Request for Information

SCOPE OF WORK

Eco Industrial Park

Alachua County, Florida

Purpose

On September 28, 2021, the County adopted the Joint Alachua County / City of Gainesville Zero Waste Strategy Report and Implementation Plan Presentation. The project, initiated in 2019, provides direction for devising the means, methods, and infrastructure necessary to sustainably manage materials within both jurisdictions. One of the key recommendations of the Report was the establishment of public and private partnerships to facilitate innovative research and to develop new technologies for managing solid waste in Alachua County. One of the components of the County's Zero Waste Plan is the development of the Eco Industrial Park located adjacent to the Leveda Brown Environmental Park and Transfer Station (5115 NE 63 Ave, Gainesville, FL 32609). The purpose of the Eco Industrial Park is to take advantage of the many emerging solid waste disposal and recycling technologies and to stimulate the market for locally sourced manufacturing inputs.

With this Request for Information (RFI), the County is seeking information and qualifications from companies (Respondents) who present innovative waste processing, conversion, research, or beneficial technologies and are interested in developing a project within the Eco Industrial Park. The purpose of this RFI is to identify active technology/equipment suppliers, project developers, technology developers, and end-market users that desire to design, build, finance, own, and/or operate facilities that will advance the economic, environmental, and Zero Waste goals of the County.

In Alachua County Zero Waste is defined as: "The conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging, and materials by minimizing discharges to land, water, or air that threaten the environment or human health". This definition is supported by the following guiding principles:

- Keep Resources Local
- Foster Job Growth
- Emphasize and Support Upstream Solutions
- Mitigate Climate Change
- Address Environmental Justice and Create Equity of Service

The businesses in the Eco Industrial Park will play a key role in continuing the transition to a Zero Waste and Circular Economy by establishing the infrastructure to produce inputs for re-introduction into industrial manufacturing supply chains. Carrying out the vision of the Circular Economy, the Eco Industrial Park will increase material diversion from disposal and develop the local manufacturing economy required to transform the County's future solid waste management system. For additional information on the County's Zero Waste Goals please see Appendix A, Zero Waste Strategy Report and Implementation Plan.

Eligible technologies will provide innovative management practices for one, or a combination of several, of the following materials from Alachua County and the surrounding region, as applicable:

A. Municipal Solid Waste;

B. Yard Waste;
C. Bulky Waste;
D. Construction & Demolition;
E. Hazardous Waste;
F. Medical Waste:
G. Industrial Waste; and
H. Plastic and glass

The County will be the sole arbiter of whether a project is eligible under this RFI. The submittals will be evaluated using the Screening Criteria outlined in Appendix B.

BACKGROUND

In 1998, Alachua County closed their last active landfill. Upon closure, the County determined it in the best interest of the community to outsource landfill disposal. The County currently contracts to dispose of Solid Waste at the New River Regional Landfill in Raiford, Florida. Prior to disposal, collected waste is transported to the Leveda Brown Environmental Park and Transfer Station (LBEP) in Gainesville. Materials are screened for prohibited waste and hazardous materials that include tires, medical waste, and industrial appliances before being compacted and transported to the New River Landfill (70.6 miles round trip). In Fiscal Year 2021 the County and its municipalities spent over $13.8 million in tipping fees to dispose of 246,000 tons of solid waste.

Solid Waste collection for residents within the County varies based upon location. The County and the Municipalities within the County provide weekly solid waste collection and the waste is delivered for processing and transportation to the LBEP. The County and the City of Gainesville provide weekly collection of recyclables materials using a dual stream system. Recyclables materials collected curbside are processed by the County at the Materials Recovery Facility located within the LBEP. The other municipalities provide weekly collection of recyclables materials using a single stream system; those materials are processed outside of the County.

Residents without mandatory curbside collection may subscribe to curbside pickup through private services or utilize the Rural Collection Centers (RCCs) or LBEP.

The five RCCs positioned throughout the County offer recycling (plastic, metals, glass, mixed paper, and cardboard), household hazardous waste disposal, yard waste recycling, bulk material disposal, and garbage disposal. The LBEP accepts recycling (plastic, metals, glass, mixed paper, and cardboard), scrap metal, tires, yard waste, household hazardous wastes, and garbage disposal and provides further educational outreach to the community. Residential composting education and supplies are currently offered through the Alachua County Solid Waste and Resource Recovery Department.

Presently there are no local mandates on the recycling of green (yard) waste nor construction and demolition (C&D) materials. Curbside collection of yard waste is currently offered within the County and is accepted at the RCCs. At this time, neither the RCCs nor LBEP accept commercial

C&D material (although small amounts of residential C&D debris go through the system). Private outlets exist for the recovery of both yard waste and C&D materials, however C&D recovery opportunities are limited.

A two-season waste composition study was conducted at the LBEP in 2020 and 2021. The purpose of the waste composition study was to collect municipal solid waste spanning various generators and geographical regions within the County and sort each sample into 42 material categories. The resulting average mass percentage per material provides an estimate of that material's presence in the overall County waste stream. The study examined 80 samples, which included samples from single-family homes, Rural Collection Centers, commercial businesses, multi-family residential complexes, and institutional sources. Figure 1 shows a summary of the results from the waste composition study. The complete report can be found in Appendix C.

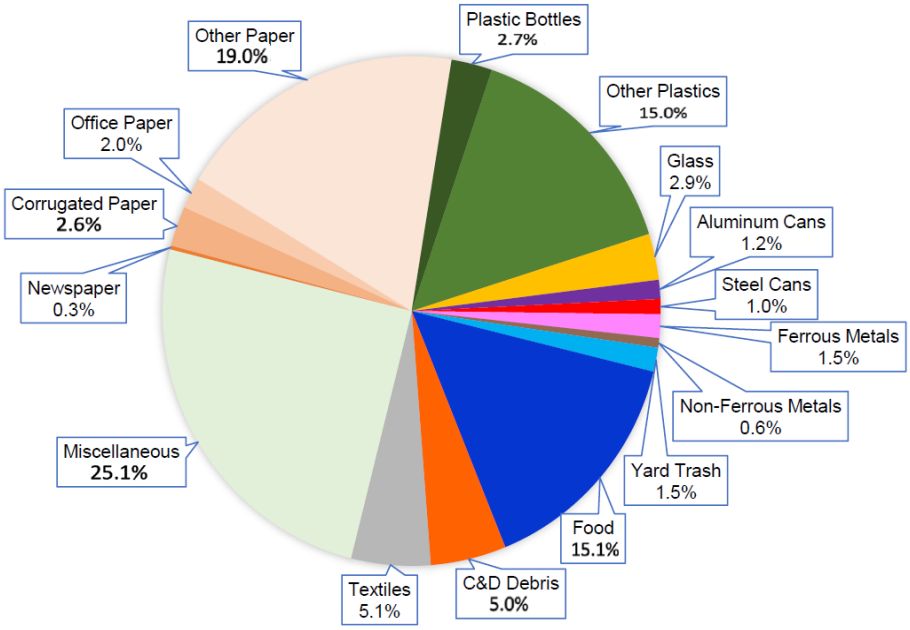

Figure 1. Waste Composition Study

FACILITIES

The County manages the following Solid Waste and Resource Recovery facilities: Leveda Brown Environmental Park and Transfer Station, Materials Recovery Facility, Rural Collection Centers, Hazardous Waste Management Facility, Closed Landfills, and the Eco Industrial Park. Figures 1 shows the locations of these assets.

Leveda Brown Environmental Park and Transfer Station

The Leveda Brown Environmental Park and Transfer Station serves as the heart of the County's solid waste system. At this facility, solid waste is received from both residential and commercial sources, placed into long-haul tractor trailers, and transported to New River Regional Landfill, located in Union County, for final disposal. Additionally, it serves as a recycling location for yard waste, scrap metal, white goods, and tires. FY2021 numbers are shown in Table 1. This site also

houses the Materials Recovery Facility and the Hazardous Waste Materials Collection Center.

Table 1 Breakdown by Materials (FY 2021)

Material	Tons
MSW	207,895
Yard waste	1,312
Tires (whole)	1,186
White Goods/Metal	718
Refrigerant Device	339 (units)

Materials Recovery Facility

The Materials Recovery Facility is located within the Leveda Brown Environmental Park. This facility receives, processes, and markets recyclable commodities. In Alachua County, a dual stream recycling system is predominately utilized where fibrous materials such as paper and cardboard are collected in a separate bin from containers such as plastic or glass bottles and aluminum or steel cans. At the Materials Recovery Facility there are two distinct sorting lines which process these streams so that they remain separate and keep contamination to a minimum. The materials received at this facility come from both residential and commercial sources. FY2021 numbers are shown in Table 2.

Table 2 Breakdown by Commodity (FY 2021)

Commodity	Tons
News	3665
Mixed Paper	10
OCC	10309
SOP	4
Alum	396
Steel	405
Glass	4003
PET	1112
HDPE Nat	224
HDPE Color	372
Other Plastics	268
Plastic Film	0
Other Metals	19
Mixed Recyclables	1
Total	20,788

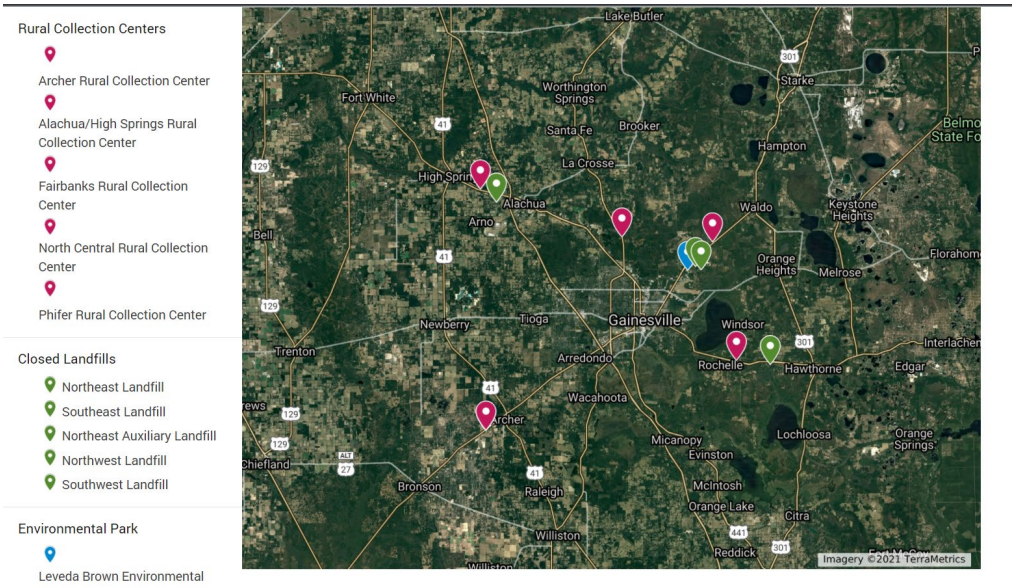

Figure 2. Alachua County Solid Waste and Resource Recovery Facilities

Rural Collection Centers

The five Rural Collection Centers serve as regional drop off facilities for garbage, recyclables, bulk materials, scrap metal, yard waste, and household hazardous waste. These sites are for the exclusive use of residential customers, primarily those who do not receive curbside collection service. The garbage, recyclables, bulk items, and a portion of the yard waste materials collected at these locations are transported to the Leveda Brown Environmental Park prior to disposal. The scrap metals and remainder of the yard waste are delivered directly to recycling facilities in Alachua County. The household hazardous waste is brought to the Hazardous Waste Materials Collection Center for proper sorting and disposal.

Hazardous Waste Management Facility

The Hazardous Waste Management Program provides a County-wide system for the proper disposal, reuse, and recycling of hazardous materials, automotive fluids, household chemicals, unwanted pharmaceuticals, waste vegetable oil, latex paint, and electronic waste materials generated by households and small businesses. Materials are collected primarily at the Hazardous Waste Collection Center (HWCC), located at the Leveda Brown Environmental Park and Transfer Station. Additional drop off sites are located within each of the five Rural Collection Centers. Through a grant from the Florida Department of Environmental Protection (FDEP), Hazardous Waste Management also conducts hazardous waste collection events in 9 neighboring counties.

In addition to residential Hazardous Waste, the HWCC also collects hazardous waste commercial from Very Small Quantity Generators as defined by FDEP.

Table 2 Breakdown by Commodity (FY 2021)

Material	Tons
E-Waste	206
Latex Paint	64
Hazardous Waste	110
Pharmaceuticals	0.6
Oil	123
Oil Filters	5
Bulbs	17
Batteries	28
Total	554

Closed Landfills

The County manages four closed landfills: The Northwest Landfill is approximately 50 acres of open land and was closed in 1982. The Northeast Landfill is approximately 90 acres and was closed in 1982. An additional 400 acres of adjacent property downgradient of the plume is owned by the County. All 490 acres are mostly pine forest. A Disaster Debris Management Site consisting of 25 -40 acres is proposed at this site. The Northeast Auxiliary Landfill is over 40 acres of forested land. Approximately 12.5 acres were used as a landfill in the late 1970s and it closed in 1982. The Southwest Landfill encompasses 232 acres total and approximately 100 acres were used for landfill operations from the 1970's until it closed in 1998.

Eco Industrial Park

The Eco Industrial Park (Park) consists of 31 acres of shovel-ready parcels available for long-term lease for private sector entrepreneurs invested in recycling, reprocessing, and remanufacturing. The site has many assets that make it attractive to appropriate private investment:

- Located in Northeast Gainesville, with easy access to State Road 24 (Waldo Road), the Park is adjacent to the Alachua County Leveda Brown Environmental Park and Transfer Station.
- The Park is located 6 miles from downtown Gainesville and 7 miles from the University of Florida main campus and UF Innovation District.
- The Park has easy access to State Roads 24 and 222, Interstate 75 (12 miles), along with US Routes 441 (5.5 miles) and 301 (9 miles).
- The Park is just minutes away from the Gainesville Regional Airport and within 130 miles to five international airports; Jacksonville, Orlando, Orlando-Sanford, and Tampa.
- The Park sits within 150 miles of four major ports; JAXPORT, Port of Tampa Bay, Port Canaveral, and Port of Brunswick, GA.
- 17 ports can be accessed within nine hours in Florida, Georgia, and Alabama.

Site Access: The Park faces East and South on NE 63rd Avenue, a two-lane asphalt-paved public road providing average access that connects to Florida State Road 24 (Waldo Road).

Site Utilities: All utilities services are currently available to the Park and include electric,

telephone, water, sewer, and broadband.

- 8'' PVC water mainline
- 8'' PVC sanitary sewer mainline
- Stormwater Management System
- New roadway infrastructure
- 4'' PVC electric conduit
- PVC communications conduit (fiber ready)

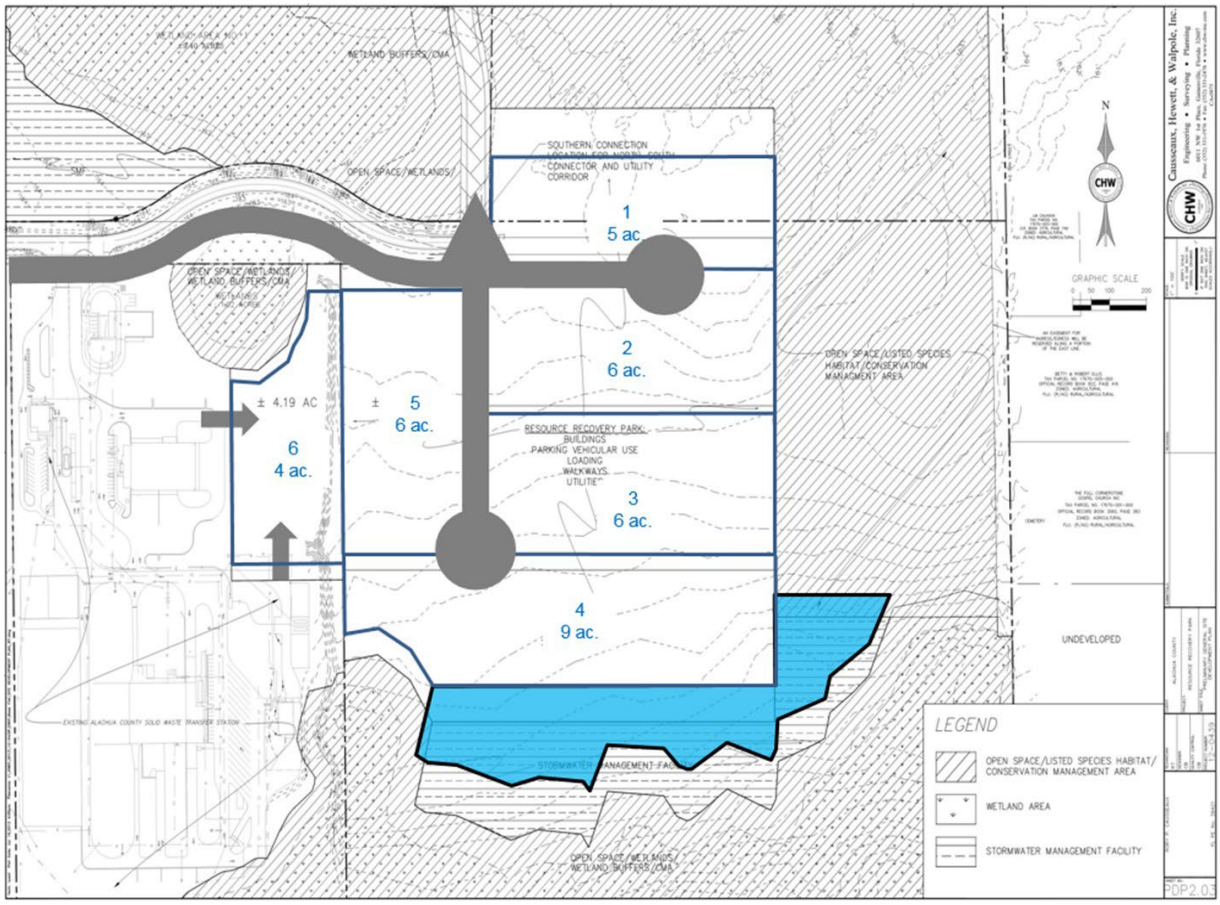

Figure 3. Eco Industrial Park Conceptual Layout

Submission Requirements

In order to provide Respondents an equal opportunity for consideration, a standardized submission format is required as part of this RFI. The format of each submission must contain the following elements in the order listed below, organized into these separate numbered chapters, for the County to consider the submission complete and responsive, with a maximum of 40 pages. Responses shall be submitted electronically. A page allocation is suggested below by chapter, but can be adjusted by the Respondent as needed to meet the 40-page maximum. There is no minimum page requirement. Submissions should not include the disclosure of confidential or proprietary information at any point as all submissions are subject to the Public Records provisions found in Florida Statutes Chapter 119.

Cover Letter (2 pages)

The cover letter must be on Respondent letterhead and signed by a Respondent representative empowered to enter into contracts with the County on the Respondent's behalf. It must contain at least the following information:

- Full name and location of the Respondent;
- Identification of any other member organization of the Respondent Team (subcontractors) and a discussion of the planned role for each firm;
- A brief summary of the proposed process or technology, describing its scale and technology status, the locations at which the process or technology has been used, any outstanding features of the process or technology and its applicability as part of the Eco Industrial Park.

Description of Proposed Process or Technology (8 pages)

Respondents' proposed process or technology description shall detail the type of waste conversiontechnology or process being offered, including the methodology, proposed throughput, inputs, and outputs. Any unique or outstanding feature of the technology shall be presented, along with a description of the products/services produced, the types of air emissions, waste products generated and how they will be managed, any pre-processing of material required before its introduction to the technology, and the nature and amount of process residue produced. The amount of acreage needed tohost the facility shall be specified. The approximate capital investment required to develop, design, construct, and commission the facility shall be provided.

Please advise if and how the proposal will engage in research and development of the products or processes with the University of Florida.

Please advise if and how this proposal specifically mitigates historical environmental injustices in Alachua County. Environmental injustices include any previously incurred damages within a specific community or group. Mitigating these might mean more fully incorporating segments of the community planning process and establishing measures to prevent future inequities from occurring.

Targeted Input / Output Material Streams (4 pages)

In this section Respondents shall outline the material stream which their technology or process targets. Descriptions shall include ideal sources, composition, and volumes of process material as well as any requisite pre-processing or contamination limits. Respondents shall clearly indicate intention or means toutilize waste streams generated outside of Alachua County.

In addition, Respondents shall include information about their outputs (products/services and by-products or residues) from the system process, and identify potential customers for their outputs.

Respondents shall also identify the locations of potential customers and how they anticipate transportingtheir outputs.

Environmental Impact (4 pages)
In this section Respondents shall highlight their technology or process capacity to positively impact thelocal and regional environment and reduce environmental liabilities by:

- Preventing material from entering the waste stream;
- Recovering materials from the waste stream and diverting material from disposal;
- Reducing need for exporting recyclable materials to export markets; and/or
- Climate Change impacts;
- Energy and Water use requirements;
- Regulated Emissions, and
- Other, as identified by the Respondent

Risk Allocation (2 pages)
Without disclosing confidential or proprietary information, Respondents shall describe their business model and the allocation of risk associated with their technology. In this section, Respondents shall describe how their technology will be designed, planned, permitted, constructed, tested, owned, operated, and maintained. This description shall include the capital financing requirements of the technology, anticipated capital expenses, whether Respondent prefer to own or lease land, and any otheradditional business information that is critical to the sustainability of the project.

Economic Impact (5 pages)
In this section, Respondents shall address what economic impacts will be created as a result of their technology including, but not limited to, job creation, attraction of cross-industrial partners, solutions to waste issues that redirect waste challenges into economic opportunities, and academic support from a research and development center. Respondents should highlight how they anticipate addressing the needs of regional manufacturers and how they will engage local, regional, and global partners in utilizing outputs from the Park.

Experience, Finances, and Qualifications (5 pages)
The purpose of this section is to provide an overview description of the Respondent's organization and the Respondent's current and prior experience in applying its technology to waste conversion. The Respondent shall summarize its organization and its financial capabilities and provide a brief business history, current principal place of business, size, number, types of employees, and any other relevant organizational information. If the Respondent Team includes other organizations (e.g., major technology providers, joint venture partners, guarantors, etc.), such information shall be provided for each Respondent Team organization.

Key Team Personnel - Optional (5 pages)
This section shall include the qualifications of the key management and technical staff of the Respondent,especially those involved with the development and operation of the technology that would be located at the Eco Industrial Park.

Supporting Materials (5 pages)
In this section, Respondents can include material that details or supplements the description of its technology and experience. Respondents can subdivide this section in any way that

conveniently organizes its supporting material and should provide contact information for any available references.

Attachments:

- Appendix A - Zero Waste Strategies Report and Implementation Plan
- Appendix B - Screening Criteria
- Appendix C - Waste Characterization Report
- Appendix D - Site Development Plan