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November 6, 2014

Mr. Philip J. Ciaravella
Solid Waste Section
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 4565
Tallahassee, FL 32399

Re: Citrus County Transfer Station
Permit No. 296143-001-SO/30
Waste Processing Facility Permit Renewal

Dear Mr. Ciaravella:

On behalf of Citrus County, King Engineering Associates, Inc. (King) is pleased to submit this application package for renewal of the referenced FDEP transfer station solid waste permit. Enclosed please find:

- Signed form 62-701.900(4).
- Two (2) copies of the following updated documents:
 - Part B, Additional Information;
 - Transfer Station Operation, Maintenance and Contingency Plan;
 - Landfill Operations Plan, modified to reflect the transfer station.
- One CD-ROM containing PDF copies of the above documents.
- Review fee check in the amount of two thousand dollars and no cents (\$2,000.00).

Please note that the following information has not changed from what was submitted for the original permit and is therefore not being re-submitted:

- The Technical Specifications (ref. existing permit Specific Condition 2., a., 2.).
- The Geotechnical Investigation (ref. existing permit Specific Condition 2., a., 3.).
- The Construction Drawings (ref. existing permit Specific Condition 2., a., 7.).
- The Tipping Floor Maximum Storage Pile Exhibit (ref. existing permit Specific Condition 2., a., 8.).
- The Boundary Survey, Deed and Topographic Survey.

Mr. Philip J. Ciaravella
November 6, 2014
Page 1

Note that the County currently operates the landfill under an existing Landfill Operations Plan. The renewal application package includes only the proposed text changes (shown in Track Changes mode) to the Landfill Operations Plan and does not include figures and appendices associated with these documents. Until such time as the County elects to construct the transfer station and other site improvements, the County will continue to operate under the existing version of this document.

The site also has an Emergency Incidents Plan and Standard Operating Guidelines for the Hazardous Waste Collection Center that are already on file with the Department and are applicable to this permit renewal. These documents are therefore not being resubmitted.

We look forward to completing a successful permitting process. Thank you for your cooperation in this matter, and please feel free to call me with any questions.

Sincerely,



Christopher F. Kuzler, P.E.
Sr. Vice President

CFK/pre

Attachments

cc: Casey Stephens, Citrus County
Sharmeela Khemlani, E.I., King
File 4217-100-002



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(4), F.A.C.

Form Title: Application to Construct, Operate, or
Modify a Waste Processing Facility

Effective Date: August 12, 2012

Incorporated in Rule: 62-701.710(2), F.A.C.

APPLICATION TO CONSTRUCT, OPERATE, OR MODIFY A WASTE PROCESSING FACILITY

GENERAL REQUIREMENT: Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes (F.S.) and in accordance with Florida Administrative Code (F.A.C.) Chapter 62-701. A minimum of four copies of the application shall be submitted to the Department District Office having jurisdiction over the facility. The appropriate fee in accordance with subsection 62-701.315(4), F.A.C., shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP). Complete appropriate sections for the type of facility for which application is made and include all additional information, drawings, and reports necessary to evaluate the facility.

Please Type or Print in Ink

A. GENERAL INFORMATION

1. Type of facility (check all that apply):

☒ Transfer Station:

☐ C&D

☐ Class III

☒ Class I

☐ Other Describe: _____

☐ Materials Recovery Facility:

☐ C&D Recycling

☐ Class III MRF

☐ Class I MRF

☐ Other Describe: _____

☐ Other Facility That Processes But Does Not Dispose Of Solid Waste On-Site:

☐ Storage, Processing or Disposal for Combustion Facilities (not addressed in another permit)

☐ Other Describe: _____

NOTE: C&D Disposal facilities that also recycle C&D shall apply on DEP Form 62-701.900(6), F.A.C.

2. Type of application:

☒ Construction/Operation

☐ Operation without Additional Construction

3. Classification of application:

☐ New

☐ Substantial Modification

☒ Renewal

☐ Intermediate Modification

☐ Minor Modification

4. Facility name: Citrus County Solid Waste Transfer Station

5. DEP ID number: 4009C00086 County: Citrus

6. Facility location (main entrance): 230 West Gulf to Lake Highway, Lecanto, FL 34461

Northwest District
160 Government Center
Pensacola, FL 32501-5794
850-595-8300

Northeast District
7777 Baymeadows Way W, Ste 100
Jacksonville, FL 32256-7590
904-256-1700

Central District
3319 Maguire Blvd, Ste 232
Orlando, FL 32803-3767
407-897-4100

Southwest District
13051 N Telecom Pkwy
Temple Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave, Ste 364
Fort Myers, FL 33901-3881
239-344-5600

Southeast District
400 North Congress Ave
West Palm Beach, FL 33401
561-681-6600

7. Location coordinates:
Section: 01 Township: 19S Range: 18E
Latitude: 28 ° 51 ' 13.83 " Longitude: 82 ° 26 ' 12.59 "
Datum: _____ Coordinate Method: _____
Collected by: _____ Company/Affiliation: _____
8. Applicant name (operating authority): Citrus County Solid Waste Management
Mailing address: P. O. Box 340 Lecanto, FL 33460
Street or P.O. Box City State Zip
Contact person: Casey Stephens Telephone: (352) 527-7670
Title: Solid Waste Management Director casey.stephens@bocc.citrus.fl.us
E-Mail address (if available)
9. Authorized agent/Consultant: King Engineering Associates, Inc.
Mailing address: 4921 Memorial Hwy, Suite 300, Tampa, FL 33634
Street or P.O. Box City State Zip
Contact person: Christopher F. Kuzler, P.E. Telephone: (813) 880-8881
Title: Sr. Vice President CKuzler@kingengineering.com
E-Mail address (if available)
10. Landowner (if different than applicant): Citrus County BOCC
Mailing address: 110 N. Apopka Ave. Inverness, FL 34450
Street or P.O. Box City State Zip
Contact person: Jeff Rogers, Interim County Administrator Telephone: (352) 341-6560
jeffrey.rogers@bocc.citrus.fl.us
E-Mail address (if available)
11. Cities, towns and areas to be served: Citrus County - including, but not limited to,
towns of Inverness, Lecanto, and Crystal River
12. Date site will be ready to be inspected for completion: TBD
13. Estimated costs:
Total Construction: \$ 0 Closing Costs: \$ N/A
14. Anticipated construction starting and completion dates:
From: N/A To: _____
15. Expected volume of waste to be received: _____ yds³/day 850 tons/day

16. Provide a brief description of the operations planned for this facility: Refuse trucks from County limits will unload solid waste onto the tipping/storage floor. The waste is then pushed into the open pit where a transfer vehicle is positioned below.
- The solid waste is compacted into transfer trailers and then taken to an approved FDEP landfill location to be determined.
- A Community Service Area, a Household Hazardous Waste and Yard Waste Centers will be operating within the facility.

B. ADDITIONAL INFORMATION

Please attach the following reports or documentation as required.

1. Provide a description of the operation of the facility that shall include (62-701.710(2)(a), F.A.C.):
 - a. The types of materials, i.e., wastes, recyclable materials or recovered materials, to be managed or processed;
 - b. The expected daily average and maximum weights or volumes of materials to be managed or processed;
 - c. How the materials will be managed or processed;
 - d. How the materials will flow through the facility including locations of the loading, unloading, sorting, processing and storage areas;
 - e. The types of equipment that will be used;
 - f. The maximum time materials will be stored at the facility;
 - g. The maximum amounts of wastes, recyclable materials, and recovered materials that will be stored at the facility at any one time; and
 - h. The expected disposition of materials after leaving the facility.
2. Attach a site plan, signed and sealed by a professional engineer registered under Chapter 471, F.S., with a scale not greater than 200 feet to the inch, which shows the facility location, total acreage of the site, and any other relevant features such as water bodies or wetlands on or within 200 feet of the site, potable water wells on or within 500 feet of the site (62-701.710(2)(b), F.A.C.).
3. Provide a boundary survey and legal description of the property (62-701.710(2)(c), F.A.C.).
4. Provide a construction plan, including engineering calculations, that describes how the applicant will comply with the design requirements of subsection 62-701.710(3), F.A.C. (62-701.710(2)(d), F.A.C.).
5. Provide an operation plan that describes how the applicant will comply with subsection 62-701.710(4), F.A.C. and the recordkeeping requirements of subsection 62-701.710(8), F.A.C. (62-701.710(2)(e), F.A.C.).
6. Provide a closure plan that describes how the applicant will comply with subsection 62-701.710(6), F.A.C. (62-701.710(2)(f), F.A.C.).
7. Provide a contingency plan that describes how the applicant will comply with subsection 62-701.320(16), F.A.C. (62-701.710(2)(g), F.A.C.).
8. Unless exempted by subparagraph 62-701.710(1)(d)1., F.A.C., provide the financial assurance documentation required by subsection 62-701.710(7), F.A.C. (62-701.710(2)(h), F.A.C.).
9. Provide a history and description of any enforcement actions by the applicant described in subsection 62-701.320(3), F.A.C. relating to solid waste management facilities in Florida. (62-701.710(2), F.A.C. and 62-701.320(7)(i), F.A.C.)
10. Provide documentation that the applicant either owns the property or has legal authorization from the property owner to use the site for a waste processing facility (62-701.710(2), F.A.C. and 62-701.320(7)(g), F.A.C.)

C. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

1. Applicant:

The undersigned applicant or authorized representative of Citrus County Board of County Commissioners

is aware that statements made in this form and attached information are an application for a Renewal

Transfer Station

Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.


Signature of Applicant or Agent

T. Casey Stephens

Name and Title (please type)

casey.stephens@bocc.citrus.fl.us

E-Mail address (if available)

P. O. Box 340

Mailing Address

Lecanto, FL 33460

City, State, Zip Code

(352) 527-7670

Telephone Number

10/15/2014

Date

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

2. Professional Engineer registered in Florida (or Public Officer if authorized under Sections 403.707 and 403.7075, Florida Statutes):

This is to certify that the engineering features of this waste processing facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.


Signature
Christopher F. Kuzler, P.E.

Name and Title (please type)

45532

Florida Registration Number
(please affix seal)

4921 Memorial Hwy, Suite 300

Mailing Address

Tampa, FL 33634

City, State, Zip Code

CKuzler@kingengineering.com

E-Mail address (if available)

(813) 880-8881

Telephone Number

11/6/14

Date

**APPLICATION FOR PERMIT
CITRUS COUNTY TRANSFER STATION**

submitted to the

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

in

June 2009

Revised July 2009

Revised November 2014 for Permit Renewal

prepared for

**CITRUS COUNTY
SOLID WASTE MANAGEMENT DIVISION
230 WEST GULF-TO-LAKE HIGHWAY
LECANTO, FL 34461**

prepared by

**KING ENGINEERING ASSOCIATES, INC.
4921 MEMORIAL HIGHWAY
ONE MEMORIAL CENTER
TAMPA, FLORIDA 33624**



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Attachment B Waste Projections

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Attachment D FEMA Map

Attachment E Fire Inspection Report

Attachment F Tipping Floor Maximum Storage Pile

(See Original Permit Application Package)

Attachment G Boundary Survey, Deed, and Topographic Survey

(See Original Permit Application Package)

Attachment H Operation, Maintenance and Contingency Plan

(Appendix O to the Landfill Operations Plan)

Attachment I Technical Specifications

(See Original Permit Application Package)

PART B – ADDITIONAL INFORMATION

Introduction

On January 7, 2010, the Florida Department of Environmental Protection (FDEP) issued permit number 296143-001-SO/30 for the construction of a transfer station to be owned by the Citrus County Board of County Commissioners and operated by Citrus County Solid Waste Management Division. The facility will be co-located with the County's landfill at 230 W Gulf to Lake Hwy, Lecanto, Florida, 34461. It is bound to the east, west and south by Withlacoochee State Forest and to the north by State Road (SR) 44 also known as West Gulf to Lake Highway in Section 01, Township 19 South and Range 18 East. This application is for the renewal of that permit.

The current facility accepts municipal solid waste, recyclables, yard waste, waste tires and household hazardous waste. The site consists of a total of 80 acres of land with an active landfill on the south 50 acres and an administration and citizens service area (CSA) on the north 30 acres. Adjacent to the project's western border there is a closed 60-acre landfill. Presently, Citrus County citizens without commercial trash service deliver their trash to the CSA while the landfill is used by commercial and private hauling services that have agreements with individuals, neighborhoods and businesses.

To address the County's growing population and its solid waste needs, this project includes redeveloping the north 30 acres of the site to include a new scale facility, CSA, transfer station, yard waste processing facility and ancillary systems. The transfer station will be used in combination with the on-site landfill for trash disposal. The transfer station will be owned and operated by the County; however, the hauling of the waste to an out-of-County landfill may be contracted out.

The proposed improvements include the following new structures and facilities:

- Transfer Station building;
- Scale Facility;
- Citizen's Service Area (CSA), including the relocated waste tire facility;
- Household Hazardous Waste (HHW) Facility;
- Electrical Building;
- A Dry Storage Building;
- Yard and Wood Waste Area;
- A 24-hour Recycling Center;
- Utilities including fire and water main improvements, potable and fire water booster pump stations, sanitary sewers and a performance based septic system;
- A leachate pump station;
- Diesel fuel storage and dispensing system;
- Two standby generators; and,
- Improved drainage and an internal road and parking system.

As part of constructing the above, the existing administration building, maintenance building, leachate treatment facility, electronics recycling building, and HHW structure will remain. The existing CSA walls and scale facility will be demolished, with the existing paved CSA area converted to a yard waste processing area.

The transfer station building will be a 17,497 square foot pre-engineered metal building. The single slot transfer station will be capable of processing a peak daily waste load of 850 tons (maximum load handled over a 24 hr period) using top load technology and has been designed to allow the addition of a second and third loading slot if necessary. The building will be equipped with a continuous ventilation system via direct drive supply and exhaust fans as well as a fire sprinkler system. The scale house facility will consist of a ±1,580 square foot

scale house with a service station type canopy. It will have two in-bound and two out-bound scales. The inside out-bound scale will serve as a reversible unit capable of being converted to a temporary in-bound scale. Each scale will be 70 feet long and 11 feet wide with a capacity of 100 tons.

The CSA will consist of the following:

- 8 multi-purpose roll-off bins with 7 slots for future expansion;
- Areas for tires, high pressure tanks, Freon/white goods and scrap metals;
- The HHW Facility.

The HHW Facility will have an area for packing, processing, sorting and storage, area for electrical appliances, paint, battery, a hazardous material identification laboratory, an equipment and emergency spill room, used motor oil storage area, toilet and shower room for both men and women and a manager's office.

The dry storage building will be used for paper goods, file and non-hazardous, routine delivery storage in support of the existing administration building.

Construction Phasing

Construction of the proposed facilities and demolition of existing facilities will take place in two phases. The intent of construction phasing is to allow the facility to remain in operation throughout construction. In general, all of the new facilities, except for the yard waste processing area, will be constructed during Phase 1. Operations will then transfer over to the new facilities after clearance is obtained from the FDEP. In Phase 2, the existing scale facility will be demolished and the paved area formerly occupied by the CSA will be converted to the new yard waste processing area. Specifically, each phase is expected to include the following work:

Phase 1

- Construction of the new transfer station building, scale facility, CSA, HHW Facility, electrical building, dry storage building, 24-hour recycling center,
- Utilities including fire and water main improvements, potable and fire water booster pump stations, sanitary sewers and a performance based septic system;
- Leachate pump station and associated force main;
- Diesel fuel storage and dispensing system;
- Standby generator and electrical improvements;
- Roads and stormwater improvements within the Phase 1 construction area.

Because the Phase 1 construction area encroaches on the southern portion of the existing CSA currently used for metals collection, the scrap metals collection area will be relocated as shown on the Site Phasing Plan (sheet C1.04). In addition, construction of the transfer station will encroach upon the area currently used for yard waste processing. During Phase 1, a temporary yard waste processing area will be constructed on the west side of the active landfill top of bank as shown on the Site Phasing Plan (sheet C1.04).

Phase 2

- Demolition of the existing scale facility;
- Demolition of the existing CSA walls, asphalt overlay/expansion and conversion of the CSA area to the new yard waste processing area;
- Completion of road and stormwater system improvements.

At the completion of Phase 2, the temporary yard waste processing area will be taken out of service.

Construction of the new facilities and demolition of the existing facilities is not expected to impact operations at the active landfill, closed landfills and the existing landfill stormwater and leachate pumping and treatment systems.

1. SOLID WASTE DESCRIPTION [62-701.710(2)(a) FAC]

(2)(a)1. The types of materials to be managed or processed.

The solid waste collection boundary for Citrus County, illustrated in Attachment A, includes all of Citrus County limits and the municipalities of Crystal River and Inverness, Florida. Presently, Citrus County citizens without collection service deliver their trash to the CSA while the landfill is used by commercial and private hauling services that have agreements with individuals, neighborhoods and businesses. Primarily, municipal solid waste is accepted at the current facility. Household Hazardous waste is also accepted. Approximately 106,515 tons (350 tons per day) of waste was handled in the facility in the fiscal year 2013. Below is a breakdown of the tonnage per type of waste:

FY 2013	Tons
Tires	373.90
Yardwaste	10,390.06
Metal	576.92
MCD	3.53
Recycle/Electronics	323.87
HHW/CESQG	281.12
Special/Tanks	1,738.36
MSW	81,325.76
Other	0.00
Emergency	0.00
Total	106,515

Grass clippings, tree trimmings, and other yard wastes are directed to the Yard Waste Processing Area.

(2)(a)2. The expected daily average and maximum weights or volumes of materials to be managed or processed.

The proposed Citrus County Solid Waste Transfer Station will accept municipal solid waste from commercial and self-haulers. Municipal solid waste roll-off containers from the CSA will also be unloaded in the transfer station.

The projection of quantities expected in the future is based on growth rates taken from the University of Florida Bureau of Economic and Business Research (BEBR) and based on a range of projections that included low, medium and high estimates in 5 year increments. A chart of the projections developed during the project's preliminary engineering phase is included in Attachment B. Daily averages for each month were calculated based on a 6 day work week for FY 2012 and FY 2013 for the Landfill, CSA and total tonnage. Tonnages from 2013 were used as the basis of the low, medium and high projections. A peaking factor to ascertain the peak day MSW generation for the future was established by taking the 6 highest cash days and 6 highest invoice days for FY 2013 and analyzing the tonnages that contribute to the landfill or the CSA.

The projections prepared in 2007 for the transfer station design and the original permit predicted a peak daily tonnage of 850 tons/day and the facility was designed based on this quantity. As shown in Attachment B, the updated projections predict that the peak daily tonnage to be processed by the facility will approach 600 tons per day over the next 20 years, which is less than originally projected due to the economic conditions of the past several years, increased recycling and other factors. The facility, as designed, should therefore have adequate capacity to process the expected amount of waste.

(2)(a)3.,4. How the materials will be managed or processed, how materials will flow through the facility, and the locations of unloading and processing areas.

The operating hours of the existing CSA and landfill are 8:00 a.m. to 4:30 p.m., Monday through Friday and 8:00 a.m. to 2:30 p.m. on Saturdays. The operating hours are posted at the entrances to the facility. The proposed Transfer Station will be operated during the same hours until the average amount of municipal waste processed each day is such that it warrants longer hours. The proposed recycling center will be open 24 hours per day. The HHW will be open for customer deliveries the same hours as the CSA on weekdays and on one Saturday each quarter. Citrus County staff will have unlimited access to the HHW facility to deposit materials found during normal operations.

All vehicles destined for the landfill, transfer station, CSA, HHW or the yard waste facility enter the site via SR-44. All customers must head east and pass through the scale facility as they enter and exit the site. Customers are weighed and charged in accordance with the current fee schedules (Attachment A). From the scale facility, commercial haulers are directed to either the transfer station or the landfill. Residential customers are directed to the CSA, HHW or yard waste area. Depending on their load, residential customers and small scale commercial haulers may also be directed to the self-haul unloading area at the transfer station.

Transfer trailers will enter the site from the main entrance at SR-44 and head south along the western boundary of the site and then east to the transfer building. In the tunnel, the open-top trailers will be loaded from above and a knuckleboom crane will compress and groom the load. A scale will be located in the tunnels to monitor the load in the trailers. The weight of the load will be displayed on a screen located on the tipping floor as well as in an area visible to the trailer driver. After being loaded, the trailers will exit the transfer building and head west to the western boundary of the property and then north where they will exit the site either through the main entrance or through the secondary entrance at the 24-hour recycling center.

The Recycle Center customers will enter the site from a separate entrance on SR-44, drop off the material at one of the six recycling bins and exit the facility in a clockwise manner. Customers exiting the scale facility also have the option of turning north to visit the Recycling Center and then exiting the site from the secondary entrance.

Currently, no sorting of municipal waste occurs at this facility, or is proposed in the future transfer station building, other than that required to remove prohibited items discovered in the waste.

(2)(a)5. Types of equipment that will be used.

The new scale facility will include a scale house and two inbound scales and two outbound scales. Each aboveground flat top scale will be 70-feet long with a capacity of 200,000 lbs. The new transfer station will be operated using open top type technology utilizing a knuckleboom crane positioned over the loading pit that will be operated from a control booth over the slot. The crane will be used to level and compact material that is loaded into the open top transfer trailers. Citrus County may contract the hauling of the municipal waste from the transfer station to the landfill. The number of transfer trucks needed depends on factors such as pay-load and trip distance. The County will obtain additional buckets for its front-end loaders as required to work in the transfer station, landfill or CSA. Other equipment the County plans on procuring includes a skid steer with broom and blade attachments, a yard truck which may be owned or leased depending on contract and if composting yard waste, a scarab or similar may be purchased. Equipment for screening and mulching will be contracted.

(2)(a)6. The maximum time material will be stored at the facility.

Waste will be processed on a first-in, first-out basis. Stored municipal solid waste will not be allowed to remain on the floor for more than seven days.

(2)(a)7. The maximum amount of wastes that will be stored at the facility at any one time.

The tipping floor will have a storage volume on the order of 620 tons.

(2)(a)8. The expected disposition of materials after leaving the facility.

All material hauled out of the transfer station will be disposed of at an approved municipal solid waste disposal facility. At this time, the County does not know who will be hauling the waste (if contracted out) or where the waste will be hauled to. This information will be provided to the FDEP prior to the start of operating the facility.

2. SITE PLAN [62-701.710(2)(b) FAC]

A Site Plan of the proposed transfer station showing structures, buildings, fences, gates, entrances, exits, parking areas and on-site roadways is included in Attachment C.

In general, existing structures on the site consist of an administration building, a maintenance building, a leachate pump station, storage sheds, scale platform and concrete pads for furniture and large items, recycling bins, oil recycle collection tank, appliances and scrap metals, antifreeze and battery and fluorescent bulbs.

The proposed structures are as described previously in the Introduction.

The site of the proposed transfer station is zoned as Industrial, with the exception of the main entrance road which is zoned Commercial. The Site Plan in Attachment C also shows adjacent properties. According to FDEP's Water Central Database, there are no water supply wells within 1,000 feet of the property and no potable water wells within 500 feet of the transfer station property line, and there are no wells serving community water supplies within

1,000 feet of the transfer station property line. A well location map is shown in Attachment C.

The site does not contain any natural wetlands or open water bodies and is not located within 200 feet of any natural or artificial water body.

3. BOUNDARY SURVEY AND LEGAL DESCRIPTION OF THE PROPERTY [62-701.710(2)(c) F.A.C.]

The Citrus County Board of County Commissioners owns and operates the Citrus County Landfill. The property on which the facility is located is the site of the future transfer station and is owned by Citrus County. A copy of the boundary survey, legal description, and topographic survey is provided in Attachment G.

4. DESIGN REQUIREMENTS [62-701.710(3) FAC]

62-701.710(3)(a):

“Tipping, processing, sorting, storage and compaction areas that are not enclosed shall be equipped with litter control devices.”

The transfer station building will be a 17,497 square foot enclosed pre-engineered metal building. The single slot transfer station has been designed to process a peak daily waste load of 850 tons (maximum load handled over a 24 hr period) using top load technology and has been designed to allow the addition of a second and third loading slot if necessary. Waste will be typically stored to a maximum height of 15 feet on the 13,100 square foot tipping floor.

Personnel are assigned to the transfer station to facilitate litter control during normal operating hours. The tunnel will be cleaned of all litter periodically during the course of operations and at the end of each business day. If absolutely necessary, waste not stored on the tipping floor or transported off-site will be stored in transfer trailers either covered with a tarp or parked in the transfer

station, within an area served by the leachate collection system, until the next business day.

62-701.710(3)(b):

“The facility shall be designed with a leachate control system to prevent discharge of leachate and mixing of leachate with stormwater, and to minimize the presence of standing water.”

The facility will be constructed with a leachate collection system to collect leachate on the tipping floor and the tunnels and convey the leachate to the proposed leachate pump station which will then pump it to the existing landfill leachate pump station. Roofing over the tipping floor and tunnel, along with grading of roadway surfaces outside the transfer station eliminate the mixing of leachate with storm water. Leachate generated within the transfer station flows into the leachate collection system trench drain on the tipping floor and floor drains in the tunnels. For ease in cleaning, the trench drain will be equipped with removable grates wide enough to accommodate a shovel.

An HDPE gravity collection system will convey the leachate from the trench drains to the proposed leachate pump station. A 4-inch leachate force main will convey leachate from the proposed pump station to the existing pump station.

The existing pump station will pump the leachate to the leachate holding tanks at the southwest corner of the landfill and ultimately the leachate will be conveyed to the leachate treatment plant. This plant receives leachate produced in the closed 7-acre landfill to the west of the site as well as the active landfill to the south of the proposed site. The leachate treatment facility separates leachate into liquid and solid constituents and sends the filtered effluent to one of the two percolation ponds directly to the south of the facility on the active landfill site. Solids are turned into sludge and sent to a sludge drying bed. If the leachate cannot be treated at the leachate plant, it is transported to one of the County's wastewater treatment plants.

The existing leachate treatment system is permitted to treat up to 30,000 gallons per day of raw leachate. Presently the 7-acre closed landfill and the active landfill cells produce an average daily leachate generation of less than 12,000 GPD, providing more than 50% of capacity for future uses. Based on similar facilities, the new Transfer Station is anticipated to produce 167 GPD of leachate on average plus approximately 5,000 gallons per week during the tipping floor washdown.

Leachate from the existing pump station is monitored, sampled and analyzed according to rule 62-701.500 (8), FAC.

62-701.710(3)(c):

“Provisions shall be made for evaluating the quantity of all incoming solid waste and recovered materials. Storage areas shall be designed to hold the expected volume of materials until they are transferred for disposal or recycling.”

Incoming solid waste trucks will be weighed at the scale house to determine the weight of the solid waste delivered. Monthly summaries of this data will continue to be maintained on-site in the administration building. Upon request, these reports will be provided to the FDEP. All incoming vehicles and rolloff containers from the CSA will be unloaded on the tipping floor at which time the front end loader operator or other staff will have the opportunity to visually observe the waste. The tipping floor will have the capacity to store approximately 620 tons of solid waste. This translates to 0.72 days of projected peak day storage in the year 2040 and 1.46 days of projected average day storage in the year 2040. If necessary, the landfill will be available to receive waste, therefore storage on the tipping floor may not be necessary.

5. OPERATIONAL REQUIREMENTS [62-701.710(4), 62-701.320(16), F.A.C.]

An Operations and Contingency Plan for the Citrus County Transfer Station prepared in accordance with 62-701.710(2)(e) is provided in this application package under separate cover.

Storage of Putrescible Wastes [62-701.710(4)(b), F.A.C.]

The transfer station tipping floor will be completely enclosed in a building to contain odors and limit access by birds and other pests. Depending upon the time of delivery, material will be stockpiled on the tipping floor until a transfer vehicle returns to the facility, at which time the waste will be pushed to the loading bays in a sequential motion. Under normal operating conditions, waste will be managed on a first-in, first-out basis and will not remain unprocessed for more than 24 hours. Under extreme operating conditions, waste will be stored for no greater than 7 days. Unauthorized waste received by the facility will be segregated on the tipping floor and transported to an authorized disposal or recycling facility within 7 days of receipt.

Training of Operators [62-701.710(2)(h), F.A.C. and 62-701.710(4)(c), F.A.C.]

The facility will primarily receive household and commercial solid waste, manage waste on a first-in, first-out basis, and store the waste for no greater than 7 days and is therefore exempt from the requirement to provide to have a trained spotter in accordance with 62-701.710(1)(d)1 F.A.C.

Operators are trained in accordance with subsection 62-701.320(15) F.A.C. and as provided by the hiring plan listed below. A trained operator is on duty at all times during transfer station operating hours. A tipping floor attendant is on duty at all times when the transfer station is receiving solid waste to ensure that prohibited materials are removed from the waste stream and to direct traffic on the tipping floor. Operators are certified in regulatory aspects of transfer station operations, such as leachate and storm water management, ventilation and odor control, waste control, operating guidelines, employee health and safety and contingency planning.

Hiring Plan

The BOCC follows the County's Human Resources hiring policies. Open positions are advertised by Citrus County Human Resources Office. The supervisor of the open position conducts the interviews of qualified, eligible individuals. Some positions require two interviewers. Many positions (all equipment operators) also require a skills test. Training of new personnel is provided by supervisors and/or other experienced employees in the following operational procedures:

- General Maintenance of Equipment
- Inspection and Reporting Procedures
- Knowledge of Materials Handled
- Health Effects of Materials Handled
- Basic Housekeeping Procedures
- Contingency Plan Procedures
- Response to Emergencies
- Hazard Communication / Right to Know
- Compliance with Applicable Laws and Regulations as Required

All staff in public information positions, scalehouse, CSA, Transfer Station or Landfill waste screening positions will be required to become certified attendants within 6 months of hiring and maintain the certifications with FDEP-approved continuing education classes. The county concentrates on selecting safety-related classes for official continuing education credits.

Formal safety training for all field positions happens at least once a month led by internal staff. Office staff has safety training at least once per quarter. Printed class outlines and attendance lists are available for review. Informal safety training happens whenever an employee takes on a new task. Counseling happens after every injury or damage incident.

Employed individuals are trained to become familiar with applicable OSHA workplace safety regulations; EPA, FDEP, and HCEPC regulations governing the identification, classification, transportation, and proper disposal of wastes; equipment operational parameters and requirements; fire safety procedures; and other operational and maintenance requirements of the transfer station. Selected individuals are also trained and certified in heavy equipment operation and first aid. Employees who work on the tipping floor have been trained relative to the identification and labeling associated with hazardous wastes, as well as infectious wastes.

Odor and Vector Control [62-701.710(4)(d) F.A.C.]

Waste will be processed on a first-in, first-out basis and will normally not remain on the floor for more than 24 hours; however, under unusual circumstances, wastes may be stored for up to seven days. The following methods are used to minimize off-site odors:

- The tipping floor is cleaned as needed to control odors.
- The loading areas, sumps and drains, and compaction equipment are cleaned regularly.
- Wastes are managed inside the transfer building and containers.
- Loaded wastes are removed from the site frequently.
- The Facility Manager, or designated representative, screens incoming loads for odor problems. Loads that have begun to degrade and may soon emit objectionable odors are given loading priority so that they can be quickly placed in trucks and transferred from the facility.

Areas where waste is stored or processed will be cleaned at least weekly to prevent odor or vector problems. Additionally, all drains and leachate conveyances will be kept clean so that leachate flow is not impeded.

In addition to proper management practices, the proposed new building will utilize air exchange as a means of controlling dust and odor. The tipping floor will have eight wall-mounted and four roof mounted exhaust fans. The tipping floor tunnel will have four propeller fan wall-mounted and three outside air intake louvers. Collectively, the fans will provide the capability of up to 22 air exchanges per hour (ACH), which should mitigate the potential for nuisance odors at the facility.

Should off-site odors become problematic, the Facility Manager will investigate the situation, determine the source of the problem, and institute corrective actions as appropriate. Additional odor control methods may be implemented, as needed. The facility will be operated to control objectionable odors in accordance with 62-296.320(2) F.A.C.

Fire Protection [62-701.710(4)(e) F.A.C.]

The site will have dual potable water systems consisting of a domestic water system and a fire system. The fire system will consist of a series of 8-inch water mains with fire hydrants placed no further than 400-feet from any building. In addition, the new transfer station building and the office area of the HHW will be constructed with automatic fire sprinkler systems. A fire and potable water booster pump station will be constructed to provide pressure to meet fire flow requirements. The processing area of the HHW will be equipped with an automatic foam fire protection system.

Fire extinguishers will be present in each building and will be mounted in the cab of all heavy machinery, control rooms, and electrical rooms. Citrus County's operating procedures require that the staff immediately contact 911 if a fire is observed. The most recent Fire Safety Review Sheet from the Citrus County Fire Marshall is presented in Attachment E. The Fire Marshall annually inspects the existing facility. The last inspection was performed in August 2013.

In accordance with County Development Review procedures, the local Fire Marshall's office will review the proposed fire system design prior to construction. Prior to operation of the facility, they will also conduct an onsite inspection of the system for compliance with required fire codes. The Fire Marshall's approval of the constructed system is one of the requirements for issuing a Building Department Certificate of Occupancy for the new building.

The transfer station attendants will be consistently alert for possible fires either from a load that is delivered or from a malfunction in the transfer station system. A first aid kit is available in the Administration Building, in heavy equipment cabs and in the HHW.

Access Control [62-701.710(4)(f) F.A.C.]

The site perimeter is enclosed by a 6-foot chain link security fence. The entrance to the facility is located on SR-44 and provides site access for waste haulers and residential customers. Attendants at the scale house will direct customers to the appropriate drop-off areas of the facility. Traffic signs located throughout the site direct the flow of traffic and provide for speed limits. The gates at the entrances will be locked at the end of business every day.

Leachate Drains [62-701.710(4)(g) F.A.C.]

The transfer station has a leachate collection system to collect leachate on the tipping floor and the tunnels and convey the leachate to the leachate pump station which then pumps it to the existing landfill leachate pump station. Roofing over the tipping floor and tunnel, along with grading of roadway surfaces outside the transfer station eliminate the mixing of leachate with storm water. Leachate generated within the transfer station flows into the leachate collection system trench drain on the tipping floor and floor drains in the tunnels. For ease in cleaning, the trench drain are equipped with removable grates wide enough to accommodate a shovel. Leachate trench drains in the transfer station are cleaned as required or, as a minimum, at the end of each business day.

Unauthorized or Hazardous Wastes [62-701.710(4)(h) F.A.C.]

If prohibited wastes are discovered by the scalehouse attendant or one of the facility attendants, the vehicle will be directed back to the administration office. If the waste has not yet been unloaded, the person responsible for shipping the waste will be notified and the vehicle driver will be directed to leave the site. If the waste has been deposited, the area of the waste load will be blocked from public access until the generator or hauler of the waste cleans up the waste. If the generator or hauler of the waste cannot be identified or is unable to remove the waste, Citrus County will be responsible for cleanup, transportation, and disposal of the waste at an appropriate waste management facility. In all cases, the FDEP will be notified.

Items in the transfer station that are identified to be unauthorized will be given back to the driver that delivered them. If the driver does not accept the material the transfer station attendant will note the truck information and fill out a load inspection sheet for the unauthorized material. The County will also notify the FDEP of the driver's refusal to accept the unauthorized material. The material left in the transfer station will then be moved to a temporary holding area away from material being processed. The location of the holding area will be designated on a daily basis depending on the day's operations and will be cleared out daily of material staged there. If the material discovered is not authorized to be handled at the Citrus County Central Landfill then appropriate arrangements will be made to properly handle the material. If material discovered in the transfer station is hazardous, the transfer station attendants will use their portable radio to contact supervision and inform them of the issue. Once notified, supervision or the transfer station operator on duty will take appropriate actions to mitigate the issue. The steps may include but are limited to, evacuating the transfer station, calling 911, or other appropriate actions.

Storage Capacity [62-701.710(4)(i) F.A.C.]

As described above, the tipping floor will have the capacity to store approximately 620 tons of solid waste, which is roughly 2.25 times the current average daily amount of waste received. This storage amount proposed is based on available space and the ability to operate on the tipping floor. Should adequate space for processing waste not be available on the tipping floor, the facility may divert incoming collection vehicles to the landfill until capacity on the tipping floor has been restored.

6. CLOSURE REQUIREMENTS [62-701.710(6) F.A.C.]

Citrus County will close the Transfer Station facility in compliance with Rule 62-701.710(6), F.A.C. by performing the following:

- The County will notify the Florida Department of Environmental Protection prior to the cessation of waste processing at the Transfer Station and specify a date of closure. No solid waste will be received at the Transfer Station after the specified date of closure.
- The County will remove and dispose of all stored and recyclable goods remaining at the transfer station facility within 30 days after the transfer station is closed. During the 30 day period, all putrescible wastes will be removed within 48 hours of entering the facility.
- The facility will dispose of any leachate remaining at the time of closure.
- Prior to closure, the building and all equipment will be cleaned and decontaminated.
- Closure of the transfer station will be completed within 180 days of receiving the final solid waste delivery. The County will then certify in writing to FDEP that closure is complete and the Department can inspect the facility within 30 days to verify closure.

7. FINANCIAL ASSURANCE DOCUMENTATION [62-701.710(7) F.A.C.]

The facility receives primarily household and commercial solid waste, manages waste on a first-in, first-out basis, and stores the waste for no greater than seven days and is therefore exempt from the requirement to provide financial assurance in accordance with 62-701.710(1)(d)1 F.A.C.

8. RECORD KEEPING [62-701.710(8) F.A.C.]

The BOCC will comply with the recordkeeping requirements of Rule 62-701.710(8).

Operational records will be electronically recorded and maintained by Citrus County and will include a daily log of the quantity of solid waste received, stored, and removed from the site for disposal, and the origin of the waste, if known. These records will include each type of solid waste, recovered materials, residuals, and unacceptable waste which is processed, recycled, and disposed. Such records are compiled on a monthly basis and are available for inspection by the Department upon request with a reasonable amount of time. All records are retained at the facility for a period of three years.

The BOCC will submit an annual report to the Department on Form 62.701.900(7). This report shall include a summary of the amount and types of waste disposed of or recycled. The county of origin of the materials which are recycled, or a statement that the county of origin is unknown, shall also be included in the report. The report will be submitted no later than April 1 of each year, and will cover the preceding calendar year.

Citrus County shall also keep on site and have available for the Department, inspection copies of the Facility Inspection Logs (e.g. litter, odor, vector, etc.), training records, permits, permitting records and the Operation Plan.

9. HISTORY AND DESCRIPTION OF ENFORCEMENT ACTIONS [62-701.320(7)(i) F.A.C.]

The facility currently has no enforcement actions.

10. PROOF OF PUBLICATION OF THE NOTICE OF APPLICATION [62-701.320 (8) FAC]

A public notice of application will be published within 14 days after the submission of this application, and such proof of publication will be provided to the FDEP upon receipt.

11. CONFORMANCE WITH PROHIBITIONS [62-701.300 FAC]

General Prohibitions [62-701.300(1) FAC]

62-701.300(1)(a):

No person shall store, process or dispose of solid waste except as authorized at a permitted solid waste management facility or a facility exempt from permitting under this chapter.

The Citrus County Transfer Station has an approved permit from the FDEP to construct and operate the existing transfer station facility. Citrus County has applied for a permit renewal under this chapter and will comply with the required regulations. Operations will not commence until the new facility is cleared by the FDEP to be placed into service under the renewed permit.

62-701.300(1)(b):

No person shall store, process, or dispose of solid waste in a manner or location that causes air quality standards to be violated or water quality standards or criteria of receiving waters to be violated.

The Citrus County Transfer Station will not store solid waste in a manner or location that causes air quality standards to be violated or water quality standards or criteria of receiving waters to be violated. The waste handling process for the CSA and the YWF, as described in the Operation, Maintenance, and Contingency Plan, list all the procedures that, if implemented properly, will avoid violations to the air and water quality standards.

The Citrus County Transfer Station will operate under an FDEP issued ERP to address stormwater treatment at this facility.

Siting [62-701.300(2) F.A.C.]

Unless authorized by a Department permit or site certification in effect on May 27, 2001, or unless specifically authorized by another Department rule or a Department license or site certification based upon site-specific geological, hydrogeological, design, or operational features, no person shall store or dispose of solid waste:

62-701.300(2)(a):

In an area where geological formations or other subsurface features will not provide support for the solid waste;

Geotechnical explorations at the site have not indicated that there are geological formations or other subsurface features that will not provide support for the proposed solid waste facilities. This is further discussed in the project geotechnical report, which was submitted at the time at which the permit was originally applied for.

62-701.300(2)(b):

Within 500 feet of an existing or approved potable water well unless storage or disposal takes place at a facility for which a complete permit application was filed or which was originally permitted before the potable water well was in existence. This prohibition shall not apply to any renewal of an existing permit that does not involve lateral expansion, nor to any vertical expansion at a permitted facility;

The permit application is for a proposed transfer facility, which does not involve the lateral or vertical expansion of a landfill. Therefore, the prohibition above is not applicable. Additionally, there does not appear to be potable water wells within 500 feet of the Citrus County Transfer Station facility per the FDEP Water Central Database as illustrated on the Well Location Map in Attachment C.

62-701.300(2)(c):

In a dewatered pit unless the pit is lined and permanent leachate containment and special design techniques are used to ensure the integrity of the liner;

Waste will not be stored in a dewatered pit at the new Transfer Station.

62-701.300(2)(d):

In any natural or artificial body of water, including ground water and wetlands within the jurisdiction of the Department. This prohibition does not apply to areas of standing water that exist only after storm events, provided that the storage or disposal does not result in objectionable odors or sanitary nuisances;

Waste will not be stored in any natural or artificial body of water, including ground water and wetlands.

62-701.300(2)(e):

Within 200 feet of any natural or artificial body of water unless storage or disposal takes place at a facility for which a complete permit application was filed or which was originally permitted before the water body was in existence. This prohibition shall not apply to any renewal of an existing permit that does not involve lateral expansion, nor to any vertical expansion at a permitted facility. For purposes of this paragraph, a "body of water" includes wetlands within the jurisdiction of the Department, but does not include impoundments or conveyances which are part of an on-site, permitted stormwater management system, or bodies of water contained completely within the property boundaries of the disposal site which do not discharge from the site to surface waters. A person may store or dispose of solid waste within the 200 foot setback area upon demonstration to the Department that permanent leachate control methods will result in compliance with water quality standards and criteria. However, nothing contained herein shall prohibit the Department from imposing conditions necessary to assure that solid waste stored or disposed within the 200 foot setback area will not cause pollution from the site in contravention of Department rules; and

There are no bodies of water within 200 feet of the Citrus County Transfer Station building.

62-701.300(2)(f):

On the right-of-way of any public highway, road or alley.

Waste will not be stored on or within any public highway, road, or alley at the new Transfer Station.

Burning [62-701.300(3) F.A.C.]

Open burning of solid waste is prohibited except in accordance with Chapter 62-256, F.A.C. Controlled burning of solid waste is prohibited except in a permitted incinerator, or in a facility in which the burning of solid waste is authorized by a site certification order issued under Chapter 403, Part II, F.S.

Waste is not and will not be burned at the Citrus County Transfer Station facility.

Hazardous waste [62-701.300(4) F.A.C.]

No hazardous waste shall be disposed of in a solid waste management facility unless such facility is permitted pursuant to Chapter 62-730, F.A.C.

Hazardous waste is not accepted nor disposed of at the Citrus County landfill facility, nor will it be at the new transfer station.

PCBs [62-701.300(5) FAC]

Disposal of liquids containing a polychlorinated biphenyl (PCB), or non-liquid PCBs in the form of contaminated soil, rags, or other debris, may be restricted or prohibited by 40 CFR Part 761. Persons managing PCBs are advised to consult that federal regulation before attempting to dispose of PCBs in any solid waste disposal unit in this state.

Liquids containing PCBs are not and will not be knowingly accepted at the Citrus County Transfer Station facility.

Biomedical waste [62-701.300(6) FAC]

62-701.300(6)(a)

No biomedical waste shall be knowingly deposited in any solid waste management facility unless:

- 1. The solid waste facility is specifically permitted to receive untreated biomedical waste;*
- 2. The biomedical waste has been properly incinerated so that little or no organic material remains in the ash residue, or treated by a process approved by the Department of Health, and the provisions in paragraph 62-701.520(5)(d), F.A.C., are complied with; or*
- 3. The biomedical waste is generated by an individual as a result of self-care, or care by a family member or other non health care provider. However, in order to reduce the chance of exposure to the public, home generators are advised to segregate and package such waste before disposal according to the guidelines for disposal of home-generated biomedical waste available from each county health department.*

Biomedical waste will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(6)(b):

No solid waste, including treated biomedical waste, shall be commingled with untreated biomedical waste unless the solid waste is being managed in the same manner as the untreated biomedical waste.

Biomedical waste will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(6)(c):

Treated or untreated biomedical waste shall not be allowed to leak into the environment during transport.

Biomedical waste will not be knowingly accepted at the Citrus County Transfer Station facility.

Class I surface waters [62-701.300(7) F.A.C.]

The Department shall not issue a construction permit for a landfill within 3,000 feet of Class I surface waters.

This permit application is for a proposed transfer station facility and not for the construction of a landfill. Therefore, the above prohibition is not applicable.

Special wastes for landfills [62-701.300(8) F.A.C.]

No person who knows or who should know of the nature of such solid waste shall dispose of the following wastes:

This permit application is for a proposed transfer station facility and not for the construction of a landfill. Therefore, the above prohibition is not applicable.

62-701.300(8)(a)(1):

Lead-acid batteries in any landfill;

Automotive lead-acid batteries will not be knowingly accepted at the Citrus County Transfer Station facility. Household and lead-acid batteries are knowingly accepted at the CSA facility. Batteries discovered by staff at the Citrus County Transfer Station are removed and isolated in an appropriate area until these items have been removed by the applicable vendor for proper recycling.

62-701.300(8)(a)(2):

Used oil in any landfill, except as provided in Chapter 62-710, F.A.C.;

Used oil will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(8)(a)(3):

Yard trash in a Class I landfill;

Vehicles containing yard trash are diverted to the on-site YWF.

62-701.300(8)(a)(4):

White goods in any landfill; and

White goods will be collected for recycling at the CSA and stored in a clearly marked, separate area. White goods containing freon will have the freon removed.

62-701.300(8)(b):

Whole waste tires in any landfill, except as provided in Chapter 62-711, F.A.C.;

Tires will be collected at the CSA, deposited in the tire collection area and managed in accordance with the facility's tire waste permit.

Special wastes for waste-to-energy facilities [62-701.300(9) F.A.C.]

No person who knows or who should know of the nature of such solid waste shall dispose of lead-acid batteries, mercury –containing devices, or spent mercury-containing lamps in any waste-to-energy facility.

The Citrus County Transfer Station facility is not a waste-to-energy facility.

Liquid restrictions [62.701.300(10) F.A.C.]

62-701.300(10)(a):

Noncontainerized liquid wastes shall not be placed in solid waste disposal units which accept household waste or construction and demolition debris for disposal unless:

- 1. The liquid waste is household waste other than septic waste; or*
- 2. The liquid waste is leachate or gas condensate derived from the solid waste disposal unit; or byproducts of the treatment of such leachate or gas condensate, and the solid waste disposal unit is lined and has a leachate collection system.*

Liquids in violation of the above regulation will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(10)(b):

Containers holding liquid waste shall not be placed in a solid waste disposal unit unless:

- 1. The container is a small container similar in size to that normally found in household waste;*
- 2. The container is designed to hold liquids for use other than storage; or*
- 3. The waste is household waste.*

Containers and liquids in violation of the above regulation will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(10)(c):

Containers or tanks twenty gallons or larger in capacity shall either have one end removed or cut open, or have a series of punctures around the bottom to ensure the container is empty and free of residue. The empty container or tank shall be compacted to its smallest practical volume for disposal.

Containers and tanks in violation of the above regulation will not be knowingly accepted at the Citrus County Transfer Station facility.

Oily Wastes [62-701.300(11) F.A.C.]

62-701.300(11)(a):

Used oil and oily wastes. Except as provided in paragraph (b) of this subsection, no person may mix or commingle used oil with solid waste that is to be disposed of in landfills or directly dispose of used oil in landfills.

Used oil will not be knowingly accepted at the Citrus County Transfer Station facility.

62-701.300(11)(b):

Oily wastes, sorbents or other materials used for maintenance or to clean up or contain leaks, spills or accidental releases of oil, and soils contaminated with used oil as a result of spills or accidental releases are not subject to the prohibition in paragraph (a) of this subsection.

Oily wastes in violation of the above regulation will not be knowingly accepted at the Citrus County Transfer Station facility.

Yard Trash [62-701.300(12) F.A.C.]

The prohibitions of this section apply to the storage, processing, or disposal of yard trash, except that paragraphs (2)(b) and (e) of this section are modified so that the following setback distances shall apply:

62-701.300(12)(a):

100 feet from off-site potable water wells, no setback required from on-site water wells; and

The YWF is not within 100 feet of any known potable water wells.

62-701.300(12)(b):

50 feet from water bodies.

The YWF is not within 50 feet of any water body.

Tanks [62-701.300(13) F.A.C.]

The prohibitions in subsection (2) of this section do not apply to the storage or treatment of solid waste in tanks which meet the criteria of Chapter 62-761 or subsection 62-701.400(6), F.A.C. Instead, no such storage tank shall be installed within 500 feet of any existing community water supply system or any existing non-transient non-community water supply system, nor shall any tank be installed within 100 feet of any other existing potable water supply well.

Tanks will only be accepted at the CSA. Tanks twenty gallons or larger will be processed in accordance with this requirement.

CCA Treated Wood [62-701.300(14) F.A.C.]

CCA treated wood shall not be incorporated into compost or made into mulch, decorative landscape chips or any other wood product that is applied as a ground cover, soil or soil amendment. CCA treated wood may be ground and used as initial cover on interior slopes of lined solid waste disposal facilities provided it meets the criteria of subsection 62-701.200(53), F.A.C. CCA treated wood shall not be disposed of through open burning or through combustion in an air curtain incinerator.

CCA treated wood will not be knowingly accepted at the Citrus County Transfer Station facility.

Dust [62-701.300(15) F.A.C.]

The owner or operator of a solid waste management facility shall not allow the unconfined emissions of particulate matter in violation of paragraph 62-296.320(4)(c), F.A.C.

The new Transfer Station building design includes provisions to control nuisance dust and odors at the facility. Emissions of particulate matter will be controlled in the following manner:

- All entrance and exit access roads into the transfer building will be asphalt and/or concrete. In addition, the tipping floor inside the transfer station building will be concrete.
- The building design includes a series of supply and exhaust fans to alleviate dust and odors inside the transfer station building.

Indoor Storage [62-701.300(16) F.A.C.]

The prohibitions in subsection (2) of this section do not apply to the storage or processing of solid waste indoors, provided that the indoor storage area has an impervious surface and a leachate collection system. For the purposes of this subsection, an impervious surface means either a poured concrete pad having a minimum thickness of four inches, or an asphalt concrete paving with both a minimum thickness of one and one-half inches and with an additional component to restrict leaching to ground water such as soil cement sub-base, an epoxy seal or a geomembrane.

As the facility will process the waste indoors and has an indoor storage area, a concrete slab and leachate collection system, subsection (2) does not apply to this facility.

Storage in vehicles or containers [62-701.300(17) F.A.C.]

The prohibitions in subsection (2) of this section do not apply to the storage of solid waste in an enclosed or covered vehicle or container, provided that such vehicle or container has either been unloaded or moved over public highways within the previous seven days, and provided also that reasonable efforts have been made to minimize leakage from the vehicle or container.

Depending on the amount of waste received on a given day and on operations, waste may be stored in trailers only at the end of the business day. The waste will be transported off-site on the next business day.

Existing facilities [62-701.300(18) FAC]

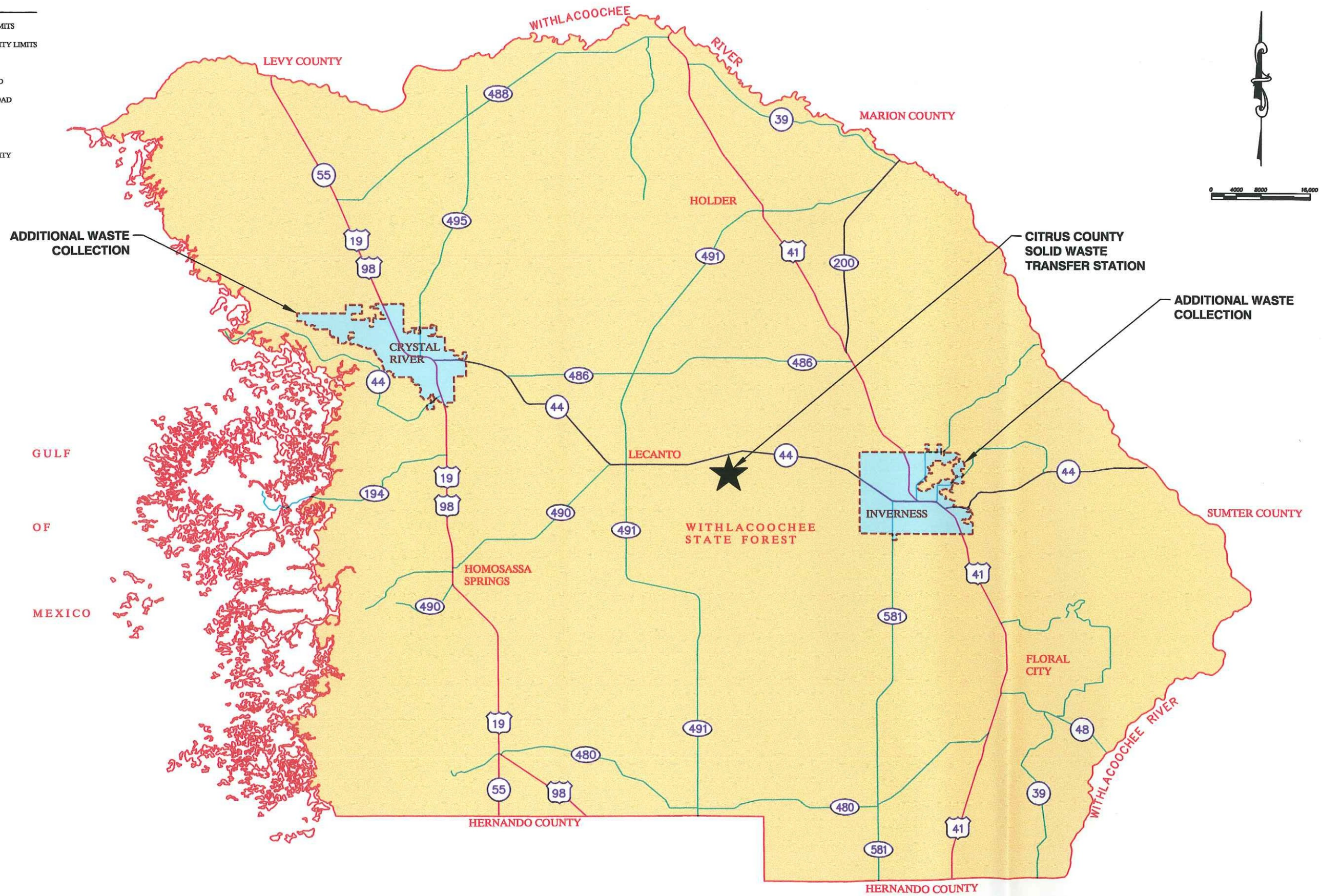
Those portions of facilities which were constructed prior to May 27, 2001, remain subject to the prohibitions that were in effect at the time the permit authorizing construction was issued. Lateral expansions of such facilities remain subject to the prohibitions that were in effect at the time of the permit authorizing the lateral expansion was issued. For example, portion of facilities constructed prior to May 19, 1994 were subject to the prohibition against storing or disposing of solid waste within 500 feet of an existing or approved shallow water supply well, but are not subject to the prohibitions of paragraph (2)(b)) of this section. However, lateral expansions of such facilities which occurred after May 19, 1994 are subject to the prohibitions of paragraph (2)(b) of this section.

Construction on the site will be subject to all applicable prohibitions.

**Attachment A Solid Waste Collection
Boundary and Fee Schedules**

LEGEND

- COUNTY LIMITS
- MUNICIPALITY LIMITS
- U.S. ROAD
- STATE ROAD
- COUNTY ROAD
- COUNTY
- MUNICIPALITY



0:\ENV\ENG\4217\001\add\dwg\Exhibits\Collection Boundary.dwg, May 8, 2009 11:13 AM, CS, King Engineering Associates Inc.
 COMMENT: THIS DRAWING IS THE PROPERTY OF KING ENGINEERING ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED IN THE TITLE BLOCK. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF KING ENGINEERING ASSOCIATES, INC.

DESIGNED	CS
DRAWN	CS
CHECKED	CS
IN CHARGE	CS

King
 ENGINEERING ASSOCIATES, INC.

4921 Memorial Highway
 One Memorial Center, Suite 300
 Tampa, Florida 33634
 Phone 813 880-8881
 Fax 813 880-8882
 www.kingengineering.com
 Engineering License #2610

**CITRUS COUNTY
 SOLID WASTE TRANSFER STATION
 & ASSOCIATED SITE IMPROVEMENTS**
 FOR
 CITRUS COUNTY BOARD OF COUNTY COMMISSIONERS

COUNTY WASTE COLLECTION BOUNDARY

JOB NO.	4217-001-001	EXHIBIT NO.
DATE	MAY 2009	1
SCALE	AS SHOWN	



CITRUS COUNTY CENTRAL LANDFILL FEE SCHEDULE

OCTOBER 1, 2014 THROUGH SEPTEMBER 30, 2015

	Residential			Commercial			
Item	Assessment Resident (Paid Annual Assessment)	Non - Assessment Resident (Unpaid Annual Assessment)	Non - Contract Hauler / Non - Assessment & Business Self Haul	Contract Hauler	City Contract Hauler & Roll-off containerized waste with Solid Waste Disposal Interlocal Agreement	Roll-off containerized waste - Unincorporated Areas & Non Assessment	Non-Profits (First 1,000 lbs per month each approved organization - No Charge)
Uncovered / Unsecured Load Fee	\$10.00 per ton						
Transation Fee - for all paid items	\$4.00 / visit			No Charge			\$4.00 / visit
Bagged or Canned Waste: Residential Solid Waste/Trash	Up to 5-30 gallon bags or cans included under transaction fee \$1.00 per bag or can from 6-9 10 and over will be per ton rate	N/A					
Bagged or Canned Waste: Residential Yard Waste	Up to 8-30 gallon bags or cans included under transaction fee 9 and over will be per ton rate						
Bulky Waste (1)	No Charge	\$49.00 / ton		\$24.00/ton	\$36.00/ton	\$49.00/ton	\$24.00/ton
Class I Solid Waste	\$24.00 / ton	\$49.00 / ton	\$49.00 / ton	\$24.00 / ton	\$36.00 / ton	\$49.00 / ton	\$24.00 / ton
*Mixed or out of County Waste	Per Agreement with BOCC only						
Certified Weight (Military -free)	\$5.00 / Visit			\$1.00 / visit		\$5.00 / visit	
Clean Recyclables (Co Program)	No Charge						
Clean Concrete for Recycling	\$10.00 / ton						
Construction & Demolition Debris	\$49.00 / ton						
Electronics - Excluding Televisions	No Charge						
Electronics - Televisions	\$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Hazardous Waste & Paint	No Charge	\$0.35 / lb	CESQG \$1.00 / lb less latex paint \$0.35 lb-10 gal 60 lb No Charge	Hazardous Waste from Small Quantity and Larger Generators will not be accepted			
*Delivered on Program dates up to 10 gallons or 60 lbs							
* Delivered on Program dates over 10 gallons or 60 lbs	\$0.35 / lb						
Latex Paint - Non-program days - 10 gallon or 60 lb limit per disposal	No Charge	\$0.35 per lb					
Late Customer Charge	\$1.50 per Minute Beginning 10 minutes after Published Closing						
Lead Acid & Rechargeable Batteries	No Charge						
Metal Appliances / Scrap Metal (2)	No Charge						
Mercury Containing Devices	\$0.80 / Lamp						
* Fluorescent Lamps (3) First 10 free of charge, thereafter							
* Mercury Contaning Devices - First 10 free of charge - residential	\$2.00 Each						
Oil/Filters/Anti-Freeeze-10 gal limit	No Charge						
Propane Tanks / High Pressure Tanks	1st Unit No Charge, thereafter \$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Recycling Program Residuals	N/A		N/A	\$24.00 / ton	N/A		
* FDEP Certified Recyclers only							
Refrigerators / Freezers and Air Conditioning Units	1st Unit No Charge, thereafter \$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Special Waste (4)	\$90.00 / ton						
Tires	No Charge-limit 5 tires twice per year	\$2.00 each					
*Passenger up to 10							
* Passenger or small truck over 10							
*Oversize tires	\$200.00 / ton						
Waste Relocation Charge - 1 hr	\$90.00 per Man-Hour						
Yardwaste (5)	\$22.50 / ton						

- (1) Consists of furniture / carpet & padding / mattress & box springs
- (2) Less Refrigerators, Freezers, A/C Units & Propane Tanks
- (3) Straight, circular, U-shaped & compact fluorescent bulbs
- (4) (1) Asbestos (friable), Sludge (Dried-including Municipalities wo Solid Waste Disposal Interlocal Agreement) & Oil-Contaminated Materials by staff pre-approval only
(2) Boats or Trailers (3) Items requiring certified burial
- (5) Grass, leaves, trimming debris, branches, palm fronds. Residential natural Christmas Trees - No Charge Dec & Jan only
Stumps in excess of 4' in diameter will not be accepted. Logs in excess of 4' in diameter or in excess of 10' in length will not be accepted.



CITRUS COUNTY CENTRAL LANDFILL FEE SCHEDULE **OCTOBER 1, 2014 THROUGH SEPTEMBER 30, 2015**

Item	Residential		Commercial				
	Assessment Resident (Paid Annual Assessment)	Non - Assessment Resident (Unpaid Annual Assessment)	Non - Contract Hauler / Non - Assessment & Business Self Haul	Contract Hauler	City Contract Hauler & Roll- off containerized waste with Solid Waste Disposal Interlocal Assessment	Roll-off containerized waste - Un- incorporated Areas & Non Assessment	Non-Profits (First 1,000 lbs per month each approved organization - No Charge)

Advanced Disposal Payment Program - residential self hauler (6) Annual Fee Pro-rated as follows:		N/A
October 1 through December 31	\$96.00 / vehicle	
January 1 through March 31	\$72.00 / vehicle	
April 1 through June 30	\$48.00 / vehicle	
July 1 through September 30	\$24.00 / vehicle	

Advanced Disposal Payment Program - senior citizen self hauler (6) Annual Fee Pro-rated as follows:		N/A
October 1 through December 31	\$68.00 / vehicle	
January 1 through March 31	\$51.00 / vehicle	
April 1 through June 30	\$34.00 / vehicle	
July 1 through September 30	\$17.00 / vehicle	

(6) Program for bagged household garbage / bagged yard waste (or a combination thereof) for up to Eight 30 gallon containers per week
 Loads may be combined with "No Charge" items up to per-visit limits and still use bypass lane.
 Loads that contain items for which there is a charge must use the scale lane.



CITRUS COUNTY CENTRAL LANDFILL FEE SCHEDULE

OCTOBER 1, 2014 THROUGH SEPTEMBER 30, 2015

	Residential			Commercial			
Item	Assessment Resident (Paid Annual Assessment)	Non - Assessment Resident (Unpaid Annual Assessment)	Non - Contract Hauler / Non - Assessment & Business Self Haul	Contract Hauler	City Contract Hauler & Roll-off containerized waste with Solid Waste Disposal Interlocal Agreement	Roll-off containerized waste - Unincorporated Areas & Non Assessment	Non-Profits (First 1,000 lbs per month each approved organization - No Charge)
Uncovered / Unsecured Load Fee	\$10.00 per ton						
Transation Fee - for all paid items	\$4.00 / visit			No Charge			\$4.00 / visit
Bagged or Canned Waste: Residential Solid Waste/Trash	Up to 5-30 gallon bags or cans included under transaction fee \$1.00 per bag or can from 6-9 10 and over will be per ton rate	N/A					
Bagged or Canned Waste: Residential Yard Waste	Up to 8-30 gallon bags or cans included under transaction fee 9 and over will be per ton rate						
Bulky Waste (1)	No Charge	\$49.00 / ton		\$24.00/ton	\$36.00/ton	\$49.00/ton	\$24.00/ton
Class I Solid Waste	\$24.00 / ton	\$49.00 / ton	\$49.00 / ton	\$24.00 / ton	\$36.00 / ton	\$49.00 / ton	\$24.00 / ton
*Mixed or out of County Waste	Per Agreement with BOCC only						
Certified Weight (Military -free)	\$5.00 / Visit			\$1.00 / visit		\$5.00 / visit	
Clean Recyclables (Co Program)	No Charge						
Clean Concrete for Recycling	\$10.00 / ton						
Construction & Demolition Debris	\$49.00 / ton						
Electronics - Excluding Televisions	No Charge						
Electronics - Televisions	\$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Hazardous Waste & Paint	No Charge	\$0.35 / lb	CESQG \$1.00 / lb less latex paint \$0.35 lb-10 gal 60 lb No Charge	Hazardous Waste from Small Quantity and Larger Generators will not be accepted			
*Delivered on Program dates up to 10 gallons or 60 lbs							
* Delivered on Program dates over 10 gallons or 60 lbs	\$0.35 / lb						
Latex Paint - Non-program days - 10 gallon or 60 lb limit per disposal	No Charge	\$0.35 per lb					
Late Customer Charge	\$1.50 per Minute Beginning 10 minutes after Published Closing						
Lead Acid & Rechargeable Batteries	No Charge						
Metal Appliances / Scrap Metal (2)	No Charge						
Mercury Containing Devices	\$0.80 / Lamp						
* Fluorescent Lamps (3) First 10 free of charge, thereafter							
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Oil/Filters/Anti-Freeeze-10 gal limit	No Charge						
Propane Tanks / High Pressure Tanks	1st Unit No Charge, thereafter \$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Recycling Program Residuals	N/A		N/A	\$24.00 / ton	N/A		
* FDEP Certified Recyclers only							
Refrigerators / Freezers and Air Conditioning Units	1st Unit No Charge, thereafter \$24.00 / ton	\$49.00 / ton					\$24.00 / ton
Special Waste (4)	\$90.00 / ton						
Tires	No Charge-limit 5 tires twice per year	\$2.00 each					
*Passenger up to 10							
* Passenger or small truck over 10		\$95.00 / ton					
*Oversize tires		\$200.00 / ton					
Waste Relocation Charge - 1 hr	\$90.00 per Man-Hour						
Yardwaste (5)	\$22.50 / ton						

- (1) Consists of furniture / carpet & padding / mattress & box springs
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- (3) Straight, circular, U-shaped & compact fluorescent bulbs
- (4) (1) Asbestos (friable), Sludge (Dried-including Municipalities wo Solid Waste Disposal Interlocal Agreement) & Oil-Contaminated Materials by staff pre-approval only
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- (5) Grass, leaves, trimming debris, branches, palm fronds. Residential natural Christmas Trees - No Charge Dec & Jan only
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CITRUS COUNTY CENTRAL LANDFILL FEE SCHEDULE

OCTOBER 1, 2014 THROUGH SEPTEMBER 30, 2015

Item	Residential		Commercial				
	Assessment Resident (Paid Annual Assessment)	Non - Assessment Resident (Unpaid Annual Assessment)	Non - Contract Hauler / Non - Assessment & Business Self Haul	Contract Hauler	City Contract Hauler & Roll- off containerized waste with Solid Waste Disposal Interlocal Assessment	Roll-off containerized waste - Un- incorporated Areas & Non Assessment	Non-Profits (First 1,000 lbs per month each approved organization - No Charge)

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 Loads may be combined with "No Charge" items up to per-visit limits and still use bypass lane.
 Loads that contain items for which there is a charge must use the scale lane.

Attachment B Waste Projections

Citrus County Solid Waste Transfer Station and Associated Site Improvements

Table 2.
Material Codes

	PRODUCT	NAME
FACILITY	100	TIRES
	300	YARDWASTE
	400	METAL
	500	MCD
	600	RECYCLE / ELECTRONICS
	600	SINGLE STREAM RECYCLE
	690F	CONCRETE
	700	HHW / CESQG
	800	SPECIAL / TANKS / SLUDGE
	300	MSW
	Other	OTHER
	E	EMERGENCY

Citrus County Solid Waste Transfer Station and Associated Site Improvements

**Table 3.
Population Projections**

Year	Low Estimate	% Change	Moderate Estimate	% Change	High Estimate	% Change
2010	145,167	N/A	135,398	N/A	127,189	N/A
2011	146,047	0.6	137,063	1.2	129,564	1.8
2012	144,755	-0.9	138,769	1.2	131,491	1.5
2013	140,519	-3.0	140,519	1.2	140,519	6.4
2014	136,020	-3.3	143,287	1.9	150,167	6.4
2015	135,200	-0.6	143,800	0.4	152,400	1.5
2016	136,020	0.6	145,660	1.3	155,300	1.9
2017	136,840	0.6	147,520	1.3	158,200	1.8
2018	137,660	0.6	149,380	1.2	161,100	1.8
2019	138,480	0.6	151,240	1.2	164,000	1.8
2020	139,300	0.6	153,100	1.2	166,900	1.7
2021	139,940	0.5	154,860	1.1	169,780	1.7
2022	140,580	0.5	156,620	1.1	172,660	1.7
2023	141,220	0.5	158,380	1.1	175,540	1.6
2024	141,860	0.5	160,140	1.1	178,420	1.6
2025	142,500	0.4	161,900	1.1	181,300	1.6
2026	142,860	0.3	163,480	1.0	184,100	1.5
2027	143,220	0.3	165,060	1.0	186,900	1.5
2028	143,580	0.3	166,640	0.9	189,700	1.5
2029	143,940	0.3	168,220	0.9	192,500	1.5
2030	144,300	0.2	169,800	0.9	195,300	1.4
2031	144,400	0.1	171,160	0.8	197,920	1.3
2032	144,500	0.1	172,520	0.8	200,540	1.3
2033	144,600	0.1	173,880	0.8	203,160	1.3
2034	144,700	0.1	175,240	0.8	205,780	1.3
2035	144,800	0.1	176,600	0.8	208,400	1.3
2036	144,700	-0.1	177,820	0.7	210,920	1.2
2037	144,600	-0.1	179,040	0.7	213,440	1.2
2038	144,500	-0.1	180,260	0.7	215,960	1.2
2039	144,400	-0.1	181,480	0.7	218,480	1.2
2040	144,300	-0.1	182,700	0.7	221,000	1.1

Notes:

* Population projection data for Citrus County originated from Florida Population Studies created by the Bureau of Economic Research (BEER) from the University of Florida.

* Population trends were based on a range of projections that included low, medium and high estimates of population projected in 5-year increments from an April 2006 beginning estimate.

* Yearly growth was estimated by linearly interpolating between increments and years previous to 2006 were assumed to decrease in population proportionally to the low, medium and high estimates of growth after 2006.

* Citrus County population from 2002-2006 provided by Citrus County Community Development Division

Citrus County Solid Waste Transfer Station and Associated Site Improvements

Table 4.

Tonnage Data By Month For FY 2012

	PRODUCT	NAME	October	November	December	January	February	March	April	May	June	July	August	September
TONNAGE TO FACILITY	100	TIRES	36.11	53.04	0.00	78.59	0.00	29.82	15.07	3.38	0.00	34.56	0.00	34.78
	200	YARDWASTE	614.24	651.22	542.13	768.92	860.06	1,160.08	925.62	1,160.08	735.57	723.60	748.21	681.48
	300	METAL	45.06	38.96	38.02	0.21	34.96	51.77	54.64	51.77	49.88	51.33	34.47	37.24
	400	MCD	0.15	0.18	0.18	0.20	0.18	0.43	0.39	0.43	1.75	0.25	0.37	0.22
	500	RECYCLE / ELECTRONICS	36.66	41.46	30.90	33.04	33.35	43.22	33.56	32.05	22.61	23.29	44.71	79.24
	600	SINGLE STREAM RECYCLING	241.76	263.84	277.90	267.18	260.23	304.68	278.89	270.23	266.32	242.14	250.46	221.39
	700	HHW / CESQG	11.52	8.66	8.57	10.72	8.75	11.56	14.23	11.76	9.80	13.74	10.58	10.80
	800	SPECIAL / TANKS	122.20	110.50	87.93	162.40	132.49	539.37	123.60	539.37	287.52	118.34	163.39	141.72
	900	MSW	6,317.71	6,720.08	6,636.20	7,306.14	6,612.21	7,200.94	6,651.15	7,200.94	6,998.71	6,796.92	7,175.67	5,860.75
	Other	OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	E	EMERGENCY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVERAGE DAY =			285.59	315.52	282.29	331.82	317.69	346.00	323.89	343.33	322.01	320.17	312.14	294.48

LANDFILL	800	SPECIAL / TANKS	122.20	110.50	87.93	162.40	132.49	539.37	123.60	539.37	287.52	118.34	163.39	141.72
	900	MSW	6,317.71	6,720.08	6,636.20	7,306.14	6,612.21	7,200.94	6,651.15	7,200.94	6,998.71	6,796.92	7,175.67	5,860.75
AVERAGE DAY =			247.69	273.22	249.04	287.25	269.79	286.68	270.99	286.68	280.24	276.61	271.82	250.10

CALCULATIONS:

ANNUAL TONNAGE DIRECTLY TO THE FACILITY =
 AVERAGE DAILY TONNAGE TO THE FACILITY =
 MAX MONTHLY TONNAGE TO THE FACILITY =

3,795
316
346

ANNUAL TONNAGE TO THE LANDFILL =
 AVERAGE DAILY TONNAGE TO THE LANDFILL =
 MAX MONTHLY TONNAGE TO THE LANDFILL =

3,250
271
287

Citrus County Solid Waste Transfer Station and Associated Site Improvements

Table 5.

Tonnage Data By Month For FY 2013

	PRODUCT	NAME	October	November	December	January	February	March	April	May	June	July	August	September
TONNAGE TO FACILITY	100	TIRES	2.90	30.61	13.07	79.33	16.27	16.57	56.20	60.73	20.42	16.70	23.67	37.43
	300	YARDWASTE	692.95	342.24	537.36	855.98	842.38	946.41	1,222.37	1,079.65	899.78	974.96	929.75	766.23
	400	METAL	51.73	45.05	39.12	57.26	42.13	71.94	42.64	51.96	47.79	51.26	35.61	40.45
	500	MCD	0.14	0.27	0.58	0.32	0.69	0.34	0.26	0.41	0.17	0.15	0.11	0.10
	600	RECYCLE / ELECTRONICS	40.11	27.09	28.07	38.63	23.53	23.86	34.96	30.88	24.32	30.23	14.19	8.00
	600	SINGLE STREAM RECYCLING	241.82	267.12	271.20	292.20	244.32	264.93	281.93	263.03	231.92	250.12	230.38	233.00
	700	HHW / CESQG	12.35	10.33	8.10	15.48	160.86	10.86	13.09	9.97	9.70	11.05	10.79	8.53
	800	SPECIAL / TANKS	148.06	121.68	105.48	240.45	160.86	140.69	139.58	195.57	143.42	133.22	107.82	101.53
	900	MSW	6,611.50	6,531.88	6,460.23	7,323.88	6,259.90	6,934.37	7,299.07	6,927.52	6,429.91	7,389.49	6,889.09	6,268.93
	Other	OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	E	EMERGENCY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVERAGE DAY =			288.95	295.05	298.53	356.14	337.00	336.40	349.62	331.53	312.30	340.66	305.24	311.01

LANDFILL	800	SPECIAL / TANKS	148.06	121.68	105.48	240.45	160.86	140.69	139.58	195.57	143.42	133.22	107.82	101.53
	900	MSW	6,611.50	6,531.88	6,460.23	7,323.88	6,259.90	6,934.37	7,299.07	6,927.52	6,429.91	7,389.49	6,889.09	6,268.93
AVERAGE DAY =			259.98	266.14	243.17	290.94	256.83	262.04	297.55	263.82	252.82	300.91	259.14	265.44

268.23

CALCULATIONS:

ANNUAL TONNAGE TO THE FACILITY =
 AVERAGE DAILY TONNAGE TO THE FACILITY =
 MAX MONTHLY TONNAGE TO THE FACILITY =

3,862
322
356

ANNUAL TONNAGE TO THE LANDFILL =
 AVERAGE DAILY TONNAGE TO THE LANDFILL =
 MAX MONTHLY TONNAGE TO THE LANDFILL =

3,219
268
301

Citrus County Solid Waste Transfer Station and Associated Site Improvements

Table 6.

Tonnages for the Top 6 Peak Days of FY 2013

INVOICE	LOCATION	INVOICE PEAK DAY 1 (07/08/13)	INVOICE PEAK DAY 2 (11/26/12)	INVOICE PEAK DAY 3 (05/28/13)	INVOICE PEAK DAY 4 (01/04/13)	INVOICE PEAK DAY 5 (06/10/13)	INVOICE PEAK DAY 6 (03/12/13)
	CSA	63.94	49	48.60	37.84	39.55	27.95
	CELL	443.14	404	381.42	384.22	359.59	328.51
TOTAL TONNAGE		507	453	430	422	399	356

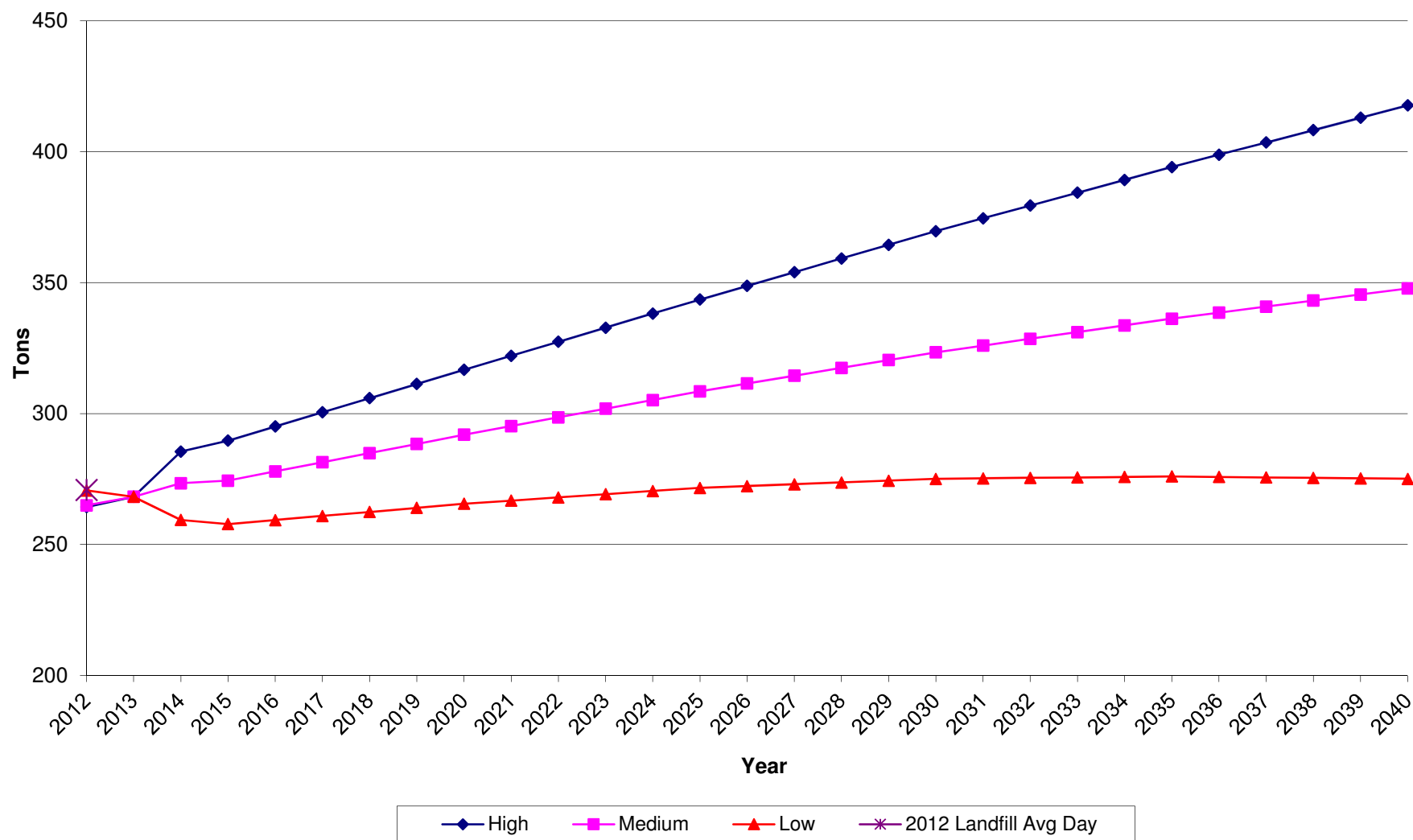
CASH	LOCATION	CASH PEAK DAY 1 (07/08/13)	CASH PEAK DAY 2 (09/03/13)	CASH PEAK DAY 3 (04/01/13)	CASH PEAK DAY 4 (01/10/13)	CASH PEAK DAY 5 (05/06/13)	CASH PEAK DAY 6 (04/20/13)
	CSA	63.94	61.07	57.93	35.68	55.52	47.07
	CELL	443.14	350.54	326.27	330.04	281.75	80.94
TOTAL TONNAGE		507	412	384	366	337	128

CALCULATIONS:

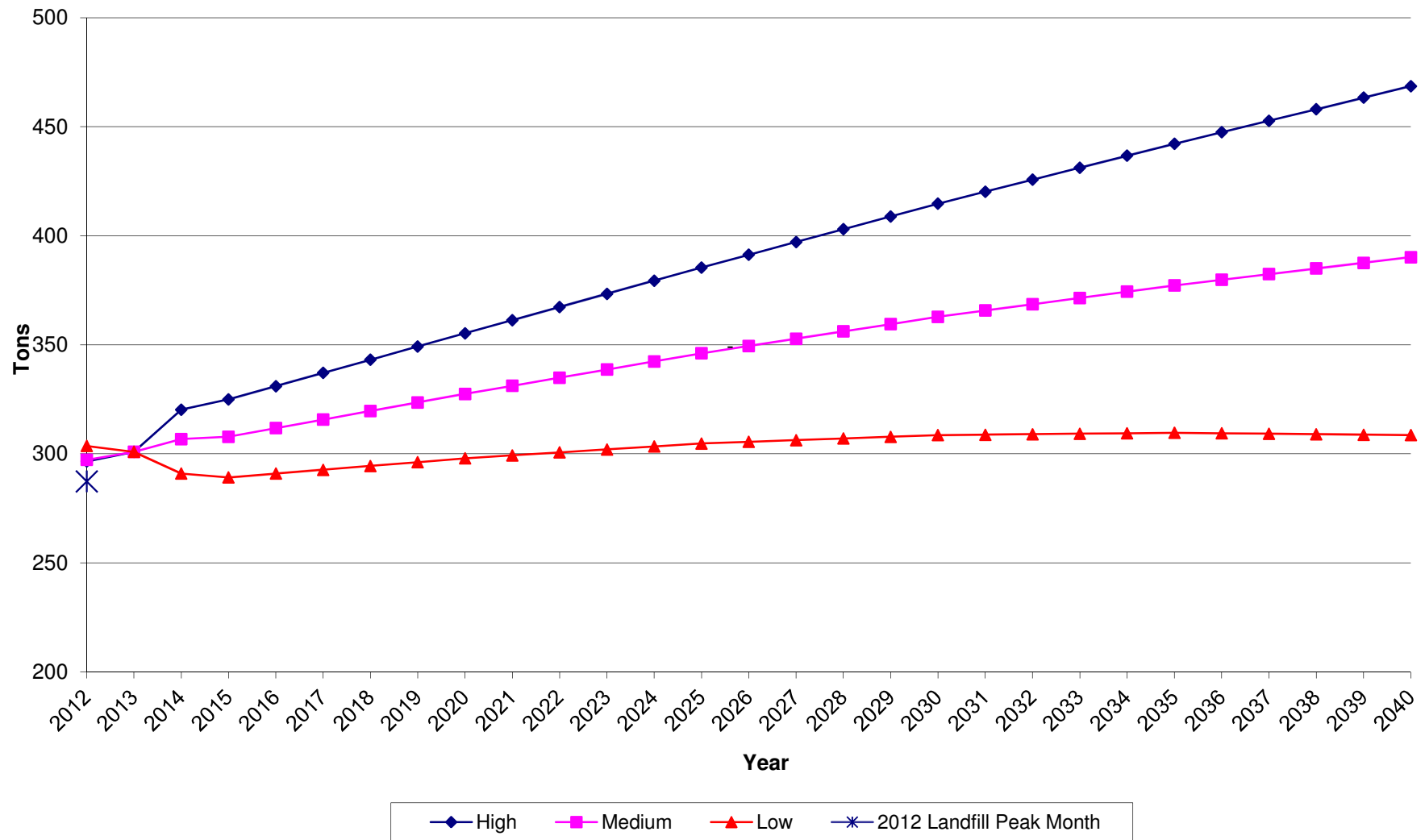
AVERAGE DAILY TONNAGE TO LANDFILL = 268
PEAK DAILY TONNAGE TO LANDFILL = 392

PEAKING FACTOR = 1.5

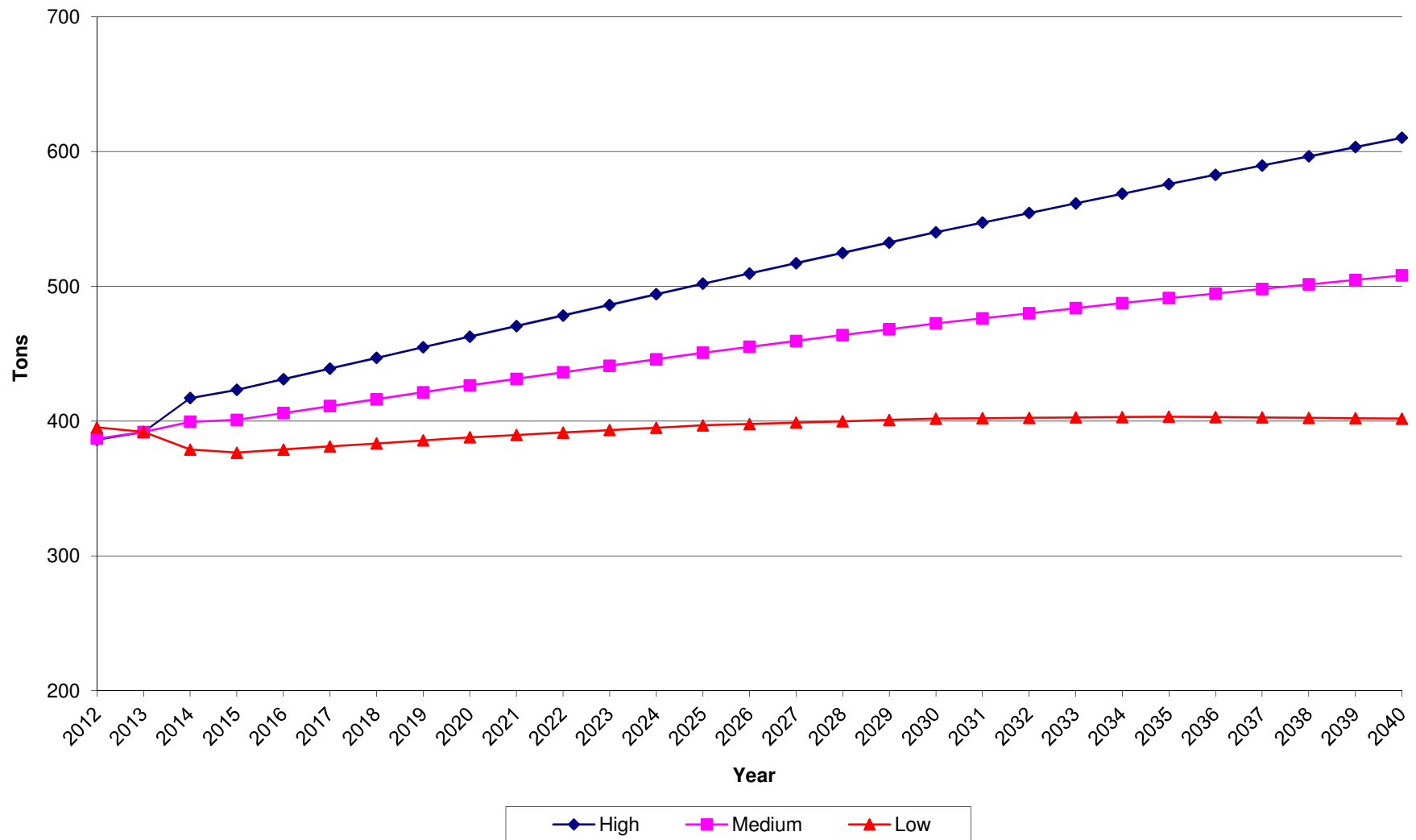
Citrus County Solid Waste Transfer Station and Site Improvements
GRAPH 1
Landfill Average Day Tonnage Projections



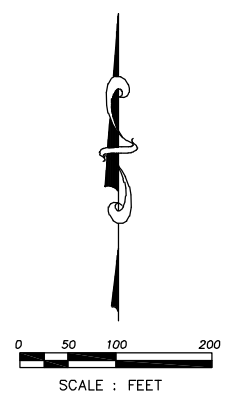
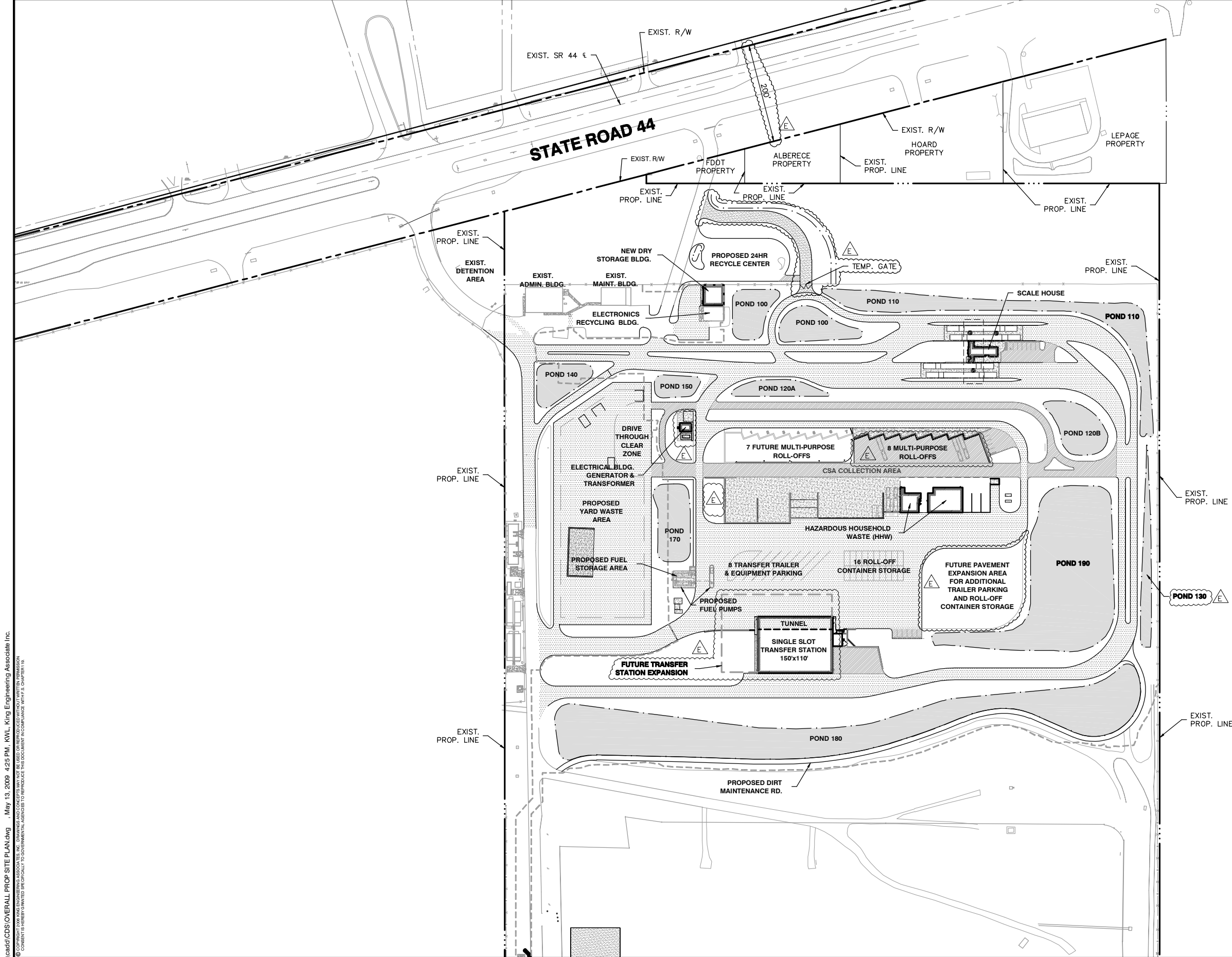
Citrus County Solid Waste Transfer Station and Site Improvements
GRAPH 2
Peak Month Average Day Tonnage Projections



Citrus County Solid Waste Transfer Station and Site Improvements
GRAPH 3
Landfill Peak Daily Tonnage Projections



Attachment C Site Plan and Well Location Map



LEGEND

- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- GRAVEL
- PROPOSED POND
- CONCRETE

NOTE: HEAVY DUTY PAVEMENT TO BE PLACED AT ALL LOCATIONS NOT SHOWN AS LIGHT DUTY.

Q:\PW-Civil\4217\001\cadd\CDS\OVERALL PROP SITE PLAN.dwg May 13, 2008 4:25 PM, KWL King Engineering Associate Inc.
© COPYRIGHT 2008 KING ENGINEERING ASSOCIATES, INC. DRAWINGS AND CONCEPTS MAY NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.
CONSENT IS HEREBY GRANTED SPECIFICALLY TO GOVERNMENTAL AGENCIES TO REPRODUCE THIS DOCUMENT IN COMPLIANCE WITH F.S. CHAPTER 119.

DESIGNED	RNC/KWL
DRAWN	NJS/KWL
CHECKED	
LGD	
G.C.	



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Fax 813 880-8882
www.kingengineering.com
Engineering License #2610

**CITRUS COUNTY
SOLID WASTE TRANSFER STATION
& ASSOCIATED SITE IMPROVEMENTS**
FOR
CITRUS COUNTY BOARD OF COUNTY COMMISSIONERS

**OVERALL PROPOSED
SITE PLAN**

NO.	DATE	DESCRIPTION	APP'D BY
E	05/02/09	90% SUBMITTAL	CRK
D	05/15/09	DEP SOLID WASTE SUBMITTAL	CRK
C	04/13/09	ERP SUBMITTAL	CPK/LGD
B	12/18/08	60% SUBMITTAL	CPK/LGD
A	07/07/08	30% SUBMITTAL	CPK/LGD

PROFESSIONAL SEAL

JOB NO.
4217-001-001
DATE:
JULY 2008
SCALE:
AS SHOWN

SHEET NO.
E
C3.00

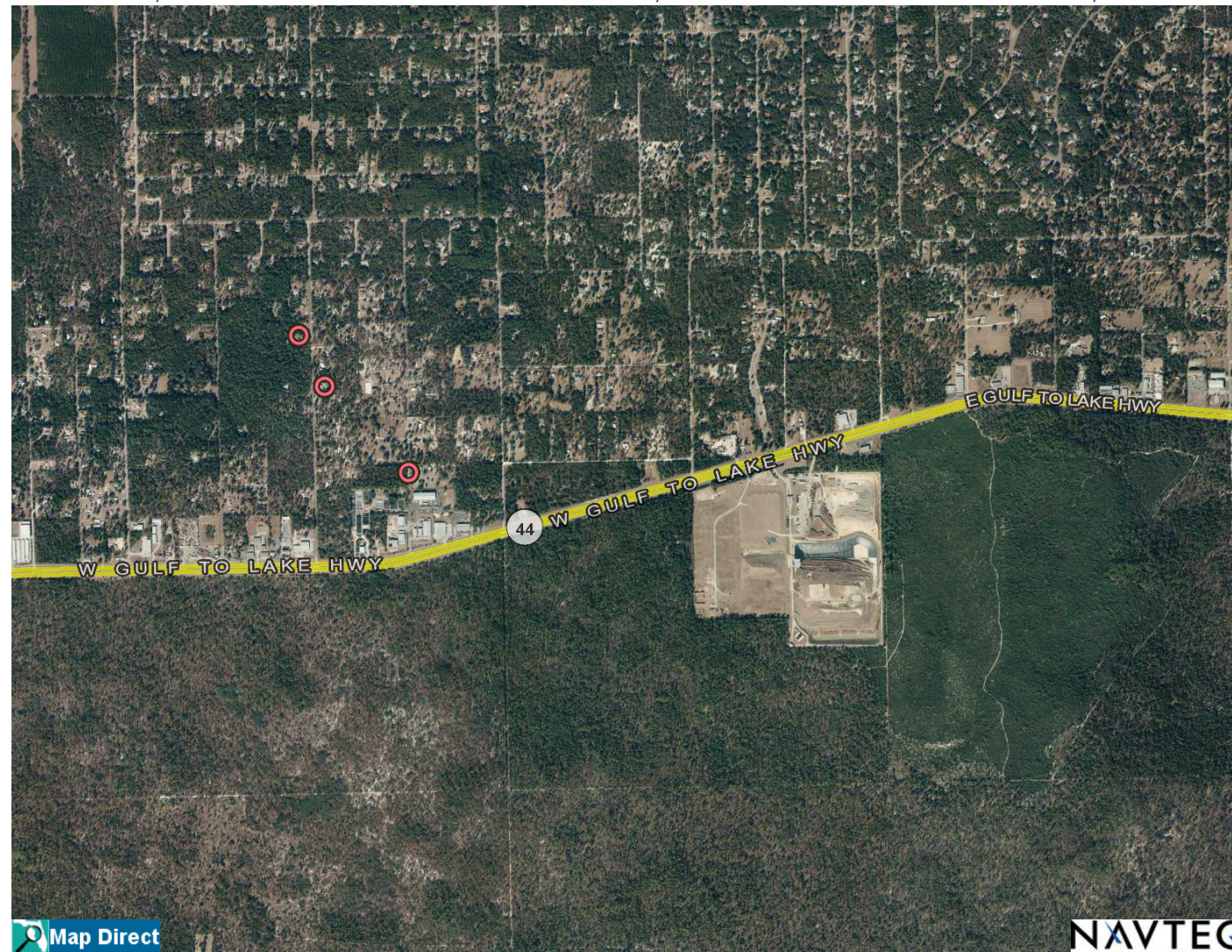


Map Direct: Generalized Water Information System (GWIS)

28°52'24.8276", -82°28'19.8473"

Scale 1:28,232

28°52'22.6865", -82°25'6.1662"



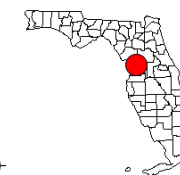
Map Direct

NAVTEQ

28°50'14.0774", -82°28'21.6944"

1 inch = 2353 feet

28°50'11.9371", -82°25'8.0783"



Aerial Imagery 2011-2013

- Water Management Districts (lines)
- FDEP Regulatory Districts (lines)
- Military Bases
- Counties
- NID Dams
- EPA Permitted Dam Locations
- HRS Private Wells from WMS
- Background Wells from WMS

Florida Department of Environmental Protection Disclaimer: This map created in Map Direct on Thu, 09 Oct 2014 17:24:45 GMT is intended for display purposes only. It was created using data from different sources collected at different scales, with different levels of accuracy, and/or covering different periods of time. NAVTEQ road data is provided "AS IS" and without warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, satisfactory quality and non-infringement. YOU SHOULD THEREFORE VERIFY ANY INFORMATION OBTAINED FROM THE SITE BEFORE ACTING ON IT.

Attachment D FEMA Map

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded tenth-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

Base map information shown on this FIRM was provided in digital format by the Southwest Florida Water Management District. The original orthophotographic base imagery was provided in color with a one-foot pixel resolution at a scale of 1" = 200' from photography flown January - February 2011.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msc.fema.gov>. A FIRMETTE (full scale section of a FIRM) is also available at this website.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-358-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp/>.

DATUM INFORMATION

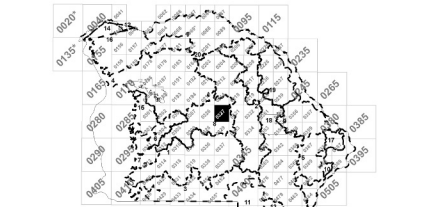
The **projection** used in the preparation of this map was State Plane Florida West. The **horizontal datum** was HARN, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane Zone used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not reflect the accuracy of this FIRM.

Base Flood Elevation (BFEs) on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

Example Datum Offset Calculation
using datum offset table below
NAVD88 = NGVD29 + (datum offset value)

To obtain current elevation, description, and/or location information for **benchmarks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242 or visit its website at <http://www.ngs.noaa.gov/>.



Watershed	Datum Offset (ft)	Study Type	Total Rainfall Volume (in)		
			1 Day 100yr	Rainfall Used **	Date of Model
1. Cardinal Lane	-0.83	Detailed	11.5	YES	09/25/12
2. Center Ridge	-0.84	Detailed	11.2	YES	08/30/11
3. Chassalawitoka River*	-0.82	Redelin	NO	NO	01/29/13
4. Crystal River	-0.87	Detailed	11.5	YES	08/24/10
5. Floral City	-0.84	Redelin	NO	NO	01/29/13
6. Homosassa North*	-0.84	Redelin	NO	NO	01/29/13
7. Homosassa South	-0.82	Redelin	NO	NO	01/29/13
8. Homosassa South Fork*	-0.85	Redelin	NO	NO	01/29/13
9. Inverness	-0.85	Redelin	NO	NO	01/29/13
10. Leslie Heffer Canal	-0.85	Redelin	NO	NO	01/29/13
11. Lizzie Hart Sink	-0.83	Redelin	NO	NO	01/29/13
12. Lower Withlacoochee*	-0.87	Redelin	NO	NO	01/29/13
13. McKinnon Lake Outlet	-0.83	Redelin	NO	NO	01/29/13
14. North of Barge Canal*	-0.98	Redelin	NO	NO	01/29/13
15. Ocala*	-0.83	Redelin	NO	NO	01/29/13
16. Red Level*	-0.85	Redelin	NO	NO	01/29/13
17. Shinn Ditch	-0.86	Redelin	NO	NO	01/29/13
18. Taita Appopka	-0.85	Detailed	11.0	NO	12/20/11
19. Taita Appopka Outlet	-0.85	Redelin	NO	NO	01/29/13
20. Withlacoochee River	-0.90	Redelin	NO	NO	01/29/13

* Redelineation performed for coastal flood zones
** Multi-Day event used only in specific sub-basins, refer to the FIS report.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot; and areas protected by levees from 1% annual chance flood. See additional note in Watershed Table on left color.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities
- Base Flood Elevation line and value; elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 1000-meter Universal Transverse Mercator grid ticks, zone 17
- 5000-foot grid values: Florida State Plane coordinate system, West Zone (FIPSZONE = 902), Transverse Mercator projection
- Porch mark (see explanation in Notes to Users section of this FIRM panel)
- River Mile
- Section - Township - Range
- Junction - Points defining locations of flow accumulation or hydraulic connectivity. The first two characters of the Junction name represents the specific watershed (as shown in the map collar locator map) in which the Junction is located (note that boundary junctions, without an associated floodplain, are also shown).
- Hydraulic Connectivity - Flow pathway between junctions.

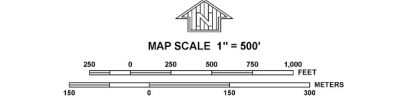
MAP REPOSITORIES
Refer to Map Repositories List on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 26, 2014

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



PANEL 0327D

FIRM
FLOOD INSURANCE RATE MAP
CITRUS COUNTY,
FLORIDA
AND INCORPORATED AREAS

PANEL 327 OF 505
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY CITRUS COUNTY
NUMBER 120063
PANEL 0327
SUFFIX D

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
12017C0327D
EFFECTIVE DATE
SEPTEMBER 26, 2014

Federal Emergency Management Agency

Attachment E Fire Inspection Report

Citrus Sheriff Fire Rescue

FIRE PREVENTION INSPECTION REPORT

1 Dr. Martin Luther King Jr. Ave. • Inverness, FL 34450 • Office 352-794-5999 • Fax 352-795-2417

Business Name: Citrus County Solid Waste
 Physical Address: 230 W. Gulf to Lake Hwy
 Mailing Address: _____ City Limits: ☐ Y ☐ N
 City: Leonia Zip Code: _____
 Description: Tire Storage
 Plaza ☐ Yes ☐ No: _____
 Unit #: _____ Station: 23
 Owner/Manager: CASE / STURMS
 Owner/Man. Phone #: 352-302-6960

Business Phone: 352-577-7610
 Building Permit: _____
 Plans Review: _____
 Type of Construction: II
 Occupancy Class: Storage
 Occupant Load: _____
 Tables & Chairs: _____
 Chairs: _____
 Square Footage: _____

☐ Initial ☐ Construction ☒ Request ☐ Complaint ☐ Re-inspection ☐ Other _____

CODE DEFICIENCIES:

County/City Occupational License: _____

STORAGE

- ☐ Improper storage of combustible material
- ☐ Storage too close to ceiling
- ☐ Storage too close to electrical panel
- ☐ Unsafe storage

EXIT DEFICIENCIES

- ☐ Exits inadequate number or capacity
- ☐ Aisles/cooridors too narrow
- ☐ Exit doors does not swing in direction of travel
- ☐ Door not equipped with approved exit hardward
- ☐ Exit doors inoperative or locked
- ☐ Exit blocked / obstructed
- ☐ Emergency lights not provided or working
- ☐ Exit sign (s) not illuminated
- ☐ Exit sign (s) battery not operable

EXTINGUISHERS

- ☐ Extinguishers not provided
- ☐ Not proper type
- ☐ Not inspected / tagged
- ☐ Not visable / accessible
- ☐ Inadequate number
- ☐ Not charged / operable
- ☐ Not properly installed

Date last inspected: Aug 2013

Number: 2/1 Type: ABC/1A

SPRINKLERS/STANDPIP

- ☐ System not inspected / maintained
- ☐ Valves closed
- ☐ Valves not accessible
- ☐ Heads obstructed or too close to stock
- ☐ FDC deficiency
- ☐ Valve not secured / monitored

Date last inspected: _____

FIRE ALARM

- ☐ Fire alarm not provided
- ☐ Fire alarm does not meet code
- ☐ Fire alarm not inspected/maintained
- ☐ Smoke detector not provided
- ☐ Smoke detector inoperative
- ☐ Smoke detector inoperative

Date las inspected: _____

ELECTRIC EQUIPMENT

- ☐ Overloaded circuits
- ☐ Electrical panel obstructed
- ☐ Electrical panel / boxes open
- ☐ Coverplate missing
- ☐ Temporary wiring / extension cords
- ☐ Open junction box
- ☐ AC / heating equipment not maintained

COOKING EQUIPMENT

- ☐ Accumulation of grease in cooking equipment or duct
- ☐ Hood & duct system not in accordance with NFPA 96
- ☐ Extinguisher system not in accordance with NFPA 17
- ☐ Other cooking equipment deficiency

Date last inspected _____

Deficiencies noted below may cause a fire, contribute to the spread or cause undue unjury to building occupants. Deficiencies must be corrected FORTHWITH. For additional information or assistance, please call: 352-794-5999.
BUILDING PERMITS ARE REQUIRED FOR ALL RENOVATION / REPAIRS.

REQUIREMENTS / COMMENTS:

No unnned tires noted on site -
All tires to be de-unned upon arrival

Inspection Date / Time: 5/28/2013 1000

Inspector: G. H. H. 174559

Compliance Date: _____

Occupant Signature: San Shuletz

Inspfrm

WHITE - office YELLOW - file PINK - recipient

**Attachment F Tipping Floor Maximum
Storage Pile**

(See Original Permit Application Package)

**Attachment G Boundary Survey, Deed, and
Topographic Survey**

(See Original Permit Application Package)

Attachment H Operation, Maintenance and Contingency Plan

(Appendix O to the Landfill Operations Plan)

Attachment I Technical Specifications
(See Original Permit Application Package)

**CITRUS COUNTY
SOLID WASTE TRANSFER STATION
OPERATION, MAINTENANCE AND CONTINGENCY PLAN**

Prepared for:

Citrus County Board of County Commissioners
P.O. Box 340
Lecanto, Florida 34460

Prepared by:

King Engineering
4921 Memorial Hwy.
Suite 300
Tampa, Florida 33634

June 2009
Revised July 2009
Revised November 2014 for Permit Renewal

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- A Sample Load Checking Inspection Forms
- B Maintenance Summary Form
- C Leachate Collection System Inspection Report

SECTION 1

INTRODUCTION

The purpose of this document is to provide a manual of operating procedures for the Citrus County Transfer Station and Citizens Service Area (CSA).

This plan has been prepared in accordance with Florida Rule 62-701, Florida Administrative Code (F.A.C.) and Part B of FDEP's permit application form for solid waste processing facility. This document is an appendix to the existing Operations Plan for the landfill (21375-008-SO/01).

1.1 FACILITY OVERVIEW

The Citrus County Transfer Station is owned and operated by the Citrus County Board of County Commissioners. The transfer station is located on the northern 30 acres of the County's active landfill site. Other co-located facilities on this portion of the County's site include:

- A scale facility consisting of a scale house, two inbound scales and two out bound scales. The inside, outbound scale is reversible and can serve as a third inbound scale when necessary.
- The Customer Service Area (CSA) which serves as a municipal solid waste (MSW) disposal location for private residents and private haulers. The CSA consists of an elevated area and unloading platform with eight roll-off containers and bunkers for the delivery and storage of tires in accordance with the waste tire facility permit, electronics, used oil, fluorescent light bulbs, scrap metal and white goods.
- A Household Hazardous Waste Collection and Storage Facility (HHW) which is co-located with the CSA.
- A yard and wood waste processing facility adjacent to and west of the CSA.
- Ancillary facilities including an electrical building, standby generator, fuel storage and dispensing area, trailer staging and equipment storage areas.
- An administration building, maintenance building, dry storage building and multi-purpose tent.
- A recycle collection center
- A leachate treatment facility

1.1.1 Operating Hours

The operating hours of the existing CSA and landfill are 8:00 a.m. to 4:30 p.m., Monday through Friday and 8:00 a.m. to 2:30 p.m. on Saturdays. The operating hours are posted at the entrances to the facility. The proposed Transfer Station will be operated during the same hours until the

average amount of municipal waste processed each day is such that it warrants longer hours. The proposed recycling center is open 24 hours per day. The HHW is open for customer deliveries the same hours as the CSA on weekdays and on one Saturday each quarter. Citrus County staff have unlimited access to the HHW facility to deposit materials found during normal operations.

1.2 FACILITY EQUIPMENT

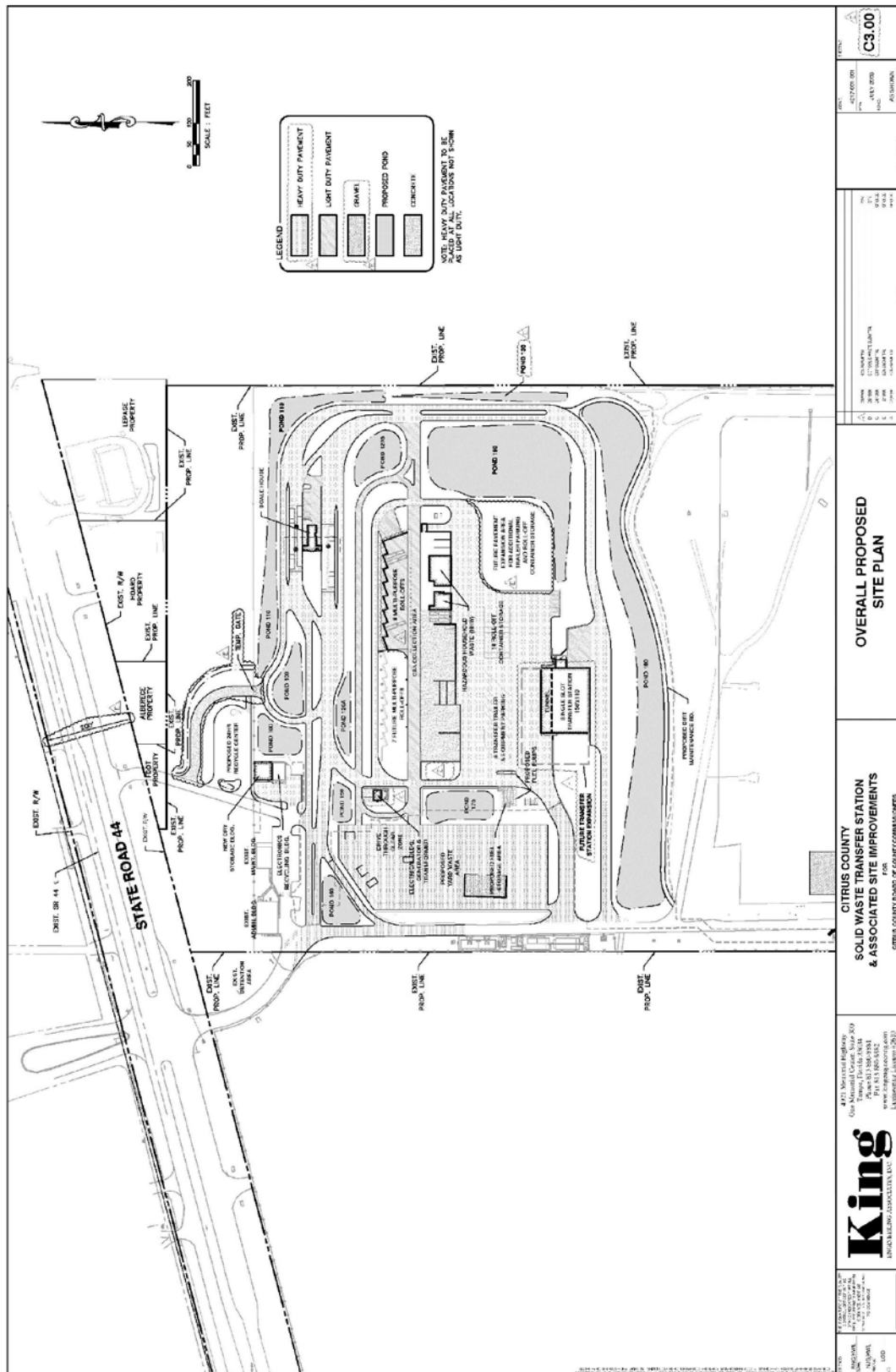
The County presently has equipment on site for management of their landfill, CSA and Yard Waste facilities. Equipment includes:

- Pickup trucks (2) for general maintenance and transport
- Utility vehicles (2) for transport
- Volvo A25 Articulated Dump Truck
- Water truck 2600 gallon tank
- (2) Front end loader, Caterpillar 950(H) with large 3.7cy multi-purpose bucket, broom, grapple and fork attachments
- Forklift, Caterpillar
- Track Loader, Bobcat, (Skid Steer)
- Roll-off truck for transporting roll-offs at the CSA to the landfill
- 20-yard and 30-yard roll-off boxes (10) for use at the CSA
- Bulldozer, Caterpillar D6
- Compactor, Caterpillar 826 G
- Compactor, Caterpillar 826 H
- Excavator, Caterpillar 320EL
- Fuel Truck, Ford F350 – with 420 gallon diesel fuel tank and air compressor
- (2) Lite Sets, Alamand, with 6kw generator (located in disposal cell and in Boneyard)
- Dump Trailer, 6' x 12', Hydraulic
- Grabber Attachment for 55 Gal. Drums, Attached to the Fork Lift
- Generator, 150 kW Caterpillar (Olympian), Trailer mounted,
- Water Transfer Pump, 6" outlet, Yanmar, Centrifugal
- Water Transfer Pump, 4" outlet, Mack, Hydraulic drive
- Water Transfer Pump, 4" outlet, Acme, Hydraulic drive
- Hand Tools and Mechanics Tools, at both the Maintenance Building and HHW.
- Zero Turn Mower, Toro and other various mowers and lawn maintenance equipment

The new scale facility will consist of a scale house, two inbound scales and two out bound scales. The inside, outbound scale is reversible and can serve as a third inbound scale when necessary. Each aboveground flat top scale is 70-feet long with a capacity of 200,000 lbs. The transfer station is operated using open top type technology utilizing a knuckleboom crane positioned over the loading pit that will be operated from a control booth adjacent to the pit. The number of transfer trucks needed will depend on factors such as pay-load and trip distance and

will be the responsibility of the sub-contractor. The County will obtain two front-end loaders, each with a 4.25 cubic yard capacity general purpose bucket with a rubber edge. The front-end loaders will be used to manage stored material on the waste tipping floor and to push waste into the loading pit. Other equipment the County plans on procuring includes a skid steer with broom and blade attachments, a Yard truck which may be owned or leased depending on contract and if composting yard waste , a scarab or similar may be purchased. Equipment for screening and mulching will be contracted.

Figure 1-1



SECTION 2

FACILITY OPERATIONS

2.1 WASTE ACCEPTANCE AND PROCESSING

2.1.1 Acceptable Materials

All solid waste arriving at the facility is routed through the scalehouse. Scalehouse attendants screen visible loads for unacceptable materials including recyclables, hazardous waste, and medical waste. All commercial haulers arriving at the site are weighed at the scale house and directed to the transfer station or to the landfill. In general, residents with less than nine bags of MSW or yard waste, or residents with flat rate items such as tires, propane tanks, electronics, batteries and fluorescent light bulbs, check in at the scale house and are not weighed. Residents and private haulers with more than nine bags of MSW or yard waste are weighed in and out at the scale house as are residents and private haulers with large loads that dispose of their waste on the transfer station tipping floor.

The scale house attendant directs customers to the proper location for disposal. Customers delivering MSW, tires, propane tanks, electronics, batteries and fluorescent light bulbs are directed to the CSA. Household hazardous wastes are temporarily received and stored in the HHW 7 days per week, and one Saturday per quarter. Customers delivering yard waste are directed to the yard waste facility. An attendant is located at the Citizen's Service Area, at the Transfer Station and at the landfill working face to observe the types of waste actually deposited.

2.1.2 Unauthorized Waste

If prohibited wastes are discovered by the scalehouse attendant or one of the facility attendants, the vehicle will be directed back to the administration office. If the waste has not yet been unloaded, the person responsible for shipping the waste will be notified and the vehicle driver will be directed to leave the site. If the waste has been deposited, the area of the waste load should be blocked from public access until the generator or hauler of the waste cleans up the waste. If the generator or hauler of the waste cannot be identified or is unable to remove the waste, Citrus County will be responsible for cleanup, transportation, and disposal of the waste at an appropriate waste management facility. In all cases, the FDEP should be notified.

The following wastes shall not be accepted at the facility:

- Wastes containing polychlorinated biphenyl (PCBs).
- Biomedical wastes.
- Containers or tanks twenty gallons or larger in capacity.

- Hazardous/CESQG wastes except for those accepted at the HHW and included in the current permit.

Special waste shall be collected at the CSA or HHW and managed as follows:

- Used oil and antifreeze is placed at the HHW facility and collected by a contractor.
- Lawn debris and yard waste is placed within the registered yard waste processing facility for management.
- Tires are placed into the permitted used tire facility for management.
- Appliances/White Goods - all freon containing appliances shall have the freon removed by County personnel and then placed within the scrap metal recycling container which is collected daily by a contractor.
- Scrap Metal - all scrap metal shall be placed within the scrap metal bunker until collected daily by a contractor.
- Electronics – all electronics shall be placed within the Electronics Recycling storage area and collected by a recycling contractor once several pallets are loaded.
- Lead acid batteries are placed on pallets and collected by a recycling contractor once several pallets are loaded.
- Mercury-containing devices, or spent mercury-containing lamps, shall be placed in containers and stored until removed for proper disposal by a designated contractor.

Used propane tanks shall be stored in the appropriate container until collected by a recycling contractor

2.2 PROCESSING CAPACITY

2.2.1 Transfer Station

The proposed transfer station building will be a roughly 17,500 square foot pre-engineered metal building. The single slot transfer station will have a 13,100 square foot tipping floor with the capacity to store roughly 610 tons of waste, and process a peak daily load of 850 tons. Four entry doors will allow for multiple commercial waste haulers to enter the building and empty their contents onto the tipping floor at a time, if traffic coordination permits.

2.2.2 Citizen Service Area (CSA)

The CSA will have 5,900 square feet for used tire drop off, and 5,750 square feet for metals. The HHW will have 3,621 square feet available for sorting, with additional area for loading and

sorted piles of electronics, paint, and battery waste.

2.3 SOLID WASTE HANDLING

2.3.1 Solid Waste Receiving and Weighing

All vehicles destined for the landfill, transfer station, CSA, HHW or the yard waste facility enter the site via SR-44. All customers must head east and pass through the scale facility as they enter and exit the site. Customers are weighed and charged in accordance with the current fee schedules. From the scale facility, commercial haulers are directed to either the transfer station or the landfill. Residential customers are directed to the CSA, HHW or yard waste area. Depending on their load, residential customers and small scale commercial haulers may also be directed to the self-haul unloading area at the transfer station.

Transfer trailers will enter the site from the main entrance at SR-44 and head south along the western boundary of the site and then east to the transfer building. In the tunnel, the open-top trailers will be loaded from above and a knuckleboom crane will compress and groom the load. A scale will be located in the tunnels to monitor the load in the trailers. The weight of the load will be displayed on a screen located on the tipping floor as well as in an area visible to the trailer driver.

2.3.2 Solid Waste Unloading and Handling

2.3.2.1 Transfer Station

Upon approaching the transfer station, all commercial vehicles are directed by the tipping floor attendant to a point on the floor where they can back up their vehicle and discard their waste. Private haulers are directed to the self-haul entrance, by which there is a 2.5-foot wall over which they can toss their waste onto the tipping floor. The waste unloaded on the tipping floor is inspected visually by the attendant prior to being moved on the floor or pushed into the pit for loading into a transfer trailer. Front end wheel loaders are used on the tipping floor to move and sort the waste received and to load the waste into the pit and into a transfer trailer. After unloading, haulers will exit the tipping floor and proceed to return to the main entrance by reverse of the same route by which they arrived at the transfer station building.

2.3.2.2 CSA

The future operation and maintenance procedures of the CSA will continue to be the same as existing CSA operations. The CSA has a full time attendant assigned for all hours of operation. A laborer is also assigned to the area to facilitate litter control and other related tasks that arise during operation hours. When customers approach the scalehouse after first entering the property, they are directed by the scale house attendant as to whether they should take their waste to the transfer station, the landfill, or the CSA. At the CSA, all customers are required to check with the attendant to provide proof of residency and identify the type of waste being delivered. If necessary, the attendant will

direct the patron to specific roll-off containers. Patrons are required to empty their own vehicles into the roll-off containers and then may leave the site.

As each container is filled to capacity, it is either loaded onto a roll-off trailer and taken off site immediately or moved to a staging area until a roll-off trailer is available. Each loaded container is transported within a few days. Scrap metal is delivered to a contracted processing facility. Tires are delivered to a separate processing facility.

2.4 TRAFFIC FLOW

All vehicles enter the site via the main entrance on SR-44. After entering the site, all haulers and residents head east to the scale facility. After exiting the scale facility, all vehicles turn south. CSA, HHW and yard waste customers then turn west while commercial haulers and other vehicles destined for the transfer station or landfill continue south and then west up the tipping floor approach road. Vehicles will then back into the transfer station from the south or up to the self-haul unloading area from the east, or will continue west to the landfill access road. Vehicles leaving the landfill or the transfer station will follow this same route in reverse.

After turning west off the main road, CSA, HHW and yard waste customers take the CSA loop road west. Yard waste customers continue west in the yard waste facility. CSA and HHW customers turn south before the yard waste facility and then east onto the CSA/HHW center aisle. Traffic from these facilities continues east, back to the main road, and then north and west to the scale facility and the site exit. Residents have the option of turning north after the scale facility to enter the 24-hour recycling center and exit to SR-44.

Transfer trailers enter the site from the main entrance at SR-44 and head south along the western boundary of the property and then east into the staging area. Transfer trailers travel through the transfer station tunnels in a clock-wise direction. After being loaded and weighed in the tunnels, the trailers will continue west to the road on the western boundary of the property and then north to the main exit or the recycling center exit.

Loaded scrap metal, electronics, tires, and hazardous waste trailers will exit onto the main road on the east side of the CSA, cross the outbound scales and then exit the site through the main exit.

2.4.1 Transfer Station

Signs are strategically located throughout the site, warning vehicles of speed limits and potential hazards. Haulers are instructed not to drive on the waste tipping floor until directed by the operating staff. Attendants and vehicle attendants verbally give instructions as required and maintain traffic on the tipping floor.

Self haulers at the self-haul unloading area are also directed to remain in their vehicle until they are advised when it is safe to back up to the unloading area. This area consists of an overhead door in the southeast corner of the transfer station with an elevated bottom wall. Much like the

walls at the CSA, customers using the self-haul unloading area at the transfer station are required to back in against the ±2.5-foot high wall at the overhead door, exit the vehicle, and throw their trash over the wall and onto the tipping floor. Children are instructed to remain in the vehicle.

2.4.2 Citizen Service Area

The CSA has a full time attendant assigned for all hours of operation. A laborer is also assigned to the area to facilitate litter control and any other task that arises during operation hours. If necessary, the attendant will direct the patron to specific roll-off containers or storage bins. Patrons are required to empty their own vehicles into the roll-off containers and bins, and then may continue to the Recycling Center or leave the site.

2.4.3 Yard Waste Facility

Customers delivering yard waste proceed to the YWF tipping area, and are directed by on-site personnel and traffic cones to the proper location to unload. Upon removal of yard waste from delivery vehicles, the customers then proceed through the CSA and then back to the County scale house to be weighed out and to complete their transactions.

Customers loading mulch are directed to either the hand or machine load area of the yard waste facility by on-site personnel. After loading the mulch, the customers proceed through the CSA and then back through the scale facility to leave the site. These vehicles are not weighed out.

2.4.4 Recycling Collection Center

The Recycle Center customers will enter the site from a separate entrance on SR-44, or after passing through the outbound scales. After dropping off the material at one of the recycling bins, they exit the recycling collection center directly onto SR-44. Vehicles from the recycling center are not allowed to enter the site from this entrance.

SECTION 3

FACILITY MAINTENANCE / HOUSEKEEPING

3.1 NUISANCE CONTROLS

3.1.1 Insect, Odor and Vector Control

Odor control for the CSA consists of removal of all waste to the landfill or transfer station prior to closing daily, plus cleaning of temporary storage areas as needed.

In the transfer station, waste is processed on a first-in, first out basis. Stored municipal solid waste does not remain on the floor for more than 24 hours except under unusual circumstance under which wastes may be stored for up to seven days. The following methods are used to minimize off-site odors:

- The tipping floor is cleaned as needed to control odors.
- The loading areas, sumps and drains, and compaction equipment are cleaned regularly.
- Wastes are managed inside the Transfer Building and containers.
- Loaded wastes are removed from the site frequently.
- The Facility Manager, or his/her designee, screens incoming loads for odor problems. Loads that have begun to degrade and may soon emit objectionable odors are given loading priority so that they can be quickly placed in trucks and transferred from the facility.

Areas where waste is stored or processed are cleaned at least weekly to prevent odor or vector problems, and all drains and leachate conveyances are kept clean so that leachate flow is not impeded.

In addition to proper management practices, the transfer station uses air exchange as a means of controlling dust and odor. Twelve exhaust fans on the tipping floor walls and roof, and four propeller fans in the tunnel provide the capability of up to 22 air exchanges per hour, which should mitigate the potential for nuisance odors at the facility.

Should off-site odors become problematic, the Operations Crew Leader will investigate, determine the source of the problem, and institute corrective actions as appropriate. Additional odor control methods may be implemented, as needed. The facility will be operated to control objectionable odors in accordance with FAC 62-296.320(2).

3.1.2 Litter Control

Personnel are assigned to the transfer station to facilitate litter control during normal operating hours. The tunnel will be cleaned of all litter periodically during the course of operations and at the end of each business day. If absolutely necessary, waste not stored on the tipping floor or

transported off-site will be stored in transfer trailers either covered with a tarp or parked in the transfer station, within an area served by the leachate collection system, until the next business day.

3.1.3 Dust Control

The new Transfer Station building design includes provisions to control nuisance dust and odors at the facility. Emissions of particulate matter will be controlled in the following manner:

- All entrance and exit access roads into the transfer building will be asphalt and/or concrete. In addition, the tipping floor inside the transfer station building will be concrete.
- The building design includes a series of supply and exhaust fans to alleviate dust and odors inside the transfer station building.

3.1.4 Noise Control

No significant noise sources are present onsite other than normal mobile equipment. The nearest occupied structures are also characterized as industrial zoned land uses. The transfer station building is fully enclosed except for the doorways, which minimizes the escape of noise resulting from waste processing.

Employees are encouraged to wear hearing protection where practical and per regulations, where not posing a safety hazard to others.

3.2 FIRE AND EXPLOSIONS

Fire and explosion control issues are presented in Section 5, Contingency Plan.

3.3 SPILL PREVENTION AND REACTION PLAN

Corrective actions for spills and other operation accidents are presented in Section 5, Contingency Plan.

3.4 LIQUIDS MANAGEMENT

3.4.1 Leachate Management

The transfer station has a leachate collection system to collect leachate on the tipping floor and the tunnels and convey the leachate to the leachate pump station which then pumps it to the existing landfill leachate pump station. Roofing over the tipping floor and tunnel, along with grading of roadway surfaces outside the transfer station eliminate the mixing of leachate with storm water. Leachate generated within the transfer station flows into the leachate collection system trench drain on the tipping floor and floor drains in the tunnels. For ease in cleaning, the trench drains are equipped with removable grates wide enough to accommodate a shovel. Leachate trench drains in the transfer station are cleaned as required or, as a minimum, at the end

of each business day.

An HDPE gravity collection system conveys the leachate from the trench drains to the proposed leachate pump station. A 4-inch leachate force main conveys leachate from the pump station to the existing landfill pump station for conveyance to either the leachate holding tanks or the leachate treatment system. The operation of the proposed leachate pump station is as follows:

- Upon wet well sump level rise, the Pressure Transducer sensors will sense the rising sewage leachate levels and upon the set pressure (second level) being reached, will start the lead pump. With the lead pump operating, the wet well level shall lower to the Pressure Transducer pressure turnoff setting and the pump shall stop. Alternating relay shall index on the stopping of the pump, so that the lag pump will start on the next operation. If the level continues to rise when the lead pump is operating, the pressure setting within the Pressure Transducer (third level) will start the lag pump and activate the visual alarm light. Both the lead and lag pump shall operate together until the pressure setting within the Transducer turns off both pumps.
- If the level of the wet well should continue to rise when both pumps are operating, the high level non-mercury switch (fourth level) shall be energized and the audible alarm shall be activated. If one (1) pump shall fail for any reason, the second pump shall operate on the override control (third level pressure setting), and the flashing visual alarm light shall activate. If the level shall then rise past the fourth level control, the audible alarm shall be activated. The high level non-mercury switch shall be adjustable, for level setting, from the surface.

The leachate collection system for the remaining system is operated and maintained, and leachate monitoring and reporting is conducted in accordance with Section 9 of this Operations Plan.

3.4.2 Surface and Groundwater Protection

The proposed traffic and waste handling activities occur on surfaces that are paved and graded to control surface drainage and prevent contamination of groundwater.

The facility manages the waste transfer operations (unloading and loading) in an enclosed building. This minimizes the volume of stormwater that contacts the waste materials, thereby reducing the volume of potentially contaminated contact wastewater, which is treated as leachate. Leachate generated within the transfer station floor and loading area is collected as described previously and is not discharged to surface water.

3.5 FIRE PROTECTION

The site has dual potable water systems consisting of a domestic water system and a fire system. The fire system consists of a series of 8-inch water mains with fire hydrants placed no further than 400-feet from any building. In addition, the transfer station building and the office area of

the HHW were constructed with automatic fire sprinkler systems. A fire and potable water booster pump station provide pressure to meet fire flow requirements. The processing area of the HHW is equipped with an automatic foam fire protection system.

Fire extinguishers are present in each building and in the cab of all heavy machinery, control rooms, and electrical rooms.

The Transfer Station attendants must be constantly alert for possible fires either from a load that is delivered or from a malfunction in the transfer station systems.

Staff shall immediately contact 911 if a fire is observed. Then, and only if trained and if they elect to, they may attempt to extinguish the flame with the fire suppression equipment at hand until the fire department arrives.

3.6 CLEANING AND SHUTDOWN PROCEDURES

At the end of the day, the staff ensure the following procedures are completed:

- All truck doors on the tipping floor level are closed and secured, this will also include the overhead door in self-haul drop off area on the east side of the tipping floor.
- Sweeping up and litter control around the scalehouse, transfer station and CCC;
- Cleaning out of leachate grates.
- A complete walk around of all equipment. Damage or issues that might have accrued are noted on the operator's inspection sheet for that machine.
- The tunnel area is inspected for any damage or issues that might impact the operation of the transfer station and its overhead doors are closed and secured.
- A check of the transfer station is completed to make sure that no unauthorized persons are present.
- All lights are turned off in the tipping floor and tunnel area.
- The restroom area is inspected for any damage or issues that might have occurred during the day.
- No waste is accepted in the transfer station while it is closed.

SECTION 4

WASTE RECORDS

Each month, a report of the amount of waste received, in tons, will be compiled. The report will also include estimates of the amounts of the following waste types:

- Household waste;
- Commercial waste;
- Construction and demolition debris;
- Yard trash;
- Waste tires;
- Materials collected at the HHW;
- Recyclables.

Reports are compiled monthly and maintained and are made available to FDEP on request.

SECTION 5

ACCESS CONTROL

The entire Citrus County Transfer Station facility and adjacent landfill is fenced, and access is gate controlled at all times. Figure 1-1 is a site plan of the entire transfer station and CSA access control facilities. The transfer station, CSA and associated facilities operate and accept waste Monday through Saturday, as follows:

Monday - Friday: 8:00 a.m. to 4:30 p.m.

Holidays and Saturday: 8:00 a.m. to 2:30 p.m.

During Holiday periods, the operating hours may be adjusted.

SECTION 6

WASTE MONITORING

6.1 WASTE INSPECTION

Citrus County has implemented a load checking program to detect and discourage attempts to dispose of unauthorized wastes at the transfer station and CSA. This program includes at least three random checks by personnel each week and inspection of suspicious loads, which are vehicles that have previously been determined to have delivered unauthorized waste, or loads that have unusual physical characteristics.

If any regulated hazardous wastes are identified during load checking the waste will be immediately placed in the household hazardous waste collection and storage facility for sorting and storage. Following is a summary of the load inspection program. The complete load inspection plan is kept on file in the Citrus County Landfill office.

1. Personnel will direct a minimum of three (3) vehicles per week to a separate area within the working disposal area.
2. The driver of the vehicle will be asked the source of the waste by the inspector. The load will be completely unloaded and spread uniformly so that all waste is visible.
3. The inspector will proceed to inspect the load for unauthorized waste. These shall include, but are not limited to the following:
 - Restricted materials (tires, yard waste, etc)
 - Regulated hazardous waste
 - Biomedical waste
 - Containers of liquids
 - Compressed gas cylinders
 - PCB wastes (Transformers)
 - Large quantity of household type hazardous waste (Indication of business source)
4. If any restricted items are observed, the waste will be relocated by the County to the appropriate disposal/management area. If a commercial hauler, the collection company will be contacted to send a representative to verify the contents of the load with the inspector and the Crew Leader. The payment for disposal of the waste will be the sole responsibility of the person responsible for shipping the waste.
5. The person responsible for shipping the waste will provide a manifest documenting the proper disposal of the unauthorized waste found during inspection. The manifest must indicate the corresponding identification number assigned to the waste during inspection.

6. If any regulated hazardous waste or biomedical waste is observed, the Crew Leader will implement the Solid Waste Management Operations Emergency Response Plan for the Identification of Regulated Hazardous Waste. This plan includes notifying FDEP, persons responsible for shipping the wastes, and the generator of the wastes.
7. Landfill personnel will relocate all special wastes such as tires, appliances, lead acid batteries, and lawn debris to the proper disposal areas. A separate invoice will be issued to the persons responsible for shipping the waste and made part of the inspection report. See Section 2.4 for procedures for handling special wastes.
8. If any large quantities of household hazardous waste are identified, it will be relocated to the household hazardous waste storage facility.
9. Copies of all completed inspection reports will be forwarded to the Administrative Office for the Division of Solid Waste Management, the persons responsible for shipping the waste, and the Citrus County Special Operations Section. These records will be maintained for three years.
10. Vehicles that have previously been determined to have delivered unauthorized waste will be considered suspicious and may be subject to inspection at any time and in the same manner as the random inspections.

6.2 HAZARDOUS WASTES AND HANDLING PROCEDURES

Hazardous waste identified during the load checking program will temporarily be stored in the household hazardous waste collection and storage facility, and all handling procedures must follow the Household Hazardous Waste Operations Plan, which is on file in the landfill office.

Items in the transfer station (TS) that are identified to be unauthorized will be given back to the driver that delivered them. If the driver does not accept the material the transfer station attendant will note the truck information and fill out a load inspection sheet for the unauthorized material. The County will also notify the FDEP of the driver's refusal to accept the unauthorized material. The material left in the transfer station will then be moved to a temporary holding area away from material being processed. The location of the holding area will be designated on a daily basis depending on the day's operations and will be cleared out daily of material staged there. If the material discovered is not authorized to be handled at the Citrus County Central Landfill or Hazardous Household Waste Area, then appropriate arrangements will be made to properly handle the material. If material discovered in the transfer station is hazardous the transfer station attendants will use their portable radio to contact supervision and inform them of the issue. Once notified, supervision or the transfer station operator on duty will take appropriate actions to mitigate the issue. The steps may include but are limited to, evacuating the transfer station or calling Citrus County Fire and Rescue or 911.

SECTION 7

STORMWATER MANAGEMENT SYSTEM AND MAINTENANCE

7.1 STORMWATER BEST MANAGEMENT PRACTICES

The transfer station and associated facilities use the following stormwater best management practices (BMPs):

- Sideswales
- Grass
- Sod
- Dry retention stormwater ponds

Plans and cross sections of these systems are on file with the FDEP Southwest District office as part of the site's Environmental Resource Permit (ERP) application package.

The contents of the roll-off containers in the CSA will be monitored and evaluated on a continuous basis to determine if their contents could generate a significant amount of leachate in the event of inclement weather. If so, these containers are to be removed and emptied. Incidental leachate that may be found on the ground shall be cleaned up.

7.2 STORMWATER MAINTENANCE PROCEDURES

Stormwater management system operation and maintenance shall be in accordance with Stormwater Management Operations & Maintenance Manual which was approved with the transfer station/CSA Environmental Resource Permit (ERP). The Stormwater Management System will be operated and maintained as necessary to meet the requirements of Rule 62-701.400(9), F.A.C.

SECTION 8

EQUIPMENT AND OPERATIONAL FEATURES

8.1 EQUIPMENT

The new transfer station will be operated using open top type technology utilizing a knuckleboom crane positioned over the loading pit that will be operated from a control booth over the slot. The crane will be used to level and compact material that is loaded into the open top transfer trailers. Citrus County will contract the hauling of the municipal waste from the transfer station to the landfill. The number of transfer trucks needed will depend on factors such as pay-load and trip distance and will be the responsibility of the contractor. The County will obtain additional buckets for its front-end loaders as required to work in the transfer station, landfill or CSA. Normal maintenance will be performed on site. Major maintenance item repairs (e.g., engine, transmissions, auxiliary drives) will be handled either at the maintenance facilities or at off-site service facilities.

8.2 BACKUP EQUIPMENT

In the event of an unscheduled shutdown of the transfer station, the doors to the tipping floor will be closed and the scale house will notified to divert trucks delivering waste to the Landfill area. If the Solid Waste Management Division Director did not initiate the shutdown, the transfer station attendant will notify he or she or their designee of the issue causing the shutdown. If the shutdown impacts the tunnel area those doors shall also be shut. In the event the shutdown was due to an emergency, the FDEP will be notified within 24 hours. As needed other resources will be called to assist with re-opening the transfer station.

8.3 COMMUNICATION EQUIPMENT

Transfer station employees will be able to communicate by two-way radios, and a telephone is located at the scalehouse and administrative office.

8.4 FIRE PROTECTION AND FIRE FIGHTING CAPABILITIES

The site has dual potable water systems consisting of a domestic water system and a fire system. The fire system consists of a series of 8-inch water mains with fire hydrants placed no further than 400-feet from any building. In addition, the new transfer station building and the HHW have automatic fire sprinkler systems. Fire and potable water booster pump stations provide pressure to meet fire flow requirements.

Additional emergency response equipment readily available on-site is listed in the Landfill and Related Facilities Emergency Incidents Plan.

8.5 SIGNS

Appropriate signs will be utilized and maintained to ensure maximum safety, efficiency, and general information. Signage will include, at a minimum, facility name and operating authority, traffic flow, hours of operation, disposal rates, and restrictions or conditions of disposal.

SECTION 9

LEACHATE MANAGEMENT

Leachate is collected by trench drains on the transfer station tipping floor and tunnel and conveyed by 6-inch High Density Polyethylene (HDPE) pipes to a manhole located to the west of the transfer station tunnel. Roofing over the tipping floor and tunnel, along with grading of roadway surfaces outside the transfer station, eliminate the mixing of leachate with storm water. The trench drains are equipped with removable grates wide enough to accommodate a shovel. Cleanouts within the building combined with the manhole allow access for inspection and cleaning of the leachate lines.

An 8-inch gravity line conveys the leachate from the manhole to the transfer station leachate pump station located at the north toe-of-slope of the hill to the west of the transfer station. Two submersible pumps in the pump station convey the leachate from the wet well into a 4-inch force main that runs to a meter assembly adjacent to the landfill master leachate pump station. After being metered, leachate from the transfer station is discharged into the landfill leachate pump station wet well. Facility personnel will record transfer station leachate flows daily. This will allow the transfer station leachate flows to be separated from the landfill leachate flows. Leachate generation/flow records will be kept at the facility as part of the official operation record.

The landfill leachate pump station conveys the combined leachate from the transfer station, the landfill and the closed 7-acre landfill to the leachate storage tanks located at the southwest corner of the landfill site or to the on-site leachate treatment facility. Leachate from the landfills is monitored, sampled and analyzed in accordance with Section 9 of the Landfill Operating Plan. There are no FDEP requirements to sample or monitor the leachate from the transfer station, although the Division Director may choose to implement some level of sampling and analyses for operations purposes.

9.1 OPERATION AND MAINTENANCE OF LEACHATE COLLECTION SYSTEM

The Utility Operator is responsible for maintenance of the leachate systems, including the site piping and pump station. The pump station equipment manufacturer will provide operation and maintenance manuals for the system components. Maintenance of each component will be performed in accordance with manufacturer specifications and documented on a Maintenance Summary Form, included in Appendix B. Operation and maintenance manuals include the following:

- Description of unit and component parts, including normal operating characteristics and limiting conditions.
- Operating procedures.
- Maintenance and overhaul procedures.

- Installation instructions.
- Original manufacturer's parts list, illustrations, and detailed assembly drawings.
- Spare parts ordering instructions.
- Manufacturer's printed operating and maintenance instructions.

Daily maintenance on each the pump station will also include reading flow meters and making sure each pump is operational. Pumping rates and electrical draw will be confirmed semiannually. If these tests indicate significantly reduced performance, the pumps will be pulled for inspection and repair. A replacement pump will be installed while the repairs are being made. Proper operation of the pump station is as follows:

1. Upon pump station wet well sump level rise, the Pressure Transducer sensors will sense the rising leachate levels and upon the set pressure (second level) being reached, will start the lead pump. With the lead pump operating, the wet well level shall lower to the Pressure Transducer pressure turnoff setting and the pump shall stop. Alternating relay shall index on the stopping of the pump, so that the lag pump will start on the next operation. If the level continues to rise when the lead pump is operating, the pressure setting within the Pressure Transducer (third level) will start the lag pump and activate the visual alarm light. Both the lead and lag pump shall operate together until the pressure setting within the Transducer turns off both pumps.
2. If the level of the wet well should continue to rise when both pumps are operating, the high level non-mercury switch (fourth level) shall be energized and the audible alarm shall be activated. If one (1) pump shall fail for any reason, the second pump shall operate on the override control (third level pressure setting), and the flashing visual alarm light shall activate. If the level shall then rise past the fourth level control, the audible alarm shall be activated. The high level non-mercury switch shall be adjustable, for level setting, from the surface.

If leachate backs up into the transfer station trench drains, the leachate collection system will be inspected. Possible reasons for back up are pump station malfunction or trench drain or drain line blockage. If pipe blockage is identified, the pipe will be power jetted using the available cleanouts or the leachate manhole to remove the blockage.

9.2 LEACHATE HANDLING (IF REGULATED AS HAZARDOUS WASTE)

If, in the future, the leachate becomes classified as a hazardous waste, it will be managed in accordance with Rule 62-730, F.A.C., or other rules as may be applicable at the time.

9.3 OFF-SITE TREATMENT

Leachate is normally treated and disposed of on site. If off site treatment and disposal is

necessary, leachate will be transported to one of several Citrus County Utilities wastewater treatment plants. No written agreement exists with Citrus County Utilities because it is a division of this department.

9.4 ON-SITE TREATMENT

Leachate will be treated on-site. A powdered activated carbon enhanced, activated sludge plant treats all leachate generated at the landfill and at the transfer station. This plant, manufactured by ZIMPRO, provides sequential batch treatment in two stages. There are two first stage reactors and one-second stage reactor. The first stage is aerobic for nitrification of the ammonia in the leachate, and the second is an anoxic treatment process for denitrification. The second stage is supplemented with methanol to support the microorganisms due to low influent nutrients. Carbon provides removal of metals, complex organics and serves as microbial attachment medium. Mobile dissolved ions are not removed. After filtration and chlorination, the effluent is ready for on-site disposal. Sludge from the treatment process is dewatered and disposed in the landfill. The Leachate System Operation Process and Instrumentation Diagram (P&ID) is filed in the landfill office and provides further information on the operation of the leachate collection and treatment system.

The leachate is initially pumped to the on-site leachate storage tank prior to treatment. Liquid levels will be measured daily in the leachate storage tank units. The tank exterior will be visually inspected weekly. The tank interior will be inspected at least every three years, and more frequently if it is drained. At the time of draining, accumulated sediment will be removed and interior maintenance will be performed. If failures are detected, repairs will be made as soon as possible and before tank is brought back into operation. Electrical and mechanical equipment maintenance will follow manufacturer's recommendations. Inspection reports will be kept in the landfill office.

Presently the 7-acre closed landfill and the active landfill cells produce an average daily leachate generation of less than 12,000 GPD, providing more than 50% of capacity for future uses. Based on similar facilities, the new Transfer Station is anticipated to produce 167 GPD of leachate on average plus approximately 5,000 gallons per week during the tipping floor washdown.

Based on the operating record of the leachate treatment system, reports of influent and effluent quality and groundwater monitoring at the effluent disposal ponds, the leachate treatment system is performing adequately.

9.5 CONTINGENCY PLAN FOR MANAGING LEACHATE

If on site leachate treatment is interrupted, leachate will be transported to one of several Citrus County Utilities wastewater treatment plants. Because multiple wastewater treatment plants are available for leachate disposal, complete interruption of off site disposal ability is not anticipated.

9.6 RECORDING LEACHATE QUANTITIES

Quantities of leachate collected by the leachate collection and removal system are recorded in gallons per day from the leachate flow observations. Utilities staff record daily flow amounts on a standard form. Completed forms are compiled monthly with the compiled form sent to the facility manager to be filed in the facility's operating record.

Appendix A - Sample Load Checking Inspection Forms

**CITRUS COUNTY WASTE COLLECTION AND DISPOSAL
CITRUS COUNTY CODE, CHAPTER 82, SECTION 101
VEHICLE INSPECTION CHECKLIST**

COLLECTOR'S

NAME: _____ **COUNTY ID NO:** _____

VEHICLE: _____

TYPE

SIZE

VEHICLE ID NO.

YEAR

MAKE

LICENSE NO.

INSPECTED BY: _____ **for SWM.**

	YES	NO
1. Collectors name and phone no. properly displayed.	_____	_____
2. Vehicle identification no. properly displayed. (Co. ID# & Truck # located on drivers side door & front bumper)	_____	_____
3. Vehicle reasonably water tight.	_____	_____
4. Solid metal sides with covered metal top	_____	_____
5. Vehicle uniformly painted & reasonably clean	_____	_____
6. Back up alarm operational	_____	_____
7. Fire extinguisher and triangles in vehicle	_____	_____
8. Proof of Insurance/Registration in vehicle	_____	_____
9. Tarp provided for roll-off vehicle	_____	_____
10. Securing system for roll-off vehicles (tie down straps/hooks)	_____	_____
11. Waste Tire Transporter Decal, if applicable	_____	_____
12. VEHICLE IN COMPLIANCE	_____	_____

If No, explanation or re-inspection list:

DATE: _____ **TARE WEIGHT:** _____

RE-INSPECTION DATE (if applicable): _____

FOR ITEM NUMBER(s): _____

Information entered into Auto Scale 2000 (date & initials) _____

Bar Code Label printed (date and initials) _____

White Copy: Landfill Office

Yellow Copy: Driver Inspection complete

Pink Copy: Driver Re-inspection needed

Appendix B - Maintenance Summary Form

Equipment Number:	20316 826H Compactor	9314 Pan Scraper	20154 Roll-off Mileage	20426 R/A Loader			
	20041 Dump Truck	20433 D6T Dozer	20164 826G Compactor	20427 Cell Loader			
OPERATOR DAILY CHECKS & SERVICES	9300 Dump Truck	20248 J/D Tractor	20033 J/D Mower	20315 Workman			
	20249 Slope Mower						
	WEEK OF:			TO:			
	Monday		Tuesday	Wednesday	Thursday	Friday	Saturday
Daily Walk Around Inspection							
Beginning Hours							
Refuel Hours							
Ending Hours							
Fuel Added, Gallons							
Check / Top-off Engine Oil							
Check Coolant Level / Radiator							
Check Hydraulic Oil Level							
Check Transmission Oil Level							
Check Drivetrain For Leaks							
Remove Debris From Pinch Areas							
LUBRICATE every 10 hours							
Drain Fuel Filter Water Seperator							
Backup Alarm & Fire Extinguisher							
Clean Windows and Cab Interior							
Quick Coupler and Tire Pressure							
Check / Clean Cab Fresh Air Filter							
Clean Primary Engine Air Cleaner							
Initials							
Operator Comments: "Have you greased and cleaned "YOUR " machine lately"							
Total Hours Operated		Next Service Due					
Total Fuel Used							
Gallons Per Hour		Posted					

ENV_4217\001\001\Permits\FDEP Facility\RAI #1\From County\MaintenanceForm.xls

Appendix C - Leachate Collection System Inspection Report

Name of Facility:	Citrus County Transfer Station	Week Beginning:
Address of Facility:	230 West Gulf to Lake Highway, Lecanto, FL 34461	
Phone:	352-527-7670	

	Mon	Tues	Wed	Thurs	Fri	Sat
Floor Drains Clean						
High Level Alarm Operating						
Pumps Running Properly						
Pipes and Fittings Not Leaking						
Floats Clean and Operable						
Valve Vault Drain Clean						
Telemetry System Operating						
Flow Meter Total Reading (gal)						
Inspected By: (Initials)						

Comments:

[illegible]

ATTACHMENT K-1

**CITRUS COUNTY CENTRAL
CLASS I LANDFILL
OPERATIONS PLAN**

Prepared for:

Citrus County Board of County Commissioners
P.O. Box 340
Lecanto, Florida 34460

Prepared by:

SCS Engineers
4041 Park Oaks Blvd.
Suite 100
Tampa, FL 33610
Certification No. 00004892

Dominique H. Bramlett, P.E.
License No. 61829

File No. 09208040.03
July 12, 2010
Updated November, 2014 to Include the Transfer Station

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SECTION 1

EXECUTIVE SUMMARY

The purpose of this document is to provide a consolidated manual of operating procedures for the Citrus County Central Landfill, including the Phase 3 expansion area. This document is part of the application to the Florida Department of Environmental Protection (FDEP) for an operations permit for the Phase 3 expansion. This operations plan supersedes previous operations plans submitted to FDEP for this facility.

This plan has been prepared in accordance with Florida Rule 62-701, Florida Administrative Code (F.A.C.). Part L of FDEP's permit application form for solid waste management facilities (Part L) includes requirements for an Operations Plan. All information identified in Part K is provided herein, or in referenced documents. This Operations Plan is organized in accordance with Part K. In addition, Table 1-1 cross-references this document with the requirements of Part K.

TABLE 1-1 CROSS REFERENCE OF FDEP PERMIT APPLICATION, PART K REQUIREMENTS	
Part K Landfill Operation Requirements (Rule 62-701.500, F.A.C.)	Corresponding Section of Operation Plan
1. Provide documentation that landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1), F.A.C.)	Section 2.1
2. Provide a landfill operation plan including procedures for: (62-701.500(2), F.A.C.)	
a. Designating responsible operating and maintenance personnel;	Section 2.2
b. Contingency operations for emergencies;	Section 2.3
c. Controlling types of waste received at the landfill;	Section 2.4
d. Weighing incoming waste;	Section 2.5
e. Vehicle traffic control and unloading;	Section 2.6
f. Method and sequence of filling waste;	Section 2.7
g. Waste compaction and application of cover;	Section 2.8
h. Operations of gas, leachate, and stormwater controls;	Section 2.9
i. Water quality monitoring;	Section 2.10

**TABLE 1-1
CROSS REFERENCE OF FDEP PERMIT APPLICATION, PART K REQUIREMENTS**

Part K Landfill Operation Requirements (Rule 62-701.500, F.A.C.)	Corresponding Section of Operation Plan
j. Maintaining and cleaning the leachate collection system.	Section 2.11
3. Provide a description of the landfill operation record to be used at the landfill; details as to location of where various operational records will be kept (i.e. FDEP permit, engineering drawings, water quality records, etc.); (62-701.500(3), F.A.C.)	Section 3
4. Describe the waste records that will be compiled monthly and provided to the Department quarterly; (62-701.500(4), F.A.C.)	Section 4
5. Describe methods of access control; (62-701.500(5), F.A.C.)	Section 5
6. Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized wastes at the landfill; (62-701.500(6), F.A.C.)	Section 6
7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7), F.A.C.)	Section 7.1
a. Waste layer thickness and compaction;	Section 7.2
b. Special considerations for first layer of waste placed above liner and leachate collection system;	Section 7.3
c. Slopes of cell working face and side grades above land surface, planned lift depths during operation;	Section 7.4
d. Maximum width of working face;	
e. Description of type of initial cover to be used at the facility that controls:	Section 7.5
1) Disease vector breeding/animal attraction	Section 7.5
2) Fires	Section 7.5
3) Odors	Section 7.5
4) Blowing litter	Section 7.5

**TABLE 1-1
CROSS REFERENCE OF FDEP PERMIT APPLICATION, PART K REQUIREMENTS**

Part K Landfill Operation Requirements (Rule 62-701.500, F.A.C.)	Corresponding Section of Operation Plan
5) Moisture infiltration 6) Procedures for applying initial cover including minimum cover frequencies; 7) Procedures for applying intermediate cover; 8) Time frames for applying final cover; 9) Procedures for controlling scavenging and salvaging; 10) Description of litter policing methods; 11) Erosion control procedures.	Section 7.5 Section 7.6 Section 7.7 Section 7.8 Section 7.9 Section 7.10
8. Describe operational procedures for leachate management including: (62-701.500(8), F.A.C.) a. Leachate level monitoring, sampling, analysis and data results submitted to the Department; b. Operation and maintenance of leachate collection and removal system, and treatment as required; c. Procedures for managing leachate if it becomes regulated as a hazardous waste; d. Agreements for off-site discharge and treatment of leachate; e. Procedure for off-site leachate treatment; f. Contingency plan for managing leachate during emergencies or equipment problems; g. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record; h. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record; i. Procedures for water pressure cleaning or video inspecting leachate collection systems.	Section 8.1 Section 8.2 Section 8.3 Section 8.4 Section 8.5 Section 8.6 Section 8.7 Section 8.8 Section 8.9
9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the	Section 9

**TABLE 1-1
CROSS REFERENCE OF FDEP PERMIT APPLICATION, PART K REQUIREMENTS**

Part K Landfill Operation Requirements (Rule 62-701.500, F.A.C.)	Corresponding Section of Operation Plan
requirements of Rule 62-701.530, F.A.C.; (62-701.500(9), F.A.C.)	
10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-710.400(9); (62-701.500(10), F.A.C.)	Section 10
11. Equipment and operation feature requirements; (62-701.500(11), F.A.C.)	Section 11.1
a. Sufficient equipment for excavating, spreading, compacting and covering waste;	Section 11.2
b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;	Section 11.3
c. Communications equipment;	Section 11.4
d. Dust control methods;	Section 11.5
e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;	Section 11.6
f. Litter control devices;	Section 11.7
g. Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.	Section 12
12. Provide a description of all-weather access road, inside perimeter road and other roads necessary for access which shall be provided at the landfill; (62-701.500(12), F.A.C.)	
13. Additional record keeping and reporting requirements: (62-701.500(13), F.A.C.)	Section 13.1
a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;	Section 13.2
b. Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;	Section 13.3

**TABLE 1-1
CROSS REFERENCE OF FDEP PERMIT APPLICATION, PART K REQUIREMENTS**

Part K Landfill Operation Requirements (Rule 62-701.500, F.A.C.)	Corresponding Section of Operation Plan
<p>c. Maintain annual estimates of remaining life of constructed landfills and or other permitted areas not yet constructed and submit this estimate annually to the Department;</p> <p>d. Procedures for archiving and retrieving records which are more than five year old.</p>	Section 13.4

Current Operating Conditions

The Citrus County Landfill is owned and operated by the Citrus County Board of County Commissioners. Vehicles access the Citrus County Landfill via State Road 44. The County disposes of its solid waste in an 80-acre area that is subdivided into smaller areas referred to as phases. A site plan of the Citrus County landfill, including the Phase 3 disposal area, is included as Figure 1-1.

All waste arriving at the Citrus County landfill is weighed at the scale house. The scale house attendant directs vehicles carrying waste to the areas where the wastes are unloaded. Commercial customers are directed to the landfill if they are disposing of Class I waste or to the materials management area for all other materials. The materials management area provides temporary storage for recyclable materials such as tires, oil, fluorescent bulbs, metal, and yard waste. The County refers to this area as the Citizen's Service Area. In addition, the materials management area provides a facility for citizens to unload their solid waste. Hazardous wastes are temporarily placed in the Hazardous Waste Collection and Storage Facility. Locations for the Citizen's Service Area, Citizens' Solid Waste Drop-Off Facility and the Hazardous Waste Collection and Storage Facility are shown on Figure 1-1.

A ramp to and from the filling area provides access to the working face of the landfill from the west side of the Class I landfill via the central access road. Waste is spread over the working face area of the landfill, placed in 2-foot layers, compacted by a compactor, and covered at the end of the working day.

Leachate generated from the landfill is either pumped to the leachate storage facility prior to treatment in the onsite leachate treatment plant or used as irrigation on the Phases 2 and 3 (a maximum of 4,633 gal per day can be recirculated in those cells and during non rainfall events). The leachate storage facility is located on the southwest side of the Class I Landfill and the leachate treatment facility is located on the northwest side of the Class I Landfill. The facility's leachate system is self-contained. Effluent from the leachate treatment plant is disposed of in one of two on-site percolation ponds. Dried solids generated from the leachate treatment plant

are disposed of in the landfill. If leachate cannot be treated at the on-site treatment plant, the leachate is transported to one of several Citrus County wastewater treatment plants.

Stormwater run-off is directed away from open areas on the active face of the landfill by a means of berms and swales along the side slopes of the landfill. The swales outside the disposal area divert stormwater into the perimeter ditches that are located outside the lined berms and, therefore, isolated from the leachate and solid waste. Within the landfill disposal area, stormwater run-off that has not contacted waste or mixed with leachate is pumped to the stormwater management system. Stormwater run-off which contacts waste or mixes with leachate is treated as leachate.

Operating Conditions Once the Transfer Station is Constructed

The Citrus County Landfill is owned and operated by the Citrus County Board of County Commissioners. Vehicles access the Citrus County Landfill via State Road 44. The County disposes of its solid waste in an 80-acre landfill area that is subdivided into smaller areas referred to as phases. A site plan of the Citrus County landfill, including the Phase 3 disposal area and the transfer station, is included as Figure 1-1A.

All customers entering the site must check in at the scale facility. All commercial haulers arriving at the site are weighed at the scale house and directed to the transfer station or to the landfill. Residents delivering MSW to the site check in at the scale house and are not weighed if they will be disposing of their waste at the CSA. Residents and private haulers with large loads, disposing of their waste on the transfer station tipping floor, are weighed. Customers are directed to the proper location for disposal by the scale house attendant. Customers delivering tires, oil, fluorescent bulbs, metal, and yard waste are directed to the CSA and are not weighed. Hazardous wastes are temporarily received and stored in the HHW. Customers delivering yard waste are weighed and are directed to the yard waste facility. The site plan shown on Figure 1-1, depicts the location of the on-site facilities.

A ramp to and from the filling area provides access to the working face of the landfill from the west side of the Class I landfill via the central access road. Waste is spread over the working face area of the landfill, placed in two-foot layers, compacted by a compactor, and covered at the end of the working day.

Leachate generated from the landfill is either pumped to the leachate storage facility prior to treatment in the onsite leachate treatment plant or used as irrigation on the Phases 2 and 3 (a maximum of 4,633 gal per day can be recirculated in those cells and during non rainfall events). The leachate storage facility is located on the southwest side of the Class I Landfill and the leachate treatment facility is located on the northwest side of the Class I Landfill. The facility's leachate system is self-contained. Effluent from the leachate treatment plant is disposed of in one of two on-site percolation ponds. Dried solids generated from the leachate treatment plant are disposed of in the landfill. If leachate cannot be treated at the on-site treatment plant, the leachate is transported to one of several Citrus County wastewater treatment plants.

Stormwater run-off is directed away from open areas on the active face of the landfill by a means of berms and swales along the side slopes of the landfill. The swales outside the disposal area divert stormwater into the perimeter ditches that are located outside the lined berms and, therefore, isolated from the leachate and solid waste. Within the landfill disposal area, stormwater run-off that has not contacted waste or mixed with leachate is pumped to the stormwater management system. Stormwater run-off which contacts waste or mixes with leachate is treated as leachate.

Citrus County
Operations Plan

SECTION 2
LANDFILL OPERATIONS AND MAINTENANCE
(RULE 62-701.500(2), F.A.C.)

Figure 2-1 is a site plan of the active area of the landfill including Phase 3.

2.1 TRAINING AND CERTIFICATION OF OPERATORS AND SPOTTERS
(Rule 62-701.500(1), F.A.C.)

In accordance with Rule 62-701.500(1), F.A.C., at least one trained operator will be on duty at the Citrus County Central Landfill whenever waste is received at the facility. In addition, at least one trained spotter will be present at each landfill active face when waste is received. Operator and spotter training will comply with Rule 62-701.320(15), F.A.C., as adopted January 6, 2010. Operators at the Citrus County Central Landfill shall participate in at least 24 hours of initial training. Every three years landfill operators shall participate in continuing education courses totaling 16 hours. All Operators training will consist of courses conducted by the University of Florida TREEO Center, or other courses presented by other providers that have been approved by the Florida Solid Waste Management Training Committee (SWMTC).

In accordance with Rule 62-701.320.15, F.A.C., Spotters shall participate in 8 hours of initial training that shall include Spotting at Construction and Demolition Sites, Landfills, and Transfer Stations (SWMTC 8 hours) and/or Waste Screening and Identification for Landfill Operators and Spotters (SWMTC 8 hours) conducted by the University of Florida TREEO Center or other SWMTC approved providers. Every three years landfill operators shall participate in continuing education courses totaling four hours. The compactor operator will be responsible for evaluating each load visually as it is dumped and serve as the spotter at the working face of the facility. Refer to Appendix E for the Training Certificates.

2.2 DESIGNATION OF PERSONS RESPONSIBLE FOR OPERATION AND MAINTENANCE (Rule 62-701.500(2)(a), F.A.C.)

The persons directly responsible for major components of the landfill and transfer station follow:

<u>Component</u>	<u>Responsible Party</u>
Operations	Field Crew Leader or Customer Service Crew Leader
Repair and Maintenance	Solid Waste Management Division Director
Permitting Requirements	Solid Waste Management Division Director
Water Quality and Leachate Testing	Solid Waste Management Division Director

The landfill Field Crew Leader or Customer Service Crew Leader has overall responsibility for the operation of the landfill. The landfill Field Crew Leader or Customer Service Crew Leader is responsible for the day-to-day implementation of the Operations Plan and, along with the Solid Waste Management Division (SWMD) Director, is responsible for environmentally safe

operations in accordance with state and federal regulations.

Insert Figure 2-1 Active Area Site Plan

2.3 CONTINGENCY OPERATIONS FOR EMERGENCIES (Rule 62-701.500(2)(b), F.A.C.)

The contingency plan for the facility addresses the following five potential emergencies:

- Equipment failure
- Unusual operating conditions resulting from poor weather conditions
- Accidents
- Fire
- Unavailable landfill capacity

2.3.1 Emergency Incidents Plan

Citrus County has developed a site specific Emergency Incidents Plan which is included in Appendix B. This plan includes additional detail for responding to emergency incidents at the Central Landfill.

2.3.2 Equipment Failure

Sufficient back-up equipment will be provided on-site for equipment breakdowns and for downtime because of normal routine equipment maintenance. In the case of a major equipment failure, the following procedures will be followed:

- Maintain duplicate equipment capability
- Contact contractors and rental equipment dealers as pre-arranged, to furnish equipment on short-term notice (within 24 hours)

In the event of equipment failure, the Field Crew Leader will contact the Landfill Maintenance Coordinator. Within 24 hours of notification of the Landfill Maintenance Coordinator, the equipment will be replaced with back-up capability if necessary, or repaired and placed back in operating condition.

All equipment maintenance will either be performed by Citrus County or will be contracted by Citrus County to a maintenance contractor.

Redundant pumping systems are provided for both the leachate and stormwater transfer system.

An emergency power generator is available for stormwater and leachate facilities.

2.3.3 Poor Weather Conditions and Natural Disasters

Unusual operating conditions could result from excessive rainfall and electrical storms. The type and volume of materials to be disposed of after a hurricane or excessive storms will change normal landfill operations. During extremely high wind conditions or electrical storms, disposal

operations will be temporarily suspended to protect the workers. Disposal operations will be suspended immediately before and during a hurricane or tornado.

During rainy weather, access to the working face along on-site roads must be maintained. It may be necessary to grade out ruts more frequently than during normal operations, or it may be necessary to apply additional material to the on-site access roads to counteract the effects of rain.

2.3.4 Fire

Waste loads that arrive at the landfill on fire will not be deposited at the working face. They will be deposited away from the working face on an area that has previously been covered with daily soil cover. The load will then be spread out and covered with daily cover soil cover to extinguish the fire. If a fire does occur at the landfill working face, a temporary area will be identified as far away from the fire as possible but still within the limits of the lined disposal area where daily soil cover has previously been placed. Berms will be constructed around the temporary area using on-site equipment and soil materials from the on-site stockpile. Solid waste entering the facility will be placed in the temporary area until the fire is extinguished. Then the waste will be transported from the temporary area to the working face using on-site equipment. The soil berms around the temporary area will then be leveled and spread out over the surface at the temporary area.

2.3.5 Temporary Transfer Station

Citrus County will implement a temporary transfer station if any condition prevents normal disposal operations at the landfill for more than 48 hours. This temporary transfer station will be located on top of the existing lined landfill. The transfer station will be constructed as a split-grade facility. Waste collection trucks will unload on the upper level. A front loader will lift the off-loaded waste and place into transfer vehicle located on the lower level. The transfer trucks will be weighed prior to leaving the site to ensure that they are legal for over-the-road transport. Crushed concrete and asphalt will be used as an operating surface. This provides an area for trucks to unload. Sloping the area away from the tipping area to a perimeter berm will provide drainage. This liquid will either be allowed to percolate into waste or be collected. Collected liquid will be pumped to the leachate storage tank. Precipitation that falls outside the perimeter berm will be managed as stormwater. Litter fences will be placed around the facility to reduce the potential for blowing litter. The temporary transfer station will not be operated for more than 30 days unless additional approval is granted from FDEP.

2.4 CONTROL/INSPECTION OF INCOMING WASTE (Rule 62-701.500(2)(c), F.A.C.)

All solid waste arriving at the landfill is routed through the scale house. Scale house attendants screen visible loads for unacceptable materials including recyclables, hazardous waste, and medical waste. From the scale house, it is directed to either the transfer station, Class I disposal area or to the citizen waste drop off management area. The Citizen's Service Area provides temporary storage for recyclable material, waste oils, yard waste, white goods, batteries, and tires. A spotter will be located at the Citizen's Service Area and at the landfill working face to

observe the types of waste actually deposited. If prohibited wastes are discovered, the spotter will direct the vehicle back to the office. If the waste has not yet been unloaded, the person responsible for shipping the waste will be notified. If the waste has been deposited, the area of the waste load should be blocked from public access until the generator or hauler of the waste cleans up the waste. If the generator or hauler of the waste cannot be identified or is unable to remove the waste, Citrus County will be responsible for cleanup, transportation, and disposal of the waste at an appropriate waste management facility.

Special waste shall be managed as follows:

- Used oil and antifreeze are each placed into double-wall containers within the HHW facility and collected by a contractor.
- Lawn debris is placed within the registered yard waste processing facility for management.
- Tires are placed into the permitted used tire facility for management.
- Appliances - all freon containing appliances shall have the freon removed by County personnel and then placed within the scrap metal recycling container. The container is collected by a contractor.
- Lead acid batteries are placed on pallets and collected by a recycling contractor once several pallets are loaded. (Collections will occur at a minimum of once per month)

The landfill has a permanent household hazardous waste collection and storage facility located at the CSA. The facility is used for the collection and storage of household hazardous waste and Conditionally Exempt Small Quantity Generator (CESQG) waste. The building is engineered to comply with EPA, NFPA, and OSHA standards and regulations for storing hazardous chemicals and wastes. The household hazardous waste collection/storage ("HHW C/S") will be operated in accordance with the guidelines outlined in the Citrus County Standard Operating Guidelines for the Hazardous Waste Collection Center (last Revised in 2010), which is on file at the landfill office. The current schedule allows for periodic program days for HHW and CESQG collection. The following is a summary of some HHW C/S guidelines:

- HHW received at the Citizen Drop-off area shall be identified and relocated for storage within the containment area of the HHW C/S Facility at the end of each collection day.
- Spillage shall be removed and properly packaged for disposal. Soils that have been contaminated by spills shall be removed and packaged for proper disposal on the same day as the spill occurred.
- Liquids, including contaminated rainwater, shall not be discharged outside of the containment structures.

- Latex paints shall be stored within a secondary containment area and may be either collected by a contractor or used as an approved alternate daily cover (ADC) process.
- Waste received at the HHW C/S Facility shall be stored within containment areas at all times.
- Records on the quantities of HHW collected and removed for disposal shall be compiled quarterly and maintained at the facility for Department review upon request.

The specific waste handling procedures for this facility is described in the Facility Standards for the Citrus County Hazardous Waste Collection and Storage Facility, 2004, which is on file in the landfill office.

2.5 WEIGHING OF INCOMING WASTES (RULE 62-701.500(2)(D), F.A.C.)

Weighing of incoming wastes will be performed at the scale house. Each customer receives a receipt made out by an automatic cash register showing the type of refuse, amount, and fee. These receipts are utilized for financial accountability and to complete the necessary daily, weekly, monthly, and annual activities/materials reports required by the Florida Department of Environmental Protection (FDEP) and Citrus County.

2.6 VEHICLE TRAFFIC CONTROL AND UNLOADING (Rule 62-701.500(2)(e), F.A.C.)

All traffic entering the landfill must pass through the scale house. Vehicle traffic control and unloading is directed by color-coded signage for unloading areas and the attendant in the scale house. The attendant will direct the vehicle to the point of unloading compatible with the waste. Additional traffic directions will be provided, when needed, by the equipment operator or spotters.

2.7 METHOD AND SEQUENCING OF FILLING WASTES (Rule 62-701.500(2)(F), F.A.C.)

The Citrus County Landfill will be operated using the area fill method. Waste delivered to landfill will be directed to the working face area of the landfill for unloading. Once unloaded, waste will be spread in layers approximately 2-feet in thickness and compacted to approximately 1 foot in thickness. Refer to Appendix A for the fill sequencing plans for the remainder of Phase 1/1A, Phase 2, and Phase 3.

2.8 WASTE COMPACTION AND APPLICATION OF COVER (Rule 62-701.500(2)(g), F.A.C.)

2.8.1 Method of Filling Wastes/Compaction

The procedure for filling and compacting of the initial waste lifts over areas of exposed liner will be as follows:

- To protect the integrity of the leachate collection system and liner, driving vehicles directly over the liner will be prohibited.
- The liner will be covered with a minimum of 2 feet of protective soil at least one week prior to the placement of waste.
- The protective soil layer is placed on the liner using low ground pressure tracked dozer approximately 1 week prior to the placement of waste. The equipment operator is directed by a spotter to ensure that the soil is placed correctly and that the equipment does not come in contact with the liner. The 2-foot minimum in-place thickness of the protective soil layer is verified by the landfill operator.
- The landfill spotter directs equipment away from the side slope liner during normal operations.
- The initial lift of waste will be 4 feet thick and selected for material that will not cause damage to the liner. The initial lift of waste will be spread with equipment that will preserve the integrity of the liner system.

The procedures for filling and compacting all waste will be as follows:

- Waste will be placed against the working face of the previous days waste, so that the first row will act as a means of access and a berm to guide the placement of waste material for the remaining rows.
- The waste will be spread and completed in 2-foot layers and compacted to approximately 1 foot in thickness by a minimum of five passes using a landfill compactor.

The procedures for protective sand placement are as follows:

The County will select sand from the cover soil stockpile that is of average consistency; not overly clayey or overly sandy. This allows the material to be applied to the slopes without sloughing or sticking to equipment. The protective cover soil is initially placed at the toe of the slope and pushed up hill. No more than 15 feet vertical of protective cover soil is placed at one time.

The depth of the protective cover soil is monitored by using plastic traffic cones that have been shortened to 2 feet in height. These cones are secured to the geogrid on the side slope with plastic tie strips. Protective cover soil is applied such that no cones are visible after placement. The protective cover soil is pushed up the slope so that there is always 2 feet of protective cover soil between the liner system components and the equipment.

The procedures for tarp removal will be as follows:

At the point in progression of the fill sequence plan it becomes necessary to expand the filling into new areas of the cell the County will cut the rain tarp at the location for the new berm to separate the active area from the rain tarp area. A new berm will be constructed into which the end of the remaining tarp will be anchored. The tarp section to be removed will be carefully cut into manageable sizes and rolled up for reuse on erosion control projects.

The tarp will only be cut using a hook knife that prevents cutting any materials below the tarp material. The tarp will be cut at the location where it enters the anchor trench so the tarp material located in the anchor trench will remain in place without disturbing the anchor trench.

The procedures for rain tarp repair are as follows:

Should damage occur to the rain tarp the County will repair it using an adhesive product manufactured by 3M. The County cuts out a patch piece and applies the glue to the section to be repaired.

2.8.2 Daily and Intermediate Cover

Cover material will be utilized to minimize vector breeding, animal attraction, and fire potential, as well as to prevent blowing litter and control odors. Daily cover will be composed of soil from the on-site stockpile, a 50/50 mixture of yard waste mulch and soil, synthetic materials such as tarps and geomembranes, or approved ADC material consisting of a spray on slurry of polymer recycled paper fibers, and latex paint, per manufacturer specifications. Daily soil cover will be placed and compacted to a minimum thickness of 6 inches; spray on daily cover will be applied per manufacturer specifications and shall not be used in the rain. The intermediate cover will be comprised of soil from the on-site stockpile or a 50/50 mixture of yard waste mulch and soil. The intermediate soil cover will be placed and compacted to a minimum thickness of 12 inches. Mulch is from on-site recycled yard waste.

If tarps or geomembranes are used as temporary daily cover, the tarps or geomembranes will be spread to cover the waste material. Sand or the tarp spreader bar will be used to minimize wind uplift. When the working face area exceeds the area of available tarp, then six inches of compacted soil will be placed to cover the waste material. A 50/50 mixture of yard waste mulch and soil may be spread over the initial soil cover for stabilization and erosion control measures.

When using ADC material, the waste shall be compacted within the working face before applying the ADC to ensure proper coverage of the waste and applied per manufacturer's specification. If uneven waste surfaces are present, spray-on materials will be applied from at least two different angles to ensure complete coverage of the waste. The landfill operator or designee will receive training in the proper mixing, application and use of the spray-on material from the manufacturer, or its representative. The operator who has received the manufacturer's training will be the one to apply the spray-on cover or provide direct supervision of the landfill staff doing the application to ensure that the material is properly applied.

2.8.3 Final Cover

The final cover system will be designed in accordance with Rule 62-701.600(5), F.A.C. The final cover will be placed on the intermediate cover as phases of the facility are closed. The conceptual final cover system for landfill closure, from top to bottom includes the following:

- 24-inch soil layer with the upper surface capable of supporting vegetative growth
- Composite drainage net layer (geosynthetic filter fabric with drainage net)
- 40-mil textured geomembrane

2.9 OPERATION OF GAS, LEACHATE, AND STORMWATER CONTROLS (Rule 62-701.500(2)(h), F.A.C.)

2.9.1 Landfill Gas Controls

The landfill gas (LFG) management system at the site currently consists of passive vents in the old closed 60-acre landfill, which serves to minimize the potential for off-site migration of LFG. A landfill gas collection and control (GCCS) system that includes vertical extraction wells and tie-ins to the existing leachate collection and removal system (LCRS) is operated in the Class I landfill (Phase 1/1A and Phase 2). The LFG from this system is routed via header and lateral pipe to a blower/flare station where the gas is combusted in a candlestick flare. The GCCS is a voluntary active LFG collection and control system that proactively reduces methane emissions to the atmosphere. This system is not required by the Federal New Source Performance Standards (NSPS) and therefore the operation, monitoring, reporting, and recordkeeping requirements of the NSPS do not apply.

The operations procedures for the GCCS will be as follows:

1. The vertical extraction wells and LCRS tie-ins should be inspected periodically (i.e., on a monthly or bi-monthly basis) to ensure that all components are functioning properly.
2. As filling operations continue, vertical wells in the active area of the landfill will be raised.
3. The pneumatic pumps should be inspected periodically to ensure proper operation. The frequency of inspection will be determined based on field operations and whether the pumps are maintaining liquid levels in the sumps low enough to not impact vacuum distribution to the wellfield. Pump counters should be checked and cycle counts recorded and reviewed to ensure pump operation.
4. The following is a list of spare parts that may be kept on site:
 - Wellhead components
 - Sample ports
 - Dust caps

- Orifice plates (assorted diameters; 0.1 inch through 1.4 inch)
- 2" Fernco quick caps
- Fernco bushings and couplings (assorted 4 and 6-inch diameter sizes)
- Worm-gear hose clamps, assorted sizes
- Kanaflex flexible hoses and clamps

Refer to Attachments I through M for the blower/flare system O&M Manual and data sheets for the air compressor, pneumatic pumps, and wellheads. The blower/flare station O&M manual includes comprehensive procedures for ensuring proper operation and checklists for routine inspections of the system.

2.9.1.1 Start-up and Shutdown Procedures

The GCCS is designed to operate continuously except for periods of automatic or manual shutdowns. Startup and shutdown events are generally planned events associated with system repair, maintenance, testing, and upgrades. Startup and shutdown procedures are outlined in the blower/flare station O&M manual provided by the flare manufacturer, Shaw LFG Specialties, LLC, which is included as an attachment to this Operations Plan and which is maintained on site.

GCCS shutdown events generally include shutdown of the gas collection system, the gas control system, and any ancillary equipment that could affect the operations or monitoring of the GCCS. There are two general types of shutdown events, those that are initiated manually by an operator (e.g. for purposes of system maintenance) and those that are initiated automatically by the control system in response to certain monitored conditions.

Some events that may cause the GCCS to shutdown automatically are listed below:

- Loss of gas flow to the flare
- High inlet gas temperature
- Flame sensor detects loss of flame
- Elevated flame arrestor temperature
- High liquid level in knockout pot
- Loss of power from the grid
- Treatment system component shutdowns
- Power generation equipment shutdowns.

2.9.1.2 GCCS Operations and Maintenance

Extraction wells are inspected periodically to ensure that all components and fittings are functioning properly. Loose fittings and couplings can introduce air into the system and cumulatively reduce the collection efficiency of the GCCS. Operation and maintenance procedures for the vertical wellheads include the following:

- Wellhead valves should be exercised across their entire range of operation to confirm their functionality periodically. If the valve does not move or is otherwise broken it should be replaced.
- Wellhead sample ports and dust caps should be checked for leaks, and repaired or replaced if necessary.
- Ensure all joints and mechanical fasteners (unions, Fernco couplings, hose clamps, etc.) are in good condition, secure and provide a proper seal from leaks. Any loose or broken fittings should be tightened or repaired.
- Flexible hoses should be inspected for cracks and breaks that can occur as a result of the hose becoming brittle due to exposure to extreme weather conditions.
- The above ground well casing should be checked for cracks or leaks, and the technician should make note of any voids or settlement which may have occurred on the ground near the well.
- Adjust the wellhead valve as necessary to minimize oxygen concentration to no more than 5 percent by volume. If oxygen levels persist above 5 percent it may be necessary to troubleshoot the well or shut it off until oxygen levels can be lowered.

LCRS tie-ins should be inspected periodically to ensure that all components and fittings are functioning properly. Loose fittings and couplings can introduce air into the system and cumulatively reduce the collection efficiency of the GCCS. Operation and maintenance procedures for the wellheads at the LCRS tie-ins include the following:

- Note any odors or signs of built up pressure at LCRS risers, as this indicates the presence of excess LFG in the area that could potentially be collected.
- Wellhead valves should be exercised across their entire range of operation to confirm their functionality periodically. If the valve does not move or is otherwise broken it should be replaced.
- Wellhead sample ports and dust caps should be checked for leaks, and repaired or replaced if necessary.
- Ensure all joints and mechanical fasteners (unions, Fernco couplings, hose clamps, etc.) are in good condition, secure and provide a proper seal from leaks. Any loose or broken fittings should be tightened or repaired.
- Flexible hoses should be inspected for cracks and breaks that can occur as a result of the hose becoming brittle due to exposure to extreme weather conditions.

- Adjust the wellhead valve as necessary to minimize oxygen concentration to no more than 5 percent by volume. If oxygen levels persist above 5 percent it may be necessary to troubleshoot the well or shut it off until oxygen levels can be lowered.

2.9.1.3 System Monitoring

Each monitoring well will be monitored on a quarterly basis, at a minimum, for static pressure, methane or combustible gases using an instrument calibrated to methane, and oxygen concentration at a minimum. Methane will be measured and recorded in terms of a percent by volume. The monitoring equipment will be calibrated in accordance with the manufacturer's recommendations.

The general procedure for monitoring at each well is as follows:

1. Record meteorological conditions including ambient temperature and barometric pressure, if available.
2. Field calibrate the methane monitoring equipment.
3. Prior to monitoring, note any damage to the wellhead, well casing, or LCRS riser pipe and repair if necessary. Failure to repair damage can affect the validity of the monitoring results.
4. Record the time of monitoring for the well.
5. Connect the monitoring instrument to the sampling hose.
6. Turn on the meter and observe the monitored parameters.
7. Remove the instrument and hose .
8. Repeat steps 3 through 7 for each monitored location.

Any problems encountered during monitoring, observations, or other pertinent information that could impact the interpretation of the data shall be recorded.

The following is a list of parameters typically recorded at the wellheads:

- Temperature
- Vacuum
- Methane concentration
- Carbon dioxide concentration
- Oxygen concentration
- Balance gas concentration

The following is a list of parameters typically recorded at the inlet of the blower/flare station:

- Gas flow rate and temperature
- Methane concentration
- Carbon dioxide concentration
- Oxygen concentration
- Balance gas concentration
- System pressure

2.9.1.4 System Maintenance

The wellheads shall be operated and maintained in accordance with the manufacturer's specifications and operational instructions. If any problems are found at the wellheads, wells or nearby header and lateral piping, repairs shall be initiated at that time, if possible. All repair activities will be recorded and kept onsite.

2.9.1.5 Isolation of Portions of the GCCS

The GCCS is designed with header isolation valves that can be closed to isolate header segments to accommodate troubleshooting and repairs. These butterfly valves are shown on the record drawings that are on file with FDEP and maintained on site.

2.9.1.6 Condensate Management System Monitoring and Maintenance

Condensate is formed as LFG that is extracted from the landfill cools. The rate at which it is generated is dependent on the LFG flow rates and the temperature differential between the warmer gas and the cooler piping.

Condensate traps and sumps are located along the header to remove condensate from the gas stream at engineered low points. Condensate collected in the traps drains back into the waste mass. Condensate collected in sumps with pumps is pumped to the leachate collection tanks via a forcemain.

Because they are self-draining, no maintenance or monitoring is required for the condensate traps. Sump maintenance includes periodically checking and cleaning the pneumatic pumps as recommended by the manufacturer. In addition, the pumping rate can be estimated based on the cycle counter readings.

2.9.1.7 Subsurface Fire Considerations

Subsurface landfill fires, or subsurface oxidation, can occur buried waste in the landfill ignites. The natural decomposition of waste can create substantially high temperatures, and in the presence of enough oxygen can lead to combustion or oxidation of the waste. These events can be minimized by limiting the potential for atmospheric oxygen to enter the waste mass by ensuring adequate landfill cover and avoiding overpulling on the landfill by the GCCS.

The temperature of the extracted LFG will be measured at wellheads

If a subsurface oxidation is detected, the technician or other site personnel will immediately notify the Site Manager and actions will be implemented to contain and eliminate the oxidation.

The following symptoms may indicate the presence of a subsurface waste oxidation:

- Deformed well casings
- Carbon monoxide (CO) concentrations in excess of 1,000 ppm in the extracted LFG. Levels of CO between 500 and 1,000 ppm are viewed as indicators of a potential subsurface oxidation and require further investigation.
- Dramatic localized settling
- Sharp increase in LFG temperatures
- Smoke or smoky odor emanating from landfill surface or wellheads
- Stressed vegetation
- Presence of sooty material inside GCCS components

The most effective method of preventing, suppressing, and extinguishing a subsurface oxidation is to eliminate the pathways of oxygen intrusion into the landfill. To accomplish this, potential sources of air intrusion must be sealed as much as practical, and it may be necessary to reduce the rate of LFG extraction. In severe cases the entire GCCS may need to be shut down in the areas adjacent to the affected waste mass.

It is important to note that even after these measures have been taken, subsurface oxidation may continue for days or weeks before it is completely extinguished. Daily CO and temperature monitoring of extraction points within the area of the subsurface oxidation should be performed in order to determine the effectiveness of the implemented control measures.

2.9.2 Leachate Controls

For Phases 1/1A, 2 and 3, the leachate management system design includes a system of collection pipes that lead to a sideslope sump. The sideslope sump is located at the low-point at the west end of each cell as shown in the Citrus County Central Landfill Phase 3 Expansion Construction Plan Sets. The low-point acts as the sump for both the collection and detection systems. For leachate removal, the collection riser and the leak detection riser will include submersible pumps. Leachate from Phase 1/1A and the transfer station will be first pumped to the Master Pump Station (MPS), and then pumped to the existing leachate storage tank along with the leachate currently being collected from the 7-acre closed area. Leachate from Phases 2 and 3 will be pumped to the leachate storage tank.

The main components of the Phases 1/1A, 2 and 3 leachate management system includes the

following:

- Geocomposite drainage layer with rock filled leachate collection trenches and perforated pipes leading to a main header pipe.
- Collection sump system including collection riser, leak detection riser, and submersible pumps for leachate removal.
- Control panel including pump controls and remote flowmeter head, including telemetry relay to the computer monitoring system at the office.
- Connection to influent line to the existing MPS and underground high-density polyethylene piping force main.

Additional information is provided in Section 8.0 of this Operations Plan.

Leachate evaporation will be employed as a supplemental method to dispose of leachate. The supplemental evaporation of leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a tank truck onto Phase 2 and 3 areas of the landfill. This approach has been used successfully at the Southeast County Landfill since 1984. Leachate spray evaporation may be applied under the following conditions:

- Leachate may only be applied on Phases 2 and 3, within the bermed working face area.
- Leachate may only be applied in Phase 3 once 30 ft of waste in place in Phase 3 at a rate of 3,552 gal/day has been obtained.
- Leachate may not be sprayed on areas with intermediate or final cover, seeded or unseeded.
- At all times, areas receiving leachate must be controlled to prevent leachate from entering the stormwater system. Leachate will not be allowed to enter the stormwater system.
- Leachate may not be applied if water is ponded on the surface of the application area or during periods of active precipitation.
- The tank truck spray bar method maximizes soil moisture evaporation. The application rate of leachate should be such that leachate does not accumulate on the landfill surface.
- Landfill gas shall be managed in accordance with Rule 62-701.530, F.A.C.

Leachate generation will be minimized by only operating a single working face and keeping the

working face as small as possible. During special events, such as during initial lift filling of the new cell, more than one working face may be operated. Daily and/or intermediate cover will be placed with slopes to promote stormwater runoff. The mixing of stormwater with leachate will be minimized by grading the daily and/or intermediate cover away from the working face and by using soil berms to direct stormwater runoff away from the working face. Gutters and lined conveyance ditches will also be used to collect and transport stormwater to stormwater management facilities.

2.9.3 Stormwater Controls

Operation of the existing stormwater system is discussed in Section 10.0 of this Operations Plan. The stormwater system will be managed as required by Rule 62-701.500(10), F.A.C., to meet applicable standards for Rule 62-302, F.A.C., and Rule 62-330, F.A.C. The system shall minimize stormwater from entering waste filled areas and avoid the mixing of stormwater with leachate. All stormwater conveyances shall be inspected at least weekly to verify adequate performance. Conveyances not performing adequately will be repaired within 3 working days. Documentation of all inspections and repairs will be kept on file at the landfill office.

2.10 WATER QUALITY MONITORING (Rule 62-701.500(2)(i), F.A.C.)

Groundwater and leachate monitoring will be conducted as described in the Citrus County Central Landfill Groundwater Monitoring Plan. The latest version of the plan was submitted and approved as part of the minor operation permit modification (Permit Number 21375-012-SO/MM) submitted by Jones Edmunds and Associates (JE&A) and approved by FDEP November 2008. This document will be updated periodically based on current operation permit requirements with a current copy held in the solid waste administration offices at the landfill.

2.11 MAINTAINING AND CLEANING THE LEACHATE COLLECTION SYSTEM (Rule 62-701.500(2)(j), F.A.C.)

The leachate system at the landfill consists of collection, storage, treatment, and disposal facilities for the closed portion and Phases 1/1A, 2, and 3 active portions of the landfill. Maintenance of the leachate system facilities is performed as specified in the manufacturer's manuals kept on file in the landfill office. See Section 8.2 for a description of the operation and maintenance procedures. Inspection and cleaning of the system will be performed every 5 years (at the time of permit renewal). Inspection of storage and treatment tanks will be performed every 3 years.

SECTION 3

OPERATING RECORDS (RULE 62-701.500(3), F.A.C.)

The operating record will consist of all records, reports, analytical results, and all notifications as required by Rule 62-701, F.A.C. These records are considered an integral part of the operations plan and will be kept at or near the facility. The operating records will be available for inspection at reasonable times upon request by FDEP personnel.

The Citrus County Solid Waste Management Division Director will be responsible for the storage and filing of all operational records. The minimum records to be kept as part of the official operating record include the following:

- Current permits and applications
- Monthly waste disposal records (volume, weight, or truckloads)
- Random load checking records
- Leachate quantities, sampling, and analysis
- On-site rain gauge data
- Monthly leachate operating reports (FDEP monthly facility report)
- Annual estimates of remaining capacity (permitted disposal) in cubic yards
- Regulatory agency inspection reports
- Groundwater and leachate sampling plan, including well construction information, sampling locations, and water quality sampling results
- All official notifications to or from FDEP regarding the facility
- Training verifications/certifications
- Landfill Operations Plan, including all supplementary material incorporated by reference
- Leachate tank inspection records
- Gas monitoring records
- Maintenance summary forms

- Gas Collection and Control System operating records
- Unauthorized waste disposal manifests
- Conditionally Exempt Small Quantity Generator (CESQG) verification documentation

SECTION 4
WASTE RECORDS
(RULE 62-701.500(4), F.A.C.)

Each month, a report of the amount of waste received, in tons, will be compiled. The report will also include estimates of the amounts of the following waste types:

- Household waste
- Commercial waste
- Ash residue
- Incinerator by-pass waste
- Construction and demolition debris
- Treated biomedical waste
- Agricultural waste
- Industrial waste
- Yard trash
- Sewage sludge
- Industrial sludge
- Water/air treatment sludge
- Waste tires
- Citizen's Service Area
- Household Hazardous Waste facility

Reports are compiled monthly and maintained and are made available to FDEP on request.

SECTION 5

ACCESS CONTROL (RULE 62-701.500(5), F.A.C.)

The entire Citrus County Landfill facility is fenced, and access is gate controlled at all times. Figure 1-1 is a site plan of the entire landfill and illustrates the landfill access control facilities. The landfill operates and accepts waste from commercial haulers Monday through Saturday, as follows:

Monday - Friday: 6:30 a.m. to 5:00 p.m.

Holidays and Saturday: 6:30 a.m. to 3:00 p.m.

During periods with inadequate daylight after 6:30 am, the County uses portable light plants to illuminate the working face. The facility does not accept waste from citizens until 8:00 am. During Holiday periods, the operating hours may be adjusted.

SECTION 6
WASTE MONITORING
(RULE 62-701.500(6), F.A.C.)

6.1 WASTE INSPECTION (Rule 62-701.500(6)(a), F.A.C.)

Citrus County has implemented a load checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill and transfer station. This program includes at least three random checks by landfill personnel each week and inspection of suspicious loads, which are vehicles that have previously been determined to have delivered unauthorized waste, or loads that have unusually physical characteristics.

If any regulated hazardous wastes are identified during load checking the waste will be immediately placed in the household hazardous waste collection and storage facility for sorting and storage. Following is a summary of the load inspection program. The complete load inspection plan is kept on file in the landfill office.

1. Disposal area personnel will direct a minimum of 3 vehicles per week to a separate area within the working disposal area.
2. The driver of the vehicle will be asked the source of the waste by the inspector. The load will be completely discharged and spread uniformly so that all waste is visible.
3. The inspector will proceed to inspect the load for unauthorized waste. These shall include, but are not limited to the following:
 - Restricted materials (tires, yard waste, etc)
 - Regulated hazardous waste
 - Biomedical waste
 - Containers of liquids
 - Compressed gas cylinders
 - PCB wastes (Transformers)
 - Large quantity of household type hazardous waste (Indication of business source)
4. If any restricted items are observed, the waste will be relocated by the County to the appropriate disposal/management area. The collection company will be contacted to send a representative to verify the contents of the load with the inspector and the Crew Leader. The payment for disposal of the waste will be the sole responsibility of the person responsible for shipping the waste.
5. The person responsible for shipping the waste will provide a manifest documenting the proper disposal of the unauthorized waste found during inspection. The manifest must indicate the corresponding identification number assigned to the waste during

inspection.

6. If any spill or contamination of regulated hazardous waste or biomedical waste is observed, the Crew Leader will notify a hazardous waste staff member and/or implement the Solid Waste Management Emergency Incidents and Contingency Plans, as provided in Appendix B. This plan may include the notification of FDEP, persons responsible for shipping the wastes, and/or the generator of the wastes.
7. Landfill personnel will relocate all special wastes such as tires, appliances, lead acid batteries, and lawn debris to the proper disposal areas. A separate invoice will be issued to the persons responsible for shipping the waste and made part of the inspection report. See Section 2.4 for procedures for handling special wastes.
8. If any amount of household hazardous waste is identified, the Crew Leader or a Hazardous Waste staff member will be notified and it will be relocated to the household hazardous waste storage facility.
9. Copies of all completed inspection reports will be forwarded to the Administrative Office for the Division of Solid Waste Management, the persons responsible for shipping the waste, and the Citrus County Special Operations Section. These records will be maintained for the life of the landfill.
10. Vehicles that have previously been determined to have delivered unauthorized waste will be considered suspicious and may be subjected to inspection at any time and in the same manner as the random inspections.

6.2 HAZARDOUS WASTES AND HANDLING PROCEDURES (Rule 62-701.500(6)(b), F.A.C.)

No hazardous wastes will be accepted at the landfill for disposal. Hazardous waste identified during the load checking program will temporarily be stored in the household hazardous waste collection and storage facility, and all handling procedures must follow the Household Hazardous Waste Operations Plan, which is on file in the landfill office.

If unauthorized material is transported to the facility, the Crew Leader or Division Director will be notified immediately and appropriate actions taken to remove any unauthorized materials or wastes from the facility. Special wastes such as waste tires and batteries that are discovered will be removed from the landfill and placed in the on-site temporary storage area for recyclable material. The Citrus County Special Operations response team is notified for handling and storage of hazardous materials for disposal in an appropriate off-site facility.

6.3 RECORDING INSPECTION RESULTS (Rule 62-701.500(6)(c), F.A.C.)

Results of the load checking inspections described in Section 6.1 of this document will be recorded in writing and retained at the site. This information will include date and time of inspection, name of hauling firm, vehicle identification number, and observations made by

landfill personnel during the inspection. In addition, an effort will be made to record the name of the driver, license plate number, and source of waste as stated by the driver. The inspector will sign the written record. A sample form used to document the inspection results is provided in Appendix C.

SECTION 7

WASTE HANDLING REQUIREMENTS (Rule 62-701.500(7), F.A.C.)

The following description represents waste handling requirements as required by Rule 62-701.500(7), F.A.C. Citrus County will meet or exceed the requirements at all times to minimize the potential adverse impacts to employees or public health or safety.

7.1 WASTE THICKNESS AND COMPACTION FREQUENCIES (Rule 62-701.500(7)(a), F.A.C.)

The waste material will be spread in layers of approximately two feet in thickness and compacted to approximately one foot in thickness, or as thin as practical, by a landfill compactor before the next layer is applied.

7.2 FIRST LAYER OF WASTE (Rule 62-701.500(7)(b), F.A.C.)

The first lift of waste placed above the liner and leachate collection system will be a minimum of four feet in compacted thickness. Waste loads in this first lift will be screened for any large, rigid objects or other materials that would damage the liner or leachate collection system.

7.3 SLOPES OF WORKING FACE (Rule 62-701.500(7)(c), F.A.C.)

The working face and side grades above land surface will be sloped at a maximum of 3 feet horizontal to one-foot vertical rise. The lift depth will typically be a maximum of 10 feet. Lift depths may be deeper than 10 feet depending on specific operations, daily waste volumes, width of the working face, and good safety practices.

7.4 WIDTH OF WORKING FACE (Rule 62-701.500(7)(d), F.A.C.)

The working face will be wide enough to safely accommodate vehicles, unloading materials, and compacting equipment. Since the waste requires daily cover, the width of the working face will be minimized.

7.5 INITIAL/DAILY COVER (Rule 62-701.500(7)(e), F.A.C.)

Daily cover will be placed over the waste at the end of each working day. Daily cover will consist of six inches of compacted soils, a yard waste/soil mix, synthetic material such as tarps and geomembranes, or a spray on slurry of polymer and recycled paper fibers, as approved by the FDEP.

7.6 INTERMEDIATE COVER (Rule 62-701.500(7)(f), F.A.C.)

If additional solid waste will not be deposited in a location within 180 days of daily cover

placement, a 12-inch compacted 50/50 mixture of soil and mulch intermediate cover will be placed within 7 days of daily cover placement.

7.7 FINAL COVER (Rule 62-701.500(7)(g), F.A.C.)

Areas that have been filled to design dimensions will receive final cover within 180 days after attaining final elevation in accordance with the Closure Plan for the Citrus County Central Landfill. A description of the final cover can be found in Section 2.8.3 of this plan.

7.8 SCAVENGING AND SALVAGING CONTROL (Rule 62-701.500(7)(i), F.A.C.)

Scavenging will be strictly prohibited at the working face of the landfill.

7.9 LITTER POLICING METHODS (Rule 62-701.500(7)(i), F.A.C.)

If any litter escapes the litter controls employed in the working area, such litter will be picked up as soon as possible. Litter policing will occur at least on a daily basis.

7.10 EROSION CONTROL (Rule 62-701.500(7)(j), F.A.C.)

Soil cover erosion control measures will be configured to channel or convey stormwater to the stormwater management system. These measures are identified and discussed as follows:

- Intermediate soil cover configured to collect and transport stormwater
- 4"-5" of mulch soil cover to prevent erosion
- Regular inspection of intermediate soil cover
- Benches and lined ditches to transport concentrated volumes of stormwater runoff

7.10.1 Intermediate Soil Cover

Temporary berms to direct stormwater away from solid waste placement and compaction activities will surround the active areas of the landfill. Inactive areas will be covered with intermediate soil cover with a minimum thickness of 1 foot. The intermediate soil cover will be sloped to promote run-off and decrease infiltration of stormwater.

Intermediately covered areas subject to erosion will be mulched or seeded with grass appropriate to the season as needed to control erosion.

7.10.2 Down Drains

Stormwater collected in swales and benches will be directed to lined ditches and/or temporary piping. The lined ditches and/or temporary piping will be installed to transport the collected stormwater to the stormwater management system without damaging the intermediate soil cover. Lightweight reinforced polyethylene will be used to line the ditches.

7.10.3 Inspections

The intermediate soil cover will be regularly inspected for erosion damage. Any damage that is discovered will be repaired within 3 days.

SECTION 8

LEACHATE MANAGEMENT (RULE 62-701.500(8), F.A.C.)

The design of the leachate management system includes a system of collection pipes that lead to a side slope sump. The side slope sump is located at the low-point on the west side of each cell. The low-point acts as the sump for both the collection and detection systems. For leachate removal, the collection riser and the leak detection riser will include submersible pumps. Leachate from Phases 1/1A, the 7-acre closed area and the transfer station will be first pumped to the existing master pump station (MPS) then pumped to the leachate storage tank. Leachate is also pumped from Phases 2 and 3 to the leachate storage tank. Effluent from the leachate storage tank will either be treated in an on-site leachate treatment plant or used as irrigation on the Phases 2 and 3. The leachate will be applied in small quantities within the bermed working face area from a spray bar mounted on the rear of a tank truck. Leachate will not be applied during active precipitation, in the presence of ponding or in quantities that may cause runoff, surface seeps, wind-blown spray, or exceedance of limits as the amounts described below:

- Leachate will be applied in Phase 3 once 30 ft of waste is in place in Phase 3 at a rate of 3,552 gal/day with a maximum of 4,663 gal/day can be recirculated in Phase 3. Leachate recirculation will only be applied within the bermed working face area. If this area is already wet due to rainfall, leachate recirculation will not be applied. Leachate recirculation will not occur during active rainfall or where any standing water is observed within the bermed working face area.
- Leachate will be applied in Phase 2 and 3 at a maximum rate of 4,663 gal/day once 70 ft of waste is in place. Leachate recirculation will only be applied within the bermed working face area. If this area is already wet due to rainfall, leachate recirculation will not be applied. Leachate recirculation will not occur during active rainfall or where any standing water is observed within the bermed working face area.

The main components of Phases 1/1A, 2 and 3 leachate management systems include the following:

- Rock filled leachate collection trenches with perforated pipes leading to the sump.
- Collection sump system including collection riser, leak detection riser, and submersible pumps for leachate removal.
- Control panel including pump controls and remote flow meter head.
- Connection to influent line to the existing leachate storage tank.

8.1 MONITORING, SAMPLING, AND ANALYSIS OF LEACHATE (Rule 62-701.500(8)(a), F.A.C.)

The Division Director is responsible for leachate monitoring, sampling, and analysis, and for providing copies of the leachate analysis to FDEP. Leachate sampling and analysis is addressed in the Citrus County Central Landfill Groundwater Monitoring Plan Evaluation. Sampling and analysis will be conducted by qualified contractors and will meet applicable FDEP requirements.

The depth of leachate over the liner in Phases 1/1A and 2 is monitored with level transducers on the leachate removal pumps. In addition, the leachate pump side slope risers and leachate collection pipe clean out side slope risers provide a mechanism to observe leachate levels through physical measurements. Complete details of the pumps and side slope risers are provided in the Phase 3 Construction Plans.

8.2 OPERATION AND MAINTENANCE OF LEACHATE COLLECTION SYSTEM (Rule 62-701.500(8)(b), F.A.C.)

The Utility Operator will be responsible for maintenance of the leachate systems, including the piping, pump stations, and piping to the leachate storage tank and treatment plant. A schematic diagram of the leachating pumping and treatment system is shown in Figure 8-1. The equipment manufacturer will provide operation and maintenance manuals for each of the system components. Maintenance of each component will be performed in accordance with manufacturer specifications and documented on a Maintenance Summary Form, included in Appendix D. Maintenance documentation may also include a video of the cleaning procedures. Operation and maintenance manuals include the following:

- Description of unit and component parts, including normal operating characteristics and limiting conditions
- Operating procedures
- Maintenance and overhaul procedures
- Installation instructions
- Original manufacturer's parts list, illustrations, and detailed assembly drawings
- Spare parts ordering instructions
- Manufacturer's printed operating and maintenance instructions

During the filling of each cell a rain tarp system will be employed to cover the exposed cell bottom and side slopes where operations are not occurring. The rain tarp will be placed such that the area not being filled will be protected and stormwater diverted from the leachate system to the existing channels using the County's hydraulic pumps. In addition, a daily cover material will be placed on the working face during non working hours as required to minimize leachate

generation.

Flow will be monitored from the leachate pumps. Facility personnel will record leachate flows daily. This will allow determination of leachate production as a function of rainfall and provide information to assess the efficiency of leachate and stormwater management practices. Leachate flow will be reported with the quarterly facility monitoring report. Leachate generation/flow records will be kept at the facility as part of the official operation record.

Daily maintenance on each leachate pump station will also include reading flow meters and making sure each pump is operational. Pumping rates and electrical draw will be confirmed semiannually. If these tests indicate significantly reduced performance, the pumps will be pulled for inspection and repair. A replacement pump will be installed while the repairs are being made.

If leachate flow volume is noticeably decreased, the leachate collection system will be inspected. Possible reasons for low or no flow are pump and/or level transducer malfunction or collection pipe collapse or blockage. If pipe blockage is identified, the collection pipe will be power jetted to remove sediment buildup. Power jetting or rodding will be done from either or both ends of the header.

The GCCS is designed to provide a means of relieving internal gas pressures within the landfill and prevent fugitive emissions of LFG to the atmosphere through the cover soils and the subsurface migration of LFG to the surrounding areas.

The proposed GCCS for Phases 1/1A and 2 include the following features:

- LFG extraction wells composed of 6-inch PVC pipe, installed in a 30-inch borehole and backfilled with FDOT No. 4 stone. The borehole will be sealed with a hydrated bentonite plug and backfilled to grade with clean soil backfill.
- Tie-ins will be made to the existing LCRS risers and these will be connected to the header/lateral system, routing LFG to the blower/flare station.
- A below grade header/lateral network will be installed. All piping will be HDPE SDR 17.
- A 2" HDPE SDR 9 air supply line will be installed at the blower/flare and compressor location to CS-1 on the east side of the Class I cells.
- A condensate sump with a pneumatic pump will be installed at the blower/flare station. An O&M manual for the pneumatic pump will be submitted to the FDEP with the report of construction completion.

- Self-draining condensate traps will be located at engineered low points in the header system for the collection of condensate. The traps will allow for the drainage of condensate from the header and lateral system back into the landfill.
- Collected LFG will be routed to the blower/flare station for combustion via the candlestick flare.

If it is necessary to perform video inspection or cleanout the LCRS via these risers, this can be accomplished by closing the 2-inch wellhead gate valve, disconnecting the flexible hose, and removing the quick release caps or flanged lids and associated piping.

8.3 LEACHATE HANDLING (IF REGULATED AS HAZARDOUS WASTE (Rule 62-701 .500(8)(b), F.A.C.)

If, in the future, the leachate becomes classified as a hazardous waste, it will be managed in accordance with Rule 62-730, F.A.C., or other rules as may be applicable at the time.

8.4 OFF-SITE TREATMENT (Rule 62-701.500(8)(c), F.A.C.)

Leachate will be pumped from the site to an existing County owned sanitary sewer manhole. From there it will be transported via a combination of gravity mains or force mains to the Meadowcrest WWTP for treatment and disposal. No written agreement exists with Citrus County Utilities because it is a division of this department.

8.5 ON-SITE TREATMENT (Rule 62-701.500(8)(d), F.A.C.)

Leachate will not be treated onsite.

The leachate is initially pumped to the on-site leachate storage tank prior to transmission to the Citrus County WWTP offsite. Liquid levels will be measured daily in the leachate storage tank units. The tank exterior will be visually inspected weekly. The tank interior will be inspected at least every three years and more frequently if it is drained. At the time of draining, accumulated sediment will be removed and interior maintenance will be performed. If failures are detected, repairs will be made as soon as possible and before tank is brought back into operation. Electrical and mechanical equipment maintenance will follow manufacturer's recommendations. Inspection reports will be kept in the landfill office.

Insert Figure 8-1. Leachate Flow Schematic

8.6 CONTINGENCY PLAN FOR MANAGING LEACHATE (Rule 62-701.500(8)(e), F.A.C.)

Since the leachate treatment takes place offsite it is unlikely it will be interrupted, however should there be an interruption in flow due to a damaged force main there is sufficient volume in the leachate storage tank to handle disruption of the flow for short periods of time while the force main is repaired. Because multiple wastewater treatment plants are available for leachate disposal in Citrus County and have the capability to divert flows if necessary, complete interruption of offsite disposal ability is not anticipated.

8.7 RECORDING LEACHATE QUANTITIES (Rule 62-701.500(8)(f), F.A.C.)

Quantities of leachate collected by the leachate collection and removal system are recorded in gallons per day from the leachate flow observations. Utilities staff record daily flow amounts on a standard form. Completed forms are compiled monthly with the compiled form sent to the facility manager to be filed in the facility's operating record.

Citrus County uses a number of metering points to measure leachate generation (See Figure 8-1). The flows generated from each landfill phase of the newer 80-acre area are measured directly by flow meters within the discharge line of each pump. Flows from the closed 7-acre area have been measured in the past with an older mechanical flow meter. However since the treatment plant is being abandoned meter number 5 can be used to measure those flows. The older meter shown on Figure 8-1 is no longer being used.

Flow from the transfer station is measured by a meter at the master pump station.

8.8 RECORDING PRECIPITATION (Rule 62-701.500(8)(g), F.A.C.)

A rain gauge has been installed and is operated and maintained by Citrus County personnel to record precipitation at the disposal facility. Precipitation records will be maintained in the facility's operating record and will be compared with leachate generation rates.

8.9 INSPECTION AND CLEANING (Rule 62-101.500(8)(h), F.A.C.)

The new leachate collection system for Phase 3 will be pressure cleaned and inspected by video recording after construction and prior to the initial placement of waste in Phase 3. Thereafter, existing leachate collection systems at the Citrus County Landfill will be pressure cleaned or inspected by video at the time of permit renewal. Results of the cleanings and inspections are kept on file in the landfill office. A copy of the most recent Inspection Report is included as Appendix F.

SECTION 9

LANDFILL GAS MONITORING (RULE 62-701.500(9), F.A.C.)

This LFG monitoring program for the Central Landfill has been prepared in accordance with Rule 62-701.530, F.A.C. As described below, the plan includes monitoring for subsurface LFG migration at the facility property boundary adjacent to the active landfill (Phases 1/1A, 2 and 3) and the closed 60-acre landfill, and in on-site structures. The LFG monitoring program is designed to confirm compliance with the requirements of Rule 62-701.530(1)(a)1, F.A.C., which requires the following:

- The methane concentration in on- or off-site structures may not exceed 25 percent of the lower explosive limit (LEL). The LEL for methane is five percent by volume in air. Therefore, the maximum allowable concentration in on- or off-site structures is 1.25 percent methane by volume.
- The methane concentration at or beyond the landfill property boundary may not exceed the LEL (i.e., five percent methane by volume).

As explained below, the monitoring plan was prepared based on site-specific conditions.

9.1 BACKGROUND INFORMATION

In November and December of 2005, eighteen permanent monitoring probes were installed along the new property boundary of the site. A new property boundary agreement has been established with the Florida Division of Forestry and Florida Department of Environmental Protection (FDEP), the 19 monitoring probes are now the only LFG compliance points at the site; the remaining 62 permanent LFG probes and 13 interim probes have been abandoned in place. Attachment 9-1 is a site map showing the LFG monitoring probe locations and Attachment 9-2 Show a detail of the gas probes.

9.1.1 Landfill Areas

The landfill areas on site include the closed 60-acre landfill and the active Phase 1/1A, Phase 2, and Phase 3 landfill cells. The closed 60-acre landfill is an unlined landfill that has been capped with a geosynthetic membrane and protective soil cover. The depth of waste in the closed 60-acre landfill is approximately 40 feet below ground surface. The Phase 1/1A and Phase 2 landfill areas have a geomembrane bottom liner system, and the bottom depth of refuse is approximately 80 feet below ground surface. Groundwater is present approximately 110 feet below ground surface, and the soil at the site is primarily silty and clayey sand. The proposed Phase 3 expansion area liner profile is similar to that of Phase 2, GCL (as opposed to clay) and a double sided bi-planar geocomposite (as opposed to a triplanar geocomposite) for the secondary leachate collection system are the only differences from Phase 2. Geo-grid will be added to the bottom liner sequence on the side slopes.

9.2 MONITORING OF ON-SITE STRUCTURES

In order to ensure the safety of workers inside and around permanent structures on site, ambient air will be monitored on a quarterly basis in on-site structures in accordance with the requirements of Rule 62-701.530(2)(a), F.A.C. As stated above, and in Rule 62-701.530(1)(a), F.A.C., the methane concentration in on- or off-site structures may not exceed 25 percent of the LEL, or 1.25 percent methane by volume. The following gas monitoring will be performed in structures at the facility.

- Explosive gas alarms located in the scale house building and leachate treatment plant electrical room will provide continuous monitoring for unacceptable concentrations of explosive gas. These monitors are designed to sound an alarm when methane concentrations exceed 25 percent of the LEL. The signal remains on as long as gas is present, and a red alarm light stays on after an alarm condition in order to alert personnel that methane was detected during their absence. Log sheets will be kept at each location to record when the alarm has been triggered, and each alarm will be calibrated or replaced on a regular basis according to the schedule recommended by the manufacturer.
- On a quarterly basis the following structures will be monitored:
 - Administration building
 - Scale house
 - Leachate treatment plant
 - Gun ranges

Monitoring will consist of using handheld instruments to monitor for combustible gases at all slab penetrations, floor drains, cracks in the slabs, along baseboards, in electrical boxes and outlets, and in enclosed spaces such as closets and ground-level cabinets.

Attachments 9-2 and 9-3 show floor plans for the Administration and scale house buildings, respectively.

9.3 GAS MONITORING PROCEDURES

9.3.1 Monitoring Procedures for Probes

Each probe will be monitored on a quarterly basis for static pressure and methane concentration, or combustible gases using an instrument calibrated to methane. Methane will be measured and recorded in terms of a percent by volume in air or as a percentage of the LEL. The monitoring equipment will be calibrated each day prior to the monitoring.

The general procedure for monitoring at each probe will be as follows:

9. Record meteorological conditions including ambient temperature and barometric pressure.
10. Calibrate the methane monitoring equipment.
11. Purge any calibration gas or gas from previous probes from the methane monitoring instrument.
12. Zero the pressure gauge.
13. Prior to monitoring, note any damage to the probe, and repair if necessary. Failure to repair damage to the above ground casing, cap, or monitoring probe can affect the validity of the monitoring results.
14. Attach the sampling hose to the pressure meter and the labcock valve on the monitoring probe.
15. Record the time of monitoring for the probe.
16. Open the labcock valve.
17. Measure and record the pressure in the probe.
18. Close the labcock valve.
19. Connect the methane monitoring instrument to the sampling hose.
20. Open the labcock valve.
21. Turn on the meter and observe the gas concentration readings, noting any spikes in concentration.
22. After the gas concentration readings stabilize, record the steady-state reading, making note of any spike that occurred prior to reaching a steady-state reading. Note that per Rule 62-701.530(2)(b), F.A.C., purging of the probe is not allowed.
23. Remove the instrument and hose, and close the labcock valve.
24. Repeat steps 3 through 15 for each probe.

Any problems encountered during monitoring, observations, or other pertinent information that could impact the interpretation of the data shall be recorded.

9.3.2 Monitoring Procedures for On-Site Structures

The following on-site structures will be monitored for methane or combustible gas on a quarterly basis using handheld field instruments in accordance with Rule 62-701.530(2)(a), F.A.C.:

- Administration building
- Scale house
- Leachate treatment plant

- Gun ranges

Methane will be monitored and recorded in terms of the percent by volume in air or as a percentage of the LEL, and the monitoring equipment will be calibrated each day prior to the monitoring.

The general locations for monitoring at each structure will be as described below.

9.3.2.1 Administration Building--

A handheld meter will be used to monitor for methane at each of the following locations:

- Along the baseboards in each of the rooms, closets, and hallways
- In all ground-level cabinets
- At the floor drains in the bathrooms
- At all electrical outlets in each room and hallway
- At electrical panels inside and outside the building
- At outdoor electrical outlets

9.3.2.2 Scale House--

A handheld meter will be used to monitor for methane in the scale house at each of the following locations:

- Along the baseboards
- At any cracks in the concrete slab or flooring
- In all ground-level cabinets
- At all electrical outlets inside and outside of the building
- At electrical panels inside and outside the building

9.3.2.3 Leachate Treatment Plant--

Methane concentration will be checked at the following locations at the leachate treatment plant:

- At any cracks in the concrete slab or flooring
- In any ground-level cabinets
- At all electrical outlets inside and outside of the building
- At electrical panels inside and outside the building

9.3.2.4 Gun Ranges--

There are two gun ranges on site that are operated by the Withlacoochee Technical Institute on the closed 60-acre landfill. At both gun ranges, the following locations will be monitored for methane.

- At cracks in the concrete slabs
- At all electrical outlets and switches

- At all slab penetrations, such as support posts for the roofs of the firing platforms

9.4 REPORTING

Results of the monitoring will be reported to FDEP quarterly. A copy of the monitoring form is included as Attachment 9-4 to this plan.

If the results of the monitoring show that combustible gas concentrations exceed the limits specified in Rule 62.701.530(1)(a), F.A.C., Citrus County will take the following actions:

- Immediately take all necessary steps to ensure protection of human health and notify FDEP of the exceedances.
- Within seven days of the detections, submit to FDEP for approval a gas remediation plan. The gas remediation plan must describe the nature and extent of the problem and the proposed remedy. The remedy must be completed within 60 days of detection unless otherwise approved by FDEP.

9.5 ROUTINE ODOR CONTROL

The site is inspected on a daily basis for odors at the point of compliance. Potential sources for odors include; incoming waste, workface activities, landfill gas, condensate systems, and leachate collection and handling systems. In the event that an odor is detected and a source identified, appropriate steps will be taken to mitigate the incident. The installation of the GCCS should eliminate odors generated by the decomposition of waste.

Deodorants and odor neutralizers will be maintained on site and utilized if soil cover does not mitigate the odor issues at the working face. Daily cover provides an effective seal against the odors. If odors persist daily cover will be increased and cover procedures will be reviewed and altered if necessary.

Insert Attachment 9-1. Gas Monitoring Probe Locations

Insert Attachment 9-2. Gas Probe Detail

Insert Attachment 9-3. Administration building floor Plan

Insert Attachment 9-4. Scale house Floor Plan

SECTION 10

STORMWATER MANAGEMENT SYSTEM AND MAINTENANCE (Rule 62-701.500(10), F.A.C.)

The Stormwater Management System will be operated and maintained as necessary to meet the requirements of Rule 62-701.400(9), F.A.C.

10.1 STORMWATER BEST MANAGEMENT PRACTICES

The landfill and transfer station will use the following stormwater best management practices (BMPs):

- Sideswales
- Grass
- Sod
- Downdrains
- Benches
- Dry retention stormwater ponds
- Pumps to transport stormwater
- Lined ditches

Many of these stormwater management systems were constructed during Phase 1 development of the Citrus County Central Landfill. Plans and cross sections of these systems, including as-built drawings and modifications, are on file with the FDEP Southwest District office. Additional stormwater management systems were installed as part of the Phase 2 expansion. Record drawings of the Phase 2 expansion was submitted with the construction certification upon completion of the project. Additional stormwater management systems will be installed as part of the Phase 3 expansion. Complete plans and cross sections of these systems are included in the Phase 3 Expansion Permit Application Construction Plans, which are also on file at the FDEP Southwest District office. Record drawings of the Phase 3 expansion will be provided with the construction certification upon completion of the project.

10.2 STORMWATER MAINTENANCE PROCEDURES

The stormwater management system operation and maintenance will include the following:

- All stormwater conveyance systems will be inspected periodically or after major storm events
- Any damaged systems will be repaired
- Accumulated sediment will be removed as necessary
- All stormwater pumps will be serviced as specified by the pump manufacturer

10.3 SURFACE DRAINAGE STRUCTURES

During the operation of the facility the County will install portions of the stormwater drainage features as shown on the Operations Drawings, as interim drainage control measures. The interim control measures shall include piping, inlet structures and energy dissipators as identified on the Operations Drawings. The piping and inlet boxes will be removed and reinstalled as part of final closure construction. The timing for the installation of interim drainage measures shall be as shown on the Filling Sequence Plan of the Operations Drawings.

SECTION 11

EQUIPMENT AND OPERATION FEATURES (RULE 62-701.500(11), F.A.C.)

11.1 EQUIPMENT (Rule 62-701.500(11)(a), F.A.C.)

Citrus County owns a diverse mix of equipment to spread, compact, and cover the waste in the landfill. While the actual equipment at the landfill may vary, sufficient equipment will be maintained at the site to ensure proper operation of the landfill. A current list of equipment is as follows:

- Two landfill compactors
- One self-loading scraper
- One bulldozer
- Two wheel loaders
- One water truck
- One fuel truck
- One water trailer
- Two dump trucks

In addition the site will have auxiliary vehicles including:

- One roll-off truck
- Several pickup trucks
- Several utility vehicles
- Several trailers

Normal maintenance will be performed on site. Major maintenance item repairs (e.g., engine, transmissions, auxiliary drives) will be handled either at the maintenance facilities or at off-site service facilities.

11.2 BACKUP EQUIPMENT (Rule 62-701.500(11)(b), F.A.C.)

There is sufficient redundancy in major equipment to maintain normal operations even during emergency operating conditions. Arrangements will be made with suppliers to obtain reserve equipment within 24 hours of equipment breakdown if sufficient equipment is not available to properly operate the landfill.

11.3 COMMUNICATION EQUIPMENT (Rule 62-701.500(11)(c), F.A.C.)

Landfill employees will be able to communicate by two-way radios, and a telephone is located at the scale house and administrative office.

11.4 DUST CONTROL (Rule 62-701.500(11)(d), F.A.C.)

Control of dust will be maintained by wetting roads as necessary with a 1,200-gallon water tank truck.

11.5 FIRE PROTECTION AND FIRE FIGHTING CAPABILITIES (Rule 62-701.500(11)(e), F.A.C.)

The daily soil cover aids in fire prevention at the landfill. The main method of fire extinguishing is to apply soil to the burning waste using a dozer. Ample soil is stockpiled on site if needed for fire extinguishing purposes. The facility is surrounded by a drainage ditch and road that would act as a firebreak protecting the adjacent forest. In addition to soil stockpiles two fire hydrants are located at the site, one in the citizen drop-off area and one near the fill area.

All equipment and vehicles at the landfill will be equipped with fire extinguishers, and all personnel will be trained in their use. All extinguishers will be inspected regularly and repaired or replaced as needed.

Emergency services are notified telephonically using 911.

11.6 LITTER CONTROL DEVICES (Rule 62-701.500(11)(f), F.A.C.)

Daily cover will provide the main litter control. When the active area of the landfill is below the ground surface, litter is not expected to be a problem. When the active area is above the ground surface, the perimeter ditch and fence will provide a barrier to blowing litter. In addition, portable and/or temporary litter fences will be located adjacent to the working face to prevent litter from being blown away from the working area.

11.7 SIGNS (Rule 62-701.500 (11)(g), F.A.C.)

Appropriate signs will be utilized and maintained to ensure maximum safety, efficiency, and general information. Signage will include, at a minimum, facility name and operating authority, traffic flow, hours of operation, disposal rates, and restrictions or conditions of disposal.

SECTION 12
ROADS
(RULE 62-701.500(12), F.A.C.)

12.1 ALL-WEATHER ROADS (Rule 62-701.500(12)(a), F.A.C.)

All-weather roads, passable and safe under normal operating conditions, will be maintained to prevent dust, rutting or loss of traction. The facility access roads are surfaced with asphaltic concrete. Figure 1-1 shows the locations of the access and perimeter site roads.

12.2 PERIMETER AND OTHER ON-SITE ROADS (Rule 62-701.500(12)(b), F.A.C.)

Some perimeter roads and internal roads will be constructed of limerock and/or stabilized soils. These roads will be inspected daily and repairs will be made in a timely manner. Limerock roads will be scraped and smoothed with a road grader or dozer as necessary. When needed, roadways will be wetted to control dust and to ensure high visibility. On-site roads will be maintained to allow access to monitoring devices and stormwater controls, for landfill inspections and fire fighting.

SECTION 13

RECORDKEEPING (RULE 62-701.500(13), F.A.C.)

13.1 PERMIT APPLICATION DOCUMENTATION (Rule 62 -701 .500(13)(a), F.A.C.)

Records of all information used to develop or support the permit applications and any supplemental information submitted to comply with Rule 62-701, F.A.C., pertaining to construction of the facility will be kept throughout the life of the facility. Records pertaining to the operation of the landfill will be kept for the life of the facility.

13.2 MONITORING INFORMATION (Rule 62-701.500(13)(b), F.A.C.)

Records of all monitoring information, including calibration and maintenance records and copies of all reports required by permit, will be retained for at least 10 years. Background water quality records will be kept for the life of the facility.

13.3 REMAINING LIFE AND CAPACITY ESTIMATE (Rule 62-701.500(13)(c), F.A.C.)

The landfill will maintain an annual estimate of the remaining life and capacity (in cubic yards) of the existing constructed landfill and the remaining capacity and site life of other permitted areas not yet constructed. The annual estimate will be based on a summary of the heights, lengths, and widths of solid waste disposal units. The estimate will be made and reported annually to the FDEP as part of the annual update to the closure and long-term care cost estimates.

13.4 ARCHIVED RECORDS (Rule 62-701.500(13)(d), F.A.C.)

The landfill may archive records that are more than five years, if necessary. Archived records will be available for inspection within seven days of the receipt of the request.

APPENDIX A

OPERATIONS DRAWINGS (REDUCED SIZE)

APPENDIX B

EMERGENCY INCIDENTS PLAN

APPENDIX C

SAMPLE LOAD CHECKING INSPECTION FORMS

APPENDIX D

MAINTENANCE SUMMARY FORM

APPENDIX E

TRAINING CERTIFICATES

APPENDIX F

LEACHATE COLLECTION SYSTEM INSPECTION REPORT

APPENDIX G

LFG MONITORING FORM

APPENDIX H

PNEUMATIC PUMP OPERATIONS AND MAINTENANCE MANUAL

ATTACHMENT I

**BLOWER FLARE SYSTEM - GAS ANALYZER, ELECTRICAL AND
MECHANICAL SYSTEM LAYOUT**

ATTACHMENT J

BLOWER FLARE SYSTEM - O&M MANUAL

ATTACHMENT K

AIR COMPRESSOR

ATTACHMENT L
PNEUMATIC PUMPS

ATTACHMENT M
WELLHEADS

ATTACHMENT N

FACILITY STANDARDS AND EMERGENCY INCIDENT PLAN FOR THE HAZARDOUS WASTE COLLECTION AND STORAGE FACILITY

ATTACHMENT O

**SOLID WASTE TRANSFER STATION
OPERATION AND MAINTENANCE PLAN**