

## Hsu, Benjamin

---

**From:** Allan Biddlecomb <abiddlecomb@pascocountyfl.net>  
**Sent:** Wednesday, February 28, 2018 4:29 PM  
**To:** Morgan, Steve; SWD\_Waste  
**Subject:** Pasco County Resource Recovery - Class III Remaining Disposal Capacity  
**Attachments:** Remaining Disposal Capacity and Site Life Calculations - Pasco County Cl....pdf

Steve,

This is our other report, for the Class III Landfill – attached is our disposal capacity report completed by JMG Engineering, Inc.

Please contact us or Jason Gorrie at JMG if you have any questions.

Thank You,  
Allan



**Allan Biddlecomb, PG**  
Acting Solid Waste Director  
Public Infrastructure  
Pasco County  
P (727) 856-0199  
14230 Hays Road  
Spring Hill, FL 34610  
[abiddlecomb@pascocountyfl.net](mailto:abiddlecomb@pascocountyfl.net)  
[www.pascocountyfl.net](http://www.pascocountyfl.net)



## *"Bringing Opportunities Home"*

The information transmitted, including attachments, is intended only for the person(s) or entity to which it is addressed and may contain material that is confidential, privileged and/or exempt from disclosure under applicable law. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and destroy any copies of this information. Under Florida law, email addresses are public records. If you do not

want your email address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

CUSA18A7

# Pasco County Utilities

## Remaining Disposal Capacity and Site Life Calculations West Pasco Class III Landfill

Reporting Year 2017

February 2018

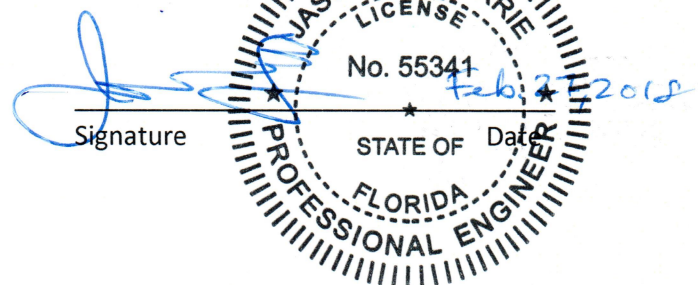


Prepared For:

Pasco County Utilities

Prepared By:

Jason Gorrie, P.E.  
JMG Engineering, Inc.  
238 East Davis Blvd.  
Suite 206  
Tampa, Florida 33606



## Purpose of Report

Rule 62-701.500(13)(c) of the Florida Administrative Code (FAC) requires landfill owners and operators to annually prepare an estimate of the remaining life and capacity (in cubic yards) of the existing, constructed landfill and an annual estimate of the life and capacity of other permitted areas not yet constructed. For the purposes of this report, the “existing, constructed landfill” is considered to be the currently active portions of the site designated as Class III (subcells 1, 2, 3, and 4 of 4). The Class I portions of the West Pasco Resource Recovery Facility Landfill are addressed in a separate Report.

## Procedure

The currently permitted capacity of the Class III Landfill is considered to be 487,904 cubic yards. At present, subcells 1 and 2 (of 4) of the Class III Landfill have received waste and are considered to be “active”. In order to estimate the current volume of waste in place in subcells 1, 2, 3, and 4 the Pasco County Engineering Services Department conducted a topographic survey of cell A-4 in January 2018. A copy of the topographic survey is included as **Attachment 1**.

Using the elevations reported on the topographic survey in conjunction with the known elevations of the liner system, it is possible to estimate the volume of waste in place in the landfill. Mathematically, the volume under a function is defined by the double integral:

$$\int_{x-\min}^{x-\max} \int_{y-\min}^{y-\max} f(x,y) dx dy$$

To determine the function  $f(x, y)$  defining the shape of the landfill surfaces, JMG Engineering relied upon the volume calculation algorithms of the surface mapping software program Surfer® 13. The total volume of waste calculated to be currently in place in the Class III Landfill is approximately 206,127 cubic yards.

Given the permitted volumetric capacity of 487,904 cubic yards and subtracting the 206,127 cubic yards calculated from the 2018 survey to be currently in place, approximately 281,177 cubic yards of airspace remains available for disposal. Compacted construction and demolition debris waste has an approximate density of 1,200 pounds per cubic yard. Using the assumed density, the 281,177 remaining cubic yards can accommodate approximately 168,706 tons of construction and demolition debris.

As shown in Table 1, the Class III waste disposal rate has varied from year to year. However, because the tipping fee charged by Pasco County to use the Class III cells is considerably higher than that of nearby private Class III landfills, it is safe to assume that the annual waste placement rate will not differ significantly from approximately 4,000 tons/year (6,667 cubic yards/year). Using this as a future disposal rate along with an estimated 10% weekly cover rate (667 cubic yards/year) results in an estimated future airspace consumption rate of 7,333 cubic yards per year. Dividing the remaining airspace of 281,177 cubic yards by the estimated future consumption rate of 7,333 cubic yards per year results in an **estimated remaining life of 38 years**.

**TABLE 1**  
Monthly Tonnage Summary for 2017

Month	West Pasco Class III (tons)
January	252.91
February	273.14
March	319.85
April	314.01
May	299.25
June	250.82
July	404.67
August	301.87
September	189.34
October	207.67
November	230.28
December	183.02
<b>Total</b>	<b>3,226.84</b>

Historical Tonnage Summary

2012	2,822
2013	3,206
2014	4,433
2015	4,125
2016	3,094
2017	3,227

## Attachments

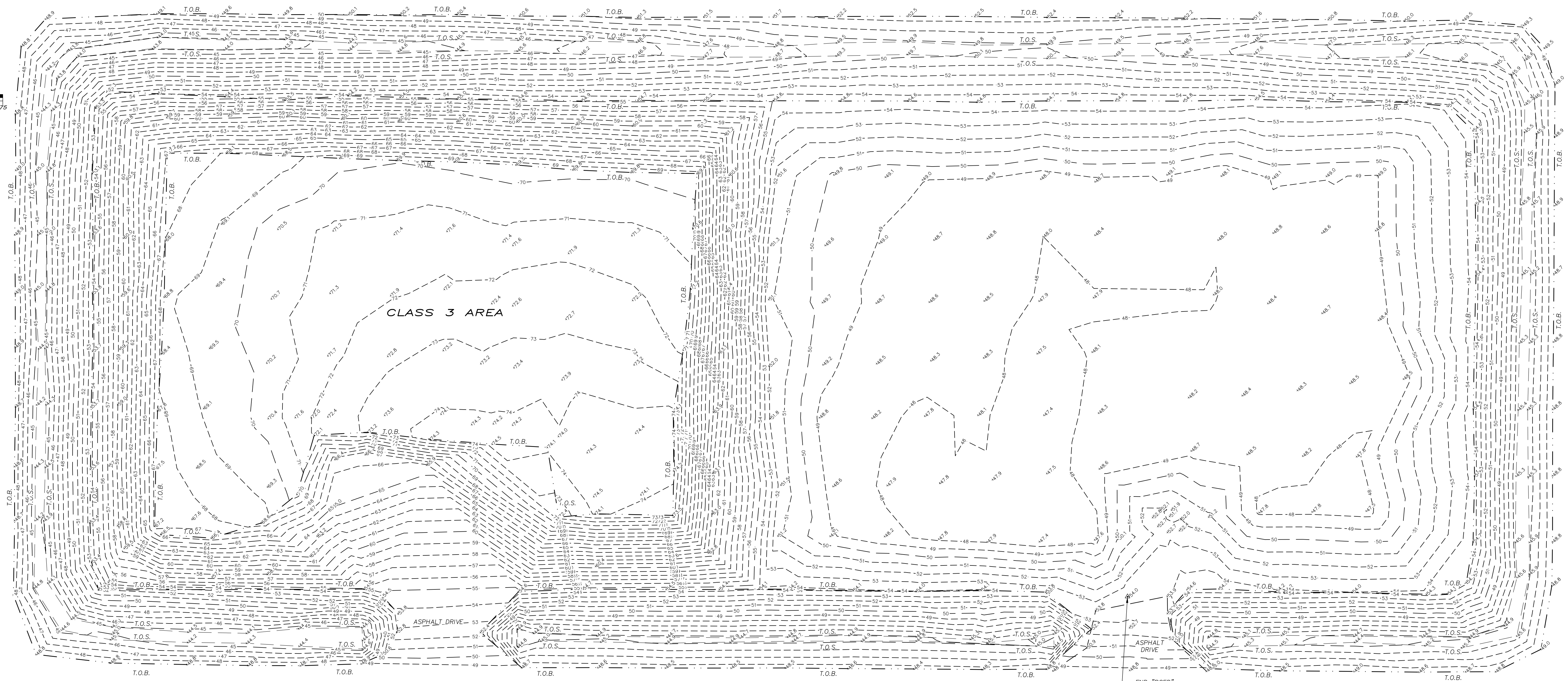
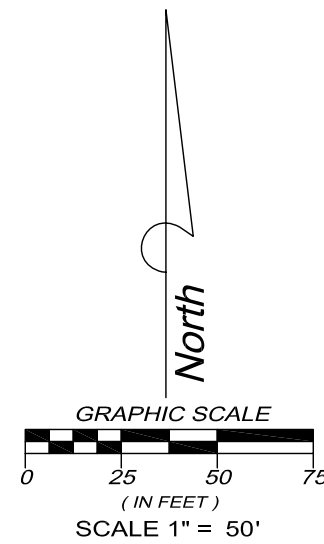
Attachment 1: Topographical Survey

Attachment 2: Grid Volume Report

Attachment 3: 2017 Waste Placement Records

ATTACHMENT 1  
2018 Topographical Survey

SECTIONS 25 & 26, TOWNSHIP 24 SOUTH, RANGE 17 EAST  
PASCO COUNTY, FLORIDA



FND "PCED"  
N: 1468416.30  
E: 473702.99  
ELEV.=53.86' (PER GPS)

NORTHWEST 1/4 OF SECTION 25-24-17

NORTHEAST 1/4 OF SECTION 26-24-17

WEST PASCO  
RESOURCE RECOVERY FACILITY

NOTES

- The Specific Purpose Survey depicted here was prepared without the benefit of an attorney's title opinion or title search of the Public Records of Pasco County, FL. There may be additional easements, takings, right of ways and other matters of record not shown on this survey.
- The parcel identification numbers shown hereon were taken from the Property Appraiser's web site at [www.appraiser.pascogov.com](http://www.appraiser.pascogov.com)
- Topographic Survey is in Florida State Plane Coordinate System, West Zone, NAD 83 (2011).
- All Horizontal and vertical measurements and procedures used were made with the proper instrumentation and methods for the desired accuracies and precisions for this particular project, and those were prescribed by the Professionals in the Pasco County Surveying and Mapping Division.
- Some visible interior occupation and improvements, were not located for the purpose of clarity of this survey unless otherwise depicted hereon. No subsurface investigations were made nor subsurface improvements shown hereon.
- Additions or deletions to this survey map by anyone other than the signing party is prohibited without written consent of the signing party.
- Last date of field survey: February 1, 2018.

SURVEY CERTIFICATION

This certifies that a survey of the subject property was made under my supervision and meets the Standards of Practice set forth by Board of Professional Surveyors & Mappers in Chapter 5J-17, of the Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

Date of Survey: February 1, 2018

Type of Survey: Specific Purpose Survey

SPECIFIC PURPOSE NOTE

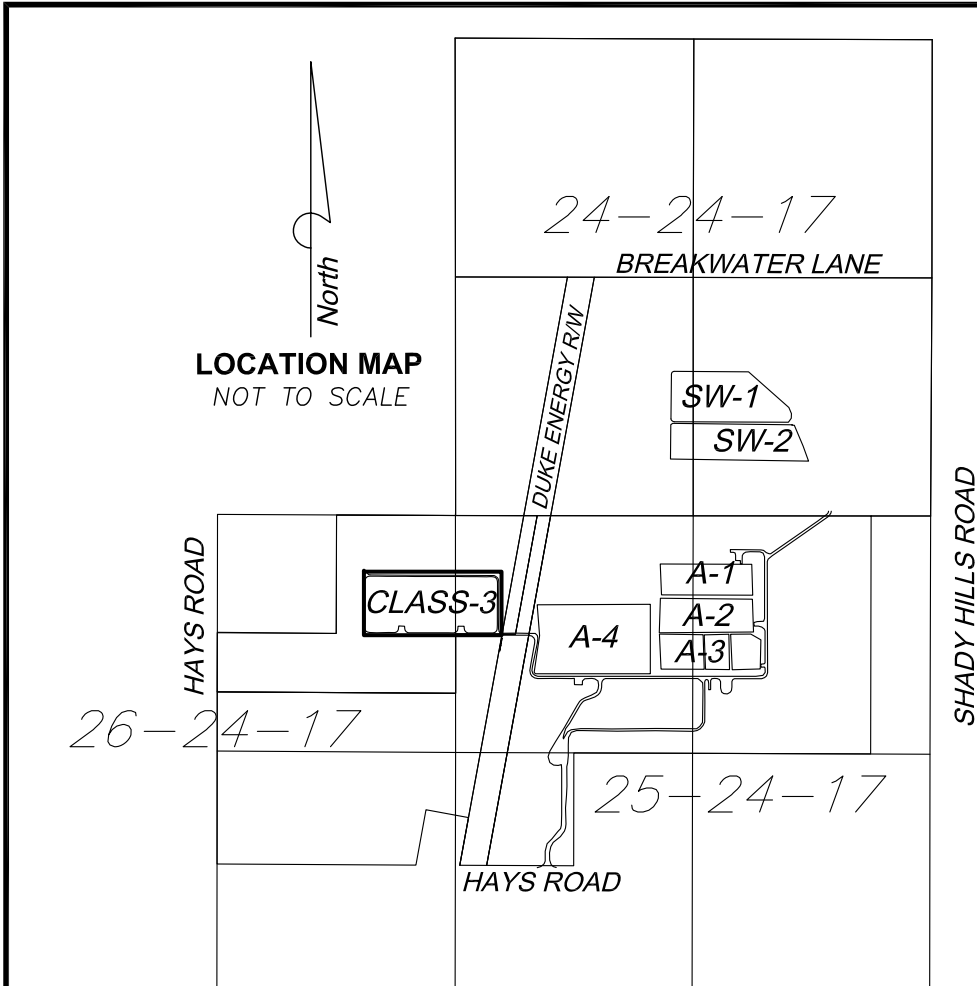
The purpose of this survey is to show the elevations of the mound area relative to the ground elevation.

\*All ground elevations are based on GPS/RTK observations and our vertical accuracy can be certified to  $\pm 0.50$  feet.

Elevations are in North American Vertical Datum 1988 (NAVD88)

LEGEND

T.B.M. TEMPORARY BENCHMARK  
T.O.B. TOP OF BANK  
T.O.S. TOE OF SLOPE  
X GROUND SPOT ELEVATION  
GPS GLOBAL POSITIONING SYSTEM  
NAVD NORTH AMERICAN VERTICAL DATUM  
RTK REAL TIME KINEMATIC  
O.R. OFFICIAL RECORDS BOOK  
FIRC FOUND IRON ROD & CAP



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DRAWN BY L.F.C.
CHECKED BY F.G.S.

PASCO COUNTY SURVEYING AND MAPPING DIVISION  
ENGINEERING SERVICES DEPARTMENT  
8731 CITIZENS DRIVE  
NEW PORT RICHEY, FLORIDA 34654-5507

POINTS FILE 1718-074 LFC.txt
DRAWING FILE West Pasco Landfill TOPO.dwg

FIELD BOOK, PAGE(S) FB 844A, PGS. 65-66 FB 856, PGS. 6-7
February 1, 2018

SCALE 1" = 50'
DATE DRAWN February 9, 2018



WEST PASCO RESOURCE RECOVERY FACILITY  
CLASS-3  
SPECIFIC PURPOSE SURVEY

SHEET: 2 OF 3
PROJECT NUMBER: X-9699.00
SURVEY JOB NO.: 1718-074

ATTACHMENT 2  
Grid Volume Report



---

# Grid Volume Computations

---

Thu Feb 22 21:04:48 2018

## Upper Surface

Grid File Name: D:\Jason\OneDrive - JMG Engineering\Pasco\Solid Waste Facility  
Compliance Assistance (TO 2-18)\Class I Useful Life\Class III\CLASS III DAT.grd  
Grid Size: 100 rows x 44 columns

X Minimum: 1468344.154  
X Maximum: 1468969.045  
X Spacing: 14.532348837205

Y Minimum: 472638.8984  
Y Maximum: 474077.1647  
Y Spacing: 14.527942424243

Z Minimum: 44.75711642493  
Z Maximum: 75.086685094614

## Lower Surface

Level Surface defined by Z = 50

## Volumes

Z Scale Factor: 1

### Total Volumes by:

Trapezoidal Rule: 5168877.0211433  
Simpson's Rule: 5176710.2635898  
Simpson's 3/8 Rule: 5170624.6382648

### Cut & Fill Volumes

Positive Volume [Cut]: 5565421.9641412 ft<sup>3</sup> (206,127 yds<sup>3</sup>)  
Negative Volume [Fill]: 396588.60506672  
Net Volume [Cut-Fill]: 5168833.3590745

## Areas

### Planar Areas

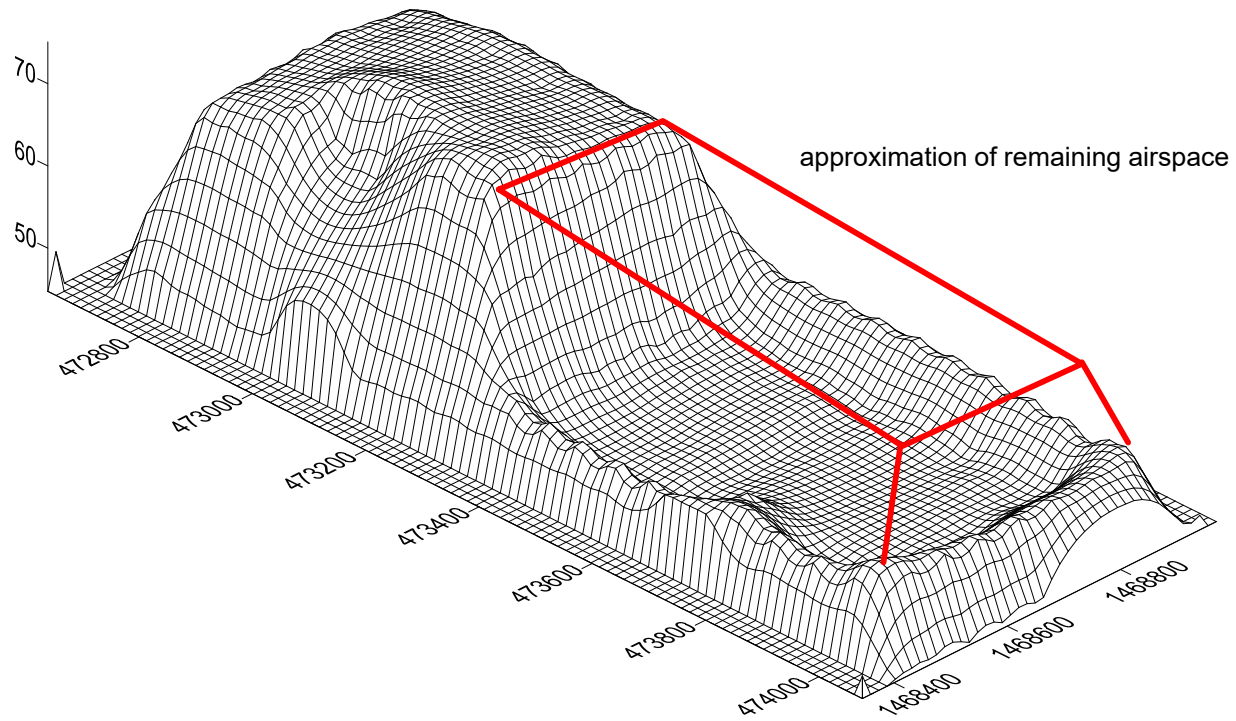
Positive Planar Area [Cut]: 498141.95229089

Negative Planar Area [Fill]: 230873.11191665  
Blanked Planar Area: 169744.60226553  
Total Planar Area: 898759.66647306

### **Surface Areas**

Positive Surface Area [Cut]: 503052.14042975  
Negative Surface Area [Fill]: 231508.99675793

# Class III Landfill



ATTACHMENT 3  
Waste Placement Records



## 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

---

### Electronic Submission

### Solid Waste Quantity Report

You have submitted your Solid Waste Quantity Report as required by Rule 62-701.500 F.A.C. which implements the requirements of the Florida Solid Waste Management Act, § 403.702-.7193 and 403.75-.769, Florida Statutes.

Below is a copy of the information you submitted for your records.

#### Facility Information

**Facility ID:** 45799  
**Facility or Business Name:** PASCO COUNTY RESOURCE RECOVERY  
**Address Line 1:** 14230 HAYS RD  
**Address Line 2:**  
**City/State/Zip Code:** Spring Hill, FL 34610 7630  
**County:** Pasco

#### Mailing Address

**Company Name:** PASCO COUNTY COMMISSIONERS  
**Address Line 1:** COUNTY COURTHOUSE  
**Address Line 2:** 8731 CITIZENS DRIVE  
**City/State/Zip Code:** NEW PORT RICHEY, FL 34654 0

#### Site Supervisor

**Name:** ALLAN BIDDLECOMB  
**Phone Number:** (727) 857-2780  
**Extension:**  
**E-mail Address:** abiddlecomb@pascocountyfl.net

If you have any questions or concerns about the information contained in this report, please contact the Solid Waste Program Coordinator in the Solid Waste Program Office at (850) 245-8707 or send e-mail to SWPP@dep.state.fl.us.

## Annual Report Summary

(all values in tons)

Facility Type	Class I Waste	Class III Waste	Ash Residue	Other Wastes
Class I Landfill	0.0	0.0	78187.56	836.28
Class III Landfill	0.0	5689.84	0.0	0.0

**County of Origin: PASCO**

### Class I Report Information (all values in tons)

Month/Year	Class I Waste	Class III Waste	Ash Residue	Other Wastes
1/2017	0.00	0.00	7236.77	153.62
2/2017	0.00	0.00	6531.49	38.59
3/2017	0.00	0.00	5283.94	283.27
4/2017	0.00	0.00	6607.75	22.12
5/2017	0.00	0.00	7289.76	33.06
6/2017	0.00	0.00	6941.19	22.69
7/2017	0.00	0.00	6650.33	51.07
8/2017	0.00	0.00	6682.40	55.06
9/2017	0.00	0.00	7167.68	38.00
10/2017	0.00	0.00	4540.56	25.66
11/2017	0.00	0.00	6767.61	28.88
12/2017	0.00	0.00	6488.08	84.26
Total	0.00	5689.84	78187.56	836.28

Additional information describing the **Other Waste** disposed of:

Grit, Street Sweepings, etc.
------------------------------

**County of Origin: PASCO**

### Class III Report Information (all values in tons)

Month/Year	Class I Waste	Class III Waste	Ash Residue	Other Wastes
1/2017	0.00	252.91	0.00	0.00
2/2017	0.00	<del>273.14</del> 2736.14	0.00	0.00
3/2017	0.00	319.85	0.00	0.00
4/2017	0.00	314.01	0.00	0.00
5/2017	0.00	299.25	0.00	0.00

6/2017	0.00	250.82	0.00	0.00
7/2017	0.00	404.67	0.00	0.00
8/2017	0.00	301.87	0.00	0.00
9/2017	0.00	189.34	0.00	0.00
10/2017	0.00	207.67	0.00	0.00
11/2017	0.00	230.29	0.00	0.00
12/2017	0.00	183.02	0.00	0.00
Total	0.00	<del>5689.84</del>	78187.56	836.28

3,226.84

Additional information describing the **Other Waste** disposed of:

**Report Submitted By**

**Name:** Joanne Chamberlain  
**Phone Number:** (727) 847-8041  
**Extension:**  
**E-mail Address:** jchamberlain@pascocountyfl.net

All information submitted was certified true, accurate, and correct to the best of the knowledge of the person whose name appears above.

## Joanne Chamberlain

---

**From:** Joanne Chamberlain  
**Sent:** Thursday, February 01, 2018 9:08 AM  
**To:** 'swpp@dep.state.fl.us'  
**Subject:** Pasco County Solid Waste Quantity Report

Hello – I am wondering how we can revise this report after submission - I found a keying error.

Thank you,



**Joanne M. Chamberlain**  
Accountant II  
Public Infrastructure Administration  
and Support Services  
P 813-235-6196 X6881  
F 813-929-1064  
[ichamberlain@pascocountyfl.net](mailto:ichamberlain@pascocountyfl.net)  
[www.pascocountyfl.net](http://www.pascocountyfl.net)