.

In order to further characterize seasonal high groundwater within the mitigation site, five (5) shallow water table monitoring wells were installed on April 23, 2007. Monitoring of the wells will be conducted weekly between April and June 2007. If necessary, the final design elevations will be adjusted based on the collected monitoring well data. In addition, more detailed stream elevation data will be collected at the locations of the proposed cross-vanes and rock interface points in order to finalize the design elevation of these structures.

Soils

Within the mitigation site, topsoil will be placed to provide a growing substrate for the woody plantings and seed mixtures to be installed. Topsoil will be from a mix of on-site soils and imported topsoil, if necessary. Based on the subsurface data collected, it appears that some suitable topsoil exists within the mitigation site; however additional topsoil will be needed to supplement the on-site soil.

Additional topsoil will be required to have an organic content of 25% or higher and a pH between 5.5 and 7.5. Off-site topsoil should be a friable, natural loam, free of subsoil, clay lumps, brush, stones, or other deleterious material larger than two inches. Additionally, it will be required that the contractor demonstrate that the off-site topsoil did not come from a location where there are invasive species growing.

Grading Plan

The grading sequence for the mitigation site includes the following: site clearing and preparation, placement of erosion and sedimentation controls, excavation and rough grading, placement of topsoil, and final finish grading. The wetlands will be created to have an amorphous shape, with microtopographic relief, to mimic conditions in natural wetlands. An Environmental Monitor (EM) familiar with wetland mitigation procedures will be on-site to observe implementation of the mitigation plan. All excess soil will be removed from the mitigation site and will be placed in an appropriate upland area. The removed material will be contained by appropriate erosion and sediment controls until adequate vegetative cover is restored.

Planting Plan

Seed mixes and woody plantings will be installed within the mitigation site following grading activities. It is anticipated that vegetation from the surrounding wetlands will also serve as a seed source to colonize the area. The combination of the native seed bank and seed mixtures should minimize the colonization of the newly graded areas with exotic species. A list of the proposed seed mixes is included in Attachment E. Native trees and shrubs were selected based on their tolerance to drought and/or flooding conditions and their wildlife value.

The wetland creation areas and adjacent upland slopes will be seeded immediately following grading activities under the observation of the EM. Plantings will be installed during the next growing season following the initial construction (i.e., spring). This will

allow time for the mitigation site to stabilize and for wetland hydrology patterns to become evident so that plantings could be installed in appropriate locations.

Conservation Easement

As an additional form of mitigation, a conservation easement has been proposed for the entire 8.2 acre mitigation site. A copy of the final draft conservation easement was provided to the USACOE on April 5, 2007 for review and approval as per the provisions of Special Condition M of the USACOE Permit. Christine Delorier has provided some general comments on the version of the conservation easement submitted with the wetland mitigation plan on March 9, 2007. Kevin Bernstein of Bond, Schoeneck & King has been in touch with Christine to schedule a time when they can discuss the language of the easement, which has already been reviewed and approved by the grantee conservation organization and the landowner.

Performance Standards

The following provides performance standards that will be used to determine if the mitigation site is meeting the stated goals and objectives.

- *Wetland Enhancement / Restoration* - To determine if there is an increase of functions within the existing wetlands, vegetative sampling will be conducted using at least three (3) 10' X10' test plots during each monitoring year. At each test plot, the following information will be recorded: a list of dominant plant species, relative percent cover of each dominant species, and observations on vitality (i.e., plant vigor) of each species. The locations of the test plots will be staked and labeled so that the sampling will be conducted in the same location from year to year. The objectives of the wetland enhancement / restoration will be met if more than 50 percent of the dominant species have an indicator status of FAC or higher. Additionally, the objectives will be met if there is a measurable increase in plant density and an improvement of the overall vitality of plants from baseline conditions (i.e., Year 1 of monitoring).
- *Water Quality Improvement* - To determine if there is an overall improvement in water quality resulting from the proposed wetland and stream mitigation measures, water samples will be collected within the stream and analyzed for certain parameters (i.e., total suspended solids, dissolved oxygen, pH, phosphorous, nitrogen, etc.). At least two (2) water samples will be taken within the main stream channel during each monitoring year. Baseline data will be collected this spring when the monitoring wells are installed. The objectives of

the water quality improvement will be met if there is a measurable improvement from baseline conditions in some or all parameters tested.

- *Enhancement and Creation of Fish and Wildlife Habitat* - To determine if there is an increase and/or improvement of fish and wildlife habitat within the mitigation site, observations will be made during each field review. Direct observations of fish and wildlife and evidence of wildlife (i.e., scat, tracks, nests, etc.) will be noted during the field reviews. In addition, nest boxes will be checked for usage and rocks and logs will be turned over to determine the presence of amphibians and other wildlife species. The objectives of the fish and wildlife habitat enhancement and creation will be met if there are fish and wildlife observed or are known to be utilizing the mitigation site.
- *Stormwater and Sediment Retention* - To determine if the forested wetlands are functioning as floodplain wetlands and therefore providing stormwater and sediment retention, at least one (1) field review will be conducted within 24 hours of a significant storm event during each monitoring year. Field observations will be made including the presence/absence of standing water, sediment accumulation and/or drift lines. The objectives of the stormwater and sediment retention will be met if evidence of stormwater and sediment retention is observed.
- *Stream Creation and Enhancement/Stabilization* – To determine if the new stream channel and the stream enhancement and stabilization measures are functioning as designed, direct observations will be made during each monitoring year. The stream channels will be reviewed for evidence of excess erosion or sediment accumulation. In addition, the design structures, including the cross-vanes and rock interfaces will be reviewed for signs of loss of integrity or function. The objectives of the stream creation and enhancement/stabilization will be met if the new stream and the proposed stream structures are functioning as designed.

Monitoring and Adaptive Management Plan

Since wetlands evolve and change in response to their surrounding environment, a monitoring and adaptive management program is an essential part of a mitigation plan. A monitoring program is important to determine if the mitigation site is developing in a way that meets the overall goals and objectives of the plan. In response to observations made through monitoring, actions may need to be taken to respond to current conditions (i.e., adaptive management).

In accordance with the USACOE Permit, the permittee will undertake three (3) years of post-construction monitoring within the proposed mitigation site. The monitoring will be conducted as part of an adaptive management program which will serve to identify

any potential problems (i.e., invasive species and erosion) early on so that remedial actions can be taken. Monitoring site visits will be conducted as per the USACOE requirements following the construction of the mitigation site.

Field reviews will be conducted each monitoring year (e.g. Years 1, 2 and 5) between April and September in order to collect surface water and groundwater elevations, take photographs and collect additional field data as described in the performance standards. One monitoring report will be prepared and submitted to the USACOE by October 31st during each monitoring year. The first monitoring report will contain a summary of the baseline data collected during the pre-construction phase including water quality data, groundwater elevations, and observations on vegetation within existing wetlands.

In addition to the items discussed in the performance standards, the monitoring report will contain the following information:

- Representative photographs of the mitigation site. Photographs will be taken from reproducible locations.
- USACOE Data Forms characterizing vegetation, soils (including moisture content), and hydrology within the mitigation site.
- A list of dominant plant species, including their relative percent cover in each vegetative strata (i.e., herbaceous, sapling, shrub, and tree), and regional indicator status for vegetation growing within the mitigation site.
- Assessment of the percent cover of purple loosestrife (*Lythrum salicaria)* and common reed (*Phragmites australis*) within the mitigation site. If the combined coverage of these invasive species is greater than 5%, the monitoring report will include an invasive species control plan. If multi-flora rose (*Rosa multiflora*) is observed during the monitoring field visits, it will be hand pulled and disposed of properly off-site.
- An estimate of the percent survivability of woody plantings within the mitigation site. The estimate will be based on data collected from two random (2) transects that will be walked. Visual observations of the overall planting conditions will also be provided in the monitoring report. If survivability of the woody plantings is estimated to be less than 85%, the monitoring report will include a plan for re-planting woody vegetation, where necessary.
- A summary of wildlife seen (i.e., including tracks, scats, nests, etc.) or heard utilizing the mitigation site.
- A sketch map depicting different ecological communities within the mitigation site. The sketch map will also show the location where information for each of the USACOE Data Forms was collected (i.e., data points).

- Surface and groundwater elevation data, including a map showing the location of the monitoring wells and gauges.
- Water quality data including results of water samples taken within the stream.
- Recommendations for remedial actions in the event that the mitigation measures are not meeting performance standards. Recommended remedial measures may include controlling invasive species, adjusting the elevation of the cross-vanes, implementing herbivory control measures, and/or a supplemental planting plan. If remedial actions are required, the measures will be described within a detailed adaptive management plan which will be included within the monitoring report. The remedial actions will be implemented upon USACOE approval.

Schedule of Implementation

Monitoring wells have been installed and groundwater levels will be collected weekly between April and June 2007. In addition, more detailed stream elevation data will be collected in the proposed locations of the cross-vanes. If necessary, the final design elevations will be adjusted based on the collected monitoring well data and more detailed stream elevation data. Any modified design elevations will be incorporated in the final construction drawings.

The Rensselaer Soil and Water Conservation District (RCSWCD) will manage the construction activities at the Capital District Farms Wetland Mitigation Site. Following the final acceptance of the Final Wetland Mitigation Plan by the USACOE, BEPCO will contract with the Rensselaer Soil and Water Conservation District (RCSWCD) to initiate the Contractor Solicitation and Selection process. As part of this process, the RCSWCD will develop a request for proposals (RFP), identify potential contractors, and submit to them the RFP based on the content of the Final Approved Wetland Mitigation Plan. The RCSWCD will make available to all prospective bidders Wetland Mitigation Project materials that are necessary to bid on the project including project plans and approved wetland permit and mitigation requirements.

The RCSWCD will arrange and conduct a pre-bid meeting at the site, and allow all prospective contractors the opportunity to view site conditions and ask questions. Following the pre-bid meeting, the RCSWCD will review bids, select the project contractor(s), and enter into agreements with the contractor(s) to initiate construction.

Following selection of the project contractor, the RCSWCD will initiate, implement, and monitor construction of the mitigation site. The primary responsibility of the RCSWCD is to insure that the mitigation site is constructed in a manner consistent with all permit requirements and the final approved Wetland Mitigation Plan.

It is anticipated that grading will begin in the late summer of 2007, during the drier months, and in conjunction with the Besicorp Project. In-stream grading, such as the installation of the cross-vanes, will be conducted within the June 15th through September 30th window unless an extension is granted by the NYSDEC. Seeding will be conducted this fall, immediately following the completion of grading activities. Woody plantings will be installed in the spring of 2008.

Summary

It is our understanding that the attached Final Wetland Mitigation Drawings and additional supplemental data included in this letter provide the necessary information for final approval of the drawings from the USACOE.

Additionally, for the proposed Class C(TS) stream enhancement work in connection with the Wetland Mitigation Plan, this submittal also provides the necessary information to confirm that this work is covered under the Water Quality Certificate (Permit ID 4-3814-00052/00004) issued by the NYSDEC and is sufficient for the issuance of a separate Article 15 Permit from the NYSDEC (refer to NYSDEC correspondence in Attachment F).

It is important to note that file review letters were submitted to the New York Natural Heritage Program, U.S. Fish and Wildlife Service (USFWS), and State Historic Preservation Office (SHPO) to request information on threatened and endangered species and archeological resources within the mitigation site (refer to Attachment F). Responses from the New York Natural Heritage Program and USFWS were received and are included in Attachment F. A response from SHPO was received and as per their recommendations, a Phase I Archeological Study is being conducted for the mitigation site (refer to Attachment F). The field study has been completed and it is anticipated that the report will be completed within a week. No archeological sites were identified during the field work. The final report will be submitted to SHPO with a copy sent to the USACOE and NYSDEC, upon completion.

BEPCO's closing counsel has identified the USACOE approval of the Wetland Mitigation Plan as a condition precedent to financial closing. BEPCO has succeeded in obtaining all remaining necessary permits for the start of construction and is completing financing matters. As a result of this, BEPCO anticipates financial closure in the second quarter of 2007. We are therefore asking the USACOE to approve the Final Wetland Mitigation Plan by May 15, 2007.

Please contact us at (518) 786-7400 or Steve Lattanzio with Besicorp, at (845) 336-7700 ext. 128 if you have any questions. Thank you for your assistance.

Sincerely,

C.T. MALE ASSOCIATES, P.C.

Karen M. Gaidasz
Environmental Scientist

c: Christine Delorier (USACOE – Troy Office)
Nancy Adams (NYSDEC – Region 4 Office)
Jerry Fraine (NYSDEC – Stamford Office)
Steve Lattanzio (Besicorp Empire Power Company, LLC)
John Vieira (Epsilon Associates, Inc.)
Eric Swanson (NRCS)
Tom Sanford (RCSWCD)
Kevin Bernstein (Bond, Schoeneck & King, PLLC)
Ed Garrigan, John Munsey (C.T. Male)

Attachments:
Attachment A - Final Wetland Mitigation Drawings
Attachment B - Compensatory Mitigation Plan Checklist
Attachment C – Engineering Calculations
Attachment D - Test Pit Logs / Geotechnical Laboratory Data
Attachment E - Seed Mixes
Attachment F - Correspondence

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Attachment B
Compensatory Mitigation Plan Checklist

Attachment 2

NEW YORK DISTRICT
U.S. ARMY CORPS OF ENGINEERS
COMPENSATORY MITIGATION PLAN CHECKLIST

Applicant:	Besicorp – Empire Development Company, LLC
Agent:	Contact: Steve Lattanzio
Project Name:	Capital District Farms Wetland Mitigation Site
Site Address:	State Route 351
Town/County/State:	Town of Brunswick, Rensselaer County, New York
Application Number:	2003-00388

Note: All information included in this checklist is provided as guidance for use during the preparation of mitigation plans. This guidance has been prepared to incorporate as many aspects of a mitigation plan as possible. The level of information required for each mitigation area is project specific, as are the scale and type of mitigation. This document is intended to provide guidance and may not require the use of all information included herein. Where applicable, information should be provided to the extent possible. It is recommended that you consult with the U.S. Army Corps of Engineers New York District prior to finalizing mitigation plans. See the attached guidance document for additional information and more detail on information provided in this checklist.

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I. Monitoring Plan and Report
J. Maintenance and Adaptive Management Plan

A. Mitigation Justification

1. Demonstrate that impacts are avoided and minimized to maximum extent practicable (404 (b)(1) guidelines met).
2. Discuss mitigation sequencing

B. Mitigation Goals and Objectives

1. Impact Site
   a. ☒ Describe and quantify the aquatic resource size, type, functions and values that will be impacted at the proposed impact site.

   Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

   b. ☒ Describe aquatic resource concerns in the watershed (e.g. flooding, water quality, habitat) and how the impact site contributes to overall watershed/regional functions.

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

c. ☐ Identify watershed or other regional plans that describe aquatic resource objectives.

N.A.

2. Mitigation Site

a. ☒ Describe and quantify the aquatic resource size, type, functions and values for which the mitigation project is intended to provide.

Refer to Attached Letter.

b. ☒ Describe the contribution to overall watershed/regional functions that the mitigation site(s) is intended to provide.

Refer to Attached Letter.

c. Description of mitigation type(s) and explain why type(s) selected is the environmentally preferred alternative.

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

d. ☒ Broad statement of what is intended to be accomplished through the mitigation project.

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline and Attached Letter.

C. Performance Standards

1. ☒ Identify clear, precise, quantifiable parameters that can be used to evaluate the status of desired functions.

Refer to Attached Letter.

2. ☒ Describe how performance standards will be used to verify that objectives identified in the Mitigation Goals and Objectives Section will be attained.

Refer to Attached Letter.

D. Mitigation Site Selection

1. ☒ Description of site selection practicability in terms of cost, existing technology, and logistics.

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

2. ☐ Existing mitigation site deed restrictions, easements and rights-of-way and a description of how the existence of any such restriction will be addressed, particularly in the context of incompatible uses.

N.A.

3. ☒ Explanation of how the design is sustainable and self-maintaining.

Refer to Attached Letter.

4. ☒ Design constraints.

Refer to Attached Letter.

5. ☒ USFWS and/or NOAA Fisheries listed species clearance letter or Biological Opinion (if there is a concern about federally listed endangered species).

Threatened and Endangered Species correspondence will be forwarded upon receipt.

6. ☒ SHPO cultural resource clearance letter (if there are known historic or cultural resources in the area).

SHPO correspondence will be forwarded upon receipt.

E. Baseline Information (required for both the impact site and mitigation site(s))

1. Location, Maps, Photos

a. ☒ Coordinates (latitude and longitude or UTM)

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

b. ☒ Written location description (physical site address, property location)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

c. ☒ Section, block, lot, township/city/village, county
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

d. ☒ Hydrologic Unit Code (11 digit HUC)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

e. ☒ Detailed vicinity map
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

f. ☒ Map identifying project location and resources within the watershed
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

g. ☒ Other maps including National Wetlands Inventory map (NWI), Natural Resources Conservation Service soils map (NRCS), New York City Department of Environmental Protection watershed, Adirondack Park Agency, etc.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

h. ☒ Aerial/Satellite Photos
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

i. ☒ Site Photos and photo location map
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

2. Site Information:

a. ☒ Describe type and purpose of work at each impact site.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

b. ☒ Describe and quantify the aquatic resource size, type, functions and values that will be impacted at the proposed impact site.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

c. ☒ Describe the proposed temporary and permanent impacts to the aquatic environment.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

d. ☒ Surrounding land use
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

e. ☒ Impairment status and impairment type of aquatic resources
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

f. ☒ Percent agriculture, forested, wetland, developed, etc.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

g. ☒ Size/Width of natural buffers (describe, show on map)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

h. ☒ Current Owner(s)

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

i. ☒ Adjacent property owners
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

j. ☒ Existing wildlife usage (including but not limited to State and Federally listed species)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

k. ☒ Known or potential cultural resources
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

l. ☒ Historic and current land use
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

m. ☐ Known listed hazardous materials sites
N.A.

n. ☐ Contaminants in water and sediments (e.g. heavy metals, PCB's)
N.A.

3. Watershed:

a. ☒ Description of landscape connectivity
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

b. ☐ Describe aquatic resource concerns in the watershed
N.A.

c. ☒ Proximity and connectivity of existing aquatic resources and natural upland areas (show on map)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

d. ☐ Amount of aquatic resource area that the impact site represents for the watershed and/or region (i.e., by individual type and overall resources)
N.A.

e. ☒ Documentation of local coordination
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

4. Wetland Classification and Functional Assessment

a. ☒ Classification of the wetland
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

b. ☒ Assessment of the functions and values of the wetland
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

5. Existing Hydrology

a. ☒ Delineation of all waters on site, with contours
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

b. ☒ Water budget and hydroperiod
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

c. ☐ In tidal waters, spring high tide, mean high water, and mean low water elevations
N.A.

d. ☒ Watershed area

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

e. ☒ Plan showing monitoring wells or other gauges used to determine the water level fluctuation of the wetland for and extended length of time
Refer to Attached Letter.

f. ☒ Monitoring well or gauge area
Refer to Attached Letter.

g. ☐ Cross-section of existing seasonal water levels
N.A.

h. ☐ Results of models used
N.A.

i. ☒ Nutrient inputs and outputs, including N, P. pH, TSS, DO, etc.
Refer to Attached Letter.

6. Existing Dominant Vegetation

a. ☒ Map showing size and location of different plant communities
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

b. ☒ Community structure (e.g. vegetative layers, canopy stratification)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

c. ☒ Wetland indicator status (National List of Plant Species That Occur in Wetlands: Northeast (Region 1), published by the U.S. Fish and Wildlife Service). USFWS Biological Report 88(26.1) May 1988.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

d. ☒ General age and health
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

e. ☒ Native/non-native/invasive status
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

7. Existing Soils

a. ☒ Soil profile and survey classification and description, including all series onsite
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

b. ☐ Identification of any contaminants
N.A.

F. Mitigation Work Plan

1. Construction

a. ☒ Maps marking boundaries of proposed mitigation types; include DGPS coordinates.
Refer to Grading and Planting Plans.

b. ☒ Timing of mitigation: before, concurrent or after authorized impacts; if mitigation is not in advance or concurrent with impacts, explain why it is not practicable and describe other measures to compensate for the consequences of temporal losses.
Refer to Attached Letter.

c. ☒ Indicate existing and proposed elevations and slopes.
Refer to Grading Plan.

d. ☒ Describe plans for establishing appropriate micro-topography
Refer to Grading and Details and Specifications Plans.

e. ☒ Plan showing proposed contours at 1 foot intervals in wetlands, scale between 1" = 20' to 1" = 50', 8 ½ by 11 sheets with overview plan and match lines, and 1 Set of full size plans
Refer to Grading Plan.

f. ☐ Representative cross section(s)
Refer to Grading Plan.

g. ☒ Description of construction methods (e.g., equipment to be used)
Refer to Grading Plan.

h. ☒ Construction schedule
Refer to Attached Letter.

I. ☒ Expected start and end dates of each construction phase
Refer to Attached Letter.

II. ☐ Expected date for as-built plan
N.A.

i. ☒ Water handling plan
Refer to Grading and Details and Specifcation Plans.

j. ☒ Erosion and sedimentation plan
Refer to Grading and Details and Specification Plans.

k. ☒ Planting/seeding schedule
Refer to Planting Plan.

l. ☒ Environmental monitor/manager
Refer to Grading and Planting Plan.

2. Planned Hydrology

a. ☒ Proposed water budget and hydroperiod
Refer to Attached Letter.

b. ☒ Any changes to watershed area
Refer to Attached Letter.

c. ☒ Plan showing locations of monitoring wells or other gauges that will be used to determine the water level fluctuation during the monitoring period
Refer to Attached Letter.

d. ☐ Cross-section of predicted seasonal water levels
N.A.

e. ☐ Changes proposed that will affect model results
N.A.

f. ☒ Proposed changes to existing nutrient inputs and outputs, including N, P, pH, TSS, DO, etc.
Refer to Attached Letter.

g. ☒ Explanation of factors and decisions determining proposed mitigation site grading and planting plan
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

h. ☒ Explanation of likelihood of mitigation success, based on proposed hydrology
Refer to Attached Letter.

3. Planned Vegetation

a. ☒ List of native hydrophytes (i.e., wetland plants) using scientific names and regional indicator status (include seed mix composition)
Refer to Planting Plan.

b. ☒ Source of native plant species, stock type, plant age(s)/size(s)
Refer to Planting Plan.

c. ☒ Plant zonation/location map
Refer to Planting Plan.

d. ☒ Plant spatial structure (e.g., quantities, densities)
Refer to Planting Plan.

e. ☒ Community structure (e.g., vegetative layers, canopy stratification)

Refer to Planting Plan.

f. ☒ Expected natural regeneration from existing seed bank, plantings, and natural recruitment
Refer to Planting Plan.

g. ☒ Use of mulch (not always necessary)
Refer to Planting Plan.

h. ☒ Wildlife plan
Refer to Attached Letter.

i. ☒ Herbivory control plan
Refer to Attached Letter.

j. ☒ Consideration of other abiotic factors
Refer to Attached Letter.

6. Planned Soils

a. ☒ Source of the soils
Refer to Grading Plan.

b. ☒ Percent organic content
Refer to Grading Plan.

c. ☒ Include a soil specification
Refer to Grading Plan.

d. ☒ Erosion and soil compaction control measures
Refer to Grading Plan.

7. Planned habitat features – include a description of planned coarse woody debris, rock mounds, microtopography, wildlife/fisheries structures, etc.
Refer to Grading and Planting Plans.

8. Planned buffer (identify on map)

a. ☒ Evaluation of the buffer's expected contribution to aquatic resource functions
Refer to Grading and Planting Plans.

b. ☒ Location, dimensions
Refer to Grading and Planting Plans.

c. ☒ Native plant composition, spatial and vertical structure
Refer to Grading and Planting Plans.

9. Other planned features – interpretive signs, trails, fence(s), etc.
Refer to Details and Specifications Plan.

G. Stream Mitigation Checklist

1. Site Selection – explanation of the site selection criteria
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

2. Baseline Information:

a. ☒ Coordinates (latitude/longitude)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

b. ☒ Written description (physical site address, property location)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

c. ☒ Section, block, lot, township, city, village, county
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

d. ☒ Hydrologic Unit Code (11 digit HUC)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline

e. ☒ Surrounding land use (% agriculture, forest, development, etc.)

Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

f. ☒ Detailed site map, with contours and watercourse/wetland delineation
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

g. ☒ Area of proposed impacts, indicated on the site plan
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

h. ☒ Delineation and size of the watershed including sub-catchments
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

i. ☒ NWI, NRCS amps, state wetland maps, aerial and satellite photos
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

j. ☒ Site photos
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

3. Functional Assessment

a. ☒ Watercourse functional, ecological, hydrologic, and hydraulic assessments completed (assessments should be comprehensive and should be used to reach the mitigation goals and specific restoration/enhancement aspects)
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline and Attached Letter.

b. ☒ Type of assessment methods
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline and Attached Letter.

c. ☒ Physical description of the mitigation site: Size, length, etc.
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline.

4. Existing Hydrology

a. ☒ Water budget – inflow, outflow, water sources, hydroperiod
Refer to Attached Letter.

b. ☒ Bankfull elevation and flow rate
Refer to Attached Letter.

c. ☐ Nutrient loads (TSS, DO, pH, etc.)
Refer to Attached Letter.

5. Mitigation Plan and Design

a. ☒ Identification of mitigation goals including, but not limited to: stream and streambank stabilization, the improvement of instream aquatic habitat with boulder placement etc., the restoration and revegetation of unstable buffers, the removal of fish migration impediments such as dams and failing culverts, the removal of stormwater outfalls, the improvement of stormwater water quality entering the watercourse
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline and Attached Letter.

b. ☒ Description of proposed methods to be employed to meet above identified mitigation goals, utilizing bioengineering construction techniques
Refer to Permit Application Materials previously submitted for the BEDCO Cogeneration Power Plant, 345 kV Transmission Line, and Natural Gas Pipeline and Attached Letter.

c. ☒ Description of erosion and sedimentation control during construction
Refer to Grading and Details and Specification Plans.

d. ☒ Description of site restoration after construction completion
Refer to Grading and Details and Specification Plans.

6. Riparian Zones and Buffers
   a. ☒ Size, width, and ecological description of buffer
      Refer to Grading and Planting Plans.
   b. ☒ Restoration and protection measures to be employed including native plantings and deed restrictions
      Refer to Grading and Planting Plans.

H. Site Protection and Financial Assurances

1. Instrument of legal protection
   a. ☒ Conservation easement
      Refer to Attachment E of Attached Letter.
   b. ☐ Deed restriction
      N.A.
   c. ☐ Transfer of title
      N.A.
2. Responsible parties and their role
   a. ☒ Site owner (Grantor)
      Refer to Attachment E of Attached Letter.
   b. ☒ Easement owner (Holder/Grantee)
      Refer to Attachment E of Attached Letter.
   c. ☒ Maintenance implementation
      Refer to Attachment E of Attached Letter.
3. Financial Assurances (if applicable)
   For each of the following, identify party(ies) responsible to establish and manage the financial assurance, the specific type of financial instrument, the method used to estimate assurance amount, the date of establishment, and the release and forfeiture conditions:
   a. ☒ Construction Phase
      Refer to Attached Letter.
   b. ☒ Maintenance
      Refer to Attached Letter.
   c. ☒ Monitoring
      Refer to Attached Letter.
   d. ☒ Remedial measures
      Refer to Attached Letter.
   e. ☒ Project success
      Refer to Attached Letter.
4. Types and schedules of financial assurances (if applicable)
   a. ☐ Performance bonds
      N.A.
   b. ☐ Irrevocable trusts
      N.A.
   c. ☐ Escrow accounts
      N.A.
   d. ☐ Casualty insurance
      N.A.
   e. ☐ Letters of credit
      N.A.

I. Monitoring Plan

1. Responsible parties and their role

a. ☒ Site Owner
Refer to Attached Letter.
b. ☒ Easement Owner
Refer to Attached Letter.
c. ☒ Monitor
Refer to Attached Letter.

2. Monitoring plan info
a. ☒ Identification of monitoring measures that will ensure the achievement of the performance standards
Refer to Attached Letter.
b. ☒ Quantitative data to be collected and reported (i.e. as built drawings)
Refer to Attached Letter.
c. ☒ Monitoring schedule, frequency, duration, monitoring stations (including transect locations on map)
Refer to Attached Letter.

3. Functional assessment
Refer to Attached Letter.

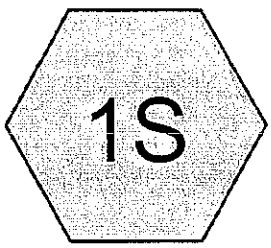
4. Monitoring report submission plans (dates, etc.)
Refer to Attached Letter.

J. Maintenance and Adaptive Management Plan

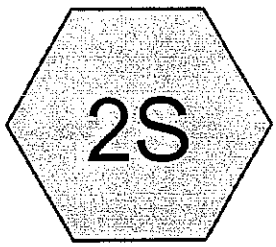
1. Maintenance Plan and Schedule
a. ☒ Environmental monitor/manager
Refer to Attached Letter.
b. ☒ Invasive species control plan (plant and animal)
Refer to Attached Letter.
c. ☒ Measures to control predation/grazing of mitigation plantings
Refer to Attached Letter.
d. ☒ Replacement planting plan
Refer to Attached Letter.
e. ☒ Structure maintenance/repair
Refer to Attached Letter.
f. ☐ Chemical controls or amendments
N.A.

2. Adaptive Management Plan
a. ☒ Identification/solutions to potential challenges that pose a risk to project success
Refer to Attached Letter.
b. ☒ Discussion of potential remedial measures in the event mitigation does not meet performance standards in specified time frame.
Refer to Attached Letter.

Attachment C
Engineering Calculations



Wetland Mitigation Watershed
(Existing Stream)



Stream Watershed
(New Stream)

Subcat Reach Pond Link

Drainage Diagram for Watershed
Prepared by C.T. Male Associates, P.C. 3/8/2007
HydroCAD® 8.00 s/n 000410 © 2006 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcats)
130.500	77	Brush, Poor, HSG C (1S,2S)
130.500		

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Wetland Mitigation Watershed Runoff Area=81.500 ac Runoff Depth>0.60"
Flow Length=3,000' Tc=39.0 min CN=77 Runoff=35.60 cfs 4.060 af

Subcatchment 2S: Stream Watershed Runoff Area=49.000 ac Runoff Depth>0.60"
Flow Length=2,250' Tc=29.9 min CN=77 Runoff=25.90 cfs 2.453 af

Total Runoff Area = 130.500 ac Runoff Volume = 6.512 af Average Runoff Depth = 0.60"
100.00% Pervious Area = 130.500 ac 0.00% Impervious Area = 0.000 ac

Subcatchment 1S: Wetland Mitigation Watershed

Runoff = 35.60 cfs @ 12.39 hrs, Volume= 4.060 af, Depth> 0.60"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall Rainfall=2.40"

Area (ac)	CN	Description
81.500	77	Brush, Poor, HSG C
81.500		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	150	0.0670	0.19		**Sheet Flow, Sheet Flow** n= 0.240 P2= 2.75"
11.0	1,475	0.1020	2.24		**Shallow Concentrated Flow, Shallow Concentrated** Short Grass Pasture Kv= 7.0 fps
14.9	1,375	0.0580	1.54	12.28	**Trap/Vee/Rect Channel Flow, Channel Flow** Bot.W=2.00' D=2.00' Z= 1.0 '/' Top.W=6.00' n= 0.240
39.0	3,000	Total			

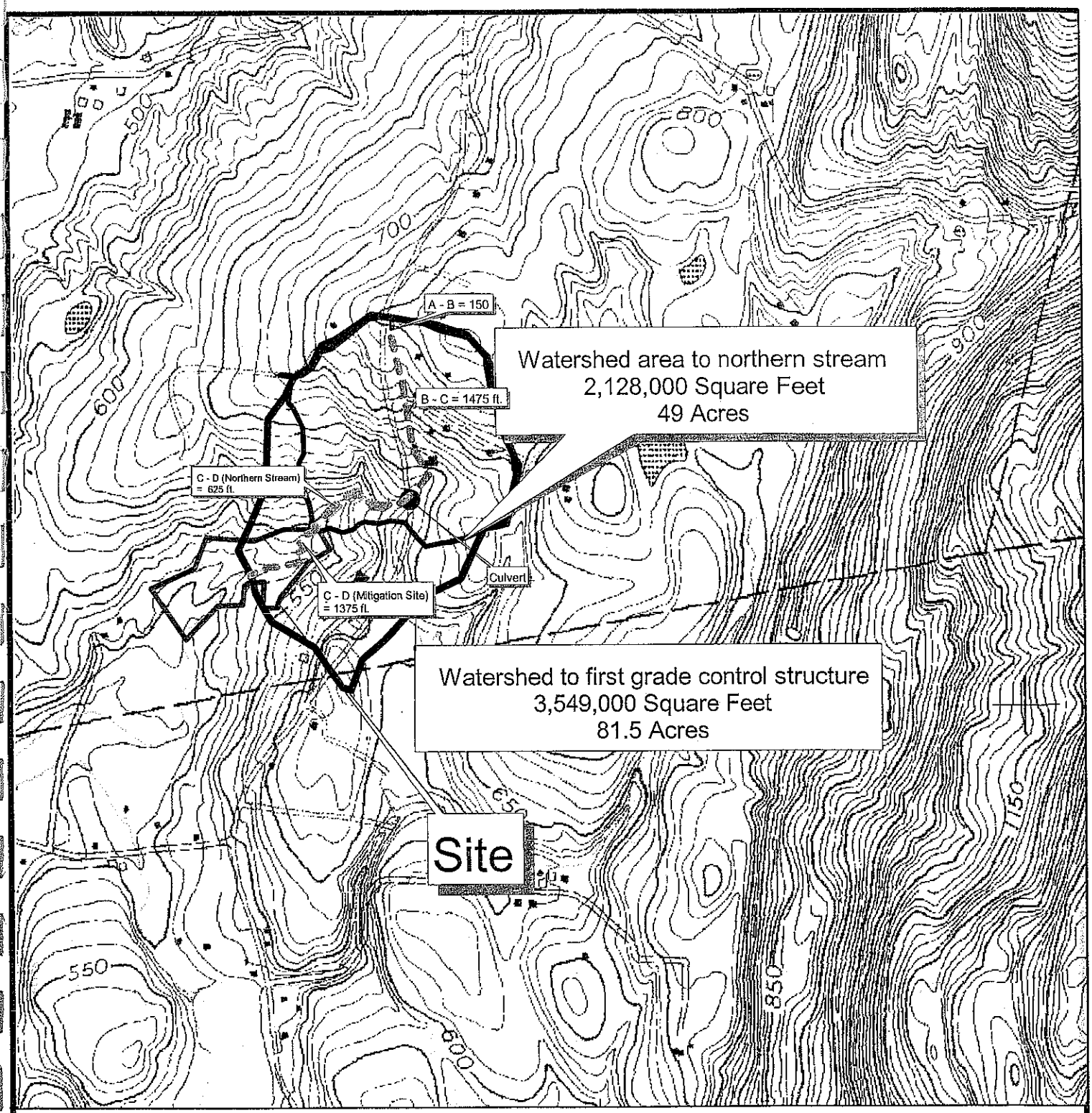
Subcatchment 2S: Stream Watershed

Runoff = 25.90 cfs @ 12.27 hrs, Volume= 2.453 af, Depth> 0.60"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall Rainfall=2.40"

Area (ac)	CN	Description
49.000	77	Brush, Poor, HSG C
49.000		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	150	0.0670	0.19		**Sheet Flow, Sheet Flow** n= 0.240 P2= 2.75"
11.0	1,475	0.1020	2.24		**Shallow Concentrated Flow, Shallow Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
5.8	625	0.0800	1.80	14.43	**Trap/Vee/Rect Channel Flow, Channel Flow** Bot.W=2.00' D=2.00' Z= 1.0 '/' Top.W=6.00' n= 0.240
29.9	2,250	Total			



MAP REFERENCE
USGS Topographic Map
Averil Park, NY Quadrangle, Dated 2000
7.5 Minute Series, NAD 83
Wetlands downloaded from NWI on 2/12/2007

600 0 600 1200 1800 Feet

N W E S

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C.T.MALE ASSOCIATES, P.C.

50 CENTURY HILL DRIVE, PO BOX 727, LATHAM, NY 12110
PHONE (518) 786-7400 FAX (518) 786-7299

WATERSHED ANALYSIS

Capital District Farms Mitigation Site

TOWN OF BRUNSWICK	RENSSELAER COUNTY, NY
SCALE: 1"= 1,000'	
DRAFTER: JML	
PROJECT NO: 00.6678	

Worksheet
Worksheet for Trapezoidal Channel

Project Description	
Worksheet	New Stream Ch
Flow Element	Trapezoidal Cha
Method	Manning's Form
Solve For	Channel Depth

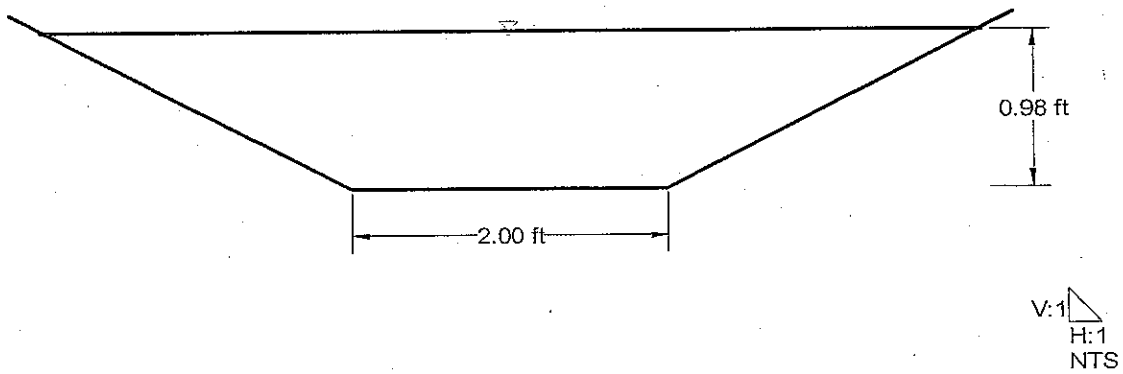
Input Data		
Mannings Coeffic	0.035	
Channel Slope	047000	ft/ft
Left Side Slope	2.00	H : V
Right Side Slope	2.00	H : V
Bottom Width	2.00	ft
Discharge	25.90	cfs

Results		
Depth	0.98	ft
Flow Area	3.9	ft²
Wetted Perim	6.40	ft
Top Width	5.94	ft
Critical Depth	1.19	ft
Critical Slope	0.021660	ft/ft
Velocity	6.63	ft/s
Velocity Head	0.68	ft
Specific Ener	1.67	ft
Froude Numb	1.44	
Flow Type	Supercritical	

Cross Section
Cross Section for Trapezoidal Channel

Project Description	
Worksheet	New Stream Cha
Flow Element	Trapezoidal Cha
Method	Manning's Formu
Solve For	Channel Depth

Section Data		
Mannings Coeffic	0.035	
Channel Slope	047000	ft/ft
Depth	0.98	ft
Left Side Slope	2.00	H : V
Right Side Slope	2.00	H : V
Bottom Width	2.00	ft
Discharge	25.90	cfs



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C.T. Male Associates, P.C.
37 Brookside Road Waterbury, CT 06708 USA +1-203-755-1666

Worksheet
Worksheet for Rectangular Channel

Project Description	
Worksheet	Rectangular Chann
Flow Element	Rectangular Chann
Method	Manning's Formula
Solve For	Bottom Width

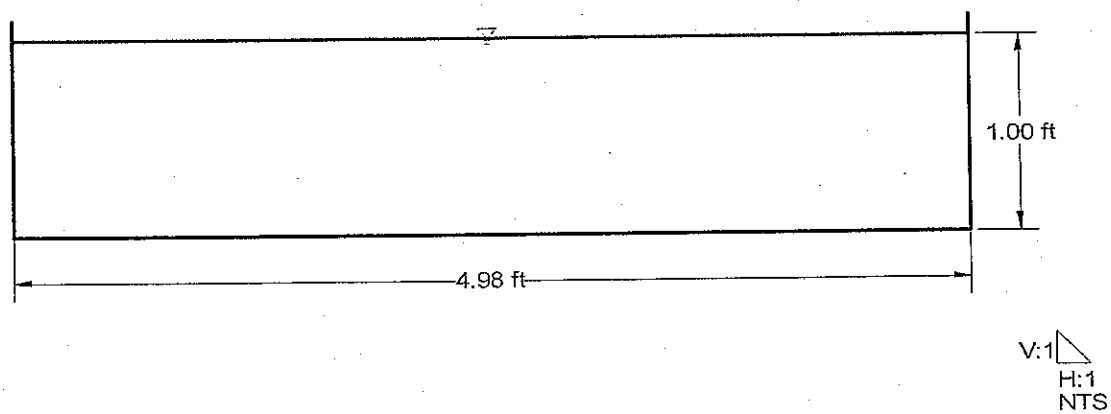
Input Data		
Mannings Coeffic	0.035	
Channel Slope	044400	ft/ft
Depth	1.00	ft
Discharge	35.60	cfs

Results		
Bottom Width	4.98	ft
Flow Area	5.0	ft²
Wetted Perim	6.98	ft
Top Width	4.98	ft
Critical Depth	1.17	ft
Critical Slope	0.028295	ft/ft
Velocity	7.14	ft/s
Velocity Head	0.79	ft
Specific Energ	1.79	ft
Froude Numb	1.26	
Flow Type	Supercritical	

Cross Section
Cross Section for Rectangular Channel

Project Description	
Worksheet	Rectangular Chann
Flow Element	Rectangular Chann
Method	Manning's Formula
Solve For	Bottom Width

Section Data		
Mannings Coeffic	0.035	
Channel Slope	044400	ft/ft
Depth	1.00	ft
Bottom Width	4.98	ft
Discharge	35.60	cfs



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Attachment D
Test Pit Logs / Geotechnical Laboratory Data

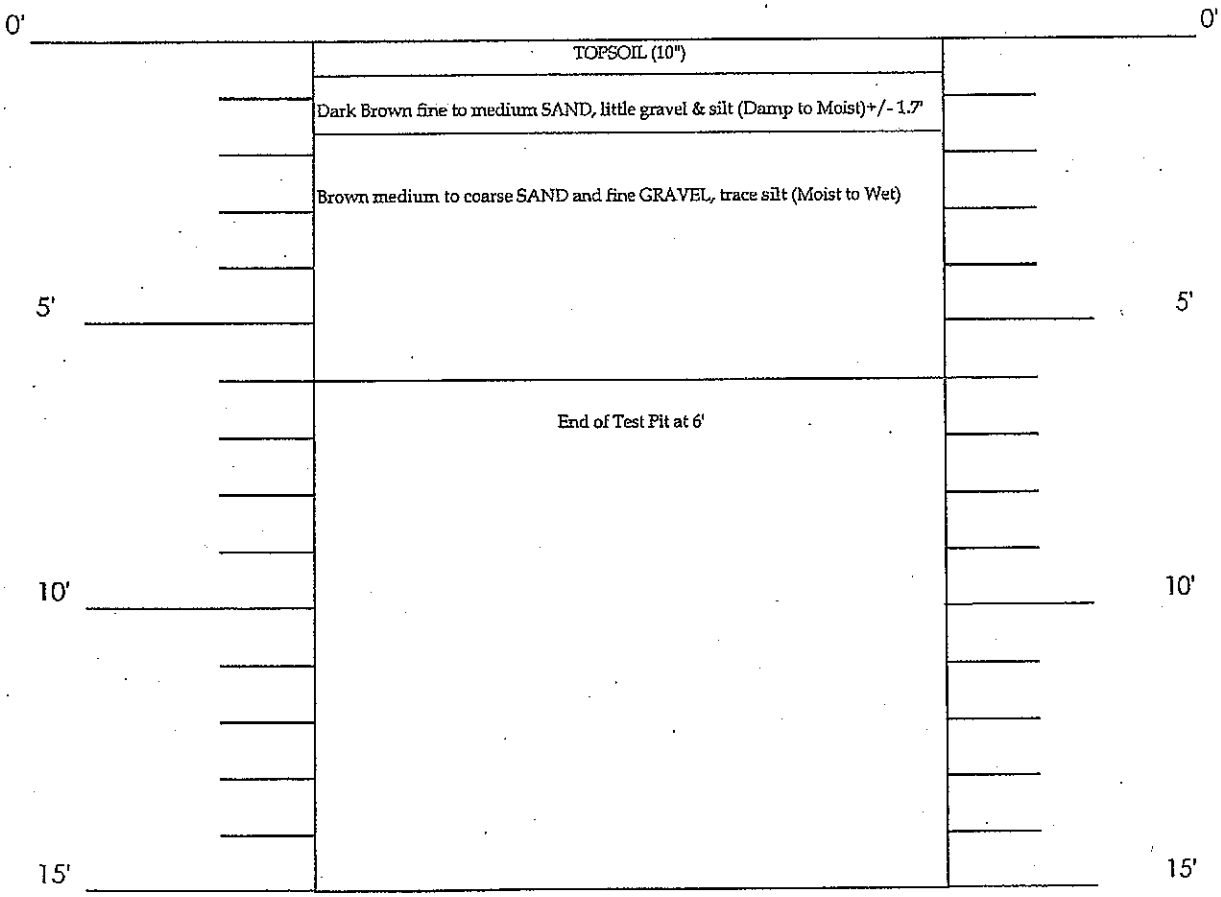
TEST PIT LOG

C.T. MALE ASSOCIATES, P.C.
50 Century Hill Drive, P.O. Box 727
Latham, NY 12110-0727
(518) 786-7400 • FAX (518) 786-7299
Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME: Besicorp
PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 1



TOTAL DEPTH: 6'
WATER AT: 3'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 4' down

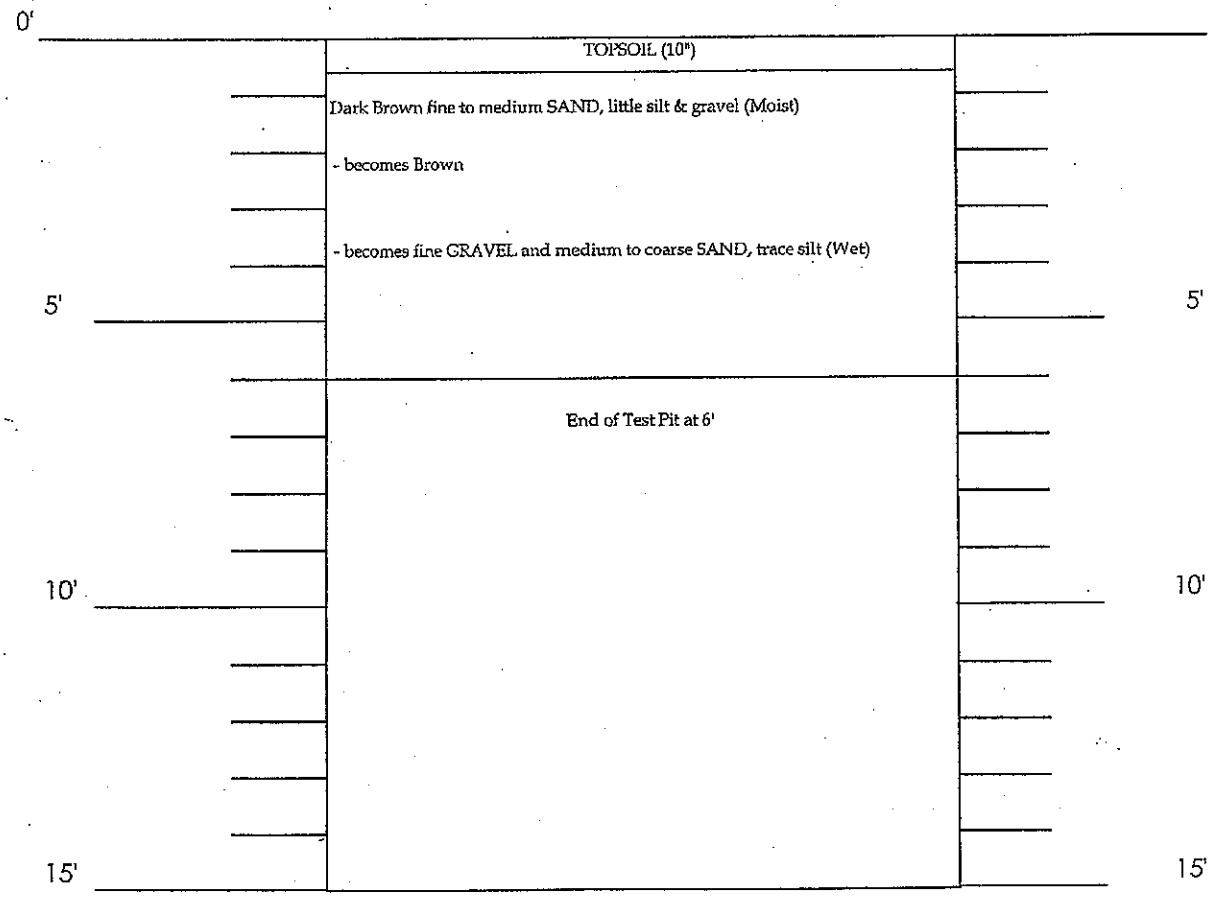
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EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 2



TOTAL DEPTH: 6'
WATER AT: 3'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 3' down

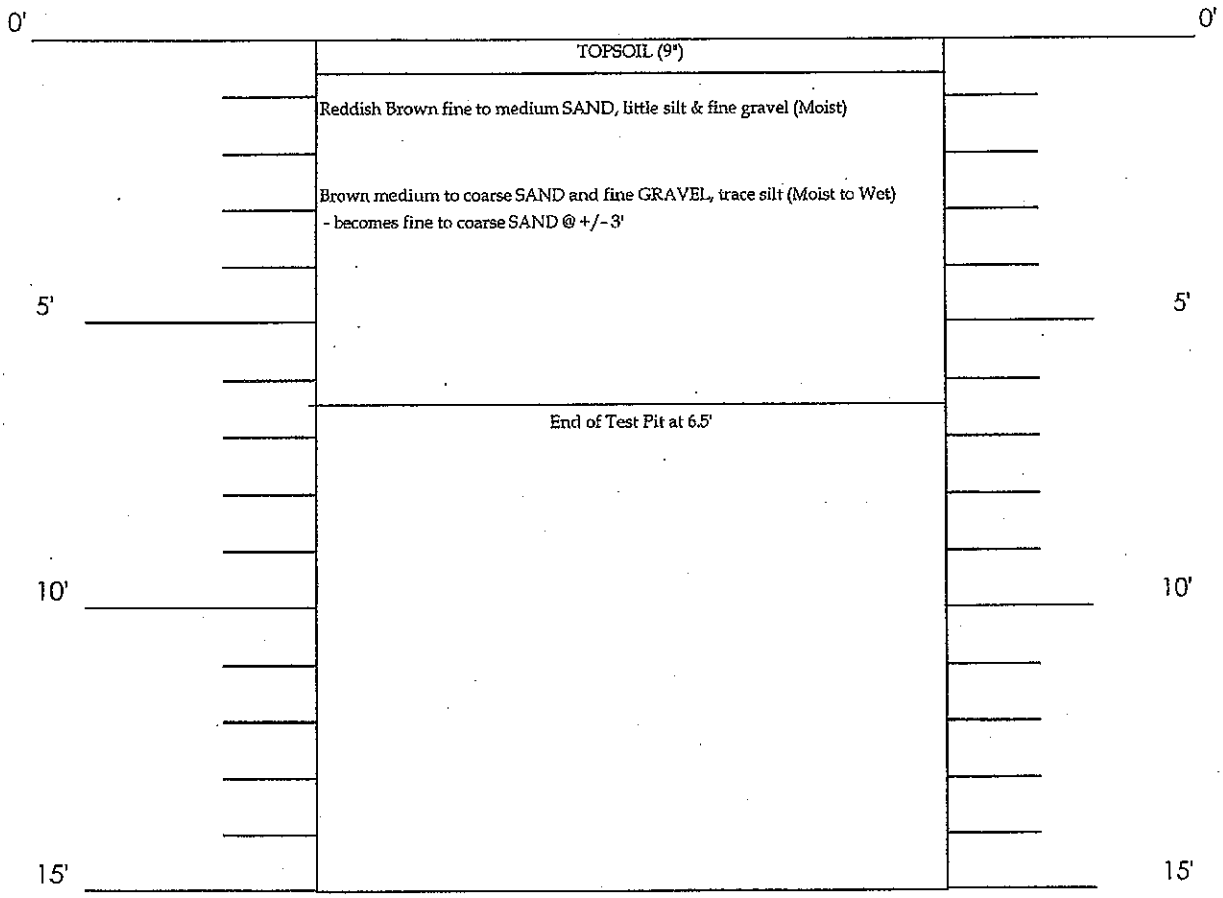
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PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 3



TOTAL DEPTH: 6.5'
WATER AT: 4'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 2' down

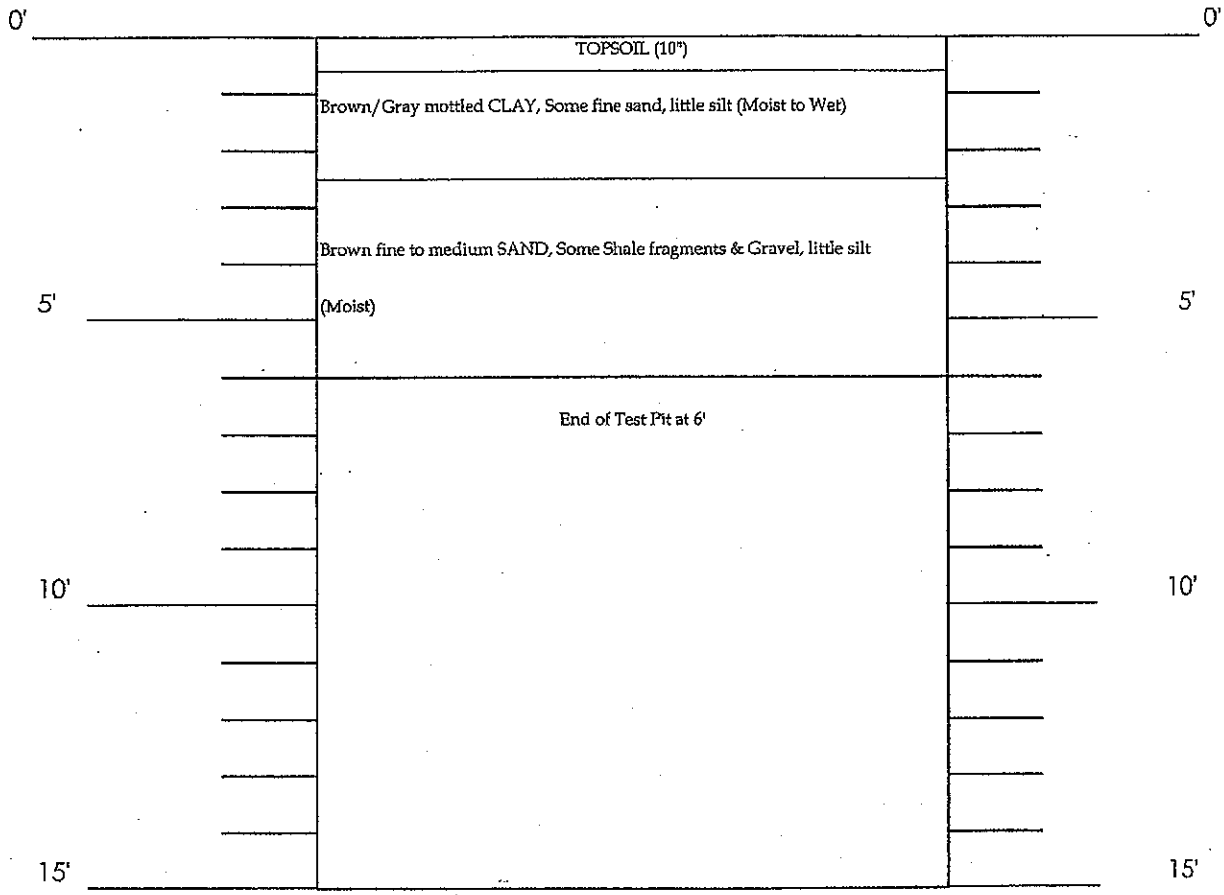
TEST PIT LOG

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PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 4



TOTAL DEPTH: 6'
WATER AT: Seeping in at 2.5'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 2' down

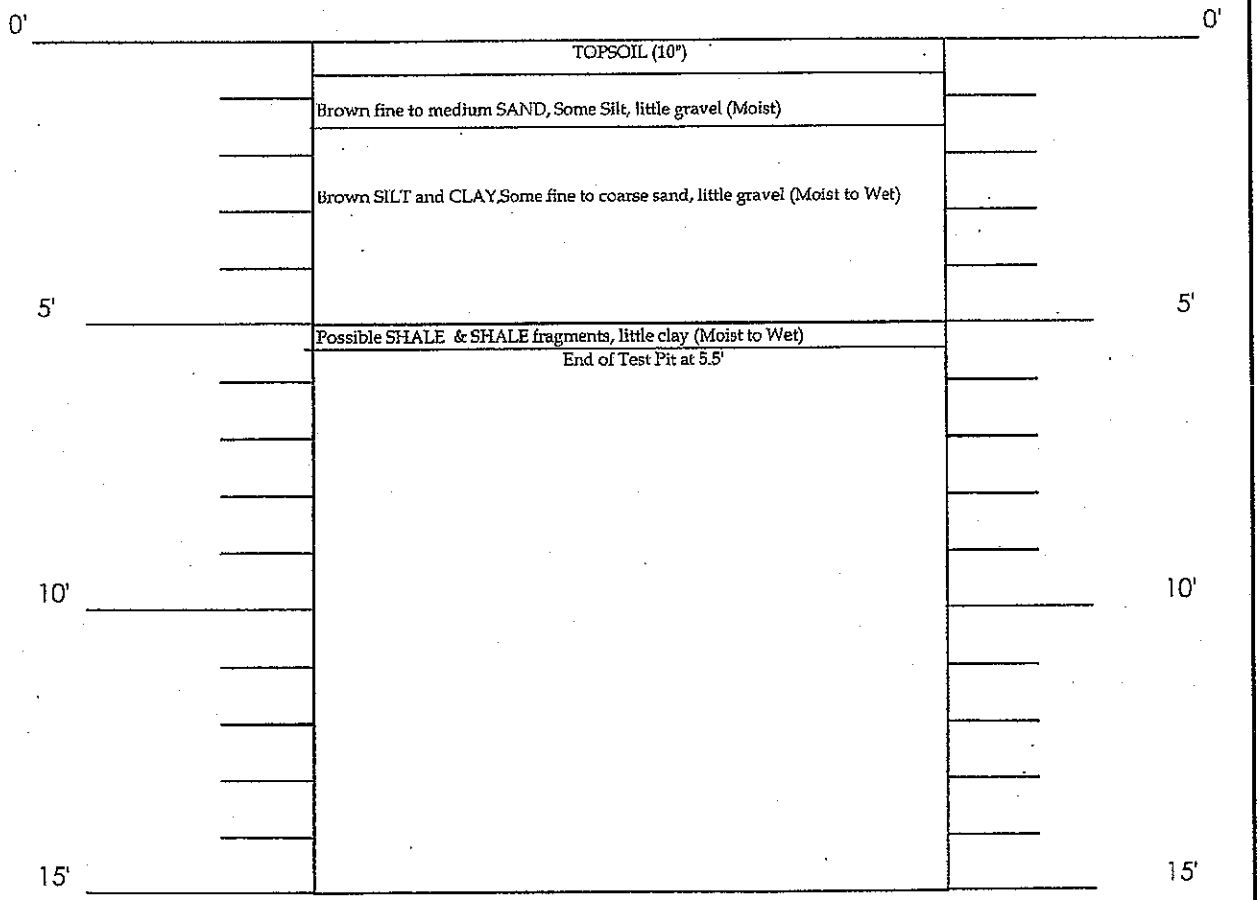
TEST PIT LOG

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PROJECT NAME: Besicorp
PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 5



TOTAL DEPTH: 5.5'
WATER AT: Seeping in at 3'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 4' down

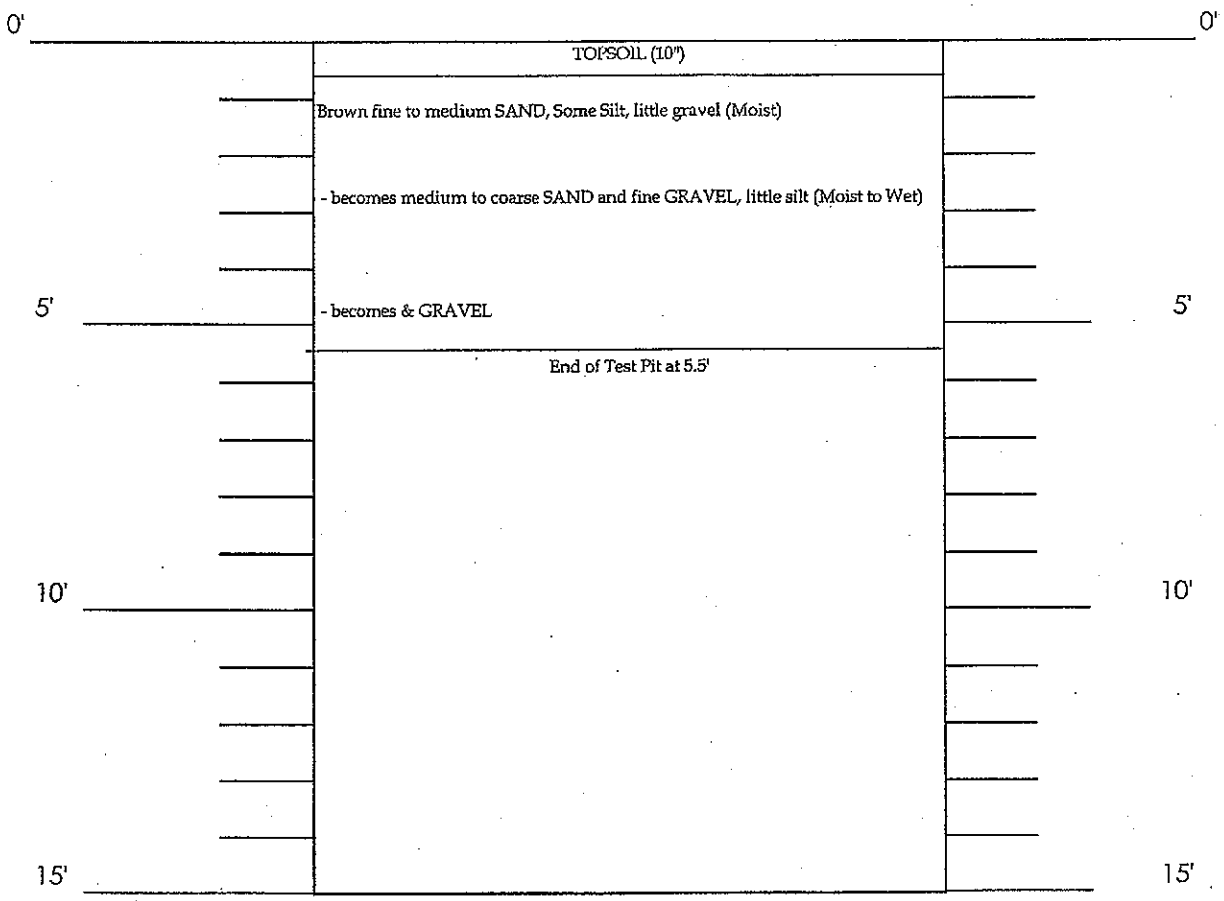
TEST PIT LOG

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PROJECT NAME: Besicorp
PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 6



TOTAL DEPTH: 5.5'
WATER AT: 3.5'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 3' down
Cobbles Encountered From 1.5' To 2.5'

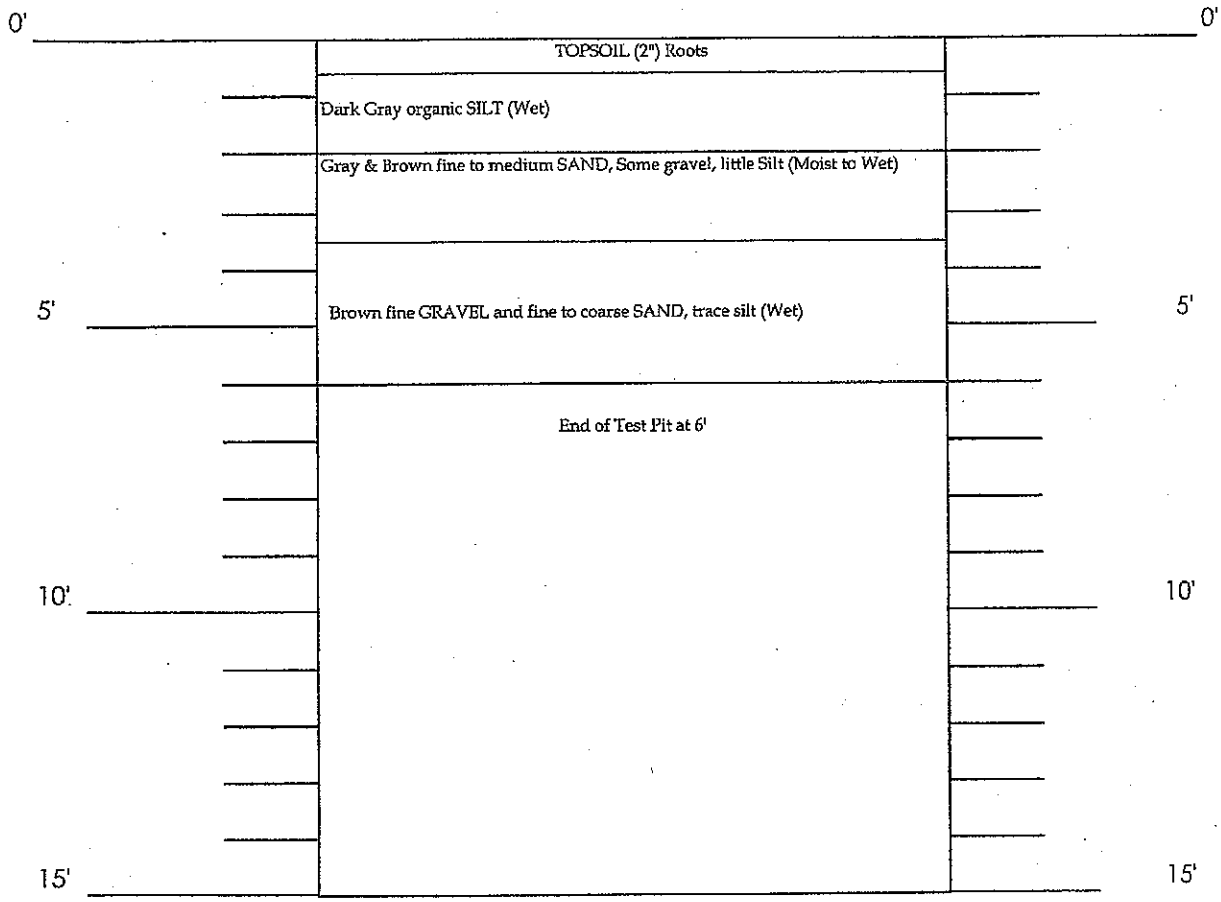
TEST PIT LOG

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PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 7



TOTAL DEPTH: 6'
WATER AT: Coming in from surface
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 4' down
Cobbles Encountered From 2' To 3.5'

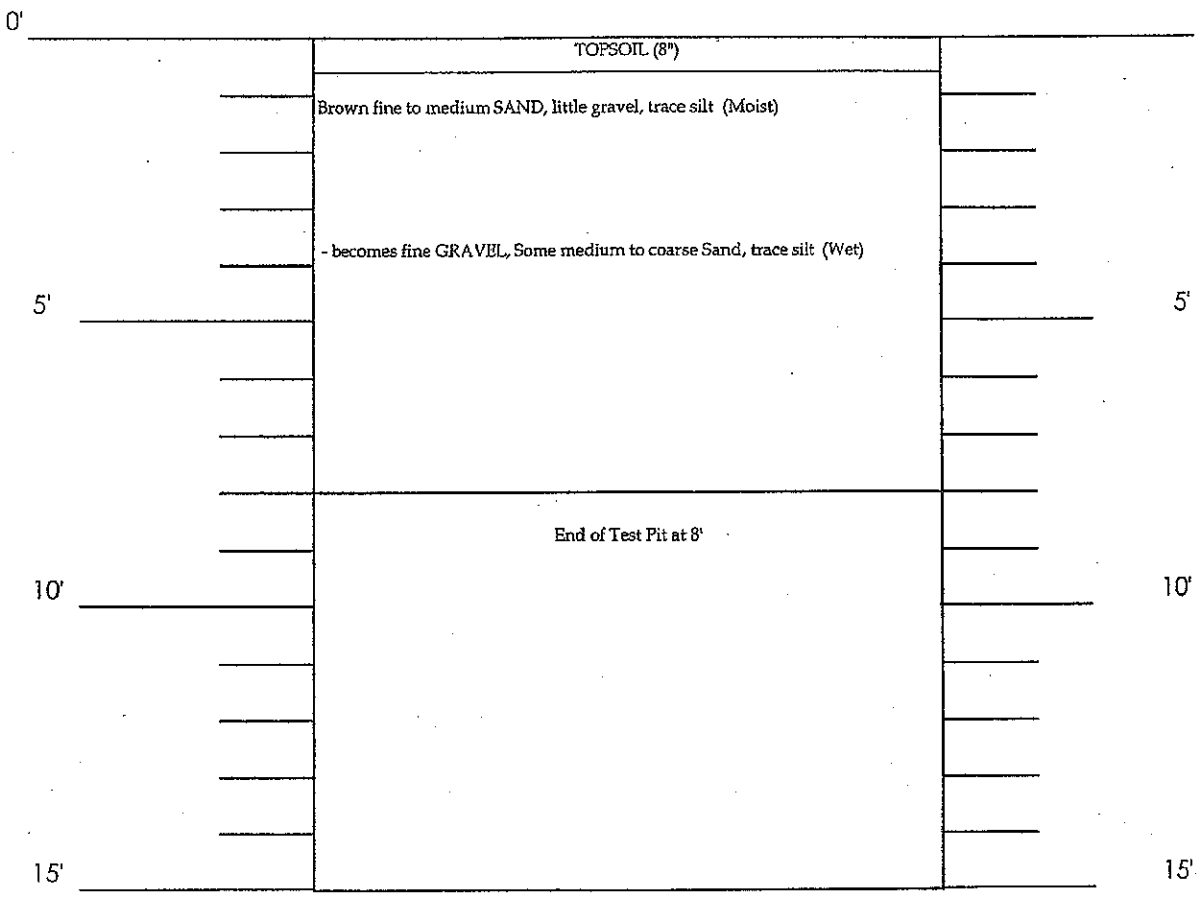
TEST PIT LOG

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PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 8



TOTAL DEPTH: 8'
WATER AT: 5'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 5' down

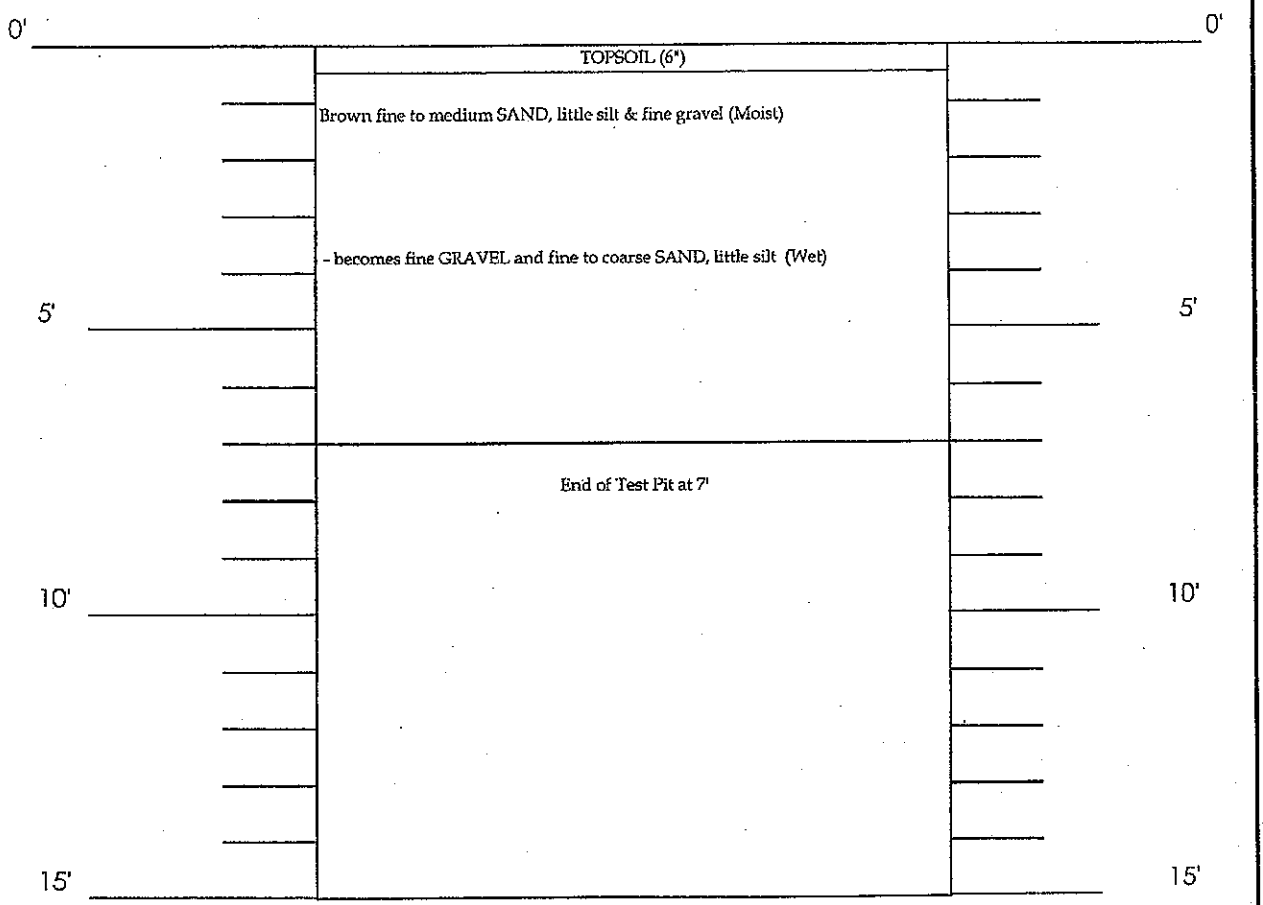
TEST PIT LOG

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Latham, NY 12110-0727
(518) 786-7400 • FAX (518) 786-7299
Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME: Besicorp
PROJECT NUMBER: 00.6678
LOGGED BY: T. Kenney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 9



TOTAL DEPTH: 7'
WATER AT: 6'
SIZE OF TEST PIT: 6' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 6' down
Cobbles Encountered From 3.5' To 7'

TEST PIT LOG

C.T. MALE ASSOCIATES, P.C.
50 Century Hill Drive, P.O. Box 727
Latham, NY 12110-0727
(518) 786-7400 • FAX (518) 786-7299
Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME: Besicorp
PROJECT NUMBER: 00.6678
LOGGED BY: T. Kerney/J. Lendrum

EXCAVATOR: Robert F. Hellwig & Son
EQUIPMENT: TLK 860 Rubber Tired Backhoe
DATE: 2/2/2007

TEST PIT NO. 10

0'

TOPSOIL (8")

Brown SILT, little fine sand, trace clay (Moist)

5'

Brown fine to coarse SAND and SILT, Some Gravel (Wet)

10'

End of Test Pit at 9'

15'

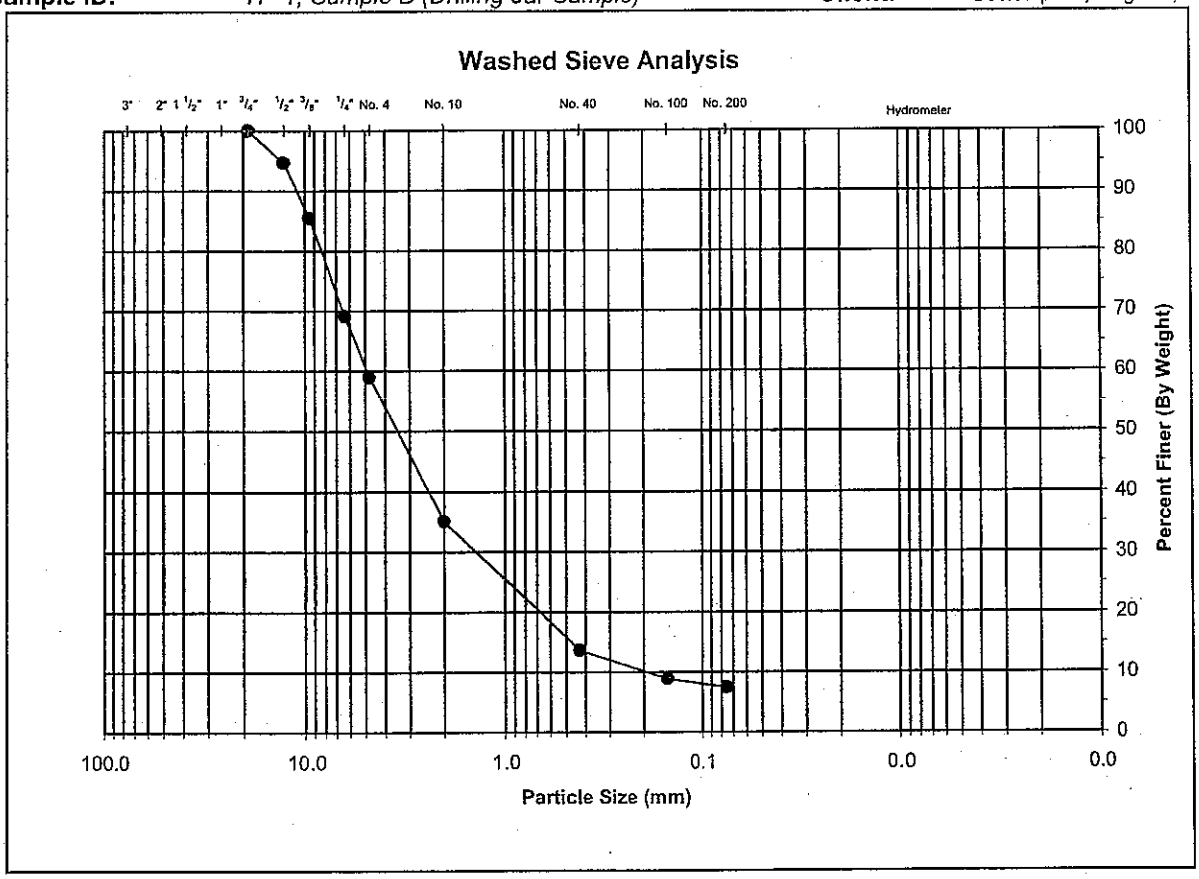
TOTAL DEPTH: 9'
WATER AT: Seeping in at 4'
SIZE OF TEST PIT: 10' x 3'

NOTES: "A" sample is topsoil.
"B" sample from 8' down

C.T. Male Associates, P.C.

Sieve Analysis
Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004A*
Sample ID:	*TP-1, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	100.0
1/2"	12.7	94.7
3/8"	9.51	85.4
1/4"	6.35	69.1
No. 4	4.76	58.9
No. 10	2.00	35.1
No. 40	0.425	13.6
No. 100	0.15	8.8
No. 200	0.075	7.4

Brown m-c SAND and fine GRAVEL, trace silt

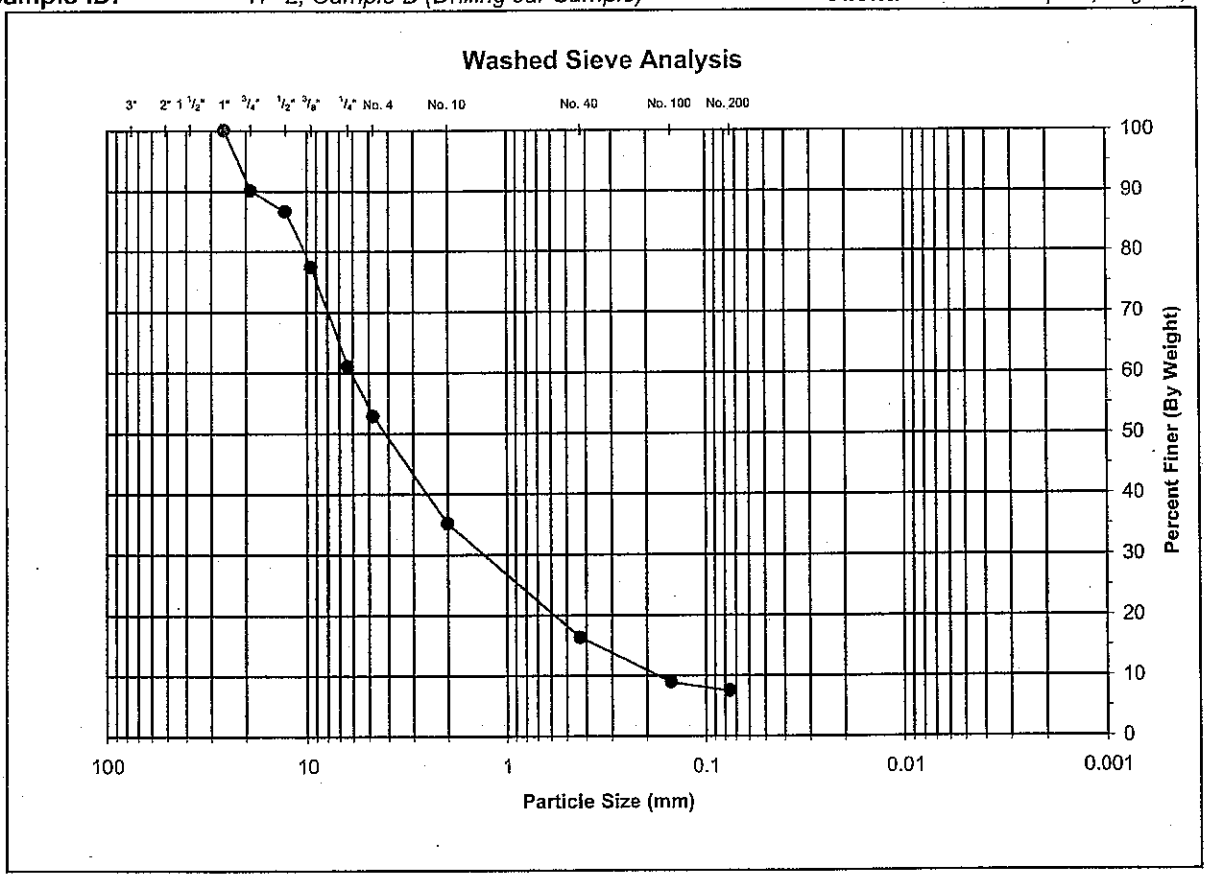
Natural % Moisture: ***15.5%***

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004B*
Sample ID:	*TP-2, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	100.0
3/4"	19.0	90.1
1/2"	12.7	86.6
3/8"	9.51	77.3
1/4"	6.35	61.0
No. 4	4.76	52.8
No. 10	2.00	35.1
No. 40	0.425	16.2
No. 100	0.15	8.9
No. 200	0.075	7.5

GRAVEL and m-c SAND, trace silt

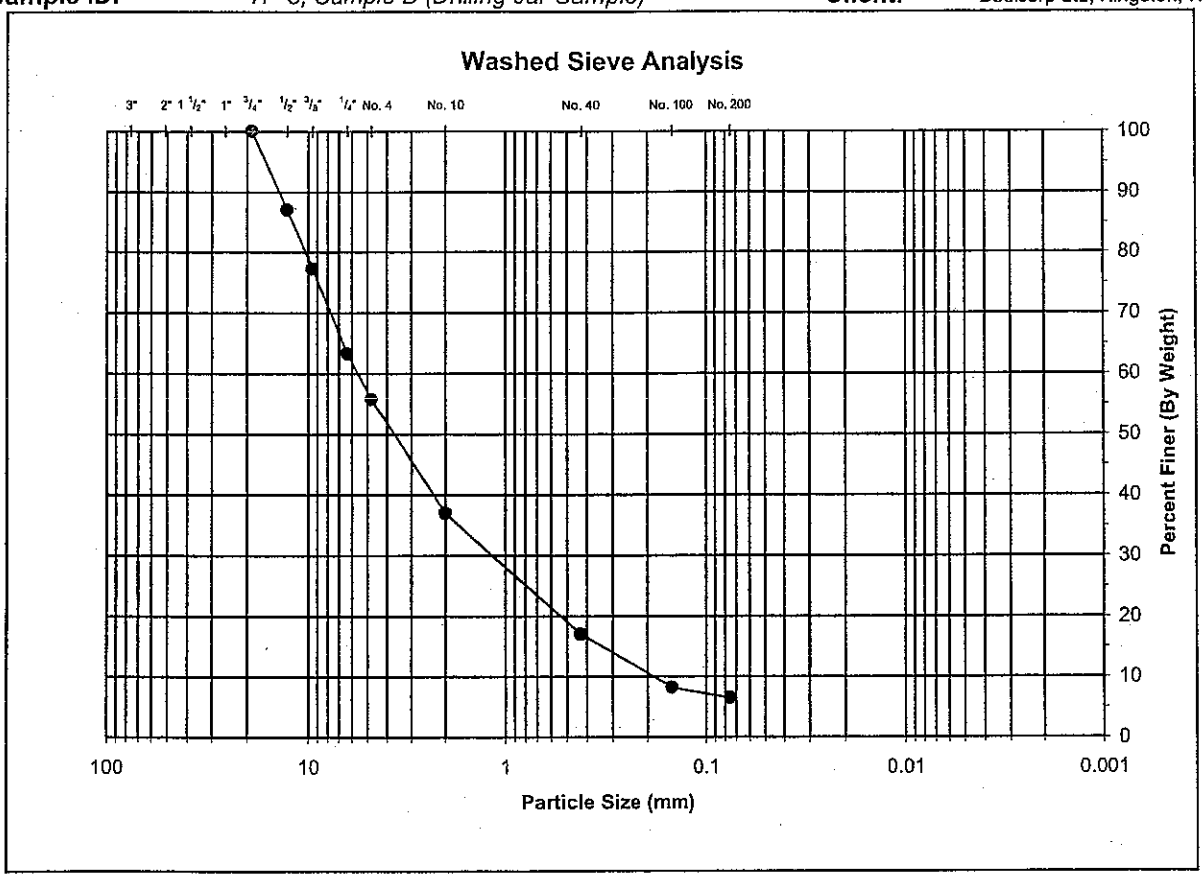
Natural % Moisture: 10.5%

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004C*
Sample ID:	*TP-3, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	100.0
1/2"	12.7	87.0
3/8"	9.51	77.3
1/4"	6.35	63.3
No. 4	4.76	55.7
No. 10	2.00	36.9
No. 40	0.425	17.0
No. 100	0.15	8.2
No. 200	0.075	6.5

Brown m-c SAND and fine GRAVEL, trace silt

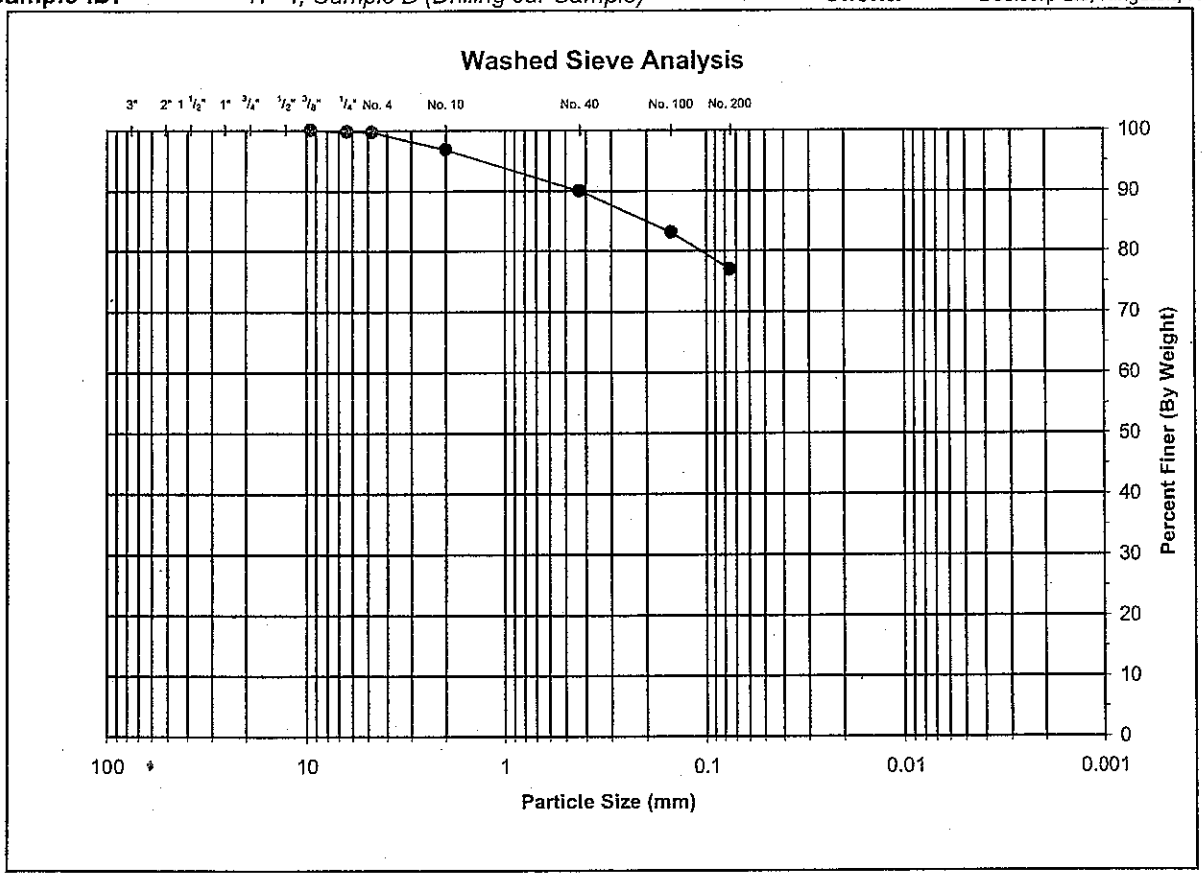
Natural % Moisture: 9.1%

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004D*
Sample ID:	*TP-4, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	
1/2"	12.7	
3/8"	9.51	100.0
1/4"	6.35	99.8
No. 4	4.76	99.7
No. 10	2.00	96.8
No. 40	0.425	90.0
No. 100	0.15	83.1
No. 200	0.075	76.9

CLAY, Some fine Sand

Natural % Moisture: *21.4%*

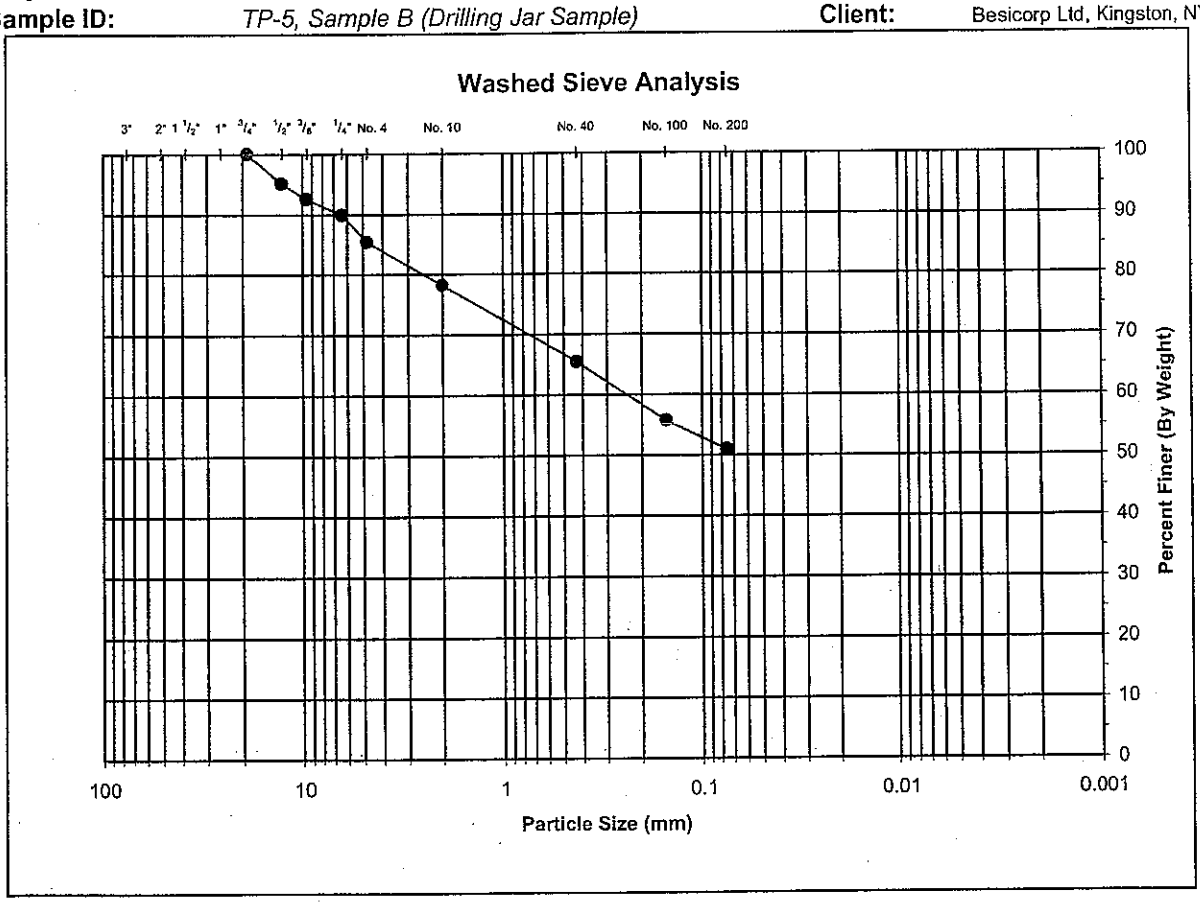
ASTM D 2487: CL, Sandy lean clay

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*09-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004E*
Sample ID:	*TP-5, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	100.0
1/2"	12.7	95.1
3/8"	9.51	92.5
1/4"	6.35	89.9
No. 4	4.76	85.4
No. 10	2.00	78.2
No. 40	0.425	65.4
No. 100	0.15	55.6
No. 200	0.075	50.9

SILT/CLAY,Some f-c Sand, little gravel

Natural % Moisture: ***13.3%***

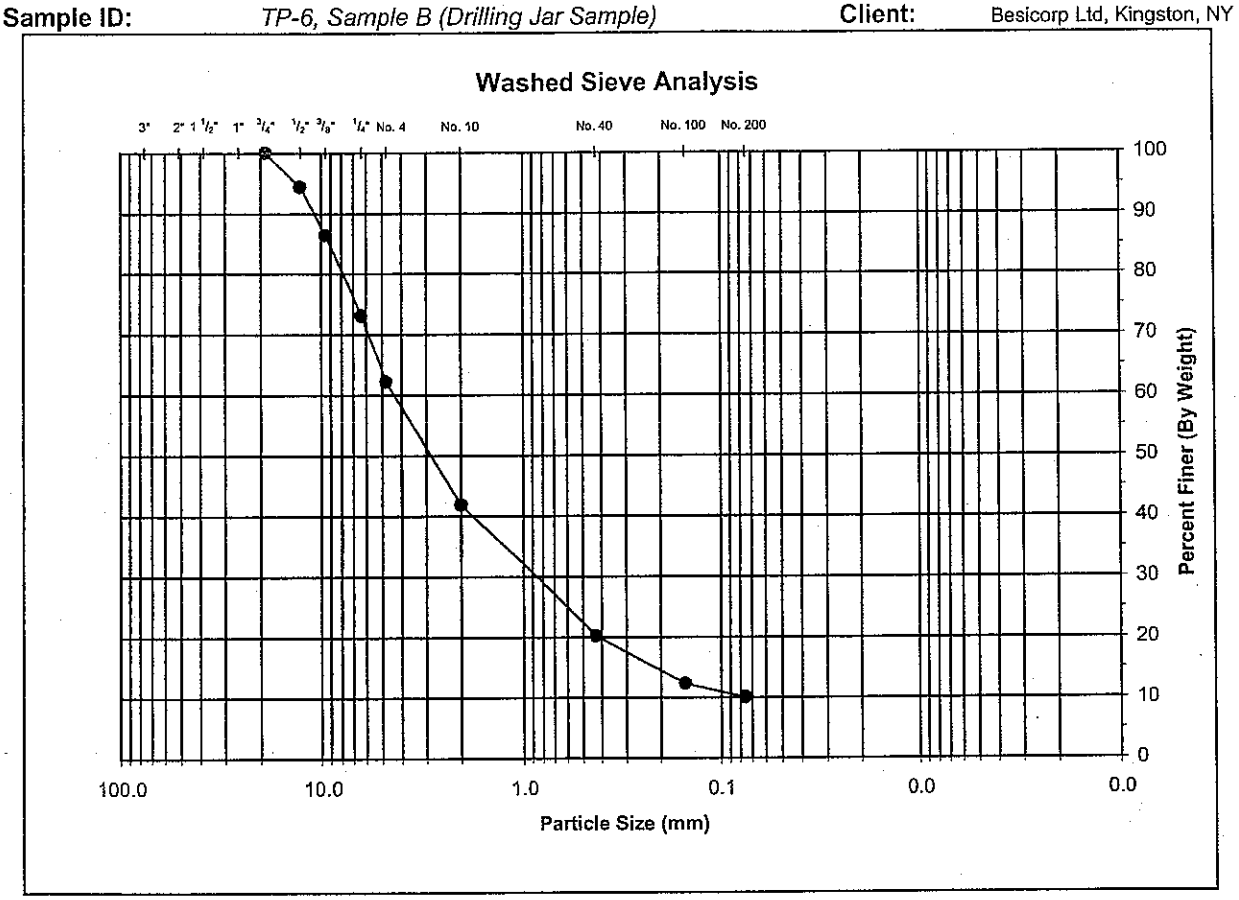
ASTM D 2487: CL-ML, Sandy silty clay

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004F*
Sample ID:	*TP-6, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	100.0
1/2"	12.7	94.3
3/8"	9.51	86.4
1/4"	6.35	73.1
No. 4	4.76	62.1
No. 10	2.00	41.9
No. 40	0.425	20.1
No. 100	0.15	12.3
No. 200	0.075	10.1

Brown m-c SAND and fine GRAVEL, little silt

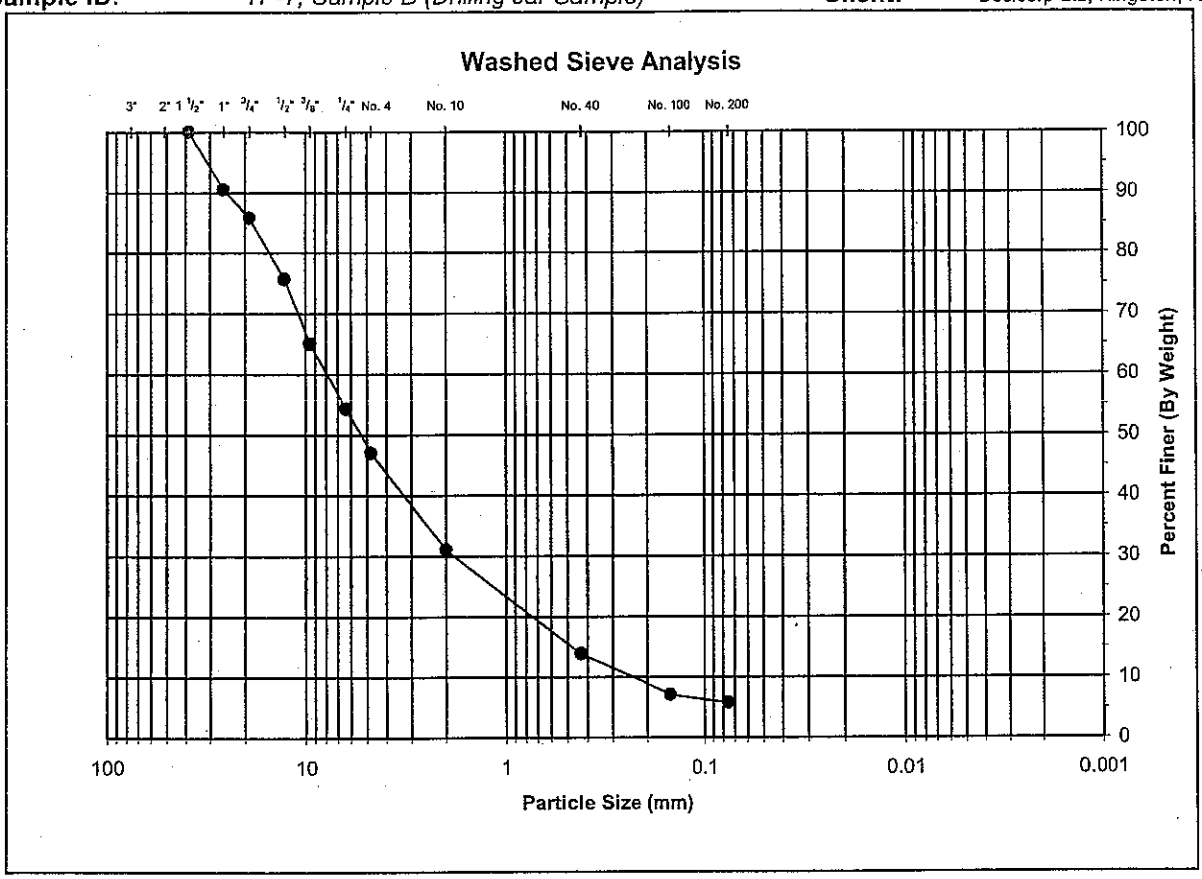
Natural % Moisture: 14.3%

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004G*
Sample ID:	*TP-7, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	100.0
1"	25.7	90.4
3/4"	19.0	85.7
1/2"	12.7	75.6
3/8"	9.51	65.0
1/4"	6.35	54.2
No. 4	4.76	47.0
No. 10	2.00	31.1
No. 40	0.425	13.8
No. 100	0.15	7.0
No. 200	0.075	5.7

GRAVEL and m-c SAND, trace silt

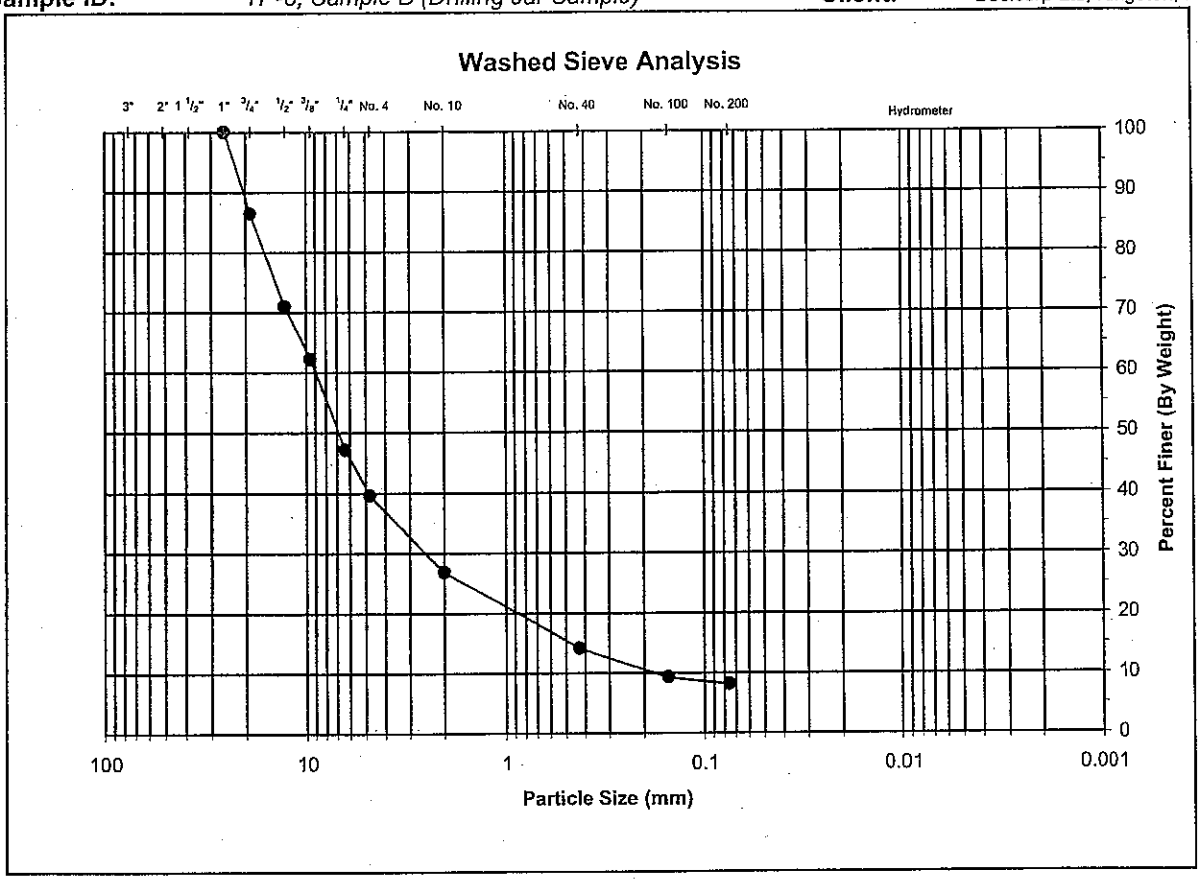
Natural % Moisture: 12.1%

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004H*
Sample ID:	*TP-8, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	100.0
3/4"	19.0	86.4
1/2"	12.7	70.9
3/8"	9.51	62.2
1/4"	6.35	47.2
No. 4	4.76	39.5
No. 10	2.00	26.8
No. 40	0.425	14.1
No. 100	0.15	9.2
No. 200	0.075	8.2

GRAVEL, Some m-c Sand, trace silt

Natural % Moisture: 11.2%

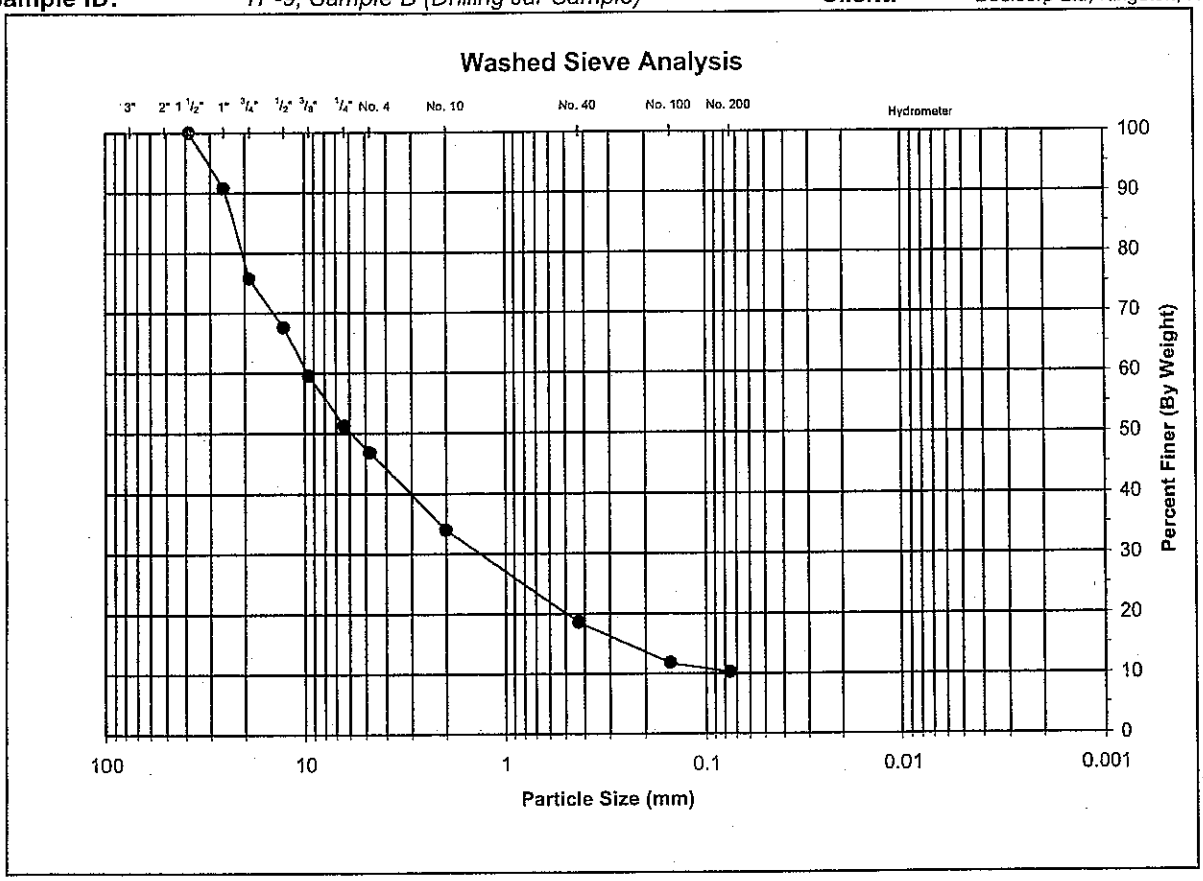
C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

p

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004l*
Sample ID:	*TP-9, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	100.0
1"	25.7	90.7
3/4"	19.0	75.7
1/2"	12.7	67.5
3/8"	9.51	59.5
1/4"	6.35	51.2
No. 4	4.76	46.7
No. 10	2.00	33.9
No. 40	0.425	18.6
No. 100	0.15	11.8
No. 200	0.075	10.2

GRAVEL and m-c SAND, little silt

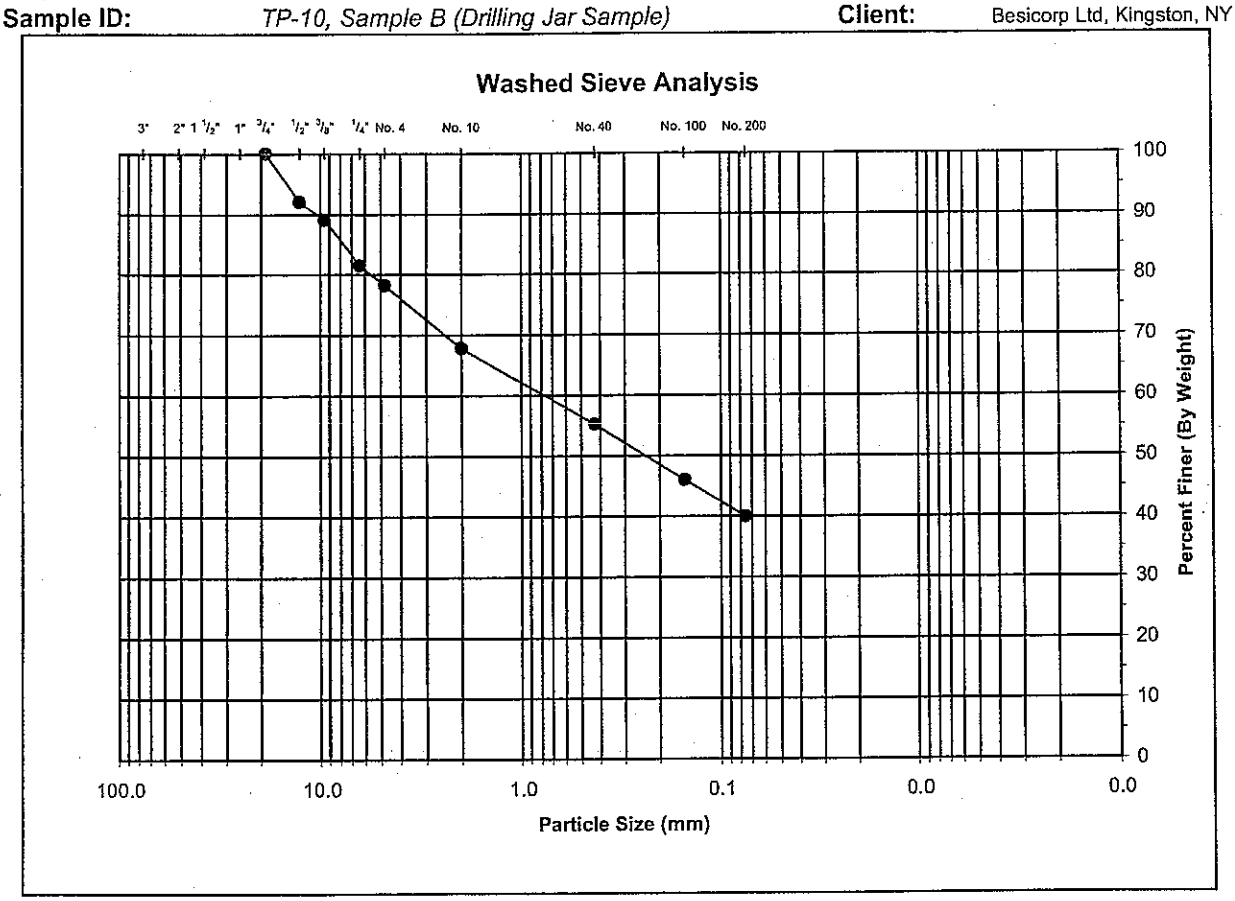
Natural % Moisture: 9.5%

C.T. Male Associates, P.C.

Sieve Analysis

Geotechnical Engineering Laboratory

Project:	*Besicorp Wetland Mitigation Project*	**Date Sampled:**	*02-Feb-07*
Location:	Brunswick, Rensselaer County, New York	**Date Tested:**	*07-Feb-07*
Project #:	*00.6678*	**Lab #:**	*7-004J*
Sample ID:	*TP-10, Sample B (Drilling Jar Sample)*	**Client:**	Besicorp Ltd, Kingston, NY



Sieve No.	Diameter (mm)	% Passing
4"	101.6	
3"	76.1	
2"	50.8	
1 1/2"	38.1	
1"	25.7	
3/4"	19.0	100.0
1/2"	12.7	92.0
3/8"	9.51	89.1
1/4"	6.35	81.5
No. 4	4.76	78.2
No. 10	2.00	67.8
No. 40	0.425	55.1
No. 100	0.15	45.9
No. 200	0.075	39.9

Brown f-c SAND and SILT, Some fine Gravel

Natural % Moisture: ***12.4%***

C.T. Male Associates, P.C.

Moisture Content

Geotechnical Engineering Laboratory

00.6678 **Besicorp Wetland Mitigation Project**

Tested: 02/07/07
Sampled: 02/02/07

Client: Besicorp Ltd, Kingston, NY

	Liquid	Plastic	
Boring	TP-4	TP-4	
Sample	S-B	S-B	
Depth			
% Moisture	35.4%	20.9%	

Correction 0.98

LL = 35
PL = 21
PI = 14
% M= **21.4%**

CLAY, Some fine Sand
ASTM D 2487: CL, Sandy lean clay

	Liquid	Plastic	
Boring	TP-5	TP-5	
Sample	S-B	S-B	
Depth			
% Moisture	26.4%	18.5%	

Correction 0.98

LL = 26
PL = 19
PI = 7
% M= **13.3%**

SILT/CLAY,Some f-c Sand, little fine gravel
ASTM D 2487: CL-ML, Sandy silty clay

Attachment E
Seed Mixes

Sample Seed Mixtures for Zone 1- Forested Wetlands			
Common Name	**Scientific Name**	**Northeast Wetland Forest Herb Mix**	**New England Wetmix**
Blackberry	*Rubus allegheniensis*	X	
Blue Flag Iris	*Iris versicolor*		X
Blue Vervain	*Verbena hastata*	X	
Buttonbush	*Cephalanthus occidentalis*	X	
Canada Mannagrass	*Glyceria canadensis*	X	
Deertongue	*Panicum clandestinum*	X	
False Nettle	*Boehmeria cylindrica*	X	
Flat-top Aster	*Aster umbellatus*		X
Fowl Mannagrass	*Glyceria striata*	X	
Fox Sedge	*Carex vulpinoidea*	X	
Giant Goldenrod	*Solidago gigantea*	X	
Green Bulrush	*Scirpus atrovirens*	X	X
Hardstem Bulrush	*Schoenoplectus acutus*		X
Hop Sedge	*Carex lupulina*	X	
Large-Leaf Avens	*Geum macrophyllum*	X	
Melic Mannagrass	*Glyceria melicaria*	X	
Monkey Flower	*Mimulus ringens*		X
Nodding Bur Marigold	*Bidens cernua*		X
Nodding Sedge	*Carex gynandra*		X
Pennsylvania Smartweed	*Polygonum pensylvanicum*	X	
Reed Meadowgrass	*Glyceria grandis*	X	
Riverbank Wild Rye	*Elymus riparius*	X	
Sensitive Fern	*Onoclea sensibilis*		X
Shallow Sedge	*Carex lurida*	X	
Soft-Stem Bulrush	*Shoenoplectus tabernaemontani*		X
Spotted Joe Pye weed	*Eupatorium maculatum*		X
Stinging Nettle	*Urtica dioica*	X	
Swamp Milkweed	*Asclepias incarnata*	X	X
Turk's Cap Lily	*Lilium superbum*	X	
Virginia Wild Rye	*Elymus virginicus*	X	
Water Dock	*Rumex verticillatus*	X	
Water Parsnip	*Sium suave*	X	
White Vervain	*Verbena urticifolia*	X	
Whitegrass	*Leersia virginica*	X	
Wild Rye	*Elymus canadensis*	X	
Wood Reed	*Cinna arundinacea*	X	
Wool Grass	*Scirpus cyperinus*	X	X
Wrinkled Goldenrod	*Solidago rugosa*	X	

Sample Seed Mixtures for Zone 2 -Scrub-Shrub Wetlands & Zone 4 - Riparian Corridor*			
Common Name	**Scientific Name**	**Northeast Wetland Shrub/ Herb Mix**	**New England Wetmix**
Arrow Wood	*Viburnum dentatum*	X	
Bladder Sedge	*Carex intumescens*	X	
Blue Flag Iris	*Iris versicolor*	X	X
Blue Vervain	*Verbena hastata*	X	
Buttonbush	*Cephalanthus occidentalis*	X	
Elderberry	*Sambucus canadensis*	X	
Flat-top Aster	*Aster umbellatus*	X	X
Fringed sedge	*Carex crinita*	X	
Green Bulrush	*Scirpus atrovirens*		X
Hardstem Bulrush	*Schoenoplectus acutus*		X
Many-leaved Bulrush	*Scirpus polyphyllus*	X	
Monkey Flower	*Mimulus ringens*		X
Nodding Bur Marigold	*Bidens cernua*	X	X
Nodding Sedge	*Carex gynandra*		X
Sensitive Fern	*Onoclea sensibilis*		X
Silky Dogwood	*Cornus amomum*	X	
Soft-Stem Bulrush	*Shoenoplectus tabernaemontani*		X
Spotted Joe Pye weed	*Eupatorium maculatum*	X	X
Swamp Milkweed	*Ascelpias incarnata*	X	X
Woolgrass	*Scirpus cyperinus*		X

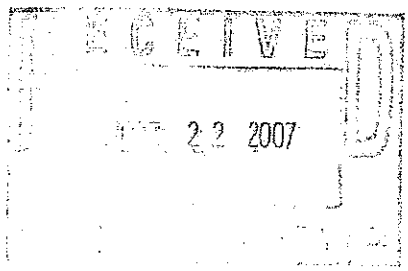
*Only disturbed areas of Zone 4 require seeding

Sample Seed Mixtures for Zone 3 - Potholes & Zone 5 - Upland Transitional Zones			
Common Name	**Scientific Name**	**Northeast Upland Native/ Naturalized Wildflower Mix**	**New England Upland Erosion Control/ Restoration Mix (Moist Sites)**
Annual Ryegrass	*Lolium multiflorum*	X	
Birdsfoot Trefoil	*Lotus corniculatus*	X	
Black Eyed Susan	*Rudbeckia hirta*	X	
Blue Vervain	*Verbena hastata*	X	X
Boneset	*Eupatorium perfoliatum*		X
Canada Goldenrod	*Solidago canadensis*	X	
Cichory	*Cichorium intybus*	X	
Common Milkweed	*Asclepias syriaca*	X	
Common Yarrow	*Achillea millefolium*	X	
Creeping Bentgrass	*Agrostis stolonifera*		X
Creeping Red Fescue	*Festuca rubra*		X
Dame's Rocket	*Hesperis matronalis*	X	
Fox Sedge	*Carex vulpinoidea*		X
Foxtail Millet	*Setaria italica*	X	
Grass-leaved Goldenrod	*Euthamia graminifolia*	X	X
Green Bulrush	*Scirpus atrovirens*		X
Joe-Pye Weed	*Eupatorium maculatum*		X
New England Aster	*Aster novae-angliae*	X	X
Nodding Bur Marigold	*Bidens cernua*		X
Ox-Eye Daisy	*Chrysanthemum leucanthem*	X	
Queen Anne's Lace	*Daucus carota*	X	
Sheep Fescue	*Festuca ovina*	X	
Soft Rush	*Juncus effusus*		X
Sweet Vernal Grass	*Anthoxanthum odoratum*	X	
Switchgrass	*Panicum virgatum*	X	
Virginia Wild Rye	*Elymus virginicus*		X
Wild Bergamot	*Monarda fistulosa*	X	
Wild Rye	*Elymus canadensis*	X	

Attachment F
Correspondence

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

March 19, 2007



Karen M. Gaidasz
C.T. Male Associates, P.C.
50 Century Hill Drive
Latham, NY 12110

Re: DEC
Empire State Newsprint Project/Besicorp
(Contains 00PR05424)
EAST GREENBUSH, NORTH GREENBUSH,
RENSSELAER, Rensselaer County
04PR01106

Dear Ms. Gaidasz:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) concerning your project's potential impact/effect upon historic and/or prehistoric cultural resources. Our staff has reviewed the documentation that you provided on your project. Preliminary comments and/or requests for additional information are noted on separate enclosures accompanying this letter. A determination of impact/effect will be provided only after ALL documentation requirements noted on any enclosures have been met. Any questions concerning our preliminary comments and/or requests for additional information should be directed to the appropriate staff person identified on each enclosure.

In cases where a state agency is involved in this undertaking, it is appropriate for that agency to determine whether consultation should take place with OPRHP under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. In addition, if there is any federal agency involvement, Advisory Council on Historic Preservation's regulations, "Protection of Historic and Cultural Properties" 36 CFR 800 requires that agency to initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).

When responding, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont

Ruth L. Pierpont
Director

Enclosure

An Equal Opportunity/Affirmative Action Agency
printed on recycled paper

ARCHEOLOGY COMMENTS
04PR01106

Based on reported resources, there is an archeological site in or adjacent to your project area. Therefore the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends that a Phase 1 archeological survey is warranted for all portions of the project to involve ground disturbance, unless substantial prior ground disturbance can be documented. If you consider the project area to be disturbed, documentation of the disturbance will need to be reviewed by OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition.

A Phase 1 survey is designed to determine the presence or absence of archeological sites or other cultural resources in the project's area of potential effect. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct cultural resources surveys. A 36 CFR 61 qualified archeologist should be retained to conduct the Phase 1 survey. Many archeological consulting firms advertise their availability in the yellow pages. The services of qualified archeologists can also be obtained by contacting local, regional, or statewide professional archeological organizations. Phase 1 surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land. Agricultural activity is not considered to be substantial ground disturbance and many sites have been identified in previously cultivated land.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before any archeological survey activities are conducted on State-owned land.If any portion of the project includes the lands of New York State you should contact the SED before initiating survey activities.The SED contact is Christina B. Rieth and she can be reached at (518) 402-5975. Section 233 permits are not required for projects on private lands.

If you have any questions concerning archeology, please contact Michael Schifferli at 518-237-8643. ext 3281

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925

March 13, 2007

RECEIVED
MAR 15 2007
C.T. MALE ASSOCIATES, P.C.

Karen M Gaidasz
C T Male associates
50 Century Hill Drive
Latham, NY 12110

Dear Ms. Gaidasz:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to an Environmental Assessment for the proposed Schmidt Farm Wetland Mitigation 8.2 acre Conservation Project 6678 Easement Area, site as indicated on the map you provided, located in the Town of Brunswick, Rensselaer County.

We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,

Tara Seoane, Information Services
New York Natural Heritage Program

Enc.
cc: Reg. 4, Wildlife Mgr.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334
Fax: (607) 753-9699

Long Island Field Office
3 Old Barto Rd., Brookhaven, NY 11719
Phone: (631) 776-1401
Fax: (631) 776-1405

Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or "critical habitat" may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current.*

Reminder: Section 9 of the ESA prohibits unauthorized taking** of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take**" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take**," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended;16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.*

Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

** Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to ***take*** (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

Rensselaer County

Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

Common Name	Scientific Name	Status
Bald eagle	*Haliaeetus leucocephalus*	T
Indiana bat (S)[1]	*Myotis sodalis*	E
Shortnose sturgeon[2]	*Acipenser brevirostrum*	E

E=Endangered T=Threatened P=Proposed C=Candidate

W=Winter S=Summer

[1]While Indiana bats could be present in this county, we do not have any specific roost information to date and they are in such small numbers that is unlikely that they would be present and impacted by any specific proposed projects. This determination may change once we have conducted spring emergence or mistnetting studies for the Albany County hibernaculum.

[2]Principal responsibility for this species is vested with the National Oceanic and Atmospheric Administration/Fisheries.

Information current as of: 3/19/2007

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo

Project Number: 70506

To: Karen Haidasz Date: 3-13-07

Regarding: Schmidt Farm wetland mitigation project

Town/County: Brunswick / Rensselaer

We have received your request for information regarding occurrences of Federally-listed threatened and endangered species within the vicinity of the above-referenced project/property. Due to increasing workload and reduction of staff, we are no longer able to reply to endangered species list requests in a timely manner. In an effort to streamline project reviews, we are shifting the majority of species list requests to our website at http://www.fws.gov/northeast/nyfo/es/section7.htm. Please go to our website and print the appropriate portions of our county list of endangered, threatened, proposed, and candidate species, and the official list request response. Step-by-step instructions are found on our website.

As a reminder, Section 9 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) prohibits unauthorized taking* of listed species and applies to Federal and non-Federal activities. Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the U.S. Fish and Wildlife Service (Service), to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take"* any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. If you have any questions or require further assistance regarding threatened or endangered species, please contact the Endangered Species Program at (607) 753-9334. Please refer to the above document control number in any future correspondence.

Endangered Species Biologist: Sandra Doran

*Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to ***take*** (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 4
1130 North Westcott Road, Schenectady, New York 12306-2014
Phone: (518) 357-2069 • **FAX:** (518) 357-2460
Website: www.dec.state.ny.us

February 16, 2007

Karen Gaidasz
C.T. MALE ASSOCIATES, P.C.
50 Century Hill Drive
P.O. Box 727
Latham, NY 12110

Re: Stream at Miller Rd Ext.
Town of Brunswick, Rensselaer County

Dear Ms. Gaidasz:

In response to your request, attached is a map which shows the nearest wetlands and streams adjacent to the above project site.

The stream in question is a Class C(ts) stream, which is protected under Article 15 regulations. In addition, there is a significant federal wetland that surrounds the stream channel, and any work in this area would require approval from the US Army Corps of Engineers, and likely a Water Quality Certification from our office. The map depicts the general location of federal wetlands, and therefore, consultation with the USACOE is suggested early in project planning stages to confirm their jurisdiction.

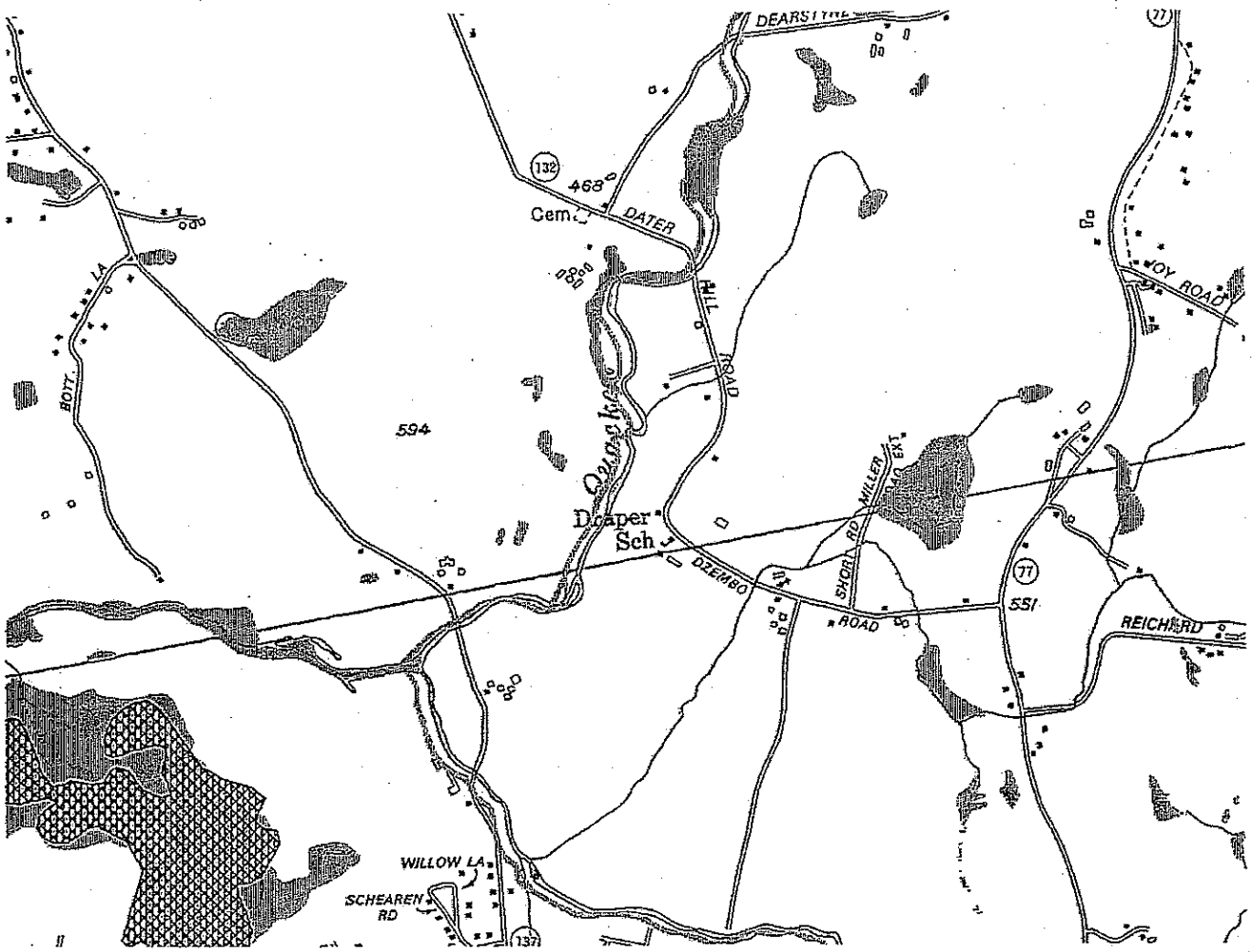
If you have any questions, please feel free to contact me.

Sincerely,

Nancy Adams

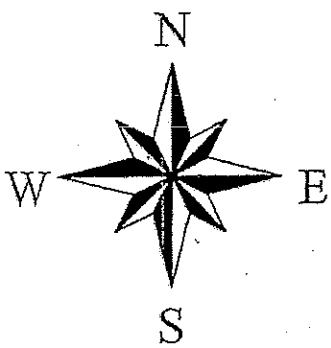
Nancy Adams
Environmental Analyst 2
Region 4

cc: C. DeLorier, USACOE, 1 Bond Street, Troy, NY 12180 (w/enclosure)
File



NYS Regulatory Freshwater Wetland
- Class 1
- Class 2
- Class 3
- Class 4
- Uncoded
- Stream with Water Classification

National Wetlands Inventory (polygon)
- NWI Wetland
- Major Road



New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, New York 12233-1750
Phone: (518) 402-9167 • **FAX:** (518) 402-9168
Website: www.dec.state.ny.us

Denise M.Sheehan
Acting
Commissioner

April 7, 2005

Dick Clark
Besicorp - Empire Power, LLC
1151 Flatbush Road
Kingston, New York 12401

RECEIVED
APR 11 2005
BOND, SCHOENECK & KING, PLLC

RE: Besicorp-Empire Power Generating Facility
DEC#: 4-3814-00052/00004 -Section 401 Water Quality Certificate
DEC#: 4-3814-00052/00002 - State Pollutant Discharge Elimination System Permit

Dear Mr. Clark:

Enclosed are your modified permits issued pursuant to Section 401 of the Clean Water Act and 6 NYCRR Part 750 (State Pollutant Discharge Elimination System). The modified permits reflect the changes requested by Kevin Bernstein, Esq., in two separate letters dated March 3, 2005.

If you have any questions regarding any of the above please contact me.

Sincerely,

Christopher M. Hogan
Project Manager

cc: M.Sanza
R. Jacobson
K. Bernstein, BSK
A. Davis, DPS
Bureau of Water Permits
RWE - Region 4
RPA - Region 4
EPA Region II

PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
BESICORP-EMPIRE POWER COMPANY LLC

1151 FLATBUSH RD
KINGSTON, NY 12401
(845) 336-7700

Facility:
BESICORP-EMPIRE POWER GENERATING FACILITY
36 RIVERSIDE DR
RENSSELAER, NY

Facility Location: in RENSSELAER in RENSSELAER COUNTY **Village:** Rensselaer
Facility Principal Reference Point: NYTM-E: 602.575 NYTM-N: 4720.446
Project Location: Off Riverside Ave. in the Port of Rensselaer

Authorized Activity: Fill approximately 1.56 acres of waters of the United States (wetlands) and install a gray water pipeline under the bed of the Hudson River from the Albany County Sewer District's (ACSD) South Plant for cooling water in conjunction with the construction of a 505 MW electric generating facility.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act
Permit ID 4-3814-00052/00004
New Permit Effective Date: 4/7/2005 Expiration Date: 4/7/2008

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: WILLIAM R ADRIANCE, Chief Permit Administrator
Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: William R. Adriance Date 4/7/2005

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: WATER QUALITY CERTIFICATION

CONSTRUCTION REQUIREMENTS

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application. Such approved plans were prepared by (See Paragraph 2).

2. **Conformance with Plans - Addenda** In addition to plans referenced in the Condition titled "Conformance with Plans," the activities authorized by this permit must be in strict conformance with the following approved plans and/or submissions made as part of the permit application:
a. Article X Application, December 2001, Chapter 7 and Appendix H;
b. Permit Application to the U.S. Army Corps of Engineers;
c. Wetland Mitigation Supplement, dated February 27, 2004, as amended by letter to the Corps dated January 11, 2005..

3. **Demarcation of Wetland Disturbance** All limits of wetland disturbance shall be demarcated by the construction of a silt fence. The purpose of the silt fence is to limit disturbance within the wetlands to the areas shown in the above referenced plans and to avoid the discharge of either fill or turbid water to the wetland areas.

4. **Revegetation of Disturbed Areas** Immediately following construction, areas of temporarily disturbed uplands adjacent to wetlands shall be regraded to restore surface runoff from these areas to the wetlands. These areas shall then be stabilized and revegetated as the season allows. When seasonal conditions prevent reseeding, areas shall be immediately protected with mulch and reseeded during the following growing season.

5. **Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

6. **No Turbid Runoff** Any excavated soil must be suitably retained and managed so that there is no turbid runoff discharged either directly or indirectly into any of the adjacent wetlands or surface waterbodies.

OPERATIONS

7. **State Not Liable for Damage** The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

8. **No Interference With Navigation** There shall be no unreasonable interference with navigation by

the work herein authorized.

9. **State May Require Site Restoration** If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

10. **State May Order Removal or Alteration of Work** If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. **Water Quality Certification** The NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. **Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. **Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY12233

4. Submission of Renewal Application The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.

5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittees agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189 (Mail)
Delaware Avenue, Cohoes 12047 (Delivery)

PROJECT REVIEW COVER FORM

Rev. 10-04

Please complete this form and attach it to the top of any and all information submitted to this office for review.
Accurate and complete forms will assist this office in the timely processing and response to your request.

This information relates to a previously submitted project.

PROJECT NUMBER 00 PR 5424

COUNTY Rensselaer

☑ If you have checked this box and noted the previous Project Review (PR) number assigned by this office you do not need to continue unless any of the required information below has changed.

2. This is a new project. ☐ If you have checked this box you will need to complete ALL of the following information.

Project Name Schmidt Farm Wetland Mitigation Project

Location State Route 351
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village Town of Brunswick
List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Rensselaer
If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☐ No ☑ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
U.S. Army Corps of Engineers	Section 404 Individual Permit	☐	☑
NYSDEC	401 WQC, Article 15 Protection of Waters	☑	☐
		☐	☐

B. Have you consulted the NYSHPO web site at http://www.nysparks.state.ny.us/shpo to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes: ☑ Yes ☐ No

Was the project site wholly or partially included within an identified archeologically sensitive area? ☐ Yes ☑ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places? ☐ Yes ☑ No

CONTACT PERSON FOR PROJECT

Name Karen M. Gaidasz Title Environmental Scientist

Firm/Agency C.T.Male Associates, P.C.

Address 50 Century Hill Drive City Latham STATE NY Zip 12110

Phone (518) 786-7400 Fax (518) 786-7299 E-Mail k.gaidasz@ctmale.com

The Historic Preservation Review Process in New York State

In order to insure that historic preservation is carefully considered in publicly-funded or permitted undertakings*, there are laws at each level of government that require projects to be reviewed for their potential impact/effect on historic properties. At the federal level, Section 106 of the National Historic Preservation Act of 1966 (NHPA) directs the review of federally funded, licensed or permitted projects. At the state level, Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law of 1980 performs a comparable function. Local environmental review for municipalities is carried out under the State Environmental Quality Review Act (SEQRA) of 1978.
(regulations on line at: www.nysparks.state.ny.us/shpo Environmental Review)

Project review is conducted in two stages. First, the Field Services Bureau assesses affected properties to determine whether or not they are listed or eligible for listing in the New York State or National Registers of Historic Places. If so, it is deemed "historic" and worthy of protection and the second stage of review is undertaken. The project is reviewed to evaluate its impact on the properties significant materials and character. Where adverse effects are identified, alternatives are explored to avoid, or reduce project impacts; where this is unsuccessful, mitigation measures are developed and formal agreement documents are prepared stipulating these measures.

ALL PROJECTS SUBMITTED FOR REVIEW SHOULD INCLUDE THE FOLLOWING MATERIAL(S).

☑ **Project Description**

Attach a full description of the nature and extent of the work to be undertaken as part of this project. Relevant portions of the project applications or environmental statements may be submitted.

☑ **Maps Locating Project**

Include a map locating the project in the community. The map must clearly show street and road names surrounding the project area as well as the location of all portions of the project. Appropriate maps include tax maps, Sanborn Insurance maps, and/or USGS quadrangle maps.

☑ **Photographs**

Photographs may be black and white prints, color prints, or color laser/photo copies; standard (black and white) photocopies are NOT acceptable.

-*If the project involves rehabilitation*, include photographs of the building(s) involved. Label each exterior view to a site map and label all interior views.

-*If the project involves new construction*, include photographs of the surrounding area looking out from the project site. Include photographs of any buildings (more than 50 years old) that are located on the project property or on adjoining property.

NOTE: Projects submissions will not be accepted via facsimile or e-mail.

**Undertaking* is defined as an agency's purchase, lease or sale of a property, assistance through grants, loans or guarantees, issuing of licenses, permits or approvals, and work performed pursuant to delegation or mandate.

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

March 1, 2007

Mr. Ken Markunas
New York State Office of Parks, Recreation, and Historic Preservation
Historic Preservation Field Office Bureau
Peebles Island
PO Box 189
Waterford, New York 12188-0189

Re: National Register of Historic Places File Review Request
OPRHP Project No. 00PR5424
Besicorp – Empire Development Company, LLC.
Schmidt Farm Wetland Mitigation Project
Town of Brunswick, Rensselaer County, NY
C.T. Male Project No. 00.6678

Dear Mr. Markunas:

C.T. Male Associates, P.C. (C.T. Male) is working with Besicorp Development, LLC on a proposed wetland mitigation project at the Schmidt Farm in the Town of Brunswick, Rensselaer County, New York (refer to Attachment A, Site Location Map).

The proposed wetland mitigation project is being undertaken to compensate for impacts to wetlands and other waters of the U.S. associated with the construction of a 505 Megawatt Combined-Cycle Cogeneration Power Plant; a Recycled Newsprint Manufacturing Plant; a 8.1 mile, 345 kilovolt transmission line; a 3,115 foot long 28-inch gray water pipeline; and a 4.5 mile long 16-inch natural gas pipeline proposed by Besicorp - Empire Development Company, LLC. The Schmidt Farm Wetland Mitigation Project is part of the overall Besicorp – Empire Development Company, LLC project which was previously reviewed by your office under the project number: 00PR5424.

The Schmidt Farm Wetland Mitigation Project involves the creation and enhancement of approximately 5.4 acres of wetlands and other waters of the U.S. within a proposed 8.2 acre conservation easement area. The mitigation site is currently an open pasture on an active dairy farm. No buildings or other structures are located within the mitigation site (refer to Attachment B, Photographs).

The proposed project includes the restoration of a stream corridor and associated wetlands that are currently in a degraded condition due to cattle activity. The project does not involve the construction of any buildings or other impervious areas.

We are interested in obtaining information from your agency regarding historic properties listed, or eligible for listing, in the National Register of Historic Places within the Schmidt Farm Wetland Mitigation Site.

Thank you for your time and if you have any questions, please do not hesitate to contact me or Jared Lendrum at (518) 786-7400.

Sincerely,

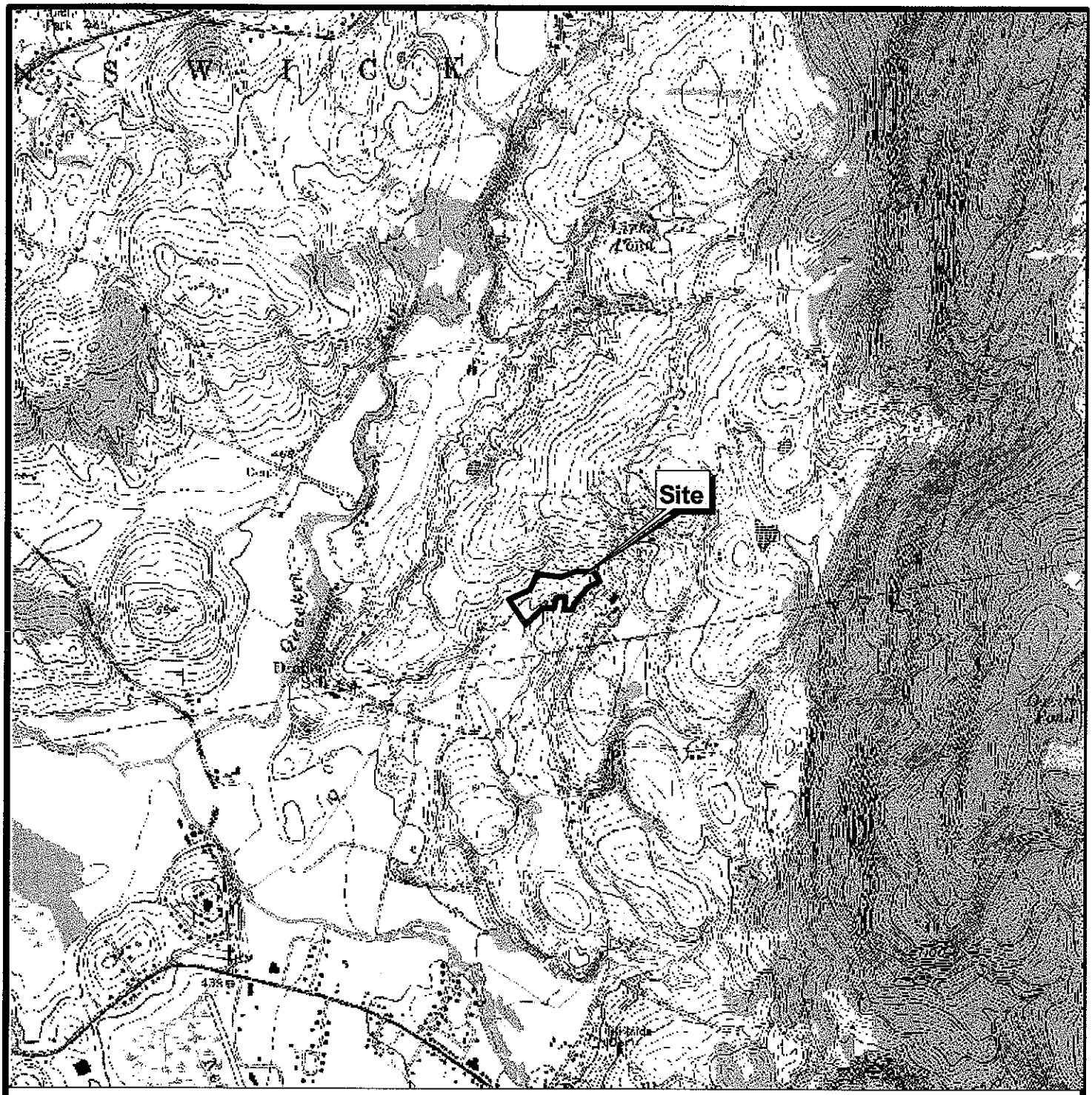
C.T. MALE ASSOCIATES, P.C.

Karen M. Gaidasz
Environmental Scientist

c: Steve Lattanzio (Besicorp Development, LLC)
Ed Garrigan, John Munsey (C.T. Male)
File

K:\Projects\006678\Env\Letters\L SHPO Markunas 03 01 07.doc

ATTACHMENT A
Site Location Map



MAP REFERENCE
Averil Park, NY Quadrangle, Dated 2000
7.5 Minute Series, NAD 83
Downloaded from CUGIR on 2/12/2007

N
W E
S

ARCHITECTURE &
BUILDING SYSTEMS ENGINEERING
CIVIL ENGINEERING
ENVIRONMENTAL SERVICES
SURVEY & LAND INFORMATION
SERVICES

C.T.MALE ASSOCIATES, P.C.

50 CENTURY HILL DRIVE, PO BOX 727, LATHAM, NY 12110
PHONE (518) 786-7400 FAX (518) 786-7299

FIGURE 1 SITE LOCATION

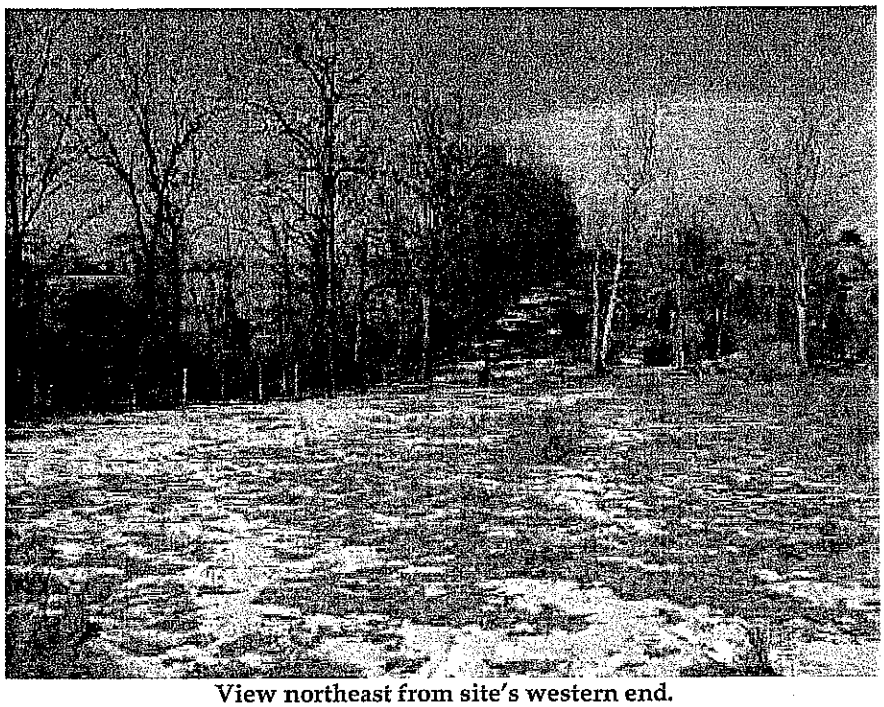
Schmidt Farm Wetland Mitigation Site

TOWN OF BRUNSWICK	RENSSELAER COUNTY, NY
SCALE: 1"= 2,000'	
DRAFTER: JML	
PROJECT NO: 00.6678	

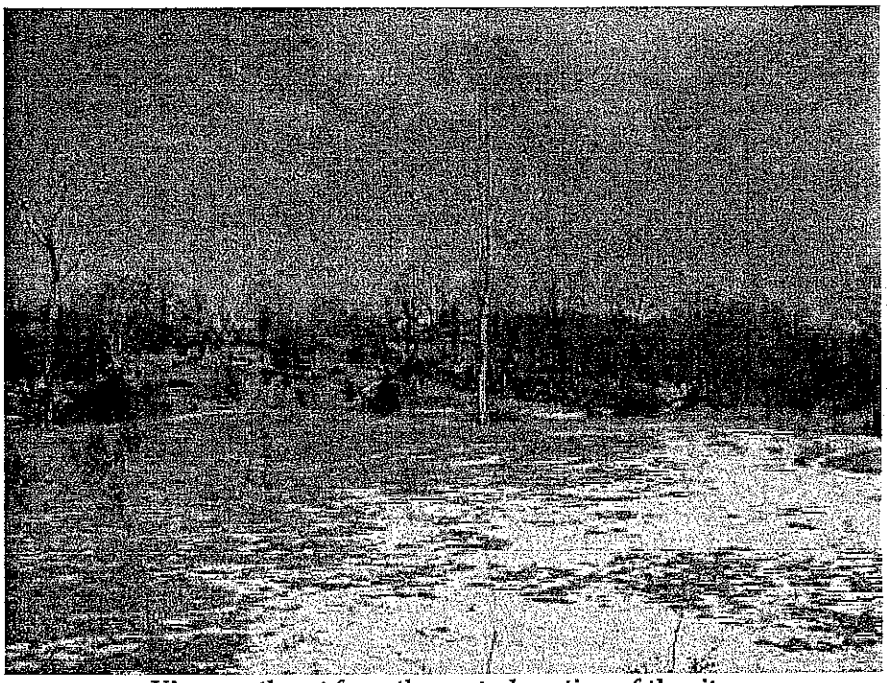
ATTACHMENT B
Photographs

REPRESENTATIVE PHOTOGRAPHS

Besicorp Wetland Mitigation Site



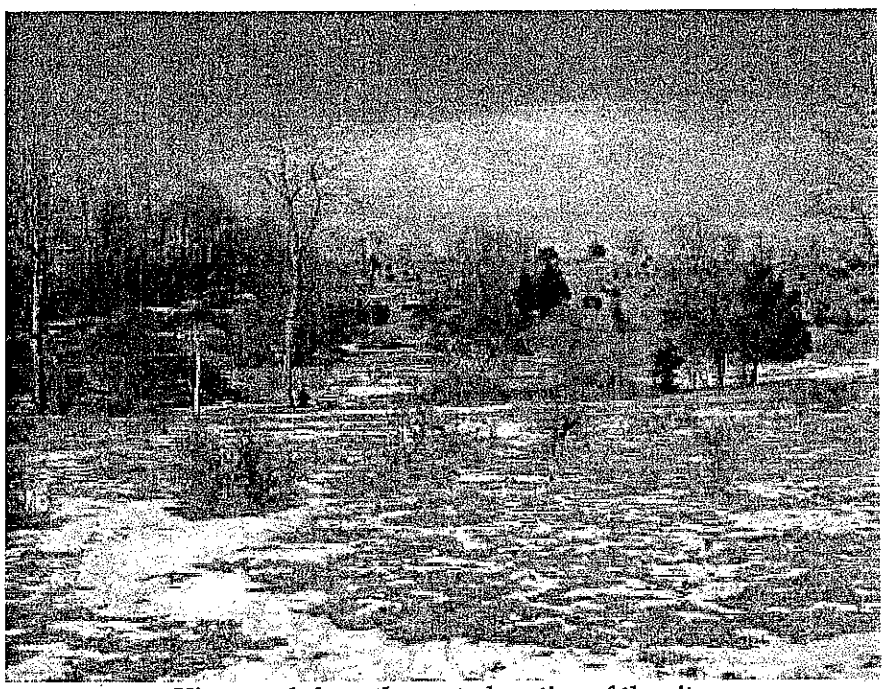
View northeast from site's western end.



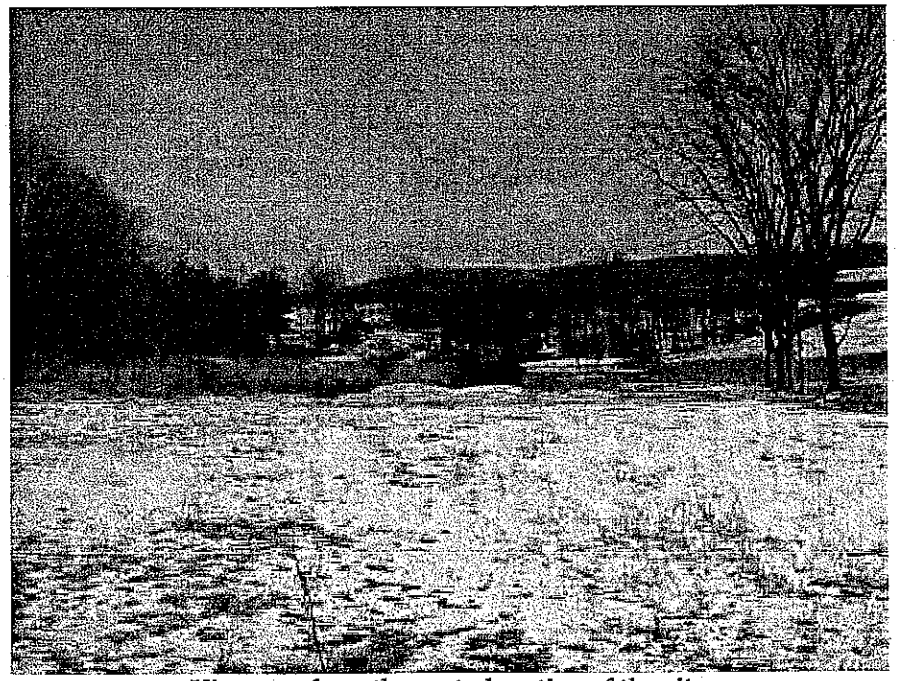
View northeast from the central portion of the site.

REPRESENTATIVE PHOTOGRAPHS

Besicorp Wetland Mitigation Site



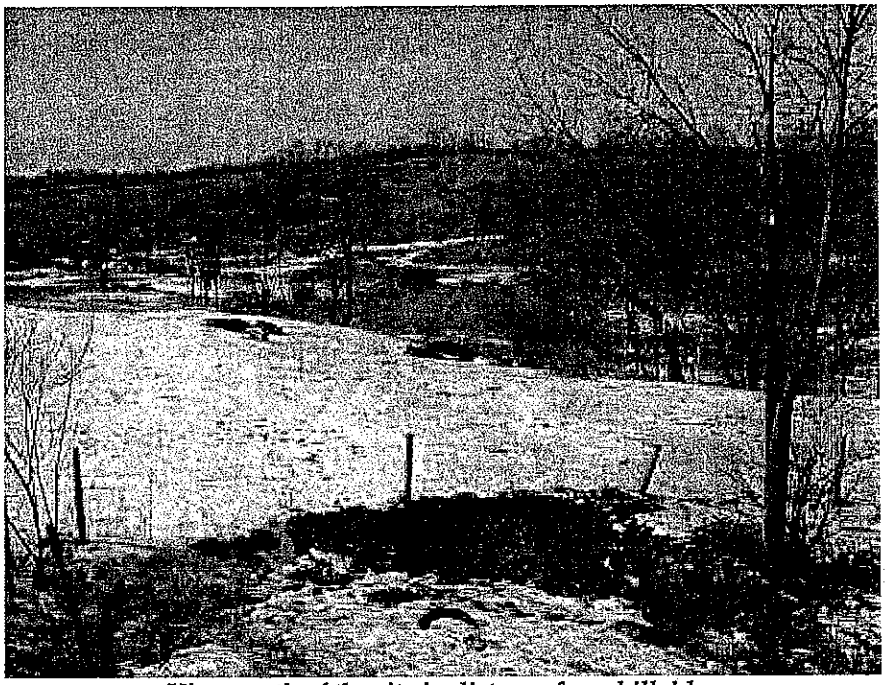
View north from the central portion of the site.



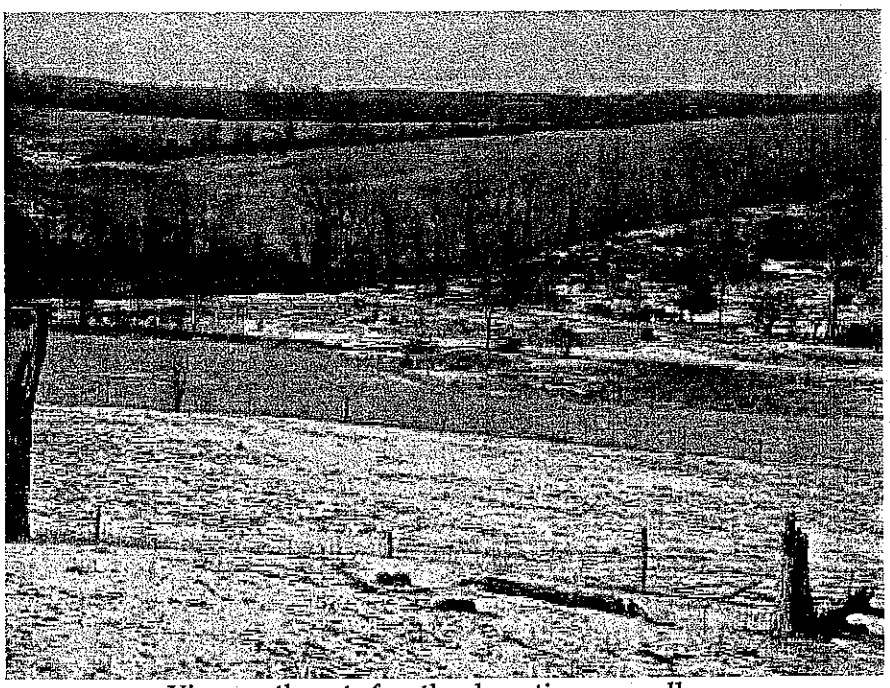
View east from the central portion of the site.

REPRESENTATIVE PHOTOGRAPHS

Besicorp Wetland Mitigation Site



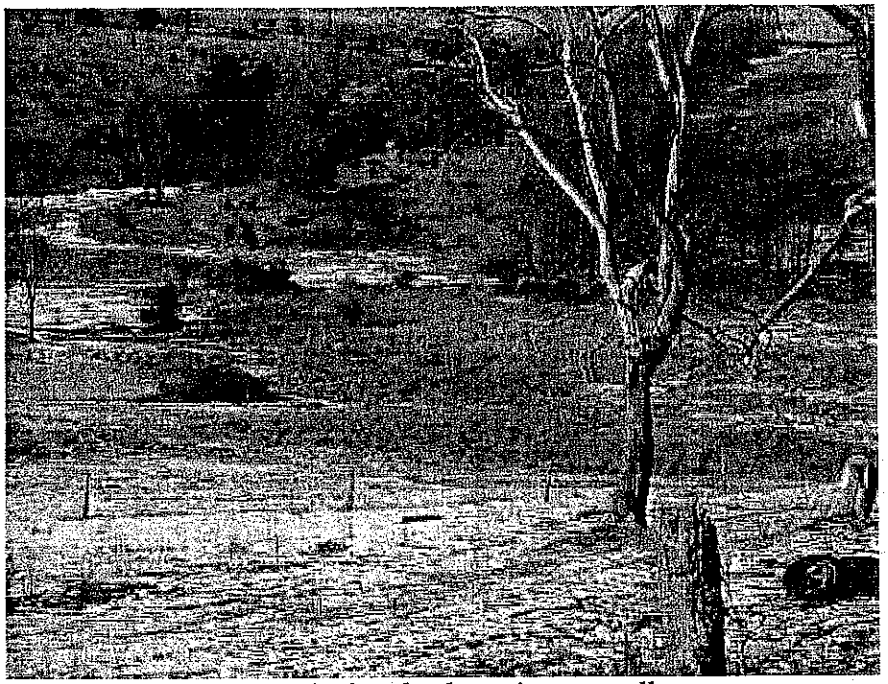
View north of the site in distance from hillside.



View northwest of wetland creation area valley.

REPRESENTATIVE PHOTOGRAPHS

Besicorp Wetland Mitigation Site



View north of wetland creation area valley.



View south of wetland creation area valley.

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

February 28, 2007

Ms. Jean Pietrusiak
New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
NY Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757

Re: Threatened and Endangered Species File Review Request
Schmidt Farm Wetland Mitigation Project
Town of Brunswick, Rensselaer County, NY
C.T. Male Project No. 00.6678

Dear Ms. Pietrusiak:

C.T. Male Associates, P.C. (C.T. Male) is working with Besicorp Development, LLC on a proposed wetland mitigation project at the Schmidt Farm in the Town of Brunswick, Rensselaer County, New York (refer to the attached Site Location Map). The latitude and longitude coordinates for the project are: N42° 42' 37", W73° 33' 35".

The project involves the creation and enhancement of approximately 5.4 acres of wetlands within a proposed 8.2 acre conservation easement area. The mitigation site is currently an open pasture on an active dairy farm. A stream corridor and interspersed wetland patches are also located within the mitigation site. No buildings or impervious surfaces are proposed.

Please provide us with information on known occurrences of threatened or endangered species or habitats on and adjacent to the site.

Thank you very much for your time and if you have any further questions, please do not hesitate to contact me or Jared Lendrum at (518) 786-7400.

Sincerely,

C.T. MALE ASSOCIATES, P.C.

Karen M. Gaidasz
Environmental Scientist

c: Steve Lattanzio (Besicorp)
Ed Garrigan (C.T. Male)

K:\Projects\006678\Env\Letters\L T&E NYSDEC Pietrusiak 02 28 07.Doc

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

February 28, 2007

Ms. Robyn Niver
United States Fish and Wildlife Service
3817 Luker Road
Cortland, New York 13045

Re: Threatened and Endangered Species File Review Request
Schmidt Farm Wetland Mitigation Project
Town of Brunswick, Rensselaer County, NY
C.T. Male Project No. 00.6678

Dear Ms. Niver:

C.T. Male Associates, P.C. (C.T. Male) is working with Besicorp Development, LLC on a proposed wetland mitigation project at the Schmidt Farm in the Town of Brunswick, Rensselaer County, New York (refer to the attached Site Location Map and sheet showing the approximate location on the topographic quadrangle map). The latitude and longitude coordinates for the project are: N42° 42′ 37″, W73° 33′ 35″.

The project involves the creation and enhancement of approximately 5.4 acres of wetlands within a proposed 8.2 acre conservation easement area. The mitigation site is currently an open pasture on an active dairy farm. A stream corridor and interspersed wetland patches are also located within the mitigation site. No buildings or impervious surfaces are proposed.

Please provide us with information on known occurrences of threatened or endangered species or habitats on and adjacent to the site.

Thank you for your time and if you have any further questions, please do not hesitate to contact me or Jared Lendrum at (518) 786-7400.

Sincerely,

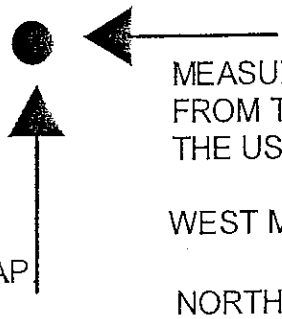
C.T. MALE ASSOCIATES, P.C.

Karen M. Gaidasz
Environmental Scientist

c: Steve Lattanzio (Besicorp)
Ed Garrigan (C.T. Male)

C.T. MALE PROJECT # 00.6678

PROJECT LOCATION (TOWN, COUNTY) Brunswick, Rensselaer



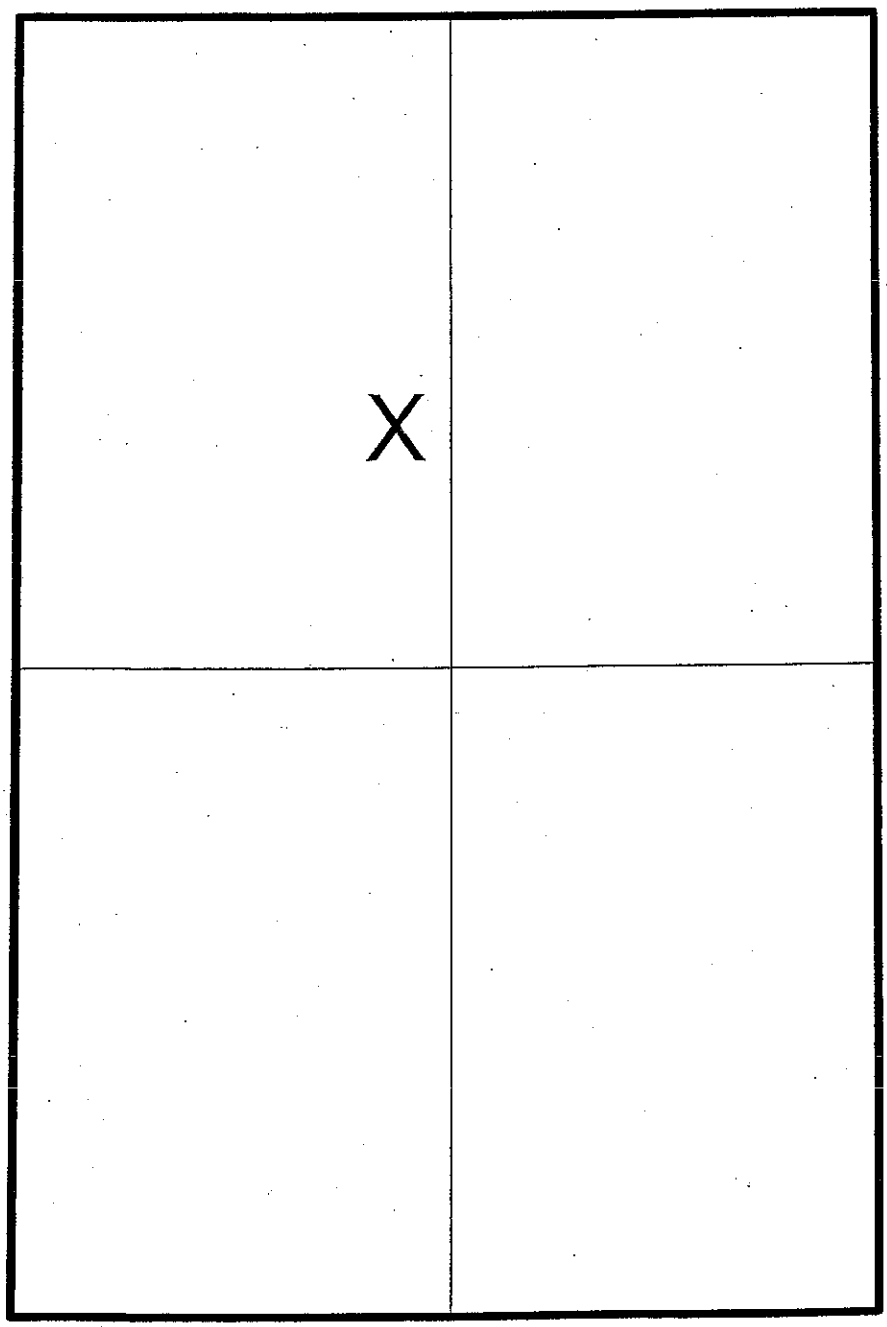
MEASUREMENTS IN INCHES
FROM THE EAST SIDE OF
THE USGS TOPOGRAPHIC MAP

MEASUREMENTS IN INCHES
FROM THE SOUTH SIDE OF
THE USGS TOPOGRAPHIC MAP

WEST MEASUREMENT 8.5

NORTH MEASUREMENT 15.8

U.S.G.S. QUADRANGLE NAME Averil Park, NY Quadrangle



TO SHOW THE APPROXIMATE
PROJECT LOCATION
ON A USGS
QUADRANGLE,
PLACE AN X WITHIN THE
ADJACENT BOX.



SPECIFICATIONS

HIGH TENSILE ELECTRIC FENCE (382)

1. SCOPE - THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING PERMANENT ELECTRIFIED FENCES AND RELATED ESSENTIAL COMPONENTS. UNLESS OTHERWISE SPECIFIED, COMPLETE ELECTRIC HIGH TENSILE FENCE SYSTEMS CONSTRUCTED IN STRICT ACCORDANCE TO A SINGLE MANUFACTURER'S RECOMMENDATIONS WILL BE ACCEPTED AS AN EQUIVALENT SUBSTITUTE TO THESE SPECIFICATIONS.

2. MATERIALS- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, MATERIALS FOR HIGH TENSILE FENCING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS

WIRE

WIRE USED FOR DIRECT LIVESTOCK CONTROL SHALL BE NEW, SMOOTH, CONDUCTIVE TO THE OUTER SURFACE, CLASS III GALVANIZED WIRE, MINIMUM 14 GAUGE WITH A MINIMUM BREAKING STRENGTH OF 1000 POUNDS.

WIRE USED AS LEADOUT FROM THE ENERGIZER TO THE CHARGED STRANDS OF FENCE AND GROUNDING SYSTEM, OR USED TO PASS ELECTRIC PULSES UNDERNEATH GATE OPENINGS OR ABOVE WATERCOURSES SHALL BE INSULATED 12-1/2 GAUGE WIRE RATED A MINIMUM OF 20,000 VOLTS.

INSULATORS

THE INSULATORS SHALL BE NEW HIGH DENSITY PORCELAIN, ULTRAVIOLET LIGHT RESISTANT HIGH DENSITY MOLDED PLASTIC, OR FLEXIBLE TUBE TYPE INSULATORS LABELED FOR HIGH-TENSILE APPLICATIONS.

STAPLES

THE STAPLES SHALL BE CLASS III GALVANIZED MINIMUM 9 GAUGE WIRE SLASH CUT POINT STAPLES. WHEN USED ON SOFTWOOD POSTS, STAPLES MUST HAVE BARBS AND HAVE A MINIMUM LENGTH OF 1.6 INCHES.

ENERGIZERS

THE ENERGIZERS SHALL BE MANUFACTURED FENCE ENERGIZERS, WHICH ARE SAFETY APPROVED BY THE U.S. BUREAU OF STANDARDS, UNDERWRITERS LABORATORIES (U.L), OR OTHER INTERNATIONAL STANDARDS WITH APPROVALS PRINTED ON THE ENERGIZER NAME PLATE.

FENCE ENERGIZERS MAY BE POWERED BY COMMERCIAL/PUBLIC ELECTRIC UTILITY (115/230V AC), BATTERY, OR SOLAR. WHERE SOLAR PANELS ARE RELIED UPON, THE ACTUAL OUTPUT OF THE PANEL MUST BE SUFFICIENT TO ADEQUATELY RECHARGE BATTERY(S) AND POWER ENERGIZER FOR THE AVERAGE SOLAR RADIATION RECEIVED AT THE SITE OF USE.

ENERGIZERS SHALL BE CAPABLE OF PRODUCING THE MINIMUM ELECTRICAL OUTPUT REQUIRED UNDER NORMALLY EXPECTED CONDITIONS CONSISTENT WITH THE KIND AND CLASS OF LIVESTOCK, THE TYPE AND AMOUNT OF FENCING, AND ANY OTHER CONSIDERATIONS SIGNIFICANTLY AFFECTING LIVESTOCK CONTROL.

POSTS

ALL BRACE, CORNER, AND GATE POSTS SHALL BE BLUNT END BLACK LOCUST, RED OR WHITE CEDAR, MINIMUM 0.40 LBS./FT3 CCA PRESSURE TREATED SOFTWOOD, OR OTHER MATERIAL OF EQUIVALENT LONGEVITY AND STRENGTH, IN MINERAL SOILS, POST TOP DIAMETER SHALL BE A MINIMUM OF 5 INCHES; THE LENGTH OF THE POST SHALL BE A MINIMUM OF 7-1/2 FEET. WOOD POSTS SHALL BE STRUCTURALLY SOUND, PREDOMINANTLY STRAIGHT THROUGHOUT THEIR LENGTH, WITH ALL LIMBS TRIMMED FLUSH WITH THE BODY OF THE POST.

LINE POSTS SHALL BE BLACK LOCUST, RED OR WHITE CEDAR, 0.40 LBS./FT3 CCA PRESSURE TREATED SOFTWOOD, STEEL "T" OR "U" POSTS, FIBERGLASS "T" OR ROUND POSTS, OR OTHER MATERIAL OF EQUIVALENT LONGEVITY AND STRENGTH. IN MINERAL SOILS LINE WOODEN POSTS TOP DIAMETER SHALL BE A MINIMUM OF 3-1/2 INCHES WITH A MINIMUM LENGTH OF 5-1/2 FEET. ALL STEEL OR FIBERGLASS LINE POSTS SHALL HAVE A MINIMUM LENGTH OF 5-1/2 FEET; FIBERGLASS "T" POSTS SHALL HAVE A MINIMUM WIDTH OF 1.2 INCHES, AND FIBERGLASS ROUND POSTS A MINIMUM OF 3/4 INCH DIAMETER.

BRACE RAILS SHALL BE A MINIMUM 4 INCHES IN DIAMETER FOR WOODEN OR A MINIMUM OF 1-1/2 INCHES DIAMETER FOR GALVANIZED STEEL PIPE. SQUARE RAILS WITH THE EQUIVALENT CROSS SECTION MAY BE USED. LENGTH OF BRACE RAILS SHALL BE A MINIMUM OF 8 FEET LONG WHERE HORIZONTAL AND 10 FEET LONG WHERE DIAGONAL.

BATTENS

BATTENS SHALL BE 3 TO 6 FEET IN LENGTH. THEY SHALL BE PRESSURE TREATED HARDWOOD OR NATURALLY DECAY RESISTANT HARDWOOD OR PLASTIC 1 TO 1-1/2 INCHES IN WIDTH AND 1 INCH IN THICKNESS. FIBERGLASS NOTCH "T" POSTS OF 5/8 INCH MINIMUM WIDTH OR ROUND FIBERGLASS POSTS OF 1/2 INCH MINIMUM DIAMETER.

GATES

ALL GATES ALONG BOUNDARY FENCES SHALL BE EITHER A PHYSICAL BARRIER (E.G., TUBULAR STEEL) OR A PSYCHOLOGICAL BARRIER OR ELECTRIC CONDUCTORS, AT LEAST TWO OF WHICH MUST BE OF SOLID METAL. ELECTRIFIED GATES SHALL BECOME CHARGED UPON CLOSING. THE CONTAINMENT/EXCLUSION ABILITY OF THE GATE SHALL BE COMMENSURATE WITH THE KIND AND CLASS OF LIVESTOCK HELD, POTENTIAL OF PREDATOR PENETRATION, AND DEGREE OF RISK IF BREACHED.

3. SETTING POSTS AND BATTENS

SPACING

POSTS AND BATTENS SHALL BE SPACED ACCORDING TO TABLE 1 BELOW, UNLESS OTHERWISE SHOWN ON THE DRAWINGS. TOPOGRAPHIC FEATURES OF THE SITE MAY DICTATE EVEN CLOSER SPACING.

TABLE 1. MAXIMUM SPACING OF FENCE POSTS FOR HIGH-TENSILE ELECTRIC FENCE.

NUMBER OF WIRES	MAXIMUM LINE POST SPACING (FEET) WITH BATTENS	WITHOUT BATTENS	MAXIMUM BATTEN SPACING (FEET)
1	--	75	--
2	150	75	75
3	150	50	50
7	66	33	33

METHOD OF INSTALLATION

THE MINIMUM DEPTH OF CORNER, GATE, AND END ASSEMBLY POSTS, IF NOT SHOWN ON DRAWINGS, SHALL BE 3-1/2 FEET DEEP. LINE POSTS SHALL BE 1-1/2 FEET DEEP.

WHEN POSTS ARE DRIVEN, THE TOP OF THE POST SHALL BE PROTECTED FROM SPLITTING BY APPLYING DRIVING PRESSURE UNIFORMLY OVER THE ENTIRE POST END AREA. POSTS THAT ARE DAMAGED DURING DRIVING SHALL BE REMOVED FROM THE FENCE AND REPLACED.

WHERE POSTS ARE SET IN HAND-DUG OR AUGURED HOLES:

A. POSTHOLES SHALL BE AT LEAST 6 INCHES LARGER THAN THE DIAMETER OR SIDE DIMENSIONS OF THE POSTS.
B. POSTS SHALL BE POSITIONED ON THE FACE OF THE HOLE FROM WHERE THE RESULTANT PULL IS ORIGINATING.
C. EARTH BACKFILL AROUND THE POSTS SHALL BE THOROUGHLY TAMPED IN LAYERS NOT THICKER THAN 4 INCHES AND SHALL COMPLETELY FILL THE POSTHOLE TO THE GROUND SURFACE. CONCRETE BACKFILL AROUND THE POSTS SHALL BE RODDED INTO PLACE IN LAYERS NOT THICKER THAN 12 INCHES AND SHALL COMPLETELY FILL THE POSTHOLE TO THE GROUND SURFACE. BACKFILL, EITHER EARTH OR CONCRETE, SHALL BE CROWNED UP AROUND THE POSTS TO 2 INCHES ABOVE THE GROUND SURFACE.
D. NO STRESS SHALL BE APPLIED TO POSTS SET IN CONCRETE UNTIL AT LEAST 24 HOURS AFTER THE CONCRETE HAS SET. POSTS FOR GATES SHALL BE ALLOWED TO SET FOR AT LEAST 48 HOURS.

4. CORNER ASSEMBLIES- WHEREVER THE FENCE LINE CHANGES HORIZONTAL DIRECTION GREATER THAN 20 DEGREES BUT LESS THAN 45 DEGREES, A SINGLE CORNER POST SHALL BE INSTALLED. WHEN ENCOUNTERING HORIZONTAL DEFLECTIONS IN THE FENCE EQUAL TO OR GREATER THAN 45 DEGREES, USE A BRACE ASSEMBLY AS SPECIFIED IN SECTION 5.

5. BRACE ASSEMBLIES- A DOUBLE BRACE ASSEMBLY SHALL BE USED AT CORNERS, GATE OPENINGS, FENCE ENDS, AND AT BOTH SIDES OF A STREAM CROSSING WHEN GREATER THAN 6 STRANDS OF WIRE ARE USED. A SINGLE BRACE ASSEMBL Y - 'H' BRACE OR DIAGONAL FLOATING BRACE - MAY BE USED WITH 6 OR FEWER STRANDS OF WIRE. ON MINERAL SOILS, SINGLE CORNER POSTS MAY BE EMPLOYED FOR 2 OR LESS STRANDS OF WIRE PROVIDED POSTS ARE SET BY POWER POST DRIVER AND INSTALLED WITH A 3-4 INCH LEAN AWAY FROM THE RESULTANT PULL OF WIRES. FOR ORGANIC SOILS, USE AN 'H' BRACE OR DOUBLE BRACE ASSEMBLY AS A MINIMUM.

PULL POST ASSEMBLIES (I.E., END ASSEMBLIES) SHALL BE INSTALLED AT INTERVALS OF EVERY 4000 FEET OR LESS ON CONTINUOUS STRAIGHT REACHES, AND AT POINTS WHERE THE FENCE DEFLECTS UPWARD GREATER THAN 10 DEGREES.

6. ATTACHING WIRE TO POSTS- THE WIRE SHALL BE ATTACHED AND TENSIONED TO POSTS AS FOLLOWS:

A. IN GENERAL, THE WIRE SHALL BE PLACED ON THE SIDE OF THE POST OPPOSITE THE AREA BEING PROTECTED. IN THE CASE OF CURVES AND CORNERS, WIRE SHALL BE PLACED ON THE OUTSIDE OF POSTS UNLESS SWING CORNERS ARE USED.
B. THE WIRE SHALL BE FASTENED TO EACH CORNER, END, GATE, AND LINE POST WITH STAPLES OR OTHER APPROPRIATE FASTENERS. INSULATORS SHALL BE USED FOR ALL WIRES AT EVERY CONTACT POINT WITH POSTS, BRACE RAILS, AND TENSIONING WIRES, EXCEPT WHERE POSTS AND RAILS ARE NON-CONDUCTIVE.
C. WIRES SHALL BE TERMINATED OR SPLICED BY EMPLOYING MANUFACTURED DEVICES LABELED FOR THOSE SPECIFIC HIGH-TENSILE APPLICATIONS.
D. STAPLES SHALL BE DRIVEN DIAGONALLY TO THE GRAIN OF THE WOOD AND SHALL BE DRIVEN SO AS NOT TO RESTRICT MOVEMENT OF WIRE PAST THAT CONTACT POINT. STAPLES SHALL BE DRIVEN INTO POSTS AT AN UPWARD ANGLE IN DEPRESSIONS AND AT A DOWNWARD ANGLE ON KNOLLS.
E. EACH LINE SHALL HAVE ONE PERMANENT AND ONE STRAINER TO MAINTAIN CORRECT TENSION; EVERY 4,000 FEET FOR STRAIGHT LINE FENCE STRETCHES, EVERY 2,500 FEET FOR FENCES WITH ONE 90° CORNER, AND EVERY 1,200 FEET IN UNEVEN TERRAIN WITH SEVERAL DIPS AND CREEPS OR NON-LINEAR REACHES. TENSION INDICATOR SPRINGS ARE OPTIONAL, BUT MAY BE MOST BENEFICIAL IN REACHES UNDER 600 FEET. IN-LINE STRAINERS SHALL BE PLACED NEAR THE FRICTION CENTER OF THE FENCE LINE.
F. WHERE THERE IS A GATE(S) BETWEEN THE ENERGIZER AND OTHER PORTIONS OF THE FENCE, ELECTRICAL PULSES SHALL BE CARRIED ACROSS THE OPENING EITHER BY AN OVERHEAD WIRE OR UNDERGROUND BY A BURIED INSULATED WIRE INSERTED THROUGH A PROTECTIVE SLEEVE OF ½ INCH DIAMETER PLASTIC PIPE.

7. FENCING AT DEPRESSIONS - WHERE FENCING IS INSTALLED PARALLEL TO THE GROUND SURFACE, THE LINE POSTS AND/OR BATTENS SUBJECT TO UPWARD PULL SHALL BE ANCHORED BY MEANS OF EXTRA EMBEDMENT OR BY SPECIAL ANCHORS LABELED FOR SUCH APPLICATIONS, OR AS DETAILED ON THE DRAWINGS.

WHERE THE FENCE IS INSTALLED WITH THE TOP WIRE STRAIGHT AND PARALLEL TO THE GROUND SURFACE ON EITHER SIDE OF THE DEPRESSION, EXTRA LENGTH POSTS SHALL BE USED TO ALLOW NORMAL POST EMBEDMENT. UNLESS OTHERWISE SPECIFIED, EXTRA SPACE BETWEEN THE BOTTOM OF THE FENCE AND GROUND SHALL BE CLOSED WITH EXTRA STRANDS OF WIRE PROPERLY ANCHORED.

8. CROSSING WATERCOURSES - WHERE THE FENCE CROSSES SMALL WATERCOURSES, END THE MAIN FENCE AT THE TOP OF THE STREAM BANK ON EACH SIDE WITH AN APPROPRIATE END ASSEMBLY. FROM SEPARATE POSTS DRIVEN NEXT TO END POSTS, CONSTRUCT A SEPARATE SECTION OF FENCE ACROSS THE WATERCOURSE THAT SHALL BE MANUALLY OR AUTOMATICALLY DE-ENERGIZED DURING HIGH FLOW OR FLOODING CONDITIONS. THE ONLY TIE BETWEEN THE MAIN FENCE AND THE SECTION SPANNING THE WATERCOURSE SHALL BE A SINGLE ELECTRICAL CONNECTION. IN ADDITION, AN INSULATED OVERHEAD WIRE SHALL BE ERECTED TO MAINTAIN ELECTRICAL CONTINUITY WITH THE FENCE ON THE OTHER SIDE OF THE WATERCOURSE.
WHERE THE FENCE CROSSES LARGER WATERCOURSES OR AREAS PRONE TO FREQUENT FLOODING CAPABLE OF CARRYING DEBRIS WHICH COULD SIGNIFICANTLY IMPAIR THE FUNCTIONING OF THE FENCE, SPECIAL PROVISIONS, SUCH AS A BREAKAWAY FENCE OR LAYING THE WIRE ON THE GROUND WILL BE MADE AS SHOWN ON THE DRAWINGS.

9. ELECTRICAL CONNECTIONS- ALL JUNCTIONS OF CONDUCTORS NORMALLY INTENDED TO PASS ELECTRIC PULSES SHALL HAVE RELIABLE, MECHANICALLY SOLID, AND LOW RESISTANCE CONNECTIONS.

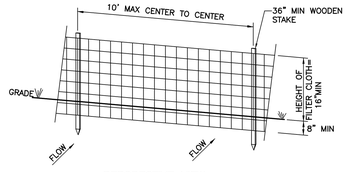
10. GROUNDING - ENERGIZERS SHALL BE PROPERLY GROUNDED AND PROTECTED FROM LIGHTNING STRIKES COMING THROUGH THE FENCE AND, WHERE ENERGIZER IS POWERED FROM A COMMERCIAL/PUBLIC ELECTRIC UTILITY, IT SHALL ALSO BE PROTECTED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

GROUNDING ELECTRODES SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

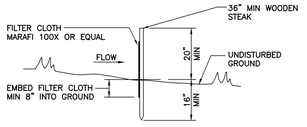
UNDER NO CIRCUMSTANCES SHALL MORE THAN ONE ENERGIZER CHARGE THE WIRES OF THE SAME FENCE.

THE ELECTRODES SHALL BE FREE OF ANY CORROSION. ELECTRODES SHALL BE A STANDARD GALVANIZED STEEL POST, NEW 1/2 INCH DIAMETER GALVANIZED STEEL PIPE, OR UL APPROVED GROUND ROD. THE EXTERIOR SURFACE OF WIRES, CLAMPS, AND ELECTRODES OF GROUNDING AND EARTH RETURN SYSTEMS SHALL BE OF THE SAME METAL COMPOSITION.

11. WARNING SIGNS - CONSPICUOUS AND CLEARLY LEGIBLE SIGNS WARNING APPROACHING PEOPLE OF THE POTENTIAL FOR ELECTRIC SHOCK AT THE FENCE SHALL BE DISPLAYED. SIGNS SHALL BE NO FARTHER APART THAN EVERY 200 LINEAR FEET ALONG REACHES OF FENCE ADJACENT TO PUBLIC TRANSPORTATION CORRIDORS, PROPERTY BOUNDARIES, INTERNAL RIGHT-OF-WAYS/EASEMENTS, GATES, AND ANY OTHER SITES THE PUBLIC IS LIKELY TO FIRST ENCOUNTER THE FENCE.



PERSPECTIVE VIEW



SECTION

NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOODEN STAKES
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

1 DET **SILT FENCE DETAIL**
SCALE: NONE
CROSS REFERENCE: NONE

LINED WATERWAY AND OUTLET (468)

1. SCOPE - THIS WORK SHALL CONSIST OF CLEARING, STRIPPING, EXCAVATING, FILLING, COMPACTING, SHAPING, GRADING, AND FURNISHING AND PLACING ROCK/STONE AND BEDDING MATERIALS NECESSARY FOR CONSTRUCTION OF THE LINED WATERWAY AT THE LOCATION(S) SHOWN ON THE DRAWINGS OR AS STAKED IN THE FIELD.

PRIOR TO COMMENCING CONSTRUCTION, PUBLIC UTILITIES SHALL BE NOTIFIED IN ACCORDANCE WITH N.Y.S. INDUSTRIAL CODE 753.

2. MATERIALS

EARTH

THE EARTH MATERIAL USED IN CONSTRUCTING THE LINED WATERWAY SHALL BE OBTAINED FROM THE WATERWAY CHANNEL AND CUT SLOPE OR OTHER APPROVED SOURCES. THE EARTH MATERIAL USED SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, AND STONES OVER 6 INCHES IN DIAMETER OR OTHER OBJECTIONABLE MATERIALS.

BEDDING

WHEN BEDDING IS SPECIFIED IT SHALL MEET THE REQUIREMENTS SHOWN ON THE DRAWINGS.

ROCK

WHEN DUMPED ROCK IS SPECIFIED, INDIVIDUAL ROCK FRAGMENTS SHALL BE DENSE, SOUND AND FREE FROM CRACKS, SEAMS AND OTHER DEFECTS CONDUCIVE TO WEATHERING. SHALE AND SILT STONES SHALL NOT BE USED. THE ROCK FRAGMENTS SHALL BE ANGULAR TO SUBANGULAR IN SHAPE AND MEET THE ROCK GRADATION REQUIREMENTS SHOWN ON THE DRAWINGS.

WHEN PLACED ROCK IS SPECIFIED, INDIVIDUAL ROCK FRAGMENTS SHALL BE DENSE, SOUND AND FREE FROM CRACKS, SEAMS AND OTHER DEFECTS CONDUCIVE TO WEATHERING. SHALE AND SILT STONES SHALL NOT BE USED. THE ROCK FRAGMENTS SHALL BE FLAT OR SLAB ROCK WITH ONE DIMENSION EQUAL TO THE COURSE THICKNESS. THE ROCK SHALL MEET THE GRADATION REQUIREMENTS SHOWN IN THE DRAWINGS.

WHEN AN ON-FARM ROCK OR STONE SOURCE IS SPECIFIED, THE ROCK SHALL MEET THE GRADATION REQUIREMENTS SHOWN ON THE DRAWINGS.

3. EARTHWORK - THE LINED WATERWAY SHALL BE CONSTRUCTED TO THE APPLICABLE CROSS-SECTIONS, LINES, GRADES, AND ELEVATIONS AS SHOWN ON THE DRAWINGS.

ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE DISPOSED OF SO THAT THEY WILL NOT INTERFERE WITH CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.

WHEN FILLING IS NECESSARY, THE FOUNDATION SHALL BE PREPARED BY STRIPPING THE AREA TO BE FILLED OF SOD AND TOPSOIL AND BY ROUGHENING THE FOUNDATION BEFORE FILL PLACEMENT. SMOOTH SURFACES SHALL BE SCARIFIED TO INSURE BONDING. PRIOR TO FILL PLACEMENT THE FOUNDATION PREPARATION SHALL BE INSPECTED AND APPROVED BY THE APPROVING OFFICIAL OR DESIGNATED REPRESENTATIVE. FILL SHALL NOT BE PLACED ON A FROZEN SURFACE. FILL SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS OF NOT MORE THAN NINE (9) INCHES IN THICKNESS PRIOR TO COMPACTION. THE MOISTURE CONTENT OF THE MATERIAL SHALL BE SUFFICIENT TO OBTAIN FIRM COMPACTION. COMPACTION SHALL BE ACCOMPLISHED BY THE ROUTING OF CONSTRUCTION EQUIPMENT OVER THE FILL SUCH THAT THE ENTIRE SURFACE OF EACH LAYER WILL BE TRAVERSED BY NOT LESS THAN ONE TRACK OF THE CONSTRUCTION EQUIPMENT OR EQUIVALENT METHODS.

4. BEDDING - EARTH FOUNDATIONS SHALL BE GRADED TO REMOVE SURFACE IRREGULARITIES AND CAVITIES SHALL BE FILLED WITH COMPACTED EARTH BACKFILL OF APPROXIMATELY THE SAME DENSITY AS THE ADJACENT FOUNDATION MATERIAL. NO FILTER FABRIC OR BEDDING SHALL BE PLACED UNTIL FOUNDATION PREPARATION IS COMPLETED AND APPROVED BY THE PROJECT DESIGNER OR DESIGNATED REPRESENTATIVE.

WHEN BEDDING IS REQUIRED, IT SHALL BE SPREAD UNIFORMLY ON THE PREPARED SURFACE IN THE DEPTH AND WIDTH SHOWN ON THE DRAWINGS. COMPACTION OF THE BEDDING IS NOT REQUIRED BUT THE SURFACES OF SUCH LAYERS SHALL BE FINISHED FREE FROM MOUNDS, DIPS OR WINDROWS. WHEN FILTER FABRIC IS REQUIRED IT SHALL BE PLACED ON THE EARTH FOUNDATION PRIOR TO PLACEMENT OF THE BEDDING MATERIAL. FILTER FABRIC SHALL MEET THE REQUIREMENTS SHOWN ON THE DRAWINGS.

5. PLACEMENT

DUMPED ROCK

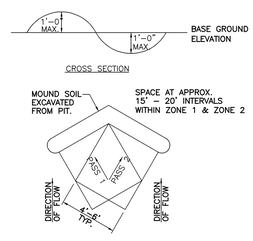
THE ROCK SHALL BE DUMPED AND SPREAD TO THE DEPTH, LINES, GRADES AND ELEVATIONS AS SHOWN ON THE DRAWINGS. THE FINISHED ROCK SURFACE SHALL BE UNIFORM TO FORM THE CROSS SECTION SHOWN ON THE DRAWINGS. THE ROCK LINING SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN SUCH A MANNER AS TO AVOID DISPLACEMENT OR DAMAGE TO THE BEDDING MATERIALS. THE ROCK SPREADING OPERATION SHALL BE DONE IN SUCH A MANNER AS TO ENSURE A HOMOGENEOUS ROCK LINING WITH LARGER ROCKS UNIFORMLY DISTRIBUTED THROUGHOUT THE LINING AND THE SPACES BETWEEN THE LARGER ROCKS FILLED WITH SMALLER ROCKS AND SPALLS. THE LINING SHALL CONTAIN NO LARGE UNFILLED SPACES CAUSED BY BRIDGING OF THE LARGER ROCK FRACTION.

PLACED ROCK

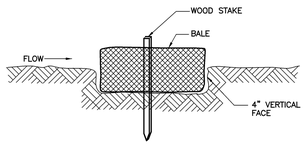
THE ROCK SHALL BE PLACED BY EQUIPMENT ON THE SURFACES AND TO THE DEPTH SPECIFIED. THE ROCK LINING SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OR DAMAGE TO THE BEDDING MATERIALS. SMALLER ROCKS SHALL NOT BE GROUPED AS A SUBSTITUTE FOR LARGER ROCK. THE ROCK SHALL BE PLACED IN A MANNER TO ENSURE A UNIFORM SURFACE AFTER PLACEMENT AND TO ENSURE THAT A TIGHT ROCK TO ROCK PATTERN IS ACHIEVED. THE VOID AREAS BETWEEN LARGE ROCKS SHALL BE CHINKED WITH SMALLER ROCK TO ENSURE THAT THE TOTAL VOID AREA FROM THE ROCK BASE TO ITS TOP SURFACE IS FILLED.

BEST MANAGEMENT PRACTICES

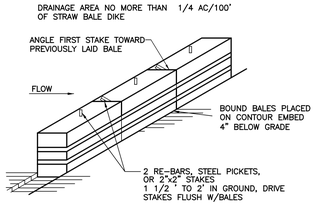
1. MINIMIZE THE DURATION OF CONSTRUCTION RELATED DISTURBANCE WITHIN EXISTING WETLANDS OR STREAMS TO THE MAXIMUM EXTENT PRACTICABLE.
2. INSOFAR AS PRACTICABLE, EXISTING VEGETATION SHOULD BE PRESERVED. SITE PREPARATION ACTIVITIES SHOULD BE PLANNED TO MINIMIZE THE AREA AND DURATION OF DISTURBANCE. IF VEGETATION REMOVAL OR CLEARING IS NECESSARY, WOODY VEGETATION SHOULD BE CUT OFF AT GROUND LEVEL, LEAVING EXISTING ROOT SYSTEMS INTACT. ALL UNNECESSARY REMOVAL OF WOODY VEGETATION SHOULD BE AVOIDED.
3. PRIOR TO THE COMMENCEMENT OF WORK, INSTALL SEDIMENT BARRIERS (SILT FENCE OR STRAW BALES) ALONG BOUNDARIES OF EXISTING WETLANDS AND STREAMS WITHIN THE WORK AREA. SEDIMENT BARRIERS MUST BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION AND REINSTALLED AS NECESSARY TO MINIMIZE FLOW OF SEDIMENTS INTO UNDISTURBED WETLANDS AND OTHER WATERS OF THE U.S. SEDIMENT BARRIERS SHOULD NOT BE INSTALLED ACROSS AN AREA OF CONCENTRATED FLOW.
4. ALL IN-STREAM WORK SHOULD BE CONDUCTED 'IN THE DRY'; IN ONE CONTINUOUS OPERATION. APPROPRIATE MEASURES SHOULD BE TAKEN TO DIVERT STREAM FLOW AROUND THE WORK AREA, SUCH AS THE DAM AND PUMP AROUND METHOD. WHEN POSSIBLE, EQUIPMENT SHOULD BE OPERATED FROM AN UPLAND AREA TO MINIMIZE UNNECESSARY DISTURBANCE TO WETLANDS AND OTHER WATERS OF THE U.S.
5. WETLANDS AND STREAMS DOWNSTREAM OF THE WORK AREA SHOULD BE MONITORED FOR SIGNS OF TURBIDITY. IF AN INCREASE IN DISCOLORATION OR TURBIDITY IS NOTED CONSTRUCTION PRACTICES SHOULD BE MODIFIED TO STABILIZE THE SOURCE OF SEDIMENT.
6. DEWATERING SHOULD BE CONDUCTED USING A PORTABLE PUMP AND HOSE, AS NECESSARY. EXCESS WATER SHOULD BE PUMPED TO A DEWATERING STRUCTURE OR GEOTEXTILE FILTER BAG LOCATED IN A WELL VEGETATED UPLAND AREA. WHEN COMPLETED, ALL DEPOSITED SEDIMENTS SHOULD BE PROPERLY MANAGED IN UPLAND AREAS OR DISPOSED OF OFF-SITE.
7. REFUELING OF CONSTRUCTION EQUIPMENT TO TAKE PLACE AT LEAST 100 FEET FROM A WETLAND OR STREAM BOUNDARY. APPROPRIATE CONTAINMENT MATERIALS (ABSORBENT AND BARRIER MATERIALS) SHOULD BE MAINTAINED ON-SITE IN AN EASILY ACCESSIBLE AREA, TO ALLOW FOR THE RAPID CONTAINMENT AND RECOVERY OF ANY SPILLS. OIL SOAKED RAGS, OR ANY OTHER CONTAMINATED MATERIALS EXPOSED TO SPILLS SHOULD BE STORED AT A DESIGNATED AREA, PROTECTED FROM PRECIPITATION AND RUNOFF, AT LEAST 100 FEET AWAY FROM ANY WETLAND OR STREAM AREAS.
8. EXCESS DEBRIS, SOILS AND CONSTRUCTION EQUIPMENT SHOULD BE REMOVED AFTER CONSTRUCTION HAS BEEN COMPLETED.
9. SEDIMENT BARRIERS AND OTHER TEMPORARY STRUCTURAL CONTROLS SHOULD BE MAINTAINED UNTIL THE AREA HAS BEEN PERMANENTLY STABILIZED. DURING AND AFTER CONSTRUCTION, REGULAR INSPECTIONS OF THE WORK AREAS SHOULD TAKE PLACE TO MONITOR SITE CONDITIONS.



2 DET **PIT AND MOUND GRADING**
SCALE: NTS
CROSS REFERENCE: NONE



3A DET **STRAW BALE BEDDING DETAIL**
SCALE: NONE
CROSS REFERENCE: NONE



3B DET **STRAW BALE DIKE DETAIL**
SCALE: NONE
CROSS REFERENCE: NONE

STREAMBANK STABILIZATION PROTECTION (580)

1. SCOPE - THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING ROCK RIPRAP, INCLUDING FILTER LAYERS OR BEDDING, AS SHOWN ON THE DRAWINGS.

PRIOR TO COMMENCING CONSTRUCTION, PUBLIC UTILITIES SHALL BE NOTIFIED IN ACCORDANCE WITH N.Y.S. INDUSTRIAL CODE 753.

2. MATERIALS - ROCK SHALL BE FREE FROM DIRT, CLAY, SAND, ROCK FINES AND OTHER MATERIALS NOT MEETING THE REQUIRED GRADATION LIMITS.

INDIVIDUAL ROCK FRAGMENTS SHALL BE DENSE, SOUND AND FREE FROM CRACKS, SEAMS AND OTHER DEFECTS CONDUCIVE TO ACCELERATED WEATHERING. EXCEPT AS OTHERWISE SPECIFIED, THE ROCK FRAGMENTS SHALL BE ANGULAR TO SUBROUNDED IN SHAPE. THE LEAST DIMENSION OF AN INDIVIDUAL ROCK FRAGMENT SHALL NOT BE LESS THAN ONE-THIRD THE GREATEST DIMENSION OF THE FRAGMENT.

EXCEPT AS PROVIDED BELOW, THE ROCK SHALL HAVE THE FOLLOWING PROPERTIES:

A. BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) NOT LESS THAN 2.5
B. ABSORPTION NOT MORE THAN 2% BY WEIGHT
C. SOUNDNESS: WEIGHT LOSS IN 5 CYCLES NOT MORE THAN 10 PERCENT WHEN SODIUM SULFATE IS USED OR 15% WHEN MAGNESIUM SULFATE IS USED.

ROCK MAY BE ACCEPTED IF SIMILAR ROCK FROM THE SAME SOURCE HAS BEEN DEMONSTRATED TO BE SOUND AFTER 5 YEARS OR MORE OF SERVICE UNDER CONDITIONS OF WEATHERING, WETTING AND DRYING, AND EROSIVE FORCES SIMILAR TO THE PROJECT.

FILTER OR BEDDING MATERIALS WHEN REQUIRED, SHALL BE AS SHOWN ON THE DRAWINGS.

3. SUBGRADE PREPARATION - GEOTEXTILE, IF SPECIFIED, SHALL BE NON-WOVEN, POLYMER FABRIC, MANUFACTURED FOR EROSION CONTROL. GEOTEXTILE WILL BE CLASS 1 AND SHALL MEET THE REQUIREMENTS OF NRCS MATERIAL SPECIFICATION 592.

THE SUBGRADE SURFACES ON WHICH THE RIPRAP OR BEDDING COURSE IS TO BE PLACED SHALL BE CUT OR FILLED AND GRADED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. WHEN FILL TO SUBGRADE LINES IS REQUIRED, IT SHALL CONSIST OF APPROPRIATE ONSITE MATERIALS.

RIPRAP SHALL NOT BE PLACED UNTIL THE FOUNDATION IS COMPLETED AND THE SUBGRADE SURFACES HAVE BEEN INSPECTED AND APPROVED BY THE APPROVING OFFICIAL OR DESIGNATED REPRESENTATIVE.

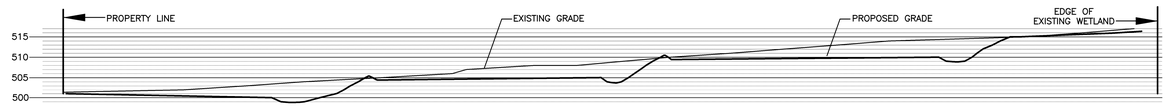
4. FILTER LAYERS AND BEDDING - WHEN A FILTER LAYER OR BEDDING IS SPECIFIED, THE MATERIAL SHALL BE SPREAD UNIFORMLY ON THE PREPARED SUBGRADE SURFACE TO THE DEPTH SPECIFIED. COMPACTION OF FILTER LAYERS OR BEDDING WILL NOT BE REQUIRED, BUT THE SURFACE OF SUCH LAYERS SHALL BE FINISHED REASONABLY FREE OF MOUNDS, DIPS OR WINDROWS.

WHEN GEOTEXTILE IS SPECIFIED, IT SHALL BE UNROLLED ALONG THE PLACEMENT AREA AND LOOSELY LAID WITHOUT STRETCHING. GEOTEXTILE SHALL BE OVERLAPPED A MINIMUM OF 18 INCHES AND SECURED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. GEOTEXTILE SHALL BE ANCHORED AS SHOWN ON THE DRAWINGS.

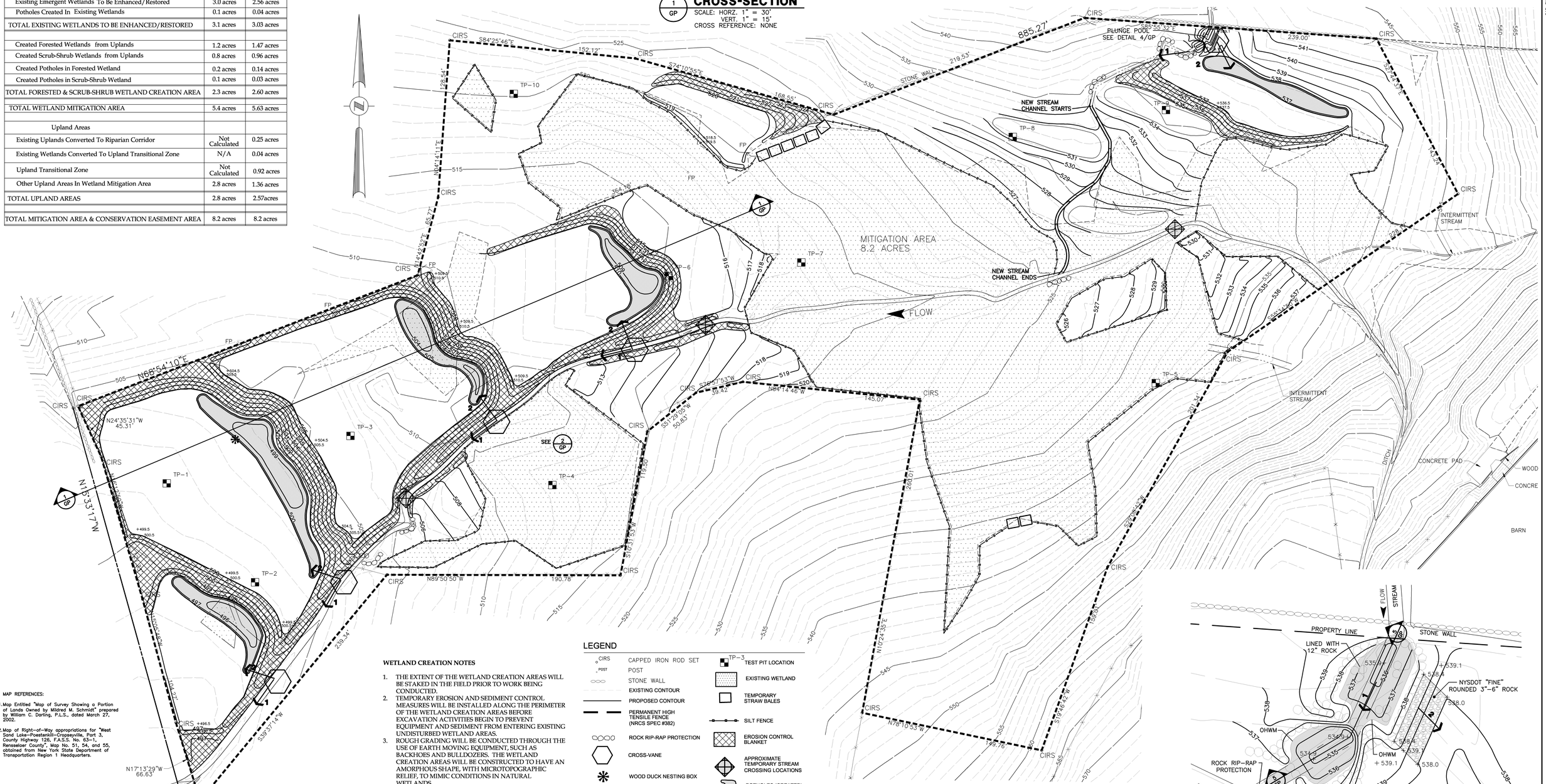
5. ROCK RIPRAP PLACEMENT - WHEN ROCK IS TO BE DUMPED BY EQUIPMENT, IT SHALL BE DUMPED ON THE SURFACES AND TO

Mitigation Summary Table

Covertype	Conceptual Plan	Final Plan
Wetland Mitigation Areas		
Existing Wetlands Converted To Riparian Corridor	Not Calculated	0.18 acres
Existing Wetlands Converted To Scrub-Shrub Wetland	N/A	0.15 acres
Existing Wetlands Converted To Forested Wetlands	N/A	0.10 acres
Existing Emergent Wetlands To Be Enhanced/Restored	3.0 acres	2.56 acres
Potholes Created In Existing Wetlands	0.1 acres	0.04 acres
TOTAL EXISTING WETLANDS TO BE ENHANCED/RESTORED	3.1 acres	3.03 acres
Created Forested Wetlands from Uplands	1.2 acres	1.47 acres
Created Scrub-Shrub Wetlands from Uplands	0.8 acres	0.96 acres
Created Potholes in Forested Wetland	0.2 acres	0.14 acres
Created Potholes in Scrub-Shrub Wetland	0.1 acres	0.03 acres
TOTAL FORESTED & SCRUB-SHRUB WETLAND CREATION AREA	2.3 acres	2.60 acres
TOTAL WETLAND MITIGATION AREA	5.4 acres	5.63 acres
Upland Areas		
Existing Uplands Converted To Riparian Corridor	Not Calculated	0.25 acres
Existing Wetlands Converted To Upland Transitional Zone	N/A	0.04 acres
Upland Transitional Zone	Not Calculated	0.92 acres
Other Upland Areas In Wetland Mitigation Area	2.8 acres	1.36 acres
TOTAL UPLAND AREAS	2.8 acres	2.57acres
TOTAL MITIGATION AREA & CONSERVATION EASEMENT AREA	8.2 acres	8.2 acres



1 GP **CROSS-SECTION**
SCALE: HORZ. 1" = 30'
VERT. 1" = 15'
CROSS REFERENCE: NONE



MAP REFERENCES:

1. Map Entitled "Map of Survey Showing a Portion of Lands Owned by Mildred M. Schmidt" prepared by William C. Darling, P.L.S., dated March 27, 2002.
2. Map of Right-of-Way appropriations for "West Sand Lake-Poestenkill-Cropseyville, Part 3, County Highway 126, F.A.S.S. No. 63-1, Rensselaer County", Map No. 51, 54, and 55, obtained from New York State Department of Transportation Region 1 Headquarters.

LEGEND

CIRS	CAPPED IRON ROD SET	TP-3	TEST PIT LOCATION
POST	POST		EXISTING WETLAND
	STONE WALL		TEMPORARY STRAW BALES
	EXISTING CONTOUR		SILT FENCE
	PROPOSED CONTOUR		EROSION CONTROL BLANKET
	PERMANENT HIGH TENSILE FENCE (NRCS SPEC #382)		APPROXIMATE TEMPORARY STREAM CROSSING LOCATIONS
	ROCK RIP-RAP PROTECTION		POTHOLES (CREATED)
	CROSS-VANE	OHWM	ORDINARY HIGH WATER MARK
	WOOD DUCK NESTING BOX		
1	PRIMARY FLOW		
2	SECONDARY FLOW		

GRADING NOTES

1. ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS AND NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PERMITS, EXCEPT AS AUTHORIZED APPROPRIATELY IN WRITING BY THE RESPECTIVE AGENCIES.
2. GRADING WILL BE CONDUCTED IN THE LATE SUMMER OR FALL, DURING THE DRIER MONTHS.
3. EQUIPMENT, SOIL STOCKPILES AND OTHER MATERIALS ARE TO REMAIN UPSLOPE OF EROSION AND SEDIMENT CONTROLS AT ALL TIMES.
4. ALL IN STREAM GRADING ACTIVITIES ARE TO BE DONE WITHIN THE JUNE 15TH THROUGH SEPTEMBER 30TH WINDOW UNLESS AN EXTENSION IS GRANTED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
5. A THIRD PARTY ENVIRONMENTAL MONITOR (EM) FAMILIAR WITH WETLAND MITIGATION PROCEDURES WILL BE ON-SITE TO ENSURE THE PROPER IMPLEMENTATION OF THE WETLAND MITIGATION PLAN.
6. ONCE SITE WORK HAS BEEN COMPLETED, ALL EQUIPMENT AND CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE WETLAND MITIGATION AREA.
7. EROSION AND SEDIMENTATION CONTROLS LOCATED AROUND EXISTING WETLAND AREAS WILL BE MAINTAINED IN GOOD CONDITION UNTIL THE WETLAND CREATION AREAS HAVE BEEN STABILIZED WITH AT LEAST 80% VEGETATIVE COVER.
8. ALL MULTI-FLORA ROSE (ROSA MULTIFLORA) WITHIN THE MITIGATION SITE SHOULD BE REMOVED FROM THE SITE AND BURIED IF POSSIBLE.

STREAM STABILIZATION NOTES (EXISTING STREAM)

1. ALL IN-STREAM WORK SHOULD BE CONDUCTED "IN THE DRY", IN ONE CONTINUOUS OPERATION AND WITHIN THE JUNE 15TH THROUGH SEPTEMBER 30TH WINDOW. APPROPRIATE MEASURES SHOULD BE TAKEN TO DIVERT STREAM FLOW AROUND THE WORK AREA, SUCH AS THE DAM AND PUMP AROUND METHOD.
2. EXISTING STREAM BANKS SHOULD BE STABILIZED WHERE SPECIFIED ON THE PLAN OR WHERE NEEDED AS PER DETAIL 3 ON THIS SHEET. THE PLACEMENT OF STREAM PROTECTION MEASURES SHOULD BE DONE IN CONSULTATION WITH THE EM.
3. ROCK RIP-RAP SHOULD CONSIST OF ROUNDED NATIVE ROCK. IF AVAILABLE, ON-SITE ROCKS UNCOVERED DURING THE EXCAVATION OF THE WETLAND CREATION AREAS MAY BE UTILIZED WITHIN THE STREAM TO STABILIZE THE BANKS.
4. CROSS-VANES SHOULD BE INSTALLED AS PER DETAIL 2 ON THIS SHEET.

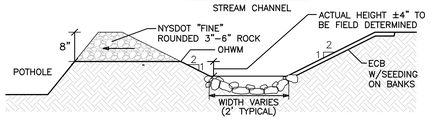
NEW STREAM CHANNEL NOTES

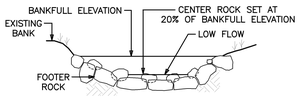
1. A NEW STREAM CHANNEL WILL BE CREATED TO CONNECT THE TRIBUTARY ENTERING THE MITIGATION AREA FROM THE NORTH TO THE MAIN STREAM THAT FLOWS THROUGH THE SITE.
2. THE NEW STREAM CHANNEL SHOULD BE INSTALLED AS PER DETAIL 3 ON THIS SHEET.
3. ROCK RIP-RAP SHOULD CONSIST OF ROUNDED NATIVE ROCK. IF AVAILABLE, ON-SITE ROCKS UNCOVERED DURING THE EXCAVATION OF THE WETLAND CREATION AREAS MAY BE UTILIZED TO STABILIZE THE BANKS.
4. MULTIPLE CROSS-VANES WILL BE CREATED IN SERIES TO CREATE A "STAIRCASE EFFECT" TO PROVIDE A GRADUAL CHANGE IN STREAM ELEVATION, AS PER DETAILS 4 AND 5 ON THIS SHEET.

WETLAND CREATION NOTES

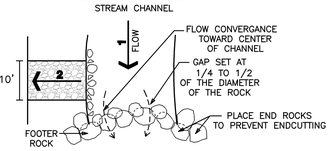
1. THE EXTENT OF THE WETLAND CREATION AREAS WILL BE STAKED IN THE FIELD PRIOR TO WORK BEING CONDUCTED.
2. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED ALONG THE PERIMETER OF THE WETLAND CREATION AREAS BEFORE EXCAVATION ACTIVITIES BEGIN TO PREVENT EQUIPMENT AND SEDIMENT FROM ENTERING EXISTING UNDISTURBED WETLAND AREAS.
3. ROUGH GRADING WILL BE CONDUCTED THROUGH THE USE OF EARTH MOVING EQUIPMENT, SUCH AS BACKHOES AND BULLDOZERS. THE WETLAND CREATION AREAS WILL BE CONSTRUCTED TO HAVE AN AMORPHOUS SHAPE, WITH MICROTOPOGRAPHIC RELIEF, TO MIMIC CONDITIONS IN NATURAL WETLANDS.
4. THE WETLAND CREATION AREAS WILL BE ROUGH GRADED TO 12-INCHES BELOW DESIGN CONTOURS. EXCESS SUBSOIL EXCAVATED FROM THE WETLAND CREATION AREAS WILL BE PROPERLY MANAGED WITHIN AN UPLAND AREA OUTSIDE OF THE MITIGATION AREA OR HAULED OFF-SITE TO AN APPROPRIATE LOCATION.
5. A 12-INCH LAYER OF TOPSOIL WILL BE PLACED WITHIN THE WETLAND CREATION AREAS TO ACHIEVE FINAL GRADES. TOPSOIL WILL BE FROM A MIX OF ON-SITE SOILS AND IMPORTED TOPSOIL. IN GENERAL, OFF-SITE SOILS WILL BE REQUIRED TO HAVE AN ORGANIC CONTENT OF 25% OR HIGHER AND A PH BETWEEN 5.5 AND 7.5. OFF-SITE TOPSOIL SHOULD BE A FRIABLE, NATURAL LOAM, FREE OF SUBSOIL, CLAY LUMPS, BRUSH, STONES, OR OTHER DELETERIOUS MATERIAL LARGER THAN TWO INCHES. ADDITIONALLY, IT WILL BE REQUIRED THAT THE CONTRACTOR DEMONSTRATE THAT THE OFF-SITE TOPSOIL DID NOT COME FROM A LOCATION WHERE THERE ARE INVASIVE SPECIES GROWING.
6. TOPSOIL WILL BE SPREAD USING HEAVY EQUIPMENT. ONCE THE TOPSOIL HAS BEEN PLACED, CARE WILL BE TAKEN TO NOT CONCENTRATE HEAVY EQUIPMENT TRAFFIC ALONG SPECIFIC ROUTES, SO AS TO NOT LOCALLY COMPACT SOILS.
7. LOW-WEIGHT-TO-SURFACE AREA EQUIPMENT (I.E., BOBCAT) WILL BE USED TO CREATE AN IRREGULAR SURFACE WITH DEPRESSIONS THAT RESEMBLES "PIT AND MOUND" TOPOGRAPHY AS SHOWN IN THE PIT AND MOUND GRADING DETAIL WITHIN ZONES 1 AND 2. THE PLACEMENT AND ORIENTATION OF THE "PIT AND MOUNDS" WILL BE DONE IN CONSULTATION WITH THE EM. IN GENERAL, THE "PIT AND MOUNDS" WILL BE ORIENTED SO THAT THEY WILL COLLECT SURFACE WATER RUN-OFF FROM SURROUNDING HIGHER AREAS.
8. THE WETLAND CREATION AREAS WILL BE PREPARED FOR SEEDING THROUGH THE SCARIFICATION (I.E., DISKING OR RAKING) OF SOILS TO A DEPTH OF APPROXIMATELY 6-INCHES. THIS WILL LOOSEN THE TOPSOIL AND REMOVE EQUIPMENT TRACKS. STUMPS AND ROCKS THAT ARE FOUND DURING THE SCARIFICATION PROCESS, IF ANY, WILL BE LEFT ON-SITE AS WILDLIFE COVER.

CROSS SECTION VIEWS

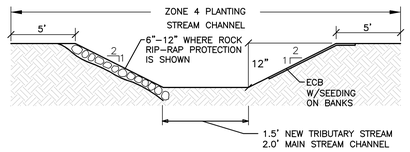




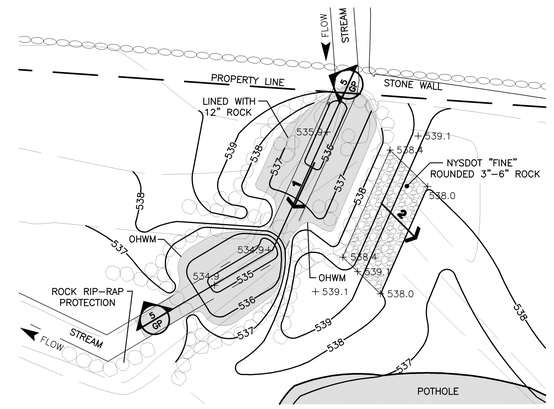
TYPICAL PLAN VIEW



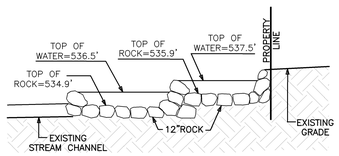
2 GP **TYPICAL CROSS-VANE DETAIL**
SCALE: NONE
CROSS REFERENCE: NONE



3 GP **STREAM STABILIZATION CROSS-SECTION**
SCALE: NONE
CROSS REFERENCE: NONE



4 GP **PLUNGE POOL PLAN**
SCALE: 1"=5'
CROSS REFERENCE: NONE



5 GP **PLUNGE POOL & PROFILE**
SCALE: NONE
CROSS REFERENCE: NONE

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
03/08/07	1	INCORPORATED USACOE COMMENTS	DMP	KMG	KMG
03/12/07	2	CORRECTED MINOR PRINTING ERRORS	DMP	KMG	KMG
04/16/07	3	REVISED PER USACOE/NYSDEC COMMENTS	TCB	KMG	KMG
04/23/07	4	REVISE DWG. NO FROM 04-556 TO 07-0213	TCB	KMG	KMG
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PROJ. NO: 00.6678
SCALE : 1"=30'
DATE : MARCH 5, 2007

WETLAND MITIGATION GRADING PLAN

CAPITAL DISTRICT FARMS WETLAND MITIGATION SITE
BESICORP DEVELOPMENT, LLC

TOWN OF BRUNSWICK — RENSSELAER COUNTY, NEW YORK

C.T. MALE ASSOCIATES, P.C.
50 CENTURY HILL DRIVE, P.O. BOX 727, LATHAM, NY 12110
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ARCHITECTURE & BUILDING SYSTEMS ENGINEERING * CIVIL ENGINEERING
ENVIRONMENTAL SERVICES * SURVEY & LAND INFORMATION SERVICES

GP
SHEET 1 OF 3
DWG. NO: 07-0213

CAD DWG. FILE NAME: 01-GRADING.DWG



PLANTING NOTES

1. PLANTINGS SHOULD BE INSTALLED DURING THE NEXT GROWING SEASON FOLLOWING THE INITIAL CONSTRUCTION (I.E., SPRING). THIS WILL ALLOW TIME FOR THE WETLAND CREATION AREAS TO STABILIZE AND FOR WETLAND HYDROLOGY PATTERNS TO BECOME EVIDENT SO THAT PLANTINGS COULD BE INSTALLED IN APPROPRIATE LOCATIONS.
2. PLANTINGS SHOULD BE INSTALLED IN ACCORDANCE WITH SUPPLIER RECOMMENDATIONS, UNDER THE OBSERVATION OF THE ENVIRONMENTAL MONITOR (EM).
3. PLANTINGS SHOULD BE PLACED TO ATTAIN A MIXTURE OF SPECIES IN EACH AREA AND SPECIES SHOULD NOT BE PLANTED IN ORGANIZED ROWS, AS THIS FORM OF DISPERSAL WOULD NOT MIMIC NATURAL FIELD CONDITIONS.
4. WOODY PLANTINGS SHOULD NOT BE INSTALLED IN STANDING WATER.
5. PLANTINGS ARE SUBJECT TO AVAILABILITY. REASONABLE SUBSTITUTIONS MAY BE MADE.

Planting Zones

Zone	Community	Approximate Area
Zone 1	Forested Wetland	1.57 acres
Zone 2	Scrub-Shrub Wetland	1.11 acres
Zone 3	Potholes	0.21 acres
Zone 4	Riparian Corridor	0.43 acres
Zone 5	Upland Transitional Zone	0.96 acres

Zone 1 Plantings
Forested Wetlands

Common Name (Indicator Status)	Scientific Name	Bare Root (18 - 24 inches)		B&B (~1" Cal.)	
		Quantity	Spacing	Quantity	Spacing
Red Maple (FAC)	*Acer rubrum*	130	10 feet O.C.	5	Random
Speckled Alder (FACW+)	*Alnus incana (A. rugosa)*	130	10 feet O.C.	–	–
Green Ash (FACW)	*Fraxinus pennsylvanica*	130	10 feet O.C.	5	Random
Swamp White Oak (FACW+)	*Quercus bicolor*	130	10 feet O.C.	–	–
Black Willow (FACW+)	*Salix nigra*	130	10 feet O.C.	–	–

Zone 2 Plantings
Scrub-Shrub Wetlands

Common Name (Indicator Status)	Scientific Name	Bare Root (18 - 24 inches)		B&B (~1" Cal.)	
		Quantity	Spacing	Quantity	Spacing
Silky Dogwood (FACW)	*Cornus amomum*	255	6 feet O.C.	5	Random
Red Osier Dogwood (FACW+)	*Cornus stolonifera*	255	6 feet O.C.	5	Random
Silky Willow (OBL)	*Salix sericea*	255	6 feet O.C.	–	–
Elderberry (FACW-)	*Sambucus canadensis*	255	6 feet O.C.	5	Random
Arrowwood (FACW-)	*Viburnum recognitum*	255	6 feet O.C.	–	–

Zone 4 Plantings
Riparian Corridor

Common Name (Indicator Status)	Scientific Name	Nursery Stock Condition	Position along corridor	Approximate Spacing	Approximate Number
Red Osier Dogwood (FACW+)	*Cornus stolonifera*	Bare root (18-24")	Randomly within corridor	5 feet O.C.	145
Silky Dogwood (FACW)	*Cornus amomum*	Bare root (18-24")	Randomly within corridor	5 feet O.C.	145
Elderberry (FACW-)	*Sambucus canadensis*	Bare root (18-24")	Randomly within corridor	5 feet O.C.	145
Highbush Cranberry (FACW)	*Viburnum trilobum*	Bare root (18-24")	Randomly within corridor	5 feet O.C.	145

Zone 5 Plantings
Upland Transitional Zone

Common Name (Indicator Status)	Scientific Name	Nursery Stock Condition	Approximate Spacing	Approximate Number
Serviceberry (FAC)	*Amelanchier canadensis*	18-24" bare root	12 feet O.C.	100
Gray Birch (FAC)	*Betula populifolia*	18-24" bare root	12 feet O.C.	100
Graystem Dogwood (FAC)	*Cornus foemina ssp.racemosa*	18-24" bare root	12 feet O.C.	100

SEEDING NOTES

1. THE WETLAND CREATION AREAS AND ADJACENT UPLAND SLOPES SHOULD BE SEEDED IMMEDIATELY FOLLOWING GRADING ACTIVITIES UNDER THE OBSERVATION OF THE ENVIRONMENTAL MONITOR (EM). THE IMMEDIATE SEEDING OF THE WETLAND CREATION AREAS SHOULD BE CONDUCTED TO OUTCOMPETE INVASIVE SPECIES SUCH AS PURPLE LOOSESTRIFE (*LYTHRUM SALICARIA*), COMMON REED (*PHRAGMITES AUSTRALIS*), AND MULTI-FLORA ROSE (ROSA MULTIFLORA).
2. THE RECOMMENDED SEED MIXTURES SHOULD BE APPLIED IN THE FALL, PRIOR TO GROUND FROST, OR IN THE EARLY SPRING, AFTER THE GROUND HAS THAWED. DEPENDING ON THE TIME OF YEAR THE SEEDING IS CONDUCTED, WETLAND SEEDS MAY NOT GERMINATE RIGHT AWAY SINCE MOST SEEDS REQUIRE COLD STRATIFICATION.
3. IN ORDER TO PROVIDE A PROTECTIVE VEGETATIVE COVER UNTIL THE WETLAND SEED BEGINS TO GROW, WINTER RYE SHOULD BE APPLIED, IF DETERMINED TO BE NECESSARY BY THE EM. IF SEEDING TAKES PLACE DURING THE NON-GROWING SEASON, IT IS ANTICIPATED THAT THE FROST CYCLE SHOULD WORK THE SEEDS INTO THE SOIL AND THE SEEDS SHOULD GERMINATE IN THE SPRING.
4. SEEDS IN WETLAND AREAS SHOULD BE APPLIED WHILE THE GROUND IS SATURATED BUT NOT INUNDATED, AS THIS WILL NOT ALLOW SEED GERMINATION.
5. NO FERTILIZER OR LIME IS PROPOSED TO BE PLACED WITHIN THE WETLANDS, SINCE ORIGINAL TOPSOIL FROM AN EXISTING WETLAND WILL BE APPLIED. FERTILIZER, LIME AND MULCH MAY BE APPLIED AS PER MANUFACTURER INSTRUCTIONS IN UPLAND AREAS.
6. SEED SHOULD BE APPLIED MANUALLY USING A CYCLONE SEEDER. TO ACHIEVE AN EVEN DISTRIBUTION OF SEED BY HAND-SEEDING, IT IS RECOMMENDED THAT ONE HALF OF THE SEED MIXTURE BE APPLIED WALKING IN ONE DIRECTION ON THE PROJECT SITE, AND THE OTHER HALF BE APPLIED BY WALKING AT 90 DEGREES TO THE INITIAL DIRECTION. SEEDED AREAS SHOULD BE RAKED TO MIX THE SEEDS INTO THE SOIL.
7. SEEDED AREAS SHOULD BE MULCHED WITH A WEED-FREE STRAW OR A TEMPORARY EROSION CONTROL BLANKET, WHERE SPECIFIED ON THE PLANS. MULCH SHOULD BE SPREAD LIGHTLY IN WETLAND AREAS TO ENSURE THAT THE WETLAND SEED HAS ENOUGH LIGHT TO GERMINATE. MULCH APPLICATION SHOULD BE CONDUCTED IN CONSULTATION WITH THE EM.
8. SEED MIXES ARE SUBJECT TO AVAILABILITY. REASONABLE SUBSTITUTIONS MAY BE MADE.

Sample Seed Mixtures for Zone 1
Forested Wetlands

Seed Mixture (Choose 1)	Supplier	Composition	Application Rate
Northeast Wetland Forest Herb Mix	Southern Tier Consulting, Inc. West Clarksville, NY (585) 968-3120	Mixture of native sedges, grasses and wildflowers	Approx. 3 lbs/acre
New England Wetmix (Wetland Seed Mix)	New England Wetland Plants, Inc. Amherst, MA (413) 256-1752	Mixture of native sedges, grasses and wildflowers	Approx. 17.5 lbs/acre

Sample Seed Mixtures for Zone 2 & Zone 4*
Scrub-Shrub Wetlands and Riparian Corridor

Seed Mixture (Choose 1)	Supplier	Composition	Application Rate
Northeast Wetland Shrub/Herb Mix	Southern Tier Consulting, Inc. West Clarksville, NY (585) 968-3120	Mixture of native shrubs, sedges and wildflowers	Approx. 2 lbs/acre
New England Wetmix (Wetland Seed Mix)	New England Wetland Plants, Inc. Amherst, MA (413) 256-1752	Mixture of native sedges, grasses and wildflowers	Approx. 17.5 lbs/acre

* only disturbed areas of Zone 4 require seeding

Sample Seed Mixtures for Zones 3 and 5
Potholes and Upland Transitional Zones

Seed Mixture (Choose 1)	Supplier	Composition	Application Rate
Northeast Upland Native / Naturalized Wildflower Mix	Southern Tier Consulting, Inc. West Clarksville, NY (585) 968-3120	Mixture of native grasses and wildflowers	Approx. 23 lbs/acre
New England Upland Erosion Control/ Restoration Mix (Moist Sites)	New England Wetland Plants, Inc. Amherst, MA (413) 256-1752	Mixture of native grasses and wildflowers	Approx. 35 lbs/acre

LEGEND

- CIRS — CAPPED IRON ROD SET
- FP — FENCE POST
- SIGN
- DECIDUOUS TREE
- STONE WALL
- PERMANENT HIGH TENSILE FENCE (NRCS SPEC #382)
- WOOD DUCK NESTING BOX
- EXISTING WETLAND
- ZONE 1 WETLAND CREATION FORESTED
- ZONE 2 WETLAND CREATION SCRUB/SHRUB
- ZONE 3 POTHOLES (CREATED)
- ZONE 4 RIPARIAN CORRIDOR ENHANCEMENT AREA
- ZONE 5 UPLAND TRANSITIONAL ZONE

MAP REFERENCES:

1. Map Entitled "Map of Survey Showing a Portion of Lands Owned by Mildred M. Schmidt" prepared by William C. Darling, P.L.S., dated March 27, 2002.
2. Map of Right-of-Way appropriations for "West Sand Lake–Poestenkill–Cropseyville, Part 3, County Highway 126, F.A.S.S. No. 63–1, Rensselaer County", Map No. 51, 54, and 55, obtained from New York State Department of Transportation Region 1 Headquarters.

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
03/08/07	1	INCORPORATED USACOE COMMENTS	DMP	KMG	KMG
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WETLAND MITIGATION PLANTING PLAN

CAPITAL DISTRICT FARMS WETLAND MITIGATION SITE
BESICORP DEVELOPMENT, LLC

TOWN OF BRUNSWICK — RENSSELAER COUNTY, NEW YORK

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ARCHITECTURE & BUILDING SYSTEMS ENGINEERING * CIVIL ENGINEERING
ENVIRONMENTAL SERVICES * SURVEY & LAND INFORMATION SERVICES

PP

CAD DWG. FILE NAME: 02– PLANTING.DWG

Plan

Erosion and Sedimentation Control Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

Plan

Erosion and Sedimentation Control Plan

Submitted to

BEPCO CC Cogen Facility

September 2007

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1.0 Introduction

1.1. Background

During the construction of the ***Besicorp-Empire Power Generating Facility*** (BEPCO CC Cogen Facility), this *Erosion and Sedimentation Control Plan (ESCP*), will be used to direct the soil erosion control and sedimentation prevention measures to be followed during the initial site clearing, grading and excavation activities, as well as during the construction phase of the project. This plan will be implemented in conjunction with the following plans developed for the construction phase of this facility:

- Stormwater Pollution Prevention Plan (SWPPP)
- Oil Spill Prevention Plan (OSPP)
- Emergency Response Plan (ERP)
- Health and Safety Plan (HASP)

The general grading of the facility and the drainage system will be modified to divert uncontaminated stormwater from the South-40 area into one of the stormwater retention ponds and/or on-site wetlands during the Foundation phase (see Figure 2 in Appendix A), as well as the Plant Construction phase (See Figure 3 in Appendix A).

During construction, precipitation and even some groundwater may collect in deep foundation excavations. Groundwater infiltration into the excavated piling area will be minimized by installing sheet piles along the sidewalls of the excavated area. Likewise, stormwater will be diverted from entering open excavations using berms, swales, and/or silt-fence barriers. If after inspection it is determined that the water collected in the pile area is not contaminated, it will be pumped, treated, if necessary, and then transferred to one of the retention ponds when it impedes excavation, or affects the ability to achieve proper compaction of backfill soils. In general, the stormwater collected in the retention ponds will be allowed to evaporate and/or be recycled for one or more of the following construction-related applications:

- Increase moisture in dry soils for compaction purposes
- Increase moisture in soils being stabilized onsite
- Application to roadways or open excavations for dust suppression
- Decontamination of equipment

1.2 Objectives of the Plan

This Erosion and Sedimentation Control Plan (ESCP) is intended to serve as a guidance manual for minimizing erosion of disturbed soils and transportation of sediments into sensitive resources (wetlands, streams, and residential areas) during construction of the BEPCO CC Cogen Facility at the South 40 location.

The Best Management Practices (BMPs) described in this plan are designed to accommodate varying field conditions and assist in minimizing impacts to the environment. The goal of this Plan is to preserve the integrity of environmentally sensitive areas and to maintain existing water quality by implementing the following objectives:

- Minimize the extent and duration of disturbance
- Minimize erosion of exposed soil by diverting runoff to stabilized areas
- Install temporary and permanent erosion control measures
- Establish an effective inspection and maintenance program.

2.0 Facility Description

2.1 Project Description

Facility Name:	***Besicorp-Empire Power Generating Facility*** – Rensselaer, NY.
Facility Street Address:	36 Riverside Ave, Rensselaer, NY 12144 (Rensselaer County)
Owner Name:	***Besicorp-Empire Power Company, LLC***
Owner Address:	1151 Flatbush Rd, Kingston, NY 12401
NAICS Code:	4911
Latitude/Longitude:	42º 37′ 48″N/ 73° 45' 08"W
Nearest Surface Water Body:	Hudson River
Distance:	< 1 miles (approximate)

BEPCO CC Cogen Facility will construct a cogeneration power plant on an undeveloped parcel of real property known as the "South 40" and located at 36 Riverside Ave in Rensselaer, NY (Rensselaer County). The site is located less than one (1) mile east of the Hudson River and is bounded by Riverside Avenue on the west, by the Port Access Highway on the east and south, and by another industrial facility on the north. A *Site Location Map* (*See Figure 1 in Appendix A*) shows the geographic location of the facility. Construction of the power plant is expected to commence in October of 2007 and be completed by the year 2010.

2.2 Monitoring and Training

An on-site Environmental Inspector (EI) will oversee implementation of the BMPs described in this Plan during the construction activities related to the development of BEPCO CC Cogen Facility, including being responsible for the following activities:

- Identify erosion/sediment control and stabilization needs at South 40 site
- Monitor the installation and implementation of erosion controls to prevent sediment flow into the adjacent roads, stormwater drainage system, and Hudson River
- Inspect and document temporary erosion control measures:
  - On a daily basis in areas of active construction or equipment operation
  - On a weekly basis in areas with no construction or equipment operation
  - Within 24 hours of each 1.0" of rainfall
- Identify, oversee, and document corrective actions to bring an activity back into compliance

- Assess and advise when environmental conditions (for e.g. wet weather) make it advisable to restrict construction activities to avoid excessive soil disturbance and/or erosion
- Monitor and maintain the compliance of this Plan with other environmental plans prepared per the conditions of the Article X Certificate and other federal or state permits and approvals
- Maintain records of training, compliance plans, proposed mitigation measures, and other Federal or state environmental permits during active construction and restoration.

Employee training programs will be implemented to inform on-site personnel about the components and goals of various environmental compliance plans, including ESCP. The level of training will be commensurate with the duties of the personnel. Training will be given prior to the start of construction and throughout the construction process to new employees, as needed, and will cover the following issues:

- LG Constructors and BEPCO CC Cogen work-policies and commitments
- The BMPs and other requirements of this and other environmental compliance plans
- The requirements of the Health and Safety Plan
- Job or activity specific permit requirements.

3.0 Clearing and Grubbing

3.1 Clearing

Clearing operations will include the removal of vegetation within the construction area. Various clearing methods will be employed depending on tree size, contour of the land, and the ability of the ground to support clearing equipment. Vegetative clearing will generally be accomplished by cutting equipment. The following procedures will be standard practice during clearing:

- Prior to beginning the removal of vegetation, the limits of clearing will be established and identified in accordance with the construction drawings.
- Construction activities and ground disturbance will be confined to within the area shown on the construction drawings (*See Figures C-4001 and C-4002*).
- Trees to be saved will be clearly marked and protected.
- Brush and trees will be felled into the construction area to minimize damage to adjacent trees and structures. Trees that inadvertently fall beyond the edge of the construction zone will be immediately moved onto the construction area and disturbed areas will be immediately stabilized.
- Cleared trees and vegetation will be chipped or pulverized and stockpiled on the project site at a location determined by LG Constructors.
- Brush and limbs may be disposed as described below depending on local restrictions, applicable permits, and construction stipulations.
- Existing surface drainage patterns will not be altered by the placement of timber or brush piles at the edge of the Project area.

3.2 Contractor Terms and Conditions

The contractor will perform the clearing and grubbing task in compliance with following measures:

- Strip and segregate topsoil per the site construction plans
- Install erosion control structures as outlined in this Plan and identified on the construction drawings, and maintain them throughout construction and restoration activities
- Implement measures to comply with relevant plans and procedures prepared per the conditions of the Article X Certificate and other federal or state permits and approvals
- Implement and comply with the Health and Safety plans

- Restore and re-vegetate disturbed areas in accordance with the measures outlined in this Plan and as directed by project representatives.
- Confine clearing and grubbing to the limits as indicated on the drawings. Areas disturbed by the Contractor's activities will be considered the "Construction Area."
- Maintain adequate barricades, guards, warning lights, other protection required at excavations and hazards created by work.
- Be responsible for control measures to prevent damage from erosion, sedimentation to on-site and off-site areas.
- Do not place or spill excavated or waste materials where they will inconvenience the public, impede travel, or impede surface drainage unless such drainage is being safely rerouted away from the excavation without causing other damage.
- Placement of erosion control fence will be done prior to construction activities. Limited clearing may be performed if necessary to install erosion control fencing.
- Remove trees, brush, and shrubs, undergrowth, and dead wood within clearing limits as shown on the plans and approved by the Department of the Army Permit No. 2003-00388 (Dated March 24, 2006). Tap roots or main root balls and other projections 6-inches in diameter and greater will be grubbed out to a depth of at least 24-inches below existing ground elevation. Trees and vegetation outside the grading and excavation area will not be removed without consultation among the Owner, LG Constructors and relevant agency representatives.
- Strip the surface of the ground to include grass, weeds, accumulated organic material, small roots, soil, and debris to a depth of 3-4 inches. Stockpile material on the project site at a location determined by LG Constructors.
- Holes or voids remaining after grubbing operations will have the sides broken down to flatten out the slopes, and will be filled with acceptable material from the existing on-site soil stockpile.
- Debris or materials other than pulverized chips that must be removed from the property will be disposed of at a landfill or disposal site licensed to accept such material or debris.

3.3 Excavation, Segregation, and Stockpiling

- Topsoil and subsoil should be segregated from each other in separate stockpiles.
- Excavated material exhibiting discoloration, odor or other unusual characteristics should be segregated from other materials and stockpiled separately.
- If the demarcation layer established in accordance with the SMP is encountered the Contractor should notify project representatives.

3.4 Cleanup

- Level off and clean up areas used for the storage of materials or the temporary deposit of excavated earth
- Clean tools and equipment engaged in the designated decontamination area prior to removing them off-site. Remove surplus material along with cleaned tools and equipment.
- Thoroughly clean drainage ways, roads, parking lots, sidewalks, and paved surfaces and remove and dispose of debris and mud

4.0 Best Management Practices (BMPs)

Best management practices (BMPs) selected for this facility are broad ranging and may include processes, procedures, human actions, or construction. The objective is to prevent excessive erosion and/or sedimentation of surface waters by stressing the importance of proper management and awareness of erosion control measures.

4.1 Installing Temporary Sediment Barriers

- Sediment barriers, which are temporary erosion controls intended to minimize the flow of sediment and to prevent the deposition of sediments into sensitive resources, will be installed following vegetative clearing operations. They may be constructed of materials such as silt fence, staked straw bales, compacted earth (e.g., drivable berms across travel lanes), sandbags, or an equivalent material (Figures 5-6 in Appendix A).
- Install temporary sediment barriers at the base of slopes adjacent to road crossings and at waterbody and wetland crossings.
- Do not stake or trench in place straw bales used on equipment bridges or on mats across the travel lane.
- Inspect temporary sediment barriers daily in areas of active construction for proper functioning and maintenance. In other areas, sediment barriers will be inspected and maintained on a weekly basis throughout construction, and within 24 hours following storm events.
- Maintain temporary sediment barriers in place until permanent revegetation measures are successful or the upland areas adjacent to wetlands, waterbodies, or roads are stabilized.
- Remove temporary sediment barriers from an area when replaced by permanent erosion control measures or when the area has been successfully restored.

4.2 Grading

The Project area will be graded as needed to provide a level workspace for safe operation of heavy equipment used in construction. The following procedures will be standard practice during grading:

- Topsoil segregation methods will be used. The following BMPs will be used during segregation activities:
  - Prevent the mixing of topsoil with subsoil by stripping topsoil from the full work area when possible.
  - Segregate at least 12 inches of topsoil in deep soils with more than 12 inches of topsoil. In soils with less than 12 inches of topsoil, make effort to segregate the entire topsoil layer.

- Maintain separation of salvaged topsoil and subsoil throughout construction activities.
- For wetlands, segregate the top 12 inches of topsoil, except in areas where standing water is present or soils are saturated or frozen.
- Leave gaps in the topsoil piles for the installation of temporary interceptor dikes to allow water to be diverted.
- Do not use topsoil for padding, backfill or trench plugs.

- Remove tree stumps in upland areas within the construction area to allow adequate clearance for the safe operation of vehicles and equipment. Stumps within the temporary construction area will be removed or ground to a suitable height that will allow the safe passage of equipment. Stumps will be chipped and reused on site or disposed at an approved off-site location

4.3 Installing Temporary Interceptor Dikes

- Temporary interceptor dikes, which are temporary erosion control measures intended to reduce runoff velocity and divert water off the construction area, will be installed following grading operations. The interceptor dikes are to be installed on disturbed areas as necessary to avoid excessive erosion. Temporary interceptor dikes may be constructed of materials such as compacted soil, silt fence, staked straw bales, or sand bags.
- Temporary slope breakers will be installed on slopes greater than 5 percent, where the base of the slope is less than 50 feet from waterbody, wetland or road crossing at the spacing indicated below (closer spacing should be used if necessary). Where the base of the slope is equal or greater than 50 feet from a waterbody, wetland, or road crossing, install interceptor dikes using spacing necessary to avoid excessive erosion.

Slope (%)	**Spacing (feet)**
<5	No Structure
5 - 15	300
> 15 - 30	200
> 30	100

- Direct the outfall of each temporary interceptor dike to a stable, well vegetated area or construct an energy-dissipating device (silt fence, staked straw bales, erosion control fabric) at the end of the interceptor dike.
- Position the outfall of each temporary interceptor dike to prevent sediment discharge into wetlands, Hudson River, or adjacent streets.
- Install temporary interceptor dikes across the entire area at wetland crossings, stormwater retention basins, and the base of slopes adjacent to roads, when requested by the EI.
- Drivable berms, which are smaller versions of interceptor dikes constructed of compacted soil or sand bags, may be used in place of staked straw bales at the entrances and exits of travel lanes at road crossings, stormwater retention basins, and wetlands. They are

installed the width of the travel lane at the start of the equipment crossing and made low enough to allow equipment and other vehicles to pass.

Inspect temporary interceptor dikes daily in areas of active construction to insure proper functioning and maintenance. In other areas, the interceptor dikes will be inspected and maintained on a weekly basis throughout construction, and within 24 hours following storm events.

4.4 Restoration

Restoration of the South 40 site will begin after construction activities have been completed. Restoration measures include the establishment of final grades and drainage patterns as well as the installation of permanent erosion and sedimentation control devices to minimize post-construction erosion.

- The contractor will make every reasonable effort to complete cleanup of an area (including final grading and installation of permanent erosion control structures) within 20 days after backfilling the trench in that area. If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (temporary interceptor dikes and sediment barriers) until conditions allow completion of cleanup.

- Seeding activity will be conducted within 10 working days of final grading, weather and soil conditions permitting.

- Spread segregated topsoil back to its original profile.

- Remove excess rock from at least the top 12 inches of soil to the extent practical in rotated and permanent areas. The size, density, and distribution of rock on the Project area should be similar to adjacent areas not disturbed by construction.

- A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed, regularly inspected, and maintained. When access is no longer required, the travel lane must be removed and restored.

- Remove construction debris (used filter bags, skids, trash, etc.) from the Project area unless project representatives approve otherwise.

4.5 Erosion Control

- Permanent interceptor dikes are intended to reduce runoff velocity, divert water off the construction site, and prevent sediment deposition into sensitive resources. Permanent interceptor dikes will be constructed of compacted soil. Sand bags or some functional equivalent may be used when approved by the EI.

  – Install permanent interceptor dikes in areas at the locations shown on the construction drawings or as approved by the EI.

- Install permanent interceptor dikes across the entire area at stormwater drainage and wetland crossings, and at the base of slopes adjacent to roads.

- Construct interceptor dikes with a 2 to 8 percent outslope to divert surface flow to a stable vegetative area without causing water to pool or erode behind the interceptor dike. In the absence of a stable vegetative area, install an energy-dissipating device at the end of the interceptor dike.

- Install a rock-lined drainage swale with restricted drainage features when directed by the EI. The drainage swale is generally 8 feet wide and a maximum of 18-24 inches deep.

- On slopes greater than 30 percent, install interceptor dikes with erosion control fabric on the swale side.

- Install erosion control fabric at interceptor dike outlets and drainage swales as necessary or as directed by the EI.

  - Install erosion control fabric or matting on slopes greater than 30 percent adjacent to roads or waterbodies. Anchor the erosion control fabric or matting with staples or other appropriate devices in accordance with the manufacturers' recommendations.

  - The EI will direct the installation of high-velocity erosion control fabric on the swale side of permanent interceptor dikes.

4.6 Erosion Control

- Successful revegetation of soils disturbed by project-related activities is essential. Seeding will be conducted using the following requirements:
- Fertilize and add soil pH modifiers as appropriate. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practical after application;
- Seed disturbed areas within 10 working days of final grading, weather and soil conditions permitting;
- Prepare seedbed in disturbed areas to a depth of 3 to 4 inches to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed;
- Seed disturbed areas in accordance with recommended seed mixes, rates, and dates, except in upland areas where project representatives may request alternative seed mixes;
- Perform seeding of permanent vegetation within recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed above and perform seeding of permanent vegetation at the beginning of the next recommended seeding season.
- Base seeding rates on Pure Live Seed (PLS). Use seed within 12 months of seed testing.

- Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydroseeding

4.7 Mulching

Mulch is intended to stabilize the soil surface and will consist of weed-free straw, wood fiber hydromulch, erosion control fabric, or some functional equivalent as approved by the EI and Chief Inspector. Hay will not be used for mulch.

- Mulch **before** seeding if:
  - Cleanup, including final grading and installation of permanent erosion control measures, is not completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas); or
  - Construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.
- When mulching before seeding, increase mulch application on slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.
- Apply mulch on slopes (except in actively cultivated cropland) concurrent with or immediately after seeding, where necessary, to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the AREA at a rate of 2 tons/acre of straw or equivalent.
- Mulch with woodchips only under the following conditions with prior approval from the Chief Inspector or the EI:
  - Do not use more than 1 ton/acre; and
  - Add the equivalent of 11 lbs/acre available nitrogen (at least 50 % of which is slow release).
- To minimize loss by wind and water, anchor the mulch with wet soil conditions (when approved by the EI), mechanical means, or with liquid mulch binders.
- When anchoring with liquid mulch binders, use rates recommended by the manufacturer. **Do not use liquid mulch binders within 100 feet of wetlands and waterbodies.**
- Install and anchor erosion control fabric, such as jute thatching, or bonded fiber blankets, on waterbody banks at the time of final bank re-contouring. Anchor the erosion control fabric with staples or other appropriate devices.

4.8 Winter Stabilization

- If construction occurs too late in the year for cleanup activities to adequately proceed, the following procedures will be implemented along the disturbed area at those locations until restoration measures can be completed.

- Install permanent interceptor dikes at specified intervals on slopes, or as approved by the EI;
- Install temporary sediment barriers adjacent to stream and wetland crossings, as well as other critical areas;
- Remove flumes from waterbody crossings to reestablish natural stream flow

6.0 Post Construction Activities

This sampling plan was prepared to provide guidelines for the monitoring program. It includes stormwater sampling and analyses, and quality assurance/quality control.

6.1 Post-construction monitoring

Projects conducted under this Plan will meet the monitoring requirements set forth in this section. Company personnel will perform the following:

- Establish and implement a program to monitor the success of restoration upon completion of construction and restoration activities;
- Conduct follow-up inspections of disturbed upland areas after the first growing season (normally 3 to 9 months after seeding) to assess the success of revegetation;
- Revegetation will be considered successful if the vegetative cover is sufficient (> 70%) to prevent the erosion of soils on the disturbed areas and density and cover are similar to that in adjacent undisturbed areas. Revegetation efforts (such as fertilizing and reseeding) will continue until revegetation is successful;
- Make efforts to control unauthorized off-road vehicle use. Maintain signs, gates, and vehicle trails as necessary.
- Inspect temporary remaining erosion and sedimentation controls during routine patrols for proper functioning. Deficiencies found will be reported and corrected as needed. Once the area has re-vegetated and stabilized, the erosion controls will be removed.

6.2 Reporting

The On-site Manager from LG Constructors and EI from CH2M HILL will monitor and maintain records and reports pertaining to this ESC Plan. The reports and records will include

- Method of temporary erosion measures implemented and their anticipated duration
- Method of permanent erosion measures implemented, their specific locations, and inspection records
- Acreage of South 40 that was prepared via clearing and grubbing activities

Appendix A – Figures

FIGURE 1. SITE LOCATION MAP
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 2. CIVIL OVERALL GRADING AND DRAINAGE PLAN (DWG. NO. C-2000)
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 3. CIVIL EROSION AND SEDIMENTATION CONTROL PLAN (DWG. NO. C-4000A) FOR FOUNDATION EXCAVATION PHASE
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 3. CIVIL EROSION AND SEDIMENTATION CONTROL PLAN (DWG. NO. C-4000)
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 5. CIVIL EROSION AND SEDIMENTATION CONTROL PLAN DETAILS (DWG. NO. C-4001)
Besicorp_Empire Power Generating Facility – Rensselaer, NY

FIGURE 6. CIVIL EROSION AND SEDIMENTATION CONTROL PLAN DETAILS (DWG. NO. C-4002)
Besicorp_Empire Power Generating Facility – Rensselaer, NY

Appendix B –Acronyms and Glossary of Terms

AST: Aboveground Storage Tanks

Berm: An earthen mound used to direct the flow of runoff around or through a structure.

Best Management Practice (BMP): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

CWA: Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

Director: The Regional Administrator or an authorized representative.

Discharge: A release or flow of stormwater or other substance from a conveyance or storage container.

Emission: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities and from motor vehicle, locomotive, or aircraft exhaust.

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff, but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber cutting.

General Permit: A permit issued under the SPDES program to cover a certain class or category of stormwater discharges. These permits allow for a reduction in the administrative burden associated with permitting stormwater discharges associated with industrial activities. For example, EPA is planning to issue two general permits: SPDES General Permits for Stormwater Discharges from Construction Activities that are classified as "Associated with Industrial Activity" and NPDES General Permits for Stormwater Discharges from Industrial Activities that are classified as "Associated with Industrial Activities." EPA is also encouraging delegated states that have an approved general permits program to issue general permits.

Grading: The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Waste: A by-product of human activities that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Material Storage Areas: Onsite locations where raw materials, products, final products, by-products, or waste materials are stored.

NYSDEC: New York State Department of Environmental Conservation

NPDES Permit: An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of the NPDES program.

Discharge Point: The point, location, or structure where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.

Permit: An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of an environmental regulation; e.g., a permit to operate a wastewater treatment plant or to operate a facility that may generate harmful emissions.

Precipitation: Any form of rain or snow.

Residual: Amount of pollutant remaining in the environment after a natural or technological process has taken place; e.g., the sludge remaining after initial wastewater treatment or particulates remaining in air after the air passes through a scrubbing or other pollutant removal process.

Run-on: Stormwater surface flow or other surface flow that enters property other than that where it originated.

Runoff: That part of precipitation, snowmelt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Sanitary Sewer: A system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.

Secondary Containment: Structures, usually dikes or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers.

Sheet Erosion: Erosion of thin layers of surface materials by continuous sheets of running water.

Sheetflow: Runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel.

Significant Spills: Include, but are not limited to releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

Soil: The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.

Spent Solvent: A liquid solution that has been used and is no longer capable of dissolving solids, gases, or liquids.

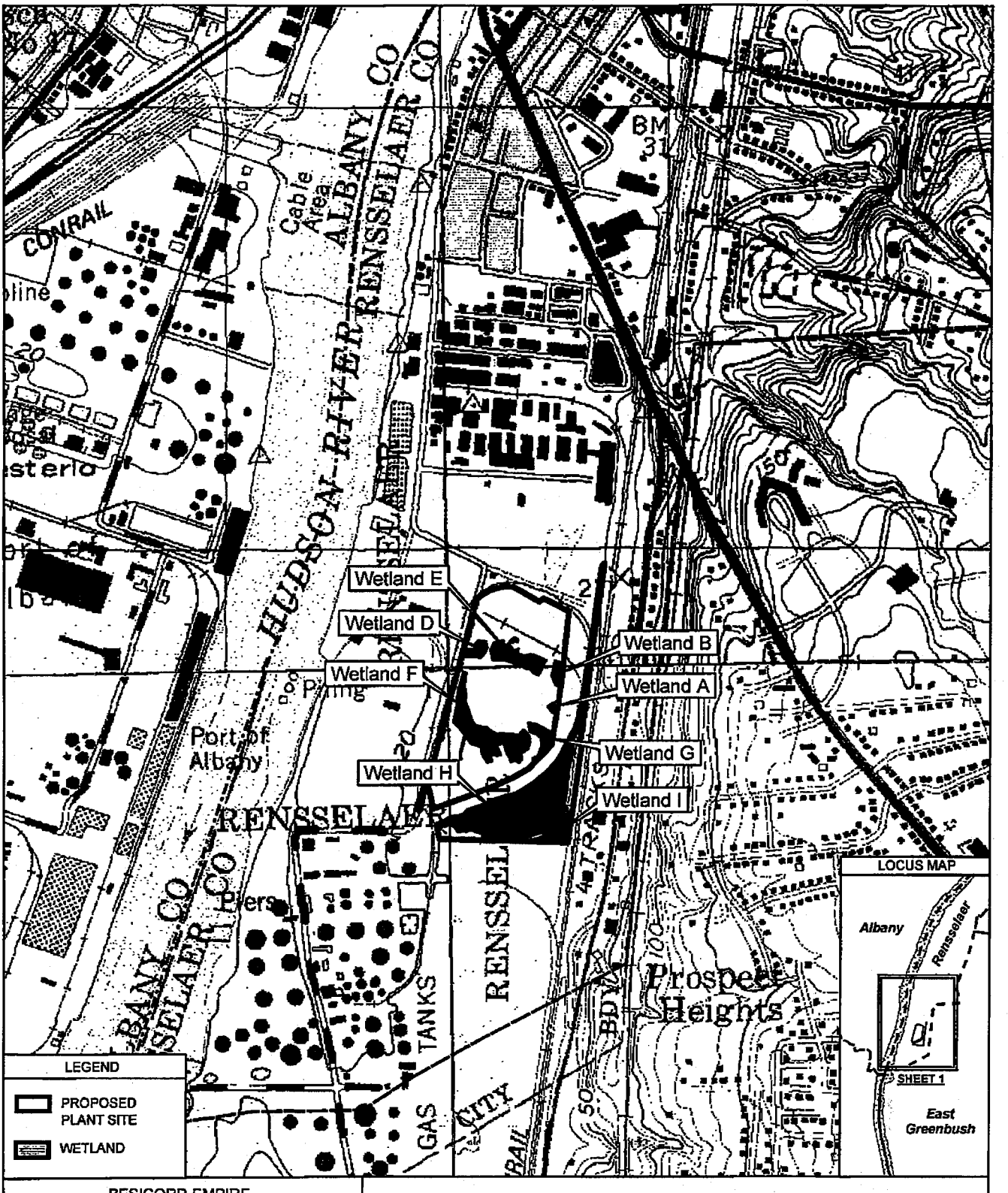
Storm Drain: A slotted opening leading to an underground pipe or an open ditch for carrying surface runoff.

Stormwater: Runoff from a storm event, snowmelt runoff, and surface runoff and drainage.

Surface Water: Water naturally open to the atmosphere (rivers, lakes, reservoirs, streams, wetlands impoundments, seas, estuaries, etc.); also refers to springs, wells, or other collectors that are directly influenced by surface water.

Topography: The physical features of a surface area including relative elevations and the position of natural and human-made features.

Waste: Unwanted materials left over from a manufacturing or other process.



BESICORP-EMPIRE
POWER GENERATING FACILITY

USGS WETLAND LOCATION MAP
SHEET 1 OF 34

GRAPHIC SCALE

1,000 0 1,000

(IN FEET)

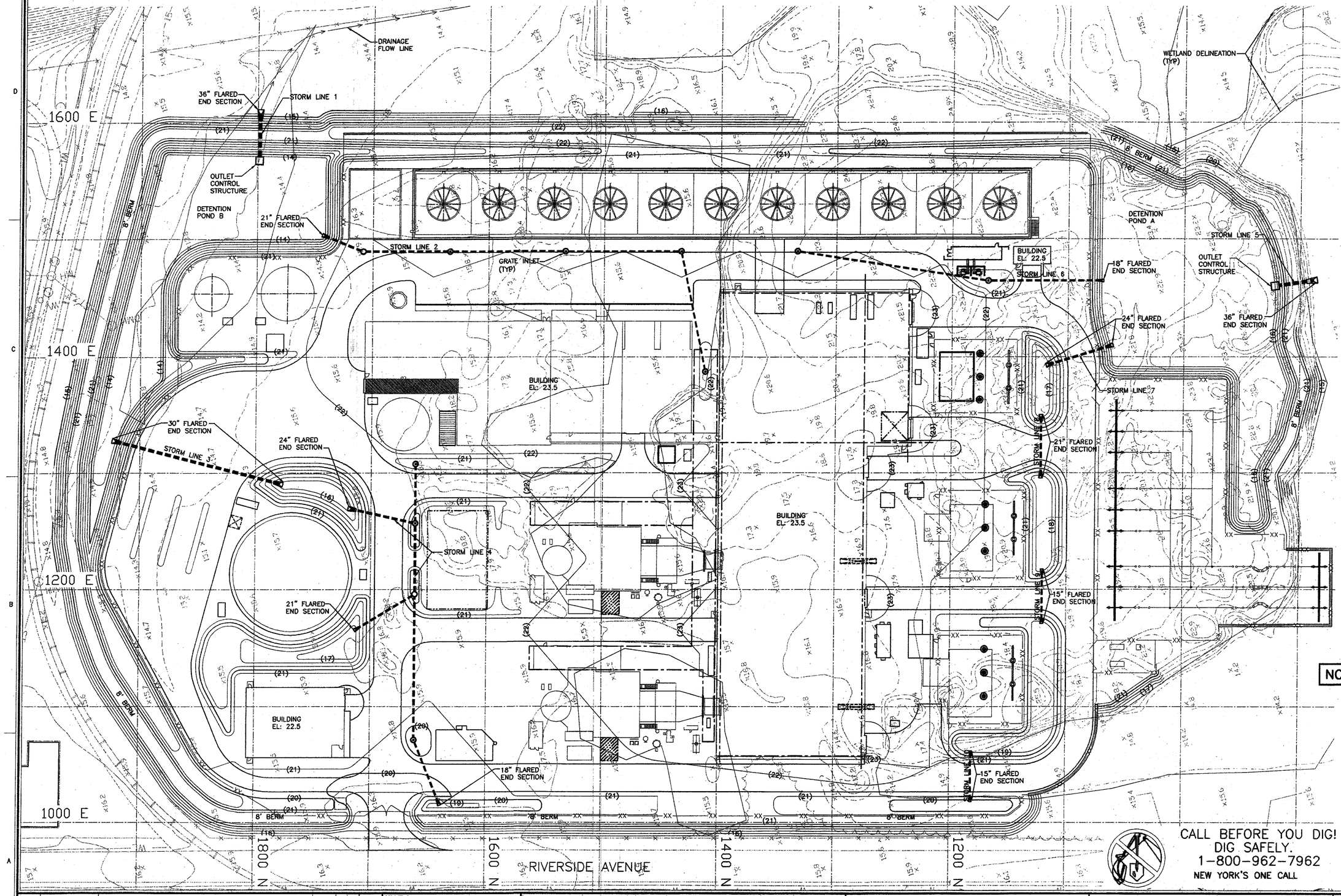
1 inch = 1,000 feet

PROPOSED WORK: BESICORP-EMPIRE POWER GENERATING FACILITY
WATERWAYS: HUDSON RIVER
CITY: RENSSELAER
COUNTY: RENSSELAER
STATE: NEW YORK
APPLICANT: BESICORP-EMPIRE POWER COMPANY, LLC
SHEET 1 OF 34
DATE: MARCH 18, 2005

N

PSILON ASSOCIATES INC.
Leaders in Environmental Consultants

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GRADING AND DRAINAGE NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED PLANS AND SPECS.
2. THE CONTRACTOR SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO INSURE COMPLIANCE WITH THE APPROVED PLANS.
3. SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE GEOTECHNICAL ENGINEER UNLESS OTHERWISE NOTED ON THE PLANS.
4. CONTRACTOR WILL BE RESPONSIBLE FOR ALL GEOTECHNICAL TESTING NECESSARY FOR THE WORK.
5. NO ROCK OR SIMILAR MATERIAL GREATER THAN 6" IN DIAMETER SHALL BE PLACED IN THE FILL.
6. ALL NEWLY GRADED SURFACES SHALL HAVE A MINIMUM SLOPE OF 1% TOWARDS PROPOSED CATCH BASINS, SWALES, OR DITCHES.
7. ALL NEW PAVED SURFACES SHALL BE SLOPED TO DRAIN. CONTRACTOR SHALL MAKE ADJUSTMENTS TO PAVING AND GRADING ELEVATIONS AS NECESSARY.
8. ALL PROPOSED SPOT ELEVATIONS & CONTOURS REPRESENT FINISH GRADE (TOP OF PAVING, GRAVEL SURFACE, FINISH SURFACE/FLOOR, OR EARTH).
9. FOR GENERAL NOTES: EROSION CONTROL NOTES, DEMOLITION NOTES, AND TRAFFIC CONTROL INFORMATION SEE DRAWING C-0002.
10. FOR PROJECT INFORMATION SEE DRAWING C-0001 AND C-0002.
11. SEE DRAWING SERIES C-4000 FOR EROSION AND SEDIMENT CONTROL PLAN.
12. SEE DRAWING SERIES C-5000 FOR STORM DRAIN SCHEDULE, SECTION AND PROFILES.

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A	15-AUG-2007	ISSUED FOR INFORMATION			

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY P. LLANO
CLIENT APPR.

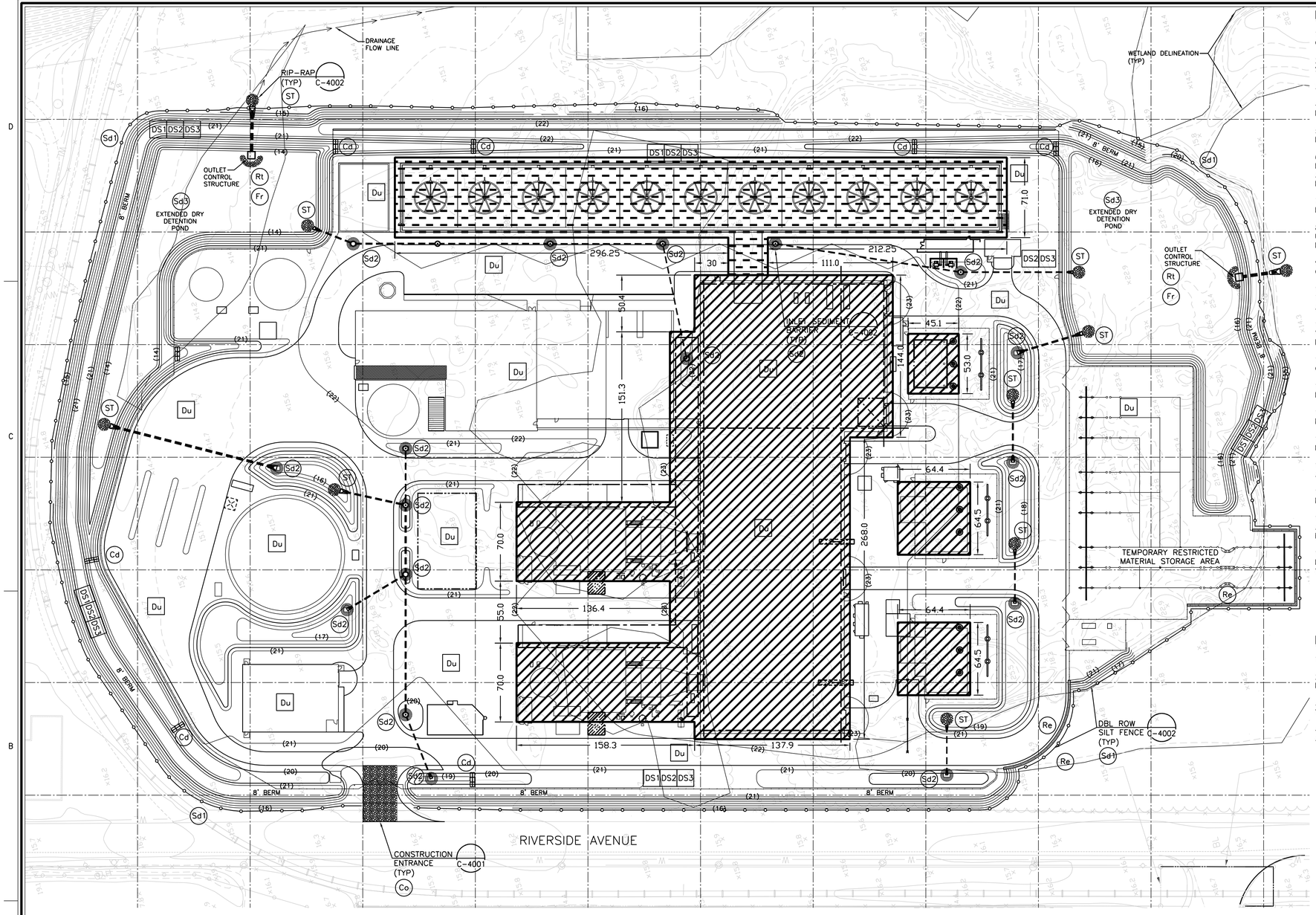
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
OVERAL GRADING AND DRAINAGE PLAN

JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
FILENAME C0002000.DWG
SCALE 1" = 40'
REV. NO. A
DWG. NO. C-2000

LGAD_3, ANSI D, 22 x 34 in.



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION CONTROL MEASURES WILL BE AS A MINIMUM IN CONFORMANCE WITH "BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

2. EROSION AND SEDIMENT CONTROL DEVICES WILL BE INSTALLED AND INSPECTED PRIOR TO LAND DISTURBANCE ON SITE.

3. SILT BARRIERS WILL BE PLACED AT DOWNSTREAM TOE OF CUT AND FILL SLOPES.

4. EFFECTIVE EROSION CONTROL MEASURES WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY NYSDEC.

5. MAINTAIN CONSTRUCTION ENTRANCE AT THE POINT OF ENTRY OR EXIT TO THE EXISTING HIGHWAY. MAINTAIN ROADWAY AND ENTRANCE UNTIL FINAL ACCEPTANCE OF THE WORK.

6. THE CONSTRUCTION EXIT WILL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF STRUCTURES USED TO TRAP SEDIMENT. MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE TO ADJACENT ROADWAY OR INTO STORM DRAIN WILL BE REMOVED IAS QUICKLY AS POSSIBLE.

7. AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS AND PRIOR TO THE START OF CONSTRUCTION, PERIMETER EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT MEASURES WILL BE INSTALLED.

8. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AND OBTAIN PERMIT. MAINTAIN EROSION CONTROL DEVICES UNTIL THE CONSTRUCTION AREA HAS BEEN STABILIZED WITH PERMANENT GRAVEL SURFACING OR GRASSING AND/OR ROADS/DRIVEWAYS HAVE BEEN PAVED.

9. REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

10. IN THE EVENT FAILURE OF EROSION CONTROL MEASURES OR DEVICES, CONSTRUCTION WORK THAT COULD IMPACT THE AFFECTED AREA WILL BE STOPPED UNTIL THE EROSION CONTROL MEASURES ARE APPROPIATELY CORRECTED AND/OR UPDATED.

11. SEDIMENT/EROSION CONTROL DEVICES WILL BE CHECKED AFTER EACH SIGNIFICANT STORM EVENT. EACH DEVICE WILL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.

12. SILT FENCES AND HAY BALE BARRIERS WILL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.

13. ANY ADDITIONAL CONSTRUCTION OTHER THAN SHOWN ON THIS PLAN MAY REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES.

14. DISTURBED AREAS LEFT IDLE FOR MORE THAN FOUR WEEKS, AND NOT TO FINAL GRADE, WILL BE STABILIZED WITH MULCH.

15, WHEN HAND PLANTING, MULCH (HAY OR STRAW) WILL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.

16. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (Ds2). ON SLOPES THAT ARE 4:1 OR STEEPER MULCH WILL BE ANCHORED.

17. THE ESCAPE OF SEDIMENT FROM THE SITE WILL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

18. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED DAILY. NOTED DEFICIENCIES WILL BE CORRECTED AS QUICKLY AS POSSIBLE. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

19. USE WATER SPRINKLING (Du) AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL OF FUGITIVE DUST PRACTICAL FOR THE CONDITION OF WORK.

FOUNDATION EXCAVATION NOTES:

1. CONTRACTOR WILL EXCAVATE FOUNDATION FOOTPRINTS TO ELEVATIONS NOTED BELOW.

2. CONTRACTOR WILL USE 2:1 CUT SLOPES FROM FOUNDATION FOOTPRINT ELEVATION TO MATCH PROPOSED GRADE ELEVATION.

3. CONTRACTOR WILL PLACE SD1 (SILT FENCE) ALONG TOP PERIMETER OF THE EXCAVATED AREAS IN CONFORMANCE WITH "BMP'S FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

4. EXCAVATED MATERIAL THAT IS POTENTIAL "RESTRICTED MATERIAL" WILL BE STOCKPILED IN THE SWITCHYARD AREA AND COVERED DURING STORAGE.

EXCAVATE FOUNDATION FOOTPRINT TO ELEVATION 16.0

EXCAVATE FOUNDATION FOOTPRINT TO ELEVATION 15.0

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*REFER TO SHEET C-4001 FOR EROSION CONTROL LEGEND AND DETAILS

NO	DATE	REVISION	BY	CK.	APPR.
A	17-SEP-2007	ISSUED FOR INFORMATION	T.O.C.	D.E.M.	

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

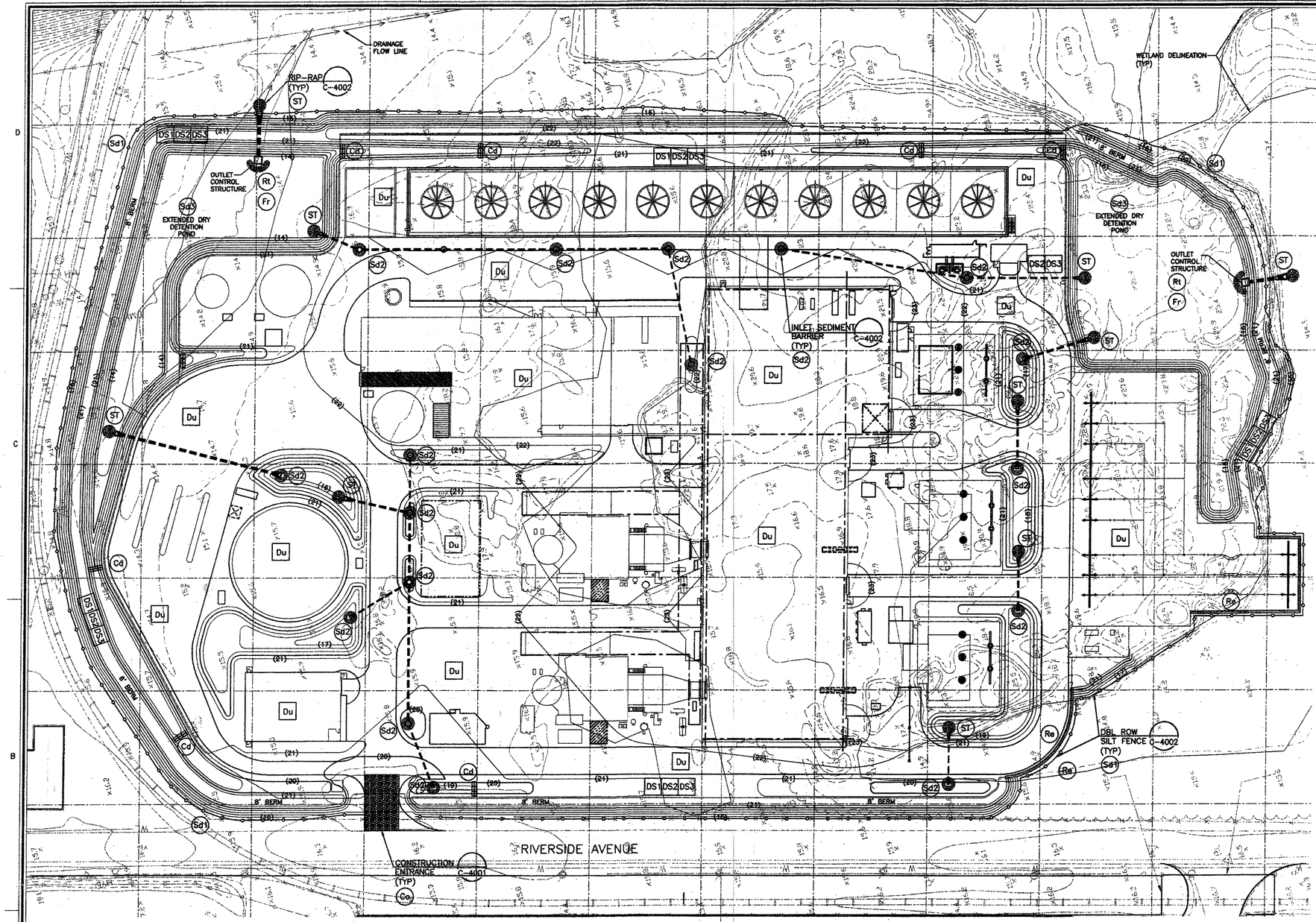
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL EROSION AND SEDIMENTATION CONTROL PLAN FOR FOUNDATION EXCAVATION

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
FILENAME C0004000A.DWG
SCALE 1" = 50'
REV. NO. A
DWG. NO. C-4000A

LGAD_3, ANSI D, 22 x 34 in.



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION CONTROL MEASURES SHALL BE AS A MINIMUM IN CONFORMANCE WITH "BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

2. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ON SITE.

3. SILT BARRIERS SHALL BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

4. STATEMENT – EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY NYSDEC.

5. MAINTAIN CONSTRUCTION ENTRANCE AT THE POINT OF ENTRY OR EXIT TO THE EXISTING HIGHWAY. MAINTAIN ROADWAY AND ENTRANCE UNTIL FINAL ACCEPTANCE OF THE WORK.

6. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN SHALL BE REMOVED IMMEDIATELY.

7. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.

8. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AND OBTAIN PERMIT. MAINTAIN EROSION CONTROL DEVICES UNTIL THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT GRAVEL SURFACING OR GRASSING AND/OR ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

9. REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

10. FAILURE TO INSTALL OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES SHALL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED TO LOCAL JURISDICTION STANDARDS.

11. SEDIMENT/EROSION CONTROL DEVICES SHALL BE CHECKED AFTER EACH SIGNIFICANT STORM EVENT. EACH DEVICE SHALL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.

12. SILT FENCES AND HAY BALE BARRIERS SHALL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.

13. ANY ADDITIONAL CONSTRUCTION OTHER THAN SHOWN ON THIS PLAN MAY REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND APPROVAL.

14. DISTURBED AREAS LEFT IDLE FOR TWO TO FOUR WEEKS, AND NOT TO FINAL GRADE, SHALL BE STABILIZED WITH MULCH.

15, WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHALL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.

16. DURING UNSUITABLE GROWING SEASONS, MULCH SHALL BE USED AS A TEMPORARY COVER (Ds2). ON SLOPES THAT ARE 4:1 OR STEEPER MULCH SHALL BE ANCHORED.

17. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

18. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

19. POLLUTION CONTROLS: USE WATER SPRINKLING (Du) AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL OF AIR POLLUTION PRACTICAL FOR THE CONDITION OF WORK.

20. COMPLY WITH THE LATEST EDITION OF THE STATE EROSION CONTROL MANUAL.

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TRUE NORTH

50 0 50 100
Scale: 1 INCH = 50 FEET

*REFER TO SHEET C-4001 FOR EROSION CONTROL LEGEND AND DETAILS

NO	DATE	REVISION	BY	CK.	APPR.
A	15-AUG-2007	ISSUED FOR INFORMATION	T.O.C.	D.E.M.	

DESIGNED BY: T. CELEDON
CHECKED BY: D. MICKANEN
APPR. BY: P. LUNO
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE: CIVIL EROSION AND SEDIMENTATION CONTROL PLAN

JOB NAME: BEPCO CC COGEN – FACILITY

JOB NO. 360473
FILENAME C0004000.DWG
SCALE 1" = 50'
REV. NO. A
DWG. NO. C-4000

LGAD_3, ANSI D, 22 x 34 in.

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UNIFORM SOIL EROSION AND SEDIMENT CONTROL PRACTICES

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving,constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		Co (LABEL)	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		Cr	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vechile transportation routes.
Dc	STREAM DIVERSION CHANNEL		Dc	A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		Dn1 (LABEL)	A flexible conduit of heavy duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and transportable.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		Dn2 (LABEL)	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING		Fr	A temporary stone barrier constructed at storm inlets and pond outlets.
Ga	GABION			Rock filled baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		Gr (LABEL)	Permanent structures installed to protect natural or artificial channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL		Re (LABEL)	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETROFITTING		Rt (LABEL)	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER		TYPE (INDICATE TYPE)	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales or straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sr	TEMPORARY STREAM CROSSING		Sr (LABEL)	A temporary bridge or culvert type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORM DRAIN OUTLET PROTECTION		St	A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Su	SURFACE ROUGHENING		Su	A rough soil surface with horizontal depressions as a contour or slopes left is a roughened condition after grading.
Tp	TOPSOILING		Tp (Show Stripping & Storage Areas)	The practice of stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after the completion of construction activities.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE MEASURES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf (LABEL)	A strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (W/ VEGETATION)		Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (W/TEMPORARY SEEDING)		Ds2	Establishing temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (W/ PERMANENT VEGETATION)		Ds3	Establishing permanent vegetative cover such as trees, shrubs, vines, grasses, sod, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (W/ SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Mb	EROSION CONTROL MATTING AND BLANKETS		Mb	The installation of a protective covering (blanket) or soil-stabilization mat on a prepared planting area of a steep slope, channel, or shoreline.
Pm	POLYACRYLAMIDE (PAM)		Pm	The land application of product containing anionic polyacrylamide (PAM) as temporary soil binding agents to reduce soil erosion.
Sb	STREAM BANK STABILIZATION (USING PERMANENT VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance stream banks, or to prevent, or restore and repair small stream bank erosion problems.
Tb	TACKIFIERS AND BINDERS		Tb	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

SITE PREPARATION
1. GRADE, AS NEEDED AND FEASIBLE, TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. AS NEEDED AND FEASIBLE, LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS
1. DRY STRAW OR HAY - SPREAD AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD WASTE, CHIPS, SAWDUST OR BARK - SPREAD 2 TO 3 INCHES DEEP (ABOUT 6 TO 9 TONS PER ACRE)
3. EROSION CONTROL MATTING OR NETTING, SUCH AS EXCELSIOR, JUTE, TEXTILE AND PLASTIC MATTING AND NETTING - APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. OUTBACK ASPHALT, SLOW CURING - APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLONS PER SQ. YD.)
5. POLYETHYLENE FILM - SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION.

MATERIALS — *DEPTH*
1. GRAIN STRAW OR GRASS HAY — 4" TO 10"
2. PINE NEEDLES — 4" TO 6"
3. WOOD WASTE (SAWDUST, BARK, CHIPS) — 4" TO 8"
4. SHREDDED RESIDUES (CORNS, LEAVES, ETC.) — 4" TO 8"
5. COMPLETELY COVER AREA WITH BLACK POLYETHYLENE FILM AND HOLD IN PLACE BY PLACING SOIL ON THE OUTER EDGE.

WHEN USING ORGANIC MULCHES, APPLY 20-30 POUNDS OF NITROGEN IN ADDITION TO THE NORMAL AMOUNT NEEDED FOR PLANT GROWTH TO OFFSET THE TIE UP OF N BY DECOMPOSITION OF MULCH.

MULCHING APPLICATION REQUIREMENTS

MATERIAL	RATE	DEPTH
Straw or hay	2 1/2Ton/Acre	5" TO 10"
Wood waste, chips, sawdust, bark	6 to 9 Ton/Acre	2" TO 3"
Cutback asphalt	1200 gal./acre or 1/4 gal./sq.yd.	
Polyethylene film	Secure with soil, anchors, weights	
Cutback asphalt	See manufacturer's recommendations	
Geotextiles, jute matting, netting, etc.		

SEEDING SCHEDULE
CONTRACTOR TO PROTECT ALL DISTURBED AREAS BY TEMPORARY RESEEDING UNTIL PERMANENT GROUND COVER IS ESTABLISHED. (MAXIMUM OF 3 WEEKS AFTER DISTURBANCE)
SOIL PREPARATION
ADD TO SOIL:
-COMMERCIAL 16-20-10 FERTILIZER @ 650 LBS/ACRE OR AS SPECIFIED BY SOILS REPORT.
-AFTER SOIL pH ANALYSIS, LIME AS SPECIFIED ON pH LEVEL CHART.

TO RAISE THE pH LEVEL
THIS CHART INDICATES THE AMOUNT OF LIME TO BE ADDED IN OUNCES PER SQUARE YARD AND IN POUNDS PER 1000 SQ. FT.

METER READING	SANDY SOIL ADD LIME	SANDY LOAM ADD LIME	MED. LOAM ADD LIME	HEAVY SOIL ADD LIME
4.0	2.25	3 OZ	4.4 OZ	5.33 OZ
1000 sqft	24 LBS	19 LBS	28 LBS	33 LBS
5.0	1.8	2.25 OZ	3.0 OZ	3.6 OZ
1000 sqft	11 LBS	14 LBS	18 LBS	23 LBS
6.0	0.5 OZ	1 OZ	1.2 OZ	1.4 OZ
1000 sqft	3.5 LBS	6 LBS	8 LBS	9 LBS

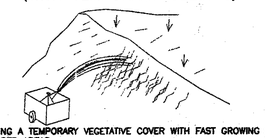
NOTE: NEUTRAL pH IS 7.0

Ds2 PLANTING DATES AND SEEDING RATES FOR TEMPORARY VEGETATION

PLANTING OPTIONS	PLANTING DATES (*1*) REGION 1	REGION 2	SEED RATES (*2*) (PURE LIVE SEED) REGION 3 LBS PER ACRE	# PER 1000 SQ. FT.
BROWNTOP MILLET	4/1-7/1	4/1-7/15	4/1-7/10	40
RYE GRAIN (*3*)	7/15-11/30	8/15-12/30	9/1-2/18	168
RYEGRASS	8/15-11/15	9/1-12/15	9/15-1/1	40
WHEAT	9/1-12/30	9/1-12/30	9/15-1/30	150

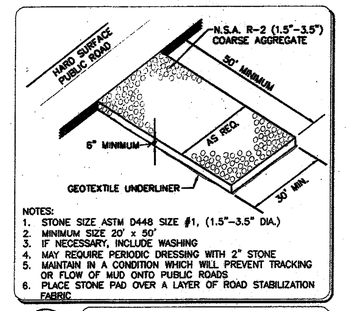
(*1*) PLANTING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL CONDITIONS.
(*2*) UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.
(*3*) RYE GRAIN IS NOT THE SAME AS RYEGRASS.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) (WITH TEMPORARY SEEDING)



- ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
- UP TO 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION
- SITE PREPARATION
  1. GRADING AND SHAPING
  2. SEEDBED PREPARATION
  3. APPLY LIME AND FERTILIZER
  4. PLANT SEEDING, SELECT SPECIES BY SEASON AND REGION
  5. APPLY MULCHING MATERIAL IF NEEDED
  6. IRRIGATE IF NEEDED BUT NOT AT RATE TO CAUSE EROSION

SPECIES	RATE PER 1000 S.F.	RATE PER ACRE	PLANTING DATES (PIEDMONT)
RYE	3 lbs.	2-3 bu	9/1-1/7 3/1-4/1
RYEGRASS	1 lb.	40-50 lbs.	8/15-1/1
RYE AND ANNUAL LESPEDEZA	1.5 lbs. 0.5 lb.	1-1.5 bu 20-25 lbs.	3/1-4/1 3/1-4/1
WEEPING LOVEGRASS	0.2 lbs.	4-6 lbs.	3/1-8/15
SUDANGRASS	1 lb.	35-45 lbs.	4/1-7/15
BROWNTOP MILLET	1 lb.	30-40 lbs.	4/1-7/15
WHEAT	3 lbs.	2-3 bu	10/15-1/1



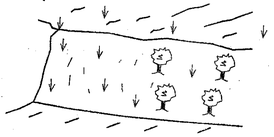
NOTES:
1. STONE SIZE ASTM D448 SIZE #1, (1.5"-3.5" DIA.)
2. MINIMUM SIZE 20' x 50'
3. IF NECESSARY, INCLUDE WASHING
4. MAY REQUIRE PERIODIC DRESSING WITH 2" STONE
5. MAINTAIN IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC ROADS
6. PLACE STONE PAD OVER A LAYER OF ROAD STABILIZATION FABRIC

Co CONSTRUCTION EXIT

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
Construction Specifications:
- The aggregate size for construction of the pad shall be 2-3 inch (51-76 mm) stone.
- Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
- The thickness of the pad shall not be less than 6 inches (0.2 m). Use geotextile fabrics, if necessary, to improve stability of the foundation in locations subject to seepage or high water table.
- The width of the pad shall not be less than the full width of all points of ingress or egress and in any case shall not be less than 12 feet (3.6 m) wide.
- The length of the pad shall be as required, but not less than 50 feet (15.2 m).
- Locate construction entrances and exits to limit sediment leaving the site and to provide for maximum utility by all construction vehicles. Avoid entrances which have steep grades & entrances at curves in public roads.
- The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or maintenance of any measures used to trap sediment.
- All sediment spilled, dropped, washed or tracked onto public rights-of-way shall be removed immediately.
- Provide drainage to carry water to a sediment trap or other suitable outlet.
- When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
- All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, straw bales, or other approved methods.

Inspection and Maintenance:
- Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site.
- Replace gravel material when surface voids are visible.
- After each rainfall, inspect any structure used to trap sediment and clean it out as necessary.
- Immediately remove all objectionable materials spilled, washed, or tracked onto public roadways. Remove all sediment deposited on paved roadways within 24 hours.

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)



ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD OR LEGUMES ON DISTURBED AREAS. APPLICABLE ON HIGHLY ERODIBLE/SEVERELY ERODED AREAS ("CRITICAL AREAS") SUCH AS:

CUT/ FILL SLOPES	BERMS
EARTHEN SPILLWAYS	ROADSIDES
BORROW AREAS	SPOIL AREAS
CHANNEL BANKS	GULLIED LANDS

GRADING AND SHAPING REQUIRED WHERE FEASIBLE AND PRACTICAL

SEEDBED PREPARATION
NOT REQUIRED IF USING HYDRAULIC SEEDING AND FERTILIZING WHEN REQUIRED:

SLOPE	SEEDBED
3:1 OR FLATTER	4" OR GREATER IN DEPTH
2:1 TO 3:1	1" TO 4" DEEP
2:1 OR STEEPER	DEPRESSIONS EVERY 6"-8" WITH HAND TOOL

HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE

MULCH ALL SLOPES STEEPER THAN 3% AND IN BOTTOM OF SPILLWAYS AND ON ROADWAYS

ANCHOR MULCH IMMEDIATELY

Ds3 PLANTING DATES AND SEEDING RATES

PLANTING OPTIONS	PLANTING DATES (*1*) REGION 1	REGION 2	SEED RATES (*2*) REGION 3	# PER ACRE	OZ. # SQ. FT. PER 1000
+TALL FESCUE	---	9/1-10/15	---	30	2
COMMON BERMUDA (UNHULLED)			6	3	
RYE GRAIN			28	11	
+TALL FESCUE	8/15-10/15	9/1-10/15	---	30	12
"APPALOW LESPEDEZA" (UNSCARIFIED)*				75	28
RYE GRAIN				28	11
+TALL FESCUE	8/15-10/15	9/1-10/15	---	30	12
RYE GRAIN				28	11
CROWNVETCH*	9/1-10/15	9/1-10/15	---	15	6
RYE GRAIN				28	11
+COMMON BERMUDA (HULLED)	---	4/1-6/1	3/15-6/1	6	2
"APPALOW LESPEDEZA" (SCARIFIED)*				60	23
BROWNTOP MILLET				10	4
+WEEPING LOVEGRASS	4/1-8/1	3/1-6/1	3/1-6/1	2	1
"APPALOW LESPEDEZA" (SCARIFIED)*				60	23
BROWNTOP MILLET				10	4
SUNFLOWER "AZTEC MAXMILLIAN"	4/15-8/1	4/15-6/1	4/1-6/1	10	4
WEEPING LOVEGRASS				2	1
COMMON BERMUDA (HULLED)	---	4/1-6/1	3/15-8/1	10	4
BROWNTOP MILLET				10	4
WEEPING LOVEGRASS	4/1-8/1	3/15-6/1	3/1-6/1	4	2
TALL FESCUE	8/15-10/15	9/1-10/15		50	19
PENSACOLA BAHIAGRASS(*3*)	---	4/1-6/1	3/1-6/1	60	23
COMMON BERMUDA (HULLED)		4/1-6/1	3/15-6/1	10	4
CENTIPEDE(*4*)		5/1-7/1	4/15-6/15	BLOCK SOD	
COMMON BERMUDA (UNHULLED)	---	10/1-3/1	11/1-2/1	10	4
WHEAT				30	12

+PREFERRED MIXES THAT INCLUDE TWO PERMANENT AND ONE TEMPORARY SPECIES.
*USE SEED INNOCULANT ACCORDING TO MANUFACTURER'S DIRECTIONS AT DOUBLE THE RECOMMENDED RATE.
(*1*)SEE FIGURE 1 TO SELECT APPROPRIATE REGION.
(*2*)SEED RATES ARE HIGHER WHEN ONE SPECIES IS SEEDED ALONE.
(*3*)HIGHLY COMPETATIVE GRASS THAT WILL SPREAD INTO SODDED LAWNS AND BERMUDA PASTURES.
(**4**)USE SOIL TEST RECOMMENDATIONS FOR LIME AND FERTILIZER.

Ds3 FERTILIZER RATES

PLANTING OPTIONS	YEAR(*2*)	ANALYSIS	# PER 1000 S.F.	# PER AC	# PER 1000 S.F.
		BASIC FERTILIZATION			TOPDRESSING (*1*)
+TALL FESCUE	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
COMMON BERMUDA (UNHULLED)	YEAR TWO	6-12-12	1000	50-100	1.2-2.3
RYE GRAIN					
+TALL FESCUE	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
"APPALOW LESPEDEZA" (UNSCARIFIED)*	YEAR TWO	0-10-10	1000		
RYE GRAIN					
+TALL FESCUE	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
RYE GRAIN	YEAR TWO	10-10-10	1000		
CROWNVETCH*	AT PLANTING	6-12-12	1500	0-50	0-1.2
RYE GRAIN	YEAR TWO	0-10-10	1000		
+COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
"APPALOW LESPEDEZA" (SCARIFIED)*	YEAR TWO	6-12-12	1000		
BROWNTOP MILLET					
+WEEPING LOVEGRASS	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
"APPALOW LESPEDEZA" (SCARIFIED)*	YEAR TWO	6-12-12	1000		
BROWNTOP MILLET					
SUNFLOWER "AZTEC MAXMILLIAN"	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
WEEPING LOVEGRASS	YEAR TWO	6-12-12	1000	50-100	1.2-2.3
COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
BROWNTOP MILLET	YEAR TWO	6-12-12	1000	50-100	1.2-2.3
WEEPING LOVEGRASS	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
	YEAR TWO	6-12-12	1000	50-100	1.2-2.3
TALL FESCUE	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
	YEAR TWO	10-10-10	1000	50-100	1.2-2.3
PENSACOLA BAHIAGRASS(*3*)	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
	YEAR TWO	0-10-10	1000		
COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
	YEAR TWO	6-12-12	1000		
CENTIPEDE(*4*)	AT PLANTING	6-12-12	400	10 - 50	1.2
	YEAR TWO	10-10-10	400	10 - 50	1.2
COMMON BERMUDA (UNHULLED)	AT PLANTING	6-12-12	1500	50-100	1.2-2.3
WHEAT	YEAR TWO	6-12-12	1000		

(*1*)USE AMMONIUM NITRATE ANALYSIS 34-0-0
(*2*)YEAR TWO IS THE NEXT GROWING SEASON AFTER PERMANENT SPECIES ARE ESTABLISHED.
(*3*)OTHER ANALYSES, WITH AN EQUIVALENT AMOUNT OF NUTRIENTS, MAY BE SUBSTITUTED.

NOT FOR CONSTRUCTION

FOR BID 8/16/2007

NO	DATE	REVISION	BY	CK.	APPR.
A	15-AUG-2007	ISSUED FOR INFORMATION	T.O.C.	D.E.M.	

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY P. LLANO
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE: CIVIL EROSION AND SEDIMENTATION CONTROL PLAN DETAILS 1 OF 2

JOB NAME: BEPCO CC COGEN - FACILITY

JOB NO. 360473
FILENAME C0004001.DWG
SCALE NTS
REV. NO. A
DWG. NO. C-4001

LGAD_3, ANSI D, 22 x 34 in.

NOT FOR CONSTRUCTION

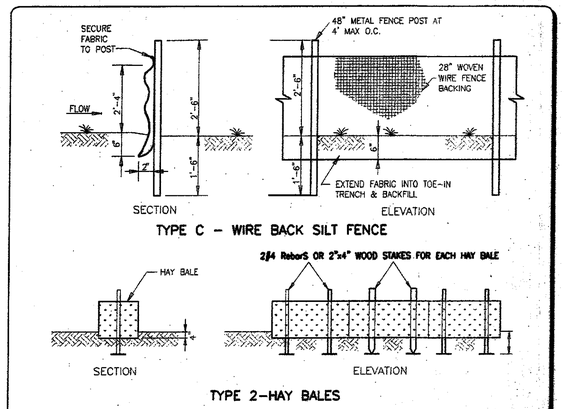
SILT FENCE NOTES:

Construction Specifications:

- The height of a silt fence shall not exceed 36 inches (0.9 m). Storage height and ponding height shall never exceed 18 inches (0.5 m).
- The fence line shall follow the contour as closely as possible.
- If possible, the filter fabric shall be cut from a continuous roll to avoid the use of joints. When joints are necessary, filter cloth shall be spliced only at a support post, with a minimum 6 inch (0.2 m) overlap and both ends securely fastened to the post.
- Posts shall be spaced a maximum of 10 feet (3.1 m) apart and driven securely into the ground (minimum of 12 inches (0.5 m)). When extra-strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet (1.8 m).
- Turn the ends of the fence uphill.
- A trench shall be excavated approximately 4 inches (101 mm) widedt 6 inches (0.2 m) deep along the line of posts and upslope from the barrier.
- When standard-strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch (25.4 mm) long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches (51 mm) and shall not extend more than 36 inches (0.9 m) above the original ground surface.
- The standard-strength filter fabric shall be stapled or wired to the fence, and 6 inches (0.2 m) of the fabric shall extend into the trench. The fabric shall not extend more than 36 inches (0.9 m) above the original ground surface. Filter fabric shall not be stapled to existing trees.
- When extra-strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts.
- The trench shall be backfilled and the soil compacted over the toe of the filter fabric.
- Silt fences placed at the toe of a slope shall be set at least 6 feet (1.8 m) from the toe in order to increase ponding volume.
- Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized and any sediment stored behind the silt fence has been removed.

Inspection and Maintenance:

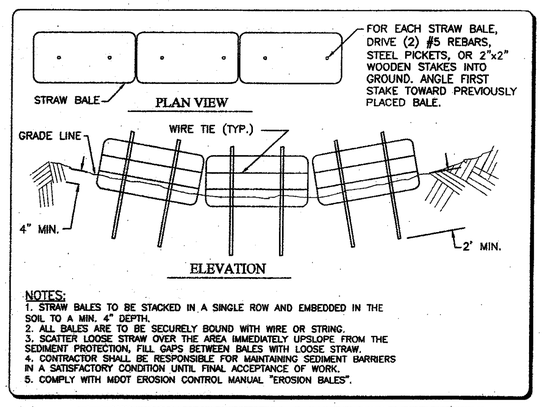
- Silt fences and filter barriers shall be inspected weekly after each significant storm (1 inch (25.4 mm) in 24 hour). Any required repairs shall be made immediately.
- Sediment should be removed when it reaches 1/2" of the top.
- The removed sediment shall conform with the existing grade and be vegetated or otherwise stabilized.



Sd1-C

SEDIMENT BARRIER ~ SILT FENCE TYPE "C"

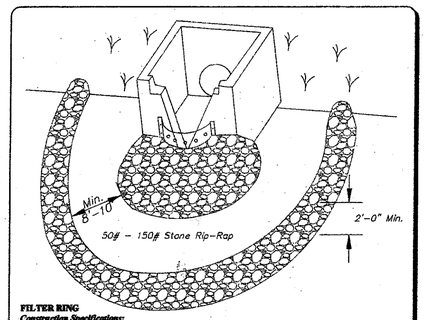
MAINTENANCE: INSPECT AND REPAIR OR REPLACE WEEKLY AND FOLLOWING EACH RAIN.



NOTES:
1. STRAW BALES TO BE STACKED IN A SINGLE ROW AND EMBEDDED IN THE SOIL TO A MIN. 4" DEPTH.
2. ALL BALES ARE TO BE SECURELY BOUND WITH WIRE OR STRING.
3. SCATTER LOOSE STRAW OVER THE AREA IMMEDIATELY UPSLOPE FROM THE SEDIMENT PROTECTION. FILL GAPS BETWEEN BALES WITH LOOSE STRAW.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SEDIMENT BARRIERS IN A SATISFACTORY CONDITION UNTIL FINAL ACCEPTANCE OF WORK.
5. COMPLY WITH MDOT EROSION CONTROL MANUAL "EROSION BALES".

Cd

CHECK DAM ~ STRAW BALE DETAIL



FILTER RING

Construction Specifications:

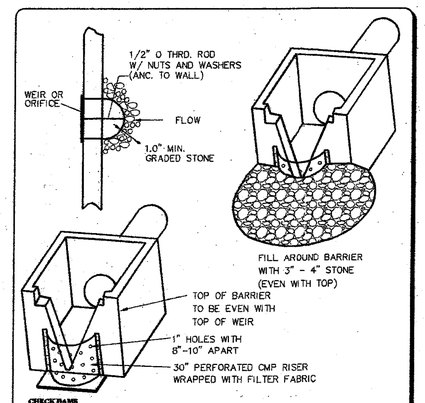
1. Mechanical or hand placement of stone shall be required to uniformly surround the structure to be supplemented.
2. Refer to Appendix C, Manual for Erosion and Sediment Control in Georgia 5th edition, for rock riprap specifications.
3. The filter ring may be constructed on natural ground surface, on an excavated surface, or on machine compacted fill.
4. A coomon failure of filter rings is caused by their placement too close or too high above the structue it is enhancing. When utilized below a storm drain outlet, it shall be placed such that it does not create a condition causing water to back-up into the storm drain system.

Inspection and Maintenance:

- The filter ring must be kept at all times free of trash and debris.
- Continuous monitoring and maintenance of the filter ring should be implemented.
- The filter ring should have sediment removal when it reaches ½ full.
- The structures are temporary and should be removed after the land disturbing activity has been stabilized.

Fr

FILTER RING ~ STONE



CHECK DAMS

CONSTRUCTION SPECIFICATIONS:

1. CANNOT BE USED IN DETENTION BASINS ON LIVE STREAMS OR IN BASINS WITH A TOTAL CONTRIBUTING DRAINAGE AREA OF 100 ACRES OR MORE.
2. CAN ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 C.Y. SEDIMENT PER ACRE OF DISTURBED AREA IN THE PROJECT. REQUIRED SEDIMENT STORAGE MAY BE OBTAINED BY EXCAVATING IN FRONT OF THE RETROFITTED OUTLET STRUCTURE. SHALL BE CONSIDERED A TEMPORARY STRUCTURE AND WILL BE REMOVED AS SOON AS PROJECT IS COMPLETED. ALL ACCU-MULATED SEDIMENT WILL BE REMOVED FROM THE DETENTION POND BASIN.
3. DIA. OF HALF ROUND PIPE 1.5 TIMES THE DIA. OF PIPE OUTLET REMOVED AS SOON AS PROJECT IS COMPLETED. ALL ACCU-MULATED SEDIMENT WILL BE REMOVED FROM THE DETENTION POND.
4. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRE TOTAL DRAINAGE AREA.
5. NEVER TO USED ON EXPOSED PIPE END OR WINGED HEADWALL.
6. SHOULD BE FIXED BY SPECIFIED MEANS (BOLTS, ECT.) TO CONCRETE OUTLET STRUCTURE.

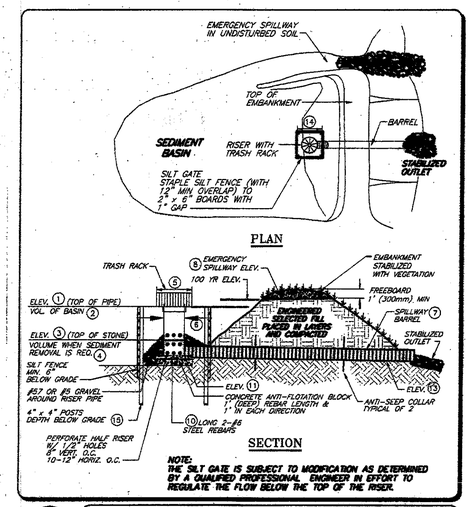
INSPECTION AND MAINTENANCE:

A. All retrofit structures shall be kept clear of all trash and debris.
B. Continuous monitoring of these structures will be necessary for maintenance.
C. All sediment should be removed from structures when ½ of the sediment storage capacity has been lost.
D. These structures are temporary and should be removed when all of the disturbed areas have recieved there permanent stabelization.

Rt

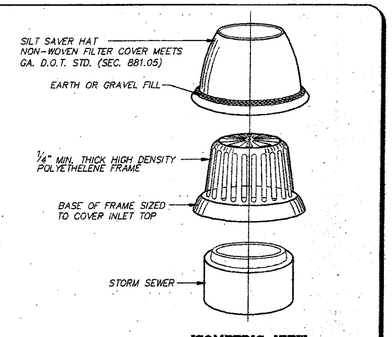
RETROFITTING

STONE FILTER RING W/ PERFORATED HALF PIPE



Sd3

TEMPORARY SEDIMENT BASIN



TYPICAL CONSTRUCTION SEQUENCE

1. EXCAVATE APPROXIMATELY 6" TO 8" BELOW THE TOP OF THE INLET STRUCTURE.
2. PLACE THE FRAME ONTO THE INLET STRUCTURE. ENSURE THE FRAME COVERS STRUCTURE COMPLETELY
3. PLACE THE FILTER OVER THE FRAME.
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND THE INLET STRUCTURE.
5. BACKFILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER BACKFILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

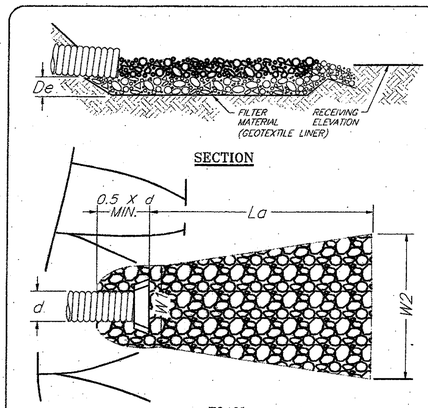
MAINTENANCE REQUIREMENTS

1. MAINTENANCE IS REQUIRED WHEN ERODED SOILS REACH A POINT OF 65% OF THE TOTAL HEIGHT OF THE FRAME OR APPROXIMATELY 7 TO 9 INCHES OF THE GRAY FILTER MATERIAL IS SHOWING.
2. REMOVE THE IMPACTED MATERIAL BY HAND OR MACHINE METHOD, PAYING CLOSE ATTENTION NOT TO DAMAGE THE FRAME OR FILTER.
3. BRUSH, SWEEP OR WASH FILTER AND INSPECT FOR ANY CUTS AND/OR ABRASIONS, REPLACE FILTER AS NECESSARY. INSPECT FRAME FOR ANY STRESS OR DAMAGE, REPLACE AS NECESSARY.
4. REFILL FILTER POCKETS, BACKFILL AS REQUIRED BY JOB SITE CONDITIONS.

Sd2

SEDIMENT TRAP

SILT SAVER FRAME & FILTER ASSEMBLY



LOCATION	d	MAX FLOW	d50	d-MAX	De	W1	La	W2
15"ø HW	15"	3.6 CFS	6"	9"	18"	3.75'	8'	9.5'
18"ø HW	18"	6.0 CFS	6"	9"	18"	4.5'	10'	11.5'
24"ø HW	24"	13 CFS	6"	9"	18"	6.0'	13'	15.0'
30"ø HW	30"	23 CFS	9"	14"	21"	7.5'	16'	18.5'
36"ø HW	36"	38 CFS	9"	14"	21"	9.0'	20'	23.0'
42"ø HW	42"	57 CFS	9"	14"	21"	10.5'	23'	26.5'
48"ø HW	48"	80 CFS	1'	18"	27"	12.0'	30'	34.0'
54"ø HW	54"	110 CFS	1'	18"	27"	13.5'	32'	36.5'
60"ø HW	60"	145 CFS	1'	18"	27"	15.0'	34'	39.0'

NOTES:
1. 1. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT. 2. FILTER MATERIAL SHALL BE FILTER FABRIC OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER.
2. 2. W1 AND W2 FOR PIPES OUTFALLING INTO A DEFINED DITCH SHOULD BE SUFFICIENTLY WIDE TO HAVE STONE ONE FOOT ABOVE THE CROWN OF THE PIPE OR THE TOP OF DITCH BANK, WHICH EVER IS LOWER.

OUTLET PROTECTION

INSPECTION AND MAINTENANCE:

- INSPECT AFTER HEAVY RAINS FOR EROSION AND DISLODGED STONES
- MAKE ALL REPAIRS IMMEDIATELY

St

OUTLET PROTECTION

NO	DATE	REVISION	BY	CK.	APPR.
A	15-AUG-2007	ISSUED FOR INFORMATION	T.O.C.	D.E.M.	

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY P. LLANO
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
EROSION AND SEDIMENTATION CONTROL PLAN DETAILS
2 OF 2

JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
FILENAME C0004002.DWG
SCALE NTS
REV. NO. A
DWG. NO. C-4002

FOR BID 8/16/2007

LGAD_3, ANSI D, 22 x 34 in.

Cultural Resources Unanticipated Discovery Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, NY

September 2007

LG Constructors

Cultural Resources Unanticipated Discovery Plan

Submitted to

BEPCO CC Cogen Facility

Rensselaer, NY

September 2007

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LG Constructors

PLAN AND PROCEDURES FOR IDENTIFYING AND RESPONDING TO UNANTICIPATED DISCOVERIES OF CULTURAL RESOURCES (INCLUDING HUMAN REMAINS) DURING CONSTRUCTION OF THE BEPCO CC Cogen Facility RENSSELAER COUNTY, New York

Prepared by

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One Croton Point Avenue, Suite B
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Prepared for

Besicorp-Empire Development Company, LLC
Kingston, New York

October 4, 2001
Reviewed and updated by CH2M HILL, September, 2007

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1.0 Introduction.....1
2.0 Training and Orientation.....1
3.0 Observed Cultural Materials 2
4.0 Observed Skeletal Materials 4

Appendix
A Notification Lists

1.0 Introduction

A. Besicorp-Empire Development Company, LLC (Owner) has proposed the construction and operation of an integrated recycled newsprint manufacturing/gas-fired cogeneration facility on a 90-acre site in the City of Rensselaer, Rensselaer County, New York. Facility interconnects will include a natural gas pipeline, an electrical transmission line, a municipal water supply pipeline, a gray water supply line from the Albany County Sewer District South Plant, a wastewater discharge pipeline, a sanitary discharge line and associated equipment. For this Plan, the Project is defined as the power plant and associated off-site facilities. The newsprint project will be addressed in a separate Unanticipated Discovery Plan when construction on that project is ready to occur. The project will be carried out under the authority of certificates of environmental compatibility and public need (Certificates) issued by the New York State Board on Electric Generation Siting and the Environment pursuant to Articles VII and X of the Public Service Law.

B. Archeological investigations/evaluations of the area of potential effect associated with construction and operation of the power plant site, and its associated electric transmission line were completed during the certification process to determine if significant archeological resources would be affected by the construction and operation of those facilities. Because of the extensive documented prior disturbance of the gas-fired cogeneration facility site, no archeological survey was conducted in that area and it was determined that the likelihood of intact archeological remains being present in that area is extremely limited.

C. To further safeguard against the possibility that construction of the Project might affect significant archeological resources, the Owner has prepared a plan for dealing with the unanticipated discovery of historic properties or human remains. This document describes the Owner's plan for dealing with such discoveries during the course of project construction. It is intended to: a) describe to regulatory and review agencies the procedures the Owner will follow to prepare for and deal with unanticipated discoveries, and b) provide direction and guidance to Owner personnel and their contractors and consultants as to the proper procedures to be followed in the event of an unanticipated discovery.

2.0 Training and Orientation

A. The Owner will be responsible for assuring that construction contractor personnel have been advised on the procedures they must follow in the event of an unanticipated discovery. All construction personnel, including operators of equipment involved in grading, stripping, or trenching activities will be advised of the need to immediately stop work if they observe any indications of the presence of artifactual or faunal remains, and contact the Owner's Project Manager (Appendix A).

B. The necessity for compliance with unanticipated discovery procedures will be stressed. Special attention will be given to situations where human remains are encountered. The need to treat such remains with dignity and respect will be emphasized.

3.0 Observed Cultural Materials

A. If any member of the construction work force believes that a potential cultural resource has been found, he/she will be required to stop work in the immediate vicinity of the find and notify the Owner. If skeletal remains are involved, the procedures described in Section 4.0 will be followed.

B. If the Owner believes that an unanticipated discovery has been made, they will direct that all ground-disturbing activities within 100 feet of the potential discovery be stopped until such time as it is determined that construction in this area may re-commence. The Owner will be responsible for taking appropriate steps to protect and secure the evidence of the discovery. At a minimum, the immediate area of the discovery will be delineated with flagging and/or safety fencing. Vehicles and equipment will be permitted to traverse the area surrounding the immediate vicinity of the discovery. However, such movement will be minimized to the extent practical, and in the case of the Project's off-site linear facilities, limited to the construction right-of-way authorized by Owner's Certificates.

C. The Owner will be responsible for immediately notifying the designated cultural resources consultants listed in Appendix A. This will be done by telephone with additional notification via e-mail, fax or overnight mail.

D. Within 24 hours of the discovery, if possible, a professional archeologist will examine the discovery, and determine if a cultural resource is present. If, in the opinion of the archeologist, the discovery is not a cultural resource, he/she will immediately advise the Owner that the stop-work order can be removed. The archeologist will submit a letter report including photographs of the discovery site to the Owner within 15 business days.

E. In the event that the archeologist determines that a discovery is a cultural resource, he/she will immediately advise the Owner. The Owner will be responsible for immediately notifying (or having the cultural resources consultant notify) the SHPO by telephone, with written confirmation by e-mail, fax or overnight mail. Every effort will be made to insure that notifications are made within 24 hours of the determination that a cultural resource has been discovered. SHPO contacts are listed in Appendix A.

F. In the event that it is determined that the cultural resource is Native American in nature, the Owner will request (or have the cultural resources consultant request) that the SHPO contact and notify representatives of the appropriate Native American tribe(s).

G. If a cultural resource is present, the notifications to SHPO will either a) explain why the archeologist believes that the resource is not significant and request from SHPO permission for construction to re-commence immediately, or b) describe a scope-of-work for evaluating the significance of the resource and evaluating project effects on it. In the latter case, the SHPO will be advised that unless an objection is received within two business days (48 hours, including Saturdays if construction is normally scheduled for Saturdays) implementation of the scope of work will begin. If deemed appropriate by SHPO, notifications to representatives of the designated Native American tribe(s) will invite tribal representatives to observe the conduct

of any proposed work. All work to evaluate significance and project effects will be confined to the project's area of direct effect (generally presumed to be the immediate area of ground disturbance surrounding the discovery).

H. If the discovery has been made after trenching for the Project's water, wastewater, sanitary or gas pipelines has been completed, welding of pipe, pipeline placement within the trench, and backfilling will be halted in the immediate vicinity of the discovery. Construction activities will be allowed to proceed in the affected area as soon as the archeologist advises the Owner that site evaluation work is complete.

I. The Owner will be responsible for notifying (or arranging for the notification of) the SHPO by telephone, e-mail, fax or overnight mail, when evaluation of the cultural resource is complete, and whether or not the resource is, in the opinion of the archeologist, significant. The archeologist will provide the Owner as soon as possible, but no later than five business days after field investigations are complete, a written report describing the results of fieldwork, and if the resource is believed to be significant, a proposal for data recovery.

J. The Owner may choose to prepare an analysis of alternatives to data recovery, and an evaluation as to whether data recovery or an alternate form of mitigation is believed to be preferable. The decision to prepare an alternatives analysis will be made by the Owner.

K. The Owner will assure that the archeologist's report and the Owner alternatives analysis (if one has been prepared) are sent via e-mail, fax and/or overnight mail, to the SHPO and representative(s) of the designated Native American tribe(s). If proposed mitigation measures can be carried out without being impeded or affected by construction, the submittal to SHPO will be accompanied by a request to resume construction immediately. If no response is received from the SHPO within two business days (48 hours, including Saturdays if construction is normally scheduled for Saturdays) construction in the area of the discovery will resume.

L. Implementation of mitigation measures will not begin until after receipt by the Owner of verbal or written authorization from SHPO. The Owner will advise SHPO when all mitigation measures have been completed. If construction has been halted the Owner will also request authorization from SHPO to re-commence construction. If no verbal or written response is received from the SHPO by the Owner within two business days (48 hours, including Saturdays if construction work is normally scheduled on Saturdays), it will be presumed that SHPO has no objections and construction will re-commence. The Owner will make a good faith effort to accommodate any requests from Native American representatives that they be present during the implementation of mitigation measures related to a Native American resource.

M. The Owner will submit a summary report describing the results of mitigation to the SHPO (and the designated Native American tribe[s] if Native American resources are involved) within 30 calendar days of the completion of mitigation fieldwork. If archeological data recovery is a component of the mitigation plan a full report will be submitted to the SHPO, (and if Native American resources are involved, to the designated Native American tribe[s]) in accordance with a schedule to be established in consultation with SHPO.

4.0 Observed Skeletal Materials

A. The procedures in this section will apply in all situations where it is not obvious and immediately apparent that skeletal remains, which are found, are non-human in origin. (Skeletal remains mean articulated or disarticulated bones or teeth). If obviously non-human skeletal remains are found in association with cultural material, the procedures described in Section 3.0 will be followed.

B. Any human remains that are inadvertently discovered during construction will at all times be treated with dignity and respect.

C. If any member of the construction work-force believes that an unanticipated discovery involving potentially human skeletal remains has been made, he/she will be required to stop work in the immediate vicinity of the find and notify the Owner.

D. If the Owner believes that potentially human skeletal remains have been found, they will direct that all ground disturbing activities within 100 feet of the potential discovery be stopped until such time as it is determined that construction may recommence. The Owner will be responsible for taking appropriate steps to protect and secure the evidence of the discovery. At a minimum, the immediate area of the discovery will be delineated with flagging and/or safety fencing. Vehicles and equipment will be permitted to traverse the area surrounding the immediate vicinity of the discovery. However, such movement will be minimized to the extent practical, and in the case of off-site interconnects, limited to the construction right-of-way authorized by Owner's Certificates.

E. The Owner will be responsible for immediately notifying the designated cultural resources consultants listed in Appendix A (via e-mail, fax, or overnight mail).

F. Within 24 hours of the discovery, if possible, it will be examined by a professional archeologist who will be responsible for determining if the remains have an archeological association, and if so, if that association is aboriginal or non-aboriginal. If the archeologist cannot determine if the skeletal material is human, the Owner will retain the services of a forensic anthropologist or other qualified individual. That individual will make an in-field determination of whether or not the remains are human and, if human, determine if the skeletal material is aboriginal. In-field examination, which may include partial exposure of the discovery, will be limited to the minimum necessary to confirm if the find is human, and if human, whether or not it may be aboriginal.

G. If it is determined that the skeletal material is not human and there is no archeological association, the individual making the determination will immediately advise the Owner, and construction will be permitted to resume. The archeologist (and the forensic anthropologist if one was involved) will submit a letter report(s) including photographs of the discovery site to the Owner within 15 business days.

H. In the event that it is determined that the skeletal material is not human, but is associated with an archeological site, the procedures described in Section 3.0, paragraphs E through M, will be followed.

I. In the event it is determined that the skeletal material is human, the Owner will notify the SHPO and the appropriate law enforcement agency (see Appendix A) .

J. It will be presumed that any human remains found in a prehistoric archeological context are aboriginal in nature. In the event that it is determined that aboriginal human remains are present (whether or not they are in an archeological context), the Owner will immediately notify the SHPO, and the designated Native American tribe(s) (see Section K and Section M).

K. If human remains are present in an aboriginal archeological context, the Owner will follow the procedures described in Section 3.0, Paragraphs E through M, except as follows:

1. Notifications to the SHPO will make special note of the fact that human remains have been found.

2. Notifications given to Native American tribe(s) will request that they advise the Owner and the SHPO of any special desires they have regarding the disposition of the human remains.

3. Proposals for site evaluation will give special consideration to the fact that human remains are present. No intrusive examination of the immediate area of the remains will be proposed. The proposal will also include an evaluation of the potential for the presence of multiple graves and describe procedures for determining if other unidentified graves may be present.

4. Proposals for mitigation will, to the extent feasible, accommodate the desires, made known to the Owner, of Native American tribal representatives regarding the treatment of human remains.

5. In the case of water, wastewater, sanitary or gas pipelines, if the discovery was made after trenching in the vicinity of the discovery has been completed, construction will be permitted to re-commence, except within 100 feet of any human remains. Construction within the 100-foot exclusion area will be permitted to proceed when the remains have been removed (or when SHPO advises the Owner that it has determined that the remains should be left in place).

L. If human remains are present and are associated with a non-aboriginal archeological context the procedures described in Section 3.0, Paragraphs E through M, will be followed except that:

1. Proposals for site evaluation will give special consideration to the fact that human remains are present. No intrusive examination of the immediate area of the remains will be proposed. The proposal will also include an evaluation of the potential for the

presence of multiple graves and, if appropriate, describe procedures for determining if other unidentified graves may be present.

2. If it is determined by the SHPO, that the associated archeological site is not significant, and that mitigative measures are not necessary, the Owner will assume that it is authorized to resume construction when the remains have been removed. The Owner will provide the SHPO with a written report describing the removal activities within 15 business days of the resumption of construction.

3. Proposals for mitigation will include discussion of what steps will be taken to attempt to identify lineal descendants of the deceased.

4. If the discovery was made after trenching in the vicinity of the discovery has been completed, construction will be permitted to re-commence, except within 100 feet of any human remains. Construction within remaining areas will be permitted to proceed when the remains have been removed (or when SHPO advises the Owner that it has determined that the remains should be left in place).

M. If human remains are found in a non-archeological context, the appropriate local law enforcement agency will be requested to notify the appropriate coroner or medical examiner. The Owner will also immediately notify the SHPO of the discovery, and advise that local law enforcement authorities have been requested to contact the coroner or medical examiner. If the remains are Native American, and if requested to do so by the Native American representative, the Owner will request that the coroner or medical examiner delay taking any action until such time as the Native American representative has made his/her desires regarding disposition of the remains known to the coroner or medical examiner.

Appendix A
Notification List

APPENDIX A

NOTIFICATION LIST

Owner Project Manager (Site)	Alternate
Name: Address: Tel: Fax: e-mail:	Name: Address: Tel: Fax: e-mail:

Contractor Project Manager (Site)	Alternate
Name: Address: Tel: Fax: e-mail:	Name: Address: Tel: Fax: e-mail:

Cultural Resources Consultant	Alternate
Name: Address: Tel: Fax: e-mail:	Name: Address: Tel: Tel: e-mail:

State Historic Preservation Officer (SHPO)	Alternate
Dr. Robert Kuhn Bureau of Historic Preservation New York State Office of Parks, Recreation And Historic Preservation Peebles Island P.O. Box 189 Waterford, New York 12188-0189 Tel: (518) 237-8643 x255 Fax: (518) 233-9049 e-mail: Robert.Kuhn@oprhp.state.ny.us	TO BE DETERMINED

Native American Representative(s)	Alternate

Name:
Address:

Tel:
Fax:
e-mail:

Name:
Address:

Tel:
Tel:
e-mail:

Law Enforcement Agency

Rensselaer Police Department
Tel:

Site Grading Plans (Table of Contents)

Drawing No.	Drawing Description
C-0001	Project Information, Abbreviations and Legend
C-0002	Notes, Vicinity Map and Control Data
C-1000	Overall Site and Paving Plan
C-1001	Partial Site Pan (1 of 3)
C-1002	Partial Site Pan (2 of 3)
C-1003	Partial Site Pan (3 of 3)
C-2000	Overall Grading and Drainage Plan
C-2001	Partial Grading and Drainage Plan (1 of 3)
C-2002	Partial Grading and Drainage Plan (2 of 3)
C-2003	Partial Grading and Drainage Plan (3 of 3)
C-4000	Erosion and Sedimentation Control Plan
C-4000A	Erosion and Sedimentation Control Plan for Foundation Excavation
C-4001	Erosion and Sedimentation Control Plan Details (1 of 2)
C-4002	Erosion and Sedimentation Control Plan Details (2 of 2)
C-5000	Storm Drain Profiles
C-7000	Sections and Details (1 of 3)
C-7001	Sections and Details (2 of 3)
C-7002	Sections and Details (3 of 3)

PROJECT INFORMATION:

SITE ADDRESS: BESICORP–EMPIRE POWER GENERATING FACILITY
36 RIVERSIDE DRIVE
RENSSELAER, NEW YORK 12144–2900

OWNER/DEVELOPER: BESICORP–EMPIRE POWER COMPANY LLC
BOB HLAVATY – PROJECT MANAGER
TEL. (845) 336–7700

ENGINEER: CH2MHILL LOCKWOOD GREENE
303 PERIMETER CENTER NORTH
SUITE 800
ATLANTA, GEORGIA 30346
ATTN: DAVID E. MICKANEN, PE
TEL. (770) 829–6615

TOPOGRAPHY/SURVEY: C.T. MALE ASSOCIATES PC
50 CENTURY HILL DRIVE
P.O. BOX 727
LATHAM, NEW YORK 12110
(PROVIDED BY BASF)
DATED JAN. 2001
TEL. (518) 786–7400

GEOTECHNICAL ENGINEER: GZA GeoENVIROMENTAL INC.
GIANNI CHIERUZZI
NEW YORK, NEW YORK 10001
REPORT DATED: IN PROGRESS
TEL. (212) 594–8140

ABBREVIATIONS:

Ac	ACRE
ABC	AGGREGATE BASE COURSE
AGGR	AGGREGATE
ASPH	ASPHALT
AC	ASPHALT CEMENT
BC	BACK OF CURB
BFP	BACKFLOW PREVENTER
BM	BENCH MARK
BITUM	BITUMINOUS
BE	BOTTOM ELEVATION
BLDG	BUILDING
CIP	CAST IRON PIPE
CB	CATCH BASIN
℄	CENTER LINE
CO	CONSTRUCTION EXIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
CF	CUBIC FEET
CW	CITY WATER
CY	CUBIC YARD
C&G	CURB AND GUTTER
DIA	DIAMETER
DB	DITCH BOTTOM
DWG	DRAWING
DI	DROP INLET
DIP	DUCTILE IRON PIPE
DOT	DEPARTMENT OF TRANSPORTATION
EA	EACH
EW	EXISTING WATER
E	EASTING OR EAST
EP	END PAVEMENT
EOP	EDGE OF PAVEMENT
ELEV	ELEVATION
EXIST	EXISTING
EFP	EXISTING FIRE PROTECTION
EMH	EXISTING MANHOLE
ESD	EXISTING STORM DRAIN
EX	EXISTING
FT	FEET
FF	FINISH FLOOR
FH	FIRE HYDRANT
FP	FIRE PROTECTION
FW	FIRE WATER
FES	FLARED END SECTION
FL	FLOOR
FM	FORCE MAIN
GAL	GALLON
GPM	GALLONS PER MINUTE
GS	GALVANIZED STEEL
GV	GATE VALVE
GE	GUTTER ELEVATION
HDCP	HANDICAP
HDWL	HEADWALL
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HYD	HYDRANT
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IPF	IRON PIN FOUND
IPS	IRON PIN SET
L	LENGTH
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MON	MONUMENT
NG	NATURAL GAS
N	NORTHING OR NORTH
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PVMT	PAVEMENT
PE	POLYETHYLENE
PVC	POLYVINYL CHLORIDE PIPE
PIV	POST INDICATOR VALVE
P.O.B	POINT OF BEGINING
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVE
PROP	PROPOSED
R	RADIUS
RR	RAILROAD
RCP	REINFORCED CONCRETE PIPE
REINF	REINFORCEMENT
ROW	RIGHT OF WAY
RW	RIVER WATER
SS	SANITARY SEWER (GRAVITY)
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MAN HOLE
S	SLOPE
SIM	SIMILAR
SD	STORM DRAIN
STA	STATION
TBM	TEMPORARY BENCH MARK
TC	TOP OF CONCRETE ELEVATION
TF	TRANSFORMER
TG	TOP OF GRATE ELEVATION
TYP	TYPICAL
TP	TOP OF PAVEMENT ELEVATION
W	WATER OR WEST
WV	WATER VALVE

EXISTING		NEW
	ASPHALT	
BM	BENCHMARK	BM
	BUILDING	
	BUSH / TREE	
N/A	CAST CONCRETE	
	CATCH BASIN / DROP INLET	
	CLEANOUT	CO
AS NOTED	COLUMN IDENTIFICATION	1
	CONCRETE MONUMENT	
N/A	CONSTRUCTION LIMITS	
900	CONTOURS	(900)
	CURB / CURB AND CUTTER	
	DRAINAGE SWALE	
	FIRE HYDRANT	
	FLARED END SECTION	
	GATE VALVE	
	GATE VALVE W/ BOX	
N/A	GRAVEL	
	GUARD POST	
	GUARDRAIL	
	HANDICAP	
IPF	IRON PIN	IPS
	LIFT STATION	
	LIGHT STANDARD	
	MANHOLE	
M	METER	M
	MONITOR NOZZLE	

EXISTING		NEW
AS NOTED	PC – PT	
N/A	POINT OF INTERSECTION	
	PIPE CAP	
	POST INDICATOR VALVE	
	PROPERTY LINE	
N/A	RADIUS POINT	R
	RAILROAD	
	RAILROAD BUMPER	
	REDUCER	
	REMOVAL / DEMOLITION	N/A
N/A	RIPRAP	
	RIVER / LAKE	N/A
N/A	SAND	
	SECURITY FENCE	
	SIGN	
	SILT FENCE	
B-1	SOIL BORING	N/A
100.00	SPOT ELEVATION	(100.00)
N/A	STONE FILTERING RING	
	STORM DRAINAGE PIPE	
N/A	SURVEY MONUMENT	JCCT 410
N/A	THRUST BLOCK	
	TREE LINE	
EUE	UTILITY	UE
	UTILITY POLE	

DRAWING LIST:

C–0001	CIVIL PROJECT INFORMATION, ABBREVIATIONS, AND LEGEND
C–0002	CIVIL NOTES, VICINITY MAP, AND CONTROL DATA
C–1000	CIVIL OVERALL SITE AND PAVING PLAN
C–1001	CIVIL PARTIAL SITE PLAN 1 OF 3
C–1002	CIVIL PARTIAL SITE PLAN 2 OF 3
C–1003	CIVIL PARTIAL SITE PLAN 3 OF 3
C–2000	CIVIL OVERALL GRADING AND DRAINAGE PLAN
C–2001	CIVIL PARTIAL GRADING AND DRAINAGE PLAN 1 OF 3
C–2002	CIVIL PARTIAL GRADING AND DRAINAGE PLAN 2 OF 3
C–2003	CIVIL PARTIAL GRADING AND DRAINAGE PLAN 3 OF 3
C–3000	CIVIL OVERALL UTILITY PLAN
C–3001	CIVIL PARTIAL UTILITY PLAN 1 OF 3 (NOT INCLUDED)
C–3002	CIVIL PARTIAL UTILITY PLAN 2 OF 3 (NOT INCLUDED)
C–3003	CIVIL PARTIAL UTILITY PLAN 3 OF 3 (NOT INCLUDED)
C–4000	CIVIL EROSION/SEDIMENTATION CONTROL PLAN
C–4000A	CIVIL EROSION/SEDIMENTAITION CONTROL PLAN FOR FOUNDATION EXCAVATION
C–4001	CIVIL EROSION/SEDIMENTATION CONTROL PLAN DETAILS 1 OF 2
C–4002	CIVIL EROSION/SEDIMENTATION CONTROL PLAN DETAILS 2 OF 2
C–5000	CIVIL STORM DRAIN PROFILES
C–5001	CIVIL STORM DRAINAGE DETENTION BASIN PLAN (NOT INCLUDED)
C–6000	CIVIL SANITARY SEWER AND FIRE WATER LINE PROFILES (NOT INCLUDED)
C–7000	CIVIL SECTIONS AND DETAIL 1 OF 3
C–7001	CIVIL SECTIONS AND DETAIL 2 OF 3
C–7002	CIVIL SECTIONS AND DETAIL 3 OF 3
C–8000	CIVIL BIKE PARK OVERALL SITE PLAN (NOT INCLUDED)
C–8001	CIVIL BIKE PATH PARTIAL SITE PLAN 1 OF 3 (NOT INCLUDED)
C–8002	CIVIL BIKE PATH PARTIAL SITE PLAN 2 OF 3 (NOT INCLUDED)
C–8003	CIVIL BIKE PATH PARTIAL SITE PLAN 3 OF 3 (NOT INCLUDED)
C–8100	CIVIL BIKE PATH OVERALL GRADING PLAN (NOT INCLUDED)
C–8101	CIVIL BIKE PATH PARTIAL GRADING PLAN 1 OF 3 (NOT INCLUDED)
C–8102	CIVIL BIKE PATH PARTIAL GRADING PLAN 2 OF 3 (NOT INCLUDED)
C–8103	CIVIL BIKE PATH PARTIAL GRADING PLAN 3 OF 3 (NOT INCLUDED)

STATE OF NEW YORK
DAVID E. MICKANEN
LICENSED PROFESSIONAL ENGINEER
085182
9-25-07

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NO	DATE	REVISION	BY	CK.	APPR.
0	25–SEP–2007	INITIAL ISSUE	T.O.C.	D.E.M.	

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PROJECT INFORMATION,
ABBREVIATIONS, AND LEGEND

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
REV. NO. 0
FILENAME C0000001.DWG
SCALE NTS
DWG. NO. C–0001

LGAD_3. ANSI D, 22 x 34 in.

GENERAL NOTES

1. SITE IS LOCATED AT 36 RIVERSIDE DRIVE, RENSSELAER, NEW YORK.

2. ALL UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS SHOULD BE CONSIDERED APPROXIMATE ONLY AND THE SUBCONTRACTOR MUST NOTIFY A UTILITY LOCATOR SERVICE PRIOR TO CONSTRUCTION. CALL DIG ALERT AT 1-800-962-7962.

3. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. MAKE RESPONSIBLE DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. USE EXTREME CARE WHEN PERFORMING ANY DEMOLITION OR GRADING OPERATIONS IN THE PROXIMITY OF THESE EXISTING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE REPAIRED AT THE SUBCONTRACTOR'S EXPENSE. NOTIFY CONTRACTOR WHEN ANY UNIDENTIFIED UTILITIES ARE DISCOVERED.

4. NO BOUNDARY INFORMATION IS SHOWN OR IMPLIED ON THESE DRAWINGS.

5. IT IS RECOMMENDED THAT SUBCONTRACTOR VISIT THE SITE AND MAKE ANY INVESTIGATIONS NECESSARY TO DETERMINE THE EXTENT OF THE WORK REQUIRED TO CONSTRUCT THE PROJECT.

6. ANY DAMAGE TO EXISTING IMPROVEMENTS, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, LANDSCAPING, PAVEMENT, STRIPING, CURB, ETC. CAUSED BY THE SUBCONTRACTOR DURING CONSTRUCTION, SHALL BE REPAIRED BY THE SUBCONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

7. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES.

8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2007 STANDARD SPECIFICATIONS OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.

9. NOTIFY CONTRACTOR A MINIMUM OF FORTY-EIGHT (48) HOURS FOR SITE INSPECTIONS, TESTING VERIFICATIONS, AND FOR ANY OTHER PORTION OF THE WORK REQUIRING ENGINEER'S OR OWNER'S SERVICES AT SITE.

10. COMPLY WITH THE 1994 STANDARDS OF OSHA DIRECTIVES, INCLUDING 29 CFR PART 1926 SUBPART P, AND ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.

11. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND IN ACCORDANCE WITH THE BEST RECONIZED TRADE PRACTICES.

12. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), LATEST EDITION, AS ADOPTED BY THE CITY OF RENSSELAER, AND SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACTOR.

13. MAINTAIN GENERAL SAFETY DURING CONSTRUCTION, AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. FENCE AND/OR BARRICADE THE CONSTRUCTION AREA AS REQUIRED TO PROTECT ADJACENT PLANT AREAS, VEHICULAR TRAFFIC, AND PEDESTRIAN TRAFFIC. SUBCONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA AND NRS CHAPTER 618, IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION ON THIS PROJECT.

14. MAINTAIN THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. ALL MATERIALS SHALL BE STORED WITHIN APPROVED CONSTRUCTION AREAS.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LAYOUTS OF LINES AND GRADES FROM CONTROL PROVIDED BY A SURVEYOR, LICENSED IN THE STATE OF NEW YORK.

16. EXCAVATED SOIL NOT USED AS FILL FOR GRADING SHALL BE STOCK PILED ON SITE IN AN AREA APPROVED BY CONTRACTOR.

17. PROJECT SHALL COMPLY WITH SITE SPECIFIC SAFETY PLAN THAT CONFORMS TO OSHA 29 CFR PART 1926 SUBPART C REQUIREMENTS AND WILL HAVE A SITE SAFETY OFFICER.

18. DUST SUPPRESSION WILL BE BY MEANS OF WATER SPRINKLING OR APPROVED DUST PALLIATIVE.

19. THE BUILDING SHALL COMPLY WITH THE NEW YORK FIRE PREVENTION CODE.

20. FIRE HYDRANTS AND STABILIZED SURFACES MUST BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES ON SITE.

21. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AND DIMENSIONS PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING WORK.

TRAFFIC CONTROL NOTES

1. COMPLY WITH THE 2003 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), REVISION NO. 1, DATED NOVEMBER 2004.

2. SUBCONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL, THROUGHOUT CONSTRUCTION, IN ACCORDANCE WITH APPLICABLE PARTS OF SPECIFICATION 332, MUTCD, AND THE STATE OF NEW YORK STATE DOT TRAFFIC CONTROL STANDARDS, AND CITY OF RENSSELAER TRAFFIC CONTROL REQUIREMENTS.

3. ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH MUTCD. ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE CONTRACTOR.

DEMOLITION NOTES

1. COORDINATE DEMOLITION WORK WITH OTHER WORK ALREADY IN PROGRESS AND SCHEDULE ACTIVITIES WITH CONTRACTOR.

2. DISPOSE OF UNSALVAGED DEMOLISHED MATERIALS OFF SITE IN A LEGAL MANNER.

3. LOCATE AND MARK ALL EXISTING UTILITY LINES WHETHER TO BE ABANDONED OR PROTECTED IN PLACE.

4. SAW CUT EXISTING PAVEMENT AT LIMITS OF DEMOLITION OR REMOVE TO THE NEXT NEAREST JOINT BEYOND LIMITS OF DEMOLITION, IF CONCRETE. REPLACE PAVEMENT WHEN REMOVAL EXTENDS BEYOND LIMITS OF DEMOLITION.

5. REPAIR OR REPLACE DAMAGED ITEMS NOT DESIGNATED TO BE DEMOLISHED. RESTORE TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE AS A MIN. IN CONFORMANCE WITH "BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

2. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ON SITE.

3. SILT BARRIERS SHALL BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

4. ALREADY INSTALLED AND NEW EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED THE NEW YORK STATE DEC SOIL EROSION AND SEDIMENTATION CONTROL TRAINING MANUAL.

5. THE CONSTRUCTION EQUIPMENTS/VEHICLES SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO ROADS AT THE SITE. THIS MAY REQUIRE PERIODIC REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO ROADS OR INTO STORM DRAIN SHALL BE REMOVED IMMEDIATELY.

6. ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.

7. THE CONSTRUCTION OF THE SITE SHALL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL SHALL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT GRAVEL SURFACING AND/OR ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

8. REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

9. SEDIMENT/EROSION CONTROL DEVICES SHALL BE CHECKED AFTER EACH SIGNIFICANT STORM EVENT. EACH DEVICE SHALL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.

10. SILT FENCES AND HAY BALE BARRIERS SHALL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.

11. ANY ADDITIONAL CONSTRUCTION OTHER THAN SHOWN ON THIS PLAN MAY REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES.

12. DISTURBED AREAS LEFT IDLE FOR 14 DAYS, AND NOT TO FINAL GRADE, SHALL BE STABILIZED BY THE APPLICATION OF DUST PALLIATIVE. DISTURBED AREAS LEFT IDLE FOR MORE THAN 45 DAYS, MUST COMPLY WITH THE NYSDEC STORMWATER QUALITY MANAGEMENT PRACTICES.

13. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHALL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.

14. DURING UNSUITABLE GROWING SEASONS, MULCH SHALL BE USED AS A TEMPORARY COVER.

15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY CONTRACTOR TO ADDRESS ON-SITE INSPECTION CONCERNS.

16. POLLUTION CONTROLS: USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL OF AIR POLLUTION PRACTICAL FOR THE CONDITION OF WORK.

17. SUBCONTRACTOR SHALL COMPLY WITH THE BESICORP FACILITY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND DOCUMENTS.

GRADING AND DRAINAGE NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EXCAVATION AND BUILDING CODE REQUIREMENTS OF THE CITY OF RENSSELAER AND NYSDEC. ANY VIOLATION WILL RESULT IN THE STOPPAGE OF ALL WORK UNTIL THE VIOLATION IS CORRECTED.

2. EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE APPROVED PLANS.

3. SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE NOTED ON THE PLANS.

4. FILLS SHALL BE COMPACTED THROUGHOUT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM SOIL COMPACTION TEST D698, COMPACT THE UPPER 18" OF SOIL BENEATH PAVEMENT AND SLAB ON GRADE TO 98% (MIN.).

5. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NYSDEC DUST PERMIT AND THE CONTINUOUS DUST CONTROL THROUGHOUT CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE REGULAR CLEANING OF ALL MUD, DIRT, DEBRIS, ETC., FROM ANY AND ALL ADJACENT ROADS, INCLUDING PUBLIC STREETS.

6. NO ROCK OR SIMILAR MATERIAL GREATER THAN 6" IN DIAMETER SHALL BE PLACED IN THE FILL UNLESS APPROVED BY THE CONTRACTOR.

7. ALL NEWLY GRADED SURFACES SHALL HAVE A MINIMUM SLOPE OF 1% TOWARDS THE STREET OR ADJACENT DRAINAGE AREA, OR AS SHOWN ON PLANS.

8. SUBCONTRACTOR SHALL INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND/OR EROSION.

9. TOPOGRAPHIC INFORMATION IS BASED ON INFORMATION PROVIDED BY BESICORP PER MAP DRAWING BM APRIL 2001.

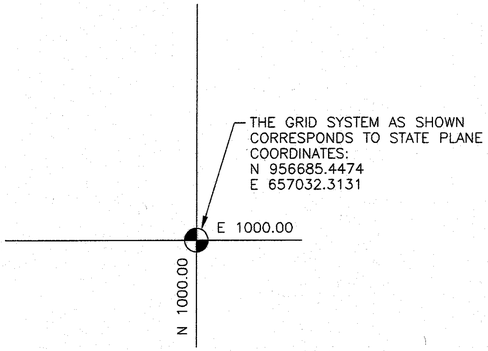
10. DRAINAGE:
(A) SUBCONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL NEW DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
(B) NO FENCE OR OTHER OBSTRUCTION, WHICH INTERFERS WITH DISCHARGE, SHALL BE CONSTRUCTED WITHIN THE DRAINAGE OR STORM DRAIN EASEMENTS.

VERTICAL DATUM

NORTH ORIENTATION AND COORDINATE DATUM ARE BASED ON THE EASTERN ZONE OF THE NEW YORK STATE PLANE COORDINATE SYSTEM AS ESTABLISHED BY DIFFERENTIAL G.P.S METHODS ORIGINATING FROM MONUMENTS VAN RENSSELAER AND LANSING (NAD27).

HORIZONTAL CONTROL

BESICORP FACILITY GRID. CONTROL POINTS ARE SET AT THE LOCATION SHOWN BELOW.



UTILITY WARNING

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM VISIBLE FIELD EVIDENCE INFORMATION ONLY. ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THERE EXACT LOCATION. ADDITIONAL BURIED UTILITY LINES AND/OR STRUCTURES MAYBE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PRELIMINARY SITE OBSERVATIONS TO LOCATE BURIED UTILITY LINES AND/OR STRUCTURES.

SECTION OR DETAIL NUMBER

SECTION OR DETAIL

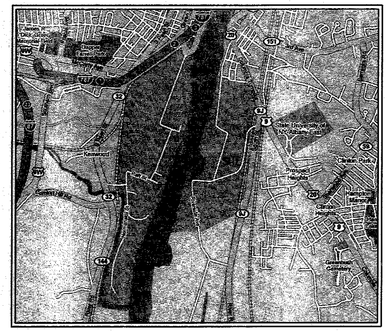
1
C-7000

SCALE: AS NOTED

DWG WHERE SECTION OR DETAIL IS DRAWN

SECTION AND DETAIL IDENTIFICATION:

* NOT ALL SYMBOLS SHOWN ARE APPLICABLE TO THIS PROJECT.
** SEE ABBREVIATIONS LISTING FOR UTILITY IDENTIFICATION.
*** NOT USED WHEN SECTION AND/OR DETAIL IS CUT AND DRAWN ON SAME DWG.



SITE LOCATION MAP

SCALE: NOT TO SCALE

NORTH

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STATE OF NEW YORK
DAVID E. MICKANEN
085162
LICENSED PROFESSIONAL ENGINEER
9-25-07

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NO	DATE	REVISION	BY	CK.	APPR.
0	25-SEP-2007	INITIAL ISSUE	T.O.C.	D.E.M.	

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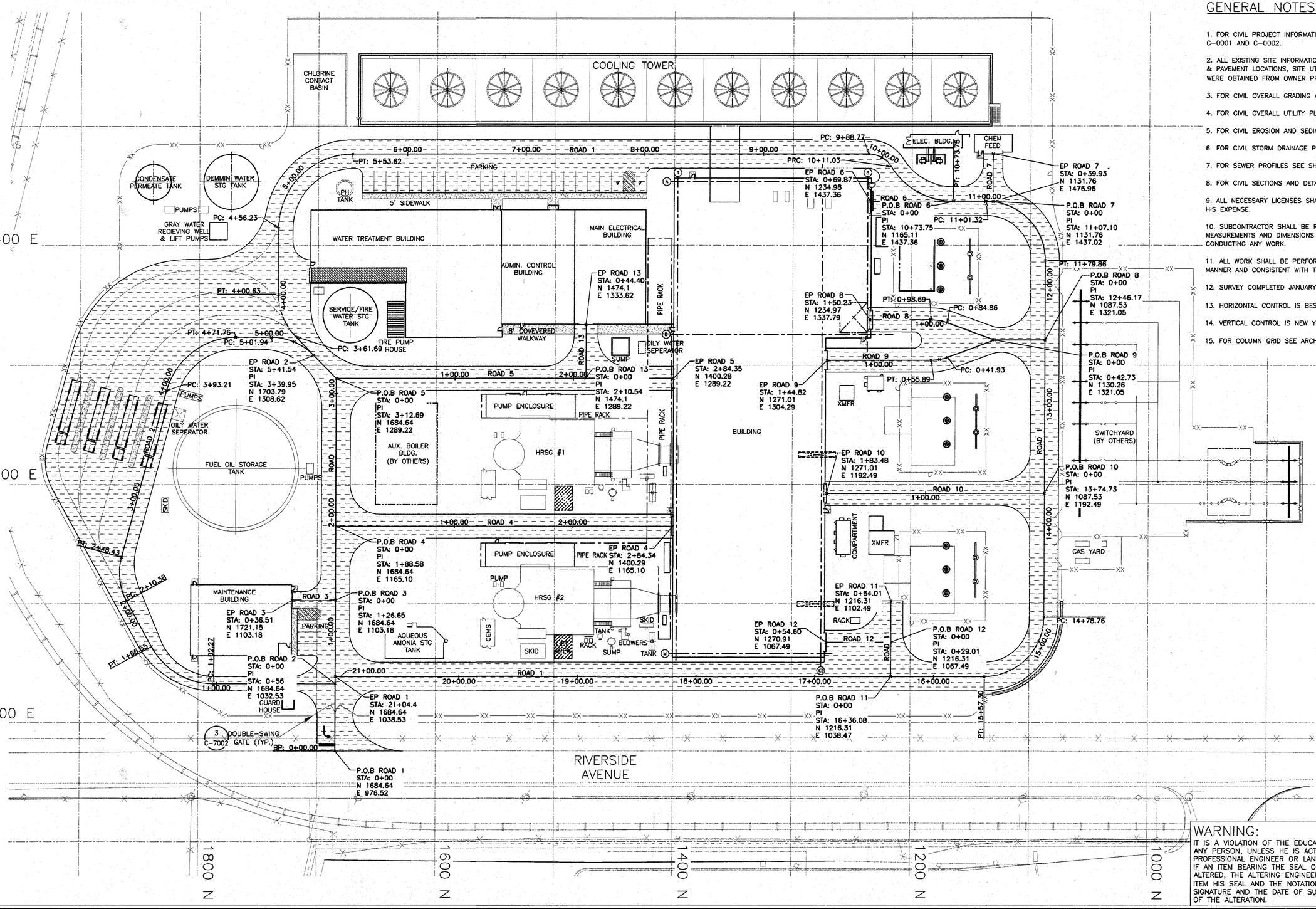
LG Constructors
Atlanta, Georgia

SHEET TITLE: CIVIL NOTES, VICINITY MAP, AND CONTROL DATA

JOB NAME: BEPCO CC COGEN - FACILITY

JOB NO. 360473
FILENAME C0000002.DWG
SCALE NTS
REV. NO. 0
DWG. NO. C-0002

LGAD_3. ANSI D, 22 x 34 in.



GENERAL NOTES:

1. FOR CIVIL PROJECT INFORMATION, ABBREVIATIONS AND LEGEND SEE SHEET C-0001 AND C-0002.
2. ALL EXISTING SITE INFORMATION: TOPOGRAPHY, BUILDING LOCATIONS, ROADS & PAVEMENT LOCATIONS, SITE UTILITIES, AND PROPERTY LINE INFORMATION WERE OBTAINED FROM OWNER PROVIDED DOCUMENTS/DRAWINGS.
3. FOR CIVIL OVERALL GRADING AND DRAINAGE PLAN SEE SHEET C-2000.
4. FOR CIVIL OVERALL UTILITY PLAN SEE SHEET C-3000.
5. FOR CIVIL EROSION AND SEDIMENT CONTROL PLAN SEE SHEET C-4000.
6. FOR CIVIL STORM DRAINAGE PROFILES SEE SHEET C-5000.
7. FOR SEWER PROFILES SEE SHEET C-6000.
8. FOR CIVIL SECTIONS AND DETAILS SEE DRAWING SERIES C-7000.
9. ALL NECESSARY LICENSES SHALL BE OBTAINED BY THE SUBCONTRACTOR AT HIS EXPENSE.
10. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AND DIMENSIONS PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
11. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMAN LIKE MANNER AND CONSISTENT WITH THE BEST RECOGNIZED TRADE PRACTICES.
12. SURVEY COMPLETED JANUARY 2001 BY C.T. MALE ASSOCIATES
13. HORIZONTAL CONTROL IS BESICORP FACILITY GRID (SEE C-0002).
14. VERTICAL CONTROL IS NEW YORK STATE PLANE
15. FOR COLUMN GRID SEE ARCHITECTURAL & STRUCTURAL DRAWINGS.

LEGEND

CONCRETE

ASPHALT PVMT.

STATE OF NEW YORK
DAVID E. MICKANEN
085162
LICENSED PROFESSIONAL ENGINEER

9-25-07

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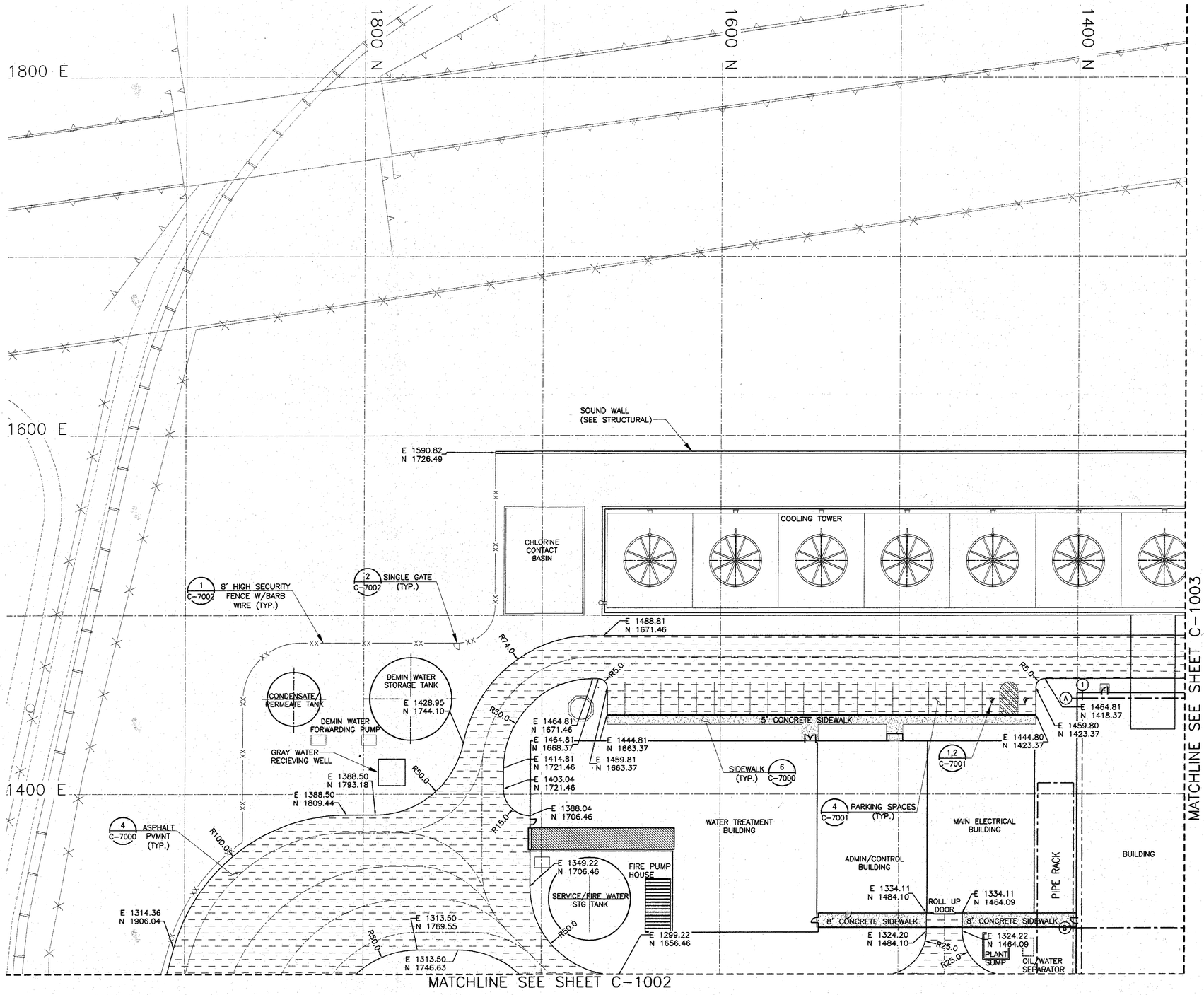
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
OVERALL SITE AND PAVING PLAN

JOB NAME
BEPCO CC
COGEN - FACILITY

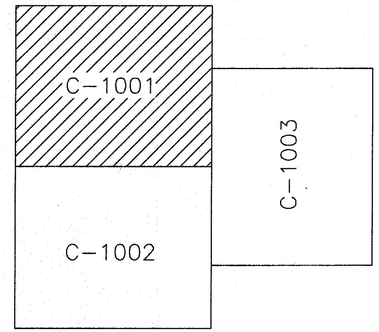
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SCALE 1" = 40'
REV. NO. 0
DWG. NO. C-1000

LOAD_3, ANSI D, 22 x 34 in.

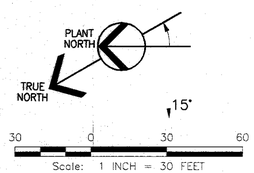


GENERAL NOTES:

1. FOR CIVIL SITE PLAN GENERAL NOTES AND LEGEND REFER TO SHEET C-1000.



KEY PLAN



STATE OF NEW YORK
DAVID E. MICKANEN
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LICENSED PROFESSIONAL ENGINEER

9-25-07

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DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL SITE PLAN
1 OF 3

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
FILENAME C0001001.DWG
SCALE 1" = 30'
REV. NO. 0
DWG. NO. C-1001

LGAD_3, ANSI D, 22 x 34 in.

MATCHLINE SEE SHEET C-1001

MATCHLINE SEE SHEET C-1003

1 C-7002 8' FENCE (TYP.)

E 1276.43
N 1817.85

PUMPS

OIL/WATER SEPARATOR

E 1263.46
N 1696.63

R50.0

E 1232.98
N 1927.83

1200 E

FUEL OIL STORAGE TANK

E 1195.86
N 1923.3

FOAM SKID

4 C-7000 ASPHALT PVMNT (TYP.)

E 1146.85
N 1852.55

R50.0

E 1115.02
N 1850.54

E 1125.26
N 1696.63

E 1110.26
N 1711.63

R15.0

E 1110.26
N 1721.63

E 1096.12
N 1721.63

MAINTENANCE BUILDING

E 1096.12
N 1716.63

E 1069.63
N 1832.00

5 C-7001 DOOR PAD (TYP.)

E 1064.75
N 1850.85

E 1056.12
N 1716.63

E 1038.53
N 1721.64

OFFICE

E 1038.54
N 1785.72

E 1056.12
N 1702.25

3.00

R50.0

R74.0

R25.0

E 1051.69
N 1699.61

E 1026.53
N 1719.63

GUARD HOUSE

E 1026.54
N 1786.09

R20.0

E 1006.42
N 1699.63

E 976.49
N 1699.63

MATCH EXISTING

R50.0

10 C-7000 PVMNT TRANSITION

DOUBLE-SWING GATE (TYP.) 3 C-7002

RIVERSIDE AVENUE

1000 E

800 E

2000 N

1800 N

1600 N

1400 N

E 1299.22
N 1509.10

E 1299.22
N 1439.09

E 1299.22
N 1400.29

R25.0

E 1279.22
N 1647.63

E 1279.22
N 1400.29

PIPE RACK

E 1254.22
N 1672.63

AUXILIARY BOILER BUILDING

HRSG #1

PIPE RACK

E 1200.11
N 1295.26

E 1175.11
N 1647.63

E 1175.11
N 1400.29

R25.0

FW PUMP & ENCLOSURE

PIPE RACK

E 1155.11
N 1647.63

E 1155.11
N 1400.29

E 1130.11
N 1672.63

HRSG #2

E 1075.53
N 1672.63

AQUEOUS AMMONIA STORAGE TANK

CEMS

SKID

TANK

RACK

BLOWERS

SUMP

AFCU SKID

E 1050.53
N 1647.63

R25.0

M

E 1026.53
N 1649.63

R20.0

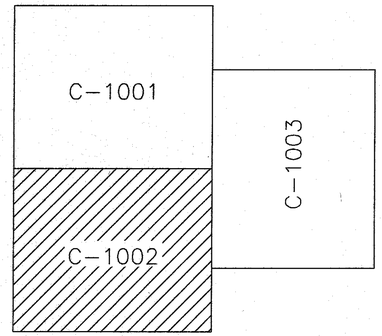
E 993.20
N 1664.54

E 976.52
N 1627.27

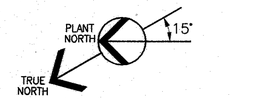
1 C-7002 8' FENCE (TYP.)

GENERAL NOTES:

1. FOR CIVIL SITE PLAN GENERAL NOTES AND LEGEND REFER TO SHEET C-1000.



KEY PLAN



30 0 30 60

Scale: 1 INCH = 30 FEET

STATE OF NEW YORK
DAVID E. MICKANEN
LICENSED PROFESSIONAL ENGINEER
085162

9-25-07

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LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL SITE PLAN
2 OF 3

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
REV. NO. 0
FILENAME C0001002.DWG
SCALE 1" = 30'
DWG. NO. C-1002

LGAD_3, ANSI D, 22 x 34 in.

MATCHLINE SEE SHEET C-1002

MATCHLINE SEE SHEET C-1001

BUILDING

8' HIGH SECURITY FENCE W/BARB WIRE (TYP.) 1 C-7002

DOOR PAD (TYP.) 5 C-7001

6' HIGH CHAIN LINK FENCE NO BARB WIRE (TYP.) 1 C-7002

COMPARTMENT

XMFR

RACK

GENERATOR

COOLING TOWER

SOUND WALL (SEE STRUCTURAL)

ELECT. BLDG

SINGLE GATE (TYP.) 2 C-7002

DOUBLE GATE (TYP.) 3 C-7002

4 C-7000 ASPHALT PVMNT (TYP.)

GAS YARD

SWITCH YARD (BY OTHERS)

REFAINING WALL

1200 N

1000 N

1000 E

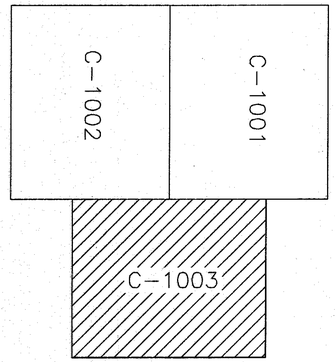
1200 E

1400 E

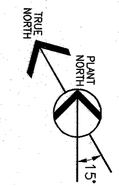
1600 E

GENERAL NOTES:

1. FOR CIVIL SITE PLAN GENERAL NOTES AND LEGEND REFER TO SHEET C-1000.



KEY PLAN



30 0 30 60

Scale: 1 INCH = 30 FEET

STATE OF NEW YORK DAVID E. MICKANEN LICENSED PROFESSIONAL ENGINEER 085162

9-25-07

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LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL SITE PLAN
3 OF 3

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
REV. NO. 0
FILENAME C0001003.DWG
SCALE 1" = 30'
DWG. NO. C-1003

LGAD_3, ANSI D, 22 x 34 in.

CALL BEFORE YOU DIG!
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1-800-962-7962
NEW YORK'S ONE CALL

GRADING AND DRAINAGE NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED PLANS AND SPECS.
2. THE CONTRACTOR SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO INSURE COMPLIANCE WITH THE APPROVED PLANS.
3. SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE GEOTECHNICAL ENGINEER UNLESS OTHERWISE NOTED ON THE PLANS.
4. CONTRACTOR WILL BE RESPONSIBLE FOR ALL GEOTECHNICAL TESTING NECESSARY FOR THE WORK.
5. NO ROCK OR SIMILAR MATERIAL GREATER THAN 6" IN DIAMETER SHALL BE PLACED IN THE FILL.
6. ALL NEWLY GRADED SURFACES SHALL HAVE A MINIMUM SLOPE OF 1% TOWARDS PROPOSED CATCH BASINS, SWALES, OR DITCHES.
7. ALL NEW PAVED SURFACES SHALL BE SLOPED TO DRAIN. CONTRACTOR SHALL MAKE ADJUSTMENTS TO PAVING AND GRADING ELEVATIONS AS NECESSARY.
8. ALL PROPOSED SPOT ELEVATIONS & CONTOURS REPRESENT FINISH GRADE (TOP OF PAVING, GRAVEL SURFACE, FINISH SURFACE/FLOOR, OR EARTH).
9. FOR GENERAL NOTES: EROSION CONTROL NOTES, DEMOLITION NOTES, AND TRAFFIC CONTROL INFORMATION SEE DRAWING C-0002.
10. FOR PROJECT INFORMATION SEE DRAWING C-0001 AND C-0002.
11. SEE DRAWING SERIES C-4000 FOR EROSION AND SEDIMENT CONTROL PLAN.
12. SEE DRAWING SERIES C-5000 FOR STORM DRAIN SCHEDULE, SECTION AND PROFILES.

PLANT NORTH 15°
TRUE NORTH

40 0 40 80
Scale: 1 INCH = 40 FEET

STATE OF NEW YORK * DAVID E. MICKANEN * LICENSED PROFESSIONAL ENGINEER 085162
9-25-07

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LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
OVERAL GRADING AND DRAINAGE PLAN

JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
FILENAME C0002000.DWG
SCALE 1" = 40'
REV. NO. 0
DWG. NO. C-2000

LGAD_3, ANSI D, 22 x 34 in.

2000 N | 1800 N | 1600 N | 1400 N

1800 E

1600 E

1400 E

FES 1.0
INV:13.8
N 1607.67
E 1798.07

8' BERM

OCS 1.1
INV:14.17
N 1571.18
E 1798.8

4 C-7002 FENCE AT DITCH CROSSING (TYP.)

DETENTION POND B

FES 2.0
INV:14.0
N 1502.15
E 258.15

CB 2.1
INV:14.2
N 1489.56
E 1708.50

7 C-7002 STORM DRAIN (TYP)

DI 2.2
GRATE: 21.5
INV:14.6
N 1489.56
E 1633.54

DI 2.3
GRATE: 21.5
INV:15.4
N 1489.56
E 1533.55

DI 2.4
GRATE: 21.5
INV:16.2
N 1489.56
E 1433.71

DI 6.2
GRATE: 21.5
INV:17.4
N 1489.55
E 1333.55

10' (TYP) C-7001

BUILDING ELEVATION 23.5

BUILDING ELEVATION 23.5

BUILDING ELEVATION 23.5

BUILDING ELEVATION 23.5

DI 2.5
GRATE 21.7
INV: 16.7
N 1387.62
E 1412.42

4' C-7002 FENCE AT DITCH CROSSING (TYP.)

FES 3.0
INV:14.0
N 1327.10
E 1921.27

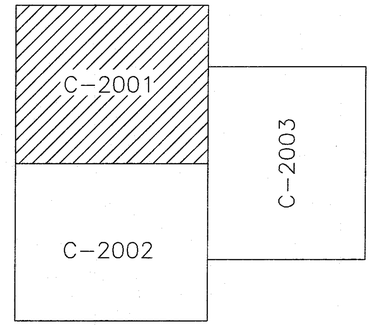
DI 4.5
GRATE: 20.0
INV:16.5
N 1307.83
E 1661.91

MATCHLINE SEE SHEET C-2003

MATCHLINE SEE SHEET C-2002

NOTES:

REFER TO DRAWING C-2000 FOR GENERAL NOTES.



KEY PLAN

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1-800-962-7962
NEW YORK'S ONE CALL

PLANT NORTH
15°
TRUE NORTH

30 0 30 60
Scale: 1 INCH = 30 FEET

STATE OF NEW YORK
DAVID E. MICKANEN
LICENSED PROFESSIONAL ENGINEER
085162
9-25-07

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LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL GRADING AND DRAINAGE PLAN 1 OF 3

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
REV. NO. 0
FILENAME C0002001.DWG
SCALE 1" = 30'
DWG. NO. C-2001

LCAD_3, ANSI D, 22 x 34 in.

2000 N

1800 N

1600 N

1400 N

MATCHLINE SEE SHEET C-2001

MATCHLINE SEE SHEET C-2003

1300 E

1100 E

900 E

8' BERM

FES 3.0
INV:14.0
N 1327.10
E 1921.27

FES 3.1
INV:15.0
N 1291.12
E 1779.34

FES 4.0
INV:15.4
N 1269.63
E 1717.33

FES 4.6
INV:16.6
N 1165.67
E 1712.29

FES 4.4
INV:18.0
N 1016.52
E 1639.75

DI 4.5
GRATE: 20.0
INV:16.5
N 1307.83
E 1661.91

DI 4.1
GRATE: 19.0
INV:15.7
INV. (IN): 15.7
INV. (IN): 16.2
N 1257.54
E 1661.91

DI 4.2
GRATE: 19.0
INV:16.25
INV. (IN): 16.3
INV. (IN): 16.25
N 1196.08
E 1661.91

DI 4.3
GRATE: 19.0
INV:16.9
INV. (IN): 17.2
N 1071.52
E 1661.91

DI 2.5
GRATE 21.7
INV. 16.7
N 1387.62
E 1412.42

BUILDING ELEVATION 23.5

BUILDING ELEVATION 22.5

MATCH AND CONNECT TO EXISTING PAVEMENT

RIVERSIDE AVENUE

N 1994.48
E 929.77

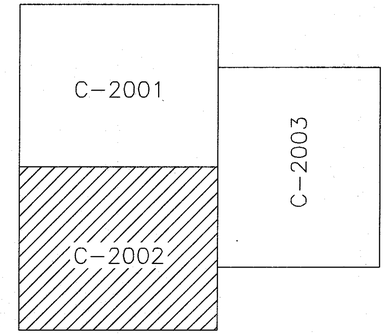
N 1993.97
E 919.78

C-7000

30 0 30 60
Scale: 1 INCH = 30 FEET

NOTES:

REFER TO DRAWING C-2000 FOR GENERAL NOTES.



KEY PLAN

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NEW YORK'S ONE CALL

PLANT NORTH 15°
TRUE NORTH

STATE OF NEW YORK
DAVID E. MICKANEN
LICENSED PROFESSIONAL ENGINEER
085162

9-25-07

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LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL GRADING AND
DRAINAGE PLAN 2 OF 3

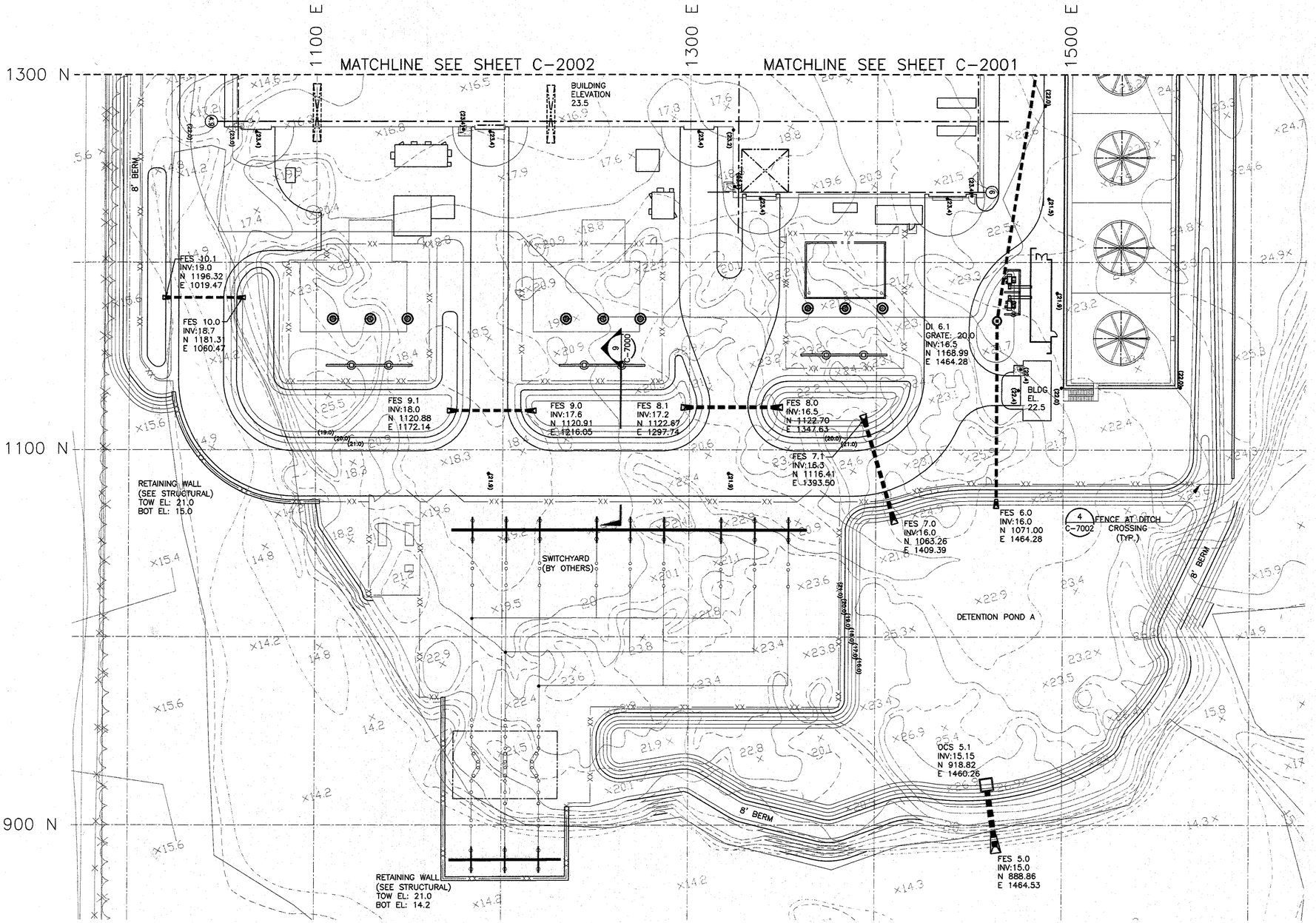
JOB NAME
BEPCO CC
COGEN - FACILITY

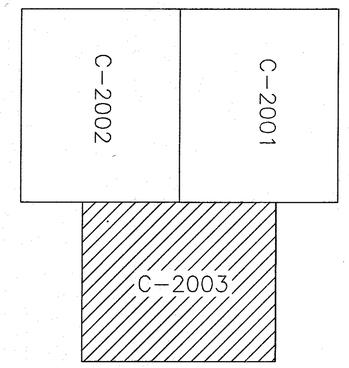
JOB NO. 360473
FILENAME C0002002.DWG
SCALE 1" = 30'
REV. NO. 0
DWG. NO. C-2002

LGAD_3, ANSI D, 22 x 34 in.

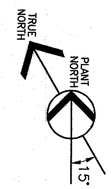
NOTES:

REFER TO DRAWING C-2000 FOR GENERAL NOTES.





KEY PLAN



STATE OF NEW YORK
DAVID E. MICKANEN
085162
LICENSED PROFESSIONAL ENGINEER

9-25-07

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30 0 30 60
Scale: 1 INCH = 30 FEET

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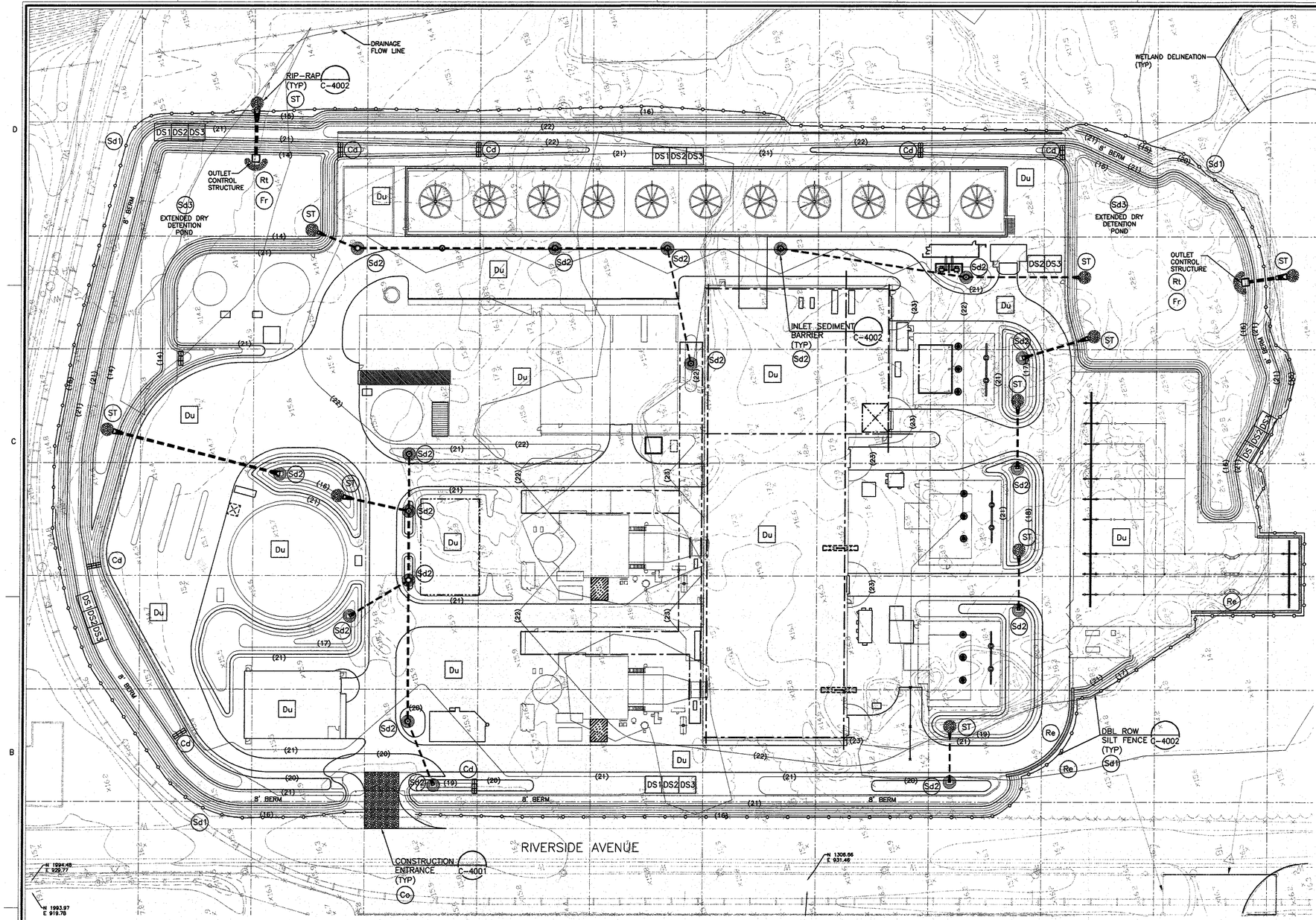
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
PARTIAL GRADING AND DRAINAGE PLAN 3 OF 3

JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
FILENAME C0002003.DWG
SCALE 1" = 30'
REV. NO. 0
DWG. NO. C-2003

LGAD_3, ANSI D, 22 x 34 in.



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION CONTROL MEASURES SHALL BE AS A MINIMUM IN CONFORMANCE WITH "BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

2. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ON SITE.

3. SILT BARRIERS SHALL BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

4. STATEMENT – EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY NYSDEC.

5. MAINTAIN CONSTRUCTION ENTRANCE AT THE POINT OF ENTRY OR EXIT TO THE EXISTING HIGHWAY. MAINTAIN ROADWAY AND ENTRANCE UNTIL FINAL ACCEPTANCE OF THE WORK.

6. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN SHALL BE REMOVED IMMEDIATELY.

7. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.

8. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AND OBTAIN PERMIT. MAINTAIN EROSION CONTROL DEVICES UNTIL THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT GRAVEL SURFACING OR GRASSING AND/OR ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

9. REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

10. FAILURE TO INSTALL OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES SHALL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED TO LOCAL JURISDICTION STANDARDS.

11. SEDIMENT/EROSION CONTROL DEVICES SHALL BE CHECKED AFTER EACH SIGNIFICANT STORM EVENT. EACH DEVICE SHALL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.

12. SILT FENCES AND HAY BALE BARRIERS SHALL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.

13. ANY ADDITIONAL CONSTRUCTION OTHER THAN SHOWN ON THIS PLAN MAY REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND APPROVAL.

14. DISTURBED AREAS LEFT IDLE FOR TWO TO FOUR WEEKS, AND NOT TO FINAL GRADE, SHALL BE STABILIZED WITH MULCH.

15, WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHALL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.

16. DURING UNSUITABLE GROWING SEASONS, MULCH SHALL BE USED AS A TEMPORARY COVER (Ds2). ON SLOPES THAT ARE 4:1 OR STEEPER MULCH SHALL BE ANCHORED.

17. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

18. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

19. POLLUTION CONTROLS: USE WATER SPRINKLING (Du) AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL OF AIR POLLUTION PRACTICAL FOR THE CONDITION OF WORK.

20. COMPLY WITH THE LATEST EDITION OF THE STATE EROSION CONTROL MANUAL.

21. REFER TO SHEET C-4001 FOR EROSION CONTROL LEGEND AND DETAILS

STATE OF NEW YORK
DAVID E. MICKANEN
LICENSED PROFESSIONAL ENGINEER
085162
9-25-07

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NO	DATE	REVISION	T.O.C. BY	D.E.M. CK.	APPR.
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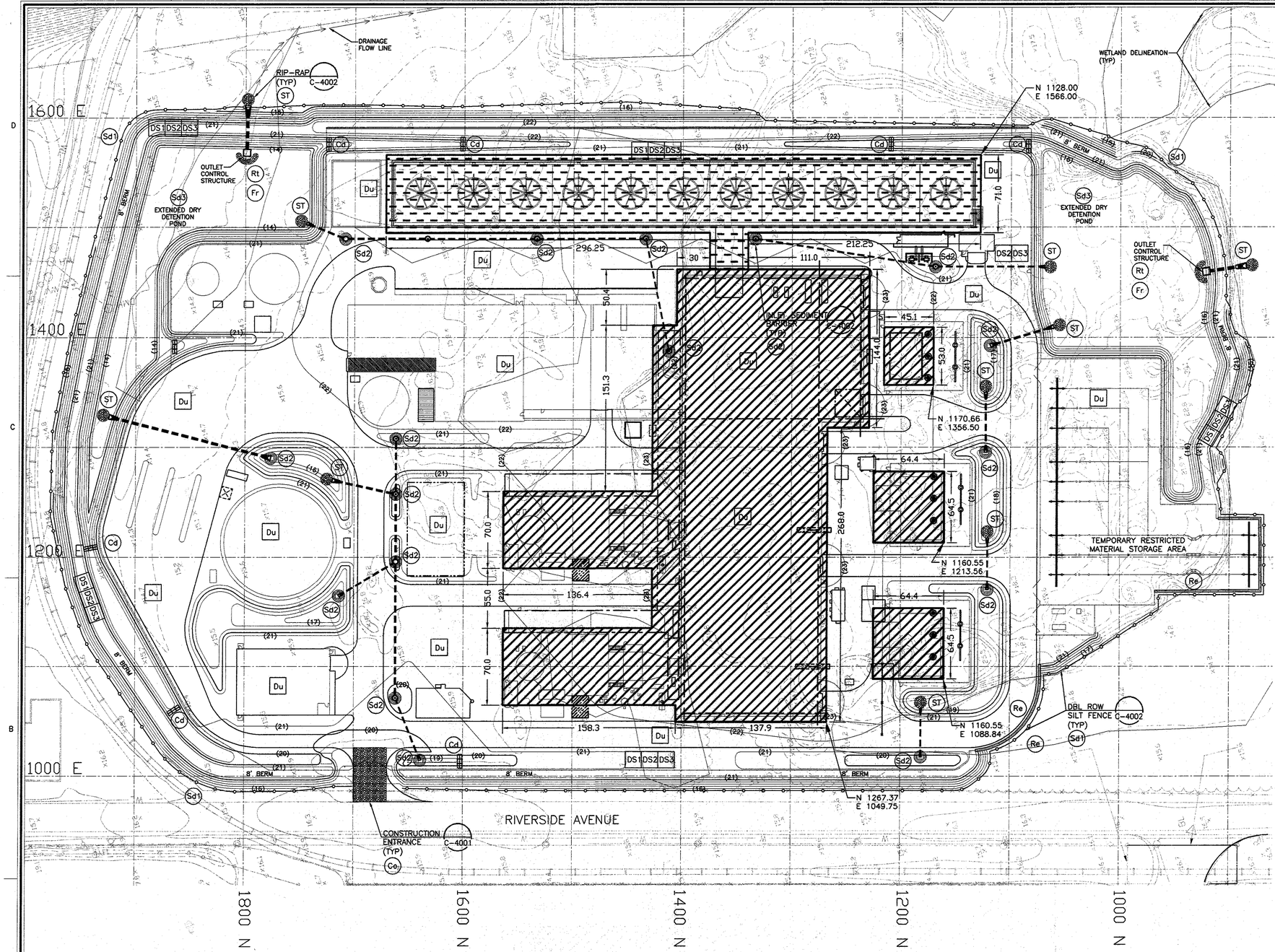
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Atlanta, Georgia

SHEET TITLE
CIVIL
EROSION AND SEDIMENTATION CONTROL PLAN

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
FILENAME C0004000.DWG
SCALE 1" = 50'
REV. NO. 0
DWG. NO. C-4000

LGAD_3, ANSI D, 22 x 34 in.



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION CONTROL MEASURES WILL BE AS A MINIMUM IN CONFORMANCE WITH "BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

2. EROSION AND SEDIMENT CONTROL DEVICES WILL BE INSTALLED AND INSPECTED PRIOR TO LAND DISTURBANCE ON SITE.

3. SILT BARRIERS WILL BE PLACED AT DOWNSTREAM TOE OF CUT AND FILL SLOPES.

4. EFFECTIVE EROSION CONTROL MEASURES WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY NYSDEC.

5. MAINTAIN CONSTRUCTION ENTRANCE AT THE POINT OF ENTRY OR EXIT TO THE EXISTING HIGHWAY. MAINTAIN ROADWAY AND ENTRANCE UNTIL FINAL ACCEPTANCE OF THE WORK.

6. THE CONSTRUCTION EXIT WILL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF STRUCTURES USED TO TRAP SEDIMENT. MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE TO ADJACENT ROADWAY OR INTO STORM DRAIN WILL BE REMOVED IAS QUICKLY AS POSSIBLE.

7. AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS AND PRIOR TO THE START OF CONSTRUCTION, PERIMETER EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT MEASURES WILL BE INSTALLED.

8. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AND OBTAIN PERMIT. MAINTAIN EROSION CONTROL DEVICES UNTIL THE CONSTRUCTION AREA HAS BEEN STABILIZED WITH PERMANENT GRAVEL SURFACING OR GRASSING AND/OR ROADS/DRIVEWAYS HAVE BEEN PAVED.

9. REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

10. IN THE EVENT FAILURE OF EROSION CONTROL MEASURES OR DEVICES, CONSTRUCTION WORK THAT COULD IMPACT THE AFFECTED AREA WILL BE STOPPED UNTIL THE EROSION CONTROL MEASURES ARE APPROPIATELY CORRECTED AND/OR UPDATED.

11. SEDIMENT/EROSION CONTROL DEVICES WILL BE CHECKED AFTER EACH SIGNIFICANT STORM EVENT. EACH DEVICE WILL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.

12. SILT FENCES AND HAY BALE BARRIERS WILL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.

13. ANY ADDITIONAL CONSTRUCTION OTHER THAN SHOWN ON THIS PLAN MAY REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES.

14. DISTURBED AREAS LEFT IDLE FOR MORE THAN FOUR WEEKS, AND NOT TO FINAL GRADE, WILL BE STABILIZED WITH MULCH.

15. WHEN HAND PLANTING, MULCH (HAY OR STRAW) WILL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.

16. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (Ds2). ON SLOPES THAT ARE 4:1 OR STEEPER MULCH WILL BE ANCHORED.

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18. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED DAILY. NOTED DEFICIENCIES WILL BE CORRECTED AS QUICKLY AS POSSIBLE. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

19. USE WATER SPRINKLING (Du) AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL OF FUGITIVE DUST PRACTICAL FOR THE CONDITION OF WORK.

FOUNDATION EXCAVATION NOTES:

1. CONTRACTOR WILL EXCAVATE FOUNDATION FOOTPRINTS TO ELEVATIONS NOTED BELOW.

2. CONTRACTOR WILL USE 2:1 CUT SLOPES FROM FOUNDATION FOOTPRINT ELEVATION TO MATCH PROPOSED GRADE ELEVATION.

3. CONTRACTOR WILL PLACE SD1 (SILT FENCE) ALONG TOP PERIMETER OF THE EXCAVATED AREAS IN CONFORMANCE WITH "BMP'S FOR CONTROLLING SEDIMENT AND EROSION FROM CONSTRUCTION ACTIVITIES."

4. EXCAVATED MATERIAL THAT IS POTENTIAL "RESTRICTED MATERIAL" WILL BE STOCKPILED IN THE SWITCHYARD AREA AND COVERED DURING STORAGE.

EXCAVATE FOUNDATION FOOTPRINT TO ELEVATION 16.0

EXCAVATE FOUNDATION FOOTPRINT TO ELEVATION 15.0

*REFER TO SHEET C-4001 FOR EROSION CONTROL LEGEND AND DETAILS

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Atlanta, Georgia

SHEET TITLE
CIVIL EROSION AND SEDIMENTATION CONTROL PLAN FOR FOUNDATION EXCAVATION

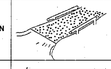
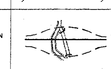
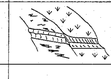
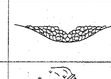
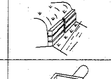
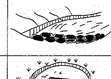
JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
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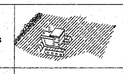
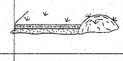
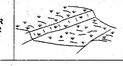
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UNIFORM SOIL EROSION AND SEDIMENT CONTROL PRACTICES

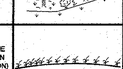
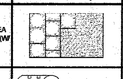
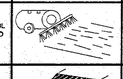
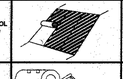
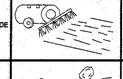
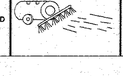
STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving,constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		 (LABEL)	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION			A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vechile transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		 (LABEL)	A flexible conduit of heavy duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		 (LABEL)	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm inlets and pond outlets.
Ga	GABION			Rock filled baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		 (LABEL)	Permanent structures installed to protect natural or artificial channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL		 (LABEL)	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETROFITTING		 (LABEL)	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER		 (INDICATE TYPE)	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales or straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sr	TEMPORARY STREAM CROSSING		 (LABEL)	A temporary bridge or culvert type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORM DRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tp	TOPSOILING		 (Show Stripng & Storage Areas)	The practice of stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after the completion of construction activities.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE MEASURES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		 (LABEL)	A strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (W/ VEGETATION)		Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seeding may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (W/ TEMPORARY SEEDING)		Ds2	Establishing temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (W/ PERMANENT VEGETATION)		Ds3	Establishing permanent vegetative cover such as trees, shrubs, vines, grasses, sod, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (W/ SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Mb	EROSION CONTROL MATTING AND BLANKETS		Mb	The installation of a protective covering (blanket) or soil stabilization mat on a prepared planting area of a steep slope, channel, or shoreline.
Pm	POLYACRYLAMIDE (PAM)		Pm	The land application of product containing anionic polyacrylamide (PAM) as temporary soil binding agents to reduce soil erosion.
Sb	STREAM BANK STABILIZATION (USING PERMANENT VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance stream banks, or to prevent, or restore and repair small stream bank erosion problems.
Tb	TACKIFIERS AND BINDERS		Tb	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

Ds1

SITE PREPARATION
1. GRADE, AS NEEDED AND FEASIBLE, TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. AS NEEDED AND FEASIBLE, LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS
1. DRY STRAW OR HAY - SPREAD AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD WASTE, CHIPS, SAWDUST OR BARK - SPREAD 2 TO 3 INCHES DEEP (ABOUT 6 TO 9 TONS PER ACRE)
3. EROSION CONTROL MATTING OR NETTING, SUCH AS EXCELSIOR, JUTE, TEXTILE AND PLASTIC MATTING AND NETTING - APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. CUTBACK ASPHALT, SLOW CURING - APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLONS PER SQ. YD.)
5. POLYETHYLENE FILM - SECURED OVER BANKS OF STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION.

MATERIALS

	DEPTH
1. GRAIN STRAW OR GRASS HAY	6" TO 10"
2. PINE NEEDLES	4" TO 6"
3. WOOD WASTE (SAWDUST, BARK, CHIPS)	4" TO 8"
4. SHREDDED RESIDUES (CROPS, LEAVES, ETC.)	4" TO 8"
5. COMPLETELY COVER AREA WITH BLACK POLYETHYLENE FILM AND HOLD IN PLACE BY PLACING SOIL ON THE OUTER EDGE.	

WHEN USING ORGANIC MULCHES, APPLY 20-30 POUNDS OF NITROGEN IN ADDITION TO THE NORMAL AMOUNT NEEDED FOR PLANT GROWTH TO OFFSET THE TIE UP OF N BY DECOMPOSITION OF MULCH.

MULCHING APPLICATION REQUIREMENTS

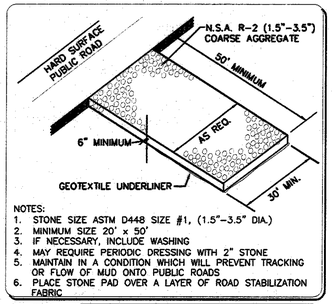
MATERIAL	RATE	DEPTH
Straw or hay	2 1/2Ton/Acre	6" TO 10"
Wood waste, chips, sawdust, bark	6 to 9 Ton/Acre	2" TO 3"
Cutback asphalt	1200 gal./acre or 1/4 gal./sq.yd.	
Polyethylene film	Secure with soil, anchors, weights	
Cutback asphalt	See manufacturer's recommendations	
Geotextiles, jute matting, netting, etc.		

SEEDING SCHEDULE
CONTRACTOR TO PROTECT ALL DISTURBED AREAS BY TEMPORARY RESEEDING UNTIL PERMANENT GROUND COVER IS ESTABLISHED. (MAXIMUM OF 3 WEEKS AFTER DISTURBANCE)
SOIL PREPARATION
ADD TO SOIL:
-COMMERCIAL 16-20-10 FERTILIZER @ 650 LBS/ACRE OR AS SPECIFIED BY SOILS REPORT.
-AFTER SOIL pH ANALYSIS, LINE AS SPECIFIED ON pH LEVEL CHART.

TO RAISE THE pH LEVEL
THIS CHART INDICATES THE AMOUNT OF LIME TO BE ADDED IN OUNCES PER SQUARE YARD AND IN POUNDS PER 1000 SQ. FT.

METER READING	SANDY SOIL ADD LIME	SANDY LOAM ADD LIME	MED. LOAM ADD LIME	HEAVY SOIL ADD LIME
4.0	2.25	3 OZ	4.4 OZ	5.33 OZ
1000 sqft	24 LBS	19 LBS	28 LBS	33 LBS
5.0	1.8	2.25 OZ	3.0 OZ	3.6 OZ
1000 sqft	11 LBS	14 LBS	28 LBS	23 LBS
6.0	0.5 OZ	1 OZ	1.2 OZ	1.4 OZ
1000 sqft	3.5 LBS	6 LBS	8 LBS	9 LBS

NOTE: NEUTRAL pH IS 7.0



NOTES:
1. STONE SIZE ASTM D448 SIZE #1, (1.5"-3.5" DIA.)
2. MINIMUM SIZE 20' x 50'
3. IF NECESSARY, INCLUDE WASHING
4. MAY REQUIRE PERIODIC DRESSING WITH 2" STONE
5. MAINTAIN IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC ROADS
6. PLACE STONE PAD OVER A LAYER OF ROAD STABILIZATION FABRIC

CONSTRUCTION EXIT

Co

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
Construction Specifications:
- The aggregate size for construction of the pad shall be 2-3 inch (51-76 mm) stone. Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
- The thickness of the pad shall not be less than 6 inches (0.2 m). Use geotextile fabrics, if necessary, to improve stability of the foundation in locations subject to seepage or high water table.
- The width of the pad shall not be less than the full width of all points of ingress or egress and in any case shall not be less than 12 feet (3.6 m) wide.
- The length of the pad shall be as required, but not less than 50 feet (15.2 m).
- Locate construction entrances and exits to limit sediment leaving the site and to provide for maximum utility by all construction vehicles. Avoid entrances which have steep grades & entrances at curves in public roads.
- The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or maintenance of any measures used to trap sediment.
- All sediment spilled, dropped, washed or tracked onto public rights-of-way shall be removed immediately.
- Provide drainage to carry water to a sediment trap or other suitable outlet.
- When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
- All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, straw bales, or other approved methods.

Inspection and Maintenance:
- Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site.
- Replace gravel material when surface voids are visible.
- After each rainfall, inspect any structure used to trap sediment and clean it out as necessary.
- Immediately remove all objectionable materials spilled, washed, or tracked onto public roadways. Remove all sediment deposited on paved roadways within 24 hours.

PLANTING DATES AND SEEDING RATES FOR TEMPORARY VEGETATION

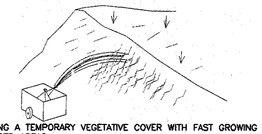
Ds2

PLANTING OPTIONS	PLANTING DATES (*1*) REGION 1	PLANTING DATES (*1*) REGION 2	SEED RATES (*2*) (PURE LIVE SEED) REGION 3 # PER ACRE
BROWNTOP MILLET	4/1-7/1	4/1-7/15	4/1-7/15 40
RYE GRAIN (*3*)	7/15-11/30	8/15-12/30	9/1-2/15 168
RYEGRASS	8/15-11/15	9/1-12/15	9/15-1/1 40
WHEAT	9/1-12/30	9/1-12/30	9/15-1/30 180

(*1*) PLANTING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL CONDITIONS.
(*2*) UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.
(*3*) RYE GRAIN IS NOT THE SAME AS RYEGRASS.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) (WITH TEMPORARY SEEDING)

Ds2

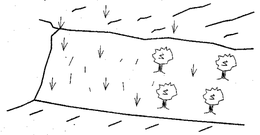


- ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
- UP TO 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION
- SITE PREPARATION
  1. GRADING AND SHAPING
  2. SEEDBED PREPARATION
  3. APPLY LIME AND FERTILIZER
  4. PLANT SEEDING, SELECT SPECIES BY SEASON AND REGION
  5. APPLY MULCHING MATERIAL IF NEEDED
  6. IRRIGATE IF NEEDED BUT NOT AT RATE TO CAUSE EROSION

SPECIES	RATE PER 1000 S.F.	RATE PER ACRE	PLANTING DATES (PIEDMONT)
RYE	3 lbs.	2-3 bu	9/1-1/7 3/1-4/1
RYEGRASS	1 lb.	40-50 lbs.	8/15-1/1
RYE AND ANNUAL LESPEDEZA	1.5 lbs. 0.5 lb.	1-1.5 bu 20-25 lbs.	3/1-4/1 3/1-4/1
WEEPING LOVEGRASS	0.2 lbs.	4-6 lbs.	3/1-8/15
SUDANGRASS	1 lb.	35-45 lbs.	4/1-7/15
BROWNTOP MILLET	1 lb.	30-40 lbs.	4/1-7/15
WHEAT	3 lbs.	2-3 bu	10/15-1/1

DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)

Ds3



ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS. APPLICABLE ON HIGHLY ERODIBLE/SEVERELY ERODED AREAS ("CRITICAL AREAS") SUCH AS:

CUT/ FILL SLOPES	BERMS
EARTHEN SPILLWAYS	ROADSIDES
BORROW AREAS	SPOIL AREAS
CHANNEL BANKS	GULLIED LANDS

GRADING AND SHAPING REQUIRED WHERE FEASIBLE AND PRACTICAL

SEEDBED PREPARATION
NOT REQUIRED IF USING HYDRAULIC SEEDING AND FERTILIZING WHEN REQUIRED:

SLOPE	SEEDBED
3:1 OR FLATTER	4" OR GREATER IN DEPTH
2:1 TO 3:1	1" TO 4" DEEP
2:1 OR STEEPER	DEPRESSIONS EVERY 6"-8" WITH HAND TOOL

HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE

MULCH ALL SLOPES STEEPER THAN 3% AND IN BOTTOM OF SPILLWAYS AND ON ROADWAYS

ANCHOR MULCH IMMEDIATELY

PLANTING DATES AND SEEDING RATES

Ds3

PLANTING OPTIONS	PLANTING DATES (*1*) REGION 1	PLANTING DATES (*1*) REGION 2	SEED RATES (*2*) (PURE LIVE SEED) REGION 3 # PER ACRE		OZ. # SQ. FT. PER 1000
+TALL FESCUE	---	9/1-10/15	---	30	2
COMMON BERMUDA (UNHULLED)			6	3	
RYE GRAIN			28	11	
+TALL FESCUE	8/15-10/15	9/1-10/15	---	30	12
"APPALOW LESPEDEZA" (UNSCARIFIED)*				28	28
RYE GRAIN				28	11
+TALL FESCUE	8/15-10/15	9/1-10/15	---	30	12
RYE GRAIN				28	11
CROWNVETCH*	9/1-10/15	9/1-10/15	---	15	6
RYE GRAIN				28	11
+COMMON BERMUDA (HULLED)	---	4/1-8/1	3/15-6/1	6	3
"APPALOW LESPEDEZA" (SCARIFIED)*				60	23
BROWNTOP MILLET				10	4
+WEEPING LOVEGRASS	4/1-6/1	3/1-6/1	3/1-6/1	2	1
"APPALOW LESPEDEZA" (SCARIFIED)*				60	23
BROWNTOP MILLET				10	4
SUNFLOWER "AZTEC MAXMILLIAN"	4/15-6/1	4/15-5/1	4/1-6/1	12	4
WEEPING LOVEGRASS				2	1
COMMON BERMUDA (HULLED)	---	4/1-6/1	3/15-6/1	10	4
BROWNTOP MILLET				10	4
WEEPING LOVEGRASS	4/1-6/1	3/15-6/1	3/1-6/1	4	2
TALL FESCUE	8/15-10/15	9/1-10/15	---	50	19
PENSACOLA BAHIAGRASS(*3*)	---	4/1-6/1	3/1-6/1	60	23
COMMON BERMUDA (HULLED)		4/1-6/1	3/15-6/1	10	4
CENTIPEDE(*4*)		5/1-7/1	4/15-6/15	BLOCK SOD	
COMMON BERMUDA (UNHULLED)	---	10/1-3/1	11/1-2/1	10	4
WHEAT			30	12	

+PREFERRED MIXES THAT INCLUDE TWO PERMANENT AND ONE TEMPORARY SPECIES.
*USE SEED INNOCULANT ACCORDING TO MANUFACTURER'S DIRECTIONS AT DOUBLE THE RECOMMENDED RATE.
(*1*)SEE FIGURE 1 TO SELECT APPROPRIATE REGION.
(*2*)SEED RATES ARE HIGHER WHEN ONE SPECIES IS SEEDED ALONE.
(*3*)HIGHLY COMPETATIVE GRASS THAT WILL SPREAD INTO SODDED LAWNS AND BERMUDA PASTURES.
(*4*)USE SOIL TEST RECOMMENDATIONS FOR LIME AND FERTILIZER.

FERTILIZER RATES

Ds3

PLANTING OPTIONS	BASIC FERTILIZATION YEAR(*2*)	ANALYSIS(*3*) ACRE	# PER # PER 1000 S.F.	TOPDRESSING (*1*) # PER AC	# PER 1000 S.F.
+TALL FESCUE	AT PLANTING	6-12-12	1500 5	50-100	1.2-2.3
COMMON BERMUDA (UNHULLED)	YEAR TWO	6-12-12	1000 25	50-100	1.2-2.3
RYE GRAIN					
+TALL FESCUE	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
"APPALOW LESPEDEZA" (UNSCARIFIED)*	YEAR TWO	0-10-10	1000 25		
RYE GRAIN					
+TALL FESCUE	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
RYE GRAIN	YEAR TWO	10-10-10	1000 25		
CROWNVETCH*	AT PLANTING	6-12-12	1500 35	0-50	0-1.2
RYE GRAIN	YEAR TWO	0-10-10	1000 25		
+COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
"APPALOW LESPEDEZA" (SCARIFIED)*	YEAR TWO	6-12-12	1000 25	50-100	1.2-2.3
BROWNTOP MILLET					
+WEEPING LOVEGRASS	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
"APPALOW LESPEDEZA" (SCARIFIED)*	YEAR TWO	6-12-12	1000 25		
BROWNTOP MILLET					
SUNFLOWER "AZTEC MAXMILLIAN"	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
WEEPING LOVEGRASS	YEAR TWO	6-12-12	1000 25	50-100	1.2-2.3
COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
BROWNTOP MILLET	YEAR TWO	6-12-12	1000 25	50-100	1.2-2.3
WEEPING LOVEGRASS	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
	YEAR TWO	6-12-12	1000 25	50-100	1.2-2.3
TALL FESCUE	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
	YEAR TWO	10-10-10	1000 25	50-100	1.2-2.3
PENSACOLA BAHIAGRASS(*3*)	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
	YEAR TWO	0-10-10	1000 25		
COMMON BERMUDA (HULLED)	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
	YEAR TWO	6-12-12	1000 25		
CENTIPEDE(*4*)	AT PLANTING	6-12-12	400 10	50	1.2
	YEAR TWO	10-10-10	400 10	50	1.2
COMMON BERMUDA (UNHULLED)	AT PLANTING	6-12-12	1500 35	50-100	1.2-2.3
WHEAT	YEAR TWO	6-12-12	1000 25		

(*1*)USE AMMONIUM NITRATE ANALYSIS 34-0-0.
(*2*)YEAR TWO IS THE NEXT GROWING SEASON AFTER PERMANENT SPECIES ARE ESTABLISHED.
(*3*)OTHER ANALYSES, WITH AN EQUIVALENT AMOUNT OF NUTRIENTS, MAY BE SUBSTITUTED.

STATE OF NEW YORK * DAVID E. MICKANEN * LICENSED PROFESSIONAL ENGINEER 085162

9-25-07

WARNING:
IT IS A VIOLATION OF THE EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO	DATE	REVISION	T.O.C. BY	D.E.M. CK.	APPR.
0	25-SEP-2007	INITIAL ISSUE			

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
EROSION AND SEDIMENTATION CONTROL PLAN DETAILS
1 OF 2

JOB NAME
BEPCO CC
COGEN - FACILITY

JOB NO. 360473
FILENAME C0004001.DWG
SCALE NTS
REV. NO. 0
DWG. NO. C-4001

LGAD_3, ANSI D, 22 x 34 in.

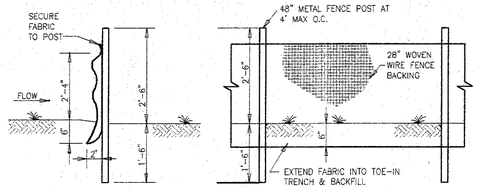
SILT FENCE NOTES:

Construction Specifications:

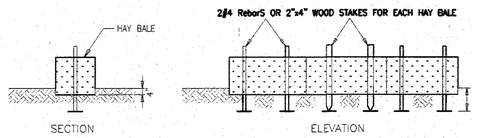
- The height of a silt fence shall not exceed 36 inches (0.9 m). Storage height and ponding height shall never exceed 18 inches (0.5 m).
- The fence line shall follow the contour as closely as possible.
- If possible, the filter fabric shall be cut from a continuous roll to avoid the use of joints. When joints are necessary, filter cloth shall be spliced only at a support post, with a minimum 6 inch (0.2 m) overlap and both ends securely fastened to the post.
- Posts shall be spaced a maximum of 10 feet (3.1 m) apart and driven securely into the ground (minimum of 12 inches (0.3 m)). When extra-strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet (1.8 m).
- Turn the ends of the fence uphill.
- A trench shall be excavated approximately 4 inches (101 mm) wide& 6 inches (0.2 m) deep along the line of posts and upslope from the barrier.
- When standard-strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch (25.4 mm) long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches (51 mm) and shall not extend more than 36 inches (0.9 m) above the original ground surface.
- The standard-strength filter fabric shall be stapled or wired to the fence, and 6 inches (0.2 m) of the fabric shall extend into the trench. The fabric shall not extend more than 36 inches (0.9 m) above the original ground surface. Filter fabric shall not be stapled to existing trees.
- When extra-strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts.
- The trench shall be backfilled and the soil compacted over the toe of the filter fabric.
- Silt fences placed at the toe of a slope shall be set at least 6 feet (1.8 m) from the toe in order to increase ponding volume.
- Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized and any sediment stored behind the silt fence has been removed.

Inspection and Maintenance:

- Silt fences and filter barriers shall be inspected weekly after each significant storm (1 inch (25.4 mm) in 24 hour). Any required repairs shall be made immediately.
- Sediment should be removed when it reaches within 12" of the top.
- The removed sediment shall conform with the existing grade and be vegetated or otherwise stabilized.



TYPE C – WIRE BACK SILT FENCE

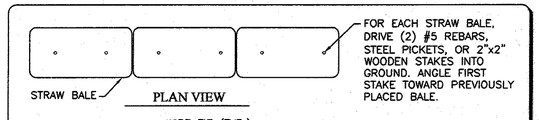


TYPE 2-HAY BALES

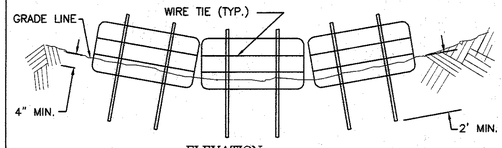
Sd1-C

SEDIMENT BARRIER ~ SILT FENCE TYPE "C"

MAINTENANCE: INSPECT AND REPAIR OR REPLACE WEEKLY AND FOLLOWING EACH RAIN.



PLAN VIEW

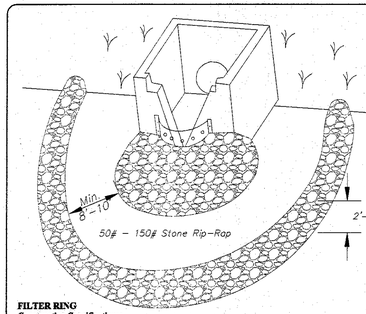


ELEVATION

NOTES:
1. STRAW BALES TO BE STACKED IN A SINGLE ROW AND EMBEDDED IN THE SOIL TO A MIN. 4" DEPTH.
2. ALL BALES ARE TO BE SECURELY BOUND WITH WIRE OR STRING.
3. SCATTER LOOSE STRAW OVER THE AREA IMMEDIATELY UPSLOPE FROM THE SEDIMENT PROTECTION, FILL GAPS BETWEEN BALES WITH LOOSE STRAW.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SEDIMENT BARRIERS IN A SATISFACTORY CONDITION UNTIL FINAL ACCEPTANCE OF WORK.
5. COMPLY WITH MDOT EROSION CONTROL MANUAL "EROSION BALES".

Cd

CHECK DAM ~ STRAW BALE DETAIL



FILTER RING

Construction Specifications:

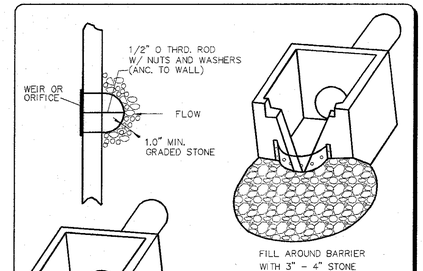
1. Mechanical or hand placement of stone shall be required to uniformly surround the structure to be supplemented.
2. Rrefer to Appendix C, Manual for Erosion and Sediment Control in Georgia 5th edition, for rock riprap specifications.
3. The filter ring may be constructed on natural ground surface, on an excavated surface, or on machine compacted fill.
4. A coomon failure of filter rings is caused by their placement too close or too high above the structue it is enhancing. When utilized below a storm drain outlet, it shall be placed such that it does not create a condition causing water to back-up into the storm drain system.

Inspection and Maintenance:

- The filter ring must be kept at all times free of trash and debris.
- Continuous monitoring and maintenance of the filter ring should be implemented.
- The filter ring should have sediment removal when it reaches ½ full.
- The structures are temporary and should be removed after the land disturbing activity has been stabilized.

Fr

FILTER RING ~ STONE



CHECK DAMS

CONSTRUCTION SPECIFICATIONS:

1. CANNOT BE USED IN DETENTION BASINS ON LIVE STREAMS OR IN BASINS WITH A TOTAL CONTRIBUTING DRAINAGE AREA OF 100 ACRES OR MORE.
2. CAN ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 C.Y. SEDIMENT PER ACRE OF DISTURBED AREA IN THE PROJECT. REQUIRED SEDIMENT STORAGE MAY BE OBTAINED BY EXCAVATING IN FRONT OF THE RETROFITTED OUTLET STRUCTURE. SHALL BE CONSIDERED A TEMPORARY STRUCTURE AND WILL BE REMOVED AS SOON AS PROJECT IS COMPLETED. ALL ACCU-MULATED SEDIMENT WILL BE REMOVED FROM THE DETENTION POND BASIN.
3. DIA. OF HALF ROUND PIPE 1.5 TIMES THE DIA. OF PIPE OUTLET REMOVED AS SOON AS PROJECT IS COMPLETED. ALL ACCU-MULATED SEDIMENT WILL BE REMOVED FROM THE DETENTION POND.
4. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRE TOTAL DRAINAGE AREA.
5. NEVER TO USED ON EXPOSED PIPE END OR WINGED HEADWALL.
6. SHOULD BE FIXED BY SPECIFIED MEANS (BOLTS, ECT.) TO CONCRETE OUTLET STRUCTURE.

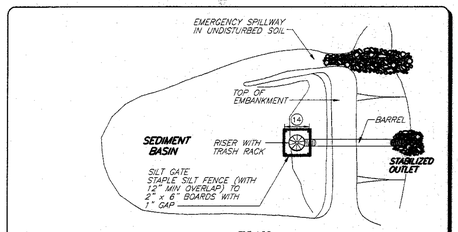
INSPECTION AND MAINTENANCE:

A. All retrofit stuctures shall be kept clear of all trash and debris.
B. Continuous monitoring of these structures will be necessary for maintenance.
C. All sediment should be removed from structures when ½ of the sediment storage capacity has been lost.
D. These structures are temporary and should be removed when all of the disturbed areas have recieved there permanent stabalization.

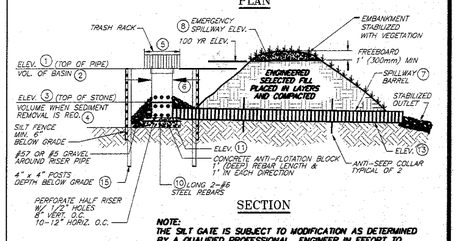
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RETROFITTING

STONE FILTER RING
W/ PERFORATED HALF PIPE



PLAN

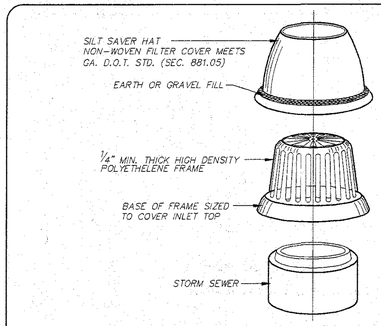


SECTION

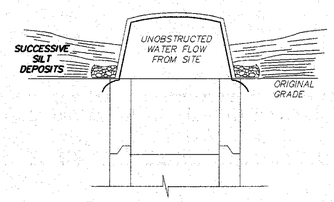
NOTE:
THE SILT GATE IS SUBJECT TO MODIFICATION AS DETERMINED BY A QUALIFIED PROFESSIONAL ENGINEER IN EFFORT TO REGULATE THE FLOW BELOW THE TOP OF THE RISER.

Sd3

TEMPORARY SEDIMENT BASIN



ISOMETRIC VIEW



SECTION

TYPICAL CONSTRUCTION SEQUENCE

1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.
2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURE THE FRAME COVERS STRUCTURE COMPLETELY
3. PLACE THE FILTER OVER THE FRAME.
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND THE INLET STRUCTURE.
5. BACKFILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER BACKFILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

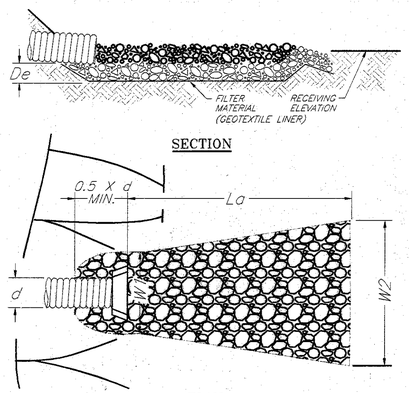
MAINTENANCE REQUIREMENTS

1. MAINTENANCE IS REQUIRED WHEN ERODED SOILS REACH A POINT OF 65% OF THE TOTAL HEIGHT OF THE FRAME OR APPROXIMATELY 7 TO 9 INCHES OF THE GRAY FILTER MATERIAL IS SHOWING.
2. REMOVE THE IMPACTED MATERIAL BY HAND OR MACHINE METHOD, PAYING CLOSE ATTENTION NOT TO DAMAGE THE FRAME OR FILTER.
3. BRUSH, SWEEP OR WASH FILTER AND INSPECT FOR ANY CUTS AND/OR ABRASIONS, REPLACE FILTER AS NECESSARY. INSPECT FRAME FOR ANY STRESS OR DAMAGE, REPLACE AS NECESSARY.
4. REFILL FILTER POCKETS, BACKFILL AS REQUIRED BY JOB SITE CONDITIONS.

Sd2

SEDIMENT TRAP

SILT SAVER FRAME & FILTER ASSEMBLY



SECTION

PLAN

LOCATION	d	MAX FLOW	d50	d-MAX	De	W1	La	W2
15"ø HW	15"	3.6 CFS	6"	9"	18"	3.75'	8'	9.5'
18"ø HW	18"	6.0 CFS	6"	9"	18"	4.5'	10'	11.5'
24"ø HW	24"	13 CFS	6"	9"	18"	6.0'	13'	15.0'
30"ø HW	30"	23 CFS	9"	14"	21"	7.5'	16'	18.5'
36"ø HW	36"	38 CFS	9"	14"	21"	9.0'	20'	23.0'
42"ø HW	42"	57 CFS	9"	14"	21"	10.5'	23'	26.5'
48"ø HW	48"	80 CFS	1'	18"	27"	12.0'	30'	34.0'
54"ø HW	54"	110 CFS	1'	18"	27"	13.5'	32'	36.5'
60"ø HW	60"	145 CFS	1'	18"	27"	15.0'	34'	39.0'

NOTES:
1. 1. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT. 2. FILTER MATERIAL SHALL BE FILTER FABRIC OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER.
2. 2. W1 AND W2 FOR PIPES OUTFALLING INTO A DEFINED DITCH SHOULD BE SUFFICIENTLY WIDE TO HAVE STONE ONE FOOT ABOVE THE CROWN OF THE PIPE OR THE TOP OF DITCH BANK, WHICH EVER IS LOWER.

OUTLET PROTECTION

INSPECTION AND MAINTENANCE:

- INSPECT AFTER HEAVY RAINS FOR EROSION AND DISLODGED STONES
- MAKE ALL REPAIRS IMMEDIATELY

St

OUTLET PROTECTION



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NO	DATE	REVISION	T.O.C. BY	D.E.M. CK.	APPR.
0	25-SEP-2007	INITIAL ISSUE			

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

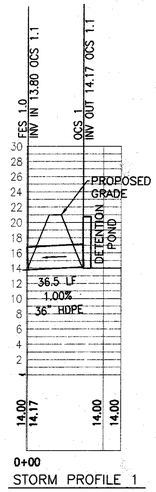
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
EROSION AND SEDIMENTATION CONTROL PLAN DETAILS
2 OF 2

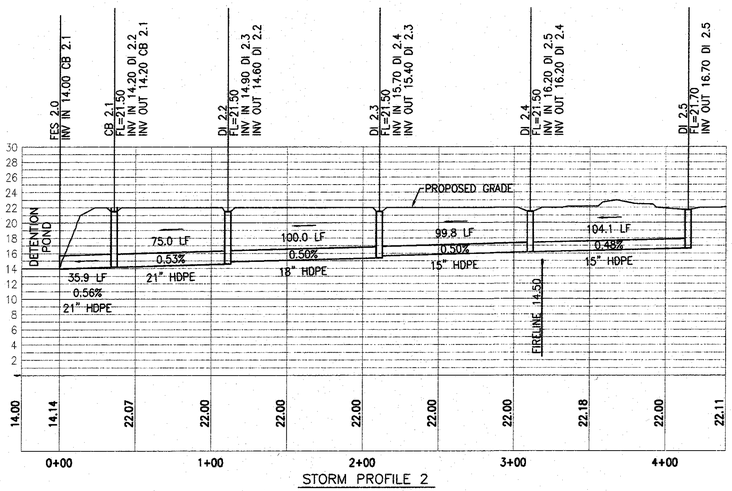
JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
FILENAME C0004002.DWG
SCALE NTS
REV. NO. 0
DWG. NO. C-4002

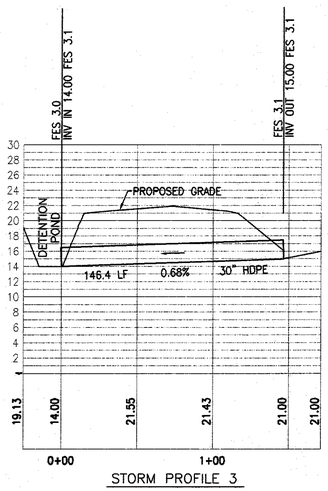
LGAD_3, ANSI D, 22 x 34 in.



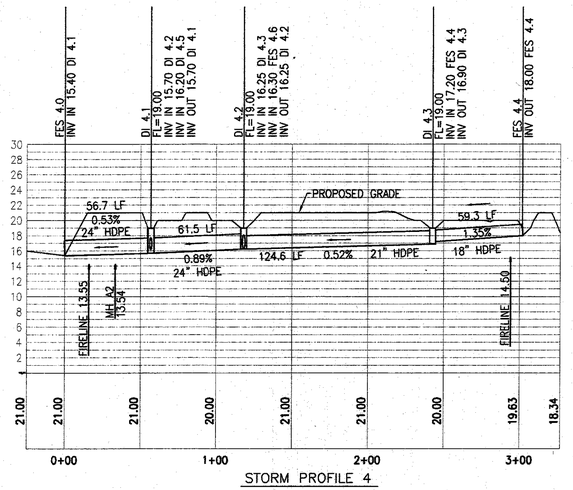
STORM PROFILE 1



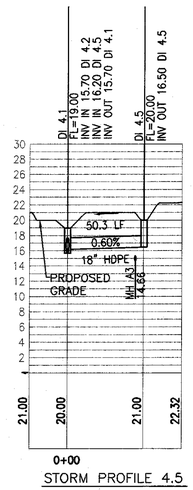
STORM PROFILE 2



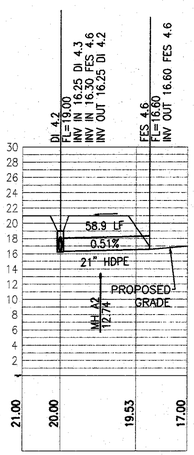
STORM PROFILE 3



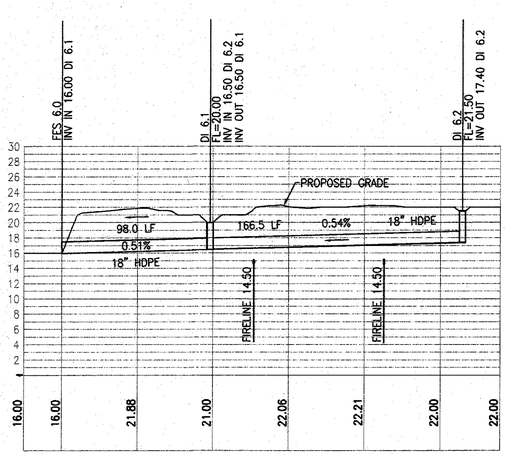
STORM PROFILE 4



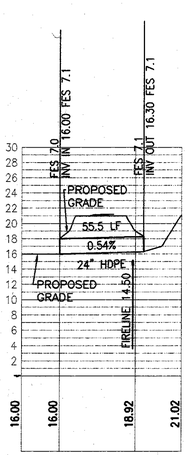
STORM PROFILE 4.5



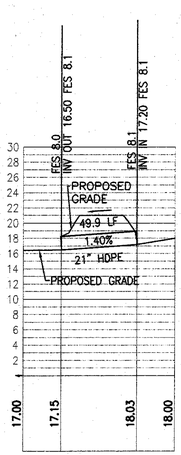
STORM PROFILE 4.6



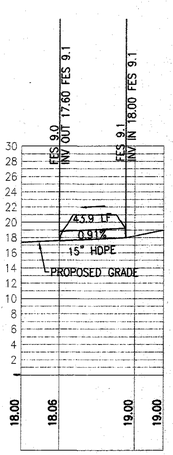
STORM PROFILE 6



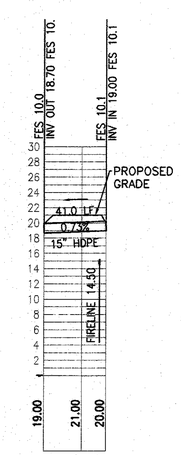
STORM PROFILE 7



STORM PROFILE 8



STORM PROFILE 9



STORM PROFILE 10



NOTES:
1. CLEARANCE BETWEEN PIPE CONFLICTS SHALL BE MINIMUM 1 LFT SEPARATION.

SCALE: HORIZONTAL 1"=50'; VERTICAL 1"=10'

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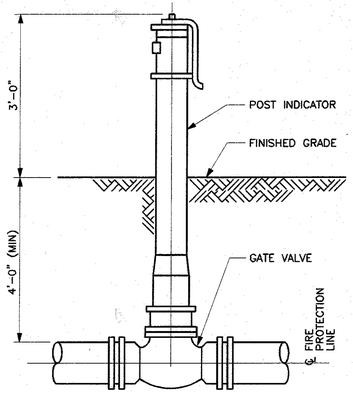
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
STORM DRAIN PROFILES

JOB NAME
BEPCO CC
COGEN – FACILITY

JOB NO. 360473
REV. NO. 0
FILENAME C0005000.DWG
SCALE AS NOTED
DWG. NO. C-5000

LGAD_3, ANSI D, 22 x 34 in.

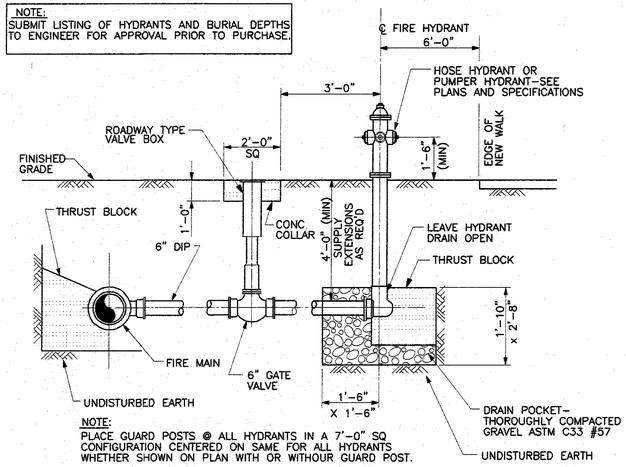


NOTES

1. PLACE GUARD POSTS @ ALL PIV's IN A 7'-0" SQUARE CONFIGURATION CENTERED ON SAME FOR ALL PIV's WHETHER SHOWN ON PLANS WITH OR WITHOUT GUARD POSTS.
2. SUBMIT LISTING OF PIV's AND BURIAL DEPTHS FOR APPROVAL PRIOR TO PURCHASE.

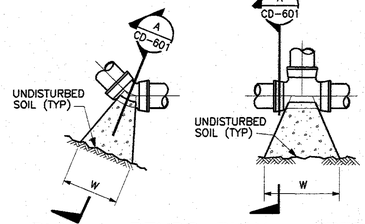
POST INDICATOR VALVE DETAIL (1 / C-7000)
SCALE: NONE

NOTE:
SUBMIT LISTING OF HYDRANTS AND BURIAL DEPTHS TO ENGINEER FOR APPROVAL PRIOR TO PURCHASE.

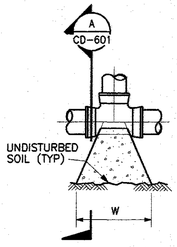


NOTE:
PLACE GUARD POSTS @ ALL HYDRANTS IN A 7'-0" SQ CONFIGURATION CENTERED ON SAME FOR ALL HYDRANTS WHETHER SHOWN ON PLAN WITH OR WITHOUR GUARD POST.

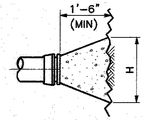
FIRE HYDRANT INSTALLATION DETAIL (2 / C-7000)
SCALE: NONE



PLAN – BENDS

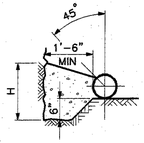


PLAN – TEES



PLAN & ELEVATION – PLUGS

NOM DIA (IN)	90° BEND		45° BEND		22.5° BEND		TEE OR CAP	
	W (IN)	H (IN)	W (IN)	H (IN)	W (IN)	H (IN)	W (IN)	H (IN)
4	24	18	18	13	12	10	18	17
6	36	24	24	20	20	12	26	24
8	41	36	34	24	23	18	44	24
10	48	47	36	34	26	24	42	38
12	59	54	42	41	30	29	53	42

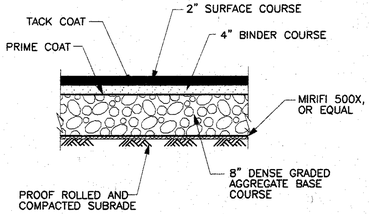


SECTION (A / C1-57067)
SCALE: NONE

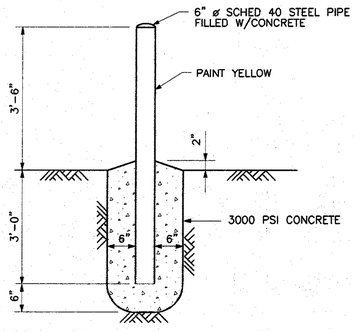
NOTES

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS MINIMUM.
2. "A" FOR TEES EQUALS "A" FOR 90° BEND OF THE SAME SIZE AS BRANCH TO BE BLOCKED.
3. THRUST BLOCKS SHALL BE USED AT ALL TEES, BENDS, PLUGS, AND FIRE HYDRANTS ON WATER AND FIRE PROTECTION LINES.
4. THRUST BLOCKS SHALL BE INSTALLED PER NFPA 24.

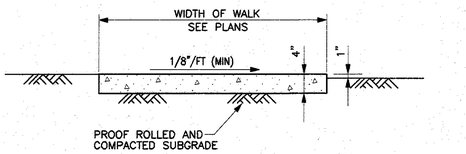
THRUST BLOCK DETAILS (3 / C-7000)
SCALE: NONE



TYPICAL HEAVY DUTY ASPHALT PAVEMENT DETAIL (4 / C-7000)
SCALE: NONE



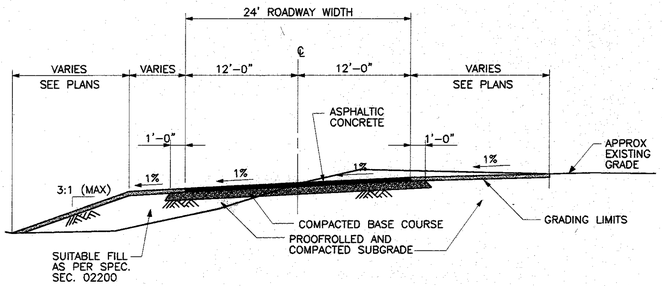
GUARD POST DETAIL (5 / C-7000)
SCALE: NONE



NOTE

TOOLED CONTRACTION JOINTS @ 5'-0" ON CENTER AND 1/2" PREMOLDED EXPANSION JOINTS @ 30'-0" ON CENTER AND AT BUILDINGS, STEPS, AND INTERSECTIONS.

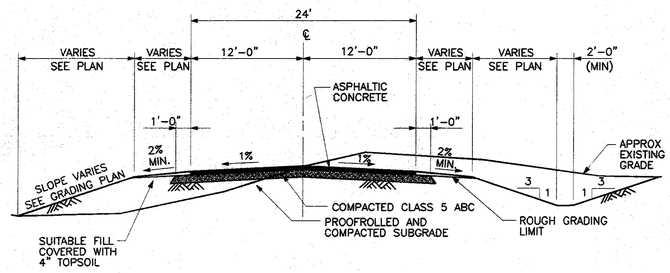
TYP CONCRETE WALK DETAIL (6 / C-7000)
SCALE: NONE



TYPICAL FILL SECTION

TYPICAL CUT SECTION

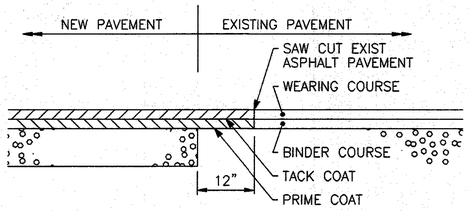
TYPICAL CROSS-SLOPED ROADWAY SECTION (8 / C-7000)
SCALE: NONE



TYPICAL FILL SECTION

TYPICAL CUT SECTION

TYPICAL ROADWAY SECTION (9 / C-7000)
SCALE: NONE



PAVEMENT TRANSITION DETAIL (10 / C-7000)
NTS



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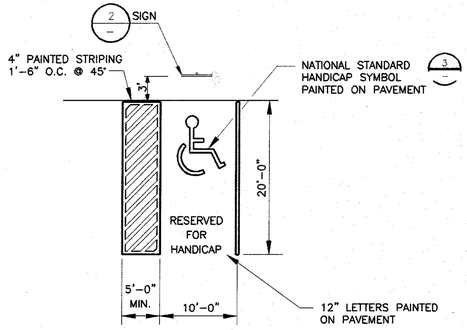
LG Constructors
Atlanta, Georgia

SHEET TITLE: CIVIL SECTIONS AND DETAILS 1 OF 3

JOB NAME: BEPCO CC COGEN – FACILITY

JOB NO.: 360473
FILENAME: C0007000.DWG
SCALE: NTS
REV. NO.: 0
DWG. NO.: C-7000

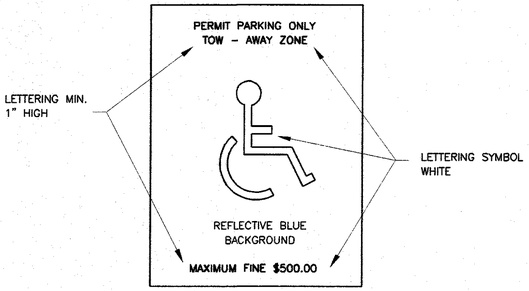
LGAD_3, ANSI D, 22 x 34 in.



HANDICAP/ACCESSIBLE PARKING STALL DETAIL

SCALE: NTS

1 C-7001



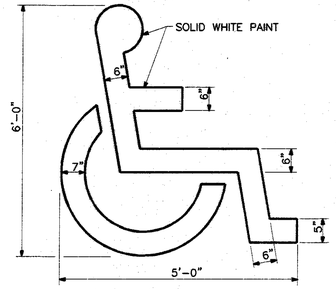
NOTE:

SIGN TO BE MOUNTED 6 FT. FROM GRADE TO BOTTOM OF SIGN

HANDICAP/ACCESSIBLE SIGN DETAIL

SCALE: NTS

2 C-7001



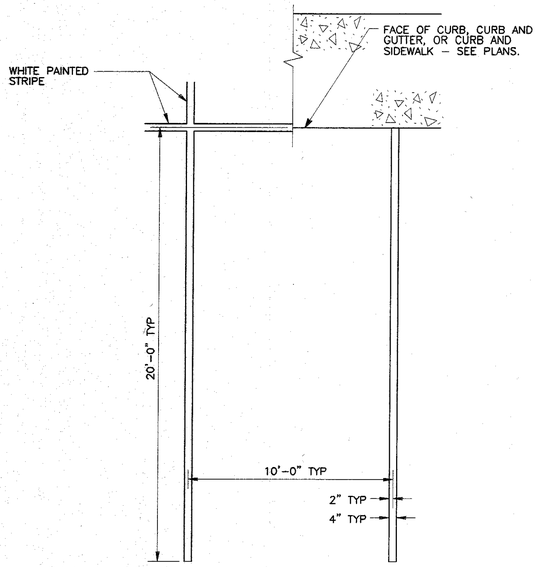
NOTES

1. PAINT SHALL BE WHITE CHLORINATED RUBBER BASED, FACTORY-MIXED, QUICK-DRYING, AND NON-BLEEDING, COMPLYING WITH FEDERAL SPECIFICATION TT-P-115.
2. THICKNESS SHALL BE 15 MILS.

HANDICAP/ACCESSIBLE PARKING SYMBOL DETAIL

SCALE: NTS

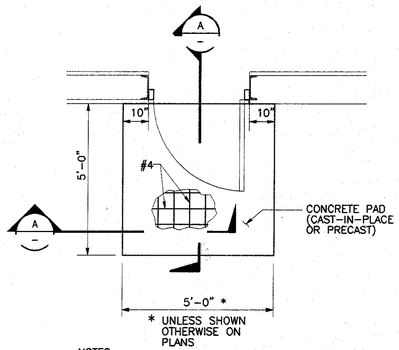
3 C-7001



90° PARKING SPACE WITH TIRE STOP DETAIL

SCALE: NTS

4 C-7001



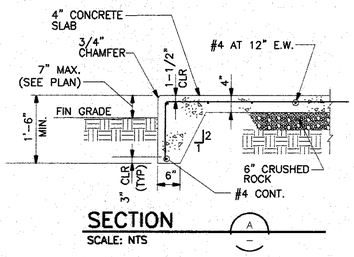
NOTES:

1. CONCRETE SHALL BE AIR ENTRAINED WITH THE NEUTRALIZED VINSOL RESIN, DAREX AEA OR SIKA AER. THE AIR ENTRAINING AGENT SHALL COMPLY WITH ASTM C260, LATEST EDITION WITH MINIMUM ENTRAINED AIR OF 3% TO 5%.
2. CENTER DOOR PAD WITH DOOR OPENING.

DOOR PAD DETAIL

SCALE: NTS

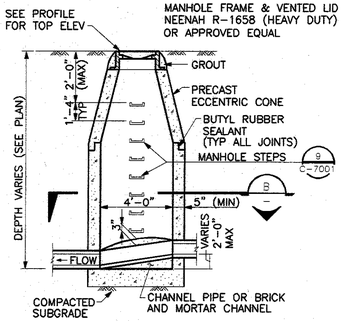
5 C-7001



SECTION

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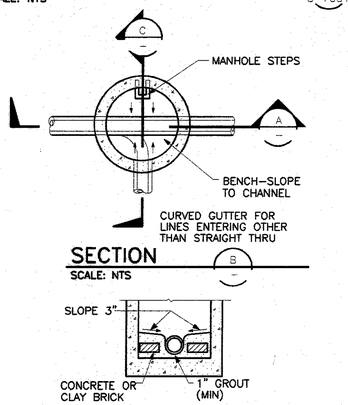
A



SECTION

SCALE: NTS

A



SECTION

SCALE: NTS

B

SECTION

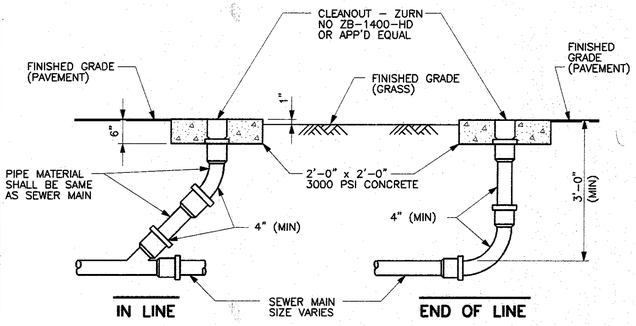
SCALE: NTS

C

TYPICAL PRECAST SANITARY SEWER MANHOLE DETAIL

SCALE: NONE

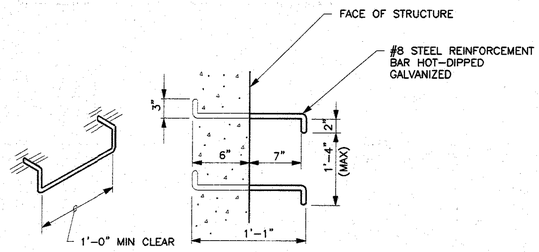
6 C-7001



GRAVITY SEWER CLEANOUT DETAIL

SCALE: NONE

8 C-7001



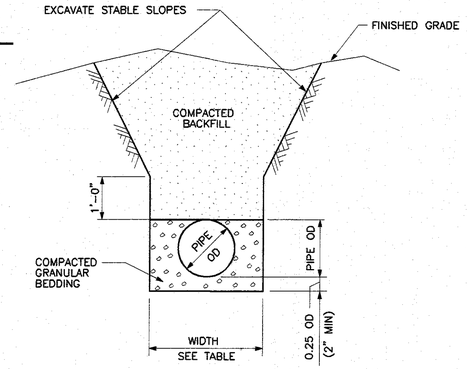
NOTE

NEENAH STEP R-1981-W OR M.A. MANHOLE STEP PS-1-PF OR APPROVED EQUAL MAY BE USED.

MANHOLE STEP DETAIL

SCALE: NONE

9 C-7001



PIPE OD	TRENCH WIDTH
24" & SMALLER	OD + 1'-4"
30" & LARGER	OD + 2'-0"

CLASS "B" PIPE BEDDING DETAIL

SCALE: NONE

10 C-7001



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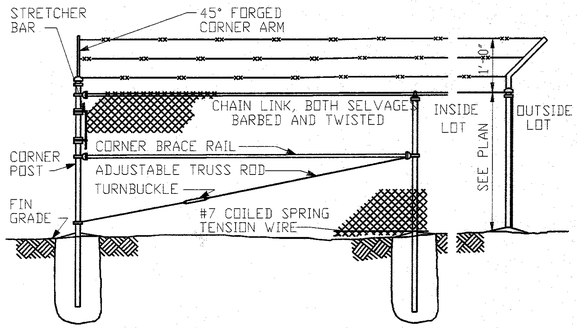
LG Constructors
Atlanta, Georgia

SHEET TITLE
CIVIL
SECTIONS & DETAILS
2 OF 3

JOB NAME
BEPCO CC
COGEN - FACILITY

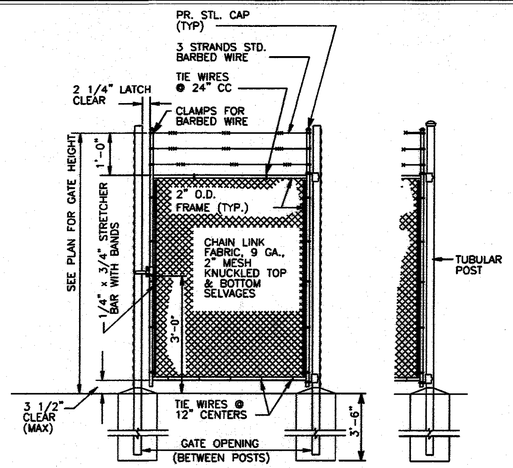
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DWG. NO. C-7001

LGAD_3, ANSI D, 22 x 34 in.

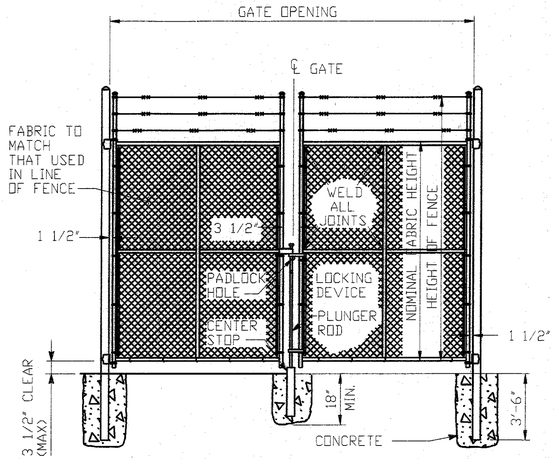


SEE SPECIFICATIONS FOR DIMENSIONS, GAGES, WEIGHTS, ETC.

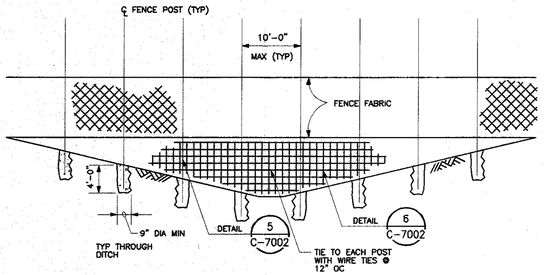
FENCE DETAIL 1 C-7002
N.T.S.



SINGLE GATE DETAIL 2 C-7002

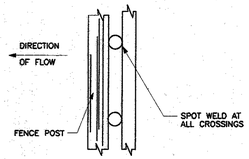


DOUBLE GATE DETAIL 3 C-7002
N.T.S.

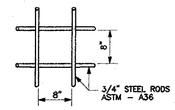


NOTE: THROUGH THE DITCH 3" SCH 40 (5.79 LB/FT) STEEL PIPE POST SHALL BE USED

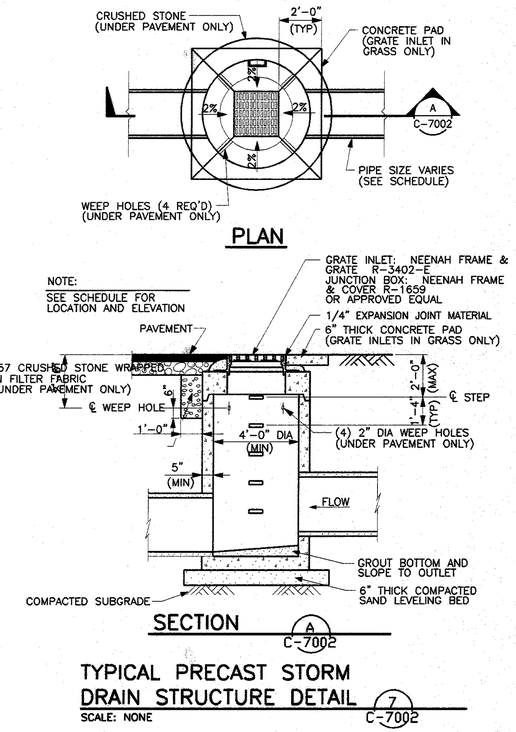
FENCE AT DITCH CROSSING 4 C-7002
SCALE: NONE



DETAIL 5 C-7002
SCALE: NONE



DETAIL 6 C-7002
SCALE: NONE



PLAN

SECTION A C-7002

TYPICAL PRECAST STORM DRAIN STRUCTURE DETAIL 7 C-7002
SCALE: NONE

STATE OF NEW YORK * DAVID E. MICKANEN * LICENSED PROFESSIONAL ENGINEER * 085162

9-25-07

WARNING:
IT IS A VIOLATION OF THE EDUCATION LAW ARTICLE 145 SECTION 7209 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION 'ALTERED BY' FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO	DATE	REVISION	BY	CK.	APPR.
0	25-SEP-2007	INITIAL ISSUE	T.O.C.	D.E.M.	

DESIGNED BY T. CELEDON
CHECKED BY D. MICKANEN
APPR. BY
CLIENT APPR.

LG Constructors
Atlanta, Georgia

SHEET TITLE: CIVIL SECTIONS & DETAILS 3 OF 3

JOB NAME: BEPCO CC COGEN - FACILITY

JOB NO. 360473
FILENAME C0007002.DWG
SCALE NTS
REV. NO. 0
DWG. NO. C-7002

LGAD_3, ANSI D, 22 x 34 in.

Tree Protection Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

Tree Protection Plan

Submitted to

BEPCO CC Cogen Facility

September 2007

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During review of the Article X application, the Owner provided an "Existing Vegetation Protection Plan". That plan forms the basis for this Tree Protection Plan, which updates and expands the original submittal. The following measures will be implemented to protect and preserve existing vegetation outside the construction zone to the extent possible.

- Prior to initiation of site preparation activities, limits of work will be marked in the field using flagging, spray paint or other effective means.
- Assessment will be made by a Certified Arborist as to whether certain trees within approximately ten feet of the demarcated limits of work can be reasonable expected to survive (depending on proximity to limits of work and nature of construction activity to be performed in the area; caliper, spread and anticipated root system of various species.
- Trees that are not expected to survive will be cut. Roots will be left in place so that the roots of other nearby trees are not disturbed.
- Areas of trees to be retained on the South 40 will be fenced with chain link to provide more substantial demarcation and protection than polyethylene fencing or other materials commonly used to identify limits of work. Signs will be placed on the fencing to denote the tree protection areas.
- Erosion control measures will also be established in the tree protection areas to prevent excessive siltation or erosion of soil from around the trees.
- No parking, material stockpiling or equipment storage will be allowed within areas of vegetation to be preserved.
- Trees designated to remain, but which have been seriously damaged (in the opinion of the arborist) despite precautions, will be replaced using stock of at least 2 – 21/2 " caliper with the number of replacement trees being determined in relationship to the caliper of the damaged tree and the arborist's recommendation regarding proper spacing. Replacement trees will be guaranteed for a period of two years following installation.
- Replacement trees, if needed, will be planted and maintained until established in accordance with species-specific recommendations to be provided by the arborist and/or the nursery supplying the tree stock.

LG Constructors

EMERGENCY RESPONSE PLAN

BEPCO Combined Cycle Project

This plan is to cover the scope of basic emergency response on the BEPCO CC Cogen Facility Project. This procedure provides guidelines for handling emergencies that may present a danger to personnel, property, general public, or the environment. Emergencies covered include thunderstorms and lightning, hurricanes, tornadoes, earthquakes, and other unexpected situations or sudden occurrences demanding immediate action such as serious injury or illness, bomb threats, toxic chemical releases, fires, and explosions.

This document will be updated as needed and is only intended to serve as a guideline, since every emergency situation can not be accounted for. Section 10 of the Project Specific Safety Manual has additional information for emergency situations.

PLANT LOCATION: Rensselaer, New York

EMERGENCY RESPONSE:

FIRE DEPARTMENT:	911
POLICE DEPARTMENT:	911
AMBULANCE SERVICE:	911

Although these numbers are posted throughout the construction area and offices, LG Constructors Safety Management must be consulted and **must** be notified when these numbers are called.

LG Constructors

Rus Keson – Project Manager
XXX – Project Superintendent
XXX – Safety Manager

This project shall develop specific emergency procedures addressing signals and alarms, communications, responsibilities, evacuation routes, assembly areas, accounting for personnel.

An information and training program is required to communicate the details of the emergency procedure to employees at initial assignment and periodically thereafter. Such training shall be documented.

Emergency procedures and telephone numbers should be posted in all offices, at all telephones, and other appropriate locations to facilitate prompt notification to those responsible for emergency response.

This project shall establish an Emergency Response Team with specific responsibilities assigned to each team member. This team will meet on a regular basis and review site-specific emergency procedures.

This project will determine the appropriate personnel to perform emergency related functions, such as:

- Establish a communications network with the site or facility, and outside sources such as ambulance, fire, police, etc.
- Establish a system to account for personnel (including visitors) during an emergency.
- Ensure the work ceases in affected areas.
- Ensure that medical response personnel respond as indicated by the nature of the emergency.
- Define emergency and clearly establish channels of communication.
- Identify emergency safe havens or assembly points.
- Keeping unauthorized personnel out of the emergency area until the "all clear" signal is given by the Incident Commander.
- Assuring unimpeded access by emergency response personnel to the scene.
- Keeping telephones and radio channels clear during an emergency.
- Establish communications capable of monitoring weather conditions for the locale.
- Establishing point of responsibility for communication to Corporate with respect to media contacts.

LG Constructors maintains a 24 hour security presence on site.

FIRST AID AND MEDICAL EMERGENCIES:

In accordance with OSHA 1926.23, each contractor on the project is required to provide a certified CPR and First Aid attendant and first aid kits for their specific employees. Employees who have received an injury must report it to their supervisor immediately. It is the contractor's responsibility to treat their employee's wounds to the best of their ability. The LG Constructors Safety Management has a stocked first aid facility. Remember that injuries may require that a drug screen be performed and the results must be negative before the employee returns to work.

For major medical emergencies the LG Constructors Safety Management **must** be contacted immediately. The Incident Commander /Safety Manager and emergency

response team will respond with medical equipment and treat the employee to the best of their ability until the local ambulance / fire department arrives. The LG Constructors Safety Management retains custody and control of the area where the emergency is located and the Safety Manager will direct activities in the area as needed.

Training will be provided by the LG Constructors safety team to enhance the site employee knowledge in the operation of safety showers and eye flush stations. The LG Constructors safety team will be trained in the operation and maintenance of a site AED (defibrillator) and will communicate to the local response team (fire department) information regarding the use of such device on a site employee. Any employee, regardless of company, that requires treatment for a work related injury or illness at any off site medical facility, must be accompanied by a supervisor and a drug screen must be performed. Only those employees with drug screen results showing negative results will be allowed to return to work. Anytime an employee, regardless of company, is going to leave the property for a doctor visit on a work related injury, the LG Constructors Safety Management team must be notified.

When an emergency situation arises, the first person on the scene shall initiate an emergency response. The communication channels established during emergency planning will be used to notify the appropriate on-site and off-site emergency medical providers.

Information transmitted from the scene concerning the emergency should include the name of the individual reporting the emergency, an accurate description of the nature of the emergency, the exact location, and the nature of the injury.

Information transmitted to off-site emergency response providers shall include the details described above and any other information requested. The operator should stay on the line until an emergency response has been confirmed.

The on-site emergency response team will provide for the care and comfort of the injured until released by the responding off-site emergency response provider. The site emergency response team shall make itself available to assist as required.

The project management team will secure the scene at the earliest possible moment and initiate an incident investigation once the scene has been secured and the injured has been transported for off-site medical attention.

RADIO PROCEDURES DURING AN EMERGENCY:

When an emergency occurs, a declaration of emergency shall be made on the LG Constructors radio Channel One. Once an emergency is declared all personnel not directly involved with the incident should monitor the radio channel, but hold all

transmissions until an "all clear" signal has been issued by the LG Constructors Incident Commander /Safety Management or LG Constructors Site Management.

TELEPHONE PROCEDURES DURING AN EMERGENCY:
Stay calm; give your name and the nature of the emergency; your phone number; and the nature of the injury. Stay on the line; answer all questions and allow the operator to hang up first.

FIRE EMERGENCIES:
Should a fire occur in a trailer, building, or connex, evacuate the area immediately. A quick head count should be taken and note any missing personnel. Call 911 to notify the Rensselaer Fire Department of the emergency. Notify the LG Constructors Incident Commander /Constructors Safety Management immediately. If the fire is small and you can safely extinguish it with a fire extinguisher, with your back to the escape exit, pull the pin on the fire extinguisher, aim the nozzle to the base of the fire, squeeze the handle to discharge extinguishing agent, and sweep the nozzle from side to side at the base of the fire. If you use the extinguisher up and the fire is still burning, or the fire is too big for you to fight, leave the area and follow the above instructions to call 911 and notify the LG Constructors Safety Managers.

If a fire should occur in a work area, evacuate the immediate area and locate the closest fire extinguisher. With your back to your escape exit, pull the pin on the fire extinguisher, aim the nozzle to the base of the fire, squeeze the handle to discharge extinguishing agent, and sweep the nozzle from side to side at the base of the fire. Have another worker immediately notify the LG Constructors Incident Commander /Safety Management of the incident. Use extra extinguishers if needed, but never place yourself in danger. If the fire becomes too large to fight with extinguishers, evacuate the area, call 911 and notify the LG Constructors Safety Management, if you have not already done so.

EXAMPLE:
FIRE: On LG Constructors radio Channel One. "This is (whoever you are), FIRE, FIRE, FIRE, fire at (state the location of the fire and what is on fire)." Notify the Incident Commander who will notify local response teams (local fire department) and communicate with direction to site personnel any information required to avoid contact with the area

Other emergency traffic should be broadcast in the same fashion as the examples above, with the person making the report identifying the caller and repeating at least three times the nature of the emergency and giving any information that may be required. All personnel not directly involved with the incident are again reminded to monitor the channel for possible instructions, but to hold all radio

communications until the "all clear" has been properly issued by the Incident Commander.

SPILL (Hazardous Material) EMERGENCIES:

The purpose of this plan is to provide a comprehensive procedure to prevent spillage of materials or substances, which may adversely affect the safety and health of employees and contaminate soil, waterways, or property. The Incident Commander will inform local response teams of any issues that might affect the locality. This plan will also include countermeasures to contain spills that occur prior to clean up, and the proper storage of hazardous materials.

HAZARDOUS MATERIALS DEFINED:

The following is a list of materials that are commonly found on a construction project and may be considered to be potentially hazardous:

gasoline	paints
fuel oil	antifreeze
hydraulic fluid	concrete curing compounds
motor oil	paint thinner
diesel fuel	form oil
gear oil	acids
acetone	caustics
cleaning solvents	adhesives
methyl ethyl ketone	

The list above identifies some, but not all hazardous materials that this procedure is intended to address.

For purposes of clarification the following definitions are provided:

- Oil Spill - Any accidental spill, regardless of quantity, of unrefined or refined crude products. Spill is any discharge that causes a film, sheen upon, or discoloration of water, or causes a sludge or emulsion to be deposited beneath the surface of water.
- Hazardous Substances Spill - Any accidental spill of any chemical or substance in concentrated form, which could be hazardous to the environment.
- This procedure is mandatory and applies to the collection, storage and disposal of flammable or combustible liquids or waste oils generated by any work operation.
- Project management will convey to all personnel the concern and contractual obligations to prevent the spill of any oils or chemicals.

- All spills must be reported IMMEDIATELY to the LG Constructors Site Office.
- A drum or other containers uncovered during excavation must also be reported immediately to the LG Constructors office.
- Liquid waste such as chemicals, fuels or lubricants shall be collected into tanks or other suitable containers for salvage or disposal off site.
- No discharge of a waste into any drain will be allowed.
- Routine storage of small quantities of liquids shall be accomplished in such a manner as to prevent a spill by providing a flat surface for storage and where deemed necessary a berm or dike shall be constructed around the storage area to contain any possible spill. Three layers of 6-mil plastic shall protect the ground area inside the berm/dike. All seams of the plastic layers shall be sealed so not to allow leakage of fluids.
- Concrete curing compounds and other immediate use liquids shall be placed so as to control leakage and spillage. Protect the ground area inside the dike with 6 mil layers of plastic (3) and seal the seams.
- Hazardous waste may never stay on site for more than 60 days.
- All traveling equipment shall be maintained in such a manner as to minimize oil, grease and hydraulic fuel leakage.
- Equipment maintenance must be conducted in designated equipment areas except for approved field servicing.
- All handling, storage and dispensing of liquid fuels, etc. shall be done in accordance with applicable rules and regulations.
- All containers shall be properly labeled with contents and contractor name.

BULK STORAGE AREAS:

Material identified in the definition section of this procedure shall be stored in areas designated by LG Constructors so as not to spread oil spill hazards to more than one location.

Storage of liquids will be approved by LG Constructors and limited to bulk-tanks and/or 55 gallon barrels away from the proximity of natural watercourses, or alternately on level storage areas surrounded by a berm or dike to contain any possible spill.

Above ground fuel and oil storage tanks shall be checked for leakage and spillage on a daily basis.

STORAGE OF HAZARDOUS MATERIALS:

Hazardous construction materials such as cleaning solvents, concrete curing compounds, paints, etc., shall be stored in a manner that will prevent accidental spillage.

Hazardous materials stored inside should be in leak-proof areas with affected floor drains covered.

MAINTENANCE & SERVICING AVAILABLE:

Maintenance & servicing of equipment shall not be performed on the BEPCO Project site without pre-approval from LG Constructors.

EMERGENCY RESPONSE TEAM:

To help facilitate fast and adequate response to emergencies on the site, the LG Constructors Inc. safety department has put an EMERGENCY RESPONSE TEAM together. This team is charged with managing the identification of hazards, spill response, ensuring that the appropriate training has been completed for any hazardous material release as well as educated in all federal, state and local regulations. These individuals are charged with responding to any emergency and beginning initial response. Emergency Response Team members can be contacted on the LG Constructors radio using Channel One.

TEAM MEMBERS:

XXX - LG Constructors Inc. - Incident Commander
Responsible for the evaluation of hazard level
Coordinate with off site/local emergency response departments
Control hazard site and direct in site responders actions

XXX - LG Constructors Inc. - First Responder
Provide information to assess hazard
Respond as directed by "Incident Commander"

XXX - LG Constructors Inc. - First Responder
Provide information to assess hazard
Respond as directed by "Incident Commander"

XXX – Rotating Subcontractor - First Responder
Provide information to assess hazard
Respond as directed by "Incident Commander"

XXX – Rotating Subcontractor - First Responder
Provide information to assess hazard
Respond as directed by "Incident Commander"

Persons involved in an incident shall follow the instructions of the identified team members. The Safety Manager for LG Constructors retains Incident Command for any incident.

WEATHER INCIDENTS:

LIGHTNING: In our current location, lightning can be common. Should a thunderstorm move into the area to affect the safety of employees, your supervisor will contact you with instructions. The most dangerous aspect of a thunderstorm is the potential for lightning. This project shall establish procedures to be followed when lightning is observed or the conditions exist for lightning to occur. The following precautions shall be considered when lightning is present:

- Development of a contingency plan to be followed in the event of a lightning event.
- Avoid exposing personnel at high elevations, such as on structural steel members, pipe racks, rooftops, process columns, antennas, etc.
- Keep personnel away from tall structures or trees.
- Avoid depressions with standing or running water.
- Lower all crane booms. If the lowering of booms is not possible, ground them from their booms to the ground.
- Relocate personnel inside or under cover as conditions warrant.

HIGH WINDS: High winds are common in the spring and early summer in this area. Each contractor is responsible to determine when wind speeds pose a danger to crane operations, JLG use, or employees working aloft. The suggested wind speed to begin consideration of stopping operations is 30 mph; however each contractor will make that determination on a case by case basis. You will receive instructions on what to do by your supervisor in the case of high winds.

TORNADOS: Tornados are common in the spring and summer months in this area. The definition of a tornado watch is those conditions that are favorable for the formation of a tornado or a tornado has formed and authorities are unsure whether the tornado will strike an area. The definition of a tornado warning is that a tornado is imminent and may have been spotted. A contingency plan for tornado emergencies shall be developed. The plan shall address the following pre-planning considerations:

- Personnel should be encouraged to report funnel clouds to management immediately.
- The National Weather Service issues a tornado watch when conditions are right for the formation of tornadoes in or near the area. The project management team member designated to perform this function should monitor weather channel advisories.

- The National Weather Service will issue a tornado warning when a tornado has been sighted. The warning will include the location, the expected path of travel and when it is expected to affect the area being warned.
- Once a warning has been issued, emergency precautions must be taken immediately. Advise personnel which areas of the facility offer the best protection. The best areas are underground shelters, basements, and interior small rooms or hallways, preferably on the structure's lowest floor. Personnel should be able to reach these safe havens within two or three minutes of an alert.
- Advise employees not to open windows during an alert. The National Weather Service states that it is not the change in pressure that does damage during a tornado, but the force of the wind.
- Advise employees to leave mobile homes, trailers, and vehicles and seek a sturdier shelter. If there is no shelter, lie flat in the nearest ditch.
- Advise employees that if they are caught out in the open, they should look for a funnel-shaped cloud with obvious rotational movement. They should listen for a roaring noise.
- Advise employees that if a tornado is spotted and appears not to be moving or is in fact heading straight at them, they should take cover immediately.
- Advise employees to take a battery-operated radio, extra batteries, water, and a first aid kit to the shelter area. The radio will advise when it is safe to leave the shelter. If the area is damaged, turn the volume to its maximum to attract rescue workers.
- A thorough inspection of the site should be made after a tornado has struck. The inspection team appointed by the senior on-site manager shall aid in emergency rescue, repairs, and shall assess damage.

HURRICANE: A contingency plan for hurricane emergencies is required if the site is exposed to hurricane conditions. The plan shall address the following pre-planning considerations:

- A hurricane is a severe tropical storm with winds exceeding 74 mph or more. The path of destruction can be as wide as 500 miles and the hurricane season begins June 1 and ends November 30 in the northern hemisphere.

- Except for pre-hurricane planning, it is impossible to set up a timetable of events. Decisions must be made based on weather information which must be accepted and considered as factual in order to serve as a basis and timetable for precautionary activities. Based on best available weather information, the decision to take action must be made early enough to provide sufficient lead time to accomplish outside work before winds are gusting to 60 mph. For these reason the first phase of hurricane planning should cover the formation of a committee, assignments, responsibility, and authority. It is with this committee that all timetables (watch, get ready, ride-out, shutdown, standby crews,

evacuation, call back, initial damage assessment and recovery) are established. These decisions should be based on previous storm experience, initial weather reports, knowledge of shutdown times, and employee personal obligations.

- An advisory committee should be established and be composed of the project manager, subcontractor management, LG Constructors safety managers, and other staff as required. They should meet periodically to discuss preseason preparedness and preliminary alert preparations. The most senior representative should chair the committee with alternates named in his or her absence.

The hurricane safety procedure should address the following points:

- Update hurricane plans.
- Issue hurricane safety precautions.
- Have all groups review checklist of things to do.
- Establish a rescue plan for employees stranded in the project/facility areas.
- Group review of their role and preparations to implement.
- Establish records of employees and means to contact after hurricane.
- Inventory and test all emergency radios.
- Charge all spare batteries for emergency radios and have available at command center.
- Verify telephone numbers of cellular phones that exist.
- Arrange for auxiliary generator.
- Maintain a supply of sand bags.
- Secure all small and portable buildings.
- Pick up or secure anything that may blow around.
- If applicable, review and modify "shutdown plans" for units, plant or area consistent with timetables established by the committee.
- Determine the number of people required to remain at the facility during a level 1-3 hurricane. For a level 4-5 hurricane plan to evacuate all personnel.
- Prepare a schedule of "Emergency Relief Crews" for morning after.
- Secure window and door glass.
- Identify special radio operators.
- Arrange for port-a-lets to be available.
- Maintain a supply of fuel to be available for standby equipment.
- Maintain first aid supplies to be easily available, including snakebite kits.
- Maintain a "master list" of key personnel and their location, in or away from the project or facility.
- Arrange for radio announcements about conditions, work schedules, etc.
- Have a good stock of emergency supplies on hand such as: flashlights, batteries, auto batteries, rope, neon tube lamps, etc.
- Set up accounting instructions, pay policy.
- Damage assessment should be continuous by all supervisors with periodic reports through channels to the committee.
- Make provisions to provide suitable drinking water. Check purity.

- Ascertain when it is safe to return to work.
- Assess damages for insurance purposes. Take pictures to show damages.
- Have sufficient petty cash available for last minute supplies.
- Arrange special pay when warranted.
- Provide assistance for families for standby crews.

HURRICANE TERMS TO KNOW:

Hurricane Center or Eye – The relatively calm area near the center of the storm. In this area winds are often light and the sky may be only partly covered by clouds.

Hurricane Force Winds - Winds of 74 mph or higher.

Hurricane Watch – An announcement by the United States Weather Bureau to the public and all other interests via press, radio, and television broadcasts whenever a tropical storm or hurricane becomes a threat to a coastal area. The hurricane watch announcement is not a warning. It indicates that the hurricane is near enough that everyone in the area covered by the "Watch" should listen for subsequent advisories and be ready to take precautionary action in case hurricane warnings are issued.

Gale Warnings – When winds of 38-55 mph are expected, a gale warning is added to the advisory message.

Storm Warning – When winds of 55-74 mph are expected, a storm warning is added to the advisory message. Gale and storm warnings indicate the coastal area to be affected by the warning, the time during which the warning will apply, and the expected intensity of the disturbance. When gale or storm warnings are part of a tropical cyclone advisory, they may change to a hurricane warning if the storm continues along the coast.

HCT Warning – When hurricane conditions are expected within 24 hours, an HCT warning is added to the advisory. HCT warnings identify coastal areas where sustained winds of at least 74 mph are expected to occur. A warning may also describe coastal areas where dangerously high water to exceptionally high waves are forecast, even though winds may be less than hurricane strength.

COLD RELATED EMERGENCIES:

Exposure to the cold can cause hypothermia and frostbite. Hypothermia occurs when your body temperature drops a few degrees below normal (approximately 98.6 F). Frost bite occurs when the fluids and tissues of the skin freeze. Both of these conditions are serious and require immediate attention. Examples of cold exposures that can happen in other seasons and are often overlooked include contact with

liquefied gases, cold year around, and working in freezers and cold storage locations.

SIGNS, SYMPTOMS AND TREATMENT:

Signs and Symptoms of hypothermia include:

- Shivering Uncontrollably.
- Slurred speech and/or loss of coordination.
- Confusion or disorientation.
- Weakness, drowsiness, and unconsciousness.

If you experience these symptoms, you should immediately get inside and warm up. Seek medical help as soon as possible. The first stages of frostbite are reddening of the skin, changing to a blotchy white gray or yellow appearance. The discolored skin areas may feel very cold or numb. In advance stages of frostbite, then skin becomes completely white, then yellow, then black, and sometimes blistered. Frostbite must be treated immediately to prevent severe injury or even death. Follow these steps to treat a person suffering from frostbite.

- Keep the victim as warm and dry as possible.
- Warm frozen body parts by immersing them in warm (100 degree F) water. Do not allow injured area to touch sides or bottom of the container.
- Never rub or move frozen body parts or allow rapid warming of the injured parts.
- Place affected areas lower than the victim's head.

Seek medical attention as soon as possible.

The key to preventing and addressing cold stress related injury is to properly prepare yourself for possible exposure, recognizing the signs and symptoms of over exposure, and knowing the basic treatment for hypothermia and frostbite.

COLD WEATHER TIPS,

- Dress in layers so that you are able to adjust with temperature changes.
- Wear a hat, gloves, facemask, and waterproof boots.
- Keep dry and have a change of clothing in case you get wet.
- Use the buddy system for outdoor work activities, and watch for signs and systems of cold stress.
- Stay out of extremely cold weather whenever possible.
- Know the current weather conditions, including chill factors.

HEAT RELATED EMERGENCIES:

Heat related emergencies include heat cramps, heat fatigue, heat exhaustion and heat stroke. Heat cramps cause the body, and commonly the stomach to cramp. Resting in a cool or shaded area and sipping water can reverse this condition. Heat fatigue causes the body to tire rapidly. A person will feel exhausted and nauseated. Like heat cramping, rest and water can reverse this condition. Heat exhaustion can be a life threatening emergency if not recognized and treated quickly. Symptoms include profuse sweating, confusion,

irritability, pale or wet red skin, and possibly unconsciousness. Getting the person to a cool place, removing extra clothing and cooling the body with cool drinks (never give anyone unconscious anything by mouth) and cool wet towels around the back of the neck and arms is the first step to treat heat exhaustion. Heat stroke is a life threatening emergency requiring immediate treatment. Contact the LG Contractors and the local services immediately. Heat stroke causes the body to stop sweating, in turn stops the body's way of releasing heat. Body temperatures can reach and exceed 105 degrees. As mentioned above, get the person to a cool place and start cooling the body down with ice packs and towels. Remember; never give anyone unconscious anything by mouth.

An easy way to avoid heat related emergencies is to drink plenty of water. If you wait until you are thirsty to drink water, you waited too long. Another way is to take periodic breaks and cool down. If you feel strange in any way while working in the heat, contact your safety person, the EMT, or go to the Safety Trailer right away.

SITE EVACUATION:

The signal for an emergency evacuation is a XXX, Channel One from the LG Constructors site radios, cell phones or by word of mouth.

In the event there is a need for a site wide evacuation, all personnel shall **immediately stop** what they are doing and proceed to their designated evacuation area for a head count by their supervisor.
Supervisors and contractors will be responsible for the head count of their employees. They will give the count to the LG Constructors Incident Commander or the LG Constructors Supervisor in charge of the project at the time of the evacuation. If an employee is not accounted for, their name is to be reported to the LG Constructors Supervisor in charge.

At no time will any site employee attempt a search or rescue for any site employee. All site search and rescue attempts will be controlled and directed by the LG Constructors Incident Commander in coordination with the appropriate local emergency response team. (fire department)

All employees will proceed to their evacuation point on foot. **Walk**, don't run.

Do **not** drive vehicles or equipment to the evacuation area.

No smoking during an evacuation.

Shut off any equipment or machinery, **if possible,** on your way to the evacuation area. Do not attempt to go back to do so.

There are two evacuation areas.
Area ONE **XXX**

Area TWO **XXX**
Both evacuation areas are clearly marked.

TERRORIST INCIDENTS:

Bomb Threat Procedure

- Bomb threats are of three types:
  - Actual Warning – A bomb has been placed and a humanitarian notice or warning is being given.
  - Harassment – The goal is to disrupt operations and/or impose economic hardship. In cases of harassment the instigator is generally a disgruntled former employee or one with political, economic, or ideological belief different from that of the Company.
  - Hoax – The instigator derives a sense of power from the confusion and excitement created. In other cases the motivation frequently is the desire to be paid for time off from work.
- The receipt of a bomb threat requires a quick assessment as to whether the threat is an actual warning, harassment, or hoax, and also a call to action by site management. This requires that advance provision be made for immediate communication of any bomb threat to the senior on-site manager. After management has considered and assessed the situation and reached a decision, the prearranged procedure for the given situation will be placed into action.
- Organizational planning in anticipation of such an event is essential in handling bomb threats. In doing so, clear-cut levels of authority must be established. Only by using an established organization and procedure can these problems be handled with the minimum risk to person and property.
- The particular characteristics and conditions at each location require that each location develop emergency procedures to meet the conditions at the site.
- The following considerations will be applied in the development of site procedures:

  Preparation and Planning

  - To make a determination of which type of bomb threat applies and to afford the maximum protection for the Company's employees and Client, it is essential that management proceed with an immediate assessment of all factors and then determine whether or not to evacuate part or all of the site.
  - The decision as to appropriate action will be based on the evaluation of the following items:
  - Is the caller specific as to time?

- Is the caller specific as to location, particularly in a multiple building facility?
- Is the caller specific as to type of bomb?
- Does the caller seem to express honest concern over possible injury to people?
- Does the caller seem to be serious, under 35, ethnic minority, sober, and calling from a location other than one with a background noise that would be associated with a bar?
- If any of the above are affirmative, the indicated building or area should be evacuated from at least 30 minutes before the stated time of explosion (if given) until at least 30 minutes after that time. The local police department should be notified immediately and Company response shall be coordinated closely with police department actions and recommendations.
- The communications accuracy of a prompt decision based on the above considerations will depend primarily on the accuracy and extent of the information concerning the call and the caller issuing the threat. Effective planning includes awareness training for telephone operator(s) that will be normal recipients of such calls. The Bomb Threat Incident Report (LGF_C8-9.3-05) should be used to capture detailed information concerning the nature of the call and its content.
- An individual to whom the operator will report the call to should be designated. Sufficient alternative individuals should be designated to assure that someone is available at all times. An order of precedence for notification should also be established.
- A comprehensive employee education program should be established. Every employee should have an adequate overview of what precautions the Company is taking in the event of a bomb threat. Making employees aware of the planned safeguards will help in reducing the potential for panic. Panic is one of the most contagious human emotions. It is caused by fear, mostly of the unknown. Employees should be kept informed before and during a bomb threat situation.
- Arrange for notification of necessary fire, ambulance, and law enforcement agencies for assistance as may be required. In preparation of the procedure, contact should be established with police and fire departments and other local governmental agencies to determine the following:

- Do fire or police departments have a bomb disposal unit?
- Under what conditions is the unit available?
- What is the telephone number for the unit?
- How can you obtain the services of the bomb unit in the event of a threat?

- Will the unit assist in the physical search of the site or will it only disarm or remove explosives?
    - Organize and train search teams consisting of key supervisory personnel. To be proficient in searching, personnel must be thoroughly familiar with areas they are assigned to search. Members of search teams should all be volunteers and should be trained in search techniques. They should be prohibited from any attempt at neutralizing, removing, or otherwise having contact with a suspected device. The removal and disarming of a bomb or suspicious object must be left to professionals in explosive ordnance disposal.
    - It is of paramount importance that all inquiries by the news media be directed to the Client's appointed media relations spokesman or to the individual designated by the Company as media relations point of contact. All other employees and site personnel should be instructed not to discuss the situation with outsiders, especially the news media. The purpose of this provision is to furnish the news media with accurate information and see that irresponsible statements from uninformed sources do not precipitate additional bomb threat calls.
    - Should evacuation be warranted, the prearranged emergency warning system should be activated and the site evacuated in an orderly manner.
- Instructions for Telephone Operators
    - Keep the caller on the line as long as possible. Ask the caller to repeat the message. Record words spoken by the person, as completely as possible.
    - If the caller does not indicate the location of the bomb or the time of possible detonation, ask for this information.
    - Inform the caller that the building(s) are occupied and the detonation of a bomb could result in death or serious injury to many innocent people.
    - Pay particular attention to peculiar background noises such as motors running, background music, conversation, and any other noise, which may give a clue as to where the call is being made.
    - Listen closely to the voice (male, female), voice quality (calm, excited), accents, and speech impediments.
    - Immediately after the caller hangs up, report to the person(s) designated by management to receive such information. Then complete the "Bomb Threat Incident Report" (LGF_C8-9.3-05).

BOMB THREAT INCIDENT REPORT

Who received the call: _____ Date: _____ Time: (am/ pm) _____

Location of call received: _____ Origin of call: Local _____

Long Distance ___ Booth ____ Internal ____ Time caller hung up: _____ (am/ pm)

THE CALLER: (Try To Hold Caller On Line And Get All Information Possible)

Time bomb will explode: _____ Kind of bomb: _____

What bomb looks like: _____ How it is activated: _____

_____ Where is it located: (bldg./ area) _____

Reason for placing the bomb: _____

Exact words of caller: _____

_____

Caller's name (if given): _____ Male ____ Female ____

Voice: Child: _____ Adult: _____ Approximate age: _____

VOICE CHARACTERISTICS:

Accent or dialect: Local _____ Not Local _____ Foreign _____

Tone: Loud _____ Soft _____ High Pitch _____ Low Pitch _____ Raspy _____

Pleasant _____ Rational _____ Irrational _____ Calm _____ Angry _____

Speech: Coherent ___ Incoherent ___ Righteous ____ Emotional ____ Laughing

Fast _____ Slow ____ Distinct ____ Distorted ____ Stutter ____ Nasal ____

Language: Excellent _____ Good _____ Poor _____ Cursing _____

BACKGROUND NOISE:

Factory Machines _____ Office Machines _____ Bedlam ____ Music ____ Quiet ____

Voices _____ Mixed _____ Animals _____ Street Traffic _____ Airplanes _____

Party Atmosphere _____

Special Note: *Did the caller appear familiar with plant or building by the description given of the bomb location? Write out the message in its entirety and any other comments on a separate sheet of paper and attach it to this checklist.*

To Be Issued

September 25, 2007

VIA OVERNIGHT MAIL

Hon. Jaclyn A. Brilling
Secretary
New York State Board on Electric Generation Siting
and the Environment
Three Empire State Plaza
20th Floor
Albany, NY 12223-1350

Re: ***Besicorp-Empire Power Company, LLC; Case 00-F-2057***
Certificate Condition X.G.

Dear Secretary Brilling:

On September 24, 2004, the New York State Board on Electric Generation Siting and the Environment (Siting Board) granted to Besicorp-Empire Development Company, LLC (BEDCO) a Certificate of Environmental Compatibility and Public Need (Certificate). The Certificate was subsequently transferred to Besicorp-Empire Power Company, LLC (BEPCO) by the Siting Board's Order issued and effective June 21, 2007.

Condition X.G. of the Certificate Conditions (Appendix A of the Siting Board's Opinion and Order) requires that, within 60 days of granting of the Certificate, the Certificate Holder request that the New York State Department of Transportation (NYSDOT) and the City of Rensselaer,

(i) remove obstructions to the lines-of-sight for drivers of vehicles entering Route 9/20 westbound via the on-ramp from Route 9J/South Street by removal of existing vegetation adjacent to and on the east side of the Route 9/20 bridge over Route 9J; and

(ii) remove obstructions to the lines-of-sight for drivers of vehicles entering Route 9/20 westbound via the on-ramp from Route 9J/South Street by relocation of or adjustment to heights of City of Rensselaer and NYSDOT signs at the west end of the Route 9/20 bridge over Route 9J.

The Certificate Condition also requires that the Certificate Holder file a report on compliance regarding the foregoing conditions. This letter will serve as the report on compliance.

Pursuant to Condition X.G. of the Certificate and Condition III.F. of the Article 15 permit, by letter dated October 25, 2004, BEDCO, the Certificate Holder at the time, made the required requests of NYSDOT and the City of Rensselaer. A copy of the letter

request by BEDCO is attached. By letter dated December 30, 2004, a copy of which is also attached, a response was received from NYSDOT (NYSDOT Letter). No response was received from the City of Rensselaer.

The NYSDOT Letter confirms that signage relocation was completed in May 2004, and also states that subsequent review by NYSDOT has determined that once the signs were relocated, vegetation trimming would provide no additional improvement to sight distance.

Sincerely,

BESICORP-EMPIRE POWER COMPANY, LLC

Tyler Reeder, Treasurer

Attachment

cc: Andrew Davis, New York State Department of Public Service
Chris Hogan, New York State Department of Environmental Conservation
William E. Logan, New York State Department of Transportation
Mark Kennedy, New York State Department of Transportation
Active Parties List

Besicorp — Empire Development Company, LLC

Dick Clark
Vice President

October 25, 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Hon. Mark Pratt
Mayor
City of Rensselaer
505 Broadway
Rensselaer, NY 12144

Mr. William E. Logan
Regional Traffic Engineer
New York State Department of Transportation
328 State Street
Schenectady, NY 12305

Re: ***City of Rensselaer, line-of-sight obstruction removal at Route 9/20 westbound on-ramp from Route 9J/South Street***

Dear Mayor Pratt and Mr. Logan:

On September 24, 2004, the New York State Board on Electric Generation Siting and the Environment granted to Besicorp-Empire Development Company, LLC (BEDCO), a Certificate of Environmental Compatibility and Public Need (Certificate) to construct and operate a nominal 505 megawatt power generating facility in the City of Rensselaer. In a companion proceeding addressing the power generating facility and an adjacent recycled newsprint manufacturing facility, the Commissioner of the New York State Department of Environmental Conservation (DEC) granted approvals and directed issuance of associated permits on September 23, 2004.

Pursuant to Condition X.G. of the Certificate and to DEC Special SEQR Conditions, Attachment III, Condition F., BEDCO requests that the New York State Department of Transportation (DOT), coordinating with the City of Rensselaer as necessary,

(i) remove obstructions to the lines-of-sight for drivers of vehicles entering Route 9/20 westbound via the on-ramp from Route 9J/South Street by removal of existing vegetation adjacent to and on the east side of the Route 9/20 bridge over Route 9J; and

(ii) remove obstructions to the lines-of-sight for drivers of vehicles entering Route 9/20 westbound via the on-ramp from Route 9J/South Street by relocation of or adjustment to heights of City of Rensselaer and NYSDOT signs at the west end of the Route 9/20 bridge over Route 9J.

This request is consistent with a letter dated January 29, 2004 (January 29 letter) from Thomas C. Werner, P.E., to Mr. Douglas K. May, New York State Public Service Commission, in which Mr. Werner stated the following:

Besicorp — Empire Development Company, LLC

Dick Clark
Vice President

We have completed a detailed investigation of the sight distance to the left for the Route 9J/South Street ramp to Route 9&20 westbound. The sight distance is limited by the existing signs, vegetation and bridge railing. We will have the vegetation removed and the signs relocated to
maximize the available sight distance as our workload permits. We will notify the City of Rensselaer, Besicorp and your agency when this work has been completed.

A copy of the January 29 letter is attached for your reference.

Please notify me of your actions in response to this request such that BEDCO may file required reports on compliance with Chairman of the Public Service Commission and with DEC. We are grateful for your assistance in this matter.

Sincerely,

BESICORP-EMPIRE DEVELOPMENT COMPANY, LLC

R. Clark

Dick Clark

DC/cr

cc: William T. Seils
Kevin M. Bernstein, Esq.

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
328 STATE STREET
SCHENECTADY, N.Y. 12305

THOMAS C. WERNER, P.E.
REGIONAL DIRECTOR

January 29, 2004

Mr. Douglas K. May, Chief
Office of Electricity & Environment
Energy Resources & the Environment
Public Service Commission
3 Empire State Plaza
Albany, NY 12223-1350

Re: BESICORP
TRAFFIC ISSUES
ROUTE 9J & ROUTE 9&20
CITY OF RENSSELAER

Dear Mr. May:

This is a follow up to the meeting held on January 8, 2004 in the Public Service Commission offices to discuss the unresolved traffic issues related to the Besicorp project, construction phase traffic and the operation of the Route 9J/South Street ramps to and from westbound Route 9&20.

LEVEL OF SERVICE

The general policy of the Department is that a development project cannot degrade the overall level of service at an intersection. We have also in many instances considered a degradation in the level of service of a major or critical move to be unacceptable. A level of service "F" for a minor left turn movement is not uncommon on many of our high volume arterials in peak periods and is not considered unacceptable. The specific move which has been the subject of much analysis and debate, the left turn from the westbound Route 9&20 off

ramp to South Street, will carry a projected peak hour volume of 63 vehicles or approximately one every minute. Our recommendation that police officer control be provided was based on a common sense evaluation that any delay to this traffic movement would be totally under the control of the police officer.

CONSTRUCTION WORK FORCE

While the Department of Transportation encourages the use of staggered work hours and Park 'N' Ride facilities as a means of reducing peak hour traffic, we do not have expertise to lend in preparing or implementing a work force management plan for the construction of the Besicorp project. As we stated at the January 8, 2004 and July 8, 2003 meetings, the most effective means of mitigating the impact of the peak construction traffic is through the spreading of the work force arrival and departure over several hours. Simply having workers using the 550 parking spaces proposed on site arrive during a two or three hour period will reduce the peak traffic from 550 to 275 or even 183.

ROUTE 9J RAMP CHANGES

We have reviewed the concept sketch prepared by Mr. Steve Savaria of Fuss & O'Neill on behalf of Besicorp. The concept presented will improve the ability of drivers of the newer longer tractor trailer trucks to stay within the right hand lane entering Route 9&20 westbound. The Department is willing to review preliminary and final design plans for the proposed design. Final approval of the plan would come through the issuance of a highway work permit to the party funding the construction. We would certainly consider making this improvement as part of the capital project to replace the Route 9&20 structure over Amtrak currently scheduled for 2010.

SIGHT DISTANCE

We have completed a detailed investigation of the sight distance to the left for the Route 9J/South Street ramp to Route 9&20 westbound. The sight distance is limited by the existing signs, vegetation and bridge railing. We will have the vegetation removed and the signs relocated to maximize the available sight distance as our

workload permits. We will notify the City of Rensselaer, Besicorp and your agency when this work has been completed.

I trust this will assist in the resolution of the outstanding traffic issues on this important project.

Sincerely,

T. C. Werner

Thomas C. Werner, P.E.

cc: R. Tyson, Bond Schoeneck & King
M. Pratt, Mayor, City of Rensselaer

RECEIVED
JAN 0 8 2005
BOND, SCHOENECK & KING, PLLC

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
328 STATE STREET
SCHENECTADY, NEW YORK 12305

Thomas C. Werner
Regional Director

Joseph H. Boardman
Commissioner

December 30, 2004

Mr. Richard Clark
Besicorp – Empire
Development Company, LLC
1151 Flatbush Road
Kingston, NY 12401

Re: ROUTE 9J RAMPS TO
ROUTE 9&20 WESTBOUND
CITY OF RENSSELAER
SIGHT DISTANCE IMPROVEMENT

Dear Mr. Clark:

I am writing in response to your October 25, 2004 letter inquiring on the status of our removal of vegetation and relocation of existing signs to improve sight distance to the east for vehicles entering Route 9&20 westbound from the Route 9J ramp.

The signing modifications discussed in Mr. Thomas Werner's January 29, 2004 letter were completed by the Department on May 24, 2004. Subsequent to Mr. Werner's January 29, 2004 letter, we determined that the removal of vegetation would not provide any improvement in the sight distance once the signs were relocated.

If you have any questions on this, please call Mark Kennedy of this office at 388-0380.

Sincerely,

William Logan

William E. Logan
Regional Traffic Engineer

cc: R. Tyson, Bond Schoeneck & King
M. Pratt, Mayor, City of Rensselaer

September 25, 2007

VIA OVERNIGHT MAIL

Hon. Jaclyn A. Brilling
Secretary
New York State Department of Public Service
Three Empire State Plaza
20th Floor
Albany, NY 12223-1350

Re: ***Besicorp-Empire Power Company, LLC; City Services Agreement***

Dear Secretary Brilling:

On September 24, 2004, the New York State Board on Electric Generation Siting and the Environment (Siting Board) granted to Besicorp-Empire Development Company a Certificate of Environmental Compatibility and Public Need (Certificate). The Certificate was transferred to Besicorp-Empire Power Company, LLC (BEPCO) by the Siting Board's Order issued and effective June 21, 2007.

Condition X.I.(ii)(c) of the Certificate Conditions (Appendix A of the Siting Board's Opinion and Order) requires, *inter alia*, that the Certificate Holder provide a copy of the police officer contract with the City of Rensselaer (City) as a Compliance Filing prior to the start of construction. Similarly, Condition X.J. requires, *inter alia*, that the Certificate Holder provide a copy of the contract with the City for the traffic Monitor prior to the start of construction. BEPCO and the City elected to incorporate the police officer and traffic Monitor services in a single "City Services Agreement," rather than in separate contracts. Therefore, enclosed herewith please find a copy of said City Services Agreement between BEPCO and the City, dated July 11, 2007.

This completes our obligations under Certificate Conditions X.I. and X.J. with respect to the filing of copies of the police and Monitor contracts. However, the copies of reports and reports on compliance also required by Certificate Conditions X.I. and X.J. shall be filed periodically as construction of the Project commences and progresses.

Respectfully submitted,

BESICORP-EMPIRE POWER COMPANY, LLC

Tyler Reeder, Treasurer

Attachment

cc: Andrew Davis, New York State Department of Public Service
Chris Hogan, New York State Department of Environmental Conservation
Active Parties List

CITY OF RENSSELAER

AND

BESICORP-EMPIRE POWER COMPANY, LLC

CITY SERVICES AGREEMENT

DATED AS OF July 11, 2007

RELATING TO THE PREMISES LOCATED ON RIVERSIDE AVENUE
IN THE CITY OF RENSSELAER,
RENSSELAER COUNTY, NEW YORK.

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CITY SERVICES AGREEMENT

THIS CITY SERVICES AGREEMENT is dated as of July 11, 2007 (the "City Services Agreement") by and between the CITY OF RENSSELAER, a municipal corporation organized and existing under the laws of the State of New York, having an office for the transaction of business located at City Hall, 505 Broadway, Rensselaer, New York 12144 (the "City", as further defined in Section 1.01(A)), and BESICORP-EMPIRE POWER COMPANY, LLC a limited liability company, organized and existing under the laws of the State of New York, having an office for the transaction of business located at 1151 Flatbush Road, Kingston, New York 12401 (the "Company").

W I T N E S S E T H :

WHEREAS, the Company has proposed the construction of (1) multiple facilities in the City to contain in the aggregate approximately 350,000 square feet of space that will produce 505 megawatts (nominal) electricity and up to 210,000 lbs. per hour of process steam (collectively, the "Power Facility"); (2) an approximately 8.1 mile electrical interconnection in the City and the Towns of East Greenbush and North Greenbush, Rensselaer County (the "Electrical Interconnection"); and (3) an approximately 4.5 mile natural gas interconnection in the City and the Towns of East Greenbush and Schodack, Rensselaer County (the "Gas Interconnection") (the Power Facility, the Electrical Interconnection and the Gas Interconnection, hereinafter collectively referred to as the "Facility"); and

WHEREAS, pursuant to the Opinion and Order Granting Certificate of Environmental Capability and Public Need, issued by the New York State Board on Electric Generating Siting and the Environment (the "Siting Board") and effective September 24, 2004 (the "Certificate"), which Certificate was transferred to the Company pursuant to an order of the Siting Board dated June 21, 2007, the Company is required to make certain payments to the City; and

WHEREAS, the Certificate requires the Company to enter into certain agreements with the City relating to the provision of a traffic engineer ("Monitor") as further defined in Section 2.03(A) and traffic control police during the period of material construction ("Construction") of the Facility (Construction shall specifically not include research, surveying, boring or related activities necessary to prepare final design plans and obtain necessary permits); and

WHEREAS, all things necessary to constitute this Agreement a valid and binding agreement by and between the parties hereto in accordance with the terms hereof have been done and performed, and the creation, execution and delivery of this City Services Agreement have in all respects been duly authorized by the City and the Company, respectively.

NOW, THEREFORE, IN CONSIDERATION OF THE MATTERS ABOVE RECITED, THE PARTIES HERETO FORMALLY COVENANT, AGREE AND BIND THEMSELVES AS FOLLOWS, TO WIT.

ARTICLE I

REPRESENTATIONS AND WARRANTIES

SECTION 1.01. REPRESENTATIONS OF AND WARRANTIES BY THE CITY. The City does hereby represent, warrant and covenant as follows:

(A) Power: The City is a municipal corporation of the State of New York (the "State"), is validly existing and has the power under the laws of the State to enter into this City Services Agreement and the transactions contemplated hereby and to perform and carry out all covenants and obligations on its part to be performed under and pursuant to this City Services Agreement. As used in this Agreement, the term "the City" shall mean only the municipal corporation known as the City of Rensselaer managed and controlled by its elected officials, the Mayor and City Council, and not the appointed agencies, boards or other bodies associated with the City that are not directly governed by the Mayor and City Council.

(B) Authorization: By proper action on the part of its City Council, the City has duly authorized the execution, delivery and performance of this City Services Agreement and the consummation of the transactions herein contemplated.

(C) Conflicts: The City is not prohibited from entering into this City Services Agreement and discharging and performing all covenants and obligations on its part to be performed under and pursuant to this City Services Agreement by the terms, conditions or provisions of any order, judgment, decree, law, ordinance, rule or regulation of any court or other governmental entity, or by any other agreement or instrument to which the City is a party or by which the City is bound.

SECTION 1.02. REPRESENTATIONS OF AND WARRANTIES BY THE COMPANY. The Company does hereby represent, warrant and covenant as follows:

(A) Power: The Company is a limited liability company duly organized and validly existing under the laws of the State of New York and has the power under the laws of the State to enter into this City Services Agreement and the transactions contemplated hereby and to perform and carry out all covenants and obligations on its part to be performed under and pursuant to this City Services Agreement, and by proper action of its managers (and members, if necessary) has been duly authorized to execute, deliver and perform this City Services Agreement.

(B) Authorization: By proper action of its managers and members (if necessary), the Company has been duly authorized to execute, deliver and perform this City Services Agreement and the consummation of the transaction herein contemplated.

(C) Conflicts: The Company is not prohibited from entering into this City Services Agreement and discharging and performing all covenants and obligations on its part to be performed under and pursuant to this City Services Agreement by the terms, conditions or provisions of its organization documents or any other restriction, law, rule, regulation or order of any court or other city or authority of government, or any contractual limitation, restriction or

outstanding indenture, deed of trust, mortgage, loan agreement, other evidence of indebtedness or any other agreement or instrument to which the Company is a party or by which the Company or any of its property is bound. The execution, delivery and performance of this City Services Agreement, the consummation of the transactions contemplated hereby and the fulfillment of and compliance with the provisions of this City Services Agreement will not conflict with or violate or constitute a breach of or a default under the terms, conditions or provisions of its organization documents or any other restriction, law, rule, regulation or order of any court or other city or authority of government, or any contractual limitation, restriction or outstanding indenture, deed of trust, mortgage, loan agreement, other evidence of indebtedness or any other agreement or instrument to which the Company is a party or by which the Company or any of its property is bound. Neither the Company's entering into this City Services Agreement nor the Company's discharging and performing all covenants and obligations on its part to be performed under and pursuant to this City Services Agreement will be in conflict with or result in a breach of or constitute a default under any of the foregoing, or result in the creation or imposition of any lien of any nature upon any of the property of the Company under the terms of any of the foregoing. This City Services Agreement is the legal, valid and binding obligation of the Company enforceable in accordance with its terms.

(D) Governmental Consents: Other than as may be required under the Certificate, no consent, approval or authorization of, or filing, registration or qualification with, any governmental or public authority on the part of the Company is required as a condition to the execution, delivery or performance of this City Services Agreement by the Company or as a condition to the validity of this City Services Agreement. This City Services Agreement shall be filed as required under the Certificate.

ARTICLE II

COVENANTS AND AGREEMENTS

SECTION 2.01. PAYMENTS RENDERED AND ACTIONS TAKEN IN ACCORDANCE WITH THE CERTIFICATE

(A) Revolving Loan Fund: Pursuant to Certificate Condition VII.E(i) and Section III. B.1 of that certain Memorandum of Agreement among the United States Army Corps of Engineers, the New York State Historic Preservation Office, the City, the Company, et al. (the "SHPO MOA") (copies of which are attached hereto as Exhibit 1), upon commencement of construction of the Power Facility, the Company shall provide to the City Two Hundred Thousand Dollars ($200,000) for the establishment of a Revolving Loan Fund to be administered in accordance with the Certificate and the SHPO MOA.

(B) Gate Design: Pursuant to, and as more fully described in, Certificate Condition X.H (a copy of which is attached hereto as Exhibit 2), within thirty (30) days of the City's final award (the "Award") of a contract to design and construct a gate (the "Gate") at the intersection of Riverside Avenue and the southerly side of Bellmore Place, the Company shall contribute to the City an amount equal to the lesser of (i) the amount of the accepted bid for the design and construction of the Gate, or (ii) One Hundred Thousand Dollars ($100,000). Neither the

Company, Besicorp-Empire Development Company, LLC ("BEDCO") nor any other current or former affiliate of the Company shall have any other obligation whatsoever with respect to the Gate. If, following payment of the foregoing amount by the Company, the Gate is not constructed by the City for any reason, the City shall promptly refund the money received under this Section 2.01(B), less any amounts expended by the City in designing the Gate, and the Company's obligations under Certificate Condition X.H shall be deemed to be discharged in full. Notwithstanding the foregoing, if the City and the Company mutually agree that construction of the Gate is unnecessary or undesirable, the parties may agree to amend this Section to forego construction of the Gate in lieu of an alternative improvement so long as necessary modifications to the Certificate are obtained from the appropriate regulatory authorities, provided that neither party shall be under any obligation to amend the provisions of this Section 2.01(B) or modify the Certificate.

(C) Bike Path: Pursuant to, and as more fully described in, Certificate Condition IX.D(ii) (a copy of which, together with a drawing depicting design basis options, is attached hereto as Exhibit 3), the Company shall, after commencement of construction of the Power Facility, construct a bikeway along and within the right of way of Riverside Avenue between the northern boundary of BASF's property commonly referred to as the Lagoon Parcel and the intersection of Riverside Avenue and the Port Access Highway and thence to an overlook at the south end of the Rensselaer Port turning basin. Once the design of and plans for such bikeway are finalized, a copy of such design and plans, including a copy of the installation schedule, shall be filed in accordance with the Certificate, with a copy to the City. The City acknowledges that no additional approvals or permits are required to be obtained from the City in order to construct the bikeway. Notwithstanding the foregoing, if the City and the Company mutually agree that construction of the overlook is unnecessary or undesirable, the parties may agree to amend this Section to forego construction of the overlook in lieu of an alternative improvement so long as necessary modifications to the Certificate are obtained from the appropriate regulatory authorities, provided that neither party shall be under any obligation to amend the provisions of this Section 2.01(C) or modify the Certificate.

(D) Affiliates: BEPCO's performance under this Section 2.01 shall satisfy and discharge any obligations for the performance of the items set forth in this Section 2.01 by BEDCO, or any of its current or former affiliates.

SECTION 2.02. TRAFFIC CONTROL POLICE AGREEMENT. Traffic control police services shall be performed pursuant to Certificate Condition X.I (a copy of which is attached hereto as Exhibit 4) as follows:

(A) City Obligations: The City shall provide (or cause the City of Rensselaer Police Department to provide) as necessary, a sufficient number of uniformed police officers ("Officer(s)") to provide traffic control ("Services") at the intersection of South Street/9J and Route 9/20 northbound on/off ramps (the "Location") during the Construction of the Facility. Subject to Section 2.02.(B), Officer(s) shall provide Services, as necessary, from 2:30 p.m. to 6:30 p.m. on Business Days, and otherwise as needed in the judgment of the Monitor (as defined in Section 2.03.(A) below). Subject to Section 2.02.(B), if, in the opinion of the Officer(s) at the Location, the intersection of South Street/Route 9J with the Port Access Highway and the Route

9/20 off ramps (the "Second Location") requires additional traffic control during the Construction of the Facility, the City shall provide an additional Officer to provide Services at the Second Location from 2:30 p.m. to 6:30 p.m. on Business Days. The City shall use its best efforts to minimize the expense of the provision of Services, including, without limitation, avoiding unnecessary overtime. For the purposes of this City Services Agreement, "Business Day" means any day on which significant construction activities are undertaken at the site of the proposed Power Facility.

(B) Determination of Services Requirement: The Monitor may, in its discretion, and in consultation with the City, reduce or eliminate the requirement for Services at the Location and/or the Second Location. The Monitor may reinstitute Services at the Location and/or the Second Location, if it determines Services are necessary for safe operations. Any changes in Services hereunder shall be reported by the Monitor, within twenty-four (24) hours of such change, to the Company, the City, the New York State Department of Public Service ("NYSDPS") and the New York State Department of Environmental Conservation ("NYSDEC").

(C) Company Obligations: The Company shall reimburse the City for its actual, out-of-pocket cost (at the hourly rates and overtime rates set forth on Exhibit 5, "Officer Pay Rates") for the wages paid to Officers providing Services at the Location and the Second Location (the "Expense"). In the event that the City of Rensselaer Police Department cannot provide sufficient Officers to provide Services, the City shall provide notice to the Company of such inability as promptly as practicable, and the Company may arrange for other duly authorized uniformed traffic control officers to provide Services, at the Company's sole cost. In no event shall the Company be liable for failure to provide Services if the City fails to provide the aforementioned notice.

(D) Payment for Services: On a monthly basis, the City shall provide the Company with a statement of its Expense for the prior month (each, a "Statement") setting forth in detail the number of hours of Services provided and the rate charged for such hours. Other than amounts disputed by the Company in good faith, the Company shall pay the Expense within thirty (30) days of receipt of each Statement. Exhibit 5 sets forth the hourly rates and overtime rates, per pay grade, for Officers. In the event of any change to the rates set forth on Exhibit 5, the City shall promptly provide the Company with a revised Exhibit 5.

(E) Standards: The City agrees that each Officer (i) shall provide Services hereunder in a professional, manner; (ii) shall comply with all applicable federal, state and local laws, rules and regulations; (iii) has, and shall maintain for the duration of this City Services Agreement, all necessary permits, permissions and licenses required to fully perform and discharge its obligations hereunder; and (iv) possesses sufficient training to perform the Services hereunder.

(F) Officer Status: The City, the City of Rensselaer Police Department and each Officer shall at all times be and remain an independent contractor and not an agent or employee of the Company for any purpose whatsoever. The Company shall in no way be responsible for the (i) payment of wages or benefits on behalf of any Officer, (ii) claims made by, against or on behalf any Officer, or (iii) actions and/or omissions of any Officer.

SECTION 2.03. TRAFFIC MONITOR AGREEMENT. Monitor services shall be performed pursuant to Certificate Condition X.J (a copy of which is attached hereto as Exhibit 6) as follows:

(A) City Obligations: The City shall select (with the approval of the Company) and retain a qualified traffic engineer (the "Monitor") who shall report to the City and, if necessary, to the Siting Board on the Company's compliance during Construction with Transportation terms and conditions set forth in Section X of the Certificate Conditions (collectively the "Terms"). The City shall supervise the activity of the Monitor and ensure its compliance with the terms of this City Services Agreement and the Certificate, and shall equip the Monitor with sufficient documentation, transportation, communication and other equipment as it requires to monitor effectively the Company's compliance with the Terms, as well as applicable sections of the New York State Public Service Law and Orders relating to the Terms. The relevant provisions of this City Services Agreement shall be included in the contract (or other similar terms of employment) with the Monitor.

(B) Monitor Obligations: In connection with its responsibilities hereunder, the Monitor (i) shall consult with NYSDPS staff when and as appropriate to insure the Company's compliance with the Terms; (ii) may request appropriate NYSDPS enforcement action when, in the opinion of the Monitor, the Company is substantially out of compliance with one or more of the Terms; and (iii) shall regularly monitor the continuing need for Services at the Location and the Second Location, and make a determination in accordance with Section 2.02.(B) hereof in its professional judgment, from time to time.

(C) Company Obligations: During the Construction of the Power Facility, the Company shall reimburse the City for the reasonable costs of the services of the Traffic Monitor. Upon the written request of the Monitor and on reasonable notice to the Company, the Company shall provide the Monitor with access to the Power Facility and all construction records regarding Transportation pursuant to Section X of the Certificate Conditions, on the same terms and conditions as if the Monitor was a representative of the PSC Chairman, designated pursuant to 16 NYCRR, Section 1003.5(b); provided that, while on the site of the Power Facility and/or land owned or controlled by the Company the Monitor shall comply in all respects with the Company's safety and access policies.

(D) Monitor Status: Subject to the Company's payment obligations in Section 2.03(C), the Monitor shall at all times be an employee or agent of the City and not an agent or employee of the Company for any purpose whatsoever.

SECTION 2.04. LATE PAYMENTS. If the Company shall fail to make any payment required by this City Services Agreement when due (other than amounts contested in good faith) and such delinquency shall continue beyond thirty (30) days, a Company Event of Default as defined in Section 3.01(A) below shall have occurred. In addition to any other remedies available to the City under law, the Company's obligation to make the payment so in default shall continue as an obligation of the Company until such payment in default shall have been made in full, and the Company shall pay the same to the City together with interest thereon, to the extent permitted by law, at the rate of ten percent (10%) per annum.

SECTION 2.05. AUDIT RIGHT. The Company, and its designated representatives, shall from time to time, and upon no less than two (2) Business Days' prior written notice, be given a reasonable opportunity to review, at its own expense, the books and records of the City relating to the performance of this Agreement in order to confirm the accuracy of information gathered and/or provided hereunder. During the term of this City Services Agreement and for three (3) years thereafter, the City shall retain all such relevant books and records.

ARTICLE III

EVENTS OF DEFAULT

SECTION 3.01. EVENTS OF COMPANY DEFAULT. Any one or more of the following events shall constitute an event of default by the Company under this City Services Agreement, and the terms "Company Event of Default" or "default by the Company" shall mean, whenever they are used in this City Services Agreement, any one or more of the following events:

(A) Failure of the Company to pay when due any uncontested amount due and payable by the Company pursuant to this City Services Agreement and continuance of said failure for a period of thirty (30) days after the Company's receipt of written notice stating that such payment is in default;

(B) Failure of the Company to observe and perform any other covenant, condition or agreement on its part to be observed and performed hereunder (other than as referred to in paragraph (A) above) and continuance of such failure for a period of thirty (30) days after the Company's receipt of written notice specifying the nature of such failure and requesting that it be remedied; provided that if such default cannot reasonably be cured within such thirty (30) day period, and if the Company shall have commenced action to cure the breach of covenant, condition or agreement within said thirty (30) day period and thereafter diligently and expeditiously proceeds to cure the same, such thirty (30) day period shall be extended for so long as the Company shall require in the exercise of due diligence to cure such default, it being agreed that no such extension shall be for a period in excess of ninety (90) days in the aggregate from the date of default; or

(C) Any warranty, representation or other statement by or on behalf of the Company contained in this City Services Agreement shall prove to have been false or incorrect in any material respect on the date when made or on the effective date of this City Services Agreement.

SECTION 3.02. REMEDIES ON COMPANY EVENT OF DEFAULT.

(A) General: Whenever any Company Event of Default shall have occurred with respect to this City Services Agreement, the City may take whatever action at law or in equity as may appear necessary or desirable to collect the amount then in default or to enforce the performance and observance of the obligations, agreements and covenants of the Company under this City Services Agreement.

(B) Separate Suits: Each such Company Event of Default shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises.

(C) Venue: The Company irrevocably agrees that any suit, action or other legal proceeding arising out of this City Services Agreement may be brought in the courts of record of the State, consents to the jurisdiction of each such court in any such suit, action or proceeding, and waives any objection which it may have to the laying of the venue of any such suit, action or proceeding in any of such courts.

SECTION 3.03. PAYMENT OF ATTORNEYS' FEES AND EXPENSES. Upon the occurrence of a Company Event of Default, if the City should commence legal proceedings for the collection of any amounts payable hereunder or for the enforcement of performance or observance of any obligation, covenant or agreement on the part of the Company herein contained, the Company agrees that it will, on demand therefor, pay to the City not only the amounts adjudicated due hereunder, together with the late payment penalty and interest due thereon, but also the reasonable fees and disbursements of attorneys and all other expenses, costs and disbursements so incurred in connection with such proceedings.

SECTION 3.04. RIGHTS AND REMEDIES OF COMPANY ON CITY DEFAULT.

(A) General: In the event that the City shall fail to observe and perform any of the covenants, conditions or agreements on its part to be observed and performed under Sections 2.02. and/or 2.03. hereunder (each such event being referred to as a "City Default") and the continuance of such failure for a period of ten (10) days after the City's receipt of notice specifying the nature of such failure and requesting that it be remedied, the Company may take whatever action at law or in equity as may be necessary or desirable to enforce the performance and observance of such obligations, agreements and covenants of the City under this City Services Agreement.

(B) Separate Suits: Each such City Default shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises.

(C) Attorney's Fees and Expenses: In the event of a City Default and the Company should commence legal proceedings to ensure the enforcement or performance or observance of any obligation, covenant or agreement on the part of the City herein contained, the City agrees that it will, on demand therefor, pay to the Company the reasonable fees and disbursements of attorneys and all other expenses, costs and disbursements so incurred in connection with such proceedings.

SECTION 3.05. REMEDIES; WAIVER AND NOTICE.

(A) No Remedy Exclusive: No remedy herein conferred upon or reserved to the City or the Company is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this City Services Agreement or now or hereafter existing at law or in equity or by statute.

(B) Delay: No delay or omission in exercising any right or power accruing upon the occurrence of any Company Event of Default or City Default hereunder shall impair any such right or power or shall be construed to be a waiver thereof, but any such right or power may be exercised from time to time and as often as may be deemed expedient.

(C) Notice Not Required: In order to entitle the City or the Company to exercise any remedy reserved to it in this City Services Agreement, it shall not be necessary to give any notice, other than such notice as may be expressly required in this City Services Agreement.

(D) No Waiver: In the event any provision contained in this City Services Agreement should be breached by any party and thereafter expressly waived by the other party so empowered to act, such waiver shall be limited to the particular breach so waived and shall not be deemed to be a waiver of any other breach hereunder. No waiver, amendment, release or modification of this City Services Agreement shall be established by conduct, custom or course of dealing.

(E) Dispute Resolution: Any and all disputes arising between the parties relating to the making, meaning or performance of any of the terms and provisions of this City Services Agreement shall be resolved in the following order of preference: First, by good faith negotiations between representatives of the parties who have authority to fully and finally resolve the dispute in the first thirty (30) days after a dispute arises. If necessary, and the parties agree, they will proceed within ninety (90) days after a dispute arises, with non-binding mediation at a location acceptable to both parties using a neutral mediator acceptable to the parties and sharing costs of such mediation equally. If the dispute is not resolved as set forth above, or if the parties do not mutually agree on mediation, then the parties shall proceed to binding arbitration located in Rensselaer County, New York, under the then-current rules of the American Arbitration Association, using a single arbitrator. The arbitrator shall be authorized to award to the prevailing party its costs (including, without limitation, costs of collection, attorneys' fees and investigative fees). Notwithstanding anything to the contrary herein, a party is entitled to seek an injunction in the courts located in Rensselaer County, New York, to enforce the terms of this City Services Agreement. Judgment upon the arbitrator's award may be entered in any court of competent jurisdiction.

ARTICLE IV

MISCELLANEOUS

SECTION 4.01. COMPANY ACTS. Where the Company is required to do or accomplish any act or thing hereunder, the Company may cause the same to be done or accomplished with the same force and effect as if done or accomplished by the Company.

SECTION 4.02. AMENDMENTS. This City Services Agreement may not be amended, changed, modified, altered or terminated except by an instrument in writing executed by the parties hereto.

SECTION 4.03. NOTICES.

(A) General: All notices, certificates or other communications hereunder shall be in writing and may be personally served, telecopied or sent by courier service or United States mail.

(B) Addresses: The addresses to which notices, certificates and other communications hereunder by the City or the Company shall be sent are as follows, unless a different address is specified, in writing:

IF TO THE COMPANY:

Besicorp-Empire Power Company, LLC
1151 Flatbush Road
Kingston, New York 12401
Attention: Frederic M. Zinn, Esq.

WITH A COPY TO:

Bond, Schoeneck & King, PLLC
One Lincoln Center
Syracuse, New York 13202
Attention: Edwin J. Kelley, Jr., Esq.

IF TO THE CITY

City of Rensselaer
62 Washington Street
Rensselaer, New York 12144
Attention: Mayor

WITH A COPY TO:

Corporation Counsel
City of Rensselaer
62 Washington Street
Rensselaer, New York 12144

(C) Change of Address: The City or the Company may, by notice given hereunder, designate any further or different addresses to which subsequent notices, certificates and other communications shall be sent.

SECTION 4.04. ASSIGNMENT; BINDING EFFECT. This City Services Agreement and the rights and obligations hereafter may not be assigned by either party without the prior written consent of the other party, not to be unreasonably withheld, conditioned or delayed. This City

Services Agreement shall inure to the benefit of, and shall be binding upon, the City, the Company and their respective successors and assigns. Notwithstanding the foregoing, the Company may assign any or all of its obligations and rights hereunder to a party or parties providing financing for the development, construction or operation of the Power Facility (collectively referred to as the "Financing Party"), and the City agrees, at the request of the Financing Party, to execute and deliver a customary acknowledgement and consent to such assignment which, among other things, will (a) entitle the Financing Party to notice of, and an opportunity to cure, any default by the Company hereunder without assuming the Company's obligations hereunder, and (b) permit (but not require) the Financing Party to succeed to the rights and obligations of the Company under this City Services Agreement.

SECTION 4.05. SEVERABILITY. If any article, section, subdivision, paragraph, sentence, clause, phrase, provision or portion of this City Services Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such article, section, subdivision, paragraph, sentence, clause, phrase, provision or portion so adjudged invalid, illegal or unenforceable shall be deemed separate, distinct and independent and the remainder of this City Services Agreement shall be and remain in full force and effect and shall not be invalidated or rendered illegal or unenforceable or otherwise affected by such holding or adjudication.

SECTION 4.06. COUNTERPARTS. This City Services Agreement may be simultaneously executed in counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

SECTION 4.07. APPLICABLE LAW. This City Services Agreement shall be governed by and construed in accordance with the laws and decisions of the State of New York.

SECTION 4.08. COMPLETE AGREEMENT. Unless supplemented or otherwise amended in writing by the Company and the City in accordance with the laws of the State, this City Services Agreement and the Certificate constitutes the parties' entire agreement with respect to the subject set forth herein, and no other agreements, written or unwritten, implied or express, will be deemed effective.

SECTION 4.09. DEFINED TERMS. All capitalized terms used but not otherwise defined herein shall have the meanings set forth in the Certificate.

IN WITNESS WHEREOF, the City and the Company have caused this City Services Agreement to be executed in their respective names by their duly authorized officers and to be dated as of the day and year first above written.

CITY OF RENSSELAER

BY: _____

BESICORP-EMPIRE POWER COMPANY, LLC

BY: _____
~~William T. Solis~~, President
Frederic H. Zuno, Executive V.P.

STATE OF NEW YORK)
) ss:
COUNTY OF RENSSELAER)

On the 11 day of July in the year 2007 before me, the undersigned, a notary public in and for said state, personally appeared Daniel Dunn, Member, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

JOHN P. HICKS
Notary Public, State of New York
No. 4758297
Qualified in Albany County
Commission Expires July 31, ~~19~~ 2010

STATE OF NEW YORK)
) ss:
COUNTY OF ULSTER)

On the 12th day of July in the year 2007 before me, the undersigned, a notary public in and for said state, personally appeared ~~William F. Sells~~ Frederic H. Zinn, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

RICHARD L. SMITH
Notary Public, State of New York
Qualified in Madison Co. No. 4500525
Commission Expires Sept. 30, 2009

EDWIN J. KELLEY JR
Notary Public, State of New York
Qualified in Onon. Co. No. 4758410
Commission Expires December 31, 20__

RICHARD L. SMITH
Notary Public, State of New York
Qualified in Madison Co. No. 4500525
Commission Expires Sept. 30, ____

RICHARD L. SMITH
Notary Public, State of New York
Qualified in Madison Co. No. 4500525
Commission Expires Sept. 30, ____

EXHIBIT 1

Certificate Condition VII.E(i)

E. To offset impacts resulting from visibility of the Cogeneration Plant to listed and other historic and cultural resources in its viewshed, the Certificate holder shall implement the following mitigation measures and provide the following offsets:

(i) A revolving Loan Fund ("RLF") shall be established for the restoration/enhancement of structures and facades in the amount of $200,000 to be administered by local municipal entity. The RLF shall be available to residents in the city's Historic Residential ("HR") zoning district.

Section III.B.1 of SHPO MOA

B. To offset effects resulting from visibility of the Projects to listed and other historic and cultural resources in its viewshed, BEDCO has agreed that the following additional offsets be provided:

1. At the commencement of construction of either the RNF or the Power Plan, BEDCO shall establish a Revolving Loan Fund ("RLF") in the amount of $200,000, by depositing this sum with the City of Rensselaer Planning and Development Agency (the "Agency"). The RLF shall be administered pursuant to guidelines to be developed by the Agency, and shall be made available by the Agency for the restoration and/or enhancement of structures and facades in the City's Historic Residential ("HR") zoning district. All work undertaken in whole or in part with funding from the RLF shall meet the Secretary of Interior's Standards for Rehabilitating Historic Properties and shall be reviewed by SHPO; and

EXHIBIT 2

Certificate Condition X.H

H. Prior to the commencement of construction activities, the Certificate holder shall contribute up to $100,000 to the City of Rensselaer toward the design and construction of a gate to be erected at the intersection of Riverside Avenue and the southerly side of Bellmore Place. The function of the gate will be to prohibit passage of automobile and truck traffic, except for emergency vehicles, on Riverside Avenue between the Fort Crailo neighborhood to the north and the industrial area to the south. The Certificate holder shall submit a report on compliance stating that it has made the required contribution. The selection of the contractor who will design and construct the gate will be made by the City through a public bidding process.

EXHIBIT 3

Certificate Conditions Section IX.D(i) and (ii)

(i) Greenway design at Riverside Avenue along with facility frontage based upon cross-section details (Exhibit 027), but subject to receipt of any and all necessary consents from the City of Rensselaer or other entities with jurisdiction over affected parcels; and

(ii) Subject to receipt of all necessary approvals, including subdivision as applicable to the Overlook Parcel defined below, the Certificate holder shall construct a suitably surfaced (e.g., asphalt or cinder) ten-foot wide, as practicable, bikeway along the north side and within the right of way of Riverside Avenue between the intersection of Riverside Avenue and the Port Access Highway and an overlook at the south end of the Rensselaer Port turning basin. The overlook shall be furnished with a sitting area and shall be designed for general consistency with the details in the 1986 City of Rensselaer Waterfront Revitalization Plan. To facilitate construction of the overlook on the required portion of the Rensselaer Port property (Overlook Parcel), the Certificate holder shall either (a) relinquish its rights to the Overlook Parcel such that it may be acquired by the City of Rensselaer, or (b) exercise its Port Property Option to Lease solely for the Overlook Parcel. Design of, plans for, and installation schedule for the bikeway shall be provided in a Compliance Filing.

Exhibit 027

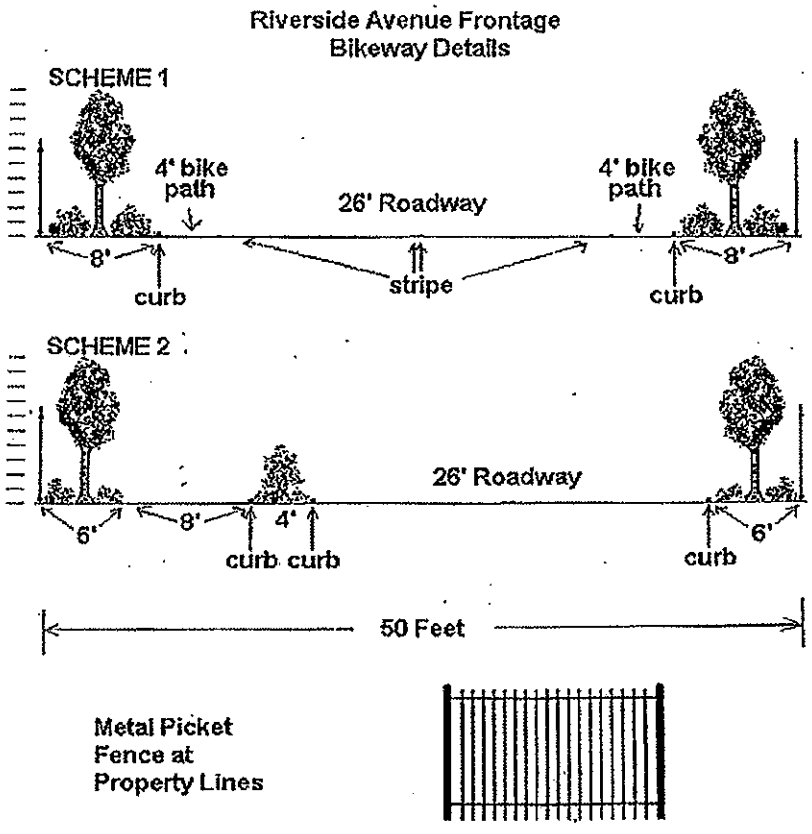


EXHIBIT 4

Certificate Condition X.I

I. The Certificate holder shall contract, at its expense, with the City of Rensselaer Police Department to provide traffic control during construction by uniformed officers with authority to control traffic at the intersection of South Street/9J with the Route 9/20 northbound on/off ramps during the afternoon (2:30 p.m. to 6:30 p.m.) peak hours and additionally otherwise as needed for purposes of public safety during construction. At any time that a sufficient number of uniformed officers is not available from the City of Rensselaer Police Department to provide such traffic control, the Certificate holder may arrange for substitution by uniformed officers with authority to control traffic from any other local or state law enforcement agency within New York State, including but not limited to the Office of the Rensselaer County Sheriff and the New York State Police. The contract shall require that during the afternoon (2:30 p.m. to 6:30 p.m.) peak hours, the City of Rensselaer Police Department traffic control officer(s) assigned to control traffic at the intersection of South Street/9J with the route 9/20 northbound on/off ramps shall also monitor the intersection of South Street/Route 9J with the Port Access Highway and the Route 9/20 southbound off ramps to determine the need for additional traffic control at that intersection. If, in the opinion of the City of Rensselaer Police Department, monitoring reveals a need for a uniformed officer to control traffic to maintain safe operations at that intersection, the City of Rensselaer, at the Certificate holder's expense, shall also provide for a uniformed officer at that intersection during the afternoon (2:30 p.m. to 6:30 p.m.) peak hours, or as otherwise needed for purposes of public safety. At the discretion of the City's traffic monitory (see Condition X.J), in consultation with the agency providing traffic officer services, police officer control may be discontinued at times that it is not necessary to maintain safe operation in the intersection, as manifested by lack of conditions that might lead to queuing on to Routes 9&20 north bound. Police officer control shall be reinstituted promptly at any time that the traffic monitor determines that it is necessary for safety. Any changes in police officer control effected pursuant to this condition shall be reported within twenty-four hours to the Certificate holder, the City of Rensselaer, NYSDPS, and NYSDEC. A copy of the police officer contract shall be provided as a compliance filing prior to the start of construction. The Certificate holder shall submit a report on compliance describing in detail the date and manner of actions taken by the Certificate holder in fulfillment of this Certificate Condition.

EXHIBIT 5

OFFICER PAY RATES

	8/1/07-2/1/08	2/1/08-7/31/08		
CHIEF/DEPUTY CHIEF	**SALARIES**	**SALARIES**		
FUSCO	$ 64,834.88	$ 65,842.88		
FRANKOSKI	$ 57,853.10	$ 58,861.10		
TOTALS	**$ 122,687.98**	**$ 124,703.98**		
PATROLMEN				
ADAMS (5)	$ 49,429.00	$ 50,418.00		
AUSTIN (4)	$ 44,905.00	$ 45,803.00		
BONIFACE (5)	$ 49,429.00	$ 50,418.00		
DESO (2)	$ 39,404.00	$ 40,192.00		
EARING (3)	$ 42,268.00	$ 43,113.00		
GALLAGHER (3)	$ 42,268.00	$ 43,113.00		
HEDGES (3)	$ 42,268.00	$ 43,113.00		
KNOWLES (5)	$ 49,429.00	$ 50,418.00		
MALATINO (5)	$ 49,429.00	$ 50,418.00		
MARTYN (5)	$ 49,429.00	$ 50,418.00		
MCCOY (5)	$ 49,429.00	$ 50,418.00		
MICARE (5)	$ 49,429.00	$ 50,418.00		
NORMANDIN (5)	$ 49,429.00	$ 50,418.00		
OLSON (5)	$ 49,429.00	$ 50,418.00		
ROBELOTTO (5)	$ 49,429.00	$ 50,418.00		
ROULLIER (5)	$ 49,429.00	$ 50,418.00		
SMITH (5)	$ 49,429.00	$ 50,418.00		
TERRY (5)	$ 49,429.00	$ 50,418.00		
TOTALS	**$ 853,690.00**	**$ 870,768.00**		
DETECTIVES				
FUMAROLA	$ 51,053.00	$ 52,074.00		
HANSEN	$ 51,053.00	$ 52,074.00		
TOTALS	**$ 102,106.00**	**$ 104,148.00**		
SERGEANT				
CHRISTENSEN	$ 51,919.00	$ 52,957.00		
FAMIGLIETTI	$ 51,919.00	$ 52,957.00		
NAGENGAST	$ 51,919.00	$ 52,957.00		
PETRUCCI	$ 52,460.00	$ 53,509.00	**hrly.rate 25.7255**	
TOTALS	**$ 208,217.00**	**$ 212,380.00**		

To Be Issued

To Be Issued

Noise Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

Noise Plan

Submitted to

BEPCO CC Cogen Facility

September 2007

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Noise Plan
Matter of Besicorp-Empire Development Company, LLC
Article X Case No. 00-F-2057
DEC Case No. 4-3814-00052
Revised and Update September, 2007

1. Establish criteria for Construction Noise Levels

a. Daytime: Construction is allowed by city code from 6:00 AM to 9:00 PM [Chapter 131, Noise: §131-1.B]. In response to a concern from the City, the Owner has agreed that no significant noise-making activities will take place prior to 7:00 AM. This would include: (1) Pile-driving, jack-hammering, or demolition; (2) the operation of bulldozers, excavators, or dump trucks for site preparation; (3) loading or off-loading big pipes or other materials that could make excessive noise; (4) conducting scheduled steam or air blows; or (5) operation of construction vehicles employing backup beepers. These activities will not be conducted between the hours of 9:00 PM and 7:00 AM unless required by scheduling difficulties and after notification of agencies identified in item 1.d. below.

The Owner will conduct a construction noise measurement program (item #2 below). The Owner's construction noise modeling reflects (a) use of the maximum value from the ranges of probable construction noise from five major construction phases and (b) simultaneous application of noise from the five major construction phases. Sound levels during the construction period will be limited to the Total Sound Level values in the Article X application at each receptor as reproduced herein as Table 1 (these are on an L_{eq} basis)[1], supplemented by the expected sound level contribution from off-site construction truck traffic. A receptor actually includes all residences near the ones listed in Table 1 with a similar line-of-sight to the construction activity, and similar community noise sources. These levels are the total of expected 1 construction noise (on-site and off-site) plus the expected pre-existing background noise from non-construction sources.

If the Total Sound Levels are above those in Table 1, the dominant source(s) of construction noise will be identified and additional mitigation measures implemented promptly. At the same time, an evaluation will be conducted to determine the level of non-construction noise (background) to see if it is significantly greater than the levels measured in April 2001 and shown in Table 1, and if so, whether the level of non-construction noise is the cause of the Total Sound Level exceedance. Should mitigation measures prove ineffective in addressing the Total Sound Level exceedance, and the construction noise is the cause of the Total Sound Level exceedance, the Owner will, if practicable,

[1] Article X Application/DEIS, Table 14-5, December 2001.

terminate the construction activity causing the exceedance until effective alternatives can be employed.

Table 1
Daytime Construction Noise Criteria

Receptor	On-site Construction Sound Level (L_{eq})[1]	Off-site Construction Truck Traffic Sound Level (L_{eq})[2]	Existing Background Sound Level (L_{eq})[3]	Total Sound Level (L_{eq})
1	58 dBA	48.9 dBA	58 dBA	61 dBA
2	56 dBA	52.4 dBA	55 dBA	59 dBA
3	58 dBA	56.9 dBA	60 dBA	63 dBA
4	63 dBA	48.7 dBA	52 dBA	63 dBA
5a	63 dBA	54.8 dBA	63 dBA	66 dBA
5b	61 dBA	59.1 dBA	63 dBA	66 dBA
6	56 dBA	51.4 dBA	61 dBA	63 dBA
7	62 dBA	48.2 dBA	53 dBA	63 dBA
8	55 dBA	48.8 dBA	57 dBA	60 dBA

1 = From Table 14-5, Article X Application/DEIS.
2 = Based on FHWA's TNMLOOK model using 23 trucks per hour.
3 = From Table 14-2, Article X Application/DEIS

b. Nighttime: Construction is not expected to occur during nighttime hours (10 PM to 7 AM). Any mechanical equipment left running overnight will employ Best Management Practices (BMP) for noise mitigation. Employment of BMPs for noise control, requiring proper operation and maintenance of contractor equipment, will be specified in construction contracts. An example of this may be a dewatering pump(s). The pump(s) will be, if necessary, fitted temporarily with acoustical shroud(s) to reduce noise.

Nighttime sound levels during the construction period will be limited to the Total Sound Level values at each receptor shown in Table 2. The proposed nighttime construction sound levels are 6 dBA lower than the daytime criterion, which represents a 75% reduction in acoustic energy. This reflects the stated conservatism in section 14.6.2.5 of the Article X Application/DEIS (Application). The existing nighttime background sound levels are taken from Table 14-2 in the Application and represent the energy average of the five nights of background measurements made in April 2001.

Table 2
Nighttime Construction Noise Criteria

Receptor	On-site Construction Sound Level (L_{eq})[1]	Off-site Construction Truck Traffic Sound Level (L_{eq})[2]	Existing Background Sound Level (L_{eq})[3]	Total Sound Level (L_{eq})
1	52 dBA	Neg.	51 dBA	55 dBA
2	50 dBA	Neg.	51 dBA	54 dBA
3	52 dBA	Neg.	58 dBA	59 dBA
4	57 dBA	Neg.	49 dBA	58 dBA
5a	57 dBA	Neg.	58 dBA	61 dBA
5b	55 dBA	Neg.	58 dBA	60 dBA
6	50 dBA	Neg.	58 dBA	59 dBA
7	56 dBA	Neg.	48 dBA	57 dBA
8	49 dBA	Neg.	50 dBA	53 dBA

1 = From Table 14-5, Article X Application/DEIS, less 6 dBA.
2 = Assume negligible as no nighttime deliveries are anticipated.
3 = From Table 14-2, Article X Application/DEIS.

c. Intermittent Noise: By its very nature, construction noise is intermittent. These sources typically include diesel engine noise, back-up alarms, pumps, and material handling. All scheduled significant construction noise events such as steam blows or explosives demolition will be conducted during daytime hours and communicated in advance to the community (see item #1.d. below).

d. Community Notification of Significant Events: The Owner will provide 3 calendar days advance notification to residents of all scheduled significant construction noise events such as steam blows and explosives demolition. An example is the demolition of the BASF boiler house exhaust stack, which may require a one-time explosives charge of 10 kilograms or less.[2] Parties who will receive notification include all residents within 1000 feet of the Project property line, contiguous industrial and commercial facilities, the City of Rensselaer, the Fort Crailo Neighborhood Association, and the Town of East Greenbush. Notification will be provided on the Project website, by hand delivery or telephonic notification of the parties identified above, and by postings at Rensselaer City Hall and East Greenbush Town Hall. This job will be the responsibility of the Community Liaison Officer (CLO), whose duties with respect to noise issues are further described in Section 7 below. Implementation

[2] Article X Application/DEIS, page 14-12, December 2001.

of the associated Community Liaison Program is addressed in section XIII of Appendix JS-I of the Joint Settlement Agreement.

2. Construction Noise Measurement program

A sound level measurement protocol will be developed by the Owner to verify off-site noise levels from construction activities. The protocol is expected to detail exact measurement locations, duration of measurements, and how often the measurements will be carried out. A draft of the protocol will be circulated to the DPS, the DEC, and the City of Rensselaer for review and approval. All interested parties will be allowed to witness the monitoring if they so desire (advance notification provided).

3. Establish criteria for Operational Noise Levels

a. Daytime and Nighttime Steady-State: The Project alone will meet a Noise Level Rank Curve of "d" for the Modified CNR (Composite Noise Rating) System at the nearest residences to the Project due to operational noise. This is equivalent to a Modified CNR level of "C". The octave band levels required to achieve a Noise Level Rank of "d" are shown in Table 3 and will be the sound level limits for the Project alone.

Table 3
Operational Noise Criteria

Octave Band Center Frequency (Hertz)								
31.5	63	125	250	500	1000	2000	4000	8000
74 dB	66 dB	59 dB	53 dB	48 dB	44 dB	40 dB	37 dB	35 dB

b. Intermittent Noise: There are several potential intermittent on-site noise sources associated with the Project. The most significant potential sources anticipated are identified in Table 4 below along with their associated noise mitigation or BMP. These controlled sound levels have been calculated at the nearest residence and found to be comparable to or less than the quietest L_{90} background sound levels measured anytime around the site, day or night. Details of the comparison are appended as Attachment A.

Table 4

Source	Mitigation/BMP
Cogen plant startup (steam release)	Silencer
Cogen plant shutdown (Controlled – steam release)	Silencer
Cogen plant shutdown (Emergency – steam release)	Silencer
Trackmobile "wheel squeal"	Barrier wall/rail siding BMP
Truck back-up alarm (off-site vendors)	Barrier wall/site layout
Truck back-up alarm (Project owned trucks)	Strobe light
Truck deceleration/acceleration	Barrier wall
Speed bumps	BMP (none planned)
Roll-off container "bang"	Barrier wall/BMP (few deliveries)

c. Community Notification of Significant Events: The Owner will provide 3 calendar days advance notification of all scheduled significant operational noise events. As noted above, none of the intermittent activities identified above are expected to cause noise levels exceeding current steady-state background values. At this time, no other operational "significant events" have been identified or are expected. If a significant event were anticipated, the parties and notification techniques will be those outlined above for construction noise (item #1.d.).

4. Post-construction Noise Measurement program

A sound level measurement protocol will be developed by the Owner to verify off-site noise levels from operational activities. The protocol is expected to detail exact measurement locations, duration of measurements, and how often the measurements will be carried out. A draft of the protocol will be circulated to the DPS, the DEC, and the City of Rensselaer for review and approval. All interested parties will be allowed to witness the monitoring if they so desire (advance notification provided). ***See*** **Ex. 015** attached to the Joint Settlement Agreement.

5. Identify Noise Mitigation Techniques

Significant sound level mitigation has been assumed, and will be incorporated, in the RNMP and Cogeneration Plant design and construction.[3] Following are additional sound level mitigation techniques that have been, or will be, incorporated in the project design to minimize potential noise from intermittent on-site activities, primarily from mobile sources.

a. No project construction or employee traffic in Fort Crailo neighborhood, including Riverside Avenue.

[3] Article X Application/DEIS, Tables 14-10 and 14-11, December 2001.

b. Site design and layout to minimize truck back-up movements where practicable.

c. Specifying quieter equipment where practicable (hardware specifications).

d. Acoustical barrier wall on northern property line – height to be determined to minimize impact to second/third floor bedrooms. The acoustic barrier will be constructed as early as practicable in the site development process.

e. Utilization of the CLO to resolve community noise concerns.

f. Best Management Practices (BMPs), such as

1. Equipment maintenance
2. Strobe light on project-owned trucks
3. Temporary noise screening for dewatering pumps, etc.
4. Restricting the Trackmobile to daytime only operation (7AM to 10PM).
5. Restricting pile driving and the use of explosives to the period from 8 AM to 5 PM.
6. Use of silencers for steam releases.

Employment of BMPs for noise control, requiring proper operation and maintenance of contractor equipment, will be specified in construction contracts.

6. City authorized to enforce noise ordinance

As described in item #4 above, a sound level measurement protocol will be developed by the Owner to verify off-site noise levels from operational activities and confirm compliance with local noise ordinances. Enforcement of the City's noise ordinances will be at the discretion of the City Building and Zoning Administrator and the City Corporation Counsel.

7. A Community Liaison Officer (CLO) will be initial contact on community noise issues

a. A Community Liaison Program (CLP) will be instituted by the Owner. The Community Liaison Officer will be responsible for noise-related issues. Details of the CLP are contained in the CLP description in section XIII of the Recommended Certificate Conditions in Appendix JS-I of the Joint Settlement Agreement.

b. The CLO will be stationed on-site during both construction and operation of the facility.

c. In the event a noise exceedance or a noise complaint cannot be addressed by the CLO, a dispute resolution process will be followed.

d. By March 1 of each year, the CLO will prepare a report summarizing his activities with respect to noise from the previous calendar year. This will include the number and nature of inquiries, suspected noise source, resolution of concern, and whether dispute resolution was required. The Owner will also make the CLO's complaint logbook available for inspection upon reasonable prior request.

Attachment A

Summary of Intermittent Noise Activities as Compared to Existing Sound Levels

(See item #3.b.)

The quietest existing background sound levels (L_{90}) for each of the twelve (12) sound level measurement surveys conducted in April 2001 are summarized below for the four measurement locations in the Fort Crailo neighborhood (see Tables 2, 3, 4, and 9 in Appendix N-2 of the Article X Application). By way of comparison, the expected maximum sound level from the primary intermittent activities is also presented below at the nearest location to their occurrence. A comparison of the two tables shows the following: the L_{90} background levels in the vicinity of Belmore Place (Site #1) are currently in the range of 44-50 dBA. These levels are equal to or greater than steam venting and truck-related activities that are expected to produce maximum sound levels ranging from 38-46 dBA. This indicates that the intermittent activities will generally be indistinguishable from background noise at this location. Along the same lines, the L_{90} background levels in the vicinity of 1 Rensselaer Avenue (Site #3) are currently in the range of 56-59 dBA. These levels are equal to or greater than steam venting and trackmobile wheel squeal that are expected to produce maximum sound levels ranging from 40-57 dBA with the barrier wall in place. This indicates that the intermittent activities will generally be indistinguishable from background noise at this location. Therefore, it is expected that the intermittent noise from mobile sources at the site will not be a nuisance as currently designed and mitigated.

Existing Background L_{90} Sound Levels – April 2001

Survey ID	L_{90} at Site #1 – 4 Belmore Place (dBA)	L_{90} at Site #2 – 62 Cambridge Ave (dBA)	L_{90} at Site #3 – 1 Rensselaer Ave (dBA)	L_{90} at Site #8 – Fort Crailo (dBA)
1. Weekday day	49	48	58	50
2. Weekday day	49	50	57	51
3. Weekday day	49	49	57	49
4. Weekday day	48	**54**	**59**	50
5. Weekday day	49	51	58	**52**
6. Weekday night	47	**46**	57	46
7. Weekday night	46	47	57	46
8. Weekday night	49	48	57	45
9. Weekend day	46	48	57	**44**
10. Weekend day	46	47	**56**	**44**
11. Weekend night	**50**	50	57	48
12. Weekend night	**44**	48	57	46

Note: Maximum and minimum L_{90} values for each location are **underlined and bold**.

Intermittent Sources

Source	Expected Maximum Sound Level	Location
Steam venting w/ silencer	38 dBA	Site #1
Truck acceleration from RNMP loading docks (includes 9 dBA shielding from OrganiChem, no barrier wall)	44 dBA	Site #1
Back-up alarm (includes 11 dBA shielding from OrganiChem, no barrier wall)	46 dBA	Site #1
Steam venting w/ silencer	40 dBA	Site #3
Trackmobile squeal – 10 dBA property line barrier	57 dBA	Site #3
Trackmobile squeal – no property line barrier	67 dBA	Site #3

To Be Issued

Post-Remediation Construction Plan

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

Post-Remediation Construction Plan

Submitted to

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

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Post-Remediation Construction Plan
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LIMITATIONS ON APPLICABILITY OF POST-REMEDIATION CONSTRUCTION PLAN

This Post-Remediation Construction Plan (Plan) was developed by Besicorp-Empire Development Company, LLC (BEDCO) in response to concerns raised by the City of Rensselaer in connection with BEDCO's proposed construction of a cogeneration plant and recycled newsprint manufacturing plant (RNMP) at property owned by BASF Corporation (BASF) on Riverside Avenue in the City. BASF has undertaken environmental investigations to define the nature and extent of contamination on the property. This updated Plan addresses the South 40 portion of the property (South 40 site), now owned by Besicorp Empire Power Company (BEPCO or "Owner"), on which the power plant will be constructed. Investigations have been completed on the South 40 site, and remedial actions have been completed by BASF and/or Besicorp consistent with work plans submitted to, and approved by, the New York State Department of Environmental Conservation (NYSDEC).

It should be noted that detailed engineering design for foundations and subsurface utilities has not been completed. In finalizing the design of these structures, BEPCO will take into consideration the final remedial work completed at the Site. It is anticipated that the final design will minimize to the extent possible excavation of materials requiring special handling. Prior to the commencement of construction, BEPCO will notify NYSDEC and provide it with a copy of the final Post-Remediation Construction Plan.

1 INTRODUCTION

1.1 Background

The Project involves the construction of a cogeneration power plant and associated facilities on property adjacent to the former BASF facility located in Rensselaer, NY. BASF/BEDCO have conducted remedial actions at the Site involving the excavation of impacted soil and sediments from a defined area, hereafter referred to as the Soil Cover Area.

1.2 Description of the Project Area

The property on which the power plant will be constructed is adjacent to and south of the former BASF manufacturing facility. Known as the "South 40 site", it is undeveloped and does not contain any buildings.

1.2.1 Topographic

The South 40 varies in elevation from 13' amsl to 27' above mean sea level (amsl). The center portion of this area is elevated from 17' – 27' amsl.

1.2.2 Existing Soils

The primary compounds of concern on the South 40 parcel are: arsenic in soil and low levels of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) in groundwater.

1.2.3 Groundwater

The proximity of the Hudson River to the Site strongly influences the hydraulic gradient of the groundwater. The tidal variations in the river are also reflected in the groundwater gradient. The groundwater flow across the site is generally in a west to southwest direction, towards the Hudson River. However, the shallow nature of the surface of the groundwater (approximately 3 to 8 feet below the existing ground surface) creates localized flow regimes that are the result of man-made activities such as surface drainage channels, underground pipelines, sewers, foundations and disposal areas.

1.3 Project Description

Ultimate development of the site will consist of two main elements: the cogeneration plant and the RNMP. The RNMP will occupy the former BASF Main Plant area and the cogeneration plant will occupy the South 40 site, as noted above. The interconnects between the two plants (e.g. wastewater, water, steam, and electric) dictate that they be in relatively close proximity. The existing sewers will be closed by BASF and BEDCO will be installing a new drainage system when the RNMP is constructed.

1.4 Definitions

1.4.1 Clean Areas

Areas for which no soil management requirements have been established by the governmental agencies.

1.4.2 Areas of Restricted Material

Areas for which soil management requirements have been established by governmental agencies. Also known as the "Soil Cover Area." This plan and the management of Restricted Material applies to the Soil Cover Area, but not to clean areas of the site.

1.5 Community Liaison Officer

In addition to the engineering controls, control technologies and operating and maintenance practices that will be in place to minimize community concerns, the Owner will select a Community Liaison Officer (CLO) to maintain a link with the community during construction and operation to address any potential concerns that might arise. Concerns that are communicated to the CLO will be logged, addressed promptly and feedback provided to the individual raising the concern. The Owner will also make the CLO's logbook available for inspection upon reasonable notice and at reasonable times by the City's Building & Zoning Administrator.

The CLO's duties and responsibilities will be as provided for in the Community Liaison Program.

1.6 On-Site Environmental Monitor

To comply with Article X Certificate Conditions, NYSDEC permit conditions and requirements imposed by the US Army Corps of Engineers (ACOE), the Owner will provide an on-site environmental monitor during construction. This monitor will help ensure environmental compliance and compliance with this Plan during construction.

1.7 Construction Sequencing & Notification

Prior to Site development, a construction schedule will be developed by the Owner and made available to interested parties. This schedule will be updated as necessary.

2 SOIL EXCAVATION, HANDLING, AND DISPOSAL

2.1 Background

During site preparation and construction activities the Soil Cover Area will receive twelve inches of clean fill over excavated areas to separate site facilities and work activities from existing soils. The cogeneration plant will be built up to a level from an estimate average elevation of ±17 feet (AMSL) to elevation 23.5 feet with a finish floor elevation of 24.5 feet. Some areas of the site are above the final grade elevations. These areas will be "cut" and these soils, if suitable for on-site fill, will be placed in the Soil Cover Area.

The earthwork portion of this construction phase will include subsurface utility installations for piping, electrical ductbanks and manholes. In addition to the subsurface utility installations, sheeting, piling, and the installation of new building and equipment foundations will be performed. During intrusive soil activities in "Areas of Residual Contamination" at the Site the procedures discussed herein shall be followed.

2.2 Prior Work

Remediation required by the Voluntary Cleanup Agreement (VCA) for the South 40 site and necessary to commence construction has been completed.

2.3 Site Preparation

The following site preparation activities will be performed by the contractor before soil excavation or grading activities are initiated:

- **Utility Clearance and Identification**– Underground and above ground utilities that could affect or be affected by construction activities will be identified prior to the initiation of intrusive soil activities. Locations of all utilities will be marked out by an independent company (UFPO / DIGSAFE). When utility locations have been identified, the construction contractor will determine if any utilities will be in conflict with the proposed construction plans. If utility conflicts are identified, the construction contractor and the associated utility company will discuss appropriate actions to avoid the conflict.

- **Erosion and Sedimentation Controls** – Erosion and sediment controls are an integral part of the construction sequence and plan and will be in place prior to commencing intrusive soil activities. These controls will be consistent with the Stormwater Management Pollution Prevention Plan developed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities Permit GP-02-01. The selection of specific erosion and sedimentation control measures during construction activities will depend on a number of parameters, including the type of construction activities, site topography, type of ground covers, and maintenance considerations. The measures may

include the use and placement of silt fence, impermeable liner material, geotextiles, riprap, seed, and mulch. The sediment and erosion controls will be inspected on a regular basis and repaired immediately if damage is observed until a final surface cover has been provided in all areas. The construction contractor will minimize the exposure of unprotected soils to preserve and protect existing vegetation to the extent practicable. In addition, the construction contractor will minimize the time that soil is left exposed. Erosion control and soil excavation activities will be conducted in accordance with proper construction sequencing to maximize the effectiveness of the erosion control strategy.

- **Work Area Security –** The type of work area security used will depend on the type of construction activities being performed and the location of these activities. Security measures will be implemented by the construction contractor and may consist of temporary fencing or barriers, warning tape, maintenance of sign in / sign out sheets, and practicing safe work procedures.

- **Clearing and Removing of Vegetation –** To facilitate construction activities, some existing vegetation, movable structures, and other obstructions will be removed from the Site.

- **Fugitive Dust Control -** During construction activities, dust control measures will be implemented in accordance with the Fugitive Dust Control Plan. Implementation of Fugitive Dust Control Plan will be the responsibility of the environmental monitor.

- **"Clean" Access Area –** Because of the potential in some areas of the site to encounter subsurface residual contamination during construction activities, a "clean" transition area, if needed, will be established at various locations for access/egress to specific work areas. The "clean" area will be used for equipment / material deliveries. The type and location of "clean" areas will vary depending on location of the areas of Restricted Material identified in any applicable soil management plan(s). It will also be dependent on the location of the work area, topography of the work area, and the type of work to be completed at the location. The construction contractor will evaluate the specific work required and, upon consultation with the owner/oversight agency (if applicable), will construct a "clean" area to facilitate the progression of construction activities. The location of this "clean" area will be modified as necessary during the site re-grading operation.

- **Site Map –** A site map will be created showing the Soil Cover Area, soil staging areas, clean access areas and other site control procedures. As the Site is regraded, or conditions change, this site map will be updated as warranted.

2.4 Soil Excavation/Grading, Handling, and Disposal During Construction Activities

During construction of the cogeneration plant, the construction contractor will follow applicable soil management plans required by permitting agencies when working on site. Copies of such plans will be provided to the City Engineer.

Permanent alterations of the existing soils and impacts to the groundwater are expected to be minimal. Most of the anticipated changes are associated with raising the existing elevation of the Site to remove it from the 100-year flood plain to comply with local regulations. The property elevation will be raised, utilizing suitable excavated material together with imported fill. The final site elevation will be reached by the placement and compaction of fill as required with an indicator layer in selected areas to demarcate potential Restricted Material below.

Soil excavated from various areas of the Site will be staged on site and handled in accordance with the applicable soil management plan. Excavated material not qualifying for use as fill will be removed from the Site for disposal in a properly permitted facility.

- **Personnel Training -** Where applicable, use personnel properly trained as required by OSHA regulations set forth in 29 CFR 1910.120, for soil excavation, grading, and handling.

- **Equipment -** In general, the equipment used for any excavation or grading of the onsite soil during the earth work phase of the construction activities will be one or more of the following: excavator, backhoe, grade-all, front-end loader, dozer, or other suitable types of material handling equipment. Equipment used in the excavation or grading of residual contamination areas will meet the requirements of the applicable soil management plan. The construction contractor will be responsible for establishing and implementing specific equipment cleaning procedures.

- **Limits of Excavation / Grading -** Excavation and grading will be completed for areas inside the limits identified on the approved construction plans. During construction, excavation limits, grading elevations, foundation elevations, and utility installations will be verified by survey control and visual observations. Proposed excavation areas will be graded to promote positive drainage away from open excavations.

- **Exposed Excavations –** During construction activities the amount of exposed excavation will be minimized to the extent practical. Exposed excavations are to be covered as practicable with polyethylene sheeting to prevent the migration of potential contaminants by rain or wind factors. In addition to covering exposed excavations, erosion and sediment control measures will be implemented, using silt fences, hay bales, mulch, or other appropriate methods.

- **Off-Site Disposal –**Minimal off-site disposal is expected for excavated soils. When material requires off-site disposal, the construction contractor will be responsible for the transportation and assurance that the disposal facility is authorized to accept the material in compliance with applicable regulations.

- **Fugitive Dust –**Procedures identified in the Fugitive Dust Control Plan are to be employed during intrusive soil activities.

- **VOC Monitoring –** As warranted or as required by the soil management plan the Owner will perform VOC monitoring. This may be by the use of portable FID testing near the potential source of VOCs and/or the use of stationary monitors at the perimeter of the Site.

3 WATER MANAGEMENT AND DEWATERING

3.1 Background

As noted in Section 2.3, the Stormwater Pollution Prevention Plan to be implemented during the construction phase of the project will be developed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities Permit GP-02-01. A copy of the Stormwater Pollution Prevention Plan will be provided to the City Engineer.

Construction activities will include installation of subsurface utilities for pipes, electrical duct banks and manholes. In addition to the subsurface utility installations, sheeting, piling, and new building and equipment foundations will be installed. During these activities, stormwater management/sediment and erosion controls will be in place and utilized as set forth in this plan and as required by applicable regulations. Stormwater directed to city-operated storm sewers will meet applicable regulatory requirements.

3.2 Stormwater

Stormwater will be controlled during excavation activities through diversion to surface swales and sediment basins. Stormwater will be diverted from entering the excavations through the construction and maintenance of hay bale or soil berms wrapped with a liner at the limit of excavations, deflecting flows to surface swales or sediment basins.

- **Soil Staging Area -** The soil staging area will be constructed to prevent Restricted Material and runoff from entering surrounding areas if needed. If needed, a sump pit will be used to collect runoff from the staging area. Soil and sediment collected in this sump will be added to stockpiled soils for appropriate disposition. Waters collected in the soil staging area sumps will be treated if required or disposed off-site.

- **Ground Cover –** The South 40 parcel is not developed. A substantial portion of the existing ground cover on the South 40 within the construction limits of the cogeneration plant will be removed during construction activities. Vegetation along the perimeter of the Site and other areas outside the plant construction area will be preserved to the extent practical. No ground cover will be burned. During construction activities, dust control measures will be employed in accordance with the Fugitive Dust Control Plan.

- **Erodible Soils -** The removal of existing ground cover may increase the potential for soil erosion. As described in Section 2.3, areas disturbed by field workers during construction will be treated in the appropriate manner including the placement of materials, such as seed and mulch, to minimize the potential for erosion in the disturbed areas.

- **Mechanical Retardation and Control of Runoff –** The contractor will utilize temporary stormwater control measures as silt fencing, diversion dikes, check dams and/or temporary seeding to provide effective stormwater management. Temporary diversion berms will be installed up gradient of the excavation. The temporary division berms will divert stormwater runoff away from the excavation areas.

- **Vegetation and Mulch –** upon completion of the project, grass seeds and mulch, crushed stone, bituminous asphalt or other suitable material will cover soil exposed during construction. Site restoration will be performed in accordance with the project specifications.

- **Protection of Existing Municipal Sewers –** Existing municipal sewers on the Site will be protected with berms and/or sediment traps to prevent sediment from flowing into the sewers.

3.3 Dewatering Excavations

Based on the existing information available for the groundwater elevations, groundwater control will likely be required for only certain areas of structural excavations. Based upon the subsurface conditions encountered during previous field investigations, excavations in some areas of the Site have the potential to encounter saturated conditions. These are expected to be perched groundwater conditions that typically are of limited volume and probably will be a function of the depth of the excavation as well as the amount of recent precipitation. Localized dewatering by surface sump pumps is expected to remove the small water volumes that may be encountered.

Current groundwater elevations are below the bottom elevation planned for the shallow foundations. Groundwater may be encountered in deep foundation excavations, such as the condenser pit. The deep excavations will be engineered to minimize the amount of groundwater entering the excavated foundation areas. Sheet piling may be required to support the sidewalls of the deep excavations and minimize or to prevent water infiltration into the excavation. Dewatering operations will only be required during placement of the foundation or structure.

The construction contractor will, to the extent practicable, prevent stormwater from entering open excavations using berms, swales, or sedimentation basins. Water that collects in the excavations as a result of groundwater intrusion will be pumped and treated as appropriate from excavations when it impedes excavation or affects the ability to achieve proper compaction of backfill soils.

Water that exists in or enters an open excavation in the Soil Cover Area will be handled in accordance with the applicable soil management plan or groundwater management plan. One or a combination of the following treatment technologies may be utilized to treat water removed from excavations: transfer to the existing WWTP; transfer to the onsite ground water treatment system; settling ponds, tanks or clarifiers; or oil / water separators.

As an alternative to direct discharge of treated water to surface water bodies or to the local sewer, treated water may be recycled for use on the Site for the following purposes:

- Increase moisture in dry soils for compaction purposes.
- Increase moisture in soils being stabilized onsite.
- Application to roadways or open excavations for dust suppression.
- Decontamination of equipment.

3.4 Equipment Decontamination Water

Water utilized for decontamination of equipment will be supplied by existing City water lines located onsite, potable water from the City, potable water from an offsite source, or from dewatering excavations (such water to be treated as necessary), or the Soil Staging Area.

Water utilized in equipment decontamination will be treated onsite as required and discharged in accordance with applicable standards or properly disposed of off-site. The construction contractor will set up portable decontamination stations to decontaminate heavy equipment or parts of heavy equipment (e.g., excavator bucket) at specific work areas.

3.5 Personnel Decontamination Water

Personnel decontamination water will be potable water supplied from onsite or offsite sources. Potable water will be stored onsite in small poly tanks or 55-gallon drums and be readily available in designated areas where personnel decontamination will occur. Each local personnel decontamination area will be a bermed, lined area that has drums for storing used personal protective equipment (PPE), tubs for washing and rinsing boots, boot racks for storage of boots and fresh PPE.

Water resulting from personnel decontamination activities[1] will be collected, treated on site, and properly discharged or, as an alternative, utilized after treatment, as described in Section 3.3 of this Plan.

[1] Analytical testing will be performed on the water resulting from personnel decontamination initially to verify it is within NYSDEC discharge guidelines. Water resulting from personnel decontamination will presumably contain levels of contaminants well below NYSDEC guidelines and once verified can be utilized for any of the purposes specified in Section 3.3 of this Plan.

4 SUBSURFACE CONSTRUCTION PROCEDURES AND PROTECTION

4.1 Background

As described in Section 2.1, during construction, some subsurface disturbance is expected. However, because parts of the Site are being raised locally to the 100 year flood level, much of the subsurface disturbance and construction (e.g., foundations) will be minimized. It is anticipated that special provisions and precautions detailed in a soil management plan will be followed by the construction contractor during any intrusive soil activities, due to the potential for encountering subsurface contamination below the existing grade.

4.2 Geological Features of the Project Area

In general, the proposed final grade for the property will be elevation 23.5' - 24.5' amsl. This elevation will be achieved by placing and compacting fill over the existing soil. In selected areas, an indicator will function as demarcation of potential subsurface contamination. The groundwater table at the Site is expected to be approximately 13' – 14' amsl. Existing depth to bedrock varies ranging from 20'-25' amsl on the east side of the Site and 70'-80' amsl on the west side of the Site.

4.3 Proposed Building and Equipment Foundation Construction Procedure

Major equipment and building foundations will be pile-supported mats or pile caps. Piles are expected to be friction or end bearing type depending upon the actual soil conditions, with lateral forces resisted by battered piles and / or passive resistance of the soil around the pile cap or mat. Additional geotechnical data will be collected before the final design and installation of the piles as described in Appendix G-2 of the Article X Application and in Appendix C of this PRCP. It is expected that steel piles will be driven at the Site. Temporary steel sheet pilings are expected to be used during specific deep excavation to minimize contaminated ground water infiltration into excavations.

4.4 Specific Deep Foundations in Potentially Contaminated Areas

4.4.1 Cogeneration Plant

The cogeneration plant will occupy the "South 40", an area of approximately 35 acres of land, a portion of which reportedly was formerly used as a fill area by prior owners.

Cogeneration Plant Foundations

The 100-year flood plain elevation is 20.50 feet amsl. The plant finished grade is established at elevation 23.50 feet and, as a good engineering practice, top of (concrete) finished floor and equipment foundation elevations will be kept at elevation 22.50 feet amsl (2.0 feet above the 100-year flood level).

A survey of the existing topography reveals that most of the Site varies with some high points at elevation 22.50 feet and above, some low areas at elevation 13.50 to 14.00 feet amsl, and the major portion of the Site at between elevation 15.0 to 16.0 feet amsl. Because of the need to raise the plant above the flood plain, four to five feet of fill will be required to elevate the plant area. Existing higher areas will be graded, while lower areas will be filled and leveled to an approximate elevation of 17.0 feet amsl to create a relatively level working surface.

Small equipment foundations will be in the fill placed above the existing ground surface. However, major equipment and building foundations will be on pile-supported mats or pile caps that may penetrate existing ground surface. Piles are envisioned to be friction or end-bearing type depending upon actual soil conditions, with lateral forces resisted by battered piles and/or passive resistance of the soil around the pile cap or mat. After driving all the piles, select structural fill will be placed and compacted underneath the pile-caps/mats. After foundations are in place, additional fill will be placed to raise the area to finished grade.

4.5 Protecting Groundwater Pathways During Subsurface Construction Activities

BASF is installing a series of trenches forming a groundwater collection system on the North 40 parcel as a component of the remedial action at the property; nevertheless, contaminated groundwater may be encountered at various site locations. The groundwater collection system is designed to minimize the migration of contamination offsite. During new construction activities, the flow of groundwater is to be maintained and changes in groundwater flow are to be minimized. Areas that typically have the most potential to change groundwater flow are new building and equipment foundations, new subsurface utility installations, and the steel piles that that support the new foundations. Since the base of most of these foundations and utilities are expected to be above the groundwater table, these are not expected to have a significant influence on the groundwater flow.

A geotechnical review of the Site will be conducted prior to the execution of intrusive soil activities. The geotechnical review will encompass the natural flow of groundwater at the Site, the final design and effects of new building construction, additional subsurface data gathered during the remedial action, the location and designed operation of the groundwater collection system, and the matrix of the subsurface soil. The specifications for this geotechnical review are provided in Appendix C of this PRCP. During the geotechnical review of this Site, the presence of subsurface contamination, with specific attention applied to potential zones of non-aqueous phase liquids (NAPL), identified through visual observation, will be noted.

The following or similar procedures can be employed as appropriate to specific conditions to maintain the natural flow of groundwater to the groundwater collection system:

- **Subgrade Materials and Characteristics –** Where practical, materials used for the subgrade around new buildings should maintain the same soil characteristics at specific elevations as the existing soils. Preferential pathways for groundwater caused by using materials with different soil characteristics should be avoided. Compaction and soil densities should also be maintained with the existing soils, to the extent

possible, so areas of different soil permeability are not created, thus creating the potential for migration of contaminants.

- **Institutional Subsurface Control Measures –** When materials of similar characteristics cannot be used due to structural concerns for an area, additional institutional controls can be employed. Where appropriate, permeable or impermeable membranes / liners can be installed to limit the flow of groundwater into an area or facilitate the flow of groundwater through an area. These methods can be used to prevent the infiltration of contaminated groundwater into the typically more permeable backfill of utility installations or sewer pipelines. A combination of these membranes can be used to channel contaminated water around new building foundations to prevent the contaminant infiltration into the subgrade material. In addition, natural material can be used to maintain groundwater pathways. Materials high in clay content can be used as subsurface barriers or stone trenches and sandy materials can be used as more permeable materials to create groundwater pathways around subsurface obstructions.

- **Pile Driving** - Prior to driving steel sheets or piles, geotechnical borings will be conducted to the proposed depth of the piles or sheets. These borings will be used to determine if low permeability confining layers are present in the subsurface, and at what depth and pressure these confining layers are located to reduce creating negative vertical preferential pathways between shallow and deeper aquifers.

4.6 Protection of the Capped Landfill During Construction Activities

The BASF property also includes a landfill on a parcel of approximately 9 acres. No construction will occur on the capped landfill. This parcel is generally flat with an average slope less than 1% from west to east. The landfill was used in the past to dispose of wastes during the operations at the former BASF facility. The landfill remained in operation until 1975. In 1982, a soil cap was installed with permeability similar to that of the fill material it covers. The landfill has been continuously monitored since 1984 through groundwater sampling. BASF and the NYSDEC are working to determine if additional remedial work is required for the landfill.

Construction activities on the South 40 site will not have an impact on the landfill.

5 OFF-SHORE CONSTRUCTION PROCEDURES AND PROTECTION PLAN

5.1 Background

A discharge pipe will be installed in the Hudson River, downstream of the North 40 parcel. The following requirements are based upon conditions in the Article 15 permit issued by NYSDEC in May 2002. These requirements will be modified as required based upon final permit conditions from both the NYSDEC and the ACOE.

BEDCO has collected off shore soil and sediment samples. These results are in Appendix E-17 & E-18 of the application.

5.2 Work Plan

The following documents will be submitted to NYSDEC a minimum of 90 days prior to construction in the Hudson River:

- Work Plan containing detailed information on the dredging methodology, type of turbidity barriers, sediment handling practices, sediment storage and disposal and water treatment system. The detailed Work Plan will include: (a) environmental monitoring; (b) sediment handling procedures; (c) procedures to minimize spillage into the river; (d) locations of sediment dewatering, storage and proposed disposal facilities; and (e) engineering design of the sediment dewatering and storage; and

- Health and Safety Plan and Quality Assurance/Quality Control Plan.

5.3 Environmental Monitoring

Before the start of construction, the Owner will employ a third party inspector that will report directly to NYSDEC. This inspector will monitor the project daily during the hours in which the NYS Public Service Commission environmental inspector is not available to inspect the dredging operations. The Owner will submit a 3rd party inspection program to the NYSDEC Permit Administrator for review and approval that identifies and details the responsibilities of the 3rd party environmental inspector. The 3rd party inspector will be empowered to order correction of acts that violate the environmental conditions of the certification and to order the temporary cessation of construction activities until such corrective action has occurred.

5.4 Pre-dredging: Determining Ambient Background Conditions

Prior to dredging, the Owner will determine ambient background total suspended solids (TSS), turbidity (NTU) and total PCB (Method 608) concentrations within the water column of the Hudson River. Samples will be collected for two days preceding the dredging operation. Samples should be collected at locations both 500 feet upstream and downstream of the work area.

Samples will be collected at three depths: approximately 18 inches below the surface, at mid-depth and at three feet above the bottom. The background NTU will be the maximum NTU measured in all of the upstream and downstream monitoring locations.

5.5 Cofferdam De-watering

Dewatering of the cofferdam will be conducted so as to not add substantial suspended solids, turbidity or sheens to the Hudson River. Continuous monitoring of the turbidity (NTU) of the effluent water, during dewatering of the cofferdam, will be conducted. This water may be discharged to the river if the turbidity in the dewatering effluent is less than the background NTU + 10% (background as determined above). If the turbidity exceeds background NTU + 10%, or if the 3rd party inspector so orders (based on the inspector's observance of visible contrast to ambient background conditions in the water column), this water must be processed through an activated carbon filter prior to discharge to the River and monitored for PCB concentrations as per Tables 5-1 and 5-2 below. Prior to activated carbon treatment of the water, pre-filtration must take place to get down to 10 microns or better. The empty bed contact time for activated carbon must be 18 minutes.

Subsequent to dredging the confines of the cofferdam, monitoring of the cofferdam dewatering effluent will be conducted every four hours for twenty-four hours. The collected samples will be analyzed for PCB as per EPA Method 608. If PCB concentrations in this effluent are less than limits in Table 5-1 below, then the effluent from the 4 to 6 week continuous dewatering process can be discharged directly to the Hudson River. No further monitoring of the dewatering effluent will be required as long as visual observation and turbidity meter readings remain constant. If the PCB concentrations exceed concentrations established in Table 5-1, the effluent from this dewatering process must be sent through the activated carbon filters on the barge. Monitoring of the effluent from the activated carbon filters should be conducted once per twelve hour shift for PCB concentration.

5.6 Dredging

An environmental bucket will be used for this project. Drawings and performance specifications of the environmental bucket will be provided to NYSDEC 30 days prior to the anticipated start date of dredging.

Dredging will take place within the confines of a cofferdam to be constructed prior to the onset of the dredging operation.

For an environmental bucket, the following specifications apply:

1. The bucket will be constructed with sealing gaskets or an overlapping sealed design at the jaws, and seals or flaps positioned at locations of vent openings to minimize the loss of material during transport over the water column and into the barge. Any seals or flaps designed and/or installed at the jaws and locations of vent openings must tightly cover these openings while the bucket is lifted over the water column and into the barge. If excessive loss of water and/or sediments from the bucket is observed from the time of it is breaking the water surface to crossing the barge gunwale, the inspector will halt dredging operations and inspect the bucket for defects. Operations will be suspended until necessary repairs or replacements are made.

2. The bucket will be lowered to the level of the barge gunwales prior to the release of the load.

Only barges in good operating condition will be employed to contain the sediment and water placed in them, so that discharge of sediment or water is prevented until the dewatering and treatment has been completed. Deck barges will not be used to contain dredged sediments unless the barge has been modified to provide for complete containment of the sediments and water. There will be no barge overflow.

Barge effluent water will be treated with activated carbon filters (or equivalent technology) prior to discharge to the river.

For activated carbon filtering, pre-filtering (to achieve 10 microns) and an 18 minute empty bed contact time for the carbon are required.

Dredging operations will not cause an increase in turbidity that will result in a substantial visible contrast to ambient background conditions.

5.7 Ultimate Fate of Dredge Spoils

A plan, acceptable to the NYSDEC, for the ultimate management of dredge spoils will be submitted to the NYSDEC at least 30 days prior to the start of dredging. Dredged material from this project must be properly disposed of at an approved upland location.

5.8 Effluent From Activated Carbon Filtering Operations

Turbidity in return water must not exceed previously measured ambient background NTU +10%.

Field results will be reported to the NYSDEC within 24 hours of collection. Laboratory results will be reported to the NYSDEC within 48 hours of receipt.

Return water discharge requirements for PCBs are summarized in Table 5-1.

5.9 Monitoring and Reporting Requirements:

Monitoring and Reporting of effluents from activated carbon treatment processes are to be conducted as per Table 5-2.

5.10 Reporting Requirements and Seasonal Restrictions

Laboratory analyses, except EPA Method 1668A analyses, required by this permit will be conducted by a laboratory certified by the New York State Department of Health. Monitoring data will be submitted to the Bureau of Environmental Permits, attention Chris Hogan, 625 Broadway, 4th floor, Albany NY, 12233

To protect fish spawning, there will be no dredging activity in this portion of the Hudson River from April 1st through August 31st of any year.

Table 5-1. PCB Return Water Discharge Requirements from Activated Carbon Filtering Processes

In-stream Background PCBs Less Than Detection Limit (65 ppt)

Action Level for Additional Engineering Controls	**Stop Work**
≥65 ppt	≥300 ppt

Detectable In-stream Background PCBs Less Than 300 ppt, greater than 65 ppt

Action Level for Additional Engineering Controls	**Stop Work**
>Background Concentration	≥300 ppt

In-stream Background PCBs Greater Than 300 ppt

Action Level for Additional Engineering Controls	**Stop Work**
	≥300 ppt

Note: (1) All Concentrations are per single PCB Aroclor using EPA Method 608. One out of every 10 PCB samples shall also be analyzed using Method 1668A. Action and Stop Work levels will be based upon the average result from 3 consecutive samples. For determining the average PCB concentration when the value is reported as non-detected, the average will be calculated using one half of the method detection level. In addition, Method 1668A monitoring results may not be used to assess compliance with the certification.

In the event of an exceedance of the permit limits, the Owner will immediately notify the NYSDEC of actions to be taken to rectify the problem.

Table 5-2. PCB Return Water Monitoring and Reporting Requirements from activated carbon filtering processes

Parameter	**Visual Monitoring**	**Turbidity Meter Reading**	**Laboratory Measurement**
Turbidity	Hourly while discharging	Continuous monitoring. Report every 4 Hours while discharging	Every 4 hours while discharging
Total Suspended Solids			Every 4 hours while discharging
PCB's			Every 4 hours while discharging
Background sampling			Daily

Notes:

NYSDEC will evaluate the monitoring program after the first 2 days of discharge operation. If the reported concentrations of PCBs consistently meet the limits in Table 5-1, then one sample will be collected per 12 hour shift for laboratory measurement thereafter.

Background sampling to be performed approximately 500 ft. upstream of discharge and 500 ft. downstream of the discharge.

6 HEALTH AND SAFETY PLAN

6.1 Introduction

Subject to final requirements for remediation, there will be a health and safety plan required for construction activities on the site. A site-specific Health and Safety Plan has been prepared for construction of the power plant.

6.2 Elements of the Plan

The health and safety plan will be tailored for construction workers on the Site after it has been released under the VCA or accepted by NYSDEC as remediated in accordance with the final remedial action report. The content of the construction health and safety plan will depend upon the extent of the remedial effort relative to individual construction related activities.

The plan may include the following elements typical of an OSHA-compliant plan: site control; training; exposure level control techniques (engineering controls, work practices, personal protective equipment); air monitoring; informational program; decontamination procedure; emergency response; and medical surveillance.

6.3 Contingencies

The procedures that will be followed in the event a contingency arises during construction will be addressed in the Emergency Response Plan and/or the Health and Safety Plan. The objective of this section of the Plan will be to minimize the impact of the contingency on site workers and area residents. This section will address emergency response procedures, testing requirements, and notification procedures in response to contingencies.

In the event, non-aqueous phase liquids (NAPL) or unexpected environmental conditions are encountered during the geotechnical investigation or construction, NYSDEC, the City of Rensselaer Engineer, and the property owner will be notified and the condition will be addressed in accordance with applicable requirements.

To Be Issued

To Be Issued

September 25, 2007

VIA OVERNIGHT MAIL

Hon. Jaclyn A. Brilling
Secretary
New York State Department of Public Service
Three Empire State Plaza
20th Floor
Albany, NY 12223-1350

Re: ***Besicorp-Empire Power Company, LLC; Case 00-F-2057***
Certificate Condition XIII.A, Community Liason Plan

Dear Secretary Brilling:

On September 24, 2004, the New York State Board on Electric Generation Siting and the Environment (Siting Board) granted to Besicorp-Empire Development Company a Certificate of Environmental Compatibility and Public Need (Certificate). The Certificate was subsequently transferred to Besicorp-Empire Power Company, LLC (BEPCO) by the Siting Board's Order issued and effective June 21, 2007.

Condition XIII.A of the Certificate Conditions (Appendix A of the Siting Board's Opinion and Order) requires that the Certificate Holder file with the Siting Board as a Compliance Filing a Community Liason Program which describes the means by which the Certificate holder will provide adequate notice and means of communication with surrounding communities and stakeholders prior to project construction. Therefore, enclosed herewith please find a copy of the Community Liason Plan that addresses the requirements in Condition XIII.A.

Respectfully submitted,

BESICORP-EMPIRE POWER COMPANY, LLC



Tyler Reeder, Treasurer

cc: Andrew Davis, New York State Department of Public Service
Chris Hogan, New York State Department of Environmental Conservation
Active Parties List

BESICORP-EMPIRE POWER COMPANY, LLC

COMMUNITY LIAISON PROGRAM (CLP)

CASE 00-F-2057

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INTRODUCTION

In July 2007 Energy Capital Partners (ECP) through its wholly-owned subsidiary Empire Gen Holdings, Inc., purchased from Besicorp-Empire Development Company (BEDCO), Besicorp-Empire Power Holdings, Inc., which owns 100% of membership interests in Besicorp-Empire Power Company, LLC (BEPCO). BEPCO is the owner and developer of a 635 Megawatts (MW) (including 107 MW of peaking capacity) combined cycle, natural gas fired power plant in Rensselear, New York (Project). ECP and its affiliates have retained FirstLight Power Resources, Inc. and its affiliates (FirstLight) to act as project manager for and operator of the Project. FirstLight is a highly qualified energy company that owns and operates over 1,442 MW of generation in Connecticut and Massachusetts. FirstLight is submitting this Community Liaison Program (CLP) for the Project on behalf of BEPCO.

The following document outlines the details of the CLP for the Project pursuant to Appendix A of the Article X Certificate of Environmental Compatibility and Public Need, Certificate Conditions XIII.A. and XIII.B. The CLP will be administered by FirstLight.

The objective of the CLP is to insure:

- That adequate notice and means of communication with surrounding communities and stakeholders is established and maintained by the Project; and
- That complaints and concerns regarding the construction and operation of the Project are promptly and appropriately addressed.

CONDITION XIII.A:

A.(i) Targeted communities and stakeholders and limits of geographic areas:

- The principal target community for the CLP is the City of Rensselaer (City), the Project's host community. The comprehensive permitting process for the Project was effective in identifying stakeholders and in ascertaining that, aside from those parties on the Active Party List, the primary community interest in the Project is from property owners and residents in close proximity to the site, and particularly residents in the Fort Crailo neighborhood. However, because construction of the natural gas pipeline and electric transmission lines extend to neighboring East Greenbush, North Greenbush, and the Town of Schodack, abutting property owners and residents in those municipalities and the town supervisors have also been identified as stakeholders and will also be included in notice and communication procedures under the CLP. Exhibit 1 provides a list of property owners and residents within 1,000 feet of the transmission line, the gas line and main plant taken from tax maps.

A.(ii) Methods of timely notification and information dissemination to involved communities and stakeholders of the construction schedule prior to and during each phase of construction:

- **Initial CLP Notification:** The process for providing initial notification about the CLP will be through both a direct newsletter mailing to the targeted communities and stakeholders and a posting on the Project Website. A sample newsletter is attached as Exhibit 2. The newsletter will include all information required for effective communications on the Project such as a construction schedule, identification of the Community Liaison Officer (CLO) and his office location and phone numbers, the formation of the Citizens Committee, Website identification, etc.

- **Community Liaison Officer / Office:** The Community Liaison Officer (CLO) and the Community Liaison Office location and telephone number will be identified in the initial newsletter in October 2007 and in all subsequent quarterly (October, January, April, July) newsletters and communications materials, on the Project's website, and at the Project's office. Jim Ginnetti, Vice President of External Affairs for FirstLight will serve as the CLO. The Project office will be located in Rensselaer and will be identified in the initial newsletter.

- **Citizens Committee:** A Citizens Committee will be formed and will meet on a quarterly (October, January, April, July) basis or more often, if needed. The CLO will provide updates on the Project schedule and activities to the Committee and provide responses to any questions or concerns.

- **Project Website:** The Project Website will be the primary tool for posting and dissemination of Project information on a timely basis and will be updated monthly to reflect changes and significant events. The website will include an opportunity to email questions to the CLO. A response to any inquiry will be made within two business days or the next business day for overnight messages for bona fide community liaison calls.

- **Alternative Information Resources:** It is recognized that all interested members of the community may not have access to the internet or may prefer more traditional methods of notice and communication. Therefore, FirstLight will make initial notification regarding commencement of Project construction, the construction schedule, contact information for the CLO, and alternative information resource locations (such as City/Town municipal offices and libraries in Rensselaer, East Greenbush, North Greenbush, and Schodack, and the Project office) through a direct newsletter mailing.

- **Special Construction Activities:** Any special construction activities (e.g., blasting or loud noise events such as steam blows) will be addressed by direct mail notification to residents within close proximity (Fort Crailo and South Street in Rensselaer and Hillview in East Greenbush) to

the site and may be accompanied by public service announcements on local media and notices posted in City/Town municipal offices and libraries in Rensselaer, East Greenbush, North Greenbush, and Schodack, at the Project office, and by announcement to the Citizens Committee.

Exhibit 3 provides a timeline of planned community outreach activities listed alongside key construction activities.

A.(iii) Criteria used to determine the direct mailing list:

- A mailing list was developed and updated in September 2007. The mailing list includes: (1) all Active Parties, (2) all addresses in zip code 12144 (Rensselaer), and (3) the property owners and residents within 1,000 feet of the gas pipeline and electric transmission line in the towns of East Greenbush, North Greenbush, and the Town of Schodack. The mailing list also includes the following: the Rensselaer School District; the Rensselaer Police Department; and the Rensselaer Planning and Building Department. Exhibit 1 lists those property owners and residents within 1,000 feet of the gas pipeline, the electric transmission line, or the plant. Exhibit 4 is the Active Party List.

A.(iv) All public locations where information shall be deposited for review and/or dissemination:

Copies of the newsletter will be made available for any interested parties at the following locations. Representatives from the Project will coordinate with municipal employees at City Hall and head librarians or staff directors to ensure information is readily accessible at respective public locations:

- The Project Website
- The Project office
- Rensselaer City Hall
- East Greenbush Town Hall
- North Greenbush Town Hall
- Schodack Town Hall
- Local Public Libraries

Rensselaer Public Library
810 Broadway
Rensselaer, NY 12144

N Greenbush Public Library
138 Main Avenue
Wynantskill, NY 12198

E. Greenbush Community Library

10 Community Way
East Greenbush, NY 12061

A.(v) A media contact plan to solicit the issuing of public service announcements for any construction phase activities that are likely to result in significant inconvenience to the public (such as traffic disruption):

The following list of media outlets will be utilized for making requests for dissemination of public service announcements. The CLO will be responsible for implementation of requests for public service announcements when an event likely to result in significant inconvenience or concern to the public is foreseen or experienced. Examples of such events include heavy hauls, steam blows, blasting, or other unusual significant noise generating events. Since such events are expected to be limited in number, scheduled in advance and during non-peak hours where possible (for heavy hauls), and noticed to local City and Rensselaer County entities pursuant to Certificate Condition X.U., the potential for public inconvenience will be well managed.

Newspapers:

- Albany Times Union
  - Albany edition
  - Rensselaer edition
- Troy Record
- The Advertiser
- Rensselaer Independent

Radio stations:

- WAMC 90.3 FM
- WGY 810 AM
- WROW 590 AM

Television stations:

- Channel 6 – WRGB
- Channel 9 - Time Warner Cable Community Calendar
- Channel 10 – WTEN
- Channel 13 – WNYT
- Channel 23 – Fox WXXA

A.(vi) Materials used to reach stakeholders with construction information (e.g., Q&A, newsletters, information brochures, visual materials, graphs, charts, site maps, etc.)

- The Project Website
- Direct mail notifications
- Newsletters/Project brochures (See Exhibit 2)
- Construction Schedule (on Project Website and bulletin boards)
- Site maps (on Project Website and bulletin boards in municipalities and at the construction site)
- Information board outside City/Town Clerks' offices in Rensselear, East Greenbush, North Greenbush, and the Town of Schodack

A.(vii) Certificate Holder's representatives and means of contact (e.g., office location, local and toll-free telephone numbers, web address, construction site sign, information board, etc.):

- CLO: Jim Ginnetti, Vice President of External Affairs for FirstLight
  - Toll-free 24 hour line - 866-532-6176
- Project website - www.firstlightpower.com
- All contact information will be posted on information bulletin board at Town halls in Rensselaer, East Greenbush, North Greenbush, and Schodack and on Project signs posted at the construction site
- Immediate emergency calls should be directed to Peter Leighton, Project Manager at (860) 402-4760.

A.(viii) A toll-free dedicated telephone line with specified hours of operation and inquiry response time:

- Toll-free 24 hour line – 866-532-6176

- A response to any inquiry will be made within two business days or the next business day for overnight messages for bona fide community liaison calls. (This response time does not apply to calls regarding solicitation of sales, services, or employment, or other matters not pertinent to the stated objectives of the CLP.)

- Immediate emergency calls should be directed to Peter Leighton, Project Manager at (860) 402-4760. Emergency calls will be addressed immediately.

A.(ix) The maintenance of a complaint log specifying procedures for receiving and responding to any complaints concerning the construction of the certified facility. Utilization of the complaint log shall extend through the operational period:

A complaint issues log shall be kept on a daily basis and copies will be provided monthly to the Citizens Committee as part of the normal reporting process and a copy will be provide the Department of Public Service (DPS) The log shall

include the following:

- date and time of initial contact
- mode of contact (e-mail, phone, letter, in person)
- nature of complaint
- date and time of response or responses
- action taken/complaint resolution

Exhibit 5 illustrates the complaint log with a hypothetical example.

A.(x) The complaint response process to be used:

- Single point of contact – CLO at 866-532-6176, website at www.firstlightpower.com, or Citizens Committee
- Initial complaint – oral discussion with CLO or designee – complaint logged with promised response time
- Complaint addressed and fully documented
- Oral and written documentation provided to caller to ensure clarity
- Acknowledgement provided within two business days
- Response depending upon nature of questions

A.(xi) Availability of a public presentation request program to inform the public about the construction and operation of the facility. The availability of the public presentation request program will extend through the operational period:

A public presentation will be made if requested with two weeks advance notice. The process to request such a presentation can be through any of the communication processes identified in the CLP. The presentation will be organized by the CLO. All material presented at public presentations will be posted on the website at www.firstlightpower.com.

A.(xii) Methods to evaluate the adequacy and effectiveness of the public liaison program:

- **Complaint log** — The complaint log will be updated on a daily basis and distributed to the Citizens Committee on a monthly basis. The response time and documented solution will be the core method of gauging the success of the program. The Citizens Committee will confirm the effectiveness and response time of the program. The DPS will be provided a copy of the complaint log on a monthly basis.

- **Updated communication materials** —Updated communications materials will also be submitted to the Citizens Committee for their review. Copies of these materials will be provided the DPS.

A.(xiii) Office location and hours:

- An office in Rensselaer will be opened and staffed on:
  - Tuesdays from 9 A.M. to 1 P.M.
  - Thursdays from 2 P.M. to 6 P.M.
  - The office will not be staffed on these days if they fall on a Federal or State holiday.

CONDITION XIII.B:

Prior to commencing construction, the Certificate Holder shall form a citizens committee, the final composition of which is to be determined, but that will include at minimum representatives of the Certificate Holder (including the CLO) and the City of Rensselaer. The committee will meet on a regularly scheduled basis to receive Project status updates and to discuss any issues of concern related to the Project:

- **Planned participants:**
  - CLO, Jim Ginnetti, Vice President External Affairs for FirstLight
  - Peter Leighton, Project Manager for FirstLight
  - Tom Nardacci, Local Consultant to the Project
  - Gordon Reynolds, Rensselaer Superintendent of Schools
  - Mayor Dan Dwyer, Mayor of Rensselaer
  - Representatives from the Town Planning Department of Rensselaer, East Greenbush, North Greenbush, and Schodack.

Meeting frequency: As needed, but no less than quarterly during construction.

EXHIBITS TO

BESICORP-EMPIRE POWER COMPANY, LLC

COMMUNITY LIAISON PROGRAM (CLP)

CASE 00-F-2057

CLP Exhibit 1

Property Owners and Residents within 1,000 feet of the transmission line, gas line, and main plant

TAXMAPID	T-Line	Gas Line	Main	OWNER_1	OWNER_2	STREET	CITYSTATE	ZIP_5
133.-1-2	x			RENSSELAER POLYTECHNIC	INST C/O ANNE M KERWIN	100 JORDAN ROAD	TROY,NY	12180
133.-2-1.11	x			ROSETTI FAMILY	IRREVOCABLE TRUST 11	427 NEW KARNER RD	ALBANY NY	12207
133.-2-1.12	x			VANALSTYNE DEVELOPMENT	GROUP	451 HOOSICK ST	TROY NY	12180
133.-2-1.13	x			VANALSTYNE DEVELOPMENT	GROUP	451 HOOSICK ST	TROY NY	12180
133.-2-15.11	x			HALSEY EUGENE L III		10 THOMPSON CT	RENSSELAER NY	12144
133.-2-15.13	x			JAMES WILLIAM M &	RAYMOND C & CARMELLA &	21 LUDLOW LANE	RENSSELAER NY	12144
133.-2-15.2	x			HALSEY EUGENE L III &	JANICE LYNN	18 LUDLOW LA	RENSSELAER NY	12144
133.-2-21	x			BOLTON DAVID &	MATARAZZO KAREN	20 LAURA LANE	RENSSELAER NY	12144
133.-2-22	x			MILLER JAMES C & JOAN B		LAURA LANE	RENSSELAER NY	12144
133.-2-23	x			NIAGARA MOHAWK POWER CORP	REAL ESTATE TAX DEPT	300 ERIE BLVD WEST	SYRACUSE NY	13202
133.-2-24	x			DWYER EDWARD F & MARY	TRUST	145 LAZY RIVER RD,	NORTH PORT FL	34287
133.-2-25	x			NITTINGER CHARLES		BOX 133A BEST ROAD	EAST GREENBUSH,NY	12061
133.-2-29	x			RENSSELAER POLYTECHNIC	INSTITUTE	100 JORDAN ROAD	TROY N Y	12180
133.-2-3.1	x			WAINMAN GERALD		MOUNTAINVIEW AVE EXT	RENSSELAER NY	12144
133.-2-3.2	x			HERBERT JAMES F SR &	PREGET C	138 VALLEY VIEW BLVD	RENSSELAER NY	12144
133.-2-8	x			STUDDIFORD ANDREW D JR &	LINDA G	12 LUDLOW LANE	RENSSELAER,NY	12144
134.-1-11.1	x			NOVAK JOSEPH Z & PATRICIA	A	650 CHURCH ST	WYNANTSKILL NY	12198
134.-1-14	x			CONSOLIDATED GAS	TRANSMISSION SUPPLY CORP.	445 WEST MAIN ST	CLARKSBURG WV	26301
134.13-1-14.1	x			MCDONALD BLANCHE E &	DINGSOR ODIN	14 AVENUE C WEST	RENSSELAER NY	12144
134.13-1-21.1	x			BLOODGOOD ROBERT D &	BETH L	12 WEST AVE B	RENSSELAER NY	12144
134.13-1-22	x			WHITEGIVER DELLA		428 N GREENBUSH RD	RENSSELAER, NY	12144
134.-1-4.3	x			FISHER CHARLES L & KAREN	S	27 JORDAN ROAD	TROY,NY	12180
134.-1-5	x			NORTH GREENBUSH ASSOC	C/O KEN FEIDEN HOME	375 NORTH GREENBUSH RD	TROY NY	12180
134.-1-6	x			CHIARO PETER J & ANO	DBA YONDER FARMS	381 NORTH GREENBUSH RD	TROY NY	12180
134.-1-7	x			NIAGARA MOHAWK POWER CORP	REAL ESTATE TAX DEPT	300 ERIE BLVD WEST	SYRACUSE NY	13202
134.-1-8.1	x			LOMBARDI PAUL		104 WEST SAND LAKE RD	WYNANTSKILL NY	12198
134.5-6-4	x			WEHNAU WALTER		429 BLOOMINGROVE DR	TROY NY	12180
134.5-7-3	x			DAMICO FRANK MICHAEL		404 BLOOMINGROVE DR	TROY NY	12180
134.5-7-6	x			DAMICO FRANCES & FRANK		494 BLOOMINGROVE DR	TROY NY	12180
134.9-1-26.131	x			LYONS ETHEL REYNOLDS		RD 4 BOX 466	TROY,NY	12180
134.9-1-26.132	x			TOWN OF NORTH GREENBUSH		MAIN ST	WYNANTSKILL,NY	12198
144.-10-11	x			TOBIN MARY F		RD 2 THIRD AVE EXT	RENSSELAER NY	12144
144.-10-12	x			COTUGNO FREDERICK T &	DEBRA L	1712 WASHINGTON AVE EXT	RENSSELAER NY	12144
144.-10-33.1	x			CATLYN & DERZEE INC		1 JUPITER DR	DELMAR NY	12054
144.-10-42.1/1	x			NORTH GREENBUSH ASSOC LLC	C/O NIGRO COMPANIES	20 CORPORATE WOODS BLVD	ALBANY NY	12211
144.-10-43	x			CLARK WM CLARK CONST CO		3RD AVENUE EXT RD 2	RENSSELAER,NY	12144
144.2-3-15	x			OBRIEN TIMOTHY P		65 MEADOW LANE	ALBANY N Y	12208
144.-3-4	x			RED HOUSE FARM INC		200 HICKS ST	BROOKLYN NY	11201
144.-4-10	x			TOBIN MARY F		RD 2 THIRD AVE EXT	RENSSELAER, NY	12144
144.-4-11	x			CLARK WILLIAM H		RD 2 3RD AVE EXT	RENSSELAER, NY	12144
144.-4-41.3	x			ALBANY INTERNATIONAL CORP		1373 BROADWAY	MENANDS NY	12180
144.-4-42./1	x			RENSSELAER COUNTY PLAZA	ASSOCIATES	20 CORPORATE WOODS	ALBANY NY	12211
144.-4-47	x			THIRD AVENUE EXT CORP	C/O HARVEY DWIGHT	52 THOMPSON HILL	RENSSELAER, NY	12144
144.-4-48	x			NIAGARA MOHAWK POWER CORP		300 ERIE BOULEVARD WEST	SYRACUSE, NY	13202
144.-4-49	x			PLATH ERIKA		THIRD AVE EXT	RENSSELAER, NY	12144
144.-4-50	x			BRUINS GYSBERT JR & RUTH		11 PATROON LANE	RENSSELAER NY	12144
144.-4-51	x			NOPPER HERBERT & MARILYN		15 PATROON LANE	RENSSELAER, NY	12144
144.-4-59.1	x			WEST LYNN CREAMERY INC		626 LYNN WAY	LYNN MA	01905
144.-4-59.2	x			NOPPER RICHARD L		13 RHODE ISLAND AVE	RENSSELAER, NY	12144
154.-2-10		x		CATALDO JOSEPH		45 ELLIOT ROAD	EAST GREENBUSH, NY	12061
154.-2-11		x		CATALDO JOSEPH A		45 ELLIOTT ROAD	EAST GREENBUSH, NY	12061
154.-2-12		x		BAUER ARTHUR M &	MILDRED HELEN	3580 RIVER RD	RENSSELAER, NY	12144

Note: In the process of updating through the Rensselaer County Office of Real Property Service

CLP Exhibit 1

Property Owners and Residents within 1,000 feet of the transmission line, gas line, and main plant

154.-2-13		x		HURLEY MICHAEL S &	BARBARA	3570 RIVER ROAD	RENSSELAER,NY	12144
154.-2-14		x		ALBERTI LESLIE M & OLGA		7 GROVE ST	DELMAR NY	12054
154.-2-15	x	x		TELLERS CROSSING INC		369 BOSTWICK RD	PHELPS NY	14532
154.-2-16.2	x			ALBANY PORT DISRICT COMM		ADMIN BLDG PORT OF ALBANY	ALBANY, NY	12202
154.-2-17	x			SPRAGUE ENERGY CORP		ONE PARADE MALL	PORTSMOUTH NH	03801
154.-2-18	x	x		TRANS MONTAIGNE TERMINAL	INC	PO BOX 1530	FAYETTEVILLE AR	72701
154.-2-19	x	x		GORMAN TERMINALS LLC		CHURCH ST	ALBANY NY	12202
154.-2-7	x	x		ROSENBLUM HYMAN		PO BOX 444	EAST GREENBUSH, NY	12061
154.-2-9.11		x		GREGOLI CAMELO	C/O CATHERINE GREGOLI	601 SOUTH ST	RENSSELAER, NY	12144
154.-2-9.12		x		CATALDO JOSEPH A		601 SOUTH ST	RENSSELAER NY	12144
154.-2-9.13		x		CATALDO JOSEPH A		601 SOUTH ST	RENSSELAER NY	12144
154.43-1-1.1			x	BRYAN BOURQUE		PO BOX 253	RENSSELAER, NY	12144
154.43-1-2			x	PAUL FISHER		PO BOX 253	RENSSELAER, NY	12144
154.43-1-8			x	MARLENE D. MILLER		378 SOUTH STREET	RENSSELAER, NY	12144
154.-5-10	x	x		PETROLEUM FUEL & TERMINAL	CO ATTN DAVID RUECHER	8182 MARYLAND AVE	ST LOUIS, MO	63105
154.-5-11.2	x	x		GORMAN TERMINALS LLC			RENSSELAER NY	12144
154.51-1-2			x	HOWARD AND LOIS HAZELTON		28A SHELTERWOOD ROAD	EAST GREENBUSH, NY	12061
154.51-1-3			x	JOHN C. PALELLA		390 SOUTH STREET	RENSSELAER, NY	12144
154.51-1-5			x	ALFRED AND MARY MAYOU		22 NEWKIRK ROAD	EAST GREENBUSH, NY	12061
154.51-1-6			x	ALFRED AND MARY MAYOU		22 NEWKIRK ROAD	EAST GREENBUSH, NY	12061
154.51-1-7		x		ROSSMAN MARVIN J JR &	AMY D	95 THIRD AVE	RENSSELAER NY	12144
154.-5-12	x			TRANSMONTAIGNE TERMINAL		280 NORTH COLLEGE	FAYETTEVILLE AR	72701
154.-5-2.1	x	x	x	BASF WYANDOTTE CORP	WAYNE ST. CLAIR	36 RIVERSIDE AVE	RENSSELAER NY	12144
154.-5-3.1	x		x	ALBANY-RENSSELAER PORT	DISTRICT COMMISSION	RIVERSIDE AVE	RENSSELAER, NY	12144
154.-5-6	x		x	POWER TEST REALITY COMPANY LTD PAR	C/O GETTY PETROLEUM CORPORATION	125 JERICHO TPKE	JERICHO NY	11753
154.-5-7	x	x	x	POLSINELLO FUELS INC		141 AIKEN AVE	RENSSELAER NY	12144
154.-5-8	x	x		BRAY TERMINALS INC		PO BOX 956	GLENS FALLS NY	12801
154.-5-9	x		x	POWERTEST REALTY	COMPANY LTD PARTNERSHIP	125 JERICHO TPKE	JERICHO NY	11753
154.59-2-1		x		PETJAM INC	TACYS EXPRESS	550 SOUTH ST	RENSSELAER NY	12144
154.59-2-2		x		J V W REALTY CORP		500 SOUTH ST	RENSSELAER, NY	12144
154.59-2-3		x		J V W REALTY CORP		500 SOUTH ST	RENSSELAER, NY	12144
154.59-3-2		x		RECTOR HARRY L & STEPHEN		15A FORBES AVE	RENSSELAER, NY	12144
154.59-3-3.1		x		PIAZZA-CAIRNS REALTY CORP		507 SOUTH ST	RENSSELAER, N.Y.	12144
154.59-3-3.2		x		PIAZZA-CAIRNS REALTY CORP		507 SOUTH ST	RENSSELAER,NY	12144
154.59-3-4		x		PIAZZA-CAIRNS REALTY CORP		507 SOUTH ST	RENSSELAER, N.Y.	12144
154.59-3-5		x		GREENBUSH CLEANING	SERVICE INC	GREENBUSH FAIR PLAZA	EAST GREENBUSH, NY	12061
154.59-3-6		x		STILSING HAROLD L	C/O STILSING ELEC INC	555 SOUTH ST	RENSSELAER, NY	12144
154.59-3-7		x		STILSING ELECTRIC INC		BOX 27	RENSSELAER NY	12144
154.67-1-1		x		STILSING ELECTRIC INC		BOX 27	RENSSELAER, NY	12144
154.67-1-2.1		x		GREGOLI CARMELO		601 SOUTH ST	RENSSELAER NY	12144
154.67-1-2.2		x		CATALDO JOSEPH A		601 SOUTH ST	RENSSELAER NY	12144
155.-10-26	x			KHURI SUHEIL M		478 SPRINGHOLLOW CT	ALBANY,NY	12203
155.11-1-10	x			MOLINEAUX ALBAN M &	BARBARA A	17 ROBERT LANE	RENSSELAER, NY	12144
155.11-1-11	x			GRAY DAVID E & CATHERINE		15 ROBERT LANE	RENSSELAER NY	12144
155.11-1-12	x			CHENG WING & HUI LIN		13 ROBERT LANE	RENSSELAER NY	12144
155.11-1-13	x			LOVELETT STEVEN S &	CAROLE M	11 ROBERT LANE	RENSSELAER, NY	12144
155.11-1-14	x			COSTELLO WILLIAM J III &	LOUISE	9 ROBERT LANE	RENSSELAER, NY	12144
155.11-1-15	x			LAIME ROGER W & PAULA M		7 ROBERT LANE	RENSSELAER NY	12144
155.11-1-16	x			COPELAND KENNETH R &	MARIE L	4 MEAGAN LANE	RENSSELAER NY	12144
155.11-1-39	x			GONYO ELVIRA M &	JEFFREY C	14 ALICE LN	EAST GREENBUSH NY	12144
155.11-1-40	x			DONOVAN & CELELLO	DEVELOPMENT CORP	KNICKERBOCKER FARM ROAD	VALATIE NY	12184
155.11-1-41	x			DILLON PAUL & KATHLEEN		15 ALICE LANE	RENSSELAER NY	12144
155.11-1-42	x			OLEARY THOMAS F		11 ALICE LANE	RENSSELAER NY	12144

Note: In the process of updating through the Rensselaer County Office of Real Property Service

CLP Exhibit 1

Property Owners and Residents within 1,000 feet of the transmission line, gas line, and main plant

155.11-1-9	x			KRAMER MICHAEL L & MINDY		19 ROBERT LANE	RENSSELAER NY	12144
155.-12-2.111	x			EDISON PAVING CORP		PO BOX 189	WATERVLIET NY	12189
155.-12-2.113	x			CORELLIS DONALD R		BOX 335	RENSSELAER NY	12144
155.-12-2.114	x			RENSSELAER COUNTY I.D.A.	C/O K & P MANAGEMENT	PO BOX 17098	WEST HARTFORD CT	06117
155.13-21-20	x			NIAGARA MOHAWK POWER CORP		300 ERIE BOULEVARD WEST	SYRACUSE, NY	13202
155.14-23-5.2	x			MCDONALD WILLIAM &	PAULINE	30 MCDONALD LANE	RENSSELAER NY	12144
155.14-23-5.3	x			MC DONALD CHRISTINA M		17 STOCK LANE	RENSSELAER NY	12144
155.15-1-1	x			RADLEY HANK D & ELLEN M		1228 RED MILL RD	RENSSELAER NY	12144
155.15-1-12	x			RAYMOND EDWARD & GRACE		3 MEAGAN LANE	RENSSELAER NY	12144
155.15-2-2	x			MCDONALD CHRISTINA M		17 STOCK LANE	RENSSELAER NY	12144
155.15-2-3	x			MCDONALD CHRISTINA M		17 STOCK LANE	RENSSELAER NY	12144
155.15-2-4	x			MCDONALD CHRISTINA M		17 STOCK LANE	RENSSELAER NY	12144
155.16-4-7	x			WITBECK GEORGE		11 TROY ROAD	EAST GREENBUSH NY	12061
155.-2-15.117	x			SPECKHARDT BARBARA A &	DALBEC RICHARD H & DONNA	88 STOCK LANE	RENSSELAER NY	12144
155.-2-15.2	x			TIME WARNER ENTERTAINMENT	ADVANCE/NEWHOUSE PTRSHP	PO BOX 6659	ENGLEWOOD CO	80155
155.-2-17	x			PAJU ROBERT E &	PERRY MARY L C/O	82 STOCK LANE	RENSSELAER NY	12144
155.-2-18	x			MENCARELLI RICO G &	ARLENE M	78 STOCK LANE	RENSSELAER,NY	12144
155.-2-19	x			VIDOR JOHN E & GLADYS S		RD 2 STOCK LANE	RENSSELAER NY	12144
155.-2-20.13	x			ALCOMBRIGHT SHEILA T		63 STOCK LANE	RENSSELAER NY	12144
155.-2-20.2	x			PUGLIESE FELIX T &	ROSEMARY	45 STOCK LANE	RENSSELAER NY	12144
155.-2-4.112	x			SCHEIBLY EDWARD P & MARK		30 SHERWOOD AVE	RENSSELAER NY	12144
155.-2-7	x			ROSECRANS LILLIAN I &	ESTHER M.	RED MILL ROAD RD 2	RENSSELAER,NY	12144
155.-2-8.1	x			GREANEY MICHAEL &	LORRAINE	145 RED MILL RD	RENSSELAER NY	12144
155.-2-8.2	x			NEWBURY LILLIAN J		105 SCHUURMAN RD	CASTLETON NY	12033
155.-3-2.1	x			TRUSTCO BANK NATIONAL	ASSOCIATION	192 ERIE BLVD	SCHENECTADY, NY	12305
165.-1-10.2	x	x		ALPHA VENTURE ONE	C/O WILLIAM RITZ	PO BOX 370	RENSSELAER, NY	12144
165.-1-11	x			VANAMERONGEN HENRY &	MILDRED & ANSLEY & ADELE	3476 RIVER RD	RENSSELAER NY	12144
165.-1-14	x			AMTRAK	C/O R KLEIN TAX&INS DEPT	400 NO CAPITAL ST NW	WASHINGTON DC	20001
165.-1-15	x	x		DINOVA PHILIP R & BARBARA		3346 RIVER RD	RENSSELAER NY	12144
165.-1-16.1		x		DINOVO IGNATIUS & ELEANOR		3336 RIVER RD	RENSSELAER NY	12144
165.-1-16.2		x		DINOVO ROBERT J &	ROBIN LYN		RENSSELAER NEW YORK	12144
165.-1-17		x		GUTTA PETER J JR &	SORENSEN LINDA E	3314 RIVER ROAD	RENSSELAER,NY	12144
165.-1-18		x		FINCH ANNE J &	FAKUNDINY ROBERT H	3288 RIVER RD - NY 9J	RENSSELAER NY	12144
165.-1-19		x		HERZOG JACOB H JR &	ARLENE	BULLOCK ROAD	SLINGERLANDS, NY	12159
165.-1-20		x		SMITH CAROLE E &	DUDLEY JOHN F	CASTLETON RD	RENSSELAER NY	12144
165.-1-22.111		x		WEBB EMBER E & CHRIS E &	SUSAN	PO BOX 209	RENSSELAER NY	12144
165.-1-22.112		x		WEBB JAMES B		PO BOX 85	EAST GREENBUSH NY	12061
165.-1-22.12		x		RADIO ENTERPRISES INC		4 CENTRAL AVE	ALBANY NY	12210
165.-1-22.2		x		MILLER JOHN III & LYDIA	C/O MILLER LARISA ETAL	8 RIDGE RD	RENSSELAER NY	12144
165.-1-23		x		ISLAND PARK LLC		52 ELMWOOD RD EXT	MENANDS NY	12204
165.-1-24	x	x		360 NORTH PASTORIA	ENVIRONMENTAL CORP	1100 RIDGEWAY AVE	ROCHESTER NY	14652
165.-1-26.1		x		NIAGARA MOHAWK POWER CORP		300 ERIE BOULEVARD WEST	SYRACUSE, NY	13202
165.-1-3.11	x	x		SMITH HAROLD E &	MCMILLEN KEVINTZ	PO BOX 779	RENSSELAER NY	12144
165.-1-3.12	x			ALPHA VENTURE ONE	C/O WILLIAM RITZ	PO BOX 370	RENSSELAER NY	12144
165.-1-3.2		x		ISLAND PARK LLC		52 ELMWOOD RD EXT	MENANDS NY	12207
165.-1-31.1		x		NIAGARA MOHAWK POWER CORP		300 ERIE BOULEVARD WEST	SYRACUSE, NY	13202
165.-1-4.11		x		VANAMERONGEN HENRY &	MILDRED & ANSLEY & ADELE	3476 RIVER RD	RENSSELAER NY	12144
165.-1-4.12	x	x		ISLAND PARK LLC		52 EAST ELMWOOD RD	MENANDS NY	12204
165.-1-4.3		x		BERIGAN JOHN C		3485 RIVER RD	RENSSELAER, NY	12144
165.-1-5	x	x		NEW YORK CENTRAL LINES	LLC	500 WATER ST (J-910)	JACKSONVILLE FL	32202
165.-1-6.1	x	x		TISKO ANTOINETTE		RT 9J PO BOX 21	RENSSELAER NY	12144
165.-1-6.2		x		ISLAND PARK LLC		52 ELMWOOD RD EXT	MENANDS NY	12204
165.-1-7		x		WEBB ELSIE E	C/O D BRICKMAN INC	PO BOX 209	RENSSELAER NY	12144

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CLP Exhibit 1

Property Owners and Residents within 1,000 feet of the transmission line, gas line, and main plant

165.-1-8		x		VANAMERONGEN HENRY				
165.-1-9		x		VANAMERONGEN ANSLEY &	ADELE	3448 RIVER RD	RENSSELAER NY	12144
166.-1-17./1	x			RAFTOGIANIS JOHN &	LEANDROS & KELLEMAN A R	3476 RIVER RD	RENSSELAER NY	12144
166.-1-17./2	x			RAFTOGIANIS JOHN &	LEANDROS & KELLEMAN A R	32 BEECHWOOD DR	BURNT HILLS NY	12027
166.-1-20.11	x			SILVERSTEIN PAUL &	DESCH CAROL ANN	99 WASHINGTON AVE	ALBANY, NY	12210
166.-1-4	x			SILVERSTEIN PAUL		7 WORTHMAN LANE	RENSSELAER NY	12144
166.-1-6	x			MARRA SALVATORE		7 WORTHMAN LANE	RENSSELAER, NY	12144
166.-1-7	x			MANDELBAUM FAMILY	PARTNERSHIP	350 COLUMBIA TURNPIKE	RENSSELAER NY	12144
166.-1-8	x			LEPORE DANTE		1201 FAIRWAY GREEN	MAMAROWECK NY	10543
166.-1-9	x			ZDZIEBLOSKI JOHN & SHEILA		360 COLUMBIA TURNPIKE	RENSSELAER NY	12144
166.-3-1	x			CORELLIS HOLDING CORP.		18 WORTHMAN LANE	RENSSELAER NY	12144
166.-3-2	x			TDT REALTY CORP	C/O T CORELLIS	COLUMBIA TRPK CLINTON HTS	RENSSELAER NY	12144
166.-3-3.12	x			EMPIRE VILLAGE LIMITED	PARTNERSHIP	BOX 335	RENSSELAER NY	12144
166.-3-4	x			LEFFLER MARGARET		42 SINTSINK DR EAST	PORT WASHINGTON NY	11050
166.-3-8	x			COLEMAN LILLIAN M		401 COLUMBIA TPKE	RENSSELAER, NY	12144
166.-3-9	x			STEIGER ELIZABETH B		365 COLUMBIA TPKE	RENSSELAER NY	12144
176.-2-1		x		ABELE JOHN J &	BUONO JOSEPH P JR	216 SHAKER PARK DRIVE	ALBANY, NY	12211
177.-1-2		x		CANADAY DOUGLAS B & WANDA		52 EAST ELMWOOD RD	MENANDS, NY	12204
177.-1-3.1		x		PICKARD KEITH & SUGI		PO BOX 335	EAST GREENBUSH NY	12061
177.-1-4		x		COLUCCIO CINDI		428 HAYS ROAD	RENSSELAER, NY	12144
177.-1-5		x		SMITH ROBERT L &	GERTRUDE S	440 HAYS RD	RENSSELAER NY	12144
177.-1-6		x		SMITH GREGORY S		13 HUCKLEBERRY RD	CASTLETON, NY	12033
177.-6-1		x		SMITH R L SALES INC		458 HAYES ROAD	RENSSELAER, NY	12144
177.-6-2.111		x		GIROUX ARCADE C & CHERYLE		HAYES & CASTLETON ROADS	RENSSELAER, NY	12144
177.-6-2.112		x		SMITH GREGORY S		409 HAYS RD	RENSSELAER NY	12144
177.-6-2.113		x		R L SMITH SALES INC		458 HAYES ROAD	RENSSELAER, NY	12144
177.-6-2.114		x		SHELDON KENT W & JEANETTE		466 HAYS RD	RENSSELAER, NY	12144
177.-6-2.12		x		GIROUX ARCADE C & CHERYLE		PO BOX 366	EAST GREENBUSH NY	12061
177.-6-3		x		COLVIN MICHAEL		789 HAYS RD	RENSSELAER NY	12144
177.-6-4		x		NAGY IMRE		2-B MAURICE LANE	CLIFTON PARK NY	12065
177.-7-1.1		x		NAGY IMRE		1205 BROADWAY	ALBANY NY	12204
177.-7-1.2		x		THOMAS CHARLES JR & NANCY		1205 BROADWAY	ALBANY NY	12204
177.-7-2.1		x		SPOTTLE HELEN		2610 RIVER RD	CASTLETON,NY	12033
177.-7-2.2		x		NAGY IMRE		200 WOODLAWN AVENUE	ALBANY,NY	12208
177.-7-3		x		DUNWORTH ROBERT R &	MARGARET R	1205 BROADWAY	ALBANY NY	12204
177.-7-4		x		BAYLEY MICHAEL A &	BRADLEY CATHERINE L	2520 RIVER RD	CASTLETON NY	12033
177.-7-5		x		ABELE JOHN J &	BUONO JOSEPH P JR	45 MEADOWBROOK DR	SLINGERLANDS NY	12159
177.-7-6		x		PATRICELLI ANDREW C &	WOLFE CINDY L	52 E ELMWOOD RD	MENANDS NY	12204
187.-1-1.1		x		ZERONDA F J INC		16 MAPLE ST	RENSSELAER NY	12144
187.-1-15		x		HOOGEBERGH, INC	C/O B S STAATS	446 SECOND ST	ALBANY,NY	12206
188.-1-1		x		COLVIN PAUL H & DELORES		RD 1 STAATS ISLAND RD	CASTLETON NY	12033
188.-7-1		x		POULOS DENNIS A & BETTE		2388 RIVER ROAD	CASTLETON, NY	12033
			x	ALEKSANDER AND CHRISTINE PIASNIK		2270 RIVER RD	CASTLETON, N.Y.	12033
			x	GORDON AND LINDA NOEL		279 SOUTH STREET	RENSSELAER, NY	12144
			x	MARVIN ROSSMAN		RD 1	RENSSELAER, NY	12144
			x	ORGANICHEM	JOHN FALLONE, PRESIDENT	480 SOUTH STREET	RENSSELAER, NY	12144
			x	Albany County Sewer District	Richard Lyons	33 RIVERSIDE AVE.	RENSSELAER, NY	12144
			x	Exxon-Mobil Corporation	Thomas L. Jamieson	P.O. Box 4187	Albany, NY	12204
			x	RENSSELAER IRON AND STEEL		50 Church Street	Albany, NY	12202
			x	CITY OF RENSSELAER		35 RIVERSIDE AVE	RENSSELAER NY	12144
						933 BROADWAY	RENSSELAER NY	12144

Note: In the process of updating through the Rensselaer County Office of Real Property Service

CLP Exhibit 2

FirstLight™
Power Resources

Newsletter
September 2007

In July 2007 Energy Capital Partners (ECP) through its wholly-owned subsidiary Empire Gen Holdings, Inc., purchased from Besicorp-Empire Development Company (BEDCO), Besicorp-Empire Power Holdings, Inc., which owns 100% of membership interests in Besicorp-Empire Power Company, LLC (BEPCO). BEPCO is the owner and developer of a 635 Megawatts (MW) (including 107 MW of peaking capacity) combined cycle, natural gas fired power plant in Rensselaer, New York (Project). ECP and its affiliates have retained FirstLight Power Resources, Inc. and its affiliates (FirstLight) to act as project manager for and operator of the Project

In order to maintain adequate notice and means of communication with surrounding communities and stakeholders, FirstLight is developing a Community Liaison Program. This is the first of several newsletters to be mailed quarterly (September, December, March, June) and serve as a key component of this communication program.

The complete CLP as well as a copy of this and all future newsletters will be posted on the Project website located at www.firstlightpower.com. The Project Website will also post timely information on the Project and include an opportunity to e-mail questions about the Project.

FirstLight is also appointing a Community Liaison Officer (CLO) who will be the primary contact for the community, interested stakeholders, and the media. The CLO is James A. Ginnetti and his contact information can be found below. An office in Rensselaer will be established for the CLO.

Finally, FirstLight will be forming a Citizens Committee to meet no less often than quarterly during construction to discuss any issues of concern related to the project. Additional information on the makeup of this committee will be forthcoming.

- **Community Liaison Officer:**
  - James A. Ginnetti - Vice President, External Affairs, FirstLight Power Resources
  - Toll free: 866-532-6176

- **Website:**
  - www.firstlightpower.com

CLP Exhibit 3

Community Liaison Program (CLP) Timeline

September 2007:

- CLP submitted to New York Department of Public Service
- Project Website established
- Community Liaison Officer (CLO) Named
- 24-hour toll-free number for CLO established
- Citizens Committee Formed

October 2007:

- Initial direct newsletter mailed to targeted communities and stakeholders
- CLO contact information posted on bulletin boards and at construction site
- Copy of initial newsletter posted on Website
- Opening of Project Office in Rensselaer
- Initial Meeting of Citizens Committee
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held
- Groundbreaking ceremony
- Start Construction

November 2007:

- Start installing pilings
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

December 2007:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

January 2008:

- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

February 2008:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

March 2008:

- Start natural gas pipeline and gate station
- Start transmission line
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

April 2008:

- Start equipment foundations
- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

May 2008:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

June 2008:

- Deliver Combustion Turbine #1
- Finish installing pilings
- Start electrical switchyard
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

July 2008:

- Deliver Combustion Turbine #2
- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

August 2008:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

September 2008:

- Deliver Heat Recovery Steam Generator #1
- Deliver steam turbine generator
- Finish equipment foundations
- Start cooling tower
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

October 2008:

- Deliver Heat Recovery Steam Generator #2
- Finish natural gas pipeline and gate station
- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee

- Rensselaer office hours held

November 2008:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

December 2008:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

January 2009:

- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

February 2009:

- Finish electrical switchyard
- Finish transmission line
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

March 2009:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

April 2009:

- Start start-up and testing
- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

May 2009:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

June 2009:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

July 2009:

- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee

- Rensselaer office hours held

August 2009:

- Finish cooling tower
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

September 2009

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

October 2009:

- Direct newsletter mailed to targeted communities and stakeholders
- Copy of newsletter posted on Website
- Citizens Committee meeting
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

November 2009:

- Complaint log distributed to Citizens Committee
- Rensselaer office hours held

December 2009:

- Finish start-up and testing
- Complaint log distributed to Citizens Committee
- Rensselaer office hours held
- Expected completion of construction

CLP Exhibit 4

CASE 00-F-2057
ACTIVE PARTY LIST
(As of 09/12/07)

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CLP Exhibit 4

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CLP Exhibit 4

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CLP Exhibit 5

Complaint Log

(with sample complaint)

Name (w. Date and Time of complaint)	**Mode of Contact**	**Nature of Complaint**	**FLPR Initial Response (w/Date and Time)**	**FLPR Action Taken/Resolution**
John Doe. Lives outside Albany. Family lives near plant. 11/1/07; 2:15 pm	*Telephone Call*	*Questions about emissions from plant.*	*FLPR CLO called back on 11/1/07 and left message on Doe's voicemail.*	*Doe called back on 11/2 and CLO detailed exactly what would be emitted from plant. Thanked us for our help.*

To Be Issued

Soil Management Plan
South 40 Site

Prepared for

BEPCO CC Cogen Facility

Rensselaer, New York

September 2007

LG Constructors

Soil Management Plan
South 40 Site

Submitted to

BEPCO CC Cogen Facility

September 2007

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LG Constructors

SOIL MANAGEMENT PLAN

FORMER BASF SOUTH 40 SITE
RENSSELAER, NEW YORK

NOTE: THE PREVIOUSLY APPROVED SOIL MANAGEMENT PLAN (SMP) WAS ORIGINALLY PREPARED PRIOR TO THE COMMENCEMENT OF SITE REMEDIATION UNDER THE APPROVED REMEDIAL ACTION WORK PLAN. THIS SMP HAS BEEN REVISED TO REFLECT CURRENT CONDITIONS AT THE SITE AS OF SEPTEMBER 2007 BASED UPON COMPLETION OF THE PREVIOUS SITE REMEDIATION ACTIVITIES.

JULY, 2003
REVISED AND UPDATED SEPTEMBER, 2007

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1.0 INTRODUCTION

1.1 Definitions

The following terms (listed in alphabetical order) are defined for use in this Soil Management Plan:

DEC - The New York State Department of Environmental Conservation or agencies subsequently created for protection of human health and the environment.

Restricted Material - All soil or fill within the area designated on Figure 1 that was not placed as clean backfill during the site remediation performed by BASF in 2004 pursuant to the Voluntary Cleanup Agreement between the DEC and BASF or during subsequent soil cover placement by Besicorp-Empire Development Company.

Excavation - The movement or disturbance of Restricted Material.

Soil Cover Area – The area designated on Figure 1 by grey shading, indicating the extent of Restricted Material and soil cover. The provisions of this Soil Management Plan are applicable to materials within the Soil Cover Area, but not elsewhere on the South 40 site.

Notification Layer - The distinctive subsurface material consisting of fabric or crushed stone that was placed under backfill or cover material during the Site Remediation performed in 2004 pursuant to the Voluntary Cleanup Agreement between the DEC and BASF Corporation or during subsequent soil cover placement by Besicorp-Empire Development Company.

SMP Officer - The qualified environmental professional responsible for the proper implementation of this Soil Management Plan.

1.2 Site Background

BASF owns a parcel of real property in the City of Rensselaer that is located south of its former manufacturing plant and is known as the "South 40" (South 40). The South 40 is undeveloped and does not contain any buildings. Generally, the South 40 varies in elevation from 13’ amsl to 27’ above mean sea level (amsl). The center portion of this area is elevated from 17’ – 27’ amsl. The central, elevated area included buried drums and other waste materials derived from past operations.

Remedial actions at the South 40 were completed in 2004 pursuant to a Voluntary Cleanup Agreement between BASF and the DEC. The implementation of the remedial actions was based on a cooperative effort between Besicorp-Empire Development Company, LLC (BEDCO) and BASF.

The remedial actions included the excavation of drums; drum carcasses, and associated soil in the “magnetic anomaly” areas. In addition, site soils containing arsenic that had the potential to exceed TCLP limit for arsenic of 5mg/l were removed. This concentration was established at

4,120 mg/kg total arsenic concentration, based on the correlation of total and TCLP arsenic from the South 40 soil samples collected during the Supplemental Investigation. To ensure excavation of all soils that could exceed the TCLP limit of 5 mg/l, grid sample locations with total arsenic concentrations greater than 500 mg/kg were excavated and post-excavation confirmatory sampling was performed. The remedial action cleanup level of 500 ppm is more than eight times lower than the concentration that qualifies as hazardous waste and could produce leachable arsenic concentrations, and thus provides a large factor of safety.

The remedial activity conducted in 2005 consisted of the following:

1. All grossly contaminated soil and drum/drum carcasses located in the previously identified "anomaly area" were removed;
2. Areas of at least 25' X 25' centered on the grid sample points with arsenic concentrations greater than 500 mg/kg were excavated from the grid sample locations outside of the anomaly area;
3. All contaminated liquids encountered during drum and soil removal were removed from the excavation location and disposed of off-site; and
4. Excavated areas were to be covered with a notification layer (distinctive aggregate or fabric) and backfilled with clean fill.

BEDCO has proposed to construct a cogeneration power plant on the South 40 after completion of the aforementioned remedial action. Because construction was not commenced within 24 months of completion of the 2004 remedial action, areas with residual surface soil arsenic concentrations in excess of the DEC Recommended Soil Cleanup Objective (RSCO) of 7.5 ppm were covered with a minimum of one (1) foot of clean fill. In September 2007, immediately prior to initiation of construction of the power plant, a demarcation layer and one foot of clean fill were placed in the Soil Cover Area.

1.3 Purpose and Scope

This Soil Management Plan (SMP) sets forth procedures to be followed by the Owner, its agents or any future occupant (Owner) for activity involving Excavation and disposal of Restricted Material, or the use of imported soil/fill for purposes such as backfill, grading or landscaping. It is anticipated that Excavation would most likely be related to development and construction of the cogeneration facility, and the emergency repair, maintenance, improvement or replacement of underground utility lines (e.g. water mains and sewers), and appurtenant structures. The SMP addresses the following components of Soil Cover Area construction activity:

- Soil Handling Procedures;
- Fugitive Dust Control;
- Stormwater Management;
- Decontamination;
- Health & Safety Plan; and
- Notification Requirements.

The SMP has been prepared with the following user groups in mind:

- Contractors;
- Municipal Water Department (including emergency work crews);
- Municipal Public Works Department;
- Utilities;
- Owner; and
- DEC and other relevant agencies.

Excavation may encounter substances containing contaminants that exceed DEC guidelines for the protection of human health and the environment. Unless special precautions are taken, the presence of the contaminants in Restricted Material could potentially lead to chemical exposure to excavation workers, and ultimately the community or the environment, should they be exposed to the Restricted Material.

The purpose of the SMP is to establish a set of standards, work practices and documentation requirements that will reduce potential exposure to or migration of contaminants that may be encountered in Restricted Material. The procedures also provide standards for the proper handling and management of Restricted Material.

The SMP requires that only properly trained and qualified personnel be involved with Excavation, and the Owner develop and identify a predefined staging area for Restricted Material.

The Owner is responsible to make all persons who may be involved with Excavation, such as private contractors or utility companies, aware of the SMP standards. The Owner will expect these groups to follow these standards. There are potential health and safety concerns associated with the presence of contamination. In addition, there are other general safety practices such as work permits, excavation shoring/bracing requirements, ladders, excavation barriers, confined space entry procedures, hot work permits, mechanical/electrical lock-out procedures, back-flow prevention, notifications, and so forth, that may be applicable but are not specifically addressed herein. It is the Owner's, Contractor's, or utility company's responsibility, as the case may be, to identify and comply with all applicable Local, OSHA, and relevant agencies requirements.

1.4 Activity-Specific SMP

Prior to conducting Excavation activities, the Owner will submit to the DEC an activity- specific SMP, attached hereto as Appendix A, in accordance with the notification requirements set forth in Section 7.0 of this SMP. The activity-specific SMP will be considered an engineering control, and will therefore need to include an appropriate engineering analysis. The currently accepted level of engineering analysis is detailed in the DEC's Draft Voluntary Cleanup Program Guide, dated May 2002, Section 7.4 Remedial Action Selection Report (or as amended). Activity-specific SMP analyses are detailed in this SMP, in Appendix A.

2.0 SOIL HANDLING PROCEDURE

2.1 Overview

The cogeneration plant will be built up to a level from an estimated average elevation of ±17 feet (AMSL) to elevation 23.0 feet, or approximate thereto for drainage, with a finish floor elevation of 23.5 feet. Some areas on the South 40 are above the final grade elevations. These areas, if not within the Soil Cover Area, will be "cut" and these soils, if suitable for on-site fill, will be placed in other areas of the South 40. Cut of soil in areas designated as Soil Cover Area within the South 40 are more fully described below.

The earthwork portion of this construction phase will also include subsurface utility installations for piping, electrical ductbanks and manholes. In addition to the subsurface utility installations, sheeting, piling, and the installation of new building and equipment foundations will be performed.

Excavated Restricted Materials from below the existing demarcation layer in the Soil Cover Area will be contained and stockpiled at a pre-designated on-site location in an effort to facilitate the flow of work. The Restricted Material will be reused as backfill material on site and incorporated into the sub grade fill. The excavated Restricted Material will only be placed in the Soil Cover Area and not in contact with standing water or below historic groundwater levels. The stockpiled Restricted Material will be covered with polyethylene sheeting to prevent fugitive dust emissions and migration of soil due to wind or rainfall. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles.

During the construction process, excavated portions of the Soil Cover Area below the existing demarcation layer will receive a twelve inch layer of clean fill to separate site facilities and work activities from existing Restricted Materials. In addition, following backfill of excavated portions of the Soil Cover Area, these Restricted Materials will be capped, either by additional clean fill, paving or structures.

During intrusive soil activities in the Soil Cover Area containing Restricted Materials the procedures discussed herein will be followed.

2.2 Supervision

An SMP Officer will be in charge of proper implementation of the SMP. The SMP Officer will be a qualified environmental professional. The SMP Officer will be on site at all times necessary to properly implement the SMP.

2.3 Site Preparation

Several general site preparation activities will be performed by the contractor prior to initiating any Excavation activities. These preparation activities include utility clearances and identification, installation of erosion controls, provisions for site security, clearing and removal

of vegetation, implementation of fugitive dust control measures, preparation of a "clean" access area, and implementation of site mapping.

2.3.1 Utility Clearance and Identification

Underground and above ground utilities that could affect or be affected by Excavation activities will be identified prior to the initiation of intrusive soil activities. Locations of all utilities will be marked out by an independent company (UFPO / DIGSAFE or equivalent). When utility locations have been identified the construction contractor will review the locations and determine if any utilities will be in conflict with the proposed construction plans. If any utility conflicts are identified the construction contractor and the appropriate utility company will discuss what actions will need to be taken.

2.3.2 Erosion and Sedimentation Controls

The construction contractor will carefully conduct site-disturbing activities to minimize the erosion of soils and fill and impacts on the off-site environment. Erosion and sediment controls are an integral part of the construction sequence and plan and will be in place prior to commencing intrusive soil activities. These controls will be consistent with the Stormwater Management Pollution Prevention Plan developed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities Permit GP-93-06. The selection of specific erosion and sedimentation control measures during construction activities will depend on a number of parameters, including the type of construction activities, site topography, type of ground covers, and maintenance considerations. The measures may include the use and placement of silt fence, impermeable liner material, geotextiles, riprap, seed, and mulch. The sediment and erosion controls will be inspected on a regular basis and repaired immediately if damage is observed until a final surface cover has been provided in all areas. The construction contractor will minimize the exposure of unprotected soils and preserve and protect existing vegetation to the extent practicable. In addition, the construction contractor will minimize the time that soil is left unprotected. Erosion control and soil excavation activities will be conducted in accordance with approved construction sequencing to maximize the effectiveness of the erosion control strategy.

2.3.3 Work Area Security

The construction contractor will implement security measures at the Site that provide safeguards for the general public and create a visual and protective barrier around Excavation locations. The type of work area security used will depend on the type of construction activities being performed and the location of these activities. Security measures may consist of temporary fencing or barriers, warning tape, maintenance of sign in / sign out sheets, and practicing safe work procedures.

2.3.4 Clearing and Removing of Vegetation

To facilitate construction activities, existing vegetation, movable structures, and other obstructions may be removed from the site after notification and approval of the Owner. Any

vegetation, movable items or structures that may have been in contact with Restricted Materials or may be contaminated will need to be characterized for disposal prior to removal from the site. Removal of trees or brush from the areas of construction will occur in accordance with project plans and in consultation with the SMP Officer and the DEC. No ground cover will be permitted to be burned. Fugitive dust created as a result of clearing/removal will be mitigated in accordance with the Fugitive Dust Control Plan (Appendix B). Implementation of dust control measures will be determined by the SMP Officer.

2.3.5 Clean Access Area

Due to the potential of encountering Restricted Material during Excavation activities, a "clean" transition area will be established at various locations for access / egress to specific work areas. The "clean" area will be used for equipment / material deliveries, and loading of any Restricted Material for off-site treatment or disposal. The type of "clean" area will vary depending on the anticipated level of contamination, location of the work area, and the type of work to be completed at the location. The construction contractor will evaluate the specific work required and upon approval of the SMP Officer will construct a "clean" area to facilitate the progression of construction activities. The location of this "clean" area will be modified as necessary during the site regrading and development operation.

2.3.6 Site Mapping

A site map will be created showing site topography and the areas where Restricted Materials are located, soil staging areas, clean access areas and other site control procedures. As the Site is regraded, or conditions change, this site map will be updated as warranted.

2.4 Soil Excavation / Grading, Handling, and Disposal During Excavation Activities

During construction of the cogeneration plant, the construction contractor will follow activity-specific SMPs required by permitting agencies.

Most of the anticipated changes are associated with raising the existing elevation of the South 40 to remove it from the 100-year flood plain to comply with local regulations. The final site elevation will be reached by placement and compaction of suitable excavated material together with imported fill. Prior to placement of clean fill in the Soil Cover Area, an indicator layer consisting of fabric and/or distinctive aggregate will be placed to demarcate potential Restricted Material below.

Restricted Material excavated from various areas of the Soil Cover Area will be staged on site and handled in accordance with the appropriate activity-specific SMP. Excavated material not qualifying for use as fill will be removed promptly from the Site for disposal in a properly permitted facility.

2.4.1 Personnel Training

Due to the potential presence of contaminated soils, fill and/or concrete in the areas governed by this SMP, the construction contractor will use personnel properly trained under the appropriate OSHA regulations. The types of required training will be determined by the SMP Officer.

2.4.2 Equipment

In general, the equipment used for Excavation or grading may involve one or more of the following: excavator, backhoe, grade-all, front-end loader, bulldozer, jackhammer or other suitable types of material handling equipment. All equipment used in the Soil Cover Area will be properly decontaminated at the end of its use, to prevent contamination from migrating from the site. The construction contractor will be responsible for implementing specific equipment cleaning procedures subject to approval of the SMP Officer. These procedures should include the removal of visible accumulations of soil on equipment tires or surfaces either manually or through the use of a high-pressure water spray. Water, solids or sludge generated during equipment decontamination will be managed in accordance with Section .0 of this SMP.

2.4.3 Limits of Excavation / Grading

Excavation and grading will be completed in accordance with the approved construction plans. Excavation or grading that would impact the Soil Cover Area outside the limits shown on the plans will be discussed and approved by the SMP Officer or oversight agency prior to intrusive activities into the Restricted Material. During construction excavation limits, grading elevations, foundation elevations, and utility installations should be verified through the use of survey control and visual observations. Excavation areas will be graded to promote positive drainage away from excavations.

2.4.4 Handling and Storage of Restricted Material

Restricted Material will be stockpiled on polyethylene sheeting if not within the Soil Cover Area and covered securely with polyethylene sheeting to prevent migration of contaminants due to wind or precipitation. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles. Procedures for handling water that contacts Restricted Material are identified in Section 4.0. Equipment, vehicles, materials, and personnel used to maintain the stockpile area will undergo decontamination procedures prior to leaving the stockpile area and accessing other “clean” areas of the site. Handling of Restricted Material will be kept to a minimum to reduce the potential for contaminants being released to the environment.

2.4.5 Exposed Excavations

During construction activities, the amount of exposed excavation is to be minimized whenever possible. When practicable, for example, in areas less than 20ft x 20ft, exposed excavations will be covered with polyethylene sheeting to prevent the potential migration of contaminants by precipitation or wind. In addition to covering exposed excavations, erosion and sediment control

measures will be followed through the use of silt fencing, hay bails, mulch, or other methods approved by the SMP Officer or the DEC.

2.4.6 Clean Cover Material

The Contractor will be responsible for providing, placing and compacting suitable cover material from a certified clean source in the Soil Cover Area.

2.4.7 Characterization of Restricted Material

Unless otherwise tested, all soil and fill below/outside a notification layer in the area designated on Figure 1 (Soil Cover Area) will be designated Restricted Material. Unless otherwise tested, all Restricted Material in the Soil Cover Area will be assumed to contain the contaminants of concern at the cleanup levels utilized during the remedial excavation performed in 2004.

Prior to any off-site disposal of Restricted Material, the Owner will submit a Sampling and Analysis Plan (SAP) to the DEC for approval. The SAP will specify the location, frequency and type of Restricted Material samples as well as the specific analytical parameters and methods. The SAP will govern waste characterization sampling for off-site disposal purposes.

The SAP will incorporate the analytical requirements of the proposed off-site disposal facility. The construction contractor will be required to maintain accurate records for sample collection and analysis performed during construction activities.

2.4.8 Off-Site Disposal

Minimal or no off-site disposal of Restricted Material is expected. Excavated Restricted Material not used as backfill in accordance with this SMP will be disposed of off-site. The Owner will be responsible for the transportation and disposal of the Restricted Material in accordance with applicable regulations.

The soil will be classified based on the analytical results obtained from the soil characterization described in Section 2.4.7,. The classification will indicate whether the soil must be disposed of as hazardous or non-hazardous waste. All soils being disposed off-site must be transported by vehicles that have a valid 6NYCRR Part 364 permit or equivalent.

The construction contractor will set up a loading area along side the stockpiled Restricted Material and load the trucks from the edge. Off-site haul trucks will be draped with polyethylene sheeting to protect the outside of the truck and tires from coming in contact with any Restricted Material. The trucks will be inspected prior to leaving the area to determine whether decontamination is required.

3.0 FUGITIVE DUST CONTROL PLAN

Procedures identified in the Fugitive Dust Control Plan attached as Appendix B are to be employed during intrusive soil activities.

3.1 VOC Monitoring

Concentrations of volatile organic compounds (VOCs) capable of significantly impacting air quality in the work zone or surrounding areas have not been identified in the Soil Cover Area. In the event that VOCs are encountered, stationary monitors will be used near the Soil Cover Area and/or the perimeter of the Site. As necessary, continuous VOC monitoring will be conducted in the work zone in accordance with the site-specific Health & Safety Plan for the purpose of protecting worker health and safety.

4.0 STORMWATER MANAGEMENT AND DEWATERING

As noted in Section 2.3.2, the Stormwater Pollution Prevention Plan to be implemented during the construction phase of the project will be developed in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities Permit GP-93-06.

Construction activities will include installation of subsurface utilities such as pipes, electrical duct banks and manholes. In addition to the subsurface utility installations, sheeting, piling, and new building and equipment foundations will be installed. During these activities, stormwater management/sediment and erosion controls will be in place and utilized as set forth in this plan and as required by applicable regulations. Stormwater discharged from the South 40will meet applicable regulatory requirements.

4.1 Stormwater Management and Control

Stormwater will be controlled during Excavation activities through diversion to surface swales and sediment basins. Stormwater will be diverted from entering the excavations through the construction and maintenance of silt fencing and/or soil or hay bale berms wrapped with liner at the limit of excavations, deflecting flows to surface swales or sediment basins.

- **Soil Staging Area -** The soil staging area will be constructed to prevent Restricted Material and runoff from entering surrounding areas. If needed, a sump pit will be used to collect runoff from the staging area. Sediment collected in this sump will be added to stockpiled soils for appropriate disposition. Waters collected in the staging area sumps will be pumped to water storage tanks, treated if required and disposed of off-site or used in accordance with the Post-Remediation Construction Plan if appropriate.

- **Ground Cover** – The South 40 is not developed. A substantial portion of the existing ground cover on the South 40 within the construction limits of the cogeneration plant will be removed during construction activities. Vegetation along the perimeter of the South 40 and other areas outside the plant construction area will be preserved to the extent practical. No ground cover will be burned. During construction activities, dust control measures will be employed in accordance with the Fugitive Dust Control Plan.

- **Erodible Soils -** The removal of existing ground cover may increase the potential for soil erosion. As described in Section 2.4, areas disturbed during construction will be treated in the appropriate manner, including the placement of stabilizing materials such as seed and mulch, to minimize the potential for erosion in the disturbed areas.

- **Mechanical Retardation and Control of Runoff -** The contractor will utilize temporary stormwater control measures such as silt fencing, diversion dikes, check dams and/or temporary seeding to provide effective stormwater management. Temporary diversion berms will be installed up

gradient of the excavation. The temporary division berms will divert stormwater runoff away from the excavation areas.

- **Final Cover / Vegetation** - upon completion of the project, established grass, crushed stone, bituminous asphalt or other suitable material will cover soil exposed during construction. Site restoration will be performed in accordance with the project specifications.

- **Protection of Existing Municipal Sewers** – Existing municipal sewers on the South 40 will be protected with berms and sediment traps to minimize the sediment from flowing into the sewers.

4.2 Dewatering Excavations During Construction Activities

Based on the existing information available for the groundwater elevations, groundwater control will likely be required for only certain areas of structural excavations. Based upon the subsurface conditions encountered during previous field investigations, excavations in some areas of the South 40 have the potential to encounter saturated conditions. These are expected to be perched groundwater conditions that typically are of limited volume and probably will be a function of the depth of the excavation as well as the amount of recent precipitation. Localized dewatering by surface sump pumps is expected to remove the small water volumes that may be encountered.

Current groundwater elevations are below the bottom elevation planned for the shallow foundations. Groundwater may be encountered in deep foundation excavations, such as the condenser pit. The deep excavations will be engineered to minimize the amount of groundwater entering the excavated foundation areas. Sheet piling may be required to support the sidewalls of the deep excavations and minimize or to prevent water infiltration into the excavation. Dewatering operations will only be required during placement of the foundation or structure.

The construction contractor will, to the extent practicable, prevent stormwater from entering open excavations using berms, swales, or sedimentation basins. Water that collects in the excavations as a result of groundwater intrusion will be pumped and treated as appropriate from excavations when it impedes excavation, or affects the ability to achieve proper compaction of backfill soils.

Water that exists in or enters an open excavation will be handled in accordance with applicable regulatory requirements. One or a combination of the following treatment technologies may be utilized to treat water removed from excavations if treatment is required: transfer to the existing WWTP; transfer to the onsite ground water treatment system; settling ponds, tanks or clarifiers; or oil / water separators.

As an alternative to direct discharge of treated water to surface water bodies or to the local sewer, treated water may be recycled for use on the South 40 for the following purposes:

- Increase moisture in dry soils for compaction purposes;

- Increase moisture in soils being stabilized onsite;
- Application to roadways or open excavations for dust suppression; and
- Decontamination of equipment.

5.0 DECONTAMINATION

5.1 Equipment Decontamination

Equipment used in the area subject to the SMP (specifically, the Soil Cover Area) will be properly decontaminated at the end of its use, to prevent contamination from migrating from the site. The construction contractor will be responsible for implementing specific equipment cleaning procedures subject to approval of the SMP Officer. These procedures should include the removal of visible accumulations of soil on equipment tires or surfaces either manually or through the use of a high-pressure water spray. Water, solids or sludge generated during equipment decontamination will be managed in accordance with Section .0 of this SMP.

The construction contractor will construct a temporary decontamination station at a location that is approved by the SMP Officer. Excavating equipment and transporter vehicles will be decontaminated by the construction contractor in the decontamination area before leaving the Soil Cover Area.

If Restricted Material is transported off-site, after each trailer or container is loaded and tarped, the construction contractor will decontaminate the body if necessary, the wheels and tires by manually removing loose particles (e.g. brushes), water spray washing (portable or stationary vehicle wash equipment) or by high pressure washing (steam cleaning), depending on need. If the equipment is decontaminated with a brush, loose particles will be transferred to a designated stockpile under the direction of the SMP Officer. If the equipment is decontaminated by water spray or high pressure washing, the rinsate will be transferred into suitable containers or the fractionation tank, as directed by the SMP Officer, for treatment and/or off-site disposal.

5.2 Equipment Decontamination Water

Water utilized for decontamination of equipment will be supplied by existing City water lines located onsite, potable water from the City, potable water from an offsite source, or from dewatering excavations (such water to be treated as necessary), or the Soil Staging Area.

Water utilized in equipment decontamination will be treated onsite as required and discharged in accordance with applicable standards or properly disposed of off-site. The construction contractor will set up portable decontamination stations to decontaminate heavy equipment or parts of heavy equipment (e.g., excavator bucket) at specific work areas.

5.3 Personnel Decontamination Water

Personnel decontamination water will be potable water supplied from onsite or offsite sources. Potable water will be stored onsite in small poly tanks or 55-gallon drums and be readily available in designated areas where personnel decontamination will occur. Each local personnel decontamination area will be a bermed, lined area that has drums for storing used personal protective equipment (PPE), tubs for washing and rinsing boots, boot racks for storage of boots and fresh PPE.

Water resulting from personnel decontamination activities[1] will be collected, treated on site, and properly discharged or, as an alternative, utilized after treatment.

[1] Analytical testing will be performed on the water resulting from personnel decontamination initially to verify it is within NYSDEC discharge guidelines. Water resulting from personnel decontamination will presumably contain levels of contaminants well below NYSDEC guidelines and once verified can be utilized for any of the purposes specified in Section 4.2 of this Plan.

6.0 HEALTH AND SAFETY

Subject to final requirements for remediation, there will be a health and safety plan required for construction activities on the site. There are potential health and safety concerns associated with the presence of contamination at this site. These and other concerns, including but not limited to general safety practices, work permits, excavation shoring/bracing requirements, ladders, excavation barriers, confined space entry procedures, explosive gas monitoring, mechanical/electrical lock-out procedures, back-flow prevention, notifications, and so forth are not addressed herein.

6.1 Elements of the Plan

The health and safety plan will be tailored for construction workers on the Soil Cover Area after the South 40 has been released under the VCA or accepted by NYSDEC as remediated in accordance with the final remedial action report. The content of the construction health and safety plan will depend upon the extent of the remedial effort relative to individual construction related activities.

The plan may include the following elements typical of an OSHA-compliant plan: site control; training; exposure level control techniques (engineering controls, work practices, personal protective equipment); air monitoring; informational program; decontamination procedure; emergency response; and medical surveillance.

6.2 Contingencies

The procedures that will be followed in the event a contingency arises during construction will be addressed in the Health and Safety Plan. The objective of this section of the Plan will be to minimize the impact of the contingency on site workers and area residents. This section will address emergency response procedures, testing requirements, and notification procedures in response to contingencies.

In the event that unexpected environmental conditions are encountered during the construction, NYSDEC and the property owner will be notified and the condition will be addressed in accordance with applicable requirements.

7.0 NOTIFICATION REQUIREMENTS

The SMP protocols are activated by any Excavation activity or movement of Restricted Material. Except in emergencies, the Owner will notify the DEC and submit an activity-specific SMP (including the aforementioned SAP) for approval a minimum of thirty (30) calendar days in advance of the planned activity. The SMP Officer and Owner will provide the approved, activity specific SMP to the contractors and subcontractors and be sure the contractors and subcontractors implement the activity specific SMP.

In the event of an emergency, the Owner will notify the DEC as soon as practicable. If it is necessary to implement this SMP prior to notification and/or development of an activity specific SMP, the Owner will submit a report to the DEC detailing how the SMP was followed and any necessary deviations.

Figure 1

Area Subject to Soil Management Requirements

Appendix A
Activity-Specific Soil Management Plans

Geotechnical Investigation

Scope
This will include the activities associated with the geotechnical investigation including the drilling of bore holes.

Chemicals of Concern
The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern
Drilling bore boles has the potential to create preferential vertical pathways for the migration of ground water.

Protection of Groundwater Pathways
Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedure can be used to maintain the natural flow of groundwater:

Refilling the bore holes with an inert material such as bentonite will reduce the potential for creating vertical pathways.

Worker Protection
Construction workers will wear the level of protection set forth in the Site-specific Health and Safety Plan.

Monitoring
Monitoring will be conducted in accordance with the Fugitive Dust Control Plan.

Site Grading

Scope

In conjunction with preparation of the South 40 for construction of the power plant, portions of the Soil Cover Area will be excavated to approximately 16' foot elevation. Other portions of the Soil Cover Area will be cut or filled to achieve final site elevation. Excavated Restricted Material will be stockpiled and used as backfill around foundations, underground ductbanks, underground piping and the like. The Soil Cover Area will receive twelve inches of clean soil cover during construction activities and again upon completion of backfilling.

Chemicals of Concern

The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern

Potentially contaminated Restricted Materials will be excavated from the Soil Cover Area, moved to a stockpile, and re-deposited in the Soil Cover Area following the installation of piles, foundations, underground ductbank, underground piping, and the like. Handling of this material could release dust particles or VOC vapors.

Soil Handling

When Restricted Materials are graded the excavated soil will be contained and stockpiled at a pre-designated onsite location. The stockpiled soil will be covered with polyethylene sheeting at to prevent fugitive dust emissions and migration of soil due to wind or rainfall. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles. Handling of soil will be kept to a minimum to reduce the potential for airborne dust creation.

Restricted Material may be excavated from any portion of the Soil Cover Area delineated on Figure 1 attached to this SMP and placed on any other portion of the Soil Cover Area for use as backfill material or incorporated into the subgrade fill. However, under no circumstances will Restricted Material be placed in any area that is in contact with standing water or below locations of historic groundwater levels.

In addition, Restricted Material used as backfill material or incorporated into the subgrade fill will be capped either by the placement over the Restricted Material of at least one foot of clean fill or by the installation of paving or permanent structures. Restricted Material removed from the Soil Cover Area that cannot be reused within that area will be properly disposed of offsite.

Worker Protection

Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring

Monitoring will be conducted in accordance with the Fugitive Dust Control Plan. A Community Air Monitoring Plan will be implemented during active excavation and grading activities.

Piling

Scope
Piling will be installed under major equipment foundations, building columns, and pipe racks. The piling is expected to be H piles. Most of this piling will be driven to bedrock.

Chemicals of Concern
The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern
Driving piles to bedrock has the potential to create preferential vertical pathways for the migration of ground water.

Protection of Groundwater Pathways
Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedures can be used to maintain the natural flow of groundwater:

Subgrade Materials and Characteristics – Materials used for the subgrade around new structures should maintain the same characteristics at specific elevations as the existing soils. The creation of preferential pathways for groundwater caused by using materials with characteristics that are different from those of existing soils should be avoided. The compaction and the densities of materials used for the subgrade should be similar to those of the existing soils, to the extent possible, so areas of different soil permeability are not created, thereby producing conditions that are conducive to the migration of contaminants into an area.

Engineering Subsurface Control Measures – When materials having characteristics similar to those of existing subsurface materials cannot be used due to structural concerns for an area, additional engineering controls will need to be employed. Several methods can be used to maintain groundwater pathways and flows. Where appropriate, permeable or impermeable membranes / liners can be installed to limit the flow of groundwater into an area or to facilitate the flow of groundwater through an area. These methods can be used to prevent the infiltration of contaminated groundwater into the typically more permeable backfill of utility installations or sewer pipelines. A combination of these membranes can be used to channel contaminated water around new building foundations to prevent the infiltration of contaminants into the subgrade material for the buildings foundations. In addition to membranes and liners, natural material can be used to maintain groundwater pathways. Materials high in clay content can be used as subsurface barriers or stone trenches and sandy materials can be used as more permeable materials to create groundwater pathways around subsurface obstructions.

A geotechnical review of the site will be conducted prior to the execution of intrusive soil activities. The geotechnical review will include, but not be limited to, the sub-surface soil and water conditions at the site, the final design and effects of construction, additional subsurface data gathered during the remedial action, and the matrix of the subsurface soil.

Worker Protection

Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring

Monitoring will be conducted in accordance with the Fugitive Dust Control Plan.

Site Excavation

Scope
This procedure covers the excavation of Restricted Material as necessary for foundations, trenches, drainage ponds and other needs.

Chemicals of Concern
The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern
Potentially contaminated Restricted Materials will be excavated from the Soil Cover Area, moved to a stockpile, and re-deposited in the Soil Cover Area following the installation of piles, underground ductbank, underground piping, foundations and the like. Handling of this material could release dust particles or VOC vapors.

Soil Handling
When Restricted Materials are excavated, the soil will be contained and stockpiled at a pre-designated onsite location. The stockpiled soil will be covered with polyethylene sheeting to prevent fugitive dust emissions and migration of soil due to wind or rainfall. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles. Handling of soil will be kept to a minimum to reduce the potential for airborne dust creation.

Restricted Material may be excavated from any portion of the Soil Cover Area delineated on Figure 1 attached to this SMP and placed on any other portion of the Soil Cover Area for use as backfill material or incorporated into the subgrade fill. However, under no circumstances will Restricted Material be placed in any area that is in contact with standing water or below locations of historic groundwater levels.

In addition, Restricted Material used as backfill material or incorporated into the subgrade fill will be capped either by the placement over the Restricted Material of at least one foot of clean fill or by the installation of paving or permanent structures. Restricted Material removed from the Soil Cover Area that cannot be reused within that area will be properly disposed of offsite.

Protection of Groundwater Pathways
Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedures can be used to maintain the natural flow of groundwater:

Subgrade Materials and Characteristics – Materials used for the subgrade around new structures should maintain the same characteristics at specific elevations as the existing soils. The creation of preferential pathways for groundwater caused by using materials with

characteristics that are different from those of existing soils should be avoided. The compaction and the densities of materials used for the subgrade should be similar to those of the existing soils, to the extent possible, so areas of different soil permeability are not created, thereby producing conditions that are conducive to the migration of contaminants into an area.

Engineering Subsurface Control Measures – When materials having characteristics similar to those of existing subsurface materials cannot be used due to structural concerns for an area, additional engineering controls will need to be employed. Several methods can be used to maintain groundwater pathways and flows. Where appropriate, permeable or impermeable membranes / liners can be installed to limit the flow of groundwater into an area or to facilitate the flow of groundwater through an area. These methods can be used to prevent the infiltration of contaminated groundwater into the typically more permeable backfill of utility installations or sewer pipelines. A combination of these membranes can be used to channel contaminated water around new building foundations to prevent the infiltration of contaminants into the subgrade material for the buildings foundations. In addition to membranes and liners, natural material can be used to maintain groundwater pathways. Materials high in clay content can be used as subsurface barriers or stone trenches and sandy materials can be used as more permeable materials to create groundwater pathways around subsurface obstructions.

A geotechnical review of the site will be conducted prior to the execution of intrusive soil activities. The geotechnical review will include, but not be limited to, the sub-surface soil and water conditions at the site, the final design and effects of construction, additional subsurface data gathered during the remedial action, and the matrix of the subsurface soil.

Worker Protection

Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring

Monitoring will be conducted in accordance with the Fugitive Dust Control Plan.

Installation of Below Grade Structures

Scope

This procedure covers the installation of foundations, pile caps and other below grade structures, such as, underground ductbank and underground piping.

Chemicals of Concern

The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern

Certain potential conditions of concern are associated with the underground structure construction. One is the potential that preferential horizontal pathways will be created that will promote the flow of contaminated groundwater. The second is the possible interference of the natural flow of groundwater to the groundwater collection system on the North 40 parcel.

Protection of Groundwater Pathways

Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedures can be used to maintain the natural flow of groundwater:

Subgrade Materials and Characteristics – Materials used for the subgrade around new structures should maintain the same characteristics at specific elevations as the existing soils. The creation of preferential pathways for groundwater caused by using materials with characteristics that are different from those of existing soils should be avoided. The compaction and the densities of materials used for the subgrade should be similar to those of the existing soils, to the extent possible, so areas of different soil permeability are not created, thereby producing conditions that are conducive to the migration of contaminants into an area.

Engineering Subsurface Control Measures – When materials having characteristics similar to those of existing subsurface materials cannot be used due to structural concerns for an area, additional engineering controls will need to be employed. Several methods can be used to maintain groundwater pathways and flows. Where appropriate, permeable or impermeable membranes / liners can be installed to limit the flow of groundwater into an area or to facilitate the flow of groundwater through an area. These methods can be used to prevent the infiltration of contaminated groundwater into the typically more permeable backfill of utility installations or sewer pipelines. A combination of these membranes can be used to channel contaminated water around new building foundations to prevent the infiltration of contaminants into the subgrade material for the buildings foundations. In addition to membranes and liners, natural material can be used to maintain groundwater pathways. Materials high in clay content can be used as subsurface barriers or stone trenches and sandy materials can be used as more permeable materials to create groundwater pathways around subsurface obstructions.

A geotechnical review of the site will be conducted prior to the execution of intrusive soil activities. The geotechnical review will include, but not be limited to, the sub-surface soil and water conditions at the site, the final design and effects of construction, additional subsurface data gathered during the remedial action, and the matrix of the subsurface soil.

Worker Protection
Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring
Monitoring will be conducted in accordance with the Fugitive Dust Control Plan.

Underground Utility Line Construction

Scope
This procedure covers the installation of the underground fire water, sewers, potable water lines, process water lines, gas lines, ductbanks, manholes and electrical lines.

Chemicals of Concern
The primary chemicals of concern are arsenic and other metals, VOCs and SVOCs. A summary of available analytical data regarding existing site conditions can be found in the Final Remediation Report.

Conditions of Concern

Certain potential conditions of concern are associated with the underground utility line construction. One is the potential that preferential horizontal pathways will be created that will promote the flow of contaminated groundwater.

Soil Handling
When Restricted Materials are excavated, the soil will be contained and stockpiled at a pre-designated onsite location. The stockpiled soil will be covered with polyethylene sheeting to prevent fugitive dust emissions and migration of soil due to wind or rainfall. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles. Handling of soil will be kept to a minimum to reduce the potential for airborne dust creation.

Restricted Material may be excavated from any portion of the Soil Cover Area delineated on Figure 1 attached to this Plan and placed on any other portion of the Soil Cover Area for use as backfill material or incorporated into the subgrade fill. However, under no circumstances will Restricted Material be placed in any area that is in contact with standing water or below locations of historic groundwater levels.

In addition, Restricted Material used as backfill material or incorporated into the subgrade fill will be capped either by the placement over the Restricted Material of at least one foot of clean fill or by the installation of paving or permanent structures. Restricted Material removed from the Soil Cover Area that cannot be reused within that area will be properly disposed of offsite..

Protection of Groundwater Pathways
Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedures can be used to maintain the natural flow of groundwater:

Subgrade Materials and Characteristics – Materials used for the subgrade around new structures should maintain the same characteristics at specific elevations as the existing soils. The creation of preferential pathways for groundwater caused by using materials with

characteristics that are different from those of existing soils should be avoided. The compaction and the densities of materials used for the subgrade should be similar to those of the existing soils, to the extent possible, so areas of different soil permeability are not created, thereby producing conditions that are conducive to the migration of contaminants into an area.

Engineering Subsurface Control Measures – When materials having characteristics similar to those of existing subsurface materials cannot be used due to structural concerns for an area, additional engineering controls will need to be employed. Several methods can be used to maintain groundwater pathways and flows. Where appropriate, permeable or impermeable membranes / liners can be installed to limit the flow of groundwater into an area or to facilitate the flow of groundwater through an area. These methods can be used to prevent the infiltration of contaminated groundwater into the typically more permeable backfill of utility installations or sewer pipelines. A combination of these membranes can be used to channel contaminated water around new building foundations to prevent the infiltration of contaminants into the subgrade material for the buildings foundations. In addition to membranes and liners, natural material can be used to maintain groundwater pathways. Materials high in clay content can be used as subsurface barriers or stone trenches and sandy materials can be used as more permeable materials to create groundwater pathways around subsurface obstructions.

A geotechnical review of the site will be conducted prior to the execution of intrusive soil activities. The geotechnical review will include, but not be limited to, the sub-surface soil and water conditions at the site, the final design and effects of construction, additional subsurface data gathered during the remedial action, and the matrix of the subsurface soil.

Worker Protection

Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring

Monitoring will be conducted in accordance with the Fugitive Dust Control Plan.

Water Discharge Structure

Scope

The water discharge structure includes the shoreline sump and the discharge line to the Hudson River. The water discharge structure will be installed in accordance with the Article 15 permit conditions. See Figure 5.

Chemicals of Concern

The Chemicals of Concern are arsenic and PCBs. PCBs were detected in the Hudson River sediment samples.

Conditions of Concern

Certain potential conditions of concern are associated with the waterline construction. One is the potential that preferential horizontal pathways will be created that will promote the flow of contaminated groundwater.

Soil and Sediment Handling

According to the Article 15 permit requirements, the sediment in the river will be disposed at an approved upland site. In addition, as a requirement of the permit, a work plan will be submitted to the NYSDEC prior the start of construction in the River.

When Restricted Materials are excavated for site development, footings or other related activities, the excavated soil will be contained and stockpiled at a pre-designated onsite location. The stockpiled soil will be covered with polyethylene sheeting to prevent fugitive dust emissions and migration of soil due to wind or rainfall. Stockpiles are to be continuously maintained to promote proper drainage of precipitation off or around the stockpiles. Handling of soil will be kept to a minimum to reduce the potential for airborne dust creation. The soil will be reused as backfill material on site and incorporated into the subgrade fill. These soils will only be placed in areas around the Site that are not in contact with standing water or below locations of historic groundwater levels. In addition, these soils will be capped, either by additional clean fill, paving or structures. At least one foot of clean fill will be placed on top of any backfilled Restricted Material. Soils not reused will be properly disposed of off site.

Protection of Groundwater Pathways

Particular care will need to be exercised during subsurface construction regarding the flow of ground water at the site. Groundwater at the site has the potential to be contaminated. During new construction activities, changes in groundwater flow are to be minimized. Construction activities that have the most potential to affect groundwater flow are the building and equipment foundations, subsurface utility installations, and the steel piles on which the foundations are expected to be supported. The following procedures can be used to maintain the natural flow of groundwater:

Subgrade Materials and Characteristics – Materials used for the subgrade around new structures should maintain the same characteristics at specific elevations as the existing soils. The creation of preferential pathways for groundwater caused by using materials with characteristics that are different from those of existing soils should be avoided. The compaction and the densities of materials used for the subgrade should be similar to those of the existing

soils, to the extent possible, so areas of different soil permeability are not created, thereby producing conditions that are conducive to the migration of contaminants into an area.

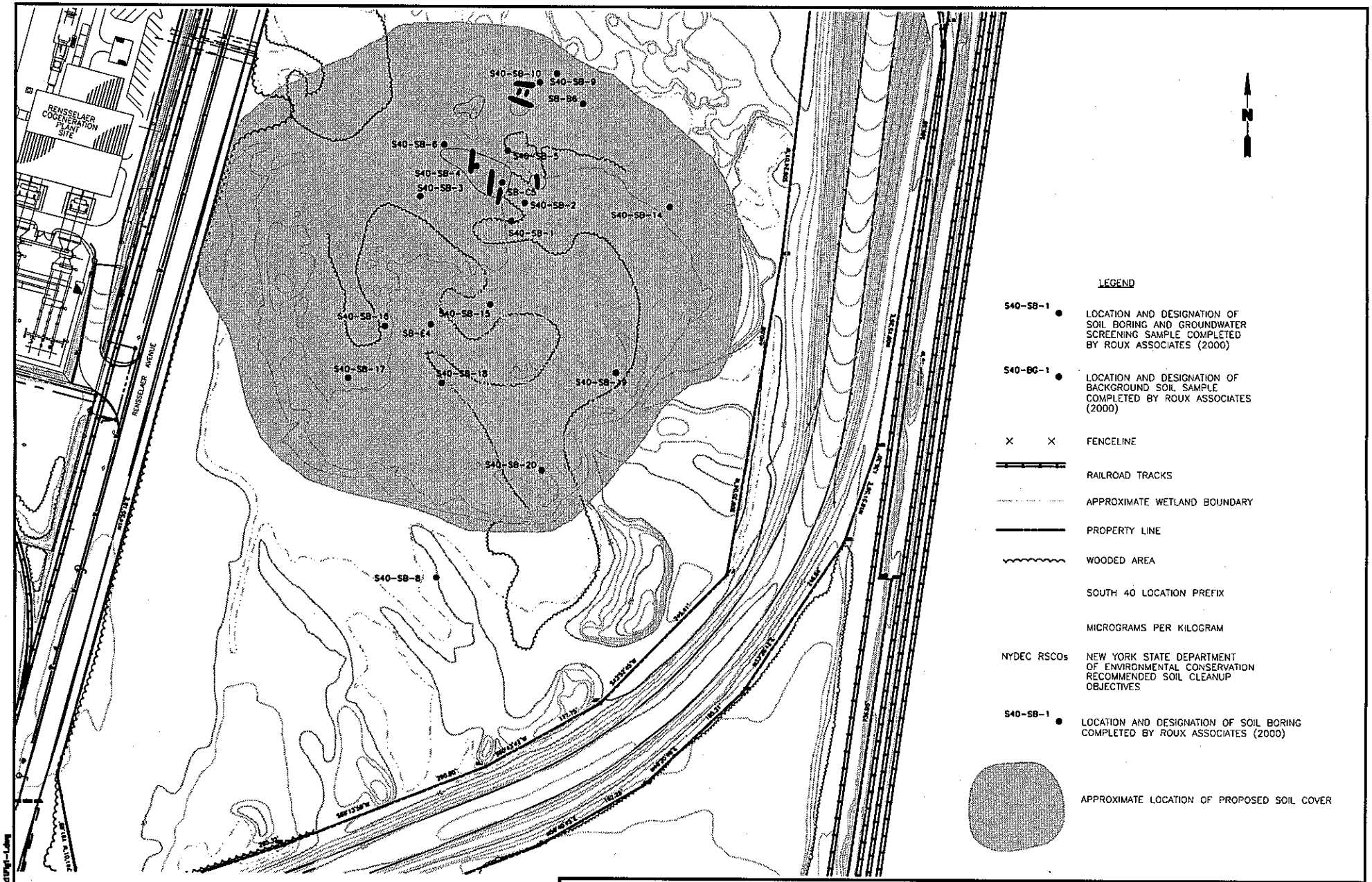
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Worker Protection

Construction workers will wear the level of protection set forth in the Site Health and Safety Plan.

Monitoring

Monitoring will be conducted in accordance with the Fugitive Dust Control Plan and the Article 15 permit requirements.



EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

40 British American Blvd.
Latham, NY 12110

PROPOSED SOIL COVER AREA

REMEDIAL ACTION
WORK PLAN
SOUTH 40 SITE
RENSSELAER, NEW YORK

DRAWN BY:	DATE:	PROJECT NUMBER:
WPL	03/21/03	60094

FIGURE NUMBER:

FIG 1

SHEET NUMBER: