



CITY COUNCIL/ELECTRICAL
ADVISORY COMMITTEE

August 8, 2012 – 6:00 p.m.
Regular Meeting

CITY COUNCIL

Leo Evans, Mayor
Brady Nelson, Mayor Pro-tem
Patricia Baribeau, Council Member
Ronald Beauchamp, Council Member
Walter Baker, Council Member

ADMINISTRATION

James V. O'Toole, City Manager
Robert S. Richards, CMC, City Clerk
Ralph B.K. Peterson, City Attorney
Mike Furmanski, Electrical Superintendent
Michael Dewar, City Controller
Thomas Butz, Power System Engineering

ELECTRICAL ADVISORY COMMITTEE

Tim Wilson, Chairperson
Ann Bissell, Vice Chairperson
Larry Arkens, Committee Member
Glendon Brown, Committee Member
Donald Racicot, Committee Member
John Anthony, Committee Member
Vacant Seat
Vacant Seat

Escanaba City Council Chambers: 410 Ludington Street - Escanaba, MI 49829

Regular Meeting Agenda
Wednesday, August 8, 2012

CALL TO ORDER
ROLL CALL
APPROVAL/ADJUSTMENTS TO THE AGENDA
CONFLICT OF INTEREST DECLARATION

NEW BUSINESS

- 1. Update - Electric Department –Distribution Operations**
Explanation: Electrical Superintendent Mike Furmanski will discuss current departmental activities and operations.
- 2. Update– Operation and Maintenance of Power Plant – Pro Energy Services, Inc.**
Explanation: Pro Energy Services, Inc. will update the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the operation and maintenance of the power plant.
- 3. Discussion – Settling Ponds Sediment – Removal Project Specifications.**
Explanation: Administration will provide a review on the Settling Ponds Sediment Removal Project Specifications, which ask for a total dollar value for all labor, material, equipment, supervision and incidental services needed to dredge, excavate and upgrade the settling ponds located at the Power Plant Facility.
- 4. Approval – Market Agent/Meter Data Management and Market Services.**
Explanation: Administration is seeking approval to enter into an agreement with Great Lakes Utilities of Manitowoc, WI to provide services for the City of Escanaba as a Market Agent and to provide meter data management and market services.

Agenda -August 8, 2012

5. **Update – Power Plant Asset Purchase Agreement.**

Explanation: Administration will provide an update on the power plant Asset Purchase Agreement with Escanaba Green Energy, LLC of Escanaba, Michigan.

GENERAL PUBLIC COMMENT

COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS

ADJOURNMENT

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audiotapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling City Hall at (906) 786-9402.

Respectfully Submitted,



James V. O'Toole
City Manager

OFFICIAL PROCEEDINGS
CITY COUNCIL
ELECTRICAL ADVISORY COMMITTEE
CITY OF ESCANABA, MICHIGAN
Special Joint Meeting
Wednesday, July 11, 2012

Pursuit to a meeting notice posted July 6, 2012, the meeting was called to order by the Mayor Leo J. Evans at 6:03 p.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Leo J. Evans, Council Members, Walter A. "Pete" Baker, Patricia A. Baribeau, Ronald J. Beauchamp, and Brady L. Nelson.

Absent: None

Present: Electrical Advisory Committee Members: John Anthony, Larry Arkens, Ann Bissell, Glendon Brown, Don Racicot, and Tim Wilson.

Absent: Two vacancies

Also Present: City Manager James V. O'Toole, Electric Superintendent Mike Furmanski, City Controller Mike Dewar, City Attorney Ralph B.K. Peterson, Pro Energy Escanaba Power Plant Manager Jack Scott, Power Systems Engineering (PSE) Representatives Tom Butz, members of the public, and Media.

Manger O'Toole asked that Agenda Item 7 be moved to New Business #3, and to allow public comment.

Nelson moved, Baribeau seconded, **CARRIED UNANIMOUSLY**, to approve the agenda as amended.

UNFINISHED BUSINESS - None

CONFLICT OF INTEREST - None

PUBLIC HEARING - None

NEW BUSINESS

Update - Electric Department - Distribution Operations.

Electrical Superintendent Mike Furmanski discussed the following current departmental activities and operations:

- Miscellaneous Pole work
- Staffing Update.

Update – Operation and Maintenance of Power Plant – Pro Energy Services, Inc.

Jack Scott Pro Energy Services Plant Manager, Inc. updated the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the operation and maintenance of the power plant:

- Power Plant was in service;
- Summary of running hours;
- Don Racicot was recognized for his 20 years of work at the City Power Plant;
- over 16,000 tons of coal was available.

Decision – Plant Sale Asset Purchase Agreement.

City Administration and City Attorney Peterson provided an update on the Power Plant Sale negotiations with Escanaba Green Energy, and sought Council approval for the sale of the Escanaba Power Plant Sale to Escanaba Green Energy.

- An agreement was been made and the Asset Purchase Agreement was presented to Council and Electrical Advisory Committee;
- City Attorney Peterson provided a summary of the Asset Purchase Agreement;
 - Escanaba Green Energy intended to convert the Power Plant to Biomass, which would retain and provided additional jobs in the community;
 - The Power Plant, it's facilities, machinery and land would be sold for \$1,500,000;
 - Escanaba Green Energy would be purchasing the City's remaining coal sitting on the docks at the City's Cost;
 - Council was being asked to approve the entire contract and exhibits;
 - Still several mile posts to be accomplished: Letter of Credit needs to be extended to November 30, 2012 prior to signing Asset Purchase Agreement (APA); On or before July 31, 2012, Escanaba Green Energy will deposit \$1,300,000 in escrow, and the City will be placing documents in the same escrow, deeds, bill of sale, and assignment;
 - The Closing would occur on or before September 30, 2012, depending on Government approvals, otherwise before November 30, 2012, thus the need to extend the Letter of Credit;
 - Reviewed terms and conditions of the Post Closing Agreement;
 - Supporting Post Closing obligations, Escanaba Green Energy will provide a performance Bond of 2 million dollars, which would protect the City of Escanaba, in the event the Escanaba Green Energy Plan fails;
 - City would be providing numbers to MISO regarding the SSR Agreement, and agreement presented to FERC and reimbursement plan to City of Escanaba. It was the intent, at the time of closing with Escanaba Green Energy, was to assign SSR Agreement to Escanaba Green Energy, which would release the City of Escanaba from any further liability under the SSR Agreement.

Joint City Council & Electrical Advisory Minutes
July 11, 2012 – cont.

- o Briefly reviewed closing costs.

Mayor Evans asked for Public Comment.

Escanaba Green Energy President, Charles DeTiege, expressed gratitude to the negotiating team, Electrical Advisory Committee, Council and City Administration. The City negotiating team worked very hard which ended in a good cooperative effort on both sides.

After discussion, Nelson moved, Baribeau seconded, that the City of Escanaba enter into the Asset Purchase Agreement as presented by the City Manager with Escanaba Green Energy LLC, and further that the Mayor and City Clerk be authorized to execute any and all necessary documents in order to complete such transaction, contingent upon the extension of Escanaba Green Energy LLC letter of credit to November 30, 2012.

Upon a call of the roll, the vote was at follows:

Ayes: Nelson, Baribeau, Beauchamp, Evans
Nays: Baker

MOTION CARRIED.

Discussion – Environmental Update.

Electric Superintendent Furmanski provided an update on the Ash Pond sediment. Expected bids specifications by the end of the following week.

Discussion – MISO Attachment Y-1 Discussions.

PSE Consultant Tom Butz and Administration reviewed and discussed the negotiations with MISO of the System Security Resource (SSR) agreement and how the process related to the plant sale negotiations. Expected discussion by early next week.

Discussion – MISO Market Agent Discussions.

PSE Consultant Tom Butz provided an update on the seeking a new provider to replace the UPPCO contract to provide MISO Market Agent Services. Much progress was made to date, and expected a new provider by the end of August 2012.

Decision – Legal and Consulting Approvals.

City Manager O'Toole reviewed information and sought approval for legal and consulting costs related to the Power Plant Sale.

Joint City Council & Electrical Advisory Minutes
July 11, 2012 – cont.

After discussion, Nelson moved, Baribeau seconded, to approve the current expenditures of Power System Engineering (PSE) and Troutman Sanders as presented, and to continue their services until completion of the Asset Purchase Agreement with a cap not to exceed \$150,000.

Upon a call of the roll, the vote was at follows:

Ayes: Nelson, Baribeau, Baker, Beauchamp, Evans
Nays: None

MOTION CARRIED.

GENERAL PUBLIC COMMENT - None

COUNCIL/COMMITTEE, STAFF REPORTS

A great deal of effort was put in by City Administration, and Electrical Advisory Committee.

ADJOURNMENT

Hearing no further public comment, or further reports from the Electrical Advisory Committee or Council, the meeting adjourned at 6:47 p.m.

Respectfully submitted,

Robert S. Richards, CMC
City Clerk

Approved:

Leo J. Evans, Mayor



CITY OF ESCANABA

COUNTY OF DELTA

STATE OF MICHIGAN

**NOTICE OF SPECIAL MEETING OF THE CITY COUNCIL, AND
ELECTRICAL ADVISORY COMMITTEE**

PLEASE TAKE NOTICE that the Escanaba City Council and Electrical Advisory Committee will conduct a special joint meeting on August 8, 2012, 6:00 p.m. in Room 101, of the City Hall. The purpose of the meeting is to discuss Power Plant Issues, and/or any other items for discussion.

August 8, 2012; 6:00 p.m.

This notice is given in accordance with Act 267 of the 1976 Public Acts of State of Michigan and Chapter II, Section 5, of the Escanaba City Charter. The City of Escanaba will provide necessary, reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon five (5) days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling the below named City Clerk. Public notice will be given regarding any changes of the above meeting.

James O'Toole, City Manager
(906) 786-9402

or

Robert S. Richards, CMC
City Clerk
(906) 786-1194

posted 8/3/2012 9:28 AM

MEMORANDUM

NB#3
CC/EAC
8/8/12

To: Jim O'Toole

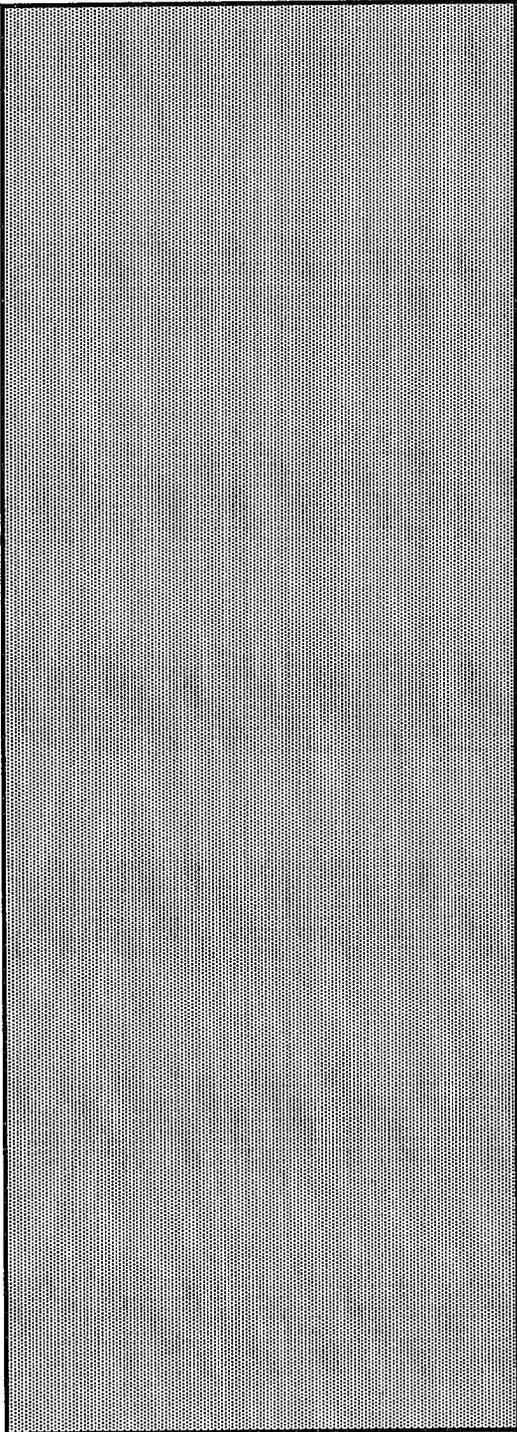
From: Mike Furmanski

Date: 03AUG12

Re: Settling Ponds Sediment Removal Specifications

Geosyntec Consultants have completed the bid specifications for the Settling Ponds Sediment Removal for our ponds at the power plant. The bids were sent to prospective bidders on July 27th, 2012. A pre-bid meeting is scheduled for August 9th.

NB# 3
CC/EAC
8/8/12



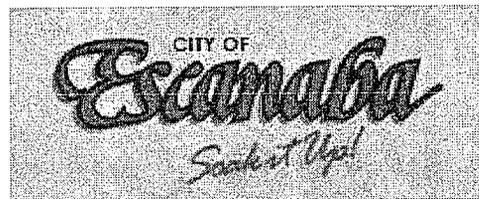
Title: Settling Pond Sediment
Removal Project Specifications
Location: Escanaba Generating
Station

Addendum: 0

Date: July 27, 2012

Issued For Bid Evaluation

Project Specifications



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City of Escanaba

Project Specifications
Approval Page

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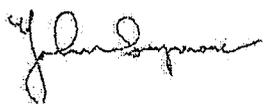
PROJECT SPECIFICATIONS APPROVAL PAGE

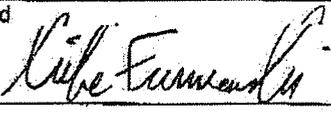
Escanaba Generation Station Settling Pond Sediment Removal

Prepared by: Omer Bozok  7/23/2012
 Senior Staff Engineer Date

Checked by: Edk. Petrovskis  7/27/2012
 Engineer's Project Director Date

APPROVAL

Approved by: John P. Seymour  7/27/2012
 Engineer of Record Date

Approved by: Mike Furmanski  7/27/2012
 Project Engineer Date

Date	Document Status
	Issued for Initial Review
	Issued for Final Review
	Issued Revised for Review
7/27/2012	Issued for Bid
	Issued for Construction

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DIVISION 1 – GENERAL REQUIREMENTS

Section 01000 – Summary of Work

Section 01025 – Measurement and Payment

Section 01030 – Environmental Protection

Section 01040 – Coordination

Section 01060 – Regulatory Compliance

Section 01300 – Submittals

DIVISION 2 – SITE WORK

Section 02105 – Surface Water, Erosion and Sediment Control

Section 02200 – Excavation

REFERENCE DOCUMENTS

Appendix A: Soil Borings

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DIVISION 0

BID DOCUMENTS

SECTION 00120

INSTRUCTIONS TO BIDDERS

- 1.01 The Specifications and Drawings are complementary. What is specified in either is binding as if required in both. In case of conflict between the Specification and the Drawings, the most stringent requirement shall govern.
- 1.02 The Bidder shall submit the **Work Plan** as specified in Sections 01300 paragraph 1.05 and Section 02200 paragraph 1.04.A with its bid.
- 1.03 The Bidder shall provide a preliminary schedule at the pre-bid meeting for the Owner's review.
- 1.04 Include in the Bidder's proposal any item not included on the Drawings or in the Specifications but is necessary for a complete installation.
- 1.05 State in the bid all proposed Subcontractors by trade. Include the Subcontractors business address, telephone number, and legal business name.
- 1.06 Addenda to the Specifications issued prior to the due date of the proposals shall become a part of this Specification.
- 1.07 Soil borings are provided in the Reference Documents, Appendix A. Boring locations are provided on the Drawings.

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SECTION 00300

BID FORM

Provide a total dollar value for all labor, material, equipment, supervision, and incidental services according to the 'BID FORM' shown below. Include any other cost and service deemed necessary for a complete and accurate bid proposal.

PART 1 GENERAL

1.01 BID FORM

A. Project: **Escanaba Generating Station Settling Pond Sediment Removal**

B. Bidder's Name : _____

Address: _____

City / State: _____

Contact person: _____

Phone: _____

Date: _____

C. PRICE QUOTATION FOR THE WORK DESCRIBED HEREIN:

The Agreement, including Drawings 1 and 2, Division 1 and Division 2 Specifications provide the details of the scope of work for this bid.

The bid shall be a LUMP SUM bid. The following price breakdown is required:

<u>Price Breakdown:</u>	<u>Price (\$)</u>
1. Mob & Demob Equip. & Personnel	_____
2. Temporary and Permanent Erosion Controls	_____
3. Dredging/Excavation	_____
4. Over excavation outside of pond to remove fly ash	_____

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- 5. Water Management _____
- 6. Off-site Disposal of Sediments and Fly Ash _____
- 7. All Other Costs Not Included above¹ _____

TOTAL LUMP SUM BID \$ _____

Written Bid Price: _____ Dollars

D. UNIT PRICE QUOTATION FOR RELATED WORK DESCRIBED HEREIN
Bidder shall provide unit rates to be used for additions/deductions for the Work to address changed conditions:

- 1. Dredging/Excavation of sediments
from the pond (\$/cuyd) _____
- 2. Off Site Non-hazardous Waste Disposal (\$/ton) _____
- 3. Over excavation outside of pond area (\$/cuyd) _____
- 4. General Fill- Procure, Transport and Compact
(\$/cuyd in place) _____
- 5. General Fill-2 - Procure, Transport and Compact
(\$/cuyd in place) _____
- 6. Road Base Aggregate- Procure, Transport and Place
(\$/ton in place) _____
- 7. Surface Course - Procure, Transport and Place
(\$/ton in place) _____
- 8. Silt Fence- Material, Transport and
Place (\$/ft in place) _____
- 9. Separator Fabric- Material, Transport
and Place (\$/sqft in place) _____

¹ The Contractor shall provide and itemized list of any items of Work that were not included in the other price breakdown items.

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- 10. On-site Topsoil- Procure, Transport and Place
(\$/cuyd in place) _____
- 11. Off-site Topsoil (Imported)- Procure, Transport and Place
(\$/cuyd in place) _____
- 12. Seed and Fertilize Disturbed
Areas (\$/sqyd in place) _____
- 13. Mulch- Procure, Transport, and Place (\$/sqyd) _____
- 14. Additional, Approved Project Time (\$/day) _____
- 15. Stand-by (\$/hour) _____
- 16. Price List of Common Equipment to be used on the project shall be
attached to the Bid including unit price per day for operation.
- 17. All unit prices shall include overhead (field and office) and profit.

1.02 QUANTITIES

- A. The Bidder shall provide their estimated quantities of the following elements of the Work:
- 1. Dredging of sediments from the pond (cuyd) _____
 - 2. General Fill Placement (cuyd in place) _____
 - 3. Silt Fence (ft) _____
 - 4. Aggregate (ton) _____
 - 5. Separator Fabric (sqft in place) _____
 - 6. On-site Topsoil Placement (cuyd in place) _____
 - 7. Off-site Topsoil Placement (cuyd in place) _____
 - 8. Seed and Fertilize Slope and Disturbed
Areas (sqyd in place) _____
 - 9. Mulch (sqyd in place) _____

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END OF SECTION

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DIVISION 1
GENERAL REQUIREMENTS

SECTION 01000

SUMMARY OF WORK

In summary, the Work is to include everything necessary to remove minimum one foot of sediments from the bottom and side slopes of the pond. This is to include the following:

1. Submittal of a Work Plan to describe how the Work will be completed and the integrity and stability of the slopes of the pond will be maintained;
2. Installation and maintenance of stormwater and erosion and sedimentation controls;
3. All work is to follow Michigan Public Act 451, Part 91 Soil Erosion and Sediment Control (SESC) and any other permit obtained by the Owner and under OSHA 1910.120.

The recommended approach to remove sediment is as follows:

1. Install all soil erosion and sediment controls as defined on the Drawings;
2. Construct the confinement berm as shown on the Drawings;
3. Establish the benchmark and grid system as defined in Section 02200, Paragraph 3.08.
4. Obtain depth soundings to obtain bottom elevations prior to excavation.
5. Start removing sediments from one pond progressing towards the other pond and place sediments within the area bounded by the confinement berm and the western edge of the pond.
6. Perform additional depth soundings as the dredging progresses to calculate how much sediment is removed.
7. Once it is verified that a minimum of one foot of sediment is removed, assist the Engineer in obtaining bottom soil samples.
8. The Engineer may ask the Contractor to remove more sediment depending on his observations of the bottom sample and/or the analysis results of the bottom sample.
9. Once the dredging activities are completed stabilize any disturbed area in accordance with Section 02105 and the Drawings.

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10. There is fly ash outside of the pond area that is expected to be encountered during topsoil stripping. This fly ash will be removed, disposed off site and backfilled.

END OF SECTION

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SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

Lump Sum Bid

Lump sum bids shall be paid on a progress basis. Details on the payment procedure are provided in the Paragraphs 25 and 26 of the General Conditions of the contract between the Owner and the Contractor. Measurement of quantities shall not be made for Lump sum work. The Contractor shall provide evidence acceptable to the Owner of the percent complete of the Price Breakdown items in Section 00300 in each progress invoice.

For additional work that is necessary to be completed under the unit rates in Section 00300, the measurements shall be of the units measured based on field measurements/surveys or by the weight of the quantity using quantity calculations approved by the Owner. All unit rates include the Contractor's field and office overhead and profit. Payment shall be applied based upon the unit rate times the agreed quantity.

The Contractor's final request for payment shall be accompanied with a waiver of lien on a form acceptable to the Owner.

END OF SECTION

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SECTION 01030

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.01 SCOPE

- A. The Contractor shall provide environmental protection throughout the conduct of the Work and shall specifically provide controls to prevent the occurrence of an unacceptable level of risk to public health and the environment (air, water, and land) during construction activities. The Contractor shall minimize any environmental disturbance during the work activities that would conflict with this standard. The Contractor and associated subcontractors shall comply with all applicable federal, state, and local laws and regulations relating to the activities to be performed.

1.02 RELATED SECTIONS AND PLANS

- A. Section 01060 – Regulatory Compliance
B. Section 01300 – Submittals
C. Section 02105 – Surface Water, Erosion and Sediment Control
D. Section 02200 – Excavation

1.03 NOTIFICATION

- A. If the Contractor is notified of or becomes aware of any nonconformance with federal, state, or local laws or regulations, the Contractor shall immediately inform the Owner of proposed corrective action and take such action as may be approved. If the Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for additional costs or damages by the Contractor.

1.04 PROTECTION OF LAND RESOURCES

- A. The Contractor shall provide temporary control measures to prevent soil erosion and to prevent damage to ground cover, shrubs, or trees outside the areas of the Work. Erosion and sediment control measures taken by the Contractor shall fulfill all requirements of applicable federal, state, and local regulations for erosion control and the requirements set forth in Section 02105 of the Specifications.

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1.05 PROTECTION OF AIR RESOURCES

- A. The Contractor shall minimize air pollution likely to occur from construction operations by maintaining effective dust-control measures, requiring proper emission control devices on construction vehicles and equipment, and by shutdown of motorized equipment when not in use.

- B. The Contractor shall be responsible for dust control in the Work Area, as well as all roads, and areas used for the transportation of personnel, equipment and materials on the Site. At a minimum, Contractor shall employ the use of a water truck for the control of dust. If the opacity exceeds 20% as determined by the Engineer, the Contractor shall immediately implement dust control measures such as watering. Any proposed additives to the water shall be submitted to the Engineer for approval prior to use.

1.06 PROTECTION OF WATER RESOURCES

- A. The Contractor shall perform activities in a manner that minimizes the potential for harmful impacts to surface water and groundwater. Measures for protection of water resources shall include providing temporary drainage facilities to prevent run-on and to control run-off from the work areas. These drainage features shall be maintained throughout the period of construction. The Contractor shall not dispose of any materials into any waters and shall install and maintain erosion and sediment controls (e.g., silt fences) as needed throughout the work. Tarps or plastic sheeting shall also be available to prevent run-off from newly exposed areas where soils appear to be contaminated. Finally, the Contractor shall take whatever steps are necessary to comply with all applicable federal, state, and local regulations for erosion and sediment control and surface water resources.

- B. Temporary surface water management shall be performed in accordance with Section 02105 of the Specifications.

1.07 SPILL CONTROL

- A. The Contractor shall prepare and submit a Spill Control and Countermeasures Plan (SCCP) to the Owner.

1.08 NOISE CONTROL

- A. The Contractor shall minimize noise by executing work using appropriate construction methods and equipment and only conducting work during approved work hours.

- B. Acceptable hours of work on this project are between 6 a.m. and 7 p.m. Monday through Saturday, unless the Owner gives prior approval.

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1.09 BURNING

- A. Burning any material will not be permitted.

1.10 ODOR CONTROL

- A. Construction odors are not expected to be a problem; however, the Contractor shall minimize odors if they should occur to the best extent practicable.

1.11 MAINTENANCE OF MONITORING FACILITIES DURING CONSTRUCTION

- A. The Contractor shall maintain all facilities constructed for environmental control and monitoring for the duration of the project.

PART 2 PRODUCTS

2.01 SILT FENCE

- A. Silt fence shall be in accordance with Section 02105.

2.02 DUST INHIBITOR

- A. Calcium chloride, if used as a dust inhibitor, shall require prior approval in accordance with procedures described in Section 01300 of the Specifications.
- B. Water, if used as a dust inhibitor, shall be obtained from sources accepted by the Owner.

2.03 TARPS AND SHEETING

Contractor may use tarps as temporary cover of soils. Potential materials of construction include fabric or synthetic fiber type materials or plastic type sheeting.

Tarps that have been used to cover waste, sludge or contaminated material from other project sites shall not be used.

PART 3 EXECUTION

3.01 GENERAL

Throughout the Work, the Contractor shall be prepared to use or implement the environmental protection controls and equipment described herein in the event that monitoring indicates there is a need or whenever there is concern about the potential for an unacceptable level of risk to public health and the environment (air, water and land).

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3.02 QUALITY CONTROL

The Contractor shall retain labels and/or shipping information for all products and materials supplied under this Section 01030 to verify that the products or materials meet the requirements of this section.

The Contractor is responsible for completing and documenting all quality control (QC). QC includes all measurements, observations, inspections, tests, and verifications that materials and procedures meet the requirements of the Specifications and Drawings. The completion of measurements, observations, inspections, tests or verifications by any other entity other than the Contractor does not relieve the Contractor of the responsibility to meet the requirements of the Drawings and Specifications.

END OF SECTION

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SECTION 01040

COORDINATION

PART 1 GENERAL

1.01 PROJECT MANAGEMENT

- A. **The Owner.** The Owner is the City of Escanaba.
- B. **The Project Manager.** The Owner's Project Manager is the primary site interface with the Contractor's authorized management representative regarding all matters of contract.

Project Manager: Mike Furmanski Telephone No: 906-786-0061

- C. **The Engineer.** The Engineer is Geosyntec Consultants, the company responsible for the design of the work. The Engineer's authority is provided in Paragraph 35 of the General Conditions of the contract between the Owner and the Contractor.
- D. Any directions or instructions from the Engineer to the Contractor's representative that in any way alters the scope of the contract will be in writing and must be approved by the Project Manager and the Engineer prior to the work starting. Normally a written Acknowledgement of Work (AOW) will be used.
- E. The Contractor shall address all day-to-day communications regarding technical issues and quality of the Work first to the Engineer. The Project Manager shall be responsible to provide any related and necessary authorizations that affect commercial contract terms.
- F. The Contractor shall provide the services of a competent site **Superintendent** throughout the duration of the Contractor's on-site work. The Superintendent shall represent the Contractor on all matters related to the Work and shall be authorized to act on behalf of the contractor. Decisions and agreements made by the Superintendent shall be binding as if made by the Contractor.

1.02 COORDINATION WITH OTHER CONTRACTORS AND SUB-CONTRACTORS

- A. Coordinate the work schedule with the Engineer and the Project Manager or his designee.

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- B. Meet with other Contractors, including the Engineer, in conjunction with the Owner to coordinate plans and schedules for orderly completion of the work. Adjust and revise the sequence of activities to meet coordination requirements in the best interest of the project.
- C. Inspect all work completed by others upon which the proper execution of the Contractor's work is dependent. Report any defect which renders such work unsuitable to the Engineer in writing prior to the commencement of further work. Failure to inspect and report constitutes an acceptance of such other work as fit and proper for the reception of the Contractor's work.
- D. To assure proper execution of the work, measure any work already in place affecting this portion of the job, and at once report to the Engineer any discrepancy between the executed work and the drawings immediately.

1.03 SCHEDULE OF WORK

- A. Prepare schedules as defined in Section 01300 Paragraph 1.03.
- B. The schedule shall graphically show the sequence of the various portions of the work and provide sufficient activity detail and definition to permit timely monitoring and comparison of actual progress to the expected progress. Include the anticipated man loading required to achieve the defined tasks in the specified time periods.
- C. Submit the Schedule to the Project Manager and the Engineer for review, comments, and approval prior to the start of work.
- D. Maintain the Schedule as required to adequately record actual performance and report progress.
- E. Make periodic revisions to the Schedule as required to adequately reflect actual performance and necessary adjustments to the succeeding activities.
- F. Provide plan details to correct schedule slippages.

1.04 PROJECT KICKOFF MEETING

- A. Project Kickoff Meeting shall be held at the site at least three days prior to the start of the Work. During this meeting, the Contractor shall present and discuss his Work Plan, equipment (including the associated loads and pressures) and procedures for performing all of the Work.

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- B. This meeting shall be attended by the Contractor's Field Superintendent, the Project Manager and the Engineer.
- C. The Work shall not begin until the Project Manager authorizes the Work to "proceed".

END OF SECTION

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SECTION 01060

REGULATORY COMPLIANCE

PART 1 GENERAL

1.01 SCOPE

- A. This Section covers the requirements for regulatory compliance on this project.

1.02 RELATED SECTIONS

- A. Section 01000 – Summary of Work
- B. Section 01030 – Environmental Protection
- C. Section 01300 – Submittals
- D. Section 02105 – Surface Water, Erosion and Sediment Control
- E. Section 02200 – General Earthwork

1.03 GENERAL

- A. The work shall be performed under OSHA 1910.120 (Hazardous Waste Operation and Emergency Response).
- B. It is the sole responsibility of the Contractor to be completely familiar with and to comply with all local, state, and federal regulations and permits pertaining to the work required in the Agreement.
- C. Certain permits and governmental agency approvals may be required for various portions of the work. Contractor shall be fully knowledgeable of, and to comply with, all regulatory requirements affecting the work, including any and all environmental requirements, permits and approvals. **Work that is included under a permit may not be initiated until the permit is received.** Copies of permits obtained for this project by the Owner are maintained onsite by the Engineer and are available for Contractor's review.
- D. The Contractor shall be solely responsible for obtaining and complying with any and all additional permits necessary to perform the Work. This shall include, but not be limited to, building permits, construction permits, permits for off-site debris and waste disposal, traffic and highway permits, demolition permits, etc.

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PART 2 EXECUTION

2.01 REGULATORY REPORTING DURING CONSTRUCTION

Routine regulatory reporting during construction will include progress reports prepared by the Engineer. The Contractor shall be aware of their required recordkeeping responsibilities as set forth in these Specifications, and shall promptly provide information as requested by the Owner and Project Manager for inclusion in the progress reports.

END OF SECTION

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SECTION 01300

SUBMITTALS

PART 1 – GENERAL

1.01 SUBMITTAL PROCEDURE

- A. All submittals shall include a transmittal sheet identifying all documents (with revision level) being submitted. Identify submittals with the Owner's Contract Number, and name of company location.
- B. Submit documents for review within 14 days after award of the Contract unless specified otherwise.
- C. Submittal documents shall include all required detail, assembly, erection drawings and diagrams required for complete installation.
- D. Submittals for approval shall be provided to the Engineer. Submittals shall be returned to the Contractor designated: "Proceed", "Proceed-Review Not Required", "Proceed as Noted" or "Revise and Resubmit".

1.02 PROJECT REQUIRED DOCUMENTATION & DATABASES

- A. Not required for this project

1.03 SCHEDULE

- A. Schedule requirements are provided in Paragraph 24 of the General Conditions of the contract between the Owner and the Contractor.
- B. The schedule shall graphically show the sequence of the various portions of the work and provide sufficient activity detail and definition to permit timely monitoring and comparison of actual progress to the expected progress. Include the anticipated man loading required to achieve the defined tasks in the specified time periods.
- C. One "day" in the schedule shall mean a calendar day excluding legal holidays recognized by the State of Michigan.
- D. Update the schedule as required to ensure that all parties involved are aware of their schedule commitments and that the overall scope of work for the parties involved is completed in accordance with the project schedule and the intent of the project.

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1.04 DRAWINGS

- A. All new drawings are to be drawn on CAD. AutoCAD, version Land Desktop 2007, is the preferred CAD system. Other file formats that are compatible with AutoCAD or that can be converted are acceptable. Approval of the format is required by the Owner.
- B. Maintain at the job site one complete set of all construction documents marked to show the actual field installed locations and conditions.
- C. Within 20 days upon completion of the Work, the Contractor shall deliver a set of as built/record drawings to the Project Manager. All measurements, locations and details of the completed Work are to be shown with sufficient clarity to enable their transfer to permanent documents without additional field verification.

1.05 WORK PLAN

- A. The Contractor shall submit a written Work Plan with its bid, and a finalized Work Plan at least 10 days prior to starting Excavation, to address the following:
 - 1. construction sequencing for implementing soil erosion and sediment control measures, dredging sediments from the settling pond, removal of fly ash from outside of the pond area, and re-establishing all disturbed areas;
 - 2. transportation plan for loading and hauling sediments and fly ash to off-site disposal;
 - 3. list of disposal facilities that are permitted under Michigan Public Act 451, Part 115;
 - 4. stockpiling plan indicating where stockpiles will be located; and
 - 5. surface water management, including how water will be pumped, how erosion and sedimentation will be minimized, where water will be placed/discharged and whether any additional permits are required.
- B. The Work Plan shall be discussed in the Project Kickoff Meeting to be held at least three days prior to the initiation of the Work.
- C. Excavation shall not begin until the Project Manager authorizes the Work to "proceed".

END OF SECTION

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DIVISION 2

SITE WORK

SECTION 02105

SURFACE WATER, EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. The Contractor shall furnish all labor, materials, tools, supervision, transportation, installation equipment, and incidentals required to install, inspect and maintain all temporary and permanent erosion and sediment control measures. All grading and site preparation work and surface water control and dewatering are included in this Work necessary to install the erosion and sediment control measures and conduct the Work.

1.02 RELATED SECTIONS

- A. Section 01030 – Environmental Protection
- B. Section 01060 – Regulatory Compliance
- C. Section 02200 – Excavation

1.03 REFERENCES

- A. NRCS National Engineering Handbook Material Specification.
- B. MDOT Standard Specification for Construction, 2003.

1.04 SUBMITTALS

- A. At least 10 days prior to the start of installation of the erosion and sediment controls, the Contractor shall submit the following information to the Engineer:
 - 1. manufacturer's product data and recommended methods of application for silt fence;
 - 2. the manufacturer's product data for a Separator Fabric;
 - 3. source and confirmation of mix for seed and fertilizer (if

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- needed);
4. the source of aggregates and representative pre-qualification test results from the supplier indicating the gradation or specified size and type of the material;
 5. for the off-site topsoil, pre-qualification test results for organic content and soil nutrients (phosphorous, potassium, nitrogen and acidity);
 6. samples for aggregate and off-site topsoil for the third party conformance testing; and
 7. A written construction Work Plan shall be submitted to document procedures.
- A. The Contractor shall notify the Engineer a minimum of five days prior to starting erosion and control activities. Erosion and sediment control measures must be installed before beginning any land clearing or grading work.
 - B. Copies of shipping manifests that describe the product and quantity shall be submitted to the Engineer one week prior to their use on site.
 - C. The Contractor shall provide labels of materials received at the Site to the Engineer to verify the product and quantities.

1.05 CONSTRUCTION QUALITY ASSURANCE

- A. Erosion and sediment control activities will be monitored by the Engineer and the Certified Stormwater Operator. The Contractor shall assist the Engineer and the Certified Stormwater Operator in these activities as needed and as appropriate.
- B. Monitoring of the performance of erosion and sediment control measures by the Engineer and the Certified Stormwater Operator in no manner relieves the Contractor of the responsibility to perform construction quality control and to construct all Work in accordance with the Drawings and Specifications.
- C. If the monitoring indicates that the Work does not meet specified requirements, the Contractor shall remove, replace, and retest the Work, at no additional cost to the Owner.

1.06 EXISTING CONDITIONS

- A. The Contractor shall comply with applicable regulations and the Owner's requirements in locating and providing clearance for all underground and

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above ground utilities prior to beginning construction activities. The Contractor shall immediately notify the Engineer if other utility lines or structures not shown on the Drawings are encountered.

- B. The Contractor may be required to subcontract a utility location service, if directed by the Project Manager.
- C. The contractor is responsible for knowing the location of all existing structures (such as monitoring wells, overflow structure) and marking them so that they are visible.
- D. The Contractor is responsible for protecting the existing structures and maintaining them in a readily accessible condition for the duration of the work.
- E. The Contractor is responsible for immediately notifying the Engineer of any observed damage to existing structures. The Owner may, at its own discretion, directly arrange repair of damaged structure, or authorize the Contractor to repair or install/construct a new one at no additional cost to the Owner.
- F. The Contractor must notify the Engineer in advance if it is necessary to temporarily limit or prohibit access to a given existing structure.

PART 2 PRODUCTS

2.01 AGGREGATE

- A. Aggregate shall meet the requirements of Section 02200.

2.02 SILT FENCE

- A. Silt fence shall be as specified on the Drawings. However, at a minimum, the filter fabric shall meet the requirements of NRCS National Engineering Handbook Material Specification 592, Geotextile Table 1 or 2, Class III with apparent opening size of at least 30 for non woven and 50 for woven geotextiles.
- B. The fabric shall have a minimum width of 3.5 feet including embedment. Filter fabric will be fastened in place by wire fasteners as specified on the drawings.
- C. Fence posts shall be either steel or wood with minimum cross-sectional area of 3.0 sq. in. Posts shall be driven minimum 18-inches into the ground as shown on the drawings.

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2.03 SEPARATOR FABRIC

- A. Separator Fabric shall meet the requirements of Section 02200.

2.04 VEGETATION

- A. Vegetative Soil (Topsoil) layer shall be in accordance with Section 02200. Finished work area surfaces are to be finished graded, fertilized (if necessary) and seeded with permanent or temporary seed mix and covered with mulch.
- B. Temporary seeding of the stockpile fill surfaces and disturbed work areas that remain inactive for 14 days must have temporary or permanent stabilization in place. Stabilization measures shall be as indicated on the Drawings.
- C. Permanent seeding of the restored areas shall be as specified on the Drawings. For the Vegetative Soil from an off-site source, the Contractor shall provide pre-qualification test results for organic content and soil nutrients (phosphorous, potassium, nitrogen and acidity) along with a sample for conformance testing.

PART 3 EXECUTION

3.01 INSTALLATION

- A. All soil erosion and sediment control measures shall be installed prior to starting any site preparation activities.
- B. Silt fence shall be installed in accordance with the manufacturers' recommendations and as shown on the Drawings. However, posts shall be spaced a maximum of five feet center-to-center. They shall extend at least 18 inches into the ground, and they shall support the silt fence for the full height of the fabric and extend at least 24 inches above ground. The filter fabric shall be buried at least 6 inches deep in a 6-inch wide trench. The fabric shall extend at least 24 inches above the ground.
- C. Temporary seeding shall be placed on stockpile fill surfaces and disturbed work areas that remain inactive for 14 days.
- D. At the end of the Work, any disturbed areas shall be permanently stabilized utilizing topsoil, the permanent seed mix, fertilizer (if needed) and mulch as stated on the Drawings.

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3.02 PROTECTION OF WORK

- A. The Contractor shall use all means necessary to protect all prior work, including materials and completed work of other Sections. The Contractor shall verify that the materials meet Specifications.
- B. The Contractor shall provide all necessary control of surface water run-on and run-off.
- C. Sediment and erosion control measures shall be inspected by a Certified Storm Water Operator, as defined by the MDEQ, at least once every seven days and within 24 hours of precipitation events that results in a discharge from the site. The Contractor shall make immediate repairs as needed at no additional cost to the Owner.

3.03 QUALITY CONTROL

- A. The Contractor shall submit labels and/or shipping information for all products and materials supplied under this Section 02105 to the Engineer to verify that the products or materials meet the requirements of this section.
- B. The Contractor is responsible for completing and documenting all quality control (QC). QC includes all measurements, observations, inspections, tests, and verifications that materials and procedures meet the requirements of the Specifications and Drawings.
- C. The Contractor shall provide the pre-qualification test results.

END OF SECTION

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SECTION 02200

EXCAVATION

PART 1 GENERAL

1.01 SCOPE

- A. The Contractor shall furnish all labor, tools, supervision, transportation, and installation equipment necessary to perform the Work as specified herein and as shown on the Drawings.
- B. The Contractor shall be prepared to perform the excavation (dredging) in conjunction with other construction activities, if present, and coordinate all the work.
- C. The Work of this section shall include, but not necessarily be limited to: excavating sediments from the bottom and side slopes of the pond, hauling, stockpiling, backfilling, compacting, and grading soil materials. The Work of this section also includes any dewatering of Work areas, and protection necessary to complete the Work.

1.02 RELATED SECTIONS

- A. Section 01025 - Measurement and Payment
- B. Section 01300 - Submittals
- C. Section 02105 - Surface Water, Erosion and Sediment Control

1.03 REFERENCES

- A. Drawings 1 and 2.
- B. Latest version of American Society for Testing and Materials (ASTM) standards:
 - 1. ASTM D 422. Standard Test Method for Particle-Size Analysis of Soils,
 - 2. ASTM D 2974. Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soil.
 - 3. ASTM D 2487. Classification of Soils for Engineering Purposes (Unified Soil Classification System).

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4. ASTM D4253. Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.
- C. MDOT Standard Specification for Construction, 2003.
- D. NRCS National Engineering Handbook Material Specification.
- E. USEPA Test Method 9095B "Paint Filter Liquids Test"

1.04 SUBMITTALS

- A. A Work Plan shall be submitted in accordance with Section 01300.
- B. At least 10 days prior to the start of excavation operations, the Contractor shall submit the pre-qualification test results of all soils and aggregates to the Engineer that are to be used in the excavation tasks included in this section.
- C. At least 10 days prior to the start of excavation operations, the Contractor shall submit samples of all aggregate and soils to the Engineer for the third party conformance testing.
- D. For soils supplied from an off-site borrow source, the Contractor shall submit written evidence, including but not limited to, documented knowledge of the past use of the borrow soil property, at least 10 days prior to the start of earthwork operations that the soil is free of materials containing hazardous or toxic constituents at concentrations above those defined by the Michigan Department of Environmental Quality for residential land use.
- E. The Contractor shall submit agricultural test results of soils that will be used for Vegetative Soil (topsoil) to the Engineer at least 10 days before preparation of the seed bed. Tests shall include soil organic content, nitrogen, phosphorus, potassium and acidity.
- F. The Contractor shall submit written notification to the Engineer minimum of five days prior to starting construction of the work included in this section. No work shall start until the Project Manager gives the Notice-to-Proceed.
- G. If the Work is interrupted for reasons other than inclement weather, the Contractor shall submit a notification to the Engineer a minimum of 24 hours prior to resuming work.

1.05 EXISTING CONDITIONS

- A. The Contractor shall comply with applicable regulations and the Owner's

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requirements in locating and providing clearance for all underground and above ground utilities prior to beginning construction activities. The Contractor shall immediately notify the Engineer if other utility lines or structures not shown on the Drawings are encountered.

- B. The Owner will stake out the alignment of water line, electric line and 48-in outfall pipe at the site.
- C. The Contractor is responsible for knowing the location of all existing structures (such as monitoring wells, overflow structure) and marking them so that they are visible.
- D. The Contractor is responsible for protecting the existing structures and maintaining them in a readily accessible condition for the duration of the work.
- E. The Contractor is responsible for immediately notifying the Engineer for any observed damage to existing structures. The Owner may, at its own discretion, directly arrange repair of damaged structures, or authorize the Contractor to repair or install/construct a new one at no additional cost to the Owner.
- F. The Contractor must notify the Engineer in advance if it is necessary to temporarily limit or prohibit access to a given existing structure.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General Fill (GF) shall be obtained from an off-site or on-site source that is free of debris, foreign objects, rock fragments, roots, and organic material. General Fill shall be classified as SM, SP, or appropriate dual classifications in accordance with the Unified Soil Classification System (USCS) as described in ASTM D2487, or equivalent as approved by the Engineer.
- B. General Fill-2 (GF-2) shall be obtained from an off-site or on-site source that is free of debris, foreign objects, rock fragments, roots, and organic material. GF-2 shall be classified as SP in accordance with the USCS, or equivalent, as approved by the Engineer.
- C. Road Base Aggregate shall be Coarse Gravel 3x1 imported from an off-site source and shall meet the requirements of the Section 916 of MDOT Standard Specifications for Construction, or equivalent material approved by the Engineer.

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- D. Surface Course shall be MDOT 21AA imported from an off-site source and shall meet the requirements of the Table 902.1 of MDOT Standard Specifications for Construction, or equivalent material approved by the Engineer.
- E. Separator Fabric shall meet the requirements of NRCS National Engineering Handbook Material Specification 592, Geotextile Table 1 or 2, Class III with apparent opening size of at least 30 for non-woven and 50 for woven geotextiles.
- F. Vegetative Soil (topsoil) from an off-site source shall consist of relatively homogeneous, natural soils that are free of debris, foreign objects, and large rock fragments. No material with maximum diameter larger than 3 inches shall be allowed. Vegetative Soil shall be classified as SP, SM, SC, CL or OL material in accordance with the USCS but shall have a minimum organic content of 3 percent and fines content of 35 percent, or equivalent material approved by the Engineer. Vegetative Soil shall have adequate levels of nitrogen, phosphorous and potassium and suitable acidity for the growth of specified grasses as identified by the supplier of the seed for the project.
- G. Substandard materials shall be segregated at the source and will not be permitted at the work area. Materials found to be substandard by the Engineer shall be removed from the work area by the Contractor at the Contractor's expense and relocated to an area designated by the Engineer.
- H. Soils provided from off-site shall be free of materials containing hazardous or toxic constituents at concentrations above those defined by the Michigan Department Environmental Quality for residential land use.

PART 3 EXECUTION

3.01 SURFACE WATER, EROSION AND SEDIMENT CONTROL

- A. The Contractor shall attend a safety meeting and training provided by the Owner with its personnel on the first day of the site work prior to implementing any work.
- B. The Contractor shall stake the Limit of Disturbance at 50 ft intervals at the field and maintain it during construction. All earth disturbing construction activities will be performed within the limit of disturbance as indicated on the Drawings.
- C. Prior to implementing any of the Work described in this Section, the Contractor shall install all surface water, erosion and sediment controls as described in Section 02105 and on the Drawings.

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- D. All erosion and sediment control practices must conform to the requirements of Michigan's Permit-by-Rule requirements and the Drawings for construction activities.
- E. The Contractor shall conduct daily inspections of the erosion and sediment controls. Maintaining the erosion and sediment controls is the sole responsibility of the Contractor. Accumulated sediment deposited behind the silt fences shall be removed by the Contractor and relocated to designated onsite areas by the Engineer.

3.02 SITE PREPARATION

- A. Once all the surface water, erosion and sediment controls are in place, the Contractor shall strip approximately 6-in of topsoil from the area where the construction vehicles will be operating for the dredging activities, from stockpile areas and where the temporary construction entrance, temporary haul road and the confinement berm will be constructed. Stripped topsoil that meets these specifications for Vegetative Soil shall be stockpiled for later use to restore the site (Paragraph 2.01 of this section provides the specifications for Vegetative Soil).
- B. Construct temporary construction entrances and haul roads.
- C. If the subgrade exposed after stripping 6-in of topsoil contains fly ash upon the inspection of the Engineer, the Contractor shall remove the fly ash to the top of native soil. The removed fly ash shall be replaced with GF-2 in the area between the confinement berm and the western edge of the ponds; in remaining area where temporary construction entrances, haul roads, access ramps will be constructed, the Contractor shall replace fly ash with GF, along with any fly ash in the area that is disturbed during these construction activities. Approximately one to three feet of fly ash is expected in the existing ground surrounding the ponds. Any fly ash removed during this process shall be hauled off-site along with the sediments from the ponds for offsite disposal.

3.03 STOCKPILING

- A. Stockpiled materials shall be located within the area bounded by the Limit of Disturbance so as not to obscure any other construction activities.
- B. Stockpiles shall be of neat configurations, graded to drain, have sideslopes no steeper than 2H:1V, be shaped and tracked in at the end of each day.
- C. Stockpiles of different construction materials shall be separated by no less than 25 feet and be clearly identified as to which material exists in each stockpile.

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- D. Soil stockpiles that will remain out of active use for a period greater than 14 days shall either be protected by covering with plastic sheeting or stabilized by revegetation in accordance with the requirements for temporary seeding set forth in the Drawings and Specifications. Chip and mulch stockpiles may be left unprotected unless otherwise directed by the Engineer.

3.04 POND EXCAVATION

- A. Once all the surface water, erosion and sediment controls are in place, construct the containment berm as shown on the Drawings.
- B. Perform excavation (dredging) activities as outlined on the Drawings.
- C. If the area where the sediments will be placed is sloping away from the edge of the pond, place GF-2 to bring the grade to a level (0% grade). If the grade is steeper than 5%, the Contractor shall grade it to 5%.
- D. The Contractor shall use an appropriate clamshell or bucket that would minimize the loss of sediments and water during excavation of sediments from pond. Environmental clamshell and buckets are recommended for minimizing the amount of circulation.
- E. The Contractor shall remove sediments from one pond (either the northern or southern pond) then move to the other pond. Once it is verified that at least a foot of sediment is removed, the Engineer will collect soil samples from the bottom of each pond for environmental testing. If the bottom sample contains fly ash the Engineer will direct the Contractor to remove additional sediment. The Contractor is responsible for assisting the Engineer obtaining these samples.
- F. All sediment, including fly ash excavated following topsoil stripping, must pass the Paint Filter Liquids Test prior to be hauled to an offsite facility. Therefore, the Contractor shall notify the Engineer in advance for him to perform the test. The Engineer will perform one test per 100 CY of sediment. However, depending on the homogeneity of sediment and his observations, the Engineer may perform the test more frequently.
- G. Trucks being utilized to haul sediments to an off-site disposal facility shall have a truck bed lined with a polyvinyl chloride (PVC) or polyethylene (PE) liner, or equivalent to minimize the spill during transportation.

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- H. The Contractor can propose an alternative approach for removing the sediments from the settling pond. The alternative approach shall be provided to the Engineer at least two weeks prior to the Kickoff Meeting for approval by the Engineer.

3.05 COMPACTION AND STABILIZATION

- A. Placement and compaction of General Fill (GF) and General Fill-2 (GF-2) used for general grading and filling shall comply with the following:
1. GF and GF-2 shall be placed in horizontal loose lifts of not more than 12 inches using approved equipment. Contractor may modify the lift height provided a test fill acceptable to the Engineer is completed and documented in a Test Fill Results Report to demonstrate the modification meets the specified density criteria;
 2. Compaction shall be performed using a vibratory smooth or pad foot drum compactors for granular soils. Each lift shall receive a minimum of three passes resulting in an average compacted lift thickness of no more than 9 inches. The GF and GF-2 shall be compacted to 75% relative density of the maximum density determined by ASTM D 4253.
- B. Placement and compaction of the Road Base Aggregate and Surface Course shall be as follows:
1. Place in 6-in loose lifts.
 2. Each Surface Course lift shall be conditioned such that uniform moisture conditions are obtained.
 3. Compact Surface Course to a minimum of 93 percent of the maximum dry density as determined from ASTM D 1557. Compaction shall consist of at least four passes from a vibratory smooth drum roller.
 4. Compact Road Base Aggregate with minimum of six passes using vibratory smooth drum roller. The stiffness of the Road Base Aggregate will be confirmed by the Engineer. The Engineer may ask for further compaction.
- C. Following the completion of dredging activities, Vegetative Soil (topsoil) shall be placed in areas that are disturbed during construction and permanently stabilized with seed, fertilizer (if needed) and mulch.
1. The contractor can utilize the topsoil stripped during site preparation if it meets the specification requirements for Vegetative Soil.
 2. If additional Vegetative Soil from an off-site source is required, Vegetative Soil shall be tested to assess the nutrients present to assess

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its suitability as Vegetative Soil and to identify the amount of fertilizer required. Pre-qualification tests shall include soil organic content, nitrogen, phosphorous, potassium, and acidity. The test results shall be submitted to the Engineer to determine the suitability of the Vegetative Soil and any fertilizer requirements based upon input from the supplier of the seed.

3.06 PUMPING AND DRAINAGE

- A. At all times during construction, the Contractor shall provide and maintain proper equipment and facilities to remove water entering the construction area so as to obtain satisfactory working conditions.
- B. The Contractor shall be responsible for controlling ground water, and prevent surface-water run-off and run-on around the construction area, at no additional cost to the Owner.
- C. Surface water in the Work area shall be pumped or drained from the construction area into the settling pond to maintain the construction area free from standing water.

3.07 DUST CONTROL

- A. The Contractor shall apply water and/or dust suppressants as needed, or as directed by the Engineer to control dust during construction in accordance with Section 01030. Dust control shall be performed at no additional cost to the Owner.

3.08 SURVEYING AND CONSTRUCTION TOLERANCES

- A. Before starting dredging activities, the Contractor shall establish a benchmark at a known elevation, and then establish the elevations of the water levels in each pond, and the elevations of the bottom of the pond. Pond bottom elevations will be obtained on a 25- foot square grid pattern by the Contractor. The Contractor shall provide grid coordinates and elevation differences to the Engineer along with the respective datums.
- B. To determine the progress and to track the amount of sediment removed, the Contractor shall provide additional set of readings as the dredging activities progress and provide results to the Engineer. The Owner is not responsible for paying for any extra excavation performed due to lack of a sounding/survey.

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- C. To accurately estimate how much fly ash is excavated from the area surrounding the ponds, the Contractor shall survey the existing ground prior to stripping any topsoil. Once the fly ash is removed and the top of native soil is exposed, the Contractor shall re-survey the area before placing GF and/or GF-2.
- D. The measurement tolerance is ± 0.05 ft for vertical and ± 1.00 ft for horizontal dimensions.

3.09 PROTECTION OF WORK

- A. The Contractor shall use all means necessary to protect all prior work, including all materials and completed work of other Sections.
- B. In the event of damage, the Contractor shall immediately make all repairs and replacements necessary, subject to the approval of the Engineer at no additional cost to the Owner.

3.10 QUALITY CONTROL

- A. The Contractor is responsible for completing and documenting all quality control (QC). QC includes all measurements, observations, inspections, tests, and verifications that materials and procedures meet the requirements of the Specifications and Drawings.
- B. The Contractor shall retain labels and/or shipping information for all products and materials supplied under this Section 02200 to verify that the products or materials meet the requirements of this section.
- C. Upon arrival of haul trucks to the site, the Contractor shall verify that each truck bed is lined with a polyvinyl chloride (PVC) or polyethylene (PE) liner, or equivalent.

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Table 02200-1. Section Extracted from MDOT Standard Specifications for Coarse Gravel 3x1.

Section 916. EROSION CONTROL MATERIALS

916.01 Stone Used For Erosion Control. Use cobblestone, coarse gravel and riprap for erosion control on slopes, in ditches and for the construction of erosion control devices including check dams. Natural stone used as cobblestone or riprap must be sound, non-stratified, durable rock. Where approved by the Engineer and not prohibited by permit requirements, sound pieces of broken concrete, with no protruding reinforcement, may be used in place of natural stone. Crushed hot mixed asphalt (HMA) pavement and broken brick will not be allowed as an erosion control material.

A. Cobblestone. Cobblestone must consist of rounded or semi-rounded rock fragments with average dimension between 3 inches and 12 inches.

B. Coarse Gravel 3x1. This material must conform to commercially graded material with particles sized from $\frac{3}{4}$ inch to 3 inches.

C. Riprap. Riprap must be natural stone, solid precast concrete blocks made from Grade P2 concrete, or sound pieces of broken concrete, free from structural defects. All riprap must be free of soil, HMA and protruding reinforcing steel. The face of the precast concrete blocks must be randomly scored with plane of weakness joints into sections with areas between 4 and 9 square feet. Lifting lugs cast into the concrete blocks must not project above the finished surface of the concrete.

Riprap is classified as either plain or heavy based on the horizontal cross section dimensions ("footprint") and the in-place thickness of the individual pieces.

1. Plain Riprap. The "footprint" dimensions for natural stone and broken concrete must range from 8 to 16 inches with in-place thickness of at least 8 inches. Smaller pieces may be used to fill spaces for better protection of the slope.

Precast concrete block used as plain riprap must be at least 6 inches thick and have a surface area no larger than 15 square feet.

2. Heavy Riprap. The "footprint" for natural stone and broken concrete must be 16 inches in least dimension with the ratio of maximum to minimum dimension not exceeding 3:1. The in-place thickness must be at least 8 inches.

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Table 02200-2. Sections Extracted from NRCS NEH Material Specification 592 for Geotextile (Separator Fabric) Silt Fence

Property	Test method	Class I	Class II & III	Class IV
Tensile strength (pounds) ^{1/}	ASTM D 4632 grab test	200 minimum in any principal direction	120 minimum in any principal direction	180 minimum in any principal direction
Elongation at failure (percent) ^{1/}	ASTM D 4632 grab test	<50	<50	<50
Puncture (pounds) ^{1/}	ASTM D 4833	90 minimum	60 minimum	60 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751	As specified, but no smaller than 0.212 mm (#70) ^{2/}	As specified, but no smaller than 0.212 mm (#70) ^{2/}	As specified, but no smaller than 0.212 mm (#70) ^{2/}
Percent open area (percent)	CWO-02215-86	4.0 minimum	4.0 minimum	1.0 minimum
Permittivity sec ⁻¹	ASTM D 4491	0.10 minimum	0.10 minimum	0.10 minimum

^{1/} Minimum average roll value (weakest principal direction).

^{2/} U.S. standard sieve size.

Note: CWO is a USACE reference.

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Table 02200-3. Sections Extracted from NRCS NEH Material Specification 592 for Geotextile (Separator Fabric) Silt Fence

Property	Test method	Class I	Class II	Class III	Class IV ^{2/}
Tensile strength (lb) ^{1/}	ASTM D 4632 grab test	180 minimum	120 minimum	90 minimum	115 minimum
Elongation at failure(%) ^{1/}	ASTM D 4632	≥ 50	≥ 50	≥ 50	≥ 50
Puncture (pounds)	ASTM D 4833	80 minimum	60 minimum	40 minimum	40 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751	As specified max. #40 ^{2/}			
Permittivity sec ⁻¹	ASTM D 4491	0.70 minimum	0.70 minimum	0.70 minimum	0.10 minimum

1/ Minimum average roll value (weakest principal direction).

2/ U.S. standard sieve size.

3/ Heat-bonded or resin-bonded geotextile may be used for classes III and IV. They are particularly well suited to class IV. Needle-punched geotextiles are required for all other classes.

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Table 02200-4. Sections Extracted from MDOT Standard Specifications for Surface Course

Material Type	Class	Item of Work by Section Number (Sequential) (a)	Sieve Analysis (ASTM 109) Total Percent Passing (b)										Loss by Washing (ASTM 109) % Passing No. 200 (b)		
			2.5 in	2 in	1.5 in	1 in	¾ in	½ in	¾ in	No. 4	No. 10	No. 30			
Coarse Aggregates	4 AA (c)	602	100	90-100	40-60		0-12								2.0 max.
	6 AAA (c)	602			100	90-100	60-85	30-60		0-8					1.0 max.(d)
	6 AA (c)	601,602, 706,708,806			100	95-100		30-60		0-8					1.0 max.(d)
	5 A	205,401,402, 601, 602, 606,706,806			100	95-100		30-50		0-5					1.0 max.(d)
	17 A				100	90-100		50-75		0-8					1.0 max.(d)
	25 A	508				100	95-100		60-90	5-30	0-12				3.0 max.
	26 A	706,712				100	95-100		60-80	5-30	0-12				3.0 max.
29 A	508						100	90-100	10-30	0-10				3.0 max.	
Dense-Graded Aggregates	21 AA	302,304,503			100	85-100		50-75			20-45				4-8 (e)(f)
	21 A	302,503				100	90-100		65-85		30-50				4-8 (e)(f)(g)
	22 A	302,306,307,603					100		60-85		25-60				9-16 (f)
	23 A	306,307													
Open-Graded Aggregates	2 G	303(0)			100	85-100		40-70			0-10	0-8			5.0 max.
	3 G				100	85-100		40-70			0-30	0-13			5.0 max.
	4 G (h)	303			100		60-80	35-65			10-25	5-15			6.0 max.
	34 R	404						100	90-100		0-5				3.0 max.
	34 G	404						100	95-100		0-5				3.0 max.

- a. Designated Item of Work (Section)
- | | |
|---|---|
| 205 Roadway Earthwork | 502 Temporary Patching with HMA Mixture |
| 302 Aggregate Base Courses | 508 Chip Seals |
| 303 Open-Graded Drainage Courses | 601 PCC Pavement Mixtures |
| 304 Rubblizing Existing PCC Pavement-Filler Aggregate | 602 Concrete Pavement Construction |
| 306 Aggregate Surface Course | 603 Concrete Pavement Repair |
| 307 Aggregate Shoulders and Approaches | 706 Structural Concrete Construction |
| 401 Culverts | 708 Prestressed Concrete Beams |
| 402 Storm Sewers | 712 Bridge Rehabilitation-Concrete |
| 404 Underdrains-Trench Backfill | 805 Bicycle Paths |
- b. Based on dry weights.
 c. Class 6AAA will be used exclusively for all mainline and ramp concrete pavement when the directional commercial ADT is greater than or equal to 5000 vehicles per day.
 d. Loss by Washing will not exceed 2.0 percent for material produced entirely by crushing rock, boulders, cobbles, slag, or concrete.
 e. When used for aggregate base courses, surface courses, shoulders and approaches and the material is produced entirely by crushing rock, boulders, cobbles, slag, or concrete, the maximum limit for Loss by Washing must not exceed 10 percent.
 f. The limits for Loss by Washing of dense-graded aggregates are significant to the nearest whole percent.
 g. For aggregates produced from sources located in Barrien County, the Loss by Washing must not exceed 8 percent and the sum of Loss by Washing and shale particles must not exceed 10 percent.
 h. For use with stabilized aggregate base.
 i. Acceptance gradation at production site only.

END OF SECTION

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**REFERENCE DOCUMENTS
APPENDIX A: BORING LOGS**

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City of Escanaba



FIELD BORING LOG

One Madison Ave
Cadillac, MI 49601
231-775-7755
231-775-1340 fax

CLIENT & PROJECT: Well install @ ESCANABA PARK PHASE DATE DRILLED: 12-14-11
 BORING NO.: MW-8 JOB NUMBER: 12159.00006.D
 BORING LOCATION: @ Stake DRILLER/HELPER: JRL/MLD
 METHOD OF DRILLING: DRILL RIG: AMS
 NOTES: LOGGED BY: MLD
 CITY: COUNTY:

Depth (ft)	Sample No. Sample Type Sample Depth	SPT Results (N-value)	% REC	Lithology Description	PID (ppm) or Qp (tsf)	Comments
0.0	0-6"			Sandy TOPSOIL; TRACE ROOT STRUCTURES MOIST - VERY DARK BROWN - BLACK		
5.0	6'-7'			FINE SAND; TRACE SILT & FINE GRAVEL DAMP - MIXED BROWNS		PARTLY ORGANIC LAYER @ 6-6 1/2'
10.0	7'-9"			FINE SAND; TRACE SILT & FINE GRAVEL VERY MOIST, GREY BROWN		Gray @ ± 8'
15.0	9'-10'			FINE-MED SAND; TRACE FINE GRAVEL CLAY VERY MOIST - GRAY		
20.0						
25.0						

<u>GROUNDWATER DEPTH</u>	<u>HOLE COLLAPSE</u>	<u>BACKFILL</u>
DURING DRILLING ± 6'	AT COMPLETION	
AT COMPLETION	AFTER HOURS	
AFTER HOURS		

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City of Escanaba



FIELD BORING LOG

One Madison Ave
Cadillac, MI 49601
231-775-7755
231-775-1340 fax

CLIENT & PROJECT: Well install ESCANABA Power Plant
BORING NO.: MW-9
BORING LOCATION: e stake
METHOD OF DRILLING:
NOTES: LOG WRITTEN WHILE PROBING - WHILE DRILLING W/ -
ALSO HAD COARSE GRAVEL + CONCRETE RUBBLE

DATE DRILLED: 12-14-11
JOB NUMBER: 12159.00006.D
DRILLER/HELPER: JEL/MLD
DRILL RIG: AMS
LOGGED BY: MLD
CITY: COUNTY:

Depth (ft)	Sample No. Sample Type Sample Depth	SPT Results (N-value)	% REC	Lithology Description	PID (ppm) or Qp (tsf)	Comments
0.0	0-5"			CLAYEY TOPSOIL, TRACE ROOT STRUCTURES SAND & FINE GRAVEL DAMP - BLACK		
5.0	5'-1'			SILTY CLAY, TRACE SANDS & FINE GRAVEL REDDISH BROWN - DAMP		
10.0	1'-1 1/2"			FINE SAND, TRACE SILT, FINE GRAVEL - in clay DK BROWN - DAMP		
15.0	1 1/2 - 5"			FINE - COARSE SAND, TRACE SILT, SLUG & FINE GRAVEL - BLACK w/ROOTS - DAMP		
20.0	5'-6"			FINE SAND, TRACE SILT & GRAVEL BROWN - VERY MOIST		
	6'-7'			FINE SAND, TRACE SILT, GRAVEL GRAY - MOIST		
	7'-8 1/2"			FIBROUS ORGANICS w/ SOME SANDS, TRACE FINE GRAVEL VERY DR. BROWN/BLACK - VERY MOIST		
	8 1/2 - 9 1/2"			FINE SAND, TRACE SILT, FINE GRAVEL GRAY - VERY MOIST		
25.0	9 1/2 - 10'			FINE - MED SAND, TRACE SILT, FINE GRAVEL - GRAY - VERY MOIST		

<u>GROUNDWATER DEPTH</u> DURING DRILLING 14' AT COMPLETION AFTER HOURS	<u>HOLE COLLAPSE</u> AT COMPLETION AFTER HOURS	<u>BACKFILL</u>
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City of Escanaba



FIELD BORING LOG

One Madison Ave
Cadillac, MI 49601
231-775-7755
231-775-1340 fax

CLIENT & PROJECT: Well install @ ESCANABA POWER PLANT
BORING NO.: MW-10
BORING LOCATION: @ STAKE # 102
METHOD OF DRILLING:
NOTES: LOG WRITTEN WHILE PROGRESSING - WHILE DRILLING
WE ALSO HAD COARSE GRAVEL + CONCRETE RUBBLE

DATE DRILLED: 12-14-11
JOB NUMBER: 12159,00006.D
DRILLER/HELPER: JEL/MLD
DRILL RIG: AMS
LOGGED BY: MLD
CITY: COUNTY:

Depth (ft)	Sample No. Sample Type Sample Depth	SPT Results (N-value)	% REC	Lithology Description	PID (ppm) or Op (lot)	Comments
0.0				CLAYEY TOPSOIL, TRACE ROOT STRUCTURES, SANDS, GRAVEL - DAMP - DARK		
4.5	4-5'			FINE SAND, TRACE - SOME CLAY, TRACE FINE GRAVEL DAMP - MIXED BROWNS		WITH BLACK 1.2'
5-7	5-7'			FINE SAND; TRACE SILT & FINE GRAVEL VERY MOIST - GRAY-BROWN		
7-10	7-10'			FINE-MED SAND; TRACE SILT & FINE GRAVEL VERY MOIST - BROWN		
10.0						
15.0						
20.0						
25.0						

<u>GROUNDWATER DEPTH</u>	<u>HOLE COLLAPSE</u>	<u>BACKFILL</u>
DURING DRILLING ± 5'	AT COMPLETION	
AT COMPLETION	AFTER HOURS	
AFTER HOURS		

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City of Escanaba

END OF DOCUMENT

VERIFY CURRENT VERSION IN DOCUMENTUM PRIOR TO USE – UNCONTROLLED WHEN PRINTED

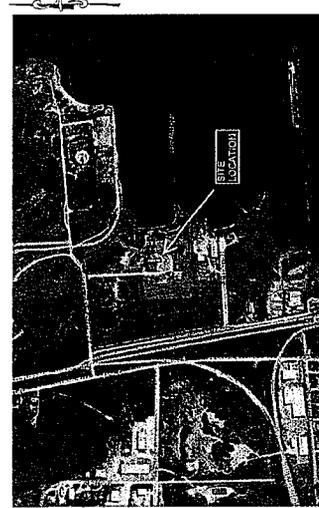
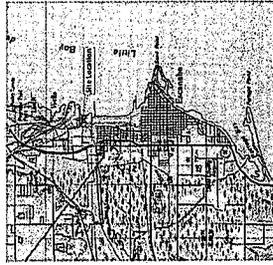
City of Escanaba

PLANS OF PROPOSED
JOB NO. CHA8270

ESCANABA GENERATING STATION SETTLING POND SEDIMENT REMOVAL
FROM GEOSYNTEC CONSULTANTS

CITY OF ESCANABA
DELTA COUNTY
STATE OF MICHIGAN

DRAWING TITLE	DRAWING NUMBER
COVER SHEET	1
PLAN VIEW AND DETAILS	2
SECTIONS AND DETAILS	3



PREPARED UNDER SUPERVISION OF

John P. Seymour
Geosyntec Consultants Engineer
CITY OF ESCANABA, MICHIGAN
ORGANIZATION
410 Ludington Street
Escanaba, Michigan
49829

ISSUED FOR BID



SIGNED: John P. Seymour



REV.	DATE	DESCRIPTION

PROJECT LOCATION IN ONTARIO

PROJECT TITLE	SETTLING POND SEDIMENT REMOVAL
CLIENT TITLE	PLAN VIEW AND DETAILS
DATE	17/09/02
BY	JPS
CHECKED	JPS
DATE	17/02/02
DATE	17/02/02
DATE	17/02/02
PROJECT NUMBER	CH-8270
FORM	2 of 3

LEGEND

	WATER BODY
	POND
	MONITORING WELL
	WATER LINE
	BOTTOM OF CONFINEMENT BERM
	TOP OF CONFINEMENT BERM
	LIMIT OF DISTURBANCE
	SILT FENCE
	ACCESS RAMP
	DIVIDER BERM
	STABILIZED CONSTRUCTION ENTRANCE

- NOTES**
- THE ALIGNMENT/LOCATION OF EXISTING STRUCTURES AND WATER BODY BOUNDARIES ARE APPROXIMATE.
 - LOCATE AND TEMPORARILY MARK ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND THE 48-IN DUTIFALL PIPE WILL BE MARKED BY THE LOWER WITH RED TRASH CANISTER.
 - LOCATE AND MARK ALL EXISTING STRUCTURES (SUCH AS MONITORING WELLS, OVERFLOW STRUCTURE) WITHIN THE LIMIT OF DISTURBANCE.
 - INSTALL ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PLAN AND DETAILS ON DRAWING 2 PRIOR TO START OF WORK. IF THE CONTRACTOR'S PROPOSED MEASURES DIFFER FROM THOSE SHOWN IN PLAN A, THE ENGINEER MUST APPROVE THE NEW LOCATION OF SILT FENCE.
 - STRIP APPROXIMATELY 6-IN TOPSOIL FROM THE AREA WHERE THE CONFINEMENT BERM, TEMPORARY HAUL ROAD AND TEMPORARY CONSTRUCTION ENTRANCE AND STOCKPILE AREAS. IF THERE IS FLY ASH IN THE SUBGRADE AFTER STRIPPING APPROXIMATELY 6-IN OF TOPSOIL, THE CONTRACTOR SHALL REMOVE ADDITIONAL FLY ASH UNTIL REACHING TO THE TOP OF NATIVE SOIL. APPROXIMATELY ONE TO TWO INCHES OF TOPSOIL SHALL BE REPLACED WITH FLY ASH WITH GP-2 ASSURING THERE IS THREE FEET OF TOPSOIL OVER THE FLY ASH WITH GP-2 SURROUNDING THE PONDS. APPROXIMATELY 4000 CY OF FLY ASH WILL BE EXCAVATED.
 - AFTER STRIPPING TOPSOIL AND/OR PLACING GP-2 IF NECESSARY, INSPECT THE CONFINEMENT BERM TO THE WESTERN EDGE OF POND AND IF NECESSARY CORRECT THE CONFINEMENT BERM TO MEET THE SPECIFICATIONS SO THAT THE GRADE IS FLAT OR SLOPING TOWARDS THE POND WITH A MAXIMUM GRADE OF 5%.
 - CONSTRUCT THE CONFINEMENT BERM WITH GF IN ACCORDANCE WITH THE SURVEYING.
 - PRIOR TO START OF DREDGING, ESTABLISH A BENCHMARK FOR THE BASIS OF SURVEYING.
 - USING THE SITE BENCHMARK ESTABLISH THE WATER ELEVATION AND ELEVATION OF THE BOTTOM OF THE POND (TOP OF SEDIMENT) ON A 25-FT GRID ESTABLISHED TOWARDS THE OTHER POND, PLACE THE SEDIMENT BETWEEN THE CONFINEMENT BERM AND THE EDGE OF THE POND AND LET THE WATER INFILTRATE INTO THE POND AND REMOVE SEDIMENTS PER ABOVE PROCEDURE.
 - ONCE SEDIMENT REMOVAL IS COMPLETED ON THE POND, NOTIFY TO THE OTHER POND AND REMOVE SEDIMENTS PER ABOVE PROCEDURE.
 - AS DREDGING PROGRESSES, PERFORM A PROGRESS SURVEY TO DETERMINE HOW MUCH SEDIMENT HAS BEEN REMOVED. ASSUMING NATIVE SOIL IS A FOOT BELOW THE DREDGED SURFACE IN THE POND, APPROXIMATELY 500 CY OF SEDIMENT WILL BE REMOVED.
 - FOLLOWING THE REMOVAL OF THE SEDIMENTS FROM NORTH AND SOUTH PONDS, REMOVE THE DIVIDER BERM, TIE-IN THE SIDESLOPES TO ADJACENT PONDS AT THE SEDIMENT INCLUDING FLY ASH EXCAVATED FOLLOWING TOPSOIL STRIPPING. MUST PASS THE PAINT FILTER LIQUIDS TEST BEFORE HAULING TO AN OFFSITE DISPOSAL FACILITY. THEREFORE, INFORM THE ENGINEER IN ADVANCE FOR HIM TO PERFORM PAINT FILTER LIQUIDS TEST ON EVERY 100 CY OF SEDIMENT TO BE HAULED TO THE OFFSITE DISPOSAL FACILITY. THE ENGINEER'S OBSERVATION OF THE ENGINEER MAY PERFORM MORE FREQUENT TESTING BEFORE LOADING THE HAUL TRUCKS WITH SEDIMENTS. INSPECT THE TRUCK BEDS AND VERIFY THAT THEY ARE LINED WITH A PLASTIC LINER OR EQUIVALENT TO PREVENT LIQUIDS AND SOLIDS LEAKING FROM THE TRUCK BED.
 - HAULED TO AN APPROVED OFFSITE DISPOSAL FACILITY. REMOVE THE CONFINEMENT BERM, ACCESS RAMPS, TEMPORARY HAUL ROADS AND CONSTRUCTION ENTRANCES.

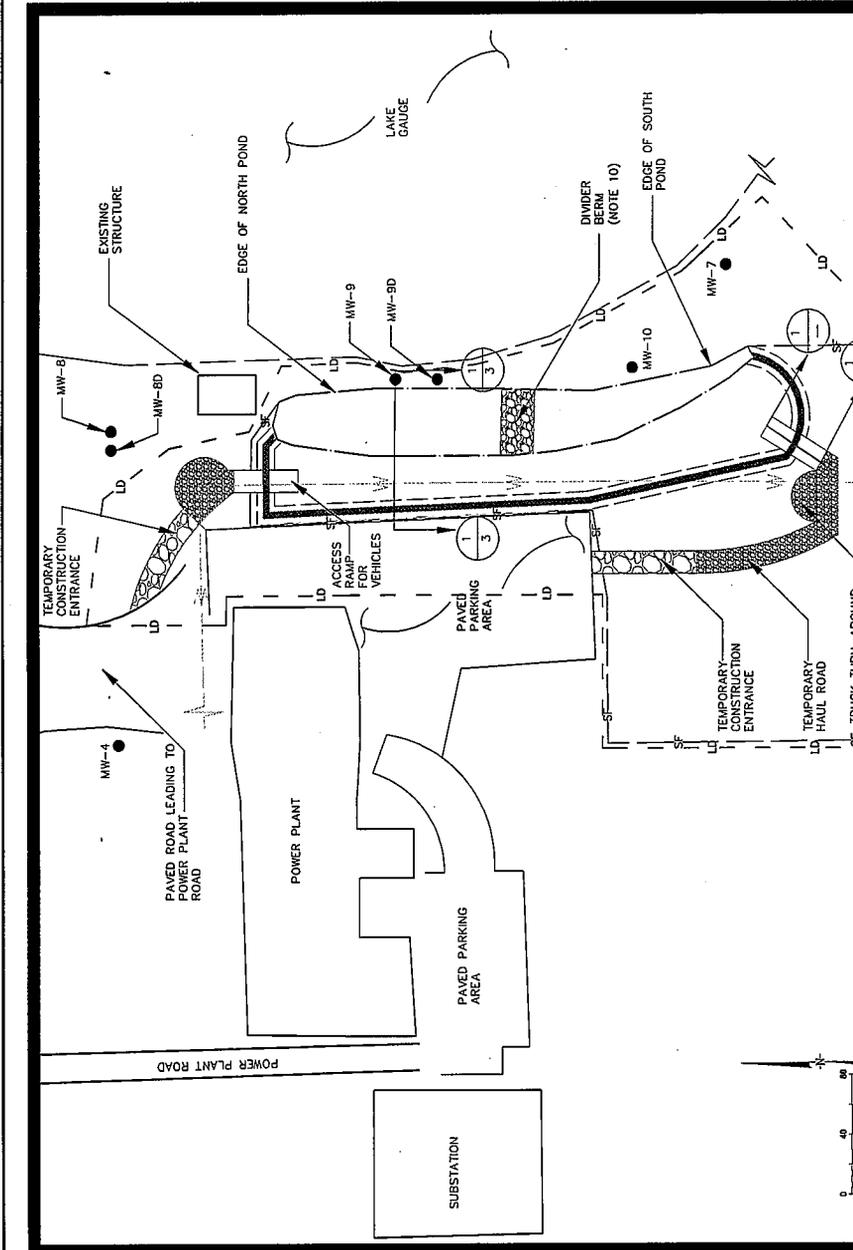


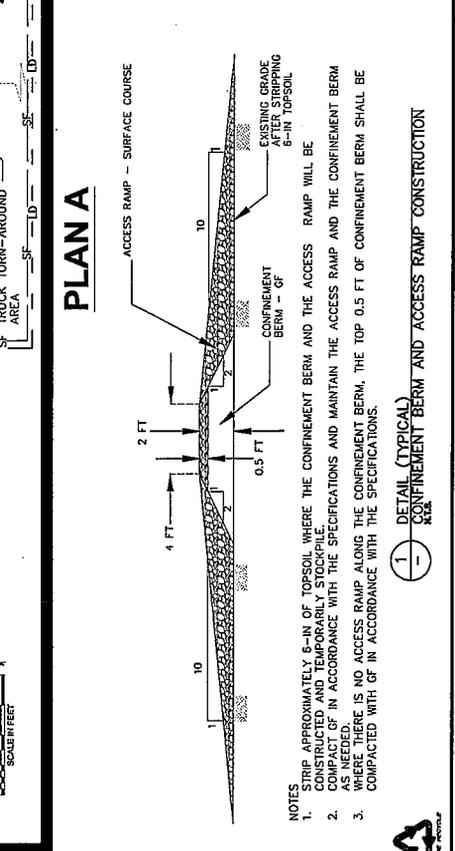
TABLE 1. TEMPORARY SEED MIX.

SEEDING DATE	SEED TYPE	AMOUNT PER 1,000 SQ.FT.	AMOUNT PER ACRE
MAY 1 - AUGUST 1	OATS, BARLEY	2 LB	90 LB
AUGUST 1-OCTOBER 1	RYE	3 LB	90 LB
SEPTEMBER 1-OCTOBER 1	WHEAT	3 LB	90 LB

IMMEDIATELY AFTER TEMPORARY OR PERMANENT SEEDING, MULCH WITH UNWEATHERED SMALL GRAIN STRAW OR HAY, SPREAD UNIFORMLY AT A RATE OF 1.5 TO 2 TONS PER ACRE, OR 100 POUNDS (2-3 BALES) PER 1,000 SQUARE FEET. MULCH MUST BE ANCHORED (I.E., CRIMPED INTO SOIL).

TABLE 2. PERMANENT SEED MIX.

SEEDING DATE	SEED TYPE	AMOUNT PER 1,000 SQ.FT.	AMOUNT PER ACRE
MAY 1 - SEPTEMBER 30	CREeping RED FESCUE	2 LB	90 LB
MAY 1 - SEPTEMBER 30	KENTUCKY BLUE GRASS	3 LB	90 LB



NB#4
CC/EAC
8/8/12

MEMORANDUM

To: Jim O'Toole

From: Mike Furmanski

Date: 03AUG12

Re: Market Agent/MDMA services

Certain requirements of being a MISO Market Participant include scheduling your load, offering your generation, and metering your load and generation. Since we became a MISO Market Participant in December, 2009, we have contracted with the Upper Peninsula Power Company for these services. UPPCO recently informed us that they no longer wish to provide these services, with an effective end date of August 17, 2012. We have negotiated a contract with Great Lakes Utilities to provide these services starting on August 18, 2012. The costs for these services are approximately 35% less than they were with UPPCO.

AGREEMENT TO PROVIDE METER
DATA MANAGEMENT AND MARKET SERVICES

This Agreement is dated as of July [], 2012 ("Effective Date") and is made by and between Great Lakes Utilities ("GLU") and City of Escanaba, Michigan ("Escanaba"). GLU and Escanaba may be referred to individually as a "Party," and collectively as the "Parties."

RECITALS

WHEREAS, GLU is a municipal electric company organized under section 66.0825, Wis. Stats., and Escanaba is a member of GLU; and

WHEREAS, Escanaba owns generation facilities consisting of two 12.5 nameplate megawatt coal-fired steam turbines (the "Generation Facilities") and one 18 nameplate megawatt diesel-fired combustion turbine unit (collectively, the "Facility") located within the City of Escanaba, Michigan and the Midwest Independent Transmission System Operator, Inc. ("MISO") market; and

WHEREAS, GLU is capable of performing meter data management agency ("MDMA") services and related functions pursuant to MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission ("FERC"), as the same may be amended from time to time and approved by FERC (the "Tariff"); and

WHEREAS, GLU is willing to provide MISO-related services to Escanaba to the extent and upon the terms set forth in this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual promises contained in this Agreement, the Parties agree as follows:

1. *Performance of Services by GLU.* GLU shall perform for Escanaba the MDMA and market services set forth in Schedule 1 to this Agreement ("Services") commencing on August 16, 2012. From time to time if requested by either Party and approved in writing by the other Party, the Parties shall prepare any appropriate amendments or revisions to Schedule 1 and cause such revised or amended Schedule 1 to become effective by written amendment hereto. Adjustments to GLU's compensation warranted by any such amendment shall be made by mutual agreement, in accordance with Section 5. Escanaba hereby designates GLU to act as its Scheduling Agent (as defined in the Tariff) and to perform the Services, and GLU accepts such designation.

2. *Term.* This Agreement shall become effective on the Effective Date and shall continue until terminated (i) by either Party upon at least sixty (60) days prior written notice or (ii) by Escanaba upon written notice to GLU of the sale and transfer of the Facility to Escanaba Green Energy, LLC or its affiliate ("EGE"), unless this Agreement is being assigned to EGE in accordance with Section 13. In addition, either Party may terminate this Agreement at any time if the other Party fails to perform any material

obligation hereunder and such failure continues for at least fifteen (15) days after receipt of notice of such failure from the other Party.

3. *Confidentiality.* GLU shall keep strictly confidential and shall not disclose, or cause or permit to be disclosed, to any person or entity any Confidential Information, except to those officers, employees or other authorized contractors, agents and representatives of GLU or any governmental authority to whom disclosure is required, provided that unless prohibited by applicable law GLU shall provide advance written notice to Escanaba before any disclosure to a governmental authority.

For purposes of this Agreement, the term "Confidential Information" shall collectively refer to all information or material disclosed or provided by or on behalf of Escanaba, or its representatives, to GLU, either orally or in writing (including electronically) pursuant to or in connection with this Agreement. Confidential Information shall not include information or material that is publicly available or becomes publicly available through no action or fault of GLU.

Upon termination of this Agreement, GLU shall promptly deliver to Escanaba, all written information, files and other materials disclosed or provided by or on behalf of Escanaba or its representatives to GLU.

4. *Standard of Care.* GLU hereby warrants that the Services shall be performed in a good and workmanlike manner in accordance with prudent industry standards observed by providers of similar services in the MISO market, and shall comply in all material respects with all applicable federal, state and local laws and regulations including, but not limited to, the Tariff and MISO rules and regulations.

5. *Compensation.* In consideration for the Services, Escanaba shall pay to GLU the fixed sum of two thousand five hundred and fifty dollars (\$2,550) per month (pro rated for partial months). Except as the Parties may mutually agree otherwise in writing, GLU shall not be entitled to any additional compensation for the Services.

6. *Payment.* Payment for Services provided by GLU under this Agreement shall be charged on a monthly invoice sent by or on behalf of GLU to Escanaba and paid by Escanaba in due course.

7. *Indemnification.* Escanaba shall indemnify and hold GLU, its officers, agents, contractors and employees (each a "GLU Party") harmless from and against all liability, damages, losses or expenses for any action taken by any GLU Party performing Services, except to the extent caused by the gross negligence or intentional wrongdoing of such GLU Party. GLU shall maintain or cause its contractors to maintain, reasonable liability, automobile, worker's compensation and all other insurance on the employees providing Services under this Agreement, which insurance shall provide reasonable coverage to the GLU or GLU Party employees while performing such Services.

8. *Independent contractor.* GLU shall be an independent contractor and not an agent (except for the limited purpose of acting as Scheduling Agent pursuant to Section 1) or employee of Escanaba, and as such, GLU shall not have any right, power or authority to enter into any contracts, agreements or other commitments of any kind on behalf of Escanaba or to otherwise bind Escanaba or its properties. All employees, contractors or agents of GLU providing Services under this Agreement shall at all times remain employees, contractors or agents of GLU and shall not be employees, contractors or agents of Escanaba. GLU remains responsible for all insurance coverage and benefits for its employees, contractors and agents providing Services under this Agreement. GLU may subcontract the performance of Services in whole or in part to (i) Manitowoc Public Utilities or (ii) as otherwise consented in writing by Escanaba, such consent not to be unreasonably withheld; provided that no such subcontract shall reduce or otherwise modify GLU's obligations under this Agreement.

9. *Notices.* Any notice provided for or concerning this Agreement shall be (a) in writing and delivered by person, mail or facsimile or (b) sent by electronic transmission with reasonable verification of receipt by the Party to whom the notice is transmitted, to the following:

If to GLU:

Administrative Manager
Great Lakes Utilities
1323 S.7th Street, PO Box 965
Manitowoc, WI 54221
Facsimile: 920-686-4397
Email: nkothari.glu@mpu.org

with a copy to:

Richard A. Heinemann
Boardman & Clark, LLP
Suite 410
One South Pinckney Street
PO Box 927
Madison, WI 53701-0927
Facsimile: 608-283-1709
Email: rheinemann@boardmanclark.com

If to Escanaba:

City of Escanaba
410 Ludington Street
Escanaba, MI 49829
Attention: Mr. Mike Furmanski - Superintendent
Facsimile: []

Email: mfirmanski@escanaba.org

Such notice shall be effective when received by the Party to whom it is sent.

10. *Governing Law.* This Agreement shall be governed by the laws of the State of Wisconsin.

11. *Entire Agreement.* This Agreement shall constitute the entire agreement between the Parties and any prior understanding or representation of any kind preceding the date of this Agreement shall not be binding upon either Party except to the extent incorporated in this Agreement. Any modification of this Agreement or any additional obligation assumed by either Party in connection with this Agreement shall be binding only if evidenced in writing by an authorized representative of each Party.

12. *Limitation on Liability.* Neither Party waives the limits or requirements set forth in Section 893.80, Wis. Stats., by entering into this Agreement.

13. *Assignment.* This Agreement and all of the provisions hereof shall be binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns. Neither this Agreement nor any of the rights, interests, or obligations hereunder shall be assigned by either Party, whether by operation of law or otherwise, without the prior written consent of the other Party, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, Escanaba may, upon written notice to GLU but without the need for consent from GLU, assign this Agreement to EGE effective upon the sale and transfer of the Facility to EGE. Effective upon assignment of this Agreement to EGE, Escanaba shall be released from any further obligations or liability arising under this Agreement from and after the effective date of assignment.

14. *Representations and Warranties.* Each Party represents and warrants to the other Party, as of the Effective Date, as follows:

- i. It is duly formed, validly existing and in good standing under the laws of its jurisdiction of incorporation, organization or formation and, in the case of GLU, the jurisdiction where the Services are being performed (i.e. Wisconsin).
- ii. It has all requisite corporate power necessary to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.
- iii. It has all necessary corporate power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.

- iv. The execution and delivery of this Agreement and the performance by it of this Agreement do not and shall not violate its governance documents or any law or government approval applicable to it or its property.
 - v. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights generally and by general principles of equity.
15. *Disputes.* Disputes arising out of or relating to this Agreement shall first be discussed by the utility manager of Escanaba and the administrative services manager of GLU. If the Parties cannot resolve the dispute within a reasonable period of time (not to exceed thirty (30) days), then they may exercise any of their remedies available at law or in equity.
16. *Jurisdiction and Venue.* Each Party hereto irrevocably submits to jurisdiction and venue in any state or federal court where suit may properly be brought. Service of process may be made in any manner recognized by such courts. Each of the Parties irrevocably waives its right to a jury trial with respect to any action or claim arising out of any dispute in connection with this Agreement or the Services to be provided herein.
17. *Waivers.* No waiver by any Party of any one or more defaults by any other Party in the performance of any of the provisions of this Agreement shall be construed as a waiver of any other default or defaults whether of a like kind or different nature.
18. *Severability.* Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law; but if any provision of this Agreement shall be prohibited by or deemed invalid under any applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
19. *Third-Party Beneficiaries.* Except as expressly provided herein, none of the provisions of this Agreement are intended for the benefit of any person or entity other than the Parties and their respective successors and permitted assigns.
20. *Counterparts.* This Agreement may be executed in one or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.
21. *Title.* Unless the Parties otherwise agree in writing, at no time shall GLU have title to any energy and ancillary services produced or capable of being produced by the Facility. The Parties further agree that all net revenues from the sale of such energy and ancillary services shall belong to Escanaba.

22. *Further Assurances.* Each Party shall promptly and duly execute and deliver such further documents and assurances for and take such further actions reasonably requested by the other Party, all as may be reasonably necessary to carry out the purposes of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first set forth above.

CITY OF ESCANABA

By: _____

Date: _____

GREAT LAKES UTILITIES

By: _____
Chairperson

Date: _____

SCHEDULE 1

MISO Services For Generation Support For Escanaba, MI

- **Set-Up Activities**
 - Confirm necessary meter access and data
 - Prepare reporting schedule and templates

- **MISO Market Coordination**
 - Submit DA/RT Offers into MISO portal
 - Monitor MISO XML messages for start/stop instructions

- **Meter Data Management Agent (MDMA)**
 - Download meter data on a daily basis
 - Format meter data into XML and upload through MISO portal
 - Submit to MISO 'Settlement Quality Meter Data' for the transactions at the cpnodes in accordance with MISO practices.
 - Ensure accuracy and completeness of meter data prior to submittal to MISO
 - Timely electronic submittals to MISO in advance of S7, S14, S55 and S105 allowing for settlement of the MISO market
 - Monthly true-up and meter data adjustment
 - Compliance with new and updated MDMA requirements

- **Outage Scheduling (CROWs interface)**
 - Coordinate schedule outages
 - Submit outage requests through MISO portal

- **MISO Market Settlement Services**
 - Shadow Settlement Services
 - Reconciliation of Statements
 - Monitoring/tracking of MISO disputes

- **Coordinate MISO Communications**
 - Billing and Payments
 - Operational Information
 - Reporting Requirements

AGREEMENT TO PROVIDE METER
DATA MANAGEMENT AND MARKET SERVICES

This Agreement is dated as of July [], 2012 ("Effective Date") and is made by and between Great Lakes Utilities ("GLU") and City of Escanaba, Michigan ("Escanaba"). GLU and Escanaba may be referred to individually as a "Party," and collectively as the "Parties."

RECITALS

WHEREAS, GLU is a municipal electric company organized under section 66.0825, Wis. Stats., and Escanaba is a member of GLU located in Michigan and within the footprint of the Midwest Independent Transmission System Operator, Inc. ("MISO") market; and

WHEREAS, GLU is capable of performing meter data management agency ("MDMA") services and related functions pursuant to MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission ("FERC"), as the same may be amended from time to time and approved by FERC (the "Tariff"); and

WHEREAS, GLU is willing to provide such services to Escanaba to the extent and upon the terms set forth in this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual promises contained in this Agreement, the Parties agree as follows:

1. *Performance of Services by GLU.* GLU shall perform for Escanaba the MDMA and market services set forth in Schedule 1 to this Agreement ("Services") commencing on August 16, 2012. From time to time if requested by either Party and approved in writing by the other Party, the Parties shall prepare any appropriate amendments or revisions to Schedule 1 and cause such revised or amended Schedule 1 to become effective by written amendment hereto. Adjustments to GLU's compensation warranted by any such amendment shall be made by mutual agreement, in accordance with Section 5. Escanaba hereby designates GLU to act as its Scheduling Agent (as defined in the Tariff) and to perform the Services, and GLU accepts such designation.
2. *Term.* This Agreement shall become effective on the Effective Date and shall continue until terminated by either Party upon at least sixty (60) days prior written notice. In addition, either Party may terminate this Agreement at any time if the other Party fails to perform any material obligation hereunder and such failure continues for at least fifteen (15) days after receipt of notice of such failure from the other Party.
3. *Confidentiality.* GLU shall keep strictly confidential and shall not disclose, or cause or permit to be disclosed, to any person or entity any Confidential Information, except to those officers, employees or other authorized contractors, agents and representatives of GLU or any governmental authority to whom disclosure is required,

provided that unless prohibited by applicable law GLU shall provide advance written notice to Escanaba before any disclosure to a governmental authority.

For purposes of this Agreement, the term "Confidential Information" shall collectively refer to all information or material disclosed or provided by or on behalf of Escanaba, or its representatives, to GLU, either orally or in writing (including electronically) pursuant to or in connection with this Agreement. Confidential Information shall not include information or material that is publicly available or becomes publicly available through no action or fault of GLU.

Upon termination of this Agreement, GLU shall promptly deliver to Escanaba, all written information, files and other materials disclosed or provided by or on behalf of Escanaba or its representatives to GLU.

4. *Standard of care.* GLU hereby warrants that the Services shall be performed in a good and workmanlike manner in accordance with prudent industry standards observed by providers of similar services in the MISO market, and shall comply in all material respects with all applicable federal, state and local laws and regulations including, but not limited to, the Tariff and MISO rules and regulations.

5. *Compensation.* In consideration for the Services, Escanaba shall pay to GLU the fixed sum of one thousand two hundred and fifty dollars (\$1,250) per month (pro rated for partial months). Except as the Parties may mutually agree otherwise, GLU shall not be entitled to any additional compensation for the Services.

6. *Payment.* Payment for Services provided by GLU under this Agreement shall be charged on a monthly invoice sent by or on behalf of GLU to Escanaba and paid by Escanaba in due course.

7. *Indemnification.* Escanaba shall indemnify and hold GLU, its officers, agents, contractors and employees (each a "GLU Party") harmless from and against all liability, damages, losses or expenses for any action taken by any GLU Party performing Services, except to the extent caused by the gross negligence or intentional wrongdoing of such GLU Party. GLU shall maintain or cause its contractors to maintain, reasonable liability, automobile, worker's compensation and all other insurance on the employees providing Services under this Agreement, which insurance shall provide reasonable coverage to the GLU or GLU Party employees while performing such Services.

8. *Independent contractor.* GLU shall be an independent contractor and not an agent (except for the limited purpose of acting as Scheduling Agent pursuant to Section 1) or employee of Escanaba, and as such, GLU shall not have any right, power or authority to enter into any contracts, agreements or other commitments of any kind on behalf of Escanaba or to otherwise bind Escanaba or its properties. All employees, contractors or agents of GLU providing services under this Agreement shall at all times remain employees, contractors or agents of GLU and shall not be employees, contractors or agents of Escanaba. GLU remains responsible for all insurance coverage and benefits

for its employees, contractors and agents providing Services under this Agreement. GLU may subcontract the performance of Services to in whole or in part to (i) Manitowoc Public Utilities or (ii) as otherwise consented by Escanaba, such consent not to be unreasonably withheld; provided that no such subcontract shall reduce or otherwise modify GLU's obligations under this Agreement.

9. *Notices.* Any notice provided for or concerning this Agreement shall be (a) in writing and delivered by person, mail or facsimile or (b) sent by electronic transmission with reasonable verification of receipt by the Party to whom the notice is transmitted, to the following:

If to GLU:

Administrative Manager
Great Lakes Utilities
1323 S.7th Street, PO Box 965
Manitowoc, WI 54221
Facsimile: 920-686-4397
Email: nkothari.glu@mpu.org

with a copy to:

Richard A. Heinemann
Boardman & Clark, LLP
Suite 410
One South Pinckney Street
PO Box 927
Madison, WI 53701-0927
Facsimile: 608-283-1709
Email: rheinemann@boardmanclark.com

If to Escanaba:

City of Escanaba
410 Ludington Street
Escanaba, MI 49829
Attention: Mr. Mike Furmanski - Superintendent
Facsimile: []
Email: mfurmanski@escanaba.org

Such notice shall be effective when received by the Party to whom it is sent.

10. *Governing Law.* This Agreement shall be governed by the laws of the State of Wisconsin.

11. *Entire Agreement.* This Agreement shall constitute the entire agreement between the Parties and any prior understanding or representation of any kind preceding the date of this Agreement shall not be binding upon either Party except to the extent incorporated in this Agreement. Any modification of this Agreement or any additional obligation assumed by either Party in connection with this Agreement shall be binding only if evidenced in writing by an authorized representative of each Party.

12. *Limitation on Liability.* Neither Party waives the limits or requirements set forth in Section 893.80, Wis. Stats., by entering into this Agreement.

13. *Assignment.* This Agreement and all of the provisions hereof shall be binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns. Neither this Agreement nor any of the rights, interests, or obligations hereunder shall be assigned by either Party, whether by operation of law or otherwise, without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

14. *Representations and Warranties.* Each Party represents and warrants to the other Party, as of the Effective Date, as follows:

- i. It is duly formed, validly existing and in good standing under the laws of its jurisdiction of incorporation, organization or formation and, in the case of GLU, the jurisdiction where the Services are being performed (i.e. Wisconsin).
- ii. It has all requisite corporate power necessary to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.
- iii. It has all necessary corporate power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.
- iv. The execution and delivery of this Agreement and the performance by it of this Agreement do not and shall not violate its governance documents or any law or government approval applicable to it or its property.
- v. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights generally and by general principles of equity.

15. *Disputes.* Disputes arising out of or relating to this Agreement shall first be discussed by the utility manager of Escanaba and the administrative services manager of

GLU. If the Parties cannot resolve the dispute within a reasonable period of time (not to exceed thirty (30) days), then they may exercise any of their remedies available at law or in equity.

16. *Jurisdiction and Venue.* Each Party hereto irrevocably submits to jurisdiction and venue in any state or federal court where suit may properly be brought. Service of process may be made in any manner recognized by such courts. Each of the Parties irrevocably waives its right to a jury trial with respect to any action or claim arising out of any dispute in connection with this Agreement or the Services to be provided herein.

17. *Waivers.* No waiver by any Party of any one or more defaults by any other Party in the performance of any of the provisions of this Agreement shall be construed as a waiver of any other default or defaults whether of a like kind or different nature.

18. *Severability.* Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law; but if any provision of this Agreement shall be prohibited by or deemed invalid under any applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

189 *Third-Party Beneficiaries.* Except as expressly provided herein, none of the provisions of this Agreement are intended for the benefit of any person or entity other than the Parties and their respective successors and permitted assigns.

20. *Counterparts.* This Agreement may be executed in one or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

21. *Title.* Unless the Parties otherwise agree in writing, at no time shall GLU have title to any energy and ancillary services produced or capable of being produced by the Facility. The Parties further agree that all net revenues from the sale of such energy and ancillary services shall belong to Escanaba.

22. *Further Assurances.* Each Party shall promptly and duly execute and deliver such further documents and assurances for and take such further actions reasonably requested by the other Party, all as may be reasonably necessary to carry out the purposes of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first set forth above.

CITY OF ESCANABA

By: _____

Date: _____

GREAT LAKES UTILITIES

By: _____
Chairperson

Date: _____

SCHEDULE 1

MISO Services For Load Assets For Escanaba, MI

- Set-Up Activities
 - Confirm necessary meter access and data
 - Prepare reporting schedule and templates

- Meter Data Management Agent (MDMA)
 - Download meter data on a daily basis
 - Format meter data into XML and upload through MISO portal
 - Submit to MISO 'Settlement Quality Meter Data' for the transactions at the cpnodes in accordance with MISO practices.
 - Ensure accuracy and completeness of meter data prior to submittal to MISO
 - Timely electronic submittals to MISO in advance of S7, S14, S55 and S105 allowing for settlement of the MISO market
 - Monthly true-up and meter data adjustment
 - Compliance with new and updated MDMA requirements

- MISO Market Settlement Services
 - Shadow Settlement Services
 - Reconciliation of Statements
 - Monitoring/tracking of MISO disputes

NB #5
cc (EAC) 8/8/12



DATE: August 3, 2012

To the **CITY MANAGER:**

At the August 3, 2012, regular meeting of the City Council this matter was referred to you for the appropriate disposal for specific action as indicated:

City Council approved a amendment to the Asset Purchase Agreement with Escanaba Green Energy, LLC, and extend the escrow deliverable date to August 31, 2012.

DOCUMENTS ATTACHED:

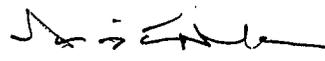

Robert S. Richards, City Clerk

<input type="checkbox"/> Assessor	<input type="checkbox"/> Library
<input checked="" type="checkbox"/> Clerk/IT Director	<input type="checkbox"/> Marina
<input type="checkbox"/> Community Preservation	<input checked="" type="checkbox"/> Other <i>E.A.C.</i>
<input checked="" type="checkbox"/> Controller	<input type="checkbox"/> Public Safety
<input type="checkbox"/> Downtown Development Authority	<input type="checkbox"/> Public Works/Engineering
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Recreation/Purchasing
<input type="checkbox"/> Human Resources/Treasurer	<input type="checkbox"/> Water/Wastewater

Please note above which is re-referred for action as below:

<input checked="" type="checkbox"/> To Comply
<input type="checkbox"/> To investigate & report with recommendation.
<input type="checkbox"/> To dispose, no report necessary.
<input type="checkbox"/> See _____
<input type="checkbox"/> _____

DOCUMENTS ATTACHED:


James V. O'Toole, City Manager

FIRST AMENDMENT TO ASSET PURCHASE AGREEMENT

THIS FIRST AMENDMENT TO ASSET PURCHASE AGREEMENT (this "Amendment") is made as of August 3, 2012, by and between the City of Escanaba, Michigan, a Michigan municipal corporation ("Seller"), and Escanaba Green Energy, LLC, a Michigan limited liability company ("Buyer"). Seller and Buyer may be referred to individually as a "Party," and collectively as the "Parties."

RECITALS:

WHEREAS, Seller and Buyer have entered into that certain Asset Purchase Agreement, dated as of July 13, 2012 (the "Agreement"), pursuant to which Buyer has agreed to purchase and assume and Seller has agreed to sell and assign, the Purchased Assets (as defined in the Agreement), upon the terms and conditions provided for therein; and

WHEREAS, Buyer was unable to deliver certain documents and monies by July 31, 2012 in accordance with the terms of Section 3.5 of the Agreement and, as a result, is in breach of the Agreement; and

WHEREAS, as a result of Buyer's breach, Seller is entitled to terminate the Agreement and receive two hundred thousand dollars (\$200,000) in liquidated damages pursuant to Section 9.2 of the Agreement; and

WHEREAS, Buyer has requested an extension of the date by which it must deliver documents and monies pursuant to Section 3.5 of the Agreement and a waiver of its breach of Section 3.5 of the Agreement and Seller's right to terminate the Agreement as a result thereof; and

WHEREAS, Seller and Buyer desire to memorialize the terms and conditions of the requested extension and waivers as well as other amendments related thereto.

NOW, THEREFORE, in consideration of the recitals, acknowledgements, covenants, obligations, representations and warranties herein set forth, the adequacy and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1. Definitions; Rules of Usage. Capitalized terms used but not defined herein and which are defined in the Agreement have the meanings assigned to them in the Agreement. The provisions in Section 1.2 of the Agreement are incorporated by reference herein.
2. Acknowledgements, Agreements and Waivers. Buyer acknowledges and agrees that it failed to perform its obligations under Section 3.5 of the Agreement, and that as a result Seller is entitled to terminate the Agreement, recover liquidated damages in the amount of two hundred thousand dollars (\$200,000), and draw on Buyer's Security for the full amount of two hundred thousand dollars (\$200,000). Buyer waives the requirement that Seller submit a termination notice to Buyer pursuant to Section 9.2 and seek to recover the liquidated damages from Buyer

before drawing on Buyer's Security. Buyer further agrees that Seller may retain the full amount of two hundred thousand dollars (\$200,000) drawn under Buyer's Security (the "Buyer's Security Payment") for its own account and use without restriction or limitation of any kind and that neither Buyer nor its Representatives will have rights of any kind to the Buyer's Security Payment (and Buyer, for itself and its Representatives, irrevocably waives any such rights) or will have claims or actions of any kind against Seller or its Representatives for the Buyer Security Payment or arising out of or in connection with Buyer drawing on Buyer's Security (and Buyer, for itself and its Representatives, irrevocably releases Seller and its Representatives from any such claims or actions). Notwithstanding anything to the contrary contained herein or in the Agreement, Seller agrees that if the Contemplated Transaction Closes pursuant to the Agreement, as amended hereby, that any monies received by Seller from the Buyer's Security shall reduce, or be credited to payment of, the Purchase Price.

3. Waiver. Effective upon the date that Seller receives the Buyer's Security Payment (the "Buyer's Security Payment Date"), Seller waives Buyer's breach of its obligation to deliver certain documents and monies by July 31, 2012 in accordance with the terms of Section 3.5 of the Agreement and Seller's right to terminate the Agreement as a result thereof. Seller's waiver is limited solely to the above facts and circumstances and shall not apply to any other facts and circumstances, including any subsequent failure by Buyer to perform its obligations under Section 3.5 of the Agreement. Seller's waiver provided in this Section 3 and Seller's agreement to the amendments in Section 4 which are effective on the Buyer's Security Payment Date are contingent on Seller receiving and retaining Buyer's Security Payment and Buyer acknowledges and agrees that Seller's waiver in this Section 3 and the amendments in Section 4 which are effective on the Buyer's Security Payment Date shall be null and void if Buyer or any of its Representatives or the bank issuing the Buyer's Security should take any action to recover the Buyer's Security Payment from Seller.

4. Amendments. Effective as of the Buyer's Security Payment Date (other than Section 4(b), Section 4(d), Section 4(e) and Section 4(h) which are effective as of the date hereof), the Parties agree that the Agreement is amended as follows:

(a) Section 3.2(a) of the Agreement is amended and restated in its entirety as follows:

“(a) Upon the terms and subject to the satisfaction of the conditions contained in this Agreement, in consideration of the sale, assignment, conveyance, transfer and delivery of the Purchased Assets, Buyer will assume the Assumed Liabilities and will pay to Seller at the Closing an aggregate amount in U.S. dollars of one million six hundred thousand dollars (\$1,600,000) plus the Fuel Inventories Cost (collectively, the "Purchase Price") by wire transfer of immediately available funds or by such other means as are agreed upon by Seller and Buyer.”

(b) Section 3.4(a) of the Agreement is amended and restated in its entirety as follows:

“(a) The Purchase Price (less any monies received by Seller from Escrow Agent pursuant to the Escrow Agreement and/or by Baybank pursuant to the Buyer's Security, in each case, on or before the Closing Date by wire transfer of immediately available funds) by wire transfer of immediately available funds in accordance with Seller's instructions or by such

other means as may be agreed to by Seller and Buyer, provided that the aggregate sum of all monies received by Seller from Buyer and all other Persons shall equal the Purchase Price;”

(c) Section 3.5 and Section 9.1(c)(iv) of the Agreement is amended to replace the reference to “July 31, 2012” with “August 31, 2012” therein.

(d) Section 7.1(e) of the Agreement is amended by replacing the reference to “Section 3.4” therein with “Section 3.3”.

(e) Section 7.2(e) of the Agreement is amended by replacing the reference to “Section 3.5” therein with “Section 3.4”.

(f) Section 7.2(g) of the Agreement is amended by replacing the reference to “one million three hundred thousand dollars (\$1,300,000)” therein with “one million four hundred thousand dollars (\$1,400,000)”.

(g) Section 9.2 of the Agreement is amended by deleting the third sentence therein and replacing it with the following:

“In the event this Agreement is terminated by Seller pursuant to Section 9.1(b)(i), Section 9.1(c)(i), Section 9.1(c)(iv) or Section 9.1(c)(ii) and, in the case of termination pursuant to Section 9.1(c)(ii), Seller has provided notice pursuant to this Section 9.2 that one or more of the conditions set forth in Section 7.2 have not or will not be fulfilled because Buyer failed to perform or breached any of its obligations, representations or warranties under this Agreement, then in lieu of all other claims and remedies that otherwise might be available to Seller with respect thereto, on the Termination Date Buyer shall pay as liquidated damages to Seller in immediately available funds Two Hundred Thousand Dollars (\$200,000), provided that Buyer's obligation shall be deemed satisfied if and to the extent Seller receives (or has received, prior to such termination) Two Hundred Thousand Dollars (\$200,000) pursuant to the Buyer's Security.”

(h) Section 9.2 of the Agreement is amended by deleting the last sentence therein and replacing it with the following:

“In the event that Buyer fails to pay liquidated damages to Seller on the Termination Date in accordance with this Section 9.2, then Seller shall be entitled to draw on Buyer's Security for the full amount of such liquidated damages if and to the extent that it has not received Two Hundred Thousand Dollars (\$200,000) pursuant to the Buyer's Security.”

(i) Section 1(vi) of the form of Escrow Agreement attached to the Agreement as Exhibit F is amended by replacing the reference to “one million five hundred thousand dollars (\$1,300,000)” therein with “one million four hundred thousand dollars (\$1,400,000)”.

5. Representations and Warranties and Acknowledgements.

(a) Each of the Parties hereby represents and warrants as of the date hereof that:

(i) it has full power and authority to execute and deliver this Amendment;

(ii) the execution and delivery by it of this Amendment have been duly and validly authorized by all necessary corporate action required on its part;

(iii) this Amendment has been duly and validly executed and delivered by it;

and

(iv) this Amendment constitutes its legal, valid and binding obligations, enforceable against it in accordance with the terms herein, except that such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws affecting or relating to enforcement of creditors' rights generally and general principles of equity (regardless of whether enforcement is considered in a proceeding at law or in equity).

(b) The Parties hereby confirm that the Agreement is in full force and effect, subject to the terms of this Amendment.

6. Governing Law. The provisions in Section 10.5 of the Agreement are incorporated by reference herein.

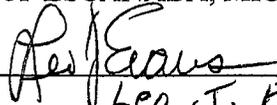
7. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Signature page follows]

IN WITNESS WHEREOF, each of the Parties have executed this First Amendment to Asset Purchase Agreement on the date first above written.

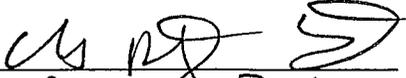
SELLER:

CITY OF ESCANABA, MICHIGAN

By: 
Name: Leo J. Evans
Title: Mayor

BUYER:

ESCANABA GREEN ENERGY, LLC

By: 
Name: Charles J. Detiege ^{III}
Title: President / Managing Member