Request for Proposals for Professional Engineering Services
—Final Design of Aerated Static Pile Composting System at Amboy Site—

Proposals Due Tuesday, February 7, 2012
No Later than 4:00 pm

Overview

The Onondaga County Resource Recovery Agency (OCRRA or the Agency) is a public benefit corporation created under the New York Public Authorities Law to manage the integrated solid waste management program for the County of Onondaga. OCRRA's main office is located at 100 Elwood Davis Road, North Syracuse New York 13212. OCRRA is legally allowed to contract with agencies, municipalities, individuals, and corporations for such work as is necessary to fulfill its purpose and to execute the necessary instruments.

OCRRA, directed by a 15 member Board of Directors, operates a comprehensive municipal solid waste management program for 33 of the 35 municipalities within the County of Onondaga. The solid waste program follows the New York State hierarchy for waste management.

With this request OCRRA is seeking professional engineering services for the final design of an Aerated Static Pile Composting System located at OCRRA's Amboy Compost Site in the Town of Camillus, NY. The facility design will be based on the existing Conceptual Site Development Plan and Basis of Design (Attachment C).

Work activities will include:

- Development of engineering documents:
  - Finalized site design and construction specifications;
  - Construction cost estimate and preliminary schedule;
  - Permit application materials (and professional assistance to support permitting process);
- Contractor procurement assistance; and
- Construction oversight.

Services shall only be performed by, or under the direction of, New York State licensed professional engineers. OCRRA will only consider proposals for which the Proposer demonstrates sufficient expertise and experience, as deemed necessary and appropriate by OCRRA, and submits a cost efficient proposal for completing the identified work activities.

Included herein are:

- Section 1 – Statement of Purpose
- Section 2 – Scope of work
- Section 3 – Target Dates
- Section 4 – Submission Requirements
- Section 5 – Selection Criteria
- Attachment A – Proposal Pricing Form
- Attachment B – Required Forms
- Attachment C – Conceptual Site Development Plan and Basis of Design

Section 1 – Statement of Purpose

OCRRA is requesting proposals from interested parties with appropriate experience and expertise in compost site construction and development. Expertise in traditional and innovative stormwater management and experience in solid waste permitting are also desired.

Since 1992, OCRRA has operated a yard waste composting facility in the Town of Camillus, Onondaga County. The physical address is 6296 Airport Road, Camillus, NY 13209. For the past three years, OCRRA has operated an Aerated Static Pile (ASP) composting system pilot project at the Amboy Compost Site. The pilot project has demonstrated the effectiveness of an ASP system (with organic covers) for composting food and yard waste in the Central New York climate.

Given the success of the pilot project, OCRRA would like to expand the existing site to process approximately 9,600 tons of institutional and commercial food waste per year (along with the needed bulking agent, estimated at 48,000 cubic yards per year) utilizing an ASP system with organic covers. Towards that end, OCRRA has already engaged a professional engineering firm to develop a Conceptual Site Development Plan (attached). Similarly, OCRRA has engaged a firm specializing in ASP systems to review and improve the Basis of Design document (attached).

With this request OCRRA is soliciting proposals for the services of a professional engineering firm to provide finalized site development and construction plans for the facility, utilizing OCRRA's existing Conceptual Site Development Plan and Basis of Design.

Section 2 – Scope of work

Services to be provided upon execution of final contract consist of the following major work activities:

A – Finalized Site Design and Construction Specifications

The selected engineering firm shall first review and analyze OCRRA's Conceptual Site Development Plan and Basis of Design, identifying opportunities for improvement and addressing any constraints. This process will include reviewing existing documents and working closely with the OCRRA team to understand the proposed system.

As part of this task, the selected firm will need to develop a comprehensive site stormwater management design. The stormwater management design shall be cost effective and in accordance with the New York State Stormwater Management Design Manual (August 2010). Traditional and innovative designs should be considered.

The engineering firm will then develop the final site design, including complete and final (100%) plans and specifications. The finalized site design and construction specifications must comprehensively address site layout and grading; traffic flows; stormwater and process water management; site utilities; specifications for aeration pad, fabric building, water tank, paving, blowers, and other miscellaneous equipment; and any other necessary items. All documents shall be signed and stamped by the firm's licensed professional engineer.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA also requests that the proposal provides an "all-in" cost estimate for this task, which shall include all direct and indirect costs.

B – Construction Cost Estimate & Preliminary Schedule

When the final site design and construction specifications are near completion, the engineering firm shall prepare a final construction cost estimate (+/- 10%). Working with OCRRA, the engineering firm shall also consider preliminary construction scheduling and whether a phased approach is desirable.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA requests that the proposal provides an "all-in" cost estimate for this task, which shall include all direct and indirect costs.

C – Permit Application Materials and Professional Permitting Assistance

Upon notification to proceed, the selected firm shall conduct a review of permits needed for the project. While completing the Task A (Finalized Site Design and Construction Specifications), the firm shall also prepare the necessary permit application materials, especially for the solid waste (NYCRR Part 360) and stormwater permits. The selected firm shall initiate the permitting process when the site design is sufficiently complete (OCRRA would like this process to begin before the completion of final design documents), manage the documents during the permitting process, attend permitting meetings with regulators, and, ultimately, obtain the necessary permits on behalf of the Agency. The selected firm will also assist OCRRA in making a determination under the New York State Environmental Quality Review Act (SEQRA) and pursuing additional environmental impact assessment work activities as necessary.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA requests that the proposal provides an "all-in" cost estimate for the permit application materials and SEQRA determination components of this task, which shall include all direct and indirect costs. OCRRA understands that it is difficult to estimate the time required for the permitting process (the number of meetings, additional documents that may need to be generated, etc…) and any follow-up environmental impact assessment work activities, so the Agency will instead review the hourly rate schedule for those components.

D – Contractor Procurement Assistance

The selected firm shall prepare a request for proposals and bid package for construction of the final site design. The package shall include: complete and final (100%) construction plans; construction cost estimate; final utility specifications; any special provisions; all necessary permits acquired and conditions noted; construction contract specifications; and all bid documents including instructions to bidders, bid form, and all required federal documents. The firm will work closely with OCRRA to ensure that the package includes all necessary Agency forms and that the process follows the Agency's procurement protocols.

The firm shall be available during the bidding process to answer any technical questions about the project design. Upon receipt of the bids, the firm will conduct an analysis and make a recommendation to the Agency.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA requests that the proposal provides an "all-in" cost estimate for this task, which shall include all direct and indirect costs.

E – Construction Oversight

The selected engineering firm will work closely with the selected contractor and the Agency to verify that all specifications and timelines are met.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA understands that it is difficult to estimate the time required for this activity, so the Agency will instead review the hourly rate schedule.

F – Additional or Alternative Activities

Proposals may include additional tasks or items in the scope of work that the engineering firm believes should be included to improve project success. Proposals may also identify alternative strategies for accomplishing the end goal more efficiently or cost-effectively. These additional or alternative proposed work activities should be clearly defined.

The proposal shall identify the project team members that will be involved in this task; describing their roles, providing their hourly rates, and estimating their number of hours. OCRRA requests that the proposal provides an "all-in" cost estimate, which shall include all direct and indirect costs.

Section 3 – Target Dates

The following schedule shows the target dates for performance of the work:

EVENT	**DATE**
RFP issued	Wednesday, January 4, 2012
Pre-proposal meeting	Tuesday, January 24, 2012
Deadline for questions	Wednesday, January 25, 2012
Response to questions	Friday, January 27, 2012
Proposals due	Tuesday, February 7, 2012
Expected notice to proceed	Thursday, March 15, 2012
Target delivery of engineering documents	Friday, June 15, 2012

Section 4 – Submission Requirements

Designated Contact Person

All inquiries and contacts during the procurement period shall be directed to the Designated Contact Person, Ms. Rusty Hunt, via email at rhunt@ocrra.org. Interested parties and their agents and representatives are directed not to contact or lobby members of the Board of Directors of OCRRA or any other OCRRA staff members regarding this RFP. Please reference the document entitled "State Finance Law Procurement Compliance Form," found in Attachment B, for all contact information provisions.

Submittal

Five (5) copies of the proposal shall be enclosed in a sealed package, plainly marked and addressed as follows:

PROPOSAL – AMBOY FINAL ENGINEERING SERVICES
Ms. Rusty Hunt, Designated Contact Person
Onondaga County Resource Recovery Agency
100 Elwood Davis Road
North Syracuse, NY 13212

Proposals received by fax or e-mail will not be considered.

Deadline
Receipt of Proposals must be no later than 4:00 PM Eastern Standard Time on Tuesday, February 7, 2012.

Pre-Proposal Meeting
A pre-proposal question and answer session will be held so that the proposing firms will have the opportunity to meet with staff, ask questions and discuss the content of the RFP in further detail. The pre-proposal conference will be held beginning at 1:30 p.m. on Tuesday, January 24th, at:

Onondaga County Resource Recovery Agency
Conference Room
100 Elwood Davis Rd.
North Syracuse, NY, 13212

The Agency staff will accept oral questions during the meeting and will make a reasonable attempt to provide responses prior to the conclusion of the conference. Oral responses provided at the conference shall not be binding on the Agency. A written summary of all questions and final responses will be posted on OCRRA's website at http://www.ocrra.org/about_procurements.asp by Friday, January 27, 2012. While the meeting is not mandatory, failure to attend the pre-proposal meeting shall not be grounds for a later claim by any proposer of unfamiliarity with the amended RFP.

Inquiries
All inquires shall be directed to Ms. Rusty Hunt via email at rhunt@ocrra.org no later than Wednesday, January 25, 2012. OCRRA will post responses on its website at http://www.ocrra.org/about_procurements.asp by Friday, January 27, 2012.

Costs to Respond to RFP
Proposer is responsible for all costs associated with the preparation of a proposal. None of the costs will be the responsibility of the Agency.

Sales Taxes
OCRRA is exempt from the payment of sales taxes of New York and of cities and counties on all services, materials, equipment and supplies sold to OCRRA pursuant to this contract.

Public Disclosure
Prior to Proposer selection, all information contained in the main body of the proposal shall be considered confidential and not, to the extent permitted by applicable laws and regulations, subject to public disclosure due to the fact that the information will directly affect proposer selection. After Proposer selection, the proposals, including any appendices, will be matters of public record and will be treated as such.

Insurance Requirements
Before commencing work, the Proposer shall procure and maintain insurance of the kinds and limits enumerated hereunder and on terms and with an insurance carrier satisfactory to the Agency. Certificates of such insurance issued by the Proposer's insurance carrier shall be filed with the Agency before commencement of work and shall set forth the following:

General Liability	$1,000,000	Combined single limit
Automobile Liability	$1,000,000	Combined single limit
Workers Compensation	Statutory Limits	
Professional Liability Coverage	$1,000,000	Combined single limit

It is required of the successful proposer that OCRRA be added, by endorsement, as an "additional insured" on the General Liability and Automobile Liability. The foregoing insurance coverage shall not be terminated or cancelled unless OCRRA is given thirty (30) days prior written notice by the insurance carrier.

Warranty of Services
Notwithstanding inspection and acceptance by OCRRA, the professional engineer will be required to warrant that all services performed under the proposed project shall be free from defects in workmanship and conform to the requirements of the Contract that will be signed between OCRRA and the successful proposer.

Prevailing Wages
Where applicable, the Contractor shall pay its employees the prevailing wages for work, labor or services as required by New York Labor Law Article 8 and Article 9.

Proposal Contents
The Proposal shall include the following information:

- Statement of Services and Demonstration of Expertise: The proposal shall describe the services to be provided, including appropriate details on the proposed approach to be used by the Proposer to accomplish each work activity as specified in Section 2. The proposal shall thoroughly demonstrate qualifications, expertise, and experience.

- Project Schedule: The proposal should contain a separate section containing the proposed schedule to complete the project upon receipt of the notice to proceed. The schedule should show how the various tasks of the individual tracks will be accomplished.

- Home Office: The Proposer will provide the address of the engineering firm's home office and addresses of such other offices at which the project work will be conducted.

- Project Team Overview: The proposal shall provide a summary of the project team, identifying the role of each team member and providing a detailed description of each team member's specific experience. A resume for each team member should be attached. All subcontractors shall be identified and the scope of each subcontractor's services shall be provided. Substitution of the project manager or any subcontractors identified in the proposal shall not be made without the written consent of the Agency.

- Client References: The proposal shall provide several references for which similar work has been completed, including the length of the contract with each client, contact names, telephone numbers, and email addresses. OCRRA may contact these references for additional information.

- Completed and Signed Pricing Form (Attachment A): Proposals should include a cost proposal for each major work activity, as specified in Section 2 and Attachment A. This should include a separate breakdown of project team members and their estimated hours/rate for each individual activity. Proposals must also include an hourly rate schedule, including rates for the entire project team.

- Supplemental Materials: Other materials that the Proposer desires as supporting documents may also accompany the proposal. This Part may also include Minority and/or Woman-Owned Business Enterprise (M/WBE) Certification or a description of your firm's plans to incorporate the use of M/WBEs in this project.

- Completed and Signed Forms (Attachments B)

- Cover Letter that, at a minimum, includes the following:
    - □ Commitment of Proposer to: 1) carry out all provisions of proposal at the quoted price (if selected by OCRRA) and 2) perform the stated work in accordance with the target schedule,
    - □ Statement that all information in the submittal, including any supplemental materials, is accurate and factual.
    - □ Designation of an individual authorized to negotiate a contract with OCRRA.
    - □ Signature of officer, principal or partner empowered to sign such material.

Section 5 – Selection Criteria

The Agency will evaluate all proposals containing the information requested and prepared in the format required by this RFP. OCRRA will only consider proposals for which the proposer demonstrates sufficient expertise and experience, as deemed necessary and appropriate by OCRRA, and submits a cost-efficient estimate for executing the work activities. The following selection criteria will be used in evaluating the proposals:

	CRITERIA	**Points Possible**
1	Cost Schedule	**30**
2	Project Team's Expertise & Experience in Traditional and Innovative Stormwater Management Engineering and Design	**25**
3	Project Team's Expertise & Experience in Solid Waste Permitting	**25**
4	Project Team's Expertise & Experience in Compost Site Design, Engineering, and Development	**15**
5	Inclusion of Minority and/or Woman-Owned Business Enterprise (M/WBE)	**5**
	TOTAL POINTS POSSIBLE	**100**

The proposer should fully understand the selection process will **not** be one of simply choosing the lowest cost proposer, but will be one of selecting the Proposal demonstrating, in OCRRA's sole opinion, the best score based on the criteria above.

Attachment A– Proposal Pricing Form

TASK A - Finalized Site Design and Construction Specifications	
Total labor costs (provide hours/rate breakdown on **separate page**)	
Travel costs (if any)	
Administration costs (if any)	
Other costs	
Totals task costs	
TASK B - Construction Cost Estimate & Preliminary Schedule	
Total labor costs (provide hours/rate breakdown on **separate page**)	
Travel costs (if any)	
Administration costs (if any)	
Other costs	
Totals task costs	
TASK C - Permit Application Materials ***SEE SECTION 2 FOR FURTHER SPECIFICATIONS*	
Total labor costs (provide hours/rate breakdown on **separate page**)	
Travel costs (if any)	
Administration costs (if any)	
Other costs	
Totals task costs	
TASK D - Contractor Procurement Assistance	
Total labor costs (provide hours/rate breakdown on **separate** page)	
Travel costs (if any)	
Administration costs (if any)	
Other costs	
Totals task costs	
TASK E - Construction Oversight	
Attach hourly rate schedule	
TASK F - Additional or Alternative Activities	
Total labor costs (provide hours/rate breakdown on **separate** page)	
Travel costs (if any)	
Administration costs (if any)	
Other costs	
Totals task costs	

Name Signature Date

Attachment B– Required Forms

The following forms must be completed and signed in order for the Proposal to be considered:

- ☐ Conflict of Interest Affidavit
- ☐ Certificate of Non-Collusion
- ☐ State Finance Law Procurement Compliance Provisions & Disclosure to OCRRA During Procurement Process of Prior Non-Responsibility Determinations

CONFLICT OF INTEREST

AFFIDAVIT

STATE OF _____)
) ss:
COUNTY OF _____)

_____, being duly sworn, deposes and says for

and on behalf of _____, that:

1. Our (my) firm _____, is an independent firm or company, and has this date submitted a bid, proposal, or quote to provide goods and/or services to the Onondaga County Resource Recovery Agency.

2. I certify on behalf of the bidder, proposer, or quoter that it and its employees have no interest, direct or indirect, which could conflict in any manner or degree with the performance or provision of these goods and/or services to the Onondaga County Resource Recovery Agency.

3. If awarded a contract my (our) firm agrees that in providing the goods or in the rendering of services to the Onondaga County Resource Recovery Agency, no persons having any such interest shall be employed by the firm. I assume full responsibility for knowing whether my (our) employees or agents have any such interest and hereby certify that no such interest exists.

Dated: _____, 20__ By: _____

For and on Behalf of: _____

Sworn before me this ____ day of

_____, 20___.

_____
Notary Public

CERTIFICATE OF NON-COLLUSION

Non-collusive Certifications required of all bidders/proposers/quoters under Section 103-d of the General Municipal Law as amended by Chapter 751 of the Laws of 1965 and Chapter 675 of the Laws of 1966 effective September 1, 1966, is as follows:

By submission of this bid/proposal/quote, the bidder/proposer/quoter and each person signing on behalf of the bidder/proposer/quoter certifies, and in the case of a joint bid/proposal/quote each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

(1) The prices in this bid/proposal/quote have been arrived at independently without collusion, consultation, communications, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder/proposer/quoter or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this bid/proposal/quote have not been knowingly disclosed by the bidder/proposer/quoter and will not knowingly be disclosed by the bidder/proposer/quoter prior to opening, directly or indirectly, to any other bidder/proposer/quoter or to any competitor; and

(3) No attempt has been made or will be made by the bidder/proposer/quoter to induce any other person, partnership, or corporation to submit or not to submit a bid/proposal/quote for the purpose of restricting competition.

_____
Legal Name of Bidder/Proposer/Quoter (Typed)

_____
Address (Typed)

_____
City State Zip

BY: _____
Signature

_____
Name (Typed)

Dated _____, 20___

_____
Title (Typed)

Vendor Information Regarding

State Finance Law Procurement Compliance Provisions

OCRRA Procurement Regarding: Professional Engineering Services - Final Design of ASP Composting System at Amboy

OCRRA Designated Procurement Contact Person(s): Ms. Rusty Hunt

OCRRA conducts its procurements to provide all vendors with an opportunity to compete fairly to maximize competition. New York State has enacted provisions in its State Finance Law, applicable to any contract over $15,000.00 that further promotes fair competition. This law now requires that all communications i.e. "contacts" with the Agency regarding this procurement, after the Request to Bid, Request for Proposals, or Request for Quotes go out, must be through a designated OCRRA Procurement Contact Person. Our Designated Procurement Contact Person is listed above. All contacts by potential vendors should be through the Designated Procurement Contact Person and NO ONE ELSE! All such contacts will be recorded by the Designated Procurement Contact Person and any responding information given to a potential vendor will also be shared with all potential vendors, so no one has a competitive advantage. As a potential vendor on this procurement, you will need to fill in the Permissible Contacts Affirmation form, attached, and submit it with your bid/proposal/quote. You will also need to fill in the other part of this two page form that advises OCRRA of any Non-Responsibility Determinations under this law. If you fail to comply with the above Procurement contacts restrictions or you submit knowingly false, inaccurate or incomplete information, or you violate our OCRRA Ethics Code, you may be found to be a "Non-Responsible" vendor. This can result in a rejection of your firm for contract award, a cancellation of the contract, if later discovered (the Contract will include a cancellation provision for such a contingency), and in the event of two such findings in a four year period, debarment from obtaining any further OCRRA procurement contract for a period of four years from the time of the second violation.

Please be sure to familiarize yourself with these new legal provisions, fill out the attached forms, and contact only the Designated Procurement Contact Person during the procurement process. This will promote fair competition on this procurement and will not disqualify your firm from a potential OCRRA contract award.

Rev. 10/15/2009

Disclosure to OCRRA During Procurement Process of
Prior Non-Responsibility Determinations

OCRRA Procurement regarding: Professional Engineering Services - Final Design of ASP Composting System at Amboy

OCRRA Designated Procurement Contact Person: Ms. Rusty Hunt

OCRRA conducts its procurements to maximize competition and provide all vendors with an opportunity to compete fairly. New York law now provides that, for any procurement over $15,000.00, all potential vendors must disclose whether a governmental entity in New York has made a finding of "Non-Responsibility." "Non-Responsibility" is defined in State Finance Law Section 139-j and can include failure of a potential bidder/proposer/quoter to timely disclose truthful, accurate, or complete information that may allow OCRRA to make a determination as to its "responsibility" relative to this procurement as well as unauthorized procurement contacts (including contacts to someone other than the designated procurement contact) and ethics code violations. In order to qualify for consideration on this procurement, the bidder/proposer/quoter must complete and sign the form below.

(For Vendor Use)

Name and Address of Bidder/Proposer/Quoter Seeking to Enter into the Procurement Contract with OCRRA: _____

_____

Name, Title, and Phone Number of Person Submitting this Form: _____

_____

Has any Governmental Entity in New York made a finding of Non-Responsibility regarding the bidder/proposer/quoter seeking to enter into the Procurement Contract in the previous four years? (Please circle):

No Yes

If you answered yes to the above question, please provide details regarding the finding of Non-Responsibility below.

New York Governmental Entity: _____

Date of Finding of Non-Responsibility: _____

Basis of Finding of Non-Responsibility: _____

_____

_____

_____

_____

_____

_____

_____

Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named bidders/proposers/quoters after a finding of intentional provision of false or incomplete information? (Please circle):

No Yes

If yes, please provide details below:

New York Governmental Entity: _____

Date of Termination or Withholding of Contract: _____

Basis of Termination or Withholding: _____

Bidder/proposer/quoter certifies that all information provided to OCRRA above with respect to State Finance Law §139-k is complete, true, and accurate.

By: _____ Date: _____

Signature _____

PERMISSIBLE CONTACTS AFFIRMATION

As a potential bidder/proposer/quoter on an OCRRA solicitation where the contract amount may exceed $15,000.00, I recognize that once the solicitation issues, New York law requires that all contacts with OCRRA regarding that procurement must be through the designated OCRRA Procurement Contact Person and no one else. On behalf of my client as a potential bidder/proposer/quoter, I affirm that my client understands and agrees to comply with the procedures of the Onondaga County Resource Recovery Agency relative to permissible contacts as required by New York State Finance Law §139-j (3) and §139-j (6) (b). This form must be submitted with the bid, proposal, or quote.

OCRRA Designated Procurement Contact Person: _____

_____ _____
Vendor Signature Print Signer's Name

Vendor Title: _____ Date: _____

Vendor Name: _____

Vendor Address: _____

Attachment C – Conceptual Site Development Plan and Basis of Design

Basis of Design for Aerated Static Pile Composting System at Amboy Site

Last Revised: 12/29/11

1.0 The Future for OCRRA's Compost Sites

It is OCRRA's vision is that by 2015, the Agency will process approximately 9,600 tons per year of the County's food waste, generated predominantly from commercial and institutional sources, at the Amboy Compost Site. The organic material entering the site will generate revenue in the form of tipping fees and sale of finished compost. In addition, OCRRA will continue to reach out to its municipal partners to ensure the proper handling of leaf, brush, and other yard waste materials generated by their residents.

OCRRA currently has a long-term lease agreement with Onondaga County for the sole control of the property. Initial site work began at Amboy in 2007 and included the demolition of three old dilapidated structures. Since then, the Amboy storage building has been completely rebuilt. In late 2008, OCRRA initiated a Food Waste Composting Pilot Project utilizing an Aerated Static Pile (ASP) system. The pilot project has demonstrated the effectiveness of an ASP system for composting food and yard waste in the Central New York climate.

Given the success of the pilot project, OCRRA plans to develop the necessary site infrastructure and improvements to process approximately 9,600 tons of institutional and commercial food waste per year (along with the needed bulking agent, estimated at 48,000 cubic yards of yard waste per year) utilizing an ASP system with organic covers. Towards that end, OCRRA engaged a professional engineering firm to develop a Conceptual Site Development Plan (attached). This scope of work included:

- Documentation of existing site features and utilities, including current stormwater management practices;
- Development of proposed site layout and traffic plan;
- Site utility plan;
- Material flow plan (compost processing areas); and
- Preliminary construction cost estimate.

OCRRA later engaged a firm specializing in ASP compost systems to perform a professional review of the conceptual site development plan and associated assumptions. OCRRA used their feedback to update the plans.

2.0 Site Description

The site was originally part of the old Syracuse Airport, which was closed when the airport moved to another location. An aircraft hangar was built in the 1920s but has since been taken down, with only the concrete slab remaining. After the airport ceased operations, the site was operated by the Onondaga County Department of Transportation as a highway maintenance facility. In the 1960s, an additional garage and salt barn were constructed but have also subsequently been demolished. A new metal building was reconstructed on the existing garage concrete slab in 2008. There is an existing sanitary sewer force main right-of-way along the eastern and southern property lines. In the 1990s, Onondaga County agreed to lease the property to OCRRA for use as a composting facility.

The site is relatively flat with primary access from a common gate. A secondary gate is also available for use by OCRRA personnel or emergency access or egress. Approximately half of the existing usable space is covered by bituminous pavement. Some of the pavement is relatively new and in good shape, while some areas are from the old airport and have deteriorated over time. Due to the flat grades at the site and the extent of impervious surfaces, stormwater ponds in numerous areas on site until it evaporates or is absorbed into the soil. A portion of the site currently drains to the ditches along Airport Road.

The closest residential area is south and west of the site along Airport Road, approximately 800 to 900 feet south where Airport Road takes a 90-degree turn to the west (the Hamlet of Amboy). The prevailing wind direction is from the west-northwest. To the south and east of the site is the Allied Chemical & Dye Corporation property (now owned by Honeywell). To the north and west of the site is undeveloped property with Nine Mile Creek following the geometry of Airport Road.

3.0 Existing Utilities and Availability of Service

The existing utilities at the site include electric service to the blowers for the pilot test project. The load center to the blowers is a 100-amp, l20/240-volt, single-phase load center with a main breaker. This load center was installed specifically for the compost pilot project in November 2008.

Public water service currently ends at a water vault manhole on the west side of the site along Airport Road. OCRRA understands that this water service is available for the site.

There is a 4-inch gas line along the west side of the site along Airport Road.

The Onondaga County Department of Water Environment Protection (WEP) was contacted concerning the availability of a sanitary sewer line for the site. There is a 24-inch pressure forcemain sewer along the east and south sides of the site.

4.0 Existing Stormwater Controls

The site is approximately 10.5 acres, with approximately 8.5 acres of useable area for compost activities. The site is flat since it was originally an airport and then used as a maintenance garage. There are old catch basins that drained to the ditches along Airport Road and finally into Nine Mile Creek through culverts under Airport Road. The catch basins have since been filled with soil and gravel to prevent stormwater flow from the site to Nine Mile Creek. Portions of the site have surface drainage to neighboring properties on the east and south. There is occasional flooding along the east side of the site since flow paths are restricted and water ponds until it evaporates. Flooding in this area makes it less conducive for composting activities. No new stormwater management facilities have been added to this site since it was operated by the County Department of Transportation.

5.0 Existing Site Access and Security

There is a perimeter fence around a portion of the site; however, on the east side, it does not follow the property line. The fence is in fair to good condition, and portions that will not be removed will require repair in order to provide continuous security along the property line. There are presently two gates that provide access to the site. The main gate, which provides the general access and egress, is on the central north side of the site. The second gate is located on the northeastern side of the property. However, both gates provide limited site distance for oncoming vehicles. The main gate provides general site distances of 400 to 500 feet to the east and less than 300 feet to west. The secondary gate provides general site distances of 200 to 300 feet to the east and less than 200 feet to west. The secondary gate is always locked, and the main gate is locked when the site is not occupied.

6.0 Compost Processing Overview

An overall description of the preferred composting process is described below. These steps will form the basis for the site planning and development at the Amboy Compost Site.

- Feedstock Delivery: Residential and commercial drop-off of yard waste, wood waste, leaves, and grass clippings; commercial drop-off of food waste.
- Feedstock Mixing: Processing (size reduction) and mixing of delivered products to achieve appropriate densities and moisture contents prior to placement on the aeration pad (also utilized to control odors from nitrogen-rich feedstocks, such as grass clippings and food waste).
- Active Decomposition Phase: Mixed feedstock is placed on an aeration pad that utilizes a series of blowers and perforated pipes to supply "positive" air from below the piles, and up through the piles. The combination of air and moisture creates an ideal environment for aerobic bacteria to break down organics into compost. Aerobic decomposition minimizes odor and prevents methane.
- Curing Phase: After the compost is removed from the aeration pad, the aerobic bacteria continues to remain active, but at a lower metabolism rate. During this phase, compost continues to break down and becomes more stable for ultimate use as a soil amendment.

- Compost Screening: After the curing phase, the final compost product may be screened to remove large organic particles that may not have fully composted, or to remove inorganic materials that were in the feedstock (such as plastics). This material may also be re-used as additional bulking materials for new feedstock.
- Compost Storage and Distribution: After screening, the compost is ready for sale and distribution or storage for later use.

7.0 Future Vehicular Controls and Site Access

Based upon review of present and potential vehicle counts, it was agreed that the following planning features would be desirable for future expansion of the Amboy Compost Site:

- Maintain a single point of site access (secondary access and emergency access is also desirable).
- Maximize site distance along Airport Road at the point of public access to the site.
- Utilize truck scale to weigh commercial loads of feedstock and commercial sale of the finished compost.
- Locate the truck scale and a modular office near the residential drop-off areas.
- Allow for sufficient queuing on site to avoid queuing along Airport Road.
- Create traffic patterns to separate residential traffic from commercial traffic.
- Maintain security around the entire perimeter of the property (fence).
- Allow for some site security lighting.
- Allow for appropriate turning radiuses for commercial vehicles (tractor trailers).
- Utilize best management practices for stormwater management to protect surface waters.
- Optimize operations to reduce energy consumption.
- Develop site features that will integrate with operational procedures to prevent negative environmental impacts.

8.0 Future Site Utilities

8.1 Electric & Gas Service: Although there was a new electric service provided as part of the pilot project, future site development will include a new electrical service with a main feed into the new building via an overhead service (to a main electrical panel). Separate sub-panels will be utilized to extend electrical distribution to the blower systems at the aeration pad, the scale and scale house, and site security lighting via buried conduits. The intent is to minimize overhead interferences and electrical poles on site. In addition, natural gas service to the site will be included for future consideration.

8.2 Water Service: There is an existing public water supply and a fire hydrant along Airport Road to the west of the Amboy Site. A new water service will be provided to the existing building and other locations as part of the site development.

8.3 Sanitary Sewer: As previously discussed, there is a 24-inch pressure forcemain sewer along the south side of the site. A new pump station will be required to tie into the sanitary sewer. Sewage and process water will be connected to the future pump station.

9.0 Proposed Site Layout

The following summary presents an overview of the proposed site plan along with key processing features.

9.1 Access Road, Scale and Scale House:

- There will be a new main entrance at the northeastern point of the site; this provides the maximum site distance to the east and west of any other point on the site.
- The two existing access points (existing main entrance and old County Highway gate) will remain in order to accommodate emergency vehicles and OCRRA vehicles that need to access the site.
- Existing main entrance will become the secondary access point to accommodate OCRRA vehicle access.
- Scale house will accommodate an automated card system during operating hours for commercial use.
- The truck scale proposed is OCRRA's existing 70 foot Rice Lake scale, currently set for temporary use. The scale will be moved from its temporary location and set with permanent foundations and approached in the new access location. Most commercial vehicles for weighing are anticipated to be 40 cubic yard roll-offs, packer trucks, or open dump trucks.
- Signs, lane designations, and jersey barriers have been included in the development to provide traffic flow control on the site.
- Commercial traffic will enter and exit over the scale. The radius of curvature for the access road is designed for a 100 cubic yard tractor trailer.
- Commercial food and yard waste will continue to dedicated unloading areas. The food waste will be unloaded in a fabric building and yard waste will be unloaded near other yard waste for ease of processing by the operator.
- Commercial traffic for compost pick-up will continue to the loading area within the operational footprint. After loading, the commercial traffic will exit back over the scale.
- Residential traffic will not need to use the scale and will proceed directly to the residential drop-off area.
- Residential vehicles will utilize a separate drop-off area from that of commercial vehicles.
- Residential traffic will be in a counter-clockwise direction. Residential traffic will enter the site, travel to the residential loading and unloading area, and exit the site without crossing commercial traffic.
- There will be signs at the loading and unloading areas to keep feedstock materials separated. These locations will be adjacent to commercial yard waste areas in order to centralize yard waste.

9.2 Material Receiving and Processing:

- The Agency is envisioning a "covered" receiving/handling area where all incoming materials can be processed "under cover" to eliminate the need for leachate/process water collection. This can be accomplished with a completely enclosed fabric building or with an "open sided" building to allow air movement. The Preliminary Design proposes an 80x100 fabric building on 8' tall concrete walls with minimum 25' rafter height for tipping and receiving.
- It is envisioned as a closed sided building with an open front and ventilated back wall. Included in the building design is a stationary shredding/mixing area with room to incorporate a slow speed shredder or mixer for food and yard wastes. The equipment would be mounted on a concrete pad and have a discharge bunker constructed of large concrete blocks for push walls and material containment. The floor of the building would preferably be concrete but that is dependent on costs and design. Water and any free liquids would be contained by curbs, slopes, and pitch. All liquids would be absorbed into the compost material and processed through the aerated system.

9.3 Compost Aeration Pad:

- The Agency recommends that the aeration pad consist of a minimum of 8 aeration bays, each 20' wide by 100' long separated by 10' tall concrete walls, cast or precast T-walls (used in agricultural silage applications). The end or push wall should be 12' tall to prevent spillage over to the blower mountings.

- Each zone should have the minimum of 3 aeration trenches, 85’ in length, starting approx.4’ from the back wall and stopping approximately 10’ from the open end of the bay. The trenches will comprise the "air distribution system" and will be fed from appropriately sized blowers. The advantage of constructing in-ground aeration trenches is to allow the operator to load feedstock and unload compost from the pad without damaging the air distribution system.
- The system shall be designed with future expansion in mind for a 9th or 10th bay if needed.
- Asphalt paving can be utilized in the bays and the aprons as a surface to minimize the expense of concrete and a minimum of a 40’ apron at the end of the bays is recommended for equipment operation and “process” water collection.

9.4 Curing Pad:

- It is recommended that a paved curing area of 180’x100’ be installed directly due south of the aeration pad and be graded to the process water collection trench and the 40’ wide operating apron. The curing phase will utilize existing aeration equipment and piping on grade, requiring electrical connections in close proximity.

9.5 Process Water:

- All water generated or accumulated during the active aeration and curing phases of the compost system must be treated as process water. To handle those liquids it is proposed to connect the aeration trenches and process water collection trench at the end of the aeration pad to a 10,000 gallon collection tank. The process water collection tank would be plumbed to re-circulate those liquids back into the compost during the mixing process and plumbed via a pumping station to an adjoining sanitary sewer force main.

9.6 Storm Water Management:

- It is recommended that site stormwater be addressed using the most cost effective technologies and in accordance with the New York State Stormwater Management Design Manual (August 2010). OCRRA’s preference is to minimize ponds/retention basins and maximize vegetative buffers and infiltration.

9.7 Pavement and Operating Surfaces:

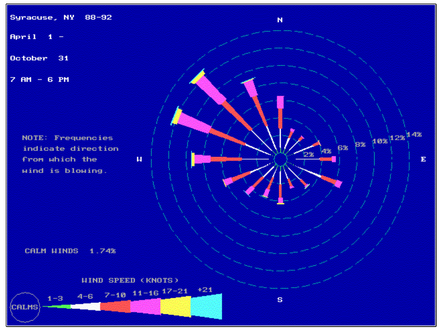
- All operational and material storage areas will be paved with an understanding that paving is a significant capital investment but will be recovered quickly with a reduction in operational and maintenance expenses. Wherever possible, asphalt paving will be utilized over concrete to minimize capital expenses, excluding equipment mounting locations and direct mixing or discharge bays.

9.8 Additional Structures:

- It is recommended that a modular office be utilized to minimize construction and renovation expense for office and operational space. The modular office should be plumbed with a restroom, shower and sink, have one main receiving room, one office, and one personnel changing room. Plumbing shall be tied to potable water and sanitary sewer, along with being weatherized for winter/cold weather operations.

10.0 Conceptual Site Development Plan

The attached Conceptual Site Development Plan encapsulates the detail provided in this Basis of Design in a drawing format. AutoCAD files will be provided to the selected engineering firm. A drawing with the existing site features is also provided.



WIND ROSE
(SYRACUSE AIRPORT)

LEGEND

- PROPOSED PAVEMENT
- PROPOSED MILLINGS/ STONE
- LANE DESIGNATION
- PROPOSED FENCELINE
- REPAIR OF EXISTING FENCE
- PROPOSED GAS SERVICE
- PROPOSED WATER SERVICE
- PROPOSED ELECTRICAL SERVICE
- BUNKER ROOF COVER SYSTEM
- OPERATIONAL FOOTPRINT AREA(S)
- COMPOST MATERIAL FLOW ARROW

SITE PLAN
SCALE: 1"=40'-0"

NOTES:

1. Compost Aeration Pad includes the following:
   a. Five (5) Active aeration zones each 20 feet wide by 100 feet long (80 foot aeration trenches); One (1) Curing aeration zone (same dimensions); and space for one additional future zone (same dimensions).
   b. Aerations zones to be separated by 12-foot high, precast concrete T-Walls.
   c. A 10-foot wide apron shall be provided and shall include a process water collection trench and piping to the Process Water Tank.
   d. The Process Water Tank shall be sized appropriately in consideration of operational and regulatory requirements. For planning purposes, a 20,000 gallon underground storage tank has been shown. This liquid will be used at the compost aeration system when moisture is needed for the compost process.
   e. A proposed pump station shall be designed to serve on-site sanitary sewage needs and the Process Water Tank if there is excess flow volume. Discharge shall be to the existing Onondaga County sewer system (24-inch force main). Coordinate with the Onondaga County Department of Water Environment Protection.
2. Feedstock Receiving & Handling Area is generally described as follows:
   a. The area shall be a covered fabric, wood, or steel building (approximately 80 ft X 100 ft) with closed sides, an open front and ventilated back wall (to protect from weather). Vertical clearance shall be at least 25 feet. A cost analysis shall determine the appropriate superstructure and foundation systems as well as the need for push walls - 8 foot high walls are anticipated.
   b. The receiving area floor shall be concrete or asphalt depending upon the results of a life cycle cost analysis. Liquid management is proposed to utilize wood chips as an absorbent for mixing with food waste. Water shall be contained using slope and curbs. Design shall also consider regulatory containment requirements.
   c. The Receiving Area shall include a stationary vertical mixer for combining food waste with yard waste to create a feedstock for the compost aeration pad (Supreme Enviro-900 or equal). Feedstock shall be conveyed from the mixer to the feedstock bunker. Walls for the bunker shall be concrete block or approved alternative.
   d. Provide water service to the Receiving Area (bunker area) for wash down capabilities.
3. Storm Water Management Area:
   a. The limits of the storm water management area are approximate only. The final design shall consider site specific needs and applicable State Regulations. The desire is to minimize land use impacts while fully complying with regulatory criteria. The use of Green Infrastructure is encouraged. No drainage discharge shall be allowed to the south of the OCRRA property.
4. Proposed Office Trailer:
   a. The Office trailer shall be a pre-fabricated, modular unit and placed on a permanent foundation. Size and features to be determined with OCRRA. Potable water, sewer, and electric utilities shall be provided.
5. Water Management at Existing Building
   a. Surface water drainage from the roof and around the existing building shall be managed separately from the compost aeration pad. Green infrastructure alternatives are encouraged.
6. Surface Treatment:
   a. New driving surfaces, other than those shown for new asphalt paving, shall consist of recycled aggregates such as asphalt millings or recycled concrete. The intent is to maximize the use of recycled products on site.

NOTES:

Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.

It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and the date of such alteration, and a specific description of the alteration.

ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
3	CJY	1/11	BAS	CJY/BAS	JHH	1/11
REVISION PER OWNER REQUEST						
2	CJY/GSL	3/09	BAS	CJY/BAS	JHH	3/09
SITE PLAN DEVELOPMENT REPORT						
1	CJY/GSL	2/09	BAS	CJY/BAS	JHH	2/09
FOR OWNER APPROVAL						
PROJECT SUPERVISOR			DEPARTMENT SUPERVISOR			

ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
7						
6						
5						
4						

STEARNS & WHELER LLC
Environmental Engineers & Scientists

OCRRA
ONONDAGA COUNTY RESOURCE RECOVERY AGENCY

AMBOY COMPOST FACILITY
TOWN OF CAMILLUS, NEW YORK
MASTER SITE DEVELOPMENT PLAN

JOB NO.	81172	CONTRACT		SHEET	G-2 (REV.)

04.01.2011 CHRISTOPHER J YARD/UNITEDSTATES/GHD/AU
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AIRPORT ROAD

(COUNTY ROUTE 100) 66' PUBLIC HIGHWAY

NEW 1 STORY BUILDING (2008)

PILOT PROJECT LOCATION (2008–2009)

NEW ELECTRIC POLE (2008)

EXISTING CONCRETE PAD

GATE HOUSE

MAIN ENTRANCE

SECONDARY ENTRANCE

EDGE OF PAVEMENT

YARD WASTE COMPOSTING AREA

SURFACE FLOW

WATER VAULT M.H. (END OF WATERLINE) RIM= 402.76

REPUTED PERMANENT RIGHT-OF-WAY TO ONONDAGA COUNTY DEPARTMENT OF DRAINAGE & SANITATION SHOWN ON MAP FOUND IN ONONDAGA COUNTY DEPARTMENT OF TRANSPORTATION OFFICE

30' PERMANENT RIGHT-OF-WAY TO ONONDAGA COUNTY DEPARTMENT OF DRAINAGE & SANITATION RIGHT-OF-WAY MAP NO. 1919

40' PERMANENT RIGHT-OF-WAY TO ONONDAGA COUNTY DEPARTMENT OF DRAINAGE & SANITATION RIGHT-OF-WAY MAP NO. 1919

THE COUNTY OF ONONDAGA n/l LIBER 2694 PAGE 018 TAX NUMBER 11.0-01.0-04.0

12" CONCRETE PIPE

24" SANITARY FORCEMAIN

6" SUN OIL PIPELINE

6' CHAIN LINK FENCE

GAS LINE MARKER (END)

TELEPHONE PEDESTAL

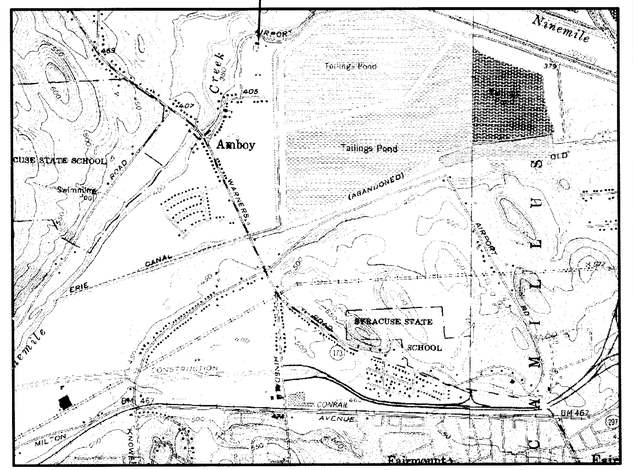
CONC. STRUCTURE W/ AIR RELEASE MANHOLE

CONC. MON.

B.M. #1

B.M. #2

PROJECT LOCATION
OCRRA'S AMBOY COMPOST SITE
6296 AIRPORT ROAD
TOWN OF CAMILLUS
ONONDAGA COUNTY, NEW YORK



PROJECT LOCATION
APPROXIMATE SCALE: 1"=500'-0"

SITE PLAN
SCALE: 1"=40'-0"

1"=40'-0" 40 0 40 80

1"=500'-0" 500 0 500 1000

18.03.2009 CHRISTOPHER YARD
z:\80000\81172\30\DRAWINGS\81172G01.DWG

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ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
3						
2	SITE PLAN DEVELOPMENT REPORT	CJY/GSL	3/09	BAS	CJY/BAS	JHH 3/09
1	FOR OWNER APPROVAL	CJY/GSL	2/09	BAS	CJY/BAS	JHH 2/09

PROJECT SUPERVISOR _____ DEPARTMENT SUPERVISOR _____

ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
7						
6						
5						
4						

STATE OF NEW YORK · JEFFREY H. HEATH · LICENSED PROFESSIONAL ENGINEER · No. 065810

STEARNS & WHELER LLC
Environmental Engineers & Scientists

OCRRA
ONONDAGA COUNTY RESOURCE RECOVERY AGENCY

AMBOY COMPOST FACILITY
TOWN OF CAMILLUS, NEW YORK

EXISTING SITE CONDITIONS

JOB NO.	81172	CONTRACT		SHEET	G-1