



Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

March 5, 2018

Transmitted via e-mail only to: Ken.Wheeler@hardeecounty.net

Mr. Ken Wheeler
Hardee County Solid Waste Management
685 Airport Road
Wauchula, FL 33873

RE: WACS Facility No: 40612
Hardee County Landfill
685 Airport Road
Wauchula, FL 33873

Dear Mr. Wheeler:

This letter is to acknowledge receipt of the subject facility's updated recalculated Closure Cost and Annual Long-Term Care Cost estimates for the facility. The submittal was dated February 26, 2018 and received on February 26, 2018. This cost estimate was prepared by Jones, Edmunds & Associates, Inc. for Hardee County Solid Waste Management. The recalculated estimates were submitted to comply with Rule 62-701.630(4)a, Florida Administrative Code (F.A.C.). The following cost estimates received on February 26, 2018 are **APPROVED for 2018:**

Closing –	\$3,325,948
Annual Long-term Care -	\$ 189,260
Total Long-term care -	\$5,677,800 for 30 years.

The next annual cost estimate is due between July 1 and September 1, 2019.

A copy of these estimates will be forwarded to the Financial Coordinator, FDEP, 2600 Blair Stone Road, MS 4548, Tallahassee, Florida, 32399-2400. Please work with Tor Bejnar at (850) 245-8743 (Tor.Bejnar@dep.state.fl.us) directly to assess the facility's compliance with the funding mechanism requirements of Rule 62-701.630, F.A.C. If you have any questions, you may contact me at (850) 245-8760.

Mr. Ken Wheeler
March 5, 2018
Page 2 of 2

Sincerely,



Henry Freedenberg PE, PG

Solid Waste Section

Florida Department of Environmental Protection

2600 Blair Stone Road, MS 4565

Tallahassee, Florida 32399

henry.freedenberg@dep.state.fl.us

850-245-8760

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**FINANCIAL ASSURANCE CLOSURE AND
LONG-TERM CARE COST ESTIMATE
HARDEE COUNTY LANDFILL**

**PERMIT NO.: 38414-016-SO/01
FACILITY ID NO.: 40612**

Submitted to:

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT**

2600 Blair Stone Road Stop #4500
Tallahassee, Florida 32399-2400

Prepared for:

HARDEE COUNTY SOLID WASTE MANAGEMENT

685 Airport Road
Wauchula, FL 33873

Prepared by:

JONES EDMUNDS & ASSOCIATES, INC.

730 NE Waldo Road
Gainesville, Florida 32641

Certificate of Authorization # 1841

February 2018

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1.0 OVERVIEW

1.1 INTRODUCTION

This document presents the estimated closure and long-term care costs for the Hardee County Landfill as required by Rules 62-701.630, FAC and 62-701.730, FAC. Exhibit R-1 provides Financial Assurance Cost Estimate Form 62-701.900(28) showing the detailed cost estimates for closure and long-term care of the Hardee County Class I Landfill. Exhibit R-2 provides backup for costs. The following describes how the costs for the estimate of closure and long-term care were obtained.

1.2 ASSUMPTIONS

The detailed closure and long-term care cost estimates are based on the following assumptions:

- The unit costs provided with each item are costs from recent bids, FDOT Pay Item 12-Month Moving Averages, and RS Means Heavy Construction Cost Data (www.rsmeansonline.com).
- Item costs that were estimated using the RS Means Heavy Construction Cost Data (www.rsmeansonline.com) are for Tampa, Florida, which is the closest location available in the online edition and is representative of costs for Wauchula, Florida.

Table 1.1 defines the abbreviations used in the cost estimate.

Table 1.1 List of Abbreviations			
AC	Acre	KGAL	1,000 Gallons
CF	Cubic foot	LF	Linear foot
CY	Cubic yard	LS	Lump sum
DY	Day	MSF	1,000 square feet
EA	Each	SF	Square foot
GAL	Gallons	SY	Square yard
HR	Hour	YR	Year

2.0 EXPLANATION OF CLOSURE COST ESTIMATES

This section presents the basis of the work and assumptions to calculate the closure cost estimates. The closure area is based on the most recent closure design dated April 2013 and has a 3D surface area of approximately 15 acres.

Table 2.1 Calculated Soil Volume for Landfill Closure						
Thickness of Soil Layer (feet)	3D Surface area (sf)	Loss Factor	3D Surface Area plus Loss Factor (sf)	3D Surface Area plus Loss Factor (sy)	Total Volume of Soil (cf)	Total Volume of Soil (cy)
0.5	657,300	1.2	788,760	87,640	394,380	14,607
1	657,300	1.2	788,760	87,640	788,760	29,213
1.5	657,300	1.2	788,760	87,640	1,183,140	43,820
2	657,300	1.2	788,760	87,640	1,577,520	58,427
Note: Quantities in FACE spreadsheet are rounded to reflect appropriate cost estimate degree of accuracy.						

The final cover will consist of 12 inches of intermediate bedding layer over the Class I waste, a 40-mil textured geomembrane with an incorporated drainage geocomposite, 18 inches of soil final cover, and 6 inches of vegetative cover.

A soil loss factor is used to adjust for a reduction in volume due to soil compaction. The soil loss factor is included in the quantity calculation because quantities of soil purchased will be greater than the quantity of soil in-place after compaction.

2.1 ITEM NO. 1 MONITORING WELLS

No additional monitoring wells are required at the time of closure. As part of the operation of the landfill, the permit-required wells are installed.

2.2 ITEM NO. 2 SLOPE AND FILL

This item assumes grading and surface preparation will be required throughout the Phase II closure and 1 foot of offsite material will be spread over the closure surface and compacted to serve as intermediate cover. The cost estimate is based on the estimates shown below:

Closure Item 2 Description	Cost / Unit	Source or Reference
Excavation:	\$0.75/SY	FDOT item 162-1-11 Prepared Soil Layer, Finish Soil 6"
Placement and Spreading:	\$2.05/ CY	RS Means Item 312323170020
Compaction:	\$0.61/CY	RS Means Item 312323235040
Off-Site Material:	\$1.50/CY	Quote from Smoak Groves
Delivery:	\$10.56/CY	RS Means Item 312323201100

2.3 ITEM NO. 3 COVER MATERIAL (BARRIER LAYER)

The final cover of the Class I landfill will consist of a layer of textured geomembrane and an overlying geocomposite. The cost estimate is based on the estimates shown below:

Closure Item 3 Description	Cost / Unit	Source or Reference
Geomembrane:	\$3.89/SY	Solmax Quote
Geocomposite:	\$5.31/SY	Agru Quote

2.4 ITEM NO. 4 TOP SOIL COVER

The quantity for this item is based on 18 inches of final cover soil plus 6 inches of vegetative soil over the landfill closure area (including soil loss factor). The cost estimate figures are based on the following:

Closure Item 4 Description	Cost / Unit	Source or Reference
Off-Site Material:	\$ 1.50/CY	Quote from Smoak Groves
Delivery	\$10.56/ CY	RS Means Item 312323201100
Placement and Spreading:	\$2.05/ CY	RS Means Item 312323170020

2.5 ITEM NO. 5 VEGETATIVE LAYER

It is assumed the entire landfill surface area will be sodded. This includes the 3D surface area and a 10% loss factor

Closure Item 5 Description	Cost / Unit	Source or Reference
Sodding:	\$2.63/SY	FDOT Item 0570 1 2 Performance Turf, Sod

2.6 ITEM NO. 6 STORMWATER CONTROL SYSTEM

The stormwater system consists of 1,080 feet of downchute piping and 4 outlet structures.

Closure Item 6 Description	Cost / Unit	Source or Reference
Piping:	\$37.18/LF	FDOT item 0440-1-20
Control Structures:	\$2,300/EA	FDOT item 0430611129

2.7 ITEM NO. 7 GAS CONTROLS: PASSIVE

This item includes the installation of a passive gas extraction system. The system consists of 15 vertical wells with an average depth of 50 feet.

Closure Item 7 Description	Cost / Unit	Source or Reference
Wells:	\$95,500/LS	Quote from CEC

2.8 ITEM NO. 8 GAS CONTROLS: ACTIVE EXTRACTION

It is assumed that a passive gas system will be constructed at the time of closure.

2.9 ITEM NO. 9 SECURITY SYSTEM

The existing fencing at the property is considered sufficient for access control to the Landfill.

2.10 ITEM NO. 10 ENGINEERING

Engineering costs for design and permitting were estimated based on the Jones Edmunds Fee Estimate in attachment R.2 and experience with previous landfill closure projects in Florida.

2.11 ITEM NO. 11 PROFESSIONAL SERVICES

This item is intended to consist of the project management for bidding, construction, and construction completion certification phases of the closing project and using Jones Edmunds standard rates.

Construction quality assurance and quality control (CQA/CQC) responsibilities belong to the general contractor and geomembrane installation subcontractor. Costs shown in Quality Assurance Testing are the third-party CQA activities, which are assumed to be administered by the consulting engineer. These costs were estimated based on the Jones Edmunds Fee Estimate in attachment R.2 and experience with previous landfill closure projects in Florida.

2.12 ITEM NO. 12 CONTINGENCY ITEM

A contingency amount of 5% of the total construction cost is given here to cover unforeseen costs that may be incurred during construction.

2.13 ITEM NO. 13 SITE SPECIFIC COSTS ITEM

Mobilization/Demobilization - This item is 5% of the subtotal of Item Nos. 1 through 9 and is based on experience with previous closure construction projects. Bonds and insurance will add 2% to the subtotal of the closing costs.

Waste Tire Facility – This item is for the disposal of the facilities waste tires and assumes a maximum of 1,500 tires disposed of at the Polk County Landfill.

Special Wastes – This item is for the final disposal of an assumed 10 tons of white goods.

Leachate Annual Disposal – This item is for one year of disposal of the facility's leachate. Annual leachate disposal costs are calculated in the facility's long term care cost estimates. (Section 3.5)

3.0 LONG-TERM CARE EXPLANATION OF COST ESTIMATES

These costs are included to provide for the long-term care of the Class I Landfill. The lined class I landfill is 24.8 acres and includes the closed Phase I and active Phase II.

3.1 ITEM NO. 1 – GROUNDWATER MONITORING

The groundwater monitoring system consists of 8 water quality monitoring wells that must be sampled semiannually. Based on the current County contract for the annual sampling, laboratory analyses, and biannual reporting, the cost breakdown is as follows:

Description	Cost/Unit	Source or Reference
Semiannual well sampling	\$9,846/LS/event	County Contract

3.2 ITEM NO. 2 – SURFACE WATER MONITORING

The surface water monitoring system consists of 1 water quality sampling point that must be sampled semiannually. Based on the current County contract for the annual sampling, laboratory analyses, and reporting, the cost breakdown is as follows:

Description	Cost/Unit	Source or Reference
Semiannual sampling	\$825/LS/event	County Contract

3.3 ITEM NO. 3 – GAS MONITORING

The Class I Landfill has 17 perimeter gas monitoring probes and several ambient gas monitoring locations. These probes and ambient locations will continue to be monitored quarterly.

Description	Cost/Unit	Source or Reference
Gas probe monitoring	\$910/LS/event	County Contract

3.4 ITEM NO. 4 – LEACHATE MONITORING

Leachate monitoring is not required at the Hardee County Landfill by FDEP permit. However, the County may have to sample leachate annually in order to dispose of leachate at a wastewater treatment plant.

Description	Cost/Unit	Source or Reference
Leachate testing	\$425/event	County Contract

3.5 ITEM NO. 5 – LEACHATE COLLECTION/TREATMENT SYSTEMS

Maintenance of the leachate collection and treatment system includes jet cleaning the collection pipes every 5-year permit cycle.

Maintenance of the two leachate storage tanks includes cleaning the interior, painting, and repairing the exterior every 3 years. The leachate disposal costs include off-site hauling and disposal to the City of Wauchula wastewater treatment plant based on the current contract with a hauling quote from JLC Farms. The amount of leachate is based on the average annual leachate flow for the last ten years and is approximately 4,200,000 gal/year.

Description	Cost/Unit	Source or Reference
Maintenance – collection pipes	\$37,096/LS	Quote from Florida Jet Clean
Maintenance – tanks	\$19,000/LS	Quote from Florida Jet Clean
Disposal	\$8.60/KGAL	Current disposal contract with City of Wauchula WWTP.
	\$17.50/KGAL	Hauling Quote from JLC Farms

3.6 ITEM NO. 6 – MAINTENANCE OF GROUNDWATER MONITORING WELLS

The cost for this item is based on replacing one groundwater well every 5 years. This includes abandonment and drilling of new well.

Description	Cost/Unit	Source or Reference
Replacement	\$1,927/EA	Huss Quote
Abandonment	\$1,202/EA	Huss Quote

3.7 ITEM NO. 7 – GAS SYSTEM MAINTENANCE

The cost for this item is based on replacing one gas vent every two years. This includes abandonment and drilling of new vent.

Description	Cost/Unit	Source or Reference
Replacement	\$2,767/EA	Huss Quote
Abandonment	\$1,202/EA	Huss Quote

3.8 ITEM NO. 8 – LANDSCAPE

The cost for this item is based on mowing all closed landfills at an estimated frequency of four times a year.

Description	Cost/Unit	Source or Reference
Mowing	\$27.88/AC	RS Means Item 320190194190

3.9 ITEM NO. 9 – EROSION CONTROL & COVER MAINTENANCE

For erosion control and cover maintenance of the cover and/or swales, we assumed that a half acre area would be regraded and sodded every year. Approximately one half acre (2,420 SY) of the landfill area will require maintenance per year. It is assumed that 100 square yards of liner will be repaired per year.

Description	Cost/Unit	Source or Reference
Sodding	\$2.61/SY	FDOT Item 0570 1 2 Sod
Regrading	\$0.76/SY	FDOT Item 0162 1 11 Prepared soil layer, finish soil 6 inches
Liner Repair	\$10.71/SY	RS Means item 334713531200

3.10 ITEM NO. 10 – STORMWATER MANAGEMENT SYSTEM MAINTENANCE

We assumed that the perimeter ditch system (4,800 linear feet) must be cleaned every 10 years. The quantity of material removed is based on 6 inches off the bottom of a 5-foot-wide ditch.

Description	Cost/Unit	Source or Reference
Conveyance maintenance	\$7.39/CY	FDOT Item 0120 4 subsoil excavation

3.11 ITEM NO. 11 – SECURITY SYSTEM MAINTENANCE

Security system maintenance assumes 50 feet per year of fencing repairs annually and a new sign and gate replacement every 5 years.

Description	Cost/Unit	Source or Reference
Fence repairs	\$15.00/LF	FDOT Item 0550 10221
Gate repairs	\$1,092.50/EA	FDOT Item 0550 60224
Sign repairs	\$349.52/EA	FDOT Item 0700 1 11

3.12 ITEM NO. 12 – UTILITIES

We assumed the facility requires approximately \$500 annually for leachate pump utilities (electrical service).

3.13 ITEM NO. 13 – LEACHATE COLLECTION/TREATMENT SYSTEMS OPERATION

This item includes operation labor cost for managing the system and current Jones Edmunds billing rates for a field technician.

3.14 ITEM NO. 14 – ADMINISTRATIVE

This item includes administration labor costs for managing the permitting and reporting requirements. The cost estimate is consistent with current Jones Edmunds labor rates.

3.15 ITEM NO. 15 – CONTINGENCY

The contingency is calculated as 5% of the total costs of Item No. 1 through 14. This number is based on Jones Edmunds engineering judgment and consideration of estimation of expected annual costs.

3.16 ITEM NO. 16 – SITE-SPECIFIC COSTS

There are no additional site-specific costs for the facility.

EXHIBIT R-1

**FINANCIAL ASSURANCE COST ESTIMATE
FORM 62-701.900(28), FAC**



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: _____

I. GENERAL INFORMATION:

Facility Name: Hardee County Landfill WACS ID: 40612
Permit Application or Consent Order No.: 38414-016-SO/01 Expiration Date: 11/8/2033
Facility Address: 685 Airport Road, Wauchula, FL 33873
Permittee or Owner/Operator: Hardee County
Mailing Address: 685 Airport Road, Wauchula, FL 33873
Latitude: 27° 34' 17" Longitude: 81° 46' 58"
Coordinate Method: _____ Datum: NAD 83
Collected by: J. Toms Company/Affiliation: Jones Edmunds

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
Phase I	12.31	NA	NA	NA	10/26/2010	1/3/2012
Phase II Section I	6.29	5/1/2008	2/1/2016	1.5 years	NA	NA
Phase II Section II	6.20	NA	5/1/2038	22 years	NA	NA

Total disposal unit acreage included in this estimate: Closure: 12.49 Long-Term Care: 24.8

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
10351 N. Telecom Pky.
Tempe Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

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

II. 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 Deflator 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:

Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Closing Cost Estimate:
_____	x _____	= _____

This adjustment is based on the Department approved long-term care cost estimate dated:

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:
_____	x _____	= _____
Number of Years of Long Term Care Remaining:		x _____
Inflation Adjusted Long-Term Care Cost Estimate:		= _____

Signature by: **Owner/Operator** **Engineer** (check what applies)

Signature

Address

Name & Title

City, State, Zip Code

Date

E-Mail Address

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 expensive.
 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

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	SY		73,033	\$ 0.75	\$ 54,775
Placement and Spreading	CY		29,213	\$ 2.05	\$ 59,887
Compaction	CY		29,213	\$ 0.61	\$ 17,820
Off-Site Material	CY		29,213	\$ 1.50	\$ 43,820
Delivery	CY		29,213	\$ 10.56	\$ 308,493
Subtotal Slope and Fill:				\$	484,795
3. Cover Material (Barrier Layer):					
Off-Site Clay	CY			\$ -	\$ -
Synthetics - 40 mil	SY		80,336	\$ 3.89	\$ 312,508
Synthetics - GCL	SY			\$ -	\$ -
Synthetics - Geonet Geotextile	SY			\$ -	\$ -
Synthetics - Other (explain)	SY		80,336	\$ 5.31	\$ 426,586
Geocomposite					
Subtotal Cover Material:				\$	739,094
4. Top Soil Cover:					
Off-Site Material	CY		58,427	\$ 1.50	\$ 87,640
Delivery	CY		58,427	\$ 10.56	\$ 616,986
Spread	CY		58,427	\$ 2.05	\$ 119,775
Subtotal Top Soil Cover:				\$	824,401
5. Vegetative Layer:					
Sodding	SY		80,337	\$ 2.63	\$ 211,286
Hydroseeding	AC			\$ -	\$ -
Fertilizer	AC			\$ -	\$ -
Mulch	AC			\$ -	\$ -
Other (explain)				\$ -	\$ -
Subtotal Vegetative Layer:				\$	211,286
6. Stormwater Control System:					
Earthwork	CY			\$ -	\$ -
Grading	SY			\$ -	\$ -
Piping	LF		1,080	\$ 37.18	\$ 40,154
Ditches	LF			\$ -	\$ -
Berms	LF			\$ -	\$ -
Control Structures	EA		4	\$ 2,300	\$ 9,200
Other (explain) GFFR	SY			\$ -	\$ -
Subtotal Stormwater Control System:				\$	49,354

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	LS	1	\$ 95,500	\$ 95,500
Pipe and Fittings	LF		\$ -	\$ -
Monitoring Probes	EA		\$ -	\$ -
NSPS/Title V Requirements	LS		\$ -	\$ -
Subtotal Passive Gas Control:				\$ 95,500
8. Active Gas Extraction Control:				
Traps	EA		\$ -	\$ -
Sumps	EA		\$ -	\$ -
Flare Assembly	EA		\$ -	\$ -
Flame Arrestor	EA		\$ -	\$ -
Mist Eliminator	EA		\$ -	\$ -
Flow Meter Pumps	EA		\$ -	\$ -
Blowers	EA		\$ -	\$ -
Collection System	LF		\$ -	\$ -
Other (explain) <u>Wellheads</u>	EA		\$ -	\$ -
Subtotal Active Gas Extraction:				\$ -
9. Security System:				
Fencing	LF		\$ -	\$ -
Gate(s)	EA		\$ -	\$ -
Sign(s)	EA		\$ -	\$ -
Subtotal Security System:				\$ -
10. Engineering:				
Closure Plan Report	LS	1	\$ 108,340	\$ 108,340
Certified Engineering Drawings	LS	1	\$ 112,640	\$ 112,640
NSPS/Title V Air Permit	LS		\$ -	\$ -
Final Survey	LS	1	\$ 13,980	\$ 13,980
Certification of Closure	LS	1	\$ 27,800	\$ 27,800
Other (explain) _____			\$ -	\$ -
Subtotal Engineering:				\$ 262,760

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services:					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	20	\$ 215	40	\$ 215	\$ 12,900
On-Site Engineer	120	\$ 170	120	\$ 170	\$ 40,800
Office Engineer	16	\$ 130	80	\$ 130	\$ 12,480
On-Site Technician	0	\$ 85	800	\$ 85	\$ 68,000
Other (explain) _____	8	\$ 80	24	\$ 80	\$ 2,560
<u>Administrative Assistant</u>					
Subtotal Professional Services:					\$ 136,740

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	\$ 65,000	\$ 65,000
Subtotal Professional Services:				\$ 201,740

Subtotal of 1-11 Above: \$ 2,868,930

12. Contingency: 5 % of Subtotal of 1-11 Above \$ 143,447

Subtotal Contingency: \$ 143,447

Estimated Closing Cost Subtotal: \$ 3,012,377

Description	Total Cost
13. Site-Specific Costs:	
Mobilization and Bonds and insurance	\$ 200,826
Waste Tire Facility	\$ 2,625
Materials Recovery Facility	\$ -
Special Wastes	\$ 500
Leachate Management System Modification - Annual Disposal	\$ 109,620
Other (explain) _____	\$ -

Subtotal Site Specific Costs:	\$ 313,571
TOTAL ESTIMATED CLOSING COSTS (\$):	\$ 3,325,948

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 items marked not applicable (N/A)

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-Annual	2	1	\$ 9,846.00	\$ 19,692
Annual	1		\$ -	\$ -
Subtotal Groundwater Monitoring:				\$ 19,692
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12		\$ -	\$ -
Quarterly	4		\$ -	\$ -
Semi-Annual	2	1	\$ 825.00	\$ 1,650
Annual	1		\$ -	\$ -
Subtotal Surface Water Monitoring:				\$ 1,650
3. Gas Monitoring [62-701.400(10)]				
Monthly	12		\$ -	\$ -
Quarterly	4	1	\$ 910.00	\$ 3,640
Semi-Annual	2		\$ -	\$ -
Annual	1		\$ -	\$ -
Subtotal Gas Monitoring:				\$ 3,640
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)c]				
Monthly	12		\$ -	\$ -
Quarterly	4		\$ -	\$ -
Semi-Annual	2		\$ -	\$ -
Annual	1	1	\$ 425.00	\$ 425
Other (explain) _____			\$ -	\$ -
Subtotal Leachate Monitoring:				\$ 425

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LS	0.2	\$ 37,096.00	\$ 7,419
Sumps, Traps	EA		\$ -	\$ -
Lift Stations	EA		\$ -	\$ -
Cleaning	LS		\$ -	\$ -
Tanks	LS	0.3	\$ 19,000.00	\$ 6,333

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 DAY			\$ -
Spray Aerators	EA		\$ -	\$ -
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1,000 gallon	4200	\$ 26.10	\$ 109,620
Subtotal Leachate Collection / Treatment				
Systems Maintenance:				\$ 123,372
6. Groundwater Monitoring Wells Maintenance				
Monitoring Wells	LF		\$ -	\$ -
Replacement	EA	0.2	\$ 1,927.00	\$ 385
Abandonment	EA	0.2	\$ 1,202.00	\$ 240
Subtotal Groundwater Monitoring Well Maintenance:				\$ 625
7. Gas System Maintenance				
Piping, Vents	EA	0.5	\$ 3,969.00	\$ 1,985
Blowers	EA		\$ -	\$ -
Flaring Units	EA		\$ -	\$ -
Meters, Valves	EA		\$ -	\$ -
Compressors	EA		\$ -	\$ -
Flame Arrestors	EA		\$ -	\$ -
Operation	LS		\$ -	\$ -
Subtotal Gas System:				\$ 1,985
8. Landscape Maintenance				
Mowing 4 /yr	AC	24.8	\$ 27.88	\$ 2,766
Fertilizer /yr	AC		\$ -	\$ -
Subtotal Landscape Maintenance:				\$ 2,766
9. Erosion Control and Cover Maintenance				
Sodding	SY	2,420	\$ 2.61	\$ 6,316
Regrading	SY	2,420	\$ 0.76	\$ 1,839
Liner Repair	SY	100	\$ 10.71	\$ 1,071
Clay	CY		\$ -	\$ -
Subtotal Erosion Control and Cover Maintenance:				\$ 9,226
10. Storm Water Management System Maintenance				
Conveyance Maintenance	CY	44	\$ 7.39	\$ 328
Subtotal Storm Water System Maintenance:				\$ 328
11. Security System Maintenance				
Fences	LS LF	50	\$ 15.00	\$ 750
Gate(s)	EA	0.2	\$ 1,092.50	\$ 219
Sign(s)	EA	0.2	\$ 349.52	\$ 70
Subtotal Security System:				\$ 1,039

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	1	\$ 500	\$ 500

13. Leachate Collection/Treatment Systems Operation

Operation

P.E. Supervisor	HR	4	\$ 215	\$ 860
On-Site Engineer	HR	0	\$ 170	\$ -
Office Engineer	HR	8	\$ 130	\$ 1,040
On-Site Technician	HR	96	\$ 85	\$ 8,160
Materials	LS			

Subtotal Leachate Collection/Treatment System Operation: \$ 10,060

14. Administrative

		Hours	\$/Hour	Total
P.E. Supervisor	HR	4	\$ 165	\$ 660
On-Site Engineer	HR	0	\$ 125	\$ -
Office Engineer	HR	24	\$ 125	\$ 3,000
Onsite Technician	HR	16	\$ 80	\$ 1,280
Other _____	HR			\$ -

Subtotal Administrative: \$ 4,940

Subtotal of 1-14 Above: \$ 180,248

15. Contingency 5% % of Subtotal of 1-14 Above \$ 9,012

Subtotal Contingency: \$ 9,012

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16 Site-Specific Costs (explain)				
_____	_____	_____	_____	\$ -
_____	_____	_____	_____	\$ -
_____	_____	_____	_____	\$ -
_____	_____	_____	_____	\$ -
Subtotal Site Specific Costs:				\$ -

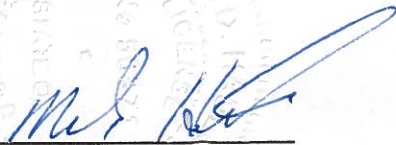
ANNUAL LONG-TERM CARE COST (\$ / Year): \$ 189,260

Number of Years of Long-Term Care: 30

TOTAL LONG-TERM CARE COST (\$): \$ 5,677,800

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

730 NE Waldo Road

Mailing Address

Mark Hadlock, PE

Senior Engineer

Name and Title (please type)

Gainesville, Florida 32641

City, State, Zip Code

2-26-18

Date

mhadlock@jonesedmunds.com

E-Mail address (if available)

56871

Florida Registration Number
(please affix seal)

(352) 377-5821

Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR

E-Mail address (if available) Telephone Number

 2-26-18

Signature

685 Airport Road

Mailing Address

Ken Wheeler, PE, Public Works Director

Name and Title (please type)

Wauchula, FL 33873

City, State, Zip Code

ken.wheeler@hardeecounty.net

E-Mail address (if available)

863-773-5089

Telephone Number

EXHIBIT R-2

**BACKUP OF CLOSURE AND LONG-TERM CARE UNIT
COSTS**

Florida Department of Transportation
Item Average Unit Cost
From 2016/07/01 to 2017/06/30

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Closure Item 2 - excavation

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0120 1	127	\$5.36	\$23,758,881.12	4,430,936.380	CY	N	REGULAR EXCAVATION
0120 2 2	60	\$11.30	\$1,779,537.37	157,441.040	CY	N	BORROW EXCAVATION, TRUCK MEASURE
0120 3	2	\$11.57	\$8,832.39	763.700	CY	N	LATERAL DITCH EXCAVATION
0120 4	28	\$8.15	\$5,728,899.80	703,362.900	CY	N	SUBSOIL EXCAVATION
0120 5	12	\$29.06	\$282,767.20	9,729.600	CY	N	CHANNEL EXCAVATION
0120 6	102	\$8.16	\$65,995,051.03	8,085,966.400	CY	N	EMBANKMENT
0120 71	39	\$34,230.20	\$1,403,438.27	41.000	LS	N	REGULAR EXCAVATION (3-R PROJECTS ONLY)
0120 74	4	\$4.27	\$275,573.23	64,588.000	CY	N	SURCHARGE EMBANKMENT
0121 70	10	\$204.71	\$105,014.76	513.000	CY	N	FLOWABLE FILL
0125 1	7	\$13.17	\$38,448.30	2,919.400	CY	N	EXCAVATION FOR STRUCTURES
0125 3	2	\$102.62	\$16,850.00	164.200	CY	N	SELECT BEDDING MATERIAL
0141 70	8	\$1,053.78	\$121,185.20	115.000	AS	N	SETTLEMENT PLATE ASSEMBLY
0145 1	2	\$3.59	\$184,709.00	51,496.000	SF	N	GEOSYNTHETIC REINFORCED SOIL SLOPE
0145 2	12	\$3.54	\$354,255.10	99,963.000	SY	N	GEOSYNTHETIC REINF FND OVER SOFT SOIL
0145 72	2	\$36.08	\$28,759.00	797.000	SY	N	CELLULAR CONFINEMENT FOR SOIL STABILIZAT
0160 4	125	\$4.32	\$19,843,078.37	4,592,980.000	SY	N	TYPE B STABILIZATION
0162 1 11	80	\$.75	\$2,530,759.12	3,380,029.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 6"
0162 1 12	5	\$3.18	\$85,097.30	26,753.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 12"
0173 77 1	1	\$800.00	\$8,000.00	10.000	CY	N	SUBSURF PRESSURE GROUTING,SAND CEM
0210 1 1	1	\$10.00	\$21,770.00	2,177.000	SY	N	REWORKING LIMEROCK BASE, 6"
0210 1 8	1	\$100.00	\$6,700.00	67.000	SY	N	REWORKING LIMEROCK BASE, 4"
0210 1 9	3	\$13.85	\$20,983.23	1,515.000	SY	N	REWORKING LIMEROCK BASE, 3"
0210 2	1	\$16.00	\$502.40	31.400	CY	N	LIMEROCK-NEW MATERIAL FOR REWORKING BASE
0285701	75	\$15.12	\$14,823,055.26	980,419.000	SY	N	OPTIONAL BASE,BASE GROUP 01
0285702	9	\$14.33	\$1,544,522.80	107,786.000	SY	N	OPTIONAL BASE,BASE GROUP 02
0285703	5	\$8.91	\$531,903.00	59,693.000	SY	N	OPTIONAL BASE,BASE GROUP 03
0285704	15	\$10.87	\$1,034,501.99	95,189.000	SY	N	OPTIONAL BASE,BASE GROUP 04
0285705	7	\$13.28	\$2,324,944.31	175,121.000	SY	N	OPTIONAL BASE,BASE GROUP 05
0285706	38	\$16.53	\$3,262,108.24	197,363.000	SY	N	OPTIONAL BASE,BASE GROUP 06
0285707	5	\$20.58	\$595,823.75	28,951.000	SY	N	OPTIONAL BASE,BASE GROUP 07
0285708	2	\$26.26	\$637,840.50	24,291.000	SY	N	OPTIONAL BASE,BASE GROUP 08
0285709	61	\$17.15	\$21,284,038.80	1,240,918.000	SY	N	OPTIONAL BASE,BASE GROUP 09
0285710	15	\$15.43	\$13,455,477.73	871,860.000	SY	N	OPTIONAL BASE,BASE GROUP 10
0285711	15	\$19.21	\$1,591,488.06	82,835.000	SY	N	OPTIONAL BASE,BASE GROUP 11
0285712	4	\$18.38	\$2,877,216.86	156,527.000	SY	N	OPTIONAL BASE,BASE GROUP 12
0285713	7	\$36.71	\$1,514,020.44	41,240.000	SY	N	OPTIONAL BASE,BASE GROUP 13
0285715	15	\$55.13	\$1,179,219.02	21,388.000	SY	N	OPTIONAL BASE,BASE GROUP 15
0286 1	37	\$22.06	\$525,100.50	23,801.000	SY	N	TURNOUT CONSTRUCTION
0286 2	10	\$128.94	\$101,669.11	788.500	TN	N	TURNOUT CONSTRUCTION-ASPHALT
0287 1	2	\$441.58	\$21,240.00	48.100	CY	N	ASPHALT TREATED PERMEABLE BASE

INVOICE

Closure Item 2 - Offsite material

Smoak Groves Inc.
1025 County Road 17 N
Lake Placid, FL 33852
(863) 465-2561

June 1, 2017

Bill to:
Hardee County Public Works
205 Hanchey Road
Wauchula, FL 33873

Date:	Truck:	Loads:	Cubic Yard:	Unit Cost:	Total:
2/3/2017	104	2	40	\$1.50	\$60.00
2/6/2017	91	4	80	\$1.50	\$120.00
2/6/2017	88	5	100	\$1.50	\$150.00
2/7/2017	88	4	80	\$1.50	\$120.00
2/8/2017	88	5	100	\$1.50	\$150.00
2/8/2017	103	2	40	\$1.50	\$60.00
2/9/2017	104	5	100	\$1.50	\$150.00
2/9/2017	82	7	140	\$1.50	\$210.00
2/9/2017	105	3	60	\$1.50	\$90.00
2/9/2017	88	5	100	\$1.50	\$150.00
2/13/2017	103	3	60	\$1.50	\$90.00
2/13/2017	92	2	40	\$1.50	\$60.00
2/13/2017	104	3	60	\$1.50	\$90.00
2/13/2017	88	3	60	\$1.50	\$90.00
TOTALS:		53 Loads	1060 CY		TOTAL: \$1,590.00

RS Means Cover Page
Cost Data: Heavy Construction
Location: Tampa, FL
Year: 2017

RSMeans data
from GORDIAN®

Guide Me

Welcome JoAnne Talamo

0

Search Data

Manage Estimates

Square Foot Estimator

Life Cycle Cost

Cost Alerts and Trends

Reference Items

☆ My Favorites

Cost Data

.....Heavy Construction

Type

Unit

Labor Type

Open Shop

Location

TAMPA (335-336,346)

Release

Year 2017

Search

Search

What are you searching for?

All

Q Search

☐ Include My Custom Data

+

Estimate Action

Select From List

Hardee County Landfill

Page 1 of 1

Lines 1 - 5 of 5

	Source	Qty	Line Number			Description	Frequency	Crew	Unit	Labor Hours	Daily Output	Extended Material	Extended Material O&P
<input type="checkbox"/>	Unit	0	312323170020		<input type="checkbox"/>	Fill, dumped material, spread, by dozer, excludes compa		B10B	L.C.Y.	0.010	1000.000		
<input type="checkbox"/>	Unit	0	312323201100		<input type="checkbox"/>	Cycle hauling(wait, load, travel, unload or dump & return		B34B	L.C.Y.	0.070	108.000		
<input type="checkbox"/>	Unit	0	312323235040		<input type="checkbox"/>	Compaction, riding, vibrating roller, 4 passes, 6" lifts		B10Y	E.C.Y.		1900.000		
<input type="checkbox"/>	Unit	0	320190194190		<input type="checkbox"/>	Mowing, lawn mowing, 5 gang reel, 12', with tractor & a		B66	M.S.F.	0.010	1200.000		
<input type="checkbox"/>	Unit	0	334713531200		<input type="checkbox"/>	Pond and reservoir liners, membrane lining systems HDF		3 Skwk	S.F.	0.010	1600.000		

Cost Estimate Report

Hardee County Landfill

Year 2017

Unit Detail Report

Prepared By: JoAnne Talamo

Jones Edmunds & Associates, Inc.

LTC item 8:
Mowing

LTC item 9:
Sodding
Liner Repair

Closure Item 2:
Placement and Spreading
Compaction
Delivery

Closure Item 4:
Delivery
Placement and Spreading

Date: 02/07/2018

LineNumber	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 31 Earthwork					
312323170020	Fill, dumped material, spread, by dozer, excludes compaction	0.00	L.C.Y.	\$2.05	
312323201100	Cycle hauling(wait, load, travel, unload or dump & return) time per cycle, excavated or borrow, loose cubic yards, 15 min load/wait/unload, 12 C.Y. truck, cycle 30 miles, 45 MPH, excludes loading equipment	0.00	L.C.Y.	\$10.56	
312323235040	Compaction, riding, vibrating roller, 4 passes, 6" lifts	0.00	E.C.Y.	\$0.61	
Division 31 Earthwork Subtotal					\$0.00
Division 32 Exterior Improvements					
320190194190	Mowing, lawn mowing, 5 gang reel, 12', with tractor & attachments	0.00	M.S.F.	\$0.64	
Division 32 Exterior Improvements Subtotal					\$0.00
\$0.64/MSF x 1 MSF/1,000 SF x 43,560 SF/AC = \$27.88/AC					
Division 33 Utilities					
334713531200	Pond and reservoir liners, membrane lining systems HDPE, 100,000 S.F. or more, 60 mil thick, per S.F.	0.00	S.F.	\$1.19	
Division 33 Utilities Subtotal					\$0.00
\$1.19 * 9 SF/SY = \$10.71/SY					

Placement and Spreading

\$0.00

Delivery

\$0.00

Compaction

\$0.00

Mowing

\$0.00

Liner Repair

\$0.00

Closure Item 3:
Geocomposite



AGRU America, Inc.
500 Garrison Road
Georgetown, SC 29440
Phone: 1-843-546-0600

January 10, 2018

Jeremy Toms, EI
Jones Edmunds & Associates, Inc.
730 NE Waldo Road
Gainesville, FL 32641

RE: **Sarasota County Central Landfill Closure – Requested Budgetary Pricing**

Agru America is pleased to provide the following budget pricing for the requested geosynthetic profile(s). Budget pricing options include a 40mil LLDPE MicroSpike and Geocomposite system as Option #1 and a 50 mil LLDPE MicroDrain geomembrane and geotextile as Option #2. As discussed, ClosureTurf may work well in this application if you would want to evaluate further.

Requested Geosynthetic Closure System #1

This geosynthetic closure system includes a standard 40 mil LLDPE MicroSpike geomembrane with 8-200-8 geocomposite.

Description	Quantity (SF)	Unit Price (\$/SF)	Total
40 mil MicroSpike LLDPE - Material	2,700,000	\$ 0.30	\$ 810,000.00
40 mil MicroSpike LLDPE - Installation	2,700,000	\$ 0.15	\$ 405,000.00
8/200/8 Geocomposite - Material	2,700,000	\$ 0.46	\$ 1,242,000.00
8/200/8 Geocomposite - Installation	2,700,000	\$ 0.13	\$ 351,000.00
Total Budget for Conventional			\$ 2,808,000.00

*Material budget pricing includes estimated freight to Sarasota, FL but no taxes. Installation budget pricing assumes non-union/non-prevailing wage rates.

*A 200 mil Geocomposite product is unlikely to meet the site specific requirements of a highly permeable cover soil typically found in FL.

Requested Geosynthetic Closure System #2

$$\$0.46 + \$0.13 = \$0.59/\text{SF} * 9 \text{ SF/SY} = \$5.31/\text{SY}$$

This geosynthetic closure system includes a standard 50 mil LLDPE MicroDrain geomembrane with 8 oz nonwoven geotextile.

Description	Quantity (SF)	Unit Price (\$/SF)	Total
50 mil LLDPE MicroDrain - Material	2,700,000	\$ 0.55	\$ 1,485,000.00
50 mil LLDPE MicroDrain - Installation	2,700,000	\$ 0.18	\$ 486,000.00
Agrutex 081 Nonwoven Geotextile - Material	2,700,000	\$ 0.11	\$ 297,000.00
Agrutex 081 Nonwoven Geotextile - Installation	2,700,000	\$ 0.10	\$ 270,000.00
Total Budget for MicroDrain Option			\$ 2,538,000.00

*Material budget pricing includes estimated freight to Sarasota, FL but no taxes. Installation budget pricing assumes non-union/non-prevailing wage rates.

We would recommend performing design shear strength and transmissivity testing specific to your project needs. We can supply material samples for this testing when appropriate and answer any questions you may have. Thank you for reaching out to us and please feel free to contact me to discuss further at ceichelberger@agruamerica.com or 330.606.8970.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Eichelberger". The signature is fluid and cursive, with the first name "Chris" and last name "Eichelberger" clearly distinguishable.

Chris Eichelberger
Agru America



SOLMAX

Closure Item 3 - Geomembrane

QUOTATION 54624 - 128697

PROJECT: Hardee Co LF-Wauchula

Date: 19/09/2017

CLIENT

Name: JONES EDMUNDS
Contact: Jeremy Toms
Phone: 135 237 75821
Fax:

Address: 730 NE Waldo Rd.
Gainesville, FL
32641, USA

PRODUCTS

Product code	Product Description	Dimensions	UOM	Quantity	Unit Price
1009613	LLDPE 40 mils Black Textured	22.3 ft x 780 ft	sf.	695,760	0.265
1045708	HDPE 40 mils Black Textured	22.3 ft x 780 ft	sf.	695,760	0.234

PROJECT INFORMATION

Currency: USD
Taxes: EXTRA
Duties:
Payment Terms: To be negotiated
Purchase Order Before: 19/09/2017
Delivery within 30 days after reception of a purchase order
Unloading and Inspection Costs Excluded
Note: Roll width and length may vary \pm 1%

Estimated Transportation
Terms of Delivery
Loading Detail
Method of Transport: 2-AXLE TRUCK
Warranty: 5 YEARS PRORATED
Additional Testing? ☐ Specifications? ☐
All terms of delivery are as per Incoterms 2000
Final routing is at Solmax's discretion

$\$0.265/\text{SF} * 9 \text{ SF/SY} = \$2.385/\text{SY}$

$\$2.385/\text{SY} + \$1.50/\text{SY} (\text{labor}) = \$3.89/\text{SY}$

NOTES

No specifications or qualifications were provided for this proposal. This quotation is based on the supply of product that meets the standard Solmax specifications, MQC frequencies and GRI GM International specifications.
It is understood that it will be one product or the other & not both, freight has been calculated per product.

Solmax Representative

Submitted by: Michael Winterbourne
Email: mwinterbourne@solmax.com

Opening Bank and Address

National Bank of Canada
2020 René-Gauthier, Varennes, Quebec, Canada, J3X 1N9

Please contact our credit department for more details.

Unless otherwise specified herein above, prices quoted are firm for acceptance within the validity date specified in the Purchase Order Before section of this quotation. Outstanding quotations that have exceeded the validity date will require a new quotation based on shipment requirements. Acceptance of your purchase order is expressly made conditional on Solmax's approval of your credit worthiness and on your acceptance of the terms and conditions herein attached. Price quoted is based on the current resin price. If the price of resin changes after the validity date bid hold period, the prices reflected herein shall be modified to reflect the increase in resin prices.

This offer is **expressly limited** to the terms of this offer set forth on these pages hereof, including the Solmax Terms and Conditions. Buyer agrees that any terms and/or conditions in Buyer's purchase order which differ or add to the quotation shall not become part of the contract between Solmax and Buyer.

Florida Department of Transportation
Item Average Unit Cost
From 2016/07/01 to 2017/06/30

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Closure item 5 - sodding

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0550 60927	1	\$2,500.00	\$2,500.00	1.000	EA	N	FENCE GATE, SPE, DOUBLE, >30' OPENING
0561 1	8	\$941.61	\$13,923,745.02	14,787.100	TN	N	COATING EXISTING STRUCTURAL STEEL
0561 2	4	\$38.72	\$1,240,714.50	32,045.000	SF	N	COATING EXISTING STRUCTURAL STEEL
0563 4	2	\$1.65	\$55,512.10	33,570.000	SF	N	ANTI-GRAFFITI COATING, NON-SACRIFICIAL
0570 1 1	34	\$1.86	\$5,789,168.69	3,110,999.000	SY	N	PERFORMANCE TURF
0570 1 2	183	\$2.63	\$15,273,055.14	5,811,003.000	SY	N	PERFORMANCE TURF, SOD
0571 1 11	8	\$5.10	\$326,454.06	64,070.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 1
0571 1 12	2	\$15.50	\$106,262.52	6,857.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 2
0571 1 13	2	\$9.61	\$4,679.75	487.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 3
0580 1 1	4	\$28,994.13	\$115,976.52	4.000	LS	N	LANDSCAPE COMPLETE- SMALL PLANTS
0580 1 2	10	\$28,891.14	\$404,475.96	14.000	LS	N	LANDSCAPE COMPLETE- LARGE PLANTS
0590 70	2	\$60,124.35	\$180,373.04	3.000	LS	N	IRRIGATION SYSTEM
0590 70 1	5	\$15,579.01	\$77,895.04	5.000	LS	N	IRRIGATION SYSTEM REPAIRS
0630 2 11	114	\$7.58	\$8,372,791.83	1,104,340.000	LF	N	CONDUIT, F& I, OPEN TRENCH
0630 2 12	118	\$18.90	\$9,092,933.79	481,214.000	LF	N	CONDUIT, F& I, DIRECTIONAL BORE
0630 2 14	25	\$22.71	\$102,381.23	4,508.000	LF	N	CONDUIT, F& I, ABOVEGROUND
0630 2 15	15	\$25.63	\$518,626.34	20,232.000	LF	N	CONDUIT, F& I, BRIDGE MOUNT
0630 2 65	2	\$9.91	\$24,780.00	2,500.000	LF	N	CONDUIT, REMOVE, BRIDGE MOUNT
0632 7 1	72	\$5,340.58	\$1,014,710.26	190.000	PI	N	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL
0632 7 2	31	\$5.50	\$160,533.88	29,182.000	LF	N	SIGNAL CABLE, REPAIR/REPL-FUR & INSTALL
0632 7 4	1	\$1,240.00	\$7,440.00	6.000	PI	N	SIGNAL CABLE, ADJUST
0632 7 6	34	\$697.56	\$47,434.10	68.000	PI	N	SIGNAL CABLE, REMOVE- INTERSECTION
0632 7 7	2	\$1.40	\$1,383.75	991.000	LF	N	SIGNAL CABLE, REMOVE- OUTSIDE OF INTERSE
0633 1112	2	\$5.55	\$1,996.80	360.000	LF	N	FIBER OPTIC CABLE, F&I,OVH,13-48
0633 1121	31	\$2.26	\$181,539.03	80,455.000	LF	N	FIBER OPTIC CABLE, F&I, UG,2-12
0633 1122	22	\$2.90	\$423,418.60	145,910.000	LF	N	FIBER OPTIC CABLE, F&I, UG,13-48
0633 1123	13	\$2.60	\$720,822.18	277,404.000	LF	N	FIBER OPTIC CABLE, F&I, UG,49-96
0633 1124	6	\$4.11	\$655,874.74	159,391.000	LF	N	FIBER OPTIC CABLE, F&I, UG,97-144
0633 1320	1	\$18.00	\$11,610.00	645.000	LF	N	FIBER OPTIC CABLE, INSTALL, UG
0633 1410	1	\$2.07	\$581.67	281.000	LF	N	FIBER OPTIC CABLE, REL, OV
0633 1420	6	\$9.78	\$29,825.18	3,050.000	LF	N	FIBER OPTIC CABLE, REL, UG
0633 1610	3	\$2.24	\$6,094.58	2,716.000	LF	N	FIBER OPTIC CABLE, REM, OV
0633 1620	14	\$6.62	\$89,480.32	144,798.000	LF	N	FIBER OPTIC CABLE, REM, UG
0633 2 31	38	\$47.12	\$345,785.42	7,338.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, SPLICE
0633 2 32	19	\$90.81	\$105,345.26	1,160.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, TERM
0633 3 11	32	\$912.04	\$225,274.58	247.000	EA	N	FIBER OPTIC CONN HDWR, SPLICE ENCLOSURE
0633 3 12	30	\$85.16	\$36,107.08	424.000	EA	N	FIBER OPTIC CONN HDWR, SPLICE TRAY
0633 3 13	10	\$78.66	\$83,458.85	1,061.000	EA	N	FIBER OPTIC CONN HDWR, PRETERM CONNECT A
0633 3 14	16	\$179.71	\$18,151.13	101.000	EA	N	FIBER OPTIC CONN HDWR, BUFFER TUBE FAN O
0633 3 15	18	\$2,192.88	\$499,977.29	228.000	EA	N	FIBER OPTIC CONN HDWR, PRETERM PATCH PAN

Florida Department of Transportation
Item Average Unit Cost
From 2016/07/01 to 2017/06/30

Closure Item 6 - piping

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0433 1	1	\$868.83	\$170,290.68	196.000	EA	N	CHEM GROUT REPAIR, MANHOLE / INLET
0434 1	1	\$315.00	\$253,102.50	803.500	CY	N	UNDERGROUND EXFILTRATION STORAGE
0436 1 1	10	\$240.29	\$744,429.09	3,098.000	LF	N	TRENCH DRAIN, STANDARD
0440 1 10	2	\$31.06	\$131,550.00	4,235.000	LF	N	UNDERDRAIN, TYPE I
0440 1 20	2	\$37.18	\$9,406.50	253.000	LF	N	UNDERDRAIN, TYPE II
0440 1 50	2	\$31.05	\$8,631.30	278.000	LF	N	UNDERDRAIN, TYPE V
0440 70	4	\$1,224.42	\$30,610.48	25.000	EA	N	UNDERDRAIN INSPECTION BOX
0440 73 1	5	\$48.96	\$15,668.40	320.000	LF	N	UNDERDRAIN OUTLET PIPE, 4"
0440 73 2	2	\$130.00	\$2,340.00	18.000	LF	N	UNDERDRAIN OUTLET PIPE, 6"
0440 73 3	1	\$21.30	\$1,214.10	57.000	LF	N	UNDERDRAIN OUTLET PIPE, 8"
0442 70	1	\$2.81	\$59,482.08	21,168.000	LF	N	VERTICAL DRAINAGE WICKS
0443 70 3	1	\$110.43	\$168,957.90	1,530.000	LF	N	FRENCH DRAIN, 18"
0443 70 4	9	\$131.79	\$1,516,746.07	11,509.000	LF	N	FRENCH DRAIN, 24"
0443 70 5	1	\$150.19	\$18,473.37	123.000	LF	N	FRENCH DRAIN, 30"
0443 70 6	2	\$162.83	\$751,957.14	4,618.000	LF	N	FRENCH DRAIN, 36"
0443 72 10	1	\$15.50	\$6,727.00	434.000	SY	N	FRENCH DRAIN- AGGREGATE W/O PIPE, 0-0.9'
0443 72 11	1	\$27.85	\$60,685.15	2,179.000	SY	N	FRENCH DRAIN- AGGREGATE W/O PIPE, 1-1.9'
0443 72 12	1	\$34.00	\$39,610.00	1,165.000	SY	N	FRENCH DRAIN- AGGREGATE W/O PIPE, 2-2.9'
0443 72 13	1	\$47.65	\$6,099.20	128.000	SY	N	FRENCH DRAIN- AGGREGATE W/O PIPE, 3-3.9'
0443 72 14	1	\$82.85	\$1,905.55	23.000	SY	N	FRENCH DRAIN- AGGREGATE W/O PIPE, 4-4.9'
0444 70 11	1	\$190.00	\$30,400.00	160.000	LF	N	DEEP WELL- OPEN HOLE, 24"
0444 71 11	1	\$235.00	\$195,050.00	830.000	LF	N	DEEP WELL CASING, 24"
0444 72 11	1	\$90.00	\$18,000.00	200.000	LF	N	DEEP WELL CLEANING, 24"
0444 73 12	1	\$600.00	\$4,800.00	8.000	EA	N	STEEL WELL GRATE, 24" AND GREATER
0446 1 1	7	\$24.60	\$2,662,979.55	108,233.000	LF	N	EDGEDRAIN DRAINCRETE, STANDARD
0446 71 1	7	\$19.08	\$152,515.84	7,995.000	LF	N	EDGEDRAIN OUTLET PIPE, 4"
0450 1 1	3	\$159.77	\$686,700.00	4,298.000	LF	N	PREST BEAMS, TYPE II
0450 1130	1	\$287.00	\$560,798.00	1,954.000	LF	N	PREST BEAM, FDT 30
0450 2 36	4	\$247.90	\$932,338.00	3,761.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 36"
0450 2 45	2	\$211.61	\$2,197,170.00	10,383.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 45"
0450 2 54	2	\$220.00	\$905,300.00	4,115.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 54"
0450 2 63	1	\$275.00	\$414,700.00	1,508.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 63"
0450 2 72	2	\$252.39	\$1,264,240.00	5,009.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 72"
0450 2 78	1	\$308.15	\$244,671.10	794.000	LF	N	PREST BEAMS: FLORIDA-I BEAM 78"
0450 3 11	1	\$225.00	\$59,625.00	265.000	LF	N	PRESTRESSED SLAB UNITS,48" X 12"
0450 3 21	1	\$350.00	\$15,400.00	44.000	LF	N	PRESTRESSED SLAB UNITS,60" X 12"
0450 3 25	2	\$254.19	\$147,940.00	582.000	LF	N	PRESTRESSED SLAB UNITS,60" X 15"
0450 3 95	2	\$254.19	\$73,970.00	291.000	LF	N	PRESTRESSED SLAB UNITS,VAR WI 30-47", 15
0450 8 21	3	\$234.98	\$955,680.00	4,067.000	LF	N	PREST BEAM: FL SLAB BEAM,15" D,48-51" W
0450 8 23	1	\$275.00	\$121,825.00	443.000	LF	N	PREST BEAM: FL SLAB BEAM,15" D,55-57" W

Florida Department of Transportation
Item Average Unit Cost
From 2016/07/01 to 2017/06/30

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Closure Item 6 - control structures

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0430185148	1	\$750.00	\$924,000.00	1,232.000	LF	N	PIPE CULV,OPT MATL, ROUND, JACK&BORE,48"
0430185166	1	\$3,910.00	\$692,070.00	177.000	LF	N	PIPE CULV,OPT MATL, ROUND, JACK&BORE,66"
0430200 23	1	\$621.00	\$621.00	1.000	EA	N	FLARED END SECTION, CONCRETE, 15"
0430200 25	1	\$550.00	\$1,650.00	3.000	EA	N	FLARED END SECTION, CONCRETE, 18"
0430200 38	1	\$3,827.53	\$3,827.53	1.000	EA	N	FLARED END SECTION, CONCRETE, 36"
0430200 43	1	\$8,651.88	\$8,651.88	1.000	EA	N	FLARED END SECTION, CONCRETE, 60"
0430600125	1	\$2,687.17	\$2,687.17	1.000	EA	N	U-ENDWALL, STD 260, 1:4 SLP, 18"
0430602123	2	\$2,846.67	\$42,700.00	15.000	EA	N	U-ENDWALL,W \GRATE,STD 260,1:4 SLP,15"
0430602129	1	\$7,155.00	\$7,155.00	1.000	EA	N	U-ENDWALL,W \GRATE,STD 260,1:4 SLP,24"
0430610123	1	\$3,800.00	\$7,600.00	2.000	EA	N	U-ENDWALL,STD 261,1:4 SLP, 15"
0430610133	1	\$2,257.30	\$2,257.30	1.000	EA	N	U-ENDWALL,STD 261,1:4 SLP, 30"
0430610225	1	\$3,100.00	\$3,100.00	1.000	EA	N	U-ENDWALL,STD 261,1:3 SLP, 18"
0430610325	2	\$2,300.00	\$16,100.00	7.000	EA	N	U-ENDWALL,STD 261,1:2 SLP, 18"
0430611023	1	\$2,160.00	\$17,280.00	8.000	EA	N	U-ENDWALL,STD 261,BAFFLES,1:6 SLP, 15"
0430611025	1	\$2,950.00	\$8,850.00	3.000	EA	N	U-ENDWALL,STD 261,BAFFLES,1:6 SLP, 18"
0430611123	1	\$1,810.00	\$5,430.00	3.000	EA	N	U-ENDWALL, BAFFLES,STD 261,1:4 SLP, 15"
0430611129	1	\$2,300.00	\$2,300.00	1.000	EA	N	U-ENDWALL, BAFFLES,STD 261,1:4 SLP, 24"
0430611133	1	\$3,981.48	\$3,981.48	1.000	EA	N	U-ENDWALL /BAFFLES,STD 261, 1:4 SLP,30"
0430611223	1	\$1,650.00	\$6,600.00	4.000	EA	N	U-ENDWALL, BAFFLES, STD 261,1:3 SLP,15"
0430611225	3	\$2,756.62	\$16,539.69	6.000	EA	N	U-ENDWALL, BAFFLES, STD 261,1:3 SLP,18"
0430611233	1	\$4,250.00	\$4,250.00	1.000	EA	N	U-ENDWALL,STD 261,BAFFLES,1:3 SLP, 30"
0430611323	1	\$1,840.00	\$3,680.00	2.000	EA	N	U-ENDWALL, BAFFLES, STD 261,1:2 SLP,15"
0430611325	2	\$3,963.15	\$7,926.29	2.000	EA	N	U-ENDWALL, BAFFLES, STD 261,1:2 SLP,18"
0430613025	2	\$3,207.50	\$25,660.00	8.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:6 SLP,18"
0430613029	2	\$3,579.09	\$17,895.45	5.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:6 SLP,24"
0430613125	2	\$3,452.34	\$24,166.35	7.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:4 SLP,18"
0430613129	2	\$3,742.86	\$26,200.00	7.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:4 SLP,24"
0430613225	1	\$3,000.00	\$33,000.00	11.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:3 SLP,18"
0430613229	1	\$3,500.00	\$3,500.00	1.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:3 SLP,24"
0430613325	1	\$3,000.00	\$60,000.00	20.000	EA	N	U-ENDWALL,BAF& GRATE,STD 261,1:2 SLP,18"
0430821 33	1	\$1,506.02	\$1,506.02	1.000	EA	N	CLEANING & SEALING EXIST PIPE JNT,30" SS
0430830	17	\$268.23	\$458,424.42	1,709.100	CY	N	PIPE FILLING AND PLUGGING
0430880 01	3	\$10,130.24	\$141,823.40	14.000	EA	N	FLAP GATES, 0-24"
0430880 02	2	\$20,290.08	\$243,480.96	12.000	EA	N	FLAP GATES, 25-36"
0430880 03	3	\$11,259.26	\$45,037.02	4.000	EA	N	FLAP GATES, 37-48"
0430880 04	2	\$66,000.00	\$330,000.00	5.000	EA	N	FLAP GATES, 49-60"
0430885 18	1	\$3,572.00	\$3,572.00	1.000	EA	N	MANATEE GATE FOR 18" PIPE
0430885 36	1	\$3,607.00	\$7,214.00	2.000	EA	N	MANATEE GATE FOR 36" PIPE
0430885 42	1	\$4,087.00	\$4,087.00	1.000	EA	N	MANATEE GATE FOR 42" PIPE
0430950	10	\$138.38	\$658,834.74	4,761.200	CY	N	DESILTING CONCRETE BOX CULVERT



CARLSON ENVIRONMENTAL CONSULTANTS, PC

LANDFILL GAS AND SOLID WASTE SPECIALISTS

January 20, 2017

Mr. Jeremy Toms
Jones Edmund Associates
Gainesville, Florida

Subject: Budget Estimate - Landfill Gas Well Drilling
Palatka, FL

Dear Mr. Toms:

Per your request, Carlson Environmental Consultants, PC (CEC) is pleased to submit the following budget estimate for landfill gas well at a landfill in Palatka Florida.

EXECUTIVE SUMMARY TABLE

TASK	DESCRIPTION	Unit Price	Units	COSTS
1	Drill Rig Mobilization/Demobilization	\$12,000	1 LS	\$5,500
2	Well Drilling, Fusion & Completion	\$110	4,400 VF	\$484,000
3	Drill Pads Construction	\$500	44 EA	\$22,000
	TOTAL PROJECT COST			\$511,500

This scope is based on general information about the project with the contractor providing all materials for well completion.

Sincerely,

Seth Nunes
Principal
Carlson Environmental Consultants, PC

Adjusting for 15 wells:
mobilization = \$5,500
drilling = \$110 * 50 VF * 15 wells = \$82,500
drill pad = \$500 * 15 = \$7,500

Total cost = \$95,500

Hardee County Landfill
Closure Design and Construction Services
Fee Estimate

Closure Item 10 - Engineering
Closure Item 11 - Professional Services

	Senior Project Engineer	Project Manager	Project Engineer	Staff Engineer/ Professional	Resident Construction Representative	Technician/ AutoCAD	Administrative Assistant	Total	Labor Cost	Subconsult. Cost	Other Direct Costs	Total Costs
Tasks	\$ 215.00	\$ 170.00	\$ 170.00	\$ 130.00	\$ 85.00	\$ 80.00	\$ 80.00					
Engineering Services												
Closure Report and Permitting	100	40	240	240	0	80	8	708	\$ 107,340	\$ -	\$ 1,000	\$ 108,340
Closure Design	120	40	240	240	0	80	8	728	\$ 111,640	\$ -	\$ 1,000	\$ 112,640
Final Survey	0	2	4	8	0	24	0	38	\$ 3,980	\$ 10,000	\$ -	\$ 13,980
Certification	16	8	40	100	0	24	16	204	\$ 27,800	\$ -	\$ -	\$ 27,800
Subtotal	236	90	524	588	0	208	32	1678	\$ 250,760	\$ 10,000	\$ 2,000	\$ 262,760
Professional Services												
Contract Management	20	80	40	16	0	0	8	164	\$ 27,420	\$ -	\$ 5,000	\$ 32,420
CQA	40	40	80	80	800	16	8	1064	\$ 109,320	\$ 40,000	\$ 20,000	\$ 169,320
Subtotal	60	120	120	96	800	16	16	1228	\$ 136,740	\$ 40,000	\$ 25,000	\$ 201,740

Polk County BoCC (/)



(<https://www.facebook.com/polkcountyfl>)

Closure Item 13 - waste tires
Closure Item 13 - White goods

(twitter.com/PolkCountyFL)



(<https://www.youtube.com/user/polkcountyfl>)



([/contact-us](#))



(<https://member.everbridge.net/index/892807736724723#/overview>)



([/pgtv](#))



([/social-media-wall](#))

MENU

Search the Site



Landfill

North Central Landfill

LOCATION

The landfill is located at 7425 DeCastro Road, Winter Haven, FL 33880, between Lakeland and Winter Haven, 4.5 miles east of U.S. 98 South on County Road 540.

HOURS

Monday through Friday 7 a.m. to 5 p.m.

Saturdays 7:30 a.m. to 12:30 p.m.

Closed Sunday and the following holidays:

New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day

PAYMENT

Cash, check, debit or credit cards are acceptable forms of payment Monday through day.

Credit cards are NOW accepted on Saturday.

For information on setting up a business account, please contact our office at (863) 284-4319.

All incoming loads are subject to a \$10 minimum fee and must be secured. No waste generated from outside Polk County will be accepted without prior written approval from the Board of County Commissioners.

Accepted Materials	Rate
Garbage/Trash (Class 1)	\$36.50/ton
Yard Trash	\$22/ton
Construction and Demolition Debris	\$36.50/ton
Refrigerators and A/C Units (White Goods)	\$27.50/ton without Freon
assume 10 tons white goods 10 tons x \$50/ton = \$500	\$50/ton with Freon
Standard Passenger Vehicle Tires: No more than 24 tires accepted per visit	\$2/tire off rim
	\$5/tire on rim
Equipment/Semi Tires over 17"	\$175/ton
Scrap Metals	1500 tires x (1 ton/100 tires) x \$175/ton = \$2,625 \$27.50/ton
Mobile Homes	\$495/side
Special Handling Materials (Requiring additional resources to process the load properly)	\$175/ton

Unaccepted Materials:

- Bulk Liquids
- Pressurized tanks
- Commercial Quantities of liquids (55 Gallon drums)
- Ammunition/Explosives
- Biological Waste
- Asbestos
- Radioactive waste

Smoking is strictly prohibited while at the landfill.

If you have questions, call Waste and Recycling Division at (863) 284-4319.

The Polk County Board of County Commissioners is an equal opportunity and affirmative action (/equal-opportunity/equal-opportunity-action-plan) employer.

Polk County Board of County Commissioners

330 W. Church St.
PO Box 9005
Bartow, FL 33831-9005
(863) 534-6000

HARDEE COUNTY PURCHASING DEPT

205 HANCHEY RD
WAUCHULA FL 33873-9691

LTC item 1 - Groundwater Monitoring
LTC Item 2 - Surface Water Monitoring
LTC Item 3 - Gas Monitoring

PURCHASE ORDER: 519503

Page: 1 of 1

***** VENDOR *****
ATKINS NORTH AMERICA, INC
PO BOX 409357
ATLANTA GA 30384-9357

***** DELIVER TO *****
HARDEE COUNTY
SOLID WASTE & RECYCLE
685 AIRPORT ROAD
WAUCHULA, FL. 33873

Ordered	Due By	Ship Via	FOB	Terms	Customer No	By
12/04/2017	01/03/2018			NET 30 DAYS		MELODY

Requisition No	Vendor No	Vendor Phone	Vendor Fax	Vendor Contact
10030935	13291-1	(407)806-4339		GREG MUDD

No	Quantity	U/M	Description	Our Stock No	Unit Price	Extended	G/L Account
1	2.00	EACH	SURFACE WATER SAMPLING - 2 PER YEAR		825.0000	1,650.00	403-534-031-0
2	2.00	EACH	GROUDWATER SAMPLING - 8 SAMPLES 2 PER YEAR		6,016.0000	12,032.00	403-534-031-0
3	2.00	EACH	GROUNDWATER ELEVATIONS - 20 SAMPLES 2 PER YEAR		690.0000	1,380.00	403-534-031-0
4	2.00	EACH	GROUNDWATER REPORT - 1 EVENT 2 PER YEAR		3,140.0000	6,280.00	403-534-031-0
5	4.00	EACH	LANDFILL GAS MONITORING - 13 SAMPLES 4 PER YEAR		910.0000	3,640.00	403-534-031-0
					** TOTAL **	24,982.00	

Groundwater Monitoring:
 $\$6,016 + \$690 + \$3,140 = \$9,846$ Semi-Annually

Surface Water Monitoring:
\$825 Semi-Annually

Gas Monitoring:
\$910 Quarterly

VENDOR INSTRUCTIONS:

SPECIAL INSTRUCTIONS:

- MAIL INVOICES TO: HARDEE COUNTY CLERK TO BOCC
ACCOUNTING DEPT
PO DRAWER 1749
WAUCHULA, FL 33873
- INVOICES AND PACKAGES MUST BEAR THE P.O. NO. ABOVE.
- PURCHASES MAY NOT EXCEED THE TOTAL AMOUNT OF THIS ORDER WITHOUT PRIOR APPROVAL BY THE PURCHASING DEPT.
- ACCEPTANCE OF THIS ORDER INCLUDES ACCEPTANCE OF ALL TERMS, PRICES, DELIVERY INSTRUCTIONS, SPECIFICATIONS AND CONDITIONS.
- STATE TAX EXEMPT#: 9975123 EIN: 59-6000632
- IF YOU HAVE QUESTIONS, PLEASE CALL 863/773-5014.

VENDOR


Jack Logan



RECEIVED

INVOICE—STATEMENT

JUN 07

LTC Item 4: Leachate Testing

MID FLORIDA WATER LAB

8 Oakwood Rd. • Winter Haven, FL 33880
Phone (863) 965-2540 • Fax (863) 967-8601
Toll Free 888-244-5657

Customer's **Nº 11093**
Order No.

Date: 5/31/17

☐ Cash ☐ Check ☐ Account

Hardee County Utilities
Wauchula Hills + Vandolani
Attn: Michelle Puma 773-3465

QUAN.	DESCRIPTION	AMOUNT
W.H.	1 Set of WW Est at \$58.00 per set	\$ 58 00
	1 Set of WW Inf + Est at \$98.00 per set	98 00
	5 Water Bacti Samples at \$15.00 each	75 00
	1 Total Nitrogen + 1 Total Phosphorus at \$63.00	63 00
	1 BOD + 1 Ammonia sample at \$43.00 per set	43 00
	2 Biweekly courier pickup at \$15.00 each	30 00
Van	1 Set of WW Est at \$58.00 per set	58 00
	for May 2017	

PLEASE PAY BY INVOICE • TERMS: NET 15 DAYS

SUBTOTAL

TAX

TOTAL **\$425 00**

Received by: _____

A requisition will need to be put in for this in order for accounting to pay this invoice.

Ms. Margaret inadvertently put it on the invoice meant for Utilities.

Michelle

CHAIN OF
CUSTODY

No 75489



MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Road
Winter Haven, FL 33880

PHONE: (863) 965-2540
FAX: (863) 967-8601
TOLL FREE: 888-244-5657

FDOH Cert# E84567

FOR LAB USE

RECEIVED

2017 MAY 16 P

Client Name Hardee County Solid Waste Dept.
Address 685 Airport Road
City Waukegan State FL ZIP: 33873
Phone # 863-773-5089 Attn: Ken Wheeler
FAX #

Collected by: Alex Palacios State Collected From: 1

Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location
1		5/16/17	10:45	grab	Manhole - Leachate
2					
3				*	Poured off into
4					kept and preserved
5					@ Lab with
6					1:4 Hrs to a
7					pH=2 ✓ @ 5/17/17
8					
9					
10					
11					
12					
13					
14					

CUSTODY TRANSFERS

Relinquished by Andrea Ventura Date 5/16/17 Time 12:14
Received by Shreyas Date 5/16/17 Time 12:14
Laboratory Remarks Conc. High Date 5/17/17 Time 11:30

TESTS REQUIRED

Analysis	Remarks
<u>BOD</u>	<u>1705</u>
<u>DO</u>	<u>1705</u>
<u>PH</u>	<u>1705</u>
<u>SO₄</u>	<u>1705</u>
<u>NO₃</u>	<u>1705</u>
<u>NO₂</u>	<u>1705</u>
<u>CO₂</u>	<u>1705</u>
<u>CH₄</u>	<u>1705</u>
<u>SiO₂</u>	<u>1705</u>
<u>Fe</u>	<u>1705</u>
<u>Mn</u>	<u>1705</u>
<u>Zn</u>	<u>1705</u>
<u>Cu</u>	<u>1705</u>
<u>Pb</u>	<u>1705</u>
<u>Cr</u>	<u>1705</u>
<u>Ag</u>	<u>1705</u>
<u>As</u>	<u>1705</u>
<u>Ba</u>	<u>1705</u>
<u>Be</u>	<u>1705</u>
<u>B</u>	<u>1705</u>
<u>Br</u>	<u>1705</u>
<u>C</u>	<u>1705</u>
<u>Ca</u>	<u>1705</u>
<u>Cl</u>	<u>1705</u>
<u>Co</u>	<u>1705</u>
<u>F</u>	<u>1705</u>
<u>Hg</u>	<u>1705</u>
<u>I</u>	<u>1705</u>
<u>K</u>	<u>1705</u>
<u>Li</u>	<u>1705</u>
<u>Mg</u>	<u>1705</u>
<u>Mo</u>	<u>1705</u>
<u>N</u>	<u>1705</u>
<u>Na</u>	<u>1705</u>
<u>Ni</u>	<u>1705</u>
<u>Se</u>	<u>1705</u>
<u>S</u>	<u>1705</u>
<u>Ti</u>	<u>1705</u>
<u>Tl</u>	<u>1705</u>
<u>V</u>	<u>1705</u>
<u>W</u>	<u>1705</u>
<u>Xe</u>	<u>1705</u>
<u>Y</u>	<u>1705</u>
<u>Zr</u>	<u>1705</u>

☒ Delivered Directly to Lab ☐ Shipped
Method of Shipment On ICE PH=2.2
Containers Received Max Patel 28°
Date 5/17/17 Time 15:03

MATRIX CODES
GW - GROUND WATER
SW - SURFACE WATER
SO - SOIL
SL - SLUDGE
WW - WASTE WATER

89 292

**MID FLORIDA WATER LAB**

FDOH CERTIFICATION #: E84567

8 OAKWOOD ROAD, WINTER HAVEN FL 33880
Phone: (863) 965-2540 Fax: (863) 967-8601 Toll Free (888) 244-5657

Margaret Rajpaul, Director

LABORATORY RESULTSCLIENT: HARDEE COUNTY UTILITIESADDRESS: Hardee County Utilities, 2428 COMMERCE CT BOWLING GREEN, FL 33834SAMPLE DESCRIPTION: HARDEE COUNTY SOLID WASTE DEPARTMENTSAMPLE COLLECTION: ALEX PALACIOS 05/16/17 at 10.45 amSYSTEM NAME: MANHOLE LEACHATEDATE AND TIME RECEIVED: 05/16/17 @ 12.14 pm

Lab I.D. Number	Parameter	Result	Qualifier	Units	Procedure	MDL	Date & Time Start	Date & Time Completed
17051444	BIOLOGICAL OXYGEN DEMAND	1200	U	MG/L	SM5210B	1200	05/17/17@ 3.12 pm	E84167
17051444	AMMONIA as N	16.7	U	MG/L	150.1	0.008	05/24/17@ 10.14 am	E84167

COMMENTS: REVISED REPORT – DATA ENTRY ERROR.

THESE TESTS MEET NELAC REQUIREMENTS

The test results in this report relate only to the analyses of the samples submitted.

Qualifiers that may apply:U = Below Detection Limit

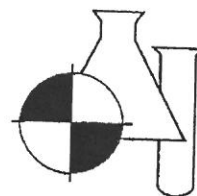
Margaret Rajpaul 5/31/17
Margaret Rajpaul – Contact Person

pg 1 of 2

Revised
SEE COMMENTS

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 17050691

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name : HARDEE COUNTY SOLID WASTE DEPT
Date Received : 05/17/2017
Time Received : 1503

Margaret Rajpaul

Submission Number: 17050691

Sample Number: 001

Sample Description: Manhole - Leachate

Sample Date: 05/16/2017

Sample Time: 1045

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	16.7	MG/L	0.008	0.032	350.1	05/24/2017 10:44	SW
BIOCHEMICAL OXYGEN DEMAND	1200 U	MG/L	1200	4800	SM5210B	05/17/2017 15:12	LD/LD

06/01/2017

Dale D. Dixon / Laboratory Director

Date

Tulay Tanrisever / QC Officer

Deborah A. Murphy / Project Manager

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.
B = Results based upon colony counts outside the ideal range.
H = Value based on field kit determination. Results may not be accurate.
I = Reported value is between the laboratory MDL and the PQL.
J1 = Estimated value. Surrogate recovery limits exceeded.
J2 = Estimated value. No quality control criteria exists for component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
J5 = Estimated value. Data questionable due to improper lab or field protocols.
K = Off-scale low. Value is known to be < the value reported.
L = Off-scale high. Value is known to be > the value reported.
N = Presumptive evidence of presence of material.
O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.
T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.
! = Data deviate from historically established concentration ranges.
? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
* = Not reported due to interference.

NOTES:

MBAS calculated as LAS; molecular weight = 340.
PQL = 4xMDL.
ND = Not detected at or above the adjusted reporting limit.
X = Value exceeds MCL.

COMMENTS:

Data entry error for BOD.

For questions or comments regarding these results, please contact us at (941) 723-9986.
Results relate only to the samples.

FLORIDA JETCLEAN

HIGH PRESSURE WATER JETTING – VACUUM EXTRACTION EXPLOSION PROOF INSPECTION - PIPE LOCATING – NO DIG REPAIRS

7538 Dunbridge Drive
Odessa, FL 33556
www.floridajetclean.com

TEL : 800-226-8013
FAX : 813-926-4616

PROPOSAL

DATE : 5/5/2017
TO : Jeremy Toms – Jones Edmunds
FROM : Ralph Calistri (floridajetclean@yahoo.com)
SUBJECT : Leachate Collection System Maintenance at Hardee County Landfill

Thank you for your inquiry. We confirm our capability and interest in carrying out this work at the Hardee County Landfill.

FLORIDA JETCLEAN specializes in leachate collection system maintenance and inspection, and has developed a considerable amount of specific expertise in this field over the last 29+ years. Our company has worked at an extensive number of landfills in Florida, Georgia, the Carolinas, Delaware, and westward to Arkansas. We have worked with most engineering companies active in this field, and have also fostered excellent working relationships with the regulatory authorities. We use modified jetting equipment designed to achieve extended pipe distances found in landfill environments and our explosion proof camera equipment complies with OSHA and regulatory mandates for methane environments. Substantial references are available on request.

- 1) **Florida Jetclean, Inc. is consistently successful in Leachate pipe cleaning because of our ability to address extended distances from a single point of entry.** Typical lower-end equipment is designed for much shorter pipes in sewer environments and is just not capable of distances required in Leachate collection systems. We will provide very capable, high-end equipment, and seasoned operators to help ensure success. Our current distance record from a single point of entry is 1,650’.
- 2) Florida Jetclean, Inc. uses only **explosion proof** (certified Class 1, Division 1, Gas Groups C & D) tractor-driven or push-rod video inspection equipment. **THIS CERTIFICATION IS MANDATED BY OSHA IN METHANE PIPING.** Our equipment and procedures fully meet OSHA and DEP requirements, and **we will put it in writing.**

Proposal to provide high-pressure water-jetting and explosion-proof video-inspection services on the Phase I leachate collection system and the Phase II Section I & II

leachate collection and groundwater collection systems at the Hardee County Landfill, as follows:

Approximately

3,000' of Phase I Leachate Collection Pipe

6,340' of Phase II Section I Groundwater Collection Pipe

2,350' of Phase II Section I Leachate Collection Pipe

1,300' of Phase II Section I Toe Drains

Two days of vacuum extraction of dislodged sediments from pump stations and sumps.

Total Cost For Above = \$ 29,227.50

Plus Additional Pipe

3,150' of Phase II Section II Leachate Collection Pipe

1,000' of Phase II Section II Groundwater Underdrain

Total Cost For Additional Pipe = \$ 7,868.50

17,140 LF Piping Total Cost = \$37,096 Piping unit cost = \$2.16 / LF

Plus Cleaning 2 x 79,000 Gallon (30' x 16') Open Top Leachate Tanks

- Confined Space Entry

- Vacuum Truck / Crew for Cleanout of Sludge

- On Site, No charge Disposal of Sludge

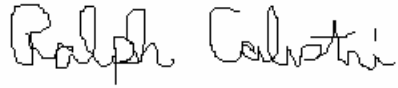
Total Cost For Tank Cleanout = \$ 9,500.00 / Tank

The proposal is subject to the following :

- The above pipe cleaning covers biomass and light silt removal. Scale removal and blockage penetration may require the use of 10,000PSI/20GPM pipeline water-blasting equipment billable at \$1,950/day. Pipes affected by heavy silting may require additional hourly billing.
- An adequate, no charge, on site water supply for jetcleaning.
- Debris vacuum extracted from landfill vaults and/or tanks to be dumped back on site at no charge.
- 2 wheel drive vehicle access within 10'-15' of each cleanout or manhole
- Continuity of access allowing work to be carried out on a single mobilization
- Exposed and opened cleanouts/manholes at ground level
- Standby time chargeable at \$200.00 per hour should delays not of our making delay progress e.g. bad weather, access problems, high leachate flow levels etc.
- Pricing is unrelated to actual or achieved footages but on the number of setups required and the time we anticipate being on site.
- Current technology limitations may preclude the use of tractor video systems (range 1250') in 8" lines restricted to cleanout access. If a push video system has to be used, we will be limited to a maximum 500' from each point of entry.
- Our equipment and procedures fully meet OSHA and DEP requirements. In particular our video inspection equipment is certified Class 1, Division 1, Groups C & D (i.e. explosion proof). This is mandated in methane piping by OSHA.

- Tanks to be pumped down thereby exposing sludge to be removed via vacuum truck.
- Video log and report together with DVD's will be provided after completion.

Regards,

A handwritten signature in black ink, appearing to read "Ralph Calistri". The signature is written in a cursive, somewhat stylized font.

Ralph Calistri – Florida Jetclean

LTC Item 5 - Leachate disposal

**#11040 – CITY OF WAUCHULA
P O BOX 818 WAUCHULA, FL 33873**

Solid Waste – Utilities

685 AIRPORT RD

SEND COPY TO KEN WHEELER & OFELIA

13 10660 Landfill

Acct# 403-534-043-0 2612.90



CITY OF WAUCHULA

126 South 7th Ave.
WAUCHULA, FL 33873-2802
863-773-3131
www.cityofwauchula.com

RECEIVED APR 26 2017

MAKE CHECKS PAYABLE TO:

CITY OF WAUCHULA

OFFICE HOURS:

Monday - Friday
8:00 a.m. - 5:00 p.m.

Please Put Account
Number on Check

ACCOUNT NUMBER

13-10660-00

SERVICE FROM

03/14/2017

SERVICE TO

04/13/2017

ACCOUNT NUMBER

13-10660-00

SERVICE ADDRESS

INDUSTRIAL PK

CUSTOMER

DUE DATE	AMOUNT DUE
05/19/17	\$2,612.90

**SERVICE MAY BE DISCONTINUED WITHOUT FURTHER NOTICE
IF NOT PAID BY THE DUE DATE. ANY PAST DUE BALANCE
(AR) MUST BE PAID IMMEDIATELY.**

AFTER HOURS, PLEASE CALL 863-773-3132

Bills are due and payable when rendered.
THIS IS THE ONLY NOTICE YOU WILL RECEIVE.
Failure to receive bill does not relieve obligation
to pay or entitle extended time for payment.

HARDEE COUNTY COMMIS



SERVICE CODES:

EL - Electric
GA - Garbage
SE - Sewer

DC - Demand Charge
SL - Security Light
ST - State Sales Tax

U - User Fee
W - Water
H - Hanger Rent

AR - Arrears
CT - City Utility Tax or Surcharge
K - Florida Gross Receipt Tax

AMOUNT DUE

\$2,612.90

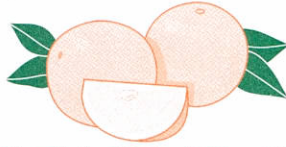
PLEASE
RETURN THIS
STUB WITH
YOUR PAYMENT

SUMMARY AREA - BILL TOTALS

METER READING		CONSUMPTION	CODE	AMOUNT DUE
PREVIOUS	PRESENT			
0	304,000	304,000	SW SEWER METE	2,612.90
AMOUNT DUE				\$2,612.90

\$2,612.90/304,000 gal x 1,000 gal = \$8.60 /1,000 gal

COST ADJ. RATE 0.00000



LTC Item 5 - Leachate Hauling

JLC FARMS, INC.
Citrus Harvesting & Hauling
Licensed Citrus Fruit Dealer

Hardee County

Attn: Ken Wheeler

Dear Mr. Wheeler,

Thank you for allowing JLC Farms, INC. the opportunity to propose a bid for the hauling job as described. We are prepared to provide our truck and driver transporting the tanker with the specified trailer load from the Hardee County Landfill. We will do this at a cost of \$70.00 per hour. We would appreciate the county's consideration for this job.

Again, thank you for your time and we look forward to working with you.

Sincerely,

Jake Carlton, Vice President
JLC Farms, INC.

Assume:

6,000 gal/load

10 hours/ 7 loads (based on current disposal)

Calculate:

$\$70/\text{hour} \times (1.5 \text{ hours/load}) \times (1 \text{ load}/6,000 \text{ gal}) = \$0.0175/\text{gal} = \$17.50/\text{Kgal}$



Client: Jones Edmunds & Associates, Inc.

Attn: FACE Backup Information - Groundwater Monitoring Well Replacement

Date: 5/10/2017

Quote Page 1 of 1

Cost Estimate Drilling: Hardee County Class I Landfill

HDI #

	EST /UNIT	PRICE	TOTAL
MOBILIZATION/DEMOBILIZATION			\$ 650.00
MONITORING WELLS (Includes: Screen, Riser, Seal & Grout)			
Diameter 2" (1x20') 0 - 50'	20.0 /ft	28.00 /ft	\$ 560.00
ADDITIONAL ITEMS			
Well Completion (Development, Concrete Pad)	1.0 /ea	207.00 /ea	\$ 207.00
Above-Ground Protective Casing	1.0 /ea	75.00 /ea	\$ 75.00
Per Diem	1.0 /dy	385.00 /dy	\$ 385.00
Permits	1.0 /ea	50.00 /ea	\$ 50.00
Total Estimate			\$ 1,927.00

35920 STATE ROAD 52 • DADE CITY, FL 33525 • (352) 567-9500 • (352) 567-6646

LTC Item 6 - Groundwater Monitoring Well Replacement

LTC Item 7 - Gas vent replacement



Client: Jones Edmunds & Associates, Inc.

Attn: FACE Backup Information - Groundwater Monitoring Well Replacement

Date: 5/10/2017

Quote Page 1 of 1

Cost Estimate Drilling: Hardee County Class I Landfill

HDI #

	EST /UNIT	PRICE	TOTAL
MOBILIZATION/DEMOBILIZATION			\$ 650.00
MONITORING WELLS (Includes: Screen, Riser, Seal & Grout)			
Diameter 2" (1x20') 0 - 50'	20.0 /ft	28.00 /ft	\$ 560.00
ADDITIONAL ITEMS			
Well Completion (Development, Well Cover, Concrete Pad)	1.0 /ea	207.00 /ea	\$ 207.00
Per Diem	1.0 /dy	385.00 /dy	\$ 385.00
Permits	1.0 /ea	50.00 /ea	\$ 50.00
Total Estimate			\$ 1,852.00

35920 STATE ROAD 52 • DADE CITY, FL 33525 • (352) 567-9500 • (352) 567-6646

Assume abandonment done concurrently with drilling:

Total = \$1,852 - \$650 = \$1,202

LTC Item 7 - Gas vent replacement



Client: Jones Edmunds & Associates, Inc.

Attn: FACE Backup Information - Groundwater Monitoring Well Replacement

Date: 5/10/2017

Quote Page 1 of 1

Cost Estimate Drilling: Hardee County Class I Landfill

HDI #

	EST /UNIT	PRICE	TOTAL
MOBILIZATION/DEMOBILIZATION			\$ 650.00
MONITORING WELLS (Includes: Screen, Riser, Seal & Grout)			
Diameter 2" (1x20') 0 - 50'	20.0 /ft	28.00 /ft	\$ 560.00
ADDITIONAL ITEMS			
Well Completion (Development, Concrete Pad)	1.0 /ea	207.00 /ea	\$ 207.00
Above-Ground Protective Casing	1.0 /ea	75.00 /ea	\$ 75.00
Per Diem	1.0 /dy	385.00 /dy	\$ 385.00
Permits	1.0 /ea	50.00 /ea	\$ 50.00
Total Estimate			\$ 1,927.00

35920 STATE ROAD 52 • DADE CITY, FL 33525 • (352) 567-9500 • (352) 567-6646

Change to 50 ft gas vent:

50 ft x \$28/ft = \$1400

\$1400 + \$650 + \$207 + \$75 + \$385 + \$50 = \$2,767

RS Means Cover Page
Cost Data: Heavy Construction
Location: Tampa, FL
Year: 2017

RSMeans data
from GORDIAN®

Guide Me

Welcome JoAnne Talamo

0

Search Data

Manage Estimates

Square Foot Estimator

Life Cycle Cost

Cost Alerts and Trends

Reference Items

☆ My Favorites

Cost Data

.....Heavy Construction

Type

Unit

Labor Type

Open Shop

Location

TAMPA (335-336,346)

Release

Year 2017

Search

Search

What are you searching for?

All

Q Search

☐ Include My Custom Data

+

Estimate Action

Select From List

Hardee County Landfill

Page 1 of 1

Lines 1 - 5 of 5

	Source	Qty	Line Number			Description	Frequency	Crew	Unit	Labor Hours	Daily Output	Extended Material	Extended Material O&P
<input type="checkbox"/>	Unit	0	312323170020		<input type="checkbox"/>	Fill, dumped material, spread, by dozer, excludes compa		B10B	L.C.Y.	0.010	1000.000		
<input type="checkbox"/>	Unit	0	312323201100		<input type="checkbox"/>	Cycle hauling(wait, load, travel, unload or dump & return		B34B	L.C.Y.	0.070	108.000		
<input type="checkbox"/>	Unit	0	312323235040		<input type="checkbox"/>	Compaction, riding, vibrating roller, 4 passes, 6" lifts		B10Y	E.C.Y.		1900.000		
<input type="checkbox"/>	Unit	0	320190194190		<input type="checkbox"/>	Mowing, lawn mowing, 5 gang reel, 12', with tractor & a		B66	M.S.F.	0.010	1200.000		
<input type="checkbox"/>	Unit	0	334713531200		<input type="checkbox"/>	Pond and reservoir liners, membrane lining systems HDF		3 Skwk	S.F.	0.010	1600.000		

Cost Estimate Report

Hardee County Landfill

Year 2017

Unit Detail Report

Prepared By: JoAnne Talamo

Jones Edmunds & Associates, Inc.

LTC item 8:
Mowing

LTC item 9:
Sodding
Liner Repair

Closure Item 2:
Placement and Spreading
Compaction
Delivery

Closure Item 4:
Delivery
Placement and Spreading

Date: 02/07/2018

LineNumber	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 31 Earthwork					
312323170020	Fill, dumped material, spread, by dozer, excludes compaction	0.00	L.C.Y.	\$2.05	
312323201100	Cycle hauling(wait, load, travel, unload or dump & return) time per cycle, excavated or borrow, loose cubic yards, 15 min load/wait/unload, 12 C.Y. truck, cycle 30 miles, 45 MPH, excludes loading equipment	0.00	L.C.Y.	\$10.56	
312323235040	Compaction, riding, vibrating roller, 4 passes, 6" lifts	0.00	E.C.Y.	\$0.61	
Division 31 Earthwork Subtotal					\$0.00
Division 32 Exterior Improvements					
320190194190	Mowing, lawn mowing, 5 gang reel, 12', with tractor & attachments	0.00	M.S.F.	\$0.64	
Division 32 Exterior Improvements Subtotal					\$0.00
					\$0.64/MSF x 1 MSF/1,000 SF x 43,560 SF/AC = \$27.88/AC
Division 33 Utilities					
334713531200	Pond and reservoir liners, membrane lining systems HDPE, 100,000 S.F. or more, 60 mil thick, per S.F.	0.00	S.F.	\$1.19	
Division 33 Utilities Subtotal					\$0.00

Placement and Spreading

\$0.00

Delivery

\$0.00

Compaction

\$0.00

Mowing

\$0.00

Liner Repair

\$0.00

\$1.19 * 9 SF/SY = \$10.71/SY

Florida Department of Transportation
Item Average Unit Cost
From 2016/04/01 to 2017/03/31

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

LTC Item 9 - Regrading

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0110 7 1	51	\$147.36	\$129,386.23	878.000	EA	N	MAILBOX, F&I SINGLE
0110 8	1	\$4,000.00	\$8,000.00	2.000	DA	N	UNDERWATER DEBRIS REMOVAL
0110 12 1	2	\$1,802.90	\$124,400.00	69.000	SY	N	HYDRODEMOLITION, REM OF DECK SURFACE
0110 20 2	1	\$405.67	\$199,995.31	493.000	SF	N	REMOVAL OF EXISTING WALL, RETAINING WALL
0110 71 1	3	\$453.19	\$434,614.00	959.000	LF	N	BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL
0110 73	4	\$107.45	\$143,125.00	1,332.000	LF	N	REMOVE EXISTING BULKHEAD
0110 82	1	\$5,000.00	\$10,000.00	2.000	MB	N	REMOVE & DISPOSE OF STRUCTURAL TIMBER
0110 84	1	\$1,855,000.00	\$1,855,000.00	1.000	LS	N	TRANSPORT EXIST MATL FOR REEF EST
0110 86	21	\$2,629.59	\$73,628.42	28.000	LS	N	DELIVERY OF SALVAGEABLE MATERIAL TO FDOT
0120 1	122	\$5.72	\$25,304,522.95	4,423,742.480	CY	N	REGULAR EXCAVATION
0120 2 2	55	\$12.81	\$1,326,809.55	103,605.740	CY	N	BORROW EXCAVATION, TRUCK MEASURE
0120 3	3	\$10.73	\$23,932.39	2,230.700	CY	N	LATERAL DITCH EXCAVATION
0120 4	33	\$7.39	\$5,946,065.26	804,342.400	CY	N	SUBSOIL EXCAVATION
0120 5	13	\$31.88	\$375,028.03	11,764.600	CY	N	CHANNEL EXCAVATION
0120 6	99	\$7.75	\$72,629,367.81	9,369,169.100	CY	N	EMBANKMENT
0120 71	37	\$30,516.96	\$1,220,678.36	40.000	LS	N	REGULAR EXCAVATION (3-R PROJECTS ONLY)
0120 74	1	\$3.00	\$66,504.00	22,168.000	CY	N	SURCHARGE EMBANKMENT
0121 70	14	\$179.62	\$657,815.61	3,662.300	CY	N	FLOWABLE FILL
0125 1	5	\$11.31	\$14,498.20	1,282.300	CY	N	EXCAVATION FOR STRUCTURES
0125 3	1	\$130.00	\$14,040.00	108.000	CY	N	SELECT BEDDING MATERIAL
0141 70	6	\$986.25	\$78,900.00	80.000	AS	N	SETTLEMENT PLATE ASSEMBLY
0145 1	2	\$3.59	\$184,709.00	51,496.000	SF	N	GEOSYNTHETIC REINFORCED SOIL SLOPE
0145 2	9	\$3.56	\$307,938.79	86,418.000	SY	N	GEOSYNTHETIC REINF FND OVER SOFT SOIL
0145 72	1	\$30.00	\$1,530.00	51.000	SY	N	CELLULAR CONFINEMENT FOR SOIL STABILIZAT
0160 4	117	\$4.23	\$20,652,184.08	4,880,580.000	SY	N	TYPE B STABILIZATION
0162 1 11	77	\$0.76	\$3,148,246.83	4,142,023.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 6"
0162 1 12	6	\$2.65	\$100,591.93	37,898.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 12"
0162 1 21	1	\$2.70	\$103,239.90	38,237.000	SY	N	PREPARED SOIL LAYER, ORGANIC SOIL, 6"
0173 76	1	\$17.00	\$17,000.00	1,000.000	LF	N	GROUT PIPE INSTALLATION
0173 77 1	2	\$196.38	\$143,360.00	730.000	CY	N	SUBSURF PRESSURE GROUTING,SAND CEM
0210 1 1	2	\$5.91	\$44,112.00	7,458.000	SY	N	REWORKING LIMEROCK BASE, 6"
0210 1 9	1	\$50.00	\$10,000.00	200.000	SY	N	REWORKING LIMEROCK BASE, 3"
0210 2	1	\$30.00	\$10,455.00	348.500	CY	N	LIMEROCK-NEW MATERIAL FOR REWORKING BASE
0285701	83	\$16.34	\$18,055,971.64	1,105,159.000	SY	N	OPTIONAL BASE,BASE GROUP 01
0285702	13	\$9.67	\$628,106.59	64,933.000	SY	N	OPTIONAL BASE,BASE GROUP 02
0285703	9	\$8.60	\$991,432.70	115,258.000	SY	N	OPTIONAL BASE,BASE GROUP 03
0285704	12	\$11.52	\$1,113,645.15	96,680.000	SY	N	OPTIONAL BASE,BASE GROUP 04
0285705	8	\$12.74	\$2,966,663.75	232,945.000	SY	N	OPTIONAL BASE,BASE GROUP 05
0285706	42	\$17.89	\$3,573,401.31	199,774.000	SY	N	OPTIONAL BASE,BASE GROUP 06
0285707	3	\$28.29	\$214,756.90	7,591.000	SY	N	OPTIONAL BASE,BASE GROUP 07

Florida Department of Transportation
Item Average Unit Cost
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Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

LTC Item 9 - Sodding

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0561 1	14	\$1,025.28	\$17,236,033.42	16,811.100	TN	N	COATING EXISTING STRUCTURAL STEEL
0561 2	2	\$34.74	\$144,189.50	4,150.000	SF	N	COATING EXISTING STRUCTURAL STEEL
0563 4	3	\$1.55	\$59,729.95	38,439.000	SF	N	ANTI-GRAFFITI COATING, NON-SACRIFICIAL
0570 1 1	37	\$1.93	\$6,446,022.03	3,332,194.000	SY	N	PERFORMANCE TURF
0570 1 2	178	\$2.61	\$16,383,491.91	6,268,046.000	SY	N	PERFORMANCE TURF, SOD
0571 1 11	7	\$3.57	\$154,350.22	43,260.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 1
0571 1 12	4	\$9.51	\$192,974.82	20,301.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 2
0571 1 13	1	\$32.00	\$704.00	22.000	SY	N	PLASTIC EROSION MAT, TRM, TYPE 3
0580 1 1	8	\$97,357.28	\$778,858.20	8.000	LS	N	LANDSCAPE COMPLETE- SMALL PLANTS
0580 1 2	11	\$37,907.32	\$492,795.13	13.000	LS	N	LANDSCAPE COMPLETE- LARGE PLANTS
0580 2 2	1	\$1,400.00	\$85,400.00	61.000	EA	N	LANDSCAPE- RELOCATE TREE, PALMS >14'
0580 7103	1	\$10.50	\$7,371.00	702.000	EA	N	LANDSCAPE- SM SHRUB/GR, MUHLY GRASS
0590 3	1	\$27,400.00	\$27,400.00	1.000	EA	N	IRRIGATION SYSTEM CONTROLLER
0590 70	4	\$60,785.00	\$243,140.00	4.000	LS	N	IRRIGATION SYSTEM
0590 70 1	8	\$39,113.22	\$312,905.75	8.000	LS	N	IRRIGATION SYSTEM REPAIRS
0630 2 11	111	\$7.25	\$10,856,822.73	1,497,112.000	LF	N	CONDUIT, F& I, OPEN TRENCH
0630 2 12	119	\$16.69	\$9,059,246.65	542,719.000	LF	N	CONDUIT, F& I, DIRECTIONAL BORE
0630 2 14	25	\$19.45	\$163,021.46	8,381.000	LF	N	CONDUIT, F& I, ABOVEGROUND
0630 2 15	25	\$18.44	\$827,936.08	44,910.000	LF	N	CONDUIT, F& I, BRIDGE MOUNT
0630 2 65	4	\$7.58	\$37,961.00	5,011.000	LF	N	CONDUIT, REMOVE, BRIDGE MOUNT
0632 7 1	75	\$5,129.21	\$1,128,425.73	220.000	PI	N	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL
0632 7 2	23	\$4.95	\$98,857.73	19,969.000	LF	N	SIGNAL CABLE, REPAIR/REPL-FUR & INSTALL
0632 7 6	36	\$620.06	\$45,264.08	73.000	PI	N	SIGNAL CABLE, REMOVE- INTERSECTION
0632 7 7	2	\$2.89	\$1,435.00	496.000	LF	N	SIGNAL CABLE, REMOVE- OUTSIDE OF INTERSE
0633 1111	3	\$5.20	\$7,880.00	1,516.000	LF	N	FIBER OPTIC CABLE, F&I, OVH,2-12
0633 1112	1	\$2.68	\$696.80	260.000	LF	N	FIBER OPTIC CABLE, F&I,OVH,13-48
0633 1113	1	\$3.00	\$17,976.00	5,992.000	LF	N	FIBER OPTIC CABLE,F&I, OVH,49-96
0633 1121	35	\$2.58	\$1,266,097.12	490,785.000	LF	N	FIBER OPTIC CABLE, F&I, UG,2-12
0633 1122	22	\$2.94	\$452,050.70	153,537.000	LF	N	FIBER OPTIC CABLE, F&I, UG,13-48
0633 1123	16	\$2.72	\$2,772,762.46	1,018,780.000	LF	N	FIBER OPTIC CABLE, F&I, UG,49-96
0633 1124	3	\$3.67	\$503,361.00	137,118.000	LF	N	FIBER OPTIC CABLE, F&I, UG,97-144
0633 1410	1	\$2.07	\$581.67	281.000	LF	N	FIBER OPTIC CABLE, REL, OV
0633 1420	7	\$12.19	\$65,179.58	5,345.000	LF	N	FIBER OPTIC CABLE, REL, UG
0633 1610	3	\$1.77	\$5,767.48	3,266.000	LF	N	FIBER OPTIC CABLE, REM, OV
0633 1620	19	\$.81	\$172,882.85	213,371.000	LF	N	FIBER OPTIC CABLE, REM, UG
0633 2 31	38	\$41.53	\$345,342.94	8,316.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, SPLICE
0633 2 32	20	\$86.60	\$233,723.96	2,699.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, TERM
0633 3 11	35	\$860.87	\$303,027.83	352.000	EA	N	FIBER OPTIC CONN HDWR, SPLICE ENCLOSURE
0633 3 12	30	\$68.88	\$40,430.86	587.000	EA	N	FIBER OPTIC CONN HDWR, SPLICE TRAY
0633 3 13	14	\$94.35	\$229,180.07	2,429.000	EA	N	FIBER OPTIC CONN HDWR, PRETERM CONNECT A

Florida Department of Transportation
Item Average Unit Cost
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Contract Type: CC STATEWIDE
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LTC Item 10 - Stormwater Ditch

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0110 7 1	51	\$147.36	\$129,386.23	878.000	EA	N	MAILBOX, F&I SINGLE
0110 8	1	\$4,000.00	\$8,000.00	2.000	DA	N	UNDERWATER DEBRIS REMOVAL
0110 12 1	2	\$1,802.90	\$124,400.00	69.000	SY	N	HYDRODEMOLITION, REM OF DECK SURFACE
0110 20 2	1	\$405.67	\$199,995.31	493.000	SF	N	REMOVAL OF EXISTING WALL, RETAINING WALL
0110 71 1	3	\$453.19	\$434,614.00	959.000	LF	N	BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL
0110 73	4	\$107.45	\$143,125.00	1,332.000	LF	N	REMOVE EXISTING BULKHEAD
0110 82	1	\$5,000.00	\$10,000.00	2.000	MB	N	REMOVE & DISPOSE OF STRUCTURAL TIMBER
0110 84	1	\$1,855,000.00	\$1,855,000.00	1.000	LS	N	TRANSPORT EXIST MATL FOR REEF EST
0110 86	21	\$2,629.59	\$73,628.42	28.000	LS	N	DELIVERY OF SALVAGEABLE MATERIAL TO FDOT
0120 1	122	\$5.72	\$25,304,522.95	4,423,742.480	CY	N	REGULAR EXCAVATION
0120 2 2	55	\$12.81	\$1,326,809.55	103,605.740	CY	N	BORROW EXCAVATION, TRUCK MEASURE
0120 3	3	\$10.73	\$23,932.39	2,230.700	CY	N	LATERAL DITCH EXCAVATION
0120 4	33	\$7.39	\$5,946,065.26	804,342.400	CY	N	SUBSOIL EXCAVATION
0120 5	13	\$31.88	\$375,028.03	11,764.600	CY	N	CHANNEL EXCAVATION
0120 6	99	\$7.75	\$72,629,367.81	9,369,169.100	CY	N	EMBANKMENT
0120 71	37	\$30,516.96	\$1,220,678.36	40.000	LS	N	REGULAR EXCAVATION (3-R PROJECTS ONLY)
0120 74	1	\$3.00	\$66,504.00	22,168.000	CY	N	SURCHARGE EMBANKMENT
0121 70	14	\$179.62	\$657,815.61	3,662.300	CY	N	FLOWABLE FILL
0125 1	5	\$11.31	\$14,498.20	1,282.300	CY	N	EXCAVATION FOR STRUCTURES
0125 3	1	\$130.00	\$14,040.00	108.000	CY	N	SELECT BEDDING MATERIAL
0141 70	6	\$986.25	\$78,900.00	80.000	AS	N	SETTLEMENT PLATE ASSEMBLY
0145 1	2	\$3.59	\$184,709.00	51,496.000	SF	N	GEOSYNTHETIC REINFORCED SOIL SLOPE
0145 2	9	\$3.56	\$307,938.79	86,418.000	SY	N	GEOSYNTHETIC REINF FND OVER SOFT SOIL
0145 72	1	\$30.00	\$1,530.00	51.000	SY	N	CELLULAR CONFINEMENT FOR SOIL STABILIZAT
0160 4	117	\$4.23	\$20,652,184.08	4,880,580.000	SY	N	TYPE B STABILIZATION
0162 1 11	77	\$.76	\$3,148,246.83	4,142,023.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 6"
0162 1 12	6	\$2.65	\$100,591.93	37,898.000	SY	N	PREPARED SOIL LAYER, FINISH SOIL, 12"
0162 1 21	1	\$2.70	\$103,239.90	38,237.000	SY	N	PREPARED SOIL LAYER, ORGANIC SOIL, 6"
0173 76	1	\$17.00	\$17,000.00	1,000.000	LF	N	GROUT PIPE INSTALLATION
0173 77 1	2	\$196.38	\$143,360.00	730.000	CY	N	SUBSURF PRESSURE GROUTING,SAND CEM
0210 1 1	2	\$5.91	\$44,112.00	7,458.000	SY	N	REWORKING LIMEROCK BASE, 6"
0210 1 9	1	\$50.00	\$10,000.00	200.000	SY	N	REWORKING LIMEROCK BASE, 3"
0210 2	1	\$30.00	\$10,455.00	348.500	CY	N	LIMEROCK-NEW MATERIAL FOR REWORKING BASE
0285701	83	\$16.34	\$18,055,971.64	1,105,159.000	SY	N	OPTIONAL BASE,BASE GROUP 01
0285702	13	\$9.67	\$628,106.59	64,933.000	SY	N	OPTIONAL BASE,BASE GROUP 02
0285703	9	\$8.60	\$991,432.70	115,258.000	SY	N	OPTIONAL BASE,BASE GROUP 03
0285704	12	\$11.52	\$1,113,645.15	96,680.000	SY	N	OPTIONAL BASE,BASE GROUP 04
0285705	8	\$12.74	\$2,966,663.75	232,945.000	SY	N	OPTIONAL BASE,BASE GROUP 05
0285706	42	\$17.89	\$3,573,401.31	199,774.000	SY	N	OPTIONAL BASE,BASE GROUP 06
0285707	3	\$28.29	\$214,756.90	7,591.000	SY	N	OPTIONAL BASE,BASE GROUP 07

Florida Department of Transportation
Item Average Unit Cost
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Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
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LTC Item 11 - Fencing

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0536 6	12	\$13.55	\$140,289.18	10,350.000	LF	N	PIPE RAIL FOR GUARDRAIL
0536 7	14	\$188.95	\$107,323.60	568.000	EA	N	SPECIAL GUARDRAIL POST
0536 7 1	3	\$90.49	\$247,674.50	2,737.000	EA	N	SPECIAL GUARDRAIL POST- DEEP POST FOR SL
0536 7 2	5	\$137.07	\$19,327.48	141.000	EA	N	SPECIAL GUARDRAIL POST- SP STEEL POST CM
0536 7 3	5	\$93.44	\$8,970.50	96.000	EA	N	SPECIAL GUARDRAIL POST- ENCASED POST SM
0536 7 4	1	\$175.00	\$3,150.00	18.000	EA	N	SPECIAL GUARDRAIL POST- FRANG LEAVE OUT
0536 8	43	\$2,585.78	\$669,717.06	259.000	EA	N	GUARDRAIL- BRIDGE ANCHORAGE ASSEM, F&I
0536 8 6	19	\$192.24	\$14,994.70	78.000	EA	N	GUARDRAIL,BRIDGE ANCHORAGE ASSEM,REMOVE
0536 8 11	3	\$1,888.44	\$16,996.00	9.000	EA	N	APPR TRANS- BRIDGE ANCH ASSY, F&I
0536 8 12	2	\$1,532.14	\$10,725.00	7.000	EA	N	APPROACH TRANS CONN TO RIGID BA, F&I, 2
0536 8 13	5	\$1,647.71	\$59,317.44	36.000	EA	N	APPROACH TRANS CONN TO RIGID BA, F&I, 3
0536 73	82	\$2.01	\$458,026.16	227,916.000	LF	N	GUARDRAIL REMOVAL
0536 82	14	\$2,430.26	\$272,189.40	112.000	EA	N	GUARDRAIL ANCHORAGE- CONC BARRIER
0536 83 1	1	\$150.00	\$1,200.00	8.000	EA	N	GUARDRAIL POST REPLACEMENT, REGULAR
0536 85 22	59	\$2,522.14	\$802,039.58	318.000	EA	N	GUARDRAIL END ANCH ASSY/END TREA- FLARED
0536 85 24	35	\$2,474.45	\$316,730.16	128.000	EA	N	GUARDRAIL END ANCH ASSY/END TRE,PARALLEL
0536 85 25	49	\$883.34	\$225,252.08	255.000	EA	N	GUARDRAIL END ANCH ASSY/END TRE- TYPE II
0536 85 26	10	\$1,995.03	\$53,865.72	27.000	EA	N	GUARDRAIL END ANCH ASSY/END TRE- TYP CRT
0536 85 27	6	\$5,023.07	\$45,207.66	9.000	EA	N	GUARDRAIL END ANCH ASSY/END TR- DBL FACE
0538 1	15	\$8.83	\$513,979.78	58,225.000	LF	N	GUARDRAIL RESET
0542 70	5	\$47.36	\$8,288.66	175.000	EA	N	BUMPER GUARDS, CONCRETE
0544 75 1	19	\$17,697.45	\$796,385.10	45.000	EA	N	CRASH CUSHION
0546 71	4	\$708.40	\$11,334.40	16.000	PS	N	RUMBLE STRIPS
0546 72 52	14	\$1,480.28	\$86,754.95	58.607	GM	N	RUMBLE STRIPS, GROUND-IN, 16" CENTERLINE
0546 72 53	29	\$1,095.45	\$365,161.36	333.345	GM	N	RUMBLE STRIPS, GROUND-IN, 8" EDGELINE
0546 72 55	20	\$1,328.08	\$333,851.18	251.378	GM	N	RUMBLE STRIPS, GROUND-IN, 16" SHOULDER
0548 12	13	\$31.65	\$20,211,532.68	638,607.000	SF	N	RET WALL SYSTEM, PERM, EX BARRIER
0548 13	8	\$14.61	\$2,648,570.34	181,286.000	SF	N	RETAINING WALL SYSTEM,TEMP, EXC BAR.
0550 10110	5	\$12.70	\$29,623.20	2,332.000	LF	N	FENCING, TYPE A, 0.0-5.0', STANDARD
0550 10120	4	\$11.79	\$40,826.44	3,462.000	LF	N	FENCING, TYPE A, 5.1-6.0, STANDARD
0550 10149	1	\$11.87	\$653,051.79	55,017.000	LF	N	FENCING, TYPE A, 7.1-8.0', SPECIAL FEATU
0550 10150	2	\$10.66	\$766,519.00	71,932.000	LF	N	FENCING, TYPE A, 8.1-10.0', STANDARD
0550 10210	2	\$25.93	\$12,135.00	468.000	LF	N	FENCING, TYPE B, 0.0-5.0', STANDARD FEAT
0550 10212	2	\$13.66	\$15,664.00	1,147.000	LF	N	FENCING, TYPE B, 0.0-5.0', W/ VINYL COAT
0550 10218	1	\$40.00	\$6,400.00	160.000	LF	N	FENCING, TYPE B, 0.0-5.0', RESET EXIST
0550 10220	10	\$12.72	\$1,008,272.54	79,273.000	LF	N	FENCING, TYPE B, 5.1-6.0', STANDARD
0550 10221	1	\$15.00	\$1,890.00	126.000	LF	N	FENCING, TYPE B, 5.1-6.0', W/ BARB ATTMT
0550 10222	9	\$17.14	\$160,232.02	9,348.000	LF	N	FENCING, TYPE B, 5.1-6.0, W/ VINYL COAT
0550 10228	7	\$11.69	\$38,478.00	3,291.000	LF	N	FENCING, TYPE B, 5.1-6.0, RESET EXISTING
0550 10231	1	\$59.50	\$8,330.00	140.000	LF	N	FENCING, TYPE B, 6.1-7.0, W/ BARB ATTMT

Florida Department of Transportation
Item Average Unit Cost
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Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

LTC item 11 - Gate

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0550 10238	1	\$20.00	\$980.00	49.000	LF	N	FENCING, TYPE B, 6.1-7.0, RESET EXISTING
0550 10248	2	\$43.91	\$6,938.15	158.000	LF	N	FENCING, TYPE B, 7.1-8.0, RESET EXISTING
0550 10251	4	\$18.29	\$2,000,988.85	109,432.000	LF	N	FENCING,TYPE B,8.1-10.0',W/ BRBD WR ATT
0550 10315	1	\$45.00	\$62,460.00	1,388.000	LF	N	FENCING, TYPE R, 0-5.0', VERTICAL
0550 10325	1	\$107.00	\$3,317.00	31.000	LF	N	FENCING, TYPE R, 5.1-6.0', VERTICAL
0550 10343	1	\$220.00	\$94,160.00	428.000	LF	N	FENCING, TYPE R, 7.1-8.0, W/FULL ENCLOS
0550 10344	2	\$30.35	\$91,313.80	3,009.000	LF	N	FENCING, TYPE R, 7.1-8.0, W/PART ENCLOS
0550 10353	3	\$79.27	\$216,162.35	2,727.000	LF	N	FENCING, TYPE R, 8.1-10', W/FULL ENCLOS
0550 10410	1	\$80.00	\$18,080.00	226.000	LF	N	FENCING, WOOD FENCE, 0.0-5.0'
0550 10420	2	\$5.24	\$4,946.25	944.000	LF	N	FENCING, WOOD, 5.1-6.0'
0550 10918	1	\$50.00	\$4,250.00	85.000	LF	N	FENCING,SPECIAL TYP, 0.0-5.0', RESET EXI
0550 10938	1	\$18.00	\$4,014.00	223.000	LF	N	FENCING, SPECIAL TYPE, 6.1-7.0', RESET
0550 10948	1	\$20.00	\$60.00	3.000	LF	N	FENCING, SPECIAL TYPE, 7.1-8.0', RESET
0550 11 11	1	\$5.46	\$89,653.20	16,420.000	LF	N	FENCING ENHANCEMENTS- GALV STEEL MESH
0550 11 12	1	\$5.80	\$79,895.00	13,775.000	LF	N	FENCING EN- PVC COAT STEEL MESH, 0-5'
0550 60112	2	\$3,661.00	\$14,644.00	4.000	EA	N	FENCE GATE,TYP A, SGL, 6.1-12' OPENING
0550 60124	1	\$2,053.02	\$2,053.02	1.000	EA	N	FENCE GATE,TYP A, DBL, 18.1-20.' OPENING
0550 60133	2	\$1,725.00	\$3,450.00	2.000	EA	N	FENCE GATE,TYP A, SLIIDE/CAN, 12.1-18.'
0550 60134	1	\$2,200.00	\$15,400.00	7.000	EA	N	FENCE GATE,TYP A, SLIIDE/CAN, 18.1-20.'
0550 60135	1	\$1,850.00	\$5,550.00	3.000	EA	N	FENCE GATE,TYP A, SLIDE/CAN, 20.1-24.0'
0550 60211	4	\$798.34	\$4,790.04	6.000	EA	N	FENCE GATE,TYP B,SGL, 0- 6.0' OPENING
0550 60212	1	\$977.57	\$2,932.71	3.000	EA	N	FENCE GATE,TYP B,SGL,6.1-12.0' OPENING
0550 60213	2	\$1,275.00	\$5,100.00	4.000	EA	N	FENCE GATE,TYP B, SGL,12.1-18.0' OPENING
0550 60214	1	\$1,400.00	\$2,800.00	2.000	EA	N	FENCE GATE,TYP B,SGL,18.1-20.0' OPENING
0550 60222	3	\$1,900.00	\$9,500.00	5.000	EA	N	FENCE GATE,TYP B, DBL, 6.1-12.0' OPENING
0550 60223	1	\$1,515.00	\$3,030.00	2.000	EA	N	FENCE GATE,TYP B, DBL,12.1-18.0' OPENING
0550 60224	2	\$1,092.50	\$7,647.51	7.000	EA	N	FENCE GATE,TYP B, DBL,18.1-20.0' OPENING
0550 60225	3	\$1,146.78	\$3,440.33	3.000	EA	N	FENCE GATE,TYP B, DBL, 20.1-24' OPENING
0550 60226	1	\$2,000.00	\$12,000.00	6.000	EA	N	FENCE GATE,TYP B, DBL, 24-30' OPENING
0550 60227	1	\$3,500.00	\$49,000.00	14.000	EA	N	FENCE GATE,TYP B,DBL, > THAN 30' OPENING
0550 60232	1	\$3,500.00	\$3,500.00	1.000	EA	N	FENCE GATE,TYP B,SLIDE/CANT,6.1-12'OPEN
0550 60234	3	\$4,300.06	\$17,200.24	4.000	EA	N	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN
0550 60235	4	\$3,152.72	\$31,527.16	10.000	EA	N	FENCE GATE,TYP B,SLIDE/CANT,20.1-24'OPEN
0550 60236	1	\$3,200.00	\$12,800.00	4.000	EA	N	FENCE GATE,TYP B,SLIDE/CANT,24.1-30'OPEN
0550 60237	2	\$3,922.15	\$74,520.94	19.000	EA	N	FENCE GATE,TYP B,SLI CANT, > THAN 30'
0550 60400	1	\$1,200.00	\$1,200.00	1.000	EA	N	FENCE GATE, RESET EXISTING
0550 60412	1	\$650.00	\$1,300.00	2.000	EA	N	FENCE GATE, WOOD, SINGLE, 6.1-12.0' OP
0550 60424	1	\$1,100.00	\$1,100.00	1.000	EA	N	FENCE GATE, WOOD, DOUBLE, 18-20 OPEN
0550 60912	1	\$1,950.00	\$1,950.00	1.000	EA	N	FENCE GATE,SPEC A, SGL, 6.1-12' OPENING
0550 60927	1	\$2,500.00	\$2,500.00	1.000	EA	N	FENCE GATE, SPE, DOUBLE, >30' OPENING

Florida Department of Transportation
Item Average Unit Cost
From 2016/04/01 to 2017/03/31

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

LTC item 11 - Sign

Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0684 7	2	\$31,421.96	\$157,109.82	5.000	EA	N	MANAGED ETHERNET HUB SWITCH
0685 1 11	14	\$6,241.27	\$486,818.96	78.000	EA	N	UPS POWER SUPPLY, F&I, LINE INTERACTIVE
0685 1 13	2	\$6,066.56	\$24,266.25	4.000	EA	N	UPS, F&I, ONLINE DOUBLE CONVERSION
0687 1 12	1	\$25,000.00	\$50,000.00	2.000	EA	N	HIGHWAY ADVISORY RADIO, F&I, AC POWERED
0687 1 50	1	\$7,520.00	\$7,520.00	1.000	EA	N	HIGHWAY ADVISORY RADIO, MODI, AC POWERED
0687 1 60	1	\$1,200.00	\$2,400.00	2.000	EA	N	HIGHWAY ADVISORY RADIO, REMOVE
0695 1 1	38	\$1,470.78	\$442,705.09	301.000	EA	N	TMS VEH SNSR-NON-WEIGHT, F&I,
0695 3 11	3	\$5,515.00	\$33,090.00	6.000	AS	N	TMS VEH SPEED/CLASS UNIT, F&I,
0695 5 1	1	\$3,100.00	\$3,100.00	1.000	EA	N	TMS VEH SOLAR POWER UNIT, F&I,
0695 6 12	39	\$1,280.31	\$426,344.45	333.000	EA	N	TMS IND LOOP ASSEMBLY
0695 7131	3	\$4,391.64	\$30,741.50	7.000	EA	N	TMS CABINET, F&I , TYP 3 BASE MOUNT
0695 7132	17	\$4,181.59	\$137,992.32	33.000	EA	N	TMS CABINET, F&I , TYP 3 PEDESTAL
0695 7141	7	\$5,279.36	\$58,072.99	11.000	EA	N	TMS CABINET, F&I , TYP 4 BASE
0695 7600	12	\$401.31	\$8,828.84	22.000	EA	N	TMS CABINET, REMOVE
0700 1 11	146	\$349.52	\$1,832,527.43	5,243.000	AS	N	SINGLE POST SIGN, F&I GM, <12 SF
0700 1 12	101	\$1,043.36	\$1,530,610.68	1,467.000	AS	N	SINGLE POST SIGN, F&I GM, 12-20 SF
0700 1 13	50	\$1,391.25	\$475,808.37	342.000	AS	N	SINGLE POST SIGN, F&I GM, 21-30 SF
0700 1 14	6	\$2,282.00	\$93,562.11	41.000	AS	N	SINGLE POST SIGN, F&I GM, 31+ SF
0700 1 21	4	\$658.33	\$3,950.00	6.000	AS	N	SINGLE POST SIGN, F&I BARR MT, LT 12 SF
0700 1 22	5	\$3,194.30	\$201,240.83	63.000	AS	N	SINGLE POST SIGN, F&I BARR MT, 12-20 SF
0700 1 31	5	\$2,326.39	\$55,833.31	24.000	AS	N	SINGLE POST SIGN, F&I BRG MNT, <12 SF
0700 1 32	2	\$3,733.18	\$41,065.00	11.000	AS	N	SINGLE POST SIGN, F&I BRG MNT, 12-20 SF
0700 1 33	1	\$1,877.82	\$1,877.82	1.000	AS	N	SINGLE POST SIGN, F&I BRG MNT, 21-30 SF
0700 1 50	107	\$174.69	\$138,177.92	791.000	AS	N	SINGLE POST SIGN, RELOCATE
0700 1 60	142	\$30.72	\$143,511.29	4,672.000	AS	N	SINGLE POST SIGN, REMOVE
0700 2 11	4	\$3,454.00	\$34,540.00	10.000	AS	N	MULTI- POST SIGN, F&I GM, <12 SF
0700 2 12	24	\$3,157.24	\$173,648.19	55.000	AS	N	MULTI- POST SIGN, F&I GM, 12-20 SF
0700 2 13	27	\$3,561.07	\$284,885.31	80.000	AS	N	MULTI- POST SIGN, F&I GM, 21-30 SF
0700 2 14	37	\$4,446.05	\$551,310.45	124.000	AS	N	MULTI- POST SIGN, F&I GM, 31-50 SF
0700 2 15	28	\$6,133.56	\$588,821.81	96.000	AS	N	MULTI- POST SIGN, F&I GM, 51-100 SF
0700 2 16	11	\$11,571.08	\$705,835.94	61.000	AS	N	MULTI- POST SIGN, F&I GM, 101-200 SF
0700 2 17	8	\$14,139.51	\$325,208.62	23.000	AS	N	MULTI- POST SIGN, F&I GM, 201-300 SF
0700 2 18	3	\$13,343.75	\$106,750.00	8.000	AS	N	MULTI- POST SIGN, F&I GM, 301-400 SF
0700 2 50	23	\$3,405.20	\$153,234.12	45.000	AS	N	MULTI- POST SIGN, RELOCATE
0700 2 60	57	\$817.16	\$279,468.22	342.000	AS	N	MULTI- POST SIGN, REMOVE
0700 3101	27	\$215.37	\$50,396.58	234.000	EA	N	SIGN PANEL, F&I GM, UP TO 12 SF
0700 3102	3	\$283.75	\$1,135.00	4.000	EA	N	SIGN PANEL, F&I GM, 12-20 SF
0700 3103	1	\$600.00	\$600.00	1.000	EA	N	SIGN PANEL, F&I GM, 21-30 SF
0700 3201	48	\$520.62	\$148,378.11	285.000	EA	N	SIGN PANEL, F&I OM, UP TO 12 SF
0700 3202	15	\$734.67	\$39,672.33	54.000	EA	N	SIGN PANEL, F&I OM, 12-20 SF

RS Means Cover Page
Cost Data: Heavy Construction
Location: Tampa, FL
Year: 2017

RSMeans data
from GORDIAN®

Guide Me

Welcome JoAnne Talamo

0

Search Data

Manage Estimates

Square Foot Estimator

Life Cycle Cost

Cost Alerts and Trends

Reference Items

☆ My Favorites

Cost Data

.....Heavy Construction

Type

Unit

Labor Type

Open Shop

Location

TAMPA (335-336,346)

Release

Year 2017

Search

Search

What are you searching for?

All

Q Search

☐ Include My Custom Data

Estimate Action

Select From List

Hardee County Landfill

Page 1 of 1

Lines 1 - 5 of 5

	Source	Qty	Line Number			Description	Frequency	Crew	Unit	Labor Hours	Daily Output	Extended Material	Extended Material O&P
<input type="checkbox"/>	Unit	0	312323170020		<input type="checkbox"/>	Fill, dumped material, spread, by dozer, excludes compa		B10B	L.C.Y.	0.010	1000.000		
<input type="checkbox"/>	Unit	0	312323201100		<input type="checkbox"/>	Cycle hauling(wait, load, travel, unload or dump & return		B34B	L.C.Y.	0.070	108.000		
<input type="checkbox"/>	Unit	0	312323235040		<input type="checkbox"/>	Compaction, riding, vibrating roller, 4 passes, 6" lifts		B10Y	E.C.Y.		1900.000		
<input type="checkbox"/>	Unit	0	320190194190		<input type="checkbox"/>	Mowing, lawn mowing, 5 gang reel, 12', with tractor & a		B66	M.S.F.	0.010	1200.000		
<input type="checkbox"/>	Unit	0	334713531200		<input type="checkbox"/>	Pond and reservoir liners, membrane lining systems HDF		3 Skwk	S.F.	0.010	1600.000		

Cost Estimate Report

Hardee County Landfill

Year 2017

Unit Detail Report

Prepared By: JoAnne Talamo

Jones Edmunds & Associates, Inc.

LTC item 8:
Mowing

LTC item 9:
Sodding
Liner Repair

Closure Item 2:
Placement and Spreading
Compaction
Delivery

Closure Item 4:
Delivery
Placement and Spreading

Date: 02/07/2018

LineNumber	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 31 Earthwork					
312323170020	Fill, dumped material, spread, by dozer, excludes compaction	0.00	L.C.Y.	\$2.05	
312323201100	Cycle hauling(wait, load, travel, unload or dump & return) time per cycle, excavated or borrow, loose cubic yards, 15 min load/wait/unload, 12 C.Y. truck, cycle 30 miles, 45 MPH, excludes loading equipment	0.00	L.C.Y.	\$10.56	
312323235040	Compaction, riding, vibrating roller, 4 passes, 6" lifts	0.00	E.C.Y.	\$0.61	
Division 31 Earthwork Subtotal					\$0.00
Division 32 Exterior Improvements					
320190194190	Mowing, lawn mowing, 5 gang reel, 12', with tractor & attachments	0.00	M.S.F.	\$0.64	
Division 32 Exterior Improvements Subtotal					\$0.00
					\$0.64/MSF x 1 MSF/1,000 SF x 43,560 SF/AC = \$27.88/AC
Division 33 Utilities					
334713531200	Pond and reservoir liners, membrane lining systems HDPE, 100,000 S.F. or more, 60 mil thick, per S.F.	0.00	S.F.	\$1.19	
Division 33 Utilities Subtotal					\$0.00

Placement and Spreading

\$0.00

Delivery

\$0.00

Compaction

\$0.00

Mowing

\$0.00

Liner Repair

\$0.00

\$1.19 * 9 SF/SY = \$10.71/SY

Closure Item 3:
Geocomposite



AGRU America, Inc.
500 Garrison Road
Georgetown, SC 29440
Phone: 1-843-546-0600

January 10, 2018

Jeremy Toms, EI
Jones Edmunds & Associates, Inc.
730 NE Waldo Road
Gainesville, FL 32641

RE: **Sarasota County Central Landfill Closure – Requested Budgetary Pricing**

Agru America is pleased to provide the following budget pricing for the requested geosynthetic profile(s). Budget pricing options include a 40mil LLDPE MicroSpike and Geocomposite system as Option #1 and a 50 mil LLDPE MicroDrain geomembrane and geotextile as Option #2. As discussed, ClosureTurf may work well in this application if you would want to evaluate further.

Requested Geosynthetic Closure System #1

This geosynthetic closure system includes a standard 40 mil LLDPE MicroSpike geomembrane with 8-200-8 geocomposite.

Description	Quantity (SF)	Unit Price (\$/SF)	Total
40 mil MicroSpike LLDPE - Material	2,700,000	\$ 0.30	\$ 810,000.00
40 mil MicroSpike LLDPE - Installation	2,700,000	\$ 0.15	\$ 405,000.00
8/200/8 Geocomposite - Material	2,700,000	\$ 0.46	\$ 1,242,000.00
8/200/8 Geocomposite - Installation	2,700,000	\$ 0.13	\$ 351,000.00
Total Budget for Conventional			\$ 2,808,000.00

*Material budget pricing includes estimated freight to Sarasota, FL but no taxes. Installation budget pricing assumes non-union/non-prevailing wage rates.

*A 200 mil Geocomposite product is unlikely to meet the site specific requirements of a highly permeable cover soil typically found in FL.

Requested Geosynthetic Closure System #2

$$\$0.46 + \$0.13 = \$0.59/\text{SF} * 9 \text{ SF/SY} = \$5.31/\text{SY}$$

This geosynthetic closure system includes a standard 50 mil LLDPE MicroDrain geomembrane with 8 oz nonwoven geotextile.

Description	Quantity (SF)	Unit Price (\$/SF)	Total
50 mil LLDPE MicroDrain - Material	2,700,000	\$ 0.55	\$ 1,485,000.00
50 mil LLDPE MicroDrain - Installation	2,700,000	\$ 0.18	\$ 486,000.00
Agrutex 081 Nonwoven Geotextile - Material	2,700,000	\$ 0.11	\$ 297,000.00
Agrutex 081 Nonwoven Geotextile - Installation	2,700,000	\$ 0.10	\$ 270,000.00
Total Budget for MicroDrain Option			\$ 2,538,000.00

*Material budget pricing includes estimated freight to Sarasota, FL but no taxes. Installation budget pricing assumes non-union/non-prevailing wage rates.

We would recommend performing design shear strength and transmissivity testing specific to your project needs. We can supply material samples for this testing when appropriate and answer any questions you may have. Thank you for reaching out to us and please feel free to contact me to discuss further at ceichelberger@agruamerica.com or 330.606.8970.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Eichelberger". The signature is fluid and cursive, with the first name "Chris" and last name "Eichelberger" clearly distinguishable.

Chris Eichelberger
Agru America

Hardee County Landfill
Closure Design and Construction Services
Fee Estimate

Closure Item 10 - Engineering
Closure Item 11 - Professional Services

	Senior Project Engineer	Project Manager	Project Engineer	Staff Engineer/ Professional	Resident Construction Representative	Technician/ AutoCAD	Administrative Assistant	Total	Labor Cost	Subconsult. Cost	Other Direct Costs	Total Costs
Tasks	\$ 215.00	\$ 170.00	\$ 170.00	\$ 130.00	\$ 85.00	\$ 80.00	\$ 80.00					
Engineering Services												
Closure Report and Permitting	100	40	240	240	0	80	8	708	\$ 107,340	\$ -	\$ 1,000	\$ 108,340
Closure Design	120	40	240	240	0	80	8	728	\$ 111,640	\$ -	\$ 1,000	\$ 112,640
Final Survey	0	2	4	8	0	24	0	38	\$ 3,980	\$ 10,000	\$ -	\$ 13,980
Certification	16	8	40	100	0	24	16	204	\$ 27,800	\$ -	\$ -	\$ 27,800
Subtotal	236	90	524	588	0	208	32	1678	\$ 250,760	\$ 10,000	\$ 2,000	\$ 262,760
Professional Services												
Contract Management	20	80	40	16	0	0	8	164	\$ 27,420	\$ -	\$ 5,000	\$ 32,420
CQA	40	40	80	80	800	16	8	1064	\$ 109,320	\$ 40,000	\$ 20,000	\$ 169,320
Subtotal	60	120	120	96	800	16	16	1228	\$ 136,740	\$ 40,000	\$ 25,000	\$ 201,740