Bid Set

Invitation to Bid 2024-01

City of Parker

Inland Flood Protection Retention Pond and Walking Path

Date of Issue: February 8, 2024

Closing: Tuesday, March 19, 2024, at 2:00 p.m. CST

ITB Coordinator(s):

Taylor Jeffreys, Public Works Administrator
City of Parker
1001 West Park Street, Parker, Florida 32404
and
Mandy O'Regan
Anchor Consulting Engineering and Inspection, Inc.
450 Magnolia Avenue
Panama City, Florida 32401

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1 INTRODUCTION

The objective of this Invitation to Bid (ITB) is to select a Florida-Licensed General Contractor or Underground Utility Contractor to provide services to the City of Parker (hereinafter referred to as "CITY" or "OWNER") for the construction of the ***Inland Flood Protection Retention Pond and Walking Path*** project as detailed on the Construction Drawings. The below is a summary of the work to be performed, which includes but may not be limited to the following.

A. This project will consist of constructing the following four stormwater facilities and associated appurtenances at 824 11th Street North and the adjacent vacant parcel on Cheri Lane (as detailed on the Construction Drawings):

1. The largest stormwater facility (Proposed Stormwater Pond 1) and its associated appurtenances will be constructed on the vacant parcel at 824 North 11th Street, Parker, Florida. This stormwater facility will be an estimated 2.8 acres and approximately 8 feet deep.

2. The second largest stormwater facility (Proposed Stormwater Pond 2) and its associated appurtenances will be located on the parcel to right at the entrance to Cheri Lane, Parker, Florida. This stormwater facility will be an estimated 0.21 acres and be approximately 4 feet deep.

3. The two smallest stormwater facilities (Proposed Stormwater Ponds 3A and 3B) and associated appurtenances will be located at the southeast and southwest corners of the 824 11th Street North parcel adjacent to Boatrace Road.

4. Site-wide drainage structures (drainage piping, metered end sections, inlets, end walls, rip rap, etc.) to accommodate existing and proposed stormwater ponds.

5. Proposed cut and patch asphalt replacement at pipe replacement locations along Lance Street, North 11th Street, and Boatrace Road.

B. This project will also consist of constructing parking, roadway turnouts, and site-wide walking path as detailed on the Construction Drawings):

1. Proposed asphalt parking area and roadway turnouts to include ADA-compliant parking/pavement markings and striping.

2. Proposed Concrete Walking Path (6-foot-wide by 1,541 linear feet).

3. Proposed Walking Path Signage spaced every 100 feet: NO SWIMMING, FISHING, DIVING, AND WATCH FOR REPTILES.

4. Site-wide sodding, landscaping, and irrigation improvements.

C. This project will have two alternates to be considered by the City:

1. Proposed Asphalt Walking Path in lieu of Concrete Walking Path.

2. Proposed Decorative Fountain with appurtenances.

The OWNER seeks BIDs from a Florida-Licensed General Contractor or Underground Utility Contractor that can provide all permits, labor, materials, equipment, tools, transportation, and supplies required for the coordination and Construction of the Inland Flood Protection Retention Pond and Walking Path project at the locations referenced above in Parker, Florida. Work shall be completed in conformance with the Construction Drawings and Specifications provided by the OWNER.

QUALIFICATIONS

The CONTRACTOR shall be a Florida-Licensed General Contractor or Underground Utility Contractor who specializes in stormwater and roadway rehabilitation. Subcontractors shall be Florida licensed in their trade.

Additional information regarding Contractor's past performance and from references may be requested and considered to determine the Contractor's qualifications.

BIDs may be deemed nonresponsive if not accompanied by proof of State of Florida General Contractor's or Underground Utility Contractor's License.

Funding for the project may be made possible through the Florida Department of Environmental Protection Resilient Florida Program Grant (Grant No. 22SRP14). There are no federal requirements for this project.

BID DEADLINE/DELIVERY

SEALED BIDS will be received up until **2:00 p.m. (CDT)** on **Tuesday, March 19, 2024**, for **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH**. Bids will be publicly opened and read aloud at the City Council Meeting on **Tuesday, March 19, 2024 at 5:30 p.m.**

Late submissions will not be accepted. Each BID shall be valid to the City of Parker for a period of 90 days after the Bid Opening.

BIDs shall be delivered to:

Ms. Taylor Jeffreys
Public Works Administrator
City of Parker Florida
1001 West Park Street
Parker, Florida 32404

BIDs shall be received by the OWNER no later than the BID deadline. BIDDERs should submit one (1) "Original" and one (1) "Copy" of the BID package. BIDs shall be enclosed in a sealed envelope bearing the title of the work, the name of the BIDDER and the date of Bid Opening. It is the sole responsibility of the BIDDER to ensure that the BID is received on time. ANY BID RECEIVED AFTER THE SPECIFIED TIME WILL NOT BE ACCEPTED OR CONSIDERED.

The OWNER will publicly open and read aloud each BID. Once the OWNER has determined the lowest, responsive, responsible BIDDER and has verified all BIDDER documentation, the selected BIDDER will be notified of intent to award the BID and to start the contract process.

SPECIAL ACCOMMODATION

Any person requiring a special accommodation at a Bid Opening because of a disability should call the City Clerk at (850) 871-4104 at least 5 workdays prior to the Bid Opening. For Hearing Impaired, Dial 1-800-955-8771 (TDD), and 1-800-955-8770 (Voice).

BID DOCUMENTS

Electronic versions of the solicitation documents are available on the City's webpage at www.cityofparker.com. Hard copies of the solicitation documents including bid documents, plans, blueprints, or other material associated with the bid may also be obtained from Parker City Hall, located at 1001 West Park Street, Parker, Florida 32404.

POINT OF CONTACT

The OWNER's representative, Mandy O'Regan, Project Administrator with Anchor Consulting Engineering and Inspection, Inc. (moregan@anchorcei.com) is the only point of contact for this ITB. Under no circumstances may a BIDDER contact any City Council Member or other City employee concerning this ITB until after the contract has been awarded. Any such contact may result in disqualification.

QUESTIONS

BIDDERs shall submit all questions, in writing, to Mandy O'Regan at moregan@anchorcei.com. All questions shall be submitted no later than 5:00 p.m. (CST) on **Friday, March 1, 2024**.

ADDENDA

Addenda issued after the initial specifications are released will be posted on the City's website at www.cityofparker.com. It is the responsibility of the BIDDER prior to submission of any BID to check the City's website above or contact the Owner's Representative, Mandy O'Regan, to verify if any addenda have been issued at moregan@anchorcei.com.

The receipt of all addenda must be acknowledged on the addenda response sheet provided within this BID package.

BID CHECKLIST

Please submit one original of the items on the following list and any other items required in the BID FORMS section or appendices (if applicable) of this ITB. The checklist is provided as a courtesy and may not be all inclusive of items required within this ITB.

1. VALID FLORIDA-REGISTERED GENERAL CONTRACTOR'S LICENSE OR UNDERGROUND UTILITY CONTRACTOR LICENSE
2. BID FORM
3. BID BOND
4. ADDENDUM ACKNOWLEDGEMENT
5. ANTI-COLLUSION CLAUSE
6. CONFLICT OF INTEREST DISCLOSURE FORM
7. IDENTICAL TIE BIDS/DRUG FREE WORKPLACE
8. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION
9. 44 C.F.R. PART 18-CERTIFICATION REGARDING LOBBYING
10. CERTIFICATION REGARDING SCRUTINIZED COMPANIES LIST
11. SUB-CONTRACTORS LIST

LICENSING

BIDDER shall be properly licensed for the work specified in this Invitation to Bid. All BIDDERs are requested to submit any required license(s) with their BIDs. License(s) must be effective as of the Bid Opening date and must be maintained throughout the contract period. Failure to be properly licensed as stated above will result in the rejection of the BID as nonresponsive.

BID FORM

To receive consideration, all BIDs shall be made on the forms provided herein, properly executed and with all items filled out. Do not change the wording of the Bid Form and do not add words to the wording of the Bid Form. No conditions, limitation, or provisions will be attached or added to the Bid Form or other Bid Documents by the BIDDER.

No BIDDER shall be permitted to correct a Bid mistake after Bid Opening that would cause such BIDDER to have the low bid, except for the correction of errors in extension of unit prices in the BIDs. In such cases, the Unit Price shall not be changed and shall prevail.

BID BOND

A Bid Bond, in the amount of 5% of the proposed Base Bid contract amount, shall accompany each bid. The successful BIDDER's security will be retained until the contract has been signed and the BIDDER has furnished the required Public Construction Bond (found in Contract Forms section of this Bid Document).

The City reserves the right to retain the security of the next BIDDER until the selected BIDDER enters into contract or until 90 days after BID OPENING, whichever is shorter. All other Bid Security will be returned as soon as possible.

COMPLETE BID AMOUNTS; EXAMINATIONS OF SPECIFICATIONS; WORK SITES

BIDs shall be calculated on the basis of unit cost pricing. The unit prices shall include all charges for completing the Work which is defined as described in the Contract Documents and depicted on the drawings to include layout, insurance, taxes, field office and supervision, overhead and profit, permits, impact permit fees, bonds and miscellaneous items needed to complete the BID. No allowance will be made to any BIDDER because of a claimed lack of examination or knowledge. The submission of a BID shall be construed as conclusive evidence that the BIDDER has made such examination.

GENERAL TERMS

Companies that are required to register with the Division of Corporations as a domestic or foreign business entity shall provide evidence of their registration.

PUBLIC ENTITY CRIMES STATEMENT

A person or affiliate who has been placed on the convicted contractor list following a conviction for a public entity crime may not submit a BID on a contract to provide any goods or services to a public entity, may not submit a BID on a contract with a public entity for the construction or repair of a public building or public work, may not submit BIDs on leases of real property to a public entity, may not be awarded or perform work as a contractor, contractor, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted contractor list.

WITHDRAWAL OF BIDS

Any BIDDER may withdraw his/her BID, either personally or by written request, at any time prior to the Bid Opening Date as posted in this ITB. A BIDDER may not withdraw his BID for a period of 90 days after the date of Bid Opening and all BIDs shall be subject to acceptance by the OWNER during this period.

CANCELLATION

The OWNER may cancel this ITB, or reject in whole or in part, when it is in the best interest of the OWNER, as determined by the City Council or their designee. Notice of cancellation shall be posted on the City website.

The notice shall identify the solicitation, and, where appropriate, explain that an opportunity will be given to compete on any re-solicitation or any future procurement of similar items.

PUBLIC RECORDS

In accordance with Chapter 119 of the Florida Statutes (Public Records Law) and except as may be provided by other applicable state or federal law, all BIDDERs should be aware that BIDs, responses, and proposals are in the public domain. BIDDERs must identify specifically any information contained in their response which they consider confidential and/or proprietary and which they believe to be exempt from disclosure, citing, specifically the applicable exempting law.

Sealed bids, proposals, or replies received by the OWNER as a result of this competitive solicitation are exempt from Florida Statute Section119.071(1) and Section 24(a), Article 1 of the State of Florida Constitution, until such time as the OWNER provides notice of an intended decision or until 30 days after opening the BIDs, proposals, or final replies, whichever is earlier.

EXEMPTION OF MEETINGS/PRESENTATIONS

Pursuant to Florida Statute Section 286.0113(2), any portion of a meeting at which a negotiation with a Bidder is conducted pursuant to a competitive solicitation, at which a

contractor makes an oral presentation as part of a competitive solicitation, or at which a contractor answers questions as part of a competitive solicitation are exempt from public meeting requirements.

However, the OWNER must make a complete recording of any portion of an exempt meeting and no portion of the exempt meeting may be held off the record. The recording of, and any records presented at, the exempt meeting are exempt from the public records law of Section 119.07(1), Florida Statute and Section 24(a), Article I of the State Constitution, until such time as the agency provides notice of an intended decision or until 30 days after opening the BIDs, submittals, or final replies, whichever occurs earlier.

If the OWNER rejects all BIDs, submittals, or replies and concurrently provides notice of its intent to reissue a competitive solicitation, the recording and any records presented at the exempt meeting remain exempt from Section 119.07(1), Florida Statute (2015) and Section 24(a), Article I of the State Constitution until such time as the agency provides notice of an intended decision concerning the reissued competitive solicitation or until the agency withdraws the reissued competitive solicitation.

A recording and any records presented at an exempt meeting are not exempt for longer than 12 months after the initial agency notice rejecting all BIDs, submittals, or replies.

REPRESENTATIONS

The Contract Documents contain the provisions required for the project. Information obtained from an office, Director, or employee of the OWNER for any other person shall not affect the risks or obligations assumed by the BIDDER or relieve the BIDDER from fulfilling any of the conditions of the contract.

BID PROTEST

A notice of protest must be submitted within three business days after posting of the recommendation of award. The protest must be in writing, via e-mail or letter and must identify the protester and the solicitation and shall include a factual summary of the basis of the protest.

The notice of protest is considered filed when it is received by the City Clerk.

BASIS OF AWARD

The contract will be awarded to the lowest, responsive, responsible BIDDER who has proposed the lowest qualified Base Bid and is deemed qualified by the City of Parker, subject to the OWNER's right to reject any or all BIDs and to waive informality and irregularity in the BIDs and proposing. In addition, the OWNER has the right to accept a BID, other than the lowest, when considered to be in the best interest of the OWNER. The Contractor's past performance and references may be evaluated as part of this process.

RIGHT TO REJECT

In accordance with OWNER policies, the OWNER reserves the right to:

1. Reject any or all BIDs received.
2. Select and award any portion of any or all BID Items.
3. Waive minor informalities and irregularities in the Respondent's BID.

A BID may be rejected if it is non-responsive or does not conform to the requirements and instructions in this ITB. A BID may be non-responsive by reasons, including, but not limited to:

1. Failure to utilize or complete prescribed forms.
2. Conditional BIDs.
3. Incomplete BIDs.
4. Indefinite or ambiguous BIDs.
5. Failure to meet deadlines.
6. Improper and/or undated signatures.

Other conditions which may cause rejection of BIDs include:

1. Evidence of collusion.
2. Obvious lack of experience or expertise to perform the required work.
3. Submission of more than one BID for the same work from an individual.
4. Bidder or corporation under the same or a different name.
5. Failure to perform or meet financial obligations on previous contracts.
6. Not delivered on or before the date and time specified as the due date for submission of the BID.

EXECUTION OF CONTRACT DOCUMENTS

The AWARDED BIDDER shall, within 10 days after receipt of the Notice of Award and the contract forms or documents, sign and deliver all required Contract Documents to the OWNER's Representative for submittal to the OWNER.

The AWARDED BIDDER shall also deliver any required bonds and the policies of insurance or insurance certificate as required. All bonds and insurance documents shall be approved by the OWNER before the successful AWARDED BIDDER may proceed with the work.

The execution of the Agreement shall be contingent upon the AWARDED CONTRACTOR obtaining all required building permits.

Neither the Notice of Award nor the execution of the required contract documents by the AWARDED BIDDER creates any rights in the BIDDER. The BIDDER has no rights with

respect to the award of contract until a fully executed Agreement is signed by all required parties and all insurance policies and other required deliverables are provided and approved by the OWNER.

CONSTRUCTION TIME

The Agreement will include a stipulation that the work be completed in a period of 180 calendar days following receipt of the Notice to Proceed. Should the CONTRACTOR fail to complete the work by the specified date, the OWNER shall deduct from the Contract Sum the amount of $250.00 per calendar day as liquidated damages for every day subsequent to the specified date until the work is fully completed and receipted by the OWNER as being completed.

For purposes of time calculation, day one of the project is one calendar day after the Notice to Proceed date.

PUBLIC CONSTRUCTION BOND

Prior to signing the Contract, the AWARDED BIDDER will secure and post a Public Construction Bond pursuant to Section 255.05 of the Florida Statutes. All such bonds shall be issued by a Surety acceptable to the OWNER. The OWNER will designate to whom subject bonds shall be posted. Failure or refusal to furnish adequate bonds in a satisfactory form shall subject the AWARDED BIDDER to loss of time from the allowable construction period equal to the time of delay in furnishing the required bonds.

EMPLOYMENT ELIGIBILITY VERIFICATION

CONTRACTOR shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of:

1. All persons employed by the AWARDED BIDDER during the term of the Agreement to perform employment duties within Florida; and

2. All persons, including contractors, subcontractors, assigned by the AWARDED BIDDER to perform work pursuant to the Agreement with the DHS and OWNER. By submission of a proposal in response to this document, the BIDDER certifies compliance with the above requirements.

HOLD HARMLESS AND INDEMNIFICATION

1. The AWARDED BIDDER shall indemnify and hold harmless the OWNER, and its officers, agents, attorneys and employees, from any and all claims, suits, actions, damages, liabilities, expenditures, or causes of action of any kind, losses, penalties, interest, demands, judgments, and costs of suit, including attorneys' fees and paralegals' fees, for any expense, damage, or liability incurred by any of them, whether for bodily or personal injury, death, property damage, direct or consequential damages, or economic loss, including environmental impairment,

arising directly or indirectly, on account of or in connection with contractor's performance of the Agreement or by any person, firm, or corporation to whom any portion of the performance of this Agreement is subcontracted to or used by the contractor, or by any other person.

2. The parties understand and agree that such indemnification by the AWARDED BIDDER relating to any matter which is the subject of this Agreement shall extend throughout the term of this Agreement and any statutes of limitations thereafter.

3. The AWARDED BIDDER's obligation shall not be limited by or in any way to any insurance coverage or by any provision in or exclusion or omission from any policy of insurance.

PAYMENTS

Payments shall be made in accordance with the Florida Prompt Payment Act, Chapter 218, Florida Statutes. Refer to the Article 4 of the Agreement for more details.

WARRANTY

The AWARDED BIDDER/CONTRACTOR shall fully warrant all workmanship and material, to meet or exceed the performance of the obligations under this Agreement and specifications, for a period of 1 year after completion of the work. The warranty period begins at the date of final payment for the project. The CONTRACTOR shall expeditiously repair and remedy any defects in the construction that are discovered within 1 year, without cost or charge to the OWNER.

In the event the CONTRACTOR fails, within 5 days after notice, to begin correction of the defect, or fails within a reasonable time thereafter to complete the repair or remedy, the OWNER may have the work done at the CONTRACTOR's expense or may proceed against the CONTRACTOR's Public Construction Bond.

SUBCONTRACTORS

The AWARDED BIDDER will be the prime service provider and shall be responsible for all work performed and Agreement deliverables. Proposed use of subcontracts should be included in the BIDDER's response. Requests for use of subcontractors received subsequent to the solicitation process are subject to review and approval by the OWNER. The OWNER reserves the right to request and review information in conjunction with its determination regarding a subcontract request.

All subcontractors are subject to the same requirements of this solicitation as the AWARDED BIDDER. The AWARDED BIDDER is the single point of contact for all work performed on the awarded project.

AWARDED BIDDER shall provide a single point of contact for matters in relation to the construction, as follows:

1. Name

2. Phone Number(s)

3. Email Address

DUTY TO PAY DEFENSE COSTS AND EXPENSES

1. The AWARDED BIDDER agrees to reimburse and pay on behalf of the OWNER the cost of the OWNER legal defense, through and including all appeals, and to include all attorneys' fees, costs, and expenses of any kind for any and all:
   a. claims described in the Hold Harmless and Indemnification paragraph; or,
   b. other claims arising out of the contractor's performance of the Agreement and in which the OWNER has prevailed.
2. The OWNER shall choose its legal defense team, experts, and consultants and invoice the AWARDED BIDDER accordingly for all fees, costs, and expenses upon the conclusion of the claim.
3. Such payment on the behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

TERMINATION FOR CONVENIENCE

1. The OWNER may terminate any awarded contract at any time for any reason by giving at least a 30-day notice in writing to the AWARDED BIDDER. If the contract is terminated by the OWNER as provided herein, the AWARDED BIDDER will be entitled to receive payment for those services reasonably performed to the date of termination.

TERMINATION FOR CAUSE

This Contract may be terminated by the OWNER if the AWARDED BIDDER is found to have submitted a false certification as required under Section 287.135 (2), Florida Statutes and has been placed on the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or been engaged in business operations in Cuba or Syria.

If the AWARDED BIDDER fails to comply with any of the terms and conditions of the awarded Contract, the OWNER may give notice, in writing, to the AWARDED BIDDER of any or all deficiencies claimed. The notice will be sufficient for all purposes if it describes the default in general terms.

If all defaults are not cured and corrected within a reasonable period as specified in the notice, the OWNER may, with no further notice, declare the awarded contract to be terminated.

The AWARDED BIDDER will thereafter be entitled to receive payment for those services reasonably performed to the date of termination, less the amount of reasonable damages suffered by the OWNER by reason of the AWARDED BIDDER's failure to comply with the awarded Contract.

Notwithstanding the above, the AWARDED BIDDER is not relieved of liability to the OWNER for damages sustained by the OWNER by virtue of any breach of this Contract by the AWARDED BIDDER and the OWNER may withhold any payments to the AWARDED BIDDER for the purpose of setoff until such time as the amount of damages due the OWNER from the AWARDED BIDDER is determined.

ANTICIPATED SCHEDULE

This schedule may be altered solely at the OWNER's discretion:

ITB Advertisement	
Panama City News Herald	Tuesday, February 8, 2024 and Tuesday, February 22, 2024, 2024
Questions Due Date:	Wednesday, March 1, 2024 (5:00 p.m. CST)
Bid Deadline:	Thursday, March 19, 2024, 2023 (2:00 p.m. CST)
Bids Read Out Loud at Council Mtg:	Thursday, March 19, 2024, 2023 (5:30 p.m. CST)
Award Recommendation At Council Meeting:	April 2, 2024
Installation Complete:	Within 180 days of Notice to Proceed

GENERAL SPECIFICATIONS

SECTION 01150
MEASUREMENT AND PAYMENT

PART 1 - SCOPE OF WORK

A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Proposal section of these Specifications.

B. Payment will be made based on the specified items included in the description in this section for each bid item.

1.02 GENERAL

A. All Contract Prices included in the Bid Proposal section will be full compensation for all labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the drawings and/or as specified in the Contract Documents to be performed under this contract.

B. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the specifications.

C. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this project.

1.03 ESTIMATED QUANTITIES

A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made.

B. The OWNER/ENGINEER does not assume any responsibility for the final quantities, nor shall the CONTRACTOR claim misunderstanding because of such estimate of quantities.

C. Final payment will be made only for satisfactorily completed quantity of each item.

1.04 WORK OUTSIDE AUTHORIZED LIMITS

A. No payment will be made for work constructed outside the authorized limits of work.

1.05 MEASUREMENT STANDARDS

A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.06 AREA MEASUREMENTS

A. In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.07 LUMP SUM ITEMS

A. Where payment for items is shown to be paid on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item.

B. Lump sum bid items shall be complete, tested and fully operable prior to request for final payment.

C. Measurement shall be based upon the ENGINEER's estimate of percent complete per partial payment period.

1.08 UNIT PRICE ITEM

A. Separate payment will be made for the items of work described herein and listed on the Bid Form.

B. Any related work not specifically listed but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.

1.09 OTHER PROVISIONS

A. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work unless indicated otherwise in the individual bid item.

1. Clearing, grubbing, and grading.

2. Replacement and/or repair of existing utilities damaged during construction.

3. Trench excavation, including necessary pavement removal, rock removal, muck removal and restoration unless a separate bid item is listed in the Bid Form.

4. Ditch and swale restoration.

5. Structural fill, backfill and grading.

6. Foundation and borrow materials.

7. Maintaining the existing quality of service during construction.

8. Appurtenant work as required for a complete and operable system.

B. Final payment shall not be requested by the CONTRACTOR or made by the OWNER until record drawings have been submitted to the ENGINEER.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 BASE BID

A. **BID ITEM 1.1 - MOBILIZATION/DEMOBILIZATION**

1. Payment for all work included under this bid item will be made at the lump sum price bid for mobilization and demobilization of all labor, equipment, materials, and appurtenances necessary for construction of the project.

2. Mobilization shall include all those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities.

3. Also included as part of this bid item is the cost for project indemnifications, video and photographs, shop drawings, working drawings, schedules, record drawings and documents, coordination, and phasing and other miscellaneous items associated with the work.

4. Measurement for this bid item will be lump sum. The lump sum price for mobilization/demobilization will be limited to 10% of the total contract base bid amount.

5. The initial 70% of the Mobilization/Demobilization lump sum price will be payable with the first month’s partial payment.

6. The remaining 30% of the Mobilization/Demobilization lump sum price will be payable with the final partial payment.

B. **BID ITEM 1.2 –PERFORMANCE AND PAYMENT BONDS**

1. Payment for this bid item shall be made at the lump sum price bid for all bonds and insurance policies as required by the Contract Documents.

2. Payment will be made only after proper documentation is provided to the ENGINEER. Measurement of this bid item shall be lump sum.

3. THIS BID ITEM SHALL NOT EXCEED 5.0% OF THE ENTIRE CONTRACT BID AMOUNT.

C. **BID ITEM 1.3 - MAINTENANCE OF TRAFFIC**

1. Payment for all work included under this bid item will be made at the lump sum price bid for maintenance of traffic in accordance with the FDOT Standards.

2. Payment shall include all maintenance of traffic necessary for construction of the improvements indicated in plans.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

4. Measurement for the work included under this bid item shall be lump sum.

D. **BID ITEM 1.4 – CONSTRUCTION TESTING**

1. Payment for all work included under this bid item will be made at the lump sum price bid for testing to be performed in accordance with the state standards.

2. Payment shall include all testing necessary for construction of the improvements indicated in plans.

3. Payment shall constitute complete compensation for all labor, materials, equipment, testing laboratory fees, and any other necessary work needed to complete this work item.

4. Measurement for the work included under this bid item shall be lump sum.

E. **BID ITEM 1.5 – STAKEOUT & AS-BUILTS BY PROFESSIONAL SURVEYOR**

1. Payment for the work included under this bid item shall be made at the lump sum price bid for all work associated with furnishing all stakeout/layouts of the improvements as well as surveys and preparation of record drawings as required under the contract documents. As-Builts shall be of sufficient detail to confirm quantities, above and below ground, elevations, materials, and locations of all improvements associated. As-Builts shall be signed and sealed by a Florida Registered Professional Land Surveyor.

2. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

3. Measurement for the work included under this bid item shall be lump sum.

F. **BID ITEM 1.6 – EROSION CONTROL & NPDES PERMITTING**

1. Payment for all work included under this bid item will be made at the lump sum price bid for all work associated with the prevention, control and abatement of erosion and water pollution and NPDES Permit Administration in accordance with the contract documents.

2. Payment shall include all items and incidentals necessary to complete the work in conformance with NPDES and other permit requirements.

3. Payment for the work included under this bid item shall be made at unit bid price for installing silt fencing and inlet protection systems as required under the contract documents.

4. Payment shall include all material, labor, equipment, and incidentals necessary to provide and install silt fencing and inlet protection systems around existing inlets at the locations noted on the Construction Drawings.

5. Measurement for work included under this bid item will be lump sum.

G. **BID ITEM 1.7 – DEMOLITION (INCLUDES HAULING AND TIPPING FEES)**

1. Payment for the work included under this bid item shall be made at the lump sum price bid for all work associated with providing demolition and removal of existing structures, including but not limited to, existing mitered end sections, existing headwalls, existing reinforced concrete piping, and removal of asphalt from cut and patch operations as required under the contract documents.

2. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item to including the removal of structures as well as hauling and tipping fees as necessary.

3. Measurement for the work included under this bid item shall be lump sum.

H. **BID ITEM 2.0 – PAVEMENT WORK**

1. Payment for the work included under this bid item shall be made at unit bid price for providing pavement work as required under the contract documents.

2. Payment shall include all material, labor, equipment, and incidentals necessary to install 790 square yards of 12-inch Type B Stabilization, install 790 square yards of Base Group 6 (6-inch limerock), and an base overlay of with 69 tons of 1-1/2-inch FC-12.5 Friction Course for the parking areas and roadway turnouts as further detailed on the Construction Drawings.

3. Payment shall include all material, labor, equipment, and incidentals necessary to replace 2,400 square yards of asphalt on the cut and patch areas along North 11th Avenue, Lance Street, and Boatrace Road at the locations noted on the Construction Drawings.

4. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

I. **BID ITEM 3.0 – DRAINAGE WORK**

1. Payment for all work included under this bid item will be made as unit price bid for installing inlets, gutters, concrete end walls, stormwater manholes, mitered end sections (MES), reinforced concrete piping (RCP), corrugated metal piping (CMP), coring of existing inlets, concrete flumes, and rip rap as required under the contract documents.

2. Payment shall include but not be limited to furnishing all material, labor, equipment, and incidentals necessary to install the following in accordance with the contract documents.

    a. Type 2 Gutter inlets (3 each).

    b. Type D ditch bottom inlets (3 each).

    c. Type C inlets with grate tops (3 each).

    d. Type C inlet with grate top and skimmer (1 each).

    e. Type H inlet (1 each).

    f. Concrete End Walls (6 each).

    g. Storm Manholes less than 10 feet (2 each).

h. Core Existing Inlets (2 each).

i. Concrete Flume (1 each).

j. RipRap (9 each).

k. MESes: 18-inch (5 each); 24-inch (2 each); and, 36-inch (2 each).

l. RCPs: 12-inch RCP (190 Linear Feet); 15-inch RCP (159 Linear Feet); 18-inch (360 Linear Feet); 24-inch (120 Linear Feet); 36-inch (256 Linear Feet).

m. CMP: 18-inch (8 Linear Feet).

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

J. **BID ITEM 4.0 – CURB AND SIDEWALK WORK**

1. Payment for the work included under this bid item shall be made at unit bid price for constructing a concrete walking path and sidewalk as required under the contract documents.

2. Payment shall include all material, labor, equipment, incidentals, compaction, earthwork, and testing necessary to construct 9,270 square feet of a 6-foot-wide by 1,541-foot-long sidewalk/walking path at the location noted on the Construction Drawings.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

K. **BID ITEM 5.0 – PAVING MARKING AND SIGNAGE WORK**

1. Payment for the work included under this bid item shall be made at unit bid price for signage and striping as required under the contract documents.

2. Payment shall include all material, labor, equipment, and incidentals necessary to stripe the parking areas including 1.25 general miles of Solid White 6-inch Thermoplastic Striping, ADA Access Special Pavement Marking (1 parking spot), and 16 signs including the ADA signage and a warning sign every 100 feet around perimeter of pond as detailed on the Construction Drawings.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

4. Full payment will be made after testing and strength requirements are confirmed.

L. **BID ITEM 6.0 – LANSCAPING WORK**

1. Payment for the work included under this bid item shall be made at unit bid price for the placement of sod/turf, an irrigation system, and landscaping improvements as required under the contract documents. This work excludes the decorative fountain (see Additive Alternate No. 2).

2. Payment for the work included under this bid item shall be made for the placement of 9,789 square yards of sod/turf as required under the contract documents.

3. Payment shall include all material, labor, equipment, and incidentals necessary to install an irrigation system including but not limited to piping, valves, spray nozzles, water connections, taps, controllers, sensors, electrical improvements and other associated appurtenances as detailed on the Construction Drawings:

4. Payment shall also include all material, labor, equipment, and incidentals necessary to install landscaping features (i.e., plants, trees, and shrubs, mulch, groundcover, etc.) included on the Construction Drawings.

5. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

M. **BID ITEM 7.0 – EARTHWORK**

1. Payment for this items shall be made based on percentage of work completed. It is estimated based on the original survey and the proposed contours, that an estimated 29,655 cubic yards will need to be removed from pond areas. This calculation does not include fill that may be required on site. The AutoCAD file can be made available to the Contractor upon request to assist with estimating quantities. This payment shall be for inground measurements (not truck measured).

2. Payment for the Work included under this bid item shall also be made at unit bid price for fencing (approximately 440 linear feet) as required under the Contract Documents.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

N. **BID ITEM 8.0 - CLEARING, GRUBBING & REMOVAL WORK**

1. Payment for this items shall be made based on percentage of work completed.

2. Payment for the work included under this bid item shall also be made at the unit bid price for the removal of 164 cubic yards of asphalt and road base 22 feet below existing grade for those cut and patch road areas as noted on the Construction Drawings.

3. Payment for the work included under this bid item shall be made at the lump sum price bid for the removal of all existing structures being replaced including inlets, sidewalks, curbs, pipes, etc.) as well as selective grubbing as required under the contract documents.

4. Payment shall include all material, labor, equipment, and incidentals necessary to remove existing structures and perform selective grubbing activities as noted on the Construction Drawings.

5. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

O. **BID ITEM – ALTERNATE A.1 (ASPHALT WALKING PATH)**

1. Payment for all work included under this bid item will be made as a percentage of work completed for all work related to constructing the 6-foot-wide by 1,541-foot-long asphalt walking path (approximately 113 tons of asphalt) in accordance with the contract documents.

2. Payment shall include but not be limited to installation of an asphalt walking path and other required and associated work or materials.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

4. Alternate A.1 should represent all costs associated with constructing an asphalt path instead of a concrete path.

P. **BID ITEM – ADDITIVE ALTERNATE A.2 (DECORATIVE FOUNTAIN)**

1. Payment for all work included under this bid item will be considered as Alternate No. A.2 and made at the lump sum price bid for furnishing all work related to constructing the decorative fountain in accordance with the contract documents.

2. Payment shall include all material, labor, equipment, and incidentals necessary to install the decorative fountain including the decorative fountain components from KASCO (manufacturer) or approved

equal, nylon double braided rope, tie downs, power cord, and any other electrical components required to have a fully functional and operating fountain.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

END OF SECTION 01150

SECTION 02200
EARTHWORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Special Conditions, apply to work of this section.

1.02 DESCRIPTION OF WORK

Definition: “Excavation” consists of removal of material encountered to subgrade elevations indicated and subsequent disposal of materials removed.

1.03 QUALITY ASSURANCE

A. Codes and Standards:

1. Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

B. Testing and Inspection Service:

1. Employ, at CONTRACTOR’s expense, a testing laboratory subject to approval by the ENGINEER to perform soil testing and inspection service for quality control during earthwork operations.

1.04 SUBMITTALS

Test Reports for Excavating:

A. Submit the following reports directly to the ENGINEER from the testing services, with a copy to the CONTRACTOR:

1. Test reports on fill material. (Modified Proctor Tests)
2. Field density test reports. (Modified Proctor Tests)
3. Report of actual unconfined compressive strength and/or results of bearing tests of each strata tested.
4. If on site material is to be used, Modified Proctor tests must be obtained for the on site material.

1.05 JOB CONDITIONS

A. Existing Utilities:

1. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and

protection during earthwork operations.

2. Should uncharted, or incorrectly charted, piping, or other utilities be encountered during excavation, immediately consult utility owner for directions. Cooperate with OWNER and utility companies in keeping respective services and facilities in operation. The CONTRACTOR shall bear all costs of repairing damaged utilities to the satisfaction of utility owner.

3. Do not interrupt existing utilities serving facilities occupied and used by the OWNERs or others, during occupied hours, except when permitted in writing by ENGINEER and then only after acceptable temporary utility services have been provided.

4. Provide a minimum of a 48-hour notice to ENGINEER and receive the notice to proceed before interrupting any utility.

5. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.

B. Use of explosives:

1. The use of explosives is not permitted for this project.

C. Protection of Persons and Property:

1. Barricade open excavations occurring as part of this work and post with warning lights.

2. Operate warning lights as recommended by authorities having jurisdiction.

D. Protect structures, utilities, sidewalks, pavements, and other facilities from damages caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

E. Perform excavation within dripline of large trees to remain by hand and protect the root system from damage or dry out in the manner prescribed in sections under “Sitework.”

PART 2 - PRODUCTS

2.01 SOILS MATERIALS

A. Subbase Material:

1. Naturally or artificially graded mixture of natural or crushed gravel,

crushed stone, crushed slag, and/or natural or crushed sand.

B. Backfill and Fill Materials:

1. Satisfactory soil materials free of clay, rock, or gravel larger than 2 inches in any dimension, debris, waste, frozen materials vegetable, and other deleterious matter.

2. The fill material should be sand containing little fines.

3. Prior to placing the fill material, the existing material shall be stripped of all soils containing a significant percentage of organics and all loose soils which cannot be readily compacted.

4. If existing materials do not meet these requirements, it may be necessary to backfill with select materials other than those that are stored on the job site.

PART 3 - EXECUTION

3.01 EXCAVATION

A. Excavation is Unclassified, and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.

B. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the ENGINEER. Unauthorized excavation, as well as remedial work directed by the ENGINEER, shall be at the CONTRACTOR’s expense.

C. Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom of elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position, when acceptable to the ENGINEER.

D. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classifications, unless otherwise directed by the ENGINEER.

E. Additional Excavation:

1. When excavation has reached required subgrade elevations, notify the ENGINEER who will inspect conditions.
2. If unsuitable bearing materials are encountered at required subgrade elevations, notify the ENGINEER who will inspect conditions.

3. If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper and replace excavated material as directed by the ENGINEER.

4. Removal of unsuitable material and its replacement as directed will be paid on basis of contract conditions relative to changes in work.

F. Stability of Excavations:

1. Slope sides of excavations to comply with local codes and ordinances having jurisdiction.

2. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.

3. Slope sides of excavations should be maintained in safe condition until completion of backfilling.

G. Shoring and Bracing:

1. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers, and cross-braces, in good serviceable condition.

2. Establish requirements for trench shoring and bracing to comply with local codes and authorities having jurisdiction.

3. Maintain shoring and bracing in excavations regardless of time period excavations will be open.

4. Carry down shoring and bracing as excavation progresses.

H. Dewatering:

1. Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area. The cost of all dewatering operations including well pointing shall be the responsibility of the CONTRACTOR.

2. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations.

3. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

4. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rainwater and water removed from excavations to collecting or run-off areas.

5. Do not use trench excavations as temporary drainage ditches.

I. Material Storage:

1. Stockpile satisfactory excavated materials where directed, until required for backfill or fill.

2. Place, grade, and shape stockpiles for proper drainage.

3. Locate and retain soil materials away from edge of excavations. Do not store within drip line of trees indicated to remain.

4. Dispose of excess soil material and waste materials as herein specified.

J. Excavation for Structures:

1. Conform to elevations and dimensions shown within a tolerance of ±0.10 feet and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of service, other construction, and for inspection.

2. Use caution when excavating footings and foundations, taking care not to disturb bottom of excavation.

3. Excavate by hand to final grade just before concrete reinforcement is placed.

4. Trim bottoms to required lines and grades to leave solid base to receive other work.

K. Excavation for Trenches:

1. Dig trenches to the uniform width required for the particular item to be installed, sufficiently wide to provide ample working room.

2. Provide 6- to 9-inch clearance on both sides of pipe or conduit and a maximum of a 30-inch total width.

3. Excavate trenches to depth indicated or required.

4. Carry depth of trenches for piping to establish indicated flow lines and invert elevations.

5. Keep bottoms of trenches sufficiently below finish grade to avoid freeze-ups anywhere beyond the building perimeter.

6. Carry excavation 6 inches below required elevation and backfill, with a 6-inch layer of crushed stone or gravel prior to the installation of pipe wherever rock is encountered.

7. Do not excavate beyond indicated depths for any pipe or conduit 5 inches or less in nominal size and for flat-bottomed, multiple-duct, conduit units.

8. Excavate bottom cuts by hand to accurate elevations and support pipe or conduit on undisturbed soil.

9. Excavate to the subbase for any pipe or conduit 6 inches or larger in nominal size, as well as for tanks and other mechanical/electrical work indicated to receive subbase: depth indicated, or, if not otherwise indicated, to 6 inches below bottom of work to be supported.

10. Excavate for water bearing pipe so top of pipe is no less than 3’-0” below finished pavement grade, but no less than 2’-6” below finish grade, except as otherwise indicated on the Contract Drawings.

11. Grade bottoms of trenches as indicated, notching under pipe bells to provide solid bearing for entire body of pipe.

12. Backfill trenches with concrete where trench excavations pass within 18 inches of column or wall footings and which are carried below bottom of such footings, or which pass under wall footings.

13. Place concrete to level of bottom of adjacent footing.

14. Use care in backfilling to avoid damage or displacement of pipe systems.

3.02 COMPACTION

A. General:

1. Control soil compaction during construction, providing minimum percentage of density specified for each area classification indicated below.

2. All compaction requirements for this section are specified on the construction plans.

B. Moisture Control:

1. Where subgrade of layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during compaction operations.

2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

3. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by dicing, harrowing, or pulverizing, until moisture content is reduced to a satisfactory value.

3.03 BACKFILL AND FILL

A. General:

1. Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below:

a. In excavations, use satisfactory excavated or borrow material.

b. Under grassed areas, use satisfactory excavated or borrow material.

c. Under walks and pavements, use subbase material, or satisfactory excavated or borrow material, or a combination of both.

d. Under piping and conduit, use subbase material where subbase is indicated under piping or conduit; shape to fit bottom 90 degrees of cylinder.

B. Backfill excavation as promptly as work permits, but not until completion of the following:

1. Acceptance of construction below finish grade.

2. Inspection, testing, approval, and recording locations of underground utilities.

3. Removal of concrete formwork.

4. Removal of shoring and bracing and backfilling of voids with satisfactory materials.

5. Removal of temporary sheet piling driven below the bottom of structures and removed in manner to prevent settlement of the structure or utilities or leave in place if required.

6. Removal of trash and debris.

7. Placement of permanent or temporary horizontal bracing on horizontally supported walls.

C. Ground Surface Preparation:

1. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills.

2. Plow, strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontals so that fill material will bond with the existing surface.

3. Break-up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density, when the existing ground surface has a density less than that specified under “Compaction” for a particular area classification.

D. Placement and Compaction:

1. The lower portion of backfill, to a compacted level of 1 foot above the top of the pipe, shall be hand placed in layers of lifts not to exceed 6 inches of compacted depth and each layer compacted individually by means of hand tampers.

2. Above that level, place lifts in layers not to exceed 12 inches of compacted depth and machine filling and tamping may be used.

3. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content.

4. Compact each lift to required percentage of minimum soil density for each area classification as designated herein.

5. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

6. Place backfill and fill materials evenly adjacent to structures, piping, or conduit to required elevations.

7. Take care to prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping, or conduit to approximately same elevation in each lift.

3.04 GRADING

A. General:

1. Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surfaces within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades.

B. Grading Outside Building Lines:

1. Grade areas adjacent to building lines to drain away from structures and to prevent ponding.

2. Finish surfaces free from irregular surface changes, and as follows:

a. Lawn or Unpaved Areas:

1) Finish areas to receive topsoil to within not more than 0.10 feet above or below required subgrade elevations.

b. Walks:

1) Shape surface of areas under walks to line, grade, and cross-section, with finish surface not more than 0.10 feet above or below required subgrade elevation.

c. Pavements:

1) Shape surface of areas under pavement to line, grade, and cross-section, with finish surface not more than ½ inch above or below requires subgrade elevations.

d. Grading Surface of Fill Under Building Slabs:

1) Grade smooth and even, free from voids, compacted as specified, and to required elevation.

2) Provide final grades within a tolerance of ½ inch when tested with an IO' straightedge.

e. Compaction:

1) After grading, compact subgrade surfaces to the depth and indicated percentage for each area classification.

3.05 FIELD QUALITY CONTROL

A. Quality Control Testing During Construction:

1. Provide testing service by a qualified soil testing firm, subject to the ENGINEER's approval, to inspect and approve subgrades and fill layers before further construction work is performed.

B. Paved Areas:

1. Make at least one field density test of subgrade for every 2,000 square feet of paved area but in no case less than three tests, nor less than one test per driveway or crossing.

2. In each compacted fill layer, make one field density test for every 2,000 square feet of paved area but in no case less than three tests nor less than one per driveway or crossing.

C. Non-Paved Areas:

1. Perform at least one field density test per 3,000 square feet of fill per every vertical foot of height and perform at least one field density test per 1,000 feet of pipe installed per every 2 feet of vertical trench depth.

2. If in opinion of the ENGINEER, based on testing service reports and inspection, subgrade or fills which have been placed below are specified density, provide additional compaction and testing at no additional expense.

3.06 MAINTENANCE

A. Protection of Graded Areas:

1. Protect newly graded areas from traffic and erosion.

2. Keep free of trash and debris.

B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.

C. Reconditioning Compacted Areas:

1. Where completed, compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-sha pe, and compact to required density prior to further construction.

D. Seeding and Sodding:

1. See Section 02960, “Restoration” for requirements of sodding and landscape requirements.

3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Disposal of all spoil material resulting from construction shall be the responsibility of the CONTRACTOR.

END OF SECTION

SECTION 02960
RESTORATION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work includes the restoration of the entire site affected by the proposed work outlined in the Contract Documents and Construction Drawings.

B. This section includes furnishing equipment, labor, and materials, and performing all necessary and incidental operations to perform the required work.

PART 2 - PRODUCTS

2.01 SOD

A. Any slope equal to or steeper than 1 vertical to 3 horizontals shall be sodded and the sod shall be pinned down for stabilization.

B. The CONTRACTOR shall, at his expense, maintain the sodded areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include watering, re-staking sod, filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

2.02 PLANTS AND TREES

A. Existing damaged plants and tress shall be replaced by plants and trees of equal type, quality, and size whenever possible. All new plants and trees shall be sound, healthy, vigorous, and free from defects, decay, disfiguring, bade abrasions plant diseases, insect pests, their eggs, or larvae. The new plants shall be approved by the ENGINEER before placing.

B. Existing plants may be removed, preserved, and replaced at the CONTRACTOR’s option. Plants shall be handled by an approved nursery.

C. Plants shall be watered and cared for until new growth appears. Dead and dying plants shall be immediately replaced. Plants used shall be in accordance with the standards for Florida No. 1 or better as given in Grades and Standards for Nursery Plants Part I.

D. Plants shall conform to the sizes indicated by the OWNER.

E. Trees shall be guaranteed for 1 year. If the replaced tree dies within 1 year of project completion it shall be replaced by the CONTRACTOR at no expense to the City.

2.03 MULCH

Match existing mulch.

2.04 WATER

The water used in the performance of this Contract shall be of drinking water quality, clean and free from injurious amounts of oil, acid, alkali, or organic matter. The CONTRACTOR shall purchase all testing water from the City.

2.05 PLANTING MIXTURE

Unless indicated otherwise on the plans, the 18-inch planting mixture, when required, shall consist of a thorough mixture of 40% peat and 60% sand. The peat shall be Florahome peat or equivalent and the sand shall be clean and free from debris of any kind.

2.06 FERTILIZER

Fertilizer shall be pelletized 13-13-13 or approved equal.

PART 3 - EXECUTION

3.01 LANDSCAPING RESTORATION

A. Lawn Areas:

Any lawn area affected by the required work shall be restored to a condition equal or better than the conditions existing before the commencement of work.

B. Balled Plants:

1. Plants where required shall be adequately balled with firm natural balls of soil, sized as set forth in “Horticultural Standards.”

2. Balls shall be firmly wrapped with burlap or equally approved strong cloth.

3. A balled plant will not be planted if the ball is cracked or broken before or during the process of planting.

C. Preparation of Plant Pits:

1. All plant pits shall be circular in outline and have vertical sides.

2. Tree pits shall be 2 feet wider than the width of the ball and 1 foot deeper than the depth of the ball.

3. Shrubs that are either balled and burlapped (B&B) or 3 gallons (and plus) shall have pits that are 2 feet wider than the width of the plant ball and 6 inches deeper than the depth of the ball.

4. Smaller shrubs shall have pits that are at least 1 foot wider than the width of the plant ball and 6 inches deeper than the ball depth.

D. Setting Plants:

1. All plants except as otherwise specified, shall be centered in pits.

2. Deep planting shall be avoided and unless otherwise specified, plants shall be set at such a level that after settlement they will bear the same relation to the required grade as they have to the natural grade before being transplanted.

3. B&B Plants and Palm Trees:

a. B&B plants and palm trees shall be placed on 6 to 12 inches of tamped planting mixture and adjusted to be at the proper level.

b. The rope and burlap shall be cut away and the burlap folded down to the bottom of the pit.

c. Exceptionally large B&B plants shall remain wrapped until fully backfilled and then just the upper portion of the burlap shall be removed.

d. Backfill of planting mix shall be placed halfway up the pit and then water tamped.

e. After this water has drained away, backfill around the ball to grade and water tamp again.

f. Finally, form a ridge of soil around the edge of the pit to form a saucer and full area three times with water.

E. Water:

1. Water to be used initially during plant installation shall be furnished by the CONTRACTOR.

2. The existing irrigation system, where damaged, shall be promptly repaired after the installation of the plants.

F. Options as to Methods:

Any plant may be furnished container grown instead of balled if all other requirements are met.

G. Fertilizer:

Immediately before sod is placed, 8-8-8 fertilizer shall be applied at the rate of approximately 500 pounds per acre, by broadcasting and raking into the planting area.

H. Tamping:

1. Sod shall be firmly embedded by light tamping.

2. Wherever necessary to prevent an erosion condition caused by vertical edges at the outer limits of the sodded area, the sod shall be tamped to produce a featheredge at the outer Limits.

3. The sod shall be kept in a moist condition after it is planted.

4. Water shall not be applied between the hours of 8:00 a.m. and 4:00 p.m. nor when there is danger of freezing.

I. The CONTRACTOR shall, at his expense, maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include watering, filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

3.02 PAVEMENT REPLACEMENT

A. Asphalt pavement shall be removed by saw cutting on a straight line with edges as vertical as possible. Concrete pavement or asphalt surfaced concrete shall be removed by cutting with a concrete saw in as straight a line and vertically as possible.

1. Non-asphalt pavement replacement shall be replaced of like material and thickness.

2. Asphalt or built-up asphalt pavement replacement shall be replaced with like material or concrete as directed by the ENGINEER.

3. Where asphalt or built-up asphalt pavement is replaced by concrete, the concrete shall have a minimum of 6 inches in thickness and be reinforced with 6 by 6 No. 6 gage welded wire fabric. Where the pavement replacement is of like material, it shall be replaced in thickness equal to or better than that existing at the time of removal.

B. Road cuts across City or County roads shall not be cut.

C. Unless the base is sealed or other temporary paving applied over driveway areas to be repaved, pavement shall be replaced not later than 2 weeks after completion of backfill.

3.03 CURB REMOVAL AND REPLACEMENT

A. Curb removal and replacement required in the construction of this work shall be done by the CONTRACTOR.

B. Reasonable care shall be exercised in removing the curb, and the CONTRACTOR shall either stockpile or dispose of this material as directed by the ENGINEER.

C. Curb shall be replaced of like material in a manner and condition equal to or better than that existing at the time of removal.

D. Materials and methods of replacing State Highway sidewalks or curbs shall conform to the Florida Department of Transportation specifications.

3.04 TESTS

A. The CONTRACTOR shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations.

B. All density tests on backfill or base replacement will be done by a commercial testing laboratory employed by the CONTRACTOR at such locations as may be recommended by the ENGINEER.

C. If the densities as determined by the specified tests fall below the required minimums, the CONTRACTOR shall pay for all retests.

END OF SECTION

FDOT

SPECIFICATIONS

PLEASE REFER TO THE CONSTRUCTION DRAWINGS AND SPECIFICALLY THE FLORIDA DEPARTMENT OF TRANSORTATION (FDOT) 2021 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES (LINKED BELOW)

(ATTACHED TO THESE SPECIFICATIONS)

(THIS PROJECT WILL ADHERE TO FDOT SPECIFICATIONS FOR THE TECHNICAL SPECIFICATIONS)

Specifically, the following Divisions of the FDOT Manual should be included but are not limited to:

- **Division 4 – Structures, specifically:**
  - **Section 400 – Concrete Structures**
  - **Section 415 – Reinforcing Concrete**
  - **Section 425 – Inlets, Manholes and Junction Boxes**
  - **Section 430 – Pipe Culverts**
- **Division 5 – Incidental Construction**
  - **Section 522 – Concrete Sidewalks and Driveways.**
- **Division 9 – Materials for Portland Cement Concrete (Structural, Pavement, and Miscellaneous)**
  - **Section 943 – Corrugated Steel Pipe and Pipe Arch**

LINK TO FDOT 2024/2025 STANDARDS IS BELOW

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/specbooks/fy-2024-25/fy2024-25ebookfinalcomp.pdf?sfvrsn=62b840b6_1

ATTACHMENT 1

BID FORMS

(REQUIRED FOR SUBMITTAL WITH BIDS)

BID FORM ITB NO: 2024-01

This proposal of_____, hereinafter called "BIDDER," organized and existing under the laws of the State of_____ doing business as (Insert "a corporation" or "a partnership" or "an individual" as applicable) _____ is hereby submitted to the City of Parker.

In compliance with the ADVERTISEMENT FOR BIDS, BIDDER hereby proposes to perform work associated with the **INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH** project at certain locations within the City of Parker as identified in the Instruction to Bidders of this Contract Document and Construction Drawings, as described in this BID, complete in every detail. Please see BID-FORM page 2 to complete BID FORM in detail. BID should include all applicable taxes, shipping charges and fees as applicable.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any other competitor.

The Unit Contract Price is:

_____ ($_____)
(Words)

submitted by:

_____
Name of BIDDER Submitting This BID

BID Prepared By:_____

SEAL: (If BID is by Corporation)

_____
Name of Individual Who Prepared This BID

Contact Email: _____

Address:_____

Phone:_____

Signature of Authorized Representative of BIDDER:

_____Date:_____

BASE BID FORM					
Bid Item #	**Description**	**Qty**	**Unit**	**Cost**	**Total**
1. General Conditions					
1.1	Mobilization/Demobilization	**1**	**LS**	**$**	**$**
1.2	Performance and Payment Bonds	**1**	**LS**	**$**	**$**
1.3	Maintenance of Traffic	**1**	**LS**	**$**	**$**
1.4	Construction Testing	**1**	**LS**	**$**	**$**
1.5	Stakeout & As-builts by Professional Surveyor	**1**	**LS**	**$**	**$**
1.6	Erosion Control & NPDES Permitting	**1**	**LS**	**$**	**$**
1.7	Demolition (Includes Hauling & Tipping Fees)	**1**	**LS**	**$**	**$**
1.8	Project Management, Overhead & Profit	**1**	**LS**	**$**	**$**
				1. General Conditions – Subtotal	**$**
2. Pavement Work					
2.1	1-½-inch Asphalt Concrete Friction Course, Traffic B, FC-12.5, Pg 76-22	**TN**	**69**	**$**	**$**
2.2	Optional Base, Base Group 06 (6-inch Limerock)	**SY**	**790**	**$**	**$**
2.3	Type B Stabilization (12-inch)	**SY**	**790**	**$**	**$**
2.4	1-1/2-inch Asphalt Concrete Patch	**SY**	**2,400**	**$**	**$**
				2. Pavement Work – Subtotal	**$**
3. Drainage Work					
3.1	Inlets, Gutter, Type 2	**EA**	**3**	**$**	**$**
3.2	Inlets, Ditch Bottom, Type D, J Bot, >10'	**EA**	**3**	**$**	**$**
3.3	Inlets, Type C with grate top	**EA**	**3**	**$**	**$**
3.4	Inlets, Type C with grate top & Skimmer	**EA**	**1**	**$**	**$**
3.5	Inlet, Type H	**EA**	**1**	**$**	**$**
3.6	Concrete End Wall	**EA**	**6**	**$**	**$**
3.7	Manholes, J-7, <10 feet	**EA**	**2**	**$**	**$**
3.8	18-inch MES	**EA**	**5**	**$**	**$**
3.9	24-inch MES	**EA**	**2**	**$**	**$**

BASE BID FORM					
Bid Item #	**Description**	**Qty**	**Unit**	**Cost**	**Total**
3. Drainage Work (continued from previous page)					
3.10	36-inch MES	**EA**	**2**	**$**	**$**
3.11	12-inch RCP	**LF**	**190**	**$**	**$**
3.12	15-inch RCP	**LF**	**159**	**$**	**$**
3.13	18-inch RCP	**LF**	**360**	**$**	**$**
3.14	24-inch RCP	**LF**	**120**	**$**	**$**
3.15	36-inch RCP	**LF**	**254**	**$**	**$**
3.16	18-inch CMP	**LF**	**8**	**$**	**$**
3.17	Core Existing Inlet	**EA**	**2**	**$**	**$**
3.18	Concrete Flume	**EA**	**1**	**$**	**$**
3.19	RipRap	**EA**	**9**	**$**	**$**
				3. Drainage Work – Subtotal	**$**
4. Curb and Sidewalk Work					
4.1	Concrete Sidewalk, 6-foot wide	**SF**	**9,270**	**$**	**$**
				4. Curb and Sidewalk – Subtotal	**$**
5. Pavement Marking and Signage Work					
5.1	Thermoplastic, Preformed, White, Solid, 6-inch	**GM**	**1.25**	**$**	**$**
5.2	Thermoplastic, Preformed, White, Message or Symbol	**EA**	**1**	**$**	**$**
5.3	Single Post Sign, F&I Ground Mount, Up to 12 SF	**EA**	**16**	**$**	**$**
				5. Pavement Marking and Signage – Subtotal	**$**
6. Landscaping Work					
6.1	Performance Turf, Sod	**SY**	**9,789**	**$**	**$**
6.2	Irrigation	**LS**	**1**	**$**	**$**
6.3	Landscaping	**LS**	**1**	**$**	**$**
				6. Landscaping – Subtotal	**$**

BASE BID FORM					
Bid Item #	**Description**	**Qty**	**Unit**	**Cost**	**Total**
7. Earthwork					
7.1	Regular Excavation	**LS**	**1**	**$**	**$**
7.2	Chain Link Fence	**LF**	**440**	**$**	**$**
				7. Earthwork – Subtotal	**$**
8. Clearing, Grubbing & Removal Work					
8.1	Removal Of Existing Structures (Inlets, Sidewalks, Curbs, Pipes, etc.)	**LS**	**1**	**$**	**$**
8.2	Removal Of Existing Asphalt And Base 22-feet Below Existing Grade	**CY**	**164**	**$**	**$**
8.3	Selective Clearing And Grubbing	**LS**	**1**	**$**	**$**
				8. Clearing, Grubbing & Removal – Subtotal	**$**

BID ALTERNATES					
Bid Item #	**Description**	**Qty**	**Unit**	**Cost**	**Total**
A.1	Alternate to Bid Item 5.1 - Asphalt Sidewalk, 6-foot wide	**TN**	**113**	**$**	**$**
A.2	Decorative Fountain and Appurtenances	**LS**	**1**	**$**	**$**

Note:
Bid Items listed above are further detailed in the ***Measurement and Payment*** Section of this Invitation to Bid package.

BID BOND

BY THIS BOND, we _____ as Principal and _____, a corporation, as Surety, are bound to the City of Parker, Florida, as OWNER, in the sum of $_____ for the payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally. THE CONDITION of this bond is such that:

1. The Principal has submitted to the OWNER a certain BID dated _____ _____.

2. If said BID shall be rejected, or, if said BID shall be accepted and the Principal shall execute and deliver a Contract and furnish bonds for the faithful performances of work and for the payment of all persons performing labor and furnishing materials in connection therewith and shall fulfill all other aspects created by the acceptance of said BID, then this obligation shall be void. Otherwise, this bond shall remain in full force and effect with it being expressly understood and agreed that the liability of the Surety and for any and all claims hereunder shall, in no event, exceed the amount of this obligation. This Surety, for value received, hereby stipulates, and agrees that the obligations of said Surety and this bond shall, in no way, be impaired or affected by any extension of time within which the OWNER may accept such BID; and Surety hereby waives notice of any such extension. Signed, sealed, and delivered in three counterparts on CORPORATE PRINCIPAL

By: _____

Attest: _____

Its: _____

Seal: _____

Acknowledged and subscribed on _____, before the undersigned authority by _____, as the _____ of the Corporation named as _____ Principal and with due authorization of the Corporation.

Notary Public

SURETY

By:_____

Attest: _____

Countersigned: By:_____

Seal:

Attorney-in-Fact, State of Florida

ADDENDUM ACKNOWLEDGEMENT

I acknowledge receipt of the following addenda:

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title:_____Date: _____

It is the responsibility of the BIDDER to ensure that they have received addenda if issued.

Call (850) 215-1285 or email Mandy O'Regan, Anchor CEI (OWNER's Representative), moregan@anchorcei.com prior to submitting your BID to ensure that you have received all issued addenda.

ANTI-COLLUSION CLAUSE

BIDDER certifies that his/her response is made without prior understanding, agreement or connection with any Corporation, Firm or person submitting a response for the same services and is in all respects fair and without collusion or fraud.

Name of Firm: _____

Authorized Signature: _____

Printed Name: _____

Title:_____ Date: _____

CONFLICT OF INTEREST DISCLOSURE FORM

For purposes of determining any possible conflict of interest, all BIDDERs, must disclose if any City Council Member(s), employee(s), elected officials(s), or any of its agencies is also an owner, corporate officer, agency, employee, etc., of their BIDDER's firm.

Indicate either "yes" (a City employee, elected official, or agency is also associated with your firm), or "no" for no conflict of interest.

If yes, give person(s) name(s) and position(s) with your firm.

YES_____ NO _____

NAME(S)	**POSITION(S)**

Name of BIDDER's firm: _____

Authorized Signature: _____

Printed Name: _____

Title:_____ Date: _____

IDENTICAL TIE BIDS/DRUG FREE WORKPLACE

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more submittals, which are equal with respect to price, quality, and service, are received by the OWNER for the procurement of commodities or contractual services, a submittal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the awarding process. Established procedures for processing tie BIDs will be followed if none of the tied firms have a drug-free workplace program. To have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under BID a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under BID, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than 5 days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in, a drug abuse assistance or rehabilitation program if such is available in the employee's community, by an employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify the following: (Check one and sign in the space provided.)

_____This firm complies fully with the above requirements.

_____This firm does not have a drug free workplace program at this time.\

Name of BIDDER's Firm: _____

Authorized Signature: _____

Printed Name: _____

Title:_____ Date: _____

CERTIFICATION REGARDING DEBARMENT, SUSPENSION,

INELIGIBILITY AND VOLUNTARY EXCLUSION

Contractor Covered Transactions

1. The prospective BIDDER of the Recipient,_____, certifies, by submission of this document, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the Recipient's contractor is unable to certify to the above statement, the prospective BIDDER shall attach an explanation to this form.

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title: _____ Date: _____

By: City of Parker

Signature:_____

Name and Title Recipient's Name: _____

44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING
Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each BID or offer exceeding $100,000)

The undersigned [BIDDER] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the Award Documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. Section 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The BIDDER,_____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the contractor understands and agrees that the provisions of 31 U.S.C. Section 3801 *et seq*., apply to this certification and disclosure, if any.

_____
Signature of BIDDER's Authorized Official

_____
Name and Title of BIDDER's Authorized Official Date

CERTIFICATION REGARDING SCRUTINIZED COMPANIES LIST

BIDDER Name: _____

BIDDER FEIN: _____

BIDDER'S AUTHORIZED REPRESENTATIVE NAME AND TIME:

_____

BIDDER'S ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE NUMBER: E-MAIL:

Section 287.135, Florida Statutes prohibits agencies from contracting with companies, for goods or services over $1,000,000, that are participating in a boycott of Israel, are on the Scrutinized Companies that Boycott Israel list, the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Both lists are created pursuant to Section 215.473, Florida Statutes.

As the person authorized to sign on behalf of Bidder, I hereby certify that the company identified above in the sector entitled "Respondent Bidder's Name" is not participating in a boycott of Israel, is not listed on the Scrutinized Companies that Boycott Israel List, the Scrutinized Companies with Activities in Sudan List, or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List and has not been engaged in business operations in Cuba or Syria. I understand that pursuant to Section 287.135, Florida Statutes, the submission of false certification may subject company to civil penalties, attorney's fees, and/or costs.

CERTIFIED BY: _____

PRINT NAME AND TITLE: _____

DATE: _____

SUB-CONTRACTORS LIST

As the bidder, I submit a listing of the Sub-Contractors which I shall use to accomplish the Work. Sub-Contractors are listed by name, address, amount of work and item of work. If none, please state so.

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

Date:_____

CERTIFICATE OF COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT

BIDDER acknowledges sole responsibility for complying with the Florida Trench Safety Act (Act). Section 553.60, Florida Statutes. Bidder further acknowledges that included in the various items of its BID and in its Total Lump Sum Bid are costs for complying with the Florida Trench Safety Act. The Bidder further identifies the costs to be summarized below:

Trench Safety Method

Item No.	Trench Safety Method (Description)	Units of Measure (LF, SY)	Quantity	Unit Cost	Extended Cost	Unit Extended
A.						
B.						
C.						
D.						
					Total	**$**

Failure to complete the above may result in your BID being declared nonresponsive. The costs indicated above are provided to comply with the Act and shall not constitute grounds for any additional compensation to that listed for the separate line items of the Bid Form.

Bidder: _____

By: _____

Its: _____

Date: _____

Authorized Signature: _____

ATTACHMENT 2

CONDITIONS AND REQUIREMENTS

GENERAL TERMS AND CONDITIONS

1. Enough detail is given in the BID to describe the item being BID, although not written, full manufacturer's specifications are implied. Manufacturer's specifications take precedent over information within this BID if any discrepancy exists.

2. Contractor shall use FDOT Road and Bridge Specifications, latest edition, for any roadway, driveway, or sidewalk work detailed in the Construction Drawings.

3. Plans, Drawings, Specifications, Special Provisions, and other documents shall be considered a part of the BID Form whether attached or not.

4. Prospective BIDDERs must be able to show that they can perform each of the various items of Work upon which they BID and that the equipment necessary for the completion of Work is available. The BIDDER shall be licensed as a CONTRACTOR when required by state law. Such license shall be in effect prior to the date and time specified for receipt of BIDs by the OWNER.

5. Should the BIDDER to whom the award of contract was made, fail to execute any of the required and acceptable bonds, the award of contract shall be annulled, and the BID Bond posted by the BIDDER shall be retained by the OWNER, not as penalty, but as liquidated damages. Award will then be given to the next BIDDER selected by the OWNER with a qualified BID.

6. The Work:

    a. Intent is for the CONTRACTOR to provide for construction, completion in every detail of the Work, furnishing all labor, materials, equipment, tools, transportation, and supplies required to complete the Work in accordance with the Contract Documents.

    b. The OWNER's Designated Representative shall have the right to make alterations in the drawings or specifications as considered necessary or desirable during the progress of the Work for satisfactory completion of the Work. No alterations shall be made which will result in a substantial change in the general plan, character, or basic scope of the Work.

    c. Upon completion of the Work, before acceptance by the Engineer or Architect of Record and before final payment, the CONTRACTOR shall remove all equipment, surplus, discarded materials, rubbish and temporary structures and shall restore, in an acceptable manner, all property, both public and private, damaged during the performance of the Work.

7. Control of the Work:

   a. At project completion, the CONTRACTOR shall furnish, on sheets not larger than 24-inches by 36-inches, as-built drawings of utility lines, stormwater pipes, and structures showing any deviation from the plans and specifications that exceed 0.1 feet in vertical elevation and 1 foot in horizontal location and any change to the type of construction material and size. The as-built drawings shall be signed and sealed by a Florida-licensed professional land surveyor or professional engineer.

   b. The CONTRACTOR shall take no advantage of any apparent error or omission which he might discover in the drawings or specifications. In the event that an error or omission is discovered by the CONTRACTOR, he shall, within 24 hours of such discovery, notify the OWNER's Designated Representative who shall then make such corrections and interpretations deemed necessary for reflecting the actual spirit, intent, and scope of the drawings and specifications.

   c. The OWNER shall have the final say on all questions, difficulties, and disputes, of whatever nature, which may arise relative to the interpretation of the drawings and specifications.

   d. The CONTRACTOR shall furnish and set slopes stakes, rough grade stakes and all other stakes necessary for construction of the project.

   e. Failure to remove or refusal by the CONTRACTOR to remove defective materials or Work or make necessary repairs to damaged Work shall be cause for the OWNER's Designated Representative to make the necessary corrections at the expense of the CONTRACTOR with such monies being deducted from the contract amount or charged against the bonds.

   f. The CONTRACTOR shall notify the OWNER's Designated Representative when the project is substantially complete. If the OWNER's Designated Representative determines the project is substantially complete, a "Certificate of Substantial Completion" will be issued by the OWNER.

   g. The CONTRACTOR shall maintain all Work in first-class condition until it has been completed as a whole and accepted by the OWNER's Designated Representative. The CONTRACTOR shall be responsible for the security and protection of all materials used in the project until a "Notice of Completion" is issued by the OWNERs.

   h. Any written claim for compensation due to delays, additional, or extra Work shall include the following:

1. For delay claims, provide a critical path schedule showing the delay is due to a controlling item of Work as well as the early start, late start, early finish, late finish, and the critical paths.

2. A detailed factual statement providing dates, locations, and items of Work affected in each claim.

3. The date on which actions or conditions resulting in the claim became evident.

4. All pertinent documents and substance of any material oral communications relating to the claim and the name of the persons making the oral communications.

5. The written claim shall identify the provisions of the Agreement which support the claim along with a detailed explanation as to why these provisions support the claim.

6. A detailed breakdown of compensation sought for labor expenses, additional material, and supplies, listing of each piece of equipment and cost, any direct and indirect damages, and all documentation in support thereof.

7. Equipment rental rates that are based on Blue Book Rental rates.

i. The OWNER will not compensate the CONTRACTOR for any delays for any reason unless 5 days (excluding Saturdays, Sundays, and holidays) have elapsed from the start of Work stoppage. The first day of any claims shall be on day six of the Work stoppage. This shall apply to each Work stoppage.

j. The OWNER expects the CONTRACTOR to use forces and equipment on any item of Work that can be completed during the delay. The CONTRACTOR's claim must show the delay is due to the controlling item of Work as shown on the critical path method schedule. After 5 workdays if the OWNER deems the delay claim to be valid, the CONTRACTOR's claim shall only be for labor, equipment and materials that are delayed due to the controlling Work item.

   If the OWNER's Representative Engineer determines the CONTRACTOR forces and equipment can be used on other Work items during the delay, no compensation will be given for these forces and equipment.

k. Unless otherwise stated in the plans or specifications, the term "install" shown in the plans and specifications shall be interpreted by the CONTRACTOR to mean the same as "furnish and install," which means the

CONTRACTOR shall provide all materials, equipment, and labor to completely install the item shown in the plans or specifications.

8. Material Control:

   a. Only materials conforming to the requirements and intent of the drawings and spe5cifications will be used and all such materials not specifically identified in the plans and specifications will be approved by the Engineer or Architect of Record prior to use to perform the Work. Reference in the contract documents to a proprietary device, product, material, or fixture to establish a quality standard is not intended to limit competition. The CONTRACTOR may use any proprietary device, product, material, or fixture that in the Engineer of Record's judgment is equal, for the purpose intended.

   b. The CONTRACTOR shall ensure that OWNER personnel have entry at all times to the construction site in order to inspect and evaluate any or all materials used for performing the Work. The OWNER's Designated Representative shall have the right to sample and test any or all materials used in performing the Work. Copies of any tests completed by the OWNER's Designated Representative will be provided to the CONTRACTOR.

   c. Materials shall be stored as specified in the Contract Documents or as per the material manufacturer's recommendations. The protection of stored materials shall be the responsibility of the CONTRACTOR and the OWNER shall not be liable for any loss, theft, or damage to stored materials.

   d. Any materials found to be defective by the CONTRACTOR or the OWNER's Designated Representative shall be removed from the Work or place of storage at the CONTRACTOR's expense and replaced at the CONTRACTOR's expense.

      Failure or refusal by the CONTRACTOR to accomplish the removal and replacement of defective materials from the Work or place of storage shall be grounds for the OWNER's Designated Representative to do same at the expense of the CONTRACTOR and such expense deducted from the contract amount or from the bond.

   e. The CONTRACTOR shall, at all times during construction, provide and maintain proper equipment and facilities to promptly remove and properly dispose of all water entering excavations and keep such excavations dry so as to obtain a satisfactory undisturbed sub-grade foundation condition until the fill, structure, or pipes to be built thereon have been completed to such extent that they will not be floated or otherwise damaged by allowing water levels to return to natural elevations.

f. The CONTRACTOR shall furnish all materials and equipment and perform all Work required to install and maintain the drainage systems for handling groundwater and surface water encountered during construction of structures, pipelines, and compacted fills. The CONTRACTOR shall obtain Florida Department of Environmental Protection (FDEP) and Northwest Florida Water Management District (NWFWMD) permits for all dewatering operations. During dewatering operations, all engines shall be equipped in a manner to keep pump noise to a minimum. If dewatering is required after 10:00 p.m. near residences and businesses, pump noise shall not create a nuisance to the property owners. The CONTRACTOR is solely responsible for any damages to private or public property caused by CONTRACTOR's dewatering operations. During dewatering operations, the CONTRACTOR shall notify all businesses and residences within a minimum of 300 feet of the dewatering operations to turn off all irrigation pumps. The 300-foot limit is a minimum, and the CONTRACTOR is responsible for any damage to private property, to include, but not limited to loss of plants, burned out pumps, building, pavement, sidewalk, or any other structural settlement, etc. that can be attributed to the dewatering operations. The OWNER will assume no liability nor pay for any claims arising from the CONTRACTOR's dewatering operation.

9. CONTRACTOR Responsibilities:

a. The CONTRACTOR shall relieve the OWNER from any and all claims arising from claims by holders of trademarks, patents or copyrights used or incurred by the CONTRACTOR in performing the Work.

b. The CONTRACTOR shall not permit his equipment to interfere with traffic while such equipment is on or traversing an existing road without coordination with and approval of appropriate officials of the State, County, or City.

c. The CONTRACTOR shall be responsible for all damages arising out of his use of explosives when deemed necessary in the performance of the Work.

d. The CONTRACTOR shall preserve from damage all public and private property along the line of construction and adjacent to the Work. If the CONTRACTOR fails to restore such property, the OWNER's Designated Representative, upon written notification, as deemed necessary, may proceed to repair the damaged property and the cost deducted from the contract sum.

e. Arrangements for utilities to the site shall be accomplished by the CONTRACTOR and in doing same he shall coordinate with the appropriate utilities for the just and proper utilization of any space where construction shall entail the joint use of area under this Work and the utility construction.

f. Final acceptance will not be given, nor will bond be released unless any and all claims against the CONTRACTOR are paid or the CONTRACTOR has otherwise been relieved of the claim.

g. Until acceptance of the Work by the OWNER's Designated Representative, the Work shall be under charge and custody of the CONTRACTOR, and he shall take every precaution against injury or damage to the Work by the action of the elements or from other causes.

10. Prosecution and Progress:

a. The CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or subsequent agreements of the contract without written consent of the OWNER.

b. The CONTRACTOR shall commence Work on or after the Notice to Proceed date and shall provide sufficient resources to ensure completion of the Work within the time limit set forth. Should the CONTRACTOR fail to provide sufficient resources to assure timely progress and if he fails to perform the Work within the specified time, the OWNER shall have ground to claim default.

c. The CONTRACTOR shall schedule his operations to minimize any inconvenience to adjacent businesses or residences. The CONTRACTOR shall take special precautions to restrict his major operations in performing the Work to what is commonly understood to be "normal" or "standard" working hours. Work performed at other periods requires preapproval from the OWNER's Designated Representative.

d. The CONTRACTOR shall maintain reasonable access at all times to all businesses and private residences and properties adjacent to the construction area or impacted by the construction.

e. The OWNER's Designated Representative shall make provision for and shall schedule a pre-construction conference with the CONTRACTOR and all concerned parties in attendance.

f. The CONTRACTOR shall provide a detailed schedule to the OWNER within 5 working days after the date of the preconstruction conference. Adherence to the CONTRACTOR's construction schedule is critical to the residences and businesses impacted by the project. The CONTRACTOR shall give the OWNER 48 hours' notice of schedule changes and shall submit a new and complete changed schedule. The OWNER will not allow any lane closure or paving operations without 48 hours' notice. The CONTRACTOR shall give the City Inspector 48 hours' notice of commencement of all major Work items.

g. The CONTRACTOR shall assure that all supervisory personnel employed by him/her are fully qualified and competent to properly perform the Work in coordination with other trades at the Work and can perform the Work within the specified periods of time.

h. The CONTRACTOR shall maintain a competent superintendent at the site at all times while Work is in progress to act as the CONTRACTOR's agent. The superintendent shall be capable of properly interpreting the Contract Documents and shall be thoroughly experienced in the type of Work being performed. The superintendent shall have full authority to receive instructions from the OWNER's Designated Representative and to execute the orders or directions of the OWNER's Designated Representative, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. This superintendent must be at the project site to supervise subcontractors. The superintendent must speak and understand English.

i. The CONTRACTOR shall designate a responsible person who speaks and understands English, and who is available at or reasonably near the worksite on a 24-hour basis, 7 days a week who is the point of contact during emergencies.

j. The OWNER's Designated Representative shall have the authority to suspend the Work, wholly, or in part, for such periods as may be deemed necessary due to unsuitable weather or other conditions considered unfavorable for performance of the Work.

k. The CONTRACTOR may be declared in default for non-progress, by the OWNER's Designated Representative, when the percentage value of dollar Work completed with respect to the total amount of contract is not within 20 percent of the time elapsed versus the total performance period.

l. The CONTRACTOR may subcontract for Work identified in this solicitation. The CONTRACTOR will be the prime service provider and shall be responsible for all Work performed and contract deliverables. The CONTRACTOR's workforce shall be responsible for at least 51 percent of the Work performed and provide an on-site, full-time job supervisor to manage the day-to-day job site operations and subcontractors. Proposed use of subcontractors should be included in the response to this solicitation.

m. All goods and services furnished by the CONTRACTOR, relating to the work described within these Specifications, will be warranted to meet or exceed the specifications contained herein for a minimum for 1 year or as indicated in the Contract Documents, whichever is longer. In the event of a breach, the CONTRACTOR will take all necessary action, at CONTRACTOR's expense, to correct such breach in the most expeditious manner possible.

11. Payments and Acceptance:

    a. Payment will not be made until the Work invoiced is completed in full. If material or equipment acceptance testing is required, payment will not be made until satisfactory test results as certified by the OWNER's Designated Representative are delivered to the OWNER.

    b. The CONTRACTOR shall accept the compensation as provided in the contract as full payment for furnishing all materials and for performing all Work planned under the contract.

    c. The contract price shall include all labor, equipment, material, tools, and incidentals required for completing the Work.

    d. Subsoil conditions, if presented, must be interpreted within the limits of investigation and the anticipated normal field variances. Claims for unusual conditions or excessive amounts of fill or excavation over original estimates of the Engineer-of-Record or CONTRACTOR shall not be grounds for extra Work clauses or request.

    e. To be paid for all quantities paid by the ton, a City Inspector must verify the delivery and receive a load ticket identifying the truck number, material and quantity of material delivered. The CONTRACTOR shall not haul such materials unless the inspector is on-site. If there has been a change in schedule, the OWNER requires 48 hours' notice to schedule inspectors.

    f. To be paid for all quantities paid by the truckload, the OWNER must have a truck chart for each truck prior to the truck being used for hauling operations. The CONTRACTOR must provide the truck chart to the City Inspector in sufficient time to allow the OWNER to verify all dimensions and volumes shown on the truck chart. A City Inspector must verify the delivery and receive (if available) a load ticket identifying the truck number, material and quantity of material hauled. The CONTRACTOR shall not haul such materials unless the Inspector is on-site. If there has been a change in schedule, the OWNER requires 48 hours' notice to schedule inspectors.

    g. The OWNER's Designated Representative retains the right to cancel portions or expand the scope of Work after a fair and just adjustment is agreed to with the CONTRACTOR.

    h. The CONTRACTOR will receive partial payment based upon the amount of Work completed as determined by the OWNER's Designated Representative, to include stored material. The OWNER will withhold retainage in the amount of 10 percent of the total Work completed at the date of the CONTRACTOR's invoice. The CONTRACTOR may reduce the retainage amount as allowed by Florida Statutes.

i. Any partial payments will be subject to withholding by the OWNER's Designated Representative pending any unsatisfied claims brought against the CONTRACTOR for labor or materials.

j. Any partial payments will be subject to withholding by the OWNER's Designated Representative pending any unsatisfied completion or restoration of any assertion for defective or damaged Work or materials.

k. In the event of dispute regarding amounts due to the CONTRACTOR, the OWNER reserves the right, at any time prior to final payment on the Contract, to audit, or cause to be audited, the CONTRACTOR's original records pertaining to the Work.

l. Whenever the Work provided for under the Contract has been completely performed by the CONTRACTOR, and the final inspection and final acceptance has been made, and it is proven to the OWNER's Designated Representative that all claims are satisfied, the final payment, being the difference between the contract amount and summation of all previous payment less any penalties assessed, shall be paid to the CONTRACTOR. Upon final payment the CONTRACTOR shall provide the OWNER's Designated Representative a statement that he has been paid all monies due and that the Work was performed in accordance with the Contract Documents.

m. The payments of subcontractors, material, men, and suppliers shall comply with Section 255.071 of Florida Statutes.

n. Within 5 Working days following each payment to the CONTRACTOR, the CONTRACTOR shall pay respective amounts allowed by the OWNER for all materials, all equipment installed in the Work, all Work performed by subcontractors to the extent of each subcontractor's interest in the CONTRACTOR's amount of payment.

o. On monthly invoices subsequent to the first invoice submitted there shall be a signed "Waiver of Right to Claim Against the Payment Bond (Progress Payment)" indicating that invoices for equipment and material supplied and sub-CONTRACTORs have been paid by the CONTRACTOR.

p. On the final invoice submitted there shall be a signed "Waiver of Right to Claim Against the Payment Bond (Final Payment)" indicating that invoices for equipment and material supplied and subcontractors have been paid by the CONTRACTOR.

q. Date of final payment shall be the commencement of all warranties and guarantees. If the OWNER reasonably determines that the CONTRACTOR or Vendor has breached any of the warranties provided herein, then the CONTRACTOR or Vendor shall perform the necessary Work to comply with its warranties and shall pay to the OWNER its reasonable costs to investigate and then identify the breach of warranty claim.

INSURANCE REQUIREMENTS

LOSS CONTROL/SAFETY

1. Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees, and property. The CONTRACTOR shall be expected to comply with all laws, regulations or ordinances related to safety and health, shall make special effort to detect hazardous conditions and shall take prompt action where loss control/safety measures should reasonably be expected.
2. The OWNER may order work to be stopped if conditions exist that present immediate danger to persons or property. The CONTRACTOR acknowledges that such stoppage will not shift responsibility for any damages from the CONTRACTOR to the OWNER.

DRUG FREE WORKPLACE REQUIREMENTS

All contracts with individuals or organizations that wish to do business with the OWNER, a stipulation will be made in the contract or purchase order that requires CONTRACTORs, subcontractors, vendors, or consultants to have a substance abuse policy. The employees of such CONTRACTORs, subcontractors, vendors, or consultants will be subject to the same rules of conduct and tests as the employees of the City of Parker. In the event of an employee of a supplier of goods or services is found to have violated the Substance Abuse Policy, that employee will be denied access to the OWNER's premises and job sites. In addition, if the violation(s) is/are considered flagrant, or the OWNER is not satisfied with the actions of the CONTRACTOR, subcontractor, vendor, or consultant, the OWNER can exercise its right to bar all of the CONTRACTOR's, subcontractor's, vendor's, or consultants' employees from its premises or decline to do business with the CONTRACTOR, subcontractor, vendor, or consultant in the future. All expenses and penalties incurred by a CONTRACTOR, subcontractor, vendor, or consultant as a result of a violation of the OWNER's Substance Abuse Policy shall be borne by the CONTRACTOR, subcontractor, vendor, or consultant.

INSURANCE - BASIC COVERAGES REQUIRED

1. The CONTRACTOR shall procure and maintain the following described insurance, except for coverages specifically waived by the OWNER, on policies and with insurers acceptable to the OWNER.
2. These insurance requirements shall not limit the liability of the CONTRACTOR. All subcontractors are subject to the same coverages and limits as the CONTRACTOR.

The OWNER does not represent these types or amounts of insurance to be sufficient or adequate to protect the CONTRACTOR's interests or liabilities but are merely minimums.

3. Except for Workers' Compensation and Professional Liability, the CONTRACTOR's insurance policies shall be endorsed to name the OWNER as an additional insured to the extent of the OWNER's interests arising from this Agreement or Contract or lease.

4. Except for Workers' Compensation, the CONTRACTOR waives its right of recovery against the OWNER, to the extent permitted by its insurance policies.

5. The CONTRACTOR's deductibles/self-insured retentions shall be disclosed to the OWNER and may be disapproved by the OWNER. They shall be reduced or eliminated at the option of the OWNER. The CONTRACTOR is responsible for the amount of any deductible or self-insured retention.

6. Insurance required of the CONTRACTOR, or any other insurance of the CONTRACTOR shall be considered primary, and insurance of the OWNER shall be considered excess, as may be applicable to claims which arise out of the Hold Harmless, Payment on Behalf of the OWNER, Insurance, Certificates of Insurance and any Additional Insurance provisions of this Agreement or Contract or lease.

7. WORKERS' COMPENSATION COVERAGE

   The CONTRACTOR shall purchase and maintain Workers' Compensation insurance for all Workers' Compensation obligations imposed by state law and employer's liability limits of at least **$500,000 each accident and $500,000 each employee/$500,000 policy limit for disease**. The CONTRACTOR shall also purchase any other coverages required by law for the benefit of employees. The CONTRACTOR shall provide to the OWNER an Affidavit stating that he/she meets all the requirements of Florida Statute 440.02(14)(d).

8. GENERAL, AUTOMOBILE & EXCESS OR UMBRELLA LIABILITY COVERAGE

   The CONTRACTOR shall purchase and maintain coverage on forms no more restrictive than the latest editions of the Commercial or Comprehensive General Liability and Business Auto policies of the Insurance Services Office. **Minimum limits of $1,000,000 per occurrence** for all liability must be provided, with excess or umbrella insurance making up the difference, if any, between the policy limits of underlying policies (including employers liability required in the Workers' Compensation Coverage section) and the amount of coverage required.

9. GENERAL LIABILITY COVERAGE Commercial General Liability - Occurrence Form Required

   Coverage A shall include bodily injury and property damage liability for premises, operations, products and completed operations, independent contractors, contractual liability covering this Agreement or Contract or lease, and broad form property damage, and property damage resulting from explosion, collapse or underground (x,c,u) exposures. Coverage B shall include personal injury. Coverage C, medical payments, is not required.

10. PRODUCTS/COMPLETED OPERATIONS

    The CONTRACTOR is required to continue to purchase products and completed operations coverage, at least to satisfy this agreement, contract, or lease, for a minimum of three years beyond the OWNER's acceptance of renovation or construction projects.

11. BUSINESS AUTO LIABILITY COVERAGE

    Business Auto Liability coverage is to include bodily injury and property damage arising out of ownership, maintenance or use of any auto, including owned, non-owned and hired automobiles and employee non-ownership use.

12. EXCESS OR UMBRELLA LIABILITY COVERAGE

    Umbrella Liability insurance is preferred, but an Excess Liability equivalent may be allowed.

    Whichever type of coverage is provided, it shall not be more restrictive than the underlying insurance policy coverages.

13. CERTIFICATES OF INSURANCE

    a. Required insurance shall be documented in Certificates of Insurance which provide that the OWNER shall be notified at least 30 days in advance of cancellation, nonrenewal or adverse change. The Certificate Holder will be addressed as the City of Parker, 1001 Park Street, Florida 32404. All certificates, cancellation, nonrenewal or adverse change notices should be mailed to this address. Each Certificate will address the service being rendered to the OWNER by the CONTRACTOR.

The OWNER shall be named as an Additional Insured, Primary and Non-Contributory for both General Liability and Business Auto Liability with Waiver of subrogation included with respects to both General Liability and Business Auto.

b. New Certificates of Insurance are to be provided to the OWNER at least 15 days after coverage renewals.

c. If requested by the OWNER, the CONTRACTOR shall furnish complete copies of insurance policies, forms, and endorsements.

d. For the Commercial General Liability coverage, the CONTRACTOR shall, at the option of the OWNER, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of the liability coverage.

14. RECEIPT OF INSUFFICIENT CERTIFICATES

Receipt of certificates or other documentation of insurance or policies or copies of policies by the OWNER, or by any of its representatives, which indicate less coverage than required does not constitute a waiver of the CONTRACTOR's obligation to fulfill the insurance requirements herein.

15. ADDITIONAL INSURANCE

If checked below, the OWNER requires the following additional types of insurance.

☐ **Professional Liability/Malpractice/Errors or Omissions Coverage**

The CONTRACTOR shall purchase and maintain professional liability or malpractice or errors or omissions insurance with minimum limits of per occurrence. If a claim is made form of coverage is provided, the retroactive date of coverage shall be no later than _____.

The inception date of claims made coverage unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great duration as available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provide a retroactive date no later than the inception date of claims made coverage.

☐ **Property Coverage for Leases**

The CONTRACTOR shall procure and maintain for the life of the lease, all risk/special perils (including sinkhole) property insurance (or its equivalent) to cover loss resulting from damage to or destruction of the building and personal property/contents. The policy shall cover 100% replacement cost and shall include an agreed value endorsement to waive coinsurance.

☐ **Commercial General Liability Increased General Aggregate Limit (or separate aggregate)**

Because the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit of N/A is required by the OWNER for this Agreement or Contract.

☐ **Liquor Liability**

In anticipation of alcohol being served, the CONTRACTOR shall provide evidence of coverage for liquor liability in an amount equal to the general/umbrella/excess liability coverage. If the general liability insurance covers liquor liability (e.g., host or other coverage), the CONTRACTOR's agent or insurer should provide written documentation to confirm that coverage already applies to this agreement, contract, or lease. If needed coverage is not included in the general/umbrella excess liability policy(ies), the policy(ies) must be endorsed to extend coverage for liquor liability, or a separate policy must be purchased to provide liquor liability coverage in the amount required.

☐ **Owners Protective Liability Coverage**

For renovation or construction contracts, the CONTRACTOR shall provide for the OWNER an OWNER's protective liability insurance policy (preferably through the CONTRACTOR's insurer) in the name of the OWNER. This is redundant coverage if the OWNER is named as an additional insured in the CONTRACTOR's Commercial General Liability insurance policy. However, this separate policy may be the only source of coverage if the CONTRACTOR's liability coverage limit is used up by other claims.

☒ **Builders Risk Coverage**

Builders Risk insurance is to be purchased to cover subject property for all risks of loss (including theft and sinkhole), subject to a waiver of coinsurance, and covering off- site storage, transit and installation risks as indicated in the Installation Floater and Motor Truck Cargo insurance described hereafter, if such coverages are not separately provided. If flood and/or earthquake risks exist, flood and earthquake insurance are to be purchased.

If there is loss of income, extra expense and/or expediting expense exposure, such coverage is to be purchased. If boiler and machinery risks are involved, boiler and machinery insurance, including coverage for testing, is to be purchased.

The Builders Risk insurance is to be endorsed to cover the interests of all parties, including the OWNER and all contractors and subcontractors. The insurance is to be endorsed to grant permission to occupy.

☐ **Installation Floater Coverage**

Installation Floater insurance is to be purchased when Builder's Risk insurance is inappropriate, or when Builder's Risk insurance will not respond, to cover damage or destruction to renovations, repairs or equipment being installed or otherwise being handled or stored by the CONTRACTOR, including off-site storage, transit, and installation. The amount of coverage should be adequate to provide full replacement value of the property, repairs, additions, or equipment being installed, otherwise being handled, or stored on or off premises. All risks coverage is preferred.

☐ **Motor Truck Cargo Coverage**

If the Installation Floater insurance does not provide transportation coverage, separate Motor Truck Cargo or Transportation insurance is to be provided for materials or equipment transported in the CONTRACTOR's vehicles from place of receipt to building sites or other storage sites. All risks coverage is preferred.

☐ **Contractor's Equipment Coverage**

CONTRACTOR's Equipment insurance is to be purchased to cover loss of equipment and machinery utilized in the performance of work by the contractor. All risks coverage is preferred.

The Contract may declare self-insurance for CONTRACTOR equipment.

☐ **Fidelity/Dishonesty/Liability Coverage – Third Party**

Fidelity/Dishonesty/Liability insurance is to be purchased or extended to cover dishonest acts of the Other Party's employees resulting in a loss to decedent, i.e., theft of valuables.

☐ **Fidelity/Dishonesty Coverage for Employer (Contractor)**

Fidelity/Dishonesty insurance is to be purchased to cover dishonest acts of the CONTRACTOR's employees, including but not limited to theft of vehicles, materials, supplies, equipment, tools, etc., especially property necessary to work performed.

☐ **Fidelity/Dishonesty/Liability Coverage for OWNER**

Fidelity/Dishonesty/Liability insurance is to be purchased or extended to cover dishonest acts of the contractor's employees resulting in loss to the OWNER.

☐ **Electronic Data Liability Insurance**

The Other Party shall purchase Electronic Data Liability with limits of

☐ **Garage Liability Coverage**

Garage Liability insurance is to be purchased to cover the CONTRACTOR and its employees for its garage and related operations while in the care, custody, and control of the OWNER's vehicles.

☐ **Garage Keepers' Coverage (Legal Liability Form)**

Garage Keepers' Liability insurance is to be purchased to cover damage or other loss, including comprehensive and collision risks, to the OWNER's vehicles while in the care, custody, and control of the CONTRACTOR. This form of coverage responds on a legal liability basis, and without regard to

legal liability on an excess basis over any other collectible insurance.

☐ **Damage to Premises Rented/Leased to you- (Legal Liability Form)**

Provide property coverage for leased premises due to liability incurred because the insured's negligence results in fire or explosion. Specified limit of liability required.

☐ **Watercraft Liability Coverage**

Because the CONTRACTOR's provision of services involves utilization of watercraft, watercraft liability coverage must be provided to include bodily injury and property damage arising out of ownership, maintenance or use of any watercraft, including owned, non-owned and hired.

Coverage may be provided in the form of an endorsement to the general liability policy, or in the form of a separate policy coverage Watercraft Liability or Protection and Indemnity.

☐ **Aircraft Liability Coverage**

Because the CONTRACTOR's provision of services involves utilization of aircraft, aircraft liability coverage must be provided to include bodily injury and property damage arising out of ownership, maintenance or use of any aircraft, including owned, non-owned and hired.

The minimum limits of coverage shall be per occurrence, Combined Single Limits for Bodily Injury (including passenger liability) and Property Damage.

☐ **Pollution Legal Liability Coverage**

Pollution legal liability insurance is to be purchased to cover pollution and/or environmental legal liability which may arise from this Agreement or Contract.

☐ **United States Longshoremen and Harbor Workers Act Coverage**

The Workers' Compensation policy is to be endorsed to include United States Longshoremen and Harbor Workers' Act Coverage for exposures which may arise from this Agreement or Contract.

☐ **Jones Act Coverage**

The Workers' Compensation policy is to be endorsed to include Jones Act Coverage for exposures which may arise from this Agreement or Contract.

ATTACHMENT 3

CONTRACT FORMS

PUBLIC CONSTRUCTION BOND

Bond No._____(enter bond number)

BY THIS BOND, We_____, as Principal and_____a corporation, as Surety, are bound to the City of Parker, Florida, herein called OWNER, in the sum of $_____ for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the Contract dated _____ between Principal and OWNER for **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH**, the Contract being made a part of this Bond by reference, at the times and in the manner prescribed in the Contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the contract; and
3. Pays OWNER all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that OWNER sustains because of a default by Principal under the contract; and,
4. Performs the guarantee of all Work and materials furnished under the Contract for the time specified in the Contract, then this Bond is void; otherwise, it remains in full force.

Any action instituted by a claimant under this Bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this bond.

DATED ON_____,

(Name of Principal)

By (As Attorney in Fact) (Name of Surety)

NOTICE OF AWARD

TO: _____

_____

_____

_____

PROJECT DESCRIPTION:

The OWNER has considered the BIDs submitted in response to its advertised **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH.**

All interested parties are hereby notified that the BID submitted by

_____ for the **CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH (ITB 2024-01)** has been accepted for the Work described in the Bid Documents in the amounts of

$_____

As required by the Instruction to Bidders, please return an acknowledged copy of this Notice of Award to the OWNER along with the executed Agreement, executed and notarized Public Construction Bond, and Certificate of Insurance within 10 calendar days from the date of this notice.

If you have any questions, please contact Mandy O'Regan, Anchor (OWNER's Representative), moregan@anchorcei.com; (850) 215-1285.

Dated this_____day of_____, 2024.

City of Parker

By: _____

Name: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged:

By _____

This the_____day of_____, 2024.

Name: _____

Title: _____

NOTICE TO PROCEED

DATE: _____

TO: _____

_____

_____

PROJECT: **ITB NO: 2024-01 - CITY OF PARKER**
CITY OF PARKER – INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH

You are hereby notified to commence Work in accordance with the Agreement dated _____, 2024, on or before _____, 2024 and you are to complete the substantially complete all Work within ***150*** calendar days. The date of substantial completion of all Work is therefore _____, 2024. Contractor will have ***30*** calendar days from the date of substantial completion to address any unresolved issues in order to reach final completion of the project. The date of final completion of all Work is therefore _____, 2024 (*180 calendar days from Notice to Proceed to Final Completion*).

You are required to return an acknowledged copy of this Notice to Proceed to the City of Parker.

BY: **CITY OF PARKER**

_____

Mayor Kelly Date

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged.

_____

CONTRACTOR's Name

This the_____day of _____, 2024.

_____

Signature

By: _____ _____

Type or Print Name Title

AGREEMENT

This Agreement, dated _____ is between the City of Parker, located at 1001 West Park Avenue, Parker, Florida 32404 ("OWNER") and _____, doing business as a _____ (an individual), or (a partnership), or (a corporation), having a business address of _____ (hereinafter called "CONTRACTOR"). It should be noted that the term CONTRACTOR in this Agreement will apply to the CONTRACTOR awarded each of the individual projects from **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH.**

1. SCOPE OF WORK

The OWNER desires to hire CONTRACTOR to provide all necessary labor, supervision, equipment, and supplies for the performance of the work in connection with the construction of **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH** ("Project"), to be located within Parker, in accordance with the Drawings and Specifications prepared by Anchor CEI, Inc. and all other Contract Documents hereafter specified.

The CONTRACTOR shall furnish, at its sole expense, all supervision, labor, equipment, tools, material, and supplies to properly and efficiently perform all of the Work required under the Contract Documents, as defined herein, and shall be solely responsible for the payment of all taxes, permits and license fees, labor fringe benefits, insurance and bond premiums, and all other expenses and costs required to complete such work in accordance with this Agreement (collectively, the "Work").

The OWNER shall award the **CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH** project as detailed in the Construction Drawings and as summarized by location below:

A. This project will consist of constructing the following four stormwater facilities and associated appurtenances at 824 11th Street North and the adjacent vacant parcel on Cheri Lane (as detailed on the Construction Drawings):

   1. The largest stormwater facility (Proposed Stormwater Pond 1) and its associated appurtenances will be constructed on the vacant parcel at 824 North 11th Street, Parker, Florida. This stormwater facility will be an estimated 2.8 acres and approximately 8 feet deep.

2. The second largest stormwater facility (Proposed Stormwater Pond 2) and its associated appurtenances will be located on the parcel to right at the entrance to Cheri Lane, Parker, Florida. This stormwater facility will be an estimated 0.21 acres and be approximately 4 feet deep.

3. The two smallest stormwater facilities (Proposed Stormwater Ponds 3A and 3B) and associated appurtenances will be located at the southeast and southwest corners of the 824 11th Street North parcel adjacent to Boatrace Road.

4. Site-wide drainage structures (drainage piping, metered end sections, inlets, end walls, rip rap, etc.) to accommodate existing and proposed stormwater ponds.

5. Proposed cut and patch asphalt replacement at pipe replacement locations along Lance Street, North 11th Street, and Boatrace Road.

B. This project also will consist of constructing parking, roadway turnouts, and site-wide walking path as detailed on the Construction Drawings):

1. Proposed asphalt parking area and roadway turnouts to include ADA-compliant parking/pavement markings and striping.

2. Proposed Concrete Walking Path (6-foot-wide by 1,541 linear feet).

3. Proposed Walking Path Signage spaced every 100 feet: NO SWIMMING, FISHING, DIVING, AND WATCH FOR REPTILES.

4. Site-wide sodding, landscaping, and irrigation improvements.

C. This project also had two alternates considered by the City:

1. Proposed Asphalt Walking Path in lieu of Concrete Walking Path.

2. Proposed Decorative Fountain with appurtenances.

2. CONTRACT DOCUMENTS

The term “Contract Documents” shall have the generally accepted meaning, including but not limited to:

A. **ITB 2024-01 – CITY OF PARKER - INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH**, including but not limited to:

1) CONFOMRED Plans and Specifications Package.

2) Bid Form.

3) Bid Bond.

4) Anti-Collusion Clause.

5) Conflict of Interest Disclosure Form.

6) Identical Tie Bids/Drug Free Workplace.

7) Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion.

8) Certification Regarding Lobbying.

9) Certification Regarding Scrutinized Companies List

10) Sub-Contractors List

11) Certification Of Compliance With Florida Trench Safety Act

12) E-Verify Documentation

13) Public Construction Bond (Payment and Performance Bond) and related bond documents.

14) Contractor’s response to the ITB.

15) Insurance Requirements.

16) Notice of Award.

17) Notice to Proceed.

18) Agreement.

19) Notice of Contest of Claim Against Payment Bond (if required).

20) Waiver of Right to Claim Against the Payment Bond (Progress Payment).

21) Waiver of Right to Claim Against the Payment Bond (Final Payment).

22) Contract Change Orders.

23) Addenda:

No. __, dated_____, 2024.

No. __, dated_____, 2024.

The Contract Documents also include any written amendments to any of the above signed by the party to be bound by such amendment. The Contract Documents are sometimes referred to herein as the "Agreement."

In the case of any conflict between the provisions of this Agreement and another Contract Document, the following priority for interpretation of those document provisions shall be followed:

a. The provisions of this Agreement shall first prevail.

b. The bid form and accompanying bidder submittals shall be next.

c. The RFP and attachments shall be the final priority.

In the event of a conflict within or between any other document or documents comprising the Contract Documents, the OWNER alone shall be entitled to select the provision which shall apply.

3. TERM

This Contract shall commence within 10 calendar days after the date of receipt of the "Notice to Proceed" to CONTRACTOR(s). The CONTRACTOR(s) for each project listed in Item 1 above shall achieve Final Completion of the Work within ***180*** calendar days of the required commencement date, except to the extent the period for Final Completion is extended pursuant to the terms of the Contract Documents ("Contract Time"). Final Completion of the Work for each project shall be achieved by CONTRACTOR within the time period set forth in the executed Notice to Proceed. The CONTRACTOR agrees to pay the OWNER, liquidated damages, in the sum of $250.00 for each calendar day that expires after the Contract Time for Final Completion.

4. CONTRACT PRICE

The CONTRACTOR agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the sum of $_____ as shown in the bid schedule included within the Bid Form, as said amount may be hereafter adjusted pursuant to the terms of the Contract Documents ("Contract Price").

5. PAYMENTS

A. Notwithstanding anything contained herein to the contrary, all payments shall be made in accordance with the Florida Prompt Payment Act of the Florida Statute, Chapter 218.70, et seq.

B. CONTRACTOR shall use **AIA G702 – Application for Payment Form** for all pay requests to the OWNER.

C. CONTRACTOR shall submit with the first Application for Payment to the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.), a schedule of values allocated to the various portions of the Work as directly outlined in the CONTRACTOR's Bid Form, prepared in such form, and supported by such data to substantiate its accuracy as the OWNER shall require from time to time. This schedule of values, unless objected to by the OWNER, shall be used as a basis for reviewing the CONTRACTOR's Applications for Payment.

D. CONTRACTOR shall submit an Application for Payment to the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) on or before the 25th of each month, filled out and signed by the CONTRACTOR covering the Work performed since the previous month's Application for Payment. Invoices received after the 25th day of each month shall be considered for payment as part of the next month's Application for Payment.

E. CONTRACTOR's Application for Payment shall be in such form and contain such detail and backup as the OWNER reasonably may require.

F. Payment by the OWNER to the CONTRACTOR of the statement amount shall be made within 25 days after the OWNER's designated representative has certified the Application for Payment and submits to the OWNER.

G. Five Percent (5%) retainage shall be held at the discretion of the OWNER; the 5% retainage shall be paid at the completion of the Work. Provided, however, nothing in this Section shall preclude or limit the OWNER's right to withhold payment as otherwise permitted by the terms of the Contract Documents or as permitted by law. Payments of these monthly invoices shall in no way imply approval or acceptance of the Work.

H. The retainage, at the discretion of the OWNER, may be reduced once 50% of the work is completed by the CONTRACTOR.

I. Each Application for Payment shall be accompanied by a **"Waiver of Right to Claim Against the Payment Bond (Progress Payment)"** in a form identified in the Contract Documents for all materials, labor, equipment,

services, and other bills associated with that portion of the Work payment is being requested in that Application for Payment.

J. Further, each Application for Payment request shall be accompanied by a claim release and waiver in the form approved by the OWNER from all Subcontractors and suppliers evidencing their payment in full through the previous month's Application for Payment.

K. Also, each payment request shall be accompanied by an updated Construction Schedule, a list inventorying all stored materials, a monthly progress status report, and any other document reasonably requested by the OWNER. The OWNER shall not be required to make payment until and unless such releases, documents and information are furnished by the CONTRACTOR.

L. Further, if the CONTRACTOR is withholding any portion of a payment to any Subcontractor or supplier for any labor, services, or materials for which the OWNER has paid CONTRACTOR, the CONTRACTOR agrees to refund such money to the OWNER upon demand by the OWNER.

M. The OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall review each Application for Payment submitted by the CONTRACTOR and shall make recommendations to the OWNER as to the proper amounts, if any, which may be owed to the CONTRACTOR thereunder. The OWNER shall have the right to refuse to approve payment amounts, or portions thereof, requested by the CONTRACTOR in an Application for Payment, or rescind any amount previously approved, and the OWNER may withhold any payments otherwise due to the CONTRACTOR under this Agreement or any other agreement between the OWNER and CONTRACTOR, to the extent it is reasonably necessary, to protect the OWNER from any expense, cost, or loss attributable to:

1) Defective or deficient Work not properly remedied in accordance with the terms of the Contract Documents.

2) The filing or reasonable evidence indicating the probable filing of third-party claims against the OWNER attributable to the fault or neglect of CONTRACTOR.

3) The CONTRACTOR's failure to make timely and proper payments to all Subcontractors and suppliers.

4) Reasonable evidence that the remaining Work cannot be completed for the unpaid Contract Price balance.

5) Reasonable evidence indicating that the remaining Work cannot be completed within the remaining Contract Time.

6) The CONTRACTOR's failure to satisfactorily prosecute the Work in accordance with the requirements of the Contract Documents.

7) Any other material breach of the requirements of the Contract Documents by CONTRACTOR.

N. The OWNER shall have the right, but not the obligation, to take any corrective action the OWNER deems appropriate to cure any of the above noted items, at the CONTRACTOR's expense, if such items are not cured by the CONTRACTOR to the OWNER's reasonable satisfaction within 3 days after CONTRACTOR's receipt of written notice from the City.

O. In the event that there is a dispute in the amount of the Application for Payment, then only the disputed amount shall be held until resolved and the undisputed amount shall be paid within the time limits as stated within Section 4 – Payment of this Agreement and the progress of the project shall not be interrupted. Both parties agree that best efforts be made to resolve the disputed amount.

P. The OWNER may reject a payment request, in whole or in part, submitted by the CONTRACTOR if such payment request is not submitted in strict accordance with the requirements of Section 4 – Payments of this Agreement. In such event, the OWNER shall notify the CONTRACTOR in writing within 20 business days after receipt of such Application for Payment that such request for payment, or portion thereof, has been rejected and the reasons for such rejection. If CONTRACTOR resubmits a revised Application for Payment correcting, in the OWNER's unfettered determination, the deficiency specified in the rejection notice, then the OWNER shall pay the CONTRACTOR the corrected portion of the payment request within 10 business days after the date the revised Application for Payment is received and approved by the OWNER.

Q. Prior to Final Completion, the OWNER may use any completed or substantially completed portions of the Work. Such use shall not constitute an acceptance of such portions of the Work.

R. Final Payment - Upon completion and acceptance of the Work, the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall issue a certificate attached to the final Application for Payment that states the Work has been fully performed in accordance with the requirements of the Contract Documents and that the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) recommends final payment in the amount reflected in the attached final Application for Payment. The OWNER shall make final payment to CONTRACTOR within 30 days after the Work is finally accepted by the OWNER, provided that CONTRACTOR first, and as an explicit condition precedent to the accrual of CONTRACTOR's right to final payment, shall

have furnished the OWNER with a properly executed and notarized final release in the form reasonably required by the OWNER, as well as a duly-executed copy of the surety's consent of release of the Public Construction Bond for final payment and such other documentation that may be required by the Contract Documents, the City.

S. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a full release and waiver of any and all claims by CONTRACTOR against the OWNER arising out of this Agreement, except those identified in writing by the CONTRACTOR as unsettled in its final Application for Payment. Any payment, however, final, or otherwise shall not release the CONTRACTOR or its sureties from any obligations under the Contract Documents. Neither the acceptance of the Work nor payment by the OWNER shall be deemed to be a waiver of the OWNER's right to enforce any obligations of the CONTRACTOR hereunder or to the recovery of damages for defective Work not discovered by the City at the time of final inspection.

T. No error or oversight in the making of payment or completion certificates shall relieve the CONTRACTOR from its obligation to do and complete the Work in accordance with the requirements of the Contract Documents.

U. Payments to Subcontractors - The CONTRACTOR shall promptly, but not later than 15 days after receipt of payment from the OWNER, pay all the amount due subcontractors less a retainage of 5%. If there should remain items to be completed, the CONTRACTOR and the OWNER shall list those items required for completion and the CONTRACTOR shall require the retainage of a sum equal to 150% of the estimated cost of completing any unfinished items, provided that said unfinished items are separately listed and the estimated cost of completing any unfinished items likewise separately listed. Thereafter, the CONTRACTOR shall pay to the Subcontractors monthly the amount retained for each incomplete item after each of said items is completed. Before issuance of final payment without any retainage, the Subcontractor shall submit satisfactory evidence that all payrolls, material bills and other indebtedness connected with each individual Project has been paid or otherwise satisfied, warranty information is complete, as-built markups have been submitted and instruction for the CITY's operating and maintenance personnel is complete. Final payment may be made to certain select Subcontractors whose Work is satisfactorily completed prior to the total completion of the Project but only upon approval of the CITY.

V. Delayed Payments by CITY - If the CITY shall fail to pay the CONTRACTOR within 20 days after the receipt of an approved payment request from the CONTRACTOR, then the CONTRACTOR may, upon 14 additional days advance written notice to the CITY and the OWNER'S designated

representative (Anchor Consulting Engineering and Inspection, Inc.) stop the Project until payment of the amount owing has been received, provided that the payment request has been submitted in sufficient detail to comply with the guidelines of the Office of the Clerk of the Circuit Court for Bay County. In the event that there is a dispute in the amount of the pay request, then only the disputed amount shall be held until resolved and the undisputed amount shall be paid within the time limits as stated within this paragraph. If undisputed amounts are timely paid, then the CONTRACTOR shall not stop the Project in any fashion and the progress of the project shall not be interrupted. Both parties agree that best efforts be made to resolve the disputed amount.

W. Payment for Materials and Equipment - Payments will be made for material and equipment not incorporated in the work but delivered and suitably stored at the site (or another location, subject to prior approval and acceptance by the County on each occasion).

6. INDEPENDENT CONTRACTOR

The CONTRACTOR shall at all times, relevant to this Agreement, be an independent CONTRACTOR and maintain control over and have sole responsibility for CONTRACTOR's employees and other personnel. In no event shall the CONTRACTOR, nor any employees or sub-contractors under it, be considered to be employees, servants, or agents of the City of Parker.

7. CONTRACTOR'S PERSONNEL

CONTRACTOR's employees and personnel shall be qualified and experienced to perform the portions of the Work to which they have been assigned. CONTRACTOR has the exclusive right to hire and terminate its employees and may transfer or reassign any of its employees to other work of the CONTRACTOR. The direction of the work of CONTRACTOR's employees shall be under the exclusive control of CONTRACTOR. If the OWNER objects to the presence or performance of any employee of CONTRACTOR, CONTRACTOR shall remove such employee from OWNER premises.

8. COOPERATION

The CONTRACTOR agrees to perform each phase of the Work at the scheduled time and in the scheduled sequence. The CONTRACTOR will cooperate with the City as requested and specifically allow the City to inspect the performance of the Work of this Agreement.

9. DIRECT PURCHASING

This Agreement does not include direct purchasing requirements.

10. MATERIALS, SUPPLIES, ETC.

CONTRACTOR shall furnish and supply all tools, materials, consumable supplies and equipment, safety devices and equipment, and any special clothing that are required to perform the work of this Agreement and consistent with the requirements of the ITB

11. RECORDS / AUDITS

The OWNER is a public agency subject to Chapter 119, Florida Statutes. The CONTRACTOR shall comply with Florida's Public Records Law. Specifically, the CONTRACTOR shall:

A. Keep and maintain public records required by the OWNER in order to perform the service.

B. Upon request from the OWNER's custodian of public records, provide the OWNER 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 Chapter 119, F.S. or as otherwise provided by law.

C. Ensure that public records that 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 Agreement if the CONTRACTOR does not transfer the records to the OWNER.

D. Upon completion of the Agreement, transfer, at no cost to the OWNER, all public records in possession of the CONTRACTOR, or keep and maintain public records required by the OWNER to perform the service. If the CONTRACTOR transfers all public records to the OWNER upon completion of the 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.

E. All records electronically stored must be provided to the OWNER, upon request from the OWNER's custodian of public records in a format that is compatible with the information technology systems of the OWNER.

F. During the term of the Agreement, the CONTRACTOR shall maintain all books, reports and records in accordance with generally accepted accounting practices and standards for records directly related to this Agreement. The form of all records and reports shall be subject to the approval of the City's Auditor. The CONTRACTOR agrees to make available to the City's Auditor, during normal business hours and in the City, all books of account, reports and records relating to this contract.

12. PUBLIC RECORDS CUSTODIAN

If the CONTRACTOR has questions regarding the application of Chapter 119, Florida Statues, to the CONTRACTOR's duty to provide public records relating to this contract, contact the City of Parker at 1001 West Park Avenue, Parker, Florida 32404, via phone at (850) 871-4101 or e-mail at tjeffreys@cityofparker.com.

13. INSPECTOR GENERAL

The parties agree to comply with s.20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with s. 20.055(5), Florida Statutes. "(5) It is the duty of every state officer, employee, agency, special district, board, commission, contractor, and subcontractor to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to this section."

14. OWNER Representative

The OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) or another designee assigned by the OWNER has authority to designate the work to be done by CONTRACTOR, to inspect such work, and to resolve questions which arise between the parties.

The CONTRACTOR or the CONTRACTOR's designee will deal with the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) on matters relating to the performance of the work.

The OWNER and the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall have the authority to stop the work whenever it deems such action necessary to secure the safe and proper performance of the work assignment.

15. LAWS, RULES AND REGULATIONS

A. General Laws:

1) CONTRACTOR agrees to comply, at its own expense, with all Federal, State, and local laws, codes, statutes, ordinances, rules, administrative orders, regulations, and requirements applicable to the Project, including but not limited to those dealing with safety (including, but not limited to, the Trench Safety Act, Chapter 553, Florida Statutes).

2) If CONTRACTOR observes that the Contract Documents are at variance therewith, it shall promptly notify the OWNER in writing.

3) The CONTRACTOR shall give all notices required of it by law and shall comply with all Federal, State, and local laws, ordinances, rules, and regulations governing CONTRACTOR's performance of this Agreement and the preservation of public health and safety.

4) Upon request by the OWNER, CONTRACTOR shall provide proof of such compliance to the OWNER.

B. Illegal Alien Labor:

1) The CONTRACTOR shall comply with all provisions State and Federal law regarding the hiring and continued employment of aliens not authorized to work in the United States. CONTRACTOR shall not knowingly employ or contract with an illegal alien to perform Work under this Agreement or enter into an Agreement with a subcontractor that fails to certify to the CONTRACTOR that the subcontractor is in compliance with such laws.

2) The CONTRACTOR agrees that it shall confirm the employment eligibility of all employees through participation in E-Verify or an employment eligibility program approved by the Social Security Administration and will require the same of any subcontractors.

3) The CONTRACTOR shall pay all cost incurred to initiate and sustain the verification programs.

C. Termination for Cause:

Failure of the CONTRACTOR to comply with the provision of this section shall constitute grounds for the OWNER to immediately terminate this Agreement for cause and declare the CONTRACTOR to be non-responsible for bidding or proposing on future contracts for 1 year from the date the City notifies the CONTRACTOR of such non-compliance.

16. PUBLIC ENTITY CRIMES STATEMENT

A. A person or affiliate who has been placed on the convicted contractor list following a conviction for a public entity crime may not submit a BID on a contract to provide any goods or services to a public entity, may not submit a BID on a contract with a public entity for the construction or repair of a public building or public work, may not submit BIDs on leases of real property to a public entity, may not be awarded or perform work as a contractor, contractor, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted contractor list.

B. By submission of a proposal in response to this document, the BIDDER certifies compliance with the above requirements as stated in Section 287.133, Florida Statutes.

17. E-VERIFY

A. As a condition precedent to entering into this agreement, and in compliance with Section 448.095, Florida Statute, CONTRACTOR and its subcontractors shall, register with and use the E-Verify system to verify work authorization status of all employees

B. CONTRACTOR shall require each of its subcontractors to provide CONTRACTOR with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. CONTRACTOR shall maintain a copy of the subcontractor's affidavit as part of and pursuant to the records retention requirements of this agreement.

C. The OWNER, CONTRACTOR, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Section 448.09(1), Fla. Stat. or the provisions of this section shall terminate the contract with the person or entity.

D. A contract terminated under the provisions of this section is not a breach of contract and may not be considered such. Any contract termination under

the provisions of this section may be challenged pursuant to Section 448.095(2)(d), Florida Statute. CONTRACTOR acknowledges that upon termination of this agreement by the OWNER for a violation of this section by CONTRACTOR, CONTRACTOR may not be awarded a public contract for at least 1 year. CONTRACTOR further acknowledges that CONTRACTOR is liable for any additional costs incurred by the OWNER as a result of termination of any contract for a violation of this section.

E. Subcontracts. CONTRACTOR or subcontractor shall insert in any subcontracts the clauses set forth in this section, including this subsection, requiring the subcontractors to include these clauses in any lower tier subcontracts. CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.

18. SCRUTINIZED COMPANIES

A. The CONTRACTOR must certify that the company is not participating in a boycott of Israel.

B. The CONTRACTOR must also certify that CONTRACTOR is not on the Scrutinized Companies that Boycott Israel list, not on the Scrutinized Companies with Activities in Sudan List, and not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Subject to limited exceptions provided in state law, the OWNER will not contract for the provision of goods or services with any scrutinized company referred to above.

C. The CONTRACTOR must submit the certification attached to this Agreement. Submitting a false certification shall be deemed a material breach of contract.

D. The OWENR shall provide notice, in writing, to the CONTRACTOR of the OWNER’s determination concerning the false certification.

E. The CONTRACTOR shall have 5 days from receipt of notice to refute the false certification allegation. If such false certification is discovered during the active contract term, the CONTRACTOR shall have 90 days following receipt of the notice to respond in writing and demonstrate that the determination of false certification was made in error.

F. If the CONTRACTOR does not demonstrate that the OWNER’s determination of false certification was made in error then the OWNER shall have the right to terminate the contract and seek civil remedies pursuant to Section 287.135, Florida Statutes, as amended from time to time.

19. WARRANTY

A. The AWARDED BIDDER/CONTRACTOR shall fully warrant all workmanship and material, to meet or exceed the performance of the obligations under this Agreement and specifications, for a period of 1 year after completion of the work.

B. The warranty period begins at the date of final payment for the project. The CONTRACTOR shall expeditiously repair and remedy any defects in the construction that are discovered within 1 year, without cost or charge to the OWNER.

C. In the event the CONTRACTOR fails, within 5 days after notice, to begin correction of the defect, or fails within a reasonable time thereafter to complete the repair or remedy, the OWNER may have the work done at the CONTRACTOR's expense or may proceed against the CONTRACTOR's Public Construction Bond.

20. INSURANCE

During the term of this Agreement, the CONTRACTOR will purchase and maintain insurance and comply with the OWNER's Drug Free Workplace and Insurance Requirements which are incorporated herein by reference.

21. PUBLIC CONSTRUCTION BOND

A. Prior to signing the Contract, the AWARDED BIDDER will secure and post a Public Construction Bond pursuant to Section 255.05 of the Florida Statutes.

B. All such bonds shall be issued by a Surety acceptable to the OWNER. The OWNER will designate to whom subject bonds shall be posted.

C. Failure or refusal to furnish adequate bonds in a satisfactory form shall subject the AWARDED BIDDER to loss of time from the allowable construction period equal to the time of delay in furnishing the required bonds.

22. HOLD HARMLESS AND INDEMNIFICATION

A. To the maximum extent permitted by Florida law, the CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the State of Florida, the Florida Department of Transportation, and their officers, agents, and employees, against any actions, claims, or damages arising out of, relating to, or resulting from negligent or wrongful act(s) of the CONTRACTOR or any of its officers, agents, or employees, acting within the scope of their office or employment, in connection with the rights granted to or exercised

by the CONTRACTOR hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes..

B. The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28. Nor shall the same be construed to constitute agreement by the CONTRACTOR to indemnify the OWNER for the negligent acts or omissions of the OWNER, its officers, agents, or employees, or third parties. Nor shall the same be construed to constitute agreement by the CONTRACTOR to indemnify the FDOT for the negligent acts or omissions of FDOT, its officers, agents, or employees, or third parties.

C. The parties understand and agree that such indemnification by the CONTRACTOR relating to any matter which is the subject of this Agreement shall extend throughout the term of this Agreement and any statutes of limitations thereafter.

D. The CONTRACTOR's obligation shall not be limited by or in any way to any insurance coverage or by any provision in or exclusion or omission from any policy of insurance.

E. If the above indemnity or the defense provisions contained herein or any part of those provisions are limited by Florida Statutes Section 725.06(1), or any other applicable law, then with respect to the part so limited, the monetary limitation on the extent of the indemnification shall be the greater of:

1) The monetary value of the Contract,

2) Coverage amount of Commercial General Liability Insurance required under the Contract, or

3) $1,000,000.00.

F. This Section survives termination or expiration of this Contract.

23. DUTY TO PAY DEFENSE COSTS

A. The CONTRACTOR agrees to reimburse and pay on behalf of the OWNER the cost of the OWNER's legal defense, through and including all appeals, and to include all attorneys' fees, costs, and expenses of any kind for any and all:

1) Claims described in the Hold Harmless and Indemnification paragraph, or

2) Other claims arising out of the CONTRACTOR's performance of the Agreement and in which the OWNER has prevailed.

B. The OWNER shall choose its legal defense team, experts, and consultants and invoice the CONTRACTOR accordingly for all fees, costs, and expenses upon the conclusion of the claim.

C. Such payment on the behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

D. This section survives termination or expiration of this Agreement.

24. NOTICES

All notices required or made pursuant to this Agreement shall be in writing and, unless otherwise required by the express terms of this Agreement, may be given either:

A. by mailing same by United States mail with proper postage affixed thereto, certified, return receipt requested, or

B. by sending same by Federal Express, Express Mail, Airborne, Emery, Purolator, UPS or other expedited mail or package delivery, or

C. by hand delivery to the appropriate address as herein provided. Notices to the OWNER required hereunder shall be directed to the following address:

If to the **OWNER**:
City of Parker
1001 West Park Avenue
Parker, Florida 32404
(850) 871-4104

If to the CONTRACTOR:

_____

_____

_____

The CONTRACTOR shall notify the OWNER of any change to its address. The Purchasing Department will disseminate the address change to all applicable departments and agencies including Finance. The CONTRACTOR's notification of address change is sufficient if sent by email or facsimile.

25. ASSIGNMENT

The CONTRACTOR shall not assign in whole or in part any part of the Work of this Agreement except with prior written consent of the OWNER.

26. SUCCESSORS AND ASSIGNS

This Agreement shall be binding on all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

27. ENTIRE AGREEMENT

All proposals, negotiations, and representations regarding the work of this Agreement are merged in this instrument. Any amendment or modification of this Agreement shall be in writing and signed by the duly authorized representatives of the parties.

28. NO WAIVER

The waiver by the OWNER of, or the OWNER's failure to demand strict performance of, any obligation of the CONTRACTOR shall not be construed to waive or limit the full and faithful performance by the CONTRACTOR of another of its obligations or of the same obligation in the future.

29. ADMINISTRATIVE, CONTRACTUAL, OR LEGAL REMEDIES

Unless otherwise provided in this contract, all claims, counterclaims, disputes and other matters in question between the local government and the CONTRACTOR, arising out of or relating to this contract, or the breach of it, will be decided by arbitration, if the parties mutually agree, or in a Florida court of competent jurisdiction.

30. TERMINATION FOR CAUSE AND FOR CONVENIENCE

A. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this contract through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

B. Not less than 10 calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate; and

C. An opportunity for consultation with the terminating party prior to termination.

D. This Agreement may be terminated in whole or in part in writing by the local government for its convenience, provided that the other party is afforded the same notice and consultation opportunity specified in A.1 above. If termination for default is effected by the local government, an equitable adjustment in the price for this contract shall be made, but no amount shall be allowed for anticipated profit on unperformed services or other work, and any payment due to the CONTRACTOR at the time of termination may be adjusted to cover any additional costs to the local government because of the CONTRACTOR's default.

E. If termination for convenience is effected by the local government, the equitable adjustment shall include a reasonable profit for services or other work performed for which profit has not already been included in an invoice. For any termination, the equitable adjustment shall provide for payment to the CONTRACTOR for services rendered and expenses incurred prior to receipt of the notice of intent to terminate, in addition to termination settlement costs reasonably incurred by the CONTRACTOR relating to commitments (e.g., suppliers, subcontractors) which had become firm prior to receipt of the notice of intent to terminate.

F. Upon receipt of a termination action under Paragraphs A.1 and A.2 above, the CONTRACTOR shall promptly discontinue all affected work (unless the notice directs otherwise) and deliver or otherwise make available to the local government all data, drawings, reports specifications, summaries and other such information, as may have been accumulated by the CONTRACTOR in performing this contract, whether completed or in process.

G. Failure of the CONTRACTOR to comply with the provision of Section 14 Laws, Rules, and Regulations shall constitute grounds for the OWNER to immediately terminate this Agreement for cause and declare the CONTRACTOR to be non-responsible for bidding or proposing on future contracts for 1 year from the date the OWNER notifies the CONTRACTOR of such non-compliance.

H. This Agreement may be terminated by the OWNER if the successful bidder (CONTRACTOR) is found to have submitted a false certification as required under section 215.471 (5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or been engaged in business operations in Cuba or Syria.

31. CONFLICTS

In the case of any conflict between the provisions of this Contract and other contract documents, the following priority for interpretation of those document provisions shall be followed:

A. The provisions of this contract prevail first.

B. The bid form and attachments are next.

C. The initial bid provisions are final priority.

32. SEVERABILITY

Should any provision of the Agreement be determined by a court with jurisdiction to be unenforceable, such a determination shall not affect the validity or enforceability of any other section or part thereof.

33. GOVERNING LAW & VENUE

This Agreement is governed by the laws of the State of Florida. The proper venue for any action regarding this contract is in the appropriate Court in Bay County, Florida

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first written above.

Executed by:

PARKER CITY COUNCIL

By: _____
Andrew Kelly, Mayor

Approved as to form:

CONTRACTOR

By: _____
(Authorized Representative)

Its: _____

State of _____ County of _____

This Agreement was acknowledged and subscribed before me the undersigned notary this _____ day of _____, 2024, by _____, as __ _____ of _____ and with proper authority, and who is personally known by me or produced identification of

_____.

_____

Notary Public

_____

Notary Public

WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND

(PROGRESS PAYMENT)

The undersigned, in consideration of the sum of $_____, hereby waives its right to claim against the payment bond for labor, services, or materials furnished through _____ (insert date) to _____(insert the name of contractor) on the job of the City of Parker, for improvements to the following described project:

ITB NO: 2024-01
CITY OF PARKER
INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH
(Project Name)

This waiver does not cover any retention, or any labor, services, or materials furnished after the date specified.

CONTRACTOR: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND

(FINAL PAYMENT)

The undersigned, in consideration of the final payment in the amount of $_____ _____, hereby waives its right to claim against the payment bond for labor, services, or materials furnished to _____ (insert the name of contractor) on the job of the City of Parker for improvements to the following described project:

ITB NO: 2024-01
CITY OF PARKER
INLAND FLOOD PROTECTION RETENTION POND AND WALKING PATH
(Project Name)

This waiver does not cover any retention, or any labor, services, or materials furnished after the date specified.

CONTRACTOR: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

APPENDIX A

ESA PHASE II FINAL

REPORT

Limited Phase II
Environmental Site Assessment

Anchor CEI, Inc. – Melendy Property +/-4.3 acres
PID: 25250-000-000
824 N 11th Street
Parker, Florida

Prepared for:
Anchor CEI, Inc.
450 Magnolia Avenue
Panama City, Florida 32401

Prepared By:

Cypress Environmental
P.O. Box 16062
Panama City, Florida 32406
Phone (850) 481-6824

June 2021

1.0 INTRODUCTION

Cypress Environmental of Bay County, LLC performed a Limited Phase II Environmental Site Assessment for a parcel of land located at 824 N. 11th Street (Parcel ID: 25250-000-000), hereinafter "subject property" in Section 13, Township 4 South, Range 14 West, within the local jurisdiction of the City of Parker, Bay County, Florida. A vicinity map showing the parcel location is included in Appendix A.

A previous Phase I ESA report dated March 12, 2021, was performed by Cypress Environmental for the subject property. Observations made on the property indicated the potential past release of hazardous substances or petroleum products into the ground and/or groundwater of the subject property. Specifically, the potential for groundwater and surface contamination due to mishandling of vehicular fluids (gasoline, diesel fuel, oil, transmission fluid, power steering and brake fluids, gear oil, and mineral spirits) include petroleum hydrocarbons, heavy metals (lead, cadmium, chromium, zinc, copper, nickel, aluminum, arsenic and mercury), and acids were present. As such, soil and groundwater analysis of the above referenced contaminants was recommended to confirm the presence or absence of contamination related to the past use of the subject property in the areas identified on the aerial included in Appendix A.

1.1 PURPOSE

The purpose of the work was to confirm/dismiss the presence of petroleum compounds and/or RCRA metals within the soil or groundwater in designated areas of the subject property due to concerns regarding historic usage and visual observations noted in the above referenced Phase I Environmental Site Assessment.

1.2 SCOPE OF WORK/ METHODOLOGY

Universal Engineering Sciences (UES) collected four soil and four groundwater samples using direct push technology (DPT) drilling and sampling methods. The soil and groundwater samples were collected on May 17, 2021. Soil boring and groundwater sampling locations are shown on Figure 1, Attachment A.

Due to the shallow nature of the groundwater at the property, the soil samples were collected at a depth of approximately two feet below ground surface (BGS) from the unsaturated zone immediately above the water table. Soil samples were collected in laboratory supplied sample containers, labeled, and place on ice pending hand delivery to Test America's Pensacola laboratory for analysis of volatile organic compounds, (VOCs, USEPA Method 8260); polycyclic aromatic hydrocarbons (PAHs, USEPA Method 8270D), TRPH via the FL-PRO Method; and the eight Resource Conservation and Recovery Act (RCRA) metals.

Immediately after the soil sample was collected at each location, a groundwater sample was collected using DPT groundwater sampling methods. At each location, UES advanced a stainless steel screen approximately 4 feet into the water table. Groundwater samples were then collected using a peristaltic pump and low-flow sampling methods. New, unused tubing was used at each location to collect the water sample. Groundwater samples were collected in laboratory supplied, pre-preserved sample containers,

labeled, and place on ice pending hand delivery to the laboratory for analysis of VOCs, PAHs, VOCs, TRPH and RCRA Metals.

2.0 FINDINGS AND CONCLUSIONS

Soil Samples

Soil sample analytical results are summarized in Table 1, Attachment B. The complete laboratory analytical data package is included as Attachment C. Soil sample analytical results were compared to the Soil Cleanup Target Levels (SCTLs) established by the State of Florida (as defined in Chapter 62-777, F.A.C.).

No VOCs detected in the soil samples at a concentration that exceeded the laboratory method detection limit (MDL). Low concentration of PAHs, metals, and TRPH were also detected in one or more of the soil samples at concentrations that did not exceed their respective SCTLs.

For the carcinogenic PAHs, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in one of more of the soil samples collected by UES at low, estimated (i.e., a concentration between the method detection limit [MDL] and the practical quantitation limit [PQL]) at concentrations that did not exceed their respective SCTL. For the carcinogenic PAHs that were detected, the concentrations must first be converted to benzo(a)pyrene (BaP) equivalents for comparison to the benzo(a)pyrene SCTL using the FDEP Benzo(a)pyrene Conversion Table. Based on the conversion tables developed for the results from this assessment (see Attachment D), none of the carcinogenic PAHs detected exceeded the residential or commercial/industrial SCTLs for benzo(a)pyrene.

Groundwater Samples

Immediately after collection of the soil sample at each boring location, UES advanced a stainless steel well screen approximately four feet into the water table at each soil boring location. A groundwater sample was then collected using a peristaltic pump and dedicated, new tubing at each location. After a well purge of approximately five minutes, a groundwater sample was collected. Groundwater samples were collected in laboratory supplied, pre-preserved sample containers, labeled, and place on ice pending hand delivery to the laboratory for analysis of VOCs, PAHs, VOCs, TRPH and RCRA Metals.

Groundwater sample analytical results are summarized in Table 2, Attachment B. The complete laboratory analytical data package is included as Attachment C. Groundwater sample analytical results were compared to the Groundwater Cleanup Target Levels (GCTLs) established by the State of Florida (as defined in Chapter 62-777, F.A.C.).

Toluene, naphthalene, indeno(1,2,3-cd) pyrene, and arsenic barium, chromium, lead, and selenium were detected in one or more of the groundwater samples collected by UES. With the exception of arsenic and lead (as discussed below), none of the analytes were detected a concentration that exceeded their respective GCTLs.

• Arsenic (As) was detected in the sample from GW-1 (0.040 mg/L) and GW-4 (0.020 mg/L) at concentrations that exceed the GCTL for arsenic of 0.010 milligrams per liter.

• Chromium (Cr) was detected in the sample from GW-4 (0.02 mg/L) at a concentration that exceeds the GCTL for chromium of 0.01 mg/L.

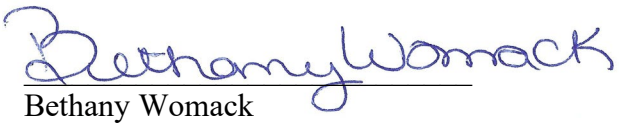
• Lead (Pb) was detected in the sample from GW-1 (0.028 mg/L) at a concentration that exceed the GCTL for lead of 0.015 mg/L. The sample from GW-4 (0.01 mg/L) was just below the GCTL.

UES expressed that the exceedances were likely related to the DPT sample collection method, given the turbidity of the identified samples were greater than 100 nephelometric turbidity units or NTUs.

Cypress Environmental agrees with the UES characterization regarding turbidity described above. To be certain that elevated analytes are in fact a result of turbidity, we would recommend blending stockpiled soil during pond construction and analyzing several samples for As, Cr, and PB to ensure that analytes are below GCTLs prior to disposal in a Class III landfill or otherwise utilized as needed. Surface water samples should also be collected after pond construction and analyzed for these analytes prior to discharging water from the facility.

3.0 LIMITATIONS

This assessment is solely based upon the scope of work described herein. No environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental conditions that may affect a site. This report must be considered in its entirety. The purpose of this Limited Phase II ESA was to confirm the presence and/or absence of certain constituents that were suspect during the reference Phase I ESA prepared by Cypress Environmental. This Limited Phase II ESA was not meant to delineate the extent of soil and/or groundwater impacts. Further assessment would be required to fully characterize the Site.



Bethany Womack
Cypress Environmental of Bay County, LLC

Attachments

Figure 1 – Soil and Groundwater Sample Location Map

824 11th Street North

PROJECT NUMBER	PROJECT LOCATION
1740.2100049.0000	**Panama City, Bay County, Florida**

UNIVERSAL ENGINEERING SCIENCES

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Vacant Parcel - 824 11th Street North
Panama City, Bay County, Florida
UES Project No. 1740.2100049.0000

Analytical Parameter	Residential Soil Cleanup Target Level [1]	Commercial and Industrial Soil Cleanup Target Level [1]	Leachability to Groundwater Soil Cleanup Target Level [1]	Analytical Results SB-1 2 Ft			Analytical Results SB-2 2 Ft		
				Result	MDL	Q	Result	MDL	Q
Volatile Organic Compounds (VOCs)									
There were no VOCs detected at a concentration that exceeded the laboratory MDL									
Polycyclic Aromatic Hydrocarbons (PAHs) - SCTL and results in micrograms per kilogram (µg/kg)									
Benzo(a)pyrene	100	700	8,000	49	38	I	45	38	I
Benzo(b)fluoranthene	#	#	2,400	44	38	I	39	38	I
Dibenz(a,h)anthracene	#	#	700	57	38	I	57	38	I
Indeno(1,2,3-cd)pyrene	#	#	6,600	50	38	I	50	38	I
Metals - results are in miligrams per kilogram (mg/kg)									
Arsenic	2.1	12	*	0.67	0.62	I	0.63	0.63	U
Barium	120	130,000	1,600	4.9	0.18		3.9	0.19	
Chromium	210	470	38	4.0	0.33		2.8	0.34	
Lead	400	1,400	*	1.9	0.24		1.7	0.010	
Mercury	3	17	2.1	0.014	0.010	I	0.022	0.010	
Total Recoverable Petroleum Hydrocarbons - results are in miligrams per kilogram (mg/kg)									
C8-C40	460	2,700	340	10	10	U	66	10	

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Vacant Parcel - 824 11th Street North
Panama City, Bay County, Florida
UES Project No. 1740.2100049.0000

Analytical Parameter	Residential Soil Cleanup Target Level [1]	Commercial and Industrial Soil Cleanup Target Level [1]	Leachability to Groundwater Soil Cleanup Target Level [1]	Analytical Results SB-3 2 Ft			Analytical Results SB-4 2 Ft		
				Result	MDL	Q	Result	MDL	Q
Volatile Organic Compounds (VOCs)									
There were no VOCs detected at a concentration that exceeded the laboratory MDL									
Polycyclic Aromatic Hydrocarbons (PAHs) - SCTL and results in micrograms per kilogram (µg/kg)									
Benzo(a)pyrene	100	700	8,000	38	36	I	0.39	0.39	U
Benzo(b)fluoranthene	#	#	2,400	0.36	36	U	0.39	0.39	U
Dibenz(a,h)anthracene	#	#	700	51	36	I	50	39	I
Indeno(1,2,3-cd)pyrene	#	#	6,600	44	36	I	42	39	I
Metals - results are in miligrams per kilogram (mg/kg)									
Arsenic	2.1	12	*	0.62	0.62	U			
Barium	120	130,000	1,600	4.1			2.6	0.19	
Chromium	210	470	38	3.2	0.34		1.8	0.35	
Lead	400	1,400	*	1.5	0.24		0.82	0.25	I
Mercury	3	17	2.1	0.0099	0.0099	U	0.011	0.011	U
Total Recoverable Petroleum Hydrocarbons - results are in miligrams per kilogram (mg/kg)									
C8-C40	460	2,700	340	66	10		13	11	I

Table 1
SUMMARY OF SOIL SAMPLE ANAYTICAL RESULTS
824 11th Street North
Panama City, Bay County, Florida
UES Project No. 1740.2100049.0000

[1] Florida Administrative Code, Chapter 62-777, Table 2

Key: **13** Reported value exceeds one or more of the comparison criteria
MDL = Method detection limit
mg/kg = milligrams per kilogram
µ = micrograms per kilogram
Q = Data qualifier

Data Qualifiers:
I = Analyte detected but below the Reporting Limit; therefore, result is estimated
U = Analyte included in the analysis but not detected.
# = Carcinogenic PAH - see benzo(a)pyrene conversion table

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
Vacant Parcel - 824 11th Street North
Panama City, Bay County, Florida
UES Project No.1740.2100049.0000

Analytical Parameter	Groundwater Cleanup Target Level [1]	Analytical Results GW-1 5 Ft Result	MDL	Q	Analytical Results GW-2 5 Ft Result	MDL	Q
Volatile Organic Compounds (VOCs) - GCTL and results are in micrograms per liter (µg/L)							
Toluene	40	0.41	0.41	U	1.2	0.041	
Polycyclic Aromatic Hydrocarbons (PAHs) - GCTL and results are in micrograms per liter (µg/L)							
Naphthalene	14	0.048	0.048	U	0.14	0.049	I, V
Indeno(1,2,3-cd)pyrene	0.05	0.038	0.031	I	0.031	0.031	U
Metals - results and GCTL are in milligrams per liter (mg/L)							
Arsenic	0.010	**0.040**	0.0030		0.0030	0.0030	U
Barium	2	0.058	0.0030		0.0078	0.0030	I
Chromium	0.1	0.095	0.0050		0.012	0.0050	
Lead	0.015	**0.028**	0.0020		0.0047	0.0020	I
Selenium	0.05	0.0080	0.0080	U	0.0080	0.0080	U
Total Recoverable Petroleum Hydrocarbons (TRPH)							
TRPH was not detected at a concentration that exceeded the MDL							

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
Vacant Parcel - 824 11th Street North
Panama City, Bay County, Florida
UES Project No.1740.2100049.0000

Analytical Parameter	Groundwater Cleanup Target Level [1]	Analytical Results GW-3 5 Ft Result	MDL	Q	Analytical Results GW-4 5 Ft Result	MDL	Q
Volatile Organic Compounds (VOCs) - GCTL and results are in micrograms per liter (µg/L)							
Toluene	40	0.48	0.41	I	0.41	0.41	I
Polycyclic Aromatic Hydrocarbons (PAHs) - GCTL and results are in micrograms per liter (µg/L)							
Naphthalene	14	0.13	0.049	I, V	0.14	0.049	I, V
Indeno(1,2,3-cd)pyrene	0.05	0.031	0.031	U	0.031	0.031	U
Metals - results and GCTL are in milligrams per liter (mg/L)							
Arsenic	0.010	0.0044	0.0030	I	**0.020**	0.0030	I
Barium	2	0.0077	0.0030	I	0.24	0.0050	
Chromium	0.1	0.0089	0.0050	I	0.20	0.0050	
Lead	0.015	0.0027	0.0020	I	0.10	0.0020	
Selenium	0.05	0.0080	0.0080	U	0.013	0.0080	I
Total Recoverable Petroleum Hydrocarbons (TRPH)							
TRPH was not detected at a concentration that exceeded the MDL							

Table 2
SUMMARY OF GROUNDWATER SAMPLE ANAYTICAL RESULTS
824 11th Street North
Panama City, Bay County, Florida
UES Project No. 1740.2100049.0000

[1] Florida Administrative Code, Chapter 62-777, Table 1

Key: **13** Reported value exceeds one or more of the comparison criteria
MDL = Method detection limit
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
Q = Data qualifier

Data Qualifiers:
I = Analyte detected but below the Reporting Limit; therefore, result is estimated
U = Analyte included in the analysis but not detected.
V = Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.
# = Carcinogenic PAH - see benzo(a)pyrene conversion table

Eurofins TestAmerica
Analytical Report

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-203513-1
Laboratory Sample Delivery Group: Panama City, Bay
Client Project/Site: 824 11th Street North

For:
Universal Engineering Sciences Inc
1985 Cope Ln.
Pensacola, Florida 32526

Attn: Paul Cheney

Cheyenne Whitmire

Authorized for release by:
6/2/2021 11:11:00 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

Table of Contents

Job ID: 400-203513-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-203513-1

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-532728 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect or not reported for these analytes, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-532728 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-532728 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-533271 and analytical batch 400-533235 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

GC/MS Semi VOA
Method 8270D LL: The method blank for preparation batch 400-532965 and analytical batch 400-533133 contained Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene and Fluorene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8270D LL: The laboratory control sample (LCS) for preparation batch 400-532965 and analytical batch 400-533133 recovered outside control limits for the following analytes: Benzo[a]anthracene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

GC Semi VOA
Method FL-PRO: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SB-3 (400-203513-3), (LCS 400-532598/2-A), (MB 400-532598/1-A) and (400-203513-E-1-F MS). These results have been reported and qualified.

Method FL-PRO: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: GW-1 (400-203513-5), GW-2 (400-203513-6), GW-3 (400-203513-7), (LCS 400-532811/2-A) and (LCSD 400-532811/3-A). These results have been reported and qualified.

Method FL-PRO: Surrogate recovery for the following sample was outside the upper control limit: GW-4 (400-203513-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method FL-PRO: The surrogate recovery for the blank associated with preparation batch 400-532811 and analytical batch 400-532842 was outside the upper control limits.

Metals
Method 6010C: The serial dilution performed for the following sample associated with batch 400-532562 was outside control limits: (400-203513-E-1-B SD).

Method 6010C: The continuing calibration verification (CCV) associated with batch 400-533754 recovered above the upper control limit for Silver, Arsenic, Barium, Cadmium, Chromium, Lead and Selenium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: GW-1 (400-203513-5), GW-2 (400-203513-6), GW-3 (400-203513-7) and (MB 400-533469/1-A).

Method 6010C: The low level continuing calibration verification (CCVL) associated with batch 400-533754 recovered above the upper control limit for Arsenic and Barium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-203513-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 6010C: The initial calibration verification (ICV) result for batch 400-533754 was above the upper control limit. Sample results were non-detects, and have been reported as qualified data. Chromium

Method 6010C: The low level check standard recovery associated with batch 400-533856 is outside the acceptance criteria for the following analyte(s): Chromium. The sample is either ND or 10x the CCVL; therefore data is reported.

Method 7470A: The matrix spike duplicate (MSD) recoveries for preparation batch 400-532325 and analytical batch 400-532563 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 7471B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-532086 and analytical batch 400-532437 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Organic Prep
Method 3511: The following samples formed emulsions during the extraction procedure: GW-1 (400-203513-5) and GW-4 (400-203513-8).

Detection Summary

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: SB-1 — Lab Sample ID: 400-203513-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	49	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	44	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	57	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	50	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Arsenic	0.67	I	1.1	0.62	mg/Kg	1	☼	6010C	Total/NA
Barium	4.9		1.1	0.18	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.0		1.1	0.33	mg/Kg	1	☼	6010C	Total/NA
Lead	1.9		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.014	I	0.017	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 — Lab Sample ID: 400-203513-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	45	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	39	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	57	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	50	I	380	38	ug/Kg	1	☼	8270D	Total/NA
Barium	3.9		1.1	0.19	mg/Kg	1	☼	6010C	Total/NA
Chromium	2.8		1.1	0.34	mg/Kg	1	☼	6010C	Total/NA
Lead	1.7		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.022		0.017	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 — Lab Sample ID: 400-203513-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	38	I	360	36	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	51	I	360	36	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	44	I	360	36	ug/Kg	1	☼	8270D	Total/NA
Total Petroleum Hydrocarbons (C8-C40)	66		22	10	mg/Kg	1	☼	FL-PRO	Total/NA
Barium	4.1		1.1	0.18	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.2		1.1	0.34	mg/Kg	1	☼	6010C	Total/NA
Lead	1.5		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SB-4 — Lab Sample ID: 400-203513-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	50	I	390	39	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	42	I	390	39	ug/Kg	1	☼	8270D	Total/NA
Total Petroleum Hydrocarbons (C8-C40)	13	I	23	11	mg/Kg	1	☼	FL-PRO	Total/NA
Barium	2.6		1.1	0.19	mg/Kg	1	☼	6010C	Total/NA
Chromium	1.8		1.1	0.35	mg/Kg	1	☼	6010C	Total/NA
Lead	0.82	I	1.1	0.25	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GW-1 — Lab Sample ID: 400-203513-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.038	I	0.19	0.031	ug/L	1		8270D LL	Total/NA
Arsenic	0.040		0.010	0.0030	mg/L	1		6010C	Total/NA
Barium	0.058		0.010	0.0030	mg/L	1		6010C	Total/NA
Chromium	0.095		0.010	0.0050	mg/L	1		6010C	Total/NA
Lead	0.028		0.010	0.0020	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: GW-2 — Lab Sample ID: 400-203513-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.2		1.0	0.41	ug/L	1		8260B	Total/NA
Naphthalene	0.14	I V	0.20	0.049	ug/L	1		8270D LL	Total/NA
Barium	0.0078	I	0.010	0.0030	mg/L	1		6010C	Total/NA
Chromium	0.012		0.010	0.0050	mg/L	1		6010C	Total/NA
Lead	0.0047	I	0.010	0.0020	mg/L	1		6010C	Total/NA

Client Sample ID: GW-3 — Lab Sample ID: 400-203513-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.48	I	1.0	0.41	ug/L	1		8260B	Total/NA
Naphthalene	0.13	I V	0.19	0.049	ug/L	1		8270D LL	Total/NA
Arsenic	0.0044	I	0.010	0.0030	mg/L	1		6010C	Total/NA
Barium	0.0077	I	0.010	0.0030	mg/L	1		6010C	Total/NA
Chromium	0.0089	I	0.010	0.0050	mg/L	1		6010C	Total/NA
Lead	0.0027	I	0.010	0.0020	mg/L	1		6010C	Total/NA

Client Sample ID: GW-4 — Lab Sample ID: 400-203513-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.41	I	1.0	0.41	ug/L	1		8260B	Total/NA
Naphthalene	0.14	I V	0.20	0.049	ug/L	1		8270D LL	Total/NA
Arsenic	0.020		0.010	0.0030	mg/L	1		6010C	Total/NA
Barium	0.24		0.010	0.0030	mg/L	1		6010C	Total/NA
Chromium	0.20		0.010	0.0050	mg/L	1		6010C	Total/NA
Lead	0.10		0.010	0.0020	mg/L	1		6010C	Total/NA
Selenium	0.013	I	0.020	0.0080	mg/L	1		6010C	Total/NA

MCLs/GCTLs:

As = 0.01 mg/L
Cr = 0.1 mg/L
Pb - 0.015 mg/L

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
FL-PRO	Florida - Petroleum Range Organics (GC)	FL-DEP	TAL PEN
6010C	Metals (ICP)	SW846	TAL PEN
6010C	RCRA Metals	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
7471B	Mercury (CVAA)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
3010A	Preparation, Total Metals	SW846	TAL PEN
3050B	Preparation, Metals	SW846	TAL PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PEN
3511	Microextraction of Organic Compounds	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
5035	Closed System Purge and Trap	SW846	TAL PEN
7470A	Preparation, Mercury	SW846	TAL PEN
7471B	Preparation, Mercury	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-203513-1	SB-1	Solid	05/17/21 10:58	05/18/21 08:29	
400-203513-2	SB-2	Solid	05/17/21 11:20	05/18/21 08:29	
400-203513-3	SB-3	Solid	05/17/21 12:45	05/18/21 08:29	
400-203513-4	SB-4	Solid	05/17/21 13:27	05/18/21 08:29	
400-203513-5	GW-1	Water	05/17/21 10:50	05/18/21 08:29	
400-203513-6	GW-2	Water	05/17/21 11:58	05/18/21 08:29	
400-203513-7	GW-3	Water	05/17/21 13:03	05/18/21 08:29	
400-203513-8	GW-4	Water	05/17/21 14:02	05/18/21 08:29	

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: SB-1
Date Collected: 05/17/21 10:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-1
Matrix: Solid
Percent Solids: 87.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.66	U	4.9	0.66	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Dichlorobromomethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Bromoform	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Carbon tetrachloride	1.7	U	4.9	1.7	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Chlorobenzene	0.51	U	4.9	0.51	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Chloroethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Chloroform	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Chloromethane	0.98	U	4.9	0.98	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Chlorodibromomethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,3-Dichlorobenzene	0.93	U	4.9	0.93	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,4-Dichlorobenzene	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,1-Dichloroethane	0.81	U	4.9	0.81	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,2-Dichloroethane	0.80	U	4.9	0.80	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,1-Dichloroethene	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
cis-1,2-Dichloroethene	0.74	U	4.9	0.74	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
trans-1,2-Dichloroethene	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,2-Dichloropropane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
cis-1,3-Dichloropropene	1.2	U	4.9	1.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
trans-1,3-Dichloropropene	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Ethylbenzene	0.60	U	4.9	0.60	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Methylene Chloride	9.8	U	15	9.8	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,1,2,2-Tetrachloroethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Tetrachloroethene	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Toluene	0.98	U	4.9	0.98	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,1,1-Trichloroethane	1.1	U	4.9	1.1	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,1,2-Trichloroethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Trichloroethene	0.98	U	4.9	0.98	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Vinyl chloride	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
o-Xylene	0.98	U	4.9	0.98	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
m-Xylene & p-Xylene	1.3	U	4.9	1.3	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Bromomethane	2.5	U	4.9	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
1,2-Dichlorobenzene	0.70	U	4.9	0.70	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Acrolein	27	U	49	27	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
Acrylonitrile	7.8	U	20	7.8	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1
2-Chloroethyl vinyl ether	4.9	U	9.8	4.9	ug/Kg	☼	05/26/21 07:29	05/26/21 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*67 - 130*	*05/26/21 07:29*	*05/26/21 13:07*	*1*
Dibromofluoromethane	*101*		*77 - 127*	*05/26/21 07:29*	*05/26/21 13:07*	*1*
Toluene-d8 (Surr)	*94*		*76 - 127*	*05/26/21 07:29*	*05/26/21 13:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Acenaphthylene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Anthracene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Benzo[a]anthracene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Benzo[a]pyrene	**49**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Benzo[b]fluoranthene	**44**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Benzo[g,h,i]perylene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1

Client Sample ID: SB-1
Date Collected: 05/17/21 10:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-1
Matrix: Solid
Percent Solids: 87.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Chrysene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Dibenz(a,h)anthracene	**57**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Fluoranthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Fluorene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Indeno[1,2,3-cd]pyrene	**50**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Naphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Phenanthrene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
Pyrene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
1-Methylnaphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1
2-Methylnaphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*27 - 127*	*05/19/21 15:26*	*05/20/21 21:55*	*1*
Nitrobenzene-d5 (Surr)	*65*		*15 - 136*	*05/19/21 15:26*	*05/20/21 21:55*	*1*
Terphenyl-d14 (Surr)	*95*		*24 - 146*	*05/19/21 15:26*	*05/20/21 21:55*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	10	U	22	10	mg/Kg	☼	05/20/21 11:01	05/20/21 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*76*		*36 - 132*	*05/20/21 11:01*	*05/20/21 18:46*	*1*
o-Terphenyl	*98*		*66 - 136*	*05/20/21 11:01*	*05/20/21 18:46*	*1*

Method: 6010C - RCRA Metals

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.36	U	0.54	0.36	mg/Kg	☼	05/19/21 11:00	05/21/21 15:42	1
Arsenic	**0.67**	**I**	1.1	0.62	mg/Kg	☼	05/19/21 11:00	05/19/21 21:34	1
Barium	**4.9**		1.1	0.18	mg/Kg	☼	05/19/21 11:00	05/19/21 21:34	1
Cadmium	0.095	U	0.54	0.095	mg/Kg	☼	05/19/21 11:00	05/19/21 21:34	1
Chromium	**4.0**		1.1	0.33	mg/Kg	☼	05/19/21 11:00	05/20/21 18:54	1
Lead	**1.9**		1.1	0.24	mg/Kg	☼	05/19/21 11:00	05/20/21 18:54	1
Selenium	0.94	U	2.2	0.94	mg/Kg	☼	05/19/21 11:00	05/19/21 21:34	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**I**	0.017	0.010	mg/Kg	☼	05/18/21 10:23	05/19/21 11:32	1

Client Sample ID: SB-2

Date Collected: 05/17/21 11:20
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-2

Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.60	U	4.5	0.60	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Dichlorobromomethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Bromoform	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Carbon tetrachloride	1.5	U	4.5	1.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Chlorobenzene	0.46	U	4.5	0.46	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Chloroethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Chloroform	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Chloromethane	0.89	U	4.5	0.89	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Chlorodibromomethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,3-Dichlorobenzene	0.85	U	4.5	0.85	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,4-Dichlorobenzene	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,1-Dichloroethane	0.74	U	4.5	0.74	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,2-Dichloroethane	0.73	U	4.5	0.73	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,1-Dichloroethene	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
cis-1,2-Dichloroethene	0.68	U	4.5	0.68	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
trans-1,2-Dichloroethene	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,2-Dichloropropane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
cis-1,3-Dichloropropene	1.1	U	4.5	1.1	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
trans-1,3-Dichloropropene	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Ethylbenzene	0.54	U	4.5	0.54	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Methylene Chloride	8.9	U	13	8.9	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,1,2,2-Tetrachloroethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Tetrachloroethene	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Toluene	0.89	U	4.5	0.89	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,1,1-Trichloroethane	0.98	U	4.5	0.98	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,1,2-Trichloroethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Trichloroethene	0.89	U	4.5	0.89	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Vinyl chloride	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
o-Xylene	0.89	U	4.5	0.89	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
m-Xylene & p-Xylene	1.2	U	4.5	1.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Bromomethane	2.2	U	4.5	2.2	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
1,2-Dichlorobenzene	0.63	U	4.5	0.63	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Acrolein	25	U	45	25	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
Acrylonitrile	7.1	U	18	7.1	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1
2-Chloroethyl vinyl ether	4.5	U	8.9	4.5	ug/Kg	☼	05/26/21 07:29	05/26/21 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*67 - 130*	*05/26/21 07:29*	*05/26/21 13:35*	*1*
Dibromofluoromethane	*99*		*77 - 127*	*05/26/21 07:29*	*05/26/21 13:35*	*1*
Toluene-d8 (Surr)	*92*		*76 - 127*	*05/26/21 07:29*	*05/26/21 13:35*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Acenaphthylene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Anthracene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Benzo[a]anthracene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Benzo[a]pyrene	**45**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Benzo[b]fluoranthene	**39**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Benzo[g,h,i]perylene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1

Client Sample ID: SB-2

Date Collected: 05/17/21 11:20
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-2

Matrix: Solid
Percent Solids: 87.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Chrysene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Dibenz(a,h)anthracene	**57**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Fluoranthene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Fluorene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Indeno[1,2,3-cd]pyrene	**50**	**I**	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Naphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Phenanthrene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
Pyrene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
1-Methylnaphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1
2-Methylnaphthalene	38	U	380	38	ug/Kg	☼	05/19/21 15:26	05/20/21 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*27 - 127*	*05/19/21 15:26*	*05/20/21 22:17*	*1*
Nitrobenzene-d5 (Surr)	*68*		*15 - 136*	*05/19/21 15:26*	*05/20/21 22:17*	*1*
Terphenyl-d14 (Surr)	*101*		*24 - 146*	*05/19/21 15:26*	*05/20/21 22:17*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	10	U	22	10	mg/Kg	☼	05/20/21 11:01	05/20/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*89*		*36 - 132*	*05/20/21 11:01*	*05/20/21 19:00*	*1*
o-Terphenyl	*107*		*66 - 136*	*05/20/21 11:01*	*05/20/21 19:00*	*1*

Method: 6010C - RCRA Metals

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.36	U	0.55	0.36	mg/Kg	☼	05/19/21 11:00	05/21/21 16:04	1
Arsenic	0.63	U	1.1	0.63	mg/Kg	☼	05/19/21 11:00	05/19/21 21:52	1
Barium	**3.9**		1.1	0.19	mg/Kg	☼	05/19/21 11:00	05/19/21 21:52	1
Cadmium	0.097	U	0.55	0.097	mg/Kg	☼	05/19/21 11:00	05/19/21 21:52	1
Chromium	**2.8**		1.1	0.34	mg/Kg	☼	05/19/21 11:00	05/20/21 19:05	1
Lead	**1.7**		1.1	0.24	mg/Kg	☼	05/19/21 11:00	05/20/21 19:05	1
Selenium	0.96	U	2.2	0.96	mg/Kg	☼	05/19/21 11:00	05/19/21 21:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.017	0.010	mg/Kg	☼	05/18/21 10:23	05/19/21 11:34	1

Client Sample ID: SB-3

Date Collected: 05/17/21 12:45
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-3

Matrix: Solid
Percent Solids: 89.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.64	U	4.8	0.64	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Dichlorobromomethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Bromoform	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Carbon tetrachloride	1.6	U	4.8	1.6	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Chlorobenzene	0.49	U	4.8	0.49	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Chloroethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Chloroform	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Chloromethane	0.95	U	4.8	0.95	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Chlorodibromomethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,3-Dichlorobenzene	0.90	U	4.8	0.90	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,4-Dichlorobenzene	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,1-Dichloroethane	0.79	U	4.8	0.79	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,2-Dichloroethane	0.78	U	4.8	0.78	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,1-Dichloroethene	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
cis-1,2-Dichloroethene	0.72	U	4.8	0.72	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
trans-1,2-Dichloroethene	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,2-Dichloropropane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
cis-1,3-Dichloropropene	1.1	U	4.8	1.1	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
trans-1,3-Dichloropropene	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Ethylbenzene	0.58	U	4.8	0.58	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Methylene Chloride	9.5	U	14	9.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,1,2,2-Tetrachloroethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Tetrachloroethene	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Toluene	0.95	U	4.8	0.95	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,1,1-Trichloroethane	1.0	U	4.8	1.0	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,1,2-Trichloroethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Trichloroethene	0.95	U	4.8	0.95	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Vinyl chloride	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
o-Xylene	0.95	U	4.8	0.95	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
m-Xylene & p-Xylene	1.2	U	4.8	1.2	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Bromomethane	2.4	U	4.8	2.4	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
1,2-Dichlorobenzene	0.68	U	4.8	0.68	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Acrolein	27	U	48	27	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
Acrylonitrile	7.6	U	19	7.6	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1
2-Chloroethyl vinyl ether	4.8	U	9.5	4.8	ug/Kg	☼	05/26/21 07:29	05/26/21 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*67 - 130*	*05/26/21 07:29*	*05/26/21 14:03*	*1*
Dibromofluoromethane	*100*		*77 - 127*	*05/26/21 07:29*	*05/26/21 14:03*	*1*
Toluene-d8 (Surr)	*96*		*76 - 127*	*05/26/21 07:29*	*05/26/21 14:03*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Acenaphthylene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Anthracene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Benzo[a]anthracene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Benzo[a]pyrene	**38**	**I**	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Benzo[b]fluoranthene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Benzo[g,h,i]perylene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1

Client Sample ID: SB-3
Date Collected: 05/17/21 12:45
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-3
Matrix: Solid
Percent Solids: 89.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Chrysene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Dibenz(a,h)anthracene	**51**	**I**	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Fluoranthene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Fluorene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Indeno[1,2,3-cd]pyrene	**44**	**I**	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Naphthalene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Phenanthrene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
Pyrene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
1-Methylnaphthalene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1
2-Methylnaphthalene	36	U	360	36	ug/Kg	☼	05/19/21 15:26	05/20/21 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*27 - 127*	*05/19/21 15:26*	*05/20/21 22:39*	*1*
Nitrobenzene-d5 (Surr)	*48*		*15 - 136*	*05/19/21 15:26*	*05/20/21 22:39*	*1*
Terphenyl-d14 (Surr)	*70*		*24 - 146*	*05/19/21 15:26*	*05/20/21 22:39*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	**66**		22	10	mg/Kg	☼	05/20/21 11:01	05/20/21 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*344*	*J1*	*36 - 132*	*05/20/21 11:01*	*05/20/21 19:13*	*1*
o-Terphenyl	*88*		*66 - 136*	*05/20/21 11:01*	*05/20/21 19:13*	*1*

Method: 6010C - RCRA Metals

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.36	U	0.54	0.36	mg/Kg	☼	05/19/21 11:00	05/21/21 16:08	1
Arsenic	0.62	U	1.1	0.62	mg/Kg	☼	05/19/21 11:00	05/19/21 21:56	1
Barium	**4.1**		1.1	0.18	mg/Kg	☼	05/19/21 11:00	05/19/21 21:56	1
Cadmium	0.095	U	0.54	0.095	mg/Kg	☼	05/19/21 11:00	05/19/21 21:56	1
Chromium	**3.2**		1.1	0.34	mg/Kg	☼	05/19/21 11:00	05/20/21 19:08	1
Lead	**1.5**		1.1	0.24	mg/Kg	☼	05/19/21 11:00	05/20/21 19:08	1
Selenium	0.94	U	2.2	0.94	mg/Kg	☼	05/19/21 11:00	05/19/21 21:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0099	U	0.017	0.0099	mg/Kg	☼	05/18/21 10:23	05/19/21 11:36	1

Client Sample ID: SB-4

Date Collected: 05/17/21 13:27
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-4

Matrix: Solid
Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.67	U	5.0	0.67	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Dichlorobromomethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Bromoform	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Carbon tetrachloride	1.7	U	5.0	1.7	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Chlorobenzene	0.52	U	5.0	0.52	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Chloroethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Chloroform	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Chloromethane	0.99	U	5.0	0.99	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Chlorodibromomethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,3-Dichlorobenzene	0.94	U	5.0	0.94	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,4-Dichlorobenzene	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,1-Dichloroethane	0.82	U	5.0	0.82	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,2-Dichloroethane	0.81	U	5.0	0.81	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,1-Dichloroethene	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
cis-1,2-Dichloroethene	0.75	U	5.0	0.75	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
trans-1,2-Dichloroethene	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,2-Dichloropropane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
cis-1,3-Dichloropropene	1.2	U	5.0	1.2	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
trans-1,3-Dichloropropene	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Ethylbenzene	0.61	U	5.0	0.61	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Methylene Chloride	9.9	U	15	9.9	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,1,2,2-Tetrachloroethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Tetrachloroethene	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Toluene	0.99	U	5.0	0.99	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,1,1-Trichloroethane	1.1	U	5.0	1.1	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,1,2-Trichloroethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Trichloroethene	0.99	U	5.0	0.99	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Vinyl chloride	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
o-Xylene	0.99	U	5.0	0.99	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
m-Xylene & p-Xylene	1.3	U	5.0	1.3	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Bromomethane	2.5	U	5.0	2.5	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
1,2-Dichlorobenzene	0.71	U	5.0	0.71	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Acrolein	28	U	50	28	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
Acrylonitrile	7.9	U	20	7.9	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1
2-Chloroethyl vinyl ether	5.0	U	9.9	5.0	ug/Kg	☼	05/26/21 07:29	05/26/21 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*67 - 130*	*05/26/21 07:29*	*05/26/21 14:30*	*1*
Dibromofluoromethane	*101*		*77 - 127*	*05/26/21 07:29*	*05/26/21 14:30*	*1*
Toluene-d8 (Surr)	*95*		*76 - 127*	*05/26/21 07:29*	*05/26/21 14:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Acenaphthylene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Anthracene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Benzo[a]anthracene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Benzo[a]pyrene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Benzo[b]fluoranthene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Benzo[g,h,i]perylene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1

Client Sample ID: SB-4

Date Collected: 05/17/21 13:27
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-4

Matrix: Solid
Percent Solids: 83.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Chrysene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Dibenz(a,h)anthracene	**50**	**I**	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Fluoranthene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Fluorene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Indeno[1,2,3-cd]pyrene	**42**	**I**	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Naphthalene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Phenanthrene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
Pyrene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
1-Methylnaphthalene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1
2-Methylnaphthalene	39	U	390	39	ug/Kg	☼	05/19/21 15:26	05/20/21 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*27 - 127*	*05/19/21 15:26*	*05/20/21 23:02*	*1*
Nitrobenzene-d5 (Surr)	*72*		*15 - 136*	*05/19/21 15:26*	*05/20/21 23:02*	*1*
Terphenyl-d14 (Surr)	*103*		*24 - 146*	*05/19/21 15:26*	*05/20/21 23:02*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	**13**	**I**	23	11	mg/Kg	☼	05/20/21 11:01	05/20/21 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*120*		*36 - 132*	*05/20/21 11:01*	*05/20/21 19:27*	*1*
o-Terphenyl	*107*		*66 - 136*	*05/20/21 11:01*	*05/20/21 19:27*	*1*

Method: 6010C - RCRA Metals

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.38	U	0.57	0.38	mg/Kg	☼	05/19/21 11:00	05/21/21 16:12	1
Arsenic	0.65	U	1.1	0.65	mg/Kg	☼	05/19/21 11:00	05/19/21 22:00	1
Barium	**2.6**		1.1	0.19	mg/Kg	☼	05/19/21 11:00	05/19/21 22:00	1
Cadmium	0.10	U	0.57	0.10	mg/Kg	☼	05/19/21 11:00	05/19/21 22:00	1
Chromium	**1.8**		1.1	0.35	mg/Kg	☼	05/19/21 11:00	05/20/21 19:23	1
Lead	**0.82**	**I**	1.1	0.25	mg/Kg	☼	05/19/21 11:00	05/20/21 19:23	1
Selenium	1.0	U	2.3	1.0	mg/Kg	☼	05/19/21 11:00	05/19/21 22:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.018	0.011	mg/Kg	☼	05/18/21 10:23	05/19/21 11:37	1

Client Sample ID: GW-1

Date Collected: 05/17/21 10:50
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			05/21/21 18:41	1
Dichlorobromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Bromoform	0.71	U	5.0	0.71	ug/L			05/21/21 18:41	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Chloroethane	0.76	U	1.0	0.76	ug/L			05/21/21 18:41	1
Chloroform	0.60	U	1.0	0.60	ug/L			05/21/21 18:41	1
Chloromethane	0.83	U	1.0	0.83	ug/L			05/21/21 18:41	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			05/21/21 18:41	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			05/21/21 18:41	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 18:41	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 18:41	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			05/21/21 18:41	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			05/21/21 18:41	1
Toluene	0.41	U	1.0	0.41	ug/L			05/21/21 18:41	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			05/21/21 18:41	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
o-Xylene	0.60	U	5.0	0.60	ug/L			05/21/21 18:41	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			05/21/21 18:41	1
Bromomethane	0.98	U	1.0	0.98	ug/L			05/21/21 18:41	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 18:41	1
Acrolein	10	U	20	10	ug/L			05/21/21 18:41	1
Acrylonitrile	2.8	U	10	2.8	ug/L			05/21/21 18:41	1
2-Chloroethyl vinyl ether	2.0	U	5.0	2.0	ug/L			05/21/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*05/21/21 18:41*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*05/21/21 18:41*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*05/21/21 18:41*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.023	U	0.19	0.023	ug/L		05/24/21 10:02	05/25/21 18:34	1
Acenaphthylene	0.021	U	0.19	0.021	ug/L		05/24/21 10:02	05/25/21 18:34	1
Anthracene	0.025	U	0.19	0.025	ug/L		05/24/21 10:02	05/25/21 18:34	1
Benzo[a]pyrene	0.071	U	0.19	0.071	ug/L		05/24/21 10:02	05/25/21 18:34	1
Benzo[b]fluoranthene	0.017	U	0.19	0.017	ug/L		05/24/21 10:02	05/25/21 18:34	1
Benzo[g,h,i]perylene	0.041	U	0.19	0.041	ug/L		05/24/21 10:02	05/25/21 18:34	1
Benzo[k]fluoranthene	0.039	U	0.19	0.039	ug/L		05/24/21 10:02	05/25/21 18:34	1

Client Sample ID: GW-1

Date Collected: 05/17/21 10:50
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-5

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	U	0.19	0.036	ug/L		05/24/21 10:02	05/25/21 18:34	1
Dibenz(a,h)anthracene	0.047	U	0.19	0.047	ug/L		05/24/21 10:02	05/25/21 18:34	1
Fluoranthene	0.090	U	0.19	0.090	ug/L		05/24/21 10:02	05/25/21 18:34	1
Fluorene	0.030	U	0.19	0.030	ug/L		05/24/21 10:02	05/25/21 18:34	1
Indeno[1,2,3-cd]pyrene	**0.038**	**I**	0.19	0.031	ug/L		05/24/21 10:02	05/25/21 18:34	1
1-Methylnaphthalene	0.065	U	0.19	0.065	ug/L		05/24/21 10:02	05/25/21 18:34	1
2-Methylnaphthalene	0.038	U	0.19	0.038	ug/L		05/24/21 10:02	05/25/21 18:34	1
Naphthalene	0.048	U	0.19	0.048	ug/L		05/24/21 10:02	05/25/21 18:34	1
Phenanthrene	0.070	U	0.19	0.070	ug/L		05/24/21 10:02	05/25/21 18:34	1
Pyrene	0.090	U	0.19	0.090	ug/L		05/24/21 10:02	05/25/21 18:34	1
Benzo[a]anthracene	0.026	U J3	0.19	0.026	ug/L		05/24/21 10:02	05/25/21 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*15 - 122*	*05/24/21 10:02*	*05/25/21 18:34*	*1*
Nitrobenzene-d5 (Surr)	*67*		*19 - 130*	*05/24/21 10:02*	*05/25/21 18:34*	*1*
Terphenyl-d14 (Surr)	*80*		*33 - 138*	*05/24/21 10:02*	*05/25/21 18:34*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.39	U	1.3	0.39	mg/L		05/21/21 13:57	05/22/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*205*	*J1*	*40 - 129*	*05/21/21 13:57*	*05/22/21 00:25*	*1*
o-Terphenyl	*134*		*66 - 139*	*05/21/21 13:57*	*05/22/21 00:25*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:42	1
Arsenic	**0.040**		0.010	0.0030	mg/L		05/27/21 10:39	06/01/21 14:30	1
Barium	**0.058**		0.010	0.0030	mg/L		05/27/21 10:39	05/29/21 18:47	1
Cadmium	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:42	1
Chromium	**0.095**		0.010	0.0050	mg/L		05/27/21 10:39	06/01/21 14:30	1
Lead	**0.028**		0.010	0.0020	mg/L		05/27/21 10:39	05/29/21 18:47	1
Selenium	0.0080	U	0.020	0.0080	mg/L		05/27/21 10:39	05/28/21 22:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070	U	0.20	0.070	ug/L		05/19/21 08:10	05/19/21 18:09	1

Client Sample ID: GW-2

Date Collected: 05/17/21 11:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			05/21/21 19:08	1
Dichlorobromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Bromoform	0.71	U	5.0	0.71	ug/L			05/21/21 19:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Chloroethane	0.76	U	1.0	0.76	ug/L			05/21/21 19:08	1
Chloroform	0.60	U	1.0	0.60	ug/L			05/21/21 19:08	1
Chloromethane	0.83	U	1.0	0.83	ug/L			05/21/21 19:08	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			05/21/21 19:08	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			05/21/21 19:08	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 19:08	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 19:08	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			05/21/21 19:08	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			05/21/21 19:08	1
Toluene	**1.2**		1.0	0.41	ug/L			05/21/21 19:08	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			05/21/21 19:08	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
o-Xylene	0.60	U	5.0	0.60	ug/L			05/21/21 19:08	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			05/21/21 19:08	1
Bromomethane	0.98	U	1.0	0.98	ug/L			05/21/21 19:08	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:08	1
Acrolein	10	U	20	10	ug/L			05/21/21 19:08	1
Acrylonitrile	2.8	U	10	2.8	ug/L			05/21/21 19:08	1
2-Chloroethyl vinyl ether	2.0	U	5.0	2.0	ug/L			05/21/21 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*05/21/21 19:08*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*05/21/21 19:08*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/21/21 19:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.023	U	0.20	0.023	ug/L		05/24/21 10:02	05/25/21 18:52	1
Acenaphthylene	0.022	U	0.20	0.022	ug/L		05/24/21 10:02	05/25/21 18:52	1
Anthracene	0.025	U	0.20	0.025	ug/L		05/24/21 10:02	05/25/21 18:52	1
Benzo[a]pyrene	0.072	U	0.20	0.072	ug/L		05/24/21 10:02	05/25/21 18:52	1
Benzo[b]fluoranthene	0.018	U	0.20	0.018	ug/L		05/24/21 10:02	05/25/21 18:52	1
Benzo[g,h,i]perylene	0.042	U	0.20	0.042	ug/L		05/24/21 10:02	05/25/21 18:52	1
Benzo[k]fluoranthene	0.039	U	0.20	0.039	ug/L		05/24/21 10:02	05/25/21 18:52	1

Client Sample ID: GW-2

Date Collected: 05/17/21 11:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	U	0.20	0.036	ug/L		05/24/21 10:02	05/25/21 18:52	1
Dibenz(a,h)anthracene	0.048	U	0.20	0.048	ug/L		05/24/21 10:02	05/25/21 18:52	1
Fluoranthene	0.091	U	0.20	0.091	ug/L		05/24/21 10:02	05/25/21 18:52	1
Fluorene	0.030	U	0.20	0.030	ug/L		05/24/21 10:02	05/25/21 18:52	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.20	0.031	ug/L		05/24/21 10:02	05/25/21 18:52	1
1-Methylnaphthalene	0.066	U	0.20	0.066	ug/L		05/24/21 10:02	05/25/21 18:52	1
2-Methylnaphthalene	0.038	U	0.20	0.038	ug/L		05/24/21 10:02	05/25/21 18:52	1
Naphthalene	**0.14**	**I V**	0.20	0.049	ug/L		05/24/21 10:02	05/25/21 18:52	1
Phenanthrene	0.071	U	0.20	0.071	ug/L		05/24/21 10:02	05/25/21 18:52	1
Pyrene	0.091	U	0.20	0.091	ug/L		05/24/21 10:02	05/25/21 18:52	1
Benzo[a]anthracene	0.026	U J3	0.20	0.026	ug/L		05/24/21 10:02	05/25/21 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*15 - 122*	*05/24/21 10:02*	*05/25/21 18:52*	*1*
Nitrobenzene-d5 (Surr)	*79*		*19 - 130*	*05/24/21 10:02*	*05/25/21 18:52*	*1*
Terphenyl-d14 (Surr)	*88*		*33 - 138*	*05/24/21 10:02*	*05/25/21 18:52*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.36	U	1.2	0.36	mg/L		05/21/21 13:57	05/22/21 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*198*	*J1*	*40 - 129*	*05/21/21 13:57*	*05/22/21 00:39*	*1*
o-Terphenyl	*134*		*66 - 139*	*05/21/21 13:57*	*05/22/21 00:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:24	1
Arsenic	0.0030	U	0.010	0.0030	mg/L		05/27/21 10:39	05/28/21 22:24	1
Barium	**0.0078**	**I**	0.010	0.0030	mg/L		05/27/21 10:39	05/29/21 18:25	1
Cadmium	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:24	1
Chromium	**0.012**		0.010	0.0050	mg/L		05/27/21 10:39	05/29/21 18:25	1
Lead	**0.0047**	**I**	0.010	0.0020	mg/L		05/27/21 10:39	05/28/21 22:24	1
Selenium	0.0080	U	0.020	0.0080	mg/L		05/27/21 10:39	05/28/21 22:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070	U	0.20	0.070	ug/L		05/19/21 08:10	05/19/21 18:11	1

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: GW-3

Date Collected: 05/17/21 13:03
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			05/21/21 19:34	1
Dichlorobromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Bromoform	0.71	U	5.0	0.71	ug/L			05/21/21 19:34	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Chloroethane	0.76	U	1.0	0.76	ug/L			05/21/21 19:34	1
Chloroform	0.60	U	1.0	0.60	ug/L			05/21/21 19:34	1
Chloromethane	0.83	U	1.0	0.83	ug/L			05/21/21 19:34	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			05/21/21 19:34	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			05/21/21 19:34	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 19:34	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 19:34	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			05/21/21 19:34	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			05/21/21 19:34	1
Toluene	**0.48**	**I**	1.0	0.41	ug/L			05/21/21 19:34	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			05/21/21 19:34	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
o-Xylene	0.60	U	5.0	0.60	ug/L			05/21/21 19:34	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			05/21/21 19:34	1
Bromomethane	0.98	U	1.0	0.98	ug/L			05/21/21 19:34	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 19:34	1
Acrolein	10	U	20	10	ug/L			05/21/21 19:34	1
Acrylonitrile	2.8	U	10	2.8	ug/L			05/21/21 19:34	1
2-Chloroethyl vinyl ether	2.0	U	5.0	2.0	ug/L			05/21/21 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*05/21/21 19:34*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*05/21/21 19:34*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*05/21/21 19:34*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.023	U	0.19	0.023	ug/L		05/24/21 10:02	05/25/21 19:10	1
Acenaphthylene	0.021	U	0.19	0.021	ug/L		05/24/21 10:02	05/25/21 19:10	1
Anthracene	0.025	U	0.19	0.025	ug/L		05/24/21 10:02	05/25/21 19:10	1
Benzo[a]pyrene	0.072	U	0.19	0.072	ug/L		05/24/21 10:02	05/25/21 19:10	1
Benzo[b]fluoranthene	0.018	U	0.19	0.018	ug/L		05/24/21 10:02	05/25/21 19:10	1
Benzo[g,h,i]perylene	0.042	U	0.19	0.042	ug/L		05/24/21 10:02	05/25/21 19:10	1
Benzo[k]fluoranthene	0.039	U	0.19	0.039	ug/L		05/24/21 10:02	05/25/21 19:10	1

Client Sample ID: GW-3

Date Collected: 05/17/21 13:03
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-7

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	U	0.19	0.036	ug/L		05/24/21 10:02	05/25/21 19:10	1
Dibenz(a,h)anthracene	0.048	U	0.19	0.048	ug/L		05/24/21 10:02	05/25/21 19:10	1
Fluoranthene	0.091	U	0.19	0.091	ug/L		05/24/21 10:02	05/25/21 19:10	1
Fluorene	0.030	U	0.19	0.030	ug/L		05/24/21 10:02	05/25/21 19:10	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.19	0.031	ug/L		05/24/21 10:02	05/25/21 19:10	1
1-Methylnaphthalene	0.066	U	0.19	0.066	ug/L		05/24/21 10:02	05/25/21 19:10	1
2-Methylnaphthalene	0.038	U	0.19	0.038	ug/L		05/24/21 10:02	05/25/21 19:10	1
Naphthalene	**0.13**	**I V**	0.19	0.049	ug/L		05/24/21 10:02	05/25/21 19:10	1
Phenanthrene	0.071	U	0.19	0.071	ug/L		05/24/21 10:02	05/25/21 19:10	1
Pyrene	0.091	U	0.19	0.091	ug/L		05/24/21 10:02	05/25/21 19:10	1
Benzo[a]anthracene	0.026	U J3	0.19	0.026	ug/L		05/24/21 10:02	05/25/21 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*15 - 122*	*05/24/21 10:02*	*05/25/21 19:10*	*1*
Nitrobenzene-d5 (Surr)	*54*		*19 - 130*	*05/24/21 10:02*	*05/25/21 19:10*	*1*
Terphenyl-d14 (Surr)	*73*		*33 - 138*	*05/24/21 10:02*	*05/25/21 19:10*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.38	U	1.2	0.38	mg/L		05/21/21 13:57	05/22/21 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*190*	*J1*	*40 - 129*	*05/21/21 13:57*	*05/22/21 00:52*	*1*
o-Terphenyl	*129*		*66 - 139*	*05/21/21 13:57*	*05/22/21 00:52*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:46	1
Arsenic	**0.0044**	**I**	0.010	0.0030	mg/L		05/27/21 10:39	05/28/21 22:46	1
Barium	**0.0077**	**I**	0.010	0.0030	mg/L		05/27/21 10:39	05/29/21 18:51	1
Cadmium	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:46	1
Chromium	**0.0089**	**I**	0.010	0.0050	mg/L		05/27/21 10:39	05/28/21 22:46	1
Lead	**0.0027**	**I**	0.010	0.0020	mg/L		05/27/21 10:39	05/28/21 22:46	1
Selenium	0.0080	U	0.020	0.0080	mg/L		05/27/21 10:39	05/28/21 22:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070	U	0.20	0.070	ug/L		05/19/21 08:10	05/19/21 18:13	1

Client Sample ID: GW-4

Date Collected: 05/17/21 14:02
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			05/21/21 20:00	1
Dichlorobromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Bromoform	0.71	U	5.0	0.71	ug/L			05/21/21 20:00	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Chloroethane	0.76	U	1.0	0.76	ug/L			05/21/21 20:00	1
Chloroform	0.60	U	1.0	0.60	ug/L			05/21/21 20:00	1
Chloromethane	0.83	U	1.0	0.83	ug/L			05/21/21 20:00	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			05/21/21 20:00	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			05/21/21 20:00	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 20:00	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 20:00	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			05/21/21 20:00	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			05/21/21 20:00	1
Toluene	**0.41**	**I**	1.0	0.41	ug/L			05/21/21 20:00	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			05/21/21 20:00	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
o-Xylene	0.60	U	5.0	0.60	ug/L			05/21/21 20:00	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			05/21/21 20:00	1
Bromomethane	0.98	U	1.0	0.98	ug/L			05/21/21 20:00	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 20:00	1
Acrolein	10	U	20	10	ug/L			05/21/21 20:00	1
Acrylonitrile	2.8	U	10	2.8	ug/L			05/21/21 20:00	1
2-Chloroethyl vinyl ether	2.0	U	5.0	2.0	ug/L			05/21/21 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*05/21/21 20:00*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*05/21/21 20:00*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*05/21/21 20:00*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.023	U	0.20	0.023	ug/L		05/24/21 10:02	05/25/21 19:27	1
Acenaphthylene	0.022	U	0.20	0.022	ug/L		05/24/21 10:02	05/25/21 19:27	1
Anthracene	0.025	U	0.20	0.025	ug/L		05/24/21 10:02	05/25/21 19:27	1
Benzo[a]pyrene	0.072	U	0.20	0.072	ug/L		05/24/21 10:02	05/25/21 19:27	1
Benzo[b]fluoranthene	0.018	U	0.20	0.018	ug/L		05/24/21 10:02	05/25/21 19:27	1
Benzo[g,h,i]perylene	0.042	U	0.20	0.042	ug/L		05/24/21 10:02	05/25/21 19:27	1
Benzo[k]fluoranthene	0.039	U	0.20	0.039	ug/L		05/24/21 10:02	05/25/21 19:27	1

Client Sample ID: GW-4

Date Collected: 05/17/21 14:02
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-8

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.036	U	0.20	0.036	ug/L		05/24/21 10:02	05/25/21 19:27	1
Dibenz(a,h)anthracene	0.048	U	0.20	0.048	ug/L		05/24/21 10:02	05/25/21 19:27	1
Fluoranthene	0.091	U	0.20	0.091	ug/L		05/24/21 10:02	05/25/21 19:27	1
Fluorene	0.030	U	0.20	0.030	ug/L		05/24/21 10:02	05/25/21 19:27	1
Indeno[1,2,3-cd]pyrene	0.031	U	0.20	0.031	ug/L		05/24/21 10:02	05/25/21 19:27	1
1-Methylnaphthalene	0.066	U	0.20	0.066	ug/L		05/24/21 10:02	05/25/21 19:27	1
2-Methylnaphthalene	0.038	U	0.20	0.038	ug/L		05/24/21 10:02	05/25/21 19:27	1
Naphthalene	**0.14**	**I V**	0.20	0.049	ug/L		05/24/21 10:02	05/25/21 19:27	1
Phenanthrene	0.071	U	0.20	0.071	ug/L		05/24/21 10:02	05/25/21 19:27	1
Pyrene	0.091	U	0.20	0.091	ug/L		05/24/21 10:02	05/25/21 19:27	1
Benzo[a]anthracene	0.026	U J3	0.20	0.026	ug/L		05/24/21 10:02	05/25/21 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*15 - 122*	*05/24/21 10:02*	*05/25/21 19:27*	*1*
Nitrobenzene-d5 (Surr)	*69*		*19 - 130*	*05/24/21 10:02*	*05/25/21 19:27*	*1*
Terphenyl-d14 (Surr)	*98*		*33 - 138*	*05/24/21 10:02*	*05/25/21 19:27*	*1*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.35	U	1.1	0.35	mg/L		05/21/21 13:57	05/22/21 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*200*	*J1*	*40 - 129*	*05/21/21 13:57*	*05/22/21 01:06*	*1*
o-Terphenyl	*141*	*J1*	*66 - 139*	*05/21/21 13:57*	*05/22/21 01:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/29/21 18:54	1
Arsenic	**0.020**		0.010	0.0030	mg/L		05/27/21 10:39	06/01/21 14:34	1
Barium	**0.24**		0.010	0.0030	mg/L		05/27/21 10:39	05/29/21 18:54	1
Cadmium	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/29/21 18:54	1
Chromium	**0.20**		0.010	0.0050	mg/L		05/27/21 10:39	05/29/21 18:54	1
Lead	**0.10**		0.010	0.0020	mg/L		05/27/21 10:39	05/29/21 18:54	1
Selenium	**0.013**	**I**	0.020	0.0080	mg/L		05/27/21 10:39	05/29/21 18:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070	U	0.20	0.070	ug/L		05/19/21 08:10	05/19/21 18:18	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

GC Semi VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J1	Estimated value; value may not be accurate. Surrogate recovery outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: SB-1
Date Collected: 05/17/21 10:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	532552	05/20/21 08:47	AW	TAL PEN

Client Sample ID: SB-1
Date Collected: 05/17/21 10:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-1
Matrix: Solid
Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			533271	05/26/21 07:29	EEH	TAL PEN
Total/NA	Analysis	8260B		1	533235	05/26/21 13:07	WPD	TAL PEN
Total/NA	Prep	3546			532494	05/19/21 15:26	BKL	TAL PEN
Total/NA	Analysis	8270D		1	532573	05/20/21 21:55	S1B	TAL PEN
Total/NA	Prep	3546			532598	05/20/21 11:01	BKL	TAL PEN
Total/NA	Analysis	FL-PRO		1	532685	05/20/21 18:46	LHB	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532562	05/19/21 21:34	LDC	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532716	05/20/21 18:54	JTW	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532928	05/21/21 15:42	JTW	TAL PEN
Total/NA	Prep	7471B			532086	05/18/21 10:23	NET	TAL PEN
Total/NA	Analysis	7471B		1	532437	05/19/21 11:32	NET	TAL PEN

Client Sample ID: SB-2
Date Collected: 05/17/21 11:20
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	532552	05/20/21 08:47	AW	TAL PEN

Client Sample ID: SB-2
Date Collected: 05/17/21 11:20
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-2
Matrix: Solid
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			533271	05/26/21 07:29	EEH	TAL PEN
Total/NA	Analysis	8260B		1	533235	05/26/21 13:35	WPD	TAL PEN
Total/NA	Prep	3546			532494	05/19/21 15:26	BKL	TAL PEN
Total/NA	Analysis	8270D		1	532573	05/20/21 22:17	S1B	TAL PEN
Total/NA	Prep	3546			532598	05/20/21 11:01	BKL	TAL PEN
Total/NA	Analysis	FL-PRO		1	532685	05/20/21 19:00	LHB	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532562	05/19/21 21:52	LDC	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532716	05/20/21 19:05	JTW	TAL PEN

Lab Chronicle

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: SB-2
Date Collected: 05/17/21 11:20
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-2
Matrix: Solid
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532928	05/21/21 16:04	JTW	TAL PEN
Total/NA	Prep	7471B			532086	05/18/21 10:23	NET	TAL PEN
Total/NA	Analysis	7471B		1	532437	05/19/21 11:34	NET	TAL PEN

Client Sample ID: SB-3
Date Collected: 05/17/21 12:45
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	532552	05/20/21 08:47	AW	TAL PEN

Client Sample ID: SB-3
Date Collected: 05/17/21 12:45
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-3
Matrix: Solid
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			533271	05/26/21 07:29	EEH	TAL PEN
Total/NA	Analysis	8260B		1	533235	05/26/21 14:03	WPD	TAL PEN
Total/NA	Prep	3546			532494	05/19/21 15:26	BKL	TAL PEN
Total/NA	Analysis	8270D		1	532573	05/20/21 22:39	S1B	TAL PEN
Total/NA	Prep	3546			532598	05/20/21 11:01	BKL	TAL PEN
Total/NA	Analysis	FL-PRO		1	532685	05/20/21 19:13	LHB	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532562	05/19/21 21:56	LDC	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532716	05/20/21 19:08	JTW	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532928	05/21/21 16:08	JTW	TAL PEN
Total/NA	Prep	7471B			532086	05/18/21 10:23	NET	TAL PEN
Total/NA	Analysis	7471B		1	532437	05/19/21 11:36	NET	TAL PEN

Client Sample ID: SB-4
Date Collected: 05/17/21 13:27
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	532552	05/20/21 08:47	AW	TAL PEN

Client Sample ID: SB-4
Date Collected: 05/17/21 13:27
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-4
Matrix: Solid
Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			533271	05/26/21 07:29	EEH	TAL PEN
Total/NA	Analysis	8260B		1	533235	05/26/21 14:30	WPD	TAL PEN

Lab Chronicle

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: SB-4
Date Collected: 05/17/21 13:27
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-4
Matrix: Solid
Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			532494	05/19/21 15:26	BKL	TAL PEN
Total/NA	Analysis	8270D		1	532573	05/20/21 23:02	S1B	TAL PEN
Total/NA	Prep	3546			532598	05/20/21 11:01	BKL	TAL PEN
Total/NA	Analysis	FL-PRO		1	532685	05/20/21 19:27	LHB	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532562	05/19/21 22:00	LDC	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532716	05/20/21 19:23	JTW	TAL PEN
Total/NA	Prep	3050B			532418	05/19/21 11:00	KWN	TAL PEN
Total/NA	Analysis	6010C		1	532928	05/21/21 16:12	JTW	TAL PEN
Total/NA	Prep	7471B			532086	05/18/21 10:23	NET	TAL PEN
Total/NA	Analysis	7471B		1	532437	05/19/21 11:37	NET	TAL PEN

Client Sample ID: GW-1
Date Collected: 05/17/21 10:50
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532728	05/21/21 18:41	SAB	TAL PEN
Total/NA	Prep	3510C			532965	05/24/21 10:02	MAC	TAL PEN
Total/NA	Analysis	8270D LL		1	533133	05/25/21 18:34	KJA	TAL PEN
Total/NA	Prep	3511			532811	05/21/21 13:57	KWS	TAL PEN
Total/NA	Analysis	FL-PRO		1	532842	05/22/21 00:25	JAW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533754	05/28/21 22:42	JTW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533856	05/29/21 18:47	JTW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533975	06/01/21 14:30	JTW	TAL PEN
Total/NA	Prep	7470A			532325	05/19/21 08:10	NET	TAL PEN
Total/NA	Analysis	7470A		1	532563	05/19/21 18:09	NET	TAL PEN

Client Sample ID: GW-2
Date Collected: 05/17/21 11:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532728	05/21/21 19:08	SAB	TAL PEN
Total/NA	Prep	3510C			532965	05/24/21 10:02	MAC	TAL PEN
Total/NA	Analysis	8270D LL		1	533133	05/25/21 18:52	KJA	TAL PEN
Total/NA	Prep	3511			532811	05/21/21 13:57	KWS	TAL PEN
Total/NA	Analysis	FL-PRO		1	532842	05/22/21 00:39	JAW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533754	05/28/21 22:24	JTW	TAL PEN

Lab Chronicle

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Client Sample ID: GW-2
Date Collected: 05/17/21 11:58
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533856	05/29/21 18:25	JTW	TAL PEN
Total/NA	Prep	7470A			532325	05/19/21 08:10	NET	TAL PEN
Total/NA	Analysis	7470A		1	532563	05/19/21 18:11	NET	TAL PEN

Client Sample ID: GW-3
Date Collected: 05/17/21 13:03
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532728	05/21/21 19:34	SAB	TAL PEN
Total/NA	Prep	3510C			532965	05/24/21 10:02	MAC	TAL PEN
Total/NA	Analysis	8270D LL		1	533133	05/25/21 19:10	KJA	TAL PEN
Total/NA	Prep	3511			532811	05/21/21 13:57	KWS	TAL PEN
Total/NA	Analysis	FL-PRO		1	532842	05/22/21 00:52	JAW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533754	05/28/21 22:46	JTW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533856	05/29/21 18:51	JTW	TAL PEN
Total/NA	Prep	7470A			532325	05/19/21 08:10	NET	TAL PEN
Total/NA	Analysis	7470A		1	532563	05/19/21 18:13	NET	TAL PEN

Client Sample ID: GW-4
Date Collected: 05/17/21 14:02
Date Received: 05/18/21 08:29

Lab Sample ID: 400-203513-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532728	05/21/21 20:00	SAB	TAL PEN
Total/NA	Prep	3510C			532965	05/24/21 10:02	MAC	TAL PEN
Total/NA	Analysis	8270D LL		1	533133	05/25/21 19:27	KJA	TAL PEN
Total/NA	Prep	3511			532811	05/21/21 13:57	KWS	TAL PEN
Total/NA	Analysis	FL-PRO		1	532842	05/22/21 01:06	JAW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533856	05/29/21 18:54	JTW	TAL PEN
Total/NA	Prep	3010A			533469	05/27/21 10:39	KW	TAL PEN
Total/NA	Analysis	6010C		1	533975	06/01/21 14:34	JTW	TAL PEN
Total/NA	Prep	7470A			532325	05/19/21 08:10	NET	TAL PEN
Total/NA	Analysis	7470A		1	532563	05/19/21 18:18	NET	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 532728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	8260B	
400-203513-6	GW-2	Total/NA	Water	8260B	
400-203513-7	GW-3	Total/NA	Water	8260B	
400-203513-8	GW-4	Total/NA	Water	8260B	
MB 400-532728/4	Method Blank	Total/NA	Water	8260B	
LCS 400-532728/1002	Lab Control Sample	Total/NA	Water	8260B	
400-203318-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
400-203318-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 533235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	8260B	533271
400-203513-2	SB-2	Total/NA	Solid	8260B	533271
400-203513-3	SB-3	Total/NA	Solid	8260B	533271
400-203513-4	SB-4	Total/NA	Solid	8260B	533271
MB 400-533271/2-A	Method Blank	Total/NA	Solid	8260B	533271
LCS 400-533271/1-A	Lab Control Sample	Total/NA	Solid	8260B	533271
400-203775-A-5-E MS	Matrix Spike	Total/NA	Solid	8260B	533271
400-203775-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	533271

Prep Batch: 533271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	5035	
400-203513-2	SB-2	Total/NA	Solid	5035	
400-203513-3	SB-3	Total/NA	Solid	5035	
400-203513-4	SB-4	Total/NA	Solid	5035	
MB 400-533271/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-533271/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-203775-A-5-E MS	Matrix Spike	Total/NA	Solid	5035	
400-203775-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 532494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	3546	
400-203513-2	SB-2	Total/NA	Solid	3546	
400-203513-3	SB-3	Total/NA	Solid	3546	
400-203513-4	SB-4	Total/NA	Solid	3546	
MB 400-532494/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-532494/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 400-532494/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 532573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	8270D	532494
400-203513-2	SB-2	Total/NA	Solid	8270D	532494
400-203513-3	SB-3	Total/NA	Solid	8270D	532494
400-203513-4	SB-4	Total/NA	Solid	8270D	532494
MB 400-532494/1-A	Method Blank	Total/NA	Solid	8270D	532494
LCS 400-532494/2-A	Lab Control Sample	Total/NA	Solid	8270D	532494

GC/MS Semi VOA (Continued)

Analysis Batch: 532573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-532494/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	532494

Prep Batch: 532965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	3510C	
400-203513-6	GW-2	Total/NA	Water	3510C	
400-203513-7	GW-3	Total/NA	Water	3510C	
400-203513-8	GW-4	Total/NA	Water	3510C	
MB 400-532965/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-532965/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-532965/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 533133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	8270D LL	532965
400-203513-6	GW-2	Total/NA	Water	8270D LL	532965
400-203513-7	GW-3	Total/NA	Water	8270D LL	532965
400-203513-8	GW-4	Total/NA	Water	8270D LL	532965
MB 400-532965/1-A	Method Blank	Total/NA	Water	8270D LL	532965
LCS 400-532965/2-A	Lab Control Sample	Total/NA	Water	8270D LL	532965
LCSD 400-532965/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	532965

GC Semi VOA

Prep Batch: 532598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	3546	
400-203513-2	SB-2	Total/NA	Solid	3546	
400-203513-3	SB-3	Total/NA	Solid	3546	
400-203513-4	SB-4	Total/NA	Solid	3546	
MB 400-532598/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-532598/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-203513-1 MS	SB-1	Total/NA	Solid	3546	
400-203513-1 MSD	SB-1	Total/NA	Solid	3546	

Analysis Batch: 532685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	FL-PRO	532598
400-203513-2	SB-2	Total/NA	Solid	FL-PRO	532598
400-203513-3	SB-3	Total/NA	Solid	FL-PRO	532598
400-203513-4	SB-4	Total/NA	Solid	FL-PRO	532598
MB 400-532598/1-A	Method Blank	Total/NA	Solid	FL-PRO	532598
LCS 400-532598/2-A	Lab Control Sample	Total/NA	Solid	FL-PRO	532598
400-203513-1 MS	SB-1	Total/NA	Solid	FL-PRO	532598
400-203513-1 MSD	SB-1	Total/NA	Solid	FL-PRO	532598

Prep Batch: 532811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	3511	
400-203513-6	GW-2	Total/NA	Water	3511	
400-203513-7	GW-3	Total/NA	Water	3511	

GC Semi VOA (Continued)

Prep Batch: 532811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-8	GW-4	Total/NA	Water	3511	
MB 400-532811/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-532811/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-532811/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 532842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	FL-PRO	532811
400-203513-6	GW-2	Total/NA	Water	FL-PRO	532811
400-203513-7	GW-3	Total/NA	Water	FL-PRO	532811
400-203513-8	GW-4	Total/NA	Water	FL-PRO	532811
MB 400-532811/1-A	Method Blank	Total/NA	Water	FL-PRO	532811
LCS 400-532811/2-A	Lab Control Sample	Total/NA	Water	FL-PRO	532811
LCSD 400-532811/3-A	Lab Control Sample Dup	Total/NA	Water	FL-PRO	532811

Metals

Prep Batch: 532086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	7471B	
400-203513-2	SB-2	Total/NA	Solid	7471B	
400-203513-3	SB-3	Total/NA	Solid	7471B	
400-203513-4	SB-4	Total/NA	Solid	7471B	
MB 400-532086/14-A	Method Blank	Total/NA	Solid	7471B	
LCS 400-532086/15-A	Lab Control Sample	Total/NA	Solid	7471B	
400-203382-I-1-B MS	Matrix Spike	Total/NA	Solid	7471B	
400-203382-I-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	

Prep Batch: 532325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	7470A	
400-203513-6	GW-2	Total/NA	Water	7470A	
400-203513-7	GW-3	Total/NA	Water	7470A	
400-203513-8	GW-4	Total/NA	Water	7470A	
MB 400-532325/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-532325/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-203520-AD-3-B MS	Matrix Spike	Total/NA	Water	7470A	
400-203520-AD-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 532418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	3050B	
400-203513-2	SB-2	Total/NA	Solid	3050B	
400-203513-3	SB-3	Total/NA	Solid	3050B	
400-203513-4	SB-4	Total/NA	Solid	3050B	
MB 400-532418/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 400-532418/2-A	Lab Control Sample	Total/NA	Solid	3050B	
400-203513-1 MS	SB-1	Total/NA	Solid	3050B	
400-203513-1 MSD	SB-1	Total/NA	Solid	3050B	

Metals

Analysis Batch: 532437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	7471B	532086
400-203513-2	SB-2	Total/NA	Solid	7471B	532086
400-203513-3	SB-3	Total/NA	Solid	7471B	532086
400-203513-4	SB-4	Total/NA	Solid	7471B	532086
MB 400-532086/14-A	Method Blank	Total/NA	Solid	7471B	532086
LCS 400-532086/15-A	Lab Control Sample	Total/NA	Solid	7471B	532086
400-203382-I-1-B MS	Matrix Spike	Total/NA	Solid	7471B	532086
400-203382-I-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	532086

Analysis Batch: 532562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	6010C	532418
400-203513-2	SB-2	Total/NA	Solid	6010C	532418
400-203513-3	SB-3	Total/NA	Solid	6010C	532418
400-203513-4	SB-4	Total/NA	Solid	6010C	532418
MB 400-532418/1-A	Method Blank	Total/NA	Solid	6010C	532418
LCS 400-532418/2-A	Lab Control Sample	Total/NA	Solid	6010C	532418
400-203513-1 MS	SB-1	Total/NA	Solid	6010C	532418
400-203513-1 MSD	SB-1	Total/NA	Solid	6010C	532418

Analysis Batch: 532563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	7470A	532325
400-203513-6	GW-2	Total/NA	Water	7470A	532325
400-203513-7	GW-3	Total/NA	Water	7470A	532325
400-203513-8	GW-4	Total/NA	Water	7470A	532325
MB 400-532325/14-A	Method Blank	Total/NA	Water	7470A	532325
LCS 400-532325/15-A	Lab Control Sample	Total/NA	Water	7470A	532325
400-203520-AD-3-B MS	Matrix Spike	Total/NA	Water	7470A	532325
400-203520-AD-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	532325

Analysis Batch: 532716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	6010C	532418
400-203513-2	SB-2	Total/NA	Solid	6010C	532418
400-203513-3	SB-3	Total/NA	Solid	6010C	532418
400-203513-4	SB-4	Total/NA	Solid	6010C	532418
MB 400-532418/1-A	Method Blank	Total/NA	Solid	6010C	532418
LCS 400-532418/2-A	Lab Control Sample	Total/NA	Solid	6010C	532418
400-203513-1 MS	SB-1	Total/NA	Solid	6010C	532418
400-203513-1 MSD	SB-1	Total/NA	Solid	6010C	532418

Analysis Batch: 532928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	6010C	532418
400-203513-2	SB-2	Total/NA	Solid	6010C	532418
400-203513-3	SB-3	Total/NA	Solid	6010C	532418
400-203513-4	SB-4	Total/NA	Solid	6010C	532418
MB 400-532418/1-A	Method Blank	Total/NA	Solid	6010C	532418
LCS 400-532418/2-A	Lab Control Sample	Total/NA	Solid	6010C	532418
400-203513-1 MS	SB-1	Total/NA	Solid	6010C	532418

Metals (Continued)

Analysis Batch: 532928 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1 MSD	SB-1	Total/NA	Solid	6010C	532418

Prep Batch: 533469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	3010A	
400-203513-6	GW-2	Total/NA	Water	3010A	
400-203513-7	GW-3	Total/NA	Water	3010A	
400-203513-8	GW-4	Total/NA	Water	3010A	
MB 400-533469/1-A	Method Blank	Total/NA	Water	3010A	
LCS 400-533469/2-A	Lab Control Sample	Total/NA	Water	3010A	
400-203513-6 MS	GW-2	Total/NA	Water	3010A	
400-203513-6 MSD	GW-2	Total/NA	Water	3010A	

Analysis Batch: 533754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	6010C	533469
400-203513-6	GW-2	Total/NA	Water	6010C	533469
400-203513-7	GW-3	Total/NA	Water	6010C	533469
MB 400-533469/1-A	Method Blank	Total/NA	Water	6010C	533469
LCS 400-533469/2-A	Lab Control Sample	Total/NA	Water	6010C	533469

Analysis Batch: 533856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	6010C	533469
400-203513-6	GW-2	Total/NA	Water	6010C	533469
400-203513-7	GW-3	Total/NA	Water	6010C	533469
400-203513-8	GW-4	Total/NA	Water	6010C	533469
LCS 400-533469/2-A	Lab Control Sample	Total/NA	Water	6010C	533469
400-203513-6 MS	GW-2	Total/NA	Water	6010C	533469
400-203513-6 MSD	GW-2	Total/NA	Water	6010C	533469

Analysis Batch: 533975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-5	GW-1	Total/NA	Water	6010C	533469
400-203513-8	GW-4	Total/NA	Water	6010C	533469

General Chemistry

Analysis Batch: 532552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203513-1	SB-1	Total/NA	Solid	Moisture	
400-203513-2	SB-2	Total/NA	Solid	Moisture	
400-203513-3	SB-3	Total/NA	Solid	Moisture	
400-203513-4	SB-4	Total/NA	Solid	Moisture	
400-203513-1 DU	SB-1	Total/NA	Solid	Moisture	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-532728/4
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			05/21/21 10:47	1
Dichlorobromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Bromoform	0.71	U	5.0	0.71	ug/L			05/21/21 10:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Chloroethane	0.76	U	1.0	0.76	ug/L			05/21/21 10:47	1
Chloroform	0.60	U	1.0	0.60	ug/L			05/21/21 10:47	1
Chloromethane	0.83	U	1.0	0.83	ug/L			05/21/21 10:47	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			05/21/21 10:47	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			05/21/21 10:47	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 10:47	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			05/21/21 10:47	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			05/21/21 10:47	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			05/21/21 10:47	1
Toluene	0.41	U	1.0	0.41	ug/L			05/21/21 10:47	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			05/21/21 10:47	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
o-Xylene	0.60	U	5.0	0.60	ug/L			05/21/21 10:47	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			05/21/21 10:47	1
Bromomethane	0.98	U	1.0	0.98	ug/L			05/21/21 10:47	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			05/21/21 10:47	1
Acrolein	10	U	20	10	ug/L			05/21/21 10:47	1
Acrylonitrile	2.8	U	10	2.8	ug/L			05/21/21 10:47	1
2-Chloroethyl vinyl ether	2.0	U	5.0	2.0	ug/L			05/21/21 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*05/21/21 10:47*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*05/21/21 10:47*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*05/21/21 10:47*	*1*

Lab Sample ID: LCS 400-532728/1002
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	46.8		ug/L		94	70 - 130
Dichlorobromomethane	50.0	47.2		ug/L		94	67 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-532728/1002
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	50.0	47.2		ug/L		94	57 - 140
Carbon tetrachloride	50.0	47.9		ug/L		96	61 - 137
Chlorobenzene	50.0	49.6		ug/L		99	70 - 130
Chloroethane	50.0	41.0		ug/L		82	55 - 141
Chloroform	50.0	47.0		ug/L		94	69 - 130
Chloromethane	50.0	36.1		ug/L		72	58 - 137
Chlorodibromomethane	50.0	48.8		ug/L		98	67 - 135
1,3-Dichlorobenzene	50.0	53.3		ug/L		107	70 - 130
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
1,1-Dichloroethane	50.0	46.6		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	45.1		ug/L		90	69 - 130
1,1-Dichloroethene	50.0	35.0		ug/L		70	63 - 134
cis-1,2-Dichloroethene	50.0	45.6		ug/L		91	68 - 130
trans-1,2-Dichloroethene	50.0	47.1		ug/L		94	70 - 130
1,2-Dichloropropane	50.0	47.4		ug/L		95	70 - 130
cis-1,3-Dichloropropene	50.0	47.2		ug/L		94	69 - 132
trans-1,3-Dichloropropene	50.0	47.5		ug/L		95	63 - 130
Ethylbenzene	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	46.7		ug/L		93	66 - 135
1,1,2,2-Tetrachloroethane	50.0	44.8		ug/L		90	70 - 131
Tetrachloroethene	50.0	43.3		ug/L		87	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
1,1,1-Trichloroethane	50.0	47.2		ug/L		94	68 - 130
1,1,2-Trichloroethane	50.0	46.0		ug/L		92	70 - 130
Trichloroethene	50.0	48.3		ug/L		97	70 - 130
Vinyl chloride	50.0	38.7		ug/L		77	59 - 136
o-Xylene	50.0	50.2		ug/L		100	70 - 130
m-Xylene & p-Xylene	50.0	51.3		ug/L		103	70 - 130
Bromomethane	50.0	50.8		ug/L		102	10 - 160
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	67 - 130
Acrolein	500	425		ug/L		85	38 - 160
Acrylonitrile	500	443		ug/L		89	64 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 400-203318-A-1 MS
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.38	U	50.0	47.0		ug/L		94	56 - 142
Dichlorobromomethane	0.50	U	50.0	48.2		ug/L		96	59 - 143
Bromoform	0.71	U	50.0	45.8		ug/L		92	50 - 140
Carbon tetrachloride	0.50	U	50.0	46.6		ug/L		93	55 - 145
Chlorobenzene	0.50	U	50.0	49.5		ug/L		99	64 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-203318-A-1 MS
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	0.76	U	50.0	38.4		ug/L		77	50 - 150
Chloroform	0.60	U	50.0	46.1		ug/L		92	60 - 141
Chloromethane	0.83	U	50.0	32.7		ug/L		65	49 - 148
Chlorodibromomethane	0.50	U	50.0	47.8		ug/L		96	56 - 143
1,3-Dichlorobenzene	0.54	U	50.0	50.2		ug/L		100	54 - 135
1,4-Dichlorobenzene	0.64	U	50.0	50.6		ug/L		101	53 - 135
1,1-Dichloroethane	0.50	U	50.0	46.8		ug/L		94	61 - 144
1,2-Dichloroethane	0.50	U	50.0	44.4		ug/L		89	60 - 141
1,1-Dichloroethene	0.50	U	50.0	41.4		ug/L		83	54 - 147
cis-1,2-Dichloroethene	43		50.0	88.2		ug/L		90	59 - 143
trans-1,2-Dichloroethene	0.50	U	50.0	46.1		ug/L		92	61 - 143
1,2-Dichloropropane	0.50	U	50.0	48.0		ug/L		96	66 - 137
cis-1,3-Dichloropropene	0.50	U	50.0	46.2		ug/L		92	57 - 140
trans-1,3-Dichloropropene	0.50	U	50.0	46.7		ug/L		93	53 - 133
Ethylbenzene	0.50	U	50.0	49.3		ug/L		99	58 - 131
Methylene Chloride	3.0	U	50.0	45.5		ug/L		91	60 - 146
1,1,2,2-Tetrachloroethane	0.50	U	50.0	43.5		ug/L		87	66 - 135
Tetrachloroethene	0.58	U	50.0	40.4		ug/L		81	52 - 133
Toluene	0.41	U	50.0	47.3		ug/L		95	65 - 130
1,1,1-Trichloroethane	0.50	U	50.0	46.0		ug/L		92	57 - 142
1,1,2-Trichloroethane	0.50	U	50.0	47.3		ug/L		95	66 - 131
Trichloroethene	0.50	U	50.0	46.5		ug/L		93	64 - 136
Vinyl chloride	4.2		50.0	39.6		ug/L		71	46 - 150
o-Xylene	0.60	U	50.0	49.8		ug/L		100	61 - 130
m-Xylene & p-Xylene	1.6	U	50.0	49.9		ug/L		100	57 - 130
Bromomethane	0.98	U	50.0	47.1		ug/L		94	10 - 150
1,2-Dichlorobenzene	0.50	U	50.0	49.5		ug/L		99	52 - 137
Acrolein	10	U	500	403		ug/L		81	38 - 150
Acrylonitrile	2.8	U	500	429		ug/L		86	62 - 149

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 400-203318-A-1 MSD
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.38	U	50.0	46.1		ug/L		92	56 - 142	2	30
Dichlorobromomethane	0.50	U	50.0	45.7		ug/L		91	59 - 143	5	30
Bromoform	0.71	U	50.0	45.0		ug/L		90	50 - 140	2	30
Carbon tetrachloride	0.50	U	50.0	46.5		ug/L		93	55 - 145	0	30
Chlorobenzene	0.50	U	50.0	46.8		ug/L		94	64 - 130	6	30
Chloroethane	0.76	U	50.0	40.7		ug/L		81	50 - 150	6	30
Chloroform	0.60	U	50.0	45.7		ug/L		91	60 - 141	1	30
Chloromethane	0.83	U	50.0	35.7		ug/L		71	49 - 148	9	31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-203318-A-1 MSD
Matrix: Water
Analysis Batch: 532728

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorodibromomethane	0.50	U	50.0	46.7		ug/L		93	56 - 143	2	30
1,3-Dichlorobenzene	0.54	U	50.0	46.9		ug/L		94	54 - 135	7	30
1,4-Dichlorobenzene	0.64	U	50.0	46.5		ug/L		93	53 - 135	9	30
1,1-Dichloroethane	0.50	U	50.0	46.3		ug/L		93	61 - 144	1	30
1,2-Dichloroethane	0.50	U	50.0	43.4		ug/L		87	60 - 141	2	30
1,1-Dichloroethene	0.50	U	50.0	34.3		ug/L		69	54 - 147	19	30
cis-1,2-Dichloroethene	43		50.0	87.0		ug/L		88	59 - 143	1	30
trans-1,2-Dichloroethene	0.50	U	50.0	45.4		ug/L		91	61 - 143	1	30
1,2-Dichloropropane	0.50	U	50.0	47.1		ug/L		94	66 - 137	2	30
cis-1,3-Dichloropropene	0.50	U	50.0	45.8		ug/L		92	57 - 140	1	30
trans-1,3-Dichloropropene	0.50	U	50.0	45.4		ug/L		91	53 - 133	3	30
Ethylbenzene	0.50	U	50.0	46.2		ug/L		92	58 - 131	6	30
Methylene Chloride	3.0	U	50.0	45.0		ug/L		90	60 - 146	1	32
1,1,2,2-Tetrachloroethane	0.50	U	50.0	45.6		ug/L		91	66 - 135	5	30
Tetrachloroethene	0.58	U	50.0	38.4		ug/L		77	52 - 133	5	30
Toluene	0.41	U	50.0	45.9		ug/L		92	65 - 130	3	30
1,1,1-Trichloroethane	0.50	U	50.0	45.6		ug/L		91	57 - 142	1	30
1,1,2-Trichloroethane	0.50	U	50.0	45.5		ug/L		91	66 - 131	4	30
Trichloroethene	0.50	U	50.0	46.4		ug/L		93	64 - 136	0	30
Vinyl chloride	4.2		50.0	41.9		ug/L		76	46 - 150	6	30
o-Xylene	0.60	U	50.0	46.3		ug/L		93	61 - 130	7	30
m-Xylene & p-Xylene	1.6	U	50.0	46.9		ug/L		94	57 - 130	6	30
Bromomethane	0.98	U	50.0	52.4		ug/L		105	10 - 150	11	50
1,2-Dichlorobenzene	0.50	U	50.0	46.8		ug/L		94	52 - 137	6	30
Acrolein	10	U	500	427		ug/L		85	38 - 150	6	31
Acrylonitrile	2.8	U	500	434		ug/L		87	62 - 149	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 400-533271/2-A
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533271

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.67	U	5.0	0.67	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Dichlorobromomethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Bromoform	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Carbon tetrachloride	1.7	U	5.0	1.7	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Chlorobenzene	0.52	U	5.0	0.52	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Chloroethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Chloroform	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Chloromethane	1.0	U	5.0	1.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Chlorodibromomethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,3-Dichlorobenzene	0.95	U	5.0	0.95	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,4-Dichlorobenzene	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-533271/2-A
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533271

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.83	U	5.0	0.83	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,2-Dichloroethane	0.82	U	5.0	0.82	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,1-Dichloroethene	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
cis-1,2-Dichloroethene	0.76	U	5.0	0.76	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
trans-1,2-Dichloroethene	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,2-Dichloropropane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
cis-1,3-Dichloropropene	1.2	U	5.0	1.2	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
trans-1,3-Dichloropropene	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Ethylbenzene	0.61	U	5.0	0.61	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Methylene Chloride	10	U	15	10	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,1,2,2-Tetrachloroethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Tetrachloroethene	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Toluene	1.0	U	5.0	1.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,1,1-Trichloroethane	1.1	U	5.0	1.1	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,1,2-Trichloroethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Trichloroethene	1.0	U	5.0	1.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Vinyl chloride	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
o-Xylene	1.0	U	5.0	1.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
m-Xylene & p-Xylene	1.3	U	5.0	1.3	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Bromomethane	2.5	U	5.0	2.5	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
1,2-Dichlorobenzene	0.71	U	5.0	0.71	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Acrolein	28	U	50	28	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
Acrylonitrile	8.0	U	20	8.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1
2-Chloroethyl vinyl ether	5.0	U	10	5.0	ug/Kg		05/26/21 07:29	05/26/21 09:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*67 - 130*	*05/26/21 07:29*	*05/26/21 09:31*	*1*
Dibromofluoromethane	*103*		*77 - 127*	*05/26/21 07:29*	*05/26/21 09:31*	*1*
Toluene-d8 (Surr)	*89*		*76 - 127*	*05/26/21 07:29*	*05/26/21 09:31*	*1*

Lab Sample ID: LCS 400-533271/1-A
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	55.4		ug/Kg		111	65 - 130
Dichlorobromomethane	50.0	51.3		ug/Kg		103	61 - 130
Bromoform	50.0	41.9		ug/Kg		84	52 - 136
Carbon tetrachloride	50.0	50.4		ug/Kg		101	60 - 130
Chlorobenzene	50.0	46.2		ug/Kg		92	70 - 130
Chloroethane	50.0	49.4		ug/Kg		99	55 - 134
Chloroform	50.0	51.2		ug/Kg		102	62 - 130
Chloromethane	50.0	30.7		ug/Kg		61	49 - 136
Chlorodibromomethane	50.0	46.3		ug/Kg		93	58 - 132
1,3-Dichlorobenzene	50.0	44.7		ug/Kg		89	66 - 130
1,4-Dichlorobenzene	50.0	44.6		ug/Kg		89	65 - 130
1,1-Dichloroethane	50.0	46.3		ug/Kg		93	59 - 130
1,2-Dichloroethane	50.0	45.3		ug/Kg		91	62 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-533271/1-A
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	52.9		ug/Kg		106	55 - 137
cis-1,2-Dichloroethene	50.0	53.7		ug/Kg		107	53 - 135
trans-1,2-Dichloroethene	50.0	55.2		ug/Kg		110	58 - 134
1,2-Dichloropropane	50.0	48.1		ug/Kg		96	64 - 130
cis-1,3-Dichloropropene	50.0	55.2		ug/Kg		110	61 - 130
trans-1,3-Dichloropropene	50.0	43.7		ug/Kg		87	60 - 130
Ethylbenzene	50.0	44.5		ug/Kg		89	70 - 130
Methylene Chloride	50.0	54.7		ug/Kg		109	57 - 132
1,1,2,2-Tetrachloroethane	50.0	36.9		ug/Kg		74	60 - 131
Tetrachloroethene	50.0	50.5		ug/Kg		101	67 - 130
Toluene	50.0	43.2		ug/Kg		86	70 - 130
1,1,1-Trichloroethane	50.0	48.6		ug/Kg		97	63 - 130
1,1,2-Trichloroethane	50.0	45.3		ug/Kg		91	65 - 130
Trichloroethene	50.0	59.4		ug/Kg		119	65 - 130
Vinyl chloride	50.0	42.1		ug/Kg		84	52 - 132
o-Xylene	50.0	43.5		ug/Kg		87	70 - 130
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 130
Bromomethane	50.0	60.4		ug/Kg		121	12 - 160
1,2-Dichlorobenzene	50.0	42.6		ug/Kg		85	64 - 130
Acrolein	500	570		ug/Kg		114	40 - 150
Acrylonitrile	500	438		ug/Kg		88	60 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*67 - 130*
Dibromofluoromethane	*99*		*77 - 127*
Toluene-d8 (Surr)	*87*		*76 - 127*

Lab Sample ID: 400-203775-A-5-E MS
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.0	I	50.8	43.3		ug/Kg		83	38 - 131
Dichlorobromomethane	2.6	U	50.8	36.1		ug/Kg		71	37 - 130
Bromoform	2.6	U	50.8	28.4		ug/Kg		56	24 - 136
Carbon tetrachloride	1.8	U	50.8	35.8		ug/Kg		70	36 - 134
Chlorobenzene	0.54	U	50.8	30.7		ug/Kg		61	37 - 130
Chloroethane	2.6	U	50.8	41.8		ug/Kg		82	36 - 139
Chloroform	2.6	U	50.8	40.8		ug/Kg		80	39 - 130
Chloromethane	1.0	U	50.8	26.5		ug/Kg		52	35 - 136
Chlorodibromomethane	2.6	U	50.8	31.9		ug/Kg		63	32 - 132
1,3-Dichlorobenzene	0.98	U	50.8	21.1		ug/Kg		42	22 - 130
1,4-Dichlorobenzene	2.6	U	50.8	21.6		ug/Kg		42	21 - 130
1,1-Dichloroethane	0.86	U	50.8	37.7		ug/Kg		74	41 - 130
1,2-Dichloroethane	0.85	U	50.8	32.9		ug/Kg		65	37 - 130
1,1-Dichloroethene	2.6	U	50.8	45.6		ug/Kg		90	39 - 138
cis-1,2-Dichloroethene	0.79	U	50.8	40.1		ug/Kg		79	32 - 135
trans-1,2-Dichloroethene	2.6	U	50.8	46.0		ug/Kg		91	40 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-203775-A-5-E MS
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	2.6	U	50.8	35.9		ug/Kg		71	39 - 130
cis-1,3-Dichloropropene	1.2	U	50.8	37.4		ug/Kg		74	34 - 130
trans-1,3-Dichloropropene	2.6	U	50.8	32.2		ug/Kg		63	31 - 130
Ethylbenzene	0.63	U	50.8	27.0		ug/Kg		53	35 - 130
Methylene Chloride	10	U	50.8	42.8		ug/Kg		84	36 - 132
1,1,2,2-Tetrachloroethane	2.6	U	50.8	25.7		ug/Kg		51	10 - 149
Tetrachloroethene	2.6	U	50.8	29.8		ug/Kg		59	27 - 147
Toluene	1.3	I	50.8	32.3		ug/Kg		61	42 - 130
1,1,1-Trichloroethane	1.1	U	50.8	37.1		ug/Kg		73	41 - 130
1,1,2-Trichloroethane	2.6	U	50.8	33.5		ug/Kg		66	37 - 130
Trichloroethene	1.0	U	50.8	42.7		ug/Kg		84	34 - 144
Vinyl chloride	2.6	U	50.8	38.0		ug/Kg		75	35 - 136
o-Xylene	1.0	U	50.8	25.6		ug/Kg		50	35 - 130
m-Xylene & p-Xylene	1.3	U	50.8	25.8		ug/Kg		51	35 - 130
Bromomethane	2.6	U	50.8	55.7		ug/Kg		110	10 - 150
1,2-Dichlorobenzene	0.73	U	50.8	20.5		ug/Kg		40	20 - 130
Acrolein	29	U	508	59.4		ug/Kg		12	10 - 150
Acrylonitrile	8.3	U	508	268		ug/Kg		53	21 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*67 - 130*
Dibromofluoromethane	*98*		*77 - 127*
Toluene-d8 (Surr)	*91*		*76 - 127*

Lab Sample ID: 400-203775-A-5-F MSD
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	1.0	I	50.8	45.3		ug/Kg		87	38 - 131	5	36
Dichlorobromomethane	2.6	U	50.8	38.5		ug/Kg		76	37 - 130	6	34
Bromoform	2.6	U	50.8	30.3		ug/Kg		60	24 - 136	7	34
Carbon tetrachloride	1.8	U	50.8	40.0		ug/Kg		79	36 - 134	11	44
Chlorobenzene	0.54	U	50.8	32.3		ug/Kg		64	37 - 130	5	37
Chloroethane	2.6	U	50.8	44.0		ug/Kg		87	36 - 139	5	42
Chloroform	2.6	U	50.8	42.1		ug/Kg		83	39 - 130	3	35
Chloromethane	1.0	U	50.8	28.5		ug/Kg		56	35 - 136	7	41
Chlorodibromomethane	2.6	U	50.8	33.8		ug/Kg		66	32 - 132	6	34
1,3-Dichlorobenzene	0.98	U	50.8	24.2		ug/Kg		48	22 - 130	14	41
1,4-Dichlorobenzene	2.6	U	50.8	24.4		ug/Kg		48	21 - 130	12	40
1,1-Dichloroethane	0.86	U	50.8	40.6		ug/Kg		80	41 - 130	7	35
1,2-Dichloroethane	0.85	U	50.8	34.5		ug/Kg		68	37 - 130	5	32
1,1-Dichloroethene	2.6	U	50.8	49.5		ug/Kg		97	39 - 138	8	37
cis-1,2-Dichloroethene	0.79	U	50.8	42.2		ug/Kg		83	32 - 135	5	35
trans-1,2-Dichloroethene	2.6	U	50.8	48.0		ug/Kg		94	40 - 134	4	38
1,2-Dichloropropane	2.6	U	50.8	37.5		ug/Kg		74	39 - 130	4	35
cis-1,3-Dichloropropene	1.2	U	50.8	39.6		ug/Kg		78	34 - 130	6	35
trans-1,3-Dichloropropene	2.6	U	50.8	33.4		ug/Kg		66	31 - 130	4	34

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-203775-A-5-F MSD
Matrix: Solid
Analysis Batch: 533235

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 533271

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	0.63	U	50.8	29.7		ug/Kg		58	35 - 130	10	46
Methylene Chloride	10	U	50.8	46.4		ug/Kg		91	36 - 132	8	38
1,1,2,2-Tetrachloroethane	2.6	U	50.8	27.0		ug/Kg		53	10 - 149	5	44
Tetrachloroethene	2.6	U	50.8	34.3		ug/Kg		67	27 - 147	14	44
Toluene	1.3	I	50.8	34.8		ug/Kg		66	42 - 130	7	37
1,1,1-Trichloroethane	1.1	U	50.8	40.2		ug/Kg		79	41 - 130	8	40
1,1,2-Trichloroethane	2.6	U	50.8	34.9		ug/Kg		69	37 - 130	4	33
Trichloroethene	1.0	U	50.8	45.9		ug/Kg		90	34 - 144	7	42
Vinyl chloride	2.6	U	50.8	38.3		ug/Kg		75	35 - 136	1	43
o-Xylene	1.0	U	50.8	27.4		ug/Kg		54	35 - 130	7	37
m-Xylene & p-Xylene	1.3	U	50.8	28.3		ug/Kg		56	35 - 130	9	42
Bromomethane	2.6	U	50.8	52.1		ug/Kg		103	10 - 150	7	47
1,2-Dichlorobenzene	0.73	U	50.8	22.9		ug/Kg		45	20 - 130	11	40
Acrolein	29	U	508	122	J3	ug/Kg		24	10 - 150	69	44
Acrylonitrile	8.3	U	508	289		ug/Kg		57	21 - 141	8	37

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*67 - 130*
Dibromofluoromethane	*101*		*77 - 127*
Toluene-d8 (Surr)	*92*		*76 - 127*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-532494/1-A
Matrix: Solid
Analysis Batch: 532573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532494

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Acenaphthylene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Anthracene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Benzo[a]anthracene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Benzo[a]pyrene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Benzo[b]fluoranthene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Benzo[g,h,i]perylene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Benzo[k]fluoranthene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Chrysene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Dibenz(a,h)anthracene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Fluoranthene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Fluorene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Indeno[1,2,3-cd]pyrene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Naphthalene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Phenanthrene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
Pyrene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
1-Methylnaphthalene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1
2-Methylnaphthalene	33	U	330	33	ug/Kg		05/19/21 15:26	05/20/21 18:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-532494/1-A
Matrix: Solid
Analysis Batch: 532573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532494

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		27 - 127	05/19/21 15:26	05/20/21 18:34	1
Nitrobenzene-d5 (Surr)	90		15 - 136	05/19/21 15:26	05/20/21 18:34	1
Terphenyl-d14 (Surr)	122		24 - 146	05/19/21 15:26	05/20/21 18:34	1

Lab Sample ID: LCS 400-532494/2-A
Matrix: Solid
Analysis Batch: 532573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2000	1530		ug/Kg		76	50 - 120
Acenaphthylene	2000	1790		ug/Kg		90	50 - 120
Anthracene	2000	1940		ug/Kg		97	52 - 120
Benzo[a]anthracene	2000	1990		ug/Kg		99	55 - 120
Benzo[a]pyrene	2000	1840		ug/Kg		92	54 - 120
Benzo[b]fluoranthene	2000	1790		ug/Kg		90	55 - 120
Benzo[g,h,i]perylene	2000	2060		ug/Kg		103	45 - 120
Benzo[k]fluoranthene	2000	1940		ug/Kg		97	52 - 120
Chrysene	2000	1980		ug/Kg		99	54 - 120
Dibenz(a,h)anthracene	2000	1930		ug/Kg		96	49 - 120
Fluoranthene	2000	1920		ug/Kg		96	49 - 120
Fluorene	2000	1830		ug/Kg		91	47 - 120
Indeno[1,2,3-cd]pyrene	2000	1870		ug/Kg		93	47 - 120
Naphthalene	2000	1620		ug/Kg		81	41 - 120
Phenanthrene	2000	1850		ug/Kg		93	50 - 120
Pyrene	2000	1970		ug/Kg		99	54 - 120
1-Methylnaphthalene	2000	1690		ug/Kg		84	40 - 120
2-Methylnaphthalene	2000	1720		ug/Kg		86	40 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	80		27 - 127
Nitrobenzene-d5 (Surr)	94		15 - 136
Terphenyl-d14 (Surr)	105		24 - 146

Lab Sample ID: LCSD 400-532494/3-A
Matrix: Solid
Analysis Batch: 532573

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 532494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	2000	1530		ug/Kg		76	50 - 120	0	30
Acenaphthylene	2000	1800		ug/Kg		90	50 - 120	0	30
Anthracene	2000	1900		ug/Kg		95	52 - 120	2	30
Benzo[a]anthracene	2000	1980		ug/Kg		99	55 - 120	0	30
Benzo[a]pyrene	2000	1810		ug/Kg		91	54 - 120	1	30
Benzo[b]fluoranthene	2000	1810		ug/Kg		91	55 - 120	1	30
Benzo[g,h,i]perylene	2000	1990		ug/Kg		99	45 - 120	4	30
Benzo[k]fluoranthene	2000	1870		ug/Kg		93	52 - 120	4	30
Chrysene	2000	1980		ug/Kg		99	54 - 120	0	30
Dibenz(a,h)anthracene	2000	1900		ug/Kg		95	49 - 120	1	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-532494/3-A
Matrix: Solid
Analysis Batch: 532573

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 532494

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoranthene			2000	1920		ug/Kg		96	49 - 120	0	30
Fluorene			2000	1840		ug/Kg		92	47 - 120	1	30
Indeno[1,2,3-cd]pyrene			2000	1840		ug/Kg		92	47 - 120	1	30
Naphthalene			2000	1620		ug/Kg		81	41 - 120	0	30
Phenanthrene			2000	1840		ug/Kg		92	50 - 120	1	30
Pyrene			2000	1930		ug/Kg		96	54 - 120	2	30
1-Methylnaphthalene			2000	1680		ug/Kg		84	40 - 120	0	30
2-Methylnaphthalene			2000	1730		ug/Kg		86	40 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*27 - 127*
Nitrobenzene-d5 (Surr)	*94*		*15 - 136*
Terphenyl-d14 (Surr)	*104*		*24 - 146*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-532965/1-A
Matrix: Water
Analysis Batch: 533133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532965

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.024	U	0.20	0.024	ug/L		05/24/21 10:01	05/25/21 17:41	1
Acenaphthylene	0.022	U	0.20	0.022	ug/L		05/24/21 10:01	05/25/21 17:41	1
Anthracene	0.026	U	0.20	0.026	ug/L		05/24/21 10:01	05/25/21 17:41	1
Benzo[a]pyrene	0.074	U	0.20	0.074	ug/L		05/24/21 10:01	05/25/21 17:41	1
Benzo[b]fluoranthene	0.018	U	0.20	0.018	ug/L		05/24/21 10:01	05/25/21 17:41	1
Benzo[g,h,i]perylene	0.043	U	0.20	0.043	ug/L		05/24/21 10:01	05/25/21 17:41	1
Benzo[k]fluoranthene	0.040	U	0.20	0.040	ug/L		05/24/21 10:01	05/25/21 17:41	1
Chrysene	0.037	U	0.20	0.037	ug/L		05/24/21 10:01	05/25/21 17:41	1
Dibenz(a,h)anthracene	0.049	U	0.20	0.049	ug/L		05/24/21 10:01	05/25/21 17:41	1
Fluoranthene	0.093	U	0.20	0.093	ug/L		05/24/21 10:01	05/25/21 17:41	1
Fluorene	0.0545	I	0.20	0.031	ug/L		05/24/21 10:01	05/25/21 17:41	1
Indeno[1,2,3-cd]pyrene	0.032	U	0.20	0.032	ug/L		05/24/21 10:01	05/25/21 17:41	1
1-Methylnaphthalene	0.0690	I	0.20	0.068	ug/L		05/24/21 10:01	05/25/21 17:41	1
2-Methylnaphthalene	0.0724	I	0.20	0.039	ug/L		05/24/21 10:01	05/25/21 17:41	1
Naphthalene	0.0771	I	0.20	0.050	ug/L		05/24/21 10:01	05/25/21 17:41	1
Phenanthrene	0.073	U	0.20	0.073	ug/L		05/24/21 10:01	05/25/21 17:41	1
Pyrene	0.093	U	0.20	0.093	ug/L		05/24/21 10:01	05/25/21 17:41	1
Benzo[a]anthracene	0.027	U	0.20	0.027	ug/L		05/24/21 10:01	05/25/21 17:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*15 - 122*	*05/24/21 10:01*	*05/25/21 17:41*	*1*
Nitrobenzene-d5 (Surr)	*77*		*19 - 130*	*05/24/21 10:01*	*05/25/21 17:41*	*1*
Terphenyl-d14 (Surr)	*98*		*33 - 138*	*05/24/21 10:01*	*05/25/21 17:41*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-532965/2-A
Matrix: Water
Analysis Batch: 533133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532965

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acenaphthene			120	116		ug/L		97	29 - 121		
Acenaphthylene			120	119		ug/L		99	30 - 120		
Anthracene			120	135		ug/L		113	36 - 125		
Benzo[a]pyrene			120	129		ug/L		108	31 - 131		
Benzo[b]fluoranthene			120	131		ug/L		109	30 - 124		
Benzo[g,h,i]perylene			120	129		ug/L		107	24 - 133		
Benzo[k]fluoranthene			120	135		ug/L		112	33 - 134		
Chrysene			120	127		ug/L		106	36 - 122		
Dibenz(a,h)anthracene			120	134		ug/L		112	31 - 129		
Fluoranthene			120	137		ug/L		114	33 - 127		
Fluorene			120	140		ug/L		117	32 - 125		
Indeno[1,2,3-cd]pyrene			120	121		ug/L		101	30 - 128		
1-Methylnaphthalene			120	110		ug/L		91	26 - 120		
2-Methylnaphthalene			120	113		ug/L		94	24 - 120		
Naphthalene			120	108		ug/L		90	25 - 120		
Phenanthrene			120	125		ug/L		104	34 - 121		
Pyrene			120	127		ug/L		106	36 - 124		
Benzo[a]anthracene			120	145	J3	ug/L		121	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5 (Surr)	*92*		*19 - 130*
Terphenyl-d14 (Surr)	*91*		*33 - 138*

Lab Sample ID: LCSD 400-532965/3-A
Matrix: Water
Analysis Batch: 533133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 532965

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			120	106		ug/L		89	29 - 121	9	56
Acenaphthylene			120	108		ug/L		90	30 - 120	10	56
Anthracene			120	121		ug/L		101	36 - 125	11	51
Benzo[a]pyrene			120	125		ug/L		104	31 - 131	4	50
Benzo[b]fluoranthene			120	117		ug/L		97	30 - 124	12	54
Benzo[g,h,i]perylene			120	113		ug/L		94	24 - 133	13	50
Benzo[k]fluoranthene			120	115		ug/L		96	33 - 134	16	52
Chrysene			120	128		ug/L		106	36 - 122	0	50
Dibenz(a,h)anthracene			120	121		ug/L		101	31 - 129	10	50
Fluoranthene			120	127		ug/L		106	33 - 127	7	52
Fluorene			120	124		ug/L		103	32 - 125	12	56
Indeno[1,2,3-cd]pyrene			120	108		ug/L		90	30 - 128	11	51
1-Methylnaphthalene			120	102		ug/L		85	26 - 120	7	55
2-Methylnaphthalene			120	98.6		ug/L		82	24 - 120	14	57
Naphthalene			120	98.9		ug/L		82	25 - 120	9	56
Phenanthrene			120	118		ug/L		98	34 - 121	6	56
Pyrene			120	116		ug/L		96	36 - 124	9	52
Benzo[a]anthracene			120	140		ug/L		117	35 - 120	4	49

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-532965/3-A
Matrix: Water
Analysis Batch: 533133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 532965

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*15 - 122*
Nitrobenzene-d5 (Surr)	*84*		*19 - 130*
Terphenyl-d14 (Surr)	*82*		*33 - 138*

Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Lab Sample ID: MB 400-532598/1-A
Matrix: Solid
Analysis Batch: 532685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532598

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	9.4	U	20	9.4	mg/Kg		05/20/21 11:01	05/20/21 17:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*30*	*J1*	*36 - 132*	*05/20/21 11:01*	*05/20/21 17:52*	*1*
o-Terphenyl	*80*		*66 - 136*	*05/20/21 11:01*	*05/20/21 17:52*	*1*

Lab Sample ID: LCS 400-532598/2-A
Matrix: Solid
Analysis Batch: 532685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Petroleum Hydrocarbons (C8-C40)	227	239		mg/Kg		106	65 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-C39	*316*	*J1*	*36 - 132*
o-Terphenyl	*92*		*66 - 136*

Lab Sample ID: 400-203513-1 MS
Matrix: Solid
Analysis Batch: 532685

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Petroleum Hydrocarbons (C8-C40)	10	U	254	170		mg/Kg	☼	67	39 - 181

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-C39	*22*	*J1*	*36 - 132*
o-Terphenyl	*92*		*66 - 136*

Lab Sample ID: 400-203513-1 MSD
Matrix: Solid
Analysis Batch: 532685

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532598

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Petroleum Hydrocarbons (C8-C40)	10	U	252	183		mg/Kg	☼	72	39 - 181	7	25

Method: FL-PRO - Florida - Petroleum Range Organics (GC) (Continued)

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-C39	86		36 - 132
o-Terphenyl	89		66 - 136

Lab Sample ID: MB 400-532811/1-A
Matrix: Water
Analysis Batch: 532842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532811

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.35	U	1.1	0.35	mg/L		05/21/21 13:57	05/21/21 23:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-C39	224	J1	40 - 129	05/21/21 13:57	05/21/21 23:44	1
o-Terphenyl	142	J1	66 - 139	05/21/21 13:57	05/21/21 23:44	1

Lab Sample ID: LCS 400-532811/2-A
Matrix: Water
Analysis Batch: 532842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532811

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Petroleum Hydrocarbons (C8-C40)			14.2	13.5		mg/L		95	66 - 119		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-C39	197	J1	40 - 129
o-Terphenyl	127		66 - 139

Lab Sample ID: LCSD 400-532811/3-A
Matrix: Water
Analysis Batch: 532842

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 532811

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Petroleum Hydrocarbons (C8-C40)			14.2	13.7		mg/L		97	66 - 119	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-C39	198	J1	40 - 129
o-Terphenyl	129		66 - 139

Method: 6010C - RCRA Metals

Lab Sample ID: MB 400-532418/1-A
Matrix: Solid
Analysis Batch: 532562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532418

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.57	U	1.0	0.57	mg/Kg		05/19/21 11:00	05/19/21 21:27	1
Barium	0.17	U	1.0	0.17	mg/Kg		05/19/21 11:00	05/19/21 21:27	1
Cadmium	0.088	U	0.50	0.088	mg/Kg		05/19/21 11:00	05/19/21 21:27	1
Selenium	0.87	U	2.0	0.87	mg/Kg		05/19/21 11:00	05/19/21 21:27	1

Method: 6010C - RCRA Metals (Continued)

Lab Sample ID: MB 400-532418/1-A
Matrix: Solid
Analysis Batch: 532716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532418

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.31	U	1.0	0.31	mg/Kg		05/19/21 11:00	05/20/21 18:46	1
Lead	0.22	U	1.0	0.22	mg/Kg		05/19/21 11:00	05/20/21 18:46	1

Lab Sample ID: MB 400-532418/1-A
Matrix: Solid
Analysis Batch: 532928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532418

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.33	U	0.50	0.33	mg/Kg		05/19/21 11:00	05/21/21 15:35	1
Chromium	0.31	U	1.0	0.31	mg/Kg		05/19/21 11:00	05/21/21 15:35	1
Lead	0.22	U	1.0	0.22	mg/Kg		05/19/21 11:00	05/21/21 15:35	1

Lab Sample ID: LCS 400-532418/2-A
Matrix: Solid
Analysis Batch: 532562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.7	104		mg/Kg		104	80 - 120
Barium	99.7	110		mg/Kg		110	80 - 120
Cadmium	49.9	51.3		mg/Kg		103	80 - 120
Selenium	99.7	101		mg/Kg		101	80 - 120

Lab Sample ID: LCS 400-532418/2-A
Matrix: Solid
Analysis Batch: 532716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	99.7	105		mg/Kg		105	80 - 120
Lead	99.7	104		mg/Kg		104	80 - 120

Lab Sample ID: LCS 400-532418/2-A
Matrix: Solid
Analysis Batch: 532928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	49.9	49.5		mg/Kg		99	80 - 120
Chromium	99.7	107		mg/Kg		107	80 - 120
Lead	99.7	102		mg/Kg		103	80 - 120

Lab Sample ID: 400-203513-1 MS
Matrix: Solid
Analysis Batch: 532562

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.67	I	106	108		mg/Kg	☼	101	75 - 125
Barium	4.9		106	123		mg/Kg	☼	111	75 - 125
Cadmium	0.095	U	53.1	53.8		mg/Kg	☼	101	75 - 125
Selenium	0.94	U	106	106		mg/Kg	☼	99	75 - 125

Method: 6010C - RCRA Metals (Continued)

Lab Sample ID: 400-203513-1 MS
Matrix: Solid
Analysis Batch: 532716

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	4.0		106	118		mg/Kg	☼	107	75 - 125
Lead	1.9		106	113		mg/Kg	☼	104	75 - 125

Lab Sample ID: 400-203513-1 MS
Matrix: Solid
Analysis Batch: 532928

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.36	U	53.1	52.4		mg/Kg	☼	99	75 - 125
Chromium	3.3		106	120		mg/Kg	☼	109	75 - 125
Lead	1.9		106	110		mg/Kg	☼	102	75 - 125

Lab Sample ID: 400-203513-1 MSD
Matrix: Solid
Analysis Batch: 532562

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.67	I	105	106		mg/Kg	☼	101	75 - 125	1	20
Barium	4.9		105	121		mg/Kg	☼	110	75 - 125	2	20
Cadmium	0.095	U	52.5	53.2		mg/Kg	☼	101	75 - 125	1	20
Selenium	0.94	U	105	105		mg/Kg	☼	100	75 - 125	0	20

Lab Sample ID: 400-203513-1 MSD
Matrix: Solid
Analysis Batch: 532716

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	4.0		105	114		mg/Kg	☼	105	75 - 125	3	20
Lead	1.9		105	112		mg/Kg	☼	105	75 - 125	1	20

Lab Sample ID: 400-203513-1 MSD
Matrix: Solid
Analysis Batch: 532928

Client Sample ID: SB-1
Prep Type: Total/NA
Prep Batch: 532418

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.36	U	52.5	52.4		mg/Kg	☼	100	75 - 125	0	20
Chromium	3.3		105	115		mg/Kg	☼	106	75 - 125	4	20
Lead	1.9		105	108		mg/Kg	☼	101	75 - 125	2	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 400-533469/1-A
Matrix: Water
Analysis Batch: 533754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533469

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:16	1
Arsenic	0.0030	U	0.010	0.0030	mg/L		05/27/21 10:39	05/28/21 22:16	1
Barium	0.00307	I	0.010	0.0030	mg/L		05/27/21 10:39	05/28/21 22:16	1
Cadmium	0.0010	U	0.0050	0.0010	mg/L		05/27/21 10:39	05/28/21 22:16	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 400-533469/1-A
Matrix: Water
Analysis Batch: 533754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533469

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0050	U	0.010	0.0050	mg/L		05/27/21 10:39	05/28/21 22:16	1
Lead	0.0020	U	0.010	0.0020	mg/L		05/27/21 10:39	05/28/21 22:16	1
Selenium	0.0080	U	0.020	0.0080	mg/L		05/27/21 10:39	05/28/21 22:16	1

Lab Sample ID: LCS 400-533469/2-A
Matrix: Water
Analysis Batch: 533754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.500	0.587		mg/L		117	80 - 120
Arsenic	1.00	1.16		mg/L		116	80 - 120
Cadmium	0.500	0.564		mg/L		113	80 - 120
Chromium	1.00	1.12		mg/L		112	80 - 120
Lead	1.00	1.15		mg/L		115	80 - 120
Selenium	1.00	1.15		mg/L		115	80 - 120

Lab Sample ID: LCS 400-533469/2-A
Matrix: Water
Analysis Batch: 533856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: 400-203513-6 MS
Matrix: Water
Analysis Batch: 533856

Client Sample ID: GW-2
Prep Type: Total/NA
Prep Batch: 533469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.0078	I	1.00	1.04		mg/L		103	75 - 125
Chromium	0.012		1.00	1.04		mg/L		102	75 - 125

Lab Sample ID: 400-203513-6 MSD
Matrix: Water
Analysis Batch: 533856

Client Sample ID: GW-2
Prep Type: Total/NA
Prep Batch: 533469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.0078	I	1.00	1.05		mg/L		105	75 - 125	2	20
Chromium	0.012		1.00	1.05		mg/L		104	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-532325/14-A
Matrix: Water
Analysis Batch: 532563

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532325

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070	U	0.20	0.070	ug/L		05/19/21 08:10	05/19/21 17:47	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 400-532325/15-A
Matrix: Water
Analysis Batch: 532563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532325

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.01	1.00		ug/L		99	80 - 120		

Lab Sample ID: 400-203520-AD-3-B MS
Matrix: Water
Analysis Batch: 532563

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 532325

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.070	U	2.01	2.06		ug/L		102	80 - 120		

Lab Sample ID: 400-203520-AD-3-C MSD
Matrix: Water
Analysis Batch: 532563

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 532325

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.070	U	2.01	0.070	U J3	ug/L		0	80 - 120	NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 400-532086/14-A
Matrix: Solid
Analysis Batch: 532437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532086

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0080	U	0.013	0.0080	mg/Kg		05/17/21 11:37	05/19/21 11:02	1

Lab Sample ID: LCS 400-532086/15-A
Matrix: Solid
Analysis Batch: 532437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0669	0.0619		mg/Kg		93	80 - 120		

Lab Sample ID: 400-203382-I-1-B MS
Matrix: Solid
Analysis Batch: 532437

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 532086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.035		0.175	0.159	J3	mg/Kg	☼	71	80 - 120		

Lab Sample ID: 400-203382-I-1-C MSD
Matrix: Solid
Analysis Batch: 532437

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 532086

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.035		0.176	0.168	J3	mg/Kg	☼	75	80 - 120	6	20

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Phone (850) 478-2671

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-102840-36552.1
Client Contact: Paul Cheney	Phone:	E-Mail: Cheyenne.Whitmire@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Universal Engineering Sciences Inc	PWSID:			Job #:
Address: 1985 Cope Ln.	Due Date Requested:			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32526	Compliance Project: Δ Yes Δ No			
Phone: 850-791-0031(Tel)	PO #: 1740.2100049.0000			
Email: pcheney@universalengineering.com	WO #:			
Project Name: 824 11th Street North, Panama City, Bay	Project #: 40009274			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260C - PP/TTO Volatile List by Method 8260	FL_PRO - C8-C40 FLPRO	8270D_LL - Low Level PAHs by 8270	7471B - Mercury (CVAA)	6010C - RCRA (Mercury not included)	Moisture - Percent Moisture	FL_PRO - 3511 Prep C8-C40 FLPRO	6010C - RCRA (Mercury not included)	7470A - Mercury (CVAA)	8270D_LL - Low Level PAHs by 8270	8260C - PP/TTO Volatile List by Method 8260
SB-1	5-17-21	1058	G	Solid	X	X	X	X	X	X					
SB-2		1120	G	Solid	X	X	X	X	X	X					
SB-3		1245	G	Solid	X	X	X	X	X	X					
SB-4		1327	G	Solid	X	X	X	X	X	X					
GW-1		1050	G	Water							X	X	X	X	X
GW-2		1158	G	Water							X	X	X	X	X
GW-3		1303	G	Water							X	X	X	X	X
GW-4		1402	G	Water							X	X	X	X	X

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Special Instructions/Note:

400-203513 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: Clare Shedd	Date/Time: 5-18-21 0829	Company UES	Received by: Kathy R Avery	Date/Time: 5-18-21 829	Company ETA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 3.3°C IR9

Ver: 01/16/2019

6/2/2021

Login Sample Receipt Checklist

Client: Universal Engineering Sciences Inc

Job Number: 400-203513-1
SDG Number: Panama City, Bay

Login Number: 203513
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0, 3.3°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Universal Engineering Sciences Inc
Project/Site: 824 11th Street North

Job ID: 400-203513-1
SDG: Panama City, Bay

Laboratory: Eurofins TestAmerica, Pensacola

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E81010	06-30-21

APPENDIX B

GEOTECHNICAL REPORT

SOUTHERN EARTH SCIENCES
Geotechnical | Environmental | Materials Testing

PANAMA CITY OFFICE
7500 McElvey Road, Ste. A
Panama City Beach, FL 32408
Tel: (850) 769-4773
Fax: (850) 872-9967
www.soearth.com

Anchor CEI
450 Magnolia Ave
Panama City, FL 32401
Attn: Ms. Elizabeth S. Moore, P.E.

February 16, 2023
File No.: P23-0060

Subject: Geotechnical Services for Stormwater Design at the Melendy Walking Park at 824 N 11th Street in Panama City, Florida

Dear Ms. Moore:

Southern Earth Sciences, Inc., has completed the geotechnical services for stormwater design at 824 N 11th Street in Panama City, Florida. Our services were performed per your request. This report presents the results of our field and laboratory testing and includes estimated seasonal high groundwater levels.

FIELD INVESTIGATIVE PROCEDURES:

Prior to our field investigation, Sunshine State One Call of Florida was contacted to locate underground utilities on the property. On February 3, 6 and 7, 2023, personnel with our firm traveled to the project site and completed the field testing for the above referenced project. For stormwater investigation, four (4) direct push borings were performed to a depth of 10 to 15 feet below existing ground surface, one in each corner of the proposed pond. Additionally, four (4) hand augers were performed within the proposed walking path to a depth of approximately 2 to 3 feet below existing grade. The site is currently an open parcel, the lot was cleared prior to our testing. The proposed stormwater management will be a wet detention pond with an area of approximately 2.8 acres.

The direct push boring was performed with our Geoprobe 6622 and the DT22 soil sampling system. This is a closed-piston sampler, with an inner piston rod and outer drive casing, and is driven to the top of the sampling interval. The inner piston rod is removed and the sampler is driven to collect a soil sample. The soil samples are collected in a clear 5-foot PVC liner and are delivered back to our laboratory for soil classifications and laboratory testing.

Test locations were established in the field by using a 100-foot tape and estimating right angles with reference to existing landmarks; therefore, our test locations should be considered approximate. See the attached Figure for our approximate test locations.

LABORATORY TESTING PROCEDURES:

Laboratory investigative work consisted of physical examination of samples obtained during the direct push boring operation. Soil samples were visually classified in the laboratory in accordance with the Unified Soil Classification System. Evaluation of these samples, in conjunction with penetration resistances have been used to estimate soil characteristics.

FIELD/LABORATORY TESTING FOR STORMWATER DESIGN:

While the direct push borings and hand auger borings performed for this project are representative of subsurface soil conditions at their respective locations/depths and for their respective vertical reaches, local variations of the subsurface materials, vertical infiltration rates, and seasonal high groundwater levels are anticipated. Soil descriptions and vertical infiltration rates, and seasonal high groundwater levels represent subsurface conditions at the designated locations.

We understand the proposed stormwater management will be a wet detention system. Since the pond will be wet detention, no infiltration testing has been performed. Based upon the provided topographic information, the site is fairly level and ranges from approximately +14 Feet in the southwest corner of the pond to +16 Feet in the northeast corner.

The soils encountered throughout the depth of our borings were sands. The sands varied in color and texture and ranged from slightly silty to slightly clayey, clayey and clean sands. Organic soils (peat) were encountered at locations HA-1 and SW-3 within the top foot. Predominantly, slightly silty to slightly clayey and clean sands were encountered within the top four to five feet and then we encountered slightly clayey to clayey sands for the remaining extent. Within the top twelve inches of our borings various amounts of organics were encountered. Additionally, the soils encountered within the hand auger borings were sands. The sands also range from clean to slightly silty, with the exception of the top six inches.

On the date of our field testing (February 3, 6 and 7, 2023), the groundwater levels were measured at the depths shown on the attached logs which ranges from approximately 1.1 to 2.5 feet below existing ground surface. At our test locations SW-1 through SW-4, seasonal high groundwater level was determined by characteristics such as soil colors and soil mottles. Based upon the results of our direct push borings, the estimated depth to seasonal high groundwater ranges from approximately 0.5 to 1.0 feet (±0.5 feet) below existing ground surface. It may be advisable to have a Professional Surveyor obtain the elevations of our test locations which would help further define the elevation of the seasonal high groundwater elevations. During periods of above average rainfall, groundwater levels may rise above the seasonal high depths indicated above.

PAVEMENT RECOMENDATIONS:

At this time, finished pavement grades are not available, however, we anticipate filling will be required to achieved finished grade. At this time, proposed traffic volume is unknown, however, will likely be very low volume. Pavement recommendations are based upon a 15-year life. It should be noted that pavement maintenance and rehabilitation, including an overlay, might be required within the life of the pavement. We have assumed light automobiles as the primary traffic for this pavement. If this assumption is incorrect, we should be notified to provide revisions to our pavement recommendations.

Fill soils, shall be sands to slightly silty sands (non-plastic) containing no more than 12%, by dry weight, finer than the U.S. No. 200 mesh sieve and shall be free of organics, organic laden sands, rubble, clay balls, and other deleterious materials. Fill soils shall be placed in thin level lifts, not to exceed 12-inches, and compacted to a density of 95% of the Modified Proctor (AASHTO T-180) maximum dry density throughout its full depth. Existing soils beneath the roadway should be compacted to 95% of the Modified Proctor (AASHTO T-180) maximum dry density to a depth of 12-inches below compacted grade.

Subgrade Preparation: Clear and grub the surface soils within the pavement perimeter, extending at least three (3) feet beyond the curbline, to remove all topsoil, organic laden sands, and other deleterious materials. Based upon these materials were encountered within 18 inches. However, these soils may extend to greater depths than our borings indicate. As noted above, organic laden soils (peat/peaty sands) were encountered at locations HA-1 and SW-3.

Prior to the addition of fill soils or once the soils have been excavated to the bottom of the base, compact the existing soils until a density of 95% of the Modified Proctor (AASHTO T-180) maximum dry density to a depth of twelve (12) inches. Fill soils described above should be placed to achieve final pavement grades. If there are no adjacent structures, a vibratory roller may be used for compaction. However, we do not recommend using vibratory compaction within one to two feet of the groundwater level. We also recommend that the top twelve (12) inches of subgrade soils be stabilized to achieve a Limerock Bearing Ratio of 40. Due to the shallow groundwater levels, we caution using clayey sands to stabilize the existing soils.

Base: We recommend a graded aggregate base with a minimum thickness of six (6) inches. Crushed concrete may be used if it meets the FDOT specifications requirements for a graded aggregate base. Due to the shallow groundwater levels, we do not recommend using limerock base, however, if the finished pavement grades are several feet above existing grade, there may be enough separation to utilize a limerock base.

Wearing Surface: We recommend a SP-9.5 asphaltic concrete wearing surface having a minimum thickness of 1.5 inches for light duty parking areas. We also recommend the asphalt be compacted to a minimum density of 92% of the laboratory maximum density (G_{mm})

All materials and methods of placement shall be in accordance with applicable sections of the Florida Department of Transportation's "Standard Specifications for Road and Bridge Construction", (Latest Edition).

For the proposed concrete sidewalk, we recommend preparing the subgrade soils in the same manner as mentioned above for flexible pavement. Prior to the addition of fill soils or once the topsoil has been grubbed, compact the existing soils until a density of 95% of the Modified Proctor (AASHTO T-180) maximum dry density to a depth of twelve (12) inches. Fill soils, shall be sands to slightly silty sands (non-plastic) containing no more than 12%, by dry weight, finer than the U.S. No. 200 mesh sieve and shall be free of organics, organic laden sands, rubble, clay balls, and other deleterious materials. Fill soils shall be placed in thin level lifts, not to exceed 12-inches, and compacted to a density of 95% of the Modified Proctor (AASHTO T-180) maximum dry density throughout its full depth. Existing soils beneath the roadway should be compacted to 95% of the Modified Proctor (AASHTO T-180) maximum dry density to a depth of 12-inches below compacted grade.

TESTING:

The effectiveness of the pavement will depend significantly on the proper preparation of the soils, as indicated previously. Therefore, we recommend the owner employ Southern Earth Sciences, Inc., as the testing laboratory to perform construction testing services. If we are not employed to provide construction services, Southern Earth Sciences, Inc., can not accept any responsibility for any conditions, which deviate from those described in this geotechnical report. Southern Earth Sciences, Inc., should be invited to the pre-construction conference to discuss the project with all interested parties so that the project may be completed expeditiously and to the intend of our geotechnical report. We would be pleased to review the plans and specifications as they relate to the soil preparation and provide a fee proposal for construction testing.

GENERAL COMMENTS:

Professional judgments on design criteria are presented in this letter. These are based partly on our evaluations of technical information provided, partly on our understanding of the characteristics of the project being planned, and partly on our general experience with subsurface conditions in the area. We do not guarantee performance of the project in any respect, only that our judgments meet the standard of care of our profession.

This information is exclusively for the use and benefit of the addressee(s) identified on the first page of this report and is not for the use or benefit of, nor may it be relied upon by any other person or entity. The contents of this letter may not be quoted in whole or in part or distributed to any person or entity other than the addressee(s) hereof without, in each case, the advance written consent of the undersigned.

This report has been prepared in order to aid in the evaluation of this property and to assist the engineers in stormwater design. It is intended for use with regard to the specific project discussed herein, and any changes in pond locations, or assumed (or reported) grades shall be brought to our attention immediately so that we may determine how such changes may effect our conclusions and recommendations. Our report does not address environmental issues which may be associated with the subject property.

While the borings performed for this project is representative of subsurface soil conditions at their respective locations and for their respective vertical reaches, local variations of the subsurface materials are anticipated and may be encountered. The boring logs and related information are based on the driller's logs and visual examination of selected samples in the laboratory. Delineation between soil types shown on the boring logs is approximate, and soil descriptions represent our interpretation of subsurface conditions at the designated boring location on the particular date drilled.

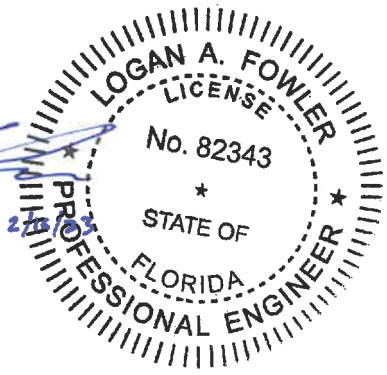
We appreciate the opportunity to assist you. If you have any questions or if we may be of further assistance, please call at your convenience.

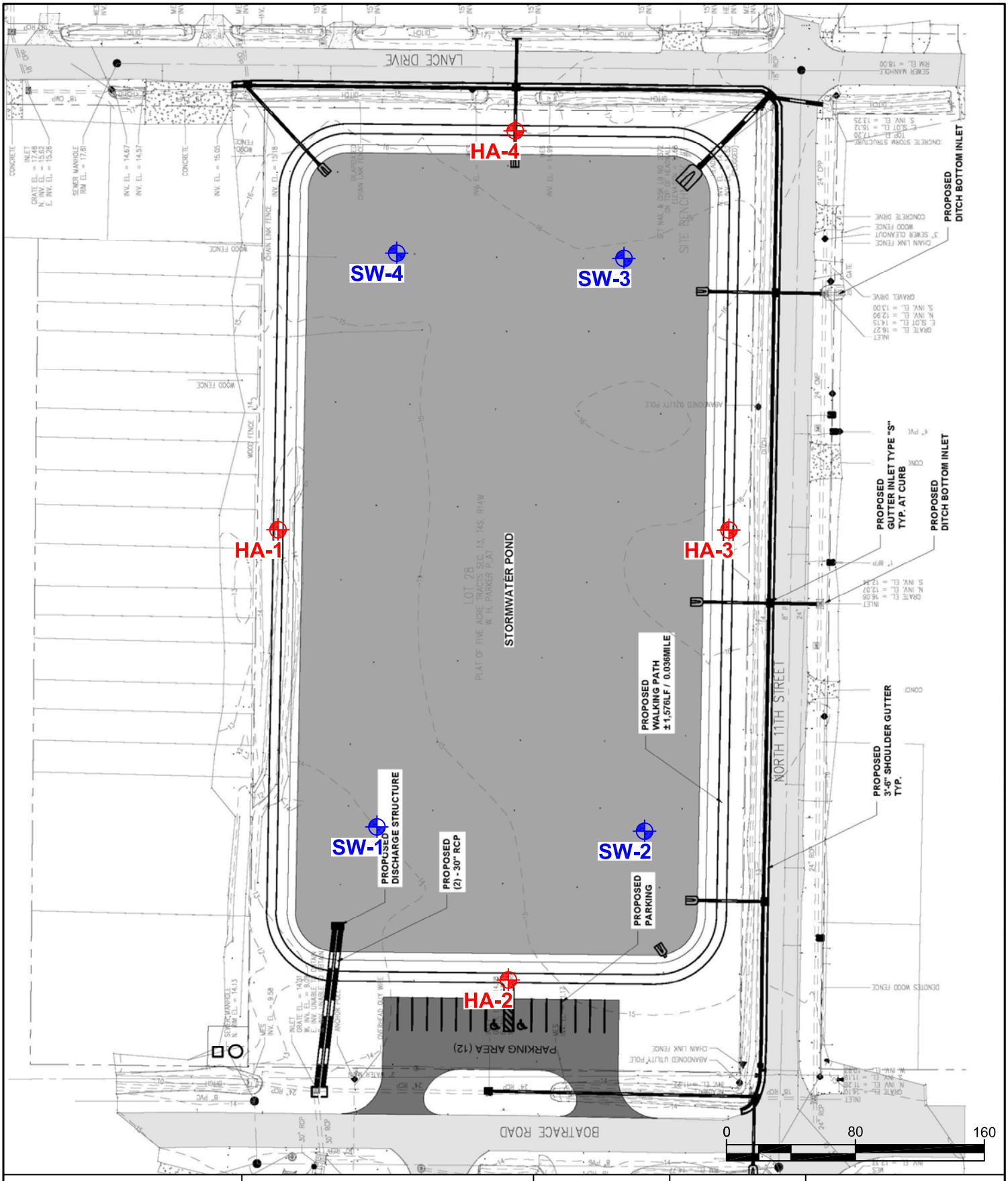
Yours Very Truly,

SOUTHERN EARTH SCIENCES, INC.

Rebecca L. McNac
Staff Engineer

Logan A. Fowler, P.E.
Eng. Reg. No. 82343
State of Florida



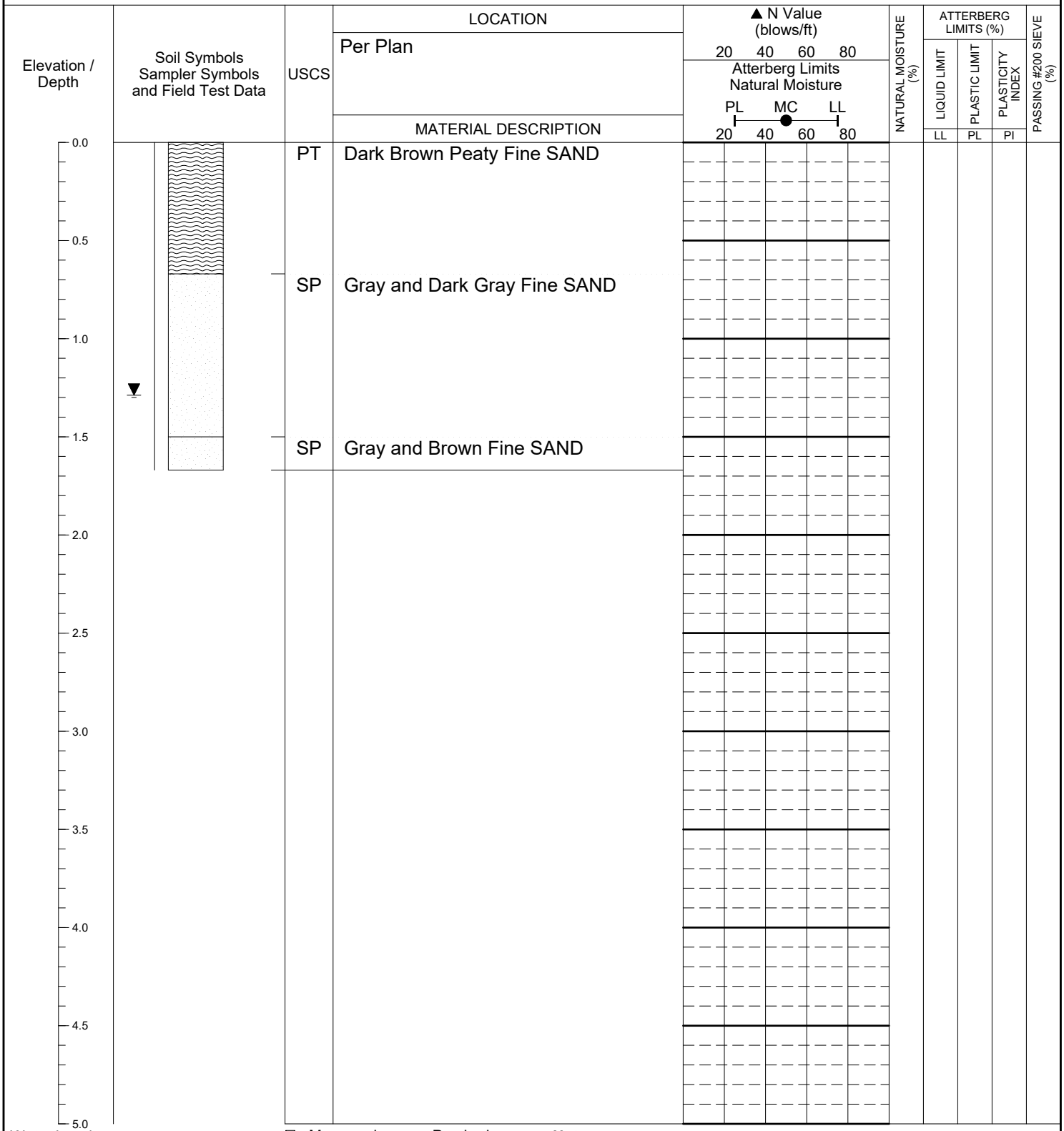


SESI FILE NO: P23-0060	SOUTHERN EARTH SCIENCES	DRAWN BY:	RM	FIGURE I
		CHECKED BY:	LF	
Melendy Walking Park Panama City, FL		DATE:	02/07/23	APPROXIMATE TEST LOCATIONS
		SCALE:	1:80	

LOG OF BORING HA-1

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/06/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**

Water Observations: Groundwater encountered at 1.3 feet below exisiting ground surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

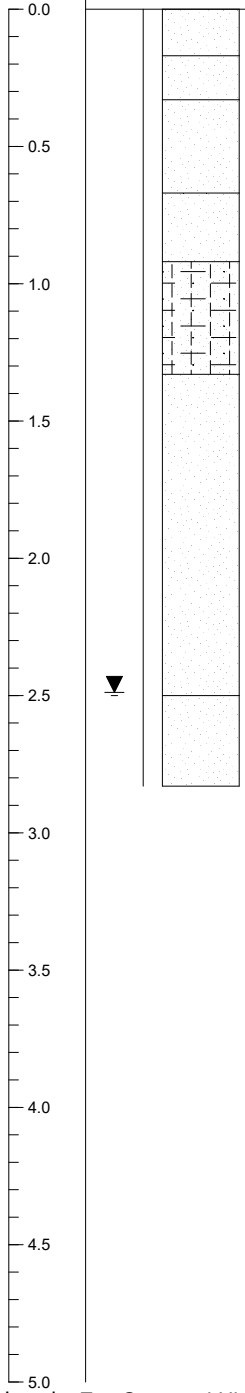
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING HA-2

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/06/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0.0	SP	Brown and Gray Fine SAND						
	SP	Light Brown and Tan Fine SAND						
0.5	SP	Gray Fine SAND						
	SP	Light Gray Fine SAND						
1.0	SP-SM	Brown Slight Silty Fine SAND with Organics						
	SP	Light Brown and Tan Fine SAND						
1.5								
2.0								
2.5	SP	Light Tan Fine SAND						
3.0								
3.5								
4.0								
4.5								
5.0								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**
Water Observations: Groundwater encountered at 2.5 feet below exisiting ground surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)
Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING HA-3

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/06/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown

Elevation / Depth	Soil Symbols Sampler Symbols and Field Test Data	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0.0		SP	Dark Brown and Gray Fine SAND with Roots						
0.5		SP	Brown Fine SAND						
1.0									
1.5		SP	Tan Fine SAND						
2.0	▼								
2.5		SP	Light Tan Fine SAND						
3.0									
3.5									
4.0									
4.5									
5.0									

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**
Water Observations: Groundwater encountered at 2.1 feet below exisiting ground surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)
Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING HA-4

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/06/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown

Elevation / Depth	Soil Symbols Sampler Symbols and Field Test Data	USCS	LOCATION / MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 / Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0.0		SP	Brown and Gray Fine SAND with Roots						
0.5		SP	Light Brown Fine SAND						
1.0		SP	Tan and Light Brown Fine SAND						
1.5									
2.0	▼	SP	Light Tan Fine SAND						
2.5									
3.0									
3.5									
4.0									
4.5									
5.0									

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**
Water Observations: Groundwater encountered at 2.0 feet below exisiting ground surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)
Sample Key: ◪ SPT ■ Shelby Tube

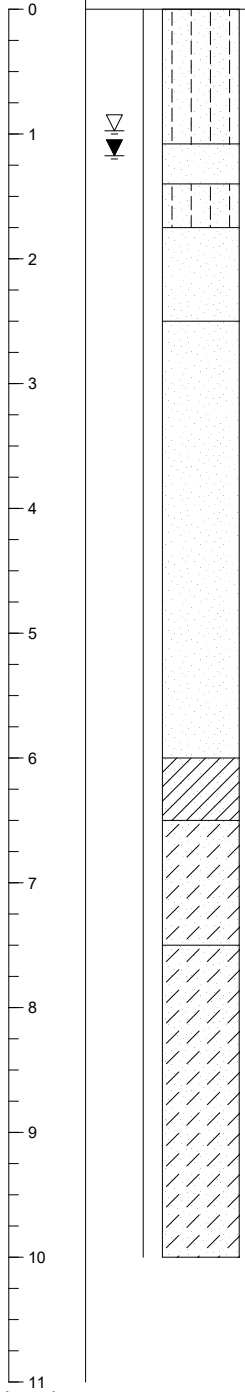
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING SW-1

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/03/23

METHOD: Direct Push
DRILLER: DT
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0	SP-SM	Gray and Dark Gray Slightly Silty Fine SAND with Trace Organics						
1	SP	Gray Fine SAND						
	SP-SM	Brown Slightly Silty Fine SAND						
2	SP	Light Brown and Tan Medium to Fine SAND						
	SP	Light Tan Medium to Fine SAND						
3								
4								
5								
6	SC	Gray and Light Orange Clayey Medium to Fine SAND						
	SP-SC	Gray Slightly Clayey Fine SAND	●	17				11
7								
	SP-SC	Gray Slightly Clayey Fine SAND						
8								
9								
10								
11								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 1.2 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.0 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

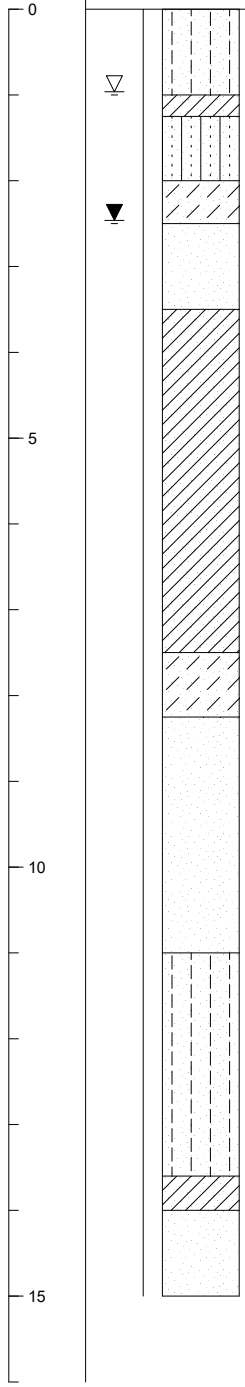
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING SW-2

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/03/23

METHOD: Direct Push
DRILLER: DT
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0	SP-SM	Light Brown and Gray Slightly Silty Fine SAND with Trace Organics						
	SC	Gray Clayey Medium to Fine SAND						
	SM	Light Brown and Dark Brown Silty Fine SAND		18				24
	SP-SC	Gray Slightly Clayey Fine SAND						
	SP	Light Gray Medium to Fine SAND						
	SC	Gray Clayey Medium to Fine SAND		19				14
5								
	SP-SC	Light Gray Slightly Clayey Medium to Fine SAND						
	SP	Gray Fine SAND with Trace Mica		25				4
10								
	SP-SM	Brown Slightly Silty Fine SAND						
	SC	Gray Clayey Fine SAND with Mica						
	SP	Light Tan Medium to Fine SAND						
15								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 2.5 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.0 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

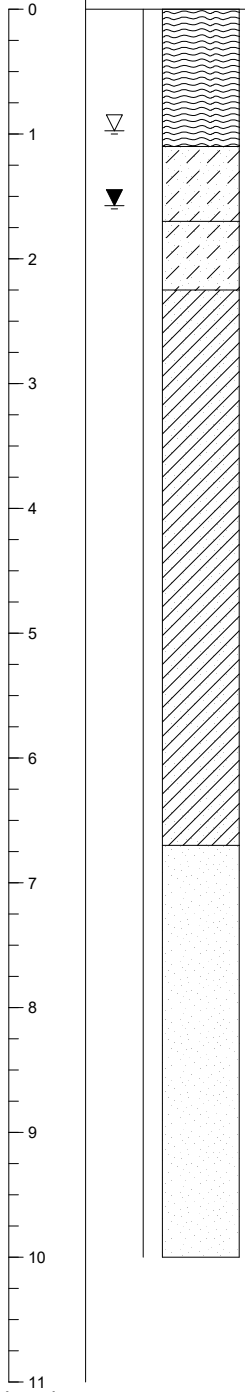
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING SW-3

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/03/23

METHOD: Direct Push
DRILLER: DT
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0	PT	Dark Brown Peaty Fine SAND						
1	SP-SC	Brown and Tan Slightly Clayey Fine SAND						
2	SP-SC	Tan and Brown Slightly Clayey Medium to Fine SAND						
	SC	Gray Clayey Medium to Fine SAND	●	15				17
7	SP	Light Gray Fine SAND						
11								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 1.6 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.0 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

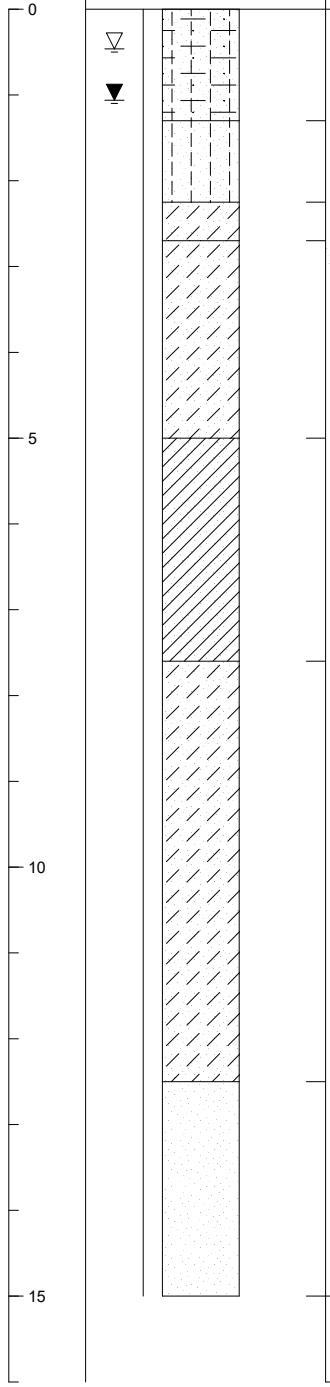
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

LOG OF BORING SW-4

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 02/03/23

METHOD: Direct Push
DRILLER: DT
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION: Per Plan MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0	SP-SM	Dark Brown Slightly Silty Fine SAND with Organics						
	SP-SM	Gray and Brown Slightly Silty Fine SAND						
	SP-SC	Gray and Tan Slightly Clayey Medium to Fine SAND						
	SP-SC	Gray Slightly Clayey Medium to Fine SAND						
5	SC	Light Gray Clayey Medium to Fine SAND		18				15
	SP-SC	Tan and Gray Slightly Clayey Medium to Fine SAND with Mica		24				9
10	SP	Gray Coarse to Fine SAND						
15								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 1.1 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 0.5 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 2/16/23

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

ASFE
The Best People on Earth

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

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SOUTHERN EARTH SCIENCES
Geotechnical | Environmental | Materials Testing

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Panama City Beach, FL 32408
Tel: (850) 769-4773
Fax: (850) 872-9967
www.soearth.com

Anchor CEI
450 Magnolia Avenue
Panama City, 32401
Attn: Ms. Elizabeth S. Moore, P.E.

June 28, 2023
File No: P23-0060

Subject: Additional Geotechnical Services for Stormwater Design for the Melendy Walking Park at 824 N 11th Street in Panama City, FL

Dear Ms. Moore:

Southern Earth Sciences, Inc., has completed the additional geotechnical services for the proposed Stormwater Management for the Melendy Walking Park in Panama City, Florida. Our services were performed in general accordance with proposal number XP23-5.31.23-2, dated May 31, 2023. We have previously performed testing on this site and submitted our report, dated February 16, 2023. Since then, additional design has been performed to the project and two dry retention ponds and an additional wet detention pond have been added to the proposed development. This report presents the results of our field and laboratory testing and includes soil and groundwater conditions for the additional stormwater management design.

FIELD INVESTIGATIVE PROCEDURES:

Prior to our field investigation, Sunshine State One Call of Florida was contacted to locate underground utilities on the property. On June 14, 2023, personnel with our firm traveled to the project site and completed the field testing for the above referenced project. For stormwater investigation, three (3) hand auger borings were performed to depths ranging from approximately 3.7 to 5 feet below existing ground surface. Additionally, two (2) double ring infiltrometer tests were performed, one at each of the two retention ponds on the south end of the site on the east and west sides of the proposed parking lot. An updated site plan was provided with the pond dimensions, locations, and depths. The site is currently an open parcel. The proposed stormwater management will be comprised of four ponds, three on the southern end of the site and one in the center of the site. The soil samples were collected in air-tight containers and delivered back to our laboratory for soil classifications and laboratory testing.

Test locations were established in the field by using a 100-foot tape and estimating right angles with reference to existing landmarks; therefore, our test locations should be considered approximate. See the attached Figure for our approximate test locations. The red and blue labels indicate the borings that were performed in our previous testing, and the yellow labels indicate the additional borings that were performed.

LABORATORY TESTING PROCEDURES:

Laboratory investigative work consisted of physical examination of samples obtained during the soil test boring operation. Soil samples were visually classified in the laboratory in accordance with the Unified Soil Classification System. Evaluation of these samples, in conjunction with cone penetration resistances, have been used to estimate soil characteristics.

Natural Moisture: Four (4) samples were selected for determination of their natural moisture content. In the laboratory, each sample was weighed, dried, and its moisture content was calculated in general accordance with ASTM D2216.

Percent Passing 200 Mesh Sieve: Four (4) samples were selected to determine their percent of materials, by dry weight, finer than the U.S. Number 200 Mesh Sieve. This test was performed in general accordance with ASTM D1140.

The laboratory test results are shown on the boring logs at the depth of the tested sample. Abbreviations of laboratory data are shown below:

NM = Natural Moisture Content (%)
-200 = Percent Finer than the U.S. No. 200 Mesh Sieve

ADDITIONAL FIELD TESTING FOR STORMWATER DESIGN:

While the borings and double ring infiltrometer tests performed for this project are representative of subsurface soil conditions at their respective locations/depths and for their respective vertical reaches, local variations of the subsurface materials, vertical infiltration rates, and seasonal high groundwater levels are anticipated. Soil descriptions and vertical infiltration rates, and seasonal high groundwater levels represent subsurface conditions at the designated locations.

The site is located on the west side of N 11th Street, just north of Boat Race Road. The site is comprised of two parcels with a combined area of approximately 4.6 acres. The two dry retention ponds on the south end of the site will have a bottom elevation of +14 Feet. The wet detention pond in the southwest corner of the site will have a bottom elevation of +10 Feet. Our previously submitted report includes the results of our testing for the large wet detention pond located in the center of the site. The 2.8-acre wet detention pond will have a bottom elevation of +8 Feet. The site is bound to the west by existing residences, to the north by Lance Street, to the south Boat Race Road, and to the east by N 11th Street. Based upon the provided topographic information, the site ranges from approximately +12 to +16 Ft.

The soils encountered throughout the depth of our hand auger borings were sands. The sands varied in color and texture and ranged from slightly silty to slightly clayey, clayey and clean sands. Predominantly, slightly silty to slightly clayey sands were encountered within the top three to four feet and then we encountered slightly clayey to clayey sands for the remaining extent. At test location HA-5/DRI-1, we encountered organics from approximately 2 to 2.5 feet below existing ground surface. Within the top twelve inches of our borings various amounts of organics were encountered.

Groundwater levels were measured on the date of our field testing (June 14, 2023) and are indicated on the attached boring logs, which range from approximately 1.9 to 2.8 feet below existing grade. At our test locations, seasonal high groundwater level was determined by characteristics such as soil colors and soil mottles. Based upon the results of our borings, the estimated depth to seasonal high groundwater level ranges from approximately 1.1 to 1.4 feet (±0.5 feet) below existing ground surface, see the attached boring logs. It may be advisable to have a Professional Surveyor obtain the elevations of our test locations which would help further define the elevation of the seasonal high groundwater elevations. Fluctuations in the water table depths will occur due to changes in gradient, seasonal precipitation/ evapotranspiration differences, and any wetland/drainage influences. Therefore, it is highly recommended that the groundwater levels be verified prior to any excavations on the site.

Vertical Infiltration Rates:

To estimate the vertical infiltration rates for each area, two double-ring infiltrometer tests were performed at test locations HA-5/DRI-1 and HA-6/DRI-2. The double-ring infiltrometer test at HA-5/DRI-1 was performed at approximately one foot below existing grade. At test location HA-6/DRI-2, the double-ring infiltrometer test was performed near existing ground surface (approximately a few inches below the existing grade). The double ring infiltrometer test was performed in general accordance with ASTM D-3385 “Infiltration Rate of Soils in Field Using Double-Ring Infiltrometers”. The soils were presaturated prior to performing the test. The double ring infiltration test does not include the effect of long-term saturation and groundwater mounding.

The results for the double-ring infiltrometer test is graphically illustrated as accumulated intake (inches) versus time (min) and infiltration rate (in/hr) versus time (min) for the test period on the attached Tables 1 and 2. Based upon the results of our double-ring infiltrometer tests, the unsaturated vertical infiltration rate at test location HA-5/DRI-1 is approximately 2.52 inches per hour, and approximately 7.56 inches per hour at location HA-6/DRI-2. We should note these infiltration rates are not factored and should be used with an appropriate factor of safety.

The vertical infiltration rate stated above should not be considered the drawdown rate of the pond or swales. The drawdown rate is a complex 3-dimensional phenomenon dependent upon numerous factors including pond/system geometry, vertical and horizontal infiltration rates, groundwater mounding, etc. The prediction of the drawdown rate is made more difficult by varying soil/groundwater conditions. The Northwest Florida Water Management District recommends a correlation factor between unsaturated vertical infiltration rates and horizontal hydraulic conductivity of 1.5.

GENERAL COMMENTS:

Professional judgments on design criteria are presented in this letter. These are based partly on our evaluations of technical information provided, partly on our understanding of the characteristics of the project being planned, and partly on our general experience with subsurface conditions in the area. We do not guarantee performance of the project in any respect, only that our judgments meet the standard of care of our profession.

This information is exclusively for the use and benefit of the addressee(s) identified on the first page of this report and is not for the use or benefit of, nor may it be relied upon by any other person or entity. The contents of this letter may not be quoted in whole or in part or distributed to any person or entity other than the addressee(s) hereof without, in each case, the advance written consent of the undersigned.

This report has been prepared in order to aid in the evaluation of this property and to assist the engineers in stormwater design. It is intended for use with regard to the specific project discussed herein, and any changes in the pond locations, or assumed (or reported) grades shall be brought to our attention immediately so that we may determine how such changes may effect our conclusions and recommendations. Our report does not address environmental issues which may be associated with the subject property.

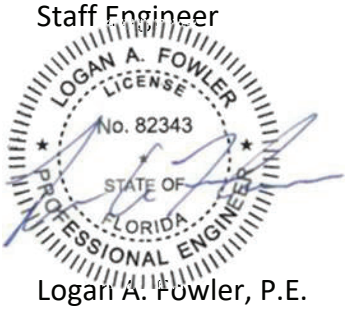
While the borings performed for this project are representative of subsurface soil conditions at their respective locations and for their respective vertical reaches, local variations of the subsurface materials are anticipated and may be encountered. The boring logs and related information are based on the driller's logs and visual examination of selected samples in the laboratory. Delineation between soil types shown on the boring logs is approximate, and soil descriptions represent our interpretation of subsurface conditions at the designated boring location on the particular date drilled.

We appreciate the opportunity to assist you. If you have any questions or if we may be of further assistance, please call at your convenience.

Sincerely,

SOUTHERN EARTH SCIENCES, INC.

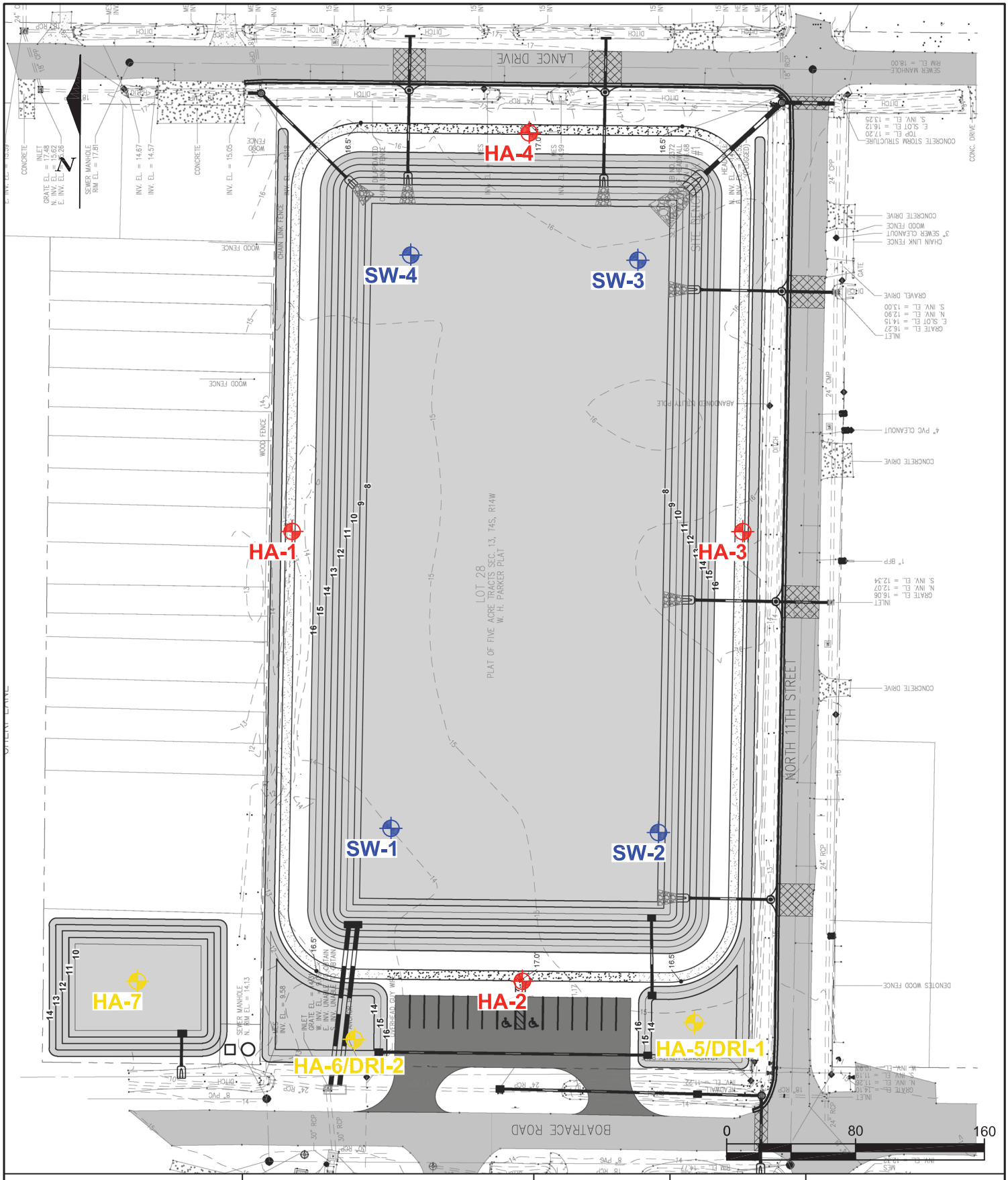
Rebecca L. McNac
Staff Engineer



Logan Fowler
Nov 21 2023 9:05 AM

DocuSign

Logan A. Fowler, P.E.
Eng. Reg. No. 82343
State of Florida



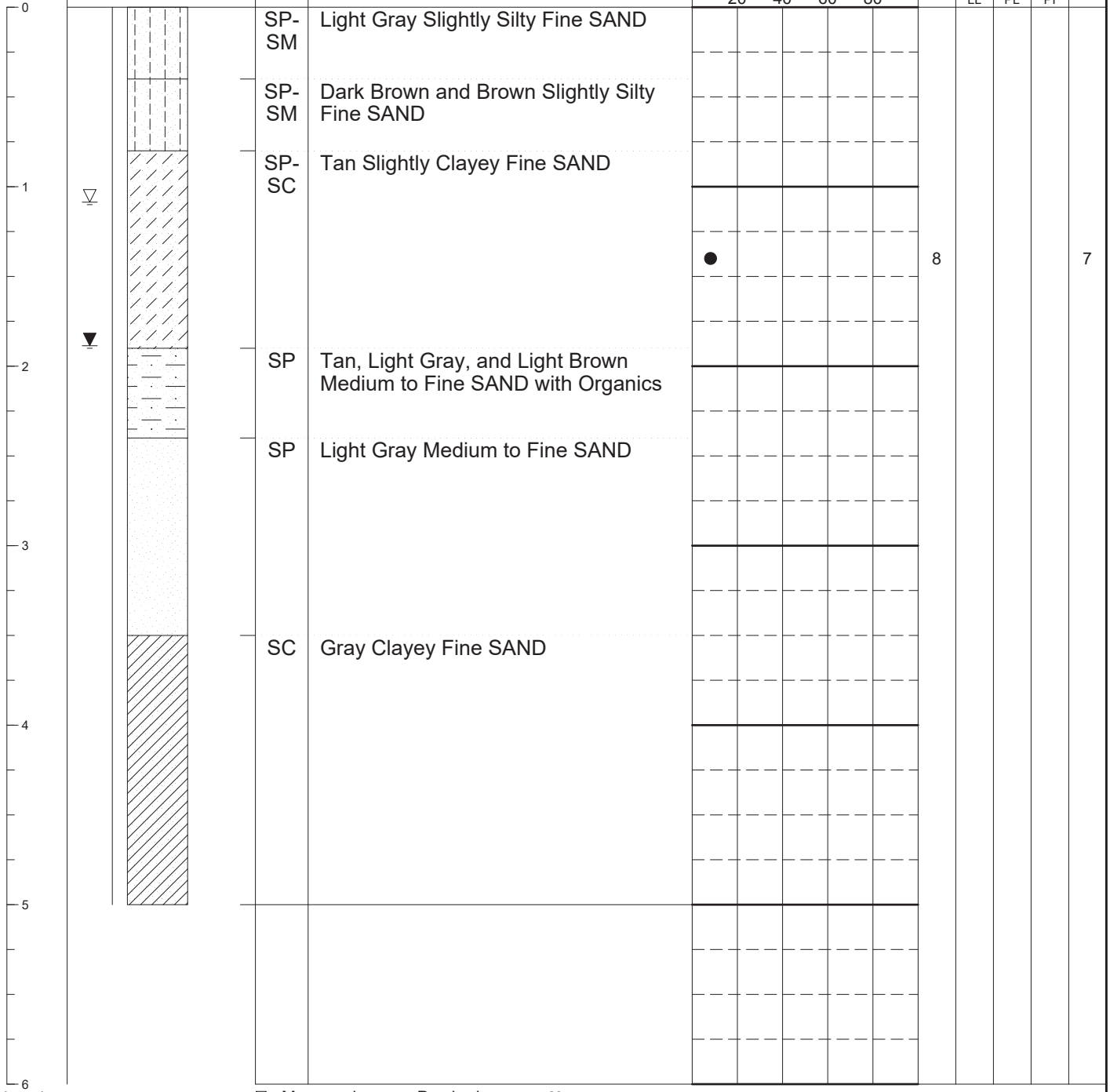
SESI FILE NO: P23-0060	SOUTHERN EARTH SCIENCES	DRAWN BY:	HL
		CHECKED BY:	LF
		DATE:	06/15/2023
		SCALE:	1:80
Melendy Walking Park Panama City, FL			APPROXIMATE TEST LOCATIONS

FIGURE II

LOG OF BORING HA-5/DRI-1

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 06/14/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 1.9 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.1 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 6/23/23

LOG OF BORING HA-6/DRI-2

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 06/14/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown

Elevation / Depth	Soil Symbols Sampler Symbols and Field Test Data	USCS	LOCATION / MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 / Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0		SP-SM	Per Plan Gray Slightly Silty Fine SAND with Organics						
		SP-SC	Gray and Dark Gray Slightly Clayey Fine SAND with Trace Organics						
1	▽	SP-SC	Brown Slightly Clayey Fine SAND						
		SP-SC	Light Brown and Tan Slightly Clayey Fine SAND						
2				●	12				8
	▼	SP	Tan Medium to Fine SAND						
3									
		SP	Light Gray Medium to Fine SAND						
4									
		SP-SC	Gray and Tan Slightly Clayey Fine SAND	●	17				12
5									
6									

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 2.8 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.4 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

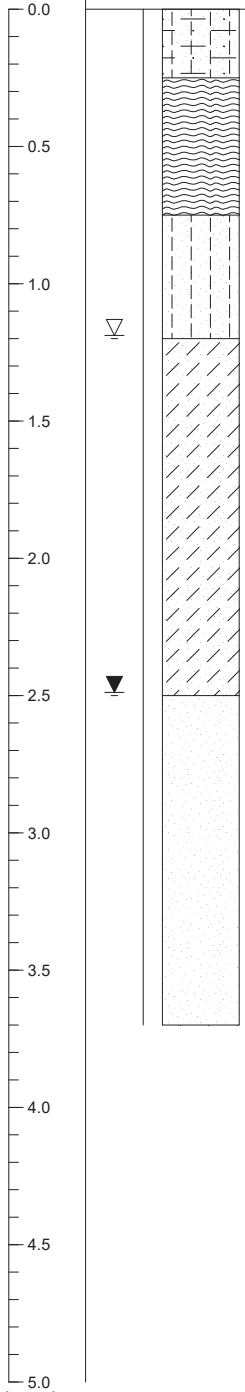
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 6/23/23

LOG OF BORING HA-7

PROJECT: Melendy Walking Park
LOCATION: 824 N 11th Street Panama City Beach, FL
PROJECT NO.: P23-0060
DATE: 06/14/23

METHOD: Hand Auger
DRILLER: HL
ENGR / GEOL: LF
SURFACE ELEVATION: Unknown



Elevation / Depth	USCS	LOCATION / MATERIAL DESCRIPTION	N Value (blows/ft) 20 40 60 80 / Atterberg Limits Natural Moisture PL MC LL	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0.0	SP-SM	Per Plan Gray Slightly Silty Fine SAND with Organics						
0.5	PT	Dark Gray Peaty Fine SAND with Wood						
1.0	SP-SM	Brown and Light Brown Slightly Silty Fine SAND						
1.5	SP-SC	Light Brown Slightly Clayey Fine SAND with Trace Organics						
2.0			●	9				9
2.5	SP	Tan Medium to Fine SAND						
3.0								
3.5								
4.0								
4.5								
5.0								

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼

Water Observations: Groundwater Measured at 2.5 Feet Below Existing Ground Surface

Notes:
Estimated Seasonal High Groundwater 1.2 Feet (+/- 0.5 Feet) Below Existing Ground Surface

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)

Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P23-0060.GPJ SES PC FL.GDT 6/23/23

Table 1

Double Ring Infiltrometer Test at HA-5

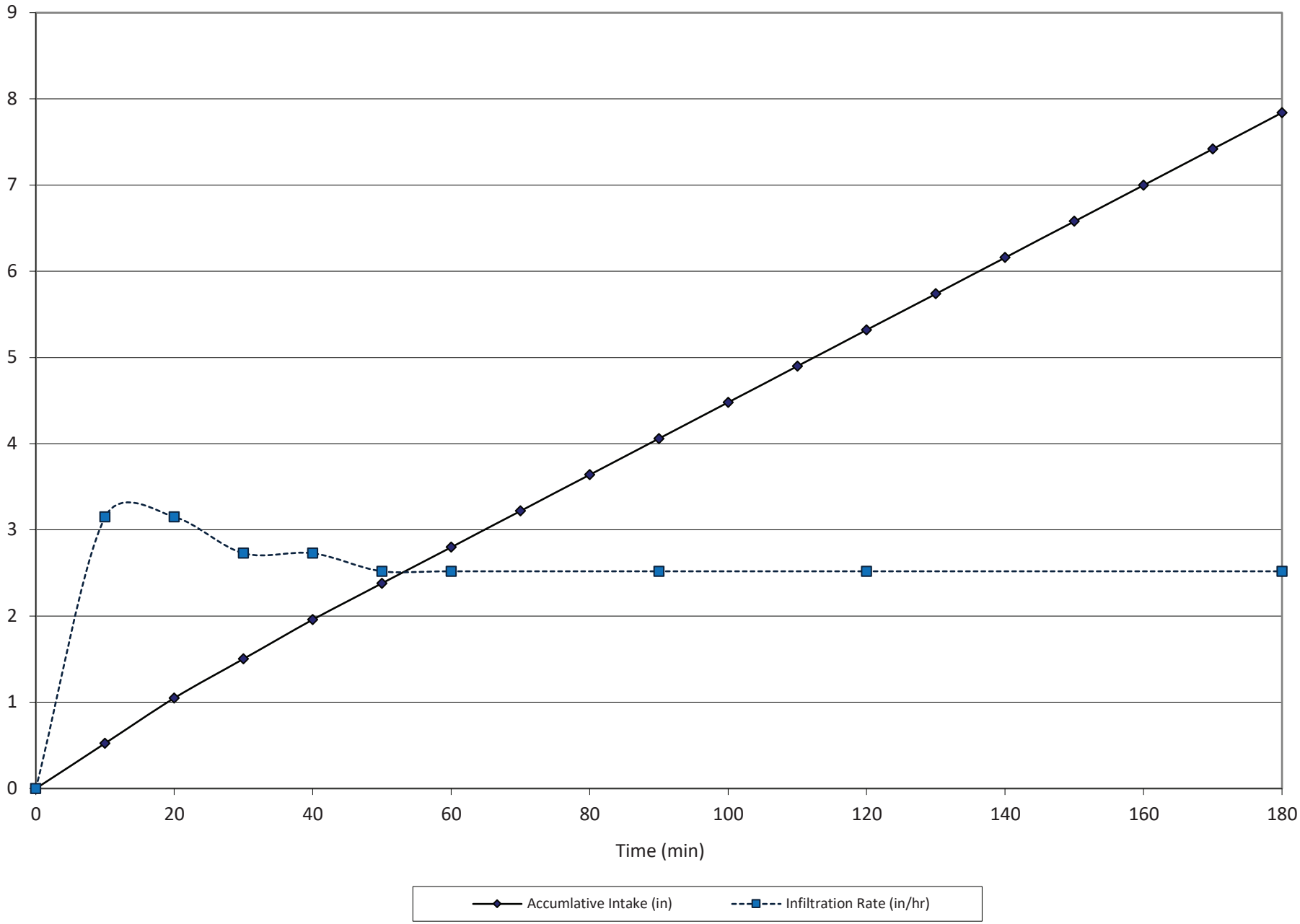
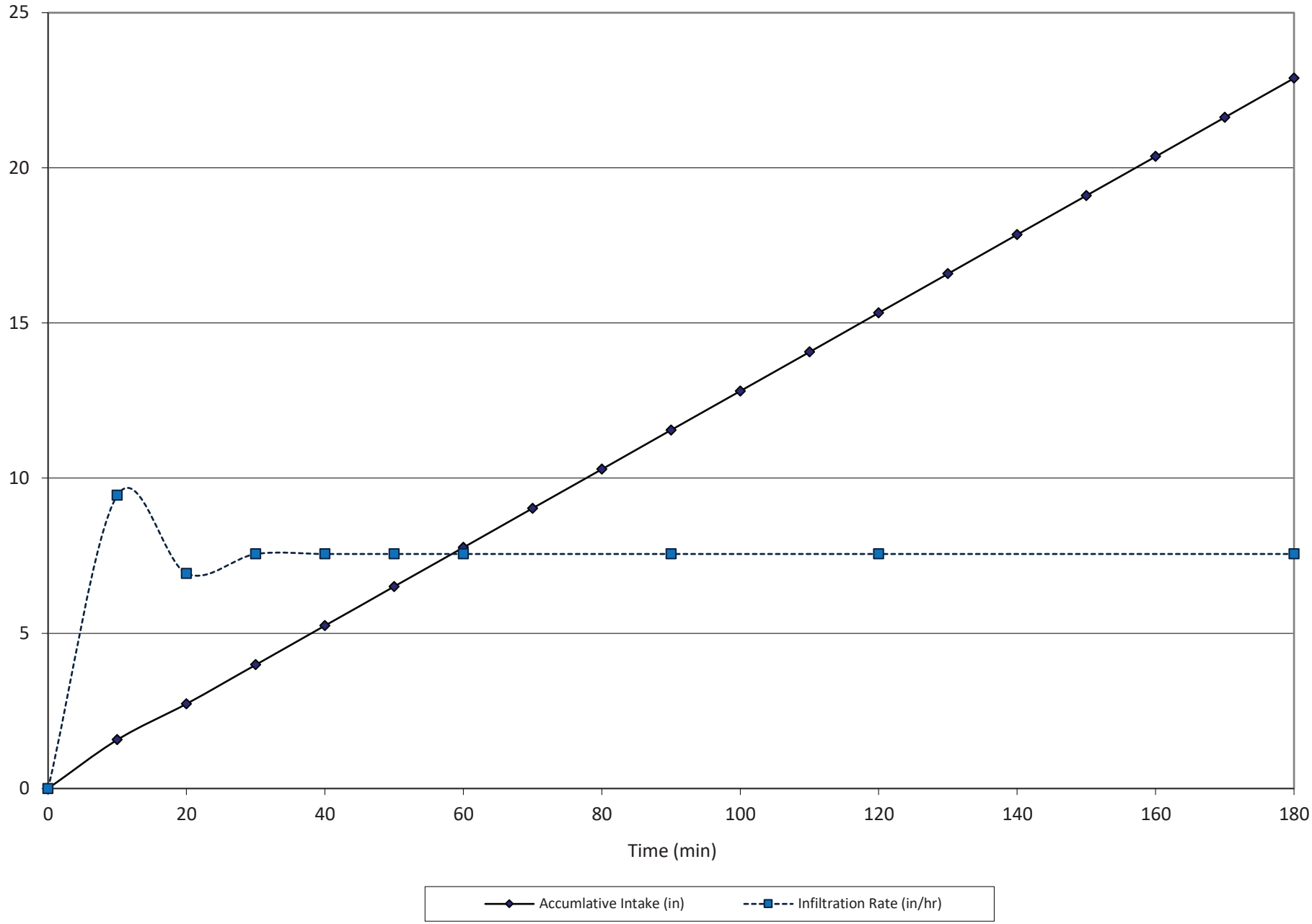


Table 2

Double Ring Infiltrometer Test at HA-6



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The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

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