TASK ORDER FMDA
TO
MASTER SERVICES AGREEMENT
BETWEEN
OWNER AND ENGINEER
FOR
MASTER SERVICES
(NON-HAZARDOUS WASTE SERVICES)

This is Task Order FMDA dated April 20, 2020 2020 attached to and made part of the Master Services Agreement dated March 4, 2020, between CDM Smith Inc. (ENGINEER) and Town of Stonington Water Pollution Control Authority (WPCA) (OWNER).

This Task Order describes the Scope of Services, Time Schedule, Charges, and Payment Conditions for Task Order FMDA known as: Flow Metering/Data Acquisition Program.

Engineer will provide the following scope of services for Flow Metering/Data Acquisition Program (FMDA) in the sewershed tributary to the Mystic Water Pollution Control Facility (WPCF) in Stonington, CT. The purpose of the report will be to develop a focused "blueprint" for inflow and infiltration (I/I) reduction measures that will identify and prioritize the subareas where comprehensive sewer system rehabilitation can be implemented in a cost-effective manner. The scope is broken into base scope tasks and optional tasks based on the findings of the base scope and the availability of funding.

## 1. SCOPE OF SERVICES

The ENGINEER will provide for Owner the following specific services:

**Task 1: Phase 1 FMDA (Base Scope unless noted otherwise)**

ENGINEER proposes to provide engineering services to develop and complete a targeted FMDA in the Mystic WPCF sewershed shown on the attached figure, which includes approximately 20 miles of sanitary sewer ranging in diameter from 8-inch to 30-inch. Of the 20 miles of sanitary sewer, approximately 12 miles are interceptors and 8 miles are lateral sewers. ENGINEER's approach will be focused on identifying extraneous flows and prioritizing areas of the Mystic WPCF sewershed where cost effective I/I reduction can be implemented. Engineer will monitor nearest USGA stations to assess increases in groundwater levels to evaluate the flow metering effort.

***Task 1.1 – Collect/Review Existing Data.*** ENGINEER will collect and review all pertinent existing reports, Mystic WPCF sewershed mapping/record drawings, available geographic information system (GIS), and all other relevant data provided by OWNER. The data will also include prior knowledge from OWNER or OWNER's contract operator related to characteristics of the sewershed, including operational history, pipe age, history of breaks/failures, and areas believed to have high I/I. Also, ENGINEER will collect and review responses to OWNER's sump pump letter sent dated August 1, 2019, existing WPCF flow data, available pump station data (if any), reported dry and wet weather sanitary sewer overflows (SSOs), and existing CCTV inspections and manhole inspections. Based on the review of the Town's GIS maps, ENGINEER will develop a datum memo.

Under this subtask, ENGINEER will prepare for and conduct an internal project kickoff meeting. ENGINEER will also prepare a Health and Safety Plan (HASP) for field activities and review up to three subconsultant HASPs for high risk activities.

***Task 1.2 – Master Sewer Mapping.*** ENGINEER will prepare a master sewer map using the OWNER's GIS and record drawings. This map will include a flow schematic for the study area and break out of subareas based on flow directions and linear feet of piping. Additionally, tables summarizing the existing pipe, manhole and parcel characteristics will be prepared. This subtask includes addressing OWNER's comments on the draft sewer mapping and flow metering plan. The flow metering plan will break the sewershed into 13 or 14 subareas, each with about 8,000 linear feet of sewers.

***Task 1.3 – Spring 2020 Flow Metering Program.*** ENIGNEER will manage installation, data collection, and maintenance of up to 14 area-velocity flow meters and one rain gauge in the study area for a minimum of 8-weeks, with the option to extend the monitoring up to 10-weeks depending on the weather. The objective is to experience a minimum of 3 storms of at least ½ inch of rain within a 12-hour period. If after the 10 weeks of flow metering the required rainfall is not received, the Engineer will meet with the Town to assess options for continuing Task 1. The cost of extending the flow monitoring on a per week basis is $5,885 for the 14 area-velocity flow meters and one rain gauge. Costs associated with any weekly extensions are not included in this Task Order.

Metering and rain gauge services will be coordinated through a flow metering specialist, Flow Assessment Services, LLC (FAS). Work in this task will include:

- Coordination of the field work with OWNER and OWNER's contract operator. ENGINEER will coordinate with FAS any required permits with Connecticut Department of Transportation.
- Final selection of metering locations, which may vary from the metering plan developed in Task 1.2 based on field conditions, such as manholes that can't be located or turbulent flow identified in manhole that may impact flow meter data collection.
- Final selection of temporary rain gauge location. ENGINEER will also evaluate the data from available local rain gauges including the gauge at the Mystic WPCF as well as those from National Weather Service, or other sources, in Stonington, New London, Groton, Westerly, Warwick (TF Green Airport), and/or others.
- Management of subcontractor through selection, installation, coordination and completion of the 10-week metering program.
- $7,000 allowance for Flaggers.
- Review provisional data on a bi-weekly basis and work with FAS to address data questions or issues that arise. Data will be collected at 5- and 15-minute intervals dependent on flow activity and pump station activity. Weekly manual confirmations measurements will be made along with data downloading and performance of routine maintenance.
- ENGINEER will collect and review all data from the long-term monthly groundwater levels at the USGS Well CT-GT 19 in New London and USGS Wells CT-NSN 77 and CT-NSN 78 in North Stonington, as well as long-term daily levels at USGS RI-WEW 52 in Westerly, RI. Trends will be evaluated prior to, during and after flow metering periods.

- ENGINEER will collect and review flow data from local streams with long-term metering, such as Pendleton Hill Brook, Beaver River, and Wood River, as a comparison to flows recorded at the Mystic WPCF, as flows to wastewater treatments plants typically are well-correlated with streamflow on rivers with comparably sized watersheds. ENGINEER will also review long-term WPCF flow data compared to long-term Mystic River data and provide comparison over time as OWNER believes the flows to the WPCF have increased in the last couple years and wondering if higher Mystic River water elevations and/or higher local groundwater elevations may be contributing to higher flows in the sanitary sewer system tributary to Mystic WPCF. This analysis will be completed to substantiate the Owners inference of higher tidal influence and groundwater elevations and to determine the need for additional studies.
- Provide initial data analysis, including:
    - Compile final flow metering and rainfall data into project database;
    - Perform quality assurance review and work with FAS to resolve discrepancies; and
    - Prepare flow meter and rainfall time series graphics.

***Task 1.4 – Initial Field Investigations.*** ENGINEER will perform an above ground survey and manhole inspections (up to 200 estimated) within the sewershed up to 15-day initial field investigations program for a two-person field crew. The opportune time to perform these investigations is in the spring of 2020, during the flow metering program, to help identify the location of extraneous I/I flow and to aide in the validation and update of the OWNER's sanitary sewer GIS.

The above ground survey will consist of locating roof leaders piped into the ground or into the building and catch basins or other potential sources of extraneous flow that may be connected to the sewer system. Additional investigations (smoke and dye water testing) will then be performed under subsequent field investigations (Task 2) to verify any potential inflow connections. The manhole inspections will consist of identifying any existing manholes that have covers with multiple holes that may allow inflow to enter the sewer system and identifying active infiltration, or signs of infiltration, into the manhole walls. Additionally, evidence of clear flow in the sewer pipes flowing into the manhole will be noted. Manhole inspections will be collected with a cloud-based solution integrated with OWNER's GIS to manage and compile all data collected.

***Task 1.5 – Spring 2020 Flow Metering Analysis.*** Following the completion of the flow metering program, ENGINEER will review and analyze the data collected. This analysis will be completed using the metering data to quantify flows and by performing a decomposition of the unit hydrographs using the EPA's SSOAP toolbox. The EPA's SSOAP toolbox is a suite of computer software tools used for the quantification of rainfall dependent infiltration and inflow (RDII) and condition assessment of sanitary sewer systems. Flow data along with groundwater and rain data for each subarea will be compared to industry standards for spring average flows and wet weather flows to determine if the flows would be considered excessive. Dry weather flow analysis will include considerations for tourist season. Flows will be compared to the following industry standards:

- Guidelines from TR-16/Merrimack Curve/MOP9: Peak on maximum day ratio based on population served.

- Guidelines from 10 States Standards: Peak hour should be less the 100 gallons per capita per day times a peaking factor based on population served.
- Average daily flow greater than 120 gallons per capita per day is excessive.
- Wet weather flows greater than 275 gallons per capita per day is excessive.

***Task 1.6 – Public Information Program.*** ENGINEER will work with OWNER to develop a public information and outreach program to inform the public about the overall project and intent. OWNER's current efforts relative to the news article and letter outreach regarding sump pumps will serve as a spring board for the future program. Up to the upper limit budget for this task, additional articles, letters, and/or bill inserts, such as educational flyers on water conservation or private inflow connections, will be developed to further educate the public and users regarding the efforts they can implement to aid and further the flow reduction program.

***Task 1.7 – FMDA Report and Cost-Effective Analysis.*** ENGINEER will prepare a FMDA Report that will become the basis for moving forward with additional FMDA investigations (Task 2) and development of the recommended comprehensive sewer rehabilitation program. The report will:

- Summarize the results of the flow metering program;
- Summarize the results of the initial field investigation program and the corresponding updates to the OWNER's GIS;
- Identify subareas that were high in inflow that warrant proceeding with smoke and/or dye water testing (Tasks 2.1 and 2.2);
- Identify the smaller subsystems that represent 70 to 80 percent of the total RDII, total inflow, and total infiltration with recommendations for performing closed circuit television (CCTV) inspections (Task 2.4);
- Identify the smaller subsystems with the highest RDII that are recommended to receive building inspections (Task 2.3).
- ENGINEER will include a breakdown of Public vs. Private I/I based on industry standards.
- ENGINEER will develop and complete a cost-effective analysis for the study area to compare the anticipated long-term cost of sewer rehabilitation for I/I reduction with the cost for transport and treatment. Four (4) scenarios will be completed and compared to evaluate the cost-effectiveness of sewer system rehabilitation. The first scenario will analyze the treatment and transport alternative using the most recent baseline conditions. This baseline condition I/I reduction scenario will be compared with three (3) incremental I/I reduction estimates (10, 30 and 50 percent) to determine which levels of rehabilitation are cost-effective. This analysis will provide OWNER with the opportunity to pursue state funding for sewer rehabilitation project area's collection system. This analysis will be completed using the spring 2020 flow metering data to quantify flows and utilizing the EPA's SSOAP toolbox. A summary of this analysis will be included in the FMDA report.
- ENGINEER will utilize the information obtained and cost-effective analysis to identify and prioritize isolated areas within the project area's collection system for comprehensive sewer rehabilitation.

ENGINEER will prepare a draft FMDA Report for review and comment by OWNER. The report will include an executive summary, figures showing the recommend plan utilizing GIS information, estimated construction costs, construction duration and phasing of the recommended plan. Five copies of the draft FMDA report will be submitted to OWNER for review. After receipt of final comments from OWNER, ENGINEER will make the necessary revisions and submit five copies of the final FMDA Report.

***Task 1.8 – Project Management and Quality Assurance.*** ENGINEER will provide the necessary management resources to coordinate all of the overall project components including subcontractor management, regular Task 1 meetings with OWNER (assumed four meetings), development and finalization of meeting minutes, invoicing, and all submittals. CDM Smith will submit a monthly progress report to OWNER that summarizes the activities of the past month, schedule status, budget status, and any outstanding action items.

In the early stages of the project, prepare for and conduct a half-day Project Quality Management (PQM) workshop to identify critical success factors of the project and identify approaches for addressing them. OWNER will be welcome to attend the PQM workshop. ENGINEER will prepare for and conduct one internal Technical Review Committee meeting. Record and file minutes for each review meeting. ENGINEER will provide quality assurance and quality control for the 90 percent draft FMDA report and the 100 percent final FMDA report.

**Optional Task – WPCA will only implement pending availability of funding and WPCA's overall need and/or desire to complete.**

**Task 2: Phase 2 Sanitary Sewer Evaluation Survey (SSES) Investigations and Report Update (Optional Tasks)**

ENGINEER will either self-perform field work or will engage Martinez Couch & Associates, LLC (MBE) for $20,000 or more to assist with performing portions of the field investigations included in this task. Where work is to be performed on private property, ENGINEER will prepare a property owner notification letter regarding the field program for OWNER review and approval and then will deliver the letter to adjacent property owners affected by the field work.

***Task 2.1 – Smoke Testing.*** Based on the recommendations from Task 1, ENGINEER proposes to provide all labor and materials necessary to conduct smoke testing of up to 20,000 linear feet of sewer. Smoke testing will be performed during periods of low groundwater in summer of 2020 and it will not be performed during a rain event or within one day thereafter. Confirmed inflow connections that actually smoke will be documented. Suspect inflow sources which may be expected to be connected to the sanitary sewer shall be recorded for future dye water testing (Task 2.2). Prior to initiating smoke testing, property owners, Police and Fire officials will be notified.

***Task 2.2 – Dye Water Testing.*** Based on the results/recommendations of Task 1 and Task 2.1, ENGINEER proposes to provide all labor and materials necessary to conduct up to 15 dye water tests to verify potential sources of inflow. The purpose is to detect both direct and indirect I/I connections to the sanitary sewer, such as catch basins or roof leaders that may potentially connect to the sanitary system. Prior to initiation of any dye water testing, the property owners, Police and Fire officials will be notified.

***Task 2.3 – Additional Field Investigations.*** ENGINEER will perform an additional 10-days of field investigations including above ground survey, manhole inspections (about 150 assumed), and walking cross country sewer routes within the sewershed with a two-person field crew.

***Task 2.4 – Building Inspections***

***Task 2.4.1 – Building Inspections.*** Based on the recommendations from Task 1, building inspections will be performed in the two subareas identified to be the highest in RDII. These subareas should have about 100 properties on average for a total of up to 200 building inspections to be attempted in the two subareas. Prior to commencing inspections, ENGINEER will review the responses provided by property owners within the two subareas (Task 1.1) and will prepare and submit a letter to each individual property, including a phone number for property owners to contact to set up an inspection. Next, ENGINEER will make three attempts in the field to contact a property owner and perform an internal building inspection with a minimum goal of 50 percent response. At least one of the three attempts will be on weekday evenings or the weekend. For properties that we are unable to perform an internal inspection, an external inspection will still be performed. A detailed building inspection form from prior related studies will be utilized.

***Task 2.4.2 – Manage, Compile and Assess Building Inspections Data.*** ENGINEER will implement a cloud-based solution to manage and compile all data collected during building inspections. Using ESRI's Cloud Environment, building inspection data will be collected on mobile devices that will sync directly to a secure cloud-base environment hosted by ENGINEER. Each building inspection will include all applicable data associated with the building inspection survey form. ENGINEER will implement a cloud-based dashboard allowing management to monitor real-time inspection status to ensure efficient collection of data. Once inspections are complete, ENGINEER will provide a summary map of all applicable building inspection results.

***Task 2.5 – CCTV.*** Based on recommendations from Task 1, ENGINEER will engage Arthur Engineering Services (WBE) to perform closed circuit television (CCTV) inspections within the two subareas noted with the highest infiltration from Task 1. An allowance of $75,000 is included to perform up to 19,000 linear feet of CCTV. The CCTV will identify if pipes can be rehabilitated via pipe lining or if point repairs are necessary to address things such as broken pipes, pipe sags, and severe offset joints. The CCTV includes light cleaning with a jet nozzle. This task does not include heavy cleaning and if heavy cleaning is required, the pipe segments requiring heaving cleaning will be noted and given to the Town for further action.

***Task 2.6 – Update GIS.*** Engineer will update the OWNER's GIS with information collected during Task 1 and 2 for up to 400 hours of updates.

***Task 2.7 – Financial Evaluation.*** Review costs of recommendations from recommendations proposed and develop a phased implementation plan. ENGINEER will review OWNER's existing budgets and contrast with other WPCA's of like-sized communities. ENGINEER will analyze projected sewer revenue, operating expenses and recommended capital improvements and make recommendations for rate increases and/or structure modifications for a 5 to 10-year projection period.

***Task 2.8 – Supplement SSES Report.*** ENGINEER will update and supplement the Task 1 FMDA report with the findings and recommendations from the Task 2 investigations. Similar to Task 1,

ENGINEER will prepare an updated draft SSES Report for review and comment by OWNER incorporating the Task 2 findings and recommendations. Five copies of the updated draft SSES report will be submitted to OWNER for review. After receipt of final comments from OWNER, ENGINEER will make the necessary revisions and submit five copies of the final SSES Report.

***Task 2.9 – Project Management and Quality Assurance.*** If Optional Task 2 tasks are performed, the overall schedule for the project would be extended. For Task 2 services, ENGINEER will provide the necessary management resources to coordinate all of the overall project components including subcontractor management, regular Task 2 meetings with OWNER (assumed three meetings), development and finalization of meeting minutes, invoicing, and all submittals. CDM Smith will submit a monthly progress report to OWNER that summarizes the activities of the past month, schedule status, budget status, and any outstanding action items.

ENGINEER will provide quality assurance and quality control for the supplemented SSES report with the results and recommendations from Task 2.

## 2. TIME SCHEDULE

The time periods for the performance of ENGINEER's Services are as follows:

The work will be completed within 10 months of execution based on the following:

- Task 1 – within 6 months of execution.
- Task 2 – within 4 months following completion of Task 1.

## 3. COMPENSATION AND INVOICING

Compensation of Services of ENGINEER described in this TASK ORDER will be on the following basis:

| PROJECT PHASE | CDM Smith | Subcontractor | TOTAL LUMP SUM FEE |
|---|---|---|---|
| **Task 1 – Phase I FMDA Investigation and Report** | | | |
| 1.1 Collect/Review Existing Date | $15,929.37 | | $15,929.37 |
| 1.2 Master Sewer Mapping | $14,470.07 | | $14,470.07 |
| 1.3 Spring 2020 Flow Metering | $28,977.24 | $77,962.50 | $106,939.74 |
| 1.4 Initial Field Investigations (w/GIS) | $47,512.31 | $4,620.00 | $52,132.31 |
| 1.5 Spring 2020 Flow Metering Analysis | $30,814.80 | | $30,814.80 |
| 1.6 Public Information Program | $9,689.38 | | $9,689.38 |
| 1.7 FMDA Report and Cost-Effective Analysis | $29,074.27 | | $29,074.27 |
| 1.8 Project Mng. & QA | $40,950.06 | | $40,950.06 |
| **Task 1 Subtotal** | | | **$300,000.00** |
| **Optional Task – WPCA will only implement pending availability of funding and WPCA's overall need and/or desire to complete.** | | | |
| **Task 2 – Phase 2 SSES Investigations and Report Update (optional tasks)** | | | |
| 2.1 Smoke Testing | $12,517.75 | $14,700.00 | $27,217.75 |
| 2.2 Dye Water | $5,157.25 | $13,125.00 | $18,282.25 |
| 2.3 Additional Field Investigation | $29,318.12 | | $29,318.12 |
| 2.4 Building Inspections | $55,828.85 | | $55,828.85 |
| 2.5 CCTV | $26,301.06 | $78,750.00 | $105,051.06 |
| 2.6 Update GIS | $43,019.99 | | $43,019.99 |
| 2.7 Financial Evaluation | $33,586.59 | | $33,586.59 |
| 2.8 Supplemental SSES Report | $22,994.66 | | $22,994.66 |
| 2.9 Project Mng. & QA | $31,367.41 | | $31,367.41 |
| **Task 2 Subtotal** | | | **$366,666.66** |
| **TOTAL LUMP SUM UPPER LIMIT FEE FOR TASK ORDER – Task 1 Only** | | | **$300,000.00** |
| **TOTAL LUMP SUM UPPER LIMIT FEE FOR TASK ORDER – Task 1 and 2** | | | **$666,666.66** |

For the Basic Services performed by the ENGINEER in this Task Order, the OWNER agrees to pay the ENGINEER the total not-to-exceed lump sum fee as follows:

For Tasks 1 and 2, the OWNER agrees to pay the ENGINEER the lump sum fee not to exceed $666,666.66.

The total upper limit not to exceed for this Task Order is $ 666,666.66.

The OWNER shall pay the ENGINEER on a monthly basis in proportion to the work completed and invoiced by the ENGINEER.

## 6. TERMS AND CONDITIONS

The terms and conditions of the Agreement referred to above shall apply to this Task Order except to the extent expressly modified herein. In the event of any such modification, the modification shall be set forth below and the Article of the Agreement to be modified shall be specifically referenced. Modifications included in this Task Order are:

No Change.

## 7. TERMS OR PROVISIONS IN CONFLICT

If the provisions set forth in the Agreement are in conflict with the provisions set forth in this Task Order, the provisions of this Task Order shall govern.

Acceptance of the terms of this Task Order is acknowledged by the following authorized signatures of the parties to the Agreement.

OWNER

By:
Title: Director
Date: 4/20/20

ENGINEER

Brendan F. Ennis
Client Service Leader
Date: April 20, 2020

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

# ENGINEERING AGREEMENT APPROVAL

April 16, 2020

Town of Stonington
Douglas Nettleton, Director
Water Pollution Control Authority
152 Elm Street
Stonington, CT 06378

Re: CWF-735-PG. Mystic I/I Study

Dear Mr. Nettleton,

This office has reviewed draft copies of the Engineering Agreement submitted via email on April 7, 2020 between the Town of Stonington and CDM-Smith, and the accompanying Form 5700-41 revised on April 9, 2020 for the above-referenced project. The Agreement is for engineering services as follows:

Engineering Agreement for Planning Services for I/I Study (Flow Metering and Data Acquisition. Phase 1):

| | **Requested Amount** | **Eligible Amount** |
|---|---|---|
| **Direct Labor** | **$68,816** | **$68,816** |
| **Indirect Costs** | **$119,465** | **$119,465** |
| **Other Direct Costs** | | |
| Transportation | $5,043 | $5,043 |
| Equipment, Materials, Supplies | $1,500 | $1,500 |
| **Other Direct Costs Subtotal** | **$6,543** | **$6,543** |
| **Subcontracts** | | |
| Martinez, Couch & Associates (MBE) | $6,600 | $6,600 |
| Flow Assessment Services | $60,650 | $60,650 |
| Connecticut Traffic Control (WBE) | $11,400 | $11,400 |
| **Subcontracts Subtotal** | **$78,650** | **$78,650** |
| **Profit** | **$26,526** | **$26,526** |
| **Total** | **$300,000** | **$300,000** |

Once the Phase 1 (flow metering phase) is completed, it is anticipated that a Phase 2 (Sanitary Sewer Evaluation Survey) will be performed by the Town to locate sources of extraneous flows that may be contributing to the wet weather flows within Mystic's collection system. The Department of Energy and

Environmental Protection (DEEP) has reviewed the subject engineering agreement and has determined that it is in compliance with the regulatory procedures contained in Sections 22a-482-4 (g) and 22a-482-4 (k) of the Regulations of Connecticut State Agencies. Approval is given for the amounts shown above as these are the amounts that pertain to the services to be provided under this project.

The approval by DEEP of an engineering agreement or amendment does not relieve the consulting engineer from the certified understanding that the subagreement price may be subject to downward renegotiation and/or recoupment where the cost and price data submitted have been determined, as a result of audit, not to have been complete, current and accurate as of the certified date. The Approval of the Engineering Agreement and the associated fees should not be interpreted as approval for additional grants funds. This approval will verify that any effort expended by your consultant for the approved services on or after the date of this letter will be considered as eligible for reimbursement under the terms and conditions of the Clean Water Fund once your funding application has been approved.

You are reminded that the Clean Water Fund MBE/WBE requirements are applicable to this approval. The Phase 1 MBE/WBE participation percentage is proposed at 6% of the total engineering fee approved herein. The 8% MBE/WBE participation goal is expected to exceed 20% through the completion of Phase 2 as shown in the draft 5700 form for Phase 2 submitted on April 9, 2020. However, DEEP cannot give CDM-Smith any credit for the MBE/WBE participation under Phase 2 until the Phase 1 report is completed, reviewed and approved by DEEP. CDM-Smith is required to submit executed subagreements meeting or exceeding the proposed 6% MBE/WBE participation within fifteen (15) days of executing the engineering contract or the date of this approval, whichever is later. No payments will be processed by DEEP for engineering services until the proposed percentage has been met and the appropriate executed subagreements have been submitted. Please submit one copy of each subagreement to Ms. Kim Forbes of DEEP Bureau of Financial and Support Services, 79 Elm Street, Hartford CT 06106-5127.

This APPROVAL does not relieve you of the obligation to obtain any other authorizations as may be required by Federal, State or Local Laws or regulations.

If you have any questions regarding this matter, please contact Carlos Esguerra at (860) 424-3756 or carlos.esguerra@ct.gov.

Sincerely,

Jennifer L. Perry, P.E.
Assistant Director
Infrastructure Management
Water Planning & Management Division
Bureau of Water Protection & Land Reuse

JLP/cae

E-copies:
Brendan Ennis, P.E. CDM-Smith (via email)
Patricia Reilly, DEEP (via e-mail)
Kim Forbes, DEEP (via email)