



HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

Purchasing Department

600 S. Commerce Ave.

Sebring, FL 33870

(863) 402-6500 Purchasing Main Line

Purchasing Designated Contact: Lori DeLoach, Purchasing Manager

(863) 402-6504, Direct Line

LDELOACH@HIGHLANDSFL.GOV, E-mail

INVITATION TO BID (ITB) 23-004-LKD

Operation and Maintenance for Landfill Systems

X	Pre-Solicitation Meeting:	Monday, May 15, 2023 @ 1:00 PM All interested persons should plan to attend this site visit.
	Location:	12700 Arbuckle Creek Road, Sebring, FL
✓	Request for Information Deadline:	Thursday, May 25, 2023, prior to 5:00 PM
✓	Submission Deadline:	Wednesday, June 7, 2023, prior to 3:30 PM

**Advertisement Date: Saturday, May 6, 2023
(SECOND ADVERTISEMENT DATE SATURDAY, MAY 13, 2023)**

PROHIBITED SUBMISSION TO THIS SOLICITATION

Any party who is in active litigation with Highlands County on the due date for responses to this solicitation or who has received notice from Highlands County that the party is in breach of a contractual obligation under a contract with Highlands County and where such breach has not been resolved to the satisfaction of Highlands County on the due date for responses to this solicitation, shall not submit a response to this solicitation. In the event of a submission by such a party as described hereinabove, the submission shall be considered non-responsible and shall be rejected.

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HIGHLANDS COUNTY BOARD OF
COUNTY COMMISSIONERS
Purchasing Department

INVITATION TO BID (“ITB”)

The Board of County Commissioners (“Board”), Highlands County, a political subdivision of the State of Florida (“County”) will receive sealed Bids in the Highlands County Purchasing Department (“Purchasing Department”) for:

ITB NO. 23-004-LKD Operation & Maintenance for Landfill Systems

Specifications may be obtained by downloading from the County website: www.HighlandsFL.Gov. Questions should be directed to: **Lori DeLoach, Purchasing Manager**, 600 S. Commerce Ave., Sebring, Florida 33870, Phone: 863-402-6504; or E-Mail: LDELOACH@HIGHLANDSFL.GOV.

A Non-Mandatory **PRE-BID meeting** will be held for this solicitation the date, time and location is noted on the cover page of this solicitation.

SUBMISSIONS MUST BE DELIVERED to the Purchasing Department, 600 S. Commerce Avenue., Sebring, FL 33870 to reach said office no later **than 3:30 P.M., Wednesday, June 7, 2023**, at which time they will be opened. Responses may be submitted by one of the following methods:

· **Electronic submission** to the County website, www.highlandsfl.gov linking to VendorRegistry.com in **one all-inclusive Adobe file** of all documents. **Label each “23-004 Bidder Name-Submission.”**

OR

· **Hard Copy submission** in a sealed and marked package. Affix the supplied “Sealed Solicitation Label” with the name of the Proposer, solicitation number, and title to the exterior of the package so as to identify the enclosed response. A hard copy response is to include the following: **one (1) original all-inclusive paper copy** (signed in blue ink), of the response, and electronic copy containing **one all-inclusive Adobe file** of all documents. **Label “23-004 Bidder Name-Submission”** (Thumb drive) of the original response.

Submissions received later than the date and time as specified will be rejected. The Board shall not be responsible for delays caused by the method of delivery such as, but not limited to; Internet, United States Postal Service, overnight express mail service(s), or delays caused by any other occurrence.

The public is invited to attend this meeting.

One or more County Commissioners may be in attendance at meetings.

Highlands County's Local Preference Policy and Women/Minority Business Preference Policy will apply to the award of this Bid. Please see the Highlands County Board of County Commissioners Purchasing Manual with an effective date of June 21, 2022. The County encourages the use of Disadvantaged Business Enterprise to include Women/Minority Business Bidder(s.)

The County reserves the right to accept or reject any or all Bids or any parts thereof, and the determination of this award, if an award is made, will be based on the lowest responsive and responsible Bid received meeting the requirements requested. The County reserves the right to waive irregularities in the Bid.

The County does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of the Board's functions, including one's access to, participation, employment or treatment in its programs or activities. Anyone requiring reasonable accommodation as provided for in the Americans with Disabilities Act or Section 286.26, Florida Statutes, should contact the ADA Coordinator at: 863-402-6809 (Voice), or via Florida Relay Service 711, or by e-mail: hrmanager@highlandsfl.gov. Requests for CART or interpreter services should be made at least 24 hours in advance to permit coordination of the service.

Board of County Commissioners, Highlands County, FL

www.Highlandsfl.gov

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SECTION I. GENERAL TERMS AND CONDITIONS

- A) For purposes of this Invitation to Bid (ITB), the following terms are defined as follows:
1. *Bidder* means the person or entity submitting a Bid in response to this ITB.
 2. *Contractor* means the Bidder whose Bid is accepted by the County and who agrees to comply with the terms and conditions of this ITB and the Contract.
 3. *Contract* means all the following:
 - (a) The terms and conditions of this ITB
 - (b) Any terms and conditions of Purchase Orders issued by the County; and
 - (c) The terms and conditions of any additional written agreement pertaining to this ITB that is executed by any Bidder and the County or executed by the Contractor and the County.
 4. *Purchase Order* means a formal written request from the County for the purchase of materials or other supplies in connection with this ITB. The form for County Purchase Orders includes binding terms and conditions and is located on the County's website at the following address: https://www.highlandsfl.gov/departments/business_services/purchasing/po_terms_and_conditions.php.
- B) All Bids shall become the property of the County.
- C) All Bidders shall comply with Section 287.087, Florida Statutes pertaining to drug free workplace programs; Section 287.133(2)(a), Florida Statutes, pertaining to public entity crimes; Section 287.134, Florida Statutes, pertaining to discrimination and Section 287.135, Florida Statutes, prohibiting contracting with scrutinized companies. CERTIFICATIONS OF COMPLIANCE WITH THE ABOVE REFERENCED STATUTES ARE LOCATED IN THE HIGHLANDS COUNTY FORMS SECTION, AND MUST BE INCLUDED WITH THE BID, SIGNED AND NOTARIZED.
- D) Bids are due and must be received in accordance with the instructions provided in the Invitation to Bid.
- E) The County will not reimburse Bidders for any costs associated or expenses incurred in connection with the preparation and submittal of any Bid.
- F) Bidders, their agents and associates shall not solicit any County Official, employee, agent, or volunteer and shall not contact any County Official, employee, agent, or volunteer other than the Purchasing Designated Contact listed on the cover page of this ITB for additional information and clarification.
- G) Due care and diligence have been exercised in the preparation of this ITB and all information contained herein is believed to be substantially correct. However, the responsibility for determining the full extent of the services required rests solely with those submitting a Bid. Neither the County nor its representatives shall be responsible for any error or omission in the Bids submitted, nor for the failure on the part of the Bidders to determine the full extent of the exposures.
- H) All timely Bids meeting the specifications set forth in this ITB will be considered. However, Bidders are cautioned to clearly indicate any deviations from these specifications. The terms and conditions contained herein are those desired by the County and preference will be given to those Bids in full or substantially full compliance with them.

- I) Each Bidder is responsible for full and complete compliance with all laws, rules, and regulations including those of the Federal Government, the State of Florida and the County of Highlands. Failure or inability on the part of the Bidder to have complete knowledge and intent to comply with such laws, rules, and regulations shall not relieve any Bidder from its obligation to honor its Bid and to perform completely in accordance with its Bid.
- J) The County, at its discretion, reserves the right to waive minor informalities or irregularities in any Bids, to reject any and all Bids in whole or in part, with or without cause, and to accept that Bid, if any, which in its judgment will be in its best interest.
- K) Award will be made to the Bidder whose Bid is determined to be the most advantageous to the County, taking into consideration those Bids in compliance with the requirements as set forth in this ITB. The County reserves the right to reject any and all Bids for any reason or make no award whatsoever or request clarification of information from the Bidders.
- L) Any interpretation, clarification, correction or change to this ITB will be made by written addendum issued by the Purchasing Department. Any oral or other type of communication concerning this ITB shall not be binding.
- M) Bids must be signed by an individual of the Bidder's organization legally authorized to commit the Bidder to the performance of services contemplated by this ITB.
- N) The following "Statement of Indemnification" will be incorporated in the contract entered into in connection with this ITB.
- O) The CONTRACTOR agrees to be liable for any and all damages, losses, and expenses incurred, by the COUNTY, in any way related to the services provided herein and this Agreement, caused by the acts and/or omissions of the CONTRACTOR, or any of its employees, agents, sub-contractors, representatives, volunteers or the like. The CONTRACTOR agrees to indemnify, defend and hold the COUNTY harmless for any and all such claims, suits, judgments or damages, losses and expenses, including but not limited to, court costs, expert witnesses, consultation services and attorney's fees, arising from any and all acts and/or omissions of the CONTRACTOR, or any of its employees, agents, sub-contractors, representatives, volunteers, or the like through and including any appeals in any way related to the services provided herein and this Agreement. Said indemnification, defense, and hold harmless actions shall not be limited by any required insurance coverage amounts set forth herein and shall survive termination or natural termination of this Agreement. All pages included in or attached by reference to this ITB shall be called and constitute the Invitation to Bid as stated on the front page of this ITB.
- P) If submitting Bids or Proposals for more than one ITB or Request for Proposal (RFP), each Bid and each Proposal must be in a separate envelope and correctly marked. Only one Bid for this ITB shall be accepted from any person, corporation or firm. Modifications will not be accepted or acknowledged.
- Q) Each Bid must contain proof of enrollment in E-Verify.
- R) Minority Owned and Women Owned businesses must submit a copy of the certificate to receive credit.
- S) Board policy prohibits any County employee or members of their family from receiving any gift, benefit, and/or profit resulting from any contract or purchase. Board policy also prohibits acceptance of gifts of any kind other than advertising novelties valued less than \$10.00
- T) Bids are only accepted if delivered to the location and prior to the time specified on the ITB. Bids must be delivered in sealed envelope or box. Late Bids will not be accepted under any circumstances. If Bids are received after the scheduled time of the Bid Opening Meeting, the Bidder will be contacted for disposition. The Purchasing Department, at the Bidder's expense, can return the unopened envelope, or, at the Bidder's request in writing, can destroy it.

- U) Emailed and faxed Bids will not be accepted. Any blank spaces on the required Bid form or the absence of required submittals or signatures may cause the Bid to be declared non-responsive.
- V) The County is not responsible for correcting any errors or typos made on the Bid. Incorrect calculations or errors may cause the Bid to be declared non-responsive.
- W) The Bidder shall comply with the Florida Sales and Use Tax Law as it may apply to the contract. The quoted amount(s) shall include any and all Florida Sales and Use Tax payment obligations required by Florida Law of the successful Bidder and its material suppliers.
- X) PUBLIC RECORD:
 - 1. Any material submitted in response to this ITB will become public record pursuant to Section 119.0701, Florida Statutes.

IF YOU HAVE QUESTIONS REGARDING THE APPLICATION OF FLORIDA STATUTES, CHAPTER 119, TO YOUR DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE COUNTY'S CUSTODIAN OF PUBLIC RECORDS:

**COUNTY CLERK: GLORIA RYBINSKI
COUNTY PUBLIC INFORMATION OFFICER
600 SOUTH COMMERCE AVENUE
SEBRING, FLORIDA 33870
TELEPHONE NUMBER: (863) 402-6836
HCBCCRECORDS@HIGHLANDSFL.GOV**

- 2. Proposer agrees to comply with public records laws, specifically to:
 - a. Keep and maintain public records required by the County to perform the services set forth herein.
 - b. Upon request from the County's custodian of public records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Florida Statutes, Chapter 119, or as otherwise provided by law.
 - c. Ensure that public records which are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law, for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the County.
 - d. Upon completion of the contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the services set forth herein. If the Contractor transfers all public records to the County upon completion of contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology systems of the County.

- Y) In the event of legal proceedings to enforce the terms of a contract entered into in connection with this ITB, the prevailing party will be entitled to legal fees. Venue is in Highlands County, Florida.
- Z) If any Bidder violates or is a party to a violation of the code of ethics of the County or the State of Florida, with respect to this ITB, such Bidder may be disqualified from performing the work described in this ITB or from furnishing the goods or services for which this ITB is issued and may be further disqualified from bidding on any future requests for work, goods or services for the County.
- AA) ADDENDUMS: In this ITB the County has attempted to address most situations that may occur. However, should situations arise that are not addressed, they will be dealt with on a case by case basis, at the discretion of the County. If deemed necessary, the Purchasing Department will supplement this ITB document with Addendums. These Addendums will be posted on the County's website, www.Highlandsfl.gov. It is the sole responsibility of the Bidder to check the website for Addendums. Bidders must acknowledge receipt of Addendums by completing the respective section on the Bid Submittal Form.
- BB) AFFIRMATION: By submitting a Bid, the Bidder affirms that the Bid is genuine and not made in the interest of, or on behalf of, any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; that the Bidder has not directly or indirectly induced or solicited any other person to submit a false or sham Bid; that the Bidder has not solicited or induced any person, firm or corporation to refrain from submitting a Bid; and that the Bidder has not sought by collusion to obtain for him/herself/itself any advantage over other persons or over the County.
- CC) COUNTY EMPLOYEES / CONFLICT OF INTEREST: All Bidders must disclose the name of any officer, director or agent who is also an employee of the Board. All Bidders must disclose the name of any Board employee who owns, directly or indirectly, any interest in the Bidder's business or any of its branches.
- DD) MISUNDERSTANDINGS: The failure or omission of the Bidder to receive or examine any instruction or document, or any part of the specifications, or to visit the site and acquaint themselves as to the nature and location of the work (where applicable), the general and local conditions, and all matters which may in any way affect performance shall not relieve the Bidder of any obligation to perform as specified herein. The Bidder understands the intent and purpose thereof and their obligations and will not make any claim for or have any right to damages resulting from any misunderstanding or misinterpretation of this ITB, or because of any lack of information.
- EE) ASSIGNMENT OF CONTRACT: The selected Bidder and the person designated by the Bidder to perform the services required by this ITB in its Bid submitted in response to this ITB shall not assign, transfer, convey, sublet or sell any portion of any contract entered into in connection with this ITB unless permission is first given in writing by the County.
- FF) COMPLAINTS: The contract will provide that complaints against the Contractor will be processed through the Purchasing Department and are to be corrected within five (5) business days. Written response to the Purchasing Manager is required. Failure to properly resolve complaints within five (5) business days may result in cancellation of the contract. Repeat complaints against the Contractor may result in termination of contract.
- GG) REQUEST FOR CHANGE OF ITB SPECIFICATIONS: Requests for changes to specifications must be submitted for consideration in writing to the Purchasing Designated Contact identified on the cover page of this ITB. Requests must be submitted by the Request for Information (RFI) Cut-Off date stated on the cover page of this ITB. The request will be evaluated by the Project Manager, and the County's response will be made in an Addendum.

- HH) EXCEPTIONS / ITEMS NOT IDENTIFIED IN THE SCOPE OF WORK: Any modification to these specifications by a Bidder shall be an exception to the ITB and must be presented in writing and in detail by the Bidder to the Purchasing Designated Contact prior to the RFI deadline.
- II) DOCUMENTATION RESULTING FROM SERVICES RENDERED: The contract will prohibit the Contractor from publishing or releasing any information related to the requested services without prior written permission from the County. All reports and documents resulting from the ensuing contract will remain the sole property of the County.
- JJ) OTHER ENTITIES ("PIGGYBACKING"): All Bidders submitting a bid to this ITB agree to allow the City of Sebring, Florida and other local government agencies to purchase the Services for the same conditions and at the same pricing set forth by the bid, during the period that the awarded bid is in effect. Any liability created by purchase orders issued against the awarded bid shall be the sole responsibility of the entity placing the order. If the City of Sebring and other governmental agencies desire to participate in this ITB, and make an award thereof, each government agency shall accept the bidder's response and make an award thereof independently of highlands County. Each governmental agency shall be responsible for its own purchases and each shall be liable for materials and services ordered and received by that governmental agency. None of the agencies assume any liability for the other agencies' actions by virtue of this ITB. This offer for participation in no way restricts or interferes with the right of the City of Sebring or any other governmental agency to competitively procure any or all items.
- KK) VENDOR COMPLIANCE: Vendors must comply with Highlands County Ordinances, codes, rules and regulations, Florida law, and the requirements of any and all other governmental agencies which have jurisdiction over the work being performed.

SECTION II. THE COUNTY'S RESERVATION OF RIGHTS

This ITB constitutes only as an invitation to submit a Bid to the County. The County reserves, holds and may in its own discretion, exercise any or all of the following rights and options with respect to this ITB:

- A) To supplement, amend or otherwise modify this ITB, and to cancel this ITB with or without the substitution of another Invitation to Bid (ITB) or Request for Proposals (RFP).
- B) To issue additional subsequent ITBs or RFPs.
- C) To reject all incomplete / non-responsive Bids, or Bids with errors.
- D) The County reserves the right to determine, in its sole discretion, whether any aspect of the submitted Bids is satisfactory to meet the criteria established in this ITB, the right to seek clarification and/or additional information from any submitting Bidder.
- E) The County reserves the right to add or delete, at any time, and/or all material, tasks, locations or services associated with this Agreement/Contract.
- F) This contract does not entitle any bidder to exclusive rights to County Agreement/Contracts. The County Reserves the right to obtain commodities or perform services in-house or by any other means it so desires.
- G) The County shall have no liability to any Bidder for any costs or expenses incurred in connection with the preparation and submittal of a Bid in response to this ITB.
- H) If the County believes that collusion exists among Bidders, all Bids will be rejected.

- I) The County reserves the right to reject a bid from any vendor who has previously failed to perform properly, or on time, contracts of similar nature; or who is not able to satisfactorily perform the contract.
- J) Should the item or service be unavailable in the timeframe needed from the lowest bidder, the County reserves the right to request from the next lowest until the item or service is obtained.
- K) The County has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget and or Requirements which shall service as a guide to the bidder(s) in conforming to the provision of goods and/or services to be provided pursuant to this Agreement/Contract:
- L) All pricing shall be all inclusive to include, but not limited to, licensing, permitting, material, labor, travel, shipping, handling or delivery, return and incidentals, as applicable, to provide the service described.

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SECTION III. INSURANCE

A) Unless otherwise stated in the specifications, the following minimum Insurance Requirements will be included in the contract and must be met before delivery of goods and performance of services:

1. Commercial General Liability Insurance: Occurrence Form Required: The Contractor shall have and maintain commercial general liability (CGL) insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to the work performed pursuant to this ITB in the amount of \$1,000,000. Products and completed operations aggregate shall be \$1,000,000. CGL insurance shall be written on an occurrence form and shall include bodily injury and property damage liability for premises, operations, independent contractors, products and completed operations, contractual liability, broad form property damage and property damage resulting from explosion, collapse or underground (x, c, u) exposures, personal injury and advertising injury. Fire damage liability shall be included at \$100,000.
2. Commercial Automobile Liability Insurance: The Contractor shall have and maintain commercial automobile liability insurance with a limit of not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage liability. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos). The policy shall be endorsed to provide contractual liability coverage.
3. Workers' Compensation Insurance: The Contractor shall have and maintain workers' compensation insurance for all employees for statutory limits in compliance with Florida law and Federal law. The policy must include Employer Liability with a limit of \$100,000 each accident, \$100,000 each employee, \$500,000 policy limit for disease.
4. Special Requirements / Evidence of Insurance:
 - a. **A copy of the Bidder's current certificate of insurance is to be provided with the Bid submitted in response to this ITB.** A formal certificate shall be provided upon announcement that a Bidder has been awarded the work as called for in this ITB. The Certificate(s) shall be signed by a person authorized by that insurer to bind coverage on its behalf. All Certificates of Insurance must be on file with and approved by the County before commencement of any work activities. **The formal insurance certificate shall also comply with the following:**
 - (1) "Highlands County, a Political Subdivision of the State of Florida and its elected officials, its agents, employees, and volunteers" shall be named as an "Additional Insured" on all policies except Worker's Compensation and Professional Liability.
 - (2) Contractor shall deliver written notice to the County by overnight delivery return receipt requested, hand delivery or confirmed facsimile thirty (30) days prior to giving or within three (3) days after receiving notice of cancellation, modification, non-renewal, or any other lapse in coverage of any required insurance policies.
 - b. It should be remembered that these are minimum requirements, which are subject to modification in response to high hazard operations.
 - c. The policies of insurance shall be written on forms acceptable to the County and placed with insurance carriers authorized by the Insurance Department in the State of Florida that meet an AM Best financial strength rating of no less than "A- Excellent: FSC VII".
 - d. The Contractor shall hold the County, its agents and employees, harmless on account of claims for damages to persons, property or premises arising out of the services performed in connection with this ITB. The County reserves the right to require the Contractor to provide and pay for any other insurance coverage the County deems necessary, depending upon the possible exposure to liability.
 - e. All policies must include Waiver of subrogation; any liability aggregate limits shall apply "Per Jobsite"/Per Job Aggregate. All liability insurance except Professional Liability shall be Primary and Non-Contributory. Certificate of Insurance shall confirm in writing that these provisions apply.

5. Renewal:
 - a. In the event the insurance coverage expires prior to termination of the contract entered into in connection with this ITB, a renewal certificate shall be issued 30-days prior to said expiration date.
 - b. Such notification will be in writing by registered mail, return receipt requested, and addressed to the County Purchasing Manager, 600 S. Commerce Ave., Sebring, FL 33870.

-END OF SECTION-

SECTION IV. SPECIAL TERMS AND CONDITIONS

These are conditions that are in relation to this solicitation only and have not been included in or are revising the County's standard General Terms and Conditions or the Scope of Work.

- A) BASIS OF AWARD: Award will be based on the lowest responsive and responsible bid determined by the "Total Annual Cost." The County reserves the right to award in whole or in part, whichever is deemed to be in the best interest. If a Vendor is unable to perform in the time allowed the County reserves the right to move to the next highest bidder until project completion. Other considerations(s) of award may be references/qualifications.
- B) TERM:
1. The successful bidder shall be responsible for furnishing and delivering to the County's requesting Department(s) the commodity or services on an "as needed basis" no purchase amount is guaranteed. The initial term of the Contract shall be for **three (3) years** from the date of the Board approval. Upon mutual agreement of the parties, the contract may be **renewed for three (3) one (1) year terms**. A Price Adjustment Clause was included in this solicitation. Prices shall remain firm for 1 year and may be reviewed prior to each anniversary thereafter for justified increase or decrease. The contract will include a thirty (30) day termination for convenience clause for termination by the County.
- C) REQUIRED QUALIFICATIONS (items to be provided with bid submission)
1. The Contractor shall submit proof of all licenses or certifications as required by the County and the State of Florida. The Bidder must have experience in Landfill System Operations. This is confirmed by:
 - 1.1. Bidder must provide, with the bid submittal, a list of a minimum of three (3) similar projects completed by the bidder as a Prime or Sub Contractor within the last ten (10) years at a facility that is at least ten (10) acres. Similar projects shall demonstrate experience for Landfill Systems operation, maintenance, and monitoring (O & M) services.
 - 1.2. Previous client's references should include all information as outlines in the Reference Form. The County intends to conduct reference checks of those clients. These checks will be designed to validate the company's performance on prior projects/programs, ascertain the difference (if any) between expectations and delivery and determine overall satisfaction with the company's services.
 - 1.3. Registered to do business with the Division of Corporations. A printout from www.Sunbiz.org which provides the Bidder's FEI/EIN, Authorized Persons, and Active Status.
- D) ITB CONTACT INFORMATION
1. All questions regarding this ITB and the details of the project during the ITB process shall be submitted by Bidders in writing to the Purchasing Department representative listed on the cover page of this solicitation.
- E) REQUEST FOR INFORMATION (RFI) CUT-OFF
1. All questions regarding this ITB shall be submitted by Bidders in writing by 5 P.M. on the date noted on the cover page of this solicitation. It shall be the Contractors responsibility to review the site and request clarification(s) for any items prior to the deadline noted on the cover sheet of this solicitation.

SECTION V. SCOPE OF WORK AND SPECIFICATIONS

- A. PURPOSE:** Highlands County owns an integrated solid waste management system that includes County owned, maintained, and operated facilities as well as contracted services. The county has landfill engineering services agreements and does not require engineering services in this scope. The County seeks to retain the services of competent and qualified Contractor to operate, maintain, and monitor the leachate collection and treatment systems, active gas management, control, and disposal system; groundwater monitoring well system, and non-potable water well and distribution system at the Highlands County Solid Waste Management Center (HCSWMC) as well as the gas collection system, leachate collection system, groundwater well monitoring system and non-potable water well and distribution system at Highlands County's Closed Desoto City Landfill.
- B. SCOPE:** The following scope of services includes but is not limited to many of the numerous tasks associated with this contract. This list of tasks is extensive but cannot cover every detail of work that may need to be performed, and as such, Contractor may need to perform tasks of similar nature that may not be included in scope. Contractor is responsible for making sure Highlands County representatives have been trained in the use of any new technology or systems that have been installed.

Highland County Solid Waste Management Center at 12700 Arbuckle Creek Road

- Perform evaluation; operations including monitoring, sampling, reporting and measurements as specified in the Draft Landfill Systems Operation Plan (Attachment A) and Current Permitted Class I Landfill Operation Plan dated July 25, 2019 (Attachment B); repair, and maintenance of the leachate lift stations, sprayfields, collection and treatment systems, telemetry systems and hydraulic monitoring systems including after hours and weekend emergency response to any alarms or issues related to the systems.
- Certification/Inspections of leachate lift stations, collection and treatment systems, telemetry systems and hydraulic monitoring systems per regulations including after hours and weekend emergency response to any alarms related to the systems.
- Evaluation, operation, repair and maintenance of active landfill gas management, control, collection and disposal systems and flare including after hours and weekend emergency response to any alarms related to the systems.
- Evaluation, operation, repair, and maintenance of the potable water well and distribution system including after hours and weekend emergency response to any alarms related to the systems.
- Evaluation, repair and maintenance of existing plumbing and landfill piping systems.
- Evaluation, repair, and maintenance of the groundwater monitoring system to include monitoring wells and coordination with county contracted laboratory companies for required monitoring well and surface water sampling.
- Evaluation and operation of landfill generators and ensuring generator service contractors are performing necessary maintenance and repairs.

- Maintain daily, monthly, and annual records of operations that are necessary for regulatory reporting.
- Contractor shall heed all cautions identified in the Draft Landfill Systems Operations Plan.

Closed Desoto City Landfill at 6000 Skipper Road

- Perform daily evaluation; operations including monitoring, sampling, reporting and measurements; repair and maintenance of the leachate system including the routine pumping of leachate from cell no. 3 into leachate tanker or other system and disposal at the HCSMWC treatment facility or other designated facility. (Transportation of leachate will be by county staff)
- Evaluation, operation, repair and maintenance of landfill gas management, control, collection, and disposal systems.
- Evaluation, operation, repair, and maintenance of the potable water well and distribution system
- Evaluation, repair and maintenance of existing plumbing and landfill water piping systems.
- Evaluation, repair, and maintenance of the groundwater monitoring system to include monitoring wells and coordination with county contracted laboratory companies for required monitoring well sampling.

Contractor must be well versed and proficient with:

- Municipal Solid Waste Class I landfills
- Industrial electrical systems
- Landfill utilities
- Landfill gas collections and flare systems
- Welding including HDPE fusion
- Permitted confined space entry
- Plumbing with knowledge of backflow preventers, valve, and piping
- Lift and fill stations with knowledge of pumps, control panels, and telemetry systems
- Construction
- Line cleaning, jetting, repairing and videotaping
- Leachate and its effects on landfill systems
- Landfill gas and its effects on landfill systems

C. PERFORMANCE REQUIREMENTS

- Contractor will submit a quote for an hourly rate, daily rate and monthly rate based on working business hours from 7:00 AM to 5:30 PM, five (5) days per week, Monday through Friday, except for the county designated days off for Christmas Day, New Year's Day, Thanksgiving Day, and 4th of July. Contractor shall submit an hourly rate and daily rate for response to emergencies after the working business hours.

- The county will procure all supplies such as liquid chlorine and all parts and materials to make any repairs. Contractor shall provide County staff with a list of supplies, a parts list, and any recommended vendors.
- Contractor is responsible for supplying all labor, tools, and equipment. Contractor shall deem their workmanship is free of defects. Contractor is responsible for site safety, housekeeping and loading/unloading materials. If unloading/loading of materials requires the assistance of mechanical equipment the county will assist with their equipment.
- Contractor will use materials, equipment, and technical specifications acceptable to industry standards, unless specifically identified by Highlands County.
- Contractor will respond to emergencies within three (3) hours. Emergency rates shall apply for emergency call outs after working business hours, Saturdays and Sundays, and county designated holiday days off. Work scheduled at night and during the weekend will be at standard rates, not emergency rates.
- The landfill is open Monday – Friday from 7:00 AM – 5:30 PM, and Saturdays from 7:00 AM – 12:00 PM, except for the county designated days off for Christmas Day, New Year’s Day, Thanksgiving Day, and 4th of July.

C. HIGHLANDS COUNTY SOLID WASTE MANAGEMENT CENTER (HCSWMC)

The HCSWMC is located at 12700 Arbuckle Creek Road, approximately 10 miles east of Sebring, Florida 33870 and has been in continuous operation since 1996. (See Aerial of HCSWMC) The 147-acre HCSWMC is owned and operated by Highlands County and consists of a Class I MSW Landfill, C & DD Landfill and an Ag-Plastic Landfill situated on the northwest portion of the 987-acre property at 12700 Arbuckle Creek Road, Sebring FL 33870 in Section 22, Township 34 South, and Range 30 East. The Class I active disposal area are Cell 1A (9 acres), Cell 1B (9 acres) and Cell 3 (18 acres). Future expansions include Cells 2, 4 and 5 through 8 (18 acres each cell). Highlands County is in the design and permitting phase of Cell 5 with construction scheduled to start in the late fall of 2023. Highlands County also operates an active 11-acre C & DD Landfill consisting of two disposal cells, Phase (1) (7-acres) and Phase 2 (7-acres) and an Ag-Plastic Landfill (6 acres) within the HCSWMC. A site Master Plan drawing showing the proposed layout of the HCSWMC is attached. (Attached Master Site Map) The core components of the Class I Landfill include the cells, landfill gas collection system with John Zink Flare, and landfill leachate collection, treatment and sprayfield irrigation systems.

CLASS I LEACHATE SYSTEM

The leachate from the Class I disposal cells is collected, treated, and disposed of onsite using an integrated system for control and management. Leachate is collected on top of the primary high density polyethylene (HDPE) liner in each cell and is conveyed by gravity on the sloped floor of the cell to perforated HDPE pipes that allow the leachate to flow to a perpendicular 8” diameter HDPE header pipe

at the low end of the cell. From there the leachate flows by gravity into a sealed wet well and lift station outside the cell.

Cell 1A contains three (3) piezometers that are used to measure the static head of leachate on the HDPE liner by lowering a ruled dipstick to the floor. The liner is protected from damage by supporting the open bottom of the slotted piezometers directly on a ¼-inch plate that rests on a ¾-inch sheet of plywood that in turn rests on the HDPE geomembrane. Cell 1B also contains three (3) piezometers. Two of the piezometers in each cell are situated mid-way between leachate drain pipes on the crest of the ridge of the cell floor and the third is adjacent to the drain pipe.

Cells 3A, 3B, and 3C each have one piezometer at the up-gradient and one each at the downgradient well. Each piezometer is to be read bi-weekly, or at a significant rainfall event, and the data recorded. This monitoring system allows the landfill operator to observe the rise and fall of the leachate level in the cells in response to rainfall events of the recirculation of leachate.

The lift stations are fully automated to cycle on and off based on the level of liquid in storage in the wet well. Each wet well is equipped with an alarm to warn the operator in the event of a pump failure. A backup unit is kept onsite for quick replacement in the event of a pump failure. Each lift station is equipped with a flowmeter. The quantity of leachate collected and pumped from each cell is to be recorded daily.

Leachate drain pipes and header pipes are equipped with cleanout ports at one end. These collection pipes are jet cleaned at least once every 5 years to remove sediment and scale build-up. The combination of data from the cell piezometers, flow meters, and cleaning of the pipe are used to determine if any stoppage exists in the collection system.

The collected leachate is then pumped via 4" force mains from the lift stations (Lift Station 1A and Lift Station 1B) directly to two (2) leachate storage basins for initial treatment. Each of the storage basins is equipped with two (2) 5HP floating aerators that throw leachate spray a horizontal distance of 10 feet. The initial treatment provided by the aeration reduces biochemical oxygen demand (BOD), chemical oxygen demand (COD), ammonia, total dissolved solids (TDS) and volatile organics in the leachate. The initially treated leachate is then drained from one or both basins via a gravity sewer line that flows to the master lift station wet well. The master lift station can then send the leachate to several locations. From the master lift station leachate can be sent back to the leachate storage basins via a dedicated force main, recirculated back to the landfill cells, or sent to the on-site leachate treatment plant consisting of a sand filter system for final processing and disposal in the sprayfield. Leachate is sent in batches of 17,500 gallons to the onsite sprayfield, which is divided into twelve (12) contiguous zones. The maximum amount of leachate that can be sent to the sprayfield per day is 35,000 gallon/day with a maximum of 17,500 gallons/day per individual zone.

The contractor shall operate the leachate management system (including the collection, removal, storage, and on-site systems) and make daily inspections of the lift stations, electrical panels, and pressure gauges to ensure the collection system is online and working properly to maintain the system as designed. Perform routine inspections and maintenance of the leachate management system in accordance with established operation plans and permit. (See Attachment A for Draft Landfill Systems Operations Plan and Attachment B for current permitted Class I Landfill Operation Plan dated July 25, 2019). Daily pump

reports must be completed which includes a series of measurements that must be taken when operating the system. These measurements include those for flowmeters, pumps, and rain gauges for various instruments on site. Contractor shall perform lift station evaluation, operation, maintenance, and the ability to perform repairs to pumps, rail system, floats, vaults, and control panels. Contractor should be certified in industrial electrical work, have the ability to perform confined space work, have experience working with intrinsically safe environments, have the ability to read blueprints and have the ability to spot and fix other defects.

LANDFILL GAS SYSTEM

The HCSWMC also has an in-place gas management system. The landfill gas monitoring is currently performed in eight (8) monitoring wells (LFG-1, LFG-2, LFG-5, LFG-6, LFG-7, LFG-8, LFG-9, and LFG-10) around the perimeter of cells 1A, 1B and 3 that are to be monitored quarterly according to the permit and FDEP requirements. (See Map of HCSWMC Monitoring Wells and Landfill Gas Wells) A handheld methane meter is used to record the percent of lower explosive limit (LEL) present in the well on a quarterly basis and report to FDEP. The landfill operator will observe stressed vegetation and/or odors. The contractor shall monitor the landfill gas system quarterly and inspect the system to ensure there are no pipes that are broken and in need of repair. The contractor shall report any issues to the Landfill Operation Manager and make any repairs that are necessary.

The Class I landfill is equipped with an active gas control system in Cells 1A, 1B, and 3. The active gas control system was installed in Cells 1A and 1B in 2001 – 2003; and extension of the gas system to Cell 3 was installed in 2007-2008. The system consists of a series of laterals, which are perforated 4" HDPE lines buried at different elevations and connected to main headers. These headers then route to an enclosed John Zink biogas flare system that consists of an enclosed biogas flare, blower skid assembly containing a panel rack with flare control panel, moisture separator and gas blowers. The landfill gas is then burned reducing any objectionable odors and surface emissions. The gas collection system also allows for the diversion of collected gas to fuel the aggregate dryer and blend mixer at the Highlands County owned and operated asphalt plant located at the HCSWMC. Two (2) 20-horsepower Hartzell centrifugal blower fans produce a negative pressure on the laterals, pulling the gas from the landfill to the flare. Contractor shall operate and maintain the landfill gas system and diagnose where active landfill gas (LFG) system vacuum may be escaping and could thereby prevent the ability to pull gas through the LFG system efficiently and repair as needed. The gas management system controls shall be operated and maintained so that they function as designed and in accordance with the permit. (See Attachment A for Draft Landfill Systems Operations Plan and Attachment B for current permitted Class I Landfill Operation Plan dated July 25, 2019) Contractor must be familiar with LFG system design, EPA and FDEP regulations, report writing and have the ability to read blueprints.

WATER SYSTEM

The landfill has a water system that includes a well with a twelve (12) inch well pump, small water plant with a flow meter, one hydro tank, liquid chlorination system and water distribution system that provides non-potable water to the landfill office, scalehouse, maintenance building, leachate treatment plant area, several fire hydrants and an irrigation system. The contractor shall be responsible for checking the water supply well system daily for proper operation, maintenance, flushing and making any repairs to the water system.

GROUNDWATER MONITORING WELL SYSTEM

The HCSWMC has a water quality plan for the site that includes the monitoring and sampling of various groundwater monitoring wells throughout the site. (See Aerial Map of HCSWMC Monitoring Wells and Map of HCSWMC Monitoring Wells and Landfill Gas Wells) These wells are sampled quarterly and semi-annually by laboratories performing environmental sampling and analysis required by FDEP permits. The contractor shall accompany the laboratory onsite during sampling procedures to ensure all required wells are being sampled accordingly. The contractor shall also make monthly visual inspections of the monitoring wells to determine if any corrective issues are needed with the wells and report those issues to the Landfill Operations Manager.

E. CLOSED DESOTO CITY CLASS I LANDFILL

The closed twenty-one (21) acres Desoto City Class I Landfill is located at 6000 Skipper Road, Sebring FL 33876 in Section 22, Township 35 South, and Range 29 East. (See Aerial of DCL) The landfill was officially closed on October 1, 1997 and consists of three (3) disposal cells described as follows:

- Cell #1 – no bottom liner and closed around 1985 or 1986 with a marl/clay top liner.
- Cell #2 – a marl/clay bottom liner, closed in the spring of 1993 with a marl/clay top liner.
- Cell #3 – a 60 mil HDPE liner, closed with a 40 mil HDPE top liner.

The landfill is currently in its thirty (30) year post closure long term care period. The leachate collection system continues to function as designed and the leachate collection system needs to be checked regularly by pumping leachate from the Cell #3 lift submersible pump out of the system and into a 5000-gallon tanker for disposal. A log must be kept of the leachate pumped from the landfill and transported to discharged into the leachate treatment plant at the HCSWMC. The contractor shall make weekly inspections of the leachate system to pump leachate into the on-site tanker. Once the tanker is filled with a leachate load the contractor will inform the Landfill Operations Manager that the tanker needs transport of the load of leachate to the HCSWMC. When the tanker arrives onsite at the HCSWMC for leachate disposal the contractor will oversee the discharge of the leachate into the leachate treatment plant.

GROUNDWATER MONITORING WELL SYSTEM

The Desoto City Landfill has a water quality plan for the site that includes the monitoring and sampling of eight (8) groundwater monitoring wells throughout the site. (See Aerial Map of DCL Monitoring Wells and Map of DCL Monitoring Wells and Landfill Gas Wells). These wells are sampled semi-annually by laboratories performing environmental sampling and analysis required by FDEP permits. The contractor shall accompany the laboratory onsite during sampling procedures to ensure all required wells are being sampled accordingly. The contractor shall also make monthly visual inspections of the monitoring wells to determine if any corrective issues are needed with the wells and report those issues to the Landfill Operations Manager.

LANDFILL GAS SYSTEM

The landfill gas monitoring system at the Desoto City Landfill is no longer in operation but as part of the long term care plan a landfill gas monitoring network is comprised of eight (8) landfill gas wells (LFG-3, LFG-11, LFG-22, LFG-26, LFG-31, LFG-42, LFG-44 and LFG-45) that are monitored quarterly according to the permit and FDEP regulations. (See Map of DCL Monitoring Wells and Landfill Gas Wells). A hand-

held methane meter is used to record the percent of lower explosive limit (LEL) present in the well on a quarterly basis and report to FDEP. The contractor shall perform monitoring of the landfill gas system quarterly and inspect the system to ensure there are no pipes that are broken and in need of repair. The contractor shall report any issues to the Landfill Operation Manager and make any repairs that are necessary.

LANDFILL WATER SYSTEM

The landfill has two separate water systems on the site. One system includes a well that supplies non-potable water to the scalehouse, office building, material transfer building, metal building and miscellaneous yard hose bibs on a water line that terminates at the pole barn. There is also a second well near the Household Hazardous Waste (HHW) yard at the north end of the property that supplies non-potable water to the HHW building several hose bibs in the HHW yard. The contractor shall be responsible for operation, maintenance, flushing and making any repairs to the water systems on the site upon his weekly inspection of the site.

-END OF SECTION-

SECTION VI. HIGHLANDS COUNTY FORMS

Documentation included with Bid submittal package

Any blank spaces on the form(s), qualifying notes or exceptions, counter offers, lack of required submittals, or signatures, on County’s Form may result in the submission being declared non-responsive by the County.

The list of forms below is meant only as a guide. It is the Bidder’s responsibility to review and include all requested and required documentation.

Forms	
LOCAL COMPLIANCE FORMS	✓
Official Bid Submittal Form: include acknowledgement of all addenda, and original signature. Electronic versions: Label each “23-004 Bidder Name-Submission”	
Drug-Free Workplace Certification, F.S. 287.087	
Public Entity Crimes Sworn Statement, F.S. 287.133	
Discrimination Certification, F.S. 287.134	
Scrutinized Companies Certification, F.S. 287.135	
E Verify Certification	
Local Preference Affidavit of Eligibility	
MISCELANEOUS DOCUMENTATION	
Reference Form	
WWW.Sunbiz.org print-out for Bidder/Proposer FEI/EIN Number	
Acord Insurance Form (sample copy of Certificate of Insurance)	
Women / Minority Business Enterprise Certification (Mark with an “x” if not applicable)	
Price Adjustment Form	
One (1) Original Submission Package, PAPER COPY, and one (1) exact electronic copy, on thumb drive, of the Submission package. Label each “23-004 Bidder Name-Submission” OR Upload one (1) all-inclusive Adobe file of the Submission package to the County Website via VendorRegistry.com. Label each “23-004 Bidder Name-Submission”	
Statement of “No Bid” Due prior to submission due date and time	
Sealed Submission Label (affix to outside of submittal package)	

OFFICIAL BID SUBMITTAL FORM

BID SUBMITTED TO:

**HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
PURCHASING DEPARTMENT**

SOLICITATION IDENTIFICATION: **ITB 23-004-LKD**

SOLICITATION NAME: **Operation and Maintenance for Landfill Systems**

SUBMITTED BY:

Bidder's Name

Bidder's Authorized Representative's Name and Title

Bidder's Address 1

Bidder's Address 2

Contact's Name and Title (Print)

Contact's E-mail Address

Contact's Phone Number

Dun's Number

Employer Identification Number/Federal Employer Identification (as shown on Sunbiz.org)

BIDDER IS: (CHECK ONE)

Individual

Partnership

Corporation

Joint Venture*

*Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above for an individual or the appropriate form of entity.)

In submitting this response, BIDDER represents that:

- BIDDER has examined and carefully studied the ITB Documents and the following Addenda (receipt of all which is hereby acknowledged). Bidder should insert date of the Addendum and Addendum Number in boxes below:

Addenda Number	Date Issued	Addenda Number	Date Issued	Addenda Number	Date Issued	Addenda Number	Date Issued

- It is the sole responsibility of the bidder/proposer to check the Purchasing web-site for any addenda issued for this solicitation.

CERTIFICATION/ACKNOWLEDGEMENTS:

Having carefully examined the general and purchase order “Terms and Conditions”, all solicitation documents and, if necessary, reviewed site conditions that may affect cost, progress, performance and finishing of the work which meet these specifications.

The pricing provided shall be all inclusive of travel, labor and materials and incidentals necessary to provide the services described herein (no additional trip, service, or mileage charges).

PRICING:

The undersigned does hereby declare that the undersigned has examined the project sites and the complete specifications of this ITB entitled “Operation and Maintenance for Landfill Systems” and agrees to supply all equipment, labor, and insurances to complete the work required in accordance with the complete specifications.

ITEM	ITEM DESCRIPTION	Per hour	Per Day	Per Month
1	Operations <u>during</u> Working Business Hours	\$	\$	\$
TOTAL ANNUAL COST (Per Month cost multiplied by 12):				\$
TOTAL ANNUAL COST written in words:				
Alternate: (utilized only as needed)				
2	Operations <u>after</u> Working Business Hours	\$	Per hour	

WORKING BUSINESS HOURS: For purposes of this ITB “Working Business Hours” shall be defined as Operational Hours from 7:00 AM to 5:30 PM, five (5) days per week, Monday through Friday, except for the county designated days off for Christmas Day, New Year’s Day, Thanksgiving Day, and 4th of July.

Bidder is familiar with and is satisfied as to the Scope of Work, all Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

SUBMITTED ON: _____ 20 _____

COMPANY: _____

SIGNATURE: _____ (Seal)
Bidder's Authorized Representative

PRINTED NAME: _____

TITLE: _____

ADDRESS: _____

CITY/STATE/ZIP _____

PHONE NUMBER: _____

EMAIL: _____

DRUG FREE WORKPLACE

**CERTIFICATION PURSUANT TO SECTION 287.087, FLORIDA STATUTES
PREFERENCE TO DO BUSINESS WITH DRUG FREE WORKPLACE PROGRAMS**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER
OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to the HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

by _____
[Print individual's name and title]

for _____
[Print name and state of incorporation or other formation of the entity submitting this sworn statement]

whose business address is _____ and

whose Federal Employer Identification Number (FEIN) is _____ (hereinafter referred to as "Bidder")

2. CERTIFICATION

Bidder hereby certifies that at the time of its Bid the Bidder has a drug free workplace program in place. The program meets the requirements of Section 287.087, Florida Statutes.

THIS CERTIFICATION IS MADE PURSUANT TO SECTION 287.087, FLORIDA STATUTES, AND IS, UPON DELIVERY, A PUBLIC RECORD.

Print Name: _____ Date: ___/___/___

STATE OF _____
COUNTY OF _____

The foregoing Certification was sworn to before me this ___ day of _____, 20___, by _____, as _____, the duly authorized officer of _____, on its behalf, who is either personally known to me [] or has produced _____ as identification [].

(AFFIX NOTARY SEAL)

Signature: _____
Print Name: _____
Notary Public, State of _____
Commission No. _____
My Commission Expires: _____

PUBLIC ENTITY CRIMES

**SWORN STATEMENT UNDER SECTION 287.133(3)(a), FLORIDA STATUTES,
ON PUBLIC ENTITY CRIMES**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER
OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

STATE OF FLORIDA _____ } ss
COUNTY OF _____ }

Before me, the undersigned authority, personally appeared _____ who, being by me first duly
sworn, made the following statement:

1. The business address of _____ (name of bidder or contractor),
is

2. I understand that a public entity crime as defined in Section 287.133 of the Florida Statutes includes a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or such an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy or material misrepresentation.

3. I understand that "convicted" or "conviction" is defined by the statute to mean a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilt or nolo contendere.

4. I understand that "affiliate" is defined by the statute to mean (1) a predecessor or successor of a person or a corporation convicted of a public entity crime, or (2) an entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime, or (3) those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate, or (4) a person or corporation who knowingly entered into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months.

5. Neither the bidder or contractor nor any officer, director, executive, partner, shareholder, employee, member or agent who is active in the management of the bidder or contractor nor any affiliate of the bidder or contractor has been convicted of a public entity crime subsequent to July 1, 1989.
(Draw a line through paragraph 5 if paragraph 6 below applies.)

6. There has been a conviction of a public entity crime by the bidder or contractor, or an officer, director, executive, partner, shareholder, employee, member or agent of the bidder or contractor who is active in the management of the bidder or contractor or an affiliate of the bidder or contractor. A determination has been made pursuant to 287.133(3) by order of the Division of Administrative Hearings that it is not in the public interest for the name of the convicted person or affiliate to appear on the convicted vendor list. The name of the convicted person or affiliate is

A copy of the order of the Division of Administrative Hearings is attached to this statement.

(Draw a line through paragraph 6 if paragraph 5 above applies.)

THIS SWORN STATEMENT IS MADE PURSUANT TO SECTION 287.133(3)A, FLORIDA STATUTES, AND IS, UPON DELIVERY, A PUBLIC RECORD

Signature: _____

Print Name: _____

Print Title: _____

On ____ day of _____, 20____.

STATE OF _____

COUNTY OF _____

Sworn and subscribed before me in the State and County first mentioned above on the _____ day of _____, 20____.

(AFFIX NOTARY SEAL)

Signature: _____

Print Name: _____

Notary Public, State of _____

Commission No. _____

My Commission Expires: _____

DISCRIMINATION CERTIFICATION

**CERTIFICATION PURSUANT TO SECTION 287.134, FLORIDA STATUTES
DISCRIMINATION; DENIAL OR REVOCATION OF THE RIGHT TO TRANSACT BUSINESS WITH
PUBLIC ENTITIES**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER
OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to the HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

by _____
[Print individual's name and title]

for _____
[Print name and state of incorporation or other formation of the entity submitting this sworn statement]

whose business address is _____ and

whose Federal Employer Identification Number (FEIN) is _____ (hereinafter referred to as "Bidder")

2. CERTIFICATION

Bidder hereby certifies that at the time of its Bid the Bidder has not been placed on the discriminatory vendor list by the Department of Management Services.

THIS CERTIFICATION IS MADE PURSUANT TO SECTION 287.134, FLORIDA STATUTES, AND IS, UPON DELIVERY, A PUBLIC RECORD.

Print Name: _____ Date: ____/____/____

STATE OF _____
COUNTY OF _____

The foregoing Certification was sworn to before me this ____ day of _____, 20____, by _____, as _____, the duly authorized officer of _____, on its behalf, who is either personally known to me [] or has produced _____ as identification [].

(AFFIX NOTARY SEAL)

Signature: _____
Print Name: _____
Notary Public, State of _____
Commission No. _____
My Commission Expires: _____

SCRUTINIZED COMPANIES CERTIFICATION

**CERTIFICATION PURSUANT TO SECTION 287.135, FLORIDA STATUTES
SCRUTINIZED COMPANIES CERTIFICATION**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR
OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to the HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

by _____
[Print individual's name and title]

for _____
[Print name and state of incorporation or other formation of the entity submitting this sworn statement]

whose business address is _____ and

whose Federal Employer Identification Number (FEIN) is _____ (hereinafter referred to as "Bidder")

2. **CERTIFICATION**

Bidder hereby certifies that at the time of its Bid the Bidder is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, and that it does not have business operations in Cuba or Syria. Bidder also hereby certifies that it is not participating in a boycott of Israel.

THIS CERTIFICATION IS MADE PURSUANT TO SECTION 287.135(5), FLORIDA STATUTES, AND IS, UPON DELIVERY, A PUBLIC RECORD.

Print Name: _____

STATE OF _____
COUNTY OF _____

The foregoing Certification was sworn to before me this ___ day of _____, 2017, by _____, as _____, the duly authorized officer of _____, on its behalf, who is either personally known to me [] or has produced _____ as identification [].

(AFFIX NOTARY SEAL)

Print Name: _____
Notary Public, State of Florida
Commission No. _____
My Commission Expires: _____

E-VERIFY CERTIFICATION

CERTIFICATION OF PARTICIPATION IN THE UNITED STATES CITIZENSHIP AND IMMIGRATION SERVICE BUREAU’S E-VERIFY PROGRAM

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to the HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

by _____
[Print individual's name and title]

for _____
[Print name and state of incorporation or other formation of the entity submitting this sworn statement]

whose business address is _____ and

whose Federal Employer Identification Number (FEIN) is _____ (hereinafter referred to as "Bidder")

2. CERTIFICATION

Bidder hereby certifies that at the time of its Bid the Bidder participates in the United States Citizenship and Immigration Services Bureau’s E-Verify Program, and does not knowingly employ, hire for employment, or continue to employ an unauthorized alien.

Bidder’s E-verify Company ID #: _____

THIS CERTIFICATION IS, UPON DELIVERY, A PUBLIC RECORD.

Print Name: _____ Date: ____/____/____

STATE OF _____
COUNTY OF _____

The foregoing Certification was sworn to before me this ____ day of _____, 20____, by _____, as _____, the duly authorized officer of _____, on its behalf, who is either personally known to me [] or has produced _____ as identification [].

(AFFIX NOTARY SEAL)

Signature: _____
Print Name: _____
Notary Public, State of _____

LOCAL VENDOR AFFIDAVIT

LOCAL PREFERENCE AFFIDAVIT OF ELIGIBILITY

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
by _____
[Print individual's name and title]

for _____
[Print name of Company/Individual submitting sworn statement]

Whose business address is _____

(If applicable) its Federal Employer Identification Number (FEIN) is _____

(If the entity has no FEIN, include the Social Security Number of the individual signing this Sworn statement): _____.

2. LOCAL PREFERENCE ELIGIBILITY

A. Contractor/Individual has had a fixed office or distribution point located in and having a street address within Highlands County for at least twelve (12) months immediately prior to the issuance of the request for quotation, competitive bids or request for proposals by the County.

YES ___ NO ___

B. Contractor/Individual holds business license required by the County, and/or if applicable, the Municipalities:

YES ___ NO ___

C. Contractor/Individual employs at least one full-time employee, or two part-time employees whose primary residence is in Highlands County, or, if the business has no employees, the business shall be at least fifty (50) percent owned by one or more persons whose primary residence is in Highlands County.

YES ___ NO ___

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM SHALL BE CONSIDERED PUBLIC RECORD.

[Signature and Date]

STATE OF _____, COUNTY OF _____

Subscribed and sworn before me, the undersigned notary public on this _____ day of _____, 20_____.

NOTARY PUBLIC

SEAL

Commission Expiration Date

Reference Form

The contact person listed as a reference shall be someone who had personal knowledge of the Bidder's performance during the reference project. Contact persons must have been informed that they are being used as a reference and that the County will be calling and emailing them.

Reference 1

Project Name: _____

Owner: _____

Contact Address: _____

Telephone Number: _____ Email Address: _____

Project Description: _____

Reference 2

Project Name: _____

Owner: _____

Contact Address: _____

Telephone Number: _____ Email Address: _____

Project Description: _____

Reference 3

Project Name: _____

Owner: _____

Contact Address: _____

Telephone Number: _____ Email Address: _____

Project Description: _____

PRICE ADJUSTMENT CLAUSE

STATEMENT OF ISSUE: The commodity(s) or services represented in the attached Invitation to Bid may be considered volatile price item(s) which may show drastic swings in price and availability during the contract period. In consideration, the COUNTY is including this price adjustment clause in the solicitation to encourage adequate competition and fair pricing on the (estimated) indefinite quantity requirement and to discourage padding or hedging prices.

The county's price adjustment criteria are as follows:

VENDOR shall agree that submitted pricing **will be held firm for the first (1) year period of the contract term**. Pricing will be reviewed at the anniversary date thereafter. A price escalation or reduction may be requested by the VENDOR or the COUNTY, to the price of all items. The COUNTY may, in its sole discretion, accept an equitable adjustment in the Contract terms or pricing if pricing or availability of supply is affected by extreme and unforeseen volatility in the marketplace, that is, by circumstances that satisfy all the following criteria: (1) the volatility is due to causes wholly beyond the VENDOR's control, (2) the volatility affects the marketplace or industry, not just the particular Contract source of supply, (3) the effect on pricing or availability of supply is substantial, (4) the volatility so affects the vendor that continued performance of the Contract would result in a substantial loss and (5) No price adjustment will be approved to compensate a vendor for inefficiency or for errors or omissions in judgment or for additional profit.

Requests from the VENDOR for price adjustments shall be RECEIVED IN WRITING (via email or mail) and are subject to County Board approval (if applicable) and executed contract amendment before becoming effective. Failure to reach agreement for a price adjustment may, at the sole option of the COUNTY, result in the termination of the Agreement for cause.

Official VERIFIABLE documentation of such changes SHALL be provided with the request for price adjustment in order to substantiate any requested change. The COUNTY reserves the right to consider various pertinent information sources to evaluate price increase requests (such as the CPI and PPI, US CITY Average, as published by the US Department of Labor, Bureau of Labor Statistics). The COUNTY also reserves the right to consider other information related to special economic and/or industry circumstances, when evaluating a price change request. Changes may be either increases or decreases and may be requested by either party.

As an authorized representative of the company listed below, I fully understand, accept, and agree to abide by the procedures denoted in this price adjustment clause.

VENDOR NAME _____

ADDRESS _____

AUTHORIZED SIGNATURE _____

PRINTED SIGNATURE _____ DATE _____



STATEMENT OF NO BID

We, the undersigned, have declined to bid

- _____ Specifications too "tight", i.e., geared toward one brand or manufacturer only
- _____ Insufficient time to respond to the Invitation to Bid.
- _____ We do not offer this product or services
- _____ Unable to meet specifications
- _____ Unable to meet Bond requirements
- _____ Specifications unclear (explain how)
- _____ Unable to meet Insurance requirements
- _____ Remove us from your "Bidders List" altogether
- _____ Other (specify below)

Remarks:

Company Name: _____

Signature: _____

Telephone: _____

E-Mail: _____

Date: _____

Sealed Submission Label

Cut along the outer border and affix this label to your sealed submission envelope to identify it as a "Sealed Bid/Proposal"

Deliver to: Highlands County Purchasing Department
600 S. Commerce Ave., 2nd Floor
Sebring, FL 33870
Contact Information: Lori DeLoach, Purchasing Manager
(863) 402-6500

PLEASE PRINT CLEARLY



		SEALED BID/PROPOSAL DOCUMENTS • DO NOT OPEN •	
SOLICITATION No.:	ITB 23-004-LKD		
SOLICITATION	OPERATION AND MAINTENANCE FOR LANDFILL SERVICES		
DATE DUE:	Wednesday, June 7, 2023		
TIME DUE:	Prior to: 3:30 PM		
SUBMITTED BY:	_____		
	<small>(Name of Company)</small>		
	<small>e-mail address</small>	<small>Telephone</small>	
DELIVER TO:	Highlands County Board of County Commissioners Attn: Purchasing Department, 2 nd Floor 600 South Commerce Avenue Sebring, Florida 33870		
Note: submissions received after the time and date above will not be accepted.			

***Notice: The Date Due/Submission Deadline Date/Opening Date as stated on this label and other forms contained herein may have been updated via issuance of Addenda. It is the sole responsibility of the Contractor/Vendor to monitor the County webpage for any updates. Contractor/Vendor may strike through and update Date Due/Submission Deadline Date/Opening Date to match any updates to this date that have been published via Addenda.**

SECTION VI. MAPS AND AERIALS

A. Highlands County Solid Waste Management Center (HCSWMC)

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MASTER SITE PLAN



**HIGHLANDS
 COUNTY
 SOLID WASTE
 MANAGEMENT
 CENTER**
SITE MASTER PLAN

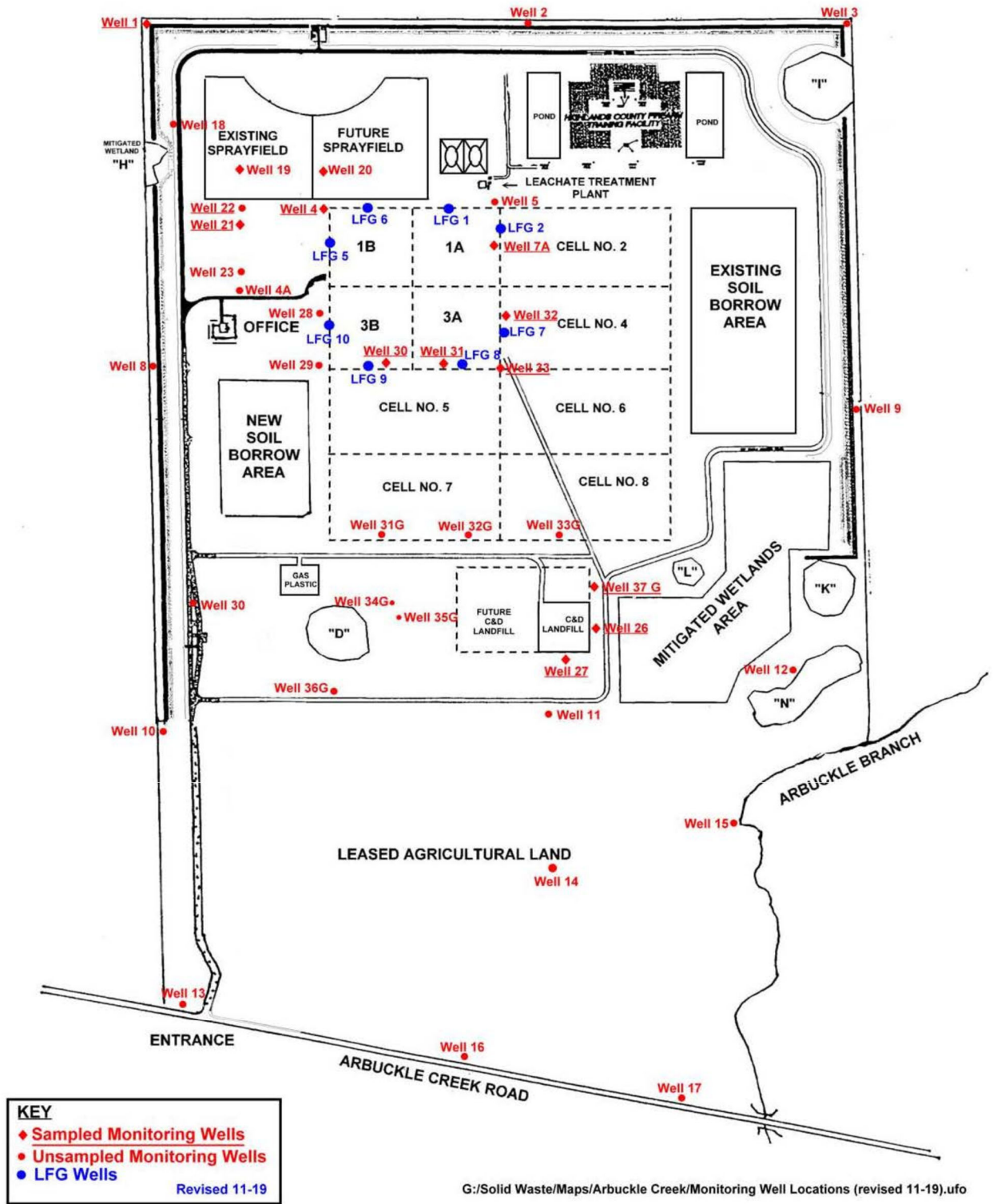
GRAPHIC SCALE
 1" = 100'
 0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100'
 MARCH 2008
 CHOSTAIN
 SKILLMAN
 ENGINEERS - PLANNERS - ARCHITECTS
 CONSULTANTS
 INCORPORATED
 1000 W. UNIVERSITY AVENUE
 SUITE 100
 GAITHERSBURG, MD 20878
 TEL: 301-981-9300
 WWW.CHOSTAIN.COM

AERIAL OF HCSWMC



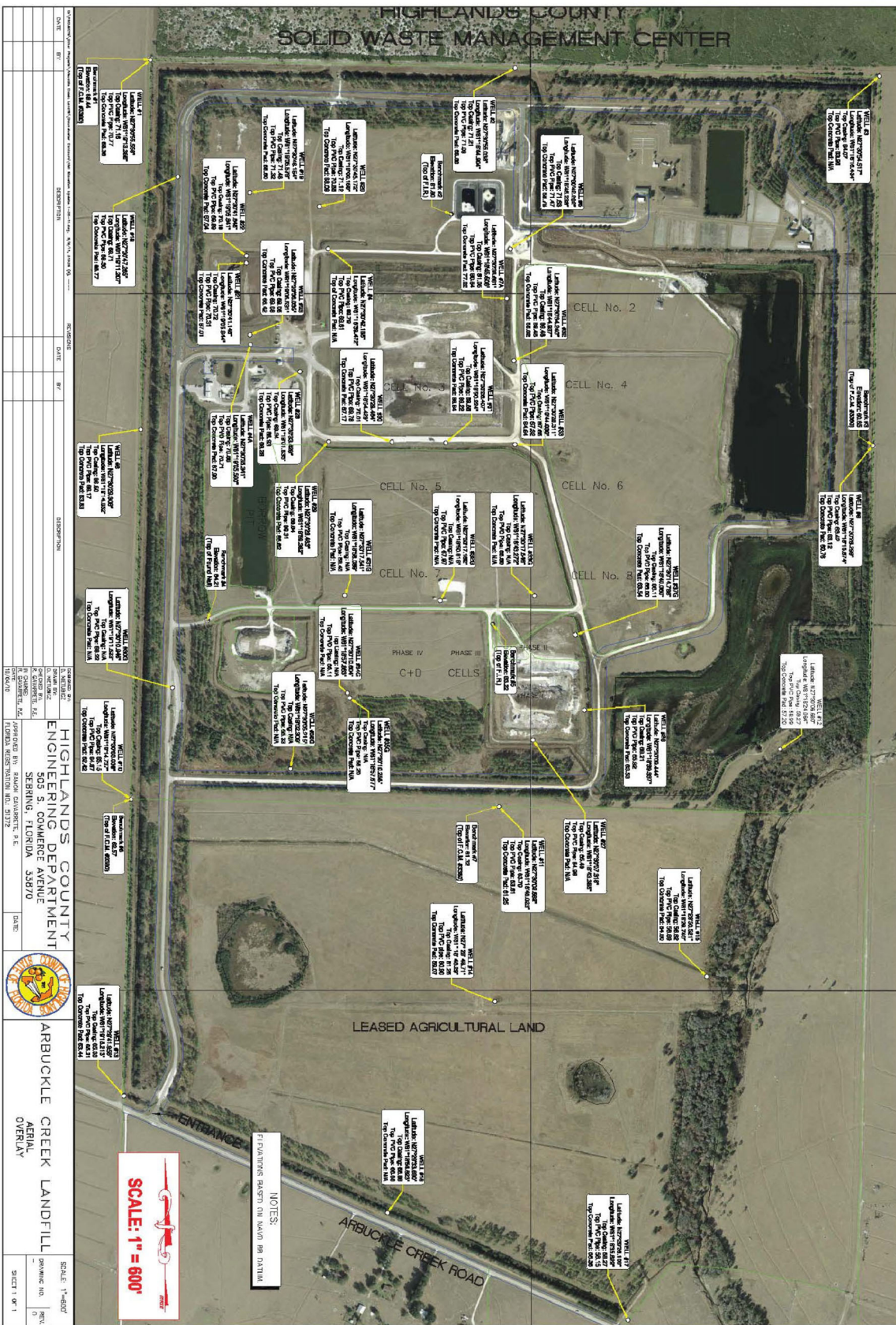
MAP OF HCSWMC MONITORING WELLS AND LANDFILL GAS WELLS

Location of Groundwater Monitoring Wells at the Highlands County Solid Waste Management Center



AERIAL MAP OF HCSWMD MONITORING WELLS

AERIAL MAP OF HCSWMC MONITORING WELLS



DATE: 03/11/2019	DATE: 03/11/2019	DATE: 03/11/2019	SCALE: 1"=800'
DESIGNED BY: [Redacted]	DESIGNED BY: [Redacted]	DESIGNED BY: [Redacted]	DRAWING NO. [Redacted]
CHECKED BY: [Redacted]	CHECKED BY: [Redacted]	CHECKED BY: [Redacted]	REV. [Redacted]
DATE: 03/11/2019	DATE: 03/11/2019	DATE: 03/11/2019	SHEET 1 OF 1

HIGHLANDS COUNTY
ENGINEERING DEPARTMENT
 505 S. COMMERCIAL AVENUE
 SEBRING, FLORIDA 33870



ARBUCKLE CREEK LANDFILL
AERIAL
OVERLAY

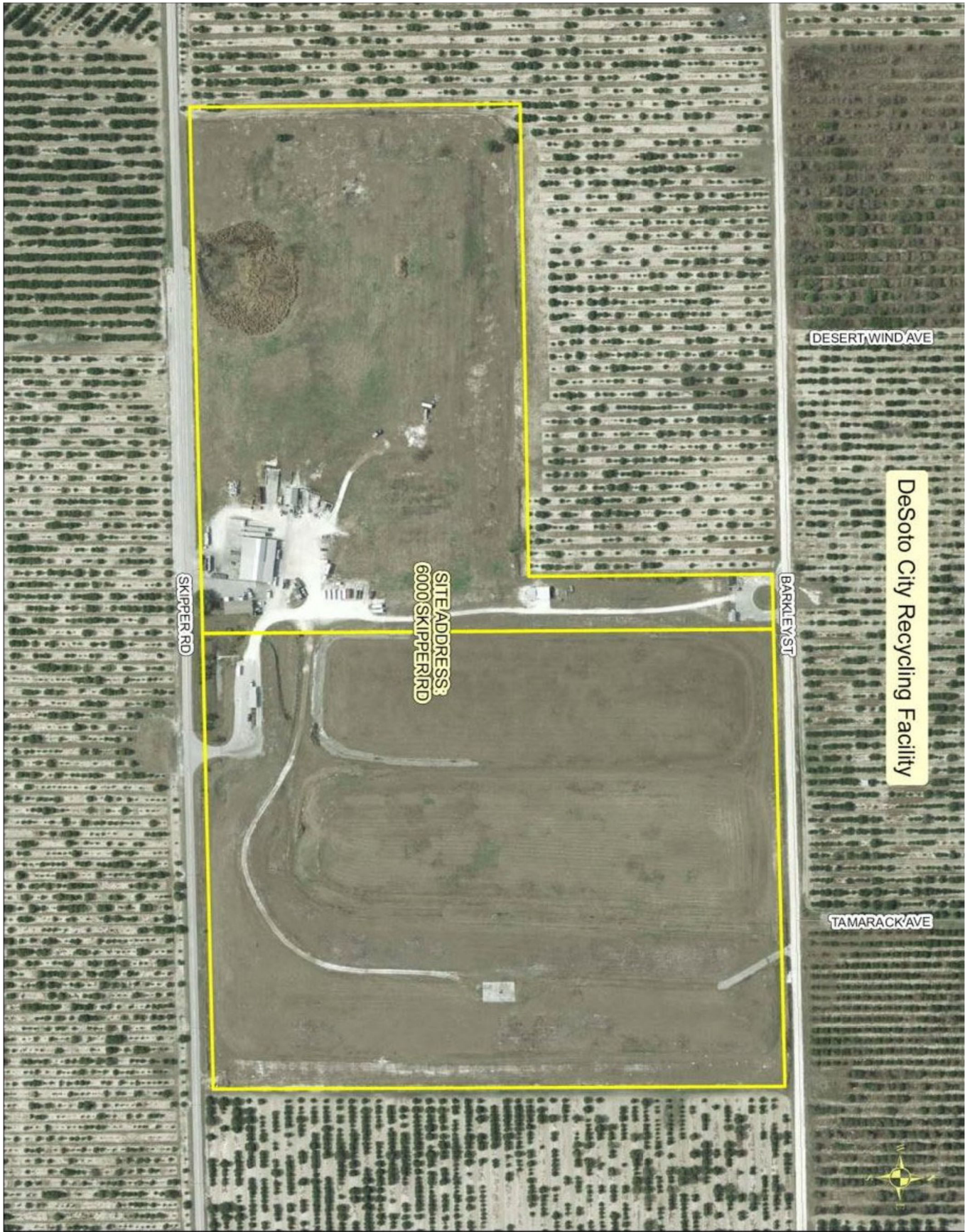


NOTES:
 1. CONSULT THE HAZARDOUS WASTE REGULATIONS FOR THE STATE OF FLORIDA.

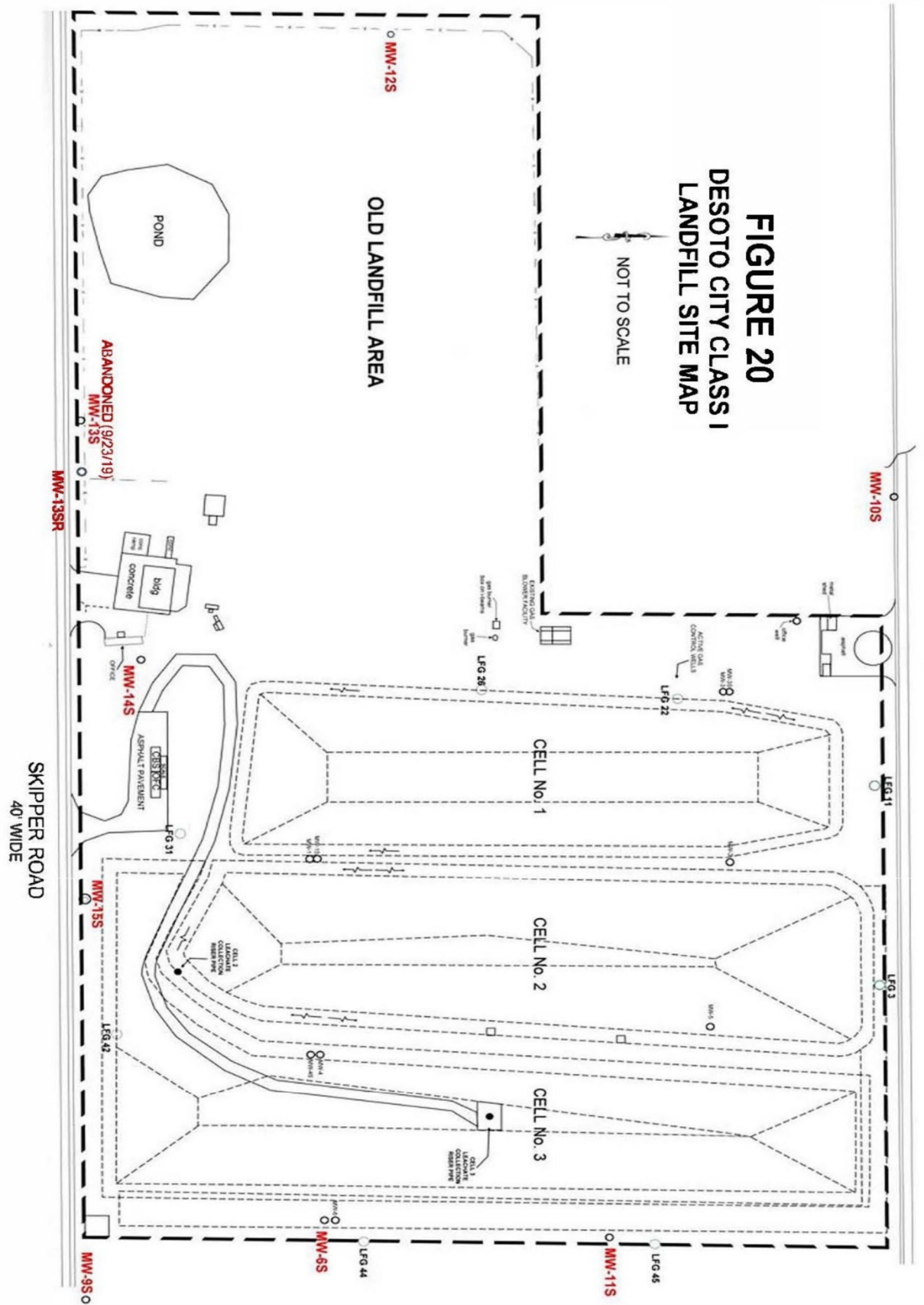
B. Desoto City Landfill (DCL)

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AERIAL OF DCL



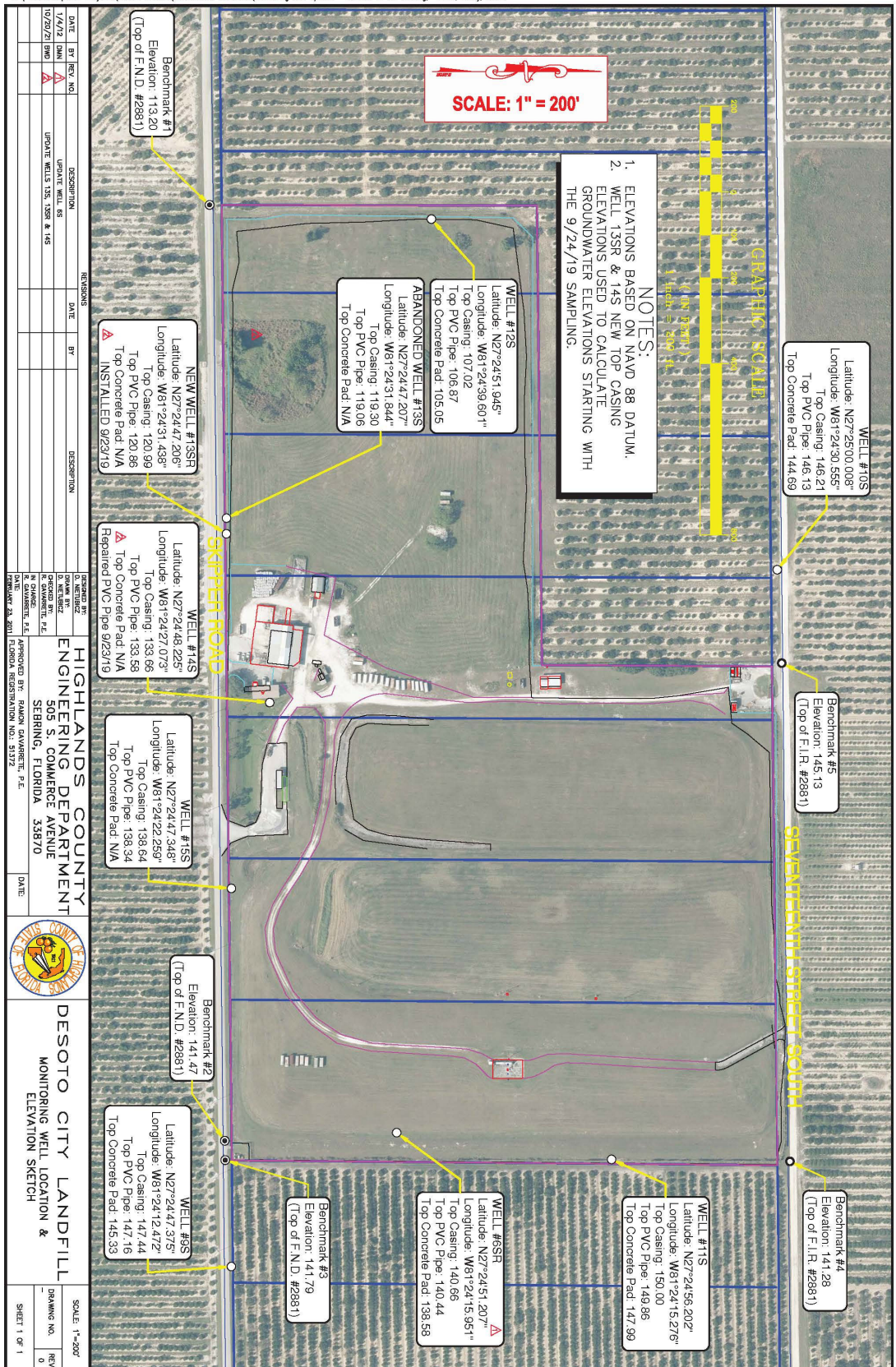
MAP OF DCL MONITORING WELLS AND LANDFILL GAS WELLS



G:\Landfill\Maps\Desoto City MW LFG Map 12-05.dwg

AERIAL MAP OF DCL MONITORING WELLS

G:\PROJECTS\Other Projects\Desoto Landfill\Groundwater Contours\Monitoring Well Update - Revised 10-20-21.dwg, 11X17, Dorey, Bruce -----



SECTION VII. ATTACHMENT

Attachment A: Draft Landfill Systems Operations Plan

Attachment B: Current Permitted Highlands County Solid Waste Management Center Facility Class I Landfill Operations Plan dated July 25, 2019.

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DRAFT

**HIGHLANDS COUNTY
LANDFILL SYSTEMS
OPERATION PLAN**

Prepared for:

Highlands County Board of County Commissioners
600 S. Commerce Avenue
Sebring, Florida 33870

Prepared by:

Jones Edmunds & Associates, Inc.
730 NE Waldo Road
Gainesville, Florida 32641

July 2022

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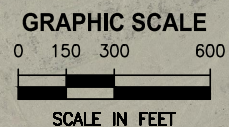
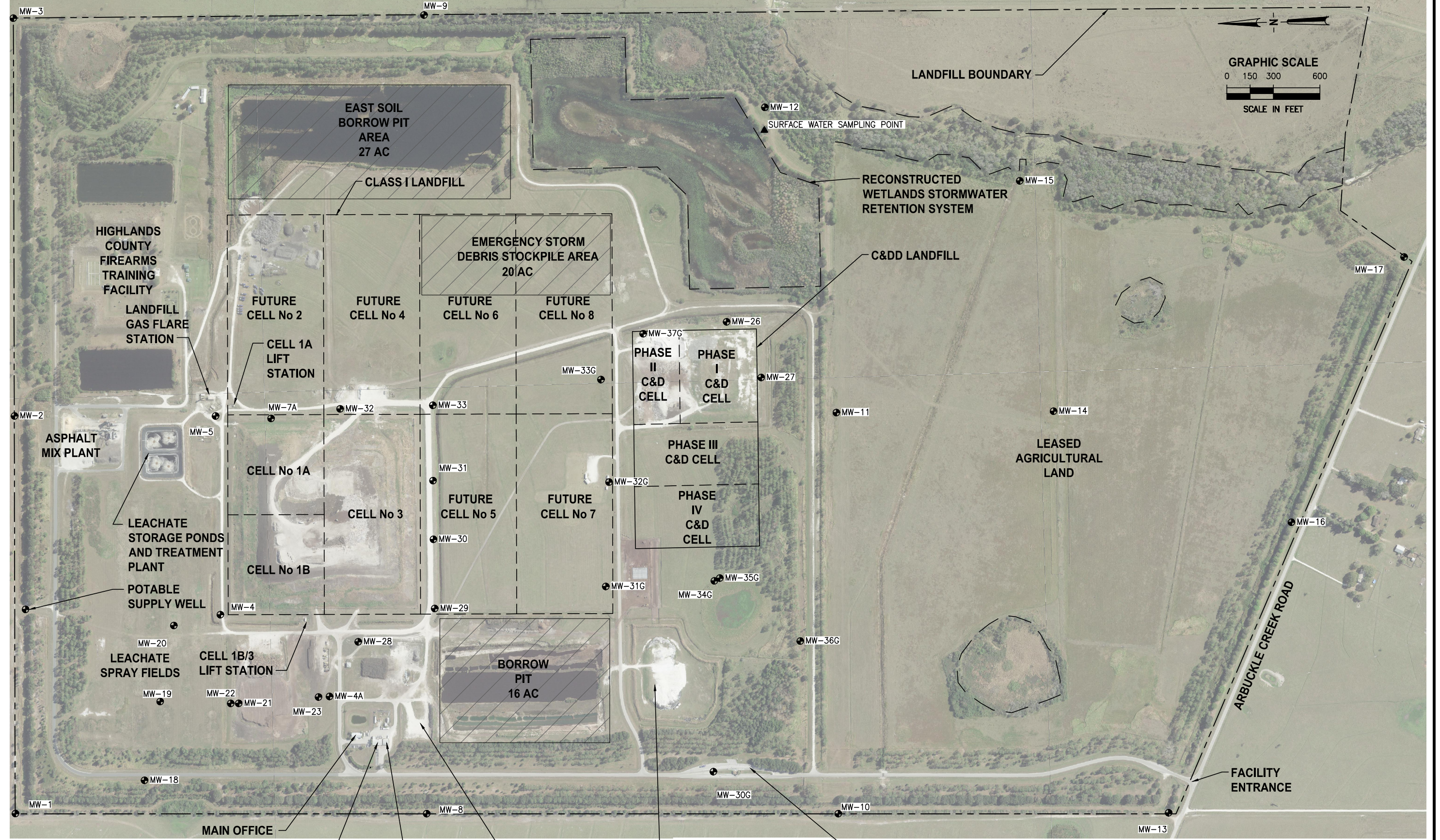
Appendix A	Permit #0038570-033-SO-01
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DRAFT**INTRODUCTION**

The Highlands County Solid Waste Management Center (HCSWMC) is in Highlands County, Florida, on Arbuckle Creek Road, approximately 4 miles from US Route 98. The HCSWMC is owned and operated by the Highlands County Board of County Commissioners. The facility address is 12700 Arbuckle Creek Road, Sebring, Florida 33870. Figure I-1 is the site plan of the facility.

This document serves as the Operation Plan for the on-site Leachate Collection and Treatment System. In addition, this Plan includes details regarding the groundwater monitoring well system and the supply water well and distribution system to ensure that each system is operational, maintained, and meets the Florida Department of Environmental Protection (FDEP) permit requirements. Appendix A provides a copy of FDEP Operation Permit No. 0038570-033-SO-01.

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SOURCE: 2017 AERIAL PHOTOGRAPHY DISTRIBUTED BY FDOT SURVEY & MAPPING OFFICE.

FIGURE I-1
SITE PLAN
HIGHLANDS COUNTY SOLID WASTE MANAGEMENT CENTER
HIGHLANDS COUNTY, FLORIDA

DRAFT**1 LEACHATE TREATMENT SYSTEM OPERATION****1.1 OVERVIEW**

This section discusses the flow of leachate on site (Section 1.2) and how to operate the leachate treatment system to apply leachate to the Sprayfield (Section 1.3) and record all necessary measurements for the system (Section 1.4) in compliance with the Florida Department of Environmental Protection (FDEP) Permit No. 0038570-033-SO-01. Leachate should be sent in *batches* of 17,500 gallons each to the on-site Sprayfield, which is divided into 12 contiguous zones. The maximum allowable amount of leachate that can be sent to the Sprayfield per day is 17,500 gallons dispensed to a single zone (or 35,000 gallons to two separate Sprayfield zones per day). Each day, a Daily Pump Report (Figure 1-1) must be completed, which is a series of measurements that must be taken when operating the system. These measurements include those for flowmeters, pumps, and rain gauges for various instruments on site.

1.2 LEACHATE FLOW ON SITE AND TREATMENT SYSTEM DESCRIPTION

Figure 1-2 and Figure 1-3 depict the leachate treatment system. Key parts of the system are numbered in the order that leachate would flow through, except for the lift stations, which pump *raw* leachate to the leachate impoundment basins. Leachate generated by Cells 1 and 3 before reaching the impoundment basins is referred to as *raw* leachate since no pretreatment will have occurred. The leachate treatment system is designed to provide preliminary aeration and filtration to the leachate before land application onto the Sprayfield. Leachate that has reached the impoundment basins will be referred to as *basin* leachate, and leachate that is pumped from the Triplex Pump Station to the Sprayfield is labeled as *treated* leachate. Table 1-1 identifies the major components and locations of the leachate treatment that are described in this document.

Table 1-1 List of Leachate Treatment System Components

Item	Number	Description/Function
Cell 1A Lift Station	#1A	Pumps leachate generated by Cell 1A to leachate impoundment basins.
Cell 1B/3 Lift Station	#1B	Pumps leachate generated by Cells 1B and 3 to leachate impoundment basins.
Leachate Impoundment Basins	#2	Stores leachate and provides preliminary aeration treatment.
Master Lift Station (MLS)	#3	Pumps leachate through treatment system and back to impoundment basins, if required.
Flowmeter TP-7	#4	Monitors leachate flow from MLS to Dosing Pump Station.
Manhole	#5	Directs flow from MLS to Dosing Pump Station and overflow from Recirculation Chamber to Dosing Pump Station.
Dosing Pump Station	#6	Pumps leachate into the Sand Filters.

DRAFT

Item	Number	Description/Function
Sand Filters	#7	Filters leachate using sand from the Dosing Pump Station.
Recirculation Chamber	#8	Directs leachate to storage tank/pump station for application at Sprayfield; overflows get redirected back to into system.
Chlorination Chamber	#9A	Historically used for disinfecting leachate (no longer performed).
Chlorination Building	#9B	Historically used for storing chlorine used for disinfection process (no longer performed).
Effluent Storage Tank	#10	Temporarily stores treated leachate prior to Sprayfield application.
Triplex Pump Station	#11	Pumps treated leachate to Sprayfield.
Manifolds	#12	Controls which zones of the Sprayfield receive leachate.
Sprayfields	#13	Twelve contiguous zones on-site that receive treated leachate for final disposal.

Figure 1-2 shows how leachate flows from Cell 1A (#1A) and Cell 1B/3 (#1B) lift stations to the leachate impoundment basins (#2). The impoundment basins are referred to as *West* and *East*, and two aerators operate in each one to provide preliminary aeration treatment. Aerated leachate from the basins is gravity fed to the leachate treatment plant, which is accentuated in Figure 1-3.

Figure 1-3 shows how leachate gravity drains from the impoundment basins to the Master Lift Station (MLS; #3), which pumps leachate on for treatment or back to the leachate impoundment basins. From the MLS, leachate flows toward Flowmeter TP-7 (#4) and the Manhole (#5) and onward to the Dosing Pump Station (#6), which pumps leachate through the Sand Filters (#7). Filtered leachate enters the Recirculation Chamber (#8), passes through the Chlorination Chamber (defunct, #9A), and is stored in the Effluent Storage Tank (#10), which passes leachate to the Triplex Pump Station (#11). From the Triplex Pump Station, leachate is pumped via the Manifolds (#12) and applied to the Sprayfield areas (#13) for final disposal according to Permit No. 0038570-033-SO-01.

DRAFT

Figure 1-1 Daily Pump Report

Daily Pump Report

Highlands County Solid Waste Management Center

Date: _____ Operator: _____
 Time: _____ Weather Condition: _____

Master Lift Station
Meter Hours

Pump 1 _____ *Treatment Plant*
 Pump 2 _____ *Elv* _____

Triplex Pump Station
Meter Hours

Pump 1 _____ *Sprayfield*
 Pump 2 _____ *Sprayfield*
 Pump 3 _____ *Sprayfield*

Leachate Basin Aerator
Hours

No. 1 _____
 No. 2 _____
 No. 3 _____
 No. 4 _____

Rain Data

W/WTP _____ inches
 Office _____ inches
 Weir Staff Gauge _____
 Office Staff Gauge _____
 Basin Staff Gauge: (W) _____ (E) _____

Flow Meters

C-1A _____ *Cell 1A*
 C-1B _____ *Cell 1B*
 C-3 _____ *Cell 3*
 LB-4 _____ *8" Gravity Flow to MLS*
 LBR-5 _____ *MLS Return to Basins*
 TP-7 _____ *Treatment Plant*
 B-9 _____ *Basin Hydrant*

Temp Heater Staff

Sand Filter

West

East

Dosing Pump Station
Meter Hours

Pump 1 _____
 Pump 2 _____

Cell 1A Lift Station
Meter Hours

Pump 1 _____
 Pump 2 _____

Cell 1B Lift Station
Meter Hours

Pump 1 _____
 Pump 2 _____

12" well/pump irrigation
 Meter reading _____

Treatment Plant Flow Meter (SP-8)

Start reading _____
 Stop reading _____

Active zone	1	2	3	4	5	6
	7	8	9	10	11	12

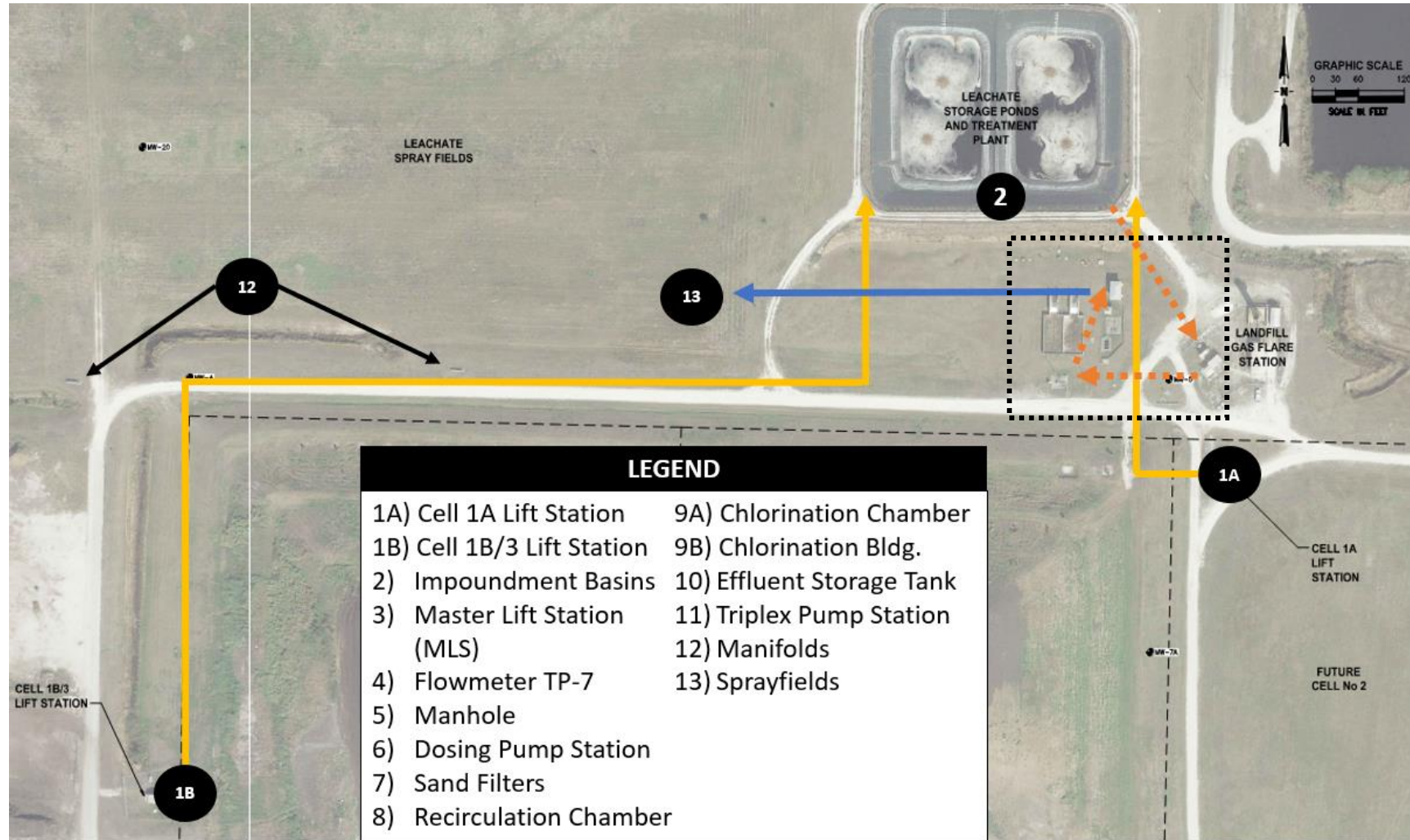
Gas Flare

Volume _____ H_2S _____
 Methane _____ O_2 _____
 Temperature _____ CO _____
 Temp at pipe _____ LEL _____
 Vacuum _____
 Mark III _____

Leachate

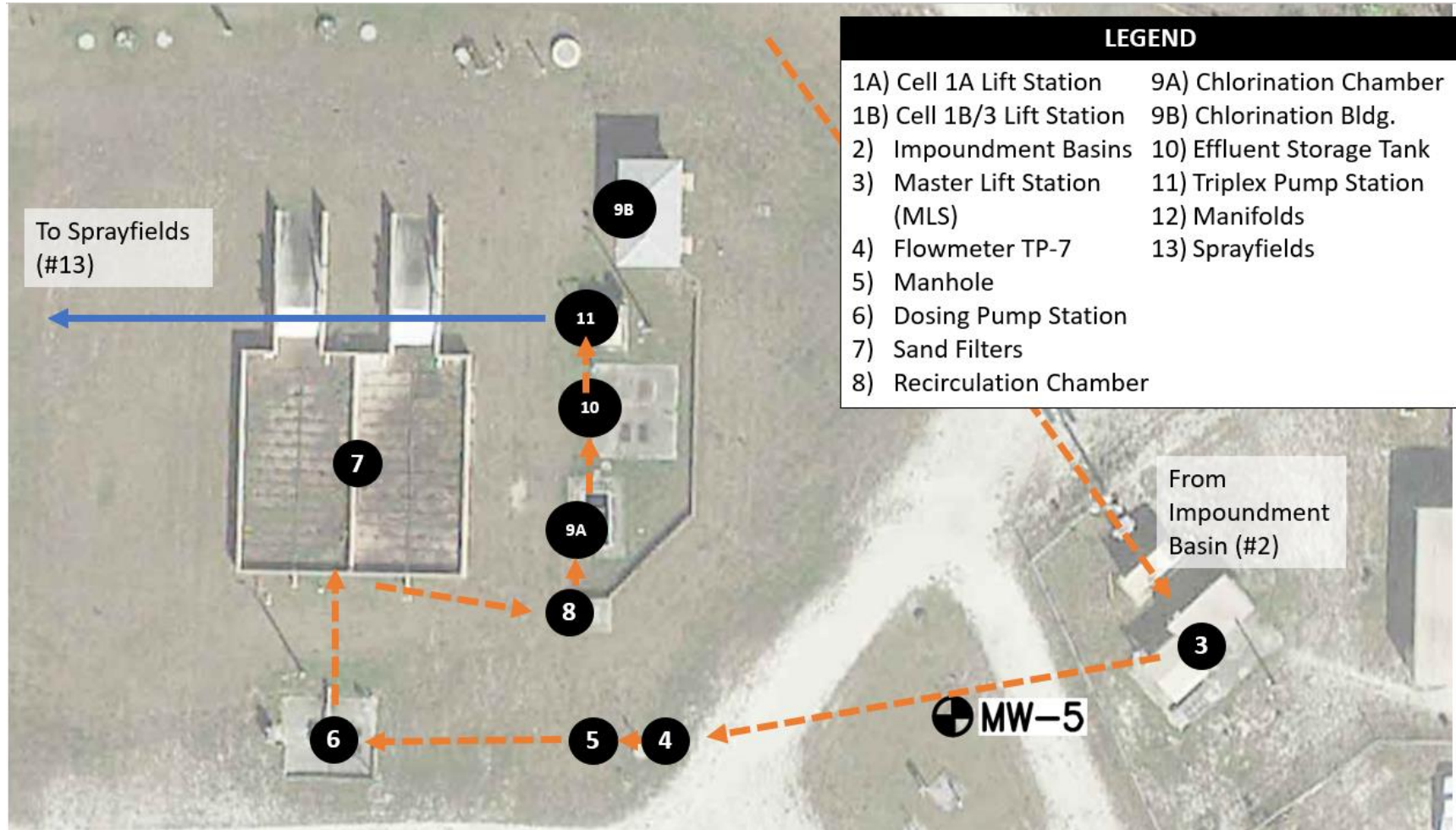
1B	3	1A
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COMMENTS: _____

DRAFT**Figure 1-2 Overview of the On-Site Leachate Generation, Treatment, and Disposal System**

Notes: The rectangular dashed section is zoomed in on Figure 1-3, which is the leachate treatment plant.

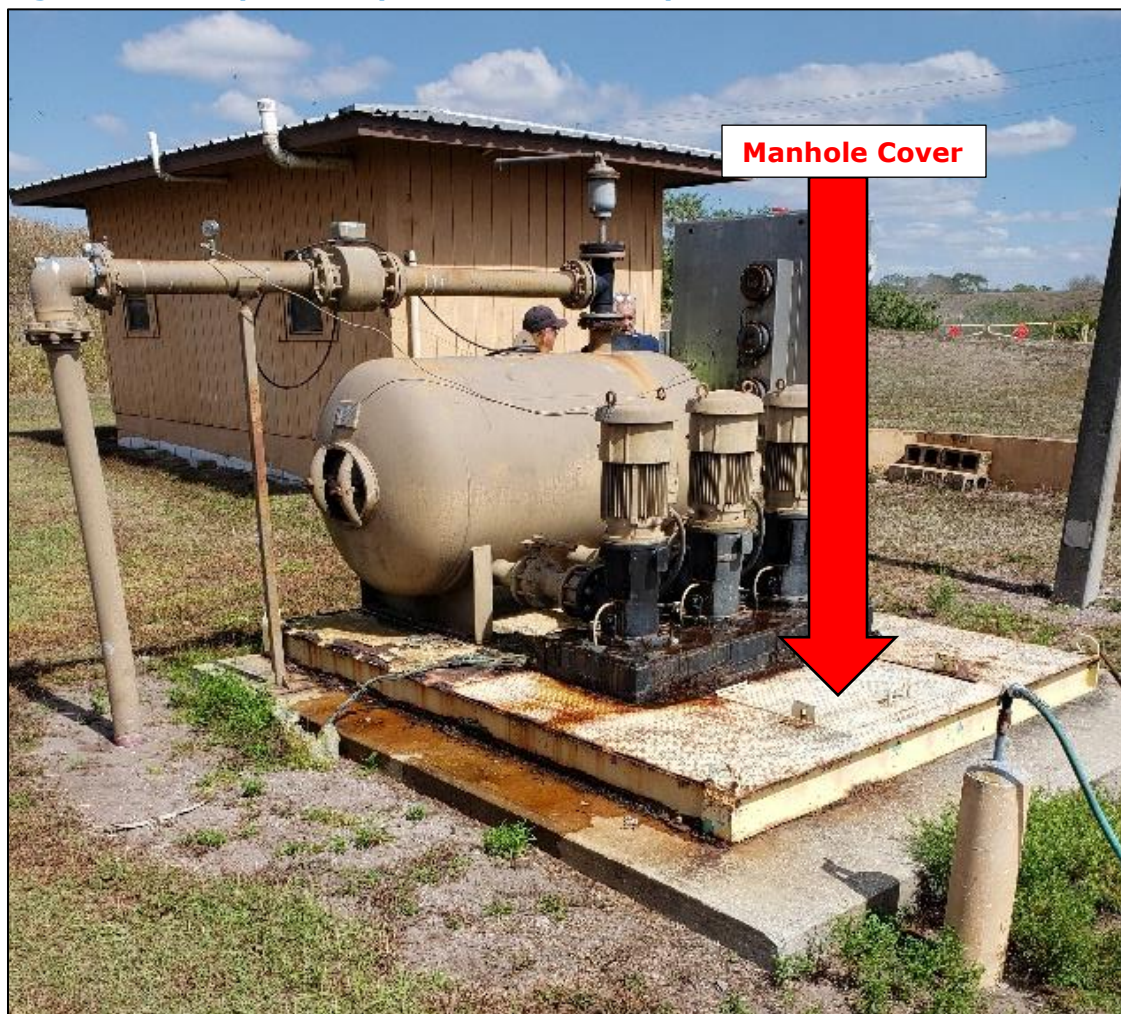
Numbers refer to the order of leachate flow (#3 through #11 are on Figure 1-3). Solid yellow lines refer to *raw* leachate flow (from landfill cells); dashed orange lines refer to *basin* leachate flow (leachate from the impoundment basins); solid blue lines/arrows refer to *treated* leachate flow (leachate pumped from the Triplex Pump Station after treatment to the Sprayfield).

DRAFT**Figure 1-3 Leachate Treatment System Overview in Order of Leachate Flow Through the System**

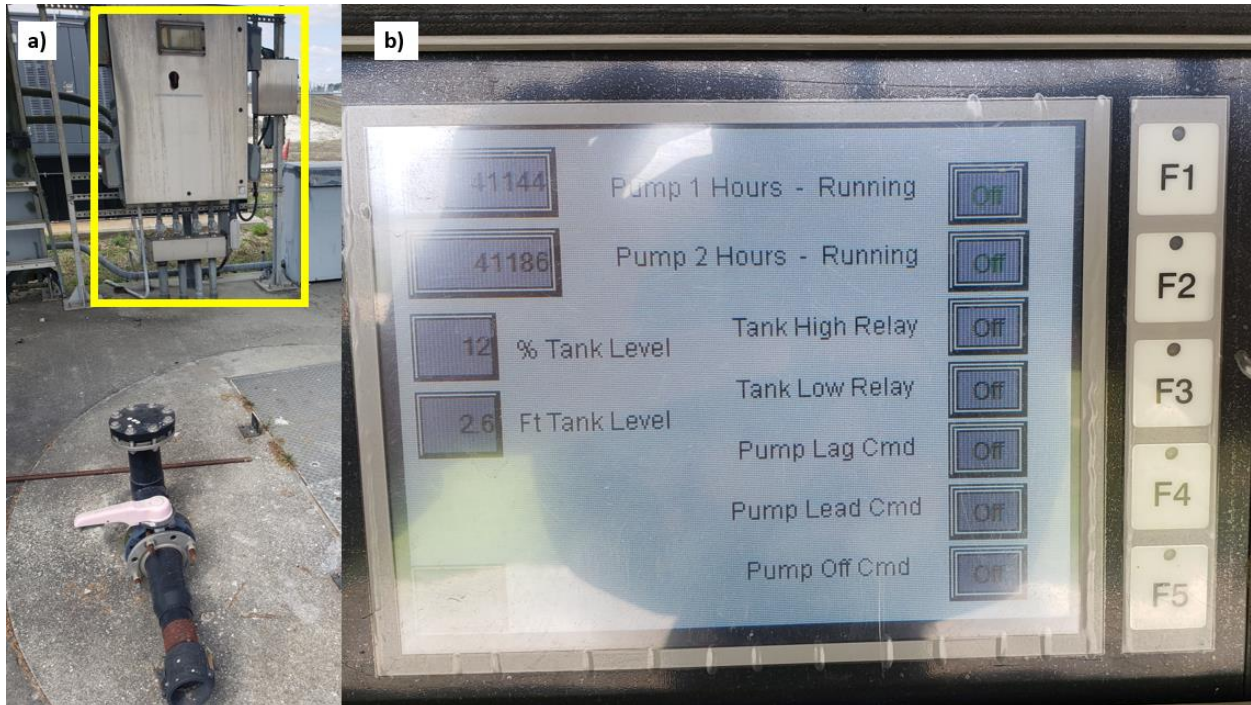
Notes: Numbers refer to the order of leachate flow (#3 through #11 on Figure 1-3). Dashed orange lines/arrows refer to *basin* leachate flow (leachate from the impoundment basins); solid blue lines/arrows refer to *treated* leachate flow (leachate pumped from the Triplex Pump Station after treatment to the Sprayfield).

DRAFT**1.3 SENDING LEACHATE TO THE SPRAYFIELDS**

1. Check the Triplex Pump Station (Figure 1-3, #11) to verify that a batch of leachate can be sent to the Sprayfield based on the leachate level in the Triplex Pump Station.
2. At the Triplex Pump Station, lift the manhole sump cover (Figure 1-4). Inspect the level of leachate. If the leachate is within 2.5 feet of the top of the hatch, a full batch of treated leachate is available to send to the Sprayfield; proceed to Step 19. If not, proceed to Step 3.

Figure 1-4 Triplex Pump Station with Sump Cover Marked**Filling the MLS**

3. Locate the MLS (#3 on Figure 1-3). Figure 1-5a provides a ground-level view of the MLS.
4. The MLS pumps are preset using the onboard electronics to start pumping at 20-percent tank level and will pump until they reach 10-percent tank level. The leachate will pump to the Dosing Pump Station (#6 on Figure 1-3). From there, the leachate will begin feeding the entire treatment system starting with the Sand Filters (#7 on Figure 1-3). Figure 1-6 shows how the pump menu is accessed at the MLS station.

DRAFT**Figure 1-5 MLS (a) and Associated Valves – MLS-1 (b) and MLS-2 (c)****Figure 1-6 MLS (a) and Digital Pump Control Screen (b)**

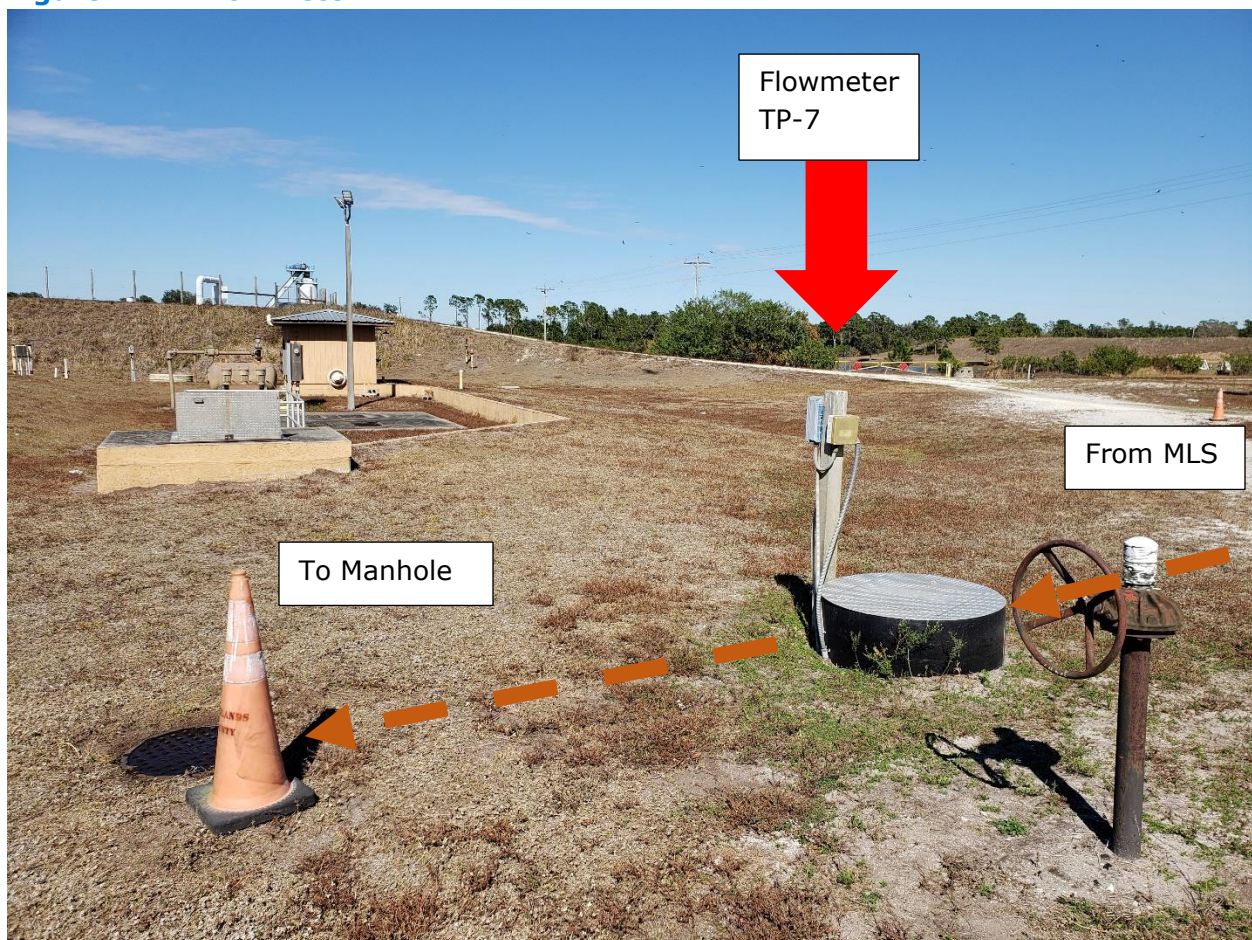
5. If the MLS is not at 20-percent tank level, Valve MLS-1 will need to be opened to allow leachate from the basins to gravity drain into the system. Turn Valve MLS-1 (Figure 1-5b) approximately eight turns to open while watching the leachate level in the MLS on the digital screen (Figure 1-6) to ensure that it is rising after opening Valve MLS-1.

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6. **NOTE:** Leachate can be returned to the impoundment basins **ONLY** from the MLS using the 6-inch line connected to Valve MLS-2 (Figure 1-5c). **VALVE MLS-2 SHOULD REMAIN OPEN AT ALL TIMES UNLESS CLOSING IT IS NECESSARY FOR MAINTENANCE. CLOSING THIS VALVE COULD RESULT IN LEACHATE OVERFLOW.** Leachate that overflows at the Recirculation Chamber (#8 in Figure 1-3), flows back to the MLS and the impoundment basin simultaneously. Flow returned to the basins can be checked by observing Flowmeter LBR-5 to see how much is returned (see Section 1.4 for in-depth discussion).

Flowmeter TP-7 and Manhole

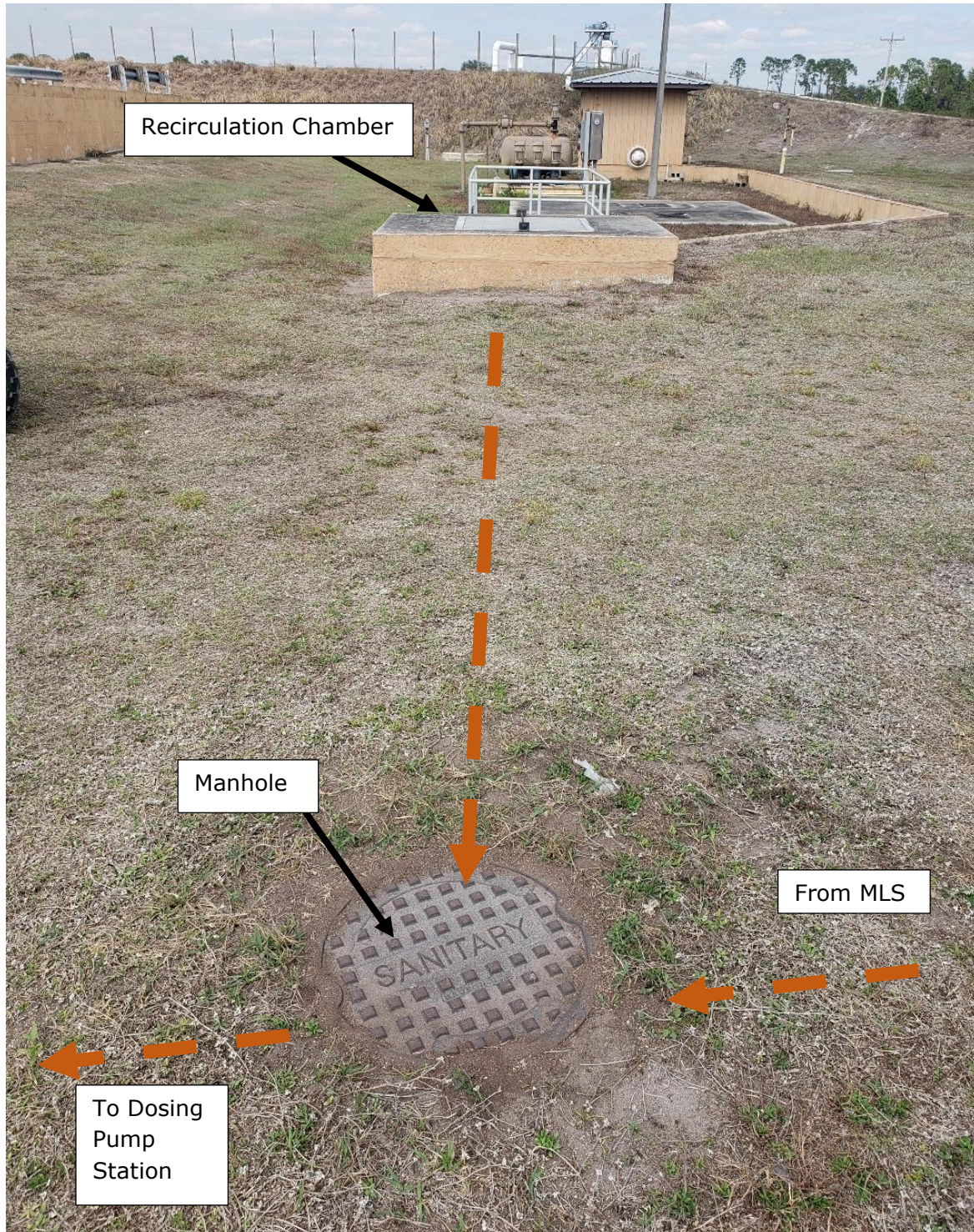
7. Flowmeter TP-7 (#4, Figure 1-3) is between the MLS and the Dosing Pump Station (Figure 1-7). The arrow indicates the flow of leachate as it begins from the MLS (not shown in Figure 1-7), passing through Flowmeter TP-7, to the Dosing Pump Station (not shown in Figure 1-7). This flowmeter measures the flow leaving the MLS to be treated. Watch this meter as the MLS pumps flow to monitor the volume going into the Dosing Pump Station. For sending a single leachate batch to the Sprayfield, assuming the Triplex Pump Station is at empty (refer to Step #2 on how to check this), this should be approximately 17,500 gallons.

Figure 1-7 Flowmeter TP-7

Note: Arrows indicate the flow path for leachate.

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8. The Manhole (#5 on Figure 1-3) is approximately 10 feet west of Flowmeter TP-7 between the MLS and the Dosing Pump Station (Figure 1-8). This is where excess leachate from the Recirculation Chamber (#8 on Figure 1-3) meets incoming flow from the MLS as the combined flow makes its way to the Dosing Pump Station. The purpose of the Recirculation Chamber is discussed further in Step #16.

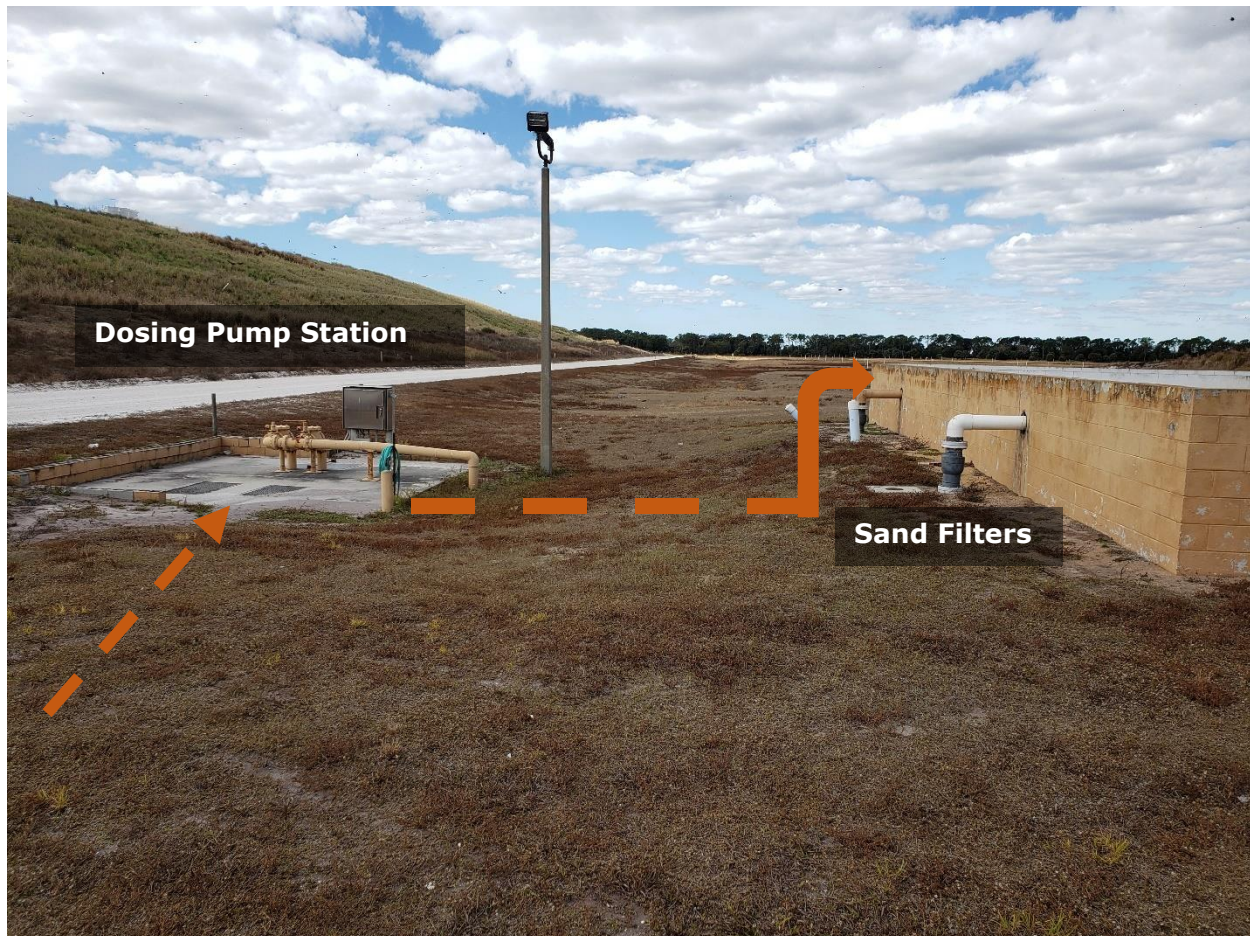
Figure 1-8 Manhole and Recirculation Chamber to the North

Note: Arrows indicate the flow path for leachate.

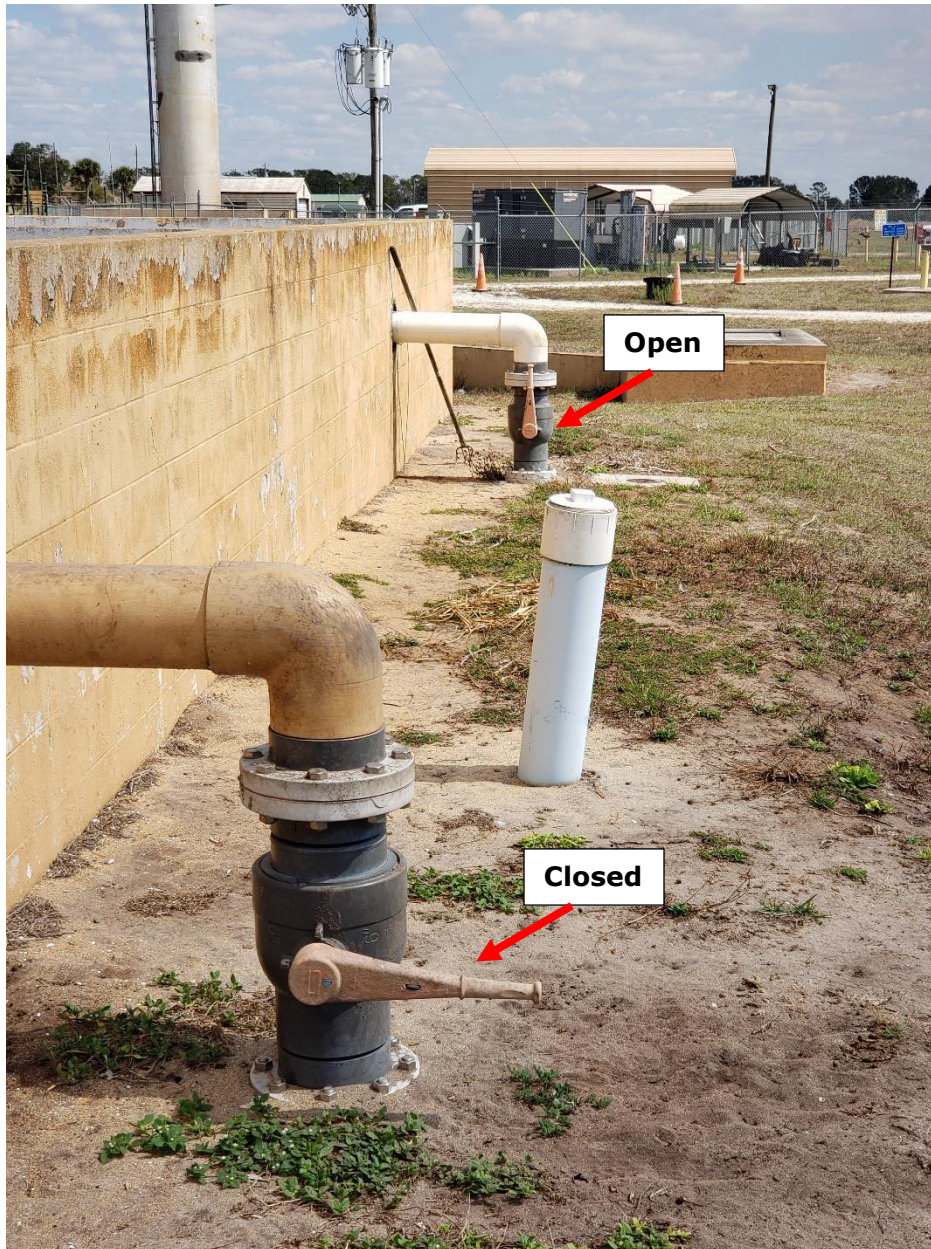
DRAFT**Dosing Pump Station**

9. Locate the Dosing Pump Station (#6 on Figure 1-3). Leachate is pumped from this station through the Sand Filters (flow shown in Figure 1-9).
10. Ensure that the valves are open for each Sand Filter (Figure 1-10). When the lever points directly vertical, the valve is open. When the lever points directly horizontal, the valve is closed.
11. Once the station reaches capacity, the pumps will start automatically and pump leachate through the Sand Filters (Figure 1-9).

Figure 1-9 View of the Dosing Pump Station and Outside South Edge of the Sand Filters



Note: Arrows indicate the flow path for leachate.

DRAFT**Figure 1-10 Sand Filter Valves****Sand Filters**

12. Locate the Sand Filters. Leachate is filtered through the Sand Filters (#7 on Figure 1-3) (Figure 1-11), which are part of the leachate treatment before applying onto the Sprayfield.
13. The system contains two Sand Filter cells – west and east. This system should be operated so that only one cell per week is used and the cells are alternated weekly. This allows each cell to fully drain. The cell in use should be marked (checked) in the Daily Pump Report.
 - a. The two cells are 50-foot by 25-foot each. The leachate distribution system in each filter cell consists of one 6-inch high-density polyethylene (HDPE) header and

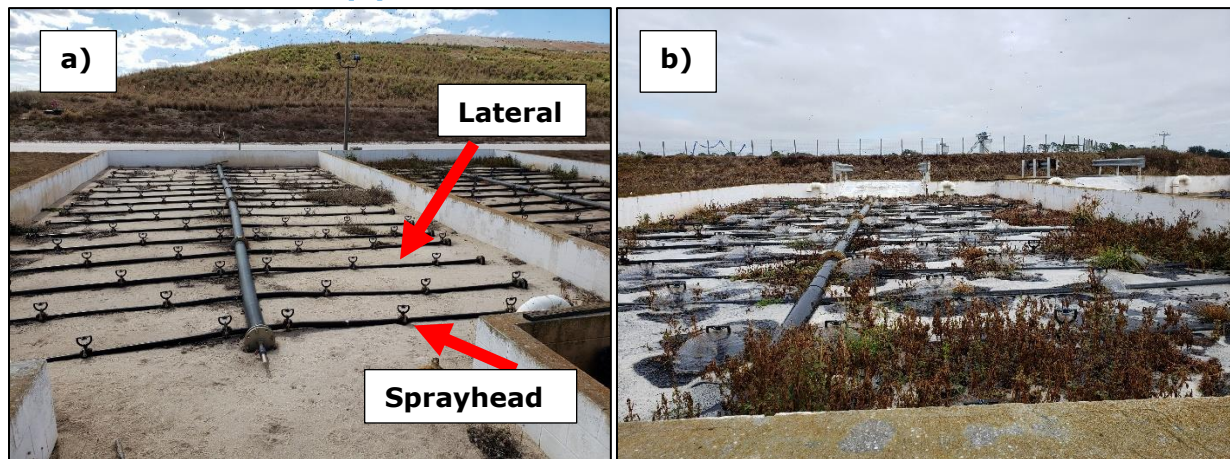
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32 HDPE laterals that are 2 inches each and are at 3-foot intervals of each other. Each lateral is approximately 11 feet long and has three 3/8-inch orifices with sprinklers at each end. Leachate flows through the main header and is sprayed out over the sand via the laterals from 360° sprinklers within each cell. Each sprinkler is spaced at 4-foot intervals. The Sand Filters have a 24-inch layer of coarse sand that overlies an 18-inch gravel layer.

- b. The Sand Filters should be maintained to prevent overgrowth of vegetation (as shown in Figure 1-11b). All County safety and health protocols must be followed when removing the vegetation.
- c. The sprinklers can clog and will need to be maintained (i.e., cleaned out) or replaced routinely.

14. Leachate percolates through the Sand Filters, collects in a perforated 6-inch HDPE pipe at the bottom of each cell, and drains into the Recirculation Chamber (#8 in Figure 1-3).

Figure 1-11 Interior of Sand Filter Cells With No Leachate (a) and With Leachate (b)



15. **NOTE:** Sand media requires replacement approximately every 2 to 3 years. The desired sand media consists of an effective grain size (D10) approximately 0.94 millimeter (mm) and a uniformity coefficient of 1.33. The media is a high-grade silica sand with a shape generally described sub-angular to sub-rounded. The gravel media is a granite stone ranging in size from 3/8 to 3/4 inch and is typically replaced every other time the sand media is replaced (approximately every 4 to 6 years).

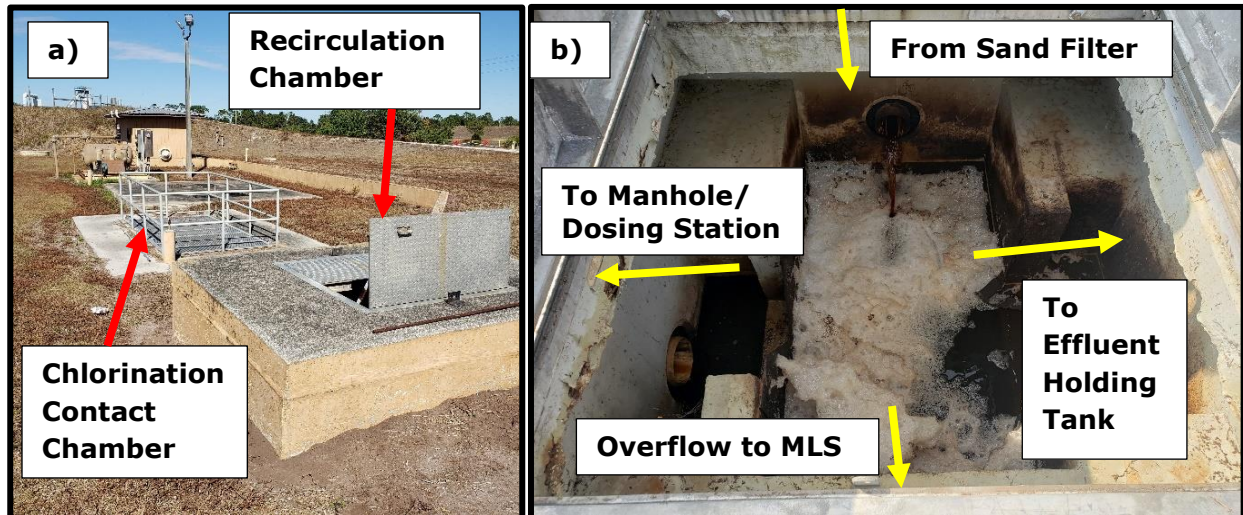
Recirculation Chamber

16. The Recirculation Chamber (#8 in Figure 1-3; pictured in Figure 1-12a) is a rectangular concrete box that houses four flow chambers and two V-notch weirs. Discharge from the Sand Filters flows to the central chamber. Figure 1-12b shows the flow direction and where the flow goes.

- a. On the north side, a 30° V-notch weir directs flow to the north side-chamber that discharges through an 8-inch polyvinyl chloride (PVC) pipe into the disinfectant contact chamber (and subsequently to the effluent storage/Triplex Pump areas).

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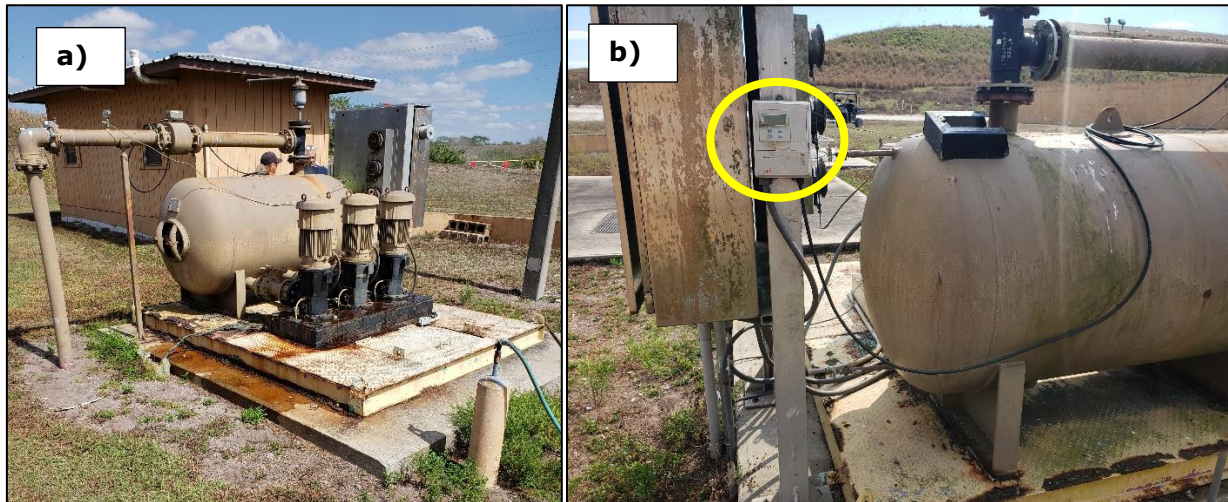
- b. On the south side of the central chamber, a 60° V-notch set at the same elevation as the 30° weir directs flow to the south side of the chamber, through an 8-inch PVC pipe, to the south manhole/dosing pump station. **NOTE: Weir heights can be adjusted as necessary.**
- c. The east chamber is separated from the central, north, and south chambers by a dividing wall. The east chamber accepts backed-up flow from the contact chamber and effluent storage/pump and discharges it through an 8-inch pipe to the MLS.

Figure 1-12 Recirculation Chamber (a) and Interior of Chamber, Facing West (b)**Chlorination Contact Chamber**

17. The Chlorination Contact Chamber is #9A on Figure 1-3. Historically, leachate going through the system may have been chlorinated before Sprayfield application (Figure 1-12a); **however, leachate is no longer chlorinated.** Chlorine was stored in the Chlorination Building (#9B on Figure 1-3).
18. Leachate flows through the chlorination chamber to the Effluent Storage Tank and Triplex Pump Station (#10 and #11 on Figure 1-3, respectively).

Effluent Storage/Triplex Pump Station

19. The Effluent Storage Tank (#10 on Figure 1-3) provides storage for treated leachate to be applied onto the Sprayfield. This storage tank has an approximate 19,400-gallon capacity. Excess leachate backs up into the Chlorine Contact Chamber, through the Recirculation Chamber, into the flow-splitting manhole, and lastly to the MLS to be re-pumped into the impoundment basins, if necessary.
20. The Triplex Pump Station (#11 on Figure 1-3) is an 8-foot-diameter, 13-foot-deep wet well that contains three pumps and a flowmeter (Figure 1-13). This pump station is positioned such that the Effluent Storage Tank can completely drain into this well before the low-level shut-off switch disables the pumps.
21. Watch for the leachate to fill the Triplex until the leachate level is approximately 30 inches (2.5 feet) or less from the top of the Manhole.
22. **STOP:** Before sending off leachate, open the valves at the Manifolds (#12 on Figure 1-2) for the Sprayfield zones to receive the leachate.

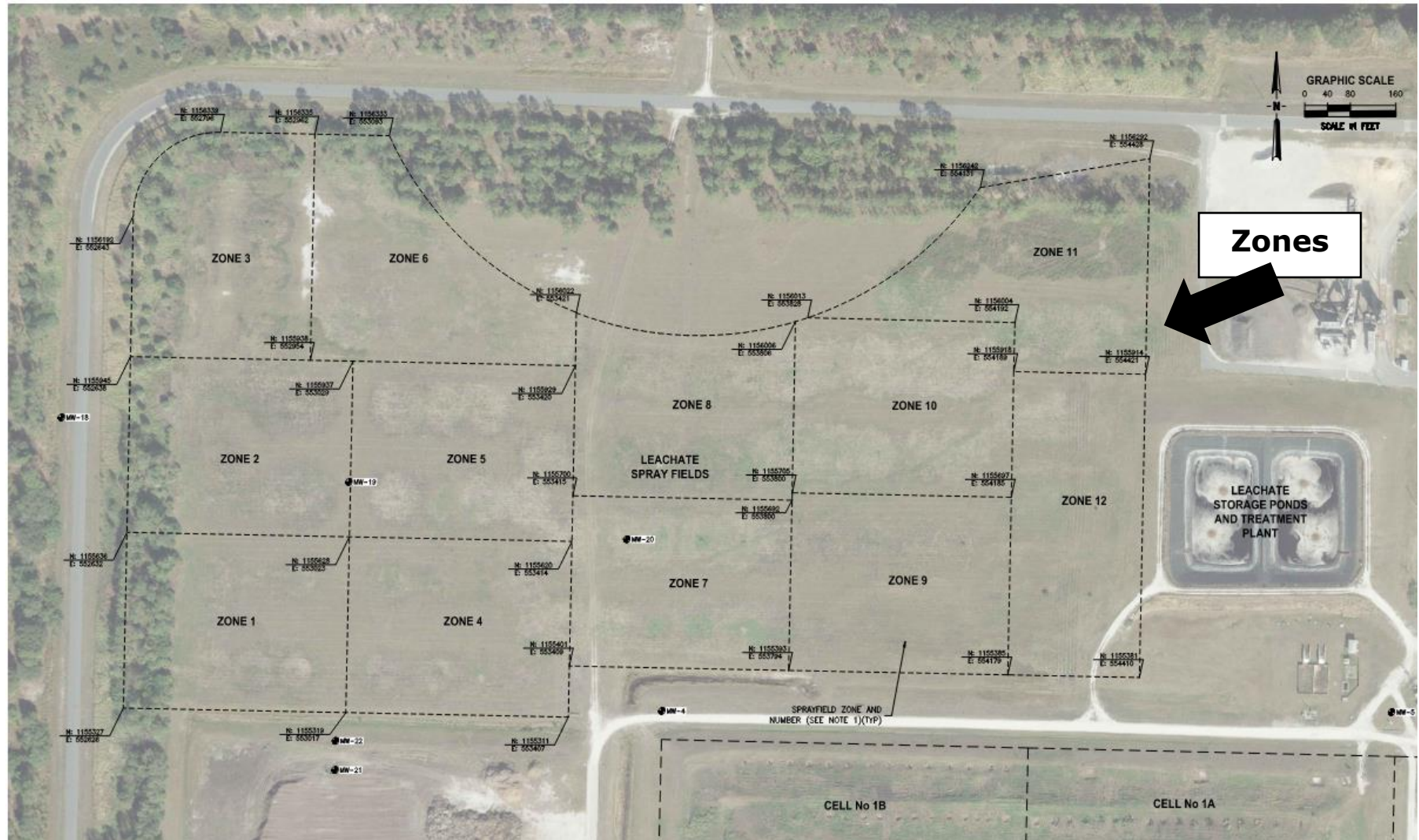
DRAFT**Figure 1-13 Triplex Pumping System (a) and Flowmeter SP-8 Behind It (b)****Sending to Sprayfield**

23. An 8-inch effluent force main feeds leachate from the Triplex Pump Station to the Sprayfield zones (Figure 1-14).
24. Two Manifold systems are used to control flow to each Sprayfield zone by turning the valve corresponding to the desired zone (Figure 1-2 shows the relative location of each Manifold; Figure 1-15 provides a close-up view). Each Manifold valve is labeled to the zone that it opens/shuts off flow to.
25. The 12 Sprayfield zones are intended to be used in a rotational sequence, receiving two leachate batches per day (not to exceed 35,000 gallons total per day) to two Sprayfield zones simultaneously with two different zones used each day. The table below provides a template for how this works on a weekly basis:

Weekday	Sprayfield Zones
Monday	1 and 6
Tuesday	2 and 5
Wednesday	3 and 4
Thursday	7 and 12
Friday	8 and 11
Saturday	—
Sunday	—
Monday	9 and 10
Tuesday	1 and 6

Note: — = No application occurs on weekends.

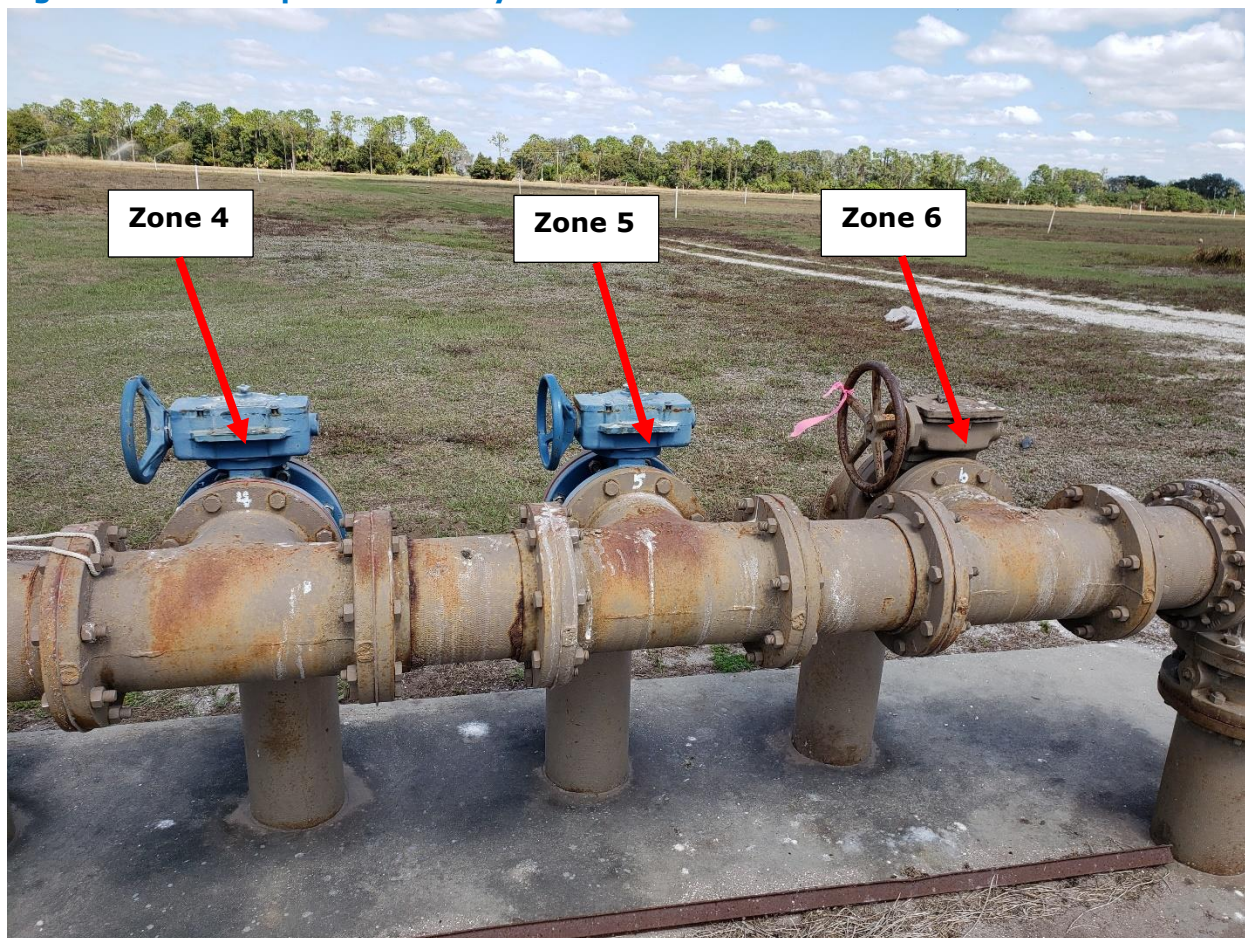
26. Select the intended Sprayfield zone(s) at the Manifold and open the valve(s). Figure 1-15 provides an example of what should be seen at each Manifold.

DRAFT**Figure 1-14 Sprayfield Zones (1 through 12)**

Note: The limits of the Sprayfield zones are provided from two drawing sets titled *Highlands County Solid Waste Management Center Leachate Treatment System*, dated April 8, 1994, and *Highlands County Solid Waste Management Center Sprayfield Expansion & Modifications to Existing Sprayfield*, dated October 24, 2001. Sprayfield zone delineations are approximate.

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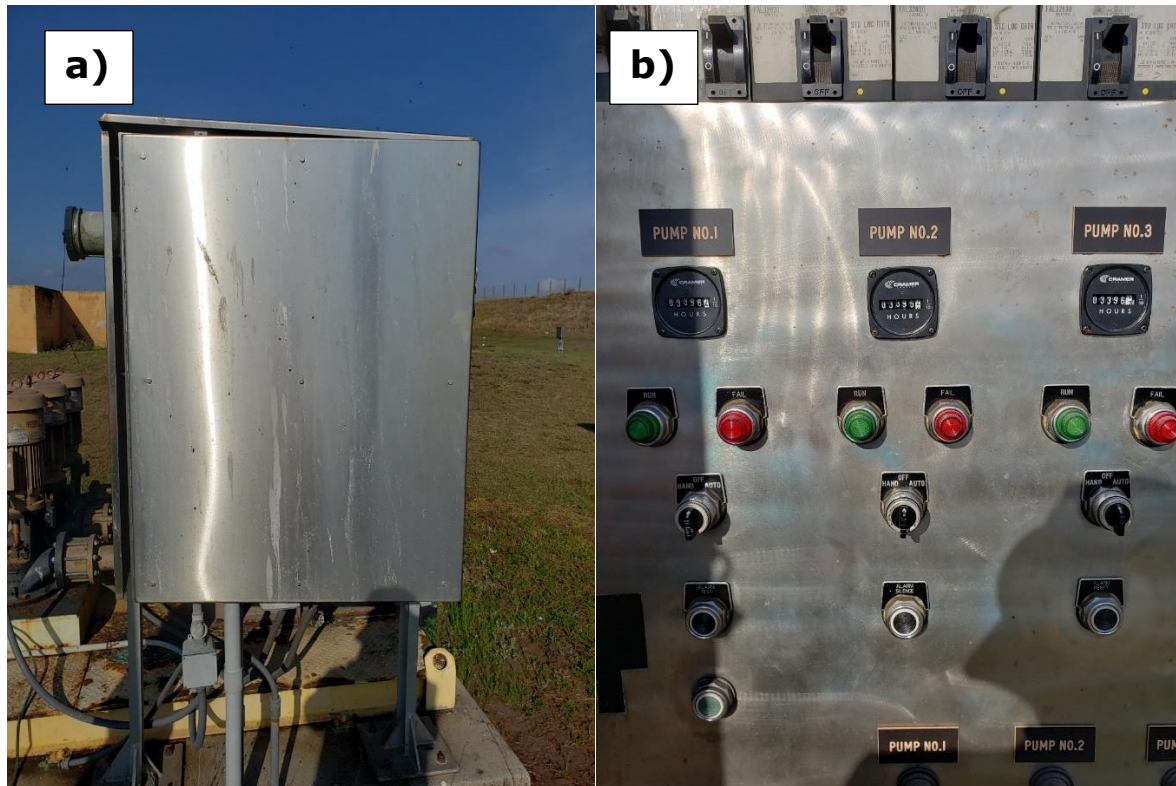
Figure 1-15 Example Manifold Systems with Zones Labeled



- 27. Proceed back to the Triplex Pump Station (#11 on Figure 1-3). Locate the pump and record the starting Flowmeter gauge SP-8 (shown on Figure 1-13b; Figure 1-16 shows where to record the data on the Daily Pump Report). Begin pumping out to the Sprayfield force main by switching from *Off* to *Hand*. Figure 1-17 shows the Triplex Pump Station controls.
- 28. Figure 1-16 shows where the Sprayfield zones you are dispensing to for the day must be recorded.

Figure 1-16 Where to Record Flowmeter Readings for Triplex Pump Station in Daily Pump Report

<u>Treatment Plant Flow Meter (SP-8)</u>						
Start reading	_____					
Stop reading	_____					
Active zone	1	2	3	4	5	6
	7	8	9	10	11	12

DRAFT**Figure 1-17 Pump Control for Triplex Pump Station – Closed (a) and Open (b)**

29. Check Flowmeter SP-8 (Figure 1-13b) to ensure that approximately 17,500 gallons have been dispensed from the pump station to the desired Sprayfield zone(s). This will take approximately 35 to 45 minutes. Watch the flowmeter to monitor that the correct volume is dispensed and that the pumps do not run dry, which could cause the Triplex Pumps to malfunction.
30. Once the desired amount of leachate has been dispensed from the Triplex Pump Station, switch the pump from *Hand* to *Off*. Record the final flowmeter gauge reading on the Daily Pump Report.
31. Repeat for a second leachate batch, if desired.

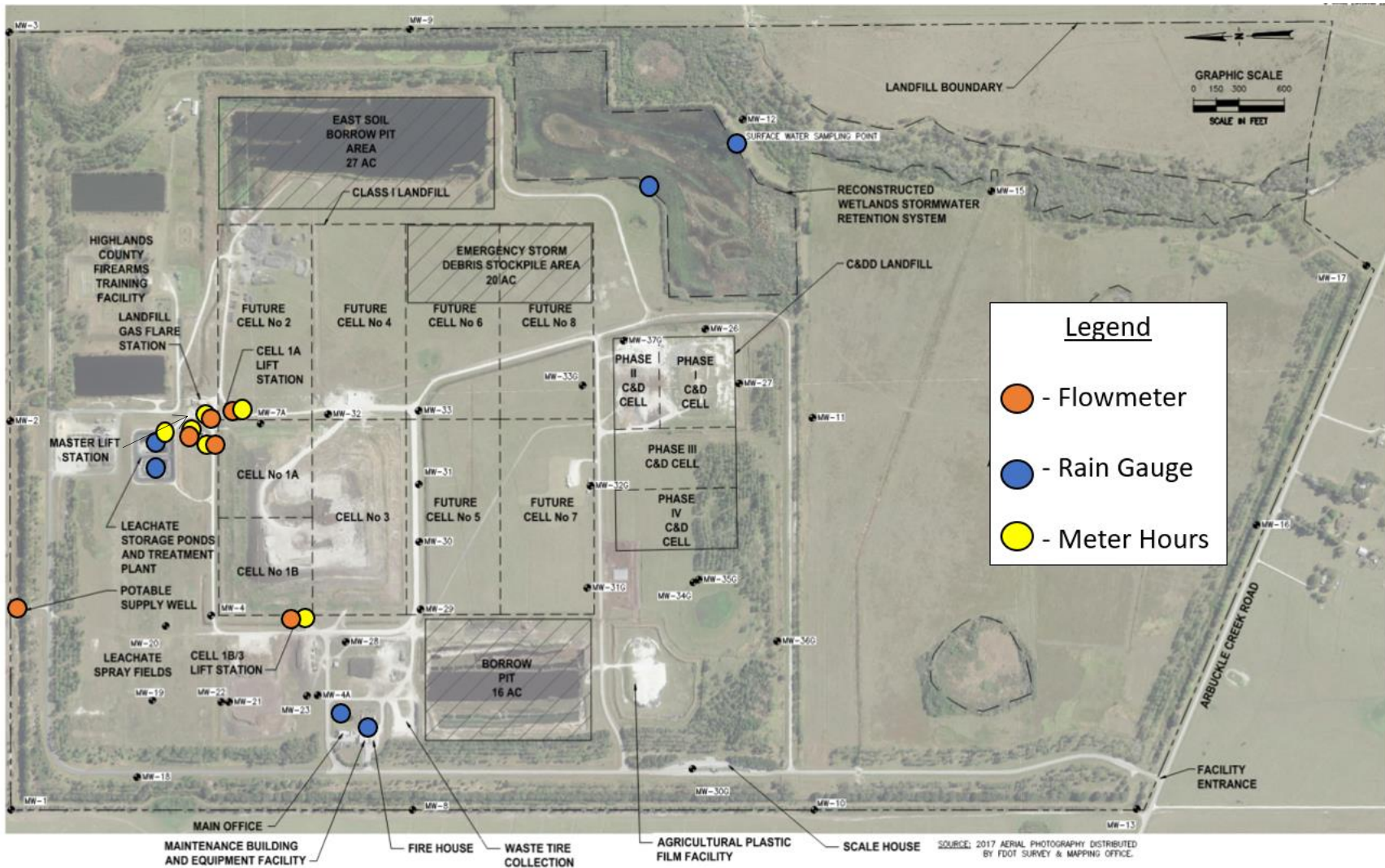
1.4 MEASUREMENTS AND DATA RECORDING

This section discusses how to record measurements using the Daily Pump Report for separate site operations, such as taking rain gauge readings, as well as when operating the leachate treatment system and recording flowmeters and pump hours for the equipment.

1. Figure 1-1 shows the Daily Pump Report used for recording all site details. Refer to Figures 1-2, 1-3, and 1-18 for where each item is on site.

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Figure 1-18 Plan View of Recording Locations for the Daily Pump Report for the HCSWMC Leachate Collection and Treatment System



DRAFT**Master Lift Station (MLS)**

2. Figure 1-19 shows the MLS pump meter. Figure 1-20 shows where hours are read from the front of the station. Record the tank level as treatment plant elevation.

Figure 1-19 Master Lift Station**Figure 1-20 Pump Readout for the MLS**

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3. Flowmeter LBR-5 is on the back side of the MLS (see Figure 1-19). Figure 1-21 provides a closeup view. Record the flow.

Figure 1-21 Flowmeter LBR-5 on Back Side of the MLS



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Treatment Plant Flowmeter (TP-7)

4. As leachate flows from the MLS, it travels through the Treatment Plant Flowmeter (TP-7) (Figure 1-22). Record the reading at the meter.

Figure 1-22 Treatment Plant Flowmeter TP-7



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Dosing Pump Station

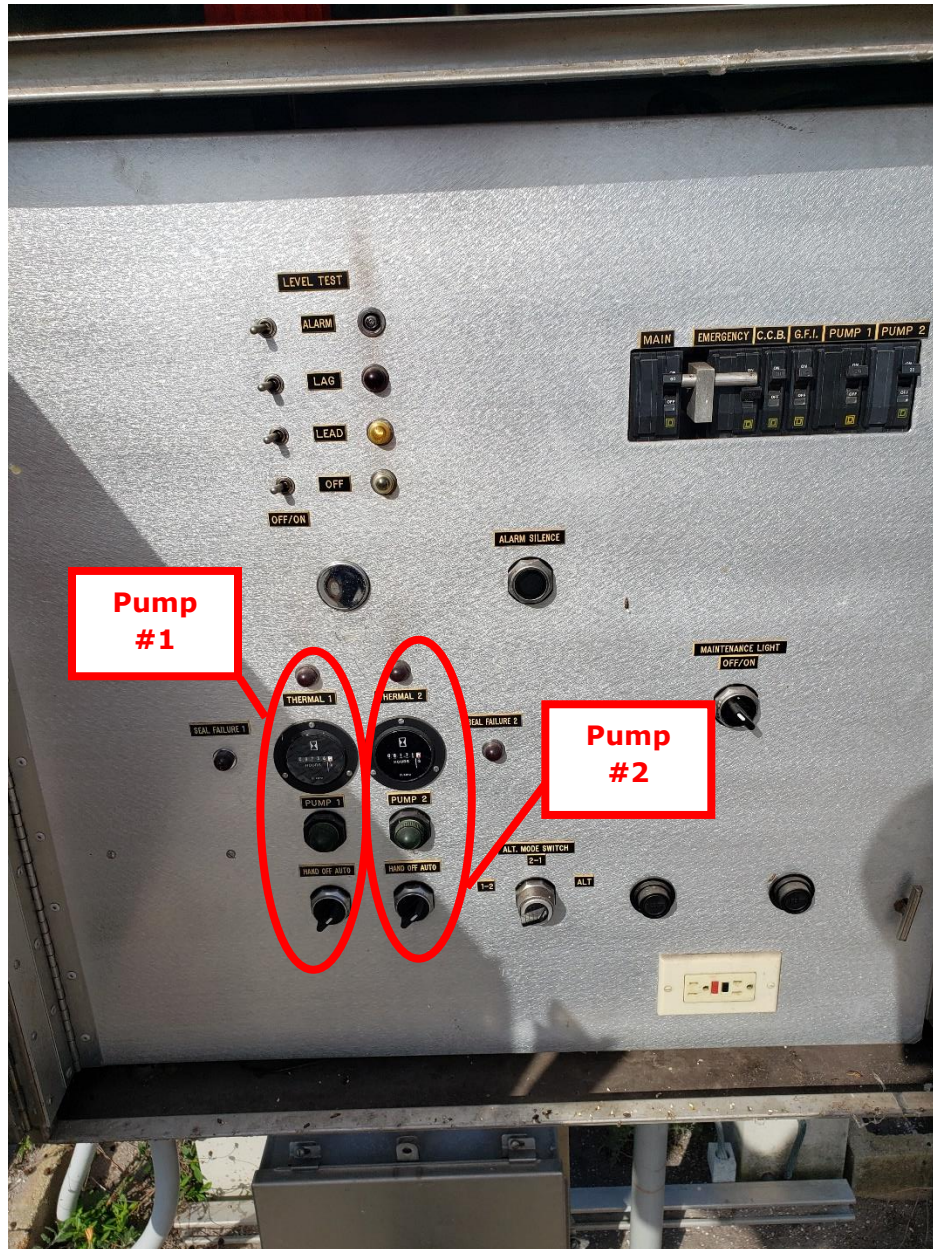
5. Leachate flows through Flowmeter TP-7 to the Dosing Pump Station (Figure 1-23).

Figure 1-23 Dosing Pump Station



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6. Figure 1-24 shows the access to the Dosing Pump Station pump controls. The pumps should be preset to *Auto* to allow them to automatically pump to the Treatment Plant (Sand Filters, Recirculation Chamber, Effluent Storage/Sump). Record the pump meter reading for Pump #1 and Pump #2.

Figure 1-24 Pump Controls for the Dosing Pump Station

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Triplex Pump Station and Treatment Plant Flowmeter SP-8

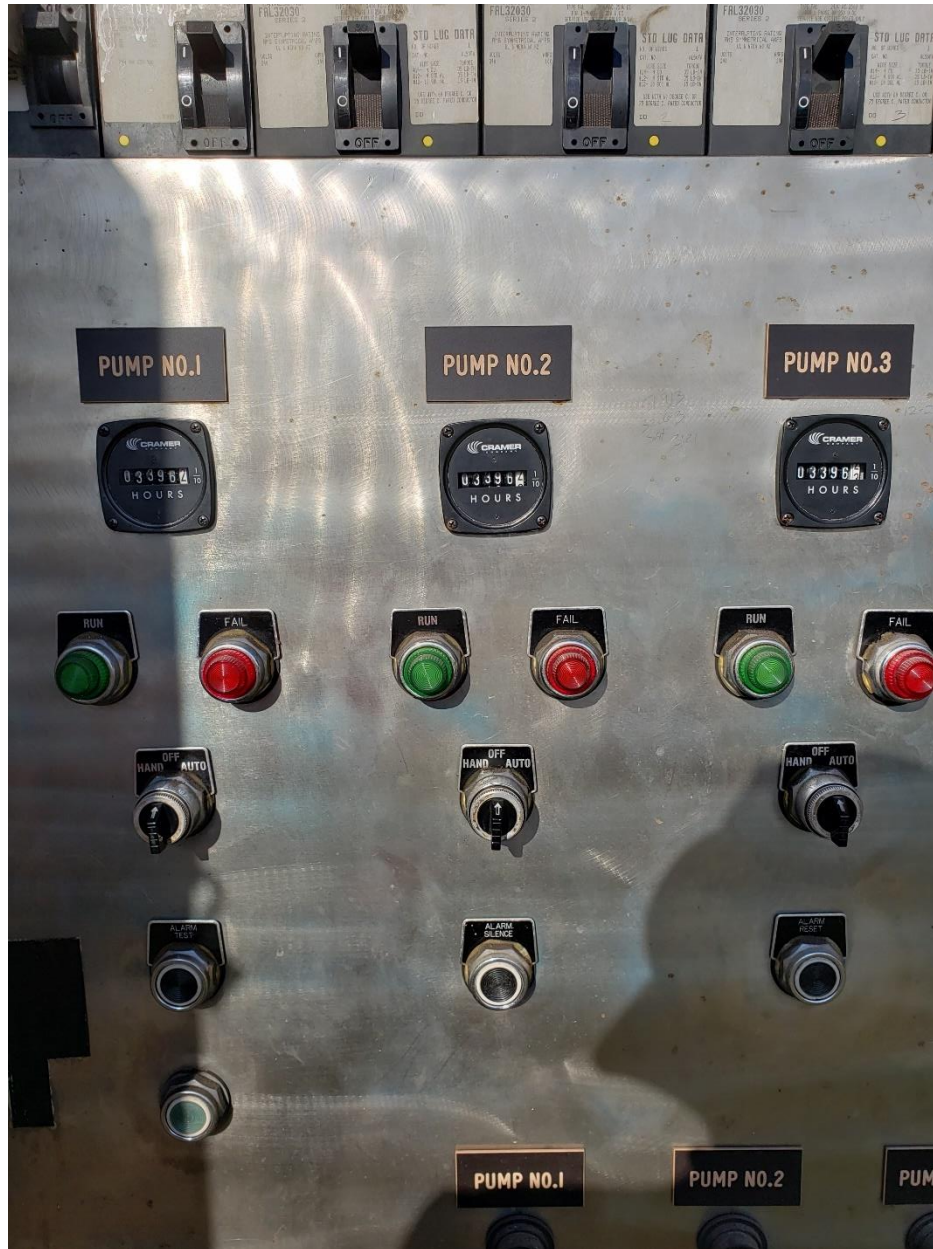
7. Leachate is pumped from the Dosing Pump Station through the Sand Filter, Effluent Storage Tank, and Triplex Pump Station. Figure 1-25 shows the pump controls access for the Triplex Pump Station.

Figure 1-25 Pump Controls Access for Triplex Pump Station



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8. Figure 1-26 shows the controls for the Triplex Pump Station. These should remain in the *Off* position whenever leachate is not being actively sent to the Sprayfield. To send leachate to the Sprayfield, switch Pump #1, Pump #2, and Pump #3 to the *Hand* position. Record the pump meter hours for Pump #1, Pump #2, and Pump #3.

Figure 1-26 Pump Controls for Triplex Pump Station

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- Figure 1-27 shows Treatment Plant Flowmeter SP-8 on the right-hand side of the station (in front of the pump controls). Record this flowmeter reading *before* and *after* sending leachate to the Sprayfield each day.

Figure 1-27 Treatment Plant Flowmeter SP-8



DRAFT**WWTP Rain Data Gauge**

10. Figure 1-28 shows the wastewater treatment plant (WWTP) Rain Data Gauge near Treatment Plant Flowmeter SP-8. Figure 1-29 shows that the gauge is read by uncapping the plastic container holding the graduated cylinder and reading the cylinder to the nearest 0.01 inch.

Figure 1-28 WWTP Rain Data Gauge



DRAFT**Figure 1-29 Rain Data Gauge Graduated Cylinder Inside the Canister****LB-4 Flowmeter**

11. Figure 1-30 shows the Flowmeter LB-4 is near the Triplex Pump Station and WWTP rain data gauge. This flowmeter measures leachate flowing from the impoundment basin to the MLS. ***At this time (July 2022), this meter could not be read as the readout is malfunctioning.***

Figure 1-30 LB-4 Flowmeter

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Cell 1A Lift Station

12. Figure 1-31 shows the pump station for the Cell 1A lift station. Leachate from this station pumps directly to the leachate impoundment basins.

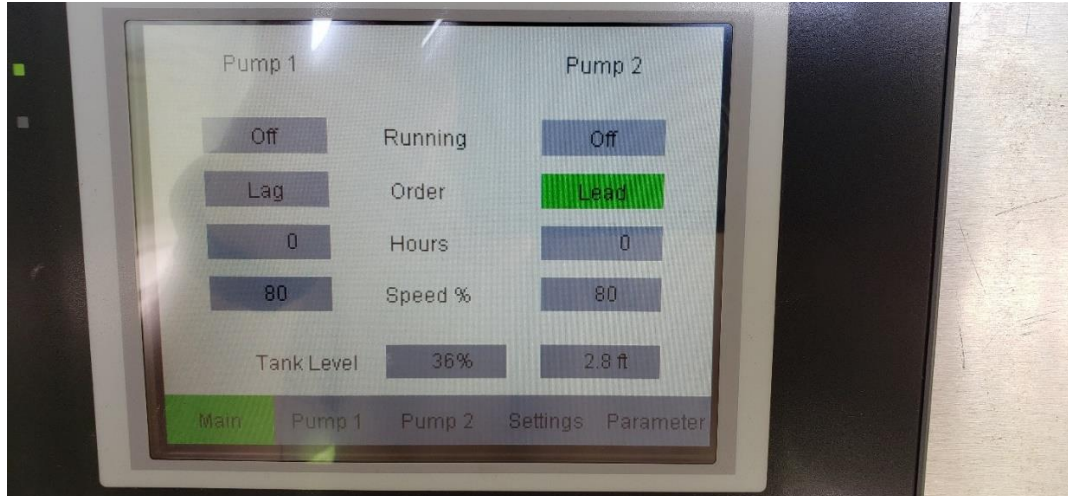
Figure 1-31 Cell 1A Lift Station Pump Controls Access



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13. Figure 1-32 shows that opening the pump controls access reveals the pump controls (Pump #1 and Pump #2) and meter hour readings. Record these readings including noting which pump is in **lead** and which is in **lag**.

Figure 1-32 Closeup of Cell 1A Lift Station Pump Controls



14. Figure 1-33 shows the flowmeter for Cell 1A just outside the pump controls area.

Figure 1-33 Flowmeter for Cell 1A



DRAFT**Cell 1B Lift Station**

15. Figure 1-34 shows the Cell 1B/3 Pump Station. Leachate flows from Cell 1B and Cell 3 individually into a combined sump that pumps to the leachate impoundment basins. Hence, two flowmeters and one pump station meter are to be read to obtain meter hours.

Figure 1-34 Cell 1B/3 Pump Station



16. Figures 1-35 and 1-36 show where meter hours for the Cell 1B/3 Pump Station are read.
17. Two valves (one for Cell 1B and one for Cell 3) control how much leachate from each cell flows into the combined Cell 1B/3 Pump Station. These are kept approximately 25-percent throttled for Cell 1B and 75 percent for Cell 3. Figure 1-37 shows these throttle valves. Note that for Cell 1B (Figure 1-37a), the valves are in series and both must be open to allow leachate to flow.

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Figure 1-35 Cell 1B/3 Pump Station Access

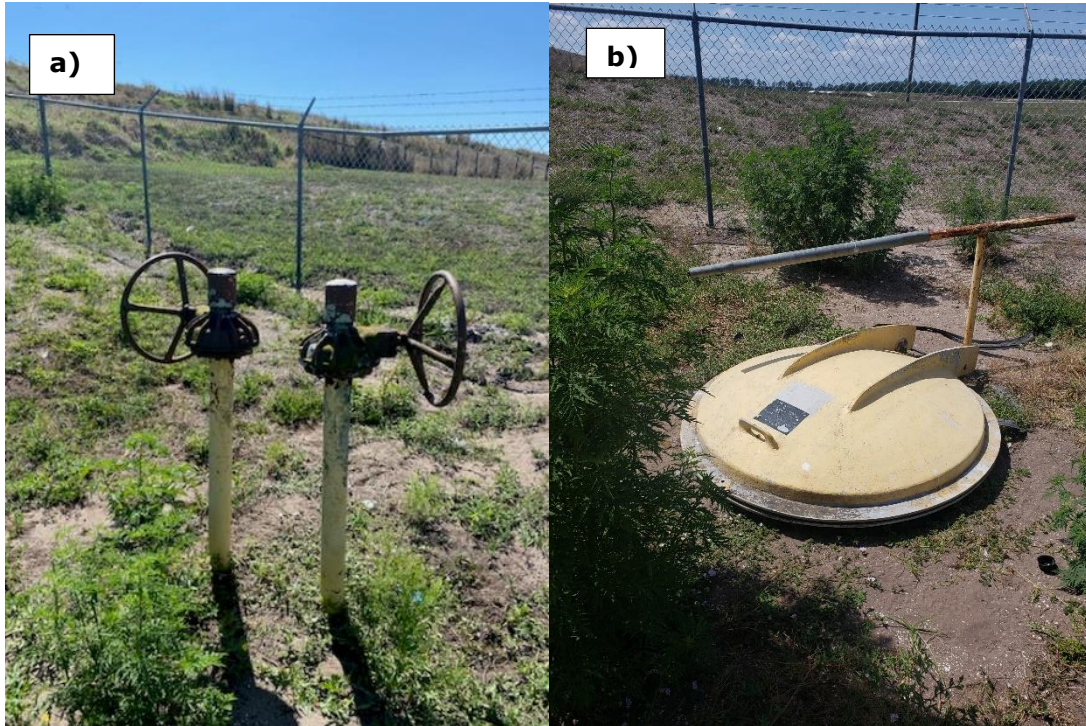


Figure 1-36 Closeup View of Cell 1B/3 Pump Station Controls



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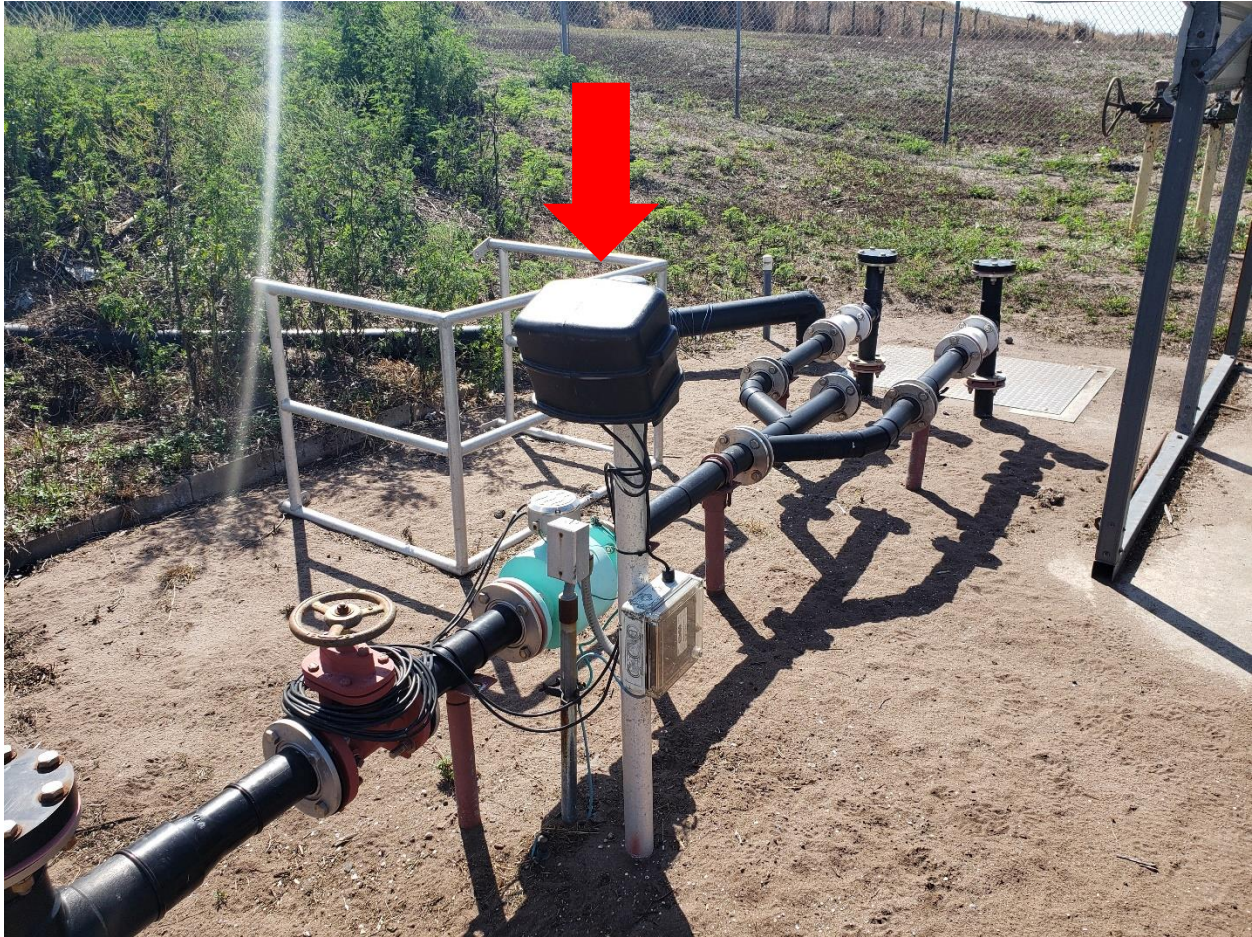
Figure 1-37 Leachate Throttle Valves for Cell 1B (a) and Cell 3 (b)



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18. Figure 1-38 shows the Cell 1B Flowmeter. Record this reading.

Figure 1-38 Cell 1B Flowmeter



DRAFT

19. Figure 1-39 shows the Cell 3 Flowmeter. Record this reading.

Figure 1-39 Cell 3 Flowmeter



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Leachate Basin Aerator

20. The leachate impoundment basins consist of two cells (West and East), each having two aerators to treat incoming leachate (four aerators total). Figure 1-40 shows these basins including marking where rain gauges are for the West and East basins. Record these every day to the nearest 0.1 foot.

Figure 1-40 Leachate Impoundment Basins with Rain Gauge Indicators Identified



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21. To record the meter hours for each aerator, locate the control box in Figure 1-41.

Figure 1-41 Aeration Control Access for Leachate Impoundment Basins



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22. Figure 1-42 shows the aerator controls inside the panel. Record the meter hours for the two basins.

Figure 1-42 Aerator Control Access for Leachate Impoundment Basins



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Office Rain Gauge

23. Figure 1-43 shows the office rain data gauge is in the stormwater pond behind the building. Record the reading to the nearest 0.1 foot.

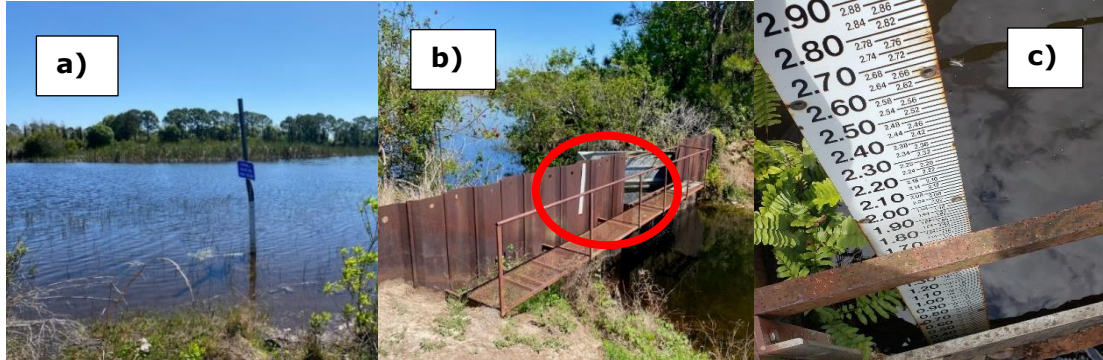
Figure 1-43 Office Rain Data Gauge



DRAFT**Weir Staff Rain Gauges**

24. The two weir staff rain data gauges are in the wetlands area (Figure 1-18 provides an aerial view). Figure 1-44 shows the gauges at ground view. The weir staff in Figure 1-44b hangs on the side of the retaining wall and is used to measure the depth of water on the retaining side (Figure 1-44c).

Figure 1-44 Weir Staff Rain Data Gauge #1 (a) and #2 (b) with Closeup of #2 (c)

**Landfill Administration Office**

25. Figure 1-45 shows that the landfill administration office rain data gauge is near the building on its south side.

Figure 1-45 Office Rain Data Gauge Location



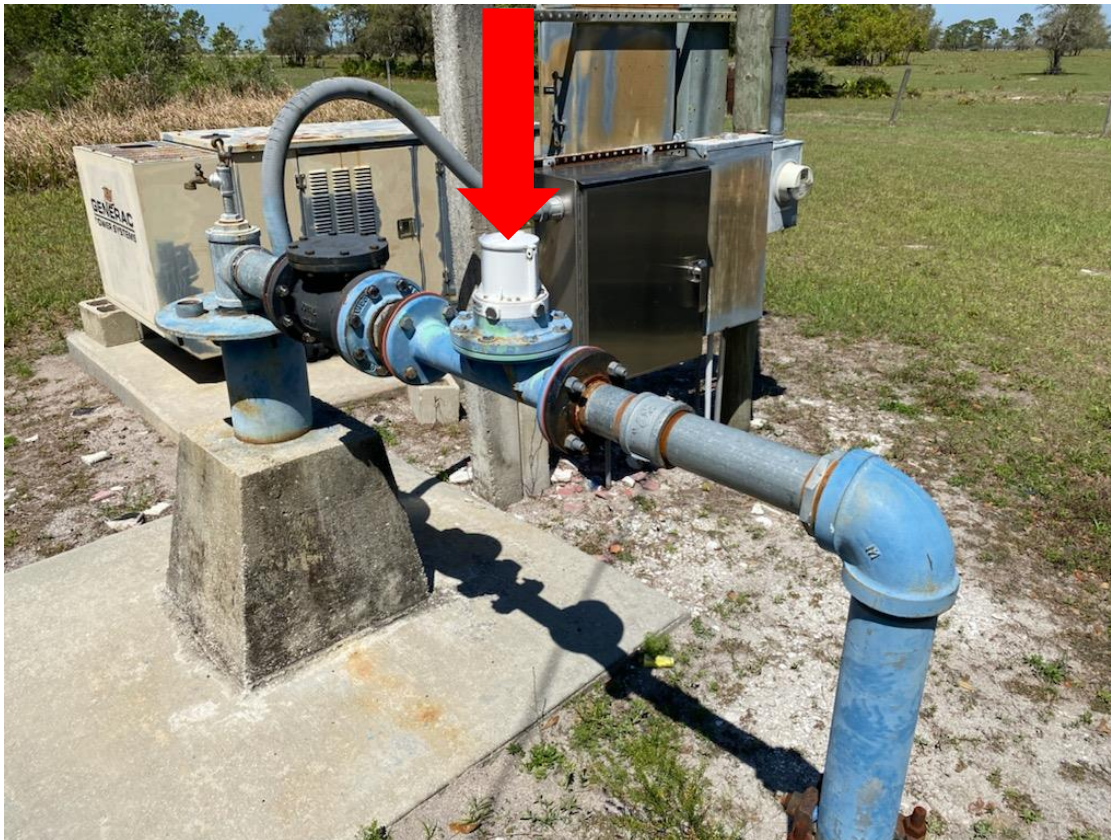
DRAFT**12-Inch Well/Pump Irrigation**

26. This well/pump is near the back of the site (north end) and is responsible for providing supply water to the administration office by pumping well water and chlorinating it. Figure 1-46 shows the system setup; Figure 1-47 shows the flowmeter.

Figure 1-46 Well/Pump Irrigation (Supply Well Water) Station



Figure 1-47 Well/Pump Irrigation Flowmeter Reading



DRAFT**2 GROUNDWATER SYSTEM OPERATION**

The HCSWMC site contains groundwater wells (Figure I-1) that are sampled quarterly or semi-annually. The County performs groundwater monitoring in compliance with Permit #0038570-033-SO-01.

Appendix A includes a copy of the Water Quality Monitoring Plan (WQMP), which is maintained on site and includes procedures for monitoring groundwater and surface water. The WQMP is based on information obtained in the hydrogeological reports for each disposal area and was prepared and submitted to FDEP in accordance with Chapter 62-701.510(2)(b) of the Florida Administrative Code (FAC). Laboratories performing environmental sampling and analyses required by FDEP permits or rules will hold a valid certification from the Department of Health's Environmental Laboratory Certification Program as required by Chapter 62-160, FAC. Field and laboratory records are made available to FDEP and are retained for the design period of the respective disposal area.

Quarterly and semi-annual analyses are performed and sent to FDEP. Weekly visual inspections of monitoring wells are performed, and issues are reported to the Landfill Operations Manager.

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3 SUPPLY WELL WATER SYSTEM OPERATION

Figure 3-1 shows the supply well, which provides chlorinated water to the landfill office and for emergency fire suppression; however, this water is not consumed by office staff, and it is not recommended for human consumption based on discussions with on-site staff. It is only recommended for septic/sanitary uses. This well is typically pumped three times a week, at a rate of approximately 8,000 gallons per day. This is an estimated total of 1.2 million gallons per year, below the permitted annual limit of 27.2 million gallons from this well. The supply well is near the north extent of the site (Figure I-1).

Figure 3-1 Supply Well System



The supply well system is checked daily and requires the following maintenance.

1. In addition to monitoring the flowmeter for this system (described in Section 1.4), the chlorine for the chlorinator needs to remain stocked. The chlorine can be purchased from any pool company and is poured into a barrel inside the shed (Figure 3-2).

Note: Exercise extreme caution when handling liquid chlorine to reduce health and safety risks associated with exposure.

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Figure 3-2 Inside the Chlorine Shed with Chlorine Barrel Shown



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Appendix A

Permit #0038570-033-SO-01

DRAFT



FLORIDA DEPARTMENT OF Environmental Protection

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

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

August 26, 2019

NOTICE OF PERMIT

E-Mail

chowerton@hcbcc.org

In the Matter of an
Application for Permit by:
Highlands County Board of County Commissioners
600 South Commerce Avenue
Sebring, Florida 33870

Highlands County
WACS # 74956
Class I Landfill, Highlands
County Solid Waste Center

Attention: Mr. Clinton Howerton, Jr., P.E.

DEP File No: 0038570-033-SO-01

Enclosed is Permit Number 0038570-033-SO-01 to operate the Class I Landfill, located at the Highlands County Solid Waste Center, which is issued pursuant to Section 403.061(14) and 403.707, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days after this Notice is filed with the Clerk of the Department.

Executed in Leon County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

A handwritten signature in blue ink that reads "Kimberly A. Walker".

Kimberly A. Walker, Program Administrator
Permitting and Compliance Assistance Program

DRAFT

Mr. Clinton Howerton, Jr., P.E.

August 26, 2019

Page 2 of 2

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to Section 120.52, F.S. with the designated Department Clerk, receipt of which is hereby acknowledged.

Tamela Starling
Clerk

8/26/2019
Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were sent before the close of business on August 26, 2019 to the listed persons.

Tamela Starling
Clerk

Enclosure: Permit No. 0038570-033-SO-01

Copies furnished to:

Robert Diefendorf, Highlands County, rdiefendorf@hcbcc.org

Dick Gorman, Highlands County, Dgorman@hcbcc.org

Tobin McKnight, P.E., B.C.E.E., Jones Edmunds & Associates, Inc., tmcknight@jonesedmunds.com

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DRAFT



**FLORIDA DEPARTMENT OF
Environmental Protection**

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

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

Permit Issued to:
Highlands County Board of County Commissioners
600 South Commerce Avenue
Sebring, Florida 33870

WACS Facility ID No.: 74956
Facility Name: Highlands County Solid Waste Management Center
12700 Arbuckle Creek Road
Sebring, Florida 33870

Authorized Representative:
Clinton Howerton, Jr., P.E., County Engineer
Highlands County
505 South Commerce Avenue, Sebring, Florida 33870
(863) 402-6877

Solid Waste Permit for Renewal of Operation
Permit No.: 0038570-033-SO-01
Replaces Permit No.: 0038570-030-SO-01

Permit Issued: August 26, 2019
Permit Renewal Application Due Date: June 26, 2024
Permit Expires: August 26, 2024

Permitting Authority
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 4565
Tallahassee, Florida 32399-2400
(850) 245-8707
Fax (850) 245-8803

DRAFT**SECTION 1 - SUMMARY INFORMATION****A. Authorization**

The Permittee is hereby authorized to operate the facility Class I landfill located at the Highlands County Solid Waste Management Center (HCSWMC) as described below in accordance with the specific and general conditions of this permit and any documents attached to this permit or specifically referenced in this permit and made a part of this permit.

This solid waste operation permit is issued under the provisions of Chapter 403, Florida Statutes, (F.S.), and Chapters 62-4 and 62-701, Florida Administrative Code, (F.A.C.).

This permit does not relieve the Permittee from complying with any other appropriate local zoning or land use ordinances or with any other laws, rules or ordinances. Receipt of any permits from the Department does not relieve the applicant from obtaining other federal, state, and local permits and/or modifications required by law, including those from other Sections within the Department or of the Water Management District.

B. Facility Location

The Highlands County Solid Waste Management Center is located at 12700 Arbuckle Creek Road, Sebring, Florida 33870. The location of the approximate center of the Class I disposal area is at latitude 27 30' 38" north and longitude 81 18' 55" west, located in section 22, Township 34 South and Range 30 East.

C. Facility Description

The Highlands County Solid Waste Management Center (HCSWMC) occupies a total area of 987 acres, and includes a Class I landfill and gas recovery facility, an Agricultural Plastic Disposal Unit, and a Construction & Demolition (C&D) Debris Disposal facility. The Class I landfill has a total disposal area of 147 acres and approximately 36 acres have been used. The Class I Landfill is composed of three cells: Cell 1A (9.17 acres); Cell 1B (9.17 acres); and Cell 3 (18 acres), with proposed expansion Cells 2, 4, and 5 through 8. The HCSWMC is permitted to operate the C&D Debris Disposal facility in accordance with Operation Permit No. 38570-032-SO, issued on January 30, 2019, and permitted to operate the Agricultural Plastic Disposal facility in accordance with Operation Permit No. 38570-031-SO-08, issued on January 21, 2015.

D. Appendices Made Part of This Permit

APPENDIX 1 - General Conditions

APPENDIX 2 – List of Approved Documents Incorporated into the Permit

APPENDIX 3 – Water Quality Monitoring Plan

APPENDIX 4 – Landfill Gas Monitoring Locations

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SECTION 2 - SPECIFIC CONDITIONS

A. Administrative Requirements

1. Documents Part of This Permit. The permit application as revised in final form replaced or amended in response to the Department's Request(s) for Additional Information are contained in the Department's files and are made a part of this permit. Those documents that make up the complete permit application are listed in APPENDIX 2.
2. Permit Modification. Any change to construction, operation, monitoring, or closure requirements of this permit may require a modification to this permit, in accordance with the provisions of Rule 62-701.320(4), F.A.C.
3. Permit Renewal. In order to ensure uninterrupted operation of this facility, a timely and sufficient permit renewal application must be submitted to the Department in accordance with Rule 62-701.320(10), F.A.C. A permit application submitted at least 61 days prior to the expiration of this permit is considered timely and sufficient.
4. Transfer of Permit or Name Change. In accordance with Rule 62-701.320(11), F.A.C., and Rule 62-4.120, F.A.C., the Department must be notified by submitting Form 62-701.900(8) within 30 days: (a) of any sale or conveyance of the facility; (b) if a new or different person takes ownership or control of the facility; or (c) if the facility name or permittee's legal name is changed.
5. Air Permit Requirements.
 - a. The landfill owner or operator is not required to obtain an air construction permit, unless landfill construction or any modification is subject to the prevention of significant deterioration (PSD) requirements of Chapter 62-212, F.A.C. A landfill for which construction or modification is subject to PSD requirements must make application to the Bureau of Air Regulation, Department of Environmental Protection, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, for an air construction permit and must obtain such permit prior to beginning any construction or modification.
 - b. The landfill owner or operator is not required to obtain an air operating permit, unless the landfill is required to obtain a Title V Air Operating Permit (Title V Permit) pursuant to Section 403.0872, F.S. A landfill is required to obtain a Title V Permit if the landfill (or the total facility, if the landfill is contiguous to or part of a larger facility) has the potential to emit 10 tons per year (TPY) or more of any hazardous air pollutant, 25 TPY or more of any combination of hazardous air pollutants, or 100 TPY or more of any other regulated air pollutant. A landfill is also required to obtain a Title V Permit if the maximum design capacity, as defined in 40 CFR 60, Subpart WWW, is equal to or greater than 2.5 million megagrams or 2.5 million cubic meters. Title V Permits must be applied for in accordance with the timing and content requirements of Rule 62-204.800, F.A.C., and Chapter 62-213, F.A.C. Title V applications shall be submitted to the Air Program Administrator (Mr. Jeff Koerner, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, MS 196_B).

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- c. The Permittee is required to comply with the requirements of 40 CFR 60, Subpart W and CC as adopted by reference in Rule 62-204.800, F.A.C. The Permittee may have to submit to the Division of Air Resource Management, Department of Environmental Protection, Mail Station 5500, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, any amended design capacity report and any Non-Methane Organic Compound (NMOC) emission rate report, as applicable, pursuant to 40 CFR 6-.757(a)(3) and (b).

B. Construction Requirements

1. Construction Authorized. This Permit does not authorize any new construction activities.

C. Operation Requirements

1. General Operating Requirements. The Permittee shall operate the Class I landfill in accordance with the approved Operations Plan dated July 25, 2019, which is identified as Document 7 in APPENDIX 2. The Department shall be notified before any changes, other than minor deviations, to the approved Operations Plan are implemented in order to determine whether a permit modification is required.
2. Operation Plan. A copy of the approved Operations Plan, including the operating record as defined in Rule 62-701.500(3), F.A.C., shall be kept at the Facility Office, 12700 Arbuckle Creek Road, and shall be accessible to landfill operators.
3. Authorized Waste Types. The facility is authorized to manage only the following waste types:
- a. Waste types defined in Rule 62-701.200, F.A.C.:
 - 1) Class I waste.
 - 2) Class III waste.
 - 3) Domestic wastewater and water treatment plant sludges.
 - 4) Yard trash.
 - 5) Agricultural waste.
 - 6) Shredded-cut tires.
 - b. Other Wastes Specifically Authorized:
 - 1) Non-Friable Asbestos: Non-friable asbestos may be accepted and managed in accordance with Section 4.B.6 of the approved Operations Plan, and pursuant to the requirements of 62-701.520(3), F.A.C.
 - 2) Contaminated Soil: Contaminated soil may be accepted for disposal on a case-by-case basis in accordance with Section 4.B.6 of the approved Operations Plan.
4. Unauthorized Waste Types. The facility is not authorized to accept, process or dispose any waste types not listed in C.3. above. Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operations Plan.

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5. Waste Management and Handling.
 - a. Solid waste shall be formed into cells to construct horizontal lifts. The working face of the cell, and side grades above land surface, shall be at a slope no greater than three feet horizontal to one-foot vertical rise or as authorized by this permit in accordance with the approved Operations Plan.
 - b. No solid waste shall be disposed of outside of the permitted footprint of the solid waste disposal units.
 - c. The sequence of waste filling shall be as specified in the approved Operations Plan.

6. Landfill Elevation. The final (maximum) elevation of the Class I landfill shall not exceed 210 feet NGVD, which was included in the approved Closure Plan Narrative, dated November 2000, which was included as "Reference A" in the Operations Permit Renewal Application dated June 4, 2014 (Document 2 in APPENDIX 2).

7. Initial Waste Placement. The first layer of waste placed above the liner and leachate collection system shall be a minimum of four feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system.

8. Cover Requirements. The specific initial and intermediate cover requirements that apply at the facility are as follows:
 - a. Initial daily cover consisting of 6-inches of cover soil will be applied at the end of each working day. Alternatively, the compacted waste may be covered with mechanically deployed tarps or other FDEP approved initial cover materials. The mechanically deployed tarps may be placed at the end of the work day and removed prior to deposition of additional waste. For portions of the working face not completely covered by the mechanically deployed tarp, 6-inches of initial cover shall be applied at the end of each working day. During periods when mechanically deployed tarps are utilized, 6-inches of initial cover shall be applied on the last working day of the week (i.e., generally on Saturday). Other approved initial cover materials include 6-inches of Recovered Screen Material (RSM), capable of passing through a final $\frac{3}{4}$ square inch screen; or 6 inches of a combination of Auto Shredder Residue (ASR) and processed tires used on interior slopes only; or 6 inches of an on-site manufactured blend of soil and mulch in a 50/50 mixture. Other alternative cover materials may only be utilized after requesting and obtaining written approval from the Department.
 - b. Intermediate cover will consist of a minimum of 12 inches of compacted thickness soils, or other FDEP approved materials, placed in areas where additional solid waste will not be deposited within 180 days. Other approved intermediate cover materials include, 12 inches of Recovered Screen Material (RSM), capable of passing through a final $\frac{3}{4}$ square inch screen, or 12 inches of a combination of Auto Shredder Residue (ASR) and processed tires used on interior slopes only, or 12 inches of an on-site manufactured blend of soil and mulch in a 50/50 mixture.

9. Erosion Control. Erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the storm water management system. Such measures shall be implemented within three days of occurrence. If the erosion

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cannot be corrected within seven days of occurrence, the landfill operator shall notify the Department and propose a correction schedule.

10. Contingency Plan and Notification of Emergencies. In the event the Permittee is temporarily unable to comply with any of the conditions of this Permit, the Permittee shall notify both the South District office at (239) 344-5600 or at SouthDistrict@dep.state.fl.us and the Department's Solid Waste Section in Tallahassee immediately in accordance with the approved Contingency Plan. Notification shall include pertinent information as to the cause of the problem and what corrective measures are being taken to prevent its reoccurrence.
11. Housekeeping. The facility shall be operated to control dust, vectors, litter and objectionable odors. If objectionable odors are confirmed beyond the landfill property boundary, the owner or operator shall comply with the gas management requirement in Section 2, Part E.
12. Leachate Management.
 - a. The Permittee shall operate the leachate management system (including the collection, removal, storage, and on-site treatment systems), and maintain the system as designed, so that leachate is not discharged from the system except as provided for in the approved Operations Plan.
 - b. Routine inspections and maintenance of the leachate management system shall be conducted in accordance with the schedule established in the approved Operations Plan. Leachate is initially collected via 4-inch force mains and collected in one of two storage basins. After initial aeration in the basins, leachate is pumped to a master lift station to be recirculated at the landfill, returned to the aeration basins, or sent to the on-site treatment plant for final processing and disposal in the sprayfield.
 - c. Leachate recirculation is allowed and should be conducted in accordance with Part N, Attachment N.1 of the Operation Permit Renewal Application dated June 17, 2019 (Document 3 in APPENDIX 2) and Section 2.H. of the approved Operations Plan. The Landfill's cover system shall be monitored closely to prevent seepage, minimize runoff, and avoid the mixing of leachate with stormwater.
 - d. The leachate collection pipes shall be cleaned or video inspected at least once every five years. A summary of the results shall be submitted with the permit renewal application.
 - e. The Permittee, on a daily basis, shall record quantities of leachate generated in gal/day and precipitation at the facility, and shall compare these measurements.
 - f. The Permittee shall monitor leachate quality in accordance with Section IV of Appendix 3, Water Quality Monitoring Plan.
13. Spotters and Operators. This facility shall have the minimum number of spotters present when waste is accepted as specified in the approved Operations Plan, and they will be trained as specified in Rule 62-701.320(15), F.A.C. A trained operator shall be on duty at the facility at all times the facility is operating. Approved training courses can be found at the following web site: <https://treeo.ufl.edu/solid-waste/>.

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14. Record Keeping Requirements.

- a. Waste Quantity Records. Waste records shall be compiled monthly, and copies shall be provided to the Department no less than annually by February 1. This information shall be reported to the Department through the DEP Business Portal located at: <http://www.fldepportal.com/go>.
- b. Estimate of Remaining Life. The Permittee shall submit the annual estimate of the remaining life and capacity by February 1. The report is required by Rule 62-701.500(13)(c), F.A.C. and must be submitted to the South District Office and to:

Florida Department of Environmental Protection
 Permitting and Compliance Assistance, Solid Waste Section, MS 4565
 2600 Blair Stone Road
 Tallahassee, Florida, 32399-2400

15. Hazardous Waste. If any regulated hazardous wastes are discovered to be deposited at the facility, the facility operator shall promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility. In the event that hazardous wastes are discovered they shall be managed in accordance with the procedures provided in the approved Operations Plan.
16. Stormwater. Leachate shall not be discharged into the storm water management system. Storm water or other surface water which comes into contact with or mixes with the solid waste or leachate shall be considered leachate and is subject to the requirements of Rule 62-701.500(8), F.A.C. The stormwater management system shall be maintained in accordance with Section 10.0 of the approved Operations Plan.

D. Water Quality Monitoring Requirements

1. Zone of Discharge. The boundary of the zone of discharge for the solid waste disposal unit and the effluent sprayfield, pursuant to Chapter 62-520, F.A.C., shall be no more than 100 feet from the solid waste disposal unit and sprayfield boundary or to the facility's property boundary, whichever is less, and shall extend vertically to the base of water-table (unconfined) aquifer, which is considered to be the greenish-gray clay identified to be present from approximately sixty(60) feet to seventy-two (72) feet below ground surface (known as the Tamiami formation). The Permittee shall ensure that Class G-II water quality standards will not be exceeded at the boundary of the zone of discharge, per Rule 62-520.420, F.A.C., and that ground water minimum criteria will not be exceeded outside the boundary of the zone of discharge, per Rule 62-701.320(17), F.A.C.
2. Water Quality Monitoring Plan. The Water Quality Monitoring Plan for this permit is included in APPENDIX 3. The groundwater monitoring well locations are shown in Figure 1 of APPENDIX 3.

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E. Gas Management System Requirements

1. Construction Requirements. This permit does not authorize any new construction activities for the gas management system. The Department shall be notified before any changes, other than minor deviations, to the approved design are implemented in order to determine whether a permit modification is required.
2. Operational Requirements. The gas management system controls shall be operated and maintained so that they function as designed, and in accordance with Section 2.h. of the approved Operations Plan.
3. Monitoring Requirements. Monitoring for methane gas at the property boundary and within structures on the property shall be performed quarterly in accordance with Section 9 of the approved Operations Plan, pursuant to Rule 62-701.530(2), F.A.C. Eight gas monitoring locations for Cells 1A, 1B, are used determine the effectiveness of the gas migration controls. The locations of the eight gas monitoring locations are shown in APPENDIX 4. The gas monitoring results shall be reported as a percent of the lower explosive limit (LEL), calibrated to methane. The report shall be submitted to the Department under separate cover no later than 15 days after the end of the period in which the monitoring occurred.
4. Gas Remediation Plan. The facility landfill gas management system shall be operated to prevent the concentration of combustible gases from exceeding 25% of the lower explosive limit in structures, excluding gas control or recovery components, and from exceeding the lower explosive limit at or beyond the property boundary. If either of these limits is exceeded then a gas remediation plan shall be designed and implemented in accordance with Rule 62-701.530(3)(a), F.A.C.
5. Odor Remediation Plan. The facility shall be operated to control objectionable odors. If objectionable odors are confirmed beyond the property boundary then upon notification by the Department the Permittee shall develop and implement an odor remediation plan in accordance with the requirements of Rule 62-701.530(3)(b), F.A.C.

F. Financial Assurance and Cost Estimates

1. Financial Assurance Mechanism. The Permittee may not receive waste for disposal or storage in any disposal unit for which financial assurance has not been approved. Proof that the financial mechanisms are established and funded in accordance with Rule 62-701.630, F.A.C. shall be submitted to the Department at least sixty (60) days prior to the planned acceptance of solid waste in any disposal unit. When established, the permittee shall maintain, in good standing, the financial assurance mechanisms. Supporting documentation and evidence of increases associated with cost estimate increases shall be submitted within the time frames specified in Rule 62-701.630, F.A.C. All submittals in response to this specific condition shall be sent to:

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Florida Department of Environmental Protection
 Financial Coordinator – Permitting & Compliance Assistance Program
 2600 Blair Stone Road, MS 4565
 Tallahassee, Florida 32399-2400

2. Cost Estimates.
- a. The Permittee shall submit closure cost estimates, including annual adjustments for inflation, in accordance with the requirements of Rule 62-701.630(3) and (4), F.A.C., and 40 CFR Part 264.142(a) using Form 62-701.900(28).
 - b. An owner or operator using an escrow account shall submit the annual inflation adjusted estimate(s) between July 1 and September 1. An owner or operator using a letter of credit, guarantee bond, performance bond, financial test, corporate guarantee, trust fund or insurance shall submit the inflation adjusted cost estimate(s) between January 1 and March 1.
 - c. All submittals in response to this specific condition shall be sent to the District Office and a copy to the address identified in Specific Condition F.1. or to the following email address: Solid.Waste.Financial.Coordinator@dep.state.fl.us.

G. Closure Requirements

1. Closure Permit Requirements. Prior to initiating closure of a solid waste disposal unit, or part of a solid waste disposal unit, the Permittee shall receive authorization from the Department in one of the following ways.
 - a. If the landfill is operating under a Department permit that includes a Closure Plan with sufficient detail to provide reasonable assurance of compliance with the closing requirements of Rule 62-701.600, F.A.C., then the Permittee shall notify the Department at least 30 days prior to initiating the closure activities and receive written approval from the Department prior to beginning the work.
 - b. If the landfill is operating under a Department permit that requires substantive changes to the closing activities in the permitted Closure Plan, then the Permittee shall request a modification of the permit to include sufficient design detail to ensure compliance with the closing requirements of Rule 62-701.600, F.A.C., and shall initiate closing only after the permit has been modified.
 - c. The Permittee shall submit an application to the Department for a closure permit on Form 62-701.900(1) and shall initiate closure activities only after the permit is issued. The application shall include a Closure Plan made up of the following:
 - 1) A closure design plan;
 - 2) A closure operation plan;
 - 3) A plan for long-term care; and,
 - 4) A demonstration that proof of financial assurance for long-term care will be provided.
2. Closure Design. All closure construction shall be done in accordance with the approved closure design plan. The Department shall be notified before any changes, other than minor deviations, to the approved closure design are implemented in order to determine whether a permit modification is required.

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- 3. Closure Operation Plan. All closure shall be done in accordance with the approved closure operation plan.
- 4. Certification of Closure Construction Completion. After closure construction has been completed, the engineer of record shall certify to the Department on Form 62-701.900(2) that the closure is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated.
- 5. List of Closed Units Not in Long-Term Care. The Class I landfill has no units in long term care.

Executed in Leon County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Kimberly A. Walker, Program Administrator
Permitting and Compliance Assistance Program

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Tamela Starling
Clerk

8/26/2019
Date

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APPENDIX 1 - General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

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8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.
 - (c) The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit or a copy thereof shall be kept at the work site of the permitted activity.
12. The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements;
 2. The person responsible for performing the sampling or measurements;
 3. The dates analyses were performed;
 4. The person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

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13. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

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APPENDIX 2

LIST OF APPROVED DOCUMENTS INCORPORATED BY REFERENCE

The following documents submitted to the Department for previous permit renewal applications in March 2008 and June 2014 are incorporated by reference in support of the Permit Renewal Application submitted on June 19, 2019:

Document 1 – “Highlands County Solid Waste Management Center, Application for Renewal of Class I Landfill Operation Permit for Cells 1A, 1B, and 3”, prepared by PBSJ, dated March 31, 2008, and received on April 7, 2008. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.54608.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.54608.1]&[profile=Permitting_Authorization])

Document 2 – “Highlands County Solid Waste Class I Landfill Operations Permit Renewal Application”, prepared by Jones Edmunds & Associates, Inc, dated June 4, 2014, and received on June 5, 2014. A copy can be found at:

[http://depdms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.208609.1\]&\[profile=Permitting_Authorization\]](http://depdms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.208609.1]&[profile=Permitting_Authorization]).

The application documents for the renewal of the Class I Landfill submitted on June 19, 2019 through July 25, 2019 consist of the following:

Document 3 – “Highlands County Solid Waste Class I Landfill, Operations Permit Renewal Application”, prepared by Jones Edmunds & Associates, Inc., signed and sealed by Tobin McKnight, P. E., dated June 17, 2019, received on June 19, 2019. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.298836.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.298836.1]&[profile=Permitting_Authorization])

Document 4 – FDEP First Request for Additional Information, Highlands County Solid Waste Management Center, Class I Landfill, dated June 27, 2019. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.299214.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.299214.1]&[profile=Permitting_Authorization])

Document 5 – “Response to FDEP First Request for Additional Information, dated June 27, 2019,” prepared by Jones Edmunds & Associates, Inc., signed and sealed by Tobin McKnight, P. E., dated July 24, 2019, and received on July 24, 2019. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.300817.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.300817.1]&[profile=Permitting_Authorization])

Document 6 – Supplemental information submitted by Jones Edmunds & Associates, Inc., on July 25, 2019 in support of the “Response to FDEP First Request for Additional Information, dated June 27, 2019,” by Jones Edmunds & Associates, Inc. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.300899.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.300899.1]&[profile=Permitting_Authorization])

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Document 7 – “Approved Operations Plan”, dated July 25, 2019, prepared by Jones Edmunds & Associates, Inc., which incorporates the comments submitted as part of the Response to FDEP Request for Additional Information. A copy can be found at:

[https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&\[guid=8.300962.1\]&\[profile=Permitting_Authorization\]](https://depdms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.300962.1]&[profile=Permitting_Authorization])

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APPENDIX 3 - WATER QUALITY MONITORING PLAN

Highlands County Solid Waste Management Facility, Class I Landfill

PERMIT NO: 0038570-033-SO-01

I. GENERAL

1. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160, F.A.C. Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. **[62-701.510(2)(b), F.A.C.]**
2. The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) referenced in Chapter 62-160, F.A.C. The laboratory designated to conduct the chemical analyses must be certified by the Florida Department of Health Environmental Laboratory Certification Program (DOH ELCP). This Certification must be for the test method and analyte(s) that are reported. **[62-160.210(1), 62-160.300(1), 62-701.510(2)(b), F.A.C. and DEP SOP FS 1008.]**
DEP-SOP-001/01 can be accessed at: <http://www.dep.state.fl.us/water/sas/sop/sops.htm>
3. The permittee must ensure that the analytical laboratory conducting the analyses uses analytical methods capable of achieving detection limits at or below the Groundwater Cleanup Target Levels (GCTLs) or the Freshwater Surface Water Cleanup Target Levels (SWCTLs) in Table I, Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". GCTLs and SWCTLs that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated. **[DEP SOP FM 1000]**
4. If, at any time, analyses detect parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Zone of Discharge, the permittee may confirm the data by resampling the affected wells within thirty (30) days of receipt of the sampling data. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. **[62-701.510(6)(a), F.A.C.]**
5. If the resampling event detects parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the permittee shall notify the Department in writing within 14 days of receipt of the sampling data. Confirmed data must be submitted to the Department within 60 days from completion of lab analyses, unless a different due date is approved. Use "CONF" (for confirmation data) in the report type column. **[62-701.510(8)(a), F.A.C.]**

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- Upon notification by the Department, the permittee shall initiate evaluation monitoring in accordance with Rule 62-701.510(6)(a), F.A.C.

II. GROUND WATER QUALITY MONITORING

- The nine (9) ground water monitoring wells included in this monitoring plan and designated for water quality testing and water level measurements for the Class I landfill and sprayfield area are listed on Table 1 and shown on Figure 1. The background well, MW-1, is sampled for both areas at different frequencies and for different parameters. **[62-701.510(3)(d)2 & 3, F.A.C.]**
- Any initial sample collected from a new ground water monitoring well, unless the new monitoring well is installed to replace an existing well within the monitoring network, shall be analyzed for the following Initial Ground Water Monitoring Parameters. **[62-701.510(5)(b), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Water elevations	1. Ammonia – N, Total
2. Dissolved oxygen	2. Chlorides
3. pH	3. Iron
4. Specific conductivity	4. Nitrate
5. Temperature	5. Sodium
6. Turbidity	6. Total dissolved solids (TDS)
7. Colors and sheens (by observation)	7. Sulfate
	8. Aluminum
	9. Those parameters listed in 40 CFR Part 258, Appendix II.*

* Mercury not listed because it is included in Appendix II.
 * Appendix I is not listed because it is a subset of Appendix II

- The six (6) active monitoring wells for the Class I landfill (Cells 1A, 1B, and 3), MW-1, MW-7A, MW-30, MW-31, MW-32, and MW-33, shall be routinely sampled and analyzed semi-annually in March and September for the following ground water monitoring parameters: **[62-701.510(5)(c), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Water elevations (static prior to purging)	1. Total Ammonia - N
2. Dissolved oxygen	2. Chlorides
3. pH	3. Nitrate
4. Specific conductivity	4. Mercury
5. Temperature	5. Iron
6. Turbidity	6. Sodium
7. Colors and sheens (by observation)	7. Total dissolved solids (TDS)
	8. Those parameters listed in 40 CFR Part 258 Appendix I

- The four (4) active monitoring wells for the sprayfield area, MW-1, MW-4, MW-21, and MW-22, shall be routinely sampled and analyzed quarterly in March, June, September, and December for the following ground water monitoring parameters. Additionally, wells MW-

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1, MW-4, MW-21, and MW-22 shall be sampled semi-annually in March and September and analyzed for the parameters listed below, plus the parameters found in 40 CFR, Part 258, Appendix I.

Field Parameters	Laboratory Parameters
1. Water elevations	1. Chlorides
2. Dissolved oxygen	2. Nitrate
3. pH	3. Iron
4. Specific conductivity	4. Sodium
5. Temperature	5. Total dissolved solids (TDS)
6. Turbidity	6. Mercury
7. Colors and sheens (by observation)	7. Total ammonia - N
	8. Gross Alpha

5. Unless otherwise approved by the Department, wells with high turbidities must be remediated or reinstalled to reduce the turbidity value to less than 20 NTU prior to sample collection. Should any ground water sample exhibit dissolved oxygen concentrations greater than 20% of oxygen saturation at the field measured temperature, the sampled well must be re-purged then resampled as soon as an acceptable dissolved oxygen value has been attained unless it can be demonstrated that in situ ground water contains higher levels of dissolved oxygen. All water quality analyses will be performed on unfiltered samples unless approved by the Department.
6. Please confer with your consultant and analytical laboratory prior to sampling to ensure the analytical method is capable of achieving detection limits at or below the Groundwater Cleanup Target Levels (GCTLs) in Table I, Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". GCTLs that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

III. SURFACE WATER MONITORING

1. The surface water in the Wetlands Mitigation Area shall be sampled semiannually in March and September, and analyzed for the parameters listed in Rule 62-701.510(8)(b), F.A.C.
2. The permittee shall monitor and record daily the groundwater elevation as indicated on the staff gauge in the pond next to the Landfill Office. When the staff gauge reading indicates a peak in the groundwater level, such as after a substantial rain event or sustained rainy period, the permittee shall monitor and record the groundwater elevations at each of the groundwater monitoring wells.

IV. LEACHATE TREATMENT SYSTEM MONITORING

1. The effectiveness of the leachate treatment system shall be checked before and after treatment by sampling and analysis on a monthly basis and submitted quarterly in January, April, July, and October of each year for the following parameters:

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Field Parameters	Laboratory Parameters
1. pH	3. chlorides
2. Specific conductivity	4. Nitrate
	5. Iron
	6. Sodium
	7. Total dissolved solids (TDS)
	8. Mercury
	9. Total ammonia - N

2. All test results are to be submitted in accordance with Section VI.7 below.

V. MONITORING WELL REQUIREMENTS

1. If a monitoring well or piezometer becomes damaged or inoperable, the Permittee shall notify the Department in writing within seven (7) days of discovery and provide a written report within ten (10) days of written notification. The written report shall describe what problem has occurred and the remedial measures that have been taken to prevent a recurrence. The Department can require the replacement of inoperable monitoring wells or piezometers. [62-520.600(6)(1), F.A.C.]
2. New or replacement monitoring well design or placement must be approved in advance by the Department. The design and construction of these wells must be based on site-specific borings with appropriate supporting data such as grain size distribution analyses, in-situ hydraulic conductivity testing, and depth to water. Wells shall be installed using standard, accepted practices for well construction. All drilling methods must be approved by the Department prior to well installation. [62-701.510(3), F.A.C. and 62-550.600(3) and (6), F.A.C.]
3. All wells and piezometers shall be clearly and permanently labeled and the well site maintained so that the well is visible at all times. Unless otherwise authorized in a Department permit, new monitoring wells, and existing monitoring wells at the time of permit renewal, shall have protective bollards or other devices installed around them if they are located in areas of high traffic flow to prevent damage from passing vehicles. [62-701.510(3)(d)5, F.A.C.]
4. The Department shall be notified in writing before any monitoring wells are abandoned or plugged. Wells shall be abandoned using standard, accepted practices for well abandonment. [62-701.510(3)(d)6, F.A.C.]

VI. REPORTING REQUIREMENTS

A. FIELD ACTIVITIES

1. The Department must be notified in writing, hard copy or e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s). [62-701.510(8)(a), F.A.C.]

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B. MONITORING WELL COMPLETION REPORT

2. One (1) electronic copy (Adobe pdf format) of the Monitoring Well Completion Report, Form 62-701.900(30), F.A.C., must be submitted to the Department within thirty (30) days after installation of any new or replacement monitoring well(s). In addition, as-built well construction diagrams and soil boring logs that cover the entire depth of the monitoring well(s) must be submitted to the Department. **[62-520.600(6)(j), F.A.C.]**
3. The top of casing elevation of each well, to the nearest 0.01 feet, and the latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and certified by a Florida Licensed Surveyor and Mapper and provided on the form. **[62-701.510(3)(d)1 & 62-520.600(6)(i), F.A.C.]**

C. SURVEYING

4. One (1) electronic copy (Adobe pdf format) of a drawing must be submitted within sixty (60) days following monitoring well installation showing the location of all monitoring sites (active, abandoned, and Evaluation Monitoring), piezometers, water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988) to the nearest 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. **[62-701.510(1)(c)&(3)(d)1, and 62-520.600(6)(i), F.A.C.]**
5. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells need to be surveyed as long as all other monitoring wells in the monitoring plan have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Report upon completion of each new well. **[62-701.510(3)(d)1, F.A.C.]**

D. DEPTH MEASUREMENTS

6. A total depth measurement must be made on each well at time at the time of permit renewal. This information must be provided as part of permit renewal application. This measurement is to be reported as total apparent depth below ground surface and should be compared to the original total depth of the well.

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E. INITIAL AND SEMI-ANNUAL SAMPLING

7. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses and shall follow the Department's electronic reporting requirements using the ADaPT software. [Rule 62-701.510(8)(a), F.A.C.]

F. WATER QUALITY REPORTING REQUIREMENTS

8. Water quality monitoring reports and all groundwater, surface water, and leachate analytical results required by this permit shall be submitted to the Department electronically via email, FTP site, compact disc, or flash drive media readable by Microsoft Windows. Water quality monitoring reports shall be submitted in Adobe PDF format. Unless otherwise approved by the Department, the water quality Electronic Data Deliverable (EDD) shall be compatible with software called Florida DEP Automated Data Processing Tool (ADaPT). ADaPT has been developed to evaluate and upload water quality data into the Department's Water Assurance Compliance System (WACS) database. A copy of this ADaPT software with installation instructions and EDD specifications can be downloaded from the following website address:
<https://floridadep.gov/waste/waste/content/adapt>
9. Water quality monitoring reports shall be submitted in Adobe PDF format and shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:
 - a) Cover letter ;
 - b) Summary of exceedances and recommendations;
 - c) Ground water contour maps;
 - d) Chain of custody forms;
 - e) Water levels, water elevation table;
 - f) Water Quality Monitoring Certification using Form Rule 62-701.900(31), F.A.C.;
 - g) Appropriate information using the Groundwater Sampling Log, Form FD 9000-24 (DEP-SOP-001/01) and,
 - h) Laboratory and Field EDDs and error logs, as applicable.
10. The monitoring report (including ADaPT EDDs) should be emailed to Tallahassee using the following email address: ADaPT.EDDs.and.Reports@dep.state.fl.us. Submit all ADaPT files in a single zip file named as follows:
12345_200811_swldd.zip
11. Submit the monitoring report in a single (text, no scanned content) PDF file named as follows:
12345_200811_swgwmr.pdf
12. If attachments are too large to email, monitoring reports may also be transmitted to the FDEP Solid Waste Program in Tallahassee using the following FTP site:
ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/EDDS_and_Reports.

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13. When submitting files to the FTP site, please combine all ADaPT EDDs and the groundwater monitoring report into a single zip file (sw_12345_200811_gwmmr.zip). Please email us at ADaPT.EDDs.and.Reports@dep.state.fl.us informing us of what files were transmitted via FTP for which facility sampling event.
14. If the Permittee is unable to submit the groundwater monitoring report electronically via email or FTP, it can also be sent in an electronic format by regular mail to:

Florida Department of Environmental Protection South District Office 2295 Victoria Avenue, Suite 364 Ft. Myers, Florida 33901	Florida Department of Environmental Protection Solid Waste Section 2600 Blair Stone Road, MS 4565 Tallahassee, Florida, 32399-2400
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G. WATER ELEVATIONS

15. Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites must be measured to the nearest 0.01 foot and reported semi-annually. Surface water elevations at sampling locations must be measured to the nearest 0.01 foot on the same day as ground water levels in the wells and piezometers and reported semiannually. All water level measurements must be made within a one-day period. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), depth to water and calculated water level elevation referenced to the same nationally recognized datum. The ground water elevations shall be reported in the ADaPT data for the upload into WACS. **[62-701.510(8)(a)8, F.A.C.]**

H. GROUND WATER CONTOUR MAPS

16. Ground water elevation contour maps for each monitored aquifer zone must be submitted semi-annually to the Department, with contours at no greater than one-foot intervals unless site specific conditions dictate otherwise. Ground water elevation contour map(s) should include monitoring well and piezometer locations, ground water elevation at each monitoring well or piezometer location referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), a bar scale, north arrow, ground water contour interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in this subject area. **[62-701.510(8)(a)9, F.A.C.]**

I. TECHNICAL REPORT

17. A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department approximately every two and one-half years during the active life of the facility, and every five years during the long-term care period. The report shall summarize and interpret the water quality monitoring results and water level measurements collected since the last Technical Report. The report shall contain, at a minimum, the following **[62-701.510(8)(b), F.A.C.]**:
- a) Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;
 - b) Trend analyses of any monitoring parameters consistently detected;
 - c) Comparisons among shallow, middle, and deep zone wells;
 - d) Comparisons between background water quality and the water quality in detection and compliance wells;
 - e) Correlations between related parameters such as total dissolved solids and specific conductance;
 - f) Discussion of erratic and/or poorly correlated data;
 - g) An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and
 - h) An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.
18. One (1) electronic copy (Adobe pdf format) of the Technical Report shall be submitted to the Department on the following schedule: **[62-701.510(8)(b), F.A.C.]**

Report	Sampling Periods Covered	Number of Semi-Annual Sampling Events in Report	Date Technical Report Due
1	September 2019 through March 2021	5	60 days after March 2022 Monitoring Event
2	March 2022 through March 2024	5	At the time of Application for Renewal

19. Required water quality monitoring reports and water quality data for the Technical Report shall be submitted in electronic format as described in Section VI. F. of this Appendix. **[62-160.240 , and 62-701.510(8)(a), F.A.C.]**

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J. LINKS TO FORMS

1. **Links to the items and forms referenced in this section are as follows:**

ADaPT Electronic Reporting Requirements, October 20, 2017
ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/EDD_guidance.pdf

Ground Water Monitoring Report Certification Form 62-701.900(31)
https://floridadep.gov/sites/default/files/62-701_900_31.pdf

Monitoring Well Completion Report Form 62-701.900(30)
https://floridadep.gov/sites/default/files/62-701_900_30.pdf

Groundwater Sampling Log, DEP Form FD 9000-24
<https://floridadep.gov/waste/petroleum-restoration/documents/groundwater-sampling-log>

List of Attachments

Table 1 – Water Quality Sampling Testsite Information

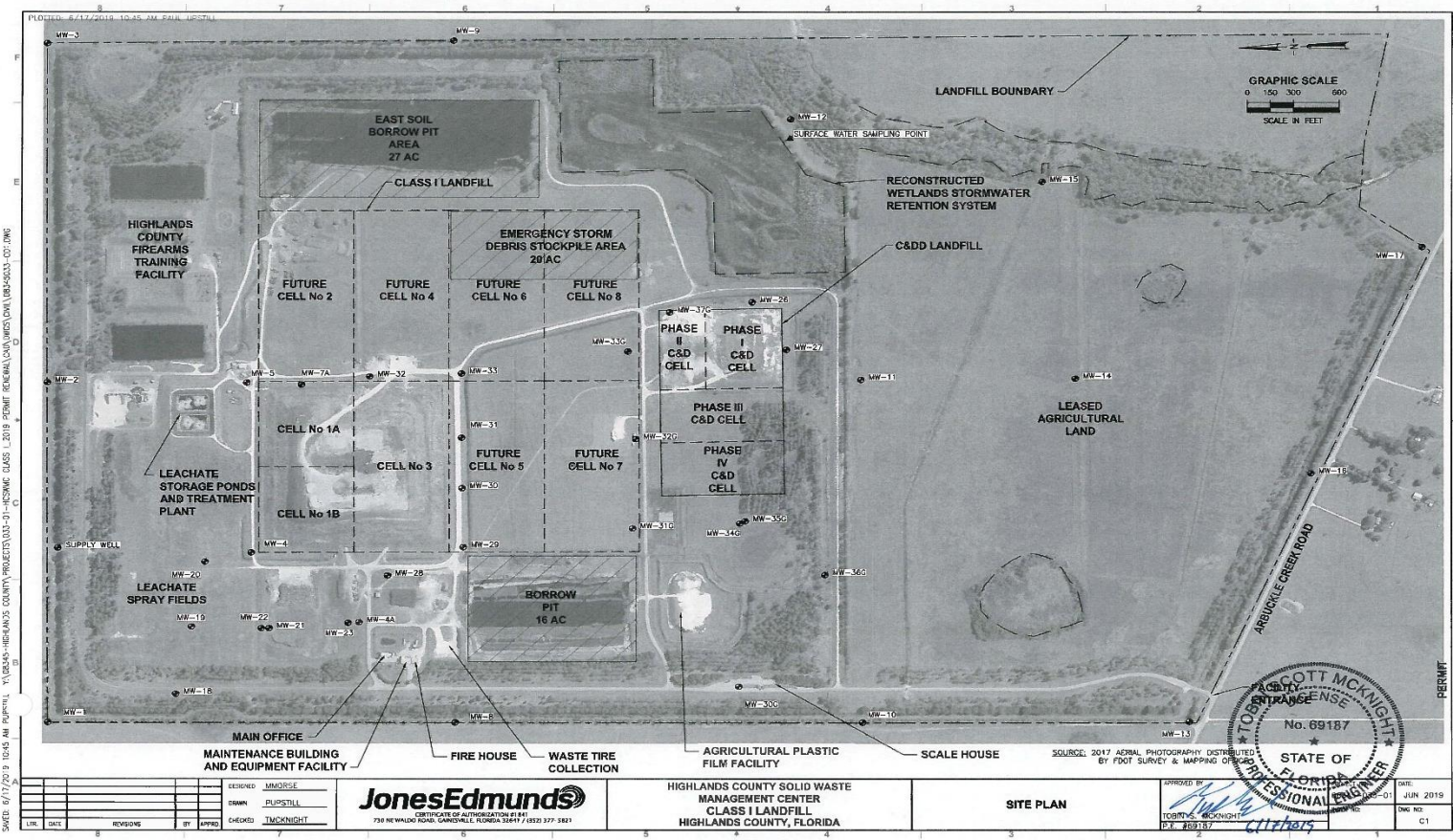
Figure 1 – Site Plan and Groundwater Monitoring Well Locations, June 2019

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Testsite Name	WACS Testsite No.	Designation	Aquifer
MW-1	8021	Background for Class I Landfill & Sprayfield	Surficial
MW-7A	7999	Class I Detection	Surficial
MW-30	23876	Class I Detection	Surficial
MW-31	23877	Class I Detection	Surficial
MW-32	23878	Class I Detection	Surficial
MW-33	23879	Class I Detection	Surficial
MW-4	23882	Sprayfield Detection	Surficial
MW-21	8022	Sprayfield Detection	Surficial
MW-22	8023	Sprayfield Detection	Surficial
Wetlands	27128	Surface Water	Wetlands Mitigation Area

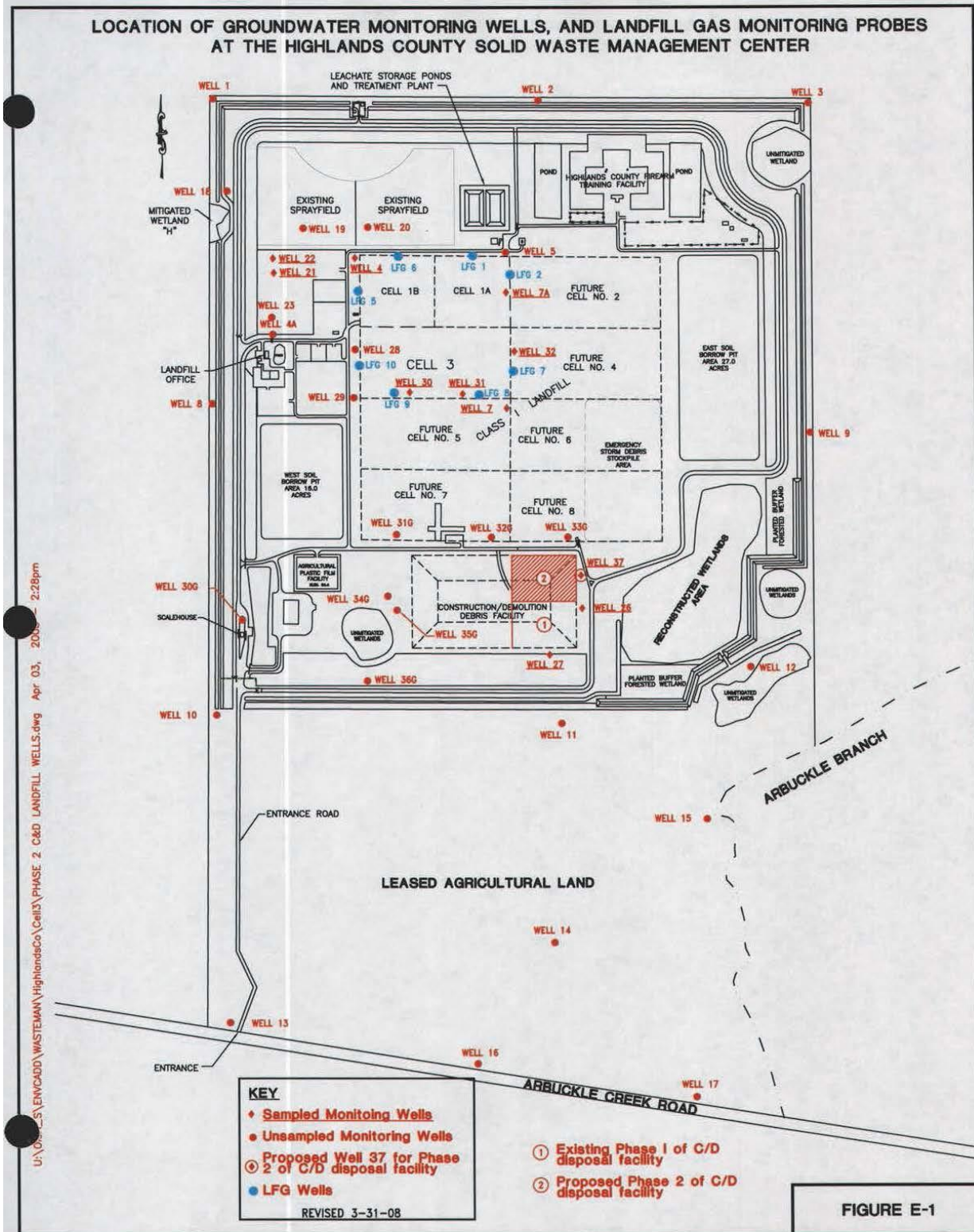
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Figure 1 – Site Plan and Groundwater Monitoring Well Locations, June 2019



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APPENDIX 4 – Landfill Gas Monitoring Locations



Note: This figure is from Appendix 2, Document 1, entitled “Highlands County Solid Waste Management Center, Application for Renewal of Class I Landfill Operation Permit for Cells 1A, 1B, and 3”, prepared by PBSJ, dated March 31, 2008

**HIGHLANDS COUNTY
SOLID WASTE MANAGEMENT CENTER FACILITY
CLASS I LANDFILL OPERATION PLAN**

PERMIT No.: 0038570-030-SO-01

FACILITY WACS ID NO.: 74956

Prepared for:

Highlands County Board of County Commissioners
Solid Waste Division
12700 Arbuckle Creek Road
Sebring, Florida 33870

Prepared by:

Highlands County Solid Waste Division
12700 Arbuckle Creek Road
Sebring, Florida 33870
and
Jones Edmunds & Associates, Inc.
730 NE Waldo Road
Gainesville, Florida 32641

PE Certificate of Authorization #1841

Geology Business #GB133

July 25, 2019

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EXECUTIVE SUMMARY

This Operation Plan provides written, detailed instructions for the daily operation of the Class I Landfill at the Highlands County Solid Waste Management Center (HCSWMC) Facility. This Operation Plan will be kept at the Facility and will be accessible to landfill personnel. This Operation Plan will be substantially complied with and will be revised if operational procedures change. The construction and operation of the Class I Landfill was initially authorized by Permit Number SC28-187507 issued by the Florida Department of Environmental Protection (FDEP) on April 19, 1991.

The Class I Landfill is on the northwest portion of the 987-acre HCSWMC property at 12700 Arbuckle Creek Road, near Sebring, Florida 33870, in Section 22, Township 34 South, and Range 30 East. The HCSWMC also operates a Construction and Demolition Debris (C&DD) Landfill and Agricultural Plastics Disposal Unit at the facility.

Facility operations are governed by its construction/operation permits issued by FDEP and the South Florida Water Management District (SFWMD); the applicable laws and regulations of Florida including Chapter 62-701, FAC, Solid Waste Management Facilities; and the regulations of the US Environmental Protection Agency (EPA). A current copy of Chapter 62-701, of the Florida Administrative Code (FAC), is maintained at the Facility office. As required, an updated Operation Plan will be submitted at the time of permit renewal.

SECTION 1.0 TRAINING AND CERTIFICATION OF OPERATORS (62-701.500)(1))

1.A. OPERATOR AND SPOTTER TRAINING

Operator and spotter training will comply with Rule 62-701.320(15), of the Florida Administrative Code (FAC), as adopted February 15, 2015. Landfill equipment operators at the Highlands County Class I Landfill will successfully complete 24 hours of initial training offered by the University of Florida (UF) Training, Research and Education for Environmental Occupations (TREEO) Center. The Landfill Operations Manager will successfully complete the 24-hour Solid Waste Association of North America (SWANA) Manager of Landfill Operations (MOLO) or the 32-hour TREEO Solid Waste Management Training Committee Landfill Operations Manager Training. Within 3 years after passing examination and every 3 years thereafter, landfill equipment operators and landfill operations managers will participate in continuing education courses totaling 16 hours. For example, these courses may include the following:

- Asbestos Awareness Course for Landfill Operators (Solid Waste Management Training Committee [SWMTC] hours: 4).
- Groundwater Issues for Landfill Operators (SWMTC hours: 6).
- Hazardous Materials in Construction and Demolition Waste (SWMTC hours: 6).
- Health and Safety Training for Landfill Operations (SWMTC hours: 5).
- Landfill Gas and Leachate Systems (SWMTC hours: 8).
- Management of Leachate, Gas, Stormwater and Odor at Class I, II, and III Landfills (SWMTC hours: 8).
- Health and Safety Training for Hazardous Materials Activities: Eight-Hour OSHA Refresher (SWMTC hours: 8).
- Waste Screening and Identification for Landfill Operators and Spotters (SWMTC hours: 8).

All courses are conducted by the UF TREEO Center and are approved by SWMTC. All courses from other providers will be SWMTC-approved.

Spotters will successfully complete 8 hours of initial training that will include Spotting at Construction and Demolition Sites, Landfills, and Transfer Stations (SWMTC 8 hours) and/or Waste Screening and Identification for Landfill Operators and Spotters (SWMTC 8 hours) conducted by the UF TREEO Center or other SWMTC-approved providers.

Every 3 years, landfill spotters will participate in continuing education courses totaling 4 hours. These courses may include the following:

- Four-Hour Landfill Spotter Refresher Training (SWMTC hours: 4).

Spotters may include landfill attendants, landfill equipment operators, and landfill operation managers. All courses are conducted by the UF TREEO Center and are approved by SWMTC. The course descriptions are on file in the landfill office. Additional courses that are approved by the SWMTC as initial or continuing education classes may be added to the training plan to meet the training requirements.

The certifications for existing landfill operators and spotters are contained in Exhibit A. Training is through the UF TREEO Center to maintain certifications for compliance with the permit.

The Landfill Operations Manager is responsible for day-to-day operation of the landfill. At least one certified landfill operator will be present on site during hours of operation that the Highlands County Solid Waste Management Center (HCSWMC) receives solid waste. At least one trained spotter will be present at each Class I landfill working face at all times that solid waste is being dumped from collection vehicles to detect unauthorized wastes.

Documentation and proof of training, including continual training education, tests, or courses, will be maintained at the Facility and will be available for inspection by FDEP.

SECTION 2.0 STANDARD LANDFILL OPERATIONS AND MAINTENANCE (62 701.500)(2))

2.A. RESPONSIBLE PERSONS (62-701.500(2)(A))

The Highlands County Class I Landfill is owned and operated by Highlands County. Ultimate responsibility for operation of the Landfill rests with the Highlands County Board of County Commissioners. Responsibility for overall management of the landfill rests with the Landfill Operations Manager. As such, this individual is designated as the contact person for matters related to regulatory compliance.

The following table summarizes the current personnel at HCSWMC:

Highlands County Solid Waste Management Center Personnel
Director
Project Manager
Landfill Operations Manager
Office Manager
Landfill Technician II
Landfill Technician I
Equipment Operator
Solid Waste Specialist
Landfill Spotter
Solid Waste Cashier

The Landfill Operations Manager has authority to request and obtain the necessary personnel to operate the site and provide for their training and orientation. The Landfill Operations Manager also ascertains the facility's need for equipment and initiates requests with the County to replace existing equipment or obtain new equipment. The Landfill Operations Manager is responsible for administering the provisions of the site Operation Plan.

The day-to-day operations of the site are directed by the Landfill Operations Manager who is assigned to the site full time. The Landfill Operations Manager is responsible for site personnel attendance and performance. As such, this individual routinely directs the daily activities of the scalehouse attendants, spotters, and landfill equipment operators.

Landfill personnel, including spotters at the working face of the landfill, inspect all incoming waste.

2.B. CONTINGENCY OPERATIONS (62-701.500(2)(B))

2.B.1 CONTINGENCY AND EMERGENCY PLANS

Emergency conditions that may constitute a special waste-handling event at the Highlands County Class I Landfill may be caused by natural disaster (e.g., hurricane, tornado, and/or flooding) or fire. Accidents, equipment breakdowns, and receipt of unauthorized waste may also constitute the implementation of the Contingency Plan.

In case of emergency, the following parties should be contacted:

Emergency Telephone Numbers		
Emergency	Who to Call	Phone Number
General		Dial 911
Injury or Illness		Dial 911
Follow up Injury or Illness	Risk Manager	863-402-6792
Ambulance	County Emergency Management	863-402-6630
Hospital	Highlands Regional – Sebring, FL	863-385-6101
Brush Fires	Fire Services	863-402-6733
Landfill Fires	Fire Services	863-385-1112
Sheriff's Office	Sebring, FL – Non-Emergency Number	863-402-7200

All and Any Other Emergencies	
Department of Solid Waste Management	863-402-7786
	863-381-7071
County Director	863-381-6875
Project Manager	863-381-6738
Florida Department of Environmental Protection (FDEP) South District	Emergency or after hours
2295 Victoria Avenue	850-413-9913
Ft. Myers, FL 33901	800-320-0519
	239-332-6975

Waste will not normally be delivered to the site during emergency conditions; however, the following procedures will be initiated at the onset of a major storm:

- Soil cover will be applied to all exposed refuse.
- All landfill equipment will be parked near natural windscreens, such as earth mounds.
- All lightweight signs and equipment will be collected and stored in a secure area.
- Work will begin in dry areas only when operations are resumed; refuse materials will not be deposited in standing water.

In the event of a severe storm in the area, operational hours will be extended after reactivation of the landfill, as appropriate, to meet the needs of the community. The stormwater management system should allow for disposal operations to continue during

periods of inclement weather. Temporary berms and ditches and judicious grading will be used to drain stormwater away from the active face of the landfill.

FDEP will be notified by telephone immediately if contingency operations are needed. The call will be confirmed by a letter. In the event of a severe storm, hurricane, or other disaster, the Highlands County Class I Landfill is expected to remain operational, except during the actual event. If any repair work is required to restore operating capability of the landfill, such repair will be performed immediately following the special-handling event. Landfill hours will be extended, necessary additional equipment will be rented, required additional equipment operators and/or other personnel will be hired, appropriate public notice will be issued, contacts with FDEP personnel will be established, contacts with local government bodies will be established, local emergency agencies will be contacted if necessary, and any other measures will be taken on a timely basis that would permit the Highlands County Class I Landfill to re-establish service to the community.

Reserve landfill equipment is readily available from the County Mechanical Shop. Equipment that is not available from the Mechanical Shop will be leased within 24 hours.

2.B.2. FIRE

In the case of fire, all disposal operations in the area impacted by fire will cease in accordance with Rule 62-701.320(16)(c)2, FAC, and the burning substance should be separated from the bulk of material. Water for fighting the fire can be pumped from surface water in the west soil borrow pit. On-site bulldozers will spread earth onto the fire to smother it. Track excavators will be used to dig out hot spots after the fire has been brought under control.

In the event of a fire in or on disposal facility equipment, the equipment operator will follow the following procedures:

- Activate the on-board fire-suppression equipment.
- If possible, safely move the equipment away from the disposal area to solid ground, drop the blade, and immediately shut off the engine.
- Evacuate the vehicle.
- Signal other operators in the immediate area of the fire by two-way hand-held radio.
- Extinguish any recurring fires with the fire-suppression equipment on the disposal facility vehicles and use a water truck as a backup if warranted.
- If the fire cannot be extinguished or controlled within 1 hour, FDEP and the County government will be notified in accordance with Rule 62-701.320(16)(c)3, FAC.
- If the fire cannot be controlled within 48 hours, the HCSWMC will notify the fire department, County government, and neighbors likely affected by the fire, in accordance with Rule 62-701.320(16)(d), FAC.

Fire extinguishers will be located throughout the facility, including on every piece of equipment.

The smoking of cigarettes by County employees or waste haulers is prohibited within the disposal cell at all times.

Open burning is not permitted at the facility.

2.B.3. EQUIPMENT FAILURE

Equipment available for landfill operations is listed in the table below. Major equipment repairs will be conducted at the County Mechanical Shop.

HCSWMC Equipment	
Model/Description	Model/Description
CAT 826 G Compactor	Volvo A25G Articulating Truck
Bomag 772RB-2 Compactor (2)	Mack Water truck (3,000 gallon Dolphin tank) (2)
CAT D6N LGP Dozer	6 x 4 transporter (4)
CAT D7H LGP Dozer (2)	Ford Semi Tractor
JD 750 J Dozer	5,000-gallon tanker trailer
Komatsu D61PX-24 Crawler Dozer	JD 6120M Cab Mowing Tractor with 8-foot Bush Hog/Rhino FR15-foot batwing.
JD 644J Wheel Loader	Pick-up trucks (12)
CAT 938G Wheel Loader	Bad Boy 60" ZTR Mower
CAT 963B Track Loader	Dixon ZTR riding mower with 4-foot deck
JD 110E Excavator	Lowboy trailer
CAT 322CL Excavator	Roll-off Truck (3)
CAT 120 G Grader	Roll-off Boxes (4)
JD 250 Articulating Truck	Volvo Excavator

Backup equipment will be available for equipment breakdowns and downtime for routine equipment maintenance. In the case of major equipment failure, equipment will be borrowed from the County or if necessary obtained on a short-term basis from outside sources. A contract is in place and arrangements with contractor and rental equipment dealers have been made to furnish equipment.

2.B.4. ALTERNATIVE LANDFILL TO ACCEPT WASTE

If an alternative landfill is necessary to accept waste from Highlands County, an agreement with an alternative landfill has been prepared for acceptance of waste in the quantities referenced. A letter establishing this agreement between HCSWMC and Okeechobee Landfill, Inc. was submitted with Section 3 of the application for renewal of Permit No. 0038570-022-SO-01, approved August 4, 2009 (Reference J).

2.B.5. COVER SOIL AVAILABILITY

2.B.5.a. Soil for Construction, Operation, and Closure of Class I Facilities

FDEP has approved the mining of two on-site borrow pits in the buffer zone of the HCSWMC to obtain soil for all purposes needed. The location of the borrow pits are shown on the Site Plan (Appendix B, Sheet C1).

Borrow Pit No. 1 on the east side of the property has been fully mined except for a small area at the northwest end of the pit. The County obtained Water Use Permit

No. 28-00674-W from the South Florida Water Management District (SFWMD) on December 17, 2012, to mine Borrow Pit No. 2 on the West side of the property to a depth of 40 feet. This borrow pit will yield approximately 290,000 cubic yards of borrow soil.

Since 1995, the County has stripped and stockpiled topsoil from construction areas on the HCSWMC for future use.

2.B.5.b. Alternative Initial Cover Methods

Tarping

FDEP has approved the use of mechanically deployed tarps by Tarpomatic, Inc. for initial cover. The County owns two Tarpomatic harness machines that can be picked up and operated by remote control from the cab of the bulldozer. The County owns three metal spools for the harness machine. Each spool can carry and deploy two 40-foot by 100-foot reinforced plastic tarps, with each tarp weighted down by two heavy chains and 11 steel wire cables. On any given day, the County can cover a single working face 150 feet by 100 feet in size, or two smaller working faces half that size. The County owns eight tarps and keeps two as spares. Each tarp is replaced annually or if it becomes torn or damaged. If conditions warrant, the County will purchase an additional harness machine, spools, and tarps to adequately cover the working face, or faces, at the end of each day.

If use of the tarping machine is prevented by mechanical problems or weather conditions, or if deployment of the tarps does not completely cover the exposed working face, the County applies an initial cover of soil blend at least 6 inches thick to areas of exposed waste at the end of each day.

Soil and Mulch Mixture

FDEP has approved the use of a blend of on-site borrow soils and shredded horticultural and yard waste (mulch) in a 50/50 mixture by volume as a substitute for pure cover soil. The County contracts the services of a vendor to grind yard waste and site clearing vegetation in a 16-foot-diameter tub grinder with screens set for 3-inch-nominal particle size. The County processes the yard waste in 2,000-ton increments about four times per year, producing an annual total of 8,000 tons or 8,000 cubic yards, of shredded mulch. As required for operational needs, portions of the stockpiled mulch are spread by bulldozer on to the ground surface of the blending pad area in a layer about 8 to 10 inches thick. The mulch is then covered with an equally thick layer of borrow soil. About 8,000 cubic yards of borrow soil are used annually.

Once the two layers are in place on the pad, the County uses a rubber-tire caterpillar SS-250 soil-stabilizer machine to make several passes over the material and mix and blend it thoroughly to a depth of 18 to 24 inches. The blend is then picked up and transported to the disposal cells or a stockpile area as needed.

ASR and Processed Tire Mixture

FDEP has approved the use of an alternate initial-cover material including a mixture of automotive shredder residue (ASR) and processed tires. This approved material is from a single source and use of material from any other source must be approved by FDEP. The

materials will be thoroughly mixed before placement on interior slopes only and will not interfere with leachate and gas collection systems.

RSM Mixture

FDEP has authorized the use of Recovered Screen Material (RSM) from construction and demolition debris (C&DD) recycling facilities for initial landfill cover. This approved material is from a single source and use of material from any other source must be approved by FDEP. The RSM will be thoroughly mixed with other approved materials before placement on interior slopes only. The use of RSM will not interfere with leachate and gas collection systems. RSM will be stored on the top surface of the Class I Landfill within the lined area and away from the side slopes.

2.B.6. WEATHER CONDITIONS

During heavy rainfall when unpaved roads within the disposal cells become impassible for collection vehicles, a designated wet-weather disposal area adjacent to the entrance to Cell 3 will be placed into operation for waste receipt. The wet-weather disposal area is accessible to collection vehicles arriving at the entrance to the disposal cell on an all-weather paved site road. Landfill operations staff will maintain the unpaved access road to the working face in the designated wet weather area using road base materials made of clean roofing shingles, broken tiles, broken concrete block, and shell stockpiled adjacent to the disposal cell.

The County may temporarily close the working face of the landfill from time to time due to local severe weather conditions that would pose a safety hazard to operators and customers, or due to high winds in excess of 35 mph that would prohibit safe waste-dumping conditions. The conditions that would warrant temporary closure of the landfill include nearby lightning strikes, high winds, intense on-site rainfall, or an approaching tornado. The landfill uses Weatherbug by Earth Network to alert personnel in the landfill office of approaching electrical storms. This equipment is used to monitor the direction and speed of storms and to determine when the danger has passed and the working face can be re-opened.

The procedures for a temporary closure of the landfill are as follows:

- The Landfill Administration will declare a temporary shutdown and will direct the scalehouse operator to halt incoming refuse collection trucks at the scalehouse until the severe weather condition passes. County personnel and any refuse haulers present in the active disposal cell will cease work and take shelter off the cell. No one will remain on the landfill disposal cells during the storm.
- The Landfill Administration will contact the County-franchised refuse collection contractor and the municipalities of Avon Park, Lake Placid, and Sebring by phone as soon as an emergency shutdown occurs. They will be notified again by phone once the landfill operations are resumed. Typical emergency shutdowns are expected to last 10 minutes to over 1 hour.
- The Landfill Administration will direct the restart of landfill operations as soon as weather and site conditions permit. If landfill operations are halted by severe weather conditions that occur after 4:30 PM (normal closing time is 5:00 PM), the landfill will remain closed

for the rest of the day and any refuse collection trucks arriving after 4:30 PM will be asked to return the next morning.

- The landfill will maintain a log of emergency shutdowns, recording the date, time of day, and duration of the shutdown. A count will be made of the number of collection vehicles held up or turned away during the temporary shutdown.

Typically, temporary landfill shutdowns do not occur more than 15 to 20 times per year.

The County may also close the entire HCSWMC for 1 or more days during a declared tropical storm or hurricane storm event. Closure occurs when the sustained wind speed from an approaching tropical storm or hurricane reaches 45 miles per hour (mph). The landfill closure would be coordinated with the County Department of Emergency Management Services, and public announcements of the closure would be made over local radio and TV stations. Closure of the landfill would also be coordinated with the County-franchised refuse collection contractors and the municipalities of Avon Park, Lake Placid, and Sebring to occur concurrent with the cessation of refuse collection activities throughout the County as the storm passes over the area.

Once the tropical storm or hurricane event is over, the landfill will be reopened as soon as it is determined that Arbuckle Creek Road is passable and not closed due to localized flooding. The County has designated and received approval from FDEP for a 20-acre area of the HCSWMC accessible by all-weather paved roads for the temporary storage of hurricane storm debris. The area is shown on the Site Plan (Appendix B – Sheet C1).

2.B.7 ACCIDENTS

The sections below describe emergency or equipment procedures that will be followed for the various types of accidents that may occur at the facility.

Vehicular Accidents

1. Determine if personal injury has occurred. If so, contact the Highlands County Landfill Administration Office.
2. Determine if the vehicle(s) can be safely moved under its own power. If so, move the vehicle(s) out of the way of normal traffic flow.
3. If the vehicle(s) cannot move under its own power and is interrupting traffic flow, push the vehicle(s) out of the way with site equipment or reroute traffic if serious injuries are involved.
4. Notify the Highlands County Landfill Administration office at (863)-402-7786 and the County Risk Manager (863-402-6792) of the details of the accident.
5. Arrange to have disabled vehicles towed from the site to maintain operations.

Personal Injury

1. Determine the nature and extent of the injuries.
2. If qualified, administer emergency first-aid techniques.
3. Call 911 for outside emergency assistance or Highlands Regional Hospital (863-385-6101).
4. Report the incident to the Highlands County Landfill Operations office at (863)-402-7786 and the County Risk Manager (863-402-6792).

5. If injuries require non-emergency medical attention, arrange to transport victim(s) to a place of professional medical care (e.g., hospital emergency room, doctor's office, clinic) by conventional means.

2.B.8. FIRE FIGHTING

Fires at landfills are most often the result of hot waste, arson, and spontaneous combustion. Efforts to reduce the fire potential include watching for and segregating hot loads and covering waste daily.

The site is equipped with 6-inch water supply pipeline capable of delivering a sustained flow of 200 gallons per minute (gpm) at 40-pound-per-square-inch (PSI) pressure from a hydrant in the equipment staging area about 100 feet from the entrance to Cell 1B. A second hydrant is at the edge of the yard waste disposal area, and a third hydrant is at the office/garage area. The County also has two pressurized 3,000-gallon water trucks equipped with a water cannon capable of delivering a 500-gpm spray 150 to 200 feet. The site also has a HALE 500 portable fire pump dispensing 500 gpm. An 8-inch-diameter dry hydrant (drafting hydrant) has been installed next to the north bank of the west borrow pit, less than 200 feet from the waste tire stockpile area. The hydrant meets the County Fire Marshall's requirement of providing a minimum sustained flow of 1,000 gpm for 3 hours to fight a tire pile fire. The landfill is also equipped with three landfill compactors and five bulldozers having enclosed cabs and large trash blades that can be used to dig out and smother a landfill fire.

In the event of a landfill fire during the day, Landfill Administration or a designated representative will call 911 to report the fire. During hours when the landfill is closed, the fire may be reported to 911 by area residents or motorists on Arbuckle Creek Road. The County Department of Emergency Management Services monitors such calls and will notify County Administration of the report of a fire. County Administration will immediately report to the landfill to direct fire-fighting operations, and will also summons Landfill Operations staff as required to help contain and put out any refuse fire in the landfill disposal cells. Landfill Administration will notify FDEP South District by calling 239-344-5600.

Any hot load of Class I waste arriving at the facility will be emptied on an unfilled area away from the active disposal area. The load will immediately be covered with earth and will not be incorporated into the Class I disposal area until it has cooled completely.

Any fire in the landfill waste will be initially hosed down to suppress the flames and reduce the rate of the lateral spread of the burn area. Once the flames have been knocked down, the landfill heavy equipment will be used to rapidly excavate the burning or smoldering waste and push it away from the burn area onto an adjacent area of the landfill that is sealed with a layer of intermediate cover soil. As the burning or smoldering waste is spread out on the surface of the intermediate cover in a thin layer, it will be hosed down and track rolled to extinguish the fire. The waste will then be turned over with the heavy equipment, so it can be hosed down and track rolled a second time. Waste in the burn area showing evidence of having been charred by the fire will be excavated from the burn area and hosed down.

Charred or burning waste excavated from the landfill will be isolated from the landfill by physical firebreak. This waste will be allowed to cool down for a minimum of 12 hours to

make sure that the fire is entirely extinguished, before the waste is pushed back into the landfill, compacted, and covered.

For a fire in or on disposal facility equipment, the equipment operator will follow the following procedures:

- Activate the on-board suppression equipment.
- If possible, safely move the equipment away from the disposal area to solid ground, drop the blade, and immediately shut off the engine.
- Evacuate the vehicle.
- Signal other operators in the mediate area of the fire by two-way hand-held radio.
- Extinguish any recurring fires with the fire-suppression equipment on the disposal facility vehicles and use a water truck as a backup if warranted.

Fire extinguishers will be located throughout the facility, including on every piece of equipment.

Smoking of cigarettes by County employees or waste haulers is prohibited within the disposal cell at all times.

Open burning is not permitted at the Facility.

2.C. CONTROL/INSPECTION OF INCOMING WASTE (62-701.500(2)(c))

Large signs are posted at the entrance to the HCSWMC and at the scalehouse facility that alert the public of the types of waste not accepted in the Class I landfill and the C&D waste landfill. The County provides a household hazardous waste collection program. It is based at the County Recycling Facility on Skipper Road. Hazardous materials removed from loads of Class I and C&D wastes or brought into the landfill site separately by waste haulers or residents are transferred to the hazardous waste storage area at the Recycling Facility where they are inventoried and removed by a licensed hazardous waste collection company under contract to the County.

Haulers delivering loads to the HCSWMC are questioned by the cashier at the scalehouse to determine the contents of the load and if the hauler is aware of any prohibited materials in the load.

Additionally, a random load-checking program to detect and discourage disposal of unauthorized wastes is in place in accordance with Rule 62-701.500(6), FAC. Refer to Section 6.a of this plan for details regarding the random load-checking program.

Loads dumped at the working face of the Class I landfill are inspected before and during the dumping process by a trained spotter stationed at the working face. Once the load has been dumped in a pile, the landfill operators spread the load onto the working face using a bulldozer and/or compactor. At this time, the load is again inspected by the spotter, bulldozer operator, and landfill compactor operator. The spotter and equipment operators communicate with hand-held radios. If small amounts of prohibited material are found, it is removed from the waste by the spotter and placed in a County pickup truck for transport to

the County Recycling Facility to be removed by a licensed hazardous waste collection company under contract to the County.

If a significant amount of regulated hazardous wastes are discovered as the load is being dumped or spread, or otherwise discovered to be improperly deposited at the landfill, the area will be immediately secured with barriers and the landfill operator will promptly notify FDEP by calling (850) 413-9913 or toll free (800) 320-0519, and the South District office at (239) 332-6975. During normal business hours, Landfill Administration will call (239) 332-6975. Arrangements will be made with the entity that generated the waste to properly dispose of the material using the licensed hazardous waste collection company currently under contract to the County. If the generator or hauler cannot be identified, the facility operator is responsible for cleanup, transportation, and disposal of the waste using Highlands County's current hazardous waste contact or transport to an alternative permitted hazardous waste management facility.

2.D. WEIGHING OR MEASURING INCOMING WASTE (62-701.500)(2)(D))

Weighing of incoming waste will be performed at the scalehouse with inbound and outbound 60-ton electronic vehicle scales. The scalehouse is equipped with a computerized vehicle recording system and a security camera with color monitor. The scales are certified by the State of Florida and calibrated quarterly.

2.E. VEHICLE TRAFFIC CONTROL AND UNLOADING (62-701.500)(2)(E))

Traffic entering the HCSWMC must pass the scalehouse. A full-time spotter will be employed to control the vehicles coming into the site, along with full-time heavy equipment operators. The spotter and the operators have the authority to direct traffic. The operators and spotters are trained to identify unacceptable waste and are stationed at the working face to monitor the incoming waste.

2.F. METHOD AND SEQUENCE OF FILLING WASTE (62-701.500)(2)(F))

Disposal Cell 1A began accepting municipal solid waste in March 1996 and Cell 1B in February 1998. The two cells form one contiguous area fill that has a base footprint of approximately 525 feet by 1,180 feet as measured by the limit of waste on the inside side slope of the confining perimeter berm at approximately elevation 80.0 feet National Geodetic Vertical Datum of 1929 (NGVD29). With Cells 3A, 3B, and 3C placed into operation, the base footprint of the landfill will be approximately 1,390 feet by 1,180 feet.

The design of the disposal cells requires the construction of cell side slopes at three horizontal to one vertical (3:1) with a maximum elevation of 210 feet NGVD29.

2.G. WASTE COMPACTION AND APPLICATION OF COVER AND CONTROL OF LEACHATE BREAKOUTS (62-701.500)(2)(G))

The compacted waste will be covered at the end of each working day with mechanically deployed tarps or approved FDEP initial cover materials (Section 2.b.5). The landfill operator may use one or two separate working faces in the Class I disposal cell as a part of normal operations. One working face is used for large, self-unloading refuse collection trucks and the other is used for small trucks, pickup trucks, and trailers that require manual unloading.

Throughout the day, the operators use a bulldozer and landfill compactor working together to spread wastes from the tipping area at the base, or top, of the working face onto the working face in loose lifts not exceeding 24 inches thick. The waste is then compacted by the landfill compactor making 4 to 6 wheel passes over the layer. The process is repeated as waste is received. At the end of the day, daily cover is applied and/or the bulldozer and attached tarping machine is used to unroll the tarps. Any portion of the working face that is not covered with a tarp will be covered with a 6-inch layer of approved initial cover material or by a 6-inch layer of cover soil. The blend material or soil are obtained from on-site stockpile areas using landfill equipment and are deposited on the exposed portions of the working face. The cover soil or blend material is spread using bulldozers to a minimal thickness of 6 inches.

Application of cover material or tarping will be used. Tarping will not be used when the following conditions apply:

- Mechanical failure of the tarping machine.
- Wind speeds exceeding 25 mph.

Areas of the landfill where additional solid waste will not be deposited within 180 days will be covered with FDEP-approved intermediate cover material having a minimum compacted thickness of 12 inches. FDEP has approved the use of an on-site manufactured blend of soil and mulch in a 50/50 mixture, RSM, ASR, and processed tires in combination with one of the other materials as an alternative to the use of soil. The blended material is manufactured on site and is stockpiled for use. Borrow soil is also obtained from on-site borrow pits and is stockpiled on site. Intermediate cover is placed on the top and front side slope of each 10-foot-thick lift of waste. Intermediate cover is also applied to the outside side slopes of the cells and is typically covered with sod or hydroseed to minimize erosion.

Waste placement and compaction operations are carefully monitored by the Landfill Operations Manager and lead landfill operator to prevent horizontal layering of impermeable materials such as roofing shingles, agricultural plastic film, or temporary cell access roadways that once buried in the landfill could cause localized perching of leachate and a potential lateral breakout of leachate on the cell side slopes. Temporary roadways are completely removed before waste is placed over the area of the roadway. Using tarps for alternative initial cover and the partial or total removal of intermediate cover before placement of new lifts of waste also contribute to a lack of stratification in the fill.

During significant rainfall events, a temporary confining soil berm, or berm constructed of "blend" material a minimum of 12 inches in height, will be constructed on top of the

existing intermediate cover layer just below the toe of the daily working face. The temporary berm will be tied into the covered side slopes of the lift on both sides of the working face. The berm or dike will serve to contain rainfall that comes into direct contact with solid waste at the working face where it can soak into the landfill instead of mixing with clean surface water runoff from other areas of the landfill sealed with intermediate cover.

To protect the integrity of the leachate collection system and synthetic liner at the disposal areas, the first 4 feet of waste placed will be screened for select materials. The entire 4-foot lift will be placed before compaction and the use of heavy equipment. Waste hauling equipment, cover hauling equipment, and compaction equipment are prohibited from driving directly on the liner and may only have access to the fill area when the 4-foot lift is compacted in place.

Any leachate breakout on side slopes or benches will be reported to the Landfill Operations Manager and its location documented. A 36-inch-wide trench will be excavated through the sod, intermediate cover, and underlying refuse just above the breakout. The length and depth of the trench will be determined by field conditions. The excavated waste will be placed in the working face of the landfill, and the trench excavation will be backfilled with clean tire chips and resealed with intermediate material and sod. The chipped tires will act as an interceptor and vertical drain to direct the flow of leachate down to the floor of the cell.

The final cover system will be designed in accordance with Rule 62-701.600(3), FAC. The final cover will be placed on the intermediate cover as portions of the facility are closed. The conceptual final cover system for landfill closure, from top to bottom, includes:

- 6-inch layer of soil material with surface vegetation.
- 18-inch soil layer.
- Textured geomembrane.
- 6-inch-minimum-thickness soil layer.

2.H. OPERATION OF GAS, LEACHATE, AND STORMWATER CONTROLS (62-701.500)(2)(H))

Landfill Gas

The landfill is currently equipped with an active gas control system in Cells 1A, 1B, and 3. The system consists of a series of laterals, which are perforated 4-inch high-density polyethylene (HDPE) lines buried at different elevations and connected to main headers. These headers then route to an enclosed flare. The landfill gas is then burned, reducing any objectionable odors and surface emissions. The gas collection system also allows the diversion of collected gas to fuel the aggregate dryer and blend mixer at the asphalt paving plant at the HCSWMC. When the asphalt plant is not operating, the gas is sent to the enclosed flare for burning.

Two 20-horsepower (Hp) Hartzell centrifugal fans produce a negative pressure on the laterals, pulling the gas from the landfill to the flare.

The gas collection laterals used for gas extraction may also be used for leachate recirculation and treatment. This will be accomplished by controlling the zones in the landfill area via valving.

Leachate

Leachate from the Class I landfill disposal cells is collected, treated, and disposed of on site using an integrated system for control and management.

Leachate is collected on top of the primary HDPE liner in each cell and is conveyed by gravity on the sloped floor of the cell to perforated HDPE drain pipes that allow the leachate to flow to a perpendicular 8-inch-diameter HDPE header pipe at the low end of the cell. Cell 1A contains four 8-inch leachate drain pipes; Cell 1B contains three 6-inch leachate drain pipes. From there, the leachate flows by gravity into a sealed wet well and lift station outside the cell.

Cell 1A contains three piezometers that are used to measure the static head of leachate on the HDPE liner by lowering a ruled dipstick to the floor. The liner is protected from damage by supporting the open bottom of the slotted piezometers directly on a 1/4-inch plate that rests on a 3/4-inch sheet of plywood that in turn rests on the HDPE geomembrane. Cell 1B also contains three piezometers. Two of the piezometers in each cell are situated mid-way between leachate drain pipes on the crest of the ridge of the cell floor and the third is adjacent to the drain pipe.

Cells 3A, 3B, and 3C each have one piezometer at the up-gradient and one each at the down-gradient well. Each piezometer is read bi-weekly, or after a significant rainfall event, and the data are recorded. This monitoring system allows the landfill operator to observe the rise and fall of the leachate level in the cells in response to rainfall events or the recirculation of leachate.

The lift stations are fully automated to cycle on and off based on the level of liquid in storage in the wet well. Each wet well is equipped with an alarm to warn the operator in the event of a pump failure. A backup unit is kept on site for quick replacement in the event of a pump failure.

Each lift station is equipped with a flow meter. The quantity of leachate collected and pumped from each cell is recorded daily. Copies of leachate analysis and reports will be made available to FDEP on request.

Leachate drain pipes and header pipes are equipped with cleanout ports at one end. These collection pipes are jet-cleaned at least once every 5 years to remove sediment and scale build-up. The combination of data from the cell piezometers, flow meters, and cleaning of the pipe are used to determine if any stoppage exists in the collection system. A copy of the previously submitted water pressure cleaning and video inspection of leachate collection system report is referred to in Reference G.

The collected leachate from Cells 1A, 1B, and 3 is pumped via 4-inch HDPE force mains directly into the leachate storage basins for initial treatment. The double synthetic-lined basins together have a 4.3-million-gallon capacity. However, a 3-foot freeboard is maintained to prevent leachate overflow. The permitted capacity of the two basins is

2 million gallons (about half the available capacity). This permitted capacity allows for closing one basin for maintenance.

Both basins are equipped with a large staff gauge welded to the surface of the liner. The elevation of the fluid level in both basins is recorded daily to track changes in leachate quantities due to leachate inflow and outflow, rainfall, or evaporation. Leachate can be pumped from one basin to the other or can be allowed to circulate back and forth. Each basin is equipped with two 5-Hp floating aerators that throw leachate spray a horizontal distance of 10 feet. The initial treatment provided by aeration reduces biochemical oxygen demand (BOD), chemical oxygen demand (COD), ammonia, total dissolved solids (TDS), and volatile organics in the leachate.

The leachate is drained from each basin by a perforated 8-inch HDPE collection pipe resting on the floor at the low end of the basin. The gravity drainage system is equipped with cleanout ports extending up the side slopes of the basins. The leachate collection pipe system in each basin is cleaned by either backpressure washing the pipes, or by jet cleaning at the same time or when needed.

The initially treated leachate flows by gravity from one or both basins via an 8-inch HDPE sewer line to the master lift station wet well. The quantity of flow is controlled by valves at the lift station that are equipped with automatic float controls and alarms to prevent the master lift station from overflowing. In addition, the 8-inch sewer line is equipped with an automatic hydrostatic valve that can close the line in the event of a power failure. The 8-inch sewer line is equipped with a cleanout port, and is jet cleaned when needed to remove sediment and biomass buildup if restricted flow is noted.

The master lift station is the heart of the system and can send the initially treated leachate to several different locations:

- Return to the leachate storage basins via a dedicated force main with a flow meter to record the amount returned
- Recirculate to Cells 1A, 1B, and 3 at various levels and locations within the disposal cells via 8-inch and 6-inch HDPE force mains and valved 4-inch lateral HDPE pipes that are buried in horizontal trenches and backfilled with shredded tire chips. The recirculation system is controlled manually by valves to balance and distribute leachate to different sections and levels of the landfill in a controlled systematic manner. The system is designed to be operated only during the dry season of the year from September until June. The piezometer installed in each cell will be monitored when recirculation is in progress to make sure that the static level of leachate on the primary HDPE liner does not exceed 12 inches. Leachate recirculation will be temporarily halted until the level of leachate on the cell floor drops below 12 inches.

If the disposal cells do not produce enough leachate to make up the difference in daily moisture requirements between the wet and dry seasons, clean groundwater can be added to the system via the limited use commercial well (the "supply well") on site. Water can be added to and pumped by force main directly into the leachate storage basins. The quantity of water added to the system will be recorded by the flow meter on the force main and adjusted for the quantity of raw leachate also concurrently draining into the wet well from Cell 1B.

The supply well provides non-potable water to the landfill office and for emergency fire suppression. It is typically pumped three times a week, at a rate of approximately 8,000 gallons per day. This is an estimated 1.2 million gallons per year, below the permitted annual limit of 27.2 million gallons.

- Send the initially treated leachate to the on-site leachate treatment plant for final processing and disposal in the sprayfield. Initially treated leachate is pumped to the dosing pump station where it is mixed with final treated effluent that has been cycled back to the dosing station from the flow-splitting manhole. The dosing mixture consists of 30-percent incoming initially treated leachate and 70-percent recycled treated leachate that has already passed through the sand filter at least one time. The mixture is then pumped to the sand filter where it trickles through the beds and is fed to microorganisms living in the sand. The effluent flows by gravity to the flow-splitting manhole. At the manhole, 30 percent of the treated leachate is sent to the disinfectant contact chamber and 70 percent is returned to the dosing pump station to be mixed with incoming initially treated leachate. From there, the treated leachate effluent is either pumped directly to the sprayfield for disposal or is temporarily held in storage before sprayfield application. The amount of treated leachate sent to the sprayfield is recorded daily by flowmeter and is reported to FDEP on an annual basis.

Sprayfield Irrigation System

Disposal of effluent from the leachate treatment system is accomplished through irrigation of a 32.8-acre on-site field. Based on theoretical calculations, the spray irrigation field should be capable of accommodating the effluent from the leachate treatment system both hydraulically and chemically.

The primary function of a spray irrigation system is effective hydraulic accommodation of applied effluent. To prevent the runoff of effluent, regulations designed to protect surface water do not allow ponding of effluent on spray sites. To size a spray irrigation field, modelling a given site is necessary to determine its capacity to hydraulically accommodate water applied by an effluent irrigation system. The effluent spray irrigation system for the HCSWMC was designed using results of the computer program LANDAP, a software tool developed by FDEP.

In the engineering report entitled *Request for Modification of Solid Waste Permit No. SC28-187507 to Include Construction of a Leachate Treatment and Disposal System*, (Chastain-Skillman, 1994), a thorough discussion of the LANDAP simulation is provided. The report explains that several factors are considered for a spray irrigation system design. Site-specific conditions such as hydraulic conductivity of the sub-surface soil matrix and hydraulic gradient of the groundwater table are important factors, as are the precipitation and evapotranspiration characteristics of the area. The seasonal leachate production rate projections must also be considered. After manipulating and entering these pertinent data, LANDAP calculates the site hydraulic capacity and the amount of wet-weather storage capacity required. For this system, LANDAP simulations calculate an average site hydraulic capacity of 0.67 inch of leachate per week and a worst-case capacity of 0.13 inch per week. LANDAP simulations indicated that a minimum of 0.47 million gallons of wet-weather storage capacity is required.

Another function of a spray irrigation system is disposal of pollutants remaining in the effluent in a manner that minimizes environmental and public health impacts. In this case, the primary concern is protection of groundwater resources from contamination. In accordance with prevailing regulations, primary and secondary drinking water standards may not be exceeded for any pollutants in samples collected from the site's groundwater monitor wells.

In the 1994 engineering report, the authors stated that the effluent constituents of primary concern are chloride, sodium, and nitrogen. In the report, the net mass loading rates to the sprayfield were calculated for each constituent, and the resulting groundwater concentrations for each constituent were projected.

At peak projected leachate flow and nitrogen concentration conditions, the nitrogen loading rate is calculated to be 185 pounds per acre (lb/ac), which is less than the site's nitrogen uptake capability of 320 lb/ac. Therefore, nitrate levels should not be elevated because of leachate application.

Sodium and chloride concentrations in the groundwater resulting from application of these constituents can be calculated by performance of a mass balance. The mass balance must take into consideration the projected concentrations of sodium and chloride in the effluent and in the background water. Additionally, the projected effluent application rate, groundwater flow rate, rainfall rate, and evapotranspiration rate must be considered. In the engineering report, worst-case concentrations for sodium and chloride of 118 milligrams per liter (mg/L) and 129 mg/L, respectively, were reported. These values are lower than the corresponding regulatory limits of 160 mg/L and 250 mg/L, respectively.

Stormwater

A stormwater management system is in place at HCSWMC that meets the criteria set forth in Rule 62-701.400(9). The system is designed to prevent stormwater from the peak discharge of the 25-year storm event from running onto the portions of the landfill that have not been closed. Stormwater on the site is controlled by stormwater collection channels around the perimeter of the fill area, which are designed to avoid contact with solid waste or leachate. A perimeter ditch will serve to direct water from the landfill to the HCSWMC's stormwater management system, at which point it is collected in two retention basins. The HCSWMC operates under Surface Water Management Permit No. 28-00342-S, which was issued by SFWMD on May 9, 1991.

The stormwater system is designed to be a system not needing routine adjustments. Stormwater flows are generated by gravity. No pumping is required. The stormwater retention system is designed with a positive outflow control structure that flows into a spreader swale. The retention system is designed to be a 35-acre productive wetlands marsh needing no mowing or cleaning.

The County inspects the stormwater management system monthly, including stormwater structures, side slopes, side slope drainage features, drainage channels, stormwater basins, drainage pipes, drainage structures, and the miscellaneous drainage swales. These features are inspected for erosion and accumulation of excess sedimentation. Such occurrences will be corrected to maintain the design hydraulic capacity. Any surface depressions will be filled with soil cover material, compacted, and vegetated. Vegetation is mowed regularly as needed. Machine cleaning of the ditches and swales is scheduled as needed.

Monitoring of the system will be conducted on a semi-annual basis. Semi-annual sampling of surface water is collected from the retention basin. If sediment has accumulated, the sediment will be removed and will be stockpiled near the working face of the Class I area to be used as initial cover.

2.I. WATER QUALITY MONITORING (62-701.500(2)(I))

The Water Quality Monitoring Plan, a copy of which is maintained on site, includes monitoring groundwater and surface water. The plan was designed based on the information obtained in the hydrogeological reports for each disposal area and was prepared and submitted to FDEP in accordance with Chapter 62-701.510(2)(b), FAC. Laboratories performing environmental sampling and analyses required by FDEP permits or rules will hold a valid certification from the Department of Health's Environmental Laboratory Certification Program as required by Chapter 62-160, FAC. Field and laboratory records are made available to FDEP and will be retained for the design period of the respective disposal area. A copy of the contracted laboratory's certification is available in Attachment E.5 of this permit application.

Quarterly and semi-annual analyses will be performed and sent to FDEP. Weekly visual inspections of monitoring wells are performed, and issues will be reported to the Landfill Operations Manager. The Groundwater Monitoring Technical Report (Appendix C) includes an evaluation of the monitoring program, groundwater quality, and surface water quality.

2.J. MAINTENANCE AND CLEANING THE LEACHATE COLLECTION SYSTEM

New leachate collection systems will be water pressure cleaned or inspected by video recording before initial placement of wastes. Existing leachate collection systems will be water pressure cleaned or inspected by video recording at the time of permit renewal. Results of the collection system cleanings or inspections will be available to FDEP on request. A copy of the water pressure cleaning and video inspection of leachate collection system report generated by Florida Jetclean, the currently contracted cleaning agency, is available in Reference G of this permit application. Refer to Section 8a for leachate monitoring requirements.

If the on-site treatment plant becomes inoperable, the leachate will be hauled to the City of Sebring Wastewater Treatment Plant with which Highlands County has an inter-local agreement. The interlocal agreement has been previously provided – refer to Reference F of this permit application.

SECTION 3.0 OPERATING RECORDS (62-701.500(3))

The Operating Record (per Rule 62-701.500(3), FAC) for each disposal area – considered part of the Operation Plan and consisting of records, reports, analytical results, demonstrations, construction, operation, and closure permits along with engineering drawings and supporting information, required notifications, and training records required by Rule 62-701.320(15), FAC – are kept at the site with the Operation Plan. Permits, drawings, and records required by Rule 62-701.500(3), FAC, are kept and maintained in the Solid Waste Department office located on site. The records are considered an integral part of the Operation Plan and will be available at reasonable times on request by FDEP personnel. The Highlands County Director, Department of Solid Waste Management, will be responsible for the storage and filing of operational records. The minimum records to be kept as part of the official operating record include:

- Current permits and applications including supporting data and engineering drawings.
- Monthly waste disposal records.
- Inspection records.
- Leachate quantities, sampling, and analysis.
- Monthly operating reports (FDEP monthly facility report).
- Annual estimates of remaining capacity (permitted disposal) in cubic yards.
- Regulatory agency inspection reports.
- Groundwater, surface water, and leachate sampling plan, including well construction information, sampling locations, and water quality sampling results.
- Official notifications to or from FDEP regarding the facility.
- Training verifications/certifications.

SECTION 4.0 WASTE RECORDS (62-701.500(4))

4.A. GENERAL

Waste reports will be compiled monthly and will include the amount of waste received in tons per day and the types of waste. Copies of the reports will be provided to FDEP annually. The monthly records of waste tonnages will cover the following categories: residential waste, commercial waste, tires, yard waste, white goods, agricultural plastic film, non-friable asbestos, contaminated soil, leachate aeration basin sludge, C&DD, and concrete shingle road base.

4.B. OPERATIONAL PROCEDURES FOR SPECIFIED MATERIALS (62-701.500(4)(B))

4.B.1 MOTOR VEHICLES (62-701.520(1))

Motor vehicles will not be accepted for disposal at the Class I Landfill.

4.B.2 SHREDDED WASTE (62-701.520(2))

Waste is not shredded at HCSWMC, and shredded waste is not accepted at the Facility.

4.B.3 BIOLOGICAL WASTE (62-701.520(5))

Biological waste is not accepted for disposal at the Class I Landfill. Untreated biomedical wastes are prohibited at the Class I Landfill.

4.B.4. AGRICULTURAL PLASTIC FILM STORAGE (62-701.500(4)(B)4.)

Agricultural Plastic Film is disposed of in a specified area with the title "Agricultural Plastic Film Facility."

4.B.5. CONCRETE WASTE

In 2008, Highlands County began crushing waste concrete to recycle and use in the Asphalt Plant, to be used by the County Road and Bridge Department, and to be used by HCSWMC to stabilize internal roads.

4.B.6. NON-FRIABLE ASBESTOS AND CONTAMINATED SOIL DISPOSAL PROCEDURES (FAC RULES 62-701.500(4)(B)4., 62-701.520(3) & 62-701.520(4))

From time to time, the County receives small quantities of non-friable asbestos for disposal in the Class I Landfill. The procedures for handling and disposal of the material are contained in Attachment M.3 of this permit application. Asbestos is received and buried using the EPA-approved double-wet-bag method. The County has designated a 200-foot by 400-foot vertical column of airspace in the southwest corner of Cell 3A and the contiguous southeast corner of Cell 3B for disposal of asbestos materials. The bagged asbestos is hand placed into pits dug into the intermediate cover and underlying buried solid waste within the confines of this vertical column at whatever grade the landfill is at when the asbestos arrives. Care is taken not to re-excavate a filled pit once it has been covered. Bagged asbestos is never disposed of in the active working face of the landfill.

Soils that have been contaminated and are to be disposed of in a County-owned and operated landfill must provide a TCLP test prior to disposal. If the results of the toxicity characteristic leaching procedure (TCLP) do not exceed the State contamination level for contaminated soils, arrangements will be made for disposal. A 24-hour notice is required before disposal. The contaminated soil will be spread in a 6-inch to 1-foot layer within the boundaries of the lined landfill (not on the side slopes).

4.B.7. YARD TRASH OPERATING PROCEDURES (62-701.500(4)(B)4.)

Highlands County receives 8,000 to 10,000 tons of yard waste (also referred to as horticultural waste) from residential collection, private tree trimming, and construction site clearing. The yard waste is managed separately from the municipal solid waste.

A designated processing area approximately 300 feet by 500 feet west of disposal Cell 1B is used for yard waste management and production of "blend" used as initial/daily cover, if needed, or intermediate cover. Incoming loads of yard waste are identified at the scalehouse and are sent to the designated yard waste processing area. Loads are inspected by a full-time landfill spotter to make sure prohibited materials are not contained in the load. The yard waste processing area is operated 6 days a week from 7:30 AM until 5:00 PM.

The yard wastes are stockpiled in two categories:

- Clean unbagged grass clippings.
- Mixed vegetative wastes, brush, clean hardwood tree branches, trunks, stumps, and plastic yard trash bags containing grass, weeds, leaves, and trimmings.

The unbagged grass clippings are composted on site using the static pile method, where the pile is turned every 6 months. Composted grass clippings are given away free to County residents.

The mixed vegetative wastes containing brush, weeds, leaves, clean hardwood tree branches, trunks, stumps, and plastic bags are pushed into another 20-foot-tall stockpile. Once every 2 months, or approximately each time the stockpile reaches 2,000 tons in size, a private mulching contractor under a multi-year contract grinds the two stockpiles using a tub grinder. The shredded yard waste is temporarily stockpiled in a windrow adjacent to the "brush pile" area. As needed, the shredded yard waste is spread into an 8- to 10-inch-thick layer over a 200-by-100 foot area and covered by 8 to 10 inches of soil from the on-site borrow pit. The two layers of material are thoroughly mixed and blended by a caterpillar soil stabilizer machine making three to four passes that cultivates to a depth of 18 to 20 inches. The manufactured blend, consisting of 50 percent soil and 50 percent shredded yard waste by volume, is then used for application as an alternative cover material in the disposal cells.

4.B.8. WASTEWATER TREATMENT SLUDGE (62-701.500(4)(B)4.)

The County receives approximately one 30-cubic-yard roll-off container of wastewater treatment plant sludge per week. The sludge is dried at the wastewater treatment plant before delivery. The dried sludge is placed at the bottom of the active face and covered with waste. All sludge is placed in the landfill.

SECTION 5.0 CONTROL OF ACCESS (62-701.500(5))

The landfill design includes methods to control access and provides a buffer designated into the overall landfill. This includes the following:

- Three-strand barbed-wire fence and a 6-foot-deep ditch and 5-foot-high berm outside the fence surrounding the site
- Gated access point that is controlled during landfill operations.
- Raised and vegetated berm around the boundary of the site to prevent any adverse visual impacts.
- Internal locked gates on site roads to limit access once inside the facility.

The landfill operates and accepts waste Monday through Saturday with normal operating hours of 7:30 AM to 5:00 PM. A sign clearly stating the hours of operation, the operating authority, and materials suitable for disposal is posted at the gate. No uncontrolled scavenging and salvaging are allowed.

Access to the fill areas will be controlled by scalehouse personnel who are on duty during operating hours. Gates will be used to limit access further and will be locked when the landfill is closed. Traffic will be permitted to enter the landfill site only at the entrance gate where it will proceed to the scale. The scale is situated so that the scalehouse is adjacent to the scale, making the scalehouse easily accessible to the driver. From the scale, the vehicles can proceed to the active face of the landfill using haul roads. Signs and traffic barricades are posted to direct traffic to the active face of the landfill. Haul roads are relocated as needed to provide access to the working face.

Once the vehicle is at the active face of the landfill, the landfill operator/spotter will direct traffic to the proper location to deposit refuse. As the refuse is deposited, landfill compaction equipment will spread and compact the waste. Once a vehicle has been emptied, it will return to the scale to be reweighed before it leaves the site, if required.

SECTION 6.0 MONITORING OF WASTE (62-701.500(6))

6.A. LOAD CHECKING PROGRAM (62-701.500(6)(A))

A full-time spotter is employed to control the vehicles coming into the site, along with full-time heavy equipment operators. The landfill spotters or landfill equipment operators will examine at least three random loads of solid waste delivered to the landfill each week in accordance with Rule 62-701.500(6)(a)(1), FAC. The spotter and the operators have the authority to direct traffic and will direct the selected loads to discharge at a designated location within the landfill, where the discharged waste is inspected. If evidence of prohibited wastes is observed, the vehicle driver or generator will be notified that such waste is not acceptable. If such waste is observed after it is dumped, the material will be isolated for removal or special treatment as directed by the Landfill Operations Manager. If practical, the prohibited material can be reloaded onto the vehicle that brought it to the facility. If any unacceptable waste is found after a hauler has left the facility, the landfill operator will ensure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility. Section 6.b outlines the procedures for notification if hazardous wastes are identified or discovered. Spotters will contact the Landfill Operations Manager for further instruction if the waste is not identifiable or cannot be removed safely.

Detailed written records of each random load check will be kept at the landfill for at least 3 years; random load inspection forms are referred to in Reference E. The form includes the following: (1) the date and time of inspection, (2) the name of the hauling firm and vehicle driver, (3) the vehicle license plate number, (4) the waste composition, and (5) observations made by the inspector during the detailed inspection including any prohibited waste and the source, if known. The inspector and driver will sign the written record. Reports will be maintained in the landfill office for a minimum of 3 years as stated in Rule 62-701.500(6)(c), FAC.

6.B. HANDLING HAZARDOUS WASTES (62-701.500(6)(B))

No hazardous wastes will be accepted at the facility for disposal. In the event of an emergency or in the event regulated hazardous wastes are identified by random load checking or are otherwise discovered to be improperly deposited at the landfill, the landfill operator will promptly notify FDEP by calling (850) 413-9913 or toll free (800) 320-0519, and the South District Office at (239) 332-6975. During normal business hours, the permittee will call (239) 332-6975.

The area where the wastes are deposited will immediately be cordoned off from public access. If the generator or hauler cannot be identified, the landfill operator will ensure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility. Subsequent shipments from sources found or suspected to be previously responsible for shipping regulated hazardous waste will be subject to precautionary measures before the solid waste management facility accepting wastes.

6.C. RECORDING INSPECTION RESULTS (62-701.500(6)(c))

Results from the three random inspections per week described in section 62-701.500(6)(a) will be recorded in writing and retained at the landfill for at least 3 years. This information will include date and time of inspection, name of hauling firm, name of driver of the vehicle, vehicle license plate number, source of waste as stated by the driver, and observations made by Highlands County Landfill personnel during the inspection. The inspector and driver will sign the written record.

6.D. EMPLOYEE TRAINING FOR DETECTION OF UNAUTHORIZED MATERIAL (62-701.500(6)(d))

Inspectors, solid waste technicians, and attendants are trained to identify unauthorized wastes or hazardous materials. Each of the scalehouse attendants and spotters is trained to identify unacceptable waste. Large signs are posted at the entrance of the landfill that alert the public of the types of waste not accepted in the landfill. A household hazardous waste collection program has been set up at the site of the closed Desoto City Landfill and is in operation. This program is offered free of charge to households within Highlands County.

If unauthorized material is transported to the facility, the appropriate supervisory personnel will be notified immediately, and appropriate actions are taken to remove any unauthorized materials or wastes from the facility. The Highlands County Hazardous Material response team is notified for handling and storage of hazardous materials for disposal in an appropriate off-site facility.

In the event of an emergency or in the event regulated hazardous wastes are identified by random load checking or are otherwise discovered to be improperly deposited at the landfill, the landfill operator will promptly notify FDEP by calling (850) 413-9913 or toll free (800) 320-0519, and the South District Office at (239) 332-6975. During normal business hours, the permittee will call (239) 332-6975.

SECTION 7.0 WASTE HANDLING REQUIREMENTS (62-701.500(7))

7.A. LAYER THICKNESS AND COMPACTION FREQUENCIES (62-701.500(7)(A))

The waste will be spread in 2-foot layers with a steel-wheeled compactor and compacted to approximately 1-foot thickness or as thin a layer as practical before the next layer is applied.

7.B. FIRST LAYER ABOVE LINER (62-701.500(7)(B))

To protect the integrity of the leachate collection system and synthetic liner at the disposal areas, the first 4 feet of waste to go on top of the liner and leachate collection system will be screened for select material that will reduce the probability of damage to either the liner or the collection system. The select material may consist of residential waste that is inspected and found to be free of bulky trash, boards, or pipes that could damage the liner. The entire 4-foot lift will be placed before compaction and use of heavy equipment. Waste hauling equipment, cover hauling equipment, and compaction equipment are prohibited from driving directly on the liner and may only have access to the fill area when the 4-foot lift is compacted in place.

7.C. WORKING FACE AND SIDE GRADE SLOPES AND LIFT DEPTHS (62-701.500(7)(C))

The working face will be maintained at a slope no greater than three horizontal to one vertical (3:1). The side slopes of the working area will be maintained at a slope no greater than 3:1. The lifts are planned to be in depths of 8 to 10 feet.

7.D. WORKING FACE WIDTH (MAXIMUM) (62-701.500(7)(D))

The establishment of a working face at the disposal area will depend on the quantity of waste received in a given day. The working face will have a typical width of 200 feet to accommodate the volume of incoming traffic and to maintain safe operating conditions. Side slopes of the fill areas and working face will be maintained at a slope of 3:1 with an intermediate terrace approximately 30 feet above grade. The tops of the phases will be graded with a 5-percent slope. Waste will be spread in 2-foot-thick layers with a steel-wheeled compactor and compacted to approximately 1 foot thickness or as thin a layer as practical before the next layer is applied. Alternatively, the landfill operator may use one or two separate working faces in the Class I disposal cell – one for large, self-unloading refuse collection trucks, and the other for small trucks, pickup trucks, and trailers that require manual unloading.

7.E. INITIAL COVER (62-701.500(7)(E))

Initial cover is applied and maintained at the landfill to minimize any adverse environmental, safety, or health effects such as those resulting from birds, unauthorized wastes, blowing litter, odors, vectors, or fires.

7.F. PROCEDURES FOR APPLYING INITIAL COVER INCLUDING MINIMUM COVER FREQUENCIES (62-701.500(7)(F))

The compacted waste will be covered at the end of each working day with initial-cover options (see Section 2.b.5). The initial cover helps to control disease, vector breeding/ animal attraction, odors, blowing litter, and moisture infiltration. The tarps used are Tarpomatic, Inc. heavy mesh-reinforced plastic that are weighed down with steel chains and wire cables sewn in sleeves. Any areas of compacted waste that are not covered with tarps are covered at the end of the day by a minimum of 6 inches of either manufactured blend material, ASR, RSM, and processed tires in combination with one of the other materials or borrow soil. Manufactured blend material consists of an FDEP-approved mixture of shredded yard waste and soil. The initial cover will be applied and maintained to minimize environmental, safety, or health effects such as those resulting from birds, unauthorized wastes, blowing litter, odors, disease, vectors, or fires. The tops of the phases will be graded with a 5-percent slope to minimize stormwater infiltration.

7.G. INTERMEDIATE COVER APPLICATION PROCEDURE (62-701.500(7)(G))

An intermediate cover in addition to the 6-inch initial cover will be applied and maintained within 7 days of cell completion if additional solid waste will not be deposited within 180 days of completion as required by Rule 62-701.500(7)(e), FAC. The landfill operator may remove all or part of the intermediate cover before placing additional waste or installing final cover.

The intermediate cover on the outside side slopes of the disposal cells will be covered with sod, hydroseeding, or other vegetative material such as juniper to control stormwater runoff and erosion. Freshly laid sod will be irrigated from the top or bottom of the slope using the water cannon or pressure ports on the water truck. Irrigation will be continued until the sod or other vegetative material has become established.

The side slope will be sealed with an intermediate cover system designed to remain in place for an extended period. The long-term intermediate cover system on this designated side slope will consist of 6 inches of initial cover and 12 inches of intermediate cover placed over compacted waste. The cover material will consist of either manufactured blend material or soil, or a combination of both. A layer of sod will be placed over the intermediate cover for stormwater management control and control of erosion. At some future date, the intermediate cover on the east and south side slopes will be partially or totally removed to accommodate the horizontal expansion of the Class I Landfill into Sections 2, 4, or 5. At some future date, the intermediate cover on the north and west slopes will receive final cover.

7.H. FINAL COVER APPLICATIONS PROCEDURES (62-701.500(7)(H))

Disposal Cells 1A, 1B, and 3 will be filled to elevation 210 feet before the installation of a final cover system on the north side slopes of Cells 1A and 1B and the west side slopes of Cells 1B and 3. The final cover system will be installed within 180 days after attaining elevation 210 feet in accordance with the closure plan for the landfill. The final cover system is not expected to be applied until about 2024.

Horizontal pipes for the leachate recirculation system will be installed progressively in the landfill disposal cells as the landfill is increased in height. The objective of the operation of the leachate recirculation system is to induce accelerated biodegradation of the landfilled waste, thus promoting significant settlement and the recovery of airspace during the operational life of the cells. As the landfill settles, the intermediate cover on the outside cell side slopes will be periodically partially or totally removed to allow placement of additional waste on the side slopes to rebuild those grades back to 3:1. Once the cell side slopes have been rebuilt to the design grades, a new intermediate cover and sod layer will be constructed. The process of rebuilding the cell side slopes may occur several times at the same location over the next 20 years.

Final cover will consist of a geomembrane or geosynthetic clay liner as the primary barrier overlain by 24 inches of cover soil or approved alternative covers. The first 18 inches will serve as a drainage layer, and the top 6 inches will be uncompacted and vegetated with native grasses or other vegetation. The vegetation will be selected to ensure that the final cover will function with minimum maintenance. The total thickness of the final cover will be in accordance with the final cover design shown on the approved Final Cover Drawings submitted with the application for renewal of Permit No. 0038570-022-SO/01, approved August 4, 2009.

7.I. SCAVENGING (62-701.500(7)(I))

Uncontrolled and unauthorized scavenging will not be permitted at any time.

7.J. LITTER POLICING METHODS (62-701.500(7)(J))

The County landfill staff minimizes the size of the working face on windy days by continually applying cover soil or blend on the waste at both sides of the top of the working face. Landfill staff also spray the waste with leachate or water to minimize blowing litter, taking care to not use leachate quantities that may cause runoff outside the solid waste disposal unit, surface seeps, wind-blown spray, or exceedance of the limits of the leachate head on the liner in accordance with Rule 62-701.400(5)(d), FAC.

In addition, an 8-foot high reinforced plastic mesh fence can be installed around the top of the perimeter confining berm Cell 3. Litter is picked from this fence several times per day when the wind is blowing strong enough to cause litter to be blown from the working face area. Additional 5-foot high litter control fences are installed at strategic locations on the disposal cells between the working face area and the perimeter confining berm litter control fence when necessary.

Finally, the County has established a policy to temporarily close the working face of the landfill if gusting winds exceed 35 mph.

Litter blown into litter-control screens or found on the ground surface outside of the working face of the landfill is picked up by hand within 24 hours of the time the litter was generated. County staff also patrols on-site roads for litter daily.

7.K. EROSION CONTROL PROCEDURES (62-701.500(7)(K))

Weekly and after heavy rain, the earth berms, slopes, swales, and catch basins will be inspected for signs of erosion. A visual inspection of erosion-control devices such as silt fences or mulch on recently graded slopes will be conducted, and such devices will be replaced or repaired as required.

Erosion-control measures will be employed to correct any erosion that exposes waste or causes malfunction of the stormwater management system. Such measures will be implemented within 3 days of occurrence. If erosion cannot be corrected within 7 days of occurrence, the landfill operator will notify FDEP at the South District Office in Ft. Myers, Florida (352-332-6975) and propose a correction schedule.

SECTION 8.0 LEACHATE MANAGEMENT (62-701.500(8))

8.A. LEACHATE LEVEL MONITORING (62-701.500(8)(A))

The landfill operator will monitor the leachate levels and inspect the collection pumping system daily.

8.B. OPERATION OF LEACHATE COLLECTION SYSTEM (62-701.500(8)(B))

The landfill operator will make daily inspections of the lift station, electrical panels, and pressure gauges to ensure the collection system is online and working properly. The leachate treatment system will be operated and monitored by a qualified operator.

If leachate flow volume is noticeably decreased, the leachate collection system will be inspected. Possible reasons for low or no flow are header collapse or header blockage. If pipe blockage is identified, the header pipe will be power jetted to remove sediment buildup. Power jetting or rodding will be done from one end of the header. Any sediment will be removed from the pipe.

8.C. MANAGING LEACHATE AS HAZARDOUS WASTE (62-701.500(8)(C))

If the leachate becomes regulated as hazardous waste, the leachate will be disposed of as a hazardous waste in accordance with Rule 62-730, FAC.

8.D. LEACHATE TREATMENT OR DISPOSAL FACILITIES (62-701.500(8)(D))

Refer to Section 2.h for a description of the leachate treatment and disposal facilities. Refer to the Leachate Treatment Plant specifications and drawings provided by Chastain-Skillman, Inc., and subsequent minor modifications to the system to incorporate floating aerators, leachate recirculation, and the sprayfield expansion, which were submitted to and approved previously by FDEP. The plant was designed according to the expected characteristics of the leachate.

8.E. CONTINGENCY PLAN FOR MANAGING LEACHATE (62-701.500(8)(E))

If the onsite treatment plant becomes inoperable, the leachate will be hauled to the City of Sebring Wastewater Treatment Plant. Highlands County has an inter-local agreement with the City for this event. Refer to the previously submitted agreement (Reference F). Although the original agreement is dated 1992, Item 7 of the agreement states that, "This agreement will be in effect for a period of five years after the date hereof and will be extended for successive five year periods thereafter unless canceled by either party in writing not less than six months prior to the expiration of any term." Neither party has canceled, so this agreement still stands.

In the event of electrical power outages, the use of a backup generator will restore power to the lift stations. The lift stations are equipped with a backup pump in the event of pump failure.

The leachate collection system is designed as a piped gravity flow system to the lift station, which is an automatic system operated with the use of variable-frequency drives (VFDs) and transducers designed to keep the level below the flowline of the leachate collection system. If problems are encountered with the leachate treatment system, excess leachate can be pumped for later treatment into aboveground impoundment ponds. The leachate lift station is monitored daily by landfill personnel.

8.F. RECORDING LEACHATE QUANTITIES (62-701.500(8)(F))

The Class I Landfill leachate management and control system is equipped with an adequate number of online flow meters, cell piezometers, and leachate storage basin staff gauges to conduct a complete water balance of the entire system. The quantity of leachate generated in Cells 1A, 1B, and 3 will be monitored by flow meters and recorded weekly. The quantity of leachate stored in the basins also is recorded weekly, as is the amount of leachate drained to the main lift station and the amount of leachate from the Desoto City Landfill that is added to the main lift station and pumped to the basins. Finally, daily records of the amount of initially treated leachate that is recirculated into Cells 1A, 1B, and 3 and daily records of the amount of initially treated leachate that is processed through the leachate treatment plant and sent on to the sprayfield for disposal are kept and the quantities are reported monthly in an annual report to FDEP.

8.G. RECORDING PRECIPITATION (62-701.500(8)(G))

Two on-site recording rain gauges are used to record the precipitation at the landfill. The record will be included with the operation record and used to compare with leachate generation. The first recording rain gauge is at the Landfill Manager's Office about 900 feet west of Cell 1B. The other is next to the leachate treatment plant about 200 feet north of Cell 1A. In addition, another rain gauge is at the reconstructed wetland weir in the southeast corner of the site. These gauges are checked and recorded daily.

8.H. PROCEDURES FOR WATER PRESSURE CLEANING OR VIDEO INSPECTING LEACHATE COLLECTION SYSTEMS (62-701.500(8)(H))

New leachate collection systems will be water pressure cleaned or inspected by video recording before initial placement of wastes. Existing leachate collection systems will be water pressure cleaned at the time of permit renewal. If necessary to locate blockages, the leachate collection piping may also be inspected by video recording. Results of the collection system cleanings or inspections will be available to FDEP on request. A copy of a recent cleaning report previously submitted is referred to in Reference G of this permit application.

SECTION 9.0 GAS MONITORING (62-701.500(9))

HCSWMC has an in-place gas management system to meet the requirements of Rule 62-701.530, FAC. The landfill gas monitoring is currently performed in eight monitoring wells around the perimeter of Cells 1A, 1B, and 3. A hand-held methane meter is used to record the percent of lower explosive limit (LEL) present in the well. The landfill operator will observe stressed vegetation and/or odors. An active gas control system was installed in Cells 1A and 1B in 2001 – 2003; an extension of the gas system to Cell 3 was installed in 2007 – 2008.

A combustible gas indicator meter will be used to determine methane concentration as a percent of the LEL. The LEL is defined as the lowest percent by volume of a mixture of explosive gases, which will propagate a flame in the air at a temperature of 25° Celsius and atmospheric pressure. Methane concentrations must not exceed the LEL at the property boundary or 25 percent of the LEL within structures on the property as outlined in Rule 62-701.530(1)(a)(1), FAC.

The daily and intermediate cover materials in each disposal area are sufficiently permeable to allow the escape of landfill gas to the atmosphere where sufficient dilution will occur to prevent any objectionable odors or adverse safety impacts. A final cover constructed with a synthetic liner will be installed over each disposal area upon closure and will prevent the release of landfill gas and odors to the atmosphere.

SECTION 10.0 STORMWATER SYSTEM MANAGEMENT (62-701.500(10))

A stormwater management system is in place at HCSWMC that meets the criteria set forth in Rule 62-701.400(9), FAC. The system is designed to prevent stormwater from the peak discharge of the 25-year storm event from running onto the portions of the landfill that have not been closed. Stormwater on the site is controlled by stormwater collection channels around the perimeter of the fill area, which are designed to avoid contact with solid waste or leachate. A perimeter ditch will serve to direct water from the Landfill to the HCSWMC's stormwater management system at which point it is collected in two retention basins. The HCSWMC operates under Surface Water Management Permit No. 28-00342-S, which was issued by SFWMD on May 9, 1991.

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

- Side swales.
- Grass.
- Sod and/or hydroseed.
- Other ground cover vegetative plants.
- Perimeter ditches.

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

- Stormwater conveyance systems will be inspected periodically or after major storm events.
- Accumulated sediment will be removed as necessary.
- The stormwater management system will be operated and maintained to meet applicable standards of Chapters 62-302 and 62-25, FAC.

The County inspects the stormwater management system monthly. Stormwater structures, including side slopes, side slope drainage features, drainage channels, stormwater basins, drainage pipes, drainage structures, and the miscellaneous drainage swales in the facility, will be inspected for erosion and accumulation of excess sedimentation. Such occurrences will be corrected to maintain the design hydraulic capacity. Surface depressions will be filled with soil cover material, compacted, and vegetated. Vegetation is mowed regularly as needed.

Monitoring of the system will be conducted on a semi-annual basis. Semi-annual sampling of surface water is collected from the retention basin. If sediment has accumulated, the sediment will be removed and will be stockpiled in the vicinity of the working face of the Class I area to be used as initial cover.

SECTION 11.0 EQUIPMENT AND OPERATION FEATURES (62 701.500(11))

11.A./B. ON-SITE AND RESERVE EQUIPMENT (62-701.500(11)(A&B))

The landfill will be operated with the landfill equipment noted in Section 2.b.3. The equipment is maintained by trained heavy-equipment mechanics that work for the County.

Equipment replacement is a budgeted part of the Solid Waste Department. The older machines are often kept as a backup to the newer machines, if they are serviceable, economical to run, and safe. Additional service equipment is available from the County Road and Bridge Department with a standing agreement and from rental equipment vendors.

Standard safety equipment supplied with the equipment is maintained in operating condition as it was delivered. This equipment meets Occupational Safety and Health Administration (OSHA) requirements. Equipment is inspected daily by the equipment operators. Any deficiencies are reported to the Operations Manager and necessary repairs are scheduled.

11.C. COMMUNICATION EQUIPMENT (62-701.500(11)(C))

The landfill will be equipped with phones in the landfill office, at the scalehouse, and at the shop building. In addition to the phone system, the scalehouse and landfill office are equipped with a base radio station that has contact with the Landfill Operations Manager's vehicle and pickups, flatbed, and transport trucks at the landfill, as well as to hand-held radios that are assigned to the operators and spotters. Landfill Administration is also equipped with cell phones.

The landfill operators and spotters have shelter and sanitary facilities provided for their convenience at the shop building. First aid equipment is also supplied for medical necessities. Portable toilets are at multiple locations at the Class I site for use by landfill users.

11.D. DUST CONTROL DEVICES (62-701.500(11)(D))

Site access roads are either dust-free paved roads, shell-paved roads, or vegetated with grass or other cover to prevent any dust problem. The shell-paved roads are watered as needed for dust control. The 1,000-foot buffer area will also serve to keep any dust from migrating off site. A central water supply system is a designed part of the landfill. This large-capacity water system can be used, if necessary, to eliminate any dust problems that might occur. The water will be used to maintain the area within the lined cell.

The County also has two 3,000-gallon water truck capable of delivering a 60-foot-wide spray of water for dust control on unpaved roads.

11.E. FIRE PROTECTION AND FIRE FIGHTING FACILITIES (62-701.500(11)(E))

The landfill has a pressurized 250-gpm well water pipeline supply system and a 1,000-gpm dry hydrant next to the west borrow pit that are both available for firefighting needs. Additionally, the Solid Waste Department has two 3,000-gallon Mack water trucks equipped with a 500-gpm water cannon that can be used to fight fires along with three landfill compactors and five bulldozers. Section 2.b.3. notes the equipment currently owned by the Solid Waste Department. Refer to Section 2.b.8 for more information regarding fire-fighting.

Any structural fires that might occur at the landfill site would be responded to by Highlands County Fire Services. This network includes several fire stations that are available to assist, but the primary fire station to respond to the HCSWMC is the DeSoto City Volunteer Fire Department, phone number (863) 402-6870, at 6800 W. George Blvd, Sebring, FL 33875, approximately 15 miles from the HCSWMC.

11.F. LITTER CONTROL DEVICES (62-701.500(11)(F))

The operation of the landfill requires the daily covering of solid waste received each day. The working face is to be kept to a minimum width. As a part of the daily operation of the landfill, the landfill operator is to inspect the lands around the landfill and any litter is to be picked up before it can be blown over into the buffer area. The property fence line is to be inspected regularly to make sure that no debris from the landfill accumulates at the fence. Refer to Section 7.j for information regarding litter control.

11.G. SIGNS (62-701.500(11)(G))

At the entrance to the landfill, signs are posted indicating the operating authority as the Board of County Commissioners, traffic directions and speed limit, disposal areas, hours of operation (7:30 AM to 5:00 PM, Monday through Saturday), and disposal restrictions (hazardous waste, biohazardous waste, containers with liquids, and C&DD).

SECTION 12.0 ACCESS ROADS (62-701.500(12))

12.A. ALL-WEATHER ROAD (62-701.500(12)(A))

The main access road to the landfill is asphalt pavement. Drainage of this road is part of the original design. The paved road will be maintained with standard road maintenance equipment and resurfaced as required to maintain a good all-weather access road.

12.B. PERIMETER AND OTHER ON-SITE ROADS (62-701.500(12)(B))

Internal roads will be inspected periodically and repaired in a timely manner. Internal access roads to the Class I Landfill are both asphalt-paved and paved with shell and graded to maintain proper drainage. Shell roads are resurfaced as needed to maintain an all-weather access road.

Routine maintenance on access roads includes the following:

- Prompt repair of potholes.
- Removal of debris.
- Watering of shell roads during dry weather to control dust.

SECTION 13.0 RECORDKEEPING (62-701.500(13))

13.A. PERMIT APPLICATION DOCUMENTATION (62-701.500(13)(A))

Records used to develop or support the permit applications, including supplemental information submitted to comply with Chapter 62-701, FAC, and that pertain to construction of the facility, will be kept throughout the life of the facility. Records pertaining to the operation of the landfill will be kept for the life of the facility.

13.B. MONITORING INFORMATION (62-701.500(13)(B))

Records of monitoring information, including maintenance records and copies of reports required by permit, will be retained for at least 10 years. Background water quality records will be kept for the life of the facility. Refer to Section 2.i for information regarding water quality monitoring.

13.C. REMAINING LIFE AND CAPACITY ESTIMATE (62-701.500(13)(C))

An annual estimate will be made to determine the remaining life and capacity (cubic yards) at the existing constructed landfill and the remaining capacity and site life of other permitted areas not yet constructed. The annual estimate will be based on a summary of the heights, lengths, and widths of solid waste disposal units. The estimate will be made and reported annually to FDEP as part of the annual update to the closure and long-term care cost estimates. A lifespan and remaining capacity estimate have been provided in Attachment E.4.c of this permit application.

13.D. PROCEDURES FOR ARCHIVING AND RETRIEVING RECORDS THAT ARE MORE THAN 5 YEARS OLD

Records that are more than 5 years old and that are required to be retained may be archived, provided that the landfill operator can retrieve them for inspection within 7 days.

SECTION 14.0 OTHER SITE ACTIVITIES

14.A. ASPHALT PLANT

An asphalt plant that produces hot-mix road building materials has been in operation since 2008. Methane gas drawn from the landfill fuels the plant for drying the aggregate materials in the drum-type plant.

Exhibit A

Certifications for Existing Landfill Operators and Spotters

Florida DEP Landfill Operators

Company Name: Highlands County Solid Waste
South District Only
Printed: 05/10/2019

1. Hours Required: The hours needed before the expiration date in order to keep the certification valid.

Coleman, Clifford C. - Highlands County Solid Waste Dept. - Sebring - Highlands County

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	11/20/1998	16	11/19/2019
Spotter / Waste Screener	02/06/2013	4	02/05/2019

Diefendorf, Robert Allen - Highlands County Solid Waste Management Facility - Sebring - Highlands County

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	08/14/2012	14	08/13/2021

Faust, Keith - Highlands County Solid Waste Dept - Sebring

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	07/26/2018	16	07/25/2021
Construction and Demolition Debris Landfill Operator	07/26/2018	16	07/25/2021
Spotter / Waste Screener	10/26/2015	4	10/25/2021

Gorman, Richard P. - Highlands County Solid Waste Dept. - Sebring - Highlands County

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	06/23/2006	14	06/22/2021
Construction and Demolition Debris Landfill Operator	06/23/2006	14	06/22/2021

Lawrence, Mark - Highlands County Solid Waste Dept. - Sebring

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	10/18/2018	14	10/17/2021
Construction and Demolition Debris Landfill Operator	10/18/2018	14	10/17/2021

Oquendo, Ariel - Highlands County Solid Waste - Sebring

Title	Initial Date	Hours Required ¹	Expiration Date
Spotter / Waste Screener	06/24/2015	4	06/23/2021

Porter, David - Highlands County Solid Waste Dept. - Sebring

Title	Initial Date	Hours Required ¹	Expiration Date
Class I, III Landfill Operator	10/05/2017	16	10/04/2020
Construction and Demolition Debris Landfill Operator	10/05/2017	16	10/04/2020
Spotter / Waste Screener	06/25/2015	4	06/24/2021

Riveras, Roan - Highlands County Solid Waste - Sebring

Title	Initial Date	Hours Required ¹	Expiration Date
Spotter / Waste Screener	11/01/2016	4	10/31/2019

Schmidt, Terry - Highlands County Solid Waste - Sebring

Title	Initial Date	Hours Required	Expiration Date
Spotter / Waste Screener	05/24/2018	4	05/23/2021

Corrections and Notes Provided by the County:

David Porter, Roan Riveras, and Terry Schmidt are no longer employed at the landfill. Two new spotters (Robert Farabee and Joe Johnson) and a new solid waste specialist (Cody Cook) will take the spotter certification class in late May 2019 or early June 2019. Ariel Oqeundo was recently promoted to the position of operator; he will take operator certification within 1 - 2 months of May 2019. Dennis Walls is a certified spotter whose information is not included on the TREEO list. His certification does not expire until September 26, 2019.