

DEP AGREEMENT NO. S0696

STATE OF FLORIDA
GRANT AGREEMENT
PURSUANT TO LINE ITEM 1663 OF THE 2012-2013 GENERAL APPROPRIATIONS ACT AND
PURSUANT TO LINE ITEM 1620 OF THE 2013-2014 GENERAL APPROPRIATIONS ACT

THIS AGREEMENT is entered into between the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, whose address is 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 (hereinafter referred to as the "Department") and the CITY OF FORT PIERCE, whose address is 100 North US 1, Fort Pierce, Florida 34950 (hereinafter referred to as "Grantee"), a local government, to provide financial assistance for the Fort Pierce Phase 1 Veterans' Memorial Park Stormwater Improvements

In consideration of the mutual benefits to be derived herefrom, the Department and the Grantee do hereby agree as follows:

1. The Grantee does hereby agree to perform in accordance with the terms and conditions set forth in this Agreement, **Attachment A, Grant Work Plan**, and all attachments and exhibits named herein which are attached hereto and incorporated by reference. For purposes of this Agreement, the terms "Grantee", and "Recipient" are used interchangeably.
2. This Agreement shall begin upon execution by both parties and remain in effect for a period of thirty (30) months, inclusive. The Grantee shall be eligible for reimbursement for work performed on or after the date of execution through the expiration date of this Agreement. This Agreement may be amended to provide for additional services if additional funding is made available by the Legislature.
3.
 - A. As consideration for the satisfactory completion of services rendered by the Grantee under the terms of this Agreement, the Department shall pay the Grantee on a cost reimbursement basis up to a maximum of \$462,000 towards the total estimated project cost of \$1,003,500. The parties hereto understand and agree that this Agreement requires at least a 54% match on the part of the Grantee. Therefore, the Grantee is responsible for providing \$541,500 through cash or third party in-kind towards the work funded under this Agreement. It is understood that any additional funds necessary for the completion of this project is the responsibility of the Grantee. The Grantee will report those expenditures to the Department in the Final Report as required under Task 6 in Attachment A.
 - B. The Grantee shall be reimbursed on a cost reimbursement basis for all eligible project costs upon the completion, submittal and approval of deliverables identified in **Attachment A**, in accordance with the schedule therein. Reimbursement shall be requested utilizing **Attachment B, Payment Request Summary Form**. All bills for amounts due under this Agreement shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof. A final payment request should be submitted to the Department no later than sixty (60) days following the completion date of the Agreement, to assure the availability of funds for payment. Each payment request submitted shall document all matching funds and/or match efforts (i.e. in-kind services) provided during the period covered by each request. The final payment will not be processed until the match requirement has been met.
 - C. The State Chief Financial Officer requires detailed supporting documentation of all costs under a cost reimbursement agreement. In accordance with the **Attachment C, Contract Payment Requirements**, the Grantee shall comply with the minimum requirements set forth therein. The Payment Request Summary Form shall be accompanied by supporting documentation and other requirements as follows for each deliverable:

subrecipient, shall establish a system to provide adequate fund accountability for each project it has been awarded.

- ii. If the Department finds that these funds have been commingled, the Department shall have the right to demand a refund, either in whole or in part, of the funds provided to the Grantee under this Agreement for non-compliance with the material terms of this Agreement. The Grantee, upon such written notification from the Department shall refund, and shall forthwith pay to the Department, the amount of money demanded by the Department. Interest on any refund shall be calculated based on the prevailing rate used by the State Board of Administration. Interest shall be calculated from the date(s) the original payment(s) are received from the Department by the Grantee to the date repayment is made by the Grantee to the Department.
 - iii. In the event that the Grantee recovers costs, incurred under this Agreement and reimbursed by the Department, from another source(s), the Grantee shall reimburse the Department for all recovered funds originally provided under this Agreement. Interest on any refund shall be calculated based on the prevailing rate used by the State Board of Administration. Interest shall be calculated from the date(s) the payment(s) are recovered by the Grantee to the date repayment is made to the Department by the Grantee.
4. The State of Florida's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature. The parties hereto understand that this Agreement is not a commitment of future appropriations.
5. The Grantee shall utilize **Attachment D, Progress Report Form**, to describe the work performed during the reporting period, problems encountered, problem resolution, schedule updates and proposed work for the next reporting period. Quarterly reports shall be submitted to the Department's Grant Manager no later than twenty (20) days following the completion of the quarterly reporting period. It is hereby understood and agreed by the parties that the term "quarterly" shall reflect the calendar quarters ending March 31, June 30, September 30 and December 31. The Department's Grant Manager shall have thirty (30) calendar days to review the required reports and deliverables submitted by the Grantee. Final payment, of up to ten (10) percent of the total Agreement amount identified in paragraph 3.A., may be withheld until all work is completed, all deliverables have been submitted, match requirements have been met and the Final Project Report has been received and approved.
6. Each party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.
7.
 - A. The Department may terminate this Agreement at any time in the event of the failure of the Grantee to fulfill any of its obligations under this Agreement. Prior to termination, the Department shall provide thirty (30) calendar days written notice of its intent to terminate and shall provide the Grantee an opportunity to consult with the Department regarding the reason(s) for termination.
 - B. The Department may terminate this Agreement for convenience by providing the Grantee with thirty (30) calendar days written notice.
8. No payment will be made for deliverables deemed unsatisfactory by the Department. In the event that a deliverable is deemed unsatisfactory by the Department, the Grantee shall re-perform the services needed for submittal of a satisfactory deliverable, at no additional cost to the Department, within ten (10) days of being notified of the unsatisfactory deliverable. If a satisfactory deliverable is not submitted within the specified timeframe, the Department may, in its sole discretion, either: 1) terminate this Agreement for failure to perform, or 2) the Department Grant Manager may, by letter specifying the failure of performance under this Agreement, request that a proposed Corrective Action Plan (CAP) be submitted by the Grantee to the Department. All CAPs must be able to be implemented and performed in no more than sixty (60) days.

- A. A CAP shall be submitted within ten (10) calendar days of the date of the letter request from the Department. The CAP shall be sent to the Department Grant Manager for review and approval. Within ten (10) calendar days of receipt of a CAP, the Department shall notify the Grantee in writing whether the CAP proposed has been accepted. If the CAP is not accepted, the Grantee shall have ten (10) calendar days from receipt of the Department letter rejecting the proposal to submit a revised proposed CAP. Failure to obtain the Department approval of a CAP as specified above shall result in the Department's termination of this Agreement for cause as authorized in this Agreement.
- B. Upon the Department's notice of acceptance of a proposed CAP, the Grantee shall have ten (10) calendar days to commence implementation of the accepted plan. Acceptance of the proposed CAP by the Department does not relieve the Grantee of any of its obligations under the Agreement. In the event the CAP fails to correct or eliminate performance deficiencies by Grantee, the Department shall retain the right to require additional or further remedial steps, or to terminate this Agreement for failure to perform. No actions approved by the Department or steps taken by the Grantee shall preclude the Department from subsequently asserting any deficiencies in performance. The Grantee shall continue to implement the CAP until all deficiencies are corrected. Reports on the progress of the CAP will be made to the Department as requested by the Department Grant Manager.
- C. Failure to respond to a Department request for a CAP or failure to correct a deficiency in the performance of the Agreement as specified by the Department may result in termination of the Agreement

The remedies set forth above are not exclusive and the Department reserves the right to exercise other remedies in addition to or in lieu of those set forth above, as permitted by the Agreement.

- 9. This Agreement may be unilaterally canceled by the Department for refusal by the Grantee to allow public access to all documents, papers, letters, or other material made or received by the Grantee in conjunction with this Agreement, unless the records are exempt from Section 24(a) of Article I of the State Constitution and Section 119.07(1)(a), Florida Statutes.
- 10. The Grantee shall maintain books, records and documents directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles consistently applied. The Department, the State, or their authorized representatives shall have access to such records for audit purposes during the term of this Agreement and for five (5) years following Agreement completion. In the event any work is subcontracted, the Grantee shall similarly require each subcontractor to maintain and allow access to such records for audit purposes.
- 11.
 - A. In addition to the requirements of the preceding paragraph, the Grantee shall comply with the applicable provisions contained in **Attachment E, Special Audit Requirements**, attached hereto and made a part hereof. **Exhibit 1 to Attachment E** summarizes the funding sources supporting the Agreement for purposes of assisting the Grantee in complying with the requirements of **Attachment E**. A revised copy of **Exhibit 1** must be provided to the Grantee for each amendment which authorizes a funding increase or decrease. If the Grantee fails to receive a revised copy of **Exhibit 1**, the Grantee shall notify the Department's Grants Development and Review Manager at 850/245-2361 to request a copy of the updated information.
 - B. The Grantee is hereby advised that the Federal and/or Florida Single Audit Act Requirements may further apply to lower tier transactions that may be a result of this Agreement. The Grantee shall consider the type of financial assistance (federal and/or state) identified in **Attachment E, Exhibit 1** when making its determination. For federal financial assistance, the Grantee shall utilize the guidance provided under OMB Circular A-133, Subpart B, Section __.210 for determining whether the relationship represents that of a subrecipient or vendor. For state financial assistance,

the Grantee shall utilize the form entitled "Checklist for Nonstate Organizations Recipient/Subrecipient vs. Vendor Determination" (form number DFS-A2-NS) that can be found under the "Links/Forms" section appearing at the following website:

<https://apps.fldfs.com/fsaa>

The Grantee should confer with its chief financial officer, audit director or contact the Department for assistance with questions pertaining to the applicability of these requirements.

12. A. The Grantee may subcontract work under this Agreement without the prior written consent of the Department's Grant Manager. The Grantee shall submit a copy of the executed subcontract to the Department within ten (10) days after execution. Regardless of any subcontract, the Grantee is ultimately responsible for all work to be performed under this Agreement. The Grantee agrees to be responsible for the fulfillment of all work elements included in any subcontract and agrees to be responsible for the payment of all monies due under any subcontract. It is understood and agreed by the Grantee that the Department shall not be liable to any subcontractor for any expenses or liabilities incurred under the subcontract and that the Grantee shall be solely liable to the subcontractor for all expenses and liabilities incurred under the subcontract.
- B. The Department of Environmental Protection supports diversity in its procurement program and requests that all subcontracting opportunities afforded by this Agreement embrace diversity enthusiastically. The award of subcontracts should reflect the full diversity of the citizens of the State of Florida. A list of minority owned firms that could be offered subcontracting opportunities may be obtained by contacting the Office of Supplier Diversity at (850) 487-0915.
13. In accordance with Section 216.347, Florida Statutes, the Grantee is hereby prohibited from using funds provided by this Agreement for the purpose of lobbying the Legislature, the judicial branch or a state agency.
14. The Grantee shall comply with all applicable federal, state and local rules and regulations in providing services to the Department under this Agreement. The Grantee acknowledges that this requirement includes, but is not limited to, compliance with all applicable federal, state and local health and safety rules and regulations. The Grantee further agrees to include this provision in all subcontracts issued as a result of this Agreement.
15. Any notices between the parties shall be considered delivered when posted by Certified Mail, return receipt requested, or overnight courier service, or delivered in person to the Grant Managers at the addresses below.
16. The Department's Grant Managers (which may also be referred to as the Department's Project Managers) for this Agreement are identified below.

<u>Technical</u>	
Taufiqul Aziz	
Florida Department of Environmental Protection	
Bureau of Watershed Restoration	
2600 Blair Stone Road	
Tallahassee, Florida 32399	
Telephone No.:	(850) 245-8415
Fax No.:	(850) 245-8434
E-mail Address:	Taufiqul.aziz@dep.state.fl.us

<u>Administrative</u>	
Connie Becker	
Florida Department of Environmental Protection	
Bureau of Watershed Restoration	
2600 Blair Stone Road, MS# 3510	
Tallahassee, Florida 32399	
Telephone No.:	(850) 245-5505
Fax No.:	(850) 245-8434
E-mail Address:	Connie.L.Becker@dep.state.fl.us

17. The Grantee's Grant Manager for this Agreement is identified below.

Tracy S. Telle, Assistant City Engineer	
Engineering Department	
City of Fort Pierce	
100 North US 1	
Fort Pierce, Florida 34950	
Telephone No.:	(772) 467-3776
Fax No.:	(772) 460-6847
E-mail Address:	ttelle@city-ftpierce.com

18. To the extent required by law, the Grantee will be self-insured against, or will secure and maintain during the life of this Agreement, Workers' Compensation Insurance for all of its employees connected with the work of this project and, in case any work is subcontracted, the Grantee shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of its employees unless such employees are covered by the protection afforded by the Grantee. Such self-insurance program or insurance coverage shall comply fully with the Florida Workers' Compensation law. In case any class of employees engaged in hazardous work under this Agreement is not protected under Workers' Compensation statutes, the Grantee shall provide, and cause each subcontractor to provide, adequate insurance satisfactory to the Department, for the protection of his employees not otherwise protected.
19. A. The Grantee shall secure and maintain Commercial General Liability insurance including bodily injury and property damage. The minimum limits of liability shall be \$300,000 each occurrence and \$1,000,000 aggregate. This insurance will provide coverage for all claims that may arise from the services and/or operations completed under this Agreement, whether such services and/or operations are by the Grantee or anyone directly or indirectly employed by him.
- B. The Grantee shall secure and maintain Commercial Automobile Liability insurance for all claims which may arise from the services and/or operations under this Agreement, whether such services and/or operations are by the Grantee or by anyone directly, or indirectly employed by him. The minimum limits of liability shall be as follows:
- \$300,000 Automobile Liability Combined Single Limit for Company Owned Vehicles, if applicable
- \$300,000 Hired and Non-owned Liability Coverage
- C. All insurance policies shall be with insurers licensed or eligible to do business in the State of Florida. The Grantee's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason except after thirty (30) days written notice (with the exception of non-payment of premium which requires a 10 day notice) to the Department's Procurement Administrator. Such insurance shall include the State of Florida as an Additional Insured for the entire length of the Agreement.

20. The Grantee covenants that it presently has no interest and shall not acquire any interest which would conflict in any manner or degree with the performance of services required.
21. Reimbursement for equipment purchases costing \$1,000 or more is not authorized under the terms and conditions of this Agreement.
22. The Department may at any time, by written order designated to be a change order, make any change in the Grant Manager information or task timelines within the current authorized Agreement period. All change orders are subject to the mutual agreement of both parties as evidenced in writing. Any change, which causes an increase or decrease in the Grantee's cost or time, shall require formal amendment to this Agreement.
23. If the Grantee's project involves environmentally related measurements or data generation, the Grantee shall develop and implement quality assurance practices consisting of policies, procedures, specifications, standards, and documentation sufficient to produce data of quality adequate to meet project objectives and to minimize loss of data due to out-of-control conditions or malfunctions. All sampling and analyses performed under this Agreement must conform with the requirements set forth in Chapter 62-160, Florida Administrative Code, and the Quality Assurance Requirements for Department Agreements, attached hereto and made part hereof as **Attachment F, Quality Assurance Requirements**.
24.
 - A. No person, on the grounds of race, creed, color, national origin, age, sex, or disability, shall be excluded from participation in; be denied the proceeds or benefits of; or be otherwise subjected to discrimination in performance of this Agreement.
 - B. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide 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 award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity, and may not transact business with any public entity. The Florida Department of Management Services is responsible for maintaining the discriminatory vendor list and posts the list on its website. Questions regarding the discriminatory vendor list may be directed to the Florida Department of Management Services, Office of Supplier Diversity, at (850) 487-0915.
25. Land acquisition is not authorized under the terms of this Agreement.
26. This Agreement has been delivered in the State of Florida and shall be construed in accordance with the laws of Florida. Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement. Any action hereon or in connection herewith shall be brought in Leon County, Florida.
27. This Agreement represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing, duly signed by each of the parties hereto, and attached to the original of this Agreement, unless otherwise provided herein.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed, the day and year last written below.

CITY OF FORT PIERCE

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: _____
Title: *Linda Hudson, Mayor

By: _____
Secretary or designee

Attest: _____
Linda W. Cox, City Clerk

Date: _____

Date: _____

Taufiqul Aziz, DEP Grant Manager

Connie Becker, DEP Grant Manager

DEP Contracts Administrator

Approved as to form and correctness:

Approved as to form and legality:

Robert V. Schwerer, City Attorney

DEP Attorney

FEID No.: 59-6000322

*For Agreements with governmental boards/commissions: If someone other than the Chairman signs this Agreement, a resolution, statement or other document authorizing that person to sign the Agreement on behalf of the Grantee must accompany the Agreement.

List of attachments/exhibits included as part of this Agreement:

Specify Type	Letter/ Number	Description (include number of pages)
Attachment	A	Grant Work Plan (8 Pages)
Attachment	B	Payment Request Summary Form (2 Pages)
Attachment	C	Contract Payment Requirements (1 Page)
Attachment	D	Progress Report Form (1 Page)
Attachment	E	Special Audit Requirements (5 Pages)
Attachment	F	Quality Assurance Requirements (14 Pages)

**ATTACHMENT A
GRANT WORK PLAN**

PROJECT NAME: Fort Pierce Phase I Veterans' Memorial Park Stormwater Improvements

PROJECT FUNDING: \$462,000.00 **MATCH:** \$541,500.00 (CITY SMU FUNDS)

TOTAL PROJECT COST: \$1,003,500.00

LEAD ORGANIZATION: City of Fort Pierce Engineering Department

PROJECT LOCATION AND WATERSHED CHARACTERISTICS:

Geographic Location: City of Fort Pierce, St. Lucie County – Refer to Exhibit 1
Impacted Watershed Name: Indian River Lagoon
Size of Project Impact: 8 Acres – Refer to Exhibit 2
Size of Area Being Treated: 44.1 Acres – Refer to Exhibit 1
Latitude: 27.7553
Longitude: 80.3206
Hydrologic Unit Code: 03080202-009
WBID: 5003A
Impaired waterbody affected: 5003A – Indian River Lagoon
Impairment: This project will reduce the Total Nitrogen, Total Phosphorus, Suspended Solids and Copper prior to discharging into the Indian River Lagoon.
TMDL Status: Indian River Lagoon – Total Maximum Daily Load (TMDL) is being reviewed
BMAP Status: Moore's Creek Watershed Basin - A BMAP is being developed
Land Uses within the area being treated

Land Use	Acres	%
Residential Low Density (1100)	3.3	7.5
Residential Medium Density (1200)	6.4	14.5
Residential High Density (1300)		
Commercial and Services (1400)	26.4	59.9
Industrial (1500)		
Extractive (1600)		
Institutional (1700)		
Recreational (1800)	8	18.1
Open Land (1900)		
Agriculture (2000)		
Upland Non-Forested (3000)		
Upland Forests (4000)		
Water (5000)		
Wetlands (6000)		
Barren Land (7000)		
Transportation, Communication, and Utilities (8000)		
Land Use Totals (Acreage and %)	44.1	100

LAND OWNERSHIP STATUS:

Land necessary for the construction of treatment infrastructure has been acquired. Title is held by City of Fort Pierce.

PROJECT OVERVIEW: The City of Fort Pierce will initially treat the 8.0 acre Veteran's Park with subsequent treatment of the remaining 36.1 acre drainage basin that currently discharges untreated into the Indian River Lagoon, refer to Exhibit 1.

The project will initially pretreat stormwater runoff via pervious pavers within the parking areas and the pedestrian plaza area. Any excess run-off will be collected into two bio-swales that will then discharge into a 0.50 acre lake. The treated water will then discharge through a control structure into the Indian River Lagoon, refer to Exhibit 2.

Water quality monitoring is proposed during and after construction and the project will include public education aspects with the use of an educational kiosk at the park and informational pamphlets inside the River Walk Center building located on site. The Grantee will provide a large display board of the project near the entrance to the City Commission chambers and also on the park property so as to permit the general public viewing rights of the project along with applicable funding amounts and funding entities. The construction will be featured in the Grantee's newsletter and have write-ups in the local paper.

ESTIMATED POLLUTANT LOAD REDUCTION MODEL USED:

This Agreement is for a structural Best Management Practice (BMP) project. In the below estimated pollutant load reduction, the applicant used the following model: The STEPL Model was used to obtain the load reductions.

BMPs Installed		TSS lbs/yr	TP lbs/yr	TN lbs/yr	Sediment lbs/yr	BOD lbs/yr	Other lbs/yr	Other lbs/yr
BMP #1 Pervious Pavers (Phase 1)							LEAD	ZINC
Pollutant Loads	Pre-Project	882.28	2.75	18.11		118.15	0.08	1.44
	Post-Project	88.23	0.96	2.72		118.15	0.00	0.00
	Load Reduction	877.34	1.79	15.39		0.00	0.08	1.44
	% Reduction	90.0	65.0	85.1		0.00	100.0	100.0
BMP #2 Bio-Swales (Phase 2)		TSS lbs/yr	TP lbs/yr	TN lbs/yr	Sediment lbs/yr	BOD lbs/yr	Other lbs/yr	Other lbs/yr
							LEAD	ZINC
Pollutant Loads	Pre-Project	88.32	0.96	2.72		1118.15	0.00	0.00
	Post-Project	12.35	0.30	1.22		33.08	0.00	0.00
	Load Reduction	75.88	0.66	1.49		85.07	0.00	0.00
	% Reduction	86.0	68.5	55.0		72.0	0.0	0.0
BMP #3 Wet Pond (Phase 1)		TSS lbs/yr	TP lbs/yr	TN lbs/yr	Sediment lbs/yr	BOD lbs/yr	Other lbs/yr	Other lbs/yr
							LEAD	ZINC
Pollutant	Pre-Project	12.35	0.30	1.22		33.08	0.00	0.00
	Post-Project	4.94	0.06	0.70		33.08	0.00	0.00
	Load Reduction	7.41	0.24	0.52		0.00	0.00	0.00

	% Reduction	60.0	79.0	42.7		0.0	0.0	0.0
TOTAL		TSS lbs/yr	TP lbs/yr	TN lbs/yr	Sediment lbs/yr	BOD lbs/yr	Other lbs/yr	Other lbs/yr
							LEAD	ZINC
Pollutant Loads	Pre-Project	882.28	2.75	18.11		118.15	0.08	1.44
	Post-Project	4.94	0.06	0.70		33.08	0.00	0.00
	Load Reduction	877.34	2.68	17.41		85.07	0.08	1.44
	% Reduction	99.4	97.7	96.1		72.0	100.0	100.0

EMCS USED IN MODEL: Event Mean Concentrations (EMCs) listed were used in the model to estimate pre-project pollutant loads.

ESTIMATED RESIDENCE TIME OF ANY PONDS, SWALES, ETC.: Estimated Pond Residence Time is seventy-four (74) days.

TASKS and DELIVERABLES:

Task 1: Design and Permitting (Match: \$66,900.00)

Complete engineering design plans for all BMPs, including bio-swales, wet pond, floc-logs, and pervious pavers.

Deliverables: A complete set of design and construction drawings and the required permit for the project.

Timeline for completion: Start Month 1 Complete Month 6

Performance Standard: The Department's Grant Manager will review the Design, Construction Drawings, and Permits for their completeness and to ensure compliance with state and federal laws specific to this Agreement.

Budget Information: DEP Amount: \$0.00; Match from City Stormwater Utility: \$66,900.00

Task 2: Bidding (Match: \$5,000.00)

Prepare, send, receive, evaluate and award construction bid.

Deliverables: Copy of the bid tabulation and copy of the Notice of Award for construction to the selected contractor.

Timeline for completion: Start Month 7 Complete Month 10

Performance Standard: The Department's Grant manager will review the bid package to ensure compliance with state and federal laws specific to this Agreement.

Budget Information: DEP Amount: \$0.00; Match from City Stormwater Utility: \$5,000.00

Task 3: BMP Implementation/Construction (DEP Amount: \$382,000; Match: \$434,600)

Acceptance of the constructed facilities according to the design for a stormwater treatment train facilities for BMPs (bio-swales, pervious pavers, floc-logs and wet detention pond). The constructed facilities are to include an 8' deep, 0.5 acre wet detention lake w/ aeration fountains; 16,000 SF +/- of pervious sidewalk and parking spaces; 320 LF of 40' wide bio-swales with littoral shelf plantings; control structure with floc-logs; and 520 LF of 24" RCP storm drain.

Deliverables: Copies of As-Builts; photographs of before, during and after construction; and Certificate of Completion from Engineer

Timeline for completion: Start Month 11 Complete Month 23

Performance Standard: The Department's Grant Manager will review the photographs and as built drawings for all components to verify that construction has been completed in accordance with the approved plans.

Budget Information: DEP Amount: \$382,000.00; Match from City Stormwater Utility: \$434,600.00.

Task 4: BMP Effectiveness Monitoring (DEP Amount: \$80,000.00)

Complete and submit to the Department a Quality Assurance Project Plan for monitoring prior to commencement of the project's monitoring. The monitoring plan will specify the sampling locations, sampling instruments, and parameters to be sampled. The parameters shall include, but are not limited to: TN (lbs/yr), TP (lbs/yr), TSS (lbs/yr), Cd, Cr, Cu, Zn, NO2/NO3, TKN, NH3, Orthophosphate, oil/grease, Fecal coliform, rainfall and flow. Monitored

events shall include 7 – 10 discrete rain events, generally greater than 0.20 inches and less than 1.5 inches. Monitoring is to be performed at inflow and outflow locations of the treatment BMP train installed and in accordance with the approved QAPP. Sampling locations shall be recorded and verified using a GPS device. Project-specific details must be added during QAPP development.

Deliverables: Approved QAPP and Monitoring Report.

Timeline for completion: Start Month 24 Complete Month 30

Performance Standard: Draft QAPP, final approved QAPP and Monitoring report will be reviewed by the Department’s Grant Manger for compliance with the Department’s standard operating procedures for Monitoring.

Budget Information: DEP Amount: \$80,000.00; Match from City Stormwater Utility: \$0.00

Task 5: Public Education (Match: \$15,000.00)

Complete an on-site kiosk with display of the stormwater project, attendance of at least one City Friday Fest to show project progress and educate the public, display at the entrance to the City Commission Chambers, and provide articles in the City’s website and/or local newspaper.

Deliverables: Photos, meeting notes, sign-in sheets, copies of articles.

Timeline for completion: Start Month 12 Complete Month 30

Performance Standard: The Department’s Grant Manager will review the photographs of kiosk, meeting notes and copies of articles to ensure they meet the objectives of the task description.

Budget Information: DEP Amount: \$0.00; Match from City Stormwater Utility: \$15,000.00

Task 6: Draft and Final Reports (Match: \$20,000.00)

Complete and submit to the Department a Final Report. This Final Report is intended to capture the outcome and results of the selected project, including all tasks included in this project. This shall include, where applicable, why a BMP did not obtain or exceeded the expected removal efficiency; any problems encountered and how those problems were overcome; an explanation of any project delays; a brief summary of any additional phases yet to be completed; pollutant load reduction in kg/year; and more. The Final Report template, available from the Department’s contract manager, should be followed as much as possible. Quarterly information regarding the status of the project conveyed to the public. Slides will be taken throughout the construction.

Deliverables: Draft final report; Final report

Timeline for completion: Start Month 24 Complete Month 30

Performance Standard: The Department’s Grant Manager will review the draft final report and provide comments to the Grantee. The Department’s Grant Manager will review the Final Report for completeness and to ensure all comments were addressed.

Budget Information: DEP Amount: \$0.00; Match from City Stormwater Utility: \$20,000.00

TIMELINE:

Task No.	Task Title	Start	Complete
1	Design and Permitting	Month 1	Month 6
2	Bidding	Month 7	Month 10
3	BMP Implementation / Construction	Month 11	Month 23
4	BMP Effectiveness Monitoring	Month 24	Month 30
5	Public Education	Month 12	Month 30
6	Draft and Final Reports	Month 24	Month 30

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PROJECT BUDGET BY CATEGORY and TASK:

Task No.	Category	Grant Funding	Match Funding	Match Source
1	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$0	\$66,900.00	Grantee
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$0	
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$0	\$66,900.00	

2	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$0	\$5,000.00	Grantee
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$0	
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$0	\$5,000.00	

3	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$382,000.00	\$434,600.00	Grantee
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$0	
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$382,000.00	\$434,600.00	

4	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$80,000.00	\$0	
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$0	
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$80,000.00	\$0	

5	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$0	\$10,000.00	Grantee
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$5,000.00	Grantee
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$0	\$15,000.00	

6	Salaries	\$0	\$0	
	Fringe Benefits	\$0	\$0	
	Travel	\$0	\$0	
	Contractual	\$0	\$20,000.00	Grantee
	Equipment Purchases	\$0	\$0	
	Supplies/Other Expenses	\$0	\$0	
	Land	\$0	\$0	
	Indirect	\$0	\$0	
	Total for Task	\$0	\$20,000.00	
Total:		\$462,000.00	\$541,500.00	
Total Project Cost:		\$1,003,500.00		
Percentage Match:		46.0%	54.0%	

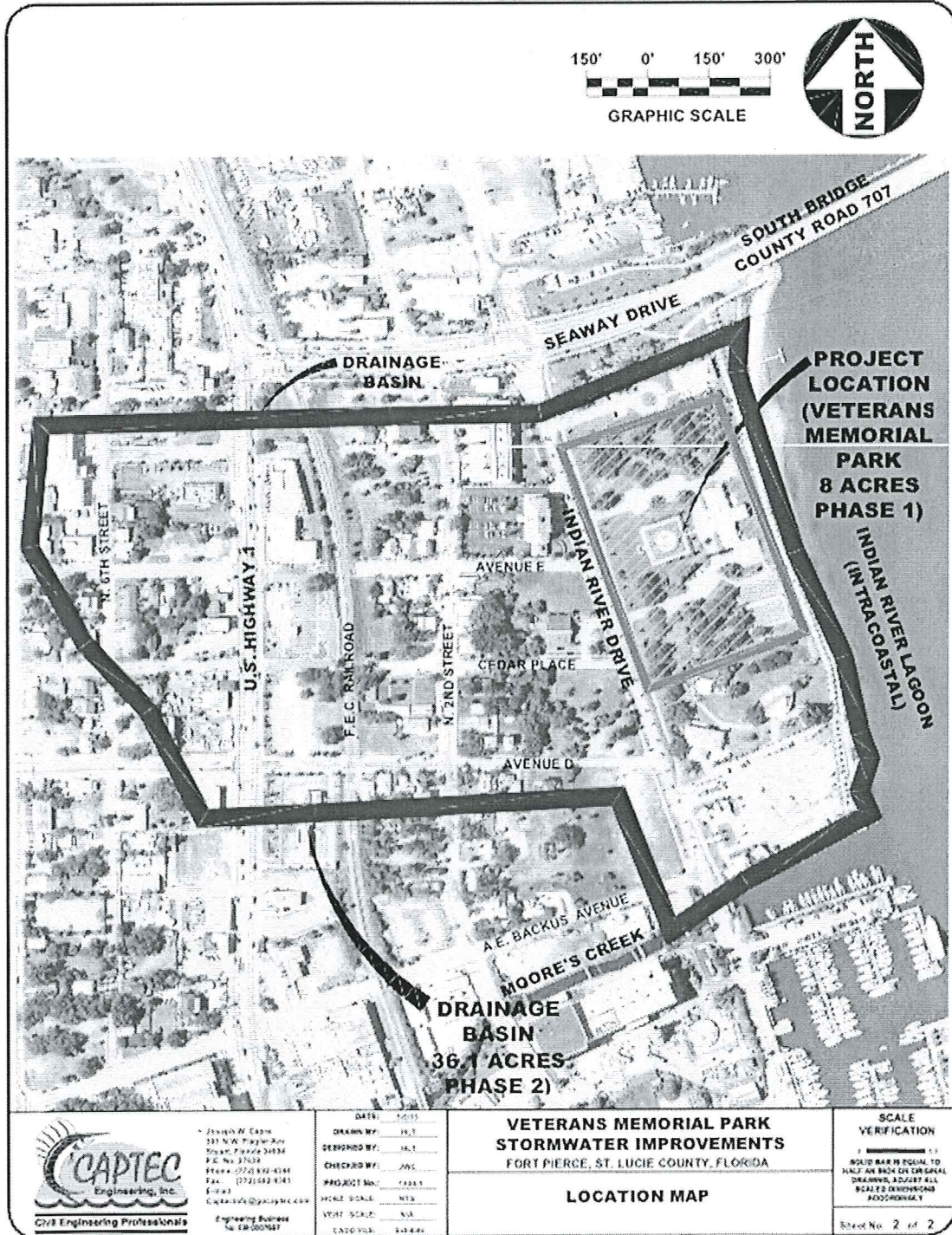
PROJECT BUDGET CATEGORY TOTALS:

Category Totals	Grant Funding	Match Funding	Match Source
Salaries Total	\$0	\$0	
Fringe Benefits Total	\$0	\$0	
Travel Total	\$0	\$0	
Contractual Total	\$462,000.00	\$536,500.00	Grantee
Equipment Purchases Total	\$0	\$0	
Supplies/Other Expenses Total	\$0	\$5,000.00	Grantee
Land Total	\$0	\$0	
Indirect Total	\$0	\$0	
Total:	\$462,000.00	\$541,500.00	
Total Project Cost:	\$1,003,500.00		
Percentage Match:	46.0%	54.0%	

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EXHIBIT 1

Drainage Basin/Treatment Area Map (Includes drainage sub-basins)



Joseph W. Cook
333 N.W. 17th Ave.
Fort Pierce, Florida 34934
P.O. No. 37538
Phone: (772) 892-4184
Fax: (772) 892-4181
E-mail: jcook@captec.com
Engineering Business
No. EB-0009487

DATE: 10/15
DRAWN BY: JWC
DESIGNED BY: JWC
CHECKED BY: JWC
PROJECT No.: 1333-1
SCALE: NTS
VERT. SCALE: N/A
CADD FILE: 13-3-01

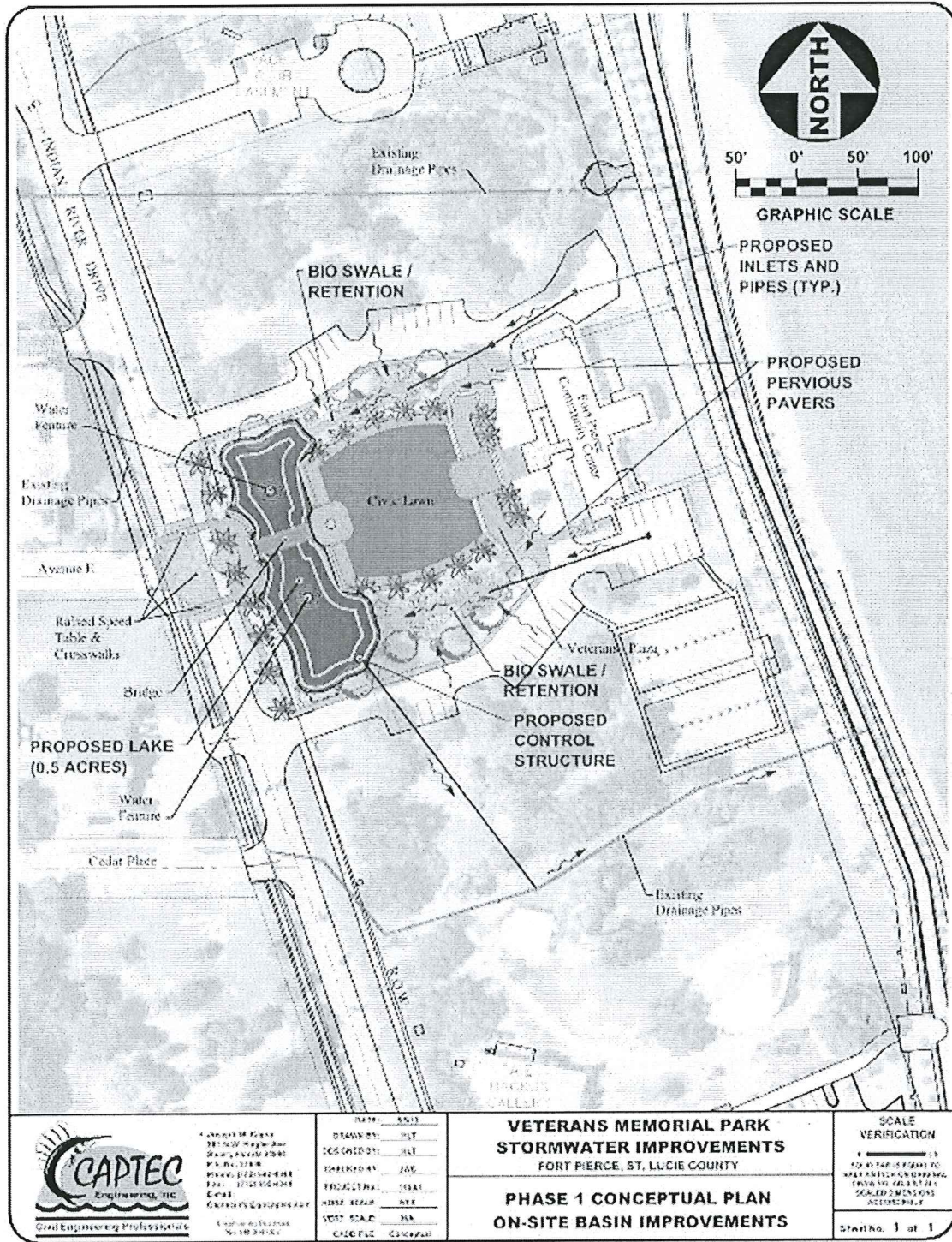
**VETERANS MEMORIAL PARK
STORMWATER IMPROVEMENTS**
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

LOCATION MAP

SCALE VERIFICATION
1" = 150'
SOLID BAR IS EQUAL TO
HALF AN INCH ON ORIGINAL
DRAWING. ADJUST ALL
SCALED DIMENSIONS
ACCORDINGLY.

Sheet No. 2 of 2

EXHIBIT 2



Christopher K. Kline
 3815 W. Highway 400
 Suite 100, Fort Pierce, FL 34947
 P.O. Box 378
 Phone: 888-252-4388
 Fax: 888-252-4388
 Email: info@capteceng.com
 Website: www.capteceng.com

DATE:	5/2/13
DRAWN BY:	SLT
CHECKED BY:	SLT
ENGINEER BY:	JOB
PROJECT NO.:	0801
DATE SCALE:	N/A
WEST SCALE:	N/A
CAD FILE:	0801.dwg

VETERANS MEMORIAL PARK
STORMWATER IMPROVEMENTS
 FORT PIERCE, ST. LUCIE COUNTY

PHASE 1 CONCEPTUAL PLAN
ON-SITE BASIN IMPROVEMENTS

SCALE VERIFICATION 1" = 50' 1/4" = 12.5' 1/8" = 6.25' 1/16" = 3.125' 1/32" = 1.5625' 1/64" = 0.78125' 1/128" = 0.390625' 1/256" = 0.1953125' 1/512" = 0.09765625' 1/1024" = 0.048828125'	Sheet No. 1 of 1
---	------------------

**ATTACHMENT B
PAYMENT REQUEST SUMMARY FORM**

Grantee: _____
Mailing Address: _____

Grantee's Grant Manager: _____
Payment Request No.: _____

DEP Agreement No.: S0696
Date Of Request: _____

Performance Period: _____

Task/Deliverable Amount Requested: \$ _____

Task/Deliverable No.: _____

GRANT EXPENDITURES SUMMARY SECTION

[Effective Date of Grant through End-of-Grant Period]

CATEGORY OF EXPENDITURE	AMOUNT OF THIS REQUEST	TOTAL CUMULATIVE PAYMENT REQUESTS	MATCHING FUNDS	TOTAL CUMULATIVE MATCHING FUNDS
Salaries	\$N/A	\$N/A	\$N/A	\$N/A
Fringe Benefits	\$N/A	\$N/A	\$N/A	\$N/A
Travel (if authorized)	\$N/A	\$N/A	\$N/A	\$N/A
Subcontracting:				
Contractual Services	\$	\$	\$	\$
Equipment Purchases	\$N/A	\$N/A	\$N/A	\$N/A
Supplies/Other Expenses	\$N/A	\$N/A	\$	\$
Land	\$N/A	\$N/A	\$N/A	\$N/A
Indirect	\$N/A	\$N/A	\$N/A	\$N/A
TOTAL AMOUNT	\$	\$	\$	\$
TOTAL TASK/DELIVERABLE BUDGET AMOUNT	\$		\$	
Less Total Cumulative Payment Requests of:	\$		\$	
TOTAL REMAINING IN TASK	\$		\$	

GRANTEE CERTIFICATION

The undersigned certifies that the amount being requested for reimbursement above was for items that were charged to and utilized only for the above cited grant activities.

_____	_____
Grantee's Grant Manager's Signature	Grantee's Fiscal Agent
_____	_____
Print Name	Print Name
_____	_____
Telephone Number	Telephone Number

**INSTRUCTIONS FOR COMPLETING
PAYMENT REQUEST SUMMARY FORM**

GRANTEE: Enter the name of the grantee's agency.

MAILING ADDRESS: Enter the address that you want the state warrant sent.

DEP AGREEMENT NO.: This is the number on your grant agreement.

DATE OF REQUEST: This is the date you are submitting the request.

TASK/DELIVERABLE AMOUNT REQUESTED: This should match the amount on the "*TOTAL TASK/DELIVERABLE BUDGET AMOUNT*" line for the "*AMOUNT OF THIS REQUEST*" column.

GRANTEE'S GRANT MANAGER: This should be the person identified as grant manager in the grant Agreement.

PAYMENT REQUEST NO.: This is the number of your payment request, not the quarter number.

PERFORMANCE PERIOD: This is the beginning and ending date of the performance period for the task/deliverable that the request is for (this must be within the timeline shown for the task/deliverable in the Agreement).

TASK/DELIVERABLE NO.: This is the number of the task/deliverable that you are requesting payment for and/or claiming match for (must agree with the current Grant Work Plan).

GRANT EXPENDITURES SUMMARY SECTION:

"AMOUNT OF THIS REQUEST" COLUMN: Enter the amount that was expended for this task during the period for which you are requesting reimbursement for this task. This must agree with the currently approved budget in the current Grant Work Plan of your grant Agreement. Do not claim expenses in a budget category that does not have an approved budget. Do not claim items that are not specifically identified in the current Grant Work Plan. Enter the column total on the "*TOTAL AMOUNT*" line. Enter the amount of the task on the "*TOTAL TASK BUDGET AMOUNT*" line. Enter the total cumulative amount of this request **and** all previous payments on the "*LESS TOTAL CUMULATIVE PAYMENT REQUESTS OF*" line. Deduct the "*LESS TOTAL CUMULATIVE PAYMENT REQUESTS OF*" from the "*TOTAL TASK BUDGET AMOUNT*" for the amount to enter on the "*TOTAL REMAINING IN TASK*" line.

"TOTAL CUMULATIVE PAYMENT REQUESTS" COLUMN: Enter the cumulative amounts that have been requested to date for reimbursement by budget category. The final request should show the total of all requests; first through the final request (this amount cannot exceed the approved budget amount for that budget category for the task you are reporting on). Enter the column total on the "*TOTALS*" line. **Do not enter anything in the shaded areas.**

"MATCHING FUNDS" COLUMN: Enter the amount to be claimed as match for the performance period for the task you are reporting on. This needs to be shown under specific budget categories according to the currently approved Grant Work Plan. Enter the total on the "*TOTAL AMOUNT*" line for this column. Enter the match budget amount on the "*TOTAL TASK BUDGET AMOUNT*" line for this column. Enter the total cumulative amount of this and any previous match claimed on the "*LESS TOTAL CUMULATIVE PAYMENTS OF*" line for this column. Deduct the "*LESS TOTAL CUMULATIVE PAYMENTS OF*" from the "*TOTAL TASK BUDGET AMOUNT*" for the amount to enter on the "*TOTAL REMAINING IN TASK*" line.

"TOTAL CUMULATIVE MATCHING FUNDS" COLUMN: Enter the cumulative amount you have claimed to date for match by budget category for the task. Put the total of all on the line titled "*TOTALS*." The final report should show the total of all claims, first claim through the final claim, etc. **Do not enter anything in the shaded areas.**

GRANTEE CERTIFICATION: Must be signed by both the Grantee's Grant Manager as identified in the grant agreement and the Grantee's Fiscal Agent.

NOTES:

If claiming reimbursement for travel, you must include copies of receipts and a copy of the travel reimbursement form approved by the Department of Financial Services, Chief Financial Officer.

Documentation for match claims must meet the same requirements as those expenditures for reimbursement.

ATTACHMENT C

Contract Payment Requirements Florida Department of Financial Services, Reference Guide for State Expenditures *Cost Reimbursement Contracts*

Invoices for cost reimbursement contracts must be supported by an itemized listing of expenditures by category (salary, travel, expenses, etc.). Supporting documentation must be provided for each amount for which reimbursement is being claimed indicating that the item has been paid. Check numbers may be provided in lieu of copies of actual checks. Each piece of documentation should clearly reflect the dates of service. Only expenditures for categories in the approved contract budget should be reimbursed.

Listed below are examples of the types of documentation representing the minimum requirements:

- (1) Salaries: A payroll register or similar documentation should be submitted. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.
- (2) Fringe Benefits: Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee (e.g., insurance premiums paid). If the contract specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.
- (3) Travel: Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, which includes submission of the claim on the approved State travel voucher or electronic means.
- (4) Other direct costs: Reimbursement will be made based on paid invoices/receipts. If nonexpendable property is purchased using State funds, the contract should include a provision for the transfer of the property to the State when services are terminated. Documentation must be provided to show compliance with Department of Management Services Rule 60A-1.017, Florida Administrative Code, regarding the requirements for contracts which include services and that provide for the contractor to purchase tangible personal property as defined in Section 273.02, Florida Statutes, for subsequent transfer to the State.
- (5) In-house charges: Charges which may be of an internal nature (e.g., postage, copies, etc.) may be reimbursed on a usage log which shows the units times the rate being charged. The rates must be reasonable.
- (6) Indirect costs: If the contract specifies that indirect costs will be paid based on a specified rate, then the calculation should be shown.

Contracts between state agencies, and or contracts between universities may submit alternative documentation to substantiate the reimbursement request that may be in the form of FLAIR reports or other detailed reports.

The Florida Department of Financial Services, online Reference Guide for State Expenditures can be found at this web address: http://www.fldfs.com/aadir/reference_guide.htm

ATTACHMENT D

PROGRESS REPORT FORM

DEP Agreement No.:	S0696		
Grantee Name:			
Grantee Address:			
Grantee's Grant Manager:		Telephone No.:	
Reporting Period:			
Project Number and Title:			
<p>Provide the following information for all tasks and deliverables identified in the Grant Work Plan: a summary of project accomplishments for the reporting period; a comparison of actual accomplishments to goals for the period; if goals were not met, provide reasons why; provide an update on the estimated time for completion of the task and an explanation for any anticipated delays and identify by task.</p> <p>NOTE: Use as many pages as necessary to cover all tasks in the Grant Work Plan.</p> <p><u>The following format should be followed:</u></p> <p>Task 1: Progress for this reporting period: Identify any delays or problems encountered:</p>			

This report is submitted in accordance with the reporting requirements of DEP Agreement No. S0696 and accurately reflects the activities associated with the project.

Signature of Grantee's Grant Manager

Date

ATTACHMENT E

SPECIAL AUDIT REQUIREMENTS

The administration of resources awarded by the Department of Environmental Protection (*which may be referred to as the "Department", "DEP", "FDEP" or "Grantor", or other name in the contract/agreement*) to the recipient (*which may be referred to as the "Contractor", Grantee" or other name in the contract/agreement*) may be subject to audits and/or monitoring by the Department of Environmental Protection, as described in this attachment.

MONITORING

In addition to reviews of audits conducted in accordance with OMB Circular A-133 and Section 215.97, F.S., as revised (see "AUDITS" below), monitoring procedures may include, but not be limited to, on-site visits by Department staff, limited scope audits as defined by OMB Circular A-133, as revised, and/or other procedures. By entering into this Agreement, the recipient agrees to comply and cooperate with any monitoring procedures/processes deemed appropriate by the Department of Environmental Protection. In the event the Department of Environmental Protection determines that a limited scope audit of the recipient is appropriate, the recipient agrees to comply with any additional instructions provided by the Department to the recipient regarding such audit. The recipient further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Chief Financial Officer or Auditor General.

AUDITS

PART I: FEDERALLY FUNDED

This part is applicable if the recipient is a State or local government or a non-profit organization as defined in OMB Circular A-133, as revised.

1. In the event that the recipient expends \$500,000 or more in Federal awards in its fiscal year, the recipient must have a single or program-specific audit conducted in accordance with the provisions of OMB Circular A-133, as revised. EXHIBIT 1 to this Attachment indicates Federal funds awarded through the Department of Environmental Protection by this Agreement. In determining the Federal awards expended in its fiscal year, the recipient shall consider all sources of Federal awards, including Federal resources received from the Department of Environmental Protection. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by OMB Circular A-133, as revised. An audit of the recipient conducted by the Auditor General in accordance with the provisions of OMB Circular A-133, as revised, will meet the requirements of this part.
2. In connection with the audit requirements addressed in Part I, paragraph 1, the recipient shall fulfill the requirements relative to auditee responsibilities as provided in Subpart C of OMB Circular A-133, as revised.
3. If the recipient expends less than \$500,000 in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, is not required. In the event that the recipient expends less than \$500,000 in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from recipient resources obtained from other than Federal entities).
4. The recipient may access information regarding the Catalog of Federal Domestic Assistance (CFDA) via the internet at <https://www.cfda.gov/>.

PART II: STATE FUNDED

This part is applicable if the recipient is a nonstate entity as defined by Section 215.97(2)(m), Florida Statutes.

1. In the event that the recipient expends a total amount of state financial assistance equal to or in excess of \$500,000 in any fiscal year of such recipient, the recipient must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, Florida Statutes; applicable rules of the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. EXHIBIT 1 to this Attachment indicates state financial assistance awarded through the Department of Environmental Protection by this Agreement. In determining the state financial assistance expended in its fiscal year, the recipient shall consider all sources of state financial assistance, including state financial assistance received from the Department of Environmental Protection, other state agencies, and other nonstate entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.
2. In connection with the audit requirements addressed in Part II, paragraph 1; the recipient shall ensure that the audit complies with the requirements of Section 215.97(7), Florida Statutes. This includes submission of a financial reporting package as defined by Section 215.97(2), Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.
3. If the recipient expends less than \$500,000 in state financial assistance in its fiscal year, an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, is not required. In the event that the recipient expends less than \$500,000 in state financial assistance in its fiscal year, and elects to have an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, the cost of the audit must be paid from the non-state entity's resources (i.e., the cost of such an audit must be paid from the recipient's resources obtained from other than State entities).
4. For information regarding the Florida Catalog of State Financial Assistance (CSFA), a recipient should access the Florida Single Audit Act website located at <https://apps.fldfs.com/fsaa> for assistance. In addition to the above websites, the following websites may be accessed for information: Legislature's Website at <http://www.leg.state.fl.us/Welcome/index.cfm>, State of Florida's website at <http://www.myflorida.com/>, Department of Financial Services' Website at <http://www.fldfs.com/> and the Auditor General's Website at <http://www.state.fl.us/audgen>.

PART III: OTHER AUDIT REQUIREMENTS

(NOTE: This part would be used to specify any additional audit requirements imposed by the State awarding entity that are solely a matter of that State awarding entity's policy (i.e., the audit is not required by Federal or State laws and is not in conflict with other Federal or State audit requirements). Pursuant to Section 215.97(8), Florida Statutes, State agencies may conduct or arrange for audits of State financial assistance that are in addition to audits conducted in accordance with Section 215.97, Florida Statutes. In such an event, the State awarding agency must arrange for funding the full cost of such additional audits.)

PART IV: REPORT SUBMISSION

1. Copies of reporting packages for audits conducted in accordance with OMB Circular A-133, as revised, and required by PART I of this Attachment shall be submitted, when required by Section .320 (d), OMB Circular A-133, as revised, by or on behalf of the recipient directly to each of the following:

- A. The Department of Environmental Protection at the following address:

Audit Director

Florida Department of Environmental Protection
Office of the Inspector General, MS 40
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

- B. The Federal Audit Clearinghouse designated in OMB Circular A-133, as revised (the number of copies required by Sections .320 (d)(1) and (2), OMB Circular A-133, as revised, should be submitted to the Federal Audit Clearinghouse), at the following address:

Federal Audit Clearinghouse
Bureau of the Census
1201 East 10th Street
Jeffersonville, IN 47132

Submissions of the Single Audit reporting package for fiscal periods ending on or after January 1, 2008, must be submitted using the Federal Clearinghouse's Internet Data Entry System which can be found at <http://harvester.census.gov/fac/>

- C. Other Federal agencies and pass-through entities in accordance with Sections .320 (e) and (f), OMB Circular A-133, as revised.

2. Pursuant to Section .320(f), OMB Circular A-133, as revised, the recipient shall submit a copy of the reporting package described in Section .320(c), OMB Circular A-133, as revised, and any management letters issued by the auditor, to the Department of Environmental Protection at the following address:

Audit Director

Florida Department of Environmental Protection
Office of the Inspector General, MS 40
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

3. Copies of financial reporting packages required by PART II of this Attachment shall be submitted by or on behalf of the recipient directly to each of the following:

- A. The Department of Environmental Protection at the following address:

Audit Director

Florida Department of Environmental Protection
Office of the Inspector General, MS 40
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

- B. The Auditor General's Office at the following address:

State of Florida Auditor General
Room 401, Claude Pepper Building
111 West Madison Street
Tallahassee, Florida 32399-1450

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4. Copies of reports or management letters required by PART III of this Attachment shall be submitted by or on behalf of the recipient directly to the Department of Environmental Protection at the following address:

Audit Director
Florida Department of Environmental Protection
Office of the Inspector General, MS 40
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

5. Any reports, management letters, or other information required to be submitted to the Department of Environmental Protection pursuant to this Agreement shall be submitted timely in accordance with OMB Circular A-133, Florida Statutes, or Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.
6. Recipients, when submitting financial reporting packages to the Department of Environmental Protection for audits done in accordance with OMB Circular A-133, or Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date that the reporting package was delivered to the recipient in correspondence accompanying the reporting package.

PART V: RECORD RETENTION

The recipient shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of **5** years from the date the audit report is issued, and shall allow the Department of Environmental Protection, or its designee, Chief Financial Officer, or Auditor General access to such records upon request. The recipient shall ensure that audit working papers are made available to the Department of Environmental Protection, or its designee, Chief Financial Officer, or Auditor General upon request for a period of **3** years from the date the audit report is issued, unless extended in writing by the Department of Environmental Protection.

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EXHIBIT - 1

FUNDS AWARDED TO THE RECIPIENT PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

Federal Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following:				
Federal Program Number	Federal Agency	CFDA Number	CFDA Title	State Appropriation Category

State Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following Matching Resources for Federal Programs:				
Federal Program Number	Federal Agency	CFDA	CFDA Title	State Appropriation Category

State Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following Resources Subject to Section 215.97, F.S.:					
State Program Number	Funding Source	State Fiscal Year	CSFA Number	CSFA Title or Funding Source Description	State Appropriation Category
Original Agreement	Water Quality Assurance Trust Fund Line Item 1663 and 1620	2013 and 2014	37.039	Statewide Surface Water Restoration and Wastewater Projects	140076

Total Award					\$462,000.00
--------------------	--	--	--	--	---------------------

For each program identified above, the recipient shall comply with the program requirements described in the Catalog of Federal Domestic Assistance (CFDA) [<http://12.46.245.173/cfda/cfda.html>] and/or the Florida Catalog of State Financial Assistance (CSFA) [<https://apps.fldfs.com/fsaa/searchCatalog.aspx>]. The services/purposes for which the funds are to be used are included in the Contract scope of services/work. Any match required by the recipient is clearly indicated in the Contract.

Attachment F
Quality Assurance Requirements
For State Funded NPS BMP Monitoring Agreements

1. All sampling and analyses performed under this Agreement must conform to the requirements set forth in Chapter 62-160, Florida Administrative Code (F.A.C.) and "Requirements for Field and Analytical Work performed for the Department of Environmental Protection under Contract" (DEP-QA-002/02), February 2002.
2. **LABORATORIES**
 - a. The GRANTEE shall ensure that all laboratory testing activities are performed by laboratories certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP) for all applicable matrix/method/analyte combinations to be measured. For non-potable water matrix, the certification requirement is considered satisfied if the laboratory is certified for the contracted analyte in at least one method that uses the same analytical technology as the contract-proposed method.
 - b. If the laboratory is not certified for some or all of the proposed test measurements, the laboratory shall apply for certification within one month of Contract execution. Within six months of Contract execution, the laboratory shall be fully certified for all applicable matrix/method/analyte combinations to be performed. Regardless of when the laboratory receives certification, the laboratory must implement all applicable standards of the National Environmental Laboratory Accreditation Conference (NELAC) upon Contract execution.
 - c. Laboratories shall maintain certification as specified in item 2.a above during the life of the Contract. Should certification for an analyte or test method be lost, all affected tests shall be immediately sub-contracted to a laboratory with current DoH ELCP certification in the appropriate matrix/method/analyte combination(s). The GRANTEE shall notify the DEP Grant Manager in writing before any change to a sub-contracted laboratory is made.
 - d. A copy of the DoH ELCP Certificate and the associated list of specific fields of accreditation for each contracted or sub-contracted laboratory shall be provided to the DEP contract manager upon Contract execution or upon receiving DoH certification (see items 2.a and 2.b above).
 - e. The GRANTEE shall ensure that an acceptable initial demonstration of capability (IDOC), as described in Appendix C of Chapter 5 of the NELAC Standards is performed. Each laboratory that performs any of the proposed matrix/method/analyte combination(s) must have the requisite IDOC documentation and supporting laboratory records. IDOCs shall be performed before the test procedure is used to generate data for this Contract. If requested by the Department, documentation that supports the IDOC shall be made available for review.
 - f. When performance test samples are not required by DoH ELCP for certification, the laboratory shall obtain, analyze and evaluate performance test samples, standard reference materials (SRM) or other externally assayed quality control (QC) samples, hereinafter known collectively as quality control check (QCC) samples.
 - (i) The laboratory shall ensure that the selected QCC samples(s) represent all matrix/method/analyte combinations that are not subject to certification requirements.
 - (ii) These samples shall be analyzed at six-month intervals and the results shall be within the acceptable range established by the QCC sample provider.
 - (iii) Before providing analytical services for this Agreement, the laboratory must provide to the DEP contract manager the results of the QCC sample(s) and the associated acceptable range(s) as established by the QCC sample provider. The submitted results must be from QCC samples that have been completed within the previous six months prior to the submission date.
 - g. Any non-standard laboratory procedures or methods that are proposed for use (i.e., those not approved by DEP for standard environmental analyses) shall be submitted for review and approval in accordance with DEP-QA-001/01, "New and Alternative Analytical Laboratory Methods," February 1, 2004. These procedures or methods shall be approved by the DEP Grant Manager before use under this Agreement and must be cited or described in the required planning document (see Section 6).
 - h. The GRANTEE shall ensure that Practical Quantitation Limits (PQLs) and Method Detection Limits (MDLs) required by the Contract are listed in the planning document (see Section 6).
 - i. The GRANTEE shall ensure that the selected laboratory test methods listed in the planning document can provide results that meet the Contract data quality objectives.
 - j. The GRANTEE shall ensure that all laboratory testing procedures follow the analytical methods as approved in the planning document (see Section 6).

- k. The GRANTEE shall ensure that the all laboratory quality control measures are consistent with Chapter 5 of the NELAC standards.
- l. In addition, the GRANTEE shall ensure that the quality control requirements specified in the attached addenda are followed.
- m. The GRANTEE shall ensure that all sample results are calculated according to the procedures specified in the analytical methods approved in the planning document.

3. **FIELD ACTIVITIES**

- a. "Sample" refers to samples that have been either collected or analyzed under the terms of this Agreement.
- b. The GRANTEE shall ensure that all sample collection and field testing activities are performed in accordance with the Department's "Standard Operating Procedures for Field Activities" (DEP-SOP-001/01, March 31, 2008). The specific standard operating procedures (SOPs) to be used for this Agreement shall be cited in the planning document (see Section 6).
- c. Any non-standard field procedure shall be submitted for review and approval to the DEP Grant Manager in accordance with section FA 2000 of DEP-SOP-001/01. All non-standard procedures and methods must be approved by the DEP Grant Manager before use under this Agreement and must be cited or described in the planning document.
- d. Per the quality control measures outlined in the DEP SOPs (FQ 1000 and the calibration requirements of the FT-series for field testing), the GRANTEE shall ensure that the following field quality controls (and any additional quality control measures specified in the addenda) are incorporated into the project design:
 - (i) Matrix-Related Quality Controls - The GRANTEE shall ensure that the laboratory is provided with sufficient sample volume to analyze at least one set of matrix spikes and either matrix spike duplicates or laboratory duplicates as follows:
 - (1) The first time a sample from a sample collection matrix (see Table FA 1000-1) is collected;
 - (2) One in each additional 20 samples of the sample collection matrix, after the first 20 samples; and
 - (3) The last time samples are collected for the sample collection matrix.
 - (ii) Field-generated Quality Control duplicates or replicates (not to be confused with laboratory duplicates) shall be collected and analyzed at a frequency of 5% of the total number of samples collected for each matrix/analyte combination (see FQ 1220).
 - (1) All field duplicate results greater than the contracted PQL should agree within 20% RPD for each measured analyte. In the event that the field duplicate agreement is not observed, the GRANTEE shall investigate and attempt to determine the cause of poor precision. The outcome of these investigations shall be reported, including the corrective measures taken to minimize future problems.
 - (iii) Field-Generated Quality Control (QC) Blanks – Blanks associated with field activities as defined in FQ 1210 of the DEP SOPs shall be collected according to the requirements of FQ 1230.
 - (1) If an analyte detected in the sample is also found in any field-generated QC blank that is associated with the sample, the GRANTEE shall investigate and attempt to determine the cause of the QC blank contamination. The outcome of this investigation shall be reported and shall include a discussion of the corrective measures taken to minimize future occurrences of QC blank contamination.
 - (2) If an analyte detected in the sample is also found in any field-generated QC blank that is associated with the sample, the GRANTEE shall ensure that the analyte in the affected sample is reported as estimated ("J" with a narrative explanation) unless the analyte concentration in the affected sample is at least 10 times the reported QC blank value concentration.
 - (iv) The GRANTEE shall identify a second laboratory that meets the requirements in Section 1 and shall arrange to have split samples collected using the sampling procedures specified in the Contract and analyzed by the primary and secondary laboratories. Split samples shall be collected at least once during the project and at least annually thereafter. The GRANTEE shall specify the procedure for splitting the samples in the planning document.
 - (1) The results from the two laboratories shall be assessed using a precision criterion of no greater than 20% RPD as an initial guide to assessment of the split sample results.
 - (2) All differences between split sample results from the two laboratories shall be investigated and resolved.

4. **REPORTING, DOCUMENTATION AND RECORDS RETENTION**

- a. The GRANTEE shall ensure that all laboratory and field records as outlined in Rules 62-160.240 and .340, F.A.C. are retained for a minimum of five years after the project completion.
- b. All field and laboratory records that are associated with work performed under this Agreement shall be organized so that any information can be quickly and easily retrieved for inspection, copying or distribution.
- c. The GRANTEE shall ensure that all laboratory reports are issued in accordance with NELAC requirements. These reports shall be submitted to the DEP Grant Manager and shall include the following information:
 - ▶ Laboratory sample identification (ID) and associated Field ID
 - ▶ Analytical/test method
 - ▶ Parameter/analyte name
 - ▶ Analytical result (including dilution factor)
 - ▶ Result unit
 - ▶ Applicable DEP Qualifiers per Table 1 of Chapter 62-160, F.A.C.
 - ▶ Result comment(s) to include corrective/preventive actions taken for any failed QC measure (e.g., QC sample, calibration failure, etc.) or other problem related to the analysis of the samples
 - ▶ Date and time of sample preparation (if applicable)
 - ▶ Date and time of sample analysis
 - ▶ Results of laboratory verification of field preservation
 - ▶ Sample matrix
 - ▶ DoH ELCP certification number for each laboratory (must be associated with the test result(s) generated by the laboratory)
 - ▶ MDL
 - ▶ PQL
 - ▶ Sample type (such as blank type, duplicate type, etc.)
 - ▶ Field and laboratory QC blank results:
 - Laboratory QC blank analysis results as required by the method, NELAC Chapter 5 and the planning document (see Section 6 below);
 - Field quality control results including trip blanks, field blanks, equipment blanks, and field duplicates (or replicates) as specified in the planning document (see Section 6)
 - ▶ Results of sample matrix spikes, laboratory duplicates or matrix spike duplicates, as applicable
 - ▶ Results of surrogate spike analyses (if performed)
 - ▶ Results of laboratory control samples (LCS)
 - ▶ Link between each reported quality control measure (e.g., QC blanks, matrix spikes, LCS, duplicates, calibration failure, etc.) and the associated sample result(s)
 - ▶ Acceptance criteria used to evaluate each reported quality control measure
- d. The GRANTEE shall ensure that the following field-related information is reported to the DEP Grant Manager:
 - ▶ Site and/or facility name, address and phone number
 - ▶ Field ID for each sample container and the associated analytes (test methods) for which the container was collected
 - ▶ Date and time of sample collection
 - ▶ Sample collection depth
 - ▶ Sample collection method identified by the DEP SOP number, where applicable
 - ▶ If performed, indicate samples that were filtered
 - ▶ Field test measurement results:
 - DEP SOP number (FT-series), where applicable
 - Parameter name
 - Result
 - Result unit
 - Applicable Data Qualifiers per Table 1 of Chapter 62-160, F.A.C.

- ▶ Narrative comments discussing corrective/preventive actions taken for any failed QC measure (e.g., blank contamination, meter calibration failure, split sample results, etc.), unacceptable field measurement or other problems related to the sampling event.
 - e. The GRANTEE shall submit the lab and field data above electronically in either Excel or Access format.
5. **AUDITS**
- a. AUDITS BY THE DEPARTMENT – Pursuant to Rule 62-160.650, F.A.C., the Department may conduct audits of field and/or laboratory activities. In addition to allowing Department representatives to conduct onsite audits, the GRANTEE, upon request by the Department, must provide all field and laboratory records pertinent to the contracted field and laboratory activities. If an audit by the Department results in a determination that the reported data are not usable for the purpose(s) or do not meet the data quality objectives specified by the Contract, the DEP Grant Manager shall pursue remedies available to the Department, including those outlined in Section 8 below.
 - b. PLANNING REVIEW AUDITS –
 - (i) Initial: Within 15 days of completing the first sampling and analysis event, the GRANTEE and all associated subcontractors shall review the planning document (see Section 6 below) relative to the completed field and laboratory activities to determine if the data quality objectives are being met, identify any improvements to be made to the process, and refine the sampling and/or analytical design or schedule. Within one month of the review, a summary of the review, including any corrective action plans or amendments to the planning document, shall be sent to the DEP Grant Manager and a copy shall be maintained with the permanent project records.
 - (ii) Ongoing: Planning reviews as described in item (i) above shall occur annually.
 - c. QUALITY SYSTEMS AUDITS – The GRANTEE and all subcontractors shall ensure that any required laboratory and field quality system and management systems audits are performed according to the respective Quality Manuals for each contracted and sub-contracted entity. These audits shall be documented in the GRANTEE's and subcontractors' records.
 - d. STATEMENTS OF USABILITY – As a part of the audit process and the final report, the GRANTEE shall provide statements about data usability relative to the Contract Data Quality Objectives and Data Quality Indicators specified in the planning document, this attachment and the addenda.
 - (i) The GRANTEE shall ensure that all acceptance and usability criteria required by this Agreement not specified above are listed in the planning document.
 - (ii) The GRANTEE shall ensure that the results of all quality control measures described above are evaluated according to the acceptance criteria listed in this attachment, the addenda and the planning document.
 - (iii) The GRANTEE shall ensure that all sample results are evaluated according to the additional usability criteria specified in the planning document.
6. **PLANNING DOCUMENT**
- a. The GRANTEE shall submit the planning document identified below to the DEP Grant Manager no later than 120 days prior to the commencement of field and laboratory activities. Failure to submit the planning document in this required timeframe shall result in a delay of approval to begin work until the document has been submitted to the Department and approved by the DEP Grant Manager. The document shall be submitted as a Sampling and Analysis Plan or, if desired, as the final monitoring plan submitted to the DEP Grant Manager. In either case, the plan shall include/discuss the information contained in the document "Requirements for Field and Analytical Work Performed for the Department of Environmental Protection Under Contract", DEP-QA-002/02.
 - b. The GRANTEE and subcontractors may submit a version of the planning document to the Department for approval no more than three times. If the GRANTEE fails to obtain approval for the planning document after the third (final) submission to the Department, the DEP Grant Manager may suspend or terminate the Contract.
 - c. The DEP Agreement number shall appear on the title page of the submitted planning document. Within forty-five (45) days of receipt of the properly identified planning document by the Department, the Department shall review and either approve the planning document or provide comments to the GRANTEE and affected subcontractors as to why the planning document is not approved. If further revisions are needed, the GRANTEE shall then have fifteen (15) days from the receipt of review comments to respond. The Department shall respond to all revisions to the planning document within thirty (30) days of receipt of any revisions.

- d. If the review of the planning document by the Department is delayed, through no fault of the GRANTEE, beyond sixty (60) days after the planning document is received by the Department, the GRANTEE shall have the option, after the planning document is approved, of requesting and receiving an extension in the term of the Agreement for a time period not to exceed the period of delayed review and approval. This option must be exercised at least sixty (60) days prior to the current termination date of the Agreement.
- e. Work may not begin for specific Contract tasks until approval has been received by the GRANTEE from the DEP Grant Manager. Sampling and analysis for the Agreement may not begin until the planning document has been approved.
- f. Once approved, the GRANTEE shall follow the protocols specified in the approved planning document including, but not limited to:
 - ▶ Ensuring that all stated quality control measures are collected, analyzed and evaluated for acceptability;
 - ▶ Using only the protocols approved in the planning document; and
 - ▶ Using only the equipment approved in the planning document.
- g. If any significant changes in procedures or test methods, changes in equipment, changes in subcontractor organizations or changes in key personnel occur, the GRANTEE shall submit appropriate revisions of the planning document to the DEP Grant Manager for review. The proposed revisions may not be implemented until they have been approved by the DEP Grant Manager. If the GRANTEE fails to submit the required revisions, the DEP Grant Manager may suspend or terminate the Agreement.
- h. When the approved planning document requires modification, the amendments shall be
 - (i) Provided in a new planning document, or
 - (ii) Provided as amended sections of the current planning document, or
 - (iii) Documented through written or electronic correspondence with the DEP Grant Manager and incorporated into the approved planning document.

7. **DELIVERABLES**

- a. The following lists the expected schedule for the deliverables that are associated with the Quality Assurance requirements of this Agreement:
 - (i) Copy of DoH ELCP Certificate(s) and the associated list(s) of specific fields of accreditation, per item 2.d above.
 - (ii) Copies of the QCC sample results per item 2.f. above.
 - (iii) Non-standard laboratory or field procedures – The GRANTEE shall submit to the DEP Grant Manager all required information necessary for review of non-standard procedures per items 2.h. and 3.b. above.
 - (iv) Reports of planning review audits as specified in item 5.b. above.
 - (v) Statements of Usability as specified in item 5.d. above.
 - (vi) Planning document per Section 6, above.

8. **CONSEQUENCES**

- a. Failure to comply with any requirement of this attachment may result in:
 - (i) Immediate termination of the Agreement.
 - (ii) Withheld payment for the affected activities.
 - (iii) Contract suspension until the requirement(s) has been met.
 - (iv) A request to refund already disbursed payments.
 - (v) A request to redo work affected by the non-compliant activity.
 - (vi) Other remedies available to the Department.

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Addendum 1
Quality Control Requirements for Laboratories Performing Chemical Analysis

In addition to the quality control requirements outlined in Chapter 5 of the NELAC Standards, the following quality control measures shall be implemented for this Agreement. Note: "Sample" refers to samples that have been either collected or analyzed under the terms of this Agreement.

1. Matrix-Related Quality Control Samples - The GRANTEE shall ensure that samples associated with this Agreement are used for matrix spikes, and either laboratory duplicates or matrix spike duplicates. The laboratory shall analyze these samples:
 - a. The first time samples from a sample collection matrix (see Table FA 1000-1) are submitted to the laboratory under this Agreement for analysis. The laboratory shall select one or more of the received samples for use in composition of the matrix spike and duplicates.
 - b. After the first 20 samples from the sample collection matrix have been analyzed, at least one matrix spike and either laboratory duplicates or matrix spike duplicates shall be composed using a sample or samples selected from each additional 20 samples of the sample collection matrix submitted to the laboratory.
 - c. The last time samples from the sample collection matrix are received and analyzed. The laboratory shall select one or more of the received samples for use in composition of the matrix spike and duplicates.
 - d. Spike levels must be at the concentrations specified in item 3 below.
 - e. If the selected sample concentration is expected to be below the Contract-specified practical quantitation limit (PQL) listed in the planning document, then matrix spike duplicates must be used.
2. Per NELAC Chapter 5 requirements, as least one Laboratory Control Sample (LCS; also known as Laboratory Fortified Blank) shall be prepared, analyzed and evaluated with each batch of 20 samples or less.
 - a. The acceptance criteria for the LCS shall be specified in the planning document.
 - b. If the LCS is unacceptable, the samples associated with the LCS shall be reprocessed with a new LCS. If the samples cannot be reprocessed, the data must be appropriately qualified.
3. For applicable analytes denoted in the planning document, a QC check sample, standard reference material (SRM) or other quality control sample, hereinafter identified collectively as quality control check samples (QCCS), shall be processed with each sample preparation batch and analyzed for evaluation according to the acceptance limits established for the QCCS.
 - a. Analysis of a QCCS is required for but not limited to the following analyses:
 - (i) Chlorophyll – the assay for the QCCS or its original formulation shall have been determined by an organization external to the laboratory ;
 - (ii) Biochemical oxygen demand (BOD) or carbonaceous BOD (CBOD) – the method-specified glucose/glutamic acid check solution shall be used; and,
 - (iii) Copper in seawater – the QCCS shall be any seawater-matrix SRM assayed by an organization external to the laboratory.
 - b. If the QCCS is unacceptable, the samples associated with the QCCS shall be reprocessed with a new QCCS. If the samples cannot be reprocessed, the data must be appropriately qualified for all contracted samples in the preparation batch.
4. Spiking/Fortification Requirements - All spike fortifications must take place prior to any required sample preparation steps (e.g., sample extraction, sample digestion, pH adjustment, etc.). The final concentration of any spike fortification shall be at the applicable level identified below.
 - a. If any of the samples in the preparation batch are non-detect (i.e., below the MDL specified in the planning document), the spiking level must not be greater than 2 times the Contract-specified PQL.
 - b. The concentration of a spiked sample cannot exceed 5 times the highest concentration of any contracted sample in the preparation batch.
5. Evaluation of Matrix Spikes - The results of matrix spikes must meet the acceptance criteria specified by the Contract and listed in the planning document or the data must be appropriately qualified.
 - a. If the failure is reported to be due to *sample* matrix interference, the laboratory shall document the process by which this conclusion is determined.
6. Evaluation of Laboratory Duplicate/Replicate Samples – All replicate samples (sample duplicates, matrix spike duplicates, LCS duplicates or other replicates) must be evaluated for a precision criterion not to exceed 20 % RPD. This criterion shall be listed in the planning document.
 - a. In the event that laboratory replicate agreement is not observed, the laboratory must investigate the poor precision and report the results with appropriate qualifiers and/or comments.

7. Instrument Calibration – In addition to calibration procedures specified in the analytical methods listed in the planning document, the GRANTEE shall ensure that the following requirements are met:
 - a. All sample results shall be chronologically bracketed between acceptable calibration verifications.
 - b. Initial Calibration Requirements
 - (i) The minimum number of calibration standards required to calibrate each instrument used for the contracted analyses shall conform to the analytical method approved in the planning document. If the minimum number of calibration standards is not specified in the method, the number must be specified in the planning document and shall be consistent with the NELAC Chapter 5 standards.
 - (ii) Unless otherwise specified by the method, all sample results shall be based on the initial calibration curve responses.
 - (iii) If linear regressions are used, the correlation coefficient shall be equal to or greater than 0.995 for all regressions.
 - (iv) Immediately after performing an initial calibration, the accuracy of the calibration shall be verified using a second source. A second source may be a standard, a Standard Reference Material (SRM), or other sample type with a verified concentration such as a QC Check Sample. Standards must have been prepared from a different lot or vendor.
 - (v) The acceptance criteria for second-source verifications shall be specified in the planning document.
 - (vi) Sample analysis cannot proceed if an initial calibration is unacceptable.
 - c. Continuing Calibration Requirements:
 - (i) When an initial calibration is not performed on the day of analysis, a continuing calibration standard shall be analyzed, evaluated and determined to be acceptable prior to analyzing samples.
 - (ii) A continuing calibration standard shall be analyzed and evaluated at the end of the analytical run.
 - (iii) The acceptance criteria for continuing calibration verifications shall be specified in the planning document.
 - (iv) For each analytical run, the analytical sensitivity must be evaluated using a continuing calibration standard prepared at the Contract-specified PQL. The analyzed value of this standard must be within 70% – 130% of the expected value. If this PQL check fails, the blank and associated sample results must be reported as “estimated” per Chapter 62-160, F.A.C. unless the affected results are at least 10 times the absolute value of the observed bias of the PQL check.
 - (v) If a continuing calibration verification fails, samples not chronologically bracketed by acceptable calibration verifications must be reanalyzed or appropriately qualified.
 - d. Sample results below the Contract-specified PQL and above the highest calibration standard shall be appropriately qualified.
8. Quality Control Blanks
 - a. If a Contracted analyte is detected in any analytical QC blank, the sample results that are associated with the blank must be reported with the appropriate qualifier from Chapter 62-160, F.A.C., unless the affected sample concentrations are at least 10 times higher than the calculated QC blank concentration.
 - b. Sample results must be chronologically bracketed with acceptable beginning and ending analytical QC blanks.
 - c. If a Contracted analyte is detected in the field blank, equipment blank or trip blank, the result must be confirmed by reanalyzing a new aliquot of the blank unless the sample concentration results associated with the blank are at least 10 times the calculated blank concentration. The laboratory must investigate the blank contamination to determine that positive blank results are not due to a laboratory error and report the affected samples and field-generated blank results with appropriate qualifiers and/or comments.
9. If any quality control measure or calibration verification fails (including those specified above), samples that are associated with the failure must be reanalyzed, if possible. Sample data that are associated with a failed quality control measure or calibration must be appropriately qualified as specified in Chapter 62-160, F.A.C. An explanatory comment must be attached to the final report for each result that has a qualifier code other than U, I, or A. Any additional qualifier codes used but not explicitly listed in Chapter 62-160, F.A.C. must be identified and defined in the report.
10. The reported MDL and PQL for each sample must be adjusted for dilution factors and any relevant preparation weights and volumes.
11. Field QC duplicates or replicates - The GRANTEE shall ensure that field duplicates (not to be confused with laboratory duplicates) are analyzed. All field duplicate results greater than the contracted PQL should agree within 20% RPD for each measured analyte. In the event that field duplicate agreement is not observed, the

laboratory must investigate sufficiently to determine that poor precision is not due to a laboratory error and report the results with appropriate qualifiers and/or comments.

12. For all organic analyses using either gas chromatography or HPLC, analytes with concentrations above the method detection limit shall be confirmed by at least one of the qualitative identification measures listed below. Confirmation must occur the first time an analyte is detected at a sampling point.

- ▶ Second column/same detector
- ▶ Second column/alternate detector
- ▶ Same column/alternate detector
- ▶ Mass spectrometry
- ▶ Alternate wavelength

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Addendum 2

Quality Control Requirements for Laboratories Performing Microbiological Testing

In addition to the quality control requirements outlined in Chapter 5 of the NELAC Standards, the following quality control measures shall be implemented for this Agreement. Note: "Sample" refers to samples that have been either collected or analyzed under the terms of this Agreement.

1. All microbiological analyses must conform to the requirements for facilities, personnel qualifications, equipment specifications and quality control measures discussed in *AWWA Standard Methods, section 9020* (all acceptable editions)
2. Holding Times – Any sample that exceeds the holding time specified in 40 CFR Part 136 (for non-potable water) or 40 CFR Part 141 (for drinking water compliance) must be appropriately qualified with a "Q". The holding begins with the sample collection date and time and ends with the date and time of the placement of the processed sample into or on the applicable growth medium.
 - a. For non-potable water, the maximum transport time to the laboratory is 6 hours and samples should be processed within 2 hours of receipt at the laboratory. **For purposes of contractual services and to determine compliance with this requirement, the Department will allow no greater than 6 hours from time of collection to the time of receipt by the laboratory AND no greater than 8 hours from time of collection to the placement of the processed sample into or on the applicable growth medium**
 - b. All samples that are either received after 6 hours **OR** placed into or on growth medium after 8 hours will be considered outside of holding time and must be qualified with a "Q" qualifier.
 - (i.) All samples that exceed the method-specified incubation period (range of minimum to maximum) shall be qualified with a "J" qualifier.
 - c. For drinking water compliance, the time from sample collection to placement of the processed sample into or on the applicable growth medium may not exceed 30 hours.
 - (i.) All samples that are processed after 30 hours will be considered outside of holding time and must be qualified with a "Q" qualifier.
 - (ii.) All samples that exceed the method-specified incubation period (range of minimum to maximum hours) shall be qualified with a "J" qualifier.
 - d. In order to evaluate the holding time for each sample, the following information shall be documented.
 - (1) Date and time of sample collection
 - (2) Date and time of laboratory receipt of the sample
 - (3) Date and time the analysis begins – (The time at which the sample is placed in or on the appropriate media for incubation).
 - (4) Date and time incubation begins
 - (5) Date and time analysis ends - The date and time incubation ends and plates/tubes are read.
3. Dilutions for membrane filter analysis - In order to achieve the recommended range of target organisms (20 – 60 colony forming units (CFU) for fecal coliform, enterococci and fecal streptococcus or 20 – 80 for total coliforms and E.coli), multiple dilutions of a sample must be run. While the general history of a sample site may be well known, the water will be influenced by many environmental factors at any one time.
 - a. **A minimum of 3 dilutions will be run for each sample analysis (except blanks).** The three dilution volumes may vary according to the range of expected values or an understanding of the environmental conditions at the time of sampling. Waters of a higher quality (low microbial density) may benefit from a dilution series of 100 mL, 50 mL, and 25 mL of sample volume, whereas, lower quality waters (high microbial density) might require only 10 mL, 1.0 mL, and 0.1 mL. Use a 100 mL dilution for all blanks (including field and equipment blanks). Table 1 provides suggested volumes for varying water sources and has been adapted from Table 9222:III, *Standard Methods*, 20th Edition, and can be used for microbiological samples:

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Water source	Dilutions (Sample Volume, mL)
Equipment, field blanks	100
Lakes, reservoirs, rivers	100, 50, 10 or 50, 10, 25
Wells, springs	100, 50, 10 or 100, 50, 25
Water supply intake	50, 10, 1
Natural bathing waters	50, 10, 1
Sewage treatment plant	10, 1, 0.1
Farm ponds, rivers	1, 0.1, 0.01
Stormwater runoff	1, 0.1, 0.01
Raw municipal sewage	0.1, 0.01, 0.001
Feedlot runoff	0.1, 0.01, 0.001
Sewage sludge	0.01, 0.001, 0.0001

4. **QUALITY CONTROL BLANKS**

- a. The number and types of blanks to be run shall follow method requirements with these modifications:
 - (i.) If the membrane filter technique is used, the sample set(s) shall be associated with a beginning and ending filtration blank processed within a time period not to exceed 30 minutes. The environmental field samples shall be filtered after the beginning blank and before the ending blank.
 - (ii.) If filtration funnels are not sanitized by U light between samples, additional sterility blanks shall be filtered after every 10 samples processed within the 30-minute set
- b. The results of any blank must be < 1 CFU/100 mL or the associated sample results must be reported with the appropriate qualifier from Chapter 62-160, F.A.C. (“V” for filtration blanks and “J” for field-generated blanks).

5. **Laboratory Quality Control Duplicates**

- a. At least 10% of the samples (or one per test run) shall be duplicated.
- b. All duplicate results shall be evaluated per method specifications using the precision criterion. The range of the transformed duplicates shall not exceed the precision criterion established by the laboratory. In the event that laboratory duplicate agreement is not observed, the laboratory must investigate the poor precision and report the results with appropriate qualifiers and/or comments.
- c. Field Quality Control Duplicates or Replicates - In the event that agreement (less than or equal the laboratory established precision criterion) is not observed between results from field-generated replicate samples, the laboratory must investigate the replicate analyses to determine that poor precision is not due to a laboratory error and report the results with appropriate qualifiers and/or comments. The laboratory shall use the analytical method specifications for precision control as a guide to evaluation of the field-generated replicate results.

6. **Colony Counts**

- a. In addition to the requirements listed below, all analytical results shall be calculated by the procedures established in the microbiological method(s) approved for the Contract and listed in the planning document.
- b. The laboratory shall make every attempt to ensure that colony counts are in the method-specified ideal range (20 – 60 colony forming units (CFU) for fecal coliform, enterococci and fecal streptococcus or 20 – 80 for total coliforms and E.coli). Reported values from colony plate counts outside this range shall be qualified with a “B” (unless the reported value is from a 100 mL sample and the count is less than 20).
- c. If all counts are above 60, the result shall be calculated and reported from the highest dilution. This result must be reported as “estimated”.

7. **Calculating Raw Data for Final Reporting** - Standard Methods (SM) 9222D and EPA Method 1600 offer slightly differing guidance on the calculation and reporting of microbiological data. Although this guidance is not intended to capture every scenario possible in the calculation and reporting of the test data, the most common scenarios are discussed with the emphasis on reporting the data result, the dilution factor, and the data qualifier. For detailed discussions on additional scenarios, see the applicable method.

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- a. Interpretation of **Standard Methods SM 9222, B.6, 20th Ed.** and **EPA 1600, Appendix B.** calculations:

$$\text{CFU}/100 \text{ mL} = \frac{C \times 100}{V}$$

Where,

CFU/100 mL = Number of enterococci or fecal coliform colony forming units per 100 mL of sample.

C = Total number of positive colonies counted on all acceptable dilutions.

V = Total volume, equal to the sum of all acceptable dilutions (sample volumes used), in mL

- (i.) When one dilution in a series has a count within the ideal CFU range (see above):
- (a) Use the count from the dilution that is within range to calculate the final result in the equation above.
- (ii.) When more than one dilution in a series has an acceptable count within the ideal range use the applicable method below. Since this calculation is not a laboratory sample replicate, do not use an "A" qualifier.
- (1) SM 9222D - Use the sum of all dilutions within the ideal range and the sum of the counts from all dilutions in the ideal range in the equation above.
- (2) EPA 1600 - Independently calculate a final value for each dilution within the ideal range in the equation above and report the average of these values.
- (iii.) When no dilutions fall within the ideal range:
- (1) For both methods: A "B" qualifier is not required if all dilutions were less than the lower acceptable limit (20 CFUs), and one of the dilutions was 100 mL. For this situation, report the calculated value from the 100 mL dilution without a "B".
- (2) SM 9222D - Use the sum of all dilutions in the equation to calculate the final result. Include dilutions that have a zero count. Report the final result with a "B" qualifier.
- (3) EPA 1600:
- (a) If all counts are under the lower acceptable limit (20 CFUs) or are both above and below the limit, choose the dilution with the count that is closest to the ideal range to calculate final result and report with a "B" qualifier.
- (b) If all counts are above the upper acceptable limit (60 or 80 CFUs), use the dilution with the smallest volume filtered to calculate final result and report with a "B" qualifier.
- (iv.) If counts from all dilutions are zero:
- (1) For SM 9222D- Use "1" as the total number of colonies counted and include all dilutions in the equation to calculate final result. Report with a "U" qualifier.
- (2) For EPA 1600 - Use "1" as the total number of colonies counted and use only the highest filtration volume as total volume in the equation above to calculate final result. Report with a "U" qualifier.
- (v.) If there are >200 target colonies in all dilutions:
- (vi.) For both methods - Use the upper limit of the ideal range (60 or 80) and the smallest filtration volume in mL to calculate an estimated final result. Report with a "Z" qualifier.
- (vii.) If there are >200 non-target colonies, or if the colonies are not distinct enough to count (confluent growth) in all dilutions:
- (1) For both methods - Report as "No Result" with a "Z" qualifier.
8. Use of Dilution Factor (DF) field
- a. Use the following equation to determine dilution factor for all samples:

$$\text{DF} = \frac{100}{V}$$

Where,

DF = Dilution Factor

V = Total volume (sum of dilutions in mL used in final calculation)

9. Verification

- a. Frequency

- (i.) Independently verify at least 10 isolated colonies from a positive sample per month.
- (ii.) Verify atypical colonies of different morphological types to check for false negatives.
- (iii.) Also, verify any ambiguous colonies as needed.

b. Procedure

- (i.) Use aseptic techniques to transfer growth from each colony into individual tubes. For 10 colonies, there should be 10 tubes total, for each verification test media.
- (ii.) See Table 2 for the method requirements for fecal coliform and Enterococci. Follow the method requirements for all others.

Table 2: Verification Tests						
Method	Verify with the following:					
Enterococci EPA 1600	<u>BHI Agar Slant</u>	<u>BHI</u>	<u>Gram stain</u>	<u>BHI</u>	<u>BEA</u>	<u>BHI</u> <u>w/6.5%</u> <u>NaCl</u>
	35 ± 0.5°C 48 ± 3 h (use growth for gram staining)	35 ± 0.5°C 24 ± 2 h (turbidity)	(gram positive cocci)	45 ± 0.5°C 48 ± 3 h (turbidity)	35 ± 0.5°C 48 ± 3 h (growth w/ black/brown precipitate)	35 ± 0.5°C 48 ± 3 h (turbidity)
Fecal Coliforms SM9222D	<u>LTB</u>	<u>EC</u>				
	35 ± 0.5°C 48 ± 3 h (turbidity and gas)	44.5 ± 0.2°C 24 ± 2 h (turbidity and gas)				
The response bolded in parentheses indicate the positive result for each test.						

c. Reporting

- (i.) Adjust colony counts for the original positive sample based on percent of colonies verified positive.
 - (1) For example: A sample dilution has a colony count of 30 fecal coliforms. Ten of these positive blue colonies were used in the verification tests, but only 8 verified positive for both EC and LTB. This means only 80% were verified positive and therefore the final count of 30 is adjusted by 80% to 24 colonies.
 - (ii.) For verified samples, report as "Verified" in the comment field.

10. Data Qualifier Codes - The use of Data Qualifier Codes is not discussed in the methods, but the Department's QA-Rule 62-160 F.A.C. requires that data qualifiers be used when the data is being submitted to the State. The purpose of the Data Qualifier Codes is to communicate the reliability of the reported data to the consumer. Table 3 identifies those Data Qualifier codes that are generally associated with microbiological data reporting. Others may apply. The laboratory must apply any applicable data qualifiers as listed in Table 1 of the Quality Assurance Rule (62-160, F.A.C.)

- a. Any data point which is derived from any analysis other than the direct calculation of the number of colonies on a membrane filter that were within the recommended range of the method must be qualified with one or more of the Data Qualifier Codes listed below.
- b. Any result associated with a failed QC test must be reported with applicable data qualifiers.
- c. Any result that is associated with a failure to meet test requirements (e.g., holding time, incubation time, etc.) shall also be qualified with applicable data qualifiers.
- d. Failure to report data with appropriate data qualifier codes will be returned to the laboratory without payment for services until corrections are made.

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Table 3

Typical Data Qualifier Codes to be used when Reporting Microbiological Data to the FDEP under the Overflow Purchase Order or Contract (others may apply)

62-160 Regulatory Meaning (rule) or Contract Requirement/Interpretation (contract)

Qualifier	Rule	Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.
A	Contract Requirement	<i>Two or more replicates of the same volume of sample are run and the data averaged.</i>
B	Rule	Results based upon colony counts outside the acceptable range. This code applies to microbiological tests and specifically to membrane filter colony counts. The code is to be used if the colony count is generated from a plate in which the total number of coliform colonies is outside the method indicated ideal range. This code is not to be used if a 100 mL sample has been filtered and the colony count is less than the lower value of the ideal range.
	Contract Requirement	<i>Based on colony counts outside the method specified range of 20 – 60 colonies per membrane filter. This code is not required if a 100 mL sample has been run, the density reported is below 20 and only this sample value was reported.</i>
J	Rule	Estimated value. A “J” value shall be accompanied by a detailed explanation to justify the reason(s) for designating the value as estimated. Where possible, the organization shall report whether the actual value is estimated to be less than or greater than the reported value. A “J” value shall not be used as a substitute for K, L, M, T, V, or Y, however, if additional reasons exist for identifying the value as an estimate (e.g., matrix spiked failed to meet acceptance criteria), the “J” code may be added to a K, L, M, T, V, or Y. Examples of situations in which a “J” code must be reported include: instances where a quality control item associated with the reported value failed to meet the established quality control criteria (the specific failure must be identified); instances when the sample matrix interfered with the ability to make any accurate determination; instances when data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample); instances when the analyte was detected at or above the method detection limit in a blank other than the method blank (such as calibration blank or field-generated blanks and the value of 10 times the blank value was equal to or greater than the associated sample value); or instances when the field or laboratory calibrations or calibration verifications did not meet calibration acceptance criteria.
	Contract Requirement	<i>In addition to the above examples, other “J” code situations are: quality control duplicate failures, ongoing precision recovery (OPR) spike failures, matrix spike failures, incubation period or temperature failures, other QC check failures.</i>
O	Contract Requirement	Sampled, but analysis lost or not performed. <i>Sample taken but analysis lost, invalidated, or not performed.</i>
Q	Rule	Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

Table 3

Typical Data Qualifier Codes to be used when Reporting Microbiological Data to the FDEP under the Overflow Purchase Order or Contract (others may apply)

62-160 Regulatory Meaning (rule) or Contract Requirement/Interpretation (contract)

Qualifier	Contract Requirement	Sample received after 6 hours OR analyzed beyond 8 hours.
U	Rule	Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component was not detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).
	Contract Requirement	Organism was analyzed for but not detected.
V	Rule	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. Note: unless specified by the method, the value in the blank shall not be subtracted from associated samples.
	Contract Requirement	Analyte was detected in both samples and method blank. Use this code when the sample result is less than or equal to 10 times the value of the blank. Do not subtract the value of the blank from the sample result.
Y	Rule	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
	Rule	Too many colonies were present for accurate counting. Historically, this condition has been reported as "too numerous to count" (TNTC). The "Z" qualifier code shall be reported when the total number of colonies of all types is more than 200 in all dilutions of the sample. When applicable to the observed test results, a numeric value for the colony count for the microorganism tested shall be estimated from the highest dilution factor (smallest sample volume) used for the test and reported with the qualifier code.;
Z	Contract Requirement	Colonies on plate too numerous to count (TNTC). Results shall be reported as the maximum recommended count of typical target colonies (60 CFU /lowest volume used x 100 mL). If atypical, non-target, spreading colonies or other interferences occur where typical target organisms cannot be determined, report "No Result" in the results column and "Z" in the Data Qualifier column.

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