



Florida Department of Environmental Protection

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

Reset Form

Print Form

DEP Form # 62-701.900(23)

Form Title: Waste Tire Processing
Facility Permit Application

Effective Date: January 6, 2010

Incorporated in Rule 62-711.530(6)

Waste Tire Processing Facility Permit Application

Permit No. _____

Renewal ☐ Modification ☐ Existing unpermitted facility ☐ Proposed new facility ☒

Part I-General Information:

A. Applicant Information:

1. Applicant Name: FRIENDS RECYCLING, LLC
2. Applicant Street Address: 2350 NW 27th Avenue
3. City: Ocala County: Marion Zip: 34475
4. Applicant Mailing Address: 2350 NW 27th Avenue
5. City: Ocala County: Marion Zip: 34475
6. Contact person: Gerald Lourenco Phone: (352)266-9497 FEID No: _____
7. Have any enforcement actions been taken by the Department against the applicant relating to the operation of any solid waste management facility in this state? This includes any Complaint, Notice of Violation, or revocation of a permit or registration, as well as any Consent Order in which a violation of Department rules is admitted. It does not include a Warning Letter, Warning Notice, Notice of Noncompliance, or other similar document which does not constitute agency action.
Yes ☐ No ☒ If yes, attach a history and description of the enforcement actions.

B. Facility Information:

1. Facility Name: FRIENDS RECYCLING, LLC
2. Facility Street Address (Main Entrance): 2350 NW 27th Avenue
3. City: Ocala County: Marion Zip: 34475
4. Facility Mailing Address: 2350 NW 27th Avenue
5. City: Ocala State: Florida Zip: 34475
6. Contact Person: Nick Giumarelli Phone: (352)266-9497
7. Facility Location Coordinates:
Section: 2 Township: 15S Range: 21E
Latitude: 29d 12' 42.02" North Longitude: 82d 10' 07.01" East
8. Anticipated date for starting construction 1-Aug-2016 and for completion of construction 15-Aug-20
9. Anticipated date for receipt of tires 16-Aug-2016 and for start of processing 16-Aug-2016

Mail completed form to
appropriate district office listed below

Northwest District
160 Government Center
Pensacola, FL 32501-5794
850-595-6360

Northeast District
7825 Baymeadows Way, Ste. 200 B
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky
Temple Terrace, FL
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33902-2549
239-332-6975

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

C. Land Owner Information (if different from applicant):

1. Owner's name: N/A
2. Land owner's mailing address: _____
3. City: _____ State: _____ Zip: _____
4. Authorized Agent: _____ Agent's phone () _____
5. Current lease expires: _____

D. Facility Operator Information (if different from applicant):

1. Operator's name: N/A
2. Operator's mailing address: _____
3. City: _____ State: _____ Zip: _____
4. Contact person: _____ Phone: () _____

E. Preparer of Application:

1. Name of person preparing application: Juan C. Guerra, P.E.
2. Mailing address: 2817 NE 3rd Street
3. City: Ocala State: Florida Zip: 34470
4. Phone: (352)629-8060
5. Affiliation with facility: Consulting Engineer

Part II-Operations:
A. Facility type (check appropriate box):

- ☒ Waste tire processing facility.
☐ Waste tire processing facility with on-site disposal of processed tires or processing residuals.
☐ Waste tire processing facility with on-site consumption of waste tires or processing residuals.
☐ Permitted solid waste management facility modification to allow waste tire site and processing.

B. Type of processing facility (check as many as apply):

- ☐ Shredder ☒ Cutter ☐ Chopper ☐ Incinerator only ☐ Incinerator with energy recovery
☐ Pyrolysis ☐ Supplemental fuel user ☐ Other, explain _____

C. Storage: Indicate the maximum quantities of whole waste tires, processed waste tires, and processing residuals, expressed in tons, to be stored at the facility, in accordance with Rule 62-711.530(2), F.A.C.

	Outdoor Storage(tons)	Outdoor Storage (sq.ft)	Indoor Storage (tons)	Indoor Storage (sq.ft)	Total Storage (tons)
Whole waste tires:	<u>30</u>	<u>250</u>	<u>0</u>	<u>0</u>	<u>30</u>
Processed tires:	<u>26.8</u>	<u>350</u>	<u>0</u>	<u>0</u>	<u>26.8</u>
Processing residuals:	<u>0.2</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>0.2</u>
TOTALS:	<u>57</u>	<u>610</u>	<u>0</u>	<u>0</u>	<u>57</u>

- D. For reporting quantity of tires in tons, tires will be: weighed on site ☐ weighed off site ☐
weights will be calculated ☒
- E. Facilities that will not be disposing of processed tires or processing residual on the facility site must indicate the permitted solid waste management facility where processed tires or residuals will be disposed.
1. Name of facility See Attach. E of Report: "List Of Approved Facilities For Ultimate Disposal"
2. Street address: N/A
3. City: N/A County: N/A Zip: N/A
- F. Facilities that will be delivering processed tires to consuming facilities must describe the existing or proposed markets for those processed tires.
- N/A
-
-
-

Part III-Attachments:

A. Facility design

NOTE: All maps, plan sheets, drawings, isometrics, cross sections, or aerial photographs shall be legible; be signed and sealed by a registered professional engineer responsible for their preparation; be of appropriate scale to show clearly all required details; be numbered, referenced to narrative, titled, have a legend of symbols used, contain horizontal and vertical scales (where applicable), and specify drafting or origination dates; and use uniform scales as much as possible, contain a north arrow and use NGVD for all elevations.

1. A topographic or section map of the facility, including the surrounding area for one mile, no more than one year old, showing land use and zoning within one mile of the facility
2. A plot plan of the facility on a scale of not less than one inch equals 200 feet. At a minimum, the plot plan shall include
 - a. The facility design, including the location and size of all storage and processing areas for used tires, unprocessed waste tires, processed waste tires, and waste tire processing residuals;
 - b. All wetlands and water bodies within the facility or within 200 feet of any storage area;
 - c. Stormwater control measures, including ditches, dikes, and other structures;
 - d. Boundaries of the facility, legal boundaries of the land containing the facility, and any easements or rights of way that are within the facility or within 200 feet of any storage area;
 - e. Location, size, and depth of all wells within the facility or within 200 feet of any storage area;
 - f. All structures and buildings that are, or will be, constructed at the facility; include those used in storage and processing operations;
 - g. All areas used for loading and unloading;
 - h. All access roads and internal roads, including fire lanes;
 - i. Location of all fences, gates, and other access control measures; and
 - j. Location of all disposal areas within the facility.

B. Facility operation.

1. A description of the facility's operation, process and products including how waste tires will be received and stored.
2. A description of the equipment used for processing tires. This description shall include the make, model, and hourly capacity of each piece of equipment.
3. Description of the waste from the process, the amount of waste expected and how and where this waste will be disposed of.
4. Statement of the maximum daily throughput and the planned daily and annual throughput.
5. A description of how the operator will maintain compliance with each of the storage requirements of Rule 62 - 711.540, F.A.C.
6. A copy of the emergency preparedness manual for the facility with a statement of the on site and off site locations where that manual will be maintained.
7. A copy of the fire safety survey
8. A description of how 75% of the annual accumulation of waste tires will be removed for disposal or recycling.


C. Completed closing plan for the facility as required by Rule 62-711.700(2) and (3), F.A.C.

- D. Attach proof of financial responsibility as requirement by Rule 62-711.500(3) OR a calculation showing that financial assurance documents, currently on file with the Department, are sufficient to assure closing of the waste tire site as well as any other solid waste management facility at that location.
- E. A letter from the land owner (if different from applicant) authorizing use of the land as a waste tire processing facility.
- F. If waste tires will be consumed or disposed of at the facility, attach a description of the other environmental permits that the applicant has for this use, including, permit number, date of issue, and name of issuing agency
- G. The permit fee as required in Rule 62-4, F.A.C.

Part IV-Certification:

A. Applicant:

The undersigned applicant or authorized representative of Friends recycling, LLC
Is aware that statements made in this form and attached information are an application for a
Tire Processing Facility 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 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 Department will be notified prior to the sale or legal transfer
of the facility.

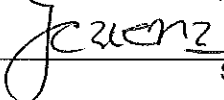

Signature of Applicant or Authorized Agent

Gerald Lourenco, Operating Mgr
Name and Title

24-August-2016
Date

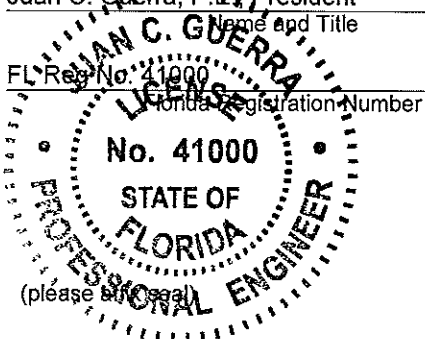
B. Professional Engineer registered in Florida.

This is to certify that the engineering features of this waste tire processing facility have been
Designed/Examined by me and found to conform to engineering principals 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 for proper maintenance and operation of the facility.


Signature

Juan C. Guerra, P.E., President
Name and Title

FL Reg No. 41000
Florida Registration Number



2817 NE 3rd Street
Mailing Address

Ocala, Florida 34470
City, State, Zip

(352) 629-8060
Telephone number

24 - August - 2016
Date

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**Engineer's Manual
(EM)**

July 5, 2016
(Revised August 23, 2016)
Ocala, Marion County, Florida
JN 16-03



GUERRA DEVELOPMENT CORPORATION

CIVIL AND STRUCTURAL ENGINEERING
2817 N.E. 3rd Street
Ocala, Florida 34470
Ph: (352) 629-8060
email: GDC@att.net

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1 GENERAL INFORMATION

1.1 Applicability

This manual has been prepared on behalf of the Friends Recycling Waste Tires Processing Facility, operated by Friends Recycling LLC. The purpose of this manual is to meet the requirements set forth in Chapter 62-711.540 of the F.A.C.

The provisions included herein are intended to address specific items required by the F.A.C. as it relates to waste tires processing facilities and it is by no means a comprehensive manual intended to address any and all emergencies which may arise at the facility.

The use of safety and emergency practices established for the hosting facility, Friends Recycling C&D Facility, shall also be observed along with common sense and reasonable safe practices.

1.2 Manual Location

A current version of this Manual and the Emergency Preparedness Manual (EPM) included herein, as prepared by Guerra Development Corporation and on file at the Orlando offices of the Florida Department of Environmental Protection, shall be kept at all times in a visible and readily accessible location at the following locations:

- Field office for Friends Recycling C & D Facility.
- Home of Mr. Nick Giumarelli, field operator of the waste tire processing facility.

1.3 EPM Updates

The EPM shall be updated annually or sooner if changes in operations and practices require it. Friends Recycling LLC shall contact Guerra Development Corporation at 352-629-8060 (or other approved entity) 45 days prior to updated report due date, to make the necessary field visits, interviews, to assess if the manual warrants an update.

2 CONTACT INFORMATION IN CASE OF FIRE, FLOOD OR OTHER EMERGENCY

Use a wireless cellular phone or the hard line telephone inside the field office.

2.1 General and all other Emergencies:

2.1.1 Dial 911

2.1.2 Nick Giumarelli – (352) 266-4853

2.2 Fire:

2.2.1 Dial 911

2.2.2 City of Ocala Fire Department – (352) 629-8513

2.2.2 Nick Giumarelli – (352) 266-4853

2.3 Notify FDEP

Once the above numbers have been called, immediately notify the FDEP of the emergency.

2.3.1 FDEP, Mr. Tom Lubozinski or his representative
Dial (407) 897-4300

2.4 Additional Contacts

- DEP Receptionist - Central District (407) 897-4100
- City of Ocala Police Department (352) 369-7070 Non-emergency
- Guerra Development Corp. (352) 629-8060
- St. Johns River WMD (386) 329-4500
- Gerald Lourenco, Operator (352) 266-9497

3 RESPONSE TO PERMIT REQUIREMENTS

3.1 To facilitate review GDC has included an attachment which provides a point-by-point response to each of the items required on the permit application. Items which not applicable to this facility and this permit application were so noted in the attachment.

3.2 Please refer to "Attachment A, Response to Permit Requirements".

4 CALCULATIONS

4.1 Calculations supporting the quantities used in the permit application have been detailed on "Appendix B, Calculations".

5. EMERGENCY PREPAREDNESS MANUAL (EPM)

5.1 An EPM as required by permit requirements has been prepared and a full copy is included in this report.

5.2 Please refer to "Attachment C - Emergency Preparedness Manual (EPM)"

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**Attachment A
Response to Permit Requirements**

A response to each of the requirements under Part III - Attachments, of the application permit for a waste tire processing facility, form 62-711.530(23), is provided below.

Part III - Attachments

A. Facility Design

1. *A topographic or section map of the facility, including the surrounding area for one mile, no more than one year old, showing land use and zoning within one mile of the facility.*
R- **A USGS Quad map has been included showing the location of the C&D facility which will host the Waste Tire Processing Facility (WTPF). A zoning map from the City of Ocala has also been included.**
2. *A plot plan of the facility on a scale of not less than one inch equals 200 feet. At a minimum, the plot plan shall include:*
 - a. *The facility design, including the location and size of all storage and processing areas for used tires, unprocessed waste tires, processed waste tires, and waste tire processing residuals;*
R- **A plan has been included showing the proposed location for the WTPF within the Friends Recycling property; This plan shows the location of the existing concrete pad and 3-wall enclosure to be used for waste tire processing.**
 - b. *All wetlands and water bodies within the facility or within 200 feet of any storage area;*
R- **There are no jurisdictional wetlands within this project's property.**
 - c. *Stormwater control measures, including ditches, dikes, and other structures;*
R- **No stormwater control measures proposed. The tire shearer will be installed under cover within the concrete pad. Runoff is not expected to get in contact with dust/particles from waste tire cutting.**
 - d. *Boundaries of the facility, legal boundaries of the land containing the facility, and any easements or rights of way that are within the facility or within 200 feet of any storage area;*
R- **The enclosed plan of Friend Recycling depicts property lines and other pertinent information in the vicinity of the proposed WTPF.**
 - e. *Location, size, and depth of all wells within the facility or within 200 feet of any storage area;*
R- **Wells within 200 feet of the proposed WTPF are shown in the enclosed drawing. Monitoring wells for the Friends Recycling C&D facility were not included.**
 - f. *All structures and buildings that are, or will be, constructed at the facility; include those used in storage and processing operations;*
R- **The only structure proposed to be used for the operation of the WTPF is an existing 3-wall concrete wall enclosure with a concrete floor. This 60' x 40' concrete slab is**

surrounded on 3 sides by concrete block walls and chainlink fence; the south wall is concrete block 16' high, the side walls are generally 3' high with chainlink fence; the north end of the slab is open for access by equipment. All tires will be stored within this 3-wall structure, and the tire shearer will be housed and operated within the 3-wall enclosure under an aluminum roof.

g. *All areas used for loading and unloading;*

R- **Waste tires are to be unloaded directly on to the 3-wall enclosure.**

h. *All access roads and internal roads, including fire lanes;*

R- **The enclosed drawing depicts existing driveways and building. No new improvements are needed and none are proposed.**

i. *Location of all fences, gates, and other access control measures; and*

R- **The enclosed drawing depicts fences, gates which constitute access control measures for the Friends Recycling.**

j. *Location of all disposal areas within the facility.*

R- **The processed tires will not be disposed of within the premises of Friends Recycling. Processed tires and residual waste from tire processing will be disposed of at an approved facility, as listed in this permit application.**

B. Facility Operation

1. *A description of the facility's operation, process and products including how waste tires will be received and stored.*

R- **The proposed WTPF is intended as a minor side operation for the existing Friends Recycling C&D Facility. The WTPF is planned to be housed in an existing open air 3-wall enclosure built from concrete block, approximately 16' high, and with a poured concrete floor.**

Friends Recycling expects to have a maximum of 3,000 waste tires at the facility at any particular time, with all tires (whole and processed) stored within the 3-wall enclosure; tires are expected to be processed as each shipment is received.

The processing consists of cutting up the tires into small pieces and storing the pieces in a 40 cubic-yard container located next to the 3-wall enclosure. An approved processing company will pick up the container when full, to dispose of the waste tires at their approved facility.

Tires expected to be processed at this facility include tires from semi-trailer, vehicles and machinery, in size and material which can be handled by the equipment on-site, as described below.

The tire processing consists of the operator picking up the waste tire stored within the 3-wall enclosure, placing it on the machine and cutting the tire into a predetermined number of small pieces. As the tire is being cut, resulting pieces are thrown into the storage bin, referred to earlier as a 40 cubic yard container.

The equipment manufacturer claims that the machine can shear the tire in 13.5 seconds; the complete cycle including placing the tire and removing sheared pieces, is estimated at 30 seconds, with a resulting effective processing rate of 2 tires per minute

2. *A description of the equipment used for processing tires. This description shall include the make, model, and hourly capacity of each piece of equipment.*

R- The WTPF will be utilizing the Desco Model 4000D tire cutter/de-rimmer. According to literature from the manufacturer, the cutter has the following specifications.

- Desco Model 4000D**
- Fuel: Diesel**
- Engine: 26.5 HP at 3600 RPM**
- Hydraulic Tank: 40-gallon capacity**
- Shear Cycle Time: 13.5 seconds**

3. *Description of the waste from the process, the amount of waste expected and how and where this waste will be disposed of.*

R- The Desco machine shears tires rather than grinding or cutting, thus very little to no dust waste is expected; small piece waste is still expected, which will be retained near the machine and swept every day at the end of operations, and the waste placed in the 40-yard processed tire waste container after each session.

4. *Statement of the maximum daily throughput and the planned daily and annual throughput.*

R- Maximum Daily Throughput = 960 tires

Planned daily Throughput = 480 tires

Annual throughput = 115,200 tires (480 x 5 days x 48 weeks)

Note: Excepting maximum daily throughput, above figures are estimates based on market conditions and business plan. The numbers are based on 480 tires per day per 5-day week and 48-week year.

5. *A description of how the operator will maintain compliance with each of the storage requirements of Rule 62-711.540, F.A.C.*

R- Below is a description of measures taken to comply with 62-711.540.

1. *All waste tire sites, collection centers, processing facilities, and disposal facilities which store waste tires shall comply with the following technical and operational standards.*

a. *If the site receives waste tires from the public, a sign shall be posted at the entrance of the site stating operating hours, cost of disposal and site rules.*

R- The site will NOT accept tires from the public.

b. *No operations involving the use of open flames shall be conducted within 25 feet of a waste tire pile.*

R- NO operation involving the use of open flames will be conducted within 25 feet of the waste tire open air enclosure.

- c. *An attendant shall be present when the site is open for business if the site receives waste tires from the public.*
- R- The site will NOT accept tires from the public.**
- d. *Fire protection services for the site shall be assured through notification to local fire protection authorities. A fire safety survey shall be conducted at least annually and the survey report shall be made part of the next quarterly report.*
- R- The local fire protection service is the City of Ocala Fire Department and they have been notified about this facility; a fire safety inspection was conducted on July 25, 2016, by Mr. Alan Peters.**
- e. *The operator of the site shall prepare and keep at the site an emergency preparedness manual. A copy of the current manual shall be kept at an off-site location designated by the operator. The manual shall be updated at least once a year and upon changes in operations at the site. The manual shall contain the following elements:*
- i. *A list of names and numbers of persons to be contacted in the event of a fire, flood, or other emergency;*
 - ii. *A list of the emergency response equipment at the site, its location, and how it should be used in the event of a fire or other emergency; and*
 - iii. *A description of the procedures that should be followed in the event of a fire, including procedures to contain and dispose of the oily material generated by the combustion of large numbers of waste tires.*
- R- An Emergency Preparedness Manual (EPM) has been prepared for this facility, to be kept at the on-site office at all times. See enclosed manual.**
- f. *The operator of the site shall immediately notify the Department in the event of a fire or other emergency which poses an unanticipated threat to the public health or the environment. Within two weeks of any emergency, the operator of the site shall submit to the Department a written report on the emergency. This report shall describe the origins of the emergency, the actions that were taken to deal with the emergency, the results of the actions that were taken, and an analysis of the success or failure of the actions.*
- R- The EPM requires the operator, Friends Recycling LLC, to immediately notify the FDEP in the event of a fire or other emergency which poses an unanticipated threat to the public health or the environment. Additionally, the manual requires the operator to submit to the FDEP a report on the emergency within two weeks of said emergency, including actions that were taken and an analysis of the success or failure of such actions.**
- g. *The operator of the site shall maintain records of the quantity of waste tires received at the site, stored at the site, and shipped from the site.*
- R- The Operations Manual (OM), which contains the EPM, requires the operator to maintain a record of the quantity of waste tires received/stored at the site and shipped from the site.**
- h. *If the operator of the site is not the owner of the property, the operator shall obtain written authorization to operate the facility from the owner of the property.*
- R- The operator IS the owner of the property, thus no operation authorization is needed.**

- i. *Communication equipment shall be maintained at the waste tire site to assure that the site operator can contact local fire protection authorities in case of a fire.*
 - R- **The OM and EPM require a land line and wireless cellular telephones available at the site as the mean to contact the Ocala Fire Department of a fire or other authorities shall a different kind of emergency arise.**
 - j. *The owner or operator shall provide for control of mosquitoes and rodents so as to protect the public health and welfare.*
 - R- **The OM describes the required procedure to ensure mosquito control is being addressed.**
 - k. *An approach and access road to the waste tire site shall be kept passable for any motor vehicle at all times.*
 - R- **The OM requires the operator to maintain the access driveway to the WTPF storage enclosure passable for any motor vehicle at all times.**
2. *All waste tire sites, collection centers, processing facilities, and disposal facilities which store waste tires indoors must comply with the following additional technical and operational standards.*
- R- **There will be NO indoor storage at the Friends Recycling WTPF.**
3. *All waste tire sites, collection centers, processing facilities, and disposal facilities which store waste tires outdoors must comply with the following additional technical and operational standards.*
- a. *A waste tire site shall not be constructed, maintained or operated in or within 200 feet of any natural or artificial body of water, including wetlands within the jurisdiction of the Department, as part of a permit application or modification, that permanent control methods for residuals will result in compliance with water quality standards in Chapters 62-302, and 62-520, F.A.C. Stormwater control methods shall meet stormwater requirements of Chapte 62-25 and 62-330, F.A.C., as applicable. The site shall be managed in such a way as to divert stormwater or floodwaters around and away from the storage piles. This section does not apply to artificial reefs constructed pursuant to Department permit.*
 - R- **The proposed Friends Recycling WTPF is NOT located within 200 feet of a body of water as described above.**
 - b. *An outdoor waste tire pile shall have no greater than the following maximum dimensions:*
 - i. *Width: 50 feet*
 - ii. *Area: 10,000 square feet; and*
 - iii. *Height: 15 feet*
 - R- **The proposed 3-wall open air concrete block enclosure does not exceed the above maximum dimensions.**
 - c. *A 50-foot wide fire lane shall be placed around the perimeter of each outdoor waste tire pile. Access to the fire lane for emergency vehicles must be unobstructed at all times.*
 - R- **There are 50-feet of unobstructed access to the WTPF enclosure and all-time**

access to it for emergency vehicles. This access is not available on the south side due to a steep drop in grades, but the other 3 sides and the small size of the enclosure allow for adequate fire protection from one side alone.

- d. *Access to the site shall be controlled through the use of fences, gates, natural barriers or other means.*
 - R- **The controlled access in use for the Friends Recycling C & D facility is in place for the WTPF, including fences and gates.**
 - e. *The site shall be bermed or given other adequate protection if necessary to keep liquid runoff from a potential waste tire fire from entering water bodies.*
 - R- **There are no water bodies in the vicinity of the proposed WTPF. However, a small berm has been provided around the downstream side of the 3-wall enclosure to capture any liquid runoff from a potential tire fire. This runoff catchment area is expected to retain tire fire runoff from leaving the Friends Recycling property.**
 - f. *The waste tire site shall be kept free of grass, underbrush, and other potentially flammable vegetation at all times.*
 - R- **The waste tires shall be kept within the 3-wall open air concrete block enclosure. Additionally, vegetation shall be kept mowed within 20 feet of the enclosure sides and within 10 feet of the back wall. Due to topography and small nature of the waste tire storage 3-wall enclosure, the north and west sides provide adequate access for fire control.**
4. *For all waste tire sites, collection centers, processing facilities, and disposal facilities which store processed waste tires, the temperature of any above-ground piles of compacted, processed tires over ten feet high shall be monitored and may not exceed 300 degrees Fahrenheit. Temperature control measures shall be instituted so that pile temperatures do not exceed 300 degrees Fahrenheit. Temperature monitoring and controls are not required for processed tires disposed of in permitted landfills.*
- R- **Processed tires will not be stored, disposed or consumed within the Friends Recycling facility. The only location which holds processed tires is the metal bin/dumpster and by default it is a metal box which contains any fire. Additionally, monitoring is not required since the WTPF is located within the site for Friends Recycling, which is an approved C & D facility.**
5. *Any residuals from waste tire processing must be managed so as to be contained on-site, and must be controlled and disposed of in a permitted solid waste management facility or properly recycled.*
- R- **Particles, dust or pieces resulting from the tire shearing operation shall be swept, collected and deposited in the same metal container as the processed tires after each session. The tire shearer will be located under a covered shed within the 3-wall enclosure. The covered area is surrounded by runoff diverters on 3 upstream sides to prevent rain runoff from getting in contact with the waste byproduct of the tire shearing operation. The diverters consist of 2"x2" square metal tubing which forms the base of the covered shed protecting the equipment.**

6. *The Department shall approve exceptions requested by an applicant as part of a waste tire processing facility permit application or modification to the preceding technical and operational standards if:*
- a. *No waste tires are stored on that site for more than one month; and*
 - b. *The Department, after consultation with the local fire authority, is satisfied that the site owner or operator has sufficient fire suppression equipment or materials on site to extinguish any potential waste tire fire within an acceptable length of time.*

R- The two prerequisites for exceptions are met by the proposed WTPF. However, no exceptions are being requested at this time.

6. *A copy of the emergency preparedness manual for the facility with a statement of the on site and off site locations where that manual will be maintained.*

R- An Emergency Preparedness Manual has been prepared for this facility, containing instructions as to where it should be kept on-site and off-site.

7. *A copy of the fire safety survey.*

R- On July 25, 2016, a fire safety inspection was made by the City of Ocala Fire Department. A letter to that effect was received from the fire inspector.

8. *A description of how 75% of the annual accumulation of waste tires will be removed for disposal or recycling.*

R- N/A. The OM requires that tires be processed as they arrive. The resulting pieces shall be deposited in the bin (dumpster/container) located adjacent to the processing area; when full, said bin shall be removed by the owner and the contents delivered to an approved facility for final disposal of the processed waste tires.

- C. *Completed closing plan for the facility as required by Rule 62-711.700(2) and (3), F.A.C.*

R- N/A (Repealed)

- D. *Attach proof of financial responsibility as requirement by Rule 62-711.500(3) OR a calculation showing that financial assurance documents, currently on file with the Department, are sufficient to assure closing of the waste tire site as well as any other solid waste management facility at that location.*

R- Due to the relative small nature of the cost of the proposed WTPF, when compared to the C&D facility, the provider of the financial assurance, Brown and Brown of Ocala, Florida, has determined that no additional instruments are needed and they intend to use the same financial instrument used for Friends Recycling C7D facility. Additionally, contact has been made with Ms. Susan Eldredge, DEP, to coordinate updates to cost estimated for closure financial responsibility.

- E. *A letter from the land owner (if different from applicant) authorizing use of the land as a waste tire processing facility.*

R- N/A. Land owner is same as applicant and operator of the WTPF.

- F. *If waste tires will be consumed or disposed of at the facility, attach a description of the other environmental permits that the applicant has for this use, including, permit number, date of issue, and name of issuing agency.*

R- N/A. Processed waste tires will be disposed off-site.

G. *The permit fee as required in Rule 62-4, F.A.C.*

R- **The required fee is \$1,250. A \$500 check was originally sent to the department for a Waste Tire Small Processing Facility. Please use that check as part of the fee for a standard Waste Tire Processing facility permit. The \$750 balance has been paid to the Department via electronic means.**

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**Attachment B
Calculations**

PART 1 - Processing Weights

Tire Weights source: various, including tire manufacturing companies.

Tire type distribution source: GDC, Friends Recycling, WastePro.

Tire Type	Tire Weight		Distribution	
Passenger Cars:	22	lbs / tire	60%	13.2
Light truck:	35	lbs / tire	25%	8.8
Semi-truck:	106	lbs / tire	15%	16.0
				<hr/> 38.0

Average weight per tire = 38.0 lbs / tire

No. Tires to be processed: 3,000 tires (per Friends Recycling)

Total Weight: $3,000 \times 38.0 = 114,000 \text{ lbs} \Rightarrow 57 \text{ tons}$

PART 2 - Processed Waste Tire Distribution

Waste Type	Weight		Distribution	
Whole Tire:	30	tons	60,000 lbs	1,579 tires
Processed Tire:	26.8	tons	53,600 lbs	1,410 tires
Residual Particles:	0.2	tons	400 lbs	11 tires
				<hr/>
57 tons			3,000 tires	

PART 3 - Space Requirements

Available space: $60 \text{ ft} \times 40 \text{ ft} = 2400 \text{ sq. ft.}$ (Existing 60'x40'x15' concrete wall enclosure)
 $12 \text{ ft} \times 20 \text{ ft} = 240 \text{ sq. ft.}$ (roof for equipment)
 $2400 - 240 = 2160 \text{ sq. ft.}$

Average tire dim: 20 inch diameter, occupies 20 in. X 20 in. = 2.8 sq.ft.

Columns: $2160 / 2.8 = 771 \text{ columns}$

Average Tire Thickness: 13 in. = 1.08 ft.

Storage Capacity: $15 \text{ ft} / 1.08 \text{ ft} = 13.8 \text{ tires / column}$

$13.8 \times 771 = 10,640 \text{ tires} > 3,000 \text{ tires stated in the permit} \Rightarrow \text{ok!}$

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**Attachment C
Emergency Preparedness Manual
(EPM)**

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**EMERGENCY
PREPAREDNESS
MANUAL
(EPM)**

July 5, 2016
(Revised August 24, 2016)
Ocala, Marion County, Florida
JN 16-03



GUERRA DEVELOPMENT CORPORATION

CIVIL AND STRUCTURAL ENGINEERING
2817 N.E. 3rd Street
Ocala, Florida 34470
Ph: (352) 629-8060
email: GDC@att.net

TABLE OF CONTENTS

- 1 GENERAL INFORMATION**
- 2 CONTACT INFORMATION IN CASE OF FIRE, FLOOD OR OTHER EMERGENCY**
- 3 EMERGENCY EQUIPMENT**
- 4 EMERGENCY PROCEDURES**
- 5 FOLLOW UP**

1 GENERAL INFORMATION

1.1 Applicability

This manual has been prepared on behalf of the Friends Recycling Waste Tires Processing Facility, operated by Friends Recycling LLC. The purpose of this manual is to meet the requirements set forth in Chapter 62-711.540 of the F.A.C.

The provisions included herein are intended to address specific items required by the F.A.C. as it relates to waste tires processing facilities and it is by no means a comprehensive manual intended to address any and all emergencies which may arise at the facility.

The use of safety and emergency practices established for the hosting facility, Friends Recycling C&D Facility, shall also be observed along with common sense and reasonable safe practices.

1.2 Manual Location

A current version of this Emergency Preparedness Manual (EPM), as prepared by Guerra Development Corporation and on file at the Orlando offices of the Florida Department of Environmental Protection, shall be kept at all times in a visible and readily accessible location at the following locations:

- Field office for Friends Recycling C & D Facility.
- Home of Mr. Nick Giumarelli, field operator of the waste tire processing facility.

1.3 EPM Updates

The EPM shall be updated annually or sooner if changes in operations and practices require it. Friends Recycling LLC shall contact Guerra Development Corporation at 352-629-8060 (or other approved entity) 45 days prior to updated report due date, to make the necessary field visits, interviews, to assess if the manual warrants an update.

2 CONTACT INFORMATION IN CASE OF FIRE, FLOOD OR OTHER EMERGENCY

Use a wireless cellular phone or the hard line telephone inside the field office.

2.1 General and all other Emergencies:

2.1.1 Dial 911

2.1.2 Nick Giumarelli – (352) 266-4853

2.2 Fire:

2.2.1 Dial 911

2.2.2 City of Ocala Fire Department – (352) 629-8513

2.2.2 Nick Giumarelli – (352) 266-4853

2.3 Notify FDEP

Once the above numbers have been called, immediately notify the FDEP of the emergency.

2.3.1 FDEP, Mr. Tom Lubozinski or his representative
Dial (407) 897-4300

2.4 Additional Contacts

- DEP Receptionist - Central District (407) 897-4100
- City of Ocala Police Department (352) 369-7070 Non-emergency
- Guerra Development Corp. (352) 629-8060
- St. Johns River WMD (386) 329-4500
- Gerald Lourenco, Operator (352) 266-9497

3 EMERGENCY EQUIPMENT

3.1 Cellular phones and hard line telephone in the field office

Use to notify the parties described above and coordinate emergency work.

3.2 Front end loader, located on site at the C&D facility

Utilize the front end loader to dump dirt on the fire, or to dig a fire-break trench around the fire to ensure that it does not spread. Additionally, the loader bucket can be used to carry water from the non-potable water well and try to douse the fire until emergency vehicles arrive.

3.3 Fire extinguishers

The fire extinguishers located in the field office for Friends Recycling can be used to control very small fires. Use CAUTION not to attempt to put out a large fire with a small fire extinguisher since its use by personnel who are not professional fire fighters may result in injury or death.

3.4 Note of CAUTION

Waste tires are expected to be located within the concrete block walls of the open air enclosure or the metal dumpster adjacent to it. Unless personnel is trapped or there is risk of injury or death, in general, Friends Recycling personnel should not attempt to put out fires other than very small fires, defined herein as fires involving less than 4 tires or a 6'x6' brush fire.

4 EMERGENCY PROCEDURES

4.1 Emergency procedures described herein are applicable to the waste tire processing facility only. The C&D facility has a separate set of approved procedures to deal with emergencies.

4.2 THERE SHALL BE NO OPERATION OF THE TIRE SHEARER if the tire shearer operator is the only person at the Friends Recycling facility.

4.3 In the event of personal injury during WTPF operations, dial 911 and render immediate assistance to the injured personnel.

- 4.4 In the event of fire, dial 911 for the fire department and attempt to control the small fire until emergency vehicles arrive. If the fire is only noticed after it has become a large fire (more than 4 tires), do not attempt to put it out with small fire extinguishers. Rather, attempt to douse it with water using the front end loader bucket or dumping dirt on it using the same front end loader.
- 4.5 If the fire is established and oily residue begins to flow, ensure that the containing berm is in good condition; otherwise, use the front end loader to cut a 1-2 foot deep ditch around the fire downstream from it to contain any overflow.

5 FOLLOW UP

- 5.1 Following an emergency, the operator shall comply with Chapter 62-711,540(1)(f), as follows:

“The operator of the site shall immediately notify the Department in the event of a fire or other emergency which poses an unanticipated threat to the public health or the environment. Within two weeks of any emergency, the operator of the site shall submit to the Department a written report on the emergency. This report shall describe the origins of the emergency, the actions that were taken to deal with the emergency, the results of the actions that were taken, and an analysis of the success or failure of the actions.”

**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

Operated By

FRIENDS RECYCLING, L.L.C.

**Attachment D
SUPPORTING DOCUMENTS**



OCALA FIRE / RESCUE

Ocala-Marion County



FIRE INSPECTION REPORT

BUSINESS Friends Recycling-Waste Tire Processing DATE 7/25/16

ADDRESS 2350 N.W. 27th Ave.

MANAGER Nick Givmarcelli PHONE (352) 266-4813

OCCUPANCY Recycling BUSINESS/PERMIT 32859

(☒) ROUTINE () NEW CONSTRUCTION () CERTIFICATE OF OCCUPANCY () CHANGE OF OCCUPANCY

<input checked="" type="checkbox"/> FIRE EXTINGUISHER	<input checked="" type="checkbox"/> SPRINKLER SYSTEM	<input checked="" type="checkbox"/> SMOKE DETECTORS
<input checked="" type="checkbox"/> EMERGENCY LIGHTING	<input checked="" type="checkbox"/> EXITS	<input checked="" type="checkbox"/> FIRE DRILL
<input checked="" type="checkbox"/> STORAGE	<input checked="" type="checkbox"/> HOOD	<input checked="" type="checkbox"/> EMERGENCY PLAN
<input checked="" type="checkbox"/> FIRE ALARM	<input checked="" type="checkbox"/> EXTINGUISHING SYSTEM	<input checked="" type="checkbox"/> ADDRESS
<input checked="" type="checkbox"/> EXIT SIGNS	<input checked="" type="checkbox"/> APPLIANCES	() OTHER

VIOLATIONS:

Portable fire extinguishers provided, tagged,
certified + mounted.
Area around processing facility clear of
storage + combustible debris.
Egress routes provided
Address provided.

The facility was found satisfactory
for routine fire inspection

(☒) PASSED.

() A RE-INSPECTION OF UNCORRECTED ITEMS WILL BE CONDUCTED ON OR
AFTER _____

I, [Signature], HAVE READ AND UNDERSTAND THE ABOVE.

INSPECTOR [Signature] Pto 246



June 21, 2016

Friends Recycling LLC
2350 NW 27th Ave
Ocala, FL
34475

RE: Tire Removal and Cleanup Service

Nick,

It was a pleasure talking to you. As per our conversation, in the event of a cleanup Waste Pro will remove all tires for \$2.00 each and dispose of them at a legal permitted facility. Our tire permit number: 1237

Please feel confident that you will be provided with the best service available in the industry. We are looking forward to providing exceptional service to you. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "F. Kraft", is written over the word "Sincerely,".

Frank A. Kraft
Sales Manager
352-400-0043

**LIST OF APPROVED FACILITIES FOR ULTIMATE DISPOSAL
(Of Processed Tires From
Friends Recycling Waste Tires Processing Facility)**

Marion County Baseline Landfill

Mike Sims, *Director*
5601 SE 66th St.
Ocala, FL 34480
Phone: 352-671-8465
Fax: 352-671-8491

Global Tire Recycling, Inc.




1201 Industrial Dr.
Wildwood, FL 34785
Phone: 352-330-2213
Fax: 352-330-2214

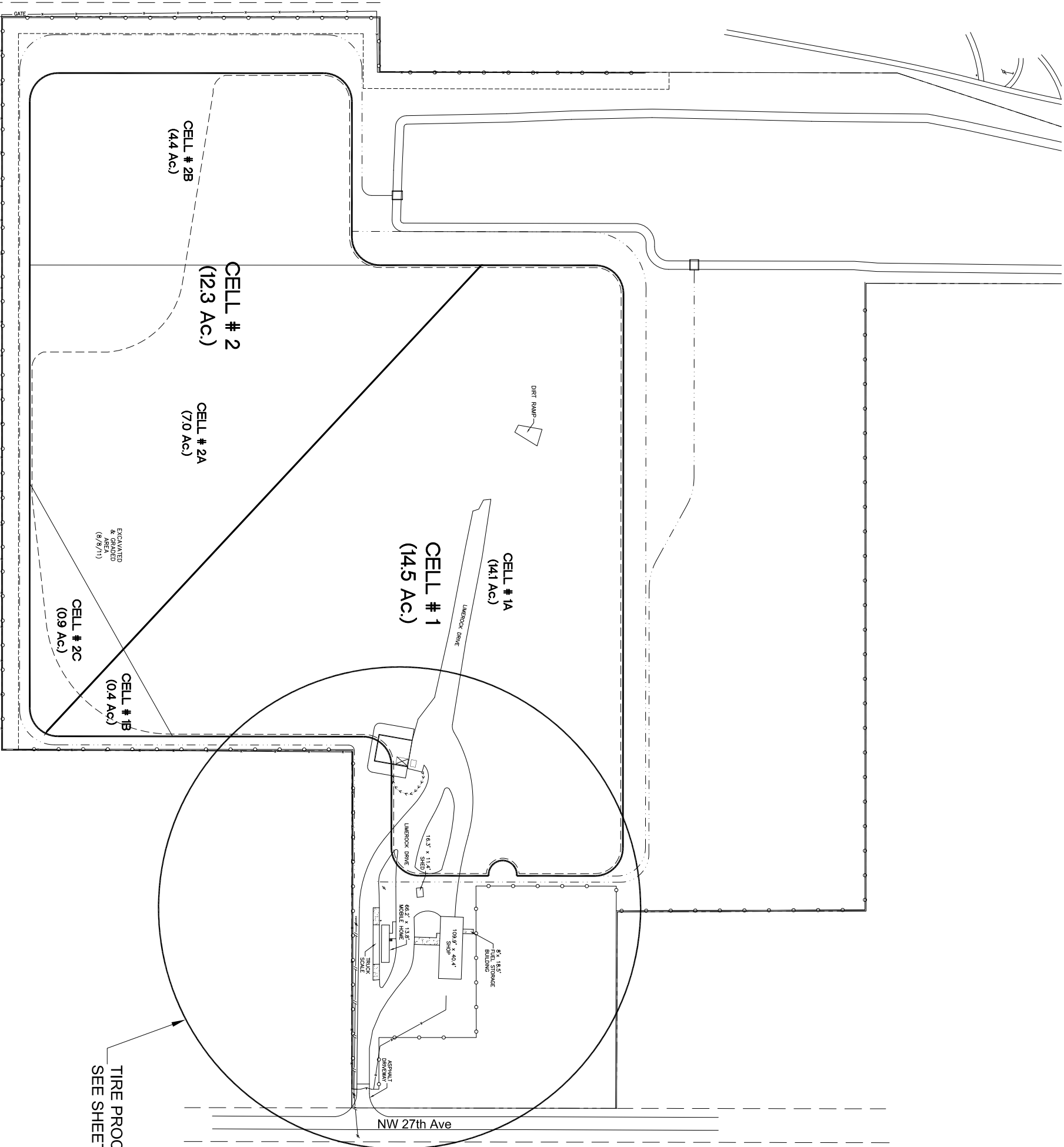
**FRIENDS RECYCLING
WASTE TIRE PROCESSING FACILITY**

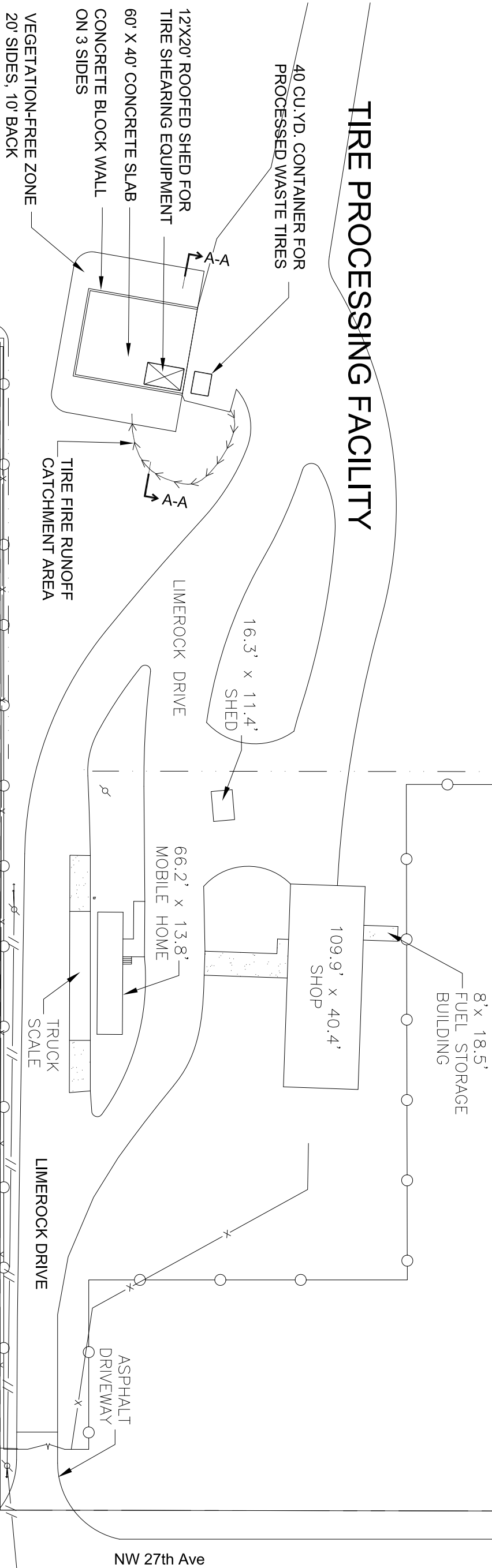
Operated By

FRIENDS RECYCLING, L.L.C.

**Attachment E
DRAWINGS**



REVISIONS			Names	Date	SEAL: 	ENGINEER OF RECORD: 	Guerra Development Corp. Consulting Engineering 2817 NE 3rd St. - Ocala, Florida 34470 (352) 629-8060 Phone State of Florida Certificate of Authorization No. 4954
Date	By	Description					
		Drawn By	AMM	23-AUG-16			
		Checked By	JCG				
		Designed By	JCG				
		Approved By	JCG				
Date: _____							
							
CLIENT: FRIENDS RECYCLING, LLC							
SHEET TITLE: TIRE PROCESSING FACILITY - OVERALL MAP							
PROJECT NAME: FRIENDS RECYCLING							
JOB NOS: 1243							
SHEET NO. 1 of 2							

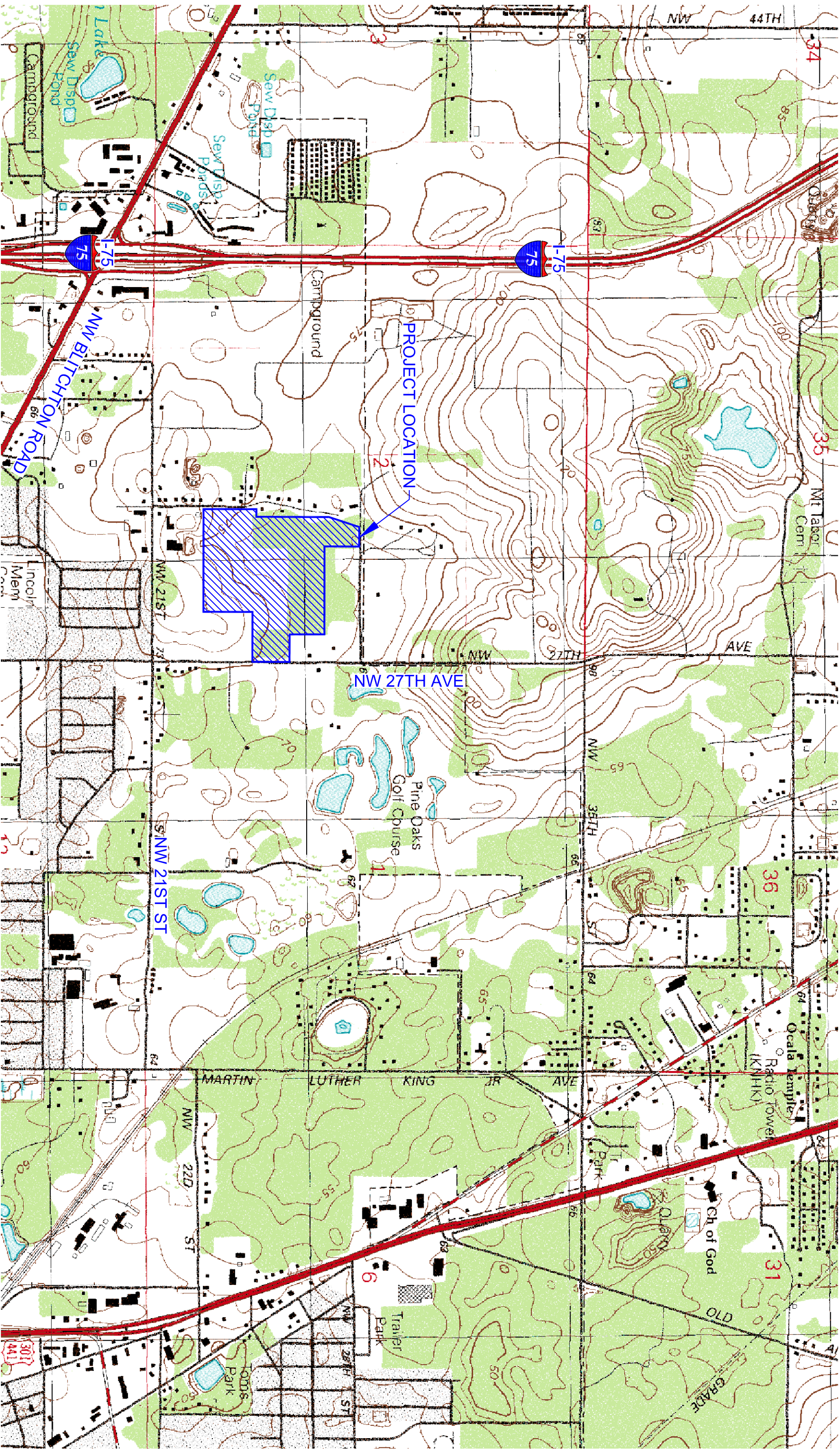




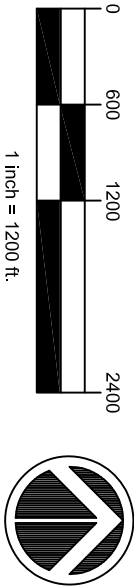
SECTION A-A WASTE TIRE PROCESSING FACILITY

NO SCALE

REVIEWS		SEAL:	ENGINEER OF RECORD:	
Date	By	Description	Names	Date
			AMM	23AUG-16
		Checked By	JCS	
		Designed By	JCS	
		Approved By	JCS	
				
			Guerra Development Corp. Consulting Engineering 2817 NE 3rd St. - Ocala, Florida 34470 (352) 828-0060 Phone State of Florida Certificate of Authorization No. 4854	
HORIZ. SCALE: 1" = 60' VERT. SCALE: N/A 0 30' 120'				CLIENT: FRIENDS RECYCLING, LLC
		SHEET TITLE: TIRE PROCESSING FACILITY - LAYOUT MAP		GDC DRAWING NAME 12403_TPLAN
		PROJECT NAME: FRIENDS RECYCLING	JOB NO.: 12403	SHEET NO.: 2 of 2



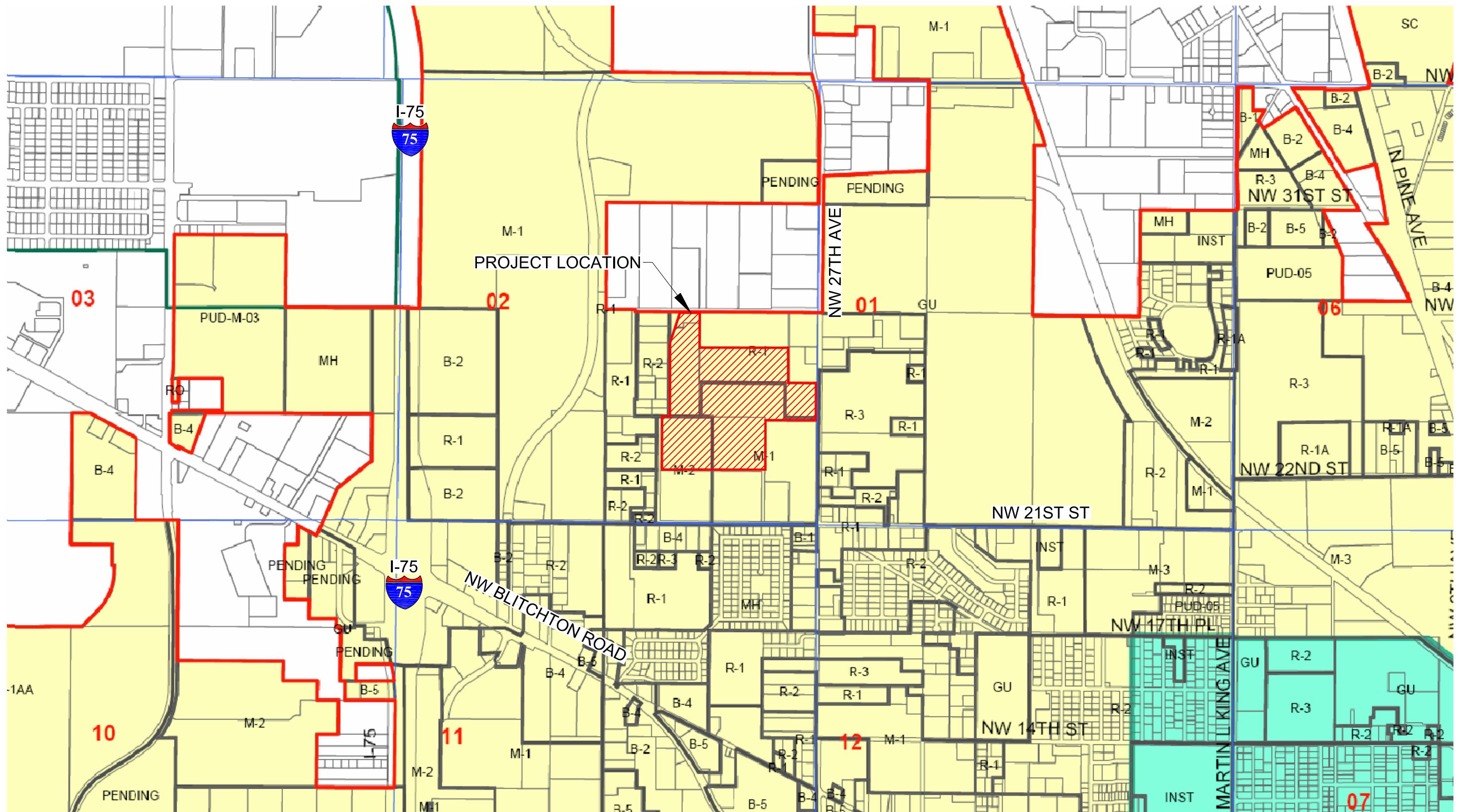
USGS MAP: PG 1 OF 1



USGS MAP
Friends Recycling, LLC

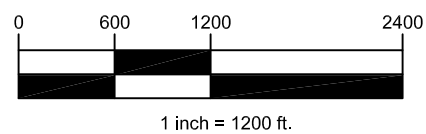
Guerra Development Corporation
Consulting Engineering

June 29, 2016



LEGEND ON PAGE 2 OF 2

LAND USE MAP: PG 1 OF 2



Land Use Map Friends Recycling, LLC



Guerra Development Corporation
Consulting Engineering

June 29, 2016

Legend

- URBAN SERVICE AREA
- SECTIONS
- PARCELS
- ZONING

- A-1 - Agricultural
- B-1 - Neighborhood Business
- B-1A - Limited Neighborhood Business
- B-2 - Community Business
- B-2A - Limited Community Business
- B-3 - Central Business
- B-3A - CRA Commercial Corridor
- B-3B - CRA Mixed Use 1
- B-3C - CRA Mixed Use 2

- B-4 - General Business
- B-5 - Wholesale Business
- GU - Governmental Use
- INST - Institutional
- M-1 - Light Industrial
- M-2 - Medium Industrial
- M-3 - Heavy Industrial
- MH - Mobile Home Park
- O-1 - Office

- O-H - Office Historic
- OP - Office Park
- PUD-0 - Planned Unit Development
- PUD-01 - Planned Unit Development-1 Unit
- PUD-02 - Planned Unit Development-2 Units
- PUD-03 - Planned Unit Development-3 Units
- PUD-04 - Planned Unit Development-4 Units
- PUD-05 - Planned Unit Development-5 Units
- PUD-06 - Planned Unit Development-6 Units

- PUD-07 - Planned Unit Development-7 Units
- PUD-08 - Planned Unit Development-8 Units
- PUD-09 - Planned Unit Development-9 Units
- PUD-10 - Planned Unit Development-10 Units
- PUD-11 - Planned Unit Development-11 Units
- PUD-12 - Planned Unit Development-12 Units
- PUD-13 - Planned Unit Development-13 Units
- PUD-14 - Planned Unit Development-14 Units
- PUD-15 - Planned Unit Development-15 Units

- PUD-16 - Planned Unit Development-16 Units
- PUD-M-08 - Planned Unit Development-Mixed-8 Units
- PUD-RO - Planned Unit Development-Office
- R-1 - Single Family Residential
- R-1A - Single Family Residential
- R-1AA - Single Family Residential
- R-2 - Two-Family Residential
- R-3 - Multiple-Family Residential
- RBH-1 - Residential Business Historic-1

- RBH-2 - Residential Business Historic-2
- RBH-3 - Residential Business Historic-3
- RO - Residential Office
- RZL - Residential Zero Lot Line
- SC-1 - Neighborhood Shopping Center (Void)
- SC-2 - Community Shopping Center (Void)
- SC-3 - Regional Shopping Center (Void)
- SC - Shopping Center
- Ordinance Pending

- HISTORIC DISTRICTS
- COMMUNITY REDEVELOPMENT AREA
- TCEA URBAN REDEVELOPMENT AREA
- CITY LIMITS





Florida Department of Environmental Protection

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

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: 07/26/13

I. GENERAL INFORMATION:

Facility Name: Friends Recycling, LLC WACS ID: 21012
Permit Application or Consent Order No.: 0019600-008-SO-24 Expiration Date: 06/19/2023
Facility Address: 2350 NW 27th Avenue, Ocala, Florida 34475
Permittee or Owner/Operator: Friends Recycling, LLC
Mailing Address: 2350 NW 27th Avenue, Ocala, Florida 34475

Latitude: 29° 12' 42.02" Longitude: 82° 10' 07.01"
Coordinate Method: Digital Aerial Photograph Datum: NAD83
Collected by: Juan C Guerra Company/Affiliation: Guerra Development Corp.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Cell 1A	14.1	1980	30 yrs	6 yrs	n/a	n/a
Cell 1B	0.4	2005	5 yrs	2 yrs	n/a	n/a
Cell 2A	7.0	2005	6 yrs	8 yrs	n/a	n/a
Cell 2B	4.4	2005	6 yrs	11 yrs	n/a	n/a
Cell 2C	0.9	2005	6 yrs	11 yrs	n/a	n/a

Total disposal unit acreage included in this estimate: Closure: 26.8 Long-Term Care: 26.8

Facility type: ☐ Class I ☐ Class III ☒ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☒ Insurance Certificate ☐ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

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

South District
2295 Victoria Ave., Ste. 384
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☒ (a) Inflation Factor Adjustment

☐ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflatory by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

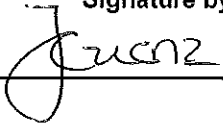
This adjustment is based on the Department approved closing cost estimate dated:		2/28/14
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Closing Cost Estimate:
\$1,176,608.68	× 1.014	= \$1,193,081.20

This adjustment is based on the Department approved long-term care cost estimate dated:		2/28/14
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$68,554.63	× 1.014	= \$69,514.39
Number of Years of Long Term Care Remaining:	×	5
Inflation Adjusted Long-Term Care Cost Estimate:	=	\$347,571.97

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)



Signature

2817 NE 3rd Street

Address

Juan C Guerra, P.E., President

Name & Title

Ocala, Florida 34470

City, State, Zip Code

August 24, 2016

Date

gdc@guerracorp.net

E-Mail Address

(352) 629-8060

Telephone Number

IV. ESTIMATED CLOSING COST (check what applies)☒ **Recalculated Cost Estimate**☐ **New Facility Cost Estimate**

Notes: 1. Cost estimates for the time period when the extent and manner of landfill operation makes closing most exp

2. Cost estimate must be certified by a professional engineer.

3. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

4. In some cases, a price quote in support of individual item estimates may be required.

Description	Unit	Number of Units	Cost / Unit	Total Cost
1. Proposed Monitoring Wells (Do not include wells already in existence.)				
	EA			
Subtotal Proposed Monitoring Wells:				
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY			
Placement and Spreading	CY			
Compaction	CY			
Off-Site Material	CY			
Delivery	CY			
Subtotal Slope and Fill:				
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY			
Synthetics - 40 mil	SY			
Synthetics - GCL	SY			
Synthetics - Geonet	SY			
Synthetics - Other (explain)				
Subtotal Cover Material:				
4. Top Soil Cover:				
Off-Site Material	CY	60,466	\$2.29	\$138,346.21
Delivery	CY	86,356	\$1.98	\$171,243.95
Spread	CY	86,356	\$0.76	\$65,803.27
Subtotal Top Soil Cover:				\$375,393.43
5. Vegetative Layer				
Sodding	SY	101,958	\$2.03	\$207,382.57
Hydroseeding	AC	12	\$4,169.70	\$50,036.40
Fertilizer	AC	12	\$1,220.40	\$14,644.80
Mulch	AC			
Other (explain)				
Subtotal Vegetative Layer:				\$272,063.77
6. Stormwater Control System:				
Earthwork	CY			
Grading	SY			
Piping	LF	2,020	\$26.95	\$54,439.00
Ditches	LF	4,470	\$8.39	\$37,503.30
Berms	LF			
Control Structures	EA	21	\$1,525.50	\$32,035.50
Other (explain)				
Subtotal Stormwater Control System:				\$123,977.80

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	_____	_____	_____
Pipe and Fittings	LF	_____	_____	_____
Monitoring Probes	EA	_____	_____	_____
NSPS/Title V requirements	LS	1	_____	_____
Subtotal Passive Gas Control:				_____
8. Active Gas Extraction Control:				
Traps	EA	_____	_____	_____
Sumps	EA	_____	_____	_____
Flare Assembly	EA	_____	_____	_____
Flame Arrestor	EA	_____	_____	_____
Mist Eliminator	EA	_____	_____	_____
Flow Meter	EA	_____	_____	_____
Blowers	EA	_____	_____	_____
Collection System	LF	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Active Gas Extraction Control:				_____
9. Security System:				
Fencing	LF	400	\$12.71	\$5,084.80
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System:				\$5,084.80
10. Engineering:				
Closure Plan Report	LS	1	\$7,627.50	\$7,627.50
Certified Engineering Drawings	LS	1	\$8,644.50	\$8,644.50
NSPS/Title V Air Permit	LS	1	\$0.00	_____
Final Survey	LS	1	\$6,610.50	\$6,610.50
Certification of Closure	LS	1	\$2,542.50	\$2,542.50
Other (explain) _____	_____	_____	_____	_____
Subtotal Engineering:				\$25,425.00

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	16	\$152.33	8	\$127.33	\$3,457.76
On-Site Engineer	40	\$122.33	4	\$122.33	\$5,369.76
Office Engineer	24	\$122.33	4	\$122.33	\$3,417.12
On-Site Technician	16	\$76.25	16	\$76.25	\$2,440.80
Other (explain) _____	_____	_____	_____	_____	_____

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	\$8,644.50	\$8,644.50
Subtotal Professional Services:				\$23,329.94

Subtotal of 1-11 Above: \$825,274.74

12. Contingency 10 % of Subtotal of 1-11 Above \$82,527.47

Subtotal Contingency: \$82,527.47

Estimated Closing Cost Subtotal: \$907,802.21

Description	Total Cost
13. Site Specific Costs	
Mobilization	<u>\$12,204.00</u>
Waste Tire Facility	<u>\$6,000.00</u>
Materials Recovery Facility	<u></u>
Special Wastes	<u></u>
Leachate Management System Modification	<u></u>
Other (explain) <u>Waste Relocation</u>	<u>\$233,302.83</u>
Subtotal Site Specific Costs:	<u>\$251,506.83</u>

TOTAL ESTIMATED CLOSING COSTS (\$): \$1,159,309.04

V. ANNUAL COST FOR LONG-TERM CARE

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.

(Check Term Length) ☒ 5 Years ☐ 20 Years ☐ 30 Years ☐ Other, ____ Years

Notes: 1. Cost estimates must be certified by a professional engineer.

2. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

3. In some cases, a price quote in support of individual item estimates may be required.

All items must be addressed. Attach a detailed explanation for all entries left blank.

Description	Sampling Frequency (Events / Year)	Number of Wells	(Cost / Well) / Event	Annual Cost
1. Groundwater Monitoring [62-701.510(6), and (8)(a)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	8	\$406.80	\$6,508.80
Annually	1	_____	_____	_____
Subtotal Groundwater Monitoring:				\$6,508.80
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Surface Water Monitoring:				_____
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	_____	_____	_____
Quarterly	4	4	\$406.80	\$6,508.80
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Gas Monitoring:				\$6,508.80
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)(c)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Leachate Monitoring:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	_____	_____	_____
Sumps, Traps	EA	_____	_____	_____
Lift Stations	EA	_____	_____	_____
Cleaning	LS	1	_____	_____
Tanks	EA	_____	_____	_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	_____	_____	_____
Sludge Removal	CY	_____	_____	_____
<u>Aeration Systems</u>				
Floating Aerators	EA	_____	_____	_____
Spray Aerators	EA	_____	_____	_____
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	_____	_____	_____
			Subtotal Leachate Collection / Treatment Systems Maintenance:	_____
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF	8	\$152.55	\$1,220.40
Replacement	EA	0.5	\$2,542.50	\$1,271.25
Abandonment	EA	0.5	\$864.45	\$432.23
			Subtotal Groundwater Monitoring Well Maintenance:	\$2,923.88
7. Gas System Maintenance				
Piping, Vents	LF	220	\$20.34	\$4,474.80
Blowers	EA	_____	_____	_____
Flaring Units	EA	_____	_____	_____
Meters, Valves	EA	_____	_____	_____
Compressors	EA	_____	_____	_____
Flame Arrestors	EA	_____	_____	_____
Operation	LS	1	\$1,525.50	\$1,525.50
			Subtotal Gas System Maintenance:	\$6,000.30
8. Landscape Maintenance				
Mowing	AC	35	\$254.25	\$8,898.75
Fertilizer	AC	20	\$86.44	\$1,728.90
			Subtotal Landscape Maintenance:	\$10,627.65
9. Erosion Control and Cover Maintenance				
Sodding	SY	1,000	\$1.98	\$1,983.00
Regrading	AC	5	\$1,525.50	\$7,627.50
Liner Repair	SY	_____	_____	_____
Clay	CY	400	\$6.10	\$2,440.80
			Subtotal Erosion Control and Cover Maintenance:	\$12,051.30
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	1	\$7,627.50	\$7,627.50
			Subtotal Storm Water Management System Maintenance:	\$7,627.50
11. Security System Maintenance				
Fences	LS	1	\$2,542.50	\$2,542.50
Gate(s)	EA	1	\$101.70	\$101.70
Sign(s)	EA	1	\$101.70	\$101.70
			Subtotal Security System Maintenance:	\$2,745.90

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	<u>1</u>	<u>\$508.65</u>	<u>\$508.65</u>
Subtotal Utilities:				<u>\$508.65</u>

13. Leachate Collection/Treatment Systems Operation
Operation

P.E. Supervisor	HR	<u> </u>	<u> </u>	<u> </u>
On-Site Engineer	HR	<u> </u>	<u> </u>	<u> </u>
Office Engineer	HR	<u> </u>	<u> </u>	<u> </u>
OnSite Technician	HR	<u> </u>	<u> </u>	<u> </u>
Materials	LS	<u>1</u>	<u> </u>	<u> </u>

Subtotal Leachate Collection/Treatment Systems Operation:

14. Administrative

P.E. Supervisor	HR	<u>6</u>	<u>\$152.55</u>	<u>\$915.30</u>
On-Site Engineer	HR	<u>10</u>	<u>\$122.04</u>	<u>\$1,220.40</u>
Office Engineer	HR	<u>20</u>	<u>\$101.70</u>	<u>\$2,034.00</u>
OnSite Technician	HR	<u>20</u>	<u>\$86.44</u>	<u>\$1,728.90</u>
Other <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Subtotal Administrative: \$5,898.60

Subtotal of 1-14 Above: \$61,401.38

15. Contingency	<u>10</u>	% of Subtotal of 1-14 Above	<u>\$6,140.14</u>
Subtotal Contingency:			<u>\$6,140.14</u>

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Subtotal Site Specific Costs:				<u> </u>

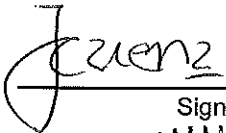
ANNUAL LONG-TERM CARE COST (\$ / YEAR): \$67,541.51

Number of Years of Long-Term Care: 5

TOTAL LONG-TERM CARE COST (\$): \$337,707.56

VI. CERTIFICATION BY ENGINEER

This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and/or long-term care of the facility and comply with the requirements of Rule 62-701.630 F.A.C. and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Cost Estimates shall be submitted to the Department annually, revised or adjusted as required by Rule 62-701.630(4), F.A.C.

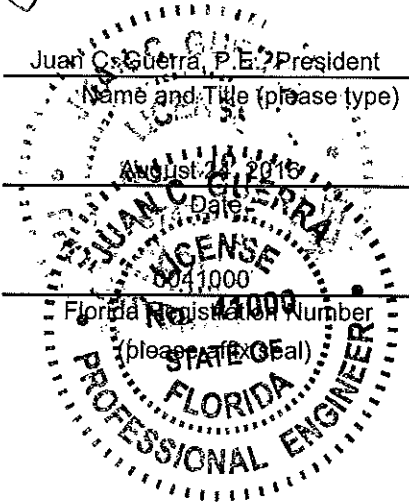


Signature

Juan C. Guerra, P.E. President
Name and Title (please type)

August 28, 2016
Date

0041000
Florida Registration Number
(please affix Seal)



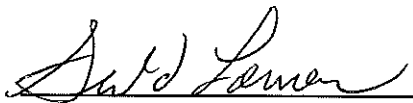
2817 NE 3rd Street
Mailing Address

Ocala, Florida, 34470
City, State, Zip Code

gdc@guerracorp.net
E-Mail address (if available)

(352) 629-8060
Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR



Signature of Applicant

Gerald Lourenco, Operating Manager
Name and Title (please type)

aws97@aol.com
E-Mail address (if available)

2350 NW 27th Avenue
Mailing Address

Ocala, Florida 34475
City, State, Zip Code

(352) 266-9497
Telephone Number