Geosyntec consultants

13101 Telecom Drive, Suite 120
Tampa, FL 33637
PH 813-558-0990
FAX 813-558-9726
www.geosyntec.com

26 June 2015

Mr. Cory Dilmore, P.E.
Florida Department of Environmental Protection
Permit Processing Central District
2600 Blair Stone Road, MS 4565
Tallahassee, Florida 32399

Subject: Minor Modification Permit Application
Cells 12 & 13 Construction Sequence Modification
J.E.D. Solid Waste Management Facility (WACS #89544)
Osceola County, Florida

Dear Mr. Dilmore:

Transmitted herewith are two copies of the J.E.D. Solid Waste Management Facility (JED facility) Minor Modification Permit Application (Application) for a revision to the permitted cell construction sequencing. This Application is submitted on behalf of Omni Waste of Osceola County, LLC (Omni) for the JED facility located in St. Cloud, Florida. This Application package contains one hard-copy of the Application, one electronic copy of the Application (sent via email), and one check in the amount of $250 (in accordance with Rule 62-701.315(4), F.A.C.).

If you have any questions or need additional information, please do not hesitate to contact the undersigned.

Sincerely,

Craig R. Browne, P.E.
Project Engineer
Florida P.E. No. 68613

Attachment

Copies to: Michael Kaiser, PWSFL

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26 June 2015

Mr. Cory Dilmore, P.E.
Florida Department of Environmental Protection
Permit Processing Central District
2600 Blair Stone Road, MS 4565
Tallahassee, Florida 32399

Subject: Minor Modification Permit Application
Revision to Cell Construction Sequencing
J.E.D. Solid Waste Management Facility (WACS ID #89544)
Osceola County, Florida

Dear Mr. Dilmore:

Geosyntec Consultants (Geosyntec) prepared this minor modification permit application on behalf of Omni Waste of Osceola County, LLC (Omni) for the J.E.D. Solid Waste Management Facility (JED facility) located in St. Cloud, Florida. This minor modification permit application is prepared in accordance with applicable sections of Chapter 62-701 of the Florida Administrative Code (F.A.C.) and the Florida Department of Environmental Protection (FDEP) Form 62-701.900(1) – *Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility*; the latter of which is completed and included in **Attachment 1** of this submittal.

A check in the amount of $250 (in accordance with Rules 62-701.320(4) and 62-050(4)(s), F.A.C.) is submitted herein.

BACKGROUND

The JED facility is currently operating under construction and operation Permit Nos. SC49-0199726-017 and SO49-0199726-022, respectively (and subsequent modifications), issued by the FDEP in August 2011 and July 2012, respectively. The 5-year construction and operation permits expire in August 2016 and July 2017, respectively. These permits authorize the construction and operation of Phases 1 through 4, which includes Cells 1 through 13. To date, Cells 1 through 10 of the JED Facility have been constructed and are in various stages of operation. As of June 2015, Cell 11 is currently under construction.

PURPOSE

At present, Cells 12 and 13 (currently included in construction Permit No. SC49-0199726-017 which expires in August 2016) have not yet been constructed. The purpose

of this minor modification application is to request that the sequence of construction for Cells 12 and 13 be reversed. Specifically, Omni is requesting authorization to construct Cell 13 prior to constructing Cell 12.

MINOR MODIFICATION PERMIT APPLICATION

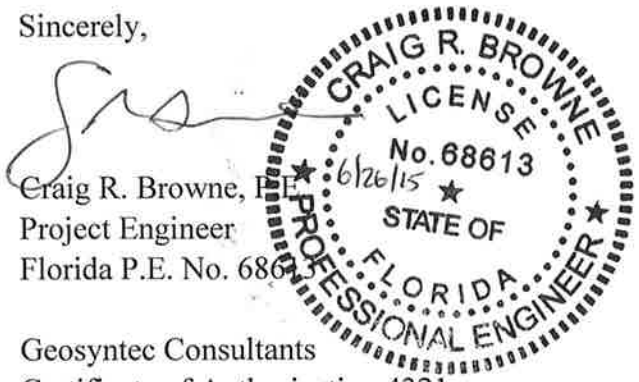
Geosyntec has completed FDEP Form No. 62-701.900(1) – *Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility*, which is included in **Attachment 1** of this submittal. Those items for which responses have not substantially changed from previous submittals to FDEP have been marked on the application form in Appendix A as "N/C" for no change. The permit application is duly certified by the applicant and a professional engineer registered in the State of Florida.

Permit Modification Drawings (Drawings), titled "Cell Sequencing Revisions," depict the proposed revisions to the construction and cell fill sequencing of Cells 12 and 13, and are included in **Attachment 2**. Relevant construction details for Cells 12 and 13 are provided in the currently approved Engineering Report, Technical Specifications, and Construction Quality Assurance Plan and are not proposed to change from the approved documents currently on file with FDEP.

CLOSURE

If you have any questions or need additional information, please do not hesitate to contact the undersigned.

Sincerely,



Craig R. Browne, P.E.
Project Engineer
Florida P.E. No. 68613

Geosyntec Consultants
Certificate of Authorization 4321
13101 Telecom Drive, Suite 120
Temple Terrace, Florida 33637

Attachments
Copies to: Michael Kaiser, PWSFL

ATTACHMENT 1

FDEP Form 62-701.900(1)

Florida Department of
Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(1), F.A.C.

Form Title: Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility

Effective Date: August 12, 2012

Incorporated in Rule: 62-701.330(3), F.A.C.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION TO CONSTRUCT, OPERATE, MODIFY, OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

APPLICATION INSTRUCTIONS AND FORMS

Northwest District
160 Governmental Center
Suite 308
Pensacola, FL 32502-5794
850-595-8300

Northeast District
7777 Baymeadows Way West
Suite 100
Jacksonville, FL 32256-7590
904-256-1700

Central District
3319 Maguire Boulevard
Suite 232
Orlando, FL 32803-3767
407-897-4100

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

South District
2295 Victoria Ave, Suite 364
P.O. Box 2549
Fort Myers, FL 33901-3881
239-344-5600

Southeast District
400 North Congress Avenue
Suite 200
West Palm Beach, FL 33401
561-681-6600

INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

I. General

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes (FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A minimum of four copies of the application shall be submitted to the appropriate Department office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "Not Applicable" or "No Substantial Change". Information provided in support of the application shall be marked "Submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

II. Application Parts Required for Construction and Operation Permits

A. Landfills and Ash Monofills - Submit Parts A through S
B. Asbestos Monofills - Submit Parts A, B, C, D, E, F, I, K, M, O through S
C. Industrial Solid Waste Disposal Facilities - Submit Parts A through S

NOTE: Portions of some Parts may not be applicable.

NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A, B and C type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

III. Application Parts Required for Closure Permits

A. Landfills and Ash Monofills - Submit Parts A, B, L, N through S
B. Asbestos Monofills - Submit Parts A, B, M, O through S
C. Industrial Solid Waste Disposal Facilities - Submit Parts A, B, L through S

NOTE: Portions of some Parts may not be applicable.

IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.

V. Application Codes

S	-	Submitted
LOCATION	-	Physical location of information in application
N/A	-	Not Applicable
N/C	-	No Substantial Change

VI. Listing of Application Parts

PART A: GENERAL INFORMATION

PART B: DISPOSAL FACILITY GENERAL INFORMATION

PART C: PROHIBITIONS

PART D: SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL

PART E: LANDFILL PERMIT REQUIREMENTS

PART F: GENERAL CRITERIA FOR LANDFILLS

PART G: LANDFILL CONSTRUCTION REQUIREMENTS

PART H: HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS

PART I: GEOTECHNICAL INVESTIGATION REQUIREMENTS

PART J: VERTICAL EXPANSION OF LANDFILLS

PART K: LANDFILL OPERATION REQUIREMENTS

PART L: WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS

PART M: SPECIAL WASTE HANDLING REQUIREMENTS

PART N: GAS MANAGEMENT SYSTEM REQUIREMENTS

PART O: LANDFILL CLOSURE REQUIREMENTS

PART P: OTHER CLOSURE PROCEDURES

PART Q: LONG-TERM CARE

PART R: FINANCIAL ASSURANCE

PART S: CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

Please Type or Print

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):
   - ☑ Class I Landfill
   - ☐ Class III Landfill
   - ☐ Industrial Solid Waste
   - ☐ Other (describe):
   - ☐ Ash Monofill
   - ☐ Asbestos Monofill

NOTE: Waste Processing Facilities should apply on Form 62-701.900(4), FAC;
Yard Trash Disposal Facilities should notify on Form 62-701.900(3), FAC;
Compost Facilities should apply on Form 62-709.901(1), FAC; and
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:
   - ☑ Construction
   - ☐ Operation
   - ☐ Construction/Operation
   - ☐ Closure
   - ☐ Long-term Care Only

3. Classification of application:
   - ☐ New
   - ☐ Renewal
   - ☐ Substantial Modification
   - ☐ Intermediate Modification
   - ☑ Minor Modification

4. Facility name: J.E.D. Solid Waste Management Facility

5. DEP ID number: 89544 (WACS) County: Osceola

6. Facility location (main entrance):
   1501 Omni Way, St. Cloud, FL 34773

7. Location coordinates:
   Section: 11,13,14,17, & 18 Township: 28S Range: 32E & 33E
   Latitude: 28 ° 3 ‘ 32 “ Longitude: 81 ° 5 ‘ 46 “
   Datum: WGS84 Coordinate method: DGPS
   Collected by: Johnston's Surveying Company/Affiliation: Johnston's Surveying

8. Applicant name (operating authority): Omni Waste of Osceola County, LLC

Mailing address: 1501 Omni Way (Street or P.O. Box) St. Cloud (City) FL (State) 34773 (Zip)

Contact person: Michael Kaiser Telephone: (904) 673-0446

Title: Southeast Region Engineer

michael.kaiser@progressivewaste.com
E-Mail address (if available)

9. Authorized agent/Consultant: Geosyntec Consultants

Mailing address: 13101 Telecom Drive, Suite 120 (Street or P.O. Box) Temple Terrace (City) FL (State) 33637 (Zip)

Contact person: Craig R. Browne, P.E. Telephone: (813) 558-0990

Title: Senior Engineer

cbrowne@geosyntec.com
E-Mail address (if available)

10. Landowner (if different than applicant): N/A

Mailing address: _____
Street or P.O. Box City State Zip

Contact person: _____ Telephone: (____) _____

_____
E-Mail address (if available)

11. Cities, towns, and areas to be served:

Primarily Osceola, Brevard, Indian River, Okeechobee, Orange, Polk, Volusia, Sumter, Lake, Seminole, Pasco, Hillsborough, Hardee, and Highlands Counties. Other Florida counties are served as waste streams are available.

12. Population to be served:

Current: 5,870,000 (approx.) Five-Year Projection: 6,240,000 (approx.)

13. Date site will be ready to be inspected for completion: N/A

14. Expected life of the facility: 20 years

15. Estimated costs: (Estimated costs correspond to construction of Cells 11 through 13 and closure of Phases 1 through 4 - excluding the 43.2-acre partially closed area)

Total Construction: $ 16,200,000 Closing Costs: $ 7,800,000

16. Anticipated construction starting and completion dates:

From: June 2015 To: December 2018

17. Expected volume or weight of waste to be received:

_____ yds^3/day 6,000 tons/day _____ gallons/day

PART B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:

This application is being submitted to revise the sequencing of construction and operation of Cells 12 and 13. Cell 13 is proposed for construction and operation prior to construction of Cell 12.

2. Facility site supervisor: John Hartings

Title: Landfill Manager Telephone: (407) 891-3720

john.hartings@progressivewaste.com
E-Mail address (if available)

3. Disposal area: Total acres: 360 Used acres: 125 Available acres: 235

4. Weighing scales used: ☑ Yes ☐ No

5. Security to prevent unauthorized use: ☑ Yes ☐ No

6. Charge for waste received: _____ $/yds^3 35 $/ton

7. Surrounding land use, zoning:

- ☐ Residential
- ☑ Agricultural
- ☐ Commercial
- ☐ Industrial
- ☐ None
- ☐ Other (describe):

8. Types of waste received:

- ☑ Household
- ☑ Commercial
- ☑ Incinerator/WTE ash
- ☑ Treated biomedical
- ☑ Water treatment sludge
- ☐ Air treatment sludge
- ☐ Agricultural
- ☑ Asbestos
- ☑ C & D debris
- ☑ Shredded/cut tires
- ☐ Yard trash
- ☐ Septic tank
- ☑ Industrial
- ☑ Industrial sludge
- ☑ Domestic sludge
- ☑ Other (describe):

Waste tires and industrial liquid waste for solidification.

9. Salvaging permitted: ☐ Yes ☑ No

10. Attendant: ☑ Yes ☐ No Trained operator: ☑ Yes ☐ No

11. Trained spotters: ☑ Yes ☐ No Number of spotters used: Minimum of 1 per work face

12. Site located in: ☑ Floodplain ☑ Wetlands ☐ Other (describe):

13. Days of operation: Monday thru Sunday

14. Hours of operation: Mon-Fri: 5am to 4pm, Sat: 6am to 12pm, Sun: 6am to 10am

15. Days working face covered: each working day

16. Elevation of water table: 79 ft. Datum Used: NGVD 29

17. Number of monitoring wells: 68

18. Number of surface monitoring points: 2

19. Gas controls used: ☑ Yes ☐ No Type controls: ☑ Active ☐ Passive

Gas flaring: ☑ Yes ☐ No Gas recovery: ☑ Yes ☐ No

20. Landfill unit liner type:

- ☐ Natural soils
- ☐ Single clay liner
- ☐ Single geomembrane
- ☐ Single composite
- ☐ Slurry wall
- ☐ Double geomembrane
- ☑ Geomembrane & composite (Cells 5 thru 23)
- ☑ Double composite (Cells 1 thru 4)
- ☐ None
- ☑ Other (describe):

A GCL layer is provided below primary geomembrane liner in the sump area in Cells 5 through 23.

21. Leachate collection method:

- ☑ Collection pipes
- ☑ Geonets (geocomposite)
- ☐ Well points
- ☐ Perimeter ditch
- ☑ Other (describe):
- ☐ Double geomembrane
- ☐ Gravel layer
- ☐ Interceptor trench
- ☐ None

Sand layer above the geocomposite.

22. Leachate storage method:

☐ Tanks
☑ Surface impoundments with flexible storage containers
☐ Other (describe):

23. Leachate treatment method:

☑ Oxidation
☐ Chemical treatment
☐ Secondary
☐ Settling
☐ Advanced
☐ None
☑ Other (describe):

Oxidation performed through aeration in one of the three leachate storage area cells.

24. Leachate disposal method:

☑ Recirculated
☐ Pumped to WWTP
☑ Transported to WWTP
☐ Discharged to surface water/wetland
☐ Injection well
☐ Percolation ponds
☐ Evaporation
☐ Spray irrigation
☐ Other (describe):

25. For leachate discharged to surface waters:

Name and Class of receiving water:

N/A

26. Storm Water:

Collected: ☑ Yes ☐ No

Type of treatment:

Dry and wet retention for landfill and dry retention for access road.

Name and Class of receiving water:

Bull Creek, Class III

27. Environmental Resources Permit (ERP) number or status:

Current ERP Numbers are ERP49-0199752-001-EI (Phase 1 Individual), ERP49-0199752-002-EI (Conceptual), ERP-49-0199752-003-EI (Phase 2 Individual), ERP49-0199752-004-EM (Phase 3 Individual), ERP-49-0199752-006-EM (Conceptual Permit Mod.), ERP-49-0199752-007-EM (Leachate Storage Facility), ERP-49-0199752-008 (Leachate Storage Facility Mod.).

PART C. PROHIBITIONS (62-701.300, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑		1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
S ☐ _____ N/A ☐ N/C ☑		2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s);
S ☐ _____ N/A ☐ N/C ☑		3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
S ☐ _____ N/A ☐ N/C ☑		4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
S ☐ _____ N/A ☐ N/C ☑		5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
S ☐ _____ N/A ☐ N/C ☑		6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
S ☐ _____ N/A ☐ N/C ☑		7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
S ☐ _____ N/A ☐ N/C ☑		8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
S ☐ _____ N/A ☐ N/C ☑		9. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
S ☐ _____ N/A ☐ N/C ☑		10. Provide documentation that the facility will be in compliance with the used oil and oily waste restrictions; (62-701.300(11), FAC)

PART D. SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL (62-701.320, FAC)

LOCATION

S ☑ Attached N/A ☐ N/C ☐		1. Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a), FAC)
S ☑ Report & Attachments N/A ☐ N/C ☐		2. Engineering and/or professional certification (signature, date, and seal) provided on the applications and all engineering plans, reports, and supporting information for the application; (62-701.320(6), FAC)
S ☑ Attached Letter N/A ☐ N/C ☐		3. A letter of transmittal to the Department; (62-701.320(7)(a), FAC)

LOCATION		PART D CONTINUED
S ☑ Attachment 1	N/A ☐ N/C ☐	4. A completed application form dated and signed by the applicant; (62-701.320(7)(b), FAC)
S ☑ Attached	N/A ☐ N/C ☐	5. Permit fee specified in Rule 62-701.315, FAC in check or money order, payable to the Department; (62-701.320(7)(c), FAC)
S ☑ Report	N/A ☐ N/C ☐	6. An engineering report addressing the requirements of this rule and with the following format: a cover sheet, text printed on 8 ½ inch by 11 inch consecutively numbered pages, a table of contents or index, the body of the report and all appendices including an operation plan, contingency plan, illustrative charts and graphs, records or logs of tests and investigations, engineering calculations; (62-701.320(7)(d), FAC)
S ☐	N/A ☐ N/C ☑	7. Operation Plan and Closure Plan; (62-701.320(7)(e)1, FAC)
S ☐	N/A ☐ N/C ☑	8. Contingency Plan; (62-701.320(7)(e)2, FAC)
S ☑ Attachment 2	N/A ☐ N/C ☐	9. Plans or drawings for the solid waste management facilities in appropriate format (including sheet size restrictions, cover sheet, legends, north arrow, horizontal and vertical scales, elevations referenced to NGVD 1929) showing: (62-701.320(7)(f), FAC)
S ☐	N/A ☐ N/C ☑	a. A regional map or plan with the project location in relation to major roadways and population centers;
S ☐	N/A ☐ N/C ☑	b. A vicinity map or aerial photograph no more than one year old showing the facility site and relevant surface features located within 1000 feet of the facility;
S ☐	N/A ☐ N/C ☑	c. A site plan showing all property boundaries certified by a Florida Licensed Professional Surveyor and Mapper;
S ☑ Attachment 2	N/A ☐ N/C ☐	d. Other necessary details to support the engineering report, including referencing elevations to a consistent, nationally recognized datum, and identifying the method used for collecting latitude and longitude data;
S ☐	N/A ☐ N/C ☑	10. Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g), FAC)
S ☐	N/A ☑ N/C ☐	11. For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706, FS; (62-701.320(7)(h), FAC)

S ☐ _____ N/A ☐ N/C ☑ 12. Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders, or permit conditions relating to the operation of any solid waste management facility in the state; (62-701.320(7)(i), FAC)

S ☐ _____ N/A ☑ N/C ☐ 13. Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-701.320(8), FAC)

S ☐ _____ N/A ☐ N/C ☑ 14. Provide a description of how the requirements for airport safety will be achieved, including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13), FAC)

S ☐ _____ N/A ☐ N/C ☑ 15. Explain how the operator and spotter training requirements and special criteria will be satisfied for the facility; (62-701.320(15), FAC)

PART E. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Regional map or aerial photograph no more than five years old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(a), FAC)

S ☑ Attachment 2 N/A ☐ N/C ☐ 2. Plot plan with a scale not greater than 200 feet to the inch showing: (62-701.330(3)(b), FAC)

S ☑ Attachment 2 N/A ☐ N/C ☐ a. Dimensions;

S ☐ _____ N/A ☐ N/C ☑ b. Locations of proposed and existing water quality monitoring wells;

S ☐ _____ N/A ☐ N/C ☑ c. Locations of soil borings;

S ☑ Attachment 2 N/A ☐ N/C ☐ d. Proposed plan of trenching or disposal areas;

S ☐ _____ N/A ☐ N/C ☑ e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;

S ☑ Attachment 2 N/A ☐ N/C ☐ f. Any previously filled waste disposal areas;

S ☐ _____ N/A ☐ N/C ☑ g. Fencing or other measures to restrict access;

S ☑ Attachment 2 N/A ☐ N/C ☐	3. Topographic maps with a scale not greater than 200 feet to the inch with five foot contour intervals showing: (62-701.330(3)(c), FAC)
S ☑ Attachment 2 N/A ☐ N/C ☐	a. Proposed fill areas;
S ☐ _____ N/A ☐ N/C ☑	b. Borrow areas;
S ☐ _____ N/A ☐ N/C ☑	c. Access roads;
S ☐ _____ N/A ☐ N/C ☑	d. Grades required for proper drainage;
S ☐ _____ N/A ☐ N/C ☑	e. Cross sections of lifts;
S ☐ _____ N/A ☐ N/C ☑	f. Special drainage devices if necessary;
S ☐ _____ N/A ☐ N/C ☑	g. Fencing;
S ☐ _____ N/A ☐ N/C ☑	h. Equipment facilities;
S ☐ _____ N/A ☐ N/C ☑	4. A report on the landfill describing the following: (62-701.330(3)(d), FAC)
S ☐ _____ N/A ☐ N/C ☑	a. The current and projected population and area to be served by the proposed site;
S ☐ _____ N/A ☐ N/C ☑	b. The anticipated type, annual quantity, and source of solid waste expressed in tons;
S ☐ _____ N/A ☐ N/C ☑	c. Planned active life of the facility, the final design height of the facility, and the maximum height of the facility during its operation;
S ☐ _____ N/A ☐ N/C ☑	d. The source and type of cover material used for the landfill;
S ☐ _____ N/A ☐ N/C ☑	5. Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160, FAC; (62-701.330(3)(g), FAC
S ☐ _____ N/A ☐ N/C ☑	6. Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3)(h), FAC)

PART F. GENERAL CRITERIA FOR LANDFILLS (62-701.340, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100 year floodplain where it will restrict the flow of the 100 year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62-701.340(3)(b), FAC)

S ☐ _____ N/A ☐ N/C ☑ 2. Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62-701.340(3)(c), FAC)

PART G. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Describe how the landfill shall be designed so the solid waste disposal units will be constructed and closed at planned intervals throughout the design period of the landfill, and shall be designed to achieve a minimum factor of safety of 1.5 using peak strength values to prevent failures of side slopes and deep-seated failures; (62-701.400(2), FAC)

S ☐ _____ N/A ☐ N/C ☑ 2. Landfill liner requirements; (62-701.400(3), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. General construction requirements; (62-701.400(3)(a), FAC)

S ☐ _____ N/A ☐ N/C ☑ (1) Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure;

S ☐ _____ N/A ☐ N/C ☑ (2) Document foundation is adequate to prevent liner failure;

S ☐ _____ N/A ☐ N/C ☑ (3) Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;

S ☐ _____ N/A ☐ N/C ☑ (4) Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;

S ☐ _____ N/A ☐ N/C ☑ (5) Installed to cover all surrounding earth which could come into contact with the waste or leachate;

S ☐ _____ N/A ☑ N/C ☐		b. Composite liners; (62-701.400(3)(b), FAC)
S ☐ _____ N/A ☑ N/C ☐	(1)	Upper geomembrane thickness and properties;
S ☐ _____ N/A ☑ N/C ☐	(2)	Design leachate head for primary leachate collection and removal system (LCRS) including leachate recirculation if appropriate;
S ☐ _____ N/A ☑ N/C ☐	(3)	Design thickness in accordance with Table A and number of lifts planned for lower soil component;
S ☐ _____ N/A ☐ N/C ☑		c. Double liners; (62-701.400(3)(c), FAC)
S ☐ _____ N/A ☐ N/C ☑	(1)	Upper and lower geomembrane thickness and properties;
S ☐ _____ N/A ☐ N/C ☑	(2)	Design leachate head for primary LCRS to limit the head to one foot above the liner;
S ☐ _____ N/A ☐ N/C ☑	(3)	Lower geomembrane sub-base design;
S ☐ _____ N/A ☐ N/C ☑	(4)	Leak detection and secondary leachate collection system minimum design criteria (k ≥ 10 cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);
S ☐ _____ N/A ☐ N/C ☑		d. Standards for geosynthetic components; (62-701.400(3)(d), FAC)
S ☐ _____ N/A ☐ N/C ☑	(1)	Factory and field seam test methods to ensure all geomembrane seams achieve the minimum specifications;
S ☐ _____ N/A ☐ N/C ☑	(2)	Geomembranes to be used shall pass a continuous spark test by the manufacturer;
S ☐ _____ N/A ☐ N/C ☑	(3)	Design of 24-inch-thick protective layer above upper geomembrane liner;
S ☐ _____ N/A ☐ N/C ☑	(4)	Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above a 24-inch-thick protective layer;
S ☐ _____ N/A ☐ N/C ☑	(5)	HDPE geomembranes, if used, meet the specifications in GRI GM13, and LLDPE geomembranes, if used, meet the specifications in GRI GM17;
S ☐ _____ N/A ☑ N/C ☐	(6)	PVC geomembranes, if used, meet the specifications in PGI 1104;

S ☐ _____ N/A ☐ N/C ☑	(7)	Interface shear strength testing results of the actual components which will be used in the liner system;
S ☐ _____ N/A ☐ N/C ☑	(8)	Transmissivity testing results of geonets if they are used in the liner system;
S ☐ _____ N/A ☐ N/C ☑	(9)	Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;
S ☐ _____ N/A ☐ N/C ☑	e. Geosynthetic specification requirements; (62-701.400(3)(e), FAC)	
S ☐ _____ N/A ☐ N/C ☑	(1)	Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
S ☐ _____ N/A ☐ N/C ☑	(2)	Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;
S ☐ _____ N/A ☐ N/C ☑	(3)	Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and non-destructive seam testing, seam testing location, frequency, procedure, sample size, and geomembrane repairs;
S ☐ _____ N/A ☐ N/C ☑	(4)	Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembranes, and procedures for lining system acceptance;
S ☐ _____ N/A ☐ N/C ☑	(5)	Geotextile and geogrids specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
S ☐ _____ N/A ☐ N/C ☑	(6)	Geonet and geocomposites specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
S ☐ _____ N/A ☐ N/C ☑	(7)	Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;

LOCATION	PART G CONTINUED	
S ☐ _____ N/A ☑ N/C ☐	f. Standards for soil liner components; (62-701.400(3)(f), FAC)	
S ☐ _____ N/A ☑ N/C ☐	(1)	Description of construction procedures including over-excavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil components in layers;
S ☐ _____ N/A ☑ N/C ☐	(2)	Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100, or an equivalent test method;
S ☐ _____ N/A ☑ N/C ☐	(3)	Procedures for testing in situ soils to demonstrate they meet the specifications for soil liners;
S ☐ _____ N/A ☑ N/C ☐	(4)	Specifications for soil component of liner including at a minimum:
S ☐ _____ N/A ☑ N/C ☐	(a)	Allowable particle size distribution, and Atterberg limits including shrinkage limit;
S ☐ _____ N/A ☑ N/C ☐	(b)	Placement moisture and dry density criteria;
S ☐ _____ N/A ☑ N/C ☐	(c)	Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
S ☐ _____ N/A ☑ N/C ☐	(d)	Minimum thickness of soil liner;
S ☐ _____ N/A ☑ N/C ☐	(e)	Lift thickness;
S ☐ _____ N/A ☑ N/C ☐	(f)	Surface preparation (scarification);
S ☐ _____ N/A ☑ N/C ☐	(g)	Type and percentage of clay mineral within the soil component;
S ☐ _____ N/A ☑ N/C ☐	(5)	Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field;
S ☐ _____ N/A ☑ N/C ☐	g. If a Class III landfill is to be constructed with a bottom liner system, provide a description of how the minimum requirements for the liner will be achieved;	

LOCATION **PART G CONTINUED**

S ☐ _____ N/A ☐ N/C ☑ 3. Leachate collection and removal system (LCRS); (62-701.400(4), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. The primary and secondary LCRS requirements; (62-701.400(4)(a), FAC)

S ☐ _____ N/A ☐ N/C ☑ (1) Constructed of materials chemically resistant to the waste and leachate;

S ☐ _____ N/A ☐ N/C ☑ (2) Have sufficient mechanical properties to prevent collapse under pressure;

S ☐ _____ N/A ☐ N/C ☑ (3) Have granular material or synthetic geotextile to prevent clogging;

S ☐ _____ N/A ☐ N/C ☑ (4) Have a method for testing and cleaning clogged pipes or contingent designs for reducing leachate around failed areas;

S ☐ _____ N/A ☐ N/C ☑ b. Other LCRS requirements; (62-701.400(4)(b) and (c), FAC

S ☐ _____ N/A ☐ N/C ☑ (1) Bottom 12 inches having hydraulic conductivity≥ 1×10^{-3} cm/sec;

S ☐ _____ N/A ☐ N/C ☑ (2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;

S ☐ _____ N/A ☐ N/C ☑ (3) Bottom slope design to accommodate for predicted settlement and still meet minimum slope requirements;

S ☐ _____ N/A ☐ N/C ☑ (4) Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load, and protection of geomembranes liner;

S ☐ _____ N/A ☐ N/C ☑ 4. Leachate recirculation; (62-701.400(5), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Describe general procedures for recirculating leachate;

S ☐ _____ N/A ☐ N/C ☑ b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;

S ☐ _____ N/A ☐ N/C ☑ c. Describe procedures for preventing perched water conditions and gas buildup;

S ☐ _____ N/A ☐ N/C ☑ d. Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;

S ☐ _____ N/A ☐ N/C ☑ e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;

S ☐ _____ N/A ☐ N/C ☑ f. If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover, and provide documentation that irrigation does not contribute significantly to leachate generation;

S ☐ _____ N/A ☐ N/C ☑ 5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Surface impoundment requirements; (62-701.400(6)(b), FAC)

S ☐ _____ N/A ☐ N/C ☑ (1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;

S ☐ _____ N/A ☐ N/C ☑ (2) Designed in segments to allow for inspection and repair, as needed, without interruption of service;

S ☐ _____ N/A ☐ N/C ☑ (3) General design requirements;

S ☐ _____ N/A ☐ N/C ☑ (a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;

S ☐ _____ N/A ☐ N/C ☑ (b) Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;

S ☐ _____ N/A ☐ N/C ☑ (c) Lower geomembrane place on subbase ≥ 6 inches thick with $k \leq 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k \leq 1 \times 10^{-7}$ cm/sec;

S ☐ _____ N/A ☐ N/C ☑ (d) Design calculation to predict potential leakage through the upper liner;

S ☐ _____ N/A ☐ N/C ☑ (e) Daily inspection requirements, and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;

S ☐ _____ N/A ☐ N/C ☑ (4) Description of procedures to prevent uplift, if applicable;

LOCATION	PART G CONTINUED	
S ☐ _____ N/A ☐ N/C ☑	(5)	Design calculations to demonstrate minimum two feet of freeboard will be maintained;
S ☐ _____ N/A ☐ N/C ☑	(6)	Procedures for controlling vectors and off-site odors;
S ☐ _____ N/A ☑ N/C ☐	b. Above-ground leachate storage tanks; (62-701.400(6)(c), FAC)	
S ☐ _____ N/A ☑ N/C ☐	(1)	Describe tank materials of construction and ensure foundation is sufficient to support tank;
S ☐ _____ N/A ☑ N/C ☐	(2)	Describe procedures for cathodic protection for the tank, if needed;
S ☐ _____ N/A ☑ N/C ☐	(3)	Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
S ☐ _____ N/A ☑ N/C ☐	(4)	Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
S ☐ _____ N/A ☑ N/C ☐	(5)	Describe design to remove and dispose of stormwater from the secondary containment system;
S ☐ _____ N/A ☑ N/C ☐	(6)	Describe an overfill prevention system, such as level sensors, gauges, alarms, and shutoff controls to prevent overfilling;
S ☐ _____ N/A ☑ N/C ☐	(7)	Inspections, corrective action, and reporting requirements;
S ☐ _____ N/A ☑ N/C ☐	(a)	Weekly inspection of overfill prevention system;
S ☐ _____ N/A ☑ N/C ☐	(b)	Weekly inspection of exposed tank exteriors;
S ☐ _____ N/A ☑ N/C ☐	(c)	Inspection of tank interiors when tank is drained, or at least every three years;
S ☐ _____ N/A ☑ N/C ☐	(d)	Procedures for immediate corrective action if failures detected;
S ☐ _____ N/A ☑ N/C ☐	(e)	Inspection reports available for Department review;
S ☐ _____ N/A ☑ N/C ☐	c. Underground leachate storage tanks; (62-701.400(6)(d), FAC)	

S ☐ _____ N/A ☑ N/C ☐ (1) Describe materials of construction;

S ☐ _____ N/A ☑ N/C ☐ (2) A double-walled tank design system to be used with the following requirements:

S ☐ _____ N/A ☑ N/C ☐ (a) Interstitial space monitoring at least weekly;

S ☐ _____ N/A ☑ N/C ☐ (b) Corrosion protection provided for primary tank interior and external surface of outer shell;

S ☐ _____ N/A ☑ N/C ☐ (c) Interior tank coatings compatible with stored leachate;

S ☐ _____ N/A ☑ N/C ☐ (d) Cathodic protection inspected weekly and repaired as needed;

S ☐ _____ N/A ☑ N/C ☐ (3) Describe an overfill prevention system, such as level sensors, gauges, alarms, and shutoff controls to prevent overfilling, and provide for weekly inspections;

S ☐ _____ N/A ☑ N/C ☐ (4) Inspection reports available for Department review;

S ☐ _____ N/A ☑ N/C ☐ d. Schedule provided for routine maintenance of LCRS; (62-701.400(6)(e), FAC)

S ☐ _____ N/A ☐ N/C ☑ 6. Liner systems construction quality assurance (CQA); (62-701.400(7), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Provide CQA Plan including:

S ☐ _____ N/A ☐ N/C ☑ (1) Specifications and construction requirements for liner system;

S ☐ _____ N/A ☐ N/C ☑ (2) Detailed description of quality control testing procedures and frequencies;

S ☐ _____ N/A ☐ N/C ☑ (3) Identification of supervising professional engineer;

S ☐ _____ N/A ☐ N/C ☑ (4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;

S ☐ _____ N/A ☐ N/C ☑ (5) State qualifications of CQA professional engineer and support personnel;

S ☐ _____ N/A ☐ N/C ☑ (6) Description of CQA reporting forms and documents;

S ☐ _____ N/A ☐ N/C ☑ b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;

S ☐ _____ N/A ☐ N/C ☑ 7. Soil liner CQA; (62-701.400(8), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Documentation that an adequate borrow source has been located with test results, or description of the field exploration and laboratory testing program to define a suitable borrow source;

S ☐ _____ N/A ☐ N/C ☑ b. Description of field test section construction and test methods to be implemented prior to liner installation;

S ☐ _____ N/A ☐ N/C ☑ c. Description of field test methods, including rejection criteria and corrective measures to insure proper liner installation;

S ☐ _____ N/A ☐ N/C ☑ 8. For surface water management systems at aboveground disposal units, provide documentation showing the design of any features intended to convey stormwater to a permitted or exempted treatment system; (62-701.400(9), FAC)

S ☐ _____ N/A ☐ N/C ☑ 9. Gas control systems; (62-701.400(10), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;

S ☐ _____ N/A ☑ N/C ☐ 10. For landfills designed in ground water, provide documentation that the landfill will provide a degree of protection equivalent to landfills designed with bottom liners not in contact with ground water; (62-701.400(11), FAC)

PART H. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(1), FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Submit a hydrogeological investigation and site report including at least the following information:

S ☐ _____ N/A ☐ N/C ☑ a. Regional and site specific geology and hydrology;

S ☐ _____ N/A ☐ N/C ☑ b. Direction and rate of ground water and surface water flow including seasonal variations;

LOCATION **PART H CONTINUED**

S ☐ _____ N/A ☐ N/C ☑ c. Background quality of ground water and surface water;

S ☐ _____ N/A ☐ N/C ☑ d. Any on-site hydraulic connections between aquifers;

S ☐ _____ N/A ☐ N/C ☑ e. Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill;

S ☐ _____ N/A ☐ N/C ☑ f. Description of topography, soil types, and surface water drainage systems;

S ☐ _____ N/A ☐ N/C ☑ g. Inventory of all public and private water wells within a one mile radius of the landfill including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique, and static water level;

S ☐ _____ N/A ☐ N/C ☑ h. Identify and locate any existing contaminated areas on the site;

S ☐ _____ N/A ☐ N/C ☑ i. Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas;

S ☐ _____ N/A ☐ N/C ☑ 2. Report signed, sealed, and dated by P.E. and/or P.G.;

PART I. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(2), FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Submit a geotechnical site investigation report defining the engineering properties of the site including at least the following:

S ☐ _____ N/A ☐ N/C ☑ a. Description of subsurface conditions including soil stratigraphy and ground water table conditions;

S ☐ _____ N/A ☐ N/C ☑ b. Investigate for the presence of muck, previously filled areas, soft ground, lineaments, and sink holes;

S ☐ _____ N/A ☐ N/C ☑ c. Estimates of average and maximum high water table across the site;

S ☐ _____ N/A ☐ N/C ☑ d. Foundation analysis including:

S ☐ _____ N/A ☐ N/C ☑ (1) Foundation bearing capacity analysis;

S ☐ _____ N/A ☐ N/C ☑ (2) Total and differential subgrade settlement analysis;

S ☐ _____ N/A ☐ N/C ☑ (3) Slope stability analysis;

S ☐ _____ N/A ☐ N/C ☑ e. Description of methods used in the investigation, and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations, and conclusions;

S ☐ _____ N/A ☐ N/C ☑ f. An evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14, and 40 CFR 258.15;

S ☐ _____ N/A ☐ N/C ☑ 2. Report signed, sealed, and dated by P.E. and/or P.G.;

PART J. VERTICAL EXPANSION OF LANDFILLS (62-701.430, FAC)

LOCATION

S ☐ _____ N/A ☑ N/C ☐ 1. Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill, shall not cause objectionable odors, or adversely affect the closure design of the existing landfill;

S ☐ _____ N/A ☑ N/C ☐ 2. Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c), FAC;

S ☐ _____ N/A ☑ N/C ☐ 3. Provide foundation and settlement analysis for the vertical expansion;

S ☐ _____ N/A ☑ N/C ☐ 4. Provide total settlement calculations demonstrating that the final elevations of the lining system, gravity drainage, and no other component of the design will be adversely affected;

S ☐ _____ N/A ☑ N/C ☐ 5. Minimum stability factor of safety of 1.5 for the lining system component interface stability and for deep stability;

S ☐ _____ N/A ☑ N/C ☐ 6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;

S ☐ _____ N/A ☑ N/C ☐ 7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion;

PART K. LANDFILL OPERATION REQUIREMENTS (62-701.500, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Provide documentation that the landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1), FAC)

S ☐ _____ N/A ☐ N/C ☑ 2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Designating responsible operating and maintenance personnel;

S ☐ _____ N/A ☐ N/C ☑ b. Emergency preparedness and response, as required in subsection 62-701.320(16), FAC;

S ☐ _____ N/A ☐ N/C ☑ c. Controlling types of waste received at the landfill;

S ☐ _____ N/A ☐ N/C ☑ d. Weighing incoming waste;

S ☐ _____ N/A ☐ N/C ☑ e. Vehicle traffic control and unloading;

S ☐ _____ N/A ☐ N/C ☑ f. Method and sequence of filling waste;

S ☐ _____ N/A ☐ N/C ☑ g. Waste compaction and application of cover;

S ☐ _____ N/A ☐ N/C ☑ h. Operations of gas, leachate, and stormwater controls;

S ☐ _____ N/A ☐ N/C ☑ i. Water quality monitoring;

S ☐ _____ N/A ☐ N/C ☑ j. Maintaining and cleaning the leachate collection system;

S ☐ _____ N/A ☐ N/C ☑ 3. Provide a description of the landfill operation record to be used at the landfill, details as to location of where various operational records will be kept (i.e. DEP permit, engineering drawings, water quality records, etc.); (62-701.500(3), FAC)

S ☐ _____ N/A ☐ N/C ☑ 4. Describe the waste records that will be compiled monthly and provided to the Department annually; (62-701.500(4), FAC)

S ☐ _____ N/A ☐ N/C ☑ 5. Describe methods of access control; (62-701.500(5), FAC)

S ☐ _____ N/A ☐ N/C ☑ 6. Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized waste at the landfill; (62-701.500(6), FAC)

LOCATION **PART K CONTINUED**

S ☐ _____ N/A ☐ N/C ☑	7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7), FAC)
S ☐ _____ N/A ☐ N/C ☑	a. Waste layer thickness and compaction frequencies;
S ☐ _____ N/A ☐ N/C ☑	b. Special considerations for first layer of waste placed above the liner and leachate collection system;
S ☐ _____ N/A ☐ N/C ☑	c. Slopes of cell working face and side grades above land surface, and planned lift depths during operation;
S ☐ _____ N/A ☐ N/C ☑	d. Maximum width of working face;
S ☐ _____ N/A ☐ N/C ☑	e. Description of type of initial cover to be used at the facility that controls:
S ☐ _____ N/A ☐ N/C ☑	(1) Vector breeding/animal attraction;
S ☐ _____ N/A ☐ N/C ☑	(2) Fires;
S ☐ _____ N/A ☐ N/C ☑	(3) Odors;
S ☐ _____ N/A ☐ N/C ☑	(4) Blowing litter;
S ☐ _____ N/A ☐ N/C ☑	(5) Moisture infiltration;
S ☐ _____ N/A ☐ N/C ☑	f. Procedures for applying initial cover, including minimum cover frequencies;
S ☐ _____ N/A ☐ N/C ☑	g. Procedures for applying intermediate cover;
S ☐ _____ N/A ☐ N/C ☑	h. Time frames for applying final cover;
S ☐ _____ N/A ☐ N/C ☑	i. Procedures for controlling scavenging and salvaging;
S ☐ _____ N/A ☐ N/C ☑	j. Description of litter policing methods;
S ☐ _____ N/A ☐ N/C ☑	k. Erosion control procedures;

S ☐ _____ N/A ☐ N/C ☑ 8. Describe operational procedures for leachate management including: (62-701.500(8), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Leachate level monitoring;

S ☐ _____ N/A ☐ N/C ☑ b. Operation and maintenance of leachate collection and removal system, and treatment as required;

S ☐ _____ N/A ☐ N/C ☑ c. Procedures for managing leachate if it becomes regulated as a hazardous waste;

S ☐ _____ N/A ☐ N/C ☑ d. Identification of treatment or disposal facilities that may be used for off-site discharge and treatment of leachate;

S ☐ _____ N/A ☐ N/C ☑ e. Contingency plan for managing leachate during emergencies or equipment problems;

S ☐ _____ N/A ☐ N/C ☑ f. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;

S ☐ _____ N/A ☐ N/C ☑ g. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;

S ☐ _____ N/A ☐ N/C ☑ h. Procedures for water pressure cleaning or video inspecting leachate collection systems;

S ☐ _____ N/A ☐ N/C ☑ 9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the requirements of Rule 62-701.530, FAC; (62-701.500(9), FAC)

S ☐ _____ N/A ☐ N/C ☑ 10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-701.400(9), FAC; (62-701.500(10), FAC)

S ☐ _____ N/A ☐ N/C ☑ 11. Equipment and operation feature requirements; (62-701.500(11), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Sufficient equipment for excavating, spreading, compacting, and covering waste;

S ☐ _____ N/A ☐ N/C ☑ b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;

S ☐ _____ N/A ☐ N/C ☑ c. Communications equipment;

LOCATION **PART K CONTINUED**

S ☐ _____ N/A ☐ N/C ☑ d. Dust control methods;

S ☐ _____ N/A ☐ N/C ☑ e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;

S ☐ _____ N/A ☐ N/C ☑ f. Litter control devices;

S ☐ _____ N/A ☐ N/C ☑ g. Signs indicating operating authority, traffic flow, hours of operation, and disposal restrictions;

S ☐ _____ N/A ☐ N/C ☑ 12. Provide a description of all-weather access road, inside perimeter road, and other on-site roads necessary for access at the landfill; (62-701.500(12), FAC)

S ☐ _____ N/A ☐ N/C ☑ 13. Additional record keeping and reporting requirements; (62-701.500(13), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;

S ☐ _____ N/A ☐ N/C ☑ b. Monitoring information, calibration and maintenance records, and copies of reports required by permit maintained for at least 10 years;

S ☐ _____ N/A ☐ N/C ☑ c. Maintain annual estimates of the remaining life of constructed landfills, and of other permitted areas not yet constructed, and submit this estimate annually to the Department;

S ☐ _____ N/A ☐ N/C ☑ d. Procedures for archiving and retrieving records which are more than five years old;

PART L. WATER QUALITY MONITORING REQUIREMENTS (62-701.510, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. A water quality monitoring plan shall be submitted describing the proposed ground water and surface water monitoring systems, and shall meet at least the following requirements:

S ☐ _____ N/A ☐ N/C ☑ a. Based on the information obtained in the hydrogeological investigation and signed, dated, and sealed by the P.G. or P.E. who prepared it; (62-701.510(2)(a), FAC)

LOCATION		
S ☐ _____ N/A ☐ N/C ☑		b. All sampling and analysis performed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b), FAC)
S ☐ _____ N/A ☐ N/C ☑		c. Ground water monitoring requirements; (62-701.510(3), FAC)
S ☐ _____ N/A ☐ N/C ☑	(1)	Detection wells located downgradient from and within 50 feet of disposal units;
S ☐ _____ N/A ☐ N/C ☑	(2)	Downgradient compliance wells as required;
S ☐ _____ N/A ☐ N/C ☑	(3)	Background wells screened in all aquifers below the landfill that may be affected by the landfill;
S ☐ _____ N/A ☐ N/C ☑	(4)	Location information for each monitoring well;
S ☐ _____ N/A ☐ N/C ☑	(5)	Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells, unless site specific conditions justify alternate well spacings;
S ☐ _____ N/A ☐ N/C ☑	(6)	Properly selected well screen locations;
S ☐ _____ N/A ☐ N/C ☑	(7)	Monitoring wells constructed to provide representative ground water samples;
S ☐ _____ N/A ☐ N/C ☑	(8)	Procedures for properly abandoning monitoring wells;
S ☐ _____ N/A ☐ N/C ☑	(9)	Detailed description of detection sensors, if proposed;
S ☐ _____ N/A ☐ N/C ☑		d. Surface water monitoring requirements; (62-701.510(4), FAC)
S ☐ _____ N/A ☐ N/C ☑	(1)	Location of and justification for all proposed surface water monitoring points;
S ☐ _____ N/A ☐ N/C ☑	(2)	Each monitoring location to be marked and its position determined by a registered Florida land surveyor;
S ☐ _____ N/A ☐ N/C ☑		e. Initial and routine sampling frequency and requirements; (62-701.510(5), FAC)
S ☐ _____ N/A ☐ N/C ☑	(1)	Initial background ground water and surface water sampling and analysis requirements;

S ☐ _____ N/A ☐ N/C ☑	(2)	Routine monitoring well sampling and analysis requirements;
S ☐ _____ N/A ☐ N/C ☑	(3)	Routine surface water sampling and analysis requirements;
S ☐ _____ N/A ☐ N/C ☑	f. Describe procedures for implementing evaluation monitoring, prevention measures, and corrective action as required; (62-701.510(6), FAC)	
S ☐ _____ N/A ☐ N/C ☑	g. Water quality monitoring report requirements; (62-701.510(8), FAC)	
S ☐ _____ N/A ☐ N/C ☑	(1)	Semi-annual report requirements; (see paragraphs 62-701.510(5)(c) and (d), FAC for sampling frequencies)
S ☐ _____ N/A ☐ N/C ☑	(2)	Documentation that the water quality data shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit;
S ☐ _____ N/A ☐ N/C ☑	(3)	Two and one-half year report requirements, or every five years if in long-term care, signed dated, and sealed by P.G. or P.E.;

PART M. SPECIAL WASTE HANDLING REQUIREMENTS (62-701.520, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑	1. Describe procedures for managing motor vehicles; (62-701.520(1), FAC)
S ☐ _____ N/A ☐ N/C ☑	2. Describe procedures for landfilling shredded waste; (62-701.520(2), FAC)
S ☐ _____ N/A ☐ N/C ☑	3. Describe procedures for asbestos waste disposal; (62-701.520(3), FAC)
S ☐ _____ N/A ☐ N/C ☑	4. Describe procedures for disposal or management of contaminated soil; (62-701.520(4), FAC)
S ☐ _____ N/A ☐ N/C ☑	5. Describe procedures for disposal of biological wastes; (62-701.520(5), FAC)

PART N. GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Provide documentation for a gas management system that will: (62-701.530(1), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;

S ☐ _____ N/A ☐ N/C ☑ b. Be designed for site specific conditions;

S ☐ _____ N/A ☐ N/C ☑ c. Be designed to reduce gas pressure in the interior of the landfill;

S ☐ _____ N/A ☐ N/C ☑ d. Be designed to not interfere with the liner, leachate control system, or final cover;

S ☐ _____ N/A ☐ N/C ☑ 2. Provide documentation that will describe locations, construction details, and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC)

S ☐ _____ N/A ☐ N/C ☑ 3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC)

S ☐ _____ N/A ☐ N/C ☑ 4. Landfill gas recovery facilities; (62-701.530(5), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Provide information required in Rules 62-701.320(7) and 62-701.330(3), FAC;

S ☐ _____ N/A ☐ N/C ☑ b. Provide information required in Rule 62-701.600(4), FAC, where relevant and practical;

S ☐ _____ N/A ☐ N/C ☑ c. Provide estimates of current and expected gas generation rates and description of condensate disposal methods;

S ☐ _____ N/A ☐ N/C ☑ d. Provide description of procedures for condensate sampling, analyzing, and data reporting;

S ☐ _____ N/A ☐ N/C ☑ e. Provide closure plan describing methods to control gas after recovery facility ceases operation, and any other requirements contained in Rule 62-701.400(10), FAC;

PART O. LANDFILL FINAL CLOSURE REQUIREMENTS (62-701.600, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Closure permit requirements; (62-701.600(2), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Application submitted to the Department at least 90 days prior to final receipt of wastes;

S ☐ _____ N/A ☐ N/C ☑ b. Closure plan shall include the following:

S ☐ _____ N/A ☐ N/C ☑ (1) Closure design plan;

S ☐ _____ N/A ☐ N/C ☑ (2) Closure operation plan;

S ☐ _____ N/A ☐ N/C ☑ (3) Plan for long-term care;

S ☐ _____ N/A ☐ N/C ☑ (4) A demonstration that proof of financial assurance for long-term care will be provided;

S ☐ _____ N/A ☐ N/C ☑ 2. Closure design plan including the following requirements: (62-701.600(3), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Plan sheet showing phases of site closing;

S ☐ _____ N/A ☐ N/C ☑ b. Drawings showing existing topography and proposed final grades;

S ☐ _____ N/A ☐ N/C ☑ c. Provisions to close units when they reach approved design dimensions;

S ☐ _____ N/A ☐ N/C ☑ d. Final elevations before settlement;

S ☐ _____ N/A ☐ N/C ☑ e. Side slope design including benches, terraces, down slope drainage ways, energy dissipaters, and description of expected precipitation effects;

S ☐ _____ N/A ☐ N/C ☑ f. Final cover installation plans including:

S ☐ _____ N/A ☐ N/C ☑ (1) CQA plan for installing and testing final cover;

S ☐ _____ N/A ☐ N/C ☑ (2) Schedule for installing final cover after final receipt of waste;

S ☐ _____ N/A ☐ N/C ☑ (3) Description of drought resistant species to be used in the vegetative cover;

S ☐ _____ N/A ☐ N/C ☑	(4) Top gradient design to maximize runoff and minimize erosion;
S ☐ _____ N/A ☐ N/C ☑	(5) Provisions for cover material to be used for final cover maintenance;
S ☐ _____ N/A ☐ N/C ☑	g. Final cover design requirements;
S ☐ _____ N/A ☐ N/C ☑	(1) Protective soil layer design;
S ☐ _____ N/A ☐ N/C ☑	(2) Barrier soil layer design;
S ☐ _____ N/A ☐ N/C ☑	(3) Erosion control vegetation;
S ☐ _____ N/A ☐ N/C ☑	(4) Geomembrane barrier layer design;
S ☐ _____ N/A ☐ N/C ☑	(5) Geosynthetic clay liner design, if used;
S ☐ _____ N/A ☐ N/C ☑	(6) Stability analysis of the cover system and the disposed waste;
S ☐ _____ N/A ☐ N/C ☑	h. Proposed method of stormwater control;
S ☐ _____ N/A ☐ N/C ☑	i. Proposed method of access control;
S ☐ _____ N/A ☐ N/C ☑	j. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC;
S ☐ _____ N/A ☐ N/C ☑	3. Closure operation plan shall include: (62-701.600(4), FAC)
S ☐ _____ N/A ☐ N/C ☑	a. Detailed description of actions which will be taken to close the landfill;
S ☐ _____ N/A ☐ N/C ☑	b. Time schedule for completion of closing and long-term care;
S ☐ _____ N/A ☐ N/C ☑	c. Describe proposed method for demonstrating financial assurance for long-term care;
S ☐ _____ N/A ☐ N/C ☑	d. Operation of the water quality monitoring plan required in Rule 62-701.510, FAC;
S ☐ _____ N/A ☐ N/C ☑	e. Development and implementation of gas management system required in Rule 62-701.530, FAC;

S ☐ _____ N/A ☐ N/C ☑ 4. Certification of closure construction completion including: (62-701.600(6), FAC)

S ☐ _____ N/A ☐ N/C ☑ a. Survey monuments; (62-701.600(6)(a), FAC)

S ☐ _____ N/A ☐ N/C ☑ b. Final survey report; (62-701.600(6)(b), FAC)

S ☐ _____ N/A ☐ N/C ☑ 5. Declaration to the public; (62-701.600(7), FAC)

S ☐ _____ N/A ☐ N/C ☑ 6. Official date of closing; (62-701.600(8), FAC)

S ☐ _____ N/A ☐ N/C ☑ 7. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(9), FAC)

PART P. OTHER CLOSURE PROCEDURES (62-701.610, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Describe how the requirements for use of closed solid waste disposal areas will be achieved; (62-701.610(1), FAC)

S ☐ _____ N/A ☐ N/C ☑ 2. Describe how the requirements for relocation of wastes will be achieved; (62-701.610(2), FAC)

PART Q. LONG-TERM CARE (62-701.620, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑ 1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)

S ☐ _____ N/A ☐ N/C ☑ 2. Stabilization report requirements; (62-701.620(6), FAC)

S ☐ _____ N/A ☐ N/C ☑ 3. Right of access; (62-701.620(7), FAC)

S ☐ _____ N/A ☐ N/C ☑ 4. Requirements for replacement of monitoring devices; (62-701.620(8), FAC)

S ☐ _____ N/A ☐ N/C ☑ 5. Completion of long-term care signed and sealed by professional engineer; (62-701.620(9), FAC)

PART R. FINANCIAL ASSURANCE (62-701.630, FAC)

LOCATION

S ☐ _____ N/A ☐ N/C ☑	1. Provide cost estimates for closing, long-term care, and corrective action costs estimated by a P.E. for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3) & (7), FAC)
S ☐ _____ N/A ☐ N/C ☑	2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4) & (8), FAC)
S ☐ _____ N/A ☐ N/C ☑	3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms. (62-701.630(5), (6), & (9), FAC)

PART S. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

1. Applicant:

The undersigned applicant or authorized representative of Omni Waste of Osceola County, LLC _____ is aware that statements made in this form and attached information are an application for a minor modification permit from the Florida Department of Environmental Protection, and certifies that the information in this application is true, correct, and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

Signature of Applicant or Agent

Mike Kaiser, Southeast Region Engineer
Name and Title (please type)

michael.kaiser@progressivewaste.com
E-Mail Address (if available)

1501 Omni Way
Mailing Address

St. Cloud, FL 34773
City, State, Zip Code

(904) 673-0446
Telephone Number

Date: 6/26/15

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

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

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

Signature

Craig R. Browne, Senior Engineer
Name and Title (please type)

68613
Florida Registration Number (please affix seal)

13101 Telecom Drive, Suite 120
Mailing Address

Temple Terrace, FL 33637
City, State, Zip Code

cbrowne@geosyntec.com
E-Mail Address (if available)

(813) 558-0990
Telephone Number

Date: 6/26/2015

Progressive Waste Solutions
2301 Eagle Parkway, Suite 200
Fort Worth, TX 76177

June 1, 2015

To Whom it May Concern:

I, Kevin C. Walbridge, hereby certify that I am a responsible corporate officer of Omni Waste of Osceola County, LLC. I hereby duly authorize Michael Kaiser, whose signature appears below, to be my representative and authorize him to sign all permit applications, modifications, and financial assurance and reporting documents for Omni Waste of Osceola County, LLC.

Sincerely,

Kevin C. Walbridge
President
Omni Waste of Osceola County, LLC

Michael Kaiser
Authorized Agent

ATTACHMENT 2

Minor Modification Drawings

J.E.D. SOLID WASTE MANAGEMENT FACILITY

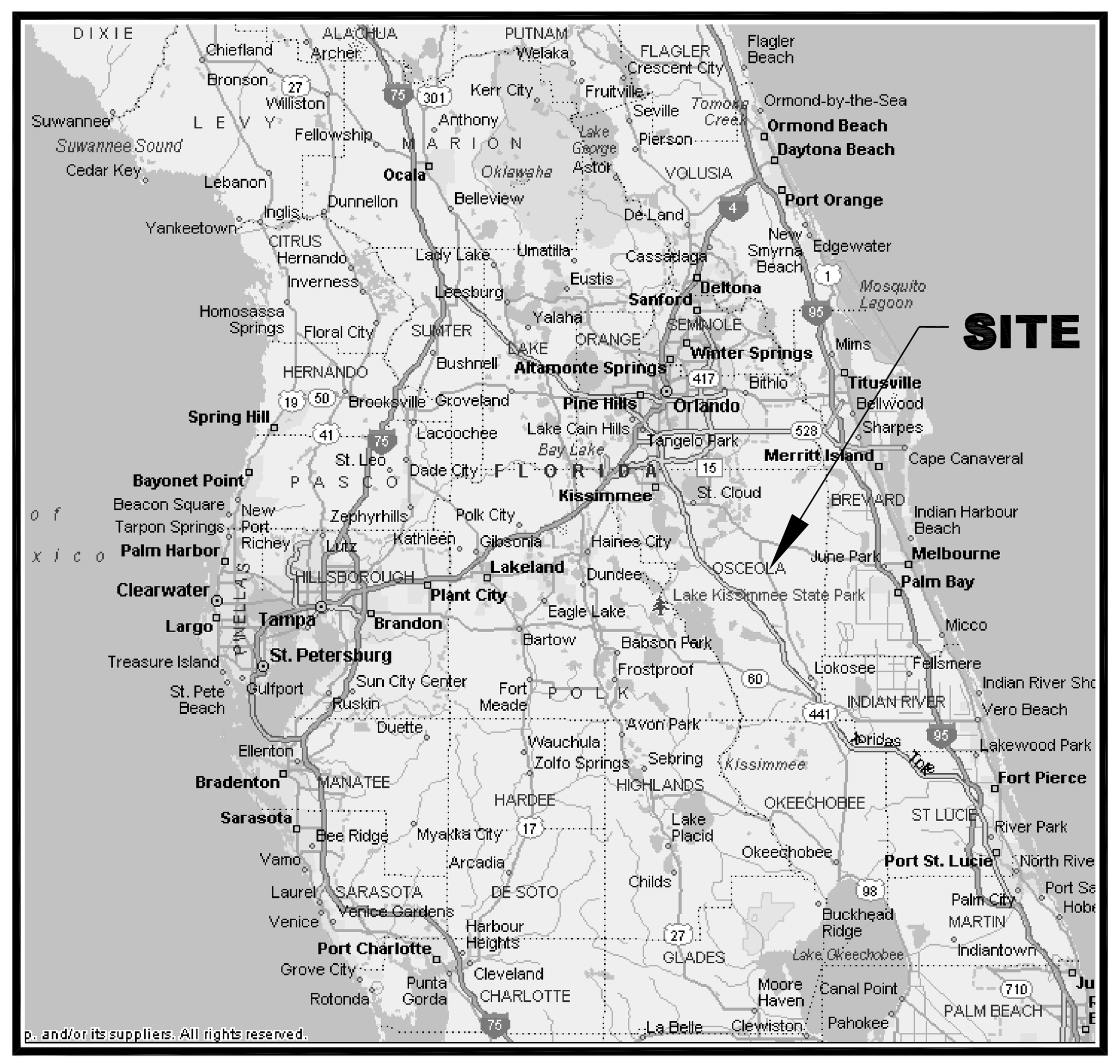
ST.CLOUD, FLORIDA

CELL SEQUENCING REVISIONS

PHASE 4 (CELLS 11-13) DISPOSAL AREA

MINOR MODIFICATION PERMIT DRAWINGS

JUNE 2015



LOCATION MAP

0 32

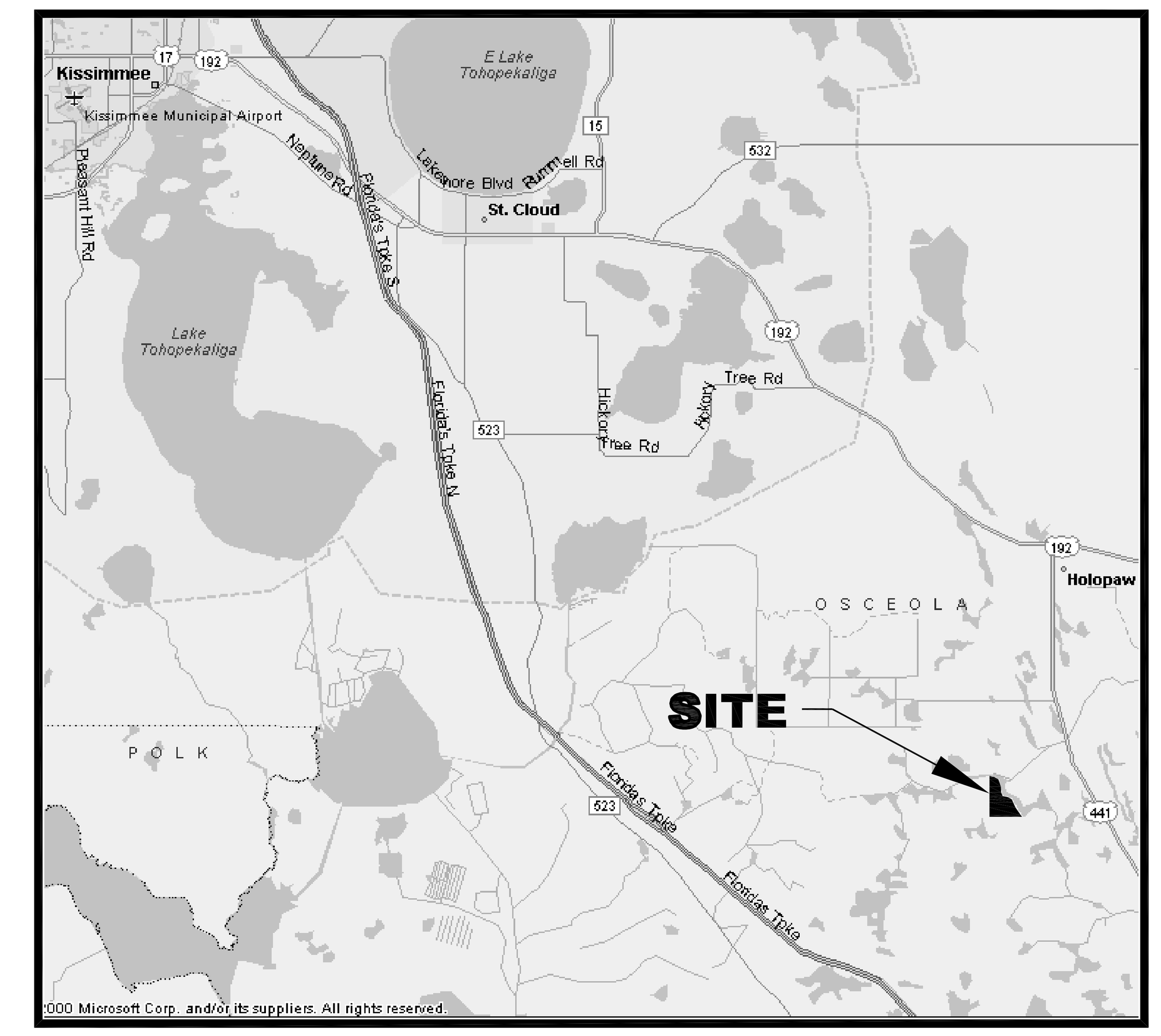
SCALE: 1" = 32 MILES

LIST OF DRAWINGS

SHEET NUMBER	SHEET TITLE	REVISION
1	TITLE SHEET	0
2	EXISTING SITE CONDITIONS AND AERIAL PHOTOGRAPH	NOTES 1 AND 2
3	TOPOGRAPHIC MAP OF THE SITE	NOTES 1 AND 2
4	SITE CHARACTERIZATION PLAN I	NOTES 1 AND 2
5	SITE CHARACTERIZATION PLAN II	NOTES 1 AND 2
6	SITE DEVELOPMENT PLAN	NOTES 1 AND 2
7	BASE GRADING PLAN - PHASE 3	NOTES 1 AND 2
8	BASE GRADING PLAN - PHASE 4	NOTES 1 AND 2
9	LEACHATE COLLECTION SYSTEM LAYOUT PLAN I	NOTES 1 AND 2
10	LEACHATE COLLECTION SYSTEM LAYOUT PLAN II	NOTES 1 AND 2
11	LANDFILL CROSS SECTIONS I	NOTES 1 AND 2
12	LANDFILL CROSS SECTIONS II	NOTES 1 AND 2
13	LANDFILL CROSS SECTIONS III	NOTES 1 AND 2
14	PERIMETER BERM TYPICAL SECTIONS	NOTES 1 AND 2
15	LINER SYSTEM DETAILS I - CELLS 8 THROUGH 13	NOTES 1 AND 2
16	LINER SYSTEM DETAILS II - CELLS 8 THROUGH 13	NOTES 1 AND 2
17	LEACHATE SUMP PLAN - CELLS 8 THROUGH 13	NOTES 1 AND 2
18	SECONDARY SUMP CROSS SECTIONS - CELLS 8 THROUGH 13	NOTES 1 AND 2
19	PRIMARY SUMP CROSS SECTIONS - CELLS 8 THROUGH 13	NOTES 1 AND 2
20	LEACHATE SUMP CROSS SECTIONS - CELLS 8 THROUGH 13	NOTES 1 AND 2
21	LEACHATE COLLECTION SYSTEM DETAILS - CELLS 8 THROUGH 13	NOTES 1 AND 2
22	LEACHATE STORAGE FACILITY PLAN	NOTES 1 AND 2
23	LEACHATE STORAGE FACILITY CROSS SECTIONS	NOTES 1 AND 2
24	LEACHATE MANAGEMENT SYSTEM SCHEMATIC DIAGRAM	NOTES 1 AND 2
25	GROUNDWATER MONITORING NETWORK	NOTES 1 AND 2
26	PHASE 3 CONSTRUCTION SEQUENCING	NOTES 1 AND 2
27	PHASE 4 CONSTRUCTION SEQUENCING	3
28	WASTE FILL SEQUENCING PLAN I	NOTES 1 AND 2
29	WASTE FILL SEQUENCING PLAN II	1
30	GAS MANAGEMENT SYSTEM PLAN I	NOTES 1 AND 2
31	GAS MANAGEMENT SYSTEM PLAN II	NOTES 1 AND 2
32	CONCEPTUAL LAYOUT OF HORIZONTAL GAS COLLECTORS	NOTES 1 AND 2
33	GAS MANAGEMENT DETAILS I	NOTES 1 AND 2
34	GAS MANAGEMENT DETAILS II	NOTES 1 AND 2
35	GAS MANAGEMENT DETAILS III	NOTES 1 AND 2
36	GAS MANAGEMENT DETAILS IV	NOTES 1 AND 2
37	LANDFILL GAS PIPELINE DETAILS	NOTES 1 AND 2
38	SCALE AND ADMINISTRATIVE AREA LAYOUT	NOTES 1 AND 2
39	FINAL COVER SYSTEM GRADING PLAN I	NOTES 1 AND 2
40	FINAL COVER SYSTEM GRADING PLAN II	NOTES 1 AND 2
41	FINAL COVER SYSTEM DETAILS	NOTES 1 AND 2
42	STORM WATER MANAGEMENT PLAN	NOTES 1 AND 2
43	STORM WATER MANAGEMENT DETAILS I	NOTES 1 AND 2
44	STORM WATER MANAGEMENT DETAILS II	NOTES 1 AND 2
45	STORM WATER DRAINAGE STRUCTURE DETAILS	NOTES 1 AND 2

NOTES:

1. THESE PERMIT DRAWINGS MODIFY PREVIOUSLY APPROVED PERMIT DRAWINGS (AS INDICATED BY NOTE 2). ONLY THE SHEETS THAT HAVE BEEN MODIFIED (INDICATED IN BOLD FONT IN THE DRAWING LIST) ARE INCLUDED IN THE PERMIT DRAWING SET. THERE ARE NO SUBSTANTIAL CHANGES TO THE REMAINING DRAWINGS (WHICH HAVE BEEN SCREENED IN THE DRAWING LIST).
2. REFER TO RENEWAL PERMIT DRAWINGS SUBMITTED TO FDEP IN NOVEMBER 2011 WITH SELECT SHEETS REVISED IN JANUARY 2012 AND IN DECEMBER 2014.



VICINITY MAP

0 4

SCALE: 1" = 4 MILES

SEQUENTIAL DETAIL NUMBER

SHEET ON WHICH THE ABOVE DETAIL IS PRESENTED

DETAIL REFERENCE KEY

DETAIL NUMBER

SHEET ON WHICH THE ABOVE DETAIL IS FIRST REFERENCED

DETAIL (TYPICAL)
LINER SYSTEM AT BASE
SCALE: NTS
XREF: FL1962.01X000.DWG

DETAIL BAR REFERENCE KEY

EXAMPLE: DETAIL 1 WHICH IS PRESENTED ON SHEET 7 WAS FIRST REFERENCED ON SHEET 5.

SEQUENTIAL SECTION LETTER

SHEET ON WHICH THE ABOVE SECTION IS PRESENTED

SECTION REFERENCE KEY

SECTION LETTER

SHEET ON WHICH THE ABOVE SECTION IS FIRST REFERENCED

SECTION (TYPICAL)
PERIMETER BERM
SCALE: 1" = 10
XREF: FL1962.01X000.DWG

SECTION BAR REFERENCE KEY

EXAMPLE: SECTION C WHICH IS PRESENTED ON SHEET 5 WAS FIRST REFERENCED ON SHEET 3.

I:_CADD (PROJECTS)\JED LANDFILL\PERMIT\CELL SEQUENCING MINOR MOD (FL2601)\DWGS\FL2601.01P010.DWG (26 June 2015 - 11:55 AM) Cvickers

REV	DATE	DESCRIPTION	DRN	APP
0	JUN 2015	MINOR PERMIT MODIFICATION	CMV	CRB

Geosyntec consultants
13101 TELECOM DRIVE, SUITE 120
TEMPLE TERRACE, FLORIDA 33637 USA
PH: 813.558.0990 - FX:813.558.9726
AUTHORIZATION NUMBER: 4321

Progressive Waste Solutions
1501 OMNI WAY
ST. CLOUD, FLORIDA 34773
TEL: 407-891-3720 FAX: 407-891-3730

TITLE: TITLE SHEET

PROJECT: INTERMEDIATE PERMIT MODIFICATION
PHASE 4 (CELLS 11-13) BASE GRADE REVISIONS

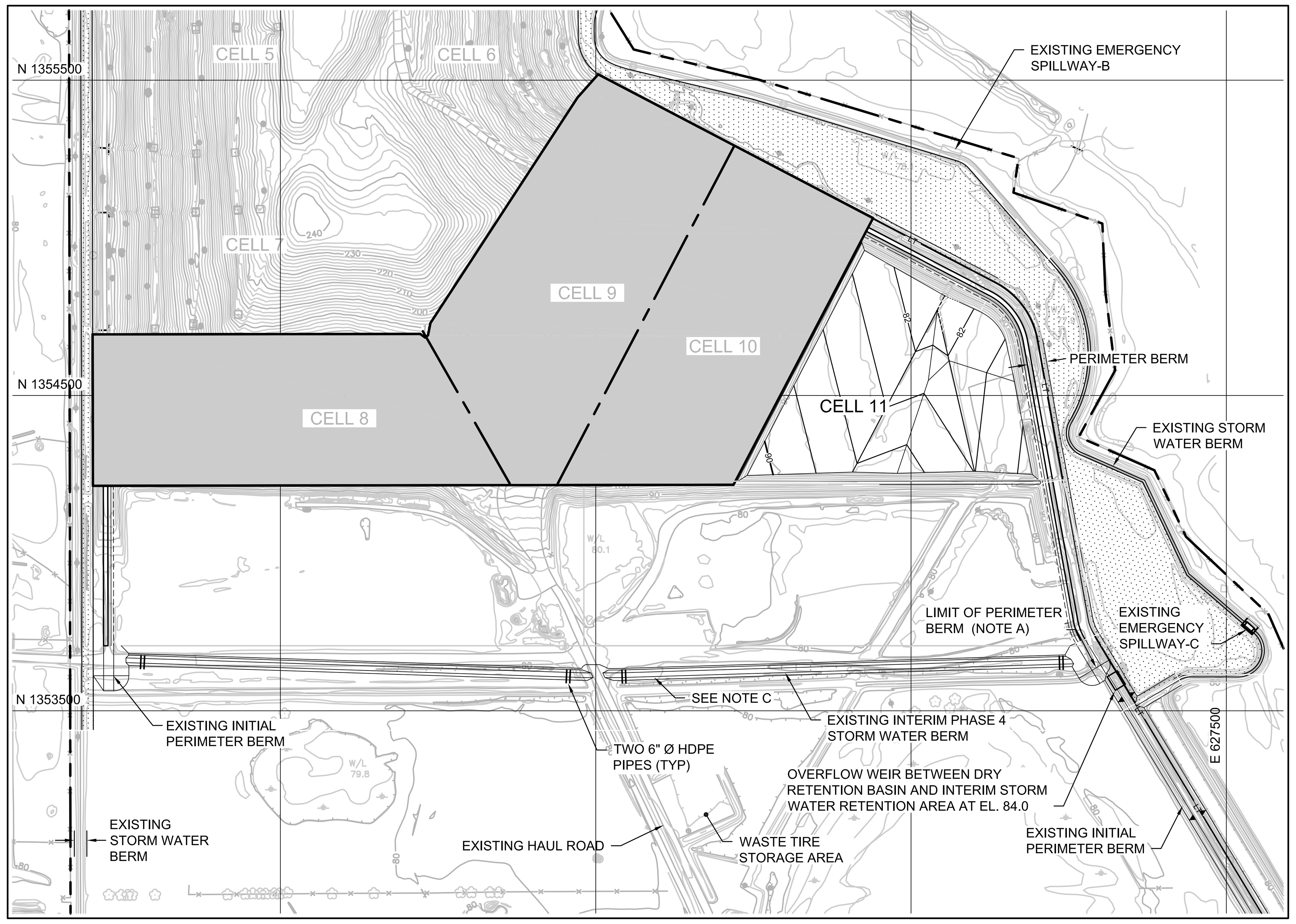
SITE: J.E.D. SOLID WASTE MANAGEMENT FACILITY

SIGNATURE
6/26/2015
DATE
CRAIG BROWNE - LICENSE NO. 68613

CRAIG R. BROWNE LICENSE No. 68613 STATE OF FLORIDA PROFESSIONAL ENGINEER

DESIGN BY:	CRB	DATE:	JUNE 2015
DRAWN BY:	CMV	PROJECT NO.:	FL2601.01
CHECKED BY:	CRB	FILE:	FL2601.01P010
REVIEWED BY:	KBT	DRAWING NO.:	1 OF 45
APPROVED BY:	CRB		

PERMIT DRAWING



PHASE 4-A CONSTRUCTION SEQUENCING

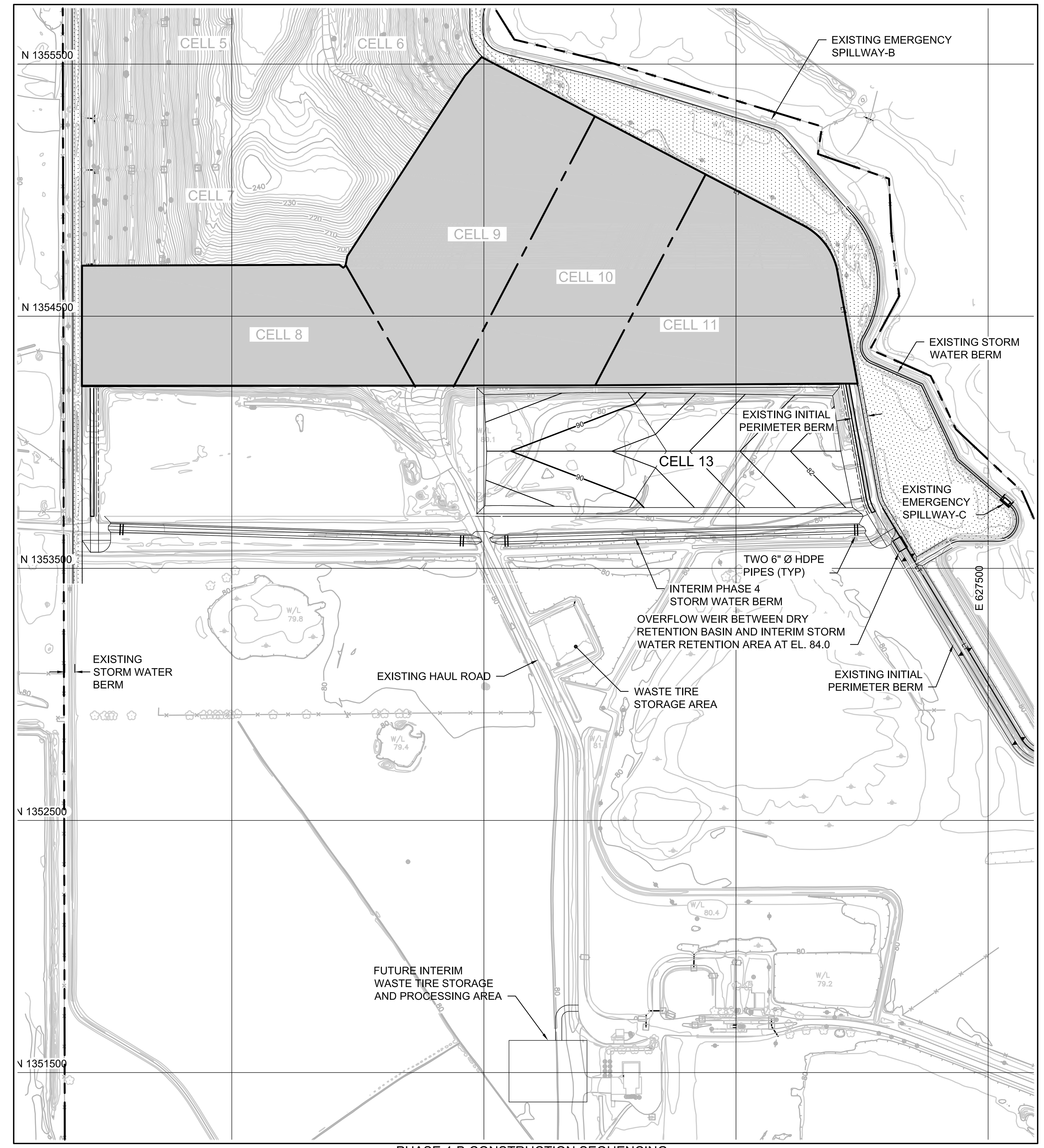
SCALE: 1" = 300'

PHASE 4-A CONSTRUCTION SEQUENCING NOTES

A. EXTEND EXISTING PERIMETER BERM (CREST EL. 96.0) TO 100 FT SOUTH OF LIMITS OF CELL 11 DURING CONSTRUCTION OF CELL 11.

B. CONSTRUCT CELL 11.

C. ABANDON TEMPORARY WATER QUALITY MONITORING PIEZOMETERS DP-14 AND DP-15, AND INSTALL NEW MONITORING WELLS MW-27, MW-28, AND MW-29 AT LOCATION IN FINAL CONSTRUCTED PERIMETER BERM FOR CELL 11. REFER TO MPIS DATED JANUARY 2013.



PHASE 4-B CONSTRUCTION SEQUENCING

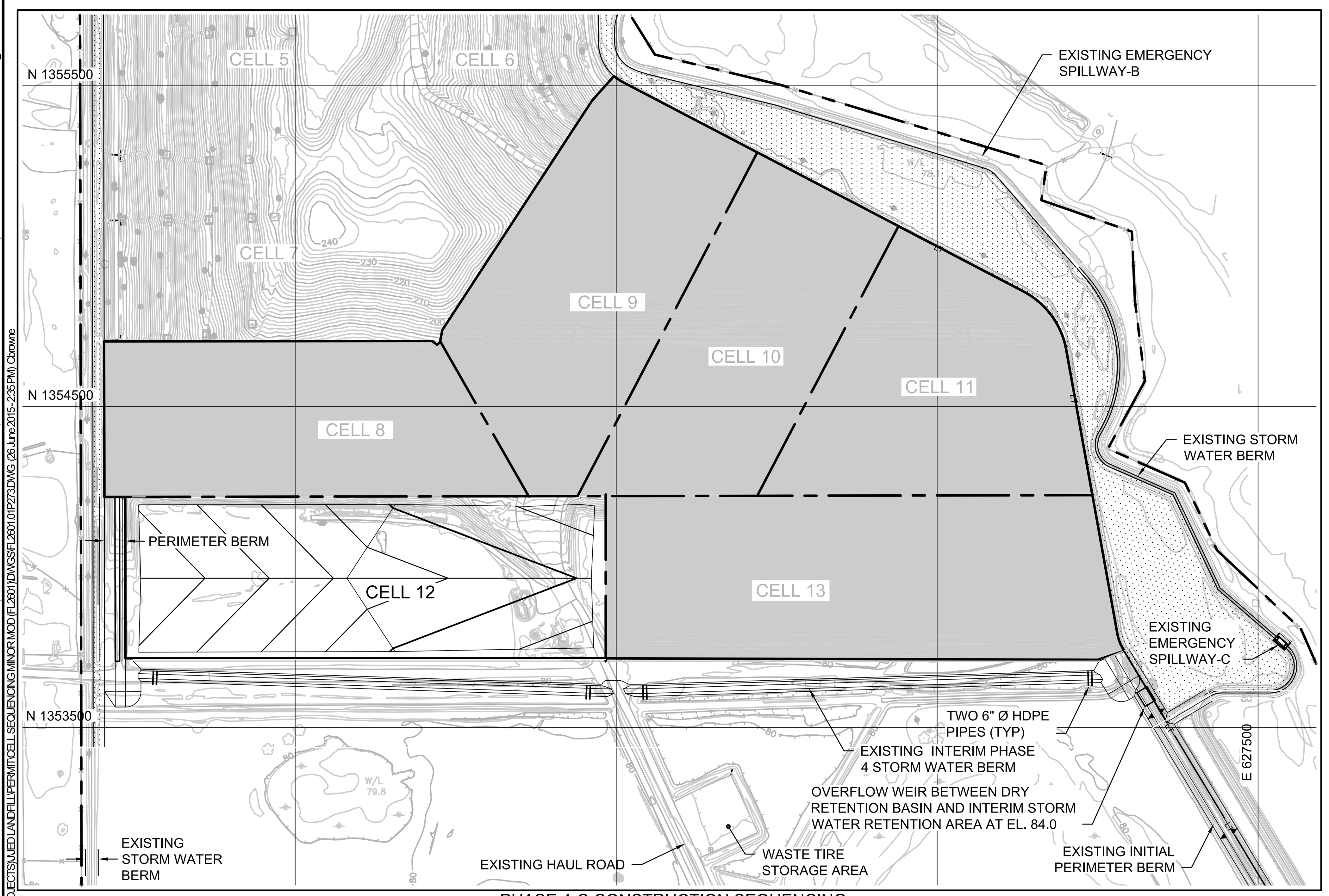
SCALE: 1" = 300'

PHASE 4-B CONSTRUCTION SEQUENCING NOTES

A. EXTEND EXISTING PERIMETER BERM TO 100 FT SOUTH OF LIMITS OF CELL 13 DURING CONSTRUCTION OF CELL 13.

B. CONSTRUCT CELL 13.

C. ABANDON TEMPORARY WATER QUALITY MONITORING WELL MW-26 AND INSTALL NEW WELL MW-31.



PHASE 4-C CONSTRUCTION SEQUENCING

SCALE: 1" = 300'

PHASE 4-C CONSTRUCTION SEQUENCING NOTES

A. EXTEND EXISTING PERIMETER BERM TO 100FT SOUTH OF LIMITS OF CELL 12 DURING CONSTRUCTION OF CELL 12.

B. CONSTRUCT CELL 12.

C. ABANDON TEMPORARY WATER QUALITY MONITORING WELL MW-24 AND INSTALL NEW WELL MW-30.

N

0 300' 600'

SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- EXISTING GROUND ELEVATION (FEET) (NOTE 4)
- EXISTING FENCE
- PROPOSED SUBBASE ELEVATION (FEET)
- STORM WATER MANAGEMENT BASIN

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REPRESENT FLORIDA STATE PLANE EAST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83).
2. THE ELEVATIONS SHOWN REPRESENT NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29)(FEET).
3. THE PROPERTY BOUNDARY BASED ON A COMPOSITE BOUNDARY SURVEY PROVIDED BY JOHNSTON SURVEYING INC., KISSIMMEE FLORIDA, DATED AUGUST 12, 1999.
4. TOPOGRAPHIC INFORMATION SHOWN ON THIS DRAWING WAS PROVIDED BY BASE MAPPING CO. LTD BASED ON AN AERIAL PHOTOGRAPH TAKEN ON 20 MAY 2015.
5. RUNOFF FROM THE LANDFILL WILL BE DIRECTED TO, RETAINED BY, AND INFILTRATED WITHIN THE CONSTRUCTED STORM WATER MANAGEMENT SYSTEM.
6. DURING CELL CONSTRUCTION, CONTRACTOR STAGING AREAS WILL BE LOCATED IN ADJACENT FURTURE CELL FOOTPRINT.

PERMIT DRAWING

REV	DATE	DESCRIPTION	DRN	APP
3	JUN 2015	MINOR PERMIT MODIFICATION	CMV	CRB
2	DEC 2014	INTERMEDIATE PERMIT MODIFICATION	JWO	VMD
1	JAN 2012	REVISED PER FDEP COMMENTS, RAI #1	JWO	VMD
0	NOV 2011	ISSUED FOR FDEP APPROVAL	JWO	VMD

Geosyntec consultants
13101 TELECOM DRIVE, SUITE 120
TEMPLE TERRACE, FLORIDA 33637 USA
PH: 813.558.0990 - FX:813.558.9726
AUTHORIZATION NUMBER: 4321

Progressive Waste Solutions
1501 OMNI WAY
ST. CLOUD, FLORIDA 34773
TEL: 407-891-3720 FAX: 407-891-3730

TITLE: PHASE 4 CONSTRUCTION SEQUENCING

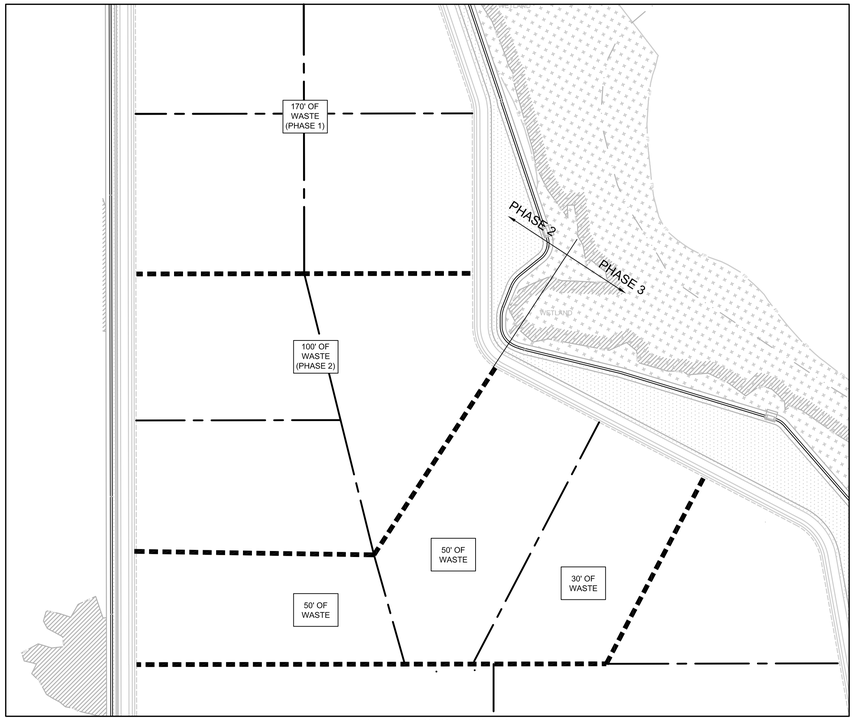
PROJECT: INTERMEDIATE PERMIT MODIFICATION
PHASE 4 (CELLS 11-13) BASE GRADE REVISIONS

SITE: J.E.D. SOLID WASTE MANAGEMENT FACILITY

SIGNATURE
6/26/2015
DATE
CRAIG BROWNE - LICENSE NO. 68613

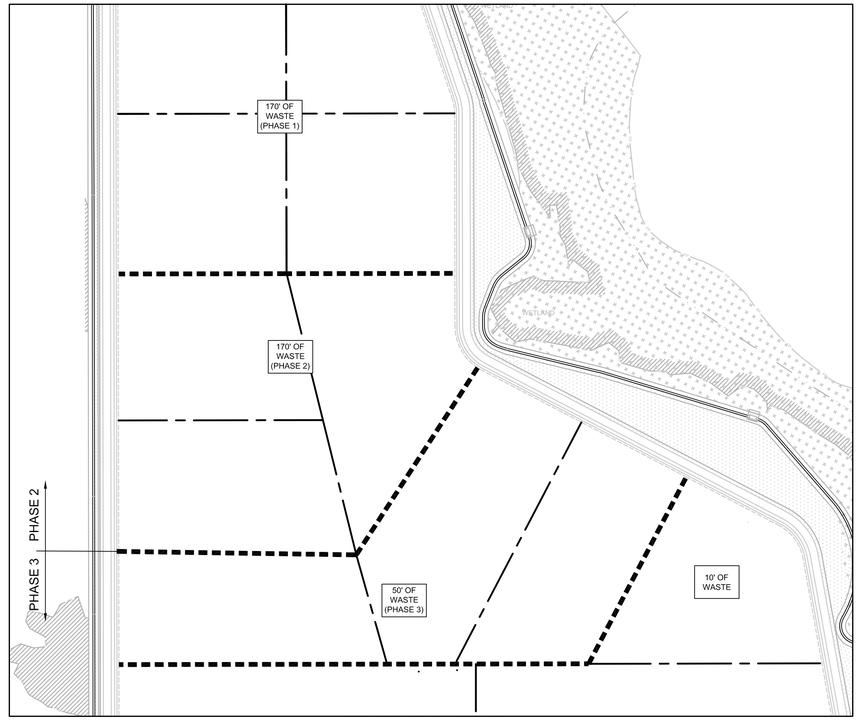
CRAIG R. BROWNE LICENSE No. 68613 STATE OF FLORIDA PROFESSIONAL ENGINEER

DESIGN BY:	CRB	DATE:	JUNE 2015
DRAWN BY:	CMV	PROJECT NO.:	FL2601.01
CHECKED BY:	CRB	FILE:	FL2601.01P273
REVIEWED BY:	KBT	DRAWING NO.:	
APPROVED BY:	CRB	27 OF 45	



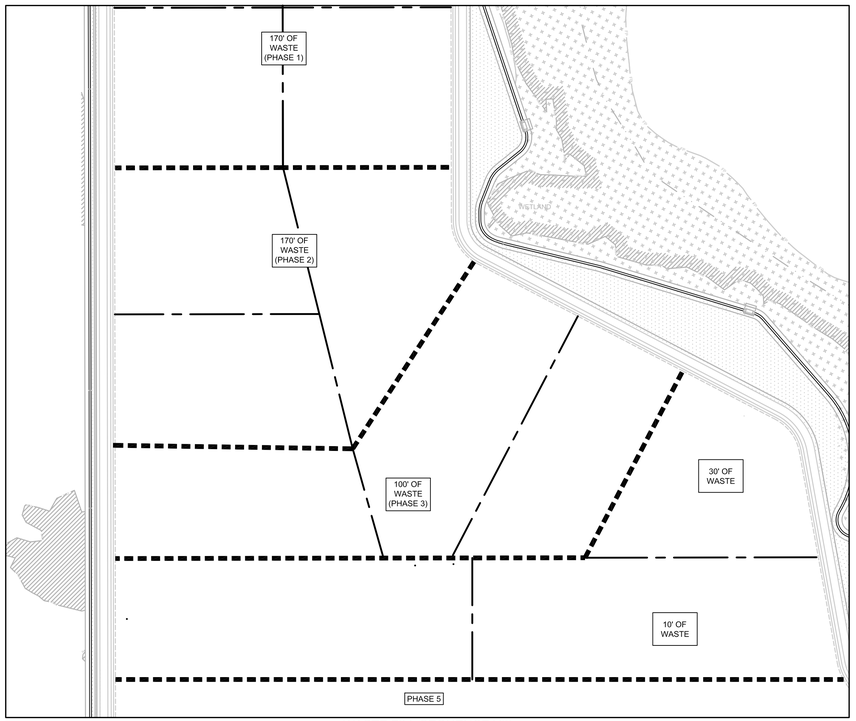
WASTE FILL SEQUENCE VI

SCALE: 1" = 300'



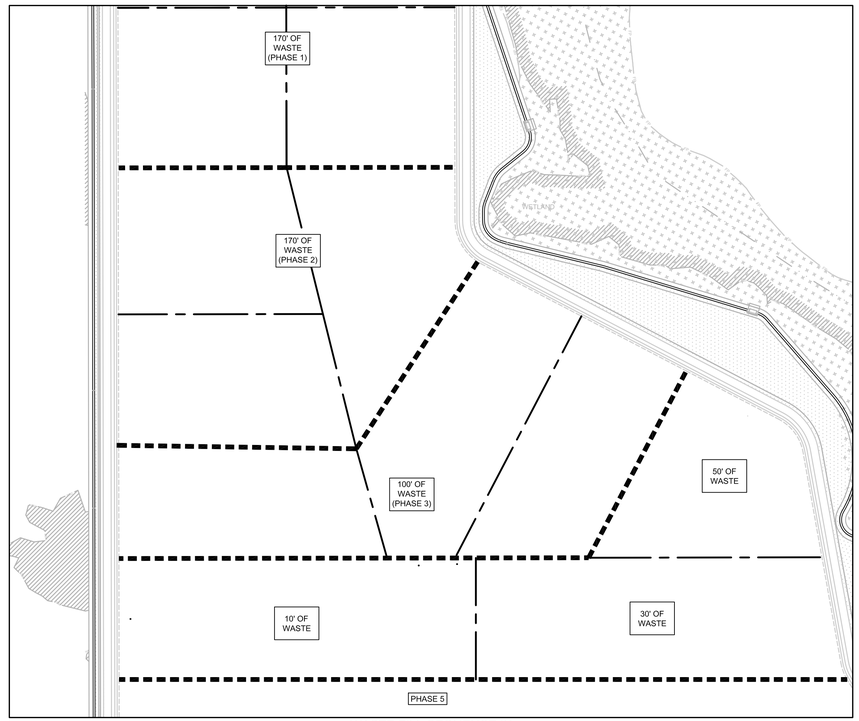
WASTE FILL SEQUENCE VII

SCALE: 1" = 300'



WASTE FILL SEQUENCE VIII

SCALE: 1" = 300'



WASTE FILL SEQUENCE IX

SCALE: 1" = 300'

NOTES:

1. THE PURPOSE OF THIS SHEET IS TO ILLUSTRATE A CONCEPTUAL WASTE FILLING SEQUENCE FOR PHASE 4.
2. WASTE HEIGHTS AND SLOPES WILL BE ADJUSTED BY THE LANDFILL SITE MANAGER TO PROVIDE EFFICIENT ACCESS TO THE WORKING FACE AND TO PROMOTE SURFACE WATER RUNOFF FROM AREAS UNDER INTERMEDIATE COVER.
3. EXPOSED WASTE AT THE WORKING FACE AND OTHER AREAS UNDER INITIAL COVER WILL BE SLOPED AND MAINTAINED TO INFILTRATE PRECIPITATION WITHOUT RUNOFF.
4. WASTE THICKNESS IS SPECIFIED BASED ON ESTIMATED MAXIMUM CELL / PHASE THICKNESS.

REV	DATE	DESCRIPTION	DRN	APP
1	JUN 2015	MINOR PERMIT MODIFICATION	CMV	CRB
0	NOV 2011	ISSUED FOR FDEP APPROVAL	JWO	VMD

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1501 OMNI WAY
ST. CLOUD, FLORIDA 34773
TEL: 407-891-3720 FAX: 407-891-3730

TITLE: WASTE FILL SEQUENCING PLAN II

PROJECT: INTERMEDIATE PERMIT MODIFICATION
PHASE 4 (CELLS 11-13) BASE GRADE REVISIONS

SITE: J.E.D. SOLID WASTE MANAGEMENT FACILITY

SIGNATURE
6/26/2015
DATE
CRAIG BROWNE - LICENSE NO. 68613

CRAIG R. BROWNE LICENSE No.68613 STATE OF FLORIDA PROFESSIONAL ENGINEER

DESIGN BY:	CRB	DATE:	JUNE 2015
DRAWN BY:	CMV	PROJECT NO.:	FL2601.01
CHECKED BY:	CRB	FILE:	FL2601.01P290
REVIEWED BY:	KBT	DRAWING NO.:	29 OF 45
APPROVED BY:	CRB		

PERMIT DRAWING

I:\CAD\PROJECTS\JED\LINDFILL\PERMIT\CELL SEQUENCING\WORKMOD\FL2601\WSSR\2601JP29SEQ.DWG (25 June 2015 - 1:29 PM) Cbrowne